APPENDIX E

Curtis & Tompkins Analytical Data Reports

First Quarter 2007

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Building 900s Area		
937GW06	3/5/2007	193174
937GW07	3/8/2007	193262
937GW101	3/6/2007	193217
937GW102	3/5/2007	193174
937GW103	3/5/2007	193174
937GW104	3/5/2007	193174
937GW105	3/5/2007	193174
937GW106	3/5/2007	193174
937GW107	3/5/2007	193174
937GW108	3/5/2007	193174
937GW12	3/5/2007	193174
937GW15	3/8/2007	193262
937GW32R	3/2/2007	193137
937GW35	3/2/2007	193137
937GW37	3/2/2007	193137
937GW38	3/5/2007	193174
937GW39	3/5/2007	193174
937GW42	3/5/2007	193174
950GW108	3/6/2007	193217
979GW109	3/5/2007	193174
979GW110	3/5/2007	193174
979GW111R	3/5/2007	193174
979GW112	3/5/2007	193174
979GW113	3/6/2007	193217
979GW114	3/6/2007	193217
979GW115	3/6/2007	193217
979GW115 (DUP0306071A)	3/6/2007	193217
979GW116	3/6/2007	193217
979GW116 (DUP0306071B)	3/6/2007	193217
979GW117	3/5/2007	193174

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Battery Howe/Wagner		
BHWGW01	3/6/2007	193217
BHWGW04	3/6/2007	193217
BHWGW04 (DUP0306073A)	3/6/2007	193217
BHWGW05	3/6/2007	193217
HWGW100	3/6/2007	193217
HWGW101	3/6/2007	193217
Fill Site 1, Landfill 2 and El Polin Spring		
EPSP01	2/28/2007	193055
LF01GW01	2/28/2007	193055
LF01GW02	2/28/2007	193055
LF01GW03	2/28/2007	193055
LF01GW04	2/28/2007	193055
LF01GW04 (DUP0228071A)	2/28/2007	193055
LF01GW05	2/28/2007	193055
LF01GW06	2/28/2007	193055
LF01GW07	2/28/2007	193055
LF02GW01	2/28/2007	193055
LF02GW02	2/28/2007	193055
LF02GW04	3/2/2007	193108
Landfill E		
DAEGW03	3/2/2007	193108
DAEGW04	3/7/2007	193262
DAEGW05	3/2/2007	193108
DAEGW06	3/1/2007	193108
DAEGW08	3/1/2007	193108
DAEGW101	3/2/2007	193108
DAEGW102	3/7/2007	193262
DAEGW103	3/1/2007	193108
DAEGW104	3/2/2007	193108
DAEGW104 (DUP0302071A)	3/2/2007	193108
Building 1047		
1047MW101	3/1/2007	193108
1047MW101 (DUP0301072A)	3/1/2007	193108

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Building 1349/Fill Site 5		
1349MW01	3/1/2007	193108
1349MW01 (DUP0301073A)	3/1/2007	193108
1349MW02	2/28/2007	193055
1349MW100	3/1/2007	193108
1349MW100 (DUP0301073B)	3/1/2007	193108
1349MW103	2/28/2007	193055
1349MW104	2/28/2007	193055
1349MW105	2/28/2007	193055
Building 231/207 Area		
231GW09	2/27/2007	193027
231GW09 (DUP0227072C)	2/27/2007	193027
Building 1065 Area		
1065MW10A	3/7/2007	193262
1065MW10B	3/7/2007	193262
1065MW11A	3/7/2007	193262
1065MW11B	3/7/2007	193262
1065MW9A	3/7/2007	193262
1065MW9B	3/7/2007	193262
1065PZ1A	3/1/2007	193108
1065PZ1B	3/7/2007	193262
1065PZ2A	3/1/2007	193108
1065PZ2B	3/6/2007	193217
1065PZ3A	3/1/2007	193108
1065PZ3B	2/28/2007	193055
1065PZ3B (DUP0228072A)	2/28/2007	193055
1065PZ4A	3/1/2007	193108
1065PZ4B	3/1/2007	193108
1065PZ5AR	3/1/2007	193108
1065PZ5B	3/1/2007	193108
1065PZ6B	3/7/2007	193262
1065PZ7A	2/27/2007	193027
1065PZ7A (DUP0227072B)	2/27/2007	193027
1065PZ7B	3/1/2007	193108
1065MW101	3/1/2007	193108
1065MW102	3/1/2007	193108

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Landfill 4		
LF4GW103	2/28/2007	193055
LF4GW104	2/28/2007	193055
Landfill 8		
LF08GW01	3/6/2007	193217
LF08GW02B	3/6/2007	193217
LF08GW03	3/6/2007	193217
LF08GW04	3/7/2007	193262
LF08GW04 (DUP0307073A)	3/7/2007	193262
LF08GW06	3/6/2007	193217
Landfill 10		
LF10GW01	2/27/2007	193027
LF10GW02	2/27/2007	193027
LF10GW03	2/27/2007	193027
LF10GW100	2/28/2007	193055
LF10SP01	2/27/2007	193027
Fill Site 6		
LF6GW100	2/28/2007	193055
LF6GW101	2/28/2007	193055
LF6GW103	2/28/2007	193055
LF6GW104	2/28/2007	193055
LF6GW105	2/27/2002	193027
LF6GW105 (DUP0227072A)	2/27/2002	193027
LF6GW106	2/28/2007	193055
Nike Facility		
NKGW01	3/7/2007	193262
NKGW02	3/6/2007	193217
NKGW02 (DUP0306071C)	3/6/2007	193217
NKGW04	3/2/2007	193137
NKGW05	3/7/2007	193262
NKSW100	3/7/2007	193213
Baker Beach Disturbed Areas 1 and 2A		
BB1PZ100	2/27/2007	193027
BB1PZ101	2/27/2007	193027

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Baker Beach Disturbed Area 3		
BB3GW100	2/27/2007	193027
Mini-CAPs		
1213GW101	3/1/2007	193108
1221GW104	3/7/2007	193262
1221GW104 (DUP0307073B)	3/7/2007	193262
514AGW101	3/2/2007	193137
FM14EX07GW101	2/27/2007	193027
FM14EX07GW102	2/27/2007	193027
Rinsate Samples		
937GW103RB102	3/5/2007	193174
979GW109RB110	3/5/2007	193174
979GW113RB114	3/6/2007	193217
BHWGW05RB01	3/6/2007	193217
1065MW10ARB10B	3/7/2007	193262
1065PZ6BRB9A	3/7/2007	193262
Trip Blanks		
TB0227071A	2/27/2007	193027
TB0228073A	2/28/2007	193055
TB0301073A	3/1/2007	193108
TB0302071A	3/2/2007	193137
TB0305072A	3/5/2007	193174
TB0306072A	3/6/2007	193217
TB0307071A	3/7/2007	193262
Source Water Samples		
DW030807A	3/8/2007	193277
DW030807B	3/8/2007	193262
Purge Water Sample		
WT030807	3/8/2007	193262

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193027

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
LF6GW105	193027-001
1065PZ7A	193027-002
231GW09	193027-003
DUP0227072A	193027-004
DUP0227072B	193027-005
DUP0227072C	193027-006
LF10GW03	193027-007
BB3GW100	193027-008
FM14EX07GW101	193027-009
FM14EX07GW102	193027-010
BB1PZ100	193027-011
BB1PZ101	193027-012
LF10SP01	193027-013
LF10GW01	193027-014
LF10GW02	193027-015
TB0227071A	193027-016

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/22/07
Operations Manager

Signature: _____ Date: 3/21/07
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193027
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	02/28/07
Samples Received:	02/28/07

This hardcopy data package contains sample and QC results for sixteen water samples, requested for the above referenced project on 02/28/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Pesticides (EPA 8081A):
High response was observed for methoxychlor in the ICV analyzed 03/01/07 02:03; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. High responses were observed for a number of analytes in the CCV analyzed 03/05/07 18:35; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
No analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:
High % difference was observed for zinc in the serial dilution of 1065PZ7A (lab # 193027-002). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
High % difference was observed for zinc in the serial dilution of 1065PZ7A (lab # 193027-002); this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193027**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**02/28/07**
Samples Received:	**02/28/07**

Sulfide (EPA 376.2):

Low recoveries were observed for sulfide in the MS/MSD of 1065PZ7A (lab # 193027-002); the LCS was within limits. No other analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

101.0

00003

Curtis & Tompkins, Ltd.

Chain of Custody

193027

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2180
Page: 1 of 2

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): [signature]
Sent to Laboratory (Name): CTI

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260)	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Sulfide	Dissolved Metals 15	BTEX/MTBE	Dissolved metals (23)			COMMENTS / NOTES
-1	LF6GW105	2/27/07	1035			X				3		6					X		X		X		X						
-2	1065P27A		1205			X		9		3		12	X	X	X		X				X		X	X	X				
-3	231GW09		1435			X				3		6					X		X		X		X						
-4	DUP022707 2A		1055			X				1		2					X		X		X		X						
-5	DUP022707 2B		1225			X		3		1		4	X	X	X		X				X		X	X	X				
-6	DUP022707 2C		1455			X				1		2					X		X		X		X						
-7	LF10GW03		1420			X		3		1		3	X	X	X	•	X				X				X	X			
-8	BB3GW100		1120			X		3		1		3	X	X	X		X		X		X								
-9	FM14EXJ7GW01		1522			X		3				4	X	X	X							X			X				
-10	FM14EX07GW02		1430			X		3				4	X	X	X							X			X				
11	BB1PZ100		0942			X				2		7		X	X		X	X		X		X				X			
-12	BB1PZ101		1015			X				2		7		X	X		X	X		X		X				X			
-13	LF10SP01		1215			X		3		2		3	X	X	X		X			X	X				X	X			
-14	LF10GW01		1310			X		3		1		3	X	X	X		X				X				X	X			
-15	LF10GW02		1245			X		3		1		3	X	X	X		X				X				X	X			

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 2/28/07	RECEIVED BY: [signature]	DATE: 2/28/07
PRINT NAME: Dean Raynal	FIRM: BTS	PRINT NAME: AARON GRENIER	FIRM: CTI
	TIME: [illegible]		TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:
	TIME:		TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193027

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2181
Page: 2 of 2

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): D. Raynal / BTS P. Cornish BTS
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)							COMMENTS / NOTES
16	TB022707 1A	2/27/07	—			K		2								K													
													•			•													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 2/28/07	RECEIVED BY: [signature]	DATE: 2/28/07
PRINT NAME: P. Cornish FIRM: BTS	TIME:	PRINT NAME: AARON CRENIER FIRM: C&T	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193027 Date Received: 2-28-07 Number of Coolers: 5
Client: Treadwell & Rollo Project: _____

A. Preliminary Examination Phase
Date Opened: 2-28-07 By (print) Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over lip of cooler Seal date: 2-28-07 Seal name: Unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 3.9°C, 2.0°C, 1.5°C, 2.0°C, 2.3°C

B. Login Phase
Date Logged In: 2-28-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... YES (NO)
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... YES (NO)
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
4.) Sample TB0227071A received with 4 VOA's while COC states 2
6) HNO_3 added to sample -005 (Lot #C49025) to bring ph below 2

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ7A	Batch#:	122581
Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	12 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	110	65-135	EPA 8015B
Bromofluorobenzene (FID)	114	65-135	EPA 8015B
Trifluorotoluene (PID)	111	65-135	EPA 8021B
Bromofluorobenzene (PID)	115	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DUP0227072B	Batch#:	122581
Lab ID:	193027-005	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.8 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	65-135	EPA 8015B
Bromofluorobenzene (FID)	110	65-135	EPA 8015B
Trifluorotoluene (PID)	109	65-135	EPA 8021B
Bromofluorobenzene (PID)	112	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

3.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10GW03	Batch#:	122581
Lab ID:	193027-007	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.2	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	65-135	EPA 8015B
Bromofluorobenzene (FID)	106	65-135	EPA 8015B
Trifluorotoluene (PID)	107	65-135	EPA 8021B
Bromofluorobenzene (PID)	108	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	BB3GW100	Batch#:	122581
Lab ID:	193027-008	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW101	Batch#:	122581
Lab ID:	193027-009	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	8.0 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	65-135	EPA 8015B
Bromofluorobenzene (FID)	115	65-135	EPA 8015B
Trifluorotoluene (PID)	109	65-135	EPA 8021B
Bromofluorobenzene (PID)	116	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW102	Batch#:	122581
Lab ID:	193027-010	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	5.5	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	112	65-135	EPA 8021B
Bromofluorobenzene (PID)	110	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

7.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10SP01	Batch#:	122581
Lab ID:	193027-013	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	65-135	EPA 8015B
Bromofluorobenzene (FID)	108	65-135	EPA 8015B
Trifluorotoluene (PID)	109	65-135	EPA 8021B
Bromofluorobenzene (PID)	110	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10GW01	Batch#:	122581
Lab ID:	193027-014	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	65-135	EPA 8015B
Bromofluorobenzene (FID)	102	65-135	EPA 8015B
Trifluorotoluene (PID)	105	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10GW02	Batch#:	122581
Lab ID:	193027-015	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	111	65-135	EPA 8015B
Bromofluorobenzene (FID)	112	65-135	EPA 8015B
Trifluorotoluene (PID)	113	65-135	EPA 8021B
Bromofluorobenzene (PID)	114	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377018	Batch#:	122581
Matrix:	Water	Analyzed:	02/28/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	110	65-135	EPA 8015B
Bromofluorobenzene (FID)	111	65-135	EPA 8015B
Trifluorotoluene (PID)	110	65-135	EPA 8021B
Bromofluorobenzene (PID)	111	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377019	Batch#:	122581
Matrix:	Water	Analyzed:	02/28/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	22.63	113	65-135
Benzene	20.00	22.13	111	65-135
Toluene	20.00	22.66	113	65-135
Ethylbenzene	20.00	22.40	112	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	113	65-135
Bromofluorobenzene (PID)	119	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377020	Batch#:	122581
Matrix:	Water	Analyzed:	02/28/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,890	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	65-135
Bromofluorobenzene (FID)	127	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ7A	Batch#:	122581
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	02/28/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377021

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.84	2,000	1,983	99	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	65-135
Bromofluorobenzene (FID)	133	65-135

Type: MSD Lab ID: QC377022

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,977	98	65-135	0	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	130	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 GCVOA Water
EPA 8015B

Inst : GC19 Name : GC 19 TVH 029
Calnum : 347042266001 Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCVOA Water: EPA 8021B

Inst : GC19
Calnum : 347068385001
Units : ng

Name : gc19mbtxe051
Date : 17-FEB-2007 18:10
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	047_044	347068385044	BTXE_1	17-FEB-2007 18:10	S5559 (1000X), S5029 (5000X)
L2	047_045	347068385045	MTBE_1	17-FEB-2007 18:48	S5558 (1250X), S5029 (5000X)
L3	047_046	347068385046	BTXE_2	17-FEB-2007 19:25	S5558 (500X), S5029 (5000X)
L4	047_047	347068385047	BTXE_3	17-FEB-2007 20:03	S5558 (125X), S5029 (5000X)
L5	047_048	347068385048	BTXE_4	17-FEB-2007 20:41	S5557 (1000X), S5029 (5000X)
L6	047_049	347068385049	BTXE_5	17-FEB-2007 21:18	S5557 (500X), S5029 (5000X)
L7	047_050	347068385050	BTXE_6	17-FEB-2007 21:56	S5557 (250X), S5029 (5000X)
L8	047_063	347068385063	MTBE_7	18-FEB-2007 06:05	S4993 (500X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		2886.9	3048.4	3236.4	2635.9	2755.2	2723.0	2571.4	AVRG		3.53E-4		2836.7	8	0.995	20	
Benzene	B	14240		14306	14293	12990	13566	13326		AVRG		7.25E-5		13787	4	0.995	20	
Toluene	B	16582		13300	13008	11890	12450	12259		AVRG		7.55E-5		13248	13	0.995	20	
Ethylbenzene	B	12370		11434	11173	10085	10730	10909		AVRG		9.00E-5		11117	7	0.995	20	
m,p-Xylenes	B	18623		15166	15442	13916	14741	14275		AVRG		6.51E-5		15360	11	0.995	20	
o-Xylene	B	12104		11014	11170	9965.1	10613	10549		AVRG		9.17E-5		10903	7	0.995	20	
MTBE	C		1198.9	1153.7	914.89	1153.3	1198.9	929.49	1299.4	AVRG		8.92E-4		1121.2	13	0.995	20	
Benzene	C	3580.4		3835.3	4053.4	3943.1	4184.4	4159.3		AVRG		2.53E-4		3959.3	6	0.995	20	
Toluene	C	3808.4		3464.9	3688.6	3606.9	3855.9	3863.8		AVRG		2.69E-4		3714.8	4	0.995	20	
Ethylbenzene	C	2912.0		3116.4	3368.3	3227.7	3490.8	3513.2		AVRG		3.06E-4		3271.4	7	0.995	20	
m,p-Xylenes	C	4532.0		4113.0	4353.7	4114.7	4466.1	4499.1		AVRG		2.30E-4		4346.4	4	0.995	20	
o-Xylene	C	2895.2		2923.4	3241.0	3017.3	3301.6	3364.4		AVRG		3.20E-4		3123.8	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: MJM Date: 02/20/07 Reviewer: CW Date: 02/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347068385001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 GCVOA Water
EPA 8021B

Inst : GC19 Name : gc19mbtxe051
Calnum : 347068385001 Cal Date: 17-FEB-2007

ICV 347068385066 (047_066 18-FEB-2007) stds: S5206 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2836.7	2875.4	100.0	101.4	ng	1	15	
Benzene	B	13787	15452	100.0	112.1	ng	12	15	
Toluene	B	13248	14379	100.0	108.5	ng	9	15	
Ethylbenzene	B	11117	11530	100.0	103.7	ng	4	15	
m,p-Xylenes	B	15360	14107	200.0	183.7	ng	-8	15	
o-Xylene	B	10903	11106	100.0	101.9	ng	2	15	
MTBE	C	1121.2	1229.0	100.0	109.6	ng	10	15	
Benzene	C	3959.3	4372.3	100.0	110.4	ng	10	15	
Toluene	C	3714.8	3990.3	100.0	107.4	ng	7	15	
Ethylbenzene	C	3271.4	3461.5	100.0	105.8	ng	6	15	
m,p-Xylenes	C	4346.4	4062.2	200.0	186.9	ng	-7	15	
o-Xylene	C	3123.8	3091.0	100.0	98.95	ng	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347073972001
Units : ng

Name : GC19 TFT/BFB 051
Date : 20-FEB-2007 09:29
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_002	347073972002	TFT/BFB_1	20-FEB-2007 09:29	S5343 (5000X)
L2	051_003	347073972003	TFT/BFB_2	20-FEB-2007 10:35	S5344 (5000X)
L3	051_004	347073972004	TFT/BFB_3	20-FEB-2007 11:12	S5345 (5000X)
L4	051_005	347073972005	TFT/BFB_4	20-FEB-2007 11:50	S5346 (5000X)
L5	051_006	347073972006	TFT/BFB_5	20-FEB-2007 12:28	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1831.3	1723.2	1644.4	1544.3	1564.2	AVRG		6.02E-4		1661.5	7	0.995	20	
Bromofluorobenzene (FID)	A	1001.8	966.25	884.66	867.71	860.32	AVRG		0.00109		916.16	7	0.995	20	
Trifluorotoluene (PID)	B	4854.0	4635.6	4428.7	4126.8	4122.7	AVRG		2.26E-4		4433.5	7	0.995	20	
Bromofluorobenzene (PID)	B	8604.1	8212.1	7725.8	7400.6	7493.5	AVRG		1.27E-4		7887.2	6	0.995	20	
Trifluorotoluene (PID)	C	1224.1	1186.3	1188.6	1130.2	1135.1	AVRG		8.53E-4		1172.8	3	0.995	20	
Bromofluorobenzene (PID)	C	2290.0	2222.9	2123.3	2049.5	2078.1	AVRG		4.65E-4		2152.8	5	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 02/20/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377019 IDF : 1.0
Seqnum : 347085636001.1 File : 059_001 Time : 28-FEB-2007 11:16
Standards: S5313 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347068385001	17-FEB-2007	2836.7	3209.4	100.0	113.1	ng	13	15	u
MTBE	C	347068385001	17-FEB-2007	1121.2	1261.8	100.0	112.5	ng	13	15	
Benzene	B	347068385001	17-FEB-2007	13787	15256	100.0	110.7	ng	11	15	u
Benzene	C	347068385001	17-FEB-2007	3959.3	3739.6	100.0	94.45	ng	-6	15	
Toluene	B	347068385001	17-FEB-2007	13248	15013	100.0	113.3	ng	13	15	u
Toluene	C	347068385001	17-FEB-2007	3714.8	3597.1	100.0	96.83	ng	-3	15	
Ethylbenzene	B	347068385001	17-FEB-2007	11117	12449	100.0	112.0	ng	12	15	u
Ethylbenzene	C	347068385001	17-FEB-2007	3271.4	3186.1	100.0	97.39	ng	-3	15	
m,p-Xylenes	B	347068385001	17-FEB-2007	15360	17613	100.0	114.7	ng	15	15	u
m,p-Xylenes	C	347068385001	17-FEB-2007	4346.4	4153.3	100.0	95.56	ng	-4	15	
o-Xylene	B	347068385001	17-FEB-2007	10903	12528	100.0	114.9	ng	15	15	u
o-Xylene	C	347068385001	17-FEB-2007	3123.8	3048.3	100.0	97.58	ng	-2	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1869.7	450.0	506.4	ng	13	15	
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1120.7	450.0	550.5	ng	**22**	15	c+
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	4992.3	450.0	506.7	ng	13	15	u
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1226.0	450.0	470.4	ng	5	15	
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	9422.7	450.0	537.6	ng	**19**	15	c+ u
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2451.5	450.0	512.5	ng	14	15	

MJM 03/01/07 [Bromofluorobenzene (PID) B]: Passes 65-135 Control Limits Range. [general version]

MJM 03/01/07 : FID surrogates N/A [general version]

BFB - 78-121 %Rec
PID-W
mcs 3/15/52

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV u=use

347085636001.1

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377020 IDF : 1.0
Seqnum : 347085636002.1 File : 059_002 Time : 28-FEB-2007 11:53
Standards: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1483.1	10000	9452	ng	-5	15	u
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	2055.5	450.0	556.7	ng	**24**	15	c+ u
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1159.6	450.0	569.6	ng	**27**	15	c+ u
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5871.4	450.0	595.9	ng	**32**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1502.5	450.0	576.5	ng	**28**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	10170	450.0	580.2	ng	**29**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2599.4	450.0	543.4	ng	**21**	15	c+

MJM 03/01/07 [Trifluorotoluene (FID) A]: Passes 65-135 Control Limits Range. [general version]

MJM 03/01/07 [Bromofluorobenzene (FID) A]: Passes 65-135 Control Limits Range. [general version]

MJM 03/01/07 : PID surrogates are not applicable. [general version]

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV u=use

347085636002.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347085636011 File : 059_011 Time : 28-FEB-2007 23:36
Standards: S5313 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1762.7	450.0	477.4	ng	6	15	
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1016.8	450.0	499.4	ng	11	15	
MTBE	B	347068385001	17-FEB-2007	2836.7	3186.5	150.0	168.5	ng	12	15	
Benzene	B	347068385001	17-FEB-2007	13787	14723	150.0	160.2	ng	7	15	
Toluene	B	347068385001	17-FEB-2007	13248	14313	150.0	162.0	ng	8	15	
Ethylbenzene	B	347068385001	17-FEB-2007	11117	12296	150.0	165.9	ng	11	15	
m,p-Xylenes	B	347068385001	17-FEB-2007	15360	16434	150.0	160.5	ng	7	15	
o-Xylene	B	347068385001	17-FEB-2007	10903	12071	150.0	166.1	ng	11	15	
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	4838.0	450.0	491.1	ng	9	15	
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	8927.7	450.0	509.4	ng	13	15	
MTBE	C	347068385001	17-FEB-2007	1121.2	1003.1	150.0	134.2	ng	-11	15	
Benzene	C	347068385001	17-FEB-2007	3959.3	3524.3	150.0	133.5	ng	-11	15	
Toluene	C	347068385001	17-FEB-2007	3714.8	3347.6	150.0	135.2	ng	-10	15	
Ethylbenzene	C	347068385001	17-FEB-2007	3271.4	3022.4	150.0	138.6	ng	-8	15	
m,p-Xylenes	C	347068385001	17-FEB-2007	4346.4	3908.7	150.0	134.9	ng	-10	15	
o-Xylene	C	347068385001	17-FEB-2007	3123.8	2872.8	150.0	137.9	ng	-8	15	
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1135.0	450.0	435.5	ng	-3	15	
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2174.2	450.0	454.5	ng	1	15	

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347085636014 File : 059_014 Time : 01-MAR-2007 01:29
Standards: S5365 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1586.5	15000	15170	ng	1	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	2171.7	450.0	588.2	ng	**31**	15	c+
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1171.0	450.0	575.2	ng	**28**	15	c+
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5911.8	450.0	600.0	ng	**33**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	10629	450.0	606.4	ng	**35**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1630.2	450.0	625.5	ng	**39**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2705.9	450.0	565.6	ng	**26**	15	c+

MJM 03/01/07 : PID surrogates are not applicable.

MJM 03/01/07 [Trifluorotoluene (FID) A]: Passes 65-135 Control Limits Range.

MJM 03/01/07 [Bromofluorobenzene (FID) A]: Passes 65-135 Control Limits Range.

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV

347085636014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347085636019 File : 059_019 Time : 01-MAR-2007 04:37
Standards: S5313 (500X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1743.5	450.0	472.2	ng	5	15	
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	991.99	450.0	487.2	ng	8	15	
MTBE	B	347068385001	17-FEB-2007	2836.7	3088.9	200.0	217.8	ng	9	15	
Benzene	B	347068385001	17-FEB-2007	13787	15067	200.0	218.6	ng	9	15	
Toluene	B	347068385001	17-FEB-2007	13248	14523	200.0	219.2	ng	10	15	
Ethylbenzene	B	347068385001	17-FEB-2007	11117	12418	200.0	223.4	ng	12	15	
m,p-Xylenes	B	347068385001	17-FEB-2007	15360	16708	200.0	217.6	ng	9	15	
o-Xylene	B	347068385001	17-FEB-2007	10903	12315	200.0	225.9	ng	13	15	
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	4823.1	450.0	489.5	ng	9	15	
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	8716.9	450.0	497.3	ng	11	15	
MTBE	C	347068385001	17-FEB-2007	1121.2	1215.5	200.0	216.8	ng	8	15	
Benzene	C	347068385001	17-FEB-2007	3959.3	3672.6	200.0	185.5	ng	-7	15	
Toluene	C	347068385001	17-FEB-2007	3714.8	3490.5	200.0	187.9	ng	-6	15	
Ethylbenzene	C	347068385001	17-FEB-2007	3271.4	3122.3	200.0	190.9	ng	-5	15	
m,p-Xylenes	C	347068385001	17-FEB-2007	4346.4	4005.6	200.0	184.3	ng	-8	15	
o-Xylene	C	347068385001	17-FEB-2007	3123.8	2963.3	200.0	189.7	ng	-5	15	
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1126.4	450.0	432.2	ng	-4	15	
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2116.0	450.0	442.3	ng	-2	15	

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

347085636019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347085636021 File : 059_021 Time : 01-MAR-2007 05:52
Standards: S5365 (500X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1561.5	20000	19900	ng	0	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	2055.2	450.0	556.6	ng	**24**	15	c+
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1142.6	450.0	561.2	ng	**25**	15	c+
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5764.4	450.0	585.1	ng	**30**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	10275	450.0	586.2	ng	**30**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1634.1	450.0	627.0	ng	**39**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2615.5	450.0	546.7	ng	**21**	15	c+

MJM 03/01/07 [Trifluorotoluene (FID) A]: Passes 65-135 Control Limits Range.

MJM 03/01/07 [Bromofluorobenzene (FID) A]: Passes 65-135 Control Limits Range.

MJM 03/01/07 : PID surrogates are not applicable.

Analyst: MJM Date: 03/01/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV

347085636021

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347068385

Instrument : GC19 Begun : 02/16/07 11:45
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	047_001	X	IB			02/16/07 11:45	1.0	1
002	047_002	X	CCV			02/16/07 12:23	1.0	2 1
003	047_003	CCV/LCS	QC375630	Soil	122230	02/16/07 13:01	1.0	3 1
004	047_004	X	CCV			02/16/07 13:56	1.0	2 1
005	047_005	X	CCV			02/16/07 14:50	1.0	2 1
006	047_006	BLANK	QC375629	Soil	122230	02/16/07 17:01	1.0	1
007	047_007	MS	QC375631	Soil	122230	02/16/07 17:38	1.0	3 1
008	047_008	X	QC375632	Soil	122230	02/16/07 18:16	1.0	3 1
009	047_009	SAMPLE	192731-001	Soil	122230	02/16/07 18:54	1.0	1
010	047_010	SAMPLE	192731-003	Soil	122230	02/16/07 19:31	1.0	1
011	047_011	SAMPLE	192731-004	Soil	122230	02/16/07 20:09	1.0	1
012	047_012	SAMPLE	192731-005	Soil	122230	02/16/07 20:47	1.0	1
013	047_013	SAMPLE	192731-006	Soil	122230	02/16/07 21:24	1.0	1
014	047_014	SAMPLE	192731-007	Soil	122230	02/16/07 22:02	1.0	1
015	047_015	CCV	TVH			02/16/07 22:40	1.0	3 1
016	047_016	CCV	TVH			02/16/07 23:17	1.0	3 1
017	047_017	SAMPLE	192740-006	Soil	122230	02/16/07 23:55	1.0	1
018	047_018	SAMPLE	192740-007	Soil	122230	02/17/07 00:33	1.0	1
019	047_019	SAMPLE	192740-008	Soil	122230	02/17/07 01:10	1.0	1
020	047_020	SAMPLE	192740-009	Soil	122230	02/17/07 01:48	1.0	1
021	047_021	SAMPLE	192770-003	Soil	122230	02/17/07 02:26	1.0	1
022	047_022	SAMPLE	192770-004	Soil	122230	02/17/07 03:03	1.0	1
023	047_023	SAMPLE	192770-005	Soil	122230	02/17/07 03:41	1.0	1
024	047_024	SAMPLE	192770-006	Soil	122230	02/17/07 04:18	1.0	1
025	047_025	MSS	192770-009	Soil	122230	02/17/07 04:56	1.0	1
026	047_026	SAMPLE	192770-010	Soil	122230	02/17/07 05:34	1.0	1
027	047_027	CCV	TVH			02/17/07 06:11	1.0	3 1
028	047_028	CCV	TVH			02/17/07 06:49	1.0	3 1
029	047_029	SAMPLE	192770-011	Soil	122230	02/17/07 07:27	1.0	1
030	047_030	SAMPLE	192770-012	Soil	122230	02/17/07 08:04	1.0	1
031	047_031	SAMPLE	192770-013	Soil	122230	02/17/07 08:42	1.0	1
032	047_032	SAMPLE	192770-014	Soil	122230	02/17/07 09:19	1.0	1
033	047_033	MSD	QC375632	Soil	122230	02/17/07 09:57	1.0	3 1
034	047_034	SAMPLE	192770-010	Soil	122230	02/17/07 11:53	1.0	1
035	047_035	SAMPLE	192770-012	Soil	122230	02/17/07 12:31	1.0	1
036	047_036	SAMPLE	192770-014	Soil	122230	02/17/07 13:09	1.0	1
037	047_037	SAMPLE	192770-010	Soil	122230	02/17/07 13:46	1.0	1
038	047_038	SAMPLE	192770-014	Soil	122230	02/17/07 14:24	1.0	1
039	047_039	CCV	TVH			02/17/07 15:02	1.0	3 1
040	047_040	CCV	TVH			02/17/07 15:39	1.0	3 1
041	047_041	X	IB			02/17/07 16:17	1.0	1
042	047_042	X	IB			02/17/07 16:55	1.0	1
043	047_043	X	ICAL			02/17/07 17:32	1.0	4 1
044	047_044	ICAL	BTXE_1			02/17/07 18:10	1.0	4 1
045	047_045	ICAL	MTBE_1			02/17/07 18:48	1.0	5 1
046	047_046	ICAL	BTXE_2			02/17/07 19:25	1.0	5 1
047	047_047	ICAL	BTXE_3			02/17/07 20:03	1.0	5 1
048	047_048	ICAL	BTXE_4			02/17/07 20:41	1.0	6 1
049	047_049	ICAL	BTXE_5			02/17/07 21:18	1.0	6 1
050	047_050	ICAL	BTXE_6			02/17/07 21:56	1.0	6 1
051	047_051	X	MTBE_7			02/17/07 22:34	1.0	7 1
052	047_052	X	IB			02/17/07 23:11	1.0	1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347068385

Instrument : GC19 Begun : 02/16/07 11:45
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	047_053	X	ICV			02/17/07 23:49	1.0	8 1	
054	047_054	X	ICV			02/18/07 00:27	1.0	8 1	
055	047_055	X	IB			02/18/07 01:04	1.0	1	
056	047_056	X	ICAL			02/18/07 01:42	1.0	4 1	
057	047_057	X	ICAL			02/18/07 02:19	1.0	5 1	
058	047_058	X	ICAL			02/18/07 02:57	1.0	5 1	
059	047_059	X	ICAL			02/18/07 03:35	1.0	5 1	
060	047_060	X	ICAL			02/18/07 04:12	1.0	6 1	
061	047_061	X	ICAL			02/18/07 04:50	1.0	6 1	
062	047_062	X	ICAL			02/18/07 05:28	1.0	6 1	
063	047_063	ICAL	MTBE_7			02/18/07 06:05	1.0	7 1	
064	047_064	X	IB			02/18/07 06:43	1.0	1	
065	047_065	X	ICV			02/18/07 07:20	1.0	8 1	
066	047_066	ICV	MBTXE			02/18/07 07:58	1.0	8 1	

MJM 02/20/07 : Sand used in QC: Lot# EM128974-M104164.

Analyst: MJM Date: 02/20/07 Reviewer: CW Date: 02/20/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5559 5=S5558 6=S5557 7=S4993 8=S5206

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347073972

Instrument : GC19 Begun : 02/20/07 08:52
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	051_001	X	IB			02/20/07 08:52	1.0	1	
002	051_002	ICAL	TFT/BFB_1			02/20/07 09:29	1.0	2	
003	051_003	ICAL	TFT/BFB_2			02/20/07 10:35	1.0	3	
004	051_004	ICAL	TFT/BFB_3			02/20/07 11:12	1.0	4	
005	051_005	ICAL	TFT/BFB_4			02/20/07 11:50	1.0	5	
006	051_006	ICAL	TFT/BFB_5			02/20/07 12:28	1.0	6	
007	051_007	X	IB			02/20/07 13:52	1.0	1	
008	051_008	CCV/LCS	QC375858	Water	122292	02/20/07 14:29	1.0	7 1	
009	051_009	CCV/LCS	QC375859	Water	122292	02/20/07 15:07	1.0	8 1	
010	051_010	BLANK	QC375857	Water	122292	02/20/07 17:21	1.0	1	
011	051_011	MS	QC375860	Water	122292	02/20/07 18:53	1.0	8 1	
012	051_012	MSD	QC375861	Water	122292	02/20/07 19:31	1.0	8 1	
013	051_013	SAMPLE	192712-025	Water	122292	02/20/07 20:09	5.0	1	
014	051_014	SAMPLE	192712-029	Water	122292	02/20/07 20:47	5.0	1	
015	051_015	SAMPLE	192762-001	Water	122292	02/20/07 21:24	1.0	1	
016	051_016	MSS	192799-006	Water	122292	02/20/07 22:02	1.0	1	
017	051_017	SAMPLE	192806-001	Water	122292	02/20/07 22:40	1.0	1	
018	051_018	X	MBTXE			02/20/07 23:17	1.0	7 1	
019	051_019	CCV	MBTXE			02/20/07 23:55	1.0	7 1	
020	051_020	CCV	TVH			02/21/07 00:33	1.0	8 1	
021	051_021	CCV	TVH			02/21/07 01:11	1.0	8 1	
022	051_022	SAMPLE	192806-002	Water	122292	02/21/07 01:48	1.0	1	
023	051_023	SAMPLE	192806-003	Water	122292	02/21/07 02:26	1.0	1	
024	051_024	SAMPLE	192806-004	Water	122292	02/21/07 03:04	1.0	1	
025	051_025	SAMPLE	192806-005	Water	122292	02/21/07 03:41	1.0	1	
026	051_026	CCV	TVH			02/21/07 04:19	1.0	8 1	
027	051_027	CCV	TVH			02/21/07 04:56	1.0	8 1	

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5343 3=S5344 4=S5345 5=S5346 6=S5347 7=S5313 8=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347085636

Instrument : GC19 Begun : 02/28/07 11:16
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	059_001	CCV/LCS	QC377019	Water	122581	02/28/07 11:16	1.0	1 2
002	059_002	CCV/LCS	QC377020	Water	122581	02/28/07 11:53	1.0	3 2
003	059_003	BLANK	QC377018	Water	122581	02/28/07 12:41	1.0	2
004	059_004	MS	QC377021	Water	122581	02/28/07 19:12	1.0	3 2
005	059_005	MSD	QC377022	Water	122581	02/28/07 19:50	1.0	3 2
006	059_006	MSS	193027-002	Water	122581	02/28/07 20:27	1.0	2
007	059_007	SAMPLE	193027-005	Water	122581	02/28/07 21:05	1.0	2
008	059_008	SAMPLE	193027-007	Water	122581	02/28/07 21:43	1.0	2
009	059_009	SAMPLE	193027-008	Water	122581	02/28/07 22:20	1.0	2
010	059_010	SAMPLE	193027-009	Water	122581	02/28/07 22:58	1.0	2
011	059_011	CCV	MBTXE			02/28/07 23:36	1.0	1 2
012	059_012	X	MBTXE			03/01/07 00:13	1.0	1 2
013	059_013	X	TVH			03/01/07 00:51	1.0	3 2
014	059_014	CCV	TVH			03/01/07 01:29	1.0	3 2
015	059_015	SAMPLE	193027-010	Water	122581	03/01/07 02:06	1.0	2
016	059_016	SAMPLE	193027-013	Water	122581	03/01/07 02:44	1.0	2
017	059_017	SAMPLE	193027-014	Water	122581	03/01/07 03:22	1.0	2
018	059_018	SAMPLE	193027-015	Water	122581	03/01/07 03:59	1.0	2
019	059_019	CCV	MBTXE			03/01/07 04:37	1.0	1 2
020	059_020	CCV	MBTXE			03/01/07 05:15	1.0	1 2
021	059_021	CCV	TVH			03/01/07 05:52	1.0	3 2
022	059_022	X	TVH			03/01/07 06:30	1.0	3 2

Analyst: MJM Date: 03/01/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5029 3=S5365

REPORTING SUMMARY FOR 193027 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193027-002	Gasoline C7-C12	GC19	A	02/28/07 20:27
193027-002	MTBE	GC19	B	02/28/07 20:27
193027-002	Benzene	GC19	B	02/28/07 20:27
193027-002	Toluene	GC19	B	02/28/07 20:27
193027-002	Ethylbenzene	GC19	B	02/28/07 20:27
193027-002	Trifluorotoluene (FID)	GC19	A	02/28/07 20:27
193027-002	Bromofluorobenzene (FID)	GC19	A	02/28/07 20:27
193027-002	Trifluorotoluene (PID)	GC19	B	02/28/07 20:27
193027-002	Bromofluorobenzene (PID)	GC19	B	02/28/07 20:27
193027-002	Xylene (total)	GC19	B	02/28/07 20:27
193027-005	Gasoline C7-C12	GC19	A	02/28/07 21:05
193027-005	MTBE	GC19	B	02/28/07 21:05
193027-005	Benzene	GC19	B	02/28/07 21:05
193027-005	Toluene	GC19	B	02/28/07 21:05
193027-005	Ethylbenzene	GC19	B	02/28/07 21:05
193027-005	Trifluorotoluene (FID)	GC19	A	02/28/07 21:05
193027-005	Bromofluorobenzene (FID)	GC19	A	02/28/07 21:05
193027-005	Trifluorotoluene (PID)	GC19	B	02/28/07 21:05
193027-005	Bromofluorobenzene (PID)	GC19	B	02/28/07 21:05
193027-005	Xylene (total)	GC19	B	02/28/07 21:05
193027-007	Gasoline C7-C12	GC19	A	02/28/07 21:43
193027-007	MTBE	GC19	B	02/28/07 21:43
193027-007	Benzene	GC19	B	02/28/07 21:43
193027-007	Toluene	GC19	B	02/28/07 21:43
193027-007	Ethylbenzene	GC19	B	02/28/07 21:43
193027-007	Trifluorotoluene (FID)	GC19	A	02/28/07 21:43
193027-007	Bromofluorobenzene (FID)	GC19	A	02/28/07 21:43
193027-007	Trifluorotoluene (PID)	GC19	B	02/28/07 21:43
193027-007	Bromofluorobenzene (PID)	GC19	B	02/28/07 21:43
193027-007	Xylene (total)	GC19	B	02/28/07 21:43
193027-008	Gasoline C7-C12	GC19	A	02/28/07 22:20
193027-008	Trifluorotoluene (FID)	GC19	A	02/28/07 22:20
193027-008	Bromofluorobenzene (FID)	GC19	A	02/28/07 22:20
193027-009	Gasoline C7-C12	GC19	A	02/28/07 22:58
193027-009	MTBE	GC19	B	02/28/07 22:58
193027-009	Benzene	GC19	B	02/28/07 22:58
193027-009	Toluene	GC19	B	02/28/07 22:58
193027-009	Ethylbenzene	GC19	B	02/28/07 22:58
193027-009	Trifluorotoluene (FID)	GC19	A	02/28/07 22:58
193027-009	Bromofluorobenzene (FID)	GC19	A	02/28/07 22:58
193027-009	Trifluorotoluene (PID)	GC19	B	02/28/07 22:58
193027-009	Bromofluorobenzene (PID)	GC19	B	02/28/07 22:58
193027-009	Xylene (total)	GC19	B	02/28/07 22:58
193027-010	Gasoline C7-C12	GC19	A	03/01/07 02:06
193027-010	MTBE	GC19	B	03/01/07 02:06
193027-010	Benzene	GC19	B	03/01/07 02:06
193027-010	Toluene	GC19	B	03/01/07 02:06
193027-010	Ethylbenzene	GC19	B	03/01/07 02:06
193027-010	Trifluorotoluene (FID)	GC19	A	03/01/07 02:06

REPORTING SUMMARY FOR 193027 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193027-010	Bromofluorobenzene (FID)	GC19	A	03/01/07 02:06
193027-010	Trifluorotoluene (PID)	GC19	B	03/01/07 02:06
193027-010	Bromofluorobenzene (PID)	GC19	B	03/01/07 02:06
193027-010	Xylene (total)	GC19	B	03/01/07 02:06
193027-013	Gasoline C7-C12	GC19	A	03/01/07 02:44
193027-013	MTBE	GC19	B	03/01/07 02:44
193027-013	Benzene	GC19	B	03/01/07 02:44
193027-013	Toluene	GC19	B	03/01/07 02:44
193027-013	Ethylbenzene	GC19	B	03/01/07 02:44
193027-013	Trifluorotoluene (FID)	GC19	A	03/01/07 02:44
193027-013	Bromofluorobenzene (FID)	GC19	A	03/01/07 02:44
193027-013	Trifluorotoluene (PID)	GC19	B	03/01/07 02:44
193027-013	Bromofluorobenzene (PID)	GC19	B	03/01/07 02:44
193027-013	Xylene (total)	GC19	B	03/01/07 02:44
193027-014	Gasoline C7-C12	GC19	A	03/01/07 03:22
193027-014	MTBE	GC19	B	03/01/07 03:22
193027-014	Benzene	GC19	B	03/01/07 03:22
193027-014	Toluene	GC19	B	03/01/07 03:22
193027-014	Ethylbenzene	GC19	B	03/01/07 03:22
193027-014	Trifluorotoluene (FID)	GC19	A	03/01/07 03:22
193027-014	Bromofluorobenzene (FID)	GC19	A	03/01/07 03:22
193027-014	Trifluorotoluene (PID)	GC19	B	03/01/07 03:22
193027-014	Bromofluorobenzene (PID)	GC19	B	03/01/07 03:22
193027-014	Xylene (total)	GC19	B	03/01/07 03:22
193027-015	Gasoline C7-C12	GC19	A	03/01/07 03:59
193027-015	MTBE	GC19	B	03/01/07 03:59
193027-015	Benzene	GC19	B	03/01/07 03:59
193027-015	Toluene	GC19	B	03/01/07 03:59
193027-015	Ethylbenzene	GC19	B	03/01/07 03:59
193027-015	Trifluorotoluene (FID)	GC19	A	03/01/07 03:59
193027-015	Bromofluorobenzene (FID)	GC19	A	03/01/07 03:59
193027-015	Trifluorotoluene (PID)	GC19	B	03/01/07 03:59
193027-015	Bromofluorobenzene (PID)	GC19	B	03/01/07 03:59
193027-015	Xylene (total)	GC19	B	03/01/07 03:59
QC377018	Gasoline C7-C12	GC19	A	02/28/07 12:41
QC377018	MTBE	GC19	B	02/28/07 12:41
QC377018	Benzene	GC19	B	02/28/07 12:41
QC377018	Toluene	GC19	B	02/28/07 12:41
QC377018	Ethylbenzene	GC19	B	02/28/07 12:41
QC377018	Trifluorotoluene (FID)	GC19	A	02/28/07 12:41
QC377018	Bromofluorobenzene (FID)	GC19	A	02/28/07 12:41
QC377018	Trifluorotoluene (PID)	GC19	B	02/28/07 12:41
QC377018	Bromofluorobenzene (PID)	GC19	B	02/28/07 12:41
QC377018	Xylene (total)	GC19	B	02/28/07 12:41
QC377019	MTBE	GC19	B	02/28/07 11:16
QC377019	Benzene	GC19	B	02/28/07 11:16
QC377019	Toluene	GC19	B	02/28/07 11:16
QC377019	Ethylbenzene	GC19	B	02/28/07 11:16
QC377019	Trifluorotoluene (PID)	GC19	B	02/28/07 11:16

REPORTING SUMMARY FOR 193027 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377019	Bromofluorobenzene (PID)	GC19	B	02/28/07 11:16
QC377020	Gasoline C7-C12	GC19	A	02/28/07 11:53
QC377020	Trifluorotoluene (FID)	GC19	A	02/28/07 11:53
QC377020	Bromofluorobenzene (FID)	GC19	A	02/28/07 11:53
QC377021	Gasoline C7-C12	GC19	A	02/28/07 19:12
QC377021	Trifluorotoluene (FID)	GC19	A	02/28/07 19:12
QC377021	Bromofluorobenzene (FID)	GC19	A	02/28/07 19:12
QC377022	Gasoline C7-C12	GC19	A	02/28/07 19:50
QC377022	Trifluorotoluene (FID)	GC19	A	02/28/07 19:50
QC377022	Bromofluorobenzene (FID)	GC19	A	02/28/07 19:50

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/21/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/21/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/27/07
Units:	ug/L	Received:	02/28/07
Diln Fac:	1.000	Prepared:	03/02/07
Batch#:	122652		

Field ID: 1065PZ7A
Type: SAMPLE
Lab ID: 193027-002
Analyzed: 03/04/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID: DUP0227072B
Type: SAMPLE
Lab ID: 193027-005
Analyzed: 03/05/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	84	65-135

Field ID: LF10GW03
Type: SAMPLE
Lab ID: 193027-007
Analyzed: 03/05/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	82	65-135

Field ID: BB3GW100
Type: SAMPLE
Lab ID: 193027-008
Analyzed: 03/05/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

31.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/27/07
Units:	ug/L	Received:	02/28/07
Diln Fac:	1.000	Prepared:	03/02/07
Batch#:	122652		

Field ID: FM14EX07GW101 Analyzed: 03/05/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 193027-009

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID: FM14EX07GW102 Analyzed: 03/05/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 193027-010

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

Field ID: BB1PZ100 Analyzed: 03/04/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 193027-011

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	79	65-135

Field ID: BB1PZ101 Analyzed: 03/04/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 193027-012

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	76	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/27/07
Units:	ug/L	Received:	02/28/07
Diln Fac:	1.000	Prepared:	03/02/07
Batch#:	122652		

Field ID:	LF10SP01	Analyzed:	03/04/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	193027-013		

Analyte	Result	RL
Diesel C12-C24	22,000 Y	50
Motor Oil C24-C36	14,000 Y	300

Surrogate	%REC	Limits
Hexacosane	66	65-135

Field ID:	LF10GW01	Analyzed:	03/04/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	193027-014		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	79	65-135

Field ID:	LF10GW02	Analyzed:	03/04/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	193027-015		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

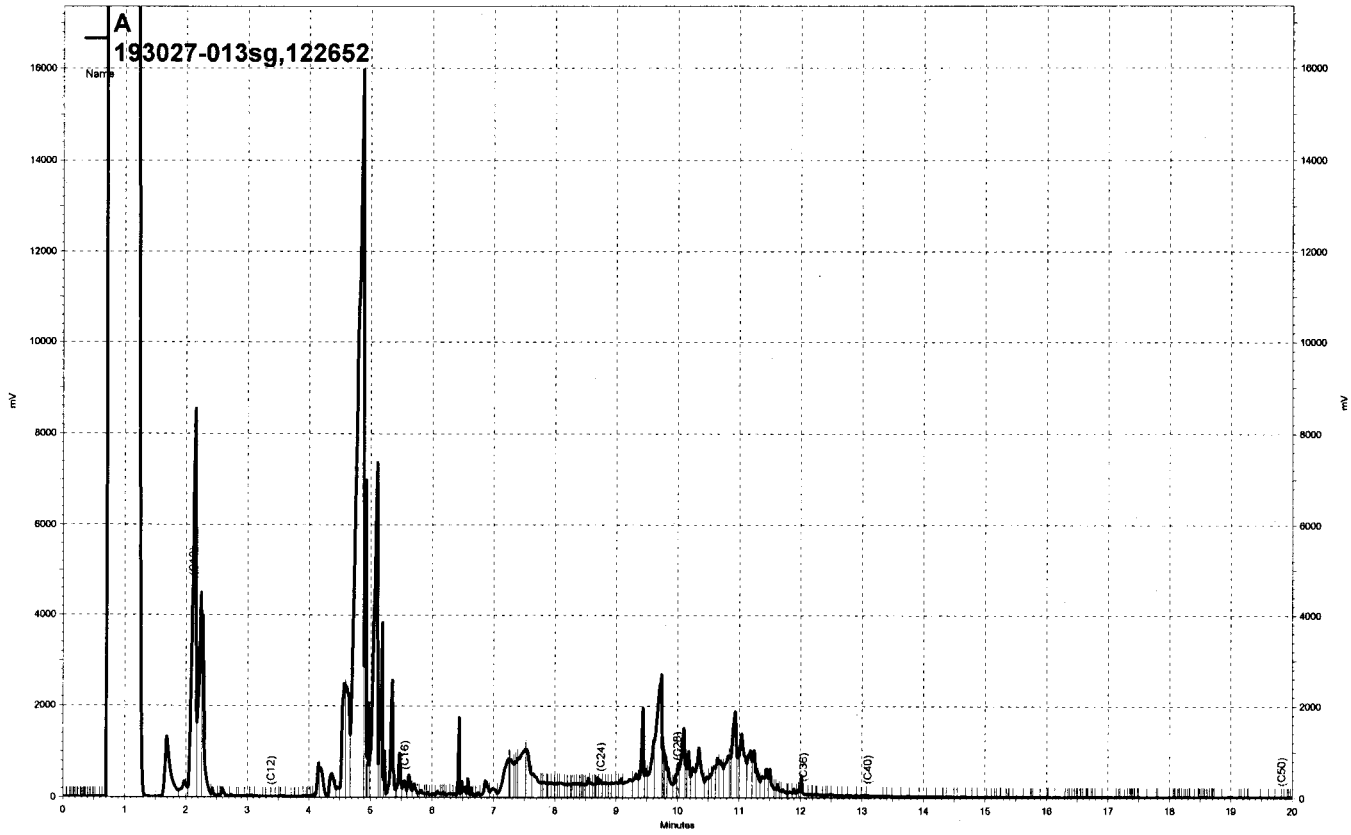
Type:	BLANK	Analyzed:	03/04/07
Lab ID:	QC377307	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	85	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

31.0



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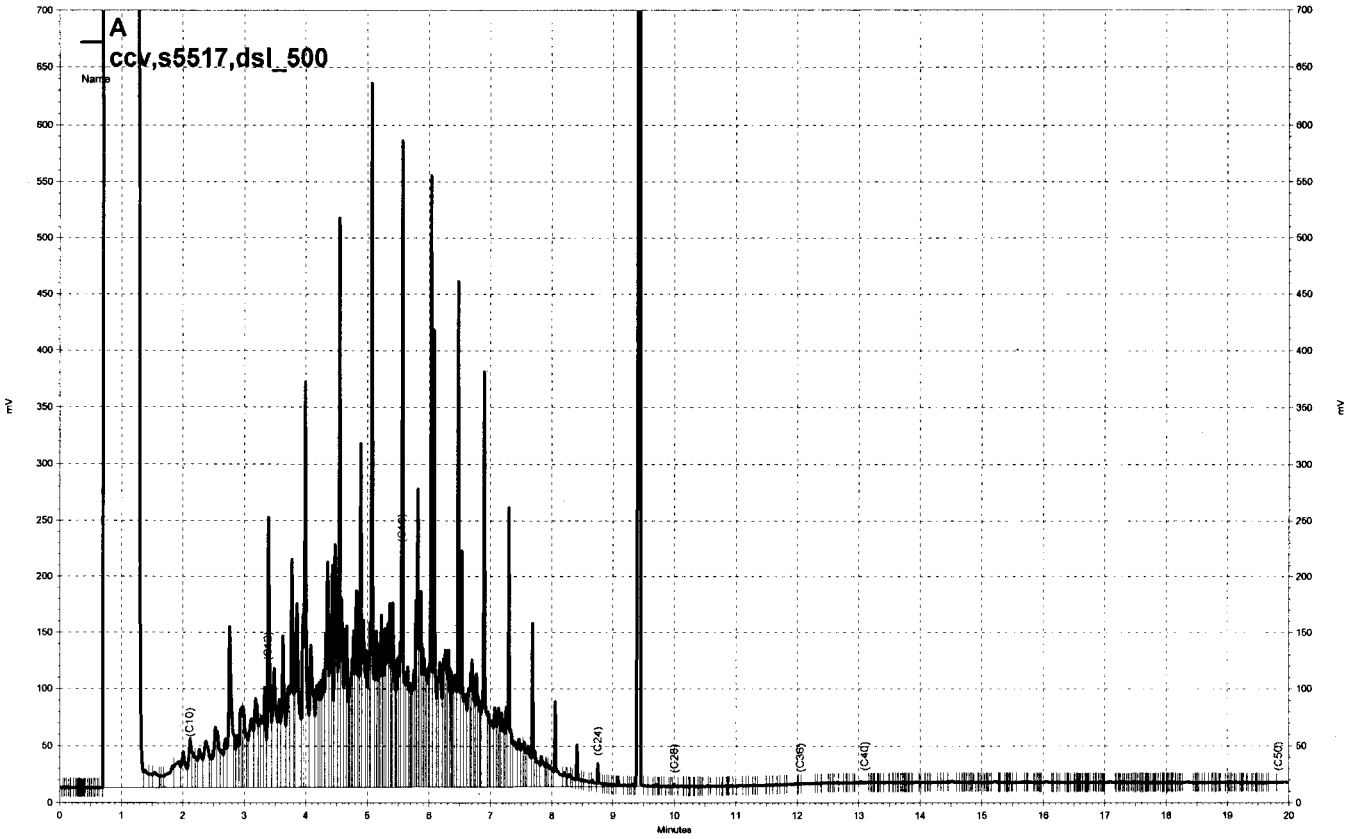
LF10SP01



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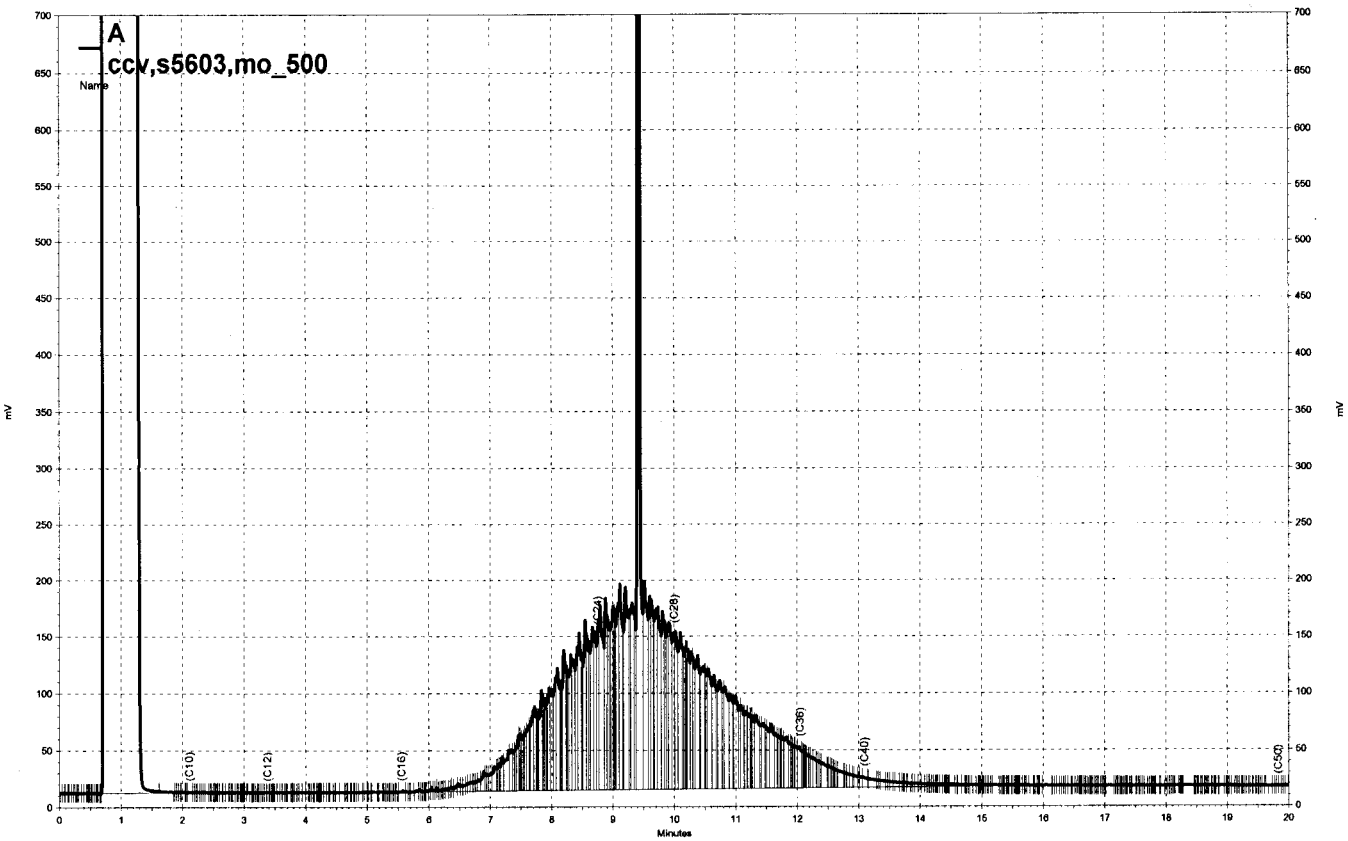
Diesel



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Motor Oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377308	Batch#:	122652
Matrix:	Water	Prepared:	03/02/07
Units:	ug/L	Analyzed:	03/04/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,459	98	65-135

Surrogate	%REC	Limits
Hexacosane	97	65-135

32.0

00051

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ7A	Batch#:	122652
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/04/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC377309

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<10.97	2,500	2,119	85	65-135

Surrogate	%REC	Limits
Hexacosane	83	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC377314

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,344	94	65-135	10	35

Surrogate	%REC	Limits
Hexacosane	88	65-135

RPD= Relative Percent Difference

33.0

00052

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date: 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117062421001
Units : mg/L

Name : Hexacosane GC11A
Date : 12-FEB-2007 17:01
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a017	117062421017	HEX_5	12-FEB-2007 17:01	S4639
L2	043a018	117062421018	HEX_10	12-FEB-2007 17:29	S4640
L3	043a019	117062421019	HEX_25	12-FEB-2007 17:57	S4641
L4	043a020	117062421020	HEX_50	12-FEB-2007 18:25	S5402
L5	043a021	117062421021	HEX_100	12-FEB-2007 18:53	S4644
L6	043a022	117062421022	HEX_200	12-FEB-2007 19:21	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	70962	70508	90970	83494	73759	68006	AVRG		1.31E-5		76283	12	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00055

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_500 IDF : 1.0
Seqnum : 117091324003 File : 063a003 Time : 04-MAR-2007 11:00
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	56810	500.0	487.6	mg/L	-2	15	
Hexacosane	117062421001	12-FEB-2007	76283	72557	50.00	47.56	mg/L	-5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117091324005 File : 063a005 Time : 04-MAR-2007 11:56
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	42225	500.0	509.3	mg/L	2	15	
Hexacosane	117062421001	12-FEB-2007	76283	71382	50.00	46.79	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_1000 IDF : 1.0
Seqnum : 117091324018 File : 063a018 Time : 04-MAR-2007 18:20
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	57708	1000	990.7	mg/L	-1	15	
Hexacosane	117062421001	12-FEB-2007	76283	73722	50.00	48.32	mg/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117091324019 File : 063a019 Time : 04-MAR-2007 18:48
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	43808	500.0	528.4	mg/L	6	15	
Hexacosane	117062421001	12-FEB-2007	76283	74301	50.00	48.70	mg/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117091324035 File : 063a035 Time : 05-MAR-2007 02:13
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	42135	500.0	508.2	mg/L	2	15	
Hexacosane	117062421001	12-FEB-2007	76283	74796	50.00	49.03	mg/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_250 IDF : 1.0
Seqnum : 117091324036 File : 063a036 Time : 05-MAR-2007 02:41
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	67239	250.0	288.6	mg/L	15	15	
Hexacosane	117062421001	12-FEB-2007	76283	91304	50.00	59.85	mg/L	**20**	15	c+

CW 03/06/07 : Hexacosane high is diesel standard. Passes in previous motor oil standard.

+=high bias c=CCV

117091324036

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_250 IDF : 1.0
Seqnum : 117091324046 File : 063a046 Time : 05-MAR-2007 07:46
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	58077	250.0	249.3	mg/L	0	15	
Hexacosane	117062421001	12-FEB-2007	76283	71417	50.00	46.81	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117091324047 File : 063a047 Time : 05-MAR-2007 08:14
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	43515	500.0	524.8	mg/L	5	15	
Hexacosane	117062421001	12-FEB-2007	76283	74735	50.00	48.98	mg/L	-2	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042a001	X	IB			02/11/07 16:08	1.0	
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1
003	042a003	X	MO_500			02/11/07 17:03	1.0	2
004	042a004	X	MO_500			02/11/07 17:47	1.0	2
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1
008	042a008	X	IB			02/11/07 20:45	1.0	
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8
015	042a015	IB	CALIB			02/12/07 00:01	1.0	
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9
018	042a018	X	IB			02/12/07 01:24	1.0	
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117062421

Instrument : GC11A
Method : EPA 8015B

Begun : 02/12/07 08:21
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043a001	X	PRIMER				02/12/07 08:21	1.0		
002	043a002	X	IB				02/12/07 08:49	1.0		
003	043a003	XCCV	DSL_500				02/12/07 09:50	1.0	1	
004	043a004	CCV	MO_500				02/12/07 10:19	1.0	2	
005	043a005	CCV	DSL_500				02/12/07 10:55	1.0	1	
006	043a006	SAMPLE	192598-010	S	Soil	121974	02/12/07 11:23	1.0		
007	043a007	SAMPLE	192483-002	S	WET DI Leachate	121995	02/12/07 11:51	1.0		
008	043a008	SAMPLE	192483-003	S	WET DI Leachate	121995	02/12/07 12:19	1.0		
009	043a009	SAMPLE	192483-004		WET DI Leachate	121995	02/12/07 12:47	1.0		
010	043a010	SAMPLE	192483-004	S	WET DI Leachate	121995	02/12/07 13:14	1.0		
011	043a011	SAMPLE	192484-007	S	WET DI Leachate	121995	02/12/07 13:42	1.0		
012	043a012	SAMPLE	192484-008	S	WET DI Leachate	121995	02/12/07 14:10	1.0		
013	043a013	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 14:38	1.0		
014	043a014	CCV	MO_500				02/12/07 15:06	1.0	2	
015	043a015	CCV	DSL_1000				02/12/07 15:33	1.0	3	
016	043a016	IB	CALIB				02/12/07 16:34	1.0		
017	043a017	ICAL	HEX_5				02/12/07 17:01	1.0	4	
018	043a018	ICAL	HEX_10				02/12/07 17:29	1.0	5	
019	043a019	ICAL	HEX_25				02/12/07 17:57	1.0	6	
020	043a020	ICAL	HEX_50				02/12/07 18:25	1.0	7	
021	043a021	ICAL	HEX_100				02/12/07 18:53	1.0	8	
022	043a022	ICAL	HEX_200				02/12/07 19:21	1.0	9	
023	043a023	IB	CALIB				02/12/07 19:49	1.0		
024	043a024	XICAL	HEX_25				02/12/07 20:17	1.0	6	
025	043a025	XICAL	HEX_50				02/12/07 20:45	1.0	7	
026	043a026	IB	CALIB				02/12/07 21:13	1.0		
027	043a027	CCV	MO_500				02/12/07 21:41	1.0	2	
028	043a028	CCV	DSL_1000				02/12/07 22:09	1.0	3	
029	043a029	CCV	MO_500				02/12/07 22:37	1.0	2	
030	043a030	CCV	DSL_1000				02/12/07 23:06	1.0	3	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4639 5=S4640 6=S4641 7=S5402 8=S4644 9=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117091324

Instrument : GC11A
Method : EPA 8015B

Begun : 03/04/07 10:04
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	063a001	X	PRIMER				03/04/07 10:04	1.0	
002	063a002	X	IB				03/04/07 10:32	1.0	
003	063a003	CCV	DSL_500				03/04/07 11:00	1.0	1
004	063a004	X	MO_500				03/04/07 11:28	1.0	2
005	063a005	CCV	MO_500				03/04/07 11:56	1.0	2
006	063a006	BLANK	QC377307	S	Water	122652	03/04/07 12:47	1.0	
007	063a007	LCS	QC377308	S	Water	122652	03/04/07 13:15	1.0	
008	063a008	MSS	193027-002	S	Water	122652	03/04/07 13:43	1.0	
009	063a009	MS	QC377309	S	Water	122652	03/04/07 14:10	1.0	
010	063a010	MSD	QC377314	S	Water	122652	03/04/07 14:38	1.0	
011	063a011	X	IB				03/04/07 15:06	1.0	
012	063a012	SAMPLE	193016-001	S	Water	122652	03/04/07 15:33	1.0	
013	063a013	SAMPLE	193016-002	S	Water	122652	03/04/07 16:01	1.0	
014	063a014	SAMPLE	193017-001	S	Water	122652	03/04/07 16:29	1.0	
015	063a015	SAMPLE	193017-002	S	Water	122652	03/04/07 16:57	1.0	
016	063a016	SAMPLE	193019-004	S	Water	122652	03/04/07 17:25	1.0	
017	063a017	X	IB				03/04/07 17:52	1.0	
018	063a018	CCV	DSL_1000				03/04/07 18:20	1.0	3
019	063a019	CCV	MO_500				03/04/07 18:48	1.0	2
020	063a020	X	CCV				03/04/07 19:16	1.0	3
021	063a021	X	CCV				03/04/07 19:43	1.0	2
022	063a022	SAMPLE	193067-005	S	Water	122652	03/04/07 20:11	1.0	
023	063a023	SAMPLE	193047-002	S	Water	122652	03/04/07 20:39	1.0	
024	063a024	SAMPLE	193047-001	S	Water	122652	03/04/07 21:07	1.0	
025	063a025	SAMPLE	193027-015	S	Water	122652	03/04/07 21:35	1.0	
026	063a026	SAMPLE	193027-014	S	Water	122652	03/04/07 22:03	1.0	
027	063a027	X	IB				03/04/07 22:31	1.0	
028	063a028	SAMPLE	193027-013	S	Water	122652	03/04/07 22:59	1.0	
029	063a029	SAMPLE	193027-012	S	Water	122652	03/04/07 23:26	1.0	
030	063a030	SAMPLE	193027-011	S	Water	122652	03/04/07 23:54	1.0	
031	063a031	SAMPLE	193027-010	S	Water	122652	03/05/07 00:22	1.0	
032	063a032	SAMPLE	193027-009	S	Water	122652	03/05/07 00:50	1.0	
033	063a033	X	IB				03/05/07 01:18	1.0	
034	063a034	X	DSL_250				03/05/07 01:45	1.0	4
035	063a035	CCV	MO_500				03/05/07 02:13	1.0	2
036	063a036	CCV	DSL_250				03/05/07 02:41	1.0	4
037	063a037	X	CCV				03/05/07 03:09	1.0	2
038	063a038	SAMPLE	193027-008	S	Water	122652	03/05/07 03:37	1.0	
039	063a039	SAMPLE	193027-007	S	Water	122652	03/05/07 04:05	1.0	
040	063a040	SAMPLE	193027-005	S	Water	122652	03/05/07 04:33	1.0	
041	063a041	SAMPLE	193074-031		Soil	122642	03/05/07 05:01	1.0	
042	063a042	SAMPLE	193074-032		Soil	122642	03/05/07 05:29	1.0	
043	063a043	SAMPLE	193076-001		Soil	122642	03/05/07 05:57	5.0	
044	063a044	X	IB				03/05/07 06:25	1.0	
045	063a045	X	IB				03/05/07 07:18	1.0	
046	063a046	CCV	DSL_250				03/05/07 07:46	1.0	4
047	063a047	CCV	MO_500				03/05/07 08:14	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

REPORTING SUMMARY FOR 193027 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193027-002	GC11A	03/04/07 13:43	1.0	+	+	+	
193027-005	GC11A	03/05/07 04:33	1.0	+	+	+	
193027-007	GC11A	03/05/07 04:05	1.0	+	+	+	
193027-008	GC11A	03/05/07 03:37	1.0	+	+	+	
193027-009	GC11A	03/05/07 00:50	1.0	+	+	+	
193027-010	GC11A	03/05/07 00:22	1.0	+	+	+	
193027-011	GC11A	03/04/07 23:54	1.0	+	+	+	
193027-012	GC11A	03/04/07 23:26	1.0	+	+	+	
193027-013	GC11A	03/04/07 22:59	1.0	+	+	+	
193027-014	GC11A	03/04/07 22:03	1.0	+	+	+	
193027-015	GC11A	03/04/07 21:35	1.0	+	+	+	
QC377307	GC11A	03/04/07 12:47	1.0	+	+	+	
QC377308	GC11A	03/04/07 13:15	1.0	+		+	
QC377309	GC11A	03/04/07 14:10	1.0	+		+	
QC377314	GC11A	03/04/07 14:38	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 122652
Started By : SFL
Method : 3520C
Spike #1 ID: S5545

Prep Date : 02-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: SFL
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193016-001		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193016-002		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193017-001		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193017-002		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193019-004		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193027-002		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	mss
193027-005		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-007		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-008		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-009		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-010		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-011		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-012		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-013		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-014		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193027-015		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193047-001		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193047-002		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
193067-005		Water	500	2.5	1	0.005	8	.5			3630C	TEH	
QC377307	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC377308	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC377309	MS	Water	500	2.5	1	0.005	8	.5	.5		3630C	TEH	
QC377314	MSD	Water	500	2.5	1	0.005	8	.5	.5		3630C	TEH	

Analyst: ATL Date: 03/06/07 Reviewer: CP Date: 03/06/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

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LIMS Batch No: 122652
LIMS Analysis: TEH
Extracted by: SFL
Date Extracted: 3/2/07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☑ mod. EPA 3520 cont. L/L
☐ _____

Cleanup Method (if needed):
☑ EPA 3630 Silica Gel
☐ Other _____

	Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
	193016-001 B	500	8	2.5	X	
	002					
	193017-001					
	002					POSS. SHARPIE CONTAMINATION. SAMPLE CONC. BLUE
5	193019-004					
	193027-002 X					MSS
	005 G					
	07 F					
	08					
10	09					
	10 G					
	11 F					
	12 F					
	13 G					SAMPLE CONC. DARK
15	14 F					
	15 F					
	193047-001 B					
	02 B					
	193067-005 A					
20	MB BC 377307		N/A			
LCS	~~BC~~ KR 3/2 8					
MS	~~BSD~~ KR 3/2 9 I		8		✓	
	MSD 14 I					
						3/3/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	SS545A	3/2/07 SFL
0.5 mL of TEH_SP was added to all spikes	SS627A	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☑ Samples were continually extracted about 450 mL of CH_2Cl_2	EM47010	
Extraction Start Time:	1255 / 1440	
Extraction End Time:	0735 / 0840	SFL 3/3/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM4411162 0	
Concentrated to volumes as noted above	✓	

3/2/07
Extraction Chemist Date

Contined from Page 1
Continued on Page

3/4/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: SFL
Cleanup Date: 3/3/07

Benchbook # **BK 2446**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
MB QC377307	122652	1.0	1.0	
LCS 08				
MS 09				
MSD 14				
193016-001				
002				
193017-001				
002				
193019-004				
193027-002				MSS
05				
07				
08				
09				
10				
11				
12				
13				
14				
15				
193047-001				
02				
193047-005 SFL 3/3/07				

3/3/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	SFL 3/3/07
☒ Extracts were cleaned up using 1.0 g cartridges	CP8243	
Extracts were eluted with 40 mL CH_2Cl_2	EM 47010	
Concentrated to volumes as noted above ✓		

3/3/07
Extraction Chemist / Date

Continued from page ___
Continued on page 1

3/4/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/21/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0227071A	Batch#:	122702
Lab ID:	193027-016	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Analyzed:	03/05/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377511	Batch#:	122702
Matrix:	Water	Analyzed:	03/05/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	96	88-110
Bromofluorobenzene	87	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122702
Units:	ug/L	Analyzed:	03/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC377512

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.75	119	65-135
Benzene	25.00	25.62	102	65-135
Trichloroethene	25.00	24.43	98	65-135
Toluene	25.00	23.89	96	65-135
Chlorobenzene	25.00	23.65	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	90	86-115

Type: BSD Lab ID: QC377513

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.93	112	65-135	6	35
Benzene	25.00	25.70	103	65-135	0	35
Trichloroethene	25.00	24.38	98	65-135	0	35
Toluene	25.00	24.50	98	65-135	2	35
Chlorobenzene	25.00	23.20	93	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-123
1,2-Dichloroethane-d4	91	76-114
Toluene-d8	95	88-110
Bromofluorobenzene	87	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193027 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477017193001 File : hac01 Time : 11-JAN-2007 22:33

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8155	25.58	
75	30.00% - 60.00% of mass 95	15166	47.58	
95		31878		
96	5.00% - 9.00% of mass 95	2033	6.38	
173	< 2.00% of mass 174	110	0.60	
174	> 50.00% and < 100.00% of mass 95	18202	57.10	
175	5.00% - 9.00% of mass 174	1444	7.93	
176	> 95.00% and < 101.00% of mass 174	18013	98.96	
177	5.00% - 9.00% of mass 176	1143	6.35	

Analyst: TEW Date: 01/12/07 Reviewer: LW Date: 01/12/07

477017193001

CURTIS & TOMPKINS BFB TUNE FOR 193027 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477092859002 File : hc502 Time : 05-MAR-2007 12:07

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	19344	28.45	
75	30.00% - 60.00% of mass 95	37522	55.19	
95		67986		
96	5.00% - 9.00% of mass 95	4342	6.39	
173	< 2.00% of mass 174	114	0.31	
174	> 50.00% and < 100.00% of mass 95	37061	54.51	
175	5.00% - 9.00% of mass 174	2603	7.02	
176	> 95.00% and < 101.00% of mass 174	35445	95.64	
177	5.00% - 9.00% of mass 176	2666	7.52	

Analyst: TEW Date: 03/05/07 Reviewer: SJD Date: 03/05/07

477092859002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 MSVOA Water: EPA 8260B

Inst : MSVOA08
Calnum: 477017193004
Units : ug/L

Name : 826GOX8
Date : 12-JAN-2007 00:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hac04	477017193004	0.25/0.5PPB	12-JAN-2007 00:23	S5152 (1000000X), S5170 (2000000X), S4713 (2000000X), S5079 (5000X)
L2	hac05	477017193005	0.5/1PPB	12-JAN-2007 01:01	S5152 (500000X), S5170 (1000000X), S4713 (1000000X), S5079 (5000X)
L3	hac06	477017193006	2PPB	12-JAN-2007 01:38	S5152 (250000X), S5170 (250000X), S4713 (500000X), S5079 (5000X)
L4	hac07	477017193007	5PPB	12-JAN-2007 02:15	S5152 (100000X), S5170 (100000X), S4713 (200000X), S5079 (5000X)
L5	hac08	477017193008	10PPB	12-JAN-2007 02:52	S5152 (50000X), S5170 (50000X), S4713 (100000X), S5079 (5000X)
L6	hac09	477017193009	20PPB	12-JAN-2007 03:29	S5152 (25000X), S5170 (25000X), S4713 (50000X), S5079 (5000X)
L7	hac10	477017193010	50PPB	12-JAN-2007 04:06	S5152 (10000X), S5170 (10000X), S4713 (20000X), S5079 (5000X)
L8	hac11	477017193011	75PPB	12-JAN-2007 04:43	S5152 (6667X), S5170 (6667X), S4713 (13330X), S5079 (5000X)
L9	hac12	477017193012	100PPB	12-JAN-2007 05:20	S5152 (5000X), S5170 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8806m	0.8058m	0.9504m	0.8173m	0.8968	0.8626	0.8204	0.7838	AVRG		1.17343		0.8522	7	15	0.10	0.99	
Vinyl Chloride	0.6275m	0.5395m	0.5830m	0.7172m	0.6221m	0.6854m	0.6979	0.6718	0.6304	AVRG		1.55851		0.6416	9	15	0.050	0.99	
Bromomethane		0.1923m	0.1603m	0.1682m	0.2089m	0.2466m	0.2531	0.2856	0.2855	QUAD	1.15385	3.95679	-0.01856	0.2251	0.999	15	0.050	0.99	
Chloroethane		0.2660m	0.2863m	0.3706m	0.3185m	0.3398	0.3516	0.3444	0.3233	AVRG		3.07633		0.3251	11	15	0.050	0.99	
Acetone				0.2780	0.3176	0.2564	0.2241	0.2901	0.2110	AVRG		3.80409		0.2629	15	15	0.050	0.99	
1,1-Dichloroethene		0.3208m	0.2726	0.2882	0.2962	0.2976	0.2927	0.3177	0.3169	AVRG		3.32984		0.3003	6	15	0.050	0.99	
Methylene Chloride			0.4606m	0.4829	0.4669	0.4651	0.4434m	0.4553	0.4293	AVRG		2.18504		0.4577	4	15	0.050	0.99	
Carbon Disulfide		1.5636	1.4603m	1.6680	1.5942	1.6172	1.4664	1.6998	1.6542	AVRG		0.62875		1.5905	6	15	0.050	0.99	
MTBE		1.5665m	1.3935	1.6422	1.6230	1.6527	1.5561	1.6054	1.4739	AVRG		0.63932		1.5642	6	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3866	0.3437	0.4016	0.4022	0.3921	0.3698	0.4047	0.3884	AVRG		2.58975		0.3861	5	15	0.050	0.99	
Vinyl Acetate			1.1636	1.0235	1.2109	1.2448	1.1327	1.1680		AVRG		0.86411		1.1573	7	15	0.050	0.99	
1,1-Dichloroethane		0.9673	0.9269	1.0715	1.0196	1.0222	0.9504	0.9804	0.8882	AVRG		1.02216		0.9783	6	15	0.10	0.99	
2-Butanone			0.3171m	0.3679	0.3908	0.3539	0.3240	0.3624	0.3060	AVRG		2.89012		0.3460	9	15	0.050	0.99	
cis-1,2-Dichloroethene		0.4464	0.4142	0.4778	0.4395	0.4330	0.4275	0.4314	0.4046	AVRG		2.30269		0.4343	5	15	0.050	0.99	
Chloroform		1.0950	0.7997	0.9241	0.8720	0.8804	0.8290	0.8293	0.7549	AVRG		1.14542		0.8730	12	15	0.050	0.99	
1,1,1-Trichloroethane		0.6184	0.5331	0.6062	0.6076	0.6067	0.5642	0.6396	0.6009	AVRG		1.67477		0.5971	6	15	0.050	0.99	
Carbon Tetrachloride		0.2395	0.1751	0.2103	0.2086	0.2060	0.2000	0.2284	0.2291	AVRG		4.71409		0.2121	10	15	0.050	0.99	
1,2-Dichloroethane		0.4006	0.3435	0.4069	0.3980	0.3982	0.3892	0.3820	0.3571	AVRG		2.60133		0.3844	6	15	0.050	0.99	
Benzene		0.7419	0.6900	0.7593	0.7475	0.7363	0.6900	0.6831	0.6553	AVRG		1.40264		0.7129	5	15	0.050	0.99	
Trichloroethene		0.1932	0.1805	0.1980	0.1893	0.1916	0.1801	0.1987	0.1887	AVRG		5.26322		0.1900	4	15	0.050	0.99	
1,2-Dichloropropane		0.2278	0.2153m	0.2530	0.2476	0.2558	0.2478	0.2412m	0.2362	AVRG		4.15663		0.2406	6	15	0.050	0.99	
Bromodichloromethane		0.2582	0.2462	0.2933	0.3009	0.2998	0.3081	0.2935	0.2847	AVRG		3.50168		0.2856	8	15	0.050	0.99	
4-Methyl-2-Pentanone			0.2865	0.3244	0.3466	0.3477	0.3362	0.3408	0.3180	AVRG		3.04331		0.3286	7	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3376	0.3073	0.3552	0.3609	0.3637	0.3588	0.3466	0.3412	AVRG		2.88676		0.3464	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4933	0.4296	0.4822	0.4536	0.4388	0.4227	0.4333	0.4107	AVRG		2.24464		0.4455	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.3087	0.3020	0.3642	0.3613	0.3458	0.3515	0.3361	0.3318	AVRG		2.96140		0.3377	7	15	0.050	0.99	
1,1,2-Trichloroethane		0.0722	0.0914	0.1106	0.1093	0.1047	0.1031	0.1011	0.0953	AVRG		10.1558		0.0985	13	15	0.050	0.99	
2-Hexanone			0.2338	0.2817	0.3151	0.2899	0.2685	0.2979	0.2668	AVRG		3.58278		0.2791	9	15	0.050	0.99	
Tetrachloroethene		0.1641	0.1213	0.1398	0.1281	0.1349	0.1240	0.1485	0.1478	AVRG		7.21771		0.1385	10	15	0.050	0.99	
Dibromochloromethane		0.2079	0.2087	0.2432	0.2413	0.2408	0.2460	0.2448	0.2421	AVRG		4.26720		0.2343	7	15	0.050	0.99	
Chlorobenzene		0.6262	0.5700	0.6463	0.6150	0.5858	0.5456	0.5632	0.5499	AVRG		1.70146		0.5877	6	15	0.30	0.99	
Ethylbenzene		1.1160	1.0891	1.1934	1.1053	1.0926	0.9722	1.0033	0.9821	AVRG		0.93523		1.0693	7	15	0.050	0.99	
m,p-Xylenes	0.3420	0.3961	0.3798	0.4233	0.3822	0.3958	0.3373	0.3443	0.3191	AVRG		2.71100		0.3689	9	15	0.050	0.99	
o-Xylene		0.3921	0.3623	0.4108	0.3856	0.3870	0.3502	0.3563	0.3369	AVRG		2.68366		0.3726	7	15	0.050	0.99	
Styrene		0.6194	0.6059	0.7032	0.6766	0.7020	0.6317	0.6324	0.5918	AVRG		1.54948		0.6454	7	15	0.050	0.99	
Bromoform		0.1375	0.1129	0.1338	0.1332	0.1350	0.1329	0.1356	0.1369	AVRG		7.56310		0.1322	6	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.7116	0.7269	0.8660	0.8562	0.8336	0.7908	0.7637	0.7685	AVRG		1.26635		0.7897	7	15	0.30	0.99	
Dibromofluoromethane	0.8849	0.9036	0.8935	0.9312	0.9037	0.9131	0.8911	0.8864	0.8527	AVRG		1.11659		0.8956	2	15	0.050	0.99	
1,2-Dichloroethane-d4	0.6018	0.6166	0.6200	0.6400	0.6236	0.6341	0.6139	0.5597	0.5498	AVRG		1.64845		0.6066	5	15	0.050	0.99	
Toluene-d8	1.1325	1.1451	1.1195	1.1656	1.1678	1.1169	1.1470	1.1131	1.1177	AVRG		0.88018		1.1361	2	15	0.050	0.99	
Bromofluorobenzene	1.7048	1.7354	1.6901	1.7118	1.7291	1.6810	1.6744	1.5998	1.6097	AVRG		0.59460		1.6818	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate			2.0000	5.0000	10.000	20.000	50.000	75.000		ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: TEW Date: 01/12/07 Reviewer: LW Date: 01/12/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 477017193004 Cal Date: 12-JAN-2007 Type : WATER

ICV 477017193013 (hac13 12-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 477017193014 (hac14 12-JAN-2007) stds: S5052 (10000X), S5168 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	477017193013	0.8522	0.7396	25.00	21.70	ug/L	-13	30	m
Vinyl Chloride	477017193013	0.6416	0.5460	25.00	21.27	ug/L	-15	20	
Bromomethane	477017193013	0.2251	0.2130	25.00	21.69	ug/L	-13	30	m
Chloroethane	477017193013	0.3251	0.3110	25.00	23.92	ug/L	-4	30	
Acetone	477017193014	0.2629	0.2119	25.00	20.15	ug/L	-19	40	
1,1-Dichloroethene	477017193014	0.3003	0.3317	25.00	27.61	ug/L	10	20	
Methylene Chloride	477017193014	0.4577	0.4833	25.00	26.40	ug/L	6	30	
Carbon Disulfide	477017193014	1.5905	1.3237	25.00	20.81	ug/L	-17	30	
MTBE	477017193014	1.5642	1.3592	25.00	21.72	ug/L	-13	30	
trans-1,2-Dichloroethene	477017193014	0.3861	0.4023	25.00	26.04	ug/L	4	30	
Vinyl Acetate	477017193014	1.1573	1.0199	25.00	22.03	ug/L	-12	40	
1,1-Dichloroethane	477017193014	0.9783	0.9634	25.00	24.62	ug/L	-2	30	
2-Butanone	477017193014	0.3460	0.3148	25.00	22.74	ug/L	-9	40	
cis-1,2-Dichloroethene	477017193014	0.4343	0.4508	25.00	25.95	ug/L	4	30	
Chloroform	477017193014	0.8730	0.8312	25.00	23.80	ug/L	-5	20	
1,1,1-Trichloroethane	477017193014	0.5971	0.5928	25.00	24.82	ug/L	-1	30	
Carbon Tetrachloride	477017193014	0.2121	0.2249	25.00	26.51	ug/L	6	30	
1,2-Dichloroethane	477017193014	0.3844	0.3561	25.00	23.16	ug/L	-7	30	
Benzene	477017193014	0.7129	0.7037	25.00	24.67	ug/L	-1	30	
Trichloroethene	477017193014	0.1900	0.1902	25.00	25.03	ug/L	0	30	
1,2-Dichloropropane	477017193014	0.2406	0.2278	25.00	23.67	ug/L	-5	20	
Bromodichloromethane	477017193014	0.2856	0.3014	25.00	26.39	ug/L	6	30	
4-Methyl-2-Pentanone	477017193014	0.3286	0.3114	25.00	23.69	ug/L	-5	40	
cis-1,3-Dichloropropene	477017193014	0.3464	0.3457	25.00	24.95	ug/L	0	30	
Toluene	477017193014	0.4455	0.4491	25.00	25.20	ug/L	1	20	
trans-1,3-Dichloropropene	477017193014	0.3377	0.3081	25.00	22.81	ug/L	-9	30	
1,1,2-Trichloroethane	477017193014	0.0985	0.0961	25.00	24.39	ug/L	-2	30	
2-Hexanone	477017193014	0.2791	0.2680	25.00	24.00	ug/L	-4	40	
Tetrachloroethene	477017193014	0.1385	0.1567	25.00	28.28	ug/L	13	30	
Dibromochloromethane	477017193014	0.2343	0.2470	25.00	26.35	ug/L	5	30	
Chlorobenzene	477017193014	0.5877	0.6046	25.00	25.72	ug/L	3	30	
Ethylbenzene	477017193014	1.0693	1.1282	25.00	26.38	ug/L	6	20	
m,p-Xylenes	477017193014	0.3689	0.3804	50.00	51.56	ug/L	3	30	
o-Xylene	477017193014	0.3726	0.4019	25.00	26.96	ug/L	8	30	
Styrene	477017193014	0.6454	0.7059	25.00	27.35	ug/L	9	30	
Bromoform	477017193014	0.1322	0.1374	25.00	25.98	ug/L	4	30	
1,1,2,2-Tetrachloroethane	477017193014	0.7897	0.7537	25.00	23.86	ug/L	-5	30	

m=manual integration

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 00:23 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.001/1000,S5170,0.0005/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:54 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 00:23 Cal File: HAC04.D
Als bottle: 4 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.794	4.794	(0.461)	2282	0.50000	0.9130
2 Chloromethane	50	5.306	5.306	(0.511)	1880	0.50000	0.1164(a)
3 Vinyl Chloride	62	5.374	5.374	(0.517)	5946	0.50000	0.4889(aM)
4 Bromomethane	94	6.004	6.004	(0.578)	912	0.50000	1.3442
5 Chloroethane	64	6.151	6.151	(0.592)	1474	0.50000	0.2392(a)
6 Trichlorofluoromethane	101	6.476	6.476	(0.623)	4959	0.50000	0.7223
7 Ethanol	45	6.712	6.712	(0.646)	3349	25.0000	23.3386(A)
8 Freon 113	101	7.174	7.174	(0.690)	1274	0.25000	0.6514
9 1,1-Dichloroethene	96	7.292	7.292	(0.702)	1267	0.25000	0.2226(a)
10 Acetone	43	7.371	7.371	(0.709)	3790	0.25000	0.7607
11 Isopropanol	45	7.450	7.450	(0.717)	1922	2.50000	2.2888(A)
12 Carbon Disulfide	76	7.696	7.696	(0.741)	7610	0.25000	0.2524(a)
13 tert-Butyl Alcohol (TBA)	59	8.010	8.010	(0.771)	2674	2.50000	2.5197(A)
14 Methylene Chloride	84	8.030	8.030	(0.773)	1660	0.25000	0.1913(a)
15 MTBE	73	8.256	8.256	(0.795)	5560	0.25000	0.1875(a)
16 trans-1,2-Dichloroethene	96	8.355	8.355	(0.804)	1833	0.25000	0.2504(a)
17 Isopropyl Ether (DIPE)	45	8.856	8.856	(0.852)	12623	0.25000	0.2275(aA)
18 Vinyl Acetate	43	8.925	8.925	(0.859)	4150	0.25000	0.1892(a)
19 1,1-Dichloroethane	63	8.994	8.994	(0.866)	4417	0.25000	0.2382(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.348	9.348	(0.900)	7349	0.25000	0.2164(aA)
21 2-Butanone	43	9.771	9.771	(0.940)	1833	0.25000	0.2795(a)
22 2,2-Dichloropropane	77	9.781	9.781	(0.941)	3046	0.25000	0.2610(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.791	9.791	(0.942)	2137	0.25000	0.2596(a)
	24 Tetrahydrofuran	42	10.174	10.174	(0.979)	15730	2.50000	4.1245(A)
	25 Bromochloromethane	128	10.145	10.145	(0.976)	508	0.25000	0.1408(a)
	26 Chloroform	83	10.184	10.184	(0.980)	4676	0.25000	0.2826(a)
*	27 Pentafluorobenzene	168	10.391	10.391	(1.000)	947546	50.0000	
	28 Dibromofluoromethane	113	10.440	10.440	(1.005)	838446	50.0000	49.4015
	29 1,1,1-Trichloroethane	97	10.479	10.479	(1.009)	2787	0.25000	0.2462(a)
	30 Carbon Tetrachloride	117	10.656	10.656	(0.926)	621	0.25000	0.0689(a)
	31 1,1-Dichloropropene	75	10.695	10.695	(0.929)	2881	0.25000	0.2618(a)
	32 1,2-Dichloroethane-d4	65	10.991	10.991	(0.955)	1276950	50.0000	49.6023
	33 Benzene	78	11.010	11.010	(0.956)	7851	0.25000	0.2594(a)
	34 Methyl tert-Amyl Ether (TAME)	73	11.010	11.010	(0.956)	3378	0.25000	0.1197(aA)
	35 1,2-Dichloroethane	62	11.099	11.099	(0.964)	3721	0.25000	0.2280(a)
*	36 1,4-Difluorobenzene	114	11.512	11.512	(1.000)	2121859	50.0000	
	37 Trichloroethene	95	11.915	11.915	(1.035)	1634	0.25000	0.2026(a)
	38 Trifluorotoluene	146	12.269	12.269	(1.066)	1811	0.25000	0.2386(aA)
	39 1,2-Dichloropropane	63	12.328	12.328	(1.071)	2413	0.25000	0.2363(a)
	40 Dibromomethane	93	12.495	12.495	(1.085)	574	0.25000	0.0992(a)
	41 Bromodichloromethane	83	12.663	12.663	(1.100)	2516	0.25000	0.2076(a)
	42 2-Chloroethylvinylether	63	12.997	12.997	(1.129)	193	0.50000	0.1240(a)
	43 Tetramethyl THF	43	13.233	13.233	(1.150)	5906	0.25000	0.2153(aA)
	44 cis-1,3-Dichloropropene	75	13.263	13.263	(1.152)	3412	0.25000	0.2320(a)
	45 4-Methyl-2-Pentanone	43	13.400	13.400	(1.164)	3101	0.25000	0.2223(a)
	46 Toluene-d8	98	13.597	13.597	(1.181)	2402974	50.0000	49.8394
	47 Toluene	92	13.686	13.686	(1.189)	5081	0.25000	0.2687(a)
	48 trans-1,3-Dichloropropene	75	14.010	14.010	(1.217)	3724	0.25000	0.2598(a)
	49 1,1,2-Trichloroethane	85	14.286	14.286	(1.241)	716	0.25000	0.1713(a)
	50 Tetrachloroethene	166	14.394	14.394	(0.927)	1419	0.25000	0.2963(a)
	51 2-Hexanone	43	14.512	14.512	(0.935)	1545	0.25000	0.1601(a)
	52 1,3-Dichloropropane	76	14.522	14.522	(0.935)	3503	0.25000	0.2407(a)
	53 Dibromochloromethane	129	14.807	14.807	(0.954)	1351	0.25000	0.1668(a)
	54 1,2-Dibromoethane	107	15.004	15.004	(1.303)	1566	0.25000	0.1895(a)
*	55 Chlorobenzene-d5	117	15.525	15.525	(1.000)	1727725	50.0000	
	56 Chlorobenzene	112	15.564	15.564	(1.003)	5049	0.25000	0.2486(a)
	57 Ethylbenzene	91	15.613	15.613	(1.006)	9674	0.25000	0.2618(a)
	58 1,1,1,2-Tetrachloroethane	131	15.643	15.643	(1.008)	1607	0.25000	0.2496(a)
	59 m,p-Xylenes	106	15.751	15.751	(1.015)	5908	0.50000	0.4635(a)
	60 o-Xylene	106	16.253	16.253	(1.047)	3189	0.25000	0.2476(a)
	61 Styrene	104	16.282	16.282	(1.049)	5294	0.25000	0.2373(a)
	62 Bromoform	173	16.587	16.587	(1.068)	2102	0.25000	0.4600(a)
	63 Isopropylbenzene	105	16.646	16.646	(0.913)	7816	0.25000	0.2406(a)
	65 Bromofluorobenzene	95	16.912	16.912	(0.927)	1157640	50.0000	50.6834
	66 1,1,2,2-Tetrachloroethane	83	17.049	17.049	(0.935)	2558	0.25000	0.2385(a)
	67 Bromobenzene	156	17.128	17.128	(0.939)	1687	0.25000	0.2577(a)
	68 Propylbenzene	91	17.118	17.118	(0.939)	11441	0.25000	0.2836(a)
	69 1,2,3-Trichloropropane	110	17.148	17.148	(0.940)	700	0.25000	0.2483(a)
	70 2-Chlorotoluene	91	17.295	17.295	(0.948)	8206	0.25000	0.2777(a)
	71 1,3,5-Trimethylbenzene	105	17.295	17.295	(0.948)	7055	0.25000	0.2678(a)
	72 4-Chlorotoluene	91	17.413	17.413	(0.955)	7268	0.25000	0.2530(a)
	73 tert-Butylbenzene	119	17.679	17.679	(0.969)	4878	0.25000	0.2500(a)
	74 1,2,4-Trimethylbenzene	105	17.738	17.738	(0.972)	6948	0.25000	0.2484(a)
	75 sec-Butylbenzene	105	17.925	17.925	(0.983)	7198	0.25000	0.2343(a)
	76 para-Isopropyl Toluene	119	18.072	18.072	(0.991)	5589	0.25000	0.2462(a)
	77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	3896	0.25000	0.3089(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

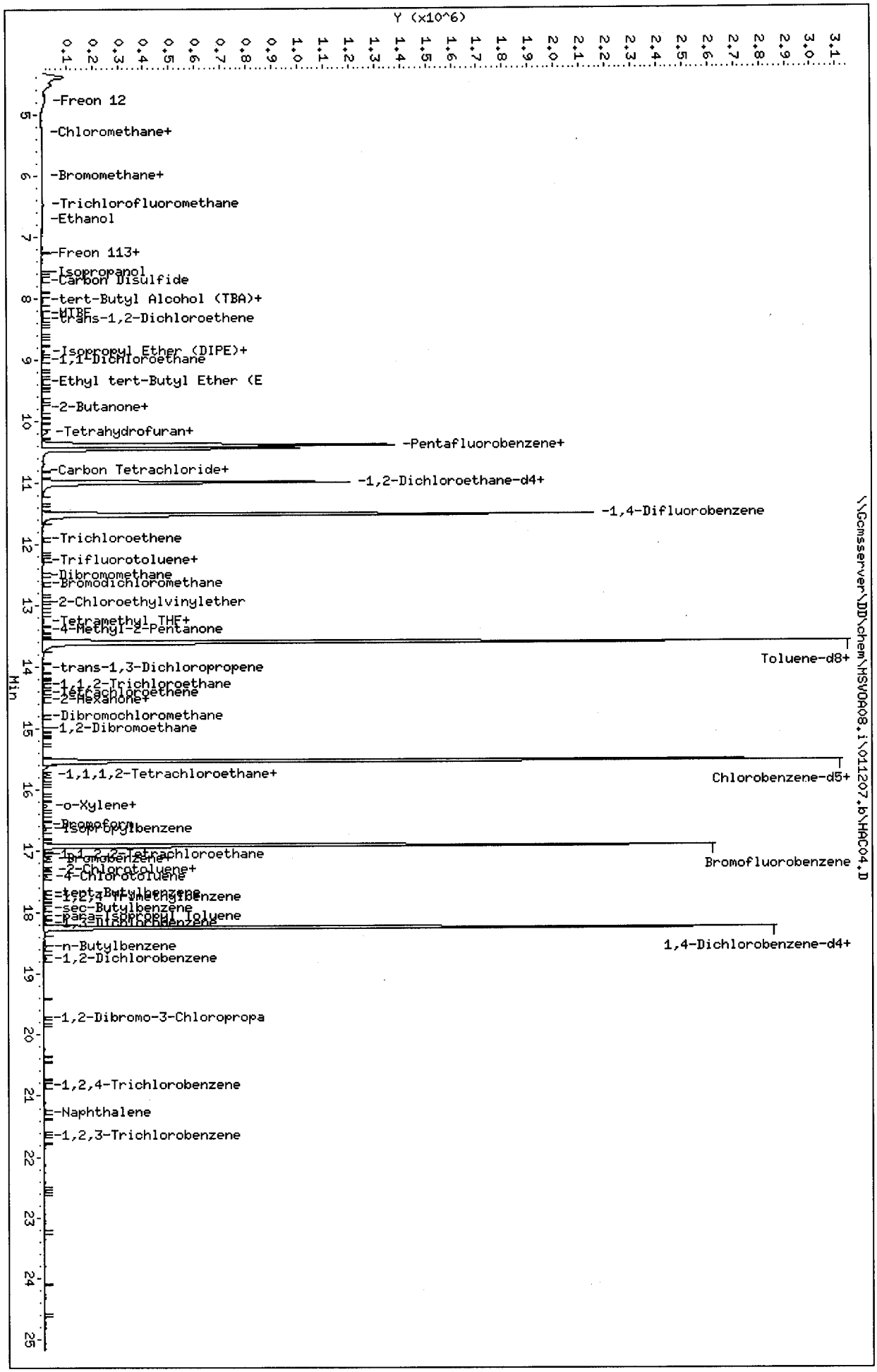
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.239	18.239	(1.000)	679048	50.0000	
79 1,4-Dichlorobenzene	146	18.269	18.269	(1.002)	3968	0.25000	0.3179(a)
80 n-Butylbenzene	91	18.544	18.544	(1.017)	5917	0.25000	0.2763(a)
81 1,2-Dichlorobenzene	146	18.741	18.741	(1.028)	3222	0.25000	0.2782(a)
82 1,2-Dibromo-3-Chloropropane	75	19.725	19.725	(1.081)	537	0.25000	0.2714(a)
83 1,2,4-Trichlorobenzene	180	20.826	20.826	(1.142)	1122	0.25000	0.2959(a)
85 Naphthalene	128	21.279	21.279	(1.167)	2015	0.25000	0.2357(a)
86 1,2,3-Trichlorobenzene	180	21.643	21.643	(1.187)	617	0.25000	0.1885(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Date : 12-JAN-2007 00:23
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.001/1000,S5170,0.0005/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 01:01 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/1000,S5170,0.001/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:44 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 01:01 Cal File: HAC05.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.777	4.777	(0.460)	8108	1.00000	1.3749(M)
2 Chloromethane	50	5.288	5.288	(0.509)	16629	1.00000	1.0332(M)
3 Vinyl Chloride	62	5.377	5.377	(0.518)	10189	1.00000	0.8408(M)
4 Bromomethane	94	5.986	5.986	(0.577)	3632	1.00000	1.9141(M)
5 Chloroethane	64	6.124	6.124	(0.590)	5023	1.00000	0.8182(M)
6 Trichlorofluoromethane	101	6.468	6.468	(0.623)	9516	1.00000	1.0654
7 Ethanol	45	6.734	6.734	(0.649)	9854	50.0000	68.9120(AM)
8 Freon 113	101	7.177	7.177	(0.691)	2248	0.50000	0.8202
9 1,1-Dichloroethene	96	7.275	7.275	(0.701)	3029	0.50000	0.5340(M)
11 Isopropanol	45	7.452	7.452	(0.718)	4638	5.00000	5.5426(A)
12 Carbon Disulfide	76	7.698	7.698	(0.741)	14764	0.50000	0.4915(a)
13 tert-Butyl Alcohol (TBA)	59	8.013	8.013	(0.772)	5634	5.00000	5.3276(A)
14 Methylene Chloride	84	8.032	8.032	(0.774)	5379	0.50000	0.6223(M)
15 MTBE	73	8.268	8.268	(0.796)	14791	0.50000	0.5007(M)
16 trans-1,2-Dichloroethene	96	8.337	8.337	(0.803)	3650	0.50000	0.5005
17 Isopropyl Ether (DIPE)	45	8.858	8.858	(0.853)	27795	0.50000	0.5027(A)
18 Vinyl Acetate	43	8.918	8.918	(0.859)	12360	0.50000	0.5655
19 1,1-Dichloroethane	63	8.986	8.986	(0.865)	9134	0.50000	0.4943(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.360	9.360	(0.901)	16956	0.50000	0.5012(A)
21 2-Butanone	43	9.773	9.773	(0.941)	3530	0.50000	0.5402(M)
22 2,2-Dichloropropane	77	9.773	9.773	(0.941)	5898	0.50000	0.5072
23 cis-1,2-Dichloroethene	96	9.803	9.803	(0.944)	4215	0.50000	0.5139

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Tetrahydrofuran	42	10.176	10.176	(0.980)	27401	5.00000	7.2100(AM)
	25 Bromochloromethane	128	10.167	10.167	(0.979)	1985	0.50000	0.5522
	26 Chloroform	83	10.186	10.186	(0.981)	10339	0.50000	0.6270
*	27 Pentafluorobenzene	168	10.383	10.383	(1.000)	944231	50.0000	
	28 Dibromofluoromethane	113	10.442	10.442	(1.006)	853226	50.0000	50.4488
	29 1,1,1-Trichloroethane	97	10.481	10.481	(1.009)	5839	0.50000	0.5178
	30 Carbon Tetrachloride	117	10.688	10.688	(0.928)	5132	0.50000	0.5645
	31 1,1-Dichloropropene	75	10.708	10.708	(0.930)	5408	0.50000	0.4866(a)
	32 1,2-Dichloroethane-d4	65	10.993	10.993	(0.955)	1321378	50.0000	50.8254
	33 Benzene	78	11.013	11.013	(0.956)	15897	0.50000	0.5202
	34 Methyl tert-Amyl Ether (TAME)	73	11.013	11.013	(0.956)	14161	0.50000	0.4972(aA)
	35 1,2-Dichloroethane	62	11.111	11.111	(0.965)	8584	0.50000	0.5210
*	36 1,4-Difluorobenzene	114	11.514	11.514	(1.000)	2142844	50.0000	
	37 Trichloroethene	95	11.927	11.927	(1.036)	4139	0.50000	0.5083
	38 Trifluorotoluene	146	12.262	12.262	(1.065)	3641	0.50000	0.4750(aA)
	39 1,2-Dichloropropane	63	12.321	12.321	(1.070)	4881	0.50000	0.4734(a)
	40 Dibromomethane	93	12.508	12.508	(1.086)	2729	0.50000	0.4671(a)
	41 Bromodichloromethane	83	12.665	12.665	(1.100)	5532	0.50000	0.4519(a)
	42 2-Chloroethylvinylether	63	12.990	12.990	(1.128)	327	1.00000	0.2080(a)
	43 Tetramethyl THF	43	13.226	13.226	(1.149)	12322	0.50000	0.4448(aAM)
	44 cis-1,3-Dichloropropene	75	13.265	13.265	(1.152)	7234	0.50000	0.4872(a)
	45 4-Methyl-2-Pentanone	43	13.403	13.403	(1.164)	7054	0.50000	0.5009
	46 Toluene-d8	98	13.599	13.599	(1.181)	2453759	50.0000	50.3943
	47 Toluene	92	13.698	13.698	(1.190)	10570	0.50000	0.5536
	48 trans-1,3-Dichloropropene	75	14.022	14.022	(1.218)	6615	0.50000	0.4570(a)
	49 1,1,2-Trichloroethane	85	14.278	14.278	(1.240)	1548	0.50000	0.3668(a)
	50 Tetrachloroethene	166	14.416	14.416	(0.928)	2886	0.50000	0.5921
	51 2-Hexanone	43	14.504	14.504	(0.934)	4798	0.50000	0.4886(a)
	52 1,3-Dichloropropane	76	14.524	14.524	(0.935)	7364	0.50000	0.4971(a)
	53 Dibromochloromethane	129	14.789	14.789	(0.952)	3657	0.50000	0.4436(a)
	54 1,2-Dibromoethane	107	15.006	15.006	(1.303)	3623	0.50000	0.4342(a)
*	55 Chlorobenzene-d5	117	15.527	15.527	(1.000)	1758898	50.0000	
	56 Chlorobenzene	112	15.566	15.566	(1.003)	11014	0.50000	0.5327
	57 Ethylbenzene	91	15.616	15.616	(1.006)	19629	0.50000	0.5218
	58 1,1,1,2-Tetrachloroethane	131	15.645	15.645	(1.008)	2653	0.50000	0.4049(a)
	59 m,p-Xylenes	106	15.753	15.753	(1.015)	13935	1.00000	1.0739
	60 o-Xylene	106	16.255	16.255	(1.047)	6896	0.50000	0.5260
	61 Styrene	104	16.275	16.275	(1.048)	10894	0.50000	0.4798(a)
	62 Bromoform	173	16.580	16.580	(1.068)	2418	0.50000	0.5198
	63 Isopropylbenzene	105	16.648	16.648	(0.913)	18028	0.50000	0.5614
	65 Bromofluorobenzene	95	16.914	16.914	(0.927)	1164975	50.0000	51.5943
	66 1,1,2,2-Tetrachloroethane	83	17.052	17.052	(0.935)	4777	0.50000	0.4505(a)
	67 Bromobenzene	156	17.120	17.120	(0.939)	3828	0.50000	0.5915
	68 Propylbenzene	91	17.120	17.120	(0.939)	21558	0.50000	0.5407
	69 1,2,3-Trichloropropane	110	17.140	17.140	(0.940)	1033	0.50000	0.3707(a)
	70 2-Chlorotoluene	91	17.298	17.298	(0.948)	17545	0.50000	0.6007
	71 1,3,5-Trimethylbenzene	105	17.298	17.298	(0.948)	15021	0.50000	0.5769
	72 4-Chlorotoluene	91	17.416	17.416	(0.955)	16395	0.50000	0.5775
	73 tert-Butylbenzene	119	17.671	17.671	(0.969)	9372	0.50000	0.4859(a)
	74 1,2,4-Trimethylbenzene	105	17.750	17.750	(0.973)	14930	0.50000	0.5399
	75 sec-Butylbenzene	105	17.927	17.927	(0.983)	15648	0.50000	0.5153
	76 para-Isopropyl Toluene	119	18.065	18.065	(0.990)	12673	0.50000	0.5647
	77 1,3-Dichlorobenzene	146	18.163	18.163	(0.996)	7722	0.50000	0.6194
*	78 1,4-Dichlorobenzene-d4	152	18.242	18.242	(1.000)	671287	50.0000	

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

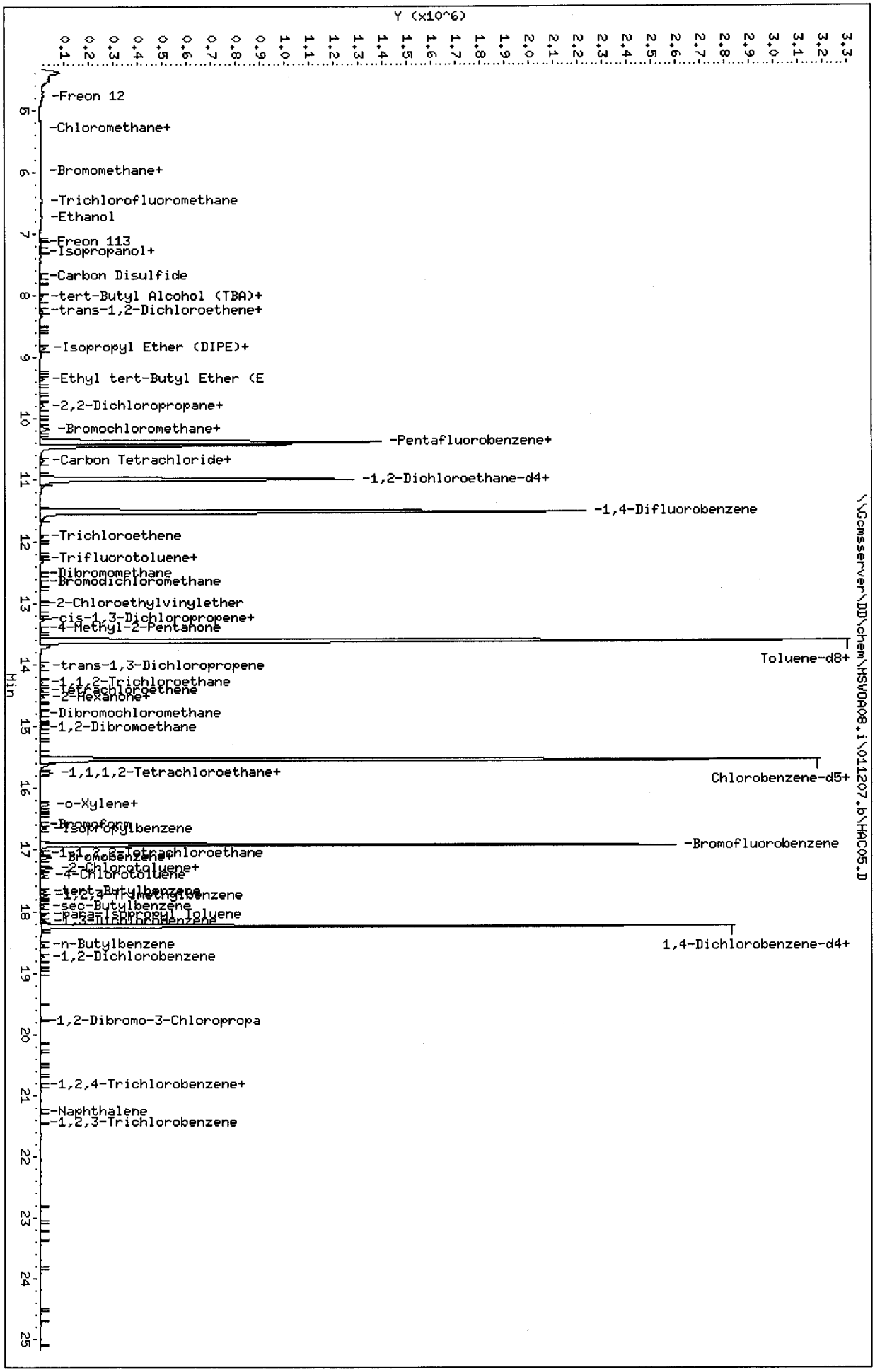
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
79 1,4-Dichlorobenzene	146	18.271	18.271	(1.002)	7093	0.50000	0.5749
80 n-Butylbenzene	91	18.547	18.547	(1.017)	11501	0.50000	0.5434
81 1,2-Dichlorobenzene	146	18.743	18.743	(1.027)	6274	0.50000	0.5480
82 1,2-Dibromo-3-Chloropropane	75	19.727	19.727	(1.081)	954	0.50000	0.4878(aM)
83 1,2,4-Trichlorobenzene	180	20.838	20.838	(1.142)	2095	0.50000	0.5589
84 Hexachlorobutadiene	225	20.947	20.947	(1.148)	253	0.50000	0.4941(aM)
85 Naphthalene	128	21.271	21.271	(1.166)	4671	0.50000	0.4222(a)
86 1,2,3-Trichlorobenzene	180	21.645	21.645	(1.187)	1334	0.50000	0.4124(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Date : 12-JAN-2007 01:01
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.002/1000,S5170,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 01:38 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/500,S5170,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:57 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 01:38 Cal File: HAC06.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.775	4.775	(0.460)	18611	2.00000	2.1933(M)
2 Chloromethane	50	5.287	5.287	(0.509)	30707	2.00000	1.8910(M)
3 Vinyl Chloride	62	5.375	5.375	(0.517)	22217	2.00000	1.8171(M)
4 Bromomethane	94	5.985	5.985	(0.576)	6107	2.00000	2.4201(M)
5 Chloroethane	64	6.133	6.133	(0.590)	10911	2.00000	1.7615(M)
6 Trichlorofluoromethane	101	6.467	6.467	(0.622)	19399	2.00000	1.7938(M)
7 Ethanol	45	6.723	6.723	(0.647)	29620	200.000	205.2954(AM)
8 Freon 113	101	7.185	7.185	(0.691)	9208	2.00000	2.0040
9 1,1-Dichloroethene	96	7.293	7.293	(0.702)	10389	2.00000	1.8155
10 Acetone	43	7.392	7.392	(0.711)	13770	2.00000	2.7490(M)
11 Isopropanol	45	7.451	7.451	(0.717)	14768	20.0000	17.4912(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	55649	2.00000	1.8362(M)
13 tert-Butyl Alcohol (TBA)	59	8.011	8.011	(0.771)	20144	20.0000	18.8787(AM)
14 Methylene Chloride	84	8.031	8.031	(0.773)	17553	2.00000	2.0128(M)
15 MTBE	73	8.257	8.257	(0.795)	53105	2.00000	1.7817
16 trans-1,2-Dichloroethene	96	8.336	8.336	(0.802)	13099	2.00000	1.7803
17 Isopropyl Ether (DIPE)	45	8.857	8.857	(0.852)	103073	2.00000	1.8478(AM)
18 Vinyl Acetate	43	8.916	8.916	(0.858)	44342	2.00000	2.0108
19 1,1-Dichloroethane	63	8.995	8.995	(0.866)	35323	2.00000	1.8948
20 Ethyl tert-Butyl Ether (ETBE)	59	9.359	9.359	(0.901)	59736	2.00000	1.7500(A)
21 2-Butanone	43	9.772	9.772	(0.940)	12085	2.00000	1.8330(M)
22 2,2-Dichloropropane	77	9.782	9.782	(0.941)	22199	2.00000	1.8922

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.801	9.801	(0.943)	15783	2.00000	1.9073
24	Tetrahydrofuran	42	10.165	10.165	(0.978)	79172	20.0000	20.6468(A)
25	Bromochloromethane	128	10.156	10.156	(0.977)	6161	2.00000	1.6987
26	Chloroform	83	10.195	10.195	(0.981)	30477	2.00000	1.8320
* 27	Pentafluorobenzene	168	10.392	10.392	(1.000)	952723	50.0000	
28	Dibromofluoromethane	113	10.441	10.441	(1.005)	851235	50.0000	49.8825
29	1,1,1-Trichloroethane	97	10.480	10.480	(1.009)	20315	2.00000	1.7855
30	Carbon Tetrachloride	117	10.687	10.687	(0.928)	15244	2.00000	1.6505
31	1,1-Dichloropropene	75	10.697	10.697	(0.929)	20694	2.00000	1.8331
32	1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1349775	50.0000	51.1042
33	Benzene	78	11.021	11.021	(0.957)	60082	2.00000	1.9355
34	Methyl tert-Amyl Ether (TAME)	73	11.021	11.021	(0.957)	53232	2.00000	1.8399(A)
35	1,2-Dichloroethane	62	11.110	11.110	(0.965)	29913	2.00000	1.7872
* 36	1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2176954	50.0000	
37	Trichloroethene	95	11.916	11.916	(1.035)	15720	2.00000	1.9003
38	Trifluorotoluene	146	12.260	12.260	(1.065)	13998	2.00000	1.7976(A)
39	1,2-Dichloropropane	63	12.319	12.319	(1.070)	18746	2.00000	1.7896(M)
40	Dibromomethane	93	12.516	12.516	(1.087)	9630	2.00000	1.6224
41	Bromodichloromethane	83	12.654	12.654	(1.099)	21438	2.00000	1.7241
42	2-Chloroethylvinylether	63	12.998	12.998	(1.129)	1363	2.00000	0.8537
43	Tetramethyl THF	43	13.224	13.224	(1.149)	48441	2.00000	1.7213(A)
44	cis-1,3-Dichloropropene	75	13.273	13.273	(1.153)	26757	2.00000	1.7740
45	4-Methyl-2-Pentanone	43	13.401	13.401	(1.164)	24944	2.00000	1.7435
46	Toluene-d8	98	13.598	13.598	(1.181)	2437199	50.0000	49.2699
47	Toluene	92	13.696	13.696	(1.190)	37405	2.00000	1.9284
48	trans-1,3-Dichloropropene	75	14.021	14.021	(1.218)	26297	2.00000	1.7886
49	1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	7955	2.00000	1.8555
50	Tetrachloroethene	166	14.414	14.414	(0.928)	8286	2.00000	1.7511
51	2-Hexanone	43	14.503	14.503	(0.934)	15970	2.00000	1.6753
52	1,3-Dichloropropane	76	14.523	14.523	(0.935)	26572	2.00000	1.8477
53	Dibromochloromethane	129	14.798	14.798	(0.953)	14256	2.00000	1.7812
54	1,2-Dibromoethane	107	15.005	15.005	(1.303)	14705	2.00000	1.7349
* 55	Chlorobenzene-d5	117	15.526	15.526	(1.000)	1707623	50.0000	
56	Chlorobenzene	112	15.565	15.565	(1.003)	38931	2.00000	1.9395
57	Ethylbenzene	91	15.614	15.614	(1.006)	74391	2.00000	2.0371
58	1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	12069	2.00000	1.8973
59	m,p-Xylenes	106	15.752	15.752	(1.015)	51889	4.00000	4.1189
60	o-Xylene	106	16.254	16.254	(1.047)	24744	2.00000	1.9443
61	Styrene	104	16.273	16.273	(1.048)	41387	2.00000	1.8777
62	Bromoform	173	16.578	16.578	(1.068)	7711	2.00000	1.7076
63	Isopropylbenzene	105	16.647	16.647	(0.913)	64110	2.00000	1.9808
65	Bromofluorobenzene	95	16.913	16.913	(0.927)	1143584	50.0000	50.2470
66	1,1,2,2-Tetrachloroethane	83	17.050	17.050	(0.935)	19675	2.00000	1.8411
67	Bromobenzene	156	17.119	17.119	(0.939)	11163	2.00000	1.7114
68	Propylbenzene	91	17.119	17.119	(0.939)	82479	2.00000	2.0523
69	1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	5938	2.00000	2.1144
70	2-Chlorotoluene	91	17.296	17.296	(0.948)	59290	2.00000	2.0142
71	1,3,5-Trimethylbenzene	105	17.296	17.296	(0.948)	52226	2.00000	1.9902
72	4-Chlorotoluene	91	17.414	17.414	(0.955)	56445	2.00000	1.9725
73	tert-Butylbenzene	119	17.680	17.680	(0.969)	35798	2.00000	1.8416
74	1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	55200	2.00000	1.9805
75	sec-Butylbenzene	105	17.926	17.926	(0.983)	58611	2.00000	1.9151
76	para-Isopropyl Toluene	119	18.063	18.063	(0.990)	43159	2.00000	1.9082
77	1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	24197	2.00000	1.9257

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

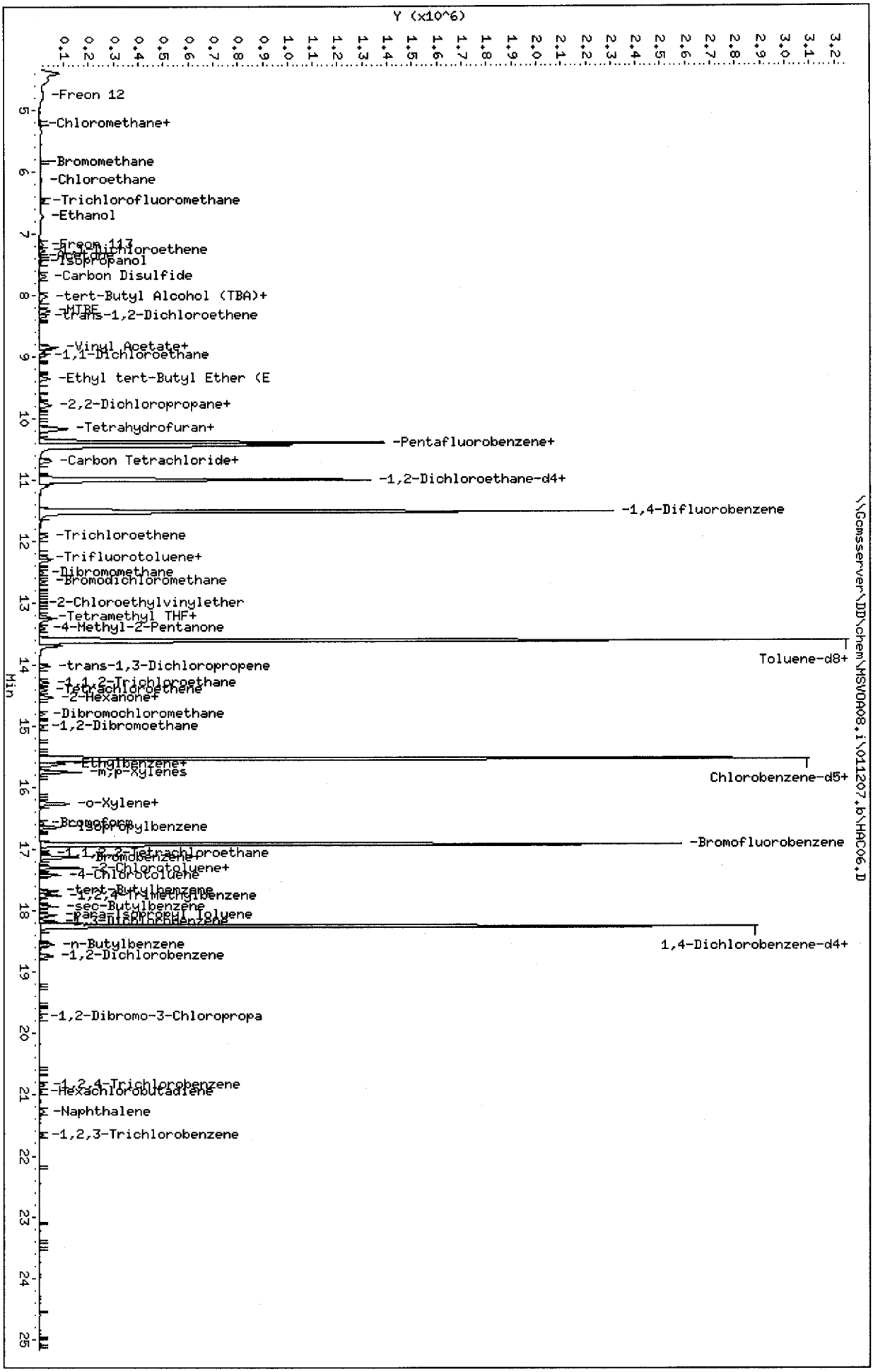
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	676630	50.0000	
79 1,4-Dichlorobenzene	146	18.270	18.270	(1.002)	23841	2.00000	1.9170
80 n-Butylbenzene	91	18.545	18.545	(1.017)	42067	2.00000	1.9719
81 1,2-Dichlorobenzene	146	18.742	18.742	(1.027)	21876	2.00000	1.8957
82 1,2-Dibromo-3-Chloropropane	75	19.726	19.726	(1.081)	3691	2.00000	1.8726
83 1,2,4-Trichlorobenzene	180	20.837	20.837	(1.142)	6471	2.00000	1.7128
84 Hexachlorobutadiene	225	20.945	20.945	(1.148)	1225	2.00000	1.8734
85 Naphthalene	128	21.270	21.270	(1.166)	18977	2.00000	1.4068
86 1,2,3-Trichlorobenzene	180	21.654	21.654	(1.187)	5383	2.00000	1.6510

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Date : 12-JAN-2007 01:38
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.002/500,S5170,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 02:15 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.005/500,S5170,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:59 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 02:15 Cal File: HAC07.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.790	4.790	(0.461)	63344	5.00000	5.7391(M)
2 Chloromethane	50	5.292	5.292	(0.510)	89901	5.00000	5.5760(M)
3 Vinyl Chloride	62	5.371	5.371	(0.517)	67845	5.00000	5.5889(M)
4 Bromomethane	94	5.981	5.981	(0.576)	15914	5.00000	4.4690(M)
5 Chloroethane	64	6.138	6.138	(0.591)	35057	5.00000	5.7004(M)
6 Trichlorofluoromethane	101	6.472	6.472	(0.623)	68481	5.00000	5.4791(M)
7 Ethanol	45	6.728	6.728	(0.648)	79367	500.000	554.0309(AM)
8 Freon 113	101	7.171	7.171	(0.690)	28203	5.00000	5.2510(M)
9 1,1-Dichloroethene	96	7.279	7.279	(0.701)	27258	5.00000	4.7975
10 Acetone	43	7.377	7.377	(0.710)	26301	5.00000	5.2884
11 Isopropanol	45	7.456	7.456	(0.718)	46213	50.0000	55.1267(AM)
12 Carbon Disulfide	76	7.692	7.692	(0.741)	157787	5.00000	5.2438
13 tert-Butyl Alcohol (TBA)	59	8.007	8.007	(0.771)	56415	50.0000	53.2501(A)
14 Methylene Chloride	84	8.036	8.036	(0.774)	45684	5.00000	5.2762
15 MTBE	73	8.262	8.262	(0.795)	155348	5.00000	5.2495
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	37992	5.00000	5.2006
17 Isopropyl Ether (DIPE)	45	8.853	8.853	(0.852)	291641	5.00000	5.2657(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	96815	5.00000	4.4219
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	101354	5.00000	5.4759
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	174817	5.00000	5.1580(A)
21 2-Butanone	43	9.767	9.767	(0.940)	34802	5.00000	5.3164
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	61541	5.00000	5.2833

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.943)	45197	5.00000	5.5010
	24 Tetrahydrofuran	42	10.161	10.161	(0.978)	214737	50.0000	56.4011(A)
	25 Bromochloromethane	128	10.161	10.161	(0.978)	17952	5.00000	4.9851
	26 Chloroform	83	10.190	10.190	(0.981)	87416	5.00000	5.2924
*	27 Pentafluorobenzene	168	10.387	10.387	(1.000)	945947	50.0000	
	28 Dibromofluoromethane	113	10.436	10.436	(1.005)	880900	50.0000	51.9906
	29 1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	57347	5.00000	5.0765
	30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	44455	5.00000	4.9575
	31 1,1-Dichloropropene	75	10.692	10.692	(0.928)	55987	5.00000	5.1082
	32 1,2-Dichloroethane-d4	65	10.997	10.997	(0.955)	1352774	50.0000	52.7530
	33 Benzene	78	11.016	11.016	(0.956)	160490	5.00000	5.3252
	34 Methyl tert-Amyl Ether (TAME)	73	11.016	11.016	(0.956)	149663	5.00000	5.3282(A)
	35 1,2-Dichloroethane	62	11.105	11.105	(0.964)	85994	5.00000	5.2918
*	36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2113598	50.0000	
	37 Trichloroethene	95	11.911	11.911	(1.034)	41859	5.00000	5.2118
	38 Trifluorotoluene	146	12.266	12.266	(1.065)	37744	5.00000	4.9925(A)
	39 1,2-Dichloropropane	63	12.315	12.315	(1.069)	53475	5.00000	5.2582
	40 Dibromomethane	93	12.511	12.511	(1.086)	29767	5.00000	5.1654
	41 Bromodichloromethane	83	12.659	12.659	(1.099)	61986	5.00000	5.1347
	42 2-Chloroethylvinylether	63	12.984	12.984	(1.127)	3827	5.00000	2.4688
	43 Tetramethyl THF	43	13.220	13.220	(1.148)	146492	5.00000	5.3617(A)
	44 cis-1,3-Dichloropropene	75	13.269	13.269	(1.152)	75076	5.00000	5.1269
	45 4-Methyl-2-Pentanone	43	13.407	13.407	(1.164)	68559	5.00000	4.9358
	46 Toluene-d8	98	13.603	13.603	(1.181)	2463520	50.0000	51.2949
	47 Toluene	92	13.692	13.692	(1.189)	101927	5.00000	5.4123
	48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	76980	5.00000	5.3929
	49 1,1,2-Trichloroethane	85	14.282	14.282	(1.240)	23377	5.00000	5.6163
	50 Tetrachloroethene	166	14.410	14.410	(0.928)	23802	5.00000	5.0438
	51 2-Hexanone	43	14.508	14.508	(0.934)	47977	5.00000	5.0466
	52 1,3-Dichloropropane	76	14.528	14.528	(0.935)	76138	5.00000	5.3088
	53 Dibromochloromethane	129	14.803	14.803	(0.953)	41413	5.00000	5.1883
	54 1,2-Dibromoethane	107	15.010	15.010	(1.303)	43903	5.00000	5.3350
*	55 Chlorobenzene-d5	117	15.531	15.531	(1.000)	1703028	50.0000	
	56 Chlorobenzene	112	15.561	15.561	(1.002)	110059	5.00000	5.4978
	57 Ethylbenzene	91	15.610	15.610	(1.005)	203231	5.00000	5.5802
	58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.007)	35900	5.00000	5.6589
	59 m,p-Xylenes	106	15.747	15.747	(1.014)	144173	10.0000	11.4752
	60 o-Xylene	106	16.249	16.249	(1.046)	69956	5.00000	5.5118
	61 Styrene	104	16.279	16.279	(1.048)	119753	5.00000	5.4477
	62 Bromoform	173	16.574	16.574	(1.067)	22781	5.00000	5.0584
	63 Isopropylbenzene	105	16.642	16.642	(0.913)	176966	5.00000	5.2959
	65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1195875	50.0000	50.8925
	66 1,1,2,2-Tetrachloroethane	83	17.056	17.056	(0.935)	60497	5.00000	5.4831
	67 Bromobenzene	156	17.124	17.124	(0.939)	36053	5.00000	5.3536
	68 Propylbenzene	91	17.115	17.115	(0.939)	229605	5.00000	5.5338
	69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	16213	5.00000	5.5918
	70 2-Chlorotoluene	91	17.292	17.292	(0.948)	167683	5.00000	5.5175
	71 1,3,5-Trimethylbenzene	105	17.292	17.292	(0.948)	145345	5.00000	5.3647
	72 4-Chlorotoluene	91	17.419	17.419	(0.955)	160635	5.00000	5.4372
	73 tert-Butylbenzene	119	17.675	17.675	(0.969)	105218	5.00000	5.2429
	74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	154384	5.00000	5.3650
	75 sec-Butylbenzene	105	17.921	17.921	(0.983)	164306	5.00000	5.2000
	76 para-Isopropyl Toluene	119	18.069	18.069	(0.991)	117384	5.00000	5.0268
	77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	66529	5.00000	5.1284

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

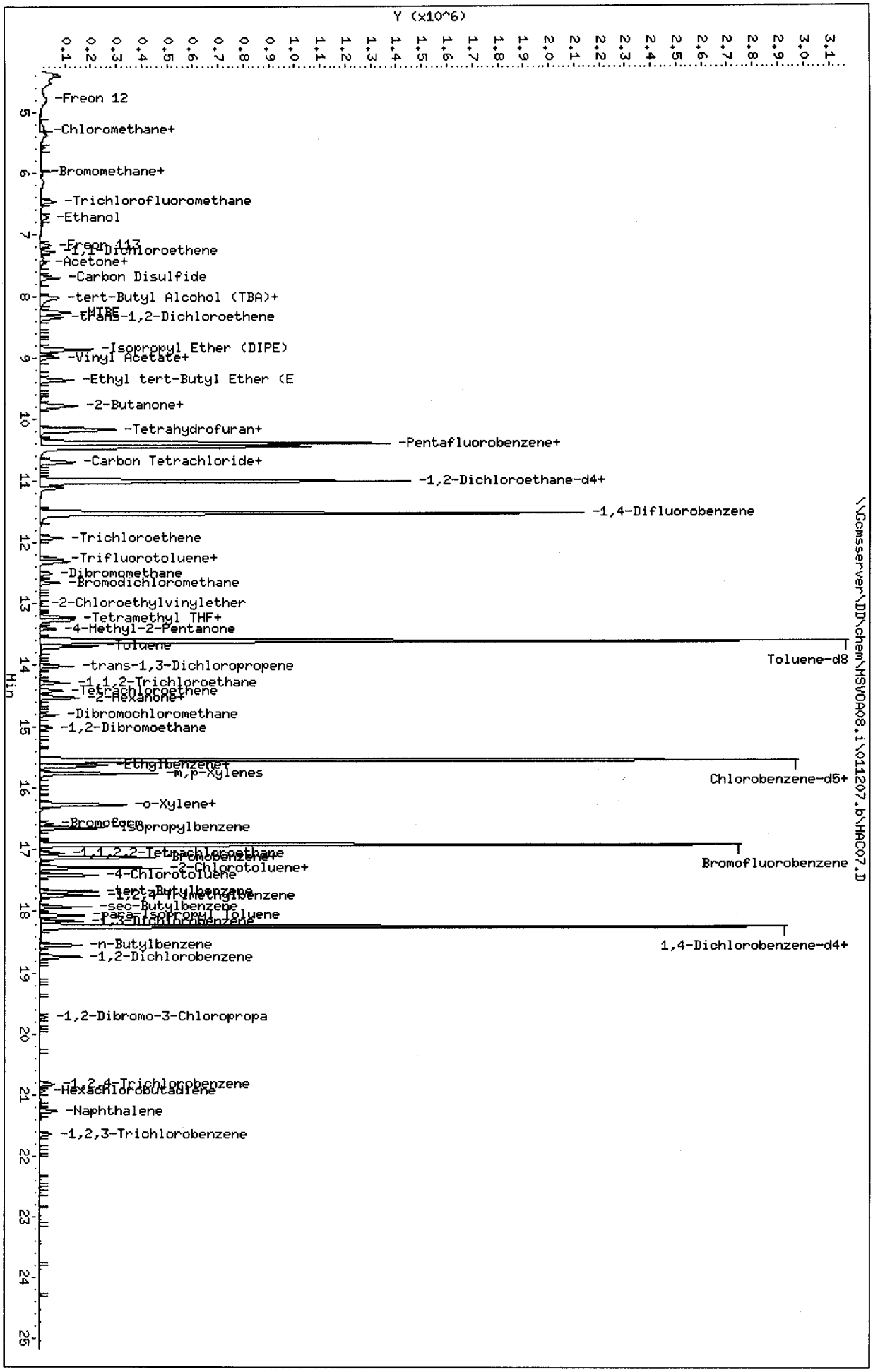
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.236	18.236	(1.000)	698594	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	67499	5.00000	5.2570
80 n-Butylbenzene	91	18.551	18.551	(1.017)	113575	5.00000	5.1565
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	61669	5.00000	5.1761
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	10389	5.00000	5.1052
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	19595	5.00000	5.0237
84 Hexachlorobutadiene	225	20.941	20.941	(1.148)	3695	5.00000	5.1855
85 Naphthalene	128	21.265	21.265	(1.166)	68868	5.00000	4.6870
86 1,2,3-Trichlorobenzene	180	21.659	21.659	(1.188)	16206	5.00000	4.8143

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Date : 12-JAN-2007 02:15
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.005/500,S5170,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Report Date: 12-Jan-2007 16:00

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 02:52 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/100,S5170,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:00 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 02:52 Cal File: HAC08.D
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	85522	10.0000	7.5746
2 Chloromethane	50	5.262	5.262	(0.507)	152754	10.0000	9.5903(M)
3 Vinyl Chloride	62	5.361	5.361	(0.516)	116265	10.0000	9.6948(M)
4 Bromomethane	94	6.000	6.000	(0.578)	39043	10.0000	9.3383(M)
5 Chloroethane	64	6.138	6.138	(0.591)	59520	10.0000	9.7966(M)
6 Trichlorofluoromethane	101	6.472	6.472	(0.623)	100539	10.0000	7.9715
7 Ethanol	45	6.718	6.718	(0.647)	152548	1000.00	1077.9054(AM)
8 Freon 113	101	7.170	7.170	(0.690)	55283	10.0000	9.9069
9 1,1-Dichloroethene	96	7.279	7.279	(0.701)	55355	10.0000	9.8619
10 Acetone	43	7.377	7.377	(0.710)	59367	10.0000	12.0831
11 Isopropanol	45	7.446	7.446	(0.717)	89958	100.000	108.6220(A)
12 Carbon Disulfide	76	7.692	7.692	(0.741)	297963	10.0000	10.0235
13 tert-Butyl Alcohol (TBA)	59	8.006	8.006	(0.771)	108809	100.000	103.9611(A)
14 Methylene Chloride	84	8.026	8.026	(0.773)	87267	10.0000	10.2021
15 MTBE	73	8.252	8.252	(0.795)	303347	10.0000	10.3762
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	75168	10.0000	10.4153
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	580316	10.0000	10.6060(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	226322	10.0000	10.4635
19 1,1-Dichloroethane	63	8.980	8.980	(0.865)	190568	10.0000	10.4220
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	351881	10.0000	10.5094(A)
21 2-Butanone	43	9.767	9.767	(0.940)	73034	10.0000	11.2933
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	116663	10.0000	10.1380

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Report Date: 12-Jan-2007 16:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.943)	82145	10.0000	10.1204
24 Tetrahydrofuran	42	10.160	10.160	(0.978)	414540	100.000	110.2116(A)
25 Bromochloromethane	128	10.160	10.160	(0.978)	37455	10.0000	10.5283
26 Chloroform	83	10.190	10.190	(0.981)	162974	10.0000	9.9877
* 27 Pentafluorobenzene	168	10.387	10.387	(1.000)	934516	50.0000	
28 Dibromofluoromethane	113	10.436	10.436	(1.005)	844520	50.0000	50.4531
29 1,1,1-Trichloroethane	97	10.475	10.475	(1.009)	113556	10.0000	10.1753
30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	87855	10.0000	9.8345
31 1,1-Dichloropropene	75	10.701	10.701	(0.929)	107213	10.0000	9.8192
32 1,2-Dichloroethane-d4	65	10.987	10.987	(0.954)	1313043	50.0000	51.3978
33 Benzene	78	11.016	11.016	(0.956)	314804	10.0000	10.4852
34 Methyl tert-Amyl Ether (TAME)	73	11.016	11.016	(0.956)	297224	10.0000	10.6218(A)
35 1,2-Dichloroethane	62	11.105	11.105	(0.964)	167600	10.0000	10.3528
* 36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2105614	50.0000	
37 Trichloroethene	95	11.921	11.921	(1.035)	79704	10.0000	9.9614
38 Trifluorotoluene	146	12.265	12.265	(1.065)	71228	10.0000	9.4572(A)
39 1,2-Dichloropropane	63	12.314	12.314	(1.069)	104274	10.0000	10.2922
40 Dibromomethane	93	12.511	12.511	(1.086)	60686	10.0000	10.5708
41 Bromodichloromethane	83	12.659	12.659	(1.099)	126704	10.0000	10.5355
42 2-Chloroethylvinylether	63	12.993	12.993	(1.128)	16187	10.0000	10.4822
43 Tetramethyl THF	43	13.219	13.219	(1.148)	302389	10.0000	11.1096(A)
44 cis-1,3-Dichloropropene	75	13.269	13.269	(1.152)	151985	10.0000	10.4184
45 4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	145962	10.0000	10.5481
46 Toluene-d8	98	13.593	13.593	(1.180)	2458874	50.0000	51.3923
47 Toluene	92	13.691	13.691	(1.189)	191039	10.0000	10.1826
48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	152143	10.0000	10.6989
49 1,1,2-Trichloroethane	85	14.282	14.282	(1.240)	46032	10.0000	11.1011
50 Tetrachloroethene	166	14.409	14.409	(0.928)	44248	10.0000	9.2449
51 2-Hexanone	43	14.498	14.498	(0.934)	108868	10.0000	11.2909
52 1,3-Dichloropropane	76	14.528	14.528	(0.936)	154141	10.0000	10.5969
53 Dibromochloromethane	129	14.803	14.803	(0.954)	83357	10.0000	10.2966
54 1,2-Dibromoethane	107	15.009	15.009	(1.303)	88675	10.0000	10.8165
* 55 Chlorobenzene-d5	117	15.521	15.521	(1.000)	1727268	50.0000	
56 Chlorobenzene	112	15.560	15.560	(1.003)	212452	10.0000	10.4638
57 Ethylbenzene	91	15.609	15.609	(1.006)	381840	10.0000	10.3373
58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	68194	10.0000	10.5987
59 m,p-Xylenes	106	15.747	15.747	(1.015)	264046	20.0000	20.7214
60 o-Xylene	106	16.249	16.249	(1.047)	133200	10.0000	10.3476
61 Styrene	104	16.268	16.268	(1.048)	233746	10.0000	10.4843
62 Bromoform	173	16.573	16.573	(1.068)	46002	10.0000	10.0713
63 Isopropylbenzene	105	16.642	16.642	(0.913)	327795	10.0000	9.9913
65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1185941	50.0000	51.4046
66 1,1,2,2-Tetrachloroethane	83	17.045	17.045	(0.935)	117447	10.0000	10.8420
67 Bromobenzene	156	17.114	17.114	(0.939)	70668	10.0000	10.6881
68 Propylbenzene	91	17.114	17.114	(0.939)	423147	10.0000	10.3873
69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	31232	10.0000	10.9713
70 2-Chlorotoluene	91	17.291	17.291	(0.948)	315120	10.0000	10.5610
71 1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	279794	10.0000	10.5185
72 4-Chlorotoluene	91	17.409	17.409	(0.955)	300658	10.0000	10.3653
73 tert-Butylbenzene	119	17.675	17.675	(0.969)	197744	10.0000	10.0359
74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	293488	10.0000	10.3879
75 sec-Butylbenzene	105	17.921	17.921	(0.983)	301471	10.0000	9.7177
76 para-Isopropyl Toluene	119	18.059	18.059	(0.990)	228261	10.0000	9.9560
77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	128169	10.0000	10.0629

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Report Date: 12-Jan-2007 16:00

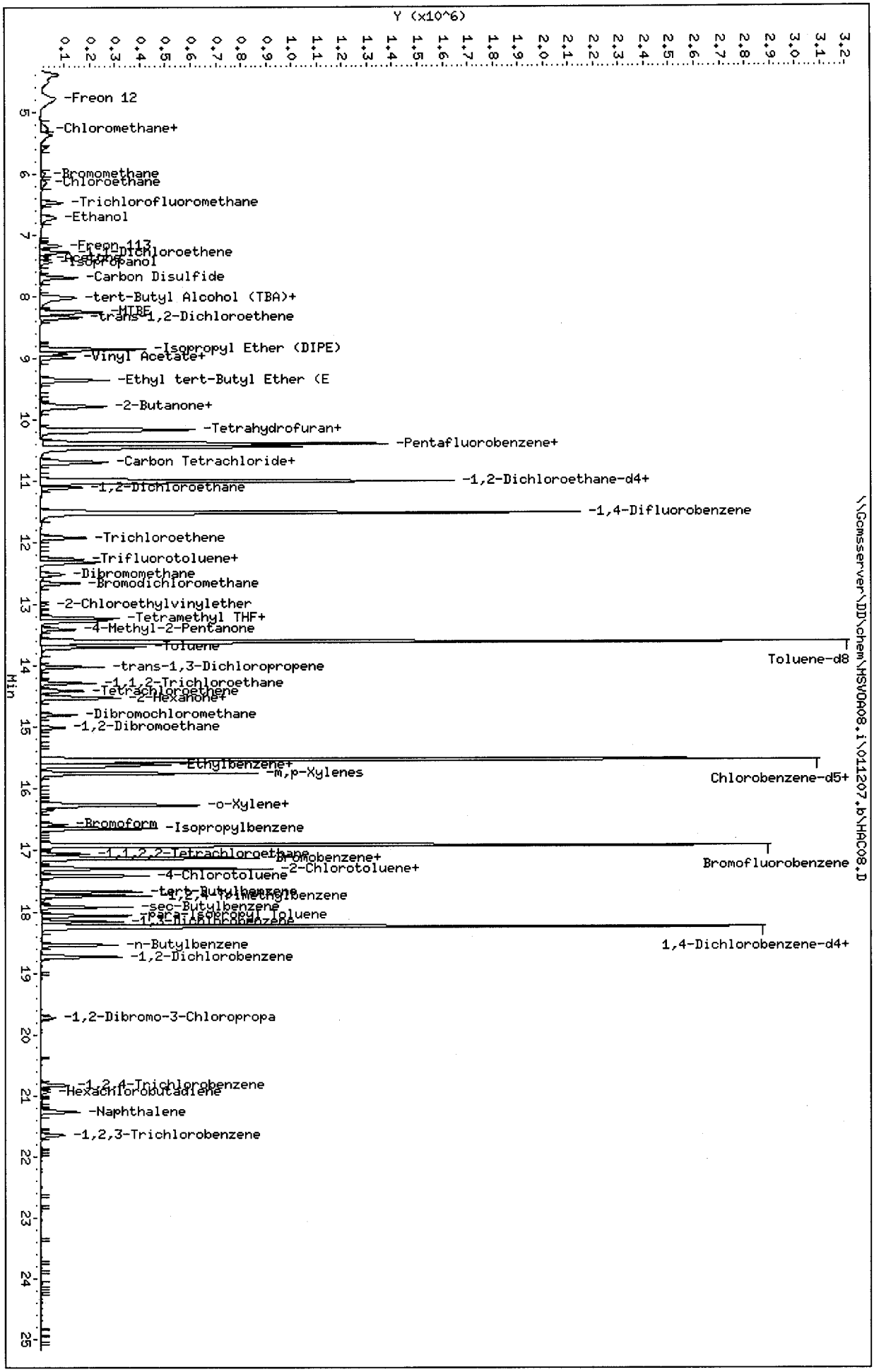
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.236	18.236	(1.000)	685890	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	124211	10.0000	9.8531
80 n-Butylbenzene	91	18.540	18.540	(1.017)	211090	10.0000	9.7614
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	120578	10.0000	10.3080
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	20876	10.0000	10.4487
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	37492	10.0000	9.7901
84 Hexachlorobutadiene	225	20.940	20.940	(1.148)	7034	10.0000	9.8282
85 Naphthalene	128	21.265	21.265	(1.166)	154007	10.0000	10.4951
86 1,2,3-Trichlorobenzene	180	21.649	21.649	(1.187)	34437	10.0000	10.4197

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Date : 12-JAN-2007 02:52
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.002/100,S5170,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 03:29 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.004/100,S5170,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:02 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 03:29 Cal File: HAC09.D
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.785	4.785	(0.461)	232296	20.0000	18.8980
2 Chloromethane	50	5.277	5.277	(0.508)	342969	20.0000	21.0477
3 Vinyl Chloride	62	5.366	5.366	(0.517)	262103	20.0000	21.3635(M)
4 Bromomethane	94	5.985	5.985	(0.577)	94289	20.0000	20.2144(M)
5 Chloroethane	64	6.143	6.143	(0.592)	129960	20.0000	20.9091
6 Trichlorofluoromethane	101	6.477	6.477	(0.624)	259701	20.0000	19.5914
7 Ethanol	45	6.723	6.723	(0.648)	293657	2000.00	2028.2651(AM)
8 Freon 113	101	7.176	7.176	(0.691)	122721	20.0000	20.5476
9 1,1-Dichloroethene	96	7.284	7.284	(0.702)	113798	20.0000	19.8176
10 Acetone	43	7.372	7.372	(0.710)	98059	20.0000	19.5088
11 Isopropanol	45	7.441	7.441	(0.717)	172289	200.000	203.3509(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	618426	20.0000	20.3355
13 tert-Butyl Alcohol (TBA)	59	8.002	8.002	(0.771)	217327	200.000	202.9692(A)
14 Methylene Chloride	84	8.031	8.031	(0.774)	177873	20.0000	20.3265
15 MTBE	73	8.258	8.258	(0.795)	632029	20.0000	21.1323
16 trans-1,2-Dichloroethene	96	8.346	8.346	(0.804)	149961	20.0000	20.3109
17 Isopropyl Ether (DIPE)	45	8.848	8.848	(0.852)	1180273	20.0000	21.0854(A)
18 Vinyl Acetate	43	8.917	8.917	(0.859)	476042	20.0000	21.5134
19 1,1-Dichloroethane	63	8.985	8.985	(0.865)	390922	20.0000	20.8978
20 Ethyl tert-Butyl Ether (ETBE)	59	9.349	9.349	(0.901)	723417	20.0000	21.1194(A)
21 2-Butanone	43	9.762	9.762	(0.940)	135332	20.0000	20.4554
22 2,2-Dichloropropane	77	9.772	9.772	(0.941)	242414	20.0000	20.5915

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.792	9.792	(0.943)	165569	20.0000	19.9392
	24 Tetrahydrofuran	42	10.156	10.156	(0.978)	808007	200.000	209.9841(A)
	25 Bromochloromethane	128	10.156	10.156	(0.978)	74838	20.0000	20.5627
	26 Chloroform	83	10.195	10.195	(0.982)	336692	20.0000	20.1692
*	27 Pentafluorobenzene	168	10.382	10.382	(1.000)	956041	50.0000	
	28 Dibromofluoromethane	113	10.431	10.431	(1.005)	872965	50.0000	50.9783
	29 1,1,1-Trichloroethane	97	10.480	10.480	(1.009)	232026	20.0000	20.3229
	30 Carbon Tetrachloride	117	10.687	10.687	(0.928)	178767	20.0000	19.4236
	31 1,1-Dichloropropene	75	10.697	10.697	(0.929)	226930	20.0000	20.1733
	32 1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1375525	50.0000	52.2623
	33 Benzene	78	11.012	11.012	(0.956)	638926	20.0000	20.6558
	34 Methyl tert-Amyl Ether (TAME)	73	11.012	11.012	(0.956)	615566	20.0000	21.3522(A)
	35 1,2-Dichloroethane	62	11.100	11.100	(0.964)	345554	20.0000	20.7184
*	36 1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2169322	50.0000	
	37 Trichloroethene	95	11.916	11.916	(1.035)	166237	20.0000	20.1662
	38 Trifluorotoluene	146	12.261	12.261	(1.065)	152507	20.0000	19.6544(A)
	39 1,2-Dichloropropane	63	12.320	12.320	(1.070)	221963	20.0000	21.2651
	40 Dibromomethane	93	12.507	12.507	(1.086)	126857	20.0000	21.4480
	41 Bromodichloromethane	83	12.654	12.654	(1.099)	260182	20.0000	20.9990
	42 2-Chloroethylvinylether	63	12.988	12.988	(1.128)	34152	20.0000	21.4663
	43 Tetramethyl THF	43	13.215	13.215	(1.148)	611480	20.0000	21.8056(A)
	44 cis-1,3-Dichloropropene	75	13.264	13.264	(1.152)	315554	20.0000	20.9957
	45 4-Methyl-2-Pentanone	43	13.402	13.402	(1.164)	301704	20.0000	21.1627
	46 Toluene-d8	98	13.598	13.598	(1.181)	2422921	50.0000	49.1536
	47 Toluene	92	13.687	13.687	(1.189)	380717	20.0000	19.6967
	48 trans-1,3-Dichloropropene	75	14.011	14.011	(1.217)	300068	20.0000	20.4815
	49 1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	90869	20.0000	21.2704
	50 Tetrachloroethene	166	14.405	14.405	(0.928)	94039	20.0000	19.4727
	51 2-Hexanone	43	14.503	14.503	(0.934)	202069	20.0000	20.7701
	52 1,3-Dichloropropane	76	14.523	14.523	(0.935)	301080	20.0000	20.5141
	53 Dibromochloromethane	129	14.798	14.798	(0.953)	167880	20.0000	20.5523
	54 1,2-Dibromoethane	107	15.005	15.005	(1.303)	177558	20.0000	21.0223
*	55 Chlorobenzene-d5	117	15.526	15.526	(1.000)	1742813	50.0000	
	56 Chlorobenzene	112	15.565	15.565	(1.003)	408385	20.0000	19.9347
	57 Ethylbenzene	91	15.615	15.615	(1.006)	761680	20.0000	20.4366
	58 1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	136680	20.0000	21.0533
	59 m,p-Xylenes	106	15.752	15.752	(1.015)	551840	40.0000	42.9202
	60 o-Xylene	106	16.254	16.254	(1.047)	269777	20.0000	20.7706
	61 Styrene	104	16.274	16.274	(1.048)	489376	20.0000	21.7544
	62 Bromoform	173	16.579	16.579	(1.068)	94100	20.0000	20.4177
	63 Isopropylbenzene	105	16.647	16.647	(0.913)	691321	20.0000	20.1770
	65 Bromofluorobenzene	95	16.913	16.913	(0.927)	1204149	50.0000	49.9774
	66 1,1,2,2-Tetrachloroethane	83	17.051	17.051	(0.935)	238847	20.0000	21.1126
	67 Bromobenzene	156	17.119	17.119	(0.939)	140399	20.0000	20.3328
	68 Propylbenzene	91	17.110	17.110	(0.938)	891308	20.0000	20.9505
	69 1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	62928	20.0000	21.1670
	70 2-Chlorotoluene	91	17.297	17.297	(0.948)	620600	20.0000	19.9157
	71 1,3,5-Trimethylbenzene	105	17.297	17.297	(0.948)	556069	20.0000	20.0170
	72 4-Chlorotoluene	91	17.415	17.415	(0.955)	607283	20.0000	20.0472
	73 tert-Butylbenzene	119	17.670	17.670	(0.969)	430730	20.0000	20.9321
	74 1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	603261	20.0000	20.4455
	75 sec-Butylbenzene	105	17.926	17.926	(0.983)	658834	20.0000	20.3353
	76 para-Isopropyl Toluene	119	18.064	18.064	(0.990)	479362	20.0000	20.0205
	77 1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	262263	20.0000	19.7167

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

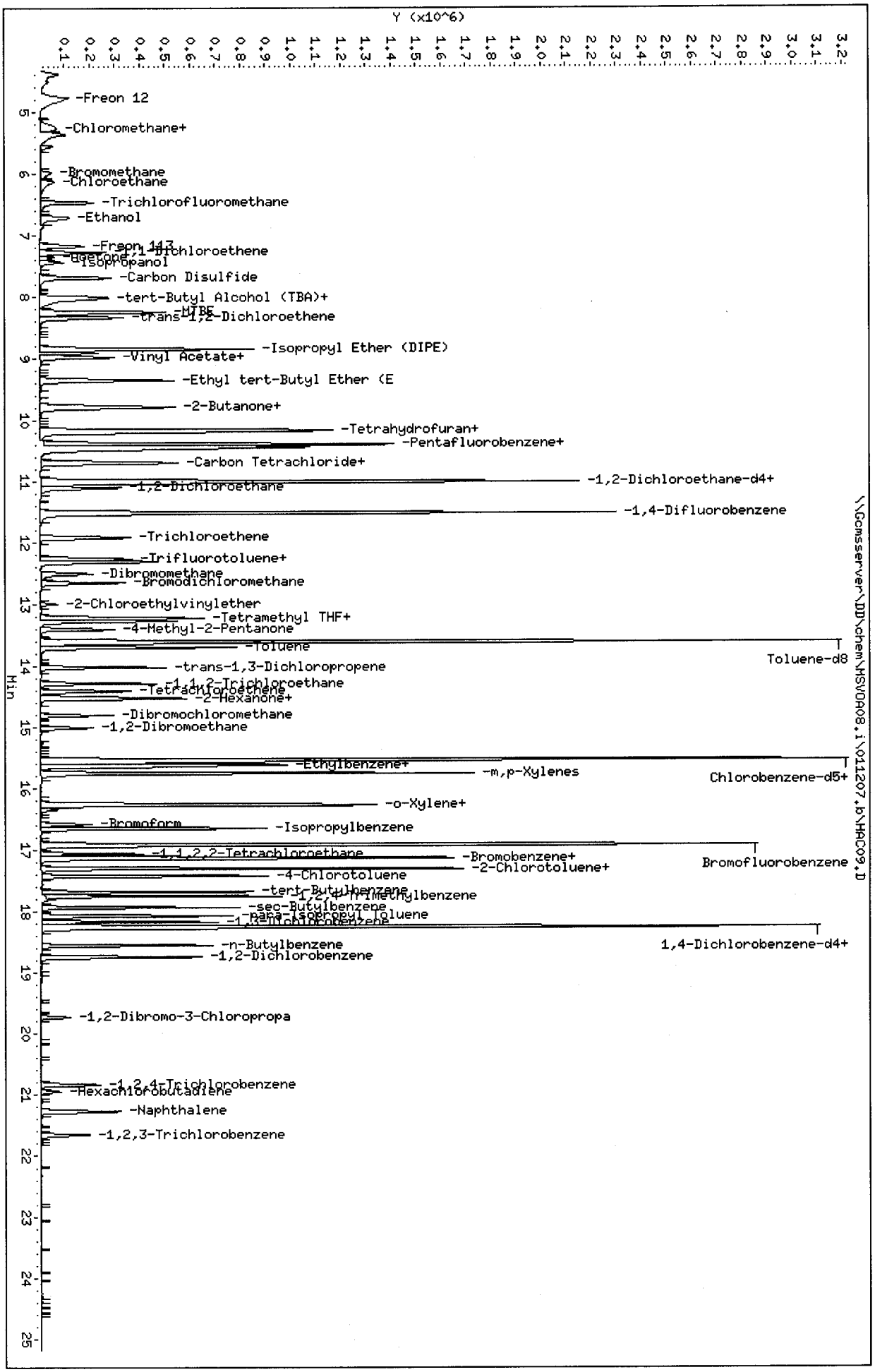
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	716308	50.0000	
79 1,4-Dichlorobenzene	146	18.270	18.270	(1.002)	265425	20.0000	20.1610
80 n-Butylbenzene	91	18.546	18.546	(1.017)	450025	20.0000	19.9268
81 1,2-Dichlorobenzene	146	18.733	18.733	(1.027)	245315	20.0000	20.0811
82 1,2-Dibromo-3-Chloropropane	75	19.716	19.716	(1.081)	42406	20.0000	20.3235
83 1,2,4-Trichlorobenzene	180	20.828	20.828	(1.142)	81285	20.0000	20.3242
84 Hexachlorobutadiene	225	20.946	20.946	(1.148)	16651	20.0000	21.4976
85 Naphthalene	128	21.260	21.260	(1.166)	329414	20.0000	21.1772
86 1,2,3-Trichlorobenzene	180	21.644	21.644	(1.187)	73497	20.0000	21.2939

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Date : 12-JAN-2007 03:29
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.004/100,S5170,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 04:06 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.01/100,S5170,0.01/100,
Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:03 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 04:06 Cal File: HAC10.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.786	4.786	(0.461)	706089	50.0000	53.3657
2 Chloromethane	50	5.278	5.278	(0.508)	865096	50.0000	50.6076
3 Vinyl Chloride	62	5.376	5.376	(0.518)	699990	50.0000	54.3869
4 Bromomethane	94	5.986	5.986	(0.577)	253853	50.0000	48.2567
5 Chloroethane	64	6.133	6.133	(0.591)	352633	50.0000	54.0816
6 Trichlorofluoromethane	101	6.478	6.478	(0.624)	742465	50.0000	52.7845
7 Ethanol	45	6.723	6.723	(0.648)	708269	5000.00	4663.1920(AM)
8 Freon 113	101	7.186	7.186	(0.692)	316826	50.0000	46.9763
9 1,1-Dichloroethene	96	7.284	7.284	(0.702)	293535	50.0000	48.7279
10 Acetone	43	7.373	7.373	(0.710)	224715	50.0000	42.6164
11 Isopropanol	45	7.451	7.451	(0.718)	435166	500.000	489.6031(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	1470730	50.0000	46.1001
13 tert-Butyl Alcohol (TBA)	59	8.002	8.002	(0.771)	538035	500.000	478.9914(A)
14 Methylene Chloride	84	8.032	8.032	(0.774)	444739	50.0000	48.4461(M)
15 MTBE	73	8.258	8.258	(0.795)	1560692	50.0000	49.7425
16 trans-1,2-Dichloroethene	96	8.346	8.346	(0.804)	370885	50.0000	47.8841
17 Isopropyl Ether (DIPE)	45	8.848	8.848	(0.852)	2935414	50.0000	49.9885(A)
18 Vinyl Acetate	43	8.917	8.917	(0.859)	1136064	50.0000	48.9404
19 1,1-Dichloroethane	63	8.986	8.986	(0.865)	953185	50.0000	48.5724
20 Ethyl tert-Butyl Ether (ETBE)	59	9.350	9.350	(0.901)	1849928	50.0000	51.4813(A)
21 2-Butanone	43	9.763	9.763	(0.940)	324976	50.0000	46.8232
22 2,2-Dichloropropane	77	9.772	9.772	(0.941)	587015	50.0000	47.5315

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.802	9.802	(0.944)	428721	50.0000	49.2157
	24 Tetrahydrofuran	42	10.156	10.156	(0.978)	1928975	500.000	477.8577(A)
	25 Bromochloromethane	128	10.166	10.166	(0.979)	190184	50.0000	49.8120
	26 Chloroform	83	10.195	10.195	(0.982)	831393	50.0000	47.4749
*	27 Pentafluorobenzene	168	10.382	10.382	(1.000)	1002942	50.0000	
	28 Dibromofluoromethane	113	10.441	10.441	(1.006)	893756	50.0000	49.7517
	29 1,1,1-Trichloroethane	97	10.481	10.481	(1.009)	565848	50.0000	47.2443
	30 Carbon Tetrachloride	117	10.687	10.687	(0.928)	445494	50.0000	47.1371
	31 1,1-Dichloropropene	75	10.697	10.697	(0.929)	549785	50.0000	47.5945
	32 1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1367637	50.0000	50.6021
	33 Benzene	78	11.012	11.012	(0.956)	1537186	50.0000	48.3945
	34 Methyl tert-Amyl Ether (TAME)	73	11.012	11.012	(0.956)	1489929	50.0000	50.3283(A)
	35 1,2-Dichloroethane	62	11.100	11.100	(0.964)	866893	50.0000	50.6155
*	36 1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2227647	50.0000	
	37 Trichloroethene	95	11.917	11.917	(1.035)	401134	50.0000	47.3876
	38 Trifluorotoluene	146	12.261	12.261	(1.065)	378404	50.0000	47.4901(A)
	39 1,2-Dichloropropane	63	12.320	12.320	(1.070)	551939	50.0000	51.4939
	40 Dibromomethane	93	12.507	12.507	(1.086)	318863	50.0000	52.4996
	41 Bromodichloromethane	83	12.654	12.654	(1.099)	686362	50.0000	53.9452
	42 2-Chloroethylvinylether	63	12.989	12.989	(1.128)	59130	50.0000	36.1931
	43 Tetramethyl THF	43	13.215	13.215	(1.148)	1471998	50.0000	51.1178(A)
	44 cis-1,3-Dichloropropene	75	13.264	13.264	(1.152)	799329	50.0000	51.7917
	45 4-Methyl-2-Pentanone	43	13.402	13.402	(1.164)	748930	50.0000	51.1576
	46 Toluene-d8	98	13.599	13.599	(1.181)	2555074	50.0000	50.4774
	47 Toluene	92	13.697	13.697	(1.190)	941543	50.0000	47.4362
	48 trans-1,3-Dichloropropene	75	14.012	14.012	(1.217)	783016	50.0000	52.0465
	49 1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	229648	50.0000	52.3481
	50 Tetrachloroethene	166	14.405	14.405	(0.928)	229062	50.0000	44.7448
	51 2-Hexanone	43	14.494	14.494	(0.933)	496119	50.0000	48.1056
	52 1,3-Dichloropropane	76	14.523	14.523	(0.935)	778238	50.0000	50.0211
	53 Dibromochloromethane	129	14.799	14.799	(0.953)	454411	50.0000	52.4785
	54 1,2-Dibromoethane	107	15.005	15.005	(1.303)	445550	50.0000	51.3705
*	55 Chlorobenzene-d5	117	15.526	15.526	(1.000)	1847481	50.0000	
	56 Chlorobenzene	112	15.566	15.566	(1.003)	1007944	50.0000	46.4138
	57 Ethylbenzene	91	15.615	15.615	(1.006)	1796160	50.0000	45.4625
	58 1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	342279	50.0000	49.7355
	59 m,p-Xylenes	106	15.753	15.753	(1.015)	1246195	100.000	91.4336
	60 o-Xylene	106	16.254	16.254	(1.047)	647005	50.0000	46.9920
	61 Styrene	104	16.274	16.274	(1.048)	1167003	50.0000	48.9381
	62 Bromoform	173	16.579	16.579	(1.068)	245574	50.0000	50.2657
	63 Isopropylbenzene	105	16.648	16.648	(0.913)	1623993	50.0000	45.9682
	65 Bromofluorobenzene	95	16.913	16.913	(0.927)	1236726	50.0000	49.7809
	66 1,1,2,2-Tetrachloroethane	83	17.051	17.051	(0.935)	584057	50.0000	50.0696
	67 Bromobenzene	156	17.120	17.120	(0.939)	333626	50.0000	46.8588
	68 Propylbenzene	91	17.110	17.110	(0.938)	1950680	50.0000	44.4682
	69 1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	152283	50.0000	49.6779
	70 2-Chlorotoluene	91	17.297	17.297	(0.948)	1476902	50.0000	45.9656
	71 1,3,5-Trimethylbenzene	105	17.297	17.297	(0.948)	1334713	50.0000	46.5968
	72 4-Chlorotoluene	91	17.415	17.415	(0.955)	1442056	50.0000	46.1681
	73 tert-Butylbenzene	119	17.671	17.671	(0.969)	1016689	50.0000	47.9173
	74 1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	1427082	50.0000	46.9071
	75 sec-Butylbenzene	105	17.926	17.926	(0.983)	1572606	50.0000	47.0752
	76 para-Isopropyl Toluene	119	18.064	18.064	(0.990)	1162397	50.0000	47.0828
	77 1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	632672	50.0000	46.1289

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

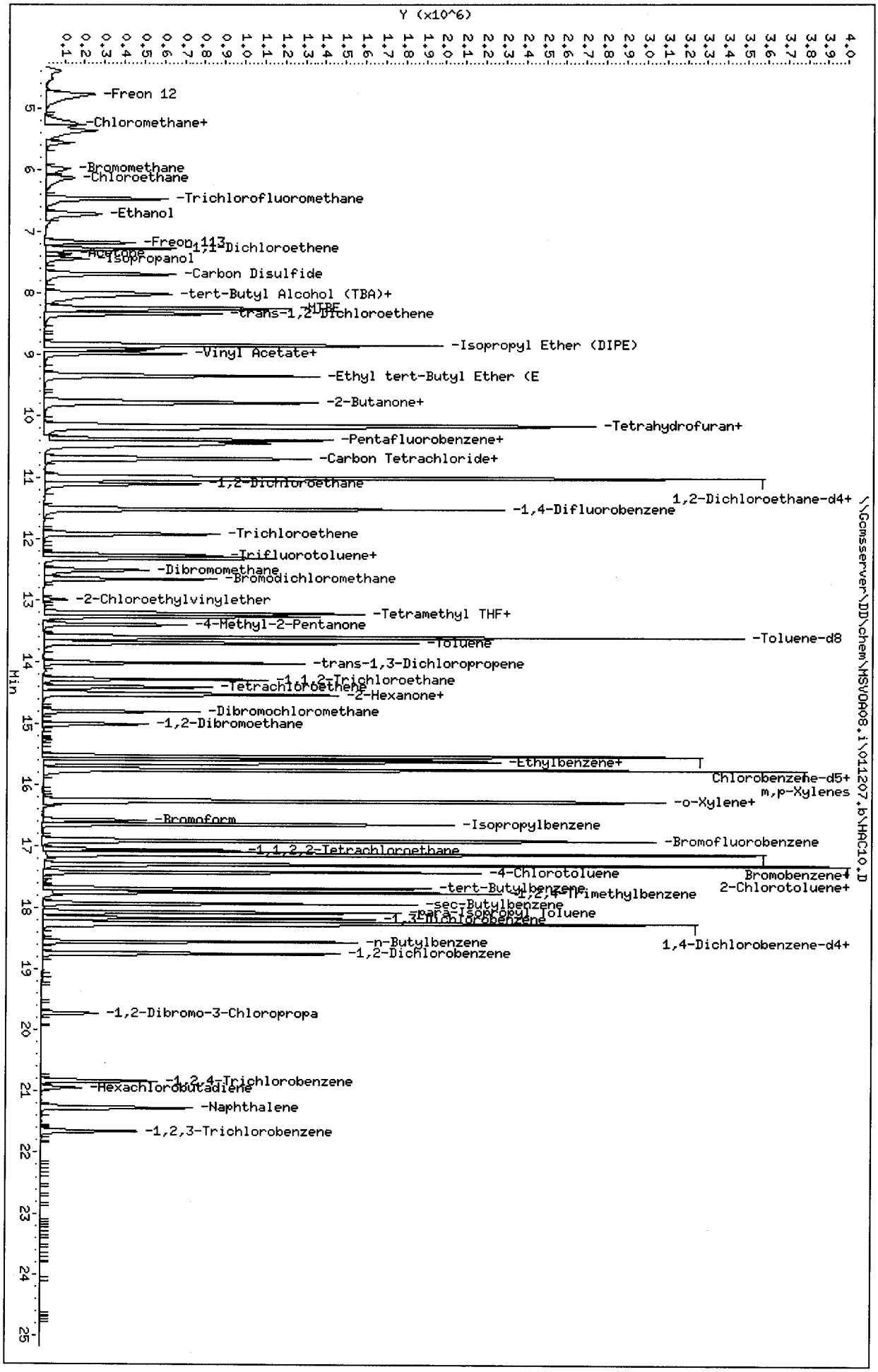
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	738590	50.0000	
79 1,4-Dichlorobenzene	146	18.271	18.271	(1.002)	638866	50.0000	47.0627
80 n-Butylbenzene	91	18.546	18.546	(1.017)	1064915	50.0000	45.7313
81 1,2-Dichlorobenzene	146	18.733	18.733	(1.027)	598563	50.0000	47.5193
82 1,2-Dibromo-3-Chloropropane	75	19.716	19.716	(1.081)	107335	50.0000	49.8895
83 1,2,4-Trichlorobenzene	180	20.828	20.828	(1.142)	192279	50.0000	46.6263
84 Hexachlorobutadiene	225	20.946	20.946	(1.148)	40504	50.0000	47.0097
85 Naphthalene	128	21.261	21.261	(1.166)	814433	50.0000	49.2251
86 1,2,3-Trichlorobenzene	180	21.654	21.654	(1.187)	181130	50.0000	50.8948

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Date : 12-JAN-2007 04:06
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.01/100,S5170,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 04:43 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.015/100,S5170,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:04 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 04:43 Cal File: HAC11.D
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	1085603	75.0000	76.6683
2 Chloromethane	50	5.262	5.262	(0.507)	1315319	75.0000	72.2036
3 Vinyl Chloride	62	5.370	5.370	(0.517)	1076970	75.0000	78.5203
4 Bromomethane	94	5.980	5.980	(0.576)	457888	75.0000	77.3958
5 Chloroethane	64	6.137	6.137	(0.591)	552153	75.0000	79.4626
6 Trichlorofluoromethane	101	6.482	6.482	(0.624)	1177445	75.0000	78.3785
7 Ethanol	45	6.718	6.718	(0.647)	1163121	7500.00	7185.9814(A)
8 Freon 113	101	7.180	7.180	(0.691)	620113	75.0000	78.2587
9 1,1-Dichloroethene	96	7.288	7.288	(0.702)	509270	75.0000	79.3308
10 Acetone	43	7.377	7.377	(0.710)	465031	75.0000	82.7567
11 Isopropanol	45	7.446	7.446	(0.717)	706104	750.000	745.4766(A)
12 Carbon Disulfide	76	7.701	7.701	(0.741)	2725209	75.0000	80.1576
13 tert-Butyl Alcohol (TBA)	59	7.996	7.996	(0.770)	885879	750.000	740.0614(A)
14 Methylene Chloride	84	8.036	8.036	(0.774)	729931	75.0000	74.6126
15 MTBE	73	8.252	8.252	(0.795)	2573785	75.0000	76.9767
16 trans-1,2-Dichloroethene	96	8.351	8.351	(0.804)	648843	75.0000	78.6082
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	4715548	75.0000	75.3545(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	1872608	75.0000	75.6986
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	1571804	75.0000	75.1600
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	2975632	75.0000	77.7053(A)
21 2-Butanone	43	9.757	9.757	(0.939)	580948	75.0000	78.5458
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	1006445	75.0000	76.4713

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.796	9.796	(0.943)	691579	75.0000	74.4984
24	Tetrahydrofuran	42	10.160	10.160	(0.978)	2936943	750.000	682.7216(A)
25	Bromochloromethane	128	10.170	10.170	(0.979)	311244	75.0000	76.4957
26	Chloroform	83	10.200	10.200	(0.982)	1329519	75.0000	71.2408
* 27	Pentafluorobenzene	168	10.387	10.387	(1.000)	1068808	50.0000	
28	Dibromofluoromethane	113	10.436	10.436	(1.005)	947399	50.0000	49.4878
29	1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	1025457	75.0000	80.3421
30	Carbon Tetrachloride	117	10.682	10.682	(0.927)	825397	75.0000	80.7629
31	1,1-Dichloropropene	75	10.701	10.701	(0.929)	1006170	75.0000	80.5496
32	1,2-Dichloroethane-d4	65	10.996	10.996	(0.955)	1348312	50.0000	46.1334
33	Benzene	78	11.016	11.016	(0.956)	2468454	75.0000	71.8658
34	Methyl tert-Amyl Ether (TAME)	73	11.006	11.006	(0.956)	2313279	75.0000	72.2608(A)
35	1,2-Dichloroethane	62	11.105	11.105	(0.964)	1380193	75.0000	74.5221
* 36	1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2408901	50.0000	
37	Trichloroethene	95	11.921	11.921	(1.035)	717905	75.0000	78.4277
38	Trifluorotoluene	146	12.265	12.265	(1.065)	737756	75.0000	85.6226(A)
39	1,2-Dichloropropane	63	12.314	12.314	(1.069)	871591	75.0000	75.1977(M)
40	Dibromomethane	93	12.511	12.511	(1.086)	507845	75.0000	77.3233
41	Bromodichloromethane	83	12.659	12.659	(1.099)	1060412	75.0000	77.0728
42	2-Chloroethylvinylether	63	12.993	12.993	(1.128)	141549	75.0000	80.1222
43	Tetramethyl THF	43	13.209	13.209	(1.147)	2328817	75.0000	74.7873(A)
44	cis-1,3-Dichloropropene	75	13.268	13.268	(1.152)	1252330	75.0000	75.0379
45	4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	1231433	75.0000	77.7870
46	Toluene-d8	98	13.593	13.593	(1.180)	2681427	50.0000	48.9877
47	Toluene	92	13.691	13.691	(1.189)	1565522	75.0000	72.9385
48	trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	1214550	75.0000	74.6558
49	1,1,2-Trichloroethane	85	14.281	14.281	(1.240)	365302	75.0000	77.0048
50	Tetrachloroethene	166	14.409	14.409	(0.928)	433677	75.0000	80.3704
51	2-Hexanone	43	14.498	14.498	(0.934)	870215	75.0000	80.0528
52	1,3-Dichloropropane	76	14.527	14.527	(0.936)	1221071	75.0000	74.4600
53	Dibromochloromethane	129	14.803	14.803	(0.954)	715168	75.0000	78.3576
54	1,2-Dibromoethane	107	15.009	15.009	(1.303)	727782	75.0000	77.5973
* 55	Chlorobenzene-d5	117	15.521	15.521	(1.000)	1947329	50.0000	
56	Chlorobenzene	112	15.560	15.560	(1.003)	1644961	75.0000	71.8633
57	Ethylbenzene	91	15.609	15.609	(1.006)	2930740	75.0000	70.3763
58	1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	545291	75.0000	75.1719
59	m,p-Xylenes	106	15.747	15.747	(1.015)	2011473	150.000	140.0151
60	o-Xylene	106	16.249	16.249	(1.047)	1040660	75.0000	71.7078
61	Styrene	104	16.278	16.278	(1.049)	1847360	75.0000	73.4966
62	Bromoform	173	16.573	16.573	(1.068)	396183	75.0000	76.9353
63	Isopropylbenzene	105	16.642	16.642	(0.912)	2657293	75.0000	72.0269
65	Bromofluorobenzene	95	16.908	16.908	(0.927)	1233935	50.0000	47.5625
66	1,1,2,2-Tetrachloroethane	83	17.045	17.045	(0.934)	883604	75.0000	72.5370
67	Bromobenzene	156	17.114	17.114	(0.938)	522083	75.0000	70.2187
68	Propylbenzene	91	17.114	17.114	(0.938)	3108819	75.0000	67.8644
69	1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	235613	75.0000	73.6027
70	2-Chlorotoluene	91	17.291	17.291	(0.948)	2207118	75.0000	65.7792
71	1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	2043082	75.0000	68.3025
72	4-Chlorotoluene	91	17.419	17.419	(0.955)	2245511	75.0000	68.8427
73	tert-Butylbenzene	119	17.675	17.675	(0.969)	1691574	75.0000	76.3445
74	1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	2260276	75.0000	71.1433
75	sec-Butylbenzene	105	17.921	17.921	(0.982)	2655378	75.0000	76.1169
76	para-Isopropyl Toluene	119	18.068	18.068	(0.990)	1884605	75.0000	73.0988
77	1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	1014464	75.0000	70.8294

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

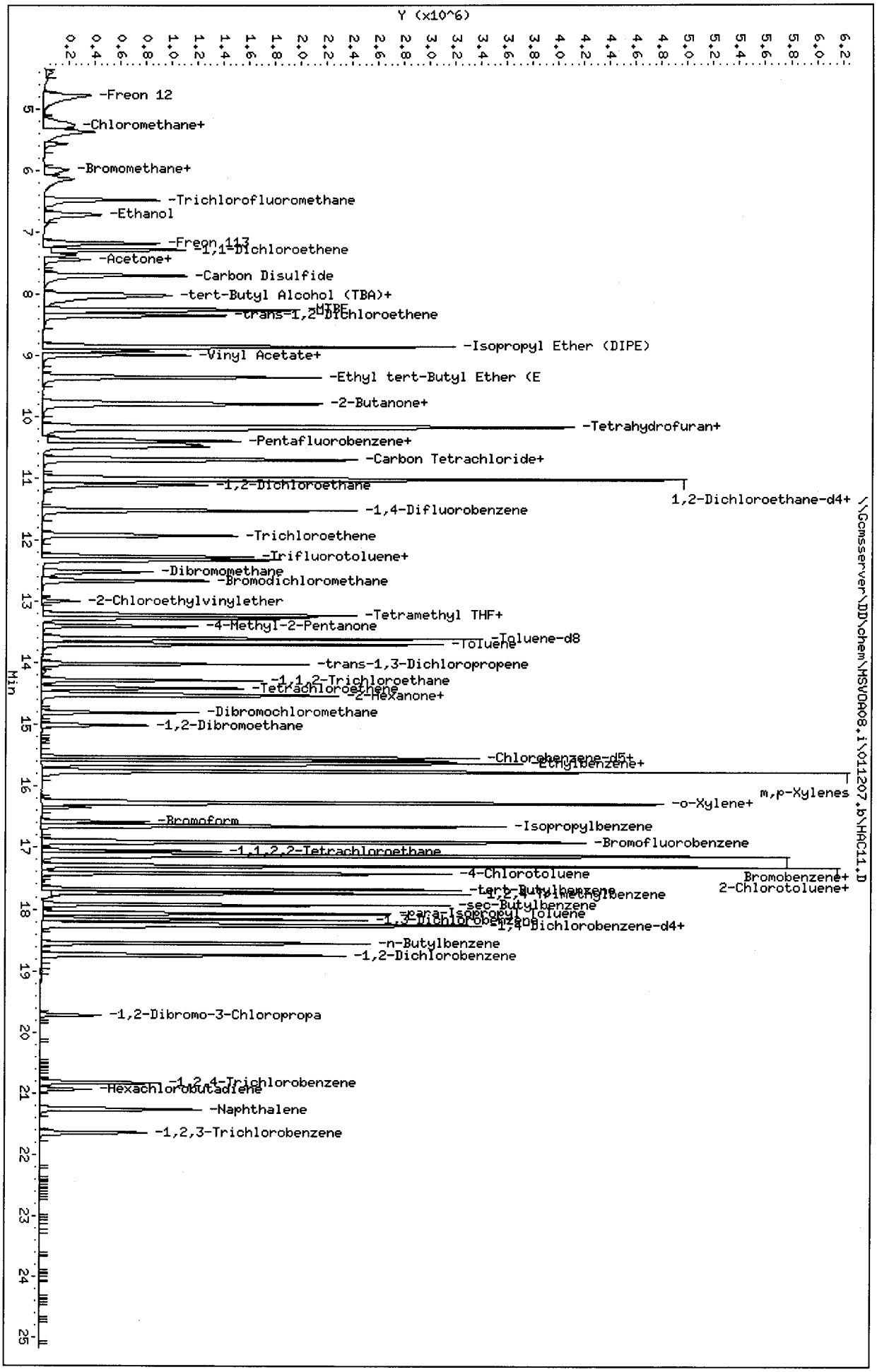
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.245	18.245	(1.000)	771296	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.001)	1020533	75.0000	71.9907
80 n-Butylbenzene	91	18.540	18.540	(1.016)	1789446	75.0000	73.5868
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.027)	961003	75.0000	73.0580
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	167943	75.0000	74.7501
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	329539	75.0000	76.5225
84 Hexachlorobutadiene	225	20.940	20.940	(1.148)	78360	75.0000	77.3023
85 Naphthalene	128	21.265	21.265	(1.165)	1332973	75.0000	74.9324
86 1,2,3-Trichlorobenzene	180	21.648	21.648	(1.187)	312981	75.0000	84.2139

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Date : 12-JAN-2007 04:43
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.015/100,S5170,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 05:20 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.02/100,S5170,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:06 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 05:20 Cal File: HAC12.D
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	1438714	100.000	97.1856
2 Chloromethane	50	5.262	5.262	(0.507)	1748057	100.000	91.9709
3 Vinyl Chloride	62	5.370	5.370	(0.517)	1405897	100.000	98.2423
4 Bromomethane	94	5.990	5.990	(0.577)	636724	100.000	98.9913
5 Chloroethane	64	6.137	6.137	(0.591)	721073	100.000	99.4602
6 Trichlorofluoromethane	101	6.482	6.482	(0.624)	1504920	100.000	95.9353
7 Ethanol	45	6.718	6.718	(0.647)	1490604	10000.0	8826.5355(A)
8 Freon 113	101	7.180	7.180	(0.691)	889096	100.000	98.7349
9 1,1-Dichloroethene	96	7.288	7.288	(0.702)	706740	100.000	105.5165
10 Acetone	43	7.377	7.377	(0.710)	470675	100.000	80.2803
11 Isopropanol	45	7.446	7.446	(0.717)	935631	1000.00	946.7532(A)
12 Carbon Disulfide	76	7.701	7.701	(0.741)	3689435	100.000	104.0092
13 tert-Butyl Alcohol (TBA)	59	7.996	7.996	(0.770)	1156954	1000.00	926.3524(A)
14 Methylene Chloride	84	8.026	8.026	(0.773)	957435	100.000	93.8007
15 MTBE	73	8.252	8.252	(0.795)	3287183	100.000	94.2275
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	866150	100.000	100.5746
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	5863479	100.000	89.8047(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	2864336	100.000	110.9767
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	1981013	100.000	90.7909
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	3669169	100.000	91.8345(A)
21 2-Butanone	43	9.757	9.757	(0.939)	682448	100.000	88.4346
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	1330680	100.000	96.9056

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.796	9.796	(0.943)	902285	100.000	93.1571
	24 Tetrahydrofuran	42	10.160	10.160	(0.978)	3687563	1000.00	821.5886(A)
	25 Bromochloromethane	128	10.160	10.160	(0.978)	404139	100.000	95.1993
	26 Chloroform	83	10.200	10.200	(0.982)	1683648	100.000	86.4673
*	27 Pentafluorobenzene	168	10.386	10.386	(1.000)	1115149	50.0000	
	28 Dibromofluoromethane	113	10.436	10.436	(1.005)	950874	50.0000	47.6053
	29 1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	1340292	100.000	100.6450
	30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	1101339	100.000	108.0014
	31 1,1-Dichloropropene	75	10.701	10.701	(0.929)	1335954	100.000	107.1872
	32 1,2-Dichloroethane-d4	65	10.986	10.986	(0.954)	1321592	50.0000	45.3192
	33 Benzene	78	11.016	11.016	(0.956)	3150179	100.000	91.9162
	34 Methyl tert-Amyl Ether (TAME)	73	11.006	11.006	(0.956)	2938544	100.000	91.9954(A)
	35 1,2-Dichloroethane	62	11.104	11.104	(0.964)	1716411	100.000	92.8809
*	36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2403585	50.0000	
	37 Trichloroethene	95	11.921	11.921	(1.035)	906915	100.000	99.2953
	38 Trifluorotoluene	146	12.265	12.265	(1.065)	1012977	100.000	117.8242(A)
	39 1,2-Dichloropropane	63	12.314	12.314	(1.069)	1135379	100.000	98.1730
	40 Dibromomethane	93	12.511	12.511	(1.086)	662548	100.000	101.1011
	41 Bromodichloromethane	83	12.659	12.659	(1.099)	1368591	100.000	99.6919
	42 2-Chloroethylvinylether	63	12.993	12.993	(1.128)	191490	100.000	108.6304
	43 Tetramethyl THF	43	13.209	13.209	(1.147)	2971972	100.000	95.6526(A)
	44 cis-1,3-Dichloropropene	75	13.268	13.268	(1.152)	1640377	100.000	98.5065
	45 4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	1528728	100.000	96.7801
	46 Toluene-d8	98	13.593	13.593	(1.180)	2686562	50.0000	49.1901
	47 Toluene	92	13.691	13.691	(1.189)	1974103	100.000	92.1779
	48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	1595018	100.000	98.2592
	49 1,1,2-Trichloroethane	85	14.281	14.281	(1.240)	458178	100.000	96.7965
	50 Tetrachloroethene	166	14.409	14.409	(0.928)	575792	100.000	106.6745
	51 2-Hexanone	43	14.498	14.498	(0.934)	1039458	100.000	95.5921
	52 1,3-Dichloropropane	76	14.527	14.527	(0.936)	1544268	100.000	94.1390
	53 Dibromochloromethane	129	14.803	14.803	(0.954)	943008	100.000	103.2889
	54 1,2-Dibromoethane	107	15.009	15.009	(1.303)	937904	100.000	100.2220
*	55 Chlorobenzene-d5	117	15.521	15.521	(1.000)	1947935	50.0000	
	56 Chlorobenzene	112	15.560	15.560	(1.003)	2142393	100.000	93.5655
	57 Ethylbenzene	91	15.609	15.609	(1.006)	3826192	100.000	91.8504
	58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	725732	100.000	100.0157
	59 m,p-Xylenes	106	15.747	15.747	(1.015)	2485984	200.000	172.9911
	60 o-Xylene	106	16.249	16.249	(1.047)	1312396	100.000	90.4039
	61 Styrene	104	16.278	16.278	(1.049)	2305685	100.000	91.7024
	62 Bromoform	173	16.573	16.573	(1.068)	533475	100.000	103.5640
	63 Isopropylbenzene	105	16.642	16.642	(0.913)	3471203	100.000	93.9766
	65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1243053	50.0000	47.8570
	66 1,1,2,2-Tetrachloroethane	83	17.055	17.055	(0.935)	1186965	100.000	97.3248
	67 Bromobenzene	156	17.114	17.114	(0.939)	693428	100.000	93.1534
	68 Propylbenzene	91	17.114	17.114	(0.939)	4151252	100.000	90.5127
	69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	305247	100.000	95.2423
	70 2-Chlorotoluene	91	17.291	17.291	(0.948)	2820140	100.000	83.9495
	71 1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	2643238	100.000	88.2615
	72 4-Chlorotoluene	91	17.419	17.419	(0.955)	2909888	100.000	89.1051
	73 tert-Butylbenzene	119	17.675	17.675	(0.969)	2289569	100.000	103.2107
	74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	2891569	100.000	90.9055
	75 sec-Butylbenzene	105	17.921	17.921	(0.983)	3586017	100.000	102.6718
	76 para-Isopropyl Toluene	119	18.068	18.068	(0.991)	2576063	100.000	99.8000
	77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	1309739	100.000	91.3368

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

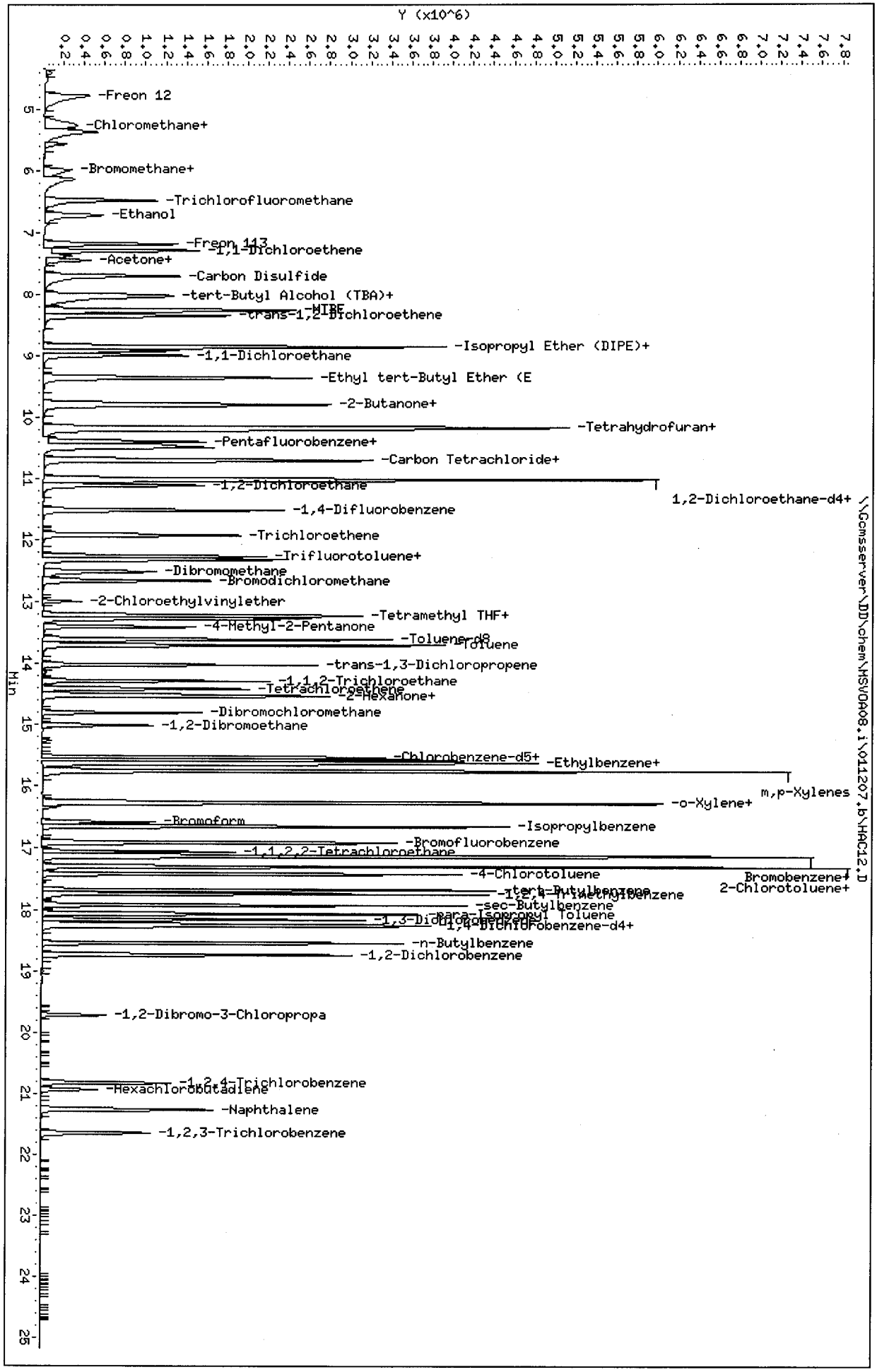
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.235	18.235	(1.000)	772213	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	1342265	100.000	94.5740
80 n-Butylbenzene	91	18.540	18.540	(1.017)	2501872	100.000	102.7615
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	1266236	100.000	96.1483
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	227489	100.000	101.1334
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	462569	100.000	107.2859
84 Hexachlorobutadiene	225	20.950	20.950	(1.149)	115894	100.000	99.3088
85 Naphthalene	128	21.265	21.265	(1.166)	1839963	100.000	100.1538
86 1,2,3-Trichlorobenzene	180	21.658	21.658	(1.188)	423942	100.000	113.9348

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Date : 12-JAN-2007 05:20
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.02/100,S5170,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193027 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: QC377512 IDF : 1.0
Seqnum : 477092859004.3 File : hc504 Time : 05-MAR-2007 13:19
Cal : 477017193004 Caldate : 12-JAN-2007 Caltype : WATER
Standards: S5520 (10000X), S5537 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.8522	0.8598	25.00	25.22	ug/L	1	30	0.1000	m u
Vinyl Chloride	0.6416	0.6864	25.00	26.74	ug/L	7	20	0.0500	m u
Bromomethane	0.2251	0.2345	25.00	23.71	ug/L	-5	30	0.0500	m u
Chloroethane	0.3251	0.3853	25.00	29.64	ug/L	19	30	0.0500	m u
Acetone	0.2629	0.2791	25.00	26.55	ug/L	6	40	0.0500	u
1,1-Dichloroethene	0.3003	0.3574	25.00	29.75	ug/L	19	20	0.0500	u
Methylene Chloride	0.4577	0.4871	25.00	26.61	ug/L	6	30	0.0500	u
Carbon Disulfide	1.5905	1.1867	25.00	18.65	ug/L	**-25**	30	0.0500	!c- u
MTBE	1.5642	1.4167	25.00	22.64	ug/L	-9	30	0.0500	u
trans-1,2-Dichloroethene	0.3861	0.4048	25.00	26.21	ug/L	5	30	0.0500	u
Vinyl Acetate	1.1573	1.3224	25.00	28.57	ug/L	14	40	0.0500	u
1,1-Dichloroethane	0.9783	1.0199	25.00	26.06	ug/L	4	30	0.1000	u
2-Butanone	0.3460	0.3834	25.00	27.70	ug/L	11	40	0.0500	u
cis-1,2-Dichloroethene	0.4343	0.4392	25.00	25.28	ug/L	1	30	0.0500	u
Chloroform	0.8730	0.8639	25.00	24.74	ug/L	-1	20	0.0500	u
1,1,1-Trichloroethane	0.5971	0.6205	25.00	25.98	ug/L	4	30	0.0500	u
Carbon Tetrachloride	0.2121	0.2402	25.00	28.31	ug/L	13	30	0.0500	u
1,2-Dichloroethane	0.3844	0.3601	25.00	23.42	ug/L	-6	30	0.0500	u
Benzene	0.7129	0.7308	25.00	25.62	ug/L	2	30	0.0500	u
Trichloroethene	0.1900	0.1856	25.00	24.43	ug/L	-2	30	0.0500	u
1,2-Dichloropropane	0.2406	0.2397	25.00	24.91	ug/L	0	20	0.0500	u
Bromodichloromethane	0.2856	0.2987	25.00	26.15	ug/L	5	30	0.0500	u
4-Methyl-2-Pentanone	0.3286	0.3851	25.00	29.30	ug/L	17	40	0.0500	u
cis-1,3-Dichloropropene	0.3464	0.3548	25.00	25.60	ug/L	2	30	0.0500	u
Toluene	0.4455	0.4258	25.00	23.89	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.3377	0.3232	25.00	23.93	ug/L	-4	30	0.0500	u
1,1,2-Trichloroethane	0.0985	0.0995	25.00	25.27	ug/L	1	30	0.0500	u
2-Hexanone	0.2791	0.3232	25.00	28.95	ug/L	16	40	0.0500	u
Tetrachloroethene	0.1385	0.1450	25.00	26.17	ug/L	5	30	0.0500	u
Dibromochloromethane	0.2343	0.2207	25.00	23.54	ug/L	-6	30	0.0500	u
Chlorobenzene	0.5877	0.5559	25.00	23.65	ug/L	-5	30	0.3000	u
Ethylbenzene	1.0693	1.0579	25.00	24.73	ug/L	-1	20	0.0500	u
m,p-Xylenes	0.3689	0.3672	50.00	49.78	ug/L	0	30	0.0500	u
o-Xylene	0.3726	0.3697	25.00	24.81	ug/L	-1	30	0.0500	u
Styrene	0.6454	0.6284	25.00	24.34	ug/L	-3	30	0.0500	u
Bromoform	0.1322	0.1325	25.00	25.06	ug/L	0	30	0.1000	u
1,1,2,2-Tetrachloroethane	0.7897	0.8120	25.00	25.71	ug/L	3	30	0.3000	u
Dibromofluoromethane	0.8956	0.8752	50.00	48.86	ug/L	-2	30	0.0500	u
1,2-Dichloroethane-d4	0.6066	0.5940	50.00	48.96	ug/L	-2	30	0.0500	u
Toluene-d8	1.1361	1.1553	50.00	50.84	ug/L	2	30	0.0500	u
Bromofluorobenzene	1.6818	1.5106	50.00	44.91	ug/L	-10	30	0.0500	u

ISTD (ICAL hac10)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1002942	1168278	16.49	10.38	10.39	0.01
1,4-Difluorobenzene	2227647	2579251	15.78	11.51	11.51	0.00
Chlorobenzene-d5	1847481	2231947	20.81	15.53	15.52	-0.01
1,4-Dichlorobenzene-d4	738590	892520	20.84	18.24	18.24	0.00

TEW 03/05/07 : Changed from BS to CCV/BS in LIMS after it ran. [general version]

Analyst: TEW Date: 03/06/07 Reviewer: WNH Date: 03/06/07

!=warning -=low bias c=CCV m=manual integration u=use

477092859004.3

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477092859

Date : 03/05/07 Reference: hac10
Sequence : MSVOA08 hc5 Analyzed : 01/12/07 04:06

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1002942	10.38	2227647	11.51	1847481	15.53	738590	18.24
		LOWER LIMIT	501471	9.88	1113824	11.01	923741	15.03	369295	17.74
		UPPER LIMIT	2005884	10.88	4455294	12.01	3694962	16.03	1477180	18.74
004	CCV/BS	QC377512	1168278	10.39	2579251	11.51	2231947	15.52	892520	18.24
006	BSD	QC377513	1351842	10.38	2868138	11.51	2403208	15.53	983117	18.24
008	BLANK	QC377511	1347523	10.39	2895037	11.52	2372015	15.53	935118	18.25
009	SAMPLE	193013-008	1291407	10.38	2800410	11.52	2314321	15.53	900342	18.24
010	SAMPLE	192917-005	1243205	10.39	2702395	11.51	2254577	15.53	899117	18.24
012	SAMPLE	193027-016	1213117	10.39	2713007	11.52	2165394	15.53	824617	18.24
013	SAMPLE	193138-003	1122935	10.39	2525479	11.52	2112585	15.52	803723	18.24
014	SAMPLE	193064-001	1150063	10.39	2651904	11.52	2223151	15.53	836186	18.24
015	SAMPLE	193064-003	1118518	10.39	2473860	11.52	2037360	15.53	801898	18.25
016	SAMPLE	193138-001	1103767	10.39	2561439	11.52	2132198	15.52	810519	18.24
017	SAMPLE	193138-002	1112490	10.39	2524706	11.52	2047156	15.53	787783	18.24
019	SAMPLE	193141-038	1089028	10.39	2459437	11.52	2025548	15.53	777075	18.24
020	SAMPLE	193145-003	1123910	10.38	2492604	11.51	2095245	15.53	789370	18.24

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477017193

Instrument : MSVOA08 Begun : 01/11/07 22:33
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hac01	TUN	BFB			01/11/07 22:33	1.0	1
002	hac02	X	IB			01/11/07 23:09	1.0	2
003	hac03	IB	CALIB IB			01/11/07 23:46	1.0	2
004	hac04	ICAL	0.25/0.5PPB			01/12/07 00:23	1.0	3 4 5 2
005	hac05	ICAL	0.5/1PPB			01/12/07 01:01	1.0	3 4 5 2
006	hac06	ICAL	2PPB			01/12/07 01:38	1.0	3 4 5 2
007	hac07	ICAL	5PPB			01/12/07 02:15	1.0	3 4 5 2
008	hac08	ICAL	10PPB			01/12/07 02:52	1.0	3 4 5 2
009	hac09	ICAL	20PPB			01/12/07 03:29	1.0	3 4 5 2
010	hac10	ICAL	50PPB			01/12/07 04:06	1.0	3 4 5 2
011	hac11	ICAL	75PPB			01/12/07 04:43	1.0	3 4 5 2
012	hac12	ICAL	100PPB			01/12/07 05:20	1.0	3 4 5 2
013	hac13	ICV	25PPB			01/12/07 05:56	1.0	6 2
014	hac14	ICV	25PPB			01/12/07 06:33	1.0	7 8 2
015	hac15	X	IB			01/12/07 07:10	1.0	2
016	hac16	X	IB			01/12/07 13:26	1.0	2
017	hac17	TUN	BFB			01/12/07 14:10	1.0	1
018	hac18	CCV	25PPB			01/12/07 14:47	1.0	3 4 2
019	hac19	BS	QC371636	Water	121203	01/12/07 16:23	1.0	7 8 6 2
020	hac20	BSD	QC371637	Water	121203	01/12/07 17:00	1.0	7 8 6 2
021	hac21	X	IB			01/12/07 17:52	1.0	2
022	hac22	BLANK	QC371635	Water	121203	01/12/07 18:29	1.0	2
023	hac23	MDL	191922-001	Water	121203	01/12/07 19:45	1.0	3 4 2
024	hac24	MDL	191922-002	Water	121203	01/12/07 20:23	1.0	3 4 2
025	hac25	MDL	191922-003	Water	121203	01/12/07 21:00	1.0	3 4 2
026	hac26	MDL	191922-004	Water	121203	01/12/07 21:37	1.0	3 4 2
027	hac27	MDL	191922-005	Water	121203	01/12/07 22:15	1.0	3 4 2
028	hac28	MDL	191922-006	Water	121203	01/12/07 22:52	1.0	3 4 2
029	hac29	MDL	191922-007	Water	121203	01/12/07 23:29	1.0	3 4 2
030	hac30	SAMPLE	192085-010	Water	121203	01/13/07 00:06	1.667	2
031	hac31	SAMPLE	192085-009	Water	121203	01/13/07 00:43	2.0	2
032	hac32	SAMPLE	192085-001	Water	121203	01/13/07 01:20	8.333	2
033	hac33	SAMPLE	192085-005	Water	121203	01/13/07 01:57	12.50	2
034	hac34	SAMPLE	192085-002	Water	121203	01/13/07 02:34	20.0	2
035	hac35	SAMPLE	192085-006	Water	121203	01/13/07 03:11	25.0	2
036	hac36	X	IB			01/13/07 03:48	1.0	2
037	hac37	X	IB			01/13/07 04:25	1.0	2
038	hac38	X	IB			01/13/07 05:02	1.0	2

TEW 01/12/07 : Reviewed through file hac15.

LW 01/12/07 : Reviewed through file hac15.

TEW 01/15/07 : Reviewed entire sequence.

Analyst: TEW Date: 01/15/07 Reviewer: LW Date: 01/15/07

Standards used: 1=S5117 2=S5079 3=S5152 4=S5170 5=S4713 6=S5241 7=S5052 8=S5168

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477092859

Instrument : MSVOA08 Begun : 03/05/07 11:39
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hc501	X	IB			03/05/07 11:39	1.0	1	
002	hc502	TUN	BFB			03/05/07 12:07	1.0	2	
003	hc503	X	20PPM			03/05/07 12:35	1.0	3 4 1	
004	hc504	CCV/BS	QC377512	Water	122702	03/05/07 13:19	1.0	5 6 7 1	
005	hc505	X	QC377513	Water	122702	03/05/07 13:58	1.0	5 6 7 1	
006	hc506	BSD	QC377513	Water	122702	03/05/07 14:43	1.0	5 6 7 1	
007	hc507	X	IB			03/05/07 15:28	1.0	1	
008	hc508	BLANK	QC377511	Water	122702	03/05/07 16:06	1.0	1	
009	hc509	SAMPLE	193013-008	Water	122702	03/05/07 16:44	250.0	1	
010	hc510	SAMPLE	192917-005	Water	122702	03/05/07 17:22	12.50	1	
011	hc511	X	IB			03/05/07 18:04	1.0	1	
012	hc512	SAMPLE	193027-016	Water	122702	03/05/07 18:42	1.0	1	
013	hc513	SAMPLE	193138-003	Water	122702	03/05/07 19:20	1.0	1	
014	hc514	SAMPLE	193064-001	Water	122702	03/05/07 19:58	1.0	1	
015	hc515	SAMPLE	193064-003	Water	122702	03/05/07 20:36	1.0	1	
016	hc516	SAMPLE	193138-001	Water	122702	03/05/07 21:13	20.0	1	
017	hc517	SAMPLE	193138-002	Water	122702	03/05/07 21:51	62.50	1	
018	hc518	X	IB			03/05/07 22:29	1.0	1	
019	hc519	SAMPLE	193141-038	Water	122702	03/05/07 23:07	1.0	1	
020	hc520	SAMPLE	193145-003	Water	122702	03/05/07 23:44	1.0	1	
021	hc521	X	IB			03/06/07 00:22	1.0	1	
022	hc522	X	IB			03/06/07 00:59	1.0	1	
023	hc523	X	IB			03/06/07 01:37	1.0	1	

Analyst: TEW Date: 03/06/07 Reviewer: LW Date: 03/06/07

Standards used: 1=S5426 2=S5117 3=S5595 4=S5618 5=S5520 6=S5537 7=S5422

REPORTING SUMMARY FOR 193027 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM E	VCR	BMEA	CLE	ACE	DCT	MTD	CSB E1	VAD N	DCT	MAC E1	DEA K	TEC 1	TCL M	TCA 1	DCL 1	BCA 2	TEZ	DPC	BCC	DAD	BMK	DPI	BCP	DEZ	DM1	CPE	CAC 2	XOX	DEB	CMZ	EOL	XYL	XYM	TOL	SYO	TTX	PBE	DCB	DMF	BCA	BZM	BRE	4F
193027-016	MSVOA08	03/02/07 14:05	1.0																																												
193027-016	MSVOA08	03/05/07 18:42	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377216	MSVOA08	03/02/07 13:19	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377217	MSVOA08	03/02/07 11:19	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377218	MSVOA08	03/02/07 11:57	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377511	MSVOA08	03/05/07 16:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377512	MSVOA08	03/05/07 13:19	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377513	MSVOA08	03/05/07 14:43	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/5/07
PREPPED BY. Tewodia

122702

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	192917-005		C	<2			8	RR @ 12.5x TCE OR	RUSH 3/5
2	193013-008		E	↓			↓	↓ 250x	
3	193064-001		A	<2					
4	↓ -003		B	↓					
5	193027-016		↓	<2				20x	
6	193138-001		↓	↓				62.5x	
7	-002		↓	<2				1x Trip Blank	
8	↓ -003		↓	↓					
9	193141-038		A	↓					
10	193145-003		↓	↓					
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/21/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/21/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ100	Batch#:	122680
Lab ID:	193027-011	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	74	65-135

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ101	Batch#:	122680
Lab ID:	193027-012	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	87	65-135

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377407	Batch#:	122680
Matrix:	Water	Prepared:	03/04/07
Units:	ug/L	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	75	65-135
Decachlorobiphenyl	92	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	122680
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Type: BS Lab ID: QC377408

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1675	84	65-135
Heptachlor	0.2000	0.1610	80	65-135
Aldrin	0.2000	0.1684	84	65-135
Dieldrin	0.4000	0.3466	87	65-135
Endrin	0.4000	0.3667 #	92	65-135
4,4'-DDT	0.4000	0.3571	89	65-135

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	97	65-135

Type: BSD Lab ID: QC377409

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1817	91	65-135	8	35
Heptachlor	0.2000	0.1732	87	65-135	7	35
Aldrin	0.2000	0.1777	89	65-135	5	35
Dieldrin	0.4000	0.3692	92	65-135	6	35
Endrin	0.4000	0.3919 #	98	65-135	7	35
4,4'-DDT	0.4000	0.3800	95	65-135	6	35

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	96	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 PEST Water: EPA 8081A

Inst : GC16
Calnum : 237085786001
Units : pg/ul

Name : gc16pest_059
Date : 28-FEB-2007 23:03
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	059_018	237085786018	PEST_1	28-FEB-2007 23:03	S5553
L2	059_019	237085786019	PEST_2	28-FEB-2007 23:23	S5554
L3	059_020	237085786020	PEST_3	28-FEB-2007 23:43	S5555
L4	059_021	237085786021	PEST_4	01-MAR-2007 00:03	S5556
L5	059_023	237085786023	PEST_6	01-MAR-2007 00:43	S5050
L6	059_024	237085786024	PEST_7	01-MAR-2007 01:03	S5263
L7	059_031	237085786031	PEST_5	01-MAR-2007 09:30	S5049

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	4483.0	4601.6	5327.2	6624.3	9142.2		7400.0	AVRG		1.60E-4		6263.0	**29**	0.995	20	rsd ***
gamma-BHC	A	4194.5	4132.0	4882.0	5884.7	7818.1		6588.0	AVRG		1.79E-4		5583.2	**26**	0.995	20	rsd ***
beta-BHC	A	4020.0	3820.0	4013.1	4058.0	4475.9	4305.2	4227.3	AVRG		2.42E-4		4131.4	5	0.995	20	
delta-BHC	A	4164.5	4017.2	4608.4	5562.9	7514.9		6233.3	AVRG		1.87E-4		5350.2	**25**	0.995	20	rsd ***
Heptachlor	A	4813.0	4453.2	4653.0	4859.8	5826.7	6056.7	5242.8	AVRG		1.95E-4		5129.3	12	0.995	20	
Aldrin	A	6120.5	5998.0	6346.6	7056.6	8267.2	8043.9	7426.9	AVRG		1.42E-4		7037.1	13	0.995	20	
Heptachlor epoxide	A	6400.5	6258.2	6549.7	6697.0	7246.7	6831.4	6864.7	AVRG		1.49E-4		6692.6	5	0.995	20	
gamma-Chlordane	A	6939.5	6513.6	6774.4	6897.7	7481.0	7163.1	7057.8	AVRG		1.43E-4		6975.3	4	0.995	20	
alpha-Chlordane	A	6136.0	5878.2	6027.6	6394.1	7179.1	6569.6	6654.9	AVRG		1.56E-4		6405.6	7	0.995	20	
4,4'-DDE	A	4621.8	4424.9	4956.6	5499.9	6248.4	6090.6	5883.9	AVRG		1.86E-4		5389.4	14	0.995	20	
Endosulfan I	A	6953.0	6578.6	7119.4	7180.1	7706.2	7817.3	7499.0	AVRG		1.38E-4		7264.8	6	0.995	20	
Dieldrin	A	5181.5	5139.9	5556.2	5993.4	6621.6	6262.4	6305.2	AVRG		1.70E-4		5865.7	10	0.995	20	
Endrin	A	4044.3	3527.8	3876.2	3974.7	4925.4	4843.6	4609.9	AVRG		2.35E-4		4257.4	13	0.995	20	
4,4'-DDD	A	2500.5	2364.7	2841.3	3358.7			3573.2	AVRG		3.42E-4		2927.7	18	0.995	20	
Endosulfan II	A	4581.5	5338.1	5300.0	5760.9	5928.8	5601.2	5604.8	AVRG		1.84E-4		5445.0	8	0.995	20	
4,4'-DDT	A	2132.8	1748.5	1978.2	2168.6	2818.4		2357.8	AVRG		4.54E-4		2200.7	17	0.995	20	
Methoxychlor	A	1612.6	1319.7	1469.9	1466.9	1541.8	1564.5	1418.9	AVRG		6.73E-4		1484.9	7	0.995	20	
Endosulfan sulfate	A	4763.3	4294.8	4564.7	4662.7	4914.4	4654.5	4829.4	AVRG		2.14E-4		4669.1	4	0.995	20	
Endrin ketone	A	4414.8	3996.3	4605.2	4962.3	5539.7	5361.4	5272.8	AVRG		2.05E-4		4878.9	12	0.995	20	
TCMX	A	6598.5	6720.1	7226.6	7654.1	8020.3	7348.6	7823.3	AVRG		1.36E-4		7341.6	7	0.995	20	
Decachlorobiphenyl	A	7118.8	5941.6	5826.0	5270.3	4753.3	4324.9	5146.2	AVRG		1.82E-4		5483.0	17	0.995	20	
alpha-BHC	B	8408.0	8578.4	9479.1	10868	13755		11588	AVRG		9.57E-5		10446	20	0.995	20	
gamma-BHC	B	9605.0	8159.2	9354.6	9906.9	11996	12158	10404	AVRG		9.78E-5		10226	14	0.995	20	
beta-BHC	B	6614.0	6147.2	6473.2	6286.1	6620.4	6254.8	6433.2	AVRG		1.56E-4		6404.1	3	0.995	20	
delta-BHC	B	7014.0	6742.4	7258.3	8151.3	10684	10773	8676.3	AVRG		1.18E-4		8471.3	20	0.995	20	
Heptachlor	B	9620.5	8319.8	8784.8	8881.0	10217	11031	9515.0	AVRG		1.05E-4		9481.2	10	0.995	20	

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Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	10563	10216	10482	11078	12540	12213	11457	AVRG		8.91E-5		11221	8	0.995	20	
Heptachlor epoxide	B	10743	10174	10442	10492	11060	10430	10591	AVRG		9.47E-5		10562	3	0.995	20	
gamma-Chlordane	B	11304	10949	11160	11153	11685	11088	11319	AVRG		8.90E-5		11237	2	0.995	20	
alpha-Chlordane	B	11099	10421	10554	10635	10958	10343	10874	AVRG		9.35E-5		10698	3	0.995	20	
4,4'-DDE	B	7893.3	7437.9	8065.0	8617.7	9569.7	9450.4	9000.7	AVRG		1.17E-4		8576.4	9	0.995	20	
Endosulfan I	B	10608	10234	10624	10529	11286	10757	10569	AVRG		9.38E-5		10658	3	0.995	20	
Dieldrin	B	9157.3	8773.7	9260.1	9666.3	10394	9897.5	9855.3	AVRG		1.04E-4		9572.1	6	0.995	20	
Endrin	B	6519.0	5660.9	6155.1	6184.6	6923.8	7009.2	6395.5	AVRG		1.56E-4		6406.9	7	0.995	20	
4,4'-DDD	B	5079.3	4797.9	5411.1	5900.6	6717.9	6747.1	5936.0	AVRG		1.72E-4		5798.5	13	0.995	20	
Endosulfan II	B	9618.3	9111.2	9244.2	9216.3	9256.5	8678.6	9160.3	AVRG		1.09E-4		9183.6	3	0.995	20	
4,4'-DDT	B	3956.0	3464.5	3801.2	4009.2	4791.0	5296.1	4005.3	AVRG		2.39E-4		4189.0	15	0.995	20	
Methoxychlor	B	2968.1	2153.0	2275.2	2163.6	2252.3	2365.1	1998.9	AVRG		4.33E-4		2310.9	13	0.995	20	
Endosulfan sulfate	B	8198.3	7161.0	7449.3	7429.0	7600.2	7237.6	7417.7	AVRG		1.33E-4		7499.0	5	0.995	20	
Endrin ketone	B	7404.8	6699.1	7576.0	8104.9	8751.6	8529.3	8225.6	AVRG		1.27E-4		7898.7	9	0.995	20	
TCMX	B	10879	10784	10799	10971	11281	10487	10934	AVRG		9.19E-5		10876	2	0.995	20	
Decachlorobiphenyl	B	14296	11648	11158	10149	9101.8	8222.6	9746.8	AVRG		9.42E-5		10617	19	0.995	20	
Average EPA 8081A	A												(n=22)	12		20	
Average EPA 8081A	B												(n=22)	9		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
gamma-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
beta-BHC	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
delta-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
Heptachlor	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Aldrin	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
4,4'-DDE	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan I	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Dieldrin	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDD	A	4.0000	10.000	20.000	40.000			50.000	pg/ul
Endosulfan II	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDT	A	4.0000	10.000	20.000	40.000	100.00		50.000	pg/ul
Methoxychlor	A	20.000	50.000	100.00	200.00	500.00	1000.0	250.00	pg/ul
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin ketone	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
TCMX	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
alpha-BHC	B	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
gamma-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
beta-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
delta-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Aldrin	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
4,4'-DDE	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan I	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Dieldrin	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDD	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan II	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDT	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Methoxychlor	B	20.000	50.000	100.00	200.00	500.00	1000.0	250.00	pg/ul
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin ketone	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
TCMX	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00128

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 PEST Water
EPA 8081A

Inst : GC16 Name : gc16pest_059
Calnum : 237085786001 Cal Date: 28-FEB-2007

ICV 237085786027 (059_027 01-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	6263.0	6766.7	25.00	27.01	pg/ul	8	15	
gamma-BHC	A	5583.2	5943.9	25.00	26.62	pg/ul	6	15	
beta-BHC	A	4131.4	3895.7	25.00	23.57	pg/ul	-6	15	
delta-BHC	A	5350.2	5899.8	25.00	27.57	pg/ul	10	15	
Heptachlor	A	5129.3	4813.2	25.00	23.46	pg/ul	-6	15	
Aldrin	A	7037.1	6914.4	25.00	24.56	pg/ul	-2	15	
Heptachlor epoxide	A	6692.6	6430.2	25.00	24.02	pg/ul	-4	15	
gamma-Chlordane	A	6975.3	7012.2	25.00	25.13	pg/ul	1	15	
alpha-Chlordane	A	6405.6	6715.4	25.00	26.21	pg/ul	5	15	
4,4'-DDE	A	5389.4	5022.0	25.00	23.30	pg/ul	-7	15	
Endosulfan I	A	7264.8	6824.6	25.00	23.49	pg/ul	-6	15	
Dieldrin	A	5865.7	5385.9	25.00	22.95	pg/ul	-8	15	
Endrin	A	4257.4	4435.2	25.00	26.04	pg/ul	4	15	
4,4'-DDD	A	2927.7	2903.2	25.00	24.79	pg/ul	-1	15	
Endosulfan II	A	5445.0	5220.0	25.00	23.97	pg/ul	-4	15	
4,4'-DDT	A	2200.7	2231.6	25.00	25.35	pg/ul	1	15	
Methoxychlor	A	1484.9	1714.7	25.00	28.87	pg/ul	15	15	
Endosulfan sulfate	A	4669.1	4538.0	25.00	24.30	pg/ul	-3	15	
Endrin ketone	A	4878.9	4774.0	25.00	24.46	pg/ul	-2	15	
alpha-BHC	B	10446	10678	25.00	25.55	pg/ul	2	15	
gamma-BHC	B	10226	9645.8	25.00	23.58	pg/ul	-6	15	
beta-BHC	B	6404.1	5887.1	25.00	22.98	pg/ul	-8	15	
delta-BHC	B	8471.3	8529.7	25.00	25.17	pg/ul	1	15	
Heptachlor	B	9481.2	9074.4	25.00	23.93	pg/ul	-4	15	
Aldrin	B	11221	10778	25.00	24.01	pg/ul	-4	15	
Heptachlor epoxide	B	10562	9917.3	25.00	23.47	pg/ul	-6	15	
gamma-Chlordane	B	11237	11011	25.00	24.50	pg/ul	-2	15	
alpha-Chlordane	B	10698	10417	25.00	24.34	pg/ul	-3	15	
4,4'-DDE	B	8576.4	8101.1	25.00	23.61	pg/ul	-6	15	
Endosulfan I	B	10658	10360	25.00	24.30	pg/ul	-3	15	
Dieldrin	B	9572.1	8922.8	25.00	23.30	pg/ul	-7	15	
Endrin	B	6406.9	6346.4	25.00	24.76	pg/ul	-1	15	
4,4'-DDD	B	5798.5	5414.7	25.00	23.35	pg/ul	-7	15	
Endosulfan II	B	9183.6	9132.6	25.00	24.86	pg/ul	-1	15	
4,4'-DDT	B	4189.0	4109.7	25.00	24.53	pg/ul	-2	15	
Methoxychlor	B	2310.9	2779.6	25.00	30.07	pg/ul	**20**	15	v+ ***
Endosulfan sulfate	B	7499.0	7387.0	25.00	24.63	pg/ul	-1	15	
Endrin ketone	B	7898.7	7988.4	25.00	25.28	pg/ul	1	15	
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

237085786001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193027 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237092622005 File : 064_005 Time : 05-MAR-2007 09:01

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	431057	6	15	
4,4'-DDE	A	2817			
4,4'-DDD	A	23176			
Endrin	A	306575	9	15	
Endrin aldehyde	A	4543			
Endrin ketone	A	24260			
4,4'-DDT	B	598882	7	15	
4,4'-DDE	B	3987			
4,4'-DDD	B	42043			
Endrin	B	459357	12	15	
Endrin aldehyde	B	18833			
Endrin ketone	B	40863			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193027 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237092622019 File : 064_019 Time : 05-MAR-2007 17:55

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	302691	9	15	
4,4'-DDE	A	2243			
4,4'-DDD	A	27245			
Endrin	A	247885	7	15	
Endrin aldehyde	A	1391			
Endrin ketone	A	17163			
4,4'-DDT	B	445528	11	15	
4,4'-DDE	B	2604			
4,4'-DDD	B	52560			
Endrin	B	374400	8	15	
Endrin aldehyde	B	4820			
Endrin ketone	B	28044			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 PEST Water
EPA 8081A

Inst : GC16
Seqnum : 237092622006
Cal : 237085786001
Standards: S5555

Run Name: PEST_3
File : 064_006
Caldate : 28-FEB-2007

IDF : 1.0
Time : 05-MAR-2007 09:21

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6263.0	5399.6	10.00	8.621	pg/ul	-14	15	rsd ***
gamma-BHC	A	5583.2	5316.7	10.00	9.523	pg/ul	-5	15	rsd ***
beta-BHC	A	4131.4	4089.4	10.00	9.898	pg/ul	-1	15	
delta-BHC	A	5350.2	4835.2	10.00	9.037	pg/ul	-10	15	rsd ***
Heptachlor	A	5129.3	5096.0	10.00	9.935	pg/ul	-1	15	
Aldrin	A	7037.1	6298.7	10.00	8.951	pg/ul	-10	15	
Heptachlor epoxide	A	6692.6	6599.8	10.00	9.861	pg/ul	-1	15	
gamma-Chlordane	A	6975.3	6896.4	10.00	9.887	pg/ul	-1	15	
alpha-Chlordane	A	6405.6	6363.8	10.00	9.935	pg/ul	-1	15	
4,4'-DDE	A	5389.4	5278.2	20.00	19.59	pg/ul	-2	15	
Endosulfan I	A	7264.8	6993.2	10.00	9.626	pg/ul	-4	15	
Dieldrin	A	5865.7	5751.7	20.00	19.61	pg/ul	-2	15	
Endrin	A	4257.4	4657.2	20.00	21.88	pg/ul	9	15	
4,4'-DDD	A	2927.7	3293.3	20.00	22.50	pg/ul	12	15	
Endosulfan II	A	5445.0	5754.1	20.00	21.14	pg/ul	6	15	
4,4'-DDT	A	2200.7	2442.4	20.00	22.20	pg/ul	11	15	
Methoxychlor	A	1484.9	1538.3	100.0	103.6	pg/ul	4	15	
Endosulfan sulfate	A	4669.1	4995.0	20.00	21.40	pg/ul	7	15	
Endrin ketone	A	4878.9	5196.1	20.00	21.30	pg/ul	7	15	
TCMX	A	7341.6	7371.1	20.00	20.08	pg/ul	0	15	
Decachlorobiphenyl	A	5483.0	6622.2	20.00	24.16	pg/ul	**21**	15	c+
alpha-BHC	B	10446	9878.0	10.00	9.456	pg/ul	-5	15	
gamma-BHC	B	10226	10109	10.00	9.885	pg/ul	-1	15	
beta-BHC	B	6404.1	6972.4	10.00	10.89	pg/ul	9	15	
delta-BHC	B	8471.3	7923.7	10.00	9.354	pg/ul	-6	15	
Heptachlor	B	9481.2	9206.1	10.00	9.710	pg/ul	-3	15	
Aldrin	B	11221	10912	10.00	9.724	pg/ul	-3	15	
Heptachlor epoxide	B	10562	10207	10.00	9.664	pg/ul	-3	15	
gamma-Chlordane	B	11237	11609	10.00	10.33	pg/ul	3	15	
alpha-Chlordane	B	10698	11087	10.00	10.36	pg/ul	4	15	
4,4'-DDE	B	8576.4	8814.6	20.00	20.56	pg/ul	3	15	
Endosulfan I	B	10658	10868	10.00	10.20	pg/ul	2	15	
Dieldrin	B	9572.1	9343.0	20.00	19.52	pg/ul	-2	15	
Endrin	B	6406.9	6793.1	20.00	21.21	pg/ul	6	15	
4,4'-DDD	B	5798.5	5607.8	20.00	19.34	pg/ul	-3	15	
Endosulfan II	B	9183.6	9754.6	20.00	21.24	pg/ul	6	15	
4,4'-DDT	B	4189.0	3966.5	20.00	18.94	pg/ul	-5	15	
Methoxychlor	B	2310.9	2022.8	100.0	87.53	pg/ul	-12	15	
Endosulfan sulfate	B	7499.0	8170.3	20.00	21.79	pg/ul	9	15	
Endrin ketone	B	7898.7	8171.2	20.00	20.69	pg/ul	3	15	
TCMX	B	10876	11322	20.00	20.82	pg/ul	4	15	
Decachlorobiphenyl	B	10617	12758	20.00	24.03	pg/ul	**20**	15	c+
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					6	15	

+=high bias c=CCV rsd=ICAL %RSD failure

237092622006

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 PEST Water
EPA 8081A

Inst : GC16
Seqnum : 237092622021
Cal : 237085786001
Standards: S5556

Run Name: PEST_4
File : 064_021
Caldate : 28-FEB-2007

IDF : 1.0
Time : 05-MAR-2007 18:35

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6263.0	7583.3	20.00	24.22	pg/ul	**21**	15	c+ rsd ***
gamma-BHC	A	5583.2	6744.8	20.00	24.16	pg/ul	**21**	15	c+ rsd ***
beta-BHC	A	4131.4	4612.5	20.00	22.33	pg/ul	12	15	
delta-BHC	A	5350.2	6419.4	20.00	24.00	pg/ul	**20**	15	c+ rsd ***
Heptachlor	A	5129.3	5816.5	20.00	22.68	pg/ul	13	15	
Aldrin	A	7037.1	7660.8	20.00	21.77	pg/ul	9	15	
Heptachlor epoxide	A	6692.6	7515.0	20.00	22.46	pg/ul	12	15	
gamma-Chlordane	A	6975.3	7614.0	20.00	21.83	pg/ul	9	15	
alpha-Chlordane	A	6405.6	7478.7	20.00	23.35	pg/ul	**17**	15	c+ ***
4,4'-DDE	A	5389.4	6378.8	40.00	47.34	pg/ul	**18**	15	c+ ***
Endosulfan I	A	7264.8	7832.0	20.00	21.56	pg/ul	8	15	
Dieldrin	A	5865.7	6798.1	40.00	46.36	pg/ul	**16**	15	c+ ***
Endrin	A	4257.4	5526.5	40.00	51.92	pg/ul	**30**	15	c+ ***
4,4'-DDD	A	2927.7	4231.5	40.00	57.81	pg/ul	**45**	15	>LR c+ ***
Endosulfan II	A	5445.0	6546.9	40.00	48.09	pg/ul	**20**	15	c+ ***
4,4'-DDT	A	2200.7	2456.8	40.00	44.66	pg/ul	12	15	
Methoxychlor	A	1484.9	1580.9	200.0	212.9	pg/ul	6	15	
Endosulfan sulfate	A	4669.1	5285.2	40.00	45.28	pg/ul	13	15	
Endrin ketone	A	4878.9	5330.8	40.00	43.70	pg/ul	9	15	
TCMX	A	7341.6	8482.0	40.00	46.21	pg/ul	**16**	15	c+
Decachlorobiphenyl	A	5483.0	5791.1	40.00	42.25	pg/ul	6	15	
alpha-BHC	B	10446	12444	20.00	23.83	pg/ul	**19**	15	c+ ***
gamma-BHC	B	10226	11395	20.00	22.29	pg/ul	11	15	
beta-BHC	B	6404.1	7117.4	20.00	22.23	pg/ul	11	15	
delta-BHC	B	8471.3	9602.3	20.00	22.67	pg/ul	13	15	
Heptachlor	B	9481.2	10034	20.00	21.17	pg/ul	6	15	
Aldrin	B	11221	12172	20.00	21.69	pg/ul	8	15	
Heptachlor epoxide	B	10562	11348	20.00	21.49	pg/ul	7	15	
gamma-Chlordane	B	11237	12107	20.00	21.55	pg/ul	8	15	
alpha-Chlordane	B	10698	11743	20.00	21.95	pg/ul	10	15	
4,4'-DDE	B	8576.4	9950.9	40.00	46.41	pg/ul	**16**	15	c+ ***
Endosulfan I	B	10658	11563	20.00	21.70	pg/ul	8	15	
Dieldrin	B	9572.1	10730	40.00	44.84	pg/ul	12	15	
Endrin	B	6406.9	7448.3	40.00	46.50	pg/ul	**16**	15	c+ ***
4,4'-DDD	B	5798.5	6970.8	40.00	48.09	pg/ul	**20**	15	c+ ***
Endosulfan II	B	9183.6	10140	40.00	44.17	pg/ul	10	15	
4,4'-DDT	B	4189.0	4085.9	40.00	39.02	pg/ul	-2	15	
Methoxychlor	B	2310.9	2205.2	200.0	190.8	pg/ul	-5	15	
Endosulfan sulfate	B	7499.0	8005.6	40.00	42.70	pg/ul	7	15	
Endrin ketone	B	7898.7	7939.2	40.00	40.20	pg/ul	1	15	
TCMX	B	10876	12367	40.00	45.48	pg/ul	14	15	
Decachlorobiphenyl	B	10617	10912	40.00	41.11	pg/ul	3	15	
Average EPA 8081A	A	(n=22)					**16**	15	ac ***
Average EPA 8081A	B	(n=22)					10	15	

+=high bias >LR=overrange ac=average CCV drift out c=CCV rsd=ICAL %RSD failure

237092622021

SEQUENCE SUMMARY FOR 193027 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237085786 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	059_001	X	HEX			28-FEB-2007 13:46	1.0							
002	059_002	X	PEM			28-FEB-2007 14:05	1.0			1			1	1:DDT44=110.374
003	059_003	X	PEST_4			28-FEB-2007 14:25	1.0	3		1			2	
004	059_004	X	PEST_3			28-FEB-2007 15:53	1.0	41		1			3 ac	
005	059_005	X	PEM			28-FEB-2007 16:12	1.0	1		1			1	2:DDT44=123.740
006	059_006	X	PEST_3			28-FEB-2007 16:32	1.0	41		1			3 ac	
007	059_007	X	PEST_5			28-FEB-2007 17:01	1.0	41		1			4 ac	5:DDD44=105.084
008	059_008	X	PRIMER			28-FEB-2007 19:46	1.0							
009	059_009	X	PRIMER			28-FEB-2007 20:06	1.0							
010	059_010	X	PRIMER			28-FEB-2007 20:25	1.0							
011	059_011	X	PRIMER			28-FEB-2007 20:45	1.0							
012	059_012	X	PRIMER			28-FEB-2007 21:05	1.0							
013	059_013	X	PRIMER			28-FEB-2007 21:25	1.0							
014	059_014	X	HEX			28-FEB-2007 21:45	1.0							
015	059_015	X	HEX			28-FEB-2007 22:04	1.0							
016	059_016	PEM	PEM			28-FEB-2007 22:24	1.0	1		1			1	2:DDT44=129.695
017	059_017	X	HEX			28-FEB-2007 22:43	1.0							
018	059_018	ICAL	PEST_1			28-FEB-2007 23:03	1.0						5	
019	059_019	ICAL	PEST_2			28-FEB-2007 23:23	1.0						6	
020	059_020	ICAL	PEST_3			28-FEB-2007 23:43	1.0						3	
021	059_021	ICAL	PEST_4			01-MAR-2007 00:03	1.0						2	
022	059_022	X	PEST_5			01-MAR-2007 00:23	1.0						4	
023	059_023	ICAL	PEST_6			01-MAR-2007 00:43	1.0						7	
024	059_024	ICAL	PEST_7			01-MAR-2007 01:03	1.0						8	
025	059_025	X	HEX			01-MAR-2007 01:23	1.0							
026	059_026	X	HEX			01-MAR-2007 01:43	1.0							
027	059_027	ICV	ICV			01-MAR-2007 02:03	1.0	3		1			9	2:XYL246=245.284
028	059_028	X	ICV			01-MAR-2007 02:23	1.0	4		1			9	2:XYL246=247.844
029	059_029	X	HEX			01-MAR-2007 02:43	1.0							
030	059_030	X	HEX			01-MAR-2007 09:10	1.0							

Stds used: 1=S5053 2=S5556 3=S5555 4=S5049 5=S5553 6=S5554 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193027 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237085786 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
031	059_031	ICAL	PEST_5			01-MAR-2007 09:30	1.0					4	

Stds used: 1=S5053 2=S5556 3=S5555 4=S5049 5=S5553 6=S5554 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193027 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237092622 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	PRIMER			05-MAR-2007 07:42	1.0						
002	064_002	X	PRIMER			05-MAR-2007 08:01	1.0						
003	064_003	X	PRIMER			05-MAR-2007 08:21	1.0						
004	064_004	X	HEX			05-MAR-2007 08:41	1.0						
005	064_005	PEM	PEM			05-MAR-2007 09:01	1.0	1.0			1	1	1:DDT44=195.872
006	064_006	CCV	PEST_3			05-MAR-2007 09:21	1.0	1.0	3		1	2	
007	064_007	X	HEX			05-MAR-2007 13:39	1.0						
008	064_008	BLANK	QC377407	122680	Water	05-MAR-2007 13:58	1.0	0.01			1	>ac	
009	064_009	BS	QC377408	122680	Water	05-MAR-2007 14:18	1.0	0.01	13		1	>ac	
010	064_010	BSD	QC377409	122680	Water	05-MAR-2007 14:37	1.0	0.01	13	1	1	>ac	
011	064_011	SAMPLE	193099-001	122680	Water	05-MAR-2007 15:18	1.0	0.009524			1	>ac	
012	064_012	SAMPLE	193027-011	122680	Water	05-MAR-2007 15:38	1.0	0.009709			1	>ac	
013	064_013	SAMPLE	193027-012	122680	Water	05-MAR-2007 15:57	1.0	0.009524			1	>ac	
014	064_014	SAMPLE	193055-004	122680	Water	05-MAR-2007 16:17	1.0	0.009434			1	>ac	
015	064_015	SAMPLE	193055-005	122680	Water	05-MAR-2007 16:37	1.0	0.009524			1	>ac	
016	064_016	SAMPLE	193055-006	122680	Water	05-MAR-2007 16:56	1.0	0.009524			1	>ac	
017	064_017	SAMPLE	193055-011	122680	Water	05-MAR-2007 17:16	1.0	0.009709			1	>ac	
018	064_018	X	HEX			05-MAR-2007 17:35	1.0						
019	064_019	PEM	PEM			05-MAR-2007 17:55	1.0	1.0			1	1	1:DDT44=137.542
020	064_020	X	PEST_4			05-MAR-2007 18:15	1.0	1.0	16		1	3 ac	1:DDD44=60.1797
021	064_021	CCV	PEST_4			05-MAR-2007 18:35	1.0	1.0	13		1	3 ac	1:DDD44=57.8143
022	064_022	X	HEX			05-MAR-2007 19:01	1.0						
023	064_023	BLANK	QC377462	122695	Soil	05-MAR-2007 19:21	1.0	0.664			1	<ac	
024	064_024	SAMPLE	193061-021	122695	Soil	05-MAR-2007 19:40	10.0	0.6662			1	<ac	
025	064_025	SAMPLE	193061-022	122695	Soil	05-MAR-2007 20:00	5.0	0.6656			1	<ac	
026	064_026	SAMPLE	193061-023	122695	Soil	05-MAR-2007 20:20	1.0	0.6653			1	<ac	
027	064_027	SAMPLE	193061-024	122695	Soil	05-MAR-2007 20:40	1.0	0.6633			1	<ac	
028	064_028	SAMPLE	193061-025	122695	Soil	05-MAR-2007 20:59	5.0	0.6616			1	<ac	
029	064_029	X	HEX			05-MAR-2007 21:19	1.0						
030	064_030	PEM	PEM			05-MAR-2007 21:39	1.0	1.0			1	1	1:DDT44=136.891

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193027 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237092622 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
031	064_031	X	PEST_3			05-MAR-2007 21:59	1.0	1.0	7	1	2	
032	064_032	CCV	PEST_3			05-MAR-2007 22:19	1.0	1.0	4	1	2	
033	064_033	X	PEM			05-MAR-2007 22:39	1.0				1	
034	064_034	X	HEX			05-MAR-2007 22:59	1.0					

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: <=opening >=closing ac=average CCV drift out

REPORTING SUMMARY FOR 193027 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193027-011	alpha-BHC	GC16	B	03/05/07 15:38
193027-011	beta-BHC	GC16	B	03/05/07 15:38
193027-011	gamma-BHC	GC16	B	03/05/07 15:38
193027-011	delta-BHC	GC16	B	03/05/07 15:38
193027-011	Heptachlor	GC16	B	03/05/07 15:38
193027-011	Aldrin	GC16	B	03/05/07 15:38
193027-011	Heptachlor epoxide	GC16	B	03/05/07 15:38
193027-011	Endosulfan I	GC16	B	03/05/07 15:38
193027-011	Dieldrin	GC16	B	03/05/07 15:38
193027-011	4,4'-DDE	GC16	B	03/05/07 15:38
193027-011	Endrin	GC16	B	03/05/07 15:38
193027-011	Endosulfan II	GC16	B	03/05/07 15:38
193027-011	Endosulfan sulfate	GC16	B	03/05/07 15:38
193027-011	4,4'-DDD	GC16	B	03/05/07 15:38
193027-011	4,4'-DDT	GC16	B	03/05/07 15:38
193027-011	alpha-Chlordane	GC16	B	03/05/07 15:38
193027-011	gamma-Chlordane	GC16	B	03/05/07 15:38
193027-011	Methoxychlor	GC16	B	03/05/07 15:38
193027-011	Endrin ketone	GC16	B	03/05/07 15:38
193027-011	Toxaphene	GC16	B	03/05/07 15:38
193027-011	TCMX	GC16	B	03/05/07 15:38
193027-011	Decachlorobiphenyl	GC16	B	03/05/07 15:38
193027-012	alpha-BHC	GC16	B	03/05/07 15:57
193027-012	beta-BHC	GC16	B	03/05/07 15:57
193027-012	gamma-BHC	GC16	B	03/05/07 15:57
193027-012	delta-BHC	GC16	B	03/05/07 15:57
193027-012	Heptachlor	GC16	B	03/05/07 15:57
193027-012	Aldrin	GC16	B	03/05/07 15:57
193027-012	Heptachlor epoxide	GC16	B	03/05/07 15:57
193027-012	Endosulfan I	GC16	B	03/05/07 15:57
193027-012	Dieldrin	GC16	B	03/05/07 15:57
193027-012	4,4'-DDE	GC16	B	03/05/07 15:57
193027-012	Endrin	GC16	B	03/05/07 15:57
193027-012	Endosulfan II	GC16	B	03/05/07 15:57
193027-012	Endosulfan sulfate	GC16	B	03/05/07 15:57
193027-012	4,4'-DDD	GC16	B	03/05/07 15:57
193027-012	4,4'-DDT	GC16	B	03/05/07 15:57
193027-012	alpha-Chlordane	GC16	B	03/05/07 15:57
193027-012	gamma-Chlordane	GC16	B	03/05/07 15:57
193027-012	Methoxychlor	GC16	B	03/05/07 15:57
193027-012	Endrin ketone	GC16	B	03/05/07 15:57
193027-012	Toxaphene	GC16	B	03/05/07 15:57
193027-012	TCMX	GC16	B	03/05/07 15:57
193027-012	Decachlorobiphenyl	GC16	B	03/05/07 15:57
QC377407	alpha-BHC	GC16	B	03/05/07 13:58
QC377407	beta-BHC	GC16	B	03/05/07 13:58
QC377407	gamma-BHC	GC16	B	03/05/07 13:58
QC377407	delta-BHC	GC16	B	03/05/07 13:58
QC377407	Heptachlor	GC16	B	03/05/07 13:58
QC377407	Aldrin	GC16	B	03/05/07 13:58
QC377407	Heptachlor epoxide	GC16	B	03/05/07 13:58
QC377407	Endosulfan I	GC16	B	03/05/07 13:58

REPORTING SUMMARY FOR 193027 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377407	Dieldrin	GC16	B	03/05/07 13:58
QC377407	4,4'-DDE	GC16	B	03/05/07 13:58
QC377407	Endrin	GC16	B	03/05/07 13:58
QC377407	Endosulfan II	GC16	B	03/05/07 13:58
QC377407	Endosulfan sulfate	GC16	B	03/05/07 13:58
QC377407	4,4'-DDD	GC16	B	03/05/07 13:58
QC377407	4,4'-DDT	GC16	B	03/05/07 13:58
QC377407	alpha-Chlordane	GC16	B	03/05/07 13:58
QC377407	gamma-Chlordane	GC16	B	03/05/07 13:58
QC377407	Methoxychlor	GC16	B	03/05/07 13:58
QC377407	Endrin ketone	GC16	B	03/05/07 13:58
QC377407	Toxaphene	GC16	B	03/05/07 13:58
QC377407	TCMX	GC16	B	03/05/07 13:58
QC377407	Decachlorobiphenyl	GC16	B	03/05/07 13:58
QC377408	gamma-BHC	GC16	B	03/05/07 14:18
QC377408	Heptachlor	GC16	B	03/05/07 14:18
QC377408	Aldrin	GC16	B	03/05/07 14:18
QC377408	Dieldrin	GC16	B	03/05/07 14:18
QC377408	Endrin	GC16	B	03/05/07 14:18
QC377408	4,4'-DDT	GC16	B	03/05/07 14:18
QC377408	TCMX	GC16	B	03/05/07 14:18
QC377408	Decachlorobiphenyl	GC16	B	03/05/07 14:18
QC377409	gamma-BHC	GC16	B	03/05/07 14:37
QC377409	Heptachlor	GC16	B	03/05/07 14:37
QC377409	Aldrin	GC16	B	03/05/07 14:37
QC377409	Dieldrin	GC16	B	03/05/07 14:37
QC377409	Endrin	GC16	B	03/05/07 14:37
QC377409	4,4'-DDT	GC16	B	03/05/07 14:37
QC377409	TCMX	GC16	B	03/05/07 14:37
QC377409	Decachlorobiphenyl	GC16	B	03/05/07 14:37

Curtis & Tompkins Laboratories Sample Preparation Summary 05-MAR-2007 14:08

Batch Number : 122680
Date Extracted: 04-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5243H
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-011		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193027-012		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-004		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193055-005		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-006		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-011		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193055-012		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193055-013		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-014		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
193057-004		Weston Solutions	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
193099-001		Malcolm Pirnie, Inc.	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
QC377407	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC377408	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC377409	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie Mee Reviewed By: [illegible] Date: 3/5/07

Relinquished By: [illegible] Received By: [illegible] Date: 3/5/07

00159

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 122680
LIMS Analysis: 8081
Extracted by: DM
Date Extracted: 4 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193027-011 D	1030	7	10.0		
12 E	1050				
193055-004 K	1060				
05 J	1050				
06 L	1050				
11 J	1030				volume in round bottom seem lower than usual (less than 30ml)
12 M	1000				
13 L	1050				
14 C	1040				
193057-004 G	1040				
193099-001 F	1050				
MB QC377407	1000	NA			
BS 08					
BSD 09					

RFW 3/5/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	S5616A	DM 3/4/07
0.025 mL of matrix spike solution was added to all spikes	S5243H	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1225	
Extraction End Time:	0720	RFW 3/5/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH_2Cl_2-rinsed powdered Na_2SO_4	EM46320652	
Exchanged 2x with Hexane	~~RFW~~ RFW 3/5/07 J7BC50E54	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	NA	

Jessica Mee 3/4/07
Analyst Date

Contined from Page ____
Continued on Page ____

RFW 3/5/07
Reviewed by Date

00151

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/21/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	122665
Lab ID:	193027-009	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.98	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.98	
Fluorene	ND	0.98	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

38.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW102	Batch#:	122665
Lab ID:	193027-010	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	101	65-135
1-Methylnaphthalene (F)	98	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

39.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ100	Batch#:	122665
Lab ID:	193027-011	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	87	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

40.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ101	Batch#:	122665
Lab ID:	193027-012	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	93	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

41.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377353	Batch#:	122665
Matrix:	Water	Prepared:	03/02/07
Units:	ug/L	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

42.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Matrix:	Water	Batch#:	122665
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Type: BS Lab ID: QC377354

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.461	85	50-135
Fluorene	2.000	1.774	89	65-135
Pyrene	1.000	0.8933	89	65-135
Benzo(a)pyrene	1.000	0.9006	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	79	65-135
1-Methylnaphthalene (F)	77	65-135

Type: BSD Lab ID: QC377355

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	10.00	9.101	91	50-135	7	35
Fluorene	2.000	1.919	96	65-135	8	35
Pyrene	1.000	0.9632	96	65-135	8	35
Benzo(a)pyrene	1.000	0.9970	100	65-135	10	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	85	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

HPLC04 METHOD 8310

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

Method [redacted]\METHODS\8310-254.M

RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

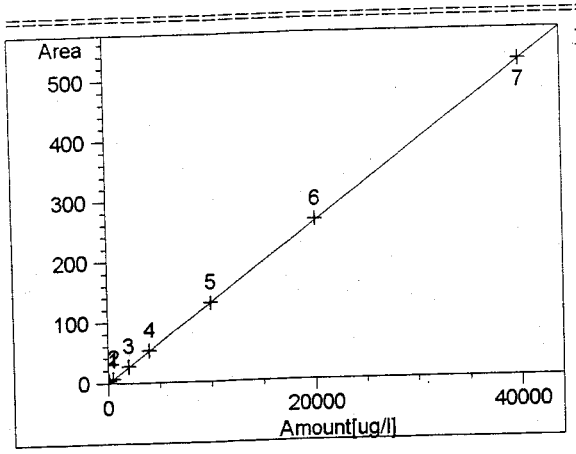
Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

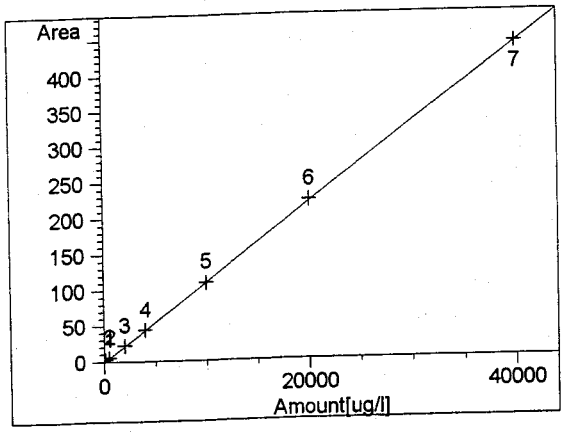
Peak Sum Table

No Entries in table

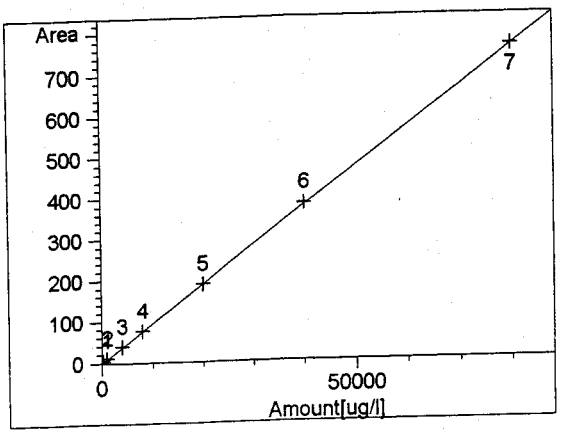
Calibration Curves



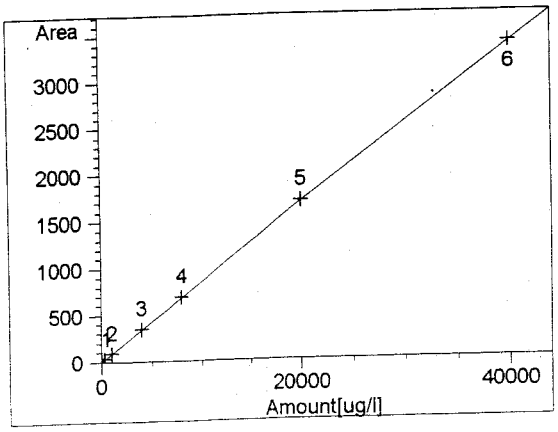
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



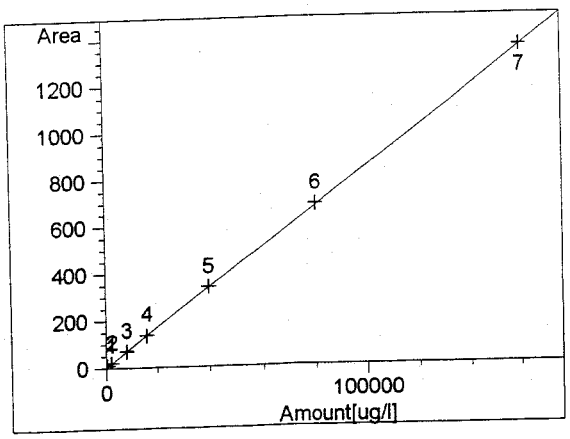
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



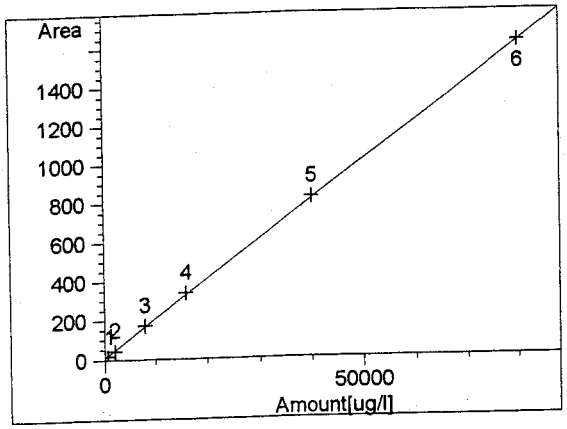
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



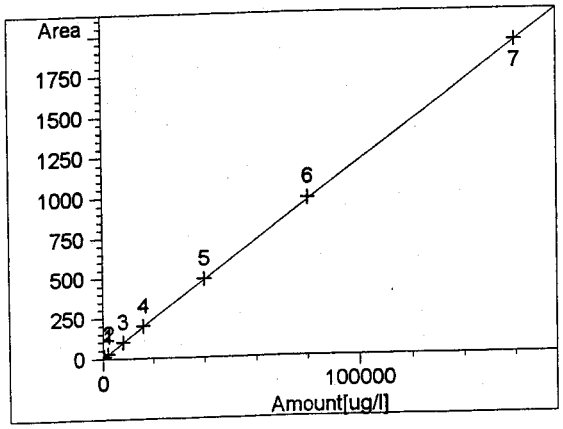
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



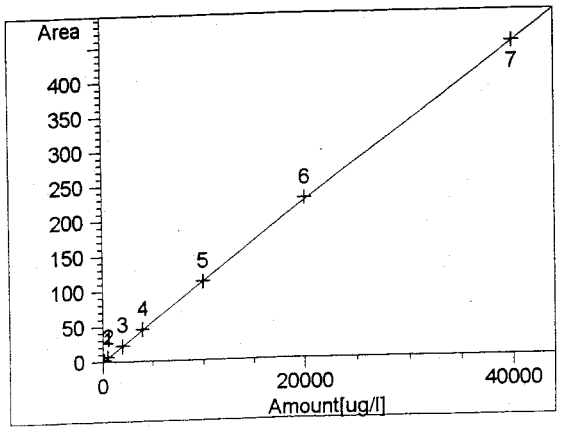
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



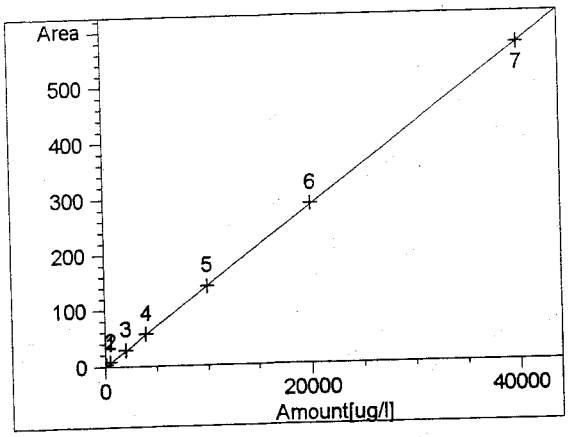
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



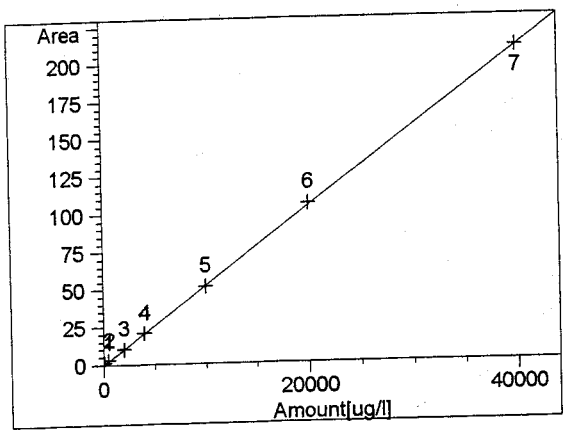
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



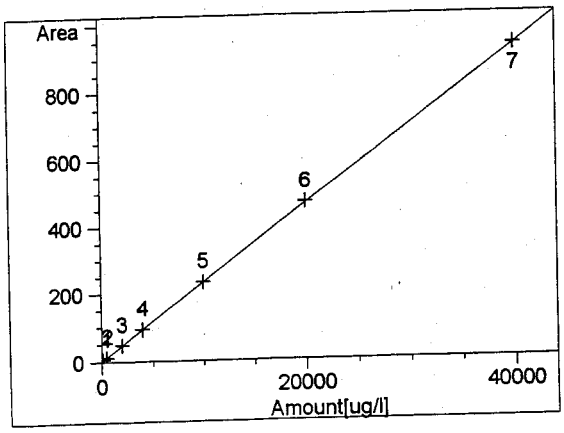
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



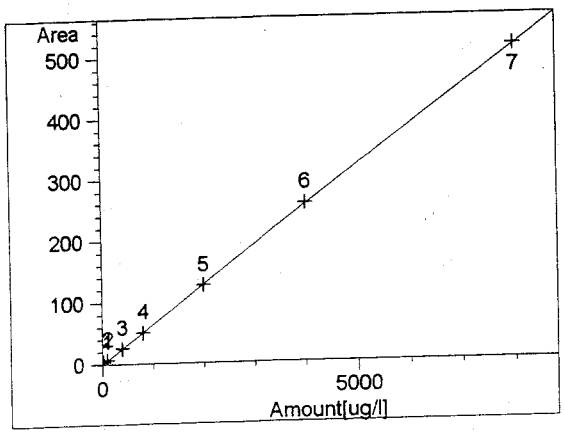
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



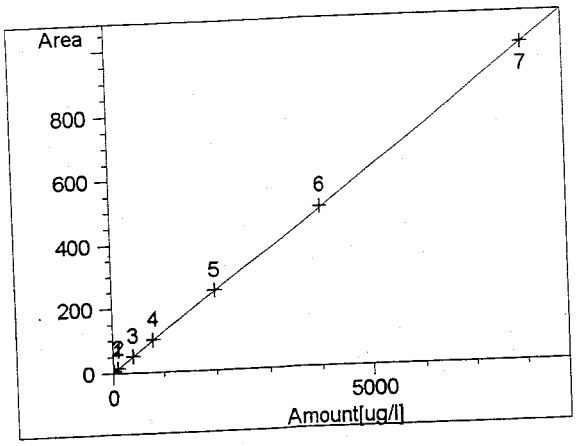
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



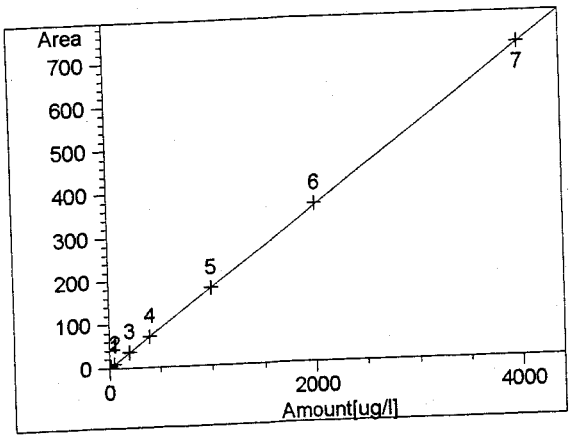
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



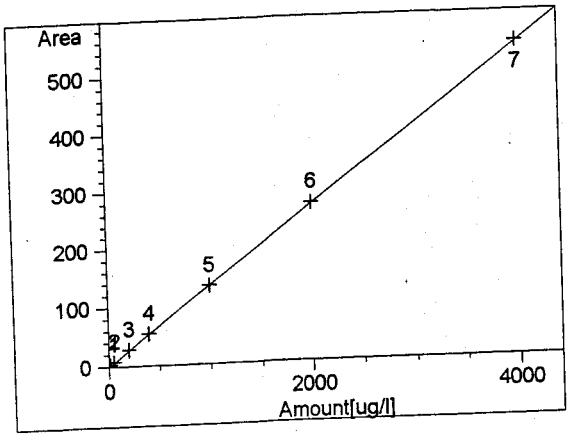
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



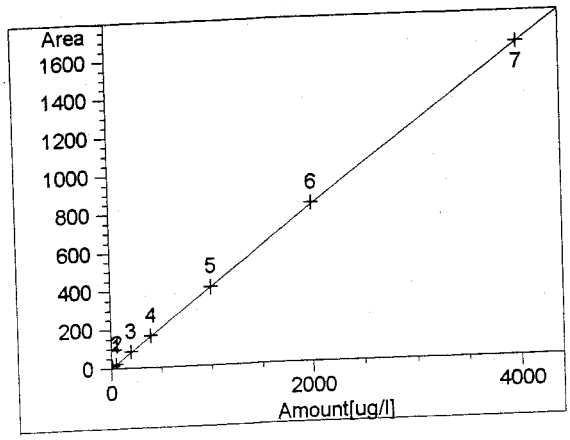
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



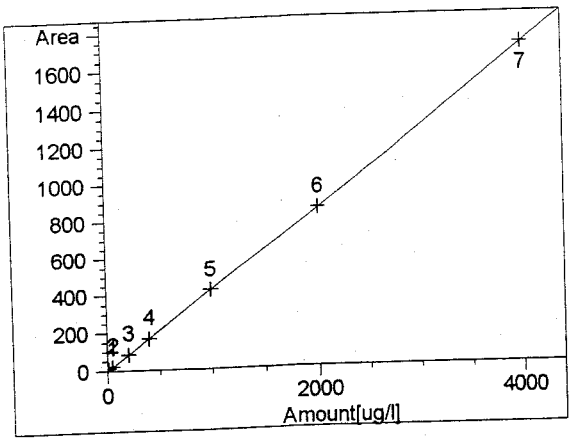
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



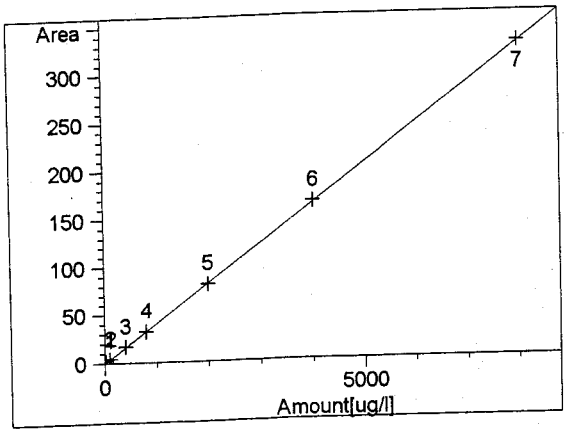
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



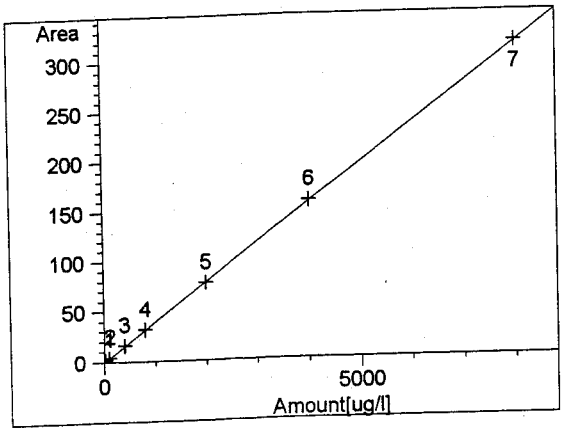
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



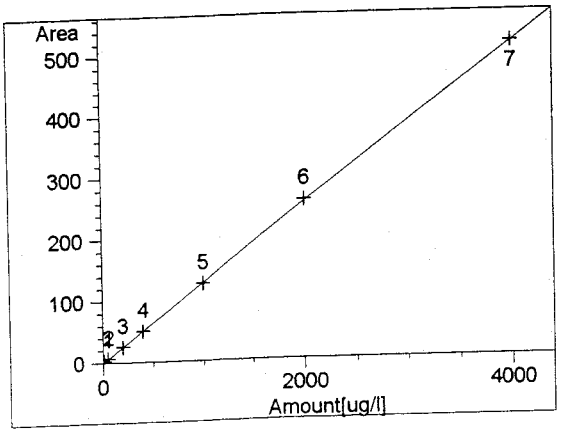
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



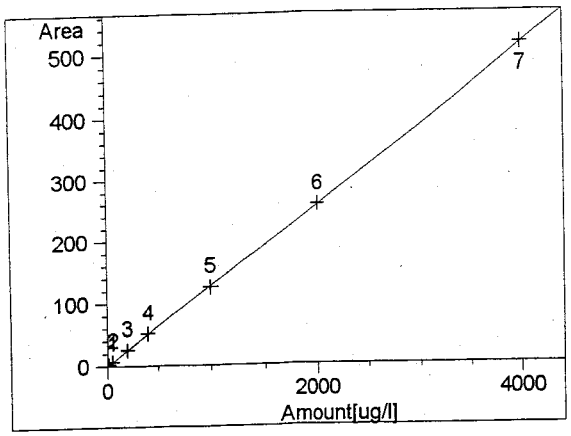
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



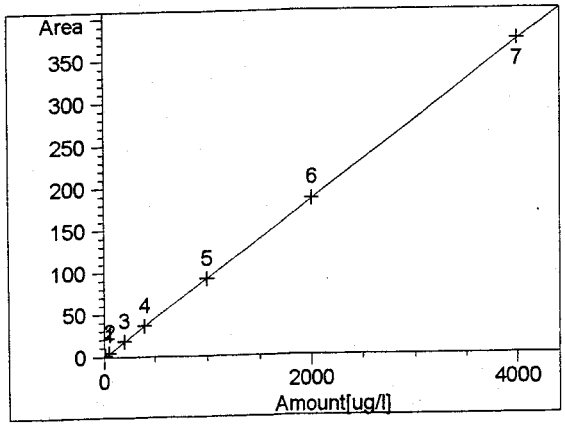
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



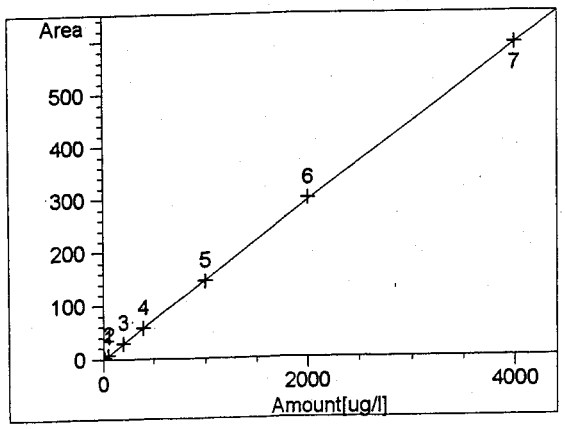
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



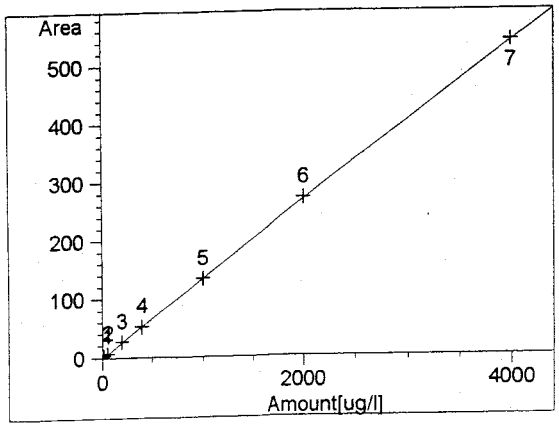
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



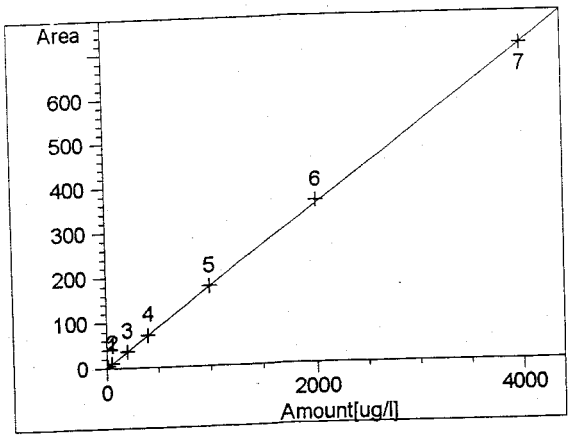
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



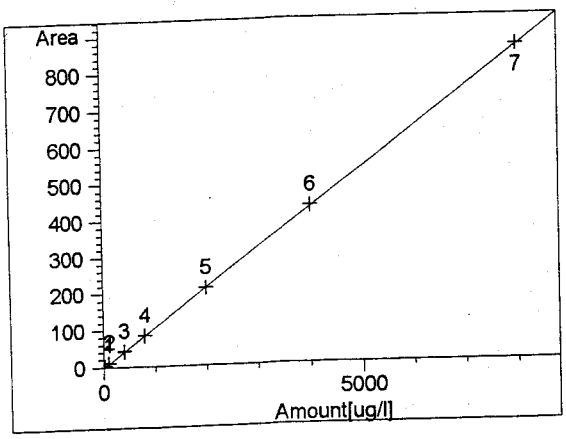
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



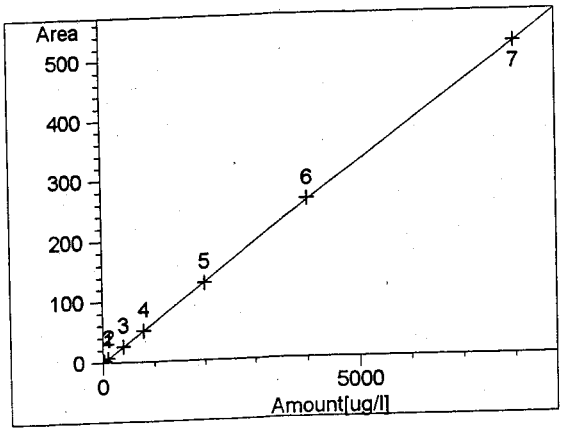
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



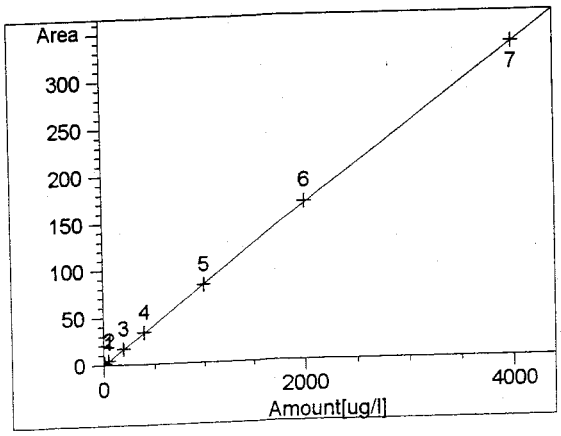
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



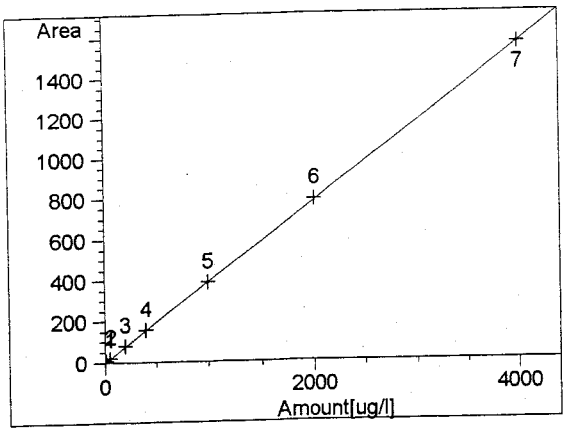
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



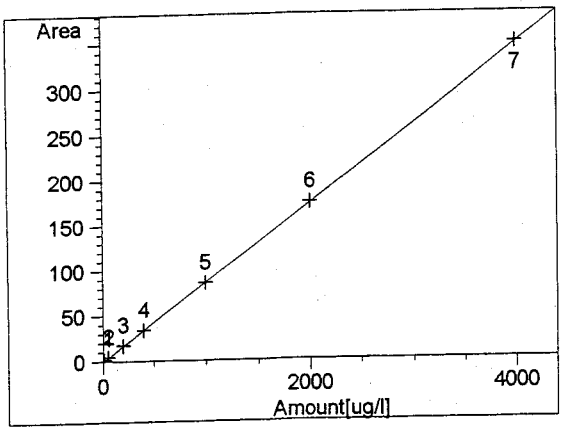
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



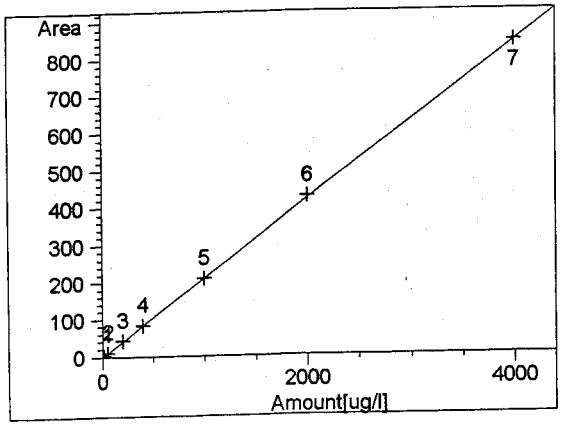
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



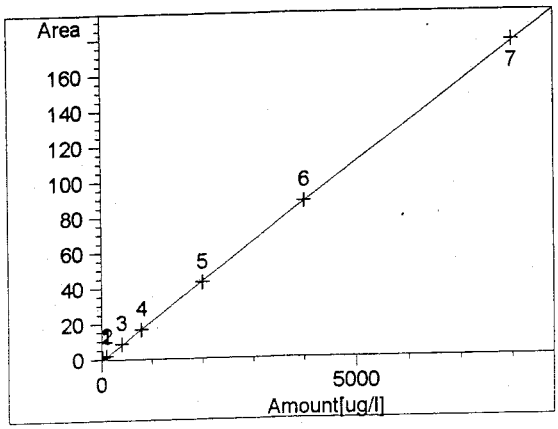
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



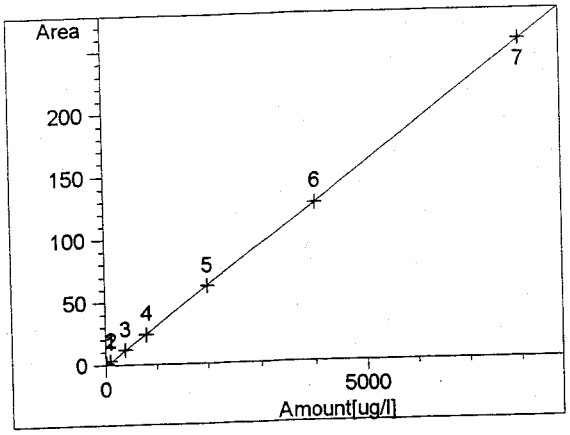
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



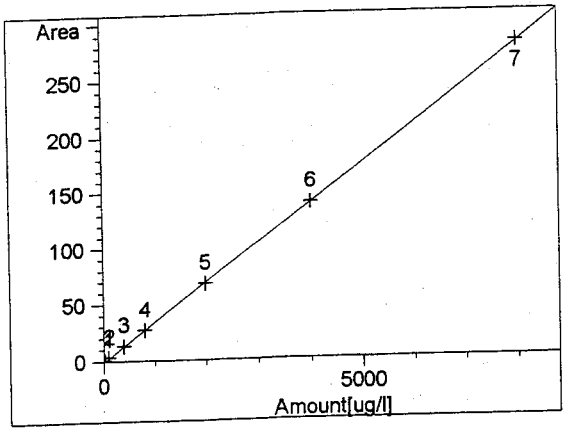
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



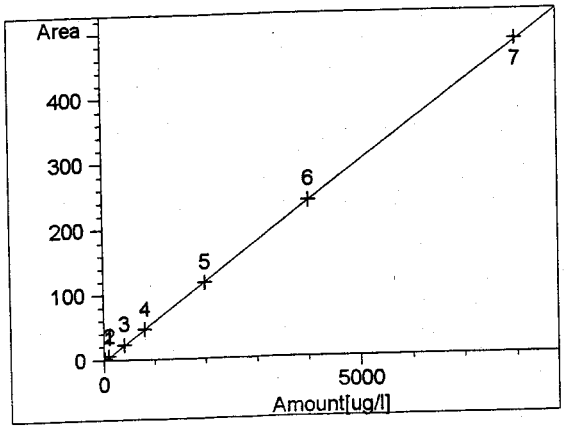
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



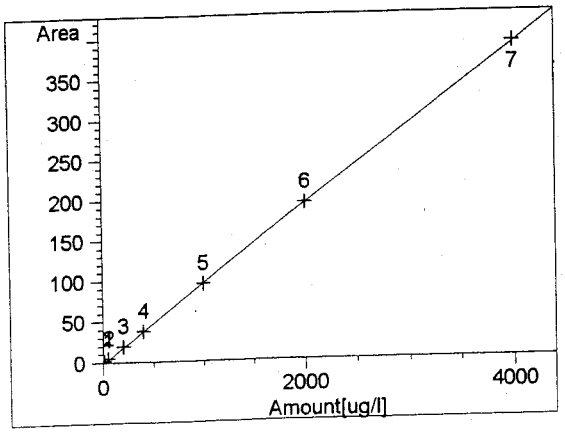
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

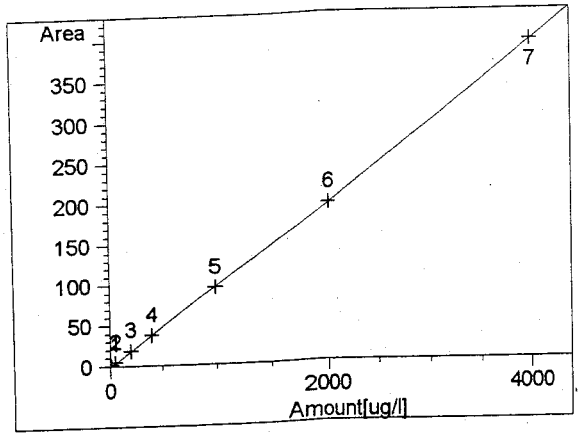


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297092730013 File : 06400013 Time : 05-MAR-2007 15:49
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4081	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8285	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4124	ug/L	3	15	
Fluorene	1	0.0637	0.0646	800.0	813.8	ug/L	2	15	
Phenanthrene	1	0.1810	0.1797	400.0	400.0	ug/L	0	15	
Anthracene	1	0.4065	0.4286	400.0	420.0	ug/L	5	15	
Fluoranthene	1	0.0404	0.0427	800.0	840.1	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0951	400.0	416.6	ug/L	4	15	
Chrysene	1	0.1350	0.1359	400.0	404.6	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1064	800.0	806.5	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0822	400.0	399.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0901	400.0	424.1	ug/L	6	15	
Dibenz(a,h)anthracene	1	0.0213	0.0210	800.0	785.8	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	800.0	817.3	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0939	400.0	398.4	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16260	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0889	8000	8349	ug/L	4	15	
Pyrene	2	0.1252	0.1305	400.0	409.6	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0215	16000	16680	ug/L	4	15	
Naphthalene	3	0.0110	0.0108	4000	3938	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0233	4000	3988	ug/L	0	15	
Fluorene	3	0.1247	0.1218	800.0	780.2	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1322	400.0	391.2	ug/L	-2	15	
Anthracene	3	0.4222	0.4419	400.0	418.8	ug/L	5	15	
Fluoranthene	3	0.0390	0.0400	800.0	819.8	ug/L	2	15	
Pyrene	3	0.1264	0.1285	400.0	405.2	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1504	400.0	410.0	ug/L	2	15	
Chrysene	3	0.1780	0.1768	400.0	395.8	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0642	800.0	796.1	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3854	400.0	395.3	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2212	400.0	421.2	ug/L	5	15	
Dibenz(a,h)anthracene	3	0.0303	0.0299	800.0	779.6	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0583	800.0	799.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0930	400.0	392.1	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	16000	15730	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193027 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297092730027 File : 06400027 Time : 05-MAR-2007 23:12
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10230	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20790	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10290	ug/L	3	15	
Fluorene	1	0.0637	0.0650	2000	2030	ug/L	2	15	
Phenanthrene	1	0.1810	0.1801	1000	998.6	ug/L	0	15	
Anthracene	1	0.4065	0.4355	1000	1064	ug/L	6	15	
Fluoranthene	1	0.0404	0.0428	2000	2093	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0960	1000	1039	ug/L	4	15	
Chrysene	1	0.1350	0.1366	1000	1014	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1079	2000	2022	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0845	1000	1019	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0926	1000	1074	ug/L	7	15	
Dibenz(a,h)anthracene	1	0.0213	0.0217	2000	1988	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0358	2000	2066	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0954	1000	991.2	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40630	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0881	20000	20790	ug/L	4	15	
Pyrene	2	0.1252	0.1334	1000	1040	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41120	ug/L	3	15	
Naphthalene	3	0.0110	0.0108	10000	9820	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0235	10000	10040	ug/L	0	15	
Fluorene	3	0.1247	0.1221	2000	1968	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1342	1000	990.3	ug/L	-1	15	
Anthracene	3	0.4222	0.4478	1000	1054	ug/L	5	15	
Fluoranthene	3	0.0390	0.0404	2000	2060	ug/L	3	15	
Pyrene	3	0.1264	0.1316	1000	1028	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1524	1000	1032	ug/L	3	15	
Chrysene	3	0.1780	0.1770	1000	996.5	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0638	0.0646	2000	1992	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3871	1000	990.6	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2241	1000	1063	ug/L	6	15	
Dibenz(a,h)anthracene	3	0.0303	0.0305	2000	1944	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0599	2000	2012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0956	1000	986.9	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	40000	39670	ug/L	-1	15	

SEQUENCE SUMMARY FOR 193027 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193027 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297092730 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 05-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	06400001	X	IB - 064			05-MAR-2007 09:30	1.0				
002	06400002	CCV	L			05-MAR-2007 10:02	1.0	1.0	10	1	
003	06400003	X	IB			05-MAR-2007 10:33	1.0				
004	06400004	BLANK	QC377400	122678	Soil	05-MAR-2007 11:05	1.0	0.06658	10		
005	06400005	MSS	193048-005	122678	Soil	05-MAR-2007 11:36	1.0	0.06671	10		
006	06400006	SAMPLE	193048-010	122678	Soil	05-MAR-2007 12:08	1.0	0.06638	10		
007	06400007	SAMPLE	193051-005	122678	Soil	05-MAR-2007 12:40	1.0	0.06664	10		
008	06400008	LCS	QC377401	122678	Soil	05-MAR-2007 13:11	1.0	0.06642	10		
009	06400009	MS	QC377402	122678	Soil	05-MAR-2007 13:43	1.0	0.06647	10		
010	06400010	MSD	QC377403	122678	Soil	05-MAR-2007 14:15	1.0	0.06656	10		
011	06400011	X	IB			05-MAR-2007 14:46	1.0				
012	06400012	X,CCV	M			05-MAR-2007 15:18	1.0			2	
013	06400013	CCV	M			05-MAR-2007 15:49	1.0	1.0	10	2	
014	06400014	X	IB			05-MAR-2007 16:21	1.0				
015	06400015	BLANK	QC377353	122665	Water	05-MAR-2007 16:52	1.0	0.002	10		
016	06400016	BS	QC377354	122665	Water	05-MAR-2007 17:24	1.0	0.002	10		
017	06400017	BSD	QC377355	122665	Water	05-MAR-2007 17:56	1.0	0.002	10		
018	06400018	X	IB			05-MAR-2007 18:27	1.0				
019	06400019	SAMPLE	193027-009	122665	Water	05-MAR-2007 18:59	1.0	0.001961	10		
020	06400020	SAMPLE	193027-010	122665	Water	05-MAR-2007 19:30	1.0	0.001942	10		
021	06400021	SAMPLE	193027-011	122665	Water	05-MAR-2007 20:02	1.0	0.001942	10		
022	06400022	SAMPLE	193055-002	122665	Water	05-MAR-2007 20:34	1.0	0.001887	10		
023	06400023	SAMPLE	193055-003	122665	Water	05-MAR-2007 21:05	1.0	0.001887	10		
024	06400024	SAMPLE	193055-004	122665	Water	05-MAR-2007 21:37	1.0	0.001887	10		
025	06400025	SAMPLE	193027-012	122665	Water	05-MAR-2007 22:08	1.0	0.001923	10		
026	06400026	X	IB			05-MAR-2007 22:40	1.0				
027	06400027	CCV	H			05-MAR-2007 23:12	1.0	1.0	10	3	
028	06400028	X	CCV			05-MAR-2007 23:43	1.0			3	
029	06400029	X	IB			06-MAR-2007 00:15	1.0				
030	06400030	X,SAMPL	193055-005	122665	Water	06-MAR-2007 00:46	1.0				
031	06400031	X,SAMPL	193055-006	122665	Water	06-MAR-2007 01:19	1.0				

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193027 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297092730 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 05-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	06400032	X,SAMPL	193055-011	122665	Water	06-MAR-2007 01:50	1.0						
033	06400033	X,SAMPL	193055-012	122665	Water	06-MAR-2007 02:22	1.0						
034	06400034	X,SAMPL	193055-013	122665	Water	06-MAR-2007 02:53	1.0						
035	06400035	X,SAMPL	193055-014	122665	Water	06-MAR-2007 03:25	1.0						
036	06400036	X,SAMPL	193093-002	122665	Water	06-MAR-2007 03:57	1.0						
037	06400037	SAMPLE	193093-001	122665	Water	06-MAR-2007 04:28	1.0	0.001887	18	1	10		
038	06400038	X	IB			06-MAR-2007 05:00	1.0						
039	06400039	X	IB			06-MAR-2007 05:32	1.0						
040	06400040	X	IB			06-MAR-2007 06:03	1.0						
041	06400041	CCV	M			06-MAR-2007 06:35	1.0	1.0	21		10	2	
042	06400042	X	CCV			06-MAR-2007 07:06	1.0					2	
043	06400043	X	IB			06-MAR-2007 07:38	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 193027 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193027-009	Naphthalene	HPLC04	1	03/05/07 18:59
193027-009	Acenaphthylene	HPLC04	1	03/05/07 18:59
193027-009	Acenaphthene	HPLC04	1	03/05/07 18:59
193027-009	Fluorene	HPLC04	1	03/05/07 18:59
193027-009	Phenanthrene	HPLC04	3	03/05/07 18:59
193027-009	Anthracene	HPLC04	3	03/05/07 18:59
193027-009	Fluoranthene	HPLC04	3	03/05/07 18:59
193027-009	Pyrene	HPLC04	3	03/05/07 18:59
193027-009	Benzo(a)anthracene	HPLC04	3	03/05/07 18:59
193027-009	Chrysene	HPLC04	3	03/05/07 18:59
193027-009	Benzo(b)fluoranthene	HPLC04	3	03/05/07 18:59
193027-009	Benzo(k)fluoranthene	HPLC04	3	03/05/07 18:59
193027-009	Benzo(a)pyrene	HPLC04	3	03/05/07 18:59
193027-009	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 18:59
193027-009	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 18:59
193027-009	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 18:59
193027-009	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 18:59
193027-009	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 18:59
193027-010	Naphthalene	HPLC04	1	03/05/07 19:30
193027-010	Acenaphthylene	HPLC04	1	03/05/07 19:30
193027-010	Acenaphthene	HPLC04	1	03/05/07 19:30
193027-010	Fluorene	HPLC04	1	03/05/07 19:30
193027-010	Phenanthrene	HPLC04	3	03/05/07 19:30
193027-010	Anthracene	HPLC04	3	03/05/07 19:30
193027-010	Fluoranthene	HPLC04	3	03/05/07 19:30
193027-010	Pyrene	HPLC04	3	03/05/07 19:30
193027-010	Benzo(a)anthracene	HPLC04	3	03/05/07 19:30
193027-010	Chrysene	HPLC04	3	03/05/07 19:30
193027-010	Benzo(b)fluoranthene	HPLC04	3	03/05/07 19:30
193027-010	Benzo(k)fluoranthene	HPLC04	3	03/05/07 19:30
193027-010	Benzo(a)pyrene	HPLC04	3	03/05/07 19:30
193027-010	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 19:30
193027-010	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 19:30
193027-010	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 19:30
193027-010	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 19:30
193027-010	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 19:30
193027-011	Naphthalene	HPLC04	1	03/05/07 20:02
193027-011	Acenaphthylene	HPLC04	1	03/05/07 20:02
193027-011	Acenaphthene	HPLC04	1	03/05/07 20:02
193027-011	Fluorene	HPLC04	1	03/05/07 20:02
193027-011	Phenanthrene	HPLC04	3	03/05/07 20:02
193027-011	Anthracene	HPLC04	3	03/05/07 20:02
193027-011	Fluoranthene	HPLC04	3	03/05/07 20:02
193027-011	Pyrene	HPLC04	3	03/05/07 20:02
193027-011	Benzo(a)anthracene	HPLC04	3	03/05/07 20:02
193027-011	Chrysene	HPLC04	3	03/05/07 20:02
193027-011	Benzo(b)fluoranthene	HPLC04	3	03/05/07 20:02
193027-011	Benzo(k)fluoranthene	HPLC04	3	03/05/07 20:02
193027-011	Benzo(a)pyrene	HPLC04	3	03/05/07 20:02
193027-011	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 20:02
193027-011	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 20:02
193027-011	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 20:02

REPORTING SUMMARY FOR 193027 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193027-011	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 20:02
193027-011	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 20:02
193027-012	Naphthalene	HPLC04	1	03/05/07 22:08
193027-012	Acenaphthylene	HPLC04	1	03/05/07 22:08
193027-012	Acenaphthene	HPLC04	1	03/05/07 22:08
193027-012	Fluorene	HPLC04	1	03/05/07 22:08
193027-012	Phenanthrene	HPLC04	3	03/05/07 22:08
193027-012	Anthracene	HPLC04	3	03/05/07 22:08
193027-012	Fluoranthene	HPLC04	3	03/05/07 22:08
193027-012	Pyrene	HPLC04	3	03/05/07 22:08
193027-012	Benzo(a)anthracene	HPLC04	3	03/05/07 22:08
193027-012	Chrysene	HPLC04	3	03/05/07 22:08
193027-012	Benzo(b)fluoranthene	HPLC04	3	03/05/07 22:08
193027-012	Benzo(k)fluoranthene	HPLC04	3	03/05/07 22:08
193027-012	Benzo(a)pyrene	HPLC04	3	03/05/07 22:08
193027-012	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 22:08
193027-012	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 22:08
193027-012	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 22:08
193027-012	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 22:08
193027-012	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 22:08
QC377353	Naphthalene	HPLC04	1	03/05/07 16:52
QC377353	Acenaphthylene	HPLC04	1	03/05/07 16:52
QC377353	Acenaphthene	HPLC04	1	03/05/07 16:52
QC377353	Fluorene	HPLC04	1	03/05/07 16:52
QC377353	Phenanthrene	HPLC04	3	03/05/07 16:52
QC377353	Anthracene	HPLC04	3	03/05/07 16:52
QC377353	Fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Pyrene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(a)anthracene	HPLC04	3	03/05/07 16:52
QC377353	Chrysene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(b)fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(k)fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(a)pyrene	HPLC04	3	03/05/07 16:52
QC377353	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 16:52
QC377353	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 16:52
QC377353	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 16:52
QC377353	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 16:52
QC377354	Naphthalene	HPLC04	1	03/05/07 17:24
QC377354	Fluorene	HPLC04	1	03/05/07 17:24
QC377354	Pyrene	HPLC04	3	03/05/07 17:24
QC377354	Benzo(a)pyrene	HPLC04	3	03/05/07 17:24
QC377354	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 17:24
QC377354	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 17:24
QC377355	Naphthalene	HPLC04	1	03/05/07 17:56
QC377355	Fluorene	HPLC04	1	03/05/07 17:56
QC377355	Pyrene	HPLC04	3	03/05/07 17:56
QC377355	Benzo(a)pyrene	HPLC04	3	03/05/07 17:56
QC377355	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 17:56
QC377355	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 17:56

S

Curtis & Tompkins Laboratories Sample Preparation Summary 03-MAR-2007 17:51

Batch Number : 122665
Date Extracted: 02-MAR-2007
Extracted by : Kevin Riley
Prep Method : 3520C

Analysis : 8310
Bgroup : HPLC
Units : mL
Clean-up :

Spike #1 ID : S5126
Spike #2 ID : S5518C
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
L93027-009		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
L93027-010		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
L93027-011		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
L93027-012		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
L93055-002		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93055-003		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93055-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93055-005		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93055-006		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93055-011		Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	.1	0		8310		
L93055-012		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
L93055-013		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
L93055-014		Treadwell & Rollo	Water	975	mL	2	0.002051	1	7	.1	0		8310		
L93093-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
L93093-002		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377353	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377354	BS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377355	BSD		Water	1000	mL	2	0.002000	1		.1	1		8310		

Prep Chemist: JM for KR Reviewed By: [signature] Date: 3/4/07

Relinquished By: [signature] Received By: [signature] Date: 05MAR2007

0519

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 122665
LIMS Analysis: 8310
Extracted by: KR
Date Extracted: 2 MAR 07

Extraction Method:
☐ EPA 3510c sep. funnel
☑ EPA 3520c cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193027-009G	1020	7	2.0		
10D	1030				
11G	1030				*
12D	1040				
~~190~~ 193055-002D	1060				
3D					
4J					
5H					
6K					near dry while concentrating
11N	1000				
12L	1020				leaky receiver - lost ~5mL before conc.
13K	950				possible glove contamination
14G	975				near dry while concentrating
193093-001R	1060				
2R	1060				
BLANK QC377353	1000	NA			
BS S4					
BSD S5					

RFW 3/3/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.1 mL of surrogate solution was added to all samples	SS126L / * P	3/2/07 KR
1.0 mL of matrix spiking solution was added to all spikes	SS518C	
☑ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47610 / EM462LF	
Extraction Start Time:	1835	
Extraction End Time:	1235 / *1300	RFW 3/3/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ granular Na2SO4	EM46111628	
Exchanged 2x with Acetonitrile	EM46173	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	NA	
Extracts filtered with 0.45 um PTFE syringe filter	Whatman 0108	

2 MAR 07
Extraction Chemist Date

Contined from Page —
Continued on Page —

3/4/07
Reviewed by 00187 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/21/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW105	Units:	ug/L
Lab ID:	193027-001	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	51	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	39,000	500	10.00	122867	03/08/07	03/08/07
Chromium	30	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	62,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	74,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

73.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Units:	ug/L
Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	1.000	122867	03/08/07	03/08/07
Calcium	51,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Copper	1.5	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	81,000	500	10.00	122867	03/08/07	03/08/07
Manganese	18	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	610	500	1.000	122867	03/08/07	03/08/07
Sodium	41,000	500	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	1.000	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

54.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW09	Units:	ug/L
Lab ID:	193027-003	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	53	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	28,000	500	10.00	122867	03/08/07	03/08/07
Chromium	24	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	47,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	68,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

74.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0227072A	Units:	ug/L
Lab ID:	193027-004	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	49	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	40,000	500	10.00	122867	03/08/07	03/08/07
Chromium	30	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	64,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	530	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	79,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

75.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0227072B	Units:	ug/L
Lab ID:	193027-005	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	51,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	10.00	122867	03/08/07	03/08/07
Copper	1.3	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	92,000	500	10.00	122867	03/08/07	03/08/07
Manganese	15	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Sodium	43,000	500	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

55.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0227072C	Units:	ug/L
Lab ID:	193027-006	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	52	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	28,000	500	10.00	122867	03/08/07	03/08/07
Chromium	22	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	46,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	68,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

76.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10GW03	Units:	ug/L
Lab ID:	193027-007	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	84	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	32,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	1.5	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	66,000	500	10.00	122867	03/08/07	03/08/07
Manganese	11	10	1.000	122867	03/08/07	03/08/07
Nickel	40	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	52,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

77.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Units:	ug/L
Lab ID:	193027-008	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	86	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	28,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	2.3	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	90,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	630	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	110,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

78.0

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Units:	ug/L
Lab ID:	193027-011	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	300	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	120	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	49,000	500	10.00	122867	03/08/07	03/08/07
Chromium	11	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	13	1.0	10.00	122949	03/10/07	03/11/07
Iron	1,500	100	1.000	122867	03/08/07	03/08/07
Lead	32	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	72,000	500	10.00	122867	03/08/07	03/08/07
Manganese	170	10	1.000	122867	03/08/07	03/08/07
Nickel	23	20	1.000	122867	03/08/07	03/08/07
Potassium	12,000	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	200,000	500	20.00	122867	03/08/07	03/10/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	47	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

48.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Units:	ug/L
Lab ID:	193027-011	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	110	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	47,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	230	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	68,000	500	10.00	122867	03/08/07	03/08/07
Manganese	130	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	12,000	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	190,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

79.0

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Units:	ug/L
Lab ID:	193027-012	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	16,000	100	1.000	122867	03/08/07	03/08/07
Antimony	2.6	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	17	5.0	1.000	122867	03/08/07	03/08/07
Barium	270	10	10.00	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	99,000	500	10.00	122867	03/08/07	03/08/07
Chromium	96	10	1.000	122867	03/08/07	03/08/07
Cobalt	19	10	1.000	122867	03/08/07	03/08/07
Copper	140	1.0	10.00	122949	03/10/07	03/11/07
Iron	33,000	100	10.00	122867	03/08/07	03/08/07
Lead	57	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	150,000	500	10.00	122867	03/08/07	03/08/07
Manganese	5,500	10	50.00	122867	03/08/07	03/10/07
Nickel	130	20	1.000	122867	03/08/07	03/08/07
Potassium	6,500	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	190,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	66	10	10.00	122867	03/08/07	03/08/07
Zinc	130	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Units:	ug/L
Lab ID:	193027-012	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	99	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	96,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	460	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	130,000	500	10.00	122867	03/08/07	03/08/07
Manganese	5,600	10	50.00	122867	03/08/07	03/10/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	4,600	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	190,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

80.0

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Lab ID:	193027-013	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	470	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	32	5.0	1.000	122867	03/08/07	03/08/07
Barium	430	10	10.00	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	74,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	16	1.0	10.00	122949	03/10/07	03/11/07
Iron	110,000	100	10.00	122867	03/08/07	03/08/07
Lead	11	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	41,000	500	10.00	122867	03/08/07	03/08/07
Manganese	3,400	10	20.00	122867	03/08/07	03/10/07
Nickel	37	20	1.000	122867	03/08/07	03/08/07
Potassium	4,100	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	49,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	77	10	10.00	122867	03/08/07	03/08/07
Zinc	67	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

50.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Lab ID:	193027-013	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	19	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	40,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	1,500	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	36,000	500	10.00	122867	03/08/07	03/08/07
Manganese	280	10	10.00	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	3,800	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	48,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

81.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10GW01	Units:	ug/L
Lab ID:	193027-014	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	46	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	13,000	500	1.000	122867	03/08/07	03/08/07
Chromium	59	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	ND	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	60,000	500	10.00	122867	03/08/07	03/08/07
Manganese	ND	10	1.000	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	ND	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	41,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

82.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10GW02	Units:	ug/L
Lab ID:	193027-015	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	1.000	122867	03/08/07	03/08/07
Antimony	ND	1.0	1.000	122867	03/08/07	03/08/07
Arsenic	ND	5.0	1.000	122867	03/08/07	03/08/07
Barium	55	10	1.000	122867	03/08/07	03/08/07
Beryllium	ND	2.0	1.000	122867	03/08/07	03/08/07
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07
Calcium	69,000	500	10.00	122867	03/08/07	03/08/07
Chromium	ND	10	1.000	122867	03/08/07	03/08/07
Cobalt	ND	10	1.000	122867	03/08/07	03/08/07
Copper	ND	1.0	1.000	122950	03/10/07	03/11/07
Iron	1,200	100	1.000	122867	03/08/07	03/08/07
Lead	ND	3.0	1.000	122867	03/08/07	03/08/07
Magnesium	33,000	500	10.00	122867	03/08/07	03/08/07
Manganese	610	10	10.00	122867	03/08/07	03/08/07
Nickel	ND	20	1.000	122867	03/08/07	03/08/07
Potassium	3,400	500	1.000	122867	03/08/07	03/08/07
Selenium	ND	5.0	1.000	122867	03/08/07	03/08/07
Silver	ND	1.0	1.000	122867	03/08/07	03/08/07
Sodium	29,000	500	10.00	122867	03/08/07	03/08/07
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07
Zinc	ND	20	1.000	122867	03/08/07	03/08/07

ND= Not Detected
RL= Reporting Limit

83.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378195	Batch#:	122867
Matrix:	Filtrate	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Diln Fac:	1.000
Type:	BLANK	Batch#:	122949
Lab ID:	QC378535	Prepared:	03/10/07
Matrix:	Water	Analyzed:	03/11/07
Units:	ug/L		

Result	RL
ND	1.0

ND= Not Detected
RL= Reporting Limit

52.0

00207

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Diln Fac:	1.000
Type:	BLANK	Batch#:	122950
Lab ID:	QC378542	Prepared:	03/10/07
Matrix:	Filtrate	Analyzed:	03/11/07
Units:	ug/L		

Result	RL
ND	1.0

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Water	Sampled:	02/27/07
Units:	ug/L	Received:	02/28/07

Field ID	Type	Lab ID	Result	RL	Batch#	Prepared	Analyzed
BB1PZ100	SAMPLE	193027-011	ND	0.20	122819	03/07/07	03/07/07
BB1PZ101	SAMPLE	193027-012	ND	0.20	122749	03/06/07	03/06/07
LF10SP01	SAMPLE	193027-013	ND	0.20	122819	03/07/07	03/07/07
	BLANK	QC377718	ND	0.20	122749	03/06/07	03/06/07
	BLANK	QC377992	ND	0.20	122819	03/07/07	03/07/07

ND= Not Detected
RL= Reporting Limit

64.0

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	02/27/07
Units:	ug/L	Received:	02/28/07
Diln Fac:	1.000		

Field ID	Type	Lab ID	Matrix	Result	RL	Batch#	Prepared	Analyzed
LF10GW03	SAMPLE	193027-007	Filtrate	ND	0.20	122749	03/06/07	03/06/07
BB1PZ100	SAMPLE	193027-011	Filtrate	ND	0.20	122749	03/06/07	03/06/07
BB1PZ101	SAMPLE	193027-012	Filtrate	ND	0.20	122819	03/07/07	03/07/07
LF10SP01	SAMPLE	193027-013	Filtrate	ND	0.20	122749	03/06/07	03/06/07
LF10GW01	SAMPLE	193027-014	Filtrate	ND	0.20	122749	03/06/07	03/06/07
LF10GW02	SAMPLE	193027-015	Filtrate	ND	0.20	122749	03/06/07	03/06/07
	BLANK	QC377718	Water	ND	0.20	122749	03/06/07	03/06/07
	BLANK	QC377992	Water	ND	0.20	122819	03/07/07	03/07/07

ND= Not Detected
RL= Reporting Limit

92.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122867
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: BS Lab ID: QC378196

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,190	102	80-120
Antimony	100.0	96.83	97	80-120
Arsenic	100.0	102.5	103	80-120
Barium	100.0	101.0	101	80-120
Beryllium	100.0	113.3	113	80-120
Cadmium	100.0	103.1	103	80-120
Calcium	10,000	10,510	105	80-120
Chromium	100.0	104.7	105	80-120
Cobalt	100.0	106.1	106	80-120
Iron	10,000	10,380	104	80-120
Lead	100.0	106.3	106	80-120
Magnesium	10,000	10,290	103	80-120
Manganese	100.0	105.7	106	80-120
Nickel	100.0	106.1	106	80-120
Potassium	10,000	10,440	104	80-120
Selenium	100.0	104.3	104	80-120
Silver	100.0	106.2	106	80-120
Sodium	10,000	10,310	103	80-120
Thallium	50.00	49.26	99	80-120
Vanadium	100.0	103.4	103	80-120
Zinc	100.0	105.4	105	80-120

Type: BSD Lab ID: QC378197

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,150	102	80-120	0	20
Antimony	100.0	97.23	97	80-120	0	20
Arsenic	100.0	101.5	102	80-120	1	20
Barium	100.0	100.4	100	80-120	1	20
Beryllium	100.0	112.0	112	80-120	1	20
Cadmium	100.0	102.8	103	80-120	0	20
Calcium	10,000	10,410	104	80-120	1	20
Chromium	100.0	102.9	103	80-120	2	20
Cobalt	100.0	103.5	104	80-120	2	20
Iron	10,000	10,340	103	80-120	0	20
Lead	100.0	104.6	105	80-120	2	20
Magnesium	10,000	10,230	102	80-120	1	20
Manganese	100.0	103.1	103	80-120	2	20
Nickel	100.0	103.6	104	80-120	2	20
Potassium	10,000	10,370	104	80-120	1	20
Selenium	100.0	104.1	104	80-120	0	20
Silver	100.0	109.3	109	80-120	3	20
Sodium	10,000	10,060	101	80-120	2	20
Thallium	50.00	48.56	97	80-120	1	20
Vanadium	100.0	101.0	101	80-120	2	20
Zinc	100.0	104.0	104	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122949
Matrix:	Water	Prepared:	03/10/07
Units:	ug/L	Analyzed:	03/11/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378536	100.0	100.4	100	80-120		
BSD	QC378537	100.0	100.2	100	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122950
Matrix:	Filtrate	Prepared:	03/10/07
Units:	ug/L	Analyzed:	03/11/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378543	100.0	98.11	98	80-120		
BSD	QC378544	100.0	98.13	98	80-120	0	20

RPD= Relative Percent Difference

89.0

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000

Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled	Received	Prepared	Analyzed
BS		QC377719	Water		5.000	5.320	106	80-120			122749			03/06/07	03/06/07
BSD		QC377720	Water		5.000	5.060	101	80-120	5	20	122749			03/06/07	03/06/07
MS	193145-001	QC377722	Filtrate	0.1320	5.000	5.020	98	75-125			122749	03/05/07	03/05/07	03/06/07	03/06/07
MSD	193145-001	QC377723	Filtrate		5.000	4.610	90	75-125	9	20	122749	03/05/07	03/05/07	03/06/07	03/06/07
BS		QC377993	Water		5.000	5.300	106	80-120			122819			03/07/07	03/07/07
BSD		QC377994	Water		5.000	5.410	108	80-120	2	20	122819			03/07/07	03/07/07
MS	193119-001	QC377996	Water	<0.05753	5.000	5.680	114	75-125			122819	03/01/07	03/02/07	03/07/07	03/07/07
MSD	193119-001	QC377997	Water		5.000	5.240	105	75-125	8	20	122819	03/01/07	03/02/07	03/07/07	03/07/07

RPD= Relative Percent Difference

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0021 1

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	10.00	Analyzed:	03/08/07

Type: MS Lab ID: QC378198

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<9.556	10,000	10,460	105	75-125
Antimony	0.09918	100.0	101.7	102	75-125
Arsenic	1.597	100.0	102.4	101	75-125
Barium	60.35	100.0	171.4	111	75-125
Beryllium	<0.1228	100.0	107.8	108	75-125
Cadmium	<0.1659	100.0	106.1	106	75-125
Calcium	50,710	10,000	63,770	131 NM	75-125
Chromium	1.805	100.0	104.4	103	75-125
Cobalt	0.2030	100.0	103.7	103	75-125
Iron	89.03	10,000	10,620	105	75-125
Lead	<0.08794	100.0	104.3	104	75-125
Magnesium	80,910	10,000	95,930	150 NM	75-125
Manganese	17.92	100.0	124.9	107	75-125
Nickel	6.971	100.0	114.3	107	75-125
Potassium	614.0	10,000	11,190	106	75-125
Selenium	<0.4308	100.0	104.9	105	75-125
Silver	<0.06797	100.0	106.5	107	75-125
Sodium	40,840	10,000	52,100	113 NM	75-125
Thallium	0.03656	50.00	48.16	96	75-125
Vanadium	7.354	100.0	110.2	103	75-125
Zinc	16.66	100.0	129.1	112	75-125

Type: MSD Lab ID: QC378199

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,000	100	75-125	4	20
Antimony	100.0	96.63	97	75-125	5	20
Arsenic	100.0	100.1	99	75-125	2	20
Barium	100.0	163.7	103	75-125	5	20
Beryllium	100.0	103.6	104	75-125	4	20
Cadmium	100.0	101.7	102	75-125	4	20
Calcium	10,000	60,270	96 NM	75-125	6	20
Chromium	100.0	100.5	99	75-125	4	20
Cobalt	100.0	100.9	101	75-125	3	20
Iron	10,000	10,270	102	75-125	3	20
Lead	100.0	100.4	100	75-125	4	20
Magnesium	10,000	90,460	96 NM	75-125	6	20
Manganese	100.0	120.8	103	75-125	3	20
Nickel	100.0	109.1	102	75-125	5	20
Potassium	10,000	10,620	100	75-125	5	20
Selenium	100.0	102.6	103	75-125	2	20
Silver	100.0	103.5	104	75-125	3	20
Sodium	10,000	49,960	91 NM	75-125	4	20
Thallium	50.00	47.15	94	75-125	2	20
Vanadium	100.0	106.7	99	75-125	3	20
Zinc	100.0	120.0	103	75-125	7	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

59.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122949
Field ID:	ZZZZZZZZZZ	Sampled:	03/01/07
MSS Lab ID:	193066-001	Received:	03/01/07
Matrix:	Water	Prepared:	03/10/07
Units:	ug/L	Analyzed:	03/11/07
Diln Fac:	10.00		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378538	1.275	100.0	100.1	99	75-125		
MSD	QC378539		100.0	101.8	101	75-125	2	20

RPD= Relative Percent Difference

62.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122950
Field ID:	1065PZ7A	Sampled:	02/27/07
MSS Lab ID:	193027-002	Received:	02/28/07
Matrix:	Filtrate	Prepared:	03/10/07
Units:	ug/L	Analyzed:	03/11/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378545	1.528	100.0	85.55	84	75-125		
MSD	QC378546		100.0	87.45	86	75-125	2	20

RPD= Relative Percent Difference

90.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Units:	ug/L
Type:	Serial Dilution	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Lab ID:	QC378200	Received:	02/28/07
Matrix:	Filtrate	Analyzed:	03/08/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Aluminum	ND	100.0	ND	100.0	NC	10	5.000
Antimony	ND	1.000	ND	1.000	NC	10	5.000
Arsenic	ND	5.000	4.315 J	5.000	NC	10	5.000
Barium	60.35	10.00	59.39	10.00	2	10	5.000
Beryllium	ND	2.000	ND	2.000	NC	10	5.000
Cadmium	ND	1.000	ND	1.000	NC	10	5.000
Calcium	50,710	500.0	51,770	500.0	2	10	50.00
Chromium	ND	10.00	2.604 J	10.00	NC	10	5.000
Cobalt	ND	10.00	ND	10.00	NC	10	5.000
Iron	ND	100.0	95.98 J	100.0	NC	10	5.000
Lead	ND	3.000	ND	3.000	NC	10	5.000
Magnesium	80,910	500.0	85,070	500.0	5	10	50.00
Manganese	17.92	10.00	17.88	10.00	0	10	5.000
Nickel	ND	20.00	7.525 J	20.00	NC	10	5.000
Potassium	614.0	500.0	550.1	500.0	10	10	5.000
Selenium	ND	5.000	ND	5.000	NC	10	5.000
Silver	ND	1.000	ND	1.000	NC	10	5.000
Sodium	40,840	500.0	44,180	500.0	8	10	50.00
Thallium	ND	1.000	ND	1.000	NC	10	5.000
Vanadium	ND	10.00	9.210 J	10.00	NC	10	5.000
Zinc	ND	20.00	2.667 J	20.00	84 *	10	5.000

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	122949
MSS Lab ID:	193066-001	Sampled:	03/01/07
Lab ID:	QC378540	Received:	03/01/07
Matrix:	Water	Analyzed:	03/11/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
1.275	1.000	10.31	5.000	NC	10

NC= Not Calculated
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Units:	ug/L
Field ID:	1065PZ7A	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122950
MSS Lab ID:	193027-002	Sampled:	02/27/07
Lab ID:	QC378547	Received:	02/28/07
Matrix:	Filtrate	Analyzed:	03/11/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
1.528	1.000	1.712	1.250	NC	10

NC= Not Calculated
RL= Reporting Limit

91.0

: 00220

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122749
MSS Lab ID:	193145-001	Sampled:	03/05/07
Lab ID:	QC377721	Received:	03/05/07
Matrix:	Filtrate	Analyzed:	03/06/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122819
MSS Lab ID:	193119-001	Sampled:	03/01/07
Lab ID:	QC377995	Received:	03/02/07
Matrix:	Water	Analyzed:	03/07/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

67.0

00222

Curtis & Tompkins Laboratories **Sample Preparation Summary** **22-MAR-2007 13:54**

Batch Number : 123394
Date Extracted: 22-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : s
Clean-up :

Spike #1 ID : S5771
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193494-001		The Avogadro Group	Air	.193	s	50	259.067358	1					436/HG/HCL		
193494-002		The Avogadro Group	Air	.1923	s	50	260.010400	1					436/HG/HCL		
193494-003		The Avogadro Group	Air	.193	s	50	259.067358	1					436/HG/HCL		
193494-004		The Avogadro Group	Air	.1946	s	50	256.937307	1					436/HG/HCL		
QC380428	BLANK		Air	1	s	50	50.000000	1					HG		
QC380429	BS		Air	1	s	50	50.000000	1		2.5			HG		
QC380430	BSD		Air	1	s	50	50.000000	1		2.5			HG		
QC380431	SDUP	of 193494-001	Air	.193	s	50	259.067358	1					HG		
QC380432	SSPIKE	of 193494-001	Air	.193	s	50	259.067358	1		2.5			HG		
QC380433	SDUP	of 193494-002	Air	.1923	s	50	260.010400	1					HG		
QC380434	SDUP	of 193494-003	Air	.193	s	50	259.067358	1					HG		
QC380435	SDUP	of 193494-004	Air	.1946	s	50	256.937307	1					HG		

Prep Chemist: _____ Reviewed By: _____ Date: _____

Relinquished By: _____ Received By: _____ Date: _____

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET06
Seqnum: 67097451031
File : c08q0031
IDF : 10.0
Lab ID: QC378201
Matrix: Filtrate
Batch : 122867
Time : 08-MAR-2007 18:54
Cal : 67097451001
MSS : 193027-002
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67097451027	1.129	A	10000	9973	A	100	75-125	u
Antimony	67097451027	0.02766	A	100.0	93.60	A	94	75-125	u
Arsenic	67097451027	0.1056	E	100.0	99.70	E	100	75-125	u
Barium	67097451027	6.490	A	100.0	106.3	A	100	75-125	u
Beryllium	67097451027	ND	A	100.0	104.6	A	105	75-125	u
Cadmium	67097451027	0.008808	A	100.0	101.7	A	102	75-125	u
Calcium	67097451027	5071	A	10000	14980	A	99	75-125	u
Chromium	67097451027	0.1625	E	100.0	99.52	E	99	75-125	u
Cobalt	67097451027	0.06119	E	100.0	99.55	E	99	75-125	u
Copper	67097451027	0.3823	E	100.0	100.1	E	100	75-125	u
Iron	67097451027	1.982	H	10000	10180	H	102	75-125	u
Lead	67097451027	0.02554	A	100.0	101.5	A	101	75-125	u
Magnesium	67097451027	8091	A	10000	18060	A	100	75-125	u
Manganese	67097451027	2.032	E	100.0	102.4	E	100	75-125	u
Molybdenum	67097451027	0.04173	A	100.0	93.30	A	93	75-125	u
Nickel	67097451027	0.8444	E	100.0	100.3	E	99	75-125	u
Potassium	67097451027	57.99	A	10000	10070	A	100	75-125	u
Selenium	67097451027	ND	H	100.0	102.0	H	102	75-125	u
Silver	67097451027	ND	A	100.0	95.98	A	96	75-125	u
Sodium	67097451059	4084	E	10000	13760	E	97	75-125	u
Thallium	67097451027	0.05334	A	50.00	48.40	A	97	75-125	u
Vanadium	67097451027	0.8269	E	100.0	99.49	E	99	75-125	u
Zinc	67097451027	2.018	E	100.0	102.1	E	100	75-125	u

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1013061	935297	-7.68
Scandium	A	1199967	1165840	-2.84
Scandium	E	36567	34621	-5.32
Scandium	H	372754	348450	-6.52
Germanium	H	86607	80029	-7.60
Germanium	E	18002	16819	-6.57
Indium	A	1570978	1441782	-8.22
Bismuth	A	1225637	1122477	-8.42
Yttrium	A	1590566	1510841	-5.01
Terbium	A	2128023	2032155	-4.51

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET05
Seqnum: 57101593027
File : c11n0027
IDF : 1.0
Lab ID: 193027-002
Matrix: Filtrate
Batch : 122950
Time : 11-MAR-2007 15:00
Cal : 57101593001
Units : ug/L

Type : PDS
Inst : MET05
Seqnum: 57101593031
File : c11n0031
IDF : 1.0
Lab ID: QC378548
Matrix: Filtrate
Batch : 122950
Time : 11-MAR-2007 15:16
Cal : 57101593001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9059	91	75-125	u
Arsenic	3.781	100.0	83.22	79	75-125	u
Barium	67.30	100.0	164.8	98	75-125	u
Beryllium	ND	100.0	94.07	94	75-125	u
Cadmium	ND	100.0	80.65	81	75-125	u
Chromium	3.064	100.0	93.46	90	75-125	u
Cobalt	0.2514	100.0	86.44	86	75-125	u
Copper	1.528	100.0	85.01	83	75-125	u
Iron	93.81	10000	8900	88	75-125	u
Lead	ND	100.0	95.20	95	75-125	u
Manganese	18.36	100.0	107.7	89	75-125	u
Nickel	7.083	100.0	91.67	85	75-125	u
Potassium	654.3	10000	9849	92	75-125	u
Selenium	ND	100.0	71.84	**72***	75-125	u
Silver	ND	100.0	84.02	84	75-125	u
Thallium	0.07909	50.00	48.90	98	75-125	u
Vanadium	9.333	100.0	100.4	91	75-125	u
Zinc	17.30	100.0	92.53	75	75-125	u

ISTD (ICALBLK c11n0004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	572954	431222	-24.74
Scandium	291997	237533	-18.65
Germanium	83828	70746	-15.61
Indium	509088	369571	-27.41
Bismuth	555151	424281	-23.57

MISSING READINGS: **CA MG NA**

u=use

57101593031

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67101597034
File : c11n0034
IDF : 10.0
Lab ID: 193066-001
Matrix: Water
Batch : 122949
Time : 11-MAR-2007 16:18
Cal : 67101597001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67101597050
File : c11n0050
IDF : 10.0
Lab ID: QC378541
Matrix: Water
Batch : 122949
Time : 11-MAR-2007 17:45
Cal : 67101597001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	4.374	A	10000	9648	A	96	75-125	u
Antimony	0.03053	A	100.0	96.94	A	97	75-125	u
Arsenic	0.5684	E	100.0	100.1	E	100	75-125	u
Barium	3.687	A	100.0	100.0	A	96	75-125	u
Beryllium	ND	A	100.0	90.59	A	91	75-125	u
Cadmium	ND	A	100.0	93.22	A	93	75-125	u
Calcium	1081	A	10000	10820	A	97	75-125	u
Chromium	0.1194	E	100.0	96.29	E	96	75-125	u
Cobalt	0.03490	E	100.0	95.43	E	95	75-125	u
Copper	0.1275	E	100.0	96.75	E	97	75-125	u
Iron	4.386	H	10000	10330	H	103	75-125	u
Lead	0.02023	A	100.0	89.49	A	89	75-125	u
Magnesium	964.6	A	10000	10570	A	96	75-125	u
Manganese	4.783	E	100.0	103.6	E	99	75-125	u
Molybdenum	0.5028	A	100.0	91.18	A	91	75-125	u
Nickel	0.2385	E	100.0	95.90	E	96	75-125	u
Potassium	1693	A	10000	11360	A	97	75-125	u
Selenium	ND	H	100.0	100.0	H	100	75-125	u
Silver	ND	A	100.0	95.16	A	95	75-125	u
Thallium	ND	A	50.00	49.29	A	99	75-125	u
Vanadium	0.8140	E	100.0	97.40	E	97	75-125	u
Zinc	0.6829	E	100.0	99.29	E	99	75-125	u

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	914016	883046	-3.39
Scandium	A	1483318	1581029	6.59
Scandium	E	39997	44322	10.81
Scandium	H	339061	331567	-2.21
Germanium	H	77433	76282	-1.49
Germanium	E	18808	20539	9.21
Indium	A	1776838	1844645	3.82
Bismuth	A	1361245	1244265	-8.59
Yttrium	A	1804800	1939659	7.47
Terbium	A	2230978	2289320	2.62

u=use

67101597050

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67102089074
File : c11v0074
IDF : 50.0
Lab ID: 193066-001
Matrix: Water
Batch : 122949
Time : 12-MAR-2007 04:10
Cal : 67102089001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67102089076
File : c11v0076
IDF : 50.0
Lab ID: QC378541
Matrix: Water
Batch : 122949
Time : 12-MAR-2007 04:20
Cal : 67102089001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	9340	A	93	75-125	
Arsenic	0.1048	E	100.0	97.86	E	98	75-125	
Barium	0.7468	A	100.0	95.04	A	94	75-125	
Cadmium	ND	A	100.0	93.58	A	94	75-125	
Calcium	206.2	A	10000	9720	A	95	75-125	
Chromium	ND	E	100.0	99.86	E	100	75-125	
Cobalt	0.007614	E	100.0	101.5	E	102	75-125	
Copper	0.02914	E	100.0	98.60	E	99	75-125	
Iron	ND	H	10000	10290	H	103	75-125	
Lead	ND	A	100.0	94.70	A	95	75-125	
Magnesium	195.8	A	10000	9488	A	93	75-125	
Manganese	0.9752	E	100.0	100.5	E	100	75-125	
Nickel	0.09200	E	100.0	101.7	E	102	75-125	
Potassium	340.2	A	10000	9822	A	95	75-125	
Selenium	ND	H	100.0	103.9	H	104	75-125	
Silver	ND	A	100.0	94.38	A	94	75-125	
Sodium	8954	E	10000	18180	E	92	75-125	u
Vanadium	0.1056	E	100.0	98.94	E	99	75-125	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Scandium	H	295941	251995	-14.85
Scandium	A	1532474	1541038	0.56
Scandium	E	43903	39622	-9.75
Germanium	H	70661	61088	-13.55
Germanium	E	20856	19291	-7.50
Indium	A	1869099	1805533	-3.40
Terbium	A	2247824	2240318	-0.33

u=use

67102089076

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET06
alnum : 67097451001
nits : ug/L

Date : 08-MAR-2007 16:29
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08q0005	67097451005		08-MAR-2007 16:35	S5645
L2	c08q0006	67097451006		08-MAR-2007 16:40	S5648
L3	c08q0007	67097451007		08-MAR-2007 16:45	S5649
L4	c08q0008	67097451008		08-MAR-2007 16:50	S5650
L5	c08q0009	67097451009		08-MAR-2007 16:55	S5644
L6	c08q0010	67097451010		08-MAR-2007 17:01	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	1.1527	0.7050	0.9499	0.6094	0.6018	0.6007	BLNK	-0.7301	1.66411		0.7699	1.000	0.995	
Antimony	A	0.3249	0.2880	0.2876	0.2704	0.2723	0.2906	BLNK	-0.0125	3.48587		0.2890	0.999	0.995	
Barium	A	0.2079	0.1280	0.0918	0.0820	0.0823	0.0812	BLNK	-0.0266	12.2764		0.1122	1.000	0.995	
Beryllium	A	0.2343	0.2539	0.2476	0.2426	0.2426	0.2335	BLNK	-0.0063	4.24879		0.2424	1.000	0.995	
Cadmium	A	0.0867	0.0821	0.0838	0.0772	0.0761	0.0767	BLNK	-0.0005	13.0582		0.0804	1.000	0.995	
Calcium	A	0.1100	0.0356	0.0274	0.0208	0.0206	0.0204	BLNK	-16.273	48.9445		0.0391	1.000	0.995	
Lead	A	1.0848	0.7323	0.6884	0.6079	0.6075	0.6064	BLNK	-0.0245	1.64871		0.7212	1.000	0.995	
Magnesium	A	1.0005	0.6156	0.5631	0.5020	0.4913	0.4846	BLNK	-1.9669	2.05813		0.6095	1.000	0.995	
Molybdenum	A	0.4571	0.2378	0.2200	0.1990	0.1994	0.2184	BLNK	-0.0171	4.66084		0.2553	0.998	0.995	
Potassium	A	9.5673	2.4651	1.5950	0.7817	0.7033	0.6925	BLNK	-123.66	1.45018		2.6341	1.000	0.995	
Silver	A	0.3647	0.3474	0.3426	0.3244	0.3286	0.3373	BLNK	-0.0063	2.98043		0.3408	1.000	0.995	
Thallium	A	0.9773	0.8394	0.8298	0.7916	0.8126	0.8820	BLNK	-0.0134	1.15229		0.8555	0.998	0.995	
Arsenic	E	0.7901	0.6392	0.5866	0.5671	0.5797	0.5830	BLNK	-0.0296	1.71771		0.6243	1.000	0.995	
Chromium	E	6.1033	3.6346	3.2994	2.8891	2.8850	2.8658	BLNK	-0.1175	0.34872		3.6129	1.000	0.995	
Cobalt	E	5.0362	4.8433	4.7685	4.6370	4.6140	4.5453	BLNK	-0.0046	0.21934		4.7407	1.000	0.995	
Copper	E	51.659	15.535	11.092	7.2223	6.6865	6.6007	BLNK	-0.6877	0.15172		16.466	1.000	0.995	
Manganese	E	2.4657	1.6963	1.6144	1.5041	1.5103	1.4934	BLNK	-0.0257	0.66819		1.7140	1.000	0.995	
Nickel	E	3.0370	1.5765	1.4445	1.2642	1.2323	1.2048	BLNK	-0.1247	0.82681		1.6265	1.000	0.995	
Sodium	E	4.2292	1.2969	0.9669	0.6466	0.5785	0.5721	BLNK	-55.516	1.74946		1.3817	1.000	0.995	
Vanadium	E	6.9544	3.2927	2.8125	2.3286	2.3502	2.3504	BLNK	-0.2126	0.42603		3.3481	1.000	0.995	
Zinc	E	20.850	5.1013	3.0654	1.1895	0.9794	0.9307	BLNK	-2.1334	1.07675		5.3526	1.000	0.995	
Iron	H	1.1490	0.9716	0.9715	0.8678	0.8462	0.8366	BLNK	-1.8814	1.19268		0.9404	1.000	0.995	
Selenium	H	0.1657	0.1442	0.1522	0.1407	0.1394	0.1356	BLNK	-0.0094	7.33173		0.1463	1.000	0.995	

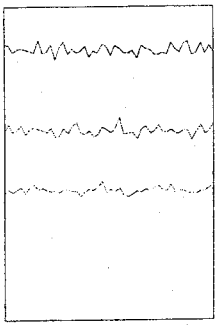
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

0022

nstrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

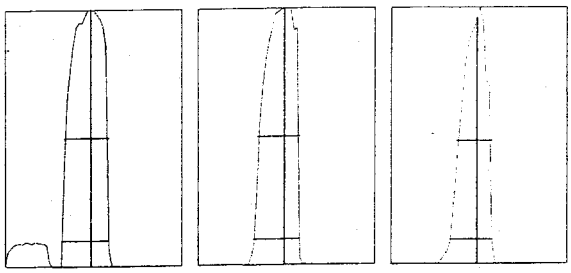
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17029.0	17193.3	1.74	2.00
89	50,000	31252.0	30184.1	2.28	1.00
205	50,000	21889.0	20832.3	2.35	4.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.071%
Doubly Charged: 70/140 1.094%



m/z:	7	89	205
Height:	17,252	30,198	20,744
Axis:	7.00	89.00	205.00
W-50%:	0.75	0.70	0.60
W-10%:	0.800	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===		===Ion Lenses===		===Q-Pole Parameters===	
RF Power :	1550 W	Extract 1 :	0 V	AMU Gain :	142
RF Matching :	1.7 V	Extract 2 :	-150 V	AMU Offset :	123
Smpl Depth :	9 mm	Omega Bias-ce :	-30 V	Axis Gain :	1.0015
Torch-H :	0.9 mm	Omega Lens-ce :	0 V	Axis Offset :	-0.03
Torch-V :	0.8 mm	Cell Entrance :	-30 V	QP Bias :	-1 V
Carrier Gas :	1.05 L/min	QP Focus :	2 V		
Makeup Gas :	0 L/min	Cell Exit :	-30 V	===Detector Parameters===	
Optional Gas :	--- %			Discriminator :	8 mV
Nebulizer Pump :	0.1 rps	===Octopole Parameters===		Analog HV :	1760 V
Sample Pump :	--- rps	OctP RF :	160 V	Pulse HV :	1380 V
S/C Temp :	2 degC	OctP Bias :	-6 V		

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	25.1	25.03
59	3401.6	3.22
89	2230.5	3.23

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2487.6	3.60
78	0.2	215.60
89	19452.5	2.27

Integration Time: 0.1000sec

Generated : Mar 08, 2007 11:27:05
Printed : Mar 08, 2007 11:28:44

00230

P/A Factor Tuning Report

Acquired:Mar 8 2007 11:38 am

Mass[amu]	Element	P/A Factor
6	Li	0.066905
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091118
45	Sc	0.090710
51	V	0.092022
52	Cr	0.094958
55	Mn	0.096330
56	Fe	Sensitivity too high
59	Co	0.097720
60	Ni	Sensitivity too low
63	Cu	0.103508
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.101248
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.108093
111	Cd	Sensitivity too low
115	In	0.106904
118	(In)	0.106124
121	Sb	0.106081
137	Ba	Sensitivity too low
159	Tb	0.108382
205	Tl	0.111849
206	(Pb)	0.111566
207	(Pb)	Sensitivity too low
208	Pb	0.111648
209	Bi	0.112033

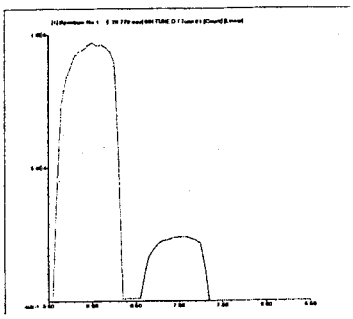
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1760 V
Pulse HV: 1380 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C08q00.B\001TUNE.D
Date Acquired:	Mar 8 2007 04:11 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.73	5.00	
59 Co	0.41	5.00	
115 In	0.85	5.00	
205 Tl	0.41	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

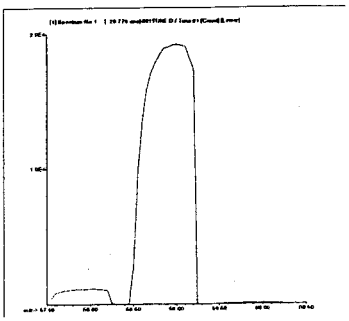
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

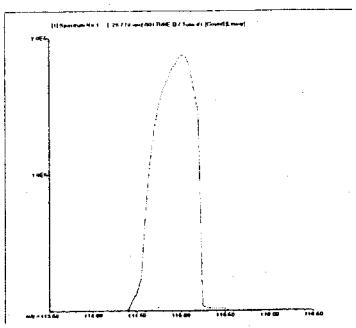
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



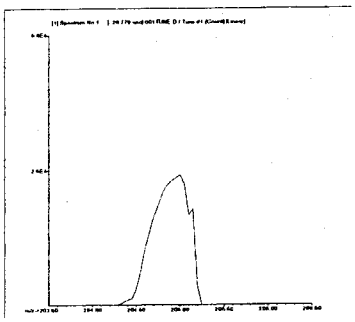
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004C
Date Acquired: Mar 8 2007 04:27 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1013060.00	A	13830.00	1.37
7	(Li)		P		
9	Be	30.00	P	5.77	19.25
23	Na	23208.36	P	306.90	1.32
24	Mg	22933.43	P	312.30	1.36
27	Al	10527.56	P	192.00	1.82
39	K	2046302.00	A	3268.00	0.16
44	Ca	7981.43	P	405.80	5.08
45	Sc	372753.69	P	1740.00	0.47
45	Sc	36566.75	P	167.50	0.46
45	Sc	1199967.00	A	13020.00	1.09
51	V	364.82	P	33.49	9.18
52	Cr	246.30	P	15.73	6.39
55	Mn	28.15	P	1.70	6.03
56	Fe	11760.94	P	416.60	3.54
59	Co	15.19	P	1.70	11.18
60	Ni	110.37	P	13.71	12.42
63	Cu	1631.60	P	87.16	5.34
65	Cu	793.37	P	40.07	5.05
66	Zn	713.36	P	8.68	1.22
72	Ge	86606.83	P	587.70	0.68
72	Ge	18001.75	P	116.90	0.65
75	As	6.22	P	3.67	59.01
78	Se	2.22	P	1.93	86.62
89	Y	1590566.00	A	13280.00	0.83
98	Mo	116.67	P	10.00	8.57
107	Ag	66.67	P	23.09	34.63
111	Cd	1.11	P	1.93	173.24
115	In	1570978.00	A	5300.00	0.34
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	112.23	P	3.85	3.43
137	Ba	92.23	P	8.39	9.10
159	Tb	2128023.00	A	11630.00	0.55
205	Tl	284.46	P	28.35	9.97
208	Pb	633.36	P	47.26	7.46
209	Bi	1225637.00	A	3066.00	0.25

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 8 2007 04:32 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1012702.00	A	3311.00	0.33
7 (Li)		P		
9 Be	474.47	P	10.18	2.15
23 Na	30956.98	P	2568.00	8.30
24 Mg	239996.80	P	3783.00	1.58
27 Al	276505.19	P	4065.00	1.47
39 K	2294810.00	A	3505.00	0.15
44 Ca	26383.05	P	740.20	2.81
45 Sc	369511.19	P	1569.00	0.42
45 Sc	36587.92	P	245.50	0.67
45 Sc	1199349.00	A	8660.00	0.72
51 V	508.90	P	13.47	2.65
52 Cr	446.68	P	39.77	8.90
55 Mn	180.37	P	11.13	6.17
56 Fe	84911.80	P	708.40	0.83
59 Co	368.53	P	3.90	1.06
60 Ni	222.23	P	5.77	2.60
63 Cu	1873.85	P	29.20	1.56
65 Cu	855.22	P	8.34	0.98
66 Zn	756.33	P	7.40	0.98
72 Ge	86491.93	P	119.00	0.14
72 Ge	18137.46	P	75.16	0.41
75 As	28.67	P	3.06	10.66
78 Se	28.67	P	1.76	6.15
89 Y	1574295.00	A	3315.00	0.21
98 Mo	1439.03	P	55.93	3.89
99 (Ru)	1.11	P	1.93	173.24
107 Ag	1150.09	P	29.06	2.53
111 Cd	273.35	P	26.67	9.76
115 In	1576816.00	A	8757.00	0.56
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1024.52	P	7.70	0.75
137 Ba	881.18	P	29.88	3.39
159 Tb	2118878.00	A	5478.00	0.26
205 Tl	1235.66	P	74.12	6.00
208 Pb	4597.17	P	41.64	0.91
209 Bi	1264356.00	A	4292.00	0.34

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1012702.40	0.33	1013060.50	100.0	80 - 120	
45 Sc	369511.16	0.42	372753.66	99.1	80 - 120	
45 Sc	36587.92	0.67	36566.75	100.1	80 - 120	
45 Sc	1199349.50	0.72	1199967.40	99.9	80 - 120	
72 Ge	86491.93	0.14	86606.83	99.9	80 - 120	
72 Ge	18137.46	0.41	18001.75	100.8	80 - 120	
89 Y	1574295.10	0.21	1590565.80	99.0	80 - 120	
115 In	1576816.10	0.56	1570978.00	100.4	80 - 120	
159 Tb	2118878.00	0.26	2128023.00	99.6	80 - 120	
209 Bi	1264356.30	0.34	1225636.90	103.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 8 2007 04:38 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1013560.00	A	30940.00	3.05
7 (Li)		P		
9 Be	2572.54	P	43.51	1.69
23 Na	47258.86	P	741.10	1.57
24 Mg	728350.19	M	20290.00	2.79
27 Al	833119.69	A	42020.00	5.04
39 K	2916269.00	A	40340.00	1.38
44 Ca	42042.86	P	3808.00	9.06
45 Sc	372923.69	P	2833.00	0.76
45 Sc	36443.14	P	171.70	0.47
45 Sc	1185302.00	A	56360.00	4.75
51 V	1200.07	P	39.77	3.31
52 Cr	1324.52	P	16.37	1.24
55 Mn	618.17	P	7.23	1.17
56 Fe	362342.91	P	4573.00	1.26
59 Co	1764.95	P	35.07	1.99
60 Ni	574.46	P	27.65	4.81
63 Cu	2804.76	P	67.37	2.40
65 Cu	1342.30	P	24.04	1.79
66 Zn	921.15	P	2.94	0.32
72 Ge	87198.08	P	414.70	0.48
72 Ge	18058.15	P	183.50	1.02
75 As	115.33	P	14.53	12.60
78 Se	125.78	P	2.78	2.21
89 Y	1558725.00	A	73130.00	4.69
98 Mo	3690.65	P	338.40	9.17
99 (Ru)	2.22	P	3.85	173.20
107 Ag	5415.71	P	169.40	3.13
111 Cd	1279.00	P	62.40	4.88
115 In	1560483.00	A	66820.00	4.28
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4486.47	P	66.72	1.49
137 Ba	2681.48	P	72.45	2.70
159 Tb	2097513.00	A	86360.00	4.12
205 Tl	5231.28	P	20.83	0.40
208 Pb	15342.02	P	87.71	0.57
209 Bi	1247103.00	A	35870.00	2.88

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1013560.40	3.05	1013060.50	100.0	80 - 120	
45 Sc	372923.66	0.76	372753.66	100.0	80 - 120	
45 Sc	36443.14	0.47	36566.75	99.7	80 - 120	
45 Sc	1185302.50	4.75	1199967.40	98.8	80 - 120	
72 Ge	87198.08	0.48	86606.83	100.7	80 - 120	
72 Ge	18058.15	1.02	18001.75	100.3	80 - 120	
89 Y	1558725.40	4.69	1590565.80	98.0	80 - 120	
115 In	1560482.60	4.28	1570978.00	99.3	80 - 120	
159 Tb	2097513.50	4.12	2128023.00	98.6	80 - 120	
209 Bi	1247103.10	2.88	1225636.90	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 8 2007 04:43 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:41 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1021859.00	A	15590.00	1.53
7 (Li)		P		
9 Be	5061.07	P	130.00	2.57
23 Na	72123.06	P	694.60	0.96
24 Mg	1344593.00	A	6841.00	0.51
27 Al	2268366.00	A	6362.00	0.28
39 K	3808722.00	A	28610.00	0.75
44 Ca	65501.42	P	866.40	1.32
45 Sc	359441.31	P	37030.00	10.30
45 Sc	37295.30	P	199.50	0.53
45 Sc	1194022.00	A	10870.00	0.91
51 V	2097.96	P	49.65	2.37
52 Cr	2460.98	P	26.31	1.07
55 Mn	1204.14	P	19.76	1.64
56 Fe	693472.50	P	3330.00	0.48
59 Co	3556.79	P	64.81	1.82
60 Ni	1077.46	P	16.12	1.50
63 Cu	4059.53	P	89.00	2.19
65 Cu	1999.43	P	15.41	0.77
66 Zn	1121.91	P	60.09	5.36
72 Ge	84931.13	P	7293.00	8.59
72 Ge	18298.79	P	76.73	0.42
75 As	214.67	P	16.83	7.84
78 Se	257.56	P	6.58	2.55
89 Y	1557698.00	A	7702.00	0.49
98 Mo	6854.18	P	64.38	0.94
99 (Ru)	0.00	P	0.00	0.00
107 Ag	10692.33	P	48.26	0.45
111 Cd	2613.69	P	78.81	3.02
115 In	1560701.00	A	22350.00	1.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8976.65	P	154.00	1.72
137 Ba	3866.26	P	73.45	1.90
159 Tb	2104923.00	A	19080.00	0.91
205 Tl	10230.04	P	165.80	1.62
208 Pb	28981.62	P	246.50	0.85
209 Bi	1232834.00	A	5389.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1021858.50	1.53	1013060.50	100.9	80 - 120	
45 Sc	359441.34	10.30	372753.66	96.4	80 - 120	
45 Sc	37295.30	0.53	36566.75	102.0	80 - 120	
45 Sc	1194022.10	0.91	1199967.40	99.5	80 - 120	
72 Ge	84931.13	8.59	86606.83	98.1	80 - 120	
72 Ge	18298.79	0.42	18001.75	101.7	80 - 120	
89 Y	1557698.30	0.49	1590565.80	97.9	80 - 120	
115 In	1560701.40	1.43	1570978.00	99.3	80 - 120	
159 Tb	2104923.00	0.91	2128023.00	98.9	80 - 120	
209 Bi	1232833.60	0.44	1225636.90	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 8 2007 04:48 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1024251.00	A	3472.00	0.34
7 (Li)		P		
9 Be	49705.71	P	602.60	1.21
23 Na	474902.59	P	3587.00	0.76
24 Mg	12172400.00	A	27720.00	0.23
27 Al	14775450.00	A	78340.00	0.53
39 K	18955170.00	A	116200.00	0.61
44 Ca	504329.00	P	1777.00	0.35
45 Sc	366855.09	P	5600.00	1.53
45 Sc	36723.08	P	296.20	0.81
45 Sc	1212380.00	A	10540.00	0.87
51 V	17102.70	P	196.90	1.15
52 Cr	21217.93	P	133.30	0.63
55 Mn	11045.17	P	269.40	2.44
56 Fe	6365849.00	A	28320.00	0.44
59 Co	34056.86	P	301.40	0.88
60 Ni	9285.01	P	114.40	1.23
63 Cu	26134.09	P	242.70	0.93
65 Cu	12852.30	P	41.22	0.32
66 Zn	4303.67	P	107.20	2.49
72 Ge	85823.54	P	444.10	0.52
72 Ge	18097.05	P	437.20	2.42
75 As	2050.83	P	68.76	3.35
78 Se	2415.34	P	16.74	0.69
89 Y	1584152.00	A	17870.00	1.13
98 Mo	63028.04	P	617.10	0.98
99 (Ru)	6.67	P	6.67	100.00
107 Ag	101327.60	P	474.60	0.47
111 Cd	24103.13	P	492.70	2.04
115 In	1561864.00	A	3759.00	0.24
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	84465.49	P	418.60	0.50
137 Ba	34959.99	P	344.00	0.98
159 Tb	2131716.00	A	19150.00	0.90
205 Tl	96812.59	P	100.20	0.10
208 Pb	259175.70	P	1678.00	0.65
209 Bi	1223014.00	A	4297.00	0.35

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1024251.10	0.34	1013060.50	101.1	80 - 120	
45 Sc	366855.09	1.53	372753.66	98.4	80 - 120	
45 Sc	36723.07	0.81	36566.75	100.4	80 - 120	
45 Sc	1212380.30	0.87	1199967.40	101.0	80 - 120	
72 Ge	85823.54	0.52	86606.83	99.1	80 - 120	
72 Ge	18097.05	2.42	18001.75	100.5	80 - 120	
89 Y	1584152.30	1.13	1590565.80	99.6	80 - 120	
115 In	1561864.40	0.24	1570978.00	99.4	80 - 120	
159 Tb	2131716.30	0.90	2128023.00	100.2	80 - 120	
209 Bi	1223014.40	0.35	1225636.90	99.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 8 2007 04:53 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	994305.13	A	14380.00	1.45
7 (Li)		P		
9 Be	482423.50	P	2135.00	0.44
23 Na	4144367.00	A	29080.00	0.70
24 Mg	############	A	525700.00	0.44
27 Al	############	A	345900.00	0.24
39 K	############	A	1349000.00	0.79
44 Ca	5003393.00	A	6044.00	0.12
45 Sc	368472.00	P	1834.00	0.50
45 Sc	35819.73	P	172.70	0.48
45 Sc	1213143.00	A	5608.00	0.46
51 V	168366.09	P	358.80	0.21
52 Cr	206675.30	P	480.00	0.23
55 Mn	108191.40	P	290.70	0.27
56 Fe	62359352.00	A	82150.00	0.13
59 Co	330534.81	P	795.30	0.24
60 Ni	88279.73	P	378.80	0.43
63 Cu	235659.70	P	552.20	0.23
65 Cu	115273.10	P	403.10	0.35
66 Zn	34518.17	P	50.72	0.15
72 Ge	83935.73	P	177.70	0.21
72 Ge	17622.01	P	39.49	0.22
75 As	20431.92	P	59.95	0.29
78 Se	23403.51	P	264.00	1.13
89 Y	1572316.00	A	10580.00	0.67
98 Mo	627131.69	P	1210.00	0.19
99 (Ru)	20.00	P	5.77	28.87
107 Ag	996675.50	M	27680.00	2.78
111 Cd	230967.91	P	208.20	0.09
115 In	1516644.00	A	8719.00	0.57
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	826053.63	P	2027.00	0.25
137 Ba	346619.09	P	2293.00	0.66
159 Tb	2104649.00	A	4667.00	0.22
205 Tl	951570.50	P	5845.00	0.61
208 Pb	2557175.00	A	23450.00	0.92
209 Bi	1171127.00	A	13420.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	994305.06	1.45	1013060.50	98.1	80 - 120	
45 Sc	368471.97	0.50	372753.66	98.9	80 - 120	
45 Sc	35819.73	0.48	36566.75	98.0	80 - 120	
45 Sc	1213143.30	0.46	1199967.40	101.1	80 - 120	
72 Ge	83935.73	0.21	86606.83	96.9	80 - 120	
72 Ge	17622.01	0.22	18001.75	97.9	80 - 120	
89 Y	1572316.10	0.67	1590565.80	98.9	80 - 120	
115 In	1516644.10	0.57	1570978.00	96.5	80 - 120	
159 Tb	2104648.50	0.22	2128023.00	98.9	80 - 120	
209 Bi	1171127.50	1.15	1225636.90	95.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 8 2007 04:59 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1003222.00	A	8263.00	0.82
7	(Li)		P		
9	Be	937117.81	A	2006.00	0.21
23	Na	8391806.00	A	37610.00	0.45
24	Mg	###########	A	1278000.00	0.53
27	Al	###########	A	1801000.00	0.60
39	K	###########	A	2146000.00	0.62
44	Ca	10233730.00	A	31810.00	0.31
45	Sc	381257.09	P	2387.00	0.63
45	Sc	36668.89	P	180.90	0.49
45	Sc	1253633.00	A	5948.00	0.47
51	V	344740.09	P	1121.00	0.33
52	Cr	420346.50	P	1722.00	0.41
55	Mn	219045.59	P	675.40	0.31
56	Fe	###########	A	360000.00	0.28
59	Co	666670.13	P	1243.00	0.19
60	Ni	176712.80	P	633.80	0.36
63	Cu	466217.41	P	465.70	0.10
65	Cu	228606.59	P	629.20	0.28
66	Zn	65736.89	P	490.00	0.75
72	Ge	85791.71	P	674.20	0.79
72	Ge	17659.07	P	178.70	1.01
75	As	41174.46	P	90.76	0.22
78	Se	46544.54	P	94.91	0.20
89	Y	1616985.00	A	18060.00	1.12
98	Mo	1412552.00	A	10440.00	0.74
99	(Ru)	40.00	P	15.28	38.20
107	Ag	2064443.00	A	4179.00	0.20
111	Cd	469356.91	P	2076.00	0.44
115	In	1530155.00	A	8645.00	0.56
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1778426.00	A	10830.00	0.61
137	Ba	692421.38	P	3389.00	0.49
159	Tb	2130573.00	A	9313.00	0.44
205	Tl	2006506.00	A	19400.00	0.97
208	Pb	5167879.00	A	24100.00	0.47
209	Bi	1137427.00	A	2496.00	0.22

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1003222.10	0.82	1013060.50	99.0	80 - 120	
45	Sc	381257.13	0.63	372753.66	102.3	80 - 120	
45	Sc	36668.89	0.49	36566.75	100.3	80 - 120	
45	Sc	1253633.30	0.47	1199967.40	104.5	80 - 120	
72	Ge	85791.72	0.79	86606.83	99.1	80 - 120	
72	Ge	17659.07	1.01	18001.75	98.1	80 - 120	
89	Y	1616984.60	1.12	1590565.80	101.7	80 - 120	
115	In	1530155.50	0.56	1570978.00	97.4	80 - 120	
159	Tb	2130573.30	0.44	2128023.00	100.1	80 - 120	
209	Bi	1137427.50	0.22	1225636.90	92.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451012 File : c08q0012 Time : 08-MAR-2007 17:12
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5653, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7699	0.6118	10000	10180	ug/L	2	10	
Antimony	A	0.2890	0.2844	100.0	99.14	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2490	100.0	105.8	ug/L	6	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0211	10000	10300	ug/L	3	10	
Lead	A	0.7212	0.6120	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.5004	10000	10300	ug/L	3	10	
Molybdenum	A	0.2553	0.2031	100.0	94.65	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3667	100.0	109.3	ug/L	9	10	
Thallium	A	0.8555	0.8042	50.00	46.32	ug/L	-7	10	
Arsenic	E	0.6243	0.5902	100.0	101.3	ug/L	1	10	
Chromium	E	3.6129	2.8630	100.0	99.72	ug/L	0	10	
Cobalt	E	4.7407	4.5130	100.0	98.99	ug/L	-1	10	
Copper	E	16.466	6.5882	100.0	99.27	ug/L	-1	10	
Manganese	E	1.7140	1.4797	100.0	98.85	ug/L	-1	10	
Nickel	E	1.6265	1.2077	100.0	99.73	ug/L	0	10	
Sodium	E	1.3817	0.5631	10000	9795	ug/L	-2	10	
Vanadium	E	3.3481	2.3136	100.0	98.35	ug/L	-2	10	
Zinc	E	5.3526	0.9346	100.0	98.50	ug/L	-2	10	
Iron	H	0.9404	0.8617	10000	10280	ug/L	3	10	
Selenium	H	0.1463	0.1394	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	993023	-1.98
Scandium	A	1199967	1230321	2.53
Scandium	E	36567	37452	2.42
Scandium	H	372754	379475	1.80
Germanium	H	86607	86294	-0.36
Germanium	E	18002	18172	0.95
Indium	A	1570978	1528510	-2.70
Bismuth	A	1225637	1169624	-4.57
Yttrium	A	1590566	1608372	1.12
Terbium	A	2128023	2118179	-0.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451035 File : c08q0035 Time : 08-MAR-2007 19:15
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5976	10000	9944	ug/L	-1	10	
Antimony	A	0.2890	0.2789	100.0	97.22	ug/L	-3	10	
Barium	A	0.1122	0.0810	100.0	99.35	ug/L	-1	10	
Beryllium	A	0.2424	0.2408	100.0	102.3	ug/L	2	10	
Cadmium	A	0.0804	0.0768	100.0	100.2	ug/L	0	10	
Calcium	A	0.0391	0.0206	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6136	100.0	101.1	ug/L	1	10	
Magnesium	A	0.6095	0.4869	10000	10020	ug/L	0	10	
Molybdenum	A	0.2553	0.2000	100.0	93.22	ug/L	-7	10	
Potassium	A	2.6341	0.7070	10000	10130	ug/L	1	10	
Silver	A	0.3408	0.3574	100.0	106.5	ug/L	7	10	
Thallium	A	0.8555	0.8058	50.00	46.41	ug/L	-7	10	
Arsenic	E	0.6243	0.5852	100.0	100.5	ug/L	1	10	
Chromium	E	3.6129	2.8788	100.0	100.3	ug/L	0	10	
Cobalt	E	4.7407	4.5364	100.0	99.50	ug/L	-1	10	
Copper	E	16.466	6.5685	100.0	98.97	ug/L	-1	10	
Manganese	E	1.7140	1.4937	100.0	99.78	ug/L	0	10	
Nickel	E	1.6265	1.2157	100.0	100.4	ug/L	0	10	
Sodium	E	1.3817	0.5608	10000	9755	ug/L	-2	10	
Vanadium	E	3.3481	2.3185	100.0	98.56	ug/L	-1	10	
Zinc	E	5.3526	0.9447	100.0	99.59	ug/L	0	10	
Iron	H	0.9404	0.8465	10000	10090	ug/L	1	10	
Selenium	H	0.1463	0.1367	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	976980	-3.56
Scandium	A	1199967	1212037	1.01
Scandium	E	36567	36160	-1.11
Scandium	H	372754	366620	-1.65
Germanium	H	86607	84668	-2.24
Germanium	E	18002	17682	-1.78
Indium	A	1570978	1529707	-2.63
Bismuth	A	1225637	1204439	-1.73
Yttrium	A	1590566	1587526	-0.19
Terbium	A	2128023	2143028	0.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451053 File : c08q0053 Time : 08-MAR-2007 20:51
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5978	10000	9948	ug/L	-1	10	
Antimony	A	0.2890	0.2774	100.0	96.67	ug/L	-3	10	
Barium	A	0.1122	0.0805	100.0	98.74	ug/L	-1	10	
Beryllium	A	0.2424	0.2456	100.0	104.3	ug/L	4	10	
Cadmium	A	0.0804	0.0774	100.0	101.1	ug/L	1	10	
Calcium	A	0.0391	0.0207	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6099	100.0	100.5	ug/L	1	10	
Magnesium	A	0.6095	0.4884	10000	10050	ug/L	1	10	
Molybdenum	A	0.2553	0.2010	100.0	93.67	ug/L	-6	10	
Potassium	A	2.6341	0.7053	10000	10100	ug/L	1	10	
Silver	A	0.3408	0.3577	100.0	106.6	ug/L	7	10	
Thallium	A	0.8555	0.7886	50.00	45.42	ug/L	-9	10	
Arsenic	E	0.6243	0.5809	100.0	99.75	ug/L	0	10	
Chromium	E	3.6129	2.8852	100.0	100.5	ug/L	1	10	
Cobalt	E	4.7407	4.5454	100.0	99.70	ug/L	0	10	
Copper	E	16.466	6.5969	100.0	99.40	ug/L	-1	10	
Manganese	E	1.7140	1.4877	100.0	99.38	ug/L	-1	10	
Nickel	E	1.6265	1.2178	100.0	100.6	ug/L	1	10	
Sodium	E	1.3817	0.5571	10000	9690	ug/L	-3	10	
Vanadium	E	3.3481	2.3339	100.0	99.22	ug/L	-1	10	
Zinc	E	5.3526	0.9375	100.0	98.82	ug/L	-1	10	
Iron	H	0.9404	0.8382	10000	9995	ug/L	0	10	
Selenium	H	0.1463	0.1387	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	994494	-1.83
Scandium	A	1199967	1234033	2.84
Scandium	E	36567	36386	-0.49
Scandium	H	372754	366011	-1.81
Germanium	H	86607	83572	-3.50
Germanium	E	18002	17867	-0.75
Indium	A	1570978	1541819	-1.86
Bismuth	A	1225637	1205901	-1.61
Yttrium	A	1590566	1613323	1.43
Terbium	A	2128023	2151819	1.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451071 File : c08q0071 Time : 08-MAR-2007 22:27
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6077	10000	10110	ug/L	1	10	
Antimony	A	0.2890	0.2823	100.0	98.39	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.2	ug/L	1	10	
Beryllium	A	0.2424	0.2476	100.0	105.2	ug/L	5	10	
Cadmium	A	0.0804	0.0781	100.0	102.0	ug/L	2	10	
Calcium	A	0.0391	0.0209	10000	10210	ug/L	2	10	
Lead	A	0.7212	0.6119	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.4947	10000	10180	ug/L	2	10	
Molybdenum	A	0.2553	0.2043	100.0	95.19	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3617	100.0	107.8	ug/L	8	10	
Thallium	A	0.8555	0.8023	50.00	46.21	ug/L	-8	10	
Arsenic	E	0.6243	0.5977	100.0	102.6	ug/L	3	10	
Chromium	E	3.6129	2.9420	100.0	102.5	ug/L	3	10	
Cobalt	E	4.7407	4.6206	100.0	101.3	ug/L	1	10	
Copper	E	16.466	6.7409	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.5065	100.0	100.6	ug/L	1	10	
Nickel	E	1.6265	1.2339	100.0	101.9	ug/L	2	10	
Sodium	E	1.3817	0.5653	10000	9834	ug/L	-2	10	
Vanadium	E	3.3481	2.3746	100.0	101.0	ug/L	1	10	
Zinc	E	5.3526	0.9669	100.0	102.0	ug/L	2	10	
Iron	H	0.9404	0.8489	10000	10120	ug/L	1	10	
Selenium	H	0.1463	0.1419	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1007714	-0.53
Scandium	A	1199967	1230946	2.58
Scandium	E	36567	36295	-0.74
Scandium	H	372754	362889	-2.65
Germanium	H	86607	83036	-4.12
Germanium	E	18002	17673	-1.83
Indium	A	1570978	1534001	-2.35
Bismuth	A	1225637	1177160	-3.96
Yttrium	A	1590566	1602188	0.73
Terbium	A	2128023	2125033	-0.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451080 File : c08q0080 Time : 08-MAR-2007 23:15
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6081	10000	10120	ug/L	1	10	
Antimony	A	0.2890	0.2812	100.0	98.02	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2424	0.2463	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0779	100.0	101.7	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10250	ug/L	3	10	
Lead	A	0.7212	0.6110	100.0	100.7	ug/L	1	10	
Magnesium	A	0.6095	0.4943	10000	10170	ug/L	2	10	
Molybdenum	A	0.2553	0.2017	100.0	93.98	ug/L	-6	10	
Potassium	A	2.6341	0.7175	10000	10280	ug/L	3	10	
Silver	A	0.3408	0.3600	100.0	107.3	ug/L	7	10	
Thallium	A	0.8555	0.8024	50.00	46.22	ug/L	-8	10	
Arsenic	E	0.6243	0.5961	100.0	102.4	ug/L	2	10	
Chromium	E	3.6129	2.9160	100.0	101.6	ug/L	2	10	
Cobalt	E	4.7407	4.5752	100.0	100.4	ug/L	0	10	
Copper	E	16.466	6.7418	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.4970	100.0	100.0	ug/L	0	10	
Nickel	E	1.6265	1.2256	100.0	101.2	ug/L	1	10	
Sodium	E	1.3817	0.5631	10000	9796	ug/L	-2	10	
Vanadium	E	3.3481	2.3581	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9607	100.0	101.3	ug/L	1	10	
Iron	H	0.9404	0.8503	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1016973	0.39
Scandium	A	1199967	1234805	2.90
Scandium	E	36567	36623	0.15
Scandium	H	372754	361464	-3.03
Germanium	H	86607	82598	-4.63
Germanium	E	18002	17734	-1.49
Indium	A	1570978	1549734	-1.35
Bismuth	A	1225637	1185379	-3.28
Yttrium	A	1590566	1623593	2.08
Terbium	A	2128023	2144502	0.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451108 File : c08q0108 Time : 09-MAR-2007 01:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6036	10000	10040	ug/L	0	10	
Antimony	A	0.2890	0.2844	100.0	99.12	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2468	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0804	0.0786	100.0	102.6	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10330	ug/L	3	10	
Lead	A	0.7212	0.6510	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4928	10000	10140	ug/L	1	10	
Molybdenum	A	0.2553	0.2073	100.0	96.62	ug/L	-3	10	
Potassium	A	2.6341	0.7188	10000	10300	ug/L	3	10	
Silver	A	0.3408	0.3435	100.0	102.4	ug/L	2	10	
Thallium	A	0.8555	0.8283	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6243	0.5861	100.0	100.6	ug/L	1	10	
Chromium	E	3.6129	2.9295	100.0	102.0	ug/L	2	10	
Cobalt	E	4.7407	4.6441	100.0	101.9	ug/L	2	10	
Copper	E	16.466	6.6127	100.0	99.64	ug/L	0	10	
Manganese	E	1.7140	1.5159	100.0	101.3	ug/L	1	10	
Nickel	E	1.6265	1.2430	100.0	102.6	ug/L	3	10	
Sodium	E	1.3817	0.5543	10000	9641	ug/L	-4	10	
Vanadium	E	3.3481	2.3567	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9437	100.0	99.47	ug/L	-1	10	
Iron	H	0.9404	0.8543	10000	10190	ug/L	2	10	
Selenium	H	0.1463	0.1402	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	802534	-20.78
Scandium	A	1199967	998035	-16.83
Scandium	E	36567	28975	-20.76
Scandium	H	372754	286227	-23.21
Germanium	H	86607	67373	-22.21
Germanium	E	18002	14500	-19.45
Indium	A	1570978	1303525	-17.02
Bismuth	A	1225637	1059860	-13.53
Yttrium	A	1590566	1323469	-16.79
Terbium	A	2128023	1852290	-12.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451126 File : c08q0126 Time : 09-MAR-2007 03:24
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6040	10000	10050	ug/L	1	10	
Antimony	A	0.2890	0.2842	100.0	99.06	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2472	100.0	105.0	ug/L	5	10	
Cadmium	A	0.0804	0.0791	100.0	103.3	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10310	ug/L	3	10	
Lead	A	0.7212	0.6511	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4924	10000	10130	ug/L	1	10	
Molybdenum	A	0.2553	0.2078	100.0	96.81	ug/L	-3	10	
Potassium	A	2.6341	0.7207	10000	10330	ug/L	3	10	
Silver	A	0.3408	0.3450	100.0	102.8	ug/L	3	10	
Thallium	A	0.8555	0.8337	50.00	48.02	ug/L	-4	10	
Arsenic	E	0.6243	0.5910	100.0	101.5	ug/L	2	10	
Chromium	E	3.6129	2.9573	100.0	103.0	ug/L	3	10	
Cobalt	E	4.7407	4.6909	100.0	102.9	ug/L	3	10	
Copper	E	16.466	6.6326	100.0	99.94	ug/L	0	10	
Manganese	E	1.7140	1.5339	100.0	102.5	ug/L	3	10	
Nickel	E	1.6265	1.2505	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5546	10000	9646	ug/L	-4	10	
Vanadium	E	3.3481	2.3732	100.0	100.9	ug/L	1	10	
Zinc	E	5.3526	0.9557	100.0	100.8	ug/L	1	10	
Iron	H	0.9404	0.8499	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1413	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	818786	-19.18
Scandium	A	1199967	1015317	-15.39
Scandium	E	36567	29231	-20.06
Scandium	H	372754	292217	-21.61
Germanium	H	86607	68066	-21.41
Germanium	E	18002	14662	-18.55
Indium	A	1570978	1316310	-16.21
Bismuth	A	1225637	1059562	-13.55
Yttrium	A	1590566	1341682	-15.65
Terbium	A	2128023	1874636	-11.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451143 File : c08q0143 Time : 09-MAR-2007 04:55
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6022	10000	10020	ug/L	0	10	
Antimony	A	0.2890	0.2826	100.0	98.51	ug/L	-1	10	
Barium	A	0.1122	0.0817	100.0	100.3	ug/L	0	10	
Beryllium	A	0.2424	0.2465	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10280	ug/L	3	10	
Lead	A	0.7212	0.6517	100.0	107.4	ug/L	7	10	
Magnesium	A	0.6095	0.4918	10000	10120	ug/L	1	10	
Molybdenum	A	0.2553	0.2063	100.0	96.14	ug/L	-4	10	
Potassium	A	2.6341	0.7141	10000	10230	ug/L	2	10	
Silver	A	0.3408	0.3429	100.0	102.2	ug/L	2	10	
Thallium	A	0.8555	0.8286	50.00	47.72	ug/L	-5	10	
Arsenic	E	0.6243	0.5939	100.0	102.0	ug/L	2	10	
Chromium	E	3.6129	2.9660	100.0	103.3	ug/L	3	10	
Cobalt	E	4.7407	4.6845	100.0	102.7	ug/L	3	10	
Copper	E	16.466	6.6402	100.0	100.0	ug/L	0	10	
Manganese	E	1.7140	1.5437	100.0	103.1	ug/L	3	10	
Nickel	E	1.6265	1.2513	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5611	10000	9761	ug/L	-2	10	
Vanadium	E	3.3481	2.3854	100.0	101.4	ug/L	1	10	
Zinc	E	5.3526	0.9542	100.0	100.6	ug/L	1	10	
Iron	H	0.9404	0.8481	10000	10110	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825273	-18.54
Scandium	A	1199967	1021873	-14.84
Scandium	E	36567	29100	-20.42
Scandium	H	372754	287690	-22.82
Germanium	H	86607	67198	-22.41
Germanium	E	18002	14624	-18.76
Indium	A	1570978	1318609	-16.06
Bismuth	A	1225637	1066402	-12.99
Yttrium	A	1590566	1344691	-15.46
Terbium	A	2128023	1874906	-11.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451015 File : c08q0015 Time : 08-MAR-2007 17:28
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.05890]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06340]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.642]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05478]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04820]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04860]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05038]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1073870	6.00
Scandium	A	1199967	1256938	4.75
Scandium	E	36567	38473	5.21
Scandium	H	372754	385873	3.52
Germanium	H	86607	89505	3.35
Germanium	E	18002	19023	5.67
Indium	A	1570978	1636995	4.20
Bismuth	A	1225637	1262297	2.99
Yttrium	A	1590566	1648430	3.64
Terbium	A	2128023	2191757	2.99

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451038 File : c08q0038 Time : 08-MAR-2007 19:32
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02556]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03569]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[7.257]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01100]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.005974]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1001395	-1.15
Scandium	A	1199967	1191926	-0.67
Scandium	E	36567	36102	-1.27
Scandium	H	372754	360289	-3.34
Germanium	H	86607	83997	-3.01
Germanium	E	18002	17843	-0.88
Indium	A	1570978	1581958	0.70
Bismuth	A	1225637	1247179	1.76
Yttrium	A	1590566	1571235	-1.22
Terbium	A	2128023	2133582	0.26

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451057 File : c08q0057 Time : 08-MAR-2007 21:13
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01637]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01486]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.452]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01958]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01008]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.002456]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005985]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1037587	2.42
Scandium	A	1199967	1232946	2.75
Scandium	E	36567	37318	2.05
Scandium	H	372754	364473	-2.22
Germanium	H	86607	84688	-2.22
Germanium	E	18002	18349	1.93
Indium	A	1570978	1592703	1.38
Bismuth	A	1225637	1238227	1.03
Yttrium	A	1590566	1617067	1.67
Terbium	A	2128023	2159508	1.48

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451074 File : c08q0074 Time : 08-MAR-2007 22:43
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02060]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02318]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005848]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.003819]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01111]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1021251	0.81
Scandium	A	1199967	1209430	0.79
Scandium	E	36567	36911	0.94
Scandium	H	372754	358359	-3.86
Germanium	H	86607	83118	-4.03
Germanium	E	18002	18296	1.63
Indium	A	1570978	1579316	0.53
Bismuth	A	1225637	1224235	-0.11
Yttrium	A	1590566	1589335	-0.08
Terbium	A	2128023	2128027	0.00

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451083 File : c08q0083 Time : 08-MAR-2007 23:31
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001860]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.004952]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.001227]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03703]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[5.296]	10.00	4.329	ug/L	!ib
Selenium	H	[0.02784]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1015614	0.25
Scandium	A	1199967	1194890	-0.42
Scandium	E	36567	36508	-0.16
Scandium	H	372754	360691	-3.24
Germanium	H	86607	83013	-4.15
Germanium	E	18002	17827	-0.97
Indium	A	1570978	1557142	-0.88
Bismuth	A	1225637	1205567	-1.64
Yttrium	A	1590566	1568778	-1.37
Terbium	A	2128023	2081668	-2.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451111 File : c08q0111 Time : 09-MAR-2007 02:03
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005955]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007007]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.005084]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	822009	-18.86
Scandium	A	1199967	998362	-16.80
Scandium	E	36567	29327	-19.80
Scandium	H	372754	293945	-21.14
Germanium	H	86607	70181	-18.97
Germanium	E	18002	14960	-16.90
Indium	A	1570978	1354502	-13.78
Bismuth	A	1225637	1118204	-8.77
Yttrium	A	1590566	1348087	-15.24
Terbium	A	2128023	1873226	-11.97

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451129 File : c08q0129 Time : 09-MAR-2007 03:40
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.07214]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06213]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.762]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01400]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008845]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01087]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850862	-16.01
Scandium	A	1199967	1021811	-14.85
Scandium	E	36567	30122	-17.62
Scandium	H	372754	292255	-21.60
Germanium	H	86607	69873	-19.32
Germanium	E	18002	15317	-14.91
Indium	A	1570978	1376799	-12.36
Bismuth	A	1225637	1141064	-6.90
Yttrium	A	1590566	1367443	-14.03
Terbium	A	2128023	1912303	-10.14

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451147 File : c08q0147 Time : 09-MAR-2007 05:17
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02957]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02532]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02658]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02283]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02980]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.008714]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01918]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850460	-16.05
Scandium	A	1199967	1031697	-14.02
Scandium	E	36567	30982	-15.27
Scandium	H	372754	301131	-19.21
Germanium	H	86607	71265	-17.71
Germanium	E	18002	15611	-13.28
Indium	A	1570978	1377183	-12.34
Bismuth	A	1225637	1149145	-6.24
Yttrium	A	1590566	1377021	-13.43
Terbium	A	2128023	1919450	-9.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451017 File : c08q0017 Time : 08-MAR-2007 17:38
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06190]	0.1000	ug/L	
Barium	A	1.108	0.1000	ug/L	
Beryllium	A	[0.03485]	0.1000	ug/L	
Cadmium	A	1.676	0.1000	ug/L	
Lead	A	0.4987	0.1000	ug/L	
Silver	A	0.2110	0.1000	ug/L	
Thallium	A	0.05584	0.05000	ug/L	
Arsenic	E	0.3292	0.1000	ug/L	
Chromium	E	1.463	0.1000	ug/L	
Cobalt	E	0.2484	0.1000	ug/L	
Copper	E	2.131	0.1000	ug/L	
Manganese	E	0.8835	0.1000	ug/L	
Nickel	E	1.350	0.1000	ug/L	
Vanadium	E	0.1866	0.1000	ug/L	
Zinc	E	1.294	0.1000	ug/L	
Selenium	H	[0.07223]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99280	ug/L	99
Calcium	A	300000	309700	ug/L	103
Magnesium	A	100000	96080	ug/L	96
Molybdenum	A	2000	2055	ug/L	103
Potassium	A	100000	101600	ug/L	102
Sodium	E	250000	257300	ug/L	103
Iron	H	250000	242800	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825510	-18.51
Scandium	A	1199967	1161981	-3.17
Scandium	E	36567	34573	-5.45
Scandium	H	372754	370712	-0.55
Germanium	H	86607	76805	-11.32
Germanium	E	18002	16545	-8.09
Indium	A	1570978	1371368	-12.71
Bismuth	A	1225637	891432	-27.27
Yttrium	A	1590566	1516370	-4.66
Terbium	A	2128023	1979918	-6.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451018 File : c08q0018 Time : 08-MAR-2007 17:44
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103500	ug/L	4		
Cadmium	A	100.0	102.4	ug/L	2	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	100100	ug/L	0		
Molybdenum	A	2000	2143	ug/L	7		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	45.49	ug/L	-9	20	
Arsenic	E	100.0	105.2	ug/L	5	20	
Chromium	E	200.0	206.9	ug/L	3	20	
Cobalt	E	200.0	192.7	ug/L	-4	20	
Copper	E	200.0	185.8	ug/L	-7	20	
Manganese	E	200.0	203.2	ug/L	2	20	
Nickel	E	200.0	188.9	ug/L	-6	20	
Sodium	E	250000	266000	ug/L	6		
Vanadium	E	200.0	211.0	ug/L	6	20	
Zinc	E	100.0	90.31	ug/L	-10	20	
Iron	H	250000	246600	ug/L	-1		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	364864	-2.12
Scandium	A	1199967	1092779	-8.93
Scandium	E	36567	33405	-8.65
Germanium	H	86607	75884	-12.38
Germanium	E	18002	15854	-11.93
Indium	A	1570978	1302188	-17.11
Yttrium	A	1590566	1444006	-9.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451086 File : c08q0086 Time : 08-MAR-2007 23:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06628]	0.1000	ug/L	
Barium	A	1.180	0.1000	ug/L	
Beryllium	A	[0.04090]	0.1000	ug/L	
Cadmium	A	1.781	0.1000	ug/L	
Lead	A	0.5239	0.1000	ug/L	
Silver	A	0.2302	0.1000	ug/L	
Thallium	A	[0.04523]	0.05000	ug/L	
Arsenic	E	0.3374	0.1000	ug/L	
Chromium	E	1.481	0.1000	ug/L	
Cobalt	E	0.2575	0.1000	ug/L	
Copper	E	3.064	0.1000	ug/L	
Manganese	E	1.033	0.1000	ug/L	
Nickel	E	1.389	0.1000	ug/L	
Vanadium	E	0.1824	0.1000	ug/L	
Zinc	E	1.298	0.1000	ug/L	
Selenium	H	[0.05560]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99290	ug/L	99
Calcium	A	300000	310700	ug/L	104
Magnesium	A	100000	95810	ug/L	96
Molybdenum	A	2000	2067	ug/L	103
Potassium	A	100000	102000	ug/L	102
Sodium	E	250000	253300	ug/L	101
Iron	H	250000	240700	ug/L	96

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	754659	-25.51
Scandium	A	1199967	1059145	-11.74
Scandium	E	36567	31365	-14.23
Scandium	H	372754	332469	-10.81
Germanium	H	86607	68907	-20.44
Germanium	E	18002	15157	-15.80
Indium	A	1570978	1271270	-19.08
Bismuth	A	1225637	863039	-29.58
Yttrium	A	1590566	1397665	-12.13
Terbium	A	2128023	1837340	-13.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451087 File : c08q0087 Time : 08-MAR-2007 23:53
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103200	ug/L	3		
Cadmium	A	100.0	103.3	ug/L	3	20	
Calcium	A	300000	323800	ug/L	8		
Magnesium	A	100000	99360	ug/L	-1		
Molybdenum	A	2000	2132	ug/L	7		
Potassium	A	100000	106400	ug/L	6		
Silver	A	50.00	45.77	ug/L	-8	20	
Arsenic	E	100.0	106.6	ug/L	7	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	196.6	ug/L	-2	20	
Copper	E	200.0	188.9	ug/L	-6	20	
Manganese	E	200.0	205.3	ug/L	3	20	
Nickel	E	200.0	192.8	ug/L	-4	20	
Sodium	E	250000	261600	ug/L	5		
Vanadium	E	200.0	215.3	ug/L	8	20	
Zinc	E	100.0	91.46	ug/L	-9	20	
Iron	H	250000	244600	ug/L	-2		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	322082	-13.59
Scandium	A	1199967	1007537	-16.04
Scandium	E	36567	29999	-17.96
Germanium	H	86607	67669	-21.87
Germanium	E	18002	14348	-20.30
Indium	A	1570978	1224392	-22.06
Yttrium	A	1590566	1346588	-15.34

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451148 File : c08q0148 Time : 09-MAR-2007 05:22
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05209]	0.1000	ug/L	
Barium	A	1.183	0.1000	ug/L	
Beryllium	A	[0.02993]	0.1000	ug/L	
Cadmium	A	1.812	0.1000	ug/L	
Lead	A	0.5462	0.1000	ug/L	
Silver	A	0.2144	0.1000	ug/L	
Thallium	A	[0.04274]	0.05000	ug/L	
Arsenic	E	0.3068	0.1000	ug/L	
Chromium	E	1.497	0.1000	ug/L	
Cobalt	E	0.2400	0.1000	ug/L	
Copper	E	2.332	0.1000	ug/L	
Manganese	E	0.9592	0.1000	ug/L	
Nickel	E	1.324	0.1000	ug/L	
Vanadium	E	0.1515	0.1000	ug/L	
Zinc	E	1.255	0.1000	ug/L	
Selenium	H	[0.08294]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102200	ug/L	102
Calcium	A	300000	319300	ug/L	106
Magnesium	A	100000	98390	ug/L	98
Molybdenum	A	2000	2104	ug/L	105
Potassium	A	100000	105700	ug/L	106
Sodium	E	250000	244400	ug/L	98
Iron	H	250000	241600	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	696986	-31.20
Scandium	A	1199967	956700	-20.27
Scandium	E	36567	29153	-20.27
Scandium	H	372754	294703	-20.94
Germanium	H	86607	62607	-27.71
Germanium	E	18002	14237	-20.91
Indium	A	1570978	1161016	-26.10
Bismuth	A	1225637	835343	-31.84
Yttrium	A	1590566	1277919	-19.66
Terbium	A	2128023	1700256	-20.10

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451149 File : c08q0149 Time : 09-MAR-2007 05:28
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104700	ug/L	5		
Cadmium	A	100.0	102.6	ug/L	3	20	
Calcium	A	300000	328000	ug/L	9		
Magnesium	A	100000	100700	ug/L	1		
Molybdenum	A	2000	2127	ug/L	6		
Potassium	A	100000	108000	ug/L	8		
Silver	A	50.00	45.34	ug/L	-9	20	
Arsenic	E	100.0	101.6	ug/L	2	20	
Chromium	E	200.0	205.1	ug/L	3	20	
Cobalt	E	200.0	191.9	ug/L	-4	20	
Copper	E	200.0	181.1	ug/L	-9	20	
Manganese	E	200.0	202.9	ug/L	1	20	
Nickel	E	200.0	187.6	ug/L	-6	20	
Sodium	E	250000	249300	ug/L	0		
Vanadium	E	200.0	209.8	ug/L	5	20	
Zinc	E	100.0	87.79	ug/L	-12	20	
Iron	H	250000	240500	ug/L	-4		
Selenium	H	100.0	100.0	ug/L	0	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	284297	-23.73
Scandium	A	1199967	873446	-27.21
Scandium	E	36567	27008	-26.14
Germanium	H	86607	60432	-30.22
Germanium	E	18002	13168	-26.85
Indium	A	1570978	1098772	-30.06
Yttrium	A	1590566	1193051	-24.99

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07 Reference: c08q0004
Sequence : MET06 c08q0 Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1013061	1199967	36567	372754	86607	18002	1570978	1225637	1590566	2128023
		LOWER LIMIT	303918	359990	10970	111826	25982	5401	471293	367691	477170	638407
		UPPER LIMIT	1215673	1439960	43880	447304	103928	21602	1885174	1470764	1908679	2553628
015	ICB		1073870	1256938	38473	385873	89505	19023	1636995	1262297	1648430	2191757
017	ICSA		825510	1161981	34573	370712	76805	16545	1371368	891432	1516370	1979918
018	ICSAB		775998	1092779	33405	364864	75884	15854	1302188	851784	1444006	1874691
023	BLANK	QC378195	869219	1100012	33070	341082	80562	16555	1428563	1183106	1446525	2007479
024	BS	QC378196	816702	1043661	30751	325031	73377	14776	1331121	1076493	1374607	1916093
025	BSD	QC378197	842726	1080137	32271	329206	74095	15376	1362809	1091947	1421969	1951109
027	MSS	193027-002	955365	1160485	35022	353024	82989	17348	1487016	1183221	1505334	2066741
028	SER	QC378200	969238	1171428	35044	360919	84589	17636	1517374	1212178	1531244	2078425
029	MS	QC378198	946709	1147205	34684	349184	81194	17257	1468891	1179013	1493719	2047309
030	MSD	QC378199	968032	1186615	35331	356109	82608	17594	1509048	1199126	1543135	2105512
031	PDS	QC378201	935297	1165840	34621	348450	80029	16819	1441782	1122477	1510841	2032155
035	CCV		976980	1212037	36160	366620	84668	17682	1529707	1204439	1587526	2143028
038	CCB		1001395	1191926	36102	360289	83997	17843	1581958	1247179	1571235	2133582
040	BLANK	QC378195	803493	990038	29763	295637	94368	19325	1276063	1071319	1298996	1860477
041	BLANK	QC377794	909233	1120219	33806	336878	78319	16649	1469032	1205760	1478181	2047961
042	SAMPLE	193213-001	990462	1203289	36120	363039	85105	18126	1564022	1250855	1573931	2135949
043	SAMPLE	193213-001	995235	1217337	36500	369332	85092	17972	1560132	1239454	1612003	2125902
044	SAMPLE	193027-001	991927	1209051	36563	366695	84965	17812	1553872	1221600	1565217	2125392
045	SAMPLE	193027-003	977187	1200968	36163	356145	83402	17948	1529507	1195224	1544080	2096356
046	SAMPLE	193027-004	983937	1204589	36037	360390	84311	17912	1526956	1182636	1543247	2092675
047	SAMPLE	193027-005	989739	1212076	37255	370990	86672	18338	1529078	1197560	1570577	2097958
048	SAMPLE	193027-006	984145	1189425	35682	358717	83388	17734	1528623	1200353	1546690	2077608
049	SAMPLE	193027-007	992037	1205563	36305	361039	84214	18166	1527431	1194429	1542035	2078638
053	CCV		994494	1234033	36386	366011	83572	17867	1541819	1205901	1613323	2151819
057	CCB		1037587	1232946	37318	364473	84688	18349	1592703	1238227	1617067	2159508
058	SER	QC378200	1020119	1197573	36093	361574	84950	18008	1540351	1207422	1566766	2079615
059	MSS	193027-002	1003023	1196272	36032	352657	81876	17803	1531135	1189848	1556140	2106174
060	SAMPLE	193027-008	994305	1182219	36127	347312	81174	17831	1485007	1146825	1527880	2045231
061	SAMPLE	193027-011	1016985	1214670	36901	368427	84189	18009	1552296	1170252	1581727	2112020
062	SAMPLE	193027-012	1018657	1221362	36455	365182	83837	17745	1536849	1155538	1580981	2098723
063	SAMPLE	193027-013	1023793	1214129	35941	360734	83075	17819	1545510	1196461	1567642	2095725
064	SAMPLE	193027-014	982461	1187910	35817	355574	82189	17850	1500549	1177083	1530967	2047942
065	SAMPLE	193027-015	995495	1194048	36244	357121	82248	17949	1510771	1184665	1536922	2068163
066	SAMPLE	193027-011	1004402	1227507	36695	365949	83344	18084	1548046	1178575	1581880	2126809
067	SAMPLE	193027-012	987791	1247499	36501	363308	81616	17816	1495661	1143652	1590622	2082181
071	CCV		1007714	1230946	36295	362889	83036	17673	1534001	1177160	1602188	2125033
074	CCB		1021251	1209430	36911	358359	83118	18296	1579316	1224235	1589335	2128027
076	SAMPLE	193027-013	992860	1208386	35954	356356	82135	17932	1529561	1191141	1595080	2087711
080	CCV		1016973	1234805	36623	361464	82598	17734	1549734	1185379	1623593	2144502
083	CCB		1015614	1194890	36508	360691	83013	17827	1557142	1205567	1568778	2081668
086	ICSA		754659	1059145	31365	332469	68907	15157	1271270	863039	1397665	1837340
087	ICSAB		719339	1007537	29999	322082	67669	14348	1224392	820014	1346588	1763641
096	BLANK	QC378188	700167	894688	26028	263274	67328	14136	1202348	1017610	1208407	1758305
097	BS	QC378189	698519	924785	26468	271234	61803	12976	1213731	961025	1237650	1772410
098	BSD	QC378190	729639	950649	27346	278162	64038	13527	1242892	975549	1271230	1802881
100	MSS	193193-001	795700	991149	29031	290321	70014	14933	1349704	1127191	1327062	1863300
101	SER	QC378193	814920	992522	29119	286173	68885	14967	1345011	1123463	1329423	1865825
104	MS	QC378191	790553	970652	28580	280839	67202	14563	1302536	1088233	1303159	1836179

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07
Sequence : MET06 c08q0

Reference: c08q0004
Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
108	CCV		802534	998035	28975	286227	67373	14500	1303525	1059860	1323469	1852290
111	CCB		822009	998362	29327	293945	70181	14960	1354502	1118204	1348087	1873226
113	MSD	QC378192	796757	975880	29021	289995	68692	14846	1298834	1070367	1292600	1820193
114	PDS	QC378194	794422	1000639	28480	287976	67111	14263	1283608	1017337	1318315	1832672
115	SAMPLE	193193-002	813398	1007016	29488	290643	69726	15022	1361530	1122945	1341474	1882422
116	SAMPLE	193193-003	814347	998705	29380	289020	69383	15132	1357344	1120102	1329974	1871280
117	SAMPLE	193193-004	801785	980488	29110	289236	69431	14904	1331974	1096440	1307758	1837707
118	SAMPLE	193193-005	808069	990777	28920	286745	68690	14723	1335747	1117818	1318251	1842971
119	SAMPLE	193193-006	814741	996211	29136	291738	69818	15018	1331964	1110220	1313871	1854367
120	SAMPLE	193193-007	803446	986562	29054	292279	69311	14903	1323472	1099768	1307700	1843275
121	SAMPLE	193193-008	805857	980365	28964	289233	69157	14845	1325685	1098324	1304181	1839750
122	SAMPLE	193193-009	807155	973597	28851	286455	68306	14811	1323514	1092534	1300361	1828819
126	CCV		818786	1015317	29231	292217	68066	14662	1316310	1059562	1341682	1874636
129	CCB		850862	1021811	30122	292255	69873	15317	1376799	1141064	1367443	1912303
131	SAMPLE	193193-010	817886	980868	29203	288883	68762	14766	1320879	1095804	1311393	1838159
132	SAMPLE	193193-011	822605	1001696	29238	289636	69014	14824	1338120	1110859	1315919	1850468
133	SAMPLE	193193-012	820858	994421	29419	289023	68500	14826	1327358	1101565	1314710	1852623
134	SAMPLE	193193-013	813887	983215	28791	287451	68565	14760	1310632	1084009	1299104	1826144
135	SAMPLE	193193-014	822530	981205	29013	284449	67873	14956	1311875	1097038	1298493	1839655
136	SAMPLE	193193-015	815529	983141	28863	281368	67354	14840	1313939	1104257	1300418	1825008
137	SAMPLE	193193-016	824016	991204	29320	287244	68643	14783	1329733	1104989	1315354	1841475
138	SAMPLE	193193-017	819010	983989	29237	288661	69210	15106	1326953	1097992	1300849	1834339
139	SAMPLE	193193-018	824529	1001139	29749	291213	69250	15030	1348851	1131000	1330524	1871635
143	CCV		825273	1021873	29100	287690	67198	14624	1318609	1066402	1344691	1874906
147	CCB		850460	1031697	30982	301131	71265	15611	1377183	1149145	1377021	1919450
148	ICSA		696986	956700	29153	294703	62607	14237	1161016	835343	1277919	1700256
149	ICSAB		636669	873446	27008	284297	60432	13168	1098772	794956	1193051	1624351

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	c08q0001	TUN				08-MAR-2007 16:11	1.0	1.0		1	
002	c08q0002	X	RINSE			08-MAR-2007 16:19	1.0			2	
003	c08q0003	X	RINSE			08-MAR-2007 16:24	1.0			2	
004	c08q0004	ICALBLK	CALBLANK			08-MAR-2007 16:29	1.0	1.0		2	
005	c08q0005	ICAL				08-MAR-2007 16:35	1.0	1.0		3	
006	c08q0006	ICAL				08-MAR-2007 16:40	1.0	1.0		4	
007	c08q0007	ICAL				08-MAR-2007 16:45	1.0	1.0		5	
008	c08q0008	ICAL				08-MAR-2007 16:50	1.0	1.0		6	
009	c08q0009	ICAL				08-MAR-2007 16:55	1.0	1.0		7	
010	c08q0010	ICAL				08-MAR-2007 17:01	1.0	1.0		8	
011	c08q0011	X	RINSE			08-MAR-2007 17:06	1.0			2	
012	c08q0012	ICV				08-MAR-2007 17:12	1.0	1.0	1	9 2	
013	c08q0013	X	RINSE			08-MAR-2007 17:17	1.0			2	
014	c08q0014	X				08-MAR-2007 17:22	1.0			2	
015	c08q0015	ICB				08-MAR-2007 17:28	1.0	1.0	1	2	
016	c08q0016	X				08-MAR-2007 17:33	1.0			2	
017	c08q0017	ICSA				08-MAR-2007 17:38	1.0	1.0	1	10 2	7:CA=309700
018	c08q0018	ICSAB				08-MAR-2007 17:44	1.0	1.0	1	11 2	10:CA=322800
019	c08q0019	X	RINSE			08-MAR-2007 17:49	1.0			2	
020	c08q0020	X	RINSE			08-MAR-2007 17:54	1.0			2	
021	c08q0021	X	RINSE			08-MAR-2007 18:00	1.0			2	
022	c08q0022	X	RINSE			08-MAR-2007 18:05	1.0			2	
023	c08q0023	BLANK	QC378195	122867	Filtra	08-MAR-2007 18:10	1.0	1.0	1	2	
024	c08q0024	BS	QC378196	122867	Filtra	08-MAR-2007 18:16	1.0	1.0	1	2	
025	c08q0025	BSD	QC378197	122867	Filtra	08-MAR-2007 18:22	1.0	1.0	1	2	
026	c08q0026	X	RINSE			08-MAR-2007 18:28	1.0			2	
027	c08q0027	MSS	193027-002	122867	Filtra	08-MAR-2007 18:33	10.0	1.0	1	2	
028	c08q0028	SER	QC378200	122867	Filtra	08-MAR-2007 18:38	50.0	1.0	1	2	
029	c08q0029	MS	QC378198	122867	Filtra	08-MAR-2007 18:44	10.0	1.0	1	2	
030	c08q0030	MSD	QC378199	122867	Filtra	08-MAR-2007 18:49	10.0	1.0	1	2	
031	c08q0031	PDS	QC378201	122867	Filtra	08-MAR-2007 18:54	10.0	1.0	1	12 13 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: [signature] Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c08q0032	X	RINSE			08-MAR-2007 18:59	1.0					2	
033	c08q0033	X	RINSE			08-MAR-2007 19:05	1.0					2	
034	c08q0034	X	RINSE			08-MAR-2007 19:10	1.0					2	
035	c08q0035	CCV				08-MAR-2007 19:15	1.0	1.0			1	14 2	
036	c08q0036	X	RINSE			08-MAR-2007 19:21	1.0					2	
037	c08q0037	X				08-MAR-2007 19:26	1.0					2	
038	c08q0038	CCB				08-MAR-2007 19:32	1.0	1.0			1	2	
039	c08q0039	X				08-MAR-2007 19:37	1.0					2	
040	c08q0040	BLANK	QC378195	122867	Filtra	08-MAR-2007 19:42	1.0	1.0			1	2	
041	c08q0041	BLANK	QC377794	122769	Filtra	08-MAR-2007 19:48	1.0	1.0			1	2	
042	c08q0042	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 19:53	10.0	1.0	1		1	2	1:MN=238.700
043	c08q0043	SAMPLE	193213-001	122867	Water	08-MAR-2007 19:58	10.0	1.0	1		1	2	1:MN=435.500
044	c08q0044	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 20:04	10.0	1.0			1	2	
045	c08q0045	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 20:09	10.0	1.0			1	2	
046	c08q0046	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 20:14	10.0	1.0			1	2	
047	c08q0047	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 20:20	10.0	1.0			1	2	
048	c08q0048	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 20:25	10.0	1.0			1	2	
049	c08q0049	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 20:30	10.0	1.0			1	2	
050	c08q0050	X	RINSE			08-MAR-2007 20:35	1.0					2	
051	c08q0051	X	RINSE			08-MAR-2007 20:41	1.0					2	
052	c08q0052	X	RINSE			08-MAR-2007 20:46	1.0					2	
053	c08q0053	CCV				08-MAR-2007 20:51	1.0	1.0			1	14 2	
054	c08q0054	X	RINSE			08-MAR-2007 20:57	1.0					2	
055	c08q0055	X				08-MAR-2007 21:02	1.0	1.0	1		1	2	
056	c08q0056	X				08-MAR-2007 21:07	1.0	1.0	1		1	2	
057	c08q0057	CCB				08-MAR-2007 21:13	1.0	1.0			1	2	
058	c08q0058	SER	QC378200	122867	Filtra	08-MAR-2007 21:18	50.0	1.0			1	2	
059	c08q0059	MSS	193027-002	122867	Filtra	08-MAR-2007 21:23	10.0	1.0			1	2	
060	c08q0060	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 21:29	10.0	1.0			1	2	
061	c08q0061	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 21:34	10.0	1.0			1	2	
062	c08q0062	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 21:39	10.0	1.0	1		1	2	1:MN=569.900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: Rebt Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

:equence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
63	c08q0063	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 21:45	10.0	1.0			1	2	
64	c08q0064	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 21:50	10.0	1.0			1	2	
65	c08q0065	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 21:55	10.0	1.0			1	2	
66	c08q0066	SAMPLE	193027-011	122867	Water	08-MAR-2007 22:01	10.0	1.0	1		1	2	1:NA=20640.0
67	c08q0067	SAMPLE	193027-012	122867	Water	08-MAR-2007 22:06	10.0	1.0	1		1	2	1:MN=531.500
68	c08q0068	X	RINSE			08-MAR-2007 22:11	1.0					2	
69	c08q0069	X	RINSE			08-MAR-2007 22:16	1.0					2	
70	c08q0070	X	RINSE			08-MAR-2007 22:22	1.0					2	
71	c08q0071	CCV				08-MAR-2007 22:27	1.0	1.0			1	14 2	
72	c08q0072	X	RINSE			08-MAR-2007 22:33	1.0					2	
73	c08q0073	X				08-MAR-2007 22:38	1.0	1.0	1		1	2	
74	c08q0074	CCB				08-MAR-2007 22:43	1.0	1.0			1	2	
75	c08q0075	X				08-MAR-2007 22:49	1.0	1.0	1		1	2	
76	c08q0076	SAMPLE	193027-013	122867	Water	08-MAR-2007 22:54	10.0	1.0	1		1	2	1:MN=341.700
77	c08q0077	X	RINSE			08-MAR-2007 22:59	1.0					2	
78	c08q0078	X	RINSE			08-MAR-2007 23:05	1.0					2	
79	c08q0079	X	RINSE			08-MAR-2007 23:10	1.0					2	
80	c08q0080	CCV				08-MAR-2007 23:15	1.0	1.0			1	14 2	
81	c08q0081	X	RINSE			08-MAR-2007 23:21	1.0					2	
82	c08q0082	X				08-MAR-2007 23:26	1.0	1.0	1		1	2	
83	c08q0083	CCB				08-MAR-2007 23:31	1.0	1.0			1	2	
84	c08q0084	X				08-MAR-2007 23:37	1.0	1.0			1	2	
85	c08q0085	X				08-MAR-2007 23:42	1.0	1.0			1	10 2	7:CA=311900
86	c08q0086	ICSA				08-MAR-2007 23:47	1.0	1.0			1	10 2	7:CA=310700
87	c08q0087	ICSAB				08-MAR-2007 23:53	1.0	1.0			1	11 2	10:CA=323800
88	c08q0088	X	RINSE			08-MAR-2007 23:58	1.0					2	
89	c08q0089	X	RINSE			09-MAR-2007 00:04	1.0					2	
90	c08q0090	X	RINSE			09-MAR-2007 00:09	1.0					2	
91	c08q0091	X				09-MAR-2007 00:14	1.0	1.0			1	11 2	10:CA=321600
92	c08q0092	X	RINSE			09-MAR-2007 00:20	1.0					2	
93	c08q0093	X	RINSE			09-MAR-2007 00:25	1.0					2	

:tds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

nalyst: Rell Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c08q0094	X	RINSE			09-MAR-2007 00:30	1.0					2	
095	c08q0095	X	RINSE			09-MAR-2007 00:36	1.0					2	
096	c08q0096	BLANK	QC378188	122866	Filtra	09-MAR-2007 00:41	1.0	1.0			1	2	
097	c08q0097	BS	QC378189	122866	Filtra	09-MAR-2007 00:46	1.0	1.0			1	2	
098	c08q0098	BSD	QC378190	122866	Filtra	09-MAR-2007 00:52	1.0	1.0			1	2	
099	c08q0099	X	RINSE			09-MAR-2007 00:58	1.0					2	
100	c08q0100	MSS	193193-001	122866	Filtra	09-MAR-2007 01:03	10.0	1.0	2		1	2	
101	c08q0101	SER	QC378193	122866	Filtra	09-MAR-2007 01:09	50.0	1.0	1		1	2	
102	c08q0102	TUN				09-MAR-2007 01:13	1.0	1.0				1	
103	c08q0103	X	RINSE			09-MAR-2007 01:21	1.0					2	
104	c08q0104	MS	QC378191	122866	Filtra	09-MAR-2007 01:26	10.0	1.0		1	1	2	
105	c08q0105	X	RINSE			09-MAR-2007 01:31	1.0					2	
106	c08q0106	X	RINSE			09-MAR-2007 01:37	1.0					2	
107	c08q0107	X	RINSE			09-MAR-2007 01:42	1.0					2	
108	c08q0108	CCV				09-MAR-2007 01:47	1.0	1.0			1	14 2	
109	c08q0109	X	RINSE			09-MAR-2007 01:53	1.0					2	
110	c08q0110	X				09-MAR-2007 01:58	1.0	1.0	1		1	2	
111	c08q0111	CCB				09-MAR-2007 02:03	1.0	1.0			1	2	
112	c08q0112	X				09-MAR-2007 02:09	1.0	1.0			1	2	
113	c08q0113	MSD	QC378192	122866	Filtra	09-MAR-2007 02:14	10.0	1.0		1	1	2	
114	c08q0114	PDS	QC378194	122866	Filtra	09-MAR-2007 02:19	10.0	1.0			1	12 13 2	
115	c08q0115	SAMPLE	193193-002	122866	Filtra	09-MAR-2007 02:25	10.0	1.0			1	2	
116	c08q0116	SAMPLE	193193-003	122866	Filtra	09-MAR-2007 02:30	10.0	1.0			1	2	
117	c08q0117	SAMPLE	193193-004	122866	Filtra	09-MAR-2007 02:36	10.0	1.0			1	2	
118	c08q0118	SAMPLE	193193-005	122866	Filtra	09-MAR-2007 02:41	10.0	1.0			1	2	
119	c08q0119	SAMPLE	193193-006	122866	Filtra	09-MAR-2007 02:46	10.0	1.0	1		1	2	
120	c08q0120	SAMPLE	193193-007	122866	Filtra	09-MAR-2007 02:52	10.0	1.0			1	2	
121	c08q0121	SAMPLE	193193-008	122866	Filtra	09-MAR-2007 02:57	10.0	1.0			1	2	
122	c08q0122	SAMPLE	193193-009	122866	Filtra	09-MAR-2007 03:03	10.0	1.0			1	2	
123	c08q0123	X	RINSE			09-MAR-2007 03:08	1.0					2	
124	c08q0124	X	RINSE			09-MAR-2007 03:13	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: Reff Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
25	c08q0125	X	RINSE			09-MAR-2007 03:19	1.0					2	
26	c08q0126	CCV				09-MAR-2007 03:24	1.0	1.0			1	14 2	
27	c08q0127	X	RINSE			09-MAR-2007 03:30	1.0					2	
28	c08q0128	X				09-MAR-2007 03:35	1.0					2	
29	c08q0129	CCB				09-MAR-2007 03:40	1.0	1.0			1	2	
30	c08q0130	X				09-MAR-2007 03:46	1.0					2	
31	c08q0131	SAMPLE	193193-010	122866	Filtra	09-MAR-2007 03:51	10.0	1.0			1	2	1:MN=226.200
32	c08q0132	SAMPLE	193193-011	122866	Filtra	09-MAR-2007 03:56	10.0	1.0			1	2	
33	c08q0133	SAMPLE	193193-012	122866	Filtra	09-MAR-2007 04:02	10.0	1.0			1	2	
34	c08q0134	SAMPLE	193193-013	122866	Filtra	09-MAR-2007 04:07	10.0	1.0	1		1	2	
35	c08q0135	SAMPLE	193193-014	122866	Filtra	09-MAR-2007 04:13	10.0	1.0			1	2	
36	c08q0136	SAMPLE	193193-015	122866	Filtra	09-MAR-2007 04:18	10.0	1.0			1	2	
37	c08q0137	SAMPLE	193193-016	122866	Filtra	09-MAR-2007 04:23	10.0	1.0			1	2	
38	c08q0138	SAMPLE	193193-017	122866	Filtra	09-MAR-2007 04:29	10.0	1.0			1	2	
39	c08q0139	SAMPLE	193193-018	122866	Filtra	09-MAR-2007 04:34	10.0	1.0			1	2	
40	c08q0140	X	RINSE			09-MAR-2007 04:39	1.0					2	
41	c08q0141	X	RINSE			09-MAR-2007 04:45	1.0					2	
42	c08q0142	X	RINSE			09-MAR-2007 04:50	1.0					2	
43	c08q0143	CCV				09-MAR-2007 04:55	1.0	1.0			1	14 2	
44	c08q0144	X	RINSE			09-MAR-2007 05:01	1.0					2	
45	c08q0145	X				09-MAR-2007 05:06	1.0					2	
46	c08q0146	X				09-MAR-2007 05:11	1.0					2	
47	c08q0147	CCB				09-MAR-2007 05:17	1.0	1.0			1	2	
48	c08q0148	ICSA				09-MAR-2007 05:22	1.0	1.0			1	10 2	7:CA=319300
49	c08q0149	ICSAB				09-MAR-2007 05:28	1.0	1.0			1	11 2	10:CA=328000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: Pett Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

st : MET06
lnum : 67098941001
its : ug/L

Date : 09-MAR-2007 17:19
X Axis : R

Reviewer: ---

vel	File	Seqnum	Sample ID	Analyzed	Stds
1	c09q0005	67098941005		09-MAR-2007 17:24	S5645
2	c09q0006	67098941006		09-MAR-2007 17:30	S5648
3	c09q0007	67098941007		09-MAR-2007 17:35	S5649
4	c09q0008	67098941008		09-MAR-2007 17:40	S5650
5	c09q0009	67098941009		09-MAR-2007 17:45	S5644
6	c09q0010	67098941010		09-MAR-2007 17:51	S5646

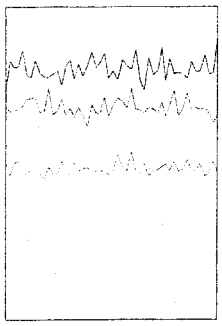
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
uminum	A	1.0127	0.7158	0.9799	0.6571	0.6506	0.6379	BLNK	-2.7680	1.56167		0.7757	1.000	0.995	
timony	A	0.4072	0.3297	0.3209	0.3088	0.3210	0.3280	BLNK	-0.0253	3.06281		0.3359	1.000	0.995	
rium	A	0.2869	0.1534	0.1078	0.0939	0.0939	0.0920	BLNK	-0.0593	10.8298		0.1380	1.000	0.995	
ryllium	A	0.4058	0.3557	0.3589	0.3440	0.3622	0.3632	BLNK	-0.0182	2.75552		0.3650	1.000	0.995	
dmium	A	0.1047	0.0922	0.0946	0.0890	0.0893	0.0891	BLNK	-0.0150	11.2216		0.0932	1.000	0.995	
lcium	A	0.4388	0.1041	0.0686	0.0289	0.0225	0.0217	BLNK	-196.48	46.3423		0.1141	1.000	0.995	
ad	A	1.2340	0.7613	0.7042	0.6332	0.6489	0.6511	BLNK	-0.0342	1.53737		0.7721	1.000	0.995	
gnesium	A	0.7525	0.6043	0.5811	0.5519	0.5437	0.5391	BLNK	-2.0795	1.85184		0.5954	1.000	0.995	
lybdenum	A	0.3454	0.2488	0.2413	0.2297	0.2313	0.2385	BLNK	-0.0518	4.22014		0.2558	1.000	0.995	
tassium	A	6.1144	1.8034	1.2709	0.7751	0.7208	0.7085	BLNK	-75.952	1.41296		1.8988	1.000	0.995	
lver	A	0.4626	0.4039	0.4088	0.3924	0.3962	0.3967	BLNK	-0.0218	2.52204		0.4101	1.000	0.995	
allium	A	2.0362	1.0312	0.9444	0.8483	0.8877	0.9593	BLNK	-0.0717	1.05940		1.1178	0.999	0.995	
senic	E	0.8142	0.7223	0.6739	0.6537	0.6486	0.6551	BLNK	-0.0505	1.53000		0.6946	1.000	0.995	
romium	E	7.6612	4.2433	3.7835	3.3656	3.2742	3.3048	BLNK	-0.1249	0.30337		4.2721	1.000	0.995	
balt	E	6.9414	5.6712	5.7061	5.4273	5.2102	5.1704	BLNK	-0.0378	0.19314		5.6878	1.000	0.995	
pper	E	26.371	12.548	12.909	8.5491	8.0398	7.9605	BLNK	-0.1957	0.12550		12.730	1.000	0.995	
nganese	E	2.8387	1.9797	1.8652	1.6900	1.6583	1.6796	BLNK	-0.0526	0.59708		1.9519	1.000	0.995	
ckel	E	3.1866	1.8564	1.7358	1.5047	1.4304	1.4170	BLNK	-0.1223	0.70485		1.8551	1.000	0.995	
dium	E	4.2421	1.4197	1.0752	0.7329	0.6813	0.6907	BLNK	-49.142	1.45605		1.4736	1.000	0.995	
nadium	E		3.1157	2.8036	2.5744	2.5588	2.5967	BLNK	-0.2606	0.38686		2.7298	1.000	0.995	
nc	E	22.520	5.2400	3.6163	1.4390	1.2153	1.1544	BLNK	-1.2930	0.86364		5.8642	0.999	0.995	
on	H	1.4541	1.0813	1.0554	0.9382	0.9387	0.9241	BLNK	-5.9496	1.07910		1.0653	1.000	0.995	
lenium	H	0.1985	0.1550	0.1620	0.1459	0.1491	0.1481	BLNK	-0.0515	6.74561		0.1598	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
aminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
timony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
rium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
lcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ad	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
gnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
tassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
allium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
senic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
romium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
balt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
pper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
nganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ckel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
nadium	E		0.5000	1.0000	10.000	100.00	200.00	ug/L
nc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
on	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

tment amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

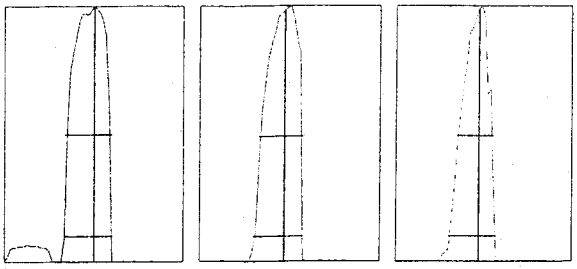
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17941.0	16037.2	4.41	0.80
89	50,000	32655.0	33846.0	3.86	0.80
205	50,000	23764.0	24112.8	3.77	3.00

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.881%
Doubly Charged: 70/140 1.423%



m/z:	7	89	205
Height:	16,264	33,712	23,918
Axis:	7.05	88.95	204.95
W-50%:	0.80	0.70	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	142
RF Matching	:	1.7 V	Extract 2	:	-160 V	AMU Offset	:	123
Smpl Depth	:	9 mm	Omega Bias-ce	:	-32 V	Axis Gain	:	1.0015
Torch-H	:	0.9 mm	Omega Lens-ce	:	0 V	Axis Offset	:	-0.03
Torch-V	:	0.6 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	1.03 L/min	QP Focus	:	2 V			
Makeup Gas	:	0 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1810 V
Sample Pump	:	--- rps	OctP RF	:	160 V	Pulse HV	:	1430 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	4 mL/min	51	14.4	29.57
Optional Gas:	--- %	59	3669.5	4.92
QP Focus:	-10 V	89	2311.9	6.04
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-13 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	4 mL/min	59	2559.4	4.64
Optional Gas:	--- %	78	0.1	342.56
QP Focus:	-8 V	89	20073.3	3.99
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-15 V			

Integration Time: 0.1000sec

Generated : Mar 09, 2007 15:47:05
Printed : Mar 09, 2007 15:48:45

00272

P/A Factor Tuning Report

Acquired:Mar 9 2007 04:34 pm

Mass [amu]	Element	P/A Factor
6	Li	0.059504
7	(Li)	Sensitivity too low
9	Be	0.068785
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086430
45	Sc	0.086036
51	V	0.087935
52	Cr	0.091605
55	Mn	0.093940
56	Fe	Sensitivity too high
59	Co	0.097332
60	Ni	0.101235
63	Cu	0.105051
65	Cu	0.104224
66	Zn	Sensitivity too low
72	Ge	0.102011
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.099997
98	Mo	0.100647
99	(Ru)	Sensitivity too low
107	Ag	0.110998
111	Cd	Sensitivity too low
115	In	0.109935
118	(In)	0.109589
121	Sb	0.108305
137	Ba	Sensitivity too low
159	Tb	0.112040
205	Tl	0.119958
206	(Pb)	0.119539
207	(Pb)	0.119266
208	Pb	0.119009
209	Bi	0.120139

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1430 V

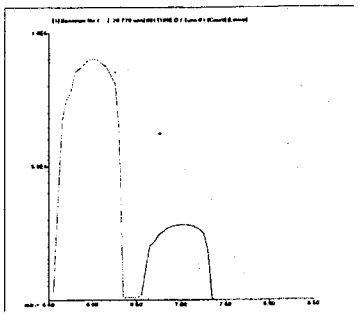
00273

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C09q00.B\001TUNE.D
Date Acquired:	Mar 9 2007 05:01 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

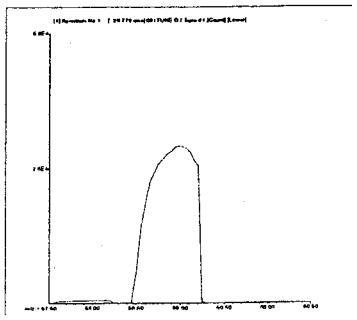
Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	1.01	5.00	
115 In	0.95	5.00	
205 Tl	0.34	5.00	



7 Li

Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:

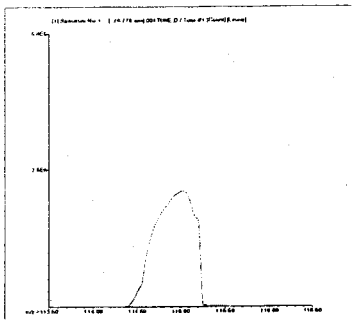
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co

Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width
Actual: 0.65
Required: 0.90
Flag:



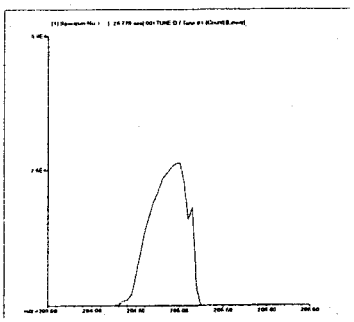
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004C
Date Acquired: Mar 9 2007 05:17 pm
Operator: .
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	916633.81	A	13710.00	1.50
7	(Li)		P		
9	Be	121.12	P	20.37	16.82
23	Na	30607.30	P	507.90	1.66
24	Mg	34040.43	P	3613.00	10.61
27	Al	53745.65	P	3790.00	7.05
39	K	1631212.00	A	9044.00	0.55
44	Ca	128692.70	P	2817.00	2.19
45	Sc	422487.81	P	6740.00	1.60
45	Sc	45344.33	P	679.40	1.50
45	Sc	1517729.00	A	29070.00	1.92
51	V	610.76	P	6.70	1.10
52	Cr	373.71	P	43.91	11.75
55	Mn	80.00	P	15.28	19.10
56	Fe	46731.86	P	14490.00	31.01
59	Co	178.15	P	74.74	41.95
60	Ni	157.41	P	15.41	9.79
63	Cu	702.62	P	59.89	8.52
65	Cu	322.60	P	17.01	5.27
66	Zn	673.73	P	52.62	7.81
72	Ge	101122.60	P	1933.00	1.91
72	Ge	22510.59	P	340.00	1.51
75	As	14.89	P	2.14	14.39
78	Se	15.56	P	8.88	57.07
89	Y	1904354.00	A	44640.00	2.34
98	Mo	466.70	P	68.08	14.59
107	Ag	316.69	P	32.83	10.37
111	Cd	48.89	P	13.47	27.55
115	In	1832636.00	A	36180.00	1.97
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	302.25	P	53.89	17.83
137	Ba	246.68	P	14.53	5.89
159	Tb	2253621.00	A	40930.00	1.82
205	Tl	1753.54	P	125.50	7.16
208	Pb	1002.30	P	51.69	5.16
209	Bi	1296680.00	A	24510.00	1.89

00276

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 9 2007 05:22 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	932362.81	A	20880.00	2.24
7 (Li)		P		
9 Be	756.72	P	98.38	13.00
23 Na	37989.20	P	453.20	1.19
24 Mg	224754.59	P	7900.00	3.51
27 Al	302506.91	P	11730.00	3.88
39 K	1825330.00	A	17170.00	0.94
44 Ca	130970.30	P	1091.00	0.83
45 Sc	408674.50	P	2821.00	0.69
45 Sc	44781.21	P	467.30	1.04
45 Sc	1493194.00	A	42010.00	2.81
51 V	532.98	P	30.60	5.74
52 Cr	686.32	P	40.92	5.96
55 Mn	254.08	P	23.13	9.10
56 Fe	118836.00	P	1660.00	1.40
59 Co	621.87	P	42.32	6.81
60 Ni	285.56	P	41.83	14.65
63 Cu	1174.14	P	53.03	4.52
65 Cu	556.31	P	28.21	5.07
66 Zn	1003.01	P	10.08	1.01
72 Ge	98470.08	P	1233.00	1.25
72 Ge	22271.34	P	380.30	1.71
75 As	36.22	P	6.47	17.88
78 Se	39.11	P	3.79	9.69
89 Y	1825115.00	A	33830.00	1.85
98 Mo	1261.22	P	55.01	4.36
99 (Ru)	5.56	P	5.09	91.65
107 Ag	1651.28	P	171.70	10.40
111 Cd	373.35	P	10.00	2.68
115 In	1783367.00	A	42550.00	2.39
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1452.36	P	44.27	3.05
137 Ba	1256.78	P	122.50	9.75
159 Tb	2191961.00	A	33700.00	1.54
205 Tl	2639.27	P	130.30	4.94
208 Pb	5411.80	P	287.80	5.32
209 Bi	1295684.00	A	22450.00	1.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	932362.81	2.24	916633.81	101.7	80 - 120	
45 Sc	408674.50	0.69	422487.78	96.7	80 - 120	
45 Sc	44781.21	1.04	45344.33	98.8	80 - 120	
45 Sc	1493194.10	2.81	1517729.50	98.4	80 - 120	
72 Ge	98470.09	1.25	101122.62	97.4	80 - 120	
72 Ge	22271.34	1.71	22510.59	98.9	80 - 120	
89 Y	1825115.60	1.85	1904353.90	95.8	80 - 120	
115 In	1783367.30	2.39	1832635.80	97.3	80 - 120	
159 Tb	2191960.80	1.54	2253621.50	97.3	80 - 120	
209 Bi	1295683.50	1.73	1296679.60	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 9 2007 05:28 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	938807.00	A	31990.00	3.41
7 (Li)		P		
9 Be	3338.29	P	91.68	2.75
23 Na	61838.99	P	267.50	0.43
24 Mg	887612.00	A	6993.00	0.79
27 Al	1051503.00	A	6508.00	0.62
39 K	2649391.00	A	9411.00	0.36
44 Ca	152952.09	P	1604.00	1.05
45 Sc	396918.41	P	3853.00	0.97
45 Sc	43558.08	P	93.97	0.22
45 Sc	1472874.00	A	90400.00	6.14
51 V	1357.12	P	17.37	1.28
52 Cr	1848.29	P	11.88	0.64
55 Mn	862.26	P	68.06	7.89
56 Fe	429154.81	P	3539.00	0.82
59 Co	2470.25	P	6.67	0.27
60 Ni	808.55	P	42.01	5.20
63 Cu	2671.40	P	100.80	3.77
65 Cu	1305.63	P	73.14	5.60
66 Zn	1115.62	P	65.52	5.87
72 Ge	94500.77	P	1088.00	1.15
72 Ge	21288.65	P	62.48	0.29
75 As	153.78	P	9.98	6.49
78 Se	146.45	P	2.69	1.84
89 Y	1798577.00	A	97930.00	5.44
98 Mo	4463.12	P	173.00	3.88
99 (Ru)	3.33	P	3.33	99.99
107 Ag	7066.54	P	119.80	1.70
111 Cd	1614.61	P	6.95	0.43
115 In	1752938.00	A	86430.00	4.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5764.79	P	214.70	3.72
137 Ba	3256.08	P	37.18	1.14
159 Tb	2126610.00	A	122200.00	5.75
205 Tl	6444.11	P	149.40	2.32
208 Pb	16149.21	P	194.10	1.20
209 Bi	1250766.00	A	52740.00	4.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	938806.94	3.41	916633.81	102.4	80 - 120	
45 Sc	396918.34	0.97	422487.78	93.9	80 - 120	
45 Sc	43558.09	0.22	45344.33	96.1	80 - 120	
45 Sc	1472874.40	6.14	1517729.50	97.0	80 - 120	
72 Ge	94500.77	1.15	101122.62	93.5	80 - 120	
72 Ge	21288.65	0.29	22510.59	94.6	80 - 120	
89 Y	1798577.30	5.44	1904353.90	94.4	80 - 120	
115 In	1752937.90	4.93	1832635.80	95.7	80 - 120	
159 Tb	2126610.30	5.75	2253621.50	94.4	80 - 120	
209 Bi	1250765.50	4.22	1296679.60	96.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 9 2007 05:33 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	949084.19	A	9162.00	0.97
7 (Li)		P		
9 Be	6811.84	P	232.60	3.41
23 Na	95789.79	P	1074.00	1.12
24 Mg	1730903.00	A	10410.00	0.60
27 Al	2918482.00	A	12270.00	0.42
39 K	3785269.00	A	32530.00	0.86
44 Ca	204370.91	P	1217.00	0.60
45 Sc	397183.91	P	1449.00	0.36
45 Sc	44549.42	P	784.20	1.76
45 Sc	1489234.00	A	3171.00	0.21
51 V	2498.03	P	61.50	2.46
52 Cr	3370.45	P	18.99	0.56
55 Mn	1661.60	P	60.28	3.63
56 Fe	838345.88	P	9281.00	1.11
59 Co	5084.31	P	137.60	2.71
60 Ni	1546.40	P	37.92	2.45
63 Cu	5637.86	P	106.10	1.88
65 Cu	2732.15	P	39.14	1.43
66 Zn	1579.00	P	28.37	1.80
72 Ge	93877.58	P	842.10	0.90
72 Ge	21839.15	P	398.60	1.83
75 As	294.45	P	15.91	5.40
78 Se	304.23	P	13.42	4.41
89 Y	1819868.00	A	9355.00	0.51
98 Mo	8782.03	P	107.40	1.22
99 (Ru)	8.89	P	7.70	86.60
107 Ag	14229.08	P	356.00	2.50
111 Cd	3293.87	P	68.88	2.09
115 In	1740483.00	A	15200.00	0.87
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	11168.36	P	104.50	0.94
137 Ba	4606.53	P	100.00	2.17
159 Tb	2136014.00	A	12900.00	0.60
205 Tl	11629.12	P	152.00	1.31
208 Pb	30079.75	P	392.70	1.31
209 Bi	1231391.00	A	5079.00	0.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	949084.25	0.97	916633.81	103.5	80 - 120	
45 Sc	397183.91	0.36	422487.78	94.0	80 - 120	
45 Sc	44549.42	1.76	45344.33	98.2	80 - 120	
45 Sc	1489233.60	0.21	1517729.50	98.1	80 - 120	
72 Ge	93877.59	0.90	101122.62	92.8	80 - 120	
72 Ge	21839.15	1.83	22510.59	97.0	80 - 120	
89 Y	1819868.10	0.51	1904353.90	95.6	80 - 120	
115 In	1740483.30	0.87	1832635.80	95.0	80 - 120	
159 Tb	2136014.30	0.60	2253621.50	94.8	80 - 120	
209 Bi	1231391.50	0.41	1296679.60	95.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 9 2007 05:38 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	953547.69	A	5058.00	0.53
7 (Li)		P		
9 Be	65607.67	P	560.40	0.85
23 Na	659608.88	M	10880.00	1.65
24 Mg	16405000.00	A	198800.00	1.21
27 Al	19529830.00	A	256400.00	1.31
39 K	23039840.00	A	412900.00	1.79
44 Ca	859148.50	A	11770.00	1.37
45 Sc	420468.81	P	3267.00	0.78
45 Sc	45001.15	P	673.60	1.50
45 Sc	1486259.00	A	16170.00	1.09
51 V	23167.72	P	273.30	1.18
52 Cr	30292.32	P	567.70	1.87
55 Mn	15208.72	P	62.77	0.41
56 Fe	7888894.00	A	73960.00	0.94
59 Co	48839.70	P	54.53	0.11
60 Ni	13540.73	P	115.50	0.85
63 Cu	37717.90	P	216.00	0.57
65 Cu	18160.82	P	87.32	0.48
66 Zn	6348.18	P	74.39	1.17
72 Ge	99980.46	P	690.90	0.69
72 Ge	22059.47	P	121.70	0.55
75 As	2883.88	P	67.19	2.33
78 Se	2917.66	P	30.15	1.03
89 Y	1813408.00	A	12890.00	0.71
98 Mo	83302.12	P	664.60	0.80
99 (Ru)	8.89	P	3.85	43.30
107 Ag	136468.59	P	646.80	0.47
111 Cd	30939.46	P	781.80	2.53
115 In	1739030.00	A	5424.00	0.31
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	107386.70	P	911.50	0.85
137 Ba	40617.30	P	69.58	0.17
159 Tb	2162836.00	A	33710.00	1.56
205 Tl	104980.10	P	557.90	0.53
208 Pb	273865.41	P	1220.00	0.45
209 Bi	1237622.00	A	11940.00	0.96

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	953547.69	0.53	916633.81	104.0	80 - 120	
45 Sc	420468.78	0.78	422487.78	99.5	80 - 120	
45 Sc	45001.15	1.50	45344.33	99.2	80 - 120	
45 Sc	1486258.60	1.09	1517729.50	97.9	80 - 120	
72 Ge	99980.46	0.69	101122.62	98.9	80 - 120	
72 Ge	22059.47	0.55	22510.59	98.0	80 - 120	
89 Y	1813408.10	0.71	1904353.90	95.2	80 - 120	
115 In	1739030.00	0.31	1832635.80	94.9	80 - 120	
159 Tb	2162836.30	1.56	2253621.50	96.0	80 - 120	
209 Bi	1237622.30	0.96	1296679.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 9 2007 05:43 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	937081.13	A	13910.00	1.48
7	(Li)		P		
9	Be	678743.38	A	9766.00	1.44
23	Na	6060036.00	A	29480.00	0.49
24	Mg	############	A	2117000.00	1.31
27	Al	############	A	896500.00	0.46
39	K	############	A	283100.00	0.13
44	Ca	6669938.00	A	43570.00	0.65
45	Sc	417386.59	P	4148.00	0.99
45	Sc	44474.40	P	190.70	0.43
45	Sc	1484756.00	A	7937.00	0.53
51	V	227598.30	P	964.40	0.42
52	Cr	291237.91	P	3252.00	1.12
55	Mn	147500.59	P	1378.00	0.93
56	Fe	78356888.00	A	123000.00	0.16
59	Co	463440.59	P	1395.00	0.30
60	Ni	127227.70	P	98.41	0.08
63	Cu	345450.91	P	2709.00	0.78
65	Cu	168927.00	P	856.30	0.51
66	Zn	52219.91	P	563.60	1.08
72	Ge	96489.86	P	674.50	0.70
72	Ge	21483.78	P	34.36	0.16
75	As	27869.04	P	191.00	0.69
78	Se	28766.99	P	215.50	0.75
89	Y	1797811.00	A	17520.00	0.97
98	Mo	831617.00	P	7351.00	0.88
99	(Ru)	15.56	P	1.93	12.38
107	Ag	1334873.00	A	3153.00	0.24
111	Cd	301002.50	P	2325.00	0.77
115	In	1684578.00	A	6999.00	0.42
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1081536.00	A	3378.00	0.31
137	Ba	398705.59	P	1559.00	0.39
159	Tb	2122223.00	A	3772.00	0.18
205	Tl	1060299.00	A	10890.00	1.03
208	Pb	2754297.00	A	28250.00	1.03
209	Bi	1194464.00	A	2339.00	0.20

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	937081.13	1.48	916633.81	102.2	80 - 120	
45	Sc	417386.63	0.99	422487.78	98.8	80 - 120	
45	Sc	44474.40	0.43	45344.33	98.1	80 - 120	
45	Sc	1484755.80	0.53	1517729.50	97.8	80 - 120	
72	Ge	96489.86	0.70	101122.62	95.4	80 - 120	
72	Ge	21483.78	0.16	22510.59	95.4	80 - 120	
89	Y	1797810.80	0.97	1904353.90	94.4	80 - 120	
115	In	1684578.30	0.42	1832635.80	91.9	80 - 120	
159	Tb	2122223.30	0.18	2253621.50	94.2	80 - 120	
209	Bi	1194464.50	0.20	1296679.60	92.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 9 2007 05:49 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	919698.63	A	29050.00	3.16
7 (Li)		P		
9 Be	1335686.00	A	25390.00	1.90
23 Na	12161390.00	A	61600.00	0.51
24 Mg	###########	A	3708000.00	1.15
27 Al	###########	A	4124000.00	1.08
39 K	###########	A	2118000.00	0.50
44 Ca	12977620.00	A	83180.00	0.64
45 Sc	418632.19	P	4688.00	1.12
45 Sc	44021.58	P	239.60	0.54
45 Sc	1497570.00	A	26740.00	1.79
51 V	457253.09	P	5817.00	1.27
52 Cr	581941.31	P	6741.00	1.16
55 Mn	295765.09	P	3685.00	1.25
56 Fe	###########	A	119200.00	0.08
59 Co	910429.63	M	5028.00	0.55
60 Ni	249501.00	P	584.90	0.23
63 Cu	673206.63	P	2546.00	0.38
65 Cu	327244.31	P	3420.00	1.05
66 Zn	97625.27	P	281.50	0.29
72 Ge	95738.95	P	862.10	0.90
72 Ge	21149.96	P	529.80	2.51
75 As	55405.40	P	441.80	0.80
78 Se	56713.07	P	265.30	0.47
89 Y	1812733.00	A	51040.00	2.82
98 Mo	1728550.00	A	9631.00	0.56
99 (Ru)	36.67	P	12.02	32.78
107 Ag	2630364.00	A	25940.00	0.99
111 Cd	590731.88	P	5359.00	0.91
115 In	1658619.00	A	38650.00	2.33
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2175337.00	A	14340.00	0.66
137 Ba	783535.38	P	10300.00	1.31
159 Tb	2130470.00	A	64450.00	3.03
205 Tl	2179188.00	A	39910.00	1.83
208 Pb	5545149.00	A	12410.00	0.22
209 Bi	1136089.00	A	29000.00	2.55

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	919698.63	3.16	916633.81	100.3	80 - 120	
45 Sc	418632.25	1.12	422487.78	99.1	80 - 120	
45 Sc	44021.58	0.54	45344.33	97.1	80 - 120	
45 Sc	1497570.50	1.79	1517729.50	98.7	80 - 120	
72 Ge	95738.95	0.90	101122.62	94.7	80 - 120	
72 Ge	21149.96	2.51	22510.59	94.0	80 - 120	
89 Y	1812733.30	2.82	1904353.90	95.2	80 - 120	
115 In	1658618.80	2.33	1832635.80	90.5	80 - 120	
159 Tb	2130470.50	3.03	2253621.50	94.5	80 - 120	
209 Bi	1136089.50	2.55	1296679.60	87.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941015 File : c09q0015 Time : 09-MAR-2007 18:28
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7757	0.6568	10000	10250	ug/L	3	10	
Antimony	A	0.3359	0.3195	100.0	97.82	ug/L	-2	10	
Barium	A	0.1380	0.0924	100.0	99.95	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.23	ug/L	-1	10	
Cadmium	A	0.0932	0.0888	100.0	99.59	ug/L	0	10	
Calcium	A	0.1141	0.0223	10000	10140	ug/L	1	10	
Lead	A	0.7721	0.6345	100.0	97.51	ug/L	-2	10	
Magnesium	A	0.5954	0.5528	10000	10230	ug/L	2	10	
Molybdenum	A	0.2558	0.2307	100.0	97.32	ug/L	-3	10	
Potassium	A	1.8988	0.7353	10000	10310	ug/L	3	10	
Silver	A	0.4101	0.4208	100.0	106.1	ug/L	6	10	
Thallium	A	1.1178	0.8895	50.00	47.05	ug/L	-6	10	
Arsenic	E	0.6946	0.6606	100.0	101.0	ug/L	1	10	
Chromium	E	4.2721	3.2821	100.0	99.45	ug/L	-1	10	
Cobalt	E	5.6878	5.1156	100.0	98.76	ug/L	-1	10	
Copper	E	12.730	7.8162	100.0	97.90	ug/L	-2	10	
Manganese	E	1.9519	1.6406	100.0	97.90	ug/L	-2	10	
Nickel	E	1.8551	1.4033	100.0	98.79	ug/L	-1	10	
Sodium	E	1.4736	0.6636	10000	9613	ug/L	-4	10	
Vanadium	E	3.2665	2.5368	100.0	97.88	ug/L	-2	10	
Zinc	E	5.8642	1.1702	100.0	99.77	ug/L	0	10	
Iron	H	1.0653	0.9073	10000	9785	ug/L	-2	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	938532	2.39
Scandium	A	1517730	1448345	-4.57
Scandium	E	45344	45386	0.09
Scandium	H	422488	427092	1.09
Germanium	H	101123	98414	-2.68
Germanium	E	22511	21784	-3.23
Indium	A	1832636	1634980	-10.79
Bismuth	A	1296680	1096500	-15.44
Yttrium	A	1904354	1748838	-8.17
Terbium	A	2253622	2025126	-10.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941046 File : c09q0046 Time : 09-MAR-2007 21:24
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3185	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0915	100.0	98.99	ug/L	-1	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.24	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	9991	ug/L	0	10	
Lead	A	0.7721	0.6252	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5954	0.5461	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2285	100.0	96.37	ug/L	-4	10	
Potassium	A	1.8988	0.7217	10000	10120	ug/L	1	10	
Silver	A	0.4101	0.4173	100.0	105.2	ug/L	5	10	
Thallium	A	1.1178	0.8698	50.00	46.00	ug/L	-8	10	
Arsenic	E	0.6946	0.6551	100.0	100.2	ug/L	0	10	
Chromium	E	4.2721	3.2245	100.0	97.70	ug/L	-2	10	
Cobalt	E	5.6878	5.0576	100.0	97.64	ug/L	-2	10	
Copper	E	12.730	7.8226	100.0	97.98	ug/L	-2	10	
Manganese	E	1.9519	1.6229	100.0	96.84	ug/L	-3	10	
Nickel	E	1.8551	1.3804	100.0	97.17	ug/L	-3	10	
Sodium	E	1.4736	0.6569	10000	9516	ug/L	-5	10	
Vanadium	E	3.2665	2.5129	100.0	96.95	ug/L	-3	10	
Zinc	E	5.8642	1.1526	100.0	98.25	ug/L	-2	10	
Iron	H	1.0653	0.9145	10000	9863	ug/L	-1	10	
Selenium	H	0.1598	0.1454	100.0	98.03	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	905174	-1.25
Scandium	A	1517730	1441531	-5.02
Scandium	E	45344	45193	-0.33
Scandium	H	422488	420497	-0.47
Germanium	H	101123	96743	-4.33
Germanium	E	22511	21533	-4.34
Indium	A	1832636	1642773	-10.36
Bismuth	A	1296680	1088318	-16.07
Yttrium	A	1904354	1748927	-8.16
Terbium	A	2253622	2043585	-9.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941068 File : c09q0068 Time : 09-MAR-2007 23:20
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6489	10000	10130	ug/L	1	10	
Antimony	A	0.3359	0.3132	100.0	95.90	ug/L	-4	10	
Barium	A	0.1380	0.0925	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0875	100.0	98.20	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9947	ug/L	-1	10	
Lead	A	0.7721	0.6311	100.0	96.98	ug/L	-3	10	
Magnesium	A	0.5954	0.5452	10000	10090	ug/L	1	10	
Molybdenum	A	0.2558	0.2257	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4190	100.0	105.6	ug/L	6	10	
Thallium	A	1.1178	0.8838	50.00	46.74	ug/L	-7	10	
Arsenic	E	0.6946	0.6568	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.2029	100.0	97.04	ug/L	-3	10	
Cobalt	E	5.6878	4.9833	100.0	96.21	ug/L	-4	10	
Copper	E	12.730	7.7997	100.0	97.69	ug/L	-2	10	
Manganese	E	1.9519	1.6174	100.0	96.52	ug/L	-3	10	
Nickel	E	1.8551	1.3802	100.0	97.16	ug/L	-3	10	
Sodium	E	1.4736	0.6559	10000	9501	ug/L	-5	10	
Vanadium	E	3.2665	2.4945	100.0	96.24	ug/L	-4	10	
Zinc	E	5.8642	1.1539	100.0	98.36	ug/L	-2	10	
Iron	H	1.0653	0.8929	10000	9630	ug/L	-4	10	
Selenium	H	0.1598	0.1429	100.0	96.34	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	913999	-0.29
Scandium	A	1517730	1455726	-4.09
Scandium	E	45344	46412	2.35
Scandium	H	422488	435589	3.10
Germanium	H	101123	100000	-1.11
Germanium	E	22511	21916	-2.64
Indium	A	1832636	1638663	-10.58
Bismuth	A	1296680	1053580	-18.75
Yttrium	A	1904354	1768625	-7.13
Terbium	A	2253622	2008550	-10.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941084 File : c09q0084 Time : 10-MAR-2007 00:46
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6509	10000	10160	ug/L	2	10	
Antimony	A	0.3359	0.3181	100.0	97.39	ug/L	-3	10	
Barium	A	0.1380	0.0921	100.0	99.73	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.22	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.31	ug/L	-2	10	
Calcium	A	0.1141	0.0221	10000	10060	ug/L	1	10	
Lead	A	0.7721	0.6278	100.0	96.48	ug/L	-4	10	
Magnesium	A	0.5954	0.5504	10000	10190	ug/L	2	10	
Molybdenum	A	0.2558	0.2258	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7317	10000	10260	ug/L	3	10	
Silver	A	0.4101	0.4203	100.0	106.0	ug/L	6	10	
Thallium	A	1.1178	0.9101	50.00	48.14	ug/L	-4	10	
Arsenic	E	0.6946	0.6458	100.0	98.75	ug/L	-1	10	
Chromium	E	4.2721	3.1412	100.0	95.17	ug/L	-5	10	
Cobalt	E	5.6878	4.9028	100.0	94.65	ug/L	-5	10	
Copper	E	12.730	7.6681	100.0	96.04	ug/L	-4	10	
Manganese	E	1.9519	1.5949	100.0	95.17	ug/L	-5	10	
Nickel	E	1.8551	1.3436	100.0	94.58	ug/L	-5	10	
Sodium	E	1.4736	0.6503	10000	9420	ug/L	-6	10	
Vanadium	E	3.2665	2.4434	100.0	94.26	ug/L	-6	10	
Zinc	E	5.8642	1.1383	100.0	97.02	ug/L	-3	10	
Iron	H	1.0653	0.8882	10000	9578	ug/L	-4	10	
Selenium	H	0.1598	0.1422	100.0	95.85	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	906941	-1.06
Scandium	A	1517730	1427826	-5.92
Scandium	E	45344	46819	3.25
Scandium	H	422488	433588	2.63
Germanium	H	101123	98832	-2.27
Germanium	E	22511	21976	-2.37
Indium	A	1832636	1596458	-12.89
Bismuth	A	1296680	999596	-22.91
Yttrium	A	1904354	1745906	-8.32
Terbium	A	2253622	1966364	-12.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

:nst : MET06 IDF : 1.0
;eqnum : 67098941108 File : c09q0108 Time : 10-MAR-2007 02:54
:al : 67098941001 Caldate: 09-MAR-2007
;tandards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3146	100.0	96.33	ug/L	-4	10	
Barium	A	0.1380	0.0900	100.0	97.39	ug/L	-3	10	
Beryllium	A	0.3650	0.3389	100.0	93.37	ug/L	-7	10	
Cadmium	A	0.0932	0.0876	100.0	98.30	ug/L	-2	10	
Calcium	A	0.1141	0.0216	10000	9797	ug/L	-2	10	
Lead	A	0.7721	0.6453	100.0	99.17	ug/L	-1	10	
Magnesium	A	0.5954	0.5421	10000	10040	ug/L	0	10	
Molybdenum	A	0.2558	0.2243	100.0	94.60	ug/L	-5	10	
Potassium	A	1.8988	0.7140	10000	10010	ug/L	0	10	
Silver	A	0.4101	0.4102	100.0	103.4	ug/L	3	10	
Thallium	A	1.1178	0.8558	50.00	45.26	ug/L	-9	10	
Arsenic	E	0.6946	0.6477	100.0	99.04	ug/L	-1	10	
Chromium	E	4.2721	3.2139	100.0	97.38	ug/L	-3	10	
Cobalt	E	5.6878	5.0239	100.0	96.99	ug/L	-3	10	
Copper	E	12.730	7.6729	100.0	96.10	ug/L	-4	10	
Manganese	E	1.9519	1.6212	100.0	96.74	ug/L	-3	10	
Nickel	E	1.8551	1.3680	100.0	96.30	ug/L	-4	10	
Sodium	E	1.4736	0.6621	10000	9591	ug/L	-4	10	
Vanadium	E	3.2665	2.4901	100.0	96.07	ug/L	-4	10	
Zinc	E	5.8642	1.1431	100.0	97.43	ug/L	-3	10	
Iron	H	1.0653	0.8920	10000	9620	ug/L	-4	10	
Selenium	H	0.1598	0.1432	100.0	96.52	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902889	-1.50
Scandium	A	1517730	1401113	-7.68
Scandium	E	45344	42563	-6.13
Scandium	H	422488	416586	-1.40
Germanium	H	101123	94956	-6.10
Germanium	E	22511	20421	-9.28
Indium	A	1832636	1614720	-11.89
Bismuth	A	1296680	1141281	-11.98
Yttrium	A	1904354	1722254	-9.56
Terbium	A	2253622	2048074	-9.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67098941129 File : c09q0129 Time : 10-MAR-2007 04:47
al : 67098941001 Caldate: 09-MAR-2007
tandards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6496	10000	10140	ug/L	1	10	
Antimony	A	0.3359	0.3148	100.0	96.40	ug/L	-4	10	
Barium	A	0.1380	0.0916	100.0	99.16	ug/L	-1	10	
Beryllium	A	0.3650	0.3472	100.0	95.65	ug/L	-4	10	
Cadmium	A	0.0932	0.0881	100.0	98.86	ug/L	-1	10	
Calcium	A	0.1141	0.0216	10000	9816	ug/L	-2	10	
Lead	A	0.7721	0.6451	100.0	99.14	ug/L	-1	10	
Magnesium	A	0.5954	0.5462	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2295	100.0	96.80	ug/L	-3	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4116	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.8799	50.00	46.54	ug/L	-7	10	
Arsenic	E	0.6946	0.6545	100.0	100.1	ug/L	0	10	
Chromium	E	4.2721	3.2320	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0486	100.0	97.47	ug/L	-3	10	
Copper	E	12.730	7.7084	100.0	96.55	ug/L	-3	10	
Manganese	E	1.9519	1.6244	100.0	96.93	ug/L	-3	10	
Nickel	E	1.8551	1.3782	100.0	97.02	ug/L	-3	10	
Sodium	E	1.4736	0.6695	10000	9699	ug/L	-3	10	
Vanadium	E	3.2665	2.5089	100.0	96.80	ug/L	-3	10	
Zinc	E	5.8642	1.1481	100.0	97.86	ug/L	-2	10	
Iron	H	1.0653	0.8988	10000	9693	ug/L	-3	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	892003	-2.69
Scandium	A	1517730	1400371	-7.73
Scandium	E	45344	43765	-3.48
Scandium	H	422488	424248	0.42
Germanium	H	101123	96829	-4.25
Germanium	E	22511	20956	-6.91
Indium	A	1832636	1610854	-12.10
Bismuth	A	1296680	1101593	-15.05
Yttrium	A	1904354	1703888	-10.53
Terbium	A	2253622	2032098	-9.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941141 File : c09q0141 Time : 10-MAR-2007 05:51
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6544	10000	10220	ug/L	2	10	
Antimony	A	0.3359	0.3165	100.0	96.91	ug/L	-3	10	
Barium	A	0.1380	0.0926	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3447	100.0	94.95	ug/L	-5	10	
Cadmium	A	0.0932	0.0893	100.0	100.2	ug/L	0	10	
Calcium	A	0.1141	0.0219	10000	9973	ug/L	0	10	
Lead	A	0.7721	0.6463	100.0	99.32	ug/L	-1	10	
Magnesium	A	0.5954	0.5481	10000	10150	ug/L	2	10	
Molybdenum	A	0.2558	0.2280	100.0	96.16	ug/L	-4	10	
Potassium	A	1.8988	0.7275	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4162	100.0	104.9	ug/L	5	10	
Thallium	A	1.1178	0.9000	50.00	47.60	ug/L	-5	10	
Arsenic	E	0.6946	0.6445	100.0	98.56	ug/L	-1	10	
Chromium	E	4.2721	3.1910	100.0	96.68	ug/L	-3	10	
Cobalt	E	5.6878	4.9869	100.0	96.28	ug/L	-4	10	
Copper	E	12.730	7.5974	100.0	95.15	ug/L	-5	10	
Manganese	E	1.9519	1.6027	100.0	95.64	ug/L	-4	10	
Nickel	E	1.8551	1.3612	100.0	95.82	ug/L	-4	10	
Sodium	E	1.4736	0.6527	10000	9455	ug/L	-5	10	
Vanadium	E	3.2665	2.4771	100.0	95.57	ug/L	-4	10	
Zinc	E	5.8642	1.1282	100.0	96.14	ug/L	-4	10	
Iron	H	1.0653	0.8772	10000	9460	ug/L	-5	10	
Selenium	H	0.1598	0.1423	100.0	95.94	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902061	-1.59
Scandium	A	1517730	1405467	-7.40
Scandium	E	45344	44656	-1.52
Scandium	H	422488	428923	1.52
Germanium	H	101123	98288	-2.80
Germanium	E	22511	21386	-5.00
Indium	A	1832636	1598338	-12.78
Bismuth	A	1296680	1083588	-16.43
Yttrium	A	1904354	1727094	-9.31
Terbium	A	2253622	2021728	-10.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941165 File : c09q0165 Time : 10-MAR-2007 08:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6447	10000	10070	ug/L	1	10	
Antimony	A	0.3359	0.3126	100.0	95.73	ug/L	-4	10	
Barium	A	0.1380	0.0921	100.0	99.64	ug/L	0	10	
Beryllium	A	0.3650	0.3385	100.0	93.25	ug/L	-7	10	
Cadmium	A	0.0932	0.0881	100.0	98.87	ug/L	-1	10	
Calcium	A	0.1141	0.0217	10000	9857	ug/L	-1	10	
Lead	A	0.7721	0.6393	100.0	98.25	ug/L	-2	10	
Magnesium	A	0.5954	0.5385	10000	9971	ug/L	0	10	
Molybdenum	A	0.2558	0.2286	100.0	96.41	ug/L	-4	10	
Potassium	A	1.8988	0.7223	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4120	100.0	103.9	ug/L	4	10	
Thallium	A	1.1178	0.9042	50.00	47.82	ug/L	-4	10	
Arsenic	E	0.6946	0.6460	100.0	98.79	ug/L	-1	10	
Chromium	E	4.2721	3.2867	100.0	99.59	ug/L	0	10	
Cobalt	E	5.6878	5.1088	100.0	98.63	ug/L	-1	10	
Copper	E	12.730	7.6466	100.0	95.77	ug/L	-4	10	
Manganese	E	1.9519	1.6359	100.0	97.62	ug/L	-2	10	
Nickel	E	1.8551	1.4041	100.0	98.84	ug/L	-1	10	
Sodium	E	1.4736	0.6613	10000	9580	ug/L	-4	10	
Vanadium	E	3.2665	2.5532	100.0	98.51	ug/L	-1	10	
Zinc	E	5.8642	1.1318	100.0	96.46	ug/L	-4	10	
Iron	H	1.0653	0.8954	10000	9657	ug/L	-3	10	
Selenium	H	0.1598	0.1445	100.0	97.41	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	877950	-4.22
Scandium	A	1517730	1386999	-8.61
Scandium	E	45344	41993	-7.39
Scandium	H	422488	407840	-3.47
Germanium	H	101123	93340	-7.70
Germanium	E	22511	20616	-8.42
Indium	A	1832636	1594481	-13.00
Bismuth	A	1296680	1064061	-17.94
Yttrium	A	1904354	1696157	-10.93
Terbium	A	2253622	2011171	-10.76

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941184 File : c09q0184 Time : 10-MAR-2007 09:41
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6482	10000	10120	ug/L	1	10	
Antimony	A	0.3359	0.3123	100.0	95.62	ug/L	-4	10	
Barium	A	0.1380	0.0927	100.0	100.3	ug/L	0	10	
Beryllium	A	0.3650	0.3425	100.0	94.36	ug/L	-6	10	
Cadmium	A	0.0932	0.0877	100.0	98.40	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	10010	ug/L	0	10	
Lead	A	0.7721	0.6466	100.0	99.38	ug/L	-1	10	
Magnesium	A	0.5954	0.5479	10000	10140	ug/L	1	10	
Molybdenum	A	0.2558	0.2280	100.0	96.17	ug/L	-4	10	
Potassium	A	1.8988	0.7311	10000	10250	ug/L	3	10	
Silver	A	0.4101	0.4091	100.0	103.2	ug/L	3	10	
Thallium	A	1.1178	0.9135	50.00	48.32	ug/L	-3	10	
Arsenic	E	0.6946	0.6497	100.0	99.35	ug/L	-1	10	
Chromium	E	4.2721	3.2258	100.0	97.74	ug/L	-2	10	
Cobalt	E	5.6878	5.0421	100.0	97.34	ug/L	-3	10	
Copper	E	12.730	7.6852	100.0	96.26	ug/L	-4	10	
Manganese	E	1.9519	1.6235	100.0	96.88	ug/L	-3	10	
Nickel	E	1.8551	1.3739	100.0	96.72	ug/L	-3	10	
Sodium	E	1.4736	0.6556	10000	9497	ug/L	-5	10	
Vanadium	E	3.2665	2.5359	100.0	97.84	ug/L	-2	10	
Zinc	E	5.8642	1.1397	100.0	97.14	ug/L	-3	10	
Iron	H	1.0653	0.8807	10000	9498	ug/L	-5	10	
Selenium	H	0.1598	0.1440	100.0	97.11	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	860804	-6.09
Scandium	A	1517730	1351596	-10.95
Scandium	E	45344	42354	-6.59
Scandium	H	422488	401343	-5.00
Germanium	H	101123	91432	-9.58
Germanium	E	22511	20368	-9.52
Indium	A	1832636	1567188	-14.48
Bismuth	A	1296680	1025975	-20.88
Yttrium	A	1904354	1661744	-12.74
Terbium	A	2253622	1953400	-13.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941199 File : c09q0199 Time : 10-MAR-2007 11:02
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6474	10000	10110	ug/L	1	10	
Antimony	A	0.3359	0.3139	100.0	96.12	ug/L	-4	10	
Barium	A	0.1380	0.0933	100.0	101.0	ug/L	1	10	
Beryllium	A	0.3650	0.3363	100.0	92.66	ug/L	-7	10	
Cadmium	A	0.0932	0.0890	100.0	99.82	ug/L	0	10	
Calcium	A	0.1141	0.0220	10000	10000	ug/L	0	10	
Lead	A	0.7721	0.6465	100.0	99.35	ug/L	-1	10	
Magnesium	A	0.5954	0.5405	10000	10010	ug/L	0	10	
Molybdenum	A	0.2558	0.2296	100.0	96.84	ug/L	-3	10	
Potassium	A	1.8988	0.7303	10000	10240	ug/L	2	10	
Silver	A	0.4101	0.4118	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.9148	50.00	48.38	ug/L	-3	10	
Arsenic	E	0.6946	0.6505	100.0	99.48	ug/L	-1	10	
Chromium	E	4.2721	3.2322	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0229	100.0	96.97	ug/L	-3	10	
Copper	E	12.730	7.6274	100.0	95.53	ug/L	-4	10	
Manganese	E	1.9519	1.6365	100.0	97.66	ug/L	-2	10	
Nickel	E	1.8551	1.3697	100.0	96.42	ug/L	-4	10	
Sodium	E	1.4736	0.6520	10000	9444	ug/L	-6	10	
Vanadium	E	3.2665	2.5242	100.0	97.39	ug/L	-3	10	
Zinc	E	5.8642	1.1393	100.0	97.10	ug/L	-3	10	
Iron	H	1.0653	0.9014	10000	9721	ug/L	-3	10	
Selenium	H	0.1598	0.1438	100.0	96.97	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	864908	-5.64
Scandium	A	1517730	1350162	-11.04
Scandium	E	45344	42695	-5.84
Scandium	H	422488	393397	-6.89
Germanium	H	101123	91024	-9.99
Germanium	E	22511	20572	-8.61
Indium	A	1832636	1550003	-15.42
Bismuth	A	1296680	1023495	-21.07
Yttrium	A	1904354	1653281	-13.18
Terbium	A	2253622	1946954	-13.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941224 File : c09q0224 Time : 10-MAR-2007 13:17
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6411	10000	10010	ug/L	0	10	
Antimony	A	0.3359	0.3184	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0936	100.0	101.3	ug/L	1	10	
Beryllium	A	0.3650	0.3456	100.0	95.20	ug/L	-5	10	
Cadmium	A	0.0932	0.0885	100.0	99.34	ug/L	-1	10	
Calcium	A	0.1141	0.0218	10000	9909	ug/L	-1	10	
Lead	A	0.7721	0.6388	100.0	98.18	ug/L	-2	10	
Magnesium	A	0.5954	0.5365	10000	9933	ug/L	-1	10	
Molybdenum	A	0.2558	0.2299	100.0	96.98	ug/L	-3	10	
Potassium	A	1.8988	0.7272	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4129	100.0	104.1	ug/L	4	10	
Thallium	A	1.1178	0.8941	50.00	47.29	ug/L	-5	10	
Arsenic	E	0.6946	0.6460	100.0	98.78	ug/L	-1	10	
Chromium	E	4.2721	3.1376	100.0	95.06	ug/L	-5	10	
Cobalt	E	5.6878	4.8490	100.0	93.61	ug/L	-6	10	
Copper	E	12.730	7.4539	100.0	93.35	ug/L	-7	10	
Manganese	E	1.9519	1.5907	100.0	94.92	ug/L	-5	10	
Nickel	E	1.8551	1.3302	100.0	93.64	ug/L	-6	10	
Sodium	E	1.4736	0.6290	10000	9110	ug/L	-9	10	
Vanadium	E	3.2665	2.4374	100.0	94.03	ug/L	-6	10	
Zinc	E	5.8642	1.1170	100.0	95.18	ug/L	-5	10	
Iron	H	1.0653	0.8878	10000	9575	ug/L	-4	10	
Selenium	H	0.1598	0.1436	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	837171	-8.67
Scandium	A	1517730	1374157	-9.46
Scandium	E	45344	44698	-1.43
Scandium	H	422488	402269	-4.79
Germanium	H	101123	93003	-8.03
Germanium	E	22511	21285	-5.44
Indium	A	1832636	1584817	-13.52
Bismuth	A	1296680	1070250	-17.46
Yttrium	A	1904354	1683860	-11.58
Terbium	A	2253622	2002425	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941236 File : c09q0236 Time : 10-MAR-2007 14:21
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6402	10000	9995	ug/L	0	10	
Antimony	A	0.3359	0.3123	100.0	95.63	ug/L	-4	10	
Barium	A	0.1380	0.0938	100.0	101.6	ug/L	2	10	
Beryllium	A	0.3650	0.3433	100.0	94.58	ug/L	-5	10	
Cadmium	A	0.0932	0.0876	100.0	98.34	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9944	ug/L	-1	10	
Lead	A	0.7721	0.6340	100.0	97.44	ug/L	-3	10	
Magnesium	A	0.5954	0.5392	10000	9983	ug/L	0	10	
Molybdenum	A	0.2558	0.2285	100.0	96.39	ug/L	-4	10	
Potassium	A	1.8988	0.7249	10000	10170	ug/L	2	10	
Silver	A	0.4101	0.4089	100.0	103.1	ug/L	3	10	
Thallium	A	1.1178	0.8683	50.00	45.92	ug/L	-8	10	
Arsenic	E	0.6946	0.6566	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.1900	100.0	96.65	ug/L	-3	10	
Cobalt	E	5.6878	4.9703	100.0	95.96	ug/L	-4	10	
Copper	E	12.730	7.4873	100.0	93.77	ug/L	-6	10	
Manganese	E	1.9519	1.6423	100.0	98.00	ug/L	-2	10	
Nickel	E	1.8551	1.3516	100.0	95.15	ug/L	-5	10	
Sodium	E	1.4736	0.6475	10000	9378	ug/L	-6	10	
Vanadium	E	3.2665	2.5091	100.0	96.81	ug/L	-3	10	
Zinc	E	5.8642	1.1323	100.0	96.49	ug/L	-4	10	
Iron	H	1.0653	0.9100	10000	9814	ug/L	-2	10	
Selenium	H	0.1598	0.1443	100.0	97.30	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	843785	-7.95
Scandium	A	1517730	1361270	-10.31
Scandium	E	45344	44250	-2.41
Scandium	H	422488	395586	-6.37
Germanium	H	101123	91504	-9.51
Germanium	E	22511	21253	-5.59
Indium	A	1832636	1578633	-13.86
Bismuth	A	1296680	1061930	-18.10
Yttrium	A	1904354	1668555	-12.38
Terbium	A	2253622	1965560	-12.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941018 File : c09q0018 Time : 09-MAR-2007 18:44
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01955]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01321]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005369]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	981613	7.09
Scandium	A	1517730	1476487	-2.72
Scandium	E	45344	48015	5.89
Scandium	H	422488	440455	4.25
Germanium	H	101123	102714	1.57
Germanium	E	22511	22945	1.93
Indium	A	1832636	1719452	-6.18
Bismuth	A	1296680	1139959	-12.09
Yttrium	A	1904354	1797451	-5.61
Terbium	A	2253622	2047526	-9.15

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941049 File : c09q0049 Time : 09-MAR-2007 21:40
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02630]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03014]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	960350	4.77
Scandium	A	1517730	1481310	-2.40
Scandium	E	45344	46876	3.38
Scandium	H	422488	431598	2.16
Germanium	H	101123	100676	-0.44
Germanium	E	22511	22327	-0.82
Indium	A	1832636	1735890	-5.28
Bismuth	A	1296680	1191218	-8.13
Yttrium	A	1904354	1834279	-3.68
Terbium	A	2253622	2106807	-6.51

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941070 File : c09q0070 Time : 09-MAR-2007 23:32
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03474]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02445]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02347]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01432]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.09417]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	972695	6.12
Scandium	A	1517730	1482231	-2.34
Scandium	E	45344	48846	7.72
Scandium	H	422488	439316	3.98
Germanium	H	101123	101199	0.08
Germanium	E	22511	23094	2.59
Indium	A	1832636	1729036	-5.65
Bismuth	A	1296680	1149784	-11.33
Yttrium	A	1904354	1823495	-4.25
Terbium	A	2253622	2056781	-8.73

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941086 File : c09q0086 Time : 10-MAR-2007 00:57
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01420]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01617]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06679]	0.1000	0.01127	ug/L	!ib
Iron	H	[6.752]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05645]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	956334	4.33
Scandium	A	1517730	1439257	-5.17
Scandium	E	45344	47503	4.76
Scandium	H	422488	447019	5.81
Germanium	H	101123	103188	2.04
Germanium	E	22511	22596	0.38
Indium	A	1832636	1677042	-8.49
Bismuth	A	1296680	1137040	-12.31
Yttrium	A	1904354	1765145	-7.31
Terbium	A	2253622	2002557	-11.14

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941112 File : c09q0112 Time : 10-MAR-2007 03:15
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.304]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01359]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002636]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	[8.887]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03640]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	924797	0.89
Scandium	A	1517730	1376821	-9.28
Scandium	E	45344	43697	-3.63
Scandium	H	422488	415130	-1.74
Germanium	H	101123	96819	-4.26
Germanium	E	22511	21189	-5.87
Indium	A	1832636	1642742	-10.36
Bismuth	A	1296680	1174900	-9.39
Yttrium	A	1904354	1721832	-9.58
Terbium	A	2253622	2056685	-8.74

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941131 File : c09q0131 Time : 10-MAR-2007 04:58
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.272]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1030	0.1000	0	ug/L	ib ***
Zinc	E	[0.01550]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	931971	1.67
Scandium	A	1517730	1401473	-7.66
Scandium	E	45344	44948	-0.87
Scandium	H	422488	427514	1.19
Germanium	H	101123	99355	-1.75
Germanium	E	22511	21712	-3.55
Indium	A	1832636	1658452	-9.50
Bismuth	A	1296680	1156128	-10.84
Yttrium	A	1904354	1730428	-9.13
Terbium	A	2253622	2037464	-9.59

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941143 File : c09q0143 Time : 10-MAR-2007 06:02
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005149]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1026	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01709]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	934611	1.96
Scandium	A	1517730	1381267	-8.99
Scandium	E	45344	45098	-0.54
Scandium	H	422488	405569	-4.00
Germanium	H	101123	95993	-5.07
Germanium	E	22511	21660	-3.78
Indium	A	1832636	1649358	-10.00
Bismuth	A	1296680	1134689	-12.49
Yttrium	A	1904354	1705681	-10.43
Terbium	A	2253622	2028289	-10.00

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941168 File : c09q0168 Time : 10-MAR-2007 08:16
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006930]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01414]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.754]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	907910	-0.95
Scandium	A	1517730	1373491	-9.50
Scandium	E	45344	43250	-4.62
Scandium	H	422488	410259	-2.89
Germanium	H	101123	95168	-5.89
Germanium	E	22511	20961	-6.88
Indium	A	1832636	1620162	-11.59
Bismuth	A	1296680	1145144	-11.69
Yttrium	A	1904354	1687177	-11.40
Terbium	A	2253622	2010187	-10.80

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941186 File : c09q0186 Time : 10-MAR-2007 09:52
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03559]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.192]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.831]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008371]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	911932	-0.51
Scandium	A	1517730	1387391	-8.59
Scandium	E	45344	44235	-2.45
Scandium	H	422488	414992	-1.77
Germanium	H	101123	96866	-4.21
Germanium	E	22511	21633	-3.90
Indium	A	1832636	1653626	-9.77
Bismuth	A	1296680	1169511	-9.81
Yttrium	A	1904354	1707120	-10.36
Terbium	A	2253622	2039560	-9.50

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941201 File : c09q0201
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 11:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009775]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	887722	-3.15
Scandium	A	1517730	1370772	-9.68
Scandium	E	45344	45085	-0.57
Scandium	H	422488	410915	-2.74
Germanium	H	101123	96368	-4.70
Germanium	E	22511	21710	-3.56
Indium	A	1832636	1630628	-11.02
Bismuth	A	1296680	1121425	-13.52
Yttrium	A	1904354	1710361	-10.19
Terbium	A	2253622	1982461	-12.03

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941227 File : c09q0227 Time : 10-MAR-2007 13:33
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.264]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	868425	-5.26
Scandium	A	1517730	1350039	-11.05
Scandium	E	45344	44352	-2.19
Scandium	H	422488	385028	-8.87
Germanium	H	101123	90590	-10.42
Germanium	E	22511	21655	-3.80
Indium	A	1832636	1609789	-12.16
Bismuth	A	1296680	1100157	-15.16
Yttrium	A	1904354	1653506	-13.17
Terbium	A	2253622	1965147	-12.80

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941239 File : c09q0239 Time : 10-MAR-2007 14:38
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.682]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	871768	-4.89
Scandium	A	1517730	1336030	-11.97
Scandium	E	45344	45051	-0.65
Scandium	H	422488	390025	-7.68
Germanium	H	101123	92251	-8.77
Germanium	E	22511	21613	-3.99
Indium	A	1832636	1593414	-13.05
Bismuth	A	1296680	1085987	-16.25
Yttrium	A	1904354	1648046	-13.46
Terbium	A	2253622	1958145	-13.11

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941020 File : c09q0020 Time : 09-MAR-2007 18:55
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04119]	0.1000	ug/L	
Barium	A	0.8910	0.1000	ug/L	
Beryllium	A	[0.01908]	0.1000	ug/L	
Cadmium	A	1.182	0.1000	ug/L	
Lead	A	0.4316	0.1000	ug/L	
Silver	A	0.1913	0.1000	ug/L	
Thallium	A	[0.01043]	0.05000	ug/L	
Arsenic	E	0.2169	0.1000	ug/L	
Chromium	E	1.352	0.1000	ug/L	
Cobalt	E	0.1939	0.1000	ug/L	
Copper	E	1.203	0.1000	ug/L	
Manganese	E	0.7121	0.1000	ug/L	
Nickel	E	1.102	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.186	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92200	ug/L	92
Calcium	A	300000	283800	ug/L	95
Magnesium	A	100000	87740	ug/L	88
Molybdenum	A	2000	1904	ug/L	95
Potassium	A	100000	93880	ug/L	94
Sodium	E	250000	233700	ug/L	93
Iron	H	250000	227000	ug/L	91

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	648481	-29.25
Scandium	A	1517730	1232034	-18.82
Scandium	E	45344	37927	-16.36
Scandium	H	422488	382036	-9.57
Germanium	H	101123	82401	-18.51
Germanium	E	22511	18306	-18.68
Indium	A	1832636	1405228	-23.32
Bismuth	A	1296680	853887	-34.15
Yttrium	A	1904354	1563770	-17.88
Terbium	A	2253622	1834242	-18.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941021 File : c09q0021 Time : 09-MAR-2007 19:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100600	ug/L	1		
Cadmium	A	100.0	104.3	ug/L	4	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	96430	ug/L	-4		
Molybdenum	A	2000	2117	ug/L	6		
Potassium	A	100000	104600	ug/L	5		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	112.5	ug/L	13	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	204.3	ug/L	2	20	
Copper	E	200.0	189.2	ug/L	-5	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	198.2	ug/L	-1	20	
Sodium	E	250000	264600	ug/L	6		
Vanadium	E	200.0	219.0	ug/L	10	20	
Zinc	E	100.0	95.94	ug/L	-4	20	
Iron	H	250000	255700	ug/L	2		
Selenium	H	100.0	104.2	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	360675	-14.63
Scandium	A	1517730	1155038	-23.90
Scandium	E	45344	34371	-24.20
Germanium	H	101123	78650	-22.22
Germanium	E	22511	16695	-25.83
Indium	A	1832636	1377995	-24.81
Yttrium	A	1904354	1538086	-19.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941089 File : c09q0089 Time : 10-MAR-2007 01:13
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03290]	0.1000	ug/L	
Barium	A	0.9061	0.1000	ug/L	
Beryllium	A	[0.004327]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4286	0.1000	ug/L	
Silver	A	0.1833	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1964	0.1000	ug/L	
Chromium	E	1.316	0.1000	ug/L	
Cobalt	E	0.1764	0.1000	ug/L	
Copper	E	1.164	0.1000	ug/L	
Manganese	E	0.7559	0.1000	ug/L	
Nickel	E	1.117	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.161	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93020	ug/L	93
Calcium	A	300000	284500	ug/L	95
Magnesium	A	100000	88550	ug/L	89
Molybdenum	A	2000	1864	ug/L	93
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	233900	ug/L	94
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	623862	-31.94
Scandium	A	1517730	1236772	-18.51
Scandium	E	45344	39129	-13.71
Scandium	H	422488	393799	-6.79
Germanium	H	101123	84184	-16.75
Germanium	E	22511	18594	-17.40
Indium	A	1832636	1368055	-25.35
Bismuth	A	1296680	819714	-36.78
Yttrium	A	1904354	1557710	-18.20
Terbium	A	2253622	1742704	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941090 File : c09q0090 Time : 10-MAR-2007 01:19
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99800	ug/L	0		
Cadmium	A	100.0	100.9	ug/L	1	20	
Calcium	A	300000	317200	ug/L	6		
Magnesium	A	100000	94790	ug/L	-5		
Molybdenum	A	2000	2061	ug/L	3		
Potassium	A	100000	103000	ug/L	3		
Silver	A	50.00	45.27	ug/L	-9	20	
Arsenic	E	100.0	110.8	ug/L	11	20	
Chromium	E	200.0	213.7	ug/L	7	20	
Cobalt	E	200.0	201.6	ug/L	1	20	
Copper	E	200.0	189.5	ug/L	-5	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	196.9	ug/L	-2	20	
Sodium	E	250000	266900	ug/L	7		
Vanadium	E	200.0	218.5	ug/L	9	20	
Zinc	E	100.0	95.65	ug/L	-4	20	
Iron	H	250000	250100	ug/L	0		
Selenium	H	100.0	103.7	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	377102	-10.74
Scandium	A	1517730	1167169	-23.10
Scandium	E	45344	35564	-21.57
Germanium	H	101123	80404	-20.49
Germanium	E	22511	17120	-23.95
Indium	A	1832636	1376611	-24.88
Yttrium	A	1904354	1543286	-18.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941146 File : c09q0146 Time : 10-MAR-2007 06:18
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03552]	0.1000	ug/L	
Barium	A	0.8836	0.1000	ug/L	
Beryllium	A	[0.004092]	0.1000	ug/L	
Cadmium	A	1.389	0.1000	ug/L	
Lead	A	0.4272	0.1000	ug/L	
Silver	A	0.1743	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1982	0.1000	ug/L	
Chromium	E	1.308	0.1000	ug/L	
Cobalt	E	0.1737	0.1000	ug/L	
Copper	E	1.218	0.1000	ug/L	
Manganese	E	0.7907	0.1000	ug/L	
Nickel	E	1.129	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.209	0.1000	ug/L	
Selenium	H	[0.04071]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91160	ug/L	91
Calcium	A	300000	280800	ug/L	94
Magnesium	A	100000	86910	ug/L	87
Molybdenum	A	2000	1830	ug/L	92
Potassium	A	100000	93540	ug/L	94
Sodium	E	250000	229700	ug/L	92
Iron	H	250000	221000	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	609904	-33.46
Scandium	A	1517730	1241471	-18.20
Scandium	E	45344	39241	-13.46
Scandium	H	422488	393129	-6.95
Germanium	H	101123	83730	-17.20
Germanium	E	22511	18443	-18.07
Indium	A	1832636	1380517	-24.67
Bismuth	A	1296680	834170	-35.67
Yttrium	A	1904354	1579303	-17.07
Terbium	A	2253622	1770798	-21.42

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941147 File : c09q0147 Time : 10-MAR-2007 06:23
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97750	ug/L	-2		
Cadmium	A	100.0	99.56	ug/L	0	20	
Calcium	A	300000	314400	ug/L	5		
Magnesium	A	100000	92990	ug/L	-7		
Molybdenum	A	2000	2025	ug/L	1		
Potassium	A	100000	102300	ug/L	2		
Silver	A	50.00	44.82	ug/L	-10	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	212.3	ug/L	6	20	
Cobalt	E	200.0	201.7	ug/L	1	20	
Copper	E	200.0	189.0	ug/L	-6	20	
Manganese	E	200.0	202.3	ug/L	1	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	258400	ug/L	3		
Vanadium	E	200.0	217.7	ug/L	9	20	
Zinc	E	100.0	94.73	ug/L	-5	20	
Iron	H	250000	246800	ug/L	-1		
Selenium	H	100.0	105.0	ug/L	5	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	373132	-11.68
Scandium	A	1517730	1174322	-22.63
Scandium	E	45344	35245	-22.27
Germanium	H	101123	78759	-22.12
Germanium	E	22511	16937	-24.76
Indium	A	1832636	1378645	-24.77
Yttrium	A	1904354	1545629	-18.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941204 File : c09q0204 Time : 10-MAR-2007 11:29
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03299]	0.1000	ug/L	
Barium	A	0.9235	0.1000	ug/L	
Beryllium	A	[0.01135]	0.1000	ug/L	
Cadmium	A	1.459	0.1000	ug/L	
Lead	A	0.4326	0.1000	ug/L	
Silver	A	0.1740	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2265	0.1000	ug/L	
Chromium	E	1.284	0.1000	ug/L	
Cobalt	E	0.1813	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.7650	0.1000	ug/L	
Nickel	E	1.079	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.106	0.1000	ug/L	
Selenium	H	[0.005864]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93090	ug/L	93
Calcium	A	300000	285200	ug/L	95
Magnesium	A	100000	88160	ug/L	88
Molybdenum	A	2000	1839	ug/L	92
Potassium	A	100000	94450	ug/L	94
Sodium	E	250000	222900	ug/L	89
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	599910	-34.55
Scandium	A	1517730	1191263	-21.51
Scandium	E	45344	39252	-13.44
Scandium	H	422488	370202	-12.38
Germanium	H	101123	79661	-21.22
Germanium	E	22511	18466	-17.97
Indium	A	1832636	1345356	-26.59
Bismuth	A	1296680	827534	-36.18
Yttrium	A	1904354	1528690	-19.73
Terbium	A	2253622	1742765	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67098941205 File : c09q0205
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 10-MAR-2007 11:34

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99200	ug/L	-1		
Cadmium	A	100.0	100.8	ug/L	1	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93600	ug/L	-6		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	103900	ug/L	4		
Silver	A	50.00	45.81	ug/L	-8	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	199.3	ug/L	0	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	201.8	ug/L	1	20	
Nickel	E	200.0	192.6	ug/L	-4	20	
Sodium	E	250000	257100	ug/L	3		
Vanadium	E	200.0	216.5	ug/L	8	20	
Zinc	E	100.0	92.80	ug/L	-7	20	
Iron	H	250000	244900	ug/L	-2		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	357716	-15.33
Scandium	A	1517730	1134866	-25.23
Scandium	E	45344	35275	-22.21
Germanium	H	101123	76421	-24.43
Germanium	E	22511	17153 .	-23.80
Indium	A	1832636	1337539	-27.02
Yttrium	A	1904354	1493682	-21.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941241 File : c09q0241 Time : 10-MAR-2007 14:48
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04069]	0.1000	ug/L	
Barium	A	0.9376	0.1000	ug/L	
Beryllium	A	[0.01409]	0.1000	ug/L	
Cadmium	A	1.455	0.1000	ug/L	
Lead	A	0.4407	0.1000	ug/L	
Silver	A	0.1966	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2228	0.1000	ug/L	
Chromium	E	1.292	0.1000	ug/L	
Cobalt	E	0.1760	0.1000	ug/L	
Copper	E	1.153	0.1000	ug/L	
Manganese	E	0.7582	0.1000	ug/L	
Nickel	E	1.069	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.073	0.1000	ug/L	
Selenium	H	[0.01115]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90460	ug/L	90
Calcium	A	300000	281600	ug/L	94
Magnesium	A	100000	86780	ug/L	87
Molybdenum	A	2000	1848	ug/L	92
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	225600	ug/L	90
Iron	H	250000	221300	ug/L	89

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	581542	-36.56
Scandium	A	1517730	1188280	-21.71
Scandium	E	45344	38831	-14.36
Scandium	H	422488	360357	-14.71
Germanium	H	101123	77698	-23.16
Germanium	E	22511	18316	-18.63
Indium	A	1832636	1350980	-26.28
Bismuth	A	1296680	805630	-37.87
Yttrium	A	1904354	1518776	-20.25
Terbium	A	2253622	1735412	-22.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941242 File : c09q0242 Time : 10-MAR-2007 14:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98070	ug/L	-2		
Cadmium	A	100.0	102.0	ug/L	2	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93340	ug/L	-7		
Molybdenum	A	2000	2063	ug/L	3		
Potassium	A	100000	102700	ug/L	3		
Silver	A	50.00	45.92	ug/L	-8	20	
Arsenic	E	100.0	110.5	ug/L	11	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	198.5	ug/L	-1	20	
Copper	E	200.0	183.1	ug/L	-8	20	
Manganese	E	200.0	203.3	ug/L	2	20	
Nickel	E	200.0	191.8	ug/L	-4	20	
Sodium	E	250000	255700	ug/L	2		
Vanadium	E	200.0	216.4	ug/L	8	20	
Zinc	E	100.0	94.32	ug/L	-6	20	
Iron	H	250000	248400	ug/L	-1		
Selenium	H	100.0	103.9	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	341093	-19.27
Scandium	A	1517730	1130423	-25.52
Scandium	E	45344	35247	-22.27
Germanium	H	101123	73516	-27.30
Germanium	E	22511	17085	-24.10
Indium	A	1832636	1317155	-28.13
Yttrium	A	1904354	1464552	-23.09

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	916634	1517730	45344	422488	101123	22511	1832636	1296680	1904354	2253622
		LOWER LIMIT	274990	455319	13603	126746	30337	6753	549791	389004	571306	676087
		UPPER LIMIT	1099961	1821276	54413	506985	121347	27013	2199163	1556016	2285225	2704346
018	ICB		981613	1476487	48015	440455	102714	22945	1719452	1139959	1797451	2047526
020	ICSA		648481	1232034	37927	382036	82401	18306	1405228	853887	1563770	1834242
021	ICSAB		582795	1155038	34371	360675	78650	16695	1377995	852495	1538086	1858666
026	BLANK	QC378336	863017	1374446	40965	392999	94008	21107	1741851	1286874	1773795	2195119
027	BS	QC378337	903666	1450057	41163	388071	92268	20779	1801605	1302872	1850641	2246110
028	BSD	QC378338	891566	1424703	42379	393068	92980	21472	1743629	1260863	1790909	2194284
031	BLANK	QC378414	773387	1276190	36872	361754	96338	21188	1651727	1282988	1687273	2200427
032	BLANK	QC378443	789285	1298089	37453	363119	94068	20836	1700706	1299604	1726652	2223508
033	MSS	193165-002	963383	1545789	46469	430915	98342	22091	1775714	1244051	1946540	2199596
034	SER	QC378341	942026	1458038	45757	418392	97918	22288	1725568	1217037	1826667	2130441
035	MS	QC378339	936660	1499541	47583	427121	96530	22532	1715638	1173677	1889410	2105941
046	CCV		905174	1441531	45193	420497	96743	21533	1642773	1088318	1748927	2043585
049	CCB		960350	1481310	46876	431598	100676	22327	1735890	1191219	1834279	2106807
055	PDS	QC378342	932148	1530176	46941	434367	96736	21744	1669597	1089202	1883003	2066072
056	SAMPLE	193165-001	952322	1503979	48239	437535	99049	22729	1705989	1152210	1870686	2074860
057	SAMPLE	193165-003	955852	1538633	48962	454552	102101	22982	1713938	1125330	1917433	2039358
058	SAMPLE	193165-004	967423	1611432	49819	451634	101145	23117	1771979	1175909	1986668	2109743
059	SAMPLE	193165-005	958524	1547831	50371	454257	101846	23535	1725335	1146647	1912778	2053880
060	SAMPLE	193165-006	998493	1589246	50471	451513	100990	23296	1742402	1149353	1949706	2087054
061	SAMPLE	193165-007	985003	1554322	50500	445054	100327	23450	1728953	1154781	1938419	2071529
062	SAMPLE	193165-008	966327	1544798	49344	436334	99819	23055	1711720	1122555	1888204	2043452
063	SAMPLE	193165-009	974905	1554277	50365	450694	100022	22841	1699669	1118344	1920211	2016418
068	CCV		913999	1455726	46412	435589	100000	21916	1638663	1053580	1768625	2008550
070	CCB		972695	1482231	48846	439316	101199	23094	1729036	1149784	1823495	2056781
073	SAMPLE	193165-010	972938	1575158	50135	449325	100503	23182	1720829	1157854	1929263	2050582
074	SAMPLE	193165-011	975873	1542417	50568	452792	102354	23468	1694315	1119077	1918120	2037129
075	SAMPLE	193202-001	931098	1425498	46924	441100	95914	21109	1540175	988222	1664166	1919982
076	SAMPLE	193202-002	892840	1408129	46358	442730	95059	20576	1514132	966987	1645724	1892526
077	SAMPLE	193202-003	884224	1409245	46402	436810	94649	21024	1528446	971327	1647355	1882595
078	SAMPLE	193202-004	979622	1536923	50318	455917	98767	22488	1643810	1056711	1884832	1984488
079	SAMPLE	193284-002	985109	1563781	50390	461985	99286	22565	1666916	1120661	1902848	2022684
084	CCV		906941	1427826	46819	433588	98832	21976	1596458	999596	1745906	1966364
086	CCB		956334	1439257	47503	447019	103188	22596	1677042	1137040	1765145	2002557
089	ICSA		623862	1236772	39129	393799	84184	18594	1368055	819714	1557710	1742704
090	ICSAB		561457	1167169	35564	377102	80404	17120	1376611	843178	1543286	1807188
095	BS	QC378415	951663	1540367	46965	435249	99965	22851	1765502	1196154	1891418	2190349
096	BSD	QC378416	972110	1564246	48675	450177	102955	23095	1775978	1174581	1907655	2180968
098	MSS	193253-001	900374	1470155	44821	426156	98578	22048	1696248	1112262	1798822	2090852
099	SER	QC378419	914606	1460055	45132	432481	101180	22233	1727773	1174234	1788889	2087437
100	MS	QC378417	895098	1430428	44507	428004	99395	21837	1649439	1121106	1760805	2075003
101	MSD	QC378418	885257	1434266	45009	427402	99071	21845	1667025	1121793	1753445	2057510
102	PDS	QC378420	847821	1411196	43324	423901	96610	20891	1630536	1085080	1742969	2056899
103	SAMPLE	193187-001	918129	1435477	44353	420441	99735	21884	1725870	1224680	1776904	2136736
108	CCV		902889	1401113	42563	416586	94956	20421	1614720	1141281	1722254	2048074
112	CCB		924797	1376821	43697	415130	96819	21189	1642742	1174900	1721832	2056685
113	SAMPLE	193187-002	915561	1411896	44401	418141	97508	21510	1638461	1154585	1730795	2048808
114	SAMPLE	193187-003	933709	1422558	44410	429762	100039	21633	1664179	1200909	1728641	2057104
117	SAMPLE	193199-001	929726	1419568	44602	429071	99163	21549	1664107	1146977	1737917	2052217

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07
Sequence : MET06 c09q0

Reference: c09q0004
Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
118	SAMPLE	193199-002	932691	1390850	43974	431171	99853	21510	1655169	1172327	1691733	2046235
119	SAMPLE	193199-003	936944	1414304	44140	417129	96955	21489	1648685	1155529	1705058	2032738
120	SAMPLE	193199-001	946352	1422379	45055	421941	97812	21548	1648097	1153561	1722060	2049120
121	SAMPLE	193199-002	942567	1433867	44565	421458	98054	21584	1663931	1163545	1699936	2039926
122	SAMPLE	193199-003	952437	1446828	45382	430507	100087	21696	1676750	1175834	1739698	2073121
123	SAMPLE	193205-001	949568	1431059	45483	436405	101828	22282	1667530	1148422	1726428	2053644
124	SAMPLE	193205-001	948968	1437818	44929	433466	100551	22049	1681861	1165414	1721645	2079978
129	CCV		892003	1400371	43765	424248	96829	20956	1610854	1101593	1703888	2032098
131	CCB		931971	1401473	44948	427514	99355	21712	1658452	1156128	1730428	2037464
134	SAMPLE	193243-001	947965	1433971	46256	435667	100466	22327	1684774	1162270	1760832	2067419
135	SAMPLE	193243-002	957304	1423797	45498	429285	99618	21958	1663899	1147299	1721760	2048812
136	SAMPLE	193253-002	917746	1414906	45173	432833	99044	21785	1603894	1074395	1699662	1987469
141	CCV		902061	1405467	44656	428923	98288	21386	1598338	1083588	1727094	2021728
143	CCB		934611	1381267	45098	405569	95993	21660	1649358	1134689	1705681	2028289
146	ICSA		609904	1241471	39241	393129	83730	18443	1380517	834170	1579303	1770798
147	ICSAB		537186	1174322	35245	373132	78759	16937	1378645	849147	1545629	1807773
152	BS	QC378444	774667	1349726	37917	375806	90392	19624	1623415	1150738	1732090	2155849
153	BSD	QC378445	780202	1356481	38136	372594	87668	19413	1624802	1134141	1732764	2106738
155	MSS	193217-011	876175	1397755	42642	406502	96903	21306	1693493	1149050	1734483	2067021
156	SER	QC378448	910334	1423010	43940	418688	98954	21933	1713381	1169658	1770301	2086307
157	MS	QC378446	878725	1398327	42721	405316	94597	20828	1637704	1135399	1734896	2057123
158	MSD	QC378447	879618	1401030	42650	400368	94637	21009	1649654	1146196	1709242	2046195
159	PDS	QC378449	848479	1389680	41278	400627	92227	20273	1608487	1054667	1714680	2038945
160	MSS	193217-021	874711	1412957	43902	412116	96445	21443	1658392	1135002	1733128	2038837
165	CCV		877950	1386999	41993	407840	93340	20616	1594481	1064061	1696157	2011171
168	CCB		907910	1373491	43250	410259	95168	20961	1620162	1145144	1687177	2010187
170	MS	QC378508	912084	1422763	43430	389480	92155	21390	1645528	1128938	1729205	2048852
171	MSD	QC378509	902677	1458695	43230	412918	95654	21056	1677263	1145594	1768214	2092280
172	SAMPLE	193055-023	914402	1434056	44367	419669	97864	21640	1641566	1125705	1733193	2039891
173	SAMPLE	193137-005	916075	1399875	43942	414996	97876	21409	1631266	1130292	1704359	2029941
174	SAMPLE	193217-010	903153	1397147	46164	402020	94234	22237	1623538	1138800	1686493	2016948
175	SAMPLE	193217-012	929033	1369759	42723	398156	93314	21027	1614797	1130902	1667710	1999508
176	SAMPLE	193217-014	928068	1419487	43460	401097	93310	21296	1651660	1154989	1723765	2060619
177	SAMPLE	193217-015	906972	1367926	42440	399515	93425	20638	1591180	1115691	1653183	1990920
178	SAMPLE	193217-016	911090	1396387	43884	412339	95839	21268	1612838	1125303	1691322	2020074
179	SAMPLE	193217-017	873427	1316326	43497	405946	94980	21139	1553156	1075831	1593753	1916399
184	CCV		860804	1351596	42354	401343	91432	20368	1567188	1025975	1661744	1953400
186	CCB		911932	1387391	44235	414992	96866	21633	1653626	1169511	1707120	2039560
189	SAMPLE	193217-018	859967	1381365	43631	403383	94147	21348	1588849	1046023	1668635	1947997
190	SAMPLE	193217-019	868431	1370522	43518	410454	95686	21190	1596118	1090920	1658624	1968888
191	SAMPLE	193217-020	895527	1384994	44484	407285	95147	21679	1588874	1066025	1674548	1966732
192	SAMPLE	193217-022	857166	1298783	44247	414967	96445	21405	1506101	1008142	1579921	1867394
193	SAMPLE	193217-023	917649	1354117	44102	407100	95980	21289	1623050	1121830	1664556	1984836
194	SAMPLE	193217-024	911929	1363987	43635	398225	93370	21181	1599712	1093031	1661086	1992253
199	CCV		864908	1350162	42695	393397	91024	20572	1550003	1023495	1653281	1946954
201	CCB		887722	1370772	45085	410915	96368	21710	1630628	1121425	1710361	1982461
204	ICSA		599910	1191263	39252	370202	79661	18466	1345356	827534	1528690	1742765
205	ICSAB		509434	1134866	35275	357716	76421	17153	1337539	829867	1493682	1765605
210	MSS	193193-001	836904	1335937	41413	377991	90337	21005	1666574	1206508	1701705	2084946
213	SER	QC378193	846561	1383067	43359	386934	93511	21520	1693543	1205709	1736518	2113365
214	MS	QC378191	851733	1377327	42849	390804	92855	21443	1667822	1187527	1730195	2099191
215	MSD	QC378192	834606	1352257	42763	385310	91048	21142	1635785	1153761	1682318	2053411

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07
Sequence : MET06 c09q0

Reference: c09q0004
Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
216	PDS	QC378194	807162	1373965	42602	384827	89411	20904	1609006	1101960	1712302	2054536
217	SAMPLE	193193-006	837697	1351619	42847	383925	91549	21489	1648575	1171136	1680832	2045000
218	SAMPLE	193193-013	850323	1381844	43488	386328	92324	21786	1672280	1172422	1713891	2068810
219	SAMPLE	193027-012	851969	1374048	44520	389682	92872	21830	1641570	1118909	1697619	2008910
224	CCV		837171	1374157	44698	402269	93003	21285	1584817	1070250	1683860	2002425
227	CCB		868425	1350039	44352	385028	90590	21655	1609789	1100157	1653506	1965147
229	SAMPLE	193027-011	866645	1356505	44718	390336	92548	21997	1600466	1043536	1658608	1947958
230	SAMPLE	193027-012	910423	1413487	45570	392055	93011	22167	1666863	1130964	1721437	2042000
231	SAMPLE	193027-013	868936	1377052	45188	386345	91538	22177	1623029	1121886	1698277	1970489
236	CCV		843785	1361270	44250	395586	91504	21253	1578633	1061930	1668555	1965560
239	CCB		871768	1336030	45051	390025	92251	21613	1593414	1085987	1648046	1958145
241	ICSA		581542	1188280	38831	360357	77698	18316	1350980	805630	1518776	1735412
242	ICSAB		496559	1130423	35247	341093	73516	17085	1317155	801642	1464552	1737562

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09q0001	TUN				09-MAR-2007 17:01	1.0	1.0				1	
002	c09q0002	X	RINSE			09-MAR-2007 17:09	1.0					2	
003	c09q0003	X	RINSE			09-MAR-2007 17:14	1.0					2	
004	c09q0004	ICALBLK	CALBLANK			09-MAR-2007 17:19	1.0	1.0				2	
005	c09q0005	ICAL				09-MAR-2007 17:24	1.0	1.0				3	
006	c09q0006	ICAL				09-MAR-2007 17:30	1.0	1.0				4	
007	c09q0007	ICAL				09-MAR-2007 17:35	1.0	1.0				5	
008	c09q0008	ICAL				09-MAR-2007 17:40	1.0	1.0				6	
009	c09q0009	ICAL				09-MAR-2007 17:45	1.0	1.0				7	
010	c09q0010	ICAL				09-MAR-2007 17:51	1.0	1.0				8	
011	c09q0011	X	RINSE			09-MAR-2007 17:58	1.0					2	
012	c09q0012	X				09-MAR-2007 18:04	1.0					9 2	
013	c09q0013	X	RINSE			09-MAR-2007 18:09	1.0					2	
014	c09q0014	X				09-MAR-2007 18:14	1.0					2	
015	c09q0015	ICV				09-MAR-2007 18:28	1.0	1.0			1	9	
016	c09q0016	X	RINSE			09-MAR-2007 18:33	1.0					2	
017	c09q0017	X				09-MAR-2007 18:39	1.0					2	
018	c09q0018	ICB				09-MAR-2007 18:44	1.0	1.0			1	2	
019	c09q0019	X				09-MAR-2007 18:49	1.0					2	
020	c09q0020	ICSA				09-MAR-2007 18:55	1.0	1.0			1	10 2	7:CA=283800
021	c09q0021	ICSAB				09-MAR-2007 19:00	1.0	1.0			1	11 2	11:CA=322800
022	c09q0022	X	RINSE			09-MAR-2007 19:05	1.0					2	
023	c09q0023	X	RINSE			09-MAR-2007 19:11	1.0					2	
024	c09q0024	X	RINSE			09-MAR-2007 19:16	1.0					2	
025	c09q0025	X	RINSE			09-MAR-2007 19:21	1.0					2	
026	c09q0026	BLANK	QC378336	122902	Soil	09-MAR-2007 19:27	5.0	50.0	1		1	2	
027	c09q0027	BS	QC378337	122902	Soil	09-MAR-2007 19:32	50.0	50.0	1	1	1	2	
028	c09q0028	BSD	QC378338	122902	Soil	09-MAR-2007 19:37	50.0	50.0		1	1	2	
029	c09q0029	X	RINSE			09-MAR-2007 19:42	1.0					2	
030	c09q0030	X	RINSE			09-MAR-2007 19:48	1.0					2	
031	c09q0031	BLANK	QC378414	122921	Filtra	09-MAR-2007 20:02	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09q0032	BLANK	QC378443	122924	Filtra	09-MAR-2007 20:07	1.0	1.0			1	2	
033	c09q0033	MSS	193165-002	122902	Soil	09-MAR-2007 20:13	50.0	50.0	1		1	2	1:MN=324.000
034	c09q0034	SER	QC378341	122902	Soil	09-MAR-2007 20:18	250.0	50.0		2	1	2	
035	c09q0035	MS	QC378339	122902	Soil	09-MAR-2007 20:23	50.0	50.0			1	2	1:MN=373.800
036	c09q0036	X	RINSE			09-MAR-2007 20:28	1.0					2	
037	c09q0037	X	RINSE			09-MAR-2007 20:34	1.0					2	
038	c09q0038	X	RINSE			09-MAR-2007 20:39	1.0					2	
039	c09q0039	X	RINSE			09-MAR-2007 20:44	1.0					2	
040	c09q0040	X				09-MAR-2007 20:50	1.0					12 2	
041	c09q0041	X	RINSE			09-MAR-2007 20:57	1.0					2	
042	c09q0042	X	RINSE			09-MAR-2007 21:03	1.0					2	
043	c09q0043	X	RINSE			09-MAR-2007 21:08	1.0					2	
044	c09q0044	X	RINSE			09-MAR-2007 21:14	1.0					2	
045	c09q0045	X	RINSE			09-MAR-2007 21:19	1.0					2	
046	c09q0046	CCV				09-MAR-2007 21:24	1.0	1.0			1	12 2	
047	c09q0047	X	RINSE			09-MAR-2007 21:29	1.0					2	
048	c09q0048	X				09-MAR-2007 21:35	1.0					2	
049	c09q0049	CCB				09-MAR-2007 21:40	1.0	1.0			1	2	
050	c09q0050	X				09-MAR-2007 21:45	1.0					2	
051	c09q0051	X				09-MAR-2007 21:51	1.0					2	
052	c09q0052	X				09-MAR-2007 21:56	1.0					2	
053	c09q0053	X				09-MAR-2007 22:01	1.0					2	
054	c09q0054	X	RINSE			09-MAR-2007 22:07	1.0					2	
055	c09q0055	PDS	QC378342	122902	Soil	09-MAR-2007 22:12	50.0	50.0			1	13 14 2	1:MN=431.000
056	c09q0056	SAMPLE	193165-001	122902	Soil	09-MAR-2007 22:17	50.0	46.73			1	2	
057	c09q0057	SAMPLE	193165-003	122902	Soil	09-MAR-2007 22:22	50.0	48.08			1	2	
058	c09q0058	SAMPLE	193165-004	122902	Soil	09-MAR-2007 22:27	50.0	47.62			1	2	
059	c09q0059	SAMPLE	193165-005	122902	Soil	09-MAR-2007 22:33	50.0	48.54			1	2	
060	c09q0060	SAMPLE	193165-006	122902	Soil	09-MAR-2007 22:38	50.0	43.48			1	2	
061	c09q0061	SAMPLE	193165-007	122902	Soil	09-MAR-2007 22:43	50.0	45.45			1	2	
062	c09q0062	SAMPLE	193165-008	122902	Soil	09-MAR-2007 22:49	50.0	49.02			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RetH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c09q0063	SAMPLE	193165-009	122902	Soil	09-MAR-2007 22:54	50.0	46.73			1	2	
064	c09q0064	X	RINSE			09-MAR-2007 22:59	1.0					2	
065	c09q0065	X	RINSE			09-MAR-2007 23:04	1.0					2	
066	c09q0066	X	RINSE			09-MAR-2007 23:10	1.0					2	
067	c09q0067	X	RINSE			09-MAR-2007 23:15	1.0					2	
068	c09q0068	CCV				09-MAR-2007 23:20	1.0	1.0			1	12 2	
069	c09q0069	X	RINSE			09-MAR-2007 23:27	1.0					2	
070	c09q0070	CCB				09-MAR-2007 23:32	1.0	1.0			1	2	
071	c09q0071	X				09-MAR-2007 23:37	1.0	1.0			1	2	
072	c09q0072	X				09-MAR-2007 23:43	1.0	1.0			1	2	
073	c09q0073	SAMPLE	193165-010	122902	Soil	09-MAR-2007 23:48	50.0	45.05			1	2	
074	c09q0074	SAMPLE	193165-011	122902	Soil	09-MAR-2007 23:53	50.0	46.73			1	2	
075	c09q0075	SAMPLE	193202-001	122902	Soil	09-MAR-2007 23:58	50.0	44.25	2		1	2	4:MG=71880.0
076	c09q0076	SAMPLE	193202-002	122902	Soil	10-MAR-2007 00:04	50.0	44.64	2		1	2	4:MG=77300.0
077	c09q0077	SAMPLE	193202-003	122902	Soil	10-MAR-2007 00:09	50.0	48.08	2		1	2	4:MG=71980.0
078	c09q0078	SAMPLE	193202-004	122902	Soil	10-MAR-2007 00:14	50.0	46.30			1	2	
079	c09q0079	SAMPLE	193284-002	122902	Soil	10-MAR-2007 00:20	50.0	46.30			1	2	
080	c09q0080	X	RINSE			10-MAR-2007 00:25	1.0					2	
081	c09q0081	X	RINSE			10-MAR-2007 00:30	1.0					2	
082	c09q0082	X	RINSE			10-MAR-2007 00:36	1.0					2	
083	c09q0083	X	RINSE			10-MAR-2007 00:41	1.0					2	
084	c09q0084	CCV				10-MAR-2007 00:46	1.0	1.0			1	12 2	
085	c09q0085	X	RINSE			10-MAR-2007 00:52	1.0					2	
086	c09q0086	CCB				10-MAR-2007 00:57	1.0	1.0			1	2	
087	c09q0087	X				10-MAR-2007 01:03	1.0	1.0	1		1	2	
088	c09q0088	X				10-MAR-2007 01:08	1.0	1.0			1	2	
089	c09q0089	ICSA				10-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=284500
090	c09q0090	ICSAB				10-MAR-2007 01:19	1.0	1.0			1	11 2	11:CA=317200
091	c09q0091	X	RINSE			10-MAR-2007 01:24	1.0					2	
092	c09q0092	X	RINSE			10-MAR-2007 01:29	1.0					2	
093	c09q0093	X	RINSE			10-MAR-2007 01:35	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RGA Date: 3/11/07

00321

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c09q0094	X	RINSE			10-MAR-2007 01:40	1.0					2	
095	c09q0095	BS	QC378415	122921	Filtra	10-MAR-2007 01:45	1.0	1.0			1	2	
096	c09q0096	BSD	QC378416	122921	Filtra	10-MAR-2007 01:50	1.0	1.0			1	2	
097	c09q0097	X	RINSE			10-MAR-2007 01:56	1.0					2	
098	c09q0098	MSS	193253-001	122921	Filtra	10-MAR-2007 02:01	10.0	1.0	8		1	2	1:NA=33180.0
099	c09q0099	SER	QC378419	122921	Filtra	10-MAR-2007 02:06	50.0	1.0		1	1	2	
100	c09q0100	MS	QC378417	122921	Filtra	10-MAR-2007 02:11	10.0	1.0			1	2	1:NA=32780.0
101	c09q0101	MSD	QC378418	122921	Filtra	10-MAR-2007 02:17	10.0	1.0			1	2	1:NA=33200.0
102	c09q0102	PDS	QC378420	122921	Filtra	10-MAR-2007 02:22	10.0	1.0	1		1	13 14 2	2:NA=42700.0
103	c09q0103	SAMPLE	193187-001	122921	Water	10-MAR-2007 02:27	10.0	1.0	9		1	2	
104	c09q0104	X	RINSE			10-MAR-2007 02:32	1.0					2	
105	c09q0105	X	RINSE			10-MAR-2007 02:38	1.0					2	
106	c09q0106	X	RINSE			10-MAR-2007 02:43	1.0					2	
107	c09q0107	X	RINSE			10-MAR-2007 02:48	1.0					2	
108	c09q0108	CCV				10-MAR-2007 02:54	1.0	1.0			1	12 2	
109	c09q0109	X	RINSE			10-MAR-2007 02:59	1.0					2	
110	c09q0110	X				10-MAR-2007 03:04	1.0	1.0	2		1	2	
111	c09q0111	X				10-MAR-2007 03:10	1.0	1.0	2		1	2	
112	c09q0112	CCB				10-MAR-2007 03:15	1.0	1.0			1	2	
113	c09q0113	SAMPLE	193187-002	122921	Water	10-MAR-2007 03:20	10.0	1.0	1		1	2	
114	c09q0114	SAMPLE	193187-003	122921	Water	10-MAR-2007 03:26	10.0	1.0	1		1	2	
115	c09q0115	TUN				10-MAR-2007 03:30	1.0	1.0				1	
116	c09q0116	X	RINSE			10-MAR-2007 03:38	1.0					2	
117	c09q0117	SAMPLE	193199-001	122921	Water	10-MAR-2007 03:43	10.0	1.0	1		1	2	
118	c09q0118	SAMPLE	193199-002	122921	Water	10-MAR-2007 03:48	10.0	1.0	1		1	2	
119	c09q0119	SAMPLE	193199-003	122921	Water	10-MAR-2007 03:54	10.0	1.0	1		1	2	
120	c09q0120	SAMPLE	193199-001	122921	Filtra	10-MAR-2007 03:59	10.0	1.0	1		1	2	
121	c09q0121	SAMPLE	193199-002	122921	Filtra	10-MAR-2007 04:04	10.0	1.0	1		1	2	
122	c09q0122	SAMPLE	193199-003	122921	Filtra	10-MAR-2007 04:10	10.0	1.0	1		1	2	
123	c09q0123	SAMPLE	193205-001	122921	Water	10-MAR-2007 04:15	10.0	1.0	1		1	2	
124	c09q0124	SAMPLE	193205-001	122921	Filtra	10-MAR-2007 04:20	10.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c09q0125	X	RINSE			10-MAR-2007 04:26	1.0					2	
126	c09q0126	X	RINSE			10-MAR-2007 04:31	1.0					2	
127	c09q0127	X	RINSE			10-MAR-2007 04:36	1.0					2	
128	c09q0128	X	RINSE			10-MAR-2007 04:42	1.0					2	
129	c09q0129	CCV				10-MAR-2007 04:47	1.0	1.0			1	12 2	
130	c09q0130	X	RINSE			10-MAR-2007 04:52	1.0					2	
131	c09q0131	CCB				10-MAR-2007 04:58	1.0	1.0	1		1	2	
132	c09q0132	X				10-MAR-2007 05:03	1.0	1.0	2		1	2	
133	c09q0133	X				10-MAR-2007 05:08	1.0	1.0	1		1	2	
134	c09q0134	SAMPLE	193243-001	122921	Water	10-MAR-2007 05:14	10.0	1.0			1	2	
135	c09q0135	SAMPLE	193243-002	122921	Water	10-MAR-2007 05:19	10.0	1.0			1	2	
136	c09q0136	SAMPLE	193253-002	122921	Filtra	10-MAR-2007 05:24	10.0	1.0			1	2	1:NA=23670.0
137	c09q0137	X	RINSE			10-MAR-2007 05:30	1.0					2	
138	c09q0138	X	RINSE			10-MAR-2007 05:35	1.0					2	
139	c09q0139	X	RINSE			10-MAR-2007 05:40	1.0					2	
140	c09q0140	X	RINSE			10-MAR-2007 05:46	1.0					2	
141	c09q0141	CCV				10-MAR-2007 05:51	1.0	1.0			1	12 2	
142	c09q0142	X	RINSE			10-MAR-2007 05:56	1.0					2	
143	c09q0143	CCB				10-MAR-2007 06:02	1.0	1.0	1		1	2	
144	c09q0144	X				10-MAR-2007 06:07	1.0	1.0	1		1	2	
145	c09q0145	X				10-MAR-2007 06:12	1.0	1.0	1		1	2	
146	c09q0146	ICSA				10-MAR-2007 06:18	1.0	1.0			1	10 2	7:CA=280800
147	c09q0147	ICSAB				10-MAR-2007 06:23	1.0	1.0			1	11 2	11:CA=314400
148	c09q0148	X	RINSE			10-MAR-2007 06:28	1.0					2	
149	c09q0149	X	RINSE			10-MAR-2007 06:34	1.0					2	
150	c09q0150	X	RINSE			10-MAR-2007 06:39	1.0					2	
151	c09q0151	X	RINSE			10-MAR-2007 06:44	1.0					2	
152	c09q0152	BS	QC378444	122924	Filtra	10-MAR-2007 06:50	1.0	1.0			1	2	
153	c09q0153	BSD	QC378445	122924	Filtra	10-MAR-2007 06:55	1.0	1.0			1	2	
154	c09q0154	X	RINSE			10-MAR-2007 07:01	1.0					2	
155	c09q0155	MSS	193217-011	122924	Filtra	10-MAR-2007 07:07	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: DAA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c09q0156	SER	QC378448	122924	Filtra	10-MAR-2007 07:12	50.0	1.0	1	1	1	2	
157	c09q0157	MS	QC378446	122924	Filtra	10-MAR-2007 07:17	10.0	1.0	1		1	2	
158	c09q0158	MSD	QC378447	122924	Filtra	10-MAR-2007 07:23	10.0	1.0	1		1	2	
159	c09q0159	PDS	QC378449	122924	Filtra	10-MAR-2007 07:28	10.0	1.0	1		1	13 14 2	
160	c09q0160	MSS	193217-021	122924	Filtra	10-MAR-2007 07:33	10.0	1.0			1	2	
161	c09q0161	X	RINSE			10-MAR-2007 07:39	1.0					2	
162	c09q0162	X	RINSE			10-MAR-2007 07:44	1.0					2	
163	c09q0163	X	RINSE			10-MAR-2007 07:49	1.0					2	
164	c09q0164	X	RINSE			10-MAR-2007 07:55	1.0					2	
165	c09q0165	CCV				10-MAR-2007 08:00	1.0	1.0			1	12 2	
166	c09q0166	X	RINSE			10-MAR-2007 08:05	1.0					2	
167	c09q0167	X				10-MAR-2007 08:11	1.0	1.0	2		1	2	
168	c09q0168	CCB				10-MAR-2007 08:16	1.0	1.0			1	2	
169	c09q0169	X				10-MAR-2007 08:21	1.0	1.0			1	2	
170	c09q0170	MS	QC378508	122924	Filtra	10-MAR-2007 08:27	10.0	1.0			1	2	
171	c09q0171	MSD	QC378509	122924	Filtra	10-MAR-2007 08:32	10.0	1.0			1	2	
172	c09q0172	SAMPLE	193055-023	122924	Water	10-MAR-2007 08:37	10.0	1.0			1	2	
173	c09q0173	SAMPLE	193137-005	122924	Filtra	10-MAR-2007 08:43	10.0	1.0			1	2	
174	c09q0174	SAMPLE	193217-010	122924	Filtra	10-MAR-2007 08:48	10.0	1.0			1	2	
175	c09q0175	SAMPLE	193217-012	122924	Filtra	10-MAR-2007 08:53	10.0	1.0			1	2	
176	c09q0176	SAMPLE	193217-014	122924	Filtra	10-MAR-2007 08:59	10.0	1.0			1	2	
177	c09q0177	SAMPLE	193217-015	122924	Filtra	10-MAR-2007 09:04	10.0	1.0			1	2	
178	c09q0178	SAMPLE	193217-016	122924	Filtra	10-MAR-2007 09:09	10.0	1.0			1	2	
179	c09q0179	SAMPLE	193217-017	122924	Filtra	10-MAR-2007 09:15	10.0	1.0			1	2	
180	c09q0180	X	RINSE			10-MAR-2007 09:20	1.0					2	
181	c09q0181	X	RINSE			10-MAR-2007 09:25	1.0					2	
182	c09q0182	X	RINSE			10-MAR-2007 09:31	1.0					2	
183	c09q0183	X	RINSE			10-MAR-2007 09:36	1.0					2	
184	c09q0184	CCV				10-MAR-2007 09:41	1.0	1.0			1	12 2	
185	c09q0185	X	RINSE			10-MAR-2007 09:47	1.0					2	
186	c09q0186	CCB				10-MAR-2007 09:52	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RGH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c09q0187	X				10-MAR-2007 09:57	1.0	1.0			1	2	
188	c09q0188	X				10-MAR-2007 10:03	1.0	1.0	3		1	2	
189	c09q0189	SAMPLE	193217-018	122924	Filtra	10-MAR-2007 10:08	10.0	1.0	1		1	2	1:NA=29570.0
190	c09q0190	SAMPLE	193217-019	122924	Filtra	10-MAR-2007 10:13	10.0	1.0	1		1	2	1:NA=20670.0
191	c09q0191	SAMPLE	193217-020	122924	Filtra	10-MAR-2007 10:19	10.0	1.0	1		1	2	1:NA=22410.0
192	c09q0192	SAMPLE	193217-022	122924	Filtra	10-MAR-2007 10:24	10.0	1.0	1		1	2	1:NA=20810.0
193	c09q0193	SAMPLE	193217-023	122924	Filtra	10-MAR-2007 10:30	10.0	1.0			1	2	
194	c09q0194	SAMPLE	193217-024	122924	Filtra	10-MAR-2007 10:35	10.0	1.0			1	2	
195	c09q0195	X	RINSE			10-MAR-2007 10:40	1.0					2	
196	c09q0196	X	RINSE			10-MAR-2007 10:46	1.0					2	
197	c09q0197	X	RINSE			10-MAR-2007 10:51	1.0					2	
198	c09q0198	X	RINSE			10-MAR-2007 10:57	1.0					2	
199	c09q0199	CCV				10-MAR-2007 11:02	1.0	1.0			1	12 2	
200	c09q0200	X	RINSE			10-MAR-2007 11:07	1.0					2	
201	c09q0201	CCB				10-MAR-2007 11:13	1.0	1.0			1	2	
202	c09q0202	X				10-MAR-2007 11:18	1.0	1.0			1	2	
203	c09q0203	X				10-MAR-2007 11:23	1.0	1.0			1	2	
204	c09q0204	ICSA				10-MAR-2007 11:29	1.0	1.0			1	10 2	7:CA=285200
205	c09q0205	ICSAB				10-MAR-2007 11:34	1.0	1.0			1	11 2	10:CA=315900
206	c09q0206	X	RINSE			10-MAR-2007 11:39	1.0					2	
207	c09q0207	X	RINSE			10-MAR-2007 11:45	1.0					2	
208	c09q0208	X	RINSE			10-MAR-2007 11:50	1.0					2	
209	c09q0209	X	RINSE			10-MAR-2007 11:56	1.0					2	
210	c09q0210	MSS	193193-001	122866	Filtra	10-MAR-2007 12:01	10.0	1.0			1	2	
211	c09q0211	TUN				10-MAR-2007 12:05	1.0	1.0				1	
212	c09q0212	X	RINSE			10-MAR-2007 12:13	1.0					2	
213	c09q0213	SER	QC378193	122866	Filtra	10-MAR-2007 12:18	50.0	1.0		2	1	2	
214	c09q0214	MS	QC378191	122866	Filtra	10-MAR-2007 12:24	10.0	1.0		1	1	2	
215	c09q0215	MSD	QC378192	122866	Filtra	10-MAR-2007 12:29	10.0	1.0		1	1	2	
216	c09q0216	PDS	QC378194	122866	Filtra	10-MAR-2007 12:34	10.0	1.0			1	13 14 2	
217	c09q0217	SAMPLE	193193-006	122866	Filtra	10-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
218	c09q0218	SAMPLE	193193-013	122866	Filtra	10-MAR-2007 12:45	10.0	1.0	1		1	2	
219	c09q0219	SAMPLE	193027-012	122867	Filtra	10-MAR-2007 12:50	50.0	1.0			1	2	
220	c09q0220	X	RINSE			10-MAR-2007 12:56	1.0					2	
221	c09q0221	X	RINSE			10-MAR-2007 13:01	1.0					2	
222	c09q0222	X	RINSE			10-MAR-2007 13:06	1.0					2	
223	c09q0223	X	RINSE			10-MAR-2007 13:12	1.0					2	
224	c09q0224	CCV				10-MAR-2007 13:17	1.0	1.0			1	12 2	
225	c09q0225	X	RINSE			10-MAR-2007 13:23	1.0					2	
226	c09q0226	X				10-MAR-2007 13:28	1.0	1.0	4		1	2	
227	c09q0227	CCB				10-MAR-2007 13:33	1.0	1.0			1	2	
228	c09q0228	X				10-MAR-2007 13:39	1.0	1.0			1	2	
229	c09q0229	SAMPLE	193027-011	122867	Water	10-MAR-2007 13:44	20.0	1.0			1	2	
230	c09q0230	SAMPLE	193027-012	122867	Water	10-MAR-2007 13:49	50.0	1.0			1	2	
231	c09q0231	SAMPLE	193027-013	122867	Water	10-MAR-2007 13:55	20.0	1.0			1	2	
232	c09q0232	X	RINSE			10-MAR-2007 14:00	1.0					2	
233	c09q0233	X	RINSE			10-MAR-2007 14:05	1.0					2	
234	c09q0234	X	RINSE			10-MAR-2007 14:11	1.0					2	
235	c09q0235	X	RINSE			10-MAR-2007 14:16	1.0					2	
236	c09q0236	CCV				10-MAR-2007 14:21	1.0	1.0			1	12 2	
237	c09q0237	X	RINSE			10-MAR-2007 14:27	1.0					2	
238	c09q0238	X				10-MAR-2007 14:32	1.0	1.0	5		1	2	
239	c09q0239	CCB				10-MAR-2007 14:38	1.0	1.0			1	2	
240	c09q0240	X				10-MAR-2007 14:43	1.0	1.0			1	2	
241	c09q0241	ICSA				10-MAR-2007 14:48	1.0	1.0			1	10 2	7:CA=281600
242	c09q0242	ICSAB				10-MAR-2007 14:54	1.0	1.0			1	11 2	10:CA=315900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: Pett Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57101593001
Units : ug/L

Date : 11-MAR-2007 13:27
X Axis : R

Reviewer: ---

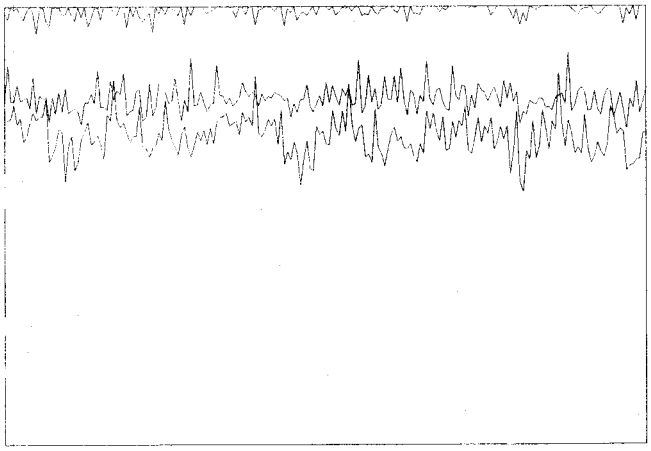
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c11n0005	57101593005		11-MAR-2007 13:31	S5647
L2	c11n0006	57101593006		11-MAR-2007 13:35	S5648
L3	c11n0007	57101593007		11-MAR-2007 13:39	S5649
L4	c11n0008	57101593008		11-MAR-2007 13:43	S5650
L5	c11n0009	57101593009		11-MAR-2007 13:47	S5644
L6	c11n0010	57101593010		11-MAR-2007 13:52	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	1.2410	1.2477	1.2262	1.1539	1.1313	1.1482	BLNK	-0.6044	0.87351		1.1914	1.000	0.995	
Antimony	0.3222	0.3126	0.2910	0.2754	0.2854	0.2947	BLNK	-0.0298	3.41601		0.2969	1.000	0.995	
Arsenic	1.2670	0.8512	0.7960	0.6011	0.5843	0.5984	BLNK	-0.0405	1.67937		0.7830	1.000	0.995	
Barium	0.1029	0.1480	0.1611	0.1038	0.1043	0.1075	BLNK	-0.0153	9.36178		0.1213	1.000	0.995	
Beryllium	0.2362	0.2530	0.2593	0.2570	0.2603	0.2660	BLNK	-0.0055	3.77638		0.2553	1.000	0.995	
Cadmium	0.7620	0.6855	0.5621	0.5675	0.5409	0.5568	BLNK	-0.0813	1.80718		0.6125	1.000	0.995	
Calcium	0.0406	0.0325	0.0286	0.0235	0.0234	0.0234	BLNK	-12.475	42.8389		0.0287	1.000	0.995	
Chromium	9.9705	6.5241	4.7102	3.0195	2.8406	2.7619	BLNK	-0.6000	0.36129		4.9711	1.000	0.995	
Cobalt	3.7971	3.7883	3.8313	3.7071	3.6977	3.6595	BLNK	-0.0051	0.27269		3.7468	1.000	0.995	
Copper	1.9965	3.5324	1.3078	1.3987	1.0389	1.0377	BLNK	-0.1801	0.96381		1.7187	1.000	0.995	
Iron	0.1511	0.1161	0.1011	0.0841	0.0837	0.0821	BLNK	-20.786	12.1503		0.1030	1.000	0.995	
Lead	1.2724	1.2536	1.2518	1.2017	1.2266	1.2609	BLNK	-0.0268	0.79763		1.2445	1.000	0.995	
Magnesium	0.1601	0.1621	0.1602	0.1583	0.1480	0.1497	BLNK	-0.5893	6.69476		0.1564	1.000	0.995	
Manganese	4.7344	4.5058	4.3238	3.9501	3.9497	3.8756	BLNK	-0.0576	0.25712		4.2232	1.000	0.995	
Molybdenum	1.0596	1.0633	1.0577	1.0228	1.0282	1.1017	BLNK	-0.0171	0.92014		1.0556	0.999	0.995	
Nickel	1.1205	1.0515	0.8866	0.8664	0.8498	0.8459	BLNK	-0.0767	1.18158		0.9368	1.000	0.995	
Potassium	3.5728	2.3780	1.6066	0.9509	0.8772	0.8869	BLNK	-76.910	1.13515		1.7121	1.000	0.995	
Selenium	0.0982	0.0681	0.0732	0.0568	0.0540	0.0538	BLNK	-0.1271	18.5749		0.0673	1.000	0.995	
Silver	2.3473	2.4144	2.4072	2.3054	2.3051	2.3294	BLNK	-0.0111	0.43023		2.3515	1.000	0.995	
Sodium	3.7224	3.0218	2.3439	1.7710	1.6845	1.6559	BLNK	-29.830	0.60284		2.3666	1.000	0.995	
Thallium	1.0310	0.9516	0.9062	0.8655	0.9113	0.9349	BLNK	-0.0209	1.07547		0.9334	1.000	0.995	
Vanadium			4.4804	3.2985	3.2763	3.3103	BLNK	-0.2475	0.30317		3.5914	1.000	0.995	
Zinc	3.6989	2.6888	1.4308	0.7296	0.6328	0.6115	BLNK	-0.9816	1.63329		1.6321	1.000	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Silver	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.1250	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Vanadium			1.0000	10.000	100.00	200.00	ug/L
Zinc	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L

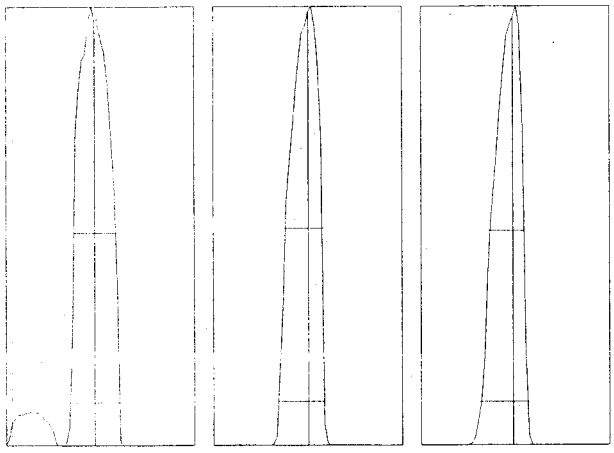
Tune Report

Tune File : nogas.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.375%
Doubly Charged:	70/140	2.604%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	14243.0	14087.4	6.38	3.80
89	20,000	16275.0	15824.1	3.75	3.00
205	10,000	10091.0	9957.0	1.90	7.00
156/140	1	0.354%	0.376%	15.97	
70/140	5	2.518%	2.544%	7.68	



m/z:	7	89	205
Height:	13,804	16,020	10,102
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 11, 2007 12:35:18
Printed : Mar 11, 2007 12:35:20

Tune Report

Tune File : nogas.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-125 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-1 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-4 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 11, 2007 12:35:18
Printed : Mar 11, 2007 12:35:23 : 00330

P/A Factor Tuning Report

Acquired:Mar 11 2007 00:50 pm

Mass[amu]	Element	P/A Factor
6	Li	0.075322
9	Be	0.084180
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.098435
44	Ca	0.100759
45	Sc	0.098270
51	V	0.098885
52	Cr	0.099854
53	Cr	0.097961
54	Fe	Sensitivity too high
55	Mn	0.101986
57	Fe	0.104293
59	Co	0.103208
60	Ni	0.104550
63	Cu	0.102416
65	Cu	0.104580
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.100962
95	Mo	0.102151
98	Mo	0.101848
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.103561
111	Cd	Sensitivity too low
114	Cd	0.104664
115	In	0.104650
118	(In)	0.108890
121	Sb	0.106586
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.105425
166	Er	Sensitivity too low
205	Tl	0.107807
206	(Pb)	0.106391
207	(Pb)	0.111162
208	Pb	0.109188
209	Bi	0.110142

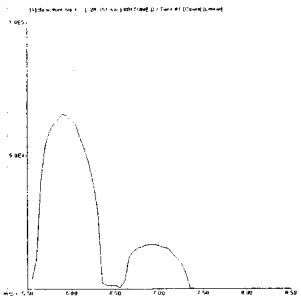
===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

6020 QC Tune Report

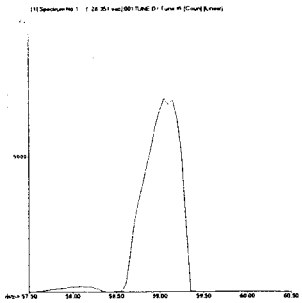
Data File: C:\ICPCHEM\1\DATA\07C11n00.B\001TUNE.D
Date Acquired: Mar 11 2007 01:13 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

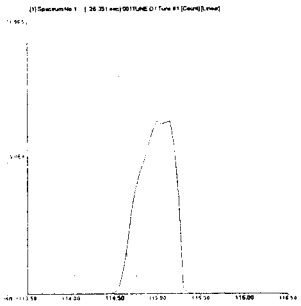
Element	Actual	Required	Flag
7 Li	1.57	5.00	
59 Co	1.38	5.00	
115 In	0.66	5.00	
205 Tl	1.47	5.00	



7 Li
Mass Calib.
Actual: 6.90
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.10
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

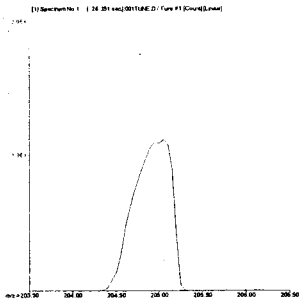
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004C
Date Acquired: Mar 11 2007 01:27 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:29 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	572954.31	A	16720.00	2.92
9	Be	16.67	P	3.33	20.00
23	Na	288942.19	P	6754.00	2.34
26	Mg	514.44	P	59.66	11.60
27	Al	4038.89	P	178.30	4.41
39	K	395595.50	P	3507.00	0.89
44	Ca	1700.32	P	46.53	2.74
45	Sc	291996.69	P	5304.00	1.82
51	V	1367.19	P	268.70	19.65
52	Cr	2784.44	P	63.80	2.29
55	Mn	375.56	P	6.94	1.85
57	Fe	2868.89	P	157.10	5.48
59	Co	31.11	P	10.71	34.43
60	Ni	108.89	P	13.47	12.37
65	Cu	313.33	P	29.06	9.27
66	Zn	1007.78	P	34.05	3.38
72	Ge	83828.00	P	645.50	0.77
75	As	40.50	P	32.22	79.57
82	Se	11.33	P	26.91	237.44
95	Mo	31.11	P	5.09	16.37
109	Ag	43.33	P	10.00	23.08
111	Cd	75.45	P	5.64	7.47
115	In	509088.00	P	2908.00	0.57
121	Sb	88.89	P	20.37	22.92
137	Ba	16.67	P	3.33	20.00
205	Tl	215.56	P	5.09	2.36
208	Pb	373.33	P	90.74	24.31
209	Bi	555151.13	P	3741.00	0.67

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 11 2007 01:31 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:29 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	562038.31	A	11450.00	2.04
9 Be	663.33	P	17.64	2.66
23 Na	544624.38	P	2807.00	0.52
26 Mg	23430.00	P	268.90	1.15
27 Al	181575.59	P	4559.00	2.51
39 K	522750.00	P	9288.00	1.78
44 Ca	5942.96	P	224.10	3.77
45 Sc	292623.31	P	782.80	0.27
51 V	3867.76	P	607.20	15.70
52 Cr	4172.22	P	132.30	3.17
55 Mn	1981.11	P	25.02	1.26
57 Fe	6324.44	P	126.30	2.00
59 Co	1588.89	P	6.94	0.44
60 Ni	468.89	P	33.55	7.16
65 Cu	835.45	P	68.34	8.18
66 Zn	1547.78	P	84.74	5.47
72 Ge	83689.33	P	88.79	0.11
75 As	530.37	P	297.30	56.06
82 Se	41.11	P	67.12	163.26
95 Mo	443.33	P	56.86	12.83
109 Ag	982.22	P	8.39	0.85
111 Cd	318.85	P	9.60	3.01
115 In	507577.50	P	1174.00	0.23
121 Sb	817.78	P	25.02	3.06
137 Ba	261.11	P	41.14	15.76
205 Tl	1431.11	P	88.96	6.22
208 Pb	3532.22	P	104.50	2.96
209 Bi	555265.63	P	7726.00	1.39

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	562038.25	2.0372	572954.31	98.09	80 - 120	
45 Sc	292623.34	0.2675	291996.66	100.21	80 - 120	
72 Ge	83689.336	0.1061	83828	99.83	80 - 120	
115 In	507577.5	0.2313	509087.97	99.70	80 - 120	
209 Bi	555265.56	1.3914	555151.06	100.02	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 11 2007 01:35 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:33 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	562668.00	A	348.00	0.06
9	Be	1423.33	P	20.82	1.46
23	Na	870973.38	A	17130.00	1.97
26	Mg	46735.56	P	933.30	2.00
27	Al	359617.81	P	6628.00	1.84
39	K	685466.31	A	4864.00	0.71
44	Ca	9385.44	P	371.80	3.96
45	Sc	288321.09	P	4571.00	1.59
51	V	4921.22	P	227.90	4.63
52	Cr	5446.67	P	262.80	4.83
55	Mn	3761.11	P	155.70	4.14
57	Fe	9690.00	P	280.90	2.90
59	Co	3162.22	P	150.60	4.76
60	Ni	877.78	P	7.70	0.88
65	Cu	2948.68	P	122.30	4.15
66	Zn	2244.44	P	64.75	2.88
72	Ge	83478.89	P	256.20	0.31
75	As	710.57	P	181.90	25.60
82	Se	56.89	P	17.13	30.11
95	Mo	887.78	P	77.05	8.68
109	Ag	2015.56	P	43.50	2.16
111	Cd	572.09	P	76.86	13.44
115	In	508349.91	P	4777.00	0.94
121	Sb	1588.89	P	39.77	2.50
137	Ba	752.22	P	29.88	3.97
205	Tl	2668.89	P	86.43	3.24
208	Pb	7032.22	P	222.40	3.16
209	Bi	561005.63	P	2900.00	0.52

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	562668	0.0618	572954.31	98.20	80 - 120	
45	Sc	288321.13	1.5854	291996.66	98.74	80 - 120	
72	Ge	83478.891	0.3069	83828	99.58	80 - 120	
115	In	508349.94	0.9397	509087.97	99.86	80 - 120	
209	Bi	561005.56	0.5169	555151.06	101.05	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 11 2007 01:39 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:37 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	561254.38	A	2320.00	0.41
9 Be	2910.00	P	111.70	3.84
23 Na	1349768.00	A	37130.00	2.75
26 Mg	92236.67	P	1992.00	2.16
27 Al	705987.50	A	18370.00	2.60
39 K	925101.00	A	11960.00	1.29
44 Ca	16458.35	P	305.80	1.86
45 Sc	287996.69	P	4828.00	1.68
51 V	7485.12	P	54.52	0.73
52 Cr	7868.89	P	215.40	2.74
55 Mn	7223.33	P	50.44	0.70
57 Fe	16895.55	P	385.10	2.28
59 Co	6400.00	P	111.30	1.74
60 Ni	1481.11	P	125.00	8.44
65 Cu	2185.14	P	78.21	3.58
66 Zn	2390.00	P	69.36	2.90
72 Ge	83533.33	P	660.40	0.79
75 As	1329.64	P	25.43	1.91
82 Se	122.22	P	61.77	50.54
95 Mo	1766.67	P	81.72	4.63
109 Ag	4021.11	P	81.94	2.04
111 Cd	939.53	P	108.70	11.57
115 In	501287.50	P	1942.00	0.39
121 Sb	2917.78	P	13.88	0.48
137 Ba	1615.56	P	34.05	2.11
205 Tl	5028.89	P	89.21	1.77
208 Pb	13894.44	P	192.20	1.38
209 Bi	555037.69	P	4026.00	0.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	561254.38	0.4134	572954.31	97.96	80 - 120	
45 Sc	287996.66	1.6764	291996.66	98.63	80 - 120	
72 Ge	83533.336	0.7906	83828	99.65	80 - 120	
115 In	501287.5	0.3874	509087.97	98.47	80 - 120	
209 Bi	555037.75	0.7254	555151.06	99.98	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 11 2007 01:43 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:41 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	553831.31	A	14700.00	2.65
9 Be	28453.33	P	809.50	2.85
23 Na	10224350.00	A	228200.00	2.23
26 Mg	914073.13	A	14600.00	1.60
27 Al	6661298.00	A	80940.00	1.22
39 K	5489673.00	A	70900.00	1.29
44 Ca	135397.59	P	1853.00	1.37
45 Sc	288667.81	P	2420.00	0.84
51 V	55703.62	P	492.40	0.88
52 Cr	50991.11	P	392.50	0.77
55 Mn	66703.33	P	130.00	0.19
57 Fe	142017.80	P	1027.00	0.72
59 Co	62603.33	P	645.30	1.03
60 Ni	14632.22	P	291.30	1.99
65 Cu	23621.45	P	475.50	2.01
66 Zn	12322.22	P	332.00	2.69
72 Ge	84440.89	P	1030.00	1.22
75 As	10149.97	P	240.30	2.37
82 Se	958.22	P	75.74	7.90
95 Mo	17272.22	P	50.15	0.29
109 Ag	38926.67	P	569.30	1.46
111 Cd	9584.05	P	148.80	1.55
115 In	508232.50	P	4681.00	0.92
121 Sb	27993.33	P	197.00	0.70
137 Ba	10552.22	P	127.90	1.21
205 Tl	48010.00	P	1012.00	2.11
208 Pb	133303.30	P	374.20	0.28
209 Bi	554692.19	P	5248.00	0.95

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	553831.38	2.6542	572954.31	96.66	80 - 120	
45 Sc	288667.78	0.8383	291996.66	98.86	80 - 120	
72 Ge	84440.891	1.2198	83828	100.73	80 - 120	
115 In	508232.53	0.921	509087.97	99.83	80 - 120	
209 Bi	554692.25	0.9461	555151.06	99.92	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 11 2007 01:47 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:45 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	523691.81	A	10150.00	1.94
9 Be	272508.91	P	2511.00	0.92
23 Na	94967696.00	A	708000.00	0.75
26 Mg	8343574.00	A	74260.00	0.89
27 Al	63778432.00	A	828300.00	1.30
39 K	49455500.00	A	247500.00	0.50
44 Ca	1318398.00	A	5489.00	0.42
45 Sc	281897.81	P	1572.00	0.56
51 V	546986.63	P	410.90	0.08
52 Cr	474248.91	P	1255.00	0.26
55 Mn	659415.63	P	2969.00	0.45
57 Fe	1397596.00	A	18120.00	1.30
59 Co	617336.69	P	3473.00	0.56
60 Ni	141877.80	P	1002.00	0.71
65 Cu	173442.09	P	1470.00	0.85
66 Zn	105640.00	P	1628.00	1.54
72 Ge	83479.11	P	494.80	0.59
75 As	97546.67	P	967.10	0.99
82 Se	9009.55	P	107.20	1.19
95 Mo	171657.80	P	2091.00	1.22
109 Ag	384832.19	P	4927.00	1.28
111 Cd	90306.12	P	713.50	0.79
115 In	481651.19	P	6538.00	1.36
121 Sb	274863.31	P	2537.00	0.92
137 Ba	100421.10	P	999.10	0.99
205 Tl	489027.69	P	6119.00	1.25
208 Pb	1316324.00	P	1841.00	0.14
209 Bi	536628.88	P	6647.00	1.24

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	523691.81	1.9382	572954.31	91.40	80 - 120	
45 Sc	281897.78	0.5576	291996.66	96.54	80 - 120	
72 Ge	83479.109	0.5927	83828	99.58	80 - 120	
115 In	481651.25	1.3574	509087.97	94.61	80 - 120	
209 Bi	536628.88	1.2387	555151.06	96.66	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 11 2007 01:52 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 11 2007 01:51 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	511966.41	M	5487.00	1.07
9 Be	544630.88	M	8650.00	1.59
23 Na	189164900.00	A	4514000.00	2.39
26 Mg	17101280.00	A	588100.00	3.44
27 Al	131170700.00	A	4844000.00	3.69
39 K	101320600.00	A	2239000.00	2.21
44 Ca	2667824.00	A	21390.00	0.80
45 Sc	285575.50	P	1031.00	0.36
51 V	1078597.00	A	14910.00	1.38
52 Cr	899926.50	A	9361.00	1.04
55 Mn	1262828.00	A	17430.00	1.38
57 Fe	2674535.00	A	7035.00	0.26
59 Co	1192479.00	A	3039.00	0.25
60 Ni	275657.81	P	1420.00	0.52
65 Cu	338147.91	P	1740.00	0.51
66 Zn	199263.30	P	1158.00	0.58
72 Ge	81472.44	P	943.20	1.16
75 As	195001.41	P	828.80	0.43
82 Se	17546.89	P	379.20	2.16
95 Mo	359016.69	P	1069.00	0.30
109 Ag	759099.88	M	4522.00	0.60
111 Cd	181405.80	P	3337.00	1.84
115 In	472395.09	P	3690.00	0.78
121 Sb	556805.63	P	1604.00	0.29
137 Ba	203075.59	P	624.80	0.31
205 Tl	953606.31	A	10270.00	1.08
208 Pb	2572157.00	A	21130.00	0.82
209 Bi	510043.31	P	8948.00	1.75

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	511966.44	1.0718	572954.31	89.36	80 - 120	
45 Sc	285575.53	0.361	291996.66	97.80	80 - 120	
72 Ge	81472.445	1.1577	83828	97.19	80 - 120	
115 In	472395.09	0.7811	509087.97	92.79	80 - 120	
209 Bi	510043.31	1.7544	555151.06	91.87	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
Seqnum : 57101593012 File : c11n0012 IDF : 1.0
Cal : 57101593001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 14:00
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.1914	1.1183	10000	9768	ug/L	-2	10	
Antimony	0.2969	0.3014	100.0	102.9	ug/L	3	10	
Arsenic	0.7830	0.6128	100.0	102.9	ug/L	3	10	
Barium	0.1213	0.1039	100.0	97.28	ug/L	-3	10	
Beryllium	0.2553	0.2624	100.0	99.10	ug/L	-1	10	
Cadmium	0.6125	0.5574	100.0	100.7	ug/L	1	10	
Calcium	0.0287	0.0237	10000	10140	ug/L	1	10	
Chromium	4.9711	2.8968	100.0	104.1	ug/L	4	10	
Cobalt	3.7468	3.7098	100.0	101.2	ug/L	1	10	
Copper	1.7187	1.0402	100.0	100.1	ug/L	0	10	
Iron	0.1030	0.0849	10000	10290	ug/L	3	10	
Lead	1.2445	1.2518	100.0	99.82	ug/L	0	10	
Magnesium	0.1564	0.1496	10000	10010	ug/L	0	10	
Manganese	4.2232	3.9821	100.0	102.3	ug/L	2	10	
Molybdenum	1.0556	1.0742	100.0	98.82	ug/L	-1	10	
Nickel	0.9368	0.8563	100.0	101.1	ug/L	1	10	
Potassium	1.7121	0.8651	10000	9743	ug/L	-3	10	
Selenium	0.0673	0.0554	100.0	102.8	ug/L	3	10	
Silver	2.3515	2.5112	100.0	108.0	ug/L	8	10	
Sodium	2.3666	1.6728	10000	10050	ug/L	1	10	
Thallium	0.9334	0.9019	50.00	48.48	ug/L	-3	10	
Vanadium	3.5914	3.3557	100.0	101.5	ug/L	2	10	
Zinc	1.6321	0.6316	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	534461	-6.72
Scandium	291997	293036	0.36
Germanium	83828	84620	0.94
Indium	509088	496154	-2.54
Bismuth	555151	539094	-2.89

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593035 File : c11n0035 Time : 11-MAR-2007 16:09
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1914	1.1499	10000	10040	ug/L	0	10	
Antimony	0.2969	0.3033	100.0	103.6	ug/L	4	10	
Arsenic	0.7830	0.6162	100.0	103.4	ug/L	3	10	
Barium	0.1213	0.1073	100.0	100.5	ug/L	1	10	
Beryllium	0.2553	0.2658	100.0	100.4	ug/L	0	10	
Cadmium	0.6125	0.5710	100.0	103.1	ug/L	3	10	
Calcium	0.0287	0.0239	10000	10220	ug/L	2	10	
Chromium	4.9711	2.9898	100.0	107.4	ug/L	7	10	
Cobalt	3.7468	3.7702	100.0	102.8	ug/L	3	10	
Copper	1.7187	1.0492	100.0	100.9	ug/L	1	10	
Iron	0.1030	0.0852	10000	10330	ug/L	3	10	
Lead	1.2445	1.2563	100.0	100.2	ug/L	0	10	
Magnesium	0.1564	0.1532	10000	10260	ug/L	3	10	
Manganese	4.2232	4.1001	100.0	105.4	ug/L	5	10	
Molybdenum	1.0556	1.0831	100.0	99.64	ug/L	0	10	
Nickel	0.9368	0.8713	100.0	102.9	ug/L	3	10	
Potassium	1.7121	0.9062	10000	10210	ug/L	2	10	
Selenium	0.0673	0.0566	100.0	105.0	ug/L	5	10	
Silver	2.3515	2.5607	100.0	110.1	ug/L	10	10	
Sodium	2.3666	1.7394	10000	10460	ug/L	5	10	
Thallium	0.9334	0.9034	50.00	48.56	ug/L	-3	10	
Vanadium	3.5914	3.4637	100.0	104.8	ug/L	5	10	
Zinc	1.6321	0.6411	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	544076	-5.04
Scandium	291997	282170	-3.37
Germanium	83828	80710	-3.72
Indium	509088	478728	-5.96
Bismuth	555151	562963	1.41

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593053 File : c11n0053 Time : 11-MAR-2007 17:22
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1914	1.1440	10000	9992	ug/L	0	10	
Antimony	0.2969	0.3046	100.0	104.0	ug/L	4	10	
Arsenic	0.7830	0.6030	100.0	101.2	ug/L	1	10	
Barium	0.1213	0.1103	100.0	103.2	ug/L	3	10	
Beryllium	0.2553	0.2707	100.0	102.2	ug/L	2	10	
Cadmium	0.6125	0.5520	100.0	99.68	ug/L	0	10	
Calcium	0.0287	0.0237	10000	10150	ug/L	2	10	
Chromium	4.9711	2.9842	100.0	107.2	ug/L	7	10	
Cobalt	3.7468	3.8006	100.0	103.6	ug/L	4	10	
Copper	1.7187	1.0478	100.0	100.8	ug/L	1	10	
Iron	0.1030	0.0877	10000	10640	ug/L	6	10	
Lead	1.2445	1.2561	100.0	100.2	ug/L	0	10	
Magnesium	0.1564	0.1539	10000	10310	ug/L	3	10	
Manganese	4.2232	4.1602	100.0	106.9	ug/L	7	10	
Molybdenum	1.0556	1.0452	100.0	96.15	ug/L	-4	10	
Nickel	0.9368	0.8823	100.0	104.2	ug/L	4	10	
Potassium	1.7121	0.9005	10000	10140	ug/L	1	10	
Selenium	0.0673	0.0546	100.0	101.3	ug/L	1	10	
Silver	2.3515	2.5053	100.0	107.8	ug/L	8	10	
Sodium	2.3666	1.7332	10000	10420	ug/L	4	10	
Thallium	0.9334	0.8885	50.00	47.76	ug/L	-4	10	
Vanadium	3.5914	3.4613	100.0	104.7	ug/L	5	10	
Zinc	1.6321	0.6370	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	538153	-6.07
Scandium	291997	281326	-3.65
Germanium	83828	81413	-2.88
Indium	509088	470158	-7.65
Bismuth	555151	581229	4.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593072 File : c11n0072 Time : 11-MAR-2007 18:53
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1914	1.1325	10000	9891	ug/L	-1	10	
Antimony	0.2969	0.3117	100.0	106.4	ug/L	6	10	
Arsenic	0.7830	0.6102	100.0	102.4	ug/L	2	10	
Barium	0.1213	0.1145	100.0	107.2	ug/L	7	10	
Beryllium	0.2553	0.2573	100.0	97.15	ug/L	-3	10	
Cadmium	0.6125	0.5718	100.0	103.3	ug/L	3	10	
Calcium	0.0287	0.0246	10000	10550	ug/L	6	10	
Chromium	4.9711	3.0996	100.0	111.4	ug/L	**11**	10	c+ ***
Cobalt	3.7468	3.8732	100.0	105.6	ug/L	6	10	
Copper	1.7187	1.0572	100.0	101.7	ug/L	2	10	
Iron	0.1030	0.0895	10000	10850	ug/L	9	10	
Lead	1.2445	1.2854	100.0	102.5	ug/L	3	10	
Magnesium	0.1564	0.1518	10000	10160	ug/L	2	10	
Manganese	4.2232	4.2679	100.0	109.7	ug/L	10	10	
Molybdenum	1.0556	1.0913	100.0	100.4	ug/L	0	10	
Nickel	0.9368	0.8876	100.0	104.8	ug/L	5	10	
Potassium	1.7121	0.9243	10000	10420	ug/L	4	10	
Selenium	0.0673	0.0560	100.0	103.9	ug/L	4	10	
Silver	2.3515	2.5728	100.0	110.7	ug/L	**11**	10	c+ ***
Sodium	2.3666	1.7189	10000	10330	ug/L	3	10	
Thallium	0.9334	0.9037	50.00	48.57	ug/L	-3	10	
Vanadium	3.5914	3.6140	100.0	109.3	ug/L	9	10	
Zinc	1.6321	0.6452	100.0	104.4	ug/L	4	10	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	569791	-0.55
Scandium	291997	280463	-3.95
Germanium	83828	76820	-8.36
Indium	509088	441527	-13.27
Bismuth	555151	556177	0.18

+=high bias c=CCV

57101593072

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593014 File : c11n0014 Time : 11-MAR-2007 14:08
Cal : 57101593001 Caldate: 11-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.05239]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1398]	0.2500	0.007794	ug/L	!ib
Barium	[0.03014]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01872]	0.2500	0.003448	ug/L	!ib
Cadmium	[0.02743]	0.2500	0.02184	ug/L	!ib
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	[0.02471]	0.2500	0.02311	ug/L	!ib
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02516]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	[0.02812]	0.2500	0.01770	ug/L	!ib
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.02815]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	1.000	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	564061	-1.55
Scandium	291997	288567	-1.17
Germanium	83828	84026	0.24
Indium	509088	514918	1.15
Bismuth	555151	567091	2.15

!=warning ib=instrument blank

57101593014

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593038 File : c11n0038 Time : 11-MAR-2007 16:21
Cal : 57101593001 Caldate: 11-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.01940]	0.2500	0.01065	ug/L	!ib
Arsenic	0.3164	0.2500	0.007794	ug/L	ib ***
Barium	[0.01556]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.004515]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	ND	0.2500	0.002798	ug/L	
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.2431]	1.000	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	564282	-1.51
Scandium	291997	285362	-2.27
Germanium	83828	83102	-0.87
Indium	509088	505514	-0.70
Bismuth	555151	584042	5.20

!=warning ib=instrument blank

57101593038

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593055 File : c11n0055 Time : 11-MAR-2007 17:30
Cal : 57101593001 Caldate: 11-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.02534]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1677]	0.2500	0.007794	ug/L	!ib
Barium	[0.02905]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01199]	0.2500	0.003448	ug/L	!ib
Cadmium	[0.04628]	0.2500	0.02184	ug/L	!ib
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.01167]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	[0.06144]	0.2500	0.01770	ug/L	!ib
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.02089]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1656]	1.000	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	563761	-1.60
Scandium	291997	283783	-2.81
Germanium	83828	82209	-1.93
Indium	509088	492216	-3.31
Bismuth	555151	604864	8.95

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57101593074 File : c11n0074
Cal : 57101593001 Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 19:01

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.02112]	0.2500	0.01065	ug/L	!ib
Arsenic	0.5806	0.2500	0.007794	ug/L	ib ***
Barium	[0.03236]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01396]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	0.4660	0.2500	0	ug/L	ib ***
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.01618]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	[0.04362]	0.2500	0.01770	ug/L	!ib
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.02189]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.5143]	1.000	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	557679	-2.67
Scandium	291997	278664	-4.57
Germanium	83828	79589	-5.06
Indium	509088	458301	-9.98
Bismuth	555151	606124	9.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593017 File : c11n0017 Time : 11-MAR-2007 14:20
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1220]	0.2500	ug/L	
Arsenic	0.8257	0.2500	ug/L	
Barium	1.450	0.2500	ug/L	
Beryllium	[0.02833]	0.2500	ug/L	
Cadmium	[0.1922]	0.2500	ug/L	
Chromium	2.216	0.2500	ug/L	
Cobalt	0.5076	0.2500	ug/L	
Copper	2.325	0.2500	ug/L	
Lead	0.7052	0.2500	ug/L	
Manganese	0.7983	0.2500	ug/L	
Nickel	2.848	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2196]	0.2500	ug/L	
Thallium	[0.05168]	0.1250	ug/L	
Vanadium	[0.1277]	1.000	ug/L	
Zinc	4.532	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	122200	ug/L	122
Calcium	300000	365500	ug/L	122
Iron	250000	284100	ug/L	114
Magnesium	100000	123800	ug/L	124
Molybdenum	2000	2320	ug/L	116
Potassium	100000	120100	ug/L	120
Sodium	250000	294000	ug/L	118

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	391057	-31.75
Scandium	291997	226329	-22.49
Germanium	83828	71363	-14.87
Indium	509088	391304	-23.14
Bismuth	555151	391921	-29.40

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593018 File : c11n0018 Time : 11-MAR-2007 14:24
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	110000	ug/L	10		
Arsenic	100.0	105.1	ug/L	5	20	
Cadmium	100.0	102.2	ug/L	2	20	
Calcium	300000	329100	ug/L	10		
Chromium	200.0	229.3	ug/L	15	20	
Cobalt	200.0	213.5	ug/L	7	20	
Copper	200.0	198.1	ug/L	-1	20	
Iron	250000	249500	ug/L	0		
Magnesium	100000	110500	ug/L	11		
Manganese	200.0	221.2	ug/L	11	20	
Molybdenum	2000	2155	ug/L	8		
Nickel	200.0	207.5	ug/L	4	20	
Potassium	100000	109200	ug/L	9		
Selenium	100.0	86.69	ug/L	-13	20	
Silver	50.00	46.25	ug/L	-8	20	
Sodium	250000	260800	ug/L	4		
Vanadium	200.0	235.0	ug/L	18	20	
Zinc	100.0	89.31	ug/L	-11	20	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Scandium	291997	237399	-18.70
Germanium	83828	71878	-14.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593077 File : c11n0077 Time : 11-MAR-2007 19:26
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.07393]	0.2500	ug/L	
Arsenic	0.7519	0.2500	ug/L	
Barium	1.478	0.2500	ug/L	
Beryllium	[0.02470]	0.2500	ug/L	
Cadmium	[0.1747]	0.2500	ug/L	
Chromium	2.181	0.2500	ug/L	
Cobalt	0.5453	0.2500	ug/L	
Copper	2.373	0.2500	ug/L	
Lead	0.6987	0.2500	ug/L	
Manganese	0.8513	0.2500	ug/L	
Nickel	2.732	0.2500	ug/L	
Selenium	[0.08102]	0.2500	ug/L	
Silver	[0.2382]	0.2500	ug/L	
Thallium	[0.03706]	0.1250	ug/L	
Vanadium	[0.2755]	1.000	ug/L	
Zinc	4.310	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	125000	ug/L	125
Calcium	300000	376100	ug/L	125
Iron	250000	276100	ug/L	110
Magnesium	100000	125000	ug/L	125
Molybdenum	2000	2444	ug/L	122
Potassium	100000	127300	ug/L	127
Sodium	250000	302800	ug/L	121

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Lithium	572954	424469	-25.92
Scandium	291997	224857	-22.99
Germanium	83828	67007	-20.07
Indium	509088	373012	-26.73
Bismuth	555151	383624	-30.90

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57101593078 File : c11n0078 Time : 11-MAR-2007 19:30
Cal : 57101593001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	113300	ug/L	13		
Arsenic	100.0	104.8	ug/L	5	20	
Cadmium	100.0	102.3	ug/L	2	20	
Calcium	300000	338200	ug/L	13		
Chromium	200.0	228.9	ug/L	14	20	
Cobalt	200.0	211.7	ug/L	6	20	
Copper	200.0	198.0	ug/L	-1	20	
Iron	250000	250000	ug/L	0		
Magnesium	100000	112800	ug/L	13		
Manganese	200.0	221.6	ug/L	11	20	
Molybdenum	2000	2193	ug/L	10		
Nickel	200.0	207.2	ug/L	4	20	
Potassium	100000	113900	ug/L	14		
Selenium	100.0	86.63	ug/L	-13	20	
Silver	50.00	46.93	ug/L	-6	20	
Sodium	250000	271100	ug/L	8		
Vanadium	200.0	237.4	ug/L	19	20	
Zinc	100.0	88.59	ug/L	-11	20	

ISTD (ICALBLK c11n0004)	ICALBLK Abund	Abund	%Drift
Scandium	291997	229383	-21.44
Germanium	83828	68074	-18.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57101593

Date : 03/11/07 Reference: c11n0004
Sequence : MET05 c11n0 Analyzed : 03/11/07 13:27

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	572954	291997	83828	509088	555151
		LOWER LIMIT	171886	87599	25148	152726	166545
		UPPER LIMIT	687545	350396	100594	610906	666181
014	ICB		564061	288567	84026	514918	567091
017	ICSA		391057	226329	71363	391304	391921
018	ICSAB		392996	237399	71878	414756	402496
023	BLANK	QC378542	439203	220090	71731	367720	425379
024	BS	QC378543	445757	233941	66594	384939	448417
025	BSD	QC378544	439749	232552	66761	386103	453290
027	MSS	193027-002	426532	232803	72548	370115	430508
028	SER	QC378547	512194	271150	80707	454514	539642
029	MS	QC378545	438163	236346	71971	375739	434993
030	MSD	QC378546	426981	234963	70724	372288	432516
031	PDS	QC378548	431222	237533	70746	369571	424281
035	CCV		544076	282170	80710	478728	562963
038	CCB		564282	285362	83102	505514	584042
040	SAMPLE	193027-001	444388	236666	69984	373530	423499
041	SAMPLE	193027-003	459076	235297	71407	367155	425268
042	SAMPLE	193027-004	436667	239597	69978	371660	435777
043	SAMPLE	193027-005	451736	240522	71652	375542	442929
044	SAMPLE	193027-006	432238	237046	72019	370565	438838
045	SAMPLE	193027-007	460298	244080	70598	375639	463733
046	SAMPLE	193027-008	432867	233016	71083	364862	423302
047	SAMPLE	193027-011	445296	234951	71688	374522	423364
048	SAMPLE	193027-012	419390	235382	69332	369900	424379
049	SAMPLE	193027-013	463650	236522	72331	385849	442178
053	CCV		538153	281326	81413	470158	581229
055	CCB		563761	283783	82209	492216	604864
058	SAMPLE	193027-014	474036	245598	73847	389164	466620
059	SAMPLE	193027-015	457660	234140	69595	377505	462657
060	SAMPLE	193193-004	462191	234808	73192	381001	461654
061	SAMPLE	193193-007	452723	227949	70610	370112	446621
062	SAMPLE	193193-008	458597	233056	71710	378605	463479
063	SAMPLE	193193-011	445931	228987	70270	368440	452730
064	SAMPLE	193193-015	441591	224542	70115	360442	444266
065	SAMPLE	193193-017	440587	225799	69140	365159	451706
072	CCV		569791	280463	76820	441527	556177
074	CCB		557679	278664	79589	458301	606124
077	ICSA		424469	224857	67007	373012	383624
078	ICSAB		420398	229383	68074	386691	400137

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57101593 Instrument: MET05 Agilent ICP-MS Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c11n0001	TUN				11-MAR-2007 13:13	1.0	1.0				1	
002	c11n0002	X	RINSE			11-MAR-2007 13:19	1.0					2	
003	c11n0003	X	RINSE			11-MAR-2007 13:23	1.0					2	
004	c11n0004	ICALBLK	CALBLANK			11-MAR-2007 13:27	1.0	1.0				2	
005	c11n0005	ICAL				11-MAR-2007 13:31	1.0	1.0				3	
006	c11n0006	ICAL				11-MAR-2007 13:35	1.0	1.0				4	
007	c11n0007	ICAL				11-MAR-2007 13:39	1.0	1.0				5	
008	c11n0008	ICAL				11-MAR-2007 13:43	1.0	1.0				6	
009	c11n0009	ICAL				11-MAR-2007 13:47	1.0	1.0				7	
010	c11n0010	ICAL				11-MAR-2007 13:52	1.0	1.0				8	
011	c11n0011	X	RINSE			11-MAR-2007 13:56	1.0					2	
012	c11n0012	ICV				11-MAR-2007 14:00	1.0	1.0			1	9	
013	c11n0013	X	RINSE			11-MAR-2007 14:04	1.0					2	
014	c11n0014	ICB				11-MAR-2007 14:08	1.0	1.0			1	2	
015	c11n0015	X				11-MAR-2007 14:12	1.0					2	
016	c11n0016	X				11-MAR-2007 14:16	1.0					2	
017	c11n0017	ICSA				11-MAR-2007 14:20	1.0	1.0			1	10 2	7:CA=365500
018	c11n0018	ICSAB				11-MAR-2007 14:24	1.0	1.0			1	11 2	12:CA=329100
019	c11n0019	X	RINSE			11-MAR-2007 14:28	1.0					2	
020	c11n0020	X	RINSE			11-MAR-2007 14:32	1.0					2	
021	c11n0021	X	RINSE			11-MAR-2007 14:36	1.0					2	
022	c11n0022	X	RINSE			11-MAR-2007 14:40	1.0					2	
023	c11n0023	BLANK	QC378542	122950	Filtra	11-MAR-2007 14:44	1.0	1.0	1		1	2	
024	c11n0024	BS	QC378543	122950	Filtra	11-MAR-2007 14:48	1.0	1.0			1	2	
025	c11n0025	BSD	QC378544	122950	Filtra	11-MAR-2007 14:52	1.0	1.0			1	2	
026	c11n0026	X	RINSE			11-MAR-2007 14:56	1.0					2	
027	c11n0027	MSS	193027-002	122950	Filtra	11-MAR-2007 15:00	1.0	1.0	3		1	2	3:MG=77730.0
028	c11n0028	SER	QC378547	122950	Filtra	11-MAR-2007 15:04	5.0	1.0		2	1	2	
029	c11n0029	MS	QC378545	122950	Filtra	11-MAR-2007 15:08	1.0	1.0			1	2	3:MG=80740.0
030	c11n0030	MSD	QC378546	122950	Filtra	11-MAR-2007 15:12	1.0	1.0			1	2	3:MG=84980.0
031	c11n0031	PDS	QC378548	122950	Filtra	11-MAR-2007 15:16	1.0	1.0		1	1	12	3:MG=84120.0

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RLH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57101593 Instrument: MET05 Agilent ICP-MS Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11n0032	X	RINSE			11-MAR-2007 15:57	1.0					2	
033	c11n0033	X	RINSE			11-MAR-2007 16:01	1.0					2	
034	c11n0034	X	RINSE			11-MAR-2007 16:05	1.0					2	
035	c11n0035	CCV				11-MAR-2007 16:09	1.0	1.0			1	13	
036	c11n0036	X	RINSE			11-MAR-2007 16:13	1.0					2	
037	c11n0037	X				11-MAR-2007 16:17	1.0					2	
038	c11n0038	CCB				11-MAR-2007 16:21	1.0	1.0	1		1	2	
039	c11n0039	X				11-MAR-2007 16:25	1.0					2	
040	c11n0040	SAMPLE	193027-001	122950	Filtra	11-MAR-2007 16:29	1.0	1.0	3		1	2	3:NA=72470.0
041	c11n0041	SAMPLE	193027-003	122950	Filtra	11-MAR-2007 16:34	1.0	1.0	3		1	2	3:NA=67380.0
042	c11n0042	SAMPLE	193027-004	122950	Filtra	11-MAR-2007 16:37	1.0	1.0	3		1	2	3:NA=77680.0
043	c11n0043	SAMPLE	193027-005	122950	Filtra	11-MAR-2007 16:41	1.0	1.0	3		1	2	3:MG=84630.0
044	c11n0044	SAMPLE	193027-006	122950	Filtra	11-MAR-2007 16:45	1.0	1.0	3		1	2	3:NA=66220.0
045	c11n0045	SAMPLE	193027-007	122950	Filtra	11-MAR-2007 16:49	1.0	1.0	3		1	2	3:MG=60840.0
046	c11n0046	SAMPLE	193027-008	122950	Filtra	11-MAR-2007 16:53	1.0	1.0	3		1	2	3:NA=111400
047	c11n0047	SAMPLE	193027-011	122950	Filtra	11-MAR-2007 16:57	1.0	1.0	3		1	2	3:NA=193000
048	c11n0048	SAMPLE	193027-012	122950	Filtra	11-MAR-2007 17:01	1.0	1.0	4		1	2	4:NA=162100
049	c11n0049	SAMPLE	193027-013	122950	Filtra	11-MAR-2007 17:05	1.0	1.0	4		1	2	4:NA=43160.0
050	c11n0050	X	RINSE			11-MAR-2007 17:09	1.0					2	
051	c11n0051	X	RINSE			11-MAR-2007 17:13	1.0					2	
052	c11n0052	X	RINSE			11-MAR-2007 17:17	1.0					2	
053	c11n0053	CCV				11-MAR-2007 17:22	1.0	1.0			1	13 2	
054	c11n0054	X	RINSE			11-MAR-2007 17:26	1.0					2	
055	c11n0055	CCB				11-MAR-2007 17:30	1.0	1.0			1	2	
056	c11n0056	X				11-MAR-2007 17:34	1.0					2	
057	c11n0057	XBLANK	QC378542	122950	Filtra	11-MAR-2007 17:38	1.0	1.0	1		1	2	
058	c11n0058	SAMPLE	193027-014	122950	Filtra	11-MAR-2007 17:42	1.0	1.0	3		1	2	2:MG=51860.0
059	c11n0059	SAMPLE	193027-015	122950	Filtra	11-MAR-2007 17:46	1.0	1.0	4		1	2	4:CA=57580.0
060	c11n0060	SAMPLE	193193-004	122950	Filtra	11-MAR-2007 17:50	1.0	1.0	1		1	2	1:NA=30240.0
061	c11n0061	SAMPLE	193193-007	122950	Filtra	11-MAR-2007 17:54	1.0	1.0	1		1	2	1:NA=39230.0
062	c11n0062	SAMPLE	193193-008	122950	Filtra	11-MAR-2007 17:58	1.0	1.0	1		1	2	1:NA=36000.0

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: Rebt Date: 3/11/07

00355

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57101593 Instrument: MET05 Agilent ICP-MS Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11n0063	SAMPLE	193193-011	122950	Filtra	11-MAR-2007 18:02	1.0	1.0	1		1	2	2:NA=24360.0
064	c11n0064	SAMPLE	193193-015	122950	Filtra	11-MAR-2007 18:06	1.0	1.0	1		1	2	1:NA=43210.0
065	c11n0065	SAMPLE	193193-017	122950	Filtra	11-MAR-2007 18:10	1.0	1.0	1		1	2	1:NA=42390.0
066	c11n0066	X	RINSE			11-MAR-2007 18:14	1.0					2	
067	c11n0067	X	RINSE			11-MAR-2007 18:18	1.0					2	
068	c11n0068	XBLANK	QC378542	122950	Filtra	11-MAR-2007 18:22	1.0	1.0	1		1	2	
069	c11n0069	X	RINSE			11-MAR-2007 18:26	1.0					2	
070	c11n0070	X	RINSE			11-MAR-2007 18:30	1.0					2	
071	c11n0071	X	RINSE			11-MAR-2007 18:35	1.0					2	
072	c11n0072	CCV				11-MAR-2007 18:53	1.0	1.0	2		1	13 2	
073	c11n0073	X	RINSE			11-MAR-2007 18:57	1.0					2	
074	c11n0074	CCB				11-MAR-2007 19:01	1.0	1.0	2		1	2	
075	c11n0075	X				11-MAR-2007 19:05	1.0					2	
076	c11n0076	X				11-MAR-2007 19:22	1.0					2	
077	c11n0077	ICSA				11-MAR-2007 19:26	1.0	1.0			1	10 2	7:CA=376100
078	c11n0078	ICSAB				11-MAR-2007 19:30	1.0	1.0			1	11 2	12:CA=338200
079	c11n0079	X	RINSE			11-MAR-2007 19:34	1.0				.	2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RCA Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67101597001
Units : ug/L

Date : 11-MAR-2007 13:35
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c11n0005	67101597005		11-MAR-2007 13:40	S5645
L2	c11n0006	67101597006		11-MAR-2007 13:46	S5648
L3	c11n0007	67101597007		11-MAR-2007 13:51	S5649
L4	c11n0008	67101597008		11-MAR-2007 13:56	S5650
L5	c11n0009	67101597009		11-MAR-2007 14:01	S5644
L6	c11n0010	67101597010		11-MAR-2007 14:06	S5646

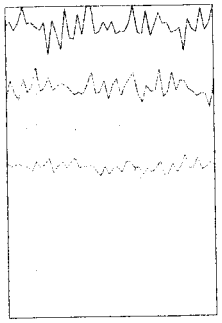
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7797	0.6602	0.6737	0.6368	0.6275	0.5950	BLNK	-0.7320	1.66246		0.6622	0.999	0.995	
Antimony	A	0.3235	0.2940	0.2939	0.2903	0.2967	0.2868	BLNK	-0.0114	3.46274		0.2975	1.000	0.995	
Barium	A	0.2790	0.1027	0.1154	0.0958	0.0920	0.0875	BLNK	-0.0155	11.3143		0.1287	0.999	0.995	
Beryllium	A	0.3327	0.3285	0.3369	0.3336	0.3416	0.3349	BLNK	-0.0020	2.97424		0.3347	1.000	0.995	
Cadmium	A	0.0869	0.0796	0.0892	0.0856	0.0835	0.0805	BLNK	-0.0027	12.3239		0.0842	1.000	0.995	
Calcium	A	0.2503	0.0646	0.0460	0.0245	0.0217	0.0205	BLNK	-118.21	48.5240		0.0713	0.999	0.995	
Lead	A	0.8656	0.7170	0.7208	0.6788	0.6635	0.6425	BLNK	-0.0210	1.54628		0.7147	1.000	0.995	
Magnesium	A	0.6343	0.5469	0.5573	0.5217	0.5101	0.4820	BLNK	-0.6918	2.05039		0.5421	0.999	0.995	
Molybdenum	A	0.2472	0.2300	0.2389	0.2271	0.2237	0.2255	BLNK	-0.0067	4.44166		0.2321	1.000	0.995	
Potassium	A	6.5780	1.8867	1.3292	0.7862	0.7289	0.6907	BLNK	-82.405	1.43897		1.9999	0.999	0.995	
Silver	A	0.3675	0.3641	0.3689	0.3579	0.3633	0.3508	BLNK	-0.0064	2.83022		0.3621	1.000	0.995	
Thallium	A	1.4676	0.9616	0.9212	0.8746	0.9153	0.8932	BLNK	-0.0414	1.11473		1.0056	1.000	0.995	
Arsenic	E	0.9187	0.6487	0.6670	0.6390	0.6251	0.6001	BLNK	-0.0420	1.65282		0.6831	1.000	0.995	
Chromium	E	6.4330	3.9322	3.5828	3.1755	3.1526	2.9789	BLNK	-0.1056	0.33200		3.8759	0.999	0.995	
Cobalt	E	5.2760	4.9399	5.2270	5.0645	4.9438	4.6485	BLNK	-0.0015	0.21239		5.0166	0.999	0.995	
Copper	E	19.117	10.270	9.2750	8.0920	7.6121	7.1405	BLNK	-0.1409	0.13831		10.251	0.999	0.995	
Manganese	E	2.0495	1.7367	1.7195	1.6453	1.6331	1.5350	BLNK	-0.0173	0.64325		1.7199	0.999	0.995	
Nickel	E	2.7116	1.6311	1.6764	1.3942	1.3366	1.2437	BLNK	-0.1049	0.79255		1.6656	0.999	0.995	
Sodium	E	3.3500	1.2333	1.0132	0.7270	0.6721	0.6461	BLNK	-41.172	1.53903		1.2736	1.000	0.995	
Vanadium	E	6.4071	3.2784	2.9968	2.5025	2.4916	2.3588	BLNK	-0.1671	0.41962		3.3392	0.999	0.995	
Zinc	E	20.742	4.8340	6.3245	1.3469	1.1345	1.0530	BLNK	-1.4141	0.94280		5.9058	0.998	0.995	
Iron	H	1.0920	0.9782	1.0156	0.9293	0.9007	0.8645	BLNK	-0.5784	1.14701		0.9634	1.000	0.995	
Selenium	H	0.1631	0.1456	0.1597	0.1555	0.1496	0.1370	BLNK	-0.0062	7.16537		0.1518	0.998	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

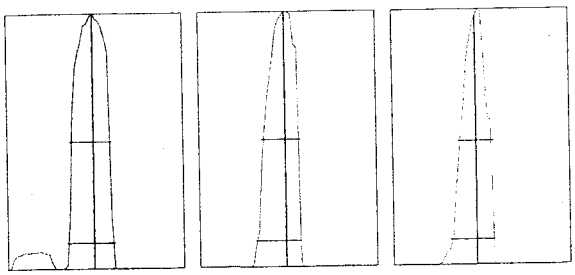
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19928.0	18753.4	4.35	1.00
89	50,000	37452.0	36828.8	3.90	0.80
205	50,000	24422.0	24217.8	3.22	2.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.985%
Doubly Charged: 70/140 2.163%



m/z:	7	89	205
Height:	18,927	36,897	23,621
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.04 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-5 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF					
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	: --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	26.8	26.85
59	3764.5	3.57
89	2364.6	3.67

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2690.7	5.11
78	0.2	231.46
89	18472.2	4.21

Integration Time: 0.1000sec

Generated : Mar 11, 2007 12:49:40
Printed : Mar 11, 2007 12:51:19

P/A Factor Tuning Report

Acquired:Mar 11 2007 01:00 pm

Mass [amu]	Element	P/A Factor
6	Li	0.064990
7	(Li)	Sensitivity too low
9	Be	0.074241
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091195
45	Sc	0.090963
51	V	0.092550
52	Cr	0.096217
55	Mn	0.098412
56	Fe	Sensitivity too high
59	Co	0.100893
60	Ni	Sensitivity too low
63	Cu	0.108212
65	Cu	0.107611
66	Zn	Sensitivity too low
72	Ge	0.105571
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103605
98	Mo	0.104388
99	(Ru)	Sensitivity too low
107	Ag	0.113364
111	Cd	Sensitivity too low
115	In	0.112154
118	(In)	0.111256
121	Sb	0.110585
137	Ba	Sensitivity too low
159	Tb	0.114120
205	Tl	0.120270
206	(Pb)	0.120189
207	(Pb)	0.120232
208	Pb	0.119703
209	Bi	0.120469

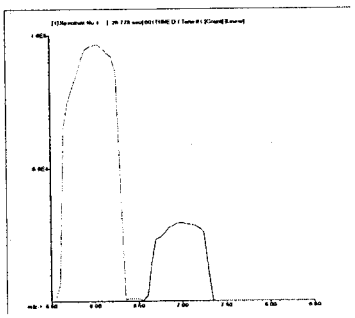
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C11n00.B\001TUNE.D
Date Acquired:	Mar 11 2007 01:17 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.31	5.00	
59 Co	0.46	5.00	
115 In	1.05	5.00	
205 Tl	0.72	5.00	



7 Li

Mass Calib.

Actual: 7.00

Required: 6.90 - 7.10

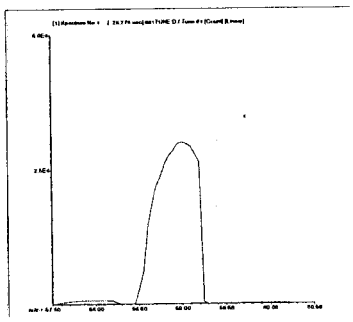
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

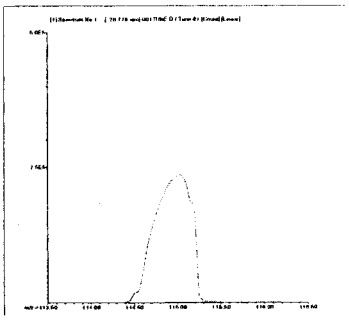
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



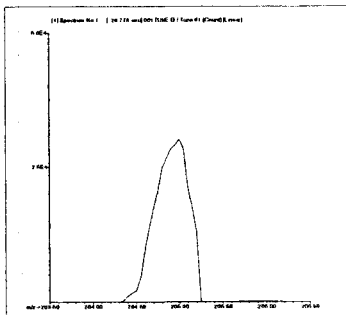
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004C
Date Acquired: Mar 11 2007 01:33 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	914016.31	A	10480.00	1.15
7	(Li)		P		
9	Be	12.22	P	5.09	41.66
23	Na	21398.87	P	249.90	1.17
24	Mg	10005.18	P	421.70	4.21
27	Al	13058.89	P	278.90	2.14
39	K	1698730.00	A	3644.00	0.21
44	Ca	72282.13	P	2201.00	3.05
45	Sc	339061.09	P	1139.00	0.34
45	Sc	39996.86	P	179.00	0.45
45	Sc	1483318.00	A	17720.00	1.19
51	V	318.53	P	34.07	10.70
52	Cr	254.45	P	13.10	5.15
55	Mn	21.48	P	1.70	7.90
56	Fe	3419.72	P	30.52	0.89
59	Co	5.56	P	1.93	34.65
60	Ni	105.93	P	5.25	4.96
63	Cu	383.34	P	35.76	9.33
65	Cu	178.89	P	20.37	11.39
66	Zn	564.09	P	27.32	4.84
72	Ge	77432.61	P	80.66	0.10
72	Ge	18807.66	P	97.30	0.52
75	As	9.56	P	1.02	10.65
78	Se	1.33	P	0.67	50.00
89	Y	1804800.00	A	16040.00	0.89
98	Mo	54.45	P	10.18	18.70
107	Ag	80.00	P	6.67	8.33
111	Cd	7.78	P	5.09	65.47
115	In	1776838.00	A	21300.00	1.20
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	116.67	P	10.00	8.57
137	Ba	61.11	P	10.18	16.66
159	Tb	2230978.00	A	34340.00	1.54
205	Tl	1010.08	P	40.00	3.96
208	Pb	606.70	P	10.00	1.65
209	Bi	1361245.00	A	12200.00	0.90

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 11 2007 01:38 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	925835.00	A	19290.00	2.08
7 (Li)		P		
9 Be	615.59	P	19.53	3.17
23 Na	27732.04	P	586.70	2.12
24 Mg	190104.80	P	1073.00	0.56
27 Al	233693.50	P	1226.00	0.52
39 K	1971530.00	A	11640.00	0.59
44 Ca	75032.58	P	1193.00	1.59
45 Sc	344107.81	P	843.70	0.25
45 Sc	41388.66	P	256.70	0.62
45 Sc	1498586.00	A	10080.00	0.67
51 V	530.39	P	29.45	5.55
52 Cr	532.61	P	28.92	5.43
55 Mn	169.63	P	18.60	10.97
56 Fe	75157.48	P	1144.00	1.52
59 Co	436.68	P	26.46	6.06
60 Ni	224.45	P	17.46	7.78
63 Cu	748.92	P	14.19	1.89
65 Cu	362.97	P	39.48	10.88
66 Zn	812.63	P	6.51	0.80
72 Ge	78328.36	P	132.30	0.17
72 Ge	19589.46	P	105.20	0.54
75 As	36.00	P	2.67	7.41
78 Se	25.56	P	3.79	14.83
89 Y	1858633.00	A	17890.00	0.96
98 Mo	918.96	P	40.33	4.39
99 (Ru)	11.11	P	8.39	75.50
107 Ag	1344.56	P	65.19	4.85
111 Cd	317.79	P	25.24	7.94
115 In	1828997.00	A	19380.00	1.06
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1183.43	P	46.32	3.91
137 Ba	1264.55	P	5.10	0.40
159 Tb	2266466.00	A	10910.00	0.48
205 Tl	2003.57	P	132.50	6.61
208 Pb	3923.72	P	60.27	1.54
209 Bi	1365602.00	A	24000.00	1.76

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	925835.00	2.08	914016.31	101.3	80 - 120	
45 Sc	344107.81	0.25	339061.13	101.5	80 - 120	
45 Sc	41388.66	0.62	39996.86	103.5	80 - 120	
45 Sc	1498586.00	0.67	1483317.60	101.0	80 - 120	
72 Ge	78328.36	0.17	77432.61	101.2	80 - 120	
72 Ge	19589.46	0.54	18807.66	104.2	80 - 120	
89 Y	1858632.60	0.96	1804800.40	103.0	80 - 120	
115 In	1828996.90	1.06	1776837.60	102.9	80 - 120	
159 Tb	2266466.50	0.48	2230977.80	101.6	80 - 120	
209 Bi	1365602.10	1.76	1361245.10	100.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 11 2007 01:43 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937823.81	A	6224.00	0.66
7 (Li)		P		
9 Be	3080.44	P	40.42	1.31
23 Na	50986.19	P	592.00	1.16
24 Mg	837286.38	A	3021.00	0.36
27 Al	1010774.00	A	5005.00	0.50
39 K	2888643.00	A	14210.00	0.49
44 Ca	98971.37	P	560.40	0.57
45 Sc	345030.69	P	1666.00	0.48
45 Sc	41342.93	P	328.20	0.79
45 Sc	1531079.00	A	12120.00	0.79
51 V	1355.64	P	62.58	4.62
52 Cr	1625.67	P	11.71	0.72
55 Mn	718.17	P	44.67	6.22
56 Fe	337522.31	P	2890.00	0.86
59 Co	2042.03	P	41.60	2.04
60 Ni	674.47	P	35.95	5.33
63 Cu	2006.47	P	92.11	4.59
65 Cu	990.42	P	34.36	3.47
66 Zn	944.12	P	35.84	3.80
72 Ge	78924.04	P	539.40	0.68
72 Ge	19536.44	P	203.10	1.04
75 As	126.67	P	10.35	8.17
78 Se	114.89	P	13.42	11.68
89 Y	1868140.00	A	19480.00	1.04
98 Mo	4296.40	P	88.37	2.06
99 (Ru)	12.22	P	1.92	15.74
107 Ag	6739.69	P	96.66	1.43
111 Cd	1473.47	P	69.86	4.74
115 In	1850896.00	A	13410.00	0.72
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5441.30	P	73.60	1.35
137 Ba	2350.29	P	131.00	5.57
159 Tb	2288938.00	A	6597.00	0.29
205 Tl	6684.22	P	326.70	4.89
208 Pb	16410.34	P	323.90	1.97
209 Bi	1390616.00	A	8860.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937823.81	0.66	914016.31	102.6	80 - 120	
45 Sc	345030.69	0.48	339061.13	101.8	80 - 120	
45 Sc	41342.93	0.79	39996.86	103.4	80 - 120	
45 Sc	1531079.30	0.79	1483317.60	103.2	80 - 120	
72 Ge	78924.04	0.68	77432.61	101.9	80 - 120	
72 Ge	19536.44	1.04	18807.66	103.9	80 - 120	
89 Y	1868140.00	1.04	1804800.40	103.5	80 - 120	
115 In	1850896.00	0.72	1776837.60	104.2	80 - 120	
159 Tb	2288938.00	0.29	2230977.80	102.6	80 - 120	
209 Bi	1390615.90	0.64	1361245.10	102.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 11 2007 01:49 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	915792.00	A	8758.00	0.96
7 (Li)		P		
9 Be	6171.53	P	159.10	2.58
23 Na	83963.03	P	607.20	0.72
24 Mg	1686488.00	A	18770.00	1.11
27 Al	2038663.00	A	8525.00	0.42
39 K	4021900.00	A	7872.00	0.20
44 Ca	139294.80	P	1229.00	0.88
45 Sc	346555.09	P	2125.00	0.61
45 Sc	41436.95	P	385.80	0.93
45 Sc	1513238.00	A	24650.00	1.63
51 V	2483.58	P	77.97	3.14
52 Cr	2968.87	P	79.60	2.68
55 Mn	1424.90	P	47.54	3.34
56 Fe	703939.00	P	5234.00	0.74
59 Co	4331.83	P	62.27	1.44
60 Ni	1389.35	P	55.93	4.03
63 Cu	3670.15	P	30.12	0.82
65 Cu	1808.29	P	25.76	1.42
66 Zn	2502.85	P	41.36	1.65
72 Ge	79028.66	P	352.70	0.45
72 Ge	19787.51	P	195.40	0.99
75 As	264.00	P	13.13	4.97
78 Se	252.45	P	12.81	5.07
89 Y	1854459.00	A	23840.00	1.29
98 Mo	8863.18	P	287.30	3.24
99 (Ru)	12.22	P	6.94	56.77
107 Ag	13474.92	P	183.00	1.36
111 Cd	3258.29	P	45.39	1.39
115 In	1826288.00	A	17690.00	0.97
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10734.66	P	253.80	2.36
137 Ba	5243.47	P	140.20	2.67
159 Tb	2272728.00	A	18870.00	0.83
205 Tl	12623.35	P	244.70	1.94
208 Pb	32763.25	P	488.80	1.49
209 Bi	1370337.00	A	23330.00	1.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	915791.94	0.96	914016.31	100.2	80 - 120	
45 Sc	346555.06	0.61	339061.13	102.2	80 - 120	
45 Sc	41436.96	0.93	39996.86	103.6	80 - 120	
45 Sc	1513238.30	1.63	1483317.60	102.0	80 - 120	
72 Ge	79028.66	0.45	77432.61	102.1	80 - 120	
72 Ge	19787.51	0.99	18807.66	105.2	80 - 120	
89 Y	1854459.40	1.29	1804800.40	102.8	80 - 120	
115 In	1826288.30	0.97	1776837.60	102.8	80 - 120	
159 Tb	2272728.00	0.83	2230977.80	101.9	80 - 120	
209 Bi	1370336.60	1.70	1361245.10	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 11 2007 01:54 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	928096.50	A	7530.00	0.81
7 (Li)		P		
9 Be	61912.26	P	769.40	1.24
23 Na	608617.13	P	1966.00	0.32
24 Mg	15938670.00	A	73420.00	0.46
27 Al	19451340.00	A	161300.00	0.83
39 K	24016490.00	A	81250.00	0.34
44 Ca	747481.63	P	2162.00	0.29
45 Sc	349240.09	P	468.70	0.13
45 Sc	41863.36	P	556.10	1.33
45 Sc	1527563.00	A	18820.00	1.23
51 V	20951.97	P	269.30	1.29
52 Cr	26584.40	P	35.38	0.13
55 Mn	13773.90	P	20.05	0.15
56 Fe	6490921.00	A	37350.00	0.58
59 Co	42397.70	P	87.32	0.21
60 Ni	11672.75	P	77.76	0.67
63 Cu	31714.51	P	195.40	0.62
65 Cu	15322.58	P	103.60	0.68
66 Zn	5278.84	P	91.01	1.72
72 Ge	80134.09	P	519.90	0.65
72 Ge	19597.26	P	137.50	0.70
75 As	2504.24	P	90.03	3.60
78 Se	2492.24	P	9.17	0.37
89 Y	1869155.00	A	15550.00	0.83
98 Mo	84910.69	P	844.10	0.99
99 (Ru)	16.67	P	6.67	40.00
107 Ag	130279.20	P	1152.00	0.88
111 Cd	31163.36	P	432.00	1.39
115 In	1819963.00	A	12020.00	0.66
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	105681.10	P	1618.00	1.53
137 Ba	43349.24	P	293.00	0.68
159 Tb	2262846.00	A	26660.00	1.18
205 Tl	119126.90	P	816.40	0.69
208 Pb	307197.81	P	456.80	0.15
209 Bi	1362154.00	A	12560.00	0.92

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	928096.56	0.81	914016.31	101.5	80 - 120	
45 Sc	349240.09	0.13	339061.13	103.0	80 - 120	
45 Sc	41863.36	1.33	39996.86	104.7	80 - 120	
45 Sc	1527562.90	1.23	1483317.60	103.0	80 - 120	
72 Ge	80134.09	0.65	77432.61	103.5	80 - 120	
72 Ge	19597.26	0.70	18807.66	104.2	80 - 120	
89 Y	1869155.10	0.83	1804800.40	103.6	80 - 120	
115 In	1819963.10	0.66	1776837.60	102.4	80 - 120	
159 Tb	2262846.30	1.18	2230977.80	101.4	80 - 120	
209 Bi	1362153.90	0.92	1361245.10	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 11 2007 01:59 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	885035.50	A	9139.00	1.03
7 (Li)		P		
9 Be	604657.19	P	4870.00	0.81
23 Na	5609490.00	A	68990.00	1.23
24 Mg	############	A	899700.00	0.57
27 Al	############	A	2278000.00	1.17
39 K	############	A	2348000.00	1.04
44 Ca	6727684.00	A	46250.00	0.69
45 Sc	360595.50	P	813.30	0.23
45 Sc	41733.74	P	122.10	0.29
45 Sc	1549179.00	A	8568.00	0.55
51 V	207966.80	P	631.80	0.30
52 Cr	263142.41	P	1229.00	0.47
55 Mn	136311.30	P	618.20	0.45
56 Fe	64959420.00	A	270300.00	0.42
59 Co	412646.59	P	3518.00	0.85
60 Ni	111561.50	P	700.70	0.63
63 Cu	300003.81	P	2643.00	0.88
65 Cu	145962.80	P	402.80	0.28
66 Zn	44711.09	P	190.60	0.43
72 Ge	80709.42	P	374.20	0.46
72 Ge	19705.54	P	34.58	0.18
75 As	24636.74	P	172.30	0.70
78 Se	24139.73	P	137.00	0.57
89 Y	1872389.00	A	20740.00	1.11
98 Mo	837844.19	P	11970.00	1.43
99 (Ru)	34.45	P	13.47	39.11
107 Ag	1304533.00	A	24510.00	1.88
111 Cd	299794.91	P	5650.00	1.88
115 In	1795535.00	A	18630.00	1.04
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	1065274.00	A	6231.00	0.58
137 Ba	418490.59	P	5897.00	1.41
159 Tb	2275105.00	A	15730.00	0.69
205 Tl	1200463.00	A	14640.00	1.22
208 Pb	3018941.00	A	31250.00	1.04
209 Bi	1311667.00	A	14710.00	1.12

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	885035.50	1.03	914016.31	96.8	80 - 120	
45 Sc	360595.50	0.23	339061.13	106.4	80 - 120	
45 Sc	41733.74	0.29	39996.86	104.3	80 - 120	
45 Sc	1549178.60	0.55	1483317.60	104.4	80 - 120	
72 Ge	80709.42	0.46	77432.61	104.2	80 - 120	
72 Ge	19705.54	0.18	18807.66	104.8	80 - 120	
89 Y	1872389.10	1.11	1804800.40	103.7	80 - 120	
115 In	1795535.00	1.04	1776837.60	101.1	80 - 120	
159 Tb	2275105.30	0.69	2230977.80	102.0	80 - 120	
209 Bi	1311666.50	1.12	1361245.10	96.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 11 2007 02:04 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 02:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	845869.38	A	8570.00	1.01
7	(Li)		P		
9	Be	1133152.00	A	26100.00	2.30
23	Na	10932670.00	A	31920.00	0.29
24	Mg	############	A	5672000.00	1.94
27	Al	############	A	8055000.00	2.23
39	K	############	A	8347000.00	1.99
44	Ca	12443510.00	A	287200.00	2.31
45	Sc	368407.91	P	6951.00	1.89
45	Sc	42308.40	P	510.70	1.21
45	Sc	1516671.00	A	34620.00	2.28
51	V	399151.00	P	2067.00	0.52
52	Cr	504107.31	P	4263.00	0.85
55	Mn	259746.91	P	981.60	0.38
56	Fe	############	A	1516000.00	1.19
59	Co	786640.13	P	5154.00	0.66
60	Ni	210473.20	P	1754.00	0.83
63	Cu	560092.81	P	2050.00	0.37
65	Cu	274376.59	P	1414.00	0.52
66	Zn	82598.06	P	204.50	0.25
72	Ge	82567.25	P	598.80	0.73
72	Ge	19609.88	P	99.58	0.51
75	As	47072.36	P	341.90	0.73
78	Se	45255.18	P	571.00	1.26
89	Y	1822665.00	A	28870.00	1.58
98	Mo	1644168.00	A	39220.00	2.39
99	(Ru)	64.45	P	12.62	19.58
107	Ag	2419848.00	A	54600.00	2.26
111	Cd	555505.31	P	6635.00	1.19
115	In	1724202.00	A	23490.00	1.36
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1978358.00	A	43160.00	2.18
137	Ba	785086.19	P	14250.00	1.82
159	Tb	2243654.00	A	37170.00	1.66
205	Tl	2261116.00	A	36300.00	1.61
208	Pb	5766329.00	A	72050.00	1.25
209	Bi	1265896.00	A	23490.00	1.86

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	845869.38	1.01	914016.31	92.5	80 - 120	
45	Sc	368407.94	1.89	339061.13	108.7	80 - 120	
45	Sc	42308.40	1.21	39996.86	105.8	80 - 120	
45	Sc	1516670.60	2.28	1483317.60	102.2	80 - 120	
72	Ge	82567.25	0.73	77432.61	106.6	80 - 120	
72	Ge	19609.88	0.51	18807.66	104.3	80 - 120	
89	Y	1822665.40	1.58	1804800.40	101.0	80 - 120	
115	In	1724201.90	1.36	1776837.60	97.0	80 - 120	
159	Tb	2243654.00	1.66	2230977.80	100.6	80 - 120	
209	Bi	1265895.60	1.86	1361245.10	93.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597016 File : c11n0016
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5653

IDF : 1.0
Time : 11-MAR-2007 14:40

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6622	0.6235	10000	10360	ug/L	4	10	
Antimony	A	0.2975	0.3089	100.0	107.0	ug/L	7	10	
Barium	A	0.1287	0.0915	100.0	103.5	ug/L	4	10	
Beryllium	A	0.3347	0.3314	100.0	98.56	ug/L	-1	10	
Cadmium	A	0.0842	0.0831	100.0	102.5	ug/L	3	10	
Calcium	A	0.0713	0.0216	10000	10380	ug/L	4	10	
Lead	A	0.7147	0.6431	100.0	99.43	ug/L	-1	10	
Magnesium	A	0.5421	0.5105	10000	10470	ug/L	5	10	
Molybdenum	A	0.2321	0.2239	100.0	99.46	ug/L	-1	10	
Potassium	A	1.9999	0.7228	10000	10320	ug/L	3	10	
Silver	A	0.3621	0.3899	100.0	110.3	ug/L	10	10	
Thallium	A	1.0056	0.8794	50.00	48.98	ug/L	-2	10	
Arsenic	E	0.6831	0.6298	100.0	104.1	ug/L	4	10	
Chromium	E	3.8759	3.0649	100.0	101.7	ug/L	2	10	
Cobalt	E	5.0166	4.7371	100.0	100.6	ug/L	1	10	
Copper	E	10.251	7.3230	100.0	101.1	ug/L	1	10	
Manganese	E	1.7199	1.5822	100.0	101.8	ug/L	2	10	
Nickel	E	1.6656	1.2817	100.0	101.5	ug/L	2	10	
Sodium	E	1.2736	0.6568	10000	10070	ug/L	1	10	
Vanadium	E	3.3392	2.4160	100.0	101.2	ug/L	1	10	
Zinc	E	5.9058	1.1217	100.0	104.3	ug/L	4	10	
Iron	H	0.9634	0.9059	10000	10390	ug/L	4	10	
Selenium	H	0.1518	0.1448	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	920893	0.75
Scandium	A	1483318	1532446	3.31
Scandium	E	39997	42978	7.45
Scandium	H	339061	350356	3.33
Germanium	H	77433	79881	3.16
Germanium	E	18808	19922	5.92
Indium	A	1776838	1787538	0.60
Bismuth	A	1361245	1284782	-5.62
Yttrium	A	1804800	1879207	4.12
Terbium	A	2230978	2243464	0.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597038 File : c11n0038
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 11-MAR-2007 16:40

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5900	10000	9808	ug/L	-2	10	
Antimony	A	0.2975	0.3014	100.0	104.4	ug/L	4	10	
Barium	A	0.1287	0.0864	100.0	97.70	ug/L	-2	10	
Beryllium	A	0.3347	0.3027	100.0	90.02	ug/L	-10	10	
Cadmium	A	0.0842	0.0786	100.0	96.91	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9943	ug/L	-1	10	
Lead	A	0.7147	0.5990	100.0	92.61	ug/L	-7	10	
Magnesium	A	0.5421	0.4839	10000	9922	ug/L	-1	10	
Molybdenum	A	0.2321	0.2117	100.0	94.03	ug/L	-6	10	
Potassium	A	1.9999	0.6954	10000	9924	ug/L	-1	10	
Silver	A	0.3621	0.3776	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8567	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6831	0.6033	100.0	99.68	ug/L	0	10	
Chromium	E	3.8759	2.9271	100.0	97.07	ug/L	-3	10	
Cobalt	E	5.0166	4.5113	100.0	95.82	ug/L	-4	10	
Copper	E	10.251	6.8447	100.0	94.53	ug/L	-5	10	
Manganese	E	1.7199	1.5380	100.0	98.91	ug/L	-1	10	
Nickel	E	1.6656	1.2219	100.0	96.73	ug/L	-3	10	
Sodium	E	1.2736	0.6305	10000	9662	ug/L	-3	10	
Vanadium	E	3.3392	2.2989	100.0	96.30	ug/L	-4	10	
Zinc	E	5.9058	1.0575	100.0	98.28	ug/L	-2	10	
Iron	H	0.9634	0.9065	10000	10400	ug/L	4	10	
Selenium	H	0.1518	0.1385	100.0	99.22	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917861	0.42
Scandium	A	1483318	1570616	5.89
Scandium	E	39997	43857	9.65
Scandium	H	339061	336429	-0.78
Germanium	H.	77433	78961	1.97
Germanium	E	18808	20769	10.43
Indium	A	1776838	1840619	3.59
Bismuth	A	1361245	1283949	-5.68
Yttrium	A	1804800	1921443	6.46
Terbium	A	2230978	2296357	2.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597058 File : c11n0058 Time : 11-MAR-2007 18:59
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5894	10000	9797	ug/L	-2	10	
Antimony	A	0.2975	0.2971	100.0	102.9	ug/L	3	10	
Barium	A	0.1287	0.0872	100.0	98.67	ug/L	-1	10	
Beryllium	A	0.3347	0.3050	100.0	90.71	ug/L	-9	10	
Cadmium	A	0.0842	0.0785	100.0	96.70	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5883	100.0	90.94	ug/L	-9	10	
Magnesium	A	0.5421	0.4833	10000	9908	ug/L	-1	10	
Molybdenum	A	0.2321	0.2099	100.0	93.24	ug/L	-7	10	
Potassium	A	1.9999	0.6950	10000	9919	ug/L	-1	10	
Silver	A	0.3621	0.3779	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8136	50.00	45.31	ug/L	-9	10	
Arsenic	E	0.6831	0.6065	100.0	100.2	ug/L	0	10	
Chromium	E	3.8759	2.9215	100.0	96.89	ug/L	-3	10	
Cobalt	E	5.0166	4.5019	100.0	95.62	ug/L	-4	10	
Copper	E	10.251	6.7154	100.0	92.74	ug/L	-7	10	
Manganese	E	1.7199	1.5513	100.0	99.77	ug/L	0	10	
Nickel	E	1.6656	1.2156	100.0	96.24	ug/L	-4	10	
Sodium	E	1.2736	0.6259	10000	9592	ug/L	-4	10	
Vanadium	E	3.3392	2.3119	100.0	96.84	ug/L	-3	10	
Zinc	E	5.9058	1.0542	100.0	97.97	ug/L	-2	10	
Iron	H	0.9634	0.8894	10000	10200	ug/L	2	10	
Selenium	H	0.1518	0.1389	100.0	99.50	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	912804	-0.13
Scandium	A	1483318	1555714	4.88
Scandium	E	39997	45395	13.50
Scandium	H	339061	316695	-6.60
Germanium	H	77433	74471	-3.82
Germanium	E	18808	21713	15.45
Indium	A	1776838	1814333	2.11
Bismuth	A	1361245	1229389	-9.69
Yttrium	A	1804800	1908693	5.76
Terbium	A	2230978	2232736	0.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597072 File : c11n0072 Time : 11-MAR-2007 20:14
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5901	10000	9810	ug/L	-2	10	
Antimony	A	0.2975	0.2952	100.0	102.2	ug/L	2	10	
Barium	A	0.1287	0.0872	100.0	98.60	ug/L	-1	10	
Beryllium	A	0.3347	0.2986	100.0	88.80	ug/L	**-11**	10	c- ***
Cadmium	A	0.0842	0.0775	100.0	95.48	ug/L	-5	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5948	100.0	91.95	ug/L	-8	10	
Magnesium	A	0.5421	0.4812	10000	9865	ug/L	-1	10	
Molybdenum	A	0.2321	0.2089	100.0	92.77	ug/L	-7	10	
Potassium	A	1.9999	0.6966	10000	9941	ug/L	-1	10	
Silver	A	0.3621	0.3747	100.0	106.0	ug/L	6	10	
Thallium	A	1.0056	0.7968	50.00	44.37	ug/L	**-11**	10	c- ***
Arsenic	E	0.6831	0.5985	100.0	98.88	ug/L	-1	10	
Chromium	E	3.8759	2.8758	100.0	95.37	ug/L	-5	10	
Cobalt	E	5.0166	4.4104	100.0	93.67	ug/L	-6	10	
Copper	E	10.251	6.7307	100.0	92.95	ug/L	-7	10	
Manganese	E	1.7199	1.5283	100.0	98.29	ug/L	-2	10	
Nickel	E	1.6656	1.1932	100.0	94.46	ug/L	-6	10	
Sodium	E	1.2736	0.6285	10000	9632	ug/L	-4	10	
Vanadium	E	3.3392	2.2624	100.0	94.77	ug/L	-5	10	
Zinc	E	5.9058	1.0555	100.0	98.09	ug/L	-2	10	
Iron	H	0.9634	0.9005	10000	10330	ug/L	3	10	
Selenium	H	0.1518	0.1394	100.0	99.85	ug/L	0	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917720	0.41
Scandium	A	1483318	1533714	3.40
Scandium	E	39997	44243	10.62
Scandium	H	339061	314905	-7.12
Germanium	H	77433	73650	-4.89
Germanium	E	18808	20782	10.50
Indium	A	1776838	1792631	0.89
Bismuth	A	1361245	1212255	-10.95
Yttrium	A	1804800	1870131	3.62
Terbium	A	2230978	2178779	-2.34

-=low bias c=CCV

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597018 File : c11n0018 Time : 11-MAR-2007 14:50
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003508]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01038]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.07495]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02791]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	963727	5.44
Scandium	A	1483318	1572576	6.02
Scandium	E	39997	45367	13.43
Scandium	H	339061	367200	8.30
Germanium	H	77433	84025	8.51
Germanium	E	18808	21238	12.92
Indium	A	1776838	1872261	5.37
Bismuth	A	1361245	1357645	-0.26
Yttrium	A	1804800	1912994	5.99
Terbium	A	2230978	2279148	2.16

!=warning ib=instrument blank

67101597018

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597040 File : c11n0040 Time : 11-MAR-2007 16:50
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01001]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01068]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01309]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001891]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01247]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005017]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01104]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	972249	6.37
Scandium	A	1483318	1654236	11.52
Scandium	E	39997	45255	13.15
Scandium	H	339061	332262	-2.01
Germanium	H	77433	78694	1.63
Germanium	E	18808	21341	13.47
Indium	A	1776838	1999046	12.51
Bismuth	A	1361245	1404744	3.20
Yttrium	A	1804800	2040525	13.06
Terbium	A	2230978	2416702	8.32

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597060 File : c11n0060 Time : 11-MAR-2007 19:09
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007192]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007118]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01108]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008521]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	calc
Manganese	E	[0.01312]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01515]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006840]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	973914	6.55
Scandium	A	1483318	1592762	7.38
Scandium	E	39997	47412	18.54
Scandium	H	339061	350704	3.43
Germanium	H	77433	81005	4.61
Germanium	E	18808	22154	17.79
Indium	A	1776838	1931902	8.73
Bismuth	A	1361245	1311613	-3.65
Yttrium	A	1804800	1959638	8.58
Terbium	A	2230978	2295376	2.89

!=warning calc=check quantitation ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597074 File : c11n0074
Cal : 67101597001 Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 20:25

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006054]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04629]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05015]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06346]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05053]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.02667]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.510]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07756]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	962389	5.29
Scandium	A	1483318	1576613	6.29
Scandium	E	39997	45713	14.29
Scandium	H	339061	315018	-7.09
Germanium	H	77433	75067	-3.06
Germanium	E	18808	21426	13.92
Indium	A	1776838	1895828	6.70
Bismuth	A	1361245	1309292	-3.82
Yttrium	A	1804800	1943884	7.71
Terbium	A	2230978	2278473	2.13

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597020 File : c11n0020 Time : 11-MAR-2007 15:01
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06348]	0.1000	ug/L	
Barium	A	0.9957	0.1000	ug/L	
Beryllium	A	[0.02693]	0.1000	ug/L	
Cadmium	A	1.769	0.1000	ug/L	
Lead	A	0.4565	0.1000	ug/L	
Silver	A	0.2096	0.1000	ug/L	
Thallium	A	[0.01561]	0.05000	ug/L	
Arsenic	E	0.2250	0.1000	ug/L	
Chromium	E	1.376	0.1000	ug/L	
Cobalt	E	0.2179	0.1000	ug/L	
Copper	E	1.289	0.1000	ug/L	
Manganese	E	0.6159	0.1000	ug/L	
Nickel	E	1.190	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.295	0.1000	ug/L	
Selenium	H	[0.08705]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95040	ug/L	95
Calcium	A	300000	295300	ug/L	98
Magnesium	A	100000	92340	ug/L	92
Molybdenum	A	2000	1940	ug/L	97
Potassium	A	100000	96420	ug/L	96
Sodium	E	250000	250000	ug/L	100
Iron	H	250000	236600	ug/L	95

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	622890	-31.85
Scandium	A	1483318	1366945	-7.85
Scandium	E	39997	38907	-2.72
Scandium	H	339061	342995	1.16
Germanium	H	77433	70980	-8.33
Germanium	E	18808	17767	-5.53
Indium	A	1776838	1533682	-13.68
Bismuth	A	1361245	982053	-27.86
Yttrium	A	1804800	1703322	-5.62
Terbium	A	2230978	2012659	-9.79

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597021 File : c11n0021 Time : 11-MAR-2007 15:06
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95930	ug/L	-4		
Cadmium	A	100.0	99.12	ug/L	-1	20	
Calcium	A	300000	300800	ug/L	0		
Magnesium	A	100000	92760	ug/L	-7		
Molybdenum	A	2000	1985	ug/L	-1		
Potassium	A	100000	97110	ug/L	-3		
Silver	A	50.00	41.98	ug/L	-16	20	
Arsenic	E	100.0	107.4	ug/L	7	20	
Chromium	E	200.0	203.6	ug/L	2	20	
Cobalt	E	200.0	190.3	ug/L	-5	20	
Copper	E	200.0	184.2	ug/L	-8	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	186.5	ug/L	-7	20	
Sodium	E	250000	255400	ug/L	2		
Vanadium	E	200.0	208.5	ug/L	4	20	
Zinc	E	100.0	91.73	ug/L	-8	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	327471	-3.42
Scandium	A	1483318	1355444	-8.62
Scandium	E	39997	36971	-7.57
Germanium	H	77433	68911	-11.01
Germanium	E	18808	16797	-10.69
Indium	A	1776838	1540719	-13.29
Yttrium	A	1804800	1696682	-5.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597076 File : c11n0076 Time : 11-MAR-2007 20:35
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05860]	0.1000	ug/L	
Barium	A	0.9563	0.1000	ug/L	
Beryllium	A	[0.02353]	0.1000	ug/L	
Cadmium	A	1.766	0.1000	ug/L	
Lead	A	0.4196	0.1000	ug/L	
Silver	A	0.2067	0.1000	ug/L	
Thallium	A	[0.008457]	0.05000	ug/L	
Arsenic	E	0.2697	0.1000	ug/L	
Chromium	E	1.414	0.1000	ug/L	
Cobalt	E	0.2241	0.1000	ug/L	
Copper	E	1.245	0.1000	ug/L	
Manganese	E	0.6715	0.1000	ug/L	
Nickel	E	1.218	0.1000	ug/L	
Vanadium	E	[0.008865]	0.1000	ug/L	
Zinc	E	1.293	0.1000	ug/L	
Selenium	H	[0.06983]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93670	ug/L	94
Calcium	A	300000	293900	ug/L	98
Magnesium	A	100000	91190	ug/L	91
Molybdenum	A	2000	1933	ug/L	97
Potassium	A	100000	96180	ug/L	96
Sodium	E	250000	252500	ug/L	101
Iron	H	250000	248400	ug/L	99

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	634364	-30.60
Scandium	A	1483318	1398346	-5.73
Scandium	E	39997	39660	-0.84
Scandium	H	339061	290010	-14.47
Germanium	H	77433	61783	-20.21
Germanium	E	18808	18488	-1.70
Indium	A	1776838	1561861	-12.10
Bismuth	A	1361245	925157	-32.04
Yttrium	A	1804800	1733946	-3.93
Terbium	A	2230978	1999275	-10.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597077 File : c11n0077 Time : 11-MAR-2007 20:41
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94960	ug/L	-5		
Cadmium	A	100.0	98.29	ug/L	-2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	91140	ug/L	-9		
Molybdenum	A	2000	1963	ug/L	-2		
Potassium	A	100000	98330	ug/L	-2		
Silver	A	50.00	42.24	ug/L	-16	20	
Arsenic	E	100.0	104.8	ug/L	5	20	
Chromium	E	200.0	195.6	ug/L	-2	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	174.2	ug/L	-13	20	
Manganese	E	200.0	195.0	ug/L	-3	20	
Nickel	E	200.0	179.0	ug/L	-11	20	
Sodium	E	250000	247100	ug/L	-1		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	88.37	ug/L	-12	20	
Iron	H	250000	251500	ug/L	1		
Selenium	H	100.0	104.9	ug/L	5	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	296240	-12.63
Scandium	A	1483318	1371514	-7.54
Scandium	E	39997	39151	-2.11
Germanium	H	77433	62930	-18.73
Germanium	E	18808	17980	-4.40
Indium	A	1776838	1548140	-12.87
Yttrium	A	1804800	1741446	-3.51

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67101597

Date : 03/11/07
Sequence : MET06 c11n0

Reference: c11n0004
Analyzed : 03/11/07 13:35

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	914016	1483318	39997	339061	77433	18808	1776838	1361245	1804800	2230978
		LOWER LIMIT	274205	444995	11999	101718	23230	5642	533051	408374	541440	669293
		UPPER LIMIT	1096820	1779982	47996	406873	92919	22569	2132206	1633494	2165760	2677174
018	ICB		963727	1572576	45367	367200	84025	21238	1872261	1357645	1912994	2279148
020	ICSA		622890	1366945	38907	342995	70980	17767	1533682	982053	1703322	2012659
021	ICSAB		569366	1355444	36971	327471	68911	16797	1540719	993926	1696682	2031170
026	BLANK	QC378535	836682	1424803	35209	292671	86773	21570	1778537	1349027	1836250	2282868
029	BS	QC378536	857144	1509285	39009	312458	72064	18496	1783183	1278068	1892531	2282399
030	BSD	QC378537	861203	1551355	39808	312548	72278	18604	1818445	1300675	1921066	2331298
034	MSS	193066-001	905777	1534515	43316	336255	78628	20673	1840908	1296053	1897043	2285615
038	CCV		917861	1570616	43857	336429	78961	20769	1840619	1283949	1921443	2296357
040	CCB		972249	1654236	45255	332262	78694	21341	1999046	1404744	2040525	2416702
042	BS	QC378337	916735	1554349	46552	334374	77400	21627	1838868	1287103	1907305	2269070
043	BSD	QC378338	956175	1670608	44594	322061	75429	20778	1975288	1353371	2046837	2424406
047	SER	QC378540	948814	1539747	44575	333366	79284	21447	1885021	1333434	1908735	2266445
048	MS	QC378538	888940	1533453	44081	333016	77306	20867	1827973	1254901	1888221	2236691
049	MSD	QC378539	892914	1550233	45009	336293	78781	21092	1851017	1270897	1915967	2255171
050	PDS	QC378541	883046	1581029	44322	331567	76282	20539	1844645	1244265	1939659	2289320
051	SAMPLE	193027-011	902112	1515017	44761	316048	75068	21252	1789200	1232903	1846622	2192746
052	SAMPLE	193027-012	882580	1581851	43375	338263	76935	20257	1795750	1245605	1928783	2250666
053	SAMPLE	193027-013	904920	1548607	44564	311777	73257	21323	1856592	1308079	1928518	2276958
058	CCV		912804	1555714	45395	316695	74471	21713	1814333	1229389	1908693	2232736
060	CCB		973914	1592762	47412	350704	81005	22154	1931902	1311613	1959638	2295376
062	BLANK	QC378542	865408	1466928	43484	292592	71811	21234	1788078	1266761	1850296	2194448
063	BLANK	QC378535	871445	1495662	41130	277041	70359	20773	1809097	1285728	1865840	2204232
065	SER	QC378448	963257	1559864	45540	322173	78179	21671	1903583	1293108	1912874	2252355
066	MSS	193217-011	934690	1563946	47186	323026	77667	22504	1876638	1291462	1921464	2270499
067	SAMPLE	193217-018	952386	1588525	46465	328076	77146	22226	1866653	1243191	1915643	2234811
068	SAMPLE	193217-019	900674	1475273	45702	316215	75969	22007	1789383	1258662	1810646	2142271
069	SAMPLE	193217-020	920841	1477998	45777	290497	70800	21769	1820574	1246372	1853182	2190742
070	SAMPLE	193217-022	903970	1491228	43775	301535	72670	21196	1795919	1213745	1841718	2170505
072	CCV		917720	1533714	44243	314905	73650	20782	1792631	1212255	1870131	2178779
074	CCB		962389	1576613	45713	315018	75067	21426	1895828	1309292	1943884	2278473
076	ICSA		634364	1398346	39660	290010	61783	18488	1561861	925157	1733946	1999275
077	ICSAB		549824	1371514	39151	296240	62930	17980	1548140	933015	1741446	2001537

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00383

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	c11n0001	TUN				11-MAR-2007 13:17	1.0	1.0			1	
002	c11n0002	X	RINSE			11-MAR-2007 13:24	1.0				2	
003	c11n0003	X	RINSE			11-MAR-2007 13:30	1.0				2	
004	c11n0004	ICALBLK	CALBLANK			11-MAR-2007 13:35	1.0	1.0			2	
005	c11n0005	ICAL				11-MAR-2007 13:40	1.0	1.0			3	
006	c11n0006	ICAL				11-MAR-2007 13:46	1.0	1.0			4	
007	c11n0007	ICAL				11-MAR-2007 13:51	1.0	1.0			5	
008	c11n0008	ICAL				11-MAR-2007 13:56	1.0	1.0			6	
009	c11n0009	ICAL				11-MAR-2007 14:01	1.0	1.0			7	
010	c11n0010	ICAL				11-MAR-2007 14:06	1.0	1.0			8	
011	c11n0011	X	RINSE			11-MAR-2007 14:12	1.0				2	
012	c11n0012	X				11-MAR-2007 14:19	1.0				9 2	
013	c11n0013	X	RINSE			11-MAR-2007 14:24	1.0				2	
014	c11n0014	X				11-MAR-2007 14:29	1.0				9 2	
015	c11n0015	X	RINSE			11-MAR-2007 14:35	1.0				2	
016	c11n0016	ICV				11-MAR-2007 14:40	1.0	1.0		1	9	
017	c11n0017	X	RINSE			11-MAR-2007 14:45	1.0				2	
018	c11n0018	ICB				11-MAR-2007 14:50	1.0	1.0		1	2	
019	c11n0019	X				11-MAR-2007 14:56	1.0				2	
020	c11n0020	ICSA				11-MAR-2007 15:01	1.0	1.0		1	10 2	7:CA=295300
021	c11n0021	ICSAB				11-MAR-2007 15:06	1.0	1.0		1	11 2	9:CA=300800
022	c11n0022	X	RINSE			11-MAR-2007 15:12	1.0				2	
023	c11n0023	X	RINSE			11-MAR-2007 15:17	1.0				2	
024	c11n0024	X	RINSE			11-MAR-2007 15:23	1.0				2	
025	c11n0025	X	RINSE			11-MAR-2007 15:30	1.0				2	
026	c11n0026	BLANK	QC378535	122949	Water	11-MAR-2007 15:36	1.0	1.0		1	2	
027	c11n0027	XBS	QC378337	122902	Soil	11-MAR-2007 15:41	100.0	50.0		1	2	
028	c11n0028	XBSD	QC378338	122902	Soil	11-MAR-2007 15:46	100.0	50.0		1	2	
029	c11n0029	BS	QC378536	122949	Water	11-MAR-2007 15:52	1.0	1.0		1	2	
030	c11n0030	BSD	QC378537	122949	Water	11-MAR-2007 15:57	1.0	1.0		1	2	
031	c11n0031	XBS	QC378337	122902	Soil	11-MAR-2007 16:02	50.0	50.0	1	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11n0032	XBSD	QC378338	122902	Soil	11-MAR-2007 16:08	50.0	50.0		1	1	2	
033	c11n0033	X	RINSE			11-MAR-2007 16:13	1.0					2	
034	c11n0034	MSS	193066-001	122949	Water	11-MAR-2007 16:18	10.0	1.0	1		1	2	1:NA=43290.0
035	c11n0035	X	RINSE			11-MAR-2007 16:24	1.0					2	
036	c11n0036	X	RINSE			11-MAR-2007 16:29	1.0					2	
037	c11n0037	X	RINSE			11-MAR-2007 16:35	1.0					2	
038	c11n0038	CCV				11-MAR-2007 16:40	1.0	1.0			1	12 2	
039	c11n0039	X	RINSE			11-MAR-2007 16:45	1.0					2	
040	c11n0040	CCB				11-MAR-2007 16:50	1.0	1.0			1	2	
041	c11n0041	X				11-MAR-2007 16:56	1.0					2	
042	c11n0042	BS	QC378337	122902	Soil	11-MAR-2007 17:01	5.0	50.0			1	2	
043	c11n0043	BSD	QC378338	122902	Soil	11-MAR-2007 17:07	5.0	50.0			1	2	
044	c11n0044	X	RINSE			11-MAR-2007 17:14	1.0					2	
045	c11n0045	X	RINSE			11-MAR-2007 17:19	1.0					2	
046	c11n0046	X	RINSE			11-MAR-2007 17:24	1.0					2	
047	c11n0047	SER	QC378540	122949	Water	11-MAR-2007 17:30	50.0	1.0	1	1	1	2	
048	c11n0048	MS	QC378538	122949	Water	11-MAR-2007 17:35	10.0	1.0			1	2	1:NA=42850.0
049	c11n0049	MSD	QC378539	122949	Water	11-MAR-2007 17:40	10.0	1.0			1	2	1:NA=40870.0
050	c11n0050	PDS	QC378541	122949	Water	11-MAR-2007 17:45	10.0	1.0			1	13 14 2	1:NA=52430.0
051	c11n0051	SAMPLE	193027-011	122949	Water	11-MAR-2007 17:51	10.0	1.0	1		1	2	1:NA=20640.0
052	c11n0052	SAMPLE	193027-012	122949	Water	11-MAR-2007 17:56	10.0	1.0	1		1	2	1:MN=546.100
053	c11n0053	SAMPLE	193027-013	122949	Water	11-MAR-2007 18:01	10.0	1.0	1		1	2	1:MN=355.100
054	c11n0054	XMSS	193165-002	122902	Soil	11-MAR-2007 18:07	100.0	50.0			1	2	
055	c11n0055	X	RINSE			11-MAR-2007 18:14	1.0					2	
056	c11n0056	X	RINSE			11-MAR-2007 18:19	1.0					2	
057	c11n0057	X	RINSE			11-MAR-2007 18:25	1.0					2	
058	c11n0058	CCV				11-MAR-2007 18:59	1.0	1.0			1	12 2	
059	c11n0059	X	RINSE			11-MAR-2007 19:04	1.0					2	
060	c11n0060	CCB				11-MAR-2007 19:09	1.0	1.0			1	2	
061	c11n0061	X				11-MAR-2007 19:15	1.0					2	
062	c11n0062	BLANK	QC378542	122950	Filtra	11-MAR-2007 19:20	1.0	1.0	2		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00385

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11n0063	BLANK	QC378535	122949	Water	11-MAR-2007 19:26	1.0	1.0	2		1	2	
064	c11n0064	XSER	NO SAMPLE	122902	Soil	11-MAR-2007 19:31	500.0					2	
065	c11n0065	SER	QC378448	122924	Filtra	11-MAR-2007 19:37	50.0	1.0	4		1	2	
066	c11n0066	MSS	193217-011	122924	Filtra	11-MAR-2007 19:42	10.0	1.0	2		1	2	
067	c11n0067	SAMPLE	193217-018	122924	Filtra	11-MAR-2007 19:47	20.0	1.0	2		1	2	
068	c11n0068	SAMPLE	193217-019	122924	Filtra	11-MAR-2007 19:53	20.0	1.0	2		1	2	
069	c11n0069	SAMPLE	193217-020	122924	Filtra	11-MAR-2007 19:58	20.0	1.0	2		1	2	
070	c11n0070	SAMPLE	193217-022	122924	Filtra	11-MAR-2007 20:03	20.0	1.0	2		1	2	
071	c11n0071	X	RINSE			11-MAR-2007 20:09	1.0					2	
072	c11n0072	CCV				11-MAR-2007 20:14	1.0	1.0	2		1	12 2	
073	c11n0073	X	RINSE			11-MAR-2007 20:19	1.0					2	
074	c11n0074	CCB				11-MAR-2007 20:25	1.0	1.0			1	2	
075	c11n0075	X				11-MAR-2007 20:30	1.0					2	
076	c11n0076	ICSA				11-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=293900
077	c11n0077	ICSAB				11-MAR-2007 20:41	1.0	1.0			1	11 2	8:CA=302800

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Reviewer: ---

: MET06
m : 67102089001
: ug/L

Date : 11-MAR-2007 21:48
X Axis : R

File	Seqnum	Sample ID	Analyzed	Stds
11v0005	67102089005		11-MAR-2007 21:57	S5645
11v0006	67102089006		11-MAR-2007 22:07	S5648
11v0007	67102089007		11-MAR-2007 22:13	S5649
11v0008	67102089008		11-MAR-2007 22:18	S5650
11v0009	67102089009		11-MAR-2007 22:23	S5644
11v0010	67102089010		11-MAR-2007 22:29	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
um	A	0.7440	0.6429	0.6521	0.6363	0.6128	0.5872	BLNK	-7.6617	1.68872		0.6459	1.000	0.995	
ay	A	0.3409	0.2890	0.2936	0.2930	0.3030	0.2968	BLNK	-0.0085	3.35540		0.3027	1.000	0.995	
	A	0.4037	0.1035	0.1118	0.0970	0.0920	0.0907	BLNK	-0.0169	10.9950		0.1498	1.000	0.995	
ium	A	0.3309	0.3028	0.3105	0.3193	0.3230	0.3251	BLNK	-0.0015	3.08033		0.3186	1.000	0.995	
n	A	0.0834	0.0796	0.0840	0.0829	0.0824	0.0798	BLNK	-0.0070	12.4432		0.0820	1.000	0.995	
n	A	0.1436	0.0446	0.0357	0.0232	0.0215	0.0207	BLNK	-81.880	48.1918		0.0482	1.000	0.995	
	A	0.8059	0.6432	0.6408	0.6257	0.6195	0.6138	BLNK	-0.0213	1.62630		0.6582	1.000	0.995	
ium	A	0.6005	0.5234	0.5359	0.5174	0.4987	0.4717	BLNK	-7.6191	2.09660		0.5246	0.999	0.995	
enum	A	0.2618	0.2114	0.2190	0.2221	0.2167	0.2214	BLNK	-0.1321	4.53953		0.2254	1.000	0.995	
ium	A	6.7520	1.8885	1.3293	0.7952	0.7214	0.6923	BLNK	-90.772	1.44010		2.0298	1.000	0.995	
	A	0.3848	0.3483	0.3611	0.3508	0.3660	0.3498	BLNK	-0.0072	2.83288		0.3601	0.999	0.995	
um	A	0.9717	0.8440	0.8654	0.8449	0.9382	0.8996	BLNK	-0.0146	1.10253		0.8940	1.000	0.995	
c	E	0.7845	0.7055	0.6703	0.6231	0.6234	0.5986	BLNK	-0.0397	1.65705		0.6676	1.000	0.995	
um	E	6.7615	3.7004	3.4790	3.0989	3.0170	2.8686	BLNK	-0.1073	0.34521		3.8209	0.999	0.995	
	E	6.3663	4.8841	5.0175	4.8824	4.7055	4.4452	BLNK	-0.0023	0.22232		5.0502	0.999	0.995	
	E	19.392	9.6176	8.7147	7.5301	7.1801	6.7889	BLNK	-0.1241	0.14570		9.8706	0.999	0.995	
ese	E	2.1469	1.8205	1.7538	1.6596	1.6205	1.5361	BLNK	-0.0190	0.64390		1.7562	0.999	0.995	
	E	2.7472	1.5734	1.5610	1.3440	1.2667	1.1876	BLNK	-0.1021	0.83129		1.6133	0.999	0.995	
n	E	5.0940	1.1259	0.9390	0.6843	0.6522	0.6178	BLNK	-35.517	1.60399		1.5189	0.999	0.995	
um	E	6.5329	3.1382	2.8300	2.4463	2.4020	2.2988	BLNK	-0.1593	0.43152		3.2747	1.000	0.995	
	E	19.597	4.6691	6.0832	1.2883	1.1073	1.0308	BLNK	-1.4441	0.96394		5.6293	0.999	0.995	
	H	2.0196	1.2241	1.0609	0.9983	0.8932	0.9093	BLNK	-0.9124	1.10350		1.1842	1.000	0.995	
ium	H	0.1531	0.1421	0.1582	0.1558	0.1440	0.1415	BLNK	-0.0066	7.03960		0.1491	1.000	0.995	

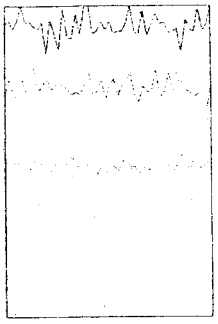
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
um	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ny	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
n	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
n	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
enum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
um	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
c	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
um	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
um	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
um	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

en amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

o

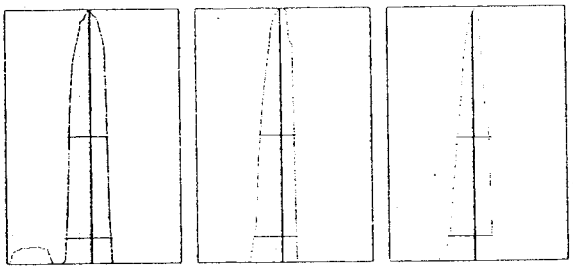
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19928.0	18753.4	4.35	1.00
89	50,000	37452.0	36828.8	3.90	0.80
205	50,000	24422.0	24217.8	3.22	2.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.985%
Doubly Charged: 70/140 2.163%



m/z:	7	89	205
Height:	18,927	36,897	23,621
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.04 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-5 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	26.8	26.85
59	3764.5	3.57
89	2364.6	3.67

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2690.7	5.11
78	0.2	231.46
89	18472.2	4.21

Integration Time: 0.1000sec

P/A Factor Tuning Report

Acquired:Mar 11 2007 01:00 pm

Mass [amu]	Element	P/A Factor
6	Li	0.064990
7	(Li)	Sensitivity too low
9	Be	0.074241
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091195
45	Sc	0.090963
51	V	0.092550
52	Cr	0.096217
55	Mn	0.098412
56	Fe	Sensitivity too high
59	Co	0.100893
60	Ni	Sensitivity too low
63	Cu	0.108212
65	Cu	0.107611
66	Zn	Sensitivity too low
72	Ge	0.105571
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103605
98	Mo	0.104388
99	(Ru)	Sensitivity too low
107	Ag	0.113364
111	Cd	Sensitivity too low
115	In	0.112154
118	(In)	0.111256
121	Sb	0.110585
137	Ba	Sensitivity too low
159	Tb	0.114120
205	Tl	0.120270
206	(Pb)	0.120189
207	(Pb)	0.120232
208	Pb	0.119703
209	Bi	0.120469

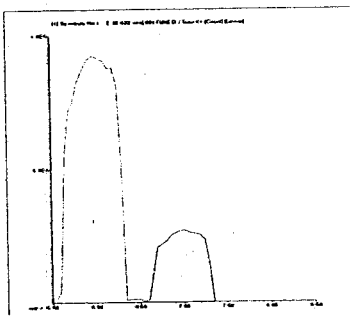
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

6020 QC Tune Report

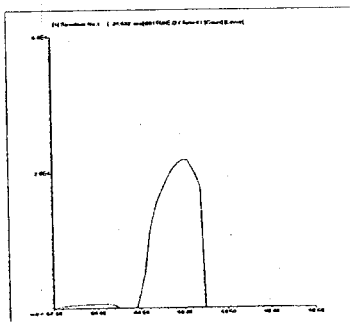
Data File: C:\ICPCHEM\1\DATA\07C11v01.B\001TUNE.D
Date Acquired: Mar 11 2007 09:29 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.70	5.00	
59 Co	1.09	5.00	
115 In	1.27	5.00	
205 Tl	1.22	5.00	

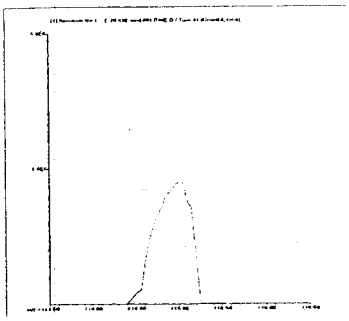


7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\07C11v01.B\001TUNE.D



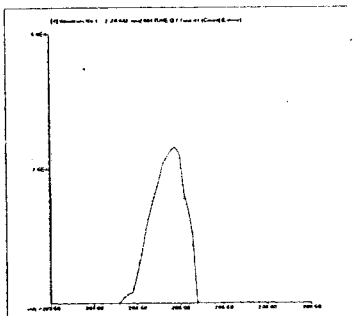
115 In

Mass Calib.

Actual:	114.95	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004C
Date Acquired: Mar 11 2007 09:45 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 09:53 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	913012.88	A	21390.00	2.34
7	(Li)		P		
9	Be	8.89	P	3.85	43.30
23	Na	19442.74	P	173.70	0.89
24	Mg	111404.80	P	7982.00	7.16
27	Al	139076.41	P	10150.00	7.30
39	K	1931819.00	A	23230.00	1.20
44	Ca	52072.44	P	990.50	1.90
45	Sc	295940.81	P	3137.00	1.06
45	Sc	43903.30	P	365.90	0.83
45	Sc	1532474.00	A	11480.00	0.75
51	V	324.08	P	5.70	1.76
52	Cr	272.97	P	29.07	10.65
55	Mn	25.93	P	6.42	24.74
56	Fe	4893.88	P	50.62	1.03
59	Co	9.26	P	1.70	18.33
60	Ni	107.78	P	6.19	5.74
63	Cu	355.19	P	32.38	9.12
65	Cu	168.52	P	8.63	5.12
66	Zn	624.84	P	8.98	1.44
72	Ge	70660.63	P	457.30	0.65
72	Ge	20855.79	P	130.90	0.63
75	As	10.00	P	1.33	13.33
78	Se	1.33	P	0.67	50.00
89	Y	1922363.00	A	17110.00	0.89
98	Mo	1119.04	P	88.63	7.92
107	Ag	95.56	P	15.03	15.73
111	Cd	21.11	P	1.93	9.12
115	In	1869099.00	A	20970.00	1.12
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	94.45	P	5.09	5.39
137	Ba	68.89	P	7.70	11.17
159	Tb	2247824.00	A	6139.00	0.27
205	Tl	350.02	P	20.28	5.79
208	Pb	590.03	P	51.32	8.70
209	Bi	1324825.00	A	13510.00	1.02

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\005CALS.D\005CALS.D#
Date Acquired: Mar 11 2007 09:55 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 09:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	888611.31	A	8271.00	0.93
7 (Li)		P		
9 Be	587.81	P	43.51	7.40
23 Na	45371.61	P	20540.00	45.27
24 Mg	177836.59	P	816.50	0.46
27 Al	220321.09	P	1956.00	0.89
39 K	1999700.00	A	7143.00	0.36
44 Ca	42528.11	P	150.10	0.35
45 Sc	285823.91	P	3124.00	1.09
45 Sc	44407.96	P	614.60	1.38
45 Sc	1480846.00	A	10870.00	0.73
51 V	580.39	P	30.56	5.27
52 Cr	600.76	P	45.60	7.59
55 Mn	190.74	P	20.56	10.78
56 Fe	115543.30	P	18840.00	16.31
59 Co	565.95	P	82.72	14.62
60 Ni	244.08	P	14.07	5.76
63 Cu	823.37	P	77.71	9.44
65 Cu	407.05	P	45.56	11.19
66 Zn	831.52	P	43.95	5.29
72 Ge	68979.10	P	793.20	1.15
72 Ge	21220.80	P	160.10	0.75
75 As	33.33	P	7.57	22.72
78 Se	21.11	P	4.82	22.85
89 Y	1874337.00	A	10880.00	0.58
98 Mo	981.18	P	15.03	1.53
99 (Ru)	13.33	P	11.55	86.62
107 Ag	1410.13	P	20.82	1.48
111 Cd	305.57	P	26.94	8.82
115 In	1832086.00	A	10410.00	0.57
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1248.99	P	81.48	6.52
137 Ba	1776.86	P	165.30	9.30
159 Tb	2200723.00	A	3241.00	0.15
205 Tl	1256.78	P	104.80	8.34
208 Pb	3547.00	P	10.00	0.28
209 Bi	1293127.00	A	5133.00	0.40

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	888611.31	0.93	913012.88	97.3	80 - 120	
45 Sc	285823.88	1.09	295940.75	96.6	80 - 120	
45 Sc	44407.96	1.38	43903.30	101.1	80 - 120	
45 Sc	1480846.40	0.73	1532473.90	96.6	80 - 120	
72 Ge	68979.10	1.15	70660.63	97.6	80 - 120	
72 Ge	21220.80	0.75	20855.79	101.8	80 - 120	
89 Y	1874336.90	0.58	1922363.30	97.5	80 - 120	
115 In	1832086.40	0.57	1869099.10	98.0	80 - 120	
159 Tb	2200723.00	0.15	2247824.30	97.9	80 - 120	
209 Bi	1293127.50	0.40	1324824.90	97.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\006CALS.D\006CALS.D#
Date Acquired: Mar 11 2007 10:05 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Mar 11 2007 10:04 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	892851.19	A	12530.00	1.40
7 (Li)		P		
9 Be	2703.68	P	52.94	1.96
23 Na	48218.69	P	342.00	0.71
24 Mg	795878.13	A	9225.00	1.16
27 Al	977733.69	A	9907.00	1.01
39 K	2872575.00	A	14340.00	0.50
44 Ca	67887.98	P	289.70	0.43
45 Sc	277820.19	P	4195.00	1.51
45 Sc	42828.47	P	201.10	0.47
45 Sc	1521778.00	A	43650.00	2.87
51 V	1344.16	P	48.19	3.59
52 Cr	1584.93	P	54.55	3.44
55 Mn	779.66	P	12.39	1.59
56 Fe	340389.31	P	38750.00	11.38
59 Co	2091.66	P	88.35	4.22
60 Ni	673.73	P	57.38	8.52
63 Cu	2012.02	P	60.09	2.99
65 Cu	981.90	P	42.75	4.35
66 Zn	976.34	P	58.48	5.99
72 Ge	67100.90	P	563.60	0.84
72 Ge	20919.56	P	248.70	1.19
75 As	147.56	P	13.09	8.87
78 Se	95.33	P	8.08	8.48
89 Y	1916718.00	A	71020.00	3.71
98 Mo	4050.75	P	173.90	4.29
99 (Ru)	22.22	P	8.39	37.75
107 Ag	6496.24	P	108.40	1.67
111 Cd	1484.59	P	16.78	1.13
115 In	1865635.00	A	61780.00	3.31
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5386.82	P	73.25	1.36
137 Ba	2339.19	P	71.30	3.05
159 Tb	2261150.00	A	50320.00	2.23
205 Tl	5557.00	P	194.50	3.50
208 Pb	14538.29	P	75.90	0.52
209 Bi	1317656.00	A	33700.00	2.56

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	892851.25	1.40	913012.88	97.8	80 -	120	
45 Sc	277820.22	1.51	295940.75	93.9	80 -	120	
45 Sc	42828.47	0.47	43903.30	97.6	80 -	120	
45 Sc	1521777.60	2.87	1532473.90	99.3	80 -	120	
72 Ge	67100.90	0.84	70660.63	95.0	80 -	120	
72 Ge	20919.56	1.19	20855.79	100.3	80 -	120	
89 Y	1916718.10	3.71	1922363.30	99.7	80 -	120	
115 In	1865635.00	3.31	1869099.10	99.8	80 -	120	
159 Tb	2261149.50	2.23	2247824.30	100.6	80 -	120	
209 Bi	1317655.60	2.56	1324824.90	99.5	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\007CALS.D\007CALS.D#
Date Acquired: Mar 11 2007 10:10 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 10:09 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	889726.31	A	40390.00	4.54
7 (Li)		P		
9 Be	5514.57	P	138.40	2.51
23 Na	81225.90	P	887.90	1.09
24 Mg	1618173.00	A	16880.00	1.04
27 Al	1967987.00	A	5043.00	0.26
39 K	4011840.00	A	8056.00	0.20
44 Ca	107753.40	P	1062.00	0.99
45 Sc	278581.00	P	1458.00	0.52
45 Sc	43255.29	P	431.10	1.00
45 Sc	1513127.00	A	96940.00	6.41
51 V	2448.02	P	40.58	1.66
52 Cr	3009.24	P	45.93	1.53
55 Mn	1517.14	P	16.68	1.10
56 Fe	591119.00	P	3462.00	0.59
59 Co	4340.72	P	69.98	1.61
60 Ni	1350.08	P	60.69	4.50
63 Cu	3617.55	P	158.90	4.39
65 Cu	1806.06	P	18.27	1.01
66 Zn	2525.07	P	39.49	1.56
72 Ge	67031.43	P	576.20	0.86
72 Ge	20754.14	P	60.50	0.29
75 As	278.23	P	6.54	2.35
78 Se	212.00	P	19.23	9.07
89 Y	1911486.00	A	112700.00	5.90
98 Mo	8350.62	P	143.70	1.72
99 (Ru)	18.89	P	10.18	53.89
107 Ag	13432.69	P	362.00	2.69
111 Cd	3130.47	P	141.60	4.52
115 In	1866237.00	A	118800.00	6.37
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10927.02	P	250.70	2.29
137 Ba	5073.39	P	68.37	1.35
159 Tb	2275914.00	A	146500.00	6.44
205 Tl	11297.72	P	207.10	1.83
208 Pb	29088.83	P	280.10	0.96
209 Bi	1309149.00	A	74710.00	5.71

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	889726.31	4.54	913012.88	97.4	80 - 120	
45 Sc	278581.00	0.52	295940.75	94.1	80 - 120	
45 Sc	43255.29	1.00	43903.30	98.5	80 - 120	
45 Sc	1513127.10	6.41	1532473.90	98.7	80 - 120	
72 Ge	67031.44	0.86	70660.63	94.9	80 - 120	
72 Ge	20754.14	0.29	20855.79	99.5	80 - 120	
89 Y	1911486.00	5.90	1922363.30	99.4	80 - 120	
115 In	1866237.00	6.37	1869099.10	99.8	80 - 120	
159 Tb	2275914.30	6.44	2247824.30	101.2	80 - 120	
209 Bi	1309148.50	5.71	1324824.90	98.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\008CALS.D\008CALS.D#
Date Acquired: Mar 11 2007 10:16 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 10:14 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	875911.38	A	7797.00	0.89
7 (Li)		P		
9 Be	55941.15	P	419.90	0.75
23 Na	585598.50	P	1631.00	0.28
24 Mg	15309360.00	A	76280.00	0.50
27 Al	18824280.00	A	140700.00	0.75
39 K	23527410.00	A	100300.00	0.43
44 Ca	685232.00	P	338.00	0.05
45 Sc	279358.31	P	667.80	0.24
45 Sc	42790.90	P	325.20	0.76
45 Sc	1479406.00	A	12170.00	0.82
51 V	20935.27	P	86.43	0.41
52 Cr	26519.52	P	219.00	0.83
55 Mn	14203.21	P	132.80	0.94
56 Fe	5577537.00	A	20060.00	0.36
59 Co	41782.20	P	314.40	0.75
60 Ni	11501.86	P	40.86	0.36
63 Cu	31117.32	P	341.60	1.10
65 Cu	15186.90	P	42.52	0.28
66 Zn	5324.04	P	101.80	1.91
72 Ge	67251.76	P	345.20	0.51
72 Ge	20662.54	P	109.60	0.53
75 As	2575.14	P	35.03	1.36
78 Se	2095.95	P	63.78	3.04
89 Y	1851541.00	A	15810.00	0.85
98 Mo	82231.22	P	886.30	1.08
99 (Ru)	14.45	P	1.93	13.33
107 Ag	127231.30	P	1953.00	1.54
111 Cd	30058.76	P	241.90	0.80
115 In	1813495.00	A	20510.00	1.13
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	106251.50	P	473.40	0.45
137 Ba	42543.44	P	637.50	1.50
159 Tb	2193482.00	A	7380.00	0.34
205 Tl	108165.00	P	878.20	0.81
208 Pb	274499.81	P	1251.00	0.46
209 Bi	1280292.00	A	10390.00	0.81

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	875911.44	0.89	913012.88	95.9	80 - 120	
45 Sc	279358.28	0.24	295940.75	94.4	80 - 120	
45 Sc	42790.91	0.76	43903.30	97.5	80 - 120	
45 Sc	1479406.30	0.82	1532473.90	96.5	80 - 120	
72 Ge	67251.76	0.51	70660.63	95.2	80 - 120	
72 Ge	20662.54	0.53	20855.79	99.1	80 - 120	
89 Y	1851541.40	0.85	1922363.30	96.3	80 - 120	
115 In	1813495.60	1.13	1869099.10	97.0	80 - 120	
159 Tb	2193481.80	0.34	2247824.30	97.6	80 - 120	
209 Bi	1280292.30	0.81	1324824.90	96.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\009CALS.D\009CALS.D#
Date Acquired: Mar 11 2007 10:21 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Mar 11 2007 10:19 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	857867.31	A	18890.00	2.20
7 (Li)		P		
9 Be	554096.69	P	3445.00	0.62
23 Na	5702629.00	A	47310.00	0.83
24 Mg	############	A	987600.00	0.65
27 Al	############	A	950600.00	0.51
39 K	############	A	580600.00	0.26
44 Ca	6586273.00	A	59300.00	0.90
45 Sc	310301.81	P	19690.00	6.35
45 Sc	43722.25	P	505.00	1.16
45 Sc	1532044.00	A	67020.00	4.37
51 V	210024.09	P	578.40	0.28
52 Cr	263798.31	P	1447.00	0.55
55 Mn	141696.41	P	755.90	0.53
56 Fe	55284180.00	A	660200.00	1.19
59 Co	411455.50	P	2771.00	0.67
60 Ni	110760.10	P	449.80	0.41
63 Cu	297134.50	P	653.20	0.22
65 Cu	144411.09	P	1757.00	1.22
66 Zn	45822.15	P	131.30	0.29
72 Ge	71620.30	P	2730.00	3.81
72 Ge	20692.93	P	229.20	1.11
75 As	25800.61	P	196.70	0.76
78 Se	20614.94	P	112.80	0.55
89 Y	1885353.00	A	83730.00	4.44
98 Mo	815739.69	P	6840.00	0.84
99 (Ru)	32.22	P	21.69	67.31
107 Ag	1292462.00	A	1314.00	0.10
111 Cd	291096.59	P	605.40	0.21
115 In	1767016.00	A	60100.00	3.40
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1069781.00	A	2747.00	0.26
137 Ba	405316.19	P	2236.00	0.55
159 Tb	2204342.00	A	78680.00	3.57
205 Tl	1133585.00	A	2438.00	0.22
208 Pb	2728828.00	A	5284.00	0.19
209 Bi	1209212.00	A	42260.00	3.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	857867.31	2.20	913012.88	94.0	80 - 120	
45 Sc	310301.78	6.35	295940.75	104.9	80 - 120	
45 Sc	43722.25	1.16	43903.30	99.6	80 - 120	
45 Sc	1532044.50	4.37	1532473.90	100.0	80 - 120	
72 Ge	71620.30	3.81	70660.63	101.4	80 - 120	
72 Ge	20692.93	1.11	20855.79	99.2	80 - 120	
89 Y	1885353.30	4.44	1922363.30	98.1	80 - 120	
115 In	1767016.40	3.40	1869099.10	94.5	80 - 120	
159 Tb	2204342.30	3.57	2247824.30	98.1	80 - 120	
209 Bi	1209212.50	3.49	1324824.90	91.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11v01.B\010CALS.D\010CALS.D#
Date Acquired: Mar 11 2007 10:26 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 10:25 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	849374.69	A	8032.00	0.95
7 (Li)		P		
9 Be	1104300.00	A	10660.00	0.97
23 Na	10911590.00	A	59540.00	0.55
24 Mg	############	A	2736000.00	0.94
27 Al	############	A	1355000.00	0.37
39 K	############	A	2077000.00	0.49
44 Ca	12788350.00	A	24200.00	0.19
45 Sc	297005.19	P	2548.00	0.86
45 Sc	44152.85	P	111.40	0.25
45 Sc	1545870.00	A	10990.00	0.71
51 V	405994.31	P	556.10	0.14
52 Cr	506630.41	P	2887.00	0.57
55 Mn	271298.91	P	1984.00	0.73
56 Fe	############	A	947300.00	0.88
59 Co	785075.31	P	2594.00	0.33
60 Ni	209745.09	P	2042.00	0.97
63 Cu	559031.81	P	2450.00	0.44
65 Cu	273265.19	P	2314.00	0.85
66 Zn	84883.18	P	421.00	0.50
72 Ge	69205.14	P	127.70	0.18
72 Ge	20586.48	P	157.00	0.76
75 As	49293.67	P	226.70	0.46
78 Se	39178.13	P	215.30	0.55
89 Y	1878091.00	A	21640.00	1.15
98 Mo	1663325.00	A	16450.00	0.99
99 (Ru)	54.45	P	12.62	23.18
107 Ag	2435427.00	A	15560.00	0.64
111 Cd	555964.63	P	1084.00	0.19
115 In	1740787.00	A	11200.00	0.64
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2066772.00	A	14640.00	0.71
137 Ba	783301.81	P	5974.00	0.76
159 Tb	2159540.00	A	10990.00	0.51
205 Tl	2119628.00	A	9008.00	0.42
208 Pb	5302186.00	A	17240.00	0.33
209 Bi	1178173.00	A	9432.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	849374.69	0.95	913012.88	93.0	80 - 120	
45 Sc	297005.16	0.86	295940.75	100.4	80 - 120	
45 Sc	44152.84	0.25	43903.30	100.6	80 - 120	
45 Sc	1545869.90	0.71	1532473.90	100.9	80 - 120	
72 Ge	69205.14	0.18	70660.63	97.9	80 - 120	
72 Ge	20586.48	0.76	20855.79	98.7	80 - 120	
89 Y	1878090.60	1.15	1922363.30	97.7	80 - 120	
115 In	1740787.60	0.64	1869099.10	93.1	80 - 120	
159 Tb	2159539.80	0.51	2247824.30	96.1	80 - 120	
209 Bi	1178173.10	0.80	1324824.90	88.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11v01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

st : MET06
qnum : 67102089012
l : 67102089001
andards: S5653

File : c11v0012
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 22:39

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
luminum	A	0.6459	0.5861	10000	9889	ug/L	-1	10	
ntimony	A	0.3027	0.2951	100.0	99.01	ug/L	-1	10	
arium	A	0.1498	0.0885	100.0	97.32	ug/L	-3	10	
eryllium	A	0.3186	0.3036	100.0	93.53	ug/L	-6	10	
admium	A	0.0820	0.0787	100.0	97.97	ug/L	-2	10	
alcium	A	0.0482	0.0208	10000	9940	ug/L	-1	10	
ead	A	0.6582	0.5999	100.0	97.54	ug/L	-2	10	
agnesium	A	0.5246	0.4777	10000	10010	ug/L	0	10	
olybdenum	A	0.2254	0.2096	100.0	95.00	ug/L	-5	10	
otassium	A	2.0298	0.7031	10000	10030	ug/L	0	10	
ilver	A	0.3601	0.3755	100.0	106.4	ug/L	6	10	
hallium	A	0.8940	0.8007	50.00	44.13	ug/L	**-12**	10	v- ***
rsenic	E	0.6676	0.5980	100.0	99.06	ug/L	-1	10	
hromium	E	3.8209	2.8823	100.0	99.40	ug/L	-1	10	
obalt	E	5.0502	4.4444	100.0	98.81	ug/L	-1	10	
opper	E	9.8706	6.6807	100.0	97.22	ug/L	-3	10	
anganese	E	1.7562	1.5275	100.0	98.34	ug/L	-2	10	
ickel	E	1.6133	1.1966	100.0	99.37	ug/L	-1	10	
odium	E	1.5189	0.6155	10000	9837	ug/L	-2	10	
anadium	E	3.2747	2.2740	100.0	97.97	ug/L	-2	10	
inc	E	5.6293	1.0427	100.0	99.07	ug/L	-1	10	
ron	H	1.1842	0.9129	10000	10070	ug/L	1	10	
elenium	H	0.1491	0.1414	100.0	99.57	ug/L	0	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	879671	-3.65
candium	A	1532474	1545652	0.86
candium	E	43903	44599	1.58
candium	H	295941	297756	0.61
ermanium	H	70661	70465	-0.28
ermanium	E	20856	21175	1.53
ndium	A	1869099	1799215	-3.74
ismuth	A	1324825	1225431	-7.50
ttrium	A	1922363	1905046	-0.90
erbium	A	2247824	2190563	-2.55

low bias v=ICV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

ıst : MET06
eqnum : 67102089035
ıl : 67102089001
tandards: S5654

File : c11v0035
Caldate: 11-MAR-2007

IDF : 1.0
Time : 12-MAR-2007 00:41

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5806	10000	9796	ug/L	-2	10	
ntimony	A	0.3027	0.2977	100.0	99.87	ug/L	0	10	
arium	A	0.1498	0.0878	100.0	96.52	ug/L	-3	10	
eryllium	A	0.3186	0.3001	100.0	92.42	ug/L	-8	10	
admium	A	0.0820	0.0794	100.0	98.74	ug/L	-1	10	
alcium	A	0.0482	0.0206	10000	9846	ug/L	-2	10	
ead	A	0.6582	0.6025	100.0	97.97	ug/L	-2	10	
agnesium	A	0.5246	0.4737	10000	9923	ug/L	-1	10	
olybdenum	A	0.2254	0.2099	100.0	95.15	ug/L	-5	10	
otassium	A	2.0298	0.6931	10000	9890	ug/L	-1	10	
ilver	A	0.3601	0.3791	100.0	107.4	ug/L	7	10	
hallium	A	0.8940	0.8080	50.00	44.53	ug/L	-11	10	c- ***
rsenic	E	0.6676	0.5903	100.0	97.78	ug/L	-2	10	
hromium	E	3.8209	2.8895	100.0	99.64	ug/L	0	10	
obalt	E	5.0502	4.4833	100.0	99.67	ug/L	0	10	
opper	E	9.8706	6.6299	100.0	96.48	ug/L	-4	10	
anganese	E	1.7562	1.5298	100.0	98.49	ug/L	-2	10	
ickel	E	1.6133	1.2101	100.0	100.5	ug/L	1	10	
odium	E	1.5189	0.6059	10000	9684	ug/L	-3	10	
anadium	E	3.2747	2.2920	100.0	98.74	ug/L	-1	10	
inc	E	5.6293	1.0294	100.0	97.79	ug/L	-2	10	
ron	H	1.1842	0.9191	10000	10140	ug/L	1	10	
elenium	H	0.1491	0.1440	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	847463	-7.18
candium	A	1532474	1518633	-0.90
candium	E	43903	42799	-2.52
candium	H	295941	279724	-5.48
ermanium	H	70661	66797	-5.47
ermanium	E	20856	20777	-0.38
ndium	A	1869099	1752125	-6.26
ismuth	A	1324825	1212470	-8.48
ttrium	A	1922363	1873794	-2.53
erbium	A	2247824	2162801	-3.78

low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

ıst : MET06
eqnum : 67102089054
ıl : 67102089001
tandards: S5654

File : c11v0054
Caldate: 11-MAR-2007

IDF : 1.0
Time : 12-MAR-2007 02:23

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5844	10000	9862	ug/L	-1	10	
ntimony	A	0.3027	0.2931	100.0	98.35	ug/L	-2	10	
arium	A	0.1498	0.0886	100.0	97.39	ug/L	-3	10	
eryllium	A	0.3186	0.2951	100.0	90.90	ug/L	-9	10	
admium	A	0.0820	0.0793	100.0	98.70	ug/L	-1	10	
alcium	A	0.0482	0.0207	10000	9894	ug/L	-1	10	
ead	A	0.6582	0.6071	100.0	98.71	ug/L	-1	10	
agnesium	A	0.5246	0.4747	10000	9945	ug/L	-1	10	
olybdenum	A	0.2254	0.2096	100.0	95.01	ug/L	-5	10	
otassium	A	2.0298	0.6948	10000	9915	ug/L	-1	10	
ilver	A	0.3601	0.3769	100.0	106.7	ug/L	7	10	
hallium	A	0.8940	0.8092	50.00	44.59	ug/L	**-11**	10	c- ***
rsenic	E	0.6676	0.6043	100.0	100.1	ug/L	0	10	
hromium	E	3.8209	2.8998	100.0	100.0	ug/L	0	10	
obalt	E	5.0502	4.4841	100.0	99.69	ug/L	0	10	
opper	E	9.8706	6.7450	100.0	98.15	ug/L	-2	10	
anganese	E	1.7562	1.5375	100.0	98.98	ug/L	-1	10	
ickel	E	1.6133	1.2072	100.0	100.2	ug/L	0	10	
odium	E	1.5189	0.6077	10000	9711	ug/L	-3	10	
anadium	E	3.2747	2.2911	100.0	98.70	ug/L	-1	10	
inc	E	5.6293	1.0609	100.0	100.8	ug/L	1	10	
ron	H	1.1842	0.9193	10000	10140	ug/L	1	10	
elenium	H	0.1491	0.1471	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	870040	-4.71
candium	A	1532474	1501599	-2.01
candium	E	43903	42576	-3.02
candium	H	295941	270206	-8.70
ermanium	H	70661	64545	-8.65
ermanium	E	20856	20222	-3.04
ndium	A	1869099	1749026	-6.42
ismuth	A	1324825	1216615	-8.17
ttrium	A	1922363	1863845	-3.04
erbium	A	2247824	2167158	-3.59

low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

nst : MET06
eqnum : 67102089062
al : 67102089001
tandards: S5654

File : c11v0062
Caldate: 11-MAR-2007

IDF : 1.0
Time : 12-MAR-2007 03:05

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5804	10000	9794	ug/L	-2	10	
ntimony	A	0.3027	0.2878	100.0	96.54	ug/L	-3	10	
arium	A	0.1498	0.0886	100.0	97.39	ug/L	-3	10	
eryllium	A	0.3186	0.2977	100.0	91.70	ug/L	-8	10	
admium	A	0.0820	0.0786	100.0	97.75	ug/L	-2	10	
alcium	A	0.0482	0.0207	10000	9876	ug/L	-1	10	
ead	A	0.6582	0.6038	100.0	98.17	ug/L	-2	10	
agnesium	A	0.5246	0.4735	10000	9920	ug/L	-1	10	
olybdenum	A	0.2254	0.2074	100.0	94.01	ug/L	-6	10	
otassium	A	2.0298	0.6911	10000	9861	ug/L	-1	10	
ilver	A	0.3601	0.3773	100.0	106.9	ug/L	7	10	
hallium	A	0.8940	0.8130	50.00	44.80	ug/L	-10	10	
rsenic	E	0.6676	0.5906	100.0	97.83	ug/L	-2	10	
hromium	E	3.8209	2.8729	100.0	99.07	ug/L	-1	10	
obalt	E	5.0502	4.4301	100.0	98.49	ug/L	-2	10	
opper	E	9.8706	6.6188	100.0	96.31	ug/L	-4	10	
anganese	E	1.7562	1.5153	100.0	97.55	ug/L	-2	10	
ickel	E	1.6133	1.1907	100.0	98.88	ug/L	-1	10	
odium	E	1.5189	0.6006	10000	9598	ug/L	-4	10	
anadium	E	3.2747	2.2499	100.0	96.93	ug/L	-3	10	
inc	E	5.6293	1.0317	100.0	98.01	ug/L	-2	10	
ron	H	1.1842	0.9129	10000	10070	ug/L	1	10	
elenium	H	0.1491	0.1451	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	855405	-6.31
candium	A	1532474	1502107	-1.98
candium	E	43903	42351	-3.54
candium	H	295941	267877	-9.48
ermanium	H	70661	64024	-9.39
ermanium	E	20856	20236	-2.97
ndium	A	1869099	1730935	-7.39
ismuth	A	1324825	1199137	-9.49
ttrium	A	1922363	1863343	-3.07
erbium	A	2247824	2141146	-4.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

nst : MET06
eqnum : 67102089085
al : 67102089001
tandards: S5654

File : c11v0085
Caldate: 11-MAR-2007

IDF : 1.0
Time : 12-MAR-2007 05:08

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5846	10000	9864	ug/L	-1	10	
ntimony	A	0.3027	0.2936	100.0	98.51	ug/L	-1	10	
arium	A	0.1498	0.0891	100.0	97.98	ug/L	-2	10	
eryllium	A	0.3186	0.2890	100.0	89.03	ug/L	**-11**	10	c- ***
admium	A	0.0820	0.0790	100.0	98.27	ug/L	-2	10	
alcium	A	0.0482	0.0209	10000	9991	ug/L	0	10	
ead	A	0.6582	0.6102	100.0	99.21	ug/L	-1	10	
agnesium	A	0.5246	0.4737	10000	9924	ug/L	-1	10	
olybdenum	A	0.2254	0.2087	100.0	94.60	ug/L	-5	10	
otassium	A	2.0298	0.7000	10000	9990	ug/L	0	10	
ilver	A	0.3601	0.3759	100.0	106.5	ug/L	7	10	
hallium	A	0.8940	0.8022	50.00	44.21	ug/L	**-12**	10	c- ***
rsenic	E	0.6676	0.5855	100.0	96.97	ug/L	-3	10	
hromium	E	3.8209	2.8954	100.0	99.84	ug/L	0	10	
obalt	E	5.0502	4.4981	100.0	100.0	ug/L	0	10	
opper	E	9.8706	6.5530	100.0	95.36	ug/L	-5	10	
anganese	E	1.7562	1.5273	100.0	98.33	ug/L	-2	10	
ickel	E	1.6133	1.2174	100.0	101.1	ug/L	1	10	
odium	E	1.5189	0.5997	10000	9584	ug/L	-4	10	
anadium	E	3.2747	2.2832	100.0	98.37	ug/L	-2	10	
inc	E	5.6293	1.0300	100.0	97.84	ug/L	-2	10	
ron	H	1.1842	0.9241	10000	10200	ug/L	2	10	
elenium	H	0.1491	0.1464	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	844200	-7.54
candium	A	1532474	1474676	-3.77
candium	E	43903	39718	-9.53
candium	H	295941	253098	-14.48
ermanium	H	70661	60742	-14.04
ermanium	E	20856	19523	-6.39
ndium	A	1869099	1726876	-7.61
ismuth	A	1324825	1191268	-10.08
ttrium	A	1922363	1849582	-3.79
erbium	A	2247824	2126137	-5.41

low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

ıst : MET06 IDF : 1.0
eqnum : 67102089103 File : c11v0103 Time : 12-MAR-2007 06:44
al : 67102089001 Caldate: 11-MAR-2007
tandards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5846	10000	9865	ug/L	-1	10	
ntimony	A	0.3027	0.2914	100.0	97.76	ug/L	-2	10	
arium	A	0.1498	0.0898	100.0	98.72	ug/L	-1	10	
eryllium	A	0.3186	0.3006	100.0	92.58	ug/L	-7	10	
admium	A	0.0820	0.0791	100.0	98.42	ug/L	-2	10	
alcium	A	0.0482	0.0209	10000	9975	ug/L	0	10	
ead	A	0.6582	0.6149	100.0	99.98	ug/L	0	10	
agnesium	A	0.5246	0.4727	10000	9903	ug/L	-1	10	
olybdenum	A	0.2254	0.2080	100.0	94.27	ug/L	-6	10	
otassium	A	2.0298	0.6988	10000	9972	ug/L	0	10	
ilver	A	0.3601	0.3745	100.0	106.1	ug/L	6	10	
hallium	A	0.8940	0.8017	50.00	44.18	ug/L	**-12**	10	c- ***
rsenic	E	0.6676	0.5988	100.0	99.18	ug/L	-1	10	
hromium	E	3.8209	2.9010	100.0	100.0	ug/L	0	10	
obalt	E	5.0502	4.4787	100.0	99.57	ug/L	0	10	
opper	E	9.8706	6.6999	100.0	97.49	ug/L	-3	10	
anganese	E	1.7562	1.5333	100.0	98.71	ug/L	-1	10	
ickel	E	1.6133	1.2076	100.0	100.3	ug/L	0	10	
odium	E	1.5189	0.6039	10000	9650	ug/L	-4	10	
anadium	E	3.2747	2.2826	100.0	98.34	ug/L	-2	10	
inc	E	5.6293	1.0515	100.0	99.92	ug/L	0	10	
ron	H	1.1842	0.9206	10000	10160	ug/L	2	10	
elenium	H	0.1491	0.1467	100.0	103.3	ug/L	3	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	839820	-8.02
candium	A	1532474	1491537	-2.67
candium	E	43903	41003	-6.61
candium	H	295941	258826	-12.54
ermanium	H	70661	61878	-12.43
ermanium	E	20856	19624	-5.91
ndium	A	1869099	1727784	-7.56
ismuth	A	1324825	1190392	-10.15
ttrium	A	1922363	1869363	-2.76
erbium	A	2247824	2113807	-5.96

low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67102089116 File : c11v0116 Time : 12-MAR-2007 07:55
al : 67102089001 Caldate: 11-MAR-2007
tandards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	0.6459	0.5841	10000	9856	ug/L	-1	10	
ntimony	A	0.3027	0.2865	100.0	96.11	ug/L	-4	10	
arium	A	0.1498	0.0899	100.0	98.87	ug/L	-1	10	
eryllium	A	0.3186	0.2938	100.0	90.49	ug/L	-10	10	
admium	A	0.0820	0.0793	100.0	98.68	ug/L	-1	10	
alcium	A	0.0482	0.0207	10000	9902	ug/L	-1	10	
ead	A	0.6582	0.6109	100.0	99.34	ug/L	-1	10	
agnesium	A	0.5246	0.4696	10000	9838	ug/L	-2	10	
olybdenum	A	0.2254	0.2088	100.0	94.67	ug/L	-5	10	
otassium	A	2.0298	0.6981	10000	9962	ug/L	0	10	
ilver	A	0.3601	0.3753	100.0	106.3	ug/L	6	10	
hallium	A	0.8940	0.8063	50.00	44.44	ug/L	**-11**	10	c- ***
rsenic	E	0.6676	0.5842	100.0	96.76	ug/L	-3	10	
hromium	E	3.8209	2.8724	100.0	99.05	ug/L	-1	10	
obalt	E	5.0502	4.4547	100.0	99.03	ug/L	-1	10	
opper	E	9.8706	6.5404	100.0	95.17	ug/L	-5	10	
anganese	E	1.7562	1.5253	100.0	98.20	ug/L	-2	10	
ickel	E	1.6133	1.2006	100.0	99.70	ug/L	0	10	
odium	E	1.5189	0.6048	10000	9666	ug/L	-3	10	
anadium	E	3.2747	2.2750	100.0	98.01	ug/L	-2	10	
inc	E	5.6293	1.0189	100.0	96.77	ug/L	-3	10	
ron	H	1.1842	0.9159	10000	10110	ug/L	1	10	
elenium	H	0.1491	0.1483	100.0	104.4	ug/L	4	10	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	822999	-9.86
candium	A	1532474	1433914	-6.43
candium	E	43903	39820	-9.30
candium	H	295941	239252	-19.16
ermanium	H	70661	56798	-19.62
ermanium	E	20856	19441	-6.78
ndium	A	1869099	1655901	-11.41
ismuth	A	1324825	1143259	-13.70
ttrium	A	1922363	1781969	-7.30
erbium	A	2247824	2042118	-9.15

ow bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

ıst : MET06
:qnum : 67102089017 File : c11v0017 IDF : 1.0
ıl : 67102089001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 23:06

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
ıluminum	A	ND	10.00	11.04	ug/L	
ıntimony	A	ND	0.1000	0	ug/L	
ɜarium	A	ND	0.1000	0	ug/L	
ɜeryllium	A	ND	0.1000	0	ug/L	
:admium	A	ND	0.1000	0.0005836	ug/L	
:alcium	A	ND	10.00	0	ug/L	
ɹead	A	[0.004047]	0.1000	0.002857	ug/L	!ib
ſagnesium	A	ND	10.00	3.328	ug/L	
ſolybdenum	A	ND	0.1000	0.07293	ug/L	
?otassium	A	ND	10.00	7.074	ug/L	
ɜilver	A	ND	0.1000	0	ug/L	
:hallium	A	ND	0.05000	0	ug/L	
ırsenic	E	ND	0.1000	0.002285	ug/L	
:hromium	E	ND	0.1000	0.0001137	ug/L	
:obalt	E	ND	0.1000	0	ug/L	
:opper	E	ND	0.1000	0.1296	ug/L	
ſanganese	E	ND	0.1000	0.004522	ug/L	
ſickel	E	ND	0.1000	0.001252	ug/L	
ɜodium	E	ND	10.00	7.900	ug/L	
⁄anadium	E	ND	0.1000	0	ug/L	
⁄inc	E	ND	0.1000	0.01127	ug/L	
[ron	H	ND	10.00	4.329	ug/L	
ɜelenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ıithium	A	913013	897509	-1.70
ɜcandium	A	1532474	1482973	-3.23
ɜcandium	E	43903	42744	-2.64
ɜcandium	H	295941	279864	-5.43
ɜermanium	H	70661	67059	-5.10
ɜermanium	E	20856	20615	-1.15
:ndium	A	1869099	1802835	-3.55
ɜismuth	A	1324825	1248923	-5.73
⁄ttrium	A	1922363	1845266	-4.01
⁄erbium	A	2247824	2163173	-3.77

-warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

st : MET06
qnum : 67102089037 File : c11v0037 IDF : 1.0
1 : 67102089001 Caldate: 11-MAR-2007 Time : 12-MAR-2007 00:52

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
luminum	A	ND	10.00	11.04	ug/L	
ntimony	A	ND	0.1000	0	ug/L	
arium	A	ND	0.1000	0	ug/L	
eryllium	A	ND	0.1000	0	ug/L	
admium	A	ND	0.1000	0.0005836	ug/L	
alcium	A	ND	10.00	0	ug/L	
ead	A	[0.008012]	0.1000	0.002857	ug/L	!ib
agnesium	A	ND	10.00	3.328	ug/L	
olybdenum	A	ND	0.1000	0.07293	ug/L	
otassium	A	ND	10.00	7.074	ug/L	
ilver	A	ND	0.1000	0	ug/L	
hallium	A	ND	0.05000	0	ug/L	
rsenic	E	[0.01234]	0.1000	0.002285	ug/L	!ib
hromium	E	[0.01413]	0.1000	0.0001137	ug/L	!ib
obalt	E	ND	0.1000	0	ug/L	
opper	E	ND	0.1000	0.1296	ug/L	
anganese	E	[0.01686]	0.1000	0.004522	ug/L	!ib
ickel	E	[0.009964]	0.1000	0.001252	ug/L	!ib
odium	E	ND	10.00	7.900	ug/L	
anadium	E	ND	0.1000	0	ug/L	
inc	E	ND	0.1000	0.01127	ug/L	
ron	H	ND	10.00	4.329	ug/L	
elenium	H	[0.01841]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	907001	-0.66
candium	A	1532474	1570758	2.50
candium	E	43903	42823	-2.46
candium	H	295941	270938	-8.45
ermanium	H	70661	65574	-7.20
ermanium	E	20856	20850	-0.03
ndium	A	1869099	1901282	1.72
ismuth	A	1324825	1301742	-1.74
ttrium	A	1922363	1970992	2.53
erbium	A	2247824	2258838	0.49

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

st : MET06 IDF : 1.0
qnum : 67102089056 File : c11v0056 Time : 12-MAR-2007 02:33
l : 67102089001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
luminum	A	ND	10.00	11.04	ug/L	
ntimony	A	ND	0.1000	0	ug/L	
arium	A	ND	0.1000	0	ug/L	
eryllium	A	ND	0.1000	0	ug/L	
admium	A	ND	0.1000	0.0005836	ug/L	
alcium	A	ND	10.00	0	ug/L	
ead	A	[0.003582]	0.1000	0.002857	ug/L	!ib
agnesium	A	ND	10.00	3.328	ug/L	
olybdenum	A	ND	0.1000	0.07293	ug/L	
otassium	A	ND	10.00	7.074	ug/L	
ilver	A	ND	0.1000	0	ug/L	
hallium	A	ND	0.05000	0	ug/L	
rsenic	E	[0.01615]	0.1000	0.002285	ug/L	!ib
hromium	E	[0.006983]	0.1000	0.0001137	ug/L	!ib
obalt	E	ND	0.1000	0	ug/L	
opper	E	ND	0.1000	0.1296	ug/L	
anganese	E	[0.009421]	0.1000	0.004522	ug/L	!ib
ickel	E	[0.02746]	0.1000	0.001252	ug/L	!ib
odium	E	ND	10.00	7.900	ug/L	
anadium	E	ND	0.1000	0	ug/L	
inc	E	ND	0.1000	0.01127	ug/L	
ron	H	ND	10.00	4.329	ug/L	
elenium	H	[0.006154]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	882627	-3.33
candium	A	1532474	1465196	-4.39
candium	E	43903	42428	-3.36
candium	H	295941	253803	-14.24
ermanium	H	70661	61221	-13.36
ermanium	E	20856	20577	-1.34
ndium	A	1869099	1795612	-3.93
ismuth	A	1324825	1244328	-6.08
ttrium	A	1922363	1836844	-4.45
erbium	A	2247824	2138135	-4.88

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67102089064 File : c11v0064 Time : 12-MAR-2007 03:16
al : 67102089001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.06810]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.07770]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.167]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	0.05084	0.05000	0	ug/L	ib ***
Arsenic	E	[0.01173]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001270]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02069]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.009885]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	913013	909570	-0.38
Scandium	A	1532474	1513988	-1.21
Scandium	E	43903	42401	-3.42
Scandium	H	295941	254172	-14.11
Germanium	H	70661	61674	-12.72
Germanium	E	20856	20398	-2.20
Indium	A	1869099	1829806	-2.10
Bismuth	A	1324825	1284890	-3.01
Yttrium	A	1922363	1909038	-0.69
Terbium	A	2247824	2193013	-2.44

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

ıst : MET06
eqnum : 67102089087 File : c11v0087 IDF : 1.0
ıl : 67102089001 Caldate: 11-MAR-2007 Time : 12-MAR-2007 05:19

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.04496]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.05786]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01511]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03489]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05654]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03036]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.009969]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	913013	855627	-6.29
Scandium	A	1532474	1444682	-5.73
Scandium	E	43903	40278	-8.26
Scandium	H	295941	230168	-22.22
Germanium	H	70661	56483	-20.06
Germanium	E	20856	19709	-5.50
Indium	A	1869099	1755215	-6.09
Bismuth	A	1324825	1242065	-6.25
Yttrium	A	1922363	1828608	-4.88
Terbium	A	2247824	2118469	-5.75

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67102089105 File : c11v0105 Time : 12-MAR-2007 06:55
al : 67102089001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.04250]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.05159]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.004408]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.009262]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	875930	-4.06
candium	A	1532474	1462246	-4.58
candium	E	43903	41337	-5.85
candium	H	295941	243513	-17.72
ermanium	H	70661	59075	-16.40
ermanium	E	20856	20171	-3.28
ndium	A	1869099	1759358	-5.87
ismuth	A	1324825	1240292	-6.38
ttrium	A	1922363	1843583	-4.10
erbium	A	2247824	2105505	-6.33

varning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

nst : MET06
eqnum : 67102089118 File : c11v0118 IDF : 1.0
al : 67102089001 Caldate: 11-MAR-2007 Time : 12-MAR-2007 08:06

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.004380]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01350]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01537]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.009925]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01554]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005713]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	858395	-5.98
candium	A	1532474	1449081	-5.44
candium	E	43903	40708	-7.28
candium	H	295941	235710	-20.35
ermanium	H	70661	57157	-19.11
ermanium	E	20856	19706	-5.51
ndium	A	1869099	1726109	-7.65
ismuth	A	1324825	1201943	-9.28
ttrium	A	1922363	1801425	-6.29
erbium	A	2247824	2068267	-7.99

arning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

st : MET06 IDF : 1.0
qnum : 67102089018 File : c11v0018 Time : 11-MAR-2007 23:11
l : 67102089001 Caldate: 11-MAR-2007
andards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
ntimony	A	[0.06592]	0.1000	ug/L	
arium	A	0.9877	0.1000	ug/L	
eryllium	A	[0.02462]	0.1000	ug/L	
admium	A	1.794	0.1000	ug/L	
ead	A	0.4656	0.1000	ug/L	
ilver	A	0.1995	0.1000	ug/L	
hallium	A	[0.04955]	0.05000	ug/L	
rsenic	E	0.2185	0.1000	ug/L	
hromium	E	1.390	0.1000	ug/L	
obalt	E	0.2278	0.1000	ug/L	
opper	E	1.335	0.1000	ug/L	
anganese	E	0.6324	0.1000	ug/L	
ickel	E	1.209	0.1000	ug/L	
anadium	E	[0]	0.1000	ug/L	
inc	E	1.302	0.1000	ug/L	
elenium	H	[0.06619]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
luminum	A	100000	97130	ug/L	97
alcium	A	300000	300300	ug/L	100
agnesium	A	100000	94640	ug/L	95
olybdenum	A	2000	2013	ug/L	101
otassium	A	100000	97940	ug/L	98
odium	E	250000	248500	ug/L	99
ron	H	250000	240300	ug/L	96

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	596061	-34.71
candium	A	1532474	1344098	-12.29
candium	E	43903	39702	-9.57
candium	H	295941	273407	-7.61
ermanium	H	70661	59077	-16.39
ermanium	E	20856	18245	-12.52
ndium	A	1869099	1500709	-19.71
ismuth	A	1324825	886633	-33.08
ttrium	A	1922363	1668116	-13.23
erbium	A	2247824	1895564	-15.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

st : MET06 IDF : 1.0
qnum : 67102089019 File : c11v0019 Time : 11-MAR-2007 23:17
l : 67102089001 Caldate: 11-MAR-2007
andards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	100000	95750	ug/L	-4		
admium	A	100.0	100.5	ug/L	1	20	
alcium	A	300000	300200	ug/L	0		
agnesium	A	100000	92980	ug/L	-7		
olybdenum	A	2000	2004	ug/L	0		
otassium	A	100000	98230	ug/L	-2		
ilver	A	50.00	42.53	ug/L	-15	20	
rsenic	E	100.0	105.0	ug/L	5	20	
hromium	E	200.0	204.8	ug/L	2	20	
obalt	E	200.0	192.8	ug/L	-4	20	
opper	E	200.0	183.3	ug/L	-8	20	
anganese	E	200.0	197.0	ug/L	-2	20	
ickel	E	200.0	187.9	ug/L	-6	20	
odium	E	250000	254400	ug/L	2		
anadium	E	200.0	209.0	ug/L	5	20	
inc	E	100.0	90.59	ug/L	-9	20	
ron	H	250000	244400	ug/L	-2		
elenium	H	100.0	103.4	ug/L	3	20	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
candium	H	295941	276324	-6.63
candium	A	1532474	1371504	-10.50
candium	E	43903	38079	-13.27
ermanium	H	70661	59632	-15.61
ermanium	E	20856	17574	-15.74
ndium	A	1869099	1525596	-18.38
ttrium	A	1922363	1717051	-10.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

st : MET06 IDF : 1.0
qnum : 67102089067 File : c11v0067 Time : 12-MAR-2007 03:32
l : 67102089001 Caldate: 11-MAR-2007
andards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
ntimony	A	[0.06528]	0.1000	ug/L	
arium	A	1.005	0.1000	ug/L	
eryllium	A	[0.03225]	0.1000	ug/L	
admium	A	1.870	0.1000	ug/L	
ead	A	0.4770	0.1000	ug/L	
ilver	A	0.2090	0.1000	ug/L	
hallium	A	[0.04586]	0.05000	ug/L	
rsenic	E	0.2289	0.1000	ug/L	
hromium	E	1.377	0.1000	ug/L	
obalt	E	0.2285	0.1000	ug/L	
opper	E	1.345	0.1000	ug/L	
anganese	E	0.6579	0.1000	ug/L	
ickel	E	1.204	0.1000	ug/L	
anadium	E	[0]	0.1000	ug/L	
inc	E	1.343	0.1000	ug/L	
elenium	H	[0.07027]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
luminum	A	100000	98070	ug/L	98
alcium	A	300000	301400	ug/L	100
agnesium	A	100000	94120	ug/L	94
olybdenum	A	2000	1994	ug/L	100
otassium	A	100000	98840	ug/L	99
odium	E	250000	245300	ug/L	98
ron	H	250000	241200	ug/L	96

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
ithium	A	913013	589494	-35.43
candium	A	1532474	1318072	-13.99
candium	E	43903	38319	-12.72
candium	H	295941	253217	-14.44
ermanium	H	70661	54987	-22.18
ermanium	E	20856	17618	-15.52
ndium	A	1869099	1452120	-22.31
ismuth	A	1324825	885127	-33.19
ttrium	A	1922363	1632449	-15.08
erbium	A	2247824	1859435	-17.28

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

st : MET06 IDF : 1.0
qnum : 67102089068 File : c11v0068 Time : 12-MAR-2007 03:38
l : 67102089001 Caldate: 11-MAR-2007
andards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
luminum	A	100000	96690	ug/L	-3		
admium	A	100.0	101.2	ug/L	1	20	
alcium	A	300000	306200	ug/L	2		
agnesium	A	100000	93860	ug/L	-6		
olybdenum	A	2000	2015	ug/L	1		
otassium	A	100000	99220	ug/L	-1		
ilver	A	50.00	43.22	ug/L	-14	20	
rsenic	E	100.0	104.2	ug/L	4	20	
hromium	E	200.0	201.3	ug/L	1	20	
obalt	E	200.0	189.5	ug/L	-5	20	
opper	E	200.0	180.9	ug/L	-10	20	
anganese	E	200.0	194.0	ug/L	-3	20	
ickel	E	200.0	185.9	ug/L	-7	20	
odium	E	250000	246900	ug/L	-1		
anadium	E	200.0	206.5	ug/L	3	20	
inc	E	100.0	89.11	ug/L	-11	20	
ron	H	250000	248100	ug/L	-1		
elenium	H	100.0	106.1	ug/L	6	20	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
candium	H	295941	250710	-15.28
candium	A	1532474	1322168	-13.72
candium	E	43903	37572	-14.42
ermanium	H	70661	54085	-23.46
ermanium	E	20856	17319	-16.96
ndium	A	1869099	1463499	-21.70
trium	A	1922363	1662284	-13.53

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67102089121 File : c11v0121 Time : 12-MAR-2007 08:21
al : 67102089001 Caldate: 11-MAR-2007
tandards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05576]	0.1000	ug/L	
Barium	A	0.9876	0.1000	ug/L	
Beryllium	A	[0.02579]	0.1000	ug/L	
Cadmium	A	1.827	0.1000	ug/L	
Lead	A	0.4696	0.1000	ug/L	
Silver	A	0.2066	0.1000	ug/L	
Thallium	A	[0.03970]	0.05000	ug/L	
Arsenic	E	0.2768	0.1000	ug/L	
Chromium	E	1.404	0.1000	ug/L	
Cobalt	E	0.2326	0.1000	ug/L	
Copper	E	1.341	0.1000	ug/L	
Manganese	E	0.6600	0.1000	ug/L	
Nickel	E	1.223	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.336	0.1000	ug/L	
Selenium	H	[0.06146]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	96360	ug/L	96
Calcium	A	300000	300200	ug/L	100
Magnesium	A	100000	92940	ug/L	93
Molybdenum	A	2000	1962	ug/L	98
Potassium	A	100000	98480	ug/L	98
Sodium	E	250000	244600	ug/L	98
Iron	H	250000	241300	ug/L	97

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	913013	590081	-35.37
candium	A	1532474	1323532	-13.63
candium	E	43903	37809	-13.88
candium	H	295941	235636	-20.38
ermanium	H	70661	51696	-26.84
ermanium	E	20856	17563	-15.79
ndium	A	1869099	1445495	-22.66
ismuth	A	1324825	887109	-33.04
ttrium	A	1922363	1644695	-14.44
erbium	A	2247824	1827619	-18.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

nst : MET06 IDF : 1.0
eqnum : 67102089122 File : c11v0122 Time : 12-MAR-2007 08:27
al : 67102089001 Caldate: 11-MAR-2007
tandards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96820	ug/L	-3		
Cadmium	A	100.0	101.1	ug/L	1	20	
Calcium	A	300000	306800	ug/L	2		
Magnesium	A	100000	93980	ug/L	-6		
Molybdenum	A	2000	2001	ug/L	0		
Potassium	A	100000	100000	ug/L	0		
Silver	A	50.00	43.02	ug/L	-14	20	
Arsenic	E	100.0	105.2	ug/L	5	20	
Chromium	E	200.0	205.3	ug/L	3	20	
Cobalt	E	200.0	191.9	ug/L	-4	20	
Copper	E	200.0	182.9	ug/L	-9	20	
Manganese	E	200.0	198.6	ug/L	-1	20	
Nickel	E	200.0	188.8	ug/L	-6	20	
Sodium	E	250000	249600	ug/L	0		
Vanadium	E	200.0	209.9	ug/L	5	20	
Zinc	E	100.0	90.53	ug/L	-9	20	
Iron	H	250000	248800	ug/L	0		
Selenium	H	100.0	106.5	ug/L	7	20	

ISTD (ICALBLK c11v0004)	Ch	ICALBLK Abund	Abund	%Drift
candium	H	295941	233174	-21.21
candium	A	1532474	1320139	-13.86
candium	E	43903	36678	-16.46
ermanium	H	70661	50977	-27.86
ermanium	E	20856	16998	-18.50
ndium	A	1869099	1455287	-22.14
ttrium	A	1922363	1659378	-13.68

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67102089

ate : 03/11/07 Reference: c11v0004
equence : MET06 c11v0 Analyzed : 03/11/07 21:48

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	913013	1532474	43903	295941	70661	20856	1869099	1324825	1922363	2247824
		LOWER LIMIT	273904	459742	13171	88782	21198	6257	560730	397448	576709	674347
		UPPER LIMIT	1095615	1838969	52684	355129	84793	25027	2242919	1589790	2306836	2697389
17	ICB		897509	1482973	42744	279864	67059	20615	1802835	1248923	1845266	2163173
18	ICSA		596061	1344098	39702	273407	59077	18245	1500709	886633	1668116	1895564
19	ICSAB		564737	1371504	38079	276324	59632	17574	1525596	909548	1717051	1952763
24	MSS	193165-002	863346	1564974	42623	262842	63384	20725	1894895	1346049	2019625	2296483
25	SER	QC378341	875400	1533597	41541	258517	62589	20410	1880666	1327553	1952585	2283165
26	MSS	193165-002	865016	1527069	41916	280762	67387	20676	1849256	1313147	1956886	2238338
27	PDS	QC378342	828902	1557785	42071	284180	67174	20322	1790631	1226990	1942660	2182534
28	MS	QC378339	870881	1606608	45244	286212	66584	21443	1842446	1279400	2054175	2246052
29	MSD	QC378340	847314	1572467	44357	272338	63597	21053	1801754	1262016	1975842	2194877
30	SAMPLE	193202-001	875806	1541408	42414	258067	61536	20216	1823078	1249538	1928541	2214813
31	SAMPLE	193202-002	864808	1502704	41478	262123	62013	19815	1747392	1223818	1853976	2149538
35	CCV		847463	1518633	42799	279724	66797	20777	1752125	1212470	1873794	2162801
37	CCB		907001	1570758	42823	270938	65574	20850	1901282	1301742	1970992	2258838
40	SAMPLE	193202-003	878959	1500615	43428	261772	61914	20665	1741096	1199762	1841104	2119850
41	SAMPLE	193202-004	877356	1597155	46368	271713	62187	21259	1803067	1231580	2016613	2146083
43	MSS	193253-001	881056	1531631	44277	277155	67071	21109	1810174	1212586	1882925	2165729
44	SER	QC378419	913797	1582319	43676	274092	66402	21079	1890666	1303060	1964815	2272302
45	MSS	193253-001	855106	1491580	43143	275884	66230	20733	1730526	1160149	1808994	2087780
46	SER	QC378419	882109	1480422	42798	267442	65192	20821	1784229	1220436	1844195	2149056
47	MS	QC378417	832912	1477606	42831	268550	64396	20558	1721243	1149419	1810903	2100905
48	MSD	QC378418	844581	1485283	42790	270532	64786	20891	1728052	1165043	1827189	2106311
49	PDS	QC378420	819900	1494379	41904	268519	63873	19939	1714028	1160967	1829741	2106019
50	SAMPLE	193187-001	852392	1473418	42273	268036	65383	20758	1775438	1263028	1829993	2143203
54	CCV		870040	1501599	42576	270206	64545	20222	1749026	1216615	1863845	2167158
56	CCB		882627	1465196	42428	253803	61221	20577	1795612	1244328	1836844	2138135
62	CCV		855405	1502107	42351	267877	64024	20236	1730935	1199137	1863343	2141146
64	CCB		909570	1513988	42401	254172	61674	20398	1829806	1284890	1909038	2193013
67	ICSA		589494	1318072	38319	253217	54987	17618	1452120	885127	1632449	1859435
68	ICSAB		530059	1322168	37572	250710	54085	17319	1463499	887854	1662284	1850410
72	BLANK	QC378535	767676	1420488	34303	202150	56250	19574	1824663	1319042	1898095	2249817
74	MSS	193066-001	850230	1466668	39325	241808	59564	19756	1837268	1300092	1874967	2189924
75	SER	QC378540	847541	1486835	39816	245007	60865	20220	1853558	1313969	1898951	2205513
76	PDS	QC378541	823198	1541038	39622	251995	61088	19291	1805533	1246114	1931112	2240318
78	SER	QC378540	866284	1506427	40004	244647	60359	19768	1859970	1321128	1919343	2218852
79	SAMPLE	193027-011	838595	1529795	39777	237542	58100	19714	1818930	1247837	1921943	2233845
80	SAMPLE	193027-012	808247	1495352	39810	238900	57389	19351	1720321	1198801	1865113	2137785
81	SAMPLE	193027-013	819543	1461581	40243	233638	56556	19863	1750431	1251555	1868873	2136427
85	CCV		844200	1474676	39718	253098	60742	19523	1726876	1191268	1849582	2126137
87	CCB		855627	1444682	40278	230168	56483	19709	1755215	1242065	1828608	2118469
90	SAMPLE	193066-002	810616	1421657	40110	241966	59008	19600	1696181	1178406	1782279	2055963
91	SAMPLE	193066-003	810339	1433977	39496	245273	59821	19367	1705965	1187122	1778904	2069799
92	SAMPLE	193066-004	814934	1443958	40300	250642	61158	19726	1712825	1192000	1803486	2074305
93	SAMPLE	193227-002	790108	1430396	40676	250884	58952	19635	1640010	1108144	1753218	2034705
94	SAMPLE	193235-001	841048	1475133	39423	236890	58606	19503	1773824	1242638	1858116	2162837
95	SAMPLE	193235-002	839940	1460301	39871	244579	59658	19734	1773810	1251346	1850532	2142516
96	SAMPLE	193235-003	825738	1436334	39860	241415	58995	19678	1757953	1227021	1819509	2111452
97	SAMPLE	193235-004	840576	1470770	40017	242583	59221	19504	1764898	1232234	1845229	2136767
98	SAMPLE	193235-005	855621	1454710	40577	243804	59933	20168	1764215	1241470	1831328	2120977

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67102089

ate : 03/11/07 Reference: c11v0004
equence : MET06 c11v0 Analyzed : 03/11/07 21:48

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
99	SAMPLE	193235-006	845659	1460799	40728	242541	59167	20234	1761711	1233943	1840176	2145863
03	CCV		839820	1491537	41003	258826	61878	19624	1727784	1190392	1869363	2113807
05	CCB		875930	1462246	41337	243513	59075	20171	1759358	1240292	1843583	2105505
10	SAMPLE	193235-007	831020	1419004	39815	246721	59984	19506	1724794	1213903	1775997	2064056
11	SAMPLE	193235-008	828024	1469455	39997	246212	59386	19553	1737338	1204035	1840717	2110129
12	SAMPLE	193235-009	824539	1426603	40291	246350	59891	19664	1727924	1233331	1798817	2100407
16	CCV		822999	1433914	39820	239252	56798	19441	1655901	1143259	1781969	2042118
18	CCB		858395	1449081	40708	235710	57157	19706	1726109	1201943	1801425	2068267
21	ICSA		590081	1323532	37809	235636	51696	17563	1445495	887109	1644695	1827619
22	ICSAB		539246	1320139	36678	233174	50977	16998	1455287	886953	1659378	1843526

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67102089 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c11v0001	TUN				11-MAR-2007 21:29	1.0	1.0				1	
002	c11v0002	X	RINSE			11-MAR-2007 21:37	1.0					2	
003	c11v0003	X	RINSE			11-MAR-2007 21:42	1.0					2	
004	c11v0004	ICALBLK	CALBLANK			11-MAR-2007 21:48	1.0	1.0				2	
005	c11v0005	ICAL				11-MAR-2007 21:57	1.0	1.0				3	
006	c11v0006	ICAL				11-MAR-2007 22:07	1.0	1.0				4	
007	c11v0007	ICAL				11-MAR-2007 22:13	1.0	1.0				5	
008	c11v0008	ICAL				11-MAR-2007 22:18	1.0	1.0				6	
009	c11v0009	ICAL				11-MAR-2007 22:23	1.0	1.0				7	
010	c11v0010	ICAL				11-MAR-2007 22:29	1.0	1.0				8	
011	c11v0011	X	RINSE			11-MAR-2007 22:34	1.0					2	
012	c11v0012	ICV				11-MAR-2007 22:39	1.0	1.0	1		1	9	
013	c11v0013	X	RINSE			11-MAR-2007 22:45	1.0					2	
014	c11v0014	X				11-MAR-2007 22:50	1.0		1		1	9	
015	c11v0015	X	RINSE			11-MAR-2007 22:55	1.0					2	
016	c11v0016	X				11-MAR-2007 23:00	1.0		1		1	2	
017	c11v0017	ICB				11-MAR-2007 23:06	1.0	1.0			1	2	
018	c11v0018	ICSA				11-MAR-2007 23:11	1.0	1.0			1	10 2	7:CA=300300
019	c11v0019	ICSAB				11-MAR-2007 23:17	1.0	1.0			1	11 2	9:CA=300200
020	c11v0020	X	RINSE			11-MAR-2007 23:22	1.0					2	
021	c11v0021	X	RINSE			11-MAR-2007 23:27	1.0					2	
022	c11v0022	X	RINSE			11-MAR-2007 23:33	1.0					2	
023	c11v0023	X	RINSE			11-MAR-2007 23:38	1.0					2	
024	c11v0024	MSS	193165-002	122902	Soil	11-MAR-2007 23:43	100.0	50.0	1		1	2	
025	c11v0025	SER	QC378341	122902	Soil	11-MAR-2007 23:49	500.0	50.0		1	1	2	
026	c11v0026	MSS	193165-002	122902	Soil	11-MAR-2007 23:54	200.0	50.0	1		1	2	
027	c11v0027	PDS	QC378342	122902	Soil	11-MAR-2007 23:59	200.0	50.0			1	12 13 2	
028	c11v0028	MS	QC378339	122902	Soil	12-MAR-2007 00:04	50.0	50.0	1		1	2	1:MN=380.000
029	c11v0029	MSD	QC378340	122902	Soil	12-MAR-2007 00:10	50.0	50.0	1		1	2	1:MN=442.800
030	c11v0030	SAMPLE	193202-001	122902	Soil	12-MAR-2007 00:15	250.0	44.25	1		1	2	
031	c11v0031	SAMPLE	193202-002	122902	Soil	12-MAR-2007 00:20	250.0	44.64	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: _____ Date: 3/12/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67102089 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11v0032	X	RINSE			12-MAR-2007 00:25	1.0					2	
033	c11v0033	X	RINSE			12-MAR-2007 00:31	1.0					2	
034	c11v0034	X	RINSE			12-MAR-2007 00:36	1.0					2	
035	c11v0035	CCV				12-MAR-2007 00:41	1.0	1.0	1		1	14	
036	c11v0036	X	RINSE			12-MAR-2007 00:47	1.0					2	
037	c11v0037	CCB				12-MAR-2007 00:52	1.0	1.0			1	2	
038	c11v0038	X				12-MAR-2007 00:58	1.0		1		1	2	
039	c11v0039	X				12-MAR-2007 01:03	1.0				1	2	
040	c11v0040	SAMPLE	193202-003	122902	Soil	12-MAR-2007 01:08	250.0	48.08	1		1	2	
041	c11v0041	SAMPLE	193202-004	122902	Soil	12-MAR-2007 01:14	50.0	46.30	2		1	2	
042	c11v0042	X	RINSE			12-MAR-2007 01:19	1.0					2	
043	c11v0043	MSS	193253-001	122921	Filtra	12-MAR-2007 01:24	20.0	1.0	2		1	2	
044	c11v0044	SER	QC378419	122921	Filtra	12-MAR-2007 01:30	100.0	1.0		1	1	2	
045	c11v0045	MSS	193253-001	122921	Filtra	12-MAR-2007 01:35	10.0	1.0	2		1	2	1:NA=33700.0
046	c11v0046	SER	QC378419	122921	Filtra	12-MAR-2007 01:40	50.0	1.0	2	1	1	2	
047	c11v0047	MS	QC378417	122921	Filtra	12-MAR-2007 01:46	10.0	1.0	1	1	1	2	1:NA=32450.0
048	c11v0048	MSD	QC378418	122921	Filtra	12-MAR-2007 01:51	10.0	1.0	1		1	2	1:NA=34470.0
049	c11v0049	PDS	QC378420	122921	Filtra	12-MAR-2007 01:56	20.0	1.0	1		1	12 13 2	1:NA=26355
050	c11v0050	SAMPLE	193187-001	122921	Water	12-MAR-2007 02:01	10.0	1.0	2		1	2	
051	c11v0051	X	RINSE			12-MAR-2007 02:07	1.0					2	
052	c11v0052	X	RINSE			12-MAR-2007 02:12	1.0					2	
053	c11v0053	X	RINSE			12-MAR-2007 02:17	1.0					2	
054	c11v0054	CCV				12-MAR-2007 02:23	1.0	1.0	1		1	14	
055	c11v0055	X	RINSE			12-MAR-2007 02:28	1.0					2	
056	c11v0056	CCB				12-MAR-2007 02:33	1.0	1.0			1	2	
057	c11v0057	X				12-MAR-2007 02:39	1.0				1	2	
058	c11v0058	X				12-MAR-2007 02:44	1.0				1	2	
059	c11v0059	X	RINSE			12-MAR-2007 02:50	1.0					2	
060	c11v0060	X	RINSE			12-MAR-2007 02:55	1.0					2	
061	c11v0061	X	RINSE			12-MAR-2007 03:00	1.0					2	
062	c11v0062	CCV				12-MAR-2007 03:05	1.0	1.0			1	14	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: [signature] Date: 3/12/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67102089 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11v0063	X	RINSE			12-MAR-2007 03:11	1.0					2	
064	c11v0064	CCB				12-MAR-2007 03:16	1.0	1.0	1		1	2	
065	c11v0065	X				12-MAR-2007 03:21	1.0				1	2	
066	c11v0066	X				12-MAR-2007 03:27	1.0				1	2	
067	c11v0067	ICSA				12-MAR-2007 03:32	1.0	1.0			1	10 2	7:CA=301400
068	c11v0068	ICSAB				12-MAR-2007 03:38	1.0	1.0			1	11 2	9:CA=306200
069	c11v0069	X	RINSE			12-MAR-2007 03:43	1.0					2	
070	c11v0070	X	RINSE			12-MAR-2007 03:48	1.0					2	
071	c11v0071	X	RINSE			12-MAR-2007 03:54	1.0					2	
072	c11v0072	BLANK	QC378535	122949	Water	12-MAR-2007 03:59	1.0	1.0	2		1	2	
073	c11v0073	X	RINSE			12-MAR-2007 04:04	1.0					2	
074	c11v0074	MSS	193066-001	122949	Water	12-MAR-2007 04:10	50.0	1.0	3		1	2	
075	c11v0075	SER	QC378540	122949	Water	12-MAR-2007 04:15	250.0	1.0		3	1	2	
076	c11v0076	PDS	QC378541	122949	Water	12-MAR-2007 04:20	50.0	1.0			1	12	
077	c11v0077	X	RINSE			12-MAR-2007 04:26	1.0					2	
078	c11v0078	SER	QC378540	122949	Water	12-MAR-2007 04:31	50.0	1.0	3	2	1	2	
079	c11v0079	SAMPLE	193027-011	122949	Water	12-MAR-2007 04:36	10.0	1.0	3		1	2	1:NA=20230.0
080	c11v0080	SAMPLE	193027-012	122949	Water	12-MAR-2007 04:42	10.0	1.0	3		1	2	1:MN=522.800
081	c11v0081	SAMPLE	193027-013	122949	Water	12-MAR-2007 04:47	10.0	1.0	3		1	2	1:MN=347.800
082	c11v0082	X	RINSE			12-MAR-2007 04:52	1.0					2	
083	c11v0083	X	RINSE			12-MAR-2007 04:57	1.0					2	
084	c11v0084	X	RINSE			12-MAR-2007 05:03	1.0					2	
085	c11v0085	CCV				12-MAR-2007 05:08	1.0	1.0	2		1	14	
086	c11v0086	X	RINSE			12-MAR-2007 05:13	1.0					2	
087	c11v0087	CCB				12-MAR-2007 05:19	1.0	1.0			1	2	
088	c11v0088	X				12-MAR-2007 05:24	1.0				1	2	
089	c11v0089	X				12-MAR-2007 05:30	1.0				1	2	
090	c11v0090	SAMPLE	193066-002	122949	Water	12-MAR-2007 05:35	10.0	1.0	3		1	2	1:NA=38880.0
091	c11v0091	SAMPLE	193066-003	122949	Water	12-MAR-2007 05:40	10.0	1.0	3		1	2	1:NA=40530.0
092	c11v0092	SAMPLE	193066-004	122949	Water	12-MAR-2007 05:46	10.0	1.0	3		1	2	1:NA=34590.0
093	c11v0093	SAMPLE	193227-002	122949	Filtra	12-MAR-2007 05:51	10.0	1.0	2		1	2	1:NA=129000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: [signature] Date: 3/12/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67102089 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c11v0094	SAMPLE	193235-001	122949	Filtra	12-MAR-2007 05:56	10.0	1.0	2		1	2	
095	c11v0095	SAMPLE	193235-002	122949	Filtra	12-MAR-2007 06:02	10.0	1.0	2		1	2	
096	c11v0096	SAMPLE	193235-003	122949	Filtra	12-MAR-2007 06:07	10.0	1.0	2		1	2	
097	c11v0097	SAMPLE	193235-004	122949	Filtra	12-MAR-2007 06:12	10.0	1.0	2		1	2	
098	c11v0098	SAMPLE	193235-005	122949	Filtra	12-MAR-2007 06:17	10.0	1.0	2		1	2	
099	c11v0099	SAMPLE	193235-006	122949	Filtra	12-MAR-2007 06:23	10.0	1.0	3		1	2	
100	c11v0100	X	RINSE			12-MAR-2007 06:28	1.0					2	
101	c11v0101	X	RINSE			12-MAR-2007 06:33	1.0					2	
102	c11v0102	X	RINSE			12-MAR-2007 06:39	1.0					2	
103	c11v0103	CCV				12-MAR-2007 06:44	1.0	1.0	1		1	14 2	
104	c11v0104	X	RINSE			12-MAR-2007 06:49	1.0					2	
105	c11v0105	CCB				12-MAR-2007 06:55	1.0	1.0			1	2	
106	c11v0106	X				12-MAR-2007 07:00	1.0				1	2	
107	c11v0107	X				12-MAR-2007 07:05	1.0					2	
108	c11v0108	TUN				12-MAR-2007 07:10	1.0	1.0				1	
109	c11v0109	X	RINSE			12-MAR-2007 07:17	1.0					2	
110	c11v0110	SAMPLE	193235-007	122949	Filtra	12-MAR-2007 07:23	10.0	1.0	1		1	2	
111	c11v0111	SAMPLE	193235-008	122949	Filtra	12-MAR-2007 07:28	10.0	1.0	1		1	2	1:MN=424.100
112	c11v0112	SAMPLE	193235-009	122949	Filtra	12-MAR-2007 07:33	10.0	1.0	1		1	2	
113	c11v0113	X	RINSE			12-MAR-2007 07:39	1.0					2	
114	c11v0114	X	RINSE			12-MAR-2007 07:44	1.0					2	
115	c11v0115	X	RINSE			12-MAR-2007 07:49	1.0					2	
116	c11v0116	CCV				12-MAR-2007 07:55	1.0	1.0	1		1	14 2	
117	c11v0117	X	RINSE			12-MAR-2007 08:00	1.0					2	
118	c11v0118	CCB				12-MAR-2007 08:06	1.0	1.0			1	2	
119	c11v0119	X				12-MAR-2007 08:11	1.0					2	
120	c11v0120	X				12-MAR-2007 08:16	1.0					2	
121	c11v0121	ICSA				12-MAR-2007 08:21	1.0	1.0			1	10 2	7:CA=300200
122	c11v0122	ICSAB				12-MAR-2007 08:27	1.0	1.0			1	11 2	9:CA=306800

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S054 13=S5055 14=S5654

Analyst: [signature] Date: 3/12/07

REPORTING SUMMARY FOR 193027 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193027-011	MET04	03/07/07 14:27	1.0															+								
193027-011	MET06	03/08/07 22:01	10.0						+	+						+					+	+		+	+	
193027-011	MET05	03/08/07 23:33	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-011	MET06	03/10/07 13:44	20.0																				+			
193027-011	MET06	03/11/07 17:51	10.0										+													
193027-011	MET06	03/12/07 04:36	10.0																							
193027-012	MET04	03/06/07 14:13	1.0															+								
193027-012	MET06	03/08/07 22:06	10.0				+		+	+				+		+					+	+	+	+	+	
193027-012	MET05	03/08/07 23:37	1.0	+	+	+		+			+	+			+				+	+						+
193027-012	MET06	03/10/07 13:49	50.0														+									
193027-012	MET06	03/11/07 17:56	10.0										+													
193027-012	MET06	03/12/07 04:42	10.0																							
193027-013	MET04	03/07/07 14:35	1.0															+								
193027-013	MET06	03/08/07 22:54	10.0				+		+	+				+		+					+	+	+	+	+	
193027-013	MET05	03/08/07 23:41	1.0	+	+	+		+			+	+			+				+	+						+
193027-013	MET06	03/10/07 13:55	20.0														+									
193027-013	MET06	03/11/07 18:01	10.0										+													
193027-013	MET06	03/12/07 04:47	10.0																							
QC377718	MET04	03/06/07 13:36	1.0															+								
QC377719	MET04	03/06/07 13:38	1.0															+								
QC377720	MET04	03/06/07 13:40	1.0															+								
QC377721	MET04	03/06/07 13:45	5.0															+								
QC377722	MET04	03/06/07 13:47	1.0															+								
QC377723	MET04	03/06/07 13:50	1.0															+								
QC377992	MET04	03/07/07 14:04	1.0															+								
QC377993	MET04	03/07/07 14:07	1.0															+								
QC377994	MET04	03/07/07 14:11	1.0															+								
QC377995	MET04	03/07/07 14:15	5.0															+								
QC377996	MET04	03/07/07 14:17	1.0															+								
QC377997	MET04	03/07/07 14:20	1.0															+								
QC378195	MET06	03/08/07 18:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378195	MET06	03/08/07 19:42	1.0																							
QC378195	MET05	03/08/07 20:53	1.0																							
QC378195	MET05	03/09/07 15:10	1.0																							
QC378196	MET06	03/08/07 18:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378196	MET05	03/08/07 20:57	1.0																							

REPORTING SUMMARY FOR 193027 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
QC378197	MET06	03/08/07 18:22	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378197	MET05	03/08/07 21:01	1.0																							
QC378198	MET06	03/08/07 18:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378198	MET05	03/08/07 21:17	1.0																							
QC378199	MET06	03/08/07 18:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378199	MET05	03/08/07 21:21	1.0																							
QC378200	MET06	03/08/07 18:38	50.0							+						+					+	+	+			
QC378200	MET05	03/08/07 21:13	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+				+	+	+
QC378200	MET06	03/08/07 21:18	50.0																							
QC378201	MET06	03/08/07 18:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378201	MET05	03/08/07 21:25	50.0																							
QC378535	MET06	03/11/07 15:36	1.0	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+
QC378535	MET06	03/11/07 19:26	1.0												+											
QC378535	MET06	03/12/07 03:59	1.0																							
QC378536	MET06	03/11/07 15:52	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378537	MET06	03/11/07 15:57	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378538	MET06	03/11/07 17:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC378539	MET06	03/11/07 17:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC378540	MET06	03/11/07 17:30	50.0	+	+		+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC378540	MET06	03/12/07 04:15	250.0																				+			
QC378540	MET06	03/12/07 04:31	50.0			+																				
QC378541	MET06	03/11/07 17:45	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC378541	MET06	03/12/07 04:20	50.0																				+			

REPORTING SUMMARY FOR 193027 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALK	SBA	ASE	BAR	BEO	CDU	CAE	CRB	COG	CUN	FEI	PB	MGK	MN	HG	NI	K	SE	AG	NAL	TL	V	ZN
193027-001	MET06	03/08/07 20:04	10.0						+	+						+					+	+	+	+	+	
193027-001	MET05	03/08/07 22:13	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-001	MET05	03/11/07 16:29	1.0										+													
193027-002	MET06	03/08/07 18:33	10.0							+						+					+	+				
193027-002	MET05	03/08/07 21:09	1.0	+	+	+	+	+	+		+	+		+	+		+		+	+				+	+	+
193027-002	MET06	03/08/07 21:23	10.0																				+			
193027-002	MET05	03/11/07 15:00	1.0										+													
193027-003	MET06	03/08/07 20:09	10.0						+	+						+					+	+	+	+	+	
193027-003	MET05	03/08/07 22:17	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-003	MET05	03/11/07 16:34	1.0										+													
193027-004	MET06	03/08/07 20:14	10.0						+	+						+					+	+	+	+	+	
193027-004	MET05	03/08/07 22:21	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-004	MET05	03/11/07 16:37	1.0										+													
193027-005	MET06	03/08/07 20:20	10.0						+	+	+					+							+		+	
193027-005	MET05	03/08/07 22:25	1.0	+	+	+								+	+		+		+	+						+
193027-005	MET05	03/11/07 16:41	1.0										+													
193027-006	MET06	03/08/07 20:25	10.0						+	+						+					+	+	+	+	+	
193027-006	MET05	03/08/07 22:29	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-006	MET05	03/11/07 16:45	1.0										+													
193027-007	MET04	03/06/07 14:09	1.0															+								
193027-007	MET06	03/08/07 20:30	10.0						+	+						+					+	+	+	+	+	
193027-007	MET05	03/08/07 22:33	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-007	MET05	03/11/07 16:49	1.0										+													
193027-008	MET06	03/08/07 21:29	10.0						+	+						+					+	+	+	+	+	
193027-008	MET05	03/08/07 22:37	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-008	MET05	03/11/07 16:53	1.0										+													
193027-011	MET04	03/06/07 14:11	1.0															+								
193027-011	MET06	03/08/07 21:34	10.0						+	+						+					+	+	+	+	+	
193027-011	MET05	03/08/07 23:13	1.0	+	+	+	+	+			+	+		+	+		+		+	+						+
193027-011	MET05	03/11/07 16:57	1.0										+													
193027-012	MET04	03/07/07 14:33	1.0															+								
193027-012	MET06	03/08/07 21:39	10.0						+	+						+					+	+	+	+	+	
193027-012	MET05	03/08/07 23:17	1.0	+	+	+	+	+			+	+		+	+				+	+						+
193027-012	MET06	03/10/07 12:50	50.0														+									
193027-012	MET05	03/11/07 17:01	1.0										+													
193027-013	MET04	03/06/07 14:16	1.0															+								
193027-013	MET06	03/08/07 21:45	10.0						+	+						+	+				+	+	+	+	+	
193027-013	MET05	03/08/07 23:21	1.0	+	+	+	+	+			+	+		+	+				+	+						+
193027-013	MET05	03/11/07 17:05	1.0										+													
193027-014	MET04	03/06/07 14:18	1.0															+								
193027-014	MET06	03/08/07 21:50	10.0						+							+					+	+	+	+	+	
193027-014	MET05	03/08/07 23:25	1.0	+	+	+	+	+		+	+	+		+	+		+		+	+						+

REPORTING SUMMARY FOR 193027 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193027-014	MET05	03/11/07 17:42	1.0										+													
193027-015	MET04	03/06/07 14:20	1.0															+								
193027-015	MET06	03/08/07 21:55	10.0						+	+						+	+				+	+	+	+	+	
193027-015	MET05	03/08/07 23:29	1.0	+	+	+	+	+			+	+		+	+				+	+						+
193027-015	MET05	03/11/07 17:46	1.0										+													
QC377718	MET04	03/06/07 13:36	1.0															+								
QC377719	MET04	03/06/07 13:38	1.0															+								
QC377720	MET04	03/06/07 13:40	1.0															+								
QC377721	MET04	03/06/07 13:45	5.0															+								
QC377722	MET04	03/06/07 13:47	1.0															+								
QC377723	MET04	03/06/07 13:50	1.0															+								
QC377992	MET04	03/07/07 14:04	1.0															+								
QC377993	MET04	03/07/07 14:07	1.0															+								
QC377994	MET04	03/07/07 14:11	1.0															+								
QC377995	MET04	03/07/07 14:15	5.0															+								
QC377996	MET04	03/07/07 14:17	1.0															+								
QC377997	MET04	03/07/07 14:20	1.0															+								
QC378195	MET06	03/08/07 18:10	1.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC378195	MET06	03/08/07 19:42	1.0																							
QC378195	MET05	03/08/07 20:53	1.0																							
QC378195	MET05	03/09/07 15:10	1.0																							
QC378196	MET06	03/08/07 18:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378196	MET05	03/08/07 20:57	1.0																							
QC378197	MET06	03/08/07 18:22	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378197	MET05	03/08/07 21:01	1.0																							
QC378198	MET06	03/08/07 18:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378198	MET05	03/08/07 21:17	1.0																							
QC378199	MET06	03/08/07 18:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378199	MET05	03/08/07 21:21	1.0																							
QC378200	MET06	03/08/07 18:38	50.0							+						+					+	+	+			
QC378200	MET05	03/08/07 21:13	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+				+	+	+
QC378200	MET06	03/08/07 21:18	50.0																							
QC378201	MET06	03/08/07 18:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+

REPORTING SUMMARY FOR 193027 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
QC378201	MET05	03/08/07 21:25	50.0																							
QC378542	MET05	03/11/07 14:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+		+
QC378542	MET06	03/11/07 19:20	1.0																						+	
QC378543	MET05	03/11/07 14:48	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378544	MET05	03/11/07 14:52	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378545	MET05	03/11/07 15:08	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC378546	MET05	03/11/07 15:12	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC378547	MET05	03/11/07 15:04	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC378548	MET05	03/11/07 15:16	1.0	+		+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+

Curtis & Tompkins Laboratories Sample Preparation Summary 08-MAR-2007 15:16

Batch Number : 122867
Date Extracted: 08-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

ample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
93027-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
93027-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
93027-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-011			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
93027-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
93027-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-013			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
93027-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93027-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93213-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
93213-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC378195	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378196	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378197	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378198	MS	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378199	MSD	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378200	SER	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378201	PDS	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/8/07 Reviewed By: [signature] Date: 3/8/07

Relinquished By: [signature] 3/8/07 Received By: [signature] Date: 3/8/07

00439

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 122867
Date Digested: 3/8/07
Digested by: KLA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK	50	50	N	
BS				
BSD				
MS-02B				FIELD FILTERED
MSD-02				
193027-02				
-01A				
-03				
-04				
-05D				
-06A				
-07D				
-08				
-11B				
-12				
-13D				
-14				
-15				
213-01A				FILTERED IN LAB
027-11				
-12				
-13F				
213-01B				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/8
.5 mL of spike solution was added to all spikes	530054	
	530035	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

3/8/07
Prep Chemist Signature / Date

AA 3/8/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories Sample Preparation Summary 10-MAR-2007 17:43

Batch Number : 122949
Date Extracted: 10-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-011			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193066-001			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/ICP		
193066-002			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/ICP		
193066-003			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/ICP		
193066-004			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/ICP		
193227-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/ICAP		
193235-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193235-009			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC378535	BLANK			Water	50	mL	50	1.000000	1					ICAP		
QC378536	BS			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378537	BSD			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378538	MS	of 193066-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378539	MSD	of 193066-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378540	SER	of 193066-001		Water	50	mL	50	1.000000	1					ICAP		
QC378541	PDS	of 193066-001		Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/10/07 Reviewed By: [signature] Date: 3/11/07

Relinquished By: [signature] 3/10/07 Received By: [signature] Date: 3/11/07

00132

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 122945
Date Digested: 3/10/07
Digested by: [illegible]

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BJK	50	50	N	
BS				
BSD				
MS -01				
MSD -01				
93Deb-010				
-02 H				
-03				
04				
235-01 G				
-02				
-03				
-04				
-05				
-06				
-07				
-08				
-09				
027-11 A				
12				
13 E				
277-02 K				FIELD FILTERED

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/10
.5 mL of spike solution was added to all spikes	550054	
	550055	
concentrated HCl	C33034 BAKER	
concentrated HNO3	C48025	
☐ filtered thru' Whatman # 541		

3/10/07
Prep Chemist Signature / Date

3/11/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **10-MAR-2007 17:56**

Batch Number : 122950
Date Extracted: 10-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193193-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193193-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193193-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193193-011			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193193-015			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193193-017			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC378542	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378543	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378544	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378545	MS	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378546	MSD	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378547	SER	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378548	PDS	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/10/07 Reviewed By: [signature] Date: 3/11/07

Relinquished By: [signature] 3/10/07 Received By: [signature] Date: 3/11/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 122950
Date Digested: B 3/10/07
Digested by: [illegible]

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 77
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS-07 B				FIELD FILTERED
MSD-07				
193071-07				
-01 A				
-03				
-04				
-05 D				
-06 A				
-07 D				
-08				
-11 B				
-12				
-13 D				
-14				
-15				
193-04 B				
-07				
-08				
-11				
-15				
-17				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	[illegible] 3/10
.5 mL of spike solution was added to all spikes	S5054	
	S5055	
concentrated HCl	C33034 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

[illegible] 3/10/07
Prep Chemist Signature / Date

[illegible] 3/11/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

t : MET04
num : 47094398001
ts : ug/L

Date : 06-MAR-2007 13:18
X Axis : R

Reviewer: ---
Type : WATER

l	File	Seqnum	Sample ID	Analyzed	Stds
	122749	47094398002	STD02REP1	06-MAR-2007 13:20	S5659 (500X)
	122749	47094398003	STD03REP1	06-MAR-2007 13:22	S5659 (200X)
	122749	47094398004	STD04REP1	06-MAR-2007 13:25	S5659 (50X)
	122749	47094398005	STD05REP1	06-MAR-2007 13:27	S5659 (20X)
	122749	47094398006	STD06REP1	06-MAR-2007 13:29	S5659 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
cury	2785.0	2792.0	2209.5	2130.0	2060.4	LINR	-0.1527	4.91E-4		2395.4	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
cury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

00135

trument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47094398001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 030607 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.90738e-4

C -1.52694e-1

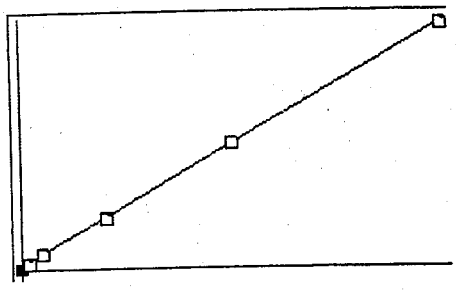
Rho .999904

Type

µ Abs.
20604

Accepted

New



Include S1 Rep 1

06-Mar-07 13:29 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.001	-.001	309	1	309		
02	.20000	.121	-.079	558	0%	557		
03	.50000	.532	.032	1397	0%	1396		
04	2.0000	2.02	.016	4419	0%	4419		
05	5.0000	5.07	.074	10650	0%	10650		
06	10.000	9.96	-.042	20604	0%	20604		

NUM SCRL

Ready

Folder: 030607
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 13:18:06 06 Mar 07 HG

Hg	.000	ppb	309	
		Bkgd 1	13700634	

*** Standard: 2 Rep: 1 Seq: 2 13:20:20 06 Mar 07 HG

Hg	.200	ppb	557	
		Bkgd 1	13684691	

*** Standard: 3 Rep: 1 Seq: 3 13:22:57 06 Mar 07 HG

Hg	.500	ppb	1396	
		Bkgd 1	13679355	

*** Standard: 4 Rep: 1 Seq: 4 13:25:06 06 Mar 07 HG

Hg	2.00	ppb	4419	
		Bkgd 1	13666234	

*** Standard: 5 Rep: 1 Seq: 5 13:27:15 06 Mar 07 HG

Hg	5.00	ppb	10650	
		Bkgd 1	13660044	

*** Standard: 6 Rep: 1 Seq: 6 13:29:23 06 Mar 07 HG

Hg	10.0	ppb	20604	
		Bkgd 1	13652621	

*** Check Standard: 2 Ck2S5661 Seq: 7 13:31:29 06 Mar 07 HG

Line	Flag		Intensities	
Hg			10921	
		Bkgd 1	13649476	

*** Check Standard: 1 Ck1ICB Seq: 8 13:33:50 06 Mar 07 HG

Line	Flag		Intensities	
Hg			11	
		Bkgd 1	13646270	

*** Sample ID: qc377718 Seq: 9 13:36:25 06 Mar 07 HG

122749,1

Hg	.062	ppb	437	
		Bkgd 1	13651563	

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 06-MAR-2007

Sequence: 47094398 Instrument: MET04 HydraAA HG Analyzer
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	122749	ICALBLK	STD01REP1				06-MAR-2007 13:18	1.0	1.0									
002	122749	ICAL	STD02REP1				06-MAR-2007 13:20	1.0	1.0									
003	122749	ICAL	STD03REP1				06-MAR-2007 13:22	1.0	1.0									
004	122749	ICAL	STD04REP1				06-MAR-2007 13:25	1.0	1.0									
005	122749	ICAL	STD05REP1				06-MAR-2007 13:27	1.0	1.0									
006	122749	ICAL	STD06REP1				06-MAR-2007 13:29	1.0	1.0									
007	122749	ICV					06-MAR-2007 13:31	1.0	1.0	2	5.000	47094398001	5.210		ug/L	104		
008	122749	ICB					06-MAR-2007 13:33	1.0	1.0			47094398001	ND	0.20	ug/L			
009	122749	BLANK	QC377718		122749	Water	06-MAR-2007 13:36	1.0	1.0			47094398001	0.062 J	0.20	ug/L			u
010	122749	BS	QC377719		122749	Water	06-MAR-2007 13:38	1.0	1.0		5.000	47094398001	5.320	0.20	ug/L	106		u
011	122749	BSD	QC377720		122749	Water	06-MAR-2007 13:40	1.0	1.0		5.000	47094398001	5.060	0.20	ug/L	101	5	u
012	122749	MSS	193145-001		122749	Filtra	06-MAR-2007 13:42	1.0	1.0			47094398001	ND	0.20	ug/L			u
013	122749	SER	QC377721	193145-001	122749	Filtra	06-MAR-2007 13:45	5.0	1.0			47094398001	ND	1.0	ug/L		--	u
014	122749	MS	QC377722	193145-001	122749	Filtra	06-MAR-2007 13:47	1.0	1.0		5.000	47094398001	5.020	0.20	ug/L	98		u
015	122749	MSD	QC377723	193145-001	122749	Filtra	06-MAR-2007 13:50	1.0	1.0		5.000	47094398001	4.610	0.20	ug/L	90	9	u
016	122749	SAMPLE	192965-005		122749	Water	06-MAR-2007 13:52	1.0	1.0			47094398001	ND	0.20	ug/L			u
017	122749	SAMPLE	192974-001		122749	Water	06-MAR-2007 13:54	1.0	1.0			47094398001	3.5	0.20	ug/L			u
018	122749	SAMPLE	193002-002		122749	Filtra	06-MAR-2007 13:56	1.0	1.0			47094398001	ND	0.20	ug/L			u
019	122749	X					06-MAR-2007 13:58	1.0										
020	122749	CCV					06-MAR-2007 14:02	1.0	1.0	4	5.000	47094398001	5.330		ug/L	107		
021	122749	CCB					06-MAR-2007 14:04	1.0	1.0			47094398001	ND	0.20	ug/L			
022	122749	SAMPLE	193002-003		122749	Filtra	06-MAR-2007 14:07	1.0	1.0			47094398001	ND	0.20	ug/L			u
023	122749	SAMPLE	193027-007		122749	Filtra	06-MAR-2007 14:09	1.0	1.0			47094398001	ND	0.20	ug/L			u
024	122749	SAMPLE	193027-011		122749	Filtra	06-MAR-2007 14:11	1.0	1.0			47094398001	ND	0.20	ug/L			u
025	122749	SAMPLE	193027-012		122749	Water	06-MAR-2007 14:13	1.0	1.0			47094398001	ND	0.20	ug/L			u
026	122749	SAMPLE	193027-013		122749	Filtra	06-MAR-2007 14:16	1.0	1.0			47094398001	ND	0.20	ug/L			u
027	122749	SAMPLE	193027-014		122749	Filtra	06-MAR-2007 14:18	1.0	1.0			47094398001	ND	0.20	ug/L			u
028	122749	SAMPLE	193027-015		122749	Filtra	06-MAR-2007 14:20	1.0	1.0			47094398001	ND	0.20	ug/L			u
029	122749	SAMPLE	193063-001		122749	Filtra	06-MAR-2007 14:23	1.0	1.0			47094398001	ND	0.20	ug/L			u
030	122749	SAMPLE	193063-003		122749	Filtra	06-MAR-2007 14:25	1.0	1.0			47094398001	ND	0.20	ug/L			u
031	122749	SAMPLE	193063-004		122749	Filtra	06-MAR-2007 14:27	1.0	1.0			47094398001	ND	0.20	ug/L			u
032	122749	CCV					06-MAR-2007 14:29	1.0	1.0	4	5.000	47094398001	5.220		ug/L	104		
033	122749	CCB					06-MAR-2007 14:32	1.0	1.0			47094398001	[0.03600]	0.20	ug/L			
034	122749	SAMPLE	193063-005		122749	Filtra	06-MAR-2007 14:34	1.0	1.0			47094398001	ND	0.20	ug/L			u
035	122749	SAMPLE	193063-006		122749	Filtra	06-MAR-2007 14:36	1.0	1.0			47094398001	ND	0.20	ug/L			u
036	122749	SAMPLE	193063-007		122749	Filtra	06-MAR-2007 14:38	1.0	1.0			47094398001	ND	0.20	ug/L			u
037	122749	SAMPLE	193099-001		122749	Water	06-MAR-2007 14:40	1.0	1.0			47094398001	ND	0.20	ug/L			u
038	122749	SAMPLE	193125-001		122749	Water	06-MAR-2007 14:42	1.0	1.0			47094398001	ND	0.20	ug/L			u
039	122749	SAMPLE	193145-002		122749	Filtra	06-MAR-2007 14:45	1.0	1.0			47094398001	ND	0.20	ug/L			u
040	122749	CCV					06-MAR-2007 14:47	1.0	1.0	5	7.500	47094398001	7.540		ug/L	101		
041	122749	CCB					06-MAR-2007 14:49	1.0	1.0			47094398001	ND	0.20	ug/L			

Stds used: 1=S5659 2=S5661 3=S5662 4=S5663 5=S5664
Flags used: u=use

Analyst: [signature] Date: 3/7/07

Curtis & Tompkins Laboratories Sample Preparation Summary 06-MAR-2007 12:18

Batch Number : 122749
Date Extracted: 06-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5659
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
192965-005			City of Berkeley - Toxics	Water	50	mL	50	1.000000	1					TAL/HG		
192974-001			Standard Iron & Metals	Water	50	mL	50	1.000000	1					HG		
193002-002			Weston Solutions	Filtrate	50	mL	50	1.000000	1					HG		
193002-003			Weston Solutions	Filtrate	50	mL	50	1.000000	1					HG		
193027-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193027-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193027-012			Treadwell & Rollo	~~Filtrate~~ WATER	50	mL	50	1.000000	1					HG		
193027-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193027-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193027-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193063-001			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193063-003			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193063-004			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193063-005			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193063-006			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193063-007			LFR Levine Fricke	Filtrate	50	mL	50	1.000000	1					HG		
193099-001			Malcolm Pirnie, Inc.	Water	50	mL	50	1.000000	1					T26/HG		
193125-001			Clayton Group Services	Water	50	mL	50	1.000000	1					T26/HG		
193145-001			URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193145-002			URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/HG		
QC377718	BLANK			Water	50	mL	50	1.000000	1					HG		
QC377719	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC377720	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC377721	SER	of 193145-001		Filtrate	50	mL	50	1.000000	1					HG		
QC377722	MS	of 193145-001		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC377723	MSD	of 193145-001		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC377724	PDS	of 193145-001		Filtrate	50	mL	50	1.000000	1					HG		

Zn 3/7/07

Prep Chemist: [signature] 3/6/07 Reviewed By: [signature] Date: 3/6/07

Relinquished By: [signature] 3/6/07 Received By: [signature] Date: 3/6/07

000115

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 122749

Date Digested: 3/6/07

Digested by: SA

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

Page 30

Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
192965-005	A	50	50		water
192974-001	D				↓
193002-002					Filtrate
↓ -003					↓
193027-007	D				Filtrate (C.F.)
-011	B				↓
-012	A				WATER
-013	D				Filtrate
-014					
↓ -015	↓				
193063-001	H				
-003					
-004					
-005	↓				
-006	G				
↓ -007	H				↓
193099-001	C				water
193125-001	E				water
193145-001 MSS	D				Filtrate (C.F.)
↓ -002	D				↓
Blank					water
BS					↓
BSD					
MS 193145-007	D				Filtrate (C.F.)
MSD ↓	↓				↓

25 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	55659	3/6/07
ICAL Source WS#	55659	
ICV / CCV WS#	55661/62/63/64	
Digestion of Samples & Standards: Time ON / Temperature ON	11:45 / 95°C	
Time OFF/ Temperature OFF	1:45 / 95°C	
concentrated H_2SO_4	B41641	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	K020807	
NaCl.hydroxylamine hydrochloride	Hy030107	
Stannous Chloride	$SnCl_2$ 030607	
☐ filtered thru' 0.45 um syringe filter	MilliporeRGAN43832	

Prep Chemist / Date

Continued from page

Continued on page

Reviewed by / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Reviewer: ---
Type : WATER

nst : MET04
alnum : 47095866001
nits : ug/L

Date : 07-MAR-2007 13:46
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	122819	47095866002	STD02REP1	07-MAR-2007 13:49	S5681 (500X)
L2	122819	47095866003	STD03REP1	07-MAR-2007 13:51	S5681 (200X)
L3	122819	47095866004	STD04REP1	07-MAR-2007 13:53	S5681 (50X)
L4	122819	47095866005	STD05REP1	07-MAR-2007 13:55	S5681 (20X)
L5	122819	47095866006	STD06REP1	07-MAR-2007 13:58	S5681 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	2925.0	2538.0	2092.5	2147.0	1986.4	LINR	-0.1379	5.04E-4		2337.8	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47095866001

2h00

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 030707 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 5.03507e-4

C -1.37925e-1

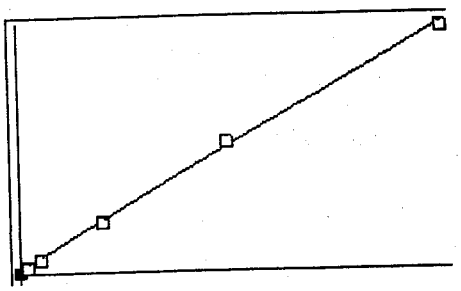
Rho .999376

Type

µ Abs.
19864

Accepted

New



Include S1 Rep 1

07-Mar-07 13:58

Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.058	-.058	160	0	153		
02	.20000	.157	-.043	586	0%	585		
03	.50000	.501	.001	1270	0%	1269		
04	2.0000	1.97	-.031	4186	0%	4185		
05	5.0000	5.27	.267	10736	0%	10735		
06	10.000	9.86	-.136	19865	0%	19864		

NUM

Ready

Folder: 030707
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	13:46:56 07 Mar 07	HG		
Hg	.000	ppb	159					
		Bkgd 1	13476476					
*** Standard: 2 Rep: 1				Seq: 2	13:49:02 07 Mar 07	HG		
Hg	.200	ppb	585					
		Bkgd 1	13472871					
*** Standard: 3 Rep: 1				Seq: 3	13:51:31 07 Mar 07	HG		
Hg	.500	ppb	1269					
		Bkgd 1	13468928					
*** Standard: 4 Rep: 1				Seq: 4	13:53:41 07 Mar 07	HG		
Hg	2.00	ppb	4185					
		Bkgd 1	13469735					
*** Standard: 5 Rep: 1				Seq: 5	13:55:45 07 Mar 07	HG		
Hg	5.00	ppb	10735					
		Bkgd 1	13466336					
*** Standard: 6 Rep: 1				Seq: 6	13:58:15 07 Mar 07	HG		
Hg	10.0	ppb	19864					
		Bkgd 1	13459769					
*** Check Standard: 2			Ck2S5683	Seq: 7	14:00:22 07 Mar 07	HG		
Line	Flag		Intensities					
Hg			10502					
		Bkgd 1	13428699					
*** Check Standard: 1			Ck1ICB	Seq: 8	14:02:28 07 Mar 07	HG		
Line	Flag		Intensities					
Hg			85					
		Bkgd 1	13425843					
*** Sample ID: qc377992			122819,1	Seq: 9	14:04:44 07 Mar 07	HG		
Hg	.076	ppb	424					
		Bkgd 1	13421582					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 07-MAR-2007

Sequence: 47095866 Instrument: MET04 HydraAA HG Analyzer
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
1	122819	ICALBLK	STD01REP1				07-MAR-2007 13:46	1.0	1.0									
2	122819	ICAL	STD02REP1				07-MAR-2007 13:49	1.0	1.0									
3	122819	ICAL	STD03REP1				07-MAR-2007 13:51	1.0	1.0									
4	122819	ICAL	STD04REP1				07-MAR-2007 13:53	1.0	1.0									
5	122819	ICAL	STD05REP1				07-MAR-2007 13:55	1.0	1.0									
6	122819	ICAL	STD06REP1				07-MAR-2007 13:58	1.0	1.0	2	5.000	47095866001	5.150		ug/L	103		
7	122819	ICV					07-MAR-2007 14:00	1.0	1.0			47095866001	ND	0.20	ug/L			
8	122819	ICB					07-MAR-2007 14:02	1.0	1.0			47095866001	0.076 J	0.20	ug/L			u
9	122819	BLANK	QC377992		122819	Water	07-MAR-2007 14:04	1.0	1.0			47095866001	5.300	0.20	ug/L	106		u
10	122819	BS	QC377993		122819	Water	07-MAR-2007 14:07	1.0	1.0		5.000	47095866001	5.410	0.20	ug/L	108	2	u
11	122819	BSD	QC377994		122819	Water	07-MAR-2007 14:11	1.0	1.0		5.000	47095866001	ND	0.20	ug/L			u
12	122819	MSS	193119-001		122819	Water	07-MAR-2007 14:13	1.0	1.0			47095866001	ND	1.0	ug/L		--	u
13	122819	SER	QC377995	193119-001	122819	Water	07-MAR-2007 14:15	5.0	1.0			47095866001	5.680	0.20	ug/L	114		u
14	122819	MS	QC377996	193119-001	122819	Water	07-MAR-2007 14:17	1.0	1.0		5.000	47095866001	5.240	0.20	ug/L	105	8	u
15	122819	MSD	QC377997	193119-001	122819	Water	07-MAR-2007 14:20	1.0	1.0		5.000	47095866001	ND	0.20	ug/L			u
16	122819	SAMPLE	193167-001		122819	Filtra	07-MAR-2007 14:22	1.0	1.0			47095866001	ND	0.20	ug/L			u
17	122819	SAMPLE	193167-002		122819	Filtra	07-MAR-2007 14:24	1.0	1.0			47095866001	ND	0.20	ug/L			u
18	122819	SAMPLE	193027-011		122819	Water	07-MAR-2007 14:27	1.0	1.0			47095866001	2.500		ug/L	100		
19	122819	CCV					07-MAR-2007 14:29	1.0	1.0	3	2.500	47095866001	ND	0.20	ug/L			
20	122819	CCB					07-MAR-2007 14:31	1.0	1.0			47095866001	ND	0.20	ug/L			u
21	122819	SAMPLE	193027-012		122819	Filtra	07-MAR-2007 14:33	1.0	1.0			47095866001	ND	0.20	ug/L			u
22	122819	SAMPLE	193027-013		122819	Water	07-MAR-2007 14:35	1.0	1.0			47095866001	ND	0.20	ug/L			u
23	122819	SAMPLE	193119-002		122819	Water	07-MAR-2007 14:38	1.0	1.0			47095866001	ND	0.20	ug/L			u
24	122819	SAMPLE	193119-004		122819	Water	07-MAR-2007 14:40	1.0	1.0			47095866001	ND	0.20	ug/L			u
25	122819	SAMPLE	193119-005		122819	Water	07-MAR-2007 14:43	1.0	1.0			47095866001	ND	0.20	ug/L			u
26	122819	SAMPLE	193119-006		122819	Water	07-MAR-2007 14:45	1.0	1.0			47095866001	ND	0.20	ug/L			u
27	122819	SAMPLE	193166-016		122819	Water	07-MAR-2007 14:47	1.0	1.0			47095866001	ND	0.20	ug/L			u
28	122819	SAMPLE	193169-001		122819	Filtra	07-MAR-2007 14:50	1.0	1.0			47095866001	ND	0.20	ug/L			u
29	122819	SAMPLE	193186-001		122819	Filtra	07-MAR-2007 14:52	1.0	1.0			47095866001	ND	0.20	ug/L			u
30	122819	SAMPLE	193186-002		122819	Filtra	07-MAR-2007 14:54	1.0	1.0			47095866001	4.320		ug/L	86		
31	122819	CCV					07-MAR-2007 14:57	1.0	1.0	4	5.000	47095866001	ND	0.20	ug/L			
32	122819	CCB					07-MAR-2007 14:59	1.0	1.0			47095866001	ND	0.20	ug/L			u
33	122819	SAMPLE	193199-001		122819	Water	07-MAR-2007 15:01	1.0	1.0			47095866001	ND	0.20	ug/L			u
34	122819	SAMPLE	193199-002		122819	Water	07-MAR-2007 15:04	1.0	1.0			47095866001	ND	0.20	ug/L			u
35	122819	SAMPLE	193199-003		122819	Water	07-MAR-2007 15:06	1.0	1.0			47095866001	ND	0.20	ug/L			u
36	122819	SAMPLE	193199-001		122819	Filtra	07-MAR-2007 15:08	1.0	1.0			47095866001	ND	0.20	ug/L			u
37	122819	SAMPLE	193199-002		122819	Filtra	07-MAR-2007 15:10	1.0	1.0			47095866001	ND	0.20	ug/L			u
38	122819	SAMPLE	193199-003		122819	Filtra	07-MAR-2007 15:13	1.0	1.0			47095866001	6.500		ug/L	87		
39	122819	CCV					07-MAR-2007 15:15	1.0	1.0	5	7.500	47095866001	ND	0.20	ug/L			
40	122819	CCB					07-MAR-2007 15:17	1.0	1.0									

Stds used: 1=S5681 2=S5683 3=S5684 4=S5685 5=S5686
Flags used: u=use

Analyst: [signature] Date: 3/9/07

Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 14:19

Batch Number : 122819
Date Extracted: 07-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5681
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-011			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
193027-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193027-013			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
193119-001			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193119-002			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193119-004			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193119-005			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193119-006			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193166-016			Weston Solutions	Water	50	mL	50	1.000000	1					HG		
193167-001			URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193167-002			URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193169-001			Strategic Engineering & Scienc	Water	50	mL	50	1.000000	1					T26/HG		
193186-001			Stellar Environmental Solution	Filtrate	50	mL	50	1.000000	1					T26/HG		
193186-002			Stellar Environmental Solution	Filtrate	50	mL	50	1.000000	1					T26/HG		
193199-001			CH2M Hill	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193199-001			CH2M Hill	Water	50	mL	50	1.000000	1					TAL/HG		
193199-002			CH2M Hill	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193199-002			CH2M Hill	Water	50	mL	50	1.000000	1					TAL/HG		
193199-003			CH2M Hill	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193199-003			CH2M Hill	Water	50	mL	50	1.000000	1					TAL/HG		
QC377992	BLANK			Water	50	mL	50	1.000000	1					HG		
QC377993	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC377994	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC377995	SER	of 193119-001		Water	50	mL	50	1.000000	1					HG		
QC377996	MS	of 193119-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC377997	MSD	of 193119-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC377998	PDS	of 193119-001		Water	50	mL	50	1.000000	1					HG		

Prep Chemist: [signature] 3/7/07 Reviewed By: [signature] Date: 3/7/07

Relinquished By: [signature] 3/7/07 Received By: [signature] Date: 3/7/07

3h00

Curtis & Tompkins, Ltd.

Water Digestion for Mercury

s, Ltd.

LIMS Batch #: 122819

Date Digested: 3/7/07

Digested by: ~~3A~~

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193027-011	A	50	50	N	water
-012	B				Filtrate (F.F.)
-013	E				Neater
193119-001 MSS	G				
-002	G				
-004	H				
-005	H				
-006	G				
193166-0116	B				
193167-001					Filtrate
-002					
193161-001	C				water
193186-001	A				Filtrate
-002					
193199-001					water
-002					
-003					
193199-001	B				Filtrate
-002	B				
-003	B				
Blank					water
BS					
BSD					
ms 193119-001	G				
msD					

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	SS681	3/7/07
ICAL Source WS#	SS681	
ICV / CCV WS#	SS683/84/85/86	
Digestion of Samples & Standards: Time ON / Temperature ON	11:00 / 95°C	
Time OFF/ Temperature OFF	1:00 / 95°C	
concentrated H_2SO_4	84104	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	K020807	
NaCl.hydroxylamine hydrochloride	Hy030107	
Stannous Chloride	Snel, 030607	
☐ filtered thru' 0.45 um syringe filter	millipore R6AN43832	

3/7/07

Chemist / Date

Continued from page X

Continued on page X

3/7/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/21/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/21/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/27/07
Units:	mg/L	Received:	02/28/07
Diln Fac:	1.000	Analyzed:	03/12/07
Batch#:	123001		

Field ID: LF6GW105 Lab ID: 193027-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	320	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	320	10

Field ID: 1065PZ7A Lab ID: 193027-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID: 231GW09 Lab ID: 193027-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	240	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	240	10

Field ID: DUP0227072A Lab ID: 193027-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID: DUP0227072B Lab ID: 193027-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	530	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	530	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/27/07
Units:	mg/L	Received:	02/28/07
Diln Fac:	1.000	Analyzed:	03/12/07
Batch#:	123001		

Field ID: DUP0227072C Lab ID: 193027-006
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	240	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	240	10

Field ID: LF10GW03 Lab ID: 193027-007
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	260	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	260	10

Field ID: BB3GW100 Lab ID: 193027-008
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Field ID: BB1PZ100 Lab ID: 193027-011
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	460	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	460	10

Field ID: BB1PZ101 Lab ID: 193027-012
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	630	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	630	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/27/07
Units:	mg/L	Received:	02/28/07
Diln Fac:	1.000	Analyzed:	03/12/07
Batch#:	123001		

Field ID: LF10SP01 Lab ID: 193027-013
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	240	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	240	10

Field ID: LF10GW01 Lab ID: 193027-014
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	130	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	130	4.0

Field ID: LF10GW02 Lab ID: 193027-015
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Type: BLANK Lab ID: QC378772

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

96.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378773	Batch#:	123001
Matrix:	Water	Analyzed:	03/12/07

Spiked	Result	%REC	Limits
200.0	194.0	97	90-110

97.0

00454

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1065PZ7A	Batch#:	123001
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	mg/L	Analyzed:	03/12/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378774	541.0	500.0	1,026	97	69-112		
MSD	QC378775		500.0	1,014	95	69-112	1	25

RPD= Relative Percent Difference

98.0

00455

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/12/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123001** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.6	100	0.0	0.0	ND			1.0		
LCS	10	25	2.5	4.9	194.00			4.0	97	
193027-002	7.4	10	0.0	5.4	541.00		n/a	10.0		
MS	9.4	10	2.0	10.3	1026.00			10.0	97	
MSD	9.4	10	2.0	10.1	1014.00			10.0	95	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193027-001	8.00	10	0.0	3.2	321.00		n/a	10.0
193027-002	7.40	10	0.0	5.4	541.00		n/a	10.0
193027-003	6.70	10	0.0	2.4	237.00		n/a	10.0
193027-004	7.10	10	0.0	3.0	301.00		n/a	10.0
193027-005	7.30	10	0.0	5.3	532.00		n/a	10.0
193027-006	7.00	10	0.0	2.4	240.00		n/a	10.0
193027-007	6.60	10	0.0	2.6	261.00		n/a	10.0
193027-008	6.90	10	0.0	2.9	287.00		n/a	10.0
193027-011	7.90	10	0.0	4.6	460.00		n/a	10.0
193027-012	7.50	10	0.0	6.3	633.00		n/a	10.0
193027-013	7.10	10	0.0	2.4	237.00		n/a	10.0
193027-014	7.40	25	0.0	3.3	130.00		n/a	4.0
193027-015	7.40	10	0.0	3.0	300.00		n/a	10.0
193157-001	7.50	10	0.0	6.0	601.00		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: Dmo 3/20/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/12/07
Batch No: 123001

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193027-001	0.0	321.0	321	321.000	0.000	0.000
193027-002	0.0	541.00	541.000	541.000	0.000	0.000
193027-003	0.0	237.00	237.000	237.000	0.000	0.000
193027-004	0.0	301.00	301.000	301.000	0.000	0.000
193027-005	0.0	532.00	532.000	532.000	0.000	0.000
193027-006	0.0	240.00	240.000	240.000	0.000	0.000
193027-007	0.0	261.00	261.000	261.000	0.000	0.000
193027-008	0.0	287.00	287.000	287.000	0.000	0.000
193027-011	0.0	460.00	460.000	460.000	0.000	0.000
193027-012	0.0	633.00	633.000	633.000	0.000	0.000
193027-013	0.0	237.00	237.000	237.000	0.000	0.000
193027-014	0.0	130.00	130.000	130.000	0.000	0.000
193027-015	0.0	300.00	300.000	300.000	0.000	0.000
193157-001	0.0	601.00	601.000	601.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/12/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123001 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193027-001	321.000	391.378	0.000	0.000
193027-002	541.000	659.613	0.000	0.000
193027-003	237.000	288.962	0.000	0.000
193027-004	301.000	366.993	0.000	0.000
193027-005	532.000	648.639	0.000	0.000
193027-006	240.000	292.619	0.000	0.000
193027-007	261.000	318.223	0.000	0.000
193027-008	287.000	349.924	0.000	0.000
193027-011	460.000	560.854	0.000	0.000
193027-012	633.000	771.783	0.000	0.000
193027-013	237.000	288.962	0.000	0.000
193027-014	130.000	158.502	0.000	0.000
193027-015	300.000	365.774	0.000	0.000
193157-001	601.000	732.767	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

00458

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd

LIMS Batch #: 123001 Date: 3/12/07 Benchbook#: **BK2384**
Matrix: water Time: 10:00 Page: **70**

CAL-ph 4.0: SS#: 8749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55635
Slope: 98.1
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR VW3229-411
Lot 8248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comment
1	Mp	4.6	100	—	<0.05		
	LCS	10.0	25	2.52	4.85		
	193027-1 H	8.0	10	—	3.21		
	-2 S	7.4	10	—	5.41		
5	MS-2	9.4	10	1.98	10.26		
	MSD-2	9.4	10	2.00	10.14		
	-3 I	6.7	10	—	2.37		
	-4 C	7.1	10	—	3.01		
	-5 F	7.3	10	—	5.32		
10	-6 C	7.0	10	—	2.40		
	-7 E	6.6	10	—	2.61		
	-8 E	6.9	10	—	2.87		
	-11C ~~9~~ 3/12	7.9	10	—	4.60		
	-12 C	7.5	10	—	6.33		
15	-13 F	~~Blank~~ 7.1	10	—	2.37		
	-14 E	7.4	3/12 ~~10~~ 25	—	3.25		
	[illegible] E	7.4	10	—	3.00		
	193157-1C	7.5	10	—	6.01		
20							

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alk

3/12/07
Analyst / Date

3/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123001
Date Started: 12-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193027-001			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-002			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-003			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-004			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-005			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-006			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-007			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-008			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-011			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-012			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-013			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-014			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193027-015			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
193157-001			Treadwell & Rollo	Water	ALKALINITY	12-MAR-2007
QC378772	BLANK			Water	ALKALINITY	
QC378773	LCS			Water	ALKALINITY	
QC378774	MS	of 193027-002		Water	ALKALINITY	
QC378775	MSD	of 193027-002		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	122614
Matrix:	Water	Received:	02/28/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF6GW105	SAMPLE	193027-001	87	2.0	10.00	02/27/07 10:35	03/01/07 00:01
1065PZ7A	SAMPLE	193027-002	35	2.0	10.00	02/27/07 12:05	02/28/07 17:55
231GW09	SAMPLE	193027-003	38	2.0	10.00	02/27/07 14:35	03/01/07 00:18
DUP0227072A	SAMPLE	193027-004	87	2.0	10.00	02/27/07 10:55	03/01/07 01:45
DUP0227072B	SAMPLE	193027-005	33	2.0	10.00	02/27/07 12:25	03/01/07 02:03
DUP0227072C	SAMPLE	193027-006	38	2.0	10.00	02/27/07 14:55	03/01/07 02:20
LF10GW03	SAMPLE	193027-007	68	2.0	10.00	02/27/07 14:20	03/01/07 02:38
BB3GW100	SAMPLE	193027-008	240	5.0	25.00	02/27/07 11:20	03/01/07 02:55
BB1PZ100	SAMPLE	193027-011	250	5.0	25.00	02/27/07 09:42	03/01/07 03:12
BB1PZ101	SAMPLE	193027-012	290	5.0	25.00	02/27/07 10:15	03/01/07 03:30
LF10SP01	SAMPLE	193027-013	69	2.0	10.00	02/27/07 12:15	03/01/07 03:47
LF10GW01	SAMPLE	193027-014	82	2.0	10.00	02/27/07 13:10	03/01/07 04:05
LF10GW02	SAMPLE	193027-015	44	2.0	10.00	02/27/07 12:45	03/01/07 04:22
	BLANK	QC377139	ND	0.20	1.000		02/28/07 11:27

ND= Not Detected
RL= Reporting Limit

20.0

00461

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	02/28/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
LF6GW105	SAMPLE	193027-001	ND	0.10	122657	02/27/07 10:35	03/01/07 13:11
1065PZ7A	SAMPLE	193027-002	0.12	0.10	122657	02/27/07 12:05	03/01/07 13:28
231GW09	SAMPLE	193027-003	ND	0.10	122614	02/27/07 14:35	02/28/07 19:40
DUP0227072A	SAMPLE	193027-004	ND	0.10	122657	02/27/07 10:55	03/01/07 13:46
DUP0227072B	SAMPLE	193027-005	0.12	0.10	122657	02/27/07 12:25	03/01/07 14:04
DUP0227072C	SAMPLE	193027-006	ND	0.10	122614	02/27/07 14:55	02/28/07 19:57
LF10GW03	SAMPLE	193027-007	ND	0.10	122657	02/27/07 14:20	03/01/07 14:21
BB3GW100	SAMPLE	193027-008	ND	0.10	122657	02/27/07 11:20	03/01/07 14:39
BB1PZ100	SAMPLE	193027-011	0.11	0.10	122657	02/27/07 09:42	03/01/07 14:56
BB1PZ101	SAMPLE	193027-012	0.28	0.10	122657	02/27/07 10:15	03/01/07 16:24
LF10SP01	SAMPLE	193027-013	ND	0.10	122614	02/27/07 12:15	02/28/07 18:48
LF10GW01	SAMPLE	193027-014	ND	0.10	122614	02/27/07 13:10	02/28/07 19:22
LF10GW02	SAMPLE	193027-015	0.10	0.10	122614	02/27/07 12:45	02/28/07 19:05
	BLANK	QC377139	ND	0.10	122614		02/28/07 11:27
	BLANK	QC377322	ND	0.10	122657		03/01/07 12:18

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	122614
Matrix:	Water	Received:	02/28/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF6GW105	SAMPLE	193027-001	4.7	0.05	1.000	02/27/07 10:35	02/28/07 21:59
1065PZ7A	SAMPLE	193027-002	1.7	0.05	1.000	02/27/07 12:05	02/28/07 22:16
231GW09	SAMPLE	193027-003	14	0.50	10.00	02/27/07 14:35	03/01/07 00:18
DUP0227072A	SAMPLE	193027-004	4.7	0.05	1.000	02/27/07 10:55	02/28/07 21:42
DUP0227072B	SAMPLE	193027-005	1.7	0.05	1.000	02/27/07 12:25	02/28/07 22:34
DUP0227072C	SAMPLE	193027-006	15	0.50	10.00	02/27/07 14:55	03/01/07 02:20
LF10GW03	SAMPLE	193027-007	8.5	0.50	10.00	02/27/07 14:20	03/01/07 02:38
BB3GW100	SAMPLE	193027-008	5.8	1.3	25.00	02/27/07 11:20	03/01/07 02:55
BB1PZ100	SAMPLE	193027-011	0.09	0.05	1.000	02/27/07 09:42	02/28/07 23:09
BB1PZ101	SAMPLE	193027-012	ND	0.05	1.000	02/27/07 10:15	02/28/07 23:26
LF10SP01	SAMPLE	193027-013	0.24	0.05	1.000	02/27/07 12:15	02/28/07 18:48
LF10GW01	SAMPLE	193027-014	9.6	0.50	10.00	02/27/07 13:10	03/01/07 04:05
LF10GW02	SAMPLE	193027-015	ND	0.05	1.000	02/27/07 12:45	02/28/07 19:05
	BLANK	QC377139	ND	0.05	1.000		02/28/07 11:27

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	122614
Units:	mg/L	Received:	02/28/07

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
LF6GW105	SAMPLE	193027-001	ND	0.05	02/27/07 10:35	02/28/07 21:59
1065PZ7A	SAMPLE	193027-002	ND	0.05	02/27/07 12:05	02/28/07 22:16
231GW09	SAMPLE	193027-003	ND	0.05	02/27/07 14:35	02/28/07 19:40
DUP0227072A	SAMPLE	193027-004	ND	0.05	02/27/07 10:55	02/28/07 21:42
DUP0227072B	SAMPLE	193027-005	ND	0.05	02/27/07 12:25	02/28/07 22:34
DUP0227072C	SAMPLE	193027-006	ND	0.05	02/27/07 14:55	02/28/07 19:57
LF10GW03	SAMPLE	193027-007	ND	0.05	02/27/07 14:20	02/28/07 21:24
BB3GW100	SAMPLE	193027-008	ND	0.05	02/27/07 11:20	02/28/07 22:51
BB1PZ100	SAMPLE	193027-011	ND	0.05	02/27/07 09:42	02/28/07 23:09
BB1PZ101	SAMPLE	193027-012	ND	0.05	02/27/07 10:15	02/28/07 23:26
LF10SP01	SAMPLE	193027-013	ND	0.05	02/27/07 12:15	02/28/07 18:48
LF10GW01	SAMPLE	193027-014	ND	0.05	02/27/07 13:10	02/28/07 19:22
LF10GW02	SAMPLE	193027-015	ND	0.05	02/27/07 12:45	02/28/07 19:05
	BLANK	QC377139	ND	0.05		02/28/07 11:27

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	122614
Matrix:	Water	Received:	02/28/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF6GW105	SAMPLE	193027-001	100	5.0	10.00	02/27/07 10:35	03/01/07 00:01
1065PZ7A	SAMPLE	193027-002	74	5.0	10.00	02/27/07 12:05	02/28/07 17:55
231GW09	SAMPLE	193027-003	67	5.0	10.00	02/27/07 14:35	03/01/07 00:18
DUP0227072A	SAMPLE	193027-004	100	5.0	10.00	02/27/07 10:55	03/01/07 01:45
DUP0227072B	SAMPLE	193027-005	74	5.0	10.00	02/27/07 12:25	03/01/07 02:03
DUP0227072C	SAMPLE	193027-006	66	5.0	10.00	02/27/07 14:55	03/01/07 02:20
LF10GW03	SAMPLE	193027-007	85	5.0	10.00	02/27/07 14:20	03/01/07 02:38
BB3GW100	SAMPLE	193027-008	56	13	25.00	02/27/07 11:20	03/01/07 02:55
BB1PZ100	SAMPLE	193027-011	80	13	25.00	02/27/07 09:42	03/01/07 03:12
BB1PZ101	SAMPLE	193027-012	160	13	25.00	02/27/07 10:15	03/01/07 03:30
LF10SP01	SAMPLE	193027-013	35	0.50	1.000	02/27/07 12:15	02/28/07 18:48
LF10GW01	SAMPLE	193027-014	50	5.0	10.00	02/27/07 13:10	03/01/07 04:05
LF10GW02	SAMPLE	193027-015	21	0.50	1.000	02/27/07 12:45	02/28/07 19:05
	BLANK	QC377139	ND	0.50	1.000		02/28/07 11:27

ND= Not Detected
RL= Reporting Limit

28.0

Batch QC Report

Chloride

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Batch#:	122614

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
	LCS		QC377140		4.000	3.815	95	80-120			1.000			02/28/07 12:30
ZZZZZZZZZZ	MS	193001-008	QC377141	13.13	100.0	110.2	97	80-120			50.00	02/27/07 14:00	02/27/07	02/28/07 14:08
ZZZZZZZZZZ	MSD	193001-008	QC377142		100.0	106.8	94	80-120	3	25	50.00	02/27/07 14:00	02/27/07	02/28/07 14:25
1065PZ7A	MS	193027-002	QC377143	34.58	20.00	52.83	91	80-120			10.00	02/27/07 12:05	02/28/07	02/28/07 18:13
1065PZ7A	MSD	193027-002	QC377144		20.00	52.81	91	80-120	0	25	10.00	02/27/07 12:05	02/28/07	02/28/07 18:30

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

00465

Batch QC Report

Fluoride

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	LCS		QC377140		2.000	1.861	93	80-120			1.000	122614			02/28/07 12:30
ZZZZZZZZZZ	MS	193001-008	QC377141	1.783	50.00	47.88	92	78-120			50.00	122614	02/27/07 14:00	02/27/07	02/28/07 14:08
ZZZZZZZZZZ	MSD	193001-008	QC377142		50.00	48.37	93	78-120	1	20	50.00	122614	02/27/07 14:00	02/27/07	02/28/07 14:25
	BS		QC377323		2.000	2.167	108	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		2.000	2.093	105	80-120	3	20	1.000	122657			03/01/07 12:53
1065PZ7A	MS	193027-002	QC377325	0.1231	1.000	1.062	94	78-120			1.020	122657	02/27/07 12:05	02/28/07	03/01/07 15:49
1065PZ7A	MSD	193027-002	QC377326		1.000	1.042	92	78-120	2	20	1.020	122657	02/27/07 12:05	02/28/07	03/01/07 16:06
LF4GW104	MS	193055-010	QC377327	0.02382	50.00	46.14	92	78-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		50.00	46.79	94	78-120	1	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

001527

Batch QC Report

Nitrate Nitrogen

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Batch#:	122614

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
	LCS		QC377140		1.000	0.9666	97	80-120			1.000			02/28/07 12:30
ZZZZZZZZZZ	MS	193001-008	QC377141	0.07500	25.00	24.19	96	80-120			50.00	02/27/07 14:00	02/27/07	02/28/07 14:08
ZZZZZZZZZZ	MSD	193001-008	QC377142		25.00	24.11	96	80-120	0	25	50.00	02/27/07 14:00	02/27/07	02/28/07 14:25
1065PZ7A	MS	193027-002	QC377143	1.672	5.000	6.480	96	80-120			10.00	02/27/07 12:05	02/28/07	02/28/07 18:13
1065PZ7A	MSD	193027-002	QC377144		5.000	6.468	96	80-120	0	25	10.00	02/27/07 12:05	02/28/07	02/28/07 18:30

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

00158

Batch QC Report

Nitrite Nitrogen

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Batch#:	122614

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
	LCS		QC377140		1.000	0.9684	97	80-120			1.000			02/28/07 12:30
ZZZZZZZZZZ	MS	193001-008	QC377141	<0.02178	25.00	24.43	98	80-120			50.00	02/27/07 14:00	02/27/07	02/28/07 14:08
ZZZZZZZZZZ	MSD	193001-008	QC377142		25.00	24.19	97	80-120	1	25	50.00	02/27/07 14:00	02/27/07	02/28/07 14:25
1065PZ7A	MS	193027-002	QC377143	<0.01089	5.000	4.972	99	80-120			10.00	02/27/07 12:05	02/28/07	02/28/07 18:13
1065PZ7A	MSD	193027-002	QC377144		5.000	5.031	101	80-120	1	25	10.00	02/27/07 12:05	02/28/07	02/28/07 18:30

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

00169

Batch QC Report

Sulfate

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Batch#:	122614

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received	Analyzed
	LCS		QC377140		10.00	9.665	97	80-120			1.000			02/28/07 12:30
ZZZZZZZZZZ	MS	193001-008	QC377141	530.8	250.0	769.6	96	80-120			50.00	02/27/07 14:00	02/27/07	02/28/07 14:08
ZZZZZZZZZZ	MSD	193001-008	QC377142		250.0	768.1	95	80-120	0	25	50.00	02/27/07 14:00	02/27/07	02/28/07 14:25
1065PZ7A	MS	193027-002	QC377143	74.24	50.00	123.2	98	80-120			10.00	02/27/07 12:05	02/28/07	02/28/07 18:13
1065PZ7A	MSD	193027-002	QC377144		50.00	123.2	98	80-120	0	25	10.00	02/27/07 12:05	02/28/07	02/28/07 18:30

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

00417 9

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 2/28/07

/CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

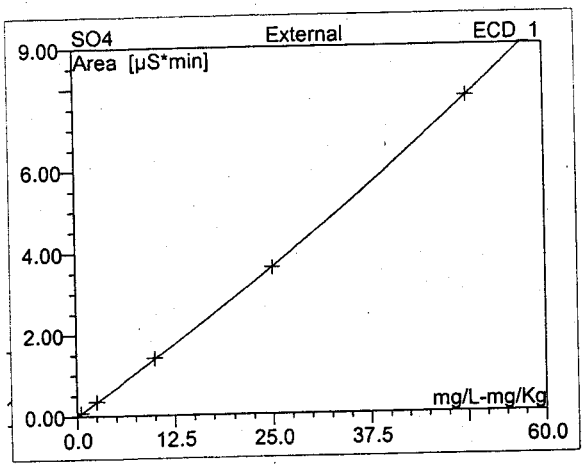
No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

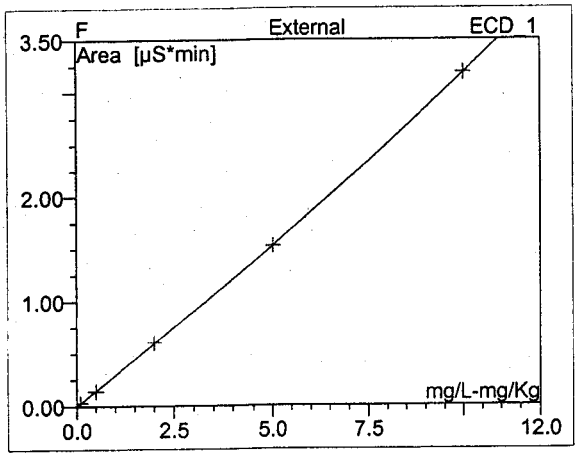
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

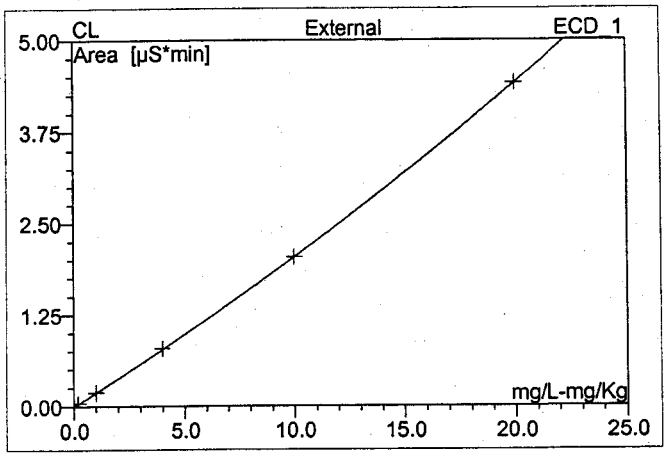


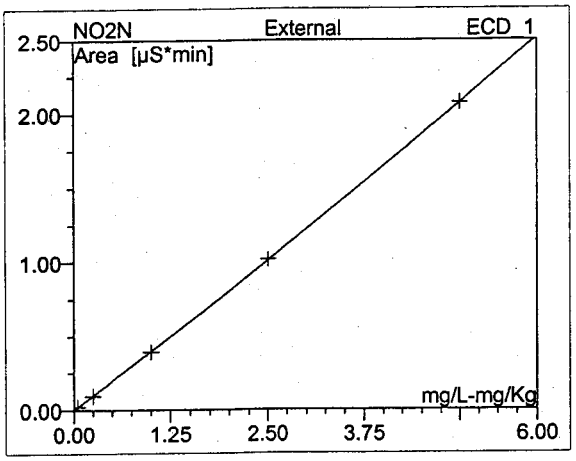
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

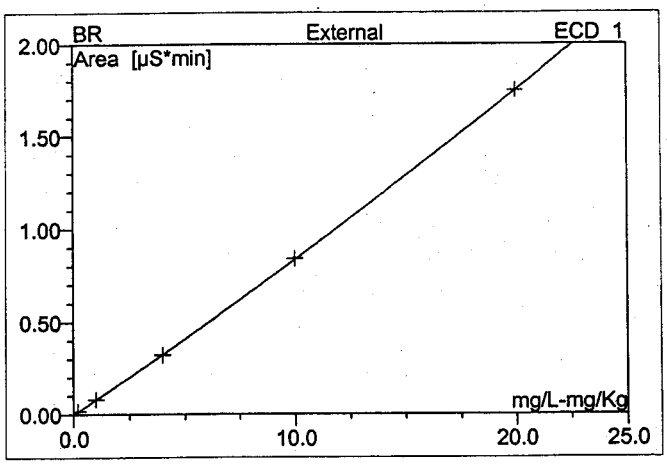
IC01 Calibration Batch Report

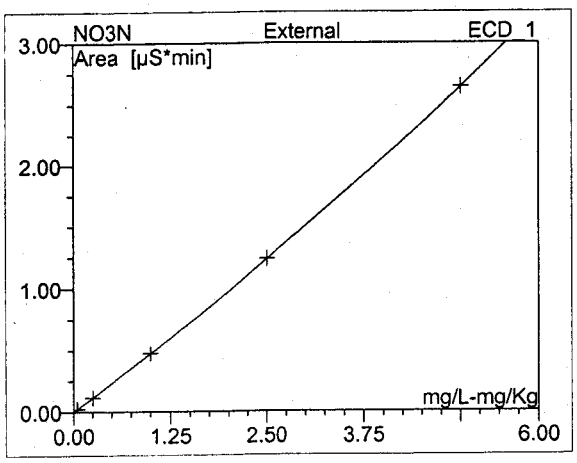
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

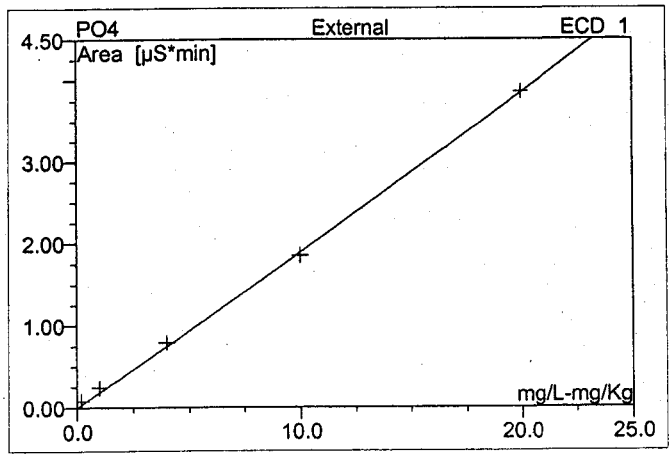












Method File: IC01-7AN_CAL
Operator: ic_analyst

Printed: 2/28/2007 11:30:15 AM

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

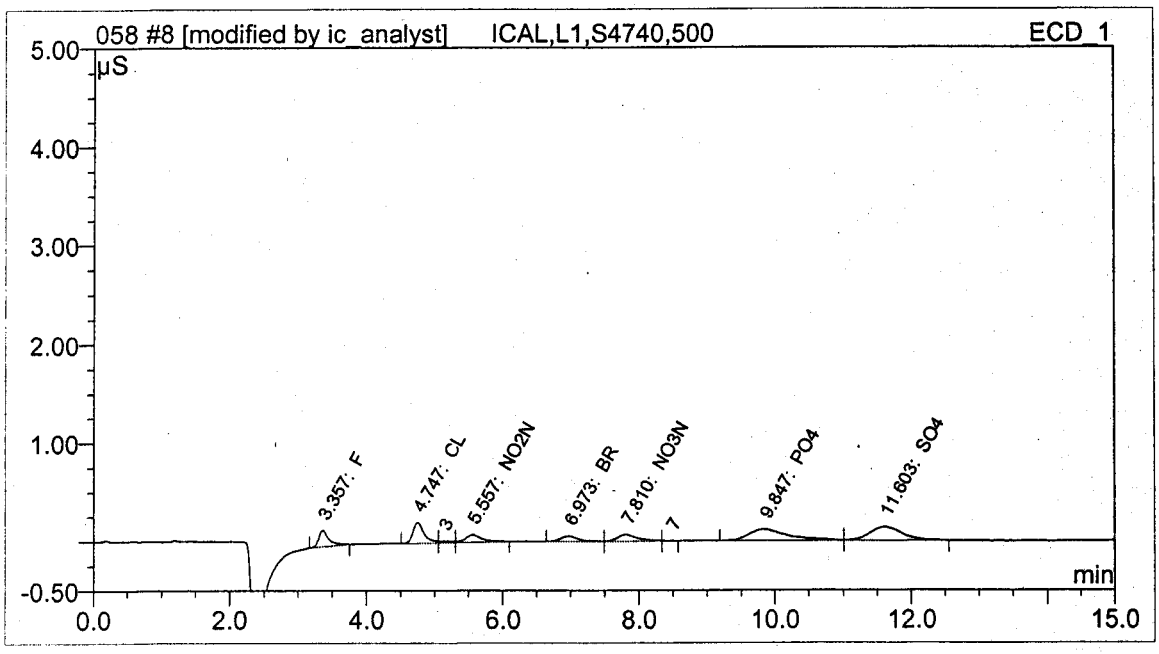
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



ANALYZED BY: _____

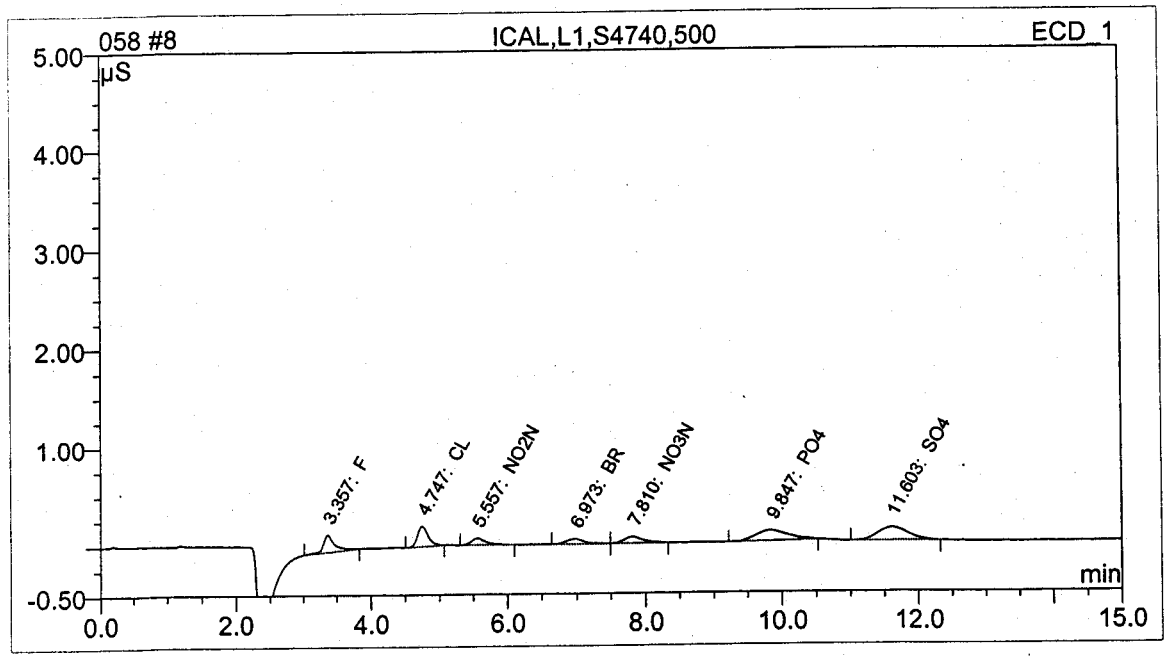
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

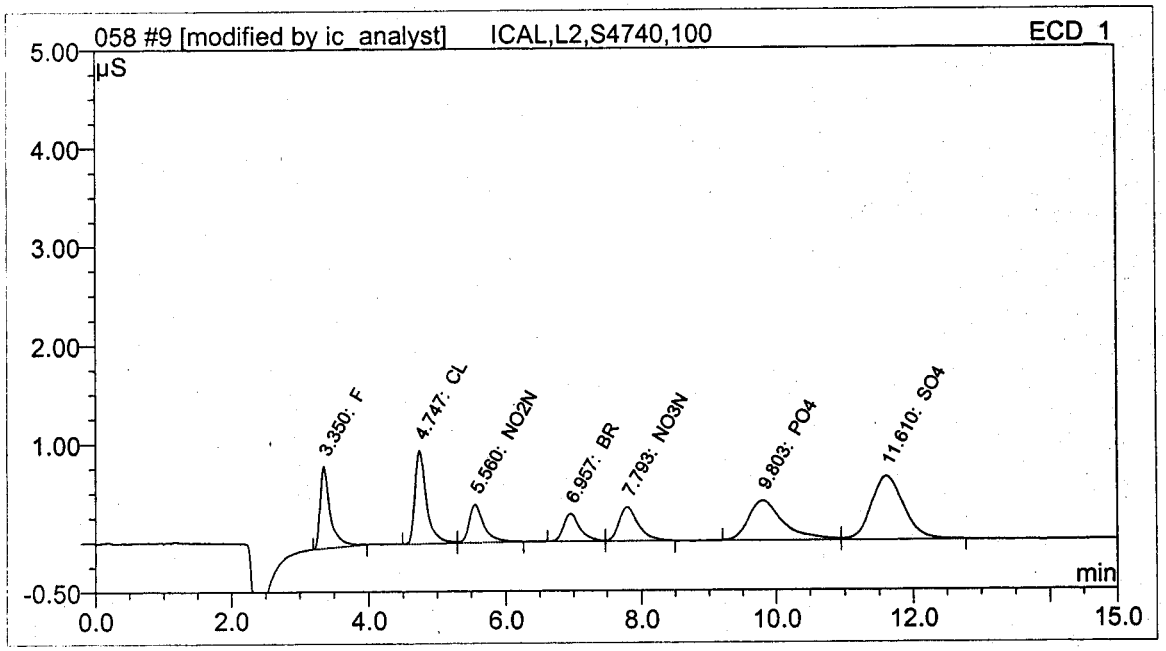
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

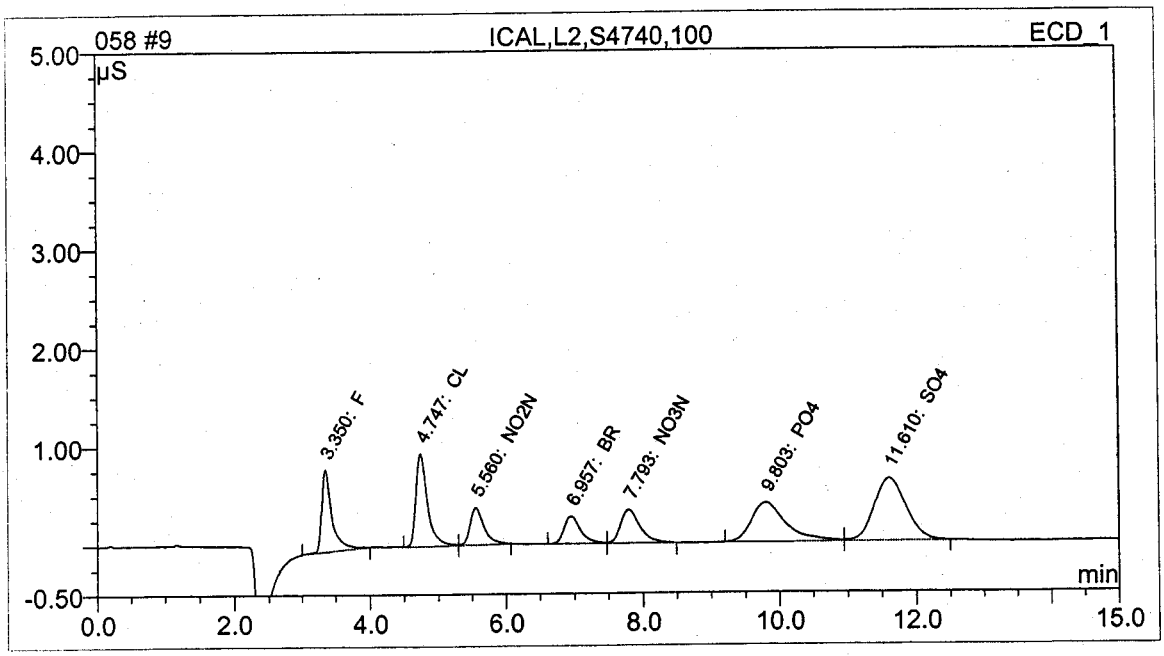
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

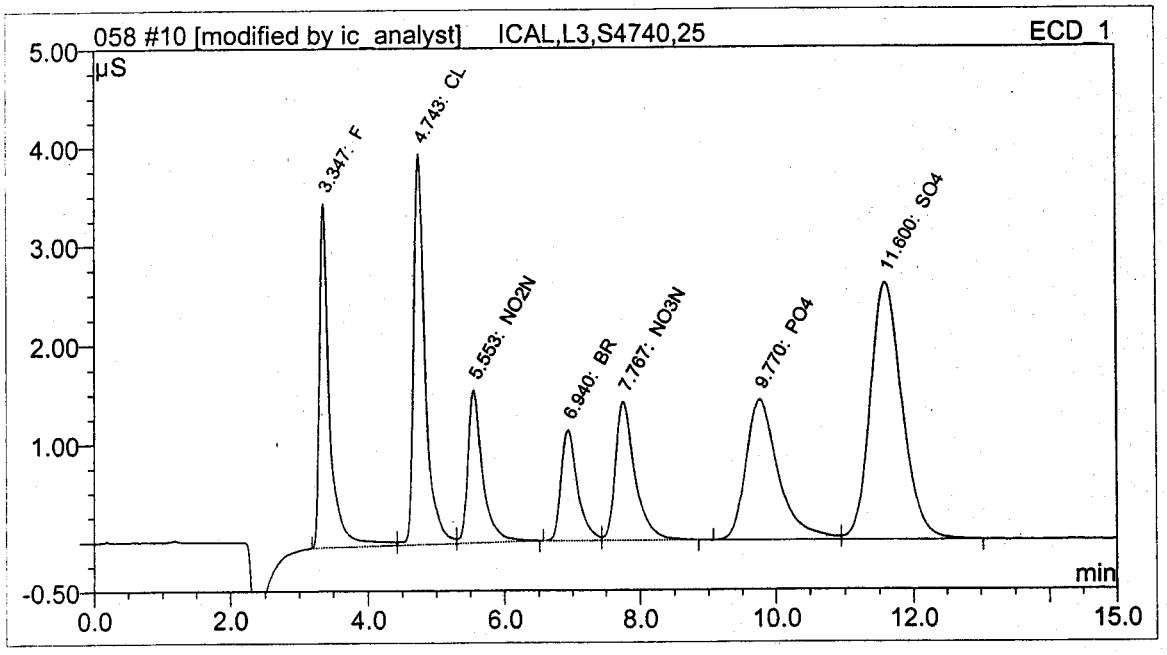
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

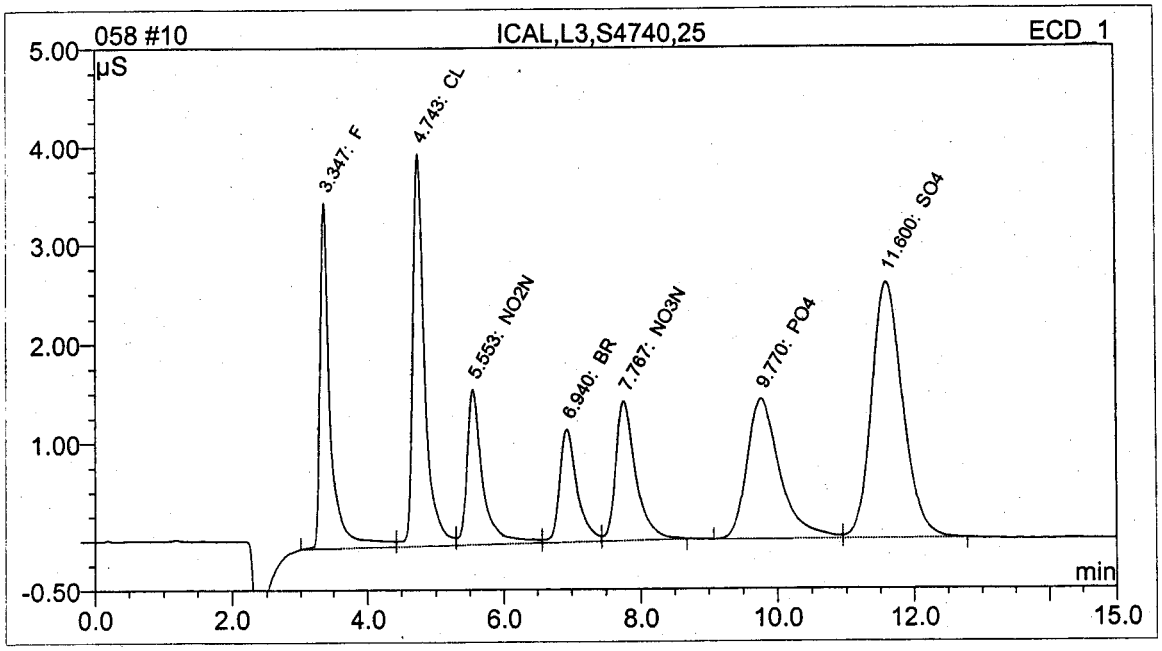
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

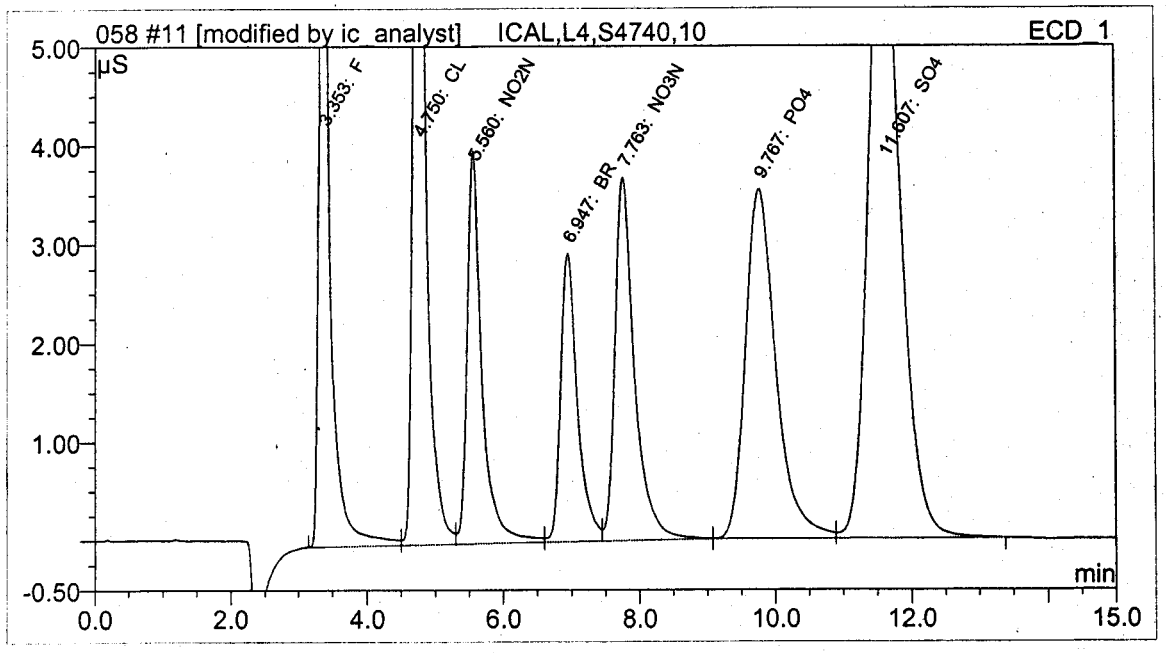
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

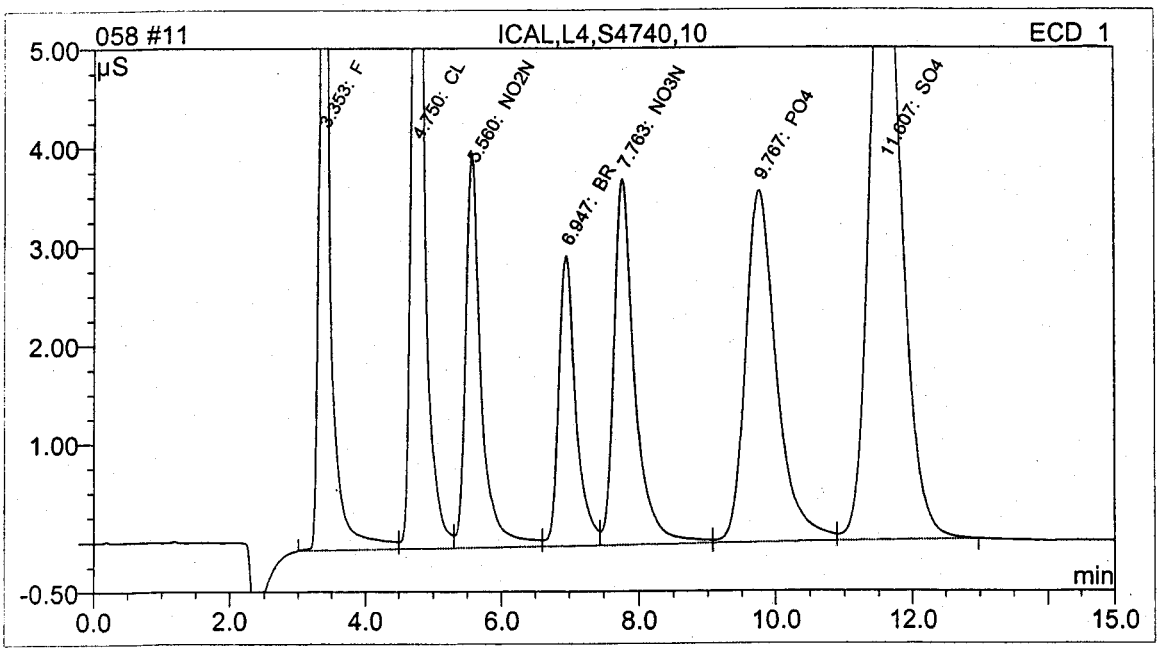
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

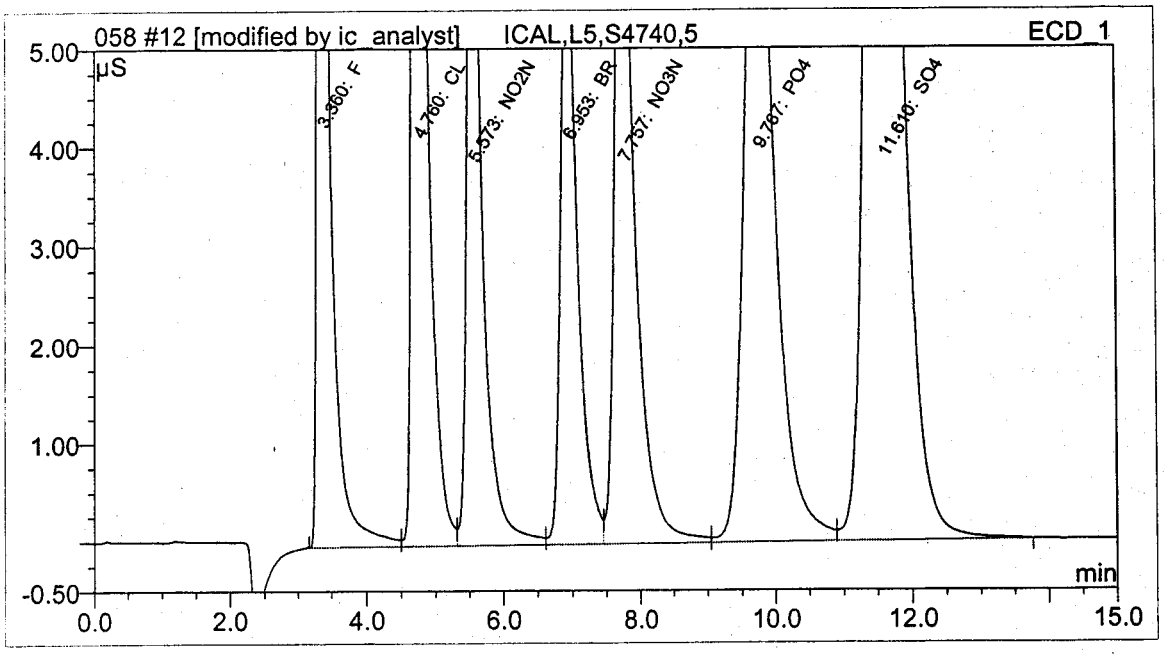
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

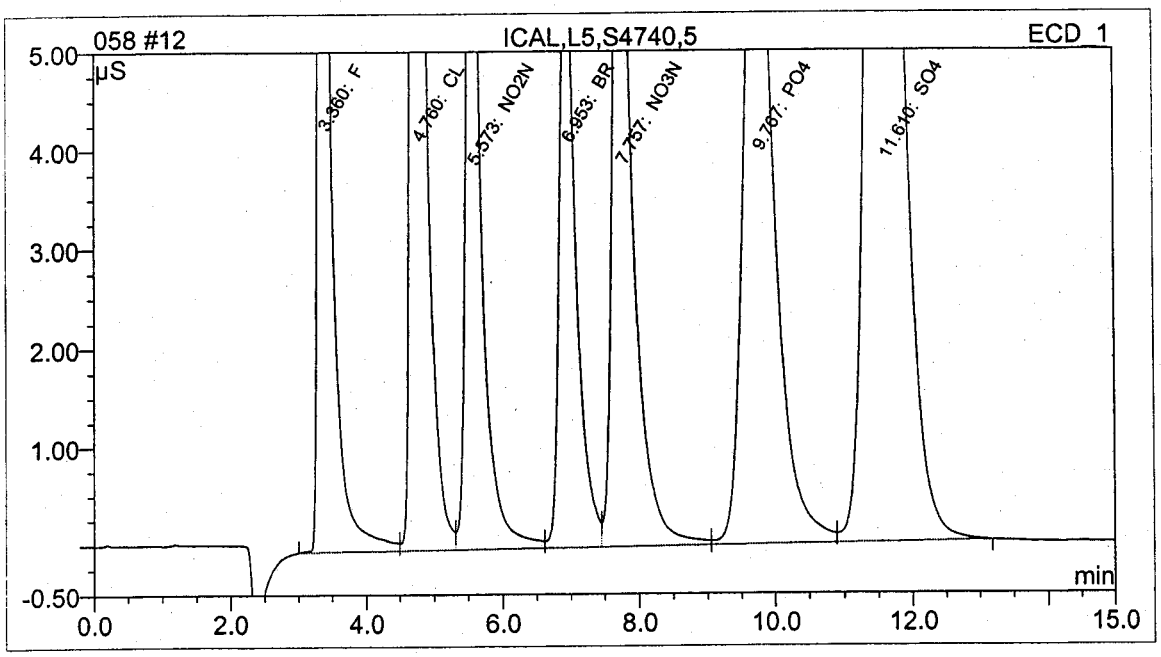
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01
Seqnum : 607084260013 File : 058_13
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

IDF : 1.0
Time : 27-FEB-2007 15:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

CW 3/1/07

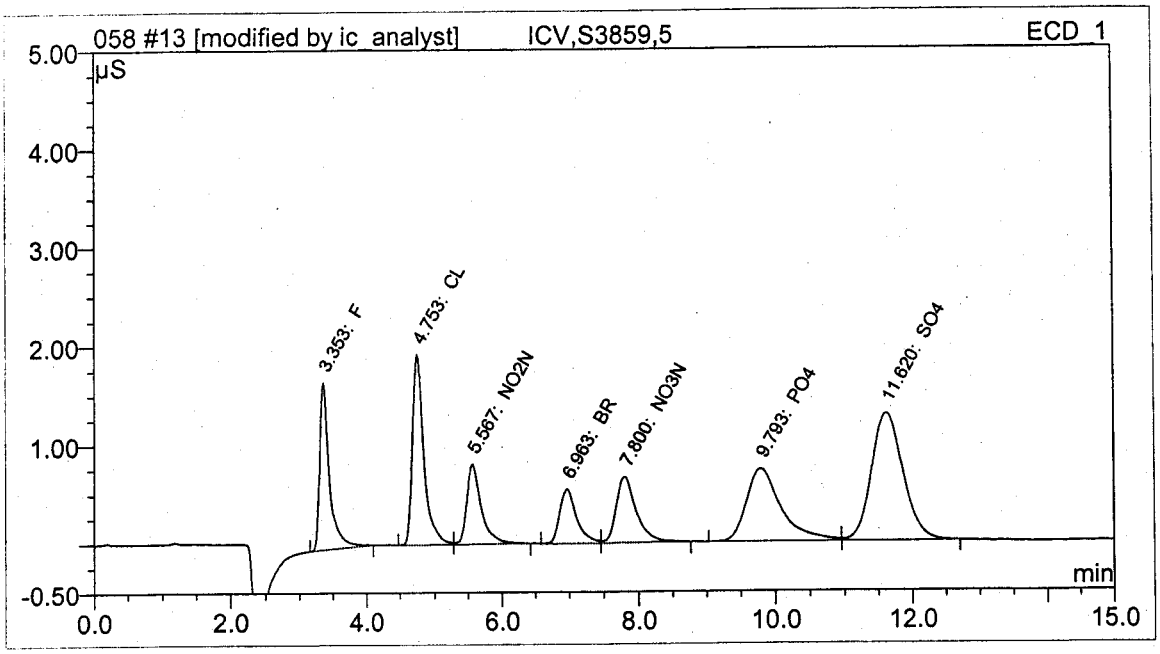
+=high bias v=ICV

607084260013

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

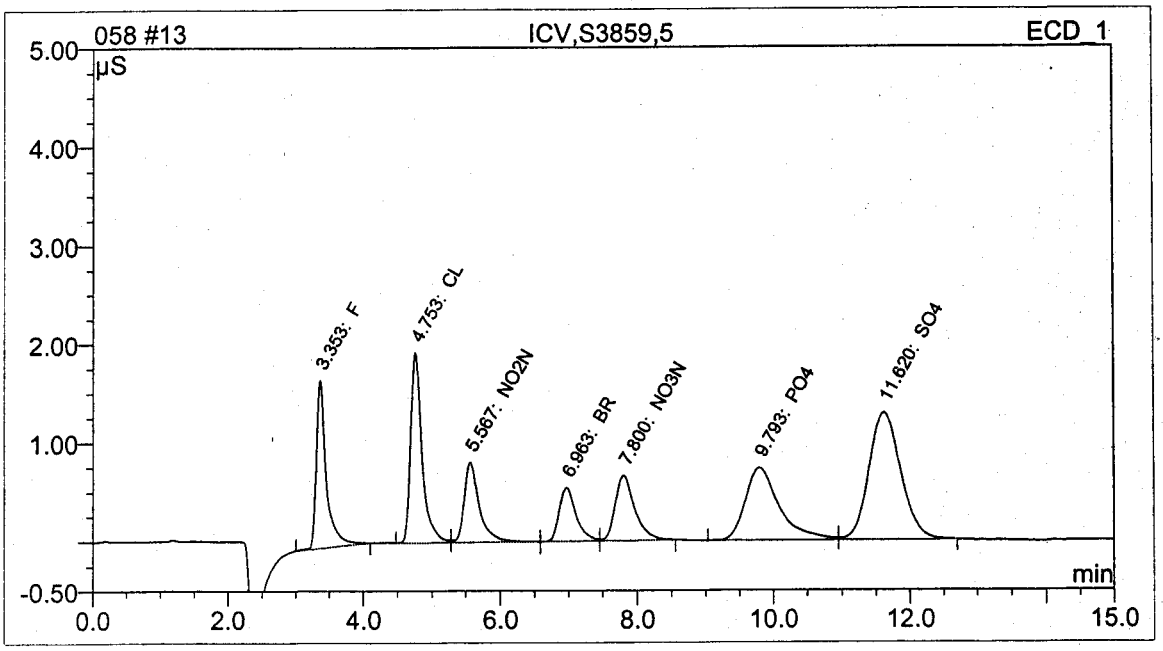
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260014 File : 058_14 Time : 27-FEB-2007 16:08
Cal : 607084260001 Caldate: 27-FEB-2007

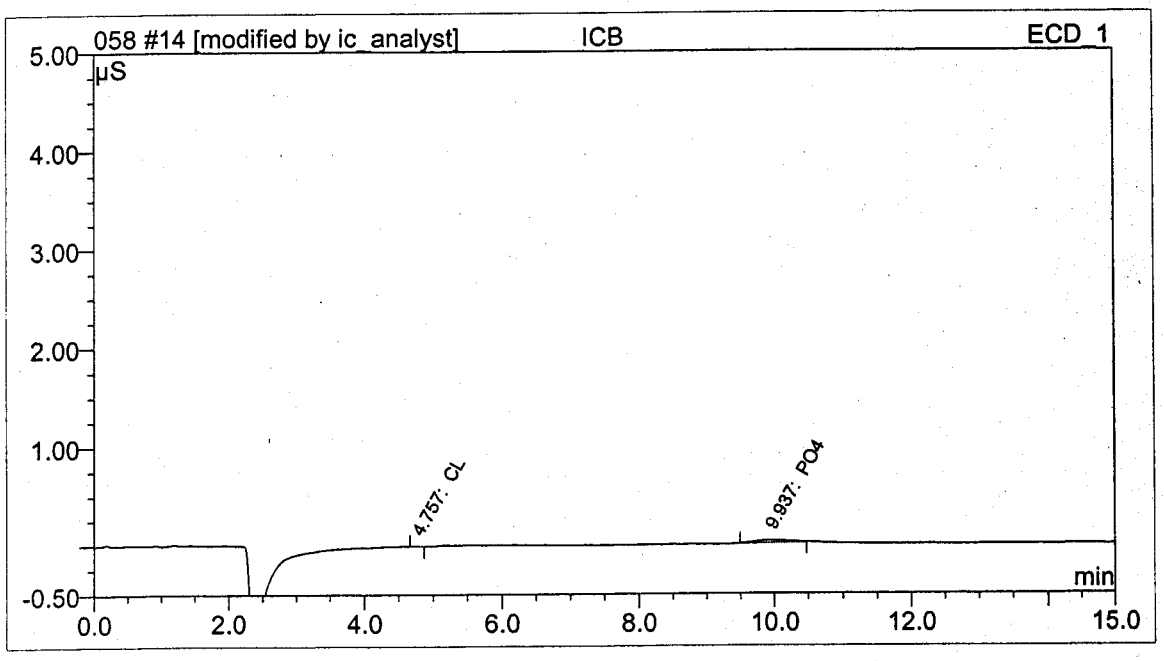
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

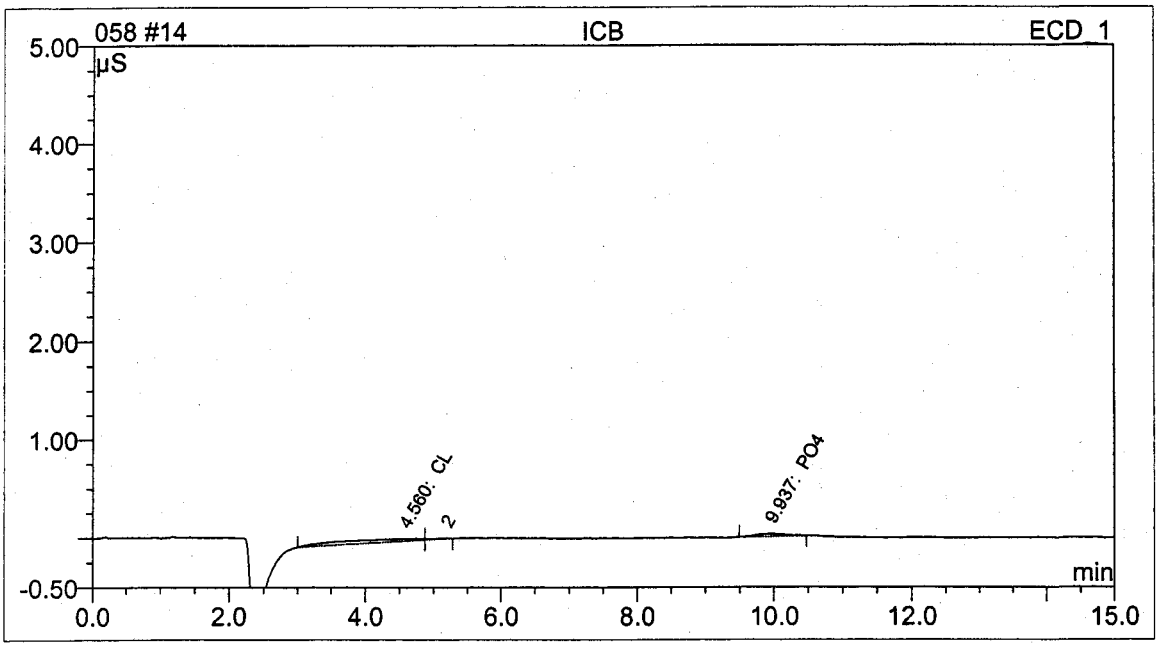
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260007 File : 058_7 Time : 27-FEB-2007 14:06
Cal : 606441349001 Caldate: 02-NOV-2006

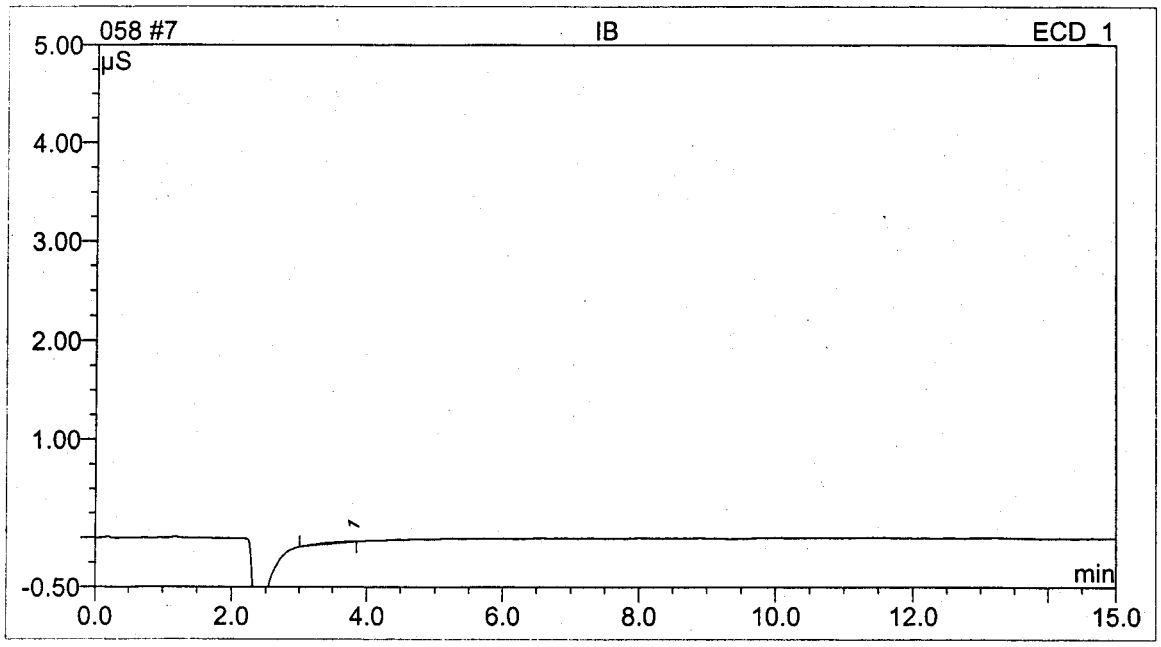
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193027 IC Water: EPA 300.0

Inst : IC03
Calnum : 627084271001
Units : mg/L

Date : 27-FEB-2007 14:33
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	627084271008	L1	27-FEB-2007 14:33	S4740 (500X)
L2	058_9	627084271009	L2	27-FEB-2007 14:51	S4740 (100X)
L3	058_10	627084271010	L3	27-FEB-2007 15:08	S4740 (25X)
L4	058_11	627084271011	L4	27-FEB-2007 15:26	S4740 (10X)
L5	058_12	627084271012	L5	27-FEB-2007 15:43	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1833	0.1915	0.2072	0.2186	0.2259	QORG		0.20810	0.001798	0.2053	1.000	0.990	
Chloride	0.1453	0.1434	0.1536	0.1638	0.1756	QORG		0.15062	0.001252	0.1564	1.000	0.990	
Nitrogen, Nitrite	0.3600	0.2864	0.3036	0.3155	0.3235	QORG		0.30443	0.003837	0.3178	1.000	0.990	
Nitrogen, Nitrate	0.3071	0.3598	0.3816	0.3889	0.4021	QORG		0.37541	0.005332	0.3679	1.000	0.990	
Sulfate	0.1015	0.1064	0.1115	0.1138	0.1217	QORG		0.10686	2.954E-4	0.1110	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193027 IC Water
EPA 300.0

Inst : IC03
Calnum : 627084271001 Cal Date: 27-FEB-2007

ICV 627084271013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2053	0.1903	1.000	0.9075	mg/L	-9	10	
Chloride	0.1564	0.1449	2.000	1.894	mg/L	-5	10	
Nitrogen, Nitrite	0.3178	0.3118	0.5000	0.5089	mg/L	2	10	
Nitrogen, Nitrate	0.3679	0.3473	0.5000	0.4596	mg/L	-8	10	
Sulfate	0.1110	0.1099	5.000	5.070	mg/L	1	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 627084271001 Date : 27-FEB-2007 14:33
Units : mg/L X Axis : A Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	627084271008	L1	27-FEB-2007 14:33	S4740 (500X)
L2	058_9	627084271009	L2	27-FEB-2007 14:51	S4740 (100X)
L3	058_10	627084271010	L3	27-FEB-2007 15:08	S4740 (25X)
L4	058_11	627084271011	L4	27-FEB-2007 15:26	S4740 (10X)
L5	058_12	627084271012	L5	27-FEB-2007 15:43	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1833	0.1915	0.2072	0.2186	0.2259	QORG		0.20810	0.001798	0.2053	1.000	0.990	
Chloride	0.1453	0.1434	0.1536	0.1638	0.1756	QORG		0.15062	0.001252	0.1564	1.000	0.990	
Nitrogen, Nitrite	0.3600	0.2864	0.3036	0.3155	0.3235	QORG		0.30443	0.003837	0.3178	1.000	0.990	
Bromide	0.0847	0.0680	0.0682	0.0673	0.0688	QORG		0.06654	1.096E-4	0.0714	1.000	0.990	
Nitrogen, Nitrate	0.3071	0.3598	0.3816	0.3889	0.4021	QORG		0.37541	0.005332	0.3679	1.000	0.990	
Orthophosphate (as P)	0.2356	0.1465	0.1344	0.1318	0.1378	QORG		0.12872	4.480E-4	0.1572	1.000	0.990	
Sulfate	0.1015	0.1064	0.1115	0.1138	0.1217	QORG		0.10686	2.954E-4	0.1110	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MS 2/28/07

JW 3/1/07

00555

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627084271001

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 12:14:32 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 14

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 2/28/2007 12:09:08 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 12:31:55 PM	IC03-7AN_CAL
2	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 12:49:19 PM	IC03-7AN_CAL
3	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:06:44 PM	IC03-7AN_CAL
4	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:24:08 PM	IC03-7AN_CAL
5	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:41:33 PM	IC03-7AN_CAL
6	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:58:58 PM	IC03-7AN_CAL
7	CAL-058	IB		1.0000	IC03-7AN	Finished	2/27/2007 2:16:22 PM	IC03-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC03-7AN	Finished	2/27/2007 2:33:47 PM	IC03-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC03-7AN	Finished	2/27/2007 2:51:12 PM	IC03-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC03-7AN	Finished	2/27/2007 3:08:40 PM	IC03-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC03-7AN	Finished	2/27/2007 3:26:05 PM	IC03-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC03-7AN	Finished	2/27/2007 3:43:29 PM	IC03-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC03-7AN	Finished	2/27/2007 4:00:54 PM	IC03-7AN_CAL
14	CAL-058	ICB		1.0000	IC03-7AN	Finished	2/27/2007 4:18:19 PM	IC03-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 12:14:32 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 14

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 2/28/2007 12:09:08 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-058	BLK		Unknown	25.0	MRS	1
2	CAL-058	BLK		Unknown	25.0	MRS	1
3	CAL-058	BLK		Unknown	25.0	MRS	1
4	CAL-058	BLK		Unknown	25.0	MRS	1
5	CAL-058	BLK		Unknown	25.0	MRS	1
6	CAL-058	BLK		Unknown	25.0	MRS	1
7	CAL-058	IB		Unknown	25.0	MRS	1
8	CAL-058	ICAL,L1,S4740,500		Standard	25.0	MRS	1
9	CAL-058	ICAL,L2,S4740,100		Standard	25.0	MRS	1
10	CAL-058	ICAL,L3,S4740,25		Standard	25.0	MRS	1
11	CAL-058	ICAL,L4,S4740,10		Standard	25.0	MRS	1
12	CAL-058	ICAL,L5,S4740,5		Standard	25.0	MRS	1
13	CAL-058	ICV,S3859,5		Unknown	25.0	MRS	1
14	CAL-058	ICB		Unknown	25.0	MRS	1

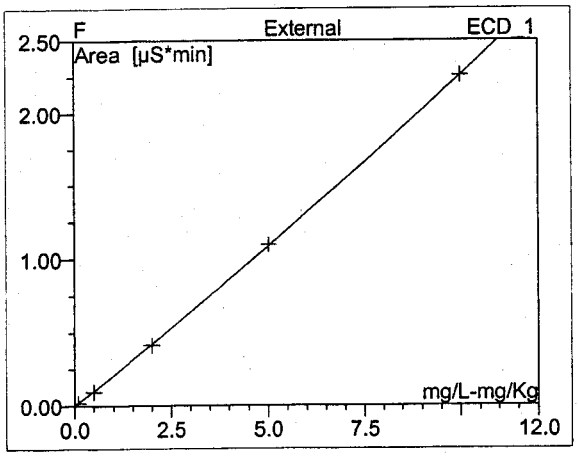
No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.018334	0.029068	0.017998	0.016931	0.015353	0.047115	0.050740
9	ICAL,L2,S474	0.095761	0.143442	0.071600	0.067961	0.089943	0.146530	0.266003
10	ICAL,L3,S474	0.414311	0.614264	0.303577	0.272992	0.381592	0.537417	1.114887
11	ICAL,L4,S474	1.092996	1.638279	0.788862	0.672712	0.972260	1.317974	2.846070
12	ICAL,L5,S474	2.259269	3.511711	1.617342	1.375325	2.010252	2.756365	6.083386

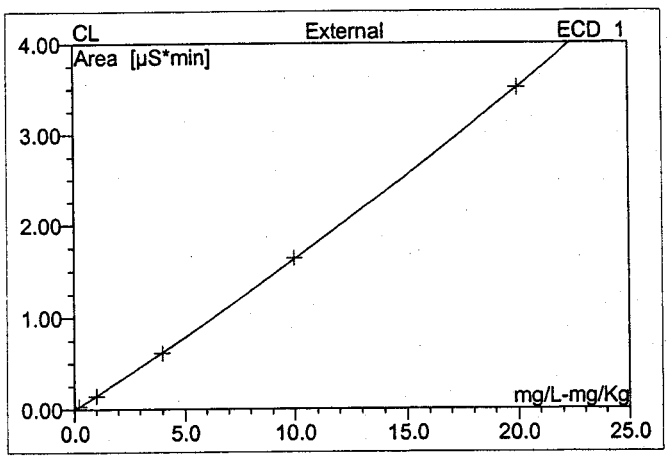
No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.138422	0.253824	0.101554	0.086294	0.077852	0.128440	0.173244
9	ICAL,L2,S474	0.720228	1.185394	0.467622	0.375066	0.415342	0.437346	0.865480
10	ICAL,L3,S474	3.223136	5.113794	1.962752	1.480972	1.778018	1.709926	3.712428
11	ICAL,L4,S474	8.800620	13.775214	5.009840	3.707364	4.591672	4.482448	9.792526
12	ICAL,L5,S474	19.325148	30.137754	10.413014	7.723142	9.734336	9.863310	21.364250

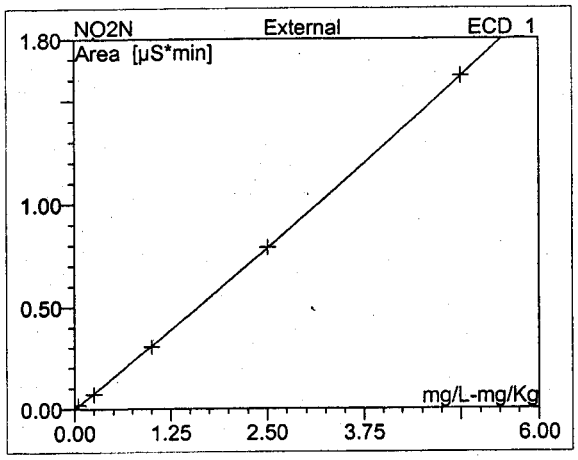
No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.088039	0.192680	0.059074	0.254344	0.040873	0.365573	0.474207
9	ICAL,L2,S474	0.458366	0.944934	0.234496	1.019639	0.238774	1.133915	2.472399
10	ICAL,L3,S474	1.957847	3.948701	0.984959	4.075330	1.002193	4.116231	10.148541
11	ICAL,L4,S474	5.033451	10.039366	2.511730	9.946991	2.500995	9.898348	24.917381
12	ICAL,L5,S474	9.993828	19.993131	4.997813	20.009926	4.999713	20.019344	50.013557

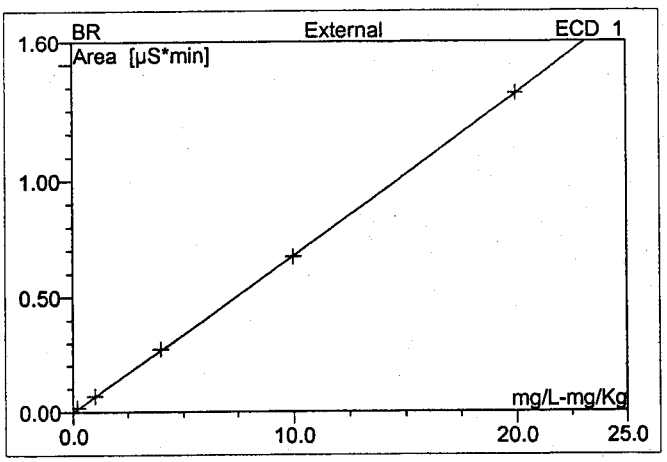
IC03 Calibration Batch Report

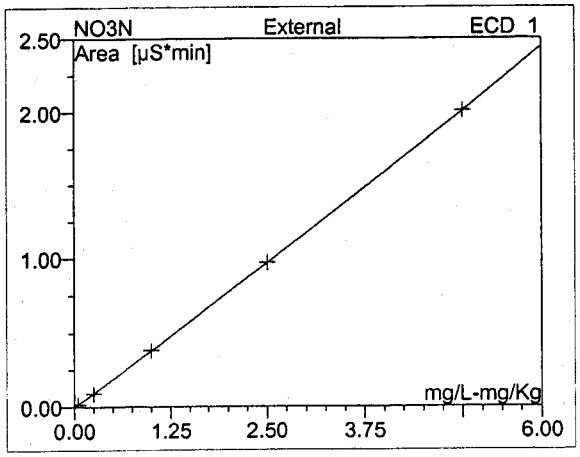
Sequence:	058	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 15:08	Run Time:	15.00

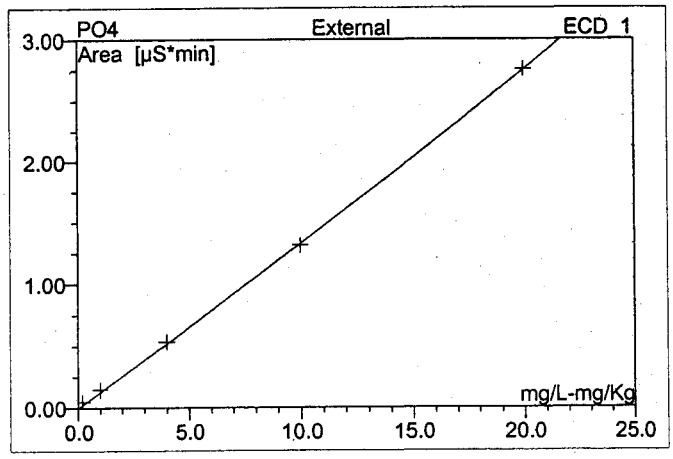




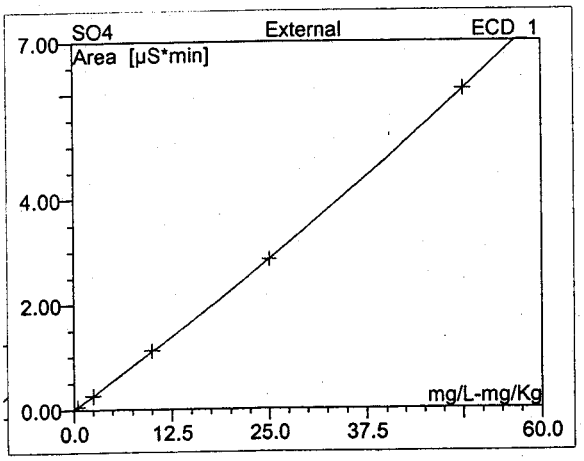








Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 15:08	*Run Time:*	15.00



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.930	F	Quad	5	0.000000	0.208095	0.001798	99.983204
2	4.310	CL	Quad	5	0.000000	0.150618	0.001252	99.936208
3	5.090	NO2N	Quad	5	0.000000	0.304434	0.003837	99.987979
4	6.473	BR	Quad	5	0.000000	0.066540	0.000110	99.992713
5	7.263	NO3N	Quad	5	0.000000	0.375413	0.005332	99.987620
7	9.440	PO4	Quad	5	0.000000	0.128716	0.000448	99.965498
8	11.350	SO4	Quad	5	0.000000	0.106859	0.000295	99.947315
AVERAGE:					0.000000	0.191525	0.001867	99.971505

Method File: IC03-7AN_CAL
Operator: ic_analyst

Printed: 2/28/2007 12:14:23 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100
1	F	2.930 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	*CL*	*4.310 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*		*0.200000*	*1.000000*
3	NO2N	5.090 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.473 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.263 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.440 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.350 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount Comment ICAL,L5,S4740,5
1	F	2.930 min	2.000000	5.000000	10.000000
2	*CL*	*4.310 min*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.090 min	1.000000	2.500000	5.000000
4	BR	6.473 min	4.000000	10.000000	20.000000
5	NO3N	7.263 min	1.000000	2.500000	5.000000
6	PO4	9.440 min	4.000000	10.000000	20.000000
7	SO4	11.350 min	10.000000	25.000000	50.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	2.930 min	1.000000	0.100000	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.310 min*	*1.000000*	*0.200000*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.090 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
4	BR	6.473 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.263 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
6	PO4	9.440 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
7	SO4	11.350 min	1.000000	0.500000	2.500000	10.000000	25.000000	50.000000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Comment
1	F	2.930 min	
2	*CL*	*4.310 min*	
3	NO2N	5.090 min	
4	BR	6.473 min	
5	NO3N	7.263 min	
6	PO4	9.440 min	
7	SO4	11.350 min	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Calibration:

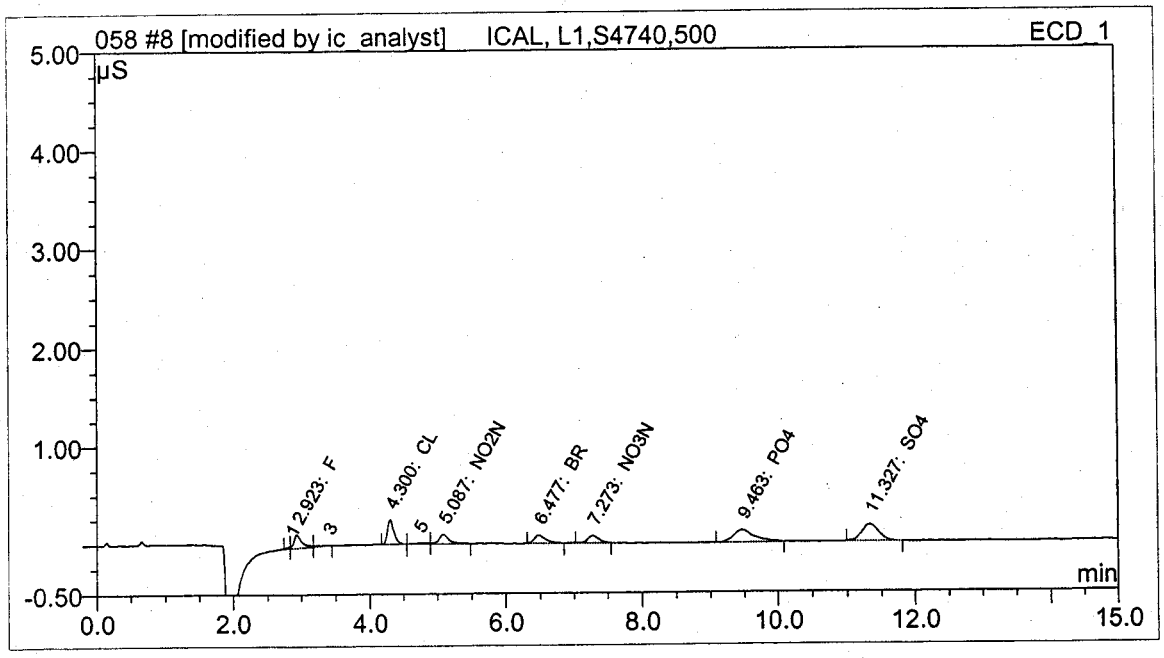
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	210	25.0	1.0000	1.0000	1.0000	2/27/2007 2:33:47 PM	Ok
2	☒	ICAL,L2,S4740,100	9	211	25.0	1.0000	1.0000	1.0000	2/27/2007 2:51:12 PM	Ok
3	☒	ICAL,L3,S4740,25	10	212	25.0	1.0000	1.0000	1.0000	2/27/2007 3:08:40 PM	Ok
4	☒	ICAL,L4,S4740,10	11	213	25.0	1.0000	1.0000	1.0000	2/27/2007 3:26:05 PM	Ok
5	☒	ICAL,L5,S4740,5	12	214	25.0	1.0000	1.0000	1.0000	2/27/2007 3:43:29 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.924	0.018334	0.0880	0.0880	
4	CL	4.300	0.029068	0.1927	0.1927	
6	NO2N	5.087	0.017998	0.0591	0.0591	
7	BR	6.477	0.016931	0.2543	0.2543	
8	NO3N	7.274	0.015353	0.0409	0.0409	
9	PO4	9.464	0.047115	0.3656	0.3656	
10	SO4	11.327	0.050740	0.4742	0.4742	



ANALYZED BY: _____

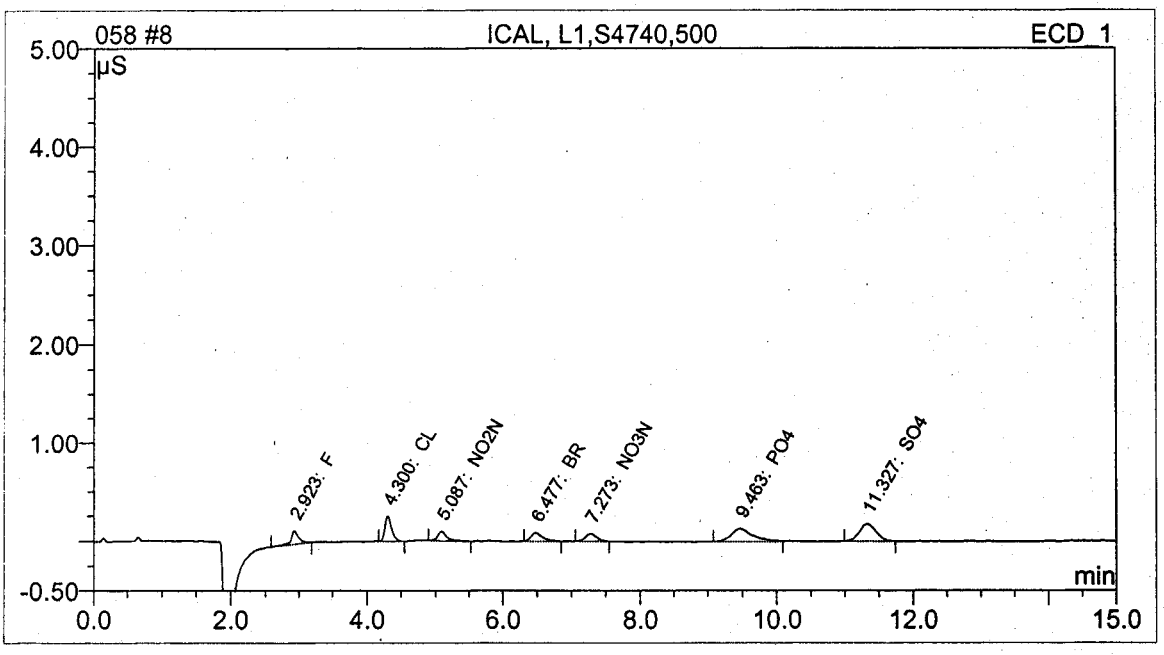
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.924	0.019177	0.0921	0.0921	
2	CL	4.300	0.029068	0.1927	0.1927	
3	NO2N	5.087	0.016424	0.0539	0.0539	
4	BR	6.477	0.016931	0.2543	0.2543	
5	NO3N	7.274	0.014888	0.0396	0.0396	
6	PO4	9.464	0.047115	0.3656	0.3656	
7	SO4	11.327	0.050277	0.4699	0.4699	



ANALYZED BY: _____

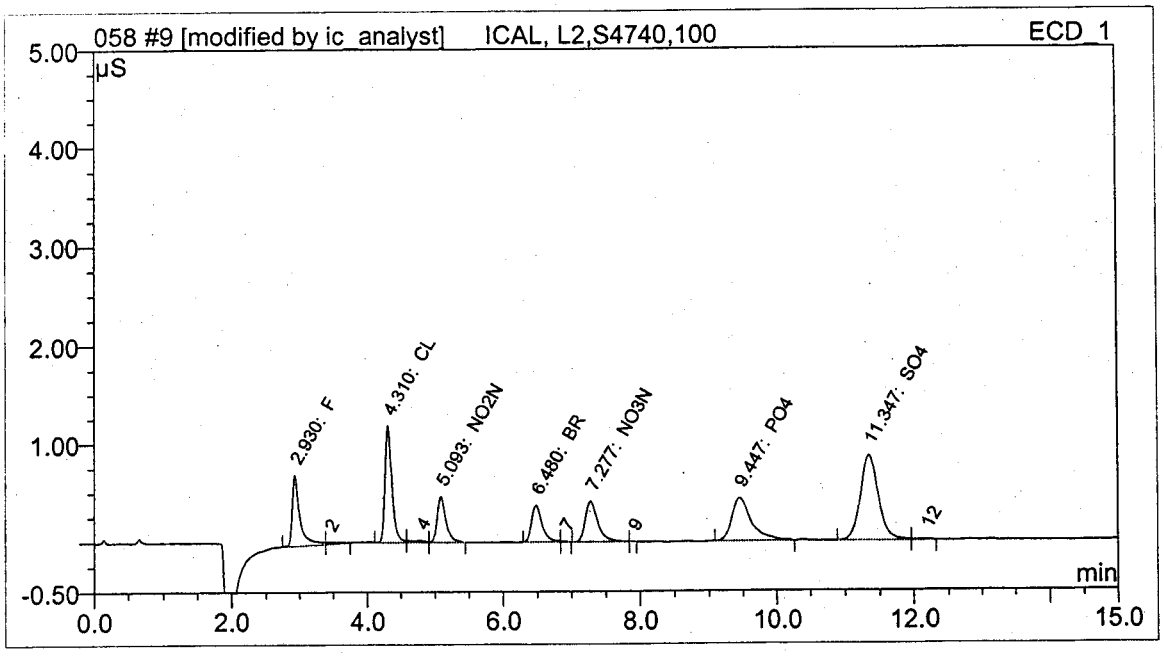
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.095761	0.4584	0.4584	
3	CL	4.310	0.143442	0.9449	0.9449	
5	NO2N	5.093	0.071600	0.2345	0.2345	
6	BR	6.480	0.067961	1.0196	1.0196	
8	NO3N	7.277	0.089943	0.2388	0.2388	
10	PO4	9.447	0.146530	1.1339	1.1339	
11	SO4	11.347	0.266003	2.4724	2.4724	



ANALYZED BY: _____

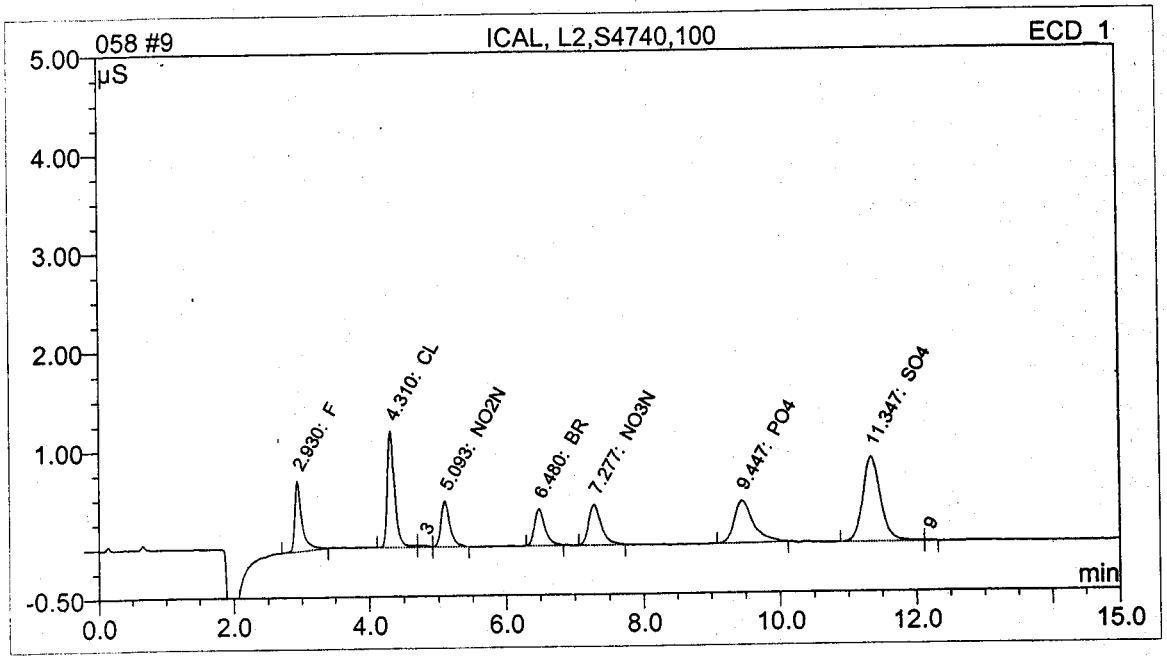
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.091342	0.4378	0.4378	
2	CL	4.310	0.145525	0.9582	0.9582	
4	NO2N	5.093	0.071600	0.2345	0.2345	
5	BR	6.480	0.066590	0.9996	0.9996	
6	NO3N	7.277	0.087219	0.2317	0.2317	
7	PO4	9.447	0.139792	1.0834	1.0834	
8	SO4	11.347	0.267502	2.4859	2.4859	



ANALYZED BY: _____

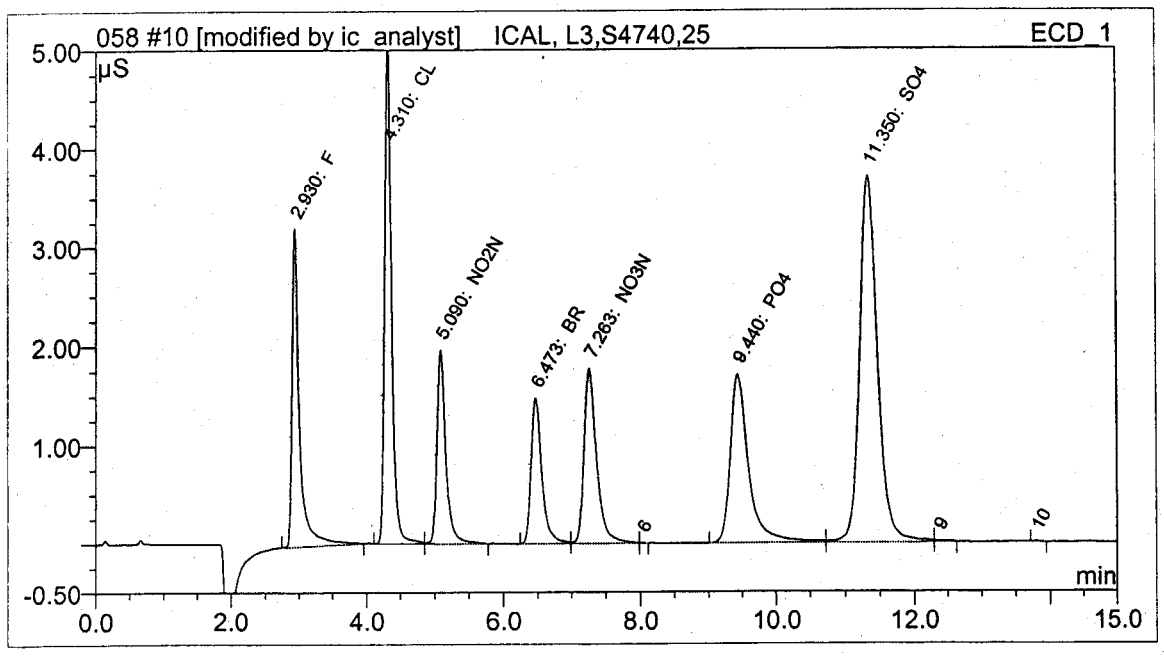
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.414311	1.9578	1.9578	
2	CL	4.310	0.614264	3.9487	3.9487	
3	NO2N	5.090	0.303577	0.9850	0.9850	
4	BR	6.473	0.272992	4.0753	4.0753	
5	NO3N	7.263	0.381592	1.0022	1.0022	
7	PO4	9.440	0.537417	4.1162	4.1162	
8	SO4	11.350	1.114887	10.1485	10.1485	



ANALYZED BY:

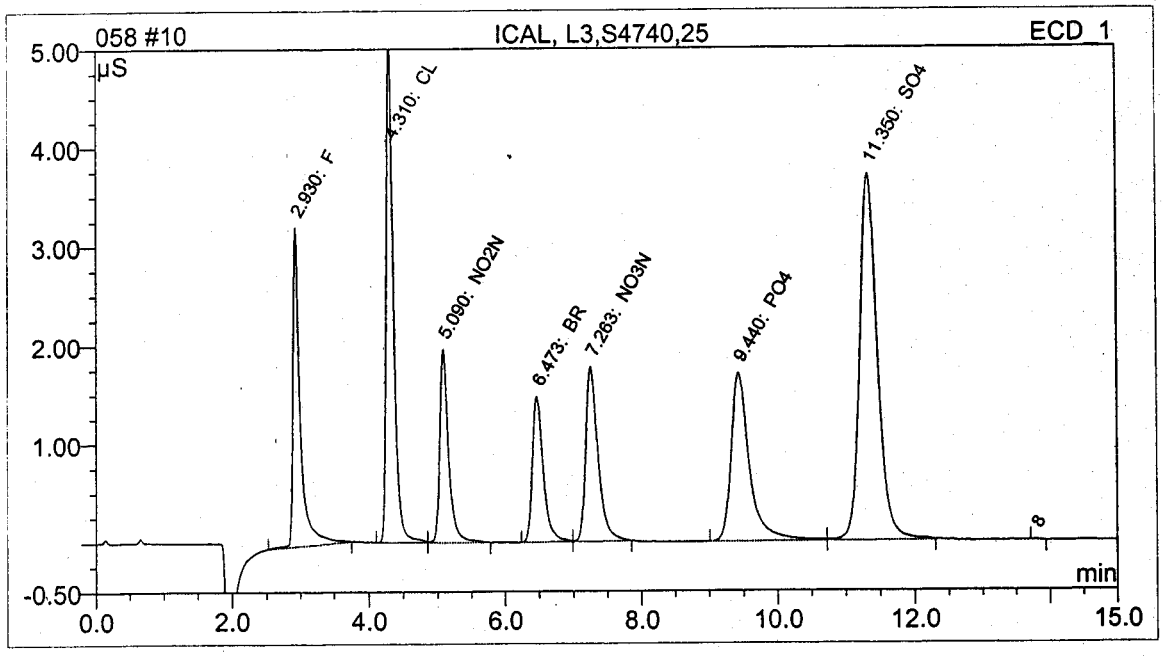
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.415473	1.9617	1.9617	
2	CL	4.310	0.614264	3.9487	3.9487	
3	NO2N	5.090	0.303577	0.9850	0.9850	
4	BR	6.473	0.270774	4.0521	4.0521	
5	NO3N	7.263	0.372240	0.9849	0.9849	
6	PO4	9.440	0.532494	4.0900	4.0900	
7	SO4	11.350	1.101728	10.0659	10.0659	



ANALYZED BY: _____

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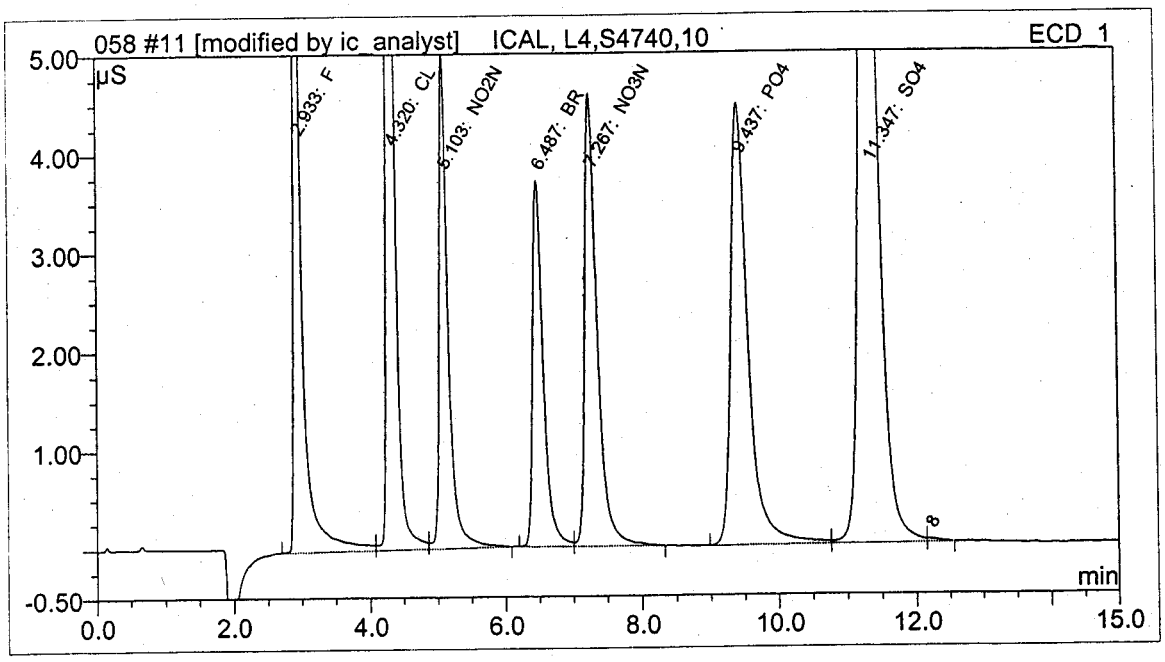
Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:26 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	1.092996	5.0335	5.0335	
2	CL	4.320	1.638279	10.0394	10.0394	
3	NO2N	5.103	0.788862	2.5117	2.5117	
4	BR	6.487	0.672712	9.9470	9.9470	
5	NO3N	7.267	0.972260	2.5010	2.5010	
6	PO4	9.437	1.317974	9.8983	9.8983	
7	SO4	11.347	2.846070	24.9174	24.9174	



ANALYZED BY:

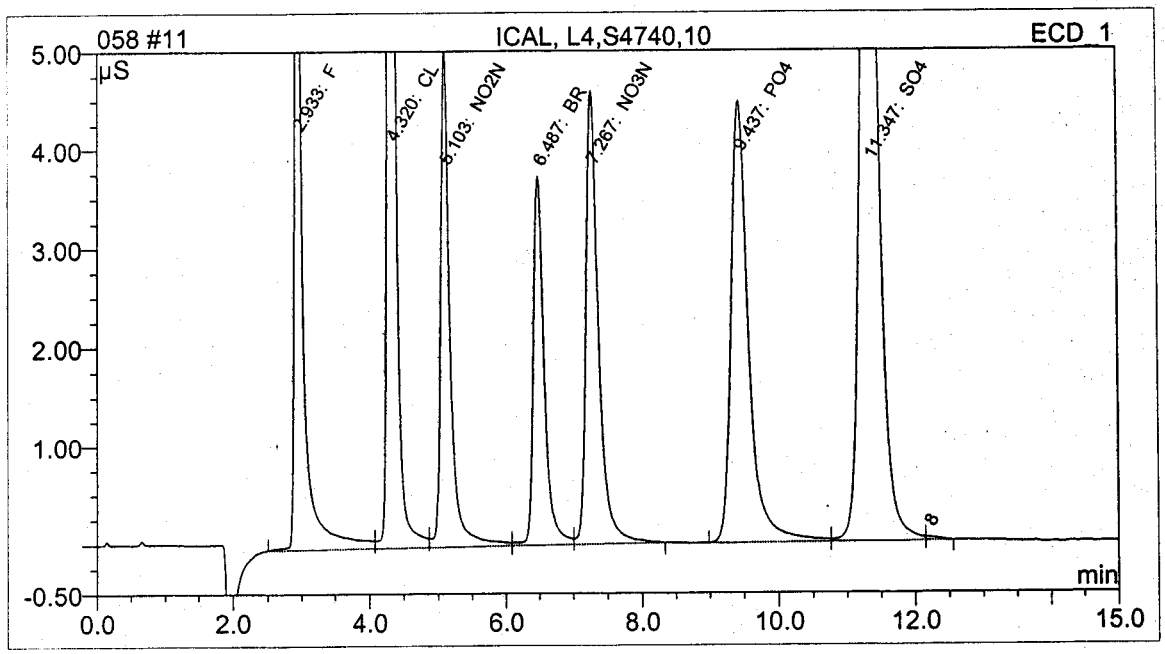
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:26 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	1.126637	5.0788	5.0788	
2	CL	4.320	1.657545	10.0728	10.0728	
3	NO2N	5.103	0.821761	2.5427	2.5427	
4	BR	6.487	0.694191	10.0424	10.0424	
5	NO3N	7.267	0.983893	2.5098	2.5098	
6	PO4	9.437	1.317974	9.8983	9.8983	
7	SO4	11.347	2.846070	24.9174	24.9174	



ANALYZED BY: _____

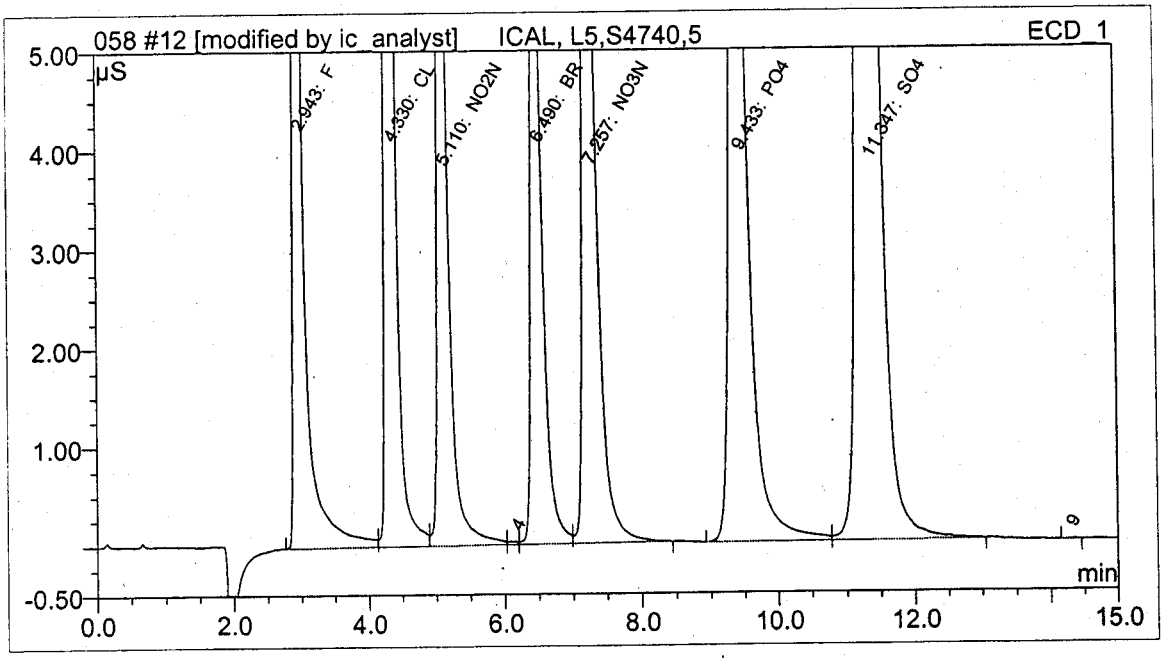
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:43 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.943	2.259269	9.9938	9.9938	
2	CL	4.330	3.511711	19.9931	19.9931	
3	NO2N	5.110	1.617342	4.9978	4.9978	
5	BR	6.490	1.375325	20.0099	20.0099	
6	NO3N	7.257	2.010252	4.9997	4.9997	
7	PO4	9.433	2.756365	20.0193	20.0193	
8	SO4	11.347	6.083386	50.0136	50.0136	



ANALYZED BY: _____

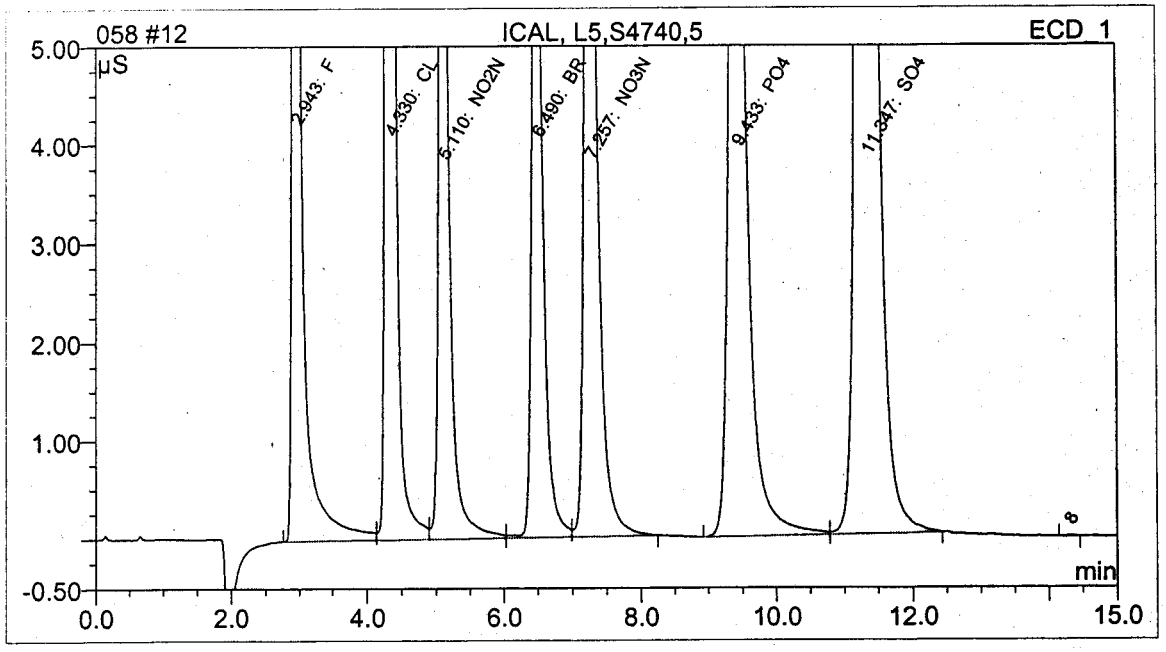
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:43 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.943	2.257818	9.9938	9.9938	
2	CL	4.330	3.509633	19.9930	19.9930	
3	NO2N	5.110	1.612622	4.9976	4.9976	
4	BR	6.490	1.375046	20.0099	20.0099	
5	NO3N	7.257	1.999557	4.9994	4.9994	
6	PO4	9.433	2.741472	20.0185	20.0185	
7	SO4	11.347	6.036318	50.0098	50.0098	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 627084271013
Cal : 627084271001
Standards: S3859 (5X)

File : 058_13
Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2053	0.1903	1.000	0.9075	mg/L	-9	10	
Chloride	0.1564	0.1449	2.000	1.894	mg/L	-5	10	
Nitrogen, Nitrite	0.3178	0.3118	0.5000	0.5089	mg/L	2	10	
Bromide	0.0714	0.0729	2.000	2.182	mg/L	9	10	
Nitrogen, Nitrate	0.3679	0.3473	0.5000	0.4596	mg/L	-8	10	
Orthophosphate (as P)	0.1572	0.1331	2.000	2.053	mg/L	3	10	
Sulfate	0.1110	0.1099	5.000	5.070	mg/L	1	10	

MKS 2/28/07

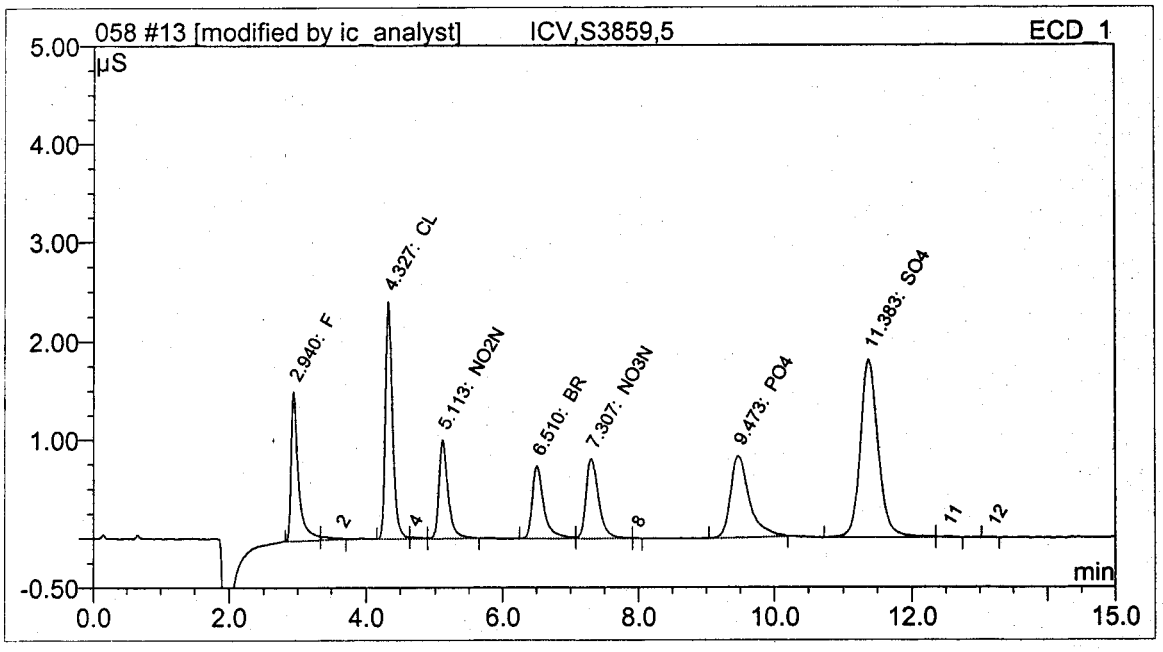
KW 3/1/07

627084271013

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:00 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.190327	0.9075	0.9075	
3	CL	4.327	0.289798	1.8942	1.8942	
5	NO2N	5.113	0.155920	0.5089	0.5089	
6	BR	6.510	0.145725	2.1822	2.1822	
7	NO3N	7.307	0.173666	0.4596	0.4596	
9	PO4	9.473	0.266202	2.0534	2.0534	
10	SO4	11.383	0.549382	5.0701	5.0701	



ANALYZED BY: _____

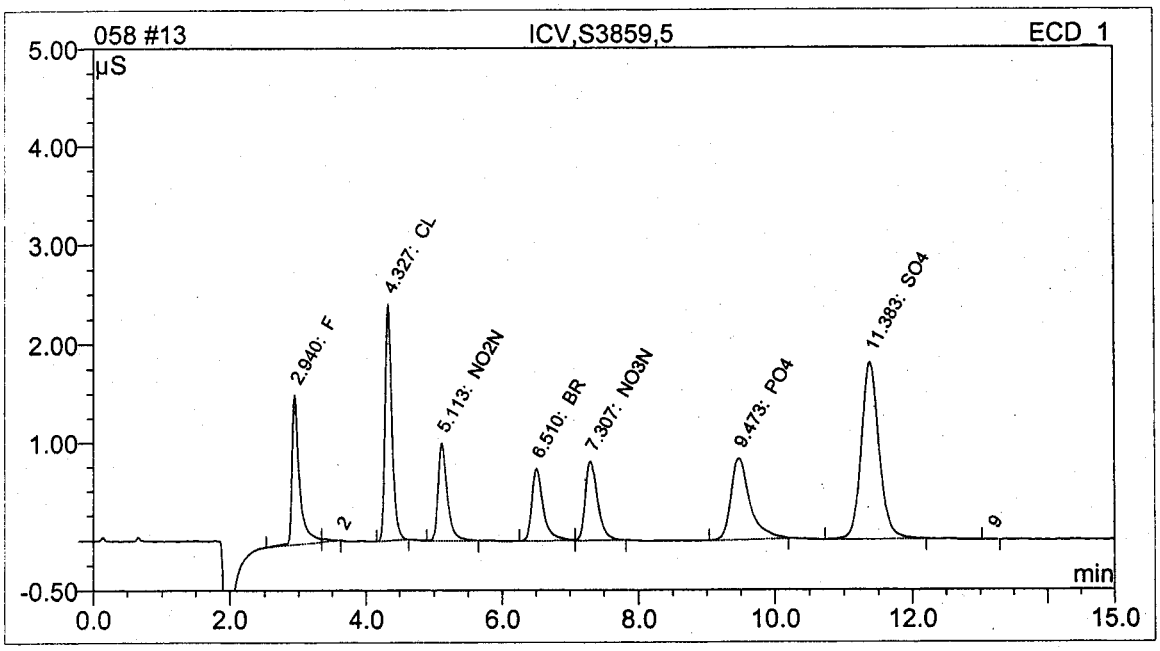
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:00 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.196919	0.9387	0.9387	
3	CL	4.327	0.285826	1.8687	1.8687	
4	NO2N	5.113	0.155087	0.5062	0.5062	
5	BR	6.510	0.143748	2.1527	2.1527	
6	NO3N	7.307	0.167654	0.4438	0.4438	
7	PO4	9.473	0.266202	2.0534	2.0534	
8	SO4	11.383	0.540901	4.9929	4.9929	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627084271014 File : 058_14 Time : 27-FEB-2007 16:18
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.01251]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	[0.05197]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

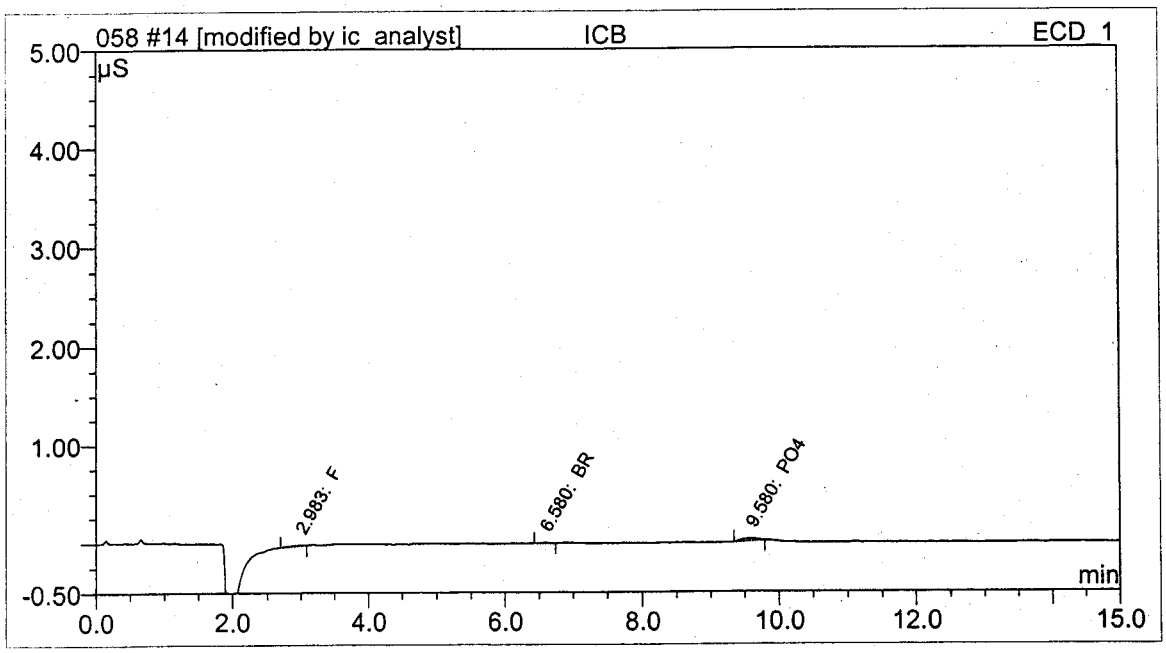
MS 2/28/07

627084271014

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:18 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.983	0.002604	0.0125	0.0125	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
2	BR	6.580	0.001438	0.0216	0.0216	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.580	0.006690	0.0520	0.0520	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

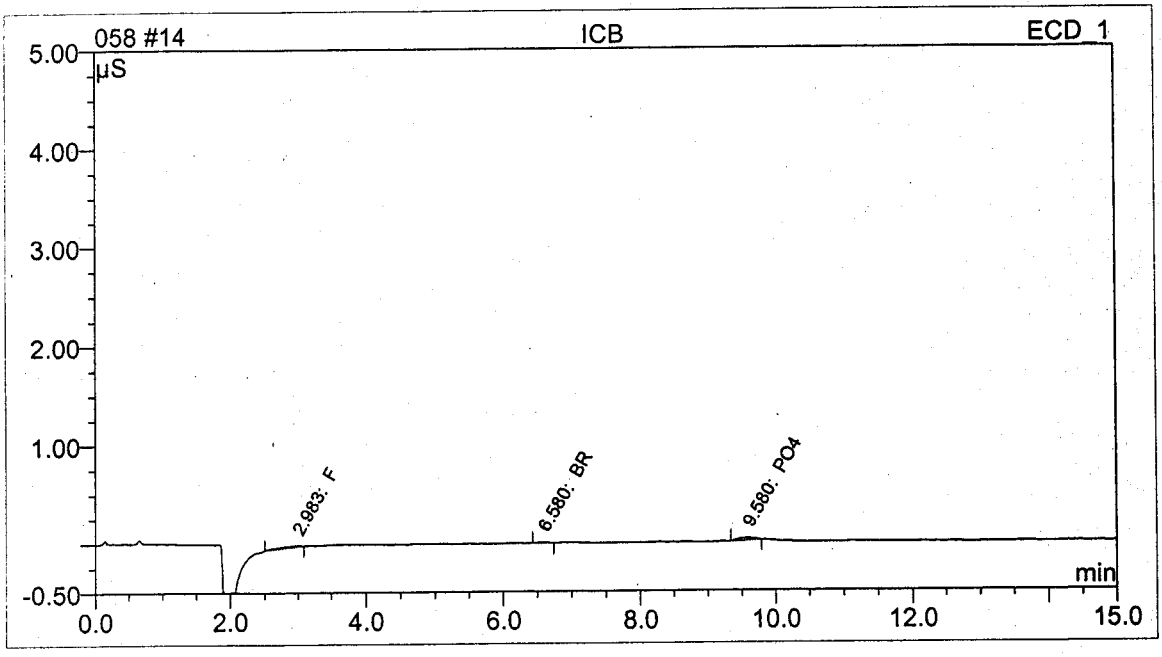
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:18 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.983	0.005579	0.0268	0.0268	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
2	BR	6.580	0.001438	0.0216	0.0216	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.580	0.006690	0.0520	0.0520	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627084271007 File : 058_7 Time : 27-FEB-2007 14:16
Cal : 626477375001 Caldate: 27-NOV-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

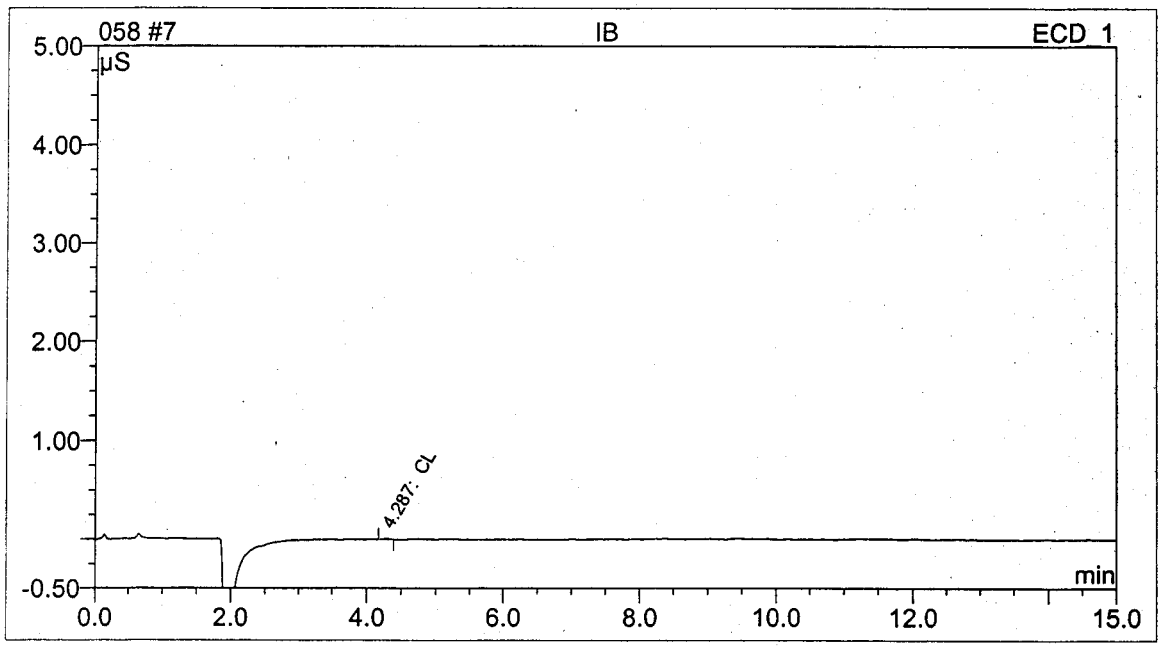
MRS 2/28/07

627084271007

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.287	0.001229	0.0082	0.0082	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.2987	0.2930	0.5000	0.4964	mg/L	-1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.2987	0.2967	2.0000	1.9867	mg/L	-1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.2987	0.3096	5.0000	5.0555	mg/L	1	10	
IC03	P	627085727007	28-FEB-2007 11:10	627084271001	27-FEB-2007	0.2053	0.2066	0.5000	0.4944	mg/L	-1	10	
IC03	P	627085727015	28-FEB-2007 14:46	627084271001	27-FEB-2007	0.2053	0.2095	2.0000	1.9797	mg/L	-1	10	
IC03	P	627085727029	28-FEB-2007 20:15	627084271001	27-FEB-2007	0.2053	0.2122	5.0000	4.8926	mg/L	-2	10	

CONTINUING CALIBRATION SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.2028	0.1933	1.0000	1.0206	mg/L	2	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.2028	0.1962	4.0000	4.0376	mg/L	1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.2028	0.2075	10.000	10.151	mg/L	2	10	
IC03	P	627085727007	28-FEB-2007 11:10	627084271001	27-FEB-2007	0.1564	0.1443	1.0000	0.9503	mg/L	-5	10	
IC03	P	627085727015	28-FEB-2007 14:46	627084271001	27-FEB-2007	0.1564	0.1537	4.0000	3.9511	mg/L	-1	10	
IC03	P	627085727029	28-FEB-2007 20:15	627084271001	27-FEB-2007	0.1564	0.1647	10.000	10.091	mg/L	1	10	
IC03	P	627085727044	01-MAR-2007 00:36	627084271001	27-FEB-2007	0.1564	0.1550	4.0000	3.9844	mg/L	0	10	
IC03	P	627085727058	01-MAR-2007 04:39	627084271001	27-FEB-2007	0.1564	0.1663	10.000	10.180	mg/L	2	10	

CONTINUING CALIBRATION SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.4045	0.3975	0.2500	0.2513	mg/L	1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.4045	0.3929	1.0000	0.9860	mg/L	-1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.4045	0.4104	2.5000	2.5342	mg/L	1	10	
IC03	P	627085727007	28-FEB-2007 11:10	627084271001	27-FEB-2007	0.3178	0.2939	0.2500	0.2406	mg/L	-4	10	
IC03	P	627085727015	28-FEB-2007 14:46	627084271001	27-FEB-2007	0.3178	0.3046	1.0000	0.9884	mg/L	-1	10	
IC03	P	627085727029	28-FEB-2007 20:15	627084271001	27-FEB-2007	0.3178	0.3148	2.5000	2.5061	mg/L	0	10	
IC03	P	627085727044	01-MAR-2007 00:36	627084271001	27-FEB-2007	0.3178	0.3023	1.0000	0.9808	mg/L	-2	10	

CONTINUING CALIBRATION SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.4834	0.4697	0.2500	0.2524	mg/L	1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.4834	0.4884	1.0000	1.0269	mg/L	3	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.4834	0.5082	2.5000	2.5608	mg/L	2	10	
IC03	P	627085727007	28-FEB-2007 11:10	627084271001	27-FEB-2007	0.3679	0.3762	0.2500	0.2496	mg/L	0	10	
IC03	P	627085727015	28-FEB-2007 14:46	627084271001	27-FEB-2007	0.3679	0.3778	1.0000	0.9924	mg/L	-1	10	
IC03	P	627085727029	28-FEB-2007 20:15	627084271001	27-FEB-2007	0.3679	0.3857	2.5000	2.4813	mg/L	-1	10	
IC03	P	627085727044	01-MAR-2007 00:36	627084271001	27-FEB-2007	0.3679	0.3827	1.0000	1.0050	mg/L	0	10	
IC03	P	627085727058	01-MAR-2007 04:39	627084271001	27-FEB-2007	0.3679	0.3882	2.5000	2.4965	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.1465	0.1394	2.5000	2.5705	mg/L	3	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.1465	0.1405	10.000	10.137	mg/L	1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.1465	0.1466	25.000	25.332	mg/L	1	10	
IC03	P	627085727007	28-FEB-2007 11:10	627084271001	27-FEB-2007	0.1110	0.1024	2.5000	2.3791	mg/L	-5	10	
IC03	P	627085727015	28-FEB-2007 14:46	627084271001	27-FEB-2007	0.1110	0.1101	10.000	10.027	mg/L	0	10	
IC03	P	627085727029	28-FEB-2007 20:15	627084271001	27-FEB-2007	0.1110	0.1145	25.000	25.048	mg/L	0	10	
IC03	P	627085727044	01-MAR-2007 00:36	627084271001	27-FEB-2007	0.1110	0.1117	10.000	10.171	mg/L	2	10	
IC03	P	627085727058	01-MAR-2007 04:39	627084271001	27-FEB-2007	0.1110	0.1146	25.000	25.069	mg/L	0	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193027 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607087173008.1
File : 060_8
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC377322
Matrix : Water
Batch : 122657
Caldate: 27-FEB-2007

Time : 01-MAR-2007 12:18
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

607087173008.1

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173019 File : 060_19 Time : 01-MAR-2007 15:31
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173031 File : 060_31 Time : 01-MAR-2007 19:01
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01001]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193027 IC Water
EPA 300.0

Inst : IC03
Seqnum : 627085727008.3
File : 059_8
Cal : 627084271001
IDF : 1.0
PDF : 1.0

Lab ID : QC377139
Matrix : Water
Batch : 122614
Caldate: 27-FEB-2007

Time : 28-FEB-2007 11:27
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

627085727008.3

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627085727016 File : 059_16 Time : 28-FEB-2007 15:03
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627085727030 File : 059_30 Time : 28-FEB-2007 20:32
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.01521]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627085727045 File : 059_45 Time : 01-MAR-2007 00:53
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193027 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627085727059 File : 059_59 Time : 01-MAR-2007 04:57
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 627084271 Instrument: IC03 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:31	1.0					
002	058_2	X	BLK			27-FEB-2007 12:49	1.0					
003	058_3	X	BLK			27-FEB-2007 13:06	1.0					
004	058_4	X	BLK			27-FEB-2007 13:24	1.0					
005	058_5	X	BLK			27-FEB-2007 13:41	1.0					
006	058_6	X	BLK			27-FEB-2007 13:58	1.0					
007	058_7	IB				27-FEB-2007 14:16	1.0	25				
008	058_8	ICAL	L1			27-FEB-2007 14:33	1.0				1	
009	058_9	ICAL	L2			27-FEB-2007 14:51	1.0				1	
010	058_10	ICAL	L3			27-FEB-2007 15:08	1.0				1	
011	058_11	ICAL	L4			27-FEB-2007 15:26	1.0				1	
012	058_12	ICAL	L5			27-FEB-2007 15:43	1.0				1	
013	058_13	ICV				27-FEB-2007 16:00	1.0	25			2	
014	058_14	ICB				27-FEB-2007 16:18	1.0	25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 627085727 Instrument: IC03 Ion Chromatograph Begun: 28-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	059_7	CCV	L	122614		28-FEB-2007 11:10	1.0	1	25			1	
008	059_8	CCB/MB	QC377139	122614	Water	28-FEB-2007 11:27	1.0		25				
009	059_9	LCS	QC377140	122614	Water	28-FEB-2007 12:30	1.0		25			1	
010	059_10	MSS	193001-008	122614	Water	28-FEB-2007 12:47	2.0	1	25				1:SO4=234.367
011	059_11	X	BLK	122614		28-FEB-2007 13:06	1.0						
012	059_12	MSS	193001-008	122614	Water	28-FEB-2007 13:25	25.0		25				
013	059_13	MS	QC377141	122614	Water	28-FEB-2007 14:08	50.0		25			1	
014	059_14	MSD	QC377142	122614	Water	28-FEB-2007 14:25	50.0		25			1	
015	059_15	CCV	M	122614		28-FEB-2007 14:46	1.0		25			1	
016	059_16	CCB		122614		28-FEB-2007 15:03	1.0		25				
017	059_17	SAMPLE	193024-002	122614	Water	28-FEB-2007 16:41	100.0		25				
018	059_18	SAMPLE	193024-002	122614	Water	28-FEB-2007 16:58	10.0	1	25				1:NO3N=27.4794
019	059_19	X	BLK	122614		28-FEB-2007 17:16	1.0						
020	059_20	X	BLK	122614		28-FEB-2007 17:33	1.0						
021	059_21	MSS	193027-002	122614	Water	28-FEB-2007 17:55	10.0		25				
022	059_22	MS	QC377143	122614	Water	28-FEB-2007 18:13	10.0		25			1	
023	059_23	MSD	QC377144	122614	Water	28-FEB-2007 18:30	10.0		25			1	
024	059_24	SAMPLE	193027-013	122614	Water	28-FEB-2007 18:48	1.0	1	25				1:CL=63.1577
025	059_25	SAMPLE	193027-015	122614	Water	28-FEB-2007 19:05	1.0	1	25				1:CL=44.0179
026	059_26	SAMPLE	193027-014	122614	Water	28-FEB-2007 19:22	1.0	3	25				3:CL=71.8241
027	059_27	SAMPLE	193027-003	122614	Water	28-FEB-2007 19:40	1.0	3	25				3:SO4=67.4460
028	059_28	SAMPLE	193027-006	122614	Water	28-FEB-2007 19:57	1.0	3	25				3:SO4=67.0836
029	059_29	CCV	H	122614		28-FEB-2007 20:15	1.0		25			1	
030	059_30	CCB		122614		28-FEB-2007 20:32	1.0		25				
031	059_31	X	CCV	122614		28-FEB-2007 20:49	1.0					1	
032	059_32	X	CCB	122614		28-FEB-2007 21:07	1.0						
033	059_33	SAMPLE	193027-007	122614	Water	28-FEB-2007 21:24	1.0	4	25				3:SO4=85.0627
034	059_34	SAMPLE	193027-004	122614	Water	28-FEB-2007 21:42	1.0	3	25				2:SO4=105.246
035	059_35	SAMPLE	193027-001	122614	Water	28-FEB-2007 21:59	1.0	3	25				2:SO4=103.501
036	059_36	MSS	193027-002	122614	Water	28-FEB-2007 22:16	1.0	3	25				2:SO4=74.6574
037	059_37	SAMPLE	193027-005	122614	Water	28-FEB-2007 22:34	1.0	3	25				2:SO4=74.0194

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 627085727 Instrument: IC03 Ion Chromatograph Begun: 28-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	059_38	SAMPLE	193027-008	122614	Water	28-FEB-2007 22:51	1.0	3	25				2:SO4=55.7861
039	059_39	SAMPLE	193027-011	122614	Water	28-FEB-2007 23:09	1.0	2	25				1:SO4=81.1961
040	059_40	SAMPLE	193027-012	122614	Water	28-FEB-2007 23:26	1.0	2	25				1:SO4=148.686
041	059_41	X	BLK	122614		28-FEB-2007 23:44	1.0						
042	059_42	SAMPLE	193027-001	122614	Water	01-MAR-2007 00:01	10.0	1	25				
043	059_43	SAMPLE	193027-003	122614	Water	01-MAR-2007 00:18	10.0	1	25				
044	059_44	CCV	M	122614		01-MAR-2007 00:36	1.0	1	25			1	
045	059_45	CCB		122614		01-MAR-2007 00:53	1.0		25				
046	059_46	X	CCV	122614		01-MAR-2007 01:11	1.0					1	
047	059_47	X	CCB	122614		01-MAR-2007 01:28	1.0						
048	059_48	SAMPLE	193027-004	122614	Water	01-MAR-2007 01:45	10.0	1	25				
049	059_49	SAMPLE	193027-005	122614	Water	01-MAR-2007 02:03	10.0	1	25				
050	059_50	SAMPLE	193027-006	122614	Water	01-MAR-2007 02:20	10.0	1	25				
051	059_51	SAMPLE	193027-007	122614	Water	01-MAR-2007 02:38	10.0	1	25				
052	059_52	SAMPLE	193027-008	122614	Water	01-MAR-2007 02:55	25.0	1	25				
053	059_53	SAMPLE	193027-011	122614	Water	01-MAR-2007 03:12	25.0	1	25				
054	059_54	SAMPLE	193027-012	122614	Water	01-MAR-2007 03:30	25.0	1	25				
055	059_55	SAMPLE	193027-013	122614	Water	01-MAR-2007 03:47	10.0	1	25				
056	059_56	SAMPLE	193027-014	122614	Water	01-MAR-2007 04:05	10.0	1	25				
057	059_57	SAMPLE	193027-015	122614	Water	01-MAR-2007 04:22	10.0	1	25				
058	059_58	CCV	H	122614		01-MAR-2007 04:39	1.0	2	25			1	
059	059_59	CCB		122614		01-MAR-2007 04:57	1.0		25				
060	059_60	X	CCV	122614		01-MAR-2007 05:14	1.0					1	
061	059_61	X	CCB	122614		01-MAR-2007 05:32	1.0						
062	059_62	X	SHUTDOWN	122614		01-MAR-2007 05:49	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	060_7	CCV	L	122657		01-MAR-2007 12:00	1.0	1		25			1	
008	060_8	CCB/MB	QC377322	122657	Water	01-MAR-2007 12:18	1.0			25				
009	060_9	BS	QC377323	122657	Water	01-MAR-2007 12:36	1.0			25			1	
010	060_10	BSD	QC377324	122657	Water	01-MAR-2007 12:53	1.0			25			1	
011	060_11	SAMPLE	193027-001	122657	Water	01-MAR-2007 13:11	1.0	2		25				2:SO4=100.065
012	060_12	MSS	193027-002	122657	Water	01-MAR-2007 13:28	1.0	4		25				2:SO4=72.8606
013	060_13	SAMPLE	193027-004	122657	Water	01-MAR-2007 13:46	1.0	2		25				2:SO4=101.551
014	060_14	SAMPLE	193027-005	122657	Water	01-MAR-2007 14:04	1.0	2		25				2:SO4=72.1854
015	060_15	SAMPLE	193027-007	122657	Water	01-MAR-2007 14:21	1.0	3		25				3:SO4=82.3755
016	060_16	SAMPLE	193027-008	122657	Water	01-MAR-2007 14:39	1.0	3		25				3:CL=160.943
017	060_17	SAMPLE	193027-011	122657	Water	01-MAR-2007 14:56	1.0	2		25				2:CL=163.070
018	060_18	CCV	M	122657		01-MAR-2007 15:14	1.0			25			1	
019	060_19	CCB		122657		01-MAR-2007 15:31	1.0			25				
020	060_20	MS	QC377325	122657	Water	01-MAR-2007 15:49	1.02		1	25			1	2:SO4=75.9503
021	060_21	MSD	QC377326	122657	Water	01-MAR-2007 16:06	1.02		1	25			1	2:SO4=76.0348
022	060_22	SAMPLE	193027-012	122657	Water	01-MAR-2007 16:24	1.0	1		25				1:SO4=144.362
023	060_23	SAMPLE	193055-009	122657	Water	01-MAR-2007 16:41	100.0			25				
024	060_24	MSS	193055-010	122657	Water	01-MAR-2007 16:59	50.0	1		25				
025	060_25	SAMPLE	193055-011	122657	Water	01-MAR-2007 17:16	100.0			25				
026	060_26	SAMPLE	193055-012	122657	Water	01-MAR-2007 17:34	100.0			25				
027	060_27	SAMPLE	193055-013	122657	Water	01-MAR-2007 17:51	100.0			25				
028	060_28	MS	QC377327	122657	Water	01-MAR-2007 18:09	50.0			25			1	
029	060_29	MSD	QC377328	122657	Water	01-MAR-2007 18:26	50.0			25			1	
030	060_30	CCV	H	122657		01-MAR-2007 18:44	1.0			25			1	
031	060_31	CCB		122657		01-MAR-2007 19:01	1.0	1		25				
032	060_32	SAMPLE	193055-009	122657	Water	01-MAR-2007 19:19	1.0	1		25				1:SO4=327.629
033	060_33	X	BLK	122657		01-MAR-2007 19:36	1.0							
034	060_34	SAMPLE	193055-009	122657	Water	01-MAR-2007 19:54	2.0	1		25				1:SO4=189.065
035	060_35	X	BLK	122657		01-MAR-2007 20:11	1.0							
036	060_36	MSS	193055-010	122657	Water	01-MAR-2007 20:29	1.0	2		25				1:SO4=152.546
037	060_37	X	BLK	122657		01-MAR-2007 20:46	1.0							

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	060_38	SAMPLE	193055-011	122657	Water	01-MAR-2007 21:04	2.0	2	25				2:CL=160.992
039	060_39	X	BLK	122657		01-MAR-2007 21:21	1.0						
040	060_40	SAMPLE	193055-011	122657	Water	01-MAR-2007 21:39	3.0	2	25				2:CL=142.793
041	060_41	X	BLK	122657		01-MAR-2007 21:56	1.0						
042	060_42	SAMPLE	193055-012	122657	Water	01-MAR-2007 22:14	2.0	2	25				2:SO4=69.8461
043	060_43	X	BLK	122657		01-MAR-2007 22:31	1.0						
044	060_44	SAMPLE	193055-012	122657	Water	01-MAR-2007 22:49	3.0	1	25				1:CL=137.873
045	060_45	X	BLK	122657		01-MAR-2007 23:06	1.0						
046	060_46	SAMPLE	193055-013	122657	Water	01-MAR-2007 23:24	1.0	1	25				1:SO4=83.2531
047	060_47	X	BLK	122657		01-MAR-2007 23:41	1.0						
048	060_48	SAMPLE	193055-013	122657	Water	01-MAR-2007 23:59	2.0	1	25				1:CL=142.857
049	060_49	X	BLK	122657		02-MAR-2007 00:16	1.0						
050	060_50	CCV	M	122657		02-MAR-2007 00:34	1.0		25			1	
051	060_51	CCB		122657		02-MAR-2007 00:51	1.0		25				
052	060_52	CCV	M	122663		02-MAR-2007 01:09	1.0		25			1	
053	060_53	CCB/MB	QC377340	122663	Water	02-MAR-2007 01:27	1.0	1	25				
054	060_54	SAMPLE	193055-008	122663	Water	02-MAR-2007 01:44	25.0		25				
055	060_55	MSS	193055-001	122663	Water	02-MAR-2007 02:02	10.0	1	25				
056	060_56	MS	QC377342	122663	Water	02-MAR-2007 02:19	10.0	1	25			1	
057	060_57	MSD	QC377343	122663	Water	02-MAR-2007 02:37	10.0	1	25			1	
058	060_58	SAMPLE	193055-019	122663	Water	02-MAR-2007 02:54	10.0		25				
059	060_59	SAMPLE	193055-026	122663	Water	02-MAR-2007 03:12	10.0		25				
060	060_60	SAMPLE	193055-019	122663	Water	02-MAR-2007 03:29	1.0	2	25				2:CL=52.4729
061	060_61	MSS	193055-001	122663	Water	02-MAR-2007 03:47	1.0	3	25				2:SO4=66.5915
062	060_62	SAMPLE	193055-008	122663	Water	02-MAR-2007 04:04	1.0	3	25				3:SO4=252.595
063	060_63	CCV	H	122663		02-MAR-2007 04:22	1.0		25			1	
064	060_64	CCB		122663		02-MAR-2007 04:39	1.0	1	25				
065	060_65	X	CCV	122663		02-MAR-2007 04:57	1.0					1	
066	060_66	X	CCB	122663		02-MAR-2007 05:14	1.0						
067	060_67	SAMPLE	193055-007	122663	Water	02-MAR-2007 05:32	10.0		25				
068	060_68	MSS	193055-021	122663	Water	02-MAR-2007 05:49	5.0	1	25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
069	060_69	MS	QC377344	122663	Water	02-MAR-2007 06:07	5.0	1	25			1	
070	060_70	MSD	QC377345	122663	Water	02-MAR-2007 06:24	5.0	1	25			1	
071	060_71	SAMPLE	193055-023	122663	Water	02-MAR-2007 06:42	10.0		25				
072	060_72	MSS	193055-021	122663	Water	02-MAR-2007 06:59	1.0	1	25				
073	060_73	SAMPLE	193055-026	122663	Water	02-MAR-2007 07:17	1.0	2	25				2:CL=52.4202
074	060_74	SAMPLE	193055-007	122663	Water	02-MAR-2007 07:34	1.0	2	25				2:SO4=66.4637
075	060_75	SAMPLE	193055-023	122663	Water	02-MAR-2007 07:52	1.0	1	25				1:CL=79.3950
076	060_76	SAMPLE	193055-002	122663	Water	02-MAR-2007 08:09	1.0	3	25				3:SO4=191.489
077	060_77	CCV	M	122663		02-MAR-2007 08:27	1.0		25			1	
078	060_78	CCB		122663		02-MAR-2007 08:44	1.0		25				
079	060_79	X	CCV	122663		02-MAR-2007 09:02	1.0					1	
080	060_80	X	CCB	122663		02-MAR-2007 09:19	1.0						
081	060_81	SAMPLE	193055-002	122663	Water	02-MAR-2007 09:37	10.0		25				
082	060_82	SAMPLE	193055-024	122663	Water	02-MAR-2007 09:54	10.0		25				
083	060_83	SAMPLE	193055-003	122663	Water	02-MAR-2007 10:12	25.0		25				
084	060_84	SAMPLE	193055-004	122663	Water	02-MAR-2007 10:29	10.0		25				
085	060_85	SAMPLE	193055-025	122663	Water	02-MAR-2007 10:47	25.0		25				
086	060_86	SAMPLE	193055-024	122663	Water	02-MAR-2007 11:04	1.0	1	25				1:CL=66.7071
087	060_87	SAMPLE	193055-016	122663	Water	02-MAR-2007 11:22	1.0	1	25				1:CL=39.0145
088	060_88	SAMPLE	193055-004	122663	Water	02-MAR-2007 11:39	1.0	2	25				2:SO4=85.0787
089	060_89	SAMPLE	193055-003	122663	Water	02-MAR-2007 11:57	1.0	3	25				3:SO4=152.747
090	060_90	SAMPLE	193055-025	122663	Water	02-MAR-2007 12:14	1.0	2	25				2:CL=123.099
091	060_91	CCV	H	122663		02-MAR-2007 12:32	1.0		25			1	
092	060_92	CCB		122663		02-MAR-2007 12:49	1.0	1	25				
093	060_93	SAMPLE	193055-005	122663	Water	02-MAR-2007 13:07	1.0	1	25				1:CL=40.7377
094	060_94	SAMPLE	193055-017	122663	Water	02-MAR-2007 13:24	1.0	2	25				2:CL=56.0830
095	060_95	SAMPLE	193055-020	122663	Water	02-MAR-2007 13:42	1.0	1	25				1:CL=57.3239
096	060_96	SAMPLE	193055-006	122663	Water	02-MAR-2007 13:59	1.0	2	25				2:SO4=58.9185
097	060_97	SAMPLE	193055-014	122663	Water	02-MAR-2007 14:17	1.0	2	25				2:CL=192.269
098	060_98	SAMPLE	193055-022	122663	Water	02-MAR-2007 14:34	1.0	2	25				2:CL=50.1426
099	060_99	SAMPLE	193055-022	122663	Water	02-MAR-2007 14:52	10.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
100	060_100	SAMPLE	193055-018	122663	Water	02-MAR-2007 15:09	1.0	2	25				2:CL=75.2200
101	060_101	SAMPLE	193055-018	122663	Water	02-MAR-2007 15:27	10.0		25				
102	060_102	SAMPLE	193055-014	122663	Water	02-MAR-2007 15:45	50.0		25				
103	060_103	CCV	M	122663		02-MAR-2007 16:02	1.0		25			1	
104	060_104	CCB		122663		02-MAR-2007 16:20	1.0		25				
105	060_105	SAMPLE	193055-016	122663	Water	02-MAR-2007 16:46	10.0		25				
106	060_106	SAMPLE	193055-005	122663	Water	02-MAR-2007 17:03	10.0		25				
107	060_107	SAMPLE	193055-017	122663	Water	02-MAR-2007 17:21	10.0		25				
108	060_108	SAMPLE	193055-020	122663	Water	02-MAR-2007 17:38	10.0		25				
109	060_109	SAMPLE	193055-006	122663	Water	02-MAR-2007 17:56	10.0		25				
110	060_110	LCS	QC377341	122663	Water	02-MAR-2007 18:13	1.0	1	25			1	
111	060_111	CCV	L	122663		02-MAR-2007 18:31	1.0	1	25			1	
112	060_112	CCB		122663		02-MAR-2007 18:48	1.0		25				

Stds used: 1=S4740

00055

REPORTING SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193027-001	IC03	02/28/07 21:59	1.0			+	+	
193027-001	IC03	03/01/07 00:01	10.0		+			+
193027-001	IC01	03/01/07 13:11	1.0	+				
193027-002	IC03	02/28/07 17:55	10.0		+			+
193027-002	IC03	02/28/07 22:16	1.0			+	+	
193027-002	IC01	03/01/07 13:28	1.0	+				
193027-003	IC03	02/28/07 19:40	1.0	+		+		
193027-003	IC03	03/01/07 00:18	10.0		+		+	+
193027-004	IC03	02/28/07 21:42	1.0			+	+	
193027-004	IC03	03/01/07 01:45	10.0		+			+
193027-004	IC01	03/01/07 13:46	1.0	+				
193027-005	IC03	02/28/07 22:34	1.0			+	+	
193027-005	IC03	03/01/07 02:03	10.0		+			+
193027-005	IC01	03/01/07 14:04	1.0	+				
193027-006	IC03	02/28/07 19:57	1.0	+		+		
193027-006	IC03	03/01/07 02:20	10.0		+		+	+
193027-007	IC03	02/28/07 21:24	1.0			+		
193027-007	IC03	03/01/07 02:38	10.0		+		+	+
193027-007	IC01	03/01/07 14:21	1.0	+				
193027-008	IC03	02/28/07 22:51	1.0			+		
193027-008	IC03	03/01/07 02:55	25.0		+		+	+
193027-008	IC01	03/01/07 14:39	1.0	+				
193027-011	IC03	02/28/07 23:09	1.0			+	+	
193027-011	IC03	03/01/07 03:12	25.0		+			+
193027-011	IC01	03/01/07 14:56	1.0	+				
193027-012	IC03	02/28/07 23:26	1.0			+	+	
193027-012	IC03	03/01/07 03:30	25.0		+			+
193027-012	IC01	03/01/07 16:24	1.0	+				
193027-013	IC03	02/28/07 18:48	1.0	+		+	+	+
193027-013	IC03	03/01/07 03:47	10.0		+			
193027-014	IC03	02/28/07 19:22	1.0	+		+		
193027-014	IC03	03/01/07 04:05	10.0		+		+	+
193027-015	IC03	02/28/07 19:05	1.0	+		+	+	+
193027-015	IC03	03/01/07 04:22	10.0		+			
QC377139	IC03	02/28/07 11:27	1.0	+	+	+	+	+
QC377140	IC03	02/28/07 12:30	1.0	+	+	+	+	+

REPORTING SUMMARY FOR 193027 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC377141	IC03	02/28/07 14:08	50.0	+	+	+	+	+	
QC377142	IC03	02/28/07 14:25	50.0	+	+	+	+	+	
QC377143	IC03	02/28/07 18:13	10.0		+	+	+	+	
QC377144	IC03	02/28/07 18:30	10.0		+	+	+	+	
QC377322	IC01	03/01/07 12:18	1.0	+	+	+	+	+	
QC377323	IC01	03/01/07 12:36	1.0	+	+	+	+	+	
QC377324	IC01	03/01/07 12:53	1.0	+	+	+	+	+	
QC377325	IC01	03/01/07 15:49	1.02	+					
QC377326	IC01	03/01/07 16:06	1.02	+					
QC377327	IC01	03/01/07 18:09	50.0	+	+	+	+	+	
QC377328	IC01	03/01/07 18:26	50.0	+	+	+	+	+	

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122614
Date Started: 2/28/07
Prep Chemist: MRS

BK 2431
Page 66

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193001-008 E	1.00	2X 25X	S	MSS
2	193024-002 E-H	N/A	100X 10X	P, Ag, Na, S	comp. 1ml of each bottle -002E, -002F, -002G -002H
3	193027-001 G	0.93	10X 1X	S	RR @ 1x for fluoride
4	-002 S	1.00			MSS RR @ 1x for fluoride
5	-003 G	0.74			
6	-004 C	0.92			RR @ 1x for fluoride
7	-005 F	1.00			RR @ 1x for fluoride
8	-006 C	0.74			
9	-007 E	0.81			RR @ 1x for fluoride
10	-008 E	1.28	25X		
11	-011 C	1.53			
12	-012 C	1.92			
13	-013 F	0.63	10X		
14	-014 E	0.66			
15	-015 E	0.63			
16	Blank QC377139	N/A	1X	N/A	
17	LCS QC377140		1X	N/A	
18	MS QC377141 E		50X	S	MS of 193001-008E
19	MSD QC377142 E		50X		MSD of 193001-008E
20	MS QC377143 S		10X		MS of 193027-002S
	MSD QC377144 S		10X		MSD of 193027-002S

MRS 2/28/07

LCS MRS 2/28/07
~~BS/BSD~~ Spiked with 0.2 mL of :
MS/MSD Spiked with 0.1 mL of :
Filters Used:

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
	100X	MRS 12/5/06	MRS 2/28/07
		S4740	
		S4740	
Ag: OnGuard II Ag		050622-1-Ag	
Na: OnGuard II Na		050413-1-Na	
P: OnGuard II P		050425-1-P	
RP: OnGuard II RP		N/A	
S: 0.20um/0.45um		Acrodisc Lot #A 1065052 2	

MRS 2/28/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CP 3/1/07
Reviewed by / Date

00558

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122614
Date Started: 28-FEB-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193001-008			LFR Levine Fricke	Water	SULFATE	05-MAR-2007
193024-002			Acme Fill Corp.	Water	NITRATE, NITRITE	12-MAR-2007
193027-001			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-002			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-004			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-005			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-007			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-008			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-011			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-012			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
193027-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	12-MAR-2007
QC377139	BLANK			Water		
QC377140	LCS			Water		
QC377141	MS	of 193001-008		Water		
QC377142	MSD	of 193001-008		Water		
QC377143	MS	of 193027-002		Water		
QC377144	MSD	of 193027-002		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122657
Date Started: 3/1/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193027-001 G	0.93	1X	S	
2	-002 S	1.00	1X		MSS
3	-004 C	0.92			
4	-005 F	1.00			
5	-007 E	0.81			
6	-008 E	1.28			
7	-011 C	1.53			
8	-012 C	1.92			
9	193055-009 A	4.77	100X 2X 1X	S	
10	-010 A	2.19	50X 1X		MSS
11	-011 G	4.41	100X 2X 3X		
12	-012 G	4.77	100X 2X 3X		
13	-013 G	3.88	100X 1X 2X		
14	Blank QC377322	N/A	1X	N/A	
15	BS QC377323				
16	BSD QC377324				
17	MS QC377325 S		1.02X	S	
18	MSD QC377326 S		1.02X		
19	MS QC377327 A		50X		
20	MSD QC377328 A		50X		

MRJ 3/1/07

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100X MRS 12/5/06	MRS 3/1/07
BS/BSD Spiked with	0.2 mL of :	54740	
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot ~~#A106 5022~~ #A10650522 MRS 3/1/07	

MRJ 3/1/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 3/5/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122657
Date Started: 01-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193027-001			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-002			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-004			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-005			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-007			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-008			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-011			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-012			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193055-009			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-012			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
QC377322	BLANK			Water		
QC377323	BS			Water		
QC377324	BSD			Water		
QC377325	MS	of 193027-002		Water		
QC377326	MSD	of 193027-002		Water		
QC377327	MS	of 193055-010		Water		
QC377328	MSD	of 193055-010		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/21/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122733
Matrix:	Water	Sampled:	02/27/07
Units:	mg/L	Received:	02/28/07
Diln Fac:	1.000	Analyzed:	03/06/07

Field ID	Type	Lab ID	Result	RL
LF6GW105	SAMPLE	193027-001	ND	0.04
1065PZ7A	SAMPLE	193027-002	ND	0.04
231GW09	SAMPLE	193027-003	ND	0.04
DUP0227072A	SAMPLE	193027-004	ND	0.04
DUP0227072B	SAMPLE	193027-005	ND	0.04
DUP0227072C	SAMPLE	193027-006	ND	0.04
	BLANK	QC377652	ND	0.04

ND= Not Detected
RL= Reporting Limit

15.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ7A	Batch#:	122733
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	mg/L	Analyzed:	03/06/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC377653	<0.04000	0.3699	ND	0 *	75-125		
MSD	QC377654		0.3699	ND	0 *	75-125	0	20
LCS	QC377655		0.3699	0.3388	92	75-125		

*= Value outside of QC limits; see narrative
ND= Not Detected
RPD= Relative Percent Difference

16.0

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	~~39147~~ 3-6-07
Instrument:	**HP UV-VIS Spectrometer**	Analysis Date:	3/6/2007
Wavelength:	626 nm	Batch:	~~1/11/2236~~ 122733
SOP#:	sulfide_376_rv 4.doc	Matrix:	WATER

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r):	0.9990
Avg Rf:	0.6210
%RSD:	3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.2104	0.3388	0.3699	92%	90 - 110%
ICB	-0.0005	-0.0008	0.0000		
CCV	0.2088	0.3363	0.3699	91%	90 - 110%
CCB	0.0005	0.0008	0.0000		
CCV	0.2148	0.3459	0.3699	94%	90 - 110%
CCB	0.0022	0.0035	0.0000		
CCV	0.2083	0.3355	0.3699	91%	90 - 110%
CCB	0.0023	0.0037	0.0000		

00565

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **122733**
Prep Date: **3/6/2007**
Analysis Date: **3/6/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0005		**ND**	0.040					
LCS	7.5000	1.0000	0.2104		**0.33884**	0.040	0.0500	55.4880	0.3699	**92**	
193027-2	7.5000	1.0000	-0.0015		**ND**	0.040					
193027-2ms	7.5000	1.0000	0.0006		**ND**	0.040	0.0500	55.4880	0.3699	**0 ***	
193027-2ms	7.5000	1.0000	0.0016		**ND**	0.040	0.0500	55.4880	0.3699	**0 ***	**#DIV/0! #**
193027-1	7.5000	1.0000	-0.0033		**ND**	0.040					
193027-3	7.5000	1.0000	0.0083		**ND**	0.040					
193027-4	7.5000	1.0000	0.0072		**ND**	0.040					
193027-5	7.5000	1.0000	0.0074		**ND**	0.040					
193027-6	7.5000	1.0000	0.0058		**ND**	0.040					
193035-1	7.5000	1.0000	0.0535	0.0528	**ND**	0.040					
193035-2	7.5000	1.0000	0.0104		**ND**	0.040					
193063-1	7.5000	1.0000	0.0172		**ND**	0.040					
193063-3	7.5000	1.0000	0.0194		**ND**	0.040					
193063-4	7.5000	1.0000	0.0193		**ND**	0.040					
193063-5	7.5000	1.0000	0.0766		**0.12336**	0.040					
193063-6	7.5000	1.0000	0.0197		**ND**	0.040					
193063-7	7.5000	1.0000	0.0196		**ND**	0.040					
193093-1	7.5000	1.0000	0.0023		**ND**	0.040					
193093-2	7.5000	1.0000	0.0076		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

00566

Reviewed by/ Date: DMM 3/7/07

00557

72 PROJECT Threadwell

XS INC 193045
LFR 193035 193063
193027

Notebook No. B/C 2451

Continued From Page

Sulfate/Bisulfide EPA 376.2 B122733

Sample	Vol (ml)	Final Vol (ml)	Abs	
193027-1	7.5	7.5	-.0033	
-2			-.00015	
-2MS	+.05 ml (55.488 mg/L From 0455292)		.0006	
-2MSD	Same as MS		.0016	S std. ≈.4g 0455292 → 50 ml DI H_2O
-3			.0083	1.0 ml S=
-4			.0072	50 ml I .0255N
-5			.0074	1.60 ml S_2O_3 .0255N
-6			.0058	
193035-1			.0535/.0528	.12750
-2			.0104	.04080
				.08670 x 16000 / 1.0
193063-1			.0172	
-3			.0194	= 1387.20 mg/L
-4			.0193	1125 = 55.4880 mg/L
-5			.0766	.05 → 7.5 = .3699 mg/L
-6			.0197	
-7			.0196	
*193083-1			.0023	* = Filtered thru WHATMAN .45μ Filter Lot. 2226
-2			.0076	
ICB/MB			-.0005	
ICV/LCS	Same as MS		.7104	
CCV			.2088	
CCB			.0005	
CCV			.2148	
CCB			~~.2083~~ .0022	
CCV			.2083	
CCB			.0023	

Continued on Page

Read and Understood By

Signed: Dm Date: 3-6-07

Signed: DM Date: 3/6/07

3-6-07

Date : ~~01-07-2007~~
Time : 13:19:45
Operator : DM

---) Quantitation Results Report (---

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0005	0.00000
2	ICV/LCS	Analytical	+0.2104	0.35120
3	193027-1	Analytical	-0.0033	0.00000
4	193027-2	Analytical	-0.0015	0.00000
5	193027-2MS	Analytical	+0.0006	9.422E-04
6	193027-2MSD	Analytical	+0.0016	0.00272
7	193027-3	Analytical	+0.0083	0.01380
8	193027-4	Analytical	+0.0072	0.01197
9	193027-5	Analytical	+0.0074	0.01235
10	193027-6	Analytical	+0.0058	0.00975
11	CCV	Analytical	+0.2088	0.34853
12	CCB	Analytical	+0.0005	8.149E-04
13	193035-1	Analytical	+0.0535	0.08933
14	193035-1CB	Analytical	+0.0528	0.08819
15	193035-2	Analytical	+0.0104	0.01737
16	193063-1	Analytical	+0.0172	0.02867
17	193063-3	Analytical	+0.0194	0.03239
18	193063-4	Analytical	+0.0193	0.03214
19	193063-5	Analytical	+0.0766	0.12786
20	193063-6	Analytical	+0.0197	0.03295
21	193063-7	Analytical	+0.0196	0.03267

22	193093-1	Analytical	+0.0023	0.00377
23	CCV	Analytical	+0.2148	0.35853
24	CCB	Analytical	+0.0022	0.00367
25	193093-2	Analytical	+0.0076	0.01263
26	CCV	Analytical	+0.2083	0.34769
27	CCB	Analytical	+0.0023	0.00377

3-6-07 [illegible]

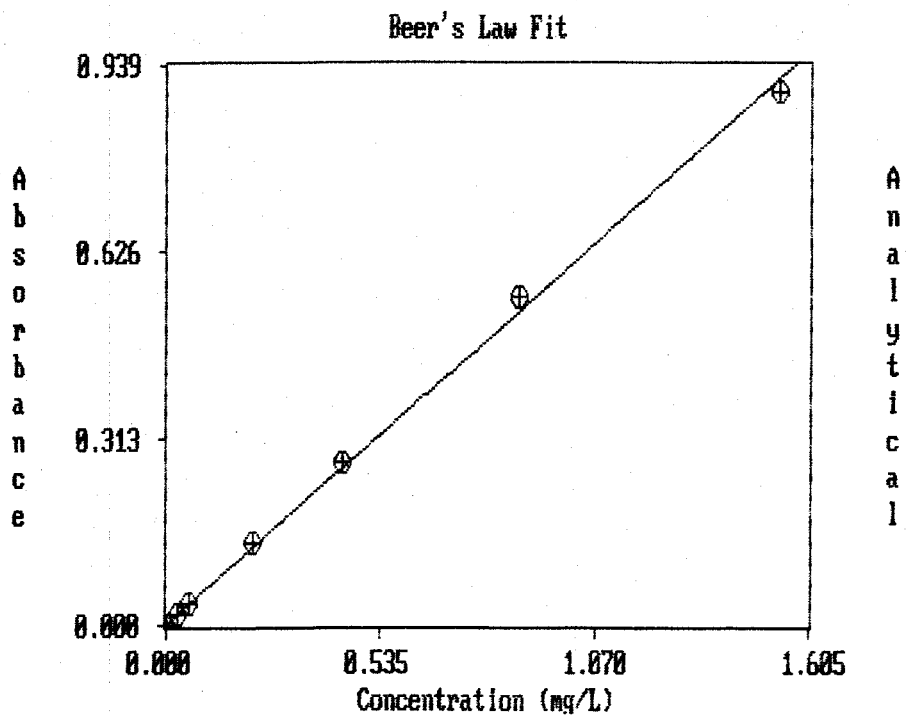
Date : ~~01-07-2007~~
Time : 13:20:09
Operator : DM

---> Standard Calibration Report <---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



---> **Standard Calibration Report** <---

Date : ~~01-07-2007~~ 3-6-07
Time : 13:20:07
Operator : DM

ile Name : C:\UV\DATA\SS1106.STD

ample Name : sulfide
olvent Name : CAL 11-16-06
onc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122733
Date Started: 06-MAR-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193027-001			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193027-002			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193027-003			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193027-004			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193027-005			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193027-006			Treadwell & Rollo	Water	SULFIDE	12-MAR-2007
193035-001			LFR Levine Fricke	Water	SULFIDE	06-MAR-2007
193035-002			LFR Levine Fricke	Water	SULFIDE	06-MAR-2007
193063-001			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193063-003			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193063-004			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193063-005			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193063-006			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193063-007			LFR Levine Fricke	Water	SULFIDE	07-MAR-2007
193093-001			Strategic Engineer	Water	DISS SULFIDE	07-MAR-2007
193093-002			Strategic Engineer	Water	DISS SULFIDE	07-MAR-2007
QC377652	BLANK			Water	SULFIDE	
QC377653	MS	of 193027-002		Water	SULFIDE	
QC377654	MSD	of 193027-002		Water	SULFIDE	
QC377655	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	122770
Matrix:	Water	Sampled:	02/27/07
Units:	mg/L	Received:	02/28/07
Diln Fac:	1.000	Analyzed:	03/06/07

Field ID	Type	Lab ID	Result	RL
LF6GW105	SAMPLE	193027-001	610	10
1065PZ7A	SAMPLE	193027-002	650	10
231GW09	SAMPLE	193027-003	510	10
DUP0227072A	SAMPLE	193027-004	590	10
DUP0227072B	SAMPLE	193027-005	650	10
DUP0227072C	SAMPLE	193027-006	490	10
LF10GW03	SAMPLE	193027-007	530	10
BB3GW100	SAMPLE	193027-008	740	10
LF10SP01	SAMPLE	193027-013	380	10
LF10GW01	SAMPLE	193027-014	430	10
LF10GW02	SAMPLE	193027-015	410	10
	BLANK	QC377801	ND	10

ND= Not Detected
RL= Reporting Limit

99.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193027	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	1065PZ7A	Batch#:	122770
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Water	Received:	02/28/07
Units:	mg/L	Analyzed:	03/06/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC377802		100.0	104.0		104	75-126		
BSD	QC377803		100.0	106.0		106	75-126	2	21
SDUP	QC377804	654.0		648.0	10.00			1	24

RL= Reporting Limit
RPD= Relative Percent Difference

100.0

Analysis: **Total Dissolved Solids**
Method: **EPA160.1** / SMWW 2540c
Matrix: Water
SOP#: tds_rv 9.doc

Analyst: SJ
Analysis Date: **06-Mar-07**
Batch #: **122770**

BATCH QC DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	Recovery,%	RPD,%
MB	50	1	51.7190	51.7193	0.0003	ND	10					
BS	50	1	54.9858	54.9910	0.0052	104.0	10	1,000	5	100	**104**	
BSD	50	1	48.3807	48.3860	0.0053	106.0	10	1,000	5	100	**106**	**1.90**
193027-00	50	1	48.5038	48.5365	0.0327	654.0	10					
SDUP	50	1	51.4732	51.5056	0.0324	648.0	10					**0.92**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193027-00	50	1	50.8531	50.8836	0.0305	610.0	10
193027-00	50	1	48.5038	48.5365	0.0327	654.0	10
193027-00	50	1	51.0500	51.0754	0.0254	508.0	10
193027-00	50	1	45.4825	45.5121	0.0296	592.0	10
193027-00	50	1	48.8175	48.8501	0.0326	652.0	10
193027-00	50	1	50.3396	50.3643	0.0247	494.0	10
193027-00	50	1	55.6965	55.7228	0.0263	526.0	10
193027-00	50	1	56.6109	56.6480	0.0371	742.0	10
193027-01	50	1	53.0632	53.0821	0.0189	378.0	10
193027-01	50	1	54.4265	54.4481	0.0216	432.0	10
193027-01	50	1	55.8182	55.8389	0.0207	414.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: RShiffa 3/12/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122730

Prep Date: 3/6/07
Prep Time: 14:30

Benchbook#: **BK 2420**
Page: **70**

Filter Mfg/ Lot#: Env. Exp. 655614
Spike WS#: 5 5560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/6/07	3/8/07	3/8/07	3/8/07		
Time:	15:00	8:00	10:00	11:00		
Temp (C):	90	180	180	180		

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	2	51.7190	51.7195	51.7193	X
	BS		↓	MAN	54.9855	54.9912	54.9910	X
	BSD		↓	BUM	48.3807	48.3860	48.3860	X
	193027-1 G	956	50	6	50.8531	50.8834	50.8836	X
5	-2	1012		GEO	48.5038	48.5362	48.5365	X
	SOUP -2	↓		69	51.4732	51.5055	51.5056	X
	-3 ↓	734		NEV	51.0500	51.0752	51.0754	X
	-4 C	946		CLA	45.4825	45.5119	45.5121	X
	-5 F	1014		9	48.8175	48.8499	48.8501	X
10	-6 C	740		SAV	50.3396	50.3641	50.3643	X
	-7 E	805		DOE	55.6965	55.7226	55.7228	X
	-8 ↓	1327		JHN	56.6109	56.6475	56.6480	X
	-13 F	637		K	53.0632	53.0821	53.0821	X
	-14 E	657		IM	54.4265	54.4477	54.4481	X
15	-15 ↓	640	↓	GENE	55.8182	55.8391	55.8389	X
20								

* Constant weight must be within 0.0005 from previous reading.

3/6/07
Analyst / Date

3/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122770
Date Started: 06-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193027-001		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-002		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-003		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-004		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-005		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-006		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-007		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-008		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-013		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-014		Treadwell & Rollo	Water	TDS	12-MAR-2007
193027-015		Treadwell & Rollo	Water	TDS	12-MAR-2007
QC377801	BLANK		Water	TDS	
QC377802	BS		Water	TDS	
QC377803	BSD		Water	TDS	
QC377804	SDUP of 193027-002		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193055

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID	Sample ID	Lab ID
1065PZ3B	193055-001	1349MW105	193055-014
LF6GW104	193055-002	TB0228073A	193055-015
LF6GW106	193055-003	LF01GW01	193055-016
LF6GW103	193055-004	LF01GW02	193055-017
LF6GW100	193055-005	LF01GW03	193055-018
LF6GW101	193055-006	LF01GW04	193055-019
DUP0228072A	193055-007	LF01GW05	193055-020
LF10GW100	193055-008	LF01GW06	193055-021
LF4GW103	193055-009	LF01GW07	193055-022
LF4GW104	193055-010	EPSP01	193055-023
1349MW02	193055-011	LF02GW01	193055-024
1349MW103	193055-012	LF02GW02	193055-025
1349MW104	193055-013	DUP0228071A	193055-026

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/23/07
Operations Manager

Signature: _____ Date: 3/22/07
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193055**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/01/07**
Samples Received:	**03/01/07**

This hardcopy data package contains sample and QC results for twenty six water samples, requested for the above referenced project on 03/01/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
High surrogate recoveries were observed for hexacosane in DUP0228072A (lab # 193055-007) and 1349MW103 (lab # 193055-012); no target analytes were detected in these samples. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Pesticides (EPA 8081A):
High response was observed for methoxychlor in the ICV analyzed 03/01/07 02:03; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. Low responses were observed for beta-BHC, delta-BHC, and endosulfan I in the ICV analyzed 03/01/07 01:49; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. High response was observed for methoxychlor; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. High responses were observed for a number of analytes in the CCV analyzed 03/05/07 18:35; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
Low surrogate recoveries were observed for decachlorobiphenyl in a number of samples; the corresponding TCMX surrogate recoveries were within limits. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
No analytical problems were encountered.

Metals (EPA 6020) Water:
No analytical problems were encountered.

127.0

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193055**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/01/07**
Samples Received:	**03/01/07**

Metals (EPA 6020 and EPA 7470A) Filtrate:
High recovery was observed for calcium in the MS of LF01GW06 (lab # 193055-021); the BS/BSD were within limits, and the associated RPD was within limits. High % difference was observed for magnesium in the serial dilution of LF01GW06 (lab # 193055-021). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

127.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193055

CHAIN OF CUSTODY RECORD
PRESIDIO OF SAN FRANCISCO

COC No. OP 2182
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): [signature]
Sent to Laboratory (Name): CET

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260) MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other) (15)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX/MTBE	Total Sulfide	Dissolved Metals (22)	PCB's	Dissolved Metals (23)	Dissolved Metals (14)	COMMENTS / NOTES
-1	1065PZ3B	2/28/07	925			X		9		3		12	X	X	X		X		X		X		X	X					Collected MS/MSD
-2	LF6GW104		1110			X				1		6		X	X		X				X	X		X	X				
-3	LF6GW106		1200			X				1		6		X	X		X				X	X		X	X				
-4	LF6GW103		1235			X		3		1		8	X	X			X	X			X	X		X	X	X			
-5	LF6GW100		1345			X		3		1		8	X	X			X	X			X	X		X		X	X		
-6	LF6GW101		1440			X		3		1		8	X	X			X	X			X	X		X		X	X		
-7	DUP0228072A		945			X		3		1		4	X	X	X		X		X		X		X	X					
-8	LF10GW100		845			X		3		1		3	X	X	X		X				X		X				X		
-9	LF4GW103		940			X				1		3					X				X					X		X	
-10	LF4GW104		1010			X				1		3					X				X					X		X	
-11	1349MW02		1105			X		6		1		7	X	X	X	X	X	X			X	X				X	X		
-12	1349MW103		1355			X		6		1		7	X	X	X	X	X	X			X	X					X		
-13	1349MW104		1300			X		6		1		7	X	X	X	X	X	X			X	X					X		
-14	1349MW105		1445			X		6		1		7	X	X	X	X	X	X			X	X					X		
-15	TB0228073A		—			X										X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: ~~2/28/07~~ 3/1/07	RECEIVED BY: [signature]	DATE: 3/1/07 1215
PRINT NAME: Devin Raynal	FIRM: BTS	TIME: 1520	PRINT NAME: AARON GRENIER	FIRM: CET	TIME: 1215
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd cold & intact Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Samples Cold & Intact

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193055

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2183
Page: ____ of ____

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / P. Cornish
Recorder (signature required): Pat Lin
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Cyanide	COMMENTS / NOTES
16	LF01GW01	2/28/07	1315			X				1	1	1					X		X		X		X	
17	LF01GW02		1350			X				1	1	1					X		X		X		X	
18	LF01GW03		1540			X				1	1	1					X		X		X		X	
19	LF01GW04		925			X				1	1	1					X		X		X		X	
20	LF01GW05		1422			X				1	1	1					X		X		X		X	
21	LF01GW06		1024			X				1	1	1					X		X		X		X	
22	LF01GW07		1500			X				1	1	1	•			•	X		X		X		X	
23	EPS101		1055			X				2	1	1					X		X	X	X		X	
24	LF02GW01		1145			X				1	1	1					X		X		X		X	
25	LF02GW02		1238			X				1	1	1					X		X		X		X	
26	DUP022807A		935			X				1	1	1					X		X		X		X	

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: Pat Lin	DATE: 3/1/07	RECEIVED BY: [signature]	DATE: 3/1/07
PRINT NAME: Pete Cornish FIRM: BTS	TIME:	PRINT NAME: AARON CRENIER FIRM: CT	TIME: 1215
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd cold + intact Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Samples Cold & Intact

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193055 Date Received: 3-01-07 Number of Coolers: 6
Client: Treadwell's Rollo Project: Presidio IQ07

A. Preliminary Examination Phase
Date Opened: 3-01-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over lip of cooler Seal date: 3-1-07 Seal name: R
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: wet Temperature: 2.9°C, 4.2°C, 3.3°C, 1.2°C, 2.3°C, 2.1°C

B. Login Phase
Date Logged In: 3-01-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... YES (NO)
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... YES (NO)
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
4.) Sample -021 received Nine containers, COC states 3, logged in as MS/MSD per SES instructions
6.) HNO_3 (C49025) added to sample -009

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ3B	Batch#:	122624
Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.8	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	65-135	EPA 8015B
Bromofluorobenzene (FID)	100	65-135	EPA 8015B
Trifluorotoluene (PID)	97	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF6GW103	Batch#:	122624
Lab ID:	193055-004	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	108	65-135

ND= Not Detected
RL= Reporting Limit

3.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF6GW100	Batch#:	122624
Lab ID:	193055-005	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	100	65-135

ND= Not Detected
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF6GW101	Batch#:	122624
Lab ID:	193055-006	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	103	65-135

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DUP0228072A	Batch#:	122624
Lab ID:	193055-007	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	4.8	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	113	65-135	EPA 8015B
Bromofluorobenzene (FID)	120	65-135	EPA 8015B
Trifluorotoluene (PID)	113	65-135	EPA 8021B
Bromofluorobenzene (PID)	119	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10GW100	Batch#:	122624
Lab ID:	193055-008	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	10 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	65-135	EPA 8015B
Bromofluorobenzene (FID)	97	65-135	EPA 8015B
Trifluorotoluene (PID)	95	65-135	EPA 8021B
Bromofluorobenzene (PID)	97	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW02	Batch#:	122624
Lab ID:	193055-011	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	94	65-135

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW103	Batch#:	122624
Lab ID:	193055-012	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW104	Batch#:	122624
Lab ID:	193055-013	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	99	65-135

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW105	Batch#:	122624
Lab ID:	193055-014	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/02/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377180	Batch#:	122624
Matrix:	Water	Analyzed:	03/01/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	65-135	EPA 8015B
Bromofluorobenzene (FID)	98	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377181	Batch#:	122624
Matrix:	Water	Analyzed:	03/01/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.69	103	65-135
Benzene	20.00	21.33	107	65-135
Toluene	20.00	21.89	109	65-135
Ethylbenzene	20.00	21.79	109	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	109	65-135
Bromofluorobenzene (PID)	114	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377182	Batch#:	122624
Matrix:	Water	Analyzed:	03/01/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,968	98	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	65-135
Bromofluorobenzene (FID)	121	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3B	Batch#:	122624
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/01/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377183

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.08	2,000	1,923	95	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	65-135
Bromofluorobenzene (FID)	125	65-135

Type: MSD Lab ID: QC377184

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,911	95	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	126	65-135

RPD= Relative Percent Difference

Confirmation Report for 193055 MBTXE Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193055-001	1065PZ3B	MTBE	2.810	2.480	13	-12
193055-007	DUP0228072A	MTBE	4.790	3.414	34	-29
193055-008	LF10GW100	MTBE	10.03 C	5.960	51	-41

C=RPD between columns exceeds 40%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCVOA Water: EPA 8021B

Inst : GC19
Calnum : 347068385001
Units : ng

Name : gc19mbtxe051
Date : 17-FEB-2007 18:10
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	047_044	347068385044	BTXE_1	17-FEB-2007 18:10	S5559 (1000X), S5029 (5000X)
L2	047_045	347068385045	MTBE_1	17-FEB-2007 18:48	S5558 (1250X), S5029 (5000X)
L3	047_046	347068385046	BTXE_2	17-FEB-2007 19:25	S5558 (500X), S5029 (5000X)
L4	047_047	347068385047	BTXE_3	17-FEB-2007 20:03	S5558 (125X), S5029 (5000X)
L5	047_048	347068385048	BTXE_4	17-FEB-2007 20:41	S5557 (1000X), S5029 (5000X)
L6	047_049	347068385049	BTXE_5	17-FEB-2007 21:18	S5557 (500X), S5029 (5000X)
L7	047_050	347068385050	BTXE_6	17-FEB-2007 21:56	S5557 (250X), S5029 (5000X)
L8	047_063	347068385063	MTBE_7	18-FEB-2007 06:05	S4993 (500X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		2886.9	3048.4	3236.4	2635.9	2755.2	2723.0	2571.4	AVRG		3.53E-4		2836.7	8	0.995	20	
Benzene	B	14240		14306	14293	12990	13566	13326		AVRG		7.25E-5		13787	4	0.995	20	
Toluene	B	16582		13300	13008	11890	12450	12259		AVRG		7.55E-5		13248	13	0.995	20	
Ethylbenzene	B	12370		11434	11173	10085	10730	10909		AVRG		9.00E-5		11117	7	0.995	20	
m,p-Xylenes	B	18623		15166	15442	13916	14741	14275		AVRG		6.51E-5		15360	11	0.995	20	
o-Xylene	B	12104		11014	11170	9965.1	10613	10549		AVRG		9.17E-5		10903	7	0.995	20	
MTBE	C		1198.9	1153.7	914.89	1153.3	1198.9	929.49	1299.4	AVRG		8.92E-4		1121.2	13	0.995	20	
Benzene	C	3580.4		3835.3	4053.4	3943.1	4184.4	4159.3		AVRG		2.53E-4		3959.3	6	0.995	20	
Toluene	C	3808.4		3464.9	3688.6	3606.9	3855.9	3863.8		AVRG		2.69E-4		3714.8	4	0.995	20	
Ethylbenzene	C	2912.0		3116.4	3368.3	3227.7	3490.8	3513.2		AVRG		3.06E-4		3271.4	7	0.995	20	
m,p-Xylenes	C	4532.0		4113.0	4353.7	4114.7	4466.1	4499.1		AVRG		2.30E-4		4346.4	4	0.995	20	
o-Xylene	C	2895.2		2923.4	3241.0	3017.3	3301.6	3364.4		AVRG		3.20E-4		3123.8	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000		25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: MJM Date: 02/20/07 Reviewer: CW Date: 02/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347068385001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 GCVOA Water
EPA 8021B

Inst : GC19 Name : gc19mbtxe051
Calnum : 347068385001 Cal Date: 17-FEB-2007

ICV 347068385066 (047_066 18-FEB-2007) stds: S5206 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2836.7	2875.4	100.0	101.4	ng	1	15	
Benzene	B	13787	15452	100.0	112.1	ng	12	15	
Toluene	B	13248	14379	100.0	108.5	ng	9	15	
Ethylbenzene	B	11117	11530	100.0	103.7	ng	4	15	
m,p-Xylenes	B	15360	14107	200.0	183.7	ng	-8	15	
o-Xylene	B	10903	11106	100.0	101.9	ng	2	15	
MTBE	C	1121.2	1229.0	100.0	109.6	ng	10	15	
Benzene	C	3959.3	4372.3	100.0	110.4	ng	10	15	
Toluene	C	3714.8	3990.3	100.0	107.4	ng	7	15	
Ethylbenzene	C	3271.4	3461.5	100.0	105.8	ng	6	15	
m,p-Xylenes	C	4346.4	4062.2	200.0	186.9	ng	-7	15	
o-Xylene	C	3123.8	3091.0	100.0	98.95	ng	-1	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347073972001
Units : ng

Name : GC19 TFT/BFB 051
Date : 20-FEB-2007 09:29
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_002	347073972002	TFT/BFB_1	20-FEB-2007 09:29	S5343 (5000X)
L2	051_003	347073972003	TFT/BFB_2	20-FEB-2007 10:35	S5344 (5000X)
L3	051_004	347073972004	TFT/BFB_3	20-FEB-2007 11:12	S5345 (5000X)
L4	051_005	347073972005	TFT/BFB_4	20-FEB-2007 11:50	S5346 (5000X)
L5	051_006	347073972006	TFT/BFB_5	20-FEB-2007 12:28	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1831.3	1723.2	1644.4	1544.3	1564.2	AVRG		6.02E-4		1661.5	7	0.995	20	
Bromofluorobenzene (FID)	A	1001.8	966.25	884.66	867.71	860.32	AVRG		0.00109		916.16	7	0.995	20	
Trifluorotoluene (PID)	B	4854.0	4635.6	4428.7	4126.8	4122.7	AVRG		2.26E-4		4433.5	7	0.995	20	
Bromofluorobenzene (PID)	B	8604.1	8212.1	7725.8	7400.6	7493.5	AVRG		1.27E-4		7887.2	6	0.995	20	
Trifluorotoluene (PID)	C	1224.1	1186.3	1188.6	1130.2	1135.1	AVRG		8.53E-4		1172.8	3	0.995	20	
Bromofluorobenzene (PID)	C	2290.0	2222.9	2123.3	2049.5	2078.1	AVRG		4.65E-4		2152.8	5	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 02/20/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193055 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377181 IDF : 1.0
Seqnum : 347087050002.1 File : 060_002 Time : 01-MAR-2007 11:28
Standards: S5313 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347068385001	17-FEB-2007	2836.7	2935.1	100.0	103.5	ng	3	15	u
MTBE	C	347068385001	17-FEB-2007	1121.2	960.22	100.0	85.64	ng	-14	15	
Benzene	B	347068385001	17-FEB-2007	13787	14702	100.0	106.6	ng	7	15	u
Benzene	C	347068385001	17-FEB-2007	3959.3	3735.1	100.0	94.34	ng	-6	15	
Toluene	B	347068385001	17-FEB-2007	13248	14503	100.0	109.5	ng	9	15	u
Toluene	C	347068385001	17-FEB-2007	3714.8	3402.2	100.0	91.59	ng	-8	15	
Ethylbenzene	B	347068385001	17-FEB-2007	11117	12114	100.0	109.0	ng	9	15	u
Ethylbenzene	C	347068385001	17-FEB-2007	3271.4	2998.1	100.0	91.65	ng	-8	15	
m,p-Xylenes	B	347068385001	17-FEB-2007	15360	16926	100.0	110.2	ng	10	15	u
m,p-Xylenes	C	347068385001	17-FEB-2007	4346.4	3931.3	100.0	90.45	ng	-10	15	
o-Xylene	B	347068385001	17-FEB-2007	10903	12167	100.0	111.6	ng	12	15	u
o-Xylene	C	347068385001	17-FEB-2007	3123.8	2859.8	100.0	91.55	ng	-8	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1827.7	450.0	495.0	ng	10	15	
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1041.1	450.0	511.4	ng	14	15	
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	4825.9	450.0	489.8	ng	9	15	u
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1196.9	450.0	459.2	ng	2	15	
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	8972.2	450.0	511.9	ng	14	15	u
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2211.4	450.0	462.3	ng	3	15	

Analyst: MJM Date: 03/05/07 Reviewer: MCH Date: 03/12/07

u=use

347087050002.1

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193055 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377182 IDF : 1.0
Seqnum : 347087050003.1 File : 060_003 Time : 01-MAR-2007 12:05
Standards: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1543.7	10000	9838	ng	-2	15	u
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1996.4	450.0	540.7	ng	**20**	15	c+ u
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1106.2	450.0	543.3	ng	**21**	15	c+ u
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5632.7	450.0	571.7	ng	**27**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1366.9	450.0	524.4	ng	**17**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	9470.0	450.0	540.3	ng	**20**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2386.6	450.0	498.9	ng	11	15	

MJM 03/02/07 : PID surrogates are not applicable. [general version]

MJM 03/02/07 [Trifluorotoluene (FID) A]: Passes 72-135% control limits range. [general version]

MJM 03/02/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits range. [general version]

Analyst: MJM Date: 03/05/07 Reviewer: MCH Date: 03/12/07

+=high bias c=CCV u=use

347087050003.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347087050012 File : 060_012 Time : 01-MAR-2007 22:37
Standards: S5313 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1862.9	450.0	504.6	ng	12	15	
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1075.2	450.0	528.1	ng	**17**	15	c+
MTBE	B	347068385001	17-FEB-2007	2836.7	3067.4	150.0	162.2	ng	8	15	
Benzene	B	347068385001	17-FEB-2007	13787	15334	150.0	166.8	ng	11	15	
Toluene	B	347068385001	17-FEB-2007	13248	14945	150.0	169.2	ng	13	15	
Ethylbenzene	B	347068385001	17-FEB-2007	11117	12781	150.0	172.5	ng	15	15	
m,p-Xylenes	B	347068385001	17-FEB-2007	15360	17381	150.0	169.7	ng	13	15	
o-Xylene	B	347068385001	17-FEB-2007	10903	12491	150.0	171.9	ng	15	15	
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5080.5	450.0	515.7	ng	15	15	
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	9453.8	450.0	539.4	ng	**20**	15	c+
MTBE	C	347068385001	17-FEB-2007	1121.2	1113.1	150.0	148.9	ng	-1	15	
Benzene	C	347068385001	17-FEB-2007	3959.3	3672.6	150.0	139.1	ng	-7	15	
Toluene	C	347068385001	17-FEB-2007	3714.8	3521.4	150.0	142.2	ng	-5	15	
Ethylbenzene	C	347068385001	17-FEB-2007	3271.4	3155.0	150.0	144.7	ng	-4	15	
m,p-Xylenes	C	347068385001	17-FEB-2007	4346.4	4077.6	150.0	140.7	ng	-6	15	
o-Xylene	C	347068385001	17-FEB-2007	3123.8	2994.2	150.0	143.8	ng	-4	15	
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1189.6	450.0	456.4	ng	1	15	
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2288.0	450.0	478.3	ng	6	15	

MJM 03/02/07 : FID Surrogates N/A

MJM 03/02/07 [Bromofluorobenzene (PID) B]: Passes 78-121% control limits range.

Analyst: MJM Date: 03/02/07 Reviewer: MCH Date: 03/12/07

+=high bias c=CCV

347087050012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347087050014 File : 060_014 Time : 01-MAR-2007 23:52
Standards: S5365 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1537.7	15000	14700	ng	-2	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	1948.9	450.0	527.8	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1077.4	450.0	529.2	ng	**18**	15	c+
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	5415.0	450.0	549.6	ng	**22**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	9549.3	450.0	544.8	ng	**21**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1452.4	450.0	557.3	ng	**24**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2379.0	450.0	497.3	ng	11	15	

MJM 03/02/07 [Trifluorotoluene (FID) A]: Passes 72-135% control limits range.

MJM 03/02/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits range.

MJM 03/02/07 : PID surrogates are not applicable.

Analyst: MJM Date: 03/02/07 Reviewer: MCH Date: 03/12/07

+=high bias c=CCV

347087050014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347087050022 File : 060_022 Time : 02-MAR-2007 04:53
Standards: S5365 (500X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1528.3	20000	19480	ng	-3	15	
Trifluorotoluene (FID)	A	347073972001	20-FEB-2007	1661.5	2108.6	450.0	571.1	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	347073972001	20-FEB-2007	916.16	1167.6	450.0	573.5	ng	**27**	15	c+
Trifluorotoluene (PID)	B	347073972001	20-FEB-2007	4433.5	6236.2	450.0	633.0	ng	**41**	15	c+
Bromofluorobenzene (PID)	B	347073972001	20-FEB-2007	7887.2	11164	450.0	637.0	ng	**42**	15	c+
Trifluorotoluene (PID)	C	347073972001	20-FEB-2007	1172.8	1700.6	450.0	652.5	ng	**45**	15	c+
Bromofluorobenzene (PID)	C	347073972001	20-FEB-2007	2152.8	2780.5	450.0	581.2	ng	**29**	15	c+

MJM 03/02/07 : PID surrogates are not applicable.

MJM 03/02/07 [Trifluorotoluene (FID) A]: Passes 72-135% control limits range.

MJM 03/02/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits range.

Analyst: MJM Date: 03/02/07 Reviewer: MCH Date: 03/12/07

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347068385

Instrument : GC19 Begun : 02/16/07 11:45
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	047_001	X	IB			02/16/07 11:45	1.0	1
002	047_002	X	CCV			02/16/07 12:23	1.0	2 1
003	047_003	CCV/LCS	QC375630	Soil	122230	02/16/07 13:01	1.0	3 1
004	047_004	X	CCV			02/16/07 13:56	1.0	2 1
005	047_005	X	CCV			02/16/07 14:50	1.0	2 1
006	047_006	BLANK	QC375629	Soil	122230	02/16/07 17:01	1.0	1
007	047_007	MS	QC375631	Soil	122230	02/16/07 17:38	1.0	3 1
008	047_008	X	QC375632	Soil	122230	02/16/07 18:16	1.0	3 1
009	047_009	SAMPLE	192731-001	Soil	122230	02/16/07 18:54	1.0	1
010	047_010	SAMPLE	192731-003	Soil	122230	02/16/07 19:31	1.0	1
011	047_011	SAMPLE	192731-004	Soil	122230	02/16/07 20:09	1.0	1
012	047_012	SAMPLE	192731-005	Soil	122230	02/16/07 20:47	1.0	1
013	047_013	SAMPLE	192731-006	Soil	122230	02/16/07 21:24	1.0	1
014	047_014	SAMPLE	192731-007	Soil	122230	02/16/07 22:02	1.0	1
015	047_015	CCV	TVH			02/16/07 22:40	1.0	3 1
016	047_016	CCV	TVH			02/16/07 23:17	1.0	3 1
017	047_017	SAMPLE	192740-006	Soil	122230	02/16/07 23:55	1.0	1
018	047_018	SAMPLE	192740-007	Soil	122230	02/17/07 00:33	1.0	1
019	047_019	SAMPLE	192740-008	Soil	122230	02/17/07 01:10	1.0	1
020	047_020	SAMPLE	192740-009	Soil	122230	02/17/07 01:48	1.0	1
021	047_021	SAMPLE	192770-003	Soil	122230	02/17/07 02:26	1.0	1
022	047_022	SAMPLE	192770-004	Soil	122230	02/17/07 03:03	1.0	1
023	047_023	SAMPLE	192770-005	Soil	122230	02/17/07 03:41	1.0	1
024	047_024	SAMPLE	192770-006	Soil	122230	02/17/07 04:18	1.0	1
025	047_025	MSS	192770-009	Soil	122230	02/17/07 04:56	1.0	1
026	047_026	SAMPLE	192770-010	Soil	122230	02/17/07 05:34	1.0	1
027	047_027	CCV	TVH			02/17/07 06:11	1.0	3 1
028	047_028	CCV	TVH			02/17/07 06:49	1.0	3 1
029	047_029	SAMPLE	192770-011	Soil	122230	02/17/07 07:27	1.0	1
030	047_030	SAMPLE	192770-012	Soil	122230	02/17/07 08:04	1.0	1
031	047_031	SAMPLE	192770-013	Soil	122230	02/17/07 08:42	1.0	1
032	047_032	SAMPLE	192770-014	Soil	122230	02/17/07 09:19	1.0	1
033	047_033	MSD	QC375632	Soil	122230	02/17/07 09:57	1.0	3 1
034	047_034	SAMPLE	192770-010	Soil	122230	02/17/07 11:53	1.0	1
035	047_035	SAMPLE	192770-012	Soil	122230	02/17/07 12:31	1.0	1
036	047_036	SAMPLE	192770-014	Soil	122230	02/17/07 13:09	1.0	1
037	047_037	SAMPLE	192770-010	Soil	122230	02/17/07 13:46	1.0	1
038	047_038	SAMPLE	192770-014	Soil	122230	02/17/07 14:24	1.0	1
039	047_039	CCV	TVH			02/17/07 15:02	1.0	3 1
040	047_040	CCV	TVH			02/17/07 15:39	1.0	3 1
041	047_041	X	IB			02/17/07 16:17	1.0	1
042	047_042	X	IB			02/17/07 16:55	1.0	1
043	047_043	X	ICAL			02/17/07 17:32	1.0	4 1
044	047_044	ICAL	BTXE_1			02/17/07 18:10	1.0	4 1
045	047_045	ICAL	MTBE_1			02/17/07 18:48	1.0	5 1
046	047_046	ICAL	BTXE_2			02/17/07 19:25	1.0	5 1
047	047_047	ICAL	BTXE_3			02/17/07 20:03	1.0	5 1
048	047_048	ICAL	BTXE_4			02/17/07 20:41	1.0	6 1
049	047_049	ICAL	BTXE_5			02/17/07 21:18	1.0	6 1
050	047_050	ICAL	BTXE_6			02/17/07 21:56	1.0	6 1
051	047_051	X	MTBE_7			02/17/07 22:34	1.0	7 1
052	047_052	X	IB			02/17/07 23:11	1.0	1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347068385

Instrument : GC19 Begun : 02/16/07 11:45
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	047_053	X	ICV			02/17/07 23:49	1.0	8 1	
054	047_054	X	ICV			02/18/07 00:27	1.0	8 1	
055	047_055	X	IB			02/18/07 01:04	1.0	1	
056	047_056	X	ICAL			02/18/07 01:42	1.0	4 1	
057	047_057	X	ICAL			02/18/07 02:19	1.0	5 1	
058	047_058	X	ICAL			02/18/07 02:57	1.0	5 1	
059	047_059	X	ICAL			02/18/07 03:35	1.0	5 1	
060	047_060	X	ICAL			02/18/07 04:12	1.0	6 1	
061	047_061	X	ICAL			02/18/07 04:50	1.0	6 1	
062	047_062	X	ICAL			02/18/07 05:28	1.0	6 1	
063	047_063	ICAL	MTBE_7			02/18/07 06:05	1.0	7 1	
064	047_064	X	IB			02/18/07 06:43	1.0	1	
065	047_065	X	ICV			02/18/07 07:20	1.0	8 1	
066	047_066	ICV	MBTXE			02/18/07 07:58	1.0	8 1	

MJM 02/20/07 : Sand used in QC: Lot# EM128974-M104164.

Analyst: MJM Date: 02/20/07 Reviewer: CW Date: 02/20/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5559 5=S5558 6=S5557 7=S4993 8=S5206

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347073972

Instrument : GC19 Begun : 02/20/07 08:52
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	051_001	X	IB			02/20/07 08:52	1.0	1	
002	051_002	ICAL	TFT/BFB_1			02/20/07 09:29	1.0	2	
003	051_003	ICAL	TFT/BFB_2			02/20/07 10:35	1.0	3	
004	051_004	ICAL	TFT/BFB_3			02/20/07 11:12	1.0	4	
005	051_005	ICAL	TFT/BFB_4			02/20/07 11:50	1.0	5	
006	051_006	ICAL	TFT/BFB_5			02/20/07 12:28	1.0	6	
007	051_007	X	IB			02/20/07 13:52	1.0	1	
008	051_008	CCV/LCS	QC375858	Water	122292	02/20/07 14:29	1.0	7 1	
009	051_009	CCV/LCS	QC375859	Water	122292	02/20/07 15:07	1.0	8 1	
010	051_010	BLANK	QC375857	Water	122292	02/20/07 17:21	1.0	1	
011	051_011	MS	QC375860	Water	122292	02/20/07 18:53	1.0	8 1	
012	051_012	MSD	QC375861	Water	122292	02/20/07 19:31	1.0	8 1	
013	051_013	SAMPLE	192712-025	Water	122292	02/20/07 20:09	5.0	1	
014	051_014	SAMPLE	192712-029	Water	122292	02/20/07 20:47	5.0	1	
015	051_015	SAMPLE	192762-001	Water	122292	02/20/07 21:24	1.0	1	
016	051_016	MSS	192799-006	Water	122292	02/20/07 22:02	1.0	1	
017	051_017	SAMPLE	192806-001	Water	122292	02/20/07 22:40	1.0	1	
018	051_018	X	MBTXE			02/20/07 23:17	1.0	7 1	
019	051_019	CCV	MBTXE			02/20/07 23:55	1.0	7 1	
020	051_020	CCV	TVH			02/21/07 00:33	1.0	8 1	
021	051_021	CCV	TVH			02/21/07 01:11	1.0	8 1	
022	051_022	SAMPLE	192806-002	Water	122292	02/21/07 01:48	1.0	1	
023	051_023	SAMPLE	192806-003	Water	122292	02/21/07 02:26	1.0	1	
024	051_024	SAMPLE	192806-004	Water	122292	02/21/07 03:04	1.0	1	
025	051_025	SAMPLE	192806-005	Water	122292	02/21/07 03:41	1.0	1	
026	051_026	CCV	TVH			02/21/07 04:19	1.0	8 1	
027	051_027	CCV	TVH			02/21/07 04:56	1.0	8 1	

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5343 3=S5344 4=S5345 5=S5346 6=S5347 7=S5313 8=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347087050

Instrument : GC19 Begun : 03/01/07 10:50
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	060_001	X	IB			03/01/07 10:50	1.0	1	
002	060_002	CCV/LCS	QC377181	Water	122624	03/01/07 11:28	1.0	2 1	
003	060_003	CCV/LCS	QC377182	Water	122624	03/01/07 12:05	1.0	3 1	
004	060_004	BLANK	QC377180	Water	122624	03/01/07 14:12	1.0	1	
005	060_005	SAMPLE	192884-004	Water	122624	03/01/07 17:33	20.0	1	
006	060_006	MSS	193055-001	Water	122624	03/01/07 18:50	1.0	1	
007	060_007	SAMPLE	193055-007	Water	122624	03/01/07 19:28	1.0	1	
008	060_008	SAMPLE	193055-008	Water	122624	03/01/07 20:06	1.0	1	
009	060_009	MS	QC377183	Water	122624	03/01/07 20:44	1.0	3 1	
010	060_010	MSD	QC377184	Water	122624	03/01/07 21:21	1.0	3 1	
011	060_011	SAMPLE	193055-004	Water	122624	03/01/07 21:59	1.0	1	
012	060_012	CCV	MBTXE			03/01/07 22:37	1.0	2 1	
013	060_013	CCV	MBTXE			03/01/07 23:14	1.0	2 1	
014	060_014	CCV	TVH			03/01/07 23:52	1.0	3 1	
015	060_015	X	TVH			03/02/07 00:29	1.0	3 1	
016	060_016	SAMPLE	193055-005	Water	122624	03/02/07 01:07	1.0	1	
017	060_017	SAMPLE	193055-006	Water	122624	03/02/07 01:45	1.0	1	
018	060_018	SAMPLE	193055-011	Water	122624	03/02/07 02:22	1.0	1	
019	060_019	SAMPLE	193055-012	Water	122624	03/02/07 03:00	1.0	1	
020	060_020	SAMPLE	193055-013	Water	122624	03/02/07 03:38	1.0	1	
021	060_021	SAMPLE	193055-014	Water	122624	03/02/07 04:15	1.0	1	
022	060_022	CCV	TVH			03/02/07 04:53	1.0	3 1	
023	060_023	X	TVH			03/02/07 05:31	1.0	3 1	

Analyst: MJM Date: 03/05/07 Reviewer: _____ Date: _____

Standards used: 1=S5029 2=S5313 3=S5365

REPORTING SUMMARY FOR 193055 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-001	Gasoline C7-C12	GC19	A	03/01/07 18:50
193055-001	MTBE	GC19	B	03/01/07 18:50
193055-001	Benzene	GC19	B	03/01/07 18:50
193055-001	Toluene	GC19	B	03/01/07 18:50
193055-001	Ethylbenzene	GC19	B	03/01/07 18:50
193055-001	Trifluorotoluene (FID)	GC19	A	03/01/07 18:50
193055-001	Bromofluorobenzene (FID)	GC19	A	03/01/07 18:50
193055-001	Trifluorotoluene (PID)	GC19	B	03/01/07 18:50
193055-001	Bromofluorobenzene (PID)	GC19	B	03/01/07 18:50
193055-001	Xylene (total)	GC19	B	03/01/07 18:50
193055-004	Gasoline C7-C12	GC19	A	03/01/07 21:59
193055-004	Trifluorotoluene (FID)	GC19	A	03/01/07 21:59
193055-004	Bromofluorobenzene (FID)	GC19	A	03/01/07 21:59
193055-005	Gasoline C7-C12	GC19	A	03/02/07 01:07
193055-005	Trifluorotoluene (FID)	GC19	A	03/02/07 01:07
193055-005	Bromofluorobenzene (FID)	GC19	A	03/02/07 01:07
193055-006	Gasoline C7-C12	GC19	A	03/02/07 01:45
193055-006	Trifluorotoluene (FID)	GC19	A	03/02/07 01:45
193055-006	Bromofluorobenzene (FID)	GC19	A	03/02/07 01:45
193055-007	Gasoline C7-C12	GC19	A	03/01/07 19:28
193055-007	MTBE	GC19	B	03/01/07 19:28
193055-007	Benzene	GC19	B	03/01/07 19:28
193055-007	Toluene	GC19	B	03/01/07 19:28
193055-007	Ethylbenzene	GC19	B	03/01/07 19:28
193055-007	Trifluorotoluene (FID)	GC19	A	03/01/07 19:28
193055-007	Bromofluorobenzene (FID)	GC19	A	03/01/07 19:28
193055-007	Trifluorotoluene (PID)	GC19	B	03/01/07 19:28
193055-007	Bromofluorobenzene (PID)	GC19	B	03/01/07 19:28
193055-007	Xylene (total)	GC19	B	03/01/07 19:28
193055-008	Gasoline C7-C12	GC19	A	03/01/07 20:06
193055-008	MTBE	GC19	B	03/01/07 20:06
193055-008	Benzene	GC19	B	03/01/07 20:06
193055-008	Toluene	GC19	B	03/01/07 20:06
193055-008	Ethylbenzene	GC19	B	03/01/07 20:06
193055-008	Trifluorotoluene (FID)	GC19	A	03/01/07 20:06
193055-008	Bromofluorobenzene (FID)	GC19	A	03/01/07 20:06
193055-008	Trifluorotoluene (PID)	GC19	B	03/01/07 20:06
193055-008	Bromofluorobenzene (PID)	GC19	B	03/01/07 20:06
193055-008	Xylene (total)	GC19	B	03/01/07 20:06
193055-011	Gasoline C7-C12	GC19	A	03/02/07 02:22
193055-011	Trifluorotoluene (FID)	GC19	A	03/02/07 02:22
193055-011	Bromofluorobenzene (FID)	GC19	A	03/02/07 02:22
193055-012	Gasoline C7-C12	GC19	A	03/02/07 03:00
193055-012	Trifluorotoluene (FID)	GC19	A	03/02/07 03:00
193055-012	Bromofluorobenzene (FID)	GC19	A	03/02/07 03:00
193055-013	Gasoline C7-C12	GC19	A	03/02/07 03:38

REPORTING SUMMARY FOR 193055 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-013	Trifluorotoluene (FID)	GC19	A	03/02/07 03:38
193055-013	Bromofluorobenzene (FID)	GC19	A	03/02/07 03:38
193055-014	Gasoline C7-C12	GC19	A	03/02/07 04:15
193055-014	Trifluorotoluene (FID)	GC19	A	03/02/07 04:15
193055-014	Bromofluorobenzene (FID)	GC19	A	03/02/07 04:15
QC377180	Gasoline C7-C12	GC19	A	03/01/07 14:12
QC377180	MTBE	GC19	B	03/01/07 14:12
QC377180	Benzene	GC19	B	03/01/07 14:12
QC377180	Toluene	GC19	B	03/01/07 14:12
QC377180	Ethylbenzene	GC19	B	03/01/07 14:12
QC377180	Trifluorotoluene (FID)	GC19	A	03/01/07 14:12
QC377180	Bromofluorobenzene (FID)	GC19	A	03/01/07 14:12
QC377180	Trifluorotoluene (PID)	GC19	B	03/01/07 14:12
QC377180	Bromofluorobenzene (PID)	GC19	B	03/01/07 14:12
QC377180	Xylene (total)	GC19	B	03/01/07 14:12
QC377181	MTBE	GC19	B	03/01/07 11:28
QC377181	Benzene	GC19	B	03/01/07 11:28
QC377181	Toluene	GC19	B	03/01/07 11:28
QC377181	Ethylbenzene	GC19	B	03/01/07 11:28
QC377181	Trifluorotoluene (PID)	GC19	B	03/01/07 11:28
QC377181	Bromofluorobenzene (PID)	GC19	B	03/01/07 11:28
QC377182	Gasoline C7-C12	GC19	A	03/01/07 12:05
QC377182	Trifluorotoluene (FID)	GC19	A	03/01/07 12:05
QC377182	Bromofluorobenzene (FID)	GC19	A	03/01/07 12:05
QC377183	Gasoline C7-C12	GC19	A	03/01/07 20:44
QC377183	Trifluorotoluene (FID)	GC19	A	03/01/07 20:44
QC377183	Bromofluorobenzene (FID)	GC19	A	03/01/07 20:44
QC377184	Gasoline C7-C12	GC19	A	03/01/07 21:21
QC377184	Trifluorotoluene (FID)	GC19	A	03/01/07 21:21
QC377184	Bromofluorobenzene (FID)	GC19	A	03/01/07 21:21

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/22/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000	Prepared:	03/12/07
Batch#:	123003		

Field ID: LF6GW103
Type: SAMPLE
Lab ID: 193055-004
Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	102	65-135

Field ID: LF6GW100
Type: SAMPLE
Lab ID: 193055-005
Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	120	65-135

Field ID: LF6GW101
Type: SAMPLE
Lab ID: 193055-006
Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	102	65-135

Type: BLANK
Lab ID: QC378780
Analyzed: 03/13/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	134	65-135

ND= Not Detected
RL= Reporting Limit
SGCU= Silica gel cleanup

119.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000	Prepared:	03/12/07
Batch#:	123003		

Field ID: 1065PZ3B
Type: SAMPLE
Lab ID: 193055-001

Analyzed: 03/13/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID: LF6GW104
Type: SAMPLE
Lab ID: 193055-002

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

Field ID: LF6GW106
Type: SAMPLE
Lab ID: 193055-003

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID: DUP0228072A
Type: SAMPLE
Lab ID: 193055-007

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	152 *	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

121.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000	Prepared:	03/12/07
Batch#:	123003		

Field ID: LF10GW100
Type: SAMPLE
Lab ID: 193055-008

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID: 1349MW02
Type: SAMPLE
Lab ID: 193055-011

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

Field ID: 1349MW103
Type: SAMPLE
Lab ID: 193055-012

Analyzed: 03/14/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	161 *	65-135

Field ID: 1349MW104
Type: SAMPLE
Lab ID: 193055-013

Analyzed: 03/13/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000	Prepared:	03/12/07
Batch#:	123003		

Field ID:	1349MW105	Analyzed:	03/13/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	193055-014		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Type:	BLANK	Analyzed:	03/13/07
Lab ID:	QC378780	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	134	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

121.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378781	Batch#:	123003
Matrix:	Water	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24 (SGCU)	2,500	2,479	99	65-135

Surrogate	%REC	Limits
Hexacosane (SGCU)	101	65-135

SGCU= Silica gel cleanup

120.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3B	Batch#:	123003
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: MS
Lab ID: QC378782
Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	19.65	2,500	2,660	106	65-135

Surrogate	%REC	Limits
Hexacosane	110	65-135

Type: MSD
Lab ID: QC378783
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,641	105	65-135	1	35

Surrogate	%REC	Limits
Hexacosane	110	65-135

RPD= Relative Percent Difference

124.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779001
Units : mg/L

Name : Diesel 14b
Date : 12-MAR-2007 17:56
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_014	227102779014	DSL_10	12-MAR-2007 17:56	S5413
L2	071_015	227102779015	DSL_100	12-MAR-2007 18:24	S5414
L3	071_016	227102779016	DSL_500	12-MAR-2007 18:53	S5416
L4	071_017	227102779017	DSL_1000	12-MAR-2007 19:22	S5417
L5	071_018	227102779018	DSL_5000	12-MAR-2007 19:50	S5411
L6	071_019	227102779019	DSL_7500	12-MAR-2007 20:18	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	31823	46248	53031	50789	51704	52394	AVRG		2.10E-5		47665	17	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227102779001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227102779001

Name : Diesel 14b
Cal Date: 12-MAR-2007

ICV 227102779021 (071_021 12-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	47665	50636	500.0	531.2	mg/L	6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779003
Units : mg/L

Name : Motor oil 14b
Date : 12-MAR-2007 22:41
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_024	227102779024	MO_50	12-MAR-2007 22:41	S5523
L2	071_025	227102779025	MO_250	12-MAR-2007 23:09	S5524
L3	071_026	227102779026	MO_500	12-MAR-2007 23:38	S5525
L4	071_028	227102779028	MO_5000	13-MAR-2007 00:35	S5522
L5	071_036	227102779036	MO_1000	13-MAR-2007 12:33	S5526

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	39814	38246	37046	36590	38315	AVRG		2.63E-5		38002	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	5000.0	1000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779002
Units : mg/L

Name : Hexacosane 14b
Date : 13-MAR-2007 01:32
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_030	227102779030	HEX_5	13-MAR-2007 01:32	S4639
L2	071_031	227102779031	HEX_10	13-MAR-2007 02:01	S4640
L3	071_032	227102779032	HEX_50	13-MAR-2007 02:29	S5402
L4	071_033	227102779033	HEX_100	13-MAR-2007 02:58	S4644
L5	071_034	227102779034	HEX_200	13-MAR-2007 03:27	S4645

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	59294	61101	60945	63451	62267	AVRG		1.63E-5		61411	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Hexacosane	B	5.0000	10.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

000515

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475001
Units : mg/L

Name : diesel
Date : 24-OCT-2006 17:58
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Diesel C12-C24	10.000	100.00	250.00	500.00	1000.0	2500.0	5000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475003
Units : mg/L

Name : hexacosane
Date : 25-OCT-2006 01:54
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Hexacosane	5.0000	10.000	25.000	50.000	75.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166500697001
Units : mg/L

Name : Mo
Date : 13-DEC-2006 17:24
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166500697001

00058

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_250 IDF : 1.0
Seqnum : 227104259017 File : 072_017 Time : 13-MAR-2007 19:10
Standards: S5258

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	45754	250.0	240.0	mg/L	-4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	56936	50.00	46.36	mg/L	-7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227104259018
Standards: S5603

Run Name: MO_500
File : 072_018

IDF : 1.0
Time : 13-MAR-2007 19:39

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	33136	500.0	436.0	mg/L	-13	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55246	50.00	44.98	mg/L	-10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_500 IDF : 1.0
Seqnum : 227104259033 File : 072_033 Time : 14-MAR-2007 03:03
Standards: S5517

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	49480	500.0	519.0	mg/L	4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	63050	50.00	51.33	mg/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227104259034 File : 072_034 Time : 14-MAR-2007 03:31
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	38012	500.0	500.1	mg/L	0	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	62943	50.00	51.25	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767054
Standards: S5517

Run Name: DSL_500
File : 071b054

IDF : 1.0
Time : 13-MAR-2007 17:38

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51674	500.0	534.4	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	63297	50.00	55.63	mg/L	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167102767055 File : 071b055 Time : 13-MAR-2007 18:10
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	36361	500.0	527.4	mg/L	5	15	
Hexacosane	166428475003	25-OCT-2006	56893	61176	50.00	53.76	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_1000 IDF : 1.0
Seqnum : 167102767067 File : 071b067 Time : 14-MAR-2007 00:59
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	50493	1000	1044	mg/L	4	15	
Hexacosane	166428475003	25-OCT-2006	56893	60847	50.00	53.48	mg/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167102767068 File : 071b068 Time : 14-MAR-2007 01:34
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37099	500.0	538.1	mg/L	8	15	
Hexacosane	166428475003	25-OCT-2006	56893	61317	50.00	53.89	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_250 IDF : 1.0
Seqnum : 167102767080 File : 071b080 Time : 14-MAR-2007 08:26
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51186	250.0	264.7	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	59563	50.00	52.35	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167102767081 File : 071b081 Time : 14-MAR-2007 09:00
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37052	500.0	537.5	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	61638	50.00	54.17	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767089
Standards: S5258

Run Name: DSL_250
File : 071b089

IDF : 1.0
Time : 14-MAR-2007 14:06

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51096	250.0	264.2	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	59543	50.00	52.33	mg/L	5	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166428475

Instrument : GC15B
Method : EPA 8015B

Begun : 10/24/06 13:15
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	297b001	X	IB			10/24/06 13:15	1.0		
002	297b002	X	IB			10/24/06 13:44	1.0		
003	297b003	X	IB			10/24/06 14:12	1.0		
004	297b004	X	IB			10/24/06 14:39	1.0		
005	297b005	X	CM			10/24/06 15:38	1.0	1	
006	297b006	CCV	DSL_250			10/24/06 16:05	1.0	2	
007	297b007	CCV	MO_500			10/24/06 16:33	1.0	3	
008	297b008	CCV	JET_250			10/24/06 17:00	1.0	4	
009	297b009	X	IB			10/24/06 17:31	1.0		
010	297b010	ICAL	DSL_10			10/24/06 17:58	1.0	5	
011	297b011	ICAL	DSL_100			10/24/06 18:26	1.0	6	
012	297b012	ICAL	DSL_250			10/24/06 18:53	1.0	7	
013	297b013	ICAL	DSL_500			10/24/06 19:21	1.0	8	
014	297b014	ICAL	DSL_1000			10/24/06 19:48	1.0	9	
015	297b015	ICAL	DSL_2500			10/24/06 20:15	1.0	10	
016	297b016	ICAL	DSL_5000			10/24/06 20:43	1.0	11	
017	297b017	ICV	DSL_500			10/24/06 21:15	10.0	12	
018	297b018	CCV	MO_500			10/24/06 21:43	1.0	3	
019	297b019	X	IB			10/24/06 22:13	1.0		
020	297b020	ICAL	MO_50			10/24/06 22:40	1.0	13	
021	297b021	ICAL	MOL_250			10/24/06 23:08	1.0	14	
022	297b022	ICAL	MO_500			10/24/06 23:35	1.0	15	
023	297b023	ICAL	MO_1000			10/25/06 00:03	1.0	16	
024	297b024	ICAL	MO_2500			10/25/06 00:30	1.0	17	
025	297b025	ICAL	MO_5000			10/25/06 00:58	1.0	18	
026	297b026	X	IB			10/25/06 01:26	1.0		
027	297b027	ICAL	HEX_5			10/25/06 01:54	1.0	19	
028	297b028	ICAL	HEX_10			10/25/06 02:21	1.0	20	
029	297b029	ICAL	HEX_25			10/25/06 02:48	1.0	21	
030	297b030	ICAL	HEX_50			10/25/06 03:15	1.0	22	
031	297b031	ICAL	HEX_75			10/25/06 03:43	1.0	23	
032	297b032	ICAL	HEX_100			10/25/06 04:10	1.0	24	
033	297b033	ICAL	HEX_200			10/25/06 04:37	1.0	25	
034	297b034	X	IB			10/25/06 05:05	1.0		
035	297b035	ICAL	JET_10			10/25/06 05:33	1.0	26	
036	297b036	ICAL	JET_100			10/25/06 06:00	1.0	27	
037	297b037	ICAL	JET_500			10/25/06 06:28	1.0	28	
038	297b038	ICAL	JET_1000			10/25/06 06:55	1.0	29	
039	297b039	ICAL	JET_2000			10/25/06 07:23	1.0	30	
040	297b040	ICAL	JET_3000			10/25/06 07:50	1.0	31	
041	297b041	ICAL	JET_5000			10/25/06 08:18	1.0	32	
042	297b042	X	IB			10/25/06 08:45	1.0		

Analyst: CP Date: 01/09/07 Reviewer: _____ Date: _____

Standards used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639 20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166500697

Instrument : GC15B
Method : EPA 8015B

Begun : 12/13/06 16:57
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	347b001	X	IB				12/13/06 16:57	1.0	
002	347b002	ICAL	MO_50				12/13/06 17:24	1.0	1
003	347b003	ICAL	MO_250				12/13/06 17:52	1.0	2
004	347b004	ICAL	MO_500				12/13/06 18:20	1.0	3
005	347b005	ICAL	MO_1000				12/13/06 18:48	1.0	4
006	347b006	ICAL	MO_5000				12/13/06 19:15	1.0	5
007	347b007	CCV	MO_500				12/13/06 19:57	1.0	6
008	347b008	CCV	DSL_500				12/13/06 20:24	1.0	7
009	347b009	BLANK	QC367007	S	Soil	120048	12/13/06 20:52	1.0	
010	347b010	LCS	QC367008	S	Soil	120048	12/13/06 21:20	1.0	
011	347b011	SAMPLE	191106-005	S	Soil	120048	12/13/06 21:47	1.0	
012	347b012	SAMPLE	191106-006	S	Soil	120048	12/13/06 22:15	1.0	
013	347b013	SAMPLE	191106-007	S	Soil	120048	12/13/06 22:42	1.0	
014	347b014	SAMPLE	191106-004	S	Soil	120048	12/13/06 23:10	1.0	
015	347b015	SAMPLE	191106-002	S	Soil	120048	12/13/06 23:38	1.0	
016	347b016	SAMPLE	191106-003	S	Soil	120048	12/14/06 00:05	1.0	
017	347b017	X	IB				12/14/06 00:33	1.0	
018	347b018	MS	QC368074		Soil	120310	12/14/06 01:00	1.0	
019	347b019	MSD	QC368075		Soil	120310	12/14/06 01:28	1.0	
020	347b020	CCV	DSL_1000				12/14/06 01:56	1.0	8
021	347b021	CCV	MO_500				12/14/06 02:23	1.0	6
022	347b022	X	CCV				12/14/06 02:50	1.0	8
023	347b023	X	CCV				12/14/06 03:18	1.0	6
024	347b024	SAMPLE	191333-007	S	Soil	120188	12/14/06 03:45	1.0	
025	347b025	SAMPLE	191333-008	S	Soil	120188	12/14/06 04:13	1.0	
026	347b026	SAMPLE	191327-001	S	Water	120297	12/14/06 04:40	1.0	
027	347b027	SAMPLE	191327-002	S	Water	120297	12/14/06 05:08	1.0	
028	347b028	SAMPLE	191372-001	S	Water	120297	12/14/06 05:36	1.0	
029	347b029	X	IB				12/14/06 06:04	1.0	
030	347b030	SAMPLE	191372-002	S	Water	120297	12/14/06 06:31	1.0	
031	347b031	SAMPLE	191372-003	S	Water	120297	12/14/06 06:59	1.0	
032	347b032	SAMPLE	191372-004	S	Water	120297	12/14/06 07:26	1.0	
033	347b033	SAMPLE	191372-005	S	Water	120297	12/14/06 07:54	1.0	
034	347b034	CCV	DSL_250				12/14/06 08:22	1.0	9
035	347b035	CCV	MO_500				12/14/06 08:49	1.0	6

Standards used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071b001	X	PRIMER				03/12/07 08:47	1.0	
002	071b002	X	IB				03/12/07 09:20	1.0	
003	071b003	X					03/12/07 09:52	1.0	1
004	071b004	X					03/12/07 10:25	1.0	2
005	071b005	CMARKER	C8-50				03/12/07 10:56	1.0	3
006	071b006	X	IB				03/12/07 11:28	1.0	
007	071b007	CCV	DSL_500				03/12/07 11:59	1.0	1
008	071b008	CCV	MO_500				03/12/07 12:31	1.0	2
009	071b009	X	IB				03/12/07 16:43	1.0	
010	071b010	CCV	DSL_500				03/12/07 17:13	1.0	1
011	071b011	CCV	MO_500				03/12/07 17:44	1.0	2
012	071b012	SAMPLE	193210-036		Water	122957	03/12/07 18:15	1.0	
013	071b013	SAMPLE	193210-044		Water	122957	03/12/07 18:47	1.0	
014	071b014	MSS	193066-001	S	Water	122957	03/12/07 19:18	1.0	
015	071b015	MS	QC378569	S	Water	122957	03/12/07 19:49	1.0	
016	071b016	MSD	QC378570	S	Water	122957	03/12/07 20:20	1.0	
017	071b017	BLANK	QC378567	S	Water	122957	03/12/07 20:52	1.0	
018	071b018	SAMPLE	193226-007	S	Water	122957	03/12/07 21:23	1.0	
019	071b019	X	IB				03/12/07 21:54	1.0	
020	071b020	LCS	QC378568	S	Water	122957	03/12/07 22:25	1.0	
021	071b021	SAMPLE	193066-003	S	Water	122957	03/12/07 22:56	1.0	
022	071b022	SAMPLE	193066-004	S	Water	122957	03/12/07 23:27	1.0	
023	071b023	CCV	DSL_1000				03/12/07 23:58	1.0	4
024	071b024	CCV	MO_500				03/13/07 00:30	1.0	2
025	071b025	X	CCV				03/13/07 01:02	1.0	4
026	071b026	X	CCV				03/13/07 01:33	1.0	2
027	071b027	SAMPLE	193066-002	S	Water	122957	03/13/07 02:05	1.0	
028	071b028	SAMPLE	193057-002	S	Water	122957	03/13/07 02:36	1.0	
029	071b029	SAMPLE	193057-003	S	Water	122957	03/13/07 03:08	1.0	
030	071b030	SAMPLE	193057-004	S	Water	122957	03/13/07 03:39	1.0	
031	071b031	SAMPLE	193276-006	S	Soil	122982	03/13/07 04:11	1.0	
032	071b032	X	IB				03/13/07 04:44	1.0	
033	071b033	SAMPLE	193276-007	S	Soil	122982	03/13/07 05:17	1.0	
034	071b034	SAMPLE	193276-008	S	Soil	122982	03/13/07 05:50	1.0	
035	071b035	SAMPLE	193276-014	S	Soil	122982	03/13/07 06:23	1.0	
036	071b036	SAMPLE	193276-015	S	Soil	122982	03/13/07 06:57	1.0	
037	071b037	SAMPLE	193276-013	S	Soil	122982	03/13/07 07:30	1.0	
038	071b038	X	IB				03/13/07 08:03	1.0	
039	071b039	CCV	DSL_250				03/13/07 08:36	1.0	5
040	071b040	CCV	MO_500				03/13/07 09:10	1.0	2
041	071b041	X	CCV				03/13/07 09:44	1.0	5
042	071b042	X	CCV				03/13/07 10:16	1.0	2
043	071b043	LCS	QC378777	S	Water	123002	03/13/07 11:53	1.0	
044	071b044	BLANK	QC378776	S	Water	123002	03/13/07 12:25	1.0	
045	071b045	SAMPLE	193218-024	S	Water	123002	03/13/07 12:56	1.0	
046	071b046	SAMPLE	193302-002		Soil	122982	03/13/07 13:28	1.0	
047	071b047	X	IB				03/13/07 13:59	1.0	
048	071b048	MSS	193108-007	S	Water	123002	03/13/07 14:30	1.0	
049	071b049	MS	QC378778	S	Water	123002	03/13/07 15:01	1.0	
050	071b050	MSD	QC378779	S	Water	123002	03/13/07 15:32	1.0	
051	071b051	SAMPLE	193108-002	S	Water	123002	03/13/07 16:03	1.0	
052	071b052	SAMPLE	193108-003	S	Water	123002	03/13/07 16:34	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	071b053	SAMPLE	193108-004	S	Water	123002	03/13/07 17:06	1.0	
054	071b054	CCV	DSL_500				03/13/07 17:38	1.0	1
055	071b055	CCV	MO_500				03/13/07 18:10	1.0	2
056	071b056	SAMPLE	193108-005	S	Water	123002	03/13/07 18:42	1.0	
057	071b057	SAMPLE	193322-014	S	Soil	123035	03/13/07 19:15	1.0	
058	071b058	SAMPLE	193322-013	S	Soil	123035	03/13/07 19:48	1.0	
059	071b059	SAMPLE	193322-025	S	Soil	123035	03/13/07 20:23	1.0	
060	071b060	X	IB				03/13/07 20:59	1.0	
061	071b061	BLANK	QC378780	S	Water	123003	03/13/07 21:34	1.0	
062	071b062	LCS	QC378781	S	Water	123003	03/13/07 22:09	1.0	
063	071b063	MSS	193055-001	S	Water	123003	03/13/07 22:43	1.0	
064	071b064	MS	QC378782	S	Water	123003	03/13/07 23:17	1.0	
065	071b065	MSD	QC378783	S	Water	123003	03/13/07 23:51	1.0	
066	071b066	SAMPLE	193055-002	S	Water	123003	03/14/07 00:25	1.0	
067	071b067	CCV	DSL_1000				03/14/07 00:59	1.0	4
068	071b068	CCV	MO_500				03/14/07 01:34	1.0	2
069	071b069	X	CCV				03/14/07 02:08	1.0	4
070	071b070	X	CCV				03/14/07 02:43	1.0	2
071	071b071	SAMPLE	193055-003	S	Water	123003	03/14/07 03:17	1.0	
072	071b072	SAMPLE	193055-004	S	Water	123003	03/14/07 03:51	1.0	
073	071b073	SAMPLE	193055-005	S	Water	123003	03/14/07 04:25	1.0	
074	071b074	SAMPLE	193055-006	S	Water	123003	03/14/07 04:59	1.0	
075	071b075	SAMPLE	193055-007	S	Water	123003	03/14/07 05:34	1.0	
076	071b076	SAMPLE	193055-008	S	Water	123003	03/14/07 06:08	1.0	
077	071b077	SAMPLE	193055-011	S	Water	123003	03/14/07 06:43	1.0	
078	071b078	SAMPLE	193055-012	S	Water	123003	03/14/07 07:17	1.0	
079	071b079	X	IB				03/14/07 07:52	1.0	
080	071b080	CCV	DSL_250				03/14/07 08:26	1.0	5
081	071b081	CCV	MO_500				03/14/07 09:00	1.0	2
082	071b082	SAMPLE	193229-008	S	Soil	123027	03/14/07 09:53	40.0	
083	071b083	SAMPLE	193229-010	S	Soil	123027	03/14/07 10:28	20.0	
084	071b084	X	IB				03/14/07 11:02	1.0	
085	071b085	SAMPLE	193322-047	S	Soil	123064	03/14/07 11:43	1.0	
086	071b086	SAMPLE	193322-041	S	Soil	123064	03/14/07 12:15	1.0	
087	071b087	MS	QC378782	S	Water	123003	03/14/07 12:48	1.0	
088	071b088	MSD	QC378783	S	Water	123003	03/14/07 13:21	1.0	
089	071b089	CCV	DSL_250				03/14/07 14:06	1.0	5
090	071b090	CCV	MO_500				03/14/07 14:37	1.0	2

Standards used: 1=S5517 2=S5603 3=S4049 4=S5259 5=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227102779

Instrument : GC14B
Method : EPA 8015B

Begun : 03/12/07 08:59
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	071_001	X	PRIMER			03/12/07 08:59	1.0	
002	071_002	X	IB			03/12/07 09:28	1.0	
003	071_003	X				03/12/07 09:57	1.0	1
004	071_004	X				03/12/07 10:26	1.0	2
005	071_005	X	IB			03/12/07 13:15	1.0	
006	071_006	X				03/12/07 13:43	1.0	3
007	071_007	X				03/12/07 14:12	1.0	
008	071_008	X				03/12/07 14:40	1.0	1
009	071_009	CMARKER	C8-50			03/12/07 15:09	1.0	3
010	071_010	X				03/12/07 16:00	1.0	1
011	071_011	X				03/12/07 16:28	1.0	2
012	071_012	X	IB			03/12/07 16:58	1.0	
013	071_013	IB	CALIB			03/12/07 17:27	1.0	
014	071_014	ICAL	DSL_10			03/12/07 17:56	1.0	4
015	071_015	ICAL	DSL_100			03/12/07 18:24	1.0	5
016	071_016	ICAL	DSL_500			03/12/07 18:53	1.0	6
017	071_017	ICAL	DSL_1000			03/12/07 19:22	1.0	7
018	071_018	ICAL	DSL_5000			03/12/07 19:50	1.0	8
019	071_019	ICAL	DSL_7500			03/12/07 20:18	1.0	9
020	071_020	IB	CALIB			03/12/07 20:47	1.0	
021	071_021	ICV	DSL_500			03/12/07 21:16	1.0	10
022	071_022	X	ICV			03/12/07 21:44	1.0	10
023	071_023	IB	CALIB			03/12/07 22:12	1.0	
024	071_024	ICAL	MO_50			03/12/07 22:41	1.0	11
025	071_025	ICAL	MO_250			03/12/07 23:09	1.0	12
026	071_026	ICAL	MO_500			03/12/07 23:38	1.0	13
027	071_027	X	MO_1000			03/13/07 00:06	1.0	14
028	071_028	ICAL	MO_5000			03/13/07 00:35	1.0	15
029	071_029	IB	CALIB			03/13/07 01:04	1.0	
030	071_030	ICAL	HEX_5			03/13/07 01:32	1.0	16
031	071_031	ICAL	HEX_10			03/13/07 02:01	1.0	17
032	071_032	ICAL	HEX_50			03/13/07 02:29	1.0	18
033	071_033	ICAL	HEX_100			03/13/07 02:58	1.0	19
034	071_034	ICAL	HEX_200			03/13/07 03:27	1.0	20
035	071_035	X	IB			03/13/07 03:56	1.0	
036	071_036	ICAL	MO_1000			03/13/07 12:33	1.0	14

Analyst: CP Date: 03/13/07 Reviewer: CW Date: 03/13/07

Standards used: 1=S5517 2=S5603 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S4639 17=S4640 18=S5402 19=S4644 20=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227104259

Instrument : GC14B
Method : EPA 8015B

Begun : 03/13/07 09:39
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	072_001	X	PRIMER				03/13/07 09:39	1.0	
002	072_002	X	IB				03/13/07 10:08	1.0	
003	072_003	CCV	DSL_500				03/13/07 10:36	1.0	1
004	072_004	CCV	MO_500				03/13/07 11:05	1.0	2
005	072_005	SAMPLE	193302-001		Soil	122982	03/13/07 13:17	2.0	
006	072_006	X	IB				03/13/07 13:46	1.0	
007	072_007	SAMPLE	193235-001	S	Water	123002	03/13/07 14:23	1.0	
008	072_008	SAMPLE	193235-002	S	Water	123002	03/13/07 14:52	1.0	
009	072_009	SAMPLE	193235-003	S	Water	123002	03/13/07 15:21	1.0	
010	072_010	SAMPLE	193235-004	S	Water	123002	03/13/07 15:50	1.0	
011	072_011	SAMPLE	193235-005	S	Water	123002	03/13/07 16:18	1.0	
012	072_012	SAMPLE	193235-006	S	Water	123002	03/13/07 16:47	1.0	
013	072_013	X	IB				03/13/07 17:16	1.0	
014	072_014	SAMPLE	193235-007	S	Water	123002	03/13/07 17:45	1.0	
015	072_015	SAMPLE	193235-008	S	Water	123002	03/13/07 18:13	1.0	
016	072_016	SAMPLE	193235-009	S	Water	123002	03/13/07 18:42	1.0	
017	072_017	CCV	DSL_250				03/13/07 19:10	1.0	3
018	072_018	CCV	MO_500				03/13/07 19:39	1.0	2
019	072_019	X	CCV				03/13/07 20:08	1.0	3
020	072_020	X	CCV				03/13/07 20:37	1.0	2
021	072_021	SAMPLE	193238-005	S	Water	123003	03/13/07 21:17	1.0	
022	072_022	SAMPLE	193238-004	S	Water	123003	03/13/07 21:46	1.0	
023	072_023	SAMPLE	193238-003	S	Water	123003	03/13/07 22:15	1.0	
024	072_024	SAMPLE	193055-013	S	Water	123003	03/13/07 22:44	1.0	
025	072_025	SAMPLE	193055-014	S	Water	123003	03/13/07 23:13	1.0	
026	072_026	X	IB				03/13/07 23:41	1.0	
027	072_027	SAMPLE	193230-001	S	Water	123003	03/14/07 00:10	1.0	
028	072_028	SAMPLE	193230-002	S	Water	123003	03/14/07 00:39	1.0	
029	072_029	SAMPLE	193230-003	S	Water	123003	03/14/07 01:08	1.0	
030	072_030	SAMPLE	193230-004	S	Water	123003	03/14/07 01:37	1.0	
031	072_031	SAMPLE	193238-002	S	Water	123003	03/14/07 02:06	1.0	
032	072_032	X	IB				03/14/07 02:34	1.0	
033	072_033	CCV	DSL_500				03/14/07 03:03	1.0	1
034	072_034	CCV	MO_500				03/14/07 03:31	1.0	2
035	072_035	X	CCV				03/14/07 04:00	1.0	1
036	072_036	X	CCV				03/14/07 04:29	1.0	2
037	072_037	SAMPLE	193322-008	S	Soil	123035	03/14/07 04:57	1.0	
038	072_038	SAMPLE	193322-009	S	Soil	123035	03/14/07 05:26	1.0	
039	072_039	X	IB				03/14/07 05:54	1.0	
040	072_040	CCV	DSL_250				03/14/07 06:22	1.0	3
041	072_041	CCV	MO_500				03/14/07 06:51	1.0	2
042	072_042	X	CCV				03/14/07 07:19	1.0	3
043	072_043	X	CCV				03/14/07 07:48	1.0	2
044	072_044	X	IB				03/14/07 09:50	1.0	
045	072_045	SAMPLE	193229-002	S	Soil	123027	03/14/07 10:18	3.0	
046	072_046	SAMPLE	193229-001	S	Soil	123027	03/14/07 10:47	3.0	
047	072_047	SAMPLE	193229-004	S	Soil	123027	03/14/07 11:15	1.0	
048	072_048	X	IB				03/14/07 11:44	1.0	
049	072_049	SAMPLE	193322-048	S	Soil	123064	03/14/07 12:13	1.0	
050	072_050	SAMPLE	193238-003	S	Water	123003	03/14/07 12:41	1.0	
051	072_051	SAMPLE	193229-002	S	Soil	123027	03/14/07 13:10	10.0	
052	072_052	SAMPLE	193283-001	S	Soil	123064	03/14/07 13:38	20.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227104259

Instrument : GC14B
Method : EPA 8015B

Begun : 03/13/07 09:39
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	072_053	CCV	DSL_250				03/14/07 14:07	1.0	3	
054	072_054	CCV	MO_500				03/14/07 14:36	1.0	2	

Standards used: 1=S5517 2=S5603 3=S5258

REPORTING SUMMARY FOR 193055 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193055-001	GC15B	03/13/07 22:43	1.0	+	+	+	
193055-002	GC15B	03/14/07 00:25	1.0	+	+	+	
193055-003	GC15B	03/14/07 03:17	1.0	+	+	+	
193055-004	GC15B	03/14/07 03:51	1.0	+		+	
193055-005	GC15B	03/14/07 04:25	1.0	+		+	
193055-006	GC15B	03/14/07 04:59	1.0	+		+	
193055-007	GC15B	03/14/07 05:34	1.0	+	+	+	
193055-008	GC15B	03/14/07 06:08	1.0	+	+	+	
193055-011	GC15B	03/14/07 06:43	1.0	+	+	+	
193055-012	GC15B	03/14/07 07:17	1.0	+	+	+	
193055-013	GC14B	03/13/07 22:44	1.0	+	+	+	
193055-014	GC14B	03/13/07 23:13	1.0	+	+	+	
QC378780	GC15B	03/13/07 21:34	1.0	+	+	+	
QC378781	GC15B	03/13/07 22:09	1.0	+		+	
QC378782	GC15B	03/13/07 23:17	1.0				
QC378782	GC15B	03/14/07 12:48	1.0	+		+	
QC378783	GC15B	03/13/07 23:51	1.0				
QC378783	GC15B	03/14/07 13:21	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123003
Started By : JOM
Method : 3520C
Spike #1 ID: S5545

Prep Date : 12-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: JXM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193055-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
193055-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-004		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193055-005		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193055-006		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193055-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193055-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193230-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193230-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193230-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193230-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193238-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193238-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193238-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193238-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC378780	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC378781	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC378782	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC378783	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: ATL Date: 03/15/07 Reviewer: CP Date: 03/15/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

LIMS Batch No: 123003
LIMS Analysis: TEH/M
Extracted by: JDM
Date Extracted: 03/12/07

Extraction Method:
- ☐ mod. EPA 3510 sep. funnel
- ☒ mod. EPA 3520 cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640 GPC
- ☒ EPA 3630 Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193055 -001 U	500	7	2.5	X	MSS
-002 E					
-003 E					
-004 H					
-005 K					
-006 H					
-007 G					
-008 G					
-011 K					
-012 N					
-013 M					
-014 D					
193230 -001 L					
-002 M					
-003 K					
-004 L					
193238 -002 H					lots of sediment
-003					
-004					
-005					
MB QC 378780		NA			
LCS 1		7			193055 -001T
MS 2		7			
MSD 3		7			

JDM 3/12/07

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5545 A	JDM 3/12/07
S 5627 B	
FS065076	
EM46352 / EM46354	
1610	
11:30	DXM 3/13/07
N/A	
2M46111628	

0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☒ Samples were continually extracted about 450 mL of CH_2Cl_2
Extraction Start Time:
Extraction End Time:
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above

3/12/07
Extraction Chemist Date

Contined from Page ___
Continued on Page ___

3/14/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JXM
Cleanup Date: 3/13/07

Benchbook # **BK 2475**
Page 7

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193055-001	123003	1.0	1.0	MSS
02				
03				
04				
05				
06				
07				
08				
11				
12				
13				
14				
193230-001				
02				
03				
04				
193238-002				
03				
04				
05				
MB QC378780				
LCS 81				
MS 82				
MSD 83				
				JXM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	JXM 3/13/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP 6483	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM4/7031	
Concentrated to volumes as noted above		

3/13/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/14/07
Reviewed by / Date

00080

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KIR
Cleanup Date: 14 MAR 07

Benchbook # **BK 2475**
Page 8

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193279-001	123064	1.0	1.0	
2				
3				
4				
5				MSS
6				
7				
8				
9				
10				
11				
12				
13				
193283-001				
193322-041				
45				
46				
47				
48				
51				
BLANK QC379032				
LCS 33				
MS 34				
MSD 35				
193238-003	123003	0.5	0.5	
JOM 3/14/07				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	N/A	KIR 3/14/07
☑ Extracts were cleaned up using 1.0 g cartridges	SP 8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM 47031	
Concentrated to volumes as noted above	✓	

KIR 14 MAR 07
Extraction Chemist / Date

Continued from page —
Continued on page —

3/14/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW02	Batch#:	122726
Lab ID:	193055-011	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW103	Batch#:	122726
Lab ID:	193055-012	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW104	Batch#:	122726
Lab ID:	193055-013	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

28.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW105	Batch#:	122726
Lab ID:	193055-014	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0228073A	Batch#:	122726
Lab ID:	193055-015	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	5.3	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377631	Batch#:	122726
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

31.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122726
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type: BS Lab ID: QC377629

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.80	115	65-135
Benzene	25.00	24.74	99	65-135
Trichloroethene	25.00	24.85	99	65-135
Toluene	25.00	24.74	99	65-135
Chlorobenzene	25.00	23.74	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	94	86-115

Type: BSD Lab ID: QC377630

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.75	111	65-135	4	35
Benzene	25.00	23.46	94	65-135	5	35
Trichloroethene	25.00	23.45	94	65-135	6	35
Toluene	25.00	23.60	94	65-135	5	35
Chlorobenzene	25.00	22.96	92	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193055 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193055 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193055 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447094064002 File : ec602 Time : 06-MAR-2007 08:14

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10004	21.77	
75	30.00% - 60.00% of mass 95	20480	44.57	
95		45952		
96	5.00% - 9.00% of mass 95	3057	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	28136	61.23	
175	5.00% - 9.00% of mass 174	2037	7.24	
176	> 95.00% and < 101.00% of mass 174	27728	98.55	
177	5.00% - 9.00% of mass 176	1812	6.53	

Analyst: BO Date: 03/06/07 Reviewer: LW Date: 03/06/07

447094064002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
richloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
romodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

*=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

447013464001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
	18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
	19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
	21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
	22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
	23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
	24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
	25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
	26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
*	27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
	28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
	29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
	30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
	31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
	32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
	33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
	34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
	35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
*	36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
	37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
	38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
	39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
	40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
	41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
	42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
	43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
	44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
	45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
	46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
	47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
	48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
	49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
	50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
	51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
	52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
	53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
	54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
*	55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
	56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
	57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
	58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
	59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
	60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
	61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
	62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
	63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

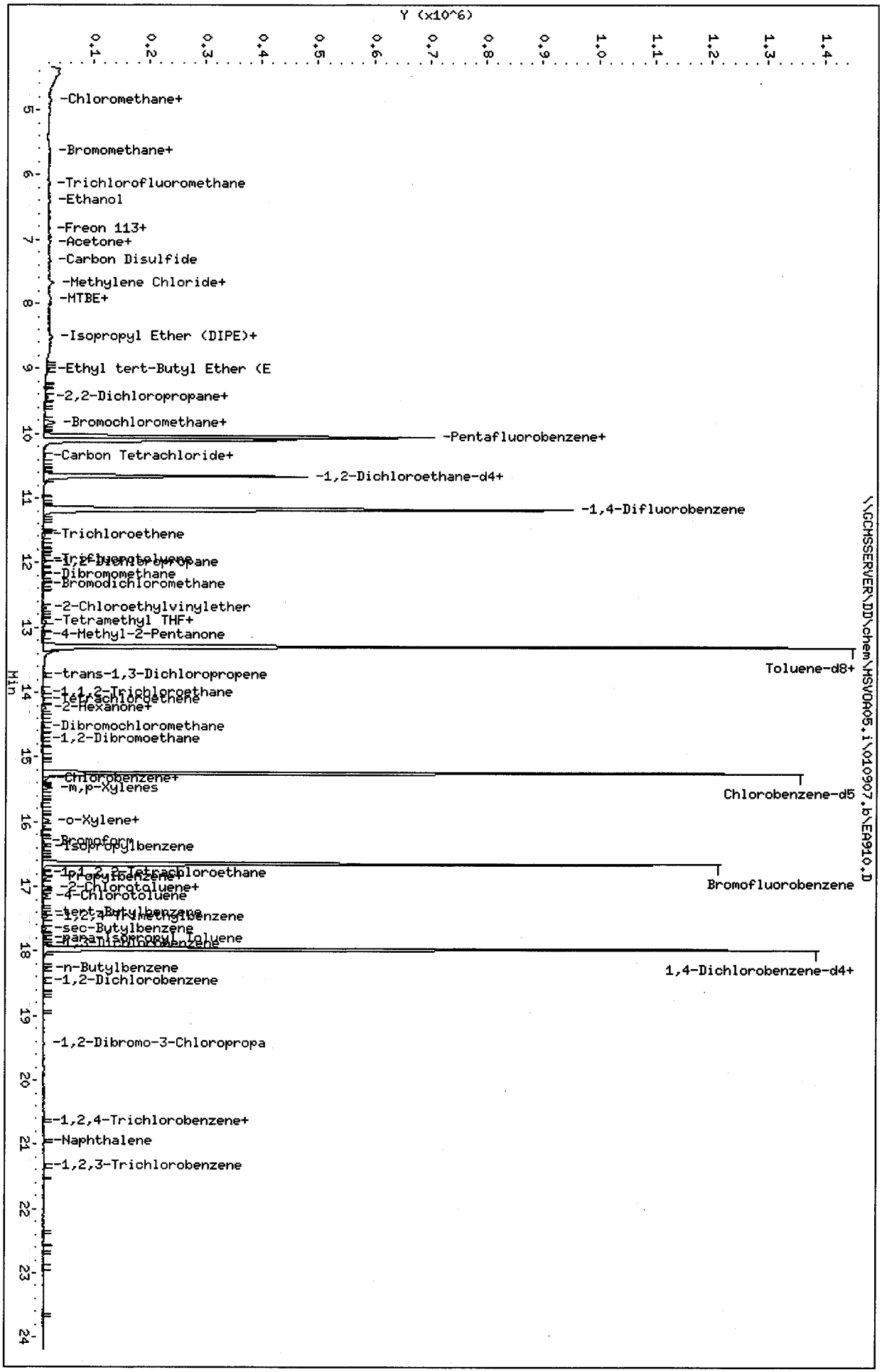
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
	18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
	19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
	21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
	22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
	24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
	25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
	26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
	30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
	33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
	37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
	38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
	40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
	46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
	47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
	50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
	51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
	57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
	60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
	61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
	62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
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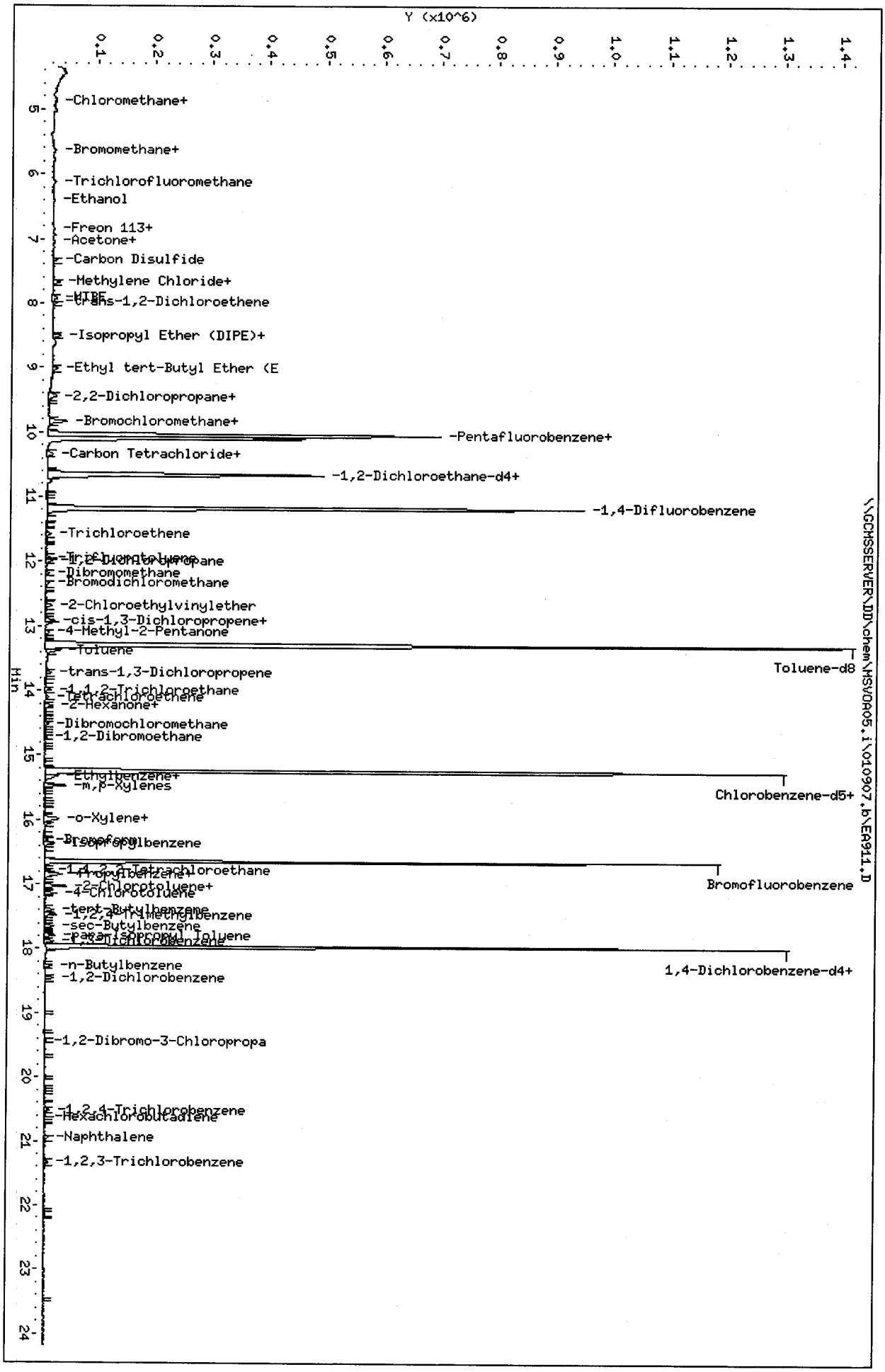

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
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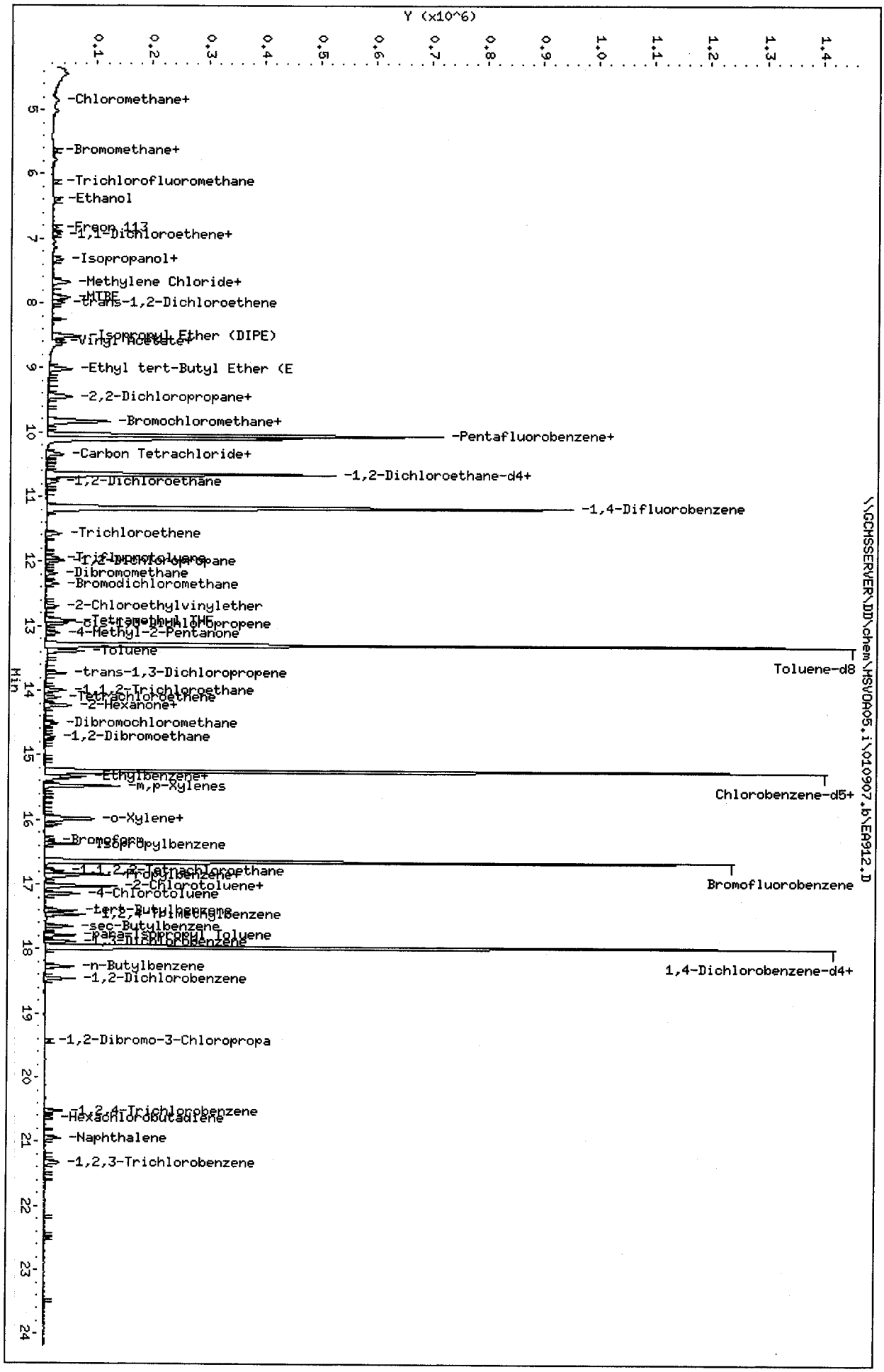
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
	18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
	19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
	21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
	22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
	24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
	25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
	26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
	28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
	30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
	33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
	37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
	38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
	39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
	40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
	43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
	46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
	47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
	48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
	50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
	51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
	57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
	58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
	59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
	60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
	61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
	62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

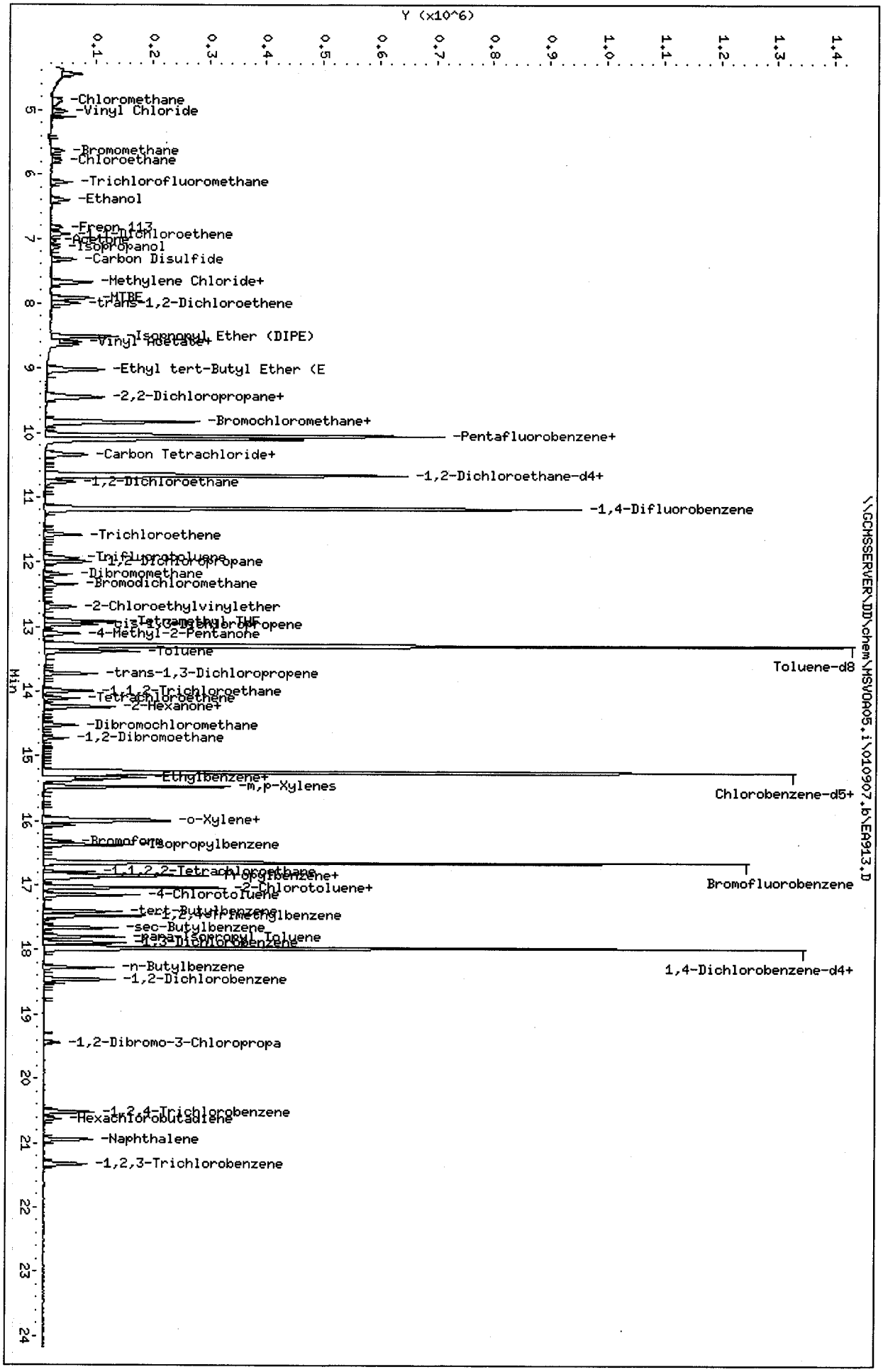
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

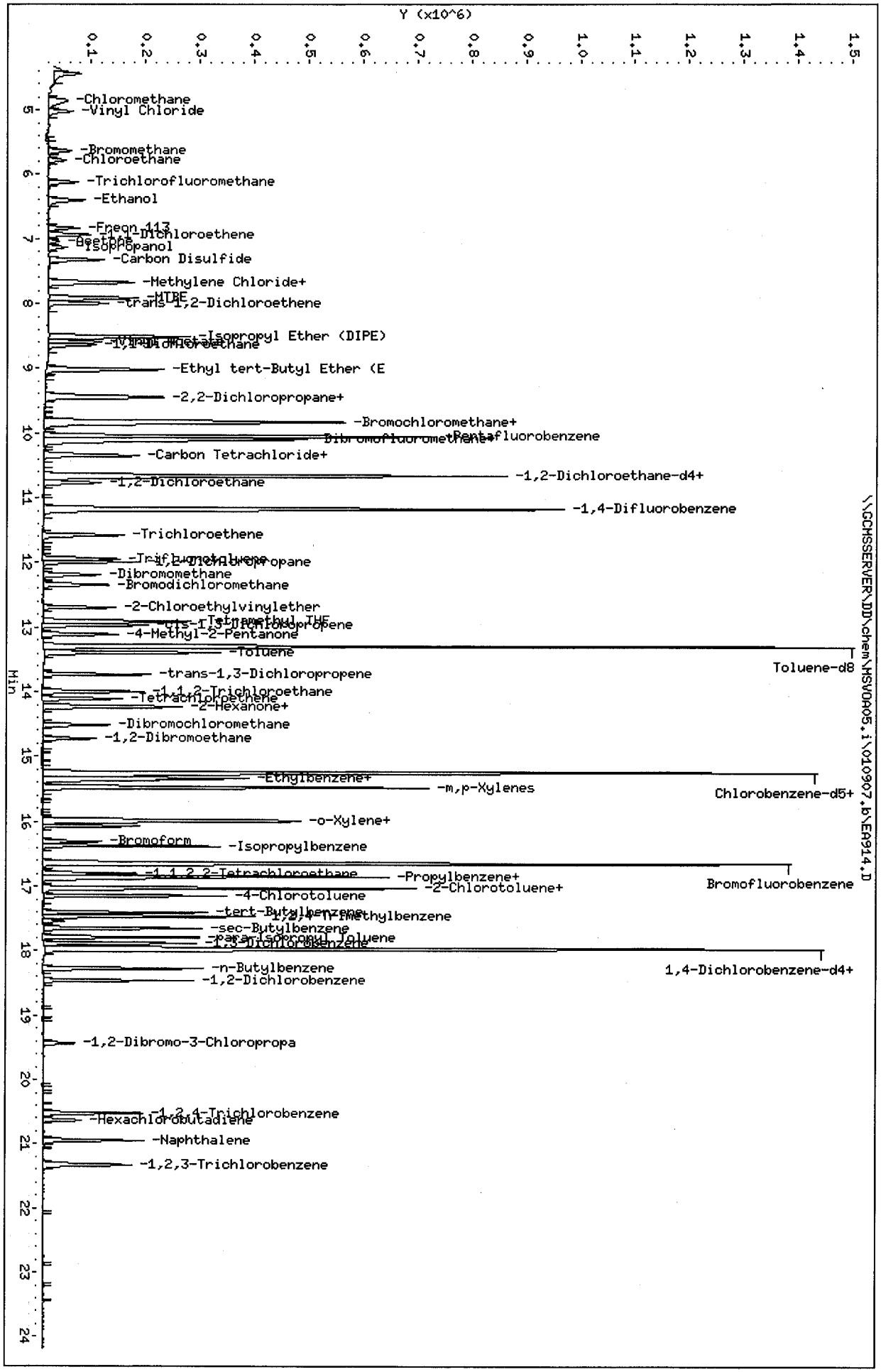
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Date : 09-JAN-2007 16:20
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5152,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Date : 09-JAN-2007 16:52
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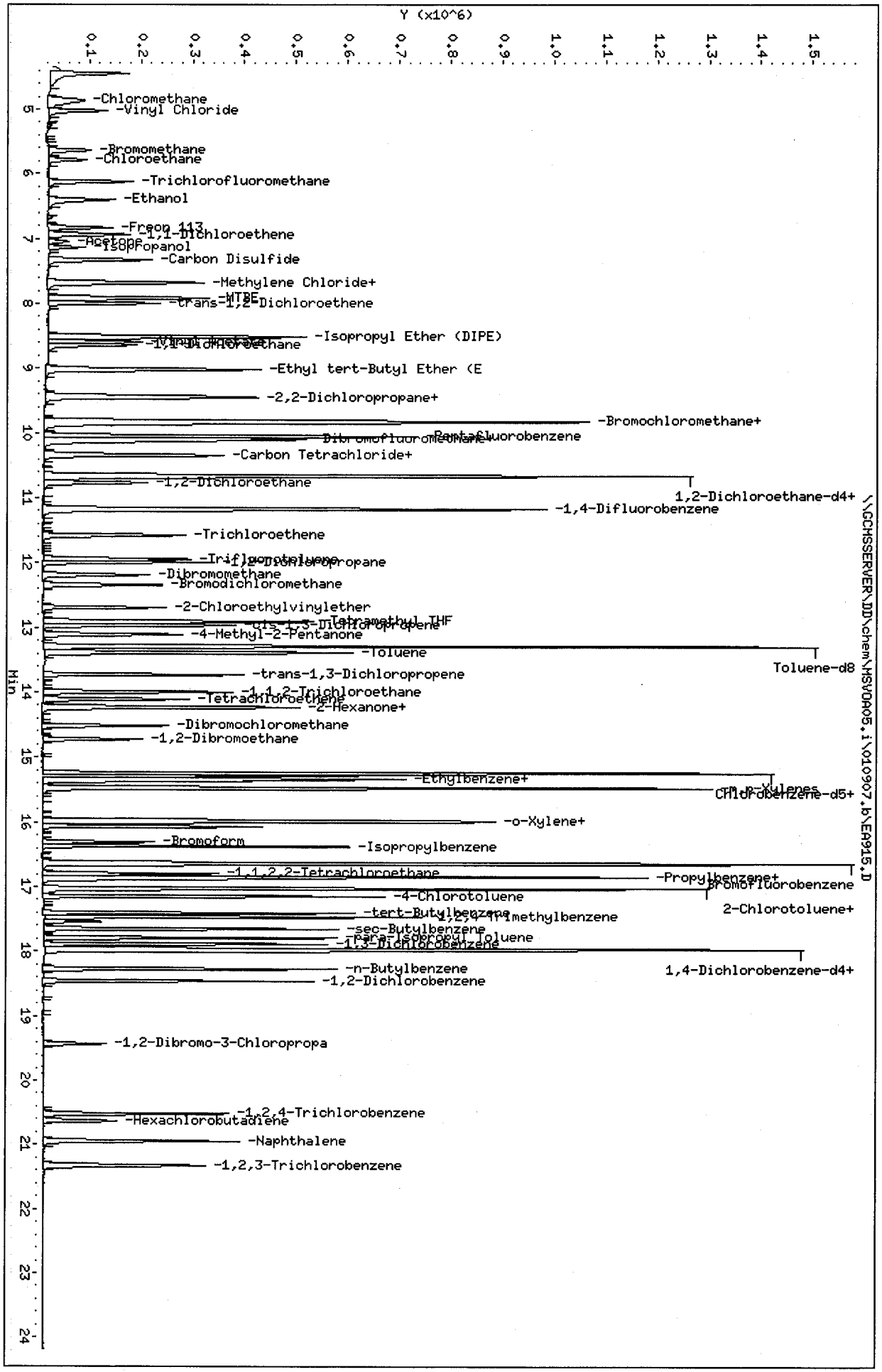
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.005/100,50PPB
Comment :
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Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
	18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
	19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
	21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
	22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
	23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
	24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
	25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
	26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
	29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
	30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
	33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
	34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
	37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
	38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
	40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
	46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
	47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
	50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
	51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
*	55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
	57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
	60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
	61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
	62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Date : 09-JAN-2007 17:24
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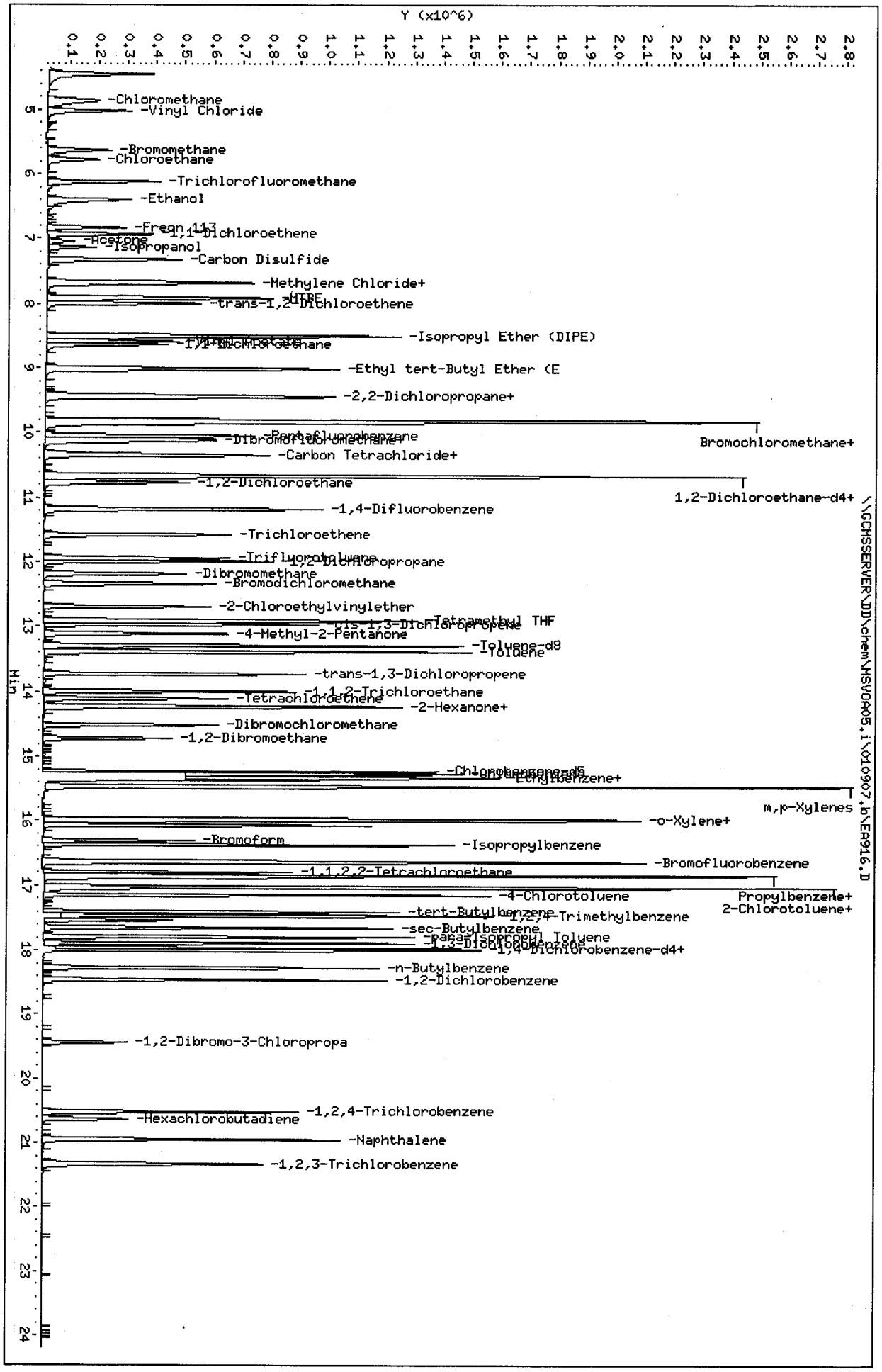
Sample Info: ICAL,S5170,0.01/100,S5152,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:49

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
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Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

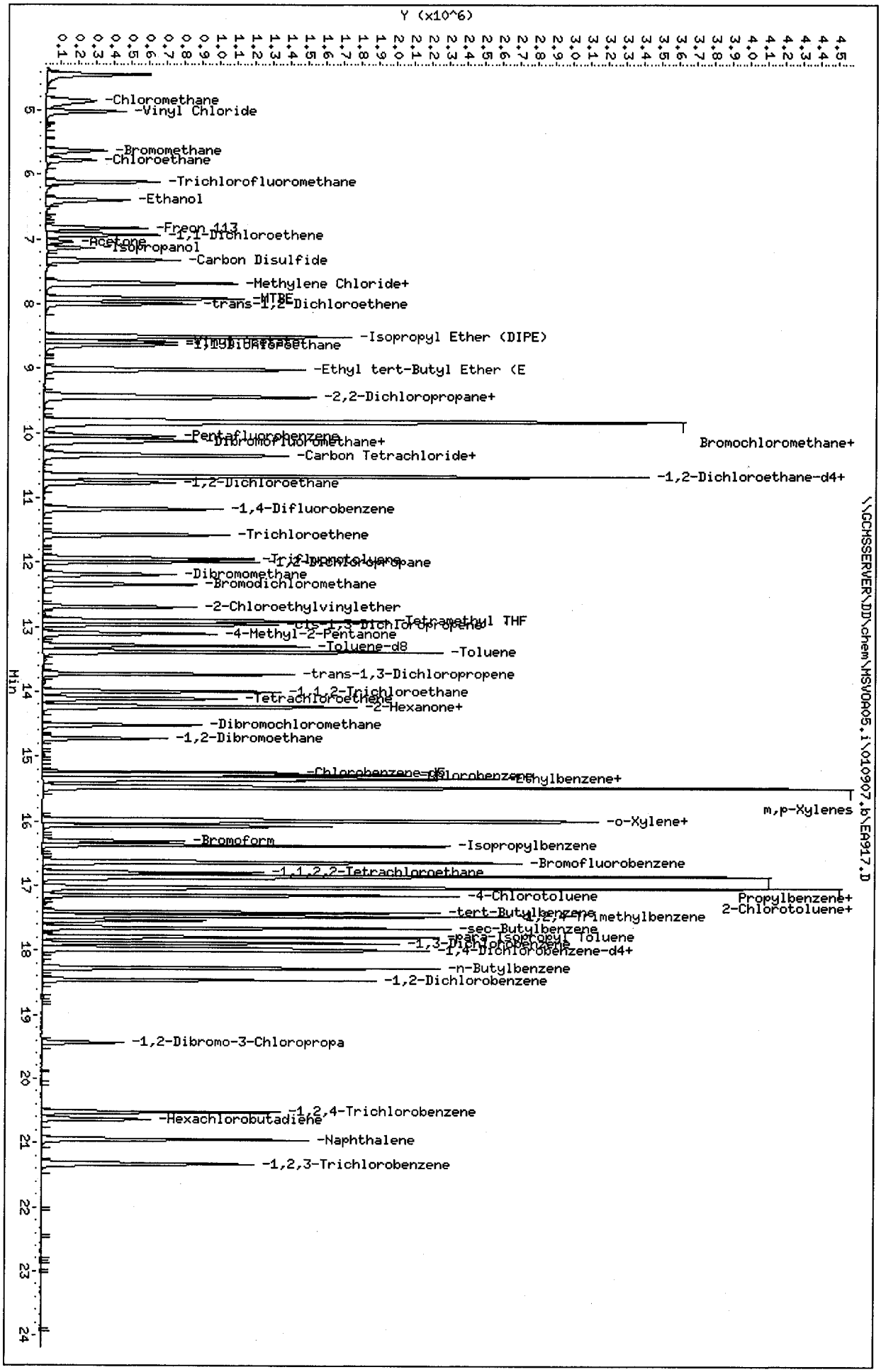
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Date : 09-JAN-2007 17:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5152,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
	18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
	19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
	21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
	22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
	24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
	25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
	26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
*	27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
	28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
	30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
	32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
	33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
	35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
*	36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
	37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
	38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
	40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
	41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
	42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
	43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
	44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
	45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
	46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
	47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
	48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
	49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
	50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
	51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
	52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
	53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
	54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
	56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
	57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
	58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
	59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
	60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
	61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
	62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
	63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

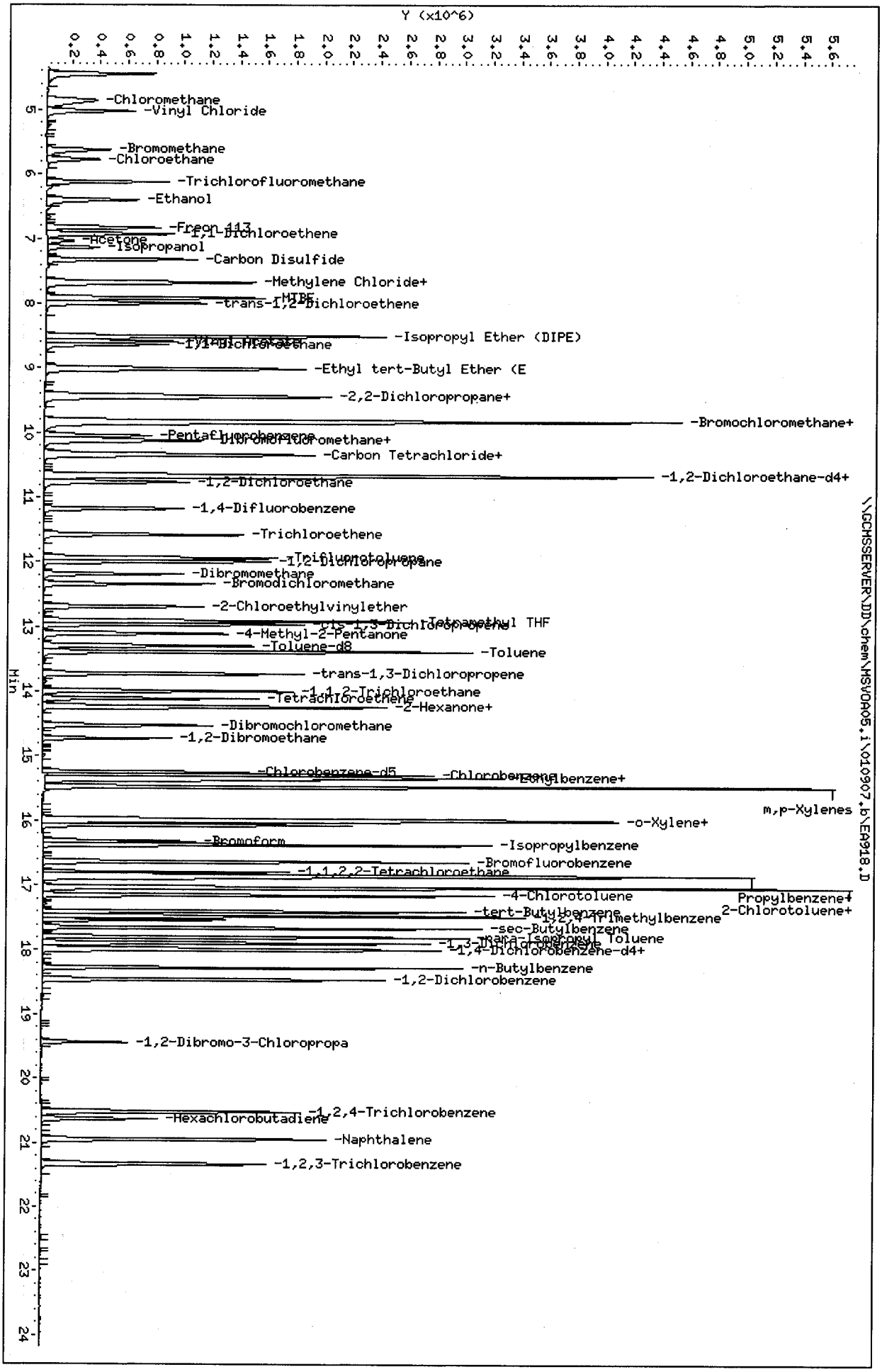
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193055 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377629 IDF : 1.0
Seqnum : 447094064003.3 File : ec603 Time : 06-MAR-2007 08:31
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7775	25.00	21.04	ug/L	-16	30	0.1000	u
Vinyl Chloride	0.6995	0.6272	25.00	22.42	ug/L	-10	20	0.0500	u
Bromomethane	0.4143	0.3394	25.00	20.48	ug/L	-18	30	0.0500	u
Chloroethane	0.3917	0.3878	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2489	25.00	22.61	ug/L	-10	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3956	25.00	28.80	ug/L	15	20	0.0500	u
Methylene Chloride	0.5327	0.5518	25.00	25.90	ug/L	4	30	0.0500	u
Carbon Disulfide	1.5714	1.1312	25.00	18.00	ug/L	**-28**	30	0.0500	!c- u
MTBE	1.6725	1.4630	25.00	21.87	ug/L	-13	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4766	25.00	26.44	ug/L	6	30	0.0500	u
Vinyl Acetate	1.5725	1.6485	25.00	26.21	ug/L	5	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0712	25.00	28.18	ug/L	13	30	0.1000	u
2-Butanone	0.5135	0.4372	25.00	21.28	ug/L	-15	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6198	25.00	23.64	ug/L	-5	30	0.0500	u
Chloroform	1.0380	1.0077	25.00	24.27	ug/L	-3	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7092	25.00	26.24	ug/L	5	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3003	25.00	28.24	ug/L	13	30	0.0500	u
1,2-Dichloroethane	0.4996	0.5239	25.00	26.22	ug/L	5	30	0.0500	u
Benzene	1.3466	1.3325	25.00	24.74	ug/L	-1	30	0.0500	u
Trichloroethene	0.3340	0.3320	25.00	24.85	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5103	25.00	25.96	ug/L	4	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5303	25.00	20.60	ug/L	-18	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5877	25.00	23.03	ug/L	-8	30	0.0500	u
Toluene	0.8216	0.8129	25.00	24.74	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5098	25.00	21.48	ug/L	-14	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1900	25.00	23.52	ug/L	-6	30	0.0500	u
2-Hexanone	0.5472	0.4213	25.00	19.25	ug/L	-23	40	0.0500	u
Tetrachloroethene	0.2838	0.3319	25.00	29.23	ug/L	17	30	0.0500	u
Dibromochloromethane	0.4287	0.3964	25.00	23.12	ug/L	-8	30	0.0500	u
Chlorobenzene	1.0173	0.9660	25.00	23.74	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.7058	25.00	24.88	ug/L	0	20	0.0500	u
m,p-Xylenes	0.6280	0.6299	50.00	50.15	ug/L	0	30	0.0500	u
o-Xylene	0.6326	0.6316	25.00	24.96	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1287	25.00	24.05	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3042	25.00	23.31	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.1314	25.00	21.37	ug/L	-15	30	0.3000	u
Dibromofluoromethane	0.5927	0.5809	50.00	49.01	ug/L	-2	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4501	50.00	56.17	ug/L	12	30	0.0500	u
Toluene-d8	1.1589	1.1827	50.00	51.03	ug/L	2	30	0.0500	u
Bromofluorobenzene	1.2864	1.2148	50.00	47.22	ug/L	-6	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	776548	24.68	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1208246	17.21	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1059171	20.00	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	510227	23.94	17.97	17.96	-0.01

Analyst: BO Date: 03/07/07 Reviewer: ACM Date: 03/07/07

!=warning -=low bias c=CCV u=use

447094064003.3

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447094064

Date : 03/06/07 Reference: ea916
Sequence : MSVOA05 ec6 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/BS	QC377629	776548	10.04	1208246	11.17	1059171	15.24	510227	17.96
004	BSD	QC377630	763694	10.04	1197810	11.17	1038738	15.24	511199	17.96
006	BLANK	QC377631	747702	10.04	1180591	11.18	1043718	15.24	497859	17.96
007	SAMPLE	193057-002	752250	10.04	1170931	11.17	1040485	15.24	495883	17.96
008	SAMPLE	193057-003	749780	10.04	1174193	11.18	1032901	15.24	496477	17.96
009	SAMPLE	193138-002	755622	10.05	1186549	11.17	1032070	15.24	498289	17.96
010	SAMPLE	193057-004	768468	10.04	1188346	11.18	1033077	15.24	495116	17.96
011	SAMPLE	193055-015	756572	10.05	1180471	11.17	1034736	15.24	492611	17.96
012	SAMPLE	193055-011	761433	10.04	1187952	11.17	1040043	15.24	492473	17.96
013	SAMPLE	193055-012	752867	10.04	1183080	11.17	1026826	15.24	493374	17.96
014	SAMPLE	193055-013	745484	10.04	1175652	11.17	1022265	15.24	497739	17.96
015	SAMPLE	193055-014	752487	10.05	1172489	11.17	1034000	15.24	490346	17.96
016	SAMPLE	193109-001	753816	10.04	1185362	11.17	1023242	15.23	488707	17.96
017	SAMPLE	193108-009	753478	10.04	1184844	11.17	1024652	15.24	489285	17.96
018	SAMPLE	193108-010	764166	10.05	1188063	11.17	1036814	15.24	489861	17.96
019	SAMPLE	193108-011	749292	10.05	1178575	11.17	1031665	15.24	513071	17.96
020	SAMPLE	193108-012	771060	10.04	1191930	11.17	1022775	15.24	500396	17.96
021	SAMPLE	192902-001	778498	10.05	1219271	11.17	1043830	15.24	494161	17.96
022	SAMPLE	193063-003	780915	10.05	1196436	11.17	1037794	15.24	495450	17.96
023	SAMPLE	193063-006	775676	10.04	1189273	11.17	1044918	15.24	509928	17.96
024	SAMPLE	193063-008	769215	10.05	1185614	11.17	1039304	15.24	505616	17.96

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ea901	X	IB			01/09/07 08:24	1.0	1
002	ea902	X	BFB			01/09/07 09:00	1.0	2
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1
007	ea907	X	IB			01/09/07 12:18	1.0	1
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1
022	ea922	X	IB			01/09/07 20:36	1.0	1
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1
031	ea931	X	IB			01/10/07 01:23	1.0	1

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447094064

Instrument : MSVOA05 Begun : 03/06/07 07:44
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec601	X	IB			03/06/07 07:44	1.0	1	
002	ec602	TUN	BFB			03/06/07 08:14	1.0	2	
003	ec603	CCV/BS	QC377629	Water	122726	03/06/07 08:31	1.0	3 4 5 1	
004	ec604	BSD	QC377630	Water	122726	03/06/07 09:14	1.0	3 4 5 1	
005	ec605	X	IB			03/06/07 09:46	1.0	1	
006	ec606	BLANK	QC377631	Water	122726	03/06/07 10:18	1.0	1	
007	ec607	SAMPLE	193057-002	Water	122726	03/06/07 10:53	1.0	1	pH > 2
008	ec608	SAMPLE	193057-003	Water	122726	03/06/07 11:25	1.0	1	pH > 2
009	ec609	SAMPLE	193138-002	Water	122726	03/06/07 11:57	1.429	1	
010	ec610	SAMPLE	193057-004	Water	122726	03/06/07 12:29	1.0	1	pH > 2
011	ec611	SAMPLE	193055-015	Water	122726	03/06/07 13:01	1.0	1	
012	ec612	SAMPLE	193055-011	Water	122726	03/06/07 13:33	1.0	1	
013	ec613	SAMPLE	193055-012	Water	122726	03/06/07 14:05	1.0	1	
014	ec614	SAMPLE	193055-013	Water	122726	03/06/07 14:37	1.0	1	
015	ec615	SAMPLE	193055-014	Water	122726	03/06/07 15:09	1.0	1	
016	ec616	SAMPLE	193109-001	Water	122726	03/06/07 15:41	1.0	1	
017	ec617	SAMPLE	193108-009	Water	122726	03/06/07 16:13	1.0	1	
018	ec618	SAMPLE	193108-010	Water	122726	03/06/07 16:45	1.0	1	
019	ec619	SAMPLE	193108-011	Water	122726	03/06/07 17:17	1.0	1	
020	ec620	SAMPLE	193108-012	Water	122726	03/06/07 17:49	2.0	1	
021	ec621	SAMPLE	192902-001	Water	122726	03/06/07 18:21	10.0	1	
022	ec622	SAMPLE	193063-003	Water	122726	03/06/07 18:52	1.0	1	
023	ec623	SAMPLE	193063-006	Water	122726	03/06/07 19:24	1.429	1	headspace <= 1 mL
024	ec624	SAMPLE	193063-008	Water	122726	03/06/07 19:56	1.0	1	headspace > 1 mL
025	ec625	X	IB			03/06/07 20:28	1.0	1	
026	ec626	X	IB			03/06/07 21:00	1.0	1	
027	ec627	X	IB			03/06/07 21:32	1.0	1	
028	ec628	X	TVH2000			03/06/07 22:04	1.0	1	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/07/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

REPORTING SUMMARY FOR 193055 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCAD	MCMDV	DMDTT	CDBTD	BMDBD	THPDC	EXXTS	TPDDB	B
				LCRLC	CTDTC	AC EC	CCTCZ	CCDIC	ZCCXC	BLBYY	OTBCB	CZR
				M ME	EELS	BE A	KELAC	AE PCB	PMPAO	ECBZL	LTYMA	FAM4
				E EA	1N E	1 1	1MLL1	A MK	1E11	2 M Z	MOX E	M1EF
						2	3 2		22			32
193055-011	MSVOA05	03/06/07 13:33	1.0	+ + +

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/6/97
PREPPED BY: Zo

122726 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	192902-1		A	<2			5	m 10x, anomalous ~~vial~~	run A
2	193063-3		F	↓			↓	m 1x, ~~total~~ OD	✓ FOAM
3	-6		D	<2	100x			m 1.42x, OD	↓
4	-8		~~B~~ A	↓	12ml/4v			m ~~1.42x~~, OD 1X	load last
5	193057-2		C	7				1X	
6	-3		↓	↓				↓	
7	-4		B	<2				1X ~~PUT OFF~~	
8	193109-1		B					m 1x, MECL RL +	TB
9	193055-15							1X	
0	-11							↓	
1	-12								
2	-13		↓						
3	-14		I					1X	
4	193108-9		B					↓	
5	-10		↓	↓				↓	
16	-11			<2				2X	
17	-12			—				1X PUT OFF	
18	-13		C	<2			5	m 1.42x, OD	
19	193138-2 #								
20									
21									
22									
23									
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PREPFORM.XLS

7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF6GW103	Batch#:	122680
Lab ID:	193055-004	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	75	65-135
Decachlorobiphenyl	82	65-135

ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF6GW100	Batch#:	122680
Lab ID:	193055-005	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	75	65-135

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF6GW101	Batch#:	122680
Lab ID:	193055-006	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	72	65-135
Decachlorobiphenyl	81	65-135

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW02	Batch#:	122680
Lab ID:	193055-011	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	82	65-135

ND= Not Detected
RL= Reporting Limit

42.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW103	Batch#:	122680
Lab ID:	193055-012	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	85	65-135
Decachlorobiphenyl	91	65-135

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW104	Batch#:	122680
Lab ID:	193055-013	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	96	65-135

ND= Not Detected
RL= Reporting Limit

44.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW105	Batch#:	122680
Lab ID:	193055-014	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	87	65-135

ND= Not Detected
RL= Reporting Limit

45.0

: 00152

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377407	Batch#:	122680
Matrix:	Water	Prepared:	03/04/07
Units:	ug/L	Analyzed:	03/05/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	75	65-135
Decachlorobiphenyl	92	65-135

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	122680
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Type: BS Lab ID: QC377408

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1675	84	65-135
Heptachlor	0.2000	0.1610	80	65-135
Aldrin	0.2000	0.1684	84	65-135
Dieldrin	0.4000	0.3466	87	65-135
Endrin	0.4000	0.3667 #	92	65-135
4,4'-DDT	0.4000	0.3571	89	65-135

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	97	65-135

Type: BSD Lab ID: QC377409

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1817	91	65-135	8	35
Heptachlor	0.2000	0.1732	87	65-135	7	35
Aldrin	0.2000	0.1777	89	65-135	5	35
Dieldrin	0.4000	0.3692	92	65-135	6	35
Endrin	0.4000	0.3919 #	98	65-135	7	35
4,4'-DDT	0.4000	0.3800	95	65-135	6	35

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	96	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
RPD= Relative Percent Difference

47.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PEST Water: EPA 8081A

Inst : GC16
Calnum : 237085786001
Units : pg/ul

Name : gc16pest_059
Date : 28-FEB-2007 23:03
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	059_018	237085786018	PEST_1	28-FEB-2007 23:03	S5553
L2	059_019	237085786019	PEST_2	28-FEB-2007 23:23	S5554
L3	059_020	237085786020	PEST_3	28-FEB-2007 23:43	S5555
L4	059_021	237085786021	PEST_4	01-MAR-2007 00:03	S5556
L5	059_023	237085786023	PEST_6	01-MAR-2007 00:43	S5050
L6	059_024	237085786024	PEST_7	01-MAR-2007 01:03	S5263
L7	059_031	237085786031	PEST_5	01-MAR-2007 09:30	S5049

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	4483.0	4601.6	5327.2	6624.3	9142.2		7400.0	AVRG		1.60E-4		6263.0	**29**	0.995	20	rsd ***
gamma-BHC	A	4194.5	4132.0	4882.0	5884.7	7818.1		6588.0	AVRG		1.79E-4		5583.2	**26**	0.995	20	rsd ***
beta-BHC	A	4020.0	3820.0	4013.1	4058.0	4475.9	4305.2	4227.3	AVRG		2.42E-4		4131.4	5	0.995	20	
delta-BHC	A	4164.5	4017.2	4608.4	5562.9	7514.9		6233.3	AVRG		1.87E-4		5350.2	**25**	0.995	20	rsd ***
Heptachlor	A	4813.0	4453.2	4653.0	4859.8	5826.7	6056.7	5242.8	AVRG		1.95E-4		5129.3	12	0.995	20	
Aldrin	A	6120.5	5998.0	6346.6	7056.6	8267.2	8043.9	7426.9	AVRG		1.42E-4		7037.1	13	0.995	20	
Heptachlor epoxide	A	6400.5	6258.2	6549.7	6697.0	7246.7	6831.4	6864.7	AVRG		1.49E-4		6692.6	5	0.995	20	
gamma-Chlordane	A	6939.5	6513.6	6774.4	6897.7	7481.0	7163.1	7057.8	AVRG		1.43E-4		6975.3	4	0.995	20	
alpha-Chlordane	A	6136.0	5878.2	6027.6	6394.1	7179.1	6569.6	6654.9	AVRG		1.56E-4		6405.6	7	0.995	20	
4,4'-DDE	A	4621.8	4424.9	4956.6	5499.9	6248.4	6090.6	5883.9	AVRG		1.86E-4		5389.4	14	0.995	20	
Endosulfan I	A	6953.0	6578.6	7119.4	7180.1	7706.2	7817.3	7499.0	AVRG		1.38E-4		7264.8	6	0.995	20	
Dieldrin	A	5181.5	5139.9	5556.2	5993.4	6621.6	6262.4	6305.2	AVRG		1.70E-4		5865.7	10	0.995	20	
Endrin	A	4044.3	3527.8	3876.2	3974.7	4925.4	4843.6	4609.9	AVRG		2.35E-4		4257.4	13	0.995	20	
4,4'-DDD	A	2500.5	2364.7	2841.3	3358.7			3573.2	AVRG		3.42E-4		2927.7	18	0.995	20	
Endosulfan II	A	4581.5	5338.1	5300.0	5760.9	5928.8	5601.2	5604.8	AVRG		1.84E-4		5445.0	8	0.995	20	
4,4'-DDT	A	2132.8	1748.5	1978.2	2168.6	2818.4		2357.8	AVRG		4.54E-4		2200.7	17	0.995	20	
Methoxychlor	A	1612.6	1319.7	1469.9	1466.9	1541.8	1564.5	1418.9	AVRG		6.73E-4		1484.9	7	0.995	20	
Endosulfan sulfate	A	4763.3	4294.8	4564.7	4662.7	4914.4	4654.5	4829.4	AVRG		2.14E-4		4669.1	4	0.995	20	
Endrin ketone	A	4414.8	3996.3	4605.2	4962.3	5539.7	5361.4	5272.8	AVRG		2.05E-4		4878.9	12	0.995	20	
TCMX	A	6598.5	6720.1	7226.6	7654.1	8020.3	7348.6	7823.3	AVRG		1.36E-4		7341.6	7	0.995	20	
Decachlorobiphenyl	A	7118.8	5941.6	5826.0	5270.3	4753.3	4324.9	5146.2	AVRG		1.82E-4		5483.0	17	0.995	20	
alpha-BHC	B	8408.0	8578.4	9479.1	10868	13755		11588	AVRG		9.57E-5		10446	20	0.995	20	
gamma-BHC	B	9605.0	8159.2	9354.6	9906.9	11996	12158	10404	AVRG		9.78E-5		10226	14	0.995	20	
beta-BHC	B	6614.0	6147.2	6473.2	6286.1	6620.4	6254.8	6433.2	AVRG		1.56E-4		6404.1	3	0.995	20	
delta-BHC	B	7014.0	6742.4	7258.3	8151.3	10684	10773	8676.3	AVRG		1.18E-4		8471.3	20	0.995	20	
Heptachlor	B	9620.5	8319.8	8784.8	8881.0	10217	11031	9515.0	AVRG		1.05E-4		9481.2	10	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	10563	10216	10482	11078	12540	12213	11457	AVRG		8.91E-5		11221	8	0.995	20	
Heptachlor epoxide	B	10743	10174	10442	10492	11060	10430	10591	AVRG		9.47E-5		10562	3	0.995	20	
gamma-Chlordane	B	11304	10949	11160	11153	11685	11088	11319	AVRG		8.90E-5		11237	2	0.995	20	
alpha-Chlordane	B	11099	10421	10554	10635	10958	10343	10874	AVRG		9.35E-5		10698	3	0.995	20	
4,4'-DDE	B	7893.3	7437.9	8065.0	8617.7	9569.7	9450.4	9000.7	AVRG		1.17E-4		8576.4	9	0.995	20	
Endosulfan I	B	10608	10234	10624	10529	11286	10757	10569	AVRG		9.38E-5		10658	3	0.995	20	
Dieldrin	B	9157.3	8773.7	9260.1	9666.3	10394	9897.5	9855.3	AVRG		1.04E-4		9572.1	6	0.995	20	
Endrin	B	6519.0	5660.9	6155.1	6184.6	6923.8	7009.2	6395.5	AVRG		1.56E-4		6406.9	7	0.995	20	
4,4'-DDD	B	5079.3	4797.9	5411.1	5900.6	6717.9	6747.1	5936.0	AVRG		1.72E-4		5798.5	13	0.995	20	
Endosulfan II	B	9618.3	9111.2	9244.2	9216.3	9256.5	8678.6	9160.3	AVRG		1.09E-4		9183.6	3	0.995	20	
4,4'-DDT	B	3956.0	3464.5	3801.2	4009.2	4791.0	5296.1	4005.3	AVRG		2.39E-4		4189.0	15	0.995	20	
Methoxychlor	B	2968.1	2153.0	2275.2	2163.6	2252.3	2365.1	1998.9	AVRG		4.33E-4		2310.9	13	0.995	20	
Endosulfan sulfate	B	8198.3	7161.0	7449.3	7429.0	7600.2	7237.6	7417.7	AVRG		1.33E-4		7499.0	5	0.995	20	
Endrin ketone	B	7404.8	6699.1	7576.0	8104.9	8751.6	8529.3	8225.6	AVRG		1.27E-4		7898.7	9	0.995	20	
TCMX	B	10879	10784	10799	10971	11281	10487	10934	AVRG		9.19E-5		10876	2	0.995	20	
Decachlorobiphenyl	B	14296	11648	11158	10149	9101.8	8222.6	9746.8	AVRG		9.42E-5		10617	19	0.995	20	
Average EPA 8081A	A												(n=22)	12		20	
Average EPA 8081A	B												(n=22)	9		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
gamma-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
beta-BHC	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
delta-BHC	A	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
Heptachlor	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Aldrin	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
4,4'-DDE	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan I	A	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Dieldrin	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDD	A	4.0000	10.000	20.000	40.000			50.000	pg/ul
Endosulfan II	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDT	A	4.0000	10.000	20.000	40.000	100.00		50.000	pg/ul
Methoxychlor	A	20.000	50.000	100.00	200.00	500.00	1000.0	250.00	pg/ul
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin ketone	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
TCMX	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
alpha-BHC	B	2.0000	5.0000	10.000	20.000	50.000		25.000	pg/ul
gamma-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
beta-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
delta-BHC	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Aldrin	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
4,4'-DDE	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan I	B	2.0000	5.0000	10.000	20.000	50.000	100.00	25.000	pg/ul
Dieldrin	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDD	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endosulfan II	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
4,4'-DDT	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Methoxychlor	B	20.000	50.000	100.00	200.00	500.00	1000.0	250.00	pg/ul
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Endrin ketone	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
TCMX	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	100.00	200.00	50.000	pg/ul

=ICAL %RSD failure

strument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 PEST Water
EPA 8081A

Inst : GC16 Name : gc16pest_059
Calnum : 237085786001 Cal Date: 28-FEB-2007

ICV 237085786027 (059_027 01-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	6263.0	6766.7	25.00	27.01	pg/ul	8	15	
gamma-BHC	A	5583.2	5943.9	25.00	26.62	pg/ul	6	15	
beta-BHC	A	4131.4	3895.7	25.00	23.57	pg/ul	-6	15	
delta-BHC	A	5350.2	5899.8	25.00	27.57	pg/ul	10	15	
Heptachlor	A	5129.3	4813.2	25.00	23.46	pg/ul	-6	15	
Aldrin	A	7037.1	6914.4	25.00	24.56	pg/ul	-2	15	
Heptachlor epoxide	A	6692.6	6430.2	25.00	24.02	pg/ul	-4	15	
gamma-Chlordane	A	6975.3	7012.2	25.00	25.13	pg/ul	1	15	
alpha-Chlordane	A	6405.6	6715.4	25.00	26.21	pg/ul	5	15	
4,4'-DDE	A	5389.4	5022.0	25.00	23.30	pg/ul	-7	15	
Endosulfan I	A	7264.8	6824.6	25.00	23.49	pg/ul	-6	15	
Dieldrin	A	5865.7	5385.9	25.00	22.95	pg/ul	-8	15	
Endrin	A	4257.4	4435.2	25.00	26.04	pg/ul	4	15	
4,4'-DDD	A	2927.7	2903.2	25.00	24.79	pg/ul	-1	15	
Endosulfan II	A	5445.0	5220.0	25.00	23.97	pg/ul	-4	15	
4,4'-DDT	A	2200.7	2231.6	25.00	25.35	pg/ul	1	15	
Methoxychlor	A	1484.9	1714.7	25.00	28.87	pg/ul	15	15	
Endosulfan sulfate	A	4669.1	4538.0	25.00	24.30	pg/ul	-3	15	
Endrin ketone	A	4878.9	4774.0	25.00	24.46	pg/ul	-2	15	
alpha-BHC	B	10446	10678	25.00	25.55	pg/ul	2	15	
gamma-BHC	B	10226	9645.8	25.00	23.58	pg/ul	-6	15	
beta-BHC	B	6404.1	5887.1	25.00	22.98	pg/ul	-8	15	
delta-BHC	B	8471.3	8529.7	25.00	25.17	pg/ul	1	15	
Heptachlor	B	9481.2	9074.4	25.00	23.93	pg/ul	-4	15	
Aldrin	B	11221	10778	25.00	24.01	pg/ul	-4	15	
Heptachlor epoxide	B	10562	9917.3	25.00	23.47	pg/ul	-6	15	
gamma-Chlordane	B	11237	11011	25.00	24.50	pg/ul	-2	15	
alpha-Chlordane	B	10698	10417	25.00	24.34	pg/ul	-3	15	
4,4'-DDE	B	8576.4	8101.1	25.00	23.61	pg/ul	-6	15	
Endosulfan I	B	10658	10360	25.00	24.30	pg/ul	-3	15	
Dieldrin	B	9572.1	8922.8	25.00	23.30	pg/ul	-7	15	
Endrin	B	6406.9	6346.4	25.00	24.76	pg/ul	-1	15	
4,4'-DDD	B	5798.5	5414.7	25.00	23.35	pg/ul	-7	15	
Endosulfan II	B	9183.6	9132.6	25.00	24.86	pg/ul	-1	15	
4,4'-DDT	B	4189.0	4109.7	25.00	24.53	pg/ul	-2	15	
Methoxychlor	B	2310.9	2779.6	25.00	30.07	pg/ul	**20**	15	v+ ***
Endosulfan sulfate	B	7499.0	7387.0	25.00	24.63	pg/ul	-1	15	
Endrin ketone	B	7898.7	7988.4	25.00	25.28	pg/ul	1	15	
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

237085786001 ICVs

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807085473001
Units : pg

Name : gc23pest_059
Date : 28-FEB-2007 22:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	059_022	807085473022	PEST_1	28-FEB-2007 22:36	S5553
L2	059_023	807085473023	PEST_2	28-FEB-2007 22:58	S5554
L3	059_024	807085473024	PEST_3	28-FEB-2007 23:19	S5555
L4	059_025	807085473025	PEST_4	28-FEB-2007 23:40	S5556
L5	059_026	807085473026	PEST_5	01-MAR-2007 00:02	S5049
L6	059_027	807085473027	PEST_6	01-MAR-2007 00:23	S5050
L7	059_028	807085473028	PEST_7	01-MAR-2007 00:45	S5263

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	6115.5	6454.2	5846.2	6567.8	6724.9	5499.2	5269.4	AVRG		1.65E-4		6068.2	9	0.995	20	
gamma-BHC	A	5694.5	5871.8	5170.7	5857.7	5987.0	4877.3	4663.3	AVRG		1.84E-4		5446.0	10	0.995	20	
beta-BHC	A	3093.0	2690.8	2216.0	2503.9	2472.3	1948.7	1885.3	AVRG		4.16E-4		2401.4	18	0.995	20	
delta-BHC	A	7922.5	6793.0	5497.5	6304.0	6162.3	4857.5	4660.3	AVRG		1.66E-4		6028.1	19	0.995	20	
Heptachlor	A	4698.5	5110.4	4474.3	5399.9	5428.9	4253.5	4132.6	AVRG		2.09E-4		4785.4	11	0.995	20	
Aldrin	A	5412.0	5690.8	4952.4	5642.6	5636.0	4614.3	4339.9	AVRG		1.93E-4		5184.0	11	0.995	20	
Heptachlor epoxide	A	4867.0	5102.2	4413.5	5032.6	4990.3	4028.9	3731.9	AVRG		2.18E-4		4595.2	12	0.995	20	
gamma-Chlordane	A	4672.5	4955.6	4273.2	4933.9	4826.5	3944.0	3711.3	AVRG		2.24E-4		4473.8	11	0.995	20	
alpha-Chlordane	A	4527.5	4617.6	4059.4	4655.0	4486.4	3687.4	3454.6	AVRG		2.37E-4		4212.5	11	0.995	20	
4,4'-DDE	A	4043.8	4362.7	3612.4	4484.4	4278.4	3393.2	3037.6	AVRG		2.57E-4		3887.5	14	0.995	20	
Endosulfan I	A	4463.5	4447.8	4062.1	4760.8	4705.7	3752.4	3517.9	AVRG		2.36E-4		4244.3	11	0.995	20	
Dieldrin	A	4508.0	4778.4	4066.1	4733.7	4575.0	3715.6	3232.8	AVRG		2.36E-4		4229.9	14	0.995	20	
Endrin	A	3492.5	3832.8	3195.7	3928.1	3721.8	2952.9	2653.8	AVRG		2.94E-4		3396.8	14	0.995	20	
4,4'-DDD	A	3098.8	3559.3	2791.0	3450.0	3371.6	2540.2	2498.1	AVRG		3.29E-4		3044.1	14	0.995	20	
Endosulfan II	A	3837.3	3922.2	3429.1	4106.8	3660.0	3112.4	2642.9	AVRG		2.83E-4		3530.1	14	0.995	20	
4,4'-DDT	A	2764.5	3194.2	2641.9	3574.7	3233.0	2648.0	2454.1	AVRG		3.41E-4		2930.1	14	0.995	20	
Methoxychlor	A	1166.4	1310.4	1070.6	1421.1	1208.3	978.40	774.77	AVRG		8.83E-4		1132.8	19	0.995	20	
Endosulfan sulfate	A	3606.5	3665.1	2981.6	3582.4	3260.5	2653.7	2410.2	AVRG		3.16E-4		3165.7	16	0.995	20	
Endrin ketone	A	3997.8	4161.7	3390.9	4106.6	3677.8	3062.7	2658.5	AVRG		2.79E-4		3579.4	16	0.995	20	
TCMX	A	3358.3	3550.7	3285.1	3528.6	3627.0	2925.5	2781.3	AVRG		3.04E-4		3293.8	10	0.995	20	
Decachlorobiphenyl	A	2177.3	2599.7	2129.6	2815.6	2241.2	1986.2	1651.3	AVRG		4.49E-4		2228.7	17	0.995	20	
alpha-BHC	B	10809	10425	9337.1	9604.7	9797.3	9808.3	9035.8	AVRG		1.02E-4		9830.9	6	0.995	20	
gamma-BHC	B	11227	10378	8297.3	8673.7	8712.8	8769.8	8021.8	AVRG		1.09E-4		9154.3	13	0.995	20	
beta-BHC	B	5483.0	4160.2	3508.4	3482.9	3498.0	3434.4	3213.5	AVRG		2.61E-4		3825.8	**21**	0.995	20	rsd ***
delta-BHC	B	14236	10353	8784.7	8597.1	8867.6	8679.8	7889.2	AVRG		1.04E-4		9629.6	**22**	0.995	20	rsd ***
Heptachlor	B	8662.5	8368.8	7423.1	7748.2	7953.0	7843.8	7186.1	AVRG		1.27E-4		7883.6	6	0.995	20	

807085473001

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	9648.0	8777.2	7868.5	8006.2	8153.0	8086.7	7399.4	AVRG		1.21E-4		8277.0	9	0.995	20	
Heptachlor epoxide	B	8742.5	7878.0	6944.5	6974.2	7062.1	6924.7	6192.3	AVRG		1.38E-4		7245.5	11	0.995	20	
gamma-Chlordane	B	8552.0	7800.0	6824.1	6930.4	7049.0	7051.8	6385.4	AVRG		1.38E-4		7227.5	10	0.995	20	
alpha-Chlordane	B	7912.0	7105.4	6359.1	6591.1	6696.6	6580.5	5993.6	AVRG		1.48E-4		6748.3	9	0.995	20	
4,4'-DDE	B	7251.5	6730.5	5996.3	6253.4	6383.8	6206.8	5049.3	AVRG		1.60E-4		6267.4	11	0.995	20	
Endosulfan I	B	8241.0	7139.4	6319.4	6144.6	6244.3	6217.8	5626.9	AVRG		1.52E-4		6561.9	13	0.995	20	
Dieldrin	B	7889.3	7264.4	6410.2	6565.8	6674.3	6345.5	5131.2	AVRG		1.51E-4		6611.5	13	0.995	20	
Endrin	B	6419.8	5915.5	5107.9	5289.8	5382.8	5182.8	4246.5	AVRG		1.86E-4		5363.6	13	0.995	20	
4,4'-DDD	B	6069.8	5456.8	4823.1	4987.2	4976.1	5003.8	4165.7	AVRG		1.97E-4		5068.9	12	0.995	20	
Endosulfan II	B	6870.8	5969.8	5320.7	5726.8	5361.8	5164.3	4373.8	AVRG		1.80E-4		5541.1	14	0.995	20	
4,4'-DDT	B	5687.3	5259.6	4741.9	5067.5	5157.0	5206.7	4409.2	AVRG		1.97E-4		5075.6	8	0.995	20	
Methoxychlor	B	2387.0	2145.5	1868.4	1961.2	1895.0	1671.5	1232.5	AVRG		5.32E-4		1880.2	19	0.995	20	
Endosulfan sulfate	B	6506.5	5414.7	4664.0	4763.1	4674.3	4597.5	3904.8	AVRG		2.03E-4		4932.1	17	0.995	20	
Endrin ketone	B	7085.0	6075.4	5331.8	5481.1	5429.2	5261.9	4246.2	AVRG		1.80E-4		5558.7	16	0.995	20	
TCMX	B	5834.0	5686.8	5069.4	5191.3	5251.7	5172.2	4805.5	AVRG		1.89E-4		5287.3	7	0.995	20	
Decachlorobiphenyl	B	4371.0	4207.5	3709.2	4040.4	3853.4	3960.2	3655.9	AVRG		2.52E-4		3971.1	7	0.995	20	
Average EPA 8081A	A												(n=22)	14		20	
Average EPA 8081A	B												(n=22)	12		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_059
Calnum : 807085473001 Cal Date: 28-FEB-2007

ICV 807085473031 (059_031 01-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	6068.2	5358.7	25.00	22.08	pg	-12	15	
gamma-BHC	A	5446.0	4778.1	25.00	21.93	pg	-12	15	
beta-BHC	A	2401.4	1915.5	25.00	19.94	pg	**-20**	15	v- ***
delta-BHC	A	6028.1	5007.1	25.00	20.77	pg	**-17**	15	v- ***
Heptachlor	A	4785.4	4162.8	25.00	21.75	pg	-13	15	
Aldrin	A	5184.0	4599.3	25.00	22.18	pg	-11	15	
Heptachlor epoxide	A	4595.2	4034.0	25.00	21.95	pg	-12	15	
gamma-Chlordane	A	4473.8	4054.2	25.00	22.65	pg	-9	15	
alpha-Chlordane	A	4212.5	3705.7	25.00	21.99	pg	-12	15	
4,4'-DDE	A	3887.5	3711.3	25.00	23.87	pg	-5	15	
Endosulfan I	A	4244.3	3545.8	25.00	20.89	pg	**-16**	15	v- ***
Dieldrin	A	4229.9	3978.8	25.00	23.52	pg	-6	15	
Endrin	A	3396.8	3298.5	25.00	24.28	pg	-3	15	
4,4'-DDD	A	3044.1	2958.3	25.00	24.30	pg	-3	15	
Endosulfan II	A	3530.1	3305.2	25.00	23.41	pg	-6	15	
4,4'-DDT	A	2930.1	2809.4	25.00	23.97	pg	-4	15	
Methoxychlor	A	1132.8	1438.5	25.00	31.75	pg	**27**	15	v+ ***
Endosulfan sulfate	A	3165.7	2987.8	25.00	23.59	pg	-6	15	
Endrin ketone	A	3579.4	3522.4	25.00	24.60	pg	-2	15	
alpha-BHC	B	9830.9	9091.0	25.00	23.12	pg	-8	15	
gamma-BHC	B	9154.3	8367.2	25.00	22.85	pg	-9	15	
beta-BHC	B	3825.8	3234.8	25.00	21.14	pg	-15	15	
delta-BHC	B	9629.6	8297.8	25.00	21.54	pg	-14	15	
Heptachlor	B	7883.6	7380.5	25.00	23.40	pg	-6	15	
Aldrin	B	8277.0	7648.4	25.00	23.10	pg	-8	15	
Heptachlor epoxide	B	7245.5	6568.9	25.00	22.67	pg	-9	15	
gamma-Chlordane	B	7227.5	6745.7	25.00	23.33	pg	-7	15	
alpha-Chlordane	B	6748.3	6324.9	25.00	23.43	pg	-6	15	
4,4'-DDE	B	6267.4	6217.0	25.00	24.80	pg	-1	15	
Endosulfan I	B	6561.9	6020.6	25.00	22.94	pg	-8	15	
Dieldrin	B	6611.5	6419.4	25.00	24.27	pg	-3	15	
Endrin	B	5363.6	5419.9	25.00	25.26	pg	1	15	
4,4'-DDD	B	5068.9	4762.4	25.00	23.49	pg	-6	15	
Endosulfan II	B	5541.1	5207.6	25.00	23.49	pg	-6	15	
4,4'-DDT	B	5075.6	4848.1	25.00	23.88	pg	-4	15	
Methoxychlor	B	1880.2	2238.7	25.00	29.77	pg	**19**	15	v+ ***
Endosulfan sulfate	B	4932.1	4461.7	25.00	22.62	pg	-10	15	
Endrin ketone	B	5558.7	5221.4	25.00	23.48	pg	-6	15	
Average EPA 8081A	A	n=20					10	15	
Average EPA 8081A	B	n=20					8	15	

+=high bias -=low bias v=ICV

807085473001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193055 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237092622005 File : 064_005 Time : 05-MAR-2007 09:01

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	431057	6	15	
4,4'-DDE	A	2817			
4,4'-DDD	A	23176			
Endrin	A	306575	9	15	
Endrin aldehyde	A	4543			
Endrin ketone	A	24260			
4,4'-DDT	B	598882	7	15	
4,4'-DDE	B	3987			
4,4'-DDD	B	42043			
Endrin	B	459357	12	15	
Endrin aldehyde	B	18833			
Endrin ketone	B	40863			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193055 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237092622019 File : 064_019 Time : 05-MAR-2007 17:55

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	302691	9	15	
4,4'-DDE	A	2243			
4,4'-DDD	A	27245			
Endrin	A	247885	7	15	
Endrin aldehyde	A	1391			
Endrin ketone	A	17163			
4,4'-DDT	B	445528	11	15	
4,4'-DDE	B	2604			
4,4'-DDD	B	52560			
Endrin	B	374400	8	15	
Endrin aldehyde	B	4820			
Endrin ketone	B	28044			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193055 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807094099004 File : 065_004 Time : 06-MAR-2007 09:45

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	280595	6	15	
4,4'-DDE	A	2673			
4,4'-DDD	A	14121			
Endrin	A	161533	10	15	
Endrin aldehyde	A	3124			
Endrin ketone	A	15138			
4,4'-DDT	B	459278	4	15	
4,4'-DDE	B	2390			
4,4'-DDD	B	15453			
Endrin	B	252415	7	15	
Endrin aldehyde	B	4070			
Endrin ketone	B	15122			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193055 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807094099016 File : 065_016 Time : 06-MAR-2007 15:20

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	235306	8	15	
4,4'-DDE	A	2328			
4,4'-DDD	A	18007			
Endrin	A	146450	12	15	
Endrin aldehyde	A	6666			
Endrin ketone	A	13206			
4,4'-DDT	B	457154	4	15	
4,4'-DDE	B	1852			
4,4'-DDD	B	17475			
Endrin	B	252931	7	15	
Endrin aldehyde	B	2441			
Endrin ketone	B	17156			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_3 IDF : 1.0
Seqnum : 237092622006 File : 064_006 Time : 05-MAR-2007 09:21
Cal : 237085786001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6263.0	5399.6	10.00	8.621	pg/ul	-14	15	rsd ***
gamma-BHC	A	5583.2	5316.7	10.00	9.523	pg/ul	-5	15	rsd ***
beta-BHC	A	4131.4	4089.4	10.00	9.898	pg/ul	-1	15	
delta-BHC	A	5350.2	4835.2	10.00	9.037	pg/ul	-10	15	rsd ***
Heptachlor	A	5129.3	5096.0	10.00	9.935	pg/ul	-1	15	
Aldrin	A	7037.1	6298.7	10.00	8.951	pg/ul	-10	15	
Heptachlor epoxide	A	6692.6	6599.8	10.00	9.861	pg/ul	-1	15	
gamma-Chlordane	A	6975.3	6896.4	10.00	9.887	pg/ul	-1	15	
alpha-Chlordane	A	6405.6	6363.8	10.00	9.935	pg/ul	-1	15	
4,4'-DDE	A	5389.4	5278.2	20.00	19.59	pg/ul	-2	15	
Endosulfan I	A	7264.8	6993.2	10.00	9.626	pg/ul	-4	15	
Dieldrin	A	5865.7	5751.7	20.00	19.61	pg/ul	-2	15	
Endrin	A	4257.4	4657.2	20.00	21.88	pg/ul	9	15	
4,4'-DDD	A	2927.7	3293.3	20.00	22.50	pg/ul	12	15	
Endosulfan II	A	5445.0	5754.1	20.00	21.14	pg/ul	6	15	
4,4'-DDT	A	2200.7	2442.4	20.00	22.20	pg/ul	11	15	
Methoxychlor	A	1484.9	1538.3	100.0	103.6	pg/ul	4	15	
Endosulfan sulfate	A	4669.1	4995.0	20.00	21.40	pg/ul	7	15	
Endrin ketone	A	4878.9	5196.1	20.00	21.30	pg/ul	7	15	
TCMX	A	7341.6	7371.1	20.00	20.08	pg/ul	0	15	
Decachlorobiphenyl	A	5483.0	6622.2	20.00	24.16	pg/ul	**21**	15	c+
alpha-BHC	B	10446	9878.0	10.00	9.456	pg/ul	-5	15	
gamma-BHC	B	10226	10109	10.00	9.885	pg/ul	-1	15	
beta-BHC	B	6404.1	6972.4	10.00	10.89	pg/ul	9	15	
delta-BHC	B	8471.3	7923.7	10.00	9.354	pg/ul	-6	15	
Heptachlor	B	9481.2	9206.1	10.00	9.710	pg/ul	-3	15	
Aldrin	B	11221	10912	10.00	9.724	pg/ul	-3	15	
Heptachlor epoxide	B	10562	10207	10.00	9.664	pg/ul	-3	15	
gamma-Chlordane	B	11237	11609	10.00	10.33	pg/ul	3	15	
alpha-Chlordane	B	10698	11087	10.00	10.36	pg/ul	4	15	
4,4'-DDE	B	8576.4	8814.6	20.00	20.56	pg/ul	3	15	
Endosulfan I	B	10658	10868	10.00	10.20	pg/ul	2	15	
Dieldrin	B	9572.1	9343.0	20.00	19.52	pg/ul	-2	15	
Endrin	B	6406.9	6793.1	20.00	21.21	pg/ul	6	15	
4,4'-DDD	B	5798.5	5607.8	20.00	19.34	pg/ul	-3	15	
Endosulfan II	B	9183.6	9754.6	20.00	21.24	pg/ul	6	15	
4,4'-DDT	B	4189.0	3966.5	20.00	18.94	pg/ul	-5	15	
Methoxychlor	B	2310.9	2022.8	100.0	87.53	pg/ul	-12	15	
Endosulfan sulfate	B	7499.0	8170.3	20.00	21.79	pg/ul	9	15	
Endrin ketone	B	7898.7	8171.2	20.00	20.69	pg/ul	3	15	
TCMX	B	10876	11322	20.00	20.82	pg/ul	4	15	
Decachlorobiphenyl	B	10617	12758	20.00	24.03	pg/ul	**20**	15	c+
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					6	15	

+=high bias c=CCV rsd=ICAL %RSD failure

237092622006

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_4 IDF : 1.0
Seqnum : 237092622021 File : 064_021 Time : 05-MAR-2007 18:35
Cal : 237085786001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6263.0	7583.3	20.00	24.22	pg/ul	**21**	15	c+ rsd ***
gamma-BHC	A	5583.2	6744.8	20.00	24.16	pg/ul	**21**	15	c+ rsd ***
beta-BHC	A	4131.4	4612.5	20.00	22.33	pg/ul	12	15	
delta-BHC	A	5350.2	6419.4	20.00	24.00	pg/ul	**20**	15	c+ rsd ***
Heptachlor	A	5129.3	5816.5	20.00	22.68	pg/ul	13	15	
Aldrin	A	7037.1	7660.8	20.00	21.77	pg/ul	9	15	
Heptachlor epoxide	A	6692.6	7515.0	20.00	22.46	pg/ul	12	15	
gamma-Chlordane	A	6975.3	7614.0	20.00	21.83	pg/ul	9	15	
alpha-Chlordane	A	6405.6	7478.7	20.00	23.35	pg/ul	**17**	15	c+ ***
4,4'-DDE	A	5389.4	6378.8	40.00	47.34	pg/ul	**18**	15	c+ ***
Endosulfan I	A	7264.8	7832.0	20.00	21.56	pg/ul	8	15	
Dieldrin	A	5865.7	6798.1	40.00	46.36	pg/ul	**16**	15	c+ ***
Endrin	A	4257.4	5526.5	40.00	51.92	pg/ul	**30**	15	c+ ***
4,4'-DDD	A	2927.7	4231.5	40.00	57.81	pg/ul	**45**	15	>LR c+ ***
Endosulfan II	A	5445.0	6546.9	40.00	48.09	pg/ul	**20**	15	c+ ***
4,4'-DDT	A	2200.7	2456.8	40.00	44.66	pg/ul	12	15	
Methoxychlor	A	1484.9	1580.9	200.0	212.9	pg/ul	6	15	
Endosulfan sulfate	A	4669.1	5285.2	40.00	45.28	pg/ul	13	15	
Endrin ketone	A	4878.9	5330.8	40.00	43.70	pg/ul	9	15	
TCMX	A	7341.6	8482.0	40.00	46.21	pg/ul	**16**	15	c+
Decachlorobiphenyl	A	5483.0	5791.1	40.00	42.25	pg/ul	6	15	
alpha-BHC	B	10446	12444	20.00	23.83	pg/ul	**19**	15	c+ ***
gamma-BHC	B	10226	11395	20.00	22.29	pg/ul	11	15	
beta-BHC	B	6404.1	7117.4	20.00	22.23	pg/ul	11	15	
delta-BHC	B	8471.3	9602.3	20.00	22.67	pg/ul	13	15	
Heptachlor	B	9481.2	10034	20.00	21.17	pg/ul	6	15	
Aldrin	B	11221	12172	20.00	21.69	pg/ul	8	15	
Heptachlor epoxide	B	10562	11348	20.00	21.49	pg/ul	7	15	
gamma-Chlordane	B	11237	12107	20.00	21.55	pg/ul	8	15	
alpha-Chlordane	B	10698	11743	20.00	21.95	pg/ul	10	15	
4,4'-DDE	B	8576.4	9950.9	40.00	46.41	pg/ul	**16**	15	c+ ***
Endosulfan I	B	10658	11563	20.00	21.70	pg/ul	8	15	
Dieldrin	B	9572.1	10730	40.00	44.84	pg/ul	12	15	
Endrin	B	6406.9	7448.3	40.00	46.50	pg/ul	**16**	15	c+ ***
4,4'-DDD	B	5798.5	6970.8	40.00	48.09	pg/ul	**20**	15	c+ ***
Endosulfan II	B	9183.6	10140	40.00	44.17	pg/ul	10	15	
4,4'-DDT	B	4189.0	4085.9	40.00	39.02	pg/ul	-2	15	
Methoxychlor	B	2310.9	2205.2	200.0	190.8	pg/ul	-5	15	
Endosulfan sulfate	B	7499.0	8005.6	40.00	42.70	pg/ul	7	15	
Endrin ketone	B	7898.7	7939.2	40.00	40.20	pg/ul	1	15	
TCMX	B	10876	12367	40.00	45.48	pg/ul	14	15	
Decachlorobiphenyl	B	10617	10912	40.00	41.11	pg/ul	3	15	
Average EPA 8081A	A	(n=22)					**16**	15	ac ***
Average EPA 8081A	B	(n=22)					10	15	

+=high bias >LR=overrange ac=average CCV drift out c=CCV rsd=ICAL %RSD failure

237092622021

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807094099005 File : 065_005 Time : 06-MAR-2007 10:06
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6283.1	10.00	10.35	pg	4	15	
gamma-BHC	A	5446.0	5544.1	10.00	10.18	pg	2	15	
beta-BHC	A	2401.4	2279.1	10.00	9.491	pg	-5	15	
delta-BHC	A	6028.1	5577.6	10.00	9.253	pg	-7	15	
Heptachlor	A	4785.4	4597.4	10.00	9.607	pg	-4	15	
Aldrin	A	5184.0	5382.6	10.00	10.38	pg	4	15	
Heptachlor epoxide	A	4595.2	4712.7	10.00	10.26	pg	3	15	
gamma-Chlordane	A	4473.8	4562.2	10.00	10.20	pg	2	15	
alpha-Chlordane	A	4212.5	4224.4	10.00	10.03	pg	0	15	
4,4'-DDE	A	3887.5	3865.7	20.00	19.89	pg	-1	15	
Endosulfan I	A	4244.3	4165.6	10.00	9.815	pg	-2	15	
Dieldrin	A	4229.9	4332.4	20.00	20.48	pg	2	15	
Endrin	A	3396.8	3140.0	20.00	18.49	pg	-8	15	
4,4'-DDD	A	3044.1	3076.5	20.00	20.21	pg	1	15	
Endosulfan II	A	3530.1	3504.2	20.00	19.85	pg	-1	15	
4,4'-DDT	A	2930.1	2770.5	20.00	18.91	pg	-5	15	
Methoxychlor	A	1132.8	1033.2	100.0	91.20	pg	-9	15	
Endosulfan sulfate	A	3165.7	3122.0	20.00	19.72	pg	-1	15	
Endrin ketone	A	3579.4	3691.3	20.00	20.62	pg	3	15	
TCMX	A	3293.8	3381.0	20.00	20.53	pg	3	15	
Decachlorobiphenyl	A	2228.7	2286.2	20.00	20.52	pg	3	15	
alpha-BHC	B	9830.9	10232	10.00	10.41	pg	4	15	
gamma-BHC	B	9154.3	9321.6	10.00	10.18	pg	2	15	
beta-BHC	B	3825.8	3732.0	10.00	9.755	pg	-2	15	rsd ***
delta-BHC	B	9629.6	9169.1	10.00	9.522	pg	-5	15	rsd ***
Heptachlor	B	7883.6	8210.8	10.00	10.41	pg	4	15	
Aldrin	B	8277.0	8742.5	10.00	10.56	pg	6	15	
Heptachlor epoxide	B	7245.5	7591.3	10.00	10.48	pg	5	15	
gamma-Chlordane	B	7227.5	7480.2	10.00	10.35	pg	3	15	
alpha-Chlordane	B	6748.3	7069.9	10.00	10.48	pg	5	15	
4,4'-DDE	B	6267.4	6709.3	20.00	21.41	pg	7	15	
Endosulfan I	B	6561.9	6965.4	10.00	10.61	pg	6	15	
Dieldrin	B	6611.5	7079.8	20.00	21.42	pg	7	15	
Endrin	B	5363.6	5636.1	20.00	21.02	pg	5	15	
4,4'-DDD	B	5068.9	5376.7	20.00	21.21	pg	6	15	
Endosulfan II	B	5541.1	5738.4	20.00	20.71	pg	4	15	
4,4'-DDT	B	5075.6	5232.8	20.00	20.62	pg	3	15	
Methoxychlor	B	1880.2	2023.2	100.0	107.6	pg	8	15	
Endosulfan sulfate	B	4932.1	5144.4	20.00	20.86	pg	4	15	
Endrin ketone	B	5558.7	6070.5	20.00	21.84	pg	9	15	
TCMX	B	5287.3	5577.9	20.00	21.10	pg	5	15	
Decachlorobiphenyl	B	3971.1	4366.7	20.00	21.99	pg	10	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					5	15	

rsd=ICAL %RSD failure

807094099005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807094099017 File : 065_017 Time : 06-MAR-2007 15:42
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6478.4	20.00	21.35	pg	7	15	
gamma-BHC	A	5446.0	5749.3	20.00	21.11	pg	6	15	
beta-BHC	A	2401.4	2345.7	20.00	19.54	pg	-2	15	
delta-BHC	A	6028.1	5822.7	20.00	19.32	pg	-3	15	
Heptachlor	A	4785.4	5147.2	20.00	21.51	pg	8	15	
Aldrin	A	5184.0	5448.6	20.00	21.02	pg	5	15	
Heptachlor epoxide	A	4595.2	4800.2	20.00	20.89	pg	4	15	
gamma-Chlordane	A	4473.8	4658.3	20.00	20.82	pg	4	15	
alpha-Chlordane	A	4212.5	4411.4	20.00	20.94	pg	5	15	
4,4'-DDE	A	3887.5	4072.6	40.00	41.90	pg	5	15	
Endosulfan I	A	4244.3	4425.6	20.00	20.85	pg	4	15	
Dieldrin	A	4229.9	4467.9	40.00	42.25	pg	6	15	
Endrin	A	3396.8	3515.3	40.00	41.40	pg	3	15	
4,4'-DDD	A	3044.1	3124.4	40.00	41.05	pg	3	15	
Endosulfan II	A	3530.1	3764.7	40.00	42.66	pg	7	15	
4,4'-DDT	A	2930.1	3114.3	40.00	42.51	pg	6	15	
Methoxychlor	A	1132.8	1222.3	200.0	215.8	pg	8	15	
Endosulfan sulfate	A	3165.7	3231.8	40.00	40.83	pg	2	15	
Endrin ketone	A	3579.4	3786.9	40.00	42.32	pg	6	15	
TCMX	A	3293.8	3492.0	40.00	42.41	pg	6	15	
Decachlorobiphenyl	A	2228.7	2631.9	40.00	47.24	pg	**18**	15	c+
alpha-BHC	B	9830.9	9931.8	20.00	20.21	pg	1	15	
gamma-BHC	B	9154.3	8851.1	20.00	19.34	pg	-3	15	
beta-BHC	B	3825.8	3524.8	20.00	18.43	pg	-8	15	rsd ***
delta-BHC	B	9629.6	8745.6	20.00	18.16	pg	-9	15	rsd ***
Heptachlor	B	7883.6	8230.6	20.00	20.88	pg	4	15	
Aldrin	B	8277.0	8349.7	20.00	20.18	pg	1	15	
Heptachlor epoxide	B	7245.5	7358.7	20.00	20.31	pg	2	15	
gamma-Chlordane	B	7227.5	7270.2	20.00	20.12	pg	1	15	
alpha-Chlordane	B	6748.3	6863.9	20.00	20.34	pg	2	15	
4,4'-DDE	B	6267.4	6603.1	40.00	42.14	pg	5	15	
Endosulfan I	B	6561.9	6609.9	20.00	20.15	pg	1	15	
Dieldrin	B	6611.5	6938.8	40.00	41.98	pg	5	15	
Endrin	B	5363.6	5558.7	40.00	41.46	pg	4	15	
4,4'-DDD	B	5068.9	5172.2	40.00	40.81	pg	2	15	
Endosulfan II	B	5541.1	5424.9	40.00	39.16	pg	-2	15	
4,4'-DDT	B	5075.6	4964.0	40.00	39.12	pg	-2	15	
Methoxychlor	B	1880.2	1847.9	200.0	196.6	pg	-2	15	
Endosulfan sulfate	B	4932.1	4675.6	40.00	37.92	pg	-5	15	
Endrin ketone	B	5558.7	5307.6	40.00	38.19	pg	-5	15	
TCMX	B	5287.3	5344.3	40.00	40.43	pg	1	15	
Decachlorobiphenyl	B	3971.1	3679.7	40.00	37.06	pg	-7	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					3	15	

+=high bias c=CCV rsd=ICAL %RSD failure

807094099017

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237085786 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used		>LR
001	059_001	X	HEX			28-FEB-2007 13:46	1.0								
002	059_002	X	PEM			28-FEB-2007 14:05	1.0			1			1		1:DDT44=110.374
003	059_003	X	PEST_4			28-FEB-2007 14:25	1.0	3		1			2		
004	059_004	X	PEST_3			28-FEB-2007 15:53	1.0	41		1			3	ac	
005	059_005	X	PEM			28-FEB-2007 16:12	1.0	1		1			1		2:DDT44=123.740
006	059_006	X	PEST_3			28-FEB-2007 16:32	1.0	41		1			3	ac	
007	059_007	X	PEST_5			28-FEB-2007 17:01	1.0	41		1			4	ac	5:DDD44=105.084
008	059_008	X	PRIMER			28-FEB-2007 19:46	1.0								
009	059_009	X	PRIMER			28-FEB-2007 20:06	1.0								
010	059_010	X	PRIMER			28-FEB-2007 20:25	1.0								
011	059_011	X	PRIMER			28-FEB-2007 20:45	1.0								
012	059_012	X	PRIMER			28-FEB-2007 21:05	1.0								
013	059_013	X	PRIMER			28-FEB-2007 21:25	1.0								
014	059_014	X	HEX			28-FEB-2007 21:45	1.0								
015	059_015	X	HEX			28-FEB-2007 22:04	1.0								
016	059_016	PEM	PEM			28-FEB-2007 22:24	1.0	1		1			1		2:DDT44=129.695
017	059_017	X	HEX			28-FEB-2007 22:43	1.0								
018	059_018	ICAL	PEST_1			28-FEB-2007 23:03	1.0						5		
019	059_019	ICAL	PEST_2			28-FEB-2007 23:23	1.0						6		
020	059_020	ICAL	PEST_3			28-FEB-2007 23:43	1.0						3		
021	059_021	ICAL	PEST_4			01-MAR-2007 00:03	1.0						2		
022	059_022	X	PEST_5			01-MAR-2007 00:23	1.0						4		
023	059_023	ICAL	PEST_6			01-MAR-2007 00:43	1.0						7		
024	059_024	ICAL	PEST_7			01-MAR-2007 01:03	1.0						8		
025	059_025	X	HEX			01-MAR-2007 01:23	1.0								
026	059_026	X	HEX			01-MAR-2007 01:43	1.0								
027	059_027	ICV	ICV			01-MAR-2007 02:03	1.0	3		1			9		2:XYL246=245.284
028	059_028	X	ICV			01-MAR-2007 02:23	1.0	4		1			9		2:XYL246=247.844
029	059_029	X	HEX			01-MAR-2007 02:43	1.0								
030	059_030	X	HEX			01-MAR-2007 09:10	1.0								

Stds used: 1=S5053 2=S5556 3=S5555 4=S5049 5=S5553 6=S5554 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237085786 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
031	059_031	ICAL	PEST_5			01-MAR-2007 09:30	1.0					4	

Stds used: 1=S5053 2=S5556 3=S5555 4=S5049 5=S5553 6=S5554 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	059_001	X	HEX			28-FEB-2007 08:33	1.0							
002	059_002	PEM	PEM			28-FEB-2007 08:54	1.0			1			1	
003	059_003	X	PEST_3			28-FEB-2007 09:16	1.0	11		1			2 ac	
004	059_004	X	PRIMER			28-FEB-2007 12:36	1.0							
005	059_005	X	PRIMER			28-FEB-2007 12:57	1.0							
006	059_006	X	PRIMER			28-FEB-2007 13:18	1.0							
007	059_007	X	HEX			28-FEB-2007 14:30	1.0							
008	059_008	X	PEM			28-FEB-2007 14:51	1.0						1	
010	059_010	X	HEX			28-FEB-2007 16:16	1.0							
011	059_011	X	PEM			28-FEB-2007 17:07	1.0			1			1	
012	059_012	X	PEST_3			28-FEB-2007 17:31	1.0	21		1			2 ac	
013	059_013	X	PRIMER			28-FEB-2007 19:24	1.0							
014	059_014	X	PRIMER			28-FEB-2007 19:45	1.0							
015	059_015	X	PRIMER			28-FEB-2007 20:07	1.0							
016	059_016	X	PRIMER			28-FEB-2007 20:28	1.0							
017	059_017	X	PRIMER			28-FEB-2007 20:49	1.0							
018	059_018	X	HEX			28-FEB-2007 21:11	1.0							
019	059_019	X	HEX			28-FEB-2007 21:32	1.0							
020	059_020	PEM	PEM			28-FEB-2007 21:54	1.0			1			1	
021	059_021	X	HEX			28-FEB-2007 22:15	1.0							
022	059_022	ICAL	PEST_1			28-FEB-2007 22:36	1.0						3	
023	059_023	ICAL	PEST_2			28-FEB-2007 22:58	1.0						4	
024	059_024	ICAL	PEST_3			28-FEB-2007 23:19	1.0						2	
025	059_025	ICAL	PEST_4			28-FEB-2007 23:40	1.0						5	
026	059_026	ICAL	PEST_5			01-MAR-2007 00:02	1.0						6	
027	059_027	ICAL	PEST_6			01-MAR-2007 00:23	1.0						7	
028	059_028	ICAL	PEST_7			01-MAR-2007 00:45	1.0						8	
029	059_029	X	HEX			01-MAR-2007 01:06	1.0							
030	059_030	X	HEX			01-MAR-2007 01:27	1.0							
031	059_031	ICV	ICV			01-MAR-2007 01:49	1.0	7		1			9	2:XYL246=215.922

Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
032	059_032	X	ICV			01-MAR-2007 02:10	1.0	8		1			9	2:CL10BZ=219.667
033	059_033	X	HEX			01-MAR-2007 02:31	1.0							

Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237092622 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	PRIMER			05-MAR-2007 07:42	1.0						
002	064_002	X	PRIMER			05-MAR-2007 08:01	1.0						
003	064_003	X	PRIMER			05-MAR-2007 08:21	1.0						
004	064_004	X	HEX			05-MAR-2007 08:41	1.0						
005	064_005	PEM	PEM			05-MAR-2007 09:01	1.0	1.0			1	1	1:DDT44=195.872
006	064_006	CCV	PEST_3			05-MAR-2007 09:21	1.0	1.0	3		1	2	
007	064_007	X	HEX			05-MAR-2007 13:39	1.0						
008	064_008	BLANK	QC377407	122680	Water	05-MAR-2007 13:58	1.0	0.01			1	>ac	
009	064_009	BS	QC377408	122680	Water	05-MAR-2007 14:18	1.0	0.01	13		1	>ac	
010	064_010	BSD	QC377409	122680	Water	05-MAR-2007 14:37	1.0	0.01	13	1	1	>ac	
011	064_011	SAMPLE	193099-001	122680	Water	05-MAR-2007 15:18	1.0	0.009524			1	>ac	
012	064_012	SAMPLE	193027-011	122680	Water	05-MAR-2007 15:38	1.0	0.009709			1	>ac	
013	064_013	SAMPLE	193027-012	122680	Water	05-MAR-2007 15:57	1.0	0.009524			1	>ac	
014	064_014	SAMPLE	193055-004	122680	Water	05-MAR-2007 16:17	1.0	0.009434			1	>ac	
015	064_015	SAMPLE	193055-005	122680	Water	05-MAR-2007 16:37	1.0	0.009524			1	>ac	
016	064_016	SAMPLE	193055-006	122680	Water	05-MAR-2007 16:56	1.0	0.009524			1	>ac	
017	064_017	SAMPLE	193055-011	122680	Water	05-MAR-2007 17:16	1.0	0.009709			1	>ac	
018	064_018	X	HEX			05-MAR-2007 17:35	1.0						
019	064_019	PEM	PEM			05-MAR-2007 17:55	1.0	1.0			1	1	1:DDT44=137.542
020	064_020	X	PEST_4			05-MAR-2007 18:15	1.0	1.0	16		1	3 ac	1:DDD44=60.1797
021	064_021	CCV	PEST_4			05-MAR-2007 18:35	1.0	1.0	13		1	3 ac	1:DDD44=57.8143
022	064_022	X	HEX			05-MAR-2007 19:01	1.0						
023	064_023	BLANK	QC377462	122695	Soil	05-MAR-2007 19:21	1.0	0.664			1	<ac	
024	064_024	SAMPLE	193061-021	122695	Soil	05-MAR-2007 19:40	10.0	0.6662			1	<ac	
025	064_025	SAMPLE	193061-022	122695	Soil	05-MAR-2007 20:00	5.0	0.6656			1	<ac	
026	064_026	SAMPLE	193061-023	122695	Soil	05-MAR-2007 20:20	1.0	0.6653			1	<ac	
027	064_027	SAMPLE	193061-024	122695	Soil	05-MAR-2007 20:40	1.0	0.6633			1	<ac	
028	064_028	SAMPLE	193061-025	122695	Soil	05-MAR-2007 20:59	5.0	0.6616			1	<ac	
029	064_029	X	HEX			05-MAR-2007 21:19	1.0						
030	064_030	PEM	PEM			05-MAR-2007 21:39	1.0	1.0			1	1	1:DDT44=136.891

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237092622 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	064_031	X	PEST_3			05-MAR-2007 21:59	1.0	1.0	7		1	2	
032	064_032	CCV	PEST_3			05-MAR-2007 22:19	1.0	1.0	4		1	2	
033	064_033	X	PEM			05-MAR-2007 22:39	1.0					1	
034	064_034	X	HEX			05-MAR-2007 22:59	1.0						

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807094099 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 06-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	065_001	X	HEX			06-MAR-2007 08:19	1.0						
002	065_002	X	HEX			06-MAR-2007 08:40	1.0						
003	065_003	X	HEX			06-MAR-2007 09:02	1.0						
004	065_004	PEM	PEM			06-MAR-2007 09:45	1.0	1.0			1	1	
005	065_005	CCV	PEST_3			06-MAR-2007 10:06	1.0	1.0	2		1	2	
006	065_006	X	HEX			06-MAR-2007 11:35	1.0						
007	065_007	BLANK	QC377462	122695	Soil	06-MAR-2007 11:56	1.0	0.664			1		
008	065_008	LCS	QC377466	122695	Soil	06-MAR-2007 12:17	1.0	0.6642	2		1		
009	065_009	SAMPLE	193061-023	122695	Soil	06-MAR-2007 12:39	1.0	0.6653			1		
010	065_010	SAMPLE	193061-024	122695	Soil	06-MAR-2007 13:00	1.0	0.6633			1		
011	065_011	SAMPLE	193055-012	122680	Water	06-MAR-2007 13:21	1.0	0.01			1		
012	065_012	SAMPLE	193055-013	122680	Water	06-MAR-2007 13:42	1.0	0.009524			1		
013	065_013	SAMPLE	193055-014	122680	Water	06-MAR-2007 14:05	1.0	0.009615			1		
014	065_014	SAMPLE	193057-004	122680	Water	06-MAR-2007 14:26	1.0	0.009615			1		
015	065_015	X	HEX			06-MAR-2007 14:59	1.0						
016	065_016	PEM	PEM			06-MAR-2007 15:20	1.0	1.0			1	1	
017	065_017	CCV	PEST_4			06-MAR-2007 15:42	1.0	1.0	2		1	3	
018	065_018	X	HEX			06-MAR-2007 17:25	1.0						
019	065_019	X	CHLORDANE			06-MAR-2007 17:46	1.0					4	
020	065_020	X	CHLORDANE			06-MAR-2007 18:08	1.0					4	
021	065_021	X	HEX			06-MAR-2007 18:29	1.0						
022	065_022	SAMPLE	193075-001	122695	Soil	06-MAR-2007 18:51	1.0	0.6649			1		
023	065_023	SAMPLE	193075-002	122695	Soil	06-MAR-2007 19:12	1.0	0.6629			1		
024	065_024	SAMPLE	193075-003	122695	Soil	06-MAR-2007 19:34	1.0	0.6631			1		
025	065_025	MSS	193078-001	122695	Soil	06-MAR-2007 19:55	1.0	0.664			1		
026	065_026	MS	QC377467	122695	Soil	06-MAR-2007 20:17	1.0	0.6638	2		1		
027	065_027	MSD	QC377468	122695	Soil	06-MAR-2007 20:38	1.0	0.666	2	1	1		
028	065_028	X	HEX			06-MAR-2007 20:59	1.0						
029	065_029	PEM	PEM			06-MAR-2007 21:21	1.0	1.0			1	1	
030	065_030	CCV	PEST_5			06-MAR-2007 21:42	1.0	1.0	2		1	5	
031	065_031	X	PEST_5			06-MAR-2007 22:04	1.0					5	

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5049

SEQUENCE SUMMARY FOR 193055 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807094099 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 06-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
032	065_032	X	CHLORDANE			06-MAR-2007 22:25	1.0			4	
033	065_033	X	CHLORDANE			06-MAR-2007 22:47	1.0			4	
034	065_034	X	PEM			06-MAR-2007 23:08	1.0			1	
035	065_035	X	HEX			06-MAR-2007 23:30	1.0				

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5049

REPORTING SUMMARY FOR 193055 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-004	alpha-BHC	GC16	B	03/05/07 16:17
193055-004	beta-BHC	GC16	B	03/05/07 16:17
193055-004	gamma-BHC	GC16	B	03/05/07 16:17
193055-004	delta-BHC	GC16	B	03/05/07 16:17
193055-004	Heptachlor	GC16	B	03/05/07 16:17
193055-004	Aldrin	GC16	B	03/05/07 16:17
193055-004	Heptachlor epoxide	GC16	B	03/05/07 16:17
193055-004	Endosulfan I	GC16	B	03/05/07 16:17
193055-004	Dieldrin	GC16	B	03/05/07 16:17
193055-004	4,4'-DDE	GC16	B	03/05/07 16:17
193055-004	Endrin	GC16	B	03/05/07 16:17
193055-004	Endosulfan II	GC16	B	03/05/07 16:17
193055-004	Endosulfan sulfate	GC16	B	03/05/07 16:17
193055-004	4,4'-DDD	GC16	B	03/05/07 16:17
193055-004	4,4'-DDT	GC16	B	03/05/07 16:17
193055-004	alpha-Chlordane	GC16	B	03/05/07 16:17
193055-004	gamma-Chlordane	GC16	B	03/05/07 16:17
193055-004	Methoxychlor	GC16	B	03/05/07 16:17
193055-004	Endrin ketone	GC16	B	03/05/07 16:17
193055-004	Toxaphene	GC16	B	03/05/07 16:17
193055-004	TCMX	GC16	B	03/05/07 16:17
193055-004	Decachlorobiphenyl	GC16	B	03/05/07 16:17
193055-005	alpha-BHC	GC16	B	03/05/07 16:37
193055-005	beta-BHC	GC16	B	03/05/07 16:37
193055-005	gamma-BHC	GC16	B	03/05/07 16:37
193055-005	delta-BHC	GC16	B	03/05/07 16:37
193055-005	Heptachlor	GC16	B	03/05/07 16:37
193055-005	Aldrin	GC16	B	03/05/07 16:37
193055-005	Heptachlor epoxide	GC16	B	03/05/07 16:37
193055-005	Endosulfan I	GC16	B	03/05/07 16:37
193055-005	Dieldrin	GC16	B	03/05/07 16:37
193055-005	4,4'-DDE	GC16	B	03/05/07 16:37
193055-005	Endrin	GC16	B	03/05/07 16:37
193055-005	Endosulfan II	GC16	B	03/05/07 16:37
193055-005	Endosulfan sulfate	GC16	B	03/05/07 16:37
193055-005	4,4'-DDD	GC16	B	03/05/07 16:37
193055-005	4,4'-DDT	GC16	B	03/05/07 16:37
193055-005	alpha-Chlordane	GC16	B	03/05/07 16:37
193055-005	gamma-Chlordane	GC16	B	03/05/07 16:37
193055-005	Methoxychlor	GC16	B	03/05/07 16:37
193055-005	Endrin ketone	GC16	B	03/05/07 16:37
193055-005	Toxaphene	GC16	B	03/05/07 16:37
193055-005	TCMX	GC16	B	03/05/07 16:37
193055-005	Decachlorobiphenyl	GC16	B	03/05/07 16:37
193055-006	alpha-BHC	GC16	B	03/05/07 16:56
193055-006	beta-BHC	GC16	B	03/05/07 16:56
193055-006	gamma-BHC	GC16	B	03/05/07 16:56
193055-006	delta-BHC	GC16	B	03/05/07 16:56
193055-006	Heptachlor	GC16	B	03/05/07 16:56
193055-006	Aldrin	GC16	B	03/05/07 16:56
193055-006	Heptachlor epoxide	GC16	B	03/05/07 16:56
193055-006	Endosulfan I	GC16	B	03/05/07 16:56

REPORTING SUMMARY FOR 193055 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-006	Dieldrin	GC16	B	03/05/07 16:56
193055-006	4,4'-DDE	GC16	B	03/05/07 16:56
193055-006	Endrin	GC16	B	03/05/07 16:56
193055-006	Endosulfan II	GC16	B	03/05/07 16:56
193055-006	Endosulfan sulfate	GC16	B	03/05/07 16:56
193055-006	4,4'-DDD	GC16	B	03/05/07 16:56
193055-006	4,4'-DDT	GC16	B	03/05/07 16:56
193055-006	alpha-Chlordane	GC16	B	03/05/07 16:56
193055-006	gamma-Chlordane	GC16	B	03/05/07 16:56
193055-006	Methoxychlor	GC16	B	03/05/07 16:56
193055-006	Endrin ketone	GC16	B	03/05/07 16:56
193055-006	Toxaphene	GC16	B	03/05/07 16:56
193055-006	TCMX	GC16	B	03/05/07 16:56
193055-006	Decachlorobiphenyl	GC16	B	03/05/07 16:56
193055-011	alpha-BHC	GC16	B	03/05/07 17:16
193055-011	beta-BHC	GC16	B	03/05/07 17:16
193055-011	gamma-BHC	GC16	B	03/05/07 17:16
193055-011	delta-BHC	GC16	B	03/05/07 17:16
193055-011	Heptachlor	GC16	B	03/05/07 17:16
193055-011	Aldrin	GC16	B	03/05/07 17:16
193055-011	Heptachlor epoxide	GC16	B	03/05/07 17:16
193055-011	Endosulfan I	GC16	B	03/05/07 17:16
193055-011	Dieldrin	GC16	B	03/05/07 17:16
193055-011	4,4'-DDE	GC16	B	03/05/07 17:16
193055-011	Endrin	GC16	B	03/05/07 17:16
193055-011	Endosulfan II	GC16	B	03/05/07 17:16
193055-011	Endosulfan sulfate	GC16	B	03/05/07 17:16
193055-011	4,4'-DDD	GC16	B	03/05/07 17:16
193055-011	4,4'-DDT	GC16	B	03/05/07 17:16
193055-011	alpha-Chlordane	GC16	B	03/05/07 17:16
193055-011	gamma-Chlordane	GC16	B	03/05/07 17:16
193055-011	Methoxychlor	GC16	B	03/05/07 17:16
193055-011	Endrin ketone	GC16	B	03/05/07 17:16
193055-011	Toxaphene	GC16	B	03/05/07 17:16
193055-011	TCMX	GC16	B	03/05/07 17:16
193055-011	Decachlorobiphenyl	GC16	B	03/05/07 17:16
193055-012	alpha-BHC	GC23	A	03/06/07 13:21
193055-012	beta-BHC	GC23	A	03/06/07 13:21
193055-012	gamma-BHC	GC23	A	03/06/07 13:21
193055-012	delta-BHC	GC23	A	03/06/07 13:21
193055-012	Heptachlor	GC23	A	03/06/07 13:21
193055-012	Aldrin	GC23	A	03/06/07 13:21
193055-012	Heptachlor epoxide	GC23	A	03/06/07 13:21
193055-012	Endosulfan I	GC23	A	03/06/07 13:21
193055-012	Dieldrin	GC23	A	03/06/07 13:21
193055-012	4,4'-DDE	GC23	A	03/06/07 13:21
193055-012	Endrin	GC23	A	03/06/07 13:21
193055-012	Endosulfan II	GC23	A	03/06/07 13:21
193055-012	Endosulfan sulfate	GC23	A	03/06/07 13:21
193055-012	4,4'-DDD	GC23	A	03/06/07 13:21
193055-012	4,4'-DDT	GC23	A	03/06/07 13:21
193055-012	alpha-Chlordane	GC23	A	03/06/07 13:21

REPORTING SUMMARY FOR 193055 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-012	gamma-Chlordane	GC23	A	03/06/07 13:21
193055-012	Methoxychlor	GC23	A	03/06/07 13:21
193055-012	Endrin ketone	GC23	A	03/06/07 13:21
193055-012	Toxaphene	GC23	A	03/06/07 13:21
193055-012	TCMX	GC23	A	03/06/07 13:21
193055-012	Decachlorobiphenyl	GC23	B	03/06/07 13:21
193055-013	alpha-BHC	GC23	A	03/06/07 13:42
193055-013	beta-BHC	GC23	A	03/06/07 13:42
193055-013	gamma-BHC	GC23	A	03/06/07 13:42
193055-013	delta-BHC	GC23	A	03/06/07 13:42
193055-013	Heptachlor	GC23	A	03/06/07 13:42
193055-013	Aldrin	GC23	A	03/06/07 13:42
193055-013	Heptachlor epoxide	GC23	A	03/06/07 13:42
193055-013	Endosulfan I	GC23	A	03/06/07 13:42
193055-013	Dieldrin	GC23	A	03/06/07 13:42
193055-013	4,4'-DDE	GC23	A	03/06/07 13:42
193055-013	Endrin	GC23	A	03/06/07 13:42
193055-013	Endosulfan II	GC23	A	03/06/07 13:42
193055-013	Endosulfan sulfate	GC23	A	03/06/07 13:42
193055-013	4,4'-DDD	GC23	A	03/06/07 13:42
193055-013	4,4'-DDT	GC23	A	03/06/07 13:42
193055-013	alpha-Chlordane	GC23	A	03/06/07 13:42
193055-013	gamma-Chlordane	GC23	A	03/06/07 13:42
193055-013	Methoxychlor	GC23	A	03/06/07 13:42
193055-013	Endrin ketone	GC23	A	03/06/07 13:42
193055-013	Toxaphene	GC23	A	03/06/07 13:42
193055-013	TCMX	GC23	A	03/06/07 13:42
193055-013	Decachlorobiphenyl	GC23	B	03/06/07 13:42
193055-014	alpha-BHC	GC23	A	03/06/07 14:05
193055-014	beta-BHC	GC23	A	03/06/07 14:05
193055-014	gamma-BHC	GC23	A	03/06/07 14:05
193055-014	delta-BHC	GC23	A	03/06/07 14:05
193055-014	Heptachlor	GC23	A	03/06/07 14:05
193055-014	Aldrin	GC23	A	03/06/07 14:05
193055-014	Heptachlor epoxide	GC23	A	03/06/07 14:05
193055-014	Endosulfan I	GC23	A	03/06/07 14:05
193055-014	Dieldrin	GC23	A	03/06/07 14:05
193055-014	4,4'-DDE	GC23	A	03/06/07 14:05
193055-014	Endrin	GC23	A	03/06/07 14:05
193055-014	Endosulfan II	GC23	A	03/06/07 14:05
193055-014	Endosulfan sulfate	GC23	A	03/06/07 14:05
193055-014	4,4'-DDD	GC23	A	03/06/07 14:05
193055-014	4,4'-DDT	GC23	A	03/06/07 14:05
193055-014	alpha-Chlordane	GC23	A	03/06/07 14:05
193055-014	gamma-Chlordane	GC23	A	03/06/07 14:05
193055-014	Methoxychlor	GC23	A	03/06/07 14:05
193055-014	Endrin ketone	GC23	A	03/06/07 14:05
193055-014	Toxaphene	GC23	A	03/06/07 14:05
193055-014	TCMX	GC23	A	03/06/07 14:05
193055-014	Decachlorobiphenyl	GC23	B	03/06/07 14:05
QC377407	alpha-BHC	GC16	B	03/05/07 13:58

REPORTING SUMMARY FOR 193055 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377407	beta-BHC	GC16	B	03/05/07 13:58
QC377407	gamma-BHC	GC16	B	03/05/07 13:58
QC377407	delta-BHC	GC16	B	03/05/07 13:58
QC377407	Heptachlor	GC16	B	03/05/07 13:58
QC377407	Aldrin	GC16	B	03/05/07 13:58
QC377407	Heptachlor epoxide	GC16	B	03/05/07 13:58
QC377407	Endosulfan I	GC16	B	03/05/07 13:58
QC377407	Dieldrin	GC16	B	03/05/07 13:58
QC377407	4,4'-DDE	GC16	B	03/05/07 13:58
QC377407	Endrin	GC16	B	03/05/07 13:58
QC377407	Endosulfan II	GC16	B	03/05/07 13:58
QC377407	Endosulfan sulfate	GC16	B	03/05/07 13:58
QC377407	4,4'-DDD	GC16	B	03/05/07 13:58
QC377407	4,4'-DDT	GC16	B	03/05/07 13:58
QC377407	alpha-Chlordane	GC16	B	03/05/07 13:58
QC377407	gamma-Chlordane	GC16	B	03/05/07 13:58
QC377407	Methoxychlor	GC16	B	03/05/07 13:58
QC377407	Endrin ketone	GC16	B	03/05/07 13:58
QC377407	Toxaphene	GC16	B	03/05/07 13:58
QC377407	TCMX	GC16	B	03/05/07 13:58
QC377407	Decachlorobiphenyl	GC16	B	03/05/07 13:58
QC377408	gamma-BHC	GC16	B	03/05/07 14:18
QC377408	Heptachlor	GC16	B	03/05/07 14:18
QC377408	Aldrin	GC16	B	03/05/07 14:18
QC377408	Dieldrin	GC16	B	03/05/07 14:18
QC377408	Endrin	GC16	B	03/05/07 14:18
QC377408	4,4'-DDT	GC16	B	03/05/07 14:18
QC377408	TCMX	GC16	B	03/05/07 14:18
QC377408	Decachlorobiphenyl	GC16	B	03/05/07 14:18
QC377409	gamma-BHC	GC16	B	03/05/07 14:37
QC377409	Heptachlor	GC16	B	03/05/07 14:37
QC377409	Aldrin	GC16	B	03/05/07 14:37
QC377409	Dieldrin	GC16	B	03/05/07 14:37
QC377409	Endrin	GC16	B	03/05/07 14:37
QC377409	4,4'-DDT	GC16	B	03/05/07 14:37
QC377409	TCMX	GC16	B	03/05/07 14:37
QC377409	Decachlorobiphenyl	GC16	B	03/05/07 14:37

Curtis & Tompkins Laboratories Sample Preparation Summary 05-MAR-2007 14:08

Batch Number : 122680
Date Extracted: 04-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5243H
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-011		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193027-012		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-004		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193055-005		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-006		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-011		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193055-012		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193055-013		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193055-014		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
193057-004		Weston Solutions	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
193099-001		Malcolm Pirnie,Inc.	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
QC377407	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC377408	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC377409	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie Mee Reviewed By: [illegible] Date: 3/5/07

Relinquished By: [illegible] Received By: [illegible] Date: 3/5/07

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 122680
LIMS Analysis: 8081
Extracted by: DM
Date Extracted: 4 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193027-011 D	1030	7	10.0		
12 E	1050				
193055-004 K	1060				
05 J	1050				
06 L	1050				
11 J	1030				volume in round bottom seem lower than usual (less than 300ml)
12 M	1000				
13 L	1050				
14 C	1040				
193057-004 G	1040				
193099-001 F	1050				
MB RC377407	1000	NA			
BS 08					
BSD 09					

RFW 3/5/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	S5616A	DM 3/4/07
0.025 mL of matrix spike solution was added to all spikes	S5243H	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1225	
Extraction End Time:	0720	RFW 3/5/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH_2Cl_2 rinsed powdered Na_2SO_4	EM46320652	
Exchanged 2x with Hexane	~~EM~~ RFW 3/5/07 J7BC50E54	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	NA	

Jessica Lee 3/4/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

3/5/07
Reviewed by 00186 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/22/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000		

Field ID:	LF6GW103	Prepared:	03/04/07
Type:	SAMPLE	Analyzed:	03/05/07
Lab ID:	193055-004	Cleanup Method:	EPA 3665A
Batch#:	122679		

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	58 *	65-135

Field ID:	LF6GW100	Prepared:	03/04/07
Type:	SAMPLE	Analyzed:	03/05/07
Lab ID:	193055-005	Cleanup Method:	EPA 3665A
Batch#:	122679		

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	68	65-135
Decachlorobiphenyl	56 *	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000		

Field ID:	LF6GW101	Prepared:	03/04/07
Type:	SAMPLE	Analyzed:	03/06/07
Lab ID:	193055-006	Cleanup Method:	EPA 3665A
Batch#:	122679		

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	71	65-135
Decachlorobiphenyl	56 *	65-135

Field ID:	LF4GW103	Prepared:	03/06/07
Type:	SAMPLE	Analyzed:	03/07/07
Lab ID:	193055-009	Cleanup Method:	EPA 3665A
Batch#:	122779		

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	75	65-135
Decachlorobiphenyl	50 *	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000		

Field ID:	LF4GW104	Prepared:	03/04/07
Type:	SAMPLE	Analyzed:	03/05/07
Lab ID:	193055-010	Cleanup Method:	EPA 3665A
Batch#:	122679		

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	66	65-135
Decachlorobiphenyl	74	65-135

Field ID:	1349MW02	Prepared:	03/04/07
Type:	SAMPLE	Analyzed:	03/06/07
Lab ID:	193055-011	Cleanup Method:	EPA 3665A
Batch#:	122679		

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.98
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	70	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000		

Type:	BLANK	Prepared:	03/04/07
Lab ID:	QC377404	Analyzed:	03/05/07
Batch#:	122679	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	96	65-135

Type:	BLANK	Prepared:	03/06/07
Lab ID:	QC377845	Analyzed:	03/07/07
Batch#:	122779	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	78	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	122679
Units:	ug/L	Prepared:	03/04/07
Diln Fac:	1.000	Analyzed:	03/05/07

Type: BS Cleanup Method: EPA 3665A
Lab ID: QC377405

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	4.783	96	65-135

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	62 *	65-135

Type: BSD Cleanup Method: EPA 3665A
Lab ID: QC377406

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	5.118	102	65-135	7	35

Surrogate	%REC	Limits
TCMX	86	65-135
Decachlorobiphenyl	60 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	122779
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: BS
Lab ID: QC377846
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.806	116	65-135

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	75	65-135

Type: BSD
Lab ID: QC377847
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	5.199	104	65-135	11	35

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	73	65-135

RPD= Relative Percent Difference

38.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PCBS Water: EPA 8082

Inst : GC06
Calnum : 207088659001
Units : pg

Name : ar1660_061
Date : 03-MAR-2007 10:35
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	061_045	207088659045	PCB25_5	03-MAR-2007 10:35	S5484
L2	061_046	207088659046	PCB100_20	03-MAR-2007 11:03	S4996
L3	061_047	207088659047	PCB250_50	03-MAR-2007 11:31	S4997
L4	061_048	207088659048	PCB500_100	03-MAR-2007 11:58	S4998
L5	061_049	207088659049	PCB750_150	03-MAR-2007 12:26	S4999
L6	061_050	207088659050	PCB1000_200	03-MAR-2007 12:53	S5000
L7	061_055	207088659055	PCB10_2	04-MAR-2007 16:31	S5483

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	467.72	442.74	371.54	352.14	358.24	322.17	526.60	AVRG		0.00246		405.88	18	.99	20	
Aroclor-1016 Peak # 2	A	454.68	458.04	399.04	439.83	440.27	417.75	341.30	AVRG		0.00237		421.56	10	.99	20	
Aroclor-1016 Peak # 3	A	293.40	299.09	243.50	246.96	262.19	235.77	332.60	AVRG		0.00366		273.36	13	.99	20	
Aroclor-1016 Peak # 4	A	175.80	186.46	148.55	145.19	152.32	137.98	218.50	AVRG		0.00601		166.40	17	.99	20	
Aroclor-1016 Peak # 5	A	233.80	244.12	207.20	207.36	222.48	199.39	289.00	AVRG		0.00437		229.05	13	.99	20	
Aroclor-1260 Peak # 1	A	673.04	669.70	552.53	543.95	590.26	529.22	826.20	AVRG		0.00160		626.41	17	.99	20	
Aroclor-1260 Peak # 2	A	365.00	411.85	457.23	451.01	536.23	481.10	554.40	AVRG		0.00215		465.26	14	.99	20	
Aroclor-1260 Peak # 3	A	362.80	387.89	274.86	294.96	318.89	274.19	366.50	AVRG		0.00307		325.73	14	.99	20	
Aroclor-1260 Peak # 4	A	678.40	689.00	575.74	593.13	689.98	609.69	787.20	AVRG		0.00151		660.45	11	.99	20	
Aroclor-1260 Peak # 5	A	276.72	305.81	252.50	280.95	337.63	315.39	402.50	AVRG		0.00322		310.21	16	.99	20	
TCMX	A	8245.6	8510.7	7882.9	8059.4	8528.8	7830.6	9445.5	AVRG		1.20E-4		8357.6	7	.99	20	
Decachlorobiphenyl	A	8808.6	8159.3	5857.8	5913.3	6786.7	5864.7	9091.0	AVRG		1.39E-4		7211.6	20	.99	20	
Aroclor-1016 Peak # 1	B	163.52	160.44	127.45	121.65	127.93	117.28	183.00	AVRG		0.00699		143.04	18	.99	20	
Aroclor-1016 Peak # 2	B	159.20	157.58	137.84	136.31	141.92	129.10	182.50	AVRG		0.00670		149.21	12	.99	20	
Aroclor-1016 Peak # 3	B	381.24	390.63	346.61	360.73	390.83	361.20	444.90	AVRG		0.00262		382.31	8	.99	20	
Aroclor-1016 Peak # 4	B	181.44	189.73	163.44	164.70	174.96	160.05	205.80	AVRG		0.00564		177.16	9	.99	20	
Aroclor-1016 Peak # 5	B	119.48	125.65	106.93	108.68	117.84	108.22	143.20	AVRG		0.00843		118.57	11	.99	20	
Aroclor-1260 Peak # 1	B	248.00	268.89	218.30	220.70	246.77	219.03	341.60	AVRG		0.00397		251.90	17	.99	20	
Aroclor-1260 Peak # 2	B	414.32	417.22	323.06	343.09	381.97	345.46	412.40	AVRG		0.00265		376.79	10	.99	20	
Aroclor-1260 Peak # 3	B	185.32	185.31	153.59	161.94	183.31	164.19	207.80	AVRG		0.00564		177.35	10	.99	20	
Aroclor-1260 Peak # 4	B	408.20	418.53	344.98	359.60	411.90	369.50	454.10	AVRG		0.00253		395.26	10	.99	20	
Aroclor-1260 Peak # 5	B	195.60	194.77	161.36	174.84	208.65	191.01	221.00	AVRG		0.00520		192.46	10	.99	20	
TCMX	B	4339.6	4720.6	4510.4	4721.8	5086.8	4729.7	4968.5	AVRG		2.12E-4		4725.3	5	.99	20	
Decachlorobiphenyl	B	5293.0	4921.4	3562.3	3602.0	4166.4	3621.1	5544.0	AVRG		2.28E-4		4387.2	19	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 2	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 3	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 4	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 5	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 1	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 2	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 3	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 4	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 5	A	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
TCMX	A	5.0000	20.000	50.000	100.00	150.00	200.00	2.0000	pg
Decachlorobiphenyl	A	5.0000	20.000	50.000	100.00	150.00	200.00	2.0000	pg
Aroclor-1016 Peak # 1	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 2	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 3	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 4	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1016 Peak # 5	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 1	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 2	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 3	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 4	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
Aroclor-1260 Peak # 5	B	25.000	100.00	250.00	500.00	750.00	1000.0	10.000	pg
TCMX	B	5.0000	20.000	50.000	100.00	150.00	200.00	2.0000	pg
Decachlorobiphenyl	B	5.0000	20.000	50.000	100.00	150.00	200.00	2.0000	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 PCBS Water
EPA 8082

Inst : GC06 Name : ar1660_061
Calnum : 207088659001 Cal Date: 03-MAR-2007

ICV 207088659052 (061_052 03-MAR-2007) stds: S4915

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	405.88		250.0	229.6	pg	-8	15	
Aroclor-1260	A	626.41		250.0	233.1	pg	-7	15	
Aroclor-1016	B	143.04		250.0	219.9	pg	-12	15	
Aroclor-1260	B	251.90		250.0	232.8	pg	-7	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PCBS Water: EPA 8082

Inst : GC06
Calnum : 207092784001
Units : pg

Name : ar1242
Date : 05-MAR-2007 14:58
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_005	207092784005	AR1242	05-MAR-2007 14:58	S5239

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	301.37	AVRG		0.00332		301.37	0	.99	20	
Aroclor-1242 Peak # 2	A	189.67	AVRG		0.00527		189.67	0	.99	20	
Aroclor-1242 Peak # 3	A	113.14	AVRG		0.00884		113.14	0	.99	20	
Aroclor-1242 Peak # 4	A	167.03	AVRG		0.00599		167.03	0	.99	20	
Aroclor-1242 Peak # 5	A	131.78	AVRG		0.00759		131.78	0	.99	20	
Aroclor-1242 Peak # 1	B	266.47	AVRG		0.00375		266.47	0	.99	20	
Aroclor-1242 Peak # 2	B	127.54	AVRG		0.00784		127.54	0	.99	20	
Aroclor-1242 Peak # 3	B	72.348	AVRG		0.01382		72.348	0	.99	20	
Aroclor-1242 Peak # 4	B	86.656	AVRG		0.01154		86.656	0	.99	20	
Aroclor-1242 Peak # 5	B	72.320	AVRG		0.01383		72.320	0	.99	20	

Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257090163001
Units : pg

Name : ar1660_062
Date : 03-MAR-2007 19:07
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	062_011	257090163011	PCB10_2	03-MAR-2007 19:07	S5483
L2	062_012	257090163012	PCB25_5	03-MAR-2007 19:34	S5484
L3	062_013	257090163013	PCB100_20	03-MAR-2007 20:00	S4996
L4	062_014	257090163014	PCB250_50	03-MAR-2007 20:26	S4997
L5	062_015	257090163015	PCB500_100	03-MAR-2007 20:53	S4998
L6	062_016	257090163016	PCB750_150	03-MAR-2007 21:19	S5227
L7	062_017	257090163017	PCB1000_200	03-MAR-2007 21:46	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	986.00	1213.7	1047.0	934.46	884.45	941.49	908.47	AVRG		0.00101		987.94	11	.99	20	
Aroclor-1016 Peak # 2	A	1628.1	1541.2	1398.9	1239.9	1235.2	1393.9	1259.0	AVRG		7.22E-4		1385.2	11	.99	20	
Aroclor-1016 Peak # 3	A	418.20	558.20	657.13	589.24	560.66	614.72	550.05	AVRG		0.00177		564.03	13	.99	20	
Aroclor-1016 Peak # 4	A	374.60	510.64	481.76	428.50	395.19	443.63	396.44	AVRG		0.00231		432.97	11	.99	20	
Aroclor-1016 Peak # 5	A	543.90	689.96	611.54	540.04	515.03	578.05	509.59	AVRG		0.00176		569.73	11	.99	20	
Aroclor-1260 Peak # 1	A	1945.9	2511.4	2185.0	1901.5	1971.9	2296.9	1863.9	AVRG		4.77E-4		2096.6	12	.99	20	
Aroclor-1260 Peak # 2	A	1389.0	2001.0	1734.1	1510.0	1558.5	1904.1	1510.1	AVRG		6.03E-4		1658.1	14	.99	20	
Aroclor-1260 Peak # 3	A	1286.5	1525.6	1322.8	1150.7	1142.3	1340.3	1092.7	AVRG		7.90E-4		1265.8	12	.99	20	
Aroclor-1260 Peak # 4	A	835.30	1328.5	1110.9	995.34	1003.2	1182.6	995.47	AVRG		9.39E-4		1064.5	15	.99	20	
Aroclor-1260 Peak # 5	A	2734.8	3409.0	3046.7	2607.3	2731.2	3105.0	2431.7	AVRG		3.49E-4		2866.5	12	.99	20	
TCMX	A	30110	34956	32377	32182	31084	29116	26551	AVRG		3.24E-5		30911	9	.99	20	
Decachlorobiphenyl	A	21947	28116	23618	21623	21352	22909	17423	AVRG		4.46E-5		22427	14	.99	20	
Aroclor-1016 Peak # 1	B	506.50	505.64	484.07	388.07	405.21	395.44	391.18	AVRG		0.00228		439.44	13	.99	20	
Aroclor-1016 Peak # 2	B	1094.5	1048.4	1080.5	853.47	913.24	929.65	934.21	AVRG		0.00102		979.13	10	.99	20	
Aroclor-1016 Peak # 3	B	485.00	492.84	444.53	331.28	355.29	341.89	345.38	AVRG		0.00250		399.46	18	.99	20	
Aroclor-1016 Peak # 4	B	360.50	342.68	332.74	245.17	268.27	258.91	260.35	AVRG		0.00338		295.52	16	.99	20	
Aroclor-1016 Peak # 5	B	473.80	449.64	433.83	305.10	347.22	325.68	325.52	AVRG		0.00263		380.11	18	.99	20	
Aroclor-1260 Peak # 1	B	1103.2	1055.6	993.69	677.84	822.65	758.93	796.37	AVRG		0.00113		886.90	18	.99	20	
Aroclor-1260 Peak # 2	B	1671.3	1563.0	1447.7	971.95	1243.6	1148.3	1182.4	AVRG		7.59E-4		1318.3	19	.99	20	
Aroclor-1260 Peak # 3	B	1838.0	1525.3	1503.7	1032.1	1299.2	1206.2	1258.7	AVRG		7.24E-4		1380.5	19	.99	20	
Aroclor-1260 Peak # 4	B	1007.2	970.64	901.82	588.16	736.21	667.33	697.71	AVRG		0.00126		795.58	20	.99	20	
Aroclor-1260 Peak # 5	B	2835.4	2536.2	2329.0	1569.8	2098.9	1846.7	1860.5	AVRG		4.64E-4		2153.8	20	.99	20	
TCMX	B	26468	21975	21492	17899	19033	18451	17172	AVRG		4.91E-5		20356	16	.99	20	
Decachlorobiphenyl	B		19819	17402	11595	15792	13852	13410	AVRG		6.53E-5		15312	19	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B		5.0000	20.000	50.000	100.00	150.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 PCBS Water
EPA 8082

Inst : GC22 Name : ar1660_062
Calnum : 257090163001 Cal Date: 03-MAR-2007

ICV 257090163020 (062_020 03-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	987.94		250.0	235.8	pg	-6	15	
Aroclor-1260	A	2096.6		250.0	270.9	pg	8	15	
Aroclor-1016	B	439.44		250.0	220.3	pg	-12	15	
Aroclor-1260	B	886.90		250.0	219.4	pg	-12	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 PCBS Water: EPA 8082

Inst : GC25
Calnum : 827088470001
Units : pg

Name : ar1660_061
Date : 02-MAR-2007 19:26
X Axis : R

Reviewer: CW

Level	File	Segnum	Sample ID	Analyzed	Stds
L1	061_017	827088470017	PCB10_2	02-MAR-2007 19:26	S5483
L2	061_018	827088470018	PCB25_5	02-MAR-2007 19:53	S5484
L3	061_019	827088470019	PCB100_20	02-MAR-2007 20:19	S4996
L4	061_020	827088470020	PCB250_50	02-MAR-2007 20:46	S4997
L5	061_021	827088470021	PCB500_100	02-MAR-2007 21:12	S4998
L6	061_022	827088470022	PCB750_150	02-MAR-2007 21:39	S5227
L7	061_023	827088470023	PCB1000_200	02-MAR-2007 22:05	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	78.200	96.160	98.650	85.168	84.646	75.157	88.305	AVRG		0.01155		86.612	10	.99	20	
Aroclor-1016 Peak # 2	A	96.900	134.72	164.62	146.11	148.84	146.98	182.11	AVRG		0.00686		145.76	18	.99	20	
Aroclor-1016 Peak # 3	A	75.200	77.760	94.210	90.052	89.924	86.556	101.15	AVRG		0.01138		87.836	10	.99	20	
Aroclor-1016 Peak # 4	A	54.400	42.400	49.740	40.956	39.606	39.028	46.726	AVRG		0.02237		44.694	13	.99	20	
Aroclor-1016 Peak # 5	A	65.200	65.640	74.840	63.756	61.096	58.168	68.295	AVRG		0.01532		65.285	8	.99	20	
Aroclor-1260 Peak # 1	A	152.80	137.20	144.97	132.66	125.18	127.55	149.29	AVRG		0.00722		138.52	8	.99	20	
Aroclor-1260 Peak # 2	A	365.60	332.80	364.70	332.53	341.38	349.16	390.85	AVRG		0.00283		353.86	6	.99	20	
Aroclor-1260 Peak # 3	A	227.00	246.68	320.31	286.86	298.49	316.11	366.21	AVRG		0.00340		294.52	16	.99	20	
Aroclor-1260 Peak # 4	A	219.40	174.40	191.97	161.53	163.79	169.83	210.81	AVRG		0.00542		184.53	13	.99	20	
Aroclor-1260 Peak # 5	A	506.60	439.80	525.25	495.61	517.58	502.24	571.63	AVRG		0.00197		508.39	8	.99	20	
TCMX	A	3297.0	3316.4	4029.4	3840.5	3743.8	3184.9	3226.3	AVRG		2.84E-4		3519.7	10	.99	20	
Decachlorobiphenyl	A	3382.0	3294.2	3677.7	3491.5	3496.6	3211.0	3953.5	AVRG		2.86E-4		3500.9	7	.99	20	
Aroclor-1016 Peak # 1	B	419.80	362.20	362.27	352.72	241.61	353.90	333.80	AVRG		0.00289		346.61	15	.99	20	
Aroclor-1016 Peak # 2	B	242.70	479.04	409.23	386.41	413.13	395.22	402.67	AVRG		0.00257		389.77	18	.99	20	
Aroclor-1016 Peak # 3	B	1448.0	1259.9	1316.0	1150.1	1292.5	1292.5	1369.4	AVRG		7.67E-4		1304.1	7	.99	20	
Aroclor-1016 Peak # 4	B	507.40	393.28	475.66	469.24	547.83	514.20	550.46	AVRG		0.00202		494.01	11	.99	20	
Aroclor-1016 Peak # 5	B	385.10	285.88	304.40	279.57	316.92	297.39	308.86	AVRG		0.00321		311.16	11	.99	20	
Aroclor-1260 Peak # 1	B	433.90	349.24	360.00	291.11	335.63	315.63	345.84	AVRG		0.00288		347.33	13	.99	20	
Aroclor-1260 Peak # 2	B	922.10	712.20	759.32	638.60	726.27	688.95	779.39	AVRG		0.00134		746.69	12	.99	20	
Aroclor-1260 Peak # 3	B	1263.8	1024.8	1035.2	831.67	991.87	947.13	1131.7	AVRG		9.69E-4		1032.3	13	.99	20	
Aroclor-1260 Peak # 4	B	1155.1	691.56	875.15	926.53	1038.8	807.72	1092.8	AVRG		0.00106		941.09	18	.99	20	
Aroclor-1260 Peak # 5	B	740.50	644.00	689.40	525.42	653.24	604.96	814.57	AVRG		0.00150		667.44	14	.99	20	
TCMX	B	23051	19449	17790	16530	19938	15194	14262	AVRG		5.55E-5		18030	17	.99	20	
Decachlorobiphenyl	B	13144	10074	10709	7929.9	9781.5	9368.5	12664	AVRG		9.50E-5		10524	17	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 PCBS Water
EPA 8082

Inst : GC25 Name : ar1660_061
Calnum : 827088470001 Cal Date: 02-MAR-2007

ICV 827088470026 (061_026 02-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	86.612		250.0	254.1	pg	2	15	
Aroclor-1260	A	138.52		250.0	249.4	pg	0	15	
Aroclor-1016	B	346.61		250.0	254.7	pg	2	15	
Aroclor-1260	B	347.33		250.0	232.5	pg	-7	15	

CONTINUING CALIBRATION SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC06	A	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007			750.00	656.30	pg	-12	15	
GC06	B	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007			750.00	666.41	pg	-11	15	
GC06	A	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007			500.00	439.56	pg	-12	15	
GC06	B	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007			500.00	460.18	pg	-8	15	
GC06	A	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007			750.00	678.72	pg	-10	15	
GC06	B	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007			750.00	694.76	pg	-7	15	
GC06	A	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007			500.00	470.18	pg	-6	15	
GC06	B	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007			500.00	482.37	pg	-4	15	
GC22	A	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007			250.00	242.82	pg	-3	15	
GC22	B	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007			250.00	249.02	pg	0	15	
GC22	A	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007			500.00	478.84	pg	-4	15	
GC22	B	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007			500.00	486.10	pg	-3	15	
GC25	A	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007			250.00	240.16	pg	-4	15	
GC25	B	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007			250.00	263.45	pg	5	15	
GC25	A	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007			100.00	96.772	pg	-3	15	
GC25	B	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007			100.00	93.645	pg	-6	15	

CONTINUING CALIBRATION SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1242

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC06	A	207092784021	05-MAR-2007 22:18	207092784001	05-MAR-2007			250.00	258.03	pg	3	15	
GC06	B	207092784021	05-MAR-2007 22:18	207092784001	05-MAR-2007			250.00	256.71	pg	3	15	
GC06	A	207095711022	08-MAR-2007 01:00	207092784001	05-MAR-2007			250.00	269.53	pg	8	15	
GC06	B	207095711022	08-MAR-2007 01:00	207092784001	05-MAR-2007			250.00	264.26	pg	6	15	
GC06	A	207095711037	08-MAR-2007 07:52	207092784001	05-MAR-2007			250.00	265.75	pg	6	15	
GC06	B	207095711037	08-MAR-2007 07:52	207092784001	05-MAR-2007			250.00	261.80	pg	5	15	
GC22	A	257092782025	05-MAR-2007 22:50	257092782001	05-MAR-2007			250.00	251.72	pg	1	15	
GC22	B	257092782025	05-MAR-2007 22:50	257092782001	05-MAR-2007			250.00	245.71	pg	-2	15	

CONTINUING CALIBRATION SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC06	A	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007			750.00	707.48	pg	-6	15	
GC06	B	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007			750.00	694.33	pg	-7	15	
GC06	A	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007			500.00	468.63	pg	-6	15	
GC06	B	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007			500.00	467.66	pg	-6	15	
GC06	A	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007			750.00	709.71	pg	-5	15	
GC06	B	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007			750.00	711.55	pg	-5	15	
GC06	A	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007			500.00	485.53	pg	-3	15	
GC06	B	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007			500.00	483.55	pg	-3	15	
GC22	A	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007			250.00	228.43	pg	-9	15	
GC22	B	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007			250.00	268.35	pg	7	15	
GC22	A	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007			500.00	491.86	pg	-2	15	
GC22	B	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007			500.00	512.20	pg	2	15	
GC25	A	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007			250.00	218.48	pg	-13	15	
GC25	B	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007			250.00	293.05	pg	**17**	15	c+ ***
GC25	A	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007			100.00	90.487	pg	-10	15	
GC25	B	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007			100.00	92.593	pg	-7	15	

+=high bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC06	A	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007	8357.6	7919.7	150.00	142.14	pg	-5	15	
GC06	B	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007	4725.3	4701.3	150.00	149.24	pg	-1	15	
GC06	A	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007	8357.6	7807.6	100.00	93.419	pg	-7	15	
GC06	B	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007	4725.3	4641.5	100.00	98.226	pg	-2	15	
GC06	A	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007	8357.6	8058.0	150.00	144.62	pg	-4	15	
GC06	B	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007	4725.3	4839.0	150.00	153.61	pg	2	15	
GC06	A	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007	8357.6	8335.4	100.00	99.734	pg	0	15	
GC06	B	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007	4725.3	4930.1	100.00	104.33	pg	4	15	
GC06	A	207095711035	08-MAR-2007 06:56	207088659001	03-MAR-2007	8357.6	8210.2	50.000	49.118	pg	-2	15	
GC06	B	207095711035	08-MAR-2007 06:56	207088659001	03-MAR-2007	4725.3	4695.8	50.000	49.687	pg	-1	15	
GC22	A	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007	30911	33686	50.000	54.490	pg	9	15	
GC22	B	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007	20356	20126	50.000	49.436	pg	-1	15	
GC22	A	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007	30911	31120	100.00	100.68	pg	1	15	
GC22	B	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007	20356	19663	100.00	96.595	pg	-3	15	
GC25	A	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007	3519.7	3862.8	50.000	54.873	pg	10	15	
GC25	B	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007	18030	17212	50.000	47.731	pg	-5	15	
GC25	A	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007	3519.7	3609.8	20.000	20.511	pg	3	15	
GC25	B	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007	18030	17831	20.000	19.779	pg	-1	15	

CONTINUING CALIBRATION SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC06	A	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007	7211.6	6056.9	150.00	125.98	pg	**-16**	15	c-
GC06	B	207092784003	05-MAR-2007 11:19	207088659001	03-MAR-2007	4387.2	3716.8	150.00	127.08	pg	-15	15	
GC06	A	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007	7211.6	6767.2	100.00	93.838	pg	-6	15	
GC06	B	207092784019	05-MAR-2007 21:23	207088659001	03-MAR-2007	4387.2	4192.6	100.00	95.565	pg	-4	15	
GC06	A	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007	7211.6	5557.5	150.00	115.60	pg	**-23**	15	c-
GC06	B	207095711003	07-MAR-2007 12:06	207088659001	03-MAR-2007	4387.2	3440.3	150.00	117.63	pg	**-22**	15	c-
GC06	A	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007	7211.6	6125.9	100.00	84.944	pg	-15	15	
GC06	B	207095711020	08-MAR-2007 00:05	207088659001	03-MAR-2007	4387.2	3785.4	100.00	86.284	pg	-14	15	
GC06	A	207095711035	08-MAR-2007 06:56	207088659001	03-MAR-2007	7211.6	6654.2	50.000	46.135	pg	-8	15	
GC06	B	207095711035	08-MAR-2007 06:56	207088659001	03-MAR-2007	4387.2	4054.1	50.000	46.204	pg	-8	15	
GC22	A	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007	22427	21223	50.000	47.315	pg	-5	15	
GC22	B	257092782041	06-MAR-2007 05:53	257090163001	03-MAR-2007	15312	18214	50.000	59.478	pg	**19**	15	c+
GC22	A	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007	22427	22790	100.00	101.62	pg	2	15	
GC22	B	257092782055	06-MAR-2007 12:11	257090163001	03-MAR-2007	15312	17384	100.00	113.53	pg	14	15	
GC25	A	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007	3500.9	3196.1	50.000	45.647	pg	-9	15	
GC25	B	827095691003	07-MAR-2007 11:44	827088470001	02-MAR-2007	10524	12402	50.000	58.919	pg	**18**	15	c+
GC25	A	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007	3500.9	3003.8	20.000	17.160	pg	-14	15	
GC25	B	827095691014	07-MAR-2007 20:27	827088470001	02-MAR-2007	10524	9573.9	20.000	18.194	pg	-9	15	

+=high bias -=low bias c=CCV

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207088659 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 02-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
002	061_002	X	HEX			02-MAR-2007 13:39	1.0						
003	061_003	X	PCB500_100			02-MAR-2007 14:06	1.0	1.0			1	1	
005	061_005	X	PCB500_100			02-MAR-2007 15:46	1.0					1	
006	061_006	CCV	PCB500_100			02-MAR-2007 16:16	1.0	1.0			1	1	
007	061_007	X	PCB100_20			02-MAR-2007 16:53	1.0	1.0	1		1	2	
008	061_008	X	PCB250_50			02-MAR-2007 17:25	1.0	1.0	1		1	3	
009	061_009	CCV	AR2154			02-MAR-2007 18:06	1.0	1.0			1	4	
010	061_010	X	AR2154			02-MAR-2007 18:34	1.0					4	
011	061_011	X	AR1242			02-MAR-2007 19:02	1.0	1.0	2		1	5	
012	061_012	CCV	AR1242			02-MAR-2007 19:29	1.0	1.0			1	5	
013	061_013	CCV	AR1248			02-MAR-2007 19:57	1.0	1.0			1	6	
014	061_014	X	HEX			02-MAR-2007 20:24	1.0						
015	061_015	BLANK	QC377101	122605	Soil	02-MAR-2007 20:52	1.0	0.6645			1		
016	061_016	LCS	QC377102	122605	Soil	02-MAR-2007 21:19	1.0	0.6568			1		
017	061_017	SAMPLE	192952-003	122605	Soil	02-MAR-2007 21:46	1.0	0.6625			1		
018	061_018	SAMPLE	192854-001	122605	Soil	02-MAR-2007 22:14	5.0	0.6627			1		
019	061_019	MSS	193032-001	122605	Soil	02-MAR-2007 22:41	1.0	0.6596			1		
020	061_020	SAMPLE	193032-002	122605	Soil	02-MAR-2007 23:09	1.0	0.6592			1		
021	061_021	SAMPLE	193033-001	122605	Soil	02-MAR-2007 23:36	1.0	0.6605			1		
022	061_022	SAMPLE	193011-001	122605	Miscel	03-MAR-2007 00:04	1.0						
023	061_023	SAMPLE	193036-001	122605	Soil	03-MAR-2007 00:31	1.0	0.6636			1		
024	061_024	X	HEX			03-MAR-2007 00:59	1.0						
025	061_025	X	PCB250_50			03-MAR-2007 01:26	1.0	1.0	2		1	3	
026	061_026	CCV	PCB250_50			03-MAR-2007 01:54	1.0	1.0			1	3	
027	061_027	CCV	AR2154			03-MAR-2007 02:21	1.0	1.0			1	4	
028	061_028	X	AR2154			03-MAR-2007 02:49	1.0					4	
029	061_029	CCV	AR1242			03-MAR-2007 03:16	1.0	1.0			1	5	
030	061_030	X	AR1242			03-MAR-2007 03:43	1.0					5	
031	061_031	CCV	AR1248			03-MAR-2007 04:11	1.0	1.0			1	6	
032	061_032	X	HEX			03-MAR-2007 04:38	1.0						
033	061_033	X	HEX			03-MAR-2007 05:06	1.0						

Stds used: 1=S4998 2=S4996 3=S4997 4=S5257 5=S5239 6=S5103 7=S5503 8=S5504 9=S5505 10=S5506 11=S5507 12=S5483 13=S5484 14=S4999 15=S5000 16=S4915

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207088659 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 02-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
034	061_034	X	HEX			03-MAR-2007 05:33	1.0				
035	061_035	ICAL	AR124810_2			03-MAR-2007 06:01	1.0	1.0		7	
036	061_036	ICAL	AR1248100_20			03-MAR-2007 06:28	1.0	1.0		8	
037	061_037	ICAL	AR1248250_50			03-MAR-2007 06:56	1.0	1.0		9	
038	061_038	ICAL	AR1248500_10			03-MAR-2007 07:23	1.0	1.0		10	
039	061_039	ICAL	AR12481000_2			03-MAR-2007 07:50	1.0	1.0		11	
040	061_040	X	HEX			03-MAR-2007 08:18	1.0				
041	061_041	X	HEX			03-MAR-2007 08:46	1.0				
042	061_042	X	HEX			03-MAR-2007 09:13	1.0				
043	061_043	X	HEX			03-MAR-2007 09:41	1.0				
044	061_044	X	PCB10_2			03-MAR-2007 10:08	1.0			12	
045	061_045	ICAL	PCB25_5			03-MAR-2007 10:35	1.0	1.0		13	
046	061_046	ICAL	PCB100_20			03-MAR-2007 11:03	1.0	1.0		2	
047	061_047	ICAL	PCB250_50			03-MAR-2007 11:31	1.0	1.0		3	
048	061_048	ICAL	PCB500_100			03-MAR-2007 11:58	1.0	1.0		1	
049	061_049	ICAL	PCB750_150			03-MAR-2007 12:26	1.0	1.0		14	
050	061_050	ICAL	PCB1000_200			03-MAR-2007 12:53	1.0	1.0		15	
051	061_051	X	HEX			03-MAR-2007 13:21	1.0				
052	061_052	ICV	ULTRA_1660			03-MAR-2007 13:48	1.0	1.0	1	16	
053	061_053	X	ULTRA_1660			03-MAR-2007 14:16	1.0	1.0	1	16	
054	061_054	X	HEX			03-MAR-2007 14:43	1.0				
055	061_055	ICAL	PCB10_2			04-MAR-2007 16:31	1.0	1.0		12	

Stds used: 1=S4998 2=S4996 3=S4997 4=S5257 5=S5239 6=S5103 7=S5503 8=S5504 9=S5505 10=S5506 11=S5507 12=S5483 13=S5484 14=S4999 15=S5000 16=S4915

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 827088470 Instrument: GC25 Gas Chromatograph #25 ECD Begun: 02-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
001	061_001	X	HEX			02-MAR-2007 10:30	1.0					
002	061_002	X	NEW HEX			02-MAR-2007 11:02	1.0					
003	061_003	X	192951-022			02-MAR-2007 11:35	1.0					
004	061_004	X	HEX			02-MAR-2007 12:22	1.0					
005	061_005	X	HEX			02-MAR-2007 12:53	1.0					
006	061_006	X	NEW LOW PT.			02-MAR-2007 13:20	1.0					
007	061_007	X	OLD LOW PT.			02-MAR-2007 13:53	1.0					
008	061_008	X	OLD HIGH PT.			02-MAR-2007 15:06	1.0					
009	061_009	X	NEW HEX			02-MAR-2007 15:51	1.0					
012	061_012	X	HIGH PT.			02-MAR-2007 17:00	1.0					
013	061_013	X	LOW PT.			02-MAR-2007 17:38	1.0					
014	061_014	X	HIGH PT.			02-MAR-2007 18:04	1.0					
015	061_015	X	HEX			02-MAR-2007 18:33	1.0					
016	061_016	X	HEX			02-MAR-2007 19:00	1.0					
017	061_017	ICAL	PCB10_2			02-MAR-2007 19:26	1.0				1	
018	061_018	ICAL	PCB25_5			02-MAR-2007 19:53	1.0				2	
019	061_019	ICAL	PCB100_20			02-MAR-2007 20:19	1.0				3	
020	061_020	ICAL	PCB250_50			02-MAR-2007 20:46	1.0				4	
021	061_021	ICAL	PCB500_100			02-MAR-2007 21:12	1.0				5	
022	061_022	ICAL	PCB750_150			02-MAR-2007 21:39	1.0				6	
023	061_023	ICAL	PCB1000_200			02-MAR-2007 22:05	1.0				7	
024	061_024	X	HEX			02-MAR-2007 22:32	1.0					
025	061_025	X	HEX			02-MAR-2007 22:58	1.0					
026	061_026	ICV	ICV			02-MAR-2007 23:25	1.0	1			8	
027	061_027	X	ICV			02-MAR-2007 23:51	1.0				8	
028	061_028	X	HEX			03-MAR-2007 00:18	1.0					

Stds used: 1=S5483 2=S5484 3=S4996 4=S4997 5=S4998 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257090163 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 03-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
001	062_001	X	PRIMER			03-MAR-2007 14:43	1.0					
002	062_002	X	PRIMER			03-MAR-2007 15:10	1.0					
003	062_003	X	PRIMER			03-MAR-2007 15:36	1.0					
004	062_004	X	PRIMER			03-MAR-2007 16:03	1.0					
005	062_005	X	PRIMER			03-MAR-2007 16:29	1.0					
006	062_006	X	PRIMER			03-MAR-2007 16:55	1.0					
007	062_007	X	PRIMER			03-MAR-2007 17:22	1.0					
008	062_008	X	HEX			03-MAR-2007 17:48	1.0					
009	062_009	X	HEX			03-MAR-2007 18:15	1.0					
010	062_010	X	HEX			03-MAR-2007 18:41	1.0					
011	062_011	ICAL	PCB10_2			03-MAR-2007 19:07	1.0				1	
012	062_012	ICAL	PCB25_5			03-MAR-2007 19:34	1.0				2	
013	062_013	ICAL	PCB100_20			03-MAR-2007 20:00	1.0				3	
014	062_014	ICAL	PCB250_50			03-MAR-2007 20:26	1.0				4	
015	062_015	ICAL	PCB500_100			03-MAR-2007 20:53	1.0				5	
016	062_016	ICAL	PCB750_150			03-MAR-2007 21:19	1.0				6	
017	062_017	ICAL	PCB1000_200			03-MAR-2007 21:46	1.0				7	
018	062_018	X	HEX			03-MAR-2007 22:12	1.0					
019	062_019	X	ULTRA_1660			03-MAR-2007 22:38	1.0				8	
020	062_020	ICV	ULTRA_1660			03-MAR-2007 23:05	1.0	1			8	
021	062_021	X	HEX			03-MAR-2007 23:31	1.0					

Stds used: 1=S5483 2=S5484 3=S4996 4=S4997 5=S4998 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207092784 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	HEX			05-MAR-2007 10:24	1.0						
002	064_002	X	PCB750_150			05-MAR-2007 10:52	1.0	1.0			1	1	
003	064_003	CCV	PCB750_150			05-MAR-2007 11:19	1.0	1.0			1	1	
004	064_004	X	AR1242			05-MAR-2007 14:30	1.0					2	
005	064_005	ICAL	AR1242			05-MAR-2007 14:58	1.0	1.0				2	
006	064_006	X	AR2154			05-MAR-2007 15:25	1.0					3	
007	064_007	X	HEX			05-MAR-2007 15:53	1.0						
008	064_008	X	QC377404	122679	Water	05-MAR-2007 16:20	1.0	0.025			1		
009	064_009	SAMPLE	193055-004	122679	Water	05-MAR-2007 16:48	1.0	0.02358		2	1		
010	064_010	BLANK	QC377404	122679	Water	05-MAR-2007 17:15	1.0	0.025			1		
011	064_011	SAMPLE	193055-005	122679	Water	05-MAR-2007 17:43	1.0	0.02358		2	1		
012	064_012	X	193055-006	122679	Water	05-MAR-2007 18:10	1.0	0.02358		4	1		
013	064_013	X	193055-009	122679	Water	05-MAR-2007 18:38	1.0	0.02381		4	1		
014	064_014	SAMPLE	193055-010	122679	Water	05-MAR-2007 19:05	1.0	0.02404			1		
015	064_015	X	193055-011	122679	Water	05-MAR-2007 19:33	1.0	0.02451		4	1		
016	064_016	BS	QC377405	122679	Water	05-MAR-2007 20:00	1.0	0.025		2	1		
017	064_017	BSD	QC377406	122679	Water	05-MAR-2007 20:28	1.0	0.025		2	1		
018	064_018	X	HEX			05-MAR-2007 20:55	1.0						
019	064_019	CCV	PCB500_100			05-MAR-2007 21:23	1.0	1.0			1	4	
020	064_020	X	PCB500_100			05-MAR-2007 21:50	1.0	1.0			1	4	
021	064_021	CCV	AR1242			05-MAR-2007 22:18	1.0	1.0			1	2	
022	064_022	X	AR1242			05-MAR-2007 22:45	1.0	1.0			1	2	
023	064_023	X	AR2154			05-MAR-2007 23:13	1.0					3	
024	064_024	ICAL	AR1232			05-MAR-2007 23:40	1.0	1.0				5	
025	064_025	X	HEX			06-MAR-2007 00:08	1.0						
026	064_026	SAMPLE	193057-004	122679	Water	06-MAR-2007 00:35	1.0	0.02451			1		
027	064_027	MDLCHEC	190412-009	121718	Soil	06-MAR-2007 01:03	1.0	0.8333			1		
028	064_028	SAMPLE	193093-001	122679	Water	06-MAR-2007 01:30	1.0	0.02358		2	1		
029	064_029	SAMPLE	193093-002	122679	Water	06-MAR-2007 01:58	1.0	0.02358			1		
030	064_030	X	HEX			06-MAR-2007 02:25	1.0						
031	064_031	CCV	PCB250_50			06-MAR-2007 02:52	1.0	1.0			1	6	

Stds used: 1=S5227 2=S5239 3=S5257 4=S4998 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207092784 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	064_032	X	PCB250_50			06-MAR-2007 03:20	1.0	1.0		1	6	
033	064_033	X	AR2154			06-MAR-2007 03:47	1.0				3	
034	064_034	CCV	AR1232			06-MAR-2007 04:15	1.0	1.0		1	5	
035	064_035	X	HEX			06-MAR-2007 04:42	1.0					

Stds used: 1=S5227 2=S5239 3=S5257 4=S4998 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	HEX			05-MAR-2007 10:22	1.0						
002	064_002	X	HEX			05-MAR-2007 10:49	1.0						
003	064_003	X	HEX			05-MAR-2007 11:15	1.0						
004	064_004	CCV	PCB750_150			05-MAR-2007 11:41	1.0	1.0			1	1	
005	064_005	X	PCB750_150			05-MAR-2007 12:08	1.0	1.0			1	1	
006	064_006	X	AR1242			05-MAR-2007 13:01	1.0					2	
007	064_007	ICAL	AR1242			05-MAR-2007 13:28	1.0	1.0				2	
008	064_008	X	AR2154			05-MAR-2007 14:51	1.0					3	
009	064_009	X	AR2154			05-MAR-2007 15:17	1.0					3	
010	064_010	X	AR1248			05-MAR-2007 15:44	1.0					4	
011	064_011	X	HEX			05-MAR-2007 16:10	1.0						
012	064_012	BLANK	QC377462	122695	Soil	05-MAR-2007 16:37	1.0	0.664			1		
013	064_013	MSS	193078-001	122695	Soil	05-MAR-2007 17:33	1.0	0.664			1		
014	064_014	SAMPLE	193061-021	122695	Soil	05-MAR-2007 17:59	1.0	0.6662			1		
015	064_015	SAMPLE	193061-022	122695	Soil	05-MAR-2007 18:26	1.0	0.6656		1	1		
016	064_016	SAMPLE	193061-023	122695	Soil	05-MAR-2007 18:52	1.0	0.6653			1		
017	064_017	SAMPLE	193061-024	122695	Soil	05-MAR-2007 19:19	1.0	0.6633			1		
018	064_018	SAMPLE	193061-025	122695	Soil	05-MAR-2007 19:45	1.0	0.6616		1	1		
019	064_019	LCS	QC377463	122695	Soil	05-MAR-2007 20:11	1.0	0.6642			1		
020	064_020	MS	QC377464	122695	Soil	05-MAR-2007 20:38	1.0	0.6664		2	1		
021	064_021	MSD	QC377465	122695	Soil	05-MAR-2007 21:04	1.0	0.6598		1	1		
022	064_022	X	HEX			05-MAR-2007 21:31	1.0						
023	064_023	CCV	PCB500_100			05-MAR-2007 21:57	1.0	1.0			1	5	
024	064_024	X	PCB500_100			05-MAR-2007 22:24	1.0	1.0	4		1	5	
025	064_025	CCV	AR1242			05-MAR-2007 22:50	1.0	1.0			1	2	
026	064_026	X	AR1242			05-MAR-2007 23:17	1.0	1.0			1	2	
027	064_027	X	AR2154			05-MAR-2007 23:43	1.0					3	
028	064_028	X	AR2154			06-MAR-2007 00:09	1.0					3	
029	064_029	X	AR1248			06-MAR-2007 00:36	1.0					4	
030	064_030	X	HEX			06-MAR-2007 01:02	1.0						
031	064_031	SAMPLE	193101-001	122695	Soil	06-MAR-2007 01:29	1.0	0.6629			1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch.	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	064_032	SAMPLE	193101-002	122695	Soil	06-MAR-2007 01:55	1.0	0.666		1	1		
033	064_033	SAMPLE	193101-003	122695	Soil	06-MAR-2007 02:22	1.0	0.6645			1		
034	064_034	SAMPLE	193101-004	122695	Soil	06-MAR-2007 02:48	1.0	0.662		1	1		
035	064_035	SAMPLE	193101-005	122695	Soil	06-MAR-2007 03:15	1.0	0.6594			1		
036	064_036	SAMPLE	193101-006	122695	Soil	06-MAR-2007 03:41	1.0	0.664			1		
037	064_037	SAMPLE	193101-007	122695	Soil	06-MAR-2007 04:08	1.0	0.664			1		
038	064_038	SAMPLE	193101-008	122695	Soil	06-MAR-2007 04:34	1.0	0.6649	3		1		5:PCB101=3722.58
039	064_039	SAMPLE	193101-009	122695	Soil	06-MAR-2007 05:00	1.0	0.6633			1		
040	064_040	X	HEX			06-MAR-2007 05:27	1.0						
041	064_041	CCV	PCB250_50			06-MAR-2007 05:53	1.0	1.0			1	6	
042	064_042	X	PCB250_50			06-MAR-2007 06:20	1.0	1.0			1	6	
043	064_043	X	AR2154			06-MAR-2007 06:46	1.0					3	
044	064_044	X	AR2154			06-MAR-2007 07:13	1.0					3	
045	064_045	X	AR1248			06-MAR-2007 07:39	1.0					4	
046	064_046	X	HEX			06-MAR-2007 08:05	1.0						
047	064_047	SAMPLE	193075-001	122695	Soil	06-MAR-2007 08:32	1.0	0.6649			1		
048	064_048	SAMPLE	193075-002	122695	Soil	06-MAR-2007 08:58	1.0	0.6629			1		
049	064_049	SAMPLE	193075-003	122695	Soil	06-MAR-2007 09:25	1.0	0.6631			1		
050	064_050	X	HEX			06-MAR-2007 09:51	1.0						
051	064_051	SAMPLE	193055-006	122679	Water	06-MAR-2007 10:25	1.0	0.02358		2	1		
052	064_052	X	193055-009	122679	Water	06-MAR-2007 10:52	1.0	0.02381		4	1		
053	064_053	SAMPLE	193055-011	122679	Water	06-MAR-2007 11:18	1.0	0.02451			1		
054	064_054	X	HEX			06-MAR-2007 11:45	1.0						
055	064_055	CCV	PCB500_100			06-MAR-2007 12:11	1.0	1.0			1	5	
056	064_056	X	PCB500_100			06-MAR-2007 12:38	1.0	1.0			1	5	
057	064_057	X	AR2154			06-MAR-2007 13:04	1.0					3	
058	064_058	X	HEX			06-MAR-2007 13:30	1.0						
059	064_059	X	193055-009	122679	Water	06-MAR-2007 13:56	1.0	0.02381		4	1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207095711 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	066_001	X	HEX			07-MAR-2007 11:11	1.0						
002	066_002	X	PCB750_150			07-MAR-2007 11:38	1.0	1.0			1	1	
003	066_003	CCV	PCB750_150			07-MAR-2007 12:06	1.0	1.0			1	1	
004	066_004	CCV	AR2154			07-MAR-2007 12:53	1.0					2	
005	066_005	CCV	AR2154			07-MAR-2007 13:21	1.0					2	
006	066_006	CCV	AR1248			07-MAR-2007 14:20	1.0					3	
007	066_007	X	HEX			07-MAR-2007 15:04	1.0						
008	066_008	X	193125-001	122779	Water	07-MAR-2007 16:12	1.0	0.02427		2	1		
009	066_009	SAMPLE	193169-001	122779	Water	07-MAR-2007 17:57	1.0	0.02358			1		
010	066_010	BLANK	QC378025	122825	Miscel	07-MAR-2007 19:29	1.0	50.0			1		
011	066_011	BLANK	QC377845	122779	Water	07-MAR-2007 19:57	1.0	0.025			1		
012	066_012	X	193214-001	122825	Miscel	07-MAR-2007 20:24	1.0	47.98	13	4	1		14:PCB126=42516.0
013	066_013	SAMPLE	193200-013	122804	Soil	07-MAR-2007 20:52	1.0	0.8243			1		
014	066_014	SAMPLE	193200-020	122804	Soil	07-MAR-2007 21:20	1.0	0.8295			1		
015	066_015	SAMPLE	193200-021	122804	Soil	07-MAR-2007 21:47	1.0	0.8264			1		
016	066_016	SAMPLE	193200-023	122804	Soil	07-MAR-2007 22:15	1.0	0.8286			1		
017	066_017	X	193055-009	122779	Water	07-MAR-2007 22:42	1.0	0.02404		4	1		
018	066_018	X	HEX			07-MAR-2007 23:10	1.0						
019	066_019	X	PCB500_100			07-MAR-2007 23:37	1.0	1.0			1	4	
020	066_020	CCV	PCB500_100			08-MAR-2007 00:05	1.0	1.0			1	4	
021	066_021	X	AR1242			08-MAR-2007 00:32	1.0	1.0			1	5	
022	066_022	CCV	AR1242			08-MAR-2007 01:00	1.0	1.0			1	5	
023	066_023	CCV	AR2154			08-MAR-2007 01:27	1.0					2	
024	066_024	CCV	AR2154			08-MAR-2007 01:55	1.0					2	
025	066_025	CCV	AR1248			08-MAR-2007 02:22	1.0					3	
026	066_026	X	HEX			08-MAR-2007 02:50	1.0						
027	066_027	SAMPLE	193201-001	122825	Oil	08-MAR-2007 03:17	1.0	49.22		2	1		
028	066_028	SAMPLE	193201-002	122825	Oil	08-MAR-2007 03:44	1.0	50.06		2	1		
029	066_029	SAMPLE	193201-003	122825	Oil	08-MAR-2007 04:12	1.0	49.12		3	1		
030	066_030	BS	QC378026	122825	Miscel	08-MAR-2007 04:39	1.0	50.0			1		
031	066_031	BSD	QC378027	122825	Miscel	08-MAR-2007 05:07	1.0	50.0			1		

Stds used: 1=S5227 2=S5257 3=S5103 4=S4998 5=S5239 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 207095711 Instrument: GC06 Gas Chromatograph #6 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
032	066_032	BS	QC377846	122779	Water	08-MAR-2007 05:34	1.0	0.025	1		
033	066_033	BSD	QC377847	122779	Water	08-MAR-2007 06:02	1.0	0.025	1		
034	066_034	X	HEX			08-MAR-2007 06:29	1.0				
035	066_035	CCV	PCB250_50			08-MAR-2007 06:56	1.0	1.0	1	6	
036	066_036	X	PCB250_50			08-MAR-2007 07:24	1.0	1.0	1	6	
037	066_037	CCV	AR1242			08-MAR-2007 07:52	1.0	1.0	1	5	
038	066_038	X	AR1242			08-MAR-2007 08:19	1.0	1.0	1	5	
039	066_039	CCV	AR2154			08-MAR-2007 08:46	1.0			2	
040	066_040	X	HEX			08-MAR-2007 09:14	1.0				
041	066_041	CCV	AR1248			08-MAR-2007 09:41	1.0			3	
042	066_042	X	HEX			08-MAR-2007 10:09	1.0				
043	066_043	X	193214-001	122825	Miscel	08-MAR-2007 10:37	50.0				
044	066_044	SAMPLE	193214-001	122825	Miscel	08-MAR-2007 11:08	100.0	47.98	1		

Stds used: 1=S5227 2=S5257 3=S5103 4=S4998 5=S5239 6=S4997

SEQUENCE SUMMARY FOR 193055 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 827095691 Instrument: GC25 Gas Chromatograph #25 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	066_001	X	HEX			07-MAR-2007 10:51	1.0						
002	066_002	X	PCB250_50			07-MAR-2007 11:18	1.0	1.0	1		1	1	
003	066_003	CCV	PCB250_50			07-MAR-2007 11:44	1.0	1.0	1		1	1	
004	066_004	CCV	AR1242			07-MAR-2007 16:02	1.0					2	
005	066_005	CCV	AR1242			07-MAR-2007 16:29	1.0					2	
006	066_006	X	HEX			07-MAR-2007 16:55	1.0						
007	066_007	X	QC377845	122779	Water	07-MAR-2007 17:22	1.0						
008	066_008	X	QC377846	122779	Water	07-MAR-2007 17:48	1.0						
009	066_009	X	QC377847	122779	Water	07-MAR-2007 18:15	1.0						
010	066_010	SAMPLE	193055-009	122779	Water	07-MAR-2007 18:41	1.0	0.02404		2	1		
011	066_011	SAMPLE	193125-001	122779	Water	07-MAR-2007 19:08	1.0	0.02427			1		
012	066_012	X	193169-001	122779	Water	07-MAR-2007 19:34	1.0	0.02358			1		
013	066_013	X	HEX			07-MAR-2007 20:01	1.0						
014	066_014	CCV	PCB100_20			07-MAR-2007 20:27	1.0	1.0			1	3	
015	066_015	X	PCB100_20			07-MAR-2007 20:54	1.0	1.0	1		1	3	
016	066_016	CCV	AR1242			07-MAR-2007 21:20	1.0					2	
017	066_017	CCV	AR1242			07-MAR-2007 21:47	1.0					2	

Stds used: 1=S4997 2=S5239 3=S4996

REPORTING SUMMARY FOR 193055 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-004	Aroclor-1016	GC06	A	03/05/07 16:48
193055-004	Aroclor-1221	GC06	A	03/05/07 16:48
193055-004	Aroclor-1232	GC06	A	03/05/07 16:48
193055-004	Aroclor-1242	GC06	A	03/05/07 16:48
193055-004	Aroclor-1248	GC06	A	03/05/07 16:48
193055-004	Aroclor-1254	GC06	A	03/05/07 16:48
193055-004	Aroclor-1260	GC06	A	03/05/07 16:48
193055-004	TCMX	GC06	B	03/05/07 16:48
193055-004	Decachlorobiphenyl	GC06	B	03/05/07 16:48
193055-005	Aroclor-1016	GC06	A	03/05/07 17:43
193055-005	Aroclor-1221	GC06	A	03/05/07 17:43
193055-005	Aroclor-1232	GC06	A	03/05/07 17:43
193055-005	Aroclor-1242	GC06	A	03/05/07 17:43
193055-005	Aroclor-1248	GC06	A	03/05/07 17:43
193055-005	Aroclor-1254	GC06	A	03/05/07 17:43
193055-005	Aroclor-1260	GC06	A	03/05/07 17:43
193055-005	TCMX	GC06	B	03/05/07 17:43
193055-005	Decachlorobiphenyl	GC06	B	03/05/07 17:43
193055-006	Aroclor-1016	GC22	A	03/06/07 10:25
193055-006	Aroclor-1221	GC22	A	03/06/07 10:25
193055-006	Aroclor-1232	GC22	A	03/06/07 10:25
193055-006	Aroclor-1242	GC22	A	03/06/07 10:25
193055-006	Aroclor-1248	GC22	A	03/06/07 10:25
193055-006	Aroclor-1254	GC22	A	03/06/07 10:25
193055-006	Aroclor-1260	GC22	A	03/06/07 10:25
193055-006	TCMX	GC22	A	03/06/07 10:25
193055-006	Decachlorobiphenyl	GC22	A	03/06/07 10:25
193055-009	Aroclor-1016	GC25	A	03/07/07 18:41
193055-009	Aroclor-1221	GC25	A	03/07/07 18:41
193055-009	Aroclor-1232	GC25	A	03/07/07 18:41
193055-009	Aroclor-1242	GC25	A	03/07/07 18:41
193055-009	Aroclor-1248	GC25	A	03/07/07 18:41
193055-009	Aroclor-1254	GC25	A	03/07/07 18:41
193055-009	Aroclor-1260	GC25	A	03/07/07 18:41
193055-009	TCMX	GC25	A	03/07/07 18:41
193055-009	Decachlorobiphenyl	GC25	A	03/07/07 18:41
193055-010	Aroclor-1016	GC06	A	03/05/07 19:05
193055-010	Aroclor-1221	GC06	A	03/05/07 19:05
193055-010	Aroclor-1232	GC06	A	03/05/07 19:05
193055-010	Aroclor-1242	GC06	A	03/05/07 19:05
193055-010	Aroclor-1248	GC06	A	03/05/07 19:05
193055-010	Aroclor-1254	GC06	A	03/05/07 19:05
193055-010	Aroclor-1260	GC06	A	03/05/07 19:05
193055-010	TCMX	GC06	B	03/05/07 19:05
193055-010	Decachlorobiphenyl	GC06	B	03/05/07 19:05
193055-011	Aroclor-1016	GC22	A	03/06/07 11:18
193055-011	Aroclor-1221	GC22	A	03/06/07 11:18
193055-011	Aroclor-1232	GC22	A	03/06/07 11:18
193055-011	Aroclor-1242	GC22	A	03/06/07 11:18

REPORTING SUMMARY FOR 193055 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-011	Aroclor-1248	GC22	A	03/06/07 11:18
193055-011	Aroclor-1254	GC22	A	03/06/07 11:18
193055-011	Aroclor-1260	GC22	A	03/06/07 11:18
193055-011	TCMX	GC22	A	03/06/07 11:18
193055-011	Decachlorobiphenyl	GC22	A	03/06/07 11:18
QC377404	Aroclor-1016	GC06	A	03/05/07 17:15
QC377404	Aroclor-1221	GC06	A	03/05/07 17:15
QC377404	Aroclor-1232	GC06	A	03/05/07 17:15
QC377404	Aroclor-1242	GC06	A	03/05/07 17:15
QC377404	Aroclor-1248	GC06	A	03/05/07 17:15
QC377404	Aroclor-1254	GC06	A	03/05/07 17:15
QC377404	Aroclor-1260	GC06	A	03/05/07 17:15
QC377404	TCMX	GC06	B	03/05/07 17:15
QC377404	Decachlorobiphenyl	GC06	B	03/05/07 17:15
QC377845	Aroclor-1016	GC06	A	03/07/07 19:57
QC377845	Aroclor-1221	GC06	A	03/07/07 19:57
QC377845	Aroclor-1232	GC06	A	03/07/07 19:57
QC377845	Aroclor-1242	GC06	A	03/07/07 19:57
QC377845	Aroclor-1248	GC06	A	03/07/07 19:57
QC377845	Aroclor-1254	GC06	A	03/07/07 19:57
QC377845	Aroclor-1260	GC06	A	03/07/07 19:57
QC377845	TCMX	GC06	A	03/07/07 19:57
QC377845	Decachlorobiphenyl	GC06	A	03/07/07 19:57
QC377405	Aroclor-1242	GC06	A	03/05/07 20:00
QC377405	TCMX	GC06	B	03/05/07 20:00
QC377405	Decachlorobiphenyl	GC06	B	03/05/07 20:00
QC377406	Aroclor-1242	GC06	A	03/05/07 20:28
QC377406	TCMX	GC06	B	03/05/07 20:28
QC377406	Decachlorobiphenyl	GC06	B	03/05/07 20:28
QC377846	Aroclor-1242	GC06	A	03/08/07 05:34
QC377846	TCMX	GC06	A	03/08/07 05:34
QC377846	Decachlorobiphenyl	GC06	A	03/08/07 05:34
QC377847	Aroclor-1242	GC06	A	03/08/07 06:02
QC377847	TCMX	GC06	A	03/08/07 06:02
QC377847	Decachlorobiphenyl	GC06	A	03/08/07 06:02

Curtis & Tompkins Laboratories Sample Preparation Summary 05-MAR-2007 11:38

Batch Number : 122679
Date Extracted: 04-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-004		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193055-005		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193055-006		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193055-009		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193055-010		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193055-011		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193057-004		Weston Solutions	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193093-001		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193093-002		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
QC377404	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC377405	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC377406	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: Jessie Mee Reviewed By: Date: 3/5/07

Relinquished By: Received By: Date: 3/5/07

00223

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

BK 2374
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LIMS Batch No: 122679
LIMS Analysis: PCB
Extracted by: JDM
Date Extracted: 4 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193055-004 G	1060	7	25.0	
05 I	↓	↓	↓	
06 G				
09 C	1050			
10 C	1040			
11 I JDM 3/4/07	1020			
193057-004 I	1020			
193093-001 O	1060			
02 P	1060	↓		
MB BC377404	1000	NA		
BS 05	↓	↓	↓	
BSD 06	↓			

KMH 3/5/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616A	JDM 3/4/07
0.05 mL of spike solution AR-1242 was added to all spikes	S5458A	↓
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 + HPLC H_2O	EM47010 / EM46352	↓
Extraction Start Time:	1210	
Extraction End Time:	0720	RFU 3/5/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	EM46354	KMH 3/5/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46116A	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTB C50E54	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	F065076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jessie Lee 3/4/07
Extraction Chemist / **Date**

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3/5/07
Reviewed by **Date**

Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 15:33

Batch Number : 122779
Date Extracted: 06-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-009		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193125-001		Clayton Group Services	Water	1030	mL	25	0.024272	1	6	.05	0		PCB	3665A	
193169-001		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	10	.05	0		PCB	3665A	
QC377845	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC377846	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC377847	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: Jessie Mee Reviewed By: [signature] Date: 3/7/07

Relinquished By: [signature] Received By: [signature] Date: 3/7/07

00225

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

BK 2374
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LIMS Batch No: 122779
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 6 March 07

Extraction Method:
- ☐ EPA 3510c Sep. Funnel
- ☒ EPA 3520c Continuous L/L
- ☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193055-009 D	1040	7	25.0	re-x
193125-001 H	1030	6	25.0	
193169-001 E	1060	10	↓	
MB QC377845	1000	NA		
BS ↓ 46	↓	↓		
BSD ↓ 47	↓	↓		

MRC

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616A	JOM 3/6/07
0.05 mL of spike solution AR-1242 was added to all spikes	S5458A	↓
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1755	
Extraction End Time:	1200	JOM 3/7/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	MRC 3-7
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM461623	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTB C43 E40	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	065076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	✓

3/6/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

3/7/07
Reviewed by 00225 **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/22/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW104	Batch#:	122665
Lab ID:	193055-002	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	93	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

90.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW106	Batch#:	122665
Lab ID:	193055-003	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	96	65-135
1-Methylnaphthalene (F)	94	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

91.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW103	Batch#:	122665
Lab ID:	193055-004	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	78	65-135
1-Methylnaphthalene (F)	75	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

92.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW100	Batch#:	122665
Lab ID:	193055-005	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

93.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW101	Batch#:	122665
Lab ID:	193055-006	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

94.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW02	Batch#:	122665
Lab ID:	193055-011	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	93	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

95.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW103	Batch#:	122665
Lab ID:	193055-012	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.98	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.98	
Fluorene	ND	0.98	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

96.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW104	Batch#:	122665
Lab ID:	193055-013	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.1	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.1	
Fluorene	ND	1.1	
Phenanthrene	ND	0.53	
Anthracene	ND	0.53	0.02
Fluoranthene	ND	0.42	0.006
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.11	
Chrysene	ND	0.11	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.11	
Benzo(a)pyrene	ND	0.11	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	ND	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.15	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	78	65-135
1-Methylnaphthalene (F)	75	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

97.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW105	Batch#:	122665
Lab ID:	193055-014	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.51	
Anthracene	ND	0.51	0.02
Fluoranthene	ND	0.41	0.005
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	ND	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	82	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

98.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377353	Batch#:	122665
Matrix:	Water	Prepared:	03/02/07
Units:	ug/L	Analyzed:	03/05/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

99.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Matrix:	Water	Batch#:	122665
Units:	ug/L	Prepared:	03/02/07
Diln Fac:	1.000	Analyzed:	03/05/07

Type: BS Lab ID: QC377354

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.461	85	50-135
Fluorene	2.000	1.774	89	65-135
Pyrene	1.000	0.8933	89	65-135
Benzo(a)pyrene	1.000	0.9006	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	79	65-135
1-Methylnaphthalene (F)	77	65-135

Type: BSD Lab ID: QC377355

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	10.00	9.101	91	50-135	7	35
Fluorene	2.000	1.919	96	65-135	8	35
Pyrene	1.000	0.9632	96	65-135	8	35
Benzo(a)pyrene	1.000	0.9970	100	65-135	10	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	85	65-135

RPD= Relative Percent Difference

100.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 HPLC Water: EPA 8310

Inst : HPLC04 Reviewer: MCH
Calnum : 296366536003 Date : 11-SEP-2006 15:34
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

HPLC04 METHOD 8310

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

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RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

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RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

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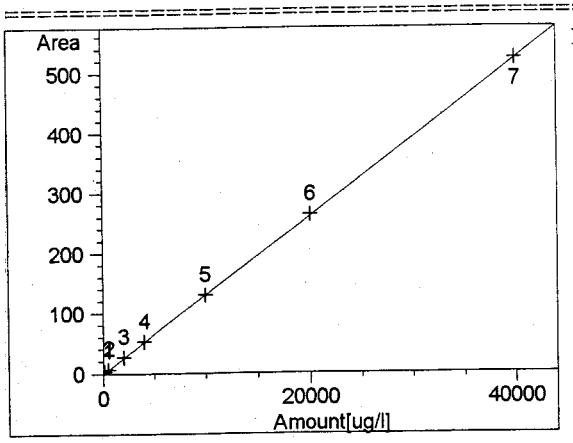
RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

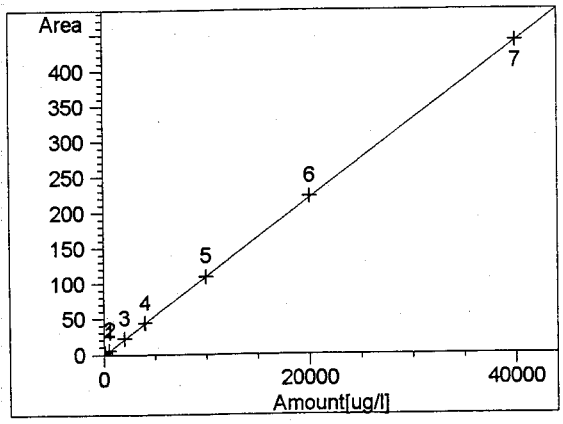
Peak Sum Table

No Entries in table

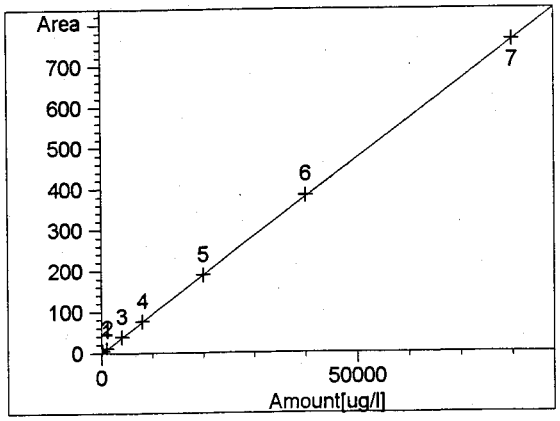
Calibration Curves



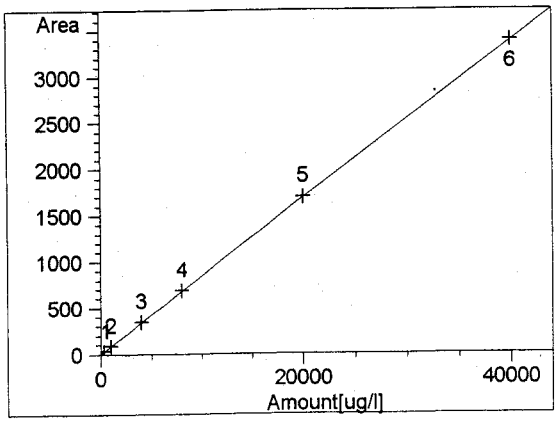
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



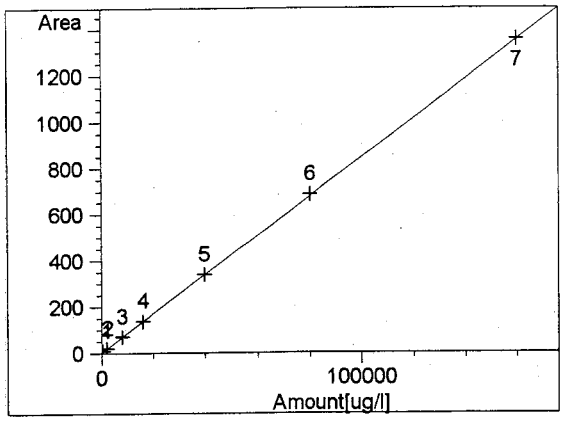
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



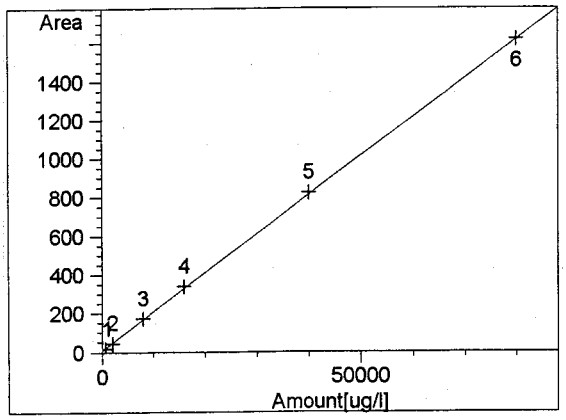
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



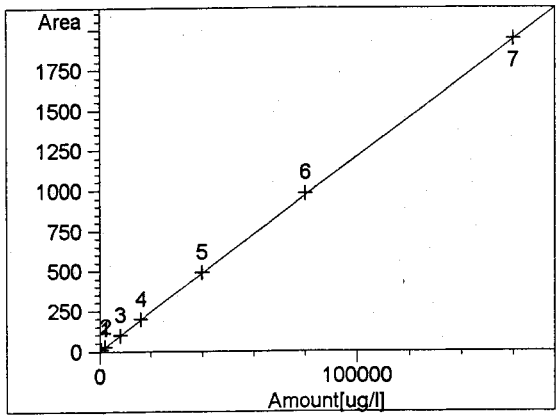
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



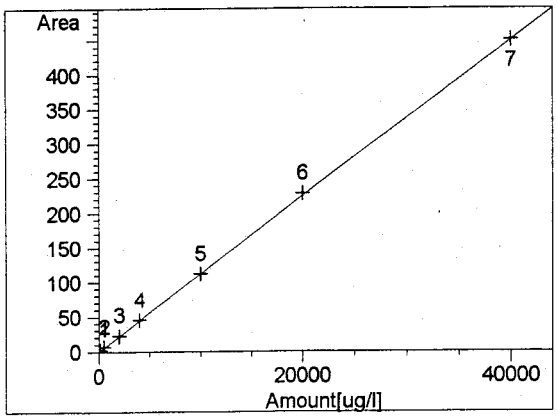
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



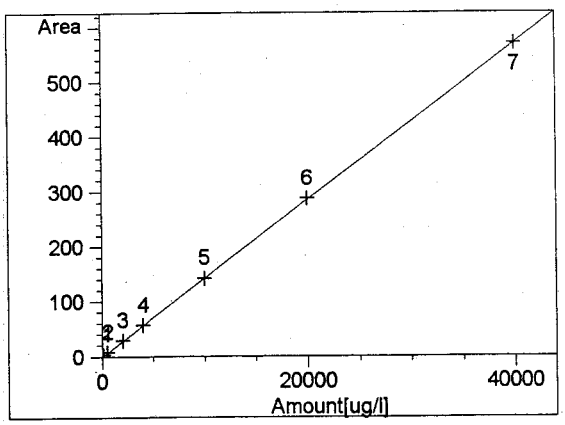
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



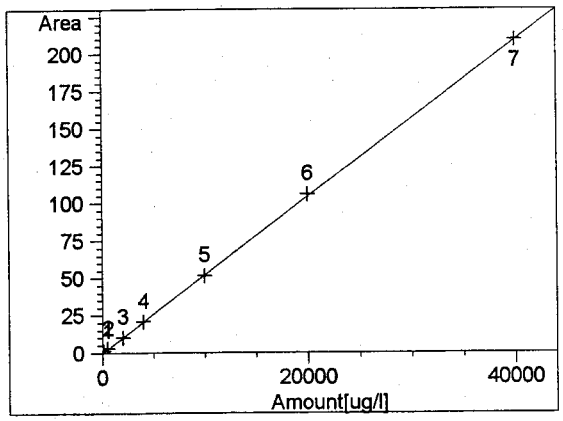
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



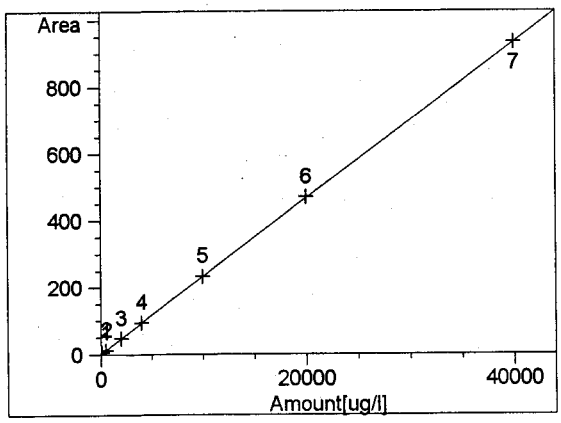
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



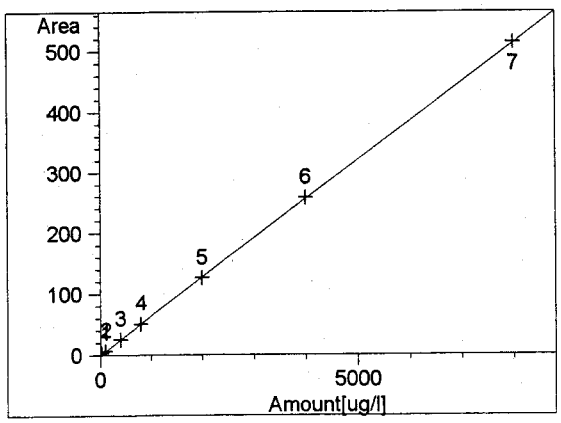
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



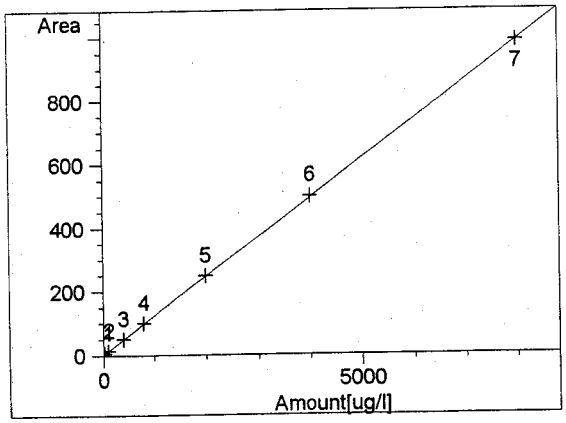
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



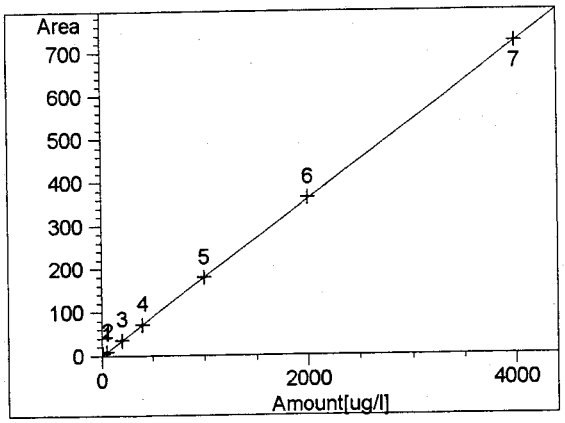
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



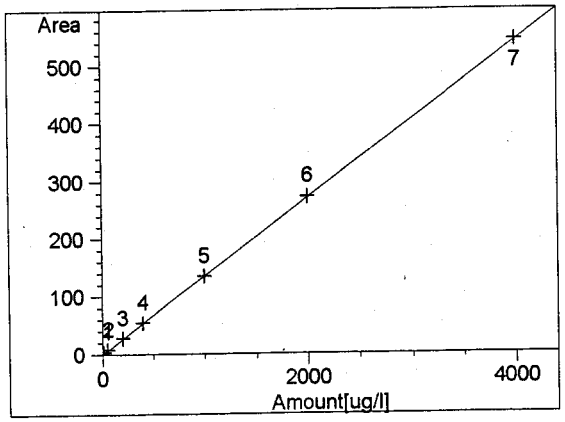
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



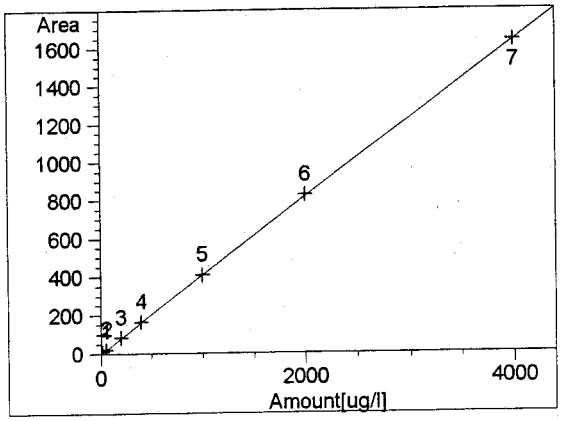
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



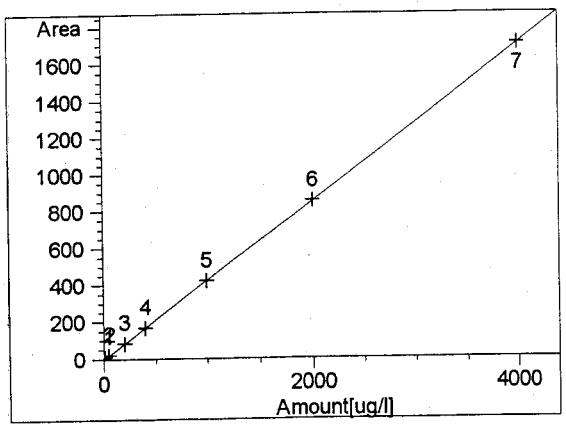
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



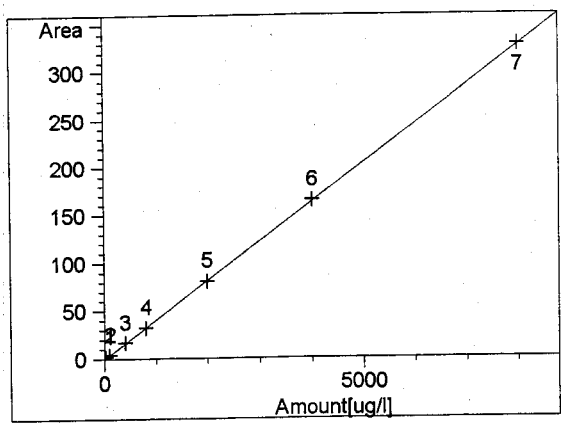
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



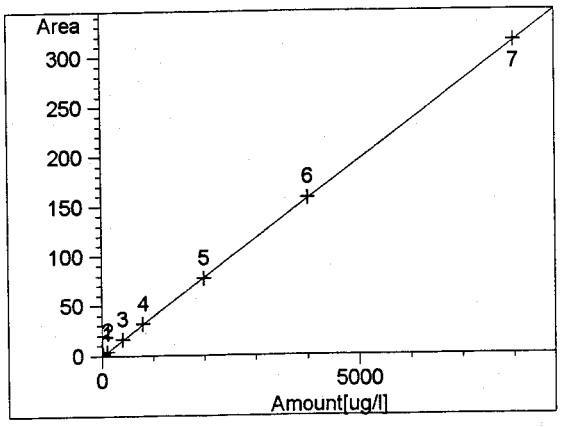
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



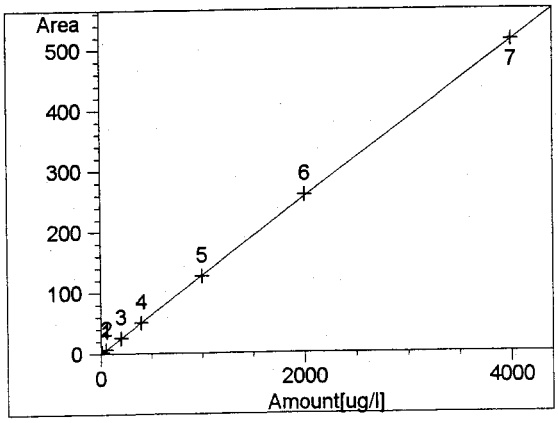
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



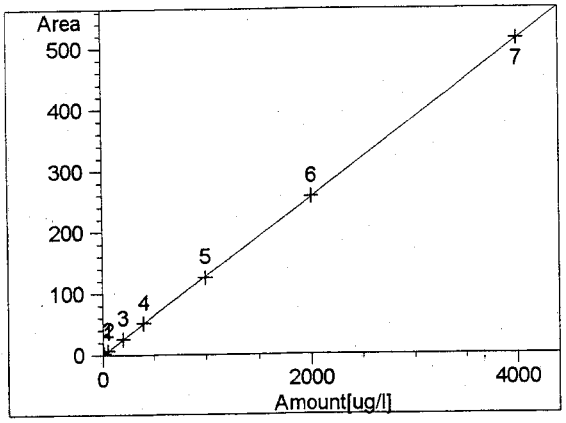
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



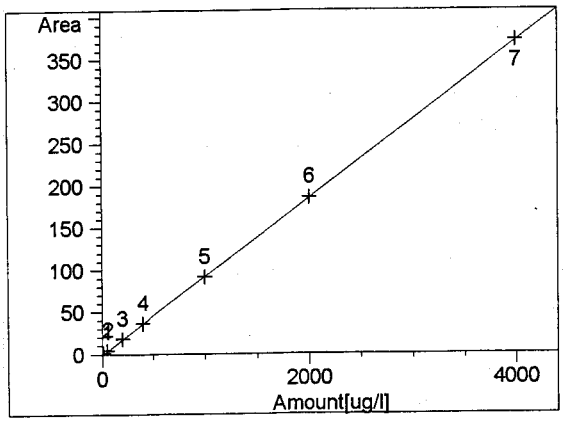
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



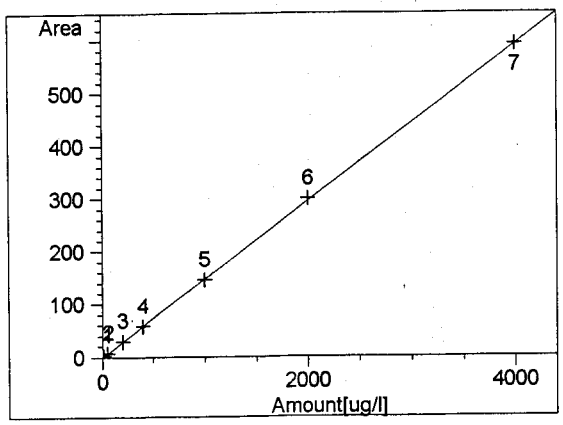
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



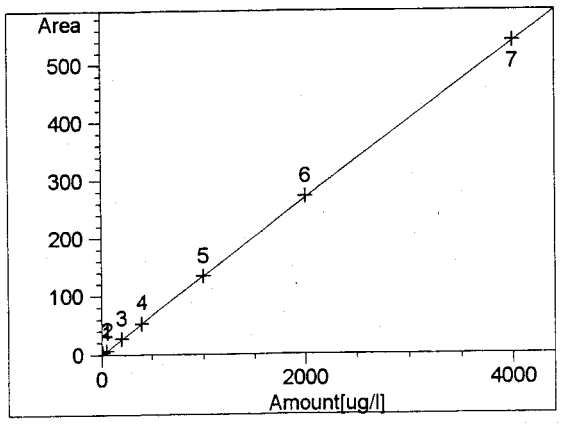
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



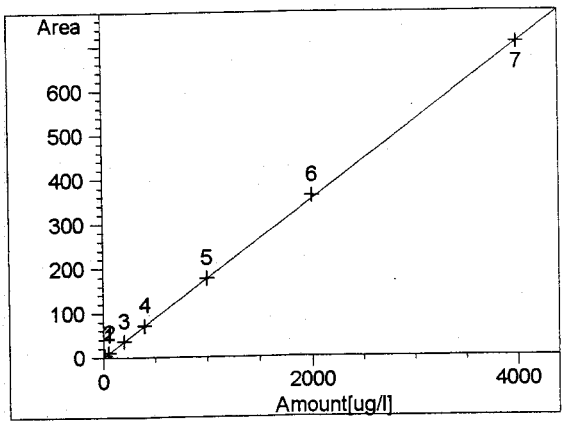
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



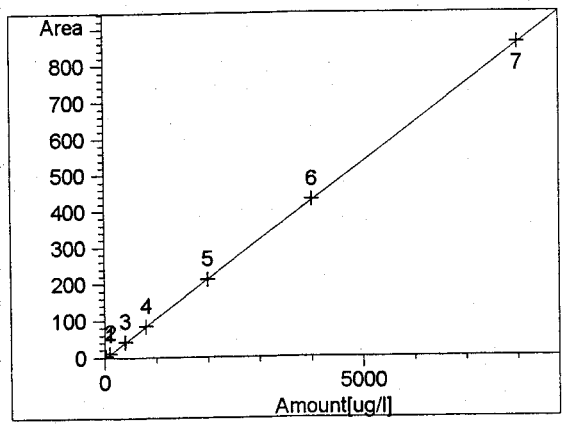
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



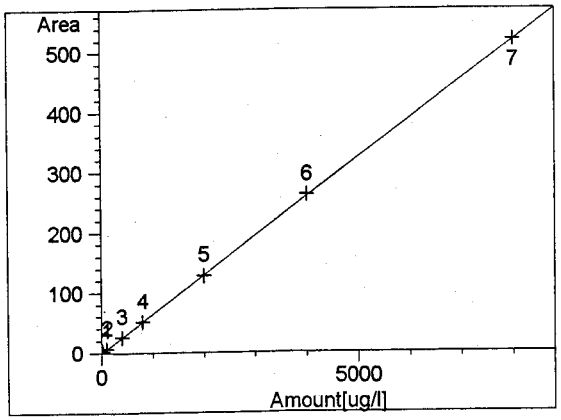
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



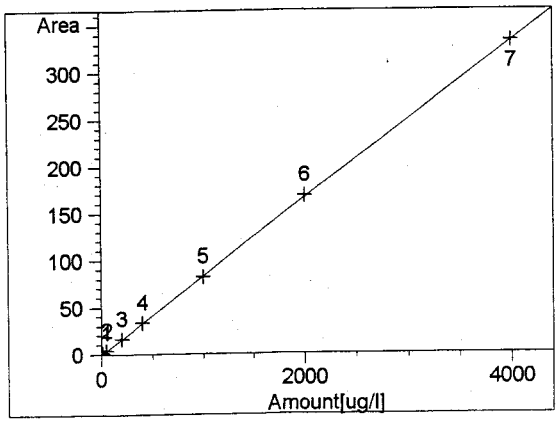
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



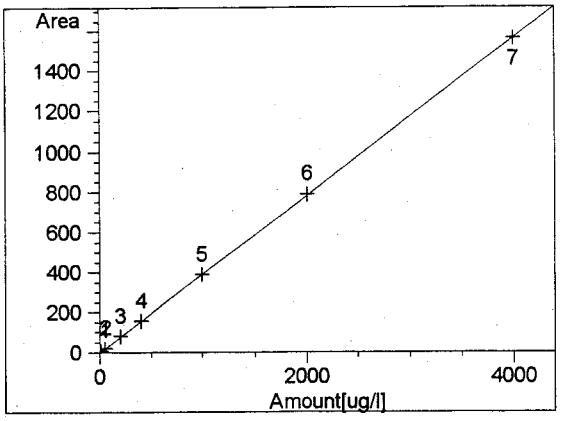
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



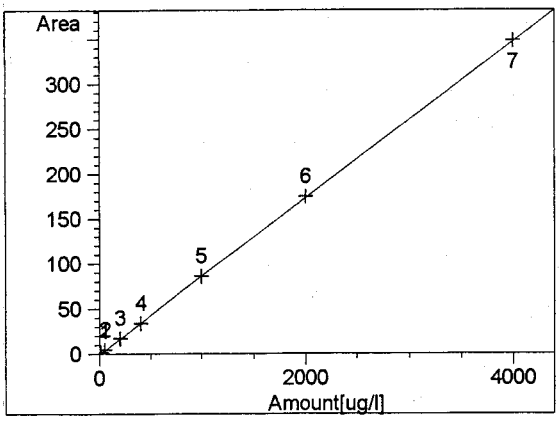
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



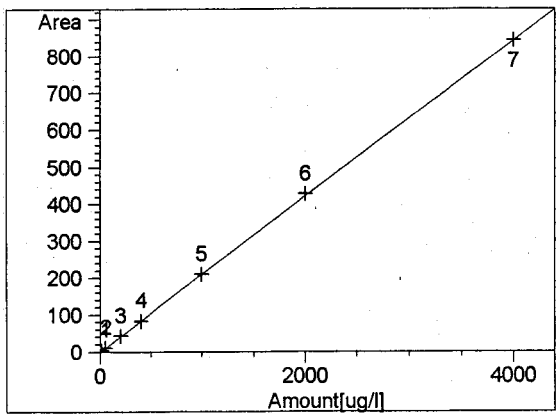
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



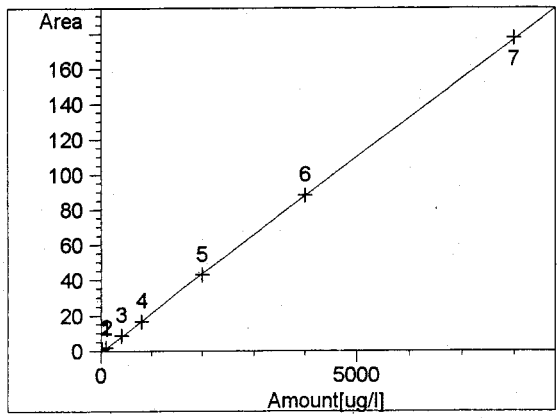
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



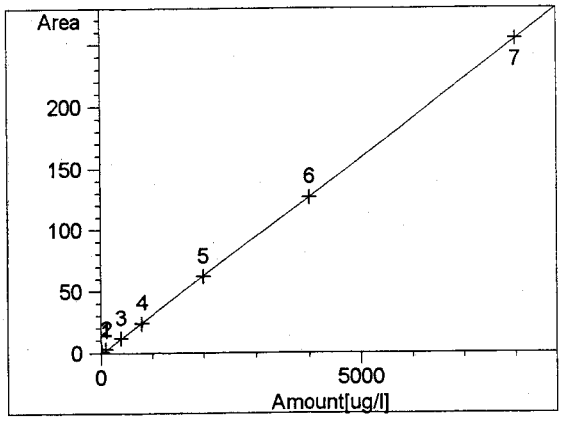
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



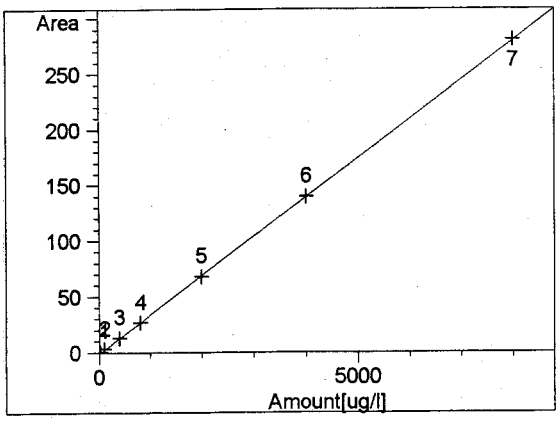
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



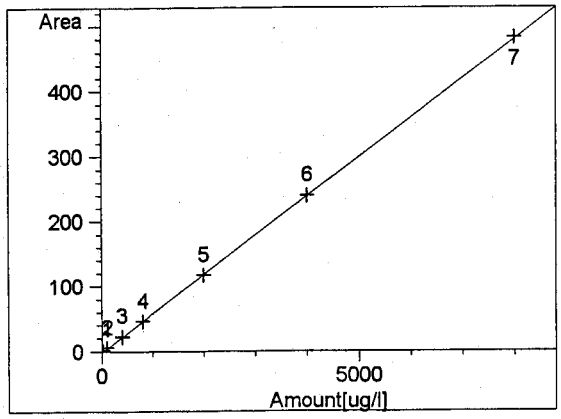
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



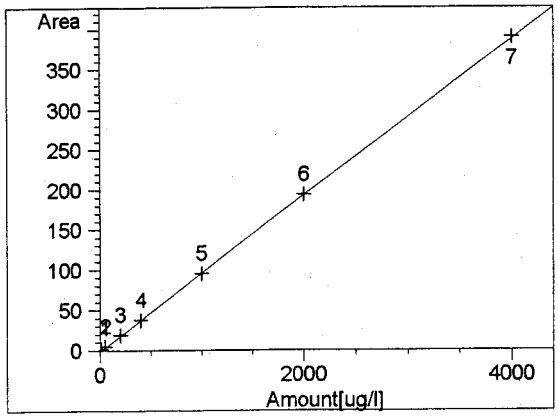
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

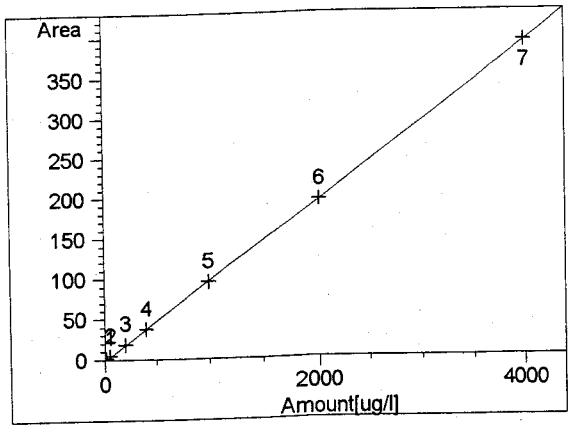


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297092730013 File : 06400013 Time : 05-MAR-2007 15:49
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4081	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8285	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4124	ug/L	3	15	
Fluorene	1	0.0637	0.0646	800.0	813.8	ug/L	2	15	
Phenanthrene	1	0.1810	0.1797	400.0	400.0	ug/L	0	15	
Anthracene	1	0.4065	0.4286	400.0	420.0	ug/L	5	15	
Fluoranthene	1	0.0404	0.0427	800.0	840.1	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0951	400.0	416.6	ug/L	4	15	
Chrysene	1	0.1350	0.1359	400.0	404.6	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1064	800.0	806.5	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0822	400.0	399.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0901	400.0	424.1	ug/L	6	15	
Dibenz(a,h)anthracene	1	0.0213	0.0210	800.0	785.8	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	800.0	817.3	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0939	400.0	398.4	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16260	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0889	8000	8349	ug/L	4	15	
Pyrene	2	0.1252	0.1305	400.0	409.6	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0215	16000	16680	ug/L	4	15	
Naphthalene	3	0.0110	0.0108	4000	3938	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0233	4000	3988	ug/L	0	15	
Fluorene	3	0.1247	0.1218	800.0	780.2	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1322	400.0	391.2	ug/L	-2	15	
Anthracene	3	0.4222	0.4419	400.0	418.8	ug/L	5	15	
Fluoranthene	3	0.0390	0.0400	800.0	819.8	ug/L	2	15	
Pyrene	3	0.1264	0.1285	400.0	405.2	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1504	400.0	410.0	ug/L	2	15	
Chrysene	3	0.1780	0.1768	400.0	395.8	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0642	800.0	796.1	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3854	400.0	395.3	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2212	400.0	421.2	ug/L	5	15	
Dibenz(a,h)anthracene	3	0.0303	0.0299	800.0	779.6	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0583	800.0	799.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0930	400.0	392.1	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	16000	15730	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297092730027 File : 06400027 Time : 05-MAR-2007 23:12
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10230	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20790	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10290	ug/L	3	15	
Fluorene	1	0.0637	0.0650	2000	2030	ug/L	2	15	
Phenanthrene	1	0.1810	0.1801	1000	998.6	ug/L	0	15	
Anthracene	1	0.4065	0.4355	1000	1064	ug/L	6	15	
Fluoranthene	1	0.0404	0.0428	2000	2093	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0960	1000	1039	ug/L	4	15	
Chrysene	1	0.1350	0.1366	1000	1014	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1079	2000	2022	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0845	1000	1019	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0926	1000	1074	ug/L	7	15	
Dibenz(a,h)anthracene	1	0.0213	0.0217	2000	1988	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0358	2000	2066	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0954	1000	991.2	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40630	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0881	20000	20790	ug/L	4	15	
Pyrene	2	0.1252	0.1334	1000	1040	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41120	ug/L	3	15	
Naphthalene	3	0.0110	0.0108	10000	9820	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0235	10000	10040	ug/L	0	15	
Fluorene	3	0.1247	0.1221	2000	1968	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1342	1000	990.3	ug/L	-1	15	
Anthracene	3	0.4222	0.4478	1000	1054	ug/L	5	15	
Fluoranthene	3	0.0390	0.0404	2000	2060	ug/L	3	15	
Pyrene	3	0.1264	0.1316	1000	1028	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1524	1000	1032	ug/L	3	15	
Chrysene	3	0.1780	0.1770	1000	996.5	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0638	0.0646	2000	1992	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3871	1000	990.6	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2241	1000	1063	ug/L	6	15	
Dibenz(a,h)anthracene	3	0.0303	0.0305	2000	1944	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0599	2000	2012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0956	1000	986.9	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	40000	39670	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297094194002 File : 06500002 Time : 06-MAR-2007 10:25
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2052	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0097	4000	4126	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	2000	2041	ug/L	2	15	
Fluorene	1	0.0637	0.0642	400.0	409.4	ug/L	2	15	
Phenanthrene	1	0.1810	0.1780	200.0	199.5	ug/L	0	15	
Anthracene	1	0.4065	0.4393	200.0	216.2	ug/L	8	15	
Fluoranthene	1	0.0404	0.0422	400.0	418.2	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0957	200.0	213.9	ug/L	7	15	
Chrysene	1	0.1350	0.1361	200.0	204.0	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1023	0.1050	400.0	405.1	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0834	200.0	205.5	ug/L	3	15	
Benzo(a)pyrene	1	0.0828	0.0924	200.0	222.5	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0200	400.0	390.2	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0309	0.0349	400.0	428.9	ug/L	7	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0942	200.0	206.9	ug/L	3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8085	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0890	4000	4140	ug/L	3	15	
Pyrene	2	0.1252	0.1318	200.0	209.1	ug/L	5	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8190	ug/L	2	15	
Naphthalene	3	0.0110	0.0111	2000	2019	ug/L	1	15	
Acenaphthene	3	0.0234	0.0238	2000	2030	ug/L	1	15	
Fluorene	3	0.1247	0.1230	400.0	389.1	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1368	200.0	203.4	ug/L	2	15	
Anthracene	3	0.4222	0.4543	200.0	217.5	ug/L	9	15	
Fluoranthene	3	0.0390	0.0405	400.0	418.5	ug/L	5	15	
Pyrene	3	0.1264	0.1327	200.0	212.1	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1524	200.0	210.0	ug/L	5	15	
Chrysene	3	0.1780	0.1782	200.0	197.6	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0636	400.0	398.6	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3838	200.0	197.6	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2303	200.0	220.5	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0290	400.0	392.8	ug/L	-2	15	
Benzo(g,h,i)perylene	3	0.0567	0.0592	400.0	418.7	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0919	200.0	200.5	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	8000	7949	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194013 File : 06500013 Time : 06-MAR-2007 16:13
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4087	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8292	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4107	ug/L	3	15	
Fluorene	1	0.0637	0.0640	800.0	806.9	ug/L	1	15	
Phenanthrene	1	0.1810	0.1780	400.0	396.2	ug/L	-1	15	
Anthracene	1	0.4065	0.4380	400.0	429.2	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	829.9	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0957	400.0	419.3	ug/L	5	15	
Chrysene	1	0.1350	0.1357	400.0	404.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1062	800.0	804.4	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0819	400.0	398.1	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0937	400.0	440.5	ug/L	10	15	
Dibenz(a,h)anthracene	1	0.0213	0.0207	800.0	776.4	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0358	800.0	846.3	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0950	400.0	402.9	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16230	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	8000	8329	ug/L	4	15	
Pyrene	2	0.1252	0.1326	400.0	416.4	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16610	ug/L	4	15	
Naphthalene	3	0.0110	0.0107	4000	3891	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3964	ug/L	-1	15	
Fluorene	3	0.1247	0.1211	800.0	775.6	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1316	400.0	389.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4508	400.0	427.2	ug/L	7	15	
Fluoranthene	3	0.0390	0.0398	800.0	815.9	ug/L	2	15	
Pyrene	3	0.1264	0.1263	400.0	398.5	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1498	400.0	408.5	ug/L	2	15	
Chrysene	3	0.1780	0.1742	400.0	389.9	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0631	800.0	782.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3807	400.0	390.6	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2261	400.0	430.5	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0295	800.0	769.1	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0594	800.0	814.0	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0932	400.0	393.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15560	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194044 File : 06500044 Time : 07-MAR-2007 08:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4109	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0100	8000	8428	ug/L	5	15	
Acenaphthene	1	0.0053	0.0054	4000	4157	ug/L	4	15	
Fluorene	1	0.0637	0.0652	800.0	821.0	ug/L	3	15	
Phenanthrene	1	0.1810	0.1810	400.0	402.9	ug/L	1	15	
Anthracene	1	0.4065	0.4459	400.0	436.9	ug/L	9	15	
Fluoranthene	1	0.0404	0.0431	800.0	848.4	ug/L	6	15	
Benzo(a)anthracene	1	0.0899	0.0972	400.0	425.6	ug/L	6	15	
Chrysene	1	0.1350	0.1382	400.0	411.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1073	800.0	813.1	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0787	0.0841	400.0	408.8	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0962	400.0	451.9	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0214	800.0	801.3	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0367	800.0	867.1	ug/L	8	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0958	400.0	406.3	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16390	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0901	8000	8457	ug/L	6	15	
Pyrene	2	0.1252	0.1353	400.0	424.5	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	16000	16780	ug/L	5	15	
Naphthalene	3	0.0110	0.0108	4000	3945	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0236	4000	4038	ug/L	1	15	
Fluorene	3	0.1247	0.1228	800.0	786.7	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1355	400.0	401.1	ug/L	0	15	
Anthracene	3	0.4222	0.4582	400.0	434.1	ug/L	9	15	
Fluoranthene	3	0.0390	0.0404	800.0	827.8	ug/L	3	15	
Pyrene	3	0.1264	0.1310	400.0	413.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1532	400.0	417.6	ug/L	4	15	
Chrysene	3	0.1780	0.1771	400.0	396.3	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0645	800.0	800.3	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3857	400.0	395.7	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2305	400.0	438.9	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0296	800.0	773.0	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0602	800.0	824.3	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0959	400.0	404.0	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	16000	15860	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193055 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297094194051 File : 06500051 Time : 07-MAR-2007 12:14
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2043	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	4000	4144	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	2000	2028	ug/L	1	15	
Fluorene	1	0.0637	0.0645	400.0	411.4	ug/L	3	15	
Phenanthrene	1	0.1810	0.1784	200.0	199.9	ug/L	0	15	
Anthracene	1	0.4065	0.4383	200.0	215.8	ug/L	8	15	
Fluoranthene	1	0.0404	0.0432	400.0	428.8	ug/L	7	15	
Benzo(a)anthracene	1	0.0899	0.0940	200.0	210.2	ug/L	5	15	
Chrysene	1	0.1350	0.1356	200.0	203.2	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1023	0.1045	400.0	403.0	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0810	200.0	199.8	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0927	200.0	223.1	ug/L	12	15	
Dibenz(a,h)anthracene	1	0.0213	0.0199	400.0	389.2	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0349	400.0	428.7	ug/L	7	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0919	200.0	202.1	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	8000	8120	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0895	4000	4163	ug/L	4	15	
Pyrene	2	0.1252	0.1313	200.0	208.2	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0218	8000	8270	ug/L	3	15	
Naphthalene	3	0.0110	0.0107	2000	1947	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	2000	1978	ug/L	-1	15	
Fluorene	3	0.1247	0.1220	400.0	385.9	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1323	200.0	196.9	ug/L	-2	15	
Anthracene	3	0.4222	0.4494	200.0	215.2	ug/L	8	15	
Fluoranthene	3	0.0390	0.0398	400.0	411.4	ug/L	3	15	
Pyrene	3	0.1264	0.1277	200.0	204.3	ug/L	2	15	
Benzo(a)anthracene	3	0.1453	0.1496	200.0	206.1	ug/L	3	15	
Chrysene	3	0.1780	0.1747	200.0	193.5	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0632	400.0	396.2	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3800	200.0	195.7	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2264	200.0	216.8	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0283	400.0	385.2	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0575	400.0	407.5	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0910	200.0	198.6	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	8000	7733	ug/L	-3	15	

SEQUENCE SUMMARY FOR 193055 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193055 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297092730 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 05-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	06400001	X	IB - 064			05-MAR-2007 09:30	1.0				
002	06400002	CCV	L			05-MAR-2007 10:02	1.0	1.0	10	1	
003	06400003	X	IB			05-MAR-2007 10:33	1.0				
004	06400004	BLANK	QC377400	122678	Soil	05-MAR-2007 11:05	1.0	0.06658	10		
005	06400005	MSS	193048-005	122678	Soil	05-MAR-2007 11:36	1.0	0.06671	10		
006	06400006	SAMPLE	193048-010	122678	Soil	05-MAR-2007 12:08	1.0	0.06638	10		
007	06400007	SAMPLE	193051-005	122678	Soil	05-MAR-2007 12:40	1.0	0.06664	10		
008	06400008	LCS	QC377401	122678	Soil	05-MAR-2007 13:11	1.0	0.06642	10		
009	06400009	MS	QC377402	122678	Soil	05-MAR-2007 13:43	1.0	0.06647	10		
010	06400010	MSD	QC377403	122678	Soil	05-MAR-2007 14:15	1.0	0.06656	10		
011	06400011	X	IB			05-MAR-2007 14:46	1.0				
012	06400012	X,CCV	M			05-MAR-2007 15:18	1.0			2	
013	06400013	CCV	M			05-MAR-2007 15:49	1.0	1.0	10	2	
014	06400014	X	IB			05-MAR-2007 16:21	1.0				
015	06400015	BLANK	QC377353	122665	Water	05-MAR-2007 16:52	1.0	0.002	10		
016	06400016	BS	QC377354	122665	Water	05-MAR-2007 17:24	1.0	0.002	10		
017	06400017	BSD	QC377355	122665	Water	05-MAR-2007 17:56	1.0	0.002	10		
018	06400018	X	IB			05-MAR-2007 18:27	1.0				
019	06400019	SAMPLE	193027-009	122665	Water	05-MAR-2007 18:59	1.0	0.001961	10		
020	06400020	SAMPLE	193027-010	122665	Water	05-MAR-2007 19:30	1.0	0.001942	10		
021	06400021	SAMPLE	193027-011	122665	Water	05-MAR-2007 20:02	1.0	0.001942	10		
022	06400022	SAMPLE	193055-002	122665	Water	05-MAR-2007 20:34	1.0	0.001887	10		
023	06400023	SAMPLE	193055-003	122665	Water	05-MAR-2007 21:05	1.0	0.001887	10		
024	06400024	SAMPLE	193055-004	122665	Water	05-MAR-2007 21:37	1.0	0.001887	10		
025	06400025	SAMPLE	193027-012	122665	Water	05-MAR-2007 22:08	1.0	0.001923	10		
026	06400026	X	IB			05-MAR-2007 22:40	1.0				
027	06400027	CCV	H			05-MAR-2007 23:12	1.0	1.0	10	3	
028	06400028	X	CCV			05-MAR-2007 23:43	1.0			3	
029	06400029	X	IB			06-MAR-2007 00:15	1.0				
030	06400030	X,SAMPL	193055-005	122665	Water	06-MAR-2007 00:46	1.0				
031	06400031	X,SAMPL	193055-006	122665	Water	06-MAR-2007 01:19	1.0				

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193055 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297092730 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 05-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	06400032	X,SAMPL	193055-011	122665	Water	06-MAR-2007 01:50	1.0						
033	06400033	X,SAMPL	193055-012	122665	Water	06-MAR-2007 02:22	1.0						
034	06400034	X,SAMPL	193055-013	122665	Water	06-MAR-2007 02:53	1.0						
035	06400035	X,SAMPL	193055-014	122665	Water	06-MAR-2007 03:25	1.0						
036	06400036	X,SAMPL	193093-002	122665	Water	06-MAR-2007 03:57	1.0						
037	06400037	SAMPLE	193093-001	122665	Water	06-MAR-2007 04:28	1.0	0.001887	18	1	10		
038	06400038	X	IB			06-MAR-2007 05:00	1.0						
039	06400039	X	IB			06-MAR-2007 05:32	1.0						
040	06400040	X	IB			06-MAR-2007 06:03	1.0						
041	06400041	CCV	M			06-MAR-2007 06:35	1.0	1.0	21		10	2	
042	06400042	X	CCV			06-MAR-2007 07:06	1.0					2	
043	06400043	X	IB			06-MAR-2007 07:38	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193055 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06500001	X	IB - 065			06-MAR-2007 09:54	1.0						
002	06500002	CCV	L			06-MAR-2007 10:25	1.0	1.0			10	1	
003	06500003	X	IB			06-MAR-2007 10:57	1.0						
004	06500004	X,SAMPL	193055-005	122665	Water	06-MAR-2007 11:29	1.0						
005	06500005	X,SAMPL	193055-006	122665	Water	06-MAR-2007 12:00	1.0						
006	06500006	SAMPLE	193055-011	122665	Water	06-MAR-2007 12:32	1.0	0.002			10		
007	06500007	SAMPLE	193055-012	122665	Water	06-MAR-2007 13:03	1.0	0.001961			10		
008	06500008	SAMPLE	193055-013	122665	Water	06-MAR-2007 13:35	1.0	0.002105			10		
009	06500009	SAMPLE	193055-014	122665	Water	06-MAR-2007 14:07	1.0	0.002051			10		
010	06500010	SAMPLE	193093-002	122665	Water	06-MAR-2007 14:38	1.0	0.001887			10		
011	06500011	SAMPLE	193093-001	122665	Water	06-MAR-2007 15:10	1.0	0.001887		1	10		
012	06500012	X	IB			06-MAR-2007 15:42	1.0						
013	06500013	CCV	M			06-MAR-2007 16:13	1.0	1.0			10	2	
014	06500014	X	CCV			06-MAR-2007 16:45	1.0					2	
015	06500015	X	IB			06-MAR-2007 17:16	1.0						
016	06500016	BLANK	QC377524	122706	Soil	06-MAR-2007 17:48	1.0	0.06614			10		
017	06500017	MSS	193048-015	122706	Soil	06-MAR-2007 18:19	1.0	0.06631			10		
018	06500018	LCS	QC377525	122706	Soil	06-MAR-2007 18:51	1.0	0.06581			10		
019	06500019	X,MS	QC377526	122706	Soil	06-MAR-2007 19:23	1.0						
020	06500020	MSD	QC377527	122706	Soil	06-MAR-2007 19:54	1.0	0.06662			10		
021	06500021	X	IB			06-MAR-2007 20:26	1.0						
022	06500022	BLANK	QC377598	122719	Water	06-MAR-2007 20:57	1.0	0.002			10		
023	06500023	SAMPLE	193049-010	122706	Soil	06-MAR-2007 21:29	1.0	0.06594			10		
024	06500024	SAMPLE	193051-010	122706	Soil	06-MAR-2007 22:01	1.0	0.0659			10		
025	06500025	SAMPLE	193049-005	122706	Soil	06-MAR-2007 22:32	1.0	0.06651			10		
026	06500026	LCS	QC377599	122719	Water	06-MAR-2007 23:04	1.0	0.002			10		
027	06500027	X	IB			06-MAR-2007 23:36	1.0						
028	06500028	CCV	H			07-MAR-2007 00:07	1.0	1.0			10	3	
029	06500029	X	CCV			07-MAR-2007 00:39	1.0					3	
030	06500030	X	IB			07-MAR-2007 01:10	1.0						
031	06500031	MSS	193108-007	122719	Water	07-MAR-2007 01:42	1.0	0.001942			10		

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193055 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	06500032	SAMPLE	193108-009	122719	Water	07-MAR-2007 02:14	1.0	0.001923			10		
033	06500033	MSS	193108-023	122719	Water	07-MAR-2007 02:45	1.0	0.001905			10		
034	06500034	MS	QC377600	122719	Water	07-MAR-2007 03:17	1.0	0.001942			10		
035	06500035	MSD	QC377601	122719	Water	07-MAR-2007 03:48	1.0	0.001942			10		
036	06500036	MS	QC377602	122719	Water	07-MAR-2007 04:20	1.0	0.001905		2	10		
037	06500037	MSD	QC377603	122719	Water	07-MAR-2007 04:52	1.0	0.001905			10		
038	06500038	X	IB			07-MAR-2007 05:23	1.0						
039	06500039	SAMPLE	193118-010	122719	Water	07-MAR-2007 05:55	1.0	0.001942	4		10		4:PYR=40300.0
040	06500040	SAMPLE	193118-011	122719	Water	07-MAR-2007 06:27	1.0	0.001887	9		10		9:PYR=81669.6
041	06500041	SAMPLE	193118-012	122719	Water	07-MAR-2007 06:58	1.0	0.001887	12	2	10		14:MTNPH1=96604.7
042	06500042	X	IB			07-MAR-2007 07:30	1.0						
043	06500043	X	IB			07-MAR-2007 08:01	1.0						
044	06500044	CCV	M			07-MAR-2007 08:33	1.0	1.0			10	2	
045	06500045	X	CCV			07-MAR-2007 09:05	1.0					2	
046	06500046	X	IB			07-MAR-2007 09:36	1.0						
047	06500047	SAMPLE	193055-005	122665	Water	07-MAR-2007 10:08	1.0	0.001887			10		
048	06500048	SAMPLE	193055-006	122665	Water	07-MAR-2007 10:39	1.0	0.001887			10		
049	06500049	MS	QC377526	122706	Soil	07-MAR-2007 11:11	1.0	0.06664			10		
050	06500050	X	IB			07-MAR-2007 11:43	1.0						
051	06500051	CCV	L			07-MAR-2007 12:14	1.0	1.0			10	1	
052	06500052	X	CCV			07-MAR-2007 12:46	1.0					1	
053	06500053	X	IB			07-MAR-2007 13:17	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 193055 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-002	Naphthalene	HPLC04	1	03/05/07 20:34
193055-002	Acenaphthylene	HPLC04	1	03/05/07 20:34
193055-002	Acenaphthene	HPLC04	1	03/05/07 20:34
193055-002	Fluorene	HPLC04	1	03/05/07 20:34
193055-002	Phenanthrene	HPLC04	3	03/05/07 20:34
193055-002	Anthracene	HPLC04	3	03/05/07 20:34
193055-002	Fluoranthene	HPLC04	3	03/05/07 20:34
193055-002	Pyrene	HPLC04	3	03/05/07 20:34
193055-002	Benzo(a)anthracene	HPLC04	3	03/05/07 20:34
193055-002	Chrysene	HPLC04	3	03/05/07 20:34
193055-002	Benzo(b)fluoranthene	HPLC04	3	03/05/07 20:34
193055-002	Benzo(k)fluoranthene	HPLC04	3	03/05/07 20:34
193055-002	Benzo(a)pyrene	HPLC04	3	03/05/07 20:34
193055-002	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 20:34
193055-002	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 20:34
193055-002	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 20:34
193055-002	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 20:34
193055-002	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 20:34
193055-003	Naphthalene	HPLC04	1	03/05/07 21:05
193055-003	Acenaphthylene	HPLC04	1	03/05/07 21:05
193055-003	Acenaphthene	HPLC04	1	03/05/07 21:05
193055-003	Fluorene	HPLC04	1	03/05/07 21:05
193055-003	Phenanthrene	HPLC04	3	03/05/07 21:05
193055-003	Anthracene	HPLC04	3	03/05/07 21:05
193055-003	Fluoranthene	HPLC04	3	03/05/07 21:05
193055-003	Pyrene	HPLC04	3	03/05/07 21:05
193055-003	Benzo(a)anthracene	HPLC04	3	03/05/07 21:05
193055-003	Chrysene	HPLC04	3	03/05/07 21:05
193055-003	Benzo(b)fluoranthene	HPLC04	3	03/05/07 21:05
193055-003	Benzo(k)fluoranthene	HPLC04	3	03/05/07 21:05
193055-003	Benzo(a)pyrene	HPLC04	3	03/05/07 21:05
193055-003	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 21:05
193055-003	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 21:05
193055-003	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 21:05
193055-003	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 21:05
193055-003	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 21:05
193055-004	Naphthalene	HPLC04	1	03/05/07 21:37
193055-004	Acenaphthylene	HPLC04	1	03/05/07 21:37
193055-004	Acenaphthene	HPLC04	1	03/05/07 21:37
193055-004	Fluorene	HPLC04	1	03/05/07 21:37
193055-004	Phenanthrene	HPLC04	3	03/05/07 21:37
193055-004	Anthracene	HPLC04	3	03/05/07 21:37
193055-004	Fluoranthene	HPLC04	3	03/05/07 21:37
193055-004	Pyrene	HPLC04	3	03/05/07 21:37
193055-004	Benzo(a)anthracene	HPLC04	3	03/05/07 21:37
193055-004	Chrysene	HPLC04	3	03/05/07 21:37
193055-004	Benzo(b)fluoranthene	HPLC04	3	03/05/07 21:37
193055-004	Benzo(k)fluoranthene	HPLC04	3	03/05/07 21:37
193055-004	Benzo(a)pyrene	HPLC04	3	03/05/07 21:37
193055-004	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 21:37
193055-004	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 21:37
193055-004	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 21:37

REPORTING SUMMARY FOR 193055 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-004	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 21:37
193055-004	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 21:37
193055-005	Naphthalene	HPLC04	1	03/07/07 10:08
193055-005	Acenaphthylene	HPLC04	1	03/07/07 10:08
193055-005	Acenaphthene	HPLC04	1	03/07/07 10:08
193055-005	Fluorene	HPLC04	1	03/07/07 10:08
193055-005	Phenanthrene	HPLC04	3	03/07/07 10:08
193055-005	Anthracene	HPLC04	3	03/07/07 10:08
193055-005	Fluoranthene	HPLC04	3	03/07/07 10:08
193055-005	Pyrene	HPLC04	3	03/07/07 10:08
193055-005	Benzo(a)anthracene	HPLC04	3	03/07/07 10:08
193055-005	Chrysene	HPLC04	3	03/07/07 10:08
193055-005	Benzo(b)fluoranthene	HPLC04	3	03/07/07 10:08
193055-005	Benzo(k)fluoranthene	HPLC04	3	03/07/07 10:08
193055-005	Benzo(a)pyrene	HPLC04	3	03/07/07 10:08
193055-005	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 10:08
193055-005	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 10:08
193055-005	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 10:08
193055-005	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 10:08
193055-005	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 10:08
193055-006	Naphthalene	HPLC04	1	03/07/07 10:39
193055-006	Acenaphthylene	HPLC04	1	03/07/07 10:39
193055-006	Acenaphthene	HPLC04	1	03/07/07 10:39
193055-006	Fluorene	HPLC04	1	03/07/07 10:39
193055-006	Phenanthrene	HPLC04	3	03/07/07 10:39
193055-006	Anthracene	HPLC04	3	03/07/07 10:39
193055-006	Fluoranthene	HPLC04	3	03/07/07 10:39
193055-006	Pyrene	HPLC04	3	03/07/07 10:39
193055-006	Benzo(a)anthracene	HPLC04	3	03/07/07 10:39
193055-006	Chrysene	HPLC04	3	03/07/07 10:39
193055-006	Benzo(b)fluoranthene	HPLC04	3	03/07/07 10:39
193055-006	Benzo(k)fluoranthene	HPLC04	3	03/07/07 10:39
193055-006	Benzo(a)pyrene	HPLC04	3	03/07/07 10:39
193055-006	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 10:39
193055-006	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 10:39
193055-006	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 10:39
193055-006	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 10:39
193055-006	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 10:39
193055-011	Naphthalene	HPLC04	1	03/06/07 12:32
193055-011	Acenaphthylene	HPLC04	1	03/06/07 12:32
193055-011	Acenaphthene	HPLC04	1	03/06/07 12:32
193055-011	Fluorene	HPLC04	1	03/06/07 12:32
193055-011	Phenanthrene	HPLC04	3	03/06/07 12:32
193055-011	Anthracene	HPLC04	3	03/06/07 12:32
193055-011	Fluoranthene	HPLC04	3	03/06/07 12:32
193055-011	Pyrene	HPLC04	3	03/06/07 12:32
193055-011	Benzo(a)anthracene	HPLC04	3	03/06/07 12:32
193055-011	Chrysene	HPLC04	3	03/06/07 12:32
193055-011	Benzo(b)fluoranthene	HPLC04	3	03/06/07 12:32
193055-011	Benzo(k)fluoranthene	HPLC04	3	03/06/07 12:32
193055-011	Benzo(a)pyrene	HPLC04	3	03/06/07 12:32

REPORTING SUMMARY FOR 193055 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-011	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 12:32
193055-011	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 12:32
193055-011	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 12:32
193055-011	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 12:32
193055-011	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 12:32
193055-012	Naphthalene	HPLC04	1	03/06/07 13:03
193055-012	Acenaphthylene	HPLC04	1	03/06/07 13:03
193055-012	Acenaphthene	HPLC04	1	03/06/07 13:03
193055-012	Fluorene	HPLC04	1	03/06/07 13:03
193055-012	Phenanthrene	HPLC04	3	03/06/07 13:03
193055-012	Anthracene	HPLC04	3	03/06/07 13:03
193055-012	Fluoranthene	HPLC04	3	03/06/07 13:03
193055-012	Pyrene	HPLC04	3	03/06/07 13:03
193055-012	Benzo(a)anthracene	HPLC04	3	03/06/07 13:03
193055-012	Chrysene	HPLC04	3	03/06/07 13:03
193055-012	Benzo(b)fluoranthene	HPLC04	3	03/06/07 13:03
193055-012	Benzo(k)fluoranthene	HPLC04	3	03/06/07 13:03
193055-012	Benzo(a)pyrene	HPLC04	3	03/06/07 13:03
193055-012	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 13:03
193055-012	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 13:03
193055-012	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 13:03
193055-012	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 13:03
193055-012	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 13:03
193055-013	Naphthalene	HPLC04	1	03/06/07 13:35
193055-013	Acenaphthylene	HPLC04	1	03/06/07 13:35
193055-013	Acenaphthene	HPLC04	1	03/06/07 13:35
193055-013	Fluorene	HPLC04	1	03/06/07 13:35
193055-013	Phenanthrene	HPLC04	3	03/06/07 13:35
193055-013	Anthracene	HPLC04	3	03/06/07 13:35
193055-013	Fluoranthene	HPLC04	3	03/06/07 13:35
193055-013	Pyrene	HPLC04	3	03/06/07 13:35
193055-013	Benzo(a)anthracene	HPLC04	3	03/06/07 13:35
193055-013	Chrysene	HPLC04	3	03/06/07 13:35
193055-013	Benzo(b)fluoranthene	HPLC04	3	03/06/07 13:35
193055-013	Benzo(k)fluoranthene	HPLC04	3	03/06/07 13:35
193055-013	Benzo(a)pyrene	HPLC04	3	03/06/07 13:35
193055-013	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 13:35
193055-013	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 13:35
193055-013	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 13:35
193055-013	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 13:35
193055-013	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 13:35
193055-014	Naphthalene	HPLC04	1	03/06/07 14:07
193055-014	Acenaphthylene	HPLC04	1	03/06/07 14:07
193055-014	Acenaphthene	HPLC04	1	03/06/07 14:07
193055-014	Fluorene	HPLC04	1	03/06/07 14:07
193055-014	Phenanthrene	HPLC04	3	03/06/07 14:07
193055-014	Anthracene	HPLC04	3	03/06/07 14:07
193055-014	Fluoranthene	HPLC04	3	03/06/07 14:07
193055-014	Pyrene	HPLC04	3	03/06/07 14:07
193055-014	Benzo(a)anthracene	HPLC04	3	03/06/07 14:07
193055-014	Chrysene	HPLC04	3	03/06/07 14:07

REPORTING SUMMARY FOR 193055 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193055-014	Benzo(b)fluoranthene	HPLC04	3	03/06/07 14:07
193055-014	Benzo(k)fluoranthene	HPLC04	3	03/06/07 14:07
193055-014	Benzo(a)pyrene	HPLC04	3	03/06/07 14:07
193055-014	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 14:07
193055-014	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 14:07
193055-014	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 14:07
193055-014	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 14:07
193055-014	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 14:07
QC377353	Naphthalene	HPLC04	1	03/05/07 16:52
QC377353	Acenaphthylene	HPLC04	1	03/05/07 16:52
QC377353	Acenaphthene	HPLC04	1	03/05/07 16:52
QC377353	Fluorene	HPLC04	1	03/05/07 16:52
QC377353	Phenanthrene	HPLC04	3	03/05/07 16:52
QC377353	Anthracene	HPLC04	3	03/05/07 16:52
QC377353	Fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Pyrene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(a)anthracene	HPLC04	3	03/05/07 16:52
QC377353	Chrysene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(b)fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(k)fluoranthene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(a)pyrene	HPLC04	3	03/05/07 16:52
QC377353	Dibenz(a,h)anthracene	HPLC04	3	03/05/07 16:52
QC377353	Benzo(g,h,i)perylene	HPLC04	3	03/05/07 16:52
QC377353	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/05/07 16:52
QC377353	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 16:52
QC377353	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 16:52
QC377354	Naphthalene	HPLC04	1	03/05/07 17:24
QC377354	Fluorene	HPLC04	1	03/05/07 17:24
QC377354	Pyrene	HPLC04	3	03/05/07 17:24
QC377354	Benzo(a)pyrene	HPLC04	3	03/05/07 17:24
QC377354	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 17:24
QC377354	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 17:24
QC377355	Naphthalene	HPLC04	1	03/05/07 17:56
QC377355	Fluorene	HPLC04	1	03/05/07 17:56
QC377355	Pyrene	HPLC04	3	03/05/07 17:56
QC377355	Benzo(a)pyrene	HPLC04	3	03/05/07 17:56
QC377355	1-Methylnaphthalene (UV)	HPLC04	1	03/05/07 17:56
QC377355	1-Methylnaphthalene (F)	HPLC04	3	03/05/07 17:56

Curtis & Tompkins Laboratories Sample Preparation Summary 03-MAR-2007 17:51

Batch Number : 122665
Date Extracted: 02-MAR-2007
Extracted by : Kevin Riley
Prep Method : 3520C

Analysis : 8310
Bgroup : HPLC
Units : mL
Clean-up :

Spike #1 ID : S5126
Spike #2 ID : S5518C
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-009		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193027-010		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193027-011		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193027-012		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193055-002		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193055-003		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193055-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193055-005		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193055-006		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193055-011		Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	.1	0		8310		
193055-012		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193055-013		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193055-014		Treadwell & Rollo	Water	975	mL	2	0.002051	1	7	.1	0		8310		
193093-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193093-002		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377353	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377354	BS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377355	BSD		Water	1000	mL	2	0.002000	1		.1	1		8310		

Prep Chemist: JDM for KR

Reviewed By: [signature] Date: 3/4/07

Relinquished By: [signature]

Received By: [signature] Date: 05MAR2007

00276

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 172665
LIMS Analysis: 8310
Extracted by: KR
Date Extracted: 2 MAR 07

Extraction Method:
☐ EPA 3510c sep. funnel
☑ EPA 3520c cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193027-009G	1020	7	2.0		
10D	1030				
11G	1030				*
12D	1090				
~~190~~ 193055-002D	1060				
3D					
4J					
5H					
6K					near dry while concentrating
11N	1000				
12L	1020				leaky receiver - lost some before conc.
13K	950				possible glove contamination
14G	975				near dry while concentrating
193093-001R	1060				
2R	1060				
BLANK QC377353	1000	NA			
BS S4					
BSD S5					

RFW 3/3/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.1 mL of surrogate solution was added to all samples	SS126L / * P	3/2/07 KR
1.0 mL of matrix spiking solution was added to all spikes	SS518C	
☑ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM470610 / EM462Lt	
Extraction Start Time:	1835	
Extraction End Time:	1235 / *1300	RFW 3/3/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ granular Na2SO4	EM46111628	
Exchanged 2x with Acetonitrile	EM46173	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	NA	
Extracts filtered with 0.45 um PTFE syringe filter	Whatman 0108	

2 MAR 07
Extraction Chemist Date

Contined from Page —
Continued on Page —

3/4/07
Reviewed by Date

00275

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/22/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3B	Batch#:	122768
Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	35,000	500
Chromium	27	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	46,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	62,000	500
Vanadium	14	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

54.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW104	Batch#:	122768
Lab ID:	193055-002	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	44	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	37,000	500
Chromium	12	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	59,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	59,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

60.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW106	Batch#:	122768
Lab ID:	193055-003	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	53	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	38,000	500
Chromium	23	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	63,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	83,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

61.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW103	Batch#:	122768
Lab ID:	193055-004	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	69	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	37,000	500
Chromium	25	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	56,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	63,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

62.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW100	Batch#:	122768
Lab ID:	193055-005	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	19	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	31,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	41,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	25,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	25	20

ND= Not Detected
RL= Reporting Limit

63.0

00282

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW101	Batch#:	122768
Lab ID:	193055-006	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	39	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	48,000	500
Chromium	22	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	67,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	56,000	500
Thallium	ND	1.0
Vanadium	14	10
Zinc	36	20

ND= Not Detected
RL= Reporting Limit

64.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0228072A	Batch#:	122768
Lab ID:	193055-007	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	37,000	500
Chromium	27	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	64,000	500
Vanadium	15	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

55.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10GW100	Batch#:	122768
Lab ID:	193055-008	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	190	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	59,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	100,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	190,000	500
Thallium	ND	1.0
Vanadium	13	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW103	Sampled:	02/28/07
Lab ID:	193055-009	Received:	03/01/07
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07
Batch#:	122768		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Arsenic	ND	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	180,000	500	10.00
Chromium	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	540,000	500	50.00
Manganese	26	10	10.00
Nickel	48	20	10.00
Potassium	1,300	500	10.00
Sodium	150,000	500	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

48.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	122768
Lab ID:	193055-010	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	81,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	200,000	500
Manganese	58	10
Nickel	22	20
Potassium	1,400	500
Sodium	83,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW02	Sampled:	02/28/07
Lab ID:	193055-011	Received:	03/01/07
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07
Batch#:	122768		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	250	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	91,000	500	10.00
Chromium	81	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	430,000	500	50.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	ND	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	250,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW103	Sampled:	02/28/07
Lab ID:	193055-012	Received:	03/01/07
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07
Batch#:	122768		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	48	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	92,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	480,000	500	50.00
Manganese	340	10	10.00
Nickel	210	20	10.00
Potassium	4,500	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	250,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

67.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW104	Sampled:	02/28/07
Lab ID:	193055-013	Received:	03/01/07
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07
Batch#:	122768		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	96	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	84,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	350,000	500	20.00
Manganese	210	10	10.00
Nickel	ND	20	10.00
Potassium	2,600	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	260,000	500	20.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

68.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW105	Batch#:	122769
Lab ID:	193055-014	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	11	5.0
Barium	41	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	68,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	110	100
Lead	ND	3.0
Magnesium	150,000	500
Manganese	200	10
Nickel	ND	20
Potassium	6,700	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	110,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

69.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW01	Batch#:	122769
Lab ID:	193055-016	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	110	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	48,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	55,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	3,000	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	25,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW02	Batch#:	122769
Lab ID:	193055-017	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	49	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	28,000	500
Chromium	22	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	57,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	2,800	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	40,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW03	Batch#:	122769
Lab ID:	193055-018	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	130	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	23,000	500
Chromium	42	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	79,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	840	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	54,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

72.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW04	Batch#:	122769
Lab ID:	193055-019	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	55	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	36,000	500
Chromium	12	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	29,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	8,400	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	50,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

73.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW05	Batch#:	122769
Lab ID:	193055-020	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	78	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	32,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	35,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW06	Batch#:	122769
Lab ID:	193055-021	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	1.4	1.0
Arsenic	ND	5.0
Barium	30	10
Beryllium	ND	2.0
Cadmium	5.0	1.0
Calcium	32,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	7.6 b	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	4,100	500
Manganese	ND	10
Nickel	ND	20
Potassium	8,500	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	14,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	770	20

b= See narrative
ND= Not Detected
RL= Reporting Limit

75.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW07	Batch#:	122769
Lab ID:	193055-022	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	41	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	33,000	500
Chromium	22	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	35,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

76.0

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	EPSP01	Batch#:	122924
Lab ID:	193055-023	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	550	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	90	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	17,000	500
Chromium	53	10
Cobalt	ND	10
Copper	1.3	1.0
Iron	1,300	100
Lead	ND	3.0
Magnesium	97,000	500
Manganese	110	10
Nickel	34	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	33,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

103.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	EPSP01	Batch#:	122769
Lab ID:	193055-023	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	86	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	18,000	500
Chromium	32	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	94,000	500
Manganese	56	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	32,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

77.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF02GW01	Batch#:	122769
Lab ID:	193055-024	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	66	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	18,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	54,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	26,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

78.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF02GW02	Batch#:	122769
Lab ID:	193055-025	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	220	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	36,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	130,000	500
Manganese	14	10
Nickel	ND	20
Potassium	530	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	60,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

79.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0228071A	Batch#:	122769
Lab ID:	193055-026	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	55	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	36,000	500
Chromium	12	10
Cobalt	ND	10
Copper	ND	1.0
Iron	390	100
Lead	ND	3.0
Magnesium	30,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	8,400	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	49,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	22	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377787	Batch#:	122768
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

81.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377794	Batch#:	122769
Matrix:	Filtrate	Prepared:	03/06/07
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	03/07/07
Antimony	ND	1.0	03/07/07
Arsenic	ND	5.0	03/07/07
Barium	ND	10	03/07/07
Beryllium	ND	2.0	03/07/07
Cadmium	ND	1.0	03/07/07
Calcium	ND	500	03/07/07
Chromium	ND	10	03/07/07
Cobalt	ND	10	03/07/07
Copper	ND	1.0	03/08/07
Iron	ND	100	03/07/07
Lead	ND	3.0	03/07/07
Magnesium	ND	500	03/07/07
Manganese	ND	10	03/07/07
Nickel	ND	20	03/07/07
Potassium	ND	500	03/07/07
Selenium	ND	5.0	03/07/07
Silver	ND	1.0	03/07/07
Sodium	ND	500	03/07/07
Thallium	ND	1.0	03/07/07
Vanadium	ND	10	03/07/07
Zinc	ND	20	03/07/07

ND= Not Detected
RL= Reporting Limit

82.1

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378443	Batch#:	122924
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	02/28/07
Units:	ug/L	Received:	03/01/07
Diln Fac:	1.000	Prepared:	03/07/07
Batch#:	122820	Analyzed:	03/08/07

Field ID	Type	Lab ID	Matrix	Result	RL
LF6GW100	SAMPLE	193055-005	Filtrate	ND	0.20
LF6GW101	SAMPLE	193055-006	Filtrate	ND	0.20
LF10GW100	SAMPLE	193055-008	Filtrate	ND	0.20
1349MW02	SAMPLE	193055-011	Filtrate	ND	0.20
1349MW103	SAMPLE	193055-012	Filtrate	ND	0.20
1349MW104	SAMPLE	193055-013	Filtrate	ND	0.20
1349MW105	SAMPLE	193055-014	Filtrate	ND	0.20
	BLANK	QC377999	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122768
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/06/07

Type: BS Lab ID: QC377788

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,690	97	80-120
Antimony	100.0	96.49	96	80-120
Arsenic	100.0	89.86	90	80-120
Barium	100.0	104.8	105	80-120
Beryllium	100.0	108.2	108	80-120
Cadmium	100.0	96.01	96	80-120
Calcium	10,000	10,190	102	80-120
Chromium	100.0	99.46	99	80-120
Cobalt	100.0	100.2	100	80-120
Copper	100.0	98.38	98	80-120
Iron	10,000	10,160	102	80-120
Lead	100.0	98.90	99	80-120
Magnesium	10,000	9,727	97	80-120
Manganese	100.0	103.0	103	80-120
Nickel	100.0	99.69	100	80-120
Potassium	10,000	10,100	101	80-120
Selenium	100.0	89.12	89	80-120
Silver	100.0	105.9	106	80-120
Sodium	10,000	9,778	98	80-120
Thallium	50.00	51.16	102	80-120
Vanadium	100.0	98.50	99	80-120
Zinc	100.0	90.21	90	80-120

Type: BSD Lab ID: QC377789

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,620	96	80-120	1	20
Antimony	100.0	98.34	98	80-120	2	20
Arsenic	100.0	94.35	94	80-120	5	20
Barium	100.0	104.5	105	80-120	0	20
Beryllium	100.0	110.5	111	80-120	2	20
Cadmium	100.0	98.32	98	80-120	2	20
Calcium	10,000	10,050	101	80-120	1	20
Chromium	100.0	98.44	98	80-120	1	20
Cobalt	100.0	99.51	100	80-120	1	20
Copper	100.0	99.16	99	80-120	1	20
Iron	10,000	10,110	101	80-120	0	20
Lead	100.0	98.22	98	80-120	1	20
Magnesium	10,000	9,686	97	80-120	0	20
Manganese	100.0	101.9	102	80-120	1	20
Nickel	100.0	99.37	99	80-120	0	20
Potassium	10,000	10,020	100	80-120	1	20
Selenium	100.0	96.08	96	80-120	8	20
Silver	100.0	106.3	106	80-120	0	20
Sodium	10,000	9,734	97	80-120	0	20
Thallium	50.00	50.53	101	80-120	1	20
Vanadium	100.0	97.85	98	80-120	1	20
Zinc	100.0	95.76	96	80-120	6	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122769
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: BS Lab ID: QC377795

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,546	95	80-120
Antimony	100.0	96.50	97	80-120
Arsenic	100.0	95.11	95	80-120
Barium	100.0	105.7	106	80-120
Beryllium	100.0	111.1	111	80-120
Cadmium	100.0	98.58	99	80-120
Calcium	10,000	10,160	102	80-120
Chromium	100.0	99.23	99	80-120
Cobalt	100.0	100.5	101	80-120
Copper	100.0	101.4	101	80-120
Iron	10,000	10,130	101	80-120
Lead	100.0	99.61	100	80-120
Magnesium	10,000	9,508	95	80-120
Manganese	100.0	103.2	103	80-120
Nickel	100.0	100.3	100	80-120
Potassium	10,000	10,090	101	80-120
Selenium	100.0	96.91	97	80-120
Silver	100.0	104.2	104	80-120
Sodium	10,000	9,715	97	80-120
Thallium	50.00	49.89	100	80-120
Vanadium	100.0	98.53	99	80-120
Zinc	100.0	94.87	95	80-120

Type: BSD Lab ID: QC377796

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,393	94	80-120	2	20
Antimony	100.0	94.96	95	80-120	2	20
Arsenic	100.0	92.15	92	80-120	3	20
Barium	100.0	102.9	103	80-120	3	20
Beryllium	100.0	108.5	109	80-120	2	20
Cadmium	100.0	96.18	96	80-120	2	20
Calcium	10,000	9,991	100	80-120	2	20
Chromium	100.0	96.80	97	80-120	2	20
Cobalt	100.0	97.81	98	80-120	3	20
Copper	100.0	98.54	99	80-120	3	20
Iron	10,000	9,881	99	80-120	2	20
Lead	100.0	96.98	97	80-120	3	20
Magnesium	10,000	9,383	94	80-120	1	20
Manganese	100.0	100.9	101	80-120	2	20
Nickel	100.0	97.72	98	80-120	3	20
Potassium	10,000	9,875	99	80-120	2	20
Selenium	100.0	93.23	93	80-120	4	20
Silver	100.0	101.5	102	80-120	3	20
Sodium	10,000	9,506	95	80-120	2	20
Thallium	50.00	48.95	98	80-120	2	20
Vanadium	100.0	95.99	96	80-120	3	20
Zinc	100.0	93.41	93	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122924
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	1.000	Analyzed:	03/10/07

Type: BS Lab ID: QC378444

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,851	99	80-120
Antimony	100.0	95.50	96	80-120
Arsenic	100.0	92.45	92	80-120
Barium	100.0	99.37	99	80-120
Beryllium	100.0	97.84	98	80-120
Cadmium	100.0	99.12	99	80-120
Calcium	10,000	10,150	102	80-120
Chromium	100.0	104.8	105	80-120
Cobalt	100.0	106.2	106	80-120
Copper	100.0	98.61	99	80-120
Iron	10,000	10,190	102	80-120
Lead	100.0	101.7	102	80-120
Magnesium	10,000	9,748	97	80-120
Manganese	100.0	102.7	103	80-120
Nickel	100.0	105.1	105	80-120
Potassium	10,000	10,160	102	80-120
Selenium	100.0	91.02	91	80-120
Silver	100.0	107.5	108	80-120
Sodium	10,000	9,874	99	80-120
Thallium	50.00	49.91	100	80-120
Vanadium	100.0	102.5	103	80-120
Zinc	100.0	94.10	94	80-120

Type: BSD Lab ID: QC378445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,583	96	80-120	3	20
Antimony	100.0	92.60	93	80-120	3	20
Arsenic	100.0	92.01	92	80-120	0	20
Barium	100.0	98.16	98	80-120	1	20
Beryllium	100.0	96.92	97	80-120	1	20
Cadmium	100.0	96.15	96	80-120	3	20
Calcium	10,000	9,862	99	80-120	3	20
Chromium	100.0	100.9	101	80-120	4	20
Cobalt	100.0	102.6	103	80-120	3	20
Copper	100.0	97.43	97	80-120	1	20
Iron	10,000	9,842	98	80-120	3	20
Lead	100.0	98.73	99	80-120	3	20
Magnesium	10,000	9,549	95	80-120	2	20
Manganese	100.0	98.38	98	80-120	4	20
Nickel	100.0	102.1	102	80-120	3	20
Potassium	10,000	9,908	99	80-120	3	20
Selenium	100.0	93.47	93	80-120	3	20
Silver	100.0	104.2	104	80-120	3	20
Sodium	10,000	9,549	95	80-120	3	20
Thallium	50.00	48.32	97	80-120	3	20
Vanadium	100.0	99.25	99	80-120	3	20
Zinc	100.0	96.27	96	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122820
Field ID:	ZZZZZZZZZZ	Sampled:	03/01/07
MSS Lab ID:	193066-001	Received:	03/01/07
Matrix:	Water	Prepared:	03/07/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378000		5.000	5.110	102	80-120		
BSD	QC378001		5.000	4.990	100	80-120	2	20
MS	QC378003	<0.05753	5.000	5.470	109	75-125		
MSD	QC378004		5.000	5.540	111	75-125	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3B	Batch#:	122768
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Type: MS Lab ID: QC377790

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	17.12	10,000	9,969	100	75-125
Antimony	0.2677	100.0	101.6	101	75-125
Arsenic	1.253	100.0	101.4	100	75-125
Barium	49.75	100.0	154.8	105	75-125
Beryllium	<0.1733	100.0	105.7	106	75-125
Cadmium	0.1099	100.0	101.7	102	75-125
Calcium	35,190	10,000	44,530	93	75-125
Chromium	26.80	100.0	124.7	98	75-125
Cobalt	0.1974	100.0	100.0	100	75-125
Copper	<0.2776	100.0	97.21	97	75-125
Iron	<19.37	10,000	10,320	103	75-125
Lead	<0.1276	100.0	98.17	98	75-125
Magnesium	45,570	10,000	54,520	90 NM	75-125
Manganese	1.022	100.0	104.5	103	75-125
Nickel	4.351	100.0	105.1	101	75-125
Potassium	180.9	10,000	10,350	102	75-125
Selenium	<0.2730	100.0	100.7	101	75-125
Silver	0.1008	100.0	103.7	104	75-125
Sodium	62,050	10,000	70,790	87 NM	75-125
Thallium	0.3764	50.00	46.94	93	75-125
Vanadium	14.01	100.0	111.3	97	75-125
Zinc	5.094	100.0	108.3	103	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3B	Batch#:	122768
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/06/07

Type: MSD Lab ID: QC377791

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,672	97	75-125	3	20
Antimony	100.0	101.2	101	75-125	0	20
Arsenic	100.0	96.72	95	75-125	5	20
Barium	100.0	152.7	103	75-125	1	20
Beryllium	100.0	102.6	103	75-125	3	20
Cadmium	100.0	100.4	100	75-125	1	20
Calcium	10,000	44,730	95	75-125	0	20
Chromium	100.0	123.7	97	75-125	1	20
Cobalt	100.0	97.72	98	75-125	2	20
Copper	100.0	94.73	95	75-125	3	20
Iron	10,000	9,954	100	75-125	4	20
Lead	100.0	96.27	96	75-125	2	20
Magnesium	10,000	55,150	96 NM	75-125	1	20
Manganese	100.0	100.6	100	75-125	4	20
Nickel	100.0	103.2	99	75-125	2	20
Potassium	10,000	10,020	98	75-125	3	20
Selenium	100.0	101.1	101	75-125	0	20
Silver	100.0	101.3	101	75-125	2	20
Sodium	10,000	71,640	96 NM	75-125	1	20
Thallium	50.00	46.18	92	75-125	2	20
Vanadium	100.0	109.9	96	75-125	1	20
Zinc	100.0	105.8	101	75-125	2	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW06	Batch#:	122769
MSS Lab ID:	193055-021	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Type: MS Lab ID: QC377797

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	23.53	10,000	9,804	98	75-125
Antimony	1.369	100.0	101.0	100	75-125
Arsenic	0.8361	100.0	97.87	97	75-125
Barium	29.64	100.0	139.2	110	75-125
Beryllium	<0.1733	100.0	105.0	105	75-125
Cadmium	4.961	100.0	106.3	101	75-125
Calcium	31,550	10,000	44,120	126 *	75-125
Chromium	1.434	100.0	99.13	98	75-125
Cobalt	0.2610	100.0	100.3	100	75-125
Copper	7.579	100.0	106.8	99	75-125
Iron	50.61	10,000	10,170	101	75-125
Lead	<0.1276	100.0	101.3	101	75-125
Magnesium	4,062	10,000	13,880	98	75-125
Manganese	4.348	100.0	106.1	102	75-125
Nickel	6.171	100.0	107.6	101	75-125
Potassium	8,492	10,000	19,450	110	75-125
Selenium	<0.2730	100.0	103.6	104	75-125
Silver	<0.07903	100.0	103.7	104	75-125
Sodium	13,530	10,000	22,990	95	75-125
Thallium	0.4038	50.00	45.12	89	75-125
Vanadium	2.545	100.0	97.90	95	75-125
Zinc	771.8	100.0	841.5	70 NM	75-125

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

87.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW06	Batch#:	122769
MSS Lab ID:	193055-021	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	10.00	Analyzed:	03/07/07

Type: MSD Lab ID: QC377798

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,849	98	75-125	0	20
Antimony	100.0	101.2	100	75-125	0	20
Arsenic	100.0	97.26	96	75-125	1	20
Barium	100.0	139.4	110	75-125	0	20
Beryllium	100.0	107.0	107	75-125	2	20
Cadmium	100.0	108.6	104	75-125	2	20
Calcium	10,000	42,460	109	75-125	4	20
Chromium	100.0	99.62	98	75-125	0	20
Cobalt	100.0	100.9	101	75-125	1	20
Copper	100.0	105.8	98	75-125	1	20
Iron	10,000	10,400	103	75-125	2	20
Lead	100.0	100.5	101	75-125	1	20
Magnesium	10,000	13,800	97	75-125	1	20
Manganese	100.0	107.0	103	75-125	1	20
Nickel	100.0	106.7	101	75-125	1	20
Potassium	10,000	18,980	105	75-125	2	20
Selenium	100.0	103.6	104	75-125	0	20
Silver	100.0	103.2	103	75-125	0	20
Sodium	10,000	22,290	88	75-125	3	20
Thallium	50.00	45.72	91	75-125	1	20
Vanadium	100.0	99.54	97	75-125	2	20
Zinc	100.0	798.0	26 NM	75-125	5	20

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Batch#:	122924
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378446

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	10,060	101	75-125
Antimony	0.2700	100.0	94.81	95	75-125
Arsenic	<0.3366	100.0	97.88	98	75-125
Barium	34.01	100.0	133.8	100	75-125
Beryllium	<0.1733	100.0	93.81	94	75-125
Cadmium	<0.05768	100.0	99.25	99	75-125
Calcium	11,030	10,000	20,980	100	75-125
Chromium	3.892	100.0	102.3	98	75-125
Cobalt	<0.07247	100.0	100.7	101	75-125
Copper	<0.2776	100.0	100.5	101	75-125
Iron	<19.37	10,000	9,851	99	75-125
Lead	<0.1276	100.0	99.22	99	75-125
Magnesium	19,770	10,000	29,050	93	75-125
Manganese	<0.1082	100.0	98.98	99	75-125
Nickel	5.010	100.0	106.1	101	75-125
Potassium	126.3	10,000	10,150	100	75-125
Selenium	1.548	100.0	98.93	97	75-125
Silver	<0.07903	100.0	102.9	103	75-125
Sodium	35,990	10,000	43,710	77	75-125
Thallium	<0.2993	50.00	46.14	92	75-125
Vanadium	2.296	100.0	99.10	97	75-125
Zinc	9.868	100.0	121.5	112	75-125

Type: MSD Lab ID: QC378447

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,080	101	75-125	0	20
Antimony	100.0	95.28	95	75-125	0	20
Arsenic	100.0	95.95	96	75-125	2	20
Barium	100.0	134.8	101	75-125	1	20
Beryllium	100.0	93.01	93	75-125	1	20
Cadmium	100.0	98.82	99	75-125	0	20
Calcium	10,000	21,440	104	75-125	2	20
Chromium	100.0	101.4	98	75-125	1	20
Cobalt	100.0	98.58	99	75-125	2	20
Copper	100.0	98.48	98	75-125	2	20
Iron	10,000	9,845	98	75-125	0	20
Lead	100.0	99.26	99	75-125	0	20
Magnesium	10,000	29,430	97	75-125	1	20
Manganese	100.0	97.68	98	75-125	1	20
Nickel	100.0	104.7	100	75-125	1	20
Potassium	10,000	10,220	101	75-125	1	20
Selenium	100.0	98.73	97	75-125	0	20
Silver	100.0	101.2	101	75-125	2	20
Sodium	10,000	44,970	90	75-125	3	20
Thallium	50.00	45.35	91	75-125	2	20
Vanadium	100.0	98.47	96	75-125	1	20
Zinc	100.0	109.7	100	75-125	10	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378508

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	38.94	10,000	10,170	101	75-125
Antimony	2.153	100.0	94.85	93	75-125
Arsenic	3.031	100.0	98.79	96	75-125
Barium	40.48	100.0	140.4	100	75-125
Beryllium	0.3423	100.0	93.82	93	75-125
Cadmium	0.4589	100.0	99.66	99	75-125
Calcium	16,710	10,000	25,600	89	75-125
Chromium	6.235	100.0	103.3	97	75-125
Cobalt	2.470	100.0	101.3	99	75-125
Copper	2.527	100.0	99.63	97	75-125
Iron	<19.37	10,000	10,360	104	75-125
Lead	0.5239	100.0	98.51	98	75-125
Magnesium	45,530	10,000	53,690	82 NM	75-125
Manganese	3.705	100.0	99.84	96	75-125
Nickel	7.760	100.0	105.2	97	75-125
Potassium	218.7	10,000	10,280	101	75-125
Selenium	<0.2730	100.0	101.2	101	75-125
Silver	0.2372	100.0	101.9	102	75-125
Sodium	122,700	10,000	129,700	70 NM	75-125
Thallium	<0.2993	50.00	46.29	93	75-125
Vanadium	10.52	100.0	108.4	98	75-125
Zinc	15.16	100.0	106.9	92	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MSD Lab ID: QC378509

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,010	100	75-125	2	20
Antimony	100.0	94.80	93	75-125	0	20
Arsenic	100.0	103.4	100	75-125	5	20
Barium	100.0	141.3	101	75-125	1	20
Beryllium	100.0	96.66	96	75-125	3	20
Cadmium	100.0	98.78	98	75-125	1	20
Calcium	10,000	25,820	91	75-125	1	20
Chromium	100.0	106.3	100	75-125	3	20
Cobalt	100.0	103.7	101	75-125	2	20
Copper	100.0	103.3	101	75-125	4	20
Iron	10,000	9,963	100	75-125	4	20
Lead	100.0	97.45	97	75-125	1	20
Magnesium	10,000	53,890	84 NM	75-125	0	20
Manganese	100.0	103.2	99	75-125	3	20
Nickel	100.0	108.7	101	75-125	3	20
Potassium	10,000	10,150	99	75-125	1	20
Selenium	100.0	100.3	100	75-125	1	20
Silver	100.0	101.9	102	75-125	0	20
Sodium	10,000	136,900	142 NM	75-125	5	20
Thallium	50.00	46.27	93	75-125	0	20
Vanadium	100.0	112.0	101	75-125	3	20
Zinc	100.0	111.3	96	75-125	4	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3B	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193055-001	Batch#:	122768
Lab ID:	QC377792	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	23.99 J	500.0	NC	10	03/06/07
Antimony	ND	1.000	ND	5.000	NC	10	03/06/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/06/07
Barium	49.75	10.00	48.86	10.00	2	10	03/06/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/06/07
Cadmium	ND	1.000	ND	5.000	NC	10	03/06/07
Calcium	35,190	500.0	36,450	500.0	4	10	03/06/07
Chromium	26.80	10.00	26.61	10.00	1	10	03/06/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/06/07
Copper	ND	1.000	ND	5.000	NC	10	03/06/07
Iron	ND	100.0	ND	500.0	NC	10	03/07/07
Lead	ND	3.000	ND	5.000	NC	10	03/06/07
Magnesium	45,570	500.0	46,860	500.0	3	10	03/06/07
Manganese	ND	10.00	0.7945 J	10.00	NC	10	03/06/07
Nickel	ND	20.00	3.367 J	20.00	NC	10	03/06/07
Potassium	ND	500.0	ND	500.0	NC	10	03/06/07
Selenium	ND	5.000	1.431 J	5.000	NC	10	03/06/07
Silver	ND	1.000	ND	5.000	NC	10	03/06/07
Sodium	62,050	500.0	62,700	500.0	1	10	03/06/07
Thallium	ND	1.000	ND	2.500	NC	10	03/06/07
Vanadium	14.01	10.00	13.04	10.00	7	10	03/06/07
Zinc	ND	20.00	37.61	25.00	NC	10	03/06/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF01GW06	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193055-021	Batch#:	122769
Lab ID:	QC377799	Sampled:	02/28/07
Matrix:	Filtrate	Received:	03/01/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	44.61 J	500.0	NC	10	03/07/07
Antimony	1.369	1.000	1.278 J	5.000	NC	10	03/07/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/07/07
Barium	29.64	10.00	31.09	10.00	5	10	03/07/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/07/07
Cadmium	4.961	1.000	5.145	5.000	4	10	03/07/07
Calcium	31,550	500.0	33,980	500.0	8	10	03/07/07
Chromium	ND	10.00	2.323 J	10.00	NC	10	03/07/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/07/07
Copper	7.579	1.000	ND	5.000	NC	10	03/13/07
Iron	ND	100.0	ND	500.0	NC	10	03/07/07
Lead	ND	3.000	ND	5.000	NC	10	03/07/07
Magnesium	4,062	500.0	4,588	500.0	13 *	10	03/07/07
Manganese	ND	10.00	5.295 J	10.00	NC	10	03/07/07
Nickel	ND	20.00	4.589 J	20.00	NC	10	03/07/07
Potassium	8,492	500.0	9,135	500.0	8	10	03/07/07
Selenium	ND	5.000	ND	5.000	NC	10	03/07/07
Silver	ND	1.000	ND	5.000	NC	10	03/07/07
Sodium	13,530	500.0	13,870	500.0	2	10	03/07/07
Thallium	ND	1.000	ND	2.500	NC	10	03/07/07
Vanadium	ND	10.00	2.260 J	10.00	NC	10	03/07/07
Zinc	771.8	20.00	757.5	20.00	2	10	03/07/07

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

88.2

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193217-011	Batch#:	122924
Lab ID:	QC378448	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	ND	500.0	NC	10	03/10/07
Antimony	ND	1.000	ND	5.000	NC	10	03/10/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/10/07
Barium	34.01	10.00	35.46	10.00	4	10	03/10/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/10/07
Cadmium	ND	1.000	ND	5.000	NC	10	03/10/07
Calcium	11,030	500.0	9,906	500.0	10	10	03/11/07
Chromium	ND	10.00	4.388 J	10.00	NC	10	03/10/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/10/07
Copper	ND	1.000	10.93	5.000	NC	10	03/10/07
Iron	ND	100.0	ND	500.0	NC	10	03/10/07
Lead	ND	3.000	ND	5.000	NC	10	03/10/07
Magnesium	19,770	500.0	20,110	500.0	2	10	03/10/07
Manganese	ND	10.00	ND	10.00	NC	10	03/10/07
Nickel	ND	20.00	4.802 J	20.00	NC	10	03/10/07
Potassium	ND	500.0	ND	500.0	NC	10	03/10/07
Selenium	ND	5.000	ND	5.000	NC	10	03/10/07
Silver	ND	1.000	ND	5.000	NC	10	03/10/07
Sodium	35,990	500.0	37,770	500.0	5	10	03/10/07
Thallium	ND	1.000	ND	2.500	NC	10	03/10/07
Vanadium	ND	10.00	3.316 J	10.00	NC	10	03/11/07
Zinc	ND	20.00	33.39	20.00	NC	10	03/10/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122820
MSS Lab ID:	193066-001	Sampled:	03/01/07
Lab ID:	QC378002	Received:	03/01/07
Matrix:	Water	Analyzed:	03/08/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

102.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67094350110
File : c06m0110
IDF : 10.0
Lab ID: 193055-001
Matrix: Filtrate
Batch : 122768
Time : 06-MAR-2007 22:24
Cal : 67094350001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67094350114
File : c06m0114
IDF : 10.0
Lab ID: QC377793
Matrix: Filtrate
Batch : 122768
Time : 06-MAR-2007 22:45
Cal : 67094350001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	1.712	A	10000	9601	A	96	75-125	u
Antimony	0.02677	A	100.0	96.86	A	97	75-125	u
Arsenic	0.1253	E	100.0	97.04	E	97	75-125	u
Barium	4.975	A	100.0	108.0	A	103	75-125	u
Beryllium	ND	A	100.0	102.9	A	103	75-125	u
Cadmium	0.01099	A	100.0	98.07	A	98	75-125	u
Calcium	3519	A	10000	13360	A	98	75-125	u
Chromium	2.680	E	100.0	99.89	E	97	75-125	u
Cobalt	0.01974	E	100.0	97.34	E	97	75-125	u
Copper	ND	E	100.0	95.20	E	95	75-125	u
Iron	ND	H	10000	9902	H	99	75-125	u
Lead	ND	A	100.0	95.57	A	96	75-125	u
Magnesium	4557	A	10000	14250	A	97	75-125	u
Manganese	0.1022	E	100.0	100.4	E	100	75-125	u
Molybdenum	0.04325	A	100.0	95.08	A	95	75-125	u
Nickel	0.4351	E	100.0	97.42	E	97	75-125	u
Potassium	18.09	A	10000	9843	A	98	75-125	u
Selenium	ND	H	100.0	98.08	H	98	75-125	u
Silver	0.01008	A	100.0	95.91	A	96	75-125	u
Sodium	6205	E	10000	16140	E	99	75-125	u
Thallium	0.03764	A	50.00	49.72	A	99	75-125	u
Vanadium	1.401	E	100.0	98.47	E	97	75-125	u
Zinc	0.5094	E	100.0	96.47	E	96	75-125	u

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	866254	714439	-17.53
Scandium	A	1225387	1105587	-9.78
Scandium	E	42775	39845	-6.85
Scandium	H	471271	423346	-10.17
Germanium	H	103809	91629	-11.73
Germanium	E	20261	18870	-6.86
Indium	A	1498516	1331332	-11.16
Bismuth	A	1439041	1174677	-18.37
Yttrium	A	1503435	1397713	-7.03
Terbium	A	2154806	1961528	-8.97

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67094350161
File : c06m0161
IDF : 10.0
Lab ID: 193055-021
Matrix: Filtrate
Batch : 122769
Time : 07-MAR-2007 02:56
Cal : 67094350001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67094350165
File : c06m0165
IDF : 10.0
Lab ID: QC377800
Matrix: Filtrate
Batch : 122769
Time : 07-MAR-2007 03:17
Cal : 67094350001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	2.353	A	10000	9387	A	94	75-125	u
Antimony	0.1369	A	100.0	95.29	A	95	75-125	u
Arsenic	0.08361	E	100.0	95.22	E	95	75-125	u
Barium	2.964	A	100.0	105.2	A	102	75-125	u
Beryllium	ND	A	100.0	101.7	A	102	75-125	u
Cadmium	0.4961	A	100.0	97.81	A	97	75-125	u
Calcium	3155	A	10000	12780	A	96	75-125	u
Chromium	0.1434	E	100.0	94.31	E	94	75-125	u
Cobalt	0.02610	E	100.0	95.01	E	95	75-125	u
Copper	0.7579	E	100.0	96.07	E	95	75-125	u
Iron	5.061	H	10000	9758	H	98	75-125	u
Lead	ND	A	100.0	95.33	A	95	75-125	u
Magnesium	379.1	A	10000	9749	A	94	75-125	u
Manganese	0.4348	E	100.0	98.03	E	98	75-125	u
Molybdenum	0.08025	A	100.0	93.12	A	93	75-125	u
Nickel	0.6171	E	100.0	95.16	E	95	75-125	u
Potassium	849.2	A	10000	10570	A	97	75-125	u
Selenium	ND	H	100.0	97.53	H	98	75-125	u
Silver	ND	A	100.0	94.45	A	94	75-125	u
Sodium	1353	E	10000	10590	E	92	75-125	u
Thallium	0.04038	A	50.00	47.33	A	95	75-125	u
Vanadium	0.2545	E	100.0	93.59	E	93	75-125	u
Zinc	77.18	E	100.0	164.3	E	87	75-125	u

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	866254	657681	-24.08
Scandium	A	1225387	1033528	-15.66
Scandium	E	42775	37654	-11.97
Scandium	H	471271	392421	-16.73
Germanium	H	103809	85597	-17.54
Germanium	E	20261	17500	-13.63
Indium	A	1498516	1253386	-16.36
Bismuth	A	1439041	1123648	-21.92
Yttrium	A	1503435	1323927	-11.94
Terbium	A	2154806	1851980	-14.05

u=use

67094350165

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67098941155
File : c09q0155
IDF : 10.0
Lab ID: 193217-011
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:07
Cal : 67098941001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67098941159
File : c09q0159
IDF : 10.0
Lab ID: QC378449
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:28
Cal : 67098941001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	9833	A	98	75-125	u
Antimony	0.02700	A	100.0	89.86	A	90	75-125	u
Arsenic	ND	E	100.0	95.98	E	96	75-125	u
Barium	3.401	A	100.0	100.4	A	97	75-125	u
Beryllium	ND	A	100.0	93.63	A	94	75-125	u
Cadmium	ND	A	100.0	95.18	A	95	75-125	u
Calcium	1103	A	10000	10840	A	97	75-125	u
Chromium	0.3892	E	100.0	98.77	E	98	75-125	u
Cobalt	ND	E	100.0	99.00	E	99	75-125	u
Copper	ND	E	100.0	96.40	E	96	75-125	u
Iron	ND	H	10000	9650	H	97	75-125	u
Lead	ND	A	100.0	94.78	A	95	75-125	u
Magnesium	1977	A	10000	11730	A	98	75-125	u
Manganese	ND	E	100.0	97.18	E	97	75-125	u
Molybdenum	0.02324	A	100.0	93.72	A	94	75-125	u
Nickel	0.5010	E	100.0	98.85	E	98	75-125	u
Potassium	12.63	A	10000	9837	A	98	75-125	u
Selenium	0.1548	H	100.0	96.14	H	96	75-125	u
Silver	ND	A	100.0	93.46	A	93	75-125	u
Sodium	3599	E	10000	13130	E	95	75-125	u
Thallium	ND	A	50.00	48.43	A	97	75-125	u
Vanadium	0.2296	E	100.0	97.72	E	97	75-125	<ib b*
Zinc	0.9868	E	100.0	96.92	E	96	75-125	u

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	916634	848479	-7.44
Scandium	A	1517730	1389680	-8.44
Scandium	E	45344	41278	-8.97
Scandium	H	422488	400627	-5.17
Germanium	H	101123	92227	-8.80
Germanium	E	22511	20273	-9.94
Indium	A	1832636	1608487	-12.23
Bismuth	A	1296680	1054667	-18.66
Yttrium	A	1904354	1714680	-9.96
Terbium	A	2253622	2038945	-9.53

<=opening b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67094350001
Units : ug/L

Date : 06-MAR-2007 12:48
X Axis : R

Reviewer: ---

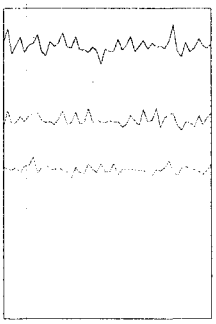
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c06m0005	67094350005		06-MAR-2007 12:54	S5645
L2	c06m0006	67094350006		06-MAR-2007 12:59	S5648
L3	c06m0007	67094350007		06-MAR-2007 13:04	S5649
L4	c06m0008	67094350008		06-MAR-2007 13:09	S5650
L5	c06m0009	67094350009		06-MAR-2007 13:14	S5644
L6	c06m0010	67094350010		06-MAR-2007 13:19	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8041	0.6834	0.6930	0.6418	0.6438	0.6316	BLNK	-0.4350	1.57728		0.6829	1.000	0.995	
Antimony	A	0.3283	0.2859	0.3086	0.2922	0.2973	0.3030	BLNK	-0.0098	3.31339		0.3026	1.000	0.995	
Barium	A	0.1730	0.0956	0.0927	0.0830	0.0820	0.0802	BLNK	-0.0141	12.4085		0.1011	1.000	0.995	
Beryllium	A	0.3131	0.3120	0.3094	0.3000	0.3083	0.2808	BLNK	-0.0060	3.49293		0.3039	0.998	0.995	
Cadmium	A	0.0974	0.0901	0.0935	0.0865	0.0863	0.0854	BLNK	-0.0022	11.6827		0.0899	1.000	0.995	
Calcium	A	0.0865	0.0347	0.0301	0.0229	0.0224	0.0219	BLNK	-26.737	45.5652		0.0364	1.000	0.995	
Lead	A	1.3129	0.8721	0.8344	0.7402	0.7343	0.7299	BLNK	-0.0675	1.36890		0.8706	1.000	0.995	
Magnesium	A	0.6863	0.5744	0.5749	0.5318	0.5245	0.5104	BLNK	-0.8922	1.94841		0.5670	1.000	0.995	
Molybdenum	A	0.2401	0.2267	0.2276	0.2227	0.2241	0.2312	BLNK	-0.0053	4.35261		0.2287	1.000	0.995	
Potassium	A	9.4096	2.4004	1.5991	0.8218	0.7516	0.7335	BLNK	-113.52	1.36590		2.6193	1.000	0.995	
Silver	A	0.3955	0.3752	0.3830	0.3665	0.3746	0.3702	BLNK	-0.0081	2.69520		0.3775	1.000	0.995	
Thallium	A	1.3335	0.9397	0.9432	0.8750	0.9359	0.9281	BLNK	-0.0287	1.07618		0.9926	1.000	0.995	
Arsenic	E	0.8303	0.6540	0.6490	0.6220	0.6322	0.6288	BLNK	-0.0331	1.58893		0.6694	1.000	0.995	
Chromium	E	6.6882	3.8794	3.6576	3.2016	3.2062	3.1305	BLNK	-0.1169	0.31812		3.9606	1.000	0.995	
Cobalt	E	5.4476	5.4224	5.4571	5.1473	5.0998	4.9398	BLNK	-0.0038	0.20112		5.2523	1.000	0.995	
Copper	E	57.034	18.054	12.926	8.3881	7.8004	7.5584	BLNK	-0.6775	0.13199		18.627	1.000	0.995	
Manganese	E	2.0000	1.6731	1.7184	1.6250	1.6088	1.5743	BLNK	-0.0161	0.63246		1.6999	1.000	0.995	
Nickel	E	2.3613	1.6039	1.5374	1.4110	1.3651	1.3155	BLNK	-0.0555	0.75462		1.5990	1.000	0.995	
Sodium	E	7.8691	2.0959	1.4372	0.7681	0.6352	0.6238	BLNK	-117.90	1.60828		2.2382	1.000	0.995	
Vanadium	E	7.5169	3.5965	3.1266	2.5513	2.5733	2.5365	BLNK	-0.2018	0.39359		3.6502	1.000	0.995	
Zinc	E		2.9245	2.2008	1.1998	1.1077	1.0429	BLNK	-0.7329	0.95110		1.6951	0.999	0.995	
Iron	H	1.0706	0.9774	0.8667	0.8760	0.8683	0.8542	BLNK	-3.3272	1.16705		0.9188	1.000	0.995	
Selenium	H	0.1651	0.1354	0.1502	0.1514	0.1497	0.1466	BLNK	-0.0065	6.79166		0.1497	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E		0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

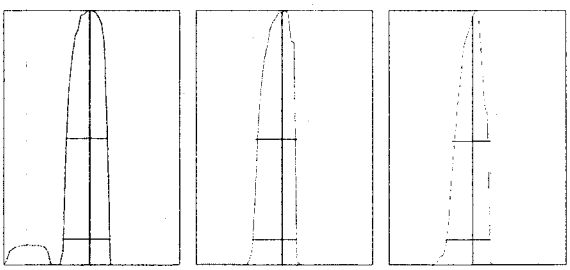
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17652.0	17570.5	2.65	0.80
89	50,000	33028.0	32012.0	2.78	1.20
205	50,000	24814.0	24080.8	2.68	3.20

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.997%
Doubly Charged: 70/140 1.214%



m/z:	7	89	205
Height:	17,588	32,068	23,602
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.70	0.65
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===		===Ion Lenses===		===Q-Pole Parameters===	
RF Power :	1550 W	Extract 1 :	0 V	AMU Gain :	142
RF Matching :	1.7 V	Extract 2 :	-180 V	AMU Offset :	123
Smpl Depth :	9 mm	Omega Bias-ce :	-30 V	Axis Gain :	1.0015
Torch-H :	0.9 mm	Omega Lens-ce :	0 V	Axis Offset :	-0.03
Torch-V :	0.8 mm	Cell Entrance :	-30 V	QP Bias :	-1 V
Carrier Gas :	1.05 L/min	QP Focus :	2 V		
Makeup Gas :	0 L/min	Cell Exit :	-30 V	===Detector Parameters===	
Optional Gas :	--- %			Discriminator :	8 mV
Nebulizer Pump :	0.1 rps	===Octopole Parameters===		Analog HV :	1760 V
Sample Pump :	--- rps	OctP RF :	160 V	Pulse HV :	1380 V
S/C Temp :	2 degC	OctP Bias :	-6 V		

===Reaction Cell===

Reaction Mode :	OFF				
H2 Gas :	0 mL/min	He Gas :	0 mL/min	Optional Gas :	--- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	4 mL/min			
Optional Gas:	--- %	51	38.6	17.74
QP Focus:	-10 V	59	4516.1	2.83
Cell Exit:	-38 V	89	2801.4	3.32
OctP Bias:	-18 V			
QP Bias:	-13 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	4 mL/min			
Optional Gas:	--- %	59	3337.6	3.07
QP Focus:	-8 V	78	0.2	231.46
Cell Exit:	-38 V	89	24307.5	2.48
OctP Bias:	-18 V			
QP Bias:	-15 V			

Integration Time: 0.1000sec

Generated : Mar 06, 2007 12:04:02
Printed : Mar 06, 2007 12:05:41

00328

P/A Factor Tuning Report

Acquired:Mar 6 2007 00:18 pm

Mass[amu]	Element	P/A Factor
6	Li	0.062960
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086265
45	Sc	0.085804
51	V	0.087153
52	Cr	0.089894
55	Mn	0.091622
56	Fe	Sensitivity too high
59	Co	0.092767
60	Ni	Sensitivity too low
63	Cu	0.099224
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.096452
98	Mo	0.096968
99	(Ru)	Sensitivity too low
107	Ag	0.103630
111	Cd	Sensitivity too low
115	In	0.102747
118	(In)	0.102094
121	Sb	0.101484
137	Ba	Sensitivity too low
159	Tb	0.104334
205	Tl	0.108261
206	(Pb)	0.107996
207	(Pb)	0.108087
208	Pb	0.108201
209	Bi	0.108455

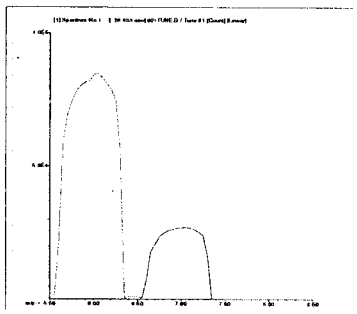
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1760 V
Pulse HV: 1380 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C06m00.B\001TUNE.D
Date Acquired:	Mar 6 2007 12:30 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	0.47	5.00	
115 In	0.89	5.00	
205 Tl	0.44	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

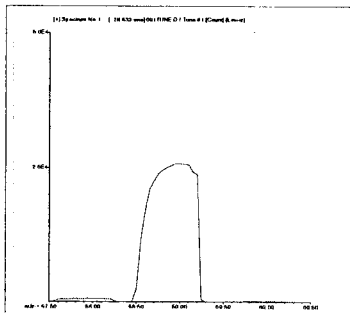
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

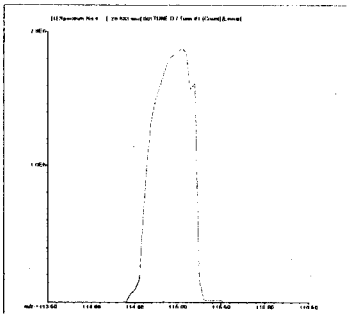
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



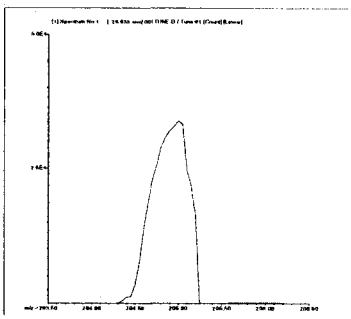
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004C
Date Acquired: Mar 6 2007 12:46 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 12:50 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	866253.63	A	16450.00	1.90
7	(Li)		P		
9	Be	30.00	P	8.82	29.40
23	Na	62715.75	P	575.90	0.92
24	Mg	11220.26	P	349.10	3.11
27	Al	6754.16	P	570.70	8.45
39	K	2036055.00	A	15010.00	0.74
44	Ca	14374.42	P	179.50	1.25
45	Sc	471271.09	P	3553.00	0.75
45	Sc	42775.15	P	231.80	0.54
45	Sc	1225387.00	A	27620.00	2.25
51	V	438.53	P	24.20	5.52
52	Cr	314.48	P	24.41	7.76
55	Mn	21.85	P	5.70	26.09
56	Fe	27035.50	P	33000.00	122.06
59	Co	16.30	P	3.39	20.83
60	Ni	62.96	P	4.21	6.68
63	Cu	2080.18	P	90.58	4.35
65	Cu	980.42	P	34.45	3.51
66	Zn	312.23	P	4.45	1.42
72	Ge	103808.90	P	806.60	0.78
72	Ge	20260.77	P	129.60	0.64
75	As	8.44	P	2.04	24.12
78	Se	2.00	P	0.67	33.34
89	Y	1503435.00	A	22300.00	1.48
98	Mo	36.67	P	10.00	27.27
107	Ag	90.00	P	6.67	7.41
111	Cd	5.56	P	1.93	34.65
115	In	1498516.00	A	34400.00	2.30
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	88.89	P	6.94	7.81
137	Ba	48.89	P	10.71	21.91
159	Tb	2154806.00	A	52120.00	2.42
205	Tl	767.83	P	33.73	4.39
208	Pb	2124.60	P	52.11	2.45
209	Bi	1439041.00	A	21130.00	1.47

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 6 2007 12:51 pm
Operator:
Sample Name: ss5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 12:50 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	853194.63	A	25870.00	3.03
7 (Li)		P		
9 Be	534.48	P	36.57	6.84
23 Na	68488.64	P	1056.00	1.54
24 Mg	164176.50	P	1334.00	0.81
27 Al	192385.00	P	1096.00	0.57
39 K	2251227.00	A	18910.00	0.84
44 Ca	20715.78	P	467.50	2.26
45 Sc	473150.00	P	2174.00	0.46
45 Sc	43538.68	P	889.10	2.04
45 Sc	1198258.00	A	56370.00	4.70
51 V	654.10	P	26.44	4.04
52 Cr	582.61	P	34.29	5.89
55 Mn	174.08	P	8.98	5.16
56 Fe	101309.70	P	1629.00	1.61
59 Co	474.46	P	16.82	3.55
60 Ni	205.56	P	9.88	4.80
63 Cu	2340.96	P	120.00	5.13
65 Cu	1121.91	P	96.01	8.56
66 Zn	387.79	P	23.41	6.04
72 Ge	103596.70	P	323.20	0.31
72 Ge	20516.33	P	401.30	1.96
75 As	34.00	P	4.62	13.59
78 Se	34.22	P	2.52	7.38
89 Y	1473910.00	A	67940.00	4.61
98 Mo	707.82	P	33.39	4.72
99 (Ru)	2.22	P	1.93	86.62
107 Ag	1163.43	P	68.40	5.88
111 Cd	286.68	P	29.63	10.34
115 In	1473304.00	A	50980.00	3.46
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	965.63	P	62.76	6.50
137 Ba	733.38	P	76.89	10.48
159 Tb	2127027.00	A	101500.00	4.77
205 Tl	1900.22	P	96.69	5.09
208 Pb	5575.13	P	107.90	1.94
209 Bi	1425050.00	A	48170.00	3.38

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	853194.63	3.03	866253.63	98.5	80 - 120	
45 Sc	473150.03	0.46	471271.06	100.4	80 - 120	
45 Sc	43538.68	2.04	42775.16	101.8	80 - 120	
45 Sc	1198257.80	4.70	1225387.30	97.8	80 - 120	
72 Ge	103596.66	0.31	103808.85	99.8	80 - 120	
72 Ge	20516.32	1.96	20260.77	101.3	80 - 120	
89 Y	1473909.90	4.61	1503435.00	98.0	80 - 120	
115 In	1473304.10	3.46	1498516.40	98.3	80 - 120	
159 Tb	2127027.30	4.77	2154805.80	98.7	80 - 120	
209 Bi	1425049.90	3.38	1439040.60	99.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 6 2007 12:57 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 12:55 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	881385.50	A	6678.00	0.76
7	(Li)		P		
9	Be	2750.36	P	95.42	3.47
23	Na	93116.63	P	1141.00	1.23
24	Mg	723335.19	A	2007.00	0.28
27	Al	860558.63	A	4364.00	0.51
39	K	3022421.00	A	24060.00	0.80
44	Ca	43683.69	P	420.10	0.96
45	Sc	483759.50	P	4873.00	1.01
45	Sc	44428.07	P	89.09	0.20
45	Sc	1259329.00	A	13630.00	1.08
51	V	1597.89	P	58.45	3.66
52	Cr	1723.46	P	45.83	2.66
55	Mn	743.36	P	40.00	5.38
56	Fe	472809.31	P	3715.00	0.79
59	Co	2409.12	P	60.08	2.49
60	Ni	712.62	P	26.35	3.70
63	Cu	3817.23	P	130.20	3.41
65	Cu	1813.10	P	25.74	1.42
66	Zn	618.17	P	40.71	6.59
72	Ge	105567.90	P	1263.00	1.20
72	Ge	21139.86	P	320.60	1.52
75	As	138.22	P	5.82	4.21
78	Se	142.89	P	1.68	1.17
89	Y	1550465.00	A	13860.00	0.89
98	Mo	3515.02	P	79.35	2.26
99	(Ru)	5.56	P	3.85	69.28
107	Ag	5702.52	P	51.71	0.91
111	Cd	1370.13	P	35.13	2.56
115	In	1520205.00	A	23560.00	1.55
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	4346.41	P	82.64	1.90
137	Ba	2125.81	P	37.47	1.76
159	Tb	2223317.00	A	28250.00	1.27
205	Tl	6886.56	P	98.96	1.44
208	Pb	19387.58	P	87.64	0.45
209	Bi	1465913.00	A	16550.00	1.13

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	881385.50	0.76	866253.63	101.7	80 - 120	
45	Sc	483759.50	1.01	471271.06	102.6	80 - 120	
45	Sc	44428.07	0.20	42775.16	103.9	80 - 120	
45	Sc	1259328.80	1.08	1225387.30	102.8	80 - 120	
72	Ge	105567.85	1.20	103808.85	101.7	80 - 120	
72	Ge	21139.86	1.52	20260.77	104.3	80 - 120	
89	Y	1550465.10	0.89	1503435.00	103.1	80 - 120	
115	In	1520204.80	1.55	1498516.40	101.4	80 - 120	
159	Tb	2223317.00	1.27	2154805.80	103.2	80 - 120	
209	Bi	1465912.60	1.13	1439040.60	101.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 6 2007 01:02 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 01:00 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	861222.63	A	9632.00	1.12
7 (Li)		P		
9 Be	5330.05	P	170.80	3.20
23 Na	124702.00	P	586.60	0.47
24 Mg	1400748.00	A	7844.00	0.56
27 Al	1688499.00	A	12460.00	0.74
39 K	3896570.00	A	28890.00	0.74
44 Ca	73424.23	P	758.60	1.03
45 Sc	512528.91	P	12630.00	2.46
45 Sc	43386.30	P	212.10	0.49
45 Sc	1218488.00	A	12820.00	1.05
51 V	2712.88	P	72.72	2.68
52 Cr	3173.73	P	37.84	1.19
55 Mn	1491.21	P	56.71	3.80
56 Fe	887990.00	A	992.70	0.11
59 Co	4735.30	P	71.05	1.50
60 Ni	1334.15	P	42.31	3.17
63 Cu	5323.66	P	37.35	0.70
65 Cu	2568.04	P	29.15	1.14
66 Zn	906.71	P	51.26	5.65
72 Ge	108518.10	P	3076.00	2.83
72 Ge	20594.24	P	204.40	0.99
75 As	267.34	P	8.11	3.03
78 Se	325.78	P	6.05	1.86
89 Y	1504759.00	A	6893.00	0.46
98 Mo	6848.63	P	149.40	2.18
99 (Ru)	1.11	P	1.93	173.24
107 Ag	11293.94	P	191.30	1.69
111 Cd	2758.17	P	36.87	1.34
115 In	1474812.00	A	16780.00	1.14
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	9101.17	P	188.80	2.07
137 Ba	3968.53	P	119.50	3.01
159 Tb	2140338.00	A	17270.00	0.81
205 Tl	13320.74	P	298.50	2.24
208 Pb	35714.24	P	691.40	1.94
209 Bi	1412359.00	A	7030.00	0.50

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	861222.56	1.12	866253.63	99.4	80 - 120	
45 Sc	512528.91	2.46	471271.06	108.8	80 - 120	
45 Sc	43386.30	0.49	42775.16	101.4	80 - 120	
45 Sc	1218488.00	1.05	1225387.30	99.4	80 - 120	
72 Ge	108518.06	2.83	103808.85	104.5	80 - 120	
72 Ge	20594.24	0.99	20260.77	101.6	80 - 120	
89 Y	1504758.50	0.46	1503435.00	100.1	80 - 120	
115 In	1474811.90	1.14	1498516.40	98.4	80 - 120	
159 Tb	2140338.00	0.81	2154805.80	99.3	80 - 120	
209 Bi	1412358.90	0.50	1439040.60	98.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 6 2007 01:07 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 01:05 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	870027.00	A	5780.00	0.66
7	(Li)		P		
9	Be	52207.02	P	291.80	0.56
23	Na	666058.19	P	1054.00	0.16
24	Mg	13304080.00	A	55330.00	0.42
27	Al	16057090.00	A	82140.00	0.51
39	K	20559350.00	A	29930.00	0.15
44	Ca	572124.13	P	2554.00	0.45
45	Sc	472613.81	P	2969.00	0.63
45	Sc	43361.80	P	431.60	1.00
45	Sc	1250964.00	A	14810.00	1.18
51	V	22123.37	P	120.00	0.54
52	Cr	27762.21	P	306.00	1.10
55	Mn	14092.72	P	186.00	1.32
56	Fe	8279714.00	A	23970.00	0.29
59	Co	44636.37	P	94.21	0.21
60	Ni	12236.18	P	52.36	0.43
63	Cu	34529.98	P	315.20	0.91
65	Cu	16820.99	P	132.50	0.79
66	Zn	4939.82	P	94.34	1.91
72	Ge	102433.70	P	387.80	0.38
72	Ge	20584.58	P	157.70	0.77
75	As	2560.48	P	19.05	0.74
78	Se	3102.15	P	11.48	0.37
89	Y	1529584.00	A	20590.00	1.35
98	Mo	68126.85	P	513.10	0.75
99	(Ru)	3.33	P	0.00	0.00
107	Ag	109536.20	P	458.40	0.42
111	Cd	25861.99	P	255.90	0.99
115	In	1494563.00	A	19600.00	1.31
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	87341.57	P	434.40	0.50
137	Ba	36501.88	P	176.50	0.48
159	Tb	2199881.00	A	29820.00	1.36
205	Tl	122898.90	P	1336.00	1.09
208	Pb	325635.91	P	2606.00	0.80
209	Bi	1404938.00	A	26870.00	1.91

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	870026.94	0.66	866253.63	100.4	80 - 120	
45	Sc	472613.81	0.63	471271.06	100.3	80 - 120	
45	Sc	43361.81	1.00	42775.16	101.4	80 - 120	
45	Sc	1250964.10	1.18	1225387.30	102.1	80 - 120	
72	Ge	102433.66	0.38	103808.85	98.7	80 - 120	
72	Ge	20584.58	0.77	20260.77	101.6	80 - 120	
89	Y	1529584.00	1.35	1503435.00	101.7	80 - 120	
115	In	1494563.10	1.31	1498516.40	99.7	80 - 120	
159	Tb	2199881.30	1.36	2154805.80	102.1	80 - 120	
209	Bi	1404938.00	1.91	1439040.60	97.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 6 2007 01:12 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 01:11 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	881484.69	A	11730.00	1.33
7 (Li)		P		
9 Be	543497.69	P	1259.00	0.23
23 Na	5626879.00	A	20480.00	0.36
24 Mg	############	A	742100.00	0.55
27 Al	############	A	1386000.00	0.83
39 K	############	A	1432000.00	0.73
44 Ca	5801653.00	A	44600.00	0.77
45 Sc	491243.41	P	480.70	0.10
45 Sc	44295.79	P	248.30	0.56
45 Sc	1296212.00	A	6966.00	0.54
51 V	227971.20	P	524.90	0.23
52 Cr	284037.59	P	910.90	0.32
55 Mn	142521.59	P	390.50	0.27
56 Fe	85307528.00	A	603100.00	0.71
59 Co	451787.41	P	1555.00	0.34
60 Ni	120936.80	P	835.10	0.69
63 Cu	323554.59	P	1655.00	0.51
65 Cu	157678.70	P	676.90	0.43
66 Zn	45945.95	P	409.60	0.89
72 Ge	104903.90	P	240.90	0.23
72 Ge	20740.00	P	130.10	0.63
75 As	26222.24	P	58.16	0.22
78 Se	31401.04	P	234.20	0.75
89 Y	1582222.00	A	9938.00	0.63
98 Mo	709204.63	P	4301.00	0.61
99 (Ru)	24.45	P	3.85	15.75
107 Ag	1125285.00	A	7250.00	0.64
111 Cd	259070.80	P	2074.00	0.80
115 In	1501936.00	A	19510.00	1.30
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	892863.19	P	1060.00	0.12
137 Ba	374107.69	P	1689.00	0.45
159 Tb	2280922.00	A	5282.00	0.23
205 Tl	1317467.00	A	3779.00	0.29
208 Pb	3349701.00	A	7864.00	0.23
209 Bi	1407795.00	A	11190.00	0.79

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	881484.69	1.33	866253.63	101.8	80 - 120	
45 Sc	491243.41	0.10	471271.06	104.2	80 - 120	
45 Sc	44295.79	0.56	42775.16	103.6	80 - 120	
45 Sc	1296212.10	0.54	1225387.30	105.8	80 - 120	
72 Ge	104903.95	0.23	103808.85	101.1	80 - 120	
72 Ge	20740.00	0.63	20260.77	102.4	80 - 120	
89 Y	1582222.10	0.63	1503435.00	105.2	80 - 120	
115 In	1501935.80	1.30	1498516.40	100.2	80 - 120	
159 Tb	2280922.00	0.23	2154805.80	105.9	80 - 120	
209 Bi	1407795.10	0.79	1439040.60	97.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C06m00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 6 2007 01:17 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 06 2007 01:16 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	858655.13	A	2410.00	0.28
7	(Li)		P		
9	Be	964300.19	A	7822.00	0.81
23	Na	11078240.00	A	13130.00	0.12
24	Mg	###########	A	2235000.00	0.84
27	Al	###########	A	1871000.00	0.57
39	K	###########	A	2061000.00	0.54
44	Ca	11340010.00	A	32070.00	0.28
45	Sc	499998.59	P	3949.00	0.79
45	Sc	44402.36	P	187.70	0.42
45	Sc	1295707.00	A	15160.00	1.17
51	V	450496.59	P	1624.00	0.36
52	Cr	555989.88	P	2281.00	0.41
55	Mn	279602.81	P	623.00	0.22
56	Fe	###########	A	1457000.00	0.85
59	Co	877337.50	P	2746.00	0.31
60	Ni	233643.91	P	1766.00	0.76
63	Cu	617375.50	P	3012.00	0.49
65	Cu	301548.50	P	1615.00	0.54
66	Zn	85186.33	P	302.50	0.36
72	Ge	104647.80	P	710.10	0.68
72	Ge	20421.00	P	211.30	1.03
75	As	51362.72	P	170.60	0.33
78	Se	61379.73	P	793.70	1.29
89	Y	1584327.00	A	13920.00	0.88
98	Mo	1465006.00	A	2479.00	0.17
99	(Ru)	35.56	P	12.62	35.49
107	Ag	2195937.00	A	11270.00	0.51
111	Cd	506804.50	P	2311.00	0.46
115	In	1483193.00	A	16410.00	1.11
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1797361.00	A	8235.00	0.46
137	Ba	728236.13	P	5062.00	0.70
159	Tb	2269055.00	A	23450.00	1.03
205	Tl	2555371.00	A	27050.00	1.06
208	Pb	6624630.00	A	17600.00	0.27
209	Bi	1376674.00	A	10970.00	0.80

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	858655.06	0.28	866253.63	99.1	80 - 120	
45	Sc	499998.63	0.79	471271.06	106.1	80 - 120	
45	Sc	44402.36	0.42	42775.16	103.8	80 - 120	
45	Sc	1295706.80	1.17	1225387.30	105.7	80 - 120	
72	Ge	104647.80	0.68	103808.85	100.8	80 - 120	
72	Ge	20421.00	1.03	20260.77	100.8	80 - 120	
89	Y	1584327.00	0.88	1503435.00	105.4	80 - 120	
115	In	1483193.40	1.11	1498516.40	99.0	80 - 120	
159	Tb	2269054.80	1.03	2154805.80	105.3	80 - 120	
209	Bi	1376674.10	0.80	1439040.60	95.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C06m00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350014 File : c06m0014 Time : 06-MAR-2007 13:40
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5653, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6829	0.6404	10000	10100	ug/L	1	10	
Antimony	A	0.3026	0.3212	100.0	106.4	ug/L	6	10	
Barium	A	0.1011	0.0809	100.0	100.4	ug/L	0	10	
Beryllium	A	0.3039	0.3009	100.0	105.1	ug/L	5	10	
Cadmium	A	0.0899	0.0860	100.0	100.4	ug/L	0	10	
Calcium	A	0.0364	0.0222	10000	10090	ug/L	1	10	
Lead	A	0.8706	0.7293	100.0	99.76	ug/L	0	10	
Magnesium	A	0.5670	0.5221	10000	10170	ug/L	2	10	
Molybdenum	A	0.2287	0.2253	100.0	98.06	ug/L	-2	10	
Potassium	A	2.6193	0.7481	10000	10100	ug/L	1	10	
Silver	A	0.3775	0.3952	100.0	106.5	ug/L	7	10	
Thallium	A	0.9926	0.9128	50.00	49.09	ug/L	-2	10	
Arsenic	E	0.6694	0.6432	100.0	102.2	ug/L	2	10	
Chromium	E	3.9606	3.1805	100.0	101.1	ug/L	1	10	
Cobalt	E	5.2523	4.9656	100.0	99.87	ug/L	0	10	
Copper	E	18.627	7.5616	100.0	99.12	ug/L	-1	10	
Manganese	E	1.6999	1.5919	100.0	100.7	ug/L	1	10	
Nickel	E	1.5990	1.3379	100.0	100.9	ug/L	1	10	
Sodium	E	2.2382	0.6233	10000	9906	ug/L	-1	10	
Vanadium	E	3.6502	2.5369	100.0	99.65	ug/L	0	10	
Zinc	E	1.6951	1.0579	100.0	99.88	ug/L	0	10	
Iron	H	0.9188	0.8680	10000	10130	ug/L	1	10	
Selenium	H	0.1497	0.1482	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	904975	4.47
Scandium	A	1225387	1316146	7.41
Scandium	E	42775	45976	7.48
Scandium	H	471271	508823	7.97
Germanium	H	103809	107935	3.97
Germanium	E	20261	21462	5.93
Indium	A	1498516	1535148	2.44
Bismuth	A	1439041	1419088	-1.39
Yttrium	A	1503435	1606604	6.86
Terbium	A	2154806	2300222	6.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350037 File : c06m0037 Time : 06-MAR-2007 15:47
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6373	10000	10050	ug/L	1	10	
Antimony	A	0.3026	0.3100	100.0	102.7	ug/L	3	10	
Barium	A	0.1011	0.0820	100.0	101.8	ug/L	2	10	
Beryllium	A	0.3039	0.2965	100.0	103.6	ug/L	4	10	
Cadmium	A	0.0899	0.0849	100.0	99.14	ug/L	-1	10	
Calcium	A	0.0364	0.0220	10000	10010	ug/L	0	10	
Lead	A	0.8706	0.7056	100.0	96.53	ug/L	-3	10	
Magnesium	A	0.5670	0.5213	10000	10160	ug/L	2	10	
Molybdenum	A	0.2287	0.2230	100.0	97.07	ug/L	-3	10	
Potassium	A	2.6193	0.7490	10000	10120	ug/L	1	10	
Silver	A	0.3775	0.3896	100.0	105.0	ug/L	5	10	
Thallium	A	0.9926	0.9158	50.00	49.25	ug/L	-2	10	
Arsenic	E	0.6694	0.6341	100.0	100.7	ug/L	1	10	
Chromium	E	3.9606	3.0946	100.0	98.33	ug/L	-2	10	
Cobalt	E	5.2523	4.8107	100.0	96.75	ug/L	-3	10	
Copper	E	18.627	7.3864	100.0	96.81	ug/L	-3	10	
Manganese	E	1.6999	1.5692	100.0	99.23	ug/L	-1	10	
Nickel	E	1.5990	1.2895	100.0	97.25	ug/L	-3	10	
Sodium	E	2.2382	0.6142	10000	9761	ug/L	-2	10	
Vanadium	E	3.6502	2.4734	100.0	97.15	ug/L	-3	10	
Zinc	E	1.6951	1.0415	100.0	98.33	ug/L	-2	10	
Iron	H	0.9188	0.8589	10000	10020	ug/L	0	10	
Selenium	H	0.1497	0.1457	100.0	98.93	ug/L	-1	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	854504	-1.36
Scandium	A	1225387	1247163	1.78
Scandium	E	42775	46316	8.28
Scandium	H	471271	500292	6.16
Germanium	H	103809	107622	3.67
Germanium	E	20261	21453	5.88
Indium	A	1498516	1479308	-1.28
Bismuth	A	1439041	1318039	-8.41
Yttrium	A	1503435	1542236	2.58
Terbium	A	2154806	2180006	1.17

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67094350055 File : c06m0055 IDF : 1.0
Cal : 67094350001 Caldate: 06-MAR-2007 Time : 06-MAR-2007 17:24
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6336	10000	9994	ug/L	0	10	
Antimony	A	0.3026	0.3099	100.0	102.7	ug/L	3	10	
Barium	A	0.1011	0.0818	100.0	101.5	ug/L	2	10	
Beryllium	A	0.3039	0.2933	100.0	102.4	ug/L	2	10	
Cadmium	A	0.0899	0.0851	100.0	99.37	ug/L	-1	10	
Calcium	A	0.0364	0.0221	10000	10040	ug/L	0	10	
Lead	A	0.8706	0.6979	100.0	95.47	ug/L	-5	10	
Magnesium	A	0.5670	0.5199	10000	10130	ug/L	1	10	
Molybdenum	A	0.2287	0.2221	100.0	96.68	ug/L	-3	10	
Potassium	A	2.6193	0.7503	10000	10140	ug/L	1	10	
Silver	A	0.3775	0.3900	100.0	105.1	ug/L	5	10	
Thallium	A	0.9926	0.9103	50.00	48.95	ug/L	-2	10	
Arsenic	E	0.6694	0.6248	100.0	99.24	ug/L	-1	10	
Chromium	E	3.9606	3.0701	100.0	97.55	ug/L	-2	10	
Cobalt	E	5.2523	4.7716	100.0	95.97	ug/L	-4	10	
Copper	E	18.627	7.1657	100.0	93.90	ug/L	-6	10	
Manganese	E	1.6999	1.5648	100.0	98.95	ug/L	-1	10	
Nickel	E	1.5990	1.2709	100.0	95.85	ug/L	-4	10	
Sodium	E	2.2382	0.6137	10000	9752	ug/L	-2	10	
Vanadium	E	3.6502	2.4639	100.0	96.77	ug/L	-3	10	
Zinc	E	1.6951	1.0284	100.0	97.08	ug/L	-3	10	
Iron	H	0.9188	0.8533	10000	9956	ug/L	0	10	
Selenium	H	0.1497	0.1437	100.0	97.62	ug/L	-2	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	853485	-1.47
Scandium	A	1225387	1239314	1.14
Scandium	E	42775	46202	8.01
Scandium	H	471271	495619	5.17
Germanium	H	103809	106593	2.68
Germanium	E	20261	21688	7.04
Indium	A	1498516	1473836	-1.65
Bismuth	A	1439041	1307427	-9.15
Yttrium	A	1503435	1542955	2.63
Terbium	A	2154806	2184932	1.40

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67094350073
Cal : 67094350001
Standards: S5654, S5290

File : c06m0073
Caldate: 06-MAR-2007

IDF : 1.0
Time : 06-MAR-2007 19:04

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6249	10000	9855	ug/L	-1	10	
Antimony	A	0.3026	0.3061	100.0	101.4	ug/L	1	10	
Barium	A	0.1011	0.0820	100.0	101.7	ug/L	2	10	
Beryllium	A	0.3039	0.2922	100.0	102.0	ug/L	2	10	
Cadmium	A	0.0899	0.0844	100.0	98.60	ug/L	-1	10	
Calcium	A	0.0364	0.0217	10000	9876	ug/L	-1	10	
Lead	A	0.8706	0.6964	100.0	95.26	ug/L	-5	10	
Magnesium	A	0.5670	0.5093	10000	9923	ug/L	-1	10	
Molybdenum	A	0.2287	0.2193	100.0	95.43	ug/L	-5	10	
Potassium	A	2.6193	0.7347	10000	9922	ug/L	-1	10	
Silver	A	0.3775	0.3833	100.0	103.3	ug/L	3	10	
Thallium	A	0.9926	0.8996	50.00	48.38	ug/L	-3	10	
Arsenic	E	0.6694	0.6239	100.0	99.09	ug/L	-1	10	
Chromium	E	3.9606	3.0293	100.0	96.25	ug/L	-4	10	
Cobalt	E	5.2523	4.7247	100.0	95.02	ug/L	-5	10	
Copper	E	18.627	7.1540	100.0	93.74	ug/L	-6	10	
Manganese	E	1.6999	1.5617	100.0	98.76	ug/L	-1	10	
Nickel	E	1.5990	1.2697	100.0	95.76	ug/L	-4	10	
Sodium	E	2.2382	0.6077	10000	9656	ug/L	-3	10	
Vanadium	E	3.6502	2.4359	100.0	95.67	ug/L	-4	10	
Zinc	E	1.6951	1.0311	100.0	97.33	ug/L	-3	10	
Iron	H	0.9188	0.8555	10000	9981	ug/L	0	10	
Selenium	H	0.1497	0.1448	100.0	98.34	ug/L	-2	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	853798	-1.44
Scandium	A	1225387	1255293	2.44
Scandium	E	42775	46359	8.38
Scandium	H	471271	485651	3.05
Germanium	H	103809	104168	0.35
Germanium	E	20261	21709	7.15
Indium	A	1498516	1484356	-0.94
Bismuth	A	1439041	1311145	-8.89
Yttrium	A	1503435	1554160	3.37
Terbium	A	2154806	2177053	1.03

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350093 File : c06m0093 Time : 06-MAR-2007 20:51
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6221	10000	9812	ug/L	-2	10	
Antimony	A	0.3026	0.3023	100.0	100.2	ug/L	0	10	
Barium	A	0.1011	0.0822	100.0	101.9	ug/L	2	10	
Beryllium	A	0.3039	0.2838	100.0	99.14	ug/L	-1	10	
Cadmium	A	0.0899	0.0838	100.0	97.85	ug/L	-2	10	
Calcium	A	0.0364	0.0218	10000	9910	ug/L	-1	10	
Lead	A	0.8706	0.6995	100.0	95.69	ug/L	-4	10	
Magnesium	A	0.5670	0.5083	10000	9903	ug/L	-1	10	
Molybdenum	A	0.2287	0.2184	100.0	95.06	ug/L	-5	10	
Potassium	A	2.6193	0.7358	10000	9936	ug/L	-1	10	
Silver	A	0.3775	0.3788	100.0	102.1	ug/L	2	10	
Thallium	A	0.9926	0.8920	50.00	47.97	ug/L	-4	10	
Arsenic	E	0.6694	0.6182	100.0	98.20	ug/L	-2	10	
Chromium	E	3.9606	3.0277	100.0	96.20	ug/L	-4	10	
Cobalt	E	5.2523	4.7189	100.0	94.90	ug/L	-5	10	
Copper	E	18.627	7.1362	100.0	93.51	ug/L	-6	10	
Manganese	E	1.6999	1.5583	100.0	98.54	ug/L	-1	10	
Nickel	E	1.5990	1.2642	100.0	95.34	ug/L	-5	10	
Sodium	E	2.2382	0.6047	10000	9607	ug/L	-4	10	
Vanadium	E	3.6502	2.4200	100.0	95.05	ug/L	-5	10	
Zinc	E	1.6951	1.0218	100.0	96.45	ug/L	-4	10	
Iron	H	0.9188	0.8542	10000	9966	ug/L	0	10	
Selenium	H	0.1497	0.1446	100.0	98.18	ug/L	-2	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	784367	-9.45
Scandium	A	1225387	1143143	-6.71
Scandium	E	42775	42475	-0.70
Scandium	H	471271	446293	-5.30
Germanium	H	103809	96360	-7.18
Germanium	E	20261	19859	-1.98
Indium	A	1498516	1398503	-6.67
Bismuth	A	1439041	1233888	-14.26
Yttrium	A	1503435	1454006	-3.29
Terbium	A	2154806	2041096	-5.28

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350118 File : c06m0118 Time : 06-MAR-2007 23:06
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6079	10000	9588	ug/L	-4	10	
Antimony	A	0.3026	0.3015	100.0	99.89	ug/L	0	10	
Barium	A	0.1011	0.0819	100.0	101.6	ug/L	2	10	
Beryllium	A	0.3039	0.2865	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0899	0.0839	100.0	98.04	ug/L	-2	10	
Calcium	A	0.0364	0.0216	10000	9821	ug/L	-2	10	
Lead	A	0.8706	0.6962	100.0	95.24	ug/L	-5	10	
Magnesium	A	0.5670	0.4960	10000	9662	ug/L	-3	10	
Molybdenum	A	0.2287	0.2183	100.0	95.02	ug/L	-5	10	
Potassium	A	2.6193	0.7286	10000	9839	ug/L	-2	10	
Silver	A	0.3775	0.3771	100.0	101.6	ug/L	2	10	
Thallium	A	0.9926	0.8851	50.00	47.60	ug/L	-5	10	
Arsenic	E	0.6694	0.6236	100.0	99.06	ug/L	-1	10	
Chromium	E	3.9606	3.0361	100.0	96.47	ug/L	-4	10	
Cobalt	E	5.2523	4.7632	100.0	95.80	ug/L	-4	10	
Copper	E	18.627	7.2019	100.0	94.38	ug/L	-6	10	
Manganese	E	1.6999	1.5622	100.0	98.79	ug/L	-1	10	
Nickel	E	1.5990	1.2708	100.0	95.84	ug/L	-4	10	
Sodium	E	2.2382	0.5975	10000	9491	ug/L	-5	10	
Vanadium	E	3.6502	2.4341	100.0	95.60	ug/L	-4	10	
Zinc	E	1.6951	1.0329	100.0	97.51	ug/L	-2	10	
Iron	H	0.9188	0.8476	10000	9888	ug/L	-1	10	
Selenium	H	0.1497	0.1434	100.0	97.39	ug/L	-3	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	742233	-14.32
Scandium	A	1225387	1120737	-8.54
Scandium	E	42775	41010	-4.13
Scandium	H	471271	434310	-7.84
Germanium	H	103809	94254	-9.20
Germanium	E	20261	19079	-5.83
Indium	A	1498516	1360619	-9.20
Bismuth	A	1439041	1205573	-16.22
Yttrium	A	1503435	1415314	-5.86
Terbium	A	2154806	2000110	-7.18

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67094350136 File : c06m0136 IDF : 1.0
Cal : 67094350001 Caldate: 06-MAR-2007 Time : 07-MAR-2007 00:42
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6172	10000	9735	ug/L	-3	10	
Antimony	A	0.3026	0.3012	100.0	99.80	ug/L	0	10	
Barium	A	0.1011	0.0822	100.0	101.9	ug/L	2	10	
Beryllium	A	0.3039	0.2862	100.0	99.97	ug/L	0	10	
Cadmium	A	0.0899	0.0832	100.0	97.18	ug/L	-3	10	
Calcium	A	0.0364	0.0217	10000	9865	ug/L	-1	10	
Lead	A	0.8706	0.6997	100.0	95.71	ug/L	-4	10	
Magnesium	A	0.5670	0.5026	10000	9792	ug/L	-2	10	
Molybdenum	A	0.2287	0.2192	100.0	95.39	ug/L	-5	10	
Potassium	A	2.6193	0.7365	10000	9946	ug/L	-1	10	
Silver	A	0.3775	0.3753	100.0	101.1	ug/L	1	10	
Thallium	A	0.9926	0.8733	50.00	46.96	ug/L	-6	10	
Arsenic	E	0.6694	0.6198	100.0	98.45	ug/L	-2	10	
Chromium	E	3.9606	3.0110	100.0	95.67	ug/L	-4	10	
Cobalt	E	5.2523	4.7146	100.0	94.82	ug/L	-5	10	
Copper	E	18.627	7.1607	100.0	93.83	ug/L	-6	10	
Manganese	E	1.6999	1.5499	100.0	98.01	ug/L	-2	10	
Nickel	E	1.5990	1.2598	100.0	95.01	ug/L	-5	10	
Sodium	E	2.2382	0.5934	10000	9425	ug/L	-6	10	
Vanadium	E	3.6502	2.4128	100.0	94.76	ug/L	-5	10	
Zinc	E	1.6951	1.0181	100.0	96.10	ug/L	-4	10	
Iron	H	0.9188	0.8404	10000	9804	ug/L	-2	10	
Selenium	H	0.1497	0.1435	100.0	97.43	ug/L	-3	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	756102	-12.72
Scandium	A	1225387	1116143	-8.92
Scandium	E	42775	41193	-3.70
Scandium	H	471271	433060	-8.11
Germanium	H	103809	93779	-9.66
Germanium	E	20261	19226	-5.11
Indium	A	1498516	1353481	-9.68
Bismuth	A	1439041	1203843	-16.34
Yttrium	A	1503435	1403752	-6.63
Terbium	A	2154806	1978965	-8.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350146 File : c06m0146 Time : 07-MAR-2007 01:35
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6046	10000	9536	ug/L	-5	10	
Antimony	A	0.3026	0.2995	100.0	99.23	ug/L	-1	10	
Barium	A	0.1011	0.0820	100.0	101.8	ug/L	2	10	
Beryllium	A	0.3039	0.2862	100.0	99.95	ug/L	0	10	
Cadmium	A	0.0899	0.0832	100.0	97.23	ug/L	-3	10	
Calcium	A	0.0364	0.0215	10000	9748	ug/L	-3	10	
Lead	A	0.8706	0.6993	100.0	95.66	ug/L	-4	10	
Magnesium	A	0.5670	0.4927	10000	9598	ug/L	-4	10	
Molybdenum	A	0.2287	0.2161	100.0	94.03	ug/L	-6	10	
Potassium	A	2.6193	0.7239	10000	9774	ug/L	-2	10	
Silver	A	0.3775	0.3731	100.0	100.5	ug/L	1	10	
Thallium	A	0.9926	0.8776	50.00	47.20	ug/L	-6	10	
Arsenic	E	0.6694	0.6179	100.0	98.15	ug/L	-2	10	
Chromium	E	3.9606	3.0053	100.0	95.49	ug/L	-5	10	
Cobalt	E	5.2523	4.6875	100.0	94.27	ug/L	-6	10	
Copper	E	18.627	7.1390	100.0	93.55	ug/L	-6	10	
Manganese	E	1.6999	1.5499	100.0	98.01	ug/L	-2	10	
Nickel	E	1.5990	1.2579	100.0	94.87	ug/L	-5	10	
Sodium	E	2.2382	0.5932	10000	9423	ug/L	-6	10	
Vanadium	E	3.6502	2.4031	100.0	94.38	ug/L	-6	10	
Zinc	E	1.6951	1.0143	100.0	95.74	ug/L	-4	10	
Iron	H	0.9188	0.8359	10000	9752	ug/L	-2	10	
Selenium	H	0.1497	0.1440	100.0	97.77	ug/L	-2	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	752181	-13.17
Scandium	A	1225387	1135322	-7.35
Scandium	E	42775	41193	-3.70
Scandium	H	471271	433993	-7.91
Germanium	H	103809	94052	-9.40
Germanium	E	20261	19148	-5.49
Indium	A	1498516	1367365	-8.75
Bismuth	A	1439041	1200532	-16.57
Yttrium	A	1503435	1435419	-4.52
Terbium	A	2154806	1995518	-7.39

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350169 File : c06m0169 Time : 07-MAR-2007 03:39
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6046	10000	9536	ug/L	-5	10	
Antimony	A	0.3026	0.2989	100.0	99.04	ug/L	-1	10	
Barium	A	0.1011	0.0829	100.0	102.8	ug/L	3	10	
Beryllium	A	0.3039	0.2887	100.0	100.8	ug/L	1	10	
Cadmium	A	0.0899	0.0832	100.0	97.17	ug/L	-3	10	
Calcium	A	0.0364	0.0217	10000	9850	ug/L	-2	10	
Lead	A	0.8706	0.7081	100.0	96.87	ug/L	-3	10	
Magnesium	A	0.5670	0.4903	10000	9552	ug/L	-4	10	
Molybdenum	A	0.2287	0.2165	100.0	94.22	ug/L	-6	10	
Potassium	A	2.6193	0.7317	10000	9881	ug/L	-1	10	
Silver	A	0.3775	0.3713	100.0	100.1	ug/L	0	10	
Thallium	A	0.9926	0.8565	50.00	46.06	ug/L	-8	10	
Arsenic	E	0.6694	0.6061	100.0	96.28	ug/L	-4	10	
Chromium	E	3.9606	3.0182	100.0	95.90	ug/L	-4	10	
Cobalt	E	5.2523	4.7353	100.0	95.23	ug/L	-5	10	
Copper	E	18.627	7.0419	100.0	92.26	ug/L	-8	10	
Manganese	E	1.6999	1.5538	100.0	98.25	ug/L	-2	10	
Nickel	E	1.5990	1.2644	100.0	95.36	ug/L	-5	10	
Sodium	E	2.2382	0.5941	10000	9436	ug/L	-6	10	
Vanadium	E	3.6502	2.4130	100.0	94.77	ug/L	-5	10	
Zinc	E	1.6951	1.0071	100.0	95.06	ug/L	-5	10	
Iron	H	0.9188	0.8361	10000	9755	ug/L	-2	10	
Selenium	H	0.1497	0.1429	100.0	97.04	ug/L	-3	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	674029	-22.19
Scandium	A	1225387	1037673	-15.32
Scandium	E	42775	37831	-11.56
Scandium	H	471271	400419	-15.03
Germanium	H	103809	87034	-16.16
Germanium	E	20261	17974	-11.29
Indium	A	1498516	1286374	-14.16
Bismuth	A	1439041	1137693	-20.94
Yttrium	A	1503435	1342151	-10.73
Terbium	A	2154806	1866008	-13.40

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350189 File : c06m0189 Time : 07-MAR-2007 05:27
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.6013	10000	9483	ug/L	-5	10	
Antimony	A	0.3026	0.2987	100.0	98.98	ug/L	-1	10	
Barium	A	0.1011	0.0820	100.0	101.8	ug/L	2	10	
Beryllium	A	0.3039	0.2828	100.0	98.76	ug/L	-1	10	
Cadmium	A	0.0899	0.0837	100.0	97.75	ug/L	-2	10	
Calcium	A	0.0364	0.0216	10000	9823	ug/L	-2	10	
Lead	A	0.8706	0.6982	100.0	95.50	ug/L	-5	10	
Magnesium	A	0.5670	0.4875	10000	9498	ug/L	-5	10	
Molybdenum	A	0.2287	0.2158	100.0	93.94	ug/L	-6	10	
Potassium	A	2.6193	0.7277	10000	9826	ug/L	-2	10	
Silver	A	0.3775	0.3669	100.0	98.89	ug/L	-1	10	
Thallium	A	0.9926	0.8451	50.00	45.45	ug/L	-9	10	
Arsenic	E	0.6694	0.6037	100.0	95.89	ug/L	-4	10	
Chromium	E	3.9606	2.9803	100.0	94.69	ug/L	-5	10	
Cobalt	E	5.2523	4.6639	100.0	93.80	ug/L	-6	10	
Copper	E	18.627	6.9712	100.0	91.33	ug/L	-9	10	
Manganese	E	1.6999	1.5408	100.0	97.43	ug/L	-3	10	
Nickel	E	1.5990	1.2501	100.0	94.28	ug/L	-6	10	
Sodium	E	2.2382	0.5894	10000	9361	ug/L	-6	10	
Vanadium	E	3.6502	2.3835	100.0	93.61	ug/L	-6	10	
Zinc	E	1.6951	0.9981	100.0	94.20	ug/L	-6	10	
Iron	H	0.9188	0.8375	10000	9771	ug/L	-2	10	
Selenium	H	0.1497	0.1435	100.0	97.43	ug/L	-3	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	697049	-19.53
Scandium	A	1225387	1054892	-13.91
Scandium	E	42775	38926	-9.00
Scandium	H	471271	405477	-13.96
Germanium	H	103809	88190	-15.05
Germanium	E	20261	18392	-9.22
Indium	A	1498516	1287430	-14.09
Bismuth	A	1439041	1148437	-20.19
Yttrium	A	1503435	1346100	-10.47
Terbium	A	2154806	1888941	-12.34

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350198 File : c06m0198 Time : 07-MAR-2007 06:15
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6829	0.5916	10000	9331	ug/L	-7	10	
Antimony	A	0.3026	0.2979	100.0	98.69	ug/L	-1	10	
Barium	A	0.1011	0.0818	100.0	101.5	ug/L	2	10	
Beryllium	A	0.3039	0.2864	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0899	0.0830	100.0	97.00	ug/L	-3	10	
Calcium	A	0.0364	0.0214	10000	9744	ug/L	-3	10	
Lead	A	0.8706	0.6993	100.0	95.67	ug/L	-4	10	
Magnesium	A	0.5670	0.4818	10000	9386	ug/L	-6	10	
Molybdenum	A	0.2287	0.2146	100.0	93.40	ug/L	-7	10	
Potassium	A	2.6193	0.7242	10000	9778	ug/L	-2	10	
Silver	A	0.3775	0.3662	100.0	98.70	ug/L	-1	10	
Thallium	A	0.9926	0.8433	50.00	45.35	ug/L	-9	10	
Arsenic	E	0.6694	0.6011	100.0	95.48	ug/L	-5	10	
Chromium	E	3.9606	2.9767	100.0	94.58	ug/L	-5	10	
Cobalt	E	5.2523	4.6705	100.0	93.93	ug/L	-6	10	
Copper	E	18.627	6.9432	100.0	90.96	ug/L	-9	10	
Manganese	E	1.6999	1.5428	100.0	97.56	ug/L	-2	10	
Nickel	E	1.5990	1.2518	100.0	94.41	ug/L	-6	10	
Sodium	E	2.2382	0.5831	10000	9260	ug/L	-7	10	
Vanadium	E	3.6502	2.3867	100.0	93.74	ug/L	-6	10	
Zinc	E	1.6951	0.9938	100.0	93.78	ug/L	-6	10	
Iron	H	0.9188	0.8256	10000	9632	ug/L	-4	10	
Selenium	H	0.1497	0.1427	100.0	96.93	ug/L	-3	10	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	684104	-21.03
Scandium	A	1225387	1061346	-13.39
Scandium	E	42775	38791	-9.31
Scandium	H	471271	408779	-13.26
Germanium	H	103809	88636	-14.62
Germanium	E	20261	18450	-8.94
Indium	A	1498516	1298408	-13.35
Bismuth	A	1439041	1148757	-20.17
Yttrium	A	1503435	1363635	-9.30
Terbium	A	2154806	1891964	-12.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67094350017 File : c06m0017
Cal : 67094350001 Caldate: 06-MAR-2007
IDF : 1.0
Time : 06-MAR-2007 13:56

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03162]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03350]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.402]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005044]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.002000]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.08943]	0.5000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006677]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	914181	5.53
Scandium	A	1225387	1274613	4.02
Scandium	E	42775	45908	7.32
Scandium	H	471271	496356	5.32
Germanium	H	103809	108463	4.48
Germanium	E	20261	21792	7.56
Indium	A	1498516	1574042	5.04
Bismuth	A	1439041	1480921	2.91
Yttrium	A	1503435	1571215	4.51
Terbium	A	2154806	2246343	4.25

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350040 File : c06m0040 Time : 06-MAR-2007 16:03
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01698]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02235]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01962]	0.5000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	886068	2.29
Scandium	A	1225387	1235007	0.79
Scandium	E	42775	46269	8.17
Scandium	H	471271	502521	6.63
Germanium	H	103809	108752	4.76
Germanium	E	20261	21743	7.32
Indium	A	1498516	1540916	2.83
Bismuth	A	1439041	1416581	-1.56
Yttrium	A	1503435	1542612	2.61
Terbium	A	2154806	2181682	1.25

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350058 File : c06m0058 Time : 06-MAR-2007 17:40
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01646]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01774]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02970]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01781]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03179]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02958]	0.1000	0.001252	ug/L	!ib
Sodium	E	[8.218]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.1039]	0.5000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.04383]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	885643	2.24
Scandium	A	1225387	1225278	-0.01
Scandium	E	42775	46970	9.81
Scandium	H	471271	488154	3.58
Germanium	H	103809	107782	3.83
Germanium	E	20261	22189	9.52
Indium	A	1498516	1516549	1.20
Bismuth	A	1439041	1394793	-3.07
Yttrium	A	1503435	1529557	1.74
Terbium	A	2154806	2150239	-0.21

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67094350076 File : c06m0076 IDF : 1.0
Cal : 67094350001 Caldate: 06-MAR-2007 Time : 06-MAR-2007 19:20

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002957]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	875937	1.12
Scandium	A	1225387	1216266	-0.74
Scandium	E	42775	46652	9.06
Scandium	H	471271	473470	0.47
Germanium	H	103809	104576	0.74
Germanium	E	20261	22048	8.82
Indium	A	1498516	1512282	0.92
Bismuth	A	1439041	1380653	-4.06
Yttrium	A	1503435	1530165	1.78
Terbium	A	2154806	2138963	-0.74

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350095 File : c06m0095 Time : 06-MAR-2007 21:02
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.06041]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.05918]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[9.421]	10.00	3.328	ug/L	!ib
Molybdenum	A	[0.07521]	0.1000	0.07293	ug/L	!ib
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05989]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05057]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06015]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04700]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01301]	0.5000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.05651]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	814418	-5.98
Scandium	A	1225387	1152498	-5.95
Scandium	E	42775	43752	2.28
Scandium	H	471271	446277	-5.30
Germanium	H	103809	99348	-4.30
Germanium	E	20261	20870	3.01
Indium	A	1498516	1472193	-1.76
Bismuth	A	1439041	1342849	-6.68
Yttrium	A	1503435	1473366	-2.00
Terbium	A	2154806	2067032	-4.07

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350120 File : c06m0120 Time : 06-MAR-2007 23:17
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03316]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03132]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.240]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04734]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02672]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05065]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04136]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01244]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	759177	-12.36
Scandium	A	1225387	1095661	-10.59
Scandium	E	42775	41996	-1.82
Scandium	H	471271	430606	-8.63
Germanium	H	103809	95523	-7.98
Germanium	E	20261	20160	-0.50
Indium	A	1498516	1392116	-7.10
Bismuth	A	1439041	1281374	-10.96
Yttrium	A	1503435	1416865	-5.76
Terbium	A	2154806	1970336	-8.56

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350139 File : c06m0139 Time : 07-MAR-2007 00:58
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.009822]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.003756]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[5.270]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002703]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	769553	-11.16
Scandium	A	1225387	1107620	-9.61
Scandium	E	42775	41122	-3.86
Scandium	H	471271	424049	-10.02
Germanium	H	103809	93889	-9.56
Germanium	E	20261	19709	-2.72
Indium	A	1498516	1399104	-6.63
Bismuth	A	1439041	1284160	-10.76
Yttrium	A	1503435	1412039	-6.08
Terbium	A	2154806	1967230	-8.71

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67094350149 File : c06m0149 IDF : 1.0
Cal : 67094350001 Caldate: 06-MAR-2007 Time : 07-MAR-2007 01:51

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01294]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.007657]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	761153	-12.13
Scandium	A	1225387	1083834	-11.55
Scandium	E	42775	40911	-4.36
Scandium	H	471271	419971	-10.89
Germanium	H	103809	93203	-10.22
Germanium	E	20261	19921	-1.68
Indium	A	1498516	1384267	-7.62
Bismuth	A	1439041	1267577	-11.92
Yttrium	A	1503435	1396728	-7.10
Terbium	A	2154806	1935478	-10.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350171 File : c06m0171 Time : 07-MAR-2007 03:49
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002761]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01147]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008519]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01130]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01204]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	693241	-19.97
Scandium	A	1225387	1029122	-16.02
Scandium	E	42775	38438	-10.14
Scandium	H	471271	401933	-14.71
Germanium	H	103809	89305	-13.97
Germanium	E	20261	18566	-8.36
Indium	A	1498516	1319412	-11.95
Bismuth	A	1439041	1210504	-15.88
Yttrium	A	1503435	1336398	-11.11
Terbium	A	2154806	1856299	-13.85

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350191 File : c06m0191 Time : 07-MAR-2007 05:38
Cal : 67094350001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.004790]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008691]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.006410]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005626]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	697857	-19.44
Scandium	A	1225387	1025944	-16.28
Scandium	E	42775	39004	-8.82
Scandium	H	471271	388919	-17.47
Germanium	H	103809	86655	-16.52
Germanium	E	20261	18568	-8.35
Indium	A	1498516	1306706	-12.80
Bismuth	A	1439041	1213467	-15.68
Yttrium	A	1503435	1333173	-11.32
Terbium	A	2154806	1837104	-14.74

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67094350200 File : c06m0200
Cal : 67094350001 Caldate: 06-MAR-2007
IDF : 1.0
Time : 07-MAR-2007 06:26

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006103]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01194]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01541]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02701]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02083]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.01127	ug/L	
Iron	H	[5.206]	10.00	4.329	ug/L	!ib
Selenium	H	[0.06566]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	687797	-20.60
Scandium	A	1225387	1033815	-15.63
Scandium	E	42775	38746	-9.42
Scandium	H	471271	398317	-15.48
Germanium	H	103809	88867	-14.39
Germanium	E	20261	18753	-7.44
Indium	A	1498516	1332082	-11.11
Bismuth	A	1439041	1213117	-15.70
Yttrium	A	1503435	1346625	-10.43
Terbium	A	2154806	1847725	-14.25

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350018 File : c06m0018 Time : 06-MAR-2007 14:02
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07953]	0.1000	ug/L	
Barium	A	1.025	0.1000	ug/L	
Beryllium	A	[0.03487]	0.1000	ug/L	
Cadmium	A	1.521	0.1000	ug/L	
Lead	A	0.4665	0.1000	ug/L	
Silver	A	0.2064	0.1000	ug/L	
Thallium	A	[0.02715]	0.05000	ug/L	
Arsenic	E	0.3070	0.1000	ug/L	
Chromium	E	1.406	0.1000	ug/L	
Cobalt	E	0.2286	0.1000	ug/L	
Copper	E	1.425	0.1000	ug/L	
Manganese	E	0.7742	0.1000	ug/L	
Nickel	E	1.344	0.1000	ug/L	
Vanadium	E	[0.09256]	0.1000	ug/L	
Zinc	E	1.575	0.5000	ug/L	
Selenium	H	[0.07819]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95300	ug/L	95
Calcium	A	300000	302200	ug/L	101
Magnesium	A	100000	93560	ug/L	94
Molybdenum	A	2000	2002	ug/L	100
Potassium	A	100000	98530	ug/L	99
Sodium	E	250000	252600	ug/L	101
Iron	H	250000	232300	ug/L	93

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	649431	-25.03
Scandium	A	1225387	1147410	-6.36
Scandium	E	42775	41000	-4.15
Scandium	H	471271	475870	0.98
Germanium	H	103809	92593	-10.80
Germanium	E	20261	18694	-7.73
Indium	A	1498516	1282992	-14.38
Bismuth	A	1439041	1138544	-20.88
Yttrium	A	1503435	1409472	-6.25
Terbium	A	2154806	2050221	-4.85

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350019 File : c06m0019 Time : 06-MAR-2007 14:07
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99920	ug/L	0		
Cadmium	A	100.0	101.3	ug/L	1	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	96440	ug/L	-4		
Molybdenum	A	2000	2076	ug/L	4		
Potassium	A	100000	102700	ug/L	3		
Silver	A	50.00	45.49	ug/L	-9	20	
Arsenic	E	100.0	106.4	ug/L	6	20	
Chromium	E	200.0	207.5	ug/L	4	20	
Cobalt	E	200.0	192.9	ug/L	-4	20	
Copper	E	200.0	183.7	ug/L	-8	20	
Manganese	E	200.0	205.2	ug/L	3	20	
Nickel	E	200.0	189.7	ug/L	-5	20	
Sodium	E	250000	270100	ug/L	8		
Vanadium	E	200.0	212.2	ug/L	6	20	
Zinc	E	100.0	91.60	ug/L	-8	20	
Iron	H	250000	246000	ug/L	-2		
Selenium	H	100.0	101.5	ug/L	2	20	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	471271	462252	-1.91
Scandium	A	1225387	1126570	-8.06
Scandium	E	42775	39319	-8.08
Germanium	H	103809	90448	-12.87
Germanium	E	20261	17981	-11.25
Indium	A	1498516	1273622	-15.01
Yttrium	A	1503435	1395881	-7.15

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350080 File : c06m0080 Time : 06-MAR-2007 19:42
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06121]	0.1000	ug/L	
Barium	A	1.087	0.1000	ug/L	
Beryllium	A	[0.03432]	0.1000	ug/L	
Cadmium	A	1.567	0.1000	ug/L	
Lead	A	0.4374	0.1000	ug/L	
Silver	A	0.2051	0.1000	ug/L	
Thallium	A	[0.01866]	0.05000	ug/L	
Arsenic	E	0.3063	0.1000	ug/L	
Chromium	E	1.477	0.1000	ug/L	
Cobalt	E	0.2208	0.1000	ug/L	
Copper	E	1.254	0.1000	ug/L	
Manganese	E	0.8781	0.1000	ug/L	
Nickel	E	1.192	0.1000	ug/L	
Vanadium	E	0.1037	0.1000	ug/L	
Zinc	E	1.619	0.5000	ug/L	
Selenium	H	[0.05616]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92520	ug/L	93
Calcium	A	300000	294200	ug/L	98
Magnesium	A	100000	89490	ug/L	89
Molybdenum	A	2000	1932	ug/L	97
Potassium	A	100000	95690	ug/L	96
Sodium	E	250000	246400	ug/L	99
Iron	H	250000	233600	ug/L	93

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	635056	-26.69
Scandium	A	1225387	1141161	-6.87
Scandium	E	42775	41332	-3.37
Scandium	H	471271	445407	-5.49
Germanium	H	103809	87827	-15.40
Germanium	E	20261	19020	-6.12
Indium	A	1498516	1298143	-13.37
Bismuth	A	1439041	1100035	-23.56
Yttrium	A	1503435	1433196	-4.67
Terbium	A	2154806	2034425	-5.59

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350081 File : c06m0081 Time : 06-MAR-2007 19:47
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97140	ug/L	-3		
Cadmium	A	100.0	98.36	ug/L	-2	20	
Calcium	A	300000	310500	ug/L	4		
Magnesium	A	100000	94080	ug/L	-6		
Molybdenum	A	2000	2043	ug/L	2		
Potassium	A	100000	101000	ug/L	1		
Silver	A	50.00	44.22	ug/L	-12	20	
Arsenic	E	100.0	101.3	ug/L	1	20	
Chromium	E	200.0	200.2	ug/L	0	20	
Cobalt	E	200.0	185.0	ug/L	-8	20	
Copper	E	200.0	174.6	ug/L	-13	20	
Manganese	E	200.0	200.5	ug/L	0	20	
Nickel	E	200.0	181.9	ug/L	-9	20	
Sodium	E	250000	262100	ug/L	5		
Vanadium	E	200.0	205.3	ug/L	3	20	
Zinc	E	100.0	87.11	ug/L	-13	20	
Iron	H	250000	243100	ug/L	-3		
Selenium	H	100.0	97.88	ug/L	-2	20	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	471271	443365	-5.92
Scandium	A	1225387	1083900	-11.55
Scandium	E	42775	39145	-8.49
Germanium	H	103809	88050	-15.18
Germanium	E	20261	18147	-10.43
Indium	A	1498516	1260016	-15.92
Yttrium	A	1503435	1372371	-8.72

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350098 File : c06m0098 Time : 06-MAR-2007 21:18
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05823]	0.1000	ug/L	
Barium	A	1.074	0.1000	ug/L	
Beryllium	A	[0.02272]	0.1000	ug/L	
Cadmium	A	1.668	0.1000	ug/L	
Lead	A	0.4292	0.1000	ug/L	
Silver	A	0.1981	0.1000	ug/L	
Thallium	A	[0.01920]	0.05000	ug/L	
Arsenic	E	0.2853	0.1000	ug/L	
Chromium	E	1.367	0.1000	ug/L	
Cobalt	E	0.2284	0.1000	ug/L	
Copper	E	1.082	0.1000	ug/L	
Manganese	E	0.8342	0.1000	ug/L	
Nickel	E	1.196	0.1000	ug/L	
Vanadium	E	[0.08951]	0.1000	ug/L	
Zinc	E	1.578	0.5000	ug/L	
Selenium	H	[0.05559]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94180	ug/L	94
Calcium	A	300000	297800	ug/L	99
Magnesium	A	100000	91100	ug/L	91
Molybdenum	A	2000	1960	ug/L	98
Potassium	A	100000	97110	ug/L	97
Sodium	E	250000	244600	ug/L	98
Iron	H	250000	233900	ug/L	94

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	601658	-30.54
Scandium	A	1225387	1055722	-13.85
Scandium	E	42775	38895	-9.07
Scandium	H	471271	422062	-10.44
Germanium	H	103809	83780	-19.29
Germanium	E	20261	18019	-11.06
Indium	A	1498516	1227555	-18.08
Bismuth	A	1439041	1011984	-29.68
Yttrium	A	1503435	1340405	-10.84
Terbium	A	2154806	1924619	-10.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350101 File : c06m0101 Time : 06-MAR-2007 21:36
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95390	ug/L	-5		
Cadmium	A	100.0	97.15	ug/L	-3	20	
Calcium	A	300000	305200	ug/L	2		
Magnesium	A	100000	92360	ug/L	-8		
Molybdenum	A	2000	2018	ug/L	1		
Potassium	A	100000	99950	ug/L	0		
Silver	A	50.00	43.58	ug/L	-13	20	
Arsenic	E	100.0	99.63	ug/L	0	20	
Chromium	E	200.0	195.6	ug/L	-2	20	
Cobalt	E	200.0	182.1	ug/L	-9	20	
Copper	E	200.0	171.4	ug/L	-14	20	
Manganese	E	200.0	197.2	ug/L	-1	20	
Nickel	E	200.0	177.9	ug/L	-11	20	
Sodium	E	250000	254000	ug/L	2		
Vanadium	E	200.0	200.6	ug/L	0	20	
Zinc	E	100.0	85.24	ug/L	-15	20	
Iron	H	250000	241400	ug/L	-3		
Selenium	H	100.0	97.30	ug/L	-3	20	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	471271	419872	-10.91
Scandium	A	1225387	1038093	-15.28
Scandium	E	42775	38119	-10.89
Germanium	H	103809	83825	-19.25
Germanium	E	20261	17595	-13.16
Indium	A	1498516	1218377	-18.69
Yttrium	A	1503435	1326954	-11.74

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350151 File : c06m0151 Time : 07-MAR-2007 02:02
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04987]	0.1000	ug/L	
Barium	A	1.074	0.1000	ug/L	
Beryllium	A	[0.02832]	0.1000	ug/L	
Cadmium	A	1.585	0.1000	ug/L	
Lead	A	0.4166	0.1000	ug/L	
Silver	A	0.2020	0.1000	ug/L	
Thallium	A	[0.02119]	0.05000	ug/L	
Arsenic	E	0.2836	0.1000	ug/L	
Chromium	E	1.349	0.1000	ug/L	
Cobalt	E	0.2195	0.1000	ug/L	
Copper	E	1.215	0.1000	ug/L	
Manganese	E	0.8498	0.1000	ug/L	
Nickel	E	1.230	0.1000	ug/L	
Vanadium	E	[0.08761]	0.1000	ug/L	
Zinc	E	1.522	0.5000	ug/L	
Selenium	H	[0.07327]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93120	ug/L	93
Calcium	A	300000	293800	ug/L	98
Magnesium	A	100000	90210	ug/L	90
Molybdenum	A	2000	1914	ug/L	96
Potassium	A	100000	96880	ug/L	97
Sodium	E	250000	241800	ug/L	97
Iron	H	250000	231700	ug/L	93

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	566136	-34.65
Scandium	A	1225387	1002313	-18.20
Scandium	E	42775	36867	-13.81
Scandium	H	471271	397759	-15.60
Germanium	H	103809	79457	-23.46
Germanium	E	20261	17051	-15.84
Indium	A	1498516	1177877	-21.40
Bismuth	A	1439041	967849	-32.74
Yttrium	A	1503435	1287364	-14.37
Terbium	A	2154806	1844800	-14.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350152 File : c06m0152 Time : 07-MAR-2007 02:07
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96210	ug/L	-4		
Cadmium	A	100.0	97.21	ug/L	-3	20	
Calcium	A	300000	306600	ug/L	2		
Magnesium	A	100000	93110	ug/L	-7		
Molybdenum	A	2000	1995	ug/L	0		
Potassium	A	100000	101200	ug/L	1		
Silver	A	50.00	43.55	ug/L	-13	20	
Arsenic	E	100.0	101.5	ug/L	2	20	
Chromium	E	200.0	197.2	ug/L	-1	20	
Cobalt	E	200.0	184.0	ug/L	-8	20	
Copper	E	200.0	173.7	ug/L	-13	20	
Manganese	E	200.0	199.6	ug/L	0	20	
Nickel	E	200.0	180.4	ug/L	-10	20	
Sodium	E	250000	254100	ug/L	2		
Vanadium	E	200.0	202.5	ug/L	1	20	
Zinc	E	100.0	86.43	ug/L	-14	20	
Iron	H	250000	241300	ug/L	-3		
Selenium	H	100.0	98.03	ug/L	-2	20	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	471271	390912	-17.05
Scandium	A	1225387	968270	-20.98
Scandium	E	42775	35524	-16.95
Germanium	H	103809	77920	-24.94
Germanium	E	20261	16392	-19.09
Indium	A	1498516	1151368	-23.17
Yttrium	A	1503435	1261448	-16.10

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350203 File : c06m0203 Time : 07-MAR-2007 06:42
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05569]	0.1000	ug/L	
Barium	A	1.095	0.1000	ug/L	
Beryllium	A	[0.02680]	0.1000	ug/L	
Cadmium	A	1.668	0.1000	ug/L	
Lead	A	0.4336	0.1000	ug/L	
Silver	A	0.1969	0.1000	ug/L	
Thallium	A	[0.02297]	0.05000	ug/L	
Arsenic	E	0.2674	0.1000	ug/L	
Chromium	E	1.333	0.1000	ug/L	
Cobalt	E	0.2210	0.1000	ug/L	
Copper	E	1.319	0.1000	ug/L	
Manganese	E	0.8337	0.1000	ug/L	
Nickel	E	1.251	0.1000	ug/L	
Vanadium	E	[0.08308]	0.1000	ug/L	
Zinc	E	1.554	0.5000	ug/L	
Selenium	H	[0.08553]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92910	ug/L	93
Calcium	A	300000	295800	ug/L	99
Magnesium	A	100000	89700	ug/L	90
Molybdenum	A	2000	1917	ug/L	96
Potassium	A	100000	97550	ug/L	98
Sodium	E	250000	235000	ug/L	94
Iron	H	250000	224100	ug/L	90

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	866254	519970	-39.97
Scandium	A	1225387	931946	-23.95
Scandium	E	42775	34925	-18.35
Scandium	H	471271	377361	-19.93
Germanium	H	103809	75386	-27.38
Germanium	E	20261	16119	-20.44
Indium	A	1498516	1114870	-25.60
Bismuth	A	1439041	908265	-36.88
Yttrium	A	1503435	1217489	-19.02
Terbium	A	2154806	1716795	-20.33

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67094350204 File : c06m0204 Time : 07-MAR-2007 06:48
Cal : 67094350001 Caldate: 06-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94850	ug/L	-5		
Cadmium	A	100.0	96.71	ug/L	-3	20	
Calcium	A	300000	304400	ug/L	1		
Magnesium	A	100000	91450	ug/L	-9		
Molybdenum	A	2000	1990	ug/L	-1		
Potassium	A	100000	100400	ug/L	0		
Silver	A	50.00	43.41	ug/L	-13	20	
Arsenic	E	100.0	99.20	ug/L	-1	20	
Chromium	E	200.0	194.5	ug/L	-3	20	
Cobalt	E	200.0	181.3	ug/L	-9	20	
Copper	E	200.0	170.7	ug/L	-15	20	
Manganese	E	200.0	197.0	ug/L	-2	20	
Nickel	E	200.0	177.2	ug/L	-11	20	
Sodium	E	250000	248800	ug/L	0		
Vanadium	E	200.0	199.2	ug/L	0	20	
Zinc	E	100.0	84.87	ug/L	-15	20	
Iron	H	250000	233300	ug/L	-7		
Selenium	H	100.0	94.81	ug/L	-5	20	

ISTD (ICALBLK c06m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	471271	371070	-21.26
Scandium	A	1225387	900304	-26.53
Scandium	E	42775	33501	-21.68
Germanium	H	103809	74512	-28.22
Germanium	E	20261	15539	-23.30
Indium	A	1498516	1087621	-27.42
Yttrium	A	1503435	1183508	-21.28

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 06-MAR-2007 ICALBLK Filename: c06m0004
Sequence: 67094350 (c06m0) Date Analyzed: 06-MAR-2007
Instrument ID: MET06 Time Analyzed: 12:48

	IS1 (LI) READING	IS2 (SC) READING	IS3 (IN) READING	IS4 (BI) READING	IS5 (Y) READING	IS6 (TB) READING
ICALBLK STD	866254	1225387	1498516	1439041	1503435	2154806
LOWER LIMIT	259876	367616	449555	431712	451031	646442
UPPER LIMIT	1039504	1470464	1798219	1726849	1804122	2585767

TYPE	SAMPLE	#						
ICB		017	914181	1274613	1574042	1480921	1571215	2246343
ICSA		018	649431	1147410	1282992	1138544	1409472	2050221
BLANK	QC377671	025	795381	1154533	1396804	1303066	1448197	2079177
BS	QC377672	026	763815	1160731	1365183	1236699	1443868	2081175
BSD	QC377673	027	752623	1161672	1359183	1227786	1419461	2041946
SAMPLE	193068-001	029	854652	1251122	1496944	1363620	1538121	2168427
SAMPLE	193068-002	030	848669	1257367	1467507	1330043	1505164	2154213
SAMPLE	193068-003	031	848878	1263851	1453298	1320074	1503353	2140405
MSS	192915-003	033	812982	1277429	1443131	1298956	1523044	2118574
CCV		037	854504	1247163	1479308	1318039	1542236	2180006
CCB		040	886068	1235007	1540916	1416581	1542612	2181682
MS	QC377674	045	837789	1332551	1488875	1334260	1576053	2185281
MSD	QC377675	046	829572	1305302	1453912	1297977	1546283	2159236
PDS	QC377677	047	807969	1300468	1427818	1274817	1557303	2154277
SAMPLE	192974-001	048	851374	1235326	1523342	1383234	1535735	2164871
SAMPLE	193068-001	049	866403	1268657	1513523	1378400	1544824	2199572
SAMPLE	192915-001	051	784161	1258061	1377356	1131184	1492705	2060880
CCV		055	853485	1239314	1473836	1307427	1542955	2184932
CCB		058	885643	1225278	1516549	1394793	1529557	2150239
SAMPLE	192974-001	060	868087	1255991	1523775	1381021	1551168	2163979
MSS	192915-003	061	862390	1248946	1507599	1348350	1539872	2159205
SER	QC377676	062	883375	1247422	1537906	1385884	1545746	2182523
MS	QC377674	063	875409	1262085	1524340	1366311	1561500	2200558
MSD	QC377675	064	862576	1262050	1513519	1363573	1558499	2179984
PDS	QC377677	065	842596	1272613	1467875	1300532	1551817	2181692
MSS	192915-003	066	822086	1293280	1476252	1306035	1557628	2159490
SER	QC377676	067	848270	1260995	1530258	1369739	1567071	2196716
SAMPLE	192915-002	068	750413	1275268	1370178	1107156	1484400	2070823

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 06-MAR-2007
Sequence: 67094350 (c06m0)
Instrument ID: MET06

ICALBLK Filename: c06m0004
Date Analyzed: 06-MAR-2007
Time Analyzed: 12:48

TYPE	SAMPLE	#							
SAMPLE	192915-004	069	821279	1281117	1459800	1273501	1529642	2122278	4
CCV		073	853798	1255293	1484356	1311145	1554160	2177053	4
CCB		076	875937	1216266	1512282	1380653	1530165	2138963	4
SAMPLE	192915-005	078	810808	1215601	1413878	1243318	1491700	2081337	4
SAMPLE	192915-006	079	788721	1228276	1383939	1175883	1487996	2059536	4
ICSA		080	635056	1141161	1298143	1100035	1433196	2034425	4
SAMPLE	192915-007	085	740668	1189587	1366835	1154842	1471118	2036047	4
SAMPLE	192915-008	086	735959	1152924	1353097	1141474	1430533	2000101	4
SAMPLE	192915-010	087	733327	1157759	1365619	1191789	1427683	1993215	4
SAMPLE	192954-001	088	739824	1113223	1355607	1189839	1401089	1970474	4
SAMPLE	192954-002	089	764021	1127560	1401838	1241160	1423422	1999623	4
CCV		093	784367	1143143	1398503	1233888	1454006	2041096	4
CCB		095	814418	1152498	1472193	1342849	1473366	2067032	4
ICSA		098	601658	1055722	1227555	1011984	1340405	1924619	3
BLANK	QC377787	106	697193	1073181	1379219	1254307	1411207	1970395	4
BS	QC377788	107	657726	1054104	1296062	1134753	1362256	1908380	3
BSD	QC377789	108	659504	1055195	1284582	1137389	1343778	1895165	3
MSS	193055-001	110	735770	1108844	1383931	1235270	1409494	1975491	4
SER	QC377792	111	746741	1098174	1387160	1253889	1410675	1972802	4
MS	QC377790	112	736890	1118239	1381460	1230186	1410883	1981797	4
MSD	QC377791	113	729748	1103799	1352564	1203570	1395955	1945304	4
PDS	QC377793	114	714439	1105587	1331332	1174677	1397713	1961528	3
CCV		118	742233	1120737	1360619	1205573	1415314	2000110	4
CCB		120	759177	1095661	1392116	1281374	1416865	1970336	4
SAMPLE	193055-002	123	733714	1088103	1340494	1201792	1376269	1929606	4
SAMPLE	193055-003	124	741312	1088217	1344178	1198661	1377274	1932921	4
SAMPLE	193055-004	125	730729	1082243	1329270	1197435	1362863	1906278	4
SAMPLE	193055-005	126	738368	1076711	1345259	1207409	1376544	1921983	4
SAMPLE	193055-006	127	739616	1094336	1334003	1214587	1374347	1944046	4
SAMPLE	193055-007	128	736481	1082488	1343911	1208013	1376332	1933379	4
SAMPLE	193055-008	129	742331	1103855	1330737	1180899	1379344	1938963	4
SAMPLE	193055-009	130	765099	1130988	1329780	1169202	1397395	1957208	4
SAMPLE	193055-010	131	770820	1123705	1336791	1199334	1402182	1973048	4
SAMPLE	193055-011	132	780489	1152555	1345006	1176925	1423117	1975869	4

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 06-MAR-2007
Sequence: 67094350 (c06m0)
Instrument ID: MET06

ICALBLK Filename: c06m0004
Date Analyzed: 06-MAR-2007
Time Analyzed: 12:48

TYPE	SAMPLE	#							
CCV		136	756102	1116143	1353481	1203843	1403752	1978965	4
CCB		139	769553	1107620	1399104	1284160	1412039	1967230	4
SAMPLE	193055-012	141	771951	1133459	1340143	1164713	1415796	1981234	4
SAMPLE	193055-013	142	764587	1114975	1311637	1156518	1385140	1926406	4
CCV		146	752181	1135322	1367365	1200532	1435419	1995518	4
CCB		149	761153	1083834	1384267	1267577	1396728	1935478	4
ICSA		151	566136	1002313	1177877	967849	1287364	1844800	3
BLANK	QC377794	157	546679	897856	1139069	1049781	1194686	1689276	3
BS	QC377795	158	603770	989948	1228137	1088922	1290397	1808813	3
BSD	QC377796	159	610017	1000477	1234054	1098946	1299335	1829950	3
MSS	193055-021	161	668458	1032889	1311721	1190734	1334126	1860140	3
SER	QC377799	162	684033	1032468	1324350	1203967	1339990	1862243	3
MS	QC377797	163	653488	1013000	1274205	1150421	1310575	1822867	3
MSD	QC377798	164	664095	1022615	1293231	1155998	1330831	1850107	3
PDS	QC377800	165	657681	1033528	1253386	1123648	1323927	1851980	3
CCV		169	674029	1037673	1286374	1137693	1342151	1866008	3
CCB		171	693241	1029122	1319412	1210504	1336398	1856299	3
SAMPLE	193055-014	174	679806	1025151	1273959	1120015	1318449	1832523	3
SAMPLE	193055-016	175	671314	1011841	1262947	1142484	1306369	1824688	3
SAMPLE	193055-017	176	664285	1012828	1260315	1132361	1289164	1806067	3
SAMPLE	193055-018	177	671810	1018792	1254634	1130569	1300204	1812525	3
SAMPLE	193055-019	178	661759	1021627	1275659	1145910	1301370	1821272	3
SAMPLE	193055-020	179	660621	999404	1249339	1125623	1282590	1775666	3
SAMPLE	193055-022	180	667796	1014829	1271623	1142910	1307217	1818186	3
SAMPLE	193055-023	181	677777	1010495	1256595	1136178	1301682	1820292	3
SAMPLE	193055-024	182	669065	1007904	1255669	1139100	1295359	1791120	3
SAMPLE	193055-025	185	665477	1008467	1238310	1108053	1286315	1792276	3
CCV		189	697049	1054892	1287430	1148437	1346100	1888941	3
CCB		191	697857	1025944	1306706	1213467	1333173	1837104	3
SAMPLE	193055-026	194	659350	1009361	1256329	1144826	1295019	1808483	3
CCV		198	684104	1061346	1298408	1148757	1363635	1891964	3
CCB		200	687797	1033815	1332082	1213117	1346625	1847725	3
ICSA		203	519970	931946	1114870	908265	1217489	1716795	3

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	c06m0001	TUN				06-MAR-2007 12:30	1.0	1.0			1	
002	c06m0002	X	RINSE			06-MAR-2007 12:38	1.0				2	
003	c06m0003	X	RINSE			06-MAR-2007 12:43	1.0				2	
004	c06m0004	ICALBLK	CALBLANK			06-MAR-2007 12:48	1.0	1.0			2	
005	c06m0005	ICAL				06-MAR-2007 12:54	1.0	1.0			3	
006	c06m0006	ICAL				06-MAR-2007 12:59	1.0	1.0			4	
007	c06m0007	ICAL				06-MAR-2007 13:04	1.0	1.0			5	
008	c06m0008	ICAL				06-MAR-2007 13:09	1.0	1.0			6	
009	c06m0009	ICAL				06-MAR-2007 13:14	1.0	1.0			7	
010	c06m0010	ICAL				06-MAR-2007 13:19	1.0	1.0			8	
011	c06m0011	X	RINSE			06-MAR-2007 13:25	1.0				2	
012	c06m0012	X				06-MAR-2007 13:30	1.0				9 2	
013	c06m0013	X	RINSE			06-MAR-2007 13:35	1.0				2	
014	c06m0014	ICV				06-MAR-2007 13:40	1.0	1.0		1	9 2	
015	c06m0015	X	RINSE			06-MAR-2007 13:46	1.0				2	
016	c06m0016	X				06-MAR-2007 13:51	1.0				2	
017	c06m0017	ICB				06-MAR-2007 13:56	1.0	1.0		1	2	
018	c06m0018	ICSA				06-MAR-2007 14:02	1.0	1.0		1	10 2	7:CA=302200
019	c06m0019	ICSAB				06-MAR-2007 14:07	1.0	1.0		1	11 2	10:CA=315900
020	c06m0020	X	RINSE			06-MAR-2007 14:12	1.0				2	
021	c06m0021	X	RINSE			06-MAR-2007 14:18	1.0				2	
022	c06m0022	X	RINSE			06-MAR-2007 14:26	1.0				2	
023	c06m0023	X	RINSE			06-MAR-2007 14:31	1.0				2	
024	c06m0024	X	RINSE			06-MAR-2007 14:37	1.0				2	
025	c06m0025	BLANK	QC377671	122737	Water	06-MAR-2007 14:42	1.0	1.0		1	2	
026	c06m0026	BS	QC377672	122737	Water	06-MAR-2007 14:47	1.0	1.0		1	2	
027	c06m0027	BSD	QC377673	122737	Water	06-MAR-2007 14:53	1.0	1.0		1	2	
028	c06m0028	X	RINSE			06-MAR-2007 14:58	1.0				2	
029	c06m0029	SAMPLE	193068-001	122737	Water	06-MAR-2007 15:05	10.0	1.0	1	1	2	
030	c06m0030	SAMPLE	193068-002	122737	Water	06-MAR-2007 15:10	10.0	1.0		1	2	
031	c06m0031	SAMPLE	193068-003	122737	Water	06-MAR-2007 15:16	10.0	1.0		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c06m0032	XSAMPLE	WRONG SAMPLE	122737	Water	06-MAR-2007 15:21	10.0	1.0	3		1	2	3:ZN=421.500
033	c06m0033	MSS	192915-003	122737	Water	06-MAR-2007 15:26	10.0	1.0	1		1	2	1:CA=22530.0
034	c06m0034	X	RINSE			06-MAR-2007 15:31	1.0					2	
035	c06m0035	X	RINSE			06-MAR-2007 15:37	1.0					2	
036	c06m0036	X	RINSE			06-MAR-2007 15:42	1.0					2	
037	c06m0037	CCV				06-MAR-2007 15:47	1.0	1.0			1	12 2	
038	c06m0038	X	RINSE			06-MAR-2007 15:53	1.0					2	
039	c06m0039	X				06-MAR-2007 15:58	1.0	1.0	1		1	2	
040	c06m0040	CCB				06-MAR-2007 16:03	1.0	1.0			1	2	
041	c06m0041	X				06-MAR-2007 16:09	1.0					2	
042	c06m0042	XSAMPLE	WRONG SAMPLE	122737	Water	06-MAR-2007 16:14	50.0	1.0			1	2	
043	c06m0043	XSER	QC377676	122737	Water	06-MAR-2007 16:19	50.0	1.0		6	1	2	
044	c06m0044	XSAMPLE	192974-001	122737	Water	06-MAR-2007 16:25	50.0	1.0	1		1	2	
045	c06m0045	MS	QC377674	122737	Water	06-MAR-2007 16:30	10.0	1.0			1	2	1:CA=23490.0
046	c06m0046	MSD	QC377675	122737	Water	06-MAR-2007 16:36	10.0	1.0			1	2	1:CA=24080.0
047	c06m0047	PDS	QC377677	122737	Water	06-MAR-2007 16:41	10.0	1.0	1		1	13 14 2	2:CA=31890.(
048	c06m0048	SAMPLE	192974-001	122737	Water	06-MAR-2007 16:47	50.0	1.0			1	2	
049	c06m0049	SAMPLE	193068-001	122737	Water	06-MAR-2007 16:52	10.0	1.0	3		1	2	
050	c06m0050	XSAMPLE	WRONG SAMPLE	122737	Water	06-MAR-2007 16:58	10.0	1.0	3		1	2	3:ZN=418.400
051	c06m0051	SAMPLE	192915-001	122737	Water	06-MAR-2007 17:03	10.0	1.0			1	2	3:NA=542600
052	c06m0052	X	RINSE			06-MAR-2007 17:08	1.0					2	
053	c06m0053	X	RINSE			06-MAR-2007 17:13	1.0					2	
054	c06m0054	X	RINSE			06-MAR-2007 17:19	1.0					2	
055	c06m0055	CCV				06-MAR-2007 17:24	1.0	1.0			1	12 2	
056	c06m0056	X	RINSE			06-MAR-2007 17:29	1.0					2	
057	c06m0057	X				06-MAR-2007 17:35	1.0	1.0	2		1	2	
058	c06m0058	CCB				06-MAR-2007 17:40	1.0	1.0			1	2	
059	c06m0059	X				06-MAR-2007 17:45	1.0	1.0	4		1	2	
060	c06m0060	SAMPLE	192974-001	122737	Water	06-MAR-2007 17:51	10.0	1.0	2		1	2	2:ZN=217.900
061	c06m0061	MSS	192915-003	122737	Water	06-MAR-2007 17:56	50.0	1.0			1	2	
062	c06m0062	SER	QC377676	122737	Water	06-MAR-2007 18:01	250.0	1.0		1	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c06m0063	MS	QC377674	122737	Water	06-MAR-2007 18:06	50.0	1.0		1	1	2	
064	c06m0064	MSD	QC377675	122737	Water	06-MAR-2007 18:12	50.0	1.0		2	1	2	
065	c06m0065	PDS	QC377677	122737	Water	06-MAR-2007 18:22	50.0	1.0			1	13 14 2	
066	c06m0066	MSS	192915-003	122737	Water	06-MAR-2007 18:27	10.0	1.0	2		1	2	1:CA=23210.0
067	c06m0067	SER	QC377676	122737	Water	06-MAR-2007 18:33	50.0	1.0		3	1	2	
068	c06m0068	SAMPLE	192915-002	122737	Water	06-MAR-2007 18:38	10.0	1.0			1	2	4:NA=819200
069	c06m0069	SAMPLE	192915-004	122737	Water	06-MAR-2007 18:43	10.0	1.0			1	2	1:CA=20790.0
070	c06m0070	X	RINSE			06-MAR-2007 18:48	1.0					2	
071	c06m0071	X	RINSE			06-MAR-2007 18:54	1.0					2	
072	c06m0072	X	RINSE			06-MAR-2007 18:59	1.0					2	
073	c06m0073	CCV				06-MAR-2007 19:04	1.0	1.0			1	12 2	
074	c06m0074	X	RINSE			06-MAR-2007 19:10	1.0					2	
075	c06m0075	X				06-MAR-2007 19:15	1.0	1.0	1		1	2	
076	c06m0076	CCB				06-MAR-2007 19:20	1.0	1.0			1	2	
077	c06m0077	X				06-MAR-2007 19:26	1.0	1.0			1	2	
078	c06m0078	SAMPLE	192915-005	122737	Water	06-MAR-2007 19:31	10.0	1.0			1	2	1:NA=63410.0
079	c06m0079	SAMPLE	192915-006	122737	Water	06-MAR-2007 19:36	10.0	1.0			1	2	3:NA=182200
080	c06m0080	ICSA				06-MAR-2007 19:42	1.0	1.0			1	10 2	7:CA=294200
081	c06m0081	ICSAB				06-MAR-2007 19:47	1.0	1.0			1	11 2	10:CA=310500
082	c06m0082	X	RINSE			06-MAR-2007 19:52	1.0					2	
083	c06m0083	X	RINSE			06-MAR-2007 19:58	1.0					2	
084	c06m0084	X	RINSE			06-MAR-2007 20:03	1.0					2	
085	c06m0085	SAMPLE	192915-007	122737	Water	06-MAR-2007 20:08	10.0	1.0			1	2	3:NA=193700
086	c06m0086	SAMPLE	192915-008	122737	Water	06-MAR-2007 20:14	10.0	1.0			1	2	1:NA=174700
087	c06m0087	SAMPLE	192915-010	122737	Water	06-MAR-2007 20:19	10.0	1.0			1	2	2:CA=69090.0
088	c06m0088	SAMPLE	192954-001	122737	Water	06-MAR-2007 20:24	10.0	1.0			1	2	1:NA=69450.0
089	c06m0089	SAMPLE	192954-002	122737	Water	06-MAR-2007 20:30	10.0	1.0			1	2	
090	c06m0090	X	RINSE			06-MAR-2007 20:35	1.0					2	
091	c06m0091	X	RINSE			06-MAR-2007 20:40	1.0					2	
092	c06m0092	X	RINSE			06-MAR-2007 20:46	1.0					2	
093	c06m0093	CCV				06-MAR-2007 20:51	1.0	1.0			1	12 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: Pell Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c06m0094	X	RINSE			06-MAR-2007 20:57	1.0					2	
095	c06m0095	CCB				06-MAR-2007 21:02	1.0	1.0			1	2	
096	c06m0096	X				06-MAR-2007 21:08	1.0	1.0			1	2	
097	c06m0097	X				06-MAR-2007 21:13	1.0	1.0			1	2	
098	c06m0098	ICSA				06-MAR-2007 21:18	1.0	1.0			1	10 2	7:CA=297800
099	c06m0099	TUN				06-MAR-2007 21:22	1.0	1.0				1	
100	c06m0100	X	RINSE			06-MAR-2007 21:30	1.0					2	
101	c06m0101	ICSAB				06-MAR-2007 21:36	1.0	1.0			1	11 2	8:CA=305200
102	c06m0102	X	RINSE			06-MAR-2007 21:41	1.0					2	
103	c06m0103	X	RINSE			06-MAR-2007 21:46	1.0					2	
104	c06m0104	X	RINSE			06-MAR-2007 21:52	1.0					2	
105	c06m0105	X	RINSE			06-MAR-2007 21:57	1.0					2	
106	c06m0106	BLANK	QC377787	122768	Filtra	06-MAR-2007 22:02	1.0	1.0			1	2	
107	c06m0107	BS	QC377788	122768	Filtra	06-MAR-2007 22:08	1.0	1.0			1	2	
108	c06m0108	BSD	QC377789	122768	Filtra	06-MAR-2007 22:13	1.0	1.0			1	2	
109	c06m0109	X	RINSE			06-MAR-2007 22:19	1.0					2	
110	c06m0110	MSS	193055-001	122768	Filtra	06-MAR-2007 22:24	10.0	1.0			1	2	
111	c06m0111	SER	QC377792	122768	Filtra	06-MAR-2007 22:29	50.0	1.0		1	1	2	
112	c06m0112	MS	QC377790	122768	Filtra	06-MAR-2007 22:35	10.0	1.0			1	2	
113	c06m0113	MSD	QC377791	122768	Filtra	06-MAR-2007 22:40	10.0	1.0			1	2	
114	c06m0114	PDS	QC377793	122768	Filtra	06-MAR-2007 22:45	10.0	1.0			1	13 14 2	
115	c06m0115	X	RINSE			06-MAR-2007 22:50	1.0					2	
116	c06m0116	X	RINSE			06-MAR-2007 22:56	1.0					2	
117	c06m0117	X	RINSE			06-MAR-2007 23:01	1.0					2	
118	c06m0118	CCV				06-MAR-2007 23:06	1.0	1.0			1	12 2	
119	c06m0119	X	RINSE			06-MAR-2007 23:12	1.0					2	
120	c06m0120	CCB				06-MAR-2007 23:17	1.0	1.0			1	2	
121	c06m0121	X				06-MAR-2007 23:22	1.0	1.0			1	2	
122	c06m0122	X				06-MAR-2007 23:28	1.0	1.0			1	2	
123	c06m0123	SAMPLE	193055-002	122768	Filtra	06-MAR-2007 23:33	10.0	1.0			1	2	
124	c06m0124	SAMPLE	193055-003	122768	Filtra	06-MAR-2007 23:38	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c06m0125	SAMPLE	193055-004	122768	Filtra	06-MAR-2007 23:44	10.0	1.0			1	2	
126	c06m0126	SAMPLE	193055-005	122768	Filtra	06-MAR-2007 23:49	10.0	1.0			1	2	
127	c06m0127	SAMPLE	193055-006	122768	Filtra	06-MAR-2007 23:54	10.0	1.0			1	2	
128	c06m0128	SAMPLE	193055-007	122768	Filtra	06-MAR-2007 23:59	10.0	1.0			1	2	
129	c06m0129	SAMPLE	193055-008	122768	Filtra	07-MAR-2007 00:05	10.0	1.0			1	2	
130	c06m0130	SAMPLE	193055-009	122768	Filtra	07-MAR-2007 00:10	10.0	1.0	1		1	2	1:MG=48410.0
131	c06m0131	SAMPLE	193055-010	122768	Filtra	07-MAR-2007 00:15	10.0	1.0			1	2	
132	c06m0132	SAMPLE	193055-011	122768	Filtra	07-MAR-2007 00:21	10.0	1.0	2		1	2	2:MG=36950.0
133	c06m0133	X	RINSE			07-MAR-2007 00:26	1.0					2	
134	c06m0134	X	RINSE			07-MAR-2007 00:31	1.0					2	
135	c06m0135	X	RINSE			07-MAR-2007 00:37	1.0					2	
136	c06m0136	CCV				07-MAR-2007 00:42	1.0	1.0			1	12 2	
137	c06m0137	X	RINSE			07-MAR-2007 00:47	1.0					2	
138	c06m0138	X				07-MAR-2007 00:52	1.0	1.0	1		1	2	
139	c06m0139	CCB				07-MAR-2007 00:58	1.0	1.0			1	2	
140	c06m0140	X				07-MAR-2007 01:03	1.0	1.0			1	2	
141	c06m0141	SAMPLE	193055-012	122768	Filtra	07-MAR-2007 01:08	10.0	1.0	2		1	2	2:MG=41540.0
142	c06m0142	SAMPLE	193055-013	122768	Filtra	07-MAR-2007 01:14	10.0	1.0	2		1	2	2:MG=30530.0
143	c06m0143	X	RINSE			07-MAR-2007 01:19	1.0					2	
144	c06m0144	X	RINSE			07-MAR-2007 01:24	1.0					2	
145	c06m0145	X	RINSE			07-MAR-2007 01:30	1.0					2	
146	c06m0146	CCV				07-MAR-2007 01:35	1.0	1.0			1	12 2	
147	c06m0147	X	RINSE			07-MAR-2007 01:40	1.0					2	
148	c06m0148	X				07-MAR-2007 01:46	1.0	1.0	1		1	2	
149	c06m0149	CCB				07-MAR-2007 01:51	1.0	1.0			1	2	
150	c06m0150	X				07-MAR-2007 01:56	1.0	1.0			1	2	
151	c06m0151	ICSA				07-MAR-2007 02:02	1.0	1.0			1	10 2	7:CA=293800
152	c06m0152	ICSAB				07-MAR-2007 02:07	1.0	1.0			1	11 2	8:CA=306600
153	c06m0153	X	RINSE			07-MAR-2007 02:12	1.0					2	
154	c06m0154	X	RINSE			07-MAR-2007 02:18	1.0					2	
155	c06m0155	X	RINSE			07-MAR-2007 02:23	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLH Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c06m0156	X	RINSE			07-MAR-2007 02:29	1.0					2	
157	c06m0157	BLANK	QC377794	122769	Filtra	07-MAR-2007 02:34	1.0	1.0			1	2	
158	c06m0158	BS	QC377795	122769	Filtra	07-MAR-2007 02:39	1.0	1.0			1	2	
159	c06m0159	BSD	QC377796	122769	Filtra	07-MAR-2007 02:45	1.0	1.0			1	2	
160	c06m0160	X	RINSE			07-MAR-2007 02:51	1.0					2	
161	c06m0161	MSS	193055-021	122769	Filtra	07-MAR-2007 02:56	10.0	1.0			1	2	
162	c06m0162	XSER	WRONG SAMPLE	122769	Filtra	07-MAR-2007 03:02	50.0	1.0		7	1	2	
163	c06m0163	MS	QC377797	122769	Filtra	07-MAR-2007 03:07	10.0	1.0			1	2	
164	c06m0164	MSD	QC377798	122769	Filtra	07-MAR-2007 03:12	10.0	1.0			1	2	
165	c06m0165	PDS	QC377800	122769	Filtra	07-MAR-2007 03:17	10.0	1.0			1	13 14 2	
166	c06m0166	X	RINSE			07-MAR-2007 03:23	1.0					2	
167	c06m0167	X	RINSE			07-MAR-2007 03:28	1.0					2	
168	c06m0168	X	RINSE			07-MAR-2007 03:33	1.0					2	
169	c06m0169	CCV				07-MAR-2007 03:39	1.0	1.0			1	12 2	
170	c06m0170	X	RINSE			07-MAR-2007 03:44	1.0					2	
171	c06m0171	CCB				07-MAR-2007 03:49	1.0	1.0			1	2	
172	c06m0172	X				07-MAR-2007 03:55	1.0	1.0			1	2	
173	c06m0173	X				07-MAR-2007 04:00	1.0	1.0			1	2	
174	c06m0174	SAMPLE	193055-014	122769	Filtra	07-MAR-2007 04:05	10.0	1.0			1	2	
175	c06m0175	SAMPLE	193055-016	122769	Filtra	07-MAR-2007 04:11	10.0	1.0			1	2	
176	c06m0176	SAMPLE	193055-017	122769	Filtra	07-MAR-2007 04:16	10.0	1.0			1	2	
177	c06m0177	SAMPLE	193055-018	122769	Filtra	07-MAR-2007 04:21	10.0	1.0			1	2	
178	c06m0178	SAMPLE	193055-019	122769	Filtra	07-MAR-2007 04:27	10.0	1.0			1	2	
179	c06m0179	SAMPLE	193055-020	122769	Filtra	07-MAR-2007 04:32	10.0	1.0			1	2	
180	c06m0180	SAMPLE	193055-022	122769	Filtra	07-MAR-2007 04:37	10.0	1.0			1	2	
181	c06m0181	SAMPLE	193055-023	122769	Filtra	07-MAR-2007 04:43	10.0	1.0			1	2	
182	c06m0182	SAMPLE	193055-024	122769	Filtra	07-MAR-2007 04:48	10.0	1.0			1	2	
183	c06m0183	TUN				07-MAR-2007 04:52	1.0	1.0				1	
184	c06m0184	X	RINSE			07-MAR-2007 05:00	1.0					2	
185	c06m0185	SAMPLE	193055-025	122769	Filtra	07-MAR-2007 05:05	10.0	1.0			1	2	
186	c06m0186	X	RINSE			07-MAR-2007 05:11	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67094350 Instrument: MET06 Agilent ICP-MS MET06 Begun: 06-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
187	c06m0187	X	RINSE			07-MAR-2007 05:16	1.0			2	
188	c06m0188	X	RINSE			07-MAR-2007 05:21	1.0			2	
189	c06m0189	CCV				07-MAR-2007 05:27	1.0	1.0	1	12 2	
190	c06m0190	X	RINSE			07-MAR-2007 05:33	1.0			2	
191	c06m0191	CCB				07-MAR-2007 05:38	1.0	1.0	1	2	
192	c06m0192	X				07-MAR-2007 05:44	1.0	1.0	1	2	
193	c06m0193	X				07-MAR-2007 05:49	1.0	1.0	1	2	
194	c06m0194	SAMPLE	193055-026	122769	Filtra	07-MAR-2007 05:54	10.0	1.0	1	2	
195	c06m0195	X	RINSE			07-MAR-2007 06:00	1.0			2	
196	c06m0196	X	RINSE			07-MAR-2007 06:05	1.0			2	
197	c06m0197	X	RINSE			07-MAR-2007 06:10	1.0			2	
198	c06m0198	CCV				07-MAR-2007 06:15	1.0	1.0	1	12 2	
199	c06m0199	X	RINSE			07-MAR-2007 06:21	1.0			2	
200	c06m0200	CCB				07-MAR-2007 06:26	1.0	1.0	1	2	
201	c06m0201	X				07-MAR-2007 06:32	1.0	1.0	1	2	
202	c06m0202	X				07-MAR-2007 06:37	1.0	1.0	1	2	
203	c06m0203	ICSA				07-MAR-2007 06:42	1.0	1.0	1	10 2	7:CA=295800
204	c06m0204	ICSAB				07-MAR-2007 06:48	1.0	1.0	1	11 2	7:CA=304400

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/7/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67095841001
Units : ug/L

Date : 07-MAR-2007 13:40
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c07n0005	67095841005		07-MAR-2007 13:45	S5645
L2	c07n0006	67095841006		07-MAR-2007 13:51	S5648
L3	c07n0007	67095841007		07-MAR-2007 13:56	S5649
L4	c07n0008	67095841008		07-MAR-2007 14:01	S5650
L5	c07n0009	67095841009		07-MAR-2007 14:06	S5644
L6	c07n0010	67095841010		07-MAR-2007 14:11	S5646

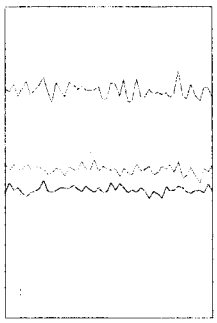
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7661	0.6827	0.6491	0.6171	0.6070	0.5827	BLNK	-1.0314	1.70196		0.6508	1.000	0.995	
Antimony	A	0.3251	0.2876	0.2836	0.2774	0.2897	0.2840	BLNK	-0.0086	3.50713		0.2912	1.000	0.995	
Barium	A	0.1846	0.1289	0.0896	0.0836	0.0835	0.0806	BLNK	-0.0169	12.3160		0.1085	1.000	0.995	
Beryllium	A	0.2962	0.2691	0.2727	0.2697	0.2672	0.2446	BLNK	-0.0058	4.01307		0.2699	0.998	0.995	
Cadmium	A	0.0856	0.0843	0.0839	0.0790	0.0789	0.0776	BLNK	-0.0023	12.8456		0.0815	1.000	0.995	
Calcium	A	0.0734	0.0353	0.0264	0.0215	0.0211	0.0204	BLNK	-19.065	48.8251		0.0330	1.000	0.995	
Lead	A	1.0992	0.7228	0.6712	0.6028	0.6055	0.5969	BLNK	-0.0316	1.67078		0.7164	1.000	0.995	
Magnesium	A	0.6462	0.5698	0.5408	0.5038	0.4927	0.4714	BLNK	-1.2857	2.10235		0.5375	1.000	0.995	
Molybdenum	A	0.2429	0.2393	0.2083	0.2044	0.2045	0.2093	BLNK	-0.0069	4.80021		0.2181	1.000	0.995	
Potassium	A	9.2309	2.4157	1.5699	0.7954	0.7146	0.6856	BLNK	-128.23	1.45744		2.5687	1.000	0.995	
Silver	A	0.3977	0.3466	0.3434	0.3350	0.3416	0.3371	BLNK	-0.0146	2.95897		0.3502	1.000	0.995	
Thallium	A	1.7157	1.0013	0.9102	0.8185	0.8925	0.8822	BLNK	-0.0597	1.13193		1.0367	1.000	0.995	
Arsenic	E	0.7258	0.5777	0.6534	0.5829	0.5926	0.5854	BLNK	-0.0315	1.70445		0.6196	1.000	0.995	
Chromium	E	6.7053	3.7007	3.3183	2.9389	2.9233	2.8698	BLNK	-0.1473	0.34746		3.7427	1.000	0.995	
Cobalt	E	5.1047	4.9774	5.0136	4.7155	4.6978	4.5543	BLNK	-0.0127	0.21820		4.8439	1.000	0.995	
Copper	E	54.054	16.503	11.964	7.4947	6.9626	6.7321	BLNK	-0.6989	0.14814		17.285	1.000	0.995	
Manganese	E	2.0094	1.6855	1.5772	1.4985	1.5174	1.4880	BLNK	-0.0235	0.66950		1.6293	1.000	0.995	
Nickel	E	3.1716	1.7386	1.5413	1.3084	1.2592	1.2089	BLNK	-0.1721	0.82110		1.7047	1.000	0.995	
Sodium	E	6.0448	1.7988	1.1630	0.6738	0.5795	0.5684	BLNK	-91.274	1.76169		1.8047	1.000	0.995	
Vanadium	E	8.3683	3.5430	2.8788	2.3759	2.3927	2.3598	BLNK	-0.2125	0.42314		3.6531	1.000	0.995	
Zinc	E	14.618	3.7573	2.5465	1.1371	1.0060	0.9407	BLNK	-1.2580	1.05621		4.0010	0.999	0.995	
Iron	H	1.0870	1.1432	0.9166	0.8420	0.8401	0.8148	BLNK	-2.9480	1.21989		0.9406	1.000	0.995	
Selenium	H	0.1374	0.1402	0.1410	0.1394	0.1381	0.1346	BLNK	-0.0088	7.39092		0.1384	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

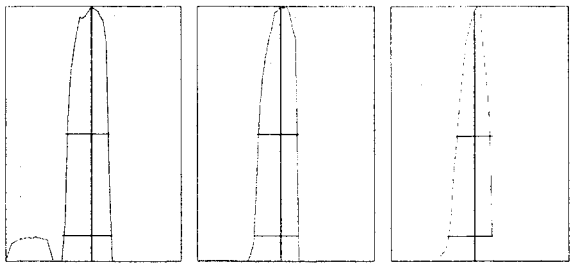
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	20343.0	20532.5	2.90	1.10
89	50,000	35320.0	36405.9	3.15	0.60
205	50,000	24509.0	23798.1	3.12	5.30

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.030%
Doubly Charged: 70/140 1.419%



m/z:	7	89	205
Height:	20,877	36,405	23,479
Axis:	7.00	88.95	204.95
W-50%:	0.75	0.70	0.60
W-10%:	0.8500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	142
RF Matching	:	1.7 V	Extract 2	:	-150 V	AMU Offset	:	123
Smpl Depth	:	9 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0015
Torch-H	:	0.9 mm	Omega Lens-ce	:	0 V	Axis Offset	:	-0.03
Torch-V	:	0.8 mm	Cell Entrance	:	-30 V	QP Bias	:	-1 V
Carrier Gas	:	1.05 L/min	QP Focus	:	2 V			
Makeup Gas	:	0 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1760 V
Sample Pump	:	--- rps	OctP RF	:	160 V	Pulse HV	:	1380 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

He Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	51	52.0	14.79	
QP Focus:	-10 V	59	4343.0	3.64	
Cell Exit:	-38 V	89	2876.3	3.99	
OctP Bias:	-18 V				
QP Bias:	-13 V				

Tune File : h2.u

H2 Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	59	3156.0	4.41	
QP Focus:	-8 V	78	0.6	121.28	
Cell Exit:	-38 V	89	23982.3	2.83	
OctP Bias:	-18 V				
QP Bias:	-15 V				

Generated : Mar 07, 2007 11:54:51
Printed : Mar 07, 2007 11:56:30

P/A Factor Tuning Report

Acquired:Mar 7 2007 00:55 pm

Mass[amu]	Element	P/A Factor
6	Li	0.063403
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.088014
45	Sc	0.087313
51	V	0.088658
52	Cr	0.091685
55	Mn	0.093443
56	Fe	Sensitivity too high
59	Co	0.095463
60	Ni	Sensitivity too low
63	Cu	0.100850
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098562
98	Mo	0.098617
99	(Ru)	Sensitivity too low
107	Ag	0.105769
111	Cd	Sensitivity too low
115	In	0.104903
118	(In)	0.104398
121	Sb	0.103396
137	Ba	Sensitivity too low
159	Tb	0.106461
205	Tl	0.110667
206	(Pb)	0.110393
207	(Pb)	0.110327
208	Pb	0.110803
209	Bi	0.111109

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1760 V
Pulse HV: 1380 V

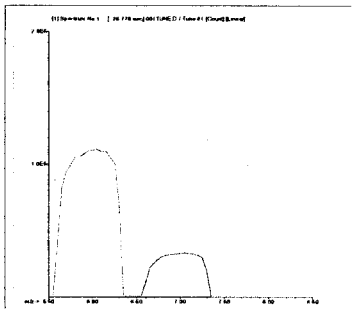
00384

6020 QC Tune Report

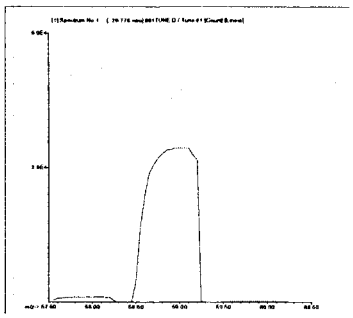
Data File: C:\ICPCHEM\1\DATA\07C07n00.B\001TUNE.D
Date Acquired: Mar 7 2007 01:21 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

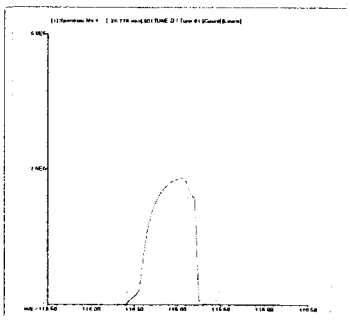
Element	Actual	Required	Flag
7 Li	1.00	5.00	
59 Co	0.28	5.00	
115 In	0.17	5.00	
205 Tl	0.85	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



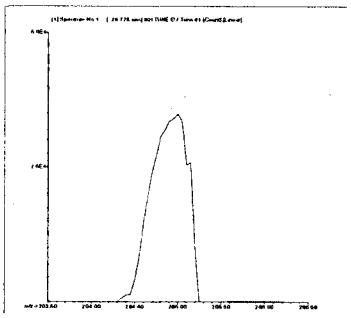
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004C
Date Acquired: Mar 7 2007 01:38 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 01:41 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1141331.00	A	30370.00	2.66
7	(Li)		P		
9	Be	33.33	P	11.55	34.65
23	Na	48752.53	P	573.50	1.18
24	Mg	17409.94	P	257.30	1.48
27	Al	17256.69	P	513.50	2.98
39	K	2504119.00	A	4321.00	0.17
44	Ca	11117.01	P	248.60	2.24
45	Sc	484861.69	P	3567.00	0.74
45	Sc	47123.53	P	2064.00	4.38
45	Sc	1423779.00	A	38660.00	2.72
51	V	472.98	P	30.11	6.37
52	Cr	399.64	P	36.25	9.07
55	Mn	32.96	P	7.40	22.44
56	Fe	23534.32	P	20860.00	88.64
59	Co	54.82	P	3.39	6.19
60	Ni	197.41	P	23.42	11.86
63	Cu	2158.71	P	102.10	4.73
65	Cu	1036.35	P	35.07	3.38
66	Zn	545.94	P	51.84	9.50
72	Ge	111973.40	P	829.80	0.74
72	Ge	22885.61	P	930.80	4.07
75	As	8.44	P	2.52	29.89
78	Se	2.67	P	0.67	25.00
89	Y	1858357.00	A	48000.00	2.58
98	Mo	53.34	P	0.00	0.00
107	Ag	181.12	P	20.09	11.09
111	Cd	6.67	P	3.33	49.99
115	In	1841965.00	A	54410.00	2.95
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	90.00	P	11.55	12.83
137	Ba	68.89	P	26.94	39.11
159	Tb	2509654.00	A	93520.00	3.73
205	Tl	1513.48	P	41.77	2.76
208	Pb	947.83	P	25.02	2.64
209	Bi	1434995.00	A	32450.00	2.26

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 7 2007 01:43 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 01:41 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1144128.00	A	9278.00	0.81
7 (Li)		P		
9 Be	677.82	P	52.74	7.78
23 Na	56265.62	P	383.40	0.68
24 Mg	188035.59	P	105.80	0.06
27 Al	222924.41	P	1637.00	0.73
39 K	2686146.00	A	4985.00	0.19
44 Ca	21367.83	P	61.94	0.29
45 Sc	483206.00	P	1726.00	0.36
45 Sc	46540.40	P	148.60	0.32
45 Sc	1455074.00	A	14420.00	0.99
51 V	778.92	P	1.11	0.14
52 Cr	624.10	P	20.26	3.25
55 Mn	187.04	P	5.70	3.05
56 Fe	105051.90	P	446.80	0.43
59 Co	475.20	P	29.53	6.21
60 Ni	295.19	P	15.88	5.38
63 Cu	2481.36	P	50.93	2.05
65 Cu	1187.84	P	47.71	4.02
66 Zn	671.14	P	29.46	4.39
72 Ge	111649.20	P	702.80	0.63
72 Ge	22950.85	P	217.20	0.95
75 As	33.33	P	3.53	10.58
78 Se	30.67	P	4.37	14.26
89 Y	1880842.00	A	16860.00	0.90
98 Mo	913.40	P	92.80	10.16
99 (Ru)	4.44	P	1.93	43.31
107 Ag	1496.81	P	107.30	7.17
111 Cd	322.24	P	10.72	3.33
115 In	1881338.00	A	12900.00	0.69
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1223.44	P	75.36	6.16
137 Ba	932.29	P	72.60	7.79
159 Tb	2525571.00	A	9495.00	0.38
205 Tl	2559.24	P	117.90	4.61
208 Pb	5551.79	P	114.20	2.06
209 Bi	1491611.00	A	10320.00	0.69

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1144127.80	0.81	1141331.50	100.2	80 - 120	
45 Sc	483206.06	0.36	484861.69	99.7	80 - 120	
45 Sc	46540.40	0.32	47123.53	98.8	80 - 120	
45 Sc	1455074.30	0.99	1423779.30	102.2	80 - 120	
72 Ge	111649.24	0.63	111973.38	99.7	80 - 120	
72 Ge	22950.85	0.95	22885.61	100.3	80 - 120	
89 Y	1880842.30	0.90	1858357.30	101.2	80 - 120	
115 In	1881337.90	0.69	1841965.00	102.1	80 - 120	
159 Tb	2525571.00	0.38	2509653.80	100.6	80 - 120	
209 Bi	1491611.30	0.69	1434994.80	103.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 7 2007 01:48 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1158398.00	A	26800.00	2.31
7 (Li)		P		
9 Be	3117.11	P	56.09	1.80
23 Na	84077.72	P	967.80	1.15
24 Mg	845479.50	A	6916.00	0.82
27 Al	1012987.00	A	8141.00	0.80
39 K	3584138.00	A	12350.00	0.34
44 Ca	52327.36	P	903.40	1.73
45 Sc	481055.91	P	2245.00	0.47
45 Sc	46741.00	P	41.30	0.09
45 Sc	1484639.00	A	48080.00	3.24
51 V	1656.04	P	9.58	0.58
52 Cr	1729.76	P	30.88	1.79
55 Mn	787.81	P	33.46	4.25
56 Fe	549945.69	P	19660.00	3.57
59 Co	2326.51	P	91.54	3.93
60 Ni	812.63	P	15.33	1.89
63 Cu	3777.59	P	10.97	0.29
65 Cu	1807.17	P	53.58	2.96
66 Zn	860.04	P	5.78	0.67
72 Ge	111297.60	P	550.30	0.49
72 Ge	22890.01	P	22.31	0.10
75 As	132.22	P	12.39	9.37
78 Se	156.00	P	6.11	3.92
89 Y	1924343.00	A	60010.00	3.12
98 Mo	4599.84	P	103.00	2.24
99 (Ru)	3.33	P	0.00	0.00
107 Ag	6622.97	P	202.40	3.06
111 Cd	1609.05	P	86.95	5.40
115 In	1910924.00	A	62640.00	3.28
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5491.32	P	251.50	4.58
137 Ba	3304.98	P	56.03	1.70
159 Tb	2565858.00	A	102800.00	4.01
205 Tl	7410.21	P	89.27	1.20
208 Pb	18523.71	P	186.00	1.00
209 Bi	1480827.00	A	39930.00	2.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1158397.60	2.31	1141331.50	101.5	80 - 120	
45 Sc	481055.91	0.47	484861.69	99.2	80 - 120	
45 Sc	46741.00	0.09	47123.53	99.2	80 - 120	
45 Sc	1484639.30	3.24	1423779.30	104.3	80 - 120	
72 Ge	111297.59	0.49	111973.38	99.4	80 - 120	
72 Ge	22890.01	0.10	22885.61	100.0	80 - 120	
89 Y	1924343.30	3.12	1858357.30	103.6	80 - 120	
115 In	1910924.10	3.28	1841965.00	103.7	80 - 120	
159 Tb	2565858.30	4.01	2509653.80	102.2	80 - 120	
209 Bi	1480827.40	2.70	1434994.80	103.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 7 2007 01:54 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 01:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1155877.00	A	12810.00	1.11
7 (Li)		P		
9 Be	6306.03	P	210.20	3.33
23 Na	110281.80	P	219.00	0.20
24 Mg	1584581.00	A	3947.00	0.25
27 Al	1901951.00	A	8300.00	0.44
39 K	4599742.00	A	19030.00	0.41
44 Ca	77315.84	P	925.10	1.20
45 Sc	485748.91	P	3272.00	0.67
45 Sc	47413.92	P	71.29	0.15
45 Sc	1464983.00	A	6355.00	0.43
51 V	2729.93	P	58.45	2.14
52 Cr	3146.68	P	37.10	1.18
55 Mn	1495.65	P	32.28	2.16
56 Fe	890424.81	A	8751.00	0.98
59 Co	4754.19	P	115.30	2.43
60 Ni	1461.58	P	17.86	1.22
63 Cu	5510.77	P	71.18	1.29
65 Cu	2670.29	P	50.60	1.89
66 Zn	1173.03	P	41.24	3.52
72 Ge	112003.50	P	837.80	0.75
72 Ge	23030.27	P	106.80	0.46
75 As	300.89	P	22.90	7.61
78 Se	316.01	P	17.90	5.66
89 Y	1908587.00	A	22960.00	1.20
98 Mo	7951.48	P	65.07	0.82
99 (Ru)	4.44	P	1.93	43.31
107 Ag	13030.03	P	173.40	1.33
111 Cd	3182.71	P	130.00	4.08
115 In	1897414.00	A	5712.00	0.30
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10762.42	P	166.80	1.55
137 Ba	4570.94	P	138.00	3.02
159 Tb	2549884.00	A	17820.00	0.70
205 Tl	13321.84	P	334.30	2.51
208 Pb	34229.24	P	353.50	1.03
209 Bi	1463507.00	A	12850.00	0.88

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1155876.90	1.11	1141331.50	101.3	80 - 120	
45 Sc	485748.94	0.67	484861.69	100.2	80 - 120	
45 Sc	47413.92	0.15	47123.53	100.6	80 - 120	
45 Sc	1464983.10	0.43	1423779.30	102.9	80 - 120	
72 Ge	112003.45	0.75	111973.38	100.0	80 - 120	
72 Ge	23030.27	0.46	22885.61	100.6	80 - 120	
89 Y	1908587.50	1.20	1858357.30	102.7	80 - 120	
115 In	1897414.10	0.30	1841965.00	103.0	80 - 120	
159 Tb	2549884.30	0.70	2509653.80	101.6	80 - 120	
209 Bi	1463506.90	0.88	1434994.80	102.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 7 2007 01:59 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 01:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1146456.00	A	5710.00	0.50
7 (Li)		P		
9 Be	61846.05	P	399.00	0.65
23 Na	640657.19	P	3922.00	0.61
24 Mg	14929420.00	A	124500.00	0.83
27 Al	18285180.00	A	137500.00	0.75
39 K	23570110.00	A	94850.00	0.40
44 Ca	636435.38	P	1332.00	0.21
45 Sc	487578.31	P	4830.00	0.99
45 Sc	47541.06	P	278.40	0.59
45 Sc	1481643.00	A	8908.00	0.60
51 V	22589.66	P	234.20	1.04
52 Cr	27943.31	P	84.40	0.30
55 Mn	14248.08	P	63.72	0.45
56 Fe	8210175.00	A	32640.00	0.40
59 Co	44835.12	P	86.62	0.19
60 Ni	12440.06	P	97.23	0.78
63 Cu	34681.06	P	176.20	0.51
65 Cu	17059.03	P	211.30	1.24
66 Zn	5261.42	P	124.50	2.37
72 Ge	111888.30	P	1173.00	1.05
72 Ge	23137.84	P	215.20	0.93
75 As	2697.17	P	28.32	1.05
78 Se	3119.93	P	10.03	0.32
89 Y	1936176.00	A	10190.00	0.53
98 Mo	79146.80	P	166.10	0.21
99 (Ru)	3.33	P	5.77	173.21
107 Ag	126941.70	P	1964.00	1.55
111 Cd	29922.69	P	269.40	0.90
115 In	1894400.00	A	6746.00	0.36
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	105108.20	P	629.80	0.60
137 Ba	43296.73	P	401.40	0.93
159 Tb	2590168.00	A	16220.00	0.63
205 Tl	119076.40	P	994.80	0.84
208 Pb	312259.81	P	2002.00	0.64
209 Bi	1454889.00	A	11190.00	0.77

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1146456.30	0.50	1141331.50	100.4	80 - 120	
45 Sc	487578.34	0.99	484861.69	100.6	80 - 120	
45 Sc	47541.07	0.59	47123.53	100.9	80 - 120	
45 Sc	1481643.40	0.60	1423779.30	104.1	80 - 120	
72 Ge	111888.32	1.05	111973.38	99.9	80 - 120	
72 Ge	23137.84	0.93	22885.61	101.1	80 - 120	
89 Y	1936176.30	0.53	1858357.30	104.2	80 - 120	
115 In	1894399.80	0.36	1841965.00	102.8	80 - 120	
159 Tb	2590167.80	0.63	2509653.80	103.2	80 - 120	
209 Bi	1454888.50	0.77	1434994.80	101.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 7 2007 02:04 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 02:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1143060.00	A	6236.00	0.55
7	(Li)		P		
9	Be	610939.13	M	23830.00	3.90
23	Na	5473472.00	A	55850.00	1.02
24	Mg	############	A	1051000.00	0.70
27	Al	############	A	485800.00	0.26
39	K	############	A	581100.00	0.27
44	Ca	6428473.00	A	42590.00	0.66
45	Sc	497109.69	P	3995.00	0.80
45	Sc	47228.17	P	444.60	0.94
45	Sc	1525673.00	A	3947.00	0.26
51	V	225993.41	P	1260.00	0.56
52	Cr	276109.59	P	767.30	0.28
55	Mn	143316.80	P	707.40	0.49
56	Fe	83520728.00	A	553600.00	0.66
59	Co	443711.69	P	596.80	0.13
60	Ni	118928.10	P	737.10	0.62
63	Cu	316673.09	P	372.50	0.12
65	Cu	154951.59	P	512.80	0.33
66	Zn	45753.63	P	130.80	0.29
72	Ge	112384.70	P	489.70	0.44
72	Ge	22742.01	P	172.70	0.76
75	As	26952.96	P	98.91	0.37
78	Se	31031.53	P	395.00	1.27
89	Y	1979856.00	A	6855.00	0.35
98	Mo	809671.31	P	1788.00	0.22
99	(Ru)	24.45	P	5.09	20.83
107	Ag	1296080.00	A	5003.00	0.39
111	Cd	299276.81	P	2902.00	0.97
115	In	1897271.00	A	4259.00	0.22
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1099084.00	A	4153.00	0.38
137	Ba	439098.09	P	2906.00	0.66
159	Tb	2629057.00	A	15600.00	0.59
205	Tl	1269449.00	A	3533.00	0.28
208	Pb	3183586.00	A	27760.00	0.87
209	Bi	1422412.00	A	11280.00	0.79

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1143059.80	0.55	1141331.50	100.2	80 - 120	
45	Sc	497109.66	0.80	484861.69	102.5	80 - 120	
45	Sc	47228.17	0.94	47123.53	100.2	80 - 120	
45	Sc	1525673.50	0.26	1423779.30	107.2	80 - 120	
72	Ge	112384.68	0.44	111973.38	100.4	80 - 120	
72	Ge	22742.01	0.76	22885.61	99.4	80 - 120	
89	Y	1979855.60	0.35	1858357.30	106.5	80 - 120	
115	In	1897271.30	0.22	1841965.00	103.0	80 - 120	
159	Tb	2629057.00	0.59	2509653.80	104.8	80 - 120	
209	Bi	1422412.40	0.79	1434994.80	99.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C07n00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 7 2007 02:09 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 07 2007 02:08 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1139417.00	A	7482.00	0.66
7	(Li)		P		
9	Be	1114971.00	A	10550.00	0.95
23	Na	10610020.00	A	64170.00	0.60
24	Mg	###########	A	1349000.00	0.47
27	Al	###########	A	4615000.00	1.29
39	K	###########	A	3921000.00	0.93
44	Ca	12516140.00	A	82390.00	0.66
45	Sc	503825.81	P	4657.00	0.92
45	Sc	46663.68	P	149.30	0.32
45	Sc	1536711.00	A	14070.00	0.92
51	V	440461.59	P	459.60	0.10
52	Cr	535654.63	P	988.40	0.18
55	Mn	277736.19	P	181.10	0.07
56	Fe	###########	A	923100.00	0.56
59	Co	850072.00	P	1217.00	0.14
60	Ni	225651.59	P	308.80	0.14
63	Cu	596346.19	P	572.30	0.10
65	Cu	291860.31	P	1780.00	0.61
66	Zn	83330.06	P	473.80	0.57
72	Ge	111789.10	P	1301.00	1.16
72	Ge	22147.75	P	246.40	1.11
75	As	51856.56	P	364.50	0.70
78	Se	60188.46	P	490.00	0.81
89	Y	1975687.00	A	11320.00	0.57
98	Mo	1654042.00	A	17100.00	1.03
99	(Ru)	57.78	P	15.75	27.26
107	Ag	2491757.00	A	5240.00	0.21
111	Cd	573539.38	P	562.60	0.10
115	In	1848003.00	A	11210.00	0.61
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2099600.00	A	2982.00	0.14
137	Ba	840762.13	P	1939.00	0.23
159	Tb	2607307.00	A	24410.00	0.94
205	Tl	2430160.00	A	16400.00	0.67
208	Pb	6225097.00	A	13780.00	0.22
209	Bi	1377434.00	A	14640.00	1.06

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1139417.10	0.66	1141331.50	99.8	80 - 120	
45	Sc	503825.84	0.92	484861.69	103.9	80 - 120	
45	Sc	46663.68	0.32	47123.53	99.0	80 - 120	
45	Sc	1536710.80	0.92	1423779.30	107.9	80 - 120	
72	Ge	111789.08	1.16	111973.38	99.8	80 - 120	
72	Ge	22147.75	1.11	22885.61	96.8	80 - 120	
89	Y	1975687.50	0.57	1858357.30	106.3	80 - 120	
115	In	1848003.30	0.61	1841965.00	100.3	80 - 120	
159	Tb	2607307.00	0.94	2509653.80	103.9	80 - 120	
209	Bi	1377434.00	1.06	1434994.80	96.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C07n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67095841014 File : c07n0014 Time : 07-MAR-2007 14:34
Cal : 67095841001 Caldate: 07-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6508	0.6063	10000	10320	ug/L	3	10	
Antimony	A	0.2912	0.2975	100.0	104.3	ug/L	4	10	
Barium	A	0.1085	0.0820	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2699	0.2700	100.0	108.3	ug/L	8	10	
Cadmium	A	0.0815	0.0798	100.0	102.6	ug/L	3	10	
Calcium	A	0.0330	0.0210	10000	10240	ug/L	2	10	
Lead	A	0.7164	0.6056	100.0	101.1	ug/L	1	10	
Magnesium	A	0.5375	0.4941	10000	10390	ug/L	4	10	
Molybdenum	A	0.2181	0.2055	100.0	98.61	ug/L	-1	10	
Potassium	A	2.5687	0.7163	10000	10310	ug/L	3	10	
Silver	A	0.3502	0.3669	100.0	108.5	ug/L	9	10	
Thallium	A	1.0367	0.8781	50.00	49.64	ug/L	-1	10	
Arsenic	E	0.6196	0.5911	100.0	100.7	ug/L	1	10	
Chromium	E	3.7427	2.8935	100.0	100.4	ug/L	0	10	
Cobalt	E	4.8439	4.5456	100.0	99.17	ug/L	-1	10	
Copper	E	17.285	6.7287	100.0	98.98	ug/L	-1	10	
Manganese	E	1.6293	1.4751	100.0	98.73	ug/L	-1	10	
Nickel	E	1.7047	1.2202	100.0	100.0	ug/L	0	10	
Sodium	E	1.8047	0.5620	10000	9809	ug/L	-2	10	
Vanadium	E	3.6531	2.3308	100.0	98.41	ug/L	-2	10	
Zinc	E	4.0010	0.9510	100.0	99.18	ug/L	-1	10	
Iron	H	0.9406	0.7909	10000	9645	ug/L	-4	10	
Selenium	H	0.1384	0.1322	100.0	97.72	ug/L	-2	10	

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	1148794	0.65
Scandium	A	1423779	1510571	6.10
Scandium	E	47124	48298	2.49
Scandium	H	484862	529675	9.24
Germanium	H	111973	117364	4.81
Germanium	E	22886	23130	1.07
Indium	A	1841965	1872462	1.66
Bismuth	A	1434995	1398098	-2.57
Yttrium	A	1858357	1970148	6.02
Terbium	A	2509654	2588258	3.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67095841035 File : c07n0035 Time : 07-MAR-2007 17:29
Cal : 67095841001 Caldate: 07-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6508	0.6166	10000	10490	ug/L	5	10	
Antimony	A	0.2912	0.2933	100.0	102.8	ug/L	3	10	
Barium	A	0.1085	0.0818	100.0	100.7	ug/L	1	10	
Beryllium	A	0.2699	0.2573	100.0	103.3	ug/L	3	10	
Cadmium	A	0.0815	0.0789	100.0	101.4	ug/L	1	10	
Calcium	A	0.0330	0.0209	10000	10170	ug/L	2	10	
Lead	A	0.7164	0.6041	100.0	100.9	ug/L	1	10	
Magnesium	A	0.5375	0.5032	10000	10580	ug/L	6	10	
Molybdenum	A	0.2181	0.2050	100.0	98.41	ug/L	-2	10	
Potassium	A	2.5687	0.7178	10000	10330	ug/L	3	10	
Silver	A	0.3502	0.3616	100.0	107.0	ug/L	7	10	
Thallium	A	1.0367	0.8638	50.00	48.83	ug/L	-2	10	
Arsenic	E	0.6196	0.5995	100.0	102.1	ug/L	2	10	
Chromium	E	3.7427	2.8836	100.0	100.0	ug/L	0	10	
Cobalt	E	4.8439	4.5189	100.0	98.59	ug/L	-1	10	
Copper	E	17.285	6.7587	100.0	99.42	ug/L	-1	10	
Manganese	E	1.6293	1.4852	100.0	99.41	ug/L	-1	10	
Nickel	E	1.7047	1.2030	100.0	98.61	ug/L	-1	10	
Sodium	E	1.8047	0.5643	10000	9850	ug/L	-2	10	
Vanadium	E	3.6531	2.3375	100.0	98.70	ug/L	-1	10	
Zinc	E	4.0010	0.9574	100.0	99.86	ug/L	0	10	
Iron	H	0.9406	0.8248	10000	10060	ug/L	1	10	
Selenium	H	0.1384	0.1377	100.0	101.8	ug/L	2	10	

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	1164923	2.07
Scandium	A	1423779	1403548	-1.42
Scandium	E	47124	44805	-4.92
Scandium	H	484862	465562	-3.98
Germanium	H	111973	104459	-6.71
Germanium	E	22886	21213	-7.31
Indium	A	1841965	1747401	-5.13
Bismuth	A	1434995	1309939	-8.71
Yttrium	A	1858357	1827014	-1.69
Terbium	A	2509654	2418066	-3.65

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67095841017
Cal : 67095841001

File : c07n0017
Caldate: 07-MAR-2007

IDF : 1.0
Time : 07-MAR-2007 14:52

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02005]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02334]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.006243]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.005165]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	1209821	6.00
Scandium	A	1423779	1495731	5.05
Scandium	E	47124	51849	10.03
Scandium	H	484862	498531	2.82
Germanium	H	111973	114967	2.67
Germanium	E	22886	24766	8.22
Indium	A	1841965	1948452	5.78
Bismuth	A	1434995	1468710	2.35
Yttrium	A	1858357	1969717	5.99
Terbium	A	2509654	2600061	3.60

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67095841037
Cal : 67095841001

File : c07n0037
Caldate: 07-MAR-2007

IDF : 1.0
Time : 07-MAR-2007 17:39

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007177]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007083]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05648]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04923]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	0.1473	0.1000	0.1296	ug/L	ib ***
Manganese	E	[0.03778]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01266]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005293]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	1192141	4.45
Scandium	A	1423779	1380320	-3.05
Scandium	E	47124	45220	-4.04
Scandium	H	484862	460009	-5.13
Germanium	H	111973	104715	-6.48
Germanium	E	22886	22168	-3.14
Indium	A	1841965	1805049	-2.00
Bismuth	A	1434995	1370248	-4.51
Yttrium	A	1858357	1815838	-2.29
Terbium	A	2509654	2402111	-4.29

!=warning ib=instrument blank

67095841037

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67095841019 File : c07n0019 IDF : 1.0
Cal : 67095841001 Caldate: 07-MAR-2007 Time : 07-MAR-2007 15:03
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06221]	0.1000	ug/L	
Barium	A	1.070	0.1000	ug/L	
Beryllium	A	[0.03346]	0.1000	ug/L	
Cadmium	A	1.549	0.1000	ug/L	
Lead	A	0.4880	0.1000	ug/L	
Silver	A	0.2041	0.1000	ug/L	
Thallium	A	[0.01740]	0.05000	ug/L	
Arsenic	E	0.2917	0.1000	ug/L	
Chromium	E	1.411	0.1000	ug/L	
Cobalt	E	0.2347	0.1000	ug/L	
Copper	E	1.745	0.1000	ug/L	
Manganese	E	0.8752	0.1000	ug/L	
Nickel	E	1.285	0.1000	ug/L	
Vanadium	E	0.1314	0.1000	ug/L	
Zinc	E	1.629	0.1000	ug/L	
Selenium	H	[0.07660]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98940	ug/L	99
Calcium	A	300000	304000	ug/L	101
Magnesium	A	100000	96250	ug/L	96
Molybdenum	A	2000	2024	ug/L	101
Potassium	A	100000	99970	ug/L	100
Sodium	E	250000	254800	ug/L	102
Iron	H	250000	242900	ug/L	97

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	868613	-23.89
Scandium	A	1423779	1328505	-6.69
Scandium	E	47124	41531	-11.87
Scandium	H	484862	452317	-6.71
Germanium	H	111973	93268	-16.71
Germanium	E	22886	19581	-14.44
Indium	A	1841965	1567465	-14.90
Bismuth	A	1434995	1062103	-25.99
Yttrium	A	1858357	1736947	-6.53
Terbium	A	2509654	2265679	-9.72

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67095841020 File : c07n0020 IDF : 1.0
Cal : 67095841001 Caldate: 07-MAR-2007 Time : 07-MAR-2007 15:08
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103300	ug/L	3		
Cadmium	A	100.0	101.0	ug/L	1	20	
Calcium	A	300000	318600	ug/L	6		
Magnesium	A	100000	100600	ug/L	1		
Molybdenum	A	2000	2087	ug/L	4		
Potassium	A	100000	104900	ug/L	5		
Silver	A	50.00	45.31	ug/L	-9	20	
Arsenic	E	100.0	107.9	ug/L	8	20	
Chromium	E	200.0	213.6	ug/L	7	20	
Cobalt	E	200.0	198.0	ug/L	-1	20	
Copper	E	200.0	190.0	ug/L	-5	20	
Manganese	E	200.0	208.8	ug/L	4	20	
Nickel	E	200.0	194.5	ug/L	-3	20	
Sodium	E	250000	273700	ug/L	9		
Vanadium	E	200.0	217.2	ug/L	9	20	
Zinc	E	100.0	92.76	ug/L	-7	20	
Iron	H	250000	257900	ug/L	3		
Selenium	H	100.0	105.8	ug/L	6	20	

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	484862	434783	-10.33
Scandium	A	1423779	1276241	-10.36
Scandium	E	47124	38880	-17.49
Germanium	H	111973	89564	-20.01
Germanium	E	22886	18334	-19.89
Indium	A	1841965	1517598	-17.61
Yttrium	A	1858357	1697309	-8.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67095841039 File : c07n0039 IDF : 1.0
Cal : 67095841001 Caldate: 07-MAR-2007 Time : 07-MAR-2007 17:50
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05739]	0.1000	ug/L	
Barium	A	1.073	0.1000	ug/L	
Beryllium	A	[0.03050]	0.1000	ug/L	
Cadmium	A	1.607	0.1000	ug/L	
Lead	A	0.4737	0.1000	ug/L	
Silver	A	0.2016	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.3651	0.1000	ug/L	
Chromium	E	1.406	0.1000	ug/L	
Cobalt	E	0.2247	0.1000	ug/L	
Copper	E	1.611	0.1000	ug/L	
Manganese	E	0.8671	0.1000	ug/L	
Nickel	E	1.248	0.1000	ug/L	
Vanadium	E	0.1448	0.1000	ug/L	
Zinc	E	1.585	0.1000	ug/L	
Selenium	H	[0.06605]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100200	ug/L	100
Calcium	A	300000	305700	ug/L	102
Magnesium	A	100000	97170	ug/L	97
Molybdenum	A	2000	1991	ug/L	100
Potassium	A	100000	100100	ug/L	100
Sodium	E	250000	257400	ug/L	103
Iron	H	250000	237600	ug/L	95

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1141332	904717	-20.73
Scandium	A	1423779	1275479	-10.42
Scandium	E	47124	39610	-15.94
Scandium	H	484862	425096	-12.33
Germanium	H	111973	86673	-22.60
Germanium	E	22886	18441	-19.42
Indium	A	1841965	1512299	-17.90
Bismuth	A	1434995	1004876	-29.97
Yttrium	A	1858357	1687810	-9.18
Terbium	A	2509654	2199940	-12.34

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67095841040 File : c07n0040 IDF : 1.0
Cal : 67095841001 Caldate: 07-MAR-2007 Time : 07-MAR-2007 17:55
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104300	ug/L	4		
Cadmium	A	100.0	101.8	ug/L	2	20	
Calcium	A	300000	320000	ug/L	7		
Magnesium	A	100000	101500	ug/L	2		
Molybdenum	A	2000	2098	ug/L	5		
Potassium	A	100000	104700	ug/L	5		
Silver	A	50.00	45.29	ug/L	-9	20	
Arsenic	E	100.0	106.3	ug/L	6	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Cobalt	E	200.0	192.6	ug/L	-4	20	
Copper	E	200.0	185.1	ug/L	-7	20	
Manganese	E	200.0	205.2	ug/L	3	20	
Nickel	E	200.0	188.9	ug/L	-6	20	
Sodium	E	250000	269700	ug/L	8		
Vanadium	E	200.0	211.2	ug/L	6	20	
Zinc	E	100.0	90.50	ug/L	-10	20	
Iron	H	250000	250200	ug/L	0		
Selenium	H	100.0	104.3	ug/L	4	20	

ISTD (ICALBLK c07n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	484862	419830	-13.41
Scandium	A	1423779	1238345	-13.02
Scandium	E	47124	38405	-18.50
Germanium	H	111973	86012	-23.19
Germanium	E	22886	17939	-21.61
Indium	A	1841965	1480109	-19.65
Yttrium	A	1858357	1642459	-11.62

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 07-MAR-2007
Sequence: 67095841 (c07n0)
Instrument ID: MET06

ICALBLK Filename: c07n0004
Date Analyzed: 07-MAR-2007
Time Analyzed: 13:40

		IS1 (LI) READING	IS2 (SC) READING	IS3 (IN) READING	IS4 (BI) READING	IS5 (Y) READING	IS6 (TB) READING
ICALBLK STD		1141332	1423779	1841965	1434995	1858357	2509654
LOWER LIMIT		342400	427134	552590	430499	557507	752896
UPPER LIMIT		1369598	1708535	2210358	1721994	2230028	3011585
TYPE	SAMPLE	#					
ICB		017	1209821	1495731	1948452	1468710	1969717	2600061
ICSA		019	868613	1328505	1567465	1062103	1736947	2265679
SER	QC377792	026	1149001	1403158	1833548	1402515	1840231	2455283
MSS	193055-021	027	1154165	1445074	1860190	1426933	1880345	2526520
SER	QC377799	028	1134269	1367026	1803975	1378090	1796274	2393481
SAMPLE	193055-009	029	1173756	1434331	1829052	1377366	1863845	2483198
SAMPLE	193055-012	031	1241163	1451385	1833778	1371662	1874997	2480269
SAMPLE	193055-013	032	1215962	1434484	1798758	1308745	1838213	2438080
SAMPLE	193055-011	033	1216484	1424381	1811756	1339105	1850023	2437090
CCV		035	1164923	1403548	1747401	1309939	1827014	2418066
CCB		037	1192141	1380320	1805049	1370248	1815838	2402111
ICSA		039	904717	1275479	1512299	1004876	1687810	2199940

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67095841 Instrument: MET06 Agilent ICP-MS MET06 Begun: 07-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c07n0001	TUN				07-MAR-2007 13:21	1.0	1.0				1	
002	c07n0002	X	RINSE			07-MAR-2007 13:29	1.0					2	
003	c07n0003	X	RINSE			07-MAR-2007 13:35	1.0					2	
004	c07n0004	ICALBLK	CALBLANK			07-MAR-2007 13:40	1.0	1.0				2	
005	c07n0005	ICAL				07-MAR-2007 13:45	1.0	1.0				3	
006	c07n0006	ICAL				07-MAR-2007 13:51	1.0	1.0				4	
007	c07n0007	ICAL				07-MAR-2007 13:56	1.0	1.0				5	
008	c07n0008	ICAL				07-MAR-2007 14:01	1.0	1.0				6	
009	c07n0009	ICAL				07-MAR-2007 14:06	1.0	1.0				7	
010	c07n0010	ICAL				07-MAR-2007 14:11	1.0	1.0				8	
011	c07n0011	X	RINSE			07-MAR-2007 14:18	1.0					2	
012	c07n0012	X				07-MAR-2007 14:23	1.0					9 2	
013	c07n0013	X	RINSE			07-MAR-2007 14:29	1.0					2	
014	c07n0014	ICV				07-MAR-2007 14:34	1.0	1.0			1	9	
015	c07n0015	X	RINSE			07-MAR-2007 14:39	1.0					2	
016	c07n0016	X				07-MAR-2007 14:45	1.0					2	
017	c07n0017	ICB				07-MAR-2007 14:52	1.0	1.0			1	2	
018	c07n0018	X				07-MAR-2007 14:58	1.0					2	
019	c07n0019	ICSA				07-MAR-2007 15:03	1.0	1.0			1	10 2	7:CA=304000
020	c07n0020	ICSAB				07-MAR-2007 15:08	1.0	1.0			1	11 2	10:CA=318600
021	c07n0021	X	RINSE			07-MAR-2007 15:14	1.0					2	
022	c07n0022	X	RINSE			07-MAR-2007 15:19	1.0					2	
023	c07n0023	X	RINSE			07-MAR-2007 15:24	1.0					2	
024	c07n0024	X	RINSE			07-MAR-2007 15:30	1.0					2	
025	c07n0025	X	RINSE			07-MAR-2007 15:35	1.0					2	
026	c07n0026	SER	QC377792	122768	Filtra	07-MAR-2007 15:40	50.0	1.0	2	1	1	2	
027	c07n0027	MSS	193055-021	122769	Filtra	07-MAR-2007 15:46	10.0	1.0	1		1	2	
028	c07n0028	SER	QC377799	122769	Filtra	07-MAR-2007 15:51	50.0	1.0	1	1	1	2	
029	c07n0029	SAMPLE	193055-009	122768	Filtra	07-MAR-2007 15:57	50.0	1.0	1		1	2	
030	c07n0030	XSAMPLE	193055-011	122768	Filtra	07-MAR-2007 16:02	20.0	1.0	2		1	2	1:MG=20340.0
031	c07n0031	SAMPLE	193055-012	122768	Filtra	07-MAR-2007 17:07	50.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/7/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67095841 Instrument: MET06 Agilent ICP-MS MET06 Begun: 07-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c07n0032	SAMPLE	193055-013	122768	Filtra	07-MAR-2007 17:13	20.0	1.0	1		1	2	
033	c07n0033	SAMPLE	193055-011	122768	Filtra	07-MAR-2007 17:18	50.0	1.0	1		1	2	
034	c07n0034	X	RINSE			07-MAR-2007 17:23	1.0					2	
035	c07n0035	CCV				07-MAR-2007 17:29	1.0	1.0			1	12 2	
036	c07n0036	X	RINSE			07-MAR-2007 17:34	1.0					2	
037	c07n0037	CCB				07-MAR-2007 17:39	1.0	1.0	1		1	2	
038	c07n0038	X				07-MAR-2007 17:45	1.0					2	
039	c07n0039	ICSA				07-MAR-2007 17:50	1.0					10 2	
040	c07n0040	ICSAB				07-MAR-2007 17:55	1.0					11 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: RLH Date: 3/7/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57097652001
Units : ug/L

Date : 08-MAR-2007 19:45
X Axis : R

Reviewer: ---

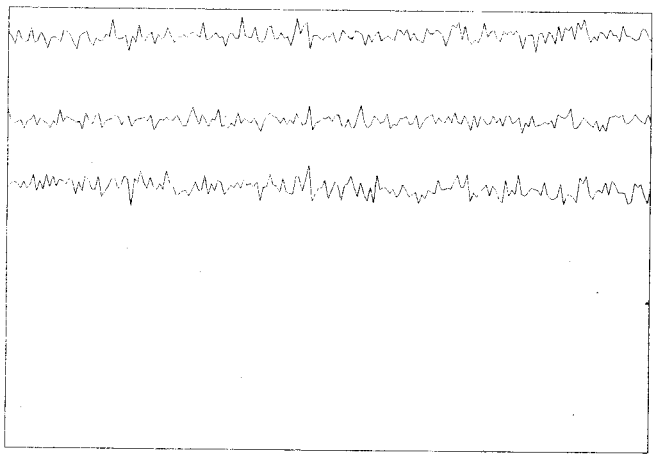
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08t0005	57097652005		08-MAR-2007 19:49	S5645
L2	c08t0006	57097652006		08-MAR-2007 19:53	S5647
L3	c08t0007	57097652007		08-MAR-2007 19:57	S5649
L4	c08t0008	57097652008		08-MAR-2007 20:01	S5650
L5	c08t0009	57097652009		08-MAR-2007 20:05	S5644
L6	c08t0010	57097652010		08-MAR-2007 20:09	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	3.0039	2.1010	0.9974	0.9568	0.9007	0.9280	BLNK	-2.8035	1.08409		1.4813	1.000	0.995	
Antimony	0.8783	0.6142	0.2964	0.2834	0.2833	0.2926	BLNK	-0.0578	3.44061		0.4414	1.000	0.995	
Arsenic	0.3229	1.1725	0.6391	0.6256	0.6076	0.6160	BLNK	0.09137	1.62688		0.6639	1.000	0.995	
Barium	0.4555	0.3943	0.1195	0.0940	0.0953	0.1001	BLNK	-0.0533	10.0907		0.2098	0.999	0.995	
Beryllium	0.7868	0.5788	0.2799	0.2868	0.2774	0.2911	BLNK	-0.0251	3.46851		0.4168	0.999	0.995	
Cadmium	2.8429	2.1531	0.9517	0.8448	0.7930	0.8018	BLNK	-0.1230	1.25075		1.3979	1.000	0.995	
Calcium	0.1343	0.0757	0.0322	0.0243	0.0237	0.0240	BLNK	-24.053	41.8865		0.0524	1.000	0.995	
Chromium	32.816	17.985	6.1530	3.7146	3.3569	3.3400	BLNK	-0.6412	0.30022		11.227	1.000	0.995	
Cobalt	10.192	7.4693	3.9887	3.8033	3.6607	3.6810	BLNK	-0.0253	0.27199		5.4658	1.000	0.995	
Copper	11.162	5.0149	1.7518	1.1018	1.0058	1.0145	BLNK	-0.7592	0.99183		3.5084	1.000	0.995	
Iron	0.4488	0.2592	0.1068	0.0890	0.0852	0.0863	BLNK	-24.612	11.6315		0.1792	1.000	0.995	
Lead	4.6897	2.5862	1.2299	1.1913	1.1587	1.2034	BLNK	-0.0751	0.83762		2.0099	1.000	0.995	
Magnesium	0.3535	0.2640	0.1292	0.1284	0.1171	0.1207	BLNK	-3.1611	8.33391		0.1855	1.000	0.995	
Manganese	15.867	11.684	4.9071	4.5123	4.2696	4.3117	BLNK	-0.0793	0.23247		7.5920	1.000	0.995	
Molybdenum	4.2224	3.0046	1.4613	1.3932	1.3417	1.3738	BLNK	-0.0806	0.73164		2.1328	1.000	0.995	
Nickel	2.8143	2.3773	0.9706	0.8921	0.8356	0.8469	BLNK	-0.0724	1.18435		1.4561	1.000	0.995	
Potassium	9.9569	5.0111	1.6691	0.9364	0.8127	0.8375	BLNK	-104.20	1.20859		3.2040	1.000	0.995	
Selenium	-0.470	0.0615	0.0228	0.0617	0.0589	0.0581	BLNK	0.40869	17.1278		-0.035	1.000	0.995	
Silver	9.3928	7.5647	3.6128	3.5551	3.3840	3.3347	BLNK	-0.0349	0.29902		5.1407	1.000	0.995	
Sodium	21.271	9.6445	3.0372	1.4735	1.2568	1.3156	BLNK	-159.09	0.77430		6.3331	0.999	0.995	
Thallium	3.4619	2.1978	0.9363	0.8512	0.8480	0.8955	BLNK	-0.1051	1.13027		1.5318	0.999	0.995	
Vanadium	25.707	13.998	5.6590	4.1699	3.9714	4.0567	BLNK	-0.3621	0.24808		9.5938	1.000	0.995	
Zinc	10.855	6.6243	2.5650	0.7275	0.5814	0.5717	BLNK	-4.9307	1.79544		3.6542	0.999	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Barium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Calcium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Copper	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Iron	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Lead	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Magnesium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Potassium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Silver	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Sodium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.0500	0.1250	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L

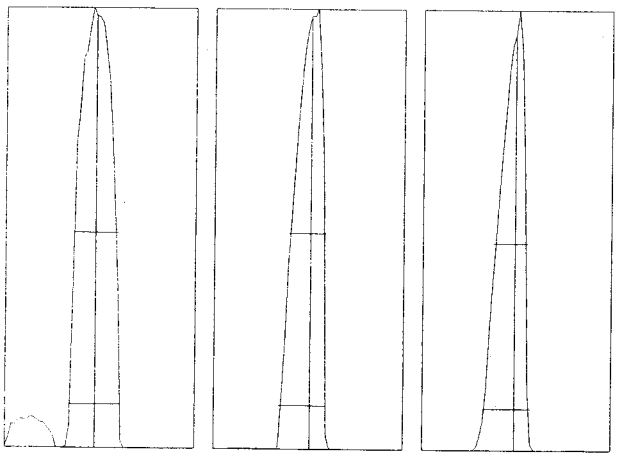
Tune Report

Tune File : ATUNE.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.329%
Doubly Charged:	70/140	0.995%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	11960.0	11888.4	2.76	4.30
89	20,000	14983.0	14949.5	1.64	3.70
205	10,000	9323.0	9416.7	1.63	8.10
156/140	1	0.401%	0.342%	15.71	
70/140	2	1.128%	1.123%	9.84	



m/z:	7	89	205
Height:	11,961	15,471	9,568
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.60	0.55
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:17

Tune Report

Tune File : ATUNE.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-142 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-2 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-6 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:20 : 00408

P/A Factor Tuning Report

Acquired:Mar 8 2007 07:27 pm

Mass[amu]	Element	P/A Factor
6	Li	0.076571
9	Be	0.085387
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.101249
44	Ca	0.103704
45	Sc	0.101262
51	V	0.101596
52	Cr	0.102554
53	Cr	0.101506
54	Fe	Sensitivity too high
55	Mn	0.104745
57	Fe	0.107281
59	Co	0.106313
60	Ni	0.108379
63	Cu	0.105922
65	Cu	0.109337
66	Zn	0.106277
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.105182
95	Mo	0.105910
98	Mo	0.105555
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108676
111	Cd	Sensitivity too low
114	Cd	0.108326
115	In	0.108334
118	(In)	0.114628
121	Sb	0.107993
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.112311
166	Er	Sensitivity too low
205	Tl	0.113826
206	(Pb)	0.111982
207	(Pb)	0.112040
208	Pb	0.114755
209	Bi	0.111177

===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

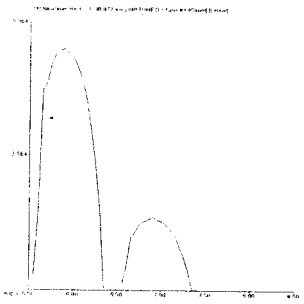
00409

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\001TUNE.D
Date Acquired:	Mar 8 2007 07:32 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.43	5.00	
59 Co	0.58	5.00	
115 In	1.93	5.00	
205 Tl	3.52	5.00	



7 Li

Mass Calib.

Actual: 6.90

Required: 6.90 - 7.10

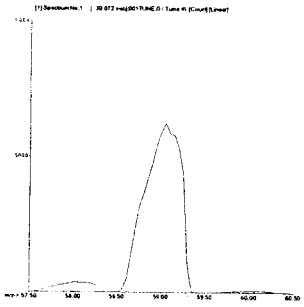
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.05

Required: 58.90 - 59.10

Flag:

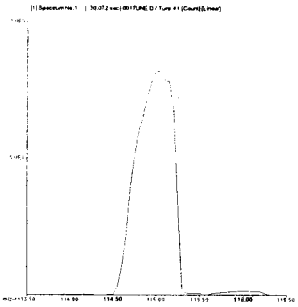
Peak Width

Actual: 0.65

Required: 0.90

Flag:

00410



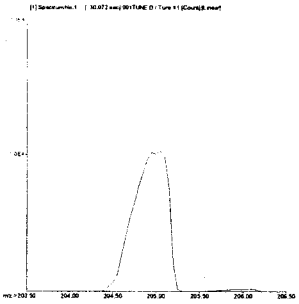
115 In

Mass Calib.

Actual:	115.05	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	205.00	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

00411

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004C
Date Acquired:	Mar 8 2007 07:45 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 07:48 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean	SD	RSD(%)
6	Li	382625.50 P	4192.00	1.10
9	Be	55.56 P	16.78	30.20
23	Na	1463632.00 A	32750.00	2.24
26	Mg	2705.56 P	460.80	17.03
27	Al	18440.00 P	2542.00	13.79
39	K	614014.13 M	10650.00	1.73
44	Ca	4090.21 P	114.50	2.80
45	Sc	356151.09 P	5436.00	1.53
51	V	1993.19 P	633.20	31.77
52	Cr	2908.89 P	101.50	3.49
55	Mn	464.44 P	22.19	4.78
57	Fe	2882.22 P	179.40	6.22
59	Co	126.67 P	3.33	2.63
60	Ni	83.33 P	14.53	17.44
65	Cu	1042.21 P	40.05	3.84
66	Zn	3738.89 P	187.10	5.00
72	Ge	68084.00 P	1033.00	1.52
75	As	-75.04 P	165.70	220.81
82	Se	-31.78 P	74.72	235.13
95	Mo	150.00 P	10.00	6.67
109	Ag	158.89 P	18.95	11.93
111	Cd	134.18 P	36.62	27.29
115	In	641888.38 P	15010.00	2.34
121	Sb	215.56 P	18.95	8.79
137	Ba	67.78 P	5.09	7.51
205	Tl	993.33 P	52.39	5.27
208	Pb	960.00 P	97.13	10.12
209	Bi	534873.31 P	16060.00	3.00

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 8 2007 07:49 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:48 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	382023.31	P	2041.00	0.53
9 Be	601.11	P	37.17	6.18
23 Na	1503425.00	A	4866.00	0.32
26 Mg	24985.55	P	823.20	3.29
27 Al	212304.41	P	3921.00	1.85
39 K	703755.13	M	15500.00	2.20
44 Ca	9494.60	P	51.16	0.54
45 Sc	353404.41	P	1211.00	0.34
51 V	3569.71	P	515.00	14.43
52 Cr	4560.00	P	86.22	1.89
55 Mn	2204.44	P	51.68	2.34
57 Fe	6235.56	P	76.98	1.23
59 Co	1416.67	P	97.70	6.90
60 Ni	391.11	P	15.75	4.03
65 Cu	1551.00	P	30.24	1.95
66 Zn	1508.89	P	111.00	7.36
72 Ge	69476.22	P	742.80	1.07
75 As	45.34	P	112.60	248.33
82 Se	-64.89	P	63.01	97.10
95 Mo	586.67	P	0.00	0.00
109 Ag	1304.44	P	86.30	6.62
111 Cd	395.01	P	4.83	1.22
115 In	634322.19	P	1679.00	0.26
121 Sb	1114.44	P	144.30	12.95
137 Ba	577.78	P	33.55	5.81
205 Tl	1894.44	P	80.30	4.24
208 Pb	5132.22	P	141.80	2.76
209 Bi	547127.81	P	11240.00	2.05

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	382023.31	0.5343	382625.53	99.84	80 - 120	
45 Sc	353404.44	0.3427	356151.13	99.23	80 - 120	
72 Ge	69476.227	1.0691	68084	102.04	80 - 120	
115 In	634322.25	0.2647	641888.44	98.82	80 - 120	
209 Bi	547127.75	2.0544	534873.31	102.29	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\006CALI.D\006CALI.D#
Date Acquired:	Mar 8 2007 07:53 pm
Operator:	
Sample Name:	s5647
Misc Info:	
Vial Number:	1103
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 07:52 pm
Sample Type:	CalStd
Total Dil Factor:	1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	384011.09	P	3865.00	1.01
9 Be	1111.11	P	26.74	2.41
23 Na	1734515.00	A	28380.00	1.64
26 Mg	47478.89	P	330.70	0.70
27 Al	377773.31	P	3140.00	0.83
39 K	901043.38	A	4836.00	0.54
44 Ca	13606.43	P	266.30	1.96
45 Sc	359692.19	P	5389.00	1.50
51 V	4749.47	P	909.20	19.14
52 Cr	6103.33	P	182.70	2.99
55 Mn	3965.55	P	78.62	1.98
57 Fe	8796.67	P	140.10	1.59
59 Co	2534.44	P	78.34	3.09
60 Ni	806.67	P	27.28	3.38
65 Cu	1702.02	P	18.36	1.08
66 Zn	2248.89	P	104.00	4.62
72 Ge	67886.22	P	863.40	1.27
75 As	398.84	P	126.90	31.82
82 Se	21.33	P	55.69	261.05
95 Mo	1020.00	P	38.44	3.77
109 Ag	2567.78	P	176.60	6.88
111 Cd	730.43	P	35.68	4.88
115 In	633797.63	P	11420.00	1.80
121 Sb	1946.67	P	57.83	2.97
137 Ba	1248.89	P	76.33	6.11
205 Tl	2928.89	P	98.45	3.36
208 Pb	6897.78	P	225.20	3.26
209 Bi	533421.13	P	15520.00	2.91

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	384011.13	1.0065	382625.53	100.36	80 - 120	
45 Sc	359692.22	1.4982	356151.13	100.99	80 - 120	
72 Ge	67886.227	1.2718	68084	99.71	80 - 120	
115 In	633797.63	1.8018	641888.44	98.74	80 - 120	
209 Bi	533421.06	2.9095	534873.31	99.73	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 8 2007 07:57 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:56 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	380241.09	P	790.80	0.21
9	Be	2128.89	P	77.27	3.63
23	Na	2155032.00	A	37940.00	1.76
26	Mg	91665.55	P	857.90	0.94
27	Al	707641.63	A	9545.00	1.35
39	K	1184236.00	A	8960.00	0.76
44	Ca	22855.67	P	341.20	1.49
45	Sc	354767.81	P	1519.00	0.43
51	V	7717.43	P	36.38	0.47
52	Cr	8390.00	P	195.00	2.32
55	Mn	6692.22	P	197.40	2.95
57	Fe	14566.67	P	86.60	0.59
59	Co	5438.89	P	89.21	1.64
60	Ni	1323.33	P	60.83	4.60
65	Cu	2388.49	P	88.59	3.71
66	Zn	3497.78	P	62.92	1.80
72	Ge	68189.56	P	618.10	0.91
75	As	870.56	P	176.40	20.26
82	Se	30.67	P	76.88	250.70
95	Mo	1993.33	P	89.69	4.50
109	Ag	4927.78	P	193.80	3.93
111	Cd	1298.17	P	71.28	5.49
115	In	632419.38	P	6772.00	1.07
121	Sb	3748.89	P	65.18	1.74
137	Ba	1511.11	P	63.62	4.21
205	Tl	4991.11	P	136.70	2.74
208	Pb	13117.78	P	321.40	2.45
209	Bi	533381.13	P	13900.00	2.61

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	380241.13	0.208	382625.53	99.38	80 - 120	
45	Sc	354767.78	0.4282	356151.13	99.61	80 - 120	
72	Ge	68189.555	0.9064	68084	100.16	80 - 120	
115	In	632419.44	1.0708	641888.44	98.52	80 - 120	
209	Bi	533381.06	2.606	534873.31	99.72	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\008CALI.D\008CALI.D#
Date Acquired:	Mar 8 2007 08:01 pm
Operator:	
Sample Name:	s5650
Misc Info:	
Vial Number:	1105
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 08:00 pm
Sample Type:	CalStd
Total Dil Factor:	1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	377210.00	P	5557.00	1.47
9 Be	21627.78	P	506.40	2.34
23 Na	10415160.00	A	50730.00	0.49
26 Mg	907348.00	A	10950.00	1.21
27 Al	6762383.00	A	56650.00	0.84
39 K	6618201.00	A	102400.00	1.55
44 Ca	171515.30	P	2450.00	1.43
45 Sc	353636.69	P	10260.00	2.90
51 V	57513.29	P	967.30	1.68
52 Cr	51242.22	P	614.10	1.20
55 Mn	62231.11	P	743.40	1.19
57 Fe	122738.90	P	1246.00	1.02
59 Co	52470.00	P	256.40	0.49
60 Ni	12305.55	P	46.71	0.38
65 Cu	15200.35	P	102.00	0.67
66 Zn	10034.44	P	127.00	1.27
72 Ge	69016.89	P	2128.00	3.08
75 As	8632.10	P	146.10	1.69
82 Se	851.56	P	19.43	2.28
95 Mo	19213.33	P	239.50	1.25
109 Ag	49048.89	P	775.20	1.58
111 Cd	11653.62	P	75.75	0.65
115 In	629155.63	P	23230.00	3.69
121 Sb	35627.78	P	586.90	1.65
137 Ba	11826.67	P	410.40	3.47
205 Tl	45233.33	P	1452.00	3.21
208 Pb	126563.30	P	2367.00	1.87
209 Bi	531631.13	P	24270.00	4.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	377210	1.4732	382625.53	98.58	80 - 120	
45 Sc	353636.66	2.9013	356151.13	99.29	80 - 120	
72 Ge	69016.891	3.0833	68084	101.37	80 - 120	
115 In	629155.56	3.6923	641888.44	98.02	80 - 120	
209 Bi	531631.06	4.5652	534873.31	99.39	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 8 2007 08:05 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:04 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	373712.19	P	1810.00	0.48
9 Be	207304.41	P	2672.00	1.29
23 Na	90023152.00	A	1710000.00	1.90
26 Mg	8386911.00	A	46300.00	0.55
27 Al	64515760.00	A	528300.00	0.82
39 K	58208472.00	A	1053000.00	1.81
44 Ca	1694354.00	A	21570.00	1.27
45 Sc	358163.31	P	2622.00	0.73
51 V	553296.88	P	2631.00	0.48
52 Cr	467685.59	P	1428.00	0.31
55 Mn	594856.69	P	6080.00	1.02
57 Fe	1186831.00	A	15360.00	1.29
59 Co	510035.59	P	2636.00	0.52
60 Ni	116422.20	P	223.70	0.19
65 Cu	140136.00	P	858.40	0.61
66 Zn	81007.78	P	669.60	0.83
72 Ge	69665.33	P	637.40	0.91
75 As	84657.81	P	117.70	0.14
82 Se	8212.22	P	99.18	1.21
95 Mo	186937.80	P	891.70	0.48
109 Ag	471474.41	P	2182.00	0.46
111 Cd	110479.40	P	1283.00	1.16
115 In	617066.19	P	3151.00	0.51
121 Sb	349661.09	P	668.10	0.19
137 Ba	117647.80	P	685.30	0.58
205 Tl	443657.81	P	15330.00	3.46
208 Pb	1212110.00	P	24020.00	1.98
209 Bi	523178.91	P	15890.00	3.04

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	373712.22	0.4843	382625.53	97.67	80 - 120	
45 Sc	358163.31	0.7321	356151.13	100.56	80 - 120	
72 Ge	69665.336	0.915	68084	102.32	80 - 120	
115 In	617066.25	0.5106	641888.44	96.13	80 - 120	
209 Bi	523178.91	3.0372	534873.31	97.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 8 2007 08:09 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:08 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	356940.00	P	3970.00	1.11
9 Be	415618.91	P	4831.00	1.16
23 Na	181920990.00	A	1627000.00	0.89
26 Mg	16693900.00	A	25740.00	0.15
27 Al	128312700.00	A	650000.00	0.51
39 K	115795500.00	A	1428000.00	1.23
44 Ca	3315358.00	A	56870.00	1.72
45 Sc	345755.50	P	5411.00	1.57
51 V	1103045.00	A	32820.00	2.98
52 Cr	908162.63	A	23590.00	2.60
55 Mn	1172304.00	A	6307.00	0.54
57 Fe	2347149.00	A	28470.00	1.21
59 Co	1000815.00	A	5505.00	0.55
60 Ni	230261.09	P	3222.00	1.40
65 Cu	275846.91	P	1967.00	0.71
66 Zn	155450.00	P	544.40	0.35
72 Ge	67972.44	P	276.40	0.41
75 As	167473.20	P	1021.00	0.61
82 Se	15783.33	P	65.03	0.41
95 Mo	373536.69	P	3577.00	0.96
109 Ag	906682.00	A	6562.00	0.72
111 Cd	217994.09	P	2585.00	1.19
115 In	586728.81	P	5508.00	0.94
121 Sb	686725.63	P	2424.00	0.35
137 Ba	234900.00	P	575.10	0.24
205 Tl	889681.13	P	21970.00	2.47
208 Pb	2390938.00	A	45060.00	1.88
209 Bi	496742.19	P	10660.00	2.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	356940	1.1122	382625.53	93.29	80 - 120	
45 Sc	345755.53	1.565	356151.13	97.08	80 - 120	
72 Ge	67972.445	0.4066	68084	99.84	80 - 120	
115 In	586728.88	0.9388	641888.44	91.41	80 - 120	
209 Bi	496742.22	2.146	534873.31	92.87	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652012 File : c08t0012 Time : 08-MAR-2007 20:17
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.4813	0.8893	10000	9638	ug/L	-4	10	
Antimony	0.4414	0.2775	100.0	95.44	ug/L	-5	10	
Arsenic	0.6639	0.6026	100.0	98.13	ug/L	-2	10	
Barium	0.2098	0.0922	100.0	93.03	ug/L	-7	10	
Beryllium	0.4168	0.2685	100.0	93.11	ug/L	-7	10	
Cadmium	1.3979	0.7805	100.0	97.50	ug/L	-3	10	
Calcium	0.0524	0.0229	10000	9589	ug/L	-4	10	
Chromium	11.227	3.2792	100.0	97.81	ug/L	-2	10	
Cobalt	5.4658	3.5242	100.0	95.83	ug/L	-4	10	
Copper	3.5084	0.9585	100.0	94.31	ug/L	-6	10	
Iron	0.1792	0.0830	10000	9627	ug/L	-4	10	
Lead	2.0099	1.1246	100.0	94.12	ug/L	-6	10	
Magnesium	0.1855	0.1167	10000	9722	ug/L	-3	10	
Manganese	7.5920	4.1174	100.0	95.64	ug/L	-4	10	
Molybdenum	2.1328	1.3116	100.0	95.88	ug/L	-4	10	
Nickel	1.4561	0.8061	100.0	95.39	ug/L	-5	10	
Potassium	3.2040	0.7992	10000	9555	ug/L	-4	10	
Selenium	-0.035	0.0579	100.0	99.63	ug/L	0	10	
Silver	5.1407	3.4670	100.0	103.6	ug/L	4	10	
Sodium	6.3331	1.2622	10000	9614	ug/L	-4	10	
Thallium	1.5318	0.8161	50.00	46.01	ug/L	-8	10	
Vanadium	9.5938	3.8285	100.0	94.62	ug/L	-5	10	
Zinc	3.6542	0.5536	100.0	94.47	ug/L	-6	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	376541	-1.59
Scandium	356151	356369	0.06
Germanium	68084	70240	3.17
Indium	641888	620910	-3.27
Bismuth	534873	526316	-1.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57097652033
Cal : 57097652001
Standards: S5654

File : c08t0033
Caldate: 08-MAR-2007

IDF : 1.0
Time : 08-MAR-2007 21:41

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.9155	10000	9922	ug/L	-1	10	
Antimony	0.4414	0.2764	100.0	95.03	ug/L	-5	10	
Arsenic	0.6639	0.5928	100.0	96.53	ug/L	-3	10	
Barium	0.2098	0.0922	100.0	93.02	ug/L	-7	10	
Beryllium	0.4168	0.2728	100.0	94.59	ug/L	-5	10	
Cadmium	1.3979	0.7255	100.0	90.62	ug/L	-9	10	
Calcium	0.0524	0.0229	10000	9574	ug/L	-4	10	
Chromium	11.227	3.1344	100.0	93.46	ug/L	-7	10	
Cobalt	5.4658	3.4635	100.0	94.18	ug/L	-6	10	
Copper	3.5084	0.9544	100.0	93.90	ug/L	-6	10	
Iron	0.1792	0.0809	10000	9385	ug/L	-6	10	
Lead	2.0099	1.1243	100.0	94.10	ug/L	-6	10	
Magnesium	0.1855	0.1202	10000	10020	ug/L	0	10	
Manganese	7.5920	3.9852	100.0	92.57	ug/L	-7	10	
Molybdenum	2.1328	1.2510	100.0	91.45	ug/L	-9	10	
Nickel	1.4561	0.7964	100.0	94.25	ug/L	-6	10	
Potassium	3.2040	0.8123	10000	9714	ug/L	-3	10	
Selenium	-0.035	0.0563	100.0	96.80	ug/L	-3	10	
Silver	5.1407	3.2546	100.0	97.28	ug/L	-3	10	
Sodium	6.3331	1.3097	10000	9982	ug/L	0	10	
Thallium	1.5318	0.8123	50.00	45.80	ug/L	-8	10	
Vanadium	9.5938	3.6728	100.0	90.75	ug/L	-9	10	
Zinc	3.6542	0.5653	100.0	96.57	ug/L	-3	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	354818	-7.27
Scandium	356151	327529	-8.04
Germanium	68084	68935	1.25
Indium	641888	571477	-10.97
Bismuth	534873	526006	-1.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57097652051 File : c08t0051 IDF : 1.0
Cal : 57097652001 Caldate: 08-MAR-2007 Time : 08-MAR-2007 22:53
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8857	10000	9599	ug/L	-4	10	
Antimony	0.4414	0.2726	100.0	93.75	ug/L	-6	10	
Arsenic	0.6639	0.5744	100.0	93.54	ug/L	-6	10	
Barium	0.2098	0.0896	100.0	90.40	ug/L	-10	10	
Beryllium	0.4168	0.2647	100.0	91.79	ug/L	-8	10	
Cadmium	1.3979	0.7072	100.0	88.33	ug/L	**-12**	10	c- ***
Calcium	0.0524	0.0225	10000	9383	ug/L	-6	10	
Chromium	11.227	3.0685	100.0	91.48	ug/L	-9	10	
Cobalt	5.4658	3.3730	100.0	91.72	ug/L	-8	10	
Copper	3.5084	0.9295	100.0	91.43	ug/L	-9	10	
Iron	0.1792	0.0804	10000	9333	ug/L	-7	10	
Lead	2.0099	1.0995	100.0	92.02	ug/L	-8	10	
Magnesium	0.1855	0.1163	10000	9686	ug/L	-3	10	
Manganese	7.5920	3.9477	100.0	91.69	ug/L	-8	10	
Molybdenum	2.1328	1.2041	100.0	88.02	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7727	100.0	91.44	ug/L	-9	10	
Potassium	3.2040	0.7838	10000	9369	ug/L	-6	10	
Selenium	-0.035	0.0546	100.0	93.95	ug/L	-6	10	
Silver	5.1407	3.1565	100.0	94.35	ug/L	-6	10	
Sodium	6.3331	1.2515	10000	9531	ug/L	-5	10	
Thallium	1.5318	0.7918	50.00	44.64	ug/L	**-11**	10	c- ***
Vanadium	9.5938	3.5832	100.0	88.53	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5466	100.0	93.21	ug/L	-7	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384233	0.42
Scandium	356151	354410	-0.49
Germanium	68084	74430	9.32
Indium	641888	609388	-5.06
Bismuth	534873	562534	5.17

-=low bias c=CCV

57097652051

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57097652067
Cal : 57097652001
Standards: S5654

File : c08t0067
Caldate: 08-MAR-2007

IDF : 1.0
Time : 08-MAR-2007 23:57

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8911	10000	9658	ug/L	-3	10	
Antimony	0.4414	0.2739	100.0	94.16	ug/L	-6	10	
Arsenic	0.6639	0.5771	100.0	93.98	ug/L	-6	10	
Barium	0.2098	0.0899	100.0	90.66	ug/L	-9	10	
Beryllium	0.4168	0.2664	100.0	92.37	ug/L	-8	10	
Cadmium	1.3979	0.6967	100.0	87.02	ug/L	**-13**	10	c- ***
Calcium	0.0524	0.0226	10000	9432	ug/L	-6	10	
Chromium	11.227	3.0743	100.0	91.65	ug/L	-8	10	
Cobalt	5.4658	3.4579	100.0	94.03	ug/L	-6	10	
Copper	3.5084	0.9449	100.0	92.96	ug/L	-7	10	
Iron	0.1792	0.0825	10000	9568	ug/L	-4	10	
Lead	2.0099	1.1107	100.0	92.96	ug/L	-7	10	
Magnesium	0.1855	0.1181	10000	9837	ug/L	-2	10	
Manganese	7.5920	4.0463	100.0	93.99	ug/L	-6	10	
Molybdenum	2.1328	1.2018	100.0	87.85	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7956	100.0	94.16	ug/L	-6	10	
Potassium	3.2040	0.7828	10000	9356	ug/L	-6	10	
Selenium	-0.035	0.0551	100.0	94.79	ug/L	-5	10	
Silver	5.1407	3.1065	100.0	92.86	ug/L	-7	10	
Sodium	6.3331	1.2834	10000	9778	ug/L	-2	10	
Thallium	1.5318	0.7973	50.00	44.95	ug/L	-10	10	
Vanadium	9.5938	3.5824	100.0	88.51	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5597	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	364333	-4.78
Scandium	356151	333904	-6.25
Germanium	68084	71338	4.78
Indium	641888	568976	-11.36
Bismuth	534873	534394	-0.09

-=low bias c=CCV

57097652067

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57097652015
Cal : 57097652001

File : c08t0015
Caldate: 08-MAR-2007

IDF : 1.0
Time : 08-MAR-2007 20:29

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.04973]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1181	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	[0.02385]	0.1000	0.01579	ug/L	!ib
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	374762	-2.06
Scandium	356151	351811	-1.22
Germanium	68084	70476	3.51
Indium	641888	634789	-1.11
Bismuth	534873	545702	2.02

=warning ib=instrument blank

57097652015

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57097652035 File : c08t0035 IDF : 1.0
Cal : 57097652001 Caldate: 08-MAR-2007 Time : 08-MAR-2007 21:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	[0.007363]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	ND	0.1000	0.3448	ug/L	
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	368761	-3.62
Scandium	356151	334843	-5.98
Germanium	68084	71147	4.50
Indium	641888	604863	-5.77
Bismuth	534873	554307	3.63

!=warning ib=instrument blank

57097652035

00424

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652053 File : c08t0053 Time : 08-MAR-2007 23:01
Cal : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	0.2424	0.1000	0.007794	ug/L	ib ***
Barium	[0.005533]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01349]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	[0.05450]	0.1000	0.01770	ug/L	!ib
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.2074	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384741	0.55
Scandium	356151	351291	-1.36
Germanium	68084	74704	9.72
Indium	641888	629371	-1.95
Bismuth	534873	577159	7.91

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652069 File : c08t0069 Time : 09-MAR-2007 00:05
Cal : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.08079]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	0.1683	0.1000	0.01770	ug/L	ib ***
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1993	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	378116	-1.18
Scandium	356151	340741	-4.33
Germanium	68084	73735	8.30
Indium	641888	600089	-6.51
Bismuth	534873	565333	5.69

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652017 File : c08t0017 Time : 08-MAR-2007 20:37
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.05647]	0.1000	ug/L	
Arsenic	0.9454	0.1000	ug/L	
Barium	1.306	0.1000	ug/L	
Beryllium	[0.01425]	0.1000	ug/L	
Cadmium	[0.07967]	0.1000	ug/L	
Chromium	1.932	0.1000	ug/L	
Cobalt	0.4899	0.1000	ug/L	
Copper	1.808	0.1000	ug/L	
Lead	0.6184	0.1000	ug/L	
Manganese	0.7207	0.1000	ug/L	
Nickel	2.596	0.1000	ug/L	
Selenium	0.5051	0.1000	ug/L	
Silver	0.2024	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1178	0.1000	ug/L	
Zinc	[0.08790]	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	121500	ug/L	122
Calcium	300000	355500	ug/L	119
Iron	250000	255300	ug/L	102
Magnesium	100000	119800	ug/L	120
Molybdenum	2000	2202	ug/L	110
Potassium	100000	120100	ug/L	120
Sodium	250000	279700	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	282773	-26.10
Scandium	356151	280052	-21.37
Germanium	68084	62234	-8.59
Indium	641888	464218	-27.68
Bismuth	534873	375342	-29.83

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
Seqnum : 57097652018 File : c08t0018
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 08-MAR-2007 20:41

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	109600	ug/L	10		
Arsenic	100.0	100.1	ug/L	0	20	
Cadmium	100.0	91.08	ug/L	-9	20	
Calcium	300000	318300	ug/L	6		
Chromium	200.0	213.5	ug/L	7	20	
Cobalt	200.0	202.7	ug/L	1	20	
Copper	200.0	190.6	ug/L	-5	20	
Iron	250000	235000	ug/L	-6		
Magnesium	100000	108900	ug/L	9		
Manganese	200.0	209.2	ug/L	5	20	
Molybdenum	2000	2020	ug/L	1		
Nickel	200.0	196.5	ug/L	-2	20	
Potassium	100000	109300	ug/L	9		
Selenium	100.0	81.78	ug/L	-18	20	
Silver	50.00	41.37	ug/L	-17	20	
Sodium	250000	251400	ug/L	1		
Vanadium	200.0	221.0	ug/L	11	20	
Zinc	100.0	83.41	ug/L	-17	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	289056	-18.84
Germanium	68084	61867	-9.13

57097652018

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652072 File : c08t0072 Time : 09-MAR-2007 00:17
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.04686]	0.1000	ug/L	
Arsenic	0.7403	0.1000	ug/L	
Barium	1.371	0.1000	ug/L	
Beryllium	[0.005095]	0.1000	ug/L	
Cadmium	[0.03532]	0.1000	ug/L	
Chromium	1.947	0.1000	ug/L	
Cobalt	0.5032	0.1000	ug/L	
Copper	1.487	0.1000	ug/L	
Lead	0.6051	0.1000	ug/L	
Manganese	0.7752	0.1000	ug/L	
Nickel	2.521	0.1000	ug/L	
Selenium	0.4467	0.1000	ug/L	
Silver	0.1922	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1686	0.1000	ug/L	
Zinc	0.1352	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	349100	ug/L	116
Iron	250000	257600	ug/L	103
Magnesium	100000	118400	ug/L	118
Molybdenum	2000	2147	ug/L	107
Potassium	100000	117600	ug/L	118
Sodium	250000	280100	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	286739	-25.06
Scandium	356151	273610	-23.18
Germanium	68084	59624	-12.43
Indium	641888	441697	-31.19
Bismuth	534873	359606	-32.77

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652073 File : c08t0073 Time : 09-MAR-2007 00:21
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107300	ug/L	7		
Arsenic	100.0	97.46	ug/L	-3	20	
Cadmium	100.0	86.13	ug/L	-14	20	
Calcium	300000	316100	ug/L	5		
Chromium	200.0	212.1	ug/L	6	20	
Cobalt	200.0	200.9	ug/L	0	20	
Copper	200.0	187.6	ug/L	-6	20	
Iron	250000	234900	ug/L	-6		
Magnesium	100000	105500	ug/L	6		
Manganese	200.0	207.9	ug/L	4	20	
Molybdenum	2000	1947	ug/L	-3		
Nickel	200.0	194.7	ug/L	-3	20	
Potassium	100000	107200	ug/L	7		
Selenium	100.0	78.75	ug/L	**-21**	20	ab- ***
Silver	50.00	39.37	ug/L	**-21**	20	ab- ***
Sodium	250000	253500	ug/L	1		
Vanadium	200.0	222.0	ug/L	11	20	
Zinc	100.0	82.18	ug/L	-18	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	277282	-22.14
Germanium	68084	59868	-12.07

-=low bias ab=ICSAB

57097652073

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

		IS1 (LI) READING	IS2 (SC) READING	IS3 (GE) READING	IS4 (IN) READING	IS5 (BI) READING	IS6 (TB) READING
ICALBLK STD		382626	356151	68084	641888	534873	629138
LOWER LIMIT		114788	106845	20425	192567	160462	188741
UPPER LIMIT		459151	427381	81701	770266	641848	754965

TYPE	SAMPLE	#					
ICB		015	374762	351811	70476	634789	545702	636819
ICSA		017	282773	280052	62234	464218	375342	523658
BLANK	QC378195	021	286751	265483	56170	467751	429380	479219
BS	QC378196	022	299261	269324	56317	464251	428812	495240
BSD	QC378197	023	304341	280663	57799	485844	440986	513617
MSS	193027-002	025	301590	281504	60861	473293	427058	511978
SER	QC378200	026	354330	323999	68648	567375	510768	591833
MS	QC378198	027	289210	272002	59259	446566	404090	492266
MSD	QC378199	028	302662	286557	60386	465383	417702	509972
CCV		033	354818	327529	68935	571477	526006	615202
CCB		035	368761	334843	71147	604863	554307	623597
BLANK	QC377794	038	288832	252909	66050	411535	343680	416729
SAMPLE	193213-001	039	317491	285287	62766	490930	471486	530648
SAMPLE	193213-001	040	353919	354557	65682	566096	490310	594053
SAMPLE	193027-001	041	304074	279260	60448	465164	427753	507988
SAMPLE	193027-003	042	306136	284770	62395	473615	442913	524578
SAMPLE	193027-004	043	296000	276433	61460	454660	425547	506572
SAMPLE	193027-005	044	304380	274887	62667	463824	445334	519516
SAMPLE	193027-006	045	301292	278263	63516	463376	441544	519511
SAMPLE	193027-007	046	313447	284828	64052	476699	448937	528018
SAMPLE	193027-008	047	300129	278130	62491	456999	426996	514842
CCV		051	384233	354410	74430	609388	562534	655934
CCB		053	384741	351291	74704	629371	577159	647367
SAMPLE	193027-011	056	323316	291899	62248	474956	414950	523872
SAMPLE	193027-012	057	308964	292548	62176	475526	423213	536579
SAMPLE	193027-013	058	327521	297913	65723	496938	458516	542464
SAMPLE	193027-014	059	317217	300733	65780	490236	456550	533196
SAMPLE	193027-015	060	320247	289779	65837	480362	464587	533033

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

TYPE	SAMPLE	#						
SAMPLE	193027-011	061	315396	285662	64537	462211	433890	534166
SAMPLE	193027-012	062	306337	330700	62107	454814	425383	534035
SAMPLE	193027-013	063	332340	312672	65892	517199	453802	557848
CCV		067	364333	333904	71338	568976	534394	613162
CCB		069	378116	340741	73735	600089	565333	626156
ICSA		072	286739	273610	59624	441697	359606	499152

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c08t0001	TUN				08-MAR-2007 19:32	1.0	1.0				1	
002	c08t0002	X	RINSE			08-MAR-2007 19:37	1.0					2	
003	c08t0003	X	RINSE			08-MAR-2007 19:41	1.0					2	
004	c08t0004	ICALBLK	CALBLANK			08-MAR-2007 19:45	1.0	1.0				2	
005	c08t0005	ICAL				08-MAR-2007 19:49	1.0	1.0				3	
006	c08t0006	ICAL				08-MAR-2007 19:53	1.0	1.0				4	
007	c08t0007	ICAL				08-MAR-2007 19:57	1.0	1.0				5	
008	c08t0008	ICAL				08-MAR-2007 20:01	1.0	1.0				6	
009	c08t0009	ICAL				08-MAR-2007 20:05	1.0	1.0				7	
010	c08t0010	ICAL				08-MAR-2007 20:09	1.0	1.0				8	
011	c08t0011	X	RINSE			08-MAR-2007 20:13	1.0					2	
012	c08t0012	ICV				08-MAR-2007 20:17	1.0	1.0			1	9	
013	c08t0013	X	RINSE			08-MAR-2007 20:21	1.0					2	
014	c08t0014	X				08-MAR-2007 20:25	1.0	1.0				2	
015	c08t0015	ICB				08-MAR-2007 20:29	1.0	1.0	1		1	2	
016	c08t0016	X				08-MAR-2007 20:33	1.0	1.0				2	
017	c08t0017	ICSA				08-MAR-2007 20:37	1.0	1.0			1	10 2	7:CA=355500
018	c08t0018	ICSAB				08-MAR-2007 20:41	1.0	1.0			1	11 2	11:CA=318300
019	c08t0019	X	RINSE			08-MAR-2007 20:45	1.0					2	
020	c08t0020	X	RINSE			08-MAR-2007 20:49	1.0					2	
021	c08t0021	BLANK	QC378195	122867	Filtra	08-MAR-2007 20:53	1.0	1.0			1	2	
022	c08t0022	BS	QC378196	122867	Filtra	08-MAR-2007 20:57	1.0	1.0			1	2	
023	c08t0023	BSD	QC378197	122867	Filtra	08-MAR-2007 21:01	1.0	1.0			1	2	
024	c08t0024	X	RINSE			08-MAR-2007 21:05	1.0					2	
025	c08t0025	MSS	193027-002	122867	Filtra	08-MAR-2007 21:09	1.0	1.0	3		1	2	3:MG=77730.0
026	c08t0026	SER	QC378200	122867	Filtra	08-MAR-2007 21:13	5.0	1.0	1	1	1	2	
027	c08t0027	MS	QC378198	122867	Filtra	08-MAR-2007 21:17	1.0	1.0	1		1	2	3:MG=89390.0
028	c08t0028	MSD	QC378199	122867	Filtra	08-MAR-2007 21:21	1.0	1.0	1		1	2	3:MG=83750.0
029	c08t0029	PDS	QC378201	122867	Filtra	08-MAR-2007 21:25	50.0	1.0			1	12	3:MG=84700.0
030	c08t0030	X	RINSE			08-MAR-2007 21:29	1.0					2	
031	c08t0031	X	RINSE			08-MAR-2007 21:33	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RCH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c08t0032	X	RINSE			08-MAR-2007 21:37	1.0					2	
033	c08t0033	CCV				08-MAR-2007 21:41	1.0	1.0			1	13	
034	c08t0034	X	RINSE			08-MAR-2007 21:45	1.0					2	
035	c08t0035	CCB				08-MAR-2007 21:49	1.0	1.0			1	2	
036	c08t0036	X				08-MAR-2007 21:53	1.0	1.0				2	
037	c08t0037	X				08-MAR-2007 21:57	1.0	1.0				2	
038	c08t0038	BLANK	QC377794	122769	Filtra	08-MAR-2007 22:01	1.0	1.0	4		1	2	
039	c08t0039	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 22:05	1.0	1.0	5		1	2	2:NA=33040.0
040	c08t0040	SAMPLE	193213-001	122867	Water	08-MAR-2007 22:09	1.0	1.0	5		1	2	2:NA=30470.0
041	c08t0041	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 22:13	1.0	1.0	6		1	2	3:NA=76650.0
042	c08t0042	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 22:17	1.0	1.0	6		1	2	3:NA=67770.0
043	c08t0043	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 22:21	1.0	1.0	6		1	2	3:NA=77290.0
044	c08t0044	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 22:25	1.0	1.0	5		1	2	3:MG=88070.0
045	c08t0045	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 22:29	1.0	1.0	6		1	2	3:NA=67140.0
046	c08t0046	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 22:33	1.0	1.0	6		1	2	3:MG=63870.0
047	c08t0047	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 22:37	1.0	1.0	6		1	2	3:NA=108300
048	c08t0048	X	RINSE			08-MAR-2007 22:41	1.0					2	
049	c08t0049	X	RINSE			08-MAR-2007 22:45	1.0					2	
050	c08t0050	X	RINSE			08-MAR-2007 22:49	1.0					2	
051	c08t0051	CCV				08-MAR-2007 22:53	1.0	1.0	4		1	13	
052	c08t0052	X	RINSE			08-MAR-2007 22:57	1.0					2	
053	c08t0053	CCB				08-MAR-2007 23:01	1.0	1.0	2		1	2	
054	c08t0054	X				08-MAR-2007 23:05	1.0	1.0				2	
055	c08t0055	X				08-MAR-2007 23:09	1.0	1.0				2	
056	c08t0056	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 23:13	1.0	1.0	6		1	2	3:NA=192700
057	c08t0057	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 23:17	1.0	1.0	7		1	2	4:NA=178400
058	c08t0058	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 23:21	1.0	1.0	7		1	2	4:NA=46740.0
059	c08t0059	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 23:25	1.0	1.0	5		1	2	2:MG=55170.0
060	c08t0060	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 23:29	1.0	1.0	7		1	2	4:CA=60370.0
061	c08t0061	SAMPLE	193027-011	122867	Water	08-MAR-2007 23:33	1.0	1.0	6		1	2	3:NA=201700
062	c08t0062	SAMPLE	193027-012	122867	Water	08-MAR-2007 23:37	1.0	1.0	9		1	2	6:NA=152100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RM Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c08t0063	SAMPLE	193027-013	122867	Water	08-MAR-2007 23:41	1.0	1.0	9		1	2	6:FE=94170.0
064	c08t0064	X	RINSE			08-MAR-2007 23:45	1.0					2	
065	c08t0065	X	RINSE			08-MAR-2007 23:49	1.0					2	
066	c08t0066	X	RINSE			08-MAR-2007 23:53	1.0					2	
067	c08t0067	CCV				08-MAR-2007 23:57	1.0	1.0	3		1	13	
068	c08t0068	X	RINSE			09-MAR-2007 00:01	1.0					2	
069	c08t0069	CCB				09-MAR-2007 00:05	1.0	1.0	2		1	2	
070	c08t0070	X				09-MAR-2007 00:09	1.0	1.0				2	
071	c08t0071	X				09-MAR-2007 00:13	1.0	1.0				2	
072	c08t0072	ICSA				09-MAR-2007 00:17	1.0	1.0			1	10 2	7:CA=349100
073	c08t0073	ICSAB				09-MAR-2007 00:21	1.0	1.0	2		1	11 2	11:CA=316100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RLH Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET06
alnum : 67098941001
nits : ug/L

Date : 09-MAR-2007 17:19
X Axis : R

Reviewer: ---

evel	File	Seqnum	Sample ID	Analyzed	Stds
L1	c09q0005	67098941005		09-MAR-2007 17:24	S5645
L2	c09q0006	67098941006		09-MAR-2007 17:30	S5648
L3	c09q0007	67098941007		09-MAR-2007 17:35	S5649
L4	c09q0008	67098941008		09-MAR-2007 17:40	S5650
L5	c09q0009	67098941009		09-MAR-2007 17:45	S5644
L6	c09q0010	67098941010		09-MAR-2007 17:51	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
uminum	A	1.0127	0.7158	0.9799	0.6571	0.6506	0.6379	BLNK	-2.7680	1.56167		0.7757	1.000	0.995	
timony	A	0.4072	0.3297	0.3209	0.3088	0.3210	0.3280	BLNK	-0.0253	3.06281		0.3359	1.000	0.995	
rium	A	0.2869	0.1534	0.1078	0.0939	0.0939	0.0920	BLNK	-0.0593	10.8298		0.1380	1.000	0.995	
ryllium	A	0.4058	0.3557	0.3589	0.3440	0.3622	0.3632	BLNK	-0.0182	2.75552		0.3650	1.000	0.995	
dmium	A	0.1047	0.0922	0.0946	0.0890	0.0893	0.0891	BLNK	-0.0150	11.2216		0.0932	1.000	0.995	
lcium	A	0.4388	0.1041	0.0686	0.0289	0.0225	0.0217	BLNK	-196.48	46.3423		0.1141	1.000	0.995	
ad	A	1.2340	0.7613	0.7042	0.6332	0.6489	0.6511	BLNK	-0.0342	1.53737		0.7721	1.000	0.995	
gnesium	A	0.7525	0.6043	0.5811	0.5519	0.5437	0.5391	BLNK	-2.0795	1.85184		0.5954	1.000	0.995	
lybdenum	A	0.3454	0.2488	0.2413	0.2297	0.2313	0.2385	BLNK	-0.0518	4.22014		0.2558	1.000	0.995	
tassium	A	6.1144	1.8034	1.2709	0.7751	0.7208	0.7085	BLNK	-75.952	1.41296		1.8988	1.000	0.995	
lver	A	0.4626	0.4039	0.4088	0.3924	0.3962	0.3967	BLNK	-0.0218	2.52204		0.4101	1.000	0.995	
allium	A	2.0362	1.0312	0.9444	0.8483	0.8877	0.9593	BLNK	-0.0717	1.05940		1.1178	0.999	0.995	
senic	E	0.8142	0.7223	0.6739	0.6537	0.6486	0.6551	BLNK	-0.0505	1.53000		0.6946	1.000	0.995	
romium	E	7.6612	4.2433	3.7835	3.3656	3.2742	3.3048	BLNK	-0.1249	0.30337		4.2721	1.000	0.995	
balt	E	6.9414	5.6712	5.7061	5.4273	5.2102	5.1704	BLNK	-0.0378	0.19314		5.6878	1.000	0.995	
pper	E	26.371	12.548	12.909	8.5491	8.0398	7.9605	BLNK	-0.1957	0.12550		12.730	1.000	0.995	
nganese	E	2.8387	1.9797	1.8652	1.6900	1.6583	1.6796	BLNK	-0.0526	0.59708		1.9519	1.000	0.995	
ckel	E	3.1866	1.8564	1.7358	1.5047	1.4304	1.4170	BLNK	-0.1223	0.70485		1.8551	1.000	0.995	
dium	E	4.2421	1.4197	1.0752	0.7329	0.6813	0.6907	BLNK	-49.142	1.45605		1.4736	1.000	0.995	
nadium	E		3.1157	2.8036	2.5744	2.5588	2.5967	BLNK	-0.2606	0.38686		2.7298	1.000	0.995	
nc	E	22.520	5.2400	3.6163	1.4390	1.2153	1.1544	BLNK	-1.2930	0.86364		5.8642	0.999	0.995	
on	H	1.4541	1.0813	1.0554	0.9382	0.9387	0.9241	BLNK	-5.9496	1.07910		1.0653	1.000	0.995	
enium	H	0.1985	0.1550	0.1620	0.1459	0.1491	0.1481	BLNK	-0.0515	6.74561		0.1598	1.000	0.995	

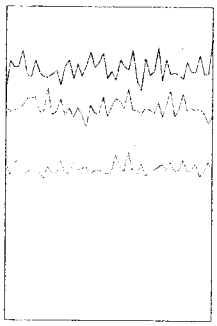
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
uminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
timony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
rium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
eryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
lcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ad	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
gnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
tassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
allium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
senic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
romium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
balt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
pper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
nganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ckel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
nadium	E		0.5000	1.0000	10.000	100.00	200.00	ug/L
nc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
on	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

trument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67098941001

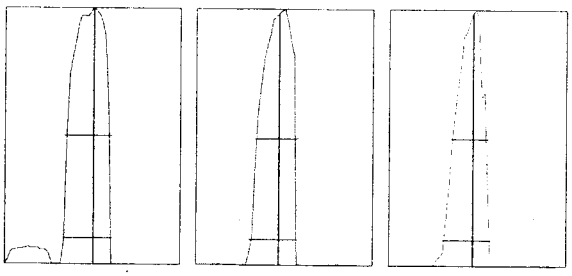
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17941.0	16037.2	4.41	0.80
89	50,000	32655.0	33846.0	3.86	0.80
205	50,000	23764.0	24112.8	3.77	3.00

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.881%
Doubly Charged: 70/140 1.423%



m/z:	7	89	205
Height:	16,264	33,712	23,918
Axis:	7.05	88.95	204.95
W-50%:	0.80	0.70	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.03 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-160 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	123
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-3 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1810 V
Pulse HV	:	1430 V

===Reaction Cell===

Reaction Mode	:	OFF					
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	: --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	14.4	29.57
59	3669.5	4.92
89	2311.9	6.04

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2559.4	4.64
78	0.1	342.56
89	20073.3	3.99

Integration Time: 0.1000sec

Generated : Mar 09, 2007 15:47:05
Printed : Mar 09, 2007 15:48:45

00438

P/A Factor Tuning Report

Acquired:Mar 9 2007 04:34 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059504
7	(Li)	Sensitivity too low
9	Be	0.068785
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086430
45	Sc	0.086036
51	V	0.087935
52	Cr	0.091605
55	Mn	0.093940
56	Fe	Sensitivity too high
59	Co	0.097332
60	Ni	0.101235
63	Cu	0.105051
65	Cu	0.104224
66	Zn	Sensitivity too low
72	Ge	0.102011
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.099997
98	Mo	0.100647
99	(Ru)	Sensitivity too low
107	Ag	0.110998
111	Cd	Sensitivity too low
115	In	0.109935
118	(In)	0.109589
121	Sb	0.108305
137	Ba	Sensitivity too low
159	Tb	0.112040
205	Tl	0.119958
206	(Pb)	0.119539
207	(Pb)	0.119266
208	Pb	0.119009
209	Bi	0.120139

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1430 V

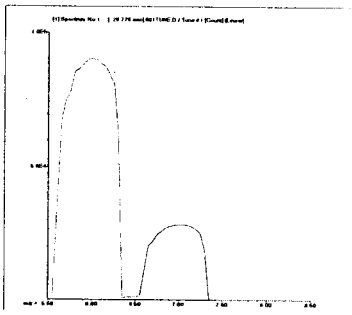
00439

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C09q00.B\001TUNE.D
Date Acquired:	Mar 9 2007 05:01 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	1.01	5.00	
115 In	0.95	5.00	
205 Tl	0.34	5.00	



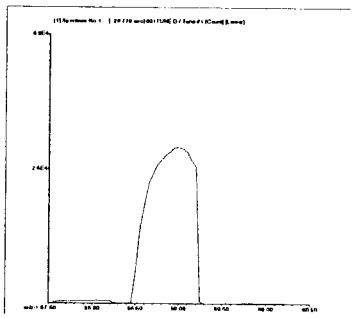
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.70
Required: 0.90
Flag:



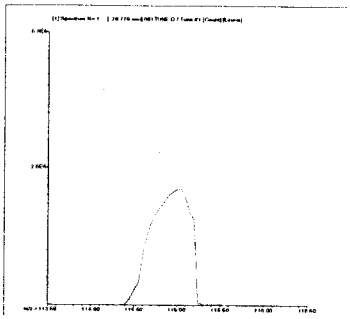
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



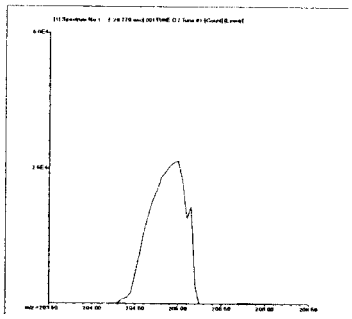
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004C
Date Acquired:	Mar 9 2007 05:17 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Mar 09 2007 05:21 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	916633.81	A	13710.00	1.50
7	(Li)		P		
9	Be	121.12	P	20.37	16.82
23	Na	30607.30	P	507.90	1.66
24	Mg	34040.43	P	3613.00	10.61
27	Al	53745.65	P	3790.00	7.05
39	K	1631212.00	A	9044.00	0.55
44	Ca	128692.70	P	2817.00	2.19
45	Sc	422487.81	P	6740.00	1.60
45	Sc	45344.33	P	679.40	1.50
45	Sc	1517729.00	A	29070.00	1.92
51	V	610.76	P	6.70	1.10
52	Cr	373.71	P	43.91	11.75
55	Mn	80.00	P	15.28	19.10
56	Fe	46731.86	P	14490.00	31.01
59	Co	178.15	P	74.74	41.95
60	Ni	157.41	P	15.41	9.79
63	Cu	702.62	P	59.89	8.52
65	Cu	322.60	P	17.01	5.27
66	Zn	673.73	P	52.62	7.81
72	Ge	101122.60	P	1933.00	1.91
72	Ge	22510.59	P	340.00	1.51
75	As	14.89	P	2.14	14.39
78	Se	15.56	P	8.88	57.07
89	Y	1904354.00	A	44640.00	2.34
98	Mo	466.70	P	68.08	14.59
107	Ag	316.69	P	32.83	10.37
111	Cd	48.89	P	13.47	27.55
115	In	1832636.00	A	36180.00	1.97
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	302.25	P	53.89	17.83
137	Ba	246.68	P	14.53	5.89
159	Tb	2253621.00	A	40930.00	1.82
205	Tl	1753.54	P	125.50	7.16
208	Pb	1002.30	P	51.69	5.16
209	Bi	1296680.00	A	24510.00	1.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 9 2007 05:22 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	932362.81	A	20880.00	2.24
7 (Li)		P		
9 Be	756.72	P	98.38	13.00
23 Na	37989.20	P	453.20	1.19
24 Mg	224754.59	P	7900.00	3.51
27 Al	302506.91	P	11730.00	3.88
39 K	1825330.00	A	17170.00	0.94
44 Ca	130970.30	P	1091.00	0.83
45 Sc	408674.50	P	2821.00	0.69
45 Sc	44781.21	P	467.30	1.04
45 Sc	1493194.00	A	42010.00	2.81
51 V	532.98	P	30.60	5.74
52 Cr	686.32	P	40.92	5.96
55 Mn	254.08	P	23.13	9.10
56 Fe	118836.00	P	1660.00	1.40
59 Co	621.87	P	42.32	6.81
60 Ni	285.56	P	41.83	14.65
63 Cu	1174.14	P	53.03	4.52
65 Cu	556.31	P	28.21	5.07
66 Zn	1003.01	P	10.08	1.01
72 Ge	98470.08	P	1233.00	1.25
72 Ge	22271.34	P	380.30	1.71
75 As	36.22	P	6.47	17.88
78 Se	39.11	P	3.79	9.69
89 Y	1825115.00	A	33830.00	1.85
98 Mo	1261.22	P	55.01	4.36
99 (Ru)	5.56	P	5.09	91.65
107 Ag	1651.28	P	171.70	10.40
111 Cd	373.35	P	10.00	2.68
115 In	1783367.00	A	42550.00	2.39
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1452.36	P	44.27	3.05
137 Ba	1256.78	P	122.50	9.75
159 Tb	2191961.00	A	33700.00	1.54
205 Tl	2639.27	P	130.30	4.94
208 Pb	5411.80	P	287.80	5.32
209 Bi	1295684.00	A	22450.00	1.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	932362.81	2.24	916633.81	101.7	80 - 120	
45 Sc	408674.50	0.69	422487.78	96.7	80 - 120	
45 Sc	44781.21	1.04	45344.33	98.8	80 - 120	
45 Sc	1493194.10	2.81	1517729.50	98.4	80 - 120	
72 Ge	98470.09	1.25	101122.62	97.4	80 - 120	
72 Ge	22271.34	1.71	22510.59	98.9	80 - 120	
89 Y	1825115.60	1.85	1904353.90	95.8	80 - 120	
115 In	1783367.30	2.39	1832635.80	97.3	80 - 120	
159 Tb	2191960.80	1.54	2253621.50	97.3	80 - 120	
209 Bi	1295683.50	1.73	1296679.60	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 9 2007 05:28 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	938807.00	A	31990.00	3.41
7 (Li)		P		
9 Be	3338.29	P	91.68	2.75
23 Na	61838.99	P	267.50	0.43
24 Mg	887612.00	A	6993.00	0.79
27 Al	1051503.00	A	6508.00	0.62
39 K	2649391.00	A	9411.00	0.36
44 Ca	152952.09	P	1604.00	1.05
45 Sc	396918.41	P	3853.00	0.97
45 Sc	43558.08	P	93.97	0.22
45 Sc	1472874.00	A	90400.00	6.14
51 V	1357.12	P	17.37	1.28
52 Cr	1848.29	P	11.88	0.64
55 Mn	862.26	P	68.06	7.89
56 Fe	429154.81	P	3539.00	0.82
59 Co	2470.25	P	6.67	0.27
60 Ni	808.55	P	42.01	5.20
63 Cu	2671.40	P	100.80	3.77
65 Cu	1305.63	P	73.14	5.60
66 Zn	1115.62	P	65.52	5.87
72 Ge	94500.77	P	1088.00	1.15
72 Ge	21288.65	P	62.48	0.29
75 As	153.78	P	9.98	6.49
78 Se	146.45	P	2.69	1.84
89 Y	1798577.00	A	97930.00	5.44
98 Mo	4463.12	P	173.00	3.88
99 (Ru)	3.33	P	3.33	99.99
107 Ag	7066.54	P	119.80	1.70
111 Cd	1614.61	P	6.95	0.43
115 In	1752938.00	A	86430.00	4.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5764.79	P	214.70	3.72
137 Ba	3256.08	P	37.18	1.14
159 Tb	2126610.00	A	122200.00	5.75
205 Tl	6444.11	P	149.40	2.32
208 Pb	16149.21	P	194.10	1.20
209 Bi	1250766.00	A	52740.00	4.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	938806.94	3.41	916633.81	102.4	80 - 120	
45 Sc	396918.34	0.97	422487.78	93.9	80 - 120	
45 Sc	43558.09	0.22	45344.33	96.1	80 - 120	
45 Sc	1472874.40	6.14	1517729.50	97.0	80 - 120	
72 Ge	94500.77	1.15	101122.62	93.5	80 - 120	
72 Ge	21288.65	0.29	22510.59	94.6	80 - 120	
89 Y	1798577.30	5.44	1904353.90	94.4	80 - 120	
115 In	1752937.90	4.93	1832635.80	95.7	80 - 120	
159 Tb	2126610.30	5.75	2253621.50	94.4	80 - 120	
209 Bi	1250765.50	4.22	1296679.60	96.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 9 2007 05:33 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	949084.19	A	9162.00	0.97
7	(Li)		P		
9	Be	6811.84	P	232.60	3.41
23	Na	95789.79	P	1074.00	1.12
24	Mg	1730903.00	A	10410.00	0.60
27	Al	2918482.00	A	12270.00	0.42
39	K	3785269.00	A	32530.00	0.86
44	Ca	204370.91	P	1217.00	0.60
45	Sc	397183.91	P	1449.00	0.36
45	Sc	44549.42	P	784.20	1.76
45	Sc	1489234.00	A	3171.00	0.21
51	V	2498.03	P	61.50	2.46
52	Cr	3370.45	P	18.99	0.56
55	Mn	1661.60	P	60.28	3.63
56	Fe	838345.88	P	9281.00	1.11
59	Co	5084.31	P	137.60	2.71
60	Ni	1546.40	P	37.92	2.45
63	Cu	5637.86	P	106.10	1.88
65	Cu	2732.15	P	39.14	1.43
66	Zn	1579.00	P	28.37	1.80
72	Ge	93877.58	P	842.10	0.90
72	Ge	21839.15	P	398.60	1.83
75	As	294.45	P	15.91	5.40
78	Se	304.23	P	13.42	4.41
89	Y	1819868.00	A	9355.00	0.51
98	Mo	8782.03	P	107.40	1.22
99	(Ru)	8.89	P	7.70	86.60
107	Ag	14229.08	P	356.00	2.50
111	Cd	3293.87	P	68.88	2.09
115	In	1740483.00	A	15200.00	0.87
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	11168.36	P	104.50	0.94
137	Ba	4606.53	P	100.00	2.17
159	Tb	2136014.00	A	12900.00	0.60
205	Tl	11629.12	P	152.00	1.31
208	Pb	30079.75	P	392.70	1.31
209	Bi	1231391.00	A	5079.00	0.41

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	949084.25	0.97	916633.81	103.5	80 - 120	
45	Sc	397183.91	0.36	422487.78	94.0	80 - 120	
45	Sc	44549.42	1.76	45344.33	98.2	80 - 120	
45	Sc	1489233.60	0.21	1517729.50	98.1	80 - 120	
72	Ge	93877.59	0.90	101122.62	92.8	80 - 120	
72	Ge	21839.15	1.83	22510.59	97.0	80 - 120	
89	Y	1819868.10	0.51	1904353.90	95.6	80 - 120	
115	In	1740483.30	0.87	1832635.80	95.0	80 - 120	
159	Tb	2136014.30	0.60	2253621.50	94.8	80 - 120	
209	Bi	1231391.50	0.41	1296679.60	95.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 9 2007 05:38 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	953547.69	A	5058.00	0.53
7 (Li)		P		
9 Be	65607.67	P	560.40	0.85
23 Na	659608.88	M	10880.00	1.65
24 Mg	16405000.00	A	198800.00	1.21
27 Al	19529830.00	A	256400.00	1.31
39 K	23039840.00	A	412900.00	1.79
44 Ca	859148.50	A	11770.00	1.37
45 Sc	420468.81	P	3267.00	0.78
45 Sc	45001.15	P	673.60	1.50
45 Sc	1486259.00	A	16170.00	1.09
51 V	23167.72	P	273.30	1.18
52 Cr	30292.32	P	567.70	1.87
55 Mn	15208.72	P	62.77	0.41
56 Fe	7888894.00	A	73960.00	0.94
59 Co	48839.70	P	54.53	0.11
60 Ni	13540.73	P	115.50	0.85
63 Cu	37717.90	P	216.00	0.57
65 Cu	18160.82	P	87.32	0.48
66 Zn	6348.18	P	74.39	1.17
72 Ge	99980.46	P	690.90	0.69
72 Ge	22059.47	P	121.70	0.55
75 As	2883.88	P	67.19	2.33
78 Se	2917.66	P	30.15	1.03
89 Y	1813408.00	A	12890.00	0.71
98 Mo	83302.12	P	664.60	0.80
99 (Ru)	8.89	P	3.85	43.30
107 Ag	136468.59	P	646.80	0.47
111 Cd	30939.46	P	781.80	2.53
115 In	1739030.00	A	5424.00	0.31
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	107386.70	P	911.50	0.85
137 Ba	40617.30	P	69.58	0.17
159 Tb	2162836.00	A	33710.00	1.56
205 Tl	104980.10	P	557.90	0.53
208 Pb	273865.41	P	1220.00	0.45
209 Bi	1237622.00	A	11940.00	0.96

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	953547.69	0.53	916633.81	104.0	80 - 120	
45 Sc	420468.78	0.78	422487.78	99.5	80 - 120	
45 Sc	45001.15	1.50	45344.33	99.2	80 - 120	
45 Sc	1486258.60	1.09	1517729.50	97.9	80 - 120	
72 Ge	99980.46	0.69	101122.62	98.9	80 - 120	
72 Ge	22059.47	0.55	22510.59	98.0	80 - 120	
89 Y	1813408.10	0.71	1904353.90	95.2	80 - 120	
115 In	1739030.00	0.31	1832635.80	94.9	80 - 120	
159 Tb	2162836.30	1.56	2253621.50	96.0	80 - 120	
209 Bi	1237622.30	0.96	1296679.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 9 2007 05:43 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	937081.13	A	13910.00	1.48
7	(Li)		P		
9	Be	678743.38	A	9766.00	1.44
23	Na	6060036.00	A	29480.00	0.49
24	Mg	############	A	2117000.00	1.31
27	Al	############	A	896500.00	0.46
39	K	############	A	283100.00	0.13
44	Ca	6669938.00	A	43570.00	0.65
45	Sc	417386.59	P	4148.00	0.99
45	Sc	44474.40	P	190.70	0.43
45	Sc	1484756.00	A	7937.00	0.53
51	V	227598.30	P	964.40	0.42
52	Cr	291237.91	P	3252.00	1.12
55	Mn	147500.59	P	1378.00	0.93
56	Fe	78356888.00	A	123000.00	0.16
59	Co	463440.59	P	1395.00	0.30
60	Ni	127227.70	P	98.41	0.08
63	Cu	345450.91	P	2709.00	0.78
65	Cu	168927.00	P	856.30	0.51
66	Zn	52219.91	P	563.60	1.08
72	Ge	96489.86	P	674.50	0.70
72	Ge	21483.78	P	34.36	0.16
75	As	27869.04	P	191.00	0.69
78	Se	28766.99	P	215.50	0.75
89	Y	1797811.00	A	17520.00	0.97
98	Mo	831617.00	P	7351.00	0.88
99	(Ru)	15.56	P	1.93	12.38
107	Ag	1334873.00	A	3153.00	0.24
111	Cd	301002.50	P	2325.00	0.77
115	In	1684578.00	A	6999.00	0.42
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1081536.00	A	3378.00	0.31
137	Ba	398705.59	P	1559.00	0.39
159	Tb	2122223.00	A	3772.00	0.18
205	Tl	1060299.00	A	10890.00	1.03
208	Pb	2754297.00	A	28250.00	1.03
209	Bi	1194464.00	A	2339.00	0.20

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	937081.13	1.48	916633.81	102.2	80 - 120	
45	Sc	417386.63	0.99	422487.78	98.8	80 - 120	
45	Sc	44474.40	0.43	45344.33	98.1	80 - 120	
45	Sc	1484755.80	0.53	1517729.50	97.8	80 - 120	
72	Ge	96489.86	0.70	101122.62	95.4	80 - 120	
72	Ge	21483.78	0.16	22510.59	95.4	80 - 120	
89	Y	1797810.80	0.97	1904353.90	94.4	80 - 120	
115	In	1684578.30	0.42	1832635.80	91.9	80 - 120	
159	Tb	2122223.30	0.18	2253621.50	94.2	80 - 120	
209	Bi	1194464.50	0.20	1296679.60	92.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 9 2007 05:49 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	919698.63	A	29050.00	3.16
7	(Li)		P		
9	Be	1335686.00	A	25390.00	1.90
23	Na	12161390.00	A	61600.00	0.51
24	Mg	############	A	3708000.00	1.15
27	Al	############	A	4124000.00	1.08
39	K	############	A	2118000.00	0.50
44	Ca	12977620.00	A	83180.00	0.64
45	Sc	418632.19	P	4688.00	1.12
45	Sc	44021.58	P	239.60	0.54
45	Sc	1497570.00	A	26740.00	1.79
51	V	457253.09	P	5817.00	1.27
52	Cr	581941.31	P	6741.00	1.16
55	Mn	295765.09	P	3685.00	1.25
56	Fe	############	A	119200.00	0.08
59	Co	910429.63	M	5028.00	0.55
60	Ni	249501.00	P	584.90	0.23
63	Cu	673206.63	P	2546.00	0.38
65	Cu	327244.31	P	3420.00	1.05
66	Zn	97625.27	P	281.50	0.29
72	Ge	95738.95	P	862.10	0.90
72	Ge	21149.96	P	529.80	2.51
75	As	55405.40	P	441.80	0.80
78	Se	56713.07	P	265.30	0.47
89	Y	1812733.00	A	51040.00	2.82
98	Mo	1728550.00	A	9631.00	0.56
99	(Ru)	36.67	P	12.02	32.78
107	Ag	2630364.00	A	25940.00	0.99
111	Cd	590731.88	P	5359.00	0.91
115	In	1658619.00	A	38650.00	2.33
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2175337.00	A	14340.00	0.66
137	Ba	783535.38	P	10300.00	1.31
159	Tb	2130470.00	A	64450.00	3.03
205	Tl	2179188.00	A	39910.00	1.83
208	Pb	5545149.00	A	12410.00	0.22
209	Bi	1136089.00	A	29000.00	2.55

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	919698.63	3.16	916633.81	100.3	80 - 120	
45	Sc	418632.25	1.12	422487.78	99.1	80 - 120	
45	Sc	44021.58	0.54	45344.33	97.1	80 - 120	
45	Sc	1497570.50	1.79	1517729.50	98.7	80 - 120	
72	Ge	95738.95	0.90	101122.62	94.7	80 - 120	
72	Ge	21149.96	2.51	22510.59	94.0	80 - 120	
89	Y	1812733.30	2.82	1904353.90	95.2	80 - 120	
115	In	1658618.80	2.33	1832635.80	90.5	80 - 120	
159	Tb	2130470.50	3.03	2253621.50	94.5	80 - 120	
209	Bi	1136089.50	2.55	1296679.60	87.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941015 File : c09q0015 Time : 09-MAR-2007 18:28
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7757	0.6568	10000	10250	ug/L	3	10	
Antimony	A	0.3359	0.3195	100.0	97.82	ug/L	-2	10	
Barium	A	0.1380	0.0924	100.0	99.95	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.23	ug/L	-1	10	
Cadmium	A	0.0932	0.0888	100.0	99.59	ug/L	0	10	
Calcium	A	0.1141	0.0223	10000	10140	ug/L	1	10	
Lead	A	0.7721	0.6345	100.0	97.51	ug/L	-2	10	
Magnesium	A	0.5954	0.5528	10000	10230	ug/L	2	10	
Molybdenum	A	0.2558	0.2307	100.0	97.32	ug/L	-3	10	
Potassium	A	1.8988	0.7353	10000	10310	ug/L	3	10	
Silver	A	0.4101	0.4208	100.0	106.1	ug/L	6	10	
Thallium	A	1.1178	0.8895	50.00	47.05	ug/L	-6	10	
Arsenic	E	0.6946	0.6606	100.0	101.0	ug/L	1	10	
Chromium	E	4.2721	3.2821	100.0	99.45	ug/L	-1	10	
Cobalt	E	5.6878	5.1156	100.0	98.76	ug/L	-1	10	
Copper	E	12.730	7.8162	100.0	97.90	ug/L	-2	10	
Manganese	E	1.9519	1.6406	100.0	97.90	ug/L	-2	10	
Nickel	E	1.8551	1.4033	100.0	98.79	ug/L	-1	10	
Sodium	E	1.4736	0.6636	10000	9613	ug/L	-4	10	
Vanadium	E	3.2665	2.5368	100.0	97.88	ug/L	-2	10	
Zinc	E	5.8642	1.1702	100.0	99.77	ug/L	0	10	
Iron	H	1.0653	0.9073	10000	9785	ug/L	-2	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	938532	2.39
Scandium	A	1517730	1448345	-4.57
Scandium	E	45344	45386	0.09
Scandium	H	422488	427092	1.09
Germanium	H	101123	98414	-2.68
Germanium	E	22511	21784	-3.23
Indium	A	1832636	1634980	-10.79
Bismuth	A	1296680	1096500	-15.44
Yttrium	A	1904354	1748838	-8.17
Terbium	A	2253622	2025126	-10.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941046 File : c09q0046 Time : 09-MAR-2007 21:24
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3185	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0915	100.0	98.99	ug/L	-1	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.24	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	9991	ug/L	0	10	
Lead	A	0.7721	0.6252	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5954	0.5461	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2285	100.0	96.37	ug/L	-4	10	
Potassium	A	1.8988	0.7217	10000	10120	ug/L	1	10	
Silver	A	0.4101	0.4173	100.0	105.2	ug/L	5	10	
Thallium	A	1.1178	0.8698	50.00	46.00	ug/L	-8	10	
Arsenic	E	0.6946	0.6551	100.0	100.2	ug/L	0	10	
Chromium	E	4.2721	3.2245	100.0	97.70	ug/L	-2	10	
Cobalt	E	5.6878	5.0576	100.0	97.64	ug/L	-2	10	
Copper	E	12.730	7.8226	100.0	97.98	ug/L	-2	10	
Manganese	E	1.9519	1.6229	100.0	96.84	ug/L	-3	10	
Nickel	E	1.8551	1.3804	100.0	97.17	ug/L	-3	10	
Sodium	E	1.4736	0.6569	10000	9516	ug/L	-5	10	
Vanadium	E	3.2665	2.5129	100.0	96.95	ug/L	-3	10	
Zinc	E	5.8642	1.1526	100.0	98.25	ug/L	-2	10	
Iron	H	1.0653	0.9145	10000	9863	ug/L	-1	10	
Selenium	H	0.1598	0.1454	100.0	98.03	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	905174	-1.25
Scandium	A	1517730	1441531	-5.02
Scandium	E	45344	45193	-0.33
Scandium	H	422488	420497	-0.47
Germanium	H	101123	96743	-4.33
Germanium	E	22511	21533	-4.34
Indium	A	1832636	1642773	-10.36
Bismuth	A	1296680	1088318	-16.07
Yttrium	A	1904354	1748927	-8.16
Terbium	A	2253622	2043585	-9.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941068 File : c09q0068
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 09-MAR-2007 23:20

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6489	10000	10130	ug/L	1	10	
Antimony	A	0.3359	0.3132	100.0	95.90	ug/L	-4	10	
Barium	A	0.1380	0.0925	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0875	100.0	98.20	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9947	ug/L	-1	10	
Lead	A	0.7721	0.6311	100.0	96.98	ug/L	-3	10	
Magnesium	A	0.5954	0.5452	10000	10090	ug/L	1	10	
Molybdenum	A	0.2558	0.2257	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4190	100.0	105.6	ug/L	6	10	
Thallium	A	1.1178	0.8838	50.00	46.74	ug/L	-7	10	
Arsenic	E	0.6946	0.6568	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.2029	100.0	97.04	ug/L	-3	10	
Cobalt	E	5.6878	4.9833	100.0	96.21	ug/L	-4	10	
Copper	E	12.730	7.7997	100.0	97.69	ug/L	-2	10	
Manganese	E	1.9519	1.6174	100.0	96.52	ug/L	-3	10	
Nickel	E	1.8551	1.3802	100.0	97.16	ug/L	-3	10	
Sodium	E	1.4736	0.6559	10000	9501	ug/L	-5	10	
Vanadium	E	3.2665	2.4945	100.0	96.24	ug/L	-4	10	
Zinc	E	5.8642	1.1539	100.0	98.36	ug/L	-2	10	
Iron	H	1.0653	0.8929	10000	9630	ug/L	-4	10	
Selenium	H	0.1598	0.1429	100.0	96.34	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	913999	-0.29
Scandium	A	1517730	1455726	-4.09
Scandium	E	45344	46412	2.35
Scandium	H	422488	435589	3.10
Germanium	H	101123	100000	-1.11
Germanium	E	22511	21916	-2.64
Indium	A	1832636	1638663	-10.58
Bismuth	A	1296680	1053580	-18.75
Yttrium	A	1904354	1768625	-7.13
Terbium	A	2253622	2008550	-10.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941084 File : c09q0084 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 00:46
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6509	10000	10160	ug/L	2	10	
Antimony	A	0.3359	0.3181	100.0	97.39	ug/L	-3	10	
Barium	A	0.1380	0.0921	100.0	99.73	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.22	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.31	ug/L	-2	10	
Calcium	A	0.1141	0.0221	10000	10060	ug/L	1	10	
Lead	A	0.7721	0.6278	100.0	96.48	ug/L	-4	10	
Magnesium	A	0.5954	0.5504	10000	10190	ug/L	2	10	
Molybdenum	A	0.2558	0.2258	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7317	10000	10260	ug/L	3	10	
Silver	A	0.4101	0.4203	100.0	106.0	ug/L	6	10	
Thallium	A	1.1178	0.9101	50.00	48.14	ug/L	-4	10	
Arsenic	E	0.6946	0.6458	100.0	98.75	ug/L	-1	10	
Chromium	E	4.2721	3.1412	100.0	95.17	ug/L	-5	10	
Cobalt	E	5.6878	4.9028	100.0	94.65	ug/L	-5	10	
Copper	E	12.730	7.6681	100.0	96.04	ug/L	-4	10	
Manganese	E	1.9519	1.5949	100.0	95.17	ug/L	-5	10	
Nickel	E	1.8551	1.3436	100.0	94.58	ug/L	-5	10	
Sodium	E	1.4736	0.6503	10000	9420	ug/L	-6	10	
Vanadium	E	3.2665	2.4434	100.0	94.26	ug/L	-6	10	
Zinc	E	5.8642	1.1383	100.0	97.02	ug/L	-3	10	
Iron	H	1.0653	0.8882	10000	9578	ug/L	-4	10	
Selenium	H	0.1598	0.1422	100.0	95.85	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	906941	-1.06
Scandium	A	1517730	1427826	-5.92
Scandium	E	45344	46819	3.25
Scandium	H	422488	433588	2.63
Germanium	H	101123	98832	-2.27
Germanium	E	22511	21976	-2.37
Indium	A	1832636	1596458	-12.89
Bismuth	A	1296680	999596	-22.91
Yttrium	A	1904354	1745906	-8.32
Terbium	A	2253622	1966364	-12.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941108 File : c09q0108 Time : 10-MAR-2007 02:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3146	100.0	96.33	ug/L	-4	10	
Barium	A	0.1380	0.0900	100.0	97.39	ug/L	-3	10	
Beryllium	A	0.3650	0.3389	100.0	93.37	ug/L	-7	10	
Cadmium	A	0.0932	0.0876	100.0	98.30	ug/L	-2	10	
Calcium	A	0.1141	0.0216	10000	9797	ug/L	-2	10	
Lead	A	0.7721	0.6453	100.0	99.17	ug/L	-1	10	
Magnesium	A	0.5954	0.5421	10000	10040	ug/L	0	10	
Molybdenum	A	0.2558	0.2243	100.0	94.60	ug/L	-5	10	
Potassium	A	1.8988	0.7140	10000	10010	ug/L	0	10	
Silver	A	0.4101	0.4102	100.0	103.4	ug/L	3	10	
Thallium	A	1.1178	0.8558	50.00	45.26	ug/L	-9	10	
Arsenic	E	0.6946	0.6477	100.0	99.04	ug/L	-1	10	
Chromium	E	4.2721	3.2139	100.0	97.38	ug/L	-3	10	
Cobalt	E	5.6878	5.0239	100.0	96.99	ug/L	-3	10	
Copper	E	12.730	7.6729	100.0	96.10	ug/L	-4	10	
Manganese	E	1.9519	1.6212	100.0	96.74	ug/L	-3	10	
Nickel	E	1.8551	1.3680	100.0	96.30	ug/L	-4	10	
Sodium	E	1.4736	0.6621	10000	9591	ug/L	-4	10	
Vanadium	E	3.2665	2.4901	100.0	96.07	ug/L	-4	10	
Zinc	E	5.8642	1.1431	100.0	97.43	ug/L	-3	10	
Iron	H	1.0653	0.8920	10000	9620	ug/L	-4	10	
Selenium	H	0.1598	0.1432	100.0	96.52	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902889	-1.50
Scandium	A	1517730	1401113	-7.68
Scandium	E	45344	42563	-6.13
Scandium	H	422488	416586	-1.40
Germanium	H	101123	94956	-6.10
Germanium	E	22511	20421	-9.28
Indium	A	1832636	1614720	-11.89
Bismuth	A	1296680	1141281	-11.98
Yttrium	A	1904354	1722254	-9.56
Terbium	A	2253622	2048074	-9.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941129 File : c09q0129
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 10-MAR-2007 04:47

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6496	10000	10140	ug/L	1	10	
Antimony	A	0.3359	0.3148	100.0	96.40	ug/L	-4	10	
Barium	A	0.1380	0.0916	100.0	99.16	ug/L	-1	10	
Beryllium	A	0.3650	0.3472	100.0	95.65	ug/L	-4	10	
Cadmium	A	0.0932	0.0881	100.0	98.86	ug/L	-1	10	
Calcium	A	0.1141	0.0216	10000	9816	ug/L	-2	10	
Lead	A	0.7721	0.6451	100.0	99.14	ug/L	-1	10	
Magnesium	A	0.5954	0.5462	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2295	100.0	96.80	ug/L	-3	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4116	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.8799	50.00	46.54	ug/L	-7	10	
Arsenic	E	0.6946	0.6545	100.0	100.1	ug/L	0	10	
Chromium	E	4.2721	3.2320	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0486	100.0	97.47	ug/L	-3	10	
Copper	E	12.730	7.7084	100.0	96.55	ug/L	-3	10	
Manganese	E	1.9519	1.6244	100.0	96.93	ug/L	-3	10	
Nickel	E	1.8551	1.3782	100.0	97.02	ug/L	-3	10	
Sodium	E	1.4736	0.6695	10000	9699	ug/L	-3	10	
Vanadium	E	3.2665	2.5089	100.0	96.80	ug/L	-3	10	
Zinc	E	5.8642	1.1481	100.0	97.86	ug/L	-2	10	
Iron	H	1.0653	0.8988	10000	9693	ug/L	-3	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	892003	-2.69
Scandium	A	1517730	1400371	-7.73
Scandium	E	45344	43765	-3.48
Scandium	H	422488	424248	0.42
Germanium	H	101123	96829	-4.25
Germanium	E	22511	20956	-6.91
Indium	A	1832636	1610854	-12.10
Bismuth	A	1296680	1101593	-15.05
Yttrium	A	1904354	1703888	-10.53
Terbium	A	2253622	2032098	-9.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941141 File : c09q0141 Time : 10-MAR-2007 05:51
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6544	10000	10220	ug/L	2	10	
Antimony	A	0.3359	0.3165	100.0	96.91	ug/L	-3	10	
Barium	A	0.1380	0.0926	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3447	100.0	94.95	ug/L	-5	10	
Cadmium	A	0.0932	0.0893	100.0	100.2	ug/L	0	10	
Calcium	A	0.1141	0.0219	10000	9973	ug/L	0	10	
Lead	A	0.7721	0.6463	100.0	99.32	ug/L	-1	10	
Magnesium	A	0.5954	0.5481	10000	10150	ug/L	2	10	
Molybdenum	A	0.2558	0.2280	100.0	96.16	ug/L	-4	10	
Potassium	A	1.8988	0.7275	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4162	100.0	104.9	ug/L	5	10	
Thallium	A	1.1178	0.9000	50.00	47.60	ug/L	-5	10	
Arsenic	E	0.6946	0.6445	100.0	98.56	ug/L	-1	10	
Chromium	E	4.2721	3.1910	100.0	96.68	ug/L	-3	10	
Cobalt	E	5.6878	4.9869	100.0	96.28	ug/L	-4	10	
Copper	E	12.730	7.5974	100.0	95.15	ug/L	-5	10	
Manganese	E	1.9519	1.6027	100.0	95.64	ug/L	-4	10	
Nickel	E	1.8551	1.3612	100.0	95.82	ug/L	-4	10	
Sodium	E	1.4736	0.6527	10000	9455	ug/L	-5	10	
Vanadium	E	3.2665	2.4771	100.0	95.57	ug/L	-4	10	
Zinc	E	5.8642	1.1282	100.0	96.14	ug/L	-4	10	
Iron	H	1.0653	0.8772	10000	9460	ug/L	-5	10	
Selenium	H	0.1598	0.1423	100.0	95.94	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902061	-1.59
Scandium	A	1517730	1405467	-7.40
Scandium	E	45344	44656	-1.52
Scandium	H	422488	428923	1.52
Germanium	H	101123	98288	-2.80
Germanium	E	22511	21386	-5.00
Indium	A	1832636	1598338	-12.78
Bismuth	A	1296680	1083588	-16.43
Yttrium	A	1904354	1727094	-9.31
Terbium	A	2253622	2021728	-10.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941165 File : c09q0165 Time : 10-MAR-2007 08:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6447	10000	10070	ug/L	1	10	
Antimony	A	0.3359	0.3126	100.0	95.73	ug/L	-4	10	
Barium	A	0.1380	0.0921	100.0	99.64	ug/L	0	10	
Beryllium	A	0.3650	0.3385	100.0	93.25	ug/L	-7	10	
Cadmium	A	0.0932	0.0881	100.0	98.87	ug/L	-1	10	
Calcium	A	0.1141	0.0217	10000	9857	ug/L	-1	10	
Lead	A	0.7721	0.6393	100.0	98.25	ug/L	-2	10	
Magnesium	A	0.5954	0.5385	10000	9971	ug/L	0	10	
Molybdenum	A	0.2558	0.2286	100.0	96.41	ug/L	-4	10	
Potassium	A	1.8988	0.7223	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4120	100.0	103.9	ug/L	4	10	
Thallium	A	1.1178	0.9042	50.00	47.82	ug/L	-4	10	
Arsenic	E	0.6946	0.6460	100.0	98.79	ug/L	-1	10	
Chromium	E	4.2721	3.2867	100.0	99.59	ug/L	0	10	
Cobalt	E	5.6878	5.1088	100.0	98.63	ug/L	-1	10	
Copper	E	12.730	7.6466	100.0	95.77	ug/L	-4	10	
Manganese	E	1.9519	1.6359	100.0	97.62	ug/L	-2	10	
Nickel	E	1.8551	1.4041	100.0	98.84	ug/L	-1	10	
Sodium	E	1.4736	0.6613	10000	9580	ug/L	-4	10	
Vanadium	E	3.2665	2.5532	100.0	98.51	ug/L	-1	10	
Zinc	E	5.8642	1.1318	100.0	96.46	ug/L	-4	10	
Iron	H	1.0653	0.8954	10000	9657	ug/L	-3	10	
Selenium	H	0.1598	0.1445	100.0	97.41	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	877950	-4.22
Scandium	A	1517730	1386999	-8.61
Scandium	E	45344	41993	-7.39
Scandium	H	422488	407840	-3.47
Germanium	H	101123	93340	-7.70
Germanium	E	22511	20616	-8.42
Indium	A	1832636	1594481	-13.00
Bismuth	A	1296680	1064061	-17.94
Yttrium	A	1904354	1696157	-10.93
Terbium	A	2253622	2011171	-10.76

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941184 File : c09q0184 Time : 10-MAR-2007 09:41
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6482	10000	10120	ug/L	1	10	
Antimony	A	0.3359	0.3123	100.0	95.62	ug/L	-4	10	
Barium	A	0.1380	0.0927	100.0	100.3	ug/L	0	10	
Beryllium	A	0.3650	0.3425	100.0	94.36	ug/L	-6	10	
Cadmium	A	0.0932	0.0877	100.0	98.40	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	10010	ug/L	0	10	
Lead	A	0.7721	0.6466	100.0	99.38	ug/L	-1	10	
Magnesium	A	0.5954	0.5479	10000	10140	ug/L	1	10	
Molybdenum	A	0.2558	0.2280	100.0	96.17	ug/L	-4	10	
Potassium	A	1.8988	0.7311	10000	10250	ug/L	3	10	
Silver	A	0.4101	0.4091	100.0	103.2	ug/L	3	10	
Thallium	A	1.1178	0.9135	50.00	48.32	ug/L	-3	10	
Arsenic	E	0.6946	0.6497	100.0	99.35	ug/L	-1	10	
Chromium	E	4.2721	3.2258	100.0	97.74	ug/L	-2	10	
Cobalt	E	5.6878	5.0421	100.0	97.34	ug/L	-3	10	
Copper	E	12.730	7.6852	100.0	96.26	ug/L	-4	10	
Manganese	E	1.9519	1.6235	100.0	96.88	ug/L	-3	10	
Nickel	E	1.8551	1.3739	100.0	96.72	ug/L	-3	10	
Sodium	E	1.4736	0.6556	10000	9497	ug/L	-5	10	
Vanadium	E	3.2665	2.5359	100.0	97.84	ug/L	-2	10	
Zinc	E	5.8642	1.1397	100.0	97.14	ug/L	-3	10	
Iron	H	1.0653	0.8807	10000	9498	ug/L	-5	10	
Selenium	H	0.1598	0.1440	100.0	97.11	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	860804	-6.09
Scandium	A	1517730	1351596	-10.95
Scandium	E	45344	42354	-6.59
Scandium	H	422488	401343	-5.00
Germanium	H	101123	91432	-9.58
Germanium	E	22511	20368	-9.52
Indium	A	1832636	1567188	-14.48
Bismuth	A	1296680	1025975	-20.88
Yttrium	A	1904354	1661744	-12.74
Terbium	A	2253622	1953400	-13.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941199
Cal : 67098941001
Standards: S5654, S5290

File : c09q0199
Caldate: 09-MAR-2007

IDF : 1.0
Time : 10-MAR-2007 11:02

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6474	10000	10110	ug/L	1	10	
Antimony	A	0.3359	0.3139	100.0	96.12	ug/L	-4	10	
Barium	A	0.1380	0.0933	100.0	101.0	ug/L	1	10	
Beryllium	A	0.3650	0.3363	100.0	92.66	ug/L	-7	10	
Cadmium	A	0.0932	0.0890	100.0	99.82	ug/L	0	10	
Calcium	A	0.1141	0.0220	10000	10000	ug/L	0	10	
Lead	A	0.7721	0.6465	100.0	99.35	ug/L	-1	10	
Magnesium	A	0.5954	0.5405	10000	10010	ug/L	0	10	
Molybdenum	A	0.2558	0.2296	100.0	96.84	ug/L	-3	10	
Potassium	A	1.8988	0.7303	10000	10240	ug/L	2	10	
Silver	A	0.4101	0.4118	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.9148	50.00	48.38	ug/L	-3	10	
Arsenic	E	0.6946	0.6505	100.0	99.48	ug/L	-1	10	
Chromium	E	4.2721	3.2322	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0229	100.0	96.97	ug/L	-3	10	
Copper	E	12.730	7.6274	100.0	95.53	ug/L	-4	10	
Manganese	E	1.9519	1.6365	100.0	97.66	ug/L	-2	10	
Nickel	E	1.8551	1.3697	100.0	96.42	ug/L	-4	10	
Sodium	E	1.4736	0.6520	10000	9444	ug/L	-6	10	
Vanadium	E	3.2665	2.5242	100.0	97.39	ug/L	-3	10	
Zinc	E	5.8642	1.1393	100.0	97.10	ug/L	-3	10	
Iron	H	1.0653	0.9014	10000	9721	ug/L	-3	10	
Selenium	H	0.1598	0.1438	100.0	96.97	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	864908	-5.64
Scandium	A	1517730	1350162	-11.04
Scandium	E	45344	42695	-5.84
Scandium	H	422488	393397	-6.89
Germanium	H	101123	91024	-9.99
Germanium	E	22511	20572	-8.61
Indium	A	1832636	1550003	-15.42
Bismuth	A	1296680	1023495	-21.07
Yttrium	A	1904354	1653281	-13.18
Terbium	A	2253622	1946954	-13.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941224 File : c09q0224 Time : 10-MAR-2007 13:17
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6411	10000	10010	ug/L	0	10	
Antimony	A	0.3359	0.3184	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0936	100.0	101.3	ug/L	1	10	
Beryllium	A	0.3650	0.3456	100.0	95.20	ug/L	-5	10	
Cadmium	A	0.0932	0.0885	100.0	99.34	ug/L	-1	10	
Calcium	A	0.1141	0.0218	10000	9909	ug/L	-1	10	
Lead	A	0.7721	0.6388	100.0	98.18	ug/L	-2	10	
Magnesium	A	0.5954	0.5365	10000	9933	ug/L	-1	10	
Molybdenum	A	0.2558	0.2299	100.0	96.98	ug/L	-3	10	
Potassium	A	1.8988	0.7272	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4129	100.0	104.1	ug/L	4	10	
Thallium	A	1.1178	0.8941	50.00	47.29	ug/L	-5	10	
Arsenic	E	0.6946	0.6460	100.0	98.78	ug/L	-1	10	
Chromium	E	4.2721	3.1376	100.0	95.06	ug/L	-5	10	
Cobalt	E	5.6878	4.8490	100.0	93.61	ug/L	-6	10	
Copper	E	12.730	7.4539	100.0	93.35	ug/L	-7	10	
Manganese	E	1.9519	1.5907	100.0	94.92	ug/L	-5	10	
Nickel	E	1.8551	1.3302	100.0	93.64	ug/L	-6	10	
Sodium	E	1.4736	0.6290	10000	9110	ug/L	-9	10	
Vanadium	E	3.2665	2.4374	100.0	94.03	ug/L	-6	10	
Zinc	E	5.8642	1.1170	100.0	95.18	ug/L	-5	10	
Iron	H	1.0653	0.8878	10000	9575	ug/L	-4	10	
Selenium	H	0.1598	0.1436	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	837171	-8.67
Scandium	A	1517730	1374157	-9.46
Scandium	E	45344	44698	-1.43
Scandium	H	422488	402269	-4.79
Germanium	H	101123	93003	-8.03
Germanium	E	22511	21285	-5.44
Indium	A	1832636	1584817	-13.52
Bismuth	A	1296680	1070250	-17.46
Yttrium	A	1904354	1683860	-11.58
Terbium	A	2253622	2002425	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941236 File : c09q0236 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 14:21
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6402	10000	9995	ug/L	0	10	
Antimony	A	0.3359	0.3123	100.0	95.63	ug/L	-4	10	
Barium	A	0.1380	0.0938	100.0	101.6	ug/L	2	10	
Beryllium	A	0.3650	0.3433	100.0	94.58	ug/L	-5	10	
Cadmium	A	0.0932	0.0876	100.0	98.34	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9944	ug/L	-1	10	
Lead	A	0.7721	0.6340	100.0	97.44	ug/L	-3	10	
Magnesium	A	0.5954	0.5392	10000	9983	ug/L	0	10	
Molybdenum	A	0.2558	0.2285	100.0	96.39	ug/L	-4	10	
Potassium	A	1.8988	0.7249	10000	10170	ug/L	2	10	
Silver	A	0.4101	0.4089	100.0	103.1	ug/L	3	10	
Thallium	A	1.1178	0.8683	50.00	45.92	ug/L	-8	10	
Arsenic	E	0.6946	0.6566	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.1900	100.0	96.65	ug/L	-3	10	
Cobalt	E	5.6878	4.9703	100.0	95.96	ug/L	-4	10	
Copper	E	12.730	7.4873	100.0	93.77	ug/L	-6	10	
Manganese	E	1.9519	1.6423	100.0	98.00	ug/L	-2	10	
Nickel	E	1.8551	1.3516	100.0	95.15	ug/L	-5	10	
Sodium	E	1.4736	0.6475	10000	9378	ug/L	-6	10	
Vanadium	E	3.2665	2.5091	100.0	96.81	ug/L	-3	10	
Zinc	E	5.8642	1.1323	100.0	96.49	ug/L	-4	10	
Iron	H	1.0653	0.9100	10000	9814	ug/L	-2	10	
Selenium	H	0.1598	0.1443	100.0	97.30	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	843785	-7.95
Scandium	A	1517730	1361270	-10.31
Scandium	E	45344	44250	-2.41
Scandium	H	422488	395586	-6.37
Germanium	H	101123	91504	-9.51
Germanium	E	22511	21253	-5.59
Indium	A	1832636	1578633	-13.86
Bismuth	A	1296680	1061930	-18.10
Yttrium	A	1904354	1668555	-12.38
Terbium	A	2253622	1965560	-12.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941018 File : c09q0018
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 09-MAR-2007 18:44

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01955]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01321]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005369]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	981613	7.09
Scandium	A	1517730	1476487	-2.72
Scandium	E	45344	48015	5.89
Scandium	H	422488	440455	4.25
Germanium	H	101123	102714	1.57
Germanium	E	22511	22945	1.93
Indium	A	1832636	1719452	-6.18
Bismuth	A	1296680	1139959	-12.09
Yttrium	A	1904354	1797451	-5.61
Terbium	A	2253622	2047526	-9.15

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67098941018

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941049 File : c09q0049 Time : 09-MAR-2007 21:40
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02630]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03014]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	960350	4.77
Scandium	A	1517730	1481310	-2.40
Scandium	E	45344	46876	3.38
Scandium	H	422488	431598	2.16
Germanium	H	101123	100676	-0.44
Germanium	E	22511	22327	-0.82
Indium	A	1832636	1735890	-5.28
Bismuth	A	1296680	1191218	-8.13
Yttrium	A	1904354	1834279	-3.68
Terbium	A	2253622	2106807	-6.51

!=warning ib=instrument blank

67098941049

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941070 File : c09q0070
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 09-MAR-2007 23:32

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03474]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02445]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02347]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01432]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.09417]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	972695	6.12
Scandium	A	1517730	1482231	-2.34
Scandium	E	45344	48846	7.72
Scandium	H	422488	439316	3.98
Germanium	H	101123	101199	0.08
Germanium	E	22511	23094	2.59
Indium	A	1832636	1729036	-5.65
Bismuth	A	1296680	1149784	-11.33
Yttrium	A	1904354	1823495	-4.25
Terbium	A	2253622	2056781	-8.73

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67098941070

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941086 File : c09q0086 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 00:57

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01420]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01617]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06679]	0.1000	0.01127	ug/L	!ib
Iron	H	[6.752]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05645]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	956334	4.33
Scandium	A	1517730	1439257	-5.17
Scandium	E	45344	47503	4.76
Scandium	H	422488	447019	5.81
Germanium	H	101123	103188	2.04
Germanium	E	22511	22596	0.38
Indium	A	1832636	1677042	-8.49
Bismuth	A	1296680	1137040	-12.31
Yttrium	A	1904354	1765145	-7.31
Terbium	A	2253622	2002557	-11.14

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67098941086

: 00465

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941112 File : c09q0112 Time : 10-MAR-2007 03:15
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.304]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01359]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002636]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	[8.887]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03640]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	924797	0.89
Scandium	A	1517730	1376821	-9.28
Scandium	E	45344	43697	-3.63
Scandium	H	422488	415130	-1.74
Germanium	H	101123	96819	-4.26
Germanium	E	22511	21189	-5.87
Indium	A	1832636	1642742	-10.36
Bismuth	A	1296680	1174900	-9.39
Yttrium	A	1904354	1721832	-9.58
Terbium	A	2253622	2056685	-8.74

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941131 File : c09q0131
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 04:58

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.272]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1030	0.1000	0	ug/L	ib ***
Zinc	E	[0.01550]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	931971	1.67
Scandium	A	1517730	1401473	-7.66
Scandium	E	45344	44948	-0.87
Scandium	H	422488	427514	1.19
Germanium	H	101123	99355	-1.75
Germanium	E	22511	21712	-3.55
Indium	A	1832636	1658452	-9.50
Bismuth	A	1296680	1156128	-10.84
Yttrium	A	1904354	1730428	-9.13
Terbium	A	2253622	2037464	-9.59

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941143 File : c09q0143
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 06:02

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005149]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1026	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01709]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	934611	1.96
Scandium	A	1517730	1381267	-8.99
Scandium	E	45344	45098	-0.54
Scandium	H	422488	405569	-4.00
Germanium	H	101123	95993	-5.07
Germanium	E	22511	21660	-3.78
Indium	A	1832636	1649358	-10.00
Bismuth	A	1296680	1134689	-12.49
Yttrium	A	1904354	1705681	-10.43
Terbium	A	2253622	2028289	-10.00

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941168
Cal : 67098941001

File : c09q0168
Caldate: 09-MAR-2007

IDF : 1.0
Time : 10-MAR-2007 08:16

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006930]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01414]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.754]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	907910	-0.95
Scandium	A	1517730	1373491	-9.50
Scandium	E	45344	43250	-4.62
Scandium	H	422488	410259	-2.89
Germanium	H	101123	95168	-5.89
Germanium	E	22511	20961	-6.88
Indium	A	1832636	1620162	-11.59
Bismuth	A	1296680	1145144	-11.69
Yttrium	A	1904354	1687177	-11.40
Terbium	A	2253622	2010187	-10.80

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941186 File : c09q0186
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 09:52

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03559]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.192]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.831]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008371]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	911932	-0.51
Scandium	A	1517730	1387391	-8.59
Scandium	E	45344	44235	-2.45
Scandium	H	422488	414992	-1.77
Germanium	H	101123	96866	-4.21
Germanium	E	22511	21633	-3.90
Indium	A	1832636	1653626	-9.77
Bismuth	A	1296680	1169511	-9.81
Yttrium	A	1904354	1707120	-10.36
Terbium	A	2253622	2039560	-9.50

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941201 File : c09q0201 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 11:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009775]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	887722	-3.15
Scandium	A	1517730	1370772	-9.68
Scandium	E	45344	45085	-0.57
Scandium	H	422488	410915	-2.74
Germanium	H	101123	96368	-4.70
Germanium	E	22511	21710	-3.56
Indium	A	1832636	1630628	-11.02
Bismuth	A	1296680	1121425	-13.52
Yttrium	A	1904354	1710361	-10.19
Terbium	A	2253622	1982461	-12.03

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941227 File : c09q0227 Time : 10-MAR-2007 13:33
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.264]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	868425	-5.26
Scandium	A	1517730	1350039	-11.05
Scandium	E	45344	44352	-2.19
Scandium	H	422488	385028	-8.87
Germanium	H	101123	90590	-10.42
Germanium	E	22511	21655	-3.80
Indium	A	1832636	1609789	-12.16
Bismuth	A	1296680	1100157	-15.16
Yttrium	A	1904354	1653506	-13.17
Terbium	A	2253622	1965147	-12.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941239 File : c09q0239
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 14:38

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.682]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	871768	-4.89
Scandium	A	1517730	1336030	-11.97
Scandium	E	45344	45051	-0.65
Scandium	H	422488	390025	-7.68
Germanium	H	101123	92251	-8.77
Germanium	E	22511	21613	-3.99
Indium	A	1832636	1593414	-13.05
Bismuth	A	1296680	1085987	-16.25
Yttrium	A	1904354	1648046	-13.46
Terbium	A	2253622	1958145	-13.11

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67098941020 File : c09q0020
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 09-MAR-2007 18:55

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04119]	0.1000	ug/L	
Barium	A	0.8910	0.1000	ug/L	
Beryllium	A	[0.01908]	0.1000	ug/L	
Cadmium	A	1.182	0.1000	ug/L	
Lead	A	0.4316	0.1000	ug/L	
Silver	A	0.1913	0.1000	ug/L	
Thallium	A	[0.01043]	0.05000	ug/L	
Arsenic	E	0.2169	0.1000	ug/L	
Chromium	E	1.352	0.1000	ug/L	
Cobalt	E	0.1939	0.1000	ug/L	
Copper	E	1.203	0.1000	ug/L	
Manganese	E	0.7121	0.1000	ug/L	
Nickel	E	1.102	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.186	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92200	ug/L	92
Calcium	A	300000	283800	ug/L	95
Magnesium	A	100000	87740	ug/L	88
Molybdenum	A	2000	1904	ug/L	95
Potassium	A	100000	93880	ug/L	94
Sodium	E	250000	233700	ug/L	93
Iron	H	250000	227000	ug/L	91

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	648481	-29.25
Scandium	A	1517730	1232034	-18.82
Scandium	E	45344	37927	-16.36
Scandium	H	422488	382036	-9.57
Germanium	H	101123	82401	-18.51
Germanium	E	22511	18306	-18.68
Indium	A	1832636	1405228	-23.32
Bismuth	A	1296680	853887	-34.15
Yttrium	A	1904354	1563770	-17.88
Terbium	A	2253622	1834242	-18.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941021 File : c09q0021 Time : 09-MAR-2007 19:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100600	ug/L	1		
Cadmium	A	100.0	104.3	ug/L	4	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	96430	ug/L	-4		
Molybdenum	A	2000	2117	ug/L	6		
Potassium	A	100000	104600	ug/L	5		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	112.5	ug/L	13	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	204.3	ug/L	2	20	
Copper	E	200.0	189.2	ug/L	-5	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	198.2	ug/L	-1	20	
Sodium	E	250000	264600	ug/L	6		
Vanadium	E	200.0	219.0	ug/L	10	20	
Zinc	E	100.0	95.94	ug/L	-4	20	
Iron	H	250000	255700	ug/L	2		
Selenium	H	100.0	104.2	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	360675	-14.63
Scandium	A	1517730	1155038	-23.90
Scandium	E	45344	34371	-24.20
Germanium	H	101123	78650	-22.22
Germanium	E	22511	16695	-25.83
Indium	A	1832636	1377995	-24.81
Yttrium	A	1904354	1538086	-19.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941089 File : c09q0089 Time : 10-MAR-2007 01:13
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03290]	0.1000	ug/L	
Barium	A	0.9061	0.1000	ug/L	
Beryllium	A	[0.004327]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4286	0.1000	ug/L	
Silver	A	0.1833	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1964	0.1000	ug/L	
Chromium	E	1.316	0.1000	ug/L	
Cobalt	E	0.1764	0.1000	ug/L	
Copper	E	1.164	0.1000	ug/L	
Manganese	E	0.7559	0.1000	ug/L	
Nickel	E	1.117	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.161	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93020	ug/L	93
Calcium	A	300000	284500	ug/L	95
Magnesium	A	100000	88550	ug/L	89
Molybdenum	A	2000	1864	ug/L	93
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	233900	ug/L	94
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	623862	-31.94
Scandium	A	1517730	1236772	-18.51
Scandium	E	45344	39129	-13.71
Scandium	H	422488	393799	-6.79
Germanium	H	101123	84184	-16.75
Germanium	E	22511	18594	-17.40
Indium	A	1832636	1368055	-25.35
Bismuth	A	1296680	819714	-36.78
Yttrium	A	1904354	1557710	-18.20
Terbium	A	2253622	1742704	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941090 File : c09q0090 Time : 10-MAR-2007 01:19
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99800	ug/L	0		
Cadmium	A	100.0	100.9	ug/L	1	20	
Calcium	A	300000	317200	ug/L	6		
Magnesium	A	100000	94790	ug/L	-5		
Molybdenum	A	2000	2061	ug/L	3		
Potassium	A	100000	103000	ug/L	3		
Silver	A	50.00	45.27	ug/L	-9	20	
Arsenic	E	100.0	110.8	ug/L	11	20	
Chromium	E	200.0	213.7	ug/L	7	20	
Cobalt	E	200.0	201.6	ug/L	1	20	
Copper	E	200.0	189.5	ug/L	-5	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	196.9	ug/L	-2	20	
Sodium	E	250000	266900	ug/L	7		
Vanadium	E	200.0	218.5	ug/L	9	20	
Zinc	E	100.0	95.65	ug/L	-4	20	
Iron	H	250000	250100	ug/L	0		
Selenium	H	100.0	103.7	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	377102	-10.74
Scandium	A	1517730	1167169	-23.10
Scandium	E	45344	35564	-21.57
Germanium	H	101123	80404	-20.49
Germanium	E	22511	17120	-23.95
Indium	A	1832636	1376611	-24.88
Yttrium	A	1904354	1543286	-18.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67098941146 File : c09q0146
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 10-MAR-2007 06:18

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03552]	0.1000	ug/L	
Barium	A	0.8836	0.1000	ug/L	
Beryllium	A	[0.004092]	0.1000	ug/L	
Cadmium	A	1.389	0.1000	ug/L	
Lead	A	0.4272	0.1000	ug/L	
Silver	A	0.1743	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1982	0.1000	ug/L	
Chromium	E	1.308	0.1000	ug/L	
Cobalt	E	0.1737	0.1000	ug/L	
Copper	E	1.218	0.1000	ug/L	
Manganese	E	0.7907	0.1000	ug/L	
Nickel	E	1.129	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.209	0.1000	ug/L	
Selenium	H	[0.04071]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91160	ug/L	91
Calcium	A	300000	280800	ug/L	94
Magnesium	A	100000	86910	ug/L	87
Molybdenum	A	2000	1830	ug/L	92
Potassium	A	100000	93540	ug/L	94
Sodium	E	250000	229700	ug/L	92
Iron	H	250000	221000	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	609904	-33.46
Scandium	A	1517730	1241471	-18.20
Scandium	E	45344	39241	-13.46
Scandium	H	422488	393129	-6.95
Germanium	H	101123	83730	-17.20
Germanium	E	22511	18443	-18.07
Indium	A	1832636	1380517	-24.67
Bismuth	A	1296680	834170	-35.67
Yttrium	A	1904354	1579303	-17.07
Terbium	A	2253622	1770798	-21.42

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941147 File : c09q0147 Time : 10-MAR-2007 06:23
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97750	ug/L	-2		
Cadmium	A	100.0	99.56	ug/L	0	20	
Calcium	A	300000	314400	ug/L	5		
Magnesium	A	100000	92990	ug/L	-7		
Molybdenum	A	2000	2025	ug/L	1		
Potassium	A	100000	102300	ug/L	2		
Silver	A	50.00	44.82	ug/L	-10	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	212.3	ug/L	6	20	
Cobalt	E	200.0	201.7	ug/L	1	20	
Copper	E	200.0	189.0	ug/L	-6	20	
Manganese	E	200.0	202.3	ug/L	1	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	258400	ug/L	3		
Vanadium	E	200.0	217.7	ug/L	9	20	
Zinc	E	100.0	94.73	ug/L	-5	20	
Iron	H	250000	246800	ug/L	-1		
Selenium	H	100.0	105.0	ug/L	5	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	373132	-11.68
Scandium	A	1517730	1174322	-22.63
Scandium	E	45344	35245	-22.27
Germanium	H	101123	78759	-22.12
Germanium	E	22511	16937	-24.76
Indium	A	1832636	1378645	-24.77
Yttrium	A	1904354	1545629	-18.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941204 File : c09q0204 Time : 10-MAR-2007 11:29
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03299]	0.1000	ug/L	
Barium	A	0.9235	0.1000	ug/L	
Beryllium	A	[0.01135]	0.1000	ug/L	
Cadmium	A	1.459	0.1000	ug/L	
Lead	A	0.4326	0.1000	ug/L	
Silver	A	0.1740	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2265	0.1000	ug/L	
Chromium	E	1.284	0.1000	ug/L	
Cobalt	E	0.1813	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.7650	0.1000	ug/L	
Nickel	E	1.079	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.106	0.1000	ug/L	
Selenium	H	[0.005864]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93090	ug/L	93
Calcium	A	300000	285200	ug/L	95
Magnesium	A	100000	88160	ug/L	88
Molybdenum	A	2000	1839	ug/L	92
Potassium	A	100000	94450	ug/L	94
Sodium	E	250000	222900	ug/L	89
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	599910	-34.55
Scandium	A	1517730	1191263	-21.51
Scandium	E	45344	39252	-13.44
Scandium	H	422488	370202	-12.38
Germanium	H	101123	79661	-21.22
Germanium	E	22511	18466	-17.97
Indium	A	1832636	1345356	-26.59
Bismuth	A	1296680	827534	-36.18
Yttrium	A	1904354	1528690	-19.73
Terbium	A	2253622	1742765	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941205 File : c09q0205 Time : 10-MAR-2007 11:34
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99200	ug/L	-1		
Cadmium	A	100.0	100.8	ug/L	1	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93600	ug/L	-6		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	103900	ug/L	4		
Silver	A	50.00	45.81	ug/L	-8	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	199.3	ug/L	0	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	201.8	ug/L	1	20	
Nickel	E	200.0	192.6	ug/L	-4	20	
Sodium	E	250000	257100	ug/L	3		
Vanadium	E	200.0	216.5	ug/L	8	20	
Zinc	E	100.0	92.80	ug/L	-7	20	
Iron	H	250000	244900	ug/L	-2		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	357716	-15.33
Scandium	A	1517730	1134866	-25.23
Scandium	E	45344	35275	-22.21
Germanium	H	101123	76421	-24.43
Germanium	E	22511	17153	-23.80
Indium	A	1832636	1337539	-27.02
Yttrium	A	1904354	1493682	-21.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941241 File : c09q0241 Time : 10-MAR-2007 14:48
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04069]	0.1000	ug/L	
Barium	A	0.9376	0.1000	ug/L	
Beryllium	A	[0.01409]	0.1000	ug/L	
Cadmium	A	1.455	0.1000	ug/L	
Lead	A	0.4407	0.1000	ug/L	
Silver	A	0.1966	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2228	0.1000	ug/L	
Chromium	E	1.292	0.1000	ug/L	
Cobalt	E	0.1760	0.1000	ug/L	
Copper	E	1.153	0.1000	ug/L	
Manganese	E	0.7582	0.1000	ug/L	
Nickel	E	1.069	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.073	0.1000	ug/L	
Selenium	H	[0.01115]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90460	ug/L	90
Calcium	A	300000	281600	ug/L	94
Magnesium	A	100000	86780	ug/L	87
Molybdenum	A	2000	1848	ug/L	92
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	225600	ug/L	90
Iron	H	250000	221300	ug/L	89

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	581542	-36.56
Scandium	A	1517730	1188280	-21.71
Scandium	E	45344	38831	-14.36
Scandium	H	422488	360357	-14.71
Germanium	H	101123	77698	-23.16
Germanium	E	22511	18316	-18.63
Indium	A	1832636	1350980	-26.28
Bismuth	A	1296680	805630	-37.87
Yttrium	A	1904354	1518776	-20.25
Terbium	A	2253622	1735412	-22.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941242 File : c09q0242 Time : 10-MAR-2007 14:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98070	ug/L	-2		
Cadmium	A	100.0	102.0	ug/L	2	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93340	ug/L	-7		
Molybdenum	A	2000	2063	ug/L	3		
Potassium	A	100000	102700	ug/L	3		
Silver	A	50.00	45.92	ug/L	-8	20	
Arsenic	E	100.0	110.5	ug/L	11	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	198.5	ug/L	-1	20	
Copper	E	200.0	183.1	ug/L	-8	20	
Manganese	E	200.0	203.3	ug/L	2	20	
Nickel	E	200.0	191.8	ug/L	-4	20	
Sodium	E	250000	255700	ug/L	2		
Vanadium	E	200.0	216.4	ug/L	8	20	
Zinc	E	100.0	94.32	ug/L	-6	20	
Iron	H	250000	248400	ug/L	-1		
Selenium	H	100.0	103.9	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	341093	-19.27
Scandium	A	1517730	1130423	-25.52
Scandium	E	45344	35247	-22.27
Germanium	H	101123	73516	-27.30
Germanium	E	22511	17085	-24.10
Indium	A	1832636	1317155	-28.13
Yttrium	A	1904354	1464552	-23.09

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	916634	1517730	45344	422488	101123	22511	1832636	1296680	1904354	2253622
		LOWER LIMIT	274990	455319	13603	126746	30337	6753	549791	389004	571306	676087
		UPPER LIMIT	1099961	1821276	54413	506985	121347	27013	2199163	1556016	2285225	2704346
018	ICB		981613	1476487	48015	440455	102714	22945	1719452	1139959	1797451	2047526
020	ICSA		648481	1232034	37927	382036	82401	18306	1405228	853887	1563770	1834242
021	ICSAB		582795	1155038	34371	360675	78650	16695	1377995	852495	1538086	1858666
026	BLANK	QC378336	863017	1374446	40965	392999	94008	21107	1741851	1286874	1773795	2195119
027	BS	QC378337	903666	1450057	41163	388071	92268	20779	1801605	1302872	1850641	2246110
028	BSD	QC378338	891566	1424703	42379	393068	92980	21472	1743629	1260863	1790909	2194284
031	BLANK	QC378414	773387	1276190	36872	361754	96338	21188	1651727	1282988	1687273	2200427
032	BLANK	QC378443	789285	1298089	37453	363119	94068	20836	1700706	1299604	1726652	2223508
033	MSS	193165-002	963383	1545789	46469	430915	98342	22091	1775714	1244051	1946540	2199596
034	SER	QC378341	942026	1458038	45757	418392	97918	22288	1725568	1217037	1826667	2130441
035	MS	QC378339	936660	1499541	47583	427121	96530	22532	1715638	1173677	1889410	2105941
046	CCV		905174	1441531	45193	420497	96743	21533	1642773	1088318	1748927	2043585
049	CCB		960350	1481310	46876	431598	100676	22327	1735890	1191218	1834279	2106807
055	PDS	QC378342	932148	1530176	46941	434367	96736	21744	1669597	1089202	1883003	2066072
056	SAMPLE	193165-001	952322	1503979	48239	437535	99049	22729	1705989	1152210	1870686	2074860
057	SAMPLE	193165-003	955852	1538633	48962	454552	102101	22982	1713938	1125330	1917433	2039358
058	SAMPLE	193165-004	967423	1611432	49819	451634	101145	23117	1771979	1175909	1986668	2109743
059	SAMPLE	193165-005	958524	1547831	50371	454257	101846	23535	1725335	1146647	1912778	2053880
060	SAMPLE	193165-006	998493	1589246	50471	451513	100990	23296	1742402	1149353	1949706	2087054
061	SAMPLE	193165-007	985003	1554322	50500	445054	100327	23450	1728953	1154781	1938419	2071529
062	SAMPLE	193165-008	966327	1544798	49344	436334	99819	23055	1711720	1122555	1888204	2043452
063	SAMPLE	193165-009	974905	1554277	50365	450694	100022	22841	1699669	1118344	1920211	2016418
068	CCV		913999	1455726	46412	435589	100000	21916	1638663	1053580	1768625	2008550
070	CCB		972695	1482231	48846	439316	101199	23094	1729036	1149784	1823495	2056781
073	SAMPLE	193165-010	972938	1575158	50135	449325	100503	23182	1720829	1157854	1929263	2050582
074	SAMPLE	193165-011	975873	1542417	50568	452792	102354	23468	1694315	1119077	1918120	2037129
075	SAMPLE	193202-001	931098	1425498	46924	441100	95914	21109	1540175	988222	1664166	1919982
076	SAMPLE	193202-002	892840	1408129	46358	442730	95059	20576	1514132	966987	1645724	1892526
077	SAMPLE	193202-003	884224	1409245	46402	436810	94649	21024	1528446	971327	1647355	1882595
078	SAMPLE	193202-004	979622	1536923	50318	455917	98767	22488	1643810	1056711	1884832	1984488
079	SAMPLE	193284-002	985109	1563781	50390	461985	99286	22565	1666916	1120661	1902848	2022684
084	CCV		906941	1427826	46819	433588	98832	21976	1596458	999596	1745906	1966364
086	CCB		956334	1439257	47503	447019	103188	22596	1677042	1137040	1765145	2002557
089	ICSA		623862	1236772	39129	393799	84184	18594	1368055	819714	1557710	1742704
090	ICSAB		561457	1167169	35564	377102	80404	17120	1376611	843178	1543286	1807188
095	BS	QC378415	951663	1540367	46965	435249	99965	22851	1765502	1196154	1891418	2190349
096	BSD	QC378416	972110	1564246	48675	450177	102955	23095	1775978	1174581	1907655	2180968
098	MSS	193253-001	900374	1470155	44821	426156	98578	22048	1696248	1112262	1798822	2090852
099	SER	QC378419	914606	1460055	45132	432481	101180	22233	1727773	1174234	1788889	2087437
100	MS	QC378417	895098	1430428	44507	428004	99395	21837	1649439	1121106	1760805	2075003
101	MSD	QC378418	885257	1434266	45009	427402	99071	21845	1667025	1121793	1753445	2057510
102	PDS	QC378420	847821	1411196	43324	423901	96610	20891	1630536	1085080	1742969	2056899
103	SAMPLE	193187-001	918129	1435477	44353	420441	99735	21884	1725870	1224680	1776904	2136736
108	CCV		902889	1401113	42563	416586	94956	20421	1614720	1141281	1722254	2048074
112	CCB		924797	1376821	43697	415130	96819	21189	1642742	1174900	1721832	2056685
113	SAMPLE	193187-002	915561	1411896	44401	418141	97508	21510	1638461	1154585	1730795	2048808
114	SAMPLE	193187-003	933709	1422558	44410	429762	100039	21633	1664179	1200909	1728641	2057104
117	SAMPLE	193199-001	929726	1419568	44602	429071	99163	21549	1664107	1146977	1737917	2052217

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
118	SAMPLE	193199-002	932691	1390850	43974	431171	99853	21510	1655169	1172327	1691733	2046235
119	SAMPLE	193199-003	936944	1414304	44140	417129	96955	21489	1648685	1155529	1705058	2032738
120	SAMPLE	193199-001	946352	1422379	45055	421941	97812	21548	1648097	1153561	1722060	2049120
121	SAMPLE	193199-002	942567	1433867	44565	421458	98054	21584	1663931	1163545	1699936	2039926
122	SAMPLE	193199-003	952437	1446828	45382	430507	100087	21696	1676750	1175834	1739698	2073121
123	SAMPLE	193205-001	949568	1431059	45483	436405	101828	22282	1667530	1148422	1726428	2053644
124	SAMPLE	193205-001	948968	1437818	44929	433466	100551	22049	1681861	1165414	1721645	2079978
129	CCV		892003	1400371	43765	424248	96829	20956	1610854	1101593	1703888	2032098
131	CCB		931971	1401473	44948	427514	99355	21712	1658452	1156128	1730428	2037464
134	SAMPLE	193243-001	947965	1433971	46256	435667	100466	22327	1684774	1162270	1760832	2067419
135	SAMPLE	193243-002	957304	1423797	45498	429285	99618	21958	1663899	1147299	1721760	2048812
136	SAMPLE	193253-002	917746	1414906	45173	432833	99044	21785	1603894	1074395	1699662	1987469
141	CCV		902061	1405467	44656	428923	98288	21386	1598338	1083588	1727094	2021728
143	CCB		934611	1381267	45098	405569	95993	21660	1649358	1134689	1705681	2028289
146	ICSA		609904	1241471	39241	393129	83730	18443	1380517	834170	1579303	1770798
147	ICSAB		537186	1174322	35245	373132	78759	16937	1378645	849147	1545629	1807773
152	BS	QC378444	774667	1349726	37917	375806	90392	19624	1623415	1150738	1732090	2155849
153	BSD	QC378445	780202	1356481	38136	372594	87668	19413	1624802	1134141	1732764	2106738
155	MSS	193217-011	876175	1397755	42642	406502	96903	21306	1693493	1149050	1734483	2067021
156	SER	QC378448	910334	1423010	43940	418688	98954	21933	1713381	1169658	1770301	2086307
157	MS	QC378446	878725	1398327	42721	405316	94597	20828	1637704	1135399	1734896	2057123
158	MSD	QC378447	879618	1401030	42650	400368	94637	21009	1649654	1146196	1709242	2046195
159	PDS	QC378449	848479	1389680	41278	400627	92227	20273	1608487	1054667	1714680	2038945
160	MSS	193217-021	874711	1412957	43902	412116	96445	21443	1658392	1135002	1733128	2038837
165	CCV		877950	1386999	41993	407840	93340	20616	1594481	1064061	1696157	2011171
168	CCB		907910	1373491	43250	410259	95168	20961	1620162	1145144	1687177	2010187
170	MS	QC378508	912084	1422763	43430	389480	92155	21390	1645528	1128938	1729205	2048852
171	MSD	QC378509	902677	1458695	43230	412918	95654	21056	1677263	1145594	1768214	2092280
172	SAMPLE	193055-023	914402	1434056	44367	419669	97864	21640	1641566	1125705	1733193	2039891
173	SAMPLE	193137-005	916075	1399875	43942	414996	97876	21409	1631266	1130292	1704359	2029941
174	SAMPLE	193217-010	903153	1397147	46164	402020	94234	22237	1623538	1138800	1686493	2016948
175	SAMPLE	193217-012	929033	1369759	42723	398156	93314	21027	1614797	1130902	1667710	1999508
176	SAMPLE	193217-014	928068	1419487	43460	401097	93310	21296	1651660	1154989	1723765	2060619
177	SAMPLE	193217-015	906972	1367926	42440	399515	93425	20638	1591180	1115691	1653183	1990920
178	SAMPLE	193217-016	911090	1396387	43884	412339	95839	21268	1612838	1125303	1691322	2020074
179	SAMPLE	193217-017	873427	1316326	43497	405946	94980	21139	1553156	1075831	1593753	1916399
184	CCV		860804	1351596	42354	401343	91432	20368	1567188	1025975	1661744	1953400
186	CCB		911932	1387391	44235	414992	96866	21633	1653626	1169511	1707120	2039560
189	SAMPLE	193217-018	859967	1381365	43631	403383	94147	21348	1588849	1046023	1668635	1947997
190	SAMPLE	193217-019	868431	1370522	43518	410454	95686	21190	1596118	1090920	1658624	1968888
191	SAMPLE	193217-020	895527	1384994	44484	407285	95147	21679	1588874	1066025	1674548	1966732
192	SAMPLE	193217-022	857166	1298783	44247	414967	96445	21405	1506101	1008142	1579921	1867394
193	SAMPLE	193217-023	917649	1354117	44102	407100	95980	21289	1623050	1121830	1664556	1984836
194	SAMPLE	193217-024	911929	1363987	43635	398225	93370	21181	1599712	1093031	1661086	1992253
199	CCV		864908	1350162	42695	393397	91024	20572	1550003	1023495	1653281	1946954
201	CCB		887722	1370772	45085	410915	96368	21710	1630628	1121425	1710361	1982461
204	ICSA		599910	1191263	39252	370202	79661	18466	1345356	827534	1528690	1742765
205	ICSAB		509434	1134866	35275	357716	76421	17153	1337539	829867	1493682	1765605
210	MSS	193193-001	836904	1335937	41413	377991	90337	21005	1666574	1206508	1701705	2084946
213	SER	QC378193	846561	1383067	43359	386934	93511	21520	1693543	1205709	1736518	2113365
214	MS	QC378191	851733	1377327	42849	390804	92855	21443	1667822	1187527	1730195	2099191
215	MSD	QC378192	834606	1352257	42763	385310	91048	21142	1635785	1153761	1682318	2053411

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	PI A	Y A	TB A
216	PDS	QC378194	807162	1373965	42602	384827	89411	20904	1609006	1101960	1712302	2054536
217	SAMPLE	193193-006	837697	1351619	42847	383925	91549	21489	1648575	1171136	1680832	2045000
218	SAMPLE	193193-013	850323	1381844	43488	386328	92324	21786	1672280	1172422	1713891	2068810
219	SAMPLE	193027-012	851969	1374048	44520	389682	92872	21830	1641570	1118909	1697619	2008910
224	CCV		837171	1374157	44698	402269	93003	21285	1584817	1070250	1683860	2002425
227	CCB		868425	1350039	44352	385028	90590	21655	1609789	1100157	1653506	1965147
229	SAMPLE	193027-011	866645	1356505	44718	390336	92548	21997	1600466	1043536	1658608	1947958
230	SAMPLE	193027-012	910423	1413487	45570	392055	93011	22167	1666863	1130964	1721437	2042000
231	SAMPLE	193027-013	868936	1377052	45188	386345	91538	22177	1623029	1121886	1698277	1970489
236	CCV		843785	1361270	44250	395586	91504	21253	1578633	1061930	1668555	1965560
239	CCB		871768	1336030	45051	390025	92251	21613	1593414	1085987	1648046	1958145
241	ICSA		581542	1188280	38831	360357	77698	18316	1350980	805630	1518776	1735412
242	ICSAB		496559	1130423	35247	341093	73516	17085	1317155	801642	1464552	1737562

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09q0001	TUN				09-MAR-2007 17:01	1.0	1.0				1	
002	c09q0002	X	RINSE			09-MAR-2007 17:09	1.0					2	
003	c09q0003	X	RINSE			09-MAR-2007 17:14	1.0					2	
004	c09q0004	ICALBLK	CALBLANK			09-MAR-2007 17:19	1.0	1.0				2	
005	c09q0005	ICAL				09-MAR-2007 17:24	1.0	1.0				3	
006	c09q0006	ICAL				09-MAR-2007 17:30	1.0	1.0				4	
007	c09q0007	ICAL				09-MAR-2007 17:35	1.0	1.0				5	
008	c09q0008	ICAL				09-MAR-2007 17:40	1.0	1.0				6	
009	c09q0009	ICAL				09-MAR-2007 17:45	1.0	1.0				7	
010	c09q0010	ICAL				09-MAR-2007 17:51	1.0	1.0				8	
011	c09q0011	X	RINSE			09-MAR-2007 17:58	1.0					2	
012	c09q0012	X				09-MAR-2007 18:04	1.0					9 2	
013	c09q0013	X	RINSE			09-MAR-2007 18:09	1.0					2	
014	c09q0014	X				09-MAR-2007 18:14	1.0					2	
015	c09q0015	ICV				09-MAR-2007 18:28	1.0	1.0			1	9	
016	c09q0016	X	RINSE			09-MAR-2007 18:33	1.0					2	
017	c09q0017	X				09-MAR-2007 18:39	1.0					2	
018	c09q0018	ICB				09-MAR-2007 18:44	1.0	1.0			1	2	
019	c09q0019	X				09-MAR-2007 18:49	1.0					2	
020	c09q0020	ICSA				09-MAR-2007 18:55	1.0	1.0			1	10 2	7:CA=283800
021	c09q0021	ICSAB				09-MAR-2007 19:00	1.0	1.0			1	11 2	11:CA=322800
022	c09q0022	X	RINSE			09-MAR-2007 19:05	1.0					2	
023	c09q0023	X	RINSE			09-MAR-2007 19:11	1.0					2	
024	c09q0024	X	RINSE			09-MAR-2007 19:16	1.0					2	
025	c09q0025	X	RINSE			09-MAR-2007 19:21	1.0					2	
026	c09q0026	BLANK	QC378336	122902	Soil	09-MAR-2007 19:27	5.0	50.0	1		1	2	
027	c09q0027	BS	QC378337	122902	Soil	09-MAR-2007 19:32	50.0	50.0	1	1	1	2	
028	c09q0028	BSD	QC378338	122902	Soil	09-MAR-2007 19:37	50.0	50.0		1	1	2	
029	c09q0029	X	RINSE			09-MAR-2007 19:42	1.0					2	
030	c09q0030	X	RINSE			09-MAR-2007 19:48	1.0					2	
031	c09q0031	BLANK	QC378414	122921	Filtra	09-MAR-2007 20:02	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09q0032	BLANK	QC378443	122924	Filtra	09-MAR-2007 20:07	1.0	1.0			1	2	
033	c09q0033	MSS	193165-002	122902	Soil	09-MAR-2007 20:13	50.0	50.0	1		1	2	1:MN=324.000
034	c09q0034	SER	QC378341	122902	Soil	09-MAR-2007 20:18	250.0	50.0		2	1	2	
035	c09q0035	MS	QC378339	122902	Soil	09-MAR-2007 20:23	50.0	50.0			1	2	1:MN=373.800
036	c09q0036	X	RINSE			09-MAR-2007 20:28	1.0					2	
037	c09q0037	X	RINSE			09-MAR-2007 20:34	1.0					2	
038	c09q0038	X	RINSE			09-MAR-2007 20:39	1.0					2	
039	c09q0039	X	RINSE			09-MAR-2007 20:44	1.0					2	
040	c09q0040	X				09-MAR-2007 20:50	1.0					12 2	
041	c09q0041	X	RINSE			09-MAR-2007 20:57	1.0					2	
042	c09q0042	X	RINSE			09-MAR-2007 21:03	1.0					2	
043	c09q0043	X	RINSE			09-MAR-2007 21:08	1.0					2	
044	c09q0044	X	RINSE			09-MAR-2007 21:14	1.0					2	
045	c09q0045	X	RINSE			09-MAR-2007 21:19	1.0					2	
046	c09q0046	CCV				09-MAR-2007 21:24	1.0	1.0			1	12 2	
047	c09q0047	X	RINSE			09-MAR-2007 21:29	1.0					2	
048	c09q0048	X				09-MAR-2007 21:35	1.0					2	
049	c09q0049	CCB				09-MAR-2007 21:40	1.0	1.0			1	2	
050	c09q0050	X				09-MAR-2007 21:45	1.0					2	
051	c09q0051	X				09-MAR-2007 21:51	1.0					2	
052	c09q0052	X				09-MAR-2007 21:56	1.0					2	
053	c09q0053	X				09-MAR-2007 22:01	1.0					2	
054	c09q0054	X	RINSE			09-MAR-2007 22:07	1.0					2	
055	c09q0055	PDS	QC378342	122902	Soil	09-MAR-2007 22:12	50.0	50.0			1	13 14 2	1:MN=431.000
056	c09q0056	SAMPLE	193165-001	122902	Soil	09-MAR-2007 22:17	50.0	46.73			1	2	
057	c09q0057	SAMPLE	193165-003	122902	Soil	09-MAR-2007 22:22	50.0	48.08			1	2	
058	c09q0058	SAMPLE	193165-004	122902	Soil	09-MAR-2007 22:27	50.0	47.62			1	2	
059	c09q0059	SAMPLE	193165-005	122902	Soil	09-MAR-2007 22:33	50.0	48.54			1	2	
060	c09q0060	SAMPLE	193165-006	122902	Soil	09-MAR-2007 22:38	50.0	43.48			1	2	
061	c09q0061	SAMPLE	193165-007	122902	Soil	09-MAR-2007 22:43	50.0	45.45			1	2	
062	c09q0062	SAMPLE	193165-008	122902	Soil	09-MAR-2007 22:49	50.0	49.02			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RGH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c09q0063	SAMPLE	193165-009	122902	Soil	09-MAR-2007 22:54	50.0	46.73			1	2	
064	c09q0064	X	RINSE			09-MAR-2007 22:59	1.0					2	
065	c09q0065	X	RINSE			09-MAR-2007 23:04	1.0					2	
066	c09q0066	X	RINSE			09-MAR-2007 23:10	1.0					2	
067	c09q0067	X	RINSE			09-MAR-2007 23:15	1.0					2	
068	c09q0068	CCV				09-MAR-2007 23:20	1.0	1.0			1	12 2	
069	c09q0069	X	RINSE			09-MAR-2007 23:27	1.0					2	
070	c09q0070	CCB				09-MAR-2007 23:32	1.0	1.0			1	2	
071	c09q0071	X				09-MAR-2007 23:37	1.0	1.0			1	2	
072	c09q0072	X				09-MAR-2007 23:43	1.0	1.0			1	2	
073	c09q0073	SAMPLE	193165-010	122902	Soil	09-MAR-2007 23:48	50.0	45.05			1	2	
074	c09q0074	SAMPLE	193165-011	122902	Soil	09-MAR-2007 23:53	50.0	46.73			1	2	
075	c09q0075	SAMPLE	193202-001	122902	Soil	09-MAR-2007 23:58	50.0	44.25	2		1	2	4:MG=71880.0
076	c09q0076	SAMPLE	193202-002	122902	Soil	10-MAR-2007 00:04	50.0	44.64	2		1	2	4:MG=77300.0
077	c09q0077	SAMPLE	193202-003	122902	Soil	10-MAR-2007 00:09	50.0	48.08	2		1	2	4:MG=71980.0
078	c09q0078	SAMPLE	193202-004	122902	Soil	10-MAR-2007 00:14	50.0	46.30			1	2	
079	c09q0079	SAMPLE	193284-002	122902	Soil	10-MAR-2007 00:20	50.0	46.30			1	2	
080	c09q0080	X	RINSE			10-MAR-2007 00:25	1.0					2	
081	c09q0081	X	RINSE			10-MAR-2007 00:30	1.0					2	
082	c09q0082	X	RINSE			10-MAR-2007 00:36	1.0					2	
083	c09q0083	X	RINSE			10-MAR-2007 00:41	1.0					2	
084	c09q0084	CCV				10-MAR-2007 00:46	1.0	1.0			1	12 2	
085	c09q0085	X	RINSE			10-MAR-2007 00:52	1.0					2	
086	c09q0086	CCB				10-MAR-2007 00:57	1.0	1.0			1	2	
087	c09q0087	X				10-MAR-2007 01:03	1.0	1.0	1		1	2	
088	c09q0088	X				10-MAR-2007 01:08	1.0	1.0			1	2	
089	c09q0089	ICSA				10-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=284500
090	c09q0090	ICSAB				10-MAR-2007 01:19	1.0	1.0			1	11 2	11:CA=317200
091	c09q0091	X	RINSE			10-MAR-2007 01:24	1.0					2	
092	c09q0092	X	RINSE			10-MAR-2007 01:29	1.0					2	
093	c09q0093	X	RINSE			10-MAR-2007 01:35	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c09q0094	X	RINSE			10-MAR-2007 01:40	1.0					2	
095	c09q0095	BS	QC378415	122921	Filtra	10-MAR-2007 01:45	1.0	1.0			1	2	
096	c09q0096	BSD	QC378416	122921	Filtra	10-MAR-2007 01:50	1.0	1.0			1	2	
097	c09q0097	X	RINSE			10-MAR-2007 01:56	1.0					2	
098	c09q0098	MSS	193253-001	122921	Filtra	10-MAR-2007 02:01	10.0	1.0	8		1	2	1:NA=33180.0
099	c09q0099	SER	QC378419	122921	Filtra	10-MAR-2007 02:06	50.0	1.0		1	1	2	
100	c09q0100	MS	QC378417	122921	Filtra	10-MAR-2007 02:11	10.0	1.0			1	2	1:NA=32780.0
101	c09q0101	MSD	QC378418	122921	Filtra	10-MAR-2007 02:17	10.0	1.0			1	2	1:NA=33200.0
102	c09q0102	PDS	QC378420	122921	Filtra	10-MAR-2007 02:22	10.0	1.0	1		1	13 14 2	2:NA=42700.0
103	c09q0103	SAMPLE	193187-001	122921	Water	10-MAR-2007 02:27	10.0	1.0	9		1	2	
104	c09q0104	X	RINSE			10-MAR-2007 02:32	1.0					2	
105	c09q0105	X	RINSE			10-MAR-2007 02:38	1.0					2	
106	c09q0106	X	RINSE			10-MAR-2007 02:43	1.0					2	
107	c09q0107	X	RINSE			10-MAR-2007 02:48	1.0					2	
108	c09q0108	CCV				10-MAR-2007 02:54	1.0	1.0			1	12 2	
109	c09q0109	X	RINSE			10-MAR-2007 02:59	1.0					2	
110	c09q0110	X				10-MAR-2007 03:04	1.0	1.0	2		1	2	
111	c09q0111	X				10-MAR-2007 03:10	1.0	1.0	2		1	2	
112	c09q0112	CCB				10-MAR-2007 03:15	1.0	1.0			1	2	
113	c09q0113	SAMPLE	193187-002	122921	Water	10-MAR-2007 03:20	10.0	1.0	1		1	2	
114	c09q0114	SAMPLE	193187-003	122921	Water	10-MAR-2007 03:26	10.0	1.0	1		1	2	
115	c09q0115	TUN				10-MAR-2007 03:30	1.0	1.0				1	
116	c09q0116	X	RINSE			10-MAR-2007 03:38	1.0					2	
117	c09q0117	SAMPLE	193199-001	122921	Water	10-MAR-2007 03:43	10.0	1.0	1		1	2	
118	c09q0118	SAMPLE	193199-002	122921	Water	10-MAR-2007 03:48	10.0	1.0	1		1	2	
119	c09q0119	SAMPLE	193199-003	122921	Water	10-MAR-2007 03:54	10.0	1.0	1		1	2	
120	c09q0120	SAMPLE	193199-001	122921	Filtra	10-MAR-2007 03:59	10.0	1.0	1		1	2	
121	c09q0121	SAMPLE	193199-002	122921	Filtra	10-MAR-2007 04:04	10.0	1.0	1		1	2	
122	c09q0122	SAMPLE	193199-003	122921	Filtra	10-MAR-2007 04:10	10.0	1.0	1		1	2	
123	c09q0123	SAMPLE	193205-001	122921	Water	10-MAR-2007 04:15	10.0	1.0	1		1	2	
124	c09q0124	SAMPLE	193205-001	122921	Filtra	10-MAR-2007 04:20	10.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RUA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c09q0125	X	RINSE			10-MAR-2007 04:26	1.0					2	
126	c09q0126	X	RINSE			10-MAR-2007 04:31	1.0					2	
127	c09q0127	X	RINSE			10-MAR-2007 04:36	1.0					2	
128	c09q0128	X	RINSE			10-MAR-2007 04:42	1.0					2	
129	c09q0129	CCV				10-MAR-2007 04:47	1.0	1.0			1	12 2	
130	c09q0130	X	RINSE			10-MAR-2007 04:52	1.0					2	
131	c09q0131	CCB				10-MAR-2007 04:58	1.0	1.0	1		1	2	
132	c09q0132	X				10-MAR-2007 05:03	1.0	1.0	2		1	2	
133	c09q0133	X				10-MAR-2007 05:08	1.0	1.0	1		1	2	
134	c09q0134	SAMPLE	193243-001	122921	Water	10-MAR-2007 05:14	10.0	1.0			1	2	
135	c09q0135	SAMPLE	193243-002	122921	Water	10-MAR-2007 05:19	10.0	1.0			1	2	
136	c09q0136	SAMPLE	193253-002	122921	Filtra	10-MAR-2007 05:24	10.0	1.0			1	2	1:NA=23670.0
137	c09q0137	X	RINSE			10-MAR-2007 05:30	1.0					2	
138	c09q0138	X	RINSE			10-MAR-2007 05:35	1.0					2	
139	c09q0139	X	RINSE			10-MAR-2007 05:40	1.0					2	
140	c09q0140	X	RINSE			10-MAR-2007 05:46	1.0					2	
141	c09q0141	CCV				10-MAR-2007 05:51	1.0	1.0			1	12 2	
142	c09q0142	X	RINSE			10-MAR-2007 05:56	1.0					2	
143	c09q0143	CCB				10-MAR-2007 06:02	1.0	1.0	1		1	2	
144	c09q0144	X				10-MAR-2007 06:07	1.0	1.0	1		1	2	
145	c09q0145	X				10-MAR-2007 06:12	1.0	1.0	1		1	2	
146	c09q0146	ICSA				10-MAR-2007 06:18	1.0	1.0			1	10 2	7:CA=280800
147	c09q0147	ICSAB				10-MAR-2007 06:23	1.0	1.0			1	11 2	11:CA=314400
148	c09q0148	X	RINSE			10-MAR-2007 06:28	1.0					2	
149	c09q0149	X	RINSE			10-MAR-2007 06:34	1.0					2	
150	c09q0150	X	RINSE			10-MAR-2007 06:39	1.0					2	
151	c09q0151	X	RINSE			10-MAR-2007 06:44	1.0					2	
152	c09q0152	BS	QC378444	122924	Filtra	10-MAR-2007 06:50	1.0	1.0			1	2	
153	c09q0153	BSD	QC378445	122924	Filtra	10-MAR-2007 06:55	1.0	1.0			1	2	
154	c09q0154	X	RINSE			10-MAR-2007 07:01	1.0					2	
155	c09q0155	MSS	193217-011	122924	Filtra	10-MAR-2007 07:07	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RAA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c09q0156	SER	QC378448	122924	Filtra	10-MAR-2007 07:12	50.0	1.0	1	1	1	2	
157	c09q0157	MS	QC378446	122924	Filtra	10-MAR-2007 07:17	10.0	1.0	1		1	2	
158	c09q0158	MSD	QC378447	122924	Filtra	10-MAR-2007 07:23	10.0	1.0	1		1	2	
159	c09q0159	PDS	QC378449	122924	Filtra	10-MAR-2007 07:28	10.0	1.0	1		1	13 14 2	
160	c09q0160	MSS	193217-021	122924	Filtra	10-MAR-2007 07:33	10.0	1.0			1	2	
161	c09q0161	X	RINSE			10-MAR-2007 07:39	1.0					2	
162	c09q0162	X	RINSE			10-MAR-2007 07:44	1.0					2	
163	c09q0163	X	RINSE			10-MAR-2007 07:49	1.0					2	
164	c09q0164	X	RINSE			10-MAR-2007 07:55	1.0					2	
165	c09q0165	CCV				10-MAR-2007 08:00	1.0	1.0			1	12 2	
166	c09q0166	X	RINSE			10-MAR-2007 08:05	1.0					2	
167	c09q0167	X				10-MAR-2007 08:11	1.0	1.0	2		1	2	
168	c09q0168	CCB				10-MAR-2007 08:16	1.0	1.0			1	2	
169	c09q0169	X				10-MAR-2007 08:21	1.0	1.0			1	2	
170	c09q0170	MS	QC378508	122924	Filtra	10-MAR-2007 08:27	10.0	1.0			1	2	
171	c09q0171	MSD	QC378509	122924	Filtra	10-MAR-2007 08:32	10.0	1.0			1	2	
172	c09q0172	SAMPLE	193055-023	122924	Water	10-MAR-2007 08:37	10.0	1.0			1	2	
173	c09q0173	SAMPLE	193137-005	122924	Filtra	10-MAR-2007 08:43	10.0	1.0			1	2	
174	c09q0174	SAMPLE	193217-010	122924	Filtra	10-MAR-2007 08:48	10.0	1.0			1	2	
175	c09q0175	SAMPLE	193217-012	122924	Filtra	10-MAR-2007 08:53	10.0	1.0			1	2	
176	c09q0176	SAMPLE	193217-014	122924	Filtra	10-MAR-2007 08:59	10.0	1.0			1	2	
177	c09q0177	SAMPLE	193217-015	122924	Filtra	10-MAR-2007 09:04	10.0	1.0			1	2	
178	c09q0178	SAMPLE	193217-016	122924	Filtra	10-MAR-2007 09:09	10.0	1.0			1	2	
179	c09q0179	SAMPLE	193217-017	122924	Filtra	10-MAR-2007 09:15	10.0	1.0			1	2	
180	c09q0180	X	RINSE			10-MAR-2007 09:20	1.0					2	
181	c09q0181	X	RINSE			10-MAR-2007 09:25	1.0					2	
182	c09q0182	X	RINSE			10-MAR-2007 09:31	1.0					2	
183	c09q0183	X	RINSE			10-MAR-2007 09:36	1.0					2	
184	c09q0184	CCV				10-MAR-2007 09:41	1.0	1.0			1	12 2	
185	c09q0185	X	RINSE			10-MAR-2007 09:47	1.0					2	
186	c09q0186	CCB				10-MAR-2007 09:52	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RAH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c09q0187	X				10-MAR-2007 09:57	1.0	1.0			1	2	
188	c09q0188	X				10-MAR-2007 10:03	1.0	1.0	3		1	2	
189	c09q0189	SAMPLE	193217-018	122924	Filtra	10-MAR-2007 10:08	10.0	1.0	1		1	2	1:NA=29570.0
190	c09q0190	SAMPLE	193217-019	122924	Filtra	10-MAR-2007 10:13	10.0	1.0	1		1	2	1:NA=20670.0
191	c09q0191	SAMPLE	193217-020	122924	Filtra	10-MAR-2007 10:19	10.0	1.0	1		1	2	1:NA=22410.0
192	c09q0192	SAMPLE	193217-022	122924	Filtra	10-MAR-2007 10:24	10.0	1.0	1		1	2	1:NA=20810.0
193	c09q0193	SAMPLE	193217-023	122924	Filtra	10-MAR-2007 10:30	10.0	1.0			1	2	
194	c09q0194	SAMPLE	193217-024	122924	Filtra	10-MAR-2007 10:35	10.0	1.0			1	2	
195	c09q0195	X	RINSE			10-MAR-2007 10:40	1.0					2	
196	c09q0196	X	RINSE			10-MAR-2007 10:46	1.0					2	
197	c09q0197	X	RINSE			10-MAR-2007 10:51	1.0					2	
198	c09q0198	X	RINSE			10-MAR-2007 10:57	1.0					2	
199	c09q0199	CCV				10-MAR-2007 11:02	1.0	1.0			1	12 2	
200	c09q0200	X	RINSE			10-MAR-2007 11:07	1.0					2	
201	c09q0201	CCB				10-MAR-2007 11:13	1.0	1.0			1	2	
202	c09q0202	X				10-MAR-2007 11:18	1.0	1.0			1	2	
203	c09q0203	X				10-MAR-2007 11:23	1.0	1.0			1	2	
204	c09q0204	ICSA				10-MAR-2007 11:29	1.0	1.0			1	10 2	7:CA=285200
205	c09q0205	ICSAB				10-MAR-2007 11:34	1.0	1.0			1	11 2	10:CA=315900
206	c09q0206	X	RINSE			10-MAR-2007 11:39	1.0					2	
207	c09q0207	X	RINSE			10-MAR-2007 11:45	1.0					2	
208	c09q0208	X	RINSE			10-MAR-2007 11:50	1.0					2	
209	c09q0209	X	RINSE			10-MAR-2007 11:56	1.0					2	
210	c09q0210	MSS	193193-001	122866	Filtra	10-MAR-2007 12:01	10.0	1.0			1	2	
211	c09q0211	TUN				10-MAR-2007 12:05	1.0	1.0				1	
212	c09q0212	X	RINSE			10-MAR-2007 12:13	1.0					2	
213	c09q0213	SER	QC378193	122866	Filtra	10-MAR-2007 12:18	50.0	1.0		2	1	2	
214	c09q0214	MS	QC378191	122866	Filtra	10-MAR-2007 12:24	10.0	1.0		1	1	2	
215	c09q0215	MSD	QC378192	122866	Filtra	10-MAR-2007 12:29	10.0	1.0		1	1	2	
216	c09q0216	PDS	QC378194	122866	Filtra	10-MAR-2007 12:34	10.0	1.0			1	13 14 2	
217	c09q0217	SAMPLE	193193-006	122866	Filtra	10-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: PLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
218	c09q0218	SAMPLE	193193-013	122866	Filtra	10-MAR-2007 12:45	10.0	1.0	1		1	2	
219	c09q0219	SAMPLE	193027-012	122867	Filtra	10-MAR-2007 12:50	50.0	1.0			1	2	
220	c09q0220	X	RINSE			10-MAR-2007 12:56	1.0					2	
221	c09q0221	X	RINSE			10-MAR-2007 13:01	1.0					2	
222	c09q0222	X	RINSE			10-MAR-2007 13:06	1.0					2	
223	c09q0223	X	RINSE			10-MAR-2007 13:12	1.0					2	
224	c09q0224	CCV				10-MAR-2007 13:17	1.0	1.0			1	12 2	
225	c09q0225	X	RINSE			10-MAR-2007 13:23	1.0					2	
226	c09q0226	X				10-MAR-2007 13:28	1.0	1.0	4		1	2	
227	c09q0227	CCB				10-MAR-2007 13:33	1.0	1.0			1	2	
228	c09q0228	X				10-MAR-2007 13:39	1.0	1.0			1	2	
229	c09q0229	SAMPLE	193027-011	122867	Water	10-MAR-2007 13:44	20.0	1.0			1	2	
230	c09q0230	SAMPLE	193027-012	122867	Water	10-MAR-2007 13:49	50.0	1.0			1	2	
231	c09q0231	SAMPLE	193027-013	122867	Water	10-MAR-2007 13:55	20.0	1.0			1	2	
232	c09q0232	X	RINSE			10-MAR-2007 14:00	1.0					2	
233	c09q0233	X	RINSE			10-MAR-2007 14:05	1.0					2	
234	c09q0234	X	RINSE			10-MAR-2007 14:11	1.0					2	
235	c09q0235	X	RINSE			10-MAR-2007 14:16	1.0					2	
236	c09q0236	CCV				10-MAR-2007 14:21	1.0	1.0			1	12 2	
237	c09q0237	X	RINSE			10-MAR-2007 14:27	1.0					2	
238	c09q0238	X				10-MAR-2007 14:32	1.0	1.0	5		1	2	
239	c09q0239	CCB				10-MAR-2007 14:38	1.0	1.0			1	2	
240	c09q0240	X				10-MAR-2007 14:43	1.0	1.0			1	2	
241	c09q0241	ICSA				10-MAR-2007 14:48	1.0	1.0			1	10 2	7:CA=281600
242	c09q0242	ICSAB				10-MAR-2007 14:54	1.0	1.0			1	11 2	10:CA=315900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67101597001
Units : ug/L

Date : 11-MAR-2007 13:35
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c11n0005	67101597005		11-MAR-2007 13:40	S5645
L2	c11n0006	67101597006		11-MAR-2007 13:46	S5648
L3	c11n0007	67101597007		11-MAR-2007 13:51	S5649
L4	c11n0008	67101597008		11-MAR-2007 13:56	S5650
L5	c11n0009	67101597009		11-MAR-2007 14:01	S5644
L6	c11n0010	67101597010		11-MAR-2007 14:06	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7797	0.6602	0.6737	0.6368	0.6275	0.5950	BLNK	-0.7320	1.66246		0.6622	0.999	0.995	
Antimony	A	0.3235	0.2940	0.2939	0.2903	0.2967	0.2868	BLNK	-0.0114	3.46274		0.2975	1.000	0.995	
Barium	A	0.2790	0.1027	0.1154	0.0958	0.0920	0.0875	BLNK	-0.0155	11.3143		0.1287	0.999	0.995	
Beryllium	A	0.3327	0.3285	0.3369	0.3336	0.3416	0.3349	BLNK	-0.0020	2.97424		0.3347	1.000	0.995	
Cadmium	A	0.0869	0.0796	0.0892	0.0856	0.0835	0.0805	BLNK	-0.0027	12.3239		0.0842	1.000	0.995	
Calcium	A	0.2503	0.0646	0.0460	0.0245	0.0217	0.0205	BLNK	-118.21	48.5240		0.0713	0.999	0.995	
Lead	A	0.8656	0.7170	0.7208	0.6788	0.6635	0.6425	BLNK	-0.0210	1.54628		0.7147	1.000	0.995	
Magnesium	A	0.6343	0.5469	0.5573	0.5217	0.5101	0.4820	BLNK	-0.6918	2.05039		0.5421	0.999	0.995	
Molybdenum	A	0.2472	0.2300	0.2389	0.2271	0.2237	0.2255	BLNK	-0.0067	4.44166		0.2321	1.000	0.995	
Potassium	A	6.5780	1.8867	1.3292	0.7862	0.7289	0.6907	BLNK	-82.405	1.43897		1.9999	0.999	0.995	
Silver	A	0.3675	0.3641	0.3689	0.3579	0.3633	0.3508	BLNK	-0.0064	2.83022		0.3621	1.000	0.995	
Thallium	A	1.4676	0.9616	0.9212	0.8746	0.9153	0.8932	BLNK	-0.0414	1.11473		1.0056	1.000	0.995	
Arsenic	E	0.9187	0.6487	0.6670	0.6390	0.6251	0.6001	BLNK	-0.0420	1.65282		0.6831	1.000	0.995	
Chromium	E	6.4330	3.9322	3.5828	3.1755	3.1526	2.9789	BLNK	-0.1056	0.33200		3.8759	0.999	0.995	
Cobalt	E	5.2760	4.9399	5.2270	5.0645	4.9438	4.6485	BLNK	-0.0015	0.21239		5.0166	0.999	0.995	
Copper	E	19.117	10.270	9.2750	8.0920	7.6121	7.1405	BLNK	-0.1409	0.13831		10.251	0.999	0.995	
Manganese	E	2.0495	1.7367	1.7195	1.6453	1.6331	1.5350	BLNK	-0.0173	0.64325		1.7199	0.999	0.995	
Nickel	E	2.7116	1.6311	1.6764	1.3942	1.3366	1.2437	BLNK	-0.1049	0.79255		1.6656	0.999	0.995	
Sodium	E	3.3500	1.2333	1.0132	0.7270	0.6721	0.6461	BLNK	-41.172	1.53903		1.2736	1.000	0.995	
Vanadium	E	6.4071	3.2784	2.9968	2.5025	2.4916	2.3588	BLNK	-0.1671	0.41962		3.3392	0.999	0.995	
Zinc	E	20.742	4.8340	6.3245	1.3469	1.1345	1.0530	BLNK	-1.4141	0.94280		5.9058	0.998	0.995	
Iron	H	1.0920	0.9782	1.0156	0.9293	0.9007	0.8645	BLNK	-0.5784	1.14701		0.9634	1.000	0.995	
Selenium	H	0.1631	0.1456	0.1597	0.1555	0.1496	0.1370	BLNK	-0.0062	7.16537		0.1518	0.998	0.995	

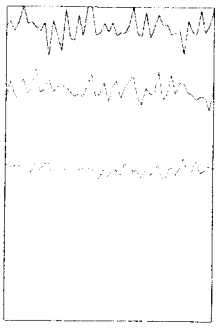
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

ns rument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67101597001

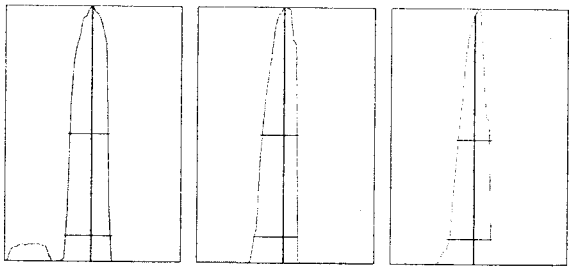
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19928.0	18753.4	4.35	1.00
89	50,000	37452.0	36828.8	3.90	0.80
205	50,000	24422.0	24217.8	3.22	2.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.985%
Doubly Charged: 70/140 2.163%



m/z:	7	89	205
Height:	18,927	36,897	23,621
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.04 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-5 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF					
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	: --- %

Tune File : he.u

He Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	51	26.8	26.85	
QP Focus:	-10 V	59	3764.5	3.57	
Cell Exit:	-38 V	89	2364.6	3.67	
OctP Bias:	-18 V				
QP Bias:	-13 V				

Tune File : h2.u

H2 Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	59	2690.7	5.11	
QP Focus:	-8 V	78	0.2	231.46	
Cell Exit:	-38 V	89	18472.2	4.21	
OctP Bias:	-18 V				
QP Bias:	-15 V				

Generated : Mar 11, 2007 12:49:40
Printed : Mar 11, 2007 12:51:19

00496

P/A Factor Tuning Report

Acquired:Mar 11 2007 01:00 pm

Mass[amu]	Element	P/A Factor
6	Li	0.064990
7	(Li)	Sensitivity too low
9	Be	0.074241
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091195
45	Sc	0.090963
51	V	0.092550
52	Cr	0.096217
55	Mn	0.098412
56	Fe	Sensitivity too high
59	Co	0.100893
60	Ni	Sensitivity too low
63	Cu	0.108212
65	Cu	0.107611
66	Zn	Sensitivity too low
72	Ge	0.105571
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103605
98	Mo	0.104388
99	(Ru)	Sensitivity too low
107	Ag	0.113364
111	Cd	Sensitivity too low
115	In	0.112154
118	(In)	0.111256
121	Sb	0.110585
137	Ba	Sensitivity too low
159	Tb	0.114120
205	Tl	0.120270
206	(Pb)	0.120189
207	(Pb)	0.120232
208	Pb	0.119703
209	Bi	0.120469

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

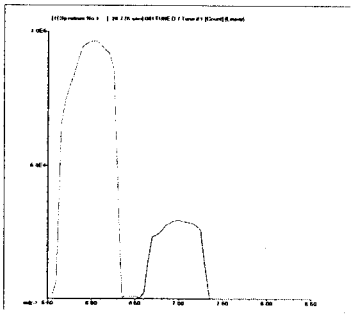
00497

6020 QC Tune Report

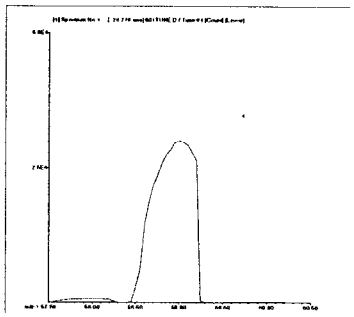
Data File: C:\ICPCHEM\1\DATA\07C11n00.B\001TUNE.D
Date Acquired: Mar 11 2007 01:17 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

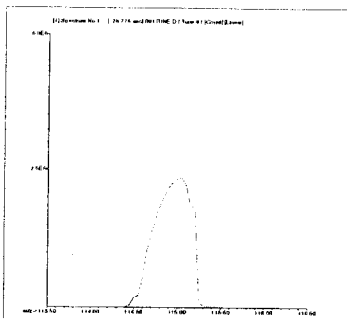
Element	Actual	Required	Flag
7 Li	0.31	5.00	
59 Co	0.46	5.00	
115 In	1.05	5.00	
205 Tl	0.72	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



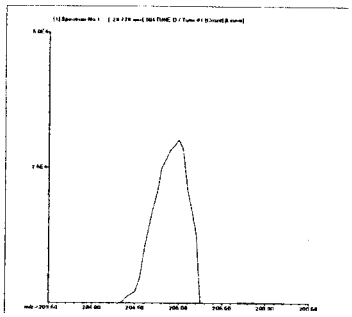
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004C
Date Acquired:	Mar 11 2007 01:33 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Mar 11 2007 01:36 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	914016.31	A	10480.00	1.15
7	(Li)		P		
9	Be	12.22	P	5.09	41.66
23	Na	21398.87	P	249.90	1.17
24	Mg	10005.18	P	421.70	4.21
27	Al	13058.89	P	278.90	2.14
39	K	1698730.00	A	3644.00	0.21
44	Ca	72282.13	P	2201.00	3.05
45	Sc	339061.09	P	1139.00	0.34
45	Sc	39996.86	P	179.00	0.45
45	Sc	1483318.00	A	17720.00	1.19
51	V	318.53	P	34.07	10.70
52	Cr	254.45	P	13.10	5.15
55	Mn	21.48	P	1.70	7.90
56	Fe	3419.72	P	30.52	0.89
59	Co	5.56	P	1.93	34.65
60	Ni	105.93	P	5.25	4.96
63	Cu	383.34	P	35.76	9.33
65	Cu	178.89	P	20.37	11.39
66	Zn	564.09	P	27.32	4.84
72	Ge	77432.61	P	80.66	0.10
72	Ge	18807.66	P	97.30	0.52
75	As	9.56	P	1.02	10.65
78	Se	1.33	P	0.67	50.00
89	Y	1804800.00	A	16040.00	0.89
98	Mo	54.45	P	10.18	18.70
107	Ag	80.00	P	6.67	8.33
111	Cd	7.78	P	5.09	65.47
115	In	1776838.00	A	21300.00	1.20
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	116.67	P	10.00	8.57
137	Ba	61.11	P	10.18	16.66
159	Tb	2230978.00	A	34340.00	1.54
205	Tl	1010.08	P	40.00	3.96
208	Pb	606.70	P	10.00	1.65
209	Bi	1361245.00	A	12200.00	0.90

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 11 2007 01:38 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	925835.00	A	19290.00	2.08
7 (Li)		P		
9 Be	615.59	P	19.53	3.17
23 Na	27732.04	P	586.70	2.12
24 Mg	190104.80	P	1073.00	0.56
27 Al	233693.50	P	1226.00	0.52
39 K	1971530.00	A	11640.00	0.59
44 Ca	75032.58	P	1193.00	1.59
45 Sc	344107.81	P	843.70	0.25
45 Sc	41388.66	P	256.70	0.62
45 Sc	1498586.00	A	10080.00	0.67
51 V	530.39	P	29.45	5.55
52 Cr	532.61	P	28.92	5.43
55 Mn	169.63	P	18.60	10.97
56 Fe	75157.48	P	1144.00	1.52
59 Co	436.68	P	26.46	6.06
60 Ni	224.45	P	17.46	7.78
63 Cu	748.92	P	14.19	1.89
65 Cu	362.97	P	39.48	10.88
66 Zn	812.63	P	6.51	0.80
72 Ge	78328.36	P	132.30	0.17
72 Ge	19589.46	P	105.20	0.54
75 As	36.00	P	2.67	7.41
78 Se	25.56	P	3.79	14.83
89 Y	1858633.00	A	17890.00	0.96
98 Mo	918.96	P	40.33	4.39
99 (Ru)	11.11	P	8.39	75.50
107 Ag	1344.56	P	65.19	4.85
111 Cd	317.79	P	25.24	7.94
115 In	1828997.00	A	19380.00	1.06
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1183.43	P	46.32	3.91
137 Ba	1264.55	P	5.10	0.40
159 Tb	2266466.00	A	10910.00	0.48
205 Tl	2003.57	P	132.50	6.61
208 Pb	3923.72	P	60.27	1.54
209 Bi	1365602.00	A	24000.00	1.76

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	925835.00	2.08	914016.31	101.3	80 - 120	
45 Sc	344107.81	0.25	339061.13	101.5	80 - 120	
45 Sc	41388.66	0.62	39996.86	103.5	80 - 120	
45 Sc	1498586.00	0.67	1483317.60	101.0	80 - 120	
72 Ge	78328.36	0.17	77432.61	101.2	80 - 120	
72 Ge	19589.46	0.54	18807.66	104.2	80 - 120	
89 Y	1858632.60	0.96	1804800.40	103.0	80 - 120	
115 In	1828996.90	1.06	1776837.60	102.9	80 - 120	
159 Tb	2266466.50	0.48	2230977.80	101.6	80 - 120	
209 Bi	1365602.10	1.76	1361245.10	100.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 11 2007 01:43 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937823.81	A	6224.00	0.66
7 (Li)		P		
9 Be	3080.44	P	40.42	1.31
23 Na	50986.19	P	592.00	1.16
24 Mg	837286.38	A	3021.00	0.36
27 Al	1010774.00	A	5005.00	0.50
39 K	2888643.00	A	14210.00	0.49
44 Ca	98971.37	P	560.40	0.57
45 Sc	345030.69	P	1666.00	0.48
45 Sc	41342.93	P	328.20	0.79
45 Sc	1531079.00	A	12120.00	0.79
51 V	1355.64	P	62.58	4.62
52 Cr	1625.67	P	11.71	0.72
55 Mn	718.17	P	44.67	6.22
56 Fe	337522.31	P	2890.00	0.86
59 Co	2042.03	P	41.60	2.04
60 Ni	674.47	P	35.95	5.33
63 Cu	2006.47	P	92.11	4.59
65 Cu	990.42	P	34.36	3.47
66 Zn	944.12	P	35.84	3.80
72 Ge	78924.04	P	539.40	0.68
72 Ge	19536.44	P	203.10	1.04
75 As	126.67	P	10.35	8.17
78 Se	114.89	P	13.42	11.68
89 Y	1868140.00	A	19480.00	1.04
98 Mo	4296.40	P	88.37	2.06
99 (Ru)	12.22	P	1.92	15.74
107 Ag	6739.69	P	96.66	1.43
111 Cd	1473.47	P	69.86	4.74
115 In	1850896.00	A	13410.00	0.72
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5441.30	P	73.60	1.35
137 Ba	2350.29	P	131.00	5.57
159 Tb	2288938.00	A	6597.00	0.29
205 Tl	6684.22	P	326.70	4.89
208 Pb	16410.34	P	323.90	1.97
209 Bi	1390616.00	A	8860.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937823.81	0.66	914016.31	102.6	80 - 120	
45 Sc	345030.69	0.48	339061.13	101.8	80 - 120	
45 Sc	41342.93	0.79	39996.86	103.4	80 - 120	
45 Sc	1531079.30	0.79	1483317.60	103.2	80 - 120	
72 Ge	78924.04	0.68	77432.61	101.9	80 - 120	
72 Ge	19536.44	1.04	18807.66	103.9	80 - 120	
89 Y	1868140.00	1.04	1804800.40	103.5	80 - 120	
115 In	1850896.00	0.72	1776837.60	104.2	80 - 120	
159 Tb	2288938.00	0.29	2230977.80	102.6	80 - 120	
209 Bi	1390615.90	0.64	1361245.10	102.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 11 2007 01:49 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	915792.00	A	8758.00	0.96
7 (Li)		P		
9 Be	6171.53	P	159.10	2.58
23 Na	83963.03	P	607.20	0.72
24 Mg	1686488.00	A	18770.00	1.11
27 Al	2038663.00	A	8525.00	0.42
39 K	4021900.00	A	7872.00	0.20
44 Ca	139294.80	P	1229.00	0.88
45 Sc	346555.09	P	2125.00	0.61
45 Sc	41436.95	P	385.80	0.93
45 Sc	1513238.00	A	24650.00	1.63
51 V	2483.58	P	77.97	3.14
52 Cr	2968.87	P	79.60	2.68
55 Mn	1424.90	P	47.54	3.34
56 Fe	703939.00	P	5234.00	0.74
59 Co	4331.83	P	62.27	1.44
60 Ni	1389.35	P	55.93	4.03
63 Cu	3670.15	P	30.12	0.82
65 Cu	1808.29	P	25.76	1.42
66 Zn	2502.85	P	41.36	1.65
72 Ge	79028.66	P	352.70	0.45
72 Ge	19787.51	P	195.40	0.99
75 As	264.00	P	13.13	4.97
78 Se	252.45	P	12.81	5.07
89 Y	1854459.00	A	23840.00	1.29
98 Mo	8863.18	P	287.30	3.24
99 (Ru)	12.22	P	6.94	56.77
107 Ag	13474.92	P	183.00	1.36
111 Cd	3258.29	P	45.39	1.39
115 In	1826288.00	A	17690.00	0.97
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10734.66	P	253.80	2.36
137 Ba	5243.47	P	140.20	2.67
159 Tb	2272728.00	A	18870.00	0.83
205 Tl	12623.35	P	244.70	1.94
208 Pb	32763.25	P	488.80	1.49
209 Bi	1370337.00	A	23330.00	1.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	915791.94	0.96	914016.31	100.2	80 - 120	
45 Sc	346555.06	0.61	339061.13	102.2	80 - 120	
45 Sc	41436.96	0.93	39996.86	103.6	80 - 120	
45 Sc	1513238.30	1.63	1483317.60	102.0	80 - 120	
72 Ge	79028.66	0.45	77432.61	102.1	80 - 120	
72 Ge	19787.51	0.99	18807.66	105.2	80 - 120	
89 Y	1854459.40	1.29	1804800.40	102.8	80 - 120	
115 In	1826288.30	0.97	1776837.60	102.8	80 - 120	
159 Tb	2272728.00	0.83	2230977.80	101.9	80 - 120	
209 Bi	1370336.60	1.70	1361245.10	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 11 2007 01:54 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	928096.50	A	7530.00	0.81
7	(Li)		P		
9	Be	61912.26	P	769.40	1.24
23	Na	608612.13	P	1966.00	0.32
24	Mg	15938670.00	A	73420.00	0.46
27	Al	19451340.00	A	161300.00	0.83
39	K	24016490.00	A	81250.00	0.34
44	Ca	747481.63	P	2162.00	0.29
45	Sc	349240.09	P	468.70	0.13
45	Sc	41863.36	P	556.10	1.33
45	Sc	1527563.00	A	18820.00	1.23
51	V	20951.97	P	269.30	1.29
52	Cr	26584.40	P	35.38	0.13
55	Mn	13773.90	P	20.05	0.15
56	Fe	6490921.00	A	37350.00	0.58
59	Co	42397.70	P	87.32	0.21
60	Ni	11672.75	P	77.76	0.67
63	Cu	31714.51	P	195.40	0.62
65	Cu	15322.58	P	103.60	0.68
66	Zn	5278.84	P	91.01	1.72
72	Ge	80134.09	P	519.90	0.65
72	Ge	19597.26	P	137.50	0.70
75	As	2504.24	P	90.03	3.60
78	Se	2492.24	P	9.17	0.37
89	Y	1869155.00	A	15550.00	0.83
98	Mo	84910.69	P	844.10	0.99
99	(Ru)	16.67	P	6.67	40.00
107	Ag	130279.20	P	1152.00	0.88
111	Cd	31163.36	P	432.00	1.39
115	In	1819963.00	A	12020.00	0.66
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	105681.10	P	1618.00	1.53
137	Ba	43349.24	P	293.00	0.68
159	Tb	2262846.00	A	26660.00	1.18
205	Tl	119126.90	P	816.40	0.69
208	Pb	307197.81	P	456.80	0.15
209	Bi	1362154.00	A	12560.00	0.92

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	928096.56	0.81	914016.31	101.5	80 - 120	
45	Sc	349240.09	0.13	339061.13	103.0	80 - 120	
45	Sc	41863.36	1.33	39996.86	104.7	80 - 120	
45	Sc	1527562.90	1.23	1483317.60	103.0	80 - 120	
72	Ge	80134.09	0.65	77432.61	103.5	80 - 120	
72	Ge	19597.26	0.70	18807.66	104.2	80 - 120	
89	Y	1869155.10	0.83	1804800.40	103.6	80 - 120	
115	In	1819963.10	0.66	1776837.60	102.4	80 - 120	
159	Tb	2262846.30	1.18	2230977.80	101.4	80 - 120	
209	Bi	1362153.90	0.92	1361245.10	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 11 2007 01:59 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	885035.50	A	9139.00	1.03
7	(Li)		P		
9	Be	604657.19	P	4870.00	0.81
23	Na	5609490.00	A	68990.00	1.23
24	Mg	############	A	899700.00	0.57
27	Al	############	A	2278000.00	1.17
39	K	############	A	2348000.00	1.04
44	Ca	6727684.00	A	46250.00	0.69
45	Sc	360595.50	P	813.30	0.23
45	Sc	41733.74	P	122.10	0.29
45	Sc	1549179.00	A	8568.00	0.55
51	V	207966.80	P	631.80	0.30
52	Cr	263142.41	P	1229.00	0.47
55	Mn	136311.30	P	618.20	0.45
56	Fe	64959420.00	A	270300.00	0.42
59	Co	412646.59	P	3518.00	0.85
60	Ni	111561.50	P	700.70	0.63
63	Cu	300003.81	P	2643.00	0.88
65	Cu	145962.80	P	402.80	0.28
66	Zn	44711.09	P	190.60	0.43
72	Ge	80709.42	P	374.20	0.46
72	Ge	19705.54	P	34.58	0.18
75	As	24636.74	P	172.30	0.70
78	Se	24139.73	P	137.00	0.57
89	Y	1872389.00	A	20740.00	1.11
98	Mo	837844.19	P	11970.00	1.43
99	(Ru)	34.45	P	13.47	39.11
107	Ag	1304533.00	A	24510.00	1.88
111	Cd	299794.91	P	5650.00	1.88
115	In	1795535.00	A	18630.00	1.04
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	1065274.00	A	6231.00	0.58
137	Ba	418490.59	P	5897.00	1.41
159	Tb	2275105.00	A	15730.00	0.69
205	Tl	1200463.00	A	14640.00	1.22
208	Pb	3018941.00	A	31250.00	1.04
209	Bi	1311667.00	A	14710.00	1.12

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	885035.50	1.03	914016.31	96.8	80 - 120	
45	Sc	360595.50	0.23	339061.13	106.4	80 - 120	
45	Sc	41733.74	0.29	39996.86	104.3	80 - 120	
45	Sc	1549178.60	0.55	1483317.60	104.4	80 - 120	
72	Ge	80709.42	0.46	77432.61	104.2	80 - 120	
72	Ge	19705.54	0.18	18807.66	104.8	80 - 120	
89	Y	1872389.10	1.11	1804800.40	103.7	80 - 120	
115	In	1795535.00	1.04	1776837.60	101.1	80 - 120	
159	Tb	2275105.30	0.69	2230977.80	102.0	80 - 120	
209	Bi	1311666.50	1.12	1361245.10	96.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 11 2007 02:04 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 02:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	845869.38	A	8570.00	1.01
7	(Li)		P		
9	Be	1133152.00	A	26100.00	2.30
23	Na	10932670.00	A	31920.00	0.29
24	Mg	###########	A	5672000.00	1.94
27	Al	###########	A	8055000.00	2.23
39	K	###########	A	8347000.00	1.99
44	Ca	12443510.00	A	287200.00	2.31
45	Sc	368407.91	P	6951.00	1.89
45	Sc	42308.40	P	510.70	1.21
45	Sc	1516671.00	A	34620.00	2.28
51	V	399151.00	P	2067.00	0.52
52	Cr	504107.31	P	4263.00	0.85
55	Mn	259746.91	P	981.60	0.38
56	Fe	###########	A	1516000.00	1.19
59	Co	786640.13	P	5154.00	0.66
60	Ni	210473.20	P	1754.00	0.83
63	Cu	560092.81	P	2050.00	0.37
65	Cu	274376.59	P	1414.00	0.52
66	Zn	82598.06	P	204.50	0.25
72	Ge	82567.25	P	598.80	0.73
72	Ge	19609.88	P	99.58	0.51
75	As	47072.36	P	341.90	0.73
78	Se	45255.18	P	571.00	1.26
89	Y	1822665.00	A	28870.00	1.58
98	Mo	1644168.00	A	39220.00	2.39
99	(Ru)	64.45	P	12.62	19.58
107	Ag	2419848.00	A	54600.00	2.26
111	Cd	555505.31	P	6635.00	1.19
115	In	1724202.00	A	23490.00	1.36
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1978358.00	A	43160.00	2.18
137	Ba	785086.19	P	14250.00	1.82
159	Tb	2243654.00	A	37170.00	1.66
205	Tl	2261116.00	A	36300.00	1.61
208	Pb	5766329.00	A	72050.00	1.25
209	Bi	1265896.00	A	23490.00	1.86

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	845869.38	1.01	914016.31	92.5	80 - 120	
45	Sc	368407.94	1.89	339061.13	108.7	80 - 120	
45	Sc	42308.40	1.21	39996.86	105.8	80 - 120	
45	Sc	1516670.60	2.28	1483317.60	102.2	80 - 120	
72	Ge	82567.25	0.73	77432.61	106.6	80 - 120	
72	Ge	19609.88	0.51	18807.66	104.3	80 - 120	
89	Y	1822665.40	1.58	1804800.40	101.0	80 - 120	
115	In	1724201.90	1.36	1776837.60	97.0	80 - 120	
159	Tb	2243654.00	1.66	2230977.80	100.6	80 - 120	
209	Bi	1265895.60	1.86	1361245.10	93.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597016 File : c11n0016
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5653

IDF : 1.0
Time : 11-MAR-2007 14:40

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6622	0.6235	10000	10360	ug/L	4	10	
Antimony	A	0.2975	0.3089	100.0	107.0	ug/L	7	10	
Barium	A	0.1287	0.0915	100.0	103.5	ug/L	4	10	
Beryllium	A	0.3347	0.3314	100.0	98.56	ug/L	-1	10	
Cadmium	A	0.0842	0.0831	100.0	102.5	ug/L	3	10	
Calcium	A	0.0713	0.0216	10000	10380	ug/L	4	10	
Lead	A	0.7147	0.6431	100.0	99.43	ug/L	-1	10	
Magnesium	A	0.5421	0.5105	10000	10470	ug/L	5	10	
Molybdenum	A	0.2321	0.2239	100.0	99.46	ug/L	-1	10	
Potassium	A	1.9999	0.7228	10000	10320	ug/L	3	10	
Silver	A	0.3621	0.3899	100.0	110.3	ug/L	10	10	
Thallium	A	1.0056	0.8794	50.00	48.98	ug/L	-2	10	
Arsenic	E	0.6831	0.6298	100.0	104.1	ug/L	4	10	
Chromium	E	3.8759	3.0649	100.0	101.7	ug/L	2	10	
Cobalt	E	5.0166	4.7371	100.0	100.6	ug/L	1	10	
Copper	E	10.251	7.3230	100.0	101.1	ug/L	1	10	
Manganese	E	1.7199	1.5822	100.0	101.8	ug/L	2	10	
Nickel	E	1.6656	1.2817	100.0	101.5	ug/L	2	10	
Sodium	E	1.2736	0.6568	10000	10070	ug/L	1	10	
Vanadium	E	3.3392	2.4160	100.0	101.2	ug/L	1	10	
Zinc	E	5.9058	1.1217	100.0	104.3	ug/L	4	10	
Iron	H	0.9634	0.9059	10000	10390	ug/L	4	10	
Selenium	H	0.1518	0.1448	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	920893	0.75
Scandium	A	1483318	1532446	3.31
Scandium	E	39997	42978	7.45
Scandium	H	339061	350356	3.33
Germanium	H	77433	79881	3.16
Germanium	E	18808	19922	5.92
Indium	A	1776838	1787538	0.60
Bismuth	A	1361245	1284782	-5.62
Yttrium	A	1804800	1879207	4.12
Terbium	A	2230978	2243464	0.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597038 File : c11n0038 Time : 11-MAR-2007 16:40
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5900	10000	9808	ug/L	-2	10	
Antimony	A	0.2975	0.3014	100.0	104.4	ug/L	4	10	
Barium	A	0.1287	0.0864	100.0	97.70	ug/L	-2	10	
Beryllium	A	0.3347	0.3027	100.0	90.02	ug/L	-10	10	
Cadmium	A	0.0842	0.0786	100.0	96.91	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9943	ug/L	-1	10	
Lead	A	0.7147	0.5990	100.0	92.61	ug/L	-7	10	
Magnesium	A	0.5421	0.4839	10000	9922	ug/L	-1	10	
Molybdenum	A	0.2321	0.2117	100.0	94.03	ug/L	-6	10	
Potassium	A	1.9999	0.6954	10000	9924	ug/L	-1	10	
Silver	A	0.3621	0.3776	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8567	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6831	0.6033	100.0	99.68	ug/L	0	10	
Chromium	E	3.8759	2.9271	100.0	97.07	ug/L	-3	10	
Cobalt	E	5.0166	4.5113	100.0	95.82	ug/L	-4	10	
Copper	E	10.251	6.8447	100.0	94.53	ug/L	-5	10	
Manganese	E	1.7199	1.5380	100.0	98.91	ug/L	-1	10	
Nickel	E	1.6656	1.2219	100.0	96.73	ug/L	-3	10	
Sodium	E	1.2736	0.6305	10000	9662	ug/L	-3	10	
Vanadium	E	3.3392	2.2989	100.0	96.30	ug/L	-4	10	
Zinc	E	5.9058	1.0575	100.0	98.28	ug/L	-2	10	
Iron	H	0.9634	0.9065	10000	10400	ug/L	4	10	
Selenium	H	0.1518	0.1385	100.0	99.22	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917861	0.42
Scandium	A	1483318	1570616	5.89
Scandium	E	39997	43857	9.65
Scandium	H	339061	336429	-0.78
Germanium	H	77433	78961	1.97
Germanium	E	18808	20769	10.43
Indium	A	1776838	1840619	3.59
Bismuth	A	1361245	1283949	-5.68
Yttrium	A	1804800	1921443	6.46
Terbium	A	2230978	2296357	2.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597058 File : c11n0058 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 18:59
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5894	10000	9797	ug/L	-2	10	
Antimony	A	0.2975	0.2971	100.0	102.9	ug/L	3	10	
Barium	A	0.1287	0.0872	100.0	98.67	ug/L	-1	10	
Beryllium	A	0.3347	0.3050	100.0	90.71	ug/L	-9	10	
Cadmium	A	0.0842	0.0785	100.0	96.70	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5883	100.0	90.94	ug/L	-9	10	
Magnesium	A	0.5421	0.4833	10000	9908	ug/L	-1	10	
Molybdenum	A	0.2321	0.2099	100.0	93.24	ug/L	-7	10	
Potassium	A	1.9999	0.6950	10000	9919	ug/L	-1	10	
Silver	A	0.3621	0.3779	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8136	50.00	45.31	ug/L	-9	10	
Arsenic	E	0.6831	0.6065	100.0	100.2	ug/L	0	10	
Chromium	E	3.8759	2.9215	100.0	96.89	ug/L	-3	10	
Cobalt	E	5.0166	4.5019	100.0	95.62	ug/L	-4	10	
Copper	E	10.251	6.7154	100.0	92.74	ug/L	-7	10	
Manganese	E	1.7199	1.5513	100.0	99.77	ug/L	0	10	
Nickel	E	1.6656	1.2156	100.0	96.24	ug/L	-4	10	
Sodium	E	1.2736	0.6259	10000	9592	ug/L	-4	10	
Vanadium	E	3.3392	2.3119	100.0	96.84	ug/L	-3	10	
Zinc	E	5.9058	1.0542	100.0	97.97	ug/L	-2	10	
Iron	H	0.9634	0.8894	10000	10200	ug/L	2	10	
Selenium	H	0.1518	0.1389	100.0	99.50	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	912804	-0.13
Scandium	A	1483318	1555714	4.88
Scandium	E	39997	45395	13.50
Scandium	H	339061	316695	-6.60
Germanium	H	77433	74471	-3.82
Germanium	E	18808	21713	15.45
Indium	A	1776838	1814333	2.11
Bismuth	A	1361245	1229389	-9.69
Yttrium	A	1804800	1908693	5.76
Terbium	A	2230978	2232736	0.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597072 File : c11n0072 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 20:14
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5901	10000	9810	ug/L	-2	10	
Antimony	A	0.2975	0.2952	100.0	102.2	ug/L	2	10	
Barium	A	0.1287	0.0872	100.0	98.60	ug/L	-1	10	
Beryllium	A	0.3347	0.2986	100.0	88.80	ug/L	**-11**	10	c- ***
Cadmium	A	0.0842	0.0775	100.0	95.48	ug/L	-5	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5948	100.0	91.95	ug/L	-8	10	
Magnesium	A	0.5421	0.4812	10000	9865	ug/L	-1	10	
Molybdenum	A	0.2321	0.2089	100.0	92.77	ug/L	-7	10	
Potassium	A	1.9999	0.6966	10000	9941	ug/L	-1	10	
Silver	A	0.3621	0.3747	100.0	106.0	ug/L	6	10	
Thallium	A	1.0056	0.7968	50.00	44.37	ug/L	**-11**	10	c- ***
Arsenic	E	0.6831	0.5985	100.0	98.88	ug/L	-1	10	
Chromium	E	3.8759	2.8758	100.0	95.37	ug/L	-5	10	
Cobalt	E	5.0166	4.4104	100.0	93.67	ug/L	-6	10	
Copper	E	10.251	6.7307	100.0	92.95	ug/L	-7	10	
Manganese	E	1.7199	1.5283	100.0	98.29	ug/L	-2	10	
Nickel	E	1.6656	1.1932	100.0	94.46	ug/L	-6	10	
Sodium	E	1.2736	0.6285	10000	9632	ug/L	-4	10	
Vanadium	E	3.3392	2.2624	100.0	94.77	ug/L	-5	10	
Zinc	E	5.9058	1.0555	100.0	98.09	ug/L	-2	10	
Iron	H	0.9634	0.9005	10000	10330	ug/L	3	10	
Selenium	H	0.1518	0.1394	100.0	99.85	ug/L	0	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917720	0.41
Scandium	A	1483318	1533714	3.40
Scandium	E	39997	44243	10.62
Scandium	H	339061	314905	-7.12
Germanium	H	77433	73650	-4.89
Germanium	E	18808	20782	10.50
Indium	A	1776838	1792631	0.89
Bismuth	A	1361245	1212255	-10.95
Yttrium	A	1804800	1870131	3.62
Terbium	A	2230978	2178779	-2.34

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597018
Cal : 67101597001

File : c11n0018
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 14:50

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003508]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01038]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.07495]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02791]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	963727	5.44
Scandium	A	1483318	1572576	6.02
Scandium	E	39997	45367	13.43
Scandium	H	339061	367200	8.30
Germanium	H	77433	84025	8.51
Germanium	E	18808	21238	12.92
Indium	A	1776838	1872261	5.37
Bismuth	A	1361245	1357645	-0.26
Yttrium	A	1804800	1912994	5.99
Terbium	A	2230978	2279148	2.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597040 File : c11n0040 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 16:50

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01001]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01068]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01309]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001891]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01247]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005017]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01104]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	972249	6.37
Scandium	A	1483318	1654236	11.52
Scandium	E	39997	45255	13.15
Scandium	H	339061	332262	-2.01
Germanium	H	77433	78694	1.63
Germanium	E	18808	21341	13.47
Indium	A	1776838	1999046	12.51
Bismuth	A	1361245	1404744	3.20
Yttrium	A	1804800	2040525	13.06
Terbium	A	2230978	2416702	8.32

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597060 File : c11n0060 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 19:09

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007192]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007118]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01108]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008521]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	calc
Manganese	E	[0.01312]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01515]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006840]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	973914	6.55
Scandium	A	1483318	1592762	7.38
Scandium	E	39997	47412	18.54
Scandium	H	339061	350704	3.43
Germanium	H	77433	81005	4.61
Germanium	E	18808	22154	17.79
Indium	A	1776838	1931902	8.73
Bismuth	A	1361245	1311613	-3.65
Yttrium	A	1804800	1959638	8.58
Terbium	A	2230978	2295376	2.89

!=warning calc=check quantitation ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597074 File : c11n0074
Cal : 67101597001 Caldate: 11-MAR-2007
IDF : 1.0
Time : 11-MAR-2007 20:25

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006054]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04629]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05015]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06346]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05053]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.02667]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.510]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07756]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	962389	5.29
Scandium	A	1483318	1576613	6.29
Scandium	E	39997	45713	14.29
Scandium	H	339061	315018	-7.09
Germanium	H	77433	75067	-3.06
Germanium	E	18808	21426	13.92
Indium	A	1776838	1895828	6.70
Bismuth	A	1361245	1309292	-3.82
Yttrium	A	1804800	1943884	7.71
Terbium	A	2230978	2278473	2.13

!=warning ib=instrument blank

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67101597020 File : c11n0020 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 15:01
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06348]	0.1000	ug/L	
Barium	A	0.9957	0.1000	ug/L	
Beryllium	A	[0.02693]	0.1000	ug/L	
Cadmium	A	1.769	0.1000	ug/L	
Lead	A	0.4565	0.1000	ug/L	
Silver	A	0.2096	0.1000	ug/L	
Thallium	A	[0.01561]	0.05000	ug/L	
Arsenic	E	0.2250	0.1000	ug/L	
Chromium	E	1.376	0.1000	ug/L	
Cobalt	E	0.2179	0.1000	ug/L	
Copper	E	1.289	0.1000	ug/L	
Manganese	E	0.6159	0.1000	ug/L	
Nickel	E	1.190	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.295	0.1000	ug/L	
Selenium	H	[0.08705]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95040	ug/L	95
Calcium	A	300000	295300	ug/L	98
Magnesium	A	100000	92340	ug/L	92
Molybdenum	A	2000	1940	ug/L	97
Potassium	A	100000	96420	ug/L	96
Sodium	E	250000	250000	ug/L	100
Iron	H	250000	236600	ug/L	95

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	622890	-31.85
Scandium	A	1483318	1366945	-7.85
Scandium	E	39997	38907	-2.72
Scandium	H	339061	342995	1.16
Germanium	H	77433	70980	-8.33
Germanium	E	18808	17767	-5.53
Indium	A	1776838	1533682	-13.68
Bismuth	A	1361245	982053	-27.86
Yttrium	A	1804800	1703322	-5.62
Terbium	A	2230978	2012659	-9.79

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597021 File : c11n0021 Time : 11-MAR-2007 15:06
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95930	ug/L	-4		
Cadmium	A	100.0	99.12	ug/L	-1	20	
Calcium	A	300000	300800	ug/L	0		
Magnesium	A	100000	92760	ug/L	-7		
Molybdenum	A	2000	1985	ug/L	-1		
Potassium	A	100000	97110	ug/L	-3		
Silver	A	50.00	41.98	ug/L	-16	20	
Arsenic	E	100.0	107.4	ug/L	7	20	
Chromium	E	200.0	203.6	ug/L	2	20	
Cobalt	E	200.0	190.3	ug/L	-5	20	
Copper	E	200.0	184.2	ug/L	-8	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	186.5	ug/L	-7	20	
Sodium	E	250000	255400	ug/L	2		
Vanadium	E	200.0	208.5	ug/L	4	20	
Zinc	E	100.0	91.73	ug/L	-8	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	327471	-3.42
Scandium	A	1483318	1355444	-8.62
Scandium	E	39997	36971	-7.57
Germanium	H	77433	68911	-11.01
Germanium	E	18808	16797	-10.69
Indium	A	1776838	1540719	-13.29
Yttrium	A	1804800	1696682	-5.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597076 File : c11n0076 Time : 11-MAR-2007 20:35
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05860]	0.1000	ug/L	
Barium	A	0.9563	0.1000	ug/L	
Beryllium	A	[0.02353]	0.1000	ug/L	
Cadmium	A	1.766	0.1000	ug/L	
Lead	A	0.4196	0.1000	ug/L	
Silver	A	0.2067	0.1000	ug/L	
Thallium	A	[0.008457]	0.05000	ug/L	
Arsenic	E	0.2697	0.1000	ug/L	
Chromium	E	1.414	0.1000	ug/L	
Cobalt	E	0.2241	0.1000	ug/L	
Copper	E	1.245	0.1000	ug/L	
Manganese	E	0.6715	0.1000	ug/L	
Nickel	E	1.218	0.1000	ug/L	
Vanadium	E	[0.008865]	0.1000	ug/L	
Zinc	E	1.293	0.1000	ug/L	
Selenium	H	[0.06983]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93670	ug/L	94
Calcium	A	300000	293900	ug/L	98
Magnesium	A	100000	91190	ug/L	91
Molybdenum	A	2000	1933	ug/L	97
Potassium	A	100000	96180	ug/L	96
Sodium	E	250000	252500	ug/L	101
Iron	H	250000	248400	ug/L	99

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	634364	-30.60
Scandium	A	1483318	1398346	-5.73
Scandium	E	39997	39660	-0.84
Scandium	H	339061	290010	-14.47
Germanium	H	77433	61783	-20.21
Germanium	E	18808	18488	-1.70
Indium	A	1776838	1561861	-12.10
Bismuth	A	1361245	925157	-32.04
Yttrium	A	1804800	1733946	-3.93
Terbium	A	2230978	1999275	-10.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67101597077 File : c11n0077
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 11-MAR-2007 20:41

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94960	ug/L	-5		
Cadmium	A	100.0	98.29	ug/L	-2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	91140	ug/L	-9		
Molybdenum	A	2000	1963	ug/L	-2		
Potassium	A	100000	98330	ug/L	-2		
Silver	A	50.00	42.24	ug/L	-16	20	
Arsenic	E	100.0	104.8	ug/L	5	20	
Chromium	E	200.0	195.6	ug/L	-2	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	174.2	ug/L	-13	20	
Manganese	E	200.0	195.0	ug/L	-3	20	
Nickel	E	200.0	179.0	ug/L	-11	20	
Sodium	E	250000	247100	ug/L	-1		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	88.37	ug/L	-12	20	
Iron	H	250000	251500	ug/L	1		
Selenium	H	100.0	104.9	ug/L	5	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	296240	-12.63
Scandium	A	1483318	1371514	-7.54
Scandium	E	39997	39151	-2.11
Germanium	H	77433	62930	-18.73
Germanium	E	18808	17980	-4.40
Indium	A	1776838	1548140	-12.87
Yttrium	A	1804800	1741446	-3.51

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67101597

Date : 03/11/07
Sequence : MET06 c11n0

Reference: c11n0004
Analyzed : 03/11/07 13:35

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	914016	1483318	39997	339061	77433	18808	1776838	1361245	1804800	2230978
		LOWER LIMIT	274205	444995	11999	101718	23230	5642	533051	408374	541440	669293
		UPPER LIMIT	1096820	1779982	47996	406873	92919	22569	2132206	1633494	2165760	2677174
018	ICB		963727	1572576	45367	367200	84025	21238	1872261	1357645	1912994	2279148
020	ICSA		622890	1366945	38907	342995	70980	17767	1533682	982053	1703322	2012659
021	ICSAB		569366	1355444	36971	327471	68911	16797	1540719	993926	1696682	2031170
026	BLANK	QC378535	836682	1424803	35209	292671	86773	21570	1778537	1349027	1836250	2282868
029	BS	QC378536	857144	1509285	39009	312458	72064	18496	1783183	1278068	1892531	2282399
030	BSD	QC378537	861203	1551355	39808	312548	72278	18604	1818445	1300675	1921066	2331298
034	MSS	193066-001	905777	1534515	43316	336255	78628	20673	1840908	1296053	1897043	2285615
038	CCV		917861	1570616	43857	336429	78961	20769	1840619	1283949	1921443	2296357
040	CCB		972249	1654236	45255	332262	78694	21341	1999046	1404744	2040525	2416702
042	BS	QC378337	916735	1554349	46552	334374	77400	21627	1838868	1287103	1907305	2269070
043	BSD	QC378338	956175	1670608	44594	322061	75429	20778	1975288	1353371	2046837	2424406
047	SER	QC378540	948814	1539747	44575	333366	79284	21447	1885021	1333434	1908735	2266445
048	MS	QC378538	888940	1533453	44081	333016	77306	20867	1827973	1254901	1888221	2236691
049	MSD	QC378539	892914	1550233	45009	336293	78781	21092	1851017	1270897	1915967	2255171
050	PDS	QC378541	883046	1581029	44322	331567	76282	20539	1844645	1244265	1939659	2289320
051	SAMPLE	193027-011	902112	1515017	44761	316048	75068	21252	1789200	1232903	1846622	2192746
052	SAMPLE	193027-012	882580	1581851	43375	338263	76935	20257	1795750	1245605	1928783	2250666
053	SAMPLE	193027-013	904920	1548607	44564	311777	73257	21323	1856592	1308079	1928518	2276958
058	CCV		912804	1555714	45395	316695	74471	21713	1814333	1229389	1908693	2232736
060	CCB		973914	1592762	47412	350704	81005	22154	1931902	1311613	1959638	2295376
062	BLANK	QC378542	865408	1466928	43484	292592	71811	21234	1788078	1266761	1850296	2194448
063	BLANK	QC378535	871445	1495662	41130	277041	70359	20773	1809097	1285728	1865840	2204232
065	SER	QC378448	963257	1559864	45540	322173	78179	21671	1903583	1293108	1912874	2252355
066	MSS	193217-011	934690	1563946	47186	323026	77667	22504	1876638	1291462	1921464	2270499
067	SAMPLE	193217-018	952386	1588525	46465	328076	77146	22226	1866653	1243191	1915643	2234811
068	SAMPLE	193217-019	900674	1475273	45702	316215	75969	22007	1789383	1258662	1810646	2142271
069	SAMPLE	193217-020	920841	1477998	45777	290497	70800	21769	1820574	1246372	1853182	2190742
070	SAMPLE	193217-022	903970	1491228	43775	301535	72670	21196	1795919	1213745	1841718	2170505
072	CCV		917720	1533714	44243	314905	73650	20782	1792631	1212255	1870131	2178779
074	CCB		962389	1576613	45713	315018	75067	21426	1895828	1309292	1943884	2278473
076	ICSA		634364	1398346	39660	290010	61783	18488	1561861	925157	1733946	1999275
077	ICSAB		549824	1371514	39151	296240	62930	17980	1548140	933015	1741446	2001537

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c11n0001	TUN				11-MAR-2007 13:17	1.0	1.0				1	
002	c11n0002	X	RINSE			11-MAR-2007 13:24	1.0					2	
003	c11n0003	X	RINSE			11-MAR-2007 13:30	1.0					2	
004	c11n0004	ICALBLK	CALBLANK			11-MAR-2007 13:35	1.0	1.0				2	
005	c11n0005	ICAL				11-MAR-2007 13:40	1.0	1.0				3	
006	c11n0006	ICAL				11-MAR-2007 13:46	1.0	1.0				4	
007	c11n0007	ICAL				11-MAR-2007 13:51	1.0	1.0				5	
008	c11n0008	ICAL				11-MAR-2007 13:56	1.0	1.0				6	
009	c11n0009	ICAL				11-MAR-2007 14:01	1.0	1.0				7	
010	c11n0010	ICAL				11-MAR-2007 14:06	1.0	1.0				8	
011	c11n0011	X	RINSE			11-MAR-2007 14:12	1.0					2	
012	c11n0012	X				11-MAR-2007 14:19	1.0					9 2	
013	c11n0013	X	RINSE			11-MAR-2007 14:24	1.0					2	
014	c11n0014	X				11-MAR-2007 14:29	1.0					9 2	
015	c11n0015	X	RINSE			11-MAR-2007 14:35	1.0					2	
016	c11n0016	ICV				11-MAR-2007 14:40	1.0	1.0			1	9	
017	c11n0017	X	RINSE			11-MAR-2007 14:45	1.0					2	
018	c11n0018	ICB				11-MAR-2007 14:50	1.0	1.0			1	2	
019	c11n0019	X				11-MAR-2007 14:56	1.0					2	
020	c11n0020	ICSA				11-MAR-2007 15:01	1.0	1.0			1	10 2	7:CA=295300
021	c11n0021	ICSAB				11-MAR-2007 15:06	1.0	1.0			1	11 2	9:CA=300800
022	c11n0022	X	RINSE			11-MAR-2007 15:12	1.0					2	
023	c11n0023	X	RINSE			11-MAR-2007 15:17	1.0					2	
024	c11n0024	X	RINSE			11-MAR-2007 15:23	1.0					2	
025	c11n0025	X	RINSE			11-MAR-2007 15:30	1.0					2	
026	c11n0026	BLANK	QC378535	122949	Water	11-MAR-2007 15:36	1.0	1.0			1	2	
027	c11n0027	XBS	QC378337	122902	Soil	11-MAR-2007 15:41	100.0	50.0			1	2	
028	c11n0028	XBSD	QC378338	122902	Soil	11-MAR-2007 15:46	100.0	50.0			1	2	
029	c11n0029	BS	QC378536	122949	Water	11-MAR-2007 15:52	1.0	1.0			1	2	
030	c11n0030	BSD	QC378537	122949	Water	11-MAR-2007 15:57	1.0	1.0			1	2	
031	c11n0031	XBS	QC378337	122902	Soil	11-MAR-2007 16:02	50.0	50.0		1	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11n0032	XBSD	QC378338	122902	Soil	11-MAR-2007 16:08	50.0	50.0		1	1	2	
033	c11n0033	X	RINSE			11-MAR-2007 16:13	1.0					2	
034	c11n0034	MSS	193066-001	122949	Water	11-MAR-2007 16:18	10.0	1.0	1		1	2	1:NA=43290.0
035	c11n0035	X	RINSE			11-MAR-2007 16:24	1.0					2	
036	c11n0036	X	RINSE			11-MAR-2007 16:29	1.0					2	
037	c11n0037	X	RINSE			11-MAR-2007 16:35	1.0					2	
038	c11n0038	CCV				11-MAR-2007 16:40	1.0	1.0			1	12 2	
039	c11n0039	X	RINSE			11-MAR-2007 16:45	1.0					2	
040	c11n0040	CCB				11-MAR-2007 16:50	1.0	1.0			1	2	
041	c11n0041	X				11-MAR-2007 16:56	1.0					2	
042	c11n0042	BS	QC378337	122902	Soil	11-MAR-2007 17:01	5.0	50.0			1	2	
043	c11n0043	BSD	QC378338	122902	Soil	11-MAR-2007 17:07	5.0	50.0			1	2	
044	c11n0044	X	RINSE			11-MAR-2007 17:14	1.0					2	
045	c11n0045	X	RINSE			11-MAR-2007 17:19	1.0					2	
046	c11n0046	X	RINSE			11-MAR-2007 17:24	1.0					2	
047	c11n0047	SER	QC378540	122949	Water	11-MAR-2007 17:30	50.0	1.0	1	1	1	2	
048	c11n0048	MS	QC378538	122949	Water	11-MAR-2007 17:35	10.0	1.0			1	2	1:NA=42850.0
049	c11n0049	MSD	QC378539	122949	Water	11-MAR-2007 17:40	10.0	1.0			1	2	1:NA=40870.0
050	c11n0050	PDS	QC378541	122949	Water	11-MAR-2007 17:45	10.0	1.0			1	13 14 2	1:NA=52430.(
051	c11n0051	SAMPLE	193027-011	122949	Water	11-MAR-2007 17:51	10.0	1.0	1		1	2	1:NA=20640.0
052	c11n0052	SAMPLE	193027-012	122949	Water	11-MAR-2007 17:56	10.0	1.0	1		1	2	1:MN=546.100
053	c11n0053	SAMPLE	193027-013	122949	Water	11-MAR-2007 18:01	10.0	1.0	1		1	2	1:MN=355.100
054	c11n0054	XMSS	193165-002	122902	Soil	11-MAR-2007 18:07	100.0	50.0			1	2	
055	c11n0055	X	RINSE			11-MAR-2007 18:14	1.0					2	
056	c11n0056	X	RINSE			11-MAR-2007 18:19	1.0					2	
057	c11n0057	X	RINSE			11-MAR-2007 18:25	1.0					2	
058	c11n0058	CCV				11-MAR-2007 18:59	1.0	1.0			1	12 2	
059	c11n0059	X	RINSE			11-MAR-2007 19:04	1.0					2	
060	c11n0060	CCB				11-MAR-2007 19:09	1.0	1.0			1	2	
061	c11n0061	X				11-MAR-2007 19:15	1.0					2	
062	c11n0062	BLANK	QC378542	122950	Filtra	11-MAR-2007 19:20	1.0	1.0	2		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11n0063	BLANK	QC378535	122949	Water	11-MAR-2007 19:26	1.0	1.0	2		1	2	
064	c11n0064	XSER	NO SAMPLE	122902	Soil	11-MAR-2007 19:31	500.0					2	
065	c11n0065	SER	QC378448	122924	Filtra	11-MAR-2007 19:37	50.0	1.0	4		1	2	
066	c11n0066	MSS	193217-011	122924	Filtra	11-MAR-2007 19:42	10.0	1.0	2		1	2	
067	c11n0067	SAMPLE	193217-018	122924	Filtra	11-MAR-2007 19:47	20.0	1.0	2		1	2	
068	c11n0068	SAMPLE	193217-019	122924	Filtra	11-MAR-2007 19:53	20.0	1.0	2		1	2	
069	c11n0069	SAMPLE	193217-020	122924	Filtra	11-MAR-2007 19:58	20.0	1.0	2		1	2	
070	c11n0070	SAMPLE	193217-022	122924	Filtra	11-MAR-2007 20:03	20.0	1.0	2		1	2	
071	c11n0071	X	RINSE			11-MAR-2007 20:09	1.0					2	
072	c11n0072	CCV				11-MAR-2007 20:14	1.0	1.0	2		1	12 2	
073	c11n0073	X	RINSE			11-MAR-2007 20:19	1.0					2	
074	c11n0074	CCB				11-MAR-2007 20:25	1.0	1.0			1	2	
075	c11n0075	X				11-MAR-2007 20:30	1.0					2	
076	c11n0076	ICSA				11-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=293900
077	c11n0077	ICSAB				11-MAR-2007 20:41	1.0	1.0			1	11 2	8:CA=302800

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67104271001
Units : ug/L

Date : 13-MAR-2007 10:09
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c13j0005	67104271005		13-MAR-2007 10:15	S5645
L2	c13j0006	67104271006		13-MAR-2007 10:20	S5648
L3	c13j0007	67104271007		13-MAR-2007 10:25	S5649
L4	c13j0008	67104271008		13-MAR-2007 10:30	S5650
L5	c13j0009	67104271009		13-MAR-2007 10:36	S5644
L6	c13j0010	67104271010		13-MAR-2007 10:41	S5646

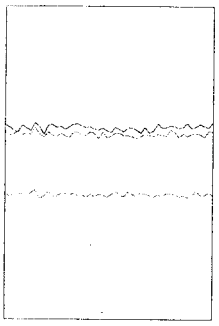
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8749	0.6622	0.6423	0.6147	0.6041	0.6172	BLNK	-2.6592	1.62746		0.6692	1.000	0.995	
Antimony	A	0.3014	0.2386	0.2411	0.2330	0.2324	0.2508	BLNK	-0.0154	4.04797		0.2495	0.999	0.995	
Barium	A	0.1614	0.1400	0.0973	0.0880	0.0852	0.0862	BLNK	-0.0426	11.6324		0.1097	1.000	0.995	
Beryllium	A	0.3111	0.2611	0.2641	0.2619	0.2567	0.2453	BLNK	-0.0145	4.03922		0.2667	0.999	0.995	
Cadmium	A	0.0972	0.0867	0.0844	0.0836	0.0809	0.0811	BLNK	-0.0047	12.3412		0.0857	1.000	0.995	
Calcium	A		0.0428	0.0330	0.0236	0.0220	0.0224	BLNK	-37.220	44.9259		0.0288	1.000	0.995	
Lead	A	1.0517	0.7195	0.6643	0.6126	0.6093	0.6191	BLNK	-0.0607	1.62101		0.7128	1.000	0.995	
Magnesium	A	0.7274	0.5421	0.5214	0.4925	0.4822	0.4914	BLNK	-2.5152	2.04298		0.5428	1.000	0.995	
Molybdenum	A	0.2185	0.2149	0.2079	0.2042	0.2010	0.2233	BLNK	-0.0124	4.57102		0.2116	0.998	0.995	
Potassium	A	4.2506	1.4190	1.0567	0.7572	0.7030	0.7173	BLNK	-46.282	1.40352		1.4840	1.000	0.995	
Silver	A	0.4582	0.3822	0.3791	0.3723	0.3662	0.3597	BLNK	-0.0065	2.77024		0.3863	1.000	0.995	
Thallium	A	1.0875	0.9247	0.8600	0.8479	0.9015	1.0350	BLNK	-0.0148	0.99227		0.9428	0.996	0.995	
Arsenic	E	0.9349	0.6535	0.6432	0.5961	0.5676	0.5704	BLNK	-0.0520	1.75521		0.6609	1.000	0.995	
Chromium	E	9.1002	4.0807	3.5694	3.0081	2.8726	2.8584	BLNK	-0.1784	0.34985		4.2482	1.000	0.995	
Cobalt	E	5.5482	4.9920	5.0349	4.9084	4.6599	4.5561	BLNK	-0.0042	0.21846		4.9499	1.000	0.995	
Copper	E	32.018	14.474	10.300	7.6904	6.9713	6.8683	BLNK	-0.6824	0.14574		13.054	1.000	0.995	
Manganese	E	2.9158	2.0239	1.8870	1.7540	1.6781	1.6662	BLNK	-0.0508	0.59945		1.9875	1.000	0.995	
Nickel	E	6.5159	2.3981	1.8247	1.3587	1.2220	1.1869	BLNK	-0.4593	0.83974		2.4177	1.000	0.995	
Sodium	E	2.5117	1.0892	0.8206	0.6511	0.5947	0.6044	BLNK	-32.117	1.66295		1.0453	1.000	0.995	
Vanadium	E	8.3157	3.3809	2.7617	2.3173	2.2371	2.2373	BLNK	-0.2328	0.44758		3.5417	1.000	0.995	
Zinc	E	39.293	18.061	5.2296	1.6024	1.1112	1.0555	BLNK	-4.0681	0.96013		11.059	0.999	0.995	
Iron	H	1.5981	1.3920	1.3996	1.3266	1.2246	1.2264	BLNK	-2.5093	0.81564		1.3612	1.000	0.995	
Selenium	H	0.2200	0.2282	0.2430	0.2398	0.2239	0.2237	BLNK	-0.0117	4.46908		0.2298	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A		50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

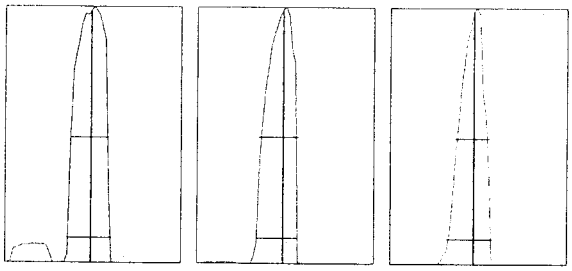
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	12618.0	12238.2	1.48	0.00
89	50,000	30013.0	29526.2	1.25	0.10
205	50,000	19908.0	19984.7	1.43	0.40

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.169%
Doubly Charged: 70/140 1.881%



m/z:	7	89	205
Height:	12,242	29,960	19,942
Axis:	7.00	89.00	204.95
W-50%:	0.65	0.65	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	142
RF Matching	:	1.7 V	Extract 2	:	-130 V	AMU Offset	:	125
Smpl Depth	:	7 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0017
Torch-H	:	0.9 mm	Omega Lens-ce	:	1 V	Axis Offset	:	-0.03
Torch-V	:	0.6 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	1.05 L/min	QP Focus	:	5 V			
Makeup Gas	:	0 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1780 V
Sample Pump	:	--- rps	OctP RF	:	160 V	Pulse HV	:	1410 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	13.3	28.07
59	2638.0	2.24
89	2201.5	2.82

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	596.7	12.84
78	0.1	522.73
89	5759.7	11.51

Integration Time: 0.1000sec

Generated : Mar 13, 2007 09:03:45
Printed : Mar 13, 2007 09:05:25

P/A Factor Tuning Report

Acquired:Mar 13 2007 09:11 am

Mass [amu]	Element	P/A Factor
6	Li	0.063055
7	(Li)	0.065855
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.090927
45	Sc	0.089520
51	V	0.084421
52	Cr	0.094796
55	Mn	0.097853
56	Fe	Sensitivity too high
59	Co	0.100402
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103104
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.111781
111	Cd	Sensitivity too low
115	In	0.111106
118	(In)	0.111662
121	Sb	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.114357
205	Tl	0.120051
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.121416
209	Bi	0.121878

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

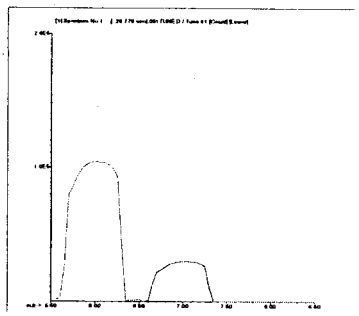
00526

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C13j01.B\001TUNE.D
Date Acquired:	Mar 13 2007 09:51 am
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	4.29	5.00	
59 Co	2.86	5.00	
115 In	1.15	5.00	
205 Tl	1.25	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

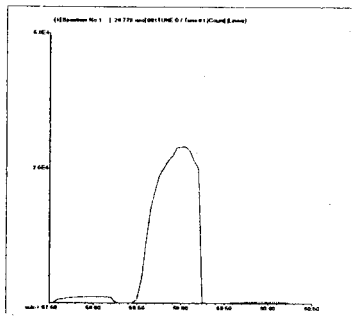
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

Flag:

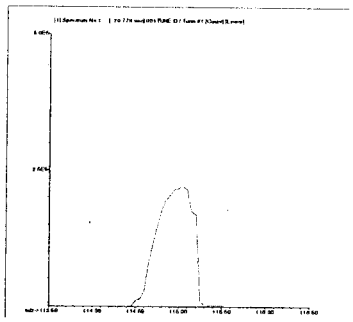
Peak Width

Actual: 0.60

Required: 0.90

Flag:

00527



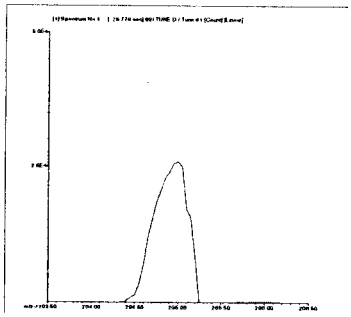
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

00528

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004C
Date Acquired:	Mar 13 2007 10:07 am
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Mar 13 2007 10:11 am
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1112145.00	A	5550.00	0.50
7	(Li)		P		
9	Be	80.00	P	20.28	25.35
23	Na	14819.26	P	96.52	0.65
24	Mg	37673.69	P	668.60	1.77
27	Al	50020.24	P	9804.00	19.60
39	K	1009115.00	A	7295.00	0.72
44	Ca	25352.30	P	321.90	1.27
45	Sc	81486.46	P	1548.00	1.90
45	Sc	38393.47	P	1399.00	3.64
45	Sc	1530095.00	A	5005.00	0.33
51	V	398.53	P	17.65	4.43
52	Cr	391.49	P	32.13	8.21
55	Mn	64.82	P	8.91	13.75
56	Fe	5011.69	P	75.10	1.50
59	Co	15.19	P	10.79	71.06
60	Ni	420.01	P	19.75	4.70
63	Cu	1756.80	P	15.67	0.89
65	Cu	870.78	P	19.57	2.25
66	Zn	1589.74	P	35.18	2.21
72	Ge	21007.08	P	245.60	1.17
72	Ge	18760.53	P	283.30	1.51
75	As	11.11	P	2.69	24.25
78	Se	1.11	P	1.02	91.62
89	Y	2073455.00	A	11040.00	0.53
98	Mo	112.23	P	3.85	3.43
107	Ag	88.89	P	17.11	19.25
111	Cd	14.45	P	10.18	70.47
115	In	1899476.00	A	11620.00	0.61
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	144.45	P	11.71	8.11
137	Ba	165.56	P	15.75	9.51
159	Tb	2262874.00	A	14440.00	0.64
205	Tl	388.91	P	22.20	5.71
208	Pb	1694.55	P	50.59	2.99
209	Bi	1301086.00	A	12270.00	0.94

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\005CALS.D\005CALS.D#
Date Acquired: Mar 13 2007 10:13 am
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:11 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1049493.00	A	63470.00	6.05
7 (Li)		P		
9 Be	654.48	P	73.51	11.23
23 Na	18616.00	P	194.30	1.04
24 Mg	207056.59	P	1921.00	0.93
27 Al	249042.00	P	1882.00	0.76
39 K	1210138.00	A	3806.00	0.31
44 Ca	34470.51	P	852.90	2.47
45 Sc	80818.95	P	3134.00	3.88
45 Sc	37196.05	P	2589.00	6.96
45 Sc	1427722.00	A	96710.00	6.77
51 V	617.80	P	29.96	4.85
52 Cr	674.84	P	31.52	4.67
55 Mn	217.41	P	27.61	12.70
56 Fe	25807.81	P	316.40	1.23
59 Co	412.23	P	18.49	4.49
60 Ni	483.72	P	16.08	3.32
63 Cu	1178.21	P	45.20	3.84
65 Cu	568.91	P	16.59	2.92
66 Zn	1446.02	P	64.66	4.47
72 Ge	20571.24	P	647.30	3.15
72 Ge	18415.27	P	787.50	4.28
75 As	34.44	P	6.01	17.45
78 Se	9.11	P	3.79	41.61
89 Y	1940798.00	A	142800.00	7.36
98 Mo	847.84	P	84.42	9.96
99 (Ru)	0.00	P	0.00	0.00
107 Ag	1636.83	P	64.30	3.93
111 Cd	347.80	P	68.34	19.65
115 In	1790845.00	A	123100.00	6.87
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1077.86	P	45.51	4.22
137 Ba	685.60	P	26.74	3.90
159 Tb	2130642.00	A	140800.00	6.61
205 Tl	1319.01	P	29.88	2.27
208 Pb	4472.71	P	100.30	2.24
209 Bi	1220076.00	A	101900.00	8.35

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1049493.40	6.05	1112145.40	94.4	80 - 120	
45 Sc	80818.95	3.88	81486.46	99.2	80 - 120	
45 Sc	37196.06	6.96	38393.47	96.9	80 - 120	
45 Sc	1427721.60	6.77	1530094.80	93.3	80 - 120	
72 Ge	20571.24	3.15	21007.08	97.9	80 - 120	
72 Ge	18415.27	4.28	18760.53	98.2	80 - 120	
89 Y	1940797.90	7.36	2073455.00	93.6	80 - 120	
115 In	1790844.50	6.87	1899476.30	94.3	80 - 120	
159 Tb	2130641.80	6.61	2262873.80	94.2	80 - 120	
209 Bi	1220075.80	8.35	1301086.50	93.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\006CALS.D\006CALS.D#
Date Acquired: Mar 13 2007 10:18 am
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:16 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1096269.00	A	4847.00	0.44
7 (Li)		P		
9 Be	2861.50	P	148.40	5.19
23 Na	42895.03	P	659.50	1.54
24 Mg	826747.81	A	5913.00	0.72
27 Al	1009978.00	A	9048.00	0.90
39 K	2164113.00	A	5721.00	0.26
44 Ca	65254.17	P	805.30	1.23
45 Sc	74294.78	P	396.20	0.53
45 Sc	39384.20	P	42.85	0.11
45 Sc	1525180.00	A	10020.00	0.66
51 V	1331.56	P	30.07	2.26
52 Cr	1607.15	P	20.86	1.30
55 Mn	797.07	P	31.16	3.91
56 Fe	103421.10	P	988.30	0.96
59 Co	1966.09	P	24.61	1.25
60 Ni	944.49	P	16.82	1.78
63 Cu	2732.15	P	78.31	2.87
65 Cu	1354.16	P	19.13	1.41
66 Zn	3409.72	P	59.46	1.74
72 Ge	19187.79	P	115.10	0.60
72 Ge	18878.09	P	100.40	0.53
75 As	123.33	P	9.17	7.43
78 Se	43.78	P	0.38	0.88
89 Y	2068385.00	A	5168.00	0.25
98 Mo	4444.22	P	95.66	2.15
99 (Ru)	1.11	P	1.93	173.24
107 Ag	7285.54	P	188.50	2.59
111 Cd	1653.50	P	113.20	6.85
115 In	1906643.00	A	19740.00	1.04
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4548.73	P	225.10	4.95
137 Ba	3191.75	P	139.80	4.38
159 Tb	2280118.00	A	15380.00	0.67
205 Tl	5968.28	P	170.30	2.85
208 Pb	16405.90	P	263.40	1.61
209 Bi	1290894.00	A	2269.00	0.18

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1096268.50	0.44	1112145.40	98.6	80 - 120	
45 Sc	74294.78	0.53	81486.46	91.2	80 - 120	
45 Sc	39384.20	0.11	38393.47	102.6	80 - 120	
45 Sc	1525180.10	0.66	1530094.80	99.7	80 - 120	
72 Ge	19187.80	0.60	21007.08	91.3	80 - 120	
72 Ge	18878.09	0.53	18760.53	100.6	80 - 120	
89 Y	2068384.50	0.25	2073455.00	99.8	80 - 120	
115 In	1906643.10	1.04	1899476.30	100.4	80 - 120	
159 Tb	2280117.80	0.67	2262873.80	100.8	80 - 120	
209 Bi	1290894.00	0.18	1301086.50	99.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\007CALS.D\007CALS.D#
Date Acquired: Mar 13 2007 10:23 am
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:21 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1099957.00	A	10590.00	0.96
7 (Li)		P		
9 Be	5809.14	P	185.10	3.19
23 Na	64962.33	P	218.60	0.34
24 Mg	1607153.00	A	2583.00	0.16
27 Al	1979894.00	A	17460.00	0.88
39 K	3257321.00	A	9889.00	0.30
44 Ca	101856.90	P	1524.00	1.50
45 Sc	72492.17	P	756.00	1.04
45 Sc	39585.20	P	322.00	0.81
45 Sc	1541319.00	A	9915.00	0.64
51 V	2186.49	P	56.73	2.59
52 Cr	2825.87	P	40.57	1.44
55 Mn	1494.17	P	60.71	4.06
56 Fe	202908.41	P	1258.00	0.62
59 Co	3985.79	P	71.48	1.79
60 Ni	1444.54	P	12.52	0.87
63 Cu	3967.65	P	68.57	1.73
65 Cu	1964.61	P	24.37	1.24
66 Zn	2014.62	P	65.59	3.26
72 Ge	18701.21	P	84.81	0.45
72 Ge	19260.82	P	76.63	0.40
75 As	247.78	P	16.33	6.59
78 Se	90.89	P	8.23	9.05
89 Y	2088642.00	A	5902.00	0.28
98 Mo	8685.29	P	279.90	3.22
99 (Ru)	4.44	P	3.85	86.60
107 Ag	14452.62	P	170.20	1.18
111 Cd	3219.38	P	194.00	6.03
115 In	1906102.00	A	11360.00	0.60
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	9190.14	P	391.80	4.26
137 Ba	4426.46	P	145.60	3.29
159 Tb	2274340.00	A	8448.00	0.37
205 Tl	11193.07	P	145.10	1.30
208 Pb	30218.46	P	270.30	0.89
209 Bi	1301587.00	A	4840.00	0.37

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1099957.60	0.96	1112145.40	98.9	80 - 120	
45 Sc	72492.16	1.04	81486.46	89.0	80 - 120	
45 Sc	39585.20	0.81	38393.47	103.1	80 - 120	
45 Sc	1541319.50	0.64	1530094.80	100.7	80 - 120	
72 Ge	18701.22	0.45	21007.08	89.0	80 - 120	
72 Ge	19260.82	0.40	18760.53	102.7	80 - 120	
89 Y	2088641.90	0.28	2073455.00	100.7	80 - 120	
115 In	1906101.90	0.60	1899476.30	100.3	80 - 120	
159 Tb	2274339.80	0.37	2262873.80	100.5	80 - 120	
209 Bi	1301586.50	0.37	1301086.50	100.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\008CALS.D\008CALS.D#
Date Acquired: Mar 13 2007 10:28 am
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:27 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1107587.00	A	23360.00	2.11
7	(Li)		P		
9	Be	58013.44	P	577.00	0.99
23	Na	520786.50	P	852.10	0.16
24	Mg	15127000.00	A	71550.00	0.47
27	Al	18881660.00	A	96350.00	0.51
39	K	23258240.00	A	74200.00	0.32
44	Ca	724352.00	P	4919.00	0.68
45	Sc	72108.73	P	553.80	0.77
45	Sc	39990.79	P	213.60	0.53
45	Sc	1536516.00	A	42200.00	2.75
51	V	18534.12	P	164.90	0.89
52	Cr	24059.10	P	18.93	0.08
55	Mn	14028.59	P	126.50	0.90
56	Fe	1913088.00	A	4359.00	0.23
59	Co	39258.50	P	230.90	0.59
60	Ni	10867.26	P	58.01	0.53
63	Cu	29754.61	P	266.70	0.90
65	Cu	14604.78	P	93.55	0.64
66	Zn	6199.96	P	149.70	2.41
72	Ge	18393.00	P	207.80	1.13
72	Ge	19345.40	P	77.78	0.40
75	As	2306.43	P	55.77	2.42
78	Se	882.03	P	17.78	2.02
89	Y	2077499.00	A	47200.00	2.27
98	Mo	84825.98	P	310.90	0.37
99	(Ru)	5.56	P	3.85	69.28
107	Ag	141140.80	P	818.60	0.58
111	Cd	31709.05	P	563.30	1.78
115	In	1895833.00	A	34950.00	1.84
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	88329.65	P	509.90	0.58
137	Ba	39576.25	P	86.51	0.22
159	Tb	2249157.00	A	47860.00	2.13
205	Tl	107633.10	P	1511.00	1.40
208	Pb	275493.19	P	1616.00	0.59
209	Bi	1269375.00	A	18270.00	1.44

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1107587.30	2.11	1112145.40	99.6	80 - 120	
45	Sc	72108.73	0.77	81486.46	88.5	80 - 120	
45	Sc	39990.79	0.53	38393.47	104.2	80 - 120	
45	Sc	1536516.40	2.75	1530094.80	100.4	80 - 120	
72	Ge	18393.00	1.13	21007.08	87.6	80 - 120	
72	Ge	19345.40	0.40	18760.53	103.1	80 - 120	
89	Y	2077498.90	2.27	2073455.00	100.2	80 - 120	
115	In	1895833.10	1.84	1899476.30	99.8	80 - 120	
159	Tb	2249157.30	2.13	2262873.80	99.4	80 - 120	
209	Bi	1269374.60	1.44	1301086.50	97.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\009CALS.D\009CALS.D#
Date Acquired: Mar 13 2007 10:34 am
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:32 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1083386.00	A	3154.00	0.29
7	(Li)		P		
9	Be	556199.13	P	1594.00	0.29
23	Na	4554625.00	A	38270.00	0.84
24	Mg	############	A	368600.00	0.26
27	Al	############	A	313600.00	0.17
39	K	############	A	924500.00	0.44
44	Ca	6599417.00	A	4195.00	0.06
45	Sc	75867.86	P	573.00	0.76
45	Sc	38298.69	P	397.80	1.04
45	Sc	1496934.00	A	26680.00	1.78
51	V	171346.59	P	594.10	0.35
52	Cr	220017.20	P	988.30	0.45
55	Mn	128524.10	P	247.40	0.19
56	Fe	18581850.00	A	80970.00	0.44
59	Co	356915.59	P	609.50	0.17
60	Ni	93598.75	P	294.40	0.31
63	Cu	250769.20	P	614.60	0.25
65	Cu	123245.00	P	696.20	0.56
66	Zn	39971.45	P	227.30	0.57
72	Ge	18985.65	P	127.40	0.67
72	Ge	17988.02	P	256.30	1.42
75	As	20416.10	P	131.00	0.64
78	Se	8502.42	P	97.85	1.15
89	Y	1980307.00	A	5135.00	0.26
98	Mo	795925.81	P	4575.00	0.57
99	(Ru)	45.56	P	15.03	32.99
107	Ag	1291966.00	A	9830.00	0.76
111	Cd	285246.81	P	1932.00	0.68
115	In	1763991.00	A	15700.00	0.89
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	819869.38	P	3840.00	0.47
137	Ba	374300.91	P	1261.00	0.34
159	Tb	2195755.00	A	8494.00	0.39
205	Tl	1023071.00	P	9037.00	0.88
208	Pb	2675916.00	A	5651.00	0.21
209	Bi	1136432.00	M	55140.00	4.85

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1083386.30	0.29	1112145.40	97.4	80 - 120	
45	Sc	75867.86	0.76	81486.46	93.1	80 - 120	
45	Sc	38298.69	1.04	38393.47	99.8	80 - 120	
45	Sc	1496933.60	1.78	1530094.80	97.8	80 - 120	
72	Ge	18985.65	0.67	21007.08	90.4	80 - 120	
72	Ge	17988.02	1.42	18760.53	95.9	80 - 120	
89	Y	1980307.50	0.26	2073455.00	95.5	80 - 120	
115	In	1763991.00	0.89	1899476.30	92.9	80 - 120	
159	Tb	2195755.30	0.39	2262873.80	97.0	80 - 120	
209	Bi	1136432.00	4.85	1301086.50	87.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13j01.B\010CALS.D\010CALS.D#
Date Acquired: Mar 13 2007 10:39 am
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 10:37 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1048257.00	A	8867.00	0.85
7 (Li)		P		
9 Be	1028472.00	A	7420.00	0.72
23 Na	8816401.00	A	52400.00	0.59
24 Mg	############	A	1543000.00	0.55
27 Al	############	A	3059000.00	0.88
39 K	############	A	2986000.00	0.74
44 Ca	12670950.00	A	104500.00	0.82
45 Sc	70041.06	P	626.50	0.89
45 Sc	36468.70	P	117.20	0.32
45 Sc	1415985.00	A	19060.00	1.35
51 V	326372.41	P	1976.00	0.61
52 Cr	416970.59	P	2505.00	0.60
55 Mn	243049.30	P	1748.00	0.72
56 Fe	34356700.00	A	128600.00	0.37
59 Co	664615.00	P	3082.00	0.46
60 Ni	173133.59	P	839.50	0.48
63 Cu	456844.19	P	1434.00	0.31
65 Cu	224442.50	P	584.20	0.26
66 Zn	70206.90	P	534.80	0.76
72 Ge	16985.65	P	11.58	0.07
72 Ge	16628.93	P	85.03	0.51
75 As	37942.41	P	166.90	0.44
78 Se	15198.81	P	79.55	0.52
89 Y	1860925.00	A	29540.00	1.59
98 Mo	1661878.00	A	12540.00	0.75
99 (Ru)	72.22	P	10.71	14.83
107 Ag	2361876.00	A	3282.00	0.14
111 Cd	532376.88	P	1788.00	0.34
115 In	1641799.00	A	13160.00	0.80
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1646728.00	A	15770.00	0.96
137 Ba	709831.19	P	2517.00	0.35
159 Tb	2059496.00	A	26460.00	1.28
205 Tl	2047900.00	A	26860.00	1.31
208 Pb	5099576.00	A	14340.00	0.28
209 Bi	989311.81	P	12450.00	1.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1048257.30	0.85	1112145.40	94.3	80 - 120	
45 Sc	70041.06	0.89	81486.46	86.0	80 - 120	
45 Sc	36468.70	0.32	38393.47	95.0	80 - 120	
45 Sc	1415984.50	1.35	1530094.80	92.5	80 - 120	
72 Ge	16985.65	0.07	21007.08	80.9	80 - 120	
72 Ge	16628.93	0.51	18760.53	88.6	80 - 120	
89 Y	1860925.40	1.59	2073455.00	89.7	80 - 120	
115 In	1641798.90	0.80	1899476.30	86.4	80 - 120	
159 Tb	2059496.00	1.28	2262873.80	91.0	80 - 120	
209 Bi	989311.75	1.26	1301086.50	76.0	80 - 120	ISFail

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13j01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Fail**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67104271012
Cal : 67104271001
Standards: S5653, S5290

File : c13j0012
Caldate: 13-MAR-2007

IDF : 1.0
Time : 13-MAR-2007 10:51

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6692	0.6617	10000	10770	ug/L	8	10	
Antimony	A	0.2495	0.2533	100.0	102.5	ug/L	3	10	
Barium	A	0.1097	0.0912	100.0	106.1	ug/L	6	10	
Beryllium	A	0.2667	0.2685	100.0	108.4	ug/L	8	10	
Cadmium	A	0.0857	0.0874	100.0	107.8	ug/L	8	10	
Calcium	A	0.0288	0.0241	10000	10790	ug/L	8	10	
Lead	A	0.7128	0.6639	100.0	107.5	ug/L	8	10	
Magnesium	A	0.5428	0.5308	10000	10840	ug/L	8	10	
Molybdenum	A	0.2116	0.2172	100.0	99.28	ug/L	-1	10	
Potassium	A	1.4840	0.7696	10000	10750	ug/L	8	10	
Silver	A	0.3863	0.3949	100.0	109.4	ug/L	9	10	
Thallium	A	0.9428	0.9675	50.00	47.99	ug/L	-4	10	
Arsenic	E	0.6609	0.5693	100.0	99.87	ug/L	0	10	
Chromium	E	4.2482	2.8596	100.0	99.86	ug/L	0	10	
Cobalt	E	4.9499	4.6163	100.0	100.8	ug/L	1	10	
Copper	E	13.054	7.3512	100.0	106.5	ug/L	7	10	
Manganese	E	1.9875	1.6635	100.0	99.67	ug/L	0	10	
Nickel	E	2.4177	1.2168	100.0	101.7	ug/L	2	10	
Sodium	E	1.0453	0.5997	10000	9941	ug/L	-1	10	
Vanadium	E	3.5417	2.2112	100.0	98.73	ug/L	-1	10	
Zinc	E	11.059	1.1303	100.0	104.5	ug/L	5	10	
Iron	H	1.3612	1.2564	10000	10250	ug/L	3	10	
Selenium	H	0.2298	0.2337	100.0	104.4	ug/L	4	10	

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	1039987	-6.49
Scandium	A	1530095	1366381	-10.70
Scandium	E	38393	37920	-1.23
Scandium	H	81486	69730	-14.43
Germanium	H	21007	17232	-17.97
Germanium	E	18761	17635	-6.00
Indium	A	1899476	1641259	-13.59
Bismuth	A	1301087	1076488	-17.26
Yttrium	A	2073455	1829707	-11.76
Terbium	A	2262874	2050740	-9.37

67104271012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67104271037 File : c13j0037 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 13:05
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6692	0.5915	10000	9623	ug/L	-4	10	
Antimony	A	0.2495	0.2414	100.0	97.72	ug/L	-2	10	
Barium	A	0.1097	0.0874	100.0	101.6	ug/L	2	10	
Beryllium	A	0.2667	0.2583	100.0	104.3	ug/L	4	10	
Cadmium	A	0.0857	0.0823	100.0	101.6	ug/L	2	10	
Calcium	A	0.0288	0.0223	10000	9974	ug/L	0	10	
Lead	A	0.7128	0.6230	100.0	100.9	ug/L	1	10	
Magnesium	A	0.5428	0.4717	10000	9633	ug/L	-4	10	
Molybdenum	A	0.2116	0.2026	100.0	92.61	ug/L	-7	10	
Potassium	A	1.4840	0.7074	10000	9882	ug/L	-1	10	
Silver	A	0.3863	0.3650	100.0	101.1	ug/L	1	10	
Thallium	A	0.9428	0.8843	50.00	43.86	ug/L	**-12**	10	c- ***
Arsenic	E	0.6609	0.5723	100.0	100.4	ug/L	0	10	
Chromium	E	4.2482	2.9551	100.0	103.2	ug/L	3	10	
Cobalt	E	4.9499	4.8262	100.0	105.4	ug/L	5	10	
Copper	E	13.054	7.2969	100.0	105.7	ug/L	6	10	
Manganese	E	1.9875	1.7383	100.0	104.2	ug/L	4	10	
Nickel	E	2.4177	1.2679	100.0	106.0	ug/L	6	10	
Sodium	E	1.0453	0.5891	10000	9765	ug/L	-2	10	
Vanadium	E	3.5417	2.2846	100.0	102.0	ug/L	2	10	
Zinc	E	11.059	1.1309	100.0	104.5	ug/L	5	10	
Iron	H	1.3612	1.2916	10000	10530	ug/L	5	10	
Selenium	H	0.2298	0.2478	100.0	110.7	ug/L	**11**	10	c+ ***

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	951213	-14.47
Scandium	A	1530095	1375681	-10.09
Scandium	E	38393	34902	-9.09
Scandium	H	81486	49889	-38.78
Germanium	H	21007	12521	-40.40
Germanium	E	18761	17251	-8.05
Indium	A	1899476	1769199	-6.86
Bismuth	A	1301087	1221873	-6.09
Yttrium	A	2073455	1967910	-5.09
Terbium	A	2262874	2237527	-1.12

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67104271058 File : c13j0058 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 14:57
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6692	0.5600	10000	9111	ug/L	-9	10	
Antimony	A	0.2495	0.2346	100.0	94.95	ug/L	-5	10	
Barium	A	0.1097	0.0801	100.0	93.19	ug/L	-7	10	
Beryllium	A	0.2667	0.2426	100.0	97.98	ug/L	-2	10	
Cadmium	A	0.0857	0.0775	100.0	95.66	ug/L	-4	10	
Calcium	A	0.0288	0.0210	10000	9376	ug/L	-6	10	
Lead	A	0.7128	0.5927	100.0	96.02	ug/L	-4	10	
Magnesium	A	0.5428	0.4488	10000	9166	ug/L	-8	10	
Molybdenum	A	0.2116	0.1923	100.0	87.88	ug/L	**-12**	10	c- ***
Potassium	A	1.4840	0.6693	10000	9347	ug/L	-7	10	
Silver	A	0.3863	0.3744	100.0	103.7	ug/L	4	10	
Thallium	A	0.9428	0.8090	50.00	40.12	ug/L	**-20**	10	c- ***
Arsenic	E	0.6609	0.5545	100.0	97.27	ug/L	-3	10	
Chromium	E	4.2482	2.7690	100.0	96.69	ug/L	-3	10	
Cobalt	E	4.9499	4.4381	100.0	96.95	ug/L	-3	10	
Copper	E	13.054	6.3486	100.0	91.84	ug/L	-8	10	
Manganese	E	1.9875	1.6204	100.0	97.09	ug/L	-3	10	
Nickel	E	2.4177	1.1800	100.0	98.63	ug/L	-1	10	
Sodium	E	1.0453	0.5501	10000	9116	ug/L	-9	10	
Vanadium	E	3.5417	2.1242	100.0	94.84	ug/L	-5	10	
Zinc	E	11.059	1.0365	100.0	95.45	ug/L	-5	10	
Iron	H	1.3612	1.2810	10000	10450	ug/L	5	10	
Selenium	H	0.2298	0.2555	100.0	114.2	ug/L	**14**	10	c+ ***

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	964965	-13.23
Scandium	A	1530095	1347605	-11.93
Scandium	E	38393	35174	-8.39
Scandium	H	81486	36873	-54.75
Germanium	H	21007	9313	-55.67
Germanium	E	18761	17290	-7.84
Indium	A	1899476	1742208	-8.28
Bismuth	A	1301087	1188628	-8.64
Yttrium	A	2073455	1913668	-7.71
Terbium	A	2262874	2190364	-3.20

+=high bias -=low bias c=CCV

67104271058

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67104271015 File : c13j0015
Cal : 67104271001 Caldate: 13-MAR-2007
IDF : 1.0
Time : 13-MAR-2007 11:08

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001753]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	50.00	0	ug/L	
Lead	A	[0.003724]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	1030138	-7.37
Scandium	A	1530095	1391627	-9.05
Scandium	E	38393	35858	-6.60
Scandium	H	81486	64003	-21.46
Germanium	H	21007	16441	-21.74
Germanium	E	18761	17675	-5.79
Indium	A	1899476	1813199	-4.54
Bismuth	A	1301087	1284279	-1.29
Yttrium	A	2073455	1936282	-6.62
Terbium	A	2262874	2205073	-2.55

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67104271041 File : c13j0041
Cal : 67104271001 Caldate: 13-MAR-2007
IDF : 1.0
Time : 13-MAR-2007 13:27

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	3.648	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005994]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	50.00	0	ug/L	
Lead	A	[0.01838]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01344]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03273]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02620]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	949523	-14.62
Scandium	A	1530095	1327013	-13.27
Scandium	E	38393	34945	-8.98
Scandium	H	81486	46051	-43.49
Germanium	H	21007	11839	-43.64
Germanium	E	18761	17910	-4.53
Indium	A	1899476	1862690	-1.94
Bismuth	A	1301087	1344697	3.35
Yttrium	A	2073455	1972859	-4.85
Terbium	A	2262874	2303906	1.81

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67104271060 File : c13j0060 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 15:08

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	4.244	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02096]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	50.00	0	ug/L	
Lead	A	[0.03248]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01814]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002962]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05983]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[6.237]	10.00	4.329	ug/L	!ib
Selenium	H	[0.03433]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	947204	-14.83
Scandium	A	1530095	1317819	-13.87
Scandium	E	38393	35017	-8.79
Scandium	H	81486	36880	-54.74
Germanium	H	21007	9638	-54.12
Germanium	E	18761	17777	-5.24
Indium	A	1899476	1816310	-4.38
Bismuth	A	1301087	1320683	1.51
Yttrium	A	2073455	1942320	-6.32
Terbium	A	2262874	2261766	-0.05

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67104271017 File : c13j0017 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 11:18
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07637]	0.1000	ug/L	
Barium	A	1.182	0.1000	ug/L	
Beryllium	A	[0.01390]	0.1000	ug/L	
Cadmium	A	1.847	0.1000	ug/L	
Lead	A	0.4970	0.1000	ug/L	
Silver	A	0.2065	0.1000	ug/L	
Thallium	A	[0.03493]	0.05000	ug/L	
Arsenic	E	0.2318	0.1000	ug/L	
Chromium	E	1.454	0.1000	ug/L	
Cobalt	E	0.2444	0.1000	ug/L	
Copper	E	1.422	0.1000	ug/L	
Manganese	E	0.6620	0.1000	ug/L	
Nickel	E	1.075	0.1000	ug/L	
Vanadium	E	[0.0009837]	0.1000	ug/L	
Zinc	E	1.018	0.1000	ug/L	
Selenium	H	[0.05003]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102500	ug/L	103
Calcium	A	300000	312000	ug/L	104
Magnesium	A	100000	100300	ug/L	100
Molybdenum	A	2000	2126	ug/L	106
Potassium	A	100000	103000	ug/L	103
Sodium	E	250000	273000	ug/L	109
Iron	H	250000	238300	ug/L	95

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	830789	-25.30
Scandium	A	1530095	1199231	-21.62
Scandium	E	38393	31665	-17.53
Scandium	H	81486	67767	-16.84
Germanium	H	21007	14445	-31.24
Germanium	E	18761	14030	-25.22
Indium	A	1899476	1311455	-30.96
Bismuth	A	1301087	682723	-47.53
Yttrium	A	2073455	1471139	-29.05
Terbium	A	2262874	1553550	-31.35

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67104271018 File : c13j0018 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 11:24
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103300	ug/L	3		
Cadmium	A	100.0	93.42	ug/L	-7	20	
Calcium	A	300000	318000	ug/L	6		
Magnesium	A	100000	101400	ug/L	1		
Molybdenum	A	2000	2149	ug/L	7		
Potassium	A	100000	104500	ug/L	5		
Silver	A	50.00	40.71	ug/L	-19	20	
Arsenic	E	100.0	101.8	ug/L	2	20	
Chromium	E	200.0	214.6	ug/L	7	20	
Cobalt	E	200.0	193.6	ug/L	-3	20	
Copper	E	200.0	187.5	ug/L	-6	20	
Manganese	E	200.0	207.3	ug/L	4	20	
Nickel	E	200.0	185.9	ug/L	-7	20	
Sodium	E	250000	280000	ug/L	12		
Vanadium	E	200.0	220.6	ug/L	10	20	
Zinc	E	100.0	88.33	ug/L	-12	20	
Iron	H	250000	243200	ug/L	-3		
Selenium	H	100.0	93.68	ug/L	-6	20	

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	81486	69284	-14.97
Scandium	A	1530095	1177999	-23.01
Scandium	E	38393	30230	-21.26
Germanium	H	21007	14909	-29.03
Germanium	E	18761	13060	-30.39
Indium	A	1899476	1300817	-31.52
Yttrium	A	2073455	1448608	-30.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67104271063 File : c13j0063 IDF : 1.0
Cal : 67104271001 Caldate: 13-MAR-2007 Time : 13-MAR-2007 15:25
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06330]	0.1000	ug/L	
Barium	A	3.276	0.1000	ug/L	
Beryllium	A	[0.01668]	0.1000	ug/L	
Cadmium	A	1.867	0.1000	ug/L	
Lead	A	0.4966	0.1000	ug/L	
Silver	A	0.1951	0.1000	ug/L	
Thallium	A	[0.02739]	0.05000	ug/L	
Arsenic	E	0.2506	0.1000	ug/L	
Chromium	E	1.420	0.1000	ug/L	
Cobalt	E	0.2324	0.1000	ug/L	
Copper	E	1.115	0.1000	ug/L	
Manganese	E	0.7705	0.1000	ug/L	
Nickel	E	1.701	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.245	0.1000	ug/L	
Selenium	H	[0.09118]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100100	ug/L	100
Calcium	A	300000	310900	ug/L	104
Magnesium	A	100000	97320	ug/L	97
Molybdenum	A	2000	2106	ug/L	105
Potassium	A	100000	102100	ug/L	102
Sodium	E	250000	261600	ug/L	105
Iron	H	250000	258400	ug/L	103

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1112145	767314	-31.01
Scandium	A	1530095	1110293	-27.44
Scandium	E	38393	29374	-23.49
Scandium	H	81486	35737	-56.14
Germanium	H	21007	7700	-63.35
Germanium	E	18761	13465	-28.23
Indium	A	1899476	1271116	-33.08
Bismuth	A	1301087	679160	-47.80
Yttrium	A	2073455	1404270	-32.27
Terbium	A	2262874	1544255	-31.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67104271064 File : c13j0064
Cal : 67104271001 Caldate: 13-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 13-MAR-2007 15:30

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101100	ug/L	1		
Cadmium	A	100.0	92.86	ug/L	-7	20	
Calcium	A	300000	315300	ug/L	5		
Magnesium	A	100000	98230	ug/L	-2		
Molybdenum	A	2000	2106	ug/L	5		
Potassium	A	100000	103300	ug/L	3		
Silver	A	50.00	40.10	ug/L	-20	20	
Arsenic	E	100.0	99.18	ug/L	-1	20	
Chromium	E	200.0	214.1	ug/L	7	20	
Cobalt	E	200.0	194.2	ug/L	-3	20	
Copper	E	200.0	179.3	ug/L	-10	20	
Manganese	E	200.0	210.8	ug/L	5	20	
Nickel	E	200.0	187.3	ug/L	-6	20	
Sodium	E	250000	268400	ug/L	7		
Vanadium	E	200.0	220.3	ug/L	10	20	
Zinc	E	100.0	86.17	ug/L	-14	20	
Iron	H	250000	263500	ug/L	5		
Selenium	H	100.0	108.5	ug/L	9	20	

ISTD (ICALBLK c13j0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	81486	35731	-56.15
Scandium	A	1530095	1091004	-28.70
Scandium	E	38393	27849	-27.46
Germanium	H	21007	7709	-63.30
Germanium	E	18761	12627	-32.69
Indium	A	1899476	1256016	-33.88
Yttrium	A	2073455	1406596	-32.16

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67104271

Date : 03/13/07
Sequence : MET06 c13j0

Reference: c13j0004
Analyzed : 03/13/07 10:09

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1112145	1530095	38393	81486	21007	18761	1899476	1301087	2073455	2262874
		LOWER LIMIT	333644	459029	11518	24446	6302	5628	569843	390326	622037	678862
		UPPER LIMIT	1334574	1836114	46072	97784	25208	22513	2279371	1561304	2488146	2715449
015	ICB		1030138	1391627	35858	64003	16441	17675	1813199	1284279	1936282	2205073
017	ICSA		830789	1199231	31665	67767	14445	14030	1311455	682723	1471139	1553550
018	ICSAB		791303	1177999	30230	69284	14909	13060	1300817	668597	1448608	1543579
023	SER	QC378770	901141	1351724	33451	48846	12686	17370	1880278	1335593	2011684	2320689
024	SAMPLE	193222-002	871784	1301673	33250	48735	12315	16633	1745826	1193604	1893545	2186537
025	SAMPLE	193222-002	923969	1368597	35253	51920	13554	18001	1869024	1310614	2009641	2273317
026	SAMPLE	193222-003	895554	1323630	33455	53422	14111	17235	1856040	1323504	1983694	2294664
027	SAMPLE	193222-004	866983	1284844	32396	47875	11963	16310	1724911	1200301	1903424	2198650
028	SAMPLE	193222-004	919429	1375920	33975	46013	12161	17623	1873836	1316229	2026275	2313088
029	SAMPLE	193222-005	874782	1281116	32460	47205	12505	16999	1833611	1340051	1941797	2296674
030	SAMPLE	193222-007	902330	1336762	32992	48188	12335	16927	1876289	1337802	1991839	2323634
037	CCV		951213	1375681	34902	49889	12521	17251	1769199	1221873	1967910	2237527
041	CCB		949523	1327013	34945	46051	11839	17910	1862690	1344697	1972859	2303906
043	SER	QC377799	935046	1314543	34671	43910	11477	17727	1849256	1354648	1961158	2329879
044	SAMPLE	193222-001	934870	1339650	35214	38299	9938	17955	1817661	1301181	1961813	2260036
045	SAMPLE	193222-002	929642	1321632	34480	37466	9785	17733	1816317	1298429	1955981	2245926
046	SAMPLE	193222-003	914688	1274974	33124	40762	10728	17164	1787415	1297587	1894092	2236487
047	SAMPLE	193222-004	933042	1326526	34423	40596	10705	17690	1800317	1296573	1947686	2252154
048	SAMPLE	193222-005	889507	1244824	32877	42187	11048	16936	1804816	1333614	1880038	2269482
049	SAMPLE	193222-007	941710	1332618	34444	42392	11093	17766	1842427	1320448	1966322	2292161
058	CCV		964965	1347605	35174	36873	9313	17290	1742208	1188628	1913668	2190364
060	CCB		947204	1317819	35017	36880	9638	17777	1816310	1320683	1942320	2261766
063	ICSA		767314	1110293	29374	35737	7700	13465	1271116	679160	1404270	1544255
064	ICSAB		748845	1091004	27849	35731	7709	12627	1256016	669962	1406596	1537964

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104271 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c13j0001	TUN				13-MAR-2007 09:51	1.0	1.0				1	
002	c13j0002	X	RINSE			13-MAR-2007 09:59	1.0					2	
003	c13j0003	X	RINSE			13-MAR-2007 10:04	1.0					2	
004	c13j0004	ICALBLK	CALBLANK			13-MAR-2007 10:09	1.0	1.0				2	
005	c13j0005	ICAL				13-MAR-2007 10:15	1.0	1.0				3	
006	c13j0006	ICAL				13-MAR-2007 10:20	1.0	1.0				4	
007	c13j0007	ICAL				13-MAR-2007 10:25	1.0	1.0				5	
008	c13j0008	ICAL				13-MAR-2007 10:30	1.0	1.0				6	
009	c13j0009	ICAL				13-MAR-2007 10:36	1.0	1.0				7	
010	c13j0010	ICAL				13-MAR-2007 10:41	1.0	1.0				8	
011	c13j0011	X	RINSE			13-MAR-2007 10:46	1.0					2	
012	c13j0012	ICV				13-MAR-2007 10:51	1.0	1.0			1	9 2	
013	c13j0013	X	RINSE			13-MAR-2007 10:57	1.0					2	
014	c13j0014	X				13-MAR-2007 11:02	1.0					2	
015	c13j0015	ICB				13-MAR-2007 11:08	1.0	1.0			1	2	
016	c13j0016	X				13-MAR-2007 11:13	1.0					2	
017	c13j0017	ICSA				13-MAR-2007 11:18	1.0	1.0			1	10 2	7:CA=312000
018	c13j0018	ICSAB				13-MAR-2007 11:24	1.0	1.0			1	11 2	10:CA=318000
019	c13j0019	X	RINSE			13-MAR-2007 11:29	1.0					2	
020	c13j0020	X	RINSE			13-MAR-2007 11:34	1.0					2	
021	c13j0021	X	RINSE			13-MAR-2007 11:40	1.0					2	
022	c13j0022	X	RINSE			13-MAR-2007 11:45	1.0					2	
023	c13j0023	SER	QC378770	123000	Water	13-MAR-2007 11:50	50.0	1.0	4	4	1	2	
024	c13j0024	SAMPLE	193222-002	123000	Water	13-MAR-2007 11:56	10.0	1.0	3		1	2	2:CA=37520.0
025	c13j0025	SAMPLE	193222-002	123000	Water	13-MAR-2007 12:01	50.0	1.0	2		1	2	
026	c13j0026	SAMPLE	193222-003	123000	Water	13-MAR-2007 12:06	50.0	1.0			1	2	
027	c13j0027	SAMPLE	193222-004	123000	Water	13-MAR-2007 12:11	10.0	1.0	3		1	2	3:CA=32320.0
028	c13j0028	SAMPLE	193222-004	123000	Water	13-MAR-2007 12:17	50.0	1.0			1	2	
029	c13j0029	SAMPLE	193222-005	123000	Water	13-MAR-2007 12:22	10.0	1.0			1	2	
030	c13j0030	SAMPLE	193222-007	123000	Water	13-MAR-2007 12:27	50.0	1.0			1	2	
031	c13j0031	X	RINSE			13-MAR-2007 12:33	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104271 Instrument: MET06 Agilent ICP-MS MET06
Analytical Method: EPA 6020 SOP Version: 6020_rv2 Begun: 13-MAR-2007

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c13j0032	X	RINSE			13-MAR-2007 12:38	1.0					2	
033	c13j0033	X	RINSE			13-MAR-2007 12:43	1.0					2	
034	c13j0034	X				13-MAR-2007 12:49	1.0					12 2	
035	c13j0035	X	RINSE			13-MAR-2007 12:55	1.0					2	
036	c13j0036	X	RINSE			13-MAR-2007 13:00	1.0					2	
037	c13j0037	CCV				13-MAR-2007 13:05	1.0	1.0	2		1	12 2	
038	c13j0038	X	RINSE			13-MAR-2007 13:11	1.0					2	
039	c13j0039	X				13-MAR-2007 13:16	1.0					12 2	
040	c13j0040	X	RINSE			13-MAR-2007 13:21	1.0					2	
041	c13j0041	CCB				13-MAR-2007 13:27	1.0	1.0	1		1	2	
042	c13j0042	X				13-MAR-2007 13:32	1.0					2	
043	c13j0043	SER	QC377799	122769	Filtra	13-MAR-2007 13:37	50.0	1.0	3	3	1	2	
044	c13j0044	SAMPLE	193222-001	123000	Filtra	13-MAR-2007 13:43	50.0	1.0	1		1	2	
045	c13j0045	SAMPLE	193222-002	123000	Filtra	13-MAR-2007 13:48	50.0	1.0	1		1	2	
046	c13j0046	SAMPLE	193222-003	123000	Filtra	13-MAR-2007 13:53	50.0	1.0			1	2	
047	c13j0047	SAMPLE	193222-004	123000	Filtra	13-MAR-2007 13:59	50.0	1.0			1	2	
048	c13j0048	SAMPLE	193222-005	123000	Filtra	13-MAR-2007 14:04	50.0	1.0			1	2	
049	c13j0049	SAMPLE	193222-007	123000	Filtra	13-MAR-2007 14:09	50.0	1.0			1	2	
050	c13j0050	X	RINSE			13-MAR-2007 14:15	1.0					2	
051	c13j0051	X	RINSE			13-MAR-2007 14:20	1.0					2	
052	c13j0052	X	RINSE			13-MAR-2007 14:25	1.0					2	
053	c13j0053	X				13-MAR-2007 14:30	1.0					12 2	
054	c13j0054	X	RINSE			13-MAR-2007 14:36	1.0					2	
055	c13j0055	X				13-MAR-2007 14:41	1.0					12 2	
056	c13j0056	X	RINSE			13-MAR-2007 14:46	1.0					2	
057	c13j0057	X	RINSE			13-MAR-2007 14:52	1.0					2	
058	c13j0058	CCV				13-MAR-2007 14:57	1.0	1.0	3		1	12 2	
059	c13j0059	X	RINSE			13-MAR-2007 15:02	1.0					2	
060	c13j0060	CCB				13-MAR-2007 15:08	1.0	1.0	1		1	2	
061	c13j0061	X				13-MAR-2007 15:14	1.0					2	
062	c13j0062	X				13-MAR-2007 15:19	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: [signature] Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104271 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	c13j0063	ICSA				13-MAR-2007 15:25	1.0	1.0		1	10 2	7:CA=310900
064	c13j0064	ICSAB				13-MAR-2007 15:30	1.0	1.0		1	11 2	10:CA=315300

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/13/07

REPORTING SUMMARY FOR 193055 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEA	CDE	CAD	CRA	COR	CUO	FEU	PBE	MGB	MNG	NIN	KNI	SE	AGS	NAG	TLA	VL	ZN
193055-023	MET06	03/10/07 08:37	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378443	MET06	03/09/07 20:07	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378444	MET06	03/10/07 06:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378445	MET06	03/10/07 06:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378446	MET06	03/10/07 07:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378447	MET06	03/10/07 07:23	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378448	MET06	03/10/07 07:12	50.0	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		+
QC378448	MET06	03/11/07 19:37	50.0							+													+		
QC378449	MET06	03/10/07 07:28	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378508	MET06	03/10/07 08:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378509	MET06	03/10/07 08:32	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

REPORTING SUMMARY FOR 193055 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193055-001	MET06	03/06/07 22:24	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193055-002	MET06	03/06/07 23:33	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-003	MET06	03/06/07 23:38	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-004	MET06	03/06/07 23:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-005	MET06	03/06/07 23:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-005	MET04	03/08/07 17:05	1.0															+								
193055-006	MET06	03/06/07 23:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-006	MET04	03/08/07 17:07	1.0															+								
193055-007	MET06	03/06/07 23:59	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193055-008	MET06	03/07/07 00:05	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-008	MET04	03/08/07 17:09	1.0															+								
193055-009	MET06	03/07/07 00:10	10.0	+		+			+	+	+		+	+	+		+		+	+			+			+
193055-009	MET06	03/07/07 15:57	50.0													+										
193055-010	MET06	03/07/07 00:15	10.0	+		+			+	+	+		+	+	+	+	+		+	+			+			+
193055-011	MET06	03/07/07 00:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
193055-011	MET06	03/07/07 17:18	50.0													+							+			
193055-011	MET04	03/08/07 17:16	1.0															+								
193055-012	MET06	03/07/07 01:08	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
193055-012	MET06	03/07/07 17:07	50.0													+							+			
193055-012	MET04	03/08/07 17:18	1.0															+								
193055-013	MET06	03/07/07 01:14	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
193055-013	MET06	03/07/07 17:13	20.0													+							+			
193055-013	MET04	03/08/07 17:20	1.0															+								
193055-014	MET06	03/07/07 04:05	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-014	MET04	03/08/07 17:22	1.0															+								
193055-016	MET06	03/07/07 04:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-017	MET06	03/07/07 04:16	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-018	MET06	03/07/07 04:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-019	MET06	03/07/07 04:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-020	MET06	03/07/07 04:32	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-021	MET06	03/07/07 02:56	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+
193055-021	MET06	03/07/07 15:46	10.0													+										
193055-022	MET06	03/07/07 04:37	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+

REPORTING SUMMARY FOR 193055 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193055-023	MET06	03/07/07 04:43	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-024	MET06	03/07/07 04:48	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-025	MET06	03/07/07 05:05	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193055-026	MET06	03/07/07 05:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377787	MET06	03/06/07 22:02	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377788	MET06	03/06/07 22:08	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377789	MET06	03/06/07 22:13	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377790	MET06	03/06/07 22:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377791	MET06	03/06/07 22:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377792	MET06	03/06/07 22:29	50.0	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	+	+	+
QC377792	MET06	03/07/07 15:40	50.0											+												
QC377793	MET06	03/06/07 22:45	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377794	MET06	03/07/07 02:34	1.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC377794	MET06	03/08/07 19:48	1.0																							
QC377794	MET05	03/08/07 22:01	1.0										+													
QC377795	MET06	03/07/07 02:39	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377796	MET06	03/07/07 02:45	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377797	MET06	03/07/07 03:07	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377798	MET06	03/07/07 03:12	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377799	MET06	03/07/07 15:51	50.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC377799	MET06	03/13/07 13:37	50.0										+													
QC377800	MET06	03/07/07 03:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377999	MET04	03/08/07 16:48	1.0															+								
QC378000	MET04	03/08/07 16:50	1.0															+								
QC378001	MET04	03/08/07 16:53	1.0															+								
QC378002	MET04	03/08/07 16:57	5.0															+								
QC378003	MET04	03/08/07 17:00	1.0															+								
QC378004	MET04	03/08/07 17:02	1.0															+								

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193055 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEA	CDA	CAR	COU	CUE	FEB	PBG	MGN	HGI	NIK	SEG	AGA	NAL	TLV	ZN
QC378000	MET04	03/08/07 16:50	1.0												+						
QC378001	MET04	03/08/07 16:53	1.0												+						
QC378002	MET04	03/08/07 16:57	5.0												+						
QC378003	MET04	03/08/07 17:00	1.0												+						
QC378004	MET04	03/08/07 17:02	1.0												+						

Curtis & Tompkins Laboratories **Sample Preparation Summary** **06-MAR-2007 14:56**

Batch Number : 122768
Date Extracted: 06-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193055-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193055-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
193055-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
193055-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-012		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193055-013		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
QC377787	BLANK		Filtrate	50	mL	50	1.000000	1				ICAP		
QC377788	BS		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC377789	BSD		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC377790	MS	of 193055-001	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC377791	MSD	of 193055-001	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC377792	SER	of 193055-001	Filtrate	50	mL	50	1.000000	1				ICAP		
QC377793	PDS	of 193055-001	Filtrate	50	mL	50	1.000000	1				ICAP		

Prep Chemist: [illegible] 3/6/07 Reviewed By: [illegible] Date: 3/6/07

Relinquished By: [illegible] 3/6/07 Received By: [illegible] Date: 3/6/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 122748
Date Digested: 3/6/07
Digested by: KLA

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

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Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
B3				
B3D				
MS-01K				FIELD FILTERED
MSD-01				
193055-01				
-02C				
-03B				
-04F				
-05				
-06				
-07F				
-08K				
-09B				
-10				
-11H				
-12				
-13				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/6
.5 mL of spike solution was added to all spikes	500054	
	350055	
concentrated HCl	C3306 BAKER	
concentrated HNO3	CH0025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date: 3/6/07

Reviewer Signature / Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **06-MAR-2007 15:00**

Batch Number : 122769
Date Extracted: 06-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-021			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-025			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193055-026			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC377794	BLANK			Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC377795	BS			Filtrate	50	mL	50	1.000000	1					ICAP		
QC377796	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377797	MS	of 193055-021		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377798	MSD	of 193055-021		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377799	SER	of 193055-021		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377800	PDS	of 193055-021		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/6/07 Reviewed By: [signature] Date: 3/6/07

Relinquished By: [signature] 3/6/07 Received By: [signature] Date: 3/6/07

00555

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: #22769
Date Digested: 3/6/07
Digested by: KLA

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
BS				
BSD				
MS -21				FIELD FILTERED
MSD -21				
93055-21				
-14 B				
-16				
-17				
-18				
-19				
-20				
-22 B				
-23 C				
-24 B				
-25				
-26 C				

digestion temperature (90-95 degrees C)
5 mL of spike solution was added to all spikes

☐ filtered thru' Whatman # 541

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/6
mL of spike solution was added to all spikes	55055	
	35034	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	

Prep Chemist Signature / Date: 3/6/07

Reviewer Signature / Date: _____

Curtis & Tompkins Laboratories Sample Preparation Summary 12-MAR-2007 16:07

Batch Number : 122924
Date Extracted: 09-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-023			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193137-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-021			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378443	BLANK			Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378444	BS			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378445	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378446	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378447	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378448	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378449	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378508	MS	of 193217-021		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378509	MSD	of 193217-021		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: for K. Gaines Reviewed By: RCH Date: 3/12/07

Relinquished By: RCH Received By: RCH Date: 3/12/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 122924
Date Digested: 3/9/07
Digested by: KeA

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 75
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50		
BS				
BSD				
MS-11 Y				
MSD 11				
193217-11				
MS 21 L				
MSD 21				
193217-21				
-10 R				
-12 E				
-14 B				
-15 G				
-16 7				
-17				
-18 E				
-19				
-20				
-22				
-23				
-24				
137-105 H				
055-23-D				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KeA 3/9
.5 mL of spike solution was added to all spikes	S50054	
	S50055	
concentrated HCl	C330362 BATCH	
concentrated HNO3	C450275	
☐ filtered thru' Whatman # 541		

KeA 3/9/07
Prep Chemist Signature / Date

3-9-07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
Calnum : 47097469001
Units : ug/L

Date : 08-MAR-2007 16:29
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	122820	47097469002	STD02REP1	08-MAR-2007 16:32	S5681 (500X)
L2	122820	47097469003	STD03REP1	08-MAR-2007 16:35	S5681 (200X)
L3	122820	47097469004	STD04REP1	08-MAR-2007 16:37	S5681 (50X)
L4	122820	47097469005	STD05REP1	08-MAR-2007 16:39	S5681 (20X)
L5	122820	47097469006	STD06REP1	08-MAR-2007 16:42	S5681 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	2680.0	1984.0	1743.0	1690.2	1649.1	LINR	-0.1464	6.14E-4		1949.3	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47097469001

005560

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb BUSY Dataset/Proto 030807a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 6.14118e-4

C -1.46381e-1

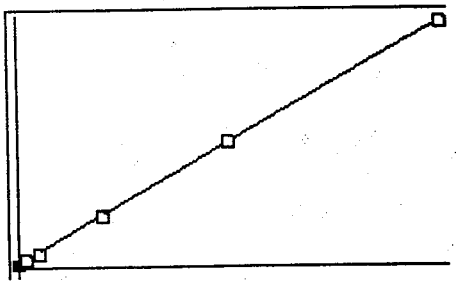
Rho .999966

Type

µ Abs.
16491

Accepted

New



Include S1 Rep 1

08-Mar-07 16:42 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.035	.035	296	1	296		
02	.20000	.183	-.017	536	0%	536		
03	.50000	.463	-.037	992	0%	992		
04	2.0000	1.99	-.006	3486	0%	3486		
05	5.0000	5.04	.044	8452	0%	8451		
06	10.000	9.98	-.019	16492	0%	16491		

Ready NUM

Folder: 030807a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	16:29:51 08 Mar 07	HG		
Hg	.000	ppb	296					
		Bkgd 1	12644329					
*** Standard: 2 Rep: 1				Seq: 2	16:32:40 08 Mar 07	HG		
Hg	.200	ppb	536					
		Bkgd 1	12635500					
*** Standard: 3 Rep: 1				Seq: 3	16:35:00 08 Mar 07	HG		
Hg	.500	ppb	992					
		Bkgd 1	12635125					
*** Standard: 4 Rep: 1				Seq: 4	16:37:08 08 Mar 07	HG		
Hg	2.00	ppb	3486					
		Bkgd 1	12629555					
*** Standard: 5 Rep: 1				Seq: 5	16:39:54 08 Mar 07	HG		
Hg	5.00	ppb	8451					
		Bkgd 1	12635866					
*** Standard: 6 Rep: 1				Seq: 6	16:42:22 08 Mar 07	HG		
Hg	10.0	ppb	16491					
		Bkgd 1	12635089					
*** Check Standard: 2			Ck2S5683	Seq: 7	16:44:28 08 Mar 07	HG		
Line	Flag		Intensities					
Hg			8664					
		Bkgd 1	12629771					
*** Check Standard: 1			Ck1ICB	Seq: 8	16:46:43 08 Mar 07	HG		
Line	Flag		Intensities					
Hg			140					
		Bkgd 1	12638036					
*** Sample ID: qc377999				Seq: 9	16:48:52 08 Mar 07	HG		
			122820,1					
Hg	-.136	ppb	17					
		Bkgd 1	12638602					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 08-MAR-2007

Sequence: 47097469 Instrument: MET04 HydraAA HG Analyzer
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	122820	ICALBLK	STD01REP1				08-MAR-2007 16:29	1.0	1.0									
002	122820	ICAL	STD02REP1				08-MAR-2007 16:32	1.0	1.0									
003	122820	ICAL	STD03REP1				08-MAR-2007 16:35	1.0	1.0									
004	122820	ICAL	STD04REP1				08-MAR-2007 16:37	1.0	1.0									
005	122820	ICAL	STD05REP1				08-MAR-2007 16:39	1.0	1.0									
006	122820	ICAL	STD06REP1				08-MAR-2007 16:42	1.0	1.0									
007	122820	ICV					08-MAR-2007 16:44	1.0	1.0	2	5.000	47097469001	5.170		ug/L	103		
008	122820	ICB					08-MAR-2007 16:46	1.0	1.0			47097469001	ND	0.20	ug/L			
009	122820	BLANK	QC377999		122820	Water	08-MAR-2007 16:48	1.0	1.0			47097469001	ND	0.20	ug/L			u
010	122820	BS	QC378000		122820	Water	08-MAR-2007 16:50	1.0	1.0		5.000	47097469001	5.110	0.20	ug/L	102		u
011	122820	BSD	QC378001		122820	Water	08-MAR-2007 16:53	1.0	1.0		5.000	47097469001	4.990	0.20	ug/L	100	2	u
012	122820	MSS	193066-001		122820	Water	08-MAR-2007 16:55	1.0	1.0			47097469001	ND	0.20	ug/L			u
013	122820	SER	QC378002	193066-001	122820	Water	08-MAR-2007 16:57	5.0	1.0			47097469001	ND	1.0	ug/L		--	u
014	122820	MS	QC378003	193066-001	122820	Water	08-MAR-2007 17:00	1.0	1.0		5.000	47097469001	5.470	0.20	ug/L	109		u
015	122820	MSD	QC378004	193066-001	122820	Water	08-MAR-2007 17:02	1.0	1.0		5.000	47097469001	5.540	0.20	ug/L	111	1	u
016	122820	SAMPLE	193055-005		122820	Filtra	08-MAR-2007 17:05	1.0	1.0			47097469001	ND	0.20	ug/L			u
017	122820	SAMPLE	193055-006		122820	Filtra	08-MAR-2007 17:07	1.0	1.0			47097469001	ND	0.20	ug/L			u
018	122820	SAMPLE	193055-008		122820	Filtra	08-MAR-2007 17:09	1.0	1.0			47097469001	ND	0.20	ug/L			u
019	122820	CCV					08-MAR-2007 17:11	1.0	1.0	3	2.500	47097469001	2.550		ug/L	102		
020	122820	CCB					08-MAR-2007 17:13	1.0	1.0			47097469001	ND	0.20	ug/L			
021	122820	SAMPLE	193055-011		122820	Filtra	08-MAR-2007 17:16	1.0	1.0			47097469001	ND	0.20	ug/L			u
022	122820	SAMPLE	193055-012		122820	Filtra	08-MAR-2007 17:18	1.0	1.0			47097469001	ND	0.20	ug/L			u
023	122820	SAMPLE	193055-013		122820	Filtra	08-MAR-2007 17:20	1.0	1.0			47097469001	ND	0.20	ug/L			u
024	122820	SAMPLE	193055-014		122820	Filtra	08-MAR-2007 17:22	1.0	1.0			47097469001	ND	0.20	ug/L			u
025	122820	SAMPLE	193057-002		122820	Filtra	08-MAR-2007 17:24	1.0	1.0			47097469001	ND	0.20	ug/L			u
026	122820	SAMPLE	193057-003		122820	Filtra	08-MAR-2007 17:27	1.0	1.0			47097469001	ND	0.20	ug/L			u
027	122820	SAMPLE	193057-004		122820	Filtra	08-MAR-2007 17:29	1.0	1.0			47097469001	ND	0.20	ug/L			u
028	122820	SAMPLE	193066-002		122820	Water	08-MAR-2007 17:31	1.0	1.0			47097469001	ND	0.20	ug/L			u
029	122820	SAMPLE	193066-003		122820	Water	08-MAR-2007 17:33	1.0	1.0			47097469001	ND	0.20	ug/L			u
030	122820	SAMPLE	193066-004		122820	Water	08-MAR-2007 17:35	1.0	1.0			47097469001	4.070		ug/L	81		
031	122820	CCV					08-MAR-2007 17:37	1.0	1.0	4	5.000	47097469001	ND	0.20	ug/L			
032	122820	CCB					08-MAR-2007 17:39	1.0	1.0			47097469001	ND	0.20	ug/L			u
033	122820	SAMPLE	193087-001		122820	Water	08-MAR-2007 17:41	1.0	1.0			47097469001	ND	0.20	ug/L			u
034	122820	SAMPLE	193114-001		122820	Water	08-MAR-2007 17:44	1.0	1.0			47097469001	ND	0.20	ug/L			u
035	122820	SAMPLE	193137-005		122820	Filtra	08-MAR-2007 17:46	1.0	1.0			47097469001	ND	0.20	ug/L			u
036	122820	SAMPLE	193187-001		122820	Water	08-MAR-2007 17:48	1.0	1.0			47097469001	ND	0.20	ug/L			u
037	122820	SAMPLE	193187-002		122820	Water	08-MAR-2007 17:50	1.0	1.0			47097469001	ND	0.20	ug/L			u
038	122820	SAMPLE	193187-003		122820	Water	08-MAR-2007 17:52	1.0	1.0			47097469001	6.230		ug/L	83		
039	122820	CCV					08-MAR-2007 17:54	1.0	1.0	5	7.500	47097469001	ND	0.20	ug/L			
040	122820	CCB					08-MAR-2007 17:56	1.0	1.0			47097469001	ND	0.20	ug/L			

Stds used: 1=S5681 2=S5683 3=S5684 4=S5685 5=S5686
Flags used: u=use

Analyst: _____ Date: _____

Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 14:23

Batch Number : 122820
Date Extracted: 07-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5681
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193055-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193057-002			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193057-003			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193057-004			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193066-001			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193066-002			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193066-003			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193066-004			Sullivan International Group,	Water	50	mL	50	1.000000	1					TAL/HG		
193087-001			Kensington Laboratories	Water	50	mL	50	1.000000	1					HG		
193114-001			CH2M Hill	Water	50	mL	50	1.000000	1					T26/HG		
193137-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193187-001			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193187-002			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193187-003			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
QC377999	BLANK			Water	50	mL	50	1.000000	1					HG		
QC378000	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC378001	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC378002	SER	of 193066-001		Water	50	mL	50	1.000000	1					HG		
QC378003	MS	of 193066-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378004	MSD	of 193066-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378005	PDS	of 193066-001		Water	50	mL	50	1.000000	1					HG		

Prep Chemist: [signature] 3/7/07 Reviewed By: [signature] Date: 3/7/07

Relinquished By: [signature] 3/7/07 Received By: [signature] Date: 3/7/07

00551

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 122820

Date Digested: 3/7/07

Digested by: TA

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193055-005	F	50	50	N	Filtrate (F.F.)
-006	F				
-008	F				
-011	H				Filtrate (F.F.)
-012					
-013					
-014	B				
193057-002	I				Filtrate (F.F.)
-003	I				
-004	M				
193066-001 MSS	P				water
-002	H				
-003					
-004					
193087-001	A				
193114-001					
193137-005	H				Filtrate (F.F.)
193187-001	A				water
-002					
-003					
Blank					
BS					
BSD					
MS 193066-001	P				
MSD					

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	S5681	3/7/07
ICAL Source WS#	S5681	
ICV / CCV WS#	S6803/84/85/86	
Digestion of Samples & Standards: Time ON / Temperature ON	11:00 / 95°C	
Time OFF/ Temperature OFF	1:00 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	K2 030807	
NaCl.hydroxylamine hydrochloride	Mu 030107	
Stannous Chloride	SnCl2 030607	
☐ filtered thru' 0.45 um syringe filter	[illegible]	

3/7/07

Prep Chemist / Date

Continued from page X

Continued on page X

3/7/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/22/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/22/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

00568

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID: 1065PZ3B Lab ID: 193055-001
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID: LF6GW104 Lab ID: 193055-002
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	230	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	230	10

Field ID: LF6GW106 Lab ID: 193055-003
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID: LF6GW103 Lab ID: 193055-004
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	320	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	320	10

Field ID: LF6GW100 Lab ID: 193055-005
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	210	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	210	10

ND= Not Detected
RL= Reporting Limit

112.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID: LF6GW101 Lab ID: 193055-006
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	390	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	390	10

Field ID: DUP0228072A Lab ID: 193055-007
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Field ID: LF10GW100 Lab ID: 193055-008
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	530	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	530	10

Field ID: LF4GW103 Lab ID: 193055-009
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	1,700	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,700	10

Field ID: LF4GW104 Lab ID: 193055-010
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	640	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	640	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID: 1349MW02 Lab ID: 193055-011
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	760	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	760	10

Field ID: 1349MW103 Lab ID: 193055-012
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	900	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	900	10

Field ID: 1349MW104 Lab ID: 193055-013
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	740	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	740	10

Field ID: 1349MW105 Lab ID: 193055-014
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID: LF01GW01 Lab ID: 193055-016
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	310	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	310	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID: LF01GW02 Lab ID: 193055-017
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	260	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	260	10

Field ID: LF01GW03 Lab ID: 193055-018
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	380	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	380	10

Field ID: LF01GW04 Lab ID: 193055-019
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	200	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	200	10

Field ID: LF01GW05 Lab ID: 193055-020
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	240	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	240	10

Field ID: LF01GW06 Lab ID: 193055-021
Type: SAMPLE Batch#: 123075

Analyte	Result	RL
Alkalinity, Bicarbonate	130	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	130	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID: LF01GW07 Lab ID: 193055-022
Type: SAMPLE Batch#: 123074

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID: EPSP01 Lab ID: 193055-023
Type: SAMPLE Batch#: 123075

Analyte	Result	RL
Alkalinity, Bicarbonate	360	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	360	5.0

Field ID: LF02GW01 Lab ID: 193055-024
Type: SAMPLE Batch#: 123075

Analyte	Result	RL
Alkalinity, Bicarbonate	220	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	220	5.0

Field ID: LF02GW02 Lab ID: 193055-025
Type: SAMPLE Batch#: 123075

Analyte	Result	RL
Alkalinity, Bicarbonate	480	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	480	5.0

Field ID: DUP0228071A Lab ID: 193055-026
Type: SAMPLE Batch#: 123075

Analyte	Result	RL
Alkalinity, Bicarbonate	200	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	200	5.0

ND= Not Detected
RL= Reporting Limit

112.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Type: BLANK Batch#: 123074
Lab ID: QC379080

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type: BLANK Batch#: 123075
Lab ID: QC379084

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

112.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379081	Batch#:	123074
Matrix:	Water	Analyzed:	03/13/07

Spiked	Result	%REC	Limits
200.0	188.8	94	90-110

113.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379085	Batch#:	123075
Matrix:	Water	Analyzed:	03/13/07

Spiked	Result	%REC	Limits
200.0	190.0	95	90-110

115.0

00576

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1065PZ3B	Batch#:	123074
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379082	300.0	500.0	787.0	97	69-112		
MSD	QC379083		500.0	780.0	96	69-112	1	25

RPD= Relative Percent Difference

114.0

00577

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	LF01GW06	Batch#:	123075
MSS Lab ID:	193055-021	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379086	127.5	250.0	356.0	91	69-112		
MSD	QC379087		250.0	351.5	90	69-112	1	25

RPD= Relative Percent Difference

116.0

Analysis: **Alkalinity**
Method: **EPA 310.1 /** SMWW 2320B
SOP#: Alkalinity_rv 7.doc

Analyst: SJ
Analysis Date: **03/13/07**
Batch No: **122074**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.2	100	0.00	0.00	ND			1.0		
LCS	10.1	25	2.35	4.72	188.8			4.0	94	
193055-001	7.9	10	0.00	3.00	300.0		n/a	10.0		
MS	9.7	10	2.19	7.87	787.0			10.0	97	
MSD	9.7	10	2.24	7.80	780.0			10.0	96	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193055-001	7.9	10	0.00	3.00	300.0		n/a	10.0
193055-002	7.3	10	0.00	2.29	229.0		n/a	10.0
193055-003	7.6	10	0.00	2.50	250.0		n/a	10.0
193055-004	7.5	10	0.00	3.20	320.0		n/a	10.0
193055-005	7.4	10	0.00	2.08	208.0		n/a	10.0
193055-006	7.6	10	0.00	3.89	389.0		n/a	10.0
193055-007	7.7	10	0.00	2.90	290.0		n/a	10.0
193055-008	7.4	10	0.00	5.34	534.0		n/a	10.0
193055-009	7.5	10	0.00	16.68	1668.0		n/a	10.0
193055-010	7.5	10	0.00	6.37	637.0		n/a	10.0
193055-011	7.6	10	0.00	7.56	756.0		n/a	10.0
193055-012	7.8	10	0.00	9.04	904.0		n/a	10.0
193055-013	7.8	10	0.00	7.35	735.0		n/a	10.0
193055-014	7.8	10	0.00	2.53	253.0		n/a	10.0
193055-016	7.6	10	0.00	3.05	305.0		n/a	10.0
193055-017	7.2	10	0.00	2.58	258.0		n/a	10.0
193055-018	7.8	10	0.00	3.76	376.0		n/a	10.0
193055-019	7.7	10	0.00	2.00	200.0		n/a	10.0
193055-020	7.3	10	0.00	2.39	239.0		n/a	10.0
193055-022	7.4	10	0.00	2.47	247.0		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMB 3/13/07

Curtis Tompkins, Ltd.

Template: F:\inorganic\stuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

00579

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/13/07
Batch No: 122074

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193055-001	0.0	300.0	300	300.000	0.000	0.000
193055-002	0.0	229.00	229.000	229.000	0.000	0.000
193055-003	0.0	250.00	250.000	250.000	0.000	0.000
193055-004	0.0	320.00	320.000	320.000	0.000	0.000
193055-005	0.0	208.00	208.000	208.000	0.000	0.000
193055-006	0.0	389.00	389.000	389.000	0.000	0.000
193055-007	0.0	290.00	290.000	290.000	0.000	0.000
193055-008	0.0	534.00	534.000	534.000	0.000	0.000
193055-009	0.0	1668.00	1668.000	1668.000	0.000	0.000
193055-010	0.0	637.00	637.000	637.000	0.000	0.000
193055-011	0.0	756.00	756.000	756.000	0.000	0.000
193055-012	0.0	904.00	904.000	904.000	0.000	0.000
193055-013	0.0	735.00	735.000	735.000	0.000	0.000
193055-014	0.0	253.00	253.000	253.000	0.000	0.000
193055-016	0.0	305.00	305.000	305.000	0.000	0.000
193055-017	0.0	258.00	258.000	258.000	0.000	0.000
193055-018	0.0	376.00	376.000	376.000	0.000	0.000
193055-019	0.0	200.00	200.000	200.000	0.000	0.000
193055-020	0.0	239.00	239.000	239.000	0.000	0.000
193055-022	0.0	247.00	247.000	247.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

00586

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analysis Date: 03/13/07
Batch No: 122074

H_2SO_4 Normality = 0.02
Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193055-001	300.000	365.774	0.000	0.000
193055-002	229.000	279.208	0.000	0.000
193055-003	250.000	304.812	0.000	0.000
193055-004	320.000	390.159	0.000	0.000
193055-005	208.000	253.603	0.000	0.000
193055-006	389.000	474.287	0.000	0.000
193055-007	290.000	353.582	0.000	0.000
193055-008	534.000	651.078	0.000	0.000
193055-009	1668.000	2033.704	0.000	0.000
193055-010	637.000	776.660	0.000	0.000
193055-011	756.000	921.751	0.000	0.000
193055-012	904.000	1102.199	0.000	0.000
193055-013	735.000	896.147	0.000	0.000
193055-014	253.000	308.470	0.000	0.000
193055-016	305.000	371.870	0.000	0.000
193055-017	258.000	314.566	0.000	0.000
193055-018	376.000	458.437	0.000	0.000
193055-019	200.000	243.849	0.000	0.000
193055-020	239.000	291.400	0.000	0.000
193055-022	247.000	301.154	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123074 Date: 3/13/07 Benchbook#: **BK2384**
Matrix: water Time: 10:30 Page: **71**

CAL-ph 4.0: SS#: S749
CAL-ph 7.0: SS#: S1291
CAL-ph 10.0: SS#: S5635
Slope: 98.4
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: S4565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR VW3229-411
Lot 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	5.2	100	—	<0.05		
	LCS	10.1	25	2.35	4.72		
	193055-1 Q	7.9	10	—	3.00		
	MS-1	9.7	10	2.19	7.87		
5	MSD-1	9.7	10	2.24	7.80		
	-2 A	7.3	10	—	2.29		
	-3	7.6	10	—	2.50		
	-4 D	7.5	10	—	~~5.70~~ 3.20		
	-5	7.4	10	—	2.08		
10	-6	7.6	10	—	3.89		
	-7	7.7	10	—	2.90		
	-8	7.4	10	—	5.34		
	-9 A	7.5	10	—	16.68		
	-10	7.5	10	—	6.37		
15	-11 G	7.6	10	—	7.56		
	-12	7.8	10	—	9.04		
	-13	7.8	10	—	7.35		
	-14 A	7.8	10	—	2.53		
	-16 C	7.6	10	—	3.05		
20	-17	7.2	10	—	2.58		
	-18	7.8	10	—	3.76		
	-19	7.7	10	—	2.00		
	-20 C	7.3	10	—	2.39		
	-22 C	7.4	10	—	2.47		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/13/07
Analyst / Date

3/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123074
Date Started: 13-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193055-001			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-002			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-003			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-004			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-005			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-006			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-007			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-008			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-009			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-010			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-011			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-012			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-013			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-014			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-016			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-017			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-018			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-019			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-020			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-022			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
QC379080	BLANK			Water	ALKALINITY	
QC379081	LCS			Water	ALKALINITY	
QC379082	MS	of 193055-001		Water	ALKALINITY	
QC379083	MSD	of 193055-001		Water	ALKALINITY	

Analysis: **Alkalinity**
Method: **EPA 310.1** / SMWW 2320B
SOP#: Alkalinity_rv 7.doc

Analyst: DMB
Analysis Date: **03/13/07**
Batch No: **122075**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.00	0.00	ND			1.0		
LCS	10	25	2.42	4.75	190.0			4.0	95	
193055-021	7.9	20	0.00	2.55	127.5		n/a	5.0		
MS	9.3	20	2.31	7.12	356.0			5.0	91	
MSD	9.4	20	2.26	7.03	351.5			5.0	90	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193055-021	7.9	20	0.00	2.55	127.5		n/a	5.0
193055-023	8.1	20	0.00	7.12	356.0		n/a	5.0
193055-024	7.8	20	0.00	4.40	220.0		n/a	5.0
193055-025	7.8	20	0.00	9.63	481.5		n/a	5.0
193055-026	7.4	20	0.00	4.08	204.0		n/a	5.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: 3/13/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

195581

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: DMB
Analysis Date: 03/13/07
Batch No: 122075

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193055-021	0.0	127.5	127.5	127.500	0.000	0.000
193055-023	0.0	356.00	356.000	356.000	0.000	0.000
193055-024	0.0	220.00	220.000	220.000	0.000	0.000
193055-025	0.0	481.50	481.500	481.500	0.000	0.000
193055-026	0.0	204.00	204.000	204.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analysis Date: 03/13/07
Batch No: 122075

H_2SO_4 Normality = 0.02
Analyst: DMB

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193055-021	127.500	155.454	0.000	0.000
193055-023	356.000	434.052	0.000	0.000
193055-024	220.000	268.234	0.000	0.000
193055-025	481.500	587.067	0.000	0.000
193055-026	204.000	248.726	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123075 Date: 3/13/07 Benchbook#: **BK2384**
Matrix: Water Time: 21:00 Page: **72**

CAL-ph 4.0: SS#: S749
CAL-ph 7.0: SS#: S1291
CAL-ph 10.0: SS#: S5635
Slope: 98.4
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: S4565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	4.9	100	—	<0.05		
	LCS	10.0	25	2.42	4.75		
	193055-021	7.2	20	—	2.55		
	MS -021	9.3	↓	2.31	7.12		
5	MSD-021	9.4		2.26	7.03		
	-023	8.1		—	7.12		
	-024	7.8		—	4.40		
	-025	7.8		—	9.63		
	-026	7.4		—	4.08		
10							
15							
20							

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/13/07
Analyst / Date

3/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123075
Date Started: 13-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193055-021			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-023			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-024			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-025			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
193055-026			Treadwell & Rollo	Water	ALKALINITY	13-MAR-2007
QC379084	BLANK			Water	ALKALINITY	
QC379085	LCS			Water	ALKALINITY	
QC379086	MS	of 193055-021		Water	ALKALINITY	
QC379087	MSD	of 193055-021		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	03/01/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1065PZ3B	SAMPLE	193055-001	57	2.0	10.00	122663	02/28/07 09:25	03/02/07 02:02
LF6GW104	SAMPLE	193055-002	37	2.0	10.00	122663	02/28/07 11:10	03/02/07 09:37
LF6GW106	SAMPLE	193055-003	94	5.0	25.00	122663	02/28/07 12:00	03/02/07 10:12
LF6GW103	SAMPLE	193055-004	42	2.0	10.00	122663	02/28/07 12:35	03/02/07 10:29
LF6GW100	SAMPLE	193055-005	43	2.0	10.00	122663	02/28/07 13:45	03/02/07 17:03
LF6GW101	SAMPLE	193055-006	57	2.0	10.00	122663	02/28/07 14:40	03/02/07 17:56
DUP0228072A	SAMPLE	193055-007	58	2.0	10.00	122663	02/28/07 09:45	03/02/07 05:32
LF10GW100	SAMPLE	193055-008	55	5.0	25.00	122663	02/28/07 08:45	03/02/07 01:44
LF4GW103	SAMPLE	193055-009	700	20	100.0	122657	02/28/07 09:40	03/01/07 16:41
LF4GW104	SAMPLE	193055-010	320	10	50.00	122657	02/28/07 10:10	03/01/07 16:59
1349MW02	SAMPLE	193055-011	1,100	20	100.0	122657	02/28/07 11:05	03/01/07 17:16
1349MW103	SAMPLE	193055-012	1,100	20	100.0	122657	02/28/07 13:55	03/01/07 17:34
1349MW104	SAMPLE	193055-013	880	20	100.0	122657	02/28/07 13:00	03/01/07 17:51
1349MW105	SAMPLE	193055-014	510	10	50.00	122663	02/28/07 14:45	03/02/07 15:45
LF01GW01	SAMPLE	193055-016	41	2.0	10.00	122663	02/28/07 13:15	03/02/07 16:46
LF01GW02	SAMPLE	193055-017	61	2.0	10.00	122663	02/28/07 13:50	03/02/07 17:21
LF01GW03	SAMPLE	193055-018	86	2.0	10.00	122663	02/28/07 15:40	03/02/07 15:27
LF01GW04	SAMPLE	193055-019	57	2.0	10.00	122663	02/28/07 09:25	03/02/07 02:54
LF01GW05	SAMPLE	193055-020	63	2.0	10.00	122663	02/28/07 14:22	03/02/07 17:38
LF01GW06	SAMPLE	193055-021	2.8	0.20	1.000	122663	02/28/07 10:24	03/02/07 06:59
LF01GW07	SAMPLE	193055-022	53	2.0	10.00	122663	02/28/07 15:00	03/02/07 14:52
EPSP01	SAMPLE	193055-023	92	2.0	10.00	122663	02/28/07 10:55	03/02/07 06:42
LF02GW01	SAMPLE	193055-024	75	2.0	10.00	122663	02/28/07 11:45	03/02/07 09:54
LF02GW02	SAMPLE	193055-025	170	5.0	25.00	122663	02/28/07 12:38	03/02/07 10:47
DUP0228071A	SAMPLE	193055-026	57	2.0	10.00	122663	02/28/07 09:35	03/02/07 03:12
	BLANK	QC377322	ND	0.20	1.000	122657		03/01/07 12:18
	BLANK	QC377340	ND	0.20	1.000	122663		03/02/07 01:27

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	03/01/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1065PZ3B	SAMPLE	193055-001	ND	0.10	1.000	122663	02/28/07 09:25	03/02/07 03:47
LF6GW104	SAMPLE	193055-002	ND	0.10	1.000	122663	02/28/07 11:10	03/02/07 08:09
LF6GW106	SAMPLE	193055-003	ND	0.10	1.000	122663	02/28/07 12:00	03/02/07 11:57
LF6GW103	SAMPLE	193055-004	ND	0.10	1.000	122663	02/28/07 12:35	03/02/07 11:39
LF6GW100	SAMPLE	193055-005	ND	0.10	1.000	122663	02/28/07 13:45	03/02/07 13:07
LF6GW101	SAMPLE	193055-006	ND	0.10	1.000	122663	02/28/07 14:40	03/02/07 13:59
DUP0228072A	SAMPLE	193055-007	ND	0.10	1.000	122663	02/28/07 09:45	03/02/07 07:34
LF10GW100	SAMPLE	193055-008	ND	0.10	1.000	122663	02/28/07 08:45	03/02/07 04:04
LF4GW103	SAMPLE	193055-009	ND	0.10	1.000	122657	02/28/07 09:40	03/01/07 19:19
LF4GW104	SAMPLE	193055-010	ND	0.10	1.000	122657	02/28/07 10:10	03/01/07 20:29
1349MW02	SAMPLE	193055-011	ND	0.20	2.000	122657	02/28/07 11:05	03/01/07 21:04
1349MW103	SAMPLE	193055-012	0.28	0.20	2.000	122657	02/28/07 13:55	03/01/07 22:14
1349MW104	SAMPLE	193055-013	ND	0.10	1.000	122657	02/28/07 13:00	03/01/07 23:24
1349MW105	SAMPLE	193055-014	0.32	0.10	1.000	122663	02/28/07 14:45	03/02/07 14:17
LF01GW01	SAMPLE	193055-016	ND	0.10	1.000	122663	02/28/07 13:15	03/02/07 11:22
LF01GW02	SAMPLE	193055-017	ND	0.10	1.000	122663	02/28/07 13:50	03/02/07 13:24
LF01GW03	SAMPLE	193055-018	ND	0.10	1.000	122663	02/28/07 15:40	03/02/07 15:09
LF01GW04	SAMPLE	193055-019	ND	0.10	1.000	122663	02/28/07 09:25	03/02/07 03:29
LF01GW05	SAMPLE	193055-020	ND	0.10	1.000	122663	02/28/07 14:22	03/02/07 13:42
LF01GW06	SAMPLE	193055-021	ND	0.10	1.000	122663	02/28/07 10:24	03/02/07 06:59
LF01GW07	SAMPLE	193055-022	ND	0.10	1.000	122663	02/28/07 15:00	03/02/07 14:34
EPSP01	SAMPLE	193055-023	ND	0.10	1.000	122663	02/28/07 10:55	03/02/07 07:52
LF02GW01	SAMPLE	193055-024	ND	0.10	1.000	122663	02/28/07 11:45	03/02/07 11:04
LF02GW02	SAMPLE	193055-025	ND	0.10	1.000	122663	02/28/07 12:38	03/02/07 12:14
DUP0228071A	SAMPLE	193055-026	ND	0.10	1.000	122663	02/28/07 09:35	03/02/07 07:17
	BLANK	QC377322	ND	0.10	1.000	122657		03/01/07 12:18
	BLANK	QC377340	ND	0.10	1.000	122663		03/02/07 01:27

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	03/01/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1065PZ3B	SAMPLE	193055-001	2.0	0.05	1.000	122663	02/28/07 09:25	03/02/07 03:47
LF6GW104	SAMPLE	193055-002	5.9	0.50	10.00	122663	02/28/07 11:10	03/02/07 09:37
LF6GW106	SAMPLE	193055-003	8.1	1.3	25.00	122663	02/28/07 12:00	03/02/07 10:12
LF6GW103	SAMPLE	193055-004	2.8	0.05	1.000	122663	02/28/07 12:35	03/02/07 11:39
LF6GW100	SAMPLE	193055-005	1.0	0.05	1.000	122663	02/28/07 13:45	03/02/07 13:07
LF6GW101	SAMPLE	193055-006	0.78	0.05	1.000	122663	02/28/07 14:40	03/02/07 13:59
DUP0228072A	SAMPLE	193055-007	2.0	0.05	1.000	122663	02/28/07 09:45	03/02/07 07:34
LF10GW100	SAMPLE	193055-008	40	1.3	25.00	122663	02/28/07 08:45	03/02/07 01:44
LF4GW103	SAMPLE	193055-009	ND	0.05	1.000	122657	02/28/07 09:40	03/01/07 19:19
LF4GW104	SAMPLE	193055-010	0.46	0.05	1.000	122657	02/28/07 10:10	03/01/07 20:29
1349MW02	SAMPLE	193055-011	1.4	0.10	2.000	122657	02/28/07 11:05	03/01/07 21:04
1349MW103	SAMPLE	193055-012	ND	0.10	2.000	122657	02/28/07 13:55	03/01/07 22:14
1349MW104	SAMPLE	193055-013	ND	0.05	1.000	122657	02/28/07 13:00	03/01/07 23:24
1349MW105	SAMPLE	193055-014	0.06	0.05	1.000	122663	02/28/07 14:45	03/02/07 14:17
LF01GW01	SAMPLE	193055-016	4.9	0.05	1.000	122663	02/28/07 13:15	03/02/07 11:22
LF01GW02	SAMPLE	193055-017	12	0.50	10.00	122664	02/28/07 13:50	03/02/07 13:39
LF01GW03	SAMPLE	193055-018	5.4	0.50	10.00	122663	02/28/07 15:40	03/02/07 15:27
LF01GW04	SAMPLE	193055-019	8.1	0.50	10.00	122663	02/28/07 09:25	03/02/07 02:54
LF01GW05	SAMPLE	193055-020	1.8	0.05	1.000	122663	02/28/07 14:22	03/02/07 13:42
LF01GW06	SAMPLE	193055-021	0.44	0.05	1.000	122663	02/28/07 10:24	03/02/07 06:59
LF01GW07	SAMPLE	193055-022	8.3	0.50	10.00	122663	02/28/07 15:00	03/02/07 14:52
EPSP01	SAMPLE	193055-023	1.2	0.05	1.000	122663	02/28/07 10:55	03/02/07 07:52
LF02GW01	SAMPLE	193055-024	0.91	0.05	1.000	122663	02/28/07 11:45	03/02/07 11:04
LF02GW02	SAMPLE	193055-025	ND	0.05	1.000	122663	02/28/07 12:38	03/02/07 12:14
DUP0228071A	SAMPLE	193055-026	8.1	0.50	10.00	122663	02/28/07 09:35	03/02/07 03:12
	BLANK	QC377322	ND	0.05	1.000	122657		03/01/07 12:18
	BLANK	QC377340	ND	0.05	1.000	122663		03/02/07 01:27
	BLANK	QC377346	ND	0.05	1.000	122664		03/02/07 11:10

ND= Not Detected
RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	03/01/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1065PZ3B	SAMPLE	193055-001	ND	0.05	1.000	122663	02/28/07 09:25	03/02/07 03:47
LF6GW104	SAMPLE	193055-002	ND	0.05	1.000	122663	02/28/07 11:10	03/02/07 08:09
LF6GW106	SAMPLE	193055-003	ND	0.05	1.000	122663	02/28/07 12:00	03/02/07 11:57
LF6GW103	SAMPLE	193055-004	ND	0.05	1.000	122663	02/28/07 12:35	03/02/07 11:39
LF6GW100	SAMPLE	193055-005	ND	0.05	1.000	122663	02/28/07 13:45	03/02/07 13:07
LF6GW101	SAMPLE	193055-006	ND	0.05	1.000	122663	02/28/07 14:40	03/02/07 13:59
DUP0228072A	SAMPLE	193055-007	ND	0.05	1.000	122663	02/28/07 09:45	03/02/07 07:34
LF10GW100	SAMPLE	193055-008	ND	0.05	1.000	122663	02/28/07 08:45	03/02/07 04:04
LF4GW103	SAMPLE	193055-009	ND	0.10	2.000	122657	02/28/07 09:40	03/01/07 19:54
LF4GW104	SAMPLE	193055-010	ND	0.05	1.000	122657	02/28/07 10:10	03/01/07 20:29
1349MW02	SAMPLE	193055-011	ND	0.15	3.000	122657	02/28/07 11:05	03/01/07 21:39
1349MW103	SAMPLE	193055-012	ND	0.15	3.000	122657	02/28/07 13:55	03/01/07 22:49
1349MW104	SAMPLE	193055-013	ND	0.10	2.000	122657	02/28/07 13:00	03/01/07 23:59
1349MW105	SAMPLE	193055-014	ND	0.05	1.000	122663	02/28/07 14:45	03/02/07 14:17
LF01GW01	SAMPLE	193055-016	ND	0.05	1.000	122663	02/28/07 13:15	03/02/07 11:22
LF01GW02	SAMPLE	193055-017	ND	0.05	1.000	122663	02/28/07 13:50	03/02/07 13:24
LF01GW03	SAMPLE	193055-018	ND	0.05	1.000	122663	02/28/07 15:40	03/02/07 15:09
LF01GW04	SAMPLE	193055-019	ND	0.05	1.000	122663	02/28/07 09:25	03/02/07 03:29
LF01GW05	SAMPLE	193055-020	ND	0.05	1.000	122663	02/28/07 14:22	03/02/07 13:42
LF01GW06	SAMPLE	193055-021	ND	0.05	1.000	122663	02/28/07 10:24	03/02/07 06:59
LF01GW07	SAMPLE	193055-022	ND	0.05	1.000	122663	02/28/07 15:00	03/02/07 14:34
EPSP01	SAMPLE	193055-023	ND	0.05	1.000	122663	02/28/07 10:55	03/02/07 07:52
LF02GW01	SAMPLE	193055-024	ND	0.05	1.000	122663	02/28/07 11:45	03/02/07 11:04
LF02GW02	SAMPLE	193055-025	ND	0.05	1.000	122663	02/28/07 12:38	03/02/07 12:14
DUP0228071A	SAMPLE	193055-026	ND	0.05	1.000	122663	02/28/07 09:35	03/02/07 07:17
	BLANK	QC377322	ND	0.05	1.000	122657		03/01/07 12:18
	BLANK	QC377340	ND	0.05	1.000	122663		03/02/07 01:27

ND= Not Detected
RL= Reporting Limit

22.0

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	03/01/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1065PZ3B	SAMPLE	193055-001	68	5.0	10.00	122663	02/28/07 09:25	03/02/07 02:02
LF6GW104	SAMPLE	193055-002	220	5.0	10.00	122663	02/28/07 11:10	03/02/07 09:37
LF6GW106	SAMPLE	193055-003	170	13	25.00	122663	02/28/07 12:00	03/02/07 10:12
LF6GW103	SAMPLE	193055-004	89	5.0	10.00	122663	02/28/07 12:35	03/02/07 10:29
LF6GW100	SAMPLE	193055-005	37	0.50	1.000	122663	02/28/07 13:45	03/02/07 13:07
LF6GW101	SAMPLE	193055-006	60	5.0	10.00	122663	02/28/07 14:40	03/02/07 17:56
DUP0228072A	SAMPLE	193055-007	68	5.0	10.00	122663	02/28/07 09:45	03/02/07 05:32
LF10GW100	SAMPLE	193055-008	300	13	25.00	122663	02/28/07 08:45	03/02/07 01:44
LF4GW103	SAMPLE	193055-009	420	50	100.0	122657	02/28/07 09:40	03/01/07 16:41
LF4GW104	SAMPLE	193055-010	160	25	50.00	122657	02/28/07 10:10	03/01/07 16:59
1349MW02	SAMPLE	193055-011	160	50	100.0	122657	02/28/07 11:05	03/01/07 17:16
1349MW103	SAMPLE	193055-012	140	1.5	3.000	122657	02/28/07 13:55	03/01/07 22:49
1349MW104	SAMPLE	193055-013	84	1.0	2.000	122657	02/28/07 13:00	03/01/07 23:59
1349MW105	SAMPLE	193055-014	86	25	50.00	122663	02/28/07 14:45	03/02/07 15:45
LF01GW01	SAMPLE	193055-016	38	0.50	1.000	122663	02/28/07 13:15	03/02/07 11:22
LF01GW02	SAMPLE	193055-017	42	0.50	1.000	122663	02/28/07 13:50	03/02/07 13:24
LF01GW03	SAMPLE	193055-018	36	0.50	1.000	122663	02/28/07 15:40	03/02/07 15:09
LF01GW04	SAMPLE	193055-019	48	0.50	1.000	122663	02/28/07 09:25	03/02/07 03:29
LF01GW05	SAMPLE	193055-020	43	0.50	1.000	122663	02/28/07 14:22	03/02/07 13:42
LF01GW06	SAMPLE	193055-021	2.7	0.50	1.000	122663	02/28/07 10:24	03/02/07 06:59
LF01GW07	SAMPLE	193055-022	46	0.50	1.000	122663	02/28/07 15:00	03/02/07 14:34
EPSP01	SAMPLE	193055-023	20	0.50	1.000	122663	02/28/07 10:55	03/02/07 07:52
LF02GW01	SAMPLE	193055-024	17	0.50	1.000	122663	02/28/07 11:45	03/02/07 11:04
LF02GW02	SAMPLE	193055-025	76	13	25.00	122663	02/28/07 12:38	03/02/07 10:47
DUP0228071A	SAMPLE	193055-026	48	0.50	1.000	122663	02/28/07 09:35	03/02/07 07:17
	BLANK	QC377322	ND	0.50	1.000	122657		03/01/07 12:18
	BLANK	QC377340	ND	0.50	1.000	122663		03/02/07 01:27

ND= Not Detected
RL= Reporting Limit

24.0

Batch QC Report

Chloride

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC377323		4.000	4.270	107	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		4.000	4.166	104	80-120	2	20	1.000	122657			03/01/07 12:53
LF4GW104	MS	193055-010	QC377327	318.2	100.0	413.1	95	80-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		100.0	415.1	97	80-120	0	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26
	LCS		QC377341		4.000	4.098	102	80-120			1.000	122663			03/02/07 18:13
1065PZ3B	MS	193055-001	QC377342	57.26	20.00	76.74	97	80-120			10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:19
1065PZ3B	MSD	193055-001	QC377343		20.00	77.02	99	80-120	0	20	10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:37
LF01GW06	MS	193055-021	QC377344	2.818	10.00	12.78	100	80-120			5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:07
LF01GW06	MSD	193055-021	QC377345		10.00	12.78	100	80-120	0	20	5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Fluoride

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC377323		2.000	2.167	108	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		2.000	2.093	105	80-120	3	20	1.000	122657			03/01/07 12:53
1065PZ7A	MS	193027-002	QC377325	0.1231	1.000	1.062	94	78-120			1.020	122657	02/27/07 12:05	02/28/07	03/01/07 15:49
1065PZ7A	MSD	193027-002	QC377326		1.000	1.042	92	78-120	2	20	1.020	122657	02/27/07 12:05	02/28/07	03/01/07 16:06
LF4GW104	MS	193055-010	QC377327	0.02382	50.00	46.14	92	78-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		50.00	46.79	94	78-120	1	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26
	LCS		QC377341		2.000	2.014	101	80-120			1.000	122663			03/02/07 18:13
1065PZ3B	MS	193055-001	QC377342	0.02705	10.00	9.235	92	78-120			10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:19
1065PZ3B	MSD	193055-001	QC377343		10.00	9.303	93	78-120	1	20	10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:37
LF01GW06	MS	193055-021	QC377344	0.08299	5.000	4.903	96	78-120			5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:07
LF01GW06	MSD	193055-021	QC377345		5.000	4.832	95	78-120	1	20	5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:24

RPD= Relative Percent Difference

19.0

Curtis & Tompkins, Ltd.

000595

Batch QC Report

Nitrate Nitrogen

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC377323		1.000	1.060	106	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		1.000	1.037	104	80-120	2	20	1.000	122657			03/01/07 12:53
LF4GW104	MS	193055-010	QC377327	0.4553	25.00	25.62	101	80-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		25.00	25.35	100	80-120	1	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26
	LCS		QC377341		1.000	1.026	103	80-120			1.000	122663			03/02/07 18:13
1065PZ3B	MS	193055-001	QC377342	2.010	5.000	7.028	100	80-120			10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:19
1065PZ3B	MSD	193055-001	QC377343		5.000	7.085	101	80-120	1	20	10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:37
LF01GW06	MS	193055-021	QC377344	0.4388	2.500	2.999	102	80-120			5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:07
LF01GW06	MSD	193055-021	QC377345		2.500	3.003	103	80-120	0	20	5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:24
	BS		QC377347		1.000	1.013	101	80-120			1.000	122664			03/02/07 11:27
	BSD		QC377348		1.000	0.9943	99	80-120	2	20	1.000	122664			03/02/07 11:44
ZZZZZZZZZZ	MS	193100-003	QC377349	6.074	12.50	18.62	100	80-120			25.00	122664	03/01/07 07:00	03/02/07	03/02/07 20:09
ZZZZZZZZZZ	MSD	193100-003	QC377350		12.50	18.40	99	80-120	1	20	25.00	122664	03/01/07 07:00	03/02/07	03/02/07 20:27

RPD= Relative Percent Difference

21.1

Curtis & Tompkins, Ltd.

00556

Batch QC Report

Nitrite Nitrogen

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC377323		1.000	1.047	105	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		1.000	1.005	100	80-120	4	20	1.000	122657			03/01/07 12:53
LF4GW104	MS	193055-010	QC377327	<0.008079	25.00	24.01	96	80-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		25.00	25.25	101	80-120	5	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26
	LCS		QC377341		1.000	1.006	101	80-120			1.000	122663			03/02/07 18:13
1065PZ3B	MS	193055-001	QC377342	<0.008079	5.000	4.953	99	80-120			10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:19
1065PZ3B	MSD	193055-001	QC377343		5.000	5.080	102	80-120	3	20	10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:37
LF01GW06	MS	193055-021	QC377344	<0.008079	2.500	2.501	100	80-120			5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:07
LF01GW06	MSD	193055-021	QC377345		2.500	2.523	101	80-120	1	20	5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:24

RPD= Relative Percent Difference

23.1

Curtis & Tompkins, Ltd.

095597

Batch QC Report

Sulfate

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC377323		10.00	10.71	107	80-120			1.000	122657			03/01/07 12:36
	BSD		QC377324		10.00	10.41	104	80-120	3	20	1.000	122657			03/01/07 12:53
LF4GW104	MS	193055-010	QC377327	164.9	250.0	415.9	100	80-120			50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:09
LF4GW104	MSD	193055-010	QC377328		250.0	416.2	101	80-120	0	20	50.00	122657	02/28/07 10:10	03/01/07	03/01/07 18:26
	LCS		QC377341		10.00	10.13	101	80-120			1.000	122663			03/02/07 18:13
1065PZ3B	MS	193055-001	QC377342	67.81	50.00	118.9	102	80-120			10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:19
1065PZ3B	MSD	193055-001	QC377343		50.00	118.9	102	80-120	0	20	10.00	122663	02/28/07 09:25	03/01/07	03/02/07 02:37
LF01GW06	MS	193055-021	QC377344	2.701	25.00	28.29	102	80-120			5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:07
LF01GW06	MSD	193055-021	QC377345		25.00	27.90	101	80-120	1	20	5.000	122663	02/28/07 10:24	03/01/07	03/02/07 06:24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

00558

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MCS 2/28/07

/cw 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

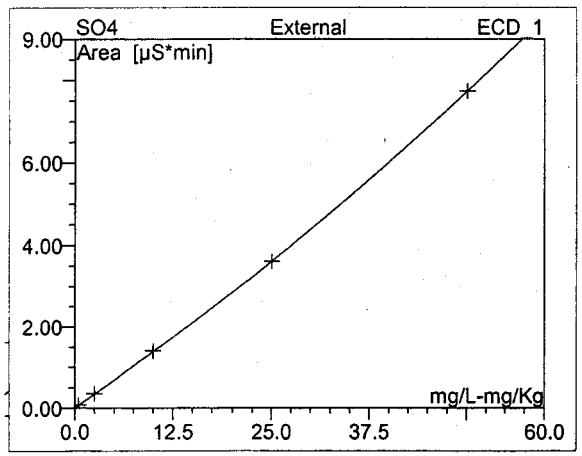
No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

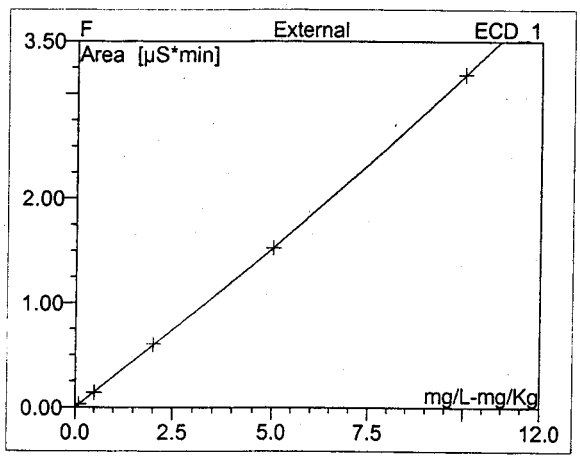
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

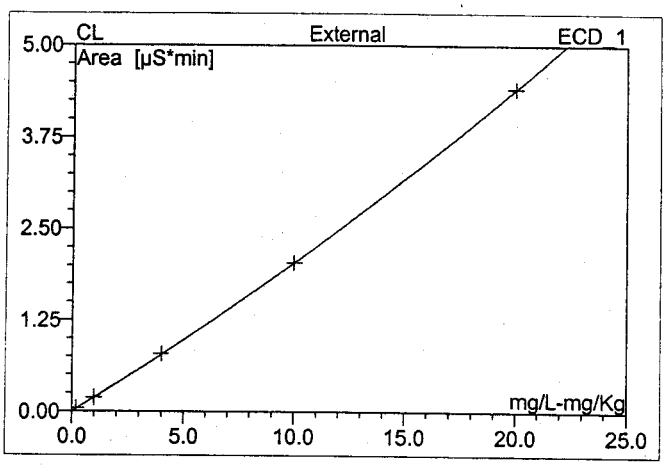


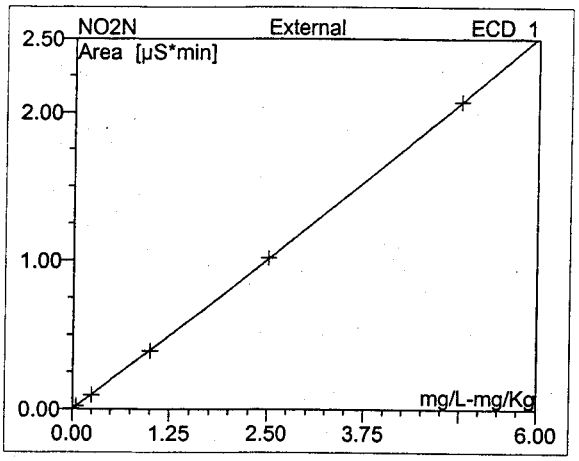
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

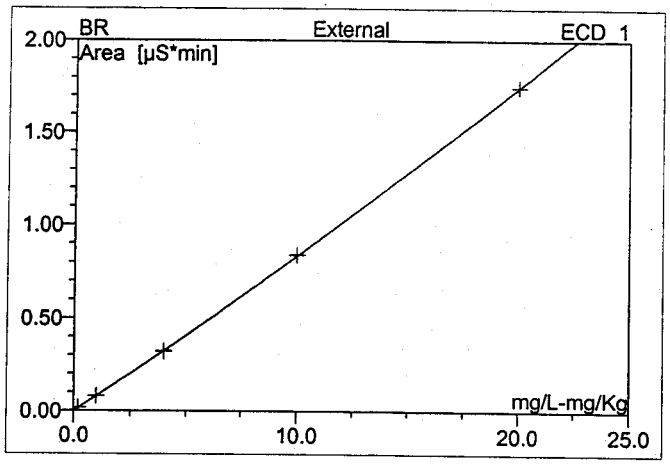
IC01 Calibration Batch Report

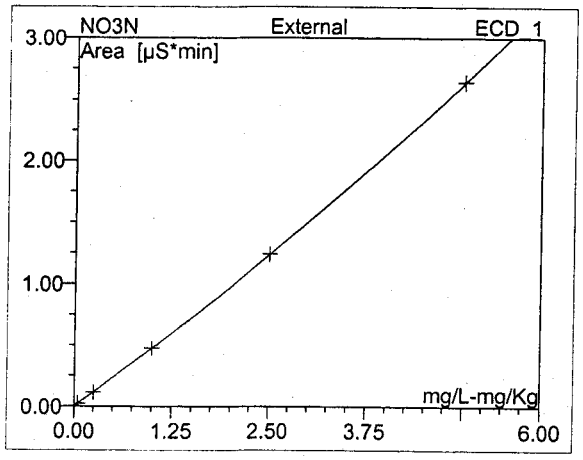
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

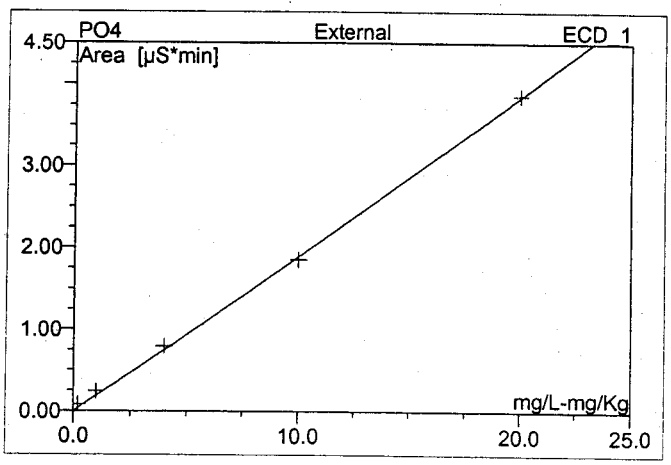












Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

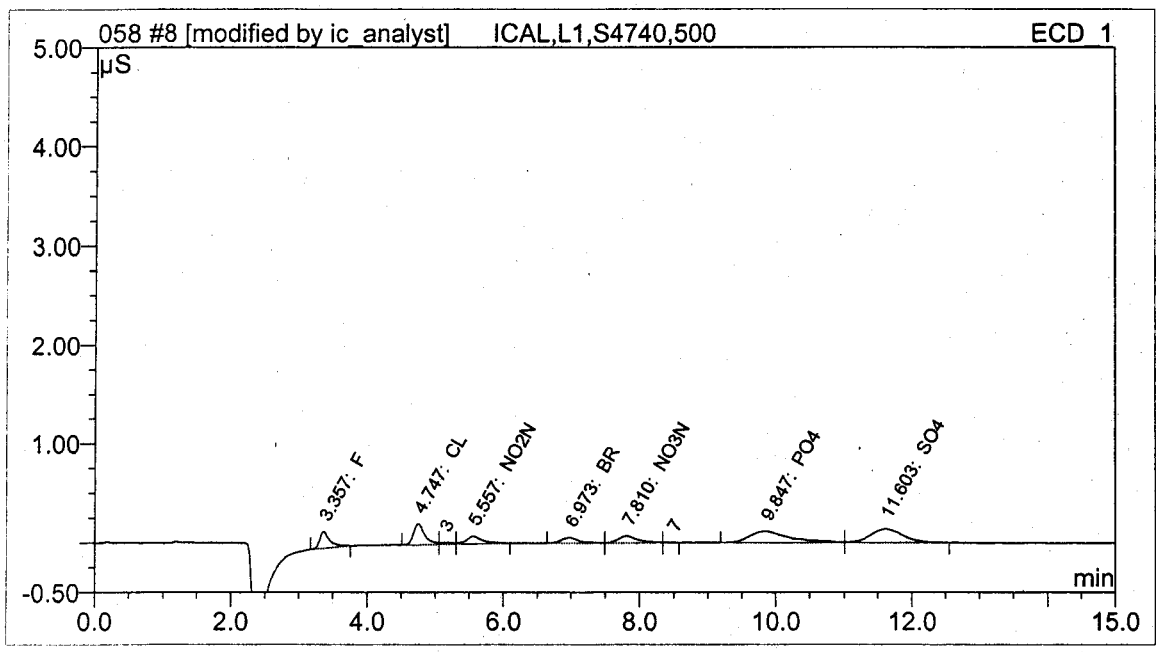
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



ANALYZED BY: _____

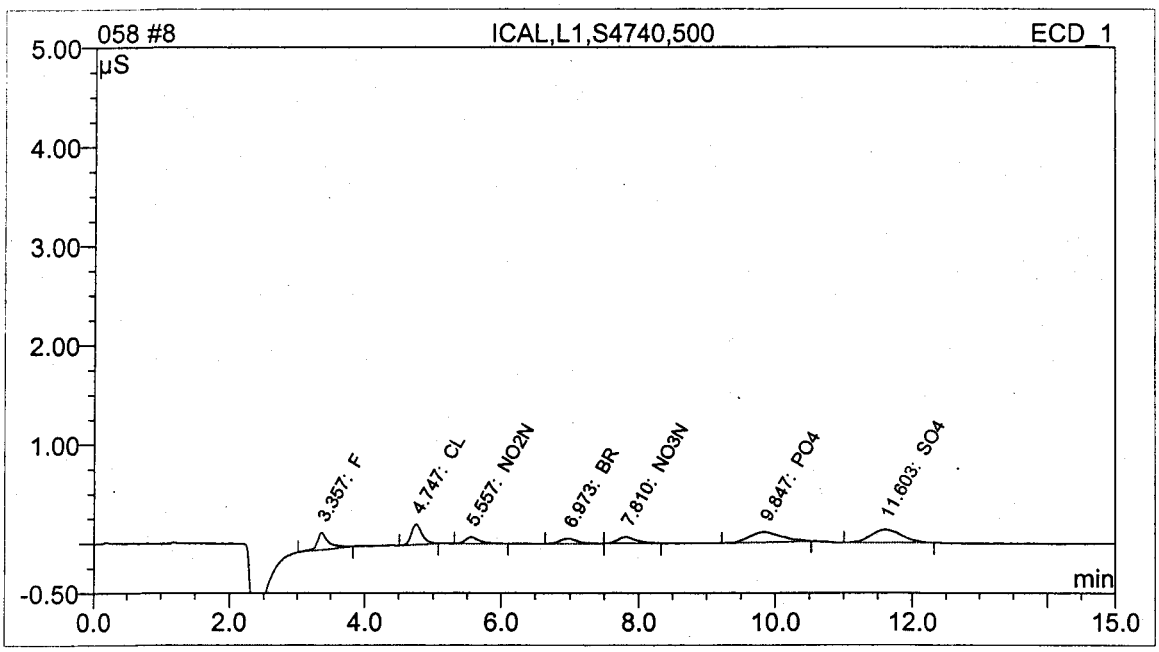
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

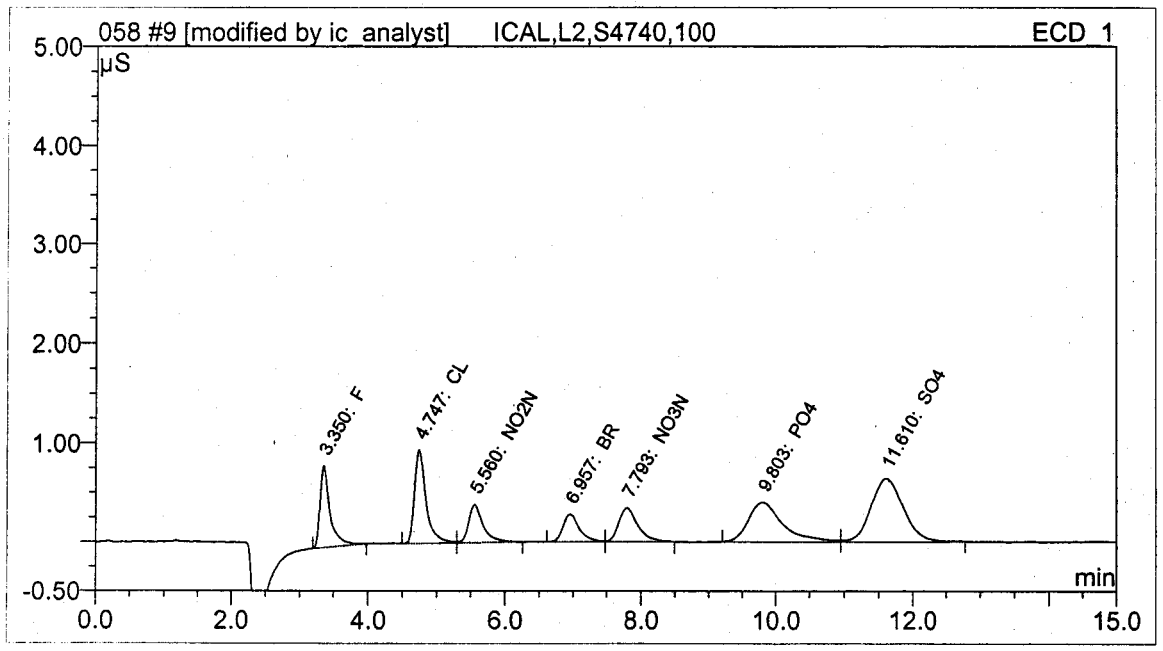
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

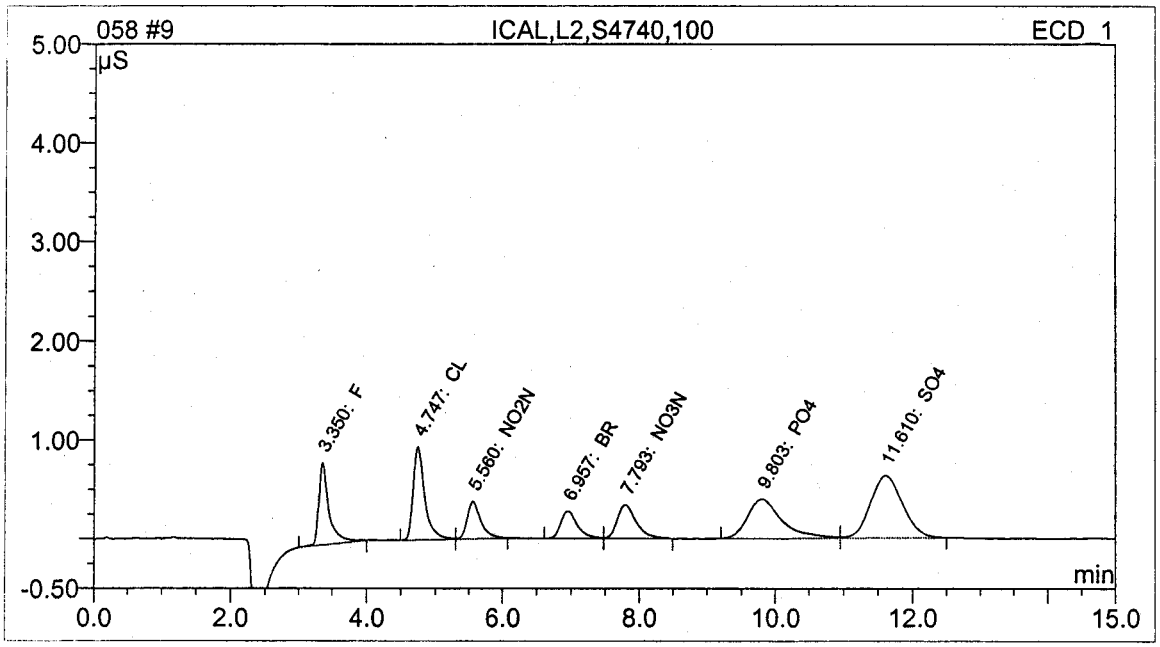
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

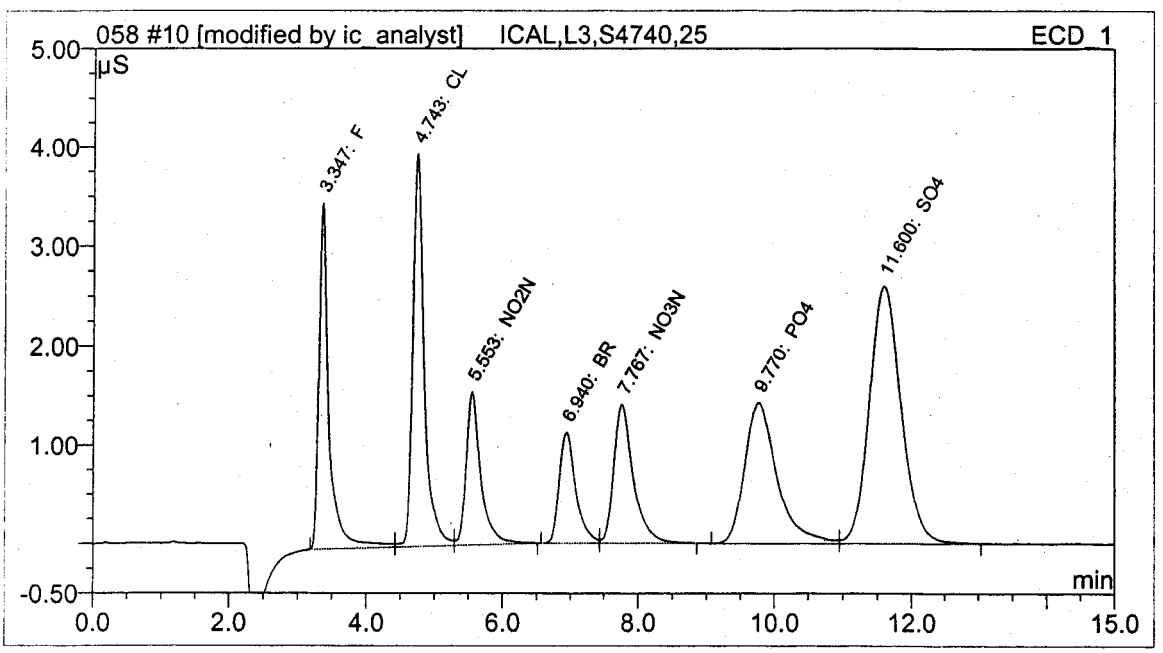
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

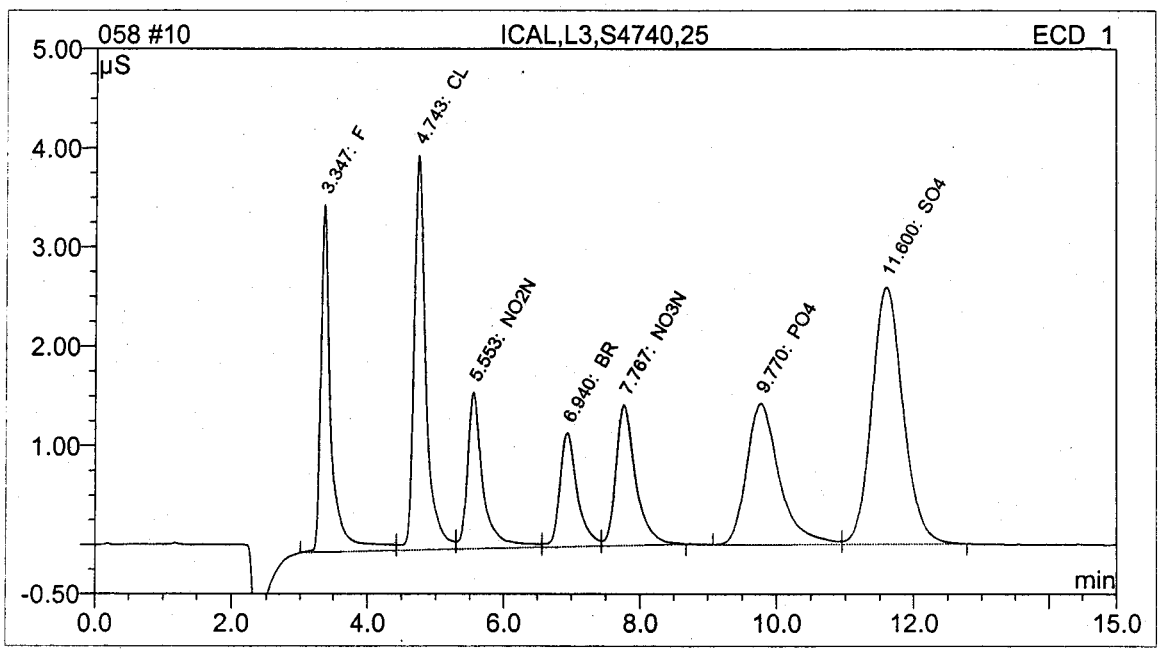
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

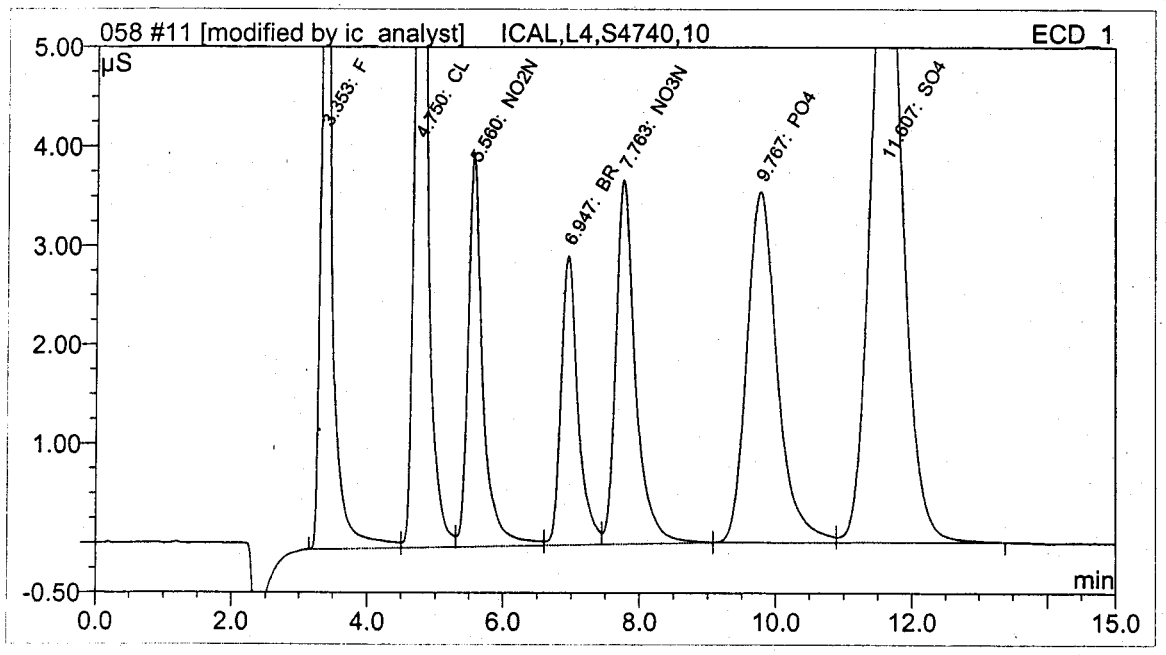
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

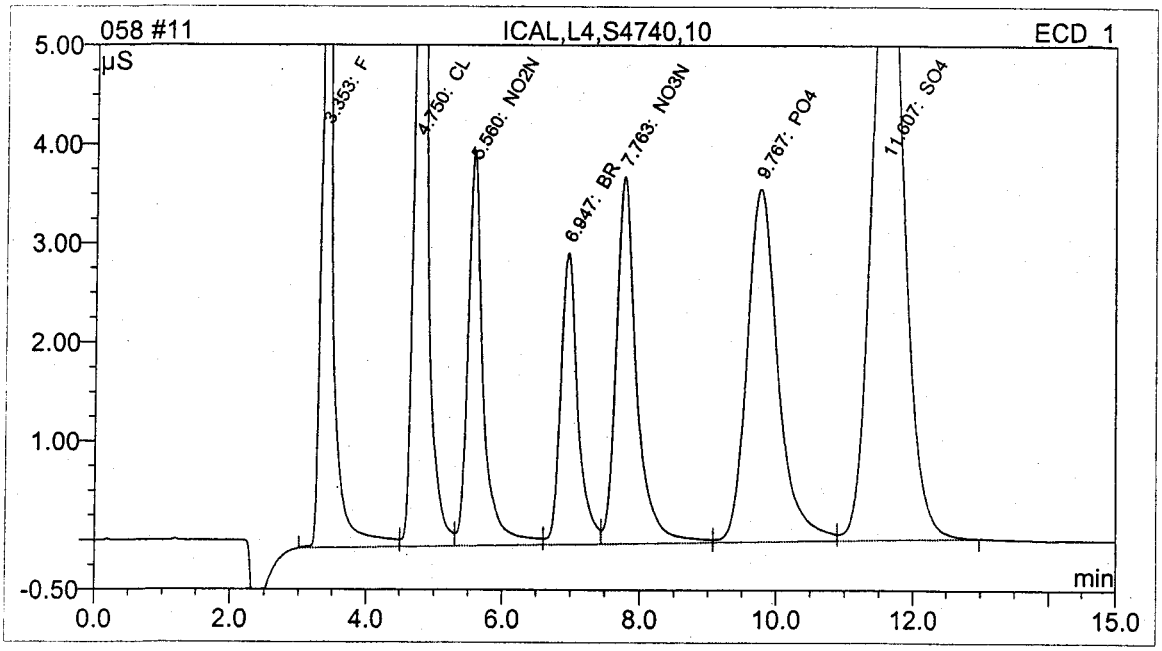
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

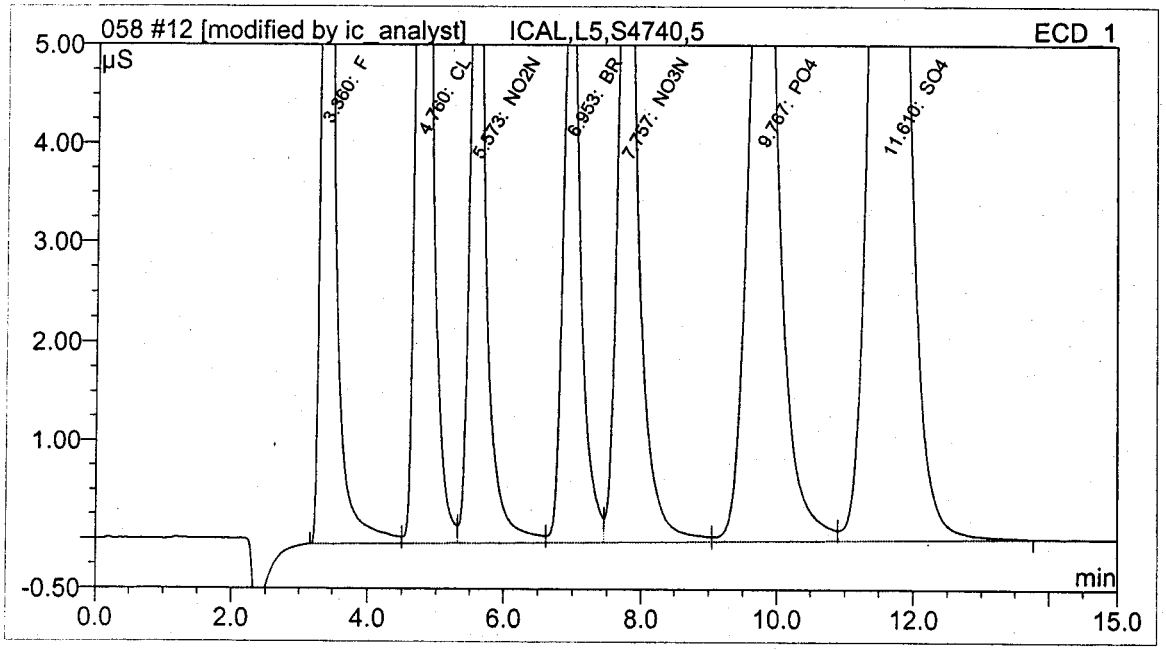
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

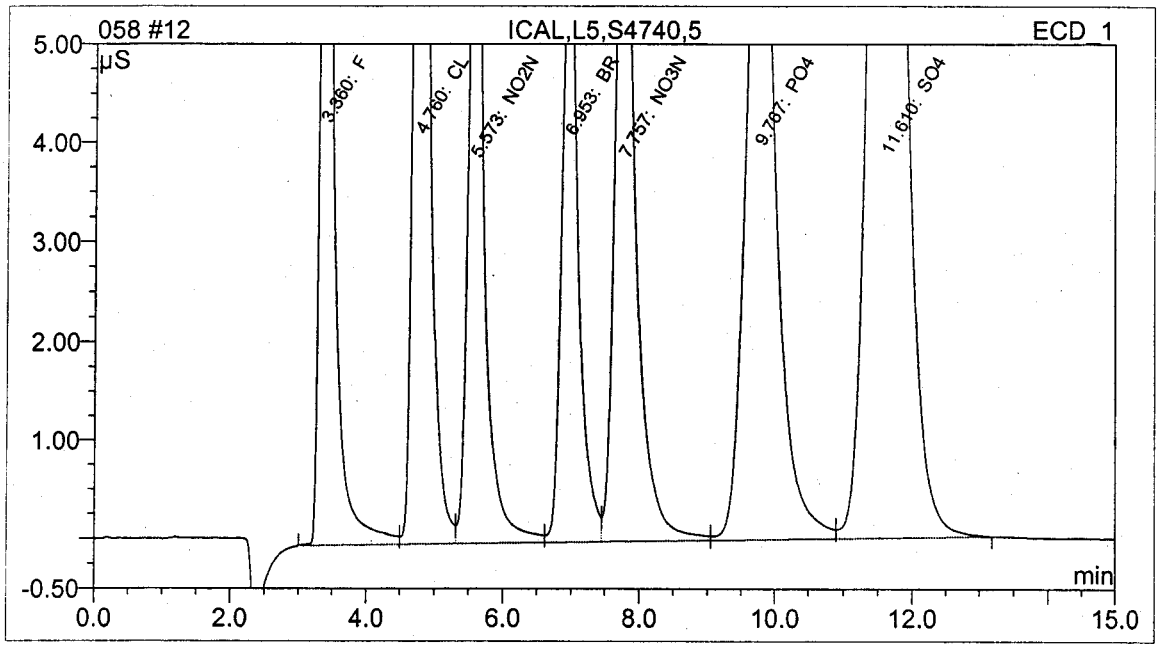
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260013 File : 058_13 Time : 27-FEB-2007 15:51
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

CW 3/1/07

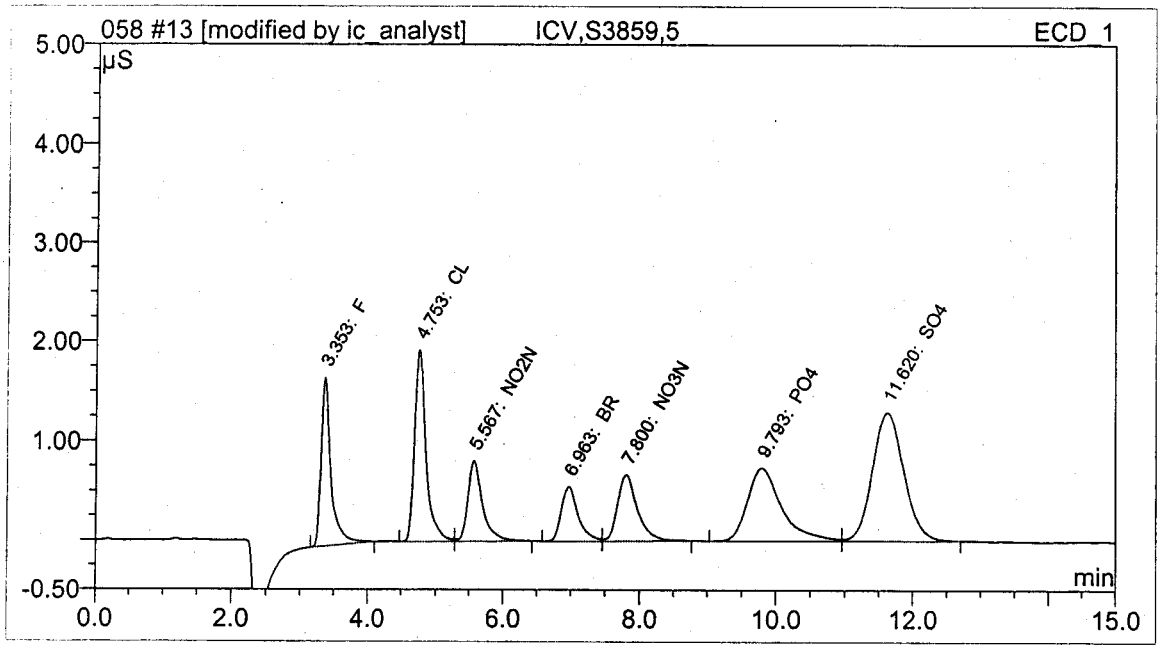
+=high bias v=ICV

607084260013

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

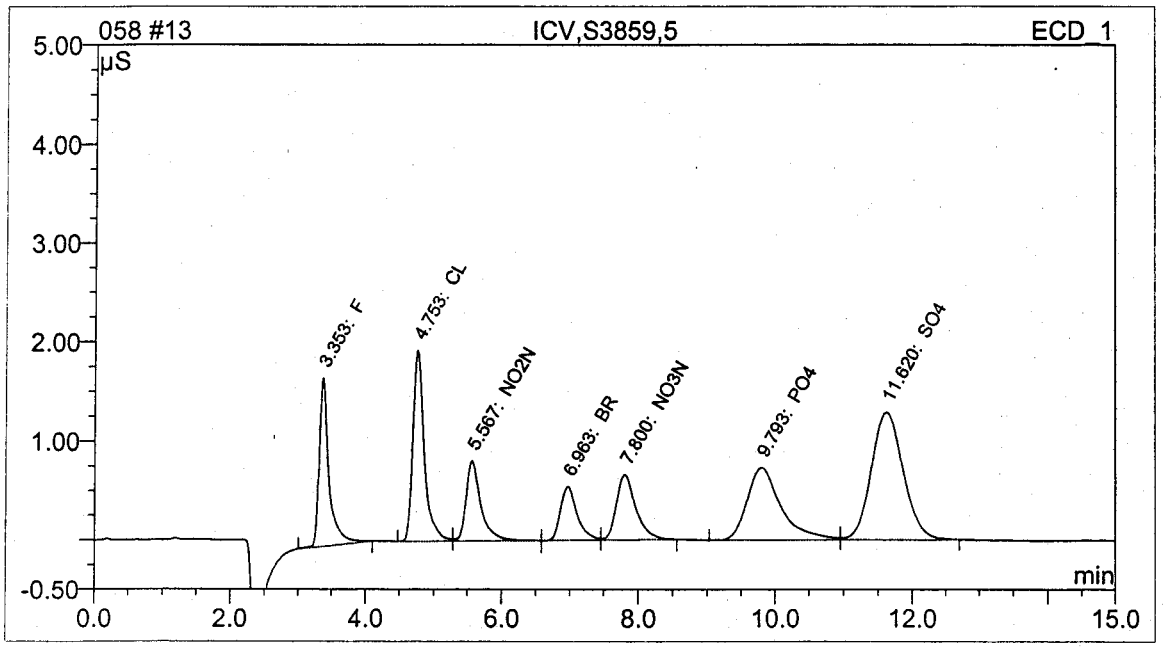
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260014 File : 058_14 Time : 27-FEB-2007 16:08
Cal : 607084260001 Caldate: 27-FEB-2007

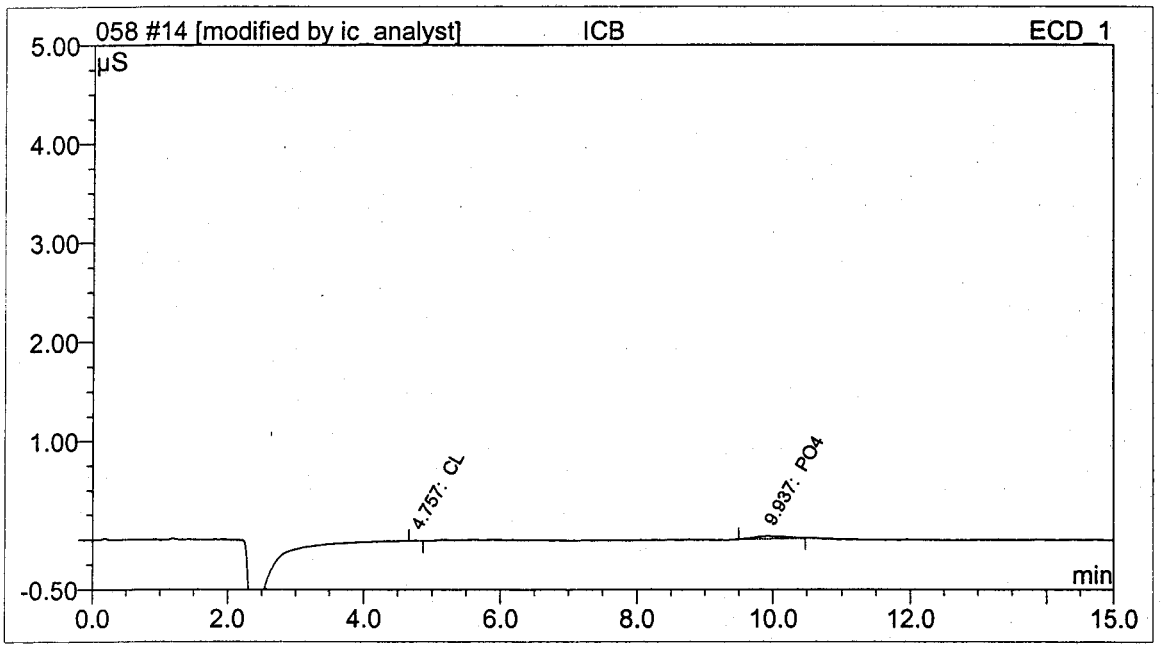
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

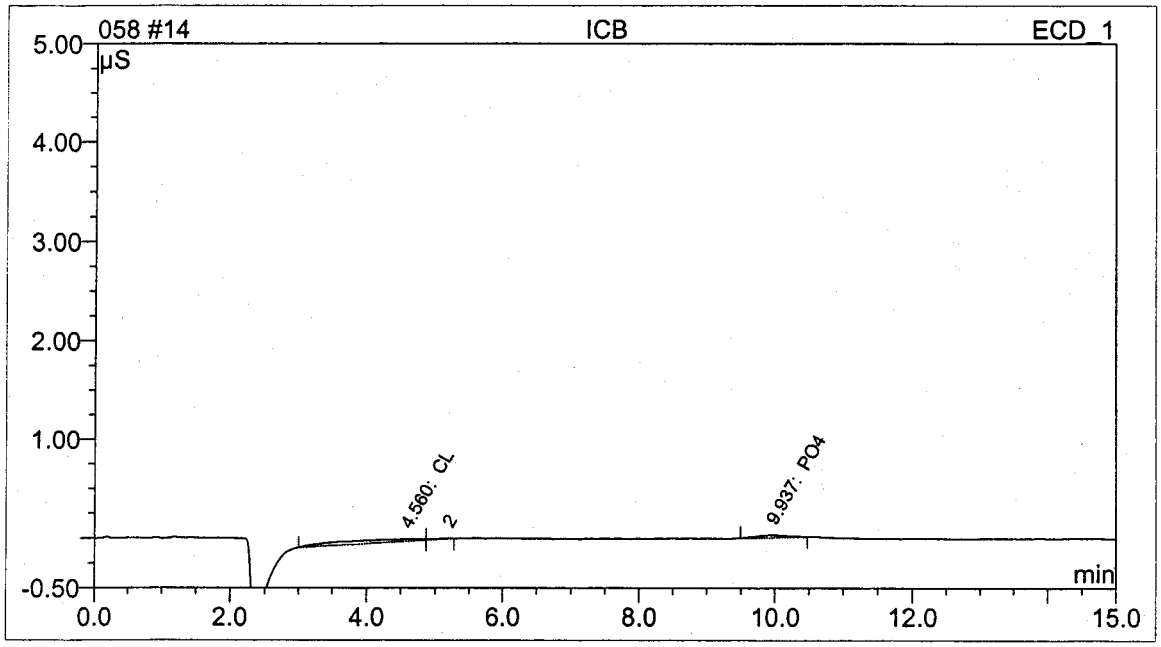
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260007 File : 058_7 Time : 27-FEB-2007 14:06
Cal : 606441349001 Caldate: 02-NOV-2006

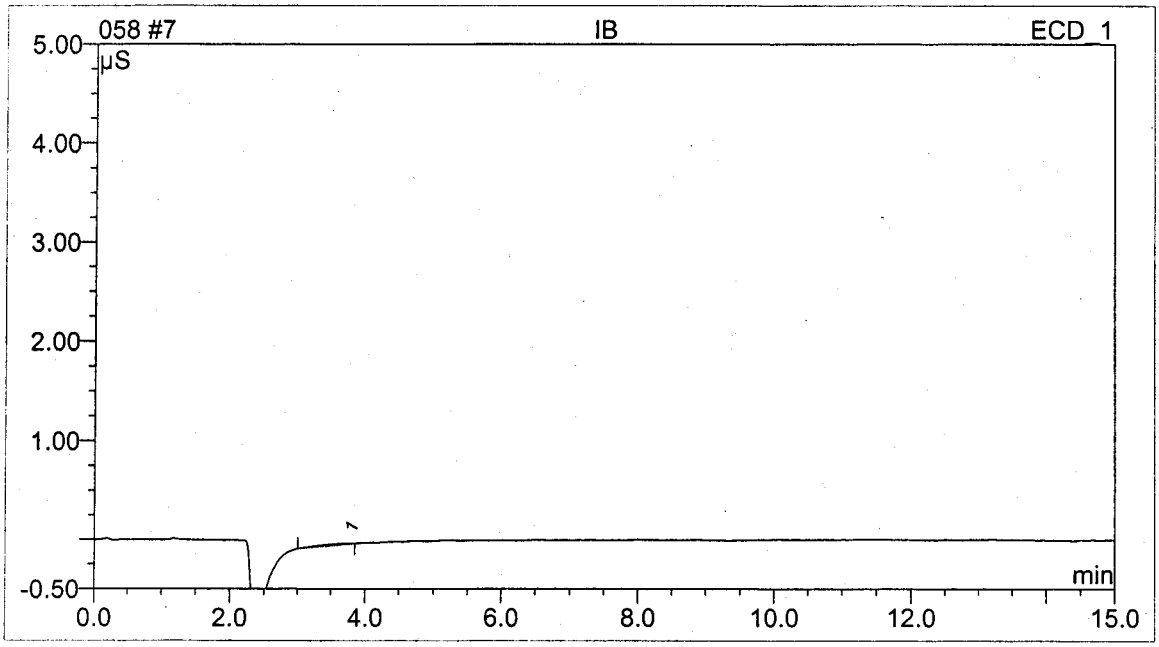
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MKS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193055 IC Water: EPA 300.0

Inst : IC03
Calnum : 627084271001
Units : mg/L

Date : 27-FEB-2007 14:33
X Axis : A

Reviewer: CW

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	627084271008	L1	27-FEB-2007 14:33	S4740 (500X)
L2	058_9	627084271009	L2	27-FEB-2007 14:51	S4740 (100X)
L3	058_10	627084271010	L3	27-FEB-2007 15:08	S4740 (25X)
L4	058_11	627084271011	L4	27-FEB-2007 15:26	S4740 (10X)
L5	058_12	627084271012	L5	27-FEB-2007 15:43	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1833	0.1915	0.2072	0.2186	0.2259	QORG		0.20810	0.001798	0.2053	1.000	0.990	
Chloride	0.1453	0.1434	0.1536	0.1638	0.1756	QORG		0.15062	0.001252	0.1564	1.000	0.990	
Nitrogen, Nitrite	0.3600	0.2864	0.3036	0.3155	0.3235	QORG		0.30443	0.003837	0.3178	1.000	0.990	
Nitrogen, Nitrate	0.3071	0.3598	0.3816	0.3889	0.4021	QORG		0.37541	0.005332	0.3679	1.000	0.990	
Sulfate	0.1015	0.1064	0.1115	0.1138	0.1217	QORG		0.10686	2.954E-4	0.1110	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627084271001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193055 IC Water
EPA 300.0

Inst : IC03
Calnum : 627084271001 Cal Date: 27-FEB-2007

ICV 627084271013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2053	0.1903	1.000	0.9075	mg/L	-9	10	
Chloride	0.1564	0.1449	2.000	1.894	mg/L	-5	10	
Nitrogen, Nitrite	0.3178	0.3118	0.5000	0.5089	mg/L	2	10	
Nitrogen, Nitrate	0.3679	0.3473	0.5000	0.4596	mg/L	-8	10	
Sulfate	0.1110	0.1099	5.000	5.070	mg/L	1	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 627084271001 Date : 27-FEB-2007 14:33
Units : mg/L X Axis : A Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	627084271008	L1	27-FEB-2007 14:33	S4740 (500X)
L2	058_9	627084271009	L2	27-FEB-2007 14:51	S4740 (100X)
L3	058_10	627084271010	L3	27-FEB-2007 15:08	S4740 (25X)
L4	058_11	627084271011	L4	27-FEB-2007 15:26	S4740 (10X)
L5	058_12	627084271012	L5	27-FEB-2007 15:43	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1833	0.1915	0.2072	0.2186	0.2259	QORG		0.20810	0.001798	0.2053	1.000	0.990	
Chloride	0.1453	0.1434	0.1536	0.1638	0.1756	QORG		0.15062	0.001252	0.1564	1.000	0.990	
Nitrogen, Nitrite	0.3600	0.2864	0.3036	0.3155	0.3235	QORG		0.30443	0.003837	0.3178	1.000	0.990	
Bromide	0.0847	0.0680	0.0682	0.0673	0.0688	QORG		0.06654	1.096E-4	0.0714	1.000	0.990	
Nitrogen, Nitrate	0.3071	0.3598	0.3816	0.3889	0.4021	QORG		0.37541	0.005332	0.3679	1.000	0.990	
Orthophosphate (as P)	0.2356	0.1465	0.1344	0.1318	0.1378	QORG		0.12872	4.480E-4	0.1572	1.000	0.990	
Sulfate	0.1015	0.1064	0.1115	0.1138	0.1217	QORG		0.10686	2.954E-4	0.1110	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MS 2/28/07

CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627084271001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 12:14:32 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 14

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 2/28/2007 12:09:08 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 12:31:55 PM	IC03-7AN_CAL
2	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 12:49:19 PM	IC03-7AN_CAL
3	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:06:44 PM	IC03-7AN_CAL
4	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:24:08 PM	IC03-7AN_CAL
5	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:41:33 PM	IC03-7AN_CAL
6	CAL-058	BLK		1.0000	IC03-7AN	Finished	2/27/2007 1:58:58 PM	IC03-7AN_CAL
7	CAL-058	IB		1.0000	IC03-7AN	Finished	2/27/2007 2:16:22 PM	IC03-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC03-7AN	Finished	2/27/2007 2:33:47 PM	IC03-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC03-7AN	Finished	2/27/2007 2:51:12 PM	IC03-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC03-7AN	Finished	2/27/2007 3:08:40 PM	IC03-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC03-7AN	Finished	2/27/2007 3:26:05 PM	IC03-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC03-7AN	Finished	2/27/2007 3:43:29 PM	IC03-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC03-7AN	Finished	2/27/2007 4:00:54 PM	IC03-7AN_CAL
14	CAL-058	ICB		1.0000	IC03-7AN	Finished	2/27/2007 4:18:19 PM	IC03-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 12:14:32 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 14

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 2/28/2007 12:09:08 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-058	BLK		Unknown	25.0	MRS	1
2	CAL-058	BLK		Unknown	25.0	MRS	1
3	CAL-058	BLK		Unknown	25.0	MRS	1
4	CAL-058	BLK		Unknown	25.0	MRS	1
5	CAL-058	BLK		Unknown	25.0	MRS	1
6	CAL-058	BLK		Unknown	25.0	MRS	1
7	CAL-058	IB		Unknown	25.0	MRS	1
8	CAL-058	ICAL,L1,S4740,500		Standard	25.0	MRS	1
9	CAL-058	ICAL,L2,S4740,100		Standard	25.0	MRS	1
10	CAL-058	ICAL,L3,S4740,25		Standard	25.0	MRS	1
11	CAL-058	ICAL,L4,S4740,10		Standard	25.0	MRS	1
12	CAL-058	ICAL,L5,S4740,5		Standard	25.0	MRS	1
13	CAL-058	ICV,S3859,5		Unknown	25.0	MRS	1
14	CAL-058	ICB		Unknown	25.0	MRS	1

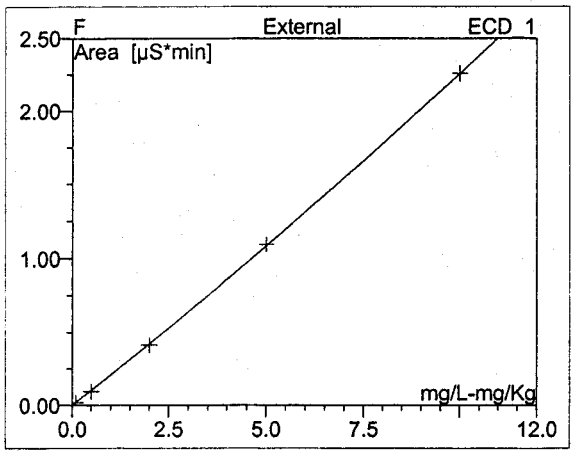
No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.018334	0.029068	0.017998	0.016931	0.015353	0.047115	0.050740
9	ICAL,L2,S474	0.095761	0.143442	0.071600	0.067961	0.089943	0.146530	0.266003
10	ICAL,L3,S474	0.414311	0.614264	0.303577	0.272992	0.381592	0.537417	1.114887
11	ICAL,L4,S474	1.092996	1.638279	0.788862	0.672712	0.972260	1.317974	2.846070
12	ICAL,L5,S474	2.259269	3.511711	1.617342	1.375325	2.010252	2.756365	6.083386

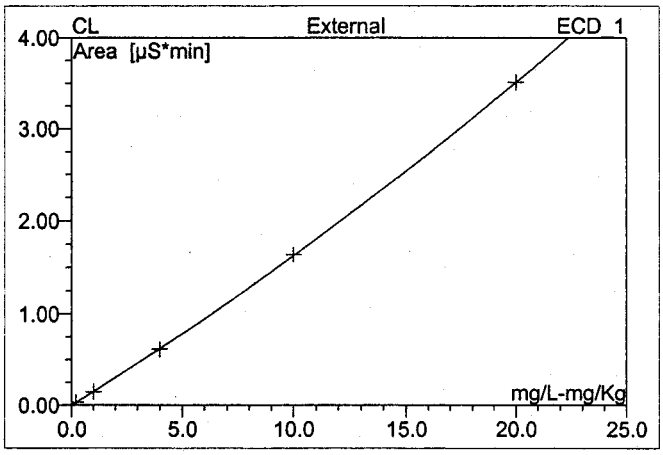
No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.138422	0.253824	0.101554	0.086294	0.077852	0.128440	0.173244
9	ICAL,L2,S474	0.720228	1.185394	0.467622	0.375066	0.415342	0.437346	0.865480
10	ICAL,L3,S474	3.223136	5.113794	1.962752	1.480972	1.778018	1.709926	3.712428
11	ICAL,L4,S474	8.800620	13.775214	5.009840	3.707364	4.591672	4.482448	9.792526
12	ICAL,L5,S474	19.325148	30.137754	10.413014	7.723142	9.734336	9.863310	21.364250

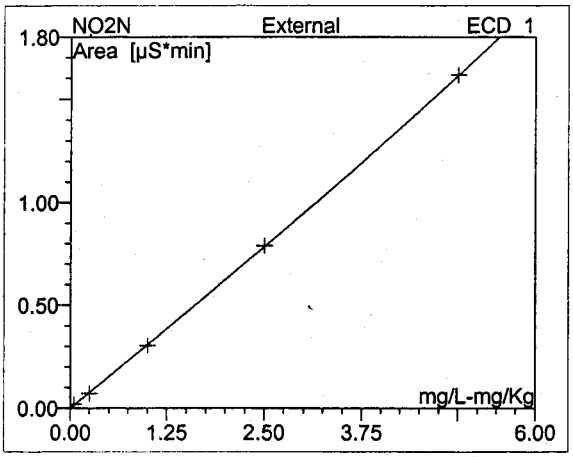
No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.088039	0.192680	0.059074	0.254344	0.040873	0.365573	0.474207
9	ICAL,L2,S474	0.458366	0.944934	0.234496	1.019639	0.238774	1.133915	2.472399
10	ICAL,L3,S474	1.957847	3.948701	0.984959	4.075330	1.002193	4.116231	10.148541
11	ICAL,L4,S474	5.033451	10.039366	2.511730	9.946991	2.500995	9.898348	24.917381
12	ICAL,L5,S474	9.993828	19.993131	4.997813	20.009926	4.999713	20.019344	50.013557

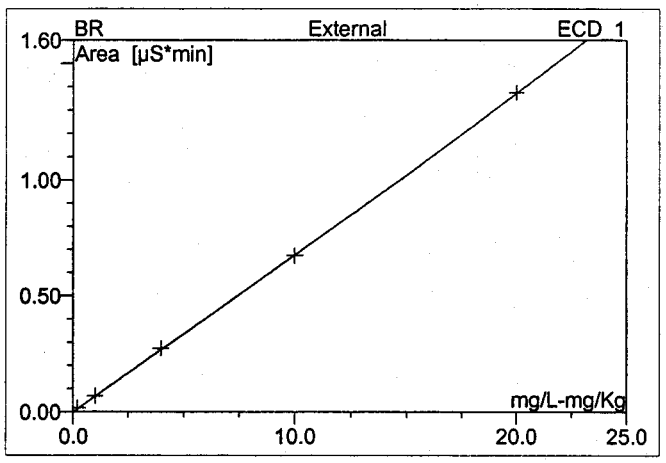
IC03 Calibration Batch Report

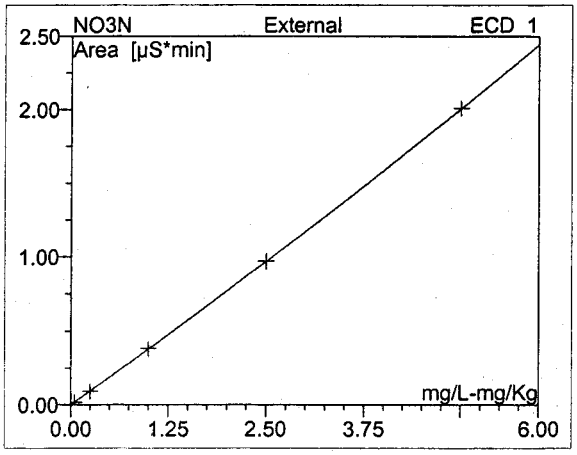
Sequence:	058	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 15:08	Run Time:	15.00

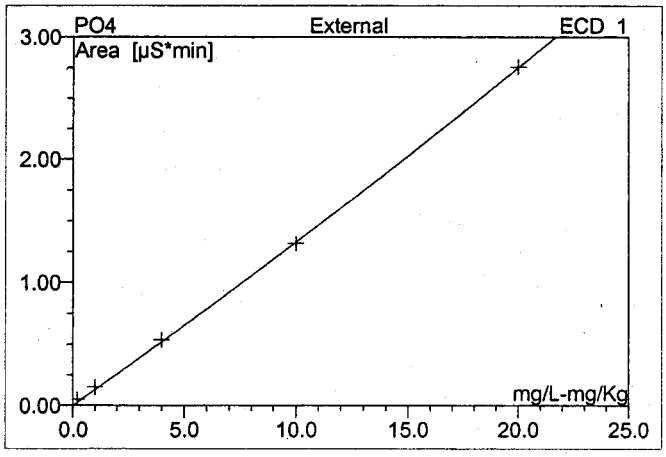




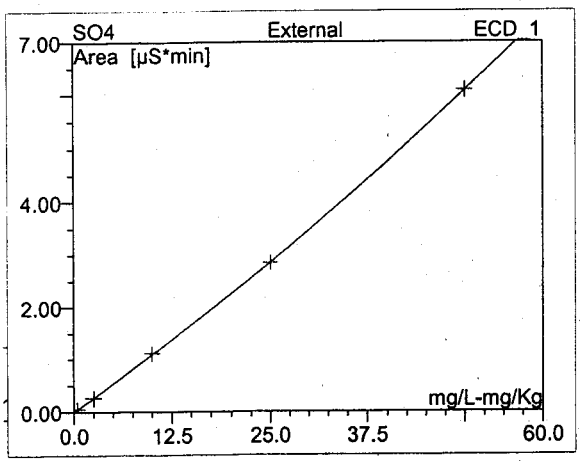








Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 15:08	*Run Time:*	15.00



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.930	F	Quad	5	0.000000	0.208095	0.001798	99.983204
2	4.310	CL	Quad	5	0.000000	0.150618	0.001252	99.936208
3	5.090	NO2N	Quad	5	0.000000	0.304434	0.003837	99.987979
4	6.473	BR	Quad	5	0.000000	0.066540	0.000110	99.992713
5	7.263	NO3N	Quad	5	0.000000	0.375413	0.005332	99.987620
7	9.440	PO4	Quad	5	0.000000	0.128716	0.000448	99.965498
8	11.350	SO4	Quad	5	0.000000	0.106859	0.000295	99.947315
AVERAGE:					0.000000	0.191525	0.001867	99.971505

Method File: IC03-7AN_CAL
Operator: ic_analyst

Printed: 2/28/2007 12:14:23 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Printed: 2/28/2007 12:14:23 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100
1	F	2.930 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	*CL*	*4.310 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*		*0.200000*	*1.000000*
3	NO2N	5.090 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.473 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.263 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.440 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.350 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5	Comment
1	F	2.930 min	2.000000	5.000000	10.000000	
2	*CL*	*4.310 min*	*4.000000*	*10.000000*	*20.000000*	
3	NO2N	5.090 min	1.000000	2.500000	5.000000	
4	BR	6.473 min	4.000000	10.000000	20.000000	
5	NO3N	7.263 min	1.000000	2.500000	5.000000	
6	PO4	9.440 min	4.000000	10.000000	20.000000	
7	SO4	11.350 min	10.000000	25.000000	50.000000	

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	2.930 min	1.000000	0.100000	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.310 min*	*1.000000*	*0.200000*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.090 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
4	BR	6.473 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.263 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
6	PO4	9.440 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
7	SO4	11.350 min	1.000000	0.500000	2.500000	10.000000	25.000000	50.000000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Comment
1	F	2.930 min	
2	*CL*	*4.310 min*	
3	NO2N	5.090 min	
4	BR	6.473 min	
5	NO3N	7.263 min	
6	PO4	9.440 min	
7	SO4	11.350 min	

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 12:08:32 PM by ic_analyst

Calibration:

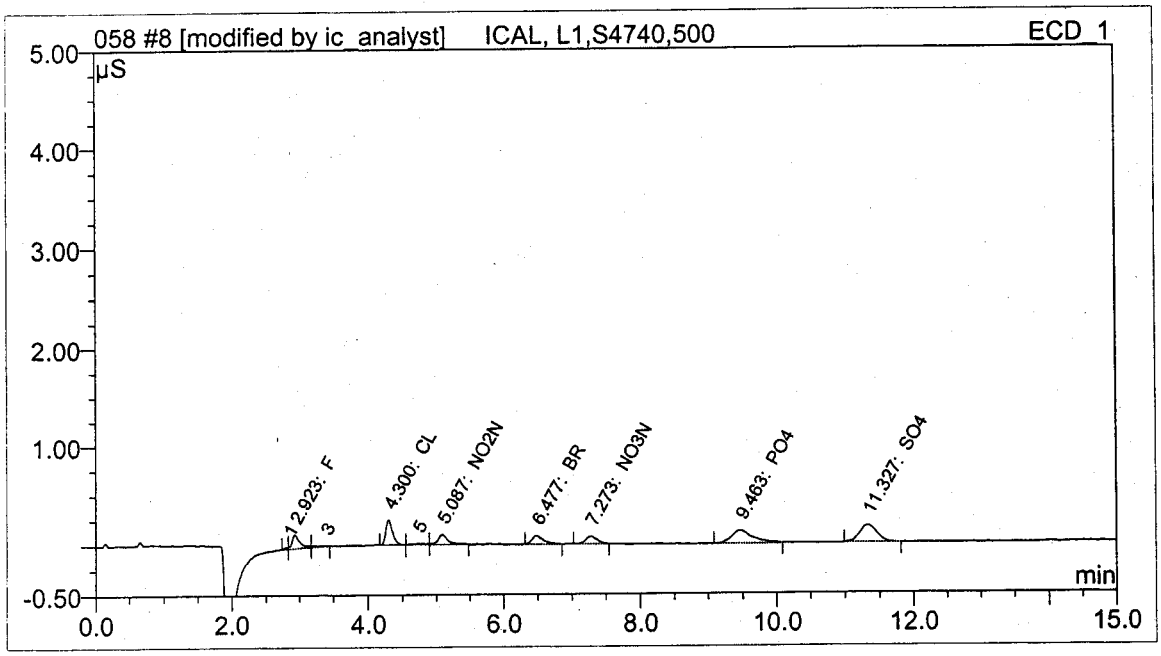
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	210	25.0	1.0000	1.0000	1.0000	2/27/2007 2:33:47 PM	Ok
2	☒	ICAL,L2,S4740,100	9	211	25.0	1.0000	1.0000	1.0000	2/27/2007 2:51:12 PM	Ok
3	☒	ICAL,L3,S4740,25	10	212	25.0	1.0000	1.0000	1.0000	2/27/2007 3:08:40 PM	Ok
4	☒	ICAL,L4,S4740,10	11	213	25.0	1.0000	1.0000	1.0000	2/27/2007 3:26:05 PM	Ok
5	☒	ICAL,L5,S4740,5	12	214	25.0	1.0000	1.0000	1.0000	2/27/2007 3:43:29 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.924	0.018334	0.0880	0.0880	
4	CL	4.300	0.029068	0.1927	0.1927	
6	NO2N	5.087	0.017998	0.0591	0.0591	
7	BR	6.477	0.016931	0.2543	0.2543	
8	NO3N	7.274	0.015353	0.0409	0.0409	
9	PO4	9.464	0.047115	0.3656	0.3656	
10	SO4	11.327	0.050740	0.4742	0.4742	



ANALYZED BY: _____

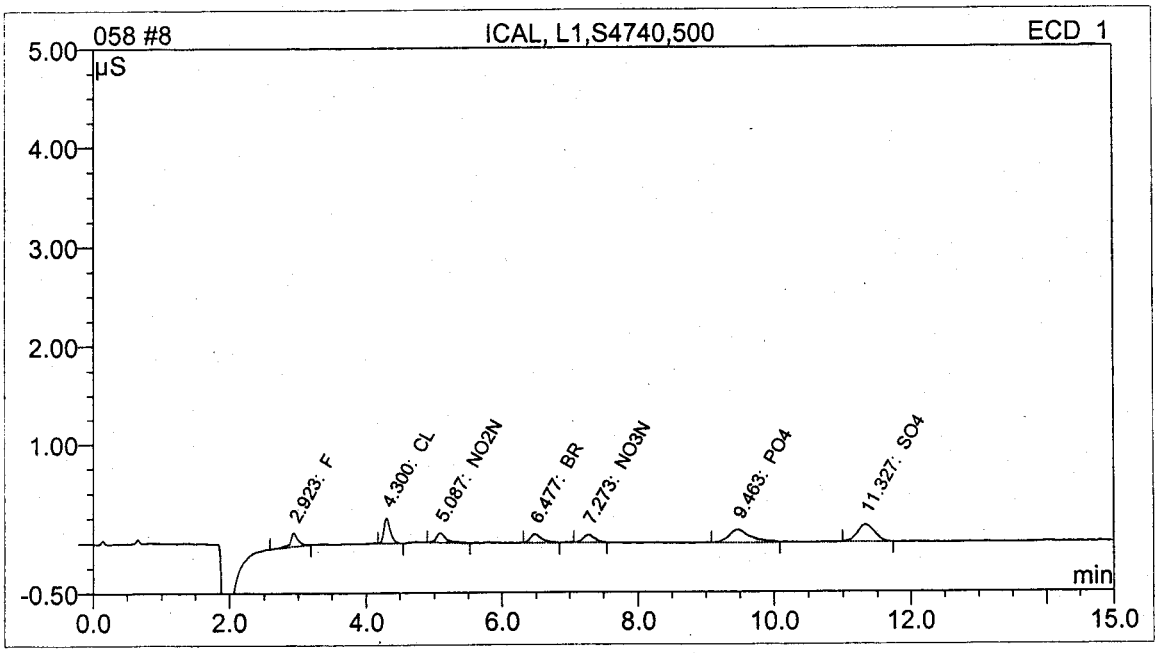
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.924	0.019177	0.0921	0.0921	
2	CL	4.300	0.029068	0.1927	0.1927	
3	NO2N	5.087	0.016424	0.0539	0.0539	
4	BR	6.477	0.016931	0.2543	0.2543	
5	NO3N	7.274	0.014888	0.0396	0.0396	
6	PO4	9.464	0.047115	0.3656	0.3656	
7	SO4	11.327	0.050277	0.4699	0.4699	



ANALYZED BY: _____

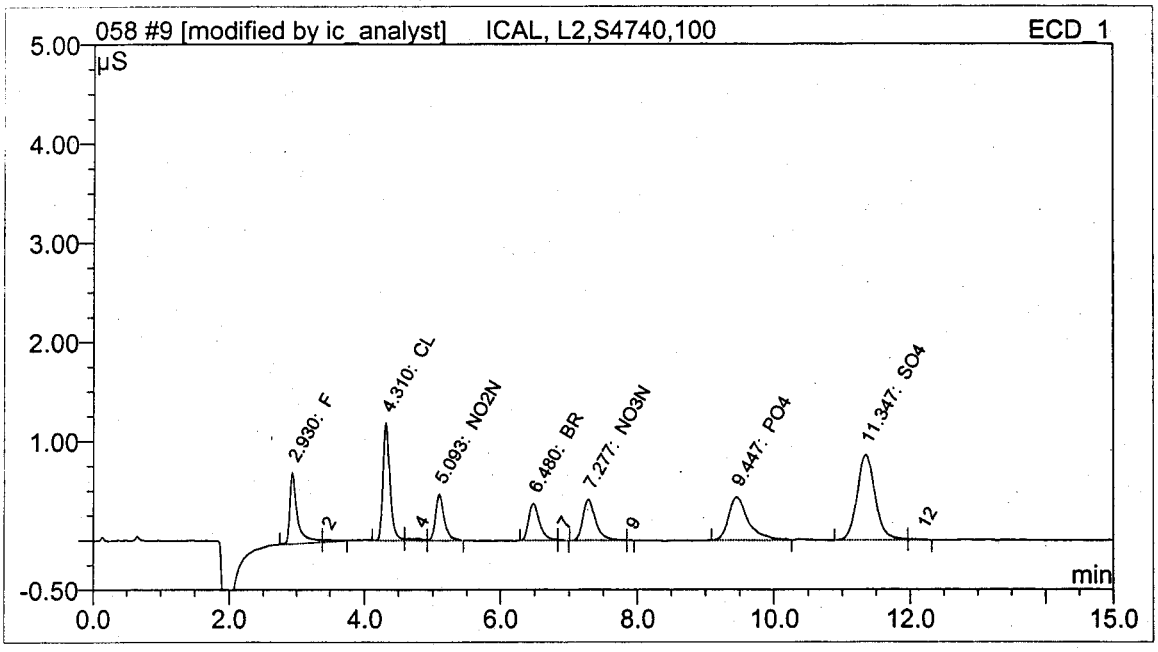
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.095761	0.4584	0.4584	
3	CL	4.310	0.143442	0.9449	0.9449	
5	NO2N	5.093	0.071600	0.2345	0.2345	
6	BR	6.480	0.067961	1.0196	1.0196	
8	NO3N	7.277	0.089943	0.2388	0.2388	
10	PO4	9.447	0.146530	1.1339	1.1339	
11	SO4	11.347	0.266003	2.4724	2.4724	



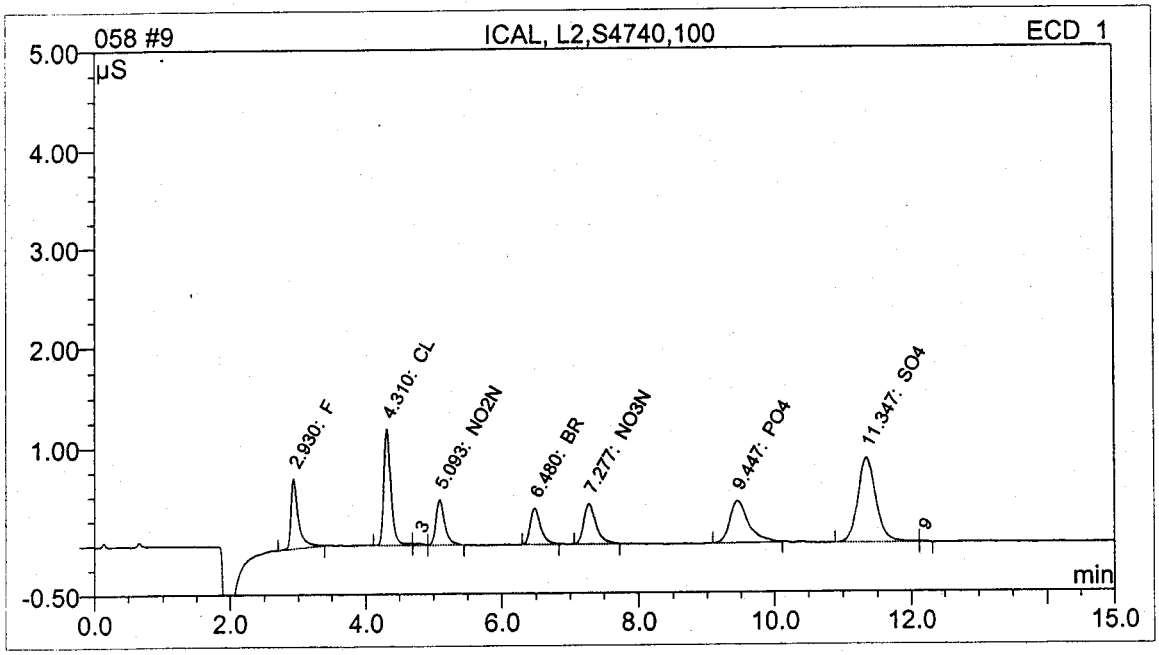
ANALYZED BY: REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.091342	0.4378	0.4378	
2	CL	4.310	0.145525	0.9582	0.9582	
4	NO2N	5.093	0.071600	0.2345	0.2345	
5	BR	6.480	0.066590	0.9996	0.9996	
6	NO3N	7.277	0.087219	0.2317	0.2317	
7	PO4	9.447	0.139792	1.0834	1.0834	
8	SO4	11.347	0.267502	2.4859	2.4859	



ANALYZED BY: _____

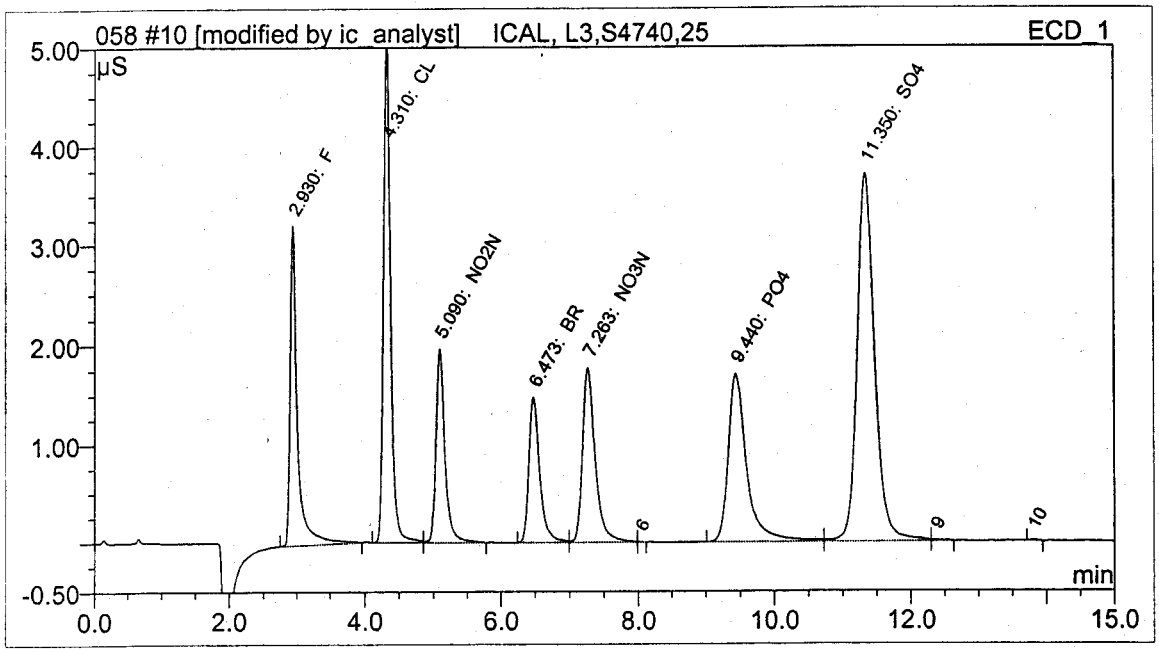
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.414311	1.9578	1.9578	
2	CL	4.310	0.614264	3.9487	3.9487	
3	NO2N	5.090	0.303577	0.9850	0.9850	
4	BR	6.473	0.272992	4.0753	4.0753	
5	NO3N	7.263	0.381592	1.0022	1.0022	
7	PO4	9.440	0.537417	4.1162	4.1162	
8	SO4	11.350	1.114887	10.1485	10.1485	



ANALYZED BY: _____

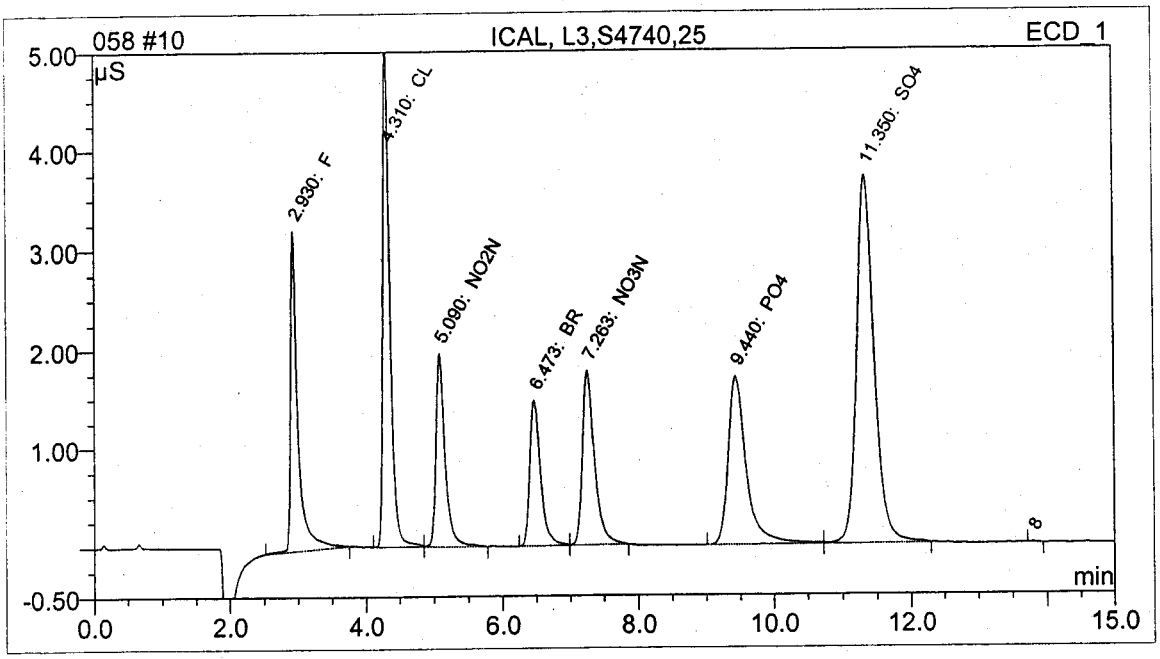
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.930	0.415473	1.9617	1.9617	
2	CL	4.310	0.614264	3.9487	3.9487	
3	NO2N	5.090	0.303577	0.9850	0.9850	
4	BR	6.473	0.270774	4.0521	4.0521	
5	NO3N	7.263	0.372240	0.9849	0.9849	
6	PO4	9.440	0.532494	4.0900	4.0900	
7	SO4	11.350	1.101728	10.0659	10.0659	



ANALYZED BY: _____

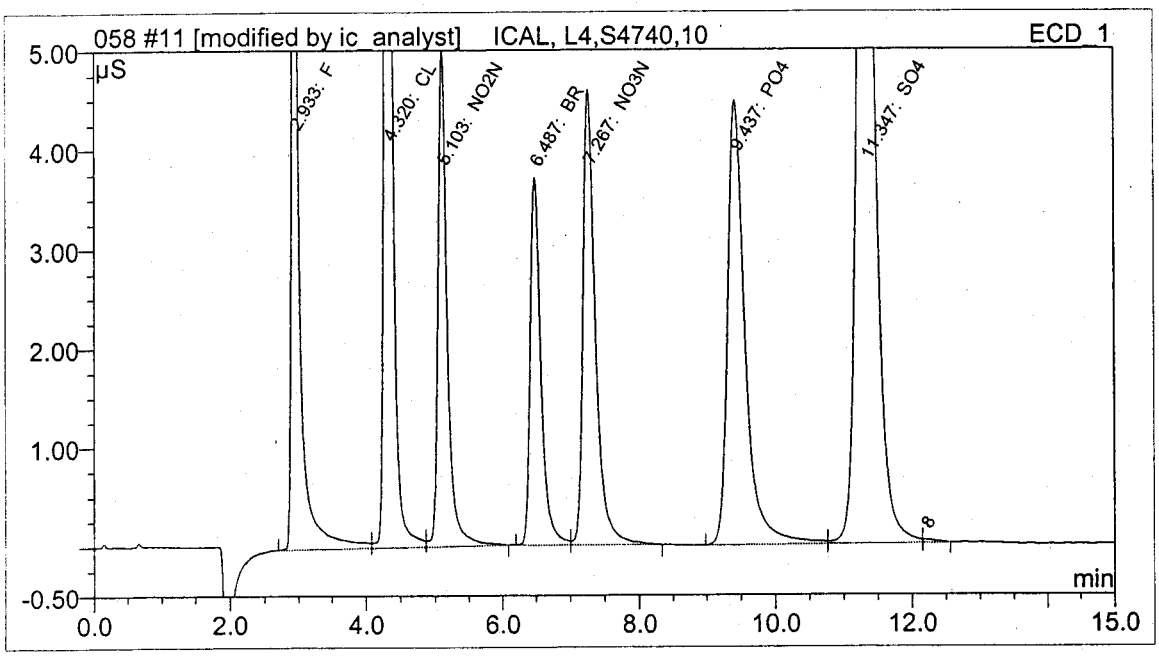
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:26 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	1.092996	5.0335	5.0335	
2	CL	4.320	1.638279	10.0394	10.0394	
3	NO2N	5.103	0.788862	2.5117	2.5117	
4	BR	6.487	0.672712	9.9470	9.9470	
5	NO3N	7.267	0.972260	2.5010	2.5010	
6	PO4	9.437	1.317974	9.8983	9.8983	
7	SO4	11.347	2.846070	24.9174	24.9174	



ANALYZED BY: _____

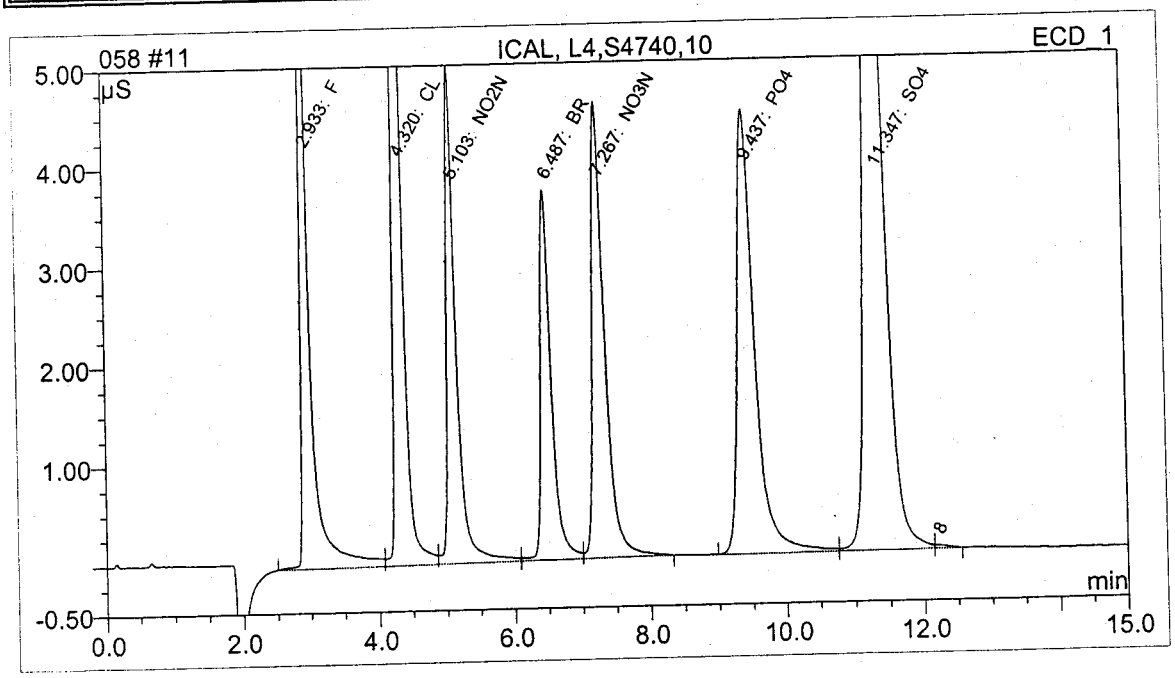
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:26 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	1.126637	5.0788	5.0788	
2	CL	4.320	1.657545	10.0728	10.0728	
3	NO2N	5.103	0.821761	2.5427	2.5427	
4	BR	6.487	0.694191	10.0424	10.0424	
5	NO3N	7.267	0.983893	2.5098	2.5098	
6	PO4	9.437	1.317974	9.8983	9.8983	
7	SO4	11.347	2.846070	24.9174	24.9174	



ANALYZED BY:

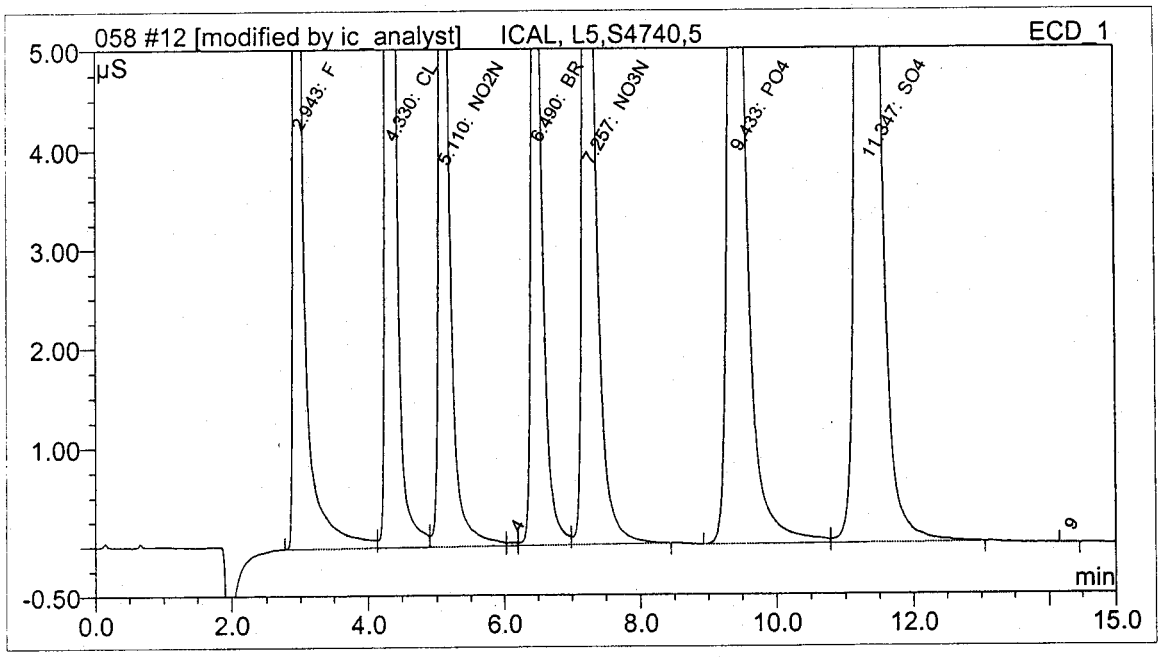
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:43 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.943	2.259269	9.9938	9.9938	
2	CL	4.330	3.511711	19.9931	19.9931	
3	NO2N	5.110	1.617342	4.9978	4.9978	
5	BR	6.490	1.375325	20.0099	20.0099	
6	NO3N	7.257	2.010252	4.9997	4.9997	
7	PO4	9.433	2.756365	20.0193	20.0193	
8	SO4	11.347	6.083386	50.0136	50.0136	



ANALYZED BY: _____

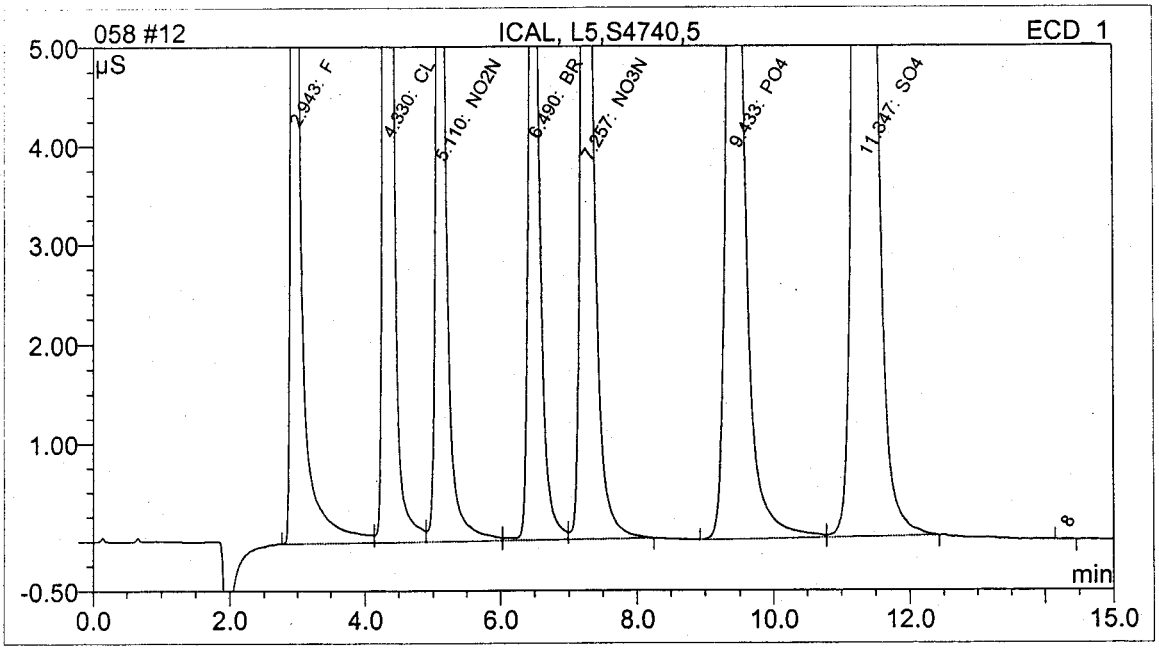
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:43 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.943	2.257818	9.9938	9.9938	
2	CL	4.330	3.509633	19.9930	19.9930	
3	NO2N	5.110	1.612622	4.9976	4.9976	
4	BR	6.490	1.375046	20.0099	20.0099	
5	NO3N	7.257	1.999557	4.9994	4.9994	
6	PO4	9.433	2.741472	20.0185	20.0185	
7	SO4	11.347	6.036318	50.0098	50.0098	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

nst : IC03
eqnum : 627084271013
al : 627084271001
tandards: S3859 (5X)

File : 058_13
Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2053	0.1903	1.000	0.9075	mg/L	-9	10	
Chloride	0.1564	0.1449	2.000	1.894	mg/L	-5	10	
Nitrogen, Nitrite	0.3178	0.3118	0.5000	0.5089	mg/L	2	10	
Bromide	0.0714	0.0729	2.000	2.182	mg/L	9	10	
Nitrogen, Nitrate	0.3679	0.3473	0.5000	0.4596	mg/L	-8	10	
Orthophosphate (as P)	0.1572	0.1331	2.000	2.053	mg/L	3	10	
Sulfate	0.1110	0.1099	5.000	5.070	mg/L	1	10	

MAS 2/28/07

CW 3/1/07

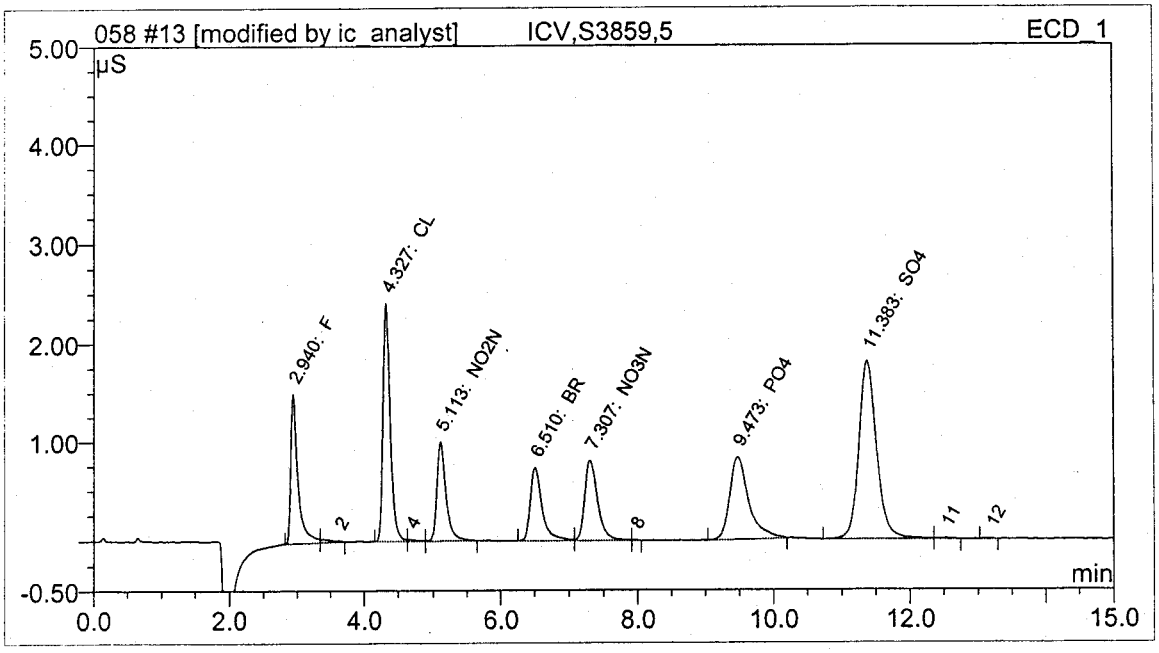
627084271013

00655

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:00 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.190327	0.9075	0.9075	
3	CL	4.327	0.289798	1.8942	1.8942	
5	NO2N	5.113	0.155920	0.5089	0.5089	
6	BR	6.510	0.145725	2.1822	2.1822	
7	NO3N	7.307	0.173666	0.4596	0.4596	
9	PO4	9.473	0.266202	2.0534	2.0534	
10	SO4	11.383	0.549382	5.0701	5.0701	



ANALYZED BY: _____

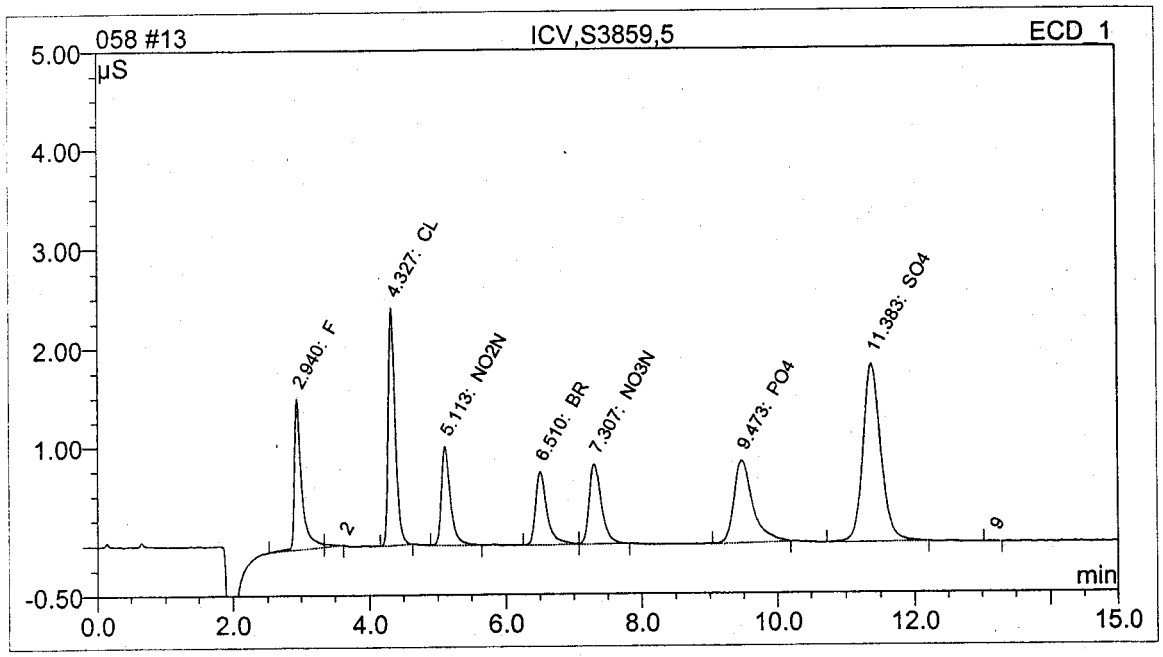
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:00 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.196919	0.9387	0.9387	
3	CL	4.327	0.285826	1.8687	1.8687	
4	NO2N	5.113	0.155087	0.5062	0.5062	
5	BR	6.510	0.143748	2.1527	2.1527	
6	NO3N	7.307	0.167654	0.4438	0.4438	
7	PO4	9.473	0.266202	2.0534	2.0534	
8	SO4	11.383	0.540901	4.9929	4.9929	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 627084271014
Cal : 627084271001

File : 058_14
Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:18

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.01251]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	[0.05197]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

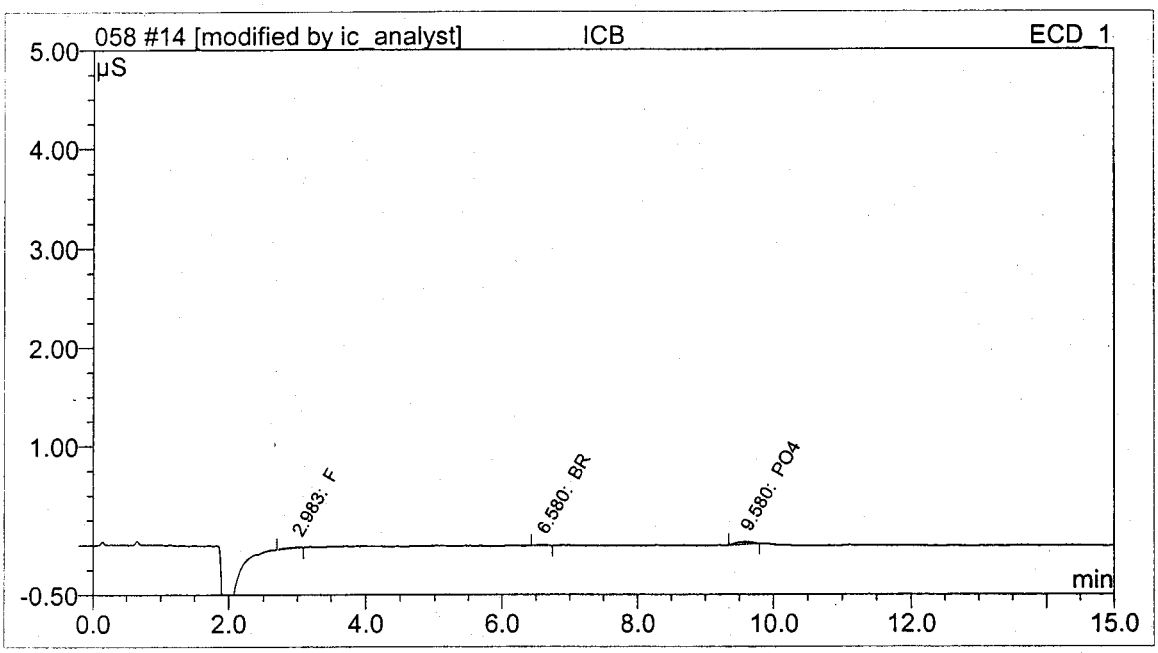
MS 2/28/07

627084271014

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:18 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.983	0.002604	0.0125	0.0125	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
2	BR	6.580	0.001438	0.0216	0.0216	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.580	0.006690	0.0520	0.0520	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

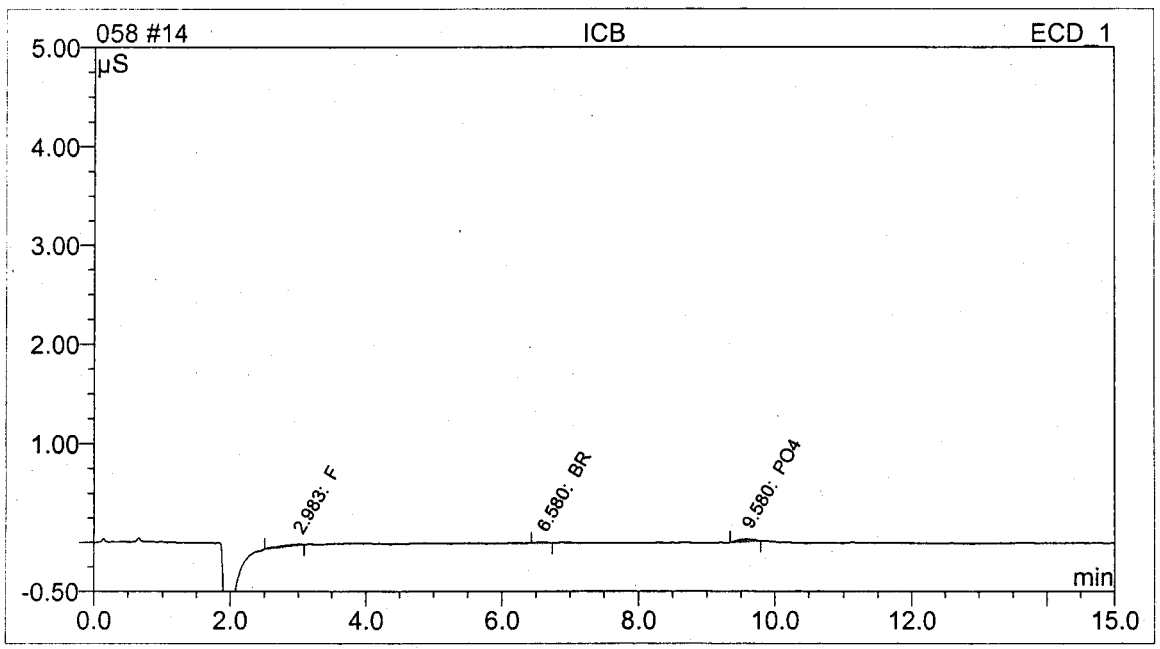
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:18 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.983	0.005579	0.0268	0.0268	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
2	BR	6.580	0.001438	0.0216	0.0216	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.580	0.006690	0.0520	0.0520	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627084271007 File : 058_7 Time : 27-FEB-2007 14:16
Cal : 626477375001 Caldate: 27-NOV-2006

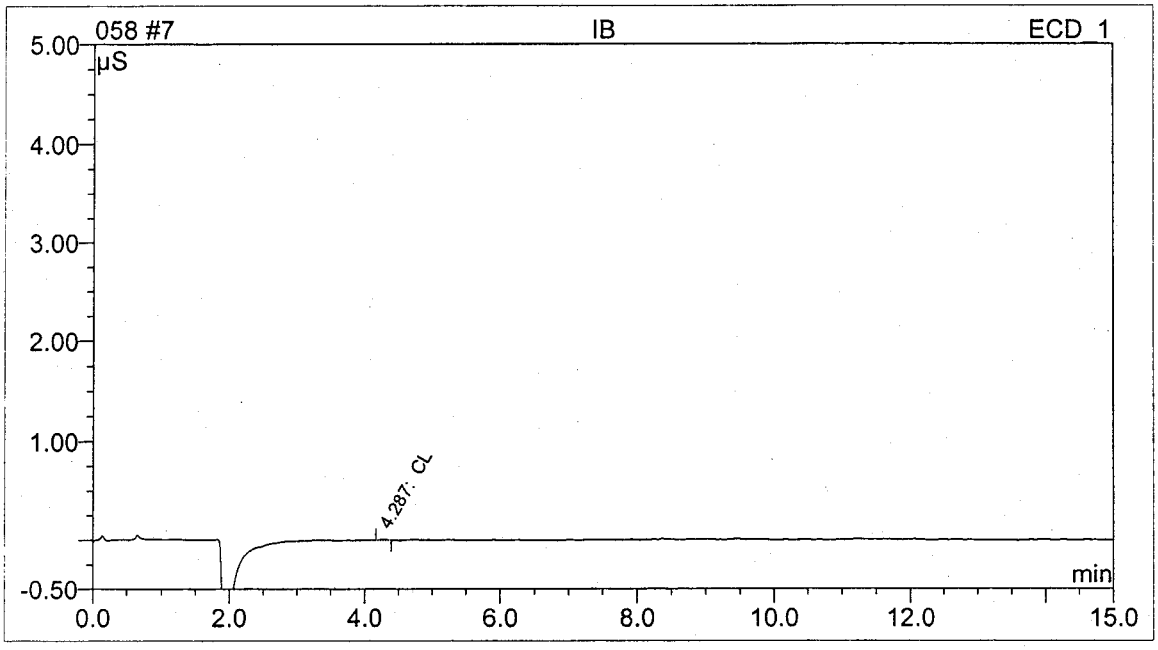
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.287	0.001229	0.0082	0.0082	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.2987	0.2930	0.5000	0.4964	mg/L	-1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.2987	0.2967	2.0000	1.9867	mg/L	-1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.2987	0.3096	5.0000	5.0555	mg/L	1	10	
IC01	P	607087173050	02-MAR-2007 00:34	607084260001	27-FEB-2007	0.2987	0.3059	2.0000	2.0470	mg/L	2	10	
IC01	P	607087173052	02-MAR-2007 01:09	607084260001	27-FEB-2007	0.2987	0.3111	2.0000	2.0813	mg/L	4	10	
IC01	P	607087173063	02-MAR-2007 04:22	607084260001	27-FEB-2007	0.2987	0.3118	5.0000	5.0900	mg/L	2	10	
IC01	P	607087173077	02-MAR-2007 08:27	607084260001	27-FEB-2007	0.2987	0.2954	2.0000	1.9779	mg/L	-1	10	
IC01	P	607087173091	02-MAR-2007 12:32	607084260001	27-FEB-2007	0.2987	0.3052	5.0000	4.9866	mg/L	0	10	
IC01	P	607087173103	02-MAR-2007 16:02	607084260001	27-FEB-2007	0.2987	0.3001	2.0000	2.0086	mg/L	0	10	
IC01	P	607087173111	02-MAR-2007 18:31	607084260001	27-FEB-2007	0.2987	0.2696	0.5000	0.4569	mg/L	-9	10	

CONTINUING CALIBRATION SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.2028	0.1933	1.0000	1.0206	mg/L	2	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.2028	0.1962	4.0000	4.0376	mg/L	1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.2028	0.2075	10.000	10.151	mg/L	2	10	
IC01	P	607087173052	02-MAR-2007 01:09	607084260001	27-FEB-2007	0.2028	0.2030	4.0000	4.1719	mg/L	4	10	
IC01	P	607087173063	02-MAR-2007 04:22	607084260001	27-FEB-2007	0.2028	0.2097	10.000	10.249	mg/L	2	10	
IC01	P	607087173077	02-MAR-2007 08:27	607084260001	27-FEB-2007	0.2028	0.1994	4.0000	4.1019	mg/L	3	10	
IC01	P	607087173091	02-MAR-2007 12:32	607084260001	27-FEB-2007	0.2028	0.2069	10.000	10.126	mg/L	1	10	
IC01	P	607087173103	02-MAR-2007 16:02	607084260001	27-FEB-2007	0.2028	0.2001	4.0000	4.1155	mg/L	3	10	
IC01	P	607087173111	02-MAR-2007 18:31	607084260001	27-FEB-2007	0.2028	0.1896	1.0000	1.0011	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.4045	0.3975	0.2500	0.2513	mg/L	1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.4045	0.3929	1.0000	0.9860	mg/L	-1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.4045	0.4104	2.5000	2.5342	mg/L	1	10	
IC01	P	607087173050	02-MAR-2007 00:34	607084260001	27-FEB-2007	0.4045	0.4058	1.0000	1.0180	mg/L	2	10	
IC01	P	607087173052	02-MAR-2007 01:09	607084260001	27-FEB-2007	0.4045	0.4086	1.0000	1.0251	mg/L	3	10	
IC01	P	607087173063	02-MAR-2007 04:22	607084260001	27-FEB-2007	0.4045	0.4138	2.5000	2.5548	mg/L	2	10	
IC01	P	607087173077	02-MAR-2007 08:27	607084260001	27-FEB-2007	0.4045	0.3950	1.0000	0.9912	mg/L	-1	10	
IC01	P	607087173091	02-MAR-2007 12:32	607084260001	27-FEB-2007	0.4045	0.4123	2.5000	2.5455	mg/L	2	10	
IC01	P	607087173103	02-MAR-2007 16:02	607084260001	27-FEB-2007	0.4045	0.4014	1.0000	1.0071	mg/L	1	10	
IC01	P	607087173111	02-MAR-2007 18:31	607084260001	27-FEB-2007	0.4045	0.3833	0.2500	0.2424	mg/L	-3	10	

CONTINUING CALIBRATION SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	RF/CF	Avg RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.4834	0.4697	0.2500	0.2524	mg/L	1	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.4834	0.4884	1.0000	1.0269	mg/L	3	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.4834	0.5082	2.5000	2.5608	mg/L	2	10	
IC01	P	607087173050	02-MAR-2007 00:34	607084260001	27-FEB-2007	0.4834	0.4947	1.0000	1.0396	mg/L	4	10	
IC01	P	607087173052	02-MAR-2007 01:09	607084260001	27-FEB-2007	0.4834	0.4957	1.0000	1.0416	mg/L	4	10	
IC01	P	607087173063	02-MAR-2007 04:22	607084260001	27-FEB-2007	0.4834	0.5096	2.5000	2.5672	mg/L	3	10	
IC01	P	607087173077	02-MAR-2007 08:27	607084260001	27-FEB-2007	0.4834	0.4936	1.0000	1.0374	mg/L	4	10	
IC01	P	607087173091	02-MAR-2007 12:32	607084260001	27-FEB-2007	0.4834	0.5084	2.5000	2.5617	mg/L	2	10	
IC01	P	607087173103	02-MAR-2007 16:02	607084260001	27-FEB-2007	0.4834	0.4871	1.0000	1.0242	mg/L	2	10	
IC01	P	607087173111	02-MAR-2007 18:31	607084260001	27-FEB-2007	0.4834	0.4644	0.2500	0.2495	mg/L	0	10	
IC03	P	627088544007	02-MAR-2007 10:52	627084271001	27-FEB-2007	0.3679	0.3588	0.2500	0.2382	mg/L	-5	10	
IC03	P	627088544018	02-MAR-2007 14:30	627084271001	27-FEB-2007	0.3679	0.3742	1.0000	0.9830	mg/L	-2	10	
IC03	P	627088544030	02-MAR-2007 18:33	627084271001	27-FEB-2007	0.3679	0.3895	2.5000	2.5049	mg/L	0	10	
IC03	P	627088544043	02-MAR-2007 22:29	627084271001	27-FEB-2007	0.3679	0.3687	1.0000	0.9689	mg/L	-3	10	

CONTINUING CALIBRATION SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607087173007	01-MAR-2007 12:00	607084260001	27-FEB-2007	0.1465	0.1394	2.5000	2.5705	mg/L	3	10	
IC01	P	607087173018	01-MAR-2007 15:14	607084260001	27-FEB-2007	0.1465	0.1405	10.000	10.137	mg/L	1	10	
IC01	P	607087173030	01-MAR-2007 18:44	607084260001	27-FEB-2007	0.1465	0.1466	25.000	25.332	mg/L	1	10	
IC01	P	607087173050	02-MAR-2007 00:34	607084260001	27-FEB-2007	0.1465	0.1420	10.000	10.240	mg/L	2	10	
IC01	P	607087173052	02-MAR-2007 01:09	607084260001	27-FEB-2007	0.1465	0.1429	10.000	10.305	mg/L	3	10	
IC01	P	607087173063	02-MAR-2007 04:22	607084260001	27-FEB-2007	0.1465	0.1471	25.000	25.409	mg/L	2	10	
IC01	P	607087173077	02-MAR-2007 08:27	607084260001	27-FEB-2007	0.1465	0.1417	10.000	10.222	mg/L	2	10	
IC01	P	607087173091	02-MAR-2007 12:32	607084260001	27-FEB-2007	0.1465	0.1452	25.000	25.101	mg/L	0	10	
IC01	P	607087173103	02-MAR-2007 16:02	607084260001	27-FEB-2007	0.1465	0.1406	10.000	10.147	mg/L	1	10	
IC01	P	607087173111	02-MAR-2007 18:31	607084260001	27-FEB-2007	0.1465	0.1375	2.5000	2.5355	mg/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173019 File : 060_19 Time : 01-MAR-2007 15:31
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173031 File : 060_31 Time : 01-MAR-2007 19:01
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01001]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173051 File : 060_51 Time : 02-MAR-2007 00:51
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01834]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173064 File : 060_64 Time : 02-MAR-2007 04:39
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.007072]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173078 File : 060_78 Time : 02-MAR-2007 08:44
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.009479]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173092 File : 060_92 Time : 02-MAR-2007 12:49
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.04035]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173104 File : 060_104 Time : 02-MAR-2007 16:20
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.008814]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607087173112 File : 060_112 Time : 02-MAR-2007 18:48
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01134]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627088544019 File : 061_19 Time : 02-MAR-2007 14:48
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02611]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627088544031 File : 061_31 Time : 02-MAR-2007 18:50
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193055 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627088544044 File : 061_44 Time : 02-MAR-2007 22:46
Cal : 627084271001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 627084271 Instrument: IC03 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:31	1.0						
002	058_2	X	BLK			27-FEB-2007 12:49	1.0						
003	058_3	X	BLK			27-FEB-2007 13:06	1.0						
004	058_4	X	BLK			27-FEB-2007 13:24	1.0						
005	058_5	X	BLK			27-FEB-2007 13:41	1.0						
006	058_6	X	BLK			27-FEB-2007 13:58	1.0						
007	058_7	IB				27-FEB-2007 14:16	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:33	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:51	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 15:08	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:26	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:43	1.0					1	
013	058_13	ICV				27-FEB-2007 16:00	1.0		25			2	
014	058_14	ICB				27-FEB-2007 16:18	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	060_7	CCV	L	122657		01-MAR-2007 12:00	1.0	1		25			1	
008	060_8	CCB/MB	QC377322	122657	Water	01-MAR-2007 12:18	1.0			25				
009	060_9	BS	QC377323	122657	Water	01-MAR-2007 12:36	1.0			25			1	
010	060_10	BSD	QC377324	122657	Water	01-MAR-2007 12:53	1.0			25			1	
011	060_11	SAMPLE	193027-001	122657	Water	01-MAR-2007 13:11	1.0	2		25				2:SO4=100.065
012	060_12	MSS	193027-002	122657	Water	01-MAR-2007 13:28	1.0	4		25				2:SO4=72.8606
013	060_13	SAMPLE	193027-004	122657	Water	01-MAR-2007 13:46	1.0	2		25				2:SO4=101.551
014	060_14	SAMPLE	193027-005	122657	Water	01-MAR-2007 14:04	1.0	2		25				2:SO4=72.1854
015	060_15	SAMPLE	193027-007	122657	Water	01-MAR-2007 14:21	1.0	3		25				3:SO4=82.3755
016	060_16	SAMPLE	193027-008	122657	Water	01-MAR-2007 14:39	1.0	3		25				3:CL=160.943
017	060_17	SAMPLE	193027-011	122657	Water	01-MAR-2007 14:56	1.0	2		25				2:CL=163.070
018	060_18	CCV	M	122657		01-MAR-2007 15:14	1.0			25			1	
019	060_19	CCB		122657		01-MAR-2007 15:31	1.0			25				
020	060_20	MS	QC377325	122657	Water	01-MAR-2007 15:49	1.02		1	25			1	2:SO4=75.9503
021	060_21	MSD	QC377326	122657	Water	01-MAR-2007 16:06	1.02		1	25			1	2:SO4=76.0348
022	060_22	SAMPLE	193027-012	122657	Water	01-MAR-2007 16:24	1.0	1		25				1:SO4=144.362
023	060_23	SAMPLE	193055-009	122657	Water	01-MAR-2007 16:41	100.0			25				
024	060_24	MSS	193055-010	122657	Water	01-MAR-2007 16:59	50.0	1		25				
025	060_25	SAMPLE	193055-011	122657	Water	01-MAR-2007 17:16	100.0			25				
026	060_26	SAMPLE	193055-012	122657	Water	01-MAR-2007 17:34	100.0			25				
027	060_27	SAMPLE	193055-013	122657	Water	01-MAR-2007 17:51	100.0			25				
028	060_28	MS	QC377327	122657	Water	01-MAR-2007 18:09	50.0			25			1	
029	060_29	MSD	QC377328	122657	Water	01-MAR-2007 18:26	50.0			25			1	
030	060_30	CCV	H	122657		01-MAR-2007 18:44	1.0			25			1	
031	060_31	CCB		122657		01-MAR-2007 19:01	1.0	1		25				
032	060_32	SAMPLE	193055-009	122657	Water	01-MAR-2007 19:19	1.0	1		25				1:SO4=327.629
033	060_33	X	BLK	122657		01-MAR-2007 19:36	1.0							
034	060_34	SAMPLE	193055-009	122657	Water	01-MAR-2007 19:54	2.0	1		25				1:SO4=189.065
035	060_35	X	BLK	122657		01-MAR-2007 20:11	1.0							
036	060_36	MSS	193055-010	122657	Water	01-MAR-2007 20:29	1.0	2		25				1:SO4=152.546
037	060_37	X	BLK	122657		01-MAR-2007 20:46	1.0							

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
038	060_38	SAMPLE	193055-011	122657	Water	01-MAR-2007 21:04	2.0	2		25				2:CL=160.992
039	060_39	X	BLK	122657		01-MAR-2007 21:21	1.0							
040	060_40	SAMPLE	193055-011	122657	Water	01-MAR-2007 21:39	3.0	2		25				2:CL=142.793
041	060_41	X	BLK	122657		01-MAR-2007 21:56	1.0							
042	060_42	SAMPLE	193055-012	122657	Water	01-MAR-2007 22:14	2.0	2		25				2:SO4=69.8461
043	060_43	X	BLK	122657		01-MAR-2007 22:31	1.0							
044	060_44	SAMPLE	193055-012	122657	Water	01-MAR-2007 22:49	3.0	1		25				1:CL=137.873
045	060_45	X	BLK	122657		01-MAR-2007 23:06	1.0							
046	060_46	SAMPLE	193055-013	122657	Water	01-MAR-2007 23:24	1.0	1		25				1:SO4=83.2531
047	060_47	X	BLK	122657		01-MAR-2007 23:41	1.0							
048	060_48	SAMPLE	193055-013	122657	Water	01-MAR-2007 23:59	2.0	1		25				1:CL=142.857
049	060_49	X	BLK	122657		02-MAR-2007 00:16	1.0							
050	060_50	CCV	M	122657		02-MAR-2007 00:34	1.0			25			1	
051	060_51	CCB		122657		02-MAR-2007 00:51	1.0			25				
052	060_52	CCV	M	122663		02-MAR-2007 01:09	1.0			25			1	
053	060_53	CCB/MB	QC377340	122663	Water	02-MAR-2007 01:27	1.0			25				
054	060_54	SAMPLE	193055-008	122663	Water	02-MAR-2007 01:44	25.0			25				
055	060_55	MSS	193055-001	122663	Water	02-MAR-2007 02:02	10.0	1		25				
056	060_56	MS	QC377342	122663	Water	02-MAR-2007 02:19	10.0			25			1	
057	060_57	MSD	QC377343	122663	Water	02-MAR-2007 02:37	10.0			25			1	
058	060_58	SAMPLE	193055-019	122663	Water	02-MAR-2007 02:54	10.0			25				
059	060_59	SAMPLE	193055-026	122663	Water	02-MAR-2007 03:12	10.0			25				
060	060_60	SAMPLE	193055-019	122663	Water	02-MAR-2007 03:29	1.0	2		25				2:CL=52.4729
061	060_61	MSS	193055-001	122663	Water	02-MAR-2007 03:47	1.0	3		25				2:SO4=66.5915
062	060_62	SAMPLE	193055-008	122663	Water	02-MAR-2007 04:04	1.0	3		25				3:SO4=252.595
063	060_63	CCV	H	122663		02-MAR-2007 04:22	1.0			25			1	
064	060_64	CCB		122663		02-MAR-2007 04:39	1.0	1		25				
065	060_65	X	CCV	122663		02-MAR-2007 04:57	1.0						1	
066	060_66	X	CCB	122663		02-MAR-2007 05:14	1.0							
067	060_67	SAMPLE	193055-007	122663	Water	02-MAR-2007 05:32	10.0			25				
068	060_68	MSS	193055-021	122663	Water	02-MAR-2007 05:49	5.0	1		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
069	060_69	MS	QC377344	122663	Water	02-MAR-2007 06:07	5.0		25			1	
070	060_70	MSD	QC377345	122663	Water	02-MAR-2007 06:24	5.0		25			1	
071	060_71	SAMPLE	193055-023	122663	Water	02-MAR-2007 06:42	10.0		25				
072	060_72	MSS	193055-021	122663	Water	02-MAR-2007 06:59	1.0	1	25				
073	060_73	SAMPLE	193055-026	122663	Water	02-MAR-2007 07:17	1.0	2	25				2:CL=52.4202
074	060_74	SAMPLE	193055-007	122663	Water	02-MAR-2007 07:34	1.0	2	25				2:SO4=66.4637
075	060_75	SAMPLE	193055-023	122663	Water	02-MAR-2007 07:52	1.0	1	25				1:CL=79.3950
076	060_76	SAMPLE	193055-002	122663	Water	02-MAR-2007 08:09	1.0	3	25				3:SO4=191.489
077	060_77	CCV	M	122663		02-MAR-2007 08:27	1.0		25			1	
078	060_78	CCB		122663		02-MAR-2007 08:44	1.0		25				
079	060_79	X	CCV	122663		02-MAR-2007 09:02	1.0					1	
080	060_80	X	CCB	122663		02-MAR-2007 09:19	1.0						
081	060_81	SAMPLE	193055-002	122663	Water	02-MAR-2007 09:37	10.0		25				
082	060_82	SAMPLE	193055-024	122663	Water	02-MAR-2007 09:54	10.0		25				
083	060_83	SAMPLE	193055-003	122663	Water	02-MAR-2007 10:12	25.0		25				
084	060_84	SAMPLE	193055-004	122663	Water	02-MAR-2007 10:29	10.0		25				
085	060_85	SAMPLE	193055-025	122663	Water	02-MAR-2007 10:47	25.0		25				
086	060_86	SAMPLE	193055-024	122663	Water	02-MAR-2007 11:04	1.0	1	25				1:CL=66.7071
087	060_87	SAMPLE	193055-016	122663	Water	02-MAR-2007 11:22	1.0	1	25				1:CL=39.0145
088	060_88	SAMPLE	193055-004	122663	Water	02-MAR-2007 11:39	1.0	2	25				2:SO4=85.0787
089	060_89	SAMPLE	193055-003	122663	Water	02-MAR-2007 11:57	1.0	3	25				3:SO4=152.747
090	060_90	SAMPLE	193055-025	122663	Water	02-MAR-2007 12:14	1.0	2	25				2:CL=123.099
091	060_91	CCV	H	122663		02-MAR-2007 12:32	1.0		25			1	
092	060_92	CCB		122663		02-MAR-2007 12:49	1.0	1	25				
093	060_93	SAMPLE	193055-005	122663	Water	02-MAR-2007 13:07	1.0	1	25				1:CL=40.7377
094	060_94	SAMPLE	193055-017	122663	Water	02-MAR-2007 13:24	1.0	2	25				2:CL=56.0830
095	060_95	SAMPLE	193055-020	122663	Water	02-MAR-2007 13:42	1.0	1	25				1:CL=57.3239
096	060_96	SAMPLE	193055-006	122663	Water	02-MAR-2007 13:59	1.0	2	25				2:SO4=58.9185
097	060_97	SAMPLE	193055-014	122663	Water	02-MAR-2007 14:17	1.0	2	25				2:CL=192.269
098	060_98	SAMPLE	193055-022	122663	Water	02-MAR-2007 14:34	1.0	2	25				2:CL=50.1426
099	060_99	SAMPLE	193055-022	122663	Water	02-MAR-2007 14:52	10.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 607087173 Instrument: IC01 Ion Chromatograph Begun: 01-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
100	060_100	SAMPLE	193055-018	122663	Water	02-MAR-2007 15:09	1.0	2	25				2:CL=75.2200
101	060_101	SAMPLE	193055-018	122663	Water	02-MAR-2007 15:27	10.0		25				
102	060_102	SAMPLE	193055-014	122663	Water	02-MAR-2007 15:45	50.0		25				
103	060_103	CCV	M	122663		02-MAR-2007 16:02	1.0		25			1	
104	060_104	CCB		122663		02-MAR-2007 16:20	1.0		25				
105	060_105	SAMPLE	193055-016	122663	Water	02-MAR-2007 16:46	10.0		25				
106	060_106	SAMPLE	193055-005	122663	Water	02-MAR-2007 17:03	10.0		25				
107	060_107	SAMPLE	193055-017	122663	Water	02-MAR-2007 17:21	10.0		25				
108	060_108	SAMPLE	193055-020	122663	Water	02-MAR-2007 17:38	10.0		25				
109	060_109	SAMPLE	193055-006	122663	Water	02-MAR-2007 17:56	10.0		25				
110	060_110	LCS	QC377341	122663	Water	02-MAR-2007 18:13	1.0		25			1	
111	060_111	CCV	L	122663		02-MAR-2007 18:31	1.0	1	25			1	
112	060_112	CCB		122663		02-MAR-2007 18:48	1.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 627088544 Instrument: IC03 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	061_7	CCV	L	122664		02-MAR-2007 10:52	1.0	3		25			1	
008	061_8	CCB/MB	QC377346	122664	Water	02-MAR-2007 11:10	1.0	1		25				
009	061_9	BS	QC377347	122664	Water	02-MAR-2007 11:27	1.0	2		25			1	
010	061_10	BSD	QC377348	122664	Water	02-MAR-2007 11:44	1.0	2		25			1	
011	061_11	X	193063-001	122664		02-MAR-2007 12:09	100.0							
012	061_12	X	193063-003	122664		02-MAR-2007 12:27	100.0							
013	061_13	X	193063-004	122664		02-MAR-2007 12:44	100.0							
014	061_14	SAMPLE	193063-005	122664	Water	02-MAR-2007 13:01	100.0			25				
015	061_15	SAMPLE	193063-006	122664	Water	02-MAR-2007 13:19	200.0			25				
016	061_16	SAMPLE	193055-017	122664	Water	02-MAR-2007 13:39	10.0	2		25				
017	061_17	SAMPLE	193063-007	122664	Water	02-MAR-2007 14:13	100.0			25				
018	061_18	CCV	M	122664		02-MAR-2007 14:30	1.0	1		25			1	
019	061_19	CCB		122664		02-MAR-2007 14:48	1.0			25				
020	061_20	X	193063-001	122664		02-MAR-2007 15:05	2.0							
021	061_21	X	193063-003	122664		02-MAR-2007 15:23	2.0							
022	061_22	SAMPLE	193063-004	122664	Water	02-MAR-2007 15:40	2.0			25				
023	061_23	SAMPLE	193063-001	122664	Water	02-MAR-2007 16:31	2.0			25				
024	061_24	SAMPLE	193063-003	122664	Water	02-MAR-2007 16:48	2.0			25				
025	061_25	SAMPLE	193063-005	122664	Water	02-MAR-2007 17:06	10.0	1		25				2:SO4=245.912
026	061_26	SAMPLE	193063-006	122664	Water	02-MAR-2007 17:23	10.0	1		25				2:SO4=355.171
027	061_27	SAMPLE	193063-007	122664	Water	02-MAR-2007 17:40	10.0	1		25				2:SO4=242.116
028	061_28	MSS	193100-003	122664	Water	02-MAR-2007 17:58	25.0	2		25				
029	061_29	MSS	193100-003	122664	Water	02-MAR-2007 18:15	1.0	5		25				3:SO4=159.301
030	061_30	CCV	H	122664		02-MAR-2007 18:33	1.0	1		25			1	
031	061_31	CCB		122664		02-MAR-2007 18:50	1.0	1		25				
032	061_32	SAMPLE	193093-002	122664	Water	02-MAR-2007 19:08	50.0			25				
033	061_33	SAMPLE	193093-002	122664	Water	02-MAR-2007 19:30	1.0	1		25				2:SO4=385.753
034	061_34	X	BLK	122664		02-MAR-2007 19:47	1.0							
035	061_35	MS	QC377349	122664	Water	02-MAR-2007 20:09	25.0	1	1	25			1	
036	061_36	MSD	QC377350	122664	Water	02-MAR-2007 20:27	25.0	1	1	25			1	
037	061_37	SAMPLE	193105-006	122664	Water	02-MAR-2007 20:44	1.0			25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 627088544 Instrument: IC03 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
038	061_38	SAMPLE	193105-005	122664	Water	02-MAR-2007 21:02	1.0			25				
039	061_39	SAMPLE	193105-003	122664	Water	02-MAR-2007 21:19	1.0			25				
040	061_40	SAMPLE	193105-002	122664	Water	02-MAR-2007 21:36	1.0			25				
041	061_41	SAMPLE	193105-004	122664	Water	02-MAR-2007 21:54	1.0	1		25				1:NO3N=9.17674
042	061_42	SAMPLE	193105-001	122664	Water	02-MAR-2007 22:11	1.0			25				
043	061_43	CCV	M	122664		02-MAR-2007 22:29	1.0	1		25			1	
044	061_44	CCB		122664		02-MAR-2007 22:46	1.0			25				
045	061_45	X	CCV	122664		02-MAR-2007 23:03	1.0						1	
046	061_46	X	CCB	122664		02-MAR-2007 23:21	1.0							
047	061_47	SAMPLE	193105-007	122664	Water	02-MAR-2007 23:38	1.0			25				
048	061_48	SAMPLE	193105-008	122664	Water	02-MAR-2007 23:56	1.0			25				
049	061_49	SAMPLE	193100-001	122664	Water	03-MAR-2007 00:13	2.0			25				
050	061_50	SAMPLE	193100-001	122664	Water	03-MAR-2007 00:31	1.0			25				
051	061_51	SAMPLE	193100-002	122664	Water	03-MAR-2007 00:48	25.0			25				
052	061_52	SAMPLE	193100-004	122664	Water	03-MAR-2007 01:05	25.0			25				
053	061_53	SAMPLE	193100-004	122664	Water	03-MAR-2007 01:23	1.0	1		25				3:SO4=169.610
054	061_54	SAMPLE	193100-002	122664	Water	03-MAR-2007 01:40	1.0			25				2:SO4=128.780
055	061_55	SAMPLE	193105-001	122664	Water	03-MAR-2007 01:58	2.0			25				
056	061_56	SAMPLE	193105-002	122664	Water	03-MAR-2007 02:15	2.0			25				
057	061_57	CCV	H	122664		03-MAR-2007 02:32	1.0			25			1	
058	061_58	CCB		122664		03-MAR-2007 02:50	1.0			25				
059	061_59	X	CCV	122664		03-MAR-2007 03:07	1.0						1	
060	061_60	X	CCB	122664		03-MAR-2007 03:25	1.0							
061	061_61	SAMPLE	193105-003	122664	Water	03-MAR-2007 03:42	2.0			25				
062	061_62	SAMPLE	193105-004	122664	Water	03-MAR-2007 03:59	2.0			25				
063	061_63	SAMPLE	193105-005	122664	Water	03-MAR-2007 04:17	2.0			25				
064	061_64	SAMPLE	193105-006	122664	Water	03-MAR-2007 04:34	2.0			25				
065	061_65	SAMPLE	193105-007	122664	Water	03-MAR-2007 04:52	2.0			25				
066	061_66	SAMPLE	193105-008	122664	Water	03-MAR-2007 05:09	2.0			25				
067	061_67	CCV	L	122664		03-MAR-2007 05:26	1.0	1		25			1	
068	061_68	CCB		122664		03-MAR-2007 05:44	1.0			25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Sequence: 627088544 Instrument: IC03 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
069	061_69	X	CCV	122664		03-MAR-2007 06:01	1.0				1	
070	061_70	X	CCB	122664		03-MAR-2007 06:19	1.0					
071	061_71	X	SHUTDOWN	122664		03-MAR-2007 06:36	1.0					

Stds used: 1=S4740

REPORTING SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193055-001	IC01	03/02/07 02:02	10.0		+			+
193055-001	IC01	03/02/07 03:47	1.0	+		+	+	
193055-002	IC01	03/02/07 08:09	1.0	+		+		
193055-002	IC01	03/02/07 09:37	10.0		+		+	+
193055-003	IC01	03/02/07 10:12	25.0		+		+	+
193055-003	IC01	03/02/07 11:57	1.0	+		+		
193055-004	IC01	03/02/07 10:29	10.0		+			+
193055-004	IC01	03/02/07 11:39	1.0	+		+	+	
193055-005	IC01	03/02/07 13:07	1.0	+		+	+	+
193055-005	IC01	03/02/07 17:03	10.0		+			
193055-006	IC01	03/02/07 13:59	1.0	+		+	+	
193055-006	IC01	03/02/07 17:56	10.0		+			+
193055-007	IC01	03/02/07 05:32	10.0		+			+
193055-007	IC01	03/02/07 07:34	1.0	+		+	+	
193055-008	IC01	03/02/07 01:44	25.0		+		+	+
193055-008	IC01	03/02/07 04:04	1.0	+		+		
193055-009	IC01	03/01/07 16:41	100.0		+			+
193055-009	IC01	03/01/07 19:19	1.0	+			+	
193055-009	IC01	03/01/07 19:54	2.0			+		
193055-010	IC01	03/01/07 16:59	50.0		+			+
193055-010	IC01	03/01/07 20:29	1.0	+		+	+	
193055-011	IC01	03/01/07 17:16	100.0		+			+
193055-011	IC01	03/01/07 21:04	2.0	+			+	
193055-011	IC01	03/01/07 21:39	3.0			+		
193055-012	IC01	03/01/07 17:34	100.0		+			
193055-012	IC01	03/01/07 22:14	2.0	+			+	
193055-012	IC01	03/01/07 22:49	3.0			+		+
193055-013	IC01	03/01/07 17:51	100.0		+			
193055-013	IC01	03/01/07 23:24	1.0	+			+	
193055-013	IC01	03/01/07 23:59	2.0			+		+
193055-014	IC01	03/02/07 14:17	1.0	+		+	+	
193055-014	IC01	03/02/07 15:45	50.0		+			+
193055-016	IC01	03/02/07 11:22	1.0	+		+	+	+
193055-016	IC01	03/02/07 16:46	10.0		+			
193055-017	IC01	03/02/07 13:24	1.0	+		+		+
193055-017	IC03	03/02/07 13:39	10.0				+	

REPORTING SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
193055-017	IC01	03/02/07 17:21	10.0		+				
193055-018	IC01	03/02/07 15:09	1.0	+		+		+	
193055-018	IC01	03/02/07 15:27	10.0		+		+		
193055-019	IC01	03/02/07 02:54	10.0		+		+		
193055-019	IC01	03/02/07 03:29	1.0	+		+		+	
193055-020	IC01	03/02/07 13:42	1.0	+		+	+	+	
193055-020	IC01	03/02/07 17:38	10.0		+				
193055-021	IC01	03/02/07 05:49	5.0						
193055-021	IC01	03/02/07 06:59	1.0	+	+	+	+	+	
193055-022	IC01	03/02/07 14:34	1.0	+		+		+	
193055-022	IC01	03/02/07 14:52	10.0		+		+		
193055-023	IC01	03/02/07 06:42	10.0		+				
193055-023	IC01	03/02/07 07:52	1.0	+		+	+	+	
193055-024	IC01	03/02/07 09:54	10.0		+				
193055-024	IC01	03/02/07 11:04	1.0	+		+	+	+	
193055-025	IC01	03/02/07 10:47	25.0		+			+	
193055-025	IC01	03/02/07 12:14	1.0	+		+	+		
193055-026	IC01	03/02/07 03:12	10.0		+		+		
193055-026	IC01	03/02/07 07:17	1.0	+		+		+	
QC377322	IC01	03/01/07 12:18	1.0	+	+	+	+	+	
QC377323	IC01	03/01/07 12:36	1.0	+	+	+	+	+	
QC377324	IC01	03/01/07 12:53	1.0	+	+	+	+	+	
QC377325	IC01	03/01/07 15:49	1.02	+					
QC377326	IC01	03/01/07 16:06	1.02	+					
QC377327	IC01	03/01/07 18:09	50.0	+	+	+	+	+	
QC377328	IC01	03/01/07 18:26	50.0	+	+	+	+	+	
QC377340	IC01	03/02/07 01:27	1.0	+	+	+	+	+	
QC377341	IC01	03/02/07 18:13	1.0	+	+	+	+	+	
QC377342	IC01	03/02/07 02:19	10.0	+	+	+	+	+	
QC377343	IC01	03/02/07 02:37	10.0	+	+	+	+	+	

REPORTING SUMMARY FOR 193055 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC377344	IC01	03/02/07 06:07	5.0	+	+	+	+	+	
QC377345	IC01	03/02/07 06:24	5.0	+	+	+	+	+	
QC377346	IC03	03/02/07 11:10	1.0				+		
QC377347	IC03	03/02/07 11:27	1.0				+		
QC377348	IC03	03/02/07 11:44	1.0				+		
QC377349	IC03	03/02/07 20:09	25.0				+		
QC377350	IC03	03/02/07 20:27	25.0				+		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122657
Date Started: 3/1/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193027-001 G	0.93	1X	S	
2	-002 S	1.00	1X		MSS
3	-004 C	0.92			
4	-005 F	1.00			
5	-007 E	0.81			
6	-008 E	1.28			
7	-011 C	1.53			
8	-012 C	1.92			
9	193055-009 A	4.77	100X 2X 1X	S	
10	-010 A	2.19	50X 1X		MSS
11	-011 G	4.41	100X 2X 3X		
12	-012 G	4.77	100X 2X 3X		
13	-013 G	3.88	100X 1X 2X		
14	Blank QC377322	N/A	1X	N/A	
15	BS QC377323				
16	BSD QC377324				
17	MS QC377325 S		1.02X	S	
18	MSD QC377326 S		1.02X		
19	MS QC377327 A		50X		
20	MSD QC377328 A		50X		

MRS 3/1/07

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100X MRS 12/5/06	MRS 3/1/07
BS/BSD Spiked with	0.2 mL of :	54740	
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot ~~#A106 5022~~ #A10650522 MRS 3/1/07	

MRS 3/1/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 3/5/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122657
Date Started: 01-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193027-001			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-002			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-004			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-005			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-007			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-008			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-011			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193027-012			Treadwell & Rollo	Water	FLUORIDE	12-MAR-2007
193055-009			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-012			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
QC377322	BLANK			Water		
QC377323	BS			Water		
QC377324	BSD			Water		
QC377325	MS	of 193027-002		Water		
QC377326	MSD	of 193027-002		Water		
QC377327	MS	of 193055-010		Water		
QC377328	MSD	of 193055-010		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122663
Date Started: 3/1/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193055-001 Q	0.82	1X 10X	S	MSS
2	-002 A	0.95	10X		
3	-003 A	1.05	25X		
4	-004 D	0.89	10X		
5	-005 D	0.56	10X		
6	-006 D	0.90	10X		
7	-007 D	0.79	10X		
8	-008 D	1.82	25X		
9	-014 A	2.16	50X		
10	-016 C	0.77	1X 10X		
11	-017 C	0.84			
12	-018 C	0.98			
13	-019 C	0.70			
14	-020 C	0.72			
15	-021 I	0.25	5X		MSS
16	-022 C	0.73	10X		
17	-023 B	0.88			
18	-024 C	0.62			
19	-025 C	1.43	25X		
20	-026 B	0.69	10X		
	Blank QC377340	N/A	1X	N/A	
	LCS QC377341		1X	N/A	
	MS QC377342 Q		10X	S	ms of 193055-001Q
	MSD QC377343 Q		10X		msd of 193055-001Q
	MS QC377344 I		5X		ms of 193055-021 I
	MSD QC377345 I		5X		msd of 193055-021 I

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100X MRS 12/5/06	MRS 3/1/07
BS/BSD Spiked with 0.2 mL of :	S4740	
MS/MSD Spiked with 0.1 mL of :	S4740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A1065052 2	

MRS 3/1/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CL 3/5/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122663
Date Started: 01-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193055-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-002			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-004			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-007			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRITE, SULFATE	13-MAR-2007
193055-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-020			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-021			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-023			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-024			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-025			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
193055-026			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	13-MAR-2007
QC377340	BLANK			Water		
QC377341	LCS			Water		
QC377342	MS	of 193055-001		Water		
QC377343	MSD	of 193055-001		Water		
QC377344	MS	of 193055-021		Water		
QC377345	MSD	of 193055-021		Water		

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122664
Date Started: 3/2/07
Prep Chemist: MES

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193055-017 C	0.84	10X	S	
2	193063-001 K	5.60	100x 2X		
3	-003	4.40			
4	-004	5.30			
5	-005	6.31	10X		
6	-006 J	10.12	200X		
7	-007 K	5.83	100X		
8	193093-002 H	3.80	50X 1X	S	
9	193100-001 B	0.18	1X 2X	S	
10	-002	1.17	1X 25X		
11	-003	1.09			MSS
12	-004	1.15			
13	193105-001 A	0.28	1X 2X	S	
14	-002	0.18			
15	-003	0.15			
16	-004	0.20			
17	-005	0.11			
18	-006	0.10			
19	-007	0.08			
20	-008	0.10			
	Blank QC377346	N/A	1X	N/A	
	BS QC377347				
MES 3/2/07	~~MS~~ BSD QC377348				
	MS QC377349 B		25X	S	
	MSD QC377350 B		25X	S	

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MES 12/5/06	MES 3/2/07
BS/BSD Spiked with 0.2 mL of :	S4740	
MS/MSD Spiked with 0.1 mL of :	S4740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A1065052 2	

MES 3/2/07
Extraction Chemist / Date

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CR 3/5/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122664
Date Started: 02-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193055-017			Treadwell & Rollo	Water	NITRATE	13-MAR-2007
193063-001			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193063-003			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193063-004			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193063-005			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193063-006			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193063-007			LFR Levine Fricke	Water	NITRATE, NITRITE, SULFATE	07-MAR-2007
193093-002			Strategic Engineer	Water	NITRATE, SULFATE	07-MAR-2007
193100-001			ConocoPhillips Com	Water	NITRATE	08-MAR-2007
193100-002			ConocoPhillips Com	Water	NITRATE	08-MAR-2007
193100-003			ConocoPhillips Com	Water	NITRATE	08-MAR-2007
193100-004			ConocoPhillips Com	Water	NITRATE	08-MAR-2007
193105-001			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-002			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-003			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-004			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-005			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-006			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-007			Questa Engineering	Water	NITRATE	08-MAR-2007
193105-008			Questa Engineering	Water	NITRATE	08-MAR-2007
QC377346	BLANK			Water		
QC377347	BS			Water		
QC377348	BSD			Water		
QC377349	MS	of 193100-003		Water		
QC377350	MSD	of 193100-003		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/22/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123021
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	Lab ID	Result	RL
LF01GW01	SAMPLE	193055-016	ND	0.01
LF01GW02	SAMPLE	193055-017	ND	0.01
LF01GW03	SAMPLE	193055-018	ND	0.01
LF01GW04	SAMPLE	193055-019	0.01	0.01
LF01GW05	SAMPLE	193055-020	ND	0.01
LF01GW06	SAMPLE	193055-021	ND	0.01
LF01GW07	SAMPLE	193055-022	ND	0.01
EPSP01	SAMPLE	193055-023	ND	0.01
LF02GW01	SAMPLE	193055-024	ND	0.01
LF02GW02	SAMPLE	193055-025	ND	0.01
DUP0228071A	SAMPLE	193055-026	ND	0.01
	BLANK	QC378843	ND	0.01

ND= Not Detected
RL= Reporting Limit

117.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	LF01GW06	Batch#:	123021
MSS Lab ID:	193055-021	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378844	<0.01000	0.1630	0.1583	97	65-135		
MSD	QC378845		0.1630	0.1703	104	65-135	7	20
LCS	QC378846		0.1630	0.1825	112	75-125		

RPD= Relative Percent Difference

118.0

Analysis:	**Cyanide**	Analyst:	DMB
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/13/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/13/2007**
Wavelength:	578 nm	Batch:	123021
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.2171	0.1556	0.1632	95%	90 - 110%
ICB	-0.0002	-0.0001	0.0000		
CCV	0.2305	0.1652	0.1632	101%	90 - 110%
CCB	0.0008	0.0006	0.0000		
CCV	0.2283	0.1636	0.1632	100%	90 - 110%
CCB	0.0004	0.0003	0.0000		
CCV	0.2248	0.1611	0.1632	99%	90 - 110%
CCB	-0.0014	-0.0010	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DMB
Prep Date: **3/13/2007**
Analysis Date: **3/13/2007**
Batch: 123021
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	Final Distill Vol (mL)	Distillate Colored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	-0.0029	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1273	**0.1825**	0.020	0.5	16.3	0.163	**112**	
193055-021	50.0	50.0	20.0	1.00	0.0049	**ND**	0.010					
MS	50.0	50.0	10.0	1.00	0.1104	**0.1583**	0.020	0.5	16.3	0.163	**97**	
MSD	50.0	50.0	10.0	1.00	0.1188	**0.1703**	0.020	0.5	16.3	0.163	**104**	**7**
193055-016	50.0	50.0	20.0	1.00	0.0005	**ND**	0.010					
193055-017	50.0	50.0	20.0	1.00	0.0009	**ND**	0.010					
193055-018	50.0	50.0	20.0	1.00	-0.0004	**ND**	0.010					
193055-019	50.0	50.0	20.0	1.00	0.0151	**0.0108**	0.010					
193055-020	50.0	50.0	20.0	1.00	0.0020	**ND**	0.010					
193055-021	50.0	50.0	20.0	1.00	0.0049	**ND**	0.010					
193055-022	50.0	50.0	20.0	1.00	0.0079	**ND**	0.010					
193055-023	50.0	50.0	20.0	1.00	-0.0077	**ND**	0.010					
193055-024	50.0	50.0	20.0	1.00	0.0001	**ND**	0.010					
193055-025	50.0	50.0	20.0	1.00	0.0099	**ND**	0.010					
193055-026	50.0	50.0	20.0	1.00	0.0065	**ND**	0.010					
193057-004	50.0	50.0	20.0	1.00	0.0029	**ND**	0.010					
193222-001	50.0	50.0	20.0	1.00	0.0042	**ND**	0.010					
193222-002	50.0	50.0	20.0	1.00	0.0160	**0.0115**	0.010					
193222-003	50.0	50.0	20.0	1.00	0.0122	**ND**	0.010					
193222-004	50.0	50.0	20.0	1.00	0.1129	**0.0809**	0.010					
193222-005	50.0	50.0	20.0	1.00	-0.0048	**ND**	0.010					
193222-006	50.0	50.0	20.0	1.00	0.0228	**0.0163**	0.010					
193222-007	50.0	50.0	20.0	1.00	0.1850	**0.1326**	0.010					
193222-008	50.0	50.0	20.0	1.00	0.0046	**ND**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

Reviewed by/ Date: DMB 3/13/07

00701

MWH 193222
Weston 193057
PROJECT Treadwell 193055

Notebook No. Bk 2451
Continued From Page

CN EPA 335.2 M

B 123021

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colorant	ABS
193055-16A	50	50		0.0005
-17				0.0009
-18				-0.0004
-19				0.0151
-20				0.0020
-21				0.0049
-21MS	+.5ml (16.32 ug/ml dilu of FS5101 1ml → 50ml)			0.1104
-21MSD	same as MS			0.1188 } DNB
-22A				0.0079
-23				-0.0077
-24				0.0001
-25				0.0099
-26				0.0065
193057-4N				0.0029
193222-1D				0.0042
-2				0.0160
-3				0.0122
-4				0.1129
-5				-0.0048
-6				0.0228
-7				0.1850
-8				0.0046
LCS	same as MS			0.1273
MB				-0.0029
ICB				-0.0002
CCV				0.2305
CCV				0.2283
CCB				0.0004
CCV				0.2248
CCB				-0.0014

Jm 3-13-07

~~DMB 3/13/07~~

Signed DMB 3/13/07 Date

Read and Understood By

Signed 3-13-07 Date

Continued on Page

---) Quantitation Results Report (---

Date : 03-13-2007
Time : 17:15:36
Operator : DMB

File Name : Data not stored yet

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 378 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	-0.0002	0.00000
2	ICV	Analytical	+0.2171	0.15924
3	MB	Analytical	-0.0029	0.00000
4	LCS	Analytical	+0.1270	0.09334
5	193055-16	Analytical	+0.0005	3.581E-04
6	193055-17	Analytical	+0.0009	6.266E-04
7	193055-18	Analytical	-0.0004	0.00000
8	193055-19	Analytical	+0.0151	0.01106
9	193055-20	Analytical	+0.0020	0.00150
10	193055-21	Analytical	+0.0049	0.00363
11	CCV	Analytical	+0.2305	0.16906
12	CCB	Analytical	+0.0008	5.595E-04
13	193055-21MS	Analytical	+0.1104	0.08097
14	193055-21MSD	Analytical	+0.1188	0.08710
15	193055-22	Analytical	+0.0079	0.00583
16	193055-23	Analytical	-0.0077	0.00000
17	193055-24	Analytical	+0.0001	8.902E-05
18	193055-25	Analytical	+0.0099	0.00727
19	193055-26	Analytical	+0.0065	0.00478
20	193057-001	Analytical	+0.0029	0.00215
21	CCV	Analytical	+0.2283	0.16745

22	CCB	Analytical	+0.0004	2.574E-04
23	193222-1	Analytical	+0.0042	0.00208
24	193222-2	Analytical	+0.0180	0.01176
25	193222-3	Analytical	+0.0122	0.00895
26	193222-4	Analytical	+0.1129	0.08281
27	193222-5	Analytical	-0.0048	0.00000
28	193222-6	Analytical	+0.0223	0.01673
29	193222-7	Analytical	+0.1850	0.13565
30	193222-8	Analytical	+0.0046	0.00335
31	CCV	Analytical	+0.2248	0.16482
32	CCB	Analytical	-0.0014	0.00000

---) Standard Calibration Report (---

Date : 03-13-2007
Time : 21:52:57
Operator : DMB

ile Name : C:\UV\DATA\CN706.STD

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = +7.333E-01 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0007	*****
2	0.00873	0.0125	-4.622 %
3	0.01746	0.0259	-7.942 %
4	0.05238	0.0716	-0.295 %
5	0.08730	0.1186	+0.385 %
6	0.13968	0.1916	-0.589 %
7	0.17460	0.2371	+0.424 %

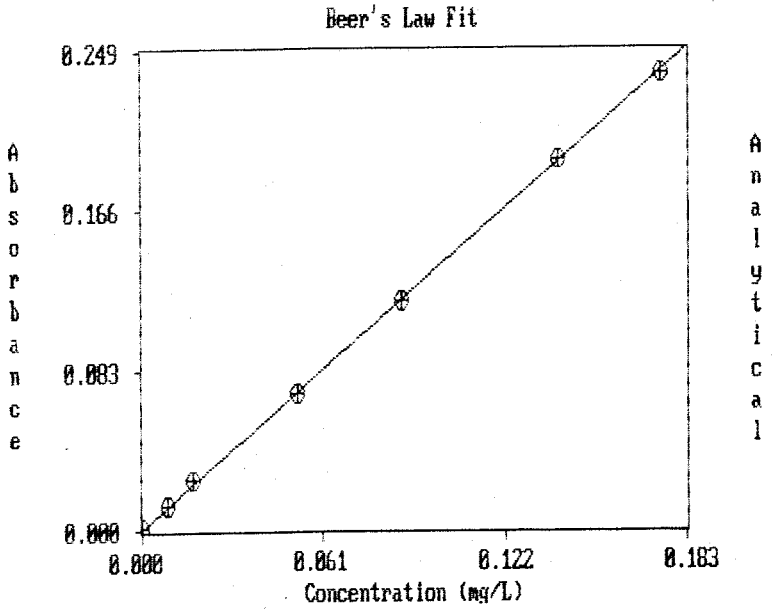
---) Standard Calibration Report (---

Date : 03-13-2007
Time : 21:52:59
Operator : DMB

ile Name : C:\UV\DATA\CN706.STD

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123021
Date Started: 13-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193055-016			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-017			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-018			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-019			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-020			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-021			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-022			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-023			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-024			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-025			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193055-026			Treadwell & Rollo	Water	CYANIDE	13-MAR-2007
193057-004			Weston Solutions	Water	CYANIDE	13-MAR-2007
193222-001			MWH	Water	CYANIDE	13-MAR-2007
193222-002			MWH	Water	CYANIDE	13-MAR-2007
193222-003			MWH	Water	CYANIDE	13-MAR-2007
193222-004			MWH	Water	CYANIDE	13-MAR-2007
193222-005			MWH	Water	CYANIDE	13-MAR-2007
193222-006			MWH	Water	CYANIDE	13-MAR-2007
193222-007			MWH	Water	CYANIDE	13-MAR-2007
193222-008			MWH	Water	CYANIDE	13-MAR-2007
QC378843	BLANK			Water	CYANIDE	
QC378844	MS	of 193055-021		Water	CYANIDE	
QC378845	MSD	of 193055-021		Water	CYANIDE	
QC378846	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122790
Matrix:	Water	Sampled:	02/28/07
Units:	mg/L	Received:	03/01/07
Diln Fac:	1.000	Analyzed:	03/07/07

Field ID	Type	Lab ID	Result	RL
1065PZ3B	SAMPLE	193055-001	ND	0.04
LF6GW104	SAMPLE	193055-002	ND	0.04
LF6GW106	SAMPLE	193055-003	ND	0.04
LF6GW103	SAMPLE	193055-004	ND	0.04
LF6GW100	SAMPLE	193055-005	ND	0.04
LF6GW101	SAMPLE	193055-006	ND	0.04
DUP0228072A	SAMPLE	193055-007	ND	0.04
	BLANK	QC377886	ND	0.04

ND= Not Detected
RL= Reporting Limit

33.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ3B	Batch#:	122790
MSS Lab ID:	193055-001	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/07/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC377887	<0.04000	0.3046	0.3002	99	75-125		
MSD	QC377888		0.3046	0.2976	98	75-125	1	20
LCS	QC377889		0.3046	0.2881	95	75-125		

RPD= Relative Percent Difference

34.0

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	7-Mar-07
Instrument:	**HP UV-VIS Spectrometer**	Analysis Date:	7-Mar-07
Wavelength:	626 nm	Batch:	122789
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r):	0.9990
Avg Rf:	0.6210
%RSD:	3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1789	0.2881	0.3046	95%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1816	0.2925	0.3046	96%	90 - 110%
CCB	0.0022	0.0035	0.0000		
CCV	0.1790	0.2883	0.3046	95%	90 - 110%
CCB	0.0049	0.0079	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: **122789**
Prep Date: **3/7/2007**
Analysis Date: **3/7/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1789		**0.28811**	0.040	0.0500	45.6960	0.3046	**95**	
193055-1	7.5000	1.0000	0.0031		**ND**	0.040					
193055-1ms	7.5000	1.0000	0.1864		**0.30018**	0.040	0.0500	45.6960	0.3046	**99**	
193055-1msd	7.5000	1.0000	0.1848		**0.29761**	0.040	0.0500	45.6960	0.3046	**98**	**1**
193055-2	7.5000	1.0000	0.0050		**ND**	0.040					
193055-3	7.5000	1.0000	0.0027		**ND**	0.040					
193055-4	7.5000	1.0000	0.0029		**ND**	0.040					
193055-5	7.5000	1.0000	0.0035		**ND**	0.040					
193055-6	7.5000	1.0000	0.0035		**ND**	0.040					
193055-7	7.5000	1.0000	0.0014		**ND**	0.040					
193169-1	7.5000	1.0000	0.0143		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

Reviewed by/ Date: 3/8/07

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

Sulfide / Diss Sulfide EPA 376.2 B 122790

Sample	Vol (ml)	Final Vol (ml)	ABS
193055-1	7.5	7.5	.0031
-1MS	+ .05 ml (45.696 mg/L S= from 0455292)		.1864
-1MSD	same	as MS	.1848
-2			.0050
-3			.0027
-4			.0029
-5			.0035
-6			.0035
-7			.0014
*193269-1A			.0143
ICV/LCS	same	as MS	.1789 ~~.0000~~ 3-7-07 [illegible] TV = .3046 mg/L
ICB/MB			.0000
~~CCB~~ 3-7-07 [illegible]			.1826
ICB			.0022
CCV			.1790
CCB			.0049

* = Filter thru WHATMAN .45 µ Filter Lot L226

S= Std

≈4g 0455292 → 50 ml DI H_2O

1.0 ml S=
5.0 ml I .025N .1275
2.2 ml S_2O_3 .025N -.0561

$\frac{.07140 \times 16000}{1.0} = 1142.4$

1:25 = 45.696

.05 → 7.5 = .3046 mg/L

Continued on Page

Read and Understood By

[illegible] 3-7-07 JMB 3/8/07
Signed Date Signed Date

3-7-07 dm

Date : ~~21-08-2007~~
Time : 11:16:17
Operator : DM

---> Quantitation Results Report <---

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	+0.0000	5.093E-05
2	ICV/LCS	Analytical	+0.1789	0.29856
3	193055-1	Analytical	+0.0031	0.00517
4	193055-1MS	Analytical	+0.1864	0.31104
5	193055-1MSD	Analytical	+0.1848	0.30837
6	193055-2	Analytical	+0.0050	0.00828
7	193055-3	Analytical	+0.0027	0.00456
8	193055-4	Analytical	+0.0029	0.00489
9	193055-5	Analytical	+0.0035	0.00586
10	193055-6	Analytical	+0.0035	0.00586
11	CCV	Analytical	+0.1815	0.30315
12	CCB	Analytical	+0.0022	0.00368
13	193055-7	Analytical	+0.0014	0.00227
14	193169-1	Analytical	+0.0143	0.02384
15	CCV	Analytical	+0.1790	0.29866
16	CCB	Analytical	+0.0049	0.00815

3-7-07 [illegible]

Date : ~~01-08-2007~~
Time : 11:16:37
Operator : DM

---) **Standard Calibration Report** (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

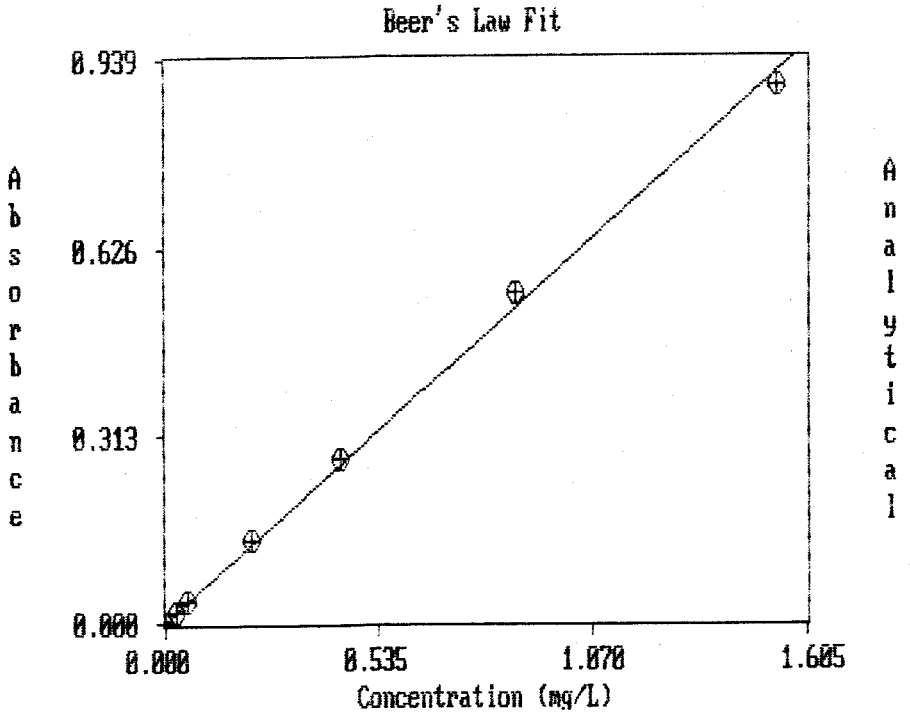
Date : ~~01 08 2007~~ 3-7-07 DM
Time : 11:16:38
Operator : DM

---) Standard Calibration Report (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122790
Date Started: 07-MAR-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193055-001			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-002			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-003			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-004			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-005			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-006			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
193055-007			Treadwell & Rollo	Water	SULFIDE	13-MAR-2007
QC377886	BLANK			Water	SULFIDE	
QC377887	MS	of 193055-001		Water	SULFIDE	
QC377888	MSD	of 193055-001		Water	SULFIDE	
QC377889	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	02/28/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#
1065PZ3B	SAMPLE	193055-001	480	10	1.000	122833
LF6GW104	SAMPLE	193055-002	620	10	1.000	122833
LF6GW106	SAMPLE	193055-003	680	10	1.000	122833
LF6GW103	SAMPLE	193055-004	560	10	1.000	122833
LF6GW100	SAMPLE	193055-005	320	10	1.000	122833
LF6GW101	SAMPLE	193055-006	530	10	1.000	122833
DUP0228072A	SAMPLE	193055-007	480	10	1.000	122833
LF10GW100	SAMPLE	193055-008	1,200	10	1.000	122833
LF4GW103	SAMPLE	193055-009	2,890	13	1.250	122833
LF4GW104	SAMPLE	193055-010	1,270	10	1.000	122833
1349MW02	SAMPLE	193055-011	2,270	11	1.111	122833
1349MW103	SAMPLE	193055-012	2,330	11	1.111	122833
1349MW104	SAMPLE	193055-013	2,000	10	1.000	122833
1349MW105	SAMPLE	193055-014	1,090	10	1.000	122833
LF01GW01	SAMPLE	193055-016	420	10	1.000	122833
LF01GW02	SAMPLE	193055-017	470	10	1.000	122833
LF01GW03	SAMPLE	193055-018	520	10	1.000	122833
LF01GW04	SAMPLE	193055-019	430	10	1.000	122833
LF01GW05	SAMPLE	193055-020	380	10	1.000	122834
LF01GW06	SAMPLE	193055-021	190	10	1.000	122834
LF01GW07	SAMPLE	193055-022	410	10	1.000	122834
EPSP01	SAMPLE	193055-023	460	10	1.000	122834
LF02GW01	SAMPLE	193055-024	320	10	1.000	122834
LF02GW02	SAMPLE	193055-025	760	10	1.000	122834
DUP0228071A	SAMPLE	193055-026	410	10	1.000	122834
	BLANK	QC378051	ND	10	1.000	122833
	BLANK	QC378056	ND	10	1.000	122834

ND= Not Detected
RL= Reporting Limit

110.0

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193055	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	02/28/07
Matrix:	Water	Analyzed:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Received
	BS		QC378052		100.0	116.0		116	75-126			1.000	122833	
	BSD		QC378053		100.0	110.0		110	75-126	5	21	1.000	122833	
ZZZZZZZZZZ	SDUP	193024-001	QC378054	15,060		15,100	100.0			0	24	10.00	122833	02/28/07
1065PZ3B	SDUP	193055-001	QC378055	476.0		494.0	10.00			4	24	1.000	122833	03/01/07
	BS		QC378057		100.0	104.0		104	75-126			1.000	122834	
	BSD		QC378058		100.0	92.00		92	75-126	12	21	1.000	122834	
LF01GW06	SDUP	193055-021	QC378059	190.0		176.0	10.00			8	24	1.000	122834	03/01/07

RL= Reporting Limit
RPD= Relative Percent Difference

111.1

Curtis & Tompkins, Ltd.

007729

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**07-Mar-07**
Matrix:	Water	Batch #:	**122833**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	51.7981	51.7980	-0.0001	ND	10					
BS	50	1	50.3552	50.3610	0.0058	116.0	10	1,000	5	100	**116**	
BSD	50	1	49.2948	49.3003	0.0055	110.0	10	1,000	5	100	**110**	**5.31**
193024-001	5	10	27.3959	27.4712	0.0753	15,060.0	100					
SDUP	5	10	24.9974	25.0729	0.0755	15,100.0	100					**0.27**
193055-001	50	1	58.1764	58.2002	0.0238	476.0	10					
SDUP	50	1	54.9665	54.9912	0.0247	494.0	10					**3.71**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193024-001	5	10	27.3959	27.4712	0.0753	15,060.0	100
193055-001	50	1	58.1764	58.2002	0.0238	476.0	10
193055-002	50	1	55.8934	55.9242	0.0308	616.0	10
193055-003	50	1	48.9502	48.9842	0.0340	680.0	10
193055-004	50	1	56.7140	56.7419	0.0279	558.0	10
193055-005	50	1	58.3161	58.3319	0.0158	316.0	10
193055-006	50	1	56.4315	56.4578	0.0263	526.0	10
193055-007	50	1	57.1117	57.1359	0.0242	484.0	10
193055-008	50	1	55.8174	55.8773	0.0599	1,198.0	10
193055-009	40	1.25	50.5531	50.6686	0.1155	2,887.5	13
193055-010	50	1	56.3261	56.3895	0.0634	1,268.0	10
193055-011	45	1.111	50.0504	50.1527	0.1023	2,273.3	11
193055-012	45	1.111	44.1415	44.2464	0.1049	2,331.1	11

00124

193055-013	50	1	54.0800	54.1800	0.1000	2,000.0	10
193055-014	50	1	54.1789	54.2332	0.0543	1,086.0	10
193055-016	50	1	56.5425	56.5633	0.0208	416.0	10
193055-017	50	1	55.5294	55.5530	0.0236	472.0	10
193055-018	50	1	53.9143	53.9401	0.0258	516.0	10
193055-019	50	1	55.3791	55.4008	0.0217	434.0	10

Note. Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: 3/13/07

001722

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122833

Prep Date: 3/7/07
Prep Time: 15:00

Benchbook#: **BK 2420**
Page: **72**

Filter Mfg/ Lot#: Env. Exp. 655614
Spike WS#: 85560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/7/07	3/8/07	3/8/07	3/8/07	3/8/07	3/8/07
Time:	18:00	800	10:00	11:00	12:30	13:30
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	TAB	51.7981	61.7980	51.7980	X
	BS		↓	HAR	50.3552	50.3610	50.3610	X
	BSD		↓	MEA	49.2948	49.3003	49.3003	X
	193024-1	23,200	5	~~LAN~~ 58.1764	58.1764	27.4708	27.4712	X
5	SDUP-1	↓	↓	5	24.9974	25.0727	25.0729	X
	193055-1	852	50	LAN	58.1764	58.2003	58.2002	X
	SDUP-1	↓	↓	FRA	54.9665	54.9908	54.9912	X
	-2	850	↓	GANJAY	55.8934	55.9238	55.9242	X
	-3	1013	↓	GASP	48.9502	48.9846	48.9842	X
10	-4	841	↓	GUARD	56.7140	56.7420	56.7419	X
	-5	546	↓	PIT	58.3161	58.3315	58.3319	X
	-6	844	↓	GOOD	56.4315	56.4578	56.4578	X
	-7	744	↓	GARG	57.1117	57.1356	57.1359	X
	-8	1685	↓	GULP	55.8774	55.8773	55.8773	X
15	-9	4509	40	50.5531	50.6682	50.6682	50.6686	X
	-10	2070	50	GED	56.3261	56.3921	56.3891	56.3895
	-11	4180	45	R	50.0504	50.1532	50.1527	X
	-12	4290	45	S	44.1415	44.2468	44.2464	X
	-13	3580	50	GOAL	54.0800	54.1798	54.1800	X
20	-16	709	↓	QIA	56.5425	56.5632	56.5633	X
	-17	737	↓	GAME	55.5294	55.5528	55.5530	X
	-18	905	↓	GUESS	53.9143	53.9405	53.9401	X
	-19	659	↓	GATE	55.3791	55.4012	55.4008	X
	~~-20~~ -14	2040	↓	GYPSIE	54.1789	54.2332	54.2332	X
	~~-14~~							

* Constant weight must be within 0.0005 from previous reading.

* Q -27, 3959

3/8/07
Analyst / Date

3/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122833
Date Started: 07-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193024-001		Acme Fill Corp.	Water	TDS	12-MAR-2007
193055-001		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-002		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-003		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-004		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-005		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-006		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-007		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-008		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-009		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-010		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-011		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-012		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-013		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-014		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-016		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-017		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-018		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-019		Treadwell & Rollo	Water	TDS	13-MAR-2007
QC378051	BLANK		Water	TDS	
QC378052	BS		Water	TDS	
QC378053	BSD		Water	TDS	
QC378054	SDUP of 193024-001		Water	TDS	
QC378055	SDUP of 193055-001		Water	TDS	

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWWW 2540C	Analysis Date:	**07-Mar-07**
Matrix:	Water	Batch #:	**122834**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	59.0014	59.0016	0.0002	ND	10					
BS	50	1	48.1409	48.1461	0.0052	104.0	10	1,000	5	100	**104**	
BSD	50	1	52.2267	52.2313	0.0046	92.0	10	1,000	5	100	**92**	**12.24**
193055-021	50	1	55.8893	55.8988	0.0095	190.0	10					
SDUP	50	1	57.2801	57.2889	0.0088	176.0	10					**7.65**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193055-020	50	1	56.9240	56.9429	0.0189	378.0	10
193055-021	50	1	55.8893	55.8988	0.0095	190.0	10
193055-022	50	1	55.5879	55.6086	0.0207	414.0	10
193055-023	50	1	55.0720	55.0952	0.0232	464.0	10
193055-024	50	1	58.2152	58.2312	0.0160	320.0	10
193055-025	50	1	55.3411	55.3790	0.0379	758.0	10
193055-026	50	1	56.1264	56.1467	0.0203	406.0	10
193169-001	10	5	29.1871	29.3100	0.1229	12,290.0	50
193145-001	50	1	55.1964	55.2340	0.0376	752.0	10
193145-002	50	1	57.3622	57.4025	0.0403	806.0	10
193167-001	50	1	57.3115	57.3381	0.0266	532.0	10
193167-002	50	1	51.6864	51.7220	0.0356	712.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: _____

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122834

Prep Date: 3/7/07
Prep Time: 16:00

Benchbook#: **BK 2420**
Page: **74**

Filter Mfg/ Lot#: Env. Exp. 655614
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3	In-4	In-4
Date:	3/7/07	3/8/07	3/8/07	3/8/07	3/8/07	3/8/07	3/8/07	3/8/07
Time:	19:00	8:00	10:00	11:00	12:50	13:30	14:45	15:45
Temp (C):	90	180	180	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
	MB		50	JUL	59.0014	59.0014	59.0016	X
	BS			JAR	48.1409	48.1464	48.1461	X
	BSD			5/10	52.2267	52.2309	52.2313	X
	193055-21	~~686~~ 235	50	GARB	55.8893	55.9005	55.8988	55.8988 X
5	SOUP -21			GUN	57.2801	57.2894	57.2889	X
	-22	~~235~~ 681		GAIN	55.5879	55.6091	55.6086	X
	-23	~~681~~ 866		GLAZE	55.0720	55.0955	55.0952	X
	-24	~~866~~ 622		G5	58.2152	58.2313	58.2312	X
	-25	~~622~~ 1375		GRASP	56.3411	55.3787	55.3790	X
10	-26	~~1375~~ 663		GOP	56.1264	56.1462	56.1467	X
	193169-1	16,380	10	810	29.1871	29.3095	29.3100	X
	193145-1	1271	50	GEE	55.1964	55.2340	55.2340	X
	-2	1214		Gator	57.3622	57.4029	57.4025	X
	193167-1	871		GOD	57.3115	57.3388	57.3403	57.3385
15	-2	948		GIVE	51.6964	51.7219	51.7220	X
	193055-20	686	50	GEEZ	56.9240	56.9432	56.9429	X
20								

* Constant weight must be within 0.0005 from previous reading.

GOD → 57.3381

3/8/07
Analyst / Date

3/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122834
Date Started: 07-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193055-020		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-021		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-022		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-023		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-024		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-025		Treadwell & Rollo	Water	TDS	13-MAR-2007
193055-026		Treadwell & Rollo	Water	TDS	13-MAR-2007
193145-001		URS Corporation	Water	TDS	08-MAR-2007
193145-002		URS Corporation	Water	TDS	08-MAR-2007
193167-001		URS Corporation	Water	TDS	08-MAR-2007
193167-002		URS Corporation	Water	TDS	08-MAR-2007
193169-001		Strategic Engineer	Water	TDS	08-MAR-2007
QC378056	BLANK		Water	TDS	
QC378057	BS		Water	TDS	
QC378058	BSD		Water	TDS	
QC378059	SDUP of 193055-021		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193108

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID	Sample ID	Lab ID
1047MW101	193108-001	1065PZ3A	193108-017
1065PZ4B	193108-002	1065PZ4A	193108-018
1065PZ7B	193108-003	1065MW101	193108-019
1065PZ5AR	193108-004	1065MW102	193108-020
1065PZ5B	193108-005	TB0301073A	193108-021
DUP0301072A	193108-006	DAEGW103	193108-022
1349MW01	193108-007	DAEGW104	193108-023
1349MW100	193108-008	DAEGW101	193108-024
DAEGW06	193108-009	DAEGW03	193108-025
DUP0301073A	193108-010	DAEGW05	193108-026
DUP0301073B	193108-011	DUP0302071A	193108-027
1213GW101	193108-012	1349MW100 RE	193108-028
DAEGW08	193108-013	DUP0301073B RE	193108-029
LF02GW04	193108-014	DAEGW08 RE	193108-030
1065PZ1A	193108-015	DAEGW03 RE	193108-031
1065PZ2A	193108-016	DAEGW05 RE	193108-032

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/23/07
Operations Manager

Signature: _____ Date: 3/23/07
Project Manager

NELAP # 01107CA

Page 1 of ___

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

This hardcopy data package contains sample and QC results for twenty seven water samples, requested for the above referenced project on 03/02/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Low recovery was observed for diesel C12-C24 in the MS of DAEGW104 (lab # 193108-023); the LCS was within limits. High RPD was also observed for diesel C12-C24 in the MS/MSD of DAEGW104 (lab # 193108-023); this analyte was not detected at or above the RL in the associated samples. Samples 1213GW101, DAEGW104, DAEGW103,DAEGW05, and DUP0302071A (lab #s 193108-012,-023,-025,-026, and -027, respectively) were initially prepared on 3/16/07 within hold time, however, an undetectable leak in the cooling system caused the extracts to dry rendering them unusable. The samples were re-extracted one day past the recommended hold time; affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the CCV analyzed 03/08/07 11:36; this analyte met minimum response criteria. No other analytical problems were encountered.

Pesticides (EPA 8081A):
High ICAL percent RSDs (relative standard deviations) were observed for beta-BHC and delta-BHC in the calibration analyzed 02/28/07 22:36; average ICAL %RSD met method requirements, and these analytes were not detected at or above the RL in the associated samples. High response was observed for methoxychlor in the ICV analyzed 03/01/07 01:49; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. High responses were observed for 4,4'-DDD and methoxychlor in the CCV analyzed 03/08/07 02:27; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for TCMX in 1349MW100 (lab # 193108-008), DUP0301073B (lab # 193108-011), and the method blank for batch 122778; the associated decachlorobiphenyl surrogate recoveries were within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
Low surrogate recoveries were observed for decachlorobiphenyl and TCMX in

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

Polychlorinated Biphenyls (PCBs) (EPA 8082):
many samples. These samples were re-extracted six and seven days past the recommended extraction hold time; affected data was qualified with "b". The re-extraction confirmed matrix effect on the surrogate recoveries of the original extraction. No target compounds were detected in the samples. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of DAEGW104 (lab # 193108-023); the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (UV) in 1349MW100 (lab # 193108-008) and DUP0301073B (lab # 193108-011), due to matrix interference; these high surrogate recoveries were confirmed by re-analysis. No other analytical problems were encountered.

Metals (EPA 6010B and SM 2340B) Water:
No analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
Responses exceeding the instrument's linear range were observed for magnesium and sodium in the MS/MSD of 1349MW01 (lab # 193108-007). High % differences were observed for calcium, manganese, and sodium in the serial dilution of 1047MW101 (lab # 193108-001) and the serial dilution of 1349MW01 (lab # 193108-007). Lead was detected above the RL in the method blank for batch 122987; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
Low recoveries were observed for sulfide in the MS/MSD of 1047MW101 (lab # 193108-001) and the MS/MSD of 1065PZ3A (lab # 193108-017); the LCS was within limits. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

Surfactants (MBAS) (EPA 425.1):
This analysis was not detected on the COC until after the analyst became unavailable for the weekend. The samples were analyzed as soon as possible on Monday, one and two days past the recommended hold time; affected data was qualified with "b". No analytical problems were encountered.

Chain of Custody

193108

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2188
Page: 1 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): [signature]
Sent to Laboratory (Name): CFT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) /MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (15)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX/MTBE	Total Sulfide	TPHss (8015M)	dissolved metals (23)	PCB's 8082	dissolved metals (22)	COMMENTS / NOTES
1	1047 MW101	3/1/07	930			X		27		3		9	X			X	X		X		X			X	X				Collected MS/MSD
2	1065 PZ 4B		1200			X		3		1		5	X	X	X		X		X		X		X	X					
3	1065 PZ 7B		1245			X		3		1		5	X	X	X		X		X		X		X	X					
4	1065 PZ 5AR		1320			X		3		1		5	X	X	X		X		X		X		X	X					
5	1065 PZ 5B		1405			X		3		1		5	X	X	X		X		X		X		X	X					
6	DUP030107 2A		950			X		9		1		3	X			X	X		X		X			X	X				
7	1349 MW01		820			X		18		3		24	X	X	X	X	X	X			X	X				X			Collected MS/MSD
8	1349 MW100		1120			X		6		1		8	X	X	X	X	X	X			X	X				X	X		
9	DAE GW06		1320			X		3		1		6		X	X	X	X				X	X						X	
	~~DAE GW103~~		~~1540~~			X		6		2		9					X												
10	DUP030107 3A		—			X		6		1		8	X	X	X	X	X	X			X	X				X			
11	DUP030107 3B		—			X		6		1		8	X	X	X	X	X	X			X	X				X	X		
12	1213GW101	3/2/07	850			X		6		1		5	X	X	X	X	X					X						X	

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Sc, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** - 15: Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, NA, Pb, Ni, Zn)

RELINQUISHED BY: [signature]	DATE: 3/2/07	RECEIVED BY: [signature]	DATE: 3/2/7
PRINT NAME: Devin Raynal	FIRM: BTS	TIME: ~~1630~~ 1245	PRINT NAME: ADRIAN GRENIER	FIRM: CFT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193108

CHAIN OF CUSTODY RECORD
PRESIDIO OF SAN FRANCISCO

COC No. OP 2187
Page: 2 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS Pete Connish
Recorder (signature required): Pete
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260) MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 13, 9, 8, 7, 3, Other)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	PCBs 8082	Cyanide	Dissolved Metals 15	BTEX, MTBE	Total Sulfide	Molybdenum	COMMENTS / NOTES
13 DAEGW08	3/1/07	1612			X		6		1		8	X	X	X	X	X	X	X		X	X	X						
14 LF01GW04		1502			X				1	1	2					X		X		X			X					
15 1065 PZ 1A		1338			X		6		1		5	X	X	X	X	X				X				X		X		
16 1065 PZ 2A		1032			X		3		1		5	X	X	X		X				X				X	X	X		MS/MSD
17 1065 PZ 3A		908			X		9		3		15	X	X	X		X				X				X	X	X		
18 1065 PZ 4A		1112			X		3		1		5	X	X	X		X				X				X	X	X		
19 1065MW101		1150			X		3		1		5	X	X	X	X	X				X				X		X		
20 1065MW102		1238			X		6		1		5	X	X	X	X	X				X				X		X		
21 TB0301073A		—			X		2								X													
22 DAEGW103		1540			X		6		2		9	X	X	X	X	X	X			X	X	X					X	See below

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn))
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - X 15 Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni, Zn

RELINQUISHED BY: Pete	DATE: 3/2/07	RECEIVED BY: [signature]	DATE: 3/2/7
PRINT NAME: Pete Connish	FIRM: BTS / TIME: 1245	PRINT NAME: AARON CENTER	FIRM: C&T / TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM: / TIME:	PRINT NAME:	FIRM: / TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
Also run for: dissolved metals (23), MBAS, Total Hardness on DAEGW03

Method of Shipment: Courier rec'd, intact, cold Ag

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

193108

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2191
Page: 3 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS B.Summersett
Recorder (signature required):
Sent to Laboratory (Name): CAT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260) MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	MBA's	Total Hardness	Molybdenum	PCBs 8082	dissolved metals (22)	COMMENTS / NOTES
23	DAEGW104	3-2	930			X		18		6		27	X	X	X	X	X	X	X		X	X	X	X	X	X		MS/MSD
24	DAEGW101		750			X		6		1		3	X			X			X		X	X						low volume on Ambers liter
25	DAEGW03		940			X		6		1		8	X	X	X	X	X	X			X	X				X	X	
26	DAEGW05		840			X		6		1		8	X	X	X	X	X	X			X	X				X	X	
27	DAP030207 1A		940			X		6		2		9	X	X	X	X	X	X	X		X	X	X	X	X	X		

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other -**)

RELINQUISHED BY:	DATE: 3-2-07	RECEIVED BY:	DATE: 3/2/7
PRINT NAME: B.Summersett FIRM: BTS	TIME: 1245	PRINT NAME: Aaron Greenlee FIRM: CAT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment: courier rec'd w/ T&R to lab

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

193108

Steve Stanley

From: "Billy Jones" <wjones@blainetech.com>
To: "Steve Stanley" <steve@ctberk.com>
Cc: "Sucheon Sung" <ssung@blainetech.com>
Sent: Wednesday, March 07, 2007 4:47 PM
Subject: COC Correction

Steve,
Please change the sample ID on T&R Presidio COC #2187 which was submitted on 3/1/07.

Incorrect ID was listed as LF01GW04. Please change to LF02GW04. Contact us if you have any questions.
Thanks,
Billy

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193108 Date Received: 3-02-07 Number of Coolers: 11
Client: TREADWELL Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-02-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 1 over lip of cooler Seal date: 3-2-07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 4.1°C 2.8°C, 3.4°, 2.5° 3.8, 3.8, 4.4°, 3.7°, 3.0°, 4.5°, 3.6°

B. Login Phase
Date Logged In: 3-02-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziplock Bag VOA's in foam
2. Did all bottles arrive unbroken? ..... YES NO ★
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
★ Sample - 011 2 VOA's broken
7.) sample - 024 low Volume in Ambers
6.) HNO_3 (C49025) added to sample -008, -027,

Rev. 1, 4/95

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	122766
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	115	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4B	Batch#:	122918
Lab ID:	193108-002	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.0	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	93	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ7B	Batch#:	122918
Lab ID:	193108-003	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.3	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	101	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5AR	Batch#:	122918
Lab ID:	193108-004	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	82	65-135	EPA 8015B
Bromofluorobenzene (FID)	88	65-135	EPA 8015B
Trifluorotoluene (PID)	84	65-135	EPA 8021B
Bromofluorobenzene (PID)	88	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5B	Batch#:	122918
Lab ID:	193108-005	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.6	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	65-135	EPA 8015B
Bromofluorobenzene (FID)	98	65-135	EPA 8015B
Trifluorotoluene (PID)	98	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301072A	Batch#:	122766
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	122766
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	122766
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

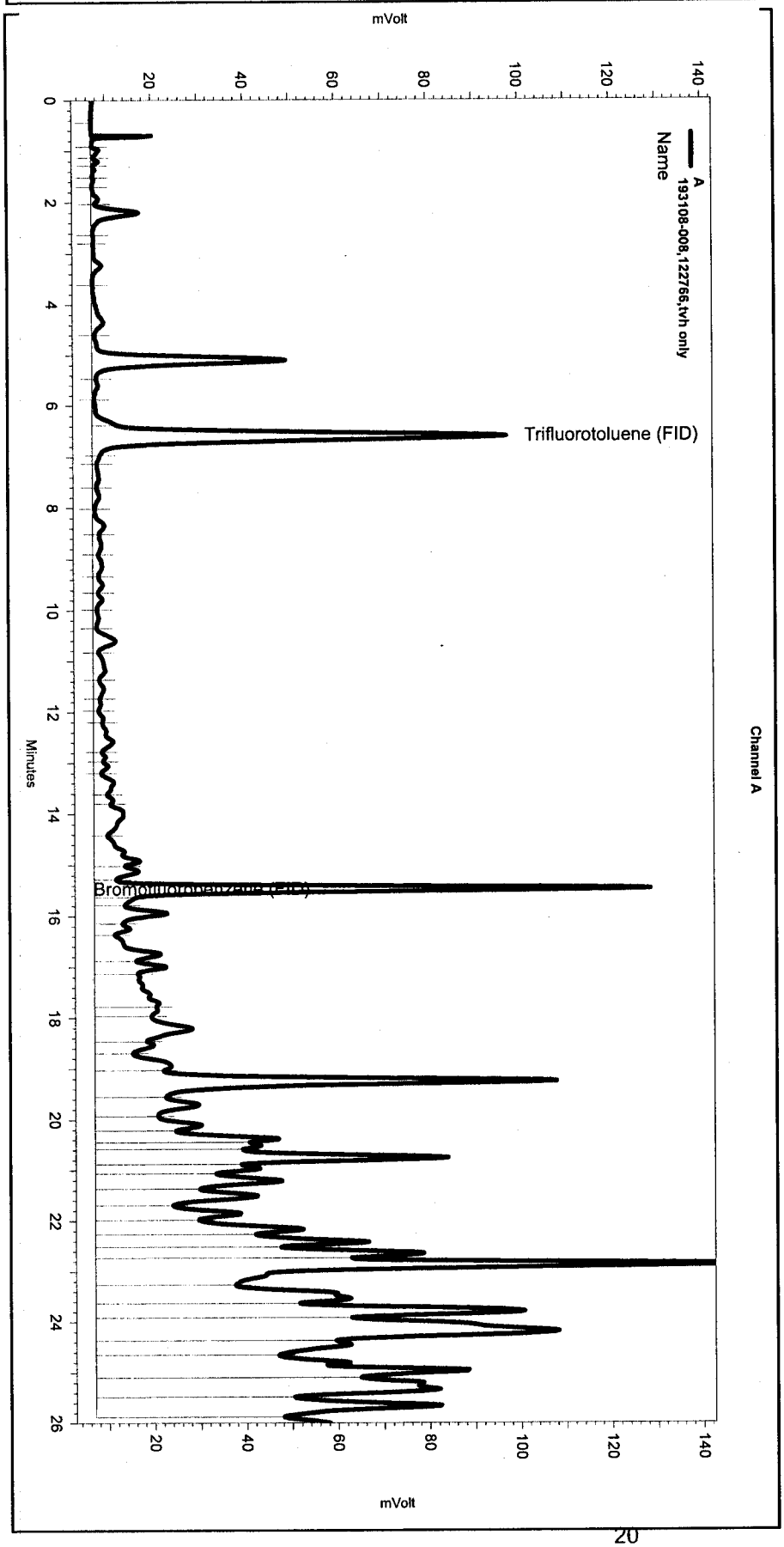
Analyte	Result	RL
Gasoline C7-C12	1,200 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	123	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-008,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_010
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 5:11:27 PM
Analysis Date: 3/7/2007 8:33:08 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: G1.3



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	6.376	0	0
Yes	Split Peak	6.966	0	0
Yes	Split Peak	15.638	0	0

1349 MW 100

20

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301073A	Batch#:	122766
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301073B	Batch#:	122766
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

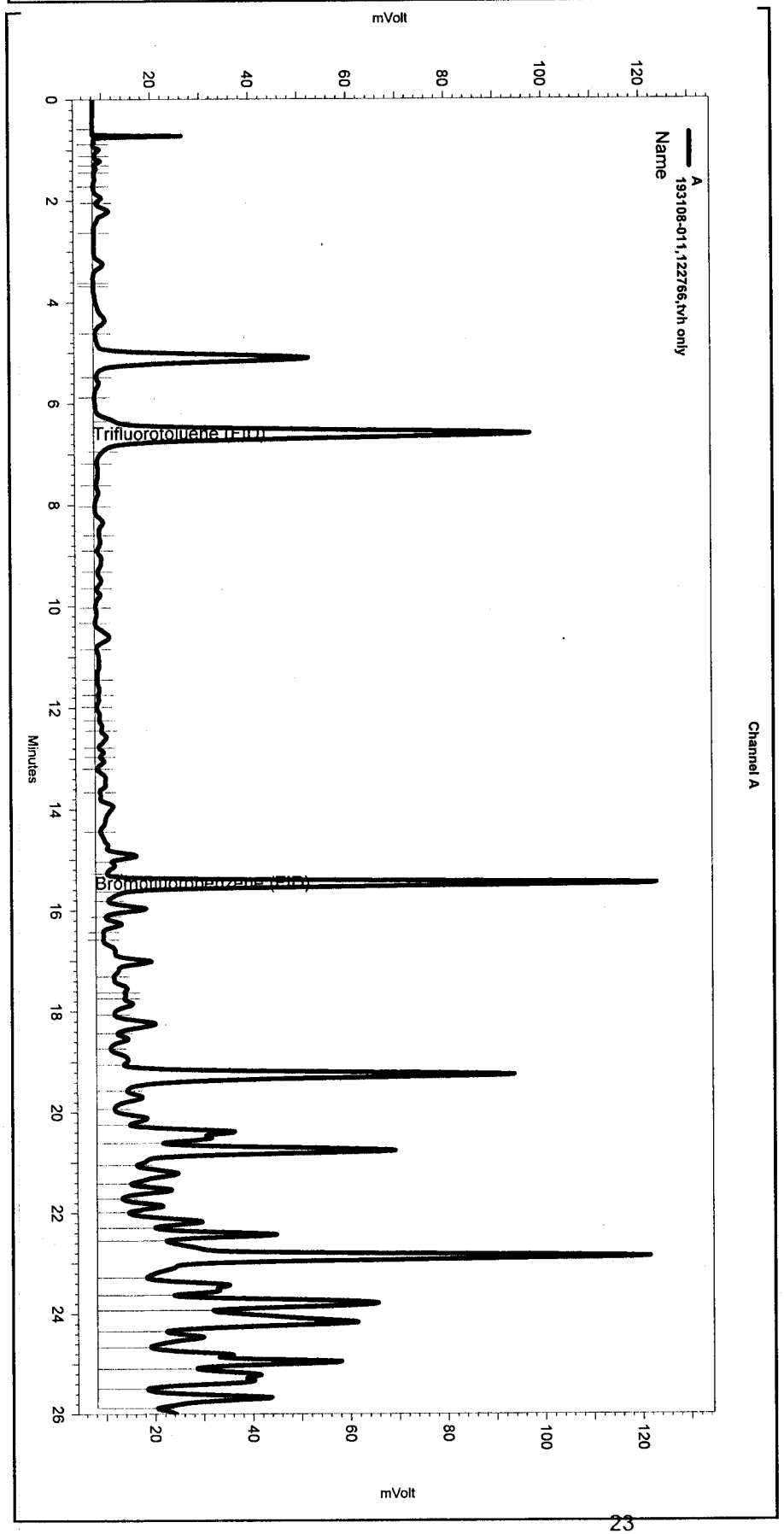
Analyte	Result	RL
Gasoline C7-C12	620 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	115	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-011,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_012
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 6:23:48 PM
Analysis Date: 3/7/2007 8:33:15 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: C1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	6.343	0	0
Yes	Split Peak	6.955	0	0
Yes	Split Peak	15.636	0	0

DUP 0301073B

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	122766
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW08	Batch#:	122766
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1A	Batch#:	122766
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

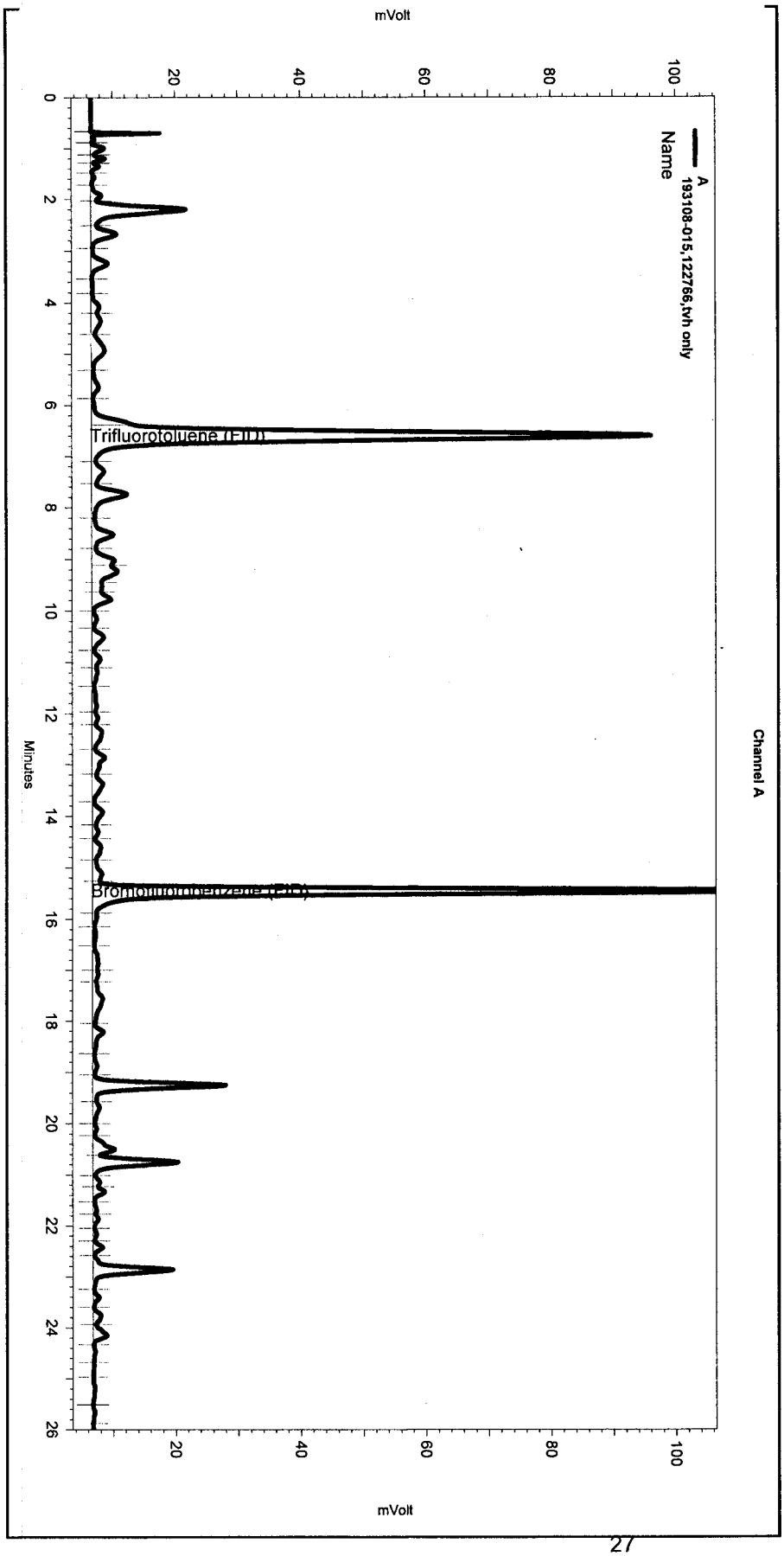
Analyte	Result	RL
Gasoline C7-C12	140 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	116	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-015,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_026
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/7/2007 2:51:05 AM
Analysis Date: 3/7/2007 8:34:10 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: C1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.377	0	0

1065 PZ 1A

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ2A	Batch#:	122918
Lab ID:	193108-016	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	88	65-135	EPA 8015B
Bromofluorobenzene (FID)	93	65-135	EPA 8015B
Trifluorotoluene (PID)	88	65-135	EPA 8021B
Bromofluorobenzene (PID)	93	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ3A	Batch#:	122918
Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.5	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	102	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4A	Batch#:	122918
Lab ID:	193108-018	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	86	65-135	EPA 8015B
Bromofluorobenzene (FID)	91	65-135	EPA 8015B
Trifluorotoluene (PID)	86	65-135	EPA 8021B
Bromofluorobenzene (PID)	91	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW101	Batch#:	122766
Lab ID:	193108-019	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	118	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW102	Batch#:	122766
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW103	Batch#:	122766
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	122766
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW101	Batch#:	122766
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW03	Batch#:	122766
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW05	Batch#:	122766
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0302071A	Batch#:	122766
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377779	Batch#:	122766
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378402	Batch#:	122918
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

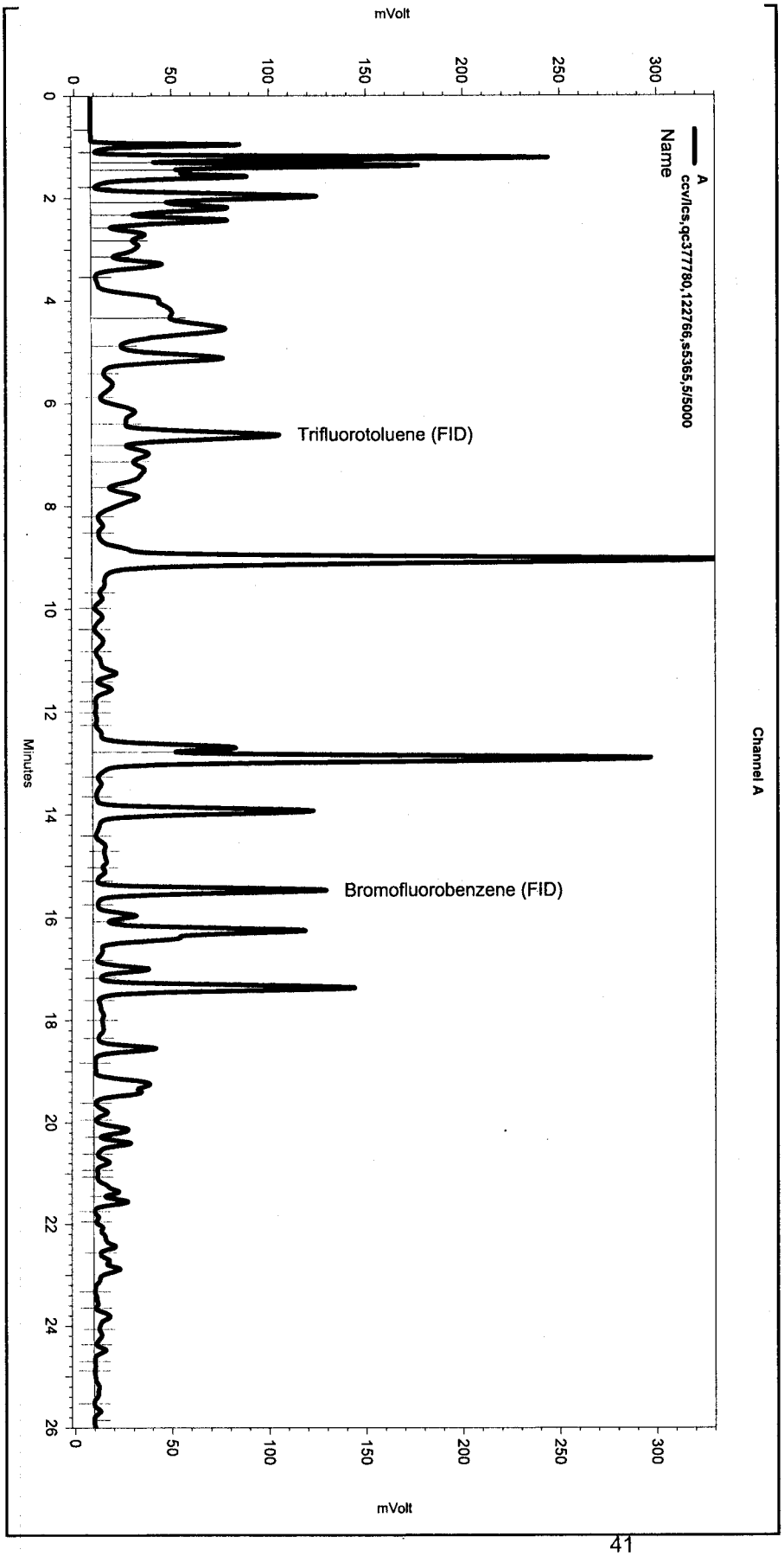
Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	65-135	EPA 8015B
Bromofluorobenzene (FID)	97	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	94	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq**
Sample Name: **ccv/lcs,qc377780,122766,s5365,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\065_002**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 10:13:19 AM
Analysis Date: 3/7/2007 8:32:34 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

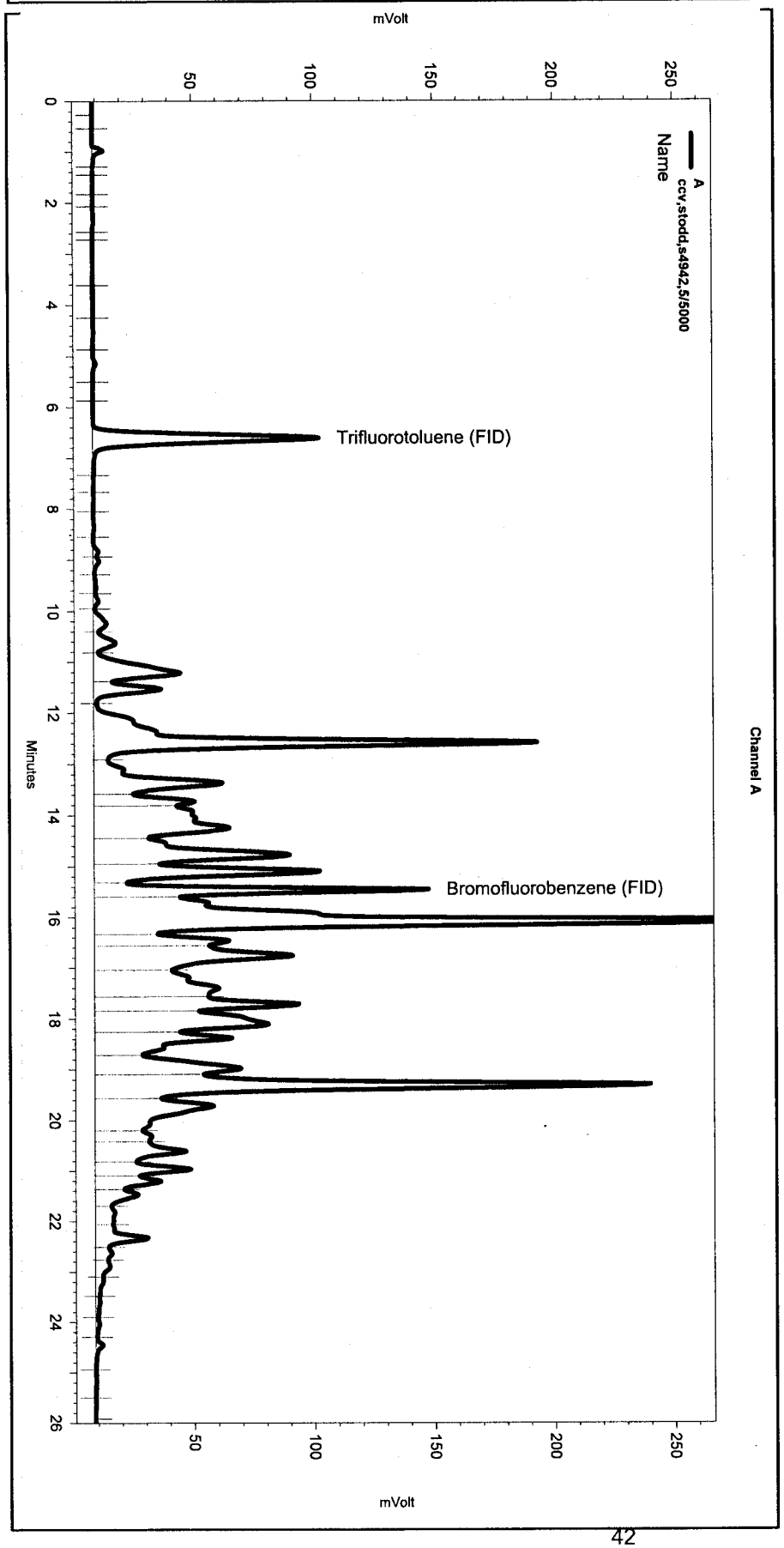
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Gasoline

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **ccv,stodd,s4942,5/5000**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_003
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 11:40:43 AM
Analysis Date: 3/7/2007 8:32:39 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Stoddard Solvent

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377780	Batch#:	122766
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,937	97	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	117	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378405	Batch#:	122918
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,879	94	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	116	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	122918
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC378403

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.62	103	65-135
Benzene	20.00	21.34	107	65-135
Toluene	20.00	20.69	103	65-135
Ethylbenzene	20.00	21.76	109	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	65-135
Bromofluorobenzene (PID)	97	65-135

Type: BSD Lab ID: QC378404

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.03	95	65-135	8	35
Benzene	20.00	21.16	106	65-135	1	35
Toluene	20.00	20.38	102	65-135	2	35
Ethylbenzene	20.00	20.92	105	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (PID)	88	65-135
Bromofluorobenzene (PID)	92	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3A	Batch#:	122918
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378406

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	8.222	2,000	1,918	96	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	120	65-135

Type: MSD Lab ID: QC378407

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,931	96	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	122	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	122766
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377781

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	30.51	2,000	2,030	100	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	65-135
Bromofluorobenzene (FID)	128	65-135

Type: MSD Lab ID: QC377782

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,841	91	65-135	10	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	129	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	122766
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377783

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.74	2,000	1,888	93	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	113	65-135

Type: MSD Lab ID: QC377784

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,832	91	65-135	3	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	112	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	122766
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377785

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	23.26	2,000	1,852	91	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	114	65-135

Type: MSD Lab ID: QC377786

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,823	90	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	111	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 327063206001
Units : ng

Name : GC07 TVH 043
Date : 12-FEB-2007 16:37
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043_007	327063206007	TVH_1	12-FEB-2007 16:37	S5078 (1000X), S5029 (5000X)
L2	043_008	327063206008	TVH_2	12-FEB-2007 17:14	S5077 (1000X), S5029 (5000X)
L3	043_009	327063206009	TVH_3	12-FEB-2007 17:50	S5076 (1000X), S5029 (5000X)
L4	043_010	327063206010	TVH_4	12-FEB-2007 18:26	S5075 (2000X), S5029 (5000X)
L5	043_017	327063206017	TVH_5	13-FEB-2007 12:20	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1954.2	1665.2	1659.1	1714.5	1763.8	AVRG		5.71E-4		1751.4	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

50

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327063206001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8015B

Inst : GC07 Name : GC07 TVH 043
Calnum : 327063206001 Cal Date: 12-FEB-2007

ICV 327063206019 (043_019 13-FEB-2007) stds: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1751.4	1746.5	10000	9972	ng	0	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC07
Calnum : 327074193001
Units : ng

Name : GC07 STODDARD 051
Date : 20-FEB-2007 14:22
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_004	327074193004	STODD	20-FEB-2007 14:22	S4942 (1000X), S5029 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Stoddard Solvent C7-C12	A	2540.3	AVRG		3.94E-4		2540.3	0	0.995	20	

Analyte Spiked Amounts	Ch	L1	Units
Stoddard Solvent C7-C12	A	10000	ng

JCP 02/21/07 : 25402572 / 10000 = 2540.2572 = 2540.3

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Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	
Trifluorotoluene (PID)	B	1665.0	1682.0	1655.7	1654.7	1576.4	AVRG		6.07E-4		1646.8	2	0.995	20	
Bromofluorobenzene (PID)	B	4178.5	4347.3	4132.7	4316.5	4159.9	AVRG		2.37E-4		4227.0	2	0.995	20	
Trifluorotoluene (PID)	C	280.55	299.47	313.70	318.56	304.47	AVRG		0.00330		303.35	5	0.995	20	
Bromofluorobenzene (PID)	C	770.41	843.26	849.70	916.75	878.28	AVRG		0.00117		851.68	6	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327026521002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

54

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8021B

Inst : GC19
Calnum: 347094532001
Units : ng

Name : GC19 MBTXE 065
Date : 07-MAR-2007 00:19
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_015	347094532015	BTXE_1	07-MAR-2007 00:19	S5559 (1000X), S5345 (5000X)
L2	065_016	347094532016	BTXE_2	07-MAR-2007 00:57	S5558 (1250X), S5345 (5000X)
L3	065_017	347094532017	BTXE_3	07-MAR-2007 01:34	S5558 (500X), S5345 (5000X)
L4	065_018	347094532018	BTXE_4	07-MAR-2007 02:12	S5558 (125X), S5345 (5000X)
L5	065_019	347094532019	BTXE_5	07-MAR-2007 02:50	S5557 (1000X), S5345 (5000X)
L6	065_020	347094532020	BTXE_6	07-MAR-2007 03:27	S5557 (500X), S5345 (5000X)
L7	065_021	347094532021	BTXE_7	07-MAR-2007 04:05	S5557 (250X), S5345 (5000X)
L8	065_022	347094532022	MTBE_7	07-MAR-2007 04:43	S4993 (500X), S5345 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		3844.7	2928.8	2729.5	2707.7	2723.5	2789.1	2700.5	AVRG		3.43E-4		2917.7	14	0.995	20	
Benzene	B	15283	14070	13944	13606	13542	13399	13426		AVRG		7.20E-5		13895	5	0.995	20	
Toluene	B	17218	13683	13277	12748	12668	12299	12327		AVRG		7.43E-5		13460	13	0.995	20	
Ethylbenzene	B	12304	10889	11222	10989	11072	10619	10982		AVRG		8.97E-5		11154	5	0.995	20	
m,p-Xylenes	B	17544	14979	14768	14800	14896	14597	14193		AVRG		6.62E-5		15111	7	0.995	20	
o-Xylene	B	11831	10709	10758	10813	10894	10576	10704		AVRG		9.18E-5		10898	4	0.995	20	
MTBE	C		1161.4	849.60	882.72	1003.0	1059.5	1121.2	1126.9	AVRG		9.72E-4		1029.2	12	0.995	20	
Benzene	C	3050.8	2644.0	2630.1	2881.1	3091.0	3125.4	3166.7		AVRG		3.40E-4		2941.3	8	0.995	20	
Toluene	C	2697.2	2425.0	2498.8	2660.0	2896.6	2894.8	2940.4		AVRG		3.68E-4		2716.1	8	0.995	20	
Ethylbenzene	C	2160.4	2122.9	2208.3	2377.6	2637.4	2615.1	2656.7		AVRG		4.17E-4		2396.9	10	0.995	20	
m,p-Xylenes	C	2953.2	2781.4	2898.4	3066.5	3354.7	3334.8	3386.1		AVRG		3.21E-4		3110.7	8	0.995	20	
o-Xylene	C	2044.4	2043.3	2070.3	2247.6	2482.0	2485.6	2568.8		AVRG		4.39E-4		2277.4	10	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8021B

Inst : GC19 Name : GC19 MBTXE 065
Calnum : 347094532001 Cal Date: 07-MAR-2007

ICV 347094532024 (065_024 07-MAR-2007) stds: S5206 (1000X), S5345 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2917.7	2567.6	100.0	88.00	ng	-12	15	
Benzene	B	13895	14504	100.0	104.4	ng	4	15	
Toluene	B	13460	13478	100.0	100.1	ng	0	15	
Ethylbenzene	B	11154	11607	100.0	104.1	ng	4	15	
m,p-Xylenes	B	15111	13169	200.0	174.3	ng	-13	15	
o-Xylene	B	10898	10825	100.0	99.33	ng	-1	15	
MTBE	C	1029.2	949.05	100.0	92.21	ng	-8	15	
Benzene	C	2941.3	3165.2	100.0	107.6	ng	8	15	
Toluene	C	2716.1	2916.1	100.0	107.4	ng	7	15	
Ethylbenzene	C	2396.9	2583.1	100.0	107.8	ng	8	15	
m,p-Xylenes	C	3110.7	2985.0	200.0	191.9	ng	-4	15	
o-Xylene	C	2277.4	2318.9	100.0	101.8	ng	2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347094532002
Units : ng

Name : GC19 TFT/BFB 065
Date : 07-MAR-2007 09:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_027	347094532027	TFT/BFB_1	07-MAR-2007 09:08	S5343 (5000X)
L2	065_028	347094532028	TFT/BFB_2	07-MAR-2007 09:48	S5344 (5000X)
L3	065_029	347094532029	TFT/BFB_3	07-MAR-2007 10:26	S5665 (5000X)
L4	065_030	347094532030	TFT/BFB_4	07-MAR-2007 11:04	S5346 (5000X)
L5	065_031	347094532031	TFT/BFB_5	07-MAR-2007 11:51	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1826.5	1624.8	1951.7	1889.3	1699.3	AVRG		5.56E-4		1798.3	7	0.995	20	
Bromofluorobenzene (FID)	A	788.41	783.36	1016.4	990.66	931.50	AVRG		0.00111		902.06	12	0.995	20	
Trifluorotoluene (PID)	B	4840.6	4318.4	5159.2	4899.1	4464.0	AVRG		2.11E-4		4736.3	7	0.995	20	
Bromofluorobenzene (PID)	B	6754.1	6717.9	8691.5	8480.4	7857.3	AVRG		1.30E-4		7700.2	12	0.995	20	
Trifluorotoluene (PID)	C	976.64	880.75	1115.3	1078.4	999.08	AVRG		9.90E-4		1010.0	9	0.995	20	
Bromofluorobenzene (PID)	C	1447.6	1451.4	1943.2	1912.3	1774.9	AVRG		5.86E-4		1705.9	14	0.995	20	

GS Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532002

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: QC377780 IDF : 1.0
Seqnum : 327094177002.2 File : 065_002 Time : 06-MAR-2007 10:13
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1696.2	10000	9685	ng	-3	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2749.3	450.0	550.9	ng	**22**	15	c+ u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2049.9	450.0	528.5	ng	**17**	15	c+ u
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1821.9	450.0	2703 >LR	ng	**501**	15	>LR c+ ***
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	948.87	450.0	259.3	ng	**-42**	15	c-
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4478.4	450.0	2366 >LR	ng	**426**	15	>LR c+ ***
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2373.2	450.0	252.6	ng	**-44**	15	c-

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135% [general version]

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131% [general version]

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327094177003 File : 065_003 Time : 06-MAR-2007 11:40
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2814.4	10000	11080	ng	11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2359.3	450.0	472.8	ng	5	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2623.1	450.0	676.3	ng	**50**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	855.45	450.0	233.8	ng	**-48**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2611.8	450.0	278.1	ng	**-38**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1488.3	450.0	2208	ng	**391**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5866.7	450.0	3100	ng	**589**	15	>LR c+ ***

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177014 File : 065_014 Time : 06-MAR-2007 19:36
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1633.5	15000	13990	ng	-7	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2719.4	450.0	544.9	ng	**21**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2008.5	450.0	517.8	ng	15	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	914.18	450.0	249.8	ng	**-44**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2214.5	450.0	235.8	ng	**-48**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2027.0	450.0	3007	ng	**568**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4202.6	450.0	2221	ng	**393**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177015 File : 065_015 Time : 06-MAR-2007 20:12
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1666.2	15000	14270	ng	-5	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2886.9	450.0	578.5	ng	**29**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2064.2	450.0	532.2	ng	**18**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	992.93	450.0	271.3	ng	**-40**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2278.2	450.0	242.5	ng	**-46**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2054.4	450.0	3048	ng	**577**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4275.0	450.0	2259	ng	**402**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327094177016 File : 065_016 Time : 06-MAR-2007 20:48
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2573.8	10000	10130	ng	1	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2419.6	450.0	484.8	ng	8	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2533.9	450.0	653.3	ng	**45**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	827.43	450.0	226.1	ng	**-50**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2385.4	450.0	253.9	ng	**-44**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1411.3	450.0	2094	ng	**365**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5094.8	450.0	2692	ng	**498**	15	>LR c+ ***

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177028 File : 065_028 Time : 07-MAR-2007 04:03
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1536.8	20000	17550	ng	-12	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2644.6	450.0	529.9	ng	**18**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2010.3	450.0	518.3	ng	15	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	908.06	450.0	248.1	ng	**-45**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2134.2	450.0	227.2	ng	**-50**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1999.0	450.0	2965	ng	**559**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4058.3	450.0	2144	ng	**377**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177029 File : 065_029 Time : 07-MAR-2007 04:39
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1581.0	20000	18050	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2859.6	450.0	573.0	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2082.8	450.0	537.0	ng	**19**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	1003.9	450.0	274.3	ng	**-39**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2249.4	450.0	239.5	ng	**-47**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2171.1	450.0	3221	ng	**616**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4300.3	450.0	2272	ng	**405**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177037 File : 065_037 Time : 07-MAR-2007 10:27
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1595.7	15000	13670	ng	-9	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2684.1	450.0	537.8	ng	**20**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1995.9	450.0	514.6	ng	14	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	907.62	450.0	248.0	ng	**-45**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2176.5	450.0	231.7	ng	**-49**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1915.4	450.0	2841	ng	**531**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4231.7	450.0	2236	ng	**397**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778012 File : 071_012 Time : 12-MAR-2007 19:45
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1573.2	15000	13470	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2502.7	450.0	501.5	ng	11	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1939.1	450.0	499.9	ng	11	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	785.42	450.0	214.6	ng	**-52**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1932.0	450.0	205.7	ng	**-54**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2205.9	450.0	3272	ng	**627**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4706.0	450.0	2487	ng	**453**	15	>LR c+ ***

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: CW Date: 03/13/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778013 File : 071_013 Time : 12-MAR-2007 20:21
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1558.1	15000	13350	ng	-11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2547.4	450.0	510.5	ng	13	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1908.8	450.0	492.1	ng	9	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	804.08	450.0	219.7	ng	**-51**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1908.9	450.0	203.2	ng	**-55**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2287.9	450.0	3394	ng	**654**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4611.4	450.0	2437	ng	**441**	15	>LR c+ ***

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778024 File : 071_024 Time : 13-MAR-2007 02:59
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1598.9	20000	18260	ng	-9	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2913.9	450.0	583.9	ng	**30**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2091.0	450.0	539.1	ng	**20**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	882.31	450.0	241.1	ng	**-46**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1994.5	450.0	212.3	ng	**-53**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2345.7	450.0	3480	ng	**673**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4743.0	450.0	2506	ng	**457**	15	>LR c+ ***

JCP 03/13/07 [Trifluorotoluene (FID) A]: Passes limits of 72-136%

JCP 03/13/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378405 IDF : 1.0
Seqnum : 347098705002.1 File : 068_002 Time : 09-MAR-2007 13:43
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1474.5	10000	9397	ng	-6	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1910.1	450.0	478.0	ng	6	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1049.6	450.0	523.6	ng	**16**	15	c+ u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5437.2	450.0	516.6	ng	15	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1227.0	450.0	546.6	ng	**21**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8852.4	450.0	517.3	ng	15	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1973.2	450.0	520.5	ng	**16**	15	c+

JCP 03/12/07 : Trifluorotoluene (PID) C passes limits of 65-135% [general version]

JCP 03/12/07 : Bromofluorobenzene (PID) C passes limits of 78-121% [general version]

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378403 IDF : 1.0
Seqnum : 347098705004.1 File : 068_004 Time : 09-MAR-2007 14:58
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	3007.5	100.0	103.1	ng	3	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	931.66	100.0	90.52	ng	-9	15	
Benzene	B	347094532001	07-MAR-2007	13895	14828	100.0	106.7	ng	7	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	3145.7	100.0	106.9	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13925	100.0	103.5	ng	3	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2920.0	100.0	107.5	ng	8	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12133	100.0	108.8	ng	9	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2597.0	100.0	108.3	ng	8	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15792	100.0	104.5	ng	5	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3343.3	100.0	107.5	ng	7	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11611	100.0	106.5	ng	7	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2427.7	100.0	106.6	ng	7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1636.2	450.0	409.4	ng	-9	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	871.86	450.0	434.9	ng	-3	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4285.8	450.0	407.2	ng	-10	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	914.48	450.0	407.4	ng	-9	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7434.2	450.0	434.5	ng	-3	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1634.0	450.0	431.0	ng	-4	15	

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705013 File : 068_013 Time : 09-MAR-2007 21:58
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1745.7	450.0	436.8	ng	-3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	963.61	450.0	480.7	ng	7	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	3167.0	150.0	162.8	ng	9	15	
Benzene	B	347094532001	07-MAR-2007	13895	14974	150.0	161.6	ng	8	15	
Toluene	B	347094532001	07-MAR-2007	13460	13840	150.0	154.2	ng	3	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12110	150.0	162.9	ng	9	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15698	150.0	155.8	ng	4	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11656	150.0	160.4	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4675.1	450.0	444.2	ng	-1	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8282.6	450.0	484.0	ng	8	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	710.07	150.0	103.5	ng	**-31**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	3156.8	150.0	161.0	ng	7	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2911.7	150.0	160.8	ng	7	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2581.3	150.0	161.5	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3297.4	150.0	159.0	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2427.1	150.0	159.9	ng	7	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	970.26	450.0	432.3	ng	-4	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1776.5	450.0	468.6	ng	4	15	

JCP 03/12/07 : MTBE fails %D low on ChC. Report MTBE from ChB. ChC is for confirm only.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705014 File : 068_014 Time : 09-MAR-2007 22:36
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1684.2	450.0	421.4	ng	-6	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	930.80	450.0	464.3	ng	3	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2872.7	150.0	147.7	ng	-2	15	
Benzene	B	347094532001	07-MAR-2007	13895	14853	150.0	160.3	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13740	150.0	153.1	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11736	150.0	157.8	ng	5	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15998	150.0	158.8	ng	6	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11650	150.0	160.4	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4505.2	450.0	428.0	ng	-5	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8044.1	450.0	470.1	ng	4	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	679.34	150.0	99.01	ng	**-34**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	3114.3	150.0	158.8	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2880.7	150.0	159.1	ng	6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2573.4	150.0	161.0	ng	7	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3295.0	150.0	158.9	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2431.5	150.0	160.1	ng	7	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	929.27	450.0	414.0	ng	-8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1725.1	450.0	455.1	ng	1	15	

JCP 03/12/07 : MTBE fails %D low on ChC. Report MTBE from ChB. ChC is for confirm only.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705015 File : 068_015 Time : 09-MAR-2007 23:13
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1473.4	15000	14080	ng	-6	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1975.0	450.0	494.2	ng	10	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1123.2	450.0	560.3	ng	**25**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5403.4	450.0	513.4	ng	14	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9411.7	450.0	550.0	ng	**22**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1279.4	450.0	570.0	ng	**27**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2080.2	450.0	548.8	ng	**22**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705016 File : 068_016 Time : 09-MAR-2007 23:51
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1448.3	15000	13850	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2072.7	450.0	518.7	ng	15	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1138.2	450.0	567.8	ng	**26**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5499.7	450.0	522.5	ng	**16**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9596.9	450.0	560.8	ng	**25**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1322.0	450.0	589.0	ng	**31**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2142.3	450.0	565.1	ng	**26**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705029 File : 068_029 Time : 10-MAR-2007 08:00
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1719.9	450.0	430.4	ng	-4	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	953.80	450.0	475.8	ng	6	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2698.1	200.0	184.9	ng	-8	15	
Benzene	B	347094532001	07-MAR-2007	13895	14666	200.0	211.1	ng	6	15	
Toluene	B	347094532001	07-MAR-2007	13460	13623	200.0	202.4	ng	1	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11686	200.0	209.5	ng	5	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15884	200.0	210.2	ng	5	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11529	200.0	211.6	ng	6	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4596.2	450.0	436.7	ng	-3	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8020.4	450.0	468.7	ng	4	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	997.50	200.0	193.8	ng	-3	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3119.2	200.0	212.1	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2876.2	200.0	211.8	ng	6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2579.6	200.0	215.2	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3288.0	200.0	211.4	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2415.2	200.0	212.1	ng	6	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	929.10	450.0	413.9	ng	-8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1694.8	450.0	447.1	ng	-1	15	

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705030 File : 068_030 Time : 10-MAR-2007 08:38
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1679.7	450.0	420.3	ng	-7	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	915.51	450.0	456.7	ng	1	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2911.7	200.0	199.6	ng	0	15	
Benzene	B	347094532001	07-MAR-2007	13895	14684	200.0	211.4	ng	6	15	
Toluene	B	347094532001	07-MAR-2007	13460	13749	200.0	204.3	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11794	200.0	211.5	ng	6	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15375	200.0	203.5	ng	2	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11440	200.0	210.0	ng	5	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4469.9	450.0	424.7	ng	-6	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7901.2	450.0	461.7	ng	3	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	1033.0	200.0	200.7	ng	0	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3119.8	200.0	212.1	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2862.1	200.0	210.7	ng	5	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2548.4	200.0	212.6	ng	6	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3223.8	200.0	207.3	ng	4	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2400.5	200.0	210.8	ng	5	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	902.37	450.0	402.0	ng	-11	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1671.5	450.0	440.9	ng	-2	15	

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705031 File : 068_031 Time : 10-MAR-2007 09:16
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1441.4	20000	18370	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1875.8	450.0	469.4	ng	4	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1049.9	450.0	523.8	ng	**16**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5058.5	450.0	480.6	ng	7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8626.9	450.0	504.2	ng	12	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1238.5	450.0	551.8	ng	**23**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1901.1	450.0	501.5	ng	11	15	

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limit sof 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705032 File : 068_032 Time : 10-MAR-2007 09:53
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1456.3	20000	18560	ng	-7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2061.3	450.0	515.8	ng	15	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1163.4	450.0	580.4	ng	**29**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5667.6	450.0	538.5	ng	**20**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9666.6	450.0	564.9	ng	**26**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1391.8	450.0	620.1	ng	**38**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2165.4	450.0	571.2	ng	**27**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705044 File : 068_044 Time : 10-MAR-2007 17:24
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1821.2	450.0	455.7	ng	1	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	998.70	450.0	498.2	ng	11	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	3003.8	150.0	154.4	ng	3	15	
Benzene	B	347094532001	07-MAR-2007	13895	14916	150.0	161.0	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13788	150.0	153.7	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11974	150.0	161.0	ng	7	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15524	150.0	154.1	ng	3	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11538	150.0	158.8	ng	6	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4820.5	450.0	458.0	ng	2	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8379.8	450.0	489.7	ng	9	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	972.89	150.0	141.8	ng	-5	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3186.9	150.0	162.5	ng	8	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2921.8	150.0	161.4	ng	8	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2590.1	150.0	162.1	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3292.5	150.0	158.8	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2423.4	150.0	159.6	ng	6	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1005.0	450.0	447.7	ng	-1	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1810.0	450.0	477.5	ng	6	15	

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705046 File : 068_046 Time : 10-MAR-2007 18:40
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1400.4	15000	13390	ng	-11	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2001.9	450.0	500.9	ng	11	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1093.4	450.0	545.4	ng	**21**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5100.0	450.0	484.6	ng	8	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8956.9	450.0	523.4	ng	**16**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1242.5	450.0	553.6	ng	**23**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1989.1	450.0	524.7	ng	**17**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	018_001	X	IB			01/18/07 10:01	1.0	1	
002	018_002	X	IB			01/18/07 10:49	1.0	1	
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1	
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1	
005	018_005	X	IB			01/18/07 18:01	1.0	1	
006	018_006	X	IB			01/18/07 18:37	1.0	1	
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1	
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1	
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1	
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1	
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1	
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1	
013	018_013	X	IB			01/18/07 22:54	1.0	1	
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1	
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1	
016	018_016	X	IB			01/19/07 00:43	1.0	1	
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1	
018	018_018	X	IB			01/19/07 01:56	1.0	1	
019	018_019	X	IB			01/19/07 02:32	1.0	1	
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1	
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1	
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1	
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1	
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1	
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1	
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1	
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1	
028	018_028	X	IB			01/19/07 08:41	1.0	1	
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1	
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1	
031	018_031	X	IB			01/19/07 12:18	1.0	1	
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15	
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16	
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17	
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18	
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19	

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327063206

Instrument : GC07 Begun : 02/12/07 08:31
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043_001	X	IB			02/12/07 08:31	1.0	1	
002	043_002	X	CCV			02/12/07 09:08	1.0	2 1	
003	043_003	X	CCV			02/12/07 09:44	1.0	3 1	
004	043_004	X	IB			02/12/07 11:42	1.0	1	
005	043_005	X	IB			02/12/07 15:25	1.0	1	
006	043_006	X	ICAL			02/12/07 16:01	1.0	4 1	
007	043_007	ICAL	TVH_1			02/12/07 16:37	1.0	4 1	
008	043_008	ICAL	TVH_2			02/12/07 17:14	1.0	5 1	
009	043_009	ICAL	TVH_3			02/12/07 17:50	1.0	6 1	
010	043_010	ICAL	TVH_4			02/12/07 18:26	1.0	7 1	
011	043_011	X	TVH_5			02/12/07 19:02	1.0	7 1	
012	043_012	X	IB			02/12/07 19:38	1.0	1	
013	043_013	X	ICV			02/12/07 20:14	1.0	3 1	
014	043_014	X	ICV			02/12/07 20:50	1.0	3 1	
015	043_015	X	IB			02/12/07 21:26	1.0	1	
016	043_016	CMARKER	CARBMARK			02/12/07 22:03	1.0	8 9 1	
017	043_017	ICAL	TVH_5			02/13/07 12:20	1.0	7 1	
018	043_018	X	IB			02/13/07 12:56	1.0	1	
019	043_019	ICV	TVH			02/13/07 13:32	1.0	3 1	

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327074193

Instrument : GC07 Begun : 02/20/07 12:33
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	051_001	X	IB			02/20/07 12:33	1.0	1	
002	051_002	X	CCV			02/20/07 13:10	1.0	2 1	
003	051_003	CCV/LCS	QC375803	Soil	122278	02/20/07 13:46	1.0	3 1	
004	051_004	ICAL	STODD			02/20/07 14:22	1.0	4 1	
005	051_005	BLANK	QC375802	Soil	122278	02/20/07 15:14	1.0	1	
006	051_006	MS	QC375804	Soil	122278	02/20/07 15:50	1.0	3 1	
007	051_007	MSD	QC375805	Soil	122278	02/20/07 16:27	1.0	3 1	
008	051_008	MSS	192789-001	Soil	122278	02/20/07 17:30	1.0	1	
009	051_009	SAMPLE	192789-002	Soil	122278	02/20/07 18:06	1.0	1	
010	051_010	SAMPLE	192789-003	Soil	122278	02/20/07 18:42	1.0	1	
011	051_011	SAMPLE	192789-004	Soil	122278	02/20/07 19:18	1.0	1	
012	051_012	CCV	TVH			02/20/07 19:54	1.0	3 1	
013	051_013	CCV	TVH			02/20/07 20:31	1.0	3 1	
014	051_014	CCV	STODD			02/20/07 21:07	1.0	4 1	
015	051_015	CCV	STODD			02/20/07 21:43	1.0	4 1	
016	051_016	CCV	JP4			02/20/07 22:19	1.0	5 1	
017	051_017	CCV	JP4			02/20/07 22:55	1.0	5 1	
018	051_018	MB	QC375836	Water	122286	02/20/07 23:32	1.0	1	
019	051_019	LCS	QC375837	Water	122286	02/21/07 00:08	666.7	1 3	
020	051_020	X	192322-001		122286	02/21/07 00:44	1.0	6 1	
021	051_021	MDL	192322-001	Water	122286	02/21/07 01:20	1.0	6 1	
022	051_022	MDL	192322-002	Water	122286	02/21/07 01:56	1.0	6 1	
023	051_023	MDL	192322-003	Water	122286	02/21/07 02:32	1.0	6 1	
024	051_024	MDL	192322-004	Water	122286	02/21/07 03:08	1.0	6 1	
025	051_025	MDL	192322-005	Water	122286	02/21/07 03:45	1.0	6 1	
026	051_026	MDL	192322-006	Water	122286	02/21/07 04:21	1.0	6 1	
027	051_027	MDL	192322-007	Water	122286	02/21/07 04:57	1.0	6 1	
028	051_028	CCV	TVH			02/21/07 05:33	1.0	3 1	
029	051_029	CCV	TVH			02/21/07 06:09	1.0	3 1	
030	051_030	CCV	JP4			02/21/07 06:45	1.0	5 1	
031	051_031	CCV	JP4			02/21/07 07:21	1.0	5 1	

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S4942 5=S4690 6=S4692

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327094177

Instrument : GC07 Begun : 03/06/07 09:37
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	065_001	X	IB			03/06/07 09:37	1.0	1
002	065_002	CCV/LCS	QC377780	Water	122766	03/06/07 10:13	1.0	2 1
003	065_003	CCV	STODD			03/06/07 11:40	1.0	3 1
004	065_004	BLANK	QC377779	Water	122766	03/06/07 12:16	1.0	1
005	065_005	SAMPLE	193167-001	Water	122766	03/06/07 13:21	1.0	1
006	065_006	MSS	193108-001	Water	122766	03/06/07 14:43	1.0	1
007	065_007	SAMPLE	193108-006	Water	122766	03/06/07 15:19	1.0	1
008	065_008	MSS	193108-007	Water	122766	03/06/07 15:55	1.0	1
009	065_009	SAMPLE	193167-002	Water	122766	03/06/07 16:35	1.0	1
010	065_010	SAMPLE	193108-008	Water	122766	03/06/07 17:11	1.0	1
011	065_011	SAMPLE	193108-010	Water	122766	03/06/07 17:47	1.0	1
012	065_012	SAMPLE	193108-011	Water	122766	03/06/07 18:23	1.0	1
013	065_013	X	IB			03/06/07 18:59	1.0	1
014	065_014	CCV	TVH			03/06/07 19:36	1.0	2 1
015	065_015	CCV	TVH			03/06/07 20:12	1.0	2 1
016	065_016	CCV	STODD			03/06/07 20:48	1.0	3 1
017	065_017	CCV	STODD			03/06/07 21:24	1.0	3 1
018	065_018	MS	QC377781	Water	122766	03/06/07 22:00	1.0	2 1
019	065_019	MSD	QC377782	Water	122766	03/06/07 22:37	1.0	2 1
020	065_020	MS	QC377783	Water	122766	03/06/07 23:13	1.0	2 1
021	065_021	MSD	QC377784	Water	122766	03/06/07 23:49	1.0	2 1
022	065_022	MS	QC377785	Water	122766	03/07/07 00:26	1.0	2 1
023	065_023	MSD	QC377786	Water	122766	03/07/07 01:02	1.0	2 1
024	065_024	SAMPLE	193108-012	Water	122766	03/07/07 01:38	1.0	1
025	065_025	SAMPLE	193108-013	Water	122766	03/07/07 02:14	1.0	1
026	065_026	SAMPLE	193108-015	Water	122766	03/07/07 02:51	1.0	1
027	065_027	SAMPLE	193108-019	Water	122766	03/07/07 03:27	1.0	1
028	065_028	CCV	TVH			03/07/07 04:03	1.0	2 1
029	065_029	CCV	TVH			03/07/07 04:39	1.0	2 1
030	065_030	SAMPLE	193108-020	Water	122766	03/07/07 05:15	1.0	1
031	065_031	SAMPLE	193108-022	Water	122766	03/07/07 05:51	1.0	1
032	065_032	MSS	193108-023	Water	122766	03/07/07 06:27	1.0	1
033	065_033	SAMPLE	193108-024	Water	122766	03/07/07 07:03	1.0	1
034	065_034	SAMPLE	193108-025	Water	122766	03/07/07 08:22	1.0	1
035	065_035	SAMPLE	193108-026	Water	122766	03/07/07 08:58	1.0	1
036	065_036	SAMPLE	193108-027	Water	122766	03/07/07 09:34	1.0	1
037	065_037	CCV	TVH			03/07/07 10:27	1.0	2 1

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5365 3=S4942

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347094532

Instrument : GC19 Begun : 03/06/07 15:32
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	065_001	X	IB			03/06/07 15:32	1.0	1	
002	065_002	X	ICAL			03/06/07 16:09	1.0	2 1	
003	065_003	X	ICAL			03/06/07 16:47	1.0	2 1	
004	065_004	X	ICAL			03/06/07 17:25	1.0	3 1	
005	065_005	X	ICAL			03/06/07 18:02	1.0	3 1	
006	065_006	X	ICAL			03/06/07 18:40	1.0	3 1	
007	065_007	X	ICAL			03/06/07 19:18	1.0	4 1	
008	065_008	X	ICAL			03/06/07 19:55	1.0	4 1	
009	065_009	X	ICAL			03/06/07 20:33	1.0	4 1	
010	065_010	X	ICAL			03/06/07 21:11	1.0	5 1	
011	065_011	X	IB			03/06/07 21:48	1.0	1	
012	065_012	X	ICV			03/06/07 22:26	1.0	6 1	
013	065_013	X	ICV			03/06/07 23:04	1.0	6 1	
014	065_014	X	IB			03/06/07 23:41	1.0	1	
015	065_015	ICAL	BTXE_1			03/07/07 00:19	1.0	2 1	
016	065_016	ICAL	BTXE_2			03/07/07 00:57	1.0	3 1	
017	065_017	ICAL	BTXE_3			03/07/07 01:34	1.0	3 1	
018	065_018	ICAL	BTXE_4			03/07/07 02:12	1.0	3 1	
019	065_019	ICAL	BTXE_5			03/07/07 02:50	1.0	4 1	
020	065_020	ICAL	BTXE_6			03/07/07 03:27	1.0	4 1	
021	065_021	ICAL	BTXE_7			03/07/07 04:05	1.0	4 1	
022	065_022	ICAL	MTBE_7			03/07/07 04:43	1.0	5 1	
023	065_023	X	IB			03/07/07 05:20	1.0	1	
024	065_024	ICV	MBTXE			03/07/07 05:58	1.0	6 1	
025	065_025	X	ICV			03/07/07 06:35	1.0	6 1	
026	065_026	X	IB			03/07/07 08:30	1.0	1	
027	065_027	ICAL	TFT/BFB_1			03/07/07 09:08	1.0	7	
028	065_028	ICAL	TFT/BFB_2			03/07/07 09:48	1.0	8	
029	065_029	ICAL	TFT/BFB_3			03/07/07 10:26	1.0	9	
030	065_030	ICAL	TFT/BFB_4			03/07/07 11:04	1.0	10	
031	065_031	ICAL	TFT/BFB_5			03/07/07 11:51	1.0	11	

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Standards used: 1=S5345 2=S5559 3=S5558 4=S5557 5=S4993 6=S5206 7=S5343 8=S5344 9=S5665 10=S5346 11=S5347

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347098705

Instrument : GC19 Begun : 03/09/07 13:05
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068_001	X	CCV			03/09/07 13:05	1.0	1 2
002	068_002	CCV/LCS	QC378405	Water	122918	03/09/07 13:43	1.0	3 2
003	068_003	CCV	COLEMAN			03/09/07 14:21	1.0	4 2
004	068_004	CCV/BS	QC378403	Water	122918	03/09/07 14:58	1.0	1 2
005	068_005	BLANK	QC378402	Water	122918	03/09/07 16:56	1.0	2
006	068_006	BSD	QC378404	Water	122918	03/09/07 17:34	1.0	1 2
007	068_007	MS	QC378406	Water	122918	03/09/07 18:12	1.0	3 2
008	068_008	MSD	QC378407	Water	122918	03/09/07 18:49	1.0	3 2
009	068_009	SAMPLE	193223-001	Water	122918	03/09/07 19:27	1.0	2
010	068_010	SAMPLE	193223-002	Water	122918	03/09/07 20:05	1.0	2
011	068_011	SAMPLE	193223-003	Water	122918	03/09/07 20:43	1.0	2
012	068_012	SAMPLE	193223-004	Water	122918	03/09/07 21:20	1.0	2
013	068_013	CCV	MBTXE			03/09/07 21:58	1.0	1 2
014	068_014	CCV	MBTXE			03/09/07 22:36	1.0	1 2
015	068_015	CCV	TVH			03/09/07 23:13	1.0	3 2
016	068_016	CCV	TVH			03/09/07 23:51	1.0	3 2
017	068_017	CCV	COLEMAN			03/10/07 00:28	1.0	4 2
018	068_018	CCV	COLEMAN			03/10/07 01:06	1.0	4 2
019	068_019	SAMPLE	193223-008	Water	122918	03/10/07 01:44	1.0	2
020	068_020	SAMPLE	193223-005	Water	122918	03/10/07 02:22	1.0	2
021	068_021	SAMPLE	193223-006	Water	122918	03/10/07 02:59	1.0	2
022	068_022	SAMPLE	193223-007	Water	122918	03/10/07 03:37	1.0	2
023	068_023	SAMPLE	193108-002	Water	122918	03/10/07 04:15	1.0	2
024	068_024	SAMPLE	193108-003	Water	122918	03/10/07 04:52	1.0	2
025	068_025	SAMPLE	193108-004	Water	122918	03/10/07 05:30	1.0	2
026	068_026	SAMPLE	193108-005	Water	122918	03/10/07 06:07	1.0	2
027	068_027	SAMPLE	193108-016	Water	122918	03/10/07 06:45	1.0	2
028	068_028	MSS	193108-017	Water	122918	03/10/07 07:23	1.0	2
029	068_029	CCV	MBTXE			03/10/07 08:00	1.0	1 2
030	068_030	CCV	MBTXE			03/10/07 08:38	1.0	1 2
031	068_031	CCV	TVH			03/10/07 09:16	1.0	3 2
032	068_032	CCV	TVH			03/10/07 09:53	1.0	3 2
033	068_033	CCV	COLEMAN			03/10/07 10:31	1.0	4 2
034	068_034	CCV	COLEMAN			03/10/07 11:08	1.0	4 2
035	068_035	SAMPLE	193248-003	Water	122918	03/10/07 11:46	1.0	2
036	068_036	SAMPLE	193108-018	Water	122918	03/10/07 12:24	1.0	2
037	068_037	SAMPLE	193256-001	Water	122918	03/10/07 13:01	1.0	2
038	068_038	SAMPLE	193248-001	Water	122918	03/10/07 13:39	1.0	2
039	068_039	SAMPLE	193248-002	Water	122918	03/10/07 14:16	1.0	2
040	068_040	MS	QC377781	Water	122766	03/10/07 14:54	1.0	3 2
041	068_041	MSD	QC377782	Water	122766	03/10/07 15:32	1.0	3 2
042	068_042	MS	QC377783	Water	122766	03/10/07 16:09	1.0	3 2
043	068_043	MSD	QC377784	Water	122766	03/10/07 16:47	1.0	3 2
044	068_044	CCV	MBTXE			03/10/07 17:24	1.0	1 2
045	068_045	X	MBTXE			03/10/07 18:02	1.0	1 2
046	068_046	CCV	TVH			03/10/07 18:40	1.0	3 2
047	068_047	CCV	TVH			03/10/07 19:17	1.0	3 2
048	068_048	MS	QC377785	Water	122766	03/10/07 19:55	1.0	3 2
049	068_049	MSD	QC377786	Water	122766	03/10/07 20:32	1.0	3 2
050	068_050	CCV	TVH			03/10/07 21:10	1.0	3 2
051	068_051	CCV	TVH			03/10/07 21:47	1.0	3 2

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347098705

Instrument : GC19 Begun : 03/09/07 13:05
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

Analyst: JCP Date: 03/12/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5345 3=S5365 4=S5067

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327102778

Instrument : GC07 Begun : 03/12/07 08:58
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071_001	X	IB			03/12/07 08:58	1.0	1	
002	071_002	CCV/LCS	QC378388	Water	122913	03/12/07 09:46	1.0	2 1	
003	071_003	BLANK	QC378387	Water	122913	03/12/07 11:21	1.0	1	
004	071_004	SAMPLE	193230-005	Water	122913	03/12/07 12:23	1.0	1	
005	071_005	MS	QC378400	Water	122913	03/12/07 13:00	1.0	2 1	
006	071_006	MSD	QC378401	Water	122913	03/12/07 13:36	1.0	2 1	
007	071_007	SAMPLE	193166-002	Water	122913	03/12/07 16:44	1.0	1	headspace > 1 mL
008	071_008	SAMPLE	193166-021	Water	122913	03/12/07 17:20	1.0	1	pH > 2
009	071_009	SAMPLE	193261-001	Water	122913	03/12/07 17:56	1.0	1	
010	071_010	SAMPLE	193261-002	Water	122913	03/12/07 18:33	1.0	1	
011	071_011	SAMPLE	193261-003	Water	122913	03/12/07 19:09	1.0	1	
012	071_012	CCV	TVH			03/12/07 19:45	1.0	2 1	
013	071_013	CCV	TVH			03/12/07 20:21	1.0	2 1	
014	071_014	MS	QC377783	Water	122766	03/12/07 20:58	1.0	2 1	
015	071_015	MSD	QC377784	Water	122766	03/12/07 21:34	1.0	2 1	
016	071_016	MS	QC377785	Water	122766	03/12/07 22:10	1.0	2 1	
017	071_017	MSD	QC377786	Water	122766	03/12/07 22:46	1.0	2 1	
018	071_018	SAMPLE	193261-004	Water	122913	03/12/07 23:22	1.0	1	
019	071_019	SAMPLE	193267-001	Water	122913	03/12/07 23:58	1.0	1	
020	071_020	SAMPLE	193267-002	Water	122913	03/13/07 00:35	1.0	1	
021	071_021	SAMPLE	193267-003	Water	122913	03/13/07 01:11	1.0	1	
022	071_022	SAMPLE	193267-004	Water	122913	03/13/07 01:47	1.0	1	
023	071_023	SAMPLE	193267-005	Water	122913	03/13/07 02:23	1.0	1	
024	071_024	CCV	TVH			03/13/07 02:59	1.0	2 1	
025	071_025	CCV	TVH			03/13/07 03:35	1.0	2 1	
026	071_026	SAMPLE	193267-006	Water	122913	03/13/07 04:11	1.0	1	
027	071_027	SAMPLE	193267-007	Water	122913	03/13/07 04:48	1.0	1	
028	071_028	SAMPLE	193267-008	Water	122913	03/13/07 05:24	1.0	1	
029	071_029	MSS	193208-001	Water	122913	03/13/07 06:00	1.0	1	
030	071_030	SAMPLE	193208-002	Water	122913	03/13/07 06:36	1.0	1	
031	071_031	SAMPLE	193208-003	Water	122913	03/13/07 07:12	1.0	1	
032	071_032	SAMPLE	193208-004	Water	122913	03/13/07 07:49	1.0	1	
033	071_033	SAMPLE	193208-005	Water	122913	03/13/07 08:25	1.0	1	
034	071_034	CCV	TVH			03/13/07 09:20	1.0	2 1	

Analyst: JCP Date: 03/13/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5365

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REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-001	Gasoline C7-C12	GC07	A	03/06/07 14:43
193108-001	Stoddard Solvent C7-C12	GC07	A	03/06/07 14:43
193108-001	Trifluorotoluene (FID)	GC07	A	03/06/07 14:43
193108-001	Bromofluorobenzene (FID)	GC07	A	03/06/07 14:43
193108-002	Gasoline C7-C12	GC19	A	03/10/07 04:15
193108-002	MTBE	GC19	B	03/10/07 04:15
193108-002	Benzene	GC19	B	03/10/07 04:15
193108-002	Toluene	GC19	B	03/10/07 04:15
193108-002	Ethylbenzene	GC19	B	03/10/07 04:15
193108-002	Trifluorotoluene (FID)	GC19	A	03/10/07 04:15
193108-002	Bromofluorobenzene (FID)	GC19	A	03/10/07 04:15
193108-002	Trifluorotoluene (PID)	GC19	B	03/10/07 04:15
193108-002	Bromofluorobenzene (PID)	GC19	B	03/10/07 04:15
193108-002	Xylene (total)	GC19	B	03/10/07 04:15
193108-003	Gasoline C7-C12	GC19	A	03/10/07 04:52
193108-003	MTBE	GC19	B	03/10/07 04:52
193108-003	Benzene	GC19	B	03/10/07 04:52
193108-003	Toluene	GC19	B	03/10/07 04:52
193108-003	Ethylbenzene	GC19	B	03/10/07 04:52
193108-003	Trifluorotoluene (FID)	GC19	A	03/10/07 04:52
193108-003	Bromofluorobenzene (FID)	GC19	A	03/10/07 04:52
193108-003	Trifluorotoluene (PID)	GC19	B	03/10/07 04:52
193108-003	Bromofluorobenzene (PID)	GC19	B	03/10/07 04:52
193108-003	Xylene (total)	GC19	B	03/10/07 04:52
193108-004	Gasoline C7-C12	GC19	A	03/10/07 05:30
193108-004	MTBE	GC19	B	03/10/07 05:30
193108-004	Benzene	GC19	B	03/10/07 05:30
193108-004	Toluene	GC19	B	03/10/07 05:30
193108-004	Ethylbenzene	GC19	B	03/10/07 05:30
193108-004	Trifluorotoluene (FID)	GC19	A	03/10/07 05:30
193108-004	Bromofluorobenzene (FID)	GC19	A	03/10/07 05:30
193108-004	Trifluorotoluene (PID)	GC19	B	03/10/07 05:30
193108-004	Bromofluorobenzene (PID)	GC19	B	03/10/07 05:30
193108-004	Xylene (total)	GC19	B	03/10/07 05:30
193108-005	Gasoline C7-C12	GC19	A	03/10/07 06:07
193108-005	MTBE	GC19	B	03/10/07 06:07
193108-005	Benzene	GC19	B	03/10/07 06:07
193108-005	Toluene	GC19	B	03/10/07 06:07
193108-005	Ethylbenzene	GC19	B	03/10/07 06:07
193108-005	Trifluorotoluene (FID)	GC19	A	03/10/07 06:07
193108-005	Bromofluorobenzene (FID)	GC19	A	03/10/07 06:07
193108-005	Trifluorotoluene (PID)	GC19	B	03/10/07 06:07
193108-005	Bromofluorobenzene (PID)	GC19	B	03/10/07 06:07
193108-005	Xylene (total)	GC19	B	03/10/07 06:07
193108-006	Gasoline C7-C12	GC07	A	03/06/07 15:19
193108-006	Stoddard Solvent C7-C12	GC07	A	03/06/07 15:19
193108-006	Trifluorotoluene (FID)	GC07	A	03/06/07 15:19
193108-006	Bromofluorobenzene (FID)	GC07	A	03/06/07 15:19

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	Gasoline C7-C12	GC07	A	03/06/07 15:55
193108-007	Trifluorotoluene (FID)	GC07	A	03/06/07 15:55
193108-007	Bromofluorobenzene (FID)	GC07	A	03/06/07 15:55
193108-008	Gasoline C7-C12	GC07	A	03/06/07 17:11
193108-008	Trifluorotoluene (FID)	GC07	A	03/06/07 17:11
193108-008	Bromofluorobenzene (FID)	GC07	A	03/06/07 17:11
193108-010	Gasoline C7-C12	GC07	A	03/06/07 17:47
193108-010	Trifluorotoluene (FID)	GC07	A	03/06/07 17:47
193108-010	Bromofluorobenzene (FID)	GC07	A	03/06/07 17:47
193108-011	Gasoline C7-C12	GC07	A	03/06/07 18:23
193108-011	Trifluorotoluene (FID)	GC07	A	03/06/07 18:23
193108-011	Bromofluorobenzene (FID)	GC07	A	03/06/07 18:23
193108-012	Gasoline C7-C12	GC07	A	03/07/07 01:38
193108-012	Trifluorotoluene (FID)	GC07	A	03/07/07 01:38
193108-012	Bromofluorobenzene (FID)	GC07	A	03/07/07 01:38
193108-013	Gasoline C7-C12	GC07	A	03/07/07 02:14
193108-013	Trifluorotoluene (FID)	GC07	A	03/07/07 02:14
193108-013	Bromofluorobenzene (FID)	GC07	A	03/07/07 02:14
193108-015	Gasoline C7-C12	GC07	A	03/07/07 02:51
193108-015	Trifluorotoluene (FID)	GC07	A	03/07/07 02:51
193108-015	Bromofluorobenzene (FID)	GC07	A	03/07/07 02:51
193108-016	Gasoline C7-C12	GC19	A	03/10/07 06:45
193108-016	MTBE	GC19	B	03/10/07 06:45
193108-016	Benzene	GC19	B	03/10/07 06:45
193108-016	Toluene	GC19	B	03/10/07 06:45
193108-016	Ethylbenzene	GC19	B	03/10/07 06:45
193108-016	Trifluorotoluene (FID)	GC19	A	03/10/07 06:45
193108-016	Bromofluorobenzene (FID)	GC19	A	03/10/07 06:45
193108-016	Trifluorotoluene (PID)	GC19	B	03/10/07 06:45
193108-016	Bromofluorobenzene (PID)	GC19	B	03/10/07 06:45
193108-016	Xylene (total)	GC19	B	03/10/07 06:45
193108-017	Gasoline C7-C12	GC19	A	03/10/07 07:23
193108-017	MTBE	GC19	B	03/10/07 07:23
193108-017	Benzene	GC19	B	03/10/07 07:23
193108-017	Toluene	GC19	B	03/10/07 07:23
193108-017	Ethylbenzene	GC19	B	03/10/07 07:23
193108-017	Trifluorotoluene (FID)	GC19	A	03/10/07 07:23
193108-017	Bromofluorobenzene (FID)	GC19	A	03/10/07 07:23
193108-017	Trifluorotoluene (PID)	GC19	B	03/10/07 07:23
193108-017	Bromofluorobenzene (PID)	GC19	B	03/10/07 07:23
193108-017	Xylene (total)	GC19	B	03/10/07 07:23
193108-018	Gasoline C7-C12	GC19	A	03/10/07 12:24
193108-018	MTBE	GC19	B	03/10/07 12:24
193108-018	Benzene	GC19	B	03/10/07 12:24
193108-018	Toluene	GC19	B	03/10/07 12:24

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-018	Ethylbenzene	GC19	B	03/10/07 12:24
193108-018	Trifluorotoluene (FID)	GC19	A	03/10/07 12:24
193108-018	Bromofluorobenzene (FID)	GC19	A	03/10/07 12:24
193108-018	Trifluorotoluene (PID)	GC19	B	03/10/07 12:24
193108-018	Bromofluorobenzene (PID)	GC19	B	03/10/07 12:24
193108-018	Xylene (total)	GC19	B	03/10/07 12:24
193108-019	Gasoline C7-C12	GC07	A	03/07/07 03:27
193108-019	Trifluorotoluene (FID)	GC07	A	03/07/07 03:27
193108-019	Bromofluorobenzene (FID)	GC07	A	03/07/07 03:27
193108-020	Gasoline C7-C12	GC07	A	03/07/07 05:15
193108-020	Trifluorotoluene (FID)	GC07	A	03/07/07 05:15
193108-020	Bromofluorobenzene (FID)	GC07	A	03/07/07 05:15
193108-022	Gasoline C7-C12	GC07	A	03/07/07 05:51
193108-022	Trifluorotoluene (FID)	GC07	A	03/07/07 05:51
193108-022	Bromofluorobenzene (FID)	GC07	A	03/07/07 05:51
193108-023	Gasoline C7-C12	GC07	A	03/07/07 06:27
193108-023	Trifluorotoluene (FID)	GC07	A	03/07/07 06:27
193108-023	Bromofluorobenzene (FID)	GC07	A	03/07/07 06:27
193108-024	Gasoline C7-C12	GC07	A	03/07/07 07:03
193108-024	Trifluorotoluene (FID)	GC07	A	03/07/07 07:03
193108-024	Bromofluorobenzene (FID)	GC07	A	03/07/07 07:03
193108-025	Gasoline C7-C12	GC07	A	03/07/07 08:22
193108-025	Trifluorotoluene (FID)	GC07	A	03/07/07 08:22
193108-025	Bromofluorobenzene (FID)	GC07	A	03/07/07 08:22
193108-026	Gasoline C7-C12	GC07	A	03/07/07 08:58
193108-026	Trifluorotoluene (FID)	GC07	A	03/07/07 08:58
193108-026	Bromofluorobenzene (FID)	GC07	A	03/07/07 08:58
193108-027	Gasoline C7-C12	GC07	A	03/07/07 09:34
193108-027	Trifluorotoluene (FID)	GC07	A	03/07/07 09:34
193108-027	Bromofluorobenzene (FID)	GC07	A	03/07/07 09:34
QC377779	Gasoline C7-C12	GC07	A	03/06/07 12:16
QC377779	Stoddard Solvent C7-C12	GC07	A	03/06/07 12:16
QC377779	Trifluorotoluene (FID)	GC07	A	03/06/07 12:16
QC377779	Bromofluorobenzene (FID)	GC07	A	03/06/07 12:16
QC377780	Gasoline C7-C12	GC07	A	03/06/07 10:13
QC377780	Trifluorotoluene (FID)	GC07	A	03/06/07 10:13
QC377780	Bromofluorobenzene (FID)	GC07	A	03/06/07 10:13
QC377781	Gasoline C7-C12	GC19	A	03/10/07 14:54
QC377781	Trifluorotoluene (FID)	GC19	A	03/10/07 14:54
QC377781	Bromofluorobenzene (FID)	GC19	A	03/10/07 14:54
QC377782	Gasoline C7-C12	GC19	A	03/10/07 15:32
QC377782	Trifluorotoluene (FID)	GC19	A	03/10/07 15:32

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377782	Bromofluorobenzene (FID)	GC19	A	03/10/07 15:32
QC377783	Gasoline C7-C12	GC07	A	03/12/07 20:58
QC377783	Trifluorotoluene (FID)	GC07	A	03/12/07 20:58
QC377783	Bromofluorobenzene (FID)	GC07	A	03/12/07 20:58
QC377784	Gasoline C7-C12	GC07	A	03/12/07 21:34
QC377784	Trifluorotoluene (FID)	GC07	A	03/12/07 21:34
QC377784	Bromofluorobenzene (FID)	GC07	A	03/12/07 21:34
QC377785	Gasoline C7-C12	GC07	A	03/12/07 22:10
QC377785	Trifluorotoluene (FID)	GC07	A	03/12/07 22:10
QC377785	Bromofluorobenzene (FID)	GC07	A	03/12/07 22:10
QC377786	Gasoline C7-C12	GC07	A	03/12/07 22:46
QC377786	Trifluorotoluene (FID)	GC07	A	03/12/07 22:46
QC377786	Bromofluorobenzene (FID)	GC07	A	03/12/07 22:46
QC378402	Gasoline C7-C12	GC19	A	03/09/07 16:56
QC378402	MTBE	GC19	B	03/09/07 16:56
QC378402	Benzene	GC19	B	03/09/07 16:56
QC378402	Toluene	GC19	B	03/09/07 16:56
QC378402	Ethylbenzene	GC19	B	03/09/07 16:56
QC378402	Trifluorotoluene (FID)	GC19	A	03/09/07 16:56
QC378402	Bromofluorobenzene (FID)	GC19	A	03/09/07 16:56
QC378402	Trifluorotoluene (PID)	GC19	B	03/09/07 16:56
QC378402	Bromofluorobenzene (PID)	GC19	B	03/09/07 16:56
QC378402	Xylene (total)	GC19	B	03/09/07 16:56
QC378403	MTBE	GC19	B	03/09/07 14:58
QC378403	Benzene	GC19	B	03/09/07 14:58
QC378403	Toluene	GC19	B	03/09/07 14:58
QC378403	Ethylbenzene	GC19	B	03/09/07 14:58
QC378403	Trifluorotoluene (PID)	GC19	B	03/09/07 14:58
QC378403	Bromofluorobenzene (PID)	GC19	B	03/09/07 14:58
QC378404	MTBE	GC19	B	03/09/07 17:34
QC378404	Benzene	GC19	B	03/09/07 17:34
QC378404	Toluene	GC19	B	03/09/07 17:34
QC378404	Ethylbenzene	GC19	B	03/09/07 17:34
QC378404	Trifluorotoluene (PID)	GC19	B	03/09/07 17:34
QC378404	Bromofluorobenzene (PID)	GC19	B	03/09/07 17:34
QC378405	Gasoline C7-C12	GC19	A	03/09/07 13:43
QC378405	Trifluorotoluene (FID)	GC19	A	03/09/07 13:43
QC378405	Bromofluorobenzene (FID)	GC19	A	03/09/07 13:43
QC378406	Gasoline C7-C12	GC19	A	03/09/07 18:12
QC378406	Trifluorotoluene (FID)	GC19	A	03/09/07 18:12
QC378406	Bromofluorobenzene (FID)	GC19	A	03/09/07 18:12
QC378407	Gasoline C7-C12	GC19	A	03/09/07 18:49
QC378407	Trifluorotoluene (FID)	GC19	A	03/09/07 18:49
QC378407	Bromofluorobenzene (FID)	GC19	A	03/09/07 18:49

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/22/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065PZ4B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-002	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID:	1065PZ7B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-003	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	117	65-135

Field ID:	1065PZ5AR	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-004	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Field ID:	1065PZ5B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-005	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW01	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-007	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID:	1349MW100	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-008	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	15,000	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID:	DAEGW06	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-009	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

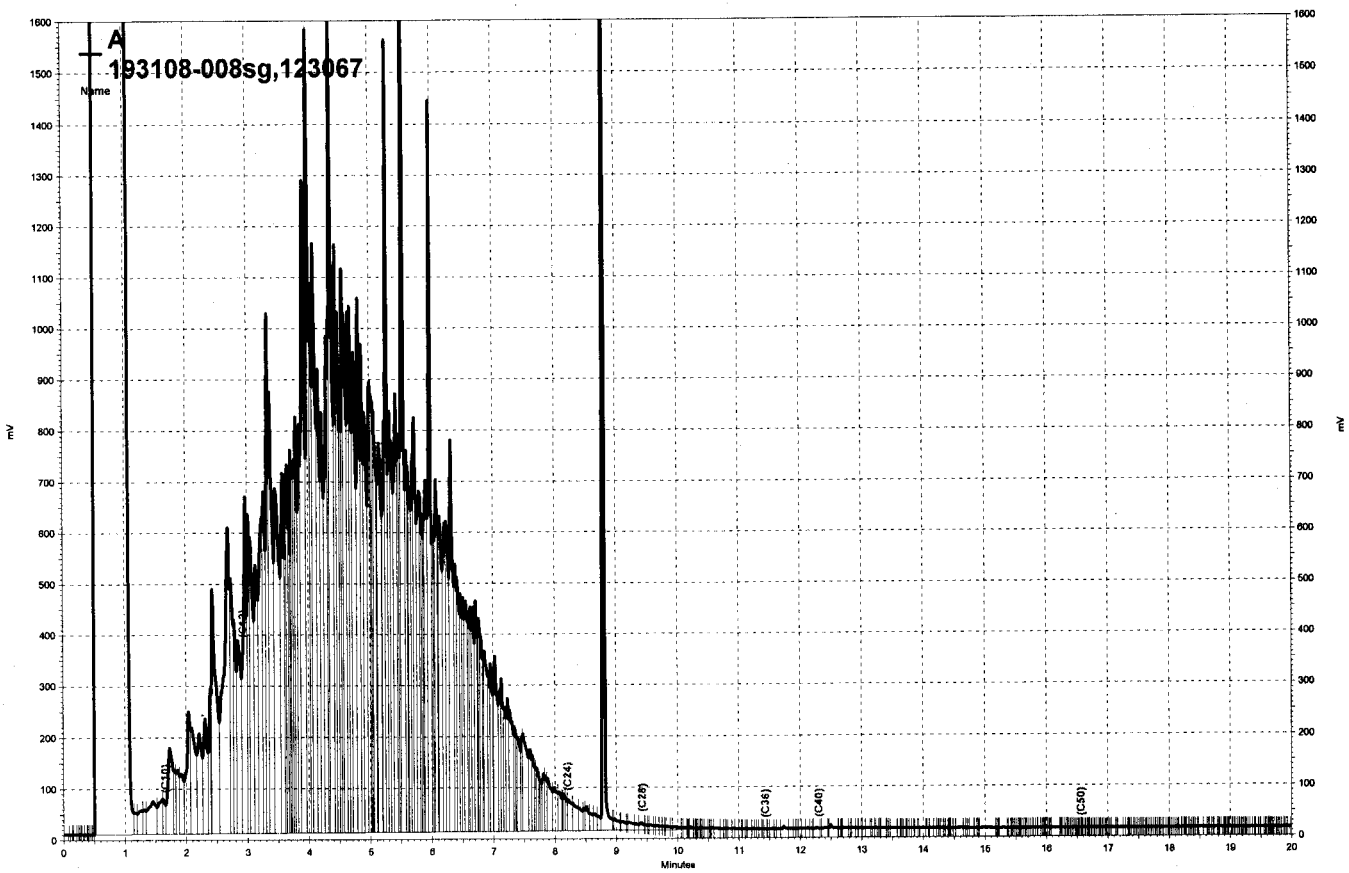
Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID:	DUP0301073A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-010	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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1349MW100

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DUP0301073B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-011	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	15,000	50
Motor Oil C24-C36	670 L Y	300

Surrogate	%REC	Limits
Hexacosane	113	65-135

Field ID:	1213GW101	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-012	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	115 b	65-135

Field ID:	DAEGW08	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-013	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

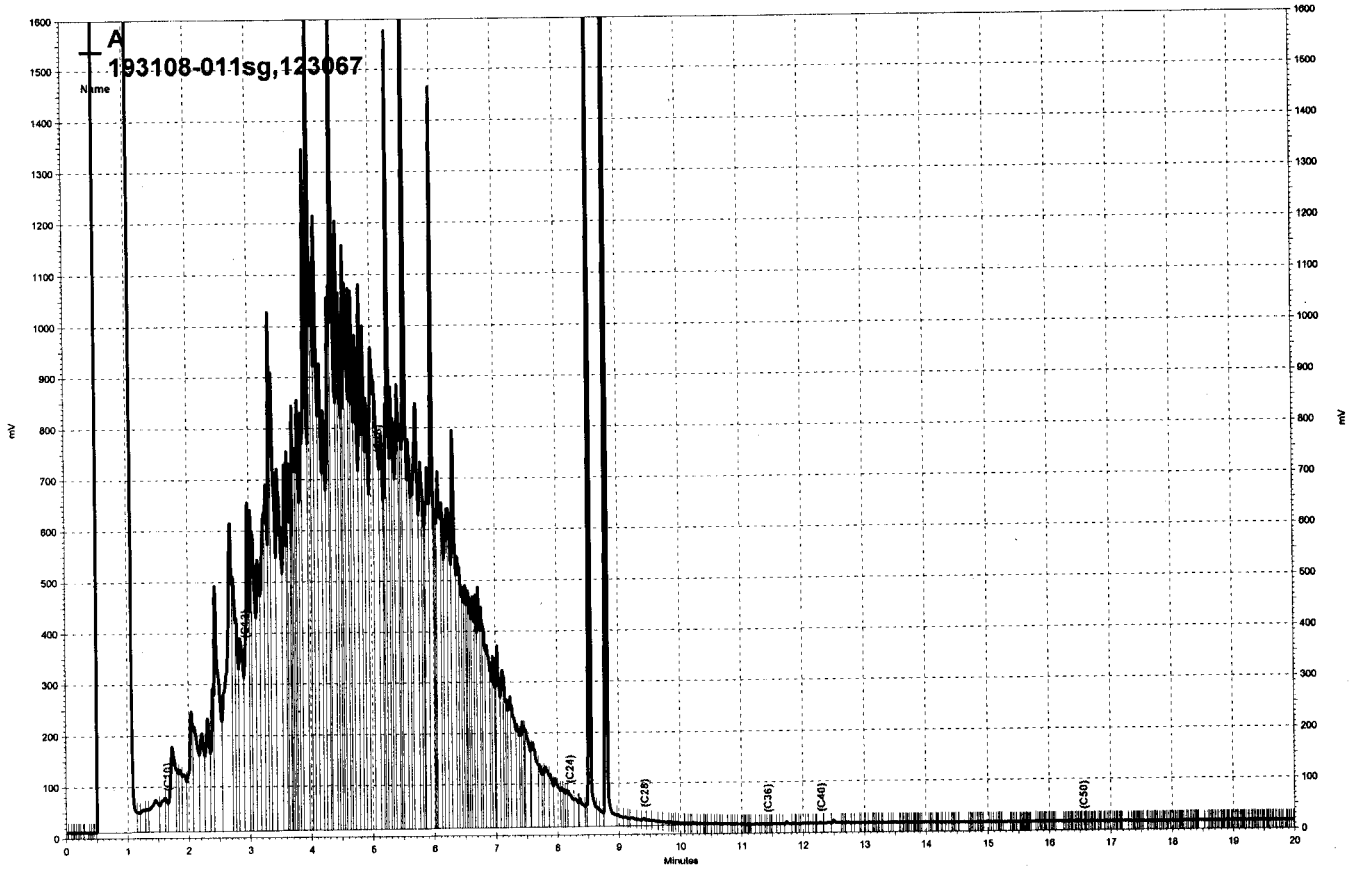
Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID:	1065PZ1A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-015	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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DUP0301073B

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065PZ2A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-016	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID:	1065PZ3A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-017	Analyzed:	03/14/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID:	1065PZ4A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-018	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	1065MW101	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-019	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	123	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065MW102	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-020	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID:	DAEGW103	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-022	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	117	65-135

Field ID:	DAEGW104	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-023	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	92 b	65-135

Field ID:	DAEGW03	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-025	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	105 b	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-026	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	109 b	65-135

Field ID:	DUP0302071A	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-027	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	94 b	65-135

Type:	BLANK	Prepared:	03/12/07
Lab ID:	QC378776	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	114	65-135

Type:	BLANK	Prepared:	03/13/07
Lab ID:	QC379052	Analyzed:	03/14/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Type:	BLANK	Prepared:	03/14/07
Lab ID:	QC379228	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

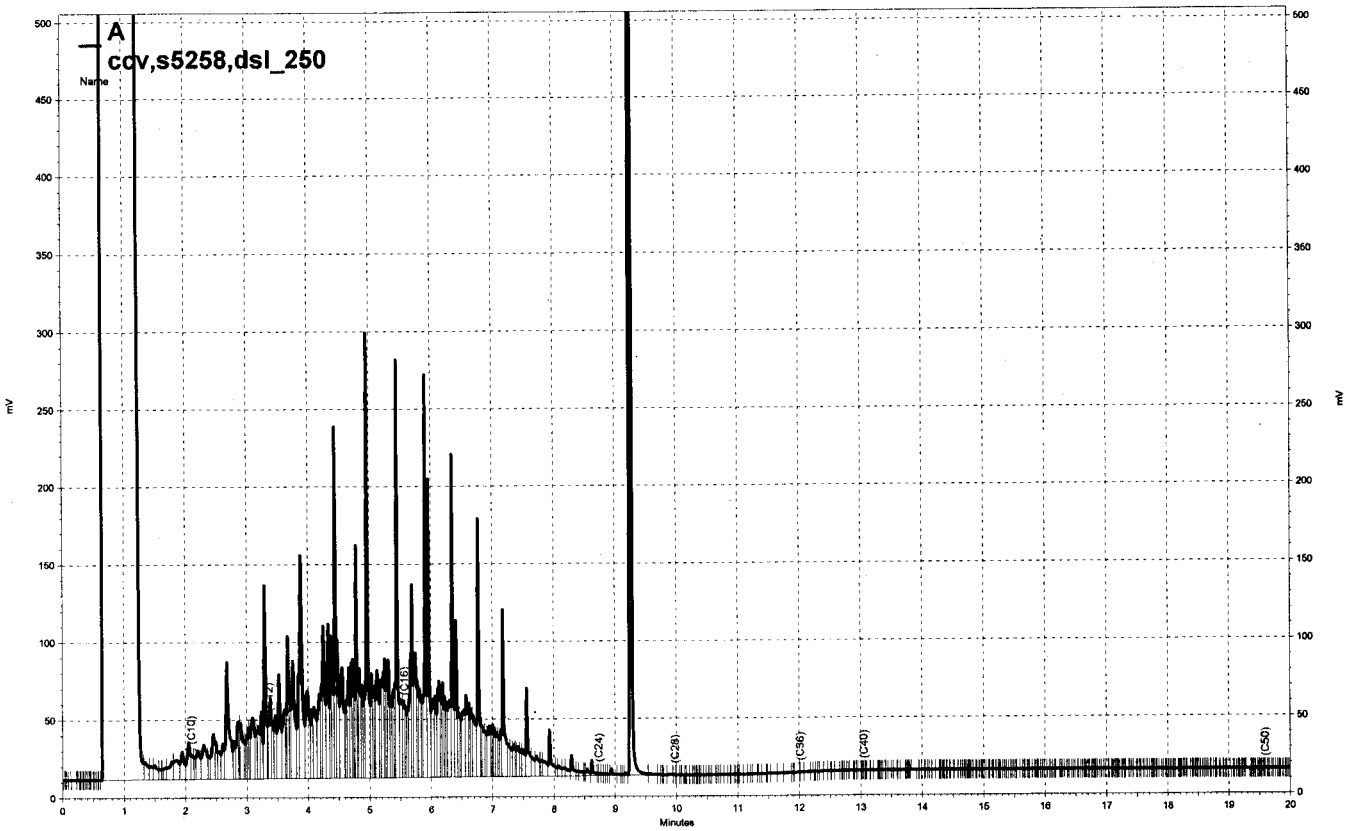
Surrogate	%REC	Limits
Hexacosane	111	65-135

Type:	BLANK	Prepared:	03/17/07
Lab ID:	QC379739	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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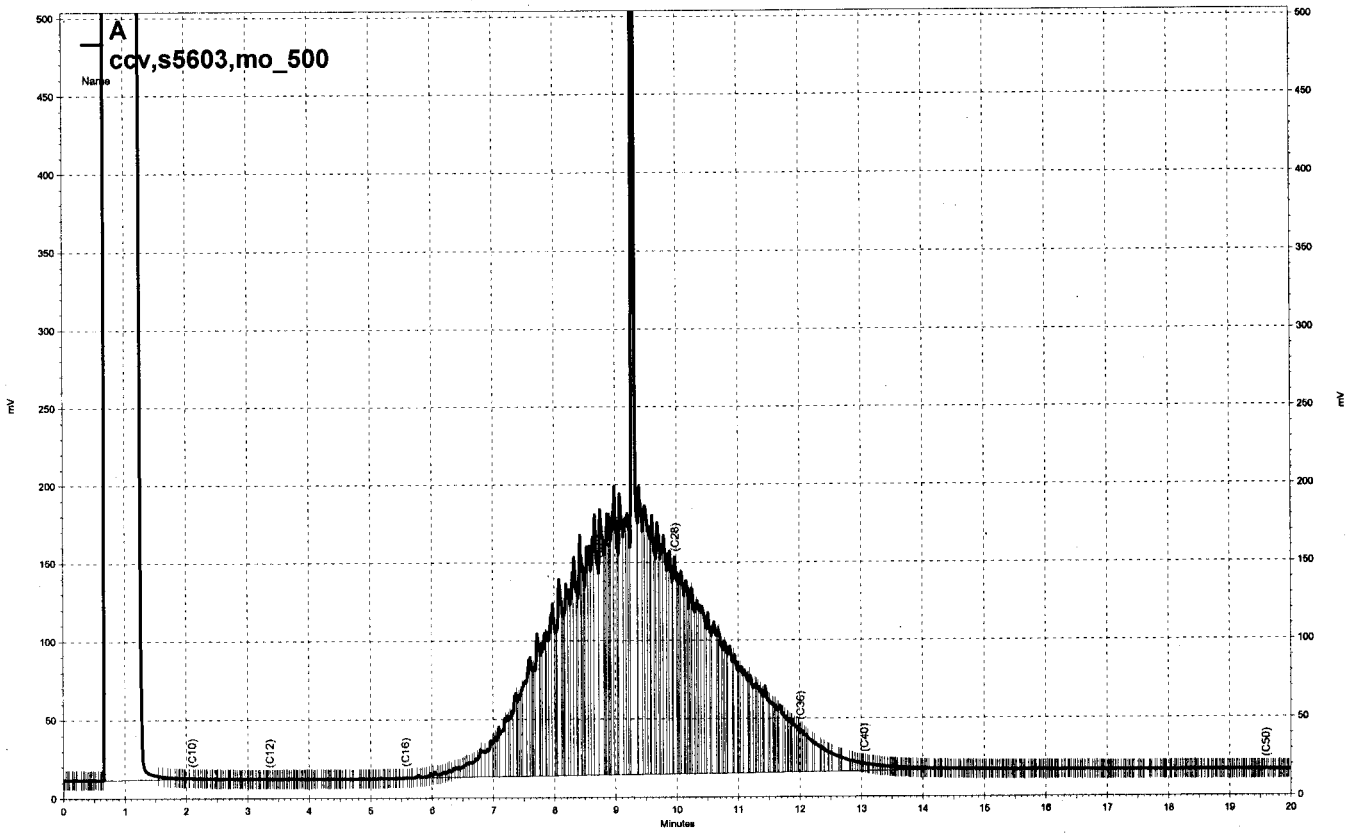
Diesel



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Motor Oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378777	Batch#:	123002
Matrix:	Water	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,487	99	65-135

Surrogate	%REC	Limits
Hexacosane	104	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379053	Batch#:	123067
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/14/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,183	87	65-135

Surrogate	%REC	Limits
Hexacosane	90	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379740	Batch#:	123229
Matrix:	Water	Prepared:	03/17/07
Units:	ug/L	Analyzed:	03/19/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,933	117	65-135

Surrogate	%REC	Limits
Hexacosane	119	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123108
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC379229

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,547	102	65-135

Surrogate	%REC	Limits
Hexacosane	114	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC379230

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,189	88	65-135	15	35

Surrogate	%REC	Limits
Hexacosane	99	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	123002
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC378778

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<17.91	2,500	2,499	100	65-135

Surrogate	%REC	Limits
Hexacosane	108	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC378779

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,204	88	65-135	13	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3A	Batch#:	123067
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC379054

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<17.91	2,500	2,380	95	65-135

Surrogate	%REC	Limits
Hexacosane	100	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC379055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,484	99	65-135	4	35

Surrogate	%REC	Limits
Hexacosane	103	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	123229
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/17/07
Diln Fac:	1.000	Analyzed:	03/20/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC379741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<10.97	2,500	1,486	59 *	65-135

Surrogate	%REC	Limits
Hexacosane	74	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC379742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,410	96	65-135	47 *	35

Surrogate	%REC	Limits
Hexacosane	103	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

117

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

118

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date: 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117102790001
Units : mg/L

Name : Hexacosane
Date : 12-MAR-2007 20:05
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071a023	117102790023	HEX_10	12-MAR-2007 20:05	S4640
L2	071a024	117102790024	HEX_25	12-MAR-2007 20:33	S4641
L3	071a025	117102790025	HEX_50	12-MAR-2007 21:01	S5402
L4	071a026	117102790026	HEX_100	12-MAR-2007 21:29	S4644
L5	071a027	117102790027	HEX_200	12-MAR-2007 21:57	S4645
L6	071a033	117102790033	HEX_5	13-MAR-2007 12:16	S4639

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60718	67049	65965	69806	68232	69707	AVRG		1.49E-5		66913	5	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	10.000	25.000	50.000	100.00	200.00	5.0000	mg/L

120

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779001
Units : mg/L

Name : Diesel 14b
Date : 12-MAR-2007 17:56
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_014	227102779014	DSL_10	12-MAR-2007 17:56	S5413
L2	071_015	227102779015	DSL_100	12-MAR-2007 18:24	S5414
L3	071_016	227102779016	DSL_500	12-MAR-2007 18:53	S5416
L4	071_017	227102779017	DSL_1000	12-MAR-2007 19:22	S5417
L5	071_018	227102779018	DSL_5000	12-MAR-2007 19:50	S5411
L6	071_019	227102779019	DSL_7500	12-MAR-2007 20:18	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	31823	46248	53031	50789	51704	52394	AVRG		2.10E-5		47665	17	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

121

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227102779001

Name : Diesel 14b
Cal Date: 12-MAR-2007

ICV 227102779021 (071_021 12-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	47665	50636	500.0	531.2	mg/L	6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779003
Units : mg/L

Name : Motor oil 14b
Date : 12-MAR-2007 22:41
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_024	227102779024	MO_50	12-MAR-2007 22:41	S5523
L2	071_025	227102779025	MO_250	12-MAR-2007 23:09	S5524
L3	071_026	227102779026	MO_500	12-MAR-2007 23:38	S5525
L4	071_028	227102779028	MO_5000	13-MAR-2007 00:35	S5522
L5	071_036	227102779036	MO_1000	13-MAR-2007 12:33	S5526

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	39814	38246	37046	36590	38315	AVRG		2.63E-5		38002	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	5000.0	1000.0	mg/L

123

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779002
Units : mg/L

Name : Hexacosane 14b
Date : 13-MAR-2007 01:32
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_030	227102779030	HEX_5	13-MAR-2007 01:32	S4639
L2	071_031	227102779031	HEX_10	13-MAR-2007 02:01	S4640
L3	071_032	227102779032	HEX_50	13-MAR-2007 02:29	S5402
L4	071_033	227102779033	HEX_100	13-MAR-2007 02:58	S4644
L5	071_034	227102779034	HEX_200	13-MAR-2007 03:27	S4645

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	59294	61101	60945	63451	62267	AVRG		1.63E-5		61411	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Hexacosane	B	5.0000	10.000	50.000	100.00	200.00	mg/L

124

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475001
Units : mg/L

Name : diesel
Date : 24-OCT-2006 17:58
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Diesel C12-C24	10.000	100.00	250.00	500.00	1000.0	2500.0	5000.0	mg/L

125

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475003
Units : mg/L

Name : hexacosane
Date : 25-OCT-2006 01:54
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Hexacosane	5.0000	10.000	25.000	50.000	75.000	100.00	200.00	mg/L

127

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166500697001
Units : mg/L

Name : Mo
Date : 13-DEC-2006 17:24
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

128

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166500697001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

129

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

131

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG	.	1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

132

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151006
Standards: S5258

Run Name: DSL_250
File : 074a006

IDF : 1.0
Time : 15-MAR-2007 12:14

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	55569	250.0	238.5	mg/L	-5	15	
Hexacosane	117102790001	12-MAR-2007	66913	67282	50.00	50.28	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151007
Standards: S5603

Run Name: MO_500
File : 074a007

IDF : 1.0
Time : 15-MAR-2007 12:42

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	40666	500.0	490.5	mg/L	-2	15	
Hexacosane	117102790001	12-MAR-2007	66913	71023	50.00	53.07	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151019
Standards: S5259

Run Name: DSL_1000
File : 074a019

IDF : 1.0
Time : 15-MAR-2007 19:20

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	55455	1000	952.0	mg/L	-5	15	
Hexacosane	117102790001	12-MAR-2007	66913	69908	50.00	52.24	mg/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151020
Standards: S5603

Run Name: MO_500
File : 074a020

IDF : 1.0
Time : 15-MAR-2007 19:48

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	41848	500.0	504.7	mg/L	1	15	
Hexacosane	117102790001	12-MAR-2007	66913	72895	50.00	54.47	mg/L	9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851030
Standards: S5259

Run Name: DSL_1000
File : 077a030

IDF : 1.0
Time : 19-MAR-2007 06:01

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54146	1000	929.5	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60895	50.00	45.50	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851031 File : 077a031 Time : 19-MAR-2007 06:29
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	38931	500.0	469.6	mg/L	-6	15	
Hexacosane	117102790001	12-MAR-2007	66913	67337	50.00	50.32	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851041
Standards: S5258

Run Name: DSL_250
File : 077a041

IDF : 1.0
Time : 19-MAR-2007 11:20

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	56502	250.0	242.5	mg/L	-3	15	
Hexacosane	117102790001	12-MAR-2007	66913	66546	50.00	49.73	mg/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst — : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851042 File : 077a042 Time : 19-MAR-2007 11:48
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	39901	500.0	481.3	mg/L	-4	15	
Hexacosane	117102790001	12-MAR-2007	66913	68135	50.00	50.91	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_500 IDF : 1.0
Seqnum : 117111851056 File : 077a056 Time : 19-MAR-2007 18:59
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	58140	500.0	499.1	mg/L	0	15	
Hexacosane	117102790001	12-MAR-2007	66913	70571	50.00	52.73	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851057 File : 077a057 Time : 19-MAR-2007 19:28
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	39916	500.0	481.4	mg/L	-4	15	
Hexacosane	117102790001	12-MAR-2007	66913	66777	50.00	49.90	mg/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851074
Standards: S5259

Run Name: DSL_1000
File : 077a074

IDF : 1.0
Time : 20-MAR-2007 03:25

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54292	1000	932.1	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60733	50.00	45.38	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742009
Standards: S5259

Run Name: DSL_1000
File : 078_009

IDF : 1.0
Time : 19-MAR-2007 13:35

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	49536	1000	1039	mg/L	4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55046	50.00	44.82	mg/L	-10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742010 File : 078_010 Time : 19-MAR-2007 14:03
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	37296	500.0	490.7	mg/L	-2	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	62684	50.00	51.04	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742022
Standards: S5259

Run Name: DSL_1000
File : 078_022

IDF : 1.0
Time : 19-MAR-2007 20:03

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	52038	1000	1092	mg/L	9	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55927	50.00	45.53	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742023 File : 078_023 Time : 19-MAR-2007 20:31
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	34951	500.0	459.9	mg/L	-8	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	57919	50.00	47.16	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_250 IDF : 1.0
Seqnum : 167102767039 File : 071b039 Time : 13-MAR-2007 08:36
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	50395	250.0	260.6	mg/L	4	15	
Hexacosane	166428475003	25-OCT-2006	56893	60099	50.00	52.82	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767040
Standards: S5603

Run Name: MO_500
File : 071b040

IDF : 1.0
Time : 13-MAR-2007 09:10

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	36696	500.0	532.3	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	61474	50.00	54.03	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167102767054 File : 071b054 Time : 13-MAR-2007 17:38
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51674	500.0	534.4	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	63297	50.00	55.63	mg/L	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767055
Standards: S5603

Run Name: MO_500
File : 071b055

IDF : 1.0
Time : 13-MAR-2007 18:10

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	36361	500.0	527.4	mg/L	5	15	
Hexacosane	166428475003	25-OCT-2006	56893	61176	50.00	53.76	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767067
Standards: S5259

Run Name: DSL_1000
File : 071b067

IDF : 1.0
Time : 14-MAR-2007 00:59

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	50493	1000	1044	mg/L	4	15	
Hexacosane	166428475003	25-OCT-2006	56893	60847	50.00	53.48	mg/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767068
Standards: S5603

Run Name: MO_500
File : 071b068

IDF : 1.0
Time : 14-MAR-2007 01:34

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37099	500.0	538.1	mg/L	8	15	
Hexacosane	166428475003	25-OCT-2006	56893	61317	50.00	53.89	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167106029002 File : 073b002 Time : 14-MAR-2007 15:53
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	52679	500.0	544.8	mg/L	9	15	
Hexacosane	166428475003	25-OCT-2006	56893	63261	50.00	55.60	mg/L	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167106029003 File : 073b003 Time : 14-MAR-2007 16:25
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	38203	500.0	554.2	mg/L	11	15	
Hexacosane	166428475003	25-OCT-2006	56893	62670	50.00	55.08	mg/L	10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167106029016
Standards: S5259

Run Name: DSL_1000
File : 073b016

IDF : 1.0
Time : 15-MAR-2007 01:37

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51047	1000	1056	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	60220	50.00	52.92	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167106029017 File : 073b017 Time : 15-MAR-2007 02:11
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37010	500.0	536.8	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	60091	50.00	52.81	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177107148003
Standards: S5517

Run Name: DSL_500
File : 074a003

IDF : 1.0
Time : 15-MAR-2007 10:43

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	64834	500.0	530.6	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	81558	50.00	52.90	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177107148004 File : 074a004 Time : 15-MAR-2007 11:10
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	45463	500.0	504.4	mg/L	1	15	
Hexacosane	177062425003	13-FEB-2007	77085	81935	50.00	53.15	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_500 IDF : 1.0
Seqnum : 177107148014 File : 074a014 Time : 15-MAR-2007 15:56
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	65674	500.0	537.4	mg/L	7	15	
Hexacosane	177062425003	13-FEB-2007	77085	81035	50.00	52.56	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177107148015 File : 074a015 Time : 15-MAR-2007 16:24
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	50311	500.0	558.2	mg/L	12	15	
Hexacosane	177062425003	13-FEB-2007	77085	87911	50.00	57.02	mg/L	14	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177112801003
Standards: S5517

Run Name: DSL_500
File : 078a003

IDF : 1.0
Time : 19-MAR-2007 08:55

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63845	500.0	522.5	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	78636	50.00	51.01	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801004 File : 078a004 Time : 19-MAR-2007 09:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47343	500.0	525.2	mg/L	5	15	
Hexacosane	177062425003	13-FEB-2007	77085	78052	50.00	50.63	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177112801017
Standards: S5259

Run Name: DSL_1000
File : 078a017

IDF : 1.0
Time : 19-MAR-2007 18:55

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63620	1000	1041	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	70124	50.00	45.49	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801018 File : 078a018 Time : 19-MAR-2007 19:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47955	500.0	532.0	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	78434	50.00	50.87	mg/L	2	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166428475

Instrument : GC15B
Method : EPA 8015B

Begun : 10/24/06 13:15
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	297b001	X	IB			10/24/06 13:15	1.0		
002	297b002	X	IB			10/24/06 13:44	1.0		
003	297b003	X	IB			10/24/06 14:12	1.0		
004	297b004	X	IB			10/24/06 14:39	1.0		
005	297b005	X	CM			10/24/06 15:38	1.0	1	
006	297b006	CCV	DSL_250			10/24/06 16:05	1.0	2	
007	297b007	CCV	MO_500			10/24/06 16:33	1.0	3	
008	297b008	CCV	JET_250			10/24/06 17:00	1.0	4	
009	297b009	X	IB			10/24/06 17:31	1.0		
010	297b010	ICAL	DSL_10			10/24/06 17:58	1.0	5	
011	297b011	ICAL	DSL_100			10/24/06 18:26	1.0	6	
012	297b012	ICAL	DSL_250			10/24/06 18:53	1.0	7	
013	297b013	ICAL	DSL_500			10/24/06 19:21	1.0	8	
014	297b014	ICAL	DSL_1000			10/24/06 19:48	1.0	9	
015	297b015	ICAL	DSL_2500			10/24/06 20:15	1.0	10	
016	297b016	ICAL	DSL_5000			10/24/06 20:43	1.0	11	
017	297b017	ICV	DSL_500			10/24/06 21:15	10.0	12	
018	297b018	CCV	MO_500			10/24/06 21:43	1.0	3	
019	297b019	X	IB			10/24/06 22:13	1.0		
020	297b020	ICAL	MO_50			10/24/06 22:40	1.0	13	
021	297b021	ICAL	MOL_250			10/24/06 23:08	1.0	14	
022	297b022	ICAL	MO_500			10/24/06 23:35	1.0	15	
023	297b023	ICAL	MO_1000			10/25/06 00:03	1.0	16	
024	297b024	ICAL	MO_2500			10/25/06 00:30	1.0	17	
025	297b025	ICAL	MO_5000			10/25/06 00:58	1.0	18	
026	297b026	X	IB			10/25/06 01:26	1.0		
027	297b027	ICAL	HEX_5			10/25/06 01:54	1.0	19	
028	297b028	ICAL	HEX_10			10/25/06 02:21	1.0	20	
029	297b029	ICAL	HEX_25			10/25/06 02:48	1.0	21	
030	297b030	ICAL	HEX_50			10/25/06 03:15	1.0	22	
031	297b031	ICAL	HEX_75			10/25/06 03:43	1.0	23	
032	297b032	ICAL	HEX_100			10/25/06 04:10	1.0	24	
033	297b033	ICAL	HEX_200			10/25/06 04:37	1.0	25	
034	297b034	X	IB			10/25/06 05:05	1.0		
035	297b035	ICAL	JET_10			10/25/06 05:33	1.0	26	
036	297b036	ICAL	JET_100			10/25/06 06:00	1.0	27	
037	297b037	ICAL	JET_500			10/25/06 06:28	1.0	28	
038	297b038	ICAL	JET_1000			10/25/06 06:55	1.0	29	
039	297b039	ICAL	JET_2000			10/25/06 07:23	1.0	30	
040	297b040	ICAL	JET_3000			10/25/06 07:50	1.0	31	
041	297b041	ICAL	JET_5000			10/25/06 08:18	1.0	32	
042	297b042	X	IB			10/25/06 08:45	1.0		

Analyst: CP Date: 01/09/07 Reviewer: _____ Date: _____

Standards used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639 20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166500697

Instrument : GC15B
Method : EPA 8015B

Begun : 12/13/06 16:57
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	347b001	X	IB				12/13/06 16:57	1.0	
002	347b002	ICAL	MO_50				12/13/06 17:24	1.0	1
003	347b003	ICAL	MO_250				12/13/06 17:52	1.0	2
004	347b004	ICAL	MO_500				12/13/06 18:20	1.0	3
005	347b005	ICAL	MO_1000				12/13/06 18:48	1.0	4
006	347b006	ICAL	MO_5000				12/13/06 19:15	1.0	5
007	347b007	CCV	MO_500				12/13/06 19:57	1.0	6
008	347b008	CCV	DSL_500				12/13/06 20:24	1.0	7
009	347b009	BLANK	QC367007	S	Soil	120048	12/13/06 20:52	1.0	
010	347b010	LCS	QC367008	S	Soil	120048	12/13/06 21:20	1.0	
011	347b011	SAMPLE	191106-005	S	Soil	120048	12/13/06 21:47	1.0	
012	347b012	SAMPLE	191106-006	S	Soil	120048	12/13/06 22:15	1.0	
013	347b013	SAMPLE	191106-007	S	Soil	120048	12/13/06 22:42	1.0	
014	347b014	SAMPLE	191106-004	S	Soil	120048	12/13/06 23:10	1.0	
015	347b015	SAMPLE	191106-002	S	Soil	120048	12/13/06 23:38	1.0	
016	347b016	SAMPLE	191106-003	S	Soil	120048	12/14/06 00:05	1.0	
017	347b017	X	IB				12/14/06 00:33	1.0	
018	347b018	MS	QC368074		Soil	120310	12/14/06 01:00	1.0	
019	347b019	MSD	QC368075		Soil	120310	12/14/06 01:28	1.0	
020	347b020	CCV	DSL_1000				12/14/06 01:56	1.0	8
021	347b021	CCV	MO_500				12/14/06 02:23	1.0	6
022	347b022	X	CCV				12/14/06 02:50	1.0	8
023	347b023	X	CCV				12/14/06 03:18	1.0	6
024	347b024	SAMPLE	191333-007	S	Soil	120188	12/14/06 03:45	1.0	
025	347b025	SAMPLE	191333-008	S	Soil	120188	12/14/06 04:13	1.0	
026	347b026	SAMPLE	191327-001	S	Water	120297	12/14/06 04:40	1.0	
027	347b027	SAMPLE	191327-002	S	Water	120297	12/14/06 05:08	1.0	
028	347b028	SAMPLE	191372-001	S	Water	120297	12/14/06 05:36	1.0	
029	347b029	X	IB				12/14/06 06:04	1.0	
030	347b030	SAMPLE	191372-002	S	Water	120297	12/14/06 06:31	1.0	
031	347b031	SAMPLE	191372-003	S	Water	120297	12/14/06 06:59	1.0	
032	347b032	SAMPLE	191372-004	S	Water	120297	12/14/06 07:26	1.0	
033	347b033	SAMPLE	191372-005	S	Water	120297	12/14/06 07:54	1.0	
034	347b034	CCV	DSL_250				12/14/06 08:22	1.0	9
035	347b035	CCV	MO_500				12/14/06 08:49	1.0	6

Standards used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	042a001	X	IB			02/11/07 16:08	1.0		
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1	
003	042a003	X	MO_500			02/11/07 17:03	1.0	2	
004	042a004	X	MO_500			02/11/07 17:47	1.0	2	
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2	
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1	
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1	
008	042a008	X	IB			02/11/07 20:45	1.0		
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3	
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4	
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5	
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6	
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7	
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8	
015	042a015	IB	CALIB			02/12/07 00:01	1.0		
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9	
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9	
018	042a018	X	IB			02/12/07 01:24	1.0		
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10	

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117102790

Instrument : GC11A
Method : EPA 8015B

Begun : 03/12/07 09:10
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071a001	X	PRIMER				03/12/07 09:10	1.0	
002	071a002	X	IB				03/12/07 09:38	1.0	
003	071a003	X	DSL_500				03/12/07 10:06	1.0	1
004	071a004	CCV	DSL_500				03/12/07 10:34	1.0	1
005	071a005	CCV	MO_500				03/12/07 11:02	1.0	2
006	071a006	CCV	JET_250				03/12/07 11:51	1.0	3
007	071a007	SAMPLE	193189-007	S	Water	122934	03/12/07 12:19	1.0	
008	071a008	SAMPLE	193189-006	S	Water	122934	03/12/07 12:47	1.0	
009	071a009	SAMPLE	193189-005	S	Water	122934	03/12/07 13:15	1.0	
010	071a010	SAMPLE	193189-004	S	Water	122934	03/12/07 13:43	1.0	
011	071a011	SAMPLE	193189-003	S	Water	122934	03/12/07 14:12	1.0	
012	071a012	X	IB				03/12/07 14:40	1.0	
013	071a013	SAMPLE	193189-002	S	Water	122934	03/12/07 15:08	1.0	
014	071a014	SAMPLE	193189-001	S	Water	122934	03/12/07 15:36	1.0	
015	071a015	SAMPLE	193190-001	S	Water	122934	03/12/07 16:05	1.0	
016	071a016	X	DSL_1000				03/12/07 16:33	1.0	4
017	071a017	CCV	MO_500				03/12/07 17:01	1.0	2
018	071a018	CCV	JET_250				03/12/07 17:29	1.0	3
019	071a019	CCV	DSL_1000				03/12/07 17:57	1.0	4
020	071a020	CCV	DSL_1000				03/12/07 18:37	1.0	4
021	071a021	IB	CALIB				03/12/07 19:09	1.0	
022	071a022	X	HEX_5				03/12/07 19:37	1.0	5
023	071a023	ICAL	HEX_10				03/12/07 20:05	1.0	6
024	071a024	ICAL	HEX_25				03/12/07 20:33	1.0	7
025	071a025	ICAL	HEX_50				03/12/07 21:01	1.0	8
026	071a026	ICAL	HEX_100				03/12/07 21:29	1.0	9
027	071a027	ICAL	HEX_200				03/12/07 21:57	1.0	10
028	071a028	IB	CALIB				03/12/07 22:25	1.0	
029	071a029	CCV	DSL_1000				03/12/07 22:52	1.0	4
030	071a030	CCV	MO_500				03/12/07 23:20	1.0	2
031	071a031	X	CCV				03/12/07 23:48	1.0	4
032	071a032	X	CCV				03/13/07 00:16	1.0	2
033	071a033	ICAL	HEX_5				03/13/07 12:16	1.0	5

Standards used: 1=S5517 2=S5603 3=S4560 4=S5259 5=S4639 6=S4640 7=S4641 8=S5402 9=S4644 10=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071b001	X	PRIMER				03/12/07 08:47	1.0	
002	071b002	X	IB				03/12/07 09:20	1.0	
003	071b003	X					03/12/07 09:52	1.0	1
004	071b004	X					03/12/07 10:25	1.0	2
005	071b005	CMARKER	C8-50				03/12/07 10:56	1.0	3
006	071b006	X	IB				03/12/07 11:28	1.0	
007	071b007	CCV	DSL_500				03/12/07 11:59	1.0	1
008	071b008	CCV	MO_500				03/12/07 12:31	1.0	2
009	071b009	X	IB				03/12/07 16:43	1.0	
010	071b010	CCV	DSL_500				03/12/07 17:13	1.0	1
011	071b011	CCV	MO_500				03/12/07 17:44	1.0	2
012	071b012	SAMPLE	193210-036		Water	122957	03/12/07 18:15	1.0	
013	071b013	SAMPLE	193210-044		Water	122957	03/12/07 18:47	1.0	
014	071b014	MSS	193066-001	S	Water	122957	03/12/07 19:18	1.0	
015	071b015	MS	QC378569	S	Water	122957	03/12/07 19:49	1.0	
016	071b016	MSD	QC378570	S	Water	122957	03/12/07 20:20	1.0	
017	071b017	BLANK	QC378567	S	Water	122957	03/12/07 20:52	1.0	
018	071b018	SAMPLE	193226-007	S	Water	122957	03/12/07 21:23	1.0	
019	071b019	X	IB				03/12/07 21:54	1.0	
020	071b020	LCS	QC378568	S	Water	122957	03/12/07 22:25	1.0	
021	071b021	SAMPLE	193066-003	S	Water	122957	03/12/07 22:56	1.0	
022	071b022	SAMPLE	193066-004	S	Water	122957	03/12/07 23:27	1.0	
023	071b023	CCV	DSL_1000				03/12/07 23:58	1.0	4
024	071b024	CCV	MO_500				03/13/07 00:30	1.0	2
025	071b025	X	CCV				03/13/07 01:02	1.0	4
026	071b026	X	CCV				03/13/07 01:33	1.0	2
027	071b027	SAMPLE	193066-002	S	Water	122957	03/13/07 02:05	1.0	
028	071b028	SAMPLE	193057-002	S	Water	122957	03/13/07 02:36	1.0	
029	071b029	SAMPLE	193057-003	S	Water	122957	03/13/07 03:08	1.0	
030	071b030	SAMPLE	193057-004	S	Water	122957	03/13/07 03:39	1.0	
031	071b031	SAMPLE	193276-006	S	Soil	122982	03/13/07 04:11	1.0	
032	071b032	X	IB				03/13/07 04:44	1.0	
033	071b033	SAMPLE	193276-007	S	Soil	122982	03/13/07 05:17	1.0	
034	071b034	SAMPLE	193276-008	S	Soil	122982	03/13/07 05:50	1.0	
035	071b035	SAMPLE	193276-014	S	Soil	122982	03/13/07 06:23	1.0	
036	071b036	SAMPLE	193276-015	S	Soil	122982	03/13/07 06:57	1.0	
037	071b037	SAMPLE	193276-013	S	Soil	122982	03/13/07 07:30	1.0	
038	071b038	X	IB				03/13/07 08:03	1.0	
039	071b039	CCV	DSL_250				03/13/07 08:36	1.0	5
040	071b040	CCV	MO_500				03/13/07 09:10	1.0	2
041	071b041	X	CCV				03/13/07 09:44	1.0	5
042	071b042	X	CCV				03/13/07 10:16	1.0	2
043	071b043	LCS	QC378777	S	Water	123002	03/13/07 11:53	1.0	
044	071b044	BLANK	QC378776	S	Water	123002	03/13/07 12:25	1.0	
045	071b045	SAMPLE	193218-024	S	Water	123002	03/13/07 12:56	1.0	
046	071b046	SAMPLE	193302-002		Soil	122982	03/13/07 13:28	1.0	
047	071b047	X	IB				03/13/07 13:59	1.0	
048	071b048	MSS	193108-007	S	Water	123002	03/13/07 14:30	1.0	
049	071b049	MS	QC378778	S	Water	123002	03/13/07 15:01	1.0	
050	071b050	MSD	QC378779	S	Water	123002	03/13/07 15:32	1.0	
051	071b051	SAMPLE	193108-002	S	Water	123002	03/13/07 16:03	1.0	
052	071b052	SAMPLE	193108-003	S	Water	123002	03/13/07 16:34	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	071b053	SAMPLE	193108-004	S	Water	123002	03/13/07 17:06	1.0	
054	071b054	CCV	DSL_500				03/13/07 17:38	1.0	1
055	071b055	CCV	MO_500				03/13/07 18:10	1.0	2
056	071b056	SAMPLE	193108-005	S	Water	123002	03/13/07 18:42	1.0	
057	071b057	SAMPLE	193322-014	S	Soil	123035	03/13/07 19:15	1.0	
058	071b058	SAMPLE	193322-013	S	Soil	123035	03/13/07 19:48	1.0	
059	071b059	SAMPLE	193322-025	S	Soil	123035	03/13/07 20:23	1.0	
060	071b060	X	IB				03/13/07 20:59	1.0	
061	071b061	BLANK	QC378780	S	Water	123003	03/13/07 21:34	1.0	
062	071b062	LCS	QC378781	S	Water	123003	03/13/07 22:09	1.0	
063	071b063	MSS	193055-001	S	Water	123003	03/13/07 22:43	1.0	
064	071b064	MS	QC378782	S	Water	123003	03/13/07 23:17	1.0	
065	071b065	MSD	QC378783	S	Water	123003	03/13/07 23:51	1.0	
066	071b066	SAMPLE	193055-002	S	Water	123003	03/14/07 00:25	1.0	
067	071b067	CCV	DSL_1000				03/14/07 00:59	1.0	4
068	071b068	CCV	MO_500				03/14/07 01:34	1.0	2
069	071b069	X	CCV				03/14/07 02:08	1.0	4
070	071b070	X	CCV				03/14/07 02:43	1.0	2
071	071b071	SAMPLE	193055-003	S	Water	123003	03/14/07 03:17	1.0	
072	071b072	SAMPLE	193055-004	S	Water	123003	03/14/07 03:51	1.0	
073	071b073	SAMPLE	193055-005	S	Water	123003	03/14/07 04:25	1.0	
074	071b074	SAMPLE	193055-006	S	Water	123003	03/14/07 04:59	1.0	
075	071b075	SAMPLE	193055-007	S	Water	123003	03/14/07 05:34	1.0	
076	071b076	SAMPLE	193055-008	S	Water	123003	03/14/07 06:08	1.0	
077	071b077	SAMPLE	193055-011	S	Water	123003	03/14/07 06:43	1.0	
078	071b078	SAMPLE	193055-012	S	Water	123003	03/14/07 07:17	1.0	
079	071b079	X	IB				03/14/07 07:52	1.0	
080	071b080	CCV	DSL_250				03/14/07 08:26	1.0	5
081	071b081	CCV	MO_500				03/14/07 09:00	1.0	2
082	071b082	SAMPLE	193229-008	S	Soil	123027	03/14/07 09:53	40.0	
083	071b083	SAMPLE	193229-010	S	Soil	123027	03/14/07 10:28	20.0	
084	071b084	X	IB				03/14/07 11:02	1.0	
085	071b085	SAMPLE	193322-047	S	Soil	123064	03/14/07 11:43	1.0	
086	071b086	SAMPLE	193322-041	S	Soil	123064	03/14/07 12:15	1.0	
087	071b087	MS	QC378782	S	Water	123003	03/14/07 12:48	1.0	
088	071b088	MSD	QC378783	S	Water	123003	03/14/07 13:21	1.0	
089	071b089	CCV	DSL_250				03/14/07 14:06	1.0	5
090	071b090	CCV	MO_500				03/14/07 14:37	1.0	2

Standards used: 1=S5517 2=S5603 3=S4049 4=S5259 5=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227102779

Instrument : GC14B
Method : EPA 8015B

Begun : 03/12/07 08:59
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071_001	X	PRIMER			03/12/07 08:59	1.0		
002	071_002	X	IB			03/12/07 09:28	1.0		
003	071_003	X				03/12/07 09:57	1.0	1	
004	071_004	X				03/12/07 10:26	1.0	2	
005	071_005	X	IB			03/12/07 13:15	1.0		
006	071_006	X				03/12/07 13:43	1.0	3	
007	071_007	X				03/12/07 14:12	1.0		
008	071_008	X				03/12/07 14:40	1.0	1	
009	071_009	CMARKER	C8-50			03/12/07 15:09	1.0	3	
010	071_010	X				03/12/07 16:00	1.0	1	
011	071_011	X				03/12/07 16:28	1.0	2	
012	071_012	X	IB			03/12/07 16:58	1.0		
013	071_013	IB	CALIB			03/12/07 17:27	1.0		
014	071_014	ICAL	DSL_10			03/12/07 17:56	1.0	4	
015	071_015	ICAL	DSL_100			03/12/07 18:24	1.0	5	
016	071_016	ICAL	DSL_500			03/12/07 18:53	1.0	6	
017	071_017	ICAL	DSL_1000			03/12/07 19:22	1.0	7	
018	071_018	ICAL	DSL_5000			03/12/07 19:50	1.0	8	
019	071_019	ICAL	DSL_7500			03/12/07 20:18	1.0	9	
020	071_020	IB	CALIB			03/12/07 20:47	1.0		
021	071_021	ICV	DSL_500			03/12/07 21:16	1.0	10	
022	071_022	X	ICV			03/12/07 21:44	1.0	10	
023	071_023	IB	CALIB			03/12/07 22:12	1.0		
024	071_024	ICAL	MO_50			03/12/07 22:41	1.0	11	
025	071_025	ICAL	MO_250			03/12/07 23:09	1.0	12	
026	071_026	ICAL	MO_500			03/12/07 23:38	1.0	13	
027	071_027	X	MO_1000			03/13/07 00:06	1.0	14	
028	071_028	ICAL	MO_5000			03/13/07 00:35	1.0	15	
029	071_029	IB	CALIB			03/13/07 01:04	1.0		
030	071_030	ICAL	HEX_5			03/13/07 01:32	1.0	16	
031	071_031	ICAL	HEX_10			03/13/07 02:01	1.0	17	
032	071_032	ICAL	HEX_50			03/13/07 02:29	1.0	18	
033	071_033	ICAL	HEX_100			03/13/07 02:58	1.0	19	
034	071_034	ICAL	HEX_200			03/13/07 03:27	1.0	20	
035	071_035	X	IB			03/13/07 03:56	1.0		
036	071_036	ICAL	MO_1000			03/13/07 12:33	1.0	14	

Analyst: CP Date: 03/13/07 Reviewer: CW Date: 03/13/07

Standards used: 1=S5517 2=S5603 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S4639 17=S4640 18=S5402 19=S4644 20=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167106029

Instrument : GC15B
Method : EPA 8015B

Begun : 03/14/07 15:09
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	073b001	X	IB				03/14/07 15:09	1.0	
002	073b002	CCV	DSL_500				03/14/07 15:53	1.0	1
003	073b003	CCV	MO_500				03/14/07 16:25	1.0	2
004	073b004	BLANK	QC379052	S	Water	123067	03/14/07 18:01	1.0	
005	073b005	LCS	QC379053	S	Water	123067	03/14/07 19:28	1.0	
006	073b006	MSS	193108-017	S	Water	123067	03/14/07 20:00	1.0	
007	073b007	MS	QC379054	S	Water	123067	03/14/07 20:32	1.0	
008	073b008	MSD	QC379055	S	Water	123067	03/14/07 21:06	1.0	
009	073b009	SAMPLE	193244-001	S	Water	123067	03/14/07 21:41	1.0	
010	073b010	SAMPLE	193119-006	S	Water	123067	03/14/07 22:15	1.0	
011	073b011	X	IB				03/14/07 22:47	1.0	
012	073b012	SAMPLE	193119-005	S	Water	123067	03/14/07 23:20	1.0	
013	073b013	SAMPLE	193119-004	S	Water	123067	03/14/07 23:53	1.0	
014	073b014	SAMPLE	193119-002	S	Water	123067	03/15/07 00:28	1.0	
015	073b015	X	IB				03/15/07 01:02	1.0	
016	073b016	CCV	DSL_1000				03/15/07 01:37	1.0	3
017	073b017	CCV	MO_500				03/15/07 02:11	1.0	2
018	073b018	X	CCV				03/15/07 02:45	1.0	3
019	073b019	X	CCV				03/15/07 03:20	1.0	2
020	073b020	SAMPLE	193119-001	S	Water	123067	03/15/07 03:54	1.0	

Standards used: 1=S5517 2=S5603 3=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117107151

Instrument : GC11A
Method : EPA 8015B

Begun : 03/15/07 09:51
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	074a001	X	PRIMER				03/15/07 09:51	1.0	
002	074a002	X	IB				03/15/07 10:19	1.0	
003	074a003	CCV	DSL_500				03/15/07 10:47	1.0	1
004	074a004	CCV	MO_500				03/15/07 11:16	1.0	2
005	074a005	SAMPLE	193119-001	S	Water	123067	03/15/07 11:45	1.0	
006	074a006	CCV	DSL_250				03/15/07 12:14	1.0	3
007	074a007	CCV	MO_500				03/15/07 12:42	1.0	2
008	074a008	BS	QC379229	S	Water	123108	03/15/07 14:00	1.0	
009	074a009	BSD	QC379230	S	Water	123108	03/15/07 14:29	1.0	
010	074a010	BLANK	QC379228	S	Water	123108	03/15/07 14:57	1.0	
011	074a011	SAMPLE	193108-019	S	Water	123108	03/15/07 15:25	1.0	
012	074a012	SAMPLE	193108-020	S	Water	123108	03/15/07 15:53	1.0	
013	074a013	SAMPLE	193108-022	S	Water	123108	03/15/07 16:22	1.0	
014	074a014	SAMPLE	193345-003	S	Water	123108	03/15/07 16:50	1.0	
015	074a015	SAMPLE	193345-005	S	Water	123108	03/15/07 17:18	1.0	
016	074a016	X	IB				03/15/07 17:46	1.0	
017	074a017	LCS	QC379310	S	Soil	123131	03/15/07 18:23	1.0	
018	074a018	BLANK	QC379309	S	Soil	123131	03/15/07 18:51	1.0	
019	074a019	CCV	DSL_1000				03/15/07 19:20	1.0	4
020	074a020	CCV	MO_500				03/15/07 19:48	1.0	2
021	074a021	X	CCV				03/15/07 20:16	1.0	4
022	074a022	X	CCV				03/15/07 20:44	1.0	2
023	074a023	SAMPLE	193303-001	S	Miscell.	123131	03/15/07 21:12	1.0	
024	074a024	SAMPLE	193303-002	S	Miscell.	123131	03/15/07 21:40	1.0	
025	074a025	SAMPLE	193303-003	S	Miscell.	123131	03/15/07 22:08	1.0	
026	074a026	SAMPLE	193303-004	S	Miscell.	123131	03/15/07 22:36	1.0	
027	074a027	SAMPLE	193148-001	S	Soil	123131	03/15/07 23:04	1.0	
028	074a028	SAMPLE	193148-002	S	Soil	123131	03/15/07 23:32	3.0	
029	074a029	X	IB				03/16/07 00:00	1.0	
030	074a030	SAMPLE	193148-003	S	Soil	123131	03/16/07 00:28	1.0	
031	074a031	SAMPLE	193148-004	S	Soil	123131	03/16/07 00:56	1.0	
032	074a032	SAMPLE	193325-001	S	Soil	123131	03/16/07 01:24	1.0	
033	074a033	SAMPLE	193325-003	S	Soil	123131	03/16/07 01:53	1.0	
034	074a034	X	IB				03/16/07 02:21	1.0	
035	074a035	CCV	DSL_500				03/16/07 02:49	1.0	1
036	074a036	CCV	MO_500				03/16/07 03:17	1.0	2
037	074a037	X	CCV				03/16/07 03:45	1.0	1
038	074a038	X	CCV				03/16/07 04:13	1.0	2
039	074a039	MSS	193325-002	S	Soil	123131	03/16/07 04:42	1.0	
040	074a040	MS	QC379311	S	Soil	123131	03/16/07 05:10	1.0	
041	074a041	MSD	QC379312	S	Soil	123131	03/16/07 05:38	1.0	
042	074a042	SAMPLE	193325-009	S	Soil	123131	03/16/07 06:06	1.0	
043	074a043	SAMPLE	193325-010	S	Soil	123131	03/16/07 06:34	1.0	
044	074a044	X	IB				03/16/07 07:03	1.0	
045	074a045	CCV	DSL_1000				03/16/07 07:31	1.0	4
046	074a046	CCV	MO_500				03/16/07 07:59	1.0	2

Standards used: 1=S5517 2=S5603 3=S5258 4=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177107148

Instrument : GC17A
Method : EPA 8015B

Begun : 03/15/07 09:48
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	074a001	X	PRIMER				03/15/07 09:48	1.0	
002	074a002	X	IB				03/15/07 10:15	1.0	
003	074a003	CCV	DSL_500				03/15/07 10:43	1.0	1
004	074a004	CCV	MO_500				03/15/07 11:10	1.0	2
005	074a005	SAMPLE	193108-016	S	Water	123067	03/15/07 11:50	1.0	
006	074a006	SAMPLE	193108-018	S	Water	123067	03/15/07 12:18	1.0	
007	074a007	SAMPLE	193108-015	S	Water	123067	03/15/07 12:45	1.0	
008	074a008	SAMPLE	193108-013	S	Water	123067	03/15/07 13:13	1.0	
009	074a009	X	IB				03/15/07 13:40	1.0	
010	074a010	SAMPLE	193108-011	S	Water	123067	03/15/07 14:07	1.0	
011	074a011	SAMPLE	193108-010	S	Water	123067	03/15/07 14:35	1.0	
012	074a012	SAMPLE	193108-009	S	Water	123067	03/15/07 15:02	1.0	
013	074a013	SAMPLE	193108-008	S	Water	123067	03/15/07 15:29	1.0	
014	074a014	CCV	DSL_500				03/15/07 15:56	1.0	1
015	074a015	CCV	MO_500				03/15/07 16:24	1.0	2
016	074a016	CCV	DSL_250				03/15/07 18:46	1.0	3
017	074a017	CCV	MO_500				03/15/07 19:13	1.0	2
018	074a018	SAMPLE	193325-008	S	Soil	123131	03/15/07 19:42	1.0	
019	074a019	SAMPLE	193325-006	S	Soil	123131	03/15/07 20:09	1.0	
020	074a020	SAMPLE	193325-005	S	Soil	123131	03/15/07 20:37	1.0	
021	074a021	SAMPLE	193325-004	S	Soil	123131	03/15/07 21:04	1.0	
022	074a022	X	IB				03/15/07 21:32	1.0	
023	074a023	SAMPLE	193334-008		Soil	123122	03/15/07 21:59	1.0	
024	074a024	SAMPLE	193334-009		Soil	123122	03/15/07 22:26	1.0	
025	074a025	SAMPLE	193334-011		Soil	123122	03/15/07 22:54	1.0	
026	074a026	SAMPLE	193334-004		Soil	123122	03/15/07 23:21	1.0	
027	074a027	SAMPLE	193334-003		Soil	123122	03/15/07 23:48	1.0	
028	074a028	SAMPLE	193334-010		Soil	123122	03/16/07 00:16	1.0	
029	074a029	X	IB				03/16/07 00:43	1.0	
030	074a030	CCV	DSL_1000				03/16/07 01:10	1.0	4
031	074a031	X	MO_500				03/16/07 01:37	1.0	2
032	074a032	X	CCV				03/16/07 02:05	1.0	4
033	074a033	CCV	MO_500				03/16/07 02:32	1.0	2
034	074a034	SAMPLE	193334-012		Soil	123122	03/16/07 02:59	1.0	
035	074a035	SAMPLE	193334-006		Soil	123122	03/16/07 03:26	1.0	
036	074a036	X	DSL_1000				03/16/07 03:53	1.0	4
037	074a037	X	MO_500				03/16/07 04:20	1.0	2
038	074a038	CCV	DSL_1000				03/16/07 04:48	1.0	4
039	074a039	CCV	MO_500				03/16/07 05:15	1.0	2

Standards used: 1=S5517 2=S5603 3=S5258 4=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A
Method : EPA 8015B

Begun : 03/18/07 16:11
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	077a001	X	PRIMER				03/18/07 16:11	1.0	
002	077a002	X	IB				03/18/07 16:39	1.0	
003	077a003	CMARKER	C8-C50				03/18/07 17:07	1.0	1
004	077a004	IB	CALIB				03/18/07 17:35	1.0	
005	077a005	ICAL	JET_10				03/18/07 18:02	1.0	2
006	077a006	ICAL	JET_100				03/18/07 18:31	1.0	3
007	077a007	ICAL	JET_500				03/18/07 18:59	1.0	4
008	077a008	ICAL	JET_1000				03/18/07 19:27	1.0	5
009	077a009	ICAL	JET_3000				03/18/07 19:56	1.0	6
010	077a010	ICAL	JET_5000				03/18/07 20:24	1.0	7
011	077a011	IB	CALIB				03/18/07 20:52	1.0	
012	077a012	CCV	DSL_250				03/18/07 21:35	1.0	8
013	077a013	CCV	MO_500				03/18/07 22:04	1.0	9
014	077a014	CCV	JET_250				03/18/07 22:32	1.0	10
015	077a015	X	CCV				03/18/07 22:59	1.0	8
016	077a016	X	CCV				03/18/07 23:27	1.0	9
017	077a017	X	CCV				03/18/07 23:55	1.0	10
018	077a018	BLANK	QC379228	S	Water	123108	03/19/07 00:23	1.0	
019	077a019	SAMPLE	193291-004		Soil	123122	03/19/07 00:51	1.0	
020	077a020	MS	QC379287		Soil	123122	03/19/07 01:20	1.0	
021	077a021	MSD	QC379288		Soil	123122	03/19/07 01:48	1.0	
022	077a022	X	IB				03/19/07 02:15	1.0	
023	077a023	SAMPLE	193274-005	S	Water	123108	03/19/07 02:43	1.0	
024	077a024	SAMPLE	193274-006	S	Water	123108	03/19/07 03:12	1.0	
025	077a025	SAMPLE	193274-007	S	Water	123108	03/19/07 03:40	1.0	
026	077a026	SAMPLE	193274-008	S	Water	123108	03/19/07 04:08	1.0	
027	077a027	SAMPLE	193274-009	S	Water	123108	03/19/07 04:36	1.0	
028	077a028	SAMPLE	193274-010	S	Water	123108	03/19/07 05:04	1.0	
029	077a029	X	IB				03/19/07 05:32	1.0	
030	077a030	CCV	DSL_1000				03/19/07 06:01	1.0	11
031	077a031	CCV	MO_500				03/19/07 06:29	1.0	9
032	077a032	CCV	JET_250				03/19/07 06:57	1.0	10
033	077a033	SAMPLE	193274-011	S	Water	123108	03/19/07 07:35	1.0	
034	077a034	SAMPLE	193274-012	S	Water	123108	03/19/07 08:03	1.0	
035	077a035	SAMPLE	193274-013	S	Water	123108	03/19/07 08:31	1.0	
036	077a036	SAMPLE	193274-014	S	Water	123108	03/19/07 08:59	1.0	
037	077a037	SAMPLE	193274-015	S	Water	123108	03/19/07 09:27	1.0	
038	077a038	SAMPLE	193291-004		Soil	123122	03/19/07 09:55	1.0	
039	077a039	SAMPLE	193274-016	S	Water	123108	03/19/07 10:24	1.0	
040	077a040	BLANK	QC379739	S	Water	123229	03/19/07 10:52	1.0	
041	077a041	CCV	DSL_250				03/19/07 11:20	1.0	8
042	077a042	CCV	MO_500				03/19/07 11:48	1.0	9
043	077a043	CCV	JET_250				03/19/07 12:16	1.0	10
044	077a044	BLANK	QC378776	S	Water	123002	03/19/07 13:23	1.0	
045	077a045	SAMPLE	193227-002	S	Water	123002	03/19/07 13:51	1.0	
046	077a046	SAMPLE	193233-002	S	Water	123002	03/19/07 14:19	1.0	
047	077a047	SAMPLE	193233-003	S	Water	123002	03/19/07 14:47	1.0	
048	077a048	X	IB				03/19/07 15:15	1.0	
049	077a049	SAMPLE	193329-007	S	Water	123229	03/19/07 15:43	1.0	
050	077a050	MSS	193108-023	S	Water	123229	03/19/07 16:11	1.0	
051	077a051	MS	QC379741	S	Water	123229	03/19/07 16:39	1.0	
052	077a052	MSD	QC379742	S	Water	123229	03/19/07 17:07	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A
Method : EPA 8015B

Begun : 03/18/07 16:11
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	077a053	SAMPLE	193291-002	S	Soil	123122	03/19/07 17:35	1.0		
054	077a054	SAMPLE	193291-003	S	Soil	123122	03/19/07 18:03	1.0		
055	077a055	X	IB				03/19/07 18:31	1.0		
056	077a056	CCV	DSL_500				03/19/07 18:59	1.0	12	
057	077a057	CCV	MO_500				03/19/07 19:28	1.0	9	
058	077a058	CCV	JET_250				03/19/07 19:56	1.0	10	
059	077a059	X	CCV				03/19/07 20:24	1.0	12	
060	077a060	X	CCV				03/19/07 20:52	1.0	9	
061	077a061	X	CCV				03/19/07 21:20	1.0	10	
062	077a062	BLANK	QC379285	S	Soil	123122	03/19/07 21:48	1.0		
063	077a063	SAMPLE	193291-004	S	Soil	123122	03/19/07 22:16	1.0		
064	077a064	MSS	193291-005	S	Soil	123122	03/19/07 22:44	1.0		
065	077a065	SAMPLE	193291-006	S	Soil	123122	03/19/07 23:12	1.0		
066	077a066	MS	QC379287	S	Soil	123122	03/19/07 23:40	1.0		
067	077a067	MSD	QC379288	S	Soil	123122	03/20/07 00:08	1.0		
068	077a068	X	IB				03/20/07 00:36	1.0		
069	077a069	SAMPLE	193329-003	S	Water	123229	03/20/07 01:04	1.0		
070	077a070	SAMPLE	193329-004	S	Water	123229	03/20/07 01:33	1.0		
071	077a071	MS	QC379741	S	Water	123229	03/20/07 02:01	1.0		
072	077a072	MSD	QC379742	S	Water	123229	03/20/07 02:29	1.0		
073	077a073	X	IB				03/20/07 02:57	1.0		
074	077a074	CCV	DSL_1000				03/20/07 03:25	1.0	11	
075	077a075	CCV	MO_500				03/20/07 03:53	1.0	9	
076	077a076	CCV	JET_250				03/20/07 04:21	1.0	10	
077	077a077	X	CCV				03/20/07 04:50	1.0	11	
078	077a078	X	CCV				03/20/07 05:18	1.0	9	
079	077a079	X	CCV				03/20/07 05:46	1.0	10	
080	077a080	SAMPLE	193329-001	S	Water	123229	03/20/07 06:14	1.0		
081	077a081	SAMPLE	193329-002	S	Water	123229	03/20/07 06:43	1.0		
082	077a082	SAMPLE	193329-005	S	Water	123229	03/20/07 07:11	1.0		
083	077a083	SAMPLE	193329-006	S	Water	123229	03/20/07 07:39	1.0		
084	077a084	CCV	DSL_250				03/20/07 08:08	1.0	8	
085	077a085	CCV	MO_500				03/20/07 08:36	1.0	9	
086	077a086	CCV	JET_250				03/20/07 09:04	1.0	10	
087	077a087	X	CCV				03/20/07 09:32	1.0	8	

Standards used: 1=S4049 2=S4665 3=S4666 4=S4667 5=S4668 6=S4670 7=S4664 8=S5258 9=S5603 10=S4560 11=S5259 12=S5517

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177112801

Instrument : GC17A
Method : EPA 8015B

Begun : 03/19/07 08:01
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER				03/19/07 08:01	1.0	
002	078a002	X	IB				03/19/07 08:28	1.0	
003	078a003	CCV	DSL_500				03/19/07 08:55	1.0	1
004	078a004	CCV	MO_500				03/19/07 09:23	1.0	2
005	078a005	SAMPLE	193331-001		Soil	123183	03/19/07 10:49	1.0	
006	078a006	MSS	193384-001		Soil	123183	03/19/07 11:24	1.0	
007	078a007	SAMPLE	193331-001	S	Soil	123183	03/19/07 11:51	1.0	
008	078a008	X	IB				03/19/07 14:32	1.0	
009	078a009	LCS	QC379740	S	Water	123229	03/19/07 14:59	1.0	
010	078a010	SAMPLE	193108-012	S	Water	123229	03/19/07 15:44	1.0	
011	078a011	SAMPLE	193137-005	S	Water	123229	03/19/07 16:11	1.0	
012	078a012	SAMPLE	193108-025	S	Water	123229	03/19/07 16:38	1.0	
013	078a013	SAMPLE	193108-026	S	Water	123229	03/19/07 17:06	1.0	
014	078a014	SAMPLE	193217-001	S	Water	123238	03/19/07 17:33	1.0	
015	078a015	SAMPLE	193217-002	S	Water	123238	03/19/07 18:00	1.0	
016	078a016	X	IB				03/19/07 18:27	1.0	
017	078a017	CCV	DSL_1000				03/19/07 18:55	1.0	3
018	078a018	CCV	MO_500				03/19/07 19:23	1.0	2
019	078a019	X	CCV				03/19/07 19:50	1.0	3
020	078a020	X	CCV				03/19/07 20:17	1.0	2
021	078a021	BLANK	QC379743	S	Water	123230	03/19/07 20:44	1.0	
022	078a022	BS	QC379744	S	Water	123230	03/19/07 21:12	1.0	
023	078a023	BSD	QC379745	S	Water	123230	03/19/07 21:39	1.0	
024	078a024	SAMPLE	193174-001	S	Water	123230	03/19/07 22:06	1.0	
025	078a025	SAMPLE	193174-002	S	Water	123230	03/19/07 22:34	1.0	
026	078a026	SAMPLE	193174-003	S	Water	123230	03/19/07 23:01	1.0	
027	078a027	SAMPLE	193174-004	S	Water	123230	03/19/07 23:28	1.0	
028	078a028	SAMPLE	193174-005	S	Water	123230	03/19/07 23:55	1.0	
029	078a029	SAMPLE	193174-006	S	Water	123230	03/20/07 00:23	1.0	
030	078a030	SAMPLE	193174-007	S	Water	123230	03/20/07 00:50	1.0	
031	078a031	X	IB				03/20/07 01:17	1.0	
032	078a032	CCV	DSL_250				03/20/07 01:44	1.0	4
033	078a033	CCV	MO_500				03/20/07 02:12	1.0	2
034	078a034	X	CCV				03/20/07 02:40	1.0	4
035	078a035	X	CCV				03/20/07 03:07	1.0	2
036	078a036	SAMPLE	193174-008	S	Water	123230	03/20/07 03:34	1.0	
037	078a037	SAMPLE	193174-009	S	Water	123230	03/20/07 04:02	1.0	
038	078a038	SAMPLE	193174-010	S	Water	123230	03/20/07 04:29	1.0	
039	078a039	SAMPLE	193174-011	S	Water	123230	03/20/07 04:56	1.0	
040	078a040	SAMPLE	193174-012	S	Water	123230	03/20/07 05:23	1.0	
041	078a041	SAMPLE	193174-013	S	Water	123230	03/20/07 05:50	1.0	
042	078a042	SAMPLE	193174-014	S	Water	123230	03/20/07 06:17	1.0	
043	078a043	X	IB				03/20/07 06:45	1.0	
044	078a044	CCV	DSL_500				03/20/07 07:13	1.0	1
045	078a045	CCV	MO_500				03/20/07 07:40	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227112742

Instrument : GC14B
Method : EPA 8015B

Begun : 03/19/07 07:02
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078_001	X	PRIMER				03/19/07 07:02	1.0	
002	078_002	X	IB				03/19/07 07:30	1.0	
003	078_003	CCV	DSL_250				03/19/07 07:58	1.0	1
004	078_004	CCV	MO_500				03/19/07 08:26	1.0	2
005	078_005	X	IB				03/19/07 09:58	1.0	
006	078_006	X	IB				03/19/07 10:26	1.0	
007	078_007	X	IB				03/19/07 10:54	1.0	
008	078_008	MSS	193384-001	S	Soil	123183	03/19/07 11:44	1.0	
009	078_009	CCV	DSL_1000				03/19/07 13:35	1.0	3
010	078_010	CCV	MO_500				03/19/07 14:03	1.0	2
011	078_011	SAMPLE	193137-002	S	Water	123229	03/19/07 14:37	1.0	
012	078_012	SAMPLE	193137-003	S	Water	123229	03/19/07 15:05	1.0	
013	078_013	SAMPLE	193137-004	S	Water	123229	03/19/07 15:33	1.0	
014	078_014	SAMPLE	193137-001	S	Water	123229	03/19/07 16:20	1.0	
015	078_015	SAMPLE	193108-027	S	Water	123229	03/19/07 16:47	1.0	
016	078_016	X	IB				03/19/07 17:15	1.0	
017	078_017	BLANK	QC379769		Water	123238	03/19/07 17:43	1.0	
018	078_018	BLANK	QC379769	S	Water	123238	03/19/07 18:11	1.0	
019	078_019	LCS	QC379770	S	Water	123238	03/19/07 18:39	1.0	
020	078_020	SAMPLE	193241-001		Water	123238	03/19/07 19:07	1.0	
021	078_021	SAMPLE	193166-016	S	Water	123238	03/19/07 19:35	1.0	
022	078_022	CCV	DSL_1000				03/19/07 20:03	1.0	3
023	078_023	CCV	MO_500				03/19/07 20:31	1.0	2
024	078_024	X	CCV				03/19/07 20:59	1.0	3
025	078_025	X	CCV				03/19/07 21:27	1.0	2
026	078_026	MSS	193217-005	S	Water	123238	03/19/07 21:55	1.0	
027	078_027	MSS	193217-011	S	Water	123238	03/19/07 22:23	1.0	
028	078_028	MS	QC379771	S	Water	123238	03/19/07 22:51	1.0	
029	078_029	MSD	QC379772	S	Water	123238	03/19/07 23:19	1.0	
030	078_030	MS	QC379773	S	Water	123238	03/19/07 23:46	1.0	
031	078_031	MSD	QC379774	S	Water	123238	03/20/07 00:14	1.0	
032	078_032	X	IB				03/20/07 00:43	1.0	
033	078_033	SAMPLE	193217-010	S	Water	123238	03/20/07 01:10	1.0	
034	078_034	SAMPLE	193217-012	S	Water	123238	03/20/07 01:38	1.0	
035	078_035	SAMPLE	193217-003	S	Water	123238	03/20/07 02:06	1.0	
036	078_036	SAMPLE	193217-004	S	Water	123238	03/20/07 02:34	1.0	
037	078_037	X	DSL_250				03/20/07 03:02	1.0	1
038	078_038	X	MO_500				03/20/07 03:30	1.0	2
039	078_039	CCV	DSL_250				03/20/07 03:57	1.0	1
040	078_040	CCV	MO_500				03/20/07 04:25	1.0	2
041	078_041	SAMPLE	193217-006	S	Water	123238	03/20/07 04:53	1.0	
042	078_042	SAMPLE	193217-007	S	Water	123238	03/20/07 05:22	1.0	
043	078_043	SAMPLE	193217-008	S	Water	123238	03/20/07 05:50	1.0	
044	078_044	SAMPLE	193217-009	S	Water	123238	03/20/07 06:18	1.0	
045	078_045	X	IB				03/20/07 06:46	1.0	
046	078_046	CCV	DSL_500				03/20/07 07:14	1.0	4
047	078_047	CCV	MO_500				03/20/07 07:42	1.0	2

Standards used: 1=S5258 2=S5603 3=S5259 4=S5517

REPORTING SUMMARY FOR 193108 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193108-002	GC15B	03/13/07 16:03	1.0	+	+	+	
193108-003	GC15B	03/13/07 16:34	1.0	+	+	+	
193108-004	GC15B	03/13/07 17:06	1.0	+	+	+	
193108-005	GC15B	03/13/07 18:42	1.0	+	+	+	
193108-007	GC15B	03/13/07 14:30	1.0	+	+	+	
193108-008	GC17A	03/15/07 15:29	1.0	+	+	+	
193108-009	GC17A	03/15/07 15:02	1.0	+	+	+	
193108-010	GC17A	03/15/07 14:35	1.0	+	+	+	
193108-011	GC17A	03/15/07 14:07	1.0	+	+	+	
193108-012	GC17A	03/19/07 15:44	1.0	+	+	+	
193108-013	GC17A	03/15/07 13:13	1.0	+	+	+	
193108-015	GC17A	03/15/07 12:45	1.0	+	+	+	
193108-016	GC17A	03/15/07 11:50	1.0	+	+	+	
193108-017	GC15B	03/14/07 20:00	1.0	+	+	+	
193108-018	GC17A	03/15/07 12:18	1.0	+	+	+	
193108-019	GC11A	03/15/07 15:25	1.0	+	+	+	
193108-020	GC11A	03/15/07 15:53	1.0	+	+	+	
193108-022	GC11A	03/15/07 16:22	1.0	+	+	+	
193108-023	GC11A	03/19/07 16:11	1.0	+	+	+	
193108-025	GC17A	03/19/07 16:38	1.0	+	+	+	
193108-026	GC17A	03/19/07 17:06	1.0	+	+	+	
193108-027	GC14B	03/19/07 16:47	1.0	+	+	+	
QC378776	GC15B	03/13/07 12:25	1.0	+	+	+	
QC378776	GC17A	03/13/07 16:29	1.0				
QC378776	GC11A	03/19/07 13:23	1.0				
QC378777	GC15B	03/13/07 11:53	1.0	+		+	
QC378778	GC15B	03/13/07 15:01	1.0	+		+	

REPORTING SUMMARY FOR 193108 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
QC378779	GC15B	03/13/07 15:32	1.0	+		+	
QC379052	GC15B	03/14/07 18:01	1.0	+	+	+	
QC379052	GC14B	03/21/07 12:12	1.0				
QC379053	GC15B	03/14/07 19:28	1.0	+		+	
QC379054	GC15B	03/14/07 20:32	1.0	+		+	
QC379055	GC15B	03/14/07 21:06	1.0	+		+	
QC379228	GC11A	03/15/07 14:57	1.0	+	+	+	
QC379228	GC11A	03/19/07 00:23	1.0				
QC379229	GC11A	03/15/07 14:00	1.0	+		+	
QC379230	GC11A	03/15/07 14:29	1.0	+		+	
QC379739	GC11A	03/19/07 10:52	1.0	+	+	+	
QC379740	GC17A	03/19/07 14:59	1.0	+		+	
QC379741	GC11A	03/19/07 16:39	1.0				
QC379741	GC11A	03/20/07 02:01	1.0	+		+	
QC379742	GC11A	03/19/07 17:07	1.0				
QC379742	GC11A	03/20/07 02:29	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123002
Started By : JOM
Method : 3520C
Spike #1 ID: S5545

Prep Date : 12-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: JLM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	MSS
193218-024		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193227-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193233-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193233-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193251-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193251-008		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC378776	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC378777	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC378778	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC378779	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: MDW Date: 03/14/07 Reviewer: CP Date: 03/14/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123002
LIMS Analysis: TEH/M
Extracted by: JM
Date Extracted: 03/12/07

Extraction Method:
- ☐ mod. EPA 3510 sep. funnel
- ☒ mod. EPA 3520 cont. L/L
- ☐ _____

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Cleanup Method (if needed):
- ☒ EPA 3630 Silica Gel
- ☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-002 H	500	7	2.5	X	
-003 ↓	↓	↓	↓	↓	
-004 F					
-005 I					
-007 AA					
193218-024 J					MSS
193227-002 M				↓	Re-X
193235-002				X	
-003 ↓				X	
193235-001 K					
-002 L					
-003 K					
-004 L					
-005 K					
-006 L					
-007 K					
-008 L					
-009 J					
193281-003 B					
-008 C					
MB QC378776		N/A			
LCS 7		↓			
MS 8S		7			
MSD 9S	↓	↓	↓	↓	193108-007 ↓

JM 3/12/07

0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1420
Extraction End Time: 0825
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5545A	JM 3/12/07
S5627B	↓
FS065076	↓
EM46352 / EM46354	↓
1420	↓
0825	JM 3/13/07
N/A	↓
EM46111628	↓
✓	↓

Julie Shue 3/12/07
Extraction Chemist Date

Contined from Page —
Continued on Page —

Pamela Mangelf 3/13/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 3/13/07

Benchbook # **BK 2475**
Page 4

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-002	123002	1.0	1.0	
-003				
-004				
-005				
-007				MSS
193218-024				
193233-002				
-003				
193235-001				
-002				
-003				
-004				
-005				
-006				
-007				
-008				
-009				
193251-003				
-008				
MB QC378776				
LCS 7				
MS 8				
MSD 9				
				JLM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	JLM 3/13/07
☑ Extracts were cleaned up using 1.0 g cartridges	SP8247	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

3/13/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/13/07
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 3/13/07

Benchbook # **BK 2475**
Page 5

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193322-006	JLM ~~123300~~ 123035	1.0	1.0	MSS
-007	123035			
-008				
-009				
-013				
-014				
-015				
-016				
-021				
-022				
-023				
-025				
-029				
-030				
193322-031				
-032				
-036				
-037				
-038				
-039				
MB QC378892				
LCS 3				
MS 4				
MSD 5				
193227-002	123002			
				JLM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	N/A	JLM 3/13/07
☑ Extracts were cleaned up using 1.0 g cartridges	SP8247	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

JLM 3/13/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Pamela Maright 3/13/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123067
Started By : JOM
Method : 3520C
Spike #1 ID: S5545

Prep Date : 13-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	MSS
193108-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193244-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193315-001		Water	500	2.5	1	0.005	7	.5				TEH	
193315-002		Water	500	2.5	1	0.005	7	.5				TEH	
193315-003		Water	500	2.5	1	0.005	7	.5				TEH	
193315-004		Water	500	2.5	1	0.005	7	.5				TEH	
QC379052	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379053	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379054	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC379055	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: ATL Date: 03/15/07 Reviewer: CP Date: 03/15/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123067
LIMS Analysis: TEH/M
Extracted by: JDM
Date Extracted: 13 March 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640 GPC
☒ EPA 3630 Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-008 N	500	7	2.5	X	
09 I					
10 O					
11 L					
13 ↓					
15 K					
16 H					
17 X					MSS
18 I					
193119-001 J					
02 ↓					
04 K					
05 ↓					
06 J					
193244-001 B					
193315-001 D					
02 E					
03					
04 ↓					
MB QC379052		NA		X	
LCS 53					
MS 54		7			193108-017 V
MSD 55		7			

DDT 3/14/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S5545A	JDM 3/13/07
0.5 mL of TEH_SP was added to all spikes	S56276	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1715	
Extraction End Time:	1115	JDM 3/14/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	DDT 3/14/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205637	
Concentrated to volumes as noted above	✓	

Jeffrey Lee 3/13/07
Extraction Chemist Date

Contined from Page ___
Continued on Page ___

3/15/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 3-14-07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-008	123067	1.0	1.0	
009				
010				
011				
013				
015				
016				
017				MSS
018				
193119-001				
002				
004				
005				
006				
193244-001				
MB QC 379052				
LCS 53				
MS 54				
MSD 55				

DJT 3/14/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	DJT 3/14/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

3/14/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/14/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123108
Started By : JOM
Method : 3520C
Spike #1 ID: S5713

Prep Date : 14-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-020		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-022		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-013		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
193274-014		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
193274-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193345-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193345-005		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC379228	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379229	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379230	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: ATL Date: 03/16/07 Reviewer: CP Date: 03/19/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123108
LIMS Analysis: TEH/M
Extracted by: JOM
Date Extracted: 14 March 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-019 L	500	7	2.5	X	
20 L					
22 M					
193274-005 N					
06 M					
07 J					
08 N					
09 M					
10 J					
11 H					
12 G		6			
13 G		10			
14 G		10			
15 I		7			
16 I					
193345-003 A					
05 C					
MB QC379228		NA			
BS 29					
BSD 30					

DJT 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S5713A	JOM 3/14/07
0.5 mL of TEH_SP was added to all spikes	S5627B	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1500	
Extraction End Time:	0910	DFK 03/15/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	DJT 3/15/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205637	
Concentrated to volumes as noted above	✓	

Jessica Chee 3/14/07
Extraction Chemist Date

Contined from Page —
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3/15/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 3/15/07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-019	123108	1.0	1.0	
020				
022				
193274-005				
006				
007				
008				
009				
010				
011				
012				
013				
014				
015				
016				
193345-003				
005				
MB QC 379228				
BS 29				
BSD 30				

DJT 3/15/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	DJT 3/15/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP 8483	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47301	
Concentrated to volumes as noted above	✓	

3/15/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

3/15/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123229
Started By : KR
Method : 3520C
Spike #1 ID: S5713

Prep Date : 17-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: RFW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-023		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
193108-025		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-026		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-027		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-001		Water	450	2.5	1	0.005556	9	.5			3630C	TEHM	
193329-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-007		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
QC379739	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379740	LCS	Water	500	2.5	1	0.005		1	.5		3630C	TEH	2x surrogate
QC379741	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC379742	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123229
LIMS Analysis: TEHM
Extracted by: KR
Date Extracted: 17 MAR07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☑ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☑ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-012I	500	7	2.5	X	
23A4					MSS filter breaking - transferred after conc.
25M					
26M					
27Q					lost 5-10mL before conc.
193132-001E		7			
2H					
3G					
4G					pink extract
5L					
193329-001G	450	9			
2G	500	7			
3I					
4L					
5J					
6K					lost ~3 mL before conc
7H		10			
BLANK QC379739		NA			
LCS 40					possible dbl SURR *
MS 41AS		7			
MSD 42AS		7			
JDM 3/20/07					

	Mfg & Lot# / LIMS # / Time	Date/ Initials
* 1.0/0.5 mL of TEH_SURR was added to all samples	S5713 D	3/17/07 KR
0.5 mL of TEH_SP was added to all spikes	S5627 C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	P065076	
☑ Samples were continually extracted about 450 mL of CH_2Cl_2	EM97031/ EM96352	
EMPC H_2O Extraction Start Time:	1930	
Extraction End Time:	0830	JDM 3/18/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	KPW 3/19/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205037	
Concentrated to volumes as noted above	✓	

17 MAR 07
Extraction Chemist Date

Contined from Page 195
Continued on Page _____

Jessica Lee 3/20/07
Reviewed by Date

Curtis & Tompkins, Ltd.

Silica Gel Cleanup

EPA 3630c

Prep Chemist: JDM
Cleanup Date: 19 March 07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-012	123229	1.0	1.0	
23				
25				
26				
27				
193137-001				
02				
03				
04				
05				
193329-001				
02				
03				
04				
05				
06				
07				
MB QC319739				done by RFW
LCS 40				
MS 41				
MSD 42				
JDM 3/19/07				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	JDM 3/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM146354	
Concentrated to volumes as noted above	✓	

Jenine Lee 3/19/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Pamela Haglet 3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	122728
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301072A	Batch#:	122728
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW01	Batch#:	122784
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	122894
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	29	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	1.4	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW06	Batch#:	122726
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301073A	Batch#:	122726
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301073B	Batch#:	122726
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	28	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	1.5	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	122784
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	1.1	0.5	
Benzene	1.0	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW08	Batch#:	122784
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1A	Batch#:	122784
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.07 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW101	Batch#:	122784
Lab ID:	193108-019	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW102	Batch#:	122784
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0301073A	Batch#:	122784
Lab ID:	193108-021	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW103	Batch#:	122784
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW104	Batch#:	122836
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW101	Batch#:	122836
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW03	Batch#:	122836
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.1 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	94	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW05	Batch#:	122836
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0302071A	Batch#:	122836
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377631	Batch#:	122726
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377635	Batch#:	122728
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377866	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378063	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378310	Batch#:	122894
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377636	Batch#:	122728
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.77	107	65-135
Benzene	25.00	26.71	107	65-135
Trichloroethene	25.00	25.98	104	65-135
Toluene	25.00	27.65	111	65-135
Chlorobenzene	25.00	25.48	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	90	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377872	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	30.00	36.08	120	65-135
Benzene	30.00	28.68	96	65-135
Trichloroethene	30.00	29.43	98	65-135
Toluene	30.00	28.69	96	65-135
Chlorobenzene	30.00	28.44	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378062	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	27.50	30.73	112	65-135
Benzene	27.50	25.10	91	65-135
Trichloroethene	27.50	25.51	93	65-135
Toluene	27.50	25.59	93	65-135
Chlorobenzene	27.50	24.13	88	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	92	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122726
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type: BS Lab ID: QC377629

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.80	115	65-135
Benzene	25.00	24.74	99	65-135
Trichloroethene	25.00	24.85	99	65-135
Toluene	25.00	24.74	99	65-135
Chlorobenzene	25.00	23.74	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	94	86-115

Type: BSD Lab ID: QC377630

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.75	111	65-135	4	35
Benzene	25.00	23.46	94	65-135	5	35
Trichloroethene	25.00	23.45	94	65-135	6	35
Toluene	25.00	23.60	94	65-135	5	35
Chlorobenzene	25.00	22.96	92	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122894
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC378308

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.07	104	65-135
Benzene	25.00	23.06	92	65-135
Trichloroethene	25.00	22.93	92	65-135
Toluene	25.00	23.14	93	65-135
Chlorobenzene	25.00	22.64	91	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

Type: BSD Lab ID: QC378309

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.13	93	65-135	12	35
Benzene	25.00	22.44	90	65-135	3	35
Trichloroethene	25.00	21.94	88	65-135	4	35
Toluene	25.00	22.44	90	65-135	3	35
Chlorobenzene	25.00	22.07	88	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	122728
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377755

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	26.36	105	65-135
Benzene	<0.2500	25.00	26.00	104	65-135
Trichloroethene	<0.1151	25.00	25.35	101	65-135
Toluene	<0.1338	25.00	25.43	102	65-135
Chlorobenzene	<0.1569	25.00	24.49	98	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC377756

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.89	104	65-135	2	35
Benzene	25.00	25.03	100	65-135	4	35
Trichloroethene	25.00	24.39	98	65-135	4	35
Toluene	25.00	25.02	100	65-135	2	35
Chlorobenzene	25.00	23.59	94	65-135	4	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	93	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW01	Batch#:	122784
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377890

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	30.00	27.59	92	65-135
Benzene	<0.04131	30.00	23.31	78	65-135
Trichloroethene	<0.07621	30.00	23.16	77	65-135
Toluene	<0.08342	30.00	23.23	77	65-135
Chlorobenzene	<0.08963	30.00	22.61	75	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Type: MSD Lab ID: QC377891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	30.00	27.05	90	65-135	2	35
Benzene	30.00	22.85	76	65-135	2	35
Trichloroethene	30.00	22.83	76	65-135	1	35
Toluene	30.00	23.52	78	65-135	1	35
Chlorobenzene	30.00	21.95	73	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	90	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW104	Batch#:	122836
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378166

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	27.50	26.77	97	65-135
Benzene	<0.04131	27.50	23.68	86	65-135
Trichloroethene	<0.07621	27.50	22.96	83	65-135
Toluene	<0.08342	27.50	23.11	84	65-135
Chlorobenzene	<0.08963	27.50	21.88	80	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC378167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	27.50	25.81	94	65-135	4	35
Benzene	27.50	22.93	83	65-135	3	35
Trichloroethene	27.50	22.65	82	65-135	1	35
Toluene	27.50	22.50	82	65-135	3	35
Chlorobenzene	27.50	21.66	79	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447094064002 File : ec602 Time : 06-MAR-2007 08:14

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10004	21.77	
75	30.00% - 60.00% of mass 95	20480	44.57	
95		45952		
96	5.00% - 9.00% of mass 95	3057	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	28136	61.23	
175	5.00% - 9.00% of mass 174	2037	7.24	
176	> 95.00% and < 101.00% of mass 174	27728	98.55	
177	5.00% - 9.00% of mass 176	1812	6.53	

Analyst: BO Date: 03/06/07 Reviewer: LW Date: 03/06/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447095480002 File : ec702 Time : 07-MAR-2007 07:47

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6278	21.11	
75	30.00% - 60.00% of mass 95	12963	43.59	
95		29741		
96	5.00% - 9.00% of mass 95	1987	6.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	20736	69.72	
175	5.00% - 9.00% of mass 174	1614	7.78	
176	> 95.00% and < 101.00% of mass 174	19715	95.08	
177	5.00% - 9.00% of mass 176	1313	6.66	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/08/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447096916009 File : ec809 Time : 08-MAR-2007 11:20

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6657	20.28	
75	30.00% - 60.00% of mass 95	14340	43.68	
95		32826		
96	5.00% - 9.00% of mass 95	2070	6.31	
173	< 2.00% of mass 174	53	0.24	
174	> 50.00% and < 100.00% of mass 95	22494	68.52	
175	5.00% - 9.00% of mass 174	1658	7.37	
176	> 95.00% and < 101.00% of mass 174	22405	99.60	
177	5.00% - 9.00% of mass 176	1483	6.62	

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447098391006 File : ec906 Time : 09-MAR-2007 10:07

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10743	19.65	
75	30.00% - 60.00% of mass 95	22837	41.77	
95		54672		
96	5.00% - 9.00% of mass 95	3511	6.42	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	39493	72.24	
175	5.00% - 9.00% of mass 174	2894	7.33	
176	> 95.00% and < 101.00% of mass 174	37618	95.25	
177	5.00% - 9.00% of mass 176	2683	7.13	

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/12/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497038053008 File : jaq08 Time : 26-JAN-2007 15:00

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	77378	23.85	
75	30.00% - 60.00% of mass 95	148629	45.81	
95		324437		
96	5.00% - 9.00% of mass 95	22037	6.79	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	249066	76.77	
175	5.00% - 9.00% of mass 174	18514	7.43	
176	> 95.00% and < 101.00% of mass 174	244885	98.32	
177	5.00% - 9.00% of mass 176	15711	6.42	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497094080002 File : jc602 Time : 06-MAR-2007 08:31

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	131333	22.39	
75	30.00% - 60.00% of mass 95	262314	44.72	
95		586517		
96	5.00% - 9.00% of mass 95	39392	6.72	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	469333	80.02	
175	5.00% - 9.00% of mass 174	36490	7.77	
176	> 95.00% and < 101.00% of mass 174	459285	97.86	
177	5.00% - 9.00% of mass 176	30784	6.70	

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497094080008 File : jc608 Time : 06-MAR-2007 11:30

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	131754	21.80	
75	30.00% - 60.00% of mass 95	271317	44.90	
95		604309		
96	5.00% - 9.00% of mass 95	40328	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	477674	79.04	
175	5.00% - 9.00% of mass 174	37269	7.80	
176	> 95.00% and < 101.00% of mass 174	473493	99.12	
177	5.00% - 9.00% of mass 176	32893	6.95	

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

447013464001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

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Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

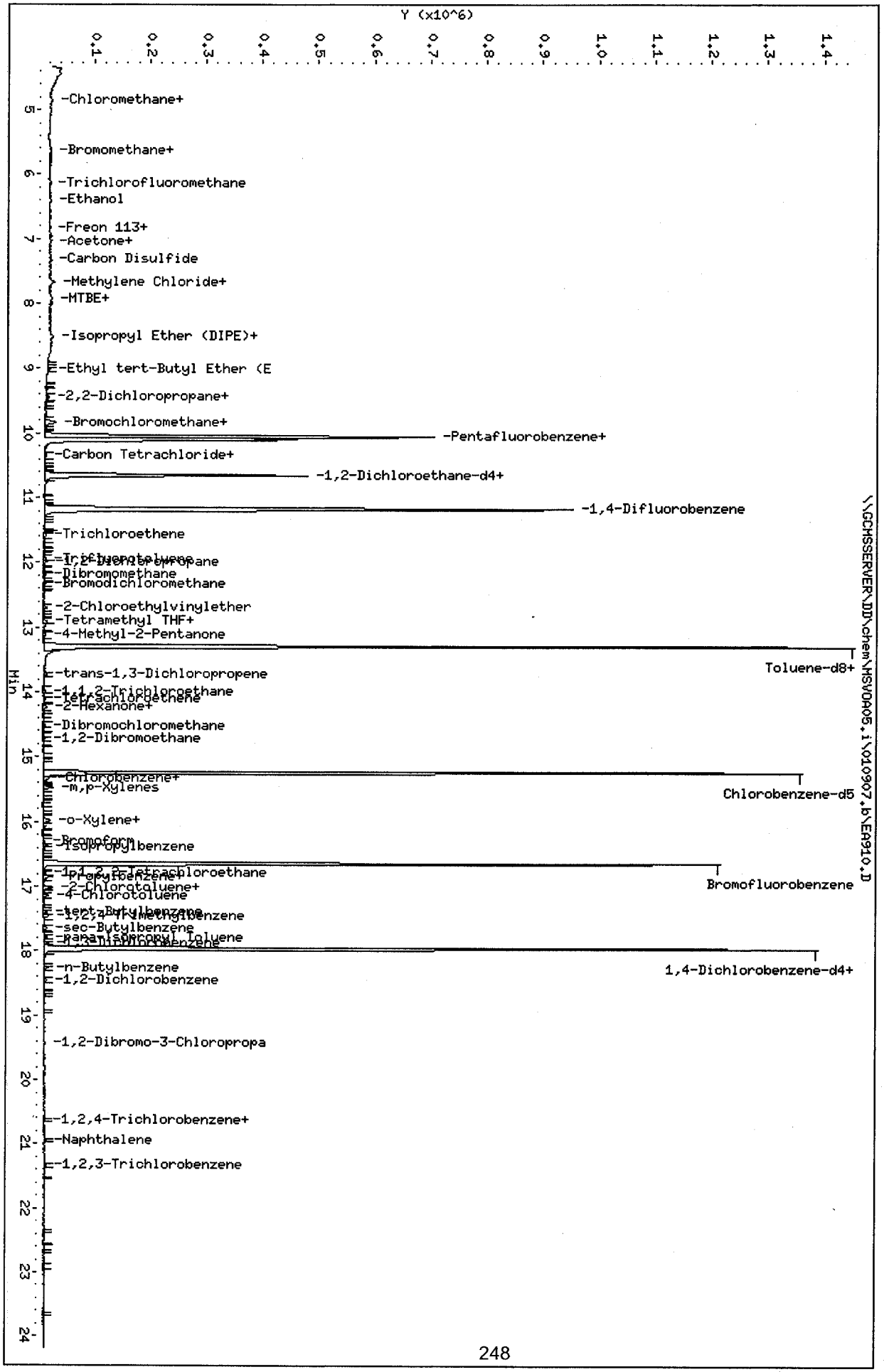
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

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Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

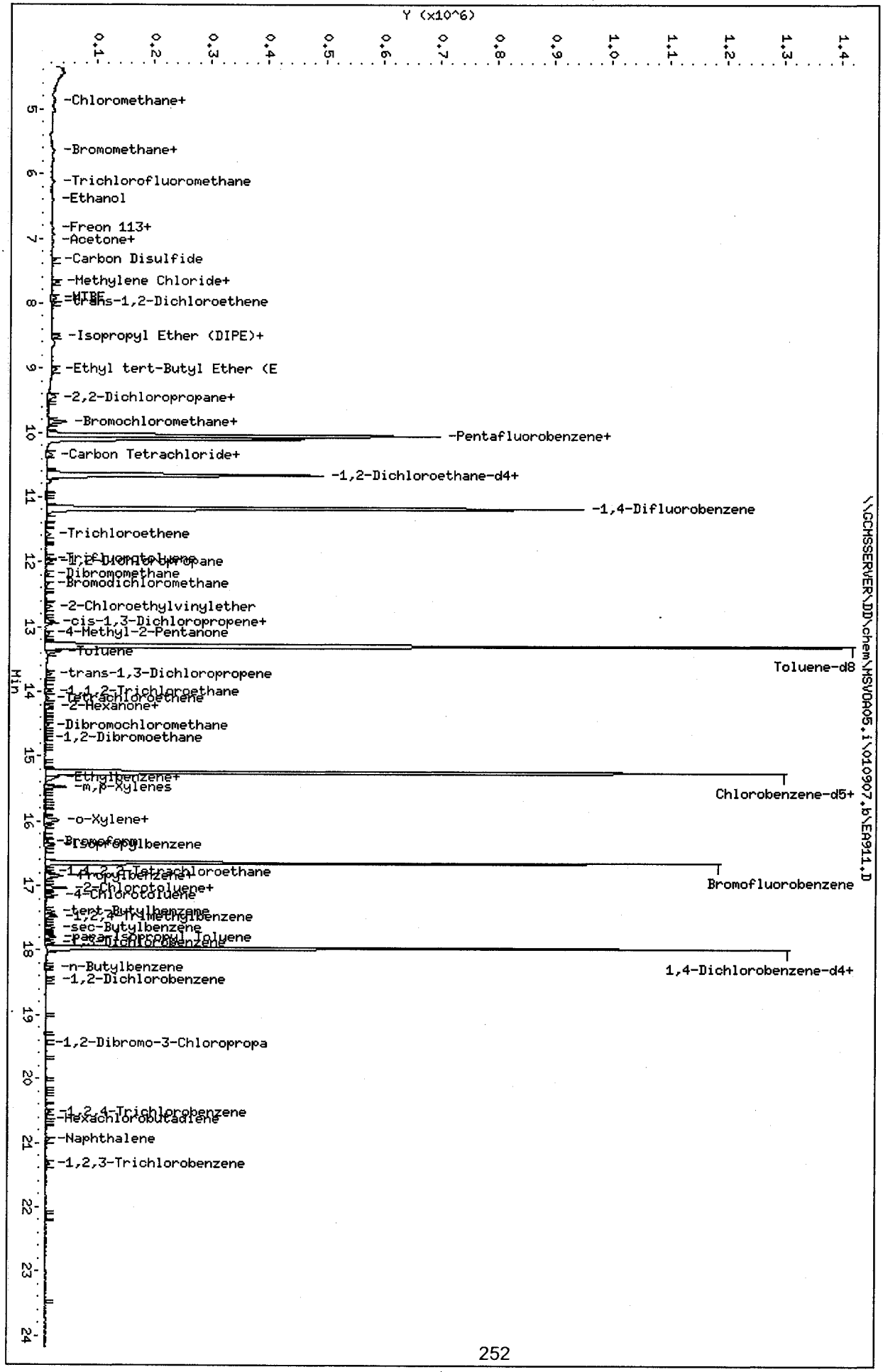
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

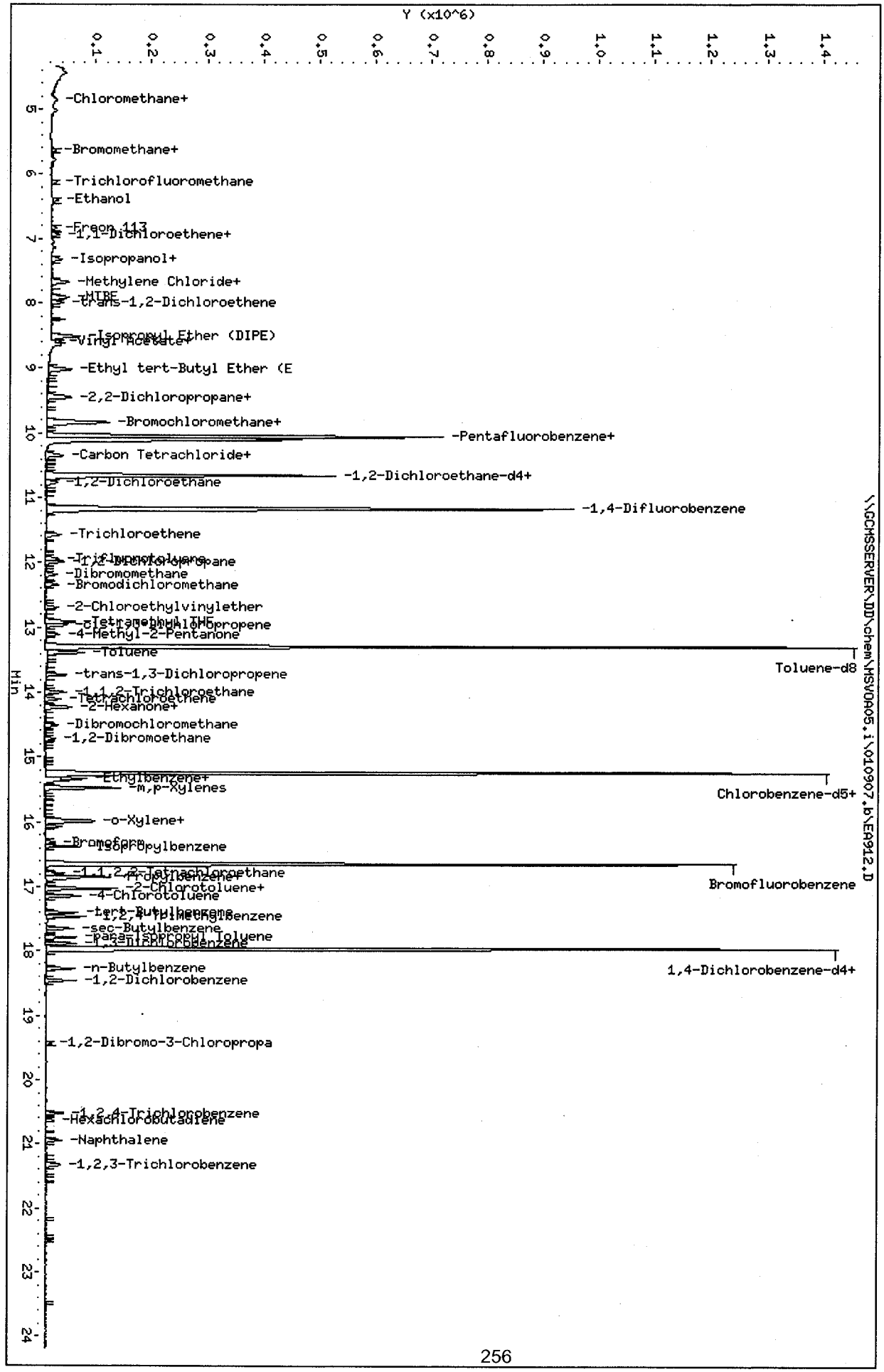
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Date : 09-JAN-2007 15:16
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

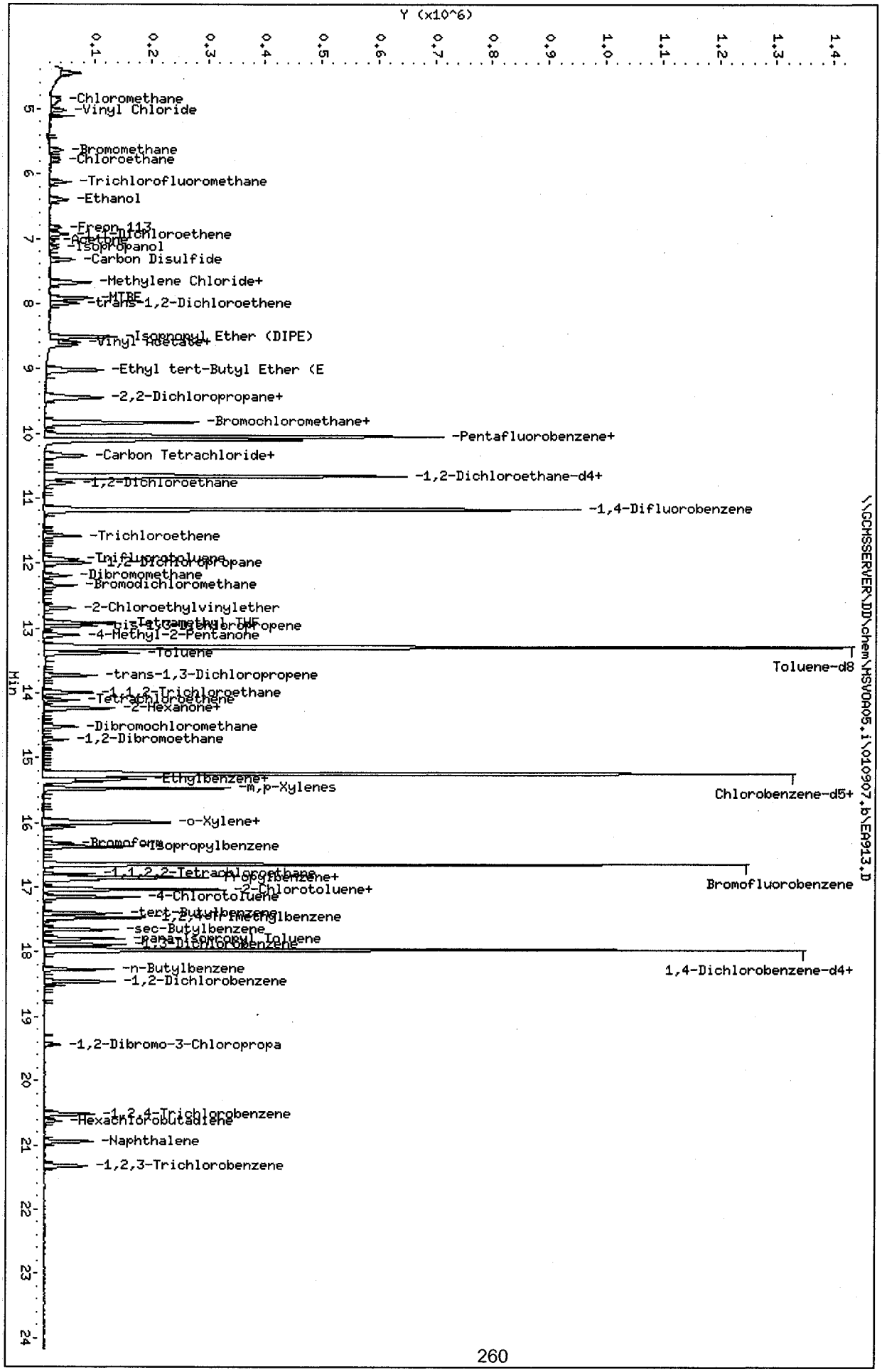
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Date : 09-JAN-2007 16:20
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5152,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
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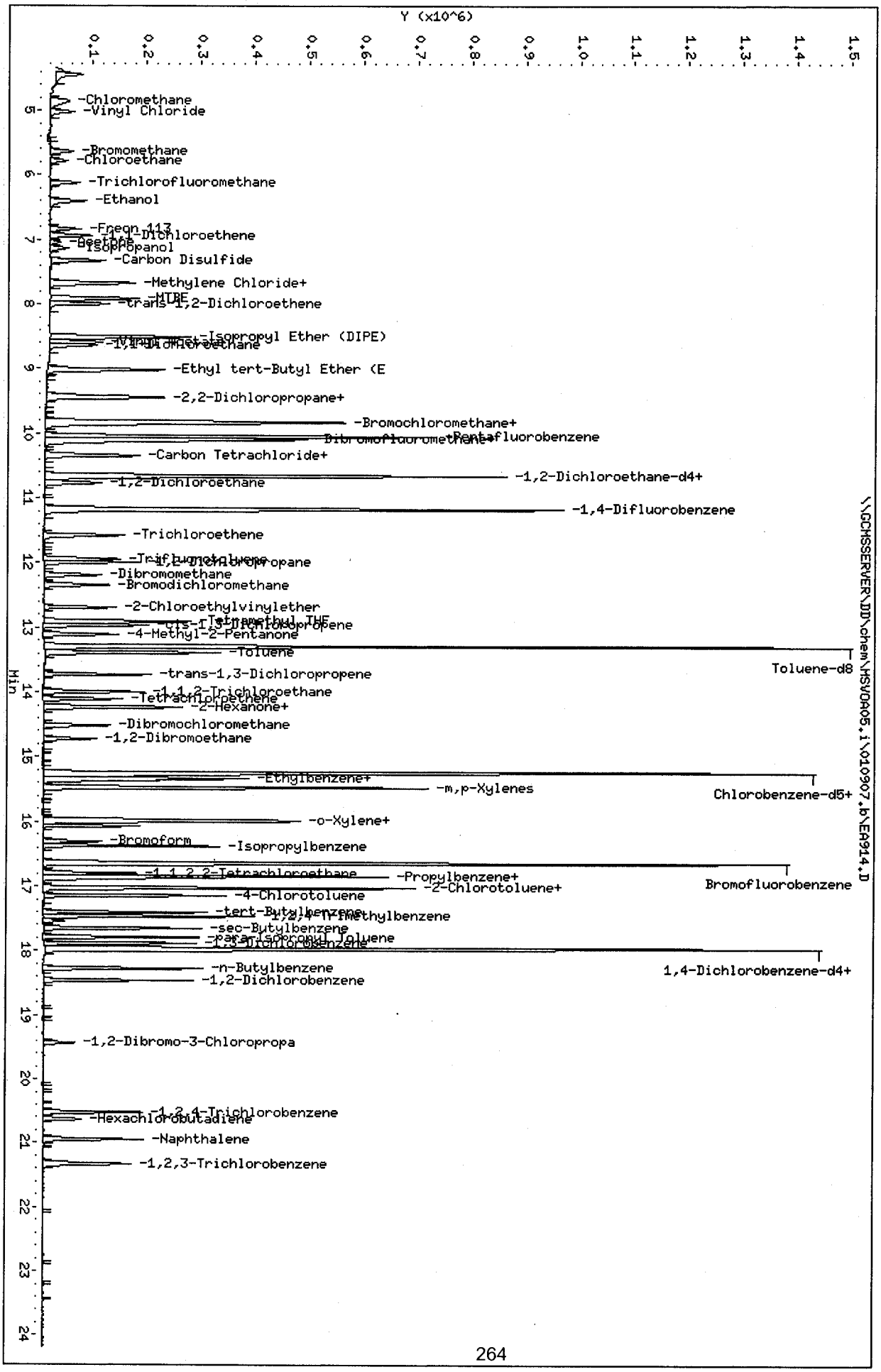

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
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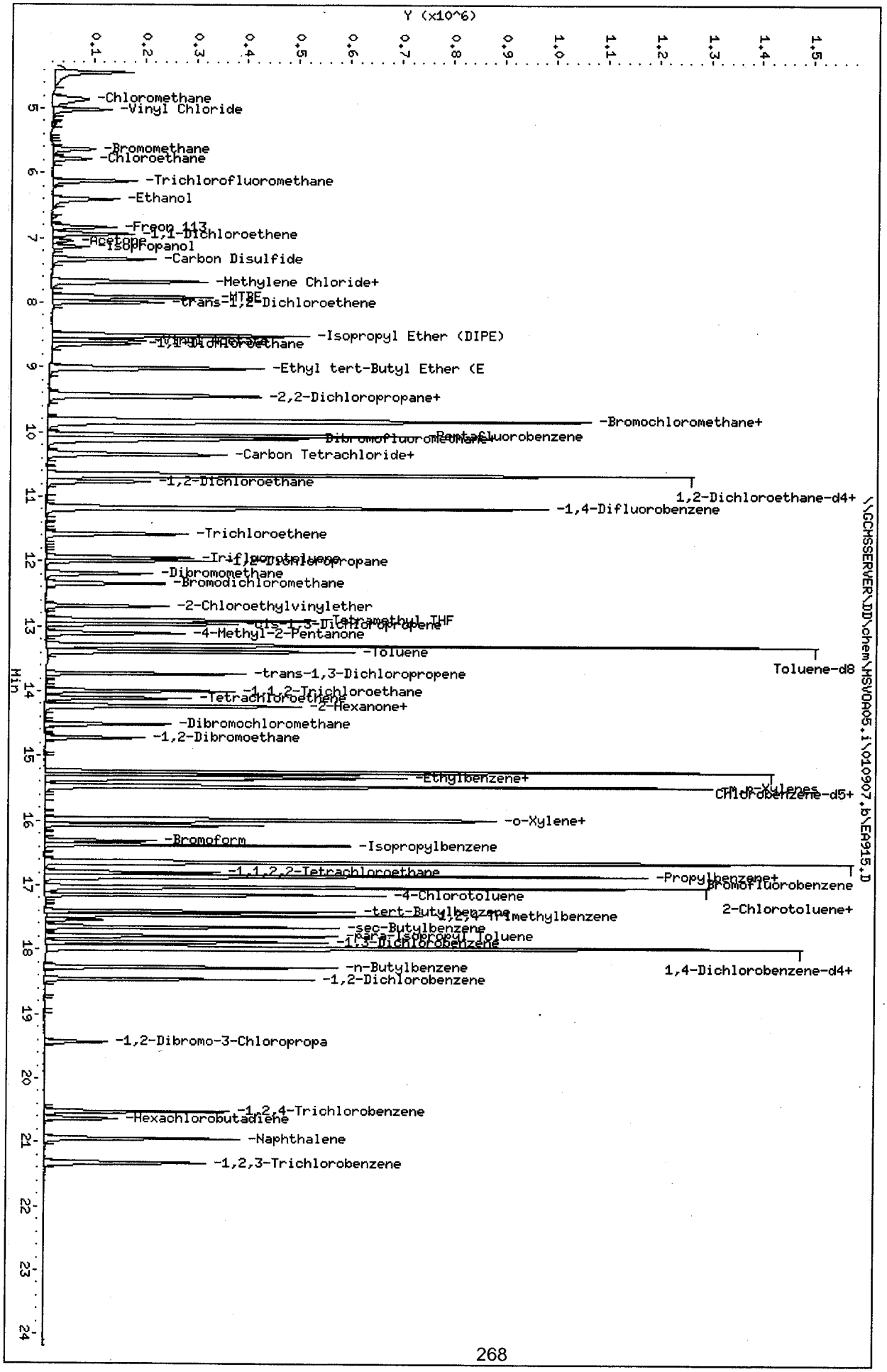
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.01/100,S5152,0.01/100,
Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

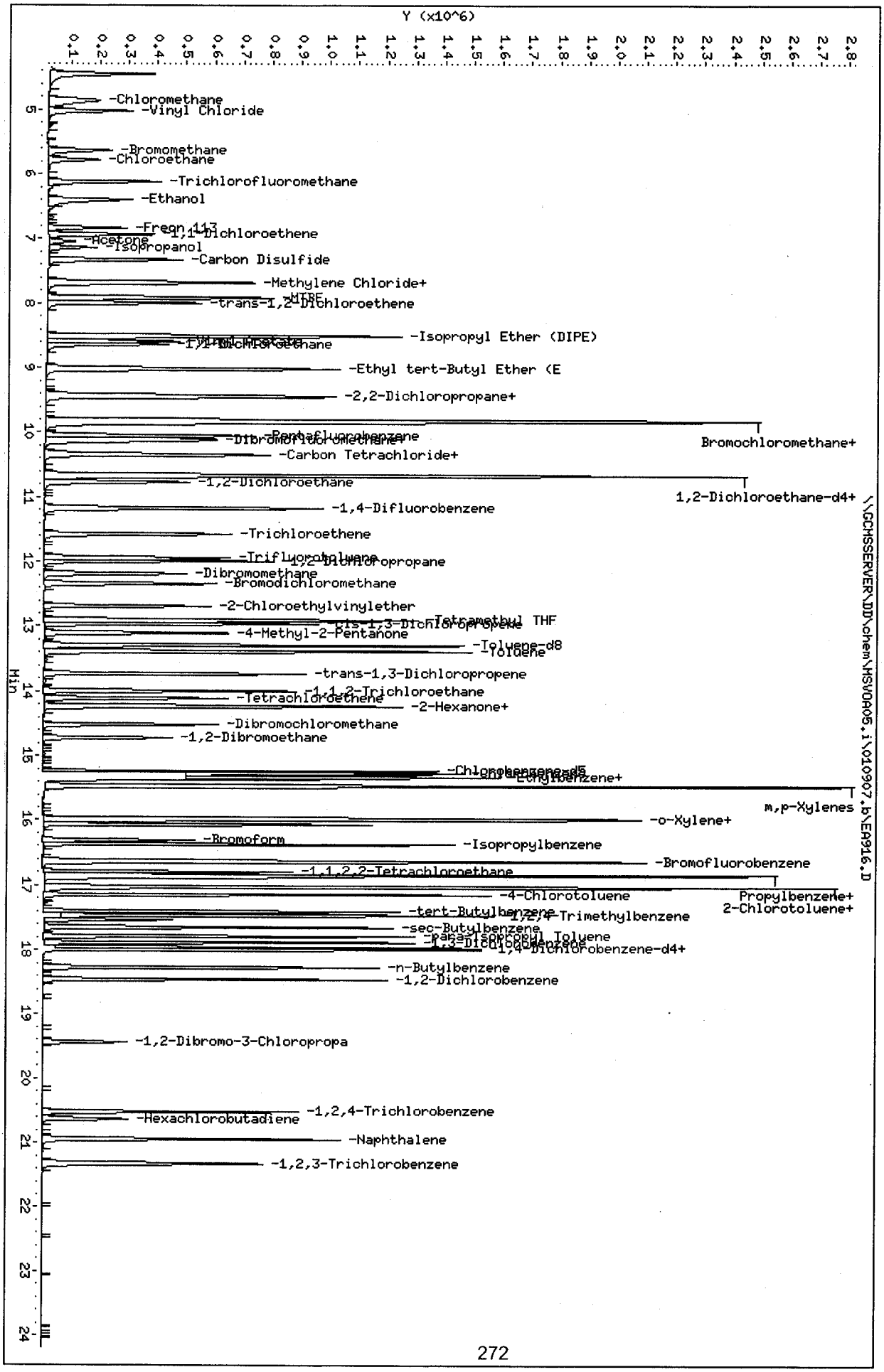
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
* 55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Date : 09-JAN-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5152,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:49

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:56 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
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Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Date : 09-JAN-2007 17:56
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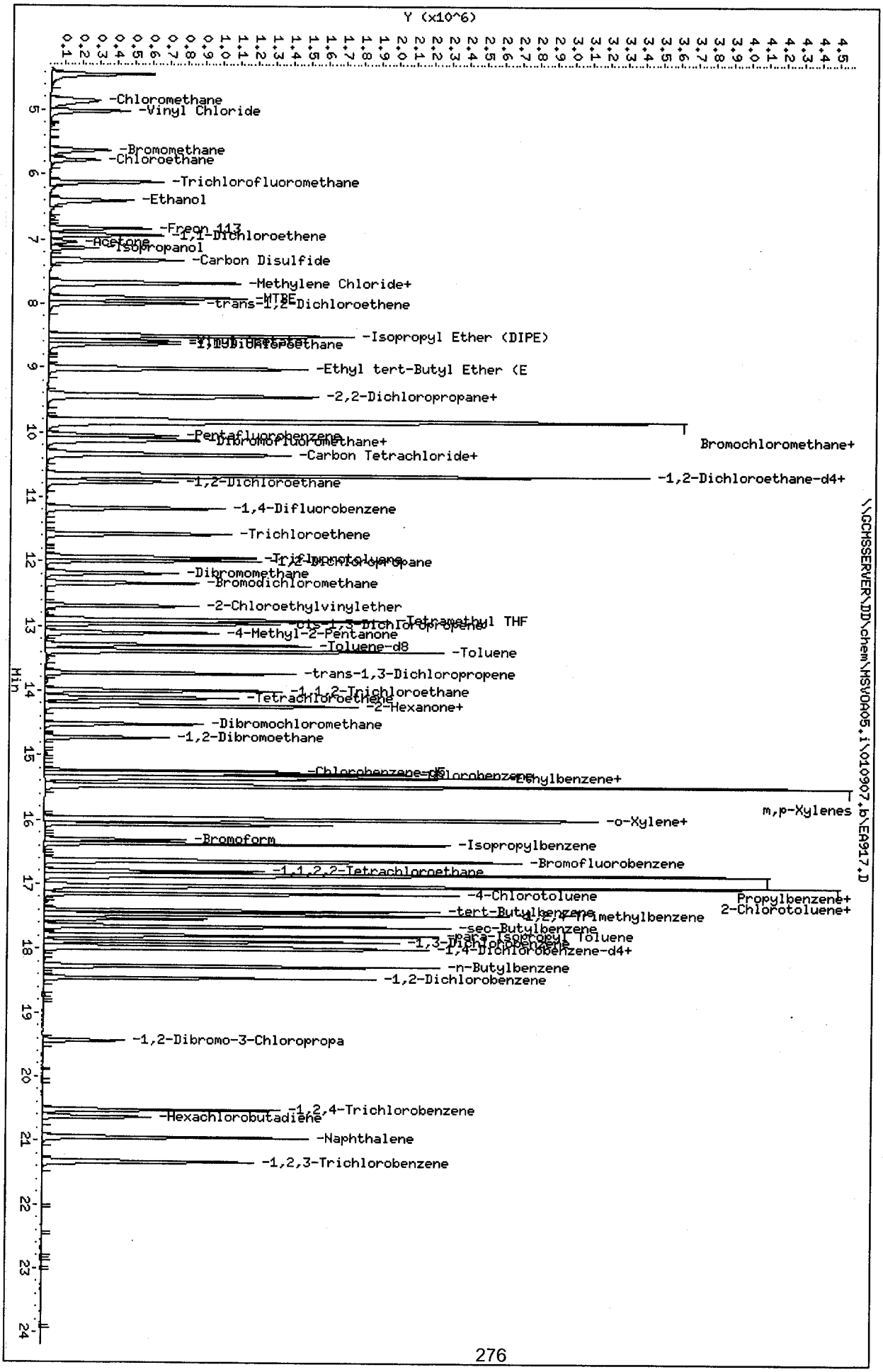
Sample Info: ICAL,S5170,0.015/100,S5152,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:50

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
* 27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
* 36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

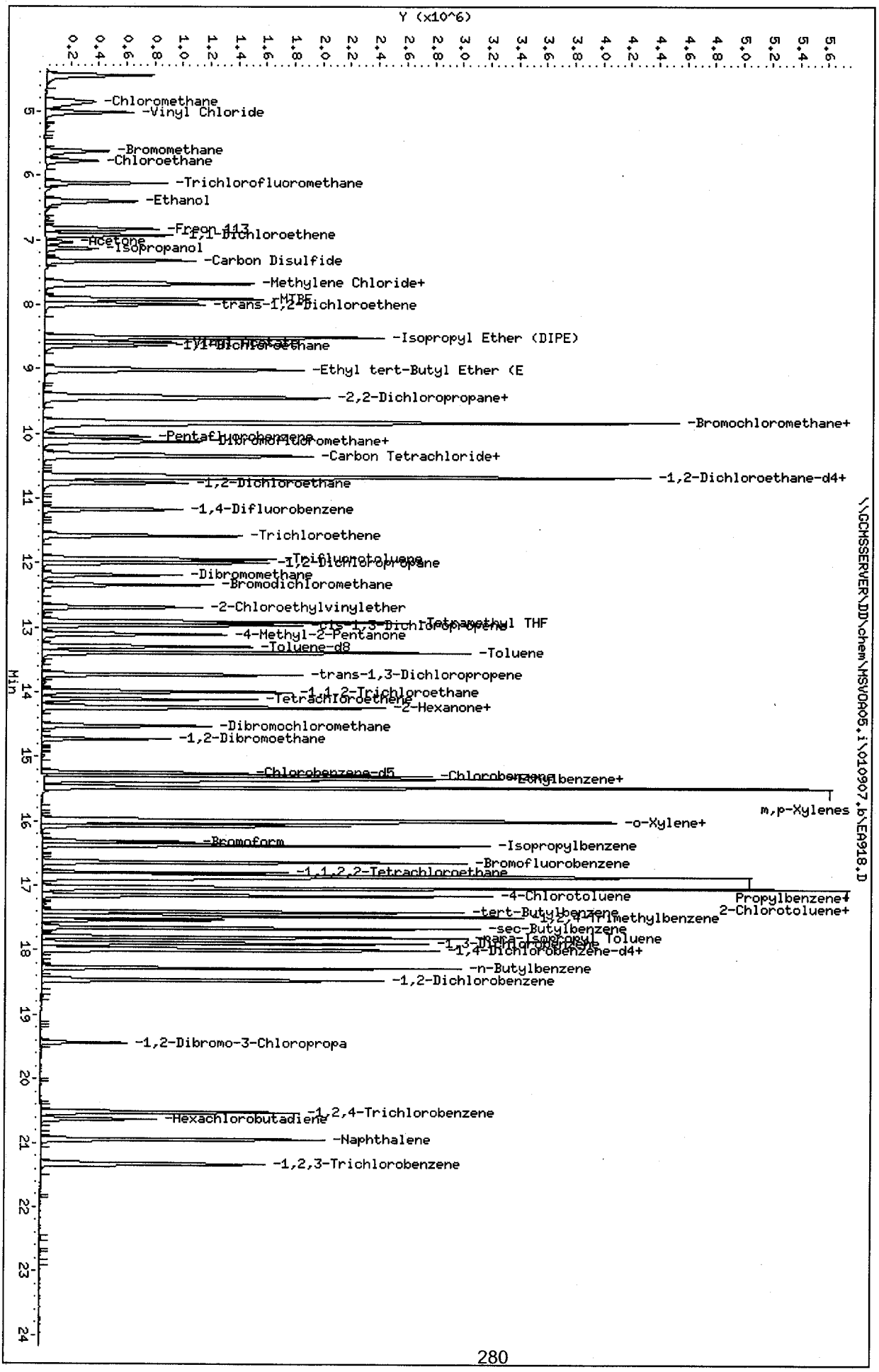
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum: 497038053001
Units : ug/L

Name : 826GOX10
Date : 26-JAN-2007 16:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaq11	497038053011	0.25/0.5PPB	26-JAN-2007 16:23	S5170 (2000000X), S5219 (1000000X), S4172 (2000000X), S5079 (5000X)
L2	jaq12	497038053012	0.5/1PPB	26-JAN-2007 16:56	S5170 (1000000X), S5219 (500000X), S4172 (1000000X), S5079 (5000X)
L3	jaq13	497038053013	2PPB	26-JAN-2007 17:28	S5170 (250000X), S5219 (250000X), S4172 (500000X), S5079 (5000X)
L4	jaq14	497038053014	5PPB	26-JAN-2007 18:01	S5170 (100000X), S5219 (100000X), S4172 (200000X), S5079 (5000X)
L5	jaq15	497038053015	10PPB	26-JAN-2007 18:34	S5170 (50000X), S5219 (50000X), S4172 (100000X), S5079 (5000X)
L6	jaq16	497038053016	20PPB	26-JAN-2007 19:06	S5170 (25000X), S5219 (25000X), S4172 (50000X), S5079 (5000X)
L7	jaq17	497038053017	50PPB	26-JAN-2007 19:39	S5170 (10000X), S5219 (10000X), S4172 (20000X), S5079 (5000X)
L8	jaq18	497038053018	75PPB	26-JAN-2007 20:12	S5170 (6667X), S5219 (6667X), S4172 (13330X), S5079 (5000X)
L9	jaq19	497038053019	100PPB	26-JAN-2007 20:44	S5170 (5000X), S5219 (5000X), S4172 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5702	0.5978m	0.5791m	0.5117m	0.5518m	0.5698m	0.5574m	0.5407m	AVRG		1.78629		0.5598	5	15	0.10	0.99	
Vinyl Chloride	0.4091m	0.4111m	0.4334m	0.4330m	0.4004m	0.4420m	0.4434	0.4439	0.4397m	AVRG		2.33402		0.4284	4	15	0.050	0.99	
Bromomethane		0.2306m	0.2441	0.2478	0.2302m	0.2430m	0.2624	0.2661	0.2682m	AVRG		4.01550		0.2490	6	15	0.050	0.99	
Chloroethane		0.2422m	0.2662	0.2571m	0.2473m	0.2571m	0.2624	0.2622	0.2588m	AVRG		3.89639		0.2566	3	15	0.050	0.99	
Acetone				0.1464	0.1417	0.1522	0.1261	0.1258	0.1342	AVRG		7.25989		0.1377	8	15	0.050	0.99	
1,1-Dichloroethene		0.2450m	0.2605m	0.2594	0.2333m	0.2576m	0.2366	0.2357	0.2456	AVRG		4.05340		0.2467	5	15	0.050	0.99	
Methylene Chloride			0.3473	0.3340	0.3160m	0.3234	0.3158	0.3166	0.3186m	AVRG		3.08128		0.3245	4	15	0.050	0.99	
Carbon Disulfide		1.1955	1.1420m	1.1328	1.0306m	1.1220m	1.0599	1.0524	1.0982	AVRG		0.90565		1.1042	5	15	0.050	0.99	
MTBE		0.8101	0.8879	0.8726m	0.8548	0.8912	0.8740m	0.8587	0.8710	AVRG		1.15603		0.8650	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3024	0.2929	0.2948	0.2742m	0.2901m	0.2836m	0.2735	0.2830	AVRG		3.48670		0.2868	4	15	0.050	0.99	
Vinyl Acetate				1.1386m	1.1379m	1.2067m	1.1239m	1.1534m	1.1166m	AVRG		0.87245		1.1462	3	15	0.050	0.99	
1,1-Dichloroethane		0.5934	0.6331m	0.6072m	0.5682m	0.5919	0.5641	0.5476	0.5548	AVRG		1.71665		0.5825	5	15	0.10	0.99	
2-Butanone			0.2271m	0.2252m	0.2183	0.2457m	0.2203	0.2116	0.2282	AVRG		4.44043		0.2252	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.3169	0.3283	0.3022	0.2998m	0.3109m	0.2991m	0.2946	0.2978	AVRG		3.26582		0.3062	4	15	0.050	0.99	
Chloroform		0.5297	0.5102	0.4927	0.4683m	0.4842	0.4605	0.4530	0.4537	AVRG		2.07676		0.4815	6	15	0.050	0.99	
1,1,1-Trichloroethane		0.3216	0.3305	0.3303	0.2948	0.3207	0.3044	0.3046	0.3232	AVRG		3.16186		0.3163	4	15	0.050	0.99	
Carbon Tetrachloride		0.1713	0.1622	0.1617	0.1456	0.1554m	0.1464	0.1514	0.1602	AVRG		6.37882		0.1568	6	15	0.050	0.99	
1,2-Dichloroethane		0.2347	0.2616	0.2581m	0.2562m	0.2634	0.2532	0.2512	0.2502	AVRG		3.94369		0.2536	4	15	0.050	0.99	
Benzene		0.7459	0.7821	0.7244m	0.6958	0.7270	0.6899	0.6930	0.6911	AVRG		1.39149		0.7187	5	15	0.050	0.99	
Trichloroethene		0.1960	0.1804	0.1698	0.1496m	0.1695	0.1593	0.1619	0.1650	AVRG		5.91977		0.1689	8	15	0.050	0.99	
1,2-Dichloropropane		0.2375	0.2319	0.2346m	0.2117m	0.2262m	0.2187	0.2155	0.2115	AVRG		4.47558		0.2234	5	15	0.050	0.99	
Bromodichloromethane		0.2243	0.2297	0.2187	0.2201	0.2317m	0.2240	0.2280	0.2246	AVRG		4.44164		0.2251	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2909m	0.3345m	0.3418m	0.3228	0.3546	0.3198	0.3398	0.3517	AVRG		3.01218		0.3320	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3082	0.3182m	0.3060	0.2928m	0.3158	0.3078	0.3098	0.3068	AVRG		3.24504		0.3082	2	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4374	0.4340	0.3929	0.4617	0.3990m	0.3770	0.3902	0.3813	AVRG		2.44402		0.4092	8	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2532m	0.2717	0.2714	0.2626	0.2789	0.2730	0.2778	0.2738	AVRG		3.69978		0.2703	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0772	0.1030	0.0918	0.0907	0.0959	0.0912	0.0932	0.0914	AVRG		10.8925		0.0918	8	15	0.050	0.99	
2-Hexanone			0.2261m	0.2142m	0.2213m	0.2535	0.2304	0.2257	0.2401	AVRG		4.34439		0.2302	6	15	0.050	0.99	
Tetrachloroethene		0.2047	0.1907	0.1883	0.1650	0.1905	0.1737m	0.1814	0.1884	AVRG		5.39515		0.1854	6	15	0.050	0.99	
Dibromochloromethane		0.1759	0.2308	0.2140	0.2051	0.2182	0.2133	0.2187	0.2210	AVRG		4.71402		0.2121	8	15	0.050	0.99	
Chlorobenzene		0.5657	0.5812	0.5274	0.4912m	0.5235m	0.4979	0.5225	0.5116	AVRG		1.89528		0.5276	6	15	0.30	0.99	
Ethylbenzene		0.9051	0.9876	0.8915	0.8355	0.8667	0.8194	0.8555	0.8454	AVRG		1.14177		0.8758	6	15	0.050	0.99	
m,p-Xylenes	0.3037	0.3336	0.3457	0.3123m	0.3191	0.3197	0.3067	0.3134	0.3120	AVRG		3.13997		0.3185	4	15	0.050	0.99	
o-Xylene		0.3356	0.3384	0.3134	0.3082	0.3148	0.3002	0.3108	0.3046	AVRG		3.16698		0.3158	4	15	0.050	0.99	
Styrene		0.5022	0.5860m	0.5371m	0.5122	0.5644	0.5372	0.5601	0.5443	AVRG		1.84183		0.5429	5	15	0.050	0.99	
Bromoform		0.1880	0.1722	0.1554	0.1554	0.1654	0.1558	0.1619	0.1642	AVRG		6.06883		0.1648	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6524	0.6948	0.6318	0.6018	0.6660	0.6091	0.6117	0.6164	AVRG		1.57353		0.6355	5	15	0.30	0.99	
Dibromofluoromethane	0.5407	0.5452	0.5423	0.5551	0.5518	0.5468	0.5492	0.5438	0.5476	AVRG		1.82833		0.5469	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3968	0.4007	0.3961	0.3972	0.3973	0.3918	0.3908	0.3935	0.3943	AVRG		2.52906		0.3954	1	15	0.050	0.99	
Toluene-d8	1.0761	1.0777	1.0805	1.0723	1.0823	1.0795	1.0767	1.0731	1.0652	AVRG		0.92943		1.0759	0	15	0.050	0.99	
Bromofluorobenzene	1.2129	1.2033	1.2171	1.2136	1.1902	1.1781	1.1523	1.1407	1.1451	AVRG		0.84481		1.1837	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

497038053001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497038053001 Cal Date: 26-JAN-2007 Type : WATER

ICV 497038053020 (jaq20 26-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 497038053021 (jaq21 26-JAN-2007) stds: S5052 (10000X), S5322 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497038053020	0.5598	0.4893	25.00	21.85	ug/L	-13	30	m
Vinyl Chloride	497038053020	0.4284	0.3821	25.00	22.29	ug/L	-11	20	m
Bromomethane	497038053020	0.2490	0.2265	25.00	22.74	ug/L	-9	30	m
Chloroethane	497038053020	0.2566	0.2530	25.00	24.64	ug/L	-1	30	m
Acetone	497038053021	0.1377	0.1420	25.00	25.77	ug/L	3	40	
1,1-Dichloroethene	497038053021	0.2467	0.2456	25.00	24.88	ug/L	0	20	
Methylene Chloride	497038053021	0.3245	0.3243	25.00	24.98	ug/L	0	30	
Carbon Disulfide	497038053021	1.1042	0.8505	25.00	19.26	ug/L	**-23**	30	!v- m
MTBE	497038053021	0.8650	0.8004	25.00	23.13	ug/L	-7	30	
trans-1,2-Dichloroethene	497038053021	0.2868	0.2826	25.00	24.64	ug/L	-1	30	
Vinyl Acetate	497038053021	1.1462	1.0327	25.00	22.53	ug/L	-10	40	m
1,1-Dichloroethane	497038053021	0.5825	0.5767	25.00	24.75	ug/L	-1	30	
2-Butanone	497038053021	0.2252	0.2315	25.00	25.70	ug/L	3	40	
cis-1,2-Dichloroethene	497038053021	0.3062	0.3223	25.00	26.31	ug/L	5	30	m
Chloroform	497038053021	0.4815	0.4837	25.00	25.11	ug/L	0	20	
1,1,1-Trichloroethane	497038053021	0.3163	0.3300	25.00	26.08	ug/L	4	30	m
Carbon Tetrachloride	497038053021	0.1568	0.1660	25.00	26.47	ug/L	6	30	
1,2-Dichloroethane	497038053021	0.2536	0.2527	25.00	24.92	ug/L	0	30	m
Benzene	497038053021	0.7187	0.7110	25.00	24.73	ug/L	-1	30	
Trichloroethene	497038053021	0.1689	0.1650	25.00	24.42	ug/L	-2	30	
1,2-Dichloropropane	497038053021	0.2234	0.2134	25.00	23.87	ug/L	-5	20	
Bromodichloromethane	497038053021	0.2251	0.2384	25.00	26.47	ug/L	6	30	m
4-Methyl-2-Pentanone	497038053021	0.3320	0.3212	25.00	24.19	ug/L	-3	40	
cis-1,3-Dichloropropene	497038053021	0.3082	0.3089	25.00	25.06	ug/L	0	30	
Toluene	497038053021	0.4092	0.4022	25.00	24.58	ug/L	-2	20	
trans-1,3-Dichloropropene	497038053021	0.2703	0.2535	25.00	23.45	ug/L	-6	30	
1,1,2-Trichloroethane	497038053021	0.0918	0.0944	25.00	25.71	ug/L	3	30	
2-Hexanone	497038053021	0.2302	0.2472	25.00	26.85	ug/L	7	40	
Tetrachloroethene	497038053021	0.1854	0.1951	25.00	26.31	ug/L	5	30	
Dibromochloromethane	497038053021	0.2121	0.2199	25.00	25.92	ug/L	4	30	
Chlorobenzene	497038053021	0.5276	0.5181	25.00	24.55	ug/L	-2	30	
Ethylbenzene	497038053021	0.8758	0.8976	25.00	25.62	ug/L	2	20	
m,p-Xylenes	497038053021	0.3185	0.3220	50.00	50.56	ug/L	1	30	
o-Xylene	497038053021	0.3158	0.3158	25.00	25.01	ug/L	0	30	
Styrene	497038053021	0.5429	0.5724	25.00	26.36	ug/L	5	30	
Bromoform	497038053021	0.1648	0.1631	25.00	24.75	ug/L	-1	30	
1,1,2,2-Tetrachloroethane	497038053021	0.6355	0.6193	25.00	24.36	ug/L	-3	30	

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Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:23 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.0005/1000,S5219,0.001/1000
Misc Info : S4172,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:03 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:23 Cal File: JAQ11.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.560	4.560	(0.428)	2535	0.50000	0.2662
2 Chloromethane	50	5.034	5.034	(0.473)	5069	0.50000	0.2829
3 Vinyl Chloride	62	5.221	5.221	(0.491)	6546	0.50000	0.4774(M)
4 Bromomethane	94	5.891	5.891	(0.554)	3347	0.50000	0.4199
5 Chloroethane	64	6.069	6.069	(0.570)	1935	0.50000	0.2356
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	4880	0.50000	0.4441
7 Ethanol	45	6.710	6.710	(0.630)	3237	25.0000	16.8374
8 Freon 113	101	7.350	7.350	(0.691)	793	0.25000	0.1069
9 Acetone	43	7.400	7.400	(0.695)	4185	0.25000	0.9494
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	887	0.25000	0.1123
11 Isopropanol	45	7.518	7.518	(0.706)	1872	2.50000	2.1586
12 Carbon Disulfide	76	7.824	7.824	(0.735)	8618	0.25000	0.2439
13 Methylene Chloride	84	8.100	8.100	(0.761)	3802	0.25000	0.3660
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.763)	1649	2.50000	1.6803
15 MTBE	73	8.494	8.494	(0.798)	6130	0.25000	0.2214
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	2257	0.25000	0.2459
18 Vinyl Acetate	43	9.145	9.145	(0.859)	12426	0.25000	0.3387
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	4220	0.25000	0.2263
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	12019	0.25000	0.2453
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	7432	0.25000	0.2129
22 2-Butanone	43	9.953	9.953	(0.935)	2308	0.25000	0.3202
23 cis-1,2-Dichloroethene	96	10.003	10.003	(0.940)	2488	0.25000	0.2539

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.943)	2193	0.25000	0.1981
25 Bromochloromethane	128	10.367	10.367	(0.974)	757	0.25000	0.1553
26 Chloroform	83	10.427	10.427	(0.980)	5576	0.25000	0.3618
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	48760	2.50000	10.1033
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1600020	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	865191	50.0000	49.4323
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	2194	0.25000	0.2167
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	2234	0.25000	0.1926
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	1328	0.25000	0.1676
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1002330	50.0000	50.1819
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	2887	0.25000	0.2253
35 Benzene	78	11.353	11.353	(0.961)	8860	0.25000	0.2440
36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.967)	5416	0.25000	0.2128
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525762	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	2421	0.25000	0.2837
39 Trifluorotoluene	146	12.586	12.586	(1.065)	1414	0.25000	0.1167
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	2497	0.25000	0.2212
41 Dibromomethane	93	12.783	12.783	(1.082)	1486	0.25000	0.2424
42 Bromodichloromethane	83	12.941	12.941	(1.095)	2246	0.25000	0.1974
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	3382	0.25000	0.2172
45 Tetramethyl THF	43	13.641	13.641	(1.154)	6620	0.25000	0.2484
46 4-Methyl-2-Pentanone	43	13.641	13.641	(1.154)	6620	0.25000	0.3947
47 Toluene-d8	98	13.966	13.966	(1.182)	2717903	50.0000	50.0069
48 Toluene	92	14.055	14.055	(1.189)	5930	0.25000	0.2869
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.208)	2914	0.25000	0.2134
50 1,1,2-Trichloroethane	85	14.538	14.538	(1.230)	874	0.25000	0.1884
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	3000	0.25000	0.2006
52 2-Hexanone	43	14.834	14.834	(0.937)	1217	0.25000	0.1274
53 Tetrachloroethene	166	14.804	14.804	(0.935)	1816	0.25000	0.2362
54 Dibromochloromethane	129	15.080	15.080	(0.953)	1689	0.25000	0.1919
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	1824	0.25000	0.2091
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2073470	50.0000	
57 Chlorobenzene	112	15.859	15.859	(1.002)	5136	0.25000	0.2347
58 1,1,1,2-Tetrachloroethane	131	15.918	15.918	(1.006)	1451	0.25000	0.1996
59 Ethylbenzene	91	15.958	15.958	(1.008)	9022	0.25000	0.2484
60 m,p-Xylenes	106	16.086	16.086	(1.016)	6298	0.50000	0.4768
61 o-Xylene	106	16.569	16.569	(1.047)	3225	0.25000	0.2462
62 Styrene	104	16.589	16.589	(1.048)	5266	0.25000	0.2338
63 Bromoform	173	16.835	16.835	(1.064)	2043	0.25000	0.2989
64 Isopropylbenzene	105	16.973	16.973	(0.916)	6782	0.25000	0.2283
65 Cyclohexanone	55	17.131	17.131	(0.925)	1418	2.50000	2.4111
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1124757	50.0000	51.2336
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	2100	0.25000	0.1781
68 1,2,3-Trichloropropane	75	17.358	17.358	(0.937)	3018	0.25000	0.2741
69 Bromobenzene	156	17.387	17.387	(0.939)	2273	0.25000	0.2609
70 Propylbenzene	91	17.436	17.436	(0.941)	8820	0.25000	0.2412
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	6823	0.25000	0.2628
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	4748	0.25000	0.2225
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	6022	0.25000	0.2496
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	4532	0.25000	0.2350
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	4301	0.25000	0.2237
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	5720	0.25000	0.2036
77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	4284	0.25000	0.2113
78 1,3-Dichlorobenzene	146	18.462	18.462	(0.997)	4523	0.25000	0.2917

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

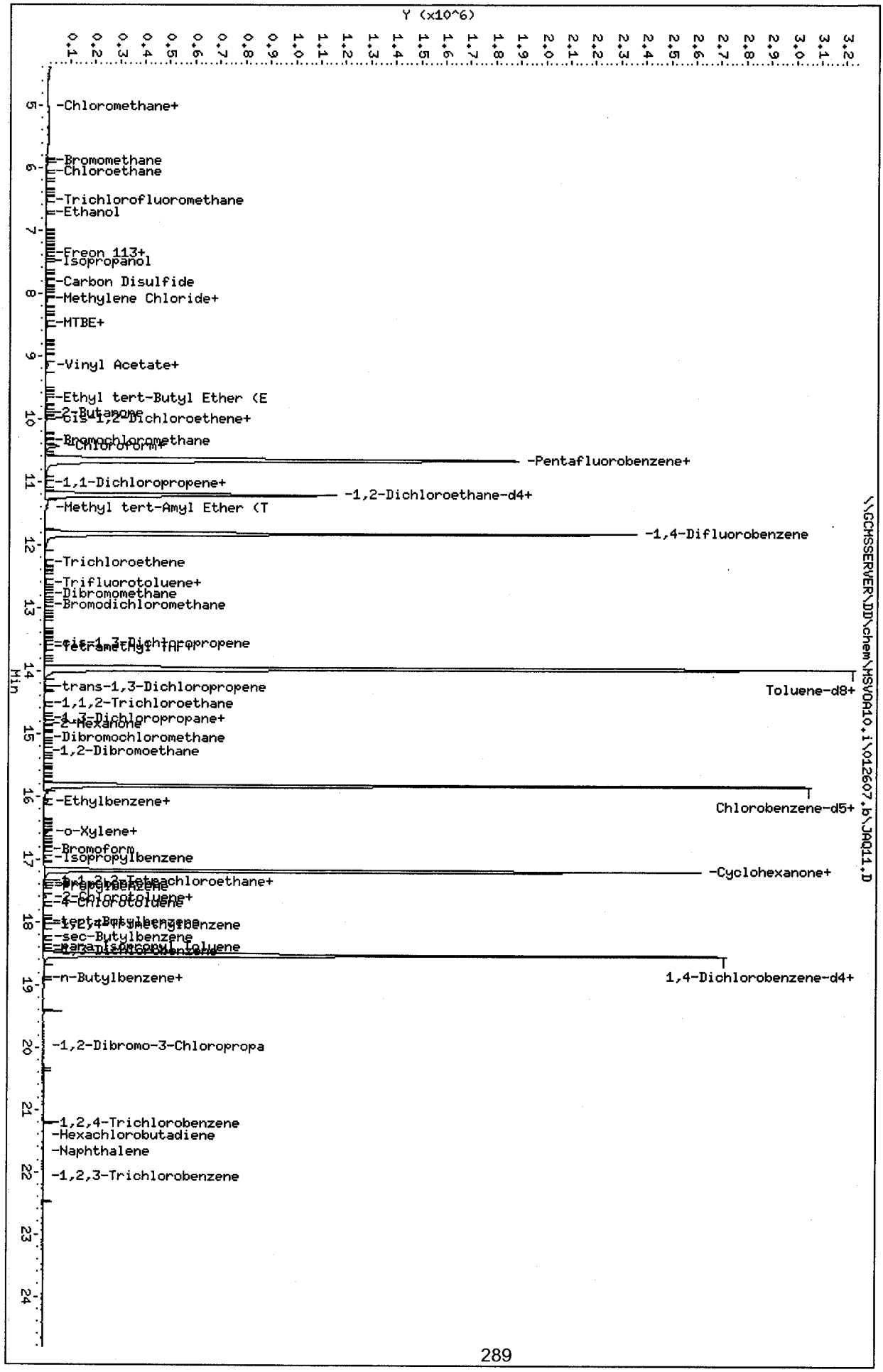
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	927324	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.001)	4544	0.25000	0.2851
81 n-Butylbenzene	91	18.886	18.886	(1.020)	3931	0.25000	0.2414
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	3574	0.25000	0.2389
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	150	0.25000	0.0823
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	2096	0.25000	0.3510
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	861	0.25000	0.2889
86 Naphthalene	128	21.676	21.676	(1.170)	1928	0.25000	0.1527
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1726	0.25000	0.3060

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Date : 26-JAN-2007 16:23
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5219,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:56 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.001/1000,S5219,0.002/1000
Misc Info : S4172,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:04 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:56 Cal File: JAQ12.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.576	4.576	(0.430)	7235	1.00000	0.7427(M)
2 Chloromethane	50	5.059	5.059	(0.476)	18667	1.00000	1.0185
3 Vinyl Chloride	62	5.216	5.216	(0.490)	13459	1.00000	0.9595(M)
4 Bromomethane	94	5.897	5.897	(0.554)	7548	1.00000	0.9258(M)
5 Chloroethane	64	6.074	6.074	(0.571)	7929	1.00000	0.9437(M)
6 Trichlorofluoromethane	101	6.528	6.528	(0.614)	9832	1.00000	0.8747
7 Ethanol	45	6.695	6.695	(0.629)	8655	50.0000	44.0061
8 Freon 113	101	7.356	7.356	(0.691)	3526	0.50000	0.4648
9 Acetone	43	7.395	7.395	(0.695)	4892	0.50000	1.0848(M)
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	4010	0.50000	0.4965(M)
11 Isopropanol	45	7.514	7.514	(0.706)	3895	5.00000	4.3903(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	19568	0.50000	0.5413
13 Methylene Chloride	84	8.095	8.095	(0.761)	6365	0.50000	0.5990(M)
14 tert-Butyl Alcohol (TBA)	59	8.115	8.115	(0.763)	4310	5.00000	4.2930
15 MTBE	73	8.490	8.490	(0.798)	13260	0.50000	0.4682
16 trans-1,2-Dichloroethene	96	8.539	8.539	(0.803)	4950	0.50000	0.5272
18 Vinyl Acetate	43	9.131	9.131	(0.858)	15549	0.50000	0.4143
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	9713	0.50000	0.5093
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	25375	0.50000	0.5062
21 Ethyl tert-Butyl Ether (ETBE)	59	9.702	9.702	(0.912)	16442	0.50000	0.4605
22 2-Butanone	43	9.949	9.949	(0.935)	3867	0.50000	0.5245
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	5187	0.50000	0.5174

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	6306	0.50000	0.5569
25 Bromochloromethane	128	10.363	10.363	(0.974)	2329	0.50000	0.4671
26 Chloroform	83	10.422	10.422	(0.980)	8670	0.50000	0.5499
27 Tetrahydrofuran	42	10.442	10.442	(0.981)	61535	5.00000	12.4633(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1636864	50.0000	
29 Dibromofluoromethane	113	10.669	10.669	(1.003)	892397	50.0000	49.8390
30 1,1,1-Trichloroethane	97	10.797	10.797	(1.015)	5264	0.50000	0.5084
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	6549	0.50000	0.5542
32 Carbon Tetrachloride	117	11.063	11.063	(0.936)	4408	0.50000	0.5462
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1031383	50.0000	50.6712
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	6041	0.50000	0.4628
35 Benzene	78	11.359	11.359	(0.961)	19199	0.50000	0.5189
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	12894	0.50000	0.4973
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2573874	50.0000	
38 Trichloroethene	95	12.276	12.276	(1.038)	5045	0.50000	0.5801
39 Trifluorotoluene	146	12.601	12.601	(1.066)	6166	0.50000	0.4994
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	6114	0.50000	0.5315
41 Dibromomethane	93	12.778	12.778	(1.081)	2626	0.50000	0.4204
42 Bromodichloromethane	83	12.956	12.956	(1.096)	5774	0.50000	0.4981
44 cis-1,3-Dichloropropene	75	13.567	13.567	(1.148)	7933	0.50000	0.5000
45 Tetramethyl THF	43	13.646	13.646	(1.154)	12460	0.50000	0.4589
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	7488	0.50000	0.4381(H)
47 Toluene-d8	98	13.962	13.962	(1.181)	2773774	50.0000	50.0809
48 Toluene	92	14.060	14.060	(1.189)	11257	0.50000	0.5344
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	6516	0.50000	0.4683(M)
50 1,1,2-Trichloroethane	85	14.524	14.524	(1.228)	1988	0.50000	0.4206
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	7415	0.50000	0.4943
52 2-Hexanone	43	14.809	14.809	(0.936)	3613	0.50000	0.3772
53 Tetrachloroethene	166	14.809	14.809	(0.936)	4259	0.50000	0.5522
54 Dibromochloromethane	129	15.086	15.086	(0.953)	3660	0.50000	0.4146
55 1,2-Dibromoethane	107	15.283	15.283	(1.293)	3828	0.50000	0.4307
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2080264	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	11768	0.50000	0.5360
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	3496	0.50000	0.4794
59 Ethylbenzene	91	15.953	15.953	(1.008)	18828	0.50000	0.5166
60 m,p-Xylenes	106	16.091	16.091	(1.017)	13879	1.00000	1.0474
61 o-Xylene	106	16.574	16.574	(1.047)	6981	0.50000	0.5313
62 Styrene	104	16.584	16.584	(1.048)	10447	0.50000	0.4624
63 Bromoform	173	16.840	16.840	(1.064)	3910	0.50000	0.5703
64 Isopropylbenzene	105	16.978	16.978	(0.917)	15942	0.50000	0.5306
65 Cyclohexanone	55	17.117	17.117	(0.924)	2707	5.00000	4.5494
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1128978	50.0000	50.8277
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	6121	0.50000	0.5132
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	7536	0.50000	0.6765
69 Bromobenzene	156	17.393	17.393	(0.939)	4426	0.50000	0.5021
70 Propylbenzene	91	17.442	17.442	(0.942)	19152	0.50000	0.5178
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	14066	0.50000	0.5355
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	10793	0.50000	0.5000
73 4-Chlorotoluene	91	17.708	17.708	(0.956)	13469	0.50000	0.5517
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	10033	0.50000	0.5142
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	8927	0.50000	0.4589
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	14915	0.50000	0.5249
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	10601	0.50000	0.5168
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	8321	0.50000	0.5304

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

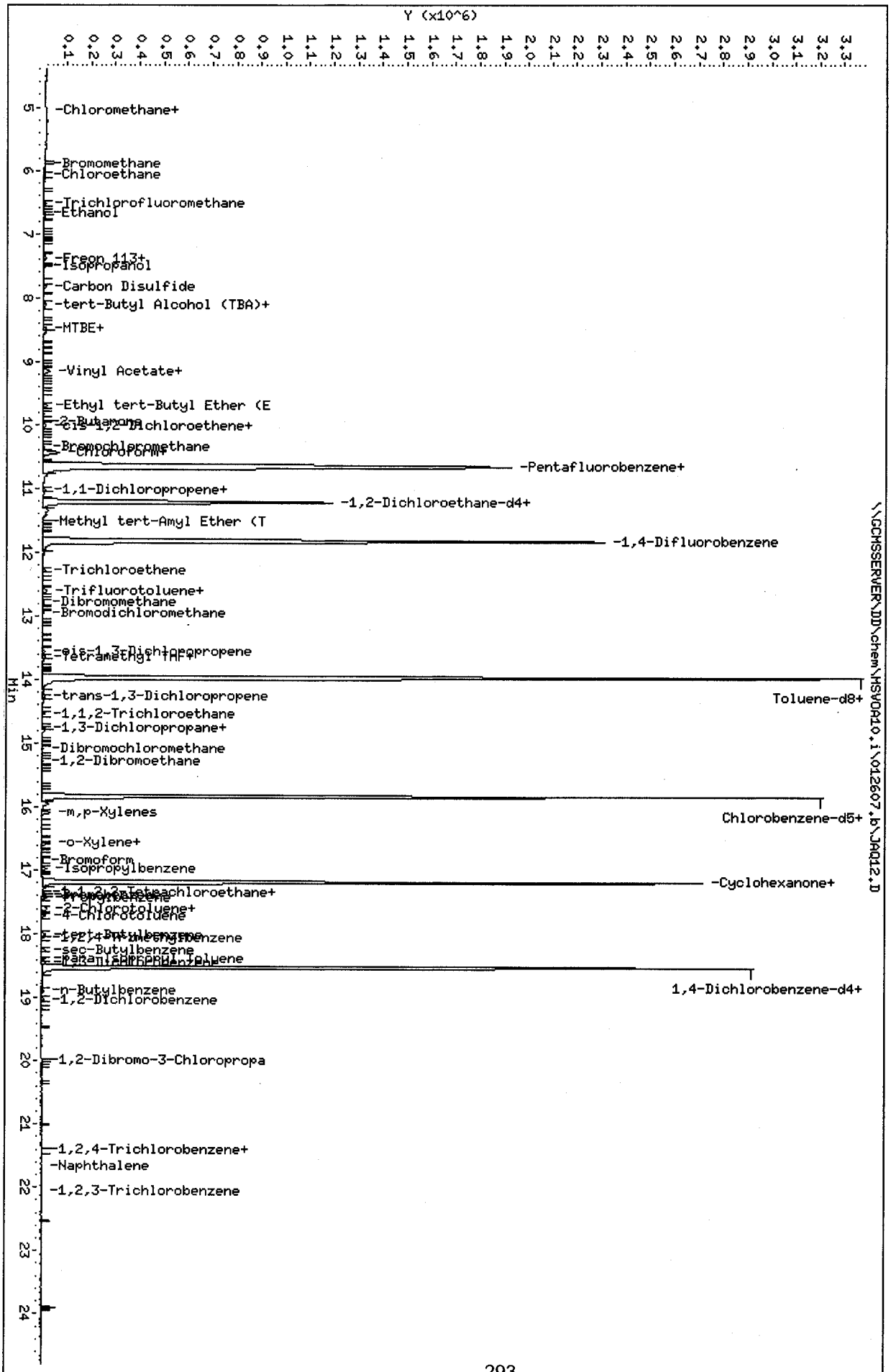
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	938237	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	9153	0.50000	0.5677
81 n-Butylbenzene	91	18.891	18.891	(1.020)	8333	0.50000	0.5058
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	7706	0.50000	0.5091
83 1,2-Dibromo-3-Chloropropane	75	19.995	19.995	(1.080)	383	0.50000	0.2078
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	3180	0.50000	0.5263
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	2029	0.50000	0.6729
86 Naphthalene	128	21.671	21.671	(1.170)	5279	0.50000	0.4133
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	2798	0.50000	0.4903

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Date : 26-JAN-2007 16:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5219,0.002/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 17:28 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/500,S5219,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:05 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 17:28 Cal File: JAQ13.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.575	4.575	(0.430)	18377	2.00000	1.9299(M)
2 Chloromethane	50	5.048	5.048	(0.475)	38262	2.00000	2.1358(M)
3 Vinyl Chloride	62	5.216	5.216	(0.490)	27735	2.00000	2.0228(M)
4 Bromomethane	94	5.896	5.896	(0.554)	15624	2.00000	1.9605
5 Chloroethane	64	6.064	6.064	(0.570)	17036	2.00000	2.0742
6 Trichlorofluoromethane	101	6.527	6.527	(0.614)	21663	2.00000	1.9716
7 Ethanol	45	6.705	6.705	(0.630)	39066	200.000	203.2028(M)
8 Freon 113	101	7.356	7.356	(0.691)	14598	2.00000	1.9690
9 Acetone	43	7.385	7.385	(0.694)	13299	2.00000	3.0171
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	16671	2.00000	2.1116(M)
11 Isopropanol	45	7.503	7.503	(0.705)	17751	20.0000	20.4691(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	73090	2.00000	2.0685(M)
13 Methylene Chloride	84	8.105	8.105	(0.762)	22230	2.00000	2.1404
14 tert-Butyl Alcohol (TBA)	59	8.125	8.125	(0.764)	19591	20.0000	19.9630
15 MTBE	73	8.480	8.480	(0.797)	56826	2.00000	2.0528
16 trans-1,2-Dichloroethene	96	8.529	8.529	(0.802)	18745	2.00000	2.0424
18 Vinyl Acetate	43	9.130	9.130	(0.858)	82474	2.00000	2.2485(M)
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	40519	2.00000	2.1736(M)
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	102783	2.00000	2.0979
21 Ethyl tert-Butyl Ether (ETBE)	59	9.692	9.692	(0.911)	72766	2.00000	2.0849
22 2-Butanone	43	9.949	9.949	(0.935)	14535	2.00000	2.0168(M)
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	21011	2.00000	2.1442

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	22956	2.00000	2.0740
25 Bromochloromethane	128	10.363	10.363	(0.974)	9569	2.00000	1.9633
26 Chloroform	83	10.422	10.422	(0.980)	32652	2.00000	2.1190
27 Tetrahydrofuran	42	10.441	10.441	(0.981)	133684	20.0000	27.6998(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1600031	50.0000	
29 Dibromofluoromethane	113	10.668	10.668	(1.003)	867760	50.0000	49.5787
30 1,1,1-Trichloroethane	97	10.796	10.796	(1.015)	21153	2.00000	2.0900
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	23288	2.00000	1.9879
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	16561	2.00000	2.0698
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1010779	50.0000	50.0873
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	26702	2.00000	2.0632
35 Benzene	78	11.358	11.358	(0.961)	79833	2.00000	2.1765
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	52839	2.00000	2.0556
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2551866	50.0000	
38 Trichloroethene	95	12.285	12.285	(1.039)	18415	2.00000	2.1359
39 Trifluorotoluene	146	12.591	12.591	(1.065)	25974	2.00000	2.1220
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	23667	2.00000	2.0754
41 Dibromomethane	93	12.778	12.778	(1.081)	13071	2.00000	2.1110
42 Bromodichloromethane	83	12.946	12.946	(1.095)	23450	2.00000	2.0407
44 cis-1,3-Dichloropropene	75	13.557	13.557	(1.147)	32480	2.00000	2.0651(M)
45 Tetramethyl THF	43	13.646	13.646	(1.154)	58138	2.00000	2.1598
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	34144	2.00000	2.0151(M)
47 Toluene-d8	98	13.961	13.961	(1.181)	2757182	50.0000	50.2107
48 Toluene	92	14.060	14.060	(1.189)	44304	2.00000	2.1215
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	27734	2.00000	2.0104
50 1,1,2-Trichloroethane	85	14.533	14.533	(1.229)	10510	2.00000	2.2430
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	30655	2.00000	2.0636
52 2-Hexanone	43	14.789	14.789	(0.935)	18632	2.00000	1.9646(M)
53 Tetrachloroethene	166	14.809	14.809	(0.936)	15714	2.00000	2.0577
54 Dibromochloromethane	129	15.085	15.085	(0.953)	19021	2.00000	2.1763
55 1,2-Dibromoethane	107	15.273	15.273	(1.292)	19499	2.00000	2.2129
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2060016	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	47893	2.00000	2.2031
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	15605	2.00000	2.1609
59 Ethylbenzene	91	15.953	15.953	(1.008)	81378	2.00000	2.2552
60 m,p-Xylenes	106	16.091	16.091	(1.017)	56977	4.00000	4.3423
61 o-Xylene	106	16.574	16.574	(1.047)	27885	2.00000	2.1434
62 Styrene	104	16.584	16.584	(1.048)	48290	2.00000	2.1587(M)
63 Bromoform	173	16.840	16.840	(1.064)	14187	2.00000	2.0897
64 Isopropylbenzene	105	16.978	16.978	(0.917)	63190	2.00000	2.1252
65 Cyclohexanone	55	17.116	17.116	(0.924)	12622	20.0000	21.4347
66 Bromofluorobenzene	95	17.175	17.175	(0.928)	1130086	50.0000	51.4096
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	25806	2.00000	2.1866
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	20828	2.00000	1.8894
69 Bromobenzene	156	17.392	17.392	(0.939)	19452	2.00000	2.2300
70 Propylbenzene	91	17.442	17.442	(0.942)	77111	2.00000	2.1067
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	60049	2.00000	2.3101
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	43770	2.00000	2.0489
73 4-Chlorotoluene	91	17.698	17.698	(0.956)	55051	2.00000	2.2788
74 tert-Butylbenzene	119	18.004	18.004	(0.972)	39220	2.00000	2.0314
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	39122	2.00000	2.0322
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	52834	2.00000	1.8788
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	37289	2.00000	1.8370
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	34911	2.00000	2.2489

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

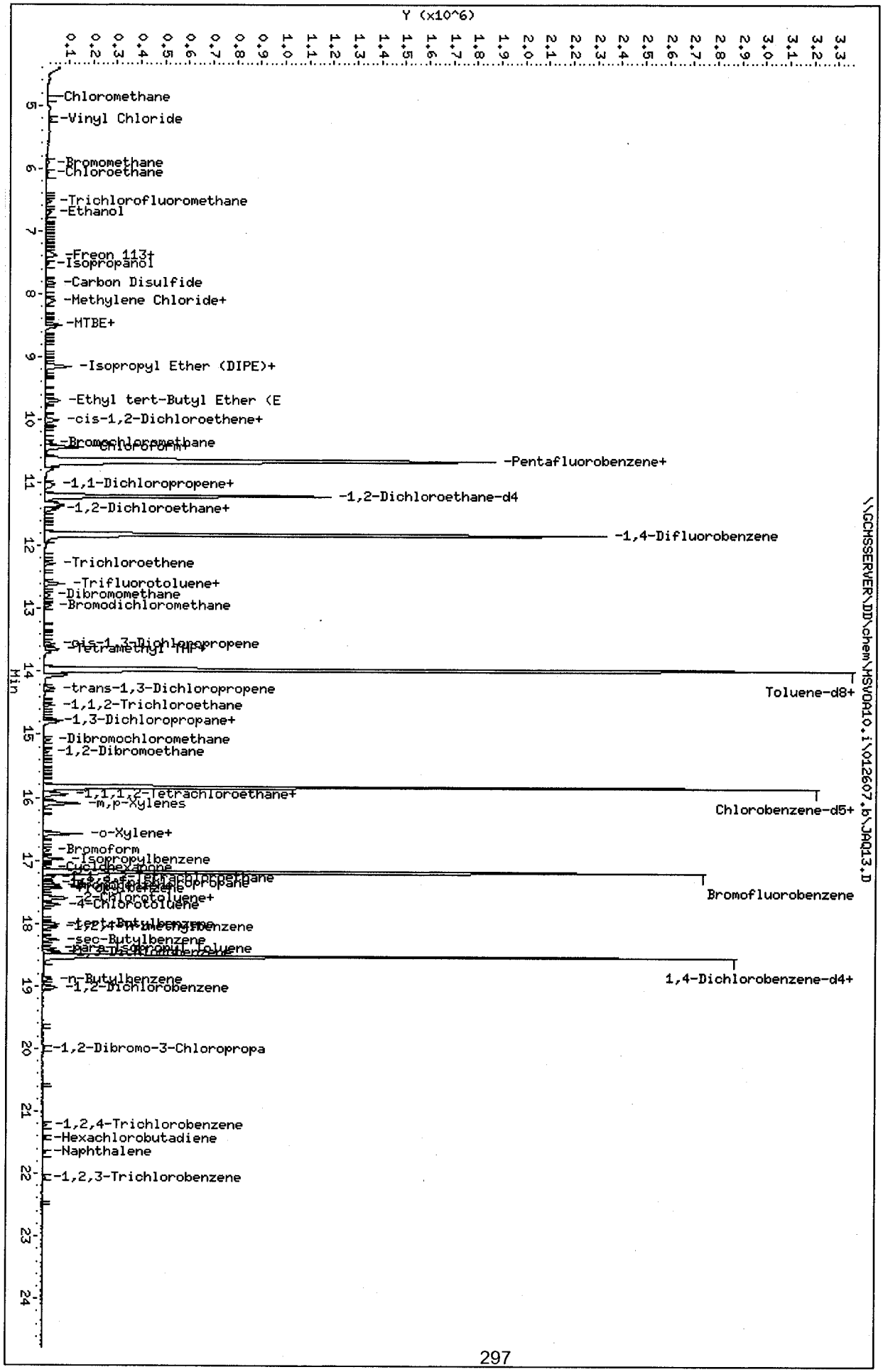
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.516	18.516	(1.000)	928528	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	36503	2.00000	2.2880
81 n-Butylbenzene	91	18.891	18.891	(1.020)	28101	2.00000	1.7235(M)
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	33310	2.00000	2.2237
83 1,2-Dibromo-3-Chloropropane	75	20.005	20.005	(1.080)	4355	2.00000	2.3883
84 1,2,4-Trichlorobenzene	180	21.218	21.218	(1.146)	10870	2.00000	1.8181
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	5429	2.00000	1.8194
86 Naphthalene	128	21.661	21.661	(1.170)	23362	2.00000	1.8484(M)
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	10856	2.00000	1.9223

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Date : 26-JAN-2007 17:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5219,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:01 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.005/500,S5219,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:07 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:01 Cal File: JAQ14.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.571	4.571	(0.429)	45057	5.00000	4.7352(M)
2 Chloromethane	50	5.044	5.044	(0.474)	92586	5.00000	5.1717(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	69233	5.00000	5.0531(M)
4 Bromomethane	94	5.892	5.892	(0.554)	39614	5.00000	4.9742
5 Chloroethane	64	6.079	6.079	(0.571)	41104	5.00000	5.0082(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	54275	5.00000	4.9431
7 Ethanol	45	6.690	6.690	(0.629)	96354	500.000	501.5352(M)
8 Freon 113	101	7.351	7.351	(0.691)	39830	5.00000	5.3761
9 Acetone	43	7.380	7.380	(0.693)	23401	5.00000	5.3125
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	41481	5.00000	5.2578
11 Isopropanol	45	7.499	7.499	(0.705)	42583	50.0000	49.1375(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	181127	5.00000	5.1296
13 Methylene Chloride	84	8.090	8.090	(0.760)	53405	5.00000	5.1458
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	48200	50.0000	49.1492(M)
15 MTBE	73	8.485	8.485	(0.797)	139526	5.00000	5.0438(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	47140	5.00000	5.1398
18 Vinyl Acetate	43	9.126	9.126	(0.857)	182058	5.00000	4.9670(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	97079	5.00000	5.2113(M)
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	254455	5.00000	5.1974(M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	179275	5.00000	5.1402(M)
22 2-Butanone	43	9.944	9.944	(0.934)	36000	5.00000	4.9988(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	48321	5.00000	4.9348

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	57419	5.00000	5.1914
25 Bromochloromethane	128	10.358	10.358	(0.973)	24836	5.00000	5.0994
26 Chloroform	83	10.427	10.427	(0.980)	78786	5.00000	5.1165
27 Tetrahydrofuran	42	10.437	10.437	(0.981)	258085	50.0000	53.5132
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1598923	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	887606	50.0000	50.7477
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	52814	5.00000	5.2219
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	60501	5.00000	5.1515
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	41379	5.00000	5.1586
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	1016175	50.0000	50.2275
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	66042	5.00000	5.0902(M)
35 Benzene	78	11.354	11.354	(0.961)	185323	5.00000	5.0399(M)
36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.967)	129813	5.00000	5.0375(M)
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2558326	50.0000	
38 Trichloroethene	95	12.281	12.281	(1.039)	43433	5.00000	5.0250
39 Trifluorotoluene	146	12.596	12.596	(1.066)	64491	5.00000	5.2554
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	60007	5.00000	5.2488(M)
41 Dibromomethane	93	12.783	12.783	(1.082)	32000	5.00000	5.1551
42 Bromodichloromethane	83	12.951	12.951	(1.096)	55962	5.00000	4.8579
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	78281	5.00000	4.9646
45 Tetramethyl THF	43	13.641	13.641	(1.154)	132056	5.00000	4.8934
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	87431	5.00000	5.1470(M)
47 Toluene-d8	98	13.966	13.966	(1.182)	2743323	50.0000	49.8321
48 Toluene	92	14.055	14.055	(1.189)	100505	5.00000	4.8007
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	69434	5.00000	5.0206
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	23486	5.00000	4.9997
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	74917	5.00000	4.9986(M)
52 2-Hexanone	43	14.785	14.785	(0.934)	44526	5.00000	4.6535(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	39144	5.00000	5.0804
54 Dibromochloromethane	129	15.090	15.090	(0.953)	44470	5.00000	5.0430
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	42530	5.00000	4.8145
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2078416	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	109608	5.00000	4.9975
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	35396	5.00000	4.8582
59 Ethylbenzene	91	15.958	15.958	(1.008)	185289	5.00000	5.0894
60 m,p-Xylenes	106	16.086	16.086	(1.016)	129806	10.0000	9.8052(M)
61 o-Xylene	106	16.569	16.569	(1.047)	65146	5.00000	4.9633
62 Styrene	104	16.579	16.579	(1.047)	111630	5.00000	4.9461(M)
63 Bromoform	173	16.845	16.845	(1.064)	32300	5.00000	4.7156
64 Isopropylbenzene	105	16.974	16.974	(0.916)	159446	5.00000	5.3219
65 Cyclohexanone	55	17.121	17.121	(0.924)	25839	50.0000	43.5472
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1135470	50.0000	51.2628
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	59115	5.00000	4.9709
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	51961	5.00000	4.6781
69 Bromobenzene	156	17.397	17.397	(0.939)	44439	5.00000	5.0560
70 Propylbenzene	91	17.437	17.437	(0.941)	189911	5.00000	5.1491
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	133716	5.00000	5.1051
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	107754	5.00000	5.0059(M)
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	122996	5.00000	5.0527
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	99337	5.00000	5.1062
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	91370	5.00000	4.7103
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	144987	5.00000	5.1167
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	99367	5.00000	4.8582
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	79859	5.00000	5.1054

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

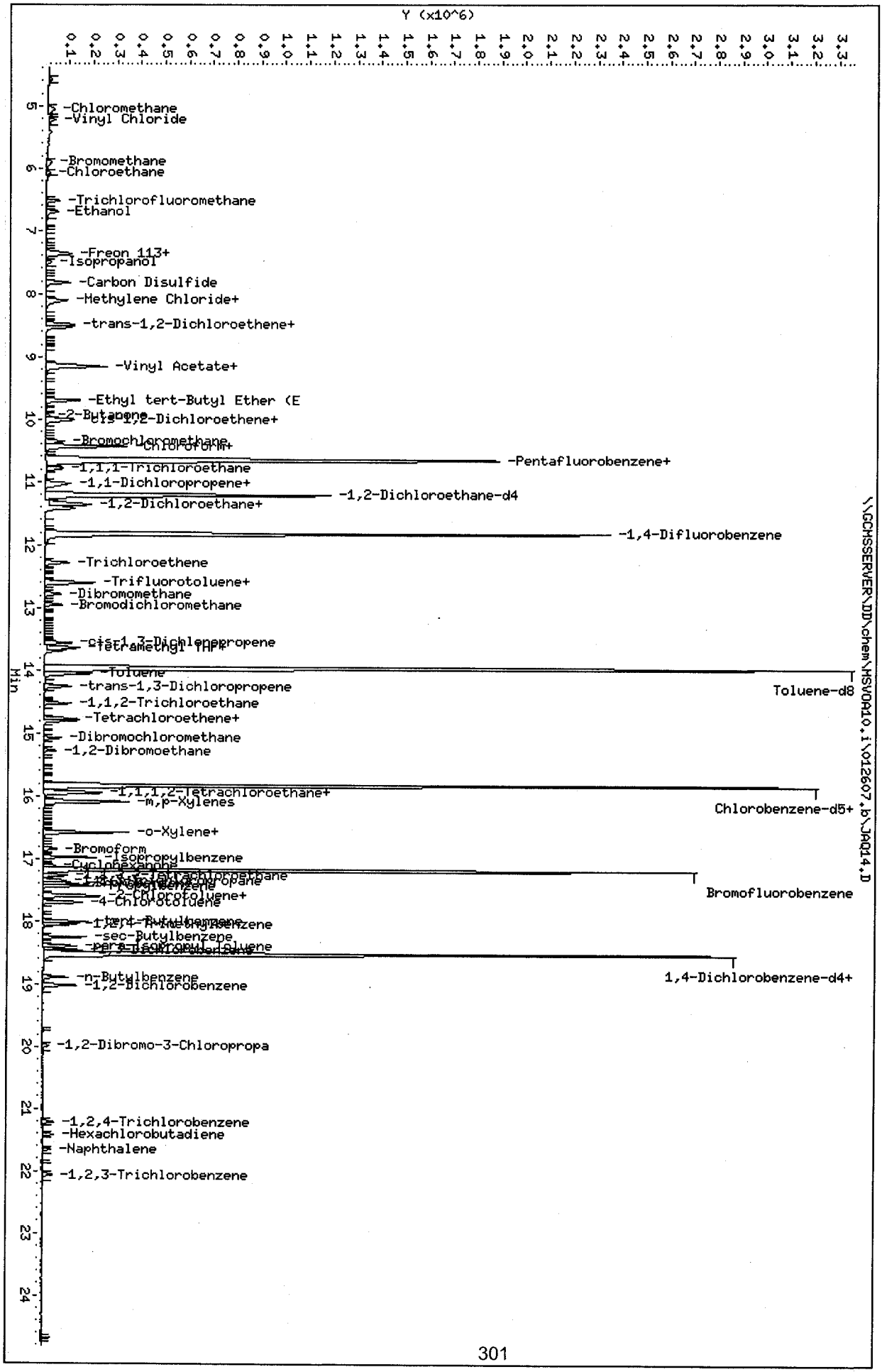
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	935622	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	78373	5.00000	4.8753
81 n-Butylbenzene	91	18.886	18.886	(1.020)	76759	5.00000	4.6722
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	75672	5.00000	5.0135
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	9331	5.00000	5.0784
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	26200	5.00000	4.3490(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	15257	5.00000	5.0743
86 Naphthalene	128	21.657	21.657	(1.169)	52322	5.00000	4.1084(M)
87 1,2,3-Trichlorobenzene	180	22.061	22.061	(1.191)	25002	5.00000	4.3937

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Date : 26-JAN-2007 18:01
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5219,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:34 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/100,S5219,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:08 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:34 Cal File: JAQ15.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	84494	10.0000	8.7838(M)
2 Chloromethane	50	5.053	5.053	(0.475)	165424	10.0000	9.1405(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	129444	10.0000	9.3456(M)
4 Bromomethane	94	5.891	5.891	(0.554)	74412	10.0000	9.2428(M)
5 Chloroethane	64	6.069	6.069	(0.570)	79961	10.0000	9.6374(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	106528	10.0000	9.5972(M)
7 Ethanol	45	6.690	6.690	(0.629)	195201	1000.00	1005.0648(M)
8 Freon 113	101	7.350	7.350	(0.691)	72575	10.0000	9.6900
9 Acetone	43	7.380	7.380	(0.693)	45813	10.0000	10.2882
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	75423	10.0000	9.4568(M)
11 Isopropanol	45	7.498	7.498	(0.705)	86791	100.000	99.0678(M)
12 Carbon Disulfide	76	7.823	7.823	(0.735)	333187	10.0000	9.3340(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	102157	10.0000	9.7369(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.762)	96548	100.000	97.3853(M)
15 MTBE	73	8.484	8.484	(0.797)	276342	10.0000	9.8818
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	88646	10.0000	9.5608(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	367875	10.0000	9.9280(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	183697	10.0000	9.7545(M)
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	488537	10.0000	9.8709
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	348567	10.0000	9.8862
22 2-Butanone	43	9.933	9.933	(0.933)	70586	10.0000	9.6954
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	96931	10.0000	9.7921(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	106663	10.0000	9.5395
25 Bromochloromethane	128	10.357	10.357	(0.973)	48823	10.0000	9.9161
26 Chloroform	83	10.426	10.426	(0.980)	151380	10.0000	9.7247(M)
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	469154	100.000	96.2264(M)
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1616394	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	891888	50.0000	50.4414
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	95313	10.0000	9.3221
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	110656	10.0000	9.3857(M)
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	74772	10.0000	9.2855
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1020366	50.0000	50.2394
34 1,2-Dichloroethane	62	11.323	11.323	(0.958)	131605	10.0000	10.1042(M)
35 Benzene	78	11.353	11.353	(0.961)	357416	10.0000	9.6823
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	251130	10.0000	9.7076
* 37 1,4-Difluorobenzene	114	11.816	11.816	(1.000)	2568270	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	76818	10.0000	8.8531(M)
39 Trifluorotoluene	146	12.595	12.595	(1.066)	113391	10.0000	9.2045(M)
40 1,2-Dichloropropane	63	12.595	12.595	(1.066)	108727	10.0000	9.4736(M)
41 Dibromomethane	93	12.773	12.773	(1.081)	62157	10.0000	9.9746
42 Bromodichloromethane	83	12.950	12.950	(1.096)	113047	10.0000	9.7753
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	150387	10.0000	9.5007(M)
45 Tetramethyl THF	43	13.640	13.640	(1.154)	264010	10.0000	9.7452
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	165790	10.0000	9.7222
47 Toluene-d8	98	13.966	13.966	(1.182)	2779653	50.0000	50.2966
48 Toluene	92	14.055	14.055	(1.189)	237133	10.0000	11.2830
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	134860	10.0000	9.7137
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	46608	10.0000	9.8836
51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	147957	10.0000	9.8331
52 2-Hexanone	43	14.784	14.784	(0.934)	92344	10.0000	9.6130(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	68864	10.0000	8.9026
54 Dibromochloromethane	129	15.080	15.080	(0.953)	85577	10.0000	9.6665
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	84326	10.0000	9.5090
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2086644	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	205003	10.0000	9.3101(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69112	10.0000	9.4485
59 Ethylbenzene	91	15.957	15.957	(1.008)	348677	10.0000	9.5394
60 m,p-Xylenes	106	16.086	16.086	(1.016)	266315	20.0000	20.0374
61 o-Xylene	106	16.569	16.569	(1.047)	128608	10.0000	9.7596
62 Styrene	104	16.578	16.578	(1.047)	213741	10.0000	9.4332
63 Bromoform	173	16.835	16.835	(1.064)	64859	10.0000	9.4318
64 Isopropylbenzene	105	16.973	16.973	(0.916)	279244	10.0000	9.1311(M)
65 Cyclohexanone	55	17.121	17.121	(0.924)	61691	100.000	101.8569
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1136659	50.0000	50.2738
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	114956	10.0000	9.4702
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	108093	10.0000	9.5340
69 Bromobenzene	156	17.397	17.397	(0.939)	84734	10.0000	9.4447
70 Propylbenzene	91	17.436	17.436	(0.941)	341476	10.0000	9.0705
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	248159	10.0000	9.2818
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	202459	10.0000	9.2144
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	224507	10.0000	9.0354
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	174361	10.0000	8.7806
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	182222	10.0000	9.2030
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	251902	10.0000	8.7093(M)
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	178033	10.0000	8.5274
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	146340	10.0000	9.1654

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

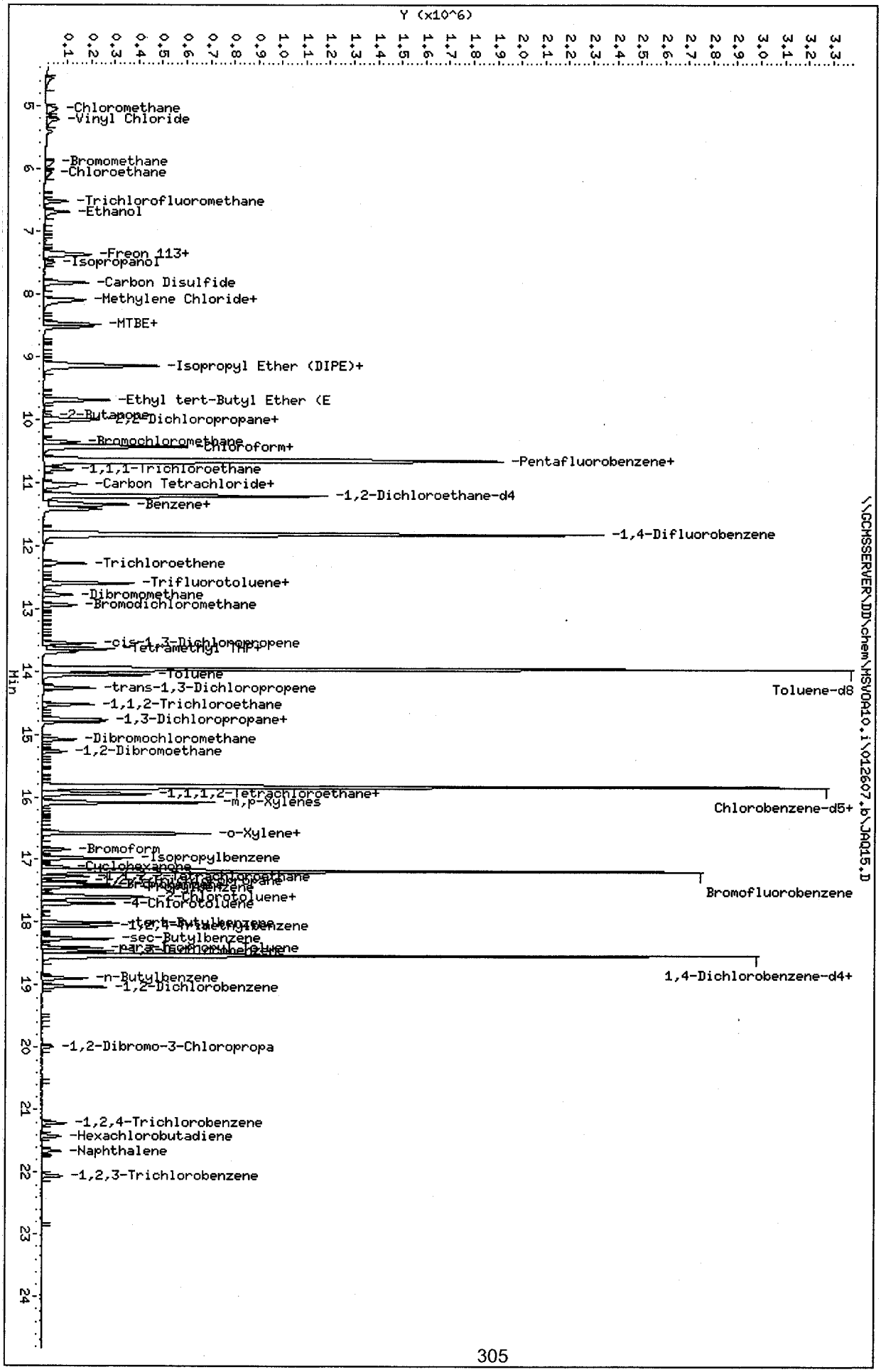
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	955028	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	145507	10.0000	8.8676
81 n-Butylbenzene	91	18.886	18.886	(1.020)	138129	10.0000	8.2369
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	142749	10.0000	9.2654
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	19208	10.0000	10.2417
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.145)	52214	10.0000	8.4911(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	25119	10.0000	8.1846
86 Naphthalene	128	21.656	21.656	(1.169)	107389	10.0000	8.2610(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	50728	10.0000	8.7336(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Date : 26-JAN-2007 18:34
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5219,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:06 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.004/100,S5219,0.004/100
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:09 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:06 Cal File: JAQ16.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	192804	20.0000	20.7696(M)
2 Chloromethane	50	5.053	5.053	(0.475)	344326	20.0000	19.7151(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	275789	20.0000	20.6328(M)
4 Bromomethane	94	5.891	5.891	(0.554)	151590	20.0000	19.5113(M)
5 Chloroethane	64	6.069	6.069	(0.570)	160389	20.0000	20.0315(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	220048	20.0000	20.5426
7 Ethanol	45	6.690	6.690	(0.629)	402306	2000.00	2146.4647
8 Freon 113	101	7.350	7.350	(0.691)	148890	20.0000	20.5997
9 Acetone	43	7.380	7.380	(0.693)	94992	20.0000	22.1052
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	160709	20.0000	20.8803(M)
11 Isopropanol	45	7.498	7.498	(0.705)	184113	200.000	217.7697(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	700052	20.0000	20.3221(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	201812	20.0000	19.9322
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	212561	200.000	222.1720(M)
15 MTBE	73	8.484	8.484	(0.797)	556038	20.0000	20.6039
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	180999	20.0000	20.2287(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	752930	20.0000	21.0559(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	369308	20.0000	20.3211
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	975758	20.0000	20.4296
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	692908	20.0000	20.3646
22 2-Butanone	43	9.934	9.934	(0.933)	153310	20.0000	21.8209(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	193973	20.0000	20.3054(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	217712	20.0000	20.1767
25 Bromochloromethane	128	10.357	10.357	(0.973)	98151	20.0000	20.6571(M)
26 Chloroform	83	10.426	10.426	(0.980)	302098	20.0000	20.1099
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	935923	200.000	198.9180
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1559883	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	852946	50.0000	49.9866
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	200085	20.0000	20.2784
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	233733	20.0000	20.2621
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	156195	20.0000	19.8247(M)
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	984510	50.0000	49.5427
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	264710	20.0000	20.7717
35 Benzene	78	11.353	11.353	(0.961)	730718	20.0000	20.2315
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	517690	20.0000	20.4529(M)
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2512865	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	170355	20.0000	20.0660
39 Trifluorotoluene	146	12.596	12.596	(1.066)	243316	20.0000	20.1868
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	227356	20.0000	20.2468(M)
41 Dibromomethane	93	12.783	12.783	(1.082)	129311	20.0000	21.2087
42 Bromodichloromethane	83	12.950	12.950	(1.096)	232895	20.0000	20.5827(M)
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	317451	20.0000	20.4973
45 Tetramethyl THF	43	13.641	13.641	(1.154)	569270	20.0000	21.4764
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	356407	20.0000	21.3613
47 Toluene-d8	98	13.966	13.966	(1.182)	2712669	50.0000	50.1668
48 Toluene	92	14.055	14.055	(1.189)	401018	20.0000	19.5015(M)
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	280298	20.0000	20.6346
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	96443	20.0000	20.9024
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	303268	20.0000	20.8741
52 2-Hexanone	43	14.774	14.774	(0.933)	204269	20.0000	22.0230
53 Tetrachloroethene	166	14.804	14.804	(0.935)	153538	20.0000	20.5572
54 Dibromochloromethane	129	15.080	15.080	(0.953)	175886	20.0000	20.5763
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	182455	20.0000	21.0282
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2014764	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	421896	20.0000	19.8437(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	145850	20.0000	20.6510
59 Ethylbenzene	91	15.958	15.958	(1.008)	698484	20.0000	19.7916
60 m,p-Xylenes	106	16.086	16.086	(1.016)	515329	40.0000	40.1565
61 o-Xylene	106	16.569	16.569	(1.047)	253697	20.0000	19.9391
62 Styrene	104	16.579	16.579	(1.047)	454840	20.0000	20.7900
63 Bromoform	173	16.835	16.835	(1.064)	133275	20.0000	20.0724
64 Isopropylbenzene	105	16.973	16.973	(0.916)	610402	20.0000	20.4406(M)
65 Cyclohexanone	55	17.111	17.111	(0.924)	144510	200.000	244.3451(M)
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1098649	50.0000	49.7631
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	248441	20.0000	20.9599
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	227603	20.0000	20.5585
69 Bromobenzene	156	17.397	17.397	(0.939)	179752	20.0000	20.5183
70 Propylbenzene	91	17.436	17.436	(0.941)	736056	20.0000	20.0225
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	514653	20.0000	19.7131
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	428199	20.0000	19.9579
73 4-Chlorotoluene	91	17.693	17.693	(0.955)	477184	20.0000	19.6672
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	391239	20.0000	20.1770
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	389708	20.0000	20.1560
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	574787	20.0000	20.3515
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	406884	20.0000	19.9584
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	306441	20.0000	19.6551

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

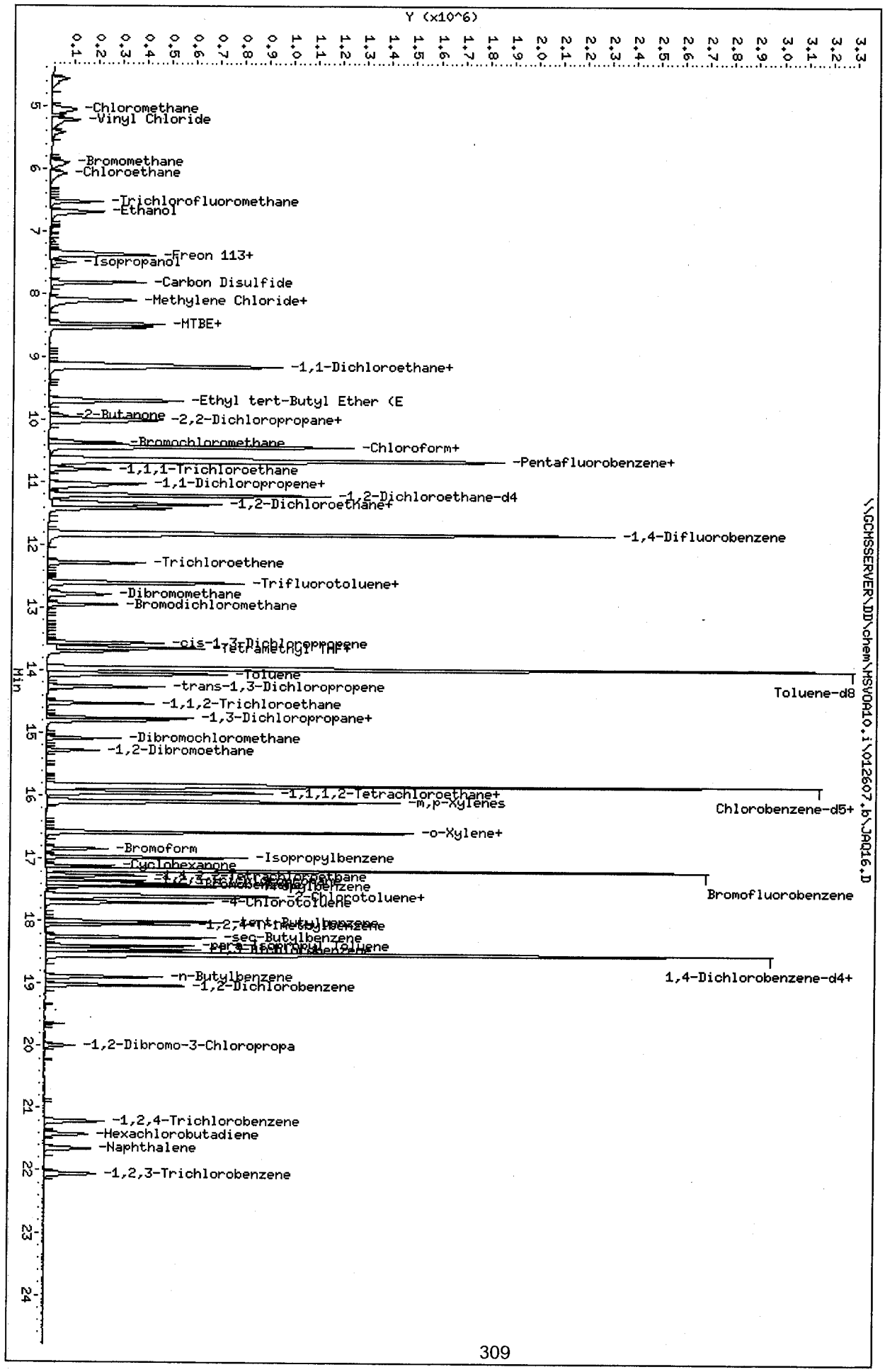
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	932565	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	318141	20.0000	19.8554
81 n-Butylbenzene	91	18.886	18.886	(1.020)	332009	20.0000	20.2754
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	303728	20.0000	20.1889
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	42724	20.0000	23.3292(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	120800	20.0000	20.1180(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	57572	20.0000	19.2108
86 Naphthalene	128	21.656	21.656	(1.169)	259513	20.0000	20.4441(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	116520	20.0000	20.5440(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Date : 26-JAN-2007 19:06
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.004/100,S5219,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:39 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.01/100,S5219,0.01/100
Misc Info : S4172,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:10 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:39 Cal File: JAQ17.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	520970	50.0000	56.2784
2 Chloromethane	50	5.044	5.044	(0.474)	886324	50.0000	50.8907(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	689712	50.0000	51.7446
4 Bromomethane	94	5.892	5.892	(0.554)	408210	50.0000	52.6886
5 Chloroethane	64	6.069	6.069	(0.570)	408130	50.0000	51.1157
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	561782	50.0000	52.5924
7 Ethanol	45	6.680	6.680	(0.628)	942062	5000.00	5040.3720
8 Freon 113	101	7.351	7.351	(0.691)	344262	50.0000	47.7639
9 Acetone	43	7.371	7.371	(0.692)	196148	50.0000	45.7728
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	368018	50.0000	47.9492
11 Isopropanol	45	7.489	7.489	(0.704)	433436	500.000	514.1075(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	1648704	50.0000	47.9952
13 Methylene Chloride	84	8.090	8.090	(0.760)	491188	50.0000	48.6488
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	496436	500.000	520.3372(M)
15 MTBE	73	8.475	8.475	(0.796)	1359574	50.0000	50.5201(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	441126	50.0000	49.4391(M)
18 Vinyl Acetate	43	9.116	9.116	(0.856)	1748211	50.0000	49.0264(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	877528	50.0000	48.4212
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	2337773	50.0000	49.0836
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	1709702	50.0000	50.3892
22 2-Butanone	43	9.924	9.924	(0.932)	342720	50.0000	48.9167
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	465253	50.0000	48.8400(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	507034	50.0000	47.1217(M)
25 Bromochloromethane	128	10.358	10.358	(0.973)	243803	50.0000	51.4552(M)
26 Chloroform	83	10.427	10.427	(0.980)	716284	50.0000	47.8151
27 Tetrahydrofuran	42	10.427	10.427	(0.980)	2095476	500.000	446.6143
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1555522	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	854225	50.0000	50.2019
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	473552	50.0000	48.1287
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	540790	50.0000	46.6546
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	369593	50.0000	46.6838
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	986905	50.0000	49.4239
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	639313	50.0000	49.9250
35 Benzene	78	11.354	11.354	(0.961)	1742148	50.0000	48.0027
36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	1253595	50.0000	49.2884
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525036	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	402225	50.0000	47.1494
39 Trifluorotoluene	146	12.596	12.596	(1.066)	574384	50.0000	47.4243
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	552323	50.0000	48.9491
41 Dibromomethane	93	12.783	12.783	(1.082)	304026	50.0000	49.6240
42 Bromodichloromethane	83	12.951	12.951	(1.096)	565585	50.0000	49.7443
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	777124	50.0000	49.9358
45 Tetramethyl THF	43	13.641	13.641	(1.154)	1381596	50.0000	51.8711
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	807610	50.0000	48.1709
47 Toluene-d8	98	13.966	13.966	(1.182)	2718680	50.0000	50.0356
48 Toluene	92	14.055	14.055	(1.189)	951856	50.0000	46.0657
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	689259	50.0000	50.4963
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	230237	50.0000	49.6596
51 1,3-Dichloropropane	76	14.755	14.755	(0.932)	702613	50.0000	47.4266
52 2-Hexanone	43	14.775	14.775	(0.933)	473392	50.0000	50.0517
53 Tetrachloroethene	166	14.804	14.804	(0.935)	356789	50.0000	46.8472(M)
54 Dibromochloromethane	129	15.081	15.081	(0.953)	438254	50.0000	50.2789
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	438278	50.0000	50.2687
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2054473	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	1022884	50.0000	47.1812
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	355870	50.0000	49.4139
59 Ethylbenzene	91	15.958	15.958	(1.008)	1683400	50.0000	46.7775
60 m,p-Xylenes	106	16.086	16.086	(1.016)	1260291	100.000	96.3088
61 o-Xylene	106	16.569	16.569	(1.047)	616795	50.0000	47.5396
62 Styrene	104	16.579	16.579	(1.047)	1103752	50.0000	49.4756
63 Bromoform	173	16.835	16.835	(1.064)	319994	50.0000	47.2624
64 Isopropylbenzene	105	16.973	16.973	(0.916)	1447868	50.0000	46.4376
65 Cyclohexanone	55	17.112	17.112	(0.924)	255178	500.000	413.2491(M)
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1122015	50.0000	48.6754
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	593081	50.0000	47.9229
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	533783	50.0000	46.1787
69 Bromobenzene	156	17.397	17.397	(0.939)	434644	50.0000	47.5188
70 Propylbenzene	91	17.437	17.437	(0.941)	1839895	50.0000	47.9364
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	1266357	50.0000	46.4581
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	1099261	50.0000	49.0720
73 4-Chlorotoluene	91	17.693	17.693	(0.955)	1177170	50.0000	46.4686
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	970054	50.0000	47.9153
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	1025019	50.0000	50.7763
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	1456185	50.0000	49.3821
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	1076521	50.0000	50.5757
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	761638	50.0000	46.7886

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

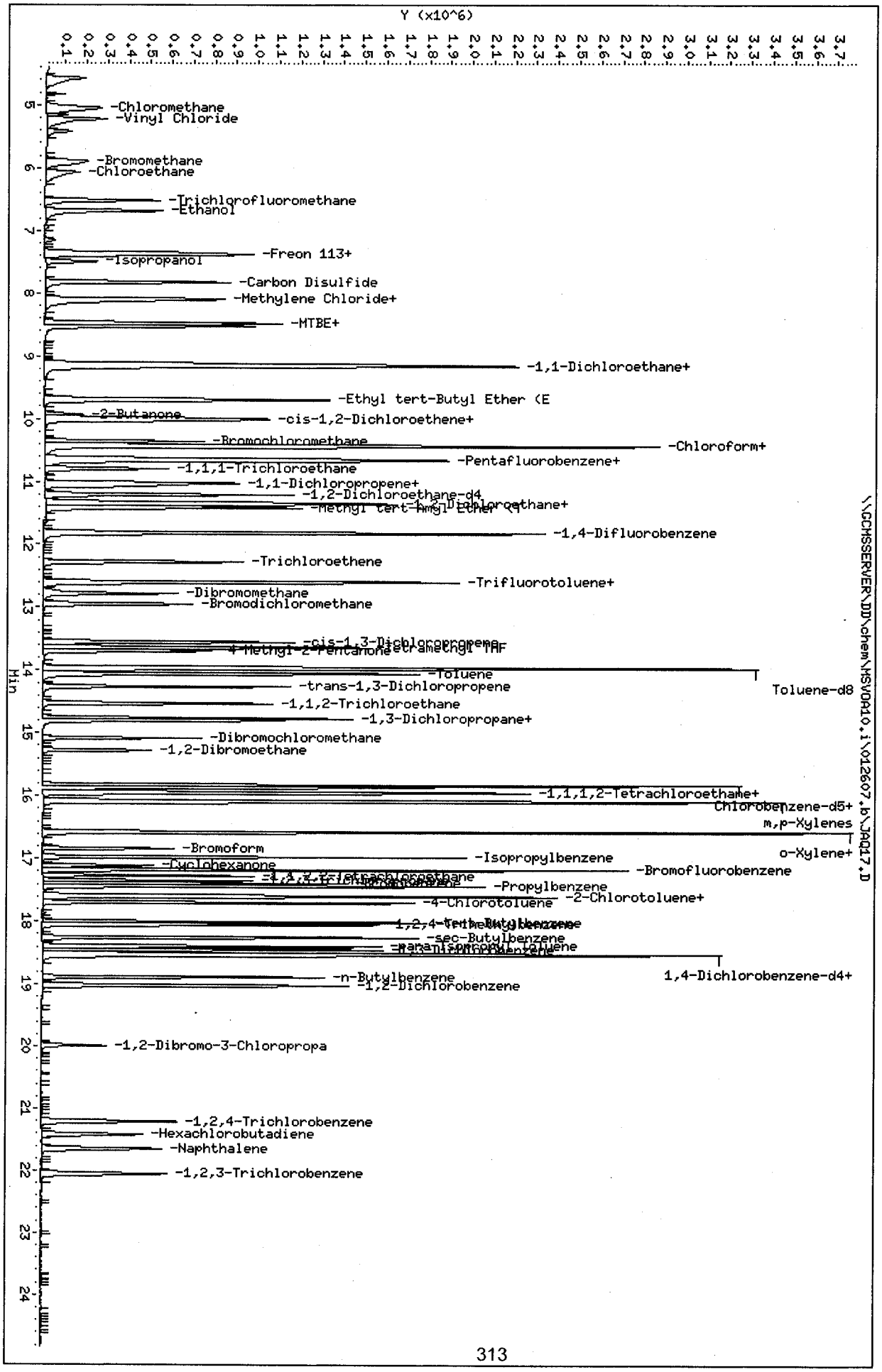
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	973680	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	779906	50.0000	46.6192
81 n-Butylbenzene	91	18.886	18.886	(1.020)	900061	50.0000	52.6447
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	752352	50.0000	47.8975
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	97414	50.0000	50.9462(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	320727	50.0000	51.1584(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	145319	50.0000	46.4429
86 Naphthalene	128	21.647	21.647	(1.169)	707854	50.0000	53.4092(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	312267	50.0000	52.7321

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Date : 26-JAN-2007 19:39
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5219,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:12 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.015/100,S5219,0.015/100
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:12 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:12 Cal File: JAQ18.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.564	4.564	(0.429)	809223	75.0000	85.8521
2 Chloromethane	50	5.048	5.048	(0.475)	1324306	75.0000	74.6772(M)
3 Vinyl Chloride	62	5.215	5.215	(0.490)	1054692	75.0000	77.7099
4 Bromomethane	94	5.895	5.895	(0.554)	632139	75.0000	80.1307
5 Chloroethane	64	6.073	6.073	(0.571)	622935	75.0000	76.6217
6 Trichlorofluoromethane	101	6.526	6.526	(0.614)	862577	75.0000	79.3061
7 Ethanol	45	6.684	6.684	(0.628)	1402318	7500.00	7368.5655
8 Freon 113	101	7.345	7.345	(0.690)	531114	75.0000	72.3689
9 Acetone	43	7.374	7.374	(0.693)	298898	75.0000	68.5015
10 1,1-Dichloroethene	96	7.384	7.384	(0.694)	559949	75.0000	71.6497
11 Isopropanol	45	7.493	7.493	(0.704)	620448	750.000	722.7494(M)
12 Carbon Disulfide	76	7.828	7.828	(0.736)	2500288	75.0000	71.4823
13 Methylene Chloride	84	8.094	8.094	(0.761)	752185	75.0000	73.1649
14 tert-Butyl Alcohol (TBA)	59	8.104	8.104	(0.762)	705157	750.000	725.8732
15 MTBE	73	8.479	8.479	(0.797)	2040096	75.0000	74.4501
16 trans-1,2-Dichloroethene	96	8.528	8.528	(0.802)	649716	75.0000	71.5130
18 Vinyl Acetate	43	9.110	9.110	(0.856)	2740359	75.0000	75.4739(M)
19 1,1-Dichloroethane	63	9.139	9.139	(0.859)	1300910	75.0000	70.4977
20 Isopropyl Ether (DIPE)	45	9.159	9.159	(0.861)	3477743	75.0000	71.7109
21 Ethyl tert-Butyl Ether (ETBE)	59	9.691	9.691	(0.911)	2557297	75.0000	74.0204
22 2-Butanone	43	9.928	9.928	(0.933)	502631	75.0000	70.4565
23 cis-1,2-Dichloroethene	96	9.997	9.997	(0.940)	699906	75.0000	72.1571

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.026	10.026	(0.943)	771300	75.0000	70.3981
25 Bromochloromethane	128	10.362	10.362	(0.974)	358502	75.0000	74.3079
26 Chloroform	83	10.421	10.421	(0.980)	1076170	75.0000	70.5527
27 Tetrahydrofuran	42	10.431	10.431	(0.981)	2980679	750.000	623.9051
* 28 Pentafluorobenzene	168	10.638	10.638	(1.000)	1583882	50.0000	
29 Dibromofluoromethane	113	10.667	10.667	(1.003)	861386	50.0000	49.7163
30 1,1,1-Trichloroethane	97	10.795	10.795	(1.015)	723687	75.0000	72.2338
31 1,1-Dichloropropene	75	11.022	11.022	(0.932)	843069	75.0000	72.7865
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	572881	75.0000	72.4149
33 1,2-Dichloroethane-d4	65	11.210	11.210	(0.948)	992977	50.0000	49.7648
34 1,2-Dichloroethane	62	11.318	11.318	(0.957)	950686	75.0000	74.2956
35 Benzene	78	11.357	11.357	(0.961)	2622858	75.0000	72.3231
36 Methyl tert-Amyl Ether (TAME)	73	11.417	11.417	(0.966)	1890516	75.0000	74.3857
* 37 1,4-Difluorobenzene	114	11.821	11.821	(1.000)	2523167	50.0000	
38 Trichloroethene	95	12.274	12.274	(1.038)	612822	75.0000	71.8891
39 Trifluorotoluene	146	12.590	12.590	(1.065)	893804	75.0000	73.8521
40 1,2-Dichloropropane	63	12.600	12.600	(1.066)	815449	75.0000	72.3220
41 Dibromomethane	93	12.777	12.777	(1.081)	465912	75.0000	76.1038
42 Bromodichloromethane	83	12.945	12.945	(1.095)	862862	75.0000	75.9466
44 cis-1,3-Dichloropropene	75	13.556	13.556	(1.147)	1172349	75.0000	75.3877
45 Tetramethyl THF	43	13.635	13.635	(1.153)	1938432	75.0000	72.8311
46 4-Methyl-2-Pentanone	43	13.694	13.694	(1.158)	1286035	75.0000	76.7639
47 Toluene-d8	98	13.960	13.960	(1.181)	2707504	50.0000	49.8668
48 Toluene	92	14.059	14.059	(1.189)	1476833	75.0000	71.5253
49 trans-1,3-Dichloropropene	75	14.256	14.256	(1.206)	1051431	75.0000	77.0868
50 1,1,2-Trichloroethane	85	14.522	14.522	(1.229)	352724	75.0000	76.1350
51 1,3-Dichloropropane	76	14.759	14.759	(0.933)	1109668	75.0000	74.7288
52 2-Hexanone	43	14.779	14.779	(0.934)	697186	75.0000	73.5421
53 Tetrachloroethene	166	14.808	14.808	(0.936)	560386	75.0000	73.4089
54 Dibromochloromethane	129	15.084	15.084	(0.953)	675604	75.0000	77.3288
55 1,2-Dibromoethane	107	15.272	15.272	(1.292)	676189	75.0000	77.6137
* 56 Chlorobenzene-d5	117	15.824	15.824	(1.000)	2059262	50.0000	
57 Chlorobenzene	112	15.863	15.863	(1.002)	1613995	75.0000	74.2735
58 1,1,1,2-Tetrachloroethane	131	15.932	15.932	(1.007)	546211	75.0000	75.6672
59 Ethylbenzene	91	15.952	15.952	(1.008)	2642627	75.0000	73.2613
60 m,p-Xylenes	106	16.080	16.080	(1.016)	1936065	150.000	147.6060
61 o-Xylene	106	16.573	16.573	(1.047)	960156	75.0000	73.8321
62 Styrene	104	16.573	16.573	(1.047)	1730073	75.0000	77.3700
63 Bromoform	173	16.839	16.839	(1.064)	500229	75.0000	73.7109
64 Isopropylbenzene	105	16.977	16.977	(0.917)	2283744	75.0000	72.0115
65 Cyclohexanone	55	17.115	17.115	(0.924)	408440	750.000	650.2945
66 Bromofluorobenzene	95	17.174	17.174	(0.928)	1129755	50.0000	48.1846
67 1,1,2,2-Tetrachloroethane	83	17.263	17.263	(0.932)	908682	75.0000	72.1862
68 1,2,3-Trichloropropane	75	17.352	17.352	(0.937)	817034	75.0000	69.4913(M)
69 Bromobenzene	156	17.391	17.391	(0.939)	690715	75.0000	74.2410
70 Propylbenzene	91	17.431	17.431	(0.941)	2929723	75.0000	75.0433
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	1996875	75.0000	72.0227
72 1,3,5-Trimethylbenzene	105	17.608	17.608	(0.951)	1770129	75.0000	77.6875
73 4-Chlorotoluene	91	17.697	17.697	(0.956)	1902006	75.0000	73.8152
74 tert-Butylbenzene	119	18.003	18.003	(0.972)	1586626	75.0000	77.0489
75 1,2,4-Trimethylbenzene	105	18.052	18.052	(0.975)	1674992	75.0000	81.5747
76 sec-Butylbenzene	105	18.259	18.259	(0.986)	2290862	75.0000	76.3775
77 para-Isopropyl Toluene	119	18.397	18.397	(0.994)	1756199	75.0000	81.1159
78 1,3-Dichlorobenzene	146	18.456	18.456	(0.997)	1238664	75.0000	74.8098

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

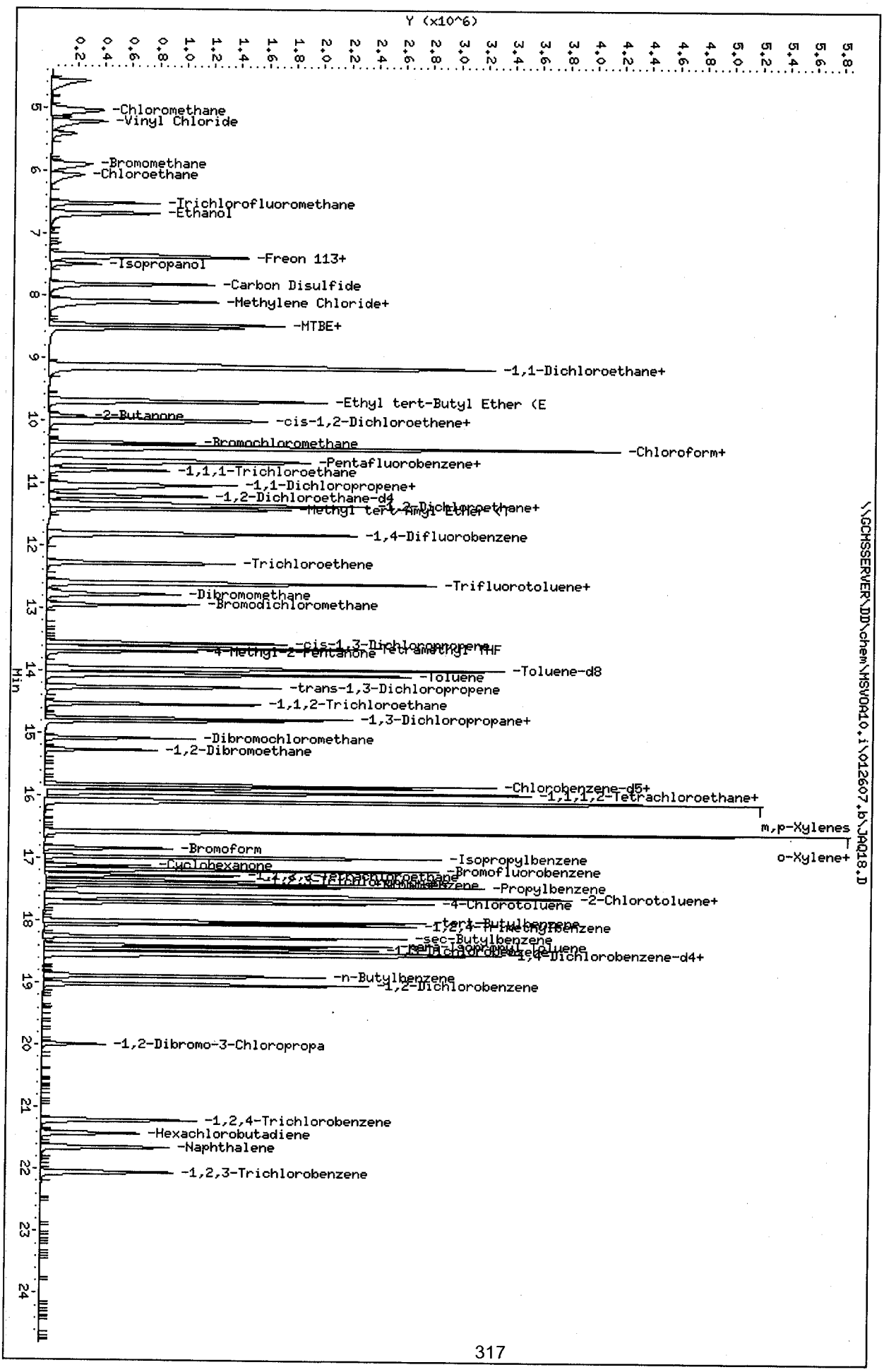
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.515	18.515	(1.000)	990383	50.0000	
80 1,4-Dichlorobenzene	146	18.545	18.545	(1.002)	1258167	75.0000	73.9392
81 n-Butylbenzene	91	18.880	18.880	(1.020)	1447562	75.0000	83.2402
82 1,2-Dichlorobenzene	146	19.018	19.018	(1.027)	1204009	75.0000	75.3589
83 1,2-Dibromo-3-Chloropropane	75	19.984	19.984	(1.079)	156657	75.0000	80.5478(M)
84 1,2,4-Trichlorobenzene	180	21.207	21.207	(1.145)	549002	75.0000	86.0931(M)
85 Hexachlorobutadiene	225	21.424	21.424	(1.157)	218719	75.0000	68.7222(M)
86 Naphthalene	128	21.651	21.651	(1.169)	1166161	75.0000	86.5057
87 1,2,3-Trichlorobenzene	180	22.055	22.055	(1.191)	526972	75.0000	87.4882

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Date : 26-JAN-2007 20:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5219,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:44 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.02/100,S5219,0.02/100
Misc Info : S4172,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:13 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:44 Cal File: JAQ19.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	1101474	100.000	115.8100
2 Chloromethane	50	5.054	5.054	(0.475)	1728322	100.000	96.5858(M)
3 Vinyl Chloride	62	5.212	5.212	(0.490)	1405434	100.000	102.6243(M)
4 Bromomethane	94	5.902	5.902	(0.555)	857330	100.000	107.7019(M)
5 Chloroethane	64	6.070	6.070	(0.571)	827102	100.000	100.8224(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	1157557	100.000	105.4728
7 Ethanol	45	6.681	6.681	(0.628)	1981668	10000.0	10319.4444
8 Freon 113	101.	7.352	7.352	(0.691)	808125	100.000	109.1269
9 Acetone	43	7.371	7.371	(0.693)	429094	100.000	97.4582
10 1,1-Dichloroethene	96	7.381	7.381	(0.694)	785094	100.000	99.5581
11 Isopropanol	45	7.490	7.490	(0.704)	904604	1000.00	1044.3109
12 Carbon Disulfide	76	7.825	7.825	(0.736)	3510437	100.000	99.4623
13 Methylene Chloride	84	8.091	8.091	(0.761)	1018464	100.000	98.1777(M)
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.762)	1045965	1000.00	1067.0409
15 MTBE	73	8.476	8.476	(0.797)	2783984	100.000	100.6864
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.802)	904479	100.000	98.6618
18 Vinyl Acetate	43	9.107	9.107	(0.856)	3568990	100.000	97.4145(M)
19 1,1-Dichloroethane	63	9.136	9.136	(0.859)	1773356	100.000	95.2385
20 Isopropyl Ether (DIPE)	45	9.156	9.156	(0.861)	4661169	100.000	95.2514
21 Ethyl tert-Butyl Ether (ETBE)	59	9.688	9.688	(0.911)	3510091	100.000	100.6880
22 2-Butanone	43	9.925	9.925	(0.933)	729524	100.000	101.3445
23 cis-1,2-Dichloroethene	96	9.994	9.994	(0.940)	951950	100.000	97.2619

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.024	10.024	(0.943)	1068977	100.000	96.6930
	25 Bromochloromethane	128	10.359	10.359	(0.974)	496480	100.000	101.9845
	26 Chloroform	83	10.418	10.418	(0.980)	1450169	100.000	94.2195
	27 Tetrahydrofuran	42	10.428	10.428	(0.981)	4159209	1000.00	862.7859
*	28 Pentafluorobenzene	168	10.635	10.635	(1.000)	1598210	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.003)	875112	50.0000	50.0557
	30 1,1,1-Trichloroethane	97	10.793	10.793	(1.015)	1033090	100.000	102.1920
	31 1,1-Dichloropropene	75	11.019	11.019	(0.932)	1198179	100.000	101.1903
	32 Carbon Tetrachloride	117	11.069	11.069	(0.937)	826457	100.000	102.1913
	33 1,2-Dichloroethane-d4	65	11.207	11.207	(0.948)	1017063	50.0000	49.8609
	34 1,2-Dichloroethane	62	11.315	11.315	(0.957)	1290572	100.000	98.6593
	35 Benzene	78	11.355	11.355	(0.961)	3565097	100.000	96.1620
	36 Methyl tert-Amyl Ether (TAME)	73	11.414	11.414	(0.966)	2595503	100.000	99.8988
*	37 1,4-Difluorobenzene	114	11.818	11.818	(1.000)	2579386	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	851032	100.000	97.6573
	39 Trifluorotoluene	146	12.587	12.587	(1.065)	1269449	100.000	102.6042
	40 1,2-Dichloropropane	63	12.597	12.597	(1.066)	1090870	100.000	94.6403
	41 Dibromomethane	93	12.774	12.774	(1.081)	630451	100.000	100.7357
	42 Bromodichloromethane	83	12.942	12.942	(1.095)	1158482	100.000	99.7439
	44 cis-1,3-Dichloropropene	75	13.553	13.553	(1.147)	1582601	100.000	99.5508
	45 Tetramethyl THF	43	13.632	13.632	(1.153)	2630251	100.000	96.6703
	46 4-Methyl-2-Pentanone	43	13.691	13.691	(1.159)	1814480	100.000	105.9465
	47 Toluene-d8	98	13.957	13.957	(1.181)	2747656	50.0000	49.5033
	48 Toluene	92	14.056	14.056	(1.189)	1966809	100.000	93.1794
	49 trans-1,3-Dichloropropene	75	14.253	14.253	(1.206)	1412656	100.000	101.3131
	50 1,1,2-Trichloroethane	85	14.519	14.519	(1.229)	471432	100.000	99.5401
	51 1,3-Dichloropropane	76	14.756	14.756	(0.933)	1507242	100.000	100.7873
	52 2-Hexanone	43	14.776	14.776	(0.934)	995713	100.000	104.2916
	53 Tetrachloroethene	166	14.805	14.805	(0.936)	781562	100.000	101.6607
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	916608	100.000	104.1743
	55 1,2-Dibromoethane	107	15.269	15.269	(1.292)	914347	100.000	102.6623
*	56 Chlorobenzene-d5	117	15.821	15.821	(1.000)	2073881	50.0000	
	57 Chlorobenzene	112	15.860	15.860	(1.002)	2121995	100.000	96.9625
	58 1,1,1,2-Tetrachloroethane	131	15.929	15.929	(1.007)	737484	100.000	101.4443
	59 Ethylbenzene	91	15.949	15.949	(1.008)	3506376	100.000	96.5217
	60 m,p-Xylenes	106	16.087	16.087	(1.017)	2588486	200.000	195.9556
	61 o-Xylene	106	16.570	16.570	(1.047)	1263431	100.000	96.4679
	62 Styrene	104	16.570	16.570	(1.047)	2257571	100.000	100.2484
	63 Bromoform	173	16.836	16.836	(1.064)	681020	100.000	99.6439
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	3148817	100.000	98.7673
	65 Cyclohexanone	55	17.112	17.112	(0.924)	709360	1000.00	1123.4657
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1140071	50.0000	48.3690
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.933)	1227449	100.000	96.9968
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	1105119	100.000	93.4999(M)
	69 Bromobenzene	156	17.388	17.388	(0.939)	896727	100.000	95.8774
	70 Propylbenzene	91	17.428	17.428	(0.941)	3978203	100.000	101.3639
	71 2-Chlorotoluene	91	17.586	17.586	(0.950)	2646632	100.000	94.9562
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	2376912	100.000	103.7698
	73 4-Chlorotoluene	91	17.694	17.694	(0.956)	2450484	100.000	94.6013
	74 tert-Butylbenzene	119	18.010	18.010	(0.973)	2198205	100.000	106.1870
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.975)	2255483	100.000	109.2682
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	3295336	100.000	109.2892
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.994)	2464620	100.000	113.2384
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.997)	1599483	100.000	96.0939

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

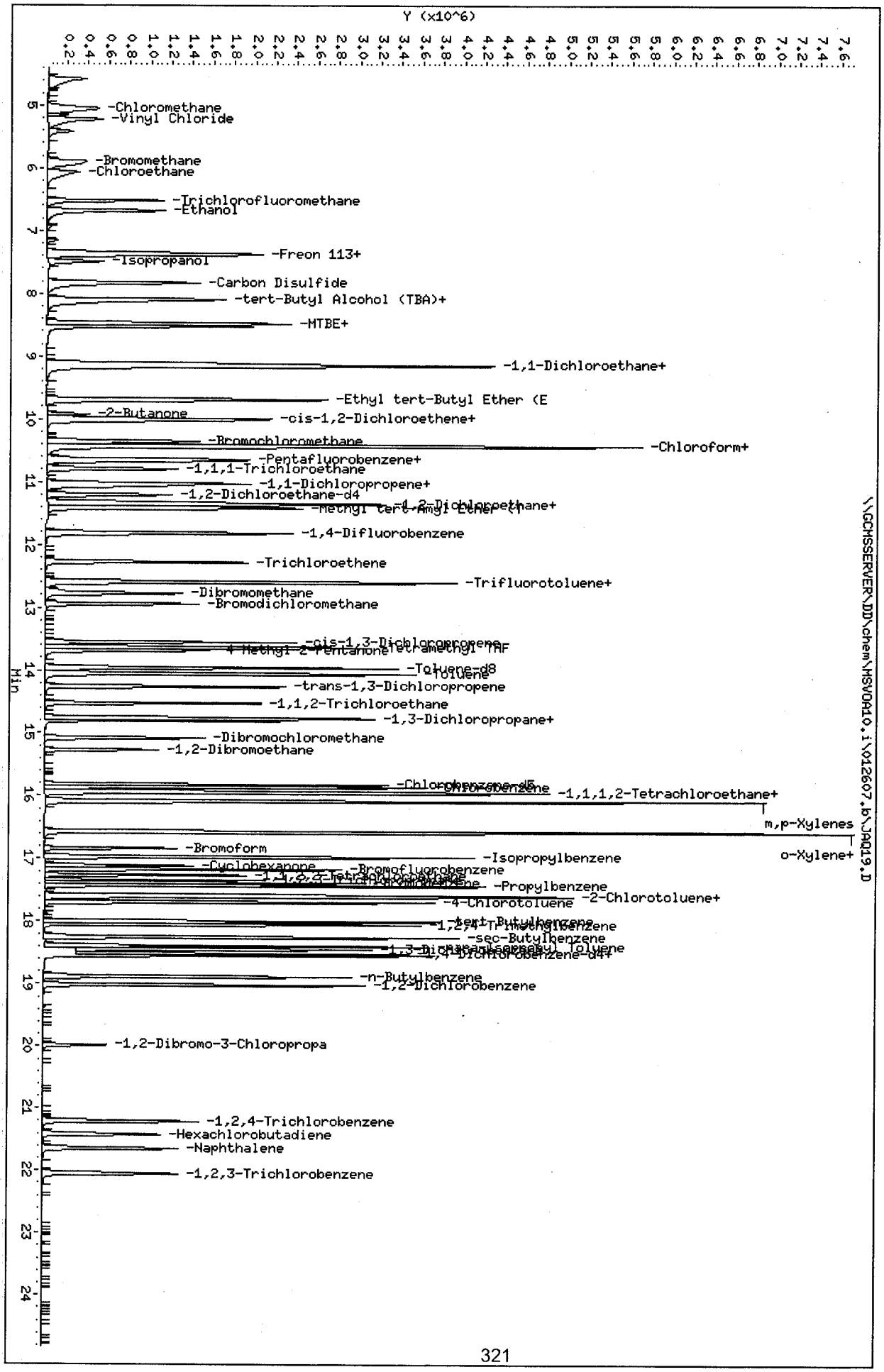
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	995616	50.0000	
80 1,4-Dichlorobenzene	146	18.542	18.542	(1.002)	1620839	100.000	94.7518
81 n-Butylbenzene	91	18.887	18.887	(1.020)	2083695	100.000	119.1905
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1555453	100.000	96.8440
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	213279	100.000	109.0846(M)
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	732219	100.000	114.2212
85 Hexachlorobutadiene	225	21.421	21.421	(1.157)	353650	100.000	110.5339(M)
86 Naphthalene	128	21.648	21.648	(1.169)	1604819	100.000	118.4196
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	687735	100.000	113.5780

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Date : 26-JAN-2007 20:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5219,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377629 IDF : 1.0
Seqnum : 447094064003.5 File : ec603 Time : 06-MAR-2007 08:31
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7775	25.00	21.04	ug/L	-16	30	0.1000	u
Vinyl Chloride	0.6995	0.6272	25.00	22.42	ug/L	-10	20	0.0500	u
Bromomethane	0.4143	0.3394	25.00	20.48	ug/L	-18	30	0.0500	u
Chloroethane	0.3917	0.3878	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2489	25.00	22.61	ug/L	-10	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3956	25.00	28.80	ug/L	15	20	0.0500	u
Methylene Chloride	0.5327	0.5518	25.00	25.90	ug/L	4	30	0.0500	u
Carbon Disulfide	1.5714	1.1312	25.00	18.00	ug/L	**-28**	30	0.0500	!c- u
MTBE	1.6725	1.4630	25.00	21.87	ug/L	-13	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4766	25.00	26.44	ug/L	6	30	0.0500	u
Vinyl Acetate	1.5725	1.6485	25.00	26.21	ug/L	5	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0712	25.00	28.18	ug/L	13	30	0.1000	u
2-Butanone	0.5135	0.4372	25.00	21.28	ug/L	-15	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6198	25.00	23.64	ug/L	-5	30	0.0500	u
Chloroform	1.0380	1.0077	25.00	24.27	ug/L	-3	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7092	25.00	26.24	ug/L	5	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3003	25.00	28.24	ug/L	13	30	0.0500	u
1,2-Dichloroethane	0.4996	0.5239	25.00	26.22	ug/L	5	30	0.0500	u
Benzene	1.3466	1.3325	25.00	24.74	ug/L	-1	30	0.0500	u
Trichloroethene	0.3340	0.3320	25.00	24.85	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5103	25.00	25.96	ug/L	4	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5303	25.00	20.60	ug/L	-18	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5877	25.00	23.03	ug/L	-8	30	0.0500	u
Toluene	0.8216	0.8129	25.00	24.74	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5098	25.00	21.48	ug/L	-14	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1900	25.00	23.52	ug/L	-6	30	0.0500	u
2-Hexanone	0.5472	0.4213	25.00	19.25	ug/L	-23	40	0.0500	u
Tetrachloroethene	0.2838	0.3319	25.00	29.23	ug/L	17	30	0.0500	u
Dibromochloromethane	0.4287	0.3964	25.00	23.12	ug/L	-8	30	0.0500	u
Chlorobenzene	1.0173	0.9660	25.00	23.74	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.7058	25.00	24.88	ug/L	0	20	0.0500	u
m,p-Xylenes	0.6280	0.6299	50.00	50.15	ug/L	0	30	0.0500	u
o-Xylene	0.6326	0.6316	25.00	24.96	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1287	25.00	24.05	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3042	25.00	23.31	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.1314	25.00	21.37	ug/L	-15	30	0.3000	u
Dibromofluoromethane	0.5927	0.5809	50.00	49.01	ug/L	-2	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4501	50.00	56.17	ug/L	12	30	0.0500	u
Toluene-d8	1.1589	1.1827	50.00	51.03	ug/L	2	30	0.0500	u
Bromofluorobenzene	1.2864	1.2148	50.00	47.22	ug/L	-6	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	776548	24.68	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1208246	17.21	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1059171	20.00	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	510227	23.94	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377872 IDF : 1.0
Seqnum : 447095480003.1 File : ec703 Time : 07-MAR-2007 08:02
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (8333X), S5614 (8333X), S5422 (8333X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7452	30.00	24.20	ug/L	-19	30	0.1000	u
Vinyl Chloride	0.6995	0.6157	30.00	26.41	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.3431	30.00	24.85	ug/L	-17	30	0.0500	u
Chloroethane	0.3917	0.3757	30.00	28.78	ug/L	-4	30	0.0500	u
Acetone	0.2753	0.2275	30.00	24.79	ug/L	-17	40	0.0500	u
1,1-Dichloroethene	0.3434	0.4131	30.00	36.08	ug/L	20	20	0.0500	u
Methylene Chloride	0.5327	0.5191	30.00	29.24	ug/L	-3	30	0.0500	u
Carbon Disulfide	1.5714	1.1458	30.00	21.87	ug/L	**-27**	30	0.0500	!c- u
MTBE	1.6725	1.4113	30.00	25.32	ug/L	-16	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4732	30.00	31.50	ug/L	5	30	0.0500	u
Vinyl Acetate	1.5725	1.5812	30.00	30.17	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0313	30.00	32.55	ug/L	9	30	0.1000	u
2-Butanone	0.5135	0.3893	30.00	22.74	ug/L	-24	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6056	30.00	27.71	ug/L	-8	30	0.0500	u
Chloroform	1.0380	0.9562	30.00	27.63	ug/L	-8	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7184	30.00	31.90	ug/L	6	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3088	30.00	34.85	ug/L	16	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4914	30.00	29.51	ug/L	-2	30	0.0500	u
Benzene	1.3466	1.2872	30.00	28.68	ug/L	-4	30	0.0500	u
Trichloroethene	0.3340	0.3277	30.00	29.43	ug/L	-2	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3558	30.00	25.25	ug/L	-16	20	0.0500	u
Bromodichloromethane	0.4914	0.4780	30.00	29.18	ug/L	-3	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5074	30.00	23.66	ug/L	-21	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5574	30.00	26.21	ug/L	-13	30	0.0500	u
Toluene	0.8216	0.7856	30.00	28.69	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4798	30.00	24.26	ug/L	-19	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1771	30.00	26.31	ug/L	-12	30	0.0500	u
2-Hexanone	0.5472	0.4144	30.00	22.72	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3442	30.00	36.38	ug/L	**21**	30	0.0500	!c+ u
Dibromochloromethane	0.4287	0.3872	30.00	27.10	ug/L	-10	30	0.0500	u
Chlorobenzene	1.0173	0.9644	30.00	28.44	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.6751	30.00	29.32	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6280	0.6233	60.00	59.55	ug/L	-1	30	0.0500	u
o-Xylene	0.6326	0.6182	30.00	29.32	ug/L	-2	30	0.0500	u
Styrene	1.1734	1.1135	30.00	28.47	ug/L	-5	30	0.0500	u
Bromoform	0.3263	0.3029	30.00	27.85	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0600	30.00	24.03	ug/L	-20	30	0.3000	u
Dibromofluoromethane	0.5927	0.5666	50.00	47.80	ug/L	-4	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4222	50.00	52.70	ug/L	5	30	0.0500	u
Toluene-d8	1.1589	1.1387	50.00	49.13	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1959	50.00	46.48	ug/L	-7	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	786634	26.29	10.05	10.05	0.00
1,4-Difluorobenzene	1030815	1231475	19.47	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1064066	20.56	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	521537	26.69	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning +=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC378062 IDF : 1.0
Seqnum : 447096916010.2 File : ec810 Time : 08-MAR-2007 11:36
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (9091X), S5614 (9091X), S5422 (9091X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7962	27.50	23.70	ug/L	-14	30	0.1000	u
Vinyl Chloride	0.6995	0.6535	27.50	25.69	ug/L	-7	20	0.0500	u
Bromomethane	0.4143	0.3975	27.50	26.39	ug/L	-4	30	0.0500	u
Chloroethane	0.3917	0.4017	27.50	28.20	ug/L	3	30	0.0500	u
Acetone	0.2753	0.2187	27.50	21.85	ug/L	-21	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3838	27.50	30.73	ug/L	12	20	0.0500	u
Methylene Chloride	0.5327	0.4958	27.50	25.60	ug/L	-7	30	0.0500	u
Carbon Disulfide	1.5714	1.0704	27.50	18.73	ug/L	**-32**	30	0.0500	c- u ***
MTBE	1.6725	1.4879	27.50	24.47	ug/L	-11	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4530	27.50	27.64	ug/L	0	30	0.0500	u
Vinyl Acetate	1.5725	1.5914	27.50	27.83	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	0.9993	27.50	28.91	ug/L	5	30	0.1000	u
2-Butanone	0.5135	0.4032	27.50	21.59	ug/L	-21	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.5807	27.50	24.36	ug/L	-11	30	0.0500	u
Chloroform	1.0380	0.9198	27.50	24.37	ug/L	-11	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6944	27.50	28.26	ug/L	3	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3108	27.50	32.15	ug/L	17	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4699	27.50	25.87	ug/L	-6	30	0.0500	u
Benzene	1.3466	1.2292	27.50	25.10	ug/L	-9	30	0.0500	u
Trichloroethene	0.3340	0.3099	27.50	25.51	ug/L	-7	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3467	27.50	22.55	ug/L	-18	20	0.0500	u
Bromodichloromethane	0.4914	0.4646	27.50	26.00	ug/L	-5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5049	27.50	21.58	ug/L	-22	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5362	27.50	23.12	ug/L	-16	30	0.0500	u
Toluene	0.8216	0.7646	27.50	25.59	ug/L	-7	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4663	27.50	21.61	ug/L	**-21**	30	0.0500	!c- u
1,1,2-Trichloroethane	0.2020	0.1740	27.50	23.69	ug/L	-14	30	0.0500	u
2-Hexanone	0.5472	0.4159	27.50	20.91	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3249	27.50	31.48	ug/L	14	30	0.0500	u
Dibromochloromethane	0.4287	0.3769	27.50	24.18	ug/L	-12	30	0.0500	u
Chlorobenzene	1.0173	0.8928	27.50	24.13	ug/L	-12	30	0.3000	u
Ethylbenzene	1.7142	1.6006	27.50	25.68	ug/L	-7	20	0.0500	u
m,p-Xylenes	0.6280	0.5979	55.00	52.36	ug/L	-5	30	0.0500	u
o-Xylene	0.6326	0.5853	27.50	25.44	ug/L	-7	30	0.0500	u
Styrene	1.1734	1.0393	27.50	24.36	ug/L	-11	30	0.0500	u
Bromoform	0.3263	0.2850	27.50	24.02	ug/L	-13	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0339	27.50	21.48	ug/L	**-22**	30	0.3000	!c- u
Dibromofluoromethane	0.5927	0.5728	50.00	48.32	ug/L	-3	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4348	50.00	54.27	ug/L	9	30	0.0500	u
Toluene-d8	1.1589	1.1304	50.00	48.77	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1866	50.00	46.12	ug/L	-8	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	785522	26.12	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1234433	19.75	11.18	11.16	-0.02
Chlorobenzene-d5	882637	1064341	20.59	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	531739	29.17	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning -=low bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: 40PPB IDF : 1.0
Seqnum : 447098391007 File : ec907 Time : 09-MAR-2007 10:23
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5618 (12500X), S5595 (12500X), S5194 (25000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.8791	40.00	38.06	ug/L	-5	30	0.1000	
Vinyl Chloride	0.6995	0.7056	40.00	40.35	ug/L	1	20	0.0500	
Bromomethane	0.4143	0.4349	40.00	42.00	ug/L	5	30	0.0500	
Chloroethane	0.3917	0.4048	40.00	41.33	ug/L	3	30	0.0500	
Acetone	0.2753	0.2482	40.00	36.06	ug/L	-10	40	0.0500	
1,1-Dichloroethene	0.3434	0.3408	40.00	39.69	ug/L	-1	20	0.0500	
Methylene Chloride	0.5327	0.5087	40.00	38.20	ug/L	-5	30	0.0500	
Carbon Disulfide	1.5714	1.2928	40.00	32.91	ug/L	-18	30	0.0500	
MTBE	1.6725	1.5399	40.00	36.83	ug/L	-8	30	0.0500	
trans-1,2-Dichloroethene	0.4507	0.4507	40.00	40.00	ug/L	0	30	0.0500	
Vinyl Acetate	1.5725	2.0002	40.00	50.88	ug/L	27	40	0.0500	
1,1-Dichloroethane	0.9505	1.0401	40.00	43.77	ug/L	9	30	0.1000	
2-Butanone	0.5135	0.4298	40.00	33.48	ug/L	-16	40	0.0500	
cis-1,2-Dichloroethene	0.6556	0.5903	40.00	36.01	ug/L	-10	30	0.0500	
Chloroform	1.0380	0.9922	40.00	38.23	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.6757	0.6570	40.00	38.89	ug/L	-3	30	0.0500	
Carbon Tetrachloride	0.2658	0.2815	40.00	42.36	ug/L	6	30	0.0500	
1,2-Dichloroethane	0.4996	0.5317	40.00	42.57	ug/L	6	30	0.0500	
Benzene	1.3466	1.2557	40.00	37.30	ug/L	-7	30	0.0500	
Trichloroethene	0.3340	0.3182	40.00	38.10	ug/L	-5	30	0.0500	
1,2-Dichloropropane	0.4228	0.3923	40.00	37.12	ug/L	-7	20	0.0500	
Bromodichloromethane	0.4914	0.4874	40.00	39.68	ug/L	-1	30	0.0500	
4-Methyl-2-Pentanone	0.6435	0.5538	40.00	34.42	ug/L	-14	40	0.0500	
cis-1,3-Dichloropropene	0.6379	0.5864	40.00	36.77	ug/L	-8	30	0.0500	
Toluene	0.8216	0.7873	40.00	38.33	ug/L	-4	20	0.0500	
trans-1,3-Dichloropropene	0.5933	0.5484	40.00	36.97	ug/L	-8	30	0.0500	
1,1,2-Trichloroethane	0.2020	0.1894	40.00	37.50	ug/L	-6	30	0.0500	
2-Hexanone	0.5472	0.4407	40.00	32.22	ug/L	-19	40	0.0500	
Tetrachloroethene	0.2838	0.3076	40.00	43.36	ug/L	8	30	0.0500	
Dibromochloromethane	0.4287	0.4108	40.00	38.34	ug/L	-4	30	0.0500	
Chlorobenzene	1.0173	0.9628	40.00	37.86	ug/L	-5	30	0.3000	
Ethylbenzene	1.7142	1.6074	40.00	37.51	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6280	0.6013	80.00	76.60	ug/L	-4	30	0.0500	
o-Xylene	0.6326	0.6013	40.00	38.02	ug/L	-5	30	0.0500	
Styrene	1.1734	1.0851	40.00	36.99	ug/L	-8	30	0.0500	
Bromoform	0.3263	0.3095	40.00	37.95	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	1.3236	1.1184	40.00	33.80	ug/L	-16	30	0.3000	
Dibromofluoromethane	0.5927	0.5741	50.00	48.43	ug/L	-3	30	0.0500	
1,2-Dichloroethane-d4	0.4006	0.4314	50.00	53.84	ug/L	8	30	0.0500	
Toluene-d8	1.1589	1.1505	50.00	49.64	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.2864	1.1810	50.00	45.91	ug/L	-8	30	0.0500	

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	764991	22.82	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1204009	16.80	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1034433	17.20	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	514170	24.90	17.97	17.97	0.00

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/12/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497094080003 File : jc603 Time : 06-MAR-2007 08:49
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (20000X), S5430 (20000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6431	25.00	28.72	ug/L	15	30	0.1000	
Vinyl Chloride	0.4284	0.5030	25.00	29.35	ug/L	17	20	0.0500	
Bromomethane	0.2490	0.2383	25.00	23.92	ug/L	-4	30	0.0500	
Chloroethane	0.2566	0.3101	25.00	30.21	ug/L	**21**	30	0.0500	!c+
Acetone	0.1377	0.1589	25.00	28.85	ug/L	15	40	0.0500	
1,1-Dichloroethene	0.2467	0.2389	25.00	24.21	ug/L	-3	20	0.0500	
Methylene Chloride	0.3245	0.3607	25.00	27.79	ug/L	11	30	0.0500	
Carbon Disulfide	1.1042	1.0543	25.00	23.87	ug/L	-5	30	0.0500	
MTBE	0.8650	0.8987	25.00	25.97	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.3102	25.00	27.04	ug/L	8	30	0.0500	
Vinyl Acetate	1.1462	1.0628	25.00	23.18	ug/L	-7	40	0.0500	m
1,1-Dichloroethane	0.5825	0.6246	25.00	26.81	ug/L	7	30	0.1000	
2-Butanone	0.2252	0.2212	25.00	24.56	ug/L	-2	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3342	25.00	27.29	ug/L	9	30	0.0500	
Chloroform	0.4815	0.5275	25.00	27.39	ug/L	10	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3247	25.00	25.67	ug/L	3	30	0.0500	
Carbon Tetrachloride	0.1568	0.1538	25.00	24.53	ug/L	-2	30	0.0500	
1,2-Dichloroethane	0.2536	0.2695	25.00	26.57	ug/L	6	30	0.0500	
Benzene	0.7187	0.7858	25.00	27.34	ug/L	9	30	0.0500	
Trichloroethene	0.1689	0.1849	25.00	27.36	ug/L	9	30	0.0500	
1,2-Dichloropropane	0.2234	0.2382	25.00	26.66	ug/L	7	20	0.0500	
Bromodichloromethane	0.2251	0.2455	25.00	27.26	ug/L	9	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3257	25.00	24.52	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3409	25.00	27.66	ug/L	11	30	0.0500	
Toluene	0.4092	0.4458	25.00	27.24	ug/L	9	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2957	25.00	27.35	ug/L	9	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.1039	25.00	28.30	ug/L	13	30	0.0500	
2-Hexanone	0.2302	0.0899	25.00	9.762	ug/L	**-61**	40	0.0500	c- ***
Tetrachloroethene	0.1854	0.1979	25.00	26.69	ug/L	7	30	0.0500	
Dibromochloromethane	0.2121	0.2233	25.00	26.31	ug/L	5	30	0.0500	
Chlorobenzene	0.5276	0.5642	25.00	26.73	ug/L	7	30	0.3000	
Ethylbenzene	0.8758	0.8920	25.00	25.46	ug/L	2	20	0.0500	
m,p-Xylenes	0.3185	0.3348	50.00	52.56	ug/L	5	30	0.0500	
o-Xylene	0.3158	0.3346	25.00	26.49	ug/L	6	30	0.0500	
Styrene	0.5429	0.5908	25.00	27.21	ug/L	9	30	0.0500	
Bromoform	0.1648	0.1657	25.00	25.14	ug/L	1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5646	25.00	22.21	ug/L	-11	30	0.3000	
Dibromofluoromethane	0.5469	0.5390	50.00	49.27	ug/L	-1	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3672	50.00	46.44	ug/L	-7	30	0.0500	
Toluene-d8	1.0759	1.1023	50.00	51.22	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1837	1.0683	50.00	45.13	ug/L	-10	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1664427	7.00	10.64	10.61	-0.03
1,4-Difluorobenzene	2525036	2733067	8.24	11.82	11.79	-0.03
Chlorobenzene-d5	2054473	2408276	17.22	15.83	15.81	-0.02
1,4-Dichlorobenzene-d4	973680	1237791	27.13	18.52	18.51	-0.01

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

!=warning +=high bias -=low bias c=CCV m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497094080009 File : jc609 Time : 06-MAR-2007 11:47
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (20000X), S5430 (20000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6202	25.00	27.70	ug/L	11	30	0.1000	
Vinyl Chloride	0.4284	0.4781	25.00	27.89	ug/L	12	20	0.0500	
Bromomethane	0.2490	0.2405	25.00	24.14	ug/L	-3	30	0.0500	
Chloroethane	0.2566	0.2961	25.00	28.84	ug/L	15	30	0.0500	
Acetone	0.1377	0.1313	25.00	23.82	ug/L	-5	40	0.0500	
1,1-Dichloroethene	0.2467	0.2173	25.00	22.02	ug/L	-12	20	0.0500	
Methylene Chloride	0.3245	0.3410	25.00	26.26	ug/L	5	30	0.0500	
Carbon Disulfide	1.1042	0.9433	25.00	21.36	ug/L	-15	30	0.0500	
MTBE	0.8650	0.8956	25.00	25.88	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.2864	25.00	24.97	ug/L	0	30	0.0500	
Vinyl Acetate	1.1462	1.2129	25.00	26.46	ug/L	6	40	0.0500	m
1,1-Dichloroethane	0.5825	0.5585	25.00	23.97	ug/L	-4	30	0.1000	
2-Butanone	0.2252	0.2313	25.00	25.67	ug/L	3	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3155	25.00	25.76	ug/L	3	30	0.0500	
Chloroform	0.4815	0.4683	25.00	24.31	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.2986	25.00	23.60	ug/L	-6	30	0.0500	
Carbon Tetrachloride	0.1568	0.1405	25.00	22.40	ug/L	-10	30	0.0500	
1,2-Dichloroethane	0.2536	0.2509	25.00	24.74	ug/L	-1	30	0.0500	
Benzene	0.7187	0.7074	25.00	24.61	ug/L	-2	30	0.0500	
Trichloroethene	0.1689	0.1648	25.00	24.39	ug/L	-2	30	0.0500	
1,2-Dichloropropane	0.2234	0.2157	25.00	24.13	ug/L	-3	20	0.0500	
Bromodichloromethane	0.2251	0.2217	25.00	24.62	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3424	25.00	25.78	ug/L	3	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3061	25.00	24.84	ug/L	-1	30	0.0500	
Toluene	0.4092	0.3986	25.00	24.35	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2687	25.00	24.85	ug/L	-1	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.0969	25.00	26.37	ug/L	5	30	0.0500	
2-Hexanone	0.2302	0.2103	25.00	22.84	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1854	0.1731	25.00	23.35	ug/L	-7	30	0.0500	
Dibromochloromethane	0.2121	0.2028	25.00	23.90	ug/L	-4	30	0.0500	
Chlorobenzene	0.5276	0.4964	25.00	23.52	ug/L	-6	30	0.3000	
Ethylbenzene	0.8758	0.7971	25.00	22.75	ug/L	-9	20	0.0500	
m,p-Xylenes	0.3185	0.3019	50.00	47.40	ug/L	-5	30	0.0500	
o-Xylene	0.3158	0.2968	25.00	23.50	ug/L	-6	30	0.0500	
Styrene	0.5429	0.5308	25.00	24.44	ug/L	-2	30	0.0500	
Bromoform	0.1648	0.1590	25.00	24.12	ug/L	-4	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5438	25.00	21.39	ug/L	-14	30	0.3000	
Dibromofluoromethane	0.5469	0.5301	50.00	48.46	ug/L	-3	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3624	50.00	45.82	ug/L	-8	30	0.0500	
Toluene-d8	1.0759	1.0988	50.00	51.07	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1837	1.0586	50.00	44.72	ug/L	-11	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1724105	10.84	10.64	10.61	-0.03
1,4-Difluorobenzene	2525036	2791374	10.55	11.82	11.80	-0.02
Chlorobenzene-d5	2054473	2441271	18.83	15.83	15.81	-0.02
1,4-Dichlorobenzene-d4	973680	1259430	29.35	18.52	18.51	-0.01

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447094064

Date : 03/06/07 Reference: ea916
Sequence : MSVOA05 ec6 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/BS	QC377629	776548	10.04	1208246	11.17	1059171	15.24	510227	17.96
004	BSD	QC377630	763694	10.04	1197810	11.17	1038738	15.24	511199	17.96
006	BLANK	QC377631	747702	10.04	1180591	11.18	1043718	15.24	497859	17.96
007	SAMPLE	193057-002	752250	10.04	1170931	11.17	1040485	15.24	495883	17.96
008	SAMPLE	193057-003	749780	10.04	1174193	11.18	1032901	15.24	496477	17.96
009	SAMPLE	193138-002	755622	10.05	1186549	11.17	1032070	15.24	498289	17.96
010	SAMPLE	193057-004	768468	10.04	1188346	11.18	1033077	15.24	495116	17.96
011	SAMPLE	193055-015	756572	10.05	1180471	11.17	1034736	15.24	492611	17.96
012	SAMPLE	193055-011	761433	10.04	1187952	11.17	1040043	15.24	492473	17.96
013	SAMPLE	193055-012	752867	10.04	1183080	11.17	1026826	15.24	493374	17.96
014	SAMPLE	193055-013	745484	10.04	1175652	11.17	1022265	15.24	497739	17.96
015	SAMPLE	193055-014	752487	10.05	1172489	11.17	1034000	15.24	490346	17.96
016	SAMPLE	193109-001	753816	10.04	1185362	11.17	1023242	15.23	488707	17.96
017	SAMPLE	193108-009	753478	10.04	1184844	11.17	1024652	15.24	489285	17.96
018	SAMPLE	193108-010	764166	10.05	1188063	11.17	1036814	15.24	489861	17.96
019	SAMPLE	193108-011	749292	10.05	1178575	11.17	1031665	15.24	513071	17.96
020	SAMPLE	193108-012	771060	10.04	1191930	11.17	1022775	15.24	500396	17.96
021	SAMPLE	192902-001	778498	10.05	1219271	11.17	1043830	15.24	494161	17.96
022	SAMPLE	193063-003	780915	10.05	1196436	11.17	1037794	15.24	495450	17.96
023	SAMPLE	193063-006	775676	10.04	1189273	11.17	1044918	15.24	509928	17.96
024	SAMPLE	193063-008	769215	10.05	1185614	11.17	1039304	15.24	505616	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447095480

Date : 03/07/07 Reference: ea916
Sequence : MSVOA05 ec7 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/LCS	QC377872	786634	10.05	1231475	11.17	1064066	15.24	521537	17.96
005	BLANK	QC377866	778009	10.04	1211595	11.17	1038221	15.24	488592	17.96
006	SAMPLE	193166-001	767496	10.04	1203760	11.17	1052475	15.24	492665	17.96
007	SAMPLE	193166-020	774397	10.04	726520	11.17	1048245	15.24	507861	17.96
008	SAMPLE	193108-021	773236	10.05	1211257	11.17	1047878	15.24	493908	17.96
009	SAMPLE	193108-012	756279	10.04	1195088	11.17	1037495	15.24	504739	17.96
010	MSS	193108-007	769176	10.05	1199256	11.17	1048830	15.24	487715	17.96
011	SAMPLE	193108-013	770484	10.04	1204213	11.17	1040957	15.24	499229	17.96
012	SAMPLE	193108-015	759611	10.04	1190762	11.17	1036051	15.24	500757	17.96
013	SAMPLE	193108-019	758788	10.04	1183861	11.17	1046826	15.24	501720	17.97
014	SAMPLE	193108-020	761022	10.04	1189398	11.17	1042326	15.24	494907	17.96
015	SAMPLE	193108-022	757539	10.04	1184717	11.17	1038417	15.24	495609	17.97
016	SAMPLE	193137-002	764305	10.05	1177433	11.17	1037131	15.24	493397	17.96
017	SAMPLE	193137-003	753312	10.05	1184996	11.17	1027569	15.24	488081	17.96
018	SAMPLE	193137-004	763841	10.05	1189205	11.17	1030890	15.24	498311	17.96
019	SAMPLE	193137-005	751604	10.04	1177386	11.17	1027733	15.24	492597	17.97
020	SAMPLE	193108-008	750910	10.04	1179478	11.17	1026001	15.24	504615	17.96
021	SAMPLE	193157-001	770331	10.04	1190644	11.17	1041977	15.24	499893	17.96
022	MS	QC377890	778919	10.04	1201614	11.17	1046349	15.24	516027	17.96
023	MSD	QC377891	774323	10.04	1188418	11.17	1051629	15.24	516759	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447096916

Date : 03/08/07 Reference: ea916
Sequence : MSVOA05 ec8 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
006	SAMPLE	193174-001	755318	10.05	1194071	11.17	1043644	15.24	494375	17.96
010	CCV/LCS	QC378062	785522	10.04	1234433	11.16	1064341	15.24	531739	17.96
012	BLANK	QC378063	769888	10.04	1203885	11.17	1055284	15.24	505730	17.96
013	SAMPLE	193174-001	757309	10.05	1189877	11.17	1046647	15.24	500155	17.96
014	SAMPLE	193174-002	758518	10.04	1201099	11.17	1042760	15.24	506978	17.96
015	SAMPLE	193174-003	766141	10.04	1204175	11.17	1055143	15.24	508687	17.96
016	SAMPLE	193174-004	771804	10.05	1214963	11.17	1056521	15.24	498792	17.96
017	SAMPLE	193174-005	775586	10.04	1227450	11.18	1070486	15.24	501073	17.96
018	SAMPLE	193174-006	761338	10.05	1214989	11.17	1062050	15.24	504268	17.96
019	SAMPLE	193174-007	763160	10.04	1193630	11.18	1054639	15.25	498797	17.97
020	SAMPLE	193174-008	759838	10.04	1197778	11.17	1055653	15.24	503827	17.96
021	MSS	193108-023	761369	10.05	1209465	11.17	1058519	15.24	506684	17.96
022	SAMPLE	193108-024	752941	10.04	1190513	11.17	1048211	15.24	500236	17.97
023	SAMPLE	193108-025	753425	10.04	1180444	11.17	1055205	15.24	504184	17.96
024	SAMPLE	193108-026	755461	10.05	1185634	11.17	1044599	15.24	504463	17.96
025	SAMPLE	193108-027	760380	10.04	1196983	11.17	1052497	15.24	508633	17.96
026	SAMPLE	193194-003	756414	10.04	1200676	11.17	1041634	15.24	497805	17.97
027	SAMPLE	193225-007	760237	10.04	1208636	11.17	1037073	15.24	500786	17.96
028	SAMPLE	193157-001	757772	10.04	1192504	11.17	1051605	15.25	494926	17.97
029	SAMPLE	193166-020	756583	10.05	1201050	11.17	1054670	15.24	499385	17.96
030	MS	QC378166	759163	10.05	1202423	11.17	1049394	15.24	517163	17.96
031	MSD	QC378167	761798	10.05	1207734	11.17	1057893	15.24	517701	17.96
035	SAMPLE	193050-001	753172	10.05	1181958	11.17	1035052	15.24	490606	17.96
036	SAMPLE	193050-002	753095	10.04	1183018	11.17	1045485	15.24	494660	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447098391

Date : 03/09/07 Reference: ea916
Sequence : MSVOA05 ec9 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
007	CCV	40PPB	764991	10.04	1204009	11.17	1034433	15.24	514170	17.97
008	BS	QC378308	775196	10.04	1210335	11.17	1057628	15.24	509503	17.96
009	BSD	QC378309	757934	10.04	1177641	11.17	1042895	15.24	507680	17.96
011	BLANK	QC378310	756438	10.05	1195196	11.17	1044725	15.24	500719	17.96
012	SAMPLE	193276-004	754409	10.05	1171058	11.17	1052883	15.24	502590	17.96
013	SAMPLE	193166-020	762314	10.04	1183574	11.17	1036235	15.24	510255	17.96
014	SAMPLE	193218-004	753191	10.04	1185465	11.17	1049147	15.24	501754	17.96
015	SAMPLE	193218-024	756719	10.04	1190156	11.17	1047979	15.24	499197	17.96
016	SAMPLE	193108-008	757915	10.04	1184197	11.17	1058270	15.25	519750	17.97
017	SAMPLE	193236-001	757897	10.05	1171868	11.17	1039850	15.24	499651	17.96
018	SAMPLE	193236-005	776145	10.05	1213807	11.17	1058712	15.24	497958	17.96
019	SAMPLE	193236-006	770835	10.04	1192337	11.17	1054320	15.24	499433	17.96
020	SAMPLE	193236-007	763025	10.04	1186451	11.17	1047990	15.24	499964	17.96
021	SAMPLE	193236-008	751221	10.04	1177463	11.17	1032397	15.24	494184	17.96
022	SAMPLE	193236-010	753622	10.05	1179635	11.17	1041111	15.24	495350	17.96
023	SAMPLE	193236-011	739183	10.04	1168616	11.18	1048511	15.24	497588	17.96
024	SAMPLE	193236-013	750035	10.05	1181576	11.17	1040050	15.24	493375	17.96
025	SAMPLE	193236-014	752569	10.05	1175988	11.17	1043711	15.24	500222	17.96
026	SAMPLE	193236-015	748941	10.04	1180583	11.17	1043405	15.24	498123	17.96
027	SAMPLE	193236-002	745722	10.04	1186914	11.17	1051345	15.24	497792	17.96
028	SAMPLE	193236-003	749737	10.04	1191924	11.18	1051910	15.24	493530	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497094080

Date : 03/06/07 Reference: jaq17
Sequence : MSVOA10 jc6 Analyzed : 01/26/07 19:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1555522	10.64	2525036	11.82	2054473	15.83	973680	18.52
		LOWER LIMIT	777761	10.14	1262518	11.32	1027237	15.33	486840	18.02
		UPPER LIMIT	3111044	11.14	5050072	12.32	4108946	16.33	1947360	19.02
003	CCV	25PPB	1664427	10.61	2733067	11.79	2408276	15.81	1237791	18.51
005	LCS	QC377636	1692963	10.61	2800580	11.79	2454941	15.81	1265133	18.51
006	BS	QC377637	1695410	10.61	2806073	11.79	2420002	15.81	1213349	18.51
007	BSD	QC377638	1696302	10.61	2781072	11.79	2430243	15.82	1243311	18.51
009	CCV	25PPB	1724105	10.61	2791374	11.80	2441271	15.81	1259430	18.51
012	BLANK	QC377635	1713725	10.62	2775517	11.80	2417088	15.81	1215690	18.51
013	MSS	193108-001	1652836	10.62	2687812	11.80	2396882	15.81	1234023	18.51
014	SAMPLE	193108-006	1689754	10.62	2806279	11.80	2472013	15.82	1236516	18.51
015	SAMPLE	193094-012	1712503	10.61	2836724	11.80	2498051	15.82	1239537	18.51
016	MDLCHECK	187659-009	1746648	10.62	2899118	11.80	2514849	15.82	1265493	18.51
017	SAMPLE	193145-002	1725844	10.61	2846860	11.79	2484798	15.82	1303017	18.51
018	SAMPLE	193168-001	1729008	10.61	2871902	11.79	2532771	15.82	1284508	18.51
019	SAMPLE	193152-002	1775051	10.62	2885268	11.80	2576206	15.82	1313924	18.51
020	SAMPLE	193152-003	1670303	10.61	2761895	11.79	2404625	15.81	1218242	18.52
021	SAMPLE	193152-004	1687168	10.62	2763122	11.80	2451164	15.82	1234846	18.51
022	SAMPLE	193094-005	1693598	10.62	2771918	11.80	2457666	15.81	1231709	18.51
023	SAMPLE	193094-002	1729490	10.61	2855778	11.79	2454714	15.82	1248802	18.51
024	SAMPLE	193167-001	1730051	10.61	2839053	11.79	2471153	15.82	1231455	18.51
025	SAMPLE	193167-002	1681793	10.61	2788329	11.80	2479313	15.81	1223752	18.51
026	SAMPLE	193167-003	1716938	10.61	2827280	11.79	2483903	15.81	1245334	18.51
027	SAMPLE	193152-001	1695332	10.62	2776459	11.80	2488075	15.81	1234821	18.51
028	SAMPLE	193145-001	1717827	10.62	2791285	11.80	2423401	15.82	1224335	18.52
029	MS	QC377755	1706662	10.62	2800748	11.80	2462542	15.83	1227644	18.52
030	MSD	QC377756	1721536	10.62	2821314	11.80	2461619	15.83	1237137	18.52

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447094064

Instrument : MSVOA05 Begun : 03/06/07 07:44
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec601	X	IB			03/06/07 07:44	1.0	1	
002	ec602	TUN	BFB			03/06/07 08:14	1.0	2	
003	ec603	CCV/BS	QC377629	Water	122726	03/06/07 08:31	1.0	3 4 5 1	
004	ec604	BSD	QC377630	Water	122726	03/06/07 09:14	1.0	3 4 5 1	
005	ec605	X	IB			03/06/07 09:46	1.0	1	
006	ec606	BLANK	QC377631	Water	122726	03/06/07 10:18	1.0	1	
007	ec607	SAMPLE	193057-002	Water	122726	03/06/07 10:53	1.0	1	pH > 2
008	ec608	SAMPLE	193057-003	Water	122726	03/06/07 11:25	1.0	1	pH > 2
009	ec609	SAMPLE	193138-002	Water	122726	03/06/07 11:57	1.429	1	
010	ec610	SAMPLE	193057-004	Water	122726	03/06/07 12:29	1.0	1	pH > 2
011	ec611	SAMPLE	193055-015	Water	122726	03/06/07 13:01	1.0	1	
012	ec612	SAMPLE	193055-011	Water	122726	03/06/07 13:33	1.0	1	
013	ec613	SAMPLE	193055-012	Water	122726	03/06/07 14:05	1.0	1	
014	ec614	SAMPLE	193055-013	Water	122726	03/06/07 14:37	1.0	1	
015	ec615	SAMPLE	193055-014	Water	122726	03/06/07 15:09	1.0	1	
016	ec616	SAMPLE	193109-001	Water	122726	03/06/07 15:41	1.0	1	
017	ec617	SAMPLE	193108-009	Water	122726	03/06/07 16:13	1.0	1	
018	ec618	SAMPLE	193108-010	Water	122726	03/06/07 16:45	1.0	1	
019	ec619	SAMPLE	193108-011	Water	122726	03/06/07 17:17	1.0	1	
020	ec620	SAMPLE	193108-012	Water	122726	03/06/07 17:49	2.0	1	
021	ec621	SAMPLE	192902-001	Water	122726	03/06/07 18:21	10.0	1	
022	ec622	SAMPLE	193063-003	Water	122726	03/06/07 18:52	1.0	1	
023	ec623	SAMPLE	193063-006	Water	122726	03/06/07 19:24	1.429	1	headspace <= 1 mL
024	ec624	SAMPLE	193063-008	Water	122726	03/06/07 19:56	1.0	1	headspace > 1 mL
025	ec625	X	IB			03/06/07 20:28	1.0	1	
026	ec626	X	IB			03/06/07 21:00	1.0	1	
027	ec627	X	IB			03/06/07 21:32	1.0	1	
028	ec628	X	TVH2000			03/06/07 22:04	1.0	1	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/07/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447095480

Instrument : MSVOA05
Method : EPA 8260B

Begun : 03/07/07 07:20
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec701	X	IB			03/07/07 07:20	1.0	1	
002	ec702	TUN	BFB			03/07/07 07:47	1.0	2	
003	ec703	CCV/LCS	QC377872	Water	122784	03/07/07 08:02	1.0	3 4 5 1	
004	ec704	X	IB			03/07/07 08:52	1.0	1	
005	ec705	BLANK	QC377866	Water	122784	03/07/07 09:24	1.0	1	
006	ec706	SAMPLE	193166-001	Water	122784	03/07/07 09:57	1.0	1	
007	ec707	SAMPLE	193166-020	Water	122784	03/07/07 10:29	1.0	1	pH > 2
008	ec708	SAMPLE	193108-021	Water	122784	03/07/07 11:01	1.0	1	
009	ec709	SAMPLE	193108-012	Water	122784	03/07/07 11:32	1.0	1	
010	ec710	MSS	193108-007	Water	122784	03/07/07 12:04	1.0	1	
011	ec711	SAMPLE	193108-013	Water	122784	03/07/07 12:36	1.0	1	
012	ec712	SAMPLE	193108-015	Water	122784	03/07/07 13:08	1.0	1	
013	ec713	SAMPLE	193108-019	Water	122784	03/07/07 13:40	1.0	1	
014	ec714	SAMPLE	193108-020	Water	122784	03/07/07 14:12	1.0	1	
015	ec715	SAMPLE	193108-022	Water	122784	03/07/07 14:44	1.0	1	
016	ec716	SAMPLE	193137-002	Water	122784	03/07/07 15:16	1.0	1	
017	ec717	SAMPLE	193137-003	Water	122784	03/07/07 15:48	1.0	1	
018	ec718	SAMPLE	193137-004	Water	122784	03/07/07 16:20	1.0	1	
019	ec719	SAMPLE	193137-005	Water	122784	03/07/07 16:52	1.0	1	
020	ec720	SAMPLE	193108-008	Water	122784	03/07/07 17:23	2.500	1	
021	ec721	SAMPLE	193157-001	Water	122784	03/07/07 17:55	25.0	1	
022	ec722	MS	QC377890	Water	122784	03/07/07 18:27	1.0	1 3 4 5	
023	ec723	MSD	QC377891	Water	122784	03/07/07 18:59	1.0	1 3 4 5	
024	ec724	X	IB			03/07/07 19:31	1.0	1	
025	ec725	X	IB			03/07/07 20:03	1.0	1	
026	ec726	X	IB			03/07/07 20:35	1.0	1	
027	ec727	X	TVH2000			03/07/07 21:07	1.0	1	

Analyst: BO Date: 03/08/07 Reviewer: LW Date: 03/08/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447096916

Instrument : MSVOA05 Begun : 03/08/07 07:16
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec801	X	IB			03/08/07 07:16	1.0	1	
002	ec802	X	BFB			03/08/07 07:45	1.0	2	
003	ec803	X	QC378062	Water	122836	03/08/07 08:01	1.0	3 4 5 1	
004	ec804	X	IB			03/08/07 08:59	1.0	1	
005	ec805	X	QC378063	Water	122836	03/08/07 09:31	1.0	1	
006	ec806	SAMPLE	193174-001	Water	122836	03/08/07 10:02	1.0	1	
007	ec807	X	BFB			03/08/07 10:33	1.0	2	
008	ec808	X	QC378062	Water	122836	03/08/07 10:49	1.0	3 4 5 1	
009	ec809	TUN	BFB			03/08/07 11:20	1.0	2	
010	ec810	CCV/LCS	QC378062	Water	122836	03/08/07 11:36	1.0	3 4 5 1	
011	ec811	X	IB			03/08/07 12:22	1.0	1	
012	ec812	BLANK	QC378063	Water	122836	03/08/07 12:54	1.0	1	
013	ec813	SAMPLE	193174-001	Water	122836	03/08/07 13:26	1.0	1	
014	ec814	SAMPLE	193174-002	Water	122836	03/08/07 13:58	1.0	1	
015	ec815	SAMPLE	193174-003	Water	122836	03/08/07 14:30	1.0	1	
016	ec816	SAMPLE	193174-004	Water	122836	03/08/07 15:02	1.0	1	
017	ec817	SAMPLE	193174-005	Water	122836	03/08/07 15:34	1.0	1	
018	ec818	SAMPLE	193174-006	Water	122836	03/08/07 16:06	1.0	1	
019	ec819	SAMPLE	193174-007	Water	122836	03/08/07 16:38	1.0	1	
020	ec820	SAMPLE	193174-008	Water	122836	03/08/07 17:10	1.0	1	
021	ec821	MSS	193108-023	Water	122836	03/08/07 17:41	1.0	1	
022	ec822	SAMPLE	193108-024	Water	122836	03/08/07 18:13	1.0	1	
023	ec823	SAMPLE	193108-025	Water	122836	03/08/07 18:45	1.0	1	
024	ec824	SAMPLE	193108-026	Water	122836	03/08/07 19:17	1.0	1	
025	ec825	SAMPLE	193108-027	Water	122836	03/08/07 19:49	1.0	1	
026	ec826	SAMPLE	193194-003	Water	122836	03/08/07 20:21	1.0	1	
027	ec827	SAMPLE	193225-007	Water	122836	03/08/07 20:53	1.0	1	
028	ec828	SAMPLE	193157-001	Water	122836	03/08/07 21:24	8.333	1	
029	ec829	SAMPLE	193166-020	Water	122836	03/08/07 21:56	1.0	1	pH > 2
030	ec830	MS	QC378166	Water	122836	03/08/07 22:28	1.0	1 3 4 5	
031	ec831	MSD	QC378167	Water	122836	03/08/07 23:00	1.0	1 3 4 5	
032	ec832	X	IB			03/08/07 23:32	1.0	1	
033	ec833	X	IB			03/09/07 00:04	1.0	1	
034	ec834	X	IB			03/09/07 00:36	1.0	1	
035	ec835	SAMPLE	193050-001	Water	122836	03/09/07 01:07	1.0	1	
036	ec836	SAMPLE	193050-002	Water	122836	03/09/07 01:39	1.0	1	
037	ec837	X	TVH2000			03/09/07 02:11	1.0	1	

BO 03/09/07 : ec810 used different aliquot of s5537

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447098391

Instrument : MSVOA05 Begun : 03/09/07 07:51
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec901	X	IB			03/09/07 07:51	1.0	1	
002	ec902	X	BFB			03/09/07 08:19	1.0	2	
003	ec903	X	QC378308	Water	122894	03/09/07 08:35	1.0	3 4 5 1	
004	ec904	X	BFB			03/09/07 09:17	1.0	2	
005	ec905	X	QC378308	Water	122894	03/09/07 09:33	1.0	3 4 5 1	
006	ec906	TUN	BFB			03/09/07 10:07	1.0	2	
007	ec907	CCV	40PPB			03/09/07 10:23	1.0	6 7 8 1	
008	ec908	BS	QC378308	Water	122894	03/09/07 11:16	1.0	3 4 5 1	
009	ec909	BSD	QC378309	Water	122894	03/09/07 11:48	1.0	3 4 5 1	
010	ec910	X	IB			03/09/07 12:20	1.0	1	
011	ec911	BLANK	QC378310	Water	122894	03/09/07 12:52	1.0	1	
012	ec912	SAMPLE	193276-004	Water	122894	03/09/07 13:24	1.0	1	
013	ec913	SAMPLE	193166-020	Water	122894	03/09/07 13:56	1.0	1	pH > 2
014	ec914	SAMPLE	193218-004	Water	122894	03/09/07 14:28	1.0	1	
015	ec915	SAMPLE	193218-024	Water	122894	03/09/07 14:59	1.0	1	
016	ec916	SAMPLE	193108-008	Water	122894	03/09/07 15:31	1.0	1	
017	ec917	SAMPLE	193236-001	Water	122894	03/09/07 16:03	1.0	1	
018	ec918	SAMPLE	193236-005	Water	122894	03/09/07 16:35	1.0	1	
019	ec919	SAMPLE	193236-006	Water	122894	03/09/07 17:07	1.0	1	
020	ec920	SAMPLE	193236-007	Water	122894	03/09/07 17:39	1.0	1	
021	ec921	SAMPLE	193236-008	Water	122894	03/09/07 18:11	1.0	1	
022	ec922	SAMPLE	193236-010	Water	122894	03/09/07 18:43	1.0	1	
023	ec923	SAMPLE	193236-011	Water	122894	03/09/07 19:15	1.0	1	
024	ec924	SAMPLE	193236-013	Water	122894	03/09/07 19:46	1.0	1	
025	ec925	SAMPLE	193236-014	Water	122894	03/09/07 20:18	1.0	1	
026	ec926	SAMPLE	193236-015	Water	122894	03/09/07 20:50	1.0	1	
027	ec927	SAMPLE	193236-002	Water	122894	03/09/07 21:22	3.333	1	
028	ec928	SAMPLE	193236-003	Water	122894	03/09/07 21:54	8.333	1	
029	ec929	X	IB			03/09/07 22:26	1.0	1	
030	ec930	X	IB			03/09/07 22:57	1.0	1	
031	ec931	X	IB			03/09/07 23:29	1.0	1	
032	ec932	X	TVH2000			03/10/07 00:01	1.0	1	

BO 03/09/07 : ec907 used new stds

Analyst: BO Date: 03/12/07 Reviewer: LW Date: 03/12/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422 6=S5618 7=S5595 8=S5194

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497038053

Instrument : MSVOA10 Begun : 01/26/07 10:13
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jaq01	X	IB			01/26/07 10:13	1.0	1	
002	jaq02	TUN	BFB			01/26/07 10:45	1.0	2	
003	jaq03	CCV	25PPB			01/26/07 11:03	1.0	3 4 5 1	
004	jaq04	TUN	BFB			01/26/07 11:48	1.0	2	
005	jaq05	CCV	25PPB			01/26/07 12:05	1.0	3 4 5 1	
006	jaq06	ICV/BS	QC373244	Water	121602	01/26/07 12:51	1.0	6 7 8 1	
007	jaq07	X	LP			01/26/07 14:26	1.0	1	
008	jaq08	TUN	BFB			01/26/07 15:00	1.0	2	
009	jaq09	X	IB			01/26/07 15:18	1.0	1	
010	jaq10	IB	CALIB			01/26/07 15:51	1.0	1	
011	jaq11	ICAL	0.25/0.5PPB			01/26/07 16:23	1.0	3 9 10 1	
012	jaq12	ICAL	0.5/1PPB			01/26/07 16:56	1.0	3 9 10 1	
013	jaq13	ICAL	2PPB			01/26/07 17:28	1.0	3 9 10 1	
014	jaq14	ICAL	5PPB			01/26/07 18:01	1.0	3 9 10 1	
015	jaq15	ICAL	10PPB			01/26/07 18:34	1.0	3 9 10 1	
016	jaq16	ICAL	20PPB			01/26/07 19:06	1.0	3 9 10 1	
017	jaq17	ICAL	50PPB			01/26/07 19:39	1.0	3 9 10 1	
018	jaq18	ICAL	75PPB			01/26/07 20:12	1.0	3 9 10 1	
019	jaq19	ICAL	100PPB			01/26/07 20:44	1.0	3 9 10 1	
020	jaq20	ICV	ICVGAS25PPB			01/26/07 21:17	1.0	8 1	
021	jaq21	ICV	ICV25PPB			01/26/07 21:50	1.0	7 6 1	
022	jaq22	X	IB			01/26/07 22:23	1.0	1	
023	jaq23	X	IB			01/26/07 22:56	1.0	1	
024	jaq24	X	IB			01/26/07 23:28	1.0	1	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5322 7=S5052 8=S5241 9=S5219 10=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497094080

Instrument : MSVOA10 Begun : 03/06/07 08:00
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jc601	X	IB			03/06/07 08:00	1.0	1	
002	jc602	TUN	BFB			03/06/07 08:31	1.0	2	
003	jc603	CCV	25PPB			03/06/07 08:49	1.0	3 4 1	
004	jc604	CCV	TVH1000PPB			03/06/07 09:23	1.0	5 1	
005	jc605	LCS	QC377636	Water	122728	03/06/07 09:55	1.0	6 7 8 1	
006	jc606	BS	QC377637	Water	122728	03/06/07 10:28	1.0	9 1	
007	jc607	BSD	QC377638	Water	122728	03/06/07 11:01	1.0	9 1	
008	jc608	TUN	BFB			03/06/07 11:30	1.0	2	
009	jc609	CCV	25PPB			03/06/07 11:47	1.0	3 4 1	
010	jc610	CCV	TVH800PPB			03/06/07 12:20	1.0	5 1	
011	jc611	X	IB			03/06/07 12:52	1.0	1	
012	jc612	BLANK	QC377635	Water	122728	03/06/07 13:25	1.0	1	
013	jc613	MSS	193108-001	Water	122728	03/06/07 13:58	1.0	1	
014	jc614	SAMPLE	193108-006	Water	122728	03/06/07 14:31	1.0	1	
015	jc615	SAMPLE	193094-012	Water	122728	03/06/07 15:04	1.0	1	
016	jc616	MDLCHECK	187659-009	Water	122728	03/06/07 15:37	1.0	5 1	
017	jc617	SAMPLE	193145-002	Water	122728	03/06/07 16:10	1.0	1	
018	jc618	SAMPLE	193168-001	Water	122728	03/06/07 16:42	1.0	1	pH > 2
019	jc619	SAMPLE	193152-002	Water	122728	03/06/07 17:15	1.0	1	
020	jc620	SAMPLE	193152-003	Water	122728	03/06/07 17:48	1.0	1	
021	jc621	SAMPLE	193152-004	Water	122728	03/06/07 18:20	1.0	1	
022	jc622	SAMPLE	193094-005	Water	122728	03/06/07 18:53	2.0	1	
023	jc623	SAMPLE	193094-002	Water	122728	03/06/07 19:25	3.333	1	
024	jc624	SAMPLE	193167-001	Water	122728	03/06/07 19:58	1.0	1	
025	jc625	SAMPLE	193167-002	Water	122728	03/06/07 20:30	1.0	1	
026	jc626	SAMPLE	193167-003	Water	122728	03/06/07 21:03	1.0	1	
027	jc627	SAMPLE	193152-001	Water	122728	03/06/07 21:36	2.500	1	
028	jc628	SAMPLE	193145-001	Water	122728	03/06/07 22:09	8.333	1	
029	jc629	MS	QC377755	Water	122728	03/06/07 22:42	1.0	1 6 7 8	
030	jc630	MSD	QC377756	Water	122728	03/06/07 23:15	1.0	1 6 7 8	
031	jc631	X	IB			03/06/07 23:47	1.0	1	

Analyst: ACM Date: 03/07/07 Reviewer: LW Date: 03/07/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5430 5=S5628 6=S5537 7=S5422 8=S5614 9=S5264

REPORTING SUMMARY FOR 193108 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACECCCTCZCCDICZCCXCBLBYYOTBCBCZR	M MEEELSBE AKELACA EPCBPMPAOECBZLLTYMAFAM4	E EA 1N E1 1 1MM1L1 A MKE1E11 2 MZ MOX E M1EF	2 3 2 2 3 2 2
193108-001	MSVOA10	03/06/07 13:58	1.0	| + | + | +

REPORTING SUMMARY FOR 193108 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	1,1,2-TCA	1,2,3-TCB	1,2,4-TCB	1,2-DCA	1,2-DCP	1,3-DCP	2-CEVE	2-CLETHYL	4-MEK	ACETONE	ACROLEIN	ACRYLONITRILE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DCE	CIS-1,3-DCP	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	ETHYLBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROETHANE	IODOMETHANE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	NITROBENZENE	PENTACHLOROETHANE	STYRENE	TCE	TETRACHLOROETHYLENE	TOLUENE	TRANS-1,2-DCE	TRANS-1,3-DCP	TRIBROMOBENZENE	TRIBROMOMETHANE	TRICHLOROFLUOROMETHANE	VINYL ACETATE	VINYL CHLORIDE	XYLENE (TOTAL)
QC377637	MSVOA10	03/06/07 10:28	1.0																																																				
QC377638	MSVOA10	03/06/07 11:01	1.0																																																				
QC377755	MSVOA10	03/06/07 22:42	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377756	MSVOA10	03/06/07 23:15	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377866	MSVOA05	03/07/07 09:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377872	MSVOA05	03/07/07 08:02	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377890	MSVOA05	03/07/07 18:27	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377891	MSVOA05	03/07/07 18:59	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378062	MSVOA05	03/08/07 11:36	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378063	MSVOA05	03/08/07 12:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378166	MSVOA05	03/08/07 22:28	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378167	MSVOA05	03/08/07 23:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378064	MSVOA06	03/08/07 08:35	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378065	MSVOA06	03/08/07 09:30	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378066	MSVOA06	03/08/07 11:02	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378308	MSVOA05	03/09/07 11:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378309	MSVOA05	03/09/07 11:48	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378310	MSVOA05	03/09/07 12:52	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/6/07
PREPPED BY: Zo

122726

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	192902-1		A	<2			5	m 10x, anomalous ~~void~~ run	A
2	193063-3		F	↓				m 1x, ~~total~~ OD	FOAM
3	-6		D	<2	100x			m 1.42x, OD	↓
4	-8		~~C~~A	↓	12mL/ev			m ~~1.42x~~, OD 1X	Load last
5	193057-2		C	7				1x	
6	-3		↓	↓				↓	
7	-4		↓	↓				↓	
8	193109-1		B	<2				1x PUT OFF	
9	193055-15		B	↓				m 1x, MECL2 ~~BL~~ +	TB
10	-11		↓	↓				1x	
11	-12		↓	↓				↓	
12	-13		↓	↓				↓	
13	-14		I	↓				↓	
14	193108-9		B	↓				1x	
15	-10		↓	↓				↓	
16	-11		↓	↓				2x	
17	-12		↓	<2				1x PUT OFF	
18	-13		↓	—					
19	193138-2 #		C	<2			5	m 1.42x, OD	
20									
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7/23/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/6/07
PREPPED BY.

WATER

12272g

16 + MS/MSD

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193094 - 2		D	<2			10	RR 3.3x OD	
2	12		B	↓			↓	RR 1X OD high NT	
3	193112 - 2		B	—				RR 1X Mod. MB contam	on MS9
4	~~192877 4~~							~~RR 1X PLE low~~	
5	187659 - 9			—			10	MDL v C25,16 TVH	
6	193151 - 1		B	—				1X	
7	2							62.5X	
8	3							2X	Put off
9	4							1X	
10	5							16.7X	
11	6		↓	—				50X	
12	193152 - 1		A	<2				~~3.3X~~ 2.5X	
13	2							1X	
14	3							~~8.3X~~ 1X	
15	4							1X	
16	193108 - 1		BCDE	<2				1X MS/MSD	
17	26		B	~~Bottle~~	~~Kn 3/6/07~~			RR 2X PLE OK	
18	193094 - 5		D	<2			10	8.3X	RUSH 3-F
19	193145 - 1		H					1X	
20	2			<2				1X	
21	193168 - 1		B	2.5				A	
22	193167 - 001		C	<2				A	
23	-002		D					TD	
24	-003		A						
25									
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7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/7/07
PREPPED BY: Zie

122784 WATER

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193108-12		D	<2			5	MS 1x, OD	
2	193166-1		A	↓				TB	
3	↓ -20		↓	7				1x Comp. 7/13V Foam	Load test
4	193157-1		H	<2				2.5x	
5	193108-7		IJKL	<2				1x, MS/MS/MSD	
6	-8		F	↓				2.5x	
7	-13		B	<2				1x	
8	-15		↓						
9	-19		D						
10	-20		↓						
11	-21		A					TB	
12	-22		E					1x	
13	193137-2		B						
14	-3								
15	-4								
16	-5		↓	↓				↓	
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 7/8/07
PREPPED BY: Zo

122836 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			E	—			5	m 1x, DP	Put OF m 6
1	193108-8		I	<2				m 8.3x, DP	
2	193157-1		B	7				m 1x, 5 amT	comm 7/13
3	193166-20		B	<2				m 10 MeCl2 + HCl	
4	193174-1		B						
5	-2								
6	-3		BDEF	<2				1x MSS/MS/MSD	
7	193108-23		D						
8	-24								
9	-25								
10	-26		B						
11	-27		A					1x	
12	193174-4								
13	-5								
14	-6								
15	-7								
16	-8		B				5	m 1x, clear —	
17	193194-3		A		NV			TB	
18	193225-7		C				5	m 1x, cu failure	
19	193174-1								
20									
21			A	<2			5	Storage Blank	
22	193050-1								
23	-2								
24									
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7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/9/07
PREPPED BY: [illegible]

122894 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193166-20	✓	B	7			5	me 1x, surr ↑, run	1st
2	193108-8		D	<2				me 1x, MeCl2 HCl 9	
3	193218-4		↓	↓				me 1x, 13DCP check	(interference)
4	↓ -24							me 1x, out of clock	
5	193276-4		A	<2	low			TB	
6	193236-1		B	↓				1x	
7	-2			<2	<4			3.33x Freon 113	
8	-3			↓	↓			8.33x Freon 113	
9	-5			<2				1x	
10	-6								
11	-7								
12	-8								
13	-10								
14	-11								
15	-13								
16	-14								
17	-15								
18	-16		↓	↓				↓ ~~out of~~	out of
19	193218-24		D	<2			5	me 1x, out of clock	
20	19								
21									
22									
23									
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7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW01	Batch#:	122778
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	101	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	122778
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07

Analyte	Result	RL	Diln Fac	Analyzed
alpha-BHC	ND	0.05	1.000	03/13/07
beta-BHC	ND	0.05	1.000	03/13/07
gamma-BHC	1.7	0.1	2.000	03/08/07
delta-BHC	ND	0.05	1.000	03/13/07
Heptachlor	1.0 C	0.05	1.000	03/13/07
Aldrin	ND	0.05	1.000	03/13/07
Heptachlor epoxide	ND	0.05	1.000	03/13/07
Endosulfan I	ND	0.05	1.000	03/13/07
Dieldrin	ND	0.1	1.000	03/13/07
4,4'-DDE	ND	0.1	1.000	03/13/07
Endrin	ND	0.1	1.000	03/13/07
Endosulfan II	ND	0.1	1.000	03/13/07
Endosulfan sulfate	ND	0.1	1.000	03/13/07
4,4'-DDD	ND	0.1	1.000	03/13/07
4,4'-DDT	ND	0.1	1.000	03/13/07
alpha-Chlordane	0.08	0.05	1.000	03/13/07
gamma-Chlordane	ND	0.05	1.000	03/13/07
Methoxychlor	ND	0.5	1.000	03/13/07
Endrin ketone	ND	0.1	1.000	03/13/07
Toxaphene	ND	1.0	1.000	03/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	36 *	65-135	1.000	03/13/07
Decachlorobiphenyl	71	65-135	1.000	03/13/07

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0301073A	Batch#:	122778
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	79	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0301073B	Batch#:	122778
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07

Analyte	Result	RL	Diln Fac	Analyzed
alpha-BHC	ND	0.05	1.000	03/13/07
beta-BHC	ND	0.05	1.000	03/13/07
gamma-BHC	1.7	0.1	2.000	03/08/07
delta-BHC	ND	0.05	1.000	03/13/07
Heptachlor	0.9 C	0.05	1.000	03/13/07
Aldrin	ND	0.05	1.000	03/13/07
Heptachlor epoxide	ND	0.05	1.000	03/13/07
Endosulfan I	ND	0.05	1.000	03/13/07
Dieldrin	ND	0.1	1.000	03/13/07
4,4'-DDE	ND	0.1	1.000	03/13/07
Endrin	ND	0.1	1.000	03/13/07
Endosulfan II	ND	0.1	1.000	03/13/07
Endosulfan sulfate	ND	0.1	1.000	03/13/07
4,4'-DDD	ND	0.1	1.000	03/13/07
4,4'-DDT	ND	0.1	1.000	03/13/07
alpha-Chlordane	0.06	0.05	1.000	03/13/07
gamma-Chlordane	0.5 C	0.05	1.000	03/13/07
Methoxychlor	ND	0.5	1.000	03/13/07
Endrin ketone	ND	0.1	1.000	03/13/07
Toxaphene	ND	1.0	1.000	03/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	33 *	65-135	1.000	03/13/07
Decachlorobiphenyl	65	65-135	1.000	03/13/07

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW08	Batch#:	122778
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	86	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW103	Batch#:	122778
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	93	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW104	Batch#:	122778
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	101	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW03	Batch#:	122778
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.1

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	98	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW05	Batch#:	122778
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	89	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0302071A	Batch#:	122778
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	95	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377837	Batch#:	122778
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	94	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377838	Batch#:	122778
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1448	72	65-135
Heptachlor	0.2000	0.1405	70	65-135
Aldrin	0.2000	0.1461	73	65-135
Dieldrin	0.4000	0.3168	79	65-135
Endrin	0.4000	0.2999	75	65-135
4,4'-DDT	0.4000	0.3084	77	65-135

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	73	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW01	Batch#:	122778
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: MS Lab ID: QC377839

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.005935	0.1961	0.1878	96	65-135
Heptachlor	<0.006222	0.1961	0.1775	91	65-135
Aldrin	<0.004301	0.1961	0.1816	93	65-135
Dieldrin	<0.008854	0.3922	0.3621	92	65-135
Endrin	<0.01369	0.3922	0.3750	96	65-135
4,4'-DDT	<0.01487	0.3922	0.3793	97	65-135

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	97	65-135

Type: MSD Lab ID: QC377840

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1961	0.1875	96	65-135	0	35
Heptachlor	0.1961	0.1930	98	65-135	8	35
Aldrin	0.1961	0.1884	96	65-135	4	35
Dieldrin	0.3922	0.3547	90	65-135	2	35
Endrin	0.3922	0.3771	96	65-135	1	35
4,4'-DDT	0.3922	0.3872	99	65-135	2	35

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	98	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW104	Batch#:	122778
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: MS Lab ID: QC377841

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.005821	0.1923	0.1773	92	65-135
Heptachlor	<0.006103	0.1923	0.1443	75	65-135
Aldrin	<0.004218	0.1923	0.1468	76	65-135
Dieldrin	<0.008683	0.3846	0.3149	82	65-135
Endrin	<0.01343	0.3846	0.3108	81	65-135
4,4'-DDT	<0.01459	0.3846	0.2770	72	65-135

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	99	65-135

Type: MSD Lab ID: QC377842

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1923	0.1787	93	65-135	1	35
Heptachlor	0.1923	0.1699	88	65-135	16	35
Aldrin	0.1923	0.1742	91	65-135	17	35
Dieldrin	0.3846	0.3371	88	65-135	7	35
Endrin	0.3846	0.3553	92	65-135	13	35
4,4'-DDT	0.3846	0.3455	90	65-135	22	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	94	65-135

RPD= Relative Percent Difference

Confirmation Report for 193108 PEST Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193108-008	1349MW100	gamma-BHC	1.721	1.350	24	-22
193108-008	1349MW100	Heptachlor	0.9953 C	0.2741	114	-72
193108-008	1349MW100	alpha-Chlordane	0.07507	0.06383	16	-15
193108-011	DUP0301073B	gamma-BHC	1.659	1.274	26	-23
193108-011	DUP0301073B	Heptachlor	0.9274 C	0.3589	88	-61
193108-011	DUP0301073B	alpha-Chlordane	0.06213	0.06540	5	5
193108-011	DUP0301073B	gamma-Chlordane	0.5267 C	0.06374	157	-88

C=RPD between columns exceeds 40%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807085473001
Units : pg

Name : gc23pest_059
Date : 28-FEB-2007 22:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	059_022	807085473022	PEST_1	28-FEB-2007 22:36	S5553
L2	059_023	807085473023	PEST_2	28-FEB-2007 22:58	S5554
L3	059_024	807085473024	PEST_3	28-FEB-2007 23:19	S5555
L4	059_025	807085473025	PEST_4	28-FEB-2007 23:40	S5556
L5	059_026	807085473026	PEST_5	01-MAR-2007 00:02	S5049
L6	059_027	807085473027	PEST_6	01-MAR-2007 00:23	S5050
L7	059_028	807085473028	PEST_7	01-MAR-2007 00:45	S5263

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	6115.5	6454.2	5846.2	6567.8	6724.9	5499.2	5269.4	AVRG		1.65E-4		6068.2	9	0.995	20	
gamma-BHC	A	5694.5	5871.8	5170.7	5857.7	5987.0	4877.3	4663.3	AVRG		1.84E-4		5446.0	10	0.995	20	
beta-BHC	A	3093.0	2690.8	2216.0	2503.9	2472.3	1948.7	1885.3	AVRG		4.16E-4		2401.4	18	0.995	20	
delta-BHC	A	7922.5	6793.0	5497.5	6304.0	6162.3	4857.5	4660.3	AVRG		1.66E-4		6028.1	19	0.995	20	
Heptachlor	A	4698.5	5110.4	4474.3	5399.9	5428.9	4253.5	4132.6	AVRG		2.09E-4		4785.4	11	0.995	20	
Aldrin	A	5412.0	5690.8	4952.4	5642.6	5636.0	4614.3	4339.9	AVRG		1.93E-4		5184.0	11	0.995	20	
Heptachlor epoxide	A	4867.0	5102.2	4413.5	5032.6	4990.3	4028.9	3731.9	AVRG		2.18E-4		4595.2	12	0.995	20	
gamma-Chlordane	A	4672.5	4955.6	4273.2	4933.9	4826.5	3944.0	3711.3	AVRG		2.24E-4		4473.8	11	0.995	20	
alpha-Chlordane	A	4527.5	4617.6	4059.4	4655.0	4486.4	3687.4	3454.6	AVRG		2.37E-4		4212.5	11	0.995	20	
4,4'-DDE	A	4043.8	4362.7	3612.4	4484.4	4278.4	3393.2	3037.6	AVRG		2.57E-4		3887.5	14	0.995	20	
Endosulfan I	A	4463.5	4447.8	4062.1	4760.8	4705.7	3752.4	3517.9	AVRG		2.36E-4		4244.3	11	0.995	20	
Dieldrin	A	4508.0	4778.4	4066.1	4733.7	4575.0	3715.6	3232.8	AVRG		2.36E-4		4229.9	14	0.995	20	
Endrin	A	3492.5	3832.8	3195.7	3928.1	3721.8	2952.9	2653.8	AVRG		2.94E-4		3396.8	14	0.995	20	
4,4'-DDD	A	3098.8	3559.3	2791.0	3450.0	3371.6	2540.2	2498.1	AVRG		3.29E-4		3044.1	14	0.995	20	
Endosulfan II	A	3837.3	3922.2	3429.1	4106.8	3660.0	3112.4	2642.9	AVRG		2.83E-4		3530.1	14	0.995	20	
4,4'-DDT	A	2764.5	3194.2	2641.9	3574.7	3233.0	2648.0	2454.1	AVRG		3.41E-4		2930.1	14	0.995	20	
Methoxychlor	A	1166.4	1310.4	1070.6	1421.1	1208.3	978.40	774.77	AVRG		8.83E-4		1132.8	19	0.995	20	
Endosulfan sulfate	A	3606.5	3665.1	2981.6	3582.4	3260.5	2653.7	2410.2	AVRG		3.16E-4		3165.7	16	0.995	20	
Endrin ketone	A	3997.8	4161.7	3390.9	4106.6	3677.8	3062.7	2658.5	AVRG		2.79E-4		3579.4	16	0.995	20	
TCMX	A	3358.3	3550.7	3285.1	3528.6	3627.0	2925.5	2781.3	AVRG		3.04E-4		3293.8	10	0.995	20	
Decachlorobiphenyl	A	2177.3	2599.7	2129.6	2815.6	2241.2	1986.2	1651.3	AVRG		4.49E-4		2228.7	17	0.995	20	
alpha-BHC	B	10809	10425	9337.1	9604.7	9797.3	9808.3	9035.8	AVRG		1.02E-4		9830.9	6	0.995	20	
gamma-BHC	B	11227	10378	8297.3	8673.7	8712.8	8769.8	8021.8	AVRG		1.09E-4		9154.3	13	0.995	20	
beta-BHC	B	5483.0	4160.2	3508.4	3482.9	3498.0	3434.4	3213.5	AVRG		2.61E-4		3825.8	**21**	0.995	20	rsd ***
delta-BHC	B	14236	10353	8784.7	8597.1	8867.6	8679.8	7889.2	AVRG		1.04E-4		9629.6	**22**	0.995	20	rsd ***
Heptachlor	B	8662.5	8368.8	7423.1	7748.2	7953.0	7843.8	7186.1	AVRG		1.27E-4		7883.6	6	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	9648.0	8777.2	7868.5	8006.2	8153.0	8086.7	7399.4	AVRG		1.21E-4		8277.0	9	0.995	20	
Heptachlor epoxide	B	8742.5	7878.0	6944.5	6974.2	7062.1	6924.7	6192.3	AVRG		1.38E-4		7245.5	11	0.995	20	
gamma-Chlordane	B	8552.0	7800.0	6824.1	6930.4	7049.0	7051.8	6385.4	AVRG		1.38E-4		7227.5	10	0.995	20	
alpha-Chlordane	B	7912.0	7105.4	6359.1	6591.1	6696.6	6580.5	5993.6	AVRG		1.48E-4		6748.3	9	0.995	20	
4,4'-DDE	B	7251.5	6730.5	5996.3	6253.4	6383.8	6206.8	5049.3	AVRG		1.60E-4		6267.4	11	0.995	20	
Endosulfan I	B	8241.0	7139.4	6319.4	6144.6	6244.3	6217.8	5626.9	AVRG		1.52E-4		6561.9	13	0.995	20	
Dieldrin	B	7889.3	7264.4	6410.2	6565.8	6674.3	6345.5	5131.2	AVRG		1.51E-4		6611.5	13	0.995	20	
Endrin	B	6419.8	5915.5	5107.9	5289.8	5382.8	5182.8	4246.5	AVRG		1.86E-4		5363.6	13	0.995	20	
4,4'-DDD	B	6069.8	5456.8	4823.1	4987.2	4976.1	5003.8	4165.7	AVRG		1.97E-4		5068.9	12	0.995	20	
Endosulfan II	B	6870.8	5969.8	5320.7	5726.8	5361.8	5164.3	4373.8	AVRG		1.80E-4		5541.1	14	0.995	20	
4,4'-DDT	B	5687.3	5259.6	4741.9	5067.5	5157.0	5206.7	4409.2	AVRG		1.97E-4		5075.6	8	0.995	20	
Methoxychlor	B	2387.0	2145.5	1868.4	1961.2	1895.0	1671.5	1232.5	AVRG		5.32E-4		1880.2	19	0.995	20	
Endosulfan sulfate	B	6506.5	5414.7	4664.0	4763.1	4674.3	4597.5	3904.8	AVRG		2.03E-4		4932.1	17	0.995	20	
Endrin ketone	B	7085.0	6075.4	5331.8	5481.1	5429.2	5261.9	4246.2	AVRG		1.80E-4		5558.7	16	0.995	20	
TCMX	B	5834.0	5686.8	5069.4	5191.3	5251.7	5172.2	4805.5	AVRG		1.89E-4		5287.3	7	0.995	20	
Decachlorobiphenyl	B	4371.0	4207.5	3709.2	4040.4	3853.4	3960.2	3655.9	AVRG		2.52E-4		3971.1	7	0.995	20	
Average EPA 8081A	A												(n=22)	14		20	
Average EPA 8081A	B												(n=22)	12		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_059
Calnum : 807085473001 Cal Date: 28-FEB-2007

ICV 807085473031 (059_031 01-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	6068.2	5358.7	25.00	22.08	pg	-12	15	
gamma-BHC	A	5446.0	4778.1	25.00	21.93	pg	-12	15	
beta-BHC	A	2401.4	1915.5	25.00	19.94	pg	**-20**	15	v- ***
delta-BHC	A	6028.1	5007.1	25.00	20.77	pg	**-17**	15	v- ***
Heptachlor	A	4785.4	4162.8	25.00	21.75	pg	-13	15	
Aldrin	A	5184.0	4599.3	25.00	22.18	pg	-11	15	
Heptachlor epoxide	A	4595.2	4034.0	25.00	21.95	pg	-12	15	
gamma-Chlordane	A	4473.8	4054.2	25.00	22.65	pg	-9	15	
alpha-Chlordane	A	4212.5	3705.7	25.00	21.99	pg	-12	15	
4,4'-DDE	A	3887.5	3711.3	25.00	23.87	pg	-5	15	
Endosulfan I	A	4244.3	3545.8	25.00	20.89	pg	**-16**	15	v- ***
Dieldrin	A	4229.9	3978.8	25.00	23.52	pg	-6	15	
Endrin	A	3396.8	3298.5	25.00	24.28	pg	-3	15	
4,4'-DDD	A	3044.1	2958.3	25.00	24.30	pg	-3	15	
Endosulfan II	A	3530.1	3305.2	25.00	23.41	pg	-6	15	
4,4'-DDT	A	2930.1	2809.4	25.00	23.97	pg	-4	15	
Methoxychlor	A	1132.8	1438.5	25.00	31.75	pg	**27**	15	v+ ***
Endosulfan sulfate	A	3165.7	2987.8	25.00	23.59	pg	-6	15	
Endrin ketone	A	3579.4	3522.4	25.00	24.60	pg	-2	15	
alpha-BHC	B	9830.9	9091.0	25.00	23.12	pg	-8	15	
gamma-BHC	B	9154.3	8367.2	25.00	22.85	pg	-9	15	
beta-BHC	B	3825.8	3234.8	25.00	21.14	pg	-15	15	
delta-BHC	B	9629.6	8297.8	25.00	21.54	pg	-14	15	
Heptachlor	B	7883.6	7380.5	25.00	23.40	pg	-6	15	
Aldrin	B	8277.0	7648.4	25.00	23.10	pg	-8	15	
Heptachlor epoxide	B	7245.5	6568.9	25.00	22.67	pg	-9	15	
gamma-Chlordane	B	7227.5	6745.7	25.00	23.33	pg	-7	15	
alpha-Chlordane	B	6748.3	6324.9	25.00	23.43	pg	-6	15	
4,4'-DDE	B	6267.4	6217.0	25.00	24.80	pg	-1	15	
Endosulfan I	B	6561.9	6020.6	25.00	22.94	pg	-8	15	
Dieldrin	B	6611.5	6419.4	25.00	24.27	pg	-3	15	
Endrin	B	5363.6	5419.9	25.00	25.26	pg	1	15	
4,4'-DDD	B	5068.9	4762.4	25.00	23.49	pg	-6	15	
Endosulfan II	B	5541.1	5207.6	25.00	23.49	pg	-6	15	
4,4'-DDT	B	5075.6	4848.1	25.00	23.88	pg	-4	15	
Methoxychlor	B	1880.2	2238.7	25.00	29.77	pg	**19**	15	v+ ***
Endosulfan sulfate	B	4932.1	4461.7	25.00	22.62	pg	-10	15	
Endrin ketone	B	5558.7	5221.4	25.00	23.48	pg	-6	15	
Average EPA 8081A	A	n=20					10	15	
Average EPA 8081A	B	n=20					8	15	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807102991001
Units : pg

Name : gc23pest_071
Date : 12-MAR-2007 20:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_018	807102991018	PEST_1	12-MAR-2007 20:02	S5553
L2	071_019	807102991019	PEST_2	12-MAR-2007 20:24	S5554
L3	071_020	807102991020	PEST_3	12-MAR-2007 20:45	S5555
L4	071_021	807102991021	PEST_4	12-MAR-2007 21:07	S5556
L5	071_022	807102991022	PEST_5	12-MAR-2007 21:28	S5049
L6	071_023	807102991023	PEST_6	12-MAR-2007 21:49	S5050
L7	071_024	807102991024	PEST_7	12-MAR-2007 22:11	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	8287.0	8058.0	7084.2	6450.4	7781.5	7196.6	6140.7	AVRG		1.37E-4		7285.5	11	0.995	20	
gamma-BHC	A	7685.0	7315.2	6305.2	5715.7	7032.6	6447.7	5570.9	AVRG		1.52E-4		6581.8	12	0.995	20	
beta-BHC	A	3095.0	2928.4	2536.5	2289.9	2848.4	2548.5	2289.8	AVRG		3.78E-4		2648.1	12	0.995	20	
delta-BHC	A	7865.5	7353.0	6225.3	5569.8	7232.0	6426.1	5629.1	AVRG		1.51E-4		6614.4	13	0.995	20	
Heptachlor	A	7061.0	6909.2	5846.8	5223.0	6670.1	6035.2	5240.0	AVRG		1.63E-4		6140.7	12	0.995	20	
Aldrin	A	7383.0	7000.8	6064.0	5394.5	6508.6	5980.0	5185.6	AVRG		1.61E-4		6216.6	13	0.995	20	
Heptachlor epoxide	A	6466.5	6208.2	5333.4	4709.8	5820.6	5240.0	4556.7	AVRG		1.83E-4		5476.4	13	0.995	20	
gamma-Chlordane	A	6326.0	6042.0	5931.0	4609.5	5730.7	5240.1	4648.2	AVRG		1.82E-4		5503.9	12	0.995	20	
alpha-Chlordane	A	5679.5	5906.6	4846.8	4488.6	5429.4	5019.6	4388.7	AVRG		1.96E-4		5108.5	11	0.995	20	
4,4'-DDE	A	5914.8	5544.2	4606.7	4006.1	5253.9	4670.3	3880.0	AVRG		2.07E-4		4839.4	16	0.995	20	
Endosulfan I	A	5736.5	5618.8	5025.3	4220.5	5485.7	4875.1	4360.5	AVRG		1.98E-4		5046.0	12	0.995	20	
Dieldrin	A	6185.5	5895.7	4968.6	4380.2	5518.9	4863.6	3946.9	AVRG		1.96E-4		5108.5	16	0.995	20	
Endrin	A	5318.0	4994.3	4129.3	3550.0	4688.8	4133.9	3466.7	AVRG		2.31E-4		4325.8	16	0.995	20	
4,4'-DDD	A	4665.8	4268.2	3556.8	3062.0	4163.8	3766.0	3232.3	AVRG		2.62E-4		3816.4	15	0.995	20	
Endosulfan II	A	5287.8	4906.4	4038.9	3541.4	4571.7	4019.6	3467.7	AVRG		2.35E-4		4261.9	16	0.995	20	
4,4'-DDT	A	4666.5	4529.0	3675.4	3162.4	4431.1	4004.5	3505.8	AVRG		2.50E-4		3996.4	14	0.995	20	
Methoxychlor	A	2148.9	1896.2	1492.0	1261.8	1727.5	1392.3		AVRG		6.05E-4		1653.1	20	0.995	20	
Endosulfan sulfate	A	4723.5	4400.2	3608.3	3073.6	4101.6	3672.3	3236.4	AVRG		2.61E-4		3830.8	16	0.995	20	
Endrin ketone	A	5529.5	5005.7	4116.5	3508.4	4729.0	4163.8	3492.8	AVRG		2.29E-4		4363.7	17	0.995	20	
TCMX	A	4485.0	4401.6	3829.2	3464.1	4099.7	3760.0	3207.8	AVRG		2.57E-4		3892.5	12	0.995	20	
Decachlorobiphenyl	A	4005.8	3708.2	2905.0	2467.0	3514.3	3034.9	2832.3	AVRG		3.12E-4		3209.6	17	0.995	20	
alpha-BHC	B	10379	9720.8	9185.8	9304.8	9341.7	9054.6	8238.2	AVRG		1.07E-4		9317.8	7	0.995	20	
gamma-BHC	B	10327	8906.2	8272.4	8372.2	8386.3	8023.0	7364.1	AVRG		1.17E-4		8521.5	11	0.995	20	
beta-BHC	B	3760.0	3533.6	3293.4	3339.2	3284.8	3079.7	2902.6	AVRG		3.02E-4		3313.3	8	0.995	20	
delta-BHC	B	9285.5	8811.2	8223.6	8557.3	8376.8	8132.5	7408.1	AVRG		1.19E-4		8399.3	7	0.995	20	
Heptachlor	B	8454.0	8021.6	7542.5	7710.8	7598.5	7156.8	6760.2	AVRG		1.31E-4		7606.3	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8790.5	8196.0	7792.6	7813.6	7763.5	7400.8	6843.9	AVRG		1.28E-4		7800.1	8	0.995	20	
Heptachlor epoxide	B	8002.5	7514.6	7027.2	6980.7	6926.6	6421.1	5915.4	AVRG		1.43E-4		6969.7	10	0.995	20	
gamma-Chlordane	B	7858.0	7429.4	6875.3	6965.6	6900.6	6487.2	6158.9	AVRG		1.44E-4		6953.6	8	0.995	20	
alpha-Chlordane	B	6847.5	7052.0	6504.1	6635.1	6608.6	6219.1	5837.2	AVRG		1.53E-4		6529.1	6	0.995	20	
4,4'-DDE	B	7323.0	6830.1	6308.5	6547.2	6376.3	5890.2	5096.6	AVRG		1.58E-4		6338.8	11	0.995	20	
Endosulfan I	B	7270.5	6953.4	6436.2	6445.6	6330.3	5873.0	5457.6	AVRG		1.56E-4		6395.2	10	0.995	20	
Dieldrin	B	7757.5	7306.0	6750.4	6812.5	6711.2	6128.7	5096.2	AVRG		1.50E-4		6651.8	13	0.995	20	
Endrin	B	6295.8	5776.3	5359.1	5473.8	5185.3	4745.9	4274.8	AVRG		1.89E-4		5301.6	12	0.995	20	
4,4'-DDD	B	6231.8	5746.1	5301.8	5462.1	5278.5	4796.5	4369.4	AVRG		1.88E-4		5312.3	11	0.995	20	
Endosulfan II	B	6138.5	6000.2	5397.2	5599.1	5438.2	5007.5	4334.7	AVRG		1.85E-4		5416.5	11	0.995	20	
4,4'-DDT	B	5267.3	5012.3	4765.4	5153.5	4940.4	4702.8	4415.9	AVRG		2.04E-4		4893.9	6	0.995	20	
Methoxychlor	B	2436.2	2150.3	1993.5	2072.8	1911.8	1591.5	1278.0	AVRG		5.21E-4		1919.2	20	0.995	20	
Endosulfan sulfate	B	5854.8	5385.8	4883.5	4961.6	4759.8	4321.7	3959.4	AVRG		2.05E-4		4875.2	13	0.995	20	
Endrin ketone	B	6845.5	6332.5	5723.3	5904.4	5679.2	5112.4	4372.3	AVRG		1.75E-4		5709.9	14	0.995	20	
TCMX	B	5686.3	5259.1	4933.2	4944.9	4923.6	4703.2	4308.6	AVRG		2.01E-4		4965.6	9	0.995	20	
Decachlorobiphenyl	B	4716.5	4361.6	3899.0	4138.3	3786.9	3424.9	3453.2	AVRG		2.52E-4		3968.6	12	0.995	20	
Average EPA 8081A	A												(n=22)	15		20	
Average EPA 8081A	B												(n=22)	10		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00		pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_071
Calnum : 807102991001 Cal Date: 12-MAR-2007

ICV 807102991027 (071_027 12-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	7285.5	6485.8	25.00	22.26	pg	-11	15	
gamma-BHC	A	6581.8	5846.4	25.00	22.21	pg	-11	15	
beta-BHC	A	2648.1	2307.7	25.00	21.79	pg	-13	15	
delta-BHC	A	6614.4	6045.2	25.00	22.85	pg	-9	15	
Heptachlor	A	6140.7	5329.8	25.00	21.70	pg	-13	15	
Aldrin	A	6216.6	5495.8	25.00	22.10	pg	-12	15	
Heptachlor epoxide	A	5476.4	4814.2	25.00	21.98	pg	-12	15	
gamma-Chlordane	A	5503.9	4927.7	25.00	22.38	pg	-10	15	
alpha-Chlordane	A	5108.5	4514.2	25.00	22.09	pg	-12	15	
4,4'-DDE	A	4839.4	4577.0	25.00	23.64	pg	-5	15	
Endosulfan I	A	5046.0	4608.2	25.00	22.83	pg	-9	15	
Dieldrin	A	5108.5	4802.8	25.00	23.50	pg	-6	15	
Endrin	A	4325.8	4152.0	25.00	24.00	pg	-4	15	
4,4'-DDD	A	3816.4	3520.7	25.00	23.06	pg	-8	15	
Endosulfan II	A	4261.9	4027.6	25.00	23.63	pg	-5	15	
4,4'-DDT	A	3996.4	3725.3	25.00	23.30	pg	-7	15	
Methoxychlor	A	1653.1	1887.4	25.00	28.54	pg	14	15	
Endosulfan sulfate	A	3830.8	3629.4	25.00	23.69	pg	-5	15	
Endrin ketone	A	4363.7	4210.0	25.00	24.12	pg	-4	15	
alpha-BHC	B	9317.8	8960.6	25.00	24.04	pg	-4	15	
gamma-BHC	B	8521.5	8058.8	25.00	23.64	pg	-5	15	
beta-BHC	B	3313.3	3135.7	25.00	23.66	pg	-5	15	
delta-BHC	B	8399.3	8530.4	25.00	25.39	pg	2	15	
Heptachlor	B	7606.3	7356.9	25.00	24.18	pg	-3	15	
Aldrin	B	7800.1	7506.9	25.00	24.06	pg	-4	15	
Heptachlor epoxide	B	6969.7	6580.6	25.00	23.60	pg	-6	15	
gamma-Chlordane	B	6953.6	6784.9	25.00	24.39	pg	-2	15	
alpha-Chlordane	B	6529.1	6357.4	25.00	24.34	pg	-3	15	
4,4'-DDE	B	6338.8	6326.6	25.00	24.95	pg	0	15	
Endosulfan I	B	6395.2	5959.5	25.00	23.30	pg	-7	15	
Dieldrin	B	6651.8	6557.3	25.00	24.64	pg	-1	15	
Endrin	B	5301.6	5571.4	25.00	26.27	pg	5	15	
4,4'-DDD	B	5312.3	5253.4	25.00	24.72	pg	-1	15	
Endosulfan II	B	5416.5	5525.2	25.00	25.50	pg	2	15	
4,4'-DDT	B	4893.9	4894.6	25.00	25.00	pg	0	15	
Methoxychlor	B	1919.2	2349.8	25.00	30.61	pg	**22**	15	v+ ***
Endosulfan sulfate	B	4875.2	4850.7	25.00	24.87	pg	-1	15	
Endrin ketone	B	5709.9	5846.1	25.00	25.60	pg	2	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807095556011 File : 066_011 Time : 07-MAR-2007 20:01

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	236213	9	15	
4,4'-DDE	A	2834			
4,4'-DDD	A	20620			
Endrin	A	139747	15	15	
Endrin aldehyde	A	9627			
Endrin ketone	A	15965			
4,4'-DDT	B	459078	5	15	
4,4'-DDE	B	2137			
4,4'-DDD	B	24560			
Endrin	B	254812	8	15	
Endrin aldehyde	B	3710			
Endrin ketone	B	19513			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807095556027 File : 066_027 Time : 08-MAR-2007 01:44

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	304179	9	15	
4,4'-DDE	A	2852			
4,4'-DDD	A	25893			
Endrin	A	180919	11	15	
Endrin aldehyde	A	8689			
Endrin ketone	A	13994			
4,4'-DDT	B	454617	7	15	
4,4'-DDE	B	1841			
4,4'-DDD	B	32340			
Endrin	B	260291	7	15	
Endrin aldehyde	B	3581			
Endrin ketone	B	17453			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807096981002 File : 067_002 Time : 08-MAR-2007 08:42

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	250387	10	15	
4,4'-DDE	A	2700			
4,4'-DDD	A	25256			
Endrin	A	154231	13	15	
Endrin aldehyde	A	7664			
Endrin ketone	A	15497			
4,4'-DDT	B	414071	8	15	
4,4'-DDE	B	2126			
4,4'-DDD	B	33396			
Endrin	B	253947	10	15	
Endrin aldehyde	B	5496			
Endrin ketone	B	22825			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807096981013 File : 067_013 Time : 08-MAR-2007 15:28

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	286608	9	15	
4,4'-DDE	A	3634			
4,4'-DDD	A	25213			
Endrin	A	174912	10	15	
Endrin aldehyde	A	7172			
Endrin ketone	A	12989			
4,4'-DDT	B	453871	7	15	
4,4'-DDE	B	2064			
4,4'-DDD	B	33883			
Endrin	B	267347	7	15	
Endrin aldehyde	B	3445			
Endrin ketone	B	15956			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991050 File : 071_050 Time : 13-MAR-2007 19:10

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	333760	3	15	
4,4'-DDE	A	3854			
4,4'-DDD	A	5025			
Endrin	A	196869	3	15	
Endrin aldehyde	A	1301			
Endrin ketone	A	5066			
4,4'-DDT	B	485481	5	15	
4,4'-DDE	B	2032			
4,4'-DDD	B	24119			
Endrin	B	257561	10	15	
Endrin aldehyde	B	7779			
Endrin ketone	B	22251			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991067 File : 071_067 Time : 14-MAR-2007 01:15

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	279505	5	15	
4,4'-DDE	A	2763			
4,4'-DDD	A	11143			
Endrin	A	170760	6	15	
Endrin aldehyde	A	2396			
Endrin ketone	A	8141			
4,4'-DDT	B	488740	8	15	
4,4'-DDE	B	2431			
4,4'-DDD	B	38259			
Endrin	B	272225	12	15	
Endrin aldehyde	B	8691			
Endrin ketone	B	29865			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807095556012 File : 066_012 Time : 07-MAR-2007 20:22
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6348.7	20.00	20.92	pg	5	15	
gamma-BHC	A	5446.0	5617.4	20.00	20.63	pg	3	15	
beta-BHC	A	2401.4	2318.0	20.00	19.30	pg	-3	15	
delta-BHC	A	6028.1	5717.2	20.00	18.97	pg	-5	15	
Heptachlor	A	4785.4	4904.3	20.00	20.50	pg	2	15	
Aldrin	A	5184.0	5370.3	20.00	20.72	pg	4	15	
Heptachlor epoxide	A	4595.2	4718.4	20.00	20.54	pg	3	15	
gamma-Chlordane	A	4473.8	4616.6	20.00	20.64	pg	3	15	
alpha-Chlordane	A	4212.5	4381.8	20.00	20.80	pg	4	15	
4,4'-DDE	A	3887.5	3994.4	40.00	41.10	pg	3	15	
Endosulfan I	A	4244.3	4322.1	20.00	20.37	pg	2	15	
Dieldrin	A	4229.9	4405.0	40.00	41.66	pg	4	15	
Endrin	A	3396.8	3352.1	40.00	39.47	pg	-1	15	
4,4'-DDD	A	3044.1	3089.7	40.00	40.60	pg	1	15	
Endosulfan II	A	3530.1	3734.6	40.00	42.32	pg	6	15	
4,4'-DDT	A	2930.1	3028.8	40.00	41.35	pg	3	15	
Methoxychlor	A	1132.8	1144.9	200.0	202.1	pg	1	15	
Endosulfan sulfate	A	3165.7	3186.1	40.00	40.26	pg	1	15	
Endrin ketone	A	3579.4	3721.0	40.00	41.58	pg	4	15	
TCMX	A	3293.8	3394.8	40.00	41.23	pg	3	15	
Decachlorobiphenyl	A	2228.7	2445.9	40.00	43.90	pg	10	15	
alpha-BHC	B	9830.9	9981.3	20.00	20.31	pg	2	15	
gamma-BHC	B	9154.3	9037.9	20.00	19.75	pg	-1	15	
beta-BHC	B	3825.8	3544.3	20.00	18.53	pg	-7	15	rsd ***
delta-BHC	B	9629.6	8662.3	20.00	17.99	pg	-10	15	rsd ***
Heptachlor	B	7883.6	8059.8	20.00	20.45	pg	2	15	
Aldrin	B	8277.0	8296.0	20.00	20.05	pg	0	15	
Heptachlor epoxide	B	7245.5	7180.7	20.00	19.82	pg	-1	15	
gamma-Chlordane	B	7227.5	7086.6	20.00	19.61	pg	-2	15	
alpha-Chlordane	B	6748.3	6593.7	20.00	19.54	pg	-2	15	
4,4'-DDE	B	6267.4	6458.9	40.00	41.22	pg	3	15	
Endosulfan I	B	6561.9	6526.3	20.00	19.89	pg	-1	15	
Dieldrin	B	6611.5	6682.7	40.00	40.43	pg	1	15	
Endrin	B	5363.6	5262.5	40.00	39.25	pg	-2	15	
4,4'-DDD	B	5068.9	5024.9	40.00	39.65	pg	-1	15	
Endosulfan II	B	5541.1	5003.8	40.00	36.12	pg	-10	15	
4,4'-DDT	B	5075.6	4729.4	40.00	37.27	pg	-7	15	
Methoxychlor	B	1880.2	1727.6	200.0	183.8	pg	-8	15	
Endosulfan sulfate	B	4932.1	4498.3	40.00	36.48	pg	-9	15	
Endrin ketone	B	5558.7	5125.4	40.00	36.88	pg	-8	15	
TCMX	B	5287.3	5442.4	40.00	41.17	pg	3	15	
Decachlorobiphenyl	B	3971.1	3542.4	40.00	35.68	pg	-11	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					4	15	

rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807095556029 File : 066_029 Time : 08-MAR-2007 02:27
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6972.4	10.00	11.49	pg	15	15	
gamma-BHC	A	5446.0	6081.0	10.00	11.17	pg	12	15	
beta-BHC	A	2401.4	2527.4	10.00	10.52	pg	5	15	
delta-BHC	A	6028.1	6292.4	10.00	10.44	pg	4	15	
Heptachlor	A	4785.4	5433.7	10.00	11.35	pg	14	15	
Aldrin	A	5184.0	5914.7	10.00	11.41	pg	14	15	
Heptachlor epoxide	A	4595.2	5281.5	10.00	11.49	pg	15	15	
gamma-Chlordane	A	4473.8	5100.0	10.00	11.40	pg	14	15	
alpha-Chlordane	A	4212.5	4708.9	10.00	11.18	pg	12	15	
4,4'-DDE	A	3887.5	4631.7	20.00	23.83	pg	**19**	15	c+ ***
Endosulfan I	A	4244.3	4678.9	10.00	11.02	pg	10	15	
Dieldrin	A	4229.9	4973.6	20.00	23.52	pg	**18**	15	c+ ***
Endrin	A	3396.8	3936.6	20.00	23.18	pg	**16**	15	c+ ***
4,4'-DDD	A	3044.1	3999.0	20.00	26.27	pg	**31**	15	c+ ***
Endosulfan II	A	3530.1	4182.3	20.00	23.70	pg	**18**	15	c+ ***
4,4'-DDT	A	2930.1	3413.7	20.00	23.30	pg	**17**	15	c+ ***
Methoxychlor	A	1132.8	1483.9	100.0	131.0	pg	**31**	15	c+ ***
Endosulfan sulfate	A	3165.7	3858.5	20.00	24.38	pg	**22**	15	c+ ***
Endrin ketone	A	3579.4	4608.4	20.00	25.75	pg	**29**	15	c+ ***
TCMX	A	3293.8	3862.1	20.00	23.45	pg	**17**	15	c+
Decachlorobiphenyl	A	2228.7	3287.7	20.00	29.50	pg	**48**	15	c+
alpha-BHC	B	9830.9	10349	10.00	10.53	pg	5	15	
gamma-BHC	B	9154.3	9391.9	10.00	10.26	pg	3	15	
beta-BHC	B	3825.8	3692.6	10.00	9.652	pg	-3	15	rsd ***
delta-BHC	B	9629.6	9232.5	10.00	9.588	pg	-4	15	rsd ***
Heptachlor	B	7883.6	8245.7	10.00	10.46	pg	5	15	
Aldrin	B	8277.0	8541.0	10.00	10.32	pg	3	15	
Heptachlor epoxide	B	7245.5	7613.2	10.00	10.51	pg	5	15	
gamma-Chlordane	B	7227.5	7492.2	10.00	10.37	pg	4	15	
alpha-Chlordane	B	6748.3	7029.8	10.00	10.42	pg	4	15	
4,4'-DDE	B	6267.4	6863.1	20.00	21.90	pg	10	15	
Endosulfan I	B	6561.9	6975.3	10.00	10.63	pg	6	15	
Dieldrin	B	6611.5	7267.1	20.00	21.98	pg	10	15	
Endrin	B	5363.6	5779.6	20.00	21.55	pg	8	15	
4,4'-DDD	B	5068.9	5944.0	20.00	23.45	pg	**17**	15	c+ ***
Endosulfan II	B	5541.1	5861.3	20.00	21.16	pg	6	15	
4,4'-DDT	B	5075.6	4929.2	20.00	19.42	pg	-3	15	
Methoxychlor	B	1880.2	2186.0	100.0	116.3	pg	**16**	15	c+ ***
Endosulfan sulfate	B	4932.1	5386.7	20.00	21.84	pg	9	15	
Endrin ketone	B	5558.7	6162.3	20.00	22.17	pg	11	15	
TCMX	B	5287.3	5764.5	20.00	21.81	pg	9	15	
Decachlorobiphenyl	B	3971.1	4511.1	20.00	22.72	pg	14	15	
Average EPA 8081A	A	(n=22)					**18**	15	ac ***
Average EPA 8081A	B	(n=22)					7	15	

+=high bias ac=average CCV drift out c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807096981003 File : 067_003 Time : 08-MAR-2007 09:04
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	5690.8	10.00	9.378	pg	-6	15	
gamma-BHC	A	5446.0	5029.2	10.00	9.235	pg	-8	15	
beta-BHC	A	2401.4	2051.9	10.00	8.545	pg	-15	15	
delta-BHC	A	6028.1	5047.1	10.00	8.373	pg	**-16**	15	c- ***
Heptachlor	A	4785.4	4384.6	10.00	9.162	pg	-8	15	
Aldrin	A	5184.0	4812.0	10.00	9.282	pg	-7	15	
Heptachlor epoxide	A	4595.2	4203.2	10.00	9.147	pg	-9	15	
gamma-Chlordane	A	4473.8	4055.2	10.00	9.064	pg	-9	15	
alpha-Chlordane	A	4212.5	3919.0	10.00	9.303	pg	-7	15	
4,4'-DDE	A	3887.5	3635.5	20.00	18.70	pg	-6	15	
Endosulfan I	A	4244.3	3833.8	10.00	9.033	pg	-10	15	
Dieldrin	A	4229.9	3952.7	20.00	18.69	pg	-7	15	
Endrin	A	3396.8	3156.6	20.00	18.59	pg	-7	15	
4,4'-DDD	A	3044.1	2948.6	20.00	19.37	pg	-3	15	
Endosulfan II	A	3530.1	3292.8	20.00	18.66	pg	-7	15	
4,4'-DDT	A	2930.1	2770.6	20.00	18.91	pg	-5	15	
Methoxychlor	A	1132.8	1143.9	100.0	101.0	pg	1	15	
Endosulfan sulfate	A	3165.7	2921.8	20.00	18.46	pg	-8	15	
Endrin ketone	A	3579.4	3381.9	20.00	18.90	pg	-6	15	
TCMX	A	3293.8	3121.4	20.00	18.95	pg	-5	15	
Decachlorobiphenyl	A	2228.7	2363.5	20.00	21.21	pg	6	15	
alpha-BHC	B	9830.9	10480	10.00	10.66	pg	7	15	
gamma-BHC	B	9154.3	9560.5	10.00	10.44	pg	4	15	
beta-BHC	B	3825.8	3694.9	10.00	9.658	pg	-3	15	rsd ***
delta-BHC	B	9629.6	9218.7	10.00	9.573	pg	-4	15	rsd ***
Heptachlor	B	7883.6	8334.2	10.00	10.57	pg	6	15	
Aldrin	B	8277.0	8751.7	10.00	10.57	pg	6	15	
Heptachlor epoxide	B	7245.5	7587.4	10.00	10.47	pg	5	15	
gamma-Chlordane	B	7227.5	7456.0	10.00	10.32	pg	3	15	
alpha-Chlordane	B	6748.3	6964.1	10.00	10.32	pg	3	15	
4,4'-DDE	B	6267.4	6723.1	20.00	21.45	pg	7	15	
Endosulfan I	B	6561.9	6895.1	10.00	10.51	pg	5	15	
Dieldrin	B	6611.5	7145.9	20.00	21.62	pg	8	15	
Endrin	B	5363.6	5641.0	20.00	21.03	pg	5	15	
4,4'-DDD	B	5068.9	5777.1	20.00	22.79	pg	14	15	
Endosulfan II	B	5541.1	5694.9	20.00	20.55	pg	3	15	
4,4'-DDT	B	5075.6	4774.6	20.00	18.81	pg	-6	15	
Methoxychlor	B	1880.2	2065.1	100.0	109.8	pg	10	15	
Endosulfan sulfate	B	4932.1	5210.2	20.00	21.13	pg	6	15	
Endrin ketone	B	5558.7	6026.9	20.00	21.68	pg	8	15	
TCMX	B	5287.3	5792.6	20.00	21.91	pg	10	15	
Decachlorobiphenyl	B	3971.1	4217.8	20.00	21.24	pg	6	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					6	15	

-=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807096981015 File : 067_015 Time : 08-MAR-2007 16:38
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6266.1	20.00	20.65	pg	3	15	
gamma-BHC	A	5446.0	5591.6	20.00	20.53	pg	3	15	
beta-BHC	A	2401.4	2339.1	20.00	19.48	pg	-3	15	
delta-BHC	A	6028.1	5830.5	20.00	19.34	pg	-3	15	
Heptachlor	A	4785.4	5062.5	20.00	21.16	pg	6	15	
Aldrin	A	5184.0	5278.6	20.00	20.36	pg	2	15	
Heptachlor epoxide	A	4595.2	4663.3	20.00	20.30	pg	1	15	
gamma-Chlordane	A	4473.8	4576.4	20.00	20.46	pg	2	15	
alpha-Chlordane	A	4212.5	4395.6	20.00	20.87	pg	4	15	
4,4'-DDE	A	3887.5	4124.2	40.00	42.44	pg	6	15	
Endosulfan I	A	4244.3	4370.3	20.00	20.59	pg	3	15	
Dieldrin	A	4229.9	4451.3	40.00	42.09	pg	5	15	
Endrin	A	3396.8	3588.3	40.00	42.25	pg	6	15	
4,4'-DDD	A	3044.1	3355.9	40.00	44.10	pg	10	15	
Endosulfan II	A	3530.1	3702.1	40.00	41.95	pg	5	15	
4,4'-DDT	A	2930.1	3085.2	40.00	42.12	pg	5	15	
Methoxychlor	A	1132.8	1269.3	200.0	224.1	pg	12	15	
Endosulfan sulfate	A	3165.7	3272.9	40.00	41.35	pg	3	15	
Endrin ketone	A	3579.4	3844.4	40.00	42.96	pg	7	15	
TCMX	A	3293.8	3301.0	40.00	40.09	pg	0	15	
Decachlorobiphenyl	A	2228.7	2647.5	40.00	47.52	pg	**19**	15	c+
alpha-BHC	B	9830.9	9020.5	20.00	18.35	pg	-8	15	
gamma-BHC	B	9154.3	8032.9	20.00	17.55	pg	-12	15	
beta-BHC	B	3825.8	3202.0	20.00	16.74	pg	**-16**	15	c- rsd ***
delta-BHC	B	9629.6	8129.8	20.00	16.89	pg	**-16**	15	c- rsd ***
Heptachlor	B	7883.6	7299.3	20.00	18.52	pg	-7	15	
Aldrin	B	8277.0	7404.2	20.00	17.89	pg	-11	15	
Heptachlor epoxide	B	7245.5	6533.6	20.00	18.03	pg	-10	15	
gamma-Chlordane	B	7227.5	6484.7	20.00	17.94	pg	-10	15	
alpha-Chlordane	B	6748.3	6194.8	20.00	18.36	pg	-8	15	
4,4'-DDE	B	6267.4	6141.6	40.00	39.20	pg	-2	15	
Endosulfan I	B	6561.9	6019.3	20.00	18.35	pg	-8	15	
Dieldrin	B	6611.5	6393.2	40.00	38.68	pg	-3	15	
Endrin	B	5363.6	5186.5	40.00	38.68	pg	-3	15	
4,4'-DDD	B	5068.9	5285.2	40.00	41.71	pg	4	15	
Endosulfan II	B	5541.1	5276.4	40.00	38.09	pg	-5	15	
4,4'-DDT	B	5075.6	4807.9	40.00	37.89	pg	-5	15	
Methoxychlor	B	1880.2	2039.0	200.0	216.9	pg	8	15	
Endosulfan sulfate	B	4932.1	4852.8	40.00	39.36	pg	-2	15	
Endrin ketone	B	5558.7	5651.1	40.00	40.67	pg	2	15	
TCMX	B	5287.3	4928.5	40.00	37.29	pg	-7	15	
Decachlorobiphenyl	B	3971.1	4020.3	40.00	40.50	pg	1	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					7	15	

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807102991053 File : 071_053 Time : 13-MAR-2007 20:14
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7065.1	20.00	19.40	pg	-3	15	
gamma-BHC	A	6581.8	6303.2	20.00	19.15	pg	-4	15	
beta-BHC	A	2648.1	2530.2	20.00	19.11	pg	-4	15	
delta-BHC	A	6614.4	6233.3	20.00	18.85	pg	-6	15	
Heptachlor	A	6140.7	5919.6	20.00	19.28	pg	-4	15	
Aldrin	A	6216.6	5920.9	20.00	19.05	pg	-5	15	
Heptachlor epoxide	A	5476.4	5196.6	20.00	18.98	pg	-5	15	
gamma-Chlordane	A	5503.9	5061.9	20.00	18.39	pg	-8	15	
alpha-Chlordane	A	5108.5	4868.0	20.00	19.06	pg	-5	15	
4,4'-DDE	A	4839.4	4526.7	40.00	37.41	pg	-6	15	
Endosulfan I	A	5046.0	4836.0	20.00	19.17	pg	-4	15	
Dieldrin	A	5108.5	4836.3	40.00	37.87	pg	-5	15	
Endrin	A	4325.8	4057.6	40.00	37.52	pg	-6	15	
4,4'-DDD	A	3816.4	3581.3	40.00	37.54	pg	-6	15	
Endosulfan II	A	4261.9	3911.6	40.00	36.71	pg	-8	15	
4,4'-DDT	A	3996.4	3716.5	40.00	37.20	pg	-7	15	
Methoxychlor	A	1653.1	1483.3	200.0	179.5	pg	-10	15	
Endosulfan sulfate	A	3830.8	3547.3	40.00	37.04	pg	-7	15	
Endrin ketone	A	4363.7	4010.6	40.00	36.76	pg	-8	15	
TCMX	A	3892.5	3833.8	40.00	39.40	pg	-2	15	
Decachlorobiphenyl	A	3209.6	2928.2	40.00	36.49	pg	-9	15	
alpha-BHC	B	9317.8	9571.9	20.00	20.55	pg	3	15	
gamma-BHC	B	8521.5	8656.4	20.00	20.32	pg	2	15	
beta-BHC	B	3313.3	3470.9	20.00	20.95	pg	5	15	
delta-BHC	B	8399.3	8675.2	20.00	20.66	pg	3	15	
Heptachlor	B	7606.3	7812.7	20.00	20.54	pg	3	15	
Aldrin	B	7800.1	7737.1	20.00	19.84	pg	-1	15	
Heptachlor epoxide	B	6969.7	7136.7	20.00	20.48	pg	2	15	
gamma-Chlordane	B	6953.6	7156.4	20.00	20.58	pg	3	15	
alpha-Chlordane	B	6529.1	6848.2	20.00	20.98	pg	5	15	
4,4'-DDE	B	6338.8	6684.8	40.00	42.18	pg	5	15	
Endosulfan I	B	6395.2	6631.8	20.00	20.74	pg	4	15	
Dieldrin	B	6651.8	6996.3	40.00	42.07	pg	5	15	
Endrin	B	5301.6	5266.7	40.00	39.74	pg	-1	15	
4,4'-DDD	B	5312.3	5753.0	40.00	43.32	pg	8	15	
Endosulfan II	B	5416.5	5757.0	40.00	42.51	pg	6	15	
4,4'-DDT	B	4893.9	5034.8	40.00	41.15	pg	3	15	
Methoxychlor	B	1919.2	2068.9	200.0	215.6	pg	8	15	
Endosulfan sulfate	B	4875.2	5135.7	40.00	42.14	pg	5	15	
Endrin ketone	B	5709.9	6204.9	40.00	43.47	pg	9	15	
TCMX	B	4965.6	5078.1	40.00	40.91	pg	2	15	
Decachlorobiphenyl	B	3968.6	4231.5	40.00	42.65	pg	7	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807102991070 File : 071_070 Time : 14-MAR-2007 02:19
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7995.4	10.00	10.97	pg	10	15	
gamma-BHC	A	6581.8	7162.2	10.00	10.88	pg	9	15	
beta-BHC	A	2648.1	2896.5	10.00	10.94	pg	9	15	
delta-BHC	A	6614.4	7116.3	10.00	10.76	pg	8	15	
Heptachlor	A	6140.7	6766.7	10.00	11.02	pg	10	15	
Aldrin	A	6216.6	6778.8	10.00	10.90	pg	9	15	
Heptachlor epoxide	A	5476.4	5946.1	10.00	10.86	pg	9	15	
gamma-Chlordane	A	5503.9	5825.1	10.00	10.58	pg	6	15	
alpha-Chlordane	A	5108.5	5452.8	10.00	10.67	pg	7	15	
4,4'-DDE	A	4839.4	5144.5	20.00	21.26	pg	6	15	
Endosulfan I	A	5046.0	5583.1	10.00	11.06	pg	11	15	
Dieldrin	A	5108.5	5481.8	20.00	21.46	pg	7	15	
Endrin	A	4325.8	4632.5	20.00	21.42	pg	7	15	
4,4'-DDD	A	3816.4	3965.0	20.00	20.78	pg	4	15	
Endosulfan II	A	4261.9	4401.5	20.00	20.65	pg	3	15	
4,4'-DDT	A	3996.4	4107.6	20.00	20.56	pg	3	15	
Methoxychlor	A	1653.1	1615.5	100.0	97.72	pg	-2	15	
Endosulfan sulfate	A	3830.8	3939.4	20.00	20.57	pg	3	15	
Endrin ketone	A	4363.7	4423.4	20.00	20.27	pg	1	15	
TCMX	A	3892.5	4426.7	20.00	22.74	pg	14	15	
Decachlorobiphenyl	A	3209.6	3066.5	20.00	19.11	pg	-4	15	
alpha-BHC	B	9317.8	8932.8	10.00	9.587	pg	-4	15	
gamma-BHC	B	8521.5	8270.7	10.00	9.706	pg	-3	15	
beta-BHC	B	3313.3	3281.0	10.00	9.902	pg	-1	15	
delta-BHC	B	8399.3	8225.7	10.00	9.793	pg	-2	15	
Heptachlor	B	7606.3	7331.8	10.00	9.639	pg	-4	15	
Aldrin	B	7800.1	7622.8	10.00	9.773	pg	-2	15	
Heptachlor epoxide	B	6969.7	6838.9	10.00	9.812	pg	-2	15	
gamma-Chlordane	B	6953.6	6727.1	10.00	9.674	pg	-3	15	
alpha-Chlordane	B	6529.1	6432.2	10.00	9.852	pg	-1	15	
4,4'-DDE	B	6338.8	6187.0	20.00	19.52	pg	-2	15	
Endosulfan I	B	6395.2	6340.1	10.00	9.914	pg	-1	15	
Dieldrin	B	6651.8	6565.5	20.00	19.74	pg	-1	15	
Endrin	B	5301.6	5039.3	20.00	19.01	pg	-5	15	
4,4'-DDD	B	5312.3	5395.4	20.00	20.31	pg	2	15	
Endosulfan II	B	5416.5	5313.9	20.00	19.62	pg	-2	15	
4,4'-DDT	B	4893.9	4444.1	20.00	18.16	pg	-9	15	
Methoxychlor	B	1919.2	1879.2	100.0	97.92	pg	-2	15	
Endosulfan sulfate	B	4875.2	4789.9	20.00	19.65	pg	-2	15	
Endrin ketone	B	5709.9	5724.8	20.00	20.05	pg	0	15	
TCMX	B	4965.6	4920.1	20.00	19.82	pg	-1	15	
Decachlorobiphenyl	B	3968.6	3889.4	20.00	19.60	pg	-2	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					2	15	

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	059_001	X	HEX			28-FEB-2007 08:33	1.0							
002	059_002	PEM	PEM			28-FEB-2007 08:54	1.0			1			1	
003	059_003	X	PEST_3			28-FEB-2007 09:16	1.0	11		1			2 ac	
004	059_004	X	PRIMER			28-FEB-2007 12:36	1.0							
005	059_005	X	PRIMER			28-FEB-2007 12:57	1.0							
006	059_006	X	PRIMER			28-FEB-2007 13:18	1.0							
007	059_007	X	HEX			28-FEB-2007 14:30	1.0							
008	059_008	X	PEM			28-FEB-2007 14:51	1.0						1	
010	059_010	X	HEX			28-FEB-2007 16:16	1.0							
011	059_011	X	PEM			28-FEB-2007 17:07	1.0			1			1	
012	059_012	X	PEST_3			28-FEB-2007 17:31	1.0	21		1			2 ac	
013	059_013	X	PRIMER			28-FEB-2007 19:24	1.0							
014	059_014	X	PRIMER			28-FEB-2007 19:45	1.0							
015	059_015	X	PRIMER			28-FEB-2007 20:07	1.0							
016	059_016	X	PRIMER			28-FEB-2007 20:28	1.0							
017	059_017	X	PRIMER			28-FEB-2007 20:49	1.0							
018	059_018	X	HEX			28-FEB-2007 21:11	1.0							
019	059_019	X	HEX			28-FEB-2007 21:32	1.0							
020	059_020	PEM	PEM			28-FEB-2007 21:54	1.0			1			1	
021	059_021	X	HEX			28-FEB-2007 22:15	1.0							
022	059_022	ICAL	PEST_1			28-FEB-2007 22:36	1.0						3	
023	059_023	ICAL	PEST_2			28-FEB-2007 22:58	1.0						4	
024	059_024	ICAL	PEST_3			28-FEB-2007 23:19	1.0						2	
025	059_025	ICAL	PEST_4			28-FEB-2007 23:40	1.0						5	
026	059_026	ICAL	PEST_5			01-MAR-2007 00:02	1.0						6	
027	059_027	ICAL	PEST_6			01-MAR-2007 00:23	1.0						7	
028	059_028	ICAL	PEST_7			01-MAR-2007 00:45	1.0						8	
029	059_029	X	HEX			01-MAR-2007 01:06	1.0							
030	059_030	X	HEX			01-MAR-2007 01:27	1.0							
031	059_031	ICV	ICV			01-MAR-2007 01:49	1.0	7		1			9	2:XYL246=215.922

Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
032	059_032	X	ICV			01-MAR-2007 02:10	1.0	8		1			9	2:CL10BZ=219.667
033	059_033	X	HEX			01-MAR-2007 02:31	1.0							

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Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807095556 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	066_001	X	HEX			07-MAR-2007 08:36	1.0						
002	066_002	X	PEM			07-MAR-2007 08:57	1.0	1.0			1	1	
003	066_003	X	PEST_3			07-MAR-2007 09:19	1.0	1.0	2		1	2	
004	066_004	CCV	PEST_3			07-MAR-2007 15:53	1.0	1.0	2		1	2	
005	066_005	PEM	PEM			07-MAR-2007 16:14	1.0	1.0			1	1	
006	066_006	X	HEX			07-MAR-2007 16:36	1.0						
007	066_007	BLANK	QC377837	122778	Water	07-MAR-2007 18:34	1.0	0.01		2	1		
008	066_008	LCS	QC377838	122778	Water	07-MAR-2007 18:55	1.0	0.01	2		1		
009	066_009	SAMPLE	193169-001	122778	Water	07-MAR-2007 19:18	1.0	0.009434			1		
010	066_010	X	HEX			07-MAR-2007 19:39	1.0						
011	066_011	PEM	PEM			07-MAR-2007 20:01	1.0	1.0			1	1	
012	066_012	CCV	PEST_4			07-MAR-2007 20:22	1.0	1.0	2		1	3	
013	066_013	X	PEST_4			07-MAR-2007 20:43	1.0					3	
014	066_014	X	PEM			07-MAR-2007 21:05	1.0					1	
015	066_015	X	HEX			07-MAR-2007 21:26	1.0						
016	066_016	MSS	193108-007	122778	Water	07-MAR-2007 21:48	1.0	0.009804			1	>ac	
017	066_017	SAMPLE	193108-008	122778	Water	07-MAR-2007 22:09	1.0	0.01	12	2	1	>ac	4:BHCGAM=151.664
018	066_018	SAMPLE	193108-010	122778	Water	07-MAR-2007 22:31	1.0	0.01			1	>ac	
019	066_019	SAMPLE	193108-011	122778	Water	07-MAR-2007 22:52	1.0	0.009901	7	3	1	>ac	3:BHCBET=397.135
020	066_020	SAMPLE	193108-013	122778	Water	07-MAR-2007 23:14	1.0	0.009709			1	>ac	
021	066_021	SAMPLE	193108-022	122778	Water	07-MAR-2007 23:35	1.0	0.009901			1	>ac	
022	066_022	MSS	193108-023	122778	Water	07-MAR-2007 23:57	1.0	0.009615			1	>ac	
023	066_023	SAMPLE	193108-025	122778	Water	08-MAR-2007 00:18	1.0	0.01053		1	1	>ac	
024	066_024	SAMPLE	193108-026	122778	Water	08-MAR-2007 00:39	1.0	0.009434			1	>ac	
025	066_025	SAMPLE	193108-027	122778	Water	08-MAR-2007 01:01	1.0	0.009709			1	>ac	
026	066_026	X	HEX			08-MAR-2007 01:22	1.0						
027	066_027	PEM	PEM			08-MAR-2007 01:44	1.0	1.0			1	1	
028	066_028	X	PEST_3			08-MAR-2007 02:05	1.0	1.0	20		1	2 ac	
029	066_029	CCV	PEST_3			08-MAR-2007 02:27	1.0	1.0	14		1	2 ac	
030	066_030	X	PEM			08-MAR-2007 02:48	1.0					1	

Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807095556 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	066_031	X	HEX			08-MAR-2007 03:09	1.0						
032	066_032	MS	QC377839	122778	Water	08-MAR-2007 03:31	1.0	0.009804	13	1	1	<ac	
033	066_033	MSD	QC377840	122778	Water	08-MAR-2007 03:52	1.0	0.009804	13	3	1	<ac	
034	066_034	MS	QC377841	122778	Water	08-MAR-2007 04:14	1.0	0.009615	13	1	1	<ac	
035	066_035	MSD	QC377842	122778	Water	08-MAR-2007 04:35	1.0	0.009615	13	2	1	<ac	
036	066_036	X	HEX			08-MAR-2007 04:57	1.0						
037	066_037	PEM	PEM			08-MAR-2007 05:18	1.0	1.0			1	1	
038	066_038	CCV	PEST_5			08-MAR-2007 05:40	1.0	1.0	2		1	4	
039	066_039	CCV	PEST_5			08-MAR-2007 06:01	1.0					4	
040	066_040	X	PEM			08-MAR-2007 06:23	1.0					1	
041	066_041	X	HEX			08-MAR-2007 06:44	1.0						

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Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807096981 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 08-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	067_001	X	HEX			08-MAR-2007 08:21	1.0						
002	067_002	PEM	PEM			08-MAR-2007 08:42	1.0	1.0			1	1	
003	067_003	CCV	PEST_3			08-MAR-2007 09:04	1.0	1.0	3		1	2	
004	067_004	X	HEX			08-MAR-2007 11:30	1.0						
005	067_005	MS	QC377839	122778	Water	08-MAR-2007 11:51	1.0	0.009804	3		1		
006	067_006	MSD	QC377840	122778	Water	08-MAR-2007 12:12	1.0	0.009804	3		1		
007	067_007	MS	QC377841	122778	Water	08-MAR-2007 12:34	1.0	0.009615	3		1		
008	067_008	MSD	QC377842	122778	Water	08-MAR-2007 12:55	1.0	0.009615	3		1		
009	067_009	SAMPLE	193108-008	122778	Water	08-MAR-2007 13:17	2.0	0.01	3	2	1		
010	067_010	SAMPLE	193108-011	122778	Water	08-MAR-2007 13:38	2.0	0.009901	3	2	1		1:BHCBET=261.257
011	067_011	SAMPLE	193108-011	122778	Water	08-MAR-2007 14:15	10.0	0.009901	3	1	1		
012	067_012	X	HEX			08-MAR-2007 15:06	1.0						
013	067_013	PEM	PEM			08-MAR-2007 15:28	1.0	1.0			1	1	
014	067_014	X	PEST_4			08-MAR-2007 15:49	1.0	1.0	9		1	3	
015	067_015	CCV	PEST_4			08-MAR-2007 16:38	1.0	1.0	2		1	3	
016	067_016	X	HEX			08-MAR-2007 18:19	1.0						
017	067_017	SAMPLE	193210-027	122843	Soil	08-MAR-2007 19:19	1.0	0.6653	10	1	1	>ac	
018	067_018	SAMPLE	193210-028	122843	Soil	08-MAR-2007 19:41	1.0	0.6581	9	1	1	>ac	
019	067_019	SAMPLE	193210-029	122843	Soil	08-MAR-2007 20:02	1.0	0.666	9	1	1	>ac	
020	067_020	SAMPLE	193210-030	122843	Soil	08-MAR-2007 20:24	1.0	0.6607	7	1	1	>ac	
021	067_021	SAMPLE	193210-035	122843	Soil	08-MAR-2007 20:45	1.0	0.6651	9		1	>ac	
022	067_022	X	QC378089	122843	Soil	08-MAR-2007 21:06	1.0	0.6596	13	8	1	>ac	
023	067_023	X	QC378090	122843	Soil	08-MAR-2007 21:28	1.0	0.6609	13	7	1	>ac	
024	067_024	X	HEX			08-MAR-2007 21:49	1.0						
025	067_025	PEM	PEM			08-MAR-2007 22:11	1.0	1.0			1	1	
026	067_026	CCV	PEST_5			08-MAR-2007 22:32	1.0	1.0	13		1	4 ac	
027	067_027	X	PEST_5			08-MAR-2007 22:54	1.0	1.0	13		1	4 ac	
028	067_028	X	PEM			08-MAR-2007 23:15	1.0					1	
029	067_029	X	HEX			08-MAR-2007 23:36	1.0						

Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	071_001	X	PRIMER			12-MAR-2007 12:31	1.0						
002	071_002	X	PRIMER			12-MAR-2007 12:53	1.0						
003	071_003	X	PRIMER			12-MAR-2007 13:14	1.0						
004	071_004	X	PRIMER			12-MAR-2007 13:35	1.0						
005	071_005	X	HEX			12-MAR-2007 13:57	1.0						
006	071_006	X	PEST_3			12-MAR-2007 14:18	1.0	1.0	25		1	1 ac	
007	071_007	X	PEST_3			12-MAR-2007 14:40	1.0	1.0	36		1	1 ac	
008	071_008	X	PEM			12-MAR-2007 15:01	1.0	1.0			1	2	
009	071_009	X	PEST_4			12-MAR-2007 15:35	1.0	1.0	20		1	3 ac	
010	071_010	X	PEST_4			12-MAR-2007 16:00	1.0	1.0	27		1	3 ac	
011	071_011	X	PRIMER			12-MAR-2007 17:33	1.0						
012	071_012	X	PRIMER			12-MAR-2007 17:54	1.0						
013	071_013	X	PRIMER			12-MAR-2007 18:16	1.0						
014	071_014	X	PRIMER			12-MAR-2007 18:37	1.0						
015	071_015	X	HEX			12-MAR-2007 18:58	1.0						
016	071_016	PEM	PEM			12-MAR-2007 19:20	1.0	1.0			1	2	
017	071_017	X	HEX			12-MAR-2007 19:41	1.0						
018	071_018	ICAL	PEST_1			12-MAR-2007 20:02	1.0	1.0				4	
019	071_019	ICAL	PEST_2			12-MAR-2007 20:24	1.0	1.0				5	
020	071_020	ICAL	PEST_3			12-MAR-2007 20:45	1.0	1.0				1	
021	071_021	ICAL	PEST_4			12-MAR-2007 21:07	1.0	1.0				3	
022	071_022	ICAL	PEST_5			12-MAR-2007 21:28	1.0	1.0				6	
023	071_023	ICAL	PEST_6			12-MAR-2007 21:49	1.0	1.0				7	
024	071_024	ICAL	PEST_7			12-MAR-2007 22:11	1.0	1.0				8	
025	071_025	X	HEX			12-MAR-2007 22:32	1.0						
026	071_026	X	HEX			12-MAR-2007 22:53	1.0						
027	071_027	ICV	ICV			12-MAR-2007 23:15	1.0	1.0	3		1	9	2:XYL246=211.331
028	071_028	X	ICV			12-MAR-2007 23:36	1.0	1.0	4		1	9	2:CL10BZ=229.806
029	071_029	X	HEX			12-MAR-2007 23:57	1.0						
030	071_030	PEM	PEM			13-MAR-2007 11:00	1.0	1.0			1	2	

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	071_031	SAMPLE	193154-019	122843	Soil	13-MAR-2007 11:28	1.0	0.662			1		
032	071_032	X	HEX			13-MAR-2007 12:05	1.0						
033	071_033	PEM	PEM			13-MAR-2007 12:26	1.0	1.0			1	2	
034	071_034	CCV	PEST_3			13-MAR-2007 12:48	1.0	1.0			1	1	
035	071_035	X	HEX			13-MAR-2007 13:31	1.0						
036	071_036	ICAL	TOXAPHENE			13-MAR-2007 13:52	1.0	1.0				10	
037	071_037	X	TOXAPHENE			13-MAR-2007 14:13	1.0					10	
038	071_038	X	HEX			13-MAR-2007 14:34	1.0						
039	071_039	BLANK	QC378642	122973	Soil	13-MAR-2007 14:56	1.0	0.6669			1		
040	071_040	LCS	QC378643	122973	Soil	13-MAR-2007 15:17	1.0	0.6625			1		
041	071_041	MSS	193210-016	122973	Soil	13-MAR-2007 15:39	1.0	0.6669			1		
042	071_042	SAMPLE	193210-017	122973	Soil	13-MAR-2007 16:00	1.0	0.6633			1		
043	071_043	SAMPLE	193210-018	122973	Soil	13-MAR-2007 16:21	1.0	0.6603			1		
044	071_044	SAMPLE	193210-019	122973	Soil	13-MAR-2007 16:42	1.0	0.6579			1		
045	071_045	SAMPLE	193210-020	122973	Soil	13-MAR-2007 17:04	1.0	0.6577			1		
046	071_046	SAMPLE	193210-037	122973	Soil	13-MAR-2007 17:25	1.0	0.6594			1		
047	071_047	SAMPLE	193210-038	122973	Soil	13-MAR-2007 17:47	1.0	0.6607			1		
048	071_048	SAMPLE	193210-039	122973	Soil	13-MAR-2007 18:08	1.0	0.6638			1		
049	071_049	X	HEX			13-MAR-2007 18:30	1.0						
050	071_050	PEM	PEM			13-MAR-2007 19:10	1.0	1.0			1	2	
051	071_051	X	TOXAPHENE			13-MAR-2007 19:31	1.0	1.0	1		1	10	
052	071_052	CCV	TOXAPHENE			13-MAR-2007 19:53	1.0	1.0			1	10	
053	071_053	CCV	PEST_4			13-MAR-2007 20:14	1.0	1.0			1	3	
054	071_054	X	PEST_4			13-MAR-2007 20:36	1.0					3	
055	071_055	X	PEM			13-MAR-2007 20:57	1.0					2	
056	071_056	X	HEX			13-MAR-2007 21:19	1.0						
057	071_057	BLANK	QC377837	122778	Water	13-MAR-2007 21:40	1.0	0.01		3	1		
058	071_058	LCS	QC377838	122778	Water	13-MAR-2007 22:02	1.0	0.01			1		
059	071_059	SAMPLE	193108-008	122778	Water	13-MAR-2007 22:23	1.0	0.01	2	1	1		2:BHCGAM=102.821
060	071_060	SAMPLE	193108-011	122778	Water	13-MAR-2007 22:45	1.0	0.009901	1	1	1		1:BHCGAM=110.640

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
061	071_061	MSS	193210-027	122843	Soil	13-MAR-2007 23:06	1.0	0.6653	1		
062	071_062	SAMPLE	193210-028	122843	Soil	13-MAR-2007 23:28	1.0	0.6581	1		
063	071_063	SAMPLE	193210-029	122843	Soil	13-MAR-2007 23:49	1.0	0.666	1		
064	071_064	SAMPLE	193210-030	122843	Soil	14-MAR-2007 00:11	1.0	0.6607	1		
065	071_065	SAMPLE	193210-035	122843	Soil	14-MAR-2007 00:32	1.0	0.6651	1		
066	071_066	X	HEX			14-MAR-2007 00:54	1.0				
067	071_067	PEM	PEM			14-MAR-2007 01:15	1.0	1.0	1	2	
068	071_068	CCV	TOXAPHENE			14-MAR-2007 01:37	1.0	1.0	1	10	
069	071_069	X	TOXAPHENE			14-MAR-2007 01:58	1.0			10	
070	071_070	CCV	PEST_3			14-MAR-2007 02:19	1.0	1.0	1	1	
071	071_071	X	PEST_3			14-MAR-2007 02:41	1.0			1	
072	071_072	X	PEM			14-MAR-2007 03:02	1.0			2	
073	071_073	X	HEX			14-MAR-2007 03:24	1.0				
074	071_074	BLANK	QC378784	123004	Water	14-MAR-2007 03:45	1.0	0.01	1		
075	071_075	BS	QC378785	123004	Water	14-MAR-2007 04:07	1.0	0.01	1		
076	071_076	BSD	QC378786	123004	Water	14-MAR-2007 04:29	1.0	0.01	1		
077	071_077	SAMPLE	193261-001	123004	Water	14-MAR-2007 04:50	1.0	0.009804	1		
078	071_078	SAMPLE	193261-002	123004	Water	14-MAR-2007 05:12	1.0	0.009709	1		
079	071_079	SAMPLE	193261-003	123004	Water	14-MAR-2007 05:33	1.0	0.009804	1		
080	071_080	SAMPLE	193261-004	123004	Water	14-MAR-2007 05:55	1.0	0.009709	1		
081	071_081	SAMPLE	193335-001	123004	Water	14-MAR-2007 06:16	1.0	0.009804	1		
082	071_082	X	HEX			14-MAR-2007 06:38	1.0				
083	071_083	PEM	PEM			14-MAR-2007 06:59	1.0	1.0	1	2	
084	071_084	CCV	PEST_4			14-MAR-2007 07:21	1.0	1.0	1	3	
085	071_085	X	PEST_4			14-MAR-2007 07:42	1.0			3	
086	071_086	X	PEM			14-MAR-2007 08:04	1.0			2	
087	071_087	X	HEX			14-MAR-2007 08:26	1.0				

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	alpha-BHC	GC23	B	03/07/07 21:48
193108-007	beta-BHC	GC23	B	03/07/07 21:48
193108-007	gamma-BHC	GC23	B	03/07/07 21:48
193108-007	delta-BHC	GC23	B	03/07/07 21:48
193108-007	Heptachlor	GC23	B	03/07/07 21:48
193108-007	Aldrin	GC23	B	03/07/07 21:48
193108-007	Heptachlor epoxide	GC23	B	03/07/07 21:48
193108-007	Endosulfan I	GC23	B	03/07/07 21:48
193108-007	Dieldrin	GC23	B	03/07/07 21:48
193108-007	4,4'-DDE	GC23	B	03/07/07 21:48
193108-007	Endrin	GC23	B	03/07/07 21:48
193108-007	Endosulfan II	GC23	B	03/07/07 21:48
193108-007	Endosulfan sulfate	GC23	B	03/07/07 21:48
193108-007	4,4'-DDD	GC23	B	03/07/07 21:48
193108-007	4,4'-DDT	GC23	B	03/07/07 21:48
193108-007	alpha-Chlordane	GC23	B	03/07/07 21:48
193108-007	gamma-Chlordane	GC23	B	03/07/07 21:48
193108-007	Methoxychlor	GC23	B	03/07/07 21:48
193108-007	Endrin ketone	GC23	B	03/07/07 21:48
193108-007	Toxaphene	GC23	B	03/07/07 21:48
193108-007	TCMX	GC23	B	03/07/07 21:48
193108-007	Decachlorobiphenyl	GC23	B	03/07/07 21:48
193108-008	alpha-BHC	GC23	A	03/13/07 22:23
193108-008	beta-BHC	GC23	A	03/13/07 22:23
193108-008	gamma-BHC	GC23	A	03/08/07 13:17
193108-008	delta-BHC	GC23	A	03/13/07 22:23
193108-008	Heptachlor	GC23	A	03/13/07 22:23
193108-008	Aldrin	GC23	A	03/13/07 22:23
193108-008	Heptachlor epoxide	GC23	A	03/13/07 22:23
193108-008	Endosulfan I	GC23	A	03/13/07 22:23
193108-008	Dieldrin	GC23	A	03/13/07 22:23
193108-008	4,4'-DDE	GC23	A	03/13/07 22:23
193108-008	Endrin	GC23	A	03/13/07 22:23
193108-008	Endosulfan II	GC23	A	03/13/07 22:23
193108-008	Endosulfan sulfate	GC23	A	03/13/07 22:23
193108-008	4,4'-DDD	GC23	A	03/13/07 22:23
193108-008	4,4'-DDT	GC23	A	03/13/07 22:23
193108-008	alpha-Chlordane	GC23	A	03/13/07 22:23
193108-008	gamma-Chlordane	GC23	A	03/13/07 22:23
193108-008	Methoxychlor	GC23	A	03/13/07 22:23
193108-008	Endrin ketone	GC23	A	03/13/07 22:23
193108-008	Toxaphene	GC23	A	03/13/07 22:23
193108-008	TCMX	GC23	A	03/13/07 22:23
193108-008	Decachlorobiphenyl	GC23	A	03/13/07 22:23
193108-010	alpha-BHC	GC23	B	03/07/07 22:31
193108-010	beta-BHC	GC23	B	03/07/07 22:31
193108-010	gamma-BHC	GC23	B	03/07/07 22:31
193108-010	delta-BHC	GC23	B	03/07/07 22:31
193108-010	Heptachlor	GC23	B	03/07/07 22:31
193108-010	Aldrin	GC23	B	03/07/07 22:31
193108-010	Heptachlor epoxide	GC23	B	03/07/07 22:31
193108-010	Endosulfan I	GC23	B	03/07/07 22:31

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-010	Dieldrin	GC23	B	03/07/07 22:31
193108-010	4,4'-DDE	GC23	B	03/07/07 22:31
193108-010	Endrin	GC23	B	03/07/07 22:31
193108-010	Endosulfan II	GC23	B	03/07/07 22:31
193108-010	Endosulfan sulfate	GC23	B	03/07/07 22:31
193108-010	4,4'-DDD	GC23	B	03/07/07 22:31
193108-010	4,4'-DDT	GC23	B	03/07/07 22:31
193108-010	alpha-Chlordane	GC23	B	03/07/07 22:31
193108-010	gamma-Chlordane	GC23	B	03/07/07 22:31
193108-010	Methoxychlor	GC23	B	03/07/07 22:31
193108-010	Endrin ketone	GC23	B	03/07/07 22:31
193108-010	Toxaphene	GC23	B	03/07/07 22:31
193108-010	TCMX	GC23	B	03/07/07 22:31
193108-010	Decachlorobiphenyl	GC23	B	03/07/07 22:31
193108-011	alpha-BHC	GC23	A	03/13/07 22:45
193108-011	beta-BHC	GC23	A	03/13/07 22:45
193108-011	gamma-BHC	GC23	A	03/08/07 13:38
193108-011	delta-BHC	GC23	A	03/13/07 22:45
193108-011	Heptachlor	GC23	A	03/13/07 22:45
193108-011	Aldrin	GC23	A	03/13/07 22:45
193108-011	Heptachlor epoxide	GC23	A	03/13/07 22:45
193108-011	Endosulfan I	GC23	A	03/13/07 22:45
193108-011	Dieldrin	GC23	A	03/13/07 22:45
193108-011	4,4'-DDE	GC23	A	03/13/07 22:45
193108-011	Endrin	GC23	A	03/13/07 22:45
193108-011	Endosulfan II	GC23	A	03/13/07 22:45
193108-011	Endosulfan sulfate	GC23	A	03/13/07 22:45
193108-011	4,4'-DDD	GC23	A	03/13/07 22:45
193108-011	4,4'-DDT	GC23	A	03/13/07 22:45
193108-011	alpha-Chlordane	GC23	A	03/13/07 22:45
193108-011	gamma-Chlordane	GC23	A	03/13/07 22:45
193108-011	Methoxychlor	GC23	A	03/13/07 22:45
193108-011	Endrin ketone	GC23	A	03/13/07 22:45
193108-011	Toxaphene	GC23	A	03/13/07 22:45
193108-011	TCMX	GC23	A	03/13/07 22:45
193108-011	Decachlorobiphenyl	GC23	A	03/13/07 22:45
193108-013	alpha-BHC	GC23	B	03/07/07 23:14
193108-013	beta-BHC	GC23	B	03/07/07 23:14
193108-013	gamma-BHC	GC23	B	03/07/07 23:14
193108-013	delta-BHC	GC23	B	03/07/07 23:14
193108-013	Heptachlor	GC23	B	03/07/07 23:14
193108-013	Aldrin	GC23	B	03/07/07 23:14
193108-013	Heptachlor epoxide	GC23	B	03/07/07 23:14
193108-013	Endosulfan I	GC23	B	03/07/07 23:14
193108-013	Dieldrin	GC23	B	03/07/07 23:14
193108-013	4,4'-DDE	GC23	B	03/07/07 23:14
193108-013	Endrin	GC23	B	03/07/07 23:14
193108-013	Endosulfan II	GC23	B	03/07/07 23:14
193108-013	Endosulfan sulfate	GC23	B	03/07/07 23:14
193108-013	4,4'-DDD	GC23	B	03/07/07 23:14
193108-013	4,4'-DDT	GC23	B	03/07/07 23:14
193108-013	alpha-Chlordane	GC23	B	03/07/07 23:14

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-013	gamma-Chlordane	GC23	B	03/07/07 23:14
193108-013	Methoxychlor	GC23	B	03/07/07 23:14
193108-013	Endrin ketone	GC23	B	03/07/07 23:14
193108-013	Toxaphene	GC23	B	03/07/07 23:14
193108-013	TCMX	GC23	B	03/07/07 23:14
193108-013	Decachlorobiphenyl	GC23	B	03/07/07 23:14
193108-022	alpha-BHC	GC23	B	03/07/07 23:35
193108-022	beta-BHC	GC23	B	03/07/07 23:35
193108-022	gamma-BHC	GC23	B	03/07/07 23:35
193108-022	delta-BHC	GC23	B	03/07/07 23:35
193108-022	Heptachlor	GC23	B	03/07/07 23:35
193108-022	Aldrin	GC23	B	03/07/07 23:35
193108-022	Heptachlor epoxide	GC23	B	03/07/07 23:35
193108-022	Endosulfan I	GC23	B	03/07/07 23:35
193108-022	Dieldrin	GC23	B	03/07/07 23:35
193108-022	4,4'-DDE	GC23	B	03/07/07 23:35
193108-022	Endrin	GC23	B	03/07/07 23:35
193108-022	Endosulfan II	GC23	B	03/07/07 23:35
193108-022	Endosulfan sulfate	GC23	B	03/07/07 23:35
193108-022	4,4'-DDD	GC23	B	03/07/07 23:35
193108-022	4,4'-DDT	GC23	B	03/07/07 23:35
193108-022	alpha-Chlordane	GC23	B	03/07/07 23:35
193108-022	gamma-Chlordane	GC23	B	03/07/07 23:35
193108-022	Methoxychlor	GC23	B	03/07/07 23:35
193108-022	Endrin ketone	GC23	B	03/07/07 23:35
193108-022	Toxaphene	GC23	A	03/07/07 23:35
193108-022	TCMX	GC23	B	03/07/07 23:35
193108-022	Decachlorobiphenyl	GC23	B	03/07/07 23:35
193108-023	alpha-BHC	GC23	B	03/07/07 23:57
193108-023	beta-BHC	GC23	B	03/07/07 23:57
193108-023	gamma-BHC	GC23	B	03/07/07 23:57
193108-023	delta-BHC	GC23	B	03/07/07 23:57
193108-023	Heptachlor	GC23	B	03/07/07 23:57
193108-023	Aldrin	GC23	B	03/07/07 23:57
193108-023	Heptachlor epoxide	GC23	B	03/07/07 23:57
193108-023	Endosulfan I	GC23	B	03/07/07 23:57
193108-023	Dieldrin	GC23	B	03/07/07 23:57
193108-023	4,4'-DDE	GC23	B	03/07/07 23:57
193108-023	Endrin	GC23	B	03/07/07 23:57
193108-023	Endosulfan II	GC23	B	03/07/07 23:57
193108-023	Endosulfan sulfate	GC23	B	03/07/07 23:57
193108-023	4,4'-DDD	GC23	B	03/07/07 23:57
193108-023	4,4'-DDT	GC23	B	03/07/07 23:57
193108-023	alpha-Chlordane	GC23	B	03/07/07 23:57
193108-023	gamma-Chlordane	GC23	B	03/07/07 23:57
193108-023	Methoxychlor	GC23	B	03/07/07 23:57
193108-023	Endrin ketone	GC23	B	03/07/07 23:57
193108-023	Toxaphene	GC23	B	03/07/07 23:57
193108-023	TCMX	GC23	B	03/07/07 23:57
193108-023	Decachlorobiphenyl	GC23	B	03/07/07 23:57
193108-025	alpha-BHC	GC23	B	03/08/07 00:18

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-025	beta-BHC	GC23	B	03/08/07 00:18
193108-025	gamma-BHC	GC23	B	03/08/07 00:18
193108-025	delta-BHC	GC23	B	03/08/07 00:18
193108-025	Heptachlor	GC23	B	03/08/07 00:18
193108-025	Aldrin	GC23	B	03/08/07 00:18
193108-025	Heptachlor epoxide	GC23	B	03/08/07 00:18
193108-025	Endosulfan I	GC23	B	03/08/07 00:18
193108-025	Dieldrin	GC23	B	03/08/07 00:18
193108-025	4,4'-DDE	GC23	B	03/08/07 00:18
193108-025	Endrin	GC23	B	03/08/07 00:18
193108-025	Endosulfan II	GC23	B	03/08/07 00:18
193108-025	Endosulfan sulfate	GC23	B	03/08/07 00:18
193108-025	4,4'-DDD	GC23	B	03/08/07 00:18
193108-025	4,4'-DDT	GC23	B	03/08/07 00:18
193108-025	alpha-Chlordane	GC23	B	03/08/07 00:18
193108-025	gamma-Chlordane	GC23	B	03/08/07 00:18
193108-025	Methoxychlor	GC23	B	03/08/07 00:18
193108-025	Endrin ketone	GC23	B	03/08/07 00:18
193108-025	Toxaphene	GC23	B	03/08/07 00:18
193108-025	TCMX	GC23	B	03/08/07 00:18
193108-025	Decachlorobiphenyl	GC23	B	03/08/07 00:18
193108-026	alpha-BHC	GC23	B	03/08/07 00:39
193108-026	beta-BHC	GC23	B	03/08/07 00:39
193108-026	gamma-BHC	GC23	B	03/08/07 00:39
193108-026	delta-BHC	GC23	B	03/08/07 00:39
193108-026	Heptachlor	GC23	B	03/08/07 00:39
193108-026	Aldrin	GC23	B	03/08/07 00:39
193108-026	Heptachlor epoxide	GC23	B	03/08/07 00:39
193108-026	Endosulfan I	GC23	B	03/08/07 00:39
193108-026	Dieldrin	GC23	B	03/08/07 00:39
193108-026	4,4'-DDE	GC23	B	03/08/07 00:39
193108-026	Endrin	GC23	B	03/08/07 00:39
193108-026	Endosulfan II	GC23	B	03/08/07 00:39
193108-026	Endosulfan sulfate	GC23	B	03/08/07 00:39
193108-026	4,4'-DDD	GC23	B	03/08/07 00:39
193108-026	4,4'-DDT	GC23	B	03/08/07 00:39
193108-026	alpha-Chlordane	GC23	B	03/08/07 00:39
193108-026	gamma-Chlordane	GC23	B	03/08/07 00:39
193108-026	Methoxychlor	GC23	B	03/08/07 00:39
193108-026	Endrin ketone	GC23	B	03/08/07 00:39
193108-026	Toxaphene	GC23	A	03/08/07 00:39
193108-026	TCMX	GC23	B	03/08/07 00:39
193108-026	Decachlorobiphenyl	GC23	B	03/08/07 00:39
193108-027	alpha-BHC	GC23	B	03/08/07 01:01
193108-027	beta-BHC	GC23	B	03/08/07 01:01
193108-027	gamma-BHC	GC23	B	03/08/07 01:01
193108-027	delta-BHC	GC23	B	03/08/07 01:01
193108-027	Heptachlor	GC23	B	03/08/07 01:01
193108-027	Aldrin	GC23	B	03/08/07 01:01
193108-027	Heptachlor epoxide	GC23	B	03/08/07 01:01
193108-027	Endosulfan I	GC23	B	03/08/07 01:01
193108-027	Dieldrin	GC23	B	03/08/07 01:01

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-027	4,4'-DDE	GC23	B	03/08/07 01:01
193108-027	Endrin	GC23	B	03/08/07 01:01
193108-027	Endosulfan II	GC23	B	03/08/07 01:01
193108-027	Endosulfan sulfate	GC23	B	03/08/07 01:01
193108-027	4,4'-DDD	GC23	B	03/08/07 01:01
193108-027	4,4'-DDT	GC23	B	03/08/07 01:01
193108-027	alpha-Chlordane	GC23	B	03/08/07 01:01
193108-027	gamma-Chlordane	GC23	B	03/08/07 01:01
193108-027	Methoxychlor	GC23	B	03/08/07 01:01
193108-027	Endrin ketone	GC23	B	03/08/07 01:01
193108-027	Toxaphene	GC23	A	03/08/07 01:01
193108-027	TCMX	GC23	B	03/08/07 01:01
193108-027	Decachlorobiphenyl	GC23	B	03/08/07 01:01
QC377837	alpha-BHC	GC23	A	03/13/07 21:40
QC377837	beta-BHC	GC23	A	03/13/07 21:40
QC377837	gamma-BHC	GC23	A	03/13/07 21:40
QC377837	delta-BHC	GC23	A	03/13/07 21:40
QC377837	Heptachlor	GC23	A	03/13/07 21:40
QC377837	Aldrin	GC23	A	03/13/07 21:40
QC377837	Heptachlor epoxide	GC23	A	03/13/07 21:40
QC377837	Endosulfan I	GC23	A	03/13/07 21:40
QC377837	Dieldrin	GC23	A	03/13/07 21:40
QC377837	4,4'-DDE	GC23	A	03/13/07 21:40
QC377837	Endrin	GC23	A	03/13/07 21:40
QC377837	Endosulfan II	GC23	A	03/13/07 21:40
QC377837	Endosulfan sulfate	GC23	A	03/13/07 21:40
QC377837	4,4'-DDD	GC23	A	03/13/07 21:40
QC377837	4,4'-DDT	GC23	A	03/13/07 21:40
QC377837	alpha-Chlordane	GC23	A	03/13/07 21:40
QC377837	gamma-Chlordane	GC23	A	03/13/07 21:40
QC377837	Methoxychlor	GC23	A	03/13/07 21:40
QC377837	Endrin ketone	GC23	A	03/13/07 21:40
QC377837	Toxaphene	GC23	A	03/13/07 21:40
QC377837	TCMX	GC23	B	03/13/07 21:40
QC377837	Decachlorobiphenyl	GC23	B	03/13/07 21:40
QC377838	gamma-BHC	GC23	A	03/13/07 22:02
QC377838	Heptachlor	GC23	A	03/13/07 22:02
QC377838	Aldrin	GC23	A	03/13/07 22:02
QC377838	Dieldrin	GC23	A	03/13/07 22:02
QC377838	Endrin	GC23	A	03/13/07 22:02
QC377838	4,4'-DDT	GC23	A	03/13/07 22:02
QC377838	TCMX	GC23	A	03/13/07 22:02
QC377838	Decachlorobiphenyl	GC23	A	03/13/07 22:02
QC377839	gamma-BHC	GC23	A	03/08/07 11:51
QC377839	Heptachlor	GC23	A	03/08/07 11:51
QC377839	Aldrin	GC23	A	03/08/07 11:51
QC377839	Dieldrin	GC23	A	03/08/07 11:51
QC377839	Endrin	GC23	A	03/08/07 11:51
QC377839	4,4'-DDT	GC23	A	03/08/07 11:51
QC377839	TCMX	GC23	A	03/08/07 11:51
QC377839	Decachlorobiphenyl	GC23	B	03/08/07 11:51

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377840	gamma-BHC	GC23	A	03/08/07 12:12
QC377840	Heptachlor	GC23	A	03/08/07 12:12
QC377840	Aldrin	GC23	A	03/08/07 12:12
QC377840	Dieldrin	GC23	A	03/08/07 12:12
QC377840	Endrin	GC23	A	03/08/07 12:12
QC377840	4,4'-DDT	GC23	A	03/08/07 12:12
QC377840	TCMX	GC23	A	03/08/07 12:12
QC377840	Decachlorobiphenyl	GC23	B	03/08/07 12:12
QC377841	gamma-BHC	GC23	A	03/08/07 12:34
QC377841	Heptachlor	GC23	A	03/08/07 12:34
QC377841	Aldrin	GC23	A	03/08/07 12:34
QC377841	Dieldrin	GC23	A	03/08/07 12:34
QC377841	Endrin	GC23	A	03/08/07 12:34
QC377841	4,4'-DDT	GC23	A	03/08/07 12:34
QC377841	TCMX	GC23	A	03/08/07 12:34
QC377841	Decachlorobiphenyl	GC23	B	03/08/07 12:34
QC377842	gamma-BHC	GC23	A	03/08/07 12:55
QC377842	Heptachlor	GC23	A	03/08/07 12:55
QC377842	Aldrin	GC23	A	03/08/07 12:55
QC377842	Dieldrin	GC23	A	03/08/07 12:55
QC377842	Endrin	GC23	A	03/08/07 12:55
QC377842	4,4'-DDT	GC23	A	03/08/07 12:55
QC377842	TCMX	GC23	A	03/08/07 12:55
QC377842	Decachlorobiphenyl	GC23	B	03/08/07 12:55

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Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 18:29

Batch Number : 122778
Date Extracted: 06-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5243H
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007		Treadwell & Rollo	Water	1020	mL	10	0.009804	1	7	.025	0		8081		MSS
193108-008		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193108-010		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193108-011		Treadwell & Rollo	Water	1010	mL	10	0.009901	1	7	.025	0		8081		
193108-013		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193108-022		Treadwell & Rollo	Water	1010	mL	10	0.009901	1	7	.025	0		8081		
193108-023		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	7	.025	0		8081		MSS
193108-025		Treadwell & Rollo	Water	950	mL	10	0.010526	1	7	.025	0		8081		
193108-026		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193108-027		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193169-001		Strategic Engineering & Scienc	Water	1060	mL	10	0.009434	1	10	.025	0		8081		
QC377837	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC377838	LCS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC377839	MS	of 193108-007	Water	1020	mL	10	0.009804	1	7	.025	.025		8081		
QC377840	MSD	of 193108-007	Water	1020	mL	10	0.009804	1	7	.025	.025		8081		
QC377841	MS	of 193108-023	Water	1040	mL	10	0.009615	1	7	.025	.025		8081		
QC377842	MSD	of 193108-023	Water	1040	mL	10	0.009615	1	7	.025	.025		8081		

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Prep Chemist: Jessie Mee Reviewed By: Pamela Hoyt Date: 3/8/07

Relinquished By: J Galvez Received By: [illegible] Date: 3/8/07

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 122778
LIMS Analysis: 8081
Extracted by: JOM
Date Extracted: 6 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-007 AE	1020	7	10.0		MSS
08 M	1000				
10 N	1000				
11 M	1010				
13 K	1030				
22 N	~~1000~~ JOM 3/6/07 1010				
25 L	950				
26 O	1060				
27 N	1030				
23 AM	1040				MSS
193169-001 J	1060	10			
MB QC377837	1000	NA			
LCS 38	1000				
MS 39	1020	7			193108-007 AB
MSD 40	1020				AG
MS 41	1040				193108-023 AR blackish H_2O
MSD 42	1040				AL yellowish H_2O

JOM 3/8/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	S5616A	JOM 3/6/07
0.025 mL of matrix spiking solution was added to all spikes	S5243H	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1740	
Extraction End Time:	1200	JOM 3/7/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	3/8/07 JDG
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ Granular Na_2SO_4	EM46011620	
Exchanged 2x with Hexane	JTBC80254	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	

[signature] 3/6/07
Extraction Chemist Date

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Continued on Page ___

Pamela Mayfield 3/8/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Florisil Cleanup** **EPA 3620B**

Prep Chemist: RFW

Cleanup Date: 3/12/07

Benchbook # **BK 2427**

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Sample #	Extraction Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193210-016	122973	1.0	1.0	MSS
-017				
-018				
-019				
-020				
-037				
-038				
-039				
MB QC 378642				
LCS 43				
MS 44				
MSD 45				
193108-008	122778			H_2O^s; by request from analysts
-011				
MB QC 377837				
LCS 38				

JOM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☒ Extracts were cleaned up using Florisil cartridges	SP3687	RCW 3/12/07
Florisil cartridges/ columns rinsed 3x with Hexane	JTB C43E40	
Extracts were eluted with 90 mL 9:1 Hexane/Acetone — Hexane		
Acetone	EM46296	
Concentrated to volumes as noted above	✓	

Extraction Chemist / Date

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Continued from page ___

Continued on page ___

3/13/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/23/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW100	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-008	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	0.99
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	49 *	65-135
Decachlorobiphenyl	21 *	65-135

Field ID:	DUP0301073B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-011	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.98
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	46 *	65-135
Decachlorobiphenyl	22 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW08	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-013	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	36 *	65-135

Field ID:	DAEGW103	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-022	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.98
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	71	65-135
Decachlorobiphenyl	24 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW104	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-023	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	36 *	65-135

Field ID:	DAEGW03	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-025	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	50 *	65-135
Decachlorobiphenyl	38 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-026	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	47 *	65-135
Decachlorobiphenyl	37 *	65-135

Field ID:	DUP0302071A	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-027	Analyzed:	03/10/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	26 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW100 RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-028	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.97
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	48 * b	65-135
Decachlorobiphenyl	43 * b	65-135

Field ID:	DUP0301073B RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-029	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.98
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	48 * b	65-135
Decachlorobiphenyl	42 * b	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW08 RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-030	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.48
Aroclor-1221	ND b	0.96
Aroclor-1232	ND b	0.48
Aroclor-1242	ND b	0.48
Aroclor-1248	ND b	0.48
Aroclor-1254	ND b	0.48
Aroclor-1260	ND b	0.48

Surrogate	%REC	Limits
TCMX	69 b	65-135
Decachlorobiphenyl	39 * b	65-135

Field ID:	DAEGW03 RE	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-031	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.98
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	52 * b	65-135
Decachlorobiphenyl	54 * b	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05 RE	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-032	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.50
Aroclor-1221	ND b	1.0
Aroclor-1232	ND b	0.50
Aroclor-1242	ND b	0.50
Aroclor-1248	ND b	0.50
Aroclor-1254	ND b	0.50
Aroclor-1260	ND b	0.50

Surrogate	%REC	Limits
TCMX	68 b	65-135
Decachlorobiphenyl	53 * b	65-135

Type:	BLANK	Prepared:	03/08/07
Lab ID:	QC378222	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	75	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Type:	BLANK	Prepared:	03/13/07
Lab ID:	QC379056	Analyzed:	03/14/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	62 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378223	Batch#:	122872
Matrix:	Water	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/09/07

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	4.171	83	65-135

Surrogate	%REC	Limits
TCMX	101	65-135
Decachlorobiphenyl	78	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	123068
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: BS
Lab ID: QC379057
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.680	114	65-135

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	60 *	65-135

Type: BSD
Lab ID: QC379058
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	5.006	100	65-135	13	35

Surrogate	%REC	Limits
TCMX	88	65-135
Decachlorobiphenyl	55 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DAEGW104	Batch#:	122872
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/09/07

Type: MS Cleanup Method: EPA 3665A
Lab ID: QC378224

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1242	<0.1180	4.762	3.638	76	65-135

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	29 *	65-135

Type: MSD Cleanup Method: EPA 3665A
Lab ID: QC378225

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	4.762	3.634	76	65-135	0	34

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	24 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257090163001
Units : pg

Name : ar1660_062
Date : 03-MAR-2007 19:07
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	062_011	257090163011	PCB10_2	03-MAR-2007 19:07	S5483
L2	062_012	257090163012	PCB25_5	03-MAR-2007 19:34	S5484
L3	062_013	257090163013	PCB100_20	03-MAR-2007 20:00	S4996
L4	062_014	257090163014	PCB250_50	03-MAR-2007 20:26	S4997
L5	062_015	257090163015	PCB500_100	03-MAR-2007 20:53	S4998
L6	062_016	257090163016	PCB750_150	03-MAR-2007 21:19	S5227
L7	062_017	257090163017	PCB1000_200	03-MAR-2007 21:46	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	986.00	1213.7	1047.0	934.46	884.45	941.49	908.47	AVRG		0.00101		987.94	11	.99	20	
Aroclor-1016 Peak # 2	A	1628.1	1541.2	1398.9	1239.9	1235.2	1393.9	1259.0	AVRG		7.22E-4		1385.2	11	.99	20	
Aroclor-1016 Peak # 3	A	418.20	558.20	657.13	589.24	560.66	614.72	550.05	AVRG		0.00177		564.03	13	.99	20	
Aroclor-1016 Peak # 4	A	374.60	510.64	481.76	428.50	395.19	443.63	396.44	AVRG		0.00231		432.97	11	.99	20	
Aroclor-1016 Peak # 5	A	543.90	689.96	611.54	540.04	515.03	578.05	509.59	AVRG		0.00176		569.73	11	.99	20	
Aroclor-1260 Peak # 1	A	1945.9	2511.4	2185.0	1901.5	1971.9	2296.9	1863.9	AVRG		4.77E-4		2096.6	12	.99	20	
Aroclor-1260 Peak # 2	A	1389.0	2001.0	1734.1	1510.0	1558.5	1904.1	1510.1	AVRG		6.03E-4		1658.1	14	.99	20	
Aroclor-1260 Peak # 3	A	1286.5	1525.6	1322.8	1150.7	1142.3	1340.3	1092.7	AVRG		7.90E-4		1265.8	12	.99	20	
Aroclor-1260 Peak # 4	A	835.30	1328.5	1110.9	995.34	1003.2	1182.6	995.47	AVRG		9.39E-4		1064.5	15	.99	20	
Aroclor-1260 Peak # 5	A	2734.8	3409.0	3046.7	2607.3	2731.2	3105.0	2431.7	AVRG		3.49E-4		2866.5	12	.99	20	
TCMX	A	30110	34956	32377	32182	31084	29116	26551	AVRG		3.24E-5		30911	9	.99	20	
Decachlorobiphenyl	A	21947	28116	23618	21623	21352	22909	17423	AVRG		4.46E-5		22427	14	.99	20	
Aroclor-1016 Peak # 1	B	506.50	505.64	484.07	388.07	405.21	395.44	391.18	AVRG		0.00228		439.44	13	.99	20	
Aroclor-1016 Peak # 2	B	1094.5	1048.4	1080.5	853.47	913.24	929.65	934.21	AVRG		0.00102		979.13	10	.99	20	
Aroclor-1016 Peak # 3	B	485.00	492.84	444.53	331.28	355.29	341.89	345.38	AVRG		0.00250		399.46	18	.99	20	
Aroclor-1016 Peak # 4	B	360.50	342.68	332.74	245.17	268.27	258.91	260.35	AVRG		0.00338		295.52	16	.99	20	
Aroclor-1016 Peak # 5	B	473.80	449.64	433.83	305.10	347.22	325.68	325.52	AVRG		0.00263		380.11	18	.99	20	
Aroclor-1260 Peak # 1	B	1103.2	1055.6	993.69	677.84	822.65	758.93	796.37	AVRG		0.00113		886.90	18	.99	20	
Aroclor-1260 Peak # 2	B	1671.3	1563.0	1447.7	971.95	1243.6	1148.3	1182.4	AVRG		7.59E-4		1318.3	19	.99	20	
Aroclor-1260 Peak # 3	B	1838.0	1525.3	1503.7	1032.1	1299.2	1206.2	1258.7	AVRG		7.24E-4		1380.5	19	.99	20	
Aroclor-1260 Peak # 4	B	1007.2	970.64	901.82	588.16	736.21	667.33	697.71	AVRG		0.00126		795.58	20	.99	20	
Aroclor-1260 Peak # 5	B	2835.4	2536.2	2329.0	1569.8	2098.9	1846.7	1860.5	AVRG		4.64E-4		2153.8	20	.99	20	
TCMX	B	26468	21975	21492	17899	19033	18451	17172	AVRG		4.91E-5		20356	16	.99	20	
Decachlorobiphenyl	B		19819	17402	11595	15792	13852	13410	AVRG		6.53E-5		15312	19	.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B		5.0000	20.000	50.000	100.00	150.00	200.00	pg

425

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

257090163001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PCBS Water
EPA 8082

Inst : GC22 Name : ar1660_062
Calnum : 257090163001 Cal Date: 03-MAR-2007

ICV 257090163020 (062_020 03-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	987.94		250.0	235.8	pg	-6	15	
Aroclor-1260	A	2096.6		250.0	270.9	pg	8	15	
Aroclor-1016	B	439.44		250.0	220.3	pg	-12	15	
Aroclor-1260	B	886.90		250.0	219.4	pg	-12	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257092782001
Units : pg

Name : ar1242
Date : 05-MAR-2007 13:28
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_007	257092782007	AR1242	05-MAR-2007 13:28	S5239

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	836.22	AVRG		0.00120		836.22	0	.99	20	
Aroclor-1242 Peak # 2	A	1084.3	AVRG		9.22E-4		1084.3	0	.99	20	
Aroclor-1242 Peak # 3	A	527.18	AVRG		0.00190		527.18	0	.99	20	
Aroclor-1242 Peak # 4	A	502.96	AVRG		0.00199		502.96	0	.99	20	
Aroclor-1242 Peak # 5	A	489.37	AVRG		0.00204		489.37	0	.99	20	
Aroclor-1242 Peak # 1	B	355.60	AVRG		0.00281		355.60	0	.99	20	
Aroclor-1242 Peak # 2	B	713.93	AVRG		0.00140		713.93	0	.99	20	
Aroclor-1242 Peak # 3	B	444.37	AVRG		0.00225		444.37	0	.99	20	
Aroclor-1242 Peak # 4	B	221.90	AVRG		0.00451		221.90	0	.99	20	
Aroclor-1242 Peak # 5	B	295.69	AVRG		0.00338		295.69	0	.99	20	

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Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257103122001
Units : pg

Name : 1660_071
Date : 12-MAR-2007 17:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_006	257103122006	PCB10_2	12-MAR-2007 17:36	S5483
L2	071_007	257103122007	PCB25_5	12-MAR-2007 18:02	S5484
L3	071_008	257103122008	PCB100_20	12-MAR-2007 18:29	S4996
L4	071_009	257103122009	PCB250_50	12-MAR-2007 18:55	S4997
L5	071_010	257103122010	PCB500_100	12-MAR-2007 19:22	S4998
L6	071_011	257103122011	PCB750_150	12-MAR-2007 19:48	S5227
L7	071_012	257103122012	PCB1000_200	12-MAR-2007 20:14	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	1148.7	1095.6	1111.1	966.15	817.74	903.27	930.70	AVRG		0.00100		996.18	12	.99	20	
Aroclor-1016 Peak # 2	A	1342.4	1385.2	1449.3	1325.1	1175.9	1380.5	1475.9	AVRG		7.34E-4		1362.1	7	.99	20	
Aroclor-1016 Peak # 3	A	597.80	559.44	656.04	598.44	511.78	568.47	603.45	AVRG		0.00171		585.06	8	.99	20	
Aroclor-1016 Peak # 4	A	378.10	405.52	446.45	401.34	338.75	361.82	391.90	AVRG		0.00257		389.13	9	.99	20	
Aroclor-1016 Peak # 5	A	667.30	649.64	669.16	606.22	520.26	575.48	610.12	AVRG		0.00163		614.02	9	.99	20	
Aroclor-1260 Peak # 1	A	2260.7	2217.4	2258.9	2143.2	2028.7	2210.1	2285.6	AVRG		4.54E-4		2200.6	4	.99	20	
Aroclor-1260 Peak # 2	A	1879.6	1844.9	1918.8	1787.4	1686.4	1887.8	2042.4	AVRG		5.37E-4		1863.9	6	.99	20	
Aroclor-1260 Peak # 3	A	1561.1	1166.5	1266.2	1174.9	1095.9	1178.6	1255.5	AVRG		8.05E-4		1242.7	12	.99	20	
Aroclor-1260 Peak # 4	A	3102.1	2924.0	3038.0	3027.6	2898.8	3041.4	3025.2	AVRG		3.32E-4		3008.2	2	.99	20	
Aroclor-1260 Peak # 5	A	1509.3	1397.4	1495.1	1418.8	1327.9	1470.6	1564.0	AVRG		6.87E-4		1454.7	5	.99	20	
TCMX	A	34845	31892	34012	33399	29284	29869	26488	AVRG		3.18E-5		31398	10	.99	20	
Decachlorobiphenyl	A	21658	20994	21971	22411	20771	20458	17498	AVRG		4.80E-5		20823	8	.99	20	
Aroclor-1016 Peak # 1	B	545.70	499.00	417.50	403.95	380.80	334.89	401.77	AVRG		0.00235		426.23	17	.99	20	
Aroclor-1016 Peak # 2	B	1194.7	1111.2	936.58	892.60	855.35	766.44	950.70	AVRG		0.00104		958.23	15	.99	20	
Aroclor-1016 Peak # 3	B	699.20	661.20	532.62	511.42	486.74	436.54	540.28	AVRG		0.00181		552.57	17	.99	20	
Aroclor-1016 Peak # 4	B	346.10	338.36	268.57	263.22	247.78	223.73	269.05	AVRG		0.00358		279.54	16	.99	20	
Aroclor-1016 Peak # 5	B	467.70	438.80	331.97	331.13	311.25	280.88	343.77	AVRG		0.00279		357.93	19	.99	20	
Aroclor-1260 Peak # 1	B	1515.8	1582.4	1126.0	1112.2	1150.6	1043.9	1343.9	AVRG		7.89E-4		1267.8	17	.99	20	
Aroclor-1260 Peak # 2	B	1057.0	1027.9	762.21	751.70	746.88	684.53	910.09	AVRG		0.00118		848.61	18	.99	20	
Aroclor-1260 Peak # 3	B	895.10	889.12	639.43	638.10	634.73	579.63	776.73	AVRG		0.00139		721.83	18	.99	20	
Aroclor-1260 Peak # 4	B	2237.1	2294.6	1651.7	1705.0	1809.9	1658.8	2111.3	AVRG		5.20E-4		1924.0	15	.99	20	
Aroclor-1260 Peak # 5	B	1125.4	1160.2	845.69	851.66	869.37	788.31	1056.7	AVRG		0.00105		956.76	16	.99	20	
TCMX	B	21813	20655	17169	16709	17334	15631	17398	AVRG		5.52E-5		18101	12	.99	20	
Decachlorobiphenyl	B	16028	16543	11873	12344	13416	12115	14415	AVRG		7.24E-5		13819	14	.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

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Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_071
Calnum : 257103122001 Cal Date: 12-MAR-2007

ICV 257103122014 (071_014 12-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	996.18		250.0	220.5	pg	-12	15	
Aroclor-1260	A	2200.6		250.0	231.4	pg	-7	15	
Aroclor-1016	B	426.23		250.0	222.2	pg	-11	15	
Aroclor-1260	B	1267.8		250.0	234.8	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257104282001
Units : pg

Name : ar1242
Date : 13-MAR-2007 12:17
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_004	257104282004	AR1242	13-MAR-2007 12:17	S5688

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	729.21	AVRG		0.00137		729.21	0	.99	20	
Aroclor-1242 Peak # 2	A	903.51	AVRG		0.00111		903.51	0	.99	20	
Aroclor-1242 Peak # 3	A	409.56	AVRG		0.00244		409.56	0	.99	20	
Aroclor-1242 Peak # 4	A	433.30	AVRG		0.00231		433.30	0	.99	20	
Aroclor-1242 Peak # 5	A	418.97	AVRG		0.00239		418.97	0	.99	20	
Aroclor-1242 Peak # 1	B	284.85	AVRG		0.00351		284.85	0	.99	20	
Aroclor-1242 Peak # 2	B	668.87	AVRG		0.00150		668.87	0	.99	20	
Aroclor-1242 Peak # 3	B	360.03	AVRG		0.00278		360.03	0	.99	20	
Aroclor-1242 Peak # 4	B	176.23	AVRG		0.00567		176.23	0	.99	20	
Aroclor-1242 Peak # 5	B	232.92	AVRG		0.00429		232.92	0	.99	20	

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Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	254.80	pg	2	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	240.69	pg	-4	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	488.88	pg	-2	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	447.76	pg	-10	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	677.73	pg	-10	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	689.89	pg	-8	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	247.85	pg	-1	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	243.36	pg	-3	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	431.57	pg	-14	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	462.25	pg	-8	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	743.29	pg	-1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	673.67	pg	-10	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	509.31	pg	2	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	474.93	pg	-5	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	232.01	pg	-7	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	251.94	pg	1	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1242

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648007	09-MAR-2007 15:44	257092782001	05-MAR-2007			250.00	227.09	pg	-9	15	
GC22	B	257098648007	09-MAR-2007 15:44	257092782001	05-MAR-2007			250.00	230.41	pg	-8	15	
GC22	A	257098648026	10-MAR-2007 00:07	257092782001	05-MAR-2007			250.00	225.68	pg	-10	15	
GC22	B	257098648026	10-MAR-2007 00:07	257092782001	05-MAR-2007			250.00	214.50	pg	-14	15	
GC22	A	257098648045	10-MAR-2007 08:28	257092782001	05-MAR-2007			250.00	238.46	pg	-5	15	
GC22	B	257098648045	10-MAR-2007 08:28	257092782001	05-MAR-2007			250.00	233.33	pg	-7	15	
GC22	A	257101495015	11-MAR-2007 22:19	257092782001	05-MAR-2007			250.00	242.25	pg	-3	15	
GC22	B	257101495015	11-MAR-2007 22:19	257092782001	05-MAR-2007			250.00	217.40	pg	-13	15	
GC22	A	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	277.17	pg	11	15	
GC22	B	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	275.72	pg	10	15	
GC22	A	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	282.26	pg	13	15	
GC22	B	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	281.75	pg	13	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	247.77	pg	-1	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	225.41	pg	-10	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	539.70	pg	8	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	465.75	pg	-7	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	725.51	pg	-3	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	741.12	pg	-1	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	246.96	pg	-1	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	246.32	pg	-1	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	486.40	pg	-3	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	457.84	pg	-8	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	802.65	pg	7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	820.69	pg	9	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	516.61	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	534.32	pg	7	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	253.08	pg	1	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	269.81	pg	8	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	30911	34336	50.000	55.541	pg	11	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	20356	19670	50.000	48.316	pg	-3	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	30911	33608	100.00	108.72	pg	9	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	20356	18941	100.00	93.050	pg	-7	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	30911	29775	150.00	144.49	pg	-4	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	20356	18823	150.00	138.71	pg	-8	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	30911	32830	50.000	53.104	pg	6	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	20356	18919	50.000	46.472	pg	-7	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	30911	29569	100.00	95.658	pg	-4	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	20356	19839	100.00	97.462	pg	-3	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	31398	29246	150.00	139.72	pg	-7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	18101	17058	150.00	141.35	pg	-6	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	31398	34984	100.00	111.42	pg	11	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	18101	19523	100.00	107.85	pg	8	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	31398	32365	50.000	51.539	pg	3	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	18101	17484	50.000	48.295	pg	-3	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	22427	20493	50.000	45.689	pg	-9	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	15312	14296	50.000	46.682	pg	-7	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	22427	22879	100.00	102.01	pg	2	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	15312	15121	100.00	98.757	pg	-1	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	22427	19549	150.00	130.75	pg	-13	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	15312	16322	150.00	159.89	pg	7	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	22427	20859	50.000	46.505	pg	-7	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	15312	16414	50.000	53.600	pg	7	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	22427	22263	100.00	99.267	pg	-1	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	15312	15349	100.00	100.25	pg	0	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	20823	20971	150.00	151.07	pg	1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	13819	16166	150.00	175.47	pg	**17**	15	c+
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	20823	21438	100.00	102.96	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	13819	15104	100.00	109.30	pg	9	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	20823	23885	50.000	57.353	pg	15	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	13819	15913	50.000	57.577	pg	15	15	

+=high bias c=CCV

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257090163 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 03-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	062_001	X	PRIMER			03-MAR-2007 14:43	1.0						
002	062_002	X	PRIMER			03-MAR-2007 15:10	1.0						
003	062_003	X	PRIMER			03-MAR-2007 15:36	1.0						
004	062_004	X	PRIMER			03-MAR-2007 16:03	1.0						
005	062_005	X	PRIMER			03-MAR-2007 16:29	1.0						
006	062_006	X	PRIMER			03-MAR-2007 16:55	1.0						
007	062_007	X	PRIMER			03-MAR-2007 17:22	1.0						
008	062_008	X	HEX			03-MAR-2007 17:48	1.0						
009	062_009	X	HEX			03-MAR-2007 18:15	1.0						
010	062_010	X	HEX			03-MAR-2007 18:41	1.0						
011	062_011	ICAL	PCB10_2			03-MAR-2007 19:07	1.0					1	
012	062_012	ICAL	PCB25_5			03-MAR-2007 19:34	1.0					2	
013	062_013	ICAL	PCB100_20			03-MAR-2007 20:00	1.0					3	
014	062_014	ICAL	PCB250_50			03-MAR-2007 20:26	1.0					4	
015	062_015	ICAL	PCB500_100			03-MAR-2007 20:53	1.0					5	
016	062_016	ICAL	PCB750_150			03-MAR-2007 21:19	1.0					6	
017	062_017	ICAL	PCB1000_200			03-MAR-2007 21:46	1.0					7	
018	062_018	X	HEX			03-MAR-2007 22:12	1.0						
019	062_019	X	ULTRA_1660			03-MAR-2007 22:38	1.0					8	
020	062_020	ICV	ULTRA_1660			03-MAR-2007 23:05	1.0		1			8	
021	062_021	X	HEX			03-MAR-2007 23:31	1.0						

Stds used: 1=S5483 2=S5484 3=S4996 4=S4997 5=S4998 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	HEX			05-MAR-2007 10:22	1.0						
002	064_002	X	HEX			05-MAR-2007 10:49	1.0						
003	064_003	X	HEX			05-MAR-2007 11:15	1.0						
004	064_004	CCV	PCB750_150			05-MAR-2007 11:41	1.0	1.0			1	1	
005	064_005	X	PCB750_150			05-MAR-2007 12:08	1.0	1.0			1	1	
006	064_006	X	AR1242			05-MAR-2007 13:01	1.0					2	
007	064_007	ICAL	AR1242			05-MAR-2007 13:28	1.0	1.0				2	
008	064_008	X	AR2154			05-MAR-2007 14:51	1.0					3	
009	064_009	X	AR2154			05-MAR-2007 15:17	1.0					3	
010	064_010	X	AR1248			05-MAR-2007 15:44	1.0					4	
011	064_011	X	HEX			05-MAR-2007 16:10	1.0						
012	064_012	BLANK	QC377462	122695	Soil	05-MAR-2007 16:37	1.0	0.664			1		
013	064_013	MSS	193078-001	122695	Soil	05-MAR-2007 17:33	1.0	0.664			1		
014	064_014	SAMPLE	193061-021	122695	Soil	05-MAR-2007 17:59	1.0	0.6662			1		
015	064_015	SAMPLE	193061-022	122695	Soil	05-MAR-2007 18:26	1.0	0.6656		1	1		
016	064_016	SAMPLE	193061-023	122695	Soil	05-MAR-2007 18:52	1.0	0.6653			1		
017	064_017	SAMPLE	193061-024	122695	Soil	05-MAR-2007 19:19	1.0	0.6633			1		
018	064_018	SAMPLE	193061-025	122695	Soil	05-MAR-2007 19:45	1.0	0.6616		1	1		
019	064_019	LCS	QC377463	122695	Soil	05-MAR-2007 20:11	1.0	0.6642			1		
020	064_020	MS	QC377464	122695	Soil	05-MAR-2007 20:38	1.0	0.6664		2	1		
021	064_021	MSD	QC377465	122695	Soil	05-MAR-2007 21:04	1.0	0.6598		1	1		
022	064_022	X	HEX			05-MAR-2007 21:31	1.0						
023	064_023	CCV	PCB500_100			05-MAR-2007 21:57	1.0	1.0			1	5	
024	064_024	X	PCB500_100			05-MAR-2007 22:24	1.0	1.0	4		1	5	
025	064_025	CCV	AR1242			05-MAR-2007 22:50	1.0	1.0			1	2	
026	064_026	X	AR1242			05-MAR-2007 23:17	1.0	1.0			1	2	
027	064_027	X	AR2154			05-MAR-2007 23:43	1.0					3	
028	064_028	X	AR2154			06-MAR-2007 00:09	1.0					3	
029	064_029	X	AR1248			06-MAR-2007 00:36	1.0					4	
030	064_030	X	HEX			06-MAR-2007 01:02	1.0						
031	064_031	SAMPLE	193101-001	122695	Soil	06-MAR-2007 01:29	1.0	0.6629			1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	064_032	SAMPLE	193101-002	122695	Soil	06-MAR-2007 01:55	1.0	0.666		1	1		
033	064_033	SAMPLE	193101-003	122695	Soil	06-MAR-2007 02:22	1.0	0.6645			1		
034	064_034	SAMPLE	193101-004	122695	Soil	06-MAR-2007 02:48	1.0	0.662		1	1		
035	064_035	SAMPLE	193101-005	122695	Soil	06-MAR-2007 03:15	1.0	0.6594			1		
036	064_036	SAMPLE	193101-006	122695	Soil	06-MAR-2007 03:41	1.0	0.664			1		
037	064_037	SAMPLE	193101-007	122695	Soil	06-MAR-2007 04:08	1.0	0.664			1		
038	064_038	SAMPLE	193101-008	122695	Soil	06-MAR-2007 04:34	1.0	0.6649	3		1		5:PCB101=3722.58
039	064_039	SAMPLE	193101-009	122695	Soil	06-MAR-2007 05:00	1.0	0.6633			1		
040	064_040	X	HEX			06-MAR-2007 05:27	1.0						
041	064_041	CCV	PCB250_50			06-MAR-2007 05:53	1.0	1.0			1	6	
042	064_042	X	PCB250_50			06-MAR-2007 06:20	1.0	1.0			1	6	
043	064_043	X	AR2154			06-MAR-2007 06:46	1.0					3	
044	064_044	X	AR2154			06-MAR-2007 07:13	1.0					3	
045	064_045	X	AR1248			06-MAR-2007 07:39	1.0					4	
046	064_046	X	HEX			06-MAR-2007 08:05	1.0						
047	064_047	SAMPLE	193075-001	122695	Soil	06-MAR-2007 08:32	1.0	0.6649			1		
048	064_048	SAMPLE	193075-002	122695	Soil	06-MAR-2007 08:58	1.0	0.6629			1		
049	064_049	SAMPLE	193075-003	122695	Soil	06-MAR-2007 09:25	1.0	0.6631			1		
050	064_050	X	HEX			06-MAR-2007 09:51	1.0						
051	064_051	SAMPLE	193055-006	122679	Water	06-MAR-2007 10:25	1.0	0.02358		2	1		
052	064_052	X	193055-009	122679	Water	06-MAR-2007 10:52	1.0	0.02381		4	1		
053	064_053	SAMPLE	193055-011	122679	Water	06-MAR-2007 11:18	1.0	0.02451			1		
054	064_054	X	HEX			06-MAR-2007 11:45	1.0						
055	064_055	CCV	PCB500_100			06-MAR-2007 12:11	1.0	1.0			1	5	
056	064_056	X	PCB500_100			06-MAR-2007 12:38	1.0	1.0			1	5	
057	064_057	X	AR2154			06-MAR-2007 13:04	1.0					3	
058	064_058	X	HEX			06-MAR-2007 13:30	1.0						
059	064_059	X	193055-009	122679	Water	06-MAR-2007 13:56	1.0	0.02381		4	1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257098648 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 09-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	068_001	X	TOX SCREEN			09-MAR-2007 12:08	1.0						
002	068_002	X	HEX			09-MAR-2007 13:32	1.0						
003	068_003	CCV	PCB250_50			09-MAR-2007 13:59	1.0	1.0			1	1	
004	068_004	X	PCB250_50			09-MAR-2007 14:25	1.0					1	
005	068_005	CCV	AR2154			09-MAR-2007 14:51	1.0					2	
006	068_006	CCV	AR2154			09-MAR-2007 15:18	1.0					2	
007	068_007	CCV	AR1242			09-MAR-2007 15:44	1.0	1.0			1	3	
008	068_008	X	AR1242			09-MAR-2007 16:11	1.0					3	
009	068_009	CCV	AR1248			09-MAR-2007 16:37	1.0					4	
010	068_010	X	HEX			09-MAR-2007 17:04	1.0						
011	068_011	BLANK	QC378222	122872	Water	09-MAR-2007 17:30	1.0	0.025			1		
012	068_012	LCS	QC378223	122872	Water	09-MAR-2007 17:57	1.0	0.025			1		
013	068_013	SAMPLE	193108-008	122872	Water	09-MAR-2007 18:23	1.0	0.02475		4	1		
014	068_014	SAMPLE	193108-011	122872	Water	09-MAR-2007 18:50	1.0	0.02451		4	1		
015	068_015	SAMPLE	193108-013	122872	Water	09-MAR-2007 19:16	1.0	0.02381		4	1		
016	068_016	SAMPLE	193108-022	122872	Water	09-MAR-2007 19:42	1.0	0.02451		2	1		
017	068_017	MSS	193108-023	122872	Water	09-MAR-2007 20:09	1.0	0.02358		2	1		
018	068_018	SAMPLE	193108-025	122872	Water	09-MAR-2007 20:35	1.0	0.02404		4	1		
019	068_019	MS	QC378224	122872	Water	09-MAR-2007 21:02	1.0	0.02381		2	1		
020	068_020	MSD	QC378225	122872	Water	09-MAR-2007 21:28	1.0	0.02381		2	1		
021	068_021	X	HEX			09-MAR-2007 21:55	1.0						
022	068_022	CCV	PCB500_100			09-MAR-2007 22:21	1.0	1.0			1	5	
023	068_023	X	PCB500_100			09-MAR-2007 22:47	1.0					5	
024	068_024	CCV	AR2154			09-MAR-2007 23:14	1.0					2	
025	068_025	CCV	AR2154			09-MAR-2007 23:40	1.0					2	
026	068_026	CCV	AR1242			10-MAR-2007 00:07	1.0	1.0			1	3	
027	068_027	X	AR1242			10-MAR-2007 00:33	1.0					3	
028	068_028	CCV	AR1248			10-MAR-2007 00:59	1.0					4	
029	068_029	X	HEX			10-MAR-2007 01:26	1.0						
030	068_030	BLANK	QC378376	122911	Soil	10-MAR-2007 01:52	1.0	0.8205			1		
031	068_031	SAMPLE	193260-004	122911	Soil	10-MAR-2007 02:19	1.0	0.8303			1		

Stds used: 1=S4997 2=S5257 3=S5239 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257098648 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 09-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	068_032	LCS	QC378377	122911	Soil	10-MAR-2007 02:45	1.0	0.8248			1		
033	068_033	SAMPLE	193108-026	122872	Water	10-MAR-2007 03:11	1.0	0.02427		4	1		
034	068_034	SAMPLE	193108-027	122872	Water	10-MAR-2007 03:38	1.0	0.02404		2	1		
035	068_035	SAMPLE	193226-007	122872	Water	10-MAR-2007 04:04	1.0	0.025			1		
036	068_036	SAMPLE	193230-001	122872	Water	10-MAR-2007 04:31	1.0	0.02475			1		
037	068_037	SAMPLE	193230-002	122872	Water	10-MAR-2007 04:57	1.0	0.02427			1		
038	068_038	SAMPLE	193230-003	122872	Water	10-MAR-2007 05:24	1.0	0.02427			1		
039	068_039	SAMPLE	193230-004	122872	Water	10-MAR-2007 05:50	1.0	0.02427			1		
040	068_040	X	HEX			10-MAR-2007 06:16	1.0						
041	068_041	CCV	PCB750_150			10-MAR-2007 06:43	1.0	1.0			1	6	
042	068_042	X	PCB750_150			10-MAR-2007 07:09	1.0					6	
043	068_043	CCV	AR2154			10-MAR-2007 07:36	1.0					2	
044	068_044	CCV	AR2154			10-MAR-2007 08:02	1.0					2	
045	068_045	CCV	AR1242			10-MAR-2007 08:28	1.0	1.0			1	3	
046	068_046	X	AR1242			10-MAR-2007 08:55	1.0					3	
047	068_047	CCV	AR1248			10-MAR-2007 09:21	1.0					4	
048	068_048	X	HEX			10-MAR-2007 09:48	1.0						

Stds used: 1=S4997 2=S5257 3=S5239 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257101495 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 11-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	070_001	X	HEX			11-MAR-2007 11:35	1.0						
002	070_002	CCV	PCB250_50			11-MAR-2007 12:02	1.0	1.0			1	1	
003	070_003	X	PCB250_50			11-MAR-2007 12:28	1.0					1	
004	070_004	X	HEX			11-MAR-2007 16:28	1.0						
005	070_005	SAMPLE	193108-008	122872	Water	11-MAR-2007 16:54	1.0	0.02475		4	1		
006	070_006	SAMPLE	193108-011	122872	Water	11-MAR-2007 17:21	1.0	0.02451		4	1		
007	070_007	SAMPLE	193108-013	122872	Water	11-MAR-2007 17:47	1.0	0.02381		4	1		
008	070_008	SAMPLE	193108-025	122872	Water	11-MAR-2007 19:13	1.0	0.02404		4	1		
009	070_009	SAMPLE	193108-026	122872	Water	11-MAR-2007 19:40	1.0	0.02427		4	1		
010	070_010	X	HEX			11-MAR-2007 20:06	1.0						
011	070_011	CCV	PCB500_100			11-MAR-2007 20:33	1.0	1.0			1	2	
012	070_012	X	PCB500_100			11-MAR-2007 20:59	1.0	1.0	1		1	2	
013	070_013	ICAL	AR2154			11-MAR-2007 21:26	1.0	1.0			1	3	
014	070_014	CCV	AR2154			11-MAR-2007 21:52	1.0	1.0	4		1	3	
015	070_015	CCV	AR1242			11-MAR-2007 22:19	1.0	1.0			1	4	
016	070_016	X	AR1242			11-MAR-2007 22:45	1.0					4	
017	070_017	X	HEX			11-MAR-2007 23:11	1.0						
018	070_018	SAMPLE	193226-006	122911	Soil	11-MAR-2007 23:38	1.0	0.8317		3	1		
019	070_019	SAMPLE	193226-008	122911	Soil	12-MAR-2007 00:04	1.0	0.8319		1	1		
020	070_020	SAMPLE	193229-001	122911	Soil	12-MAR-2007 00:31	1.0	0.8297	1		1		
021	070_021	X	193229-002	122911	Soil	12-MAR-2007 00:57	1.0	0.827	13		1		15:PCB126=1697.58
022	070_022	X	193229-003	122911	Soil	12-MAR-2007 01:23	1.0	0.8224	1		1		
023	070_023	X	193229-004	122911	Soil	12-MAR-2007 01:50	1.0	0.8256	1		1		
024	070_024	SAMPLE	193229-007	122911	Soil	12-MAR-2007 02:16	1.0	0.8264			1		
025	070_025	SAMPLE	193229-008	122911	Soil	12-MAR-2007 02:42	1.0	0.8306		2	1		
026	070_026	MS	QC378378	122911	Soil	12-MAR-2007 03:09	1.0	0.8308			1		
027	070_027	MSD	QC378379	122911	Soil	12-MAR-2007 03:35	1.0	0.8311			1		
028	070_028	X	HEX			12-MAR-2007 04:01	1.0						
029	070_029	X	PCB750_150			12-MAR-2007 04:28	1.0	1.0	1		1	5	2:PCB126=1005.96
030	070_030	CCV	PCB750_150			12-MAR-2007 04:54	1.0	1.0	1		1	5	
031	070_031	CCV	AR2154			12-MAR-2007 05:21	1.0	1.0			1	3	

Stds used: 1=S4997 2=S4998 3=S5257 4=S5239 5=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257101495 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 11-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	070_032	X	AR2154			12-MAR-2007 05:47	1.0	1.0			1	3	
033	070_033	CCV	AR1242			12-MAR-2007 06:14	1.0	1.0			1	4	
034	070_034	X	AR1242			12-MAR-2007 06:40	1.0					4	
035	070_035	X	HEX			12-MAR-2007 07:07	1.0						
036	070_036	SAMPLE	193229-009	122911	Soil	12-MAR-2007 07:33	1.0	0.827			1		
037	070_037	SAMPLE	193229-010	122911	Soil	12-MAR-2007 07:59	1.0	0.8319			1		
038	070_038	SAMPLE	193229-011	122911	Soil	12-MAR-2007 08:26	1.0	0.8267			1		
039	070_039	SAMPLE	193234-001	122911	Soil	12-MAR-2007 08:52	1.0	0.8317			1		
040	070_040	MSS	193234-004	122911	Soil	12-MAR-2007 09:19	1.0	0.8284			1		
041	070_041	SAMPLE	193234-005	122911	Soil	12-MAR-2007 09:45	1.0	0.8284			1		
042	070_042	SAMPLE	193234-009	122911	Soil	12-MAR-2007 10:12	1.0	0.8256			1		
043	070_043	SAMPLE	193234-011	122911	Soil	12-MAR-2007 10:38	1.0	0.8322			1		
044	070_044	SAMPLE	193283-001	122911	Soil	12-MAR-2007 11:05	1.0	0.8275		1	1		
045	070_045	X	HEX			12-MAR-2007 11:31	1.0						
046	070_046	CCV	PCB500_100			12-MAR-2007 11:58	1.0	1.0	1		1	2	
047	070_047	X	PCB500_100			12-MAR-2007 12:24	1.0	1.0	1		1	2	
048	070_048	CCV	AR2154			12-MAR-2007 12:50	1.0	1.0			1	3	
049	070_049	X	AR2154			12-MAR-2007 13:17	1.0	1.0			1	3	
050	070_050	X	HEX			12-MAR-2007 13:43	1.0						

Stds used: 1=S4997 2=S4998 3=S5257 4=S5239 5=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257103122 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	071_001	X	PCB500_100			12-MAR-2007 14:42	1.0						1	
002	071_002	X	PCB500_100			12-MAR-2007 15:09	1.0						1	
003	071_003	X	PCB500_100			12-MAR-2007 15:46	1.0	1		1			1	
004	071_004	X	HEX			12-MAR-2007 16:43	1.0							
005	071_005	X	HEX			12-MAR-2007 17:09	1.0							
006	071_006	ICAL	PCB10_2			12-MAR-2007 17:36	1.0						2	
007	071_007	ICAL	PCB25_5			12-MAR-2007 18:02	1.0						3	
008	071_008	ICAL	PCB100_20			12-MAR-2007 18:29	1.0						4	
009	071_009	ICAL	PCB250_50			12-MAR-2007 18:55	1.0						5	
010	071_010	ICAL	PCB500_100			12-MAR-2007 19:22	1.0						1	
011	071_011	ICAL	PCB750_150			12-MAR-2007 19:48	1.0						6	
012	071_012	ICAL	PCB1000_200			12-MAR-2007 20:14	1.0						7	
013	071_013	X	HEX			12-MAR-2007 20:41	1.0							
014	071_014	ICV	ULTRA_1660			12-MAR-2007 21:07	1.0			1			8	
015	071_015	X	ULTRA_1660			12-MAR-2007 21:34	1.0	2		1			8	
016	071_016	X	HEX			12-MAR-2007 22:00	1.0							

Stds used: 1=S4998 2=S5483 3=S5484 4=S4996 5=S4997 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	072_001	CCV	PCB500_100			13-MAR-2007 10:02	1.0	1.0			1	1	
002	072_002	X	PCB500_100			13-MAR-2007 10:28	1.0	1.0	4		1	1	
003	072_003	X	AR1242			13-MAR-2007 11:51	1.0	1.0	1		1	2	
004	072_004	ICAL	AR1242			13-MAR-2007 12:17	1.0	1.0			1	2	
005	072_005	CCV	AR2154			13-MAR-2007 12:44	1.0	1.0			1	3	
006	072_006	X	AR2154			13-MAR-2007 13:10	1.0	1.0			1	3	
007	072_007	CCV	AR1248			13-MAR-2007 14:19	1.0					4	
008	072_008	ICAL	AR1248			13-MAR-2007 14:45	1.0	1.0				4	
009	072_009	CCV	AR1232			13-MAR-2007 15:12	1.0					5	
010	072_010	X	HEX			13-MAR-2007 15:38	1.0						
011	072_011	BLANK	QC378900	123037	Miscel	13-MAR-2007 16:05	1.0	50.0			1		
012	072_012	BLANK	QC378910	123039	Soil	13-MAR-2007 16:31	1.0	0.8221			1		
013	072_013	SAMPLE	193121-001	123037	Miscel	13-MAR-2007 16:57	1.0	49.98	1		1		2:PCB122=1203.02
014	072_014	SAMPLE	193229-002	122911	Soil	13-MAR-2007 17:24	2.0	0.827			1		
015	072_015	SAMPLE	193229-003	122911	Soil	13-MAR-2007 17:52	1.0	0.8224			1		
016	072_016	SAMPLE	193229-004	122911	Soil	13-MAR-2007 18:19	1.0	0.8256			1		
017	072_017	BS	QC378901	123037	Miscel	13-MAR-2007 18:51	1.0	50.0			1		
018	072_018	BSD	QC378902	123037	Miscel	13-MAR-2007 19:18	1.0	50.0			1		
019	072_019	LCS	QC378911	123039	Soil	13-MAR-2007 19:44	1.0	0.8317		1	1		
020	072_020	X	HEX			13-MAR-2007 20:11	1.0						
021	072_021	CCV	PCB250_50			13-MAR-2007 20:37	1.0	1.0			1	6	
022	072_022	X	PCB250_50			13-MAR-2007 21:04	1.0	1.0	1		1	6	
023	072_023	CCV	AR1242			13-MAR-2007 21:30	1.0	1.0			1	2	
024	072_024	X	AR1242			13-MAR-2007 21:57	1.0	1.0	1		1	2	
025	072_025	CCV	AR2154			13-MAR-2007 22:23	1.0	1.0			1	3	
026	072_026	X	AR2154			13-MAR-2007 22:50	1.0	1.0	1		1	3	
027	072_027	CCV	AR1248			13-MAR-2007 23:16	1.0	1.0			1	4	
028	072_028	CCV	AR1232			13-MAR-2007 23:43	1.0					5	
029	072_029	X	HEX			14-MAR-2007 00:09	1.0						
030	072_030	SAMPLE	193280-001	123039	Soil	14-MAR-2007 00:36	1.0	0.8457			1		
031	072_031	SAMPLE	193280-002	123039	Soil	14-MAR-2007 01:02	1.0	0.8466			1		

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	072_032	SAMPLE	193280-003	123039	Soil	14-MAR-2007 01:29	1.0					
033	072_033	SAMPLE	193280-004	123039	Soil	14-MAR-2007 01:55	1.0	0.8232		1		
034	072_034	SAMPLE	193280-005	123039	Soil	14-MAR-2007 02:22	1.0	0.8221		1		
035	072_035	SAMPLE	193280-006	123039	Soil	14-MAR-2007 02:48	1.0	0.8342		1		
036	072_036	SAMPLE	193280-007	123039	Soil	14-MAR-2007 03:15	1.0	0.8237		1		
037	072_037	SAMPLE	193280-008	123039	Soil	14-MAR-2007 03:41	10.0	0.8353		1		
038	072_038	SAMPLE	193280-009	123039	Soil	14-MAR-2007 04:08	1.0	0.8375		1		
039	072_039	SAMPLE	193280-010	123039	Soil	14-MAR-2007 04:34	1.0	0.835		1		
040	072_040	X	HEX			14-MAR-2007 05:01	1.0					
041	072_041	X	PCB500_100			14-MAR-2007 05:27	1.0	1.0		1	1	
042	072_042	CCV	PCB500_100			14-MAR-2007 05:54	1.0	1.0		1	1	
043	072_043	CCV	AR2154			14-MAR-2007 06:20	1.0	1.0		1	3	
044	072_044	X	AR2154			14-MAR-2007 06:47	1.0	1.0	1	1	3	
045	072_045	CCV	AR1248			14-MAR-2007 07:13	1.0	1.0		1	4	
046	072_046	X	HEX			14-MAR-2007 07:40	1.0					
047	072_047	SAMPLE	193280-011	123039	Soil	14-MAR-2007 08:06	1.0	0.8386		1		
048	072_048	SAMPLE	193280-012	123039	Soil	14-MAR-2007 08:33	1.0	0.8409		1		
049	072_049	SAMPLE	193280-013	123039	Soil	14-MAR-2007 08:59	2.0	0.8245		1		
050	072_050	SAMPLE	193314-001	123039	Soil	14-MAR-2007 09:26	1.0	0.8289		1		
051	072_051	SAMPLE	193314-002	123039	Soil	14-MAR-2007 09:52	1.0	0.827	2	1		3:PCB122=5298.41
052	072_052	SAMPLE	193314-003	123039	Soil	14-MAR-2007 10:19	1.0	0.8205		1		
053	072_053	SAMPLE	193314-004	123039	Soil	14-MAR-2007 10:45	5.0	0.8213		1		
054	072_054	X	193314-005	123039	Soil	14-MAR-2007 11:12	5.0	0.8322		1		
055	072_055	SAMPLE	193314-006	123039	Soil	14-MAR-2007 11:38	2.0	0.8218		1		
056	072_056	SAMPLE	193314-007	123039	Soil	14-MAR-2007 12:05	2.0	0.821		1		
057	072_057	X	HEX			14-MAR-2007 12:31	1.0					
058	072_058	CCV	PCB250_50			14-MAR-2007 12:57	1.0	1.0		1	6	
059	072_059	X	PCB250_50			14-MAR-2007 13:24	1.0				6	
060	072_060	CCV	AR2154			14-MAR-2007 13:50	1.0	1.0		1	3	
061	072_061	X	AR2154			14-MAR-2007 14:17	1.0				3	
062	072_062	CCV	AR1248			14-MAR-2007 14:43	1.0	1.0			4	

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	072_063	X	HEX			14-MAR-2007 15:09	1.0					

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Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	073_001	CCV	PCB750_150			14-MAR-2007 16:01	1.0	1.0			1	1	
002	073_002	X	PCB750_150			14-MAR-2007 16:27	1.0					1	
003	073_003	CCV	AR1242			14-MAR-2007 16:54	1.0	1.0			1	2	
004	073_004	X	AR1242			14-MAR-2007 17:20	1.0	1.0			1	2	
005	073_005	CCV	AR2154			14-MAR-2007 17:50	1.0	1.0			1	3	
006	073_006	X	AR2154			14-MAR-2007 18:17	1.0	1.0			1	3	
007	073_007	ICAL	AR1248			14-MAR-2007 18:43	1.0	1.0			1	4	
008	073_008	X	HEX			14-MAR-2007 19:10	1.0						
009	073_009	BLANK	QC379056	123068	Water	14-MAR-2007 19:36	1.0	0.025		1	1		
010	073_010	SAMPLE	193280-003	123039	Soil	14-MAR-2007 20:02	1.0	0.8401			1		
011	073_011	SAMPLE	193280-004	123039	Soil	14-MAR-2007 20:29	1.0	0.8232			1		
012	073_012	SAMPLE	193280-008	123039	Soil	14-MAR-2007 20:55	2.0	0.8353			1		
013	073_013	SAMPLE	193280-013	123039	Soil	14-MAR-2007 21:22	1.0	0.8245			1		
014	073_014	BS	QC379057	123068	Water	14-MAR-2007 21:48	1.0	0.025		2	1		
015	073_015	BSD	QC379058	123068	Water	14-MAR-2007 22:15	1.0	0.025		2	1		
016	073_016	MSS	193314-005	123039	Soil	14-MAR-2007 22:41	1.0	0.8322			1		
017	073_017	MS	QC378912	123039	Soil	14-MAR-2007 23:08	1.0	0.8292		1	1		
018	073_018	MSD	QC378913	123039	Soil	14-MAR-2007 23:34	1.0	0.8306		1	1		
019	073_019	X	HEX			15-MAR-2007 00:00	1.0						
020	073_020	CCV	PCB500_100			15-MAR-2007 00:27	1.0	1.0			1	5	
021	073_021	X	PCB500_100			15-MAR-2007 00:53	1.0	1.0			1	5	
022	073_022	CCV	AR1242			15-MAR-2007 01:20	1.0	1.0			1	2	
023	073_023	X	AR1242			15-MAR-2007 01:46	1.0	1.0	1		1	2	
024	073_024	CCV	AR2154			15-MAR-2007 02:13	1.0	1.0			1	3	
025	073_025	X	AR2154			15-MAR-2007 02:39	1.0	1.0			1	3	
026	073_026	CCV	AR1248			15-MAR-2007 03:06	1.0	1.0			1	4	
027	073_027	X	HEX			15-MAR-2007 03:32	1.0						
028	073_028	SAMPLE	193108-028	123068	Water	15-MAR-2007 03:58	1.0	0.02427	18	4	1	sh	
029	073_029	SAMPLE	193108-029	123068	Water	15-MAR-2007 04:25	1.0	0.02451	18	4	1	sh	
030	073_030	SAMPLE	193108-030	123068	Water	15-MAR-2007 04:51	1.0	0.02404	18	3	1	sh	

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	073_031	SAMPLE	193108-031	123068	Water	15-MAR-2007 05:18	1.0	0.02451	18	4	1	sh	
032	073_032	SAMPLE	193108-032	123068	Water	15-MAR-2007 05:44	1.0	0.025	18	3	1	sh	
033	073_033	SAMPLE	193261-001	123068	Water	15-MAR-2007 06:11	1.0	0.03125			1		
034	073_034	SAMPLE	193261-002	123068	Water	15-MAR-2007 06:37	1.0	0.02427			1		
035	073_035	SAMPLE	193261-003	123068	Water	15-MAR-2007 07:03	1.0	0.02381			1		
036	073_036	SAMPLE	193261-004	123068	Water	15-MAR-2007 07:30	1.0	0.02358			1		
037	073_037	SAMPLE	193347-001	123068	Water	15-MAR-2007 07:56	1.0	0.02358	1	2	1	2:PCB126=1419.49	
038	073_038	X	HEX			15-MAR-2007 08:23	1.0						
039	073_039	CCV	PCB250_50			15-MAR-2007 08:49	1.0	1.0			1	6	
040	073_040	X	PCB250_50			15-MAR-2007 09:16	1.0	1.0	1		1	6	
041	073_041	CCV	AR2154			15-MAR-2007 09:42	1.0					3	
042	073_042	CCV	AR2154			15-MAR-2007 10:08	1.0					3	
043	073_043	X	HEX			15-MAR-2007 10:35	1.0						

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Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-008	Aroclor-1016	GC22	A	03/11/07 16:54
193108-008	Aroclor-1221	GC22	A	03/11/07 16:54
193108-008	Aroclor-1232	GC22	A	03/11/07 16:54
193108-008	Aroclor-1242	GC22	A	03/11/07 16:54
193108-008	Aroclor-1248	GC22	A	03/11/07 16:54
193108-008	Aroclor-1254	GC22	A	03/11/07 16:54
193108-008	Aroclor-1260	GC22	A	03/11/07 16:54
193108-008	TCMX	GC22	A	03/11/07 16:54
193108-008	Decachlorobiphenyl	GC22	A	03/11/07 16:54
193108-011	Aroclor-1016	GC22	A	03/11/07 17:21
193108-011	Aroclor-1221	GC22	A	03/11/07 17:21
193108-011	Aroclor-1232	GC22	A	03/11/07 17:21
193108-011	Aroclor-1242	GC22	A	03/11/07 17:21
193108-011	Aroclor-1248	GC22	A	03/11/07 17:21
193108-011	Aroclor-1254	GC22	A	03/11/07 17:21
193108-011	Aroclor-1260	GC22	A	03/11/07 17:21
193108-011	TCMX	GC22	A	03/11/07 17:21
193108-011	Decachlorobiphenyl	GC22	A	03/11/07 17:21
193108-013	Aroclor-1016	GC22	A	03/11/07 17:47
193108-013	Aroclor-1221	GC22	A	03/11/07 17:47
193108-013	Aroclor-1232	GC22	A	03/11/07 17:47
193108-013	Aroclor-1242	GC22	A	03/11/07 17:47
193108-013	Aroclor-1248	GC22	A	03/11/07 17:47
193108-013	Aroclor-1254	GC22	A	03/11/07 17:47
193108-013	Aroclor-1260	GC22	A	03/11/07 17:47
193108-013	TCMX	GC22	A	03/11/07 17:47
193108-013	Decachlorobiphenyl	GC22	A	03/11/07 17:47
193108-022	Aroclor-1016	GC22	A	03/09/07 19:42
193108-022	Aroclor-1221	GC22	A	03/09/07 19:42
193108-022	Aroclor-1232	GC22	A	03/09/07 19:42
193108-022	Aroclor-1242	GC22	A	03/09/07 19:42
193108-022	Aroclor-1248	GC22	A	03/09/07 19:42
193108-022	Aroclor-1254	GC22	A	03/09/07 19:42
193108-022	Aroclor-1260	GC22	A	03/09/07 19:42
193108-022	TCMX	GC22	A	03/09/07 19:42
193108-022	Decachlorobiphenyl	GC22	A	03/09/07 19:42
193108-023	Aroclor-1016	GC22	A	03/09/07 20:09
193108-023	Aroclor-1221	GC22	A	03/09/07 20:09
193108-023	Aroclor-1232	GC22	A	03/09/07 20:09
193108-023	Aroclor-1242	GC22	A	03/09/07 20:09
193108-023	Aroclor-1248	GC22	A	03/09/07 20:09
193108-023	Aroclor-1254	GC22	A	03/09/07 20:09
193108-023	Aroclor-1260	GC22	A	03/09/07 20:09
193108-023	TCMX	GC22	A	03/09/07 20:09
193108-023	Decachlorobiphenyl	GC22	A	03/09/07 20:09
193108-025	Aroclor-1016	GC22	A	03/11/07 19:13
193108-025	Aroclor-1221	GC22	A	03/11/07 19:13
193108-025	Aroclor-1232	GC22	A	03/11/07 19:13
193108-025	Aroclor-1242	GC22	A	03/11/07 19:13

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-025	Aroclor-1248	GC22	A	03/11/07 19:13
193108-025	Aroclor-1254	GC22	A	03/11/07 19:13
193108-025	Aroclor-1260	GC22	A	03/11/07 19:13
193108-025	TCMX	GC22	A	03/11/07 19:13
193108-025	Decachlorobiphenyl	GC22	A	03/11/07 19:13
193108-026	Aroclor-1016	GC22	A	03/11/07 19:40
193108-026	Aroclor-1221	GC22	A	03/11/07 19:40
193108-026	Aroclor-1232	GC22	A	03/11/07 19:40
193108-026	Aroclor-1242	GC22	A	03/11/07 19:40
193108-026	Aroclor-1248	GC22	A	03/11/07 19:40
193108-026	Aroclor-1254	GC22	A	03/11/07 19:40
193108-026	Aroclor-1260	GC22	A	03/11/07 19:40
193108-026	TCMX	GC22	A	03/11/07 19:40
193108-026	Decachlorobiphenyl	GC22	A	03/11/07 19:40
193108-027	Aroclor-1016	GC22	A	03/10/07 03:38
193108-027	Aroclor-1221	GC22	A	03/10/07 03:38
193108-027	Aroclor-1232	GC22	A	03/10/07 03:38
193108-027	Aroclor-1242	GC22	A	03/10/07 03:38
193108-027	Aroclor-1248	GC22	A	03/10/07 03:38
193108-027	Aroclor-1254	GC22	A	03/10/07 03:38
193108-027	Aroclor-1260	GC22	A	03/10/07 03:38
193108-027	TCMX	GC22	A	03/10/07 03:38
193108-027	Decachlorobiphenyl	GC22	A	03/10/07 03:38
193108-028	Aroclor-1016	GC22	A	03/15/07 03:58
193108-028	Aroclor-1221	GC22	A	03/15/07 03:58
193108-028	Aroclor-1232	GC22	A	03/15/07 03:58
193108-028	Aroclor-1242	GC22	A	03/15/07 03:58
193108-028	Aroclor-1248	GC22	A	03/15/07 03:58
193108-028	Aroclor-1254	GC22	A	03/15/07 03:58
193108-028	Aroclor-1260	GC22	A	03/15/07 03:58
193108-028	TCMX	GC22	A	03/15/07 03:58
193108-028	Decachlorobiphenyl	GC22	A	03/15/07 03:58
193108-029	Aroclor-1016	GC22	A	03/15/07 04:25
193108-029	Aroclor-1221	GC22	A	03/15/07 04:25
193108-029	Aroclor-1232	GC22	A	03/15/07 04:25
193108-029	Aroclor-1242	GC22	A	03/15/07 04:25
193108-029	Aroclor-1248	GC22	A	03/15/07 04:25
193108-029	Aroclor-1254	GC22	A	03/15/07 04:25
193108-029	Aroclor-1260	GC22	A	03/15/07 04:25
193108-029	TCMX	GC22	A	03/15/07 04:25
193108-029	Decachlorobiphenyl	GC22	A	03/15/07 04:25
193108-030	Aroclor-1016	GC22	A	03/15/07 04:51
193108-030	Aroclor-1221	GC22	A	03/15/07 04:51
193108-030	Aroclor-1232	GC22	A	03/15/07 04:51
193108-030	Aroclor-1242	GC22	A	03/15/07 04:51
193108-030	Aroclor-1248	GC22	A	03/15/07 04:51
193108-030	Aroclor-1254	GC22	A	03/15/07 04:51
193108-030	Aroclor-1260	GC22	A	03/15/07 04:51
193108-030	TCMX	GC22	B	03/15/07 04:51

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-030	Decachlorobiphenyl	GC22	B	03/15/07 04:51
193108-031	Aroclor-1016	GC22	A	03/15/07 05:18
193108-031	Aroclor-1221	GC22	A	03/15/07 05:18
193108-031	Aroclor-1232	GC22	A	03/15/07 05:18
193108-031	Aroclor-1242	GC22	A	03/15/07 05:18
193108-031	Aroclor-1248	GC22	A	03/15/07 05:18
193108-031	Aroclor-1254	GC22	A	03/15/07 05:18
193108-031	Aroclor-1260	GC22	A	03/15/07 05:18
193108-031	TCMX	GC22	A	03/15/07 05:18
193108-031	Decachlorobiphenyl	GC22	A	03/15/07 05:18
193108-032	Aroclor-1016	GC22	A	03/15/07 05:44
193108-032	Aroclor-1221	GC22	A	03/15/07 05:44
193108-032	Aroclor-1232	GC22	A	03/15/07 05:44
193108-032	Aroclor-1242	GC22	A	03/15/07 05:44
193108-032	Aroclor-1248	GC22	A	03/15/07 05:44
193108-032	Aroclor-1254	GC22	A	03/15/07 05:44
193108-032	Aroclor-1260	GC22	A	03/15/07 05:44
193108-032	TCMX	GC22	B	03/15/07 05:44
193108-032	Decachlorobiphenyl	GC22	B	03/15/07 05:44
QC378222	Aroclor-1016	GC22	A	03/09/07 17:30
QC378222	Aroclor-1221	GC22	A	03/09/07 17:30
QC378222	Aroclor-1232	GC22	A	03/09/07 17:30
QC378222	Aroclor-1242	GC22	A	03/09/07 17:30
QC378222	Aroclor-1248	GC22	A	03/09/07 17:30
QC378222	Aroclor-1254	GC22	A	03/09/07 17:30
QC378222	Aroclor-1260	GC22	A	03/09/07 17:30
QC378222	TCMX	GC22	A	03/09/07 17:30
QC378222	Decachlorobiphenyl	GC22	A	03/09/07 17:30
QC379056	Aroclor-1016	GC22	A	03/14/07 19:36
QC379056	Aroclor-1221	GC22	A	03/14/07 19:36
QC379056	Aroclor-1232	GC22	A	03/14/07 19:36
QC379056	Aroclor-1242	GC22	A	03/14/07 19:36
QC379056	Aroclor-1248	GC22	A	03/14/07 19:36
QC379056	Aroclor-1254	GC22	A	03/14/07 19:36
QC379056	Aroclor-1260	GC22	A	03/14/07 19:36
QC379056	TCMX	GC22	A	03/14/07 19:36
QC379056	Decachlorobiphenyl	GC22	A	03/14/07 19:36
QC378223	Aroclor-1242	GC22	A	03/09/07 17:57
QC378223	TCMX	GC22	A	03/09/07 17:57
QC378223	Decachlorobiphenyl	GC22	A	03/09/07 17:57
QC378224	Aroclor-1242	GC22	A	03/09/07 21:02
QC378224	TCMX	GC22	A	03/09/07 21:02
QC378224	Decachlorobiphenyl	GC22	A	03/09/07 21:02
QC378225	Aroclor-1242	GC22	A	03/09/07 21:28
QC378225	TCMX	GC22	A	03/09/07 21:28
QC378225	Decachlorobiphenyl	GC22	A	03/09/07 21:28

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379057	Aroclor-1242	GC22	A	03/14/07 21:48
QC379057	TCMX	GC22	A	03/14/07 21:48
QC379057	Decachlorobiphenyl	GC22	A	03/14/07 21:48
QC379058	Aroclor-1242	GC22	A	03/14/07 22:15
QC379058	TCMX	GC22	A	03/14/07 22:15
QC379058	Decachlorobiphenyl	GC22	A	03/14/07 22:15

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 16:46

Batch Number : 123068
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-028		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193108-029		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-030		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193108-031		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-032		Treadwell & Rollo	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
193217-014		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193217-015		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-016		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-017		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-001		Blasland, Bouck & Lee	Water	800	mL	25	0.031250	1	7	.05	0		PCB	3665A	
193261-002		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-003		Blasland, Bouck & Lee	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193261-004		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193347-001		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	9	.05	0		PCB	3665A	
QC379056	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC379057	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC379058	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: for JOM Reviewed By: Date: 3/15/07

Relinquished By: Received By: Date: 3/15/07

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 123068
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
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Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193108-028	1030	7	25.0	alias of 193108-008 O
29	1020			11 H
30	1040			13 M
31	1020			25 J
32	1000			26 K
193217-001 14 J	1030			
15 K	1050			
16 L	1050			
17 J	1030			
193261-001 M	800			limited sample; contained twigs
02 L	1030			
03 K	1050			
04 N	1060			
193347-001 B	1060	9		H_2O contains free product (oily)
MB QC379056	1000	NA		
BS 57				
BSD 58				

JXM 3/14/07

0.05 mL of surrogate solution was added to all samples
0.05 mL of spike solution AR1242 was added to all spikes
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1750
Extraction End Time: 1200
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~granular~~ powder Na2SO4
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #
Centrifuged for 1min; 10mL transferred to labelled vial

Mfg & Lot# / LIMS # / Time	Date/ Initials
SE616A	JOM 3/13/07
S545BA	
EM47031 / EM47011	
1750	
1200	JXM 3/14/07
N/A	
EM46320628	
STBC38639	
FS065076	
✓	

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Jerine Mae 3/13/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

3/15/07
Reviewed by **Date**

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Curtis & Tompkins Laboratories Sample Preparation Summary 09-MAR-2007 11:24

Batch Number : 122872
Date Extracted: 08-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-008		Treadwell & Rollo	Water	1010	mL	25	0.024752	1	7	.05	0		PCB	3665A	
193108-011		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-013		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193108-022		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-023		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	MSS
193108-025		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193108-026		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193108-027		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193226-007		URS Corporation	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
193230-001		Blasland, Bouck & Lee	Water	1010	mL	25	0.024752	1	5	.05	0		PCB	3665A	
193230-002		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
193230-003		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
193230-004		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
QC378222	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC378223	LCS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC378224	MS	of 193108-023	Water	1050	mL	25	0.023810	1	7	.05	.05		PCB	3665A	
QC378225	MSD	of 193108-023	Water	1050	mL	25	0.023810	1	7	.05	.05		PCB	3665A	

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Prep Chemist: SPK for Tom Reviewed By: Pamela Mayfield Date: 3/9/07

Relinquished By: [signature] Received By: [signature] Date: 3-11-07

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 122872
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 8 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
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Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193108-008 L	1010	7	25.0	
-011 I	1020			
-013 J	1050			
-022 O	1020			
-023 AX	1060			MS
-025 O	1040			
-026 L	1030			
-027 M	1040			
193226 -007 M	1000			
193230-001 N	1010	5 STK 03/8/07		
-002 L	1030	5 STK 03/8/07		
-003 N	1030	5		
-004 K	1030	5		
MB QC378227	1000	NA		
LCS 23				
MS 24	1050	7		193108-023 AV
MSD 25				AW
				JCM 3/9/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616B	JM 3/8/07
0.05 mL of spike solution AR1242 was added to all spikes	S5458A	
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1430	
Extraction End Time:	0830	JCM 3/9/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTBC43E40	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	FS065076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jessica Mee 3/8/07
Extraction Chemist **Date**

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Continued on Page ____

Pamela Nagle 3/9/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/23/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW01	Batch#:	122719
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	0.02 J	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	74	65-135
1-Methylnaphthalene (F)	71	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Sampled:	03/01/07
Lab ID:	193108-008	Received:	03/02/07
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/09/07
Batch#:	122719		

Analyte	Result	RL	MDL	Diln Fac
Naphthalene	ND	0.97		1.000
Acenaphthylene	ND	1.9		1.000
Acenaphthene	ND	0.97		1.000
Fluorene	16	4.9		5.000
Phenanthrene	25	2.4		5.000
Anthracene	1.2	0.49	0.02	1.000
Fluoranthene	7.0	0.39	0.005	1.000
Pyrene	2.9	0.19		1.000
Benzo(a)anthracene	1.9	0.10		1.000
Chrysene	1.7	0.10		1.000
Benzo(b)fluoranthene	0.21	0.19		1.000
Benzo(k)fluoranthene	0.14	0.10		1.000
Benzo(a)pyrene	ND	0.10		1.000
Dibenz(a,h)anthracene	ND	0.19		1.000
Benzo(g,h,i)perylene	ND	0.19		1.000
Indeno(1,2,3-cd)pyrene	ND	0.14		1.000

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	179 *	65-135	1.000
1-Methylnaphthalene (F)	133	65-135	1.000

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW06	Batch#:	122719
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	78	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0301073A	Batch#:	122719
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.98	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.98	
Fluorene	ND	0.98	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0301073B	Sampled:	03/01/07
Lab ID:	193108-011	Received:	03/02/07
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/09/07
Batch#:	122719		

Analyte	Result	RL	MDL	Diln Fac
Naphthalene	ND	1.0		1.000
Acenaphthylene	ND	2.0		1.000
Acenaphthene	3.8	1.0		1.000
Fluorene	11	1.0		1.000
Phenanthrene	15	2.5		5.000
Anthracene	0.63	0.50	0.02	1.000
Fluoranthene	3.9	0.40	0.005	1.000
Pyrene	1.3	0.20		1.000
Benzo(a)anthracene	ND	0.10		1.000
Chrysene	0.85	0.10		1.000
Benzo(b)fluoranthene	ND	0.20		1.000
Benzo(k)fluoranthene	ND	0.10		1.000
Benzo(a)pyrene	ND	0.10		1.000
Dibenz(a,h)anthracene	ND	0.20		1.000
Benzo(g,h,i)perylene	ND	0.20		1.000
Indeno(1,2,3-cd)pyrene	ND	0.14		1.000

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	146 *	65-135	1.000
1-Methylnaphthalene (F)	108	65-135	1.000

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1213GW101	Batch#:	122719
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND.	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	86	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW08	Batch#:	122719
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.04 J	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	92	65-135
1-Methylnaphthalene (F)	89	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW103	Batch#:	122719
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	83	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW104	Batch#:	122719
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	84	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW101	Batch#:	122719
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.2	
Acenaphthylene	ND	2.4	
Acenaphthene	ND	1.2	
Fluorene	ND	1.2	
Phenanthrene	ND	0.61	
Anthracene	ND	0.61	0.02
Fluoranthene	ND	0.48	0.006
Pyrene	ND	0.24	
Benzo(a)anthracene	ND	0.12	
Chrysene	ND	0.12	
Benzo(b)fluoranthene	ND	0.24	
Benzo(k)fluoranthene	ND	0.12	
Benzo(a)pyrene	ND	0.12	
Dibenz(a,h)anthracene	ND	0.24	
Benzo(g,h,i)perylene	ND	0.24	
Indeno(1,2,3-cd)pyrene	ND	0.17	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	78	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW03	Batch#:	122775
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	78	65-135
1-Methylnaphthalene (F)	75	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW05	Batch#:	122775
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.1	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.1	
Fluorene	ND	1.1	
Phenanthrene	ND	0.53	
Anthracene	ND	0.53	0.02
Fluoranthene	ND	0.42	0.006
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.11	
Chrysene	ND	0.11	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.11	
Benzo(a)pyrene	ND	0.11	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	ND	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.15	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0302071A	Batch#:	122775
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377598	Batch#:	122719
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377822	Batch#:	122775
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	70	65-135
1-Methylnaphthalene (F)	68	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377599	Batch#:	122719
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/06/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.548	95	50-135
Fluorene	2.000	1.997	100	65-135
Pyrene	1.000	0.9904	99	65-135
Benzo(a)pyrene	1.000	1.065	106	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	90	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Matrix:	Water	Batch#:	122775
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: BS Lab ID: QC377823

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.832	88	50-135
Fluorene	2.000	1.850	93	65-135
Pyrene	1.000	0.9476	95	65-135
Benzo(a)pyrene	1.000	1.007	101	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	84	65-135
1-Methylnaphthalene (F)	82	65-135

Type: BSD Lab ID: QC377824

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	10.00	8.592	86	50-135	3	35
Fluorene	2.000	1.754	88	65-135	5	35
Pyrene	1.000	0.8865	89	65-135	7	35
Benzo(a)pyrene	1.000	0.9384	94	65-135	7	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW01	Batch#:	122719
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: MS Lab ID: QC377600

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09091	9.709	8.797	91	50-135
Fluorene	<0.009457	1.942	1.792	92	65-135
Pyrene	<0.003815	0.9709	0.8500	88	65-135
Benzo(a)pyrene	<0.01503	0.9709	0.7500	77	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

Type: MSD Lab ID: QC377601

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.709	8.519	88	50-135	3	35
Fluorene	1.942	1.777	92	65-135	1	35
Pyrene	0.9709	0.8417	87	65-135	1	35
Benzo(a)pyrene	0.9709	0.7107	73	65-135	5	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	84	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW104	Batch#:	122719
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: MS Lab ID: QC377602

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.08918	9.524	8.812	93	50-135
Fluorene	<0.009277	1.905	1.763	93	65-135
Pyrene	<0.003743	0.9524	0.6964	73	65-135
Benzo(a)pyrene	<0.01474	0.9524	0.4533	48 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	79	65-135
1-Methylnaphthalene (F)	76	65-135

Type: MSD Lab ID: QC377603

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.524	8.273	87	50-135	6	35
Fluorene	1.905	1.674	88	65-135	5	35
Pyrene	0.9524	0.7378	77	65-135	6	35
Benzo(a)pyrene	0.9524	0.4425	46 *	65-135	2	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	73	65-135
1-Methylnaphthalene (F)	69	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Confirmation Report for 193108 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193108-007	1349MW01	Fluoranthene	0.02450 J	0.05898	83	141
193108-008	1349MW100	Fluorene	16.39	9.929	49	-39
193108-008	1349MW100	Phenanthrene	25.37	24.23	5	-4
193108-008	1349MW100	Anthracene	1.175	4.092	111	248
193108-008	1349MW100	Fluoranthene	7.033	33.24	130	373
193108-008	1349MW100	Pyrene	2.871	28.20	163	882
193108-008	1349MW100	Benzo(a)anthracene	1.854	11.49	144	520
193108-008	1349MW100	Chrysene	1.688	4.519	91	168
193108-008	1349MW100	Benzo(b)fluoranthene	0.2084	0.3215	43	54
193108-008	1349MW100	Benzo(k)fluoranthene	0.1352	0.5381	120	298
193108-011	DUP0301073B	Acenaphthene	3.829	4.020	5	5
193108-011	DUP0301073B	Fluorene	10.53	7.127	39	-32
193108-011	DUP0301073B	Phenanthrene	15.10	12.79	17	-15
193108-011	DUP0301073B	Anthracene	0.6319	2.220	111	251
193108-011	DUP0301073B	Fluoranthene	3.888	16.69	124	329
193108-011	DUP0301073B	Pyrene	1.317	13.74	165	943
193108-011	DUP0301073B	Chrysene	0.8473	2.022	82	139
193108-013	DAEGW08	Fluoranthene	0.03801 J	0.04988	27	31

J=estimated

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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HPLC04 METHOD 8310 NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

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RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

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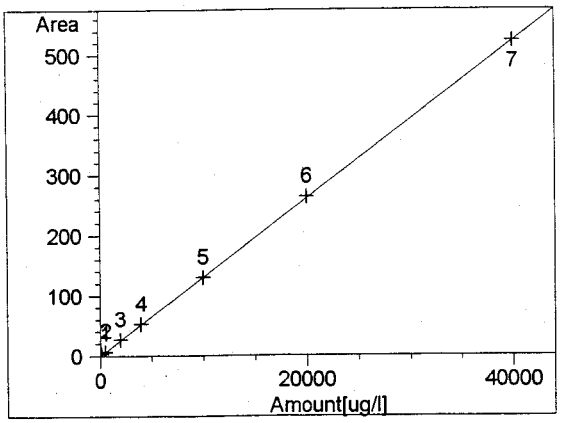
RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

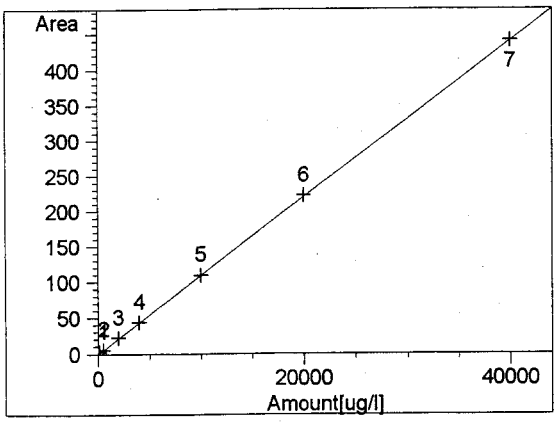
Peak Sum Table

No Entries in table

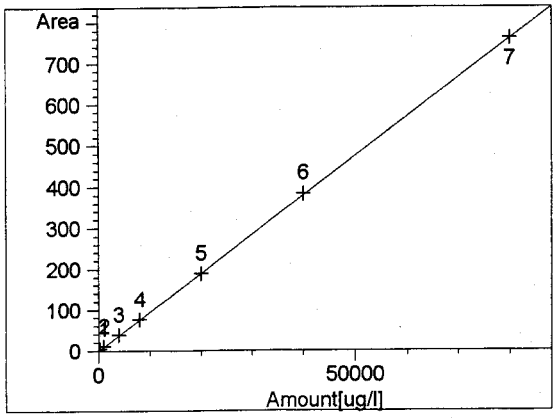
Calibration Curves



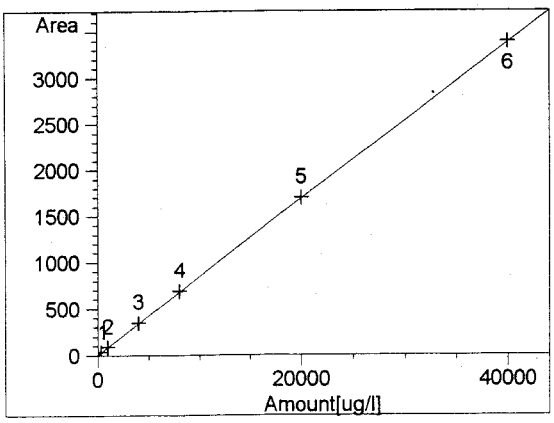
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



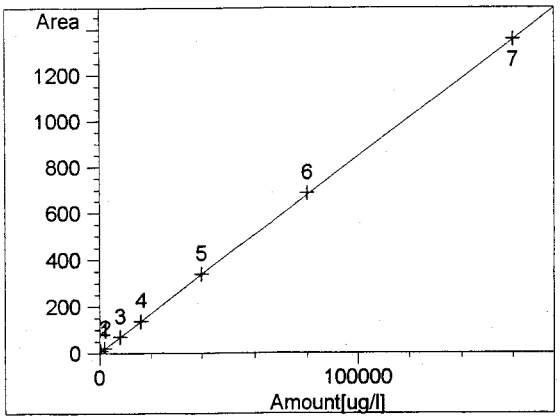
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



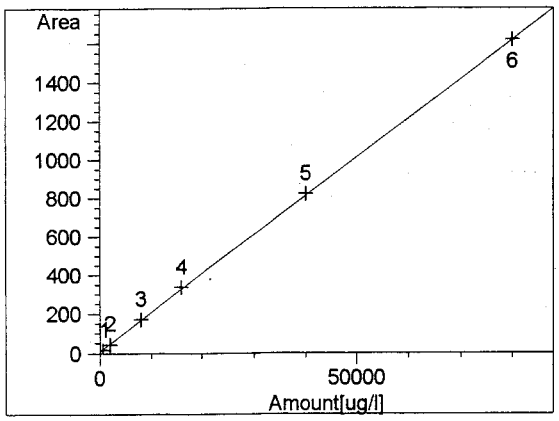
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



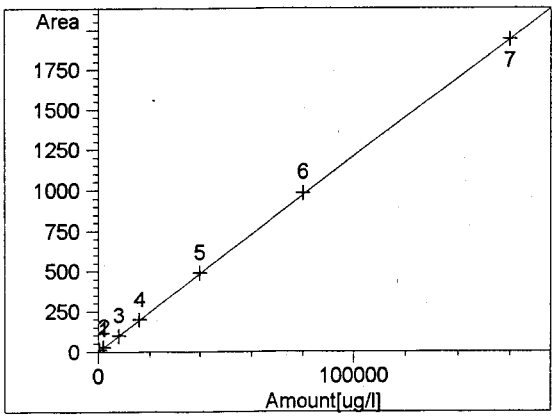
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



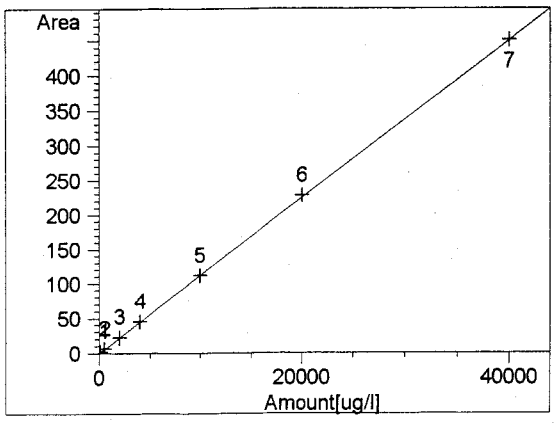
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



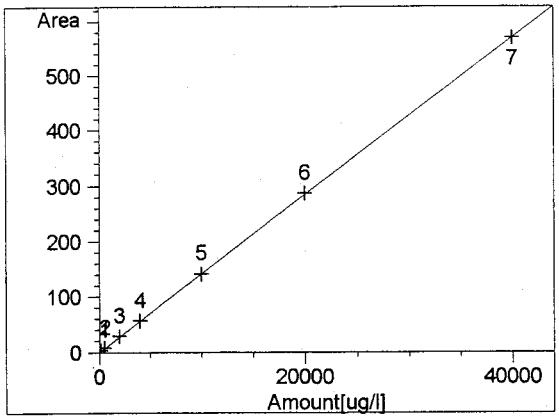
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



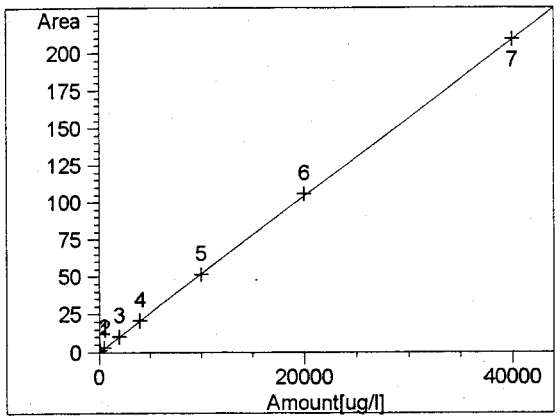
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



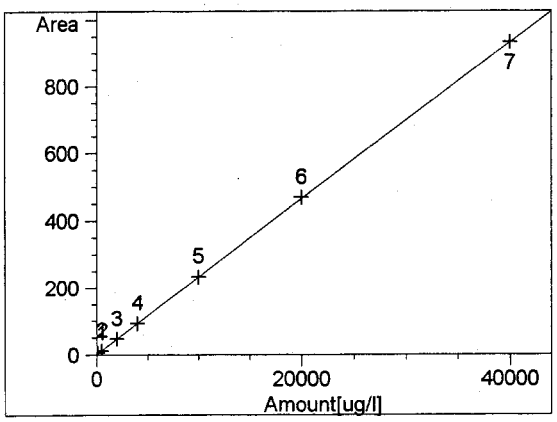
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



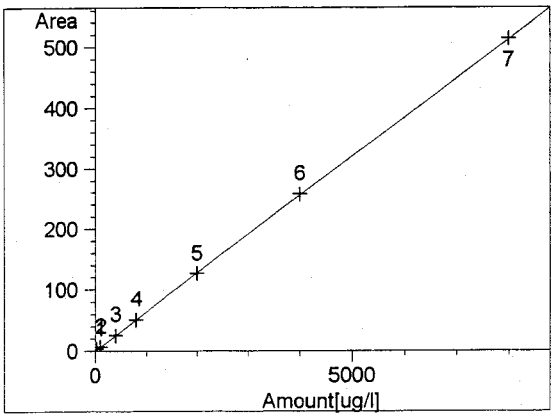
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



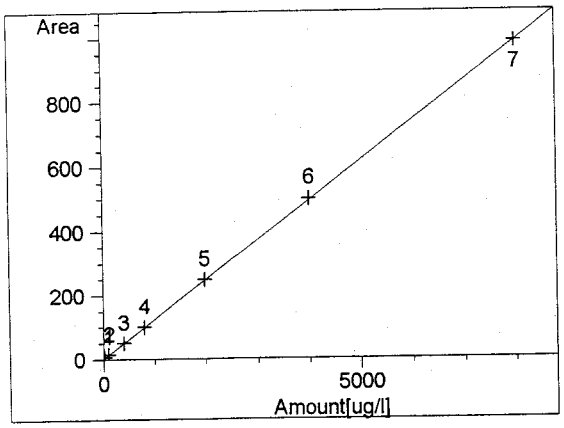
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



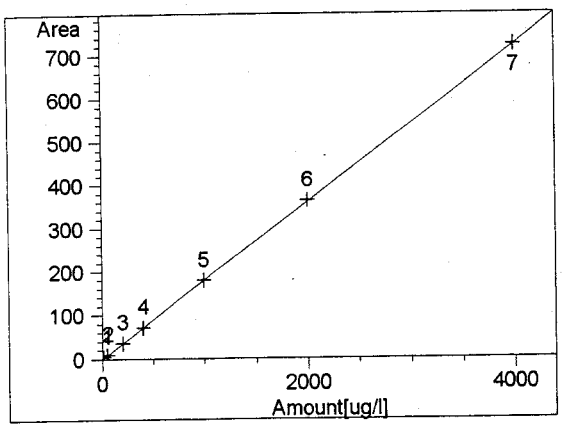
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



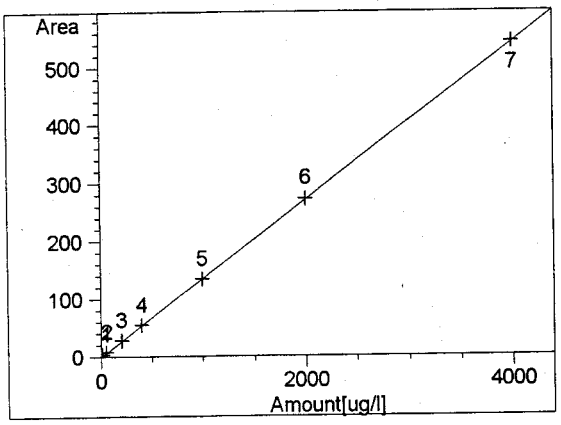
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



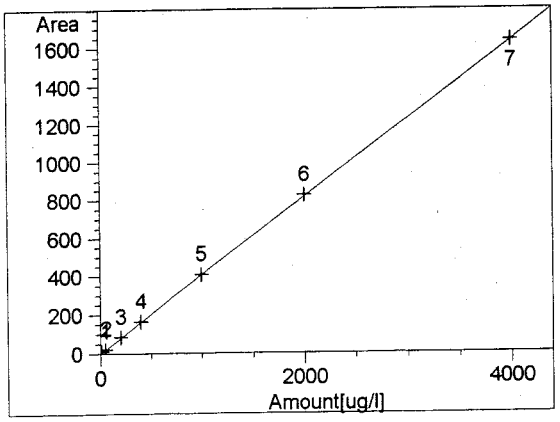
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



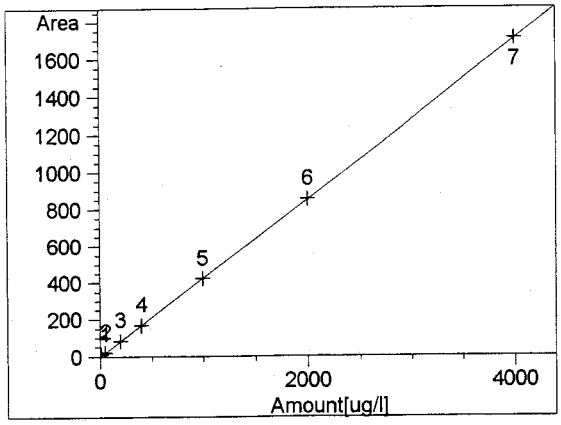
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



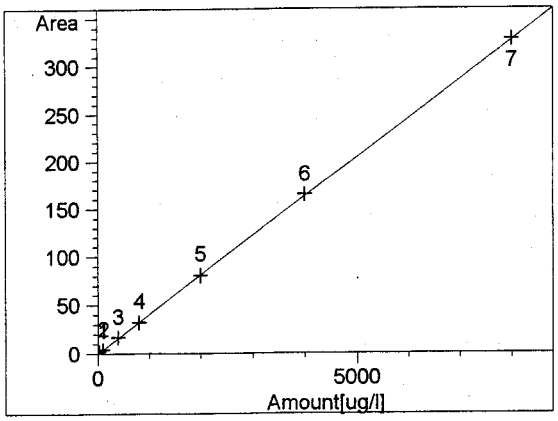
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



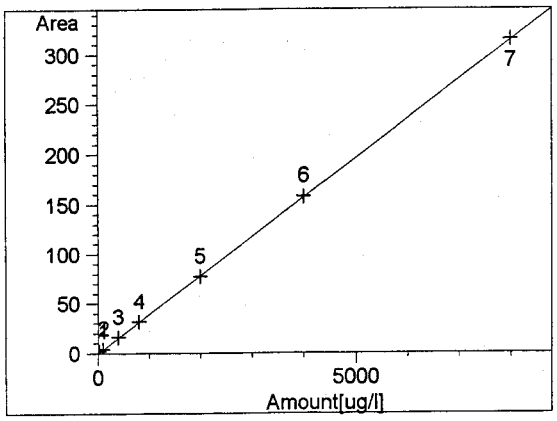
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



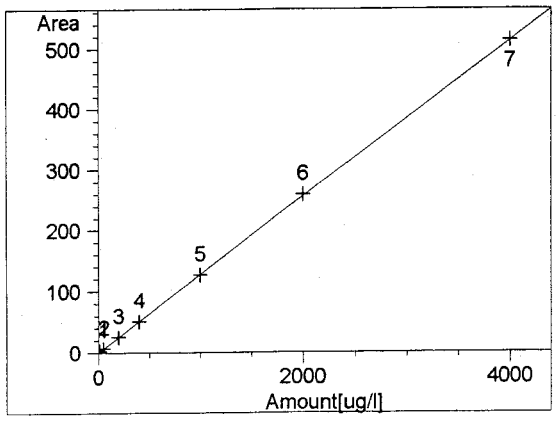
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



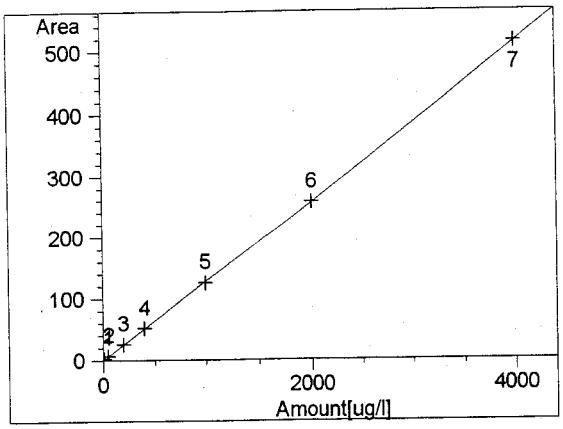
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
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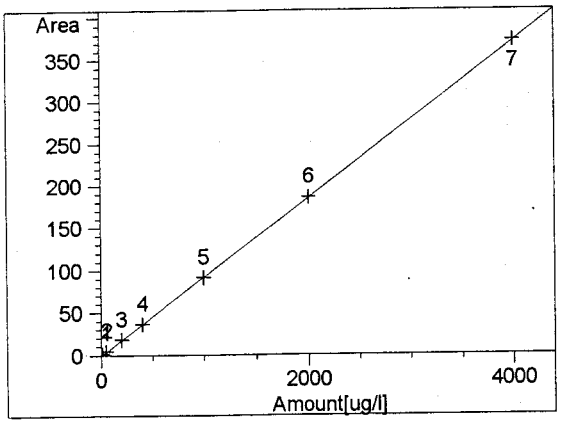
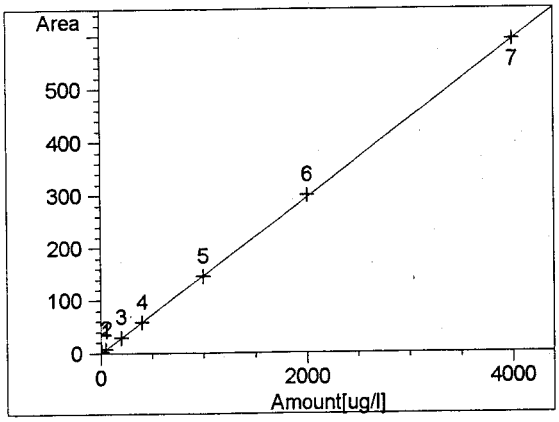
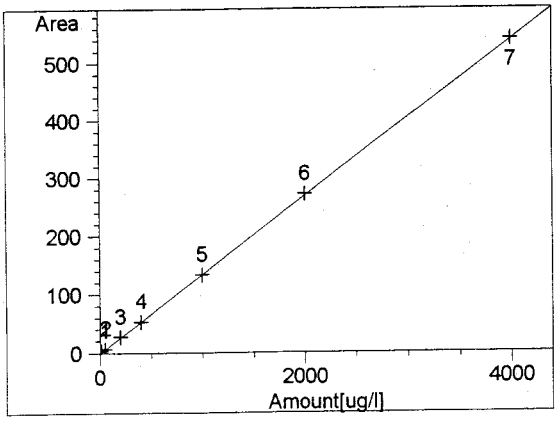


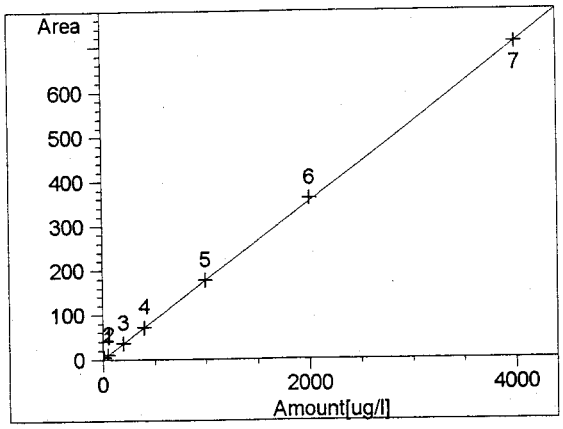
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



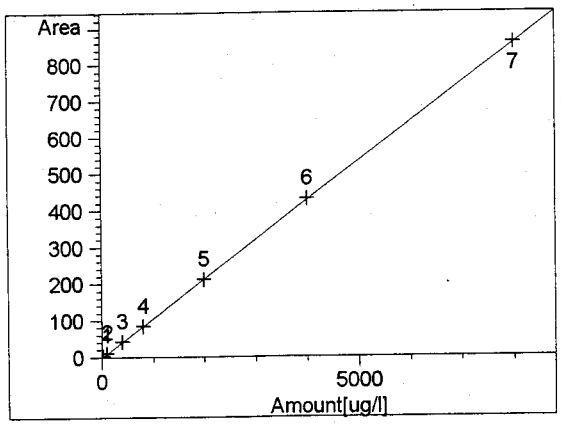
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



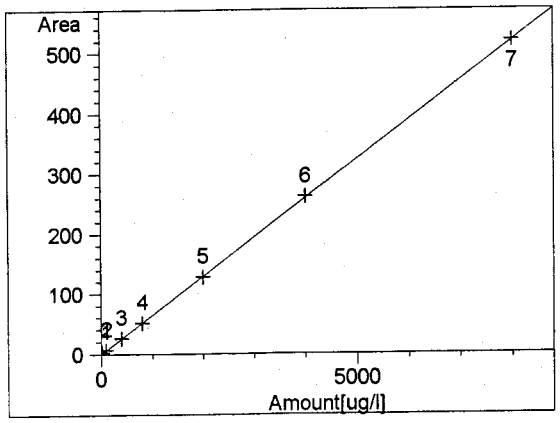
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



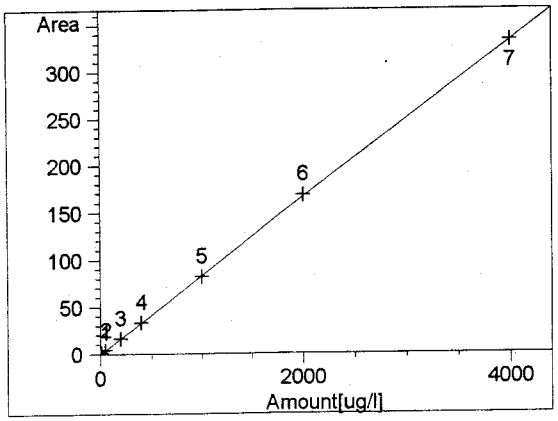
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



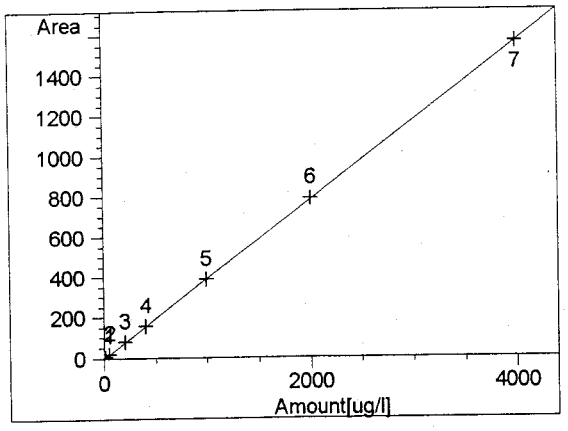
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



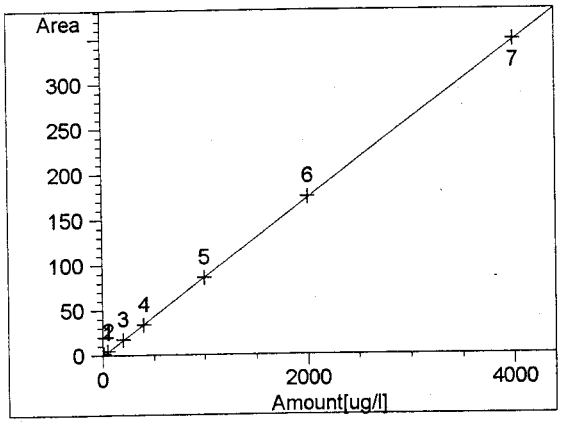
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



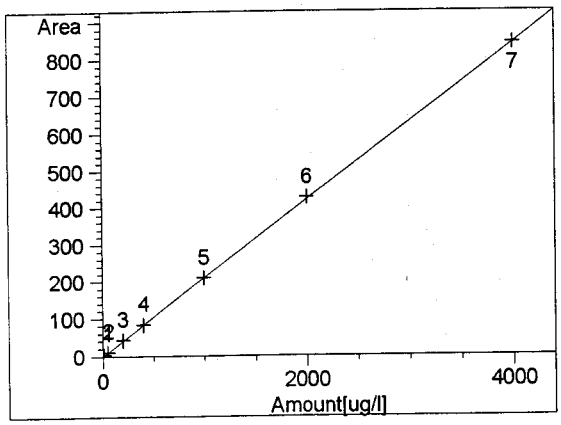
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



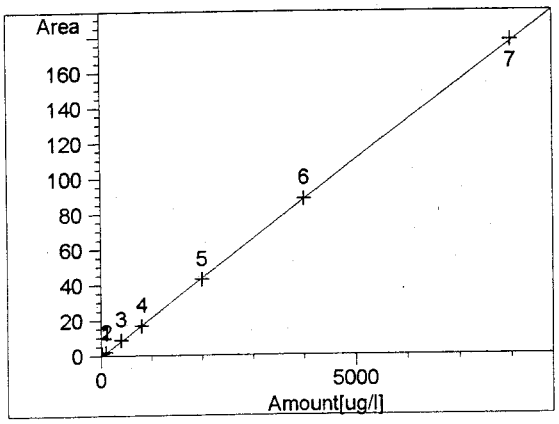
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



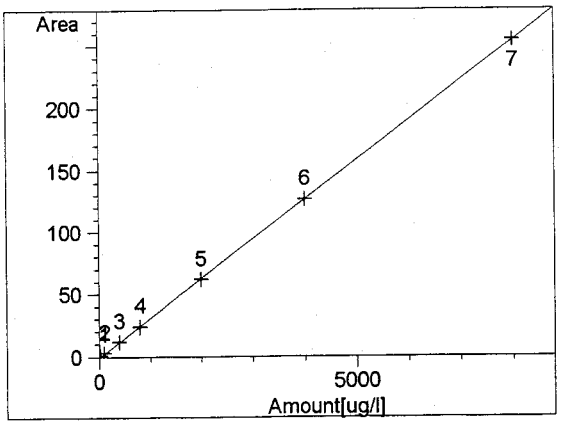
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



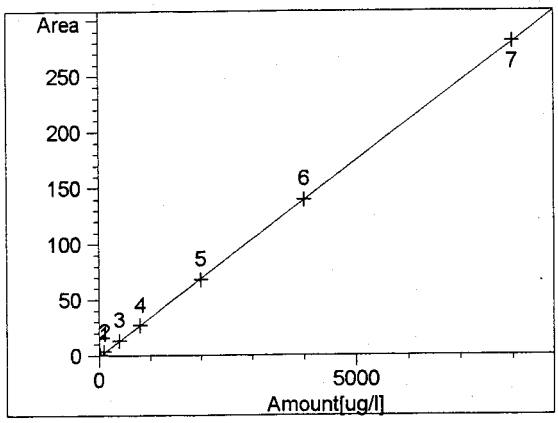
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



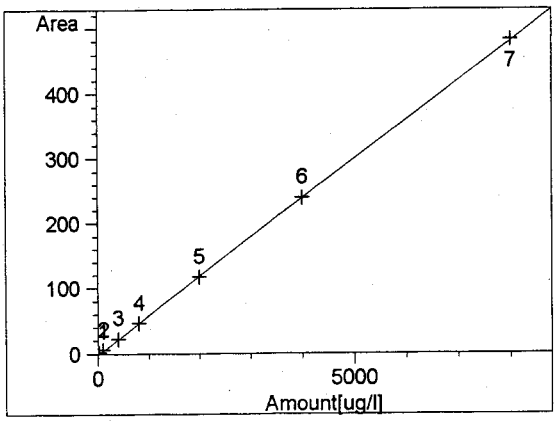
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



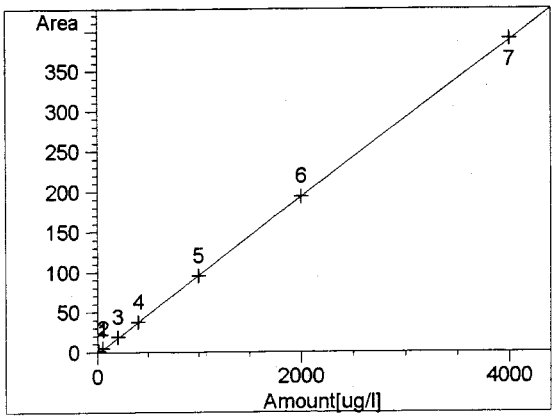
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

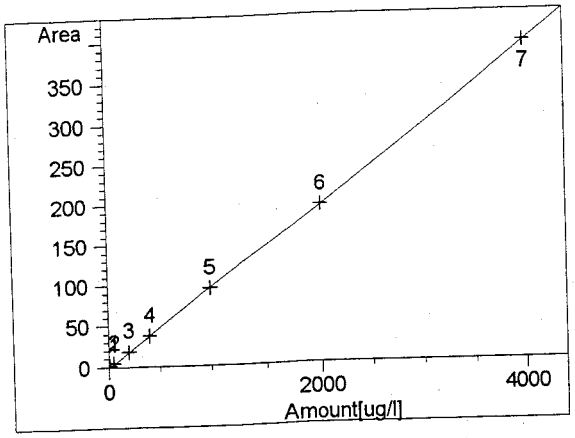


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194013 File : 06500013 Time : 06-MAR-2007 16:13
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4087	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8292	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4107	ug/L	3	15	
Fluorene	1	0.0637	0.0640	800.0	806.9	ug/L	1	15	
Phenanthrene	1	0.1810	0.1780	400.0	396.2	ug/L	-1	15	
Anthracene	1	0.4065	0.4380	400.0	429.2	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	829.9	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0957	400.0	419.3	ug/L	5	15	
Chrysene	1	0.1350	0.1357	400.0	404.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1062	800.0	804.4	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0819	400.0	398.1	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0937	400.0	440.5	ug/L	10	15	
Dibenz(a,h)anthracene	1	0.0213	0.0207	800.0	776.4	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0358	800.0	846.3	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0950	400.0	402.9	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16230	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	8000	8329	ug/L	4	15	
Pyrene	2	0.1252	0.1326	400.0	416.4	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16610	ug/L	4	15	
Naphthalene	3	0.0110	0.0107	4000	3891	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3964	ug/L	-1	15	
Fluorene	3	0.1247	0.1211	800.0	775.6	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1316	400.0	389.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4508	400.0	427.2	ug/L	7	15	
Fluoranthene	3	0.0390	0.0398	800.0	815.9	ug/L	2	15	
Pyrene	3	0.1264	0.1263	400.0	398.5	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1498	400.0	408.5	ug/L	2	15	
Chrysene	3	0.1780	0.1742	400.0	389.9	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0631	800.0	782.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3807	400.0	390.6	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2261	400.0	430.5	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0295	800.0	769.1	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0594	800.0	814.0	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0932	400.0	393.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15560	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297094194028 File : 06500028 Time : 07-MAR-2007 00:07
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	20000	20600	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	10000	10150	ug/L	2	15	
Fluorene	1	0.0637	0.0642	2000	2006	ug/L	0	15	
Phenanthrene	1	0.1810	0.1783	1000	988.4	ug/L	-1	15	
Anthracene	1	0.4065	0.4374	1000	1069	ug/L	7	15	
Fluoranthene	1	0.0404	0.0424	2000	2073	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0959	1000	1037	ug/L	4	15	
Chrysene	1	0.1350	0.1358	1000	1008	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1070	2000	2005	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0835	1000	1006	ug/L	1	15	
Benzo(a)pyrene	1	0.0828	0.0956	1000	1107	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0215	2000	1969	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0309	0.0366	2000	2111	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0979	1000	1017	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	40000	40180	ug/L	0	15	
Acenaphthylene	2	0.0861	0.0872	20000	20560	ug/L	3	15	
Pyrene	2	0.1252	0.1329	1000	1036	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0207	40000	40650	ug/L	2	15	
Naphthalene	3	0.0110	0.0106	10000	9580	ug/L	-4	15	
Acenaphthene	3	0.0234	0.0230	10000	9841	ug/L	-2	15	
Fluorene	3	0.1247	0.1204	2000	1942	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1313	1000	968.9	ug/L	-3	15	
Anthracene	3	0.4222	0.4499	1000	1059	ug/L	6	15	
Fluoranthene	3	0.0390	0.0394	2000	2011	ug/L	1	15	
Pyrene	3	0.1264	0.1259	1000	984.1	ug/L	-2	15	
Benzo(a)anthracene	3	0.1453	0.1500	1000	1016	ug/L	2	15	
Chrysene	3	0.1780	0.1730	1000	973.9	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0638	2000	1968	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3826	1000	979.2	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2292	1000	1087	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0299	2000	1904	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0567	0.0601	2000	2019	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0950	1000	981.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0118	40000	38600	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194044 File : 06500044 Time : 07-MAR-2007 08:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4109	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0100	8000	8428	ug/L	5	15	
Acenaphthene	1	0.0053	0.0054	4000	4157	ug/L	4	15	
Fluorene	1	0.0637	0.0652	800.0	821.0	ug/L	3	15	
Phenanthrene	1	0.1810	0.1810	400.0	402.9	ug/L	1	15	
Anthracene	1	0.4065	0.4459	400.0	436.9	ug/L	9	15	
Fluoranthene	1	0.0404	0.0431	800.0	848.4	ug/L	6	15	
Benzo(a)anthracene	1	0.0899	0.0972	400.0	425.6	ug/L	6	15	
Chrysene	1	0.1350	0.1382	400.0	411.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1073	800.0	813.1	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0787	0.0841	400.0	408.8	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0962	400.0	451.9	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0214	800.0	801.3	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0367	800.0	867.1	ug/L	8	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0958	400.0	406.3	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16390	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0901	8000	8457	ug/L	6	15	
Pyrene	2	0.1252	0.1353	400.0	424.5	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	16000	16780	ug/L	5	15	
Naphthalene	3	0.0110	0.0108	4000	3945	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0236	4000	4038	ug/L	1	15	
Fluorene	3	0.1247	0.1228	800.0	786.7	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1355	400.0	401.1	ug/L	0	15	
Anthracene	3	0.4222	0.4582	400.0	434.1	ug/L	9	15	
Fluoranthene	3	0.0390	0.0404	800.0	827.8	ug/L	3	15	
Pyrene	3	0.1264	0.1310	400.0	413.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1532	400.0	417.6	ug/L	4	15	
Chrysene	3	0.1780	0.1771	400.0	396.3	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0645	800.0	800.3	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3857	400.0	395.7	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2305	400.0	438.9	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0296	800.0	773.0	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0602	800.0	824.3	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0959	400.0	404.0	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	16000	15860	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297095975002 File : 06600002 Time : 07-MAR-2007 16:07
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	2000	2027	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	4000	4154	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	2000	2044	ug/L	2	15	
Fluorene	1	0.0637	0.0641	400.0	408.7	ug/L	2	15	
Phenanthrene	1	0.1810	0.1790	200.0	200.6	ug/L	0	15	
Anthracene	1	0.4065	0.4410	200.0	217.1	ug/L	9	15	
Fluoranthene	1	0.0404	0.0432	400.0	428.5	ug/L	7	15	
Benzo(a)anthracene	1	0.0899	0.0961	200.0	214.6	ug/L	7	15	
Chrysene	1	0.1350	0.1370	200.0	205.3	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1047	400.0	404.1	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0829	200.0	204.4	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0928	200.0	223.2	ug/L	12	15	
Dibenz(a,h)anthracene	1	0.0213	0.0199	400.0	389.1	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	400.0	424.4	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0926	200.0	203.6	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	8000	8098	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0889	4000	4139	ug/L	3	15	
Pyrene	2	0.1252	0.1342	200.0	212.7	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8193	ug/L	2	15	
Naphthalene	3	0.0110	0.0109	2000	1991	ug/L	0	15	
Acenaphthene	3	0.0234	0.0239	2000	2032	ug/L	2	15	
Fluorene	3	0.1247	0.1225	400.0	387.3	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1353	200.0	201.2	ug/L	1	15	
Anthracene	3	0.4222	0.4568	200.0	218.6	ug/L	9	15	
Fluoranthene	3	0.0390	0.0397	400.0	409.6	ug/L	2	15	
Pyrene	3	0.1264	0.1304	200.0	208.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1522	200.0	209.7	ug/L	5	15	
Chrysene	3	0.1780	0.1760	200.0	195.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0632	400.0	396.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3785	200.0	194.9	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2281	200.0	218.4	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0286	400.0	388.5	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0587	400.0	415.3	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0866	200.0	189.6	ug/L	-5	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	8000	7905	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297095975019 File : 06600019 Time : 08-MAR-2007 01:04
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10250	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	20000	20810	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	10000	10220	ug/L	2	15	
Fluorene	1	0.0637	0.0648	2000	2026	ug/L	1	15	
Phenanthrene	1	0.1810	0.1800	1000	997.9	ug/L	0	15	
Anthracene	1	0.4065	0.4421	1000	1080	ug/L	8	15	
Fluoranthene	1	0.0404	0.0427	2000	2092	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0969	1000	1048	ug/L	5	15	
Chrysene	1	0.1350	0.1368	1000	1015	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1077	2000	2019	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0844	1000	1017	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0971	1000	1125	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	2000	1980	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0368	2000	2123	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0980	1000	1017	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40610	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0881	20000	20780	ug/L	4	15	
Pyrene	2	0.1252	0.1337	1000	1042	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41040	ug/L	3	15	
Naphthalene	3	0.0110	0.0107	10000	9696	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	10000	9940	ug/L	-1	15	
Fluorene	3	0.1247	0.1214	2000	1958	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1319	1000	972.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4540	1000	1069	ug/L	7	15	
Fluoranthene	3	0.0390	0.0399	2000	2033	ug/L	2	15	
Pyrene	3	0.1264	0.1267	1000	990.4	ug/L	-1	15	
Benzo(a)anthracene	3	0.1453	0.1507	1000	1020	ug/L	2	15	
Chrysene	3	0.1780	0.1742	1000	980.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0641	2000	1975	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3833	1000	980.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2312	1000	1097	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0301	2000	1918	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0603	2000	2026	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0951	1000	982.4	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	40000	39050	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297097355018 File : 06700018 Time : 08-MAR-2007 23:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4074	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0097	8000	8214	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	4000	4026	ug/L	1	15	
Fluorene	1	0.0637	0.0638	800.0	803.8	ug/L	0	15	
Phenanthrene	1	0.1810	0.1778	400.0	395.9	ug/L	-1	15	
Anthracene	1	0.4065	0.4368	400.0	428.0	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	830.5	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0951	400.0	416.7	ug/L	4	15	
Chrysene	1	0.1350	0.1351	400.0	402.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1050	800.0	795.5	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0816	400.0	396.7	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0926	400.0	435.3	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0203	800.0	763.1	ug/L	-5	15	
Benzo(g,h,i)perylene	1	0.0309	0.0355	800.0	840.0	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0915	400.0	388.8	ug/L	-3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16090	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0880	8000	8255	ug/L	3	15	
Pyrene	2	0.1252	0.1315	400.0	412.9	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0211	16000	16380	ug/L	2	15	
Naphthalene	3	0.0110	0.0107	4000	3887	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3955	ug/L	-1	15	
Fluorene	3	0.1247	0.1205	800.0	771.3	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1311	400.0	388.0	ug/L	-3	15	
Anthracene	3	0.4222	0.4488	400.0	425.3	ug/L	6	15	
Fluoranthene	3	0.0390	0.0395	800.0	809.2	ug/L	1	15	
Pyrene	3	0.1264	0.1268	400.0	400.1	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1494	400.0	407.5	ug/L	2	15	
Chrysene	3	0.1780	0.1735	400.0	388.2	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0630	800.0	782.1	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	400.0	387.2	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2257	400.0	429.8	ug/L	7	15	
Dibenz(a,h)anthracene	3	0.0303	0.0285	800.0	743.6	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0575	800.0	788.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0931	400.0	392.6	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15510	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297097355029 File : 06700029 Time : 09-MAR-2007 05:20
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	10000	10180	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20750	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10240	ug/L	2	15	
Fluorene	1	0.0637	0.0646	2000	2019	ug/L	1	15	
Phenanthrene	1	0.1810	0.1797	1000	996.1	ug/L	0	15	
Anthracene	1	0.4065	0.4422	1000	1080	ug/L	8	15	
Fluoranthene	1	0.0404	0.0430	2000	2105	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0965	1000	1044	ug/L	4	15	
Chrysene	1	0.1350	0.1365	1000	1013	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1076	2000	2017	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0836	1000	1008	ug/L	1	15	
Benzo(a)pyrene	1	0.0828	0.0960	1000	1112	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	2000	1979	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0368	2000	2125	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0973	1000	1011	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40500	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0877	20000	20680	ug/L	3	15	
Pyrene	2	0.1252	0.1342	1000	1047	ug/L	5	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0207	40000	40700	ug/L	2	15	
Naphthalene	3	0.0110	0.0106	10000	9631	ug/L	-4	15	
Acenaphthene	3	0.0234	0.0232	10000	9929	ug/L	-1	15	
Fluorene	3	0.1247	0.1211	2000	1952	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1307	1000	964.4	ug/L	-4	15	
Anthracene	3	0.4222	0.4541	1000	1069	ug/L	7	15	
Fluoranthene	3	0.0390	0.0396	2000	2021	ug/L	1	15	
Pyrene	3	0.1264	0.1253	1000	979.6	ug/L	-2	15	
Benzo(a)anthracene	3	0.1453	0.1505	1000	1019	ug/L	2	15	
Chrysene	3	0.1780	0.1718	1000	967.1	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0639	2000	1971	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3831	1000	980.4	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2292	1000	1087	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0296	2000	1888	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0598	2000	2010	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0958	1000	989.0	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0118	40000	38840	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297098623002 File : 06800002 Time : 09-MAR-2007 12:14
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	2000	2025	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	4000	4164	ug/L	4	15	
Acenaphthene	1	0.0053	0.0052	2000	2012	ug/L	1	15	
Fluorene	1	0.0637	0.0635	400.0	405.3	ug/L	1	15	
Phenanthrene	1	0.1810	0.1774	200.0	198.8	ug/L	-1	15	
Anthracene	1	0.4065	0.4397	200.0	216.5	ug/L	8	15	
Fluoranthene	1	0.0404	0.0413	400.0	410.4	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0932	200.0	208.5	ug/L	4	15	
Chrysene	1	0.1350	0.1328	200.0	199.0	ug/L	-1	15	
Benzo(b)fluoranthene	1	0.1023	0.1039	400.0	400.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0802	200.0	197.8	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0900	200.0	216.8	ug/L	8	15	
Dibenz(a,h)anthracene	1	0.0213	0.0202	400.0	394.3	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	400.0	424.2	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0867	200.0	191.5	ug/L	-4	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8057	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0884	4000	4116	ug/L	3	15	
Pyrene	2	0.1252	0.1320	200.0	209.4	ug/L	5	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8168	ug/L	2	15	
Naphthalene	3	0.0110	0.0109	2000	1982	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0236	2000	2010	ug/L	1	15	
Fluorene	3	0.1247	0.1209	400.0	382.1	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1349	200.0	200.7	ug/L	0	15	
Anthracene	3	0.4222	0.4553	200.0	217.9	ug/L	9	15	
Fluoranthene	3	0.0390	0.0398	400.0	411.5	ug/L	3	15	
Pyrene	3	0.1264	0.1330	200.0	212.5	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1508	200.0	207.8	ug/L	4	15	
Chrysene	3	0.1780	0.1738	200.0	192.5	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0638	0.0627	400.0	392.8	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3764	200.0	193.8	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2271	200.0	217.5	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0285	400.0	387.4	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0578	400.0	409.5	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0916	200.0	200.0	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	8000	7884	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297098623007 File : 06800007 Time : 09-MAR-2007 14:52
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4082	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8286	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	4000	4074	ug/L	2	15	
Fluorene	1	0.0637	0.0642	800.0	809.3	ug/L	1	15	
Phenanthrene	1	0.1810	0.1793	400.0	399.1	ug/L	0	15	
Anthracene	1	0.4065	0.4422	400.0	433.3	ug/L	8	15	
Fluoranthene	1	0.0404	0.0418	800.0	823.2	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0960	400.0	420.7	ug/L	5	15	
Chrysene	1	0.1350	0.1362	400.0	405.7	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1058	800.0	802.0	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0819	400.0	398.3	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0924	400.0	434.3	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0205	800.0	769.5	ug/L	-4	15	
Benzo(g,h,i)perylene	1	0.0309	0.0351	800.0	829.1	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0915	400.0	388.5	ug/L	-3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16310	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0890	8000	8355	ug/L	4	15	
Pyrene	2	0.1252	0.1326	400.0	416.1	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	16000	16720	ug/L	4	15	
Naphthalene	3	0.0110	0.0106	4000	3865	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0233	4000	3974	ug/L	-1	15	
Fluorene	3	0.1247	0.1205	800.0	771.5	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1322	400.0	391.2	ug/L	-2	15	
Anthracene	3	0.4222	0.4559	400.0	432.0	ug/L	8	15	
Fluoranthene	3	0.0390	0.0395	800.0	809.4	ug/L	1	15	
Pyrene	3	0.1264	0.1285	400.0	405.2	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1508	400.0	411.3	ug/L	3	15	
Chrysene	3	0.1780	0.1728	400.0	386.7	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0633	800.0	785.9	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3811	400.0	391.0	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2285	400.0	435.1	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0289	800.0	753.5	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0587	800.0	804.8	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0932	400.0	392.9	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15570	ug/L	-3	15	

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06500001	X	IB - 065			06-MAR-2007 09:54	1.0						
002	06500002	CCV	L			06-MAR-2007 10:25	1.0	1.0			10	1	
003	06500003	X	IB			06-MAR-2007 10:57	1.0						
004	06500004	X,SAMPL	193055-005	122665	Water	06-MAR-2007 11:29	1.0						
005	06500005	X,SAMPL	193055-006	122665	Water	06-MAR-2007 12:00	1.0						
006	06500006	SAMPLE	193055-011	122665	Water	06-MAR-2007 12:32	1.0	0.002			10		
007	06500007	SAMPLE	193055-012	122665	Water	06-MAR-2007 13:03	1.0	0.001961			10		
008	06500008	SAMPLE	193055-013	122665	Water	06-MAR-2007 13:35	1.0	0.002105			10		
009	06500009	SAMPLE	193055-014	122665	Water	06-MAR-2007 14:07	1.0	0.002051			10		
010	06500010	SAMPLE	193093-002	122665	Water	06-MAR-2007 14:38	1.0	0.001887			10		
011	06500011	SAMPLE	193093-001	122665	Water	06-MAR-2007 15:10	1.0	0.001887		1	10		
012	06500012	X	IB			06-MAR-2007 15:42	1.0						
013	06500013	CCV	M			06-MAR-2007 16:13	1.0	1.0			10	2	
014	06500014	X	CCV			06-MAR-2007 16:45	1.0					2	
015	06500015	X	IB			06-MAR-2007 17:16	1.0						
016	06500016	BLANK	QC377524	122706	Soil	06-MAR-2007 17:48	1.0	0.06614			10		
017	06500017	MSS	193048-015	122706	Soil	06-MAR-2007 18:19	1.0	0.06631			10		
018	06500018	LCS	QC377525	122706	Soil	06-MAR-2007 18:51	1.0	0.06581			10		
019	06500019	X,MS	QC377526	122706	Soil	06-MAR-2007 19:23	1.0						
020	06500020	MSD	QC377527	122706	Soil	06-MAR-2007 19:54	1.0	0.06662			10		
021	06500021	X	IB			06-MAR-2007 20:26	1.0						
022	06500022	BLANK	QC377598	122719	Water	06-MAR-2007 20:57	1.0	0.002			10		
023	06500023	SAMPLE	193049-010	122706	Soil	06-MAR-2007 21:29	1.0	0.06594			10		
024	06500024	SAMPLE	193051-010	122706	Soil	06-MAR-2007 22:01	1.0	0.0659			10		
025	06500025	SAMPLE	193049-005	122706	Soil	06-MAR-2007 22:32	1.0	0.06651			10		
026	06500026	LCS	QC377599	122719	Water	06-MAR-2007 23:04	1.0	0.002			10		
027	06500027	X	IB			06-MAR-2007 23:36	1.0						
028	06500028	CCV	H			07-MAR-2007 00:07	1.0	1.0			10	3	
029	06500029	X	CCV			07-MAR-2007 00:39	1.0					3	
030	06500030	X	IB			07-MAR-2007 01:10	1.0						
031	06500031	MSS	193108-007	122719	Water	07-MAR-2007 01:42	1.0	0.001942			10		

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	06500032	SAMPLE	193108-009	122719	Water	07-MAR-2007 02:14	1.0	0.001923			10		
033	06500033	MSS	193108-023	122719	Water	07-MAR-2007 02:45	1.0	0.001905			10		
034	06500034	MS	QC377600	122719	Water	07-MAR-2007 03:17	1.0	0.001942			10		
035	06500035	MSD	QC377601	122719	Water	07-MAR-2007 03:48	1.0	0.001942			10		
036	06500036	MS	QC377602	122719	Water	07-MAR-2007 04:20	1.0	0.001905		4	10		
037	06500037	MSD	QC377603	122719	Water	07-MAR-2007 04:52	1.0	0.001905		2	10		
038	06500038	X	IB			07-MAR-2007 05:23	1.0						
039	06500039	SAMPLE	193118-010	122719	Water	07-MAR-2007 05:55	1.0	0.001942	4		10		4:PYR=40300.0
040	06500040	SAMPLE	193118-011	122719	Water	07-MAR-2007 06:27	1.0	0.001887	9		10		9:PYR=81669.6
041	06500041	SAMPLE	193118-012	122719	Water	07-MAR-2007 06:58	1.0	0.001887	12	2	10		14:MTNPH1=96604.7
042	06500042	X	IB			07-MAR-2007 07:30	1.0						
043	06500043	X	IB			07-MAR-2007 08:01	1.0						
044	06500044	CCV	M			07-MAR-2007 08:33	1.0	1.0			10	2	
045	06500045	X	CCV			07-MAR-2007 09:05	1.0					2	
046	06500046	X	IB			07-MAR-2007 09:36	1.0						
047	06500047	SAMPLE	193055-005	122665	Water	07-MAR-2007 10:08	1.0	0.001887			10		
048	06500048	SAMPLE	193055-006	122665	Water	07-MAR-2007 10:39	1.0	0.001887			10		
049	06500049	MS	QC377526	122706	Soil	07-MAR-2007 11:11	1.0	0.06664			10		
050	06500050	X	IB			07-MAR-2007 11:43	1.0						
051	06500051	CCV	L			07-MAR-2007 12:14	1.0	1.0			10	1	
052	06500052	X	CCV			07-MAR-2007 12:46	1.0					1	
053	06500053	X	IB			07-MAR-2007 13:17	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297095975 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 07-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06600001	X	IB - 066			07-MAR-2007 15:35	1.0						
002	06600002	CCV	L			07-MAR-2007 16:07	1.0	1.0			10	1	
003	06600003	X	CCV			07-MAR-2007 16:38	1.0					1	
004	06600004	X	IB			07-MAR-2007 17:10	1.0						
005	06600005	BLANK	QC377822	122775	Water	07-MAR-2007 17:42	1.0	0.002			10		
006	06600006	BS	QC377823	122775	Water	07-MAR-2007 18:13	1.0	0.002			10		
007	06600007	BSD	QC377824	122775	Water	07-MAR-2007 18:45	1.0	0.002			10		
008	06600008	X	IB			07-MAR-2007 19:16	1.0						
009	06600009	SAMPLE	193169-001	122775	Water	07-MAR-2007 19:48	1.0	0.001887			10		
010	06600010	SAMPLE	193108-025	122775	Water	07-MAR-2007 20:20	1.0	0.001942			10		
011	06600011	SAMPLE	193108-026	122775	Water	07-MAR-2007 20:51	1.0	0.002105			10		
012	06600012	SAMPLE	193108-027	122775	Water	07-MAR-2007 21:23	1.0	0.001905			10		
013	06600013	SAMPLE	193137-001	122775	Water	07-MAR-2007 21:55	1.0	0.001905		2	10		
014	06600014	SAMPLE	193118-011	122719	Water	07-MAR-2007 22:26	4.0	0.001887	2		10		2:PYR=21706.7
015	06600015	X	IB			07-MAR-2007 22:58	1.0						
016	06600016	SAMPLE	193118-012	122719	Water	07-MAR-2007 23:29	20.0	0.001887			10		
017	06600017	X	IB			08-MAR-2007 00:01	1.0						
018	06600018	X	IB			08-MAR-2007 00:33	1.0						
019	06600019	CCV	H			08-MAR-2007 01:04	1.0	1.0			10	2	
020	06600020	X	CCV			08-MAR-2007 01:36	1.0					2	
021	06600021	X	IB			08-MAR-2007 02:07	1.0						
022	06600022	X,SAMPL	193064-002	122719	Water	08-MAR-2007 02:39	1.0						

Stds used: 1=S5286 2=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297097355 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 08-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06700001	X	IB - 067			08-MAR-2007 14:35	1.0						
002	06700002	X,CCV	L			08-MAR-2007 15:07	1.0	1.0	10		10	1	
003	06700003	X	CCV			08-MAR-2007 15:39	1.0					1	
004	06700004	X	IB			08-MAR-2007 16:10	1.0						
005	06700005	X	IB			08-MAR-2007 16:42	1.0						
006	06700006	X	IB			08-MAR-2007 17:13	1.0						
007	06700007	X	IB - 067			08-MAR-2007 17:45	1.0						
008	06700008	CCV	L			08-MAR-2007 18:17	1.0	1.0			10	1	
009	06700009	X	CCV			08-MAR-2007 18:48	1.0					1	
010	06700010	X	IB			08-MAR-2007 19:20	1.0						
011	06700011	SAMPLE	193137-001	122775	Water	08-MAR-2007 19:51	1.0	0.001905			10		
012	06700012	SAMPLE	193064-002	122719	Water	08-MAR-2007 20:23	1.0	0.001923			10		
013	06700013	SAMPLE	193064-004	122719	Water	08-MAR-2007 20:55	1.0	0.001887			10		
014	06700014	SAMPLE	193065-002	122719	Water	08-MAR-2007 21:26	1.0	0.001905			10		
015	06700015	SAMPLE	193065-004	122719	Water	08-MAR-2007 21:58	1.0	0.001887			10		
016	06700016	SAMPLE	193065-006	122719	Water	08-MAR-2007 22:30	1.0	0.002105			10		
017	06700017	X	IB			08-MAR-2007 23:01	1.0						
018	06700018	CCV	M			08-MAR-2007 23:33	1.0	1.0			10	2	
019	06700019	X	CCV			09-MAR-2007 00:04	1.0					2	
020	06700020	X	IB			09-MAR-2007 00:36	1.0						
021	06700021	SAMPLE	193108-010	122719	Water	09-MAR-2007 01:08	1.0	0.001961			10		
022	06700022	SAMPLE	193108-012	122719	Water	09-MAR-2007 01:39	1.0	0.001887			10		
023	06700023	SAMPLE	193108-013	122719	Water	09-MAR-2007 02:11	1.0	0.001923			10		
024	06700024	SAMPLE	193108-022	122719	Water	09-MAR-2007 02:42	1.0	0.001923			10		
025	06700025	SAMPLE	193108-024	122719	Water	09-MAR-2007 03:14	1.0	0.002424			10		
026	06700026	SAMPLE	193108-008	122719	Water	09-MAR-2007 03:46	1.0	0.001942	6	2	10		6:FLA=17120.7
027	06700027	SAMPLE	193108-011	122719	Water	09-MAR-2007 04:17	1.0	0.002	4	1	10		4:PHAN=8540.50
028	06700028	X	IB			09-MAR-2007 04:49	1.0						
029	06700029	CCV	H			09-MAR-2007 05:20	1.0	1.0			10	3	
030	06700030	X	CCV			09-MAR-2007 05:52	1.0					3	
031	06700031	X	IB			09-MAR-2007 06:24	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297098623 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 09-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06800001	X	IB - 068			09-MAR-2007 11:43	1.0						
002	06800002	CCV	L			09-MAR-2007 12:14	1.0	1.0			10	1	
003	06800003	X	IB			09-MAR-2007 12:46	1.0						
004	06800004	SAMPLE	193108-011	122719	Water	09-MAR-2007 13:18	5.0	0.002	1		10		
005	06800005	SAMPLE	193108-008	122719	Water	09-MAR-2007 13:49	5.0	0.001942	2		10		
006	06800006	X	IB			09-MAR-2007 14:21	1.0						
007	06800007	CCV	M			09-MAR-2007 14:52	1.0	1.0			10	2	
008	06800008	X	IB			09-MAR-2007 15:24	1.0						

513

Stds used: 1=S5286 2=S5285

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	Naphthalene	HPLC04	1	03/07/07 01:42
193108-007	Acenaphthylene	HPLC04	1	03/07/07 01:42
193108-007	Acenaphthene	HPLC04	1	03/07/07 01:42
193108-007	Fluorene	HPLC04	1	03/07/07 01:42
193108-007	Phenanthrene	HPLC04	3	03/07/07 01:42
193108-007	Anthracene	HPLC04	3	03/07/07 01:42
193108-007	Fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Pyrene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(a)anthracene	HPLC04	3	03/07/07 01:42
193108-007	Chrysene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(b)fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(k)fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(a)pyrene	HPLC04	3	03/07/07 01:42
193108-007	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 01:42
193108-007	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 01:42
193108-007	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 01:42
193108-007	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 01:42
193108-008	Naphthalene	HPLC04	1	03/09/07 03:46
193108-008	Acenaphthylene	HPLC04	1	03/09/07 03:46
193108-008	Acenaphthene	HPLC04	1	03/09/07 03:46
193108-008	Fluorene	HPLC04	1	03/09/07 13:49
193108-008	Phenanthrene	HPLC04	3	03/09/07 13:49
193108-008	Anthracene	HPLC04	3	03/09/07 03:46
193108-008	Fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Pyrene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(a)anthracene	HPLC04	3	03/09/07 03:46
193108-008	Chrysene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(b)fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(k)fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(a)pyrene	HPLC04	3	03/09/07 03:46
193108-008	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 03:46
193108-008	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 03:46
193108-008	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 03:46
193108-008	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 03:46
193108-009	Naphthalene	HPLC04	1	03/07/07 02:14
193108-009	Acenaphthylene	HPLC04	1	03/07/07 02:14
193108-009	Acenaphthene	HPLC04	1	03/07/07 02:14
193108-009	Fluorene	HPLC04	1	03/07/07 02:14
193108-009	Phenanthrene	HPLC04	3	03/07/07 02:14
193108-009	Anthracene	HPLC04	3	03/07/07 02:14
193108-009	Fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Pyrene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(a)anthracene	HPLC04	3	03/07/07 02:14
193108-009	Chrysene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(b)fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(k)fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(a)pyrene	HPLC04	3	03/07/07 02:14
193108-009	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 02:14
193108-009	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 02:14

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-009	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 02:14
193108-009	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 02:14
193108-010	Naphthalene	HPLC04	1	03/09/07 01:08
193108-010	Acenaphthylene	HPLC04	1	03/09/07 01:08
193108-010	Acenaphthene	HPLC04	1	03/09/07 01:08
193108-010	Fluorene	HPLC04	1	03/09/07 01:08
193108-010	Phenanthrene	HPLC04	3	03/09/07 01:08
193108-010	Anthracene	HPLC04	3	03/09/07 01:08
193108-010	Fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Pyrene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(a)anthracene	HPLC04	3	03/09/07 01:08
193108-010	Chrysene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(b)fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(k)fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(a)pyrene	HPLC04	3	03/09/07 01:08
193108-010	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 01:08
193108-010	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 01:08
193108-010	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 01:08
193108-010	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 01:08
193108-011	Naphthalene	HPLC04	1	03/09/07 04:17
193108-011	Acenaphthylene	HPLC04	1	03/09/07 04:17
193108-011	Acenaphthene	HPLC04	1	03/09/07 04:17
193108-011	Fluorene	HPLC04	1	03/09/07 04:17
193108-011	Phenanthrene	HPLC04	3	03/09/07 13:18
193108-011	Anthracene	HPLC04	3	03/09/07 04:17
193108-011	Fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Pyrene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(a)anthracene	HPLC04	3	03/09/07 04:17
193108-011	Chrysene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(b)fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(k)fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(a)pyrene	HPLC04	3	03/09/07 04:17
193108-011	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 04:17
193108-011	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 04:17
193108-011	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 04:17
193108-011	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 04:17
193108-012	Naphthalene	HPLC04	1	03/09/07 01:39
193108-012	Acenaphthylene	HPLC04	1	03/09/07 01:39
193108-012	Acenaphthene	HPLC04	1	03/09/07 01:39
193108-012	Fluorene	HPLC04	1	03/09/07 01:39
193108-012	Phenanthrene	HPLC04	3	03/09/07 01:39
193108-012	Anthracene	HPLC04	3	03/09/07 01:39
193108-012	Fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Pyrene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(a)anthracene	HPLC04	3	03/09/07 01:39
193108-012	Chrysene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(b)fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(k)fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(a)pyrene	HPLC04	3	03/09/07 01:39

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-012	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 01:39
193108-012	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 01:39
193108-012	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 01:39
193108-012	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 01:39
193108-013	Naphthalene	HPLC04	1	03/09/07 02:11
193108-013	Acenaphthylene	HPLC04	1	03/09/07 02:11
193108-013	Acenaphthene	HPLC04	1	03/09/07 02:11
193108-013	Fluorene	HPLC04	1	03/09/07 02:11
193108-013	Phenanthrene	HPLC04	3	03/09/07 02:11
193108-013	Anthracene	HPLC04	3	03/09/07 02:11
193108-013	Fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Pyrene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(a)anthracene	HPLC04	3	03/09/07 02:11
193108-013	Chrysene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(b)fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(k)fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(a)pyrene	HPLC04	3	03/09/07 02:11
193108-013	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 02:11
193108-013	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 02:11
193108-013	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 02:11
193108-013	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 02:11
193108-022	Naphthalene	HPLC04	1	03/09/07 02:42
193108-022	Acenaphthylene	HPLC04	1	03/09/07 02:42
193108-022	Acenaphthene	HPLC04	1	03/09/07 02:42
193108-022	Fluorene	HPLC04	1	03/09/07 02:42
193108-022	Phenanthrene	HPLC04	3	03/09/07 02:42
193108-022	Anthracene	HPLC04	3	03/09/07 02:42
193108-022	Fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Pyrene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(a)anthracene	HPLC04	3	03/09/07 02:42
193108-022	Chrysene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(b)fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(k)fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(a)pyrene	HPLC04	3	03/09/07 02:42
193108-022	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 02:42
193108-022	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 02:42
193108-022	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 02:42
193108-022	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 02:42
193108-023	Naphthalene	HPLC04	1	03/07/07 02:45
193108-023	Acenaphthylene	HPLC04	1	03/07/07 02:45
193108-023	Acenaphthene	HPLC04	1	03/07/07 02:45
193108-023	Fluorene	HPLC04	1	03/07/07 02:45
193108-023	Phenanthrene	HPLC04	3	03/07/07 02:45
193108-023	Anthracene	HPLC04	3	03/07/07 02:45
193108-023	Fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Pyrene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(a)anthracene	HPLC04	3	03/07/07 02:45
193108-023	Chrysene	HPLC04	3	03/07/07 02:45

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-023	Benzo(b)fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(k)fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(a)pyrene	HPLC04	3	03/07/07 02:45
193108-023	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 02:45
193108-023	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 02:45
193108-023	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 02:45
193108-023	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 02:45
193108-024	Naphthalene	HPLC04	1	03/09/07 03:14
193108-024	Acenaphthylene	HPLC04	1	03/09/07 03:14
193108-024	Acenaphthene	HPLC04	1	03/09/07 03:14
193108-024	Fluorene	HPLC04	1	03/09/07 03:14
193108-024	Phenanthrene	HPLC04	3	03/09/07 03:14
193108-024	Anthracene	HPLC04	3	03/09/07 03:14
193108-024	Fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Pyrene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(a)anthracene	HPLC04	3	03/09/07 03:14
193108-024	Chrysene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(b)fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(k)fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(a)pyrene	HPLC04	3	03/09/07 03:14
193108-024	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 03:14
193108-024	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 03:14
193108-024	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 03:14
193108-024	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 03:14
193108-025	Naphthalene	HPLC04	1	03/07/07 20:20
193108-025	Acenaphthylene	HPLC04	1	03/07/07 20:20
193108-025	Acenaphthene	HPLC04	1	03/07/07 20:20
193108-025	Fluorene	HPLC04	1	03/07/07 20:20
193108-025	Phenanthrene	HPLC04	3	03/07/07 20:20
193108-025	Anthracene	HPLC04	3	03/07/07 20:20
193108-025	Fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Pyrene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(a)anthracene	HPLC04	3	03/07/07 20:20
193108-025	Chrysene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(b)fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(k)fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(a)pyrene	HPLC04	3	03/07/07 20:20
193108-025	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 20:20
193108-025	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 20:20
193108-025	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 20:20
193108-025	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 20:20
193108-026	Naphthalene	HPLC04	1	03/07/07 20:51
193108-026	Acenaphthylene	HPLC04	1	03/07/07 20:51
193108-026	Acenaphthene	HPLC04	1	03/07/07 20:51
193108-026	Fluorene	HPLC04	1	03/07/07 20:51
193108-026	Phenanthrene	HPLC04	3	03/07/07 20:51
193108-026	Anthracene	HPLC04	3	03/07/07 20:51
193108-026	Fluoranthene	HPLC04	3	03/07/07 20:51

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-026	Pyrene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(a)anthracene	HPLC04	3	03/07/07 20:51
193108-026	Chrysene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(b)fluoranthene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(k)fluoranthene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(a)pyrene	HPLC04	3	03/07/07 20:51
193108-026	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 20:51
193108-026	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 20:51
193108-026	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 20:51
193108-026	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 20:51
193108-027	Naphthalene	HPLC04	1	03/07/07 21:23
193108-027	Acenaphthylene	HPLC04	1	03/07/07 21:23
193108-027	Acenaphthene	HPLC04	1	03/07/07 21:23
193108-027	Fluorene	HPLC04	1	03/07/07 21:23
193108-027	Phenanthrene	HPLC04	3	03/07/07 21:23
193108-027	Anthracene	HPLC04	3	03/07/07 21:23
193108-027	Fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Pyrene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(a)anthracene	HPLC04	3	03/07/07 21:23
193108-027	Chrysene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(b)fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(k)fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(a)pyrene	HPLC04	3	03/07/07 21:23
193108-027	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 21:23
193108-027	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 21:23
193108-027	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 21:23
193108-027	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 21:23
QC377598	Naphthalene	HPLC04	1	03/06/07 20:57
QC377598	Acenaphthylene	HPLC04	1	03/06/07 20:57
QC377598	Acenaphthene	HPLC04	1	03/06/07 20:57
QC377598	Fluorene	HPLC04	1	03/06/07 20:57
QC377598	Phenanthrene	HPLC04	3	03/06/07 20:57
QC377598	Anthracene	HPLC04	3	03/06/07 20:57
QC377598	Fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Pyrene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(a)anthracene	HPLC04	3	03/06/07 20:57
QC377598	Chrysene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(b)fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(k)fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(a)pyrene	HPLC04	3	03/06/07 20:57
QC377598	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 20:57
QC377598	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 20:57
QC377598	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 20:57
QC377598	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 20:57
QC377599	Naphthalene	HPLC04	1	03/06/07 23:04
QC377599	Fluorene	HPLC04	1	03/06/07 23:04
QC377599	Pyrene	HPLC04	3	03/06/07 23:04
QC377599	Benzo(a)pyrene	HPLC04	3	03/06/07 23:04

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377599	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 23:04
QC377599	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 23:04
QC377600	Naphthalene	HPLC04	1	03/07/07 03:17
QC377600	Fluorene	HPLC04	1	03/07/07 03:17
QC377600	Pyrene	HPLC04	3	03/07/07 03:17
QC377600	Benzo(a)pyrene	HPLC04	3	03/07/07 03:17
QC377600	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 03:17
QC377600	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 03:17
QC377601	Naphthalene	HPLC04	1	03/07/07 03:48
QC377601	Fluorene	HPLC04	1	03/07/07 03:48
QC377601	Pyrene	HPLC04	3	03/07/07 03:48
QC377601	Benzo(a)pyrene	HPLC04	3	03/07/07 03:48
QC377601	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 03:48
QC377601	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 03:48
QC377602	Naphthalene	HPLC04	1	03/07/07 04:20
QC377602	Fluorene	HPLC04	1	03/07/07 04:20
QC377602	Pyrene	HPLC04	3	03/07/07 04:20
QC377602	Benzo(a)pyrene	HPLC04	3	03/07/07 04:20
QC377602	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 04:20
QC377602	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 04:20
QC377603	Naphthalene	HPLC04	1	03/07/07 04:52
QC377603	Fluorene	HPLC04	1	03/07/07 04:52
QC377603	Pyrene	HPLC04	3	03/07/07 04:52
QC377603	Benzo(a)pyrene	HPLC04	3	03/07/07 04:52
QC377603	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 04:52
QC377603	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 04:52
QC377822	Naphthalene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthylene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthene	HPLC04	1	03/07/07 17:42
QC377822	Fluorene	HPLC04	1	03/07/07 17:42
QC377822	Phenanthrene	HPLC04	3	03/07/07 17:42
QC377822	Anthracene	HPLC04	3	03/07/07 17:42
QC377822	Fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Pyrene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Chrysene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(b)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(k)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)pyrene	HPLC04	3	03/07/07 17:42
QC377822	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 17:42
QC377822	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 17:42
QC377822	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 17:42
QC377822	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 17:42
QC377823	Naphthalene	HPLC04	1	03/07/07 18:13
QC377823	Fluorene	HPLC04	1	03/07/07 18:13
QC377823	Pyrene	HPLC04	3	03/07/07 18:13
QC377823	Benzo(a)pyrene	HPLC04	3	03/07/07 18:13

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377823	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:13
QC377823	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:13
QC377824	Naphthalene	HPLC04	1	03/07/07 18:45
QC377824	Fluorene	HPLC04	1	03/07/07 18:45
QC377824	Pyrene	HPLC04	3	03/07/07 18:45
QC377824	Benzo(a)pyrene	HPLC04	3	03/07/07 18:45
QC377824	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:45
QC377824	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:45

Curtis & Tompkins Laboratories Sample Preparation Summary 06-MAR-2007 16:10

Batch Number : 122719
Date Extracted: 05-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5126Q
Spike #2 ID : S5518A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193064-002			URS Corporation	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193064-004			URS Corporation	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193065-002			URS Corporation	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193065-004			URS Corporation	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193065-006			URS Corporation	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193108-007			Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		MSS
193108-008			Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193108-009			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-010			Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193108-011			Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	.1	0		8310		
193108-012			Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193108-013			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-022			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-023			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		MSS
193108-024			Treadwell & Rollo	Water	825	mL	2	0.002424	1	7	.1	0		8310		
193118-010			Burns & McDonnell	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193118-011			Burns & McDonnell	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193118-012			Burns & McDonnell	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377598	BLANK			Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377599	LCS			Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377600	MS	of 193108-007		Water	1030	mL	2	0.001942	1	7	.1	1		8310		
QC377601	MSD	of 193108-007		Water	1030	mL	2	0.001942	1	7	.1	1		8310		
QC377602	MS	of 193108-023		Water	1050	mL	2	0.001905	1	7	.1	1		8310		
QC377603	MSD	of 193108-023		Water	1050	mL	2	0.001905	1	7	.1	1		8310		

Prep Chemist: Jessie Mee Reviewed By: [signature] Date: 03/07/07

Relinquished By: [signature] Received By: [signature] Date: 07MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

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LIMS Batch No: 192719
LIMS Analysis: 8310
Extracted by: JOM
Date Extracted: 5 March 07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193064-002 A	1040	7	2.0		
04	1060				
193065-002	1050				
04	1060				
06	950				
193108-007 X	1030				MSS
08K	RFW 3/5/07 ~~1000~~ 1030				
09H	1040				
10M	1020				
11K	1000				
12L	1060				
13O	1040				**
22P	1040				
23AO	1050				MSS
24J	825				
193118-010F	1030				loose receiver lost some sample (~5mL)
11	1060				
12	1060				
MB BC37759B	1000	NA			*
LCS 599	1000				
MS 600	1030	7			193108-007 Y
MSD 601	1030				Z
MS 602	1050				193108-023 AP
MSD 603	1050				AU

JOM 3/5/07

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1625
Extraction End Time: 1830
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ Granular Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5126Q* / S5244E** / D	JOM 3/5/07
S5518A	
EM47010 / EM46352	
	SFK 03/06/07
N/A	3/6/07
EM46111628	
EM46173	
✓	
N/A	
whatman 0100	

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Contined from Page _____
Continued on Page _____

Extraction Chemist 3/5/07 Date

Reviewed by 03/06/07 Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **07-MAR-2007 15:45**

Batch Number : 122775
Date Extracted: 06-MAR-2007
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5244E
Spike #2 ID : S5518A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-025		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193108-026		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193108-027		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193137-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193169-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377822	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377823	BS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377824	BSD		Water	1000	mL	2	0.002000	1		.1	1		8310		

Prep Chemist: _____ Reviewed By: _____ Date: 3/8/07

Relinquished By: _____ Received By: _____ Date: 08MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 122775
LIMS Analysis: 8310
Extracted by: RFW
Date Extracted: 03/06/07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-025 K	1030	7	2.0		
-026 J	950				*
-027 L	1050				*
193137-001 D	1050				
193169-001 G	1060	11			
MB QC377822	1000	NA			
BS 23					
BSD 24					
					SXM 3/7/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.1 mL of surrogate solution was added to all samples	55244E/55673A*	RFW 3/6/07
1.0 mL of matrix spiking solution was added to all spikes	55518A	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2	EM46354	
Extraction Start Time:	DW 3/6/07 ~~1550~~ 1545	
Extraction End Time:	10:57	RFW 3/7/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SXM 3/7/07
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ brown Na2SO4	EM46111628	
Exchanged 2x with Acetonitrile	EM46173	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume		
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	N/A	
Extracts filtered with 0.45 um PTFE syringe filter	Whatman 0108	

SXM for RFW 3/6/07

SXM 3/8/07 3/7/07

Extraction Chemist **Date**

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Contined from Page ___
Continued on Page ___

3/8/07

Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/23/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Batch#:	122986
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	8,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	6,800	500
Manganese	ND	10
Nickel	ND	20
Potassium	1,400	500
Sodium	7,100	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4B	Batch#:	122986
Lab ID:	193108-002	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	27,000	500
Chromium	31	10
Copper	1.2	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	53,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	840	500
Sodium	59,000	500
Vanadium	14	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7B	Batch#:	122986
Lab ID:	193108-003	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	64,000	500
Chromium	30	10
Copper	1.6	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	83,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	500	500
Sodium	94,000	500
Vanadium	14	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5AR	Batch#:	122986
Lab ID:	193108-004	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	27	5.0
Cadmium	ND	1.0
Calcium	81,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	32,000	100
Lead	ND	3.0
Magnesium	75,000	500
Manganese	1,900	10
Nickel	ND	20
Potassium	5,900	500
Sodium	86,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5B	Batch#:	122986
Lab ID:	193108-005	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	31,000	500
Chromium	21	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	38,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	54,000	500
Vanadium	16	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301072A	Batch#:	122986
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	8,500	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	6,600	500
Manganese	ND	10
Nickel	ND	20
Potassium	1,400	500
Sodium	7,500	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Sampled:	03/01/07
Lab ID:	193108-007	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	32	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	1.5	1.0	10.00
Calcium	110,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	11	1.0	10.00
Iron	110	100	10.00
Lead	ND	3.0	10.00
Magnesium	230,000	500	50.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	2,000	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	250,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	25	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Sampled:	03/01/07
Lab ID:	193108-008	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	7.5	5.0	10.00
Barium	730	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	150,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	33,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	200,000	500	10.00
Manganese	15,000	10	100.0
Nickel	ND	20	10.00
Potassium	2,200	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	400,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW06	Batch#:	122987
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	57	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	35,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	1.9	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	63,000	500
Manganese	16	10
Nickel	ND	20
Potassium	960	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	35,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301073A	Sampled:	03/01/07
Lab ID:	193108-010	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	31	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	1.4	1.0	10.00
Calcium	110,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	1.4	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	210,000	500	50.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	2,000	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	230,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	25	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301073B	Sampled:	03/01/07
Lab ID:	193108-011	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	7.8	5.0	10.00
Barium	660	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	130,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	31,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	180,000	500	10.00
Manganese	14,000	10	100.0
Nickel	ND	20	10.00
Potassium	2,100	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	360,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Sampled:	03/02/07
Lab ID:	193108-012	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	23	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	19,000	500	10.00
Chromium	67	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	76,000	500	10.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	1,100	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	290,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW08	Batch#:	122987
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	81	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	51,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	91,000	500
Manganese	240	10
Nickel	45	20
Potassium	500	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	68,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	21	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF02GW04	Batch#:	122987
Lab ID:	193108-014	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	6.5	5.0
Barium	97	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	22,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	86,000	500
Manganese	52	10
Nickel	ND	20
Potassium	1,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	61,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1A	Batch#:	122986
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	15	5.0
Cadmium	ND	1.0
Calcium	29,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	17,000	100
Lead	ND	3.0
Magnesium	44,000	500
Manganese	82	10
Nickel	ND	20
Potassium	1,100	500
Sodium	180,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	122986
Lab ID:	193108-016	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	6.2	5.0
Cadmium	ND	1.0
Calcium	19,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	8,100	100
Lead	ND	3.0
Magnesium	29,000	500
Manganese	1,100	10
Nickel	ND	20
Potassium	3,600	500
Sodium	71,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3A	Batch#:	122986
Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	46,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	51,000	500
Manganese	14	10
Nickel	ND	20
Potassium	1,300	500
Sodium	24,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4A	Sampled:	03/01/07
Lab ID:	193108-018	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07
Batch#:	122986		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	12	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	58,000	500	10.00
Chromium	ND	10	10.00
Copper	ND	1.0	10.00
Iron	37,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	73,000	500	10.00
Manganese	2,100	10	50.00
Nickel	ND	20	10.00
Potassium	6,600	500	10.00
Sodium	110,000	500	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW101	Sampled:	03/01/07
Lab ID:	193108-019	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07
Batch#:	122986		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	24	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	22,000	500	10.00
Chromium	ND	10	10.00
Copper	ND	1.0	10.00
Iron	22,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	38,000	500	10.00
Manganese	57	10	10.00
Nickel	ND	20	10.00
Potassium	5,800	500	10.00
Sodium	210,000	500	50.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW102	Batch#:	122986
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	18,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	1,300	100
Lead	ND	3.0
Magnesium	12,000	500
Manganese	250	10
Nickel	ND	20
Potassium	3,400	500
Sodium	76,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW103	Batch#:	122987
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	150	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	41,000	500
Chromium	19	10
Cobalt	ND	10
Copper	2.3	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	44,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	830	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	94,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	77	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	49,000	500
Manganese	510	10
Nickel	ND	20
Potassium	1,200	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW101	Batch#:	122987
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	72	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	190,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	2.7	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	90,000	500
Manganese	410	10
Nickel	31	20
Potassium	27,000	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	53,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW03	Batch#:	122987
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	88	10
Beryllium	ND	2.0
Cadmium	4.8	1.0
Calcium	68,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	140,000	500
Manganese	410	10
Nickel	ND	20
Potassium	890	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	130,000	500
Thallium	ND	1.0
Vanadium	13	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW05	Batch#:	122987
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	70	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	67,000	500
Chromium	11	10
Cobalt	13	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	96,000	500
Manganese	160	10
Nickel	1,000	20
Potassium	1,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	83,000	500
Thallium	ND	1.0
Vanadium	10	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0302071A	Batch#:	122987
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	76	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	520	10
Nickel	ND	20
Potassium	1,300	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378693	Batch#:	122986
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	ND	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Batch#:	122987
Lab ID:	QC378700	Prepared:	03/12/07
Matrix:	Filtrate	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	ND	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	ND	500	1.000
Chromium	ND	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	5.3 b	3.0	1.000
Magnesium	ND	500	1.000
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	ND	500	1.000
Selenium	ND	5.0	10.00
Silver	ND	1.0	1.000
Sodium	ND	500	1.000
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DAEGW103	Sampled:	03/01/07
Lab ID:	193108-022	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

97.2

00555

Curtis & Tompkins, Ltd.

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DUP0302071A	Sampled:	03/02/07
Lab ID:	193108-027	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

192.0

00555A

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Diln Fac:	1.000
Type:	BLANK	Batch#:	122751
Lab ID:	QC377727	Prepared:	03/06/07
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

193.0

00555B

Curtis & Tompkins, Ltd.

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Sampled:	03/02/07
Field ID:	DAEGW104	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	193108-023	ND	5.0	10.00
BLANK	QC378700	ND	5.0	1.000

ND= Not Detected
RL= Reporting Limit

188.0

00555C

Curtis & Tompkins, Ltd.

Hardness (Total)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	122751
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/06/07

Field ID	Type	Lab ID	Result	RL	Sampled
DAEGW103	SAMPLE	193108-022	350	3.3	03/01/07
DAEGW104	SAMPLE	193108-023	370	3.3	03/02/07
DUP0302071A	SAMPLE	193108-027	330	3.3	03/02/07
	BLANK	QC377727	ND	3.3	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	Lab ID	Matrix	Result	RL	Batch#	Sampled
1349MW01	SAMPLE	193108-007	Filtrate	ND	0.20	123057	03/01/07
1349MW100	SAMPLE	193108-008	Filtrate	ND	0.20	123057	03/01/07
DUP0301073A	SAMPLE	193108-010	Filtrate	ND	0.20	123057	03/01/07
DUP0301073B	SAMPLE	193108-011	Filtrate	ND	0.20	123057	03/01/07
DAEGW103	SAMPLE	193108-022	Filtrate	ND	0.20	123057	03/01/07
DAEGW104	SAMPLE	193108-023	Filtrate	ND	0.20	123058	03/02/07
DAEGW101	SAMPLE	193108-024	Filtrate	ND	0.20	123057	03/02/07
DUP0302071A	SAMPLE	193108-027	Filtrate	ND	0.20	123057	03/02/07
	BLANK	QC378996	Water	ND	0.20	123057	
	BLANK	QC379003	Water	ND	0.20	123058	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122986
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/13/07

Type: BS Lab ID: QC378694

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,445	94	80-120
Antimony	100.0	96.74	97	80-120
Arsenic	100.0	96.68	97	80-120
Cadmium	100.0	98.82	99	80-120
Calcium	10,000	10,370	104	80-120
Chromium	100.0	109.2	109	80-120
Copper	100.0	104.2	104	80-120
Iron	10,000	11,420	114	80-120
Lead	100.0	104.4	104	80-120
Magnesium	10,000	9,279	93	80-120
Manganese	100.0	109.5	110	80-120
Nickel	100.0	114.7	115	80-120
Potassium	10,000	10,070	101	80-120
Sodium	10,000	10,080	101	80-120
Vanadium	100.0	106.7	107	80-120
Zinc	100.0	95.98	96	80-120

Type: BSD Lab ID: QC378695

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,276	93	80-120	2	20
Antimony	100.0	97.02	97	80-120	0	20
Arsenic	100.0	96.43	96	80-120	0	20
Cadmium	100.0	98.95	99	80-120	0	20
Calcium	10,000	10,230	102	80-120	1	20
Chromium	100.0	106.4	106	80-120	3	20
Copper	100.0	102.8	103	80-120	1	20
Iron	10,000	11,360	114	80-120	1	20
Lead	100.0	104.0	104	80-120	0	20
Magnesium	10,000	9,224	92	80-120	1	20
Manganese	100.0	106.8	107	80-120	2	20
Nickel	100.0	111.9	112	80-120	2	20
Potassium	10,000	9,847	98	80-120	2	20
Sodium	10,000	9,987	100	80-120	1	20
Vanadium	100.0	104.6	105	80-120	2	20
Zinc	100.0	96.52	97	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122987
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: BS Lab ID: QC378701

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,190	102	80-120
Antimony	100.0	101.0	101	80-120
Arsenic	100.0	101.1	101	80-120
Barium	100.0	102.3	102	80-120
Beryllium	100.0	113.4	113	80-120
Cadmium	100.0	102.1	102	80-120
Calcium	10,000	10,310	103	80-120
Chromium	100.0	105.2	105	80-120
Cobalt	100.0	107.0	107	80-120
Copper	100.0	107.2	107	80-120
Iron	10,000	10,260	103	80-120
Lead	100.0	103.5	104	80-120
Magnesium	10,000	10,300	103	80-120
Manganese	100.0	104.9	105	80-120
Nickel	100.0	107.4	107	80-120
Potassium	10,000	10,280	103	80-120
Selenium	100.0	94.55	95	80-120
Silver	100.0	115.2	115	80-120
Sodium	10,000	10,220	102	80-120
Thallium	50.00	50.42	101	80-120
Vanadium	100.0	106.2	106	80-120
Zinc	100.0	103.4	103	80-120

Type: BSD Lab ID: QC378702

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,939	99	80-120	2	20
Antimony	100.0	100.1	100	80-120	1	20
Arsenic	100.0	97.60	98	80-120	4	20
Barium	100.0	101.4	101	80-120	1	20
Beryllium	100.0	111.3	111	80-120	2	20
Cadmium	100.0	100.1	100	80-120	2	20
Calcium	10,000	10,210	102	80-120	1	20
Chromium	100.0	104.3	104	80-120	1	20
Cobalt	100.0	105.1	105	80-120	2	20
Copper	100.0	105.2	105	80-120	2	20
Iron	10,000	10,170	102	80-120	1	20
Lead	100.0	101.4	101	80-120	2	20
Magnesium	10,000	10,020	100	80-120	3	20
Manganese	100.0	104.0	104	80-120	1	20
Nickel	100.0	108.0	108	80-120	1	20
Potassium	10,000	10,030	100	80-120	2	20
Selenium	100.0	91.28	91	80-120	4	20
Silver	100.0	114.6	115	80-120	1	20
Sodium	10,000	10,260	103	80-120	0	20
Thallium	50.00	50.19	100	80-120	0	20
Vanadium	100.0	105.1	105	80-120	1	20
Zinc	100.0	105.7	106	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DAEGW104	Sampled:	03/02/07
MSS Lab ID:	193108-023	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC377728		400.0	426.7	107	80-120		
BSD	QC377729		400.0	432.7	108	80-120	1	20
MS	QC377732	5.017	400.0	435.4	108	75-125		
MSD	QC377733		400.0	433.0	107	75-125	1	20

RPD= Relative Percent Difference

Batch QC Report

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled
	BS		QC378701		100.0	101.4	101	80-120			1.000	
	BSD		QC378702		100.0	99.71	100	80-120	2	20	1.000	
1349MW01	MS	193108-007	QC378703	2.949	100.0	101.9	99	75-125			10.00	03/01/07
1349MW01	MSD	193108-007	QC378704		100.0	102.7	100	75-125	1	20	10.00	03/01/07
DAEGW104	MS	193108-023	QC378711	1.985	100.0	101.0	99	75-125			10.00	03/02/07
DAEGW104	MSD	193108-023	QC378712		100.0	101.9	100	75-125	1	20	10.00	03/02/07

RPD= Relative Percent Difference

189.2

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00569A

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled
	BS		QC378997	Water		5.000	5.280	106	80-120			123057	
	BSD		QC378998	Water		5.000	5.100	102	80-120	3	20	123057	
1349MW01	MS	193108-007	QC379000	Filtrate	<0.05753	5.000	5.310	106	75-125			123057	03/01/07
1349MW01	MSD	193108-007	QC379001	Filtrate		5.000	5.280	106	75-125	1	20	123057	03/01/07
	BS		QC379004	Water		5.000	5.090	102	80-120			123058	
	BSD		QC379005	Water		5.000	5.160	103	80-120	1	20	123058	
DAEGW104	MS	193108-023	QC379007	Filtrate	<0.02083	5.000	5.420	108	75-125			123058	03/02/07
DAEGW104	MSD	193108-023	QC379008	Filtrate		5.000	5.440	109	75-125	0	20	123058	03/02/07

561

RPD= Relative Percent Difference

168.0

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Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Batch#:	122986
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Type: MS Lab ID: QC378696

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	9,979	100	75-125
Antimony	0.9124	100.0	102.5	102	75-125
Arsenic	1.216	100.0	104.9	104	75-125
Cadmium	<0.05768	100.0	104.5	105	75-125
Calcium	8,029	10,000	18,960	109	75-125
Chromium	1.237	100.0	108.4	107	75-125
Copper	<0.2776	100.0	109.8	110	75-125
Iron	<19.37	10,000	12,020	120	75-125
Lead	<0.1276	100.0	108.8	109	75-125
Magnesium	6,828	10,000	16,530	97	75-125
Manganese	0.2437	100.0	108.5	108	75-125
Nickel	2.121	100.0	115.3	113	75-125
Potassium	1,417	10,000	11,710	103	75-125
Sodium	7,079	10,000	18,630	116	75-125
Vanadium	4.427	100.0	109.0	105	75-125
Zinc	<0.6189	100.0	115.7	116	75-125

Type: MSD Lab ID: QC378697

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,998	100	75-125	0	20
Antimony	100.0	102.0	101	75-125	0	20
Arsenic	100.0	105.7	104	75-125	1	20
Cadmium	100.0	105.3	105	75-125	1	20
Calcium	10,000	18,640	106	75-125	2	20
Chromium	100.0	109.5	108	75-125	1	20
Copper	100.0	112.5	113	75-125	2	20
Iron	10,000	12,040	120	75-125	0	20
Lead	100.0	108.5	109	75-125	0	20
Magnesium	10,000	16,400	96	75-125	1	20
Manganese	100.0	107.8	108	75-125	1	20
Nickel	100.0	117.9	116	75-125	2	20
Potassium	10,000	11,720	103	75-125	0	20
Sodium	10,000	18,490	114	75-125	1	20
Vanadium	100.0	108.1	104	75-125	1	20
Zinc	100.0	116.3	116	75-125	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3A	Batch#:	122986
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Type: MS Lab ID: QC378713

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	9,839	98	75-125
Antimony	<0.09301	100.0	100.8	101	75-125
Arsenic	0.6427	100.0	102.2	102	75-125
Cadmium	<0.05768	100.0	103.3	103	75-125
Calcium	45,970	10,000	56,000	100 NM	75-125
Chromium	6.696	100.0	110.4	104	75-125
Copper	0.8371	100.0	104.8	104	75-125
Iron	<19.37	10,000	11,880	119	75-125
Lead	<0.1276	100.0	106.2	106	75-125
Magnesium	50,530	10,000	60,210	97 NM	75-125
Manganese	14.13	100.0	120.2	106	75-125
Nickel	10.55	100.0	118.3	108	75-125
Potassium	1,296	10,000	11,460	102	75-125
Sodium	24,020	10,000	32,030	80	75-125
Vanadium	7.225	100.0	109.3	102	75-125
Zinc	6.177	100.0	107.9	102	75-125

Type: MSD Lab ID: QC378714

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,825	98	75-125	0	20
Antimony	100.0	99.75	100	75-125	1	20
Arsenic	100.0	103.5	103	75-125	1	20
Cadmium	100.0	103.6	104	75-125	0	20
Calcium	10,000	54,510	85 NM	75-125	3	20
Chromium	100.0	112.0	105	75-125	1	20
Copper	100.0	104.0	103	75-125	1	20
Iron	10,000	12,090	121	75-125	2	20
Lead	100.0	105.6	106	75-125	1	20
Magnesium	10,000	58,990	85 NM	75-125	2	20
Manganese	100.0	120.9	107	75-125	1	20
Nickel	100.0	119.3	109	75-125	1	20
Potassium	10,000	11,390	101	75-125	1	20
Sodium	10,000	31,500	75	75-125	2	20
Vanadium	100.0	110.3	103	75-125	1	20
Zinc	100.0	105.9	100	75-125	2	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MS Lab ID: QC378703

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	66.69	10,000	9,970	99	75-125
Antimony	0.4574	100.0	105.1	105	75-125
Arsenic	3.457	100.0	108.2	105	75-125
Barium	31.65	100.0	136.1	104	75-125
Beryllium	0.4358	100.0	109.3	109	75-125
Cadmium	1.539	100.0	103.3	102	75-125
Calcium	110,200	10,000	117,100	69 NM	75-125
Chromium	1.786	100.0	106.0	104	75-125
Cobalt	0.6710	100.0	105.1	104	75-125
Copper	10.53	100.0	106.4	96	75-125
Iron	111.7	10,000	10,420	103	75-125
Lead	0.5740	100.0	100.8	100	75-125
Magnesium	227,000	10,000	217,100 >LR	-99 NM	75-125
Manganese	8.773	100.0	111.4	103	75-125
Nickel	10.41	100.0	115.0	105	75-125
Potassium	2,019	10,000	12,000	100	75-125
Selenium	0.5676	100.0	102.1	102	75-125
Silver	0.4637	100.0	113.8	113	75-125
Sodium	250,800	10,000	249,400 >LR	-14 NM	75-125
Thallium	0.5191	50.00	50.01	99	75-125
Vanadium	6.960	100.0	119.8	113	75-125
Zinc	25.36	100.0	126.7	101	75-125

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MSD Lab ID: QC378704

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,030	100	75-125	1	20
Antimony	100.0	105.4	105	75-125	0	20
Arsenic	100.0	107.1	104	75-125	1	20
Barium	100.0	137.5	106	75-125	1	20
Beryllium	100.0	110.3	110	75-125	1	20
Cadmium	100.0	105.1	104	75-125	2	20
Calcium	10,000	123,900	137 NM	75-125	6	20
Chromium	100.0	104.6	103	75-125	1	20
Cobalt	100.0	103.2	103	75-125	2	20
Copper	100.0	106.4	96	75-125	0	20
Iron	10,000	10,360	102	75-125	1	20
Lead	100.0	100.9	100	75-125	0	20
Magnesium	10,000	230,000 >LR	30 NM	75-125	NC	20
Manganese	100.0	111.0	102	75-125	0	20
Nickel	100.0	115.5	105	75-125	0	20
Potassium	10,000	12,140	101	75-125	1	20
Selenium	100.0	99.91	99	75-125	2	20
Silver	100.0	113.6	113	75-125	0	20
Sodium	10,000	257,900 >LR	71 NM	75-125	NC	20
Thallium	50.00	50.56	100	75-125	1	20
Vanadium	100.0	120.0	113	75-125	0	20
Zinc	100.0	122.8	97	75-125	3	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MS Lab ID: QC378711

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	9.787	10,000	9,861	99	75-125
Antimony	0.1388	100.0	102.3	102	75-125
Arsenic	1.782	100.0	102.2	100	75-125
Barium	76.71	100.0	180.1	103	75-125
Beryllium	<0.1733	100.0	108.9	109	75-125
Cadmium	<0.05768	100.0	104.4	104	75-125
Calcium	44,580	10,000	54,400	98 NM	75-125
Chromium	0.7995	100.0	102.3	102	75-125
Cobalt	0.1873	100.0	103.6	103	75-125
Copper	<0.2776	100.0	103.2	103	75-125
Iron	<19.37	10,000	10,280	103	75-125
Lead	0.3637	100.0	101.7	101	75-125
Magnesium	48,720	10,000	58,180	95 NM	75-125
Manganese	510.3	100.0	611.3	101 NM	75-125
Nickel	1.581	100.0	105.7	104	75-125
Potassium	1,205	10,000	11,230	100	75-125
Selenium	<0.2730	100.0	102.7	103	75-125
Silver	<0.07903	100.0	113.8	114	75-125
Sodium	37,790	10,000	47,650	99	75-125
Thallium	<0.2993	50.00	37.49	75	75-125
Vanadium	<0.2578	100.0	99.29	99	75-125
Zinc	17.10	100.0	116.1	99	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MSD Lab ID: QC378712

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,921	99	75-125	1	20
Antimony	100.0	101.2	101	75-125	1	20
Arsenic	100.0	103.9	102	75-125	2	20
Barium	100.0	176.5	100	75-125	2	20
Beryllium	100.0	108.6	109	75-125	0	20
Cadmium	100.0	102.7	103	75-125	2	20
Calcium	10,000	53,100	85 NM	75-125	2	20
Chromium	100.0	103.3	103	75-125	1	20
Cobalt	100.0	104.6	104	75-125	1	20
Copper	100.0	106.9	107	75-125	4	20
Iron	10,000	10,260	103	75-125	0	20
Lead	100.0	102.5	102	75-125	1	20
Magnesium	10,000	56,340	76 NM	75-125	3	20
Manganese	100.0	597.8	88 NM	75-125	2	20
Nickel	100.0	107.0	105	75-125	1	20
Potassium	10,000	11,180	100	75-125	0	20
Selenium	100.0	102.4	102	75-125	0	20
Silver	100.0	113.0	113	75-125	1	20
Sodium	10,000	46,600	88	75-125	2	20
Thallium	50.00	37.86	76	75-125	1	20
Vanadium	100.0	100.2	100	75-125	1	20
Zinc	100.0	122.0	105	75-125	5	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	122986
MSS Lab ID:	193108-001	Sampled:	03/01/07
Lab ID:	QC378698	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Aluminum	ND	100.0	ND	500.0	NC	10
Antimony	ND	1.000	ND	5.000	NC	10
Arsenic	ND	5.000	ND	5.000	NC	10
Cadmium	ND	1.000	ND	5.000	NC	10
Calcium	8,029	500.0	9,268	500.0	15 *	10
Chromium	ND	10.00	ND	10.00	NC	10
Copper	ND	1.000	ND	5.000	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Lead	ND	3.000	ND	5.000	NC	10
Magnesium	6,828	500.0	6,684	500.0	2	10
Manganese	ND	10.00	ND	10.00	NC	10
Nickel	ND	20.00	2.345 J	20.00	NC	10
Potassium	1,417	500.0	1,359	500.0	NC	10
Sodium	7,079	500.0	7,907	500.0	12 *	10
Vanadium	ND	10.00	3.008 J	10.00	NC	10
Zinc	ND	20.00	46.57 J	50.00	NC	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Units:	ug/L
Type:	Serial Dilution	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378705	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/15/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Aluminum	ND	100.0	150.4 J	500.0	NC	10	50.00
Antimony	ND	1.000	1.356 J	5.000	NC	10	50.00
Arsenic	ND	5.000	9.528	5.000	NC	10	50.00
Barium	31.65	10.00	31.58	10.00	0	10	50.00
Beryllium	ND	2.000	1.065 J	5.000	NC	10	50.00
Cadmium	1.539	1.000	2.155 J	5.000	NC	10	50.00
Calcium	110,200	500.0	118,500	500.0	8	10	50.00
Chromium	ND	10.00	2.790 J	10.00	NC	10	50.00
Cobalt	ND	10.00	0.5626 J	10.00	NC	10	50.00
Copper	10.53	1.000	ND	5.000	NC	10	50.00
Iron	111.7	100.0	ND	500.0	NC	10	50.00
Lead	ND	3.000	2.724 J	5.000	NC	10	50.00
Magnesium	227,000	500.0	222,300	2,500	2	10	250.0
Manganese	ND	10.00	10.36	10.00	18 *	10	50.00
Nickel	ND	20.00	14.50 J	20.00	NC	10	50.00
Potassium	2,019	500.0	2,468	500.0	NC	10	50.00
Selenium	ND	5.000	ND	5.000	NC	10	50.00
Silver	ND	1.000	1.061 J	5.000	NC	10	50.00
Sodium	250,800	500.0	251,200	2,500	0	10	250.0
Thallium	ND	1.000	1.656 J	2.500	NC	10	50.00
Vanadium	ND	10.00	40.56	10.00	NC	10	50.00
Zinc	25.36	20.00	39.48	20.00	NC	10	50.00

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Units:	ug/L
Field ID:	DAEGW104	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122751
MSS Lab ID:	193108-023	Sampled:	03/02/07
Lab ID:	QC377805	Received:	03/02/07
Matrix:	Water	Analyzed:	03/06/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
5.017	5.000	6.577 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Units:	ug/L
Field ID:	1349MW01	Diln Fac:	250.0
Type:	Serial Dilution	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378705	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/15/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	5.000	5.672 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

190.0

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Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	1349MW01	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123057
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378999	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	DAEGW104	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123058
MSS Lab ID:	193108-023	Sampled:	03/02/07
Lab ID:	QC379006	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6010B

Type : PDS
Inst : MET09
Seqnum: 97094389039
File : 030607ar
IDF : 1.0
Lab ID: QC377806
Matrix: Water
Batch : 122751
Time : 06-MAR-2007 15:57
Cal : 97094389001
MSS : 193108-023
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4884 (100X), S4885 (100X)

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	97094389035	21570	R	2000	22780	R	61	75-125	: u
Antimony	97094389035	1.106	A	500.0	485.6	A	97	75-125	u
Arsenic	97094389040	9.898	A	100.0	114.9	A	105	75-125	u
Barium	97094389035	293.8	A	2000	2304	A	101	75-125	u
Beryllium	97094389035	0.7734	A	50.00	53.38	A	105	75-125	u
Cadmium	97094389035	ND	A	50.00	49.53	A	99	75-125	u
Calcium	97094389035	48080	R	20000	67890	R	99	75-125	u
Chromium	97094389035	100.0	A	200.0	297.2	A	99	75-125	u
Cobalt	97094389035	22.17	A	500.0	484.6	A	92	75-125	u
Copper	97094389035	35.98	A	250.0	283.7	A	99	75-125	u
Iron	97094389035	36540	R	1000	36600	R	6	75-125	: u
Lead	97094389035	9.155	A	100.0	105.0	A	96	75-125	u
Magnesium	97094389035	61400	R	20000	79580	R	91	75-125	u
Manganese	97094389035	4916	A	50.00	4870	A	-91	75-125	: u
Molybdenum	97094389035	5.017	A	400.0	419.0	A	103	75-125	u
Nickel	97094389035	121.5	A	500.0	600.5	A	96	75-125	u
Potassium	97094389035	4102	R	10000	13960	R	99	75-125	u
Selenium	97094389035	ND	A	100.0	102.9	A	103	75-125	u
Silver	97094389035	ND	A	50.00	48.60	A	97	75-125	u
Sodium	97094389035	42300	R	20000	60270	R	90	75-125	u
Thallium	97094389035	2.073	A	100.0	108.7	A	107	75-125	u
Vanadium	97094389035	63.35	A	500.0	564.3	A	100	75-125	u
Zinc	97094389035	105.8	A	500.0	622.7	A	103	75-125	u
Boron	97094389035	54.54	A	1000	1121	A	107	75-125	u
Tin	97094389035	ND	A	1000	979.6	A	98	75-125	u
Titanium	97094389035	493.0	A	1000	1537	A	104	75-125	u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	3574688	3360570	-5.99

:=recovery not meaningful u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67103428094
File : c12t0094
IDF : 10.0
Lab ID: 193108-001
Matrix: Filtrate
Batch : 122986
Time : 13-MAR-2007 04:11
Cal : 67103428001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67103428098
File : c12t0098
IDF : 10.0
Lab ID: QC378699
Matrix: Filtrate
Batch : 122986
Time : 13-MAR-2007 04:32
Cal : 67103428001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	16.76	A	10000	9301	A	93	75-125	u
Arsenic	0.2115	E	100.0	97.56	E	97	75-125	u
Barium	0.7227	A	100.0	97.01	A	96	75-125	u
Beryllium	0.09331	A	100.0	111.1	A	111	75-125	u
Cadmium	0.08367	A	100.0	97.59	A	98	75-125	u
Calcium	852.0	A	10000	10560	A	97	75-125	u
Chromium	0.2384	E	100.0	100.2	E	100	75-125	u
Copper	0.2823	E	100.0	97.86	E	98	75-125	u
Lead	0.1000	A	100.0	100.1	A	100	75-125	u
Magnesium	677.2	A	10000	9936	A	93	75-125	u
Manganese	0.8125	E	100.0	100.9	E	100	75-125	u
Nickel	0.3672	E	100.0	103.4	E	103	75-125	u
Potassium	156.1	A	10000	9824	A	97	75-125	u
Silver	0.09812	A	100.0	95.65	A	96	75-125	u
Sodium	761.8	E	10000	10280	E	95	75-125	u
Thallium	0.08550	A	50.00	48.36	A	97	75-125	u
Vanadium	0.5106	E	100.0	99.81	E	99	75-125	u
Zinc	1.007	E	100.0	97.39	E	96	75-125	u

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	672761	443509	-34.08
Scandium	A	1282606	1026001	-20.01
Scandium	E	35324	27786	-21.34
Germanium	E	19198	15510	-19.21
Indium	A	1826336	1467429	-19.65
Bismuth	A	1431311	1138292	-20.47
Terbium	A	2265507	1926073	-14.98

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280107
File : c14t0107
IDF : 10.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:03
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280111
File : c14t0111
IDF : 10.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:24
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	6.669	A	10000	9524	A	95	75-125	u
Arsenic	0.3457	E	100.0	98.16	E	98	75-125	u
Barium	3.165	A	100.0	102.7	A	100	75-125	u
Beryllium	0.04358	A	100.0	105.7	A	106	75-125	u
Cadmium	0.1539	A	100.0	99.24	A	99	75-125	u
Calcium	11020	A	10000	20940 >LR	A	99	75-125	>LR **b***
Chromium	0.1786	E	100.0	97.97	E	98	75-125	u
Cobalt	0.06710	E	100.0	97.71	E	98	75-125	u
Copper	1.053	E	100.0	98.06	E	97	75-125	u
Iron	11.17	H	10000	9954	H	99	75-125	u
Lead	0.05740	A	100.0	97.06	A	97	75-125	u
Manganese	0.8773	E	100.0	98.74	E	98	75-125	u
Nickel	1.041	E	100.0	99.57	E	99	75-125	u
Potassium	201.9	A	10000	9998	A	98	75-125	>ib **b***
Selenium	0.05676	H	100.0	98.83	H	99	75-125	u
Silver	0.04637	A	100.0	98.81	A	99	75-125	u
Thallium	0.05191	A	50.00	49.63	A	99	75-125	u
Vanadium	0.6960	E	100.0	99.39	E	99	75-125	u
Zinc	2.536	E	100.0	97.48	E	95	75-125	u

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1018511	-16.15
Scandium	A	1291021	1250369	-3.15
Scandium	E	94503	90174	-4.58
Scandium	H	842013	829761	-1.46
Germanium	H	169845	167226	-1.54
Germanium	E	39701	37577	-5.35
Indium	A	1596397	1456898	-8.74
Bismuth	A	1672268	1460669	-12.65
Terbium	A	2400096	2274536	-5.23

>=closing >LR=overrange b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280107
File : c14t0107
IDF : 10.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:03
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280143
File : c14t0143
IDF : 10.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 08:26
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	6.669	A	10000	9396	A	94	75-125	
Antimony	0.04574	A	100.0	98.74	A	99	75-125	u
Arsenic	0.3457	E	100.0	98.81	E	98	75-125	
Barium	3.165	A	100.0	101.1	A	98	75-125	
Beryllium	0.04358	A	100.0	104.1	A	104	75-125	
Cadmium	0.1539	A	100.0	97.78	A	98	75-125	
Calcium	11020.	A	10000	20520 >LR	A	95	75-125	>LR **b***
Chromium	0.1786	E	100.0	98.52	E	98	75-125	
Cobalt	0.06710	E	100.0	98.10	E	98	75-125	
Copper	1.053	E	100.0	97.58	E	97	75-125	
Iron	11.17	H	10000	9784	H	98	75-125	
Lead	0.05740	A	100.0	95.55	A	95	75-125	
Manganese	0.8773	E	100.0	98.52	E	98	75-125	
Molybdenum	0.08127	A	100.0	94.81	A	95	75-125	u
Nickel	1.041	E	100.0	99.54	E	98	75-125	
Potassium	201.9	A	10000	9776	A	96	75-125	u
Selenium	0.05676	H	100.0	98.07	H	98	75-125	
Silver	0.04637	A	100.0	96.49	A	96	75-125	
Thallium	0.05191	A	50.00	48.34	A	97	75-125	
Vanadium	0.6960	E	100.0	99.32	E	99	75-125	
Zinc	2.536	E	100.0	97.87	E	95	75-125	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1019261	-16.09
Scandium	A	1291021	1238339	-4.08
Scandium	E	94503	87417	-7.50
Scandium	H	842013	801153	-4.85
Germanium	H	169845	160568	-5.46
Germanium	E	39701	36710	-7.53
Indium	A	1596397	1450144	-9.16
Bismuth	A	1672268	1461319	-12.61
Yttrium	A	1593478	1544448	-3.08
Terbium	A	2400096	2266377	-5.57

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280108
File : c14t0108
IDF : 50.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:08
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280146
File : c14t0146
IDF : 50.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 08:43
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	4.976	A	10000	9444	A	94	75-125	
Antimony	0.02724	A	100.0	95.18	A	95	75-125	
Arsenic	0.1427	E	100.0	99.28	E	99	75-125	
Barium	0.6462	A	100.0	100.0	A	99	75-125	
Beryllium	0.02156	A	100.0	104.0	A	104	75-125	
Cadmium	0.04274	A	100.0	97.82	A	98	75-125	
Calcium	23.76	A	10000	11810	A	94	75-125	u
Chromium	ND	E	100.0	98.74	E	99	75-125	
Cobalt	ND	E	100.0	98.74	E	99	75-125	
Copper	ND	E	100.0	98.60	E	99	75-125	
Iron	ND	H	10000	9744	H	97	75-125	
Lead	0.05214	A	100.0	96.70	A	97	75-125	
Magnesium	4540	A	10000	13620	A	91	75-125	u
Manganese	0.1931	E	100.0	98.08	E	98	75-125	
Molybdenum	0.05898	A	100.0	95.02	A	95	75-125	u
Nickel	0.2568	E	100.0	100.2	E	100	75-125	
Selenium	ND	H	100.0	97.64	H	98	75-125	
Silver	0.02478	A	100.0	95.36	A	95	75-125	
Sodium	5016	E	10000	14400	E	94	75-125	u
Thallium	0.03146	A	50.00	48.18	A	96	75-125	
Vanadium	0.7640	E	100.0	98.84	E	98	75-125	
Zinc	0.8256	E	100.0	97.62	E	97	75-125	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1052228	-13.38
Scandium	A	1291021	1268793	-1.72
Scandium	E	94503	89605	-5.18
Scandium	H	842013	821664	-2.42
Germanium	H	169845	166086	-2.21
Germanium	E	39701	37842	-4.68
Indium	A	1596397	1501178	-5.96
Bismuth	A	1672268	1511695	-9.60
Yttrium	A	1593478	1563999	-1.85
Terbium	A	2400096	2302057	-4.08

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6010B

Inst : MET09
Calnum : 97094389001
Units : ug/L

Date : 06-MAR-2007 13:09
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	030607ar	97094389002	CRIM08	06-MAR-2007 13:13	S5393
L2	030607ar	97094389003	CS100	06-MAR-2007 13:17	S5428
L3	030607ar	97094389004	CS1K	06-MAR-2007 13:20	S5427
L4	030607ar	97094389005	CS10K	06-MAR-2007 13:22	S5323
L5	030607ar	97094389006	CS100K	06-MAR-2007 13:26	S5561

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	24.825	20.755	21.070	20.760		LOR0	0.00000	0.04816		21.852	1.000	0.995	
Arsenic	A	10.817	10.317	10.381	10.288		LOR0	0.00000	0.09719		10.451	1.000	0.995	
Barium	A	105.30	97.881	99.782	95.864		LOR0	0.00000	0.01043		99.707	1.000	0.995	
Beryllium	A	3769.6	3886.2	3946.4			LOR0	0.00000	2.53E-4		3867.4	1.000	0.995	
Boron	A	186.50		187.42	188.92		LOR0	0.00000	0.00529		187.61	1.000	0.995	
Cadmium	A	179.29	184.20	181.93	174.20		LOR0	0.00000	0.00574		179.91	1.000	0.995	
Chromium	A	185.86	178.94	173.87	168.30		LOR0	0.00000	0.00594		176.74	1.000	0.995	
Cobalt	A	57.230	55.296	56.789	55.901		LOR0	0.00000	0.01789		56.304	1.000	0.995	
Copper	A	183.82	185.91	188.17	185.42		LOR0	0.00000	0.00539		185.83	1.000	0.995	
Lead	A	63.907	54.062	54.941	52.571		LOR0	0.00000	0.01901		56.370	1.000	0.995	
Manganese	A	513.70	517.54	507.70	474.06		LOR0	0.00000	0.00211		503.25	1.000	0.995	
Molybdenum	A	41.109	44.745	43.896	42.607		LOR0	0.00000	0.02346		43.089	1.000	0.995	
Nickel	A	92.067	92.785	93.265	89.851		LOR0	0.00000	0.01113		91.992	1.000	0.995	
Selenium	A	14.157	13.429	13.924	13.961		LOR0	0.00000	0.07163		13.868	1.000	0.995	
Silver	A	462.17	491.15	490.21	478.24		LOR0	0.00000	0.00208		480.44	1.000	0.995	
Thallium	A	7.1235	9.0019	8.8275	8.4082		LOR0	0.00000	0.11887		8.3403	1.000	0.995	
Tin	A	20.181	19.669	20.469	19.921		LOR0	0.00000	0.05018		20.060	1.000	0.995	
Titanium	A	716.69	725.67	713.15	662.45		LOR0	0.00000	0.00151		704.49	1.000	0.995	
Vanadium	A	176.49	192.50	190.40	189.00		LOR0	0.00000	0.00529		187.09	1.000	0.995	
Zinc	A	88.790	83.202	83.561	81.528		LOR0	0.00000	0.01226		84.270	1.000	0.995	
Aluminum	R	0.9689		0.9572	0.9119	0.9032	LOR0	0.00000	1.10702		0.9353	1.000	0.995	
Calcium	R	11.306		10.127	9.3847	8.8865	LOR0	0.00000	0.11247		9.9260	1.000	0.995	
Iron	R	4.9714		5.0548	4.8488	4.6018	LOR0	0.00000	0.21719		4.8692	1.000	0.995	
Magnesium	R	1.3341		1.4055	1.3342	1.2608	LOR0	0.00000	0.79269		1.3337	1.000	0.995	
Potassium	R	3.5360		3.0984	3.0706	2.9978	LOR0	0.00000	0.33349		3.1757	1.000	0.995	
Sodium	R	288.47		317.15	298.46	282.04	LOR0	0.00000	0.00354		296.53	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Antimony	A	5.0000	100.00	1000.0	10000.0		ug/L
Arsenic	A	5.0000	100.00	1000.0	10000.0		ug/L
Barium	A	5.0000	100.00	1000.0	10000.0		ug/L
Beryllium	A	2.0000	100.00	1000.0			ug/L
Boron	A	100.00		1000.0	10000.0		ug/L
Cadmium	A	5.0000	100.00	1000.0	10000.0		ug/L
Chromium	A	5.0000	100.00	1000.0	10000.0		ug/L
Cobalt	A	5.0000	100.00	1000.0	10000.0		ug/L
Copper	A	5.0000	100.00	1000.0	10000.0		ug/L
Lead	A	3.0000	100.00	1000.0	10000.0		ug/L
Manganese	A	5.0000	100.00	1000.0	10000.0		ug/L
Molybdenum	A	5.0000	100.00	1000.0	10000.0		ug/L
Nickel	A	5.0000	100.00	1000.0	10000.0		ug/L
Selenium	A	5.0000	100.00	1000.0	10000.0		ug/L
Silver	A	5.0000	100.00	1000.0	2000.0		ug/L
Thallium	A	5.0000	100.00	1000.0	10000.0		ug/L
Tin	A	40.000	100.00	1000.0	10000.0		ug/L
Titanium	A	10.000	100.00	1000.0	10000.0		ug/L
Vanadium	A	5.0000	100.00	1000.0	10000.0		ug/L
Zinc	A	20.000	100.00	1000.0	10000.0		ug/L
Aluminum	R	100.00		1000.0	10000.0	100000	ug/L
Calcium	R	200.00		1000.0	10000.0	100000	ug/L
Iron	R	100.00		1000.0	10000.0	100000	ug/L
Magnesium	R	200.00		1000.0	10000.0	100000	ug/L
Potassium	R	500.00		1000.0	10000.0	100000	ug/L
Sodium	R	500.00		1000.0	10000.0	100000	ug/L

579

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

97094389001

Sequence No.: 1
Sample ID: ICALBLK,
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/6/2007 1:09:36 PM
Data Type: Reprocessed on 3/6/2007 1:52:51 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-1274.7	66.90	5.25%	[0.00]	ug/L
Al 308.215 R	45.6	1.19	2.60%	[0.00]	ug/L
As 188.979	-24.5	6.84	27.93%	[0.00]	ug/L
B 249.677	492.2	26.40	5.36%	[0.00]	ug/L
Ba 233.527	-40.4	4.54	11.23%	[0.00]	ug/L
Be 313.107	-1894.8	115.77	6.11%	[0.00]	ug/L
Ca 315.887 R	333.0	14.01	4.21%	[0.00]	ug/L
Cd 214.440	-116.2	14.56	12.53%	[0.00]	ug/L
Co 228.616	-46.5	5.74	12.33%	[0.00]	ug/L
Cr 267.716	-170.7	9.53	5.59%	[0.00]	ug/L
Cu 324.752	3245.4	45.79	1.41%	[0.00]	ug/L
Fe 238.204 R	-263.8	3.62	1.37%	[0.00]	ug/L
K 766.490 R	449.9	147.62	32.81%	[0.00]	ug/L
Mg 279.077 R	-365.2	2.40	0.66%	[0.00]	ug/L
Mn 257.610	-328.3	13.41	4.09%	[0.00]	ug/L
Mo 202.031	24.5	1.67	6.83%	[0.00]	ug/L
Na 589.592 R	22925.4	1558.71	6.80%	[0.00]	ug/L
Ni 231.604	705.6	12.87	1.82%	[0.00]	ug/L
Pb 220.353	-191.0	20.56	10.76%	[0.00]	ug/L
Sb 206.836	-126.7	3.06	2.42%	[0.00]	ug/L
Se 196.026	5.0	12.37	249.76%	[0.00]	ug/L
Ti 334.940 R	227.2	41.30	18.18%	[0.00]	ug/L
Tl 190.801	-53.2	25.21	47.41%	[0.00]	ug/L
V 292.402	-1829.0	73.99	4.05%	[0.00]	ug/L
Zn 206.200	-15.6	8.20	52.72%	[0.00]	ug/L
Sn 189.927	52.8	7.74	14.67%	[0.00]	ug/L

Sequence No.: 2
Sample ID: ICAL,CRIM08
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/6/2007 1:13:33 PM
Data Type: Reprocessed on 3/6/2007 1:52:55 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CRIM08

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CRIM08

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3574688.2	24011.08	0.67%	100.0	%
Y	341848.8	9173.97	2.68%	100.0	%
Ag 328.068†	2310.9	277.37	12.00%	[5.0]	ug/L
Al 308.215 R†	96.9	6.69	6.91%	[100]	ug/L
As 188.979†	54.1	12.33	22.80%	[5.0]	ug/L
B 249.677†	18649.7	700.83	3.76%	[100]	ug/L
Ba 233.527†	526.5	7.55	1.43%	[5.0]	ug/L
Be 313.107†	7539.2	153.88	2.04%	[2.0]	ug/L
Ca 315.887 R†	2261.2	62.80	2.78%	[200]	ug/L
Cd 214.440†	896.5	3.94	0.44%	[5.0]	ug/L
Co 228.616†	286.1	8.57	3.00%	[5.0]	ug/L
Cr 267.716†	929.3	6.25	0.67%	[5.0]	ug/L
Cu 324.752†	919.1	63.54	6.91%	[5.0]	ug/L
Fe 238.204 R†	497.1	7.98	1.60%	[100]	ug/L
K 766.490 R†	1768.0	345.08	19.52%	[500]	ug/L
Mg 279.077 R†	266.8	7.80	2.92%	[200]	ug/L
Mn 257.610†	2568.5	10.13	0.39%	[5.0]	ug/L
Mo 202.031†	205.5	2.16	1.05%	[5.0]	ug/L
Na 589.592 R†	144234.2	3747.69	2.60%	[500]	ug/L
Ni 231.604†	460.3	7.16	1.56%	[5.0]	ug/L
Pb 220.353†	191.7	6.29	3.28%	[3.0]	ug/L
Sb 206.836†	124.1	30.59	24.64%	[5.0]	ug/L
Se 196.026†	70.8	44.20	62.44%	[5.0]	ug/L
Ti 334.940 R†	7166.9	263.66	3.68%	[10]	ug/L
Tl 190.801†	35.6	26.45	74.25%	[5.0]	ug/L
V 292.402†	882.4	91.61	10.38%	[5.0]	ug/L
Zn 206.200†	1775.8	17.28	0.97%	[20]	ug/L
Sn 189.927†	807.2	7.48	0.93%	[40]	ug/L

Sequence No.: 3
Sample ID: ICAL,CS100
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/6/2007 1:17:34 PM
Data Type: Reprocessed on 3/6/2007 1:52:58 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3593017.5	77208.10	2.15%	100.5	%
Y	341573.9	3700.59	1.08%	99.92	%
Ag 328.068†	49115.0	1187.26	2.42%	[100]	ug/L
As 188.979†	1031.7	31.20	3.02%	[100]	ug/L
Ba 233.527†	9788.1	186.70	1.91%	[100]	ug/L
Be 313.107†	388622.3	835.08	0.21%	[100]	ug/L
Cd 214.440†	18420.3	841.83	4.57%	[100]	ug/L
Co 228.616†	5529.6	103.35	1.87%	[100]	ug/L
Cr 267.716†	17893.9	495.32	2.77%	[100]	ug/L
Cu 324.752†	18590.6	508.83	2.74%	[100]	ug/L
Mn 257.610†	51754.1	1383.75	2.67%	[100]	ug/L
Mo 202.031†	4474.5	90.28	2.02%	[100]	ug/L
Ni 231.604†	9278.5	351.56	3.79%	[100]	ug/L
Pb 220.353†	5406.2	96.52	1.79%	[100]	ug/L
Sb 206.836†	2075.5	75.12	3.62%	[100]	ug/L
Se 196.026†	1342.9	32.91	2.45%	[100]	ug/L
Ti 334.940 R†	72566.7	2082.97	2.87%	[100]	ug/L
Tl 190.801†	900.2	33.74	3.75%	[100]	ug/L
V 292.402†	19250.1	462.08	2.40%	[100]	ug/L
Zn 206.200†	8320.2	152.38	1.83%	[100]	ug/L
Sn 189.927†	1966.9	42.50	2.16%	[100]	ug/L

Sequence No.: 4
Sample ID: ICAL,CS1K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/6/2007 1:20:37 PM
Data Type: Reprocessed on 3/6/2007 1:53:00 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3624324.3	11409.15	0.31%	101.4	%
Y	338508.0	7898.39	2.33%	99.02	%
Ag 328.068†	490210.3	1030.72	0.21%	[1000]	ug/L
Al 308.215 R†	957.2	26.28	2.75%	[1000]	ug/L
As 188.979†	10381.0	42.75	0.41%	[1000]	ug/L
B 249.677†	187419.1	387.46	0.21%	[1000]	ug/L
Ba 233.527†	99782.4	175.78	0.18%	[1000]	ug/L
Be 313.107†	3946393.9	10576.02	0.27%	[1000]	ug/L
Ca 315.887 R†	10126.9	308.70	3.05%	[1000]	ug/L
Cd 214.440†	181933.6	465.73	0.26%	[1000]	ug/L
Co 228.616†	56788.9	508.72	0.90%	[1000]	ug/L
Cr 267.716†	173874.2	485.72	0.28%	[1000]	ug/L
Cu 324.752†	188171.8	1096.95	0.58%	[1000]	ug/L
Fe 238.204 R†	5054.8	160.37	3.17%	[1000]	ug/L
K 766.490 R†	3098.4	173.09	5.59%	[1000]	ug/L
Mg 279.077 R†	1405.5	50.99	3.63%	[1000]	ug/L
Mn 257.610†	507702.3	1034.80	0.20%	[1000]	ug/L
Mo 202.031†	43895.9	624.43	1.42%	[1000]	ug/L
Na 589.592 R†	317154.3	8295.46	2.62%	[1000]	ug/L
Ni 231.604†	93265.4	238.84	0.26%	[1000]	ug/L
Pb 220.353†	54940.9	895.45	1.63%	[1000]	ug/L
Sb 206.836†	21070.4	191.85	0.91%	[1000]	ug/L
Se 196.026†	13923.7	256.30	1.84%	[1000]	ug/L
Ti 334.940 R†	713149.1	1997.69	0.28%	[1000]	ug/L
Tl 190.801†	8827.5	102.82	1.16%	[1000]	ug/L
V 292.402†	190395.3	357.30	0.19%	[1000]	ug/L
Zn 206.200†	83560.8	368.67	0.44%	[1000]	ug/L
Sn 189.927†	20468.6	262.96	1.28%	[1000]	ug/L

Sequence No.: 5
Sample ID: ICAL,CS10K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/6/2007 1:22:46 PM
Data Type: Reprocessed on 3/6/2007 1:53:03 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3479744.7	16363.86	0.47%	97.34	%
Y	323300.5	4790.00	1.48%	94.57	%
Ag 328.068†	956480.6	6457.53	0.68%	[2000]	ug/L
Al 308.215 R†	9118.9	88.47	0.97%	[10000]	ug/L
As 188.979†	102880.3	1521.05	1.48%	[10000]	ug/L
B 249.677†	1889210.4	11437.62	0.61%	[10000]	ug/L
Ba 233.527†	958641.9	6423.47	0.67%	[10000]	ug/L
Ca 315.887 R†	93847.1	448.11	0.48%	[10000]	ug/L
Cd 214.440†	1741976.3	19957.21	1.15%	[10000]	ug/L
Co 228.616†	559014.2	3961.38	0.71%	[10000]	ug/L
Cr 267.716†	1683012.9	10422.25	0.62%	[10000]	ug/L
Cu 324.752†	1854233.8	8509.27	0.46%	[10000]	ug/L
Fe 238.204 R†	48487.9	268.88	0.55%	[10000]	ug/L
K 766.490 R†	30705.6	102.49	0.33%	[10000]	ug/L
Mg 279.077 R†	13341.9	100.47	0.75%	[10000]	ug/L
Mn 257.610†	4740627.0	34547.69	0.73%	[10000]	ug/L
Mo 202.031†	426071.3	7873.52	1.85%	[10000]	ug/L
Na 589.592 R†	2984614.3	27638.74	0.93%	[10000]	ug/L
Ni 231.604†	898510.5	7653.51	0.85%	[10000]	ug/L
Pb 220.353†	525714.3	7980.84	1.52%	[10000]	ug/L
Sb 206.836†	207595.8	4013.73	1.93%	[10000]	ug/L
Se 196.026†	139610.6	2607.78	1.87%	[10000]	ug/L
Ti 334.940 R†	6624457.5	39508.29	0.60%	[10000]	ug/L
Tl 190.801†	84081.8	687.52	0.82%	[10000]	ug/L
V 292.402†	1889964.0	11015.75	0.58%	[10000]	ug/L
Zn 206.200†	815284.5	8086.51	0.99%	[10000]	ug/L
Sn 189.927†	199213.9	3851.43	1.93%	[10000]	ug/L

Sequence No.: 6
Sample ID: ICAL,CS100K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/6/2007 1:26:08 PM
Data Type: Reprocessed on 3/6/2007 1:53:04 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3172444.0	16228.63	0.51%	88.75	%
Y	315715.3	7816.50	2.48%	92.36	%
Al 308.215 Rt	90323.5	1184.51	1.31%	[100000]	ug/L
Ca 315.887 Rt	888651.7	9529.97	1.07%	[100000]	ug/L
Fe 238.204 Rt	460177.2	5054.54	1.10%	[100000]	ug/L
K 766.490 Rt	299781.4	4085.93	1.36%	[100000]	ug/L
Mg 279.077 Rt	126079.3	1598.02	1.27%	[100000]	ug/L
Na 589.592 Rt	28204237.6	1136279.77	4.03%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	480.7	0.00000	0.999950	
Al 308.215 R	4	Lin Thru 0	0.0	0.9033	0.00000	0.999999	
As 188.979	4	Lin Thru 0	0.0	10.29	0.00000	1.000000	
B 249.677	3	Lin Thru 0	0.0	188.9	0.00000	1.000000	
Ba 233.527	4	Lin Thru 0	0.0	95.90	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	3946	0.00000	0.999999	
Ca 315.887 R	4	Lin Thru 0	0.0	8.892	0.00000	0.999984	
Cd 214.440	4	Lin Thru 0	0.0	174.3	0.00000	0.999990	
Co 228.616	4	Lin Thru 0	0.0	55.91	0.00000	0.999999	
Cr 267.716	4	Lin Thru 0	0.0	168.4	0.00000	0.999994	
Cu 324.752	4	Lin Thru 0	0.0	185.5	0.00000	0.999999	
Fe 238.204 R	4	Lin Thru 0	0.0	4.604	0.00000	0.999985	
K 766.490 R	4	Lin Thru 0	0.0	2.999	0.00000	0.999997	
Mg 279.077 R	4	Lin Thru 0	0.0	1.262	0.00000	0.999983	
Mn 257.610	4	Lin Thru 0	0.0	474.4	0.00000	0.999975	
Mo 202.031	4	Lin Thru 0	0.0	42.62	0.00000	0.999995	
Na 589.592 R	4	Lin Thru 0	0.0	282.2	0.00000	0.999983	
Ni 231.604	4	Lin Thru 0	0.0	89.89	0.00000	0.999993	
Pb 220.353	4	Lin Thru 0	0.0	52.60	0.00000	0.999990	
Sb 206.836	4	Lin Thru 0	0.0	20.76	0.00000	0.999999	
Se 196.026	4	Lin Thru 0	0.0	13.96	0.00000	1.000000	
Ti 334.940 R	4	Lin Thru 0	0.0	663.0	0.00000	0.999971	
Tl 190.801	4	Lin Thru 0	0.0	8.412	0.00000	0.999988	
V 292.402	4	Lin Thru 0	0.0	189.0	0.00000	1.000000	
Zn 206.200	4	Lin Thru 0	0.0	81.55	0.00000	0.999997	
Sn 189.927	4	Lin Thru 0	0.0	19.93	0.00000	0.999996	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389007 File : 030607ar Time : 06-MAR-2007 13:29
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5324

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	21.852	21.924	5000	5280	ug/L	6	10	
Arsenic	A	10.451	11.128	5000	5408	ug/L	8	10	
Barium	A	99.707	99.673	5000	5197	ug/L	4	10	
Beryllium	A	3867.4	4000.5	500.0	506.9	ug/L	1	10	
Boron	A	187.61	195.35	5000	5171	ug/L	3	10	
Cadmium	A	179.91	181.24	5000	5200	ug/L	4	10	
Chromium	A	176.74	173.49	5000	5153	ug/L	3	10	
Cobalt	A	56.304	57.408	5000	5123	ug/L	2	10	
Copper	A	185.83	185.63	5000	5005	ug/L	0	10	
Lead	A	56.370	54.317	5000	5164	ug/L	3	10	
Manganese	A	503.25	486.32	5000	5126	ug/L	3	10	
Molybdenum	A	43.089	45.892	5000	5384	ug/L	8	10	
Nickel	A	91.992	91.531	5000	5092	ug/L	2	10	
Selenium	A	13.868	14.618	5000	5235	ug/L	5	10	
Silver	A	480.44	477.26	1000	992.9	ug/L	-1	10	
Thallium	A	8.3403	8.8757	5000	5275	ug/L	6	10	
Tin	A	20.060	20.437	5000	5128	ug/L	3	10	
Titanium	A	704.49	672.11	5000	5069	ug/L	1	10	
Vanadium	A	187.09	193.41	5000	5116	ug/L	2	10	
Zinc	A	84.270	84.031	5000	5152	ug/L	3	10	
Aluminum	R	0.9353	0.9088	20000	20120	ug/L	1	10	
Calcium	R	9.9260	9.2677	20000	20850	ug/L	4	10	
Iron	R	4.8692	4.8037	20000	20870	ug/L	4	10	
Magnesium	R	1.3337	1.3142	20000	20840	ug/L	4	10	
Potassium	R	3.1757	3.0492	20000	20340	ug/L	2	10	
Sodium	R	296.53	292.56	20000	20730	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3338173	-6.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389020 File : 030607ar Time : 06-MAR-2007 14:30
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.051	5000	5070	ug/L	1	10	
Arsenic	A	10.451	10.674	5000	5187	ug/L	4	10	
Barium	A	99.707	98.227	5000	5121	ug/L	2	10	
Beryllium	A	3867.4	3963.3	500.0	502.2	ug/L	0	10	
Boron	A	187.61	193.26	5000	5115	ug/L	2	10	
Cadmium	A	179.91	178.38	5000	5118	ug/L	2	10	
Chromium	A	176.74	171.33	5000	5088	ug/L	2	10	
Cobalt	A	56.304	55.499	5000	4952	ug/L	-1	10	
Copper	A	185.83	183.07	5000	4936	ug/L	-1	10	
Lead	A	56.370	52.619	5000	5002	ug/L	0	10	
Manganese	A	503.25	478.23	5000	5040	ug/L	1	10	
Molybdenum	A	43.089	44.374	5000	5206	ug/L	4	10	
Nickel	A	91.992	90.510	5000	5035	ug/L	1	10	
Selenium	A	13.868	14.046	5000	5031	ug/L	1	10	
Silver	A	480.44	461.85	1000	960.9	ug/L	-4	10	
Thallium	A	8.3403	8.4920	5000	5047	ug/L	1	10	
Tin	A	20.060	19.696	5000	4942	ug/L	-1	10	
Titanium	A	704.49	662.84	5000	4999	ug/L	0	10	
Vanadium	A	187.09	190.87	5000	5049	ug/L	1	10	
Zinc	A	84.270	83.221	5000	5103	ug/L	2	10	
Aluminum	R	0.9353	0.8705	20000	19270	ug/L	-4	10	
Calcium	R	9.9260	8.9335	20000	20090	ug/L	0	10	
Iron	R	4.8692	4.6489	20000	20190	ug/L	1	10	
Magnesium	R	1.3337	1.2758	20000	20230	ug/L	1	10	
Potassium	R	3.1757	2.9350	20000	19580	ug/L	-2	10	
Sodium	R	296.53	276.10	20000	19570	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3434150	-3.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389029 File : 030607ar Time : 06-MAR-2007 15:03
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	20.940	5000	5043	ug/L	1	10	
Arsenic	A	10.451	10.545	5000	5125	ug/L	2	10	
Barium	A	99.707	97.435	5000	5080	ug/L	2	10	
Beryllium	A	3867.4	3930.2	500.0	498.0	ug/L	0	10	
Boron	A	187.61	190.62	5000	5045	ug/L	1	10	
Cadmium	A	179.91	176.38	5000	5060	ug/L	1	10	
Chromium	A	176.74	169.64	5000	5038	ug/L	1	10	
Cobalt	A	56.304	54.935	5000	4902	ug/L	-2	10	
Copper	A	185.83	182.44	5000	4919	ug/L	-2	10	
Lead	A	56.370	51.741	5000	4919	ug/L	-2	10	
Manganese	A	503.25	475.13	5000	5008	ug/L	0	10	
Molybdenum	A	43.089	44.136	5000	5178	ug/L	4	10	
Nickel	A	91.992	89.331	5000	4969	ug/L	-1	10	
Selenium	A	13.868	14.063	5000	5037	ug/L	1	10	
Silver	A	480.44	460.38	1000	957.8	ug/L	-4	10	
Thallium	A	8.3403	8.5603	5000	5088	ug/L	2	10	
Tin	A	20.060	19.480	5000	4888	ug/L	-2	10	
Titanium	A	704.49	660.97	5000	4985	ug/L	0	10	
Vanadium	A	187.09	189.47	5000	5012	ug/L	0	10	
Zinc	A	84.270	81.720	5000	5010	ug/L	0	10	
Aluminum	R	0.9353	0.9006	20000	19940	ug/L	0	10	
Calcium	R	9.9260	9.1503	20000	20580	ug/L	3	10	
Iron	R	4.8692	4.7772	20000	20750	ug/L	4	10	
Magnesium	R	1.3337	1.3030	20000	20660	ug/L	3	10	
Potassium	R	3.1757	3.0158	20000	20110	ug/L	1	10	
Sodium	R	296.53	291.92	20000	20690	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3350831	-6.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389043 File : 030607ar Time : 06-MAR-2007 16:11
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.324	5000	5135	ug/L	3	10	
Arsenic	A	10.451	10.804	5000	5250	ug/L	5	10	
Barium	A	99.707	98.791	5000	5151	ug/L	3	10	
Beryllium	A	3867.4	3973.5	500.0	503.5	ug/L	1	10	
Boron	A	187.61	193.71	5000	5127	ug/L	3	10	
Cadmium	A	179.91	178.58	5000	5123	ug/L	2	10	
Chromium	A	176.74	171.93	5000	5106	ug/L	2	10	
Cobalt	A	56.304	56.003	5000	4997	ug/L	0	10	
Copper	A	185.83	184.49	5000	4974	ug/L	-1	10	
Lead	A	56.370	53.110	5000	5049	ug/L	1	10	
Manganese	A	503.25	480.38	5000	5063	ug/L	1	10	
Molybdenum	A	43.089	45.040	5000	5284	ug/L	6	10	
Nickel	A	91.992	90.772	5000	5049	ug/L	1	10	
Selenium	A	13.868	14.380	5000	5150	ug/L	3	10	
Silver	A	480.44	464.29	1000	966.0	ug/L	-3	10	
Thallium	A	8.3403	8.9810	5000	5338	ug/L	7	10	
Tin	A	20.060	19.873	5000	4986	ug/L	0	10	
Titanium	A	704.49	665.92	5000	5022	ug/L	0	10	
Vanadium	A	187.09	191.70	5000	5071	ug/L	1	10	
Zinc	A	84.270	83.762	5000	5136	ug/L	3	10	
Aluminum	R	0.9353	0.8934	20000	19780	ug/L	-1	10	
Calcium	R	9.9260	9.1188	20000	20510	ug/L	3	10	
Iron	R	4.8692	4.7845	20000	20780	ug/L	4	10	
Magnesium	R	1.3337	1.3000	20000	20610	ug/L	3	10	
Potassium	R	3.1757	3.0173	20000	20120	ug/L	1	10	
Sodium	R	296.53	291.37	20000	20650	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3443157	-3.68

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389058 File : 030607ar Time : 06-MAR-2007 17:09
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	20.716	5000	4989	ug/L	0	10	
Arsenic	A	10.451	10.441	5000	5074	ug/L	1	10	
Barium	A	99.707	96.314	5000	5021	ug/L	0	10	
Beryllium	A	3867.4	3896.3	500.0	493.7	ug/L	-1	10	
Boron	A	187.61	192.27	5000	5089	ug/L	2	10	
Cadmium	A	179.91	179.41	5000	5147	ug/L	3	10	
Chromium	A	176.74	167.47	5000	4974	ug/L	-1	10	
Cobalt	A	56.304	54.066	5000	4824	ug/L	-4	10	
Copper	A	185.83	178.66	5000	4817	ug/L	-4	10	
Lead	A	56.370	51.370	5000	4884	ug/L	-2	10	
Manganese	A	503.25	478.19	5000	5040	ug/L	1	10	
Molybdenum	A	43.089	44.843	5000	5261	ug/L	5	10	
Nickel	A	91.992	88.576	5000	4927	ug/L	-1	10	
Selenium	A	13.868	13.869	5000	4967	ug/L	-1	10	
Silver	A	480.44	451.38	1000	939.1	ug/L	-6	10	
Thallium	A	8.3403	8.2901	5000	4927	ug/L	-1	10	
Tin	A	20.060	19.421	5000	4873	ug/L	-3	10	
Titanium	A	704.49	657.11	5000	4956	ug/L	-1	10	
Vanadium	A	187.09	186.77	5000	4941	ug/L	-1	10	
Zinc	A	84.270	81.427	5000	4993	ug/L	0	10	
Aluminum	R	0.9353	0.8899	20000	19700	ug/L	-1	10	
Calcium	R	9.9260	9.1840	20000	20660	ug/L	3	10	
Iron	R	4.8692	4.8853	20000	21220	ug/L	6	10	
Magnesium	R	1.3337	1.2901	20000	20450	ug/L	2	10	
Potassium	R	3.1757	3.1058	20000	20720	ug/L	4	10	
Sodium	R	296.53	305.46	20000	21650	ug/L	8	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3607468	0.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389068 File : 030607ar Time : 06-MAR-2007 17:44
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.553	5000	5190	ug/L	4	10	
Arsenic	A	10.451	10.922	5000	5308	ug/L	6	10	
Barium	A	99.707	98.835	5000	5153	ug/L	3	10	
Beryllium	A	3867.4	3975.4	500.0	503.8	ug/L	1	10	
Boron	A	187.61	195.39	5000	5172	ug/L	3	10	
Cadmium	A	179.91	186.06	5000	5338	ug/L	7	10	
Chromium	A	176.74	172.30	5000	5117	ug/L	2	10	
Cobalt	A	56.304	56.053	5000	5002	ug/L	0	10	
Copper	A	185.83	181.49	5000	4893	ug/L	-2	10	
Lead	A	56.370	53.538	5000	5090	ug/L	2	10	
Manganese	A	503.25	488.27	5000	5146	ug/L	3	10	
Molybdenum	A	43.089	44.908	5000	5268	ug/L	5	10	
Nickel	A	91.992	91.320	5000	5080	ug/L	2	10	
Selenium	A	13.868	14.406	5000	5159	ug/L	3	10	
Silver	A	480.44	464.70	1000	966.8	ug/L	-3	10	
Thallium	A	8.3403	8.5029	5000	5054	ug/L	1	10	
Tin	A	20.060	20.232	5000	5077	ug/L	2	10	
Titanium	A	704.49	663.54	5000	5004	ug/L	0	10	
Vanadium	A	187.09	191.75	5000	5072	ug/L	1	10	
Zinc	A	84.270	84.443	5000	5177	ug/L	4	10	
Aluminum	R	0.9353	0.8930	20000	19770	ug/L	-1	10	
Calcium	R	9.9260	9.1611	20000	20610	ug/L	3	10	
Iron	R	4.8692	4.8619	20000	21120	ug/L	6	10	
Magnesium	R	1.3337	1.2836	20000	20350	ug/L	2	10	
Potassium	R	3.1757	3.0753	20000	20510	ug/L	3	10	
Sodium	R	296.53	299.53	20000	21230	ug/L	6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3567383	-0.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389008 File : 030607ar Time : 06-MAR-2007 13:39
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2399]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[8.255]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.2963]	5.000	0.1091	ug/L	!ib
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[0.4339]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[1.747]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[74.34]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3638118	1.77

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389022 File : 030607ar Time : 06-MAR-2007 14:37
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.3018]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[10.51]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3095]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.3567]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.3140]	5.000	0.3034	ug/L	!ib
Copper	A	[0.8541]	5.000	0.8535	ug/L	!ib
Lead	A	[1.300]	3.000	0.6892	ug/L	!ib
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[3.327]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.832]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[44.68]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3578732	0.11

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389031 File : 030607ar Time : 06-MAR-2007 15:10
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.4289]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[9.762]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.4566]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.3937]	5.000	0.2448	ug/L	!ib
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	[1.036]	5.000	0.8535	ug/L	!ib
Lead	A	[1.432]	3.000	0.6892	ug/L	!ib
Manganese	A	[0.4850]	5.000	0.4388	ug/L	!ib
Molybdenum	A	[1.960]	5.000	0.4140	ug/L	!ib
Nickel	A	[0.3837]	5.000	0.3660	ug/L	!ib
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.252]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[54.80]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3591134	0.46

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389045 File : 030607ar Time : 06-MAR-2007 16:19
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2444]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[5.669]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3161]	5.000	0.1091	ug/L	!ib
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[1.880]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[3.917]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[44.81]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3576183	0.04

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389061 File : 030607ar Time : 06-MAR-2007 17:20
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.3103]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[22.82]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3429]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.4595]	5.000	0.2448	ug/L	!ib
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[0.6761]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.550]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[198.4]	500.0	39.71	ug/L	!ib
Sodium	R	1261	500.0	17.18	ug/L	ib ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3819252	6.84

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389071 File : 030607ar Time : 06-MAR-2007 17:54
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.4094]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[17.18]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.4261]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.4358]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.3154]	5.000	0.3034	ug/L	!ib
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	[0.4525]	5.000	0.4388	ug/L	!ib
Molybdenum	A	ND	5.000	0.4140	ug/L	
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[109.9]	500.0	39.71	ug/L	!ib
Sodium	R	555.8	500.0	17.18	ug/L	ib ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3870017	8.26

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389009 File : 030607ar Time : 06-MAR-2007 13:43
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5626

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[1.806]	5.000	ug/L	
Arsenic	A	[1.824]	5.000	ug/L	
Barium	A	[-1.027]	5.000	ug/L	
Beryllium	A	[-0.5392]	2.000	ug/L	
Boron	A	[30.76]	100.0	ug/L	
Cadmium	A	[0.5297]	5.000	ug/L	
Cobalt	A	[-0.01453]	5.000	ug/L	
Lead	A	[2.103]	3.000	ug/L	
Molybdenum	A	[0.08987]	5.000	ug/L	
Selenium	A	[-0.8484]	5.000	ug/L	
Silver	A	[1.896]	5.000	ug/L	
Thallium	A	[0.3636]	5.000	ug/L	
Tin	A	[-5.004]	40.00	ug/L	
Zinc	A	[13.82]	20.00	ug/L	
Potassium	R	[114.9]	500.0	ug/L	
Sodium	R	[-11.77]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19240	ug/L	96
Copper	A	20000	20410	ug/L	102
Manganese	A	20000	18800	ug/L	94
Nickel	A	20000	17590	ug/L	88
Titanium	A	20000	20110	ug/L	101
Vanadium	A	20000	20070	ug/L	100
Aluminum	R	500000	514500	ug/L	103
Calcium	R	500000	511200	ug/L	102
Iron	R	200000	198900	ug/L	99
Magnesium	R	500000	520500	ug/L	104

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	2978489	-16.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389010 File : 030607ar Time : 06-MAR-2007 13:45
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	515.9	ug/L	3	20	
Arsenic	A	500.0	527.9	ug/L	6	20	
Barium	A	500.0	516.3	ug/L	3	20	
Beryllium	A	500.0	513.2	ug/L	3	20	
Cadmium	A	1000	972.4	ug/L	-3	20	
Chromium	A	500.0	509.8	ug/L	2	20	
Cobalt	A	500.0	445.2	ug/L	-11	20	
Copper	A	500.0	538.8	ug/L	8	20	
Lead	A	1000	914.6	ug/L	-9	20	
Manganese	A	500.0	512.7	ug/L	3	20	
Molybdenum	A	500.0	528.2	ug/L	6	20	
Nickel	A	1000	890.3	ug/L	-11	20	
Selenium	A	500.0	498.1	ug/L	0	20	
Silver	A	1000	998.0	ug/L	0	20	
Thallium	A	500.0	456.3	ug/L	-9	20	
Titanium	A	20000	20240	ug/L	1		
Vanadium	A	500.0	528.7	ug/L	6	20	
Zinc	A	1000	950.0	ug/L	-5	20	
Aluminum	R	500000	481800	ug/L	-4		
Calcium	R	500000	467600	ug/L	-6		
Iron	R	200000	183600	ug/L	-8		
Magnesium	R	500000	472100	ug/L	-6		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	2940888	-17.73

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389027 File : 030607ar Time : 06-MAR-2007 14:57
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	501.3	ug/L	0	20	
Arsenic	A	500.0	545.6	ug/L	9	20	
Barium	A	500.0	522.7	ug/L	5	20	
Beryllium	A	500.0	519.3	ug/L	4	20	
Cadmium	A	1000	1007	ug/L	1	20	
Chromium	A	500.0	515.3	ug/L	3	20	
Cobalt	A	500.0	454.3	ug/L	-9	20	
Copper	A	500.0	532.9	ug/L	7	20	
Lead	A	1000	932.7	ug/L	-7	20	
Manganese	A	500.0	520.4	ug/L	4	20	
Molybdenum	A	500.0	533.1	ug/L	7	20	
Nickel	A	1000	928.7	ug/L	-7	20	
Selenium	A	500.0	530.1	ug/L	6	20	
Silver	A	1000	998.4	ug/L	0	20	
Thallium	A	500.0	482.3	ug/L	-4	20	
Titanium	A	20000	20370	ug/L	2		
Vanadium	A	500.0	531.1	ug/L	6	20	
Zinc	A	1000	993.2	ug/L	-1	20	
Aluminum	R	500000	461400	ug/L	-8		
Calcium	R	500000	466800	ug/L	-7		
Iron	R	200000	183600	ug/L	-8		
Magnesium	R	500000	476300	ug/L	-5		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3032258	-15.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389066 File : 030607ar Time : 06-MAR-2007 17:38
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	498.5	ug/L	0	20	
Arsenic	A	500.0	560.6	ug/L	12	20	
Barium	A	500.0	515.6	ug/L	3	20	
Beryllium	A	500.0	514.2	ug/L	3	20	
Cadmium	A	1000	1007	ug/L	1	20	
Chromium	A	500.0	506.4	ug/L	1	20	
Cobalt	A	500.0	445.2	ug/L	-11	20	
Copper	A	500.0	525.3	ug/L	5	20	
Lead	A	1000	923.8	ug/L	-8	20	
Manganese	A	500.0	518.0	ug/L	4	20	
Molybdenum	A	500.0	529.5	ug/L	6	20	
Nickel	A	1000	911.1	ug/L	-9	20	
Selenium	A	500.0	513.2	ug/L	3	20	
Silver	A	1000	997.4	ug/L	0	20	
Thallium	A	500.0	470.0	ug/L	-6	20	
Titanium	A	20000	20110	ug/L	1		
Vanadium	A	500.0	525.3	ug/L	5	20	
Zinc	A	1000	962.3	ug/L	-4	20	
Aluminum	R	500000	485000	ug/L	-3		
Calcium	R	500000	472100	ug/L	-6		
Iron	R	200000	188700	ug/L	-6		
Magnesium	R	500000	473300	ug/L	-5		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3128224	-12.49

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	030607ar	ICALBLK				06-MAR-2007 13:09	1.0	1.0					
002	030607ar	ICAL	CRIM08			06-MAR-2007 13:13	1.0	1.0				1	
003	030607ar	ICAL	CS100			06-MAR-2007 13:17	1.0	1.0				2	
004	030607ar	ICAL	CS1K			06-MAR-2007 13:20	1.0	1.0				3	
005	030607ar	ICAL	CS10K			06-MAR-2007 13:22	1.0	1.0				4	
006	030607ar	ICAL	CS100K			06-MAR-2007 13:26	1.0	1.0				5	
007	030607ar	ICV				06-MAR-2007 13:29	1.0	1.0			5000	6	
008	030607ar	ICB				06-MAR-2007 13:39	1.0	1.0			5000		
009	030607ar	ICSA				06-MAR-2007 13:43	1.0	1.0			5000	7	10:MG=520500
010	030607ar	ICSAB				06-MAR-2007 13:45	1.0	1.0			5000	8	5:AL=481801
011	030607ar	BLANK	QC377704	122747	Filtra	06-MAR-2007 13:58	1.0	1.0			5000		
012	030607ar	BS	QC377705	122747	Filtra	06-MAR-2007 14:02	1.0	1.0			5000		
013	030607ar	BSD	QC377706	122747	Filtra	06-MAR-2007 14:05	1.0	1.0			5000		
014	030607ar	MSS	193002-002	122747	Filtra	06-MAR-2007 14:09	1.0	1.0	1		5000		1:NA=132241
015	030607ar	MS	QC377707	122747	Filtra	06-MAR-2007 14:13	1.0	1.0			5000		1:NA=145608
016	030607ar	MSD	QC377708	122747	Filtra	06-MAR-2007 14:16	1.0	1.0			5000		1:NA=145973
017	030607ar	SER	QC377709	122747	Filtra	06-MAR-2007 14:19	5.0	1.0		1	5000		
018	030607ar	PDS	QC377710	122747	Filtra	06-MAR-2007 14:23	1.0	1.0			5000	9 10	1:NA=149804
019	030607ar	X	RINSE			06-MAR-2007 14:26	1.0						
020	030607ar	CCV				06-MAR-2007 14:30	1.0	1.0			5000	11	
021	030607ar	X	FLUSH			06-MAR-2007 14:33	1.0						
022	030607ar	CCB				06-MAR-2007 14:37	1.0	1.0			5000		
023	030607ar	SAMPLE	193002-003	122747	Filtra	06-MAR-2007 14:41	1.0	1.0			5000		1:NA=101735
024	030607ar	SAMPLE	193018-001	122747	Water	06-MAR-2007 14:45	1.0	1.0			5000		
025	030607ar	SAMPLE	193018-002	122747	Water	06-MAR-2007 14:49	1.0	1.0			5000		1:NA=551524
026	030607ar	SAMPLE	193018-006	122747	Water	06-MAR-2007 14:54	1.0	1.0			5000		1:NA=137035
027	030607ar	ICSAB				06-MAR-2007 14:57	1.0	1.0			5000	8	5:MG=476276
028	030607ar	X	RINSE			06-MAR-2007 14:59	1.0						
029	030607ar	CCV				06-MAR-2007 15:03	1.0	1.0			5000	11	
030	030607ar	X	FLUSH			06-MAR-2007 15:06	1.0						
031	030607ar	CCB				06-MAR-2007 15:10	1.0	1.0			5000		

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	030607ar	BLANK	QC377727	122751	Water	06-MAR-2007 15:35	1.0	1.0		5000		
033	030607ar	BS	QC377728	122751	Water	06-MAR-2007 15:39	1.0	1.0		5000		
034	030607ar	BSD	QC377729	122751	Water	06-MAR-2007 15:42	1.0	1.0		5000		
035	030607ar	MSS	193108-023	122751	Water	06-MAR-2007 15:45	1.0	1.0	1	5000		
036	030607ar	MS	QC377732	122751	Water	06-MAR-2007 15:48	1.0	1.0		5000		
037	030607ar	MSD	QC377733	122751	Water	06-MAR-2007 15:51	1.0	1.0		5000		
038	030607ar	SER	QC377805	122751	Water	06-MAR-2007 15:54	5.0	1.0		5000		
039	030607ar	PDS	QC377806	122751	Water	06-MAR-2007 15:57	1.0	1.0		5000	9 10	
040	030607ar	MSS	193108-023	122751	Water	06-MAR-2007 16:01	1.0	1.0		5000		
041	030607ar	SAMPLE	193097-001	122751	Water	06-MAR-2007 16:04	1.0	1.0		5000		
042	030607ar	X	RINSE			06-MAR-2007 16:08	1.0					
043	030607ar	CCV				06-MAR-2007 16:11	1.0	1.0		5000	11	
044	030607ar	X	FLUSH			06-MAR-2007 16:15	1.0					
045	030607ar	CCB				06-MAR-2007 16:19	1.0	1.0		5000		
046	030607ar	SAMPLE	193097-019	122751	Water	06-MAR-2007 16:23	1.0	1.0		5000		
047	030607ar	SAMPLE	193014-001	122751	Water	06-MAR-2007 16:27	1.0	1.0		5000		1:CA=10435 603
048	030607ar	SAMPLE	193014-003	122751	Water	06-MAR-2007 16:31	1.0	1.0		5000		
049	030607ar	SAMPLE	193014-005	122751	Water	06-MAR-2007 16:35	1.0	1.0		5000		
050	030607ar	SAMPLE	193125-001	122751	Water	06-MAR-2007 16:39	1.0	1.0		5000		
051	030607ar	SAMPLE	193128-001	122751	Water	06-MAR-2007 16:42	1.0	1.0	4	5000		4:CA=2103697
052	030607ar	SAMPLE	193128-002	122751	Water	06-MAR-2007 16:47	1.0	1.0	4	5000		4:CA=1430652
053	030607ar	SAMPLE	193099-001	122751	Water	06-MAR-2007 16:53	1.0	1.0		5000		2:MG=311697
054	030607ar	SAMPLE	193098-004	122751	Water	06-MAR-2007 16:57	1.0	1.0		5000		1:NA=126682
055	030607ar	SAMPLE	193087-001	122751	Water	06-MAR-2007 17:00	1.0	1.0		5000		
056	030607ar	X	RINSE			06-MAR-2007 17:04	1.0					
057	030607ar	X				06-MAR-2007 17:08	1.0					
058	030607ar	CCV				06-MAR-2007 17:09	1.0	1.0		5000	11	
059	030607ar	X	FLUSH			06-MAR-2007 17:13	1.0					
060	030607ar	X				06-MAR-2007 17:17	1.0					
061	030607ar	CCB				06-MAR-2007 17:20	1.0	1.0	1	5000		
062	030607ar	SAMPLE	193145-001	122751	Filtra	06-MAR-2007 17:24	1.0	1.0	1	5000		1:NA=131983

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	030607ar	SAMPLE	193145-002	122751	Filtra	06-MAR-2007 17:28	1.0	1.0	1	5000		1:NA=169958
064	030607ar	SAMPLE	193108-022	122751	Water	06-MAR-2007 17:32	1.0	1.0		5000		1:NA=101354
065	030607ar	SAMPLE	193108-027	122751	Water	06-MAR-2007 17:35	1.0	1.0		5000		
066	030607ar	ICSAB				06-MAR-2007 17:38	1.0	1.0		5000	8	5:AL=484958
067	030607ar	X	RINSE			06-MAR-2007 17:40	1.0					
068	030607ar	CCV				06-MAR-2007 17:44	1.0	1.0		5000	11	
069	030607ar	X	FLUSH			06-MAR-2007 17:47	1.0					
070	030607ar	X				06-MAR-2007 17:51	1.0					
071	030607ar	CCB				06-MAR-2007 17:54	1.0	1.0	1	5000		

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Stds used: 1=S5393 2=~~S5428~~ 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67103428001
Units : ug/L

Date : 12-MAR-2007 20:06
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c12t0005	67103428005		12-MAR-2007 20:12	S5645
L2	c12t0006	67103428006		12-MAR-2007 20:17	S5648
L3	c12t0007	67103428007		12-MAR-2007 20:22	S5649
L4	c12t0008	67103428008		12-MAR-2007 20:27	S5650
L5	c12t0009	67103428009		12-MAR-2007 20:33	S5644
L6	c12t0010	67103428010		12-MAR-2007 20:39	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7783	0.6225	0.6293	0.5900	0.5820	0.5425	BLNK	-4.2566	1.81708		0.6241	0.999	0.995	
Antimony	A	0.3566	0.2923	0.2929	0.2870	0.2935	0.2772	BLNK	-0.0345	3.56579		0.2999	0.999	0.995	
Barium	A	0.4848	0.1162	0.1181	0.0960	0.0922	0.0867	BLNK	-0.1048	11.3932		0.1657	0.999	0.995	
Beryllium	A	0.3200	0.3104	0.3298	0.3224	0.3193	0.2817	BLNK	-0.0302	3.45778		0.3139	0.996	0.995	
Cadmium	A	0.1059	0.0918	0.0919	0.0905	0.0891	0.0828	BLNK	-0.0232	11.8967		0.0920	0.999	0.995	
Calcium	A	0.1105	0.0415	0.0338	0.0243	0.0229	0.0214	BLNK	-26.817	46.1314		0.0424	0.999	0.995	
Lead	A	0.9910	0.7937	0.7767	0.7377	0.7253	0.6810	BLNK	-0.0742	1.45007		0.7842	0.999	0.995	
Magnesium	A	0.6027	0.5569	0.5031	0.4769	0.4645	0.4329	BLNK	-8.7158	2.27753		0.5062	0.999	0.995	
Molybdenum	A	0.2551	0.2260	0.2335	0.2227	0.2222	0.2149	BLNK	-0.0353	4.62193		0.2291	1.000	0.995	
Potassium	A	4.9515	1.5736	1.1941	0.7736	0.7259	0.6783	BLNK	-62.083	1.45912		1.6495	0.999	0.995	
Silver	A	0.4011	0.3840	0.3803	0.3753	0.3759	0.3473	BLNK	-0.0245	2.83282		0.3773	0.998	0.995	
Thallium	A	1.1173	0.9488	0.9327	0.8922	0.9574	0.8984	BLNK	-0.0275	1.09910		0.9578	0.999	0.995	
Arsenic	E	0.6852	0.6070	0.6606	0.6264	0.6080	0.5743	BLNK	-0.0388	1.72115		0.6269	0.999	0.995	
Chromium	E	7.6866	4.0039	3.5518	3.2499	3.1223	2.9505	BLNK	-0.1600	0.33530		4.0942	0.999	0.995	
Cobalt	E	5.5374	5.3292	5.3485	5.3135	5.0610	4.7282	BLNK	-0.0108	0.20853		5.2197	0.999	0.995	
Copper	E	21.575	10.634	9.0022	7.3859	6.8890	6.3789	BLNK	-0.2095	0.15445		10.311	0.999	0.995	
Manganese	E	2.6878	2.0869	2.0008	1.8806	1.8141	1.7006	BLNK	-0.0480	0.58034		2.0285	0.999	0.995	
Nickel	E	3.8071	1.8669	1.7576	1.4548	1.3377	1.2420	BLNK	-0.1534	0.79343		1.9110	0.999	0.995	
Sodium	E	2.5275	1.0359	0.8639	0.6481	0.5605	0.5326	BLNK	-29.686	1.86076		1.0281	0.999	0.995	
Vanadium	E	5.7138	3.1214	2.7717	2.4990	2.4443	2.3186	BLNK	-0.1918	0.42712		3.1448	0.999	0.995	
Zinc	E			7.6415	1.4656	1.1206	1.0202	BLNK	-2.0445	0.97255		2.8120	0.997	0.995	
Iron	H	1.6815	1.4080	1.4303	1.3427	1.2353	1.1963	BLNK	-1.9159	0.83039		1.3824	1.000	0.995	
Selenium	H	0.2397	0.2216	0.1997	0.2215	0.2066	0.1992	BLNK	-0.0044	4.98301		0.2147	1.000	0.995	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E			1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

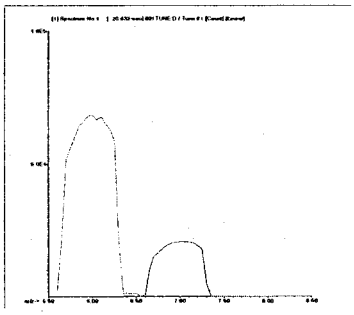
Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

6020 QC Tune Report

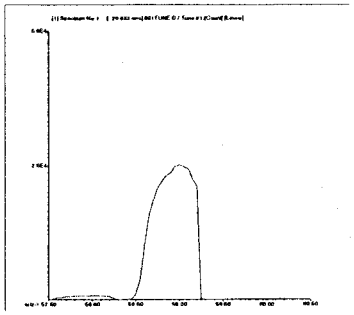
Data File: C:\ICPCHEM\1\DATA\07C12t00.B\001TUNE.D
Date Acquired: Mar 12 2007 07:48 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

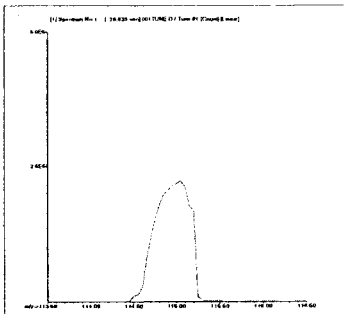
Element	Actual	Required	Flag
7 Li	1.08	5.00	
59 Co	0.72	5.00	
115 In	1.06	5.00	
205 Tl	0.98	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



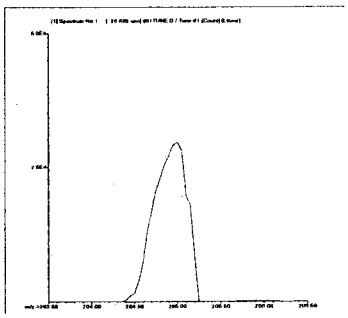
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004C
Date Acquired: Mar 12 2007 08:04 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:08 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	672760.88	A	6400.00	0.95
7	(Li)		P		
9	Be	117.78	P	39.77	33.77
23	Na	11273.71	P	422.10	3.74
24	Mg	98078.36	P	23310.00	23.77
27	Al	60061.39	P	9198.00	15.31
39	K	1091342.00	A	21770.00	1.99
44	Ca	14907.68	P	1101.00	7.39
45	Sc	90742.55	P	345.30	0.38
45	Sc	35324.06	P	566.20	1.60
45	Sc	1282606.00	A	11440.00	0.89
51	V	317.42	P	18.07	5.69
52	Cr	337.42	P	41.19	12.21
55	Mn	58.52	P	12.88	22.01
56	Fe	4186.97	P	80.50	1.92
59	Co	37.04	P	28.55	77.08
60	Ni	136.67	P	20.37	14.91
63	Cu	521.13	P	43.38	8.32
65	Cu	240.75	P	20.56	8.54
66	Zn	807.44	P	59.88	7.42
72	Ge	25353.95	P	113.20	0.45
72	Ge	19198.17	P	248.40	1.29
75	As	8.67	P	2.31	26.64
78	Se	0.44	P	0.38	86.60
89	Y	1853201.00	A	26870.00	1.45
98	Mo	283.35	P	40.56	14.31
107	Ag	315.57	P	24.57	7.79
111	Cd	71.11	P	25.46	35.80
115	In	1826335.00	A	13940.00	0.76
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	353.36	P	35.28	9.98
137	Ba	416.69	P	20.82	5.00
159	Tb	2265507.00	A	21230.00	0.94
205	Tl	714.50	P	121.00	16.94
208	Pb	2319.07	P	158.30	6.83
209	Bi	1431311.00	A	16460.00	1.15

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 12 2007 08:09 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:08 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	678491.38	A	8627.00	1.27
7 (Li)		P		
9 Be	434.47	P	50.92	11.72
23 Na	18416.88	P	662.20	3.60
24 Mg	154287.50	P	1427.00	0.92
27 Al	199217.70	P	1070.00	0.54
39 K	1267369.00	A	8584.00	0.68
44 Ca	28295.84	P	137.30	0.49
45 Sc	93048.34	P	931.30	1.00
45 Sc	36439.83	P	423.90	1.16
45 Sc	1279924.00	A	13670.00	1.07
51 V	416.31	P	17.44	4.19
52 Cr	560.02	P	19.28	3.44
55 Mn	195.93	P	12.24	6.25
56 Fe	31291.96	P	462.40	1.48
59 Co	403.34	P	30.97	7.68
60 Ni	277.41	P	5.70	2.06
63 Cu	846.70	P	20.58	2.43
65 Cu	421.86	P	17.01	4.03
66 Zn	2250.21	P	63.61	2.83
72 Ge	25948.72	P	185.40	0.71
72 Ge	19621.72	P	43.74	0.22
75 As	26.89	P	4.02	14.95
78 Se	12.44	P	1.54	12.38
89 Y	1821761.00	A	13600.00	0.75
98 Mo	930.07	P	93.88	10.09
99 (Ru)	2.22	P	1.93	86.62
107 Ag	1452.36	P	26.74	1.84
111 Cd	383.35	P	41.77	10.90
115 In	1810471.00	A	7689.00	0.42
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1291.23	P	42.22	3.27
137 Ba	2160.26	P	35.12	1.63
159 Tb	2228029.00	A	7967.00	0.36
205 Tl	1572.39	P	87.72	5.58
208 Pb	4416.03	P	268.80	6.09
209 Bi	1407546.00	A	6179.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	678491.38	1.27	672760.88	100.9	80 - 120	
45 Sc	93048.34	1.00	90742.55	102.5	80 - 120	
45 Sc	36439.83	1.16	35324.06	103.2	80 - 120	
45 Sc	1279924.00	1.07	1282606.30	99.8	80 - 120	
72 Ge	25948.72	0.71	25353.96	102.3	80 - 120	
72 Ge	19621.72	0.22	19198.17	102.2	80 - 120	
89 Y	1821761.30	0.75	1853200.60	98.3	80 - 120	
115 In	1810471.40	0.42	1826335.60	99.1	80 - 120	
159 Tb	2228029.30	0.36	2265507.00	98.3	80 - 120	
209 Bi	1407546.30	0.44	1431310.80	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

610

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 12 2007 08:15 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:13 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	694977.00	A	2734.00	0.39
7 (Li)		P		
9 Be	2156.90	P	23.34	1.08
23 Na	38468.13	P	147.60	0.38
24 Mg	734533.81	M	21750.00	2.96
27 Al	821299.50	A	12100.00	1.47
39 K	2076168.00	A	22620.00	1.09
44 Ca	54777.21	P	1700.00	3.10
45 Sc	94523.60	P	460.40	0.49
45 Sc	37137.96	P	350.60	0.94
45 Sc	1319455.00	A	16430.00	1.25
51 V	1159.32	P	30.07	2.59
52 Cr	1486.77	P	29.46	1.98
55 Mn	775.22	P	37.92	4.89
56 Fe	133088.09	P	630.00	0.47
59 Co	1979.06	P	7.29	0.37
60 Ni	693.36	P	28.87	4.16
63 Cu	2117.59	P	61.60	2.91
65 Cu	1043.76	P	12.88	1.23
66 Zn	2681.03	P	56.60	2.11
72 Ge	26368.77	P	339.30	1.29
72 Ge	19913.63	P	53.43	0.27
75 As	120.89	P	7.34	6.07
78 Se	58.45	P	2.69	4.61
89 Y	1876675.00	A	25970.00	1.38
98 Mo	4241.94	P	273.40	6.45
99 (Ru)	0.00	P	0.00	0.00
107 Ag	7010.95	P	60.51	0.86
111 Cd	1676.84	P	83.54	4.98
115 In	1826165.00	A	16320.00	0.89
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5337.93	P	120.40	2.26
137 Ba	2632.59	P	207.10	7.87
159 Tb	2263881.00	A	44190.00	1.95
205 Tl	6790.94	P	33.40	0.49
208 Pb	17970.10	P	450.50	2.51
209 Bi	1431570.00	A	16570.00	1.16

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	694977.00	0.39	672760.88	103.3	80 - 120	
45 Sc	94523.60	0.49	90742.55	104.2	80 - 120	
45 Sc	37137.96	0.94	35324.06	105.1	80 - 120	
45 Sc	1319455.50	1.25	1282606.30	102.9	80 - 120	
72 Ge	26368.77	1.29	25353.96	104.0	80 - 120	
72 Ge	19913.64	0.27	19198.17	103.7	80 - 120	
89 Y	1876675.10	1.38	1853200.60	101.3	80 - 120	
115 In	1826165.40	0.89	1826335.60	100.0	80 - 120	
159 Tb	2263880.50	1.95	2265507.00	99.9	80 - 120	
209 Bi	1431569.60	1.16	1431310.80	100.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 12 2007 08:20 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:18 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	685553.13	A	8563.00	1.25
7 (Li)		P		
9 Be	4521.98	P	93.99	2.08
23 Na	62838.53	P	225.00	0.36
24 Mg	1291836.00	A	10920.00	0.85
27 Al	1616190.00	A	16870.00	1.04
39 K	3066603.00	A	13690.00	0.45
44 Ca	86719.78	P	627.30	0.72
45 Sc	90596.98	P	400.80	0.44
45 Sc	36373.43	P	412.90	1.14
45 Sc	1284110.00	A	10680.00	0.83
51 V	2016.10	P	29.51	1.46
52 Cr	2583.60	P	11.55	0.45
55 Mn	1454.91	P	65.87	4.53
56 Fe	259160.50	P	158.20	0.06
59 Co	3889.85	P	101.10	2.60
60 Ni	1278.59	P	21.21	1.66
63 Cu	3519.00	P	59.06	1.68
65 Cu	1776.06	P	66.69	3.75
66 Zn	2987.02	P	51.69	1.73
72 Ge	25531.65	P	316.90	1.24
72 Ge	19544.95	P	16.41	0.08
75 As	258.23	P	8.88	3.44
78 Se	102.00	P	4.16	4.08
89 Y	1837792.00	A	8214.00	0.45
98 Mo	8583.06	P	96.00	1.12
99 (Ru)	1.11	P	1.93	173.24
107 Ag	13679.55	P	269.50	1.97
111 Cd	3306.09	P	61.97	1.87
115 In	1798289.00	A	22390.00	1.25
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10532.28	P	193.40	1.84
137 Ba	5286.80	P	250.20	4.73
159 Tb	2237557.00	A	17940.00	0.80
205 Tl	13157.28	P	323.10	2.46
208 Pb	34755.50	P	102.40	0.29
209 Bi	1410482.00	A	13740.00	0.97

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	685553.06	1.25	672760.88	101.9	80 - 120	
45 Sc	90596.98	0.44	90742.55	99.8	80 - 120	
45 Sc	36373.43	1.14	35324.06	103.0	80 - 120	
45 Sc	1284110.50	0.83	1282606.30	100.1	80 - 120	
72 Ge	25531.65	1.24	25353.96	100.7	80 - 120	
72 Ge	19544.95	0.08	19198.17	101.8	80 - 120	
89 Y	1837792.50	0.45	1853200.60	99.2	80 - 120	
115 In	1798288.90	1.25	1826335.60	98.5	80 - 120	
159 Tb	2237556.80	0.80	2265507.00	98.8	80 - 120	
209 Bi	1410482.50	0.97	1431310.80	98.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

612

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 12 2007 08:25 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:24 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	691113.81	A	7944.00	1.15
7 (Li)		P		
9 Be	44557.23	P	358.20	0.80
23 Na	478735.50	P	2653.00	0.55
24 Mg	12476940.00	A	38180.00	0.31
27 Al	15434640.00	A	100800.00	0.65
39 K	20238950.00	A	128600.00	0.64
44 Ca	635172.88	P	3960.00	0.62
45 Sc	91827.04	P	615.40	0.67
45 Sc	36934.78	P	170.60	0.46
45 Sc	1308061.00	A	5772.00	0.44
51 V	18459.97	P	248.70	1.35
52 Cr	24006.50	P	183.20	0.76
55 Mn	13891.43	P	139.50	1.00
56 Fe	2465920.00	A	11150.00	0.45
59 Co	39249.58	P	264.40	0.67
60 Ni	10746.43	P	162.70	1.51
63 Cu	29310.37	P	193.40	0.66
65 Cu	14482.80	P	108.40	0.75
66 Zn	5816.47	P	37.49	0.64
72 Ge	25709.04	P	306.70	1.19
72 Ge	19844.26	P	192.70	0.97
75 As	2486.02	P	21.34	0.86
78 Se	1138.94	P	10.96	0.96
89 Y	1850130.00	A	21580.00	1.17
98 Mo	82416.04	P	300.60	0.36
99 (Ru)	7.78	P	1.93	24.75
107 Ag	136184.09	P	573.50	0.42
111 Cd	32822.91	P	279.10	0.85
115 In	1814409.00	A	7988.00	0.44
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	104145.70	P	375.80	0.36
137 Ba	43283.35	P	407.60	0.94
159 Tb	2255012.00	A	7868.00	0.35
205 Tl	126048.90	P	1855.00	1.47
208 Pb	332694.19	P	3209.00	0.96
209 Bi	1412713.00	A	1960.00	0.14

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	691113.81	1.15	672760.88	102.7	80 - 120	
45 Sc	91827.05	0.67	90742.55	101.2	80 - 120	
45 Sc	36934.78	0.46	35324.06	104.6	80 - 120	
45 Sc	1308060.50	0.44	1282606.30	102.0	80 - 120	
72 Ge	25709.04	1.19	25353.96	101.4	80 - 120	
72 Ge	19844.26	0.97	19198.17	103.4	80 - 120	
89 Y	1850130.10	1.17	1853200.60	99.8	80 - 120	
115 In	1814409.40	0.44	1826335.60	99.3	80 - 120	
159 Tb	2255012.00	0.35	2265507.00	99.5	80 - 120	
209 Bi	1412712.80	0.14	1431310.80	98.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 12 2007 08:30 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	677083.19	A	4479.00	0.66
7 (Li)		P		
9 Be	432288.69	P	3929.00	0.91
23 Na	4202490.00	A	30260.00	0.72
24 Mg	###########	A	1232000.00	1.01
27 Al	###########	A	709900.00	0.46
39 K	###########	A	1240000.00	0.65
44 Ca	6017839.00	A	41060.00	0.68
45 Sc	94421.19	P	389.40	0.41
45 Sc	37489.30	P	346.60	0.92
45 Sc	1314186.00	A	8837.00	0.67
51 V	183256.20	P	305.80	0.17
52 Cr	234087.50	P	1253.00	0.54
55 Mn	136010.20	P	379.90	0.28
56 Fe	23326620.00	A	76160.00	0.33
59 Co	379447.09	P	1556.00	0.41
60 Ni	100293.20	P	104.00	0.10
63 Cu	272674.09	P	779.50	0.29
65 Cu	133392.41	P	510.70	0.38
66 Zn	44355.38	P	91.00	0.21
72 Ge	25783.19	P	127.60	0.49
72 Ge	19790.87	P	93.59	0.47
75 As	24064.36	P	129.60	0.54
78 Se	10652.81	P	85.62	0.80
89 Y	1838449.00	A	13690.00	0.74
98 Mo	817017.13	P	6957.00	0.85
99 (Ru)	36.67	P	12.02	32.78
107 Ag	1309827.00	A	4719.00	0.36
111 Cd	310358.19	P	2828.00	0.91
115 In	1742209.00	A	14850.00	0.85
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1022511.00	A	3721.00	0.36
137 Ba	409592.19	P	3421.00	0.84
159 Tb	2220177.00	A	17650.00	0.79
205 Tl	1268248.00	A	9969.00	0.79
208 Pb	3220794.00	A	26350.00	0.82
209 Bi	1324739.00	A	6012.00	0.45

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	677083.19	0.66	672760.88	100.6	80 - 120	
45 Sc	94421.20	0.41	90742.55	104.1	80 - 120	
45 Sc	37489.30	0.92	35324.06	106.1	80 - 120	
45 Sc	1314186.00	0.67	1282606.30	102.5	80 - 120	
72 Ge	25783.19	0.49	25353.96	101.7	80 - 120	
72 Ge	19790.87	0.47	19198.17	103.1	80 - 120	
89 Y	1838449.10	0.74	1853200.60	99.2	80 - 120	
115 In	1742208.80	0.85	1826335.60	95.4	80 - 120	
159 Tb	2220177.30	0.79	2265507.00	98.0	80 - 120	
209 Bi	1324739.00	0.45	1431310.80	92.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 12 2007 08:37 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:35 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	662555.38	A	1802.00	0.27
7 (Li)		P		
9 Be	746495.50	A	610.00	0.08
23 Na	7932156.00	A	49980.00	0.63
24 Mg	###########	A	591300.00	0.26
27 Al	###########	A	1453000.00	0.51
39 K	###########	A	411800.00	0.12
44 Ca	11271110.00	A	16720.00	0.15
45 Sc	91265.47	P	1278.00	1.40
45 Sc	37237.45	P	465.20	1.25
45 Sc	1316070.00	A	7647.00	0.58
51 V	345312.91	P	1339.00	0.39
52 Cr	439426.31	P	2783.00	0.63
55 Mn	253279.91	P	1002.00	0.40
56 Fe	43666368.00	A	221500.00	0.51
59 Co	704190.13	P	2353.00	0.33
60 Ni	184977.09	P	345.20	0.19
63 Cu	494594.41	P	2855.00	0.58
65 Cu	243433.50	P	1640.00	0.67
66 Zn	79104.31	P	211.10	0.27
72 Ge	24523.21	P	253.80	1.03
72 Ge	19385.09	P	168.40	0.87
75 As	44530.93	P	117.60	0.26
78 Se	19533.35	P	192.10	0.98
89 Y	1814803.00	A	12270.00	0.68
98 Mo	1560286.00	A	5438.00	0.35
99 (Ru)	60.00	P	8.82	14.70
107 Ag	2344843.00	A	8878.00	0.38
111 Cd	559069.31	P	481.30	0.09
115 In	1688014.00	A	10980.00	0.65
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1871939.00	A	7209.00	0.39
137 Ba	755844.88	P	4982.00	0.66
159 Tb	2179423.00	A	20470.00	0.94
205 Tl	2289599.00	A	13630.00	0.60
208 Pb	5936212.00	A	22010.00	0.37
209 Bi	1274335.00	A	8531.00	0.67

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	662555.44	0.27	672760.88	98.5	80 - 120	
45 Sc	91265.48	1.40	90742.55	100.6	80 - 120	
45 Sc	37237.45	1.25	35324.06	105.4	80 - 120	
45 Sc	1316069.90	0.58	1282606.30	102.6	80 - 120	
72 Ge	24523.21	1.03	25353.96	96.7	80 - 120	
72 Ge	19385.09	0.87	19198.17	101.0	80 - 120	
89 Y	1814803.30	0.68	1853200.60	97.9	80 - 120	
115 In	1688014.40	0.65	1826335.60	92.4	80 - 120	
159 Tb	2179423.00	0.94	2265507.00	96.2	80 - 120	
209 Bi	1274335.40	0.67	1431310.80	89.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428012 File : c12t0012 Time : 12-MAR-2007 20:50
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6241	0.5183	10000	9413	ug/L	-6	10	
Antimony	A	0.2999	0.2653	100.0	94.57	ug/L	-5	10	
Barium	A	0.1657	0.0827	100.0	94.10	ug/L	-6	10	
Beryllium	A	0.3139	0.2907	100.0	100.5	ug/L	1	10	
Cadmium	A	0.0920	0.0797	100.0	94.85	ug/L	-5	10	
Calcium	A	0.0424	0.0206	10000	9459	ug/L	-5	10	
Lead	A	0.7842	0.6532	100.0	94.64	ug/L	-5	10	
Magnesium	A	0.5062	0.4163	10000	9472	ug/L	-5	10	
Molybdenum	A	0.2291	0.2038	100.0	94.14	ug/L	-6	10	
Potassium	A	1.6495	0.6597	10000	9564	ug/L	-4	10	
Silver	A	0.3773	0.3674	100.0	104.1	ug/L	4	10	
Thallium	A	0.9578	0.8238	50.00	45.24	ug/L	-10	10	
Arsenic	E	0.6269	0.5937	100.0	102.2	ug/L	2	10	
Chromium	E	4.0942	2.9826	100.0	99.85	ug/L	0	10	
Cobalt	E	5.2197	4.7575	100.0	99.20	ug/L	-1	10	
Copper	E	10.311	6.4585	100.0	99.54	ug/L	0	10	
Manganese	E	2.0285	1.7123	100.0	99.32	ug/L	-1	10	
Nickel	E	1.9110	1.2660	100.0	100.3	ug/L	0	10	
Sodium	E	1.0281	0.5277	10000	9790	ug/L	-2	10	
Vanadium	E	3.1448	2.3142	100.0	98.65	ug/L	-1	10	
Zinc	E	2.8120	1.0523	100.0	100.3	ug/L	0	10	
Iron	H	1.3824	1.2212	10000	10140	ug/L	1	10	
Selenium	H	0.2147	0.2067	100.0	103.0	ug/L	3	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	691518	2.79
Scandium	A	1282606	1364637	6.40
Scandium	E	35324	37131	5.12
Scandium	H	90743	86581	-4.59
Germanium	H	25354	23721	-6.44
Germanium	E	19198	19516	1.66
Indium	A	1826336	1808139	-1.00
Bismuth	A	1431311	1357521	-5.16
Yttrium	A	1853201	1891408	2.06
Terbium	A	2265507	2297843	1.43

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428035 File : c12t0035 Time : 12-MAR-2007 22:53
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5326	10000	9674	ug/L	-3	10	
Antimony	A	0.2999	0.2824	100.0	100.6	ug/L	1	10	
Barium	A	0.1657	0.0863	100.0	98.22	ug/L	-2	10	
Beryllium	A	0.3139	0.3130	100.0	108.2	ug/L	8	10	
Cadmium	A	0.0920	0.0842	100.0	100.2	ug/L	0	10	
Calcium	A	0.0424	0.0217	10000	9970	ug/L	0	10	
Lead	A	0.7842	0.6892	100.0	99.87	ug/L	0	10	
Magnesium	A	0.5062	0.4244	10000	9656	ug/L	-3	10	
Molybdenum	A	0.2291	0.2133	100.0	98.56	ug/L	-1	10	
Potassium	A	1.6495	0.6844	10000	9924	ug/L	-1	10	
Silver	A	0.3773	0.3829	100.0	108.4	ug/L	8	10	
Thallium	A	0.9578	0.8495	50.00	46.65	ug/L	-7	10	
Arsenic	E	0.6269	0.5834	100.0	100.4	ug/L	0	10	
Chromium	E	4.0942	3.0339	100.0	101.6	ug/L	2	10	
Cobalt	E	5.2197	4.8755	100.0	101.7	ug/L	2	10	
Copper	E	10.311	6.3131	100.0	97.30	ug/L	-3	10	
Manganese	E	2.0285	1.7371	100.0	100.8	ug/L	1	10	
Nickel	E	1.9110	1.2979	100.0	102.8	ug/L	3	10	
Sodium	E	1.0281	0.5232	10000	9707	ug/L	-3	10	
Vanadium	E	3.1448	2.3325	100.0	99.43	ug/L	-1	10	
Zinc	E	2.8120	1.0365	100.0	98.75	ug/L	-1	10	
Iron	H	1.3824	1.2521	10000	10400	ug/L	4	10	
Selenium	H	0.2147	0.2106	100.0	104.9	ug/L	5	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	558143	-17.04
Scandium	A	1282606	1188859	-7.31
Scandium	E	35324	32615	-7.67
Scandium	H	90743	68305	-24.73
Germanium	H	25354	19200	-24.27
Germanium	E	19198	17998	-6.25
Indium	A	1826336	1639568	-10.23
Bismuth	A	1431311	1276764	-10.80
Yttrium	A	1853201	1720957	-7.14
Terbium	A	2265507	2117912	-6.51

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428053 File : c12t0053 Time : 13-MAR-2007 00:30
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5300	10000	9626	ug/L	-4	10	
Antimony	A	0.2999	0.2785	100.0	99.26	ug/L	-1	10	
Barium	A	0.1657	0.0863	100.0	98.16	ug/L	-2	10	
Beryllium	A	0.3139	0.3047	100.0	105.3	ug/L	5	10	
Cadmium	A	0.0920	0.0835	100.0	99.27	ug/L	-1	10	
Calcium	A	0.0424	0.0214	10000	9846	ug/L	-2	10	
Lead	A	0.7842	0.6931	100.0	100.4	ug/L	0	10	
Magnesium	A	0.5062	0.4252	10000	9675	ug/L	-3	10	
Molybdenum	A	0.2291	0.2125	100.0	98.16	ug/L	-2	10	
Potassium	A	1.6495	0.6837	10000	9914	ug/L	-1	10	
Silver	A	0.3773	0.3804	100.0	107.7	ug/L	8	10	
Thallium	A	0.9578	0.8487	50.00	46.61	ug/L	-7	10	
Arsenic	E	0.6269	0.5872	100.0	101.0	ug/L	1	10	
Chromium	E	4.0942	3.0290	100.0	101.4	ug/L	1	10	
Cobalt	E	5.2197	4.8594	100.0	101.3	ug/L	1	10	
Copper	E	10.311	6.3705	100.0	98.19	ug/L	-2	10	
Manganese	E	2.0285	1.7282	100.0	100.2	ug/L	0	10	
Nickel	E	1.9110	1.2987	100.0	102.9	ug/L	3	10	
Sodium	E	1.0281	0.5255	10000	9748	ug/L	-3	10	
Vanadium	E	3.1448	2.3406	100.0	99.78	ug/L	0	10	
Zinc	E	2.8120	1.0390	100.0	99.00	ug/L	-1	10	
Iron	H	1.3824	1.2446	10000	10330	ug/L	3	10	
Selenium	H	0.2147	0.2115	100.0	105.4	ug/L	5	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	576134	-14.36
Scandium	A	1282606	1192710	-7.01
Scandium	E	35324	32387	-8.31
Scandium	H	90743	64338	-29.10
Germanium	H	25354	17939	-29.25
Germanium	E	19198	17648	-8.07
Indium	A	1826336	1623229	-11.12
Bismuth	A	1431311	1250140	-12.66
Yttrium	A	1853201	1688058	-8.91
Terbium	A	2265507	2068362	-8.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428071 File : c12t0071 Time : 13-MAR-2007 02:07
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5315	10000	9654	ug/L	-3	10	
Antimony	A	0.2999	0.2769	100.0	98.70	ug/L	-1	10	
Barium	A	0.1657	0.0858	100.0	97.59	ug/L	-2	10	
Beryllium	A	0.3139	0.3119	100.0	107.8	ug/L	8	10	
Cadmium	A	0.0920	0.0826	100.0	98.22	ug/L	-2	10	
Calcium	A	0.0424	0.0215	10000	9868	ug/L	-1	10	
Lead	A	0.7842	0.6926	100.0	100.4	ug/L	0	10	
Magnesium	A	0.5062	0.4250	10000	9672	ug/L	-3	10	
Molybdenum	A	0.2291	0.2126	100.0	98.22	ug/L	-2	10	
Potassium	A	1.6495	0.6832	10000	9907	ug/L	-1	10	
Silver	A	0.3773	0.3770	100.0	106.8	ug/L	7	10	
Thallium	A	0.9578	0.8460	50.00	46.47	ug/L	-7	10	
Arsenic	E	0.6269	0.5806	100.0	99.89	ug/L	0	10	
Chromium	E	4.0942	2.9271	100.0	97.98	ug/L	-2	10	
Cobalt	E	5.2197	4.6783	100.0	97.55	ug/L	-2	10	
Copper	E	10.311	6.2005	100.0	95.56	ug/L	-4	10	
Manganese	E	2.0285	1.6710	100.0	96.93	ug/L	-3	10	
Nickel	E	1.9110	1.2462	100.0	98.72	ug/L	-1	10	
Sodium	E	1.0281	0.5103	10000	9465	ug/L	-5	10	
Vanadium	E	3.1448	2.2720	100.0	96.85	ug/L	-3	10	
Zinc	E	2.8120	1.0134	100.0	96.51	ug/L	-3	10	
Iron	H	1.3824	1.2713	10000	10550	ug/L	6	10	
Selenium	H	0.2147	0.2177	100.0	108.5	ug/L	9	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	539267	-19.84
Scandium	A	1282606	1139836	-11.13
Scandium	E	35324	32252	-8.70
Scandium	H	90743	53236	-41.33
Germanium	H	25354	15001	-40.83
Germanium	E	19198	17357	-9.59
Indium	A	1826336	1554148	-14.90
Bismuth	A	1431311	1197989	-16.30
Yttrium	A	1853201	1601360	-13.59
Terbium	A	2265507	1999397	-11.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428079 File : c12t0079 Time : 13-MAR-2007 02:49
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5230	10000	9499	ug/L	-5	10	
Antimony	A	0.2999	0.2771	100.0	98.76	ug/L	-1	10	
Barium	A	0.1657	0.0853	100.0	97.09	ug/L	-3	10	
Beryllium	A	0.3139	0.3118	100.0	107.8	ug/L	8	10	
Cadmium	A	0.0920	0.0829	100.0	98.65	ug/L	-1	10	
Calcium	A	0.0424	0.0213	10000	9780	ug/L	-2	10	
Lead	A	0.7842	0.6828	100.0	98.94	ug/L	-1	10	
Magnesium	A	0.5062	0.4201	10000	9560	ug/L	-4	10	
Molybdenum	A	0.2291	0.2099	100.0	96.99	ug/L	-3	10	
Potassium	A	1.6495	0.6749	10000	9786	ug/L	-2	10	
Silver	A	0.3773	0.3752	100.0	106.3	ug/L	6	10	
Thallium	A	0.9578	0.8333	50.00	45.76	ug/L	-8	10	
Arsenic	E	0.6269	0.5802	100.0	99.83	ug/L	0	10	
Chromium	E	4.0942	2.9441	100.0	98.55	ug/L	-1	10	
Cobalt	E	5.2197	4.7033	100.0	98.07	ug/L	-2	10	
Copper	E	10.311	6.2583	100.0	96.45	ug/L	-4	10	
Manganese	E	2.0285	1.6913	100.0	98.11	ug/L	-2	10	
Nickel	E	1.9110	1.2611	100.0	99.91	ug/L	0	10	
Sodium	E	1.0281	0.5113	10000	9484	ug/L	-5	10	
Vanadium	E	3.1448	2.2852	100.0	97.41	ug/L	-3	10	
Zinc	E	2.8120	1.0145	100.0	96.62	ug/L	-3	10	
Iron	H	1.3824	1.2523	10000	10400	ug/L	4	10	
Selenium	H	0.2147	0.2120	100.0	105.6	ug/L	6	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	548426	-18.48
Scandium	A	1282606	1172070	-8.62
Scandium	E	35324	32661	-7.54
Scandium	H	90743	59740	-34.17
Germanium	H	25354	16910	-33.30
Germanium	E	19198	17592	-8.37
Indium	A	1826336	1585016	-13.21
Bismuth	A	1431311	1232457	-13.89
Yttrium	A	1853201	1660700	-10.39
Terbium	A	2265507	2053112	-9.38

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428102 File : c12t0102 Time : 13-MAR-2007 04:54
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5132	10000	9321	ug/L	-7	10	
Antimony	A	0.2999	0.2737	100.0	97.54	ug/L	-2	10	
Barium	A	0.1657	0.0836	100.0	95.18	ug/L	-5	10	
Beryllium	A	0.3139	0.3135	100.0	108.4	ug/L	8	10	
Cadmium	A	0.0920	0.0819	100.0	97.39	ug/L	-3	10	
Calcium	A	0.0424	0.0213	10000	9819	ug/L	-2	10	
Lead	A	0.7842	0.6893	100.0	99.88	ug/L	0	10	
Magnesium	A	0.5062	0.4107	10000	9346	ug/L	-7	10	
Molybdenum	A	0.2291	0.2083	100.0	96.26	ug/L	-4	10	
Potassium	A	1.6495	0.6733	10000	9762	ug/L	-2	10	
Silver	A	0.3773	0.3677	100.0	104.2	ug/L	4	10	
Thallium	A	0.9578	0.8364	50.00	45.93	ug/L	-8	10	
Arsenic	E	0.6269	0.5780	100.0	99.44	ug/L	-1	10	
Chromium	E	4.0942	2.9790	100.0	99.72	ug/L	0	10	
Cobalt	E	5.2197	4.8089	100.0	100.3	ug/L	0	10	
Copper	E	10.311	6.2648	100.0	96.55	ug/L	-3	10	
Manganese	E	2.0285	1.7045	100.0	98.87	ug/L	-1	10	
Nickel	E	1.9110	1.2842	100.0	101.7	ug/L	2	10	
Sodium	E	1.0281	0.5160	10000	9572	ug/L	-4	10	
Vanadium	E	3.1448	2.3014	100.0	98.10	ug/L	-2	10	
Zinc	E	2.8120	1.0256	100.0	97.69	ug/L	-2	10	
Iron	H	1.3824	1.3170	10000	10930	ug/L	9	10	
Selenium	H	0.2147	0.2338	100.0	116.5	ug/L	**17**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	473857	-29.57
Scandium	A	1282606	1061584	-17.23
Scandium	E	35324	28613	-19.00
Scandium	H	90743	40785	-55.05
Germanium	H	25354	11477	-54.73
Germanium	E	19198	15769	-17.86
Indium	A	1826336	1503074	-17.70
Bismuth	A	1431311	1180026	-17.56
Yttrium	A	1853201	1549197	-16.40
Terbium	A	2265507	1960410	-13.47

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428122 File : c12t0122 Time : 13-MAR-2007 06:42
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5132	10000	9321	ug/L	-7	10	
Antimony	A	0.2999	0.2771	100.0	98.78	ug/L	-1	10	
Barium	A	0.1657	0.0859	100.0	97.73	ug/L	-2	10	
Beryllium	A	0.3139	0.3168	100.0	109.5	ug/L	10	10	
Cadmium	A	0.0920	0.0832	100.0	98.96	ug/L	-1	10	
Calcium	A	0.0424	0.0214	10000	9854	ug/L	-1	10	
Lead	A	0.7842	0.6983	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5062	0.4086	10000	9297	ug/L	-7	10	
Molybdenum	A	0.2291	0.2106	100.0	97.31	ug/L	-3	10	
Potassium	A	1.6495	0.6721	10000	9745	ug/L	-3	10	
Silver	A	0.3773	0.3727	100.0	105.6	ug/L	6	10	
Thallium	A	0.9578	0.8456	50.00	46.44	ug/L	-7	10	
Arsenic	E	0.6269	0.5958	100.0	102.5	ug/L	3	10	
Chromium	E	4.0942	3.0291	100.0	101.4	ug/L	1	10	
Cobalt	E	5.2197	4.8941	100.0	102.0	ug/L	2	10	
Copper	E	10.311	6.3756	100.0	98.26	ug/L	-2	10	
Manganese	E	2.0285	1.7342	100.0	100.6	ug/L	1	10	
Nickel	E	1.9110	1.3082	100.0	103.6	ug/L	4	10	
Sodium	E	1.0281	0.5122	10000	9502	ug/L	-5	10	
Vanadium	E	3.1448	2.3485	100.0	100.1	ug/L	0	10	
Zinc	E	2.8120	1.0383	100.0	98.93	ug/L	-1	10	
Iron	H	1.3824	1.3170	10000	10930	ug/L	9	10	
Selenium	H	0.2147	0.2355	100.0	117.3	ug/L	**17**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	472755	-29.73
Scandium	A	1282606	1065035	-16.96
Scandium	E	35324	28329	-19.80
Scandium	H	90743	38017	-58.10
Germanium	H	25354	10663	-57.94
Germanium	E	19198	15612	-18.68
Indium	A	1826336	1483105	-18.79
Bismuth	A	1431311	1166025	-18.53
Yttrium	A	1853201	1539145	-16.95
Terbium	A	2265507	1928184	-14.89

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428133 File : c12t0133 Time : 13-MAR-2007 07:41
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5038	10000	9150	ug/L	-9	10	
Antimony	A	0.2999	0.2770	100.0	98.75	ug/L	-1	10	
Barium	A	0.1657	0.0853	100.0	97.03	ug/L	-3	10	
Beryllium	A	0.3139	0.3199	100.0	110.6	ug/L	**11**	10	c+ ***
Cadmium	A	0.0920	0.0825	100.0	98.15	ug/L	-2	10	
Calcium	A	0.0424	0.0212	10000	9740	ug/L	-3	10	
Lead	A	0.7842	0.7013	100.0	101.6	ug/L	2	10	
Magnesium	A	0.5062	0.3998	10000	9098	ug/L	-9	10	
Molybdenum	A	0.2291	0.2116	100.0	97.74	ug/L	-2	10	
Potassium	A	1.6495	0.6637	10000	9622	ug/L	-4	10	
Silver	A	0.3773	0.3660	100.0	103.6	ug/L	4	10	
Thallium	A	0.9578	0.8636	50.00	47.43	ug/L	-5	10	
Arsenic	E	0.6269	0.5870	100.0	101.0	ug/L	1	10	
Chromium	E	4.0942	3.0016	100.0	100.5	ug/L	1	10	
Cobalt	E	5.2197	4.8566	100.0	101.3	ug/L	1	10	
Copper	E	10.311	6.2833	100.0	96.84	ug/L	-3	10	
Manganese	E	2.0285	1.7214	100.0	99.85	ug/L	0	10	
Nickel	E	1.9110	1.2975	100.0	102.8	ug/L	3	10	
Sodium	E	1.0281	0.5030	10000	9331	ug/L	-7	10	
Vanadium	E	3.1448	2.3288	100.0	99.28	ug/L	-1	10	
Zinc	E	2.8120	1.0216	100.0	97.31	ug/L	-3	10	
Iron	H	1.3824	1.3550	10000	11250	ug/L	**13**	10	c+ ***
Selenium	H	0.2147	0.2383	100.0	118.7	ug/L	**19**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	428613	-36.29
Scandium	A	1282606	988902	-22.90
Scandium	E	35324	26811	-24.10
Scandium	H	90743	30985	-65.85
Germanium	H	25354	8880	-64.98
Germanium	E	19198	14902	-22.38
Indium	A	1826336	1402853	-23.19
Bismuth	A	1431311	1086892	-24.06
Yttrium	A	1853201	1436916	-22.46
Terbium	A	2265507	1825095	-19.44

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428016 File : c12t0016 Time : 12-MAR-2007 21:12
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01134]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6379]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005031]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	684230	1.70
Scandium	A	1282606	1283346	0.06
Scandium	E	35324	36574	3.54
Scandium	H	90743	84145	-7.27
Germanium	H	25354	23489	-7.36
Germanium	E	19198	19539	1.78
Indium	A	1826336	1801004	-1.39
Bismuth	A	1431311	1394169	-2.59
Yttrium	A	1853201	1826368	-1.45
Terbium	A	2265507	2202376	-2.79

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428039 File : c12t0039 Time : 12-MAR-2007 23:16
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005643]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02103]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.5666]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.04013]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	572260	-14.94
Scandium	A	1282606	1163598	-9.28
Scandium	E	35324	32687	-7.47
Scandium	H	90743	61980	-31.70
Germanium	H	25354	17377	-31.46
Germanium	E	19198	18080	-5.82
Indium	A	1826336	1675623	-8.25
Bismuth	A	1431311	1323445	-7.54
Yttrium	A	1853201	1706921	-7.89
Terbium	A	2265507	2089215	-7.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428055 File : c12t0055 Time : 13-MAR-2007 00:41
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02720]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03372]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04280]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03839]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6521]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005668]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	584178	-13.17
Scandium	A	1282606	1163969	-9.25
Scandium	E	35324	32628	-7.63
Scandium	H	90743	57838	-36.26
Germanium	H	25354	16537	-34.78
Germanium	E	19198	17927	-6.62
Indium	A	1826336	1674348	-8.32
Bismuth	A	1431311	1323160	-7.56
Yttrium	A	1853201	1688471	-8.89
Terbium	A	2265507	2093106	-7.61

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428074 File : c12t0074 Time : 13-MAR-2007 02:23
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02406]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02451]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002595]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01812]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.7417]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006318]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	544480	-19.07
Scandium	A	1282606	1123633	-12.39
Scandium	E	35324	31267	-11.49
Scandium	H	90743	54186	-40.29
Germanium	H	25354	15564	-38.61
Germanium	E	19198	17129	-10.78
Indium	A	1826336	1609502	-11.87
Bismuth	A	1431311	1276154	-10.84
Yttrium	A	1853201	1608566	-13.20
Terbium	A	2265507	2002503	-11.61

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428081 File : c12t0081 Time : 13-MAR-2007 03:01
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02799]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04404]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02440]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6701]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02533]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	551101	-18.08
Scandium	A	1282606	1138251	-11.25
Scandium	E	35324	31981	-9.46
Scandium	H	90743	51956	-42.74
Germanium	H	25354	14941	-41.07
Germanium	E	19198	17315	-9.81
Indium	A	1826336	1629017	-10.80
Bismuth	A	1431311	1300721	-9.12
Yttrium	A	1853201	1634215	-11.82
Terbium	A	2265507	2043455	-9.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428104 File : c12t0104 Time : 13-MAR-2007 05:05
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.008642]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01148]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01870]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6076]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01058]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	474440	-29.48
Scandium	A	1282606	1037054	-19.14
Scandium	E	35324	28268	-19.98
Scandium	H	90743	38966	-57.06
Germanium	H	25354	11104	-56.20
Germanium	E	19198	15761	-17.90
Indium	A	1826336	1531016	-16.17
Bismuth	A	1431311	1240650	-13.32
Yttrium	A	1853201	1530048	-17.44
Terbium	A	2265507	1944778	-14.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428124 File : c12t0124 Time : 13-MAR-2007 06:53
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01155]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01210]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.04039]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.5734]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006862]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	477506	-29.02
Scandium	A	1282606	1047977	-18.29
Scandium	E	35324	28366	-19.70
Scandium	H	90743	35035	-61.39
Germanium	H	25354	9998	-60.57
Germanium	E	19198	15927	-17.04
Indium	A	1826336	1541219	-15.61
Bismuth	A	1431311	1236345	-13.62
Yttrium	A	1853201	1548762	-16.43
Terbium	A	2265507	1948190	-14.01

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428137 File : c12t0137 Time : 13-MAR-2007 08:03
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.0007652]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01073]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01625]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01168]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.03035]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.7339]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01347]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	450096	-33.10
Scandium	A	1282606	985472	-23.17
Scandium	E	35324	26551	-24.84
Scandium	H	90743	31786	-64.97
Germanium	H	25354	9303	-63.31
Germanium	E	19198	14925	-22.26
Indium	A	1826336	1455882	-20.28
Bismuth	A	1431311	1171665	-18.14
Yttrium	A	1853201	1460955	-21.17
Terbium	A	2265507	1848797	-18.39

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428017 File : c12t0017 Time : 12-MAR-2007 21:17
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04117]	0.1000	ug/L	
Barium	A	0.9511	0.1000	ug/L	
Beryllium	A	[0.01171]	0.1000	ug/L	
Cadmium	A	1.548	0.1000	ug/L	
Lead	A	0.4455	0.1000	ug/L	
Silver	A	0.1900	0.1000	ug/L	
Thallium	A	[0.03663]	0.05000	ug/L	
Arsenic	E	0.2527	0.1000	ug/L	
Chromium	E	1.384	0.1000	ug/L	
Cobalt	E	0.2132	0.1000	ug/L	
Copper	E	1.344	0.1000	ug/L	
Manganese	E	0.5839	0.1000	ug/L	
Nickel	E	1.224	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.103	1.000	ug/L	
Selenium	H	[0.06435]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99920	ug/L	100
Calcium	A	300000	303400	ug/L	101
Magnesium	A	100000	98290	ug/L	98
Molybdenum	A	2000	2033	ug/L	102
Potassium	A	100000	100000	ug/L	100
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	244100	ug/L	98

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	529020	-21.37
Scandium	A	1282606	1131558	-11.78
Scandium	E	35324	33312	-5.70
Scandium	H	90743	86427	-4.76
Germanium	H	25354	21783	-14.08
Germanium	E	19198	17051	-11.18
Indium	A	1826336	1424690	-21.99
Bismuth	A	1431311	986296	-31.09
Yttrium	A	1853201	1552431	-16.23
Terbium	A	2265507	1890899	-16.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428018 File : c12t0018 Time : 12-MAR-2007 21:23
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101700	ug/L	2		
Cadmium	A	100.0	96.58	ug/L	-3	20	
Calcium	A	300000	309200	ug/L	3		
Magnesium	A	100000	98880	ug/L	-1		
Molybdenum	A	2000	2068	ug/L	3		
Potassium	A	100000	101600	ug/L	2		
Silver	A	50.00	42.45	ug/L	-15	20	
Arsenic	E	100.0	104.4	ug/L	4	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	193.2	ug/L	-3	20	
Copper	E	200.0	184.1	ug/L	-8	20	
Manganese	E	200.0	205.7	ug/L	3	20	
Nickel	E	200.0	188.3	ug/L	-6	20	
Sodium	E	250000	256500	ug/L	3		
Vanadium	E	200.0	215.1	ug/L	8	20	
Zinc	E	100.0	89.30	ug/L	-11	20	
Iron	H	250000	245300	ug/L	-2		
Selenium	H	100.0	96.48	ug/L	-4	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	84375	-7.02
Scandium	A	1282606	1088750	-15.11
Scandium	E	35324	31352	-11.24
Germanium	H	25354	21080	-16.86
Germanium	E	19198	16036	-16.47
Indium	A	1826336	1387046	-24.05
Yttrium	A	1853201	1508758	-18.59

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428084 File : c12t0084 Time : 13-MAR-2007 03:17
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04476]	0.1000	ug/L	
Barium	A	0.9359	0.1000	ug/L	
Beryllium	A	[0.01268]	0.1000	ug/L	
Cadmium	A	1.566	0.1000	ug/L	
Lead	A	0.4620	0.1000	ug/L	
Silver	A	0.2004	0.1000	ug/L	
Thallium	A	[0.02999]	0.05000	ug/L	
Arsenic	E	0.2739	0.1000	ug/L	
Chromium	E	1.385	0.1000	ug/L	
Cobalt	E	0.2314	0.1000	ug/L	
Copper	E	1.340	0.1000	ug/L	
Manganese	E	0.6164	0.1000	ug/L	
Nickel	E	1.143	0.1000	ug/L	
Vanadium	E	[0.008384]	0.1000	ug/L	
Zinc	E	2.149	1.000	ug/L	
Selenium	H	[0.08698]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	97410	ug/L	97
Calcium	A	300000	297700	ug/L	99
Magnesium	A	100000	94690	ug/L	95
Molybdenum	A	2000	1994	ug/L	100
Potassium	A	100000	98330	ug/L	98
Sodium	E	250000	235000	ug/L	94
Iron	H	250000	248200	ug/L	99

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	457003	-32.07
Scandium	A	1282606	1025111	-20.08
Scandium	E	35324	29971	-15.15
Scandium	H	90743	55112	-39.27
Germanium	H	25354	14025	-44.68
Germanium	E	19198	15477	-19.38
Indium	A	1826336	1314511	-28.02
Bismuth	A	1431311	919593	-35.75
Yttrium	A	1853201	1422418	-23.25
Terbium	A	2265507	1738620	-23.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428085 File : c12t0085 Time : 13-MAR-2007 03:22
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100500	ug/L	1		
Cadmium	A	100.0	96.78	ug/L	-3	20	
Calcium	A	300000	310000	ug/L	3		
Magnesium	A	100000	97610	ug/L	-2		
Molybdenum	A	2000	2072	ug/L	4		
Potassium	A	100000	101700	ug/L	2		
Silver	A	50.00	42.39	ug/L	-15	20	
Arsenic	E	100.0	103.9	ug/L	4	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	194.8	ug/L	-3	20	
Copper	E	200.0	180.8	ug/L	-10	20	
Manganese	E	200.0	204.9	ug/L	2	20	
Nickel	E	200.0	190.0	ug/L	-5	20	
Sodium	E	250000	248100	ug/L	-1		
Vanadium	E	200.0	214.1	ug/L	7	20	
Zinc	E	100.0	87.55	ug/L	-12	20	
Iron	H	250000	258700	ug/L	3		
Selenium	H	100.0	106.8	ug/L	7	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	53189	-41.38
Scandium	A	1282606	963391	-24.89
Scandium	E	35324	27839	-21.19
Germanium	H	25354	13555	-46.54
Germanium	E	19198	14666	-23.61
Indium	A	1826336	1267081	-30.62
Yttrium	A	1853201	1355100	-26.88

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428140 File : c12t0140 Time : 13-MAR-2007 08:19
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04964]	0.1000	ug/L	
Barium	A	0.9407	0.1000	ug/L	
Beryllium	A	[0.007333]	0.1000	ug/L	
Cadmium	A	1.514	0.1000	ug/L	
Lead	A	0.4665	0.1000	ug/L	
Silver	A	0.1818	0.1000	ug/L	
Thallium	A	[0.02353]	0.05000	ug/L	
Arsenic	E	0.2347	0.1000	ug/L	
Chromium	E	1.429	0.1000	ug/L	
Cobalt	E	0.2249	0.1000	ug/L	
Copper	E	1.310	0.1000	ug/L	
Manganese	E	0.6310	0.1000	ug/L	
Nickel	E	1.185	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.946	1.000	ug/L	
Selenium	H	[0.07561]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100500	ug/L	101
Calcium	A	300000	312100	ug/L	104
Magnesium	A	100000	97410	ug/L	97
Molybdenum	A	2000	2056	ug/L	103
Potassium	A	100000	103400	ug/L	103
Sodium	E	250000	233600	ug/L	93
Iron	H	250000	263500	ug/L	105

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	363271	-46.00
Scandium	A	1282606	825760	-35.62
Scandium	E	35324	24898	-29.52
Scandium	H	90743	34557	-61.92
Germanium	H	25354	8987	-64.55
Germanium	E	19198	13426	-30.07
Indium	A	1826336	1134908	-37.86
Bismuth	A	1431311	816988	-42.92
Yttrium	A	1853201	1199913	-35.25
Terbium	A	2265507	1504944	-33.57

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428141 File : c12t0141 Time : 13-MAR-2007 08:24
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102000	ug/L	2		
Cadmium	A	100.0	98.06	ug/L	-2	20	
Calcium	A	300000	321900	ug/L	7		
Magnesium	A	100000	98760	ug/L	-1		
Molybdenum	A	2000	2101	ug/L	5		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	42.60	ug/L	-15	20	
Arsenic	E	100.0	105.0	ug/L	5	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Cobalt	E	200.0	194.8	ug/L	-3	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	204.7	ug/L	2	20	
Nickel	E	200.0	190.2	ug/L	-5	20	
Sodium	E	250000	238700	ug/L	-5		
Vanadium	E	200.0	214.5	ug/L	7	20	
Zinc	E	100.0	88.14	ug/L	-12	20	
Iron	H	250000	272300	ug/L	9		
Selenium	H	100.0	112.9	ug/L	13	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	32226	-64.49
Scandium	A	1282606	773384	-39.70
Scandium	E	35324	23616	-33.14
Germanium	H	25354	8548	-66.29
Germanium	E	19198	12524	-34.76
Indium	A	1826336	1079770	-40.88
Yttrium	A	1853201	1132326	-38.90

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67103428

Date : 03/12/07 Reference: c12t0004
Sequence : MET06 c12t0 Analyzed : 03/12/07 20:06

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	672761	1282606	35324	90743	25354	19198	1826336	1431311	1853201	2265507
		LOWER LIMIT	201828	384782	10597	27223	7606	5759	547901	429393	555960	679652
		UPPER LIMIT	807313	1539127	42389	108891	30425	23038	2191603	1717573	2223841	2718608
016	ICB		684230	1283346	36574	84145	23489	19539	1801004	1394169	1826368	2202376
017	ICSA		529020	1131558	33312	86427	21783	17051	1424690	986296	1552431	1890899
018	ICSAB		484285	1088750	31352	84375	21080	16036	1387046	948270	1508758	1852688
023	BLANK	QC378765	395544	943631	25079	55213	17072	15990	1592670	1284645	1599844	2091640
024	BS	QC378766	456667	1092899	28724	64448	17744	15792	1646985	1264276	1722537	2157504
025	BSD	QC378767	438382	1049545	27591	61081	16927	15471	1611971	1240322	1669571	2108602
027	MSS	193222-001	604247	1227283	34198	63625	17746	18654	1702644	1293885	1764788	2148294
028	SER	QC378770	620715	1244672	33829	62738	17838	18611	1758675	1368113	1787782	2165300
029	MS	QC378768	559342	1193067	33653	65293	18078	18084	1662919	1280364	1728362	2105969
030	MSD	QC378769	537637	1168429	32153	63472	17654	17391	1633668	1262621	1697725	2074101
031	PDS	QC378771	508023	1141120	30985	63989	17728	16933	1562159	1190260	1665016	2038774
035	CCV		558143	1188859	32615	68305	19200	17998	1639568	1276764	1720957	2117912
039	CCB		572260	1163598	32687	61980	17377	18080	1675623	1323445	1706921	2089215
040	MSS	193222-001	589981	1181191	32214	59575	16980	18087	1685045	1325659	1698265	2101327
041	SER	QC378770	569453	1146839	31906	59606	17118	17889	1664830	1331133	1664475	2069335
042	MS	QC378768	568344	1151778	32740	60234	17203	18011	1662077	1316914	1686033	2077770
043	MSD	QC378769	582421	1185524	31884	59552	16993	17663	1688159	1342552	1721819	2131097
044	PDS	QC378771	527188	1146295	31017	61163	16943	17008	1585819	1242635	1664081	2045854
045	SAMPLE	193222-002	594825	1201589	33326	54399	15121	18180	1656413	1256792	1704312	2074426
046	SAMPLE	193222-003	574859	1201550	32661	53254	15117	17989	1680508	1290237	1728000	2114854
047	SAMPLE	193222-004	567162	1196318	33225	51132	14258	17862	1631204	1251287	1698072	2061843
048	SAMPLE	193222-005	550632	1114699	31346	51378	14641	17360	1614847	1282887	1616873	2031588
049	SAMPLE	193222-006	527889	1085768	29961	51851	14809	16722	1578406	1268165	1589206	1978003
053	CCV		576134	1192710	32387	64338	17939	17648	1623229	1250140	1688058	2068362
055	CCB		584178	1163969	32628	57838	16537	17927	1674348	1323160	1688471	2093106
058	SAMPLE	193222-007	554616	1176110	31270	51717	14529	17109	1636149	1241954	1668416	2061211
059	SAMPLE	193222-008	534427	1110405	31134	47945	13612	17318	1619520	1272286	1615783	2015162
060	SAMPLE	193222-001	571599	1166916	31887	46467	12933	17402	1592260	1229872	1639644	2021659
061	SAMPLE	193222-002	578305	1178764	32466	43089	11823	17581	1629297	1248761	1664868	2048944
062	SAMPLE	193222-003	538810	1152552	31148	44988	12728	17223	1591841	1234593	1644349	2016668
063	SAMPLE	193222-004	544809	1160726	31816	48210	13329	17194	1556335	1205877	1622267	1999430
064	SAMPLE	193222-005	517347	1057406	30085	50792	14494	16695	1520094	1221905	1536127	1932974
065	SAMPLE	193222-006	518930	1072875	29790	52614	15022	16647	1567247	1261356	1555977	1981551
066	SAMPLE	193222-007	535176	1146821	31479	53337	14854	17244	1579610	1216148	1625893	2023302
067	SAMPLE	193222-008	522818	1079035	30347	51889	14766	16978	1570777	1247356	1555908	1968860
071	CCV		539267	1139836	32252	53236	15001	17357	1554148	1197989	1601360	1999397
074	CCB		544480	1123633	31267	54186	15564	17129	1609502	1276154	1608566	2002503
079	CCV		548426	1172070	32661	59740	16910	17592	1585016	1232457	1660700	2053112
081	CCB		551101	1138251	31981	51956	14941	17315	1629017	1300721	1634215	2043455
084	ICSA		457003	1025111	29971	55112	14025	15477	1314511	919593	1422418	1738620
085	ICSAB		407122	963391	27839	53189	13555	14666	1267081	873326	1355100	1671175
090	BLANK	QC378693	359013	923596	24528	38198	11135	14684	1559003	1260896	1551050	2048933
091	BS	QC378694	359375	918109	23935	38671	10916	13873	1492432	1163421	1518326	1999554
092	BSD	QC378695	364206	927837	24488	38567	10698	14081	1477053	1149929	1516548	1976403
094	MSS	193108-001	446223	1009823	27576	42974	12426	15767	1571698	1266396	1537696	1997871
095	SER	QC378698	457731	1008095	27665	42347	12286	15997	1523636	1238196	1527336	1925385
096	MS	QC378696	447358	1015518	27498	41827	12074	15455	1526734	1234713	1522312	1948708
097	MSD	QC378697	448613	1021156	27673	42236	12225	15784	1538409	1236802	1526656	1963729

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67103428

Date : 03/12/07 Reference: c12t0004
Sequence : MET06 c12t0 Analyzed : 03/12/07 20:06

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
098	PDS	QC378699	443509	1026001	27786	42295	11912	15510	1467429	1138292	1516133	1926073
102	CCV		473857	1061584	28613	40785	11477	15769	1503074	1180026	1549197	1960410
104	CCB		474440	1037054	28268	38966	11104	15761	1531016	1240650	1530048	1944778
109	MSS	193108-017	439082	1001599	26439	41156	11695	14890	1477817	1201158	1487476	1900315
110	MS	QC378713	451949	1015044	27257	39530	11368	15459	1472549	1190402	1498153	1903126
111	MSD	QC378714	449613	1006610	26979	37876	10956	15409	1472782	1179727	1501270	1901718
112	SAMPLE	193108-002	440007	992053	26705	37557	10725	15079	1449181	1173752	1461417	1868294
113	SAMPLE	193108-003	448132	1003836	27212	36707	10466	15195	1454462	1155626	1480575	1884568
114	SAMPLE	193108-004	436034	985690	27109	36428	10288	15111	1426877	1144274	1445481	1861987
115	SAMPLE	193108-005	435328	980375	26814	37683	10911	15121	1436787	1153627	1448461	1859238
116	SAMPLE	193108-006	443369	992770	27290	38390	11208	15479	1477890	1197973	1472565	1884217
117	SAMPLE	193108-015	446649	1023080	27559	39731	11466	15389	1485863	1166414	1501081	1913045
118	SAMPLE	193108-016	449878	1016974	27854	40885	11861	15894	1492114	1194520	1507421	1905302
122	CCV		472755	1065035	28329	38017	10663	15612	1483105	1166025	1539145	1928184

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c12t0001	TUN				12-MAR-2007 19:48	1.0	1.0				1	
002	c12t0002	X	RINSE			12-MAR-2007 19:56	1.0					2	
003	c12t0003	X	RINSE			12-MAR-2007 20:01	1.0					2	
004	c12t0004	ICALBLK	CALBLANK			12-MAR-2007 20:06	1.0	1.0				2	
005	c12t0005	ICAL				12-MAR-2007 20:12	1.0	1.0				3	
006	c12t0006	ICAL				12-MAR-2007 20:17	1.0	1.0				4	
007	c12t0007	ICAL				12-MAR-2007 20:22	1.0	1.0				5	
008	c12t0008	ICAL				12-MAR-2007 20:27	1.0	1.0				6	
009	c12t0009	ICAL				12-MAR-2007 20:33	1.0	1.0				7	
010	c12t0010	ICAL				12-MAR-2007 20:39	1.0	1.0				8	
011	c12t0011	X	RINSE			12-MAR-2007 20:44	1.0					2	
012	c12t0012	ICV				12-MAR-2007 20:50	1.0	1.0			1	9	
013	c12t0013	X	RINSE			12-MAR-2007 20:56	1.0					2	
014	c12t0014	X				12-MAR-2007 21:01	1.0					2	
015	c12t0015	X				12-MAR-2007 21:07	1.0					2	
016	c12t0016	ICB				12-MAR-2007 21:12	1.0	1.0			1	2	640
017	c12t0017	ICSA				12-MAR-2007 21:17	1.0	1.0			1	10 2	7:CA=303400
018	c12t0018	ICSAB				12-MAR-2007 21:23	1.0	1.0			1	11 2	10:CA=309200
019	c12t0019	X	RINSE			12-MAR-2007 21:28	1.0					2	
020	c12t0020	X	RINSE			12-MAR-2007 21:33	1.0					2	
021	c12t0021	X	RINSE			12-MAR-2007 21:39	1.0					2	
022	c12t0022	X	RINSE			12-MAR-2007 21:44	1.0					2	
023	c12t0023	BLANK	QC378765	123000	Water	12-MAR-2007 21:49	1.0	1.0			1	2	
024	c12t0024	BS	QC378766	123000	Water	12-MAR-2007 21:55	1.0	1.0			1	2	
025	c12t0025	BSD	QC378767	123000	Water	12-MAR-2007 22:00	1.0	1.0			1	2	
026	c12t0026	X	RINSE			12-MAR-2007 22:05	1.0					2	
027	c12t0027	MSS	193222-001	123000	Water	12-MAR-2007 22:11	10.0	1.0	2		1	2	2:CA=36360.0
028	c12t0028	SER	QC378770	123000	Water	12-MAR-2007 22:16	50.0	1.0	2	3	1	2	
029	c12t0029	MS	QC378768	123000	Water	12-MAR-2007 22:21	10.0	1.0			1	2	2:CA=37220.0
030	c12t0030	MSD	QC378769	123000	Water	12-MAR-2007 22:27	10.0	1.0			1	2	2:CA=38600.0
031	c12t0031	PDS	QC378771	123000	Water	12-MAR-2007 22:32	10.0	1.0			1	12	2:CA=45920.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c12t0032	X	RINSE			12-MAR-2007 22:37	1.0					2	
033	c12t0033	X	RINSE			12-MAR-2007 22:42	1.0					2	
034	c12t0034	X	RINSE			12-MAR-2007 22:48	1.0					2	
035	c12t0035	CCV				12-MAR-2007 22:53	1.0	1.0			1	13	
036	c12t0036	X	RINSE			12-MAR-2007 22:58	1.0					2	
037	c12t0037	X				12-MAR-2007 23:05	1.0					2	
038	c12t0038	X				12-MAR-2007 23:10	1.0					2	
039	c12t0039	CCB				12-MAR-2007 23:16	1.0	1.0			1	2	
040	c12t0040	MSS	193222-001	123000	Water	12-MAR-2007 23:21	50.0	1.0	1		1	2	
041	c12t0041	SER	QC378770	123000	Water	12-MAR-2007 23:27	250.0	1.0			1	2	
042	c12t0042	MS	QC378768	123000	Water	12-MAR-2007 23:32	50.0	1.0			1	2	
043	c12t0043	MSD	QC378769	123000	Water	12-MAR-2007 23:37	50.0	1.0			1	2	
044	c12t0044	PDS	QC378771	123000	Water	12-MAR-2007 23:43	50.0	1.0			1	12	
045	c12t0045	SAMPLE	193222-002	123000	Water	12-MAR-2007 23:48	10.0	1.0	3		1	2	2:CA=38150.0
046	c12t0046	SAMPLE	193222-003	123000	Water	12-MAR-2007 23:53	10.0	1.0	1		1	2	1:MN=302.900
047	c12t0047	SAMPLE	193222-004	123000	Water	12-MAR-2007 23:58	10.0	1.0	5		1	2	3:CA=31960.0
048	c12t0048	SAMPLE	193222-005	123000	Water	13-MAR-2007 00:04	10.0	1.0	1		1	2	
049	c12t0049	SAMPLE	193222-006	123000	Water	13-MAR-2007 00:09	10.0	1.0			1	2	
050	c12t0050	X	RINSE			13-MAR-2007 00:15	1.0					2	
051	c12t0051	X	RINSE			13-MAR-2007 00:20	1.0					2	
052	c12t0052	X	RINSE			13-MAR-2007 00:25	1.0					2	
053	c12t0053	CCV				13-MAR-2007 00:30	1.0	1.0			1	13	
054	c12t0054	X	RINSE			13-MAR-2007 00:36	1.0					2	
055	c12t0055	CCB				13-MAR-2007 00:41	1.0	1.0			1	2	
056	c12t0056	X				13-MAR-2007 00:46	1.0					2	
057	c12t0057	X				13-MAR-2007 00:52	1.0					2	
058	c12t0058	SAMPLE	193222-007	123000	Water	13-MAR-2007 00:57	10.0	1.0	1		1	2	1:CA=47620.0
059	c12t0059	SAMPLE	193222-008	123000	Water	13-MAR-2007 01:03	10.0	1.0			1	2	
060	c12t0060	SAMPLE	193222-001	123000	Filtra	13-MAR-2007 01:08	10.0	1.0	2		1	2	2:CA=36670.0
061	c12t0061	SAMPLE	193222-002	123000	Filtra	13-MAR-2007 01:13	10.0	1.0	2		1	2	2:CA=40080.0
062	c12t0062	SAMPLE	193222-003	123000	Filtra	13-MAR-2007 01:19	10.0	1.0	1		1	2	1:MN=301.100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c12t0063	SAMPLE	193222-004	123000	Filtra	13-MAR-2007 01:24	10.0	1.0	3		1	2	3:CA=30990.0
064	c12t0064	SAMPLE	193222-005	123000	Filtra	13-MAR-2007 01:29	10.0	1.0	1		1	2	
065	c12t0065	SAMPLE	193222-006	123000	Filtra	13-MAR-2007 01:35	10.0	1.0			1	2	
066	c12t0066	SAMPLE	193222-007	123000	Filtra	13-MAR-2007 01:40	10.0	1.0	1		1	2	1:CA=50890.0
067	c12t0067	SAMPLE	193222-008	123000	Filtra	13-MAR-2007 01:46	10.0	1.0			1	2	
068	c12t0068	X	RINSE			13-MAR-2007 01:51	1.0					2	
069	c12t0069	X	RINSE			13-MAR-2007 01:56	1.0					2	
070	c12t0070	X	RINSE			13-MAR-2007 02:02	1.0					2	
071	c12t0071	CCV				13-MAR-2007 02:07	1.0	1.0			1	13	
072	c12t0072	X	RINSE			13-MAR-2007 02:12	1.0					2	
073	c12t0073	X				13-MAR-2007 02:17	1.0					2	
074	c12t0074	CCB				13-MAR-2007 02:23	1.0	1.0			1	2	
075	c12t0075	X				13-MAR-2007 02:28	1.0					2	
076	c12t0076	X	RINSE			13-MAR-2007 02:33	1.0					2	
077	c12t0077	X	RINSE			13-MAR-2007 02:39	1.0					2	
078	c12t0078	X	RINSE			13-MAR-2007 02:44	1.0					2	
079	c12t0079	CCV				13-MAR-2007 02:49	1.0	1.0			1	13	
080	c12t0080	X	RINSE			13-MAR-2007 02:55	1.0					2	
081	c12t0081	CCB				13-MAR-2007 03:01	1.0	1.0			1	2	
082	c12t0082	X				13-MAR-2007 03:06	1.0					2	
083	c12t0083	X				13-MAR-2007 03:11	1.0					2	
084	c12t0084	ICSA				13-MAR-2007 03:17	1.0	1.0			1	10 2	7:CA=297700
085	c12t0085	ICSAB				13-MAR-2007 03:22	1.0	1.0			1	11 2	10:CA=310000
086	c12t0086	X	RINSE			13-MAR-2007 03:27	1.0					2	
087	c12t0087	X	RINSE			13-MAR-2007 03:33	1.0					2	
088	c12t0088	X	RINSE			13-MAR-2007 03:38	1.0					2	
089	c12t0089	X	RINSE			13-MAR-2007 03:44	1.0					2	
090	c12t0090	BLANK	QC378693	122986	Filtra	13-MAR-2007 03:49	1.0	1.0	1		1	2	
091	c12t0091	BS	QC378694	122986	Filtra	13-MAR-2007 03:54	1.0	1.0	1	1	1	2	
092	c12t0092	BSD	QC378695	122986	Filtra	13-MAR-2007 03:59	1.0	1.0	1	1	1	2	
093	c12t0093	X	RINSE			13-MAR-2007 04:05	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/13/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c12t0094	MSS	193108-001	122986	Filtra	13-MAR-2007 04:11	10.0	1.0	3		1	2	
095	c12t0095	SER	QC378698	122986	Filtra	13-MAR-2007 04:16	50.0	1.0		1	1	2	
096	c12t0096	MS	QC378696	122986	Filtra	13-MAR-2007 04:21	10.0	1.0			1	2	
097	c12t0097	MSD	QC378697	122986	Filtra	13-MAR-2007 04:27	10.0	1.0			1	2	
098	c12t0098	PDS	QC378699	122986	Filtra	13-MAR-2007 04:32	10.0	1.0			1	12	
099	c12t0099	X	RINSE			13-MAR-2007 04:38	1.0					2	
100	c12t0100	X	RINSE			13-MAR-2007 04:44	1.0					2	
101	c12t0101	X	RINSE			13-MAR-2007 04:49	1.0					2	
102	c12t0102	CCV				13-MAR-2007 04:54	1.0	1.0	1		1	13	
103	c12t0103	X	RINSE			13-MAR-2007 04:59	1.0					2	
104	c12t0104	CCB				13-MAR-2007 05:05	1.0	1.0			1	2	
105	c12t0105	X				13-MAR-2007 05:10	1.0					2	
106	c12t0106	X				13-MAR-2007 05:15	1.0					2	
107	c12t0107	TUN				13-MAR-2007 05:20	1.0	1.0				1	
108	c12t0108	X	RINSE			13-MAR-2007 05:28	1.0					2	
109	c12t0109	MSS	193108-017	122986	Filtra	13-MAR-2007 05:33	10.0	1.0			1	2	643
110	c12t0110	MS	QC378713	122986	Filtra	13-MAR-2007 05:38	10.0	1.0	1		1	2	
111	c12t0111	MSD	QC378714	122986	Filtra	13-MAR-2007 05:44	10.0	1.0	1	2	1	2	
112	c12t0112	SAMPLE	193108-002	122986	Filtra	13-MAR-2007 05:49	10.0	1.0			1	2	
113	c12t0113	SAMPLE	193108-003	122986	Filtra	13-MAR-2007 05:54	10.0	1.0			1	2	
114	c12t0114	SAMPLE	193108-004	122986	Filtra	13-MAR-2007 05:59	10.0	1.0			1	2	
115	c12t0115	SAMPLE	193108-005	122986	Filtra	13-MAR-2007 06:05	10.0	1.0			1	2	
116	c12t0116	SAMPLE	193108-006	122986	Filtra	13-MAR-2007 06:10	10.0	1.0			1	2	
117	c12t0117	SAMPLE	193108-015	122986	Filtra	13-MAR-2007 06:16	10.0	1.0			1	2	
118	c12t0118	SAMPLE	193108-016	122986	Filtra	13-MAR-2007 06:21	10.0	1.0			1	2	
119	c12t0119	X	RINSE			13-MAR-2007 06:26	1.0					2	
120	c12t0120	X	RINSE			13-MAR-2007 06:32	1.0					2	
121	c12t0121	X	RINSE			13-MAR-2007 06:37	1.0					2	
122	c12t0122	CCV				13-MAR-2007 06:42	1.0	1.0	1		1	13	
123	c12t0123	X	RINSE			13-MAR-2007 06:48	1.0					2	
124	c12t0124	CCB				13-MAR-2007 06:53	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c12t0125	X				13-MAR-2007 06:58	1.0					2	
126	c12t0126	X				13-MAR-2007 07:04	1.0					2	
127	c12t0127	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 07:09	10.0	1.0	2		1	2	1:MN=210.300
128	c12t0128	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 07:14	10.0	1.0	2		1	2	1:NA=20120.0
129	c12t0129	SAMPLE	193108-020	122986	Filtra	13-MAR-2007 07:20	10.0	1.0	1		1	2	
130	c12t0130	X	RINSE			13-MAR-2007 07:25	1.0					2	
131	c12t0131	X	RINSE			13-MAR-2007 07:31	1.0					2	
132	c12t0132	X	RINSE			13-MAR-2007 07:36	1.0					2	
133	c12t0133	CCV				13-MAR-2007 07:41	1.0	1.0	3		1	13 2	
134	c12t0134	X	RINSE			13-MAR-2007 07:46	1.0					2	
135	c12t0135	X				13-MAR-2007 07:52	1.0					13 2	
136	c12t0136	X	RINSE			13-MAR-2007 07:57	1.0					2	
137	c12t0137	CCB				13-MAR-2007 08:03	1.0	1.0			1	2	
138	c12t0138	X				13-MAR-2007 08:08	1.0					2	
139	c12t0139	X				13-MAR-2007 08:13	1.0					2	
140	c12t0140	ICSA				13-MAR-2007 08:19	1.0	1.0			1	10 2	7:CA=312100
141	c12t0141	ICSAB				13-MAR-2007 08:24	1.0	1.0			1	11 2	10:CA=321900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67104645001
Units : ug/L

Date : 13-MAR-2007 16:23
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c13q0005	67104645005		13-MAR-2007 16:29	S5645
L2	c13q0006	67104645006		13-MAR-2007 16:34	S5648
L3	c13q0007	67104645007		13-MAR-2007 16:46	S5649
L4	c13q0008	67104645008		13-MAR-2007 16:53	S5650
L5	c13q0009	67104645009		13-MAR-2007 16:58	S5644
L6	c13q0010	67104645010		13-MAR-2007 17:03	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.9625	0.7166	0.6806	0.5676	0.5765	0.5634	BLNK	-5.3856	1.76731		0.6779	1.000	0.995	
Antimony	A	0.2912	0.2547	0.2948	0.2386	0.2438	0.2536	BLNK	-0.0165	3.97445		0.2628	1.000	0.995	
Barium	A	5.1262	0.9338	0.5405	0.1274	0.0879	0.0849	BLNK	-3.9358	11.9672		1.1501	1.000	0.995	
Beryllium	A	0.2939	0.2657	0.2811	0.2641	0.2638	0.2471	BLNK	-0.0039	3.99285		0.2693	0.999	0.995	
Cadmium	A	0.0918	0.0815	0.0935	0.0814	0.0820	0.0803	BLNK	-0.0022	12.4048		0.0851	1.000	0.995	
Calcium	A	0.1636	0.0503	0.0396	0.0232	0.0224	0.0218	BLNK	-55.952	45.8384		0.0535	1.000	0.995	
Lead	A	1.0245	0.7167	0.7267	0.6110	0.6221	0.6139	BLNK	-0.0621	1.62521		0.7192	1.000	0.995	
Magnesium	A	0.6547	0.5459	0.5357	0.4535	0.4591	0.4461	BLNK	-2.2585	2.22879		0.5158	1.000	0.995	
Molybdenum	A	0.2359	0.2024	0.2254	0.1980	0.2024	0.2190	BLNK	-0.0168	4.63748		0.2138	0.999	0.995	
Potassium	A	3.8670	1.3668	1.1168	0.7152	0.7002	0.6812	BLNK	-46.273	1.46391		1.4079	1.000	0.995	
Silver	A	0.4007	0.3565	0.3935	0.3488	0.3572	0.3486	BLNK	-0.0073	2.85461		0.3676	1.000	0.995	
Thallium	A	1.0677	0.8678	0.9221	0.8324	0.9492	1.0183	BLNK	-0.0171	0.99614		0.9429	0.999	0.995	
Arsenic	E	0.8624	0.6993	0.5704	0.5666	0.5798	0.5741	BLNK	-0.0367	1.73884		0.6421	1.000	0.995	
Chromium	E	6.7639	3.7852	3.1950	2.9957	2.9208	2.9001	BLNK	-0.1150	0.34454		3.7601	1.000	0.995	
Cobalt	E	5.2407	5.1706	4.8567	4.9443	4.8114	4.7202	BLNK	-0.0069	0.21103		4.9573	1.000	0.995	
Copper	E	21.502	12.418	8.9271	7.0876	6.6896	6.5303	BLNK	-0.5183	0.15285		10.526	1.000	0.995	
Manganese	E	3.0961	2.0527	1.8159	1.7881	1.7462	1.7197	BLNK	-0.0743	0.57993		2.0365	1.000	0.995	
Nickel	E	3.0408	1.7693	1.5011	1.3560	1.2681	1.2332	BLNK	-0.1707	0.80702		1.6947	1.000	0.995	
Sodium	E	2.0557	0.9654	0.7225	0.6220	0.5673	0.5612	BLNK	-26.987	1.78073		0.9157	1.000	0.995	
Vanadium	E	6.4105	3.0811	2.5443	2.2833	2.2547	2.2746	BLNK	-0.1786	0.44089		3.1414	1.000	0.995	
Zinc	E	21.465	13.539	3.2734	1.4356	1.0995	1.0287	BLNK	-3.1487	0.97688		6.9734	0.999	0.995	
Iron	H	1.9532	1.5860	1.5738	1.5313	1.4144	1.3971	BLNK	-4.4694	0.71404		1.5760	1.000	0.995	
Selenium	H	0.2852	0.2631	0.2865	0.3136	0.3030	0.2934	BLNK	-0.0684	3.38713		0.2908	1.000	0.995	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

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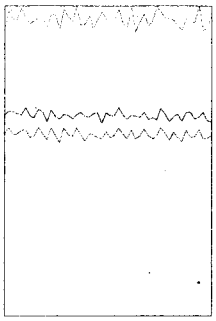
Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

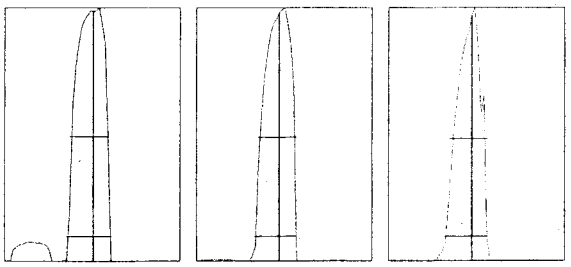
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	12535.0	12948.1	1.90	0.30
89	50,000	29078.0	29246.3	2.37	0.30
205	20,000	19392.0	19121.2	2.49	1.20

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.156%
Doubly Charged: 70/140 2.058%



m/z:	7	89	205
Height:	12,898	28,728	19,065
Axis:	7.05	88.95	204.95
W-50%:	0.65	0.65	0.60
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	7 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-130 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	1 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0017
Axis Offset	:	-0.03
QP Bias	:	-2 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

			m/z	Count(Mean)	RSD%
He Gas:	4	mL/min	51	14.0	26.78
Optional Gas:	---	%	59	2643.5	2.80
QP Focus:	-10	V	89	2227.4	2.54
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-13	V			

Integration Time: 0.1000sec

Tune File : h2.u

			m/z	Count(Mean)	RSD%
H2 Gas:	4	mL/min	59	523.5	14.61
Optional Gas:	---	%	78	0.1	342.56
QP Focus:	-8	V	89	5324.9	11.02
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-15	V			

Integration Time: 0.1000sec

Generated : Mar 13, 2007 15:52:32
Printed : Mar 13, 2007 15:54:11

P/A Factor Tuning Report

Acquired:Mar 13 2007 03:57 pm

Mass[amu]	Element	P/A Factor
6	Li	0.061896
7	(Li)	0.065211
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.089975
45	Sc	0.088317
51	V	0.083384
52	Cr	0.093107
55	Mn	0.096350
56	Fe	Sensitivity too high
59	Co	0.099044
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.101644
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.110216
111	Cd	Sensitivity too low
115	In	0.109855
118	(In)	0.110033
121	Sb	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.112625
205	Tl	0.118235
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.119102
209	Bi	0.120032

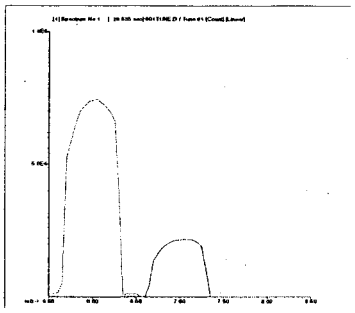
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C13q00.B\001TUNE.D
Date Acquired:	Mar 13 2007 04:05 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.26	5.00	
59 Co	1.00	5.00	
115 In	0.51	5.00	
205 Tl	0.56	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

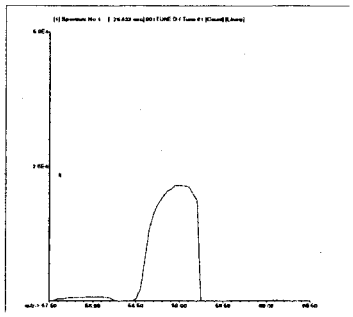
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

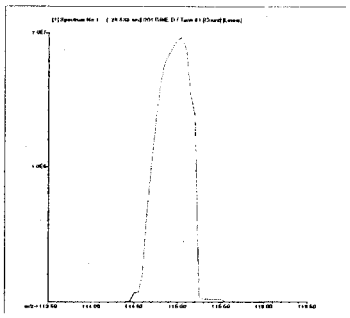
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



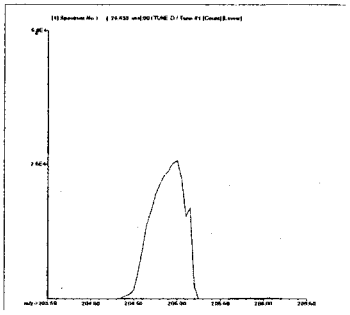
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004C
Date Acquired: Mar 13 2007 04:21 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:25 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	735115.69	A	9677.00	1.32
7	(Li)		P		
9	Be	14.44	P	5.09	35.25
23	Na	8725.18	P	156.00	1.79
24	Mg	21524.91	P	376.90	1.75
27	Al	64730.16	P	1551.00	2.40
39	K	671559.69	P	3793.00	0.56
44	Ca	25932.17	P	95.52	0.37
45	Sc	23412.11	P	167.80	0.72
45	Sc	28787.09	P	326.10	1.13
45	Sc	1062377.00	A	14210.00	1.34
51	V	233.34	P	25.63	10.98
52	Cr	192.23	P	8.82	4.59
55	Mn	73.70	P	11.98	16.25
56	Fe	2930.41	P	859.20	29.32
59	Co	18.89	P	1.11	5.88
60	Ni	121.85	P	11.13	9.13
63	Cu	1035.24	P	31.14	3.01
65	Cu	527.42	P	15.33	2.91
66	Zn	983.75	P	24.00	2.44
72	Ge	6030.63	P	70.62	1.17
72	Ge	15262.54	P	114.20	0.75
75	As	6.44	P	1.39	21.54
78	Se	2.44	P	1.39	56.78
89	Y	1639670.00	A	8544.00	0.52
98	Mo	118.89	P	5.09	4.28
107	Ag	81.11	P	24.57	30.29
111	Cd	5.56	P	3.85	69.28
115	In	1591912.00	A	5109.00	0.32
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	132.23	P	20.09	15.19
137	Ba	13131.37	P	171.50	1.31
159	Tb	1996313.00	A	10040.00	0.50
205	Tl	397.80	P	38.63	9.71
208	Pb	1526.76	P	131.70	8.63
209	Bi	1159222.00	A	10140.00	0.87

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 13 2007 04:26 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:25 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	734846.38	A	9560.00	1.30
7 (Li)		P		
9 Be	432.25	P	50.15	11.60
23 Na	12240.06	P	453.30	3.70
24 Mg	140636.09	P	493.00	0.35
27 Al	206751.80	P	969.00	0.47
39 K	830652.31	A	5967.00	0.72
44 Ca	35142.12	P	102.10	0.29
45 Sc	25238.92	P	378.60	1.50
45 Sc	29781.10	P	861.80	2.89
45 Sc	1074119.00	A	8961.00	0.83
51 V	381.49	P	19.32	5.06
52 Cr	402.97	P	29.70	7.37
55 Mn	184.45	P	23.52	12.75
56 Fe	9857.99	P	92.87	0.94
59 Co	312.23	P	15.56	4.98
60 Ni	181.11	P	20.03	11.06
63 Cu	675.58	P	36.23	5.36
65 Cu	326.30	P	3.90	1.20
66 Zn	674.10	P	14.50	2.15
72 Ge	6623.87	P	109.50	1.65
72 Ge	15706.42	P	245.30	1.56
75 As	27.11	P	4.02	14.82
78 Se	3.78	P	1.02	26.95
89 Y	1654068.00	A	17240.00	1.04
98 Mo	780.05	P	60.83	7.80
99 (Ru)	0.00	P	0.00	0.00
107 Ag	1274.55	P	64.50	5.06
111 Cd	292.24	P	28.35	9.70
115 In	1591241.00	A	19510.00	1.23
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	926.73	P	44.85	4.84
137 Ba	20549.74	P	169.30	0.82
159 Tb	2004381.00	A	11880.00	0.59
205 Tl	1206.77	P	37.57	3.11
208 Pb	4107.09	P	78.11	1.90
209 Bi	1130286.00	M	33950.00	3.00

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	734846.44	1.30	735115.69	100.0	80 - 120	
45 Sc	25238.92	1.50	23412.12	107.8	80 - 120	
45 Sc	29781.10	2.89	28787.09	103.5	80 - 120	
45 Sc	1074119.50	0.83	1062376.60	101.1	80 - 120	
72 Ge	6623.86	1.65	6030.63	109.8	80 - 120	
72 Ge	15706.42	1.56	15262.54	102.9	80 - 120	
89 Y	1654067.60	1.04	1639670.30	100.9	80 - 120	
115 In	1591241.10	1.23	1591912.00	100.0	80 - 120	
159 Tb	2004381.00	0.59	1996313.30	100.4	80 - 120	
209 Bi	1130286.00	3.00	1159221.60	97.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 13 2007 04:32 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:30 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	752806.31	A	1077.00	0.14
7 (Li)		P		
9 Be	2000.21	P	64.90	3.24
23 Na	28966.68	P	612.90	2.12
24 Mg	603833.63	P	5084.00	0.84
27 Al	792568.81	P	3368.00	0.42
39 K	1511635.00	A	8799.00	0.58
44 Ca	55589.97	P	911.40	1.64
45 Sc	27044.15	P	303.80	1.12
45 Sc	30005.10	P	252.60	0.84
45 Sc	1106111.00	A	15980.00	1.44
51 V	924.49	P	34.66	3.75
52 Cr	1135.62	P	18.96	1.67
55 Mn	615.95	P	28.77	4.67
56 Fe	42888.54	P	287.90	0.67
59 Co	1551.22	P	39.08	2.52
60 Ni	530.76	P	22.34	4.21
63 Cu	1984.98	P	48.96	2.47
65 Cu	993.75	P	21.27	2.14
66 Zn	2163.90	P	39.51	1.83
72 Ge	7011.48	P	98.64	1.41
72 Ge	15984.10	P	82.56	0.52
75 As	111.78	P	3.67	3.29
78 Se	18.44	P	2.69	14.61
89 Y	1712874.00	A	18730.00	1.09
98 Mo	3467.22	P	124.60	3.59
99 (Ru)	5.56	P	1.93	34.65
107 Ag	5872.60	P	118.60	2.02
111 Cd	1342.35	P	44.77	3.34
115 In	1647611.00	A	19210.00	1.17
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4198.59	P	270.50	6.44
137 Ba	19465.91	P	209.80	1.08
159 Tb	2084639.00	A	26550.00	1.27
205 Tl	5207.91	P	74.27	1.43
208 Pb	14942.92	P	392.80	2.63
209 Bi	1200418.00	A	26690.00	2.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	752806.31	0.14	735115.69	102.4	80 - 120	
45 Sc	27044.15	1.12	23412.12	115.5	80 - 120	
45 Sc	30005.11	0.84	28787.09	104.2	80 - 120	
45 Sc	1106110.80	1.44	1062376.60	104.1	80 - 120	
72 Ge	7011.48	1.41	6030.63	116.3	80 - 120	
72 Ge	15984.10	0.52	15262.54	104.7	80 - 120	
89 Y	1712874.50	1.09	1639670.30	104.5	80 - 120	
115 In	1647611.40	1.17	1591912.00	103.5	80 - 120	
159 Tb	2084638.90	1.27	1996313.30	104.4	80 - 120	
209 Bi	1200418.10	2.22	1159221.60	103.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 13 2007 04:44 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	705774.63	A	35230.00	4.99
7 (Li)		P		
9 Be	3958.46	P	70.04	1.77
23 Na	45841.97	P	379.80	0.83
24 Mg	1069425.00	A	10390.00	0.97
27 Al	1358796.00	A	13560.00	1.00
39 K	2230404.00	A	372.00	0.02
44 Ca	79005.76	P	423.40	0.54
45 Sc	22758.44	P	34.52	0.15
45 Sc	31782.96	P	1694.00	5.33
45 Sc	1003217.00	A	82140.00	8.19
51 V	1614.93	P	19.42	1.20
52 Cr	2026.84	P	26.27	1.30
55 Mn	1150.80	P	72.29	6.28
56 Fe	71635.95	P	228.20	0.32
59 Co	3081.49	P	17.64	0.57
60 Ni	953.01	P	35.44	3.72
63 Cu	2980.72	P	42.47	1.42
65 Cu	1447.50	P	45.62	3.15
66 Zn	1094.13	P	34.36	3.14
72 Ge	5850.92	P	92.63	1.58
72 Ge	16715.37	P	606.60	3.63
75 As	190.45	P	3.42	1.80
78 Se	33.56	P	3.67	10.94
89 Y	1559396.00	A	133500.00	8.56
98 Mo	6994.27	P	76.95	1.10
99 (Ru)	0.00	P	0.00	0.00
107 Ag	11861.17	P	32.40	0.27
111 Cd	2814.86	P	75.18	2.67
115 In	1513954.00	A	124300.00	8.21
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8876.57	P	126.10	1.42
137 Ba	20555.40	P	159.00	0.77
159 Tb	1912696.00	A	168700.00	8.82
205 Tl	10143.28	P	133.70	1.32
208 Pb	27675.12	P	626.10	2.26
209 Bi	1106262.00	M	100400.00	9.08

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705774.56	4.99	735115.69	96.0	80 - 120	
45 Sc	22758.45	0.15	23412.12	97.2	80 - 120	
45 Sc	31782.96	5.33	28787.09	110.4	80 - 120	
45 Sc	1003217.40	8.19	1062376.60	94.4	80 - 120	
72 Ge	5850.92	1.58	6030.63	97.0	80 - 120	
72 Ge	16715.37	3.63	15262.54	109.5	80 - 120	
89 Y	1559396.40	8.56	1639670.30	95.1	80 - 120	
115 In	1513953.50	8.21	1591912.00	95.1	80 - 120	
159 Tb	1912695.60	8.82	1996313.30	95.8	80 - 120	
209 Bi	1106261.60	9.08	1159221.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 13 2007 04:51 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:49 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	763591.63	A	27270.00	3.57
7 (Li)		P		
9 Be	40290.04	P	237.60	0.59
23 Na	372354.19	P	1193.00	0.32
24 Mg	10108980.00	A	43380.00	0.43
27 Al	12650910.00	A	118400.00	0.94
39 K	15945000.00	A	50140.00	0.31
44 Ca	516743.59	P	2934.00	0.57
45 Sc	21069.55	P	109.40	0.52
45 Sc	29933.87	P	180.80	0.60
45 Sc	1116917.00	A	61080.00	5.47
51 V	13668.94	P	115.60	0.85
52 Cr	17934.46	P	150.20	0.84
55 Mn	10704.90	P	123.70	1.16
56 Fe	645275.81	P	4734.00	0.73
59 Co	29600.86	P	294.60	1.00
60 Ni	8117.23	P	181.30	2.23
63 Cu	22485.17	P	81.20	0.36
65 Cu	11164.55	P	73.20	0.66
66 Zn	4553.76	P	133.40	2.93
72 Ge	5400.36	P	10.09	0.19
72 Ge	15862.86	P	122.80	0.77
75 As	1797.46	P	22.67	1.26
78 Se	338.67	P	19.91	5.88
89 Y	1707484.00	A	75560.00	4.43
98 Mo	67547.29	P	642.10	0.95
99 (Ru)	11.11	P	3.85	34.64
107 Ag	114840.20	P	1132.00	0.99
111 Cd	26807.27	P	500.40	1.87
115 In	1648783.00	A	75490.00	4.58
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	78557.77	P	478.60	0.61
137 Ba	53338.47	P	249.80	0.47
159 Tb	2096947.00	A	95390.00	4.55
205 Tl	99822.75	P	210.30	0.21
208 Pb	255900.91	P	710.90	0.28
209 Bi	1200119.00	A	41920.00	3.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	763591.56	3.57	735115.69	103.9	80 - 120	
45 Sc	21069.55	0.52	23412.12	90.0	80 - 120	
45 Sc	29933.87	0.60	28787.09	104.0	80 - 120	
45 Sc	1116917.50	5.47	1062376.60	105.1	80 - 120	
72 Ge	5400.36	0.19	6030.63	89.5	80 - 120	
72 Ge	15862.86	0.77	15262.54	103.9	80 - 120	
89 Y	1707483.90	4.43	1639670.30	104.1	80 - 120	
115 In	1648783.40	4.58	1591912.00	103.6	80 - 120	
159 Tb	2096947.50	4.55	1996313.30	105.0	80 - 120	
209 Bi	1200118.50	3.49	1159221.60	103.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 13 2007 04:56 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:54 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	735560.63	A	9127.00	1.24
7 (Li)		P		
9 Be	388091.41	P	2782.00	0.72
23 Na	3311316.00	A	23100.00	0.70
24 Mg	97883408.00	A	369700.00	0.38
27 Al	############	A	463000.00	0.38
39 K	############	A	331900.00	0.22
44 Ca	4782789.00	A	18850.00	0.39
45 Sc	21732.42	P	210.90	0.97
45 Sc	29185.26	P	198.10	0.68
45 Sc	1066045.00	A	10370.00	0.97
51 V	131608.20	P	484.90	0.37
52 Cr	170488.41	P	785.40	0.46
55 Mn	101923.40	P	182.00	0.18
56 Fe	6147439.00	A	13930.00	0.23
59 Co	280836.91	P	895.60	0.32
60 Ni	74014.14	P	240.20	0.32
63 Cu	199792.00	P	689.70	0.35
65 Cu	98664.59	P	226.70	0.23
66 Zn	32837.11	P	452.50	1.38
72 Ge	5475.58	P	50.66	0.93
72 Ge	14933.31	P	114.90	0.77
75 As	17317.48	P	115.10	0.66
78 Se	3318.42	P	69.91	2.11
89 Y	1595375.00	A	6869.00	0.43
98 Mo	645700.31	P	3149.00	0.49
99 (Ru)	45.56	P	1.93	4.23
107 Ag	1060101.00	A	6543.00	0.62
111 Cd	243194.91	P	1141.00	0.47
115 In	1483762.00	A	5905.00	0.40
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	723547.00	P	1908.00	0.26
137 Ba	338947.31	P	225.70	0.07
159 Tb	1927210.00	A	3536.00	0.18
205 Tl	918503.19	P	3083.00	0.34
208 Pb	2397853.00	A	8379.00	0.35
209 Bi	967700.81	P	2282.00	0.24

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735560.56	1.24	735115.69	100.1	80 - 120	
45 Sc	21732.42	0.97	23412.12	92.8	80 - 120	
45 Sc	29185.26	0.68	28787.09	101.4	80 - 120	
45 Sc	1066044.90	0.97	1062376.60	100.3	80 - 120	
72 Ge	5475.58	0.93	6030.63	90.8	80 - 120	
72 Ge	14933.31	0.77	15262.54	97.8	80 - 120	
89 Y	1595375.10	0.43	1639670.30	97.3	80 - 120	
115 In	1483761.80	0.40	1591912.00	93.2	80 - 120	
159 Tb	1927210.40	0.18	1996313.30	96.5	80 - 120	
209 Bi	967700.81	0.24	1159221.60	83.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 13 2007 05:01 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 05:00 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	715948.63	A	4802.00	0.67
7 (Li)		P		
9 Be	707567.88	A	2754.00	0.39
23 Na	6293969.00	A	46750.00	0.74
24 Mg	###########	A	236000.00	0.13
27 Al	###########	A	344700.00	0.15
39 K	###########	A	226100.00	0.08
44 Ca	9175356.00	A	15180.00	0.17
45 Sc	21042.45	P	180.80	0.86
45 Sc	28040.41	P	223.30	0.80
45 Sc	1054532.00	A	4546.00	0.43
51 V	255115.59	P	578.50	0.23
52 Cr	325284.19	P	3096.00	0.95
55 Mn	192886.41	P	1362.00	0.71
56 Fe	11759350.00	A	47090.00	0.40
59 Co	529405.81	P	267.30	0.05
60 Ni	138317.80	P	491.40	0.36
63 Cu	367192.59	P	423.90	0.12
65 Cu	181847.00	P	862.00	0.47
66 Zn	57840.53	P	366.20	0.63
72 Ge	5180.28	P	54.47	1.05
72 Ge	14057.95	P	127.40	0.91
75 As	32279.79	P	267.10	0.83
78 Se	6078.92	P	47.70	0.78
89 Y	1514760.00	A	12500.00	0.83
98 Mo	1327049.00	A	8534.00	0.64
99 (Ru)	68.89	P	15.03	21.82
107 Ag	1934783.00	A	5348.00	0.28
111 Cd	445557.59	P	1478.00	0.33
115 In	1387640.00	A	13700.00	0.99
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1407568.00	A	7913.00	0.56
137 Ba	621156.50	P	1486.00	0.24
159 Tb	1829047.00	A	4781.00	0.26
205 Tl	1812933.00	A	11170.00	0.62
208 Pb	4491443.00	A	16500.00	0.37
209 Bi	890285.31	P	7569.00	0.85

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	715948.63	0.67	735115.69	97.4	80 - 120	
45 Sc	21042.45	0.86	23412.12	89.9	80 - 120	
45 Sc	28040.41	0.80	28787.09	97.4	80 - 120	
45 Sc	1054532.10	0.43	1062376.60	99.3	80 - 120	
72 Ge	5180.28	1.05	6030.63	85.9	80 - 120	
72 Ge	14057.95	0.91	15262.54	92.1	80 - 120	
89 Y	1514760.00	0.83	1639670.30	92.4	80 - 120	
115 In	1387639.80	0.99	1591912.00	87.2	80 - 120	
159 Tb	1829046.60	0.26	1996313.30	91.6	80 - 120	
209 Bi	890285.31	0.85	1159221.60	76.8	80 - 120	ISFail

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Fail**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645014 File : c13q0014 Time : 13-MAR-2007 17:25
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5653, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6779	0.5586	10000	9866	ug/L	-1	10	
Antimony	A	0.2628	0.2444	100.0	97.13	ug/L	-3	10	
Barium	A	1.1501	0.0808	100.0	92.75	ug/L	-7	10	
Beryllium	A	0.2693	0.2559	100.0	102.2	ug/L	2	10	
Cadmium	A	0.0851	0.0800	100.0	99.28	ug/L	-1	10	
Calcium	A	0.0535	0.0219	10000	9977	ug/L	0	10	
Lead	A	0.7192	0.6046	100.0	98.19	ug/L	-2	10	
Magnesium	A	0.5158	0.4464	10000	9948	ug/L	-1	10	
Molybdenum	A	0.2138	0.1998	100.0	92.63	ug/L	-7	10	
Potassium	A	1.4079	0.6850	10000	9982	ug/L	0	10	
Silver	A	0.3676	0.3779	100.0	107.9	ug/L	8	10	
Thallium	A	0.9429	0.9056	50.00	45.08	ug/L	-10	10	
Arsenic	E	0.6421	0.5798	100.0	100.8	ug/L	1	10	
Chromium	E	3.7601	2.9068	100.0	100.0	ug/L	0	10	
Cobalt	E	4.9573	4.7186	100.0	99.57	ug/L	0	10	
Copper	E	10.526	6.4952	100.0	98.76	ug/L	-1	10	
Manganese	E	2.0365	1.7067	100.0	98.90	ug/L	-1	10	
Nickel	E	1.6947	1.2494	100.0	100.7	ug/L	1	10	
Sodium	E	0.9157	0.5511	10000	9787	ug/L	-2	10	
Vanadium	E	3.1414	2.2290	100.0	98.09	ug/L	-2	10	
Zinc	E	6.9734	1.0440	100.0	98.84	ug/L	-1	10	
Iron	H	1.5760	1.4293	10000	10200	ug/L	2	10	
Selenium	H	0.2908	0.3075	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	758383	3.17
Scandium	A	1062377	1101608	3.69
Scandium	E	28787	29877	3.79
Scandium	H	23412	20850	-10.94
Germanium	H	6031	5180	-14.11
Germanium	E	15263	15258	-0.03
Indium	A	1591912	1517864	-4.65
Bismuth	A	1159222	982476	-15.25
Yttrium	A	1639670	1633252	-0.39
Terbium	A	1996313	1972545	-1.19

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645028 File : c13q0028 Time : 13-MAR-2007 18:43
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5474	10000	9669	ug/L	-3	10	
Antimony	A	0.2628	0.2509	100.0	99.68	ug/L	0	10	
Barium	A	1.1501	0.0820	100.0	94.20	ug/L	-6	10	
Beryllium	A	0.2693	0.2615	100.0	104.4	ug/L	4	10	
Cadmium	A	0.0851	0.0814	100.0	101.0	ug/L	1	10	
Calcium	A	0.0535	0.0222	10000	10100	ug/L	1	10	
Lead	A	0.7192	0.6236	100.0	101.3	ug/L	1	10	
Magnesium	A	0.5158	0.4354	10000	9701	ug/L	-3	10	
Molybdenum	A	0.2138	0.2018	100.0	93.55	ug/L	-6	10	
Potassium	A	1.4079	0.6888	10000	10040	ug/L	0	10	
Silver	A	0.3676	0.3799	100.0	108.5	ug/L	9	10	
Thallium	A	0.9429	0.9132	50.00	45.47	ug/L	-9	10	
Arsenic	E	0.6421	0.5872	100.0	102.1	ug/L	2	10	
Chromium	E	3.7601	2.9725	100.0	102.3	ug/L	2	10	
Cobalt	E	4.9573	4.8962	100.0	103.3	ug/L	3	10	
Copper	E	10.526	6.4666	100.0	98.32	ug/L	-2	10	
Manganese	E	2.0365	1.7460	100.0	101.2	ug/L	1	10	
Nickel	E	1.6947	1.2894	100.0	103.9	ug/L	4	10	
Sodium	E	0.9157	0.5422	10000	9629	ug/L	-4	10	
Vanadium	E	3.1414	2.2768	100.0	100.2	ug/L	0	10	
Zinc	E	6.9734	1.0553	100.0	99.95	ug/L	0	10	
Iron	H	1.5760	1.5188	10000	10840	ug/L	8	10	
Selenium	H	0.2908	0.3409	100.0	115.4	ug/L	**15**	10	c+ ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	594507	-19.13
Scandium	A	1062377	931401	-12.33
Scandium	E	28787	25139	-12.67
Scandium	H	23412	12778	-45.42
Germanium	H	6031	3114	-48.36
Germanium	E	15263	13486	-11.64
Indium	A	1591912	1413929	-11.18
Bismuth	A	1159222	952819	-17.81
Yttrium	A	1639670	1506984	-8.09
Terbium	A	1996313	1874910	-6.08

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645044 File : c13q0044 Time : 13-MAR-2007 20:09
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5539	10000	9784	ug/L	-2	10	
Antimony	A	0.2628	0.2491	100.0	99.00	ug/L	-1	10	
Barium	A	1.1501	0.0815	100.0	93.60	ug/L	-6	10	
Beryllium	A	0.2693	0.2625	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0851	0.0811	100.0	100.6	ug/L	1	10	
Calcium	A	0.0535	0.0223	10000	10160	ug/L	2	10	
Lead	A	0.7192	0.6289	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5158	0.4419	10000	9846	ug/L	-2	10	
Molybdenum	A	0.2138	0.2025	100.0	93.90	ug/L	-6	10	
Potassium	A	1.4079	0.6943	10000	10120	ug/L	1	10	
Silver	A	0.3676	0.3746	100.0	106.9	ug/L	7	10	
Thallium	A	0.9429	0.9088	50.00	45.24	ug/L	-10	10	
Arsenic	E	0.6421	0.5841	100.0	101.5	ug/L	2	10	
Chromium	E	3.7601	2.9676	100.0	102.1	ug/L	2	10	
Cobalt	E	4.9573	4.8918	100.0	103.2	ug/L	3	10	
Copper	E	10.526	6.5274	100.0	99.25	ug/L	-1	10	
Manganese	E	2.0365	1.7505	100.0	101.4	ug/L	1	10	
Nickel	E	1.6947	1.2938	100.0	104.2	ug/L	4	10	
Sodium	E	0.9157	0.5487	10000	9743	ug/L	-3	10	
Vanadium	E	3.1414	2.2767	100.0	100.2	ug/L	0	10	
Zinc	E	6.9734	1.0577	100.0	100.2	ug/L	0	10	
Iron	H	1.5760	1.5209	10000	10850	ug/L	9	10	
Selenium	H	0.2908	0.3556	100.0	120.4	ug/L	**20**	10	c+ ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	613951	-16.48
Scandium	A	1062377	932416	-12.23
Scandium	E	28787	25273	-12.21
Scandium	H	23412	10153	-56.63
Germanium	H	6031	2410	-60.04
Germanium	E	15263	13471	-11.74
Indium	A	1591912	1419670	-10.82
Bismuth	A	1159222	967942	-16.50
Yttrium	A	1639670	1499622	-8.54
Terbium	A	1996313	1876171	-6.02

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645067 File : c13q0067 Time : 13-MAR-2007 22:12
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5612	10000	9913	ug/L	-1	10	
Antimony	A	0.2628	0.2488	100.0	98.86	ug/L	-1	10	
Barium	A	1.1501	0.0805	100.0	92.37	ug/L	-8	10	
Beryllium	A	0.2693	0.2739	100.0	109.3	ug/L	9	10	
Cadmium	A	0.0851	0.0807	100.0	100.2	ug/L	0	10	
Calcium	A	0.0535	0.0229	10000	10430	ug/L	4	10	
Lead	A	0.7192	0.6230	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5158	0.4439	10000	9892	ug/L	-1	10	
Molybdenum	A	0.2138	0.2041	100.0	94.63	ug/L	-5	10	
Potassium	A	1.4079	0.7116	10000	10370	ug/L	4	10	
Silver	A	0.3676	0.3639	100.0	103.9	ug/L	4	10	
Thallium	A	0.9429	0.8941	50.00	44.51	ug/L	**-11**	10	c- ***
Arsenic	E	0.6421	0.5789	100.0	100.6	ug/L	1	10	
Chromium	E	3.7601	3.0703	100.0	105.7	ug/L	6	10	
Cobalt	E	4.9573	5.1359	100.0	108.4	ug/L	8	10	
Copper	E	10.526	6.4495	100.0	98.06	ug/L	-2	10	
Manganese	E	2.0365	1.7983	100.0	104.2	ug/L	4	10	
Nickel	E	1.6947	1.3619	100.0	109.7	ug/L	10	10	
Sodium	E	0.9157	0.5460	10000	9696	ug/L	-3	10	
Vanadium	E	3.1414	2.3386	100.0	102.9	ug/L	3	10	
Zinc	E	6.9734	1.0376	100.0	98.21	ug/L	-2	10	
Iron	H	1.5760	1.7192	10000	12270	ug/L	**23**	10	c+ i- ***
Selenium	H	0.2908	0.4366	100.0	147.8	ug/L	**48**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	430782	-41.40
Scandium	A	1062377	681099	-35.89
Scandium	E	28787	17595	-38.88
Scandium	H	23412	3319	**-85.82 ***
Germanium	H	6031	735	**-87.81 ***
Germanium	E	15263	10014	-34.39
Indium	A	1591912	1166215	-26.74
Bismuth	A	1159222	834709	-27.99
Yttrium	A	1639670	1191857	-27.31
Terbium	A	1996313	1571131	-21.30

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645089 File : c13q0089 Time : 14-MAR-2007 00:10
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5601	10000	9892	ug/L	-1	10	
Antimony	A	0.2628	0.2475	100.0	98.35	ug/L	-2	10	
Barium	A	1.1501	0.0804	100.0	92.26	ug/L	-8	10	
Beryllium	A	0.2693	0.2683	100.0	107.1	ug/L	7	10	
Cadmium	A	0.0851	0.0806	100.0	99.94	ug/L	0	10	
Calcium	A	0.0535	0.0228	10000	10370	ug/L	4	10	
Lead	A	0.7192	0.6162	100.0	100.1	ug/L	0	10	
Magnesium	A	0.5158	0.4451	10000	9918	ug/L	-1	10	
Molybdenum	A	0.2138	0.2036	100.0	94.41	ug/L	-6	10	
Potassium	A	1.4079	0.7072	10000	10310	ug/L	3	10	
Silver	A	0.3676	0.3645	100.0	104.0	ug/L	4	10	
Thallium	A	0.9429	0.8849	50.00	44.06	ug/L	**-12**	10	c- ***
Arsenic	E	0.6421	0.5799	100.0	100.8	ug/L	1	10	
Chromium	E	3.7601	3.0307	100.0	104.3	ug/L	4	10	
Cobalt	E	4.9573	5.0557	100.0	106.7	ug/L	7	10	
Copper	E	10.526	6.4891	100.0	98.67	ug/L	-1	10	
Manganese	E	2.0365	1.7631	100.0	102.2	ug/L	2	10	
Nickel	E	1.6947	1.3507	100.0	108.8	ug/L	9	10	
Sodium	E	0.9157	0.5415	10000	9616	ug/L	-4	10	
Vanadium	E	3.1414	2.3049	100.0	101.4	ug/L	1	10	
Zinc	E	6.9734	1.0454	100.0	98.97	ug/L	-1	10	
Iron	H	1.5760	1.8717	10000	13360	ug/L	**34**	10	c+ i- ***
Selenium	H	0.2908	0.5505	100.0	186.4	ug/L	**86**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	466559	-36.53
Scandium	A	1062377	723141	-31.93
Scandium	E	28787	18326	-36.34
Scandium	H	23412	1987	**-91.51 ***
Germanium	H	6031	388	**-93.57 ***
Germanium	E	15263	10245	-32.87
Indium	A	1591912	1193032	-25.06
Bismuth	A	1159222	854005	-26.33
Yttrium	A	1639670	1228324	-25.09
Terbium	A	1996313	1607498	-19.48

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645099 File : c13q0099 Time : 14-MAR-2007 01:04
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5614	10000	9916	ug/L	-1	10	
Antimony	A	0.2628	0.2460	100.0	97.76	ug/L	-2	10	
Barium	A	1.1501	0.0811	100.0	93.06	ug/L	-7	10	
Beryllium	A	0.2693	0.2672	100.0	106.7	ug/L	7	10	
Cadmium	A	0.0851	0.0801	100.0	99.41	ug/L	-1	10	
Calcium	A	0.0535	0.0228	10000	10380	ug/L	4	10	
Lead	A	0.7192	0.6189	100.0	100.5	ug/L	1	10	
Magnesium	A	0.5158	0.4450	10000	9915	ug/L	-1	10	
Molybdenum	A	0.2138	0.2003	100.0	92.89	ug/L	-7	10	
Potassium	A	1.4079	0.7113	10000	10370	ug/L	4	10	
Silver	A	0.3676	0.3636	100.0	103.8	ug/L	4	10	
Thallium	A	0.9429	0.8815	50.00	43.89	ug/L	**-12**	10	c- ***
Arsenic	E	0.6421	0.5819	100.0	101.2	ug/L	1	10	
Chromium	E	3.7601	3.0173	100.0	103.8	ug/L	4	10	
Cobalt	E	4.9573	5.0436	100.0	106.4	ug/L	6	10	
Copper	E	10.526	6.4133	100.0	97.51	ug/L	-2	10	
Manganese	E	2.0365	1.7590	100.0	101.9	ug/L	2	10	
Nickel	E	1.6947	1.3523	100.0	109.0	ug/L	9	10	
Sodium	E	0.9157	0.5362	10000	9521	ug/L	-5	10	
Vanadium	E	3.1414	2.2938	100.0	101.0	ug/L	1	10	
Zinc	E	6.9734	1.0280	100.0	97.27	ug/L	-3	10	
Iron	H	1.5760	1.8538	10000	13230	ug/L	**32**	10	c+ i- ***
Selenium	H	0.2908	0.5376	100.0	182.0	ug/L	**82**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	478021	-34.97
Scandium	A	1062377	735138	-30.80
Scandium	E	28787	18401	-36.08
Scandium	H	23412	2021	**-91.37 ***
Germanium	H	6031	393	**-93.48 ***
Germanium	E	15263	10391	-31.92
Indium	A	1591912	1209475	-24.02
Bismuth	A	1159222	859926	-25.82
Yttrium	A	1639670	1255490	-23.43
Terbium	A	1996313	1611371	-19.28

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645017 File : c13q0017 Time : 13-MAR-2007 17:41
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	1.716	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007430]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.003934]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.07643]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.07389]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06003]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03707]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	748490	1.82
Scandium	A	1062377	1074057	1.10
Scandium	E	28787	29924	3.95
Scandium	H	23412	18529	-20.86
Germanium	H	6031	4795	-20.49
Germanium	E	15263	15889	4.10
Indium	A	1591912	1577058	-0.93
Bismuth	A	1159222	1127120	-2.77
Yttrium	A	1639670	1651641	0.73
Terbium	A	1996313	1984415	-0.60

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645031 File : c13q0031 Time : 13-MAR-2007 18:59
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.378	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005678]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01899]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	604051	-17.83
Scandium	A	1062377	916831	-13.70
Scandium	E	28787	25109	-12.78
Scandium	H	23412	12065	-48.47
Germanium	H	6031	3090	-48.76
Germanium	E	15263	13884	-9.03
Indium	A	1591912	1495883	-6.03
Bismuth	A	1159222	1123261	-3.10
Yttrium	A	1639670	1517763	-7.43
Terbium	A	1996313	1928268	-3.41

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645047 File : c13q0047 Time : 13-MAR-2007 20:25
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.619	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01317]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01828]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02440]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04245]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02546]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.08418]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	624286	-15.08
Scandium	A	1062377	921347	-13.27
Scandium	E	28787	25291	-12.14
Scandium	H	23412	9218	-60.63
Germanium	H	6031	2232	-62.99
Germanium	E	15263	13926	-8.76
Indium	A	1591912	1479288	-7.07
Bismuth	A	1159222	1101875	-4.95
Yttrium	A	1639670	1520322	-7.28
Terbium	A	1996313	1918710	-3.89

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645069 File : c13q0069 Time : 13-MAR-2007 22:23
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.872	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005146]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01643]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01754]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03567]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01730]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005671]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i-
Selenium	H	ND	0.1000	0.004672	ug/L	i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	430152	-41.49
Scandium	A	1062377	680649	-35.93
Scandium	E	28787	17700	-38.51
Scandium	H	23412	3806	**-83.74 ***
Germanium	H	6031	867	**-85.62 ***
Germanium	E	15263	10329	-32.32
Indium	A	1591912	1229567	-22.76
Bismuth	A	1159222	937516	-19.13
Yttrium	A	1639670	1213110	-26.01
Terbium	A	1996313	1622605	-18.72

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645091 File : c13q0091 Time : 14-MAR-2007 00:21
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	3.057	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006703]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008792]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01299]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02589]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.007086]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03313]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i-
Selenium	H	[0.06585]	0.1000	0.004672	ug/L	!ib i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	454940	-38.11
Scandium	A	1062377	709385	-33.23
Scandium	E	28787	18091	-37.16
Scandium	H	23412	2418	**-89.67 ***
Germanium	H	6031	546	**-90.95 ***
Germanium	E	15263	10466	-31.43
Indium	A	1591912	1242893	-21.92
Bismuth	A	1159222	945621	-18.43
Yttrium	A	1639670	1236452	-24.59
Terbium	A	1996313	1618940	-18.90

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645101 File : c13q0101 Time : 14-MAR-2007 01:15
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.174	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006123]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008225]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.02800]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.008189]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[8.600]	10.00	4.329	ug/L	!ib i-
Selenium	H	0.1397	0.1000	0.004672	ug/L	i- ib ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	456501	-37.90
Scandium	A	1062377	711442	-33.03
Scandium	E	28787	18210	-36.74
Scandium	H	23412	1824	**-92.21 ***
Germanium	H	6031	363	**-93.98 ***
Germanium	E	15263	10510	-31.14
Indium	A	1591912	1248630	-21.56
Bismuth	A	1159222	943798	-18.58
Yttrium	A	1639670	1233469	-24.77
Terbium	A	1996313	1624677	-18.62

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645019 File : c13q0019 Time : 13-MAR-2007 17:52
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06422]	0.1000	ug/L	
Barium	A	0.1694	0.1000	ug/L	
Beryllium	A	[0.02417]	0.1000	ug/L	
Cadmium	A	1.729	0.1000	ug/L	
Lead	A	0.5025	0.1000	ug/L	
Silver	A	0.2056	0.1000	ug/L	
Thallium	A	[0.03333]	0.05000	ug/L	
Arsenic	E	0.2939	0.1000	ug/L	
Chromium	E	1.463	0.1000	ug/L	
Cobalt	E	0.2266	0.1000	ug/L	
Copper	E	1.225	0.1000	ug/L	
Manganese	E	0.6376	0.1000	ug/L	
Nickel	E	1.794	0.1000	ug/L	
Vanadium	E	[0.05544]	0.1000	ug/L	
Zinc	E	0.8166	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107600	ug/L	108
Calcium	A	300000	324700	ug/L	108
Magnesium	A	100000	105000	ug/L	105
Molybdenum	A	2000	2172	ug/L	109
Potassium	A	100000	108100	ug/L	108
Sodium	E	250000	269300	ug/L	108
Iron	H	250000	240100	ug/L	96

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	655590	-10.82
Scandium	A	1062377	946357	-10.92
Scandium	E	28787	26535	-7.82
Scandium	H	23412	20439	-12.70
Germanium	H	6031	4380	-27.37
Germanium	E	15263	12435	-18.53
Indium	A	1591912	1108134	-30.39
Bismuth	A	1159222	611251	-47.27
Yttrium	A	1639670	1210893	-26.15
Terbium	A	1996313	1371533	-31.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645020 File : c13q0020 Time : 13-MAR-2007 17:57
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	108500	ug/L	9		
Cadmium	A	100.0	95.25	ug/L	-5	20	
Calcium	A	300000	328200	ug/L	9		
Magnesium	A	100000	106500	ug/L	7		
Molybdenum	A	2000	2182	ug/L	9		
Potassium	A	100000	109100	ug/L	9		
Silver	A	50.00	42.16	ug/L	-16	20	
Arsenic	E	100.0	98.19	ug/L	-2	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	187.6	ug/L	-6	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	203.2	ug/L	2	20	
Nickel	E	200.0	179.7	ug/L	-10	20	
Sodium	E	250000	273200	ug/L	9		
Vanadium	E	200.0	214.7	ug/L	7	20	
Zinc	E	100.0	86.26	ug/L	-14	20	
Iron	H	250000	248000	ug/L	-1		
Selenium	H	100.0	93.29	ug/L	-7	20	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	19212	-17.94
Scandium	A	1062377	889159	-16.30
Scandium	E	28787	24551	-14.72
Germanium	H	6031	4203	-30.31
Germanium	E	15263	11457	-24.93
Indium	A	1591912	1051217	-33.97
Yttrium	A	1639670	1163651	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645049 File : c13q0049 Time : 13-MAR-2007 20:35
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05421]	0.1000	ug/L	
Barium	A	0.3789	0.1000	ug/L	
Beryllium	A	[0.02364]	0.1000	ug/L	
Cadmium	A	1.724	0.1000	ug/L	
Lead	A	0.5039	0.1000	ug/L	
Silver	A	0.1992	0.1000	ug/L	
Thallium	A	[0.02827]	0.05000	ug/L	
Arsenic	E	0.2741	0.1000	ug/L	
Chromium	E	1.488	0.1000	ug/L	
Cobalt	E	0.2304	0.1000	ug/L	
Copper	E	1.197	0.1000	ug/L	
Manganese	E	0.6888	0.1000	ug/L	
Nickel	E	1.822	0.1000	ug/L	
Vanadium	E	[0.06247]	0.1000	ug/L	
Zinc	E	0.9149	0.1000	ug/L	
Selenium	H	[0.04925]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107000	ug/L	107
Calcium	A	300000	326700	ug/L	109
Magnesium	A	100000	104200	ug/L	104
Molybdenum	A	2000	2112	ug/L	106
Potassium	A	100000	108000	ug/L	108
Sodium	E	250000	256900	ug/L	103
Iron	H	250000	261700	ug/L	105

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	558969	-23.96
Scandium	A	1062377	816765	-23.12
Scandium	E	28787	22917	-20.39
Scandium	H	23412	9411	-59.80
Germanium	H	6031	1926	-68.06
Germanium	E	15263	11242	-26.34
Indium	A	1591912	1037872	-34.80
Bismuth	A	1159222	623621	-46.20
Yttrium	A	1639670	1133858	-30.85
Terbium	A	1996313	1356945	-32.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645050 File : c13q0050 Time : 13-MAR-2007 20:41
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	107200	ug/L	7		
Cadmium	A	100.0	93.47	ug/L	-7	20	
Calcium	A	300000	329500	ug/L	10		
Magnesium	A	100000	104600	ug/L	5		
Molybdenum	A	2000	2148	ug/L	7		
Potassium	A	100000	108800	ug/L	9		
Silver	A	50.00	40.87	ug/L	-18	20	
Arsenic	E	100.0	98.31	ug/L	-2	20	
Chromium	E	200.0	212.1	ug/L	6	20	
Cobalt	E	200.0	192.8	ug/L	-4	20	
Copper	E	200.0	182.3	ug/L	-9	20	
Manganese	E	200.0	206.7	ug/L	3	20	
Nickel	E	200.0	184.1	ug/L	-8	20	
Sodium	E	250000	264100	ug/L	6		
Vanadium	E	200.0	217.2	ug/L	9	20	
Zinc	E	100.0	85.99	ug/L	-14	20	
Iron	H	250000	263800	ug/L	6		
Selenium	H	100.0	107.9	ug/L	8	20	i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	8461	-63.86
Scandium	A	1062377	761577	-28.31
Scandium	E	28787	20482	-28.85
Germanium	H	6031	1806	**-70.05 ***
Germanium	E	15263	9961	-34.74
Indium	A	1591912	978682	-38.52
Yttrium	A	1639670	1066301	-34.97

-=low bias i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645104 File : c13q0104 Time : 14-MAR-2007 01:31
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05759]	0.1000	ug/L	
Barium	A	1.147	0.1000	ug/L	
Beryllium	A	[0.03148]	0.1000	ug/L	
Cadmium	A	1.640	0.1000	ug/L	
Lead	A	0.5488	0.1000	ug/L	
Silver	A	0.1879	0.1000	ug/L	
Thallium	A	[0.03830]	0.05000	ug/L	
Arsenic	E	0.2916	0.1000	ug/L	
Chromium	E	1.571	0.1000	ug/L	
Cobalt	E	0.2546	0.1000	ug/L	
Copper	E	1.284	0.1000	ug/L	
Manganese	E	0.6896	0.1000	ug/L	
Nickel	E	1.940	0.1000	ug/L	
Vanadium	E	[0.06107]	0.1000	ug/L	
Zinc	E	1.003	0.1000	ug/L	
Selenium	H	[0.02311]	0.1000	ug/L	i-

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	108700	ug/L	109
Calcium	A	300000	333900	ug/L	111
Magnesium	A	100000	106300	ug/L	106
Molybdenum	A	2000	2182	ug/L	109
Potassium	A	100000	110500	ug/L	111
Sodium	E	250000	259900	ug/L	104
Iron	H	250000	305200	ug/L	122

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	444953	-39.47
Scandium	A	1062377	643118	-39.46
Scandium	E	28787	16412	-42.99
Scandium	H	23412	2004	**-91.44 ***
Germanium	H	6031	376	**-93.77 ***
Germanium	E	15263	8514	-44.22
Indium	A	1591912	890664	-44.05
Bismuth	A	1159222	572765	-50.59
Yttrium	A	1639670	931387	-43.20
Terbium	A	1996313	1183866	-40.70

-=low bias i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645105 File : c13q0105 Time : 14-MAR-2007 01:37
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	110300	ug/L	10		
Cadmium	A	100.0	96.41	ug/L	-4	20	
Calcium	A	300000	343900	ug/L	15		
Magnesium	A	100000	107700	ug/L	8		
Molybdenum	A	2000	2245	ug/L	12		
Potassium	A	100000	113600	ug/L	14		
Silver	A	50.00	41.85	ug/L	-16	20	
Arsenic	E	100.0	97.28	ug/L	-3	20	
Chromium	E	200.0	221.8	ug/L	11	20	
Cobalt	E	200.0	204.0	ug/L	2	20	
Copper	E	200.0	182.6	ug/L	-9	20	
Manganese	E	200.0	213.9	ug/L	7	20	
Nickel	E	200.0	197.0	ug/L	-2	20	
Sodium	E	250000	260900	ug/L	4		
Vanadium	E	200.0	225.3	ug/L	13	20	
Zinc	E	100.0	85.06	ug/L	-15	20	
Iron	H	250000	297200	ug/L	19		i-
Selenium	H	100.0	148.1	ug/L	**48**	20	ab+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	2100	**-91.03 ***
Scandium	A	1062377	602321	-43.30
Scandium	E	28787	15175	-47.29
Germanium	H	6031	400	**-93.37 ***
Germanium	E	15263	7921	-48.10
Indium	A	1591912	832676	-47.69
Yttrium	A	1639670	875971	-46.58

+=high bias -=low bias ab=ICSAB i=ISTD failure

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67104645

Date : 03/13/07 Reference: c13q0004
Sequence : MET06 c13q0 Analyzed : 03/13/07 16:23

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	735116	1062377	28787	23412	6031	15263	1591912	1159222	1639670	1996313
		LOWER LIMIT	220535	318713	8636	7024	1809	4579	477574	347767	491901	598894
		UPPER LIMIT	882139	1274852	34545	28095	7237	18315	1910294	1391066	1967604	2395576
017	ICB		748490	1074057	29924	18529	4795	15889	1577058	1127120	1651641	1984415
019	ICSA		655590	946357	26535	20439	4380	12435	1108134	611251	1210893	1371533
020	ICSAB		612853	889159	24551	19212	4203	11457	1051217	588946	1163651	1326370
025	SER	QC378770	587629	958442	24093	12256	3117	13516	1534743	1096892	1575465	1958529
028	CCV		594507	931401	25139	12778	3114	13486	1413929	952819	1506984	1874910
031	CCB		604051	916831	25109	12065	3090	13884	1495883	1123261	1517763	1928268
033	MSS	193108-001	585851	891884	24086	12030	3034	13549	1490772	1113004	1506813	1934416
034	SAMPLE	193108-004	535357	830842	22919	10978	2738	12429	1356619	970489	1400042	1806411
035	SAMPLE	193108-006	546575	835282	22693	12914	3291	12751	1415218	1046318	1421111	1846583
036	SAMPLE	193108-018	549089	854295	22868	12466	3208	12657	1378921	971901	1412083	1823002
037	SAMPLE	193108-018	585871	883869	24036	11804	3003	13267	1434299	1045689	1456377	1866783
038	SAMPLE	193108-019	557663	866385	23368	10625	2627	12653	1383176	970019	1422620	1820670
039	SAMPLE	193108-019	590641	903631	24177	10029	2518	13415	1449457	1046532	1475058	1882280
040	SAMPLE	193108-020	591646	888776	23914	9395	2336	13431	1453480	1043020	1469821	1890795
044	CCV		613951	932416	25273	10153	2410	13471	1419670	967942	1499622	1876171
047	CCB		624286	921347	25291	9218	2232	13926	1479288	1101875	1520322	1918710
049	ICSA		558969	816765	22917	9411	1926	11242	1037872	623621	1133858	1356945
050	ICSAB		516767	761577	20482	8461	1806 *	9961	978682	591466	1066301	1287028
055	BLANK	QC378923	386846	621679	15886	4123 *	996 *	9552	1145979	890381	1122931	1513817
056	BS	QC378924	389538	628479	16171	4031 *	950 *	9492	1158760	877409	1144105	1534192
057	BSD	QC378925	388802	625058	16144	4208 *	1015 *	9361	1167531	882502	1141352	1535531
059	MSS	193234-004	408864	674165	17966	4768 *	1153 *	10329	1213832	913713	1262343	1610032
060	SER	QC378928	423899	676490	17529	4608 *	1070 *	10219	1236222	949003	1226285	1650319
061	MS	QC378926	436221	718214	18694	4064 *	925 *	10569	1261886	935469	1331600	1672778
062	MSD	QC378927	420714	696732	18065	3480 *	807 *	10267	1209539	899429	1288754	1604573
063	PDS	QC378929	419899	686108	17635	3411 *	768 *	9748	1152940	824040	1246016	1564703
067	CCV		430782	681099	17595	3319 *	735 *	10014	1166215	834709	1191857	1571131
069	CCB		430152	680649	17700	3806 *	867 *	10329	1229567	937516	1213110	1622605
072	SAMPLE	193165-001	463806	755917	19341	2656 *	550 *	11189	1297664	971638	1343912	1694537
076	BLANK	QC378903	417990	668374	17359	2906 *	659 *	10838	1252121	912016	1250448	1710985
077	BS	QC378904	436454	703071	18170	2983 *	609 *	9927	1234836	854925	1262536	1684913
078	BSD	QC378905	432402	690201	17626	2843 *	538 *	9757	1217212	854889	1238939	1657555
080	MSS	193230-001	460896	718013	17774	2407 *	557 *	10417	1281731	977227	1269992	1676830
081	SER	QC378908	458095	725933	17226	2402 *	510 *	10236	1282889	987916	1267048	1681339
082	MS	QC378906	455338	717809	18303	2242 *	451 *	10498	1249725	925331	1255180	1643100
083	MSD	QC378907	450352	706827	18096	2531 *	563 *	10408	1241543	923415	1236867	1630360
084	PDS	QC378909	459882	710809	17531	2701 *	599 *	9952	1182570	848963	1220019	1606337
085	SAMPLE	193230-002	465096	720318	18315	2986 *	698 *	10526	1274858	969629	1258278	1655638
089	CCV		466559	723141	18326	1987 *	388 *	10245	1193032	854005	1228324	1607498
091	CCB		454940	709385	18091	2418 *	546 *	10466	1242893	945621	1236452	1618940
094	SAMPLE	193230-003	471397	723047	18296	2201 *	448 *	10693	1261104	964957	1246890	1635480
095	SAMPLE	193230-004	467375	721130	18395	2060 *	413 *	10691	1242795	941307	1242727	1627588
099	CCV		478021	735138	18401	2021 *	393 *	10391	1209475	859926	1255490	1611371
101	CCB		456501	711442	18210	1824 *	363 *	10510	1248630	943798	1233469	1624677
104	ICSA		444953	643118	16412	2004 *	376 *	8514	890664	572765	931387	1183866
105	ICSAB		410077	602321	15175	2100 *	400 *	7921	832676	534500	875971	1111844

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c13q0001	TUN				13-MAR-2007 16:05	1.0	1.0				1	
002	c13q0002	X	RINSE			13-MAR-2007 16:13	1.0					2	
003	c13q0003	X	RINSE			13-MAR-2007 16:18	1.0					2	
004	c13q0004	ICALBLK	CALBLANK			13-MAR-2007 16:23	1.0	1.0				2	
005	c13q0005	ICAL				13-MAR-2007 16:29	1.0	1.0				3	
006	c13q0006	ICAL				13-MAR-2007 16:34	1.0	1.0				4	
007	c13q0007	ICAL				13-MAR-2007 16:46	1.0	1.0				5	
008	c13q0008	ICAL				13-MAR-2007 16:53	1.0	1.0				6	
009	c13q0009	ICAL				13-MAR-2007 16:58	1.0	1.0				7	
010	c13q0010	ICAL				13-MAR-2007 17:03	1.0	1.0				8	
011	c13q0011	X	RINSE			13-MAR-2007 17:09	1.0					2	
012	c13q0012	X				13-MAR-2007 17:15	1.0					9 2	
013	c13q0013	X	RINSE			13-MAR-2007 17:20	1.0					2	
014	c13q0014	ICV				13-MAR-2007 17:25	1.0	1.0			1	9 2	
015	c13q0015	X	RINSE			13-MAR-2007 17:30	1.0					2	
016	c13q0016	X				13-MAR-2007 17:36	1.0					2	
017	c13q0017	ICB				13-MAR-2007 17:41	1.0	1.0	1		1	2	
018	c13q0018	X				13-MAR-2007 17:46	1.0					2	
019	c13q0019	ICSA				13-MAR-2007 17:52	1.0	1.0			1	10 2	7:CA=324700
020	c13q0020	ICSAB				13-MAR-2007 17:57	1.0	1.0			1	11 2	10:CA=328200
021	c13q0021	X	RINSE			13-MAR-2007 18:05	1.0					2	
022	c13q0022	X	RINSE			13-MAR-2007 18:11	1.0					2	
023	c13q0023	X	RINSE			13-MAR-2007 18:16	1.0					2	
024	c13q0024	X	RINSE			13-MAR-2007 18:21	1.0					2	
025	c13q0025	SER	QC378770	123000	Water	13-MAR-2007 18:27	50.0	1.0	2	1	1	2	
026	c13q0026	X	RINSE			13-MAR-2007 18:32	1.0					2	
027	c13q0027	X	RINSE			13-MAR-2007 18:38	1.0					2	
028	c13q0028	CCV				13-MAR-2007 18:43	1.0	1.0	1		1	12 2	
029	c13q0029	X	RINSE			13-MAR-2007 18:48	1.0					2	
030	c13q0030	X				13-MAR-2007 18:54	1.0					2	
031	c13q0031	CCB				13-MAR-2007 18:59	1.0	1.0	1		1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c13q0032	X				13-MAR-2007 19:04	1.0					2	
033	c13q0033	MSS	193108-001	122986	Filtra	13-MAR-2007 19:10	10.0	1.0	1		1	2	
034	c13q0034	SAMPLE	193108-004	122986	Filtra	13-MAR-2007 19:15	10.0	1.0			1	2	
035	c13q0035	SAMPLE	193108-006	122986	Filtra	13-MAR-2007 19:20	10.0	1.0			1	2	
036	c13q0036	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 19:26	10.0	1.0	1		1	2	1:MN=214.800
037	c13q0037	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 19:31	50.0	1.0			1	2	
038	c13q0038	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 19:37	10.0	1.0	1		1	2	1:NA=20410.0
039	c13q0039	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 19:42	50.0	1.0			1	2	
040	c13q0040	SAMPLE	193108-020	122986	Filtra	13-MAR-2007 19:47	10.0	1.0			1	2	
041	c13q0041	X	RINSE			13-MAR-2007 19:53	1.0					2	
042	c13q0042	X	RINSE			13-MAR-2007 19:58	1.0					2	
043	c13q0043	X	RINSE			13-MAR-2007 20:03	1.0					2	
044	c13q0044	CCV				13-MAR-2007 20:09	1.0	1.0	1		1	12 2	
045	c13q0045	X	RINSE			13-MAR-2007 20:14	1.0					2	
046	c13q0046	X				13-MAR-2007 20:19	1.0					2	
047	c13q0047	CCB				13-MAR-2007 20:25	1.0	1.0	1		1	2	
048	c13q0048	X				13-MAR-2007 20:30	1.0					2	
049	c13q0049	ICSA				13-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=326700
050	c13q0050	ICSAB				13-MAR-2007 20:41	1.0	1.0			1	11 2	10:CA=329500
051	c13q0051	X	RINSE			13-MAR-2007 20:46	1.0					2	
052	c13q0052	X	RINSE			13-MAR-2007 20:52	1.0					2	
053	c13q0053	X	RINSE			13-MAR-2007 20:57	1.0					2	
054	c13q0054	X	RINSE			13-MAR-2007 21:02	1.0					2	
055	c13q0055	BLANK	QC378923	123041	Soil	13-MAR-2007 21:08	5.0	50.0	7		1	2	
056	c13q0056	BS	QC378924	123041	Soil	13-MAR-2007 21:13	50.0	50.0	4	4	1	2	
057	c13q0057	BSD	QC378925	123041	Soil	13-MAR-2007 21:19	50.0	50.0	5	4	1	2	
058	c13q0058	X	RINSE			13-MAR-2007 21:24	1.0					2	
059	c13q0059	MSS	193234-004	123041	Soil	13-MAR-2007 21:29	50.0	49.50	3		1	2	
060	c13q0060	SER	QC378928	123041	Soil	13-MAR-2007 21:35	250.0	49.50			1	2	
061	c13q0061	MS	QC378926	123041	Soil	13-MAR-2007 21:40	50.0	48.08	1	2	1	2	
062	c13q0062	MSD	QC378927	123041	Soil	13-MAR-2007 21:45	50.0	44.64	1	1	1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c13q0063	PDS	QC378929	123041	Soil	13-MAR-2007 21:50	50.0	49.50	1	1	1	13 14 2	
064	c13q0064	X	RINSE			13-MAR-2007 21:56	1.0					2	
065	c13q0065	X	RINSE			13-MAR-2007 22:01	1.0					2	
066	c13q0066	X	RINSE			13-MAR-2007 22:07	1.0					2	
067	c13q0067	CCV				13-MAR-2007 22:12	1.0	1.0	3		1	12 2	
068	c13q0068	X	RINSE			13-MAR-2007 22:17	1.0					2	
069	c13q0069	CCB				13-MAR-2007 22:23	1.0	1.0	1		1	2	
070	c13q0070	X				13-MAR-2007 22:28	1.0					2	
071	c13q0071	X				13-MAR-2007 22:33	1.0					2	
072	c13q0072	SAMPLE	193165-001	123041	Soil	13-MAR-2007 22:39	50.0	48.08	3		1	2	
073	c13q0073	X	RINSE			13-MAR-2007 22:44	1.0					2	
074	c13q0074	X	RINSE			13-MAR-2007 22:50	1.0					2	
075	c13q0075	X	RINSE			13-MAR-2007 22:55	1.0					2	
076	c13q0076	BLANK	QC378903	123038	Filtra	13-MAR-2007 23:00	1.0	1.0	2		1	2	
077	c13q0077	BS	QC378904	123038	Filtra	13-MAR-2007 23:06	1.0	1.0	4	2	1	2	
078	c13q0078	BSD	QC378905	123038	Filtra	13-MAR-2007 23:11	1.0	1.0	4	2	1	2	679
079	c13q0079	X	RINSE			13-MAR-2007 23:16	1.0					2	
080	c13q0080	MSS	193230-001	123038	Filtra	13-MAR-2007 23:22	10.0	1.0	2		1	2	
081	c13q0081	SER	QC378908	123038	Filtra	13-MAR-2007 23:27	50.0	1.0	1		1	2	
082	c13q0082	MS	QC378906	123038	Filtra	13-MAR-2007 23:32	10.0	1.0	2	2	1	2	
083	c13q0083	MSD	QC378907	123038	Filtra	13-MAR-2007 23:38	10.0	1.0	2	2	1	2	
084	c13q0084	PDS	QC378909	123038	Filtra	13-MAR-2007 23:43	10.0	1.0	2	2	1	13 14 2	
085	c13q0085	SAMPLE	193230-002	123038	Filtra	13-MAR-2007 23:48	10.0	1.0	2		1	2	
086	c13q0086	X	RINSE			13-MAR-2007 23:54	1.0					2	
087	c13q0087	X	RINSE			13-MAR-2007 23:59	1.0					2	
088	c13q0088	X	RINSE			14-MAR-2007 00:05	1.0					2	
089	c13q0089	CCV				14-MAR-2007 00:10	1.0	1.0	3		1	12 2	
090	c13q0090	X	RINSE			14-MAR-2007 00:15	1.0					2	
091	c13q0091	CCB				14-MAR-2007 00:21	1.0	1.0	1		1	2	
092	c13q0092	X				14-MAR-2007 00:26	1.0					2	
093	c13q0093	X				14-MAR-2007 00:32	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c13q0094	SAMPLE	193230-003	123038	Filtra	14-MAR-2007 00:37	10.0	1.0	3		1	2	
095	c13q0095	SAMPLE	193230-004	123038	Filtra	14-MAR-2007 00:42	10.0	1.0	5		1	2	
096	c13q0096	X	RINSE			14-MAR-2007 00:48	1.0					2	
097	c13q0097	X	RINSE			14-MAR-2007 00:53	1.0					2	
098	c13q0098	X	RINSE			14-MAR-2007 00:58	1.0					2	
099	c13q0099	CCV				14-MAR-2007 01:04	1.0	1.0	3		1	12 2	
100	c13q0100	X	RINSE			14-MAR-2007 01:10	1.0					2	
101	c13q0101	CCB				14-MAR-2007 01:15	1.0	1.0	2		1	2	
102	c13q0102	X				14-MAR-2007 01:21	1.0					2	
103	c13q0103	X				14-MAR-2007 01:26	1.0					2	
104	c13q0104	ICSA				14-MAR-2007 01:31	1.0	1.0			1	10 2	7:CA=333900
105	c13q0105	ICSAB				14-MAR-2007 01:37	1.0	1.0	1		1	11 2	11:CA=343900

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67106280001
Units : ug/L

Date : 14-MAR-2007 19:39
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c14t0005	67106280005		14-MAR-2007 19:44	S5645
L2	c14t0006	67106280006		14-MAR-2007 19:49	S5648
L3	c14t0007	67106280007		14-MAR-2007 19:54	S5649
L4	c14t0008	67106280008		14-MAR-2007 20:00	S5650
L5	c14t0009	67106280009		14-MAR-2007 20:05	S5644
L6	c14t0010	67106280010		14-MAR-2007 20:10	S5646

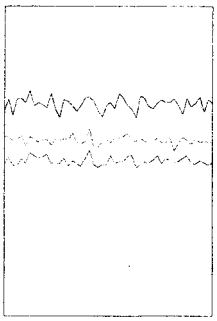
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8735	0.7102	0.6864	0.6447	0.6119	0.6411	BLNK	-1.0342	1.57429		0.6946	1.000	0.995	
Antimony	A	0.3703	0.3028	0.2967	0.2850	0.2758	0.2971	BLNK	-0.0184	3.41580		0.3046	0.999	0.995	
Barium	A	0.4011	0.1512	0.1066	0.0731	0.0673	0.0704	BLNK	-0.1662	14.3500		0.1449	1.000	0.995	
Beryllium	A	0.2413	0.2557	0.2505	0.2528	0.2475	0.2358	BLNK	-0.0008	4.19880		0.2473	0.999	0.995	
Cadmium	A	0.0989	0.0871	0.0872	0.0853	0.0810	0.0848	BLNK	-0.0037	11.8984		0.0874	1.000	0.995	
Calcium	A	0.1240	0.0433	0.0322	0.0223	0.0202	0.0211	BLNK	-42.916	48.0069		0.0438	1.000	0.995	
Lead	A	1.4284	0.9726	0.8470	0.7490	0.7212	0.7572	BLNK	-0.0522	1.33385		0.9125	0.999	0.995	
Magnesium	A	0.7216	0.6124	0.6020	0.5662	0.5280	0.5513	BLNK	-0.5891	1.82943		0.5969	1.000	0.995	
Molybdenum	A	0.2528	0.2257	0.2169	0.2069	0.2011	0.2155	BLNK	-0.0069	4.70367		0.2198	0.999	0.995	
Potassium	A	6.7202	1.8843	1.2834	0.7145	0.6288	0.6566	BLNK	-89.143	1.54416		1.9813	0.999	0.995	
Silver	A	0.3819	0.3351	0.3381	0.3314	0.3080	0.3280	BLNK	-0.0069	3.08629		0.3371	0.999	0.995	
Thallium	A	1.0082	0.8759	0.8465	0.8180	0.8355	0.8752	BLNK	-0.0139	1.15342		0.8765	0.999	0.995	
Arsenic	E	1.4776	0.7322	0.6272	0.5410	0.5370	0.5157	BLNK	-0.1967	1.92526		0.7385	1.000	0.995	
Chromium	E	5.6898	2.8894	2.5556	2.1869	2.1562	2.0923	BLNK	-0.1630	0.47548		2.9284	1.000	0.995	
Cobalt	E	3.3541	3.2164	3.1146	3.0621	3.0093	2.9304	BLNK	-0.0029	0.33940		3.1145	1.000	0.995	
Copper	E	44.599	13.071	9.1024	5.2949	4.7842	4.5157	BLNK	-0.6607	0.21967		13.561	0.999	0.995	
Manganese	E	2.2840	1.7424	1.5984	1.5161	1.5127	1.4549	BLNK	-0.0269	0.68199		1.6848	1.000	0.995	
Nickel	E	2.4311	1.1372	0.9823	0.7870	0.7563	0.7194	BLNK	-0.1481	1.37689		1.1356	0.999	0.995	
Sodium	E	4.8752	1.4914	1.0773	0.6209	0.5781	0.5561	BLNK	-71.845	1.79169		1.5332	1.000	0.995	
Vanadium	E	43.908	9.6439	5.3037	2.0187	1.7949	1.7471	BLNK	-2.4585	0.57776		10.736	1.000	0.995	
Zinc	E	38.750	8.7193	4.1757	1.3458	0.9650	0.8946	BLNK	-2.8972	1.11908		9.1417	0.999	0.995	
Iron	H	0.9288	0.8542	0.8120	0.7726	0.7391	0.7395	BLNK	-0.8768	1.35235		0.8077	1.000	0.995	
Selenium	H	0.1243	0.1173	0.1209	0.1154	0.1107	0.1092	BLNK	-0.0173	9.13221		0.1163	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

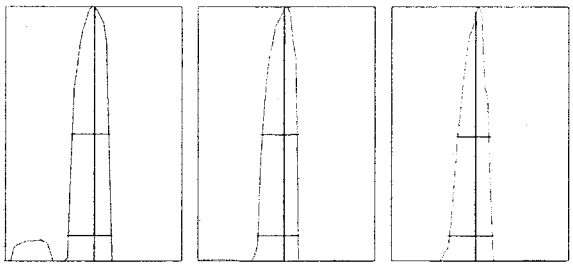
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	13721.0	13678.3	3.08	0.10
89	50,000	24761.0	25038.8	2.60	0.30
205	50,000	28020.0	28388.1	2.13	0.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.011%
Doubly Charged: 70/140 1.287%



m/z:	7	89	205
Height:	13,849	25,370	28,075
Axis:	7.05	89.00	204.95
W-50%:	0.65	0.65	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	1550	W	Extract 1	0	V	AMU Gain	142	
RF Matching	1.7	V	Extract 2	-150	V	AMU Offset	125	
Smpl Depth	9	mm	Omega Bias-ce	-30	V	Axis Gain	1.0017	
Torch-H	1.3	mm	Omega Lens-ce	0	V	Axis Offset	-0.03	
Torch-V	0.4	mm	Cell Entrance	-30	V	QP Bias	-3	V
Carrier Gas	1.05	L/min	QP Focus	5	V			
Makeup Gas	0	L/min	Cell Exit	-30	V	===Detector Parameters===		
Optional Gas	---	%				Discriminator	8	mV
Nebulizer Pump	0.1	rps	===Octopole Parameters===			Analog HV	1770	V
Sample Pump	---	rps	OctP RF	160	V	Pulse HV	1420	V
S/C Temp	2	degC	OctP Bias	-6	V			

===Reaction Cell===

Reaction Mode	OFF							
H2 Gas	0	mL/min	He Gas	0	mL/min	Optional Gas	---	%

Tune File : he.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
He Gas:	3.5	mL/min	51	79.8	12.48	
Optional Gas:	---	%	59	3633.2	2.52	
QP Focus:	-10	V	89	4247.1	2.97	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-14	V				

Tune File : h2.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
H2 Gas:	3	mL/min	59	3493.3	3.42	
Optional Gas:	---	%	78	0.4	188.98	
QP Focus:	-8	V	89	13417.0	2.54	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-16	V				

Generated : Mar 14, 2007 13:11:19
Printed : Mar 14, 2007 13:12:56

P/A Factor Tuning Report

Acquired:Mar 14 2007 01:23 pm

Mass[amu]	Element	P/A Factor
6	Li	0.065699
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.092689
45	Sc	0.091624
51	V	0.091674
52	Cr	0.096135
55	Mn	0.098313
56	Fe	0.098500
59	Co	0.101783
60	Ni	Sensitivity too low
63	Cu	0.105448
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103974
98	Mo	0.102873
99	(Ru)	Sensitivity too low
107	Ag	0.111454
111	Cd	Sensitivity too low
115	In	0.111544
118	(In)	0.110865
121	Sb	0.108983
137	Ba	Sensitivity too low
159	Tb	0.113548
205	Tl	0.117970
206	(Pb)	0.117654
207	(Pb)	0.117670
208	Pb	0.118585
209	Bi	0.118695

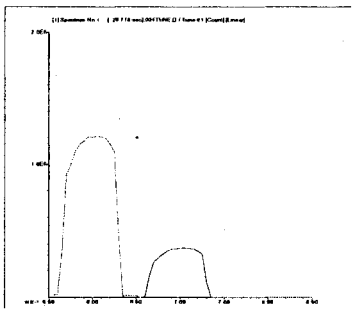
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1420 V

6020 QC Tune Report

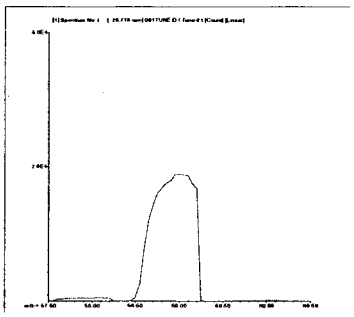
Data File: C:\ICPCHEM\1\DATA\07C14t00.B\001TUNE.D
Date Acquired: Mar 14 2007 07:20 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

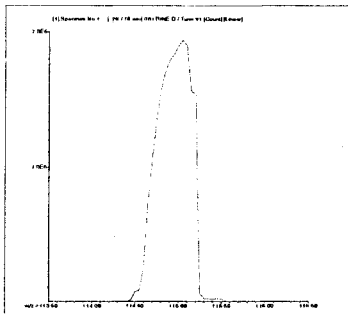
Element	Actual	Required	Flag
7 Li	0.68	5.00	
59 Co	0.94	5.00	
115 In	2.14	5.00	
205 Tl	0.88	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



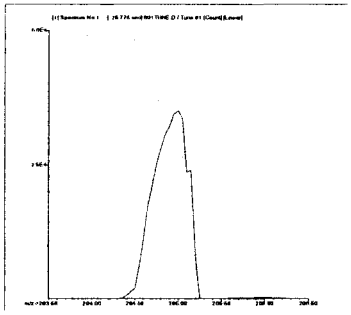
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004C
Date Acquired: Mar 14 2007 07:37 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:40 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1214699.00	A	23850.00	1.96
7	(Li)		P		
9	Be	4.44	P	3.85	86.60
23	Na	75788.24	P	442.70	0.58
24	Mg	8312.74	P	390.30	4.70
27	Al	16965.06	P	863.60	5.09
39	K	1489877.00	A	16130.00	1.08
44	Ca	23056.17	P	574.40	2.49
45	Sc	842012.63	M	7481.00	0.89
45	Sc	94503.46	P	272.10	0.29
45	Sc	1291021.00	A	41990.00	3.25
51	V	8042.76	P	155.30	1.93
52	Cr	647.80	P	8.89	1.37
55	Mn	74.45	P	13.88	18.64
56	Fe	10917.67	P	190.70	1.75
59	Co	16.30	P	4.21	25.82
60	Ni	203.34	P	12.37	6.08
63	Cu	2388.38	P	65.11	2.73
65	Cu	1155.62	P	35.61	3.08
66	Zn	2055.36	P	34.88	1.70
72	Ge	169845.41	P	1396.00	0.82
72	Ge	39700.66	P	430.90	1.09
75	As	81.11	P	6.05	7.46
78	Se	6.44	P	1.93	29.87
89	Y	1593478.00	A	59090.00	3.71
98	Mo	46.67	P	12.02	25.76
107	Ag	71.11	P	8.39	11.80
111	Cd	10.00	P	3.33	33.33
115	In	1596397.00	A	37890.00	2.37
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	172.23	P	23.41	13.59
137	Ba	556.70	P	58.98	10.60
159	Tb	2400096.00	A	77260.00	3.22
205	Tl	404.47	P	81.95	20.26
208	Pb	1879.02	P	43.38	2.31
209	Bi	1672268.00	A	55490.00	3.32

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 14 2007 07:42 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1204475.00	A	9451.00	0.78
7 (Li)		P		
9 Be	581.14	P	47.42	8.16
23 Na	93521.14	P	194.20	0.21
24 Mg	186616.91	P	748.50	0.40
27 Al	225911.91	P	524.80	0.23
39 K	1737951.00	A	6189.00	0.36
44 Ca	32080.47	P	130.20	0.41
45 Sc	845309.00	M	6251.00	0.74
45 Sc	95915.59	P	484.50	0.51
45 Sc	1293208.00	A	13630.00	1.05
51 V	8422.97	P	37.93	0.45
52 Cr	1091.54	P	28.58	2.62
55 Mn	438.16	P	10.96	2.50
56 Fe	157017.20	P	1041.00	0.66
59 Co	643.36	P	14.19	2.21
60 Ni	466.31	P	24.15	5.18
63 Cu	3561.61	P	16.14	0.45
65 Cu	1723.46	P	34.02	1.97
66 Zn	3094.82	P	34.93	1.13
72 Ge	170686.00	P	1459.00	0.85
72 Ge	39934.34	P	478.20	1.20
75 As	118.00	P	4.67	3.96
78 Se	42.44	P	3.15	7.42
89 Y	1581912.00	A	8229.00	0.52
98 Mo	800.06	P	55.08	6.88
99 (Ru)	10.00	P	8.82	88.19
107 Ag	1215.66	P	43.51	3.58
111 Cd	314.46	P	32.38	10.30
115 In	1591845.00	A	18070.00	1.14
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1178.99	P	24.12	2.05
137 Ba	1921.32	P	61.68	3.21
159 Tb	2394815.00	A	17760.00	0.74
205 Tl	1695.73	P	45.51	2.68
208 Pb	6842.10	P	281.30	4.11
209 Bi	1682109.00	A	7342.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1204474.90	0.78	1214699.10	99.2	80 - 120	
45 Sc	845309.00	0.74	842012.63	100.4	80 - 120	
45 Sc	95915.59	0.51	94503.46	101.5	80 - 120	
45 Sc	1293207.80	1.05	1291020.90	100.2	80 - 120	
72 Ge	170686.05	0.85	169845.42	100.5	80 - 120	
72 Ge	39934.34	1.20	39700.66	100.6	80 - 120	
89 Y	1581912.40	0.52	1593477.80	99.3	80 - 120	
115 In	1591845.50	1.14	1596397.00	99.7	80 - 120	
159 Tb	2394814.80	0.74	2400095.80	99.8	80 - 120	
209 Bi	1682108.60	0.44	1672267.60	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 14 2007 07:47 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:45 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1209533.00	A	9363.00	0.77
7 (Li)		P		
9 Be	3092.65	P	98.47	3.18
23 Na	142441.50	P	613.90	0.43
24 Mg	793325.13	A	14880.00	1.88
27 Al	920071.69	A	20620.00	2.24
39 K	2440965.00	A	25320.00	1.04
44 Ca	56133.15	P	1603.00	2.86
45 Sc	833619.81	M	7570.00	0.91
45 Sc	95510.14	P	456.70	0.48
45 Sc	1295402.00	A	11710.00	0.90
51 V	9210.87	P	79.74	0.87
52 Cr	2759.56	P	30.48	1.10
55 Mn	1664.19	P	14.33	0.86
56 Fe	712079.13	P	3317.00	0.47
59 Co	3071.85	P	18.68	0.61
60 Ni	1085.98	P	44.04	4.06
63 Cu	5185.10	P	55.07	1.06
65 Cu	2482.10	P	66.73	2.69
66 Zn	3458.61	P	88.92	2.57
72 Ge	169612.41	P	1349.00	0.80
72 Ge	39667.17	P	115.20	0.29
75 As	290.45	P	10.46	3.60
78 Se	198.89	P	7.90	3.97
89 Y	1586006.00	A	10980.00	0.69
98 Mo	3580.61	P	126.70	3.54
99 (Ru)	12.22	P	5.09	41.66
107 Ag	5362.38	P	38.66	0.72
111 Cd	1393.46	P	62.46	4.48
115 In	1600281.00	A	16380.00	1.02
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4845.48	P	26.73	0.55
137 Ba	3642.85	P	233.00	6.40
159 Tb	2408998.00	A	25810.00	1.07
205 Tl	7372.41	P	75.42	1.02
208 Pb	23428.23	P	130.90	0.56
209 Bi	1683452.00	A	13050.00	0.78

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1209533.40	0.77	1214699.10	99.6	80 - 120	
45 Sc	833619.81	0.91	842012.63	99.0	80 - 120	
45 Sc	95510.14	0.48	94503.46	101.1	80 - 120	
45 Sc	1295402.50	0.90	1291020.90	100.3	80 - 120	
72 Ge	169612.41	0.80	169845.42	99.9	80 - 120	
72 Ge	39667.17	0.29	39700.66	99.9	80 - 120	
89 Y	1586005.60	0.69	1593477.80	99.5	80 - 120	
115 In	1600281.40	1.02	1596397.00	100.2	80 - 120	
159 Tb	2408997.80	1.07	2400095.80	100.4	80 - 120	
209 Bi	1683452.00	0.78	1672267.60	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 14 2007 07:52 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:51 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1241454.00	A	12900.00	1.04
7 (Li)		P		
9 Be	6218.21	P	102.70	1.65
23 Na	205767.41	P	187.40	0.09
24 Mg	1575486.00	A	15580.00	0.99
27 Al	1796355.00	A	18760.00	1.04
39 K	3358506.00	A	14060.00	0.42
44 Ca	84358.67	P	273.90	0.32
45 Sc	848932.63	M	8168.00	0.96
45 Sc	95506.52	P	359.00	0.38
45 Sc	1308758.00	A	27580.00	2.11
51 V	10130.40	P	99.46	0.98
52 Cr	4881.64	P	63.01	1.29
55 Mn	3052.96	P	100.20	3.28
56 Fe	1378620.00	A	7597.00	0.55
59 Co	5949.11	P	55.10	0.93
60 Ni	1876.44	P	20.86	1.11
63 Cu	7286.04	P	81.31	1.12
65 Cu	3495.67	P	83.14	2.38
66 Zn	3341.92	P	104.50	3.13
72 Ge	170742.20	P	1422.00	0.83
72 Ge	40023.01	P	288.30	0.72
75 As	502.01	P	16.17	3.22
78 Se	412.68	P	9.02	2.19
89 Y	1629717.00	A	9334.00	0.57
98 Mo	7069.86	P	85.19	1.21
99 (Ru)	12.22	P	1.93	15.75
107 Ag	11029.28	P	94.60	0.86
111 Cd	2843.74	P	98.51	3.46
115 In	1630943.00	A	15180.00	0.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	9678.27	P	138.50	1.43
137 Ba	5180.07	P	139.90	2.70
159 Tb	2430055.00	A	26280.00	1.08
205 Tl	14503.13	P	162.40	1.12
208 Pb	41164.20	P	606.90	1.47
209 Bi	1713377.00	A	6735.00	0.39

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1241453.60	1.04	1214699.10	102.2	80 - 120	
45 Sc	848932.63	0.96	842012.63	100.8	80 - 120	
45 Sc	95506.52	0.38	94503.46	101.1	80 - 120	
45 Sc	1308758.40	2.11	1291020.90	101.4	80 - 120	
72 Ge	170742.16	0.83	169845.42	100.5	80 - 120	
72 Ge	40023.01	0.72	39700.66	100.8	80 - 120	
89 Y	1629717.40	0.57	1593477.80	102.3	80 - 120	
115 In	1630943.10	0.93	1596397.00	102.2	80 - 120	
159 Tb	2430054.80	1.08	2400095.80	101.2	80 - 120	
209 Bi	1713376.50	0.39	1672267.60	102.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

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Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 14 2007 07:58 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:56 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1231495.00	A	13890.00	1.13
7 (Li)		P		
9 Be	62270.10	P	941.40	1.51
23 Na	1212073.00	A	12660.00	1.04
24 Mg	14897020.00	A	81330.00	0.55
27 Al	16962050.00	A	76510.00	0.45
39 K	18800300.00	A	188100.00	1.00
44 Ca	585503.13	P	1453.00	0.25
45 Sc	844027.69	A	11500.00	1.36
45 Sc	97642.59	P	1869.00	1.91
45 Sc	1315695.00	A	18670.00	1.42
51 V	39406.90	P	453.60	1.15
52 Cr	42693.39	P	222.60	0.52
55 Mn	29599.75	P	161.40	0.55
56 Fe	13041660.00	A	71930.00	0.55
59 Co	59778.95	P	610.70	1.02
60 Ni	15366.32	P	236.10	1.54
63 Cu	43030.45	P	386.00	0.90
65 Cu	21070.06	P	144.30	0.68
66 Zn	10936.98	P	240.90	2.20
72 Ge	171947.50	P	716.10	0.42
72 Ge	40635.55	P	276.70	0.68
75 As	4396.27	P	63.16	1.44
78 Se	3968.59	P	120.20	3.03
89 Y	1629772.00	A	22540.00	1.38
98 Mo	67421.43	P	518.10	0.77
99 (Ru)	13.33	P	11.55	86.62
107 Ag	107484.00	P	376.40	0.35
111 Cd	27659.01	P	596.80	2.16
115 In	1621967.00	A	13530.00	0.83
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	92441.16	P	362.50	0.39
137 Ba	36046.27	P	495.60	1.37
159 Tb	2467045.00	A	24940.00	1.01
205 Tl	139233.91	P	1385.00	0.99
208 Pb	369540.91	P	1134.00	0.31
209 Bi	1702100.00	A	18510.00	1.09

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1231495.10	1.13	1214699.10	101.4	80 - 120	
45 Sc	844027.69	1.36	842012.63	100.2	80 - 120	
45 Sc	97642.59	1.91	94503.46	103.3	80 - 120	
45 Sc	1315695.30	1.42	1291020.90	101.9	80 - 120	
72 Ge	171947.55	0.42	169845.42	101.2	80 - 120	
72 Ge	40635.55	0.68	39700.66	102.4	80 - 120	
89 Y	1629771.80	1.38	1593477.80	102.3	80 - 120	
115 In	1621967.10	0.83	1596397.00	101.6	80 - 120	
159 Tb	2467045.30	1.01	2400095.80	102.8	80 - 120	
209 Bi	1702099.50	1.09	1672267.60	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 14 2007 08:03 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 08:01 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1176467.00	A	95270.00	8.10
7 (Li)		P		
9 Be	579765.00	P	2911.00	0.50
23 Na	10560360.00	A	76770.00	0.73
24 Mg	###########	A	191800.00	0.14
27 Al	###########	A	528100.00	0.33
39 K	###########	A	1244000.00	0.76
44 Ca	5268178.00	A	49080.00	0.93
45 Sc	833040.00	M	17620.00	2.12
45 Sc	91341.44	P	468.50	0.51
45 Sc	1316057.00	A	144000.00	10.94
51 V	327886.91	P	1548.00	0.47
52 Cr	393896.50	P	936.90	0.24
55 Mn	276356.69	P	2704.00	0.98
56 Fe	###########	A	789900.00	0.64
59 Co	549741.00	P	2459.00	0.45
60 Ni	138167.09	P	736.70	0.53
63 Cu	362201.91	P	1592.00	0.44
65 Cu	174924.70	P	776.10	0.44
66 Zn	73057.00	P	520.30	0.71
72 Ge	166257.91	P	2757.00	1.66
72 Ge	37854.01	P	165.70	0.44
75 As	40656.27	P	219.20	0.54
78 Se	36806.70	P	308.60	0.84
89 Y	1604599.00	A	173200.00	10.79
98 Mo	640626.13	P	3756.00	0.59
99 (Ru)	13.33	P	6.67	50.00
107 Ag	964766.38	P	6213.00	0.64
111 Cd	253626.20	P	1856.00	0.73
115 In	1575992.00	A	156500.00	9.93
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	863757.63	P	4413.00	0.51
137 Ba	324926.91	P	2538.00	0.78
159 Tb	2428562.00	A	250800.00	10.33
205 Tl	1348062.00	A	7447.00	0.55
208 Pb	3478722.00	A	12830.00	0.37
209 Bi	1623403.00	A	150300.00	9.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1176466.60	8.10	1214699.10	96.9	80 - 120	
45 Sc	833039.94	2.12	842012.63	98.9	80 - 120	
45 Sc	91341.44	0.51	94503.46	96.7	80 - 120	
45 Sc	1316057.40	10.94	1291020.90	101.9	80 - 120	
72 Ge	166257.89	1.66	169845.42	97.9	80 - 120	
72 Ge	37854.01	0.44	39700.66	95.3	80 - 120	
89 Y	1604598.60	10.79	1593477.80	100.7	80 - 120	
115 In	1575991.80	9.93	1596397.00	98.7	80 - 120	
159 Tb	2428562.30	10.33	2400095.80	101.2	80 - 120	
209 Bi	1623403.00	9.26	1672267.60	97.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

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Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 14 2007 08:08 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 08:06 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1092022.00	A	3848.00	0.35
7	(Li)		P		
9	Be	1030016.00	A	4571.00	0.44
23	Na	20224540.00	A	154000.00	0.76
24	Mg	############	A	705900.00	0.27
27	Al	############	A	1899000.00	0.61
39	K	############	A	1291000.00	0.41
44	Ca	10171540.00	A	45950.00	0.45
45	Sc	808282.31	M	8373.00	1.04
45	Sc	90933.69	P	1500.00	1.65
45	Sc	1207414.00	A	12440.00	1.03
51	V	635327.31	P	5119.00	0.81
52	Cr	760888.50	P	5446.00	0.72
55	Mn	529075.81	P	2162.00	0.41
56	Fe	############	A	2192000.00	0.92
59	Co	1065648.00	A	3772.00	0.35
60	Ni	261636.30	P	147.40	0.06
63	Cu	680580.63	P	5753.00	0.85
65	Cu	328232.31	P	1504.00	0.46
66	Zn	134835.41	P	773.40	0.57
72	Ge	160961.41	P	1105.00	0.69
72	Ge	37689.56	P	705.80	1.87
75	As	77727.62	P	974.60	1.25
78	Se	70307.51	P	476.50	0.68
89	Y	1484046.00	A	8630.00	0.58
98	Mo	1279239.00	A	7072.00	0.55
99	(Ru)	30.00	P	14.53	48.43
107	Ag	1884234.00	A	15690.00	0.83
111	Cd	487174.09	P	771.60	0.16
115	In	1436284.00	A	16170.00	1.13
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1706524.00	A	9994.00	0.59
137	Ba	632233.88	P	1537.00	0.24
159	Tb	2246637.00	A	6590.00	0.29
205	Tl	2586877.00	A	12390.00	0.48
208	Pb	6804158.00	A	28650.00	0.42
209	Bi	1477909.00	A	5241.00	0.35

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1092021.50	0.35	1214699.10	89.9	80 - 120	
45	Sc	808282.25	1.04	842012.63	96.0	80 - 120	
45	Sc	90933.69	1.65	94503.46	96.2	80 - 120	
45	Sc	1207414.50	1.03	1291020.90	93.5	80 - 120	
72	Ge	160961.41	0.69	169845.42	94.8	80 - 120	
72	Ge	37689.56	1.87	39700.66	94.9	80 - 120	
89	Y	1484045.90	0.58	1593477.80	93.1	80 - 120	
115	In	1436284.00	1.13	1596397.00	90.0	80 - 120	
159	Tb	2246636.80	0.29	2400095.80	93.6	80 - 120	
209	Bi	1477909.30	0.35	1672267.60	88.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280012 File : c14t0012 Time : 14-MAR-2007 20:21
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6946	0.6495	10000	10220	ug/L	2	10	
Antimony	A	0.3046	0.2907	100.0	99.27	ug/L	-1	10	
Barium	A	0.1449	0.0704	100.0	100.8	ug/L	1	10	
Beryllium	A	0.2473	0.2544	100.0	106.8	ug/L	7	10	
Cadmium	A	0.0874	0.0857	100.0	101.9	ug/L	2	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7574	100.0	101.0	ug/L	1	10	
Magnesium	A	0.5969	0.5616	10000	10270	ug/L	3	10	
Molybdenum	A	0.2198	0.2125	100.0	99.95	ug/L	0	10	
Potassium	A	1.9813	0.6632	10000	10150	ug/L	2	10	
Silver	A	0.3371	0.3263	100.0	100.7	ug/L	1	10	
Thallium	A	0.8765	0.8725	50.00	50.30	ug/L	1	10	
Arsenic	E	0.7385	0.5325	100.0	102.3	ug/L	2	10	
Chromium	E	2.9284	2.1565	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0343	100.0	103.0	ug/L	3	10	
Copper	E	13.561	4.7560	100.0	103.8	ug/L	4	10	
Manganese	E	1.6848	1.4992	100.0	102.2	ug/L	2	10	
Nickel	E	1.1356	0.7559	100.0	103.9	ug/L	4	10	
Sodium	E	1.5332	0.5704	10000	10150	ug/L	2	10	
Vanadium	E	10.736	1.8024	100.0	101.7	ug/L	2	10	
Zinc	E	9.1417	0.9602	100.0	104.6	ug/L	5	10	
Iron	H	0.8077	0.7492	10000	10130	ug/L	1	10	
Selenium	H	0.1163	0.1123	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1143660	-5.85
Scandium	A	1291021	1247216	-3.39
Scandium	E	94503	91835	-2.82
Scandium	H	842013	823953	-2.14
Germanium	H	169845	163787	-3.57
Germanium	E	39701	38160	-3.88
Indium	A	1596397	1504668	-5.75
Bismuth	A	1672268	1555808	-6.96
Yttrium	A	1593478	1531617	-3.88
Terbium	A	2400096	2334701	-2.72

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280035 File : c14t0035 Time : 14-MAR-2007 22:26
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6441	10000	10140	ug/L	1	10	
Antimony	A	0.3046	0.2982	100.0	101.9	ug/L	2	10	
Barium	A	0.1449	0.0724	100.0	103.7	ug/L	4	10	
Beryllium	A	0.2473	0.2595	100.0	109.0	ug/L	9	10	
Cadmium	A	0.0874	0.0874	100.0	104.0	ug/L	4	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7656	100.0	102.1	ug/L	2	10	
Magnesium	A	0.5969	0.5550	10000	10150	ug/L	2	10	
Molybdenum	A	0.2198	0.2140	100.0	100.6	ug/L	1	10	
Potassium	A	1.9813	0.6644	10000	10170	ug/L	2	10	
Silver	A	0.3371	0.3361	100.0	103.7	ug/L	4	10	
Thallium	A	0.8765	0.8733	50.00	50.35	ug/L	1	10	
Arsenic	E	0.7385	0.5409	100.0	103.9	ug/L	4	10	
Chromium	E	2.9284	2.1821	100.0	103.6	ug/L	4	10	
Cobalt	E	3.1145	3.0634	100.0	104.0	ug/L	4	10	
Copper	E	13.561	4.8091	100.0	105.0	ug/L	5	10	
Manganese	E	1.6848	1.5075	100.0	102.8	ug/L	3	10	
Nickel	E	1.1356	0.7689	100.0	105.7	ug/L	6	10	
Sodium	E	1.5332	0.5726	10000	10190	ug/L	2	10	
Vanadium	E	10.736	1.8263	100.0	103.1	ug/L	3	10	
Zinc	E	9.1417	0.9581	100.0	104.3	ug/L	4	10	
Iron	H	0.8077	0.7663	10000	10360	ug/L	4	10	
Selenium	H	0.1163	0.1140	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1128538	-7.09
Scandium	A	1291021	1277067	-1.08
Scandium	E	94503	92584	-2.03
Scandium	H	842013	835430	-0.78
Germanium	H	169845	168980	-0.51
Germanium	E	39701	38672	-2.59
Indium	A	1596397	1493244	-6.46
Bismuth	A	1672268	1548687	-7.39
Yttrium	A	1593478	1549122	-2.78
Terbium	A	2400096	2318739	-3.39

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280052 File : c14t0052 Time : 14-MAR-2007 23:57
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6433	10000	10130	ug/L	1	10	
Antimony	A	0.3046	0.2954	100.0	100.9	ug/L	1	10	
Barium	A	0.1449	0.0722	100.0	103.4	ug/L	3	10	
Beryllium	A	0.2473	0.2588	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0862	100.0	102.6	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10190	ug/L	2	10	
Lead	A	0.9125	0.7665	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5550	10000	10150	ug/L	2	10	
Molybdenum	A	0.2198	0.2118	100.0	99.60	ug/L	0	10	
Potassium	A	1.9813	0.6654	10000	10190	ug/L	2	10	
Silver	A	0.3371	0.3331	100.0	102.8	ug/L	3	10	
Thallium	A	0.8765	0.8678	50.00	50.03	ug/L	0	10	
Arsenic	E	0.7385	0.5327	100.0	102.4	ug/L	2	10	
Chromium	E	2.9284	2.1631	100.0	102.7	ug/L	3	10	
Cobalt	E	3.1145	3.0246	100.0	102.7	ug/L	3	10	
Copper	E	13.561	4.7532	100.0	103.8	ug/L	4	10	
Manganese	E	1.6848	1.4920	100.0	101.7	ug/L	2	10	
Nickel	E	1.1356	0.7608	100.0	104.6	ug/L	5	10	
Sodium	E	1.5332	0.5655	10000	10060	ug/L	1	10	
Vanadium	E	10.736	1.8026	100.0	101.7	ug/L	2	10	
Zinc	E	9.1417	0.9517	100.0	103.6	ug/L	4	10	
Iron	H	0.8077	0.7690	10000	10400	ug/L	4	10	
Selenium	H	0.1163	0.1135	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1139389	-6.20
Scandium	A	1291021	1285567	-0.42
Scandium	E	94503	94511	0.01
Scandium	H	842013	843863	0.22
Germanium	H	169845	171473	0.96
Germanium	E	39701	39450	-0.63
Indium	A	1596397	1516717	-4.99
Bismuth	A	1672268	1557067	-6.89
Yttrium	A	1593478	1575062	-1.16
Terbium	A	2400096	2328556	-2.98

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280075 File : c14t0075 Time : 15-MAR-2007 02:03
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6410	10000	10090	ug/L	1	10	
Antimony	A	0.3046	0.2960	100.0	101.1	ug/L	1	10	
Barium	A	0.1449	0.0732	100.0	104.9	ug/L	5	10	
Beryllium	A	0.2473	0.2607	100.0	109.5	ug/L	10	10	
Cadmium	A	0.0874	0.0872	100.0	103.7	ug/L	4	10	
Calcium	A	0.0438	0.0213	10000	10210	ug/L	2	10	
Lead	A	0.9125	0.7694	100.0	102.6	ug/L	3	10	
Magnesium	A	0.5969	0.5532	10000	10120	ug/L	1	10	
Molybdenum	A	0.2198	0.2122	100.0	99.79	ug/L	0	10	
Potassium	A	1.9813	0.6685	10000	10230	ug/L	2	10	
Silver	A	0.3371	0.3376	100.0	104.2	ug/L	4	10	
Thallium	A	0.8765	0.8677	50.00	50.03	ug/L	0	10	
Arsenic	E	0.7385	0.5373	100.0	103.2	ug/L	3	10	
Chromium	E	2.9284	2.1733	100.0	103.2	ug/L	3	10	
Cobalt	E	3.1145	3.0661	100.0	104.1	ug/L	4	10	
Copper	E	13.561	4.7909	100.0	104.6	ug/L	5	10	
Manganese	E	1.6848	1.5121	100.0	103.1	ug/L	3	10	
Nickel	E	1.1356	0.7687	100.0	105.7	ug/L	6	10	
Sodium	E	1.5332	0.5620	10000	9997	ug/L	0	10	
Vanadium	E	10.736	1.8295	100.0	103.2	ug/L	3	10	
Zinc	E	9.1417	0.9503	100.0	103.4	ug/L	3	10	
Iron	H	0.8077	0.7598	10000	10270	ug/L	3	10	
Selenium	H	0.1163	0.1129	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1083621	-10.79
Scandium	A	1291021	1266717	-1.88
Scandium	E	94503	92028	-2.62
Scandium	H	842013	837284	-0.56
Germanium	H	169845	169695	-0.09
Germanium	E	39701	38703	-2.51
Indium	A	1596397	1504795	-5.74
Bismuth	A	1672268	1543975	-7.67
Yttrium	A	1593478	1568498	-1.57
Terbium	A	2400096	2299347	-4.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280090 File : c14t0090 Time : 15-MAR-2007 03:24
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6414	10000	10100	ug/L	1	10	
Antimony	A	0.3046	0.2937	100.0	100.3	ug/L	0	10	
Barium	A	0.1449	0.0722	100.0	103.4	ug/L	3	10	
Beryllium	A	0.2473	0.2560	100.0	107.5	ug/L	8	10	
Cadmium	A	0.0874	0.0863	100.0	102.7	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7670	100.0	102.3	ug/L	2	10	
Magnesium	A	0.5969	0.5531	10000	10120	ug/L	1	10	
Molybdenum	A	0.2198	0.2122	100.0	99.79	ug/L	0	10	
Potassium	A	1.9813	0.6683	10000	10230	ug/L	2	10	
Silver	A	0.3371	0.3315	100.0	102.3	ug/L	2	10	
Thallium	A	0.8765	0.8751	50.00	50.45	ug/L	1	10	
Arsenic	E	0.7385	0.5281	100.0	101.5	ug/L	2	10	
Chromium	E	2.9284	2.1572	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0425	100.0	103.3	ug/L	3	10	
Copper	E	13.561	4.7142	100.0	102.9	ug/L	3	10	
Manganese	E	1.6848	1.5047	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7636	100.0	105.0	ug/L	5	10	
Sodium	E	1.5332	0.5644	10000	10040	ug/L	0	10	
Vanadium	E	10.736	1.8134	100.0	102.3	ug/L	2	10	
Zinc	E	9.1417	0.9434	100.0	102.7	ug/L	3	10	
Iron	H	0.8077	0.7616	10000	10300	ug/L	3	10	
Selenium	H	0.1163	0.1133	100.0	103.5	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1097106	-9.68
Scandium	A	1291021	1260258	-2.38
Scandium	E	94503	91318	-3.37
Scandium	H	842013	826305	-1.87
Germanium	H	169845	168483	-0.80
Germanium	E	39701	38781	-2.32
Indium	A	1596397	1501227	-5.96
Bismuth	A	1672268	1528868	-8.58
Yttrium	A	1593478	1554437	-2.45
Terbium	A	2400096	2294105	-4.42

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280115 File : c14t0115 Time : 15-MAR-2007 05:46
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6312	10000	9936	ug/L	-1	10	
Antimony	A	0.3046	0.2860	100.0	97.66	ug/L	-2	10	
Barium	A	0.1449	0.0720	100.0	103.1	ug/L	3	10	
Beryllium	A	0.2473	0.2586	100.0	108.6	ug/L	9	10	
Cadmium	A	0.0874	0.0843	100.0	100.3	ug/L	0	10	
Calcium	A	0.0438	0.0211	10000	10100	ug/L	1	10	
Lead	A	0.9125	0.7498	100.0	99.96	ug/L	0	10	
Magnesium	A	0.5969	0.5423	10000	9920	ug/L	-1	10	
Molybdenum	A	0.2198	0.2081	100.0	97.90	ug/L	-2	10	
Potassium	A	1.9813	0.6615	10000	10130	ug/L	1	10	
Silver	A	0.3371	0.3273	100.0	101.0	ug/L	1	10	
Thallium	A	0.8765	0.8589	50.00	49.52	ug/L	-1	10	
Arsenic	E	0.7385	0.5274	100.0	101.3	ug/L	1	10	
Chromium	E	2.9284	2.1256	100.0	100.9	ug/L	1	10	
Cobalt	E	3.1145	3.0171	100.0	102.4	ug/L	2	10	
Copper	E	13.561	4.7243	100.0	103.1	ug/L	3	10	
Manganese	E	1.6848	1.4820	100.0	101.0	ug/L	1	10	
Nickel	E	1.1356	0.7519	100.0	103.4	ug/L	3	10	
Sodium	E	1.5332	0.5476	10000	9740	ug/L	-3	10	
Vanadium	E	10.736	1.7953	100.0	101.3	ug/L	1	10	
Zinc	E	9.1417	0.9288	100.0	101.0	ug/L	1	10	
Iron	H	0.8077	0.7505	10000	10150	ug/L	2	10	
Selenium	H	0.1163	0.1100	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1073409	-11.63
Scandium	A	1291021	1296768	0.45
Scandium	E	94503	94306	-0.21
Scandium	H	842013	850061	0.96
Germanium	H	169845	175737	3.47
Germanium	E	39701	39521	-0.45
Indium	A	1596397	1560309	-2.26
Bismuth	A	1672268	1554232	-7.06
Yttrium	A	1593478	1611598	1.14
Terbium	A	2400096	2367432	-1.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280120 File : c14t0120 Time : 15-MAR-2007 06:15
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6304	10000	9923	ug/L	-1	10	
Antimony	A	0.3046	0.2932	100.0	100.1	ug/L	0	10	
Barium	A	0.1449	0.0726	100.0	104.1	ug/L	4	10	
Beryllium	A	0.2473	0.2587	100.0	108.6	ug/L	9	10	
Cadmium	A	0.0874	0.0864	100.0	102.8	ug/L	3	10	
Calcium	A	0.0438	0.0211	10000	10090	ug/L	1	10	
Lead	A	0.9125	0.7611	100.0	101.5	ug/L	2	10	
Magnesium	A	0.5969	0.5440	10000	9952	ug/L	0	10	
Molybdenum	A	0.2198	0.2108	100.0	99.15	ug/L	-1	10	
Potassium	A	1.9813	0.6622	10000	10140	ug/L	1	10	
Silver	A	0.3371	0.3347	100.0	103.3	ug/L	3	10	
Thallium	A	0.8765	0.8693	50.00	50.12	ug/L	0	10	
Arsenic	E	0.7385	0.5352	100.0	102.8	ug/L	3	10	
Chromium	E	2.9284	2.1628	100.0	102.7	ug/L	3	10	
Cobalt	E	3.1145	3.0526	100.0	103.6	ug/L	4	10	
Copper	E	13.561	4.7584	100.0	103.9	ug/L	4	10	
Manganese	E	1.6848	1.4961	100.0	102.0	ug/L	2	10	
Nickel	E	1.1356	0.7656	100.0	105.3	ug/L	5	10	
Sodium	E	1.5332	0.5572	10000	9912	ug/L	-1	10	
Vanadium	E	10.736	1.8123	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9456	100.0	102.9	ug/L	3	10	
Iron	H	0.8077	0.7638	10000	10330	ug/L	3	10	
Selenium	H	0.1163	0.1129	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087655	-10.46
Scandium	A	1291021	1303993	1.00
Scandium	E	94503	93801	-0.74
Scandium	H	842013	855473	1.60
Germanium	H	169845	176148	3.71
Germanium	E	39701	39657	-0.11
Indium	A	1596397	1535095	-3.84
Bismuth	A	1672268	1551876	-7.20
Yttrium	A	1593478	1603829	0.65
Terbium	A	2400096	2351823	-2.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67106280139 File : c14t0139 IDF : 1.0
Cal : 67106280001 Caldate: 14-MAR-2007 Time : 15-MAR-2007 08:03
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6299	10000	9916	ug/L	-1	10	
Antimony	A	0.3046	0.2924	100.0	99.85	ug/L	0	10	
Barium	A	0.1449	0.0732	100.0	104.8	ug/L	5	10	
Beryllium	A	0.2473	0.2590	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0856	100.0	101.8	ug/L	2	10	
Calcium	A	0.0438	0.0211	10000	10060	ug/L	1	10	
Lead	A	0.9125	0.7593	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5969	0.5394	10000	9867	ug/L	-1	10	
Molybdenum	A	0.2198	0.2111	100.0	99.28	ug/L	-1	10	
Potassium	A	1.9813	0.6639	10000	10160	ug/L	2	10	
Silver	A	0.3371	0.3318	100.0	102.4	ug/L	2	10	
Thallium	A	0.8765	0.8694	50.00	50.12	ug/L	0	10	
Arsenic	E	0.7385	0.5272	100.0	101.3	ug/L	1	10	
Chromium	E	2.9284	2.1462	100.0	101.9	ug/L	2	10	
Cobalt	E	3.1145	3.0395	100.0	103.2	ug/L	3	10	
Copper	E	13.561	4.6968	100.0	102.5	ug/L	3	10	
Manganese	E	1.6848	1.4890	100.0	101.5	ug/L	2	10	
Nickel	E	1.1356	0.7628	100.0	104.9	ug/L	5	10	
Sodium	E	1.5332	0.5480	10000	9746	ug/L	-3	10	
Vanadium	E	10.736	1.8105	100.0	102.1	ug/L	2	10	
Zinc	E	9.1417	0.9328	100.0	101.5	ug/L	2	10	
Iron	H	0.8077	0.7520	10000	10170	ug/L	2	10	
Selenium	H	0.1163	0.1121	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1088042	-10.43
Scandium	A	1291021	1314575	1.82
Scandium	E	94503	95452	1.00
Scandium	H	842013	867126	2.98
Germanium	H	169845	177781	4.67
Germanium	E	39701	40362	1.67
Indium	A	1596397	1563988	-2.03
Bismuth	A	1672268	1571144	-6.05
Yttrium	A	1593478	1622543	1.82
Terbium	A	2400096	2377557	-0.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280158 File : c14t0158 Time : 15-MAR-2007 09:48
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6235	10000	9814	ug/L	-2	10	
Antimony	A	0.3046	0.2901	100.0	99.08	ug/L	-1	10	
Barium	A	0.1449	0.0718	100.0	102.8	ug/L	3	10	
Beryllium	A	0.2473	0.2579	100.0	108.3	ug/L	8	10	
Cadmium	A	0.0874	0.0839	100.0	99.78	ug/L	0	10	
Calcium	A	0.0438	0.0209	10000	9989	ug/L	0	10	
Lead	A	0.9125	0.7494	100.0	99.91	ug/L	0	10	
Magnesium	A	0.5969	0.5383	10000	9847	ug/L	-2	10	
Molybdenum	A	0.2198	0.2082	100.0	97.94	ug/L	-2	10	
Potassium	A	1.9813	0.6579	10000	10070	ug/L	1	10	
Silver	A	0.3371	0.3263	100.0	100.7	ug/L	1	10	
Thallium	A	0.8765	0.8616	50.00	49.67	ug/L	-1	10	
Arsenic	E	0.7385	0.5343	100.0	102.7	ug/L	3	10	
Chromium	E	2.9284	2.1360	100.0	101.4	ug/L	1	10	
Cobalt	E	3.1145	3.0195	100.0	102.5	ug/L	3	10	
Copper	E	13.561	4.7193	100.0	103.0	ug/L	3	10	
Manganese	E	1.6848	1.4844	100.0	101.2	ug/L	1	10	
Nickel	E	1.1356	0.7579	100.0	104.2	ug/L	4	10	
Sodium	E	1.5332	0.5472	10000	9732	ug/L	-3	10	
Vanadium	E	10.736	1.7978	100.0	101.4	ug/L	1	10	
Zinc	E	9.1417	0.9424	100.0	102.6	ug/L	3	10	
Iron	H	0.8077	0.7490	10000	10130	ug/L	1	10	
Selenium	H	0.1163	0.1124	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087329	-10.49
Scandium	A	1291021	1305548	1.13
Scandium	E	94503	93918	-0.62
Scandium	H	842013	838348	-0.44
Germanium	H	169845	169422	-0.25
Germanium	E	39701	39375	-0.82
Indium	A	1596397	1577099	-1.21
Bismuth	A	1672268	1579551	-5.54
Yttrium	A	1593478	1627297	2.12
Terbium	A	2400096	2401895	0.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280179 File : c14t0179 Time : 15-MAR-2007 11:44
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6172	10000	9715	ug/L	-3	10	
Antimony	A	0.3046	0.2936	100.0	100.3	ug/L	0	10	
Barium	A	0.1449	0.0719	100.0	103.0	ug/L	3	10	
Beryllium	A	0.2473	0.2550	100.0	107.1	ug/L	7	10	
Cadmium	A	0.0874	0.0846	100.0	100.6	ug/L	1	10	
Calcium	A	0.0438	0.0210	10000	10030	ug/L	0	10	
Lead	A	0.9125	0.7550	100.0	100.7	ug/L	1	10	
Magnesium	A	0.5969	0.5276	10000	9652	ug/L	-3	10	
Molybdenum	A	0.2198	0.2090	100.0	98.32	ug/L	-2	10	
Potassium	A	1.9813	0.6550	10000	10020	ug/L	0	10	
Silver	A	0.3371	0.3269	100.0	100.9	ug/L	1	10	
Thallium	A	0.8765	0.8509	50.00	49.06	ug/L	-2	10	
Arsenic	E	0.7385	0.5379	100.0	103.4	ug/L	3	10	
Chromium	E	2.9284	2.1494	100.0	102.0	ug/L	2	10	
Cobalt	E	3.1145	3.0378	100.0	103.1	ug/L	3	10	
Copper	E	13.561	4.6719	100.0	102.0	ug/L	2	10	
Manganese	E	1.6848	1.5047	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7600	100.0	104.5	ug/L	5	10	
Sodium	E	1.5332	0.5525	10000	9828	ug/L	-2	10	
Vanadium	E	10.736	1.8117	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9379	100.0	102.1	ug/L	2	10	
Iron	H	0.8077	0.7608	10000	10290	ug/L	3	10	
Selenium	H	0.1163	0.1115	100.0	101.8	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1012026	-16.69
Scandium	A	1291021	1243416	-3.69
Scandium	E	94503	89165	-5.65
Scandium	H	842013	790627	-6.10
Germanium	H	169845	162363	-4.41
Germanium	E	39701	37935	-4.45
Indium	A	1596397	1508684	-5.49
Bismuth	A	1672268	1552302	-7.17
Yttrium	A	1593478	1556823	-2.30
Terbium	A	2400096	2325784	-3.10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280184 File : c14t0184 Time : 15-MAR-2007 12:12
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6300	10000	9917	ug/L	-1	10	
Antimony	A	0.3046	0.2993	100.0	102.2	ug/L	2	10	
Barium	A	0.1449	0.0739	100.0	105.9	ug/L	6	10	
Beryllium	A	0.2473	0.2596	100.0	109.0	ug/L	9	10	
Cadmium	A	0.0874	0.0858	100.0	102.1	ug/L	2	10	
Calcium	A	0.0438	0.0214	10000	10230	ug/L	2	10	
Lead	A	0.9125	0.7665	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5385	10000	9851	ug/L	-1	10	
Molybdenum	A	0.2198	0.2135	100.0	100.4	ug/L	0	10	
Potassium	A	1.9813	0.6704	10000	10260	ug/L	3	10	
Silver	A	0.3371	0.3333	100.0	102.9	ug/L	3	10	
Thallium	A	0.8765	0.8734	50.00	50.35	ug/L	1	10	
Arsenic	E	0.7385	0.5440	100.0	104.5	ug/L	5	10	
Chromium	E	2.9284	2.1581	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0549	100.0	103.7	ug/L	4	10	
Copper	E	13.561	4.7319	100.0	103.3	ug/L	3	10	
Manganese	E	1.6848	1.5134	100.0	103.2	ug/L	3	10	
Nickel	E	1.1356	0.7639	100.0	105.0	ug/L	5	10	
Sodium	E	1.5332	0.5518	10000	9815	ug/L	-2	10	
Vanadium	E	10.736	1.8299	100.0	103.3	ug/L	3	10	
Zinc	E	9.1417	0.9466	100.0	103.0	ug/L	3	10	
Iron	H	0.8077	0.7509	10000	10150	ug/L	2	10	
Selenium	H	0.1163	0.1113	100.0	101.6	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1023936	-15.70
Scandium	A	1291021	1248231	-3.31
Scandium	E	94503	91314	-3.37
Scandium	H	842013	826173	-1.88
Germanium	H	169845	168585	-0.74
Germanium	E	39701	38794	-2.28
Indium	A	1596397	1513694	-5.18
Bismuth	A	1672268	1541437	-7.82
Yttrium	A	1593478	1559249	-2.15
Terbium	A	2400096	2319430	-3.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280204 File : c14t0204 Time : 15-MAR-2007 14:13
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6280	10000	9885	ug/L	-1	10	
Antimony	A	0.3046	0.2979	100.0	101.7	ug/L	2	10	
Barium	A	0.1449	0.0735	100.0	105.3	ug/L	5	10	
Beryllium	A	0.2473	0.2590	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0862	100.0	102.5	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7667	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5390	10000	9860	ug/L	-1	10	
Molybdenum	A	0.2198	0.2125	100.0	99.92	ug/L	0	10	
Potassium	A	1.9813	0.6694	10000	10250	ug/L	3	10	
Silver	A	0.3371	0.3312	100.0	102.2	ug/L	2	10	
Thallium	A	0.8765	0.8654	50.00	49.89	ug/L	0	10	
Arsenic	E	0.7385	0.5410	100.0	104.0	ug/L	4	10	
Chromium	E	2.9284	2.1428	100.0	101.7	ug/L	2	10	
Cobalt	E	3.1145	3.0259	100.0	102.7	ug/L	3	10	
Copper	E	13.561	4.6603	100.0	101.7	ug/L	2	10	
Manganese	E	1.6848	1.5055	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7576	100.0	104.2	ug/L	4	10	
Sodium	E	1.5332	0.5508	10000	9797	ug/L	-2	10	
Vanadium	E	10.736	1.8115	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9411	100.0	102.4	ug/L	2	10	
Iron	H	0.8077	0.7485	10000	10120	ug/L	1	10	
Selenium	H	0.1163	0.1110	100.0	101.4	ug/L	1	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1018121	-16.18
Scandium	A	1291021	1235249	-4.32
Scandium	E	94503	92685	-1.92
Scandium	H	842013	820657	-2.54
Germanium	H	169845	167661	-1.29
Germanium	E	39701	39241	-1.16
Indium	A	1596397	1511943	-5.29
Bismuth	A	1672268	1558351	-6.81
Yttrium	A	1593478	1552047	-2.60
Terbium	A	2400096	2320381	-3.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280015 File : c14t0015 Time : 14-MAR-2007 20:37
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005983]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01203]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03659]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06965]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.07287]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.08188]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06344]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02216]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1189514	-2.07
Scandium	A	1291021	1253306	-2.92
Scandium	E	94503	94153	-0.37
Scandium	H	842013	829837	-1.45
Germanium	H	169845	167034	-1.66
Germanium	E	39701	39155	-1.37
Indium	A	1596397	1560436	-2.25
Bismuth	A	1672268	1629474	-2.56
Yttrium	A	1593478	1531263	-3.90
Terbium	A	2400096	2350809	-2.05

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280037 File : c14t0037 Time : 14-MAR-2007 22:37
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002782]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01589]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01398]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.006848]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01630]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1208102	-0.54
Scandium	A	1291021	1312747	1.68
Scandium	E	94503	95286	0.83
Scandium	H	842013	854603	1.50
Germanium	H	169845	174963	3.01
Germanium	E	39701	40481	1.97
Indium	A	1596397	1623141	1.68
Bismuth	A	1672268	1670833	-0.09
Yttrium	A	1593478	1621148	1.74
Terbium	A	2400096	2410236	0.42

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280054 File : c14t0054 Time : 15-MAR-2007 00:08
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002634]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009931]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02400]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06387]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06586]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05653]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02568]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1212723	-0.16
Scandium	A	1291021	1337380	3.59
Scandium	E	94503	95212	0.75
Scandium	H	842013	857751	1.87
Germanium	H	169845	174046	2.47
Germanium	E	39701	40133	1.09
Indium	A	1596397	1635033	2.42
Bismuth	A	1672268	1685122	0.77
Yttrium	A	1593478	1634806	2.59
Terbium	A	2400096	2433334	1.38

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280077 File : c14t0077 Time : 15-MAR-2007 02:14
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001208]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008754]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01137]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1137787	-6.33
Scandium	A	1291021	1299468	0.65
Scandium	E	94503	95058	0.59
Scandium	H	842013	848929	0.82
Germanium	H	169845	176767	4.08
Germanium	E	39701	40145	1.12
Indium	A	1596397	1595563	-0.05
Bismuth	A	1672268	1647187	-1.50
Yttrium	A	1593478	1602169	0.55
Terbium	A	2400096	2374814	-1.05

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280093 File : c14t0093 Time : 15-MAR-2007 03:43
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03094]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03221]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.760]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.184]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01498]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02552]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01965]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03460]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02576]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1152496	-5.12
Scandium	A	1291021	1297585	0.51
Scandium	E	94503	95742	1.31
Scandium	H	842013	842329	0.04
Germanium	H	169845	174171	2.55
Germanium	E	39701	39877	0.44
Indium	A	1596397	1599809	0.21
Bismuth	A	1672268	1643485	-1.72
Yttrium	A	1593478	1594455	0.06
Terbium	A	2400096	2376420	-0.99

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280118 File : c14t0118 Time : 15-MAR-2007 06:02
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02516]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02558]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.904]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	10.00	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01189]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03070]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02294]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[4.743]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05025]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1157498	-4.71
Scandium	A	1291021	1348054	4.42
Scandium	E	94503	101183	7.07
Scandium	H	842013	905377	7.53
Germanium	H	169845	187647	10.48
Germanium	E	39701	42809	7.83
Indium	A	1596397	1670831	4.66
Bismuth	A	1672268	1687124	0.89
Yttrium	A	1593478	1691065	6.12
Terbium	A	2400096	2461195	2.55

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280122 File : c14t0122 Time : 15-MAR-2007 06:26
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01172]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01682]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01729]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01441]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01402]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.883]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07248]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1156020	-4.83
Scandium	A	1291021	1345794	4.24
Scandium	E	94503	98998	4.76
Scandium	H	842013	889917	5.69
Germanium	H	169845	184862	8.84
Germanium	E	39701	41830	5.36
Indium	A	1596397	1654447	3.64
Bismuth	A	1672268	1689667	1.04
Yttrium	A	1593478	1670382	4.83
Terbium	A	2400096	2445466	1.89

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280141 File : c14t0141 Time : 15-MAR-2007 08:15
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003738]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009201]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01977]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04350]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05918]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05203]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03266]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.04102]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1139378	-6.20
Scandium	A	1291021	1356536	5.07
Scandium	E	94503	97309	2.97
Scandium	H	842013	868186	3.11
Germanium	H	169845	180757	6.42
Germanium	E	39701	40999	3.27
Indium	A	1596397	1658497	3.89
Bismuth	A	1672268	1701486	1.75
Yttrium	A	1593478	1676970	5.24
Terbium	A	2400096	2456092	2.33

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280160 File : c14t0160 Time : 15-MAR-2007 10:00
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.004098]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009133]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.979]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02892]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.003059]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01780]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1110714	-8.56
Scandium	A	1291021	1291098	0.01
Scandium	E	94503	95284	0.83
Scandium	H	842013	839154	-0.34
Germanium	H	169845	176320	3.81
Germanium	E	39701	40668	2.44
Indium	A	1596397	1602960	0.41
Bismuth	A	1672268	1655865	-0.98
Yttrium	A	1593478	1609623	1.01
Terbium	A	2400096	2387794	-0.51

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280181 File : c14t0181 Time : 15-MAR-2007 11:56
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001717]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01019]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	16.50	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007582]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02380]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01197]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1307	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01189]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1046592	-13.84
Scandium	A	1291021	1256372	-2.68
Scandium	E	94503	94001	-0.53
Scandium	H	842013	831503	-1.25
Germanium	H	169845	173412	2.10
Germanium	E	39701	39777	0.19
Indium	A	1596397	1566039	-1.90
Bismuth	A	1672268	1642775	-1.76
Yttrium	A	1593478	1576199	-1.08
Terbium	A	2400096	2327683	-3.02

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280186 File : c14t0186 Time : 15-MAR-2007 12:26
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003554]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01432]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	13.00	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04501]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06192]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.09164]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04376]	0.1000	0.001252	ug/L	!ib
Sodium	E	12.44	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1514	0.1000	0.01127	ug/L	ib ***
Iron	H	[4.990]	10.00	4.329	ug/L	!ib
Selenium	H	[0.04549]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087127	-10.50
Scandium	A	1291021	1304212	1.02
Scandium	E	94503	94571	0.07
Scandium	H	842013	845068	0.36
Germanium	H	169845	175993	3.62
Germanium	E	39701	40404	1.77
Indium	A	1596397	1624096	1.74
Bismuth	A	1672268	1670975	-0.08
Yttrium	A	1593478	1638625	2.83
Terbium	A	2400096	2413131	0.54

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67106280206
Cal : 67106280001

File : c14t0206
Caldate: 14-MAR-2007

IDF : 1.0
Time : 15-MAR-2007 14:27

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03219]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.362]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	15.72	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.002657]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04098]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01210]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1834	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01122]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1092994	-10.02
Scandium	A	1291021	1281884	-0.71
Scandium	E	94503	97393	3.06
Scandium	H	842013	822072	-2.37
Germanium	H	169845	170602	0.45
Germanium	E	39701	41143	3.63
Indium	A	1596397	1608061	0.73
Bismuth	A	1672268	1673078	0.05
Yttrium	A	1593478	1604128	0.67
Terbium	A	2400096	2377813	-0.93

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280017 File : c14t0017 Time : 14-MAR-2007 20:48
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08928]	0.1000	ug/L	
Barium	A	6.473	0.1000	ug/L	
Beryllium	A	[0.02325]	0.1000	ug/L	
Cadmium	A	2.058	0.1000	ug/L	
Lead	A	0.5482	0.1000	ug/L	
Silver	A	0.2284	0.1000	ug/L	
Thallium	A	[0.03798]	0.05000	ug/L	
Arsenic	E	0.5856	0.1000	ug/L	
Chromium	E	1.467	0.1000	ug/L	
Cobalt	E	0.2519	0.1000	ug/L	
Copper	E	1.630	0.1000	ug/L	
Manganese	E	0.8874	0.1000	ug/L	
Nickel	E	1.984	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.886	0.1000	ug/L	
Selenium	H	0.7528	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99620	ug/L	100
Calcium	A	300000	303200	ug/L	101
Magnesium	A	100000	97270	ug/L	97
Molybdenum	A	2000	2070	ug/L	104
Potassium	A	100000	100400	ug/L	100
Sodium	E	250000	257100	ug/L	103
Iron	H	250000	248000	ug/L	99

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	903535	-25.62
Scandium	A	1291021	1128348	-12.60
Scandium	E	94503	81063	-14.22
Scandium	H	842013	726281	-13.74
Germanium	H	169845	146944	-13.48
Germanium	E	39701	34533	-13.02
Indium	A	1596397	1323556	-17.09
Bismuth	A	1672268	1281708	-23.36
Yttrium	A	1593478	1400300	-12.12
Terbium	A	2400096	2156713	-10.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280018 File : c14t0018 Time : 14-MAR-2007 20:53
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	102.1	ug/L	2	20	
Calcium	A	300000	310700	ug/L	4		
Magnesium	A	100000	98480	ug/L	-2		
Molybdenum	A	2000	2056	ug/L	3		
Potassium	A	100000	101900	ug/L	2		
Silver	A	50.00	45.69	ug/L	-9	20	
Arsenic	E	100.0	102.8	ug/L	3	20	
Chromium	E	200.0	212.9	ug/L	6	20	
Cobalt	E	200.0	197.1	ug/L	-1	20	
Copper	E	200.0	179.2	ug/L	-10	20	
Manganese	E	200.0	209.7	ug/L	5	20	
Nickel	E	200.0	195.9	ug/L	-2	20	
Sodium	E	250000	261900	ug/L	5		
Vanadium	E	200.0	217.8	ug/L	9	20	
Zinc	E	100.0	90.08	ug/L	-10	20	
Iron	H	250000	246700	ug/L	-1		
Selenium	H	100.0	95.61	ug/L	-4	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	733478	-12.89
Scandium	A	1291021	1112893	-13.80
Scandium	E	94503	79123	-16.28
Germanium	H	169845	148935	-12.31
Germanium	E	39701	34497	-13.11
Indium	A	1596397	1319128	-17.37
Yttrium	A	1593478	1409664	-11.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280057 File : c14t0057 Time : 15-MAR-2007 00:24
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07319]	0.1000	ug/L	
Barium	A	6.619	0.1000	ug/L	
Beryllium	A	[0.02474]	0.1000	ug/L	
Cadmium	A	2.046	0.1000	ug/L	
Lead	A	0.5331	0.1000	ug/L	
Silver	A	0.2191	0.1000	ug/L	
Thallium	A	[0.03573]	0.05000	ug/L	
Arsenic	E	0.5527	0.1000	ug/L	
Chromium	E	1.397	0.1000	ug/L	
Cobalt	E	0.2494	0.1000	ug/L	
Copper	E	1.561	0.1000	ug/L	
Manganese	E	0.8441	0.1000	ug/L	
Nickel	E	1.938	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.669	0.1000	ug/L	
Selenium	H	0.5092	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94820	ug/L	95
Calcium	A	300000	294900	ug/L	98
Magnesium	A	100000	92690	ug/L	93
Molybdenum	A	2000	1974	ug/L	99
Potassium	A	100000	96820	ug/L	97
Sodium	E	250000	243400	ug/L	97
Iron	H	250000	243600	ug/L	97

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	934501	-23.07
Scandium	A	1291021	1210565	-6.23
Scandium	E	94503	86554	-8.41
Scandium	H	842013	754296	-10.42
Germanium	H	169845	153646	-9.54
Germanium	E	39701	36814	-7.27
Indium	A	1596397	1406925	-11.87
Bismuth	A	1672268	1348530	-19.36
Yttrium	A	1593478	1521326	-4.53
Terbium	A	2400096	2274590	-5.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280058 File : c14t0058 Time : 15-MAR-2007 00:29
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100000	ug/L	0		
Cadmium	A	100.0	103.0	ug/L	3	20	
Calcium	A	300000	308900	ug/L	3		
Magnesium	A	100000	97290	ug/L	-3		
Molybdenum	A	2000	2077	ug/L	4		
Potassium	A	100000	101400	ug/L	1		
Silver	A	50.00	46.37	ug/L	-7	20	
Arsenic	E	100.0	105.1	ug/L	5	20	
Chromium	E	200.0	214.9	ug/L	7	20	
Cobalt	E	200.0	199.7	ug/L	0	20	
Copper	E	200.0	182.7	ug/L	-9	20	
Manganese	E	200.0	208.9	ug/L	4	20	
Nickel	E	200.0	198.9	ug/L	-1	20	
Sodium	E	250000	261500	ug/L	5		
Vanadium	E	200.0	220.5	ug/L	10	20	
Zinc	E	100.0	91.50	ug/L	-9	20	
Iron	H	250000	250700	ug/L	0		
Selenium	H	100.0	98.55	ug/L	-1	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	734922	-12.72
Scandium	A	1291021	1120935	-13.17
Scandium	E	94503	79411	-15.97
Germanium	H	169845	148950	-12.30
Germanium	E	39701	34327	-13.54
Indium	A	1596397	1319838	-17.32
Yttrium	A	1593478	1404296	-11.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280095 File : c14t0095 Time : 15-MAR-2007 03:54
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08974]	0.1000	ug/L	
Barium	A	7.111	0.1000	ug/L	
Beryllium	A	[0.03864]	0.1000	ug/L	
Cadmium	A	2.194	0.1000	ug/L	
Lead	A	0.5644	0.1000	ug/L	
Silver	A	0.2313	0.1000	ug/L	
Thallium	A	[0.03803]	0.05000	ug/L	
Arsenic	E	0.6118	0.1000	ug/L	
Chromium	E	1.444	0.1000	ug/L	
Cobalt	E	0.2596	0.1000	ug/L	
Copper	E	1.577	0.1000	ug/L	
Manganese	E	0.8925	0.1000	ug/L	
Nickel	E	2.028	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.849	0.1000	ug/L	
Selenium	H	0.7936	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98500	ug/L	99
Calcium	A	300000	304600	ug/L	102
Magnesium	A	100000	95530	ug/L	96
Molybdenum	A	2000	2044	ug/L	102
Potassium	A	100000	100500	ug/L	101
Sodium	E	250000	247100	ug/L	99
Iron	H	250000	246800	ug/L	99

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	893493	-26.44
Scandium	A	1291021	1185327	-8.19
Scandium	E	94503	85016	-10.04
Scandium	H	842013	760159	-9.72
Germanium	H	169845	154290	-9.16
Germanium	E	39701	36402	-8.31
Indium	A	1596397	1377710	-13.70
Bismuth	A	1672268	1312855	-21.49
Yttrium	A	1593478	1479699	-7.14
Terbium	A	2400096	2227161	-7.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280096 File : c14t0096 Time : 15-MAR-2007 03:59
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98180	ug/L	-2		
Cadmium	A	100.0	101.9	ug/L	2	20	
Calcium	A	300000	307700	ug/L	3		
Magnesium	A	100000	95320	ug/L	-5		
Molybdenum	A	2000	2041	ug/L	2		
Potassium	A	100000	99940	ug/L	0		
Silver	A	50.00	45.50	ug/L	-9	20	
Arsenic	E	100.0	102.1	ug/L	2	20	
Chromium	E	200.0	210.0	ug/L	5	20	
Cobalt	E	200.0	194.5	ug/L	-3	20	
Copper	E	200.0	178.6	ug/L	-11	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	194.9	ug/L	-3	20	
Sodium	E	250000	253000	ug/L	1		
Vanadium	E	200.0	215.3	ug/L	8	20	
Zinc	E	100.0	88.46	ug/L	-12	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	96.73	ug/L	-3	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	769175	-8.65
Scandium	A	1291021	1166035	-9.68
Scandium	E	94503	82627	-12.57
Germanium	H	169845	156968	-7.58
Germanium	E	39701	35704	-10.07
Indium	A	1596397	1365202	-14.48
Yttrium	A	1593478	1475085	-7.43

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280163 File : c14t0163 Time : 15-MAR-2007 10:16
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06682]	0.1000	ug/L	
Barium	A	2.520	0.1000	ug/L	
Beryllium	A	[0.02401]	0.1000	ug/L	
Cadmium	A	2.075	0.1000	ug/L	
Lead	A	0.4886	0.1000	ug/L	
Silver	A	0.2077	0.1000	ug/L	
Thallium	A	[0.03882]	0.05000	ug/L	
Arsenic	E	0.4938	0.1000	ug/L	
Chromium	E	1.386	0.1000	ug/L	
Cobalt	E	0.2350	0.1000	ug/L	
Copper	E	1.200	0.1000	ug/L	
Manganese	E	0.7264	0.1000	ug/L	
Nickel	E	1.450	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.141	0.1000	ug/L	
Selenium	H	0.8692	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93440	ug/L	93
Calcium	A	300000	291200	ug/L	97
Magnesium	A	100000	90750	ug/L	91
Molybdenum	A	2000	1954	ug/L	98
Potassium	A	100000	96110	ug/L	96
Sodium	E	250000	236300	ug/L	95
Iron	H	250000	235800	ug/L	94

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	857869	-29.38
Scandium	A	1291021	1155607	-10.49
Scandium	E	94503	83014	-12.16
Scandium	H	842013	747045	-11.28
Germanium	H	169845	153377	-9.70
Germanium	E	39701	35997	-9.33
Indium	A	1596397	1357176	-14.99
Bismuth	A	1672268	1295416	-22.54
Yttrium	A	1593478	1464074	-8.12
Terbium	A	2400096	2196164	-8.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280164 File : c14t0164 Time : 15-MAR-2007 10:22
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	105.6	ug/L	6	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	97150	ug/L	-3		
Molybdenum	A	2000	2114	ug/L	6		
Potassium	A	100000	103400	ug/L	3		
Silver	A	50.00	47.23	ug/L	-6	20	
Arsenic	E	100.0	103.7	ug/L	4	20	
Chromium	E	200.0	208.4	ug/L	4	20	
Cobalt	E	200.0	194.4	ug/L	-3	20	
Copper	E	200.0	178.6	ug/L	-11	20	
Manganese	E	200.0	204.5	ug/L	2	20	
Nickel	E	200.0	193.2	ug/L	-3	20	
Sodium	E	250000	247500	ug/L	-1		
Vanadium	E	200.0	214.7	ug/L	7	20	
Zinc	E	100.0	88.97	ug/L	-11	20	
Iron	H	250000	247000	ug/L	-1		
Selenium	H	100.0	96.05	ug/L	-4	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	734702	-12.74
Scandium	A	1291021	1098817	-14.89
Scandium	E	94503	80659	-14.65
Germanium	H	169845	150607	-11.33
Germanium	E	39701	34803	-12.34
Indium	A	1596397	1308970	-18.00
Yttrium	A	1593478	1395914	-12.40

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280209 File : c14t0209 Time : 15-MAR-2007 15:07
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06498]	0.1000	ug/L	
Barium	A	2.864	0.1000	ug/L	
Beryllium	A	[0.03440]	0.1000	ug/L	
Cadmium	A	2.092	0.1000	ug/L	
Lead	A	0.4873	0.1000	ug/L	
Silver	A	0.2175	0.1000	ug/L	
Thallium	A	[0.03533]	0.05000	ug/L	
Arsenic	E	0.5701	0.1000	ug/L	
Chromium	E	1.386	0.1000	ug/L	
Cobalt	E	0.2471	0.1000	ug/L	
Copper	E	1.213	0.1000	ug/L	
Manganese	E	0.7479	0.1000	ug/L	
Nickel	E	1.393	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.354	0.1000	ug/L	
Selenium	H	0.8657	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92990	ug/L	93
Calcium	A	300000	293100	ug/L	98
Magnesium	A	100000	89840	ug/L	90
Molybdenum	A	2000	1973	ug/L	99
Potassium	A	100000	96130	ug/L	96
Sodium	E	250000	233300	ug/L	93
Iron	H	250000	237800	ug/L	95

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	855614	-29.56
Scandium	A	1291021	1184416	-8.26
Scandium	E	94503	87657	-7.24
Scandium	H	842013	750003	-10.93
Germanium	H	169845	152373	-10.29
Germanium	E	39701	37993	-4.30
Indium	A	1596397	1395115	-12.61
Bismuth	A	1672268	1336414	-20.08
Yttrium	A	1593478	1495794	-6.13
Terbium	A	2400096	2246675	-6.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280210 File : c14t0210 Time : 15-MAR-2007 15:13
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96300	ug/L	-4		
Cadmium	A	100.0	102.3	ug/L	2	20	
Calcium	A	300000	305900	ug/L	2		
Magnesium	A	100000	93020	ug/L	-7		
Molybdenum	A	2000	2034	ug/L	2		
Potassium	A	100000	100100	ug/L	0		
Silver	A	50.00	45.72	ug/L	-9	20	
Arsenic	E	100.0	102.7	ug/L	3	20	
Chromium	E	200.0	205.6	ug/L	3	20	
Cobalt	E	200.0	190.4	ug/L	-5	20	
Copper	E	200.0	174.7	ug/L	-13	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	190.0	ug/L	-5	20	
Sodium	E	250000	246300	ug/L	-1		
Vanadium	E	200.0	213.5	ug/L	7	20	
Zinc	E	100.0	87.89	ug/L	-12	20	
Iron	H	250000	246300	ug/L	-1		
Selenium	H	100.0	95.25	ug/L	-5	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	763049	-9.38
Scandium	A	1291021	1186520	-8.09
Scandium	E	94503	86692	-8.27
Germanium	H	169845	156372	-7.93
Germanium	E	39701	37529	-5.47
Indium	A	1596397	1408781	-11.75
Yttrium	A	1593478	1521792	-4.50

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1214699	1291021	94503	842013	169845	39701	1596397	1672268	1593478	2400096
		LOWER LIMIT	364410	387306	28351	252604	50954	11910	478919	501680	478043	720029
		UPPER LIMIT	1457639	1549225	113404	1010415	203814	47641	1915676	2006722	1912174	2880115
015	ICB		1189514	1253306	94153	829837	167034	39155	1560436	1629474	1531263	2350809
017	ICSA		903535	1128348	81063	726281	146944	34533	1323556	1281708	1400300	2156713
018	ICSAB		887873	1112893	79123	733478	148935	34497	1319128	1293005	1409664	2179714
023	BLANK	QC378923	1190353	1315644	98369	869571	178626	41675	1634684	1718820	1632827	2439543
024	BS	QC378924	1156729	1278024	94917	840691	169327	39680	1577712	1658975	1571448	2375496
025	BSD	QC378925	1166562	1301222	96167	853170	171648	40186	1595028	1672366	1608458	2408157
027	MSS	193234-004	1125200	1269472	91717	822360	160860	37954	1514969	1618615	1614433	2324964
028	SER	QC378928	1163262	1289801	95159	858196	172376	39683	1566747	1653453	1597829	2379758
029	MS	QC378926	1157318	1320254	95340	846820	166680	39142	1576166	1653374	1695063	2410207
030	MSD	QC378927	1179648	1365259	99277	882826	174704	40713	1602300	1661612	1735443	2410149
031	PDS	QC378929	1083443	1268707	93121	853835	168335	38265	1470491	1537445	1615860	2304408
035	CCV		1128538	1277067	92584	835430	168980	38672	1493244	1548687	1549122	2318739
037	CCB		1208102	1312747	95286	854603	174963	40481	1623141	1670833	1621148	2410236
040	SAMPLE	193234-001	1225880	1384299	101588	932176	182424	41225	1627675	1699197	1710582	2454415
041	SAMPLE	193234-002	1219021	1463001	106618	940619	181268	42331	1646484	1689288	1819585	2476901
042	SAMPLE	193234-003	1226596	1448083	105834	940326	180782	41890	1617867	1680490	1796293	2457048
043	SAMPLE	193234-005	1197967	1367922	99890	891413	176348	40870	1611556	1679801	1745879	2434501
044	SAMPLE	193234-008	1196413	1440393	106539	958963	182813	41894	1605701	1660871	1785304	2435422
045	SAMPLE	193234-009	1191551	1366092	99854	881512	175038	40996	1605846	1668750	1721565	2432141
046	SAMPLE	193234-010	1238220	1466877	106834	948708	181590	42215	1649982	1705152	1810890	2489201
047	SAMPLE	193234-011	1236562	1418660	101823	908967	180322	41992	1664349	1718921	1738285	2479234
048	SAMPLE	193234-012	1211046	1446579	106754	948415	181047	42279	1632586	1670899	1780110	2452598
052	CCV		1139389	1285567	94511	843863	171473	39450	1516717	1557067	1575062	2328556
054	CCB		1212723	1337380	95212	857751	174046	40133	1635033	1685122	1634806	2433334
057	ICSA		934501	1210565	86554	754296	153646	36814	1406925	1348530	1521326	2274590
058	ICSAB		853036	1120935	79411	734922	148950	34327	1319838	1269784	1404296	2146970
063	BLANK	QC378903	1021908	1166824	83653	769879	195501	41086	1444718	1535220	1469195	2238044
064	BS	QC378904	990222	1149880	82210	778323	157497	34183	1381306	1443028	1420622	2179492
065	BSD	QC378905	995782	1142177	81126	751219	154459	33698	1375563	1446438	1413210	2180594
067	MSS	193230-001	1139248	1277408	92390	841801	173598	39552	1571201	1653945	1575748	2337541
068	SER	QC378908	1137367	1281010	94204	841727	176622	40059	1579244	1628002	1589872	2331094
069	MS	QC378906	1108964	1270245	91923	838340	171575	39189	1552997	1602364	1572373	2317772
070	MSD	QC378907	1125565	1271691	93287	838120	172817	39519	1567331	1604101	1572043	2341696
071	PDS	QC378909	1086450	1267159	91717	833233	168801	38313	1506106	1518228	1552858	2307447
075	CCV		1083621	1266717	92028	837284	169695	38703	1504795	1543975	1568498	2299347
077	CCB		1137787	1299468	95058	848929	176767	40145	1595563	1647187	1602169	2374814
080	SAMPLE	193230-002	1154224	1299282	94227	849331	179226	40474	1599767	1671284	1598030	2362340
081	SAMPLE	193230-003	1151285	1286508	94547	850355	177597	40731	1600531	1671570	1590130	2357091
082	SAMPLE	193230-004	1133722	1273761	92546	842622	173144	39235	1573461	1634365	1585761	2346247
083	SAMPLE	193261-001	1127150	1289319	93692	839588	172727	39703	1574395	1635583	1579254	2338461
084	SAMPLE	193261-002	1131329	1275937	93449	847341	174556	39574	1576259	1632021	1576052	2352692
085	SAMPLE	193261-003	1136118	1288956	94445	843537	176097	40325	1592844	1649704	1588951	2359428
086	SAMPLE	193261-004	1123412	1250469	91492	837650	170698	38826	1551853	1614336	1547577	2301270
090	CCV		1097106	1260258	91318	826305	168483	38781	1501227	1528868	1554437	2294105
093	CCB		1152496	1297585	95742	842329	174171	39877	1599809	1643485	1594455	2376420
095	ICSA		893493	1185327	85016	760159	154290	36402	1377710	1312855	1479699	2227161
096	ICSAB		852118	1166035	82627	769175	156968	35704	1365202	1298016	1475085	2191093
101	BLANK	QC378700	982584	1140874	81934	765175	215704 *	43170	1403231	1468155	1436840	2186452

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
102	BS	QC378701	961362	1129770	81141	764485	158939	33696	1362387	1417973	1412395	2151900
105	BSD	QC378702	977706	1156580	81684	771061	161923	34137	1382358	1418474	1448447	2167673
107	MSS	193108-007	1134370	1346515	97441	867707	182164	40704	1564417	1546643	1640473	2387766
108	MSS	193108-007	1191069	1377518	99886	883687	186964	42344	1662965	1644642	1689438	2448596
109	MS	QC378703	1131852	1349632	95897	871488	180590	40012	1574326	1547473	1650257	2399215
110	MSD	QC378704	1119532	1334086	96942	879097	181583	40382	1555309	1528838	1628993	2363598
111	PDS	QC378706	1018511	1250369	90174	829761	167226	37577	1456898	1460669	1550512	2274536
115	CCV		1073409	1296768	94306	850061	175737	39521	1560309	1554232	1611598	2367432
118	CCB		1157498	1348054	101183	905377	187647	42809	1670831	1687124	1691065	2461195
119	BLANK	QC378700	1035306	1198778	86729	811723	226010 *	44220	1463394	1521174	1506127	2264179
120	CCV		1087655	1303993	93801	855473	176148	39657	1535095	1551876	1603829	2351823
122	CCB		1156020	1345794	98998	889917	184862	41830	1654447	1689667	1670382	2445466
124	BLANK	QC378700	1109687	1313175	95398	852171	181928	40305	1618993	1667262	1628025	2409134
125	MSS	193108-023	1132233	1313521	95775	869215	181864	40344	1586335	1613803	1619320	2385569
126	MS	QC378711	1114691	1325938	94793	860691	178662	40377	1574742	1612346	1623027	2392317
127	MSD	QC378712	1152051	1354493	97149	886452	182736	40943	1627271	1651955	1671036	2467319
129	BS	QC378701	1018333	1197243	84382	739554	159817	35520	1442828	1481098	1494832	2256052
130	BSD	QC378702	988611	1188104	83517	783387	165360	35141	1421253	1461247	1482120	2213106
132	MSS	193108-007	1150656	1349168	96288	864590	181311	40116	1580528	1568783	1644997	2418555
133	SER	QC378705	1195119	1402317	101825	883261	187589	42898	1678660	1678601	1709589	2468339
134	MS	QC378703	1120894	1338582	96383	872531	180717	40582	1564121	1557940	1632609	2381976
135	MSD	QC378704	1105402	1326020	96821	881219	181740	40339	1552887	1514432	1597019	2349903
139	CCV		1088042	1314575	95452	867126	177781	40362	1563988	1571144	1622543	2377557
141	CCB		1139378	1356536	97309	868186	180757	40999	1658497	1701486	1676970	2456092
143	PDS	QC378706	1019261	1238339	87417	801153	160568	36710	1450144	1461319	1544448	2266377
145	SER	QC378705	1141932	1317600	95995	866408	182267	41186	1620229	1634263	1631925	2391609
146	PDS	QC378706	1052228	1268793	89605	821664	166086	37842	1501178	1511695	1563999	2302057
148	BLANK	QC378903	1017164	1168163	83686	781317	202994	40280	1431016	1519193	1471186	2222952
149	BLANK	QC378903	1044022	1204393	85697	795976	192515	38642	1464270	1549231	1497613	2259525
150	SAMPLE	193261-003	1090937	1248235	91457	832185	171893	38974	1550117	1600132	1547623	2301266
151	SAMPLE	193108-008	1041778	1250932	90811	838120	165839	38240	1482211	1474586	1519582	2272472
152	SAMPLE	193108-009	1124023	1305662	93070	840532	174103	39673	1554075	1592983	1595779	2350251
153	SAMPLE	193108-010	1110250	1282644	93779	841847	175412	39177	1519039	1502906	1552994	2289772
154	SAMPLE	193108-011	1058492	1256121	91597	832864	166681	38128	1478103	1471478	1535124	2245338
158	CCV		1087329	1305548	93918	838348	169422	39375	1577099	1579551	1627297	2401895
160	CCB		1110714	1291098	95284	839154	176320	40668	1602960	1655865	1609623	2387794
162	SAMPLE	193108-012	1084882	1286703	91964	832890	173176	39295	1538193	1557839	1571014	2335083
163	ICSA		857869	1155607	83014	747045	153377	35997	1357176	1295416	1464074	2196164
164	ICSAB		797425	1098817	80659	734702	150607	34803	1308970	1259975	1395914	2096220
169	SAMPLE	193108-013	1005703	1218729	89440	804052	168482	38375	1486821	1533339	1521675	2271126
170	SAMPLE	193108-014	1013673	1221595	89927	805990	168550	38554	1488547	1523395	1513379	2257611
171	SAMPLE	193108-022	1018023	1239429	91386	830287	171935	39088	1542677	1568728	1551552	2321916
172	SAMPLE	193108-024	1002523	1218318	89793	813038	170010	38228	1478392	1497779	1504770	2238545
173	SAMPLE	193108-025	1020570	1227727	89920	824273	171934	38492	1471361	1510502	1510538	2251850
174	SAMPLE	193108-026	1021743	1228830	90920	810932	169238	38622	1482125	1524066	1516815	2260176
175	SAMPLE	193108-027	1028821	1230190	91398	841430	176130	39032	1482891	1539031	1516523	2268489
179	CCV		1012026	1243416	89165	790627	162363	37935	1508684	1552302	1556823	2325784
181	CCB		1046592	1256372	94001	831503	173412	39777	1566039	1642775	1576199	2327683
184	CCV		1023936	1248231	91314	826173	168585	38794	1513694	1541437	1559249	2319430
187	CCB		1080732	1282658	94839	841535	175968	40621	1599052	1645514	1610676	2393843
189	SAMPLE	193108-022	1051290	1271655	92709	828731	171882	39883	1573301	1602085	1586258	2369828
195	SAMPLE	193108-008	1065537	1256399	93331	833331	170142	39334	1569539	1601807	1575503	2327713

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
196	SAMPLE	193108-010	1091135	1285246	96440	837244	173081	40951	1584628	1603640	1589284	2352688
197	SAMPLE	193108-011	1054497	1239742	94547	828022	171201	39957	1562175	1589800	1558321	2329913
198	SAMPLE	193108-012	1057820	1245816	94127	830687	174182	40410	1554405	1601910	1561016	2319476
199	SAMPLE	193108-008	1059146	1246468	95530	834321	171278	40090	1568765	1600694	1551424	2334801
200	SAMPLE	193108-011	1057270	1248063	97297	839190	174923	40959	1572572	1621669	1560021	2351579
204	CCV		1018121	1235249	92685	820657	167661	39241	1511943	1558351	1552047	2320381
206	CCB		1092994	1281884	97393	822072	170602	41143	1608061	1673078	1604128	2377813
209	ICSA		855614	1184416	87657	750003	152373	37993	1395115	1336414	1495794	2246675
210	ICSAB		825742	1186520	86692	763049	156372	37529	1408781	1337567	1521792	2265292

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c14t0001	TUN				14-MAR-2007 19:20	1.0	1.0				1	
002	c14t0002	X	RINSE			14-MAR-2007 19:28	1.0					2	
003	c14t0003	X	RINSE			14-MAR-2007 19:33	1.0					2	
004	c14t0004	ICALBLK	CALBLANK			14-MAR-2007 19:39	1.0	1.0				2	
005	c14t0005	ICAL				14-MAR-2007 19:44	1.0	1.0				3	
006	c14t0006	ICAL				14-MAR-2007 19:49	1.0	1.0				4	
007	c14t0007	ICAL				14-MAR-2007 19:54	1.0	1.0				5	
008	c14t0008	ICAL				14-MAR-2007 20:00	1.0	1.0				6	
009	c14t0009	ICAL				14-MAR-2007 20:05	1.0	1.0				7	
010	c14t0010	ICAL				14-MAR-2007 20:10	1.0	1.0				8	
011	c14t0011	X	RINSE			14-MAR-2007 20:16	1.0					2	
012	c14t0012	ICV				14-MAR-2007 20:21	1.0	1.0			1	9	
013	c14t0013	X	RINSE			14-MAR-2007 20:26	1.0					2	
014	c14t0014	X				14-MAR-2007 20:32	1.0					2	
015	c14t0015	ICB				14-MAR-2007 20:37	1.0	1.0			1	2	
016	c14t0016	X				14-MAR-2007 20:42	1.0					2	731
017	c14t0017	ICSA				14-MAR-2007 20:48	1.0	1.0			1	10 2	7:CA=303200
018	c14t0018	ICSAB				14-MAR-2007 20:53	1.0	1.0			1	11 2	10:CA=310700
019	c14t0019	X	RINSE			14-MAR-2007 20:59	1.0					2	
020	c14t0020	X	RINSE			14-MAR-2007 21:04	1.0					2	
021	c14t0021	X	RINSE			14-MAR-2007 21:09	1.0					2	
022	c14t0022	X	RINSE			14-MAR-2007 21:15	1.0					2	
023	c14t0023	BLANK	QC378923	123041	Soil	14-MAR-2007 21:20	5.0	50.0	1		1	2	
024	c14t0024	BS	QC378924	123041	Soil	14-MAR-2007 21:25	50.0	50.0		1	1	2	
025	c14t0025	BSD	QC378925	123041	Soil	14-MAR-2007 21:31	50.0	50.0		2	1	2	
026	c14t0026	X	RINSE			14-MAR-2007 21:37	1.0					2	
027	c14t0027	MSS	193234-004	123041	Soil	14-MAR-2007 21:42	50.0	49.50			1	2	
028	c14t0028	SER	QC378928	123041	Soil	14-MAR-2007 21:47	250.0	49.50		4	1	2	
029	c14t0029	MS	QC378926	123041	Soil	14-MAR-2007 21:53	50.0	48.08		1	1	2	
030	c14t0030	MSD	QC378927	123041	Soil	14-MAR-2007 21:58	50.0	44.64			1	2	
031	c14t0031	PDS	QC378929	123041	Soil	14-MAR-2007 22:04	50.0	49.50			1	12	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGA Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
032	c14t0032	X	RINSE			14-MAR-2007 22:10	1.0			2	
033	c14t0033	X	RINSE			14-MAR-2007 22:16	1.0			2	
034	c14t0034	X	RINSE			14-MAR-2007 22:21	1.0			2	
035	c14t0035	CCV				14-MAR-2007 22:26	1.0	1.0	1	13	
036	c14t0036	X	RINSE			14-MAR-2007 22:32	1.0			2	
037	c14t0037	CCB				14-MAR-2007 22:37	1.0	1.0	1	2	
038	c14t0038	X				14-MAR-2007 22:43	1.0			2	
039	c14t0039	X				14-MAR-2007 22:48	1.0			2	
040	c14t0040	SAMPLE	193234-001	123041	Soil	14-MAR-2007 22:53	50.0	50.51	1	2	
041	c14t0041	SAMPLE	193234-002	123041	Soil	14-MAR-2007 22:58	50.0	52.08	1	2	
042	c14t0042	SAMPLE	193234-003	123041	Soil	14-MAR-2007 23:04	50.0	51.02	1	2	1:MN=297.200
043	c14t0043	SAMPLE	193234-005	123041	Soil	14-MAR-2007 23:09	50.0	49.50	1	2	
044	c14t0044	SAMPLE	193234-008	123041	Soil	14-MAR-2007 23:14	50.0	48.54	1	2	
045	c14t0045	SAMPLE	193234-009	123041	Soil	14-MAR-2007 23:20	50.0	52.63	1	2	1:MN=314.800
046	c14t0046	SAMPLE	193234-010	123041	Soil	14-MAR-2007 23:25	50.0	50.51	1	2	1:MN=266.600
047	c14t0047	SAMPLE	193234-011	123041	Soil	14-MAR-2007 23:30	50.0	44.25	1	2	
048	c14t0048	SAMPLE	193234-012	123041	Soil	14-MAR-2007 23:36	50.0	49.50	1	2	
049	c14t0049	X	RINSE			14-MAR-2007 23:41	1.0			2	
050	c14t0050	X	RINSE			14-MAR-2007 23:46	1.0			2	
051	c14t0051	X	RINSE			14-MAR-2007 23:52	1.0			2	
052	c14t0052	CCV				14-MAR-2007 23:57	1.0	1.0	1	13	
053	c14t0053	X	RINSE			15-MAR-2007 00:02	1.0			2	
054	c14t0054	CCB				15-MAR-2007 00:08	1.0	1.0	1	2	
055	c14t0055	X				15-MAR-2007 00:13	1.0			2	
056	c14t0056	X				15-MAR-2007 00:19	1.0			2	
057	c14t0057	ICSA				15-MAR-2007 00:24	1.0	1.0	1	10 2	7:CA=294900
058	c14t0058	ICSAB				15-MAR-2007 00:29	1.0	1.0	1	11 2	10:CA=308900
059	c14t0059	X	RINSE			15-MAR-2007 00:35	1.0			2	
060	c14t0060	X	RINSE			15-MAR-2007 00:40	1.0			2	
061	c14t0061	X	RINSE			15-MAR-2007 00:46	1.0			2	
062	c14t0062	X	RINSE			15-MAR-2007 00:51	1.0			2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCH Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c14t0063	BLANK	QC378903	123038	Filtra	15-MAR-2007 00:56	1.0	1.0	1		1	2	
064	c14t0064	BS	QC378904	123038	Filtra	15-MAR-2007 01:02	1.0	1.0			1	2	
065	c14t0065	BSD	QC378905	123038	Filtra	15-MAR-2007 01:08	1.0	1.0			1	2	
066	c14t0066	X	RINSE			15-MAR-2007 01:15	1.0					2	
067	c14t0067	MSS	193230-001	123038	Filtra	15-MAR-2007 01:20	10.0	1.0			1	2	
068	c14t0068	SER	QC378908	123038	Filtra	15-MAR-2007 01:26	50.0	1.0	1		1	2	
069	c14t0069	MS	QC378906	123038	Filtra	15-MAR-2007 01:31	10.0	1.0			1	2	
070	c14t0070	MSD	QC378907	123038	Filtra	15-MAR-2007 01:36	10.0	1.0			1	2	
071	c14t0071	PDS	QC378909	123038	Filtra	15-MAR-2007 01:42	10.0	1.0			1	12	
072	c14t0072	X	RINSE			15-MAR-2007 01:47	1.0					2	
073	c14t0073	X	RINSE			15-MAR-2007 01:52	1.0					2	
074	c14t0074	X	RINSE			15-MAR-2007 01:58	1.0					2	
075	c14t0075	CCV				15-MAR-2007 02:03	1.0	1.0			1	13	
076	c14t0076	X	RINSE			15-MAR-2007 02:09	1.0					2	
077	c14t0077	CCB				15-MAR-2007 02:14	1.0	1.0			1	2	
078	c14t0078	X				15-MAR-2007 02:19	1.0					2	
079	c14t0079	X				15-MAR-2007 02:25	1.0					2	
080	c14t0080	SAMPLE	193230-002	123038	Filtra	15-MAR-2007 02:30	10.0	1.0			1	2	
081	c14t0081	SAMPLE	193230-003	123038	Filtra	15-MAR-2007 02:36	10.0	1.0			1	2	
082	c14t0082	SAMPLE	193230-004	123038	Filtra	15-MAR-2007 02:41	10.0	1.0			1	2	
083	c14t0083	SAMPLE	193261-001	123038	Filtra	15-MAR-2007 02:46	10.0	1.0			1	2	
084	c14t0084	SAMPLE	193261-002	123038	Filtra	15-MAR-2007 02:52	10.0	1.0			1	2	
085	c14t0085	SAMPLE	193261-003	123038	Filtra	15-MAR-2007 02:57	10.0	1.0	1		1	2	
086	c14t0086	SAMPLE	193261-004	123038	Filtra	15-MAR-2007 03:02	10.0	1.0			1	2	
087	c14t0087	X	RINSE			15-MAR-2007 03:08	1.0					2	
088	c14t0088	X	RINSE			15-MAR-2007 03:13	1.0					2	
089	c14t0089	X	RINSE			15-MAR-2007 03:19	1.0					2	
090	c14t0090	CCV				15-MAR-2007 03:24	1.0	1.0			1	13	
091	c14t0091	X	RINSE			15-MAR-2007 03:32	1.0					2	
092	c14t0092	X				15-MAR-2007 03:37	1.0					2	
093	c14t0093	CCB				15-MAR-2007 03:43	1.0	1.0			1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCH Date: 3/18/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c14t0094	X				15-MAR-2007 03:48	1.0					2	
095	c14t0095	ICSA				15-MAR-2007 03:54	1.0	1.0			1	10 2	7:CA=304600
096	c14t0096	ICSAB				15-MAR-2007 03:59	1.0	1.0			1	11 2	10:CA=307700
097	c14t0097	X	RINSE			15-MAR-2007 04:05	1.0					2	
098	c14t0098	X	RINSE			15-MAR-2007 04:10	1.0					2	
099	c14t0099	X	RINSE			15-MAR-2007 04:15	1.0					2	
100	c14t0100	X	RINSE			15-MAR-2007 04:21	1.0					2	
101	c14t0101	BLANK	QC378700	122987	Filtra	15-MAR-2007 04:26	1.0	1.0			1	2	
102	c14t0102	BS	QC378701	122987	Filtra	15-MAR-2007 04:32	1.0	1.0			1	2	
103	c14t0103	TUN				15-MAR-2007 04:37	1.0	1.0				1	
104	c14t0104	X	RINSE			15-MAR-2007 04:45	1.0					2	
105	c14t0105	BSD	QC378702	122987	Filtra	15-MAR-2007 04:50	1.0	1.0			1	2	
106	c14t0106	X	RINSE			15-MAR-2007 04:57	1.0					2	
107	c14t0107	MSS	193108-007	122987	Filtra	15-MAR-2007 05:03	10.0	1.0	2		1	2	2:NA=24070.0
108	c14t0108	MSS	193108-007	122987	Filtra	15-MAR-2007 05:08	50.0	1.0	1		1	2	
109	c14t0109	MS	QC378703	122987	Filtra	15-MAR-2007 05:13	10.0	1.0	1		1	2	2:NA=24940.0
110	c14t0110	MSD	QC378704	122987	Filtra	15-MAR-2007 05:19	10.0	1.0	1		1	2	2:NA=25790.0
111	c14t0111	PDS	QC378706	122987	Filtra	15-MAR-2007 05:24	10.0	1.0	2		1	12	3:NA=33760.0
112	c14t0112	X	RINSE			15-MAR-2007 05:30	1.0					2	
113	c14t0113	X	RINSE			15-MAR-2007 05:35	1.0					2	
114	c14t0114	X	RINSE			15-MAR-2007 05:41	1.0					2	
115	c14t0115	CCV				15-MAR-2007 05:46	1.0	1.0			1	13	
116	c14t0116	X	RINSE			15-MAR-2007 05:51	1.0					2	
117	c14t0117	X				15-MAR-2007 05:57	1.0		2		1	2	
118	c14t0118	CCB				15-MAR-2007 06:02	1.0	1.0	1		1	2	
119	c14t0119	BLANK	QC378700	122987	Filtra	15-MAR-2007 06:08	1.0	1.0			1	2	
120	c14t0120	CCV				15-MAR-2007 06:15	1.0	1.0			1	13 2	
121	c14t0121	X	RINSE			15-MAR-2007 06:20	1.0					2	
122	c14t0122	CCB				15-MAR-2007 06:26	1.0	1.0			1	2	
123	c14t0123	X				15-MAR-2007 06:31	1.0					2	
124	c14t0124	BLANK	QC378700	122987	Filtra	15-MAR-2007 06:38	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCA Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c14t0125	MSS	193108-023	122987	Filtra	15-MAR-2007 06:44	10.0	1.0			1	2	
126	c14t0126	MS	QC378711	122987	Filtra	15-MAR-2007 06:49	10.0	1.0			1	2	
127	c14t0127	MSD	QC378712	122987	Filtra	15-MAR-2007 06:54	10.0	1.0			1	2	
128	c14t0128	X	RINSE			15-MAR-2007 07:00	1.0					2	
129	c14t0129	BS	QC378701	122987	Filtra	15-MAR-2007 07:05	1.0	1.0			1	2	
130	c14t0130	BSD	QC378702	122987	Filtra	15-MAR-2007 07:12	1.0	1.0			1	2	
131	c14t0131	X	RINSE			15-MAR-2007 07:19	1.0					2	
132	c14t0132	MSS	193108-007	122987	Filtra	15-MAR-2007 07:25	10.0	1.0	2		1	2	2:NA=24110.0
133	c14t0133	SER	QC378705	122987	Filtra	15-MAR-2007 07:30	50.0	1.0		1	1	2	
134	c14t0134	MS	QC378703	122987	Filtra	15-MAR-2007 07:36	10.0	1.0			1	2	2:NA=24250.0
135	c14t0135	MSD	QC378704	122987	Filtra	15-MAR-2007 07:42	10.0	1.0			1	2	2:NA=25860.0
136	c14t0136	X	RINSE			15-MAR-2007 07:47	1.0					2	
137	c14t0137	X	RINSE			15-MAR-2007 07:52	1.0					2	
138	c14t0138	X	RINSE			15-MAR-2007 07:58	1.0					2	
139	c14t0139	CCV				15-MAR-2007 08:03	1.0	1.0			1	13 2	
140	c14t0140	X	RINSE			15-MAR-2007 08:09	1.0					2	
141	c14t0141	CCB				15-MAR-2007 08:15	1.0	1.0			1	2	
142	c14t0142	X				15-MAR-2007 08:20	1.0					2	
143	c14t0143	PDS	QC378706	122987	Filtra	15-MAR-2007 08:26	10.0	1.0	1		1	12 14 2	3:NA=34070.0
144	c14t0144	X	RINSE			15-MAR-2007 08:32	1.0					2	
145	c14t0145	SER	QC378705	122987	Filtra	15-MAR-2007 08:38	250.0	1.0	1		1	2	
146	c14t0146	PDS	QC378706	122987	Filtra	15-MAR-2007 08:43	50.0	1.0			1	12 14 2	
147	c14t0147	X	RINSE			15-MAR-2007 08:48	1.0					2	
148	c14t0148	BLANK	QC378903	123038	Filtra	15-MAR-2007 08:54	1.0	1.0			1	2	
149	c14t0149	BLANK	QC378903	123038	Filtra	15-MAR-2007 08:59	1.0	1.0			1	2	
150	c14t0150	SAMPLE	193261-003	123038	Filtra	15-MAR-2007 09:05	10.0	1.0			1	2	
151	c14t0151	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 09:10	10.0	1.0	2		1	2	2:NA=39600.0
152	c14t0152	SAMPLE	193108-009	122987	Filtra	15-MAR-2007 09:16	10.0	1.0			1	2	
153	c14t0153	SAMPLE	193108-010	122987	Filtra	15-MAR-2007 09:21	10.0	1.0	2		1	2	2:NA=23650.0
154	c14t0154	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 09:26	10.0	1.0	2		1	2	2:NA=36420.0
155	c14t0155	X	RINSE			15-MAR-2007 09:32	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: PeA Date: 3/15/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c14t0156	X	RINSE			15-MAR-2007 09:37	1.0					2	
157	c14t0157	X	RINSE			15-MAR-2007 09:43	1.0					2	
158	c14t0158	CCV				15-MAR-2007 09:48	1.0	1.0			1	13 2	
159	c14t0159	X	RINSE			15-MAR-2007 09:54	1.0					2	
160	c14t0160	CCB				15-MAR-2007 10:00	1.0	1.0			1	2	
161	c14t0161	X				15-MAR-2007 10:05	1.0					2	
162	c14t0162	SAMPLE	193108-012	122987	Filtra	15-MAR-2007 10:11	10.0	1.0	1		1	2	1:NA=30210.0
163	c14t0163	ICSA				15-MAR-2007 10:16	1.0	1.0			1	10 2	7:CA=291200
164	c14t0164	ICSAB				15-MAR-2007 10:22	1.0	1.0			1	11 2	10:CA=315900
165	c14t0165	X	RINSE			15-MAR-2007 10:27	1.0					2	
166	c14t0166	X	RINSE			15-MAR-2007 10:33	1.0					2	
167	c14t0167	X	RINSE			15-MAR-2007 10:38	1.0					2	
168	c14t0168	X	RINSE			15-MAR-2007 10:44	1.0					2	
169	c14t0169	SAMPLE	193108-013	122987	Filtra	15-MAR-2007 10:49	10.0	1.0			1	2	
170	c14t0170	SAMPLE	193108-014	122987	Filtra	15-MAR-2007 10:55	10.0	1.0			1	2	
171	c14t0171	SAMPLE	193108-022	122987	Filtra	15-MAR-2007 11:00	10.0	1.0	1		1	2	
172	c14t0172	SAMPLE	193108-024	122987	Filtra	15-MAR-2007 11:06	10.0	1.0			1	2	
173	c14t0173	SAMPLE	193108-025	122987	Filtra	15-MAR-2007 11:11	10.0	1.0			1	2	
174	c14t0174	SAMPLE	193108-026	122987	Filtra	15-MAR-2007 11:16	10.0	1.0			1	2	
175	c14t0175	SAMPLE	193108-027	122987	Filtra	15-MAR-2007 11:22	10.0	1.0			1	2	
176	c14t0176	X	RINSE			15-MAR-2007 11:27	1.0					2	
177	c14t0177	X	RINSE			15-MAR-2007 11:33	1.0					2	
178	c14t0178	X	RINSE			15-MAR-2007 11:38	1.0					2	
179	c14t0179	CCV				15-MAR-2007 11:44	1.0	1.0			1	13 2	
180	c14t0180	X	RINSE			15-MAR-2007 11:50	1.0					2	
181	c14t0181	CCB				15-MAR-2007 11:56	1.0	1.0	2		1	2	
182	c14t0182	X				15-MAR-2007 12:01	1.0					2	
183	c14t0183	X	RINSE			15-MAR-2007 12:07	1.0					2	
184	c14t0184	CCV				15-MAR-2007 12:12	1.0	1.0			1	13 2	
185	c14t0185	X	RINSE			15-MAR-2007 12:18	1.0					2	
186	c14t0186	X				15-MAR-2007 12:26	1.0	1.0	3		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGH Date: 3/15/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c14t0187	CCB				15-MAR-2007 12:31	1.0	1.0	2		1	2	
188	c14t0188	X				15-MAR-2007 12:37	1.0					2	
189	c14t0189	SAMPLE	193108-022	122987	Filtra	15-MAR-2007 12:42	10.0	1.0			1	2	
190	c14t0190	X	RINSE			15-MAR-2007 12:53	1.0					2	
191	c14t0191	X	NO SAMPLE			15-MAR-2007 12:59	1.0					2	
192	c14t0192	X	NO SAMPLE			15-MAR-2007 13:04	1.0					2	
193	c14t0193	TUN				15-MAR-2007 13:09	1.0	1.0				1	
194	c14t0194	X	RINSE			15-MAR-2007 13:16	1.0					2	
195	c14t0195	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 13:22	50.0	1.0	3		1	2	1:MN=304.000
196	c14t0196	SAMPLE	193108-010	122987	Filtra	15-MAR-2007 13:27	50.0	1.0	2		1	2	
197	c14t0197	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 13:33	50.0	1.0	2		1	2	1:MN=275.400
198	c14t0198	SAMPLE	193108-012	122987	Filtra	15-MAR-2007 13:38	50.0	1.0	1		1	2	
199	c14t0199	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 13:44	100.0	1.0	2		1	2	
200	c14t0200	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 13:49	100.0	1.0	1		1	2	
201	c14t0201	X	RINSE			15-MAR-2007 13:54	1.0					2	
202	c14t0202	X	RINSE			15-MAR-2007 14:02	1.0					2	
203	c14t0203	X	RINSE			15-MAR-2007 14:08	1.0					2	
204	c14t0204	CCV				15-MAR-2007 14:13	1.0	1.0			1	13 2	
205	c14t0205	X	RINSE			15-MAR-2007 14:19	1.0					2	
206	c14t0206	CCB				15-MAR-2007 14:27	1.0	1.0	2		1	2	
207	c14t0207	X				15-MAR-2007 14:40	1.0					2	
208	c14t0208	X				15-MAR-2007 15:01	1.0					2	
209	c14t0209	ICSA				15-MAR-2007 15:07	1.0	1.0			1	10 2	7:CA=293100
210	c14t0210	ICSAB				15-MAR-2007 15:13	1.0	1.0			1	11 2	10:CA=305900

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGA Date: 3/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	HARD	CA	MG	MO	
193108-022	MET09	03/06/07 17:32	1.0		+	+	+	
193108-023	MET09	03/06/07 15:45	1.0		+	+	+	
193108-023	MET09	03/06/07 16:01	1.0					
193108-027	MET09	03/06/07 17:35	1.0		+	+	+	
QC377727	MET09	03/06/07 15:35	1.0		+	+	+	
QC377728	MET09	03/06/07 15:39	1.0		+	+	+	
QC377729	MET09	03/06/07 15:42	1.0		+	+	+	
QC377732	MET09	03/06/07 15:48	1.0		+	+	+	
QC377733	MET09	03/06/07 15:51	1.0		+	+	+	
QC377805	MET09	03/06/07 15:54	5.0		+	+	+	
QC377806	MET09	03/06/07 15:57	1.0		+	+	+	

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
193108-001	MET06	03/13/07 04:11	10.0																								
193108-001	MET06	03/13/07 19:10	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-002	MET06	03/13/07 05:49	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-003	MET06	03/13/07 05:54	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-004	MET06	03/13/07 05:59	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	
193108-004	MET06	03/13/07 19:15	10.0																								+
193108-005	MET06	03/13/07 06:05	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-006	MET06	03/13/07 06:10	10.0	+	+	+			+	+	+			+	+	+	+			+	+			+		+	
193108-006	MET06	03/13/07 19:20	10.0										+														+
193108-007	MET04	03/13/07 16:13	1.0															+									
193108-007	MET06	03/15/07 05:03	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
193108-007	MET06	03/15/07 05:08	50.0													+			+					+			
193108-007	MET06	03/15/07 07:25	10.0																								
193108-008	MET04	03/13/07 16:21	1.0															+									
193108-008	MET06	03/15/07 09:10	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
193108-008	MET06	03/15/07 13:22	50.0																					+			
193108-008	MET06	03/15/07 13:44	100.0														+										
193108-009	MET06	03/15/07 09:16	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-010	MET04	03/13/07 16:24	1.0															+									
193108-010	MET06	03/15/07 09:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
193108-010	MET06	03/15/07 13:27	50.0													+								+			
193108-011	MET04	03/13/07 16:26	1.0															+									
193108-011	MET06	03/15/07 09:26	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
193108-011	MET06	03/15/07 13:33	50.0																					+			
193108-011	MET06	03/15/07 13:49	100.0														+										
193108-012	MET06	03/15/07 10:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
193108-012	MET06	03/15/07 13:38	50.0																					+			
193108-013	MET06	03/15/07 10:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-014	MET06	03/15/07 10:55	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-015	MET06	03/13/07 06:16	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-016	MET06	03/13/07 06:21	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-017	MET06	03/13/07 05:33	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
193108-018	MET06	03/13/07 07:09	10.0	+	+	+			+	+	+		+		+	+				+	+			+		+	+
193108-018	MET06	03/13/07 19:26	10.0											+													
193108-018	MET06	03/13/07 19:31	50.0														+										
193108-019	MET06	03/13/07 07:14	10.0	+	+	+			+	+	+		+		+	+	+			+	+					+	+
193108-019	MET06	03/13/07 19:37	10.0											+													
193108-019	MET06	03/13/07 19:42	50.0																					+			
193108-020	MET06	03/13/07 07:20	10.0	+	+	+			+	+	+		+		+	+	+			+	+			+		+	+
193108-020	MET06	03/13/07 19:47	10.0											+													
193108-022	MET04	03/13/07 16:33	1.0															+									
193108-022	MET06	03/15/07 11:00	10.0	+	+	+	+	+	+	+	+	+	+		+	+	+			+	+	+	+	+	+	+	+
193108-022	MET06	03/15/07 12:42	10.0											+													
193108-023	MET14	03/13/07 17:35	1.0															+									
193108-023	MET06	03/15/07 06:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
193108-024	MET04	03/13/07 16:35	1.0															+									
193108-024	MET06	03/15/07 11:06	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-025	MET06	03/15/07 11:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-026	MET06	03/15/07 11:16	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-027	MET04	03/13/07 16:37	1.0															+									
193108-027	MET06	03/15/07 11:22	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378693	MET06	03/13/07 03:49	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378694	MET06	03/13/07 03:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378695	MET06	03/13/07 03:59	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378696	MET06	03/13/07 04:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378697	MET06	03/13/07 04:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378698	MET06	03/13/07 04:16	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378699	MET06	03/13/07 04:32	10.0	+		+	+	+	+	+	+		+		+	+	+			+	+		+	+	+	+	+
QC378713	MET06	03/13/07 05:38	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378714	MET06	03/13/07 05:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378700	MET06	03/15/07 04:26	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
QC378700	MET06	03/15/07 06:08	1.0																								
QC378700	MET06	03/15/07 06:38	10.0																			+					
QC378701	MET06	03/15/07 04:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378701	MET06	03/15/07 07:05	1.0																								
QC378702	MET06	03/15/07 04:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378702	MET06	03/15/07 07:12	1.0																								
QC378703	MET06	03/15/07 05:13	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378703	MET06	03/15/07 07:36	10.0																								
QC378704	MET06	03/15/07 05:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378704	MET06	03/15/07 07:42	10.0																								
QC378705	MET06	03/15/07 07:30	50.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
QC378705	MET06	03/15/07 08:38	250.0													+			+					+			
QC378706	MET06	03/15/07 05:24	10.0	+		+	+	+	+		+	+	+	+	+		+			+		+	+		+	+	+
QC378706	MET06	03/15/07 08:26	10.0		+														+		+						
QC378706	MET06	03/15/07 08:43	50.0							+						+			+					+			
QC378711	MET06	03/15/07 06:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378712	MET06	03/15/07 06:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378996	MET04	03/13/07 16:06	1.0															+									
QC378997	MET04	03/13/07 16:08	1.0															+									
QC378998	MET04	03/13/07 16:10	1.0															+									
QC378999	MET04	03/13/07 16:15	5.0															+									
QC379000	MET04	03/13/07 16:17	1.0															+									
QC379001	MET04	03/13/07 16:19	1.0															+									
QC379003	MET14	03/13/07 17:28	1.0															+									
QC379004	MET14	03/13/07 17:31	1.0															+									
QC379005	MET14	03/13/07 17:33	1.0															+									
QC379006	MET14	03/13/07 17:37	5.0															+									
QC379007	MET14	03/13/07 17:39	1.0															+									

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEC	CDA	CRO	COU	FEB	PBG	MGN	HG+	MOI	NI	K	SE	AGA	NAL	TL	V	ZN
QC379008	MET14	03/13/07 17:42	1.0																				

00742

Curtis & Tompkins Laboratories Sample Preparation Summary 06-MAR-2007 18:14

Batch Number : 122751
Date Extracted: 06-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 3010A

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4884
Spike #2 ID : S4885
Spike #3 ID :
SOP Version : 3010A_ICP_rv8

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193014-001		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193014-003		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193014-005		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193087-001		Kensington Laboratories	Water	50	mL	50	1.000000	1					AG, CD, CR, (more)		
193097-001		Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193097-019		Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193098-004		ConocoPhillips	Water	50	mL	50	1.000000	1					CU, NI, ZN		
193099-001		Malcolm Pirnie,Inc.	Water	50	mL	50	1.000000	1					T26/ICP		
193108-022		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193108-023		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193108-027		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193125-001		Clayton Group Services	Water	50	mL	50	1.000000	1					T26/ICP		
193128-001		New Logic Research	Water	50	mL	50	1.000000	1					AL, B, BA, C(more)		
193128-002		New Logic Research	Water	50	mL	50	1.000000	1					AL, B, BA, C(more)		
193145-001		URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193145-002		URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC377727	BLANK		Water	50	mL	50	1.000000	1					ICAP		
QC377728	BS		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377729	BSD		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377732	MS	of 193108-023	Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377733	MSD	of 193108-023	Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377805	SER	of 193108-023	Water	50	mL	50	1.000000	1					ICAP		
QC377806	PDS	of 193108-023	Water	50	mL	50	1.000000	1					ICAP		

743

Prep Chemist: [signature] 3/6/07 Reviewed By: [signature] Date: 3/6/07

Relinquished By: [signature] 3/6/07 Received By: [signature] Date: 3/6/07

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 122751
Date Digested: 3/6/07
Digested by: KA

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK 2471
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Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
LCS	↓	↓	↓	
BSD				
MS-01A				
MSD-01				
— 113097-01				
19				
014-01				
03				
05				
— 125-01 E				
128-01				
02				
— 099-01 C				
— 098-04 A				
— 087-01				FIELD FILTERED
145-01 D				
- 02				
— MS-03W				
MSD-03				
108-03				
- 22H				
27G	✓	✓	✓	

Reagent ID or LIMS #	Initials / Date
95	KA 3/6
34884	↓
34885	
045075 BATCH	
046035 022707	
	✓

— digestion temperature (90-95 degrees C)
5 mL of spike solution was added to all spikes

☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples
1:1 HCl added to all samples
☐ filtered thru' Whatman # 541

KA 3/6/07
Prep Chemist Signature / Date

3/6/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-MAR-2007 18:23**

Batch Number : 122986
Date Extracted: 12-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
QC378693	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC378694	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378695	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378696	MS	of 193108-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378697	MSD	of 193108-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378698	SER	of 193108-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378699	PDS	of 193108-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378713	MS	of 193108-017		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378714	MSD	of 193108-017		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		

Prep Chemist: For K. Gaines Reviewed By: Date: 3/12/07

Relinquished By: Received By: Date: 3/12/07

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 122986
Date Digested: 3/12/07
Digested by: KEA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50		
BS				
BSD				
MS-01AC				FIELD FILTERED
MSD-01				
193108-01				
MS-17N				
MSD-17				
193108-17				
-02F				
-03E				
-04F				
-05G				
-06L				
-15J				
-16G				
-18F				
-19F				
-20H				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KEA 3/12
.5 mL of spike solution was added to all spikes	S5054	
	S5055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date 3/12/07

Reviewer Signature / Date 3/12/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-MAR-2007 18:09**

Batch Number : 122987
Date Extracted: 12-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-009			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-025			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-026			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-027			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378700	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378701	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378702	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378703	MS	of 193108-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378704	MSD	of 193108-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378705	SER	of 193108-007		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378706	PDS	of 193108-007		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378711	MS	of 193108-023		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378712	MSD	of 193108-023		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: For K. Gaines Reviewed By: Date: 3/12/07

Relinquished By: Received By: Date: 3/12/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 127987
Date Digested: 3/12/07
Digested by: KWA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 79
Continued From: /
Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS -07				FIELD FILTERED
MSD -07				
193108-07				
MS - 23				
MSD - 23				
193108 - 23				
- 08				
- 09				
- 10				
- 11				
- 12				
- 13				
- 14				
- 22				
- 24				
- 25				
- 26				
- 27				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KWA 3/12
.5 mL of spike solution was added to all spikes	35054	
	35055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

KWA 3/12/07
Prep Chemist Signature / Date

3/12/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
Calnum : 47104621001
Units : ug/L

Date : 13-MAR-2007 15:41
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	123057	47104621002	STD02REP1	13-MAR-2007 15:43	S5707 (500X)
L2	123057	47104621003	STD03REP1	13-MAR-2007 15:45	S5707 (200X)
L3	123057	47104621004	STD04REP1	13-MAR-2007 15:48	S5707 (50X)
L4	123057	47104621005	STD05REP1	13-MAR-2007 15:50	S5707 (20X)
L5	123057	47104621006	STD06REP1	13-MAR-2007 15:52	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3440.0	2574.0	2530.0	2524.2	2408.0	LINR	-0.1086	4.17E-4		2695.2	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

749

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47104621001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 031307 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.16695e-4

C -1.08611e-1

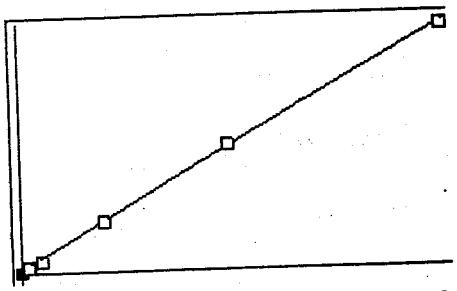
Rho .999778

Type

μ Abs.
24080

Accepted

New



Include S1 Rep 1 ☑

13-Mar-07 15:52

Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.018	.018	305	1	305		
02	.20000	.178	-.022	689	0%	688		
03	.50000	.428	-.072	1288	0%	1287		
04	2.0000	2.00	-.000	5060	0%	5060		
05	5.0000	5.15	.150	12622	0%	12621		
06	10.000	9.93	-.075	24080	0%	24080		

NUM

Ready

Folder: 031307
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	15:41:42 13 Mar 07	HG		
Hg	.000	ppb	305					
		Bkgd 1	15548840					
*** Standard: 2 Rep: 1				Seq: 2	15:43:52 13 Mar 07	HG		
Hg	.200	ppb	688					
		Bkgd 1	15545738					
*** Standard: 3 Rep: 1				Seq: 3	15:45:58 13 Mar 07	HG		
Hg	.500	ppb	1287					
		Bkgd 1	15544827					
*** Standard: 4 Rep: 1				Seq: 4	15:48:08 13 Mar 07	HG		
Hg	2.00	ppb	5060					
		Bkgd 1	15552388					
*** Standard: 5 Rep: 1				Seq: 5	15:50:13 13 Mar 07	HG		
Hg	5.00	ppb	12621					
		Bkgd 1	15551581					
*** Standard: 6 Rep: 1				Seq: 6	15:52:19 13 Mar 07	HG		
Hg	10.0	ppb	24080					
		Bkgd 1	15546178					
*** Check Standard: 2			Ck2S5709	Seq: 7	15:54:24 13 Mar 07	HG		
Line	Flag		Intensities					
Hg	L		6466					
		Bkgd 1	15537431					
*** Check Standard: 2			Ck2S5709	Seq: 8	16:02:17 13 Mar 07	HG		
Line	Flag		Intensities					
Hg			12842					
		Bkgd 1	15512054					
*** Check Standard: 1			Ck1ICB	Seq: 9	16:04:42 13 Mar 07	HG		
Line	Flag		Intensities					
Hg			77					
		Bkgd 1	15504486					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 13-MAR-2007

HydraAA HG Analyzer
SOP Version: HG_water_rv7

equence: 47104621 Instrument: MET04
nalytical Method: EPA 7470A
nalyte: Mercury

#.	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
01	123057	ICALBLK	STD01REP1				13-MAR-2007 15:41	1.0	1.0									
02	123057	ICAL	STD02REP1				13-MAR-2007 15:43	1.0	1.0									
03	123057	ICAL	STD03REP1				13-MAR-2007 15:45	1.0	1.0									
04	123057	ICAL	STD04REP1				13-MAR-2007 15:48	1.0	1.0									
05	123057	ICAL	STD05REP1				13-MAR-2007 15:50	1.0	1.0									
06	123057	ICAL	STD06REP1				13-MAR-2007 15:52	1.0	1.0									
07	123057	X					13-MAR-2007 15:54	1.0							ug/L	105		
08	123057	ICV					13-MAR-2007 16:02	1.0	1.0	2	5.000	47104621001	5.240					
09	123057	ICB					13-MAR-2007 16:04	1.0	1.0			47104621001	ND	0.20	ug/L			u
10	123057	BLANK	QC378996		123057	Water	13-MAR-2007 16:06	1.0	1.0			47104621001	ND	0.20	ug/L			u
11	123057	BS	QC378997		123057	Water	13-MAR-2007 16:08	1.0	1.0		5.000	47104621001	5.280	0.20	ug/L	106		
12	123057	BSD	QC378998		123057	Water	13-MAR-2007 16:10	1.0	1.0		5.000	47104621001	5.100	0.20	ug/L	102	3	u
13	123057	MSS	193108-007		123057	Filtra	13-MAR-2007 16:13	1.0	1.0			47104621001	ND	0.20	ug/L			u
14	123057	SER	QC378999	193108-007	123057	Filtra	13-MAR-2007 16:15	5.0	1.0			47104621001	ND	1.0	ug/L		--	u
15	123057	MS	QC379000	193108-007	123057	Filtra	13-MAR-2007 16:17	1.0	1.0		5.000	47104621001	5.310	0.20	ug/L	106		u
16	123057	MSD	QC379001	193108-007	123057	Filtra	13-MAR-2007 16:19	1.0	1.0		5.000	47104621001	5.280	0.20	ug/L	106	1	u
17	123057	SAMPLE	193108-008		123057	Filtra	13-MAR-2007 16:21	1.0	1.0			47104621001	ND	0.20	ug/L			u
18	123057	SAMPLE	193108-010		123057	Filtra	13-MAR-2007 16:24	1.0	1.0			47104621001	ND	0.20	ug/L			u
19	123057	SAMPLE	193108-011		123057	Filtra	13-MAR-2007 16:26	1.0	1.0			47104621001	ND	0.20	ug/L			u
20	123057	CCV					13-MAR-2007 16:28	1.0	1.0	3	2.500	47104621001	2.610		ug/L	104		
21	123057	CCB					13-MAR-2007 16:30	1.0	1.0			47104621001	[0.03700]	0.20	ug/L			
22	123057	SAMPLE	193108-022		123057	Filtra	13-MAR-2007 16:33	1.0	1.0			47104621001	ND	0.20	ug/L			u
23	123057	SAMPLE	193108-024		123057	Filtra	13-MAR-2007 16:35	1.0	1.0			47104621001	ND	0.20	ug/L			u
24	123057	SAMPLE	193108-027		123057	Filtra	13-MAR-2007 16:37	1.0	1.0			47104621001	ND	0.20	ug/L			u
25	123057	SAMPLE	193261-001		123057	Filtra	13-MAR-2007 16:39	1.0	1.0			47104621001	ND	0.20	ug/L			u
26	123057	SAMPLE	193261-002		123057	Filtra	13-MAR-2007 16:42	1.0	1.0			47104621001	ND	0.20	ug/L			u
27	123057	SAMPLE	193261-003		123057	Filtra	13-MAR-2007 16:45	1.0	1.0			47104621001	ND	0.20	ug/L			u
28	123057	SAMPLE	193261-004		123057	Filtra	13-MAR-2007 16:47	1.0	1.0			47104621001	ND	0.20	ug/L			u
29	123057	SAMPLE	193267-001		123057	Filtra	13-MAR-2007 16:50	1.0	1.0			47104621001	ND	0.20	ug/L			u
30	123057	SAMPLE	193267-002		123057	Filtra	13-MAR-2007 16:52	1.0	1.0			47104621001	ND	0.20	ug/L			u
31	123057	SAMPLE	193267-003		123057	Filtra	13-MAR-2007 16:54	1.0	1.0			47104621001	ND	0.20	ug/L			u
32	123057	CCV					13-MAR-2007 16:57	1.0	1.0	3	2.500	47104621001	2.600		ug/L	104		
33	123057	CCB					13-MAR-2007 16:59	1.0	1.0			47104621001	[0.02000]	0.20	ug/L			
34	123057	SAMPLE	193267-004		123057	Filtra	13-MAR-2007 17:01	1.0	1.0			47104621001	ND	0.20	ug/L			u
35	123057	SAMPLE	193267-005		123057	Filtra	13-MAR-2007 17:04	1.0	1.0			47104621001	ND	0.20	ug/L			u
36	123057	SAMPLE	193267-006		123057	Filtra	13-MAR-2007 17:06	1.0	1.0			47104621001	ND	0.20	ug/L			u
37	123057	SAMPLE	193267-007		123057	Filtra	13-MAR-2007 17:08	1.0	1.0			47104621001	ND	0.20	ug/L			u
38	123057	SAMPLE	193267-008		123057	Filtra	13-MAR-2007 17:11	1.0	1.0			47104621001	ND	0.20	ug/L			u
39	123057	SAMPLE	193322-052		123057	Filtra	13-MAR-2007 17:13	1.0	1.0			47104621001	ND	0.20	ug/L			u
40	123057	CCV					13-MAR-2007 17:15	1.0	1.0	3	2.500	47104621001	2.700		ug/L	108		
41	123057	CCB					13-MAR-2007 17:18	1.0	1.0			47104621001	[0.01200]	0.20	ug/L			

Stds used: 1=S5707 2=S5709 3=S5710
Flags used: u=use

Analyst: [signature] Date: 3/13/07

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:13

Batch Number : 123057
Date Extracted: 13-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-022		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-024		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-027		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193261-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193267-001		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-002		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-003		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-004		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-005		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-006		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-007		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-008		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193322-052		URS Corporation	Filtrate	50	mL	50	1.000000	1					HG		
QC378996	BLANK		Water	50	mL	50	1.000000	1					HG		
QC378997	BS		Water	50	mL	50	1.000000	1		2.5			HG		
QC378998	BSD		Water	50	mL	50	1.000000	1		2.5			HG		
QC378999	SER	of 193108-007	Filtrate	50	mL	50	1.000000	1					HG		
QC379000	MS	of 193108-007	Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379001	MSD	of 193108-007	Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379002	PDS	of 193108-007	Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist: 3/13/07 Reviewed By: Date: 3/13/07

Relinquished By: 3/13/07 Received By: Date: 3/13/07

Curtis & Tompkins, L

Water Digestion for Mercury

BK 2452
Page 40

LIMS Batch #: 123057
Date Digested: 3/13/07
Digested by: [illegible]

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193108-007 MBS AR	50	50	N	Filtrate (F.F.)
-008 I				
-010 H				
-011 G				
-022 J				
-024 H				
-027 I				
193261-001 H				
-002				
-003				
-004				
193267-001				Filtrate
-002				
-003				
-004				
-005				
-006				
-007				
-008				
193322-052				water
Blank				
BS				
BSD				
MS 193108-007 AR				Filtrate (F.F.)
MSD				

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	S5707	[illegible] 3/13/07
ICAL Source WS#	S5707	
ICV / CCV WS#	S5709/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	1:15 / 95°C	
Time OFF/ Temperature OFF	3:15 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030807	
5% $K_2S_2O_8$	K2030807	
NaCl.hydroxylamine hydrochloride	Hy030207	
Stannous Chloride	SnCl2 031107	
☐ filtered thru' 0.45 um syringe filter	MILLIPORE R6AN 48332	

[illegible] 3/13/07
Analyst / Date

754

Continued from page X

Continued on page X

[illegible] 3/13/07
Reviewed by / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Reviewer: ---
Type : WATER

Inst : MET14
Calnum : 847104647001
Units : ug/L

Date : 13-MAR-2007 16:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	123061	847104647002	STD02REP1	13-MAR-2007 16:09	S5707 (500X)
L2	123061	847104647003	STD03REP1	13-MAR-2007 16:11	S5707 (200X)
L3	123061	847104647004	STD04REP1	13-MAR-2007 16:14	S5707 (50X)
L4	123061	847104647005	STD05REP1	13-MAR-2007 16:16	S5707 (20X)
L5	123061	847104647006	STD06REP1	13-MAR-2007 16:18	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3490.0	2580.0	2631.0	2601.6	2470.5	LINR	-0.1062	4.05E-4		2754.6	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

755

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

84710464700

WinHg Database 1.5

File Utility Help

RN RN

BUSY Dataset/Proto 031307 /hgppb

Protocol hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.05463e-4

C -1.06243e-1

Rho .999712

Type Linear

Calibrated

Accepted

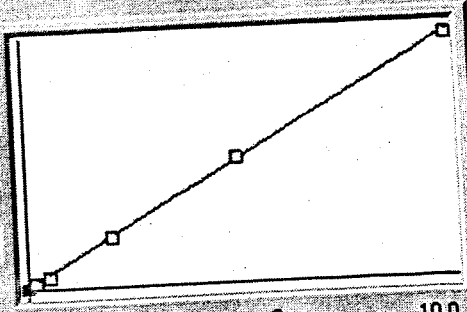
Accept

µ Abs.

24705

Accepted

New



13-Mar-07 16:18

Conc. 10.0

Include S1 Rep 1 2 3 4 5

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.000	.000	263	0	263		
02	.20000	.177	-.023	699	0%	698		
03	.50000	.417	-.083	1290	0%	1290		
04	2.0000	2.03	.027	5263	0%	5262		
05	5.0000	5.17	.168	13008	0%	13008		
06	10.000	9.91	-.089	24706	0%	24705		

NUM SCRL

Ready

Folder: 031307
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	16:07:28 13 Mar 07			HG
Hg	.000	ppb	263					
		Bkgd 1	15783510					
*** Standard: 2 Rep: 1				Seq: 2	16:09:32 13 Mar 07			HG
Hg	.200	ppb	698					
		Bkgd 1	15780087					
*** Standard: 3 Rep: 1				Seq: 3	16:11:37 13 Mar 07			HG
Hg	.500	ppb	1290					
		Bkgd 1	15773918					
*** Standard: 4 Rep: 1				Seq: 4	16:14:14 13 Mar 07			HG
Hg	2.00	ppb	5262					
		Bkgd 1	15781425					
*** Standard: 5 Rep: 1				Seq: 5	16:16:19 13 Mar 07			HG
Hg	5.00	ppb	13008					
		Bkgd 1	15782001					
*** Standard: 6 Rep: 1				Seq: 6	16:18:26 13 Mar 07			HG
Hg	10.0	ppb	24705					
		Bkgd 1	15777264					
*** Check Standard: 2			Ck2S5709	Seq: 7	16:20:42 13 Mar 07			HG
Line	Flag		Intensities					
Hg	L		6798					
		Bkgd 1	15770864					
*** Check Standard: 2			Ck2S5709	Seq: 8	16:27:45 13 Mar 07			HG
Line	Flag		Intensities					
Hg			13045					
		Bkgd 1	15765552					
*** Check Standard: 1			Ck1ICB	Seq: 9	16:30:09 13 Mar 07			HG
Line	Flag		Intensities					
Hg			-182					
		Bkgd 1	15765155					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 13-MAR-2007

Sequence: 847104647 Instrument: MET14 HydraAA HG Analyzer MET14
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	123061	ICALBLK	STD01REP1				13-MAR-2007 16:07	1.0	1.0									
002	123061	ICAL	STD02REP1				13-MAR-2007 16:09	1.0	1.0									
003	123061	ICAL	STD03REP1				13-MAR-2007 16:11	1.0	1.0									
004	123061	ICAL	STD04REP1				13-MAR-2007 16:14	1.0	1.0									
005	123061	ICAL	STD05REP1				13-MAR-2007 16:16	1.0	1.0									
006	123061	ICAL	STD06REP1				13-MAR-2007 16:18	1.0	1.0									
007	123061	X					13-MAR-2007 16:20	1.0										
008	123061	ICV					13-MAR-2007 16:27	1.0	1.0	2	5.000	847104647001	5.180		ug/L	104		
009	123061	ICB					13-MAR-2007 16:30	1.0	1.0			847104647001	ND	0.20	ug/L			
010	123061	BLANK	QC379021		123061	Air	13-MAR-2007 16:32	1.0	50.0			847104647001	ND	0.020	ug/s			u
011	123061	BS	QC379022		123061	Air	13-MAR-2007 16:34	1.0	50.0		0.2500	847104647001	0.2615	0.020	ug/s	105		u
012	123061	BSD	QC379023		123061	Air	13-MAR-2007 16:36	1.0	50.0		0.2500	847104647001	0.2655	0.020	ug/s	106	2	u
013	123061	MSS	192995-001 H		123061	Air	13-MAR-2007 16:38	1.0	146.7			847104647001	3.7 >LR	0.029	ug/s			>LR sh
014	123061	SDUP	QC379024 H	192995-001	123061	Air	13-MAR-2007 16:40	1.0	146.7			847104647001	3.8 >LR	0.029	ug/s		--	>LR b*
015	123061	MSS	192995-002 H		123061	Air	13-MAR-2007 16:43	1.0	166.7			847104647001	0.10	0.033	ug/s			sh b*
016	123061	SDUP	QC379025 H	192995-002	123061	Air	13-MAR-2007 16:45	1.0	166.7			847104647001	0.11	0.033	ug/s		13	u
017	123061	MSS	192995-003 H		123061	Air	13-MAR-2007 16:47	1.0	208.3			847104647001	0.063	0.042	ug/s			sh b*
018	123061	SDUP	QC379026 H	192995-003	123061	Air	13-MAR-2007 16:49	1.0	208.3			847104647001	0.060	0.042	ug/s		6	u
019	123061	SSPIKE	QC379027 H	192995-003	123061	Air	13-MAR-2007 16:51	1.0	208.3		1.042	847104647001	1.104	0.042	ug/s	100		u
020	123061	CCV					13-MAR-2007 16:54	1.0	1.0	3	2.500	847104647001	2.650		ug/L	106		
021	123061	CCB					13-MAR-2007 16:56	1.0	1.0			847104647001	ND	0.20	ug/L			
022	123061	MSS	192995-004 H		123061	Air	13-MAR-2007 16:58	1.0	103.3			847104647001	ND	0.021	ug/s			sh b*
023	123061	SDUP	QC379028 H	192995-004	123061	Air	13-MAR-2007 17:00	1.0	103.3			847104647001	ND	0.021	ug/s		--	u
024	123061	MSS	192995-001 H		123061	Air	13-MAR-2007 17:03	5.0	146.7			847104647001	3.9	0.15	ug/s			sh b*
025	123061	SDUP	QC379024 H	192995-001	123061	Air	13-MAR-2007 17:05	5.0	146.7			847104647001	3.8	0.15	ug/s		3	u
026	123061	CCV					13-MAR-2007 17:07	1.0	1.0	3	2.500	847104647001	2.710		ug/L	108		
027	123061	CCB					13-MAR-2007 17:09	1.0	1.0			847104647001	[0.05300]	0.20	ug/L			ib

Stds used: 1=S5707 2=S5709 3=S5710
Flags used: !=warning >LR=overrange b=noncompliant ib=instrument blank sh=out of sample hold u=use

Analyst: [signature] Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847104719 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 13-MAR-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	123058	X					13-MAR-2007 17:19	1.0	1.0	1	2.500	847104647001	-0.09900		ug/L	-4		c- b*
002	123058	CCV					13-MAR-2007 17:24	1.0	1.0	1	2.500	847104647001	2.610		ug/L	104		
003	123058	CCB					13-MAR-2007 17:26	1.0	1.0			847104647001	ND	0.20	ug/L			
004	123058	BLANK	QC379003		123058	Water	13-MAR-2007 17:28	1.0	1.0			847104647001	ND	0.20	ug/L			u
005	123058	BS	QC379004		123058	Water	13-MAR-2007 17:31	1.0	1.0		5.000	847104647001	5.090	0.20	ug/L	102		u
006	123058	BSD	QC379005		123058	Water	13-MAR-2007 17:33	1.0	1.0		5.000	847104647001	5.160	0.20	ug/L	103	1	u
007	123058	MSS	193108-023		123058	Filtra	13-MAR-2007 17:35	1.0	1.0			847104647001	ND	0.20	ug/L			u
008	123058	SER	QC379006	193108-023	123058	Filtra	13-MAR-2007 17:37	5.0	1.0			847104647001	ND	1.0	ug/L		--	u
009	123058	MS	QC379007	193108-023	123058	Filtra	13-MAR-2007 17:39	1.0	1.0		5.000	847104647001	5.420	0.20	ug/L	108		u
010	123058	MSD	QC379008	193108-023	123058	Filtra	13-MAR-2007 17:42	1.0	1.0		5.000	847104647001	5.440	0.20	ug/L	109	0	u
011	123058	SAMPLE	193330-001		123058	Filtra	13-MAR-2007 17:45	1.0	1.0			847104647001	ND	0.20	ug/L			u
012	123058	SAMPLE	193330-002		123058	Filtra	13-MAR-2007 17:47	1.0	1.0			847104647001	ND	0.20	ug/L			u
013	123058	SAMPLE	193330-003		123058	Filtra	13-MAR-2007 17:49	1.0	1.0			847104647001	ND	0.20	ug/L			u
014	123058	CCV					13-MAR-2007 17:52	1.0	1.0	1	2.500	847104647001	2.670		ug/L	107		
015	123058	CCB					13-MAR-2007 17:54	1.0	1.0			847104647001	ND	0.20	ug/L			
016	123058	SAMPLE	193330-004		123058	Filtra	13-MAR-2007 17:56	1.0	1.0			847104647001	ND	0.20	ug/L			u
017	123058	SAMPLE	193330-005		123058	Filtra	13-MAR-2007 17:58	1.0	1.0			847104647001	ND	0.20	ug/L			u
018	123058	SAMPLE	193330-006		123058	Filtra	13-MAR-2007 18:00	1.0	1.0			847104647001	ND	0.20	ug/L			u
019	123058	SAMPLE	193330-007		123058	Filtra	13-MAR-2007 18:03	1.0	1.0			847104647001	ND	0.20	ug/L			u
020	123058	SAMPLE	193330-008		123058	Filtra	13-MAR-2007 18:05	1.0	1.0			847104647001	ND	0.20	ug/L			u
021	123058	SAMPLE	193335-001		123058	Filtra	13-MAR-2007 18:08	1.0	1.0			847104647001	ND	0.20	ug/L			u
022	123058	SAMPLE	193342-001		123058	Filtra	13-MAR-2007 18:10	1.0	1.0			847104647001	0.031 J	0.20	ug/L			u
023	123058	SAMPLE	193346-001		123058	Filtra	13-MAR-2007 18:12	1.0	1.0			847104647001	ND	0.20	ug/L			u
024	123058	SAMPLE	193346-002		123058	Filtra	13-MAR-2007 18:14	1.0	1.0			847104647001	ND	0.20	ug/L			u
025	123058	SAMPLE	193346-003		123058	Filtra	13-MAR-2007 18:17	1.0	1.0			847104647001	ND	0.20	ug/L			u
026	123058	CCV					13-MAR-2007 18:19	1.0	1.0	1	2.500	847104647001	2.690		ug/L	108		
027	123058	CCB					13-MAR-2007 18:21	1.0	1.0			847104647001	ND	0.20	ug/L			
028	123058	SAMPLE	193346-004		123058	Filtra	13-MAR-2007 18:24	1.0	1.0			847104647001	ND	0.20	ug/L			u
029	123058	SAMPLE	193346-005		123058	Filtra	13-MAR-2007 18:26	1.0	1.0			847104647001	0.043 J	0.20	ug/L			u
030	123058	SAMPLE	193346-006		123058	Filtra	13-MAR-2007 18:28	1.0	1.0			847104647001	ND	0.20	ug/L			u
031	123058	SAMPLE	193346-007		123058	Filtra	13-MAR-2007 18:31	1.0	1.0			847104647001	0.082 J	0.20	ug/L			u
032	123058	SAMPLE	193346-008		123058	Filtra	13-MAR-2007 18:33	1.0	1.0			847104647001	ND	0.20	ug/L			u
033	123058	CCV					13-MAR-2007 18:36	1.0	1.0	1	2.500	847104647001	2.750		ug/L	110		
034	123058	CCB					13-MAR-2007 18:39	1.0	1.0			847104647001	ND	0.20	ug/L			

Stds used: 1=S5710
Flags used: -=low bias b=noncompliant c=CCV u=use

Analyst: [signature] Date: 3/13/07

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:15

Batch Number : 123058
Date Extracted: 13-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193330-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193335-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193342-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
QC379003	BLANK			Water	50	mL	50	1.000000	1					HG		
QC379004	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC379005	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC379006	SER	of 193108-023		Filtrate	50	mL	50	1.000000	1					HG		
QC379007	MS	of 193108-023		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379008	MSD	of 193108-023		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379009	PDS	of 193108-023		Filtrate	50	mL	50	1.000000	1					HG		

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Prep Chemist: 3/13/07 Reviewed By: Date: 3/13/07

Relinquished By: 3/13/07 Received By: Date: 3/13/07

ns, Ltd.

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

Batch #: 123058

Digested: 3/13/07

Digested by: ZA

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193108-023 MSS	Y	50	50	N	Filtrate (C.F.)
193330-001	G				
-002					
-003					
-004					
-005					
-006					
-007					
-008					
193335-001	J				
193342-001	G				
193346-001					
-002					
-003					
-004					
-005					
-006					
-007					
-008					
-009					
Blank	3/13/07				Water
BS					
BSD					
MS 193108-023	Y				Filtrate (C.F.)
MSD					

25 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	S5707	3/13/07
ICAL Source WS#	S5707	
ICV / CCV WS#	S5709/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	1:15 / 95°C	
Time OFF/ Temperature OFF	3:15 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030907	
5% $K_2S_2O_8$	K030907	
NaCl.hydroxylamine hydrochloride	H4030107	
Stannous Chloride	SnCl2031307	
☐ filtered thru' 0.45 um syringe filter	Millipore RLAN43832	

Ls / Dat
3/13/07

3/17/07

Prep Chemist / Date

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Continued from page X

Continued on page X

3/13/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/23/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/23/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1047MW101	Batch#:	123101
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-001	Analyzed:	03/14/07

Analyte	Result	RL
Alkalinity, Bicarbonate	33	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	33	1.0

Field ID:	1065PZ4B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-002	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID:	1065PZ7B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-003	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	350	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	350	10

Field ID:	1065PZ5AR	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-004	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	790	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	790	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1065PZ5B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-005	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	230	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	230	10

Field ID:	DUP0301072A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-006	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	32	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	32	10

Field ID:	1349MW01	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-007	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Field ID:	1349MW100	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-008	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	1,000	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,000	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW06	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-009	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	220	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	220	10

Field ID:	DUP0301073A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-010	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	280	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	280	10

Field ID:	DUP0301073B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-011	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	980	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	980	10

Field ID:	1213GW101	Batch#:	123166
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-012	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	420	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	420	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW08	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-013	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID:	LF02GW04	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-014	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	370	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	370	10

Field ID:	1065PZ1A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-015	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	550	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	550	10

Field ID:	1065PZ2A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-016	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	220	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	220	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1065PZ3A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-017	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID:	1065PZ4A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-018	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	680	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	680	10

Field ID:	1065MW101	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-019	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	670	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	670	10

Field ID:	1065MW102	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-020	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	81	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	81	4.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW103	Batch#:	123169
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-022	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	270	10

Field ID:	DAEGW104	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-023	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	280	10
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	280	10

Field ID:	DAEGW03	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-025	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	820	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	820	10

Field ID:	DAEGW05	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-026	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	410	6.7

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DUP0302071A	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-027	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Type:	BLANK	Batch#:	123101
Lab ID:	QC379188	Analyzed:	03/14/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type:	BLANK	Batch#:	123166
Lab ID:	QC379459	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type:	BLANK	Batch#:	123169
Lab ID:	QC379477	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379189	Batch#:	123101
Matrix:	Water	Analyzed:	03/14/07

Spiked	Result	%REC	Limits
200.0	192.0	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379460	Batch#:	123166
Matrix:	Water	Analyzed:	03/15/07

Spiked	Result	%REC	Limits
200.0	185.2	93	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379478	Batch#:	123169
Matrix:	Water	Analyzed:	03/15/07

Spiked	Result	%REC	Limits
200.0	191.2	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1047MW101	Batch#:	123101
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379190	32.60	200.0	224.0	96	69-112		
MSD	QC379191		200.0	226.0	97	69-112	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1349MW01	Batch#:	123166
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379461	285.0	500.0	777.0	98	69-112		
MSD	QC379462		500.0	779.0	99	69-112	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1065PZ3A	Batch#:	123166
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379463	303.0	500.0	747.0	89	69-112		
MSD	QC379464		500.0	774.0	97	69-112	4	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	DAEGW104	Batch#:	123169
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379479	281.0	500.0	752.0	94	69-112		
MSD	QC379480		500.0	756.0	95	69-112	1	25

RPD= Relative Percent Difference

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/14/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123101** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.3	4.8	192.00			4.0	96	
193108-001	6.8	100	0.0	3.3	32.60		n/a	1.0		
MS	10.1	25	2.2	5.6	224.00			4.0	96	
MSD	9.9	25	2.2	5.7	226.00			4.0	97	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-001	6.80	100	0.0	3.3	32.60		n/a	1.0
193222-001	8.20	10	0.0	3.6	362.00		n/a	10.0
193222-002	7.80	10	0.0	3.7	367.00		n/a	10.0
193222-003	7.30	10	0.0	3.6	358.00		n/a	10.0
193222-004	7.60	10	0.0	5.9	593.00		n/a	10.0
193222-005	6.90	100	0.0	2.6	26.10		n/a	1.0
193222-006	6.70	100	0.0	3.3	32.80		n/a	1.0
193222-007	8.10	10	0.0	3.2	318.00		n/a	10.0
193222-008	7.00	100	0.0	2.6	25.80		n/a	1.0
193225-001	7.90	10	0.0	2.3	229.00		n/a	10.0
193227-002	7.20	10	0.0	12.1	1208.00		n/a	10.0
193230-001	4.70	100	0.0	0.2	rpt low alk	0.29	ND	1.0
193230-002	5.30	100	0.0	0.5	rpt low alk	0.70	3.400	1.0
193230-003	5.70	100	0.0	1.4	rpt low alk	1.65	11.700	1.0
193230-004	5.70	100	0.0	5.3	53.20		n/a	1.0

779

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMK 3/15/07

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/14/07
Batch No: 123101

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as $CaCO_3$ (mg/L)	Carbonate Alkalinity as $CaCO_3$ (mg/L)	Hydroxide Alkalinity as $CaCO_3$ (mg/L)
193108-001	0.0	32.6	32.6	32.600	0.000	0.000
193222-001	0.0	362.00	362.000	362.000	0.000	0.000
193222-002	0.0	367.00	367.000	367.000	0.000	0.000
193222-003	0.0	358.00	358.000	358.000	0.000	0.000
193222-004	0.0	593.00	593.000	593.000	0.000	0.000
193222-005	0.0	26.10	26.100	26.100	0.000	0.000
193222-006	0.0	32.80	32.800	32.800	0.000	0.000
193222-007	0.0	318.00	318.000	318.000	0.000	0.000
193222-008	0.0	25.80	25.800	25.800	0.000	0.000
193225-001	0.0	229.00	229.000	229.000	0.000	0.000
193227-002	0.0	1208.00	1208.000	1208.000	0.000	0.000
193230-001	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193230-002	0.0	#VALUE!	3.400	not applicable	not applicable	not applicable
193230-003	0.0	#VALUE!	11.700	not applicable	not applicable	not applicable
193230-004	0.0	53.20	53.200	53.200	0.000	0.000

780

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/14/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123101 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
193108-001	32.600	39.747	0.000	0.000
193222-001	362.000	441.367	0.000	0.000
193222-002	367.000	447.464	0.000	0.000
193222-003	358.000	436.490	0.000	0.000
193222-004	593.000	723.014	0.000	0.000
193222-005	26.100	31.822	0.000	0.000
193222-006	32.800	39.991	0.000	0.000
193222-007	318.000	387.721	0.000	0.000
193222-008	25.800	31.457	0.000	0.000
193225-001	229.000	279.208	0.000	0.000
193227-002	1208.000	1472.850	0.000	0.000
193230-001	ND	not applicable	not applicable	not applicable
193230-002	3.400	not applicable	not applicable	not applicable
193230-003	11.700	not applicable	not applicable	not applicable
193230-004	53.200	64.864	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd

LIMS Batch #: 123101
Matrix: water

Date: 3/14/07
Time: 9:20

Benchbook#: **BK2384**
Page: **73**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55635
Slope: 100.6
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	4.9	100	—	<0.05		
	LCS	10.1	25	2.32	4.80		
	193108-1 A	6.6	25	—	<1 mL		
	-1	6.8	100	—	3.26		
5	MS-1	10.1	25	2.17	5.61		
	MSD-1	9.9	↓	2.24	5.65		
	193222-1 F	8.2	10	—	3.62		
	-2	7.8	10	—	3.67		
	-3	7.3	10	—	3.58		
10	-4	7.6	10	—	5.93		
	-5	7.1	25	—	<2mL		
	-5	6.9	100	—	2.61		
	-6	6.7	25	—	<2mL		
	-6	6.7	100	—	3.28		
15	-7	8.1	10	—	3.18		
	-8	~~7.1~~ 7.1	25	—	<2mL		
	-8	7.0	100	—	2.58		
	193225-1 F	7.9	10	—	2.29		
	193227-2 I	7.2	10	—	12.08		
20	193230-1 I	5.0	25	—	~~<0.05~~ <2mL		
	-1	4.7	100	—	0.15	0.29	
	-2	5.3	25	—	<2 mL		
	-2	5.3	100	—	0.52	0.70	
	-3	6.3	25	—	<2mL		
	-3	5.7	100	—	1.41	1.65	
	-4	5.6	25	—	<2mL		
	-4 I	5.7	100	—	5.32		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/14/07
Analyst / Date

3/14/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123101
Date Started: 14-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193222-001			MWH	Water	ALKALINITY	13-MAR-2007
193222-002			MWH	Water	ALKALINITY	13-MAR-2007
193222-003			MWH	Water	ALKALINITY	13-MAR-2007
193222-004			MWH	Water	ALKALINITY	13-MAR-2007
193222-005			MWH	Water	ALKALINITY	13-MAR-2007
193222-006			MWH	Water	ALKALINITY	13-MAR-2007
193222-007			MWH	Water	ALKALINITY	13-MAR-2007
193222-008			MWH	Water	ALKALINITY	13-MAR-2007
193225-001			Kennedy/Jenks Cons	Water	ALKALINITY	13-MAR-2007
193227-002			Innovative Technic	Water	ALKALINITY	13-MAR-2007
193230-001			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-002			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-003			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-004			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
QC379188	BLANK			Water	ALKALINITY	
QC379189	LCS			Water	ALKALINITY	
QC379190	MS	of 193108-001		Water	ALKALINITY	
QC379191	MSD	of 193108-001		Water	ALKALINITY	

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1 /** SMWW 2320B Analysis Date: **03/15/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123166** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.5	4.6	185.20			4.0	93	
193108-007	6.7	10	0.0	2.9	285.00		n/a	10.0		
MS	9.2	10	1.2	7.8	777.00			10.0	98	
MSD	9.1	10	1.2	7.8	779.00			10.0	99	0
193108-017	7.10	10	0.0	3.0	303.00	n/a		10.0		
MS	9.5	10	1.7	7.5	747.00			10.0	89	
MSD	9.5	10	2.0	7.7	774.00			10.0	94	4

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-002	7.30	10	0.0	3.0	297.00		n/a	10.0
193108-003	7.50	10	0.0	3.5	348.00		n/a	10.0
193108-004	7.20	10	0.0	7.9	789.00		n/a	10.0
193108-005	7.20	10	0.0	2.3	225.00		n/a	10.0
193108-006	6.80	100	0.0	3.2	31.60		n/a	1.0
193108-007	6.70	10	0.0	2.9	285.00		n/a	10.0
193108-008	6.80	10	0.0	10.3	1034.00		n/a	10.0
193108-009	7.30	10	0.0	2.2	224.00		n/a	10.0
193108-010	6.80	10	0.0	2.8	284.00		n/a	10.0
193108-011	6.90	10	0.0	9.8	982.00		n/a	10.0
193108-012	8.00	10	0.0	4.2	415.00		n/a	10.0
193108-013	7.40	10	0.0	5.4	535.00		n/a	10.0
193108-014	7.60	10	0.0	3.7	368.00		n/a	10.0
193108-015	7.30	10	0.0	5.5	549.00		n/a	10.0
193108-016	7.30	10	0.0	2.2	221.00		n/a	10.0
193108-017	7.10	10	0.0	3.0	303.00		n/a	10.0
193108-018	7.20	10	0.0	6.8	678.00		n/a	10.0
193108-019	7.30	10	0.0	6.7	673.00		n/a	10.0
193108-020	7.00	25	0.0	2.0	81.20		n/a	4.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: 3/15/07

Analysis: **Alkalinity** Analyst: SJ H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Analysis Date: 03/15/07

Batch No: 123166

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193108-002	0.0	297.0	297	297.000	0.000	0.000
193108-003	0.0	348.00	348.000	348.000	0.000	0.000
193108-004	0.0	789.00	789.000	789.000	0.000	0.000
193108-005	0.0	225.00	225.000	225.000	0.000	0.000
193108-006	0.0	31.60	31.600	31.600	0.000	0.000
193108-007	0.0	285.00	285.000	285.000	0.000	0.000
193108-008	0.0	1034.00	1034.000	1034.000	0.000	0.000
193108-009	0.0	224.00	224.000	224.000	0.000	0.000
193108-010	0.0	284.00	284.000	284.000	0.000	0.000
193108-011	0.0	982.00	982.000	982.000	0.000	0.000
193108-012	0.0	415.00	415.000	415.000	0.000	0.000
193108-013	0.0	535.00	535.000	535.000	0.000	0.000
193108-014	0.0	368.00	368.000	368.000	0.000	0.000
193108-015	0.0	549.00	549.000	549.000	0.000	0.000
193108-016	0.0	221.00	221.000	221.000	0.000	0.000
193108-017	0.0	303.00	303.000	303.000	0.000	0.000
193108-018	0.0	678.00	678.000	678.000	0.000	0.000
193108-019	0.0	673.00	673.000	673.000	0.000	0.000
193108-020	0.0	81.20	81.200	81.200	0.000	0.000

785

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/15/07 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 123166 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193108-002	297.000	362.116	0.000	0.000
193108-003	348.000	424.298	0.000	0.000
193108-004	789.000	961.986	0.000	0.000
193108-005	225.000	274.331	0.000	0.000
193108-006	31.600	38.528	0.000	0.000
193108-007	285.000	347.485	0.000	0.000
193108-008	1034.000	1260.701	0.000	0.000
193108-009	224.000	273.111	0.000	0.000
193108-010	284.000	346.266	0.000	0.000
193108-011	982.000	1197.301	0.000	0.000
193108-012	415.000	505.988	0.000	0.000
193108-013	535.000	652.297	0.000	0.000
193108-014	368.000	448.683	0.000	0.000
193108-015	549.000	669.367	0.000	0.000
193108-016	221.000	269.454	0.000	0.000
193108-017	303.000	369.432	0.000	0.000
193108-018	678.000	826.650	0.000	0.000
193108-019	673.000	820.553	0.000	0.000
193108-020	81.200	99.003	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123169
Matrix: water

Date: 3/15/07
Time: 16:30

Benchbook#: **BK2384**
Page: **75**

CAL-ph 4.0: SS#: 5779
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 100.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: rwk 3229-Y
(lot #6248 Exp. 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	9.9	100	—	<0.05		
	LCS	9.9	25	2.35	4.78		
	193108-22A	7.2	10	—	2.70		
	-23AB	7.6	10	—	2.81		
5	MS -23	9.7	10	2.10	7.52		
	MSD -23	9.7	10	2.19	7.56		
	-25 I	7.6	10	—	8.20		
	-26 H	7.4	15	—	6.21		
	-27 J	7.7	10	—	2.89		
10							
15							
20							

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/15/07
Analyst / Date

3/15/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123166
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-002			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-003			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-004			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-005			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-006			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-007			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-008			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-009			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-010			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-011			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-012			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-013			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-014			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-015			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-016			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-017			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-018			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-019			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-020			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
QC379459	BLANK			Water	ALKALINITY	
QC379460	LCS			Water	ALKALINITY	
QC379461	MS	of 193108-007		Water	ALKALINITY	
QC379462	MSD	of 193108-007		Water	ALKALINITY	
QC379463	MS	of 193108-017		Water	ALKALINITY	
QC379464	MSD	of 193108-017		Water	ALKALINITY	

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/15/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123169** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	9.9	25	2.4	4.8	191.20			4.0	96	
193108-023	7.6	10	0.0	2.8	281.00		n/a	10.0		
MS	9.7	10	2.1	7.5	752.00			10.0	94	
MSD	9.7	10	2.2	7.6	756.00			10.0	95	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-022	7.20	10	0.0	2.7	270.00		n/a	10.0
193108-023	7.60	10	0.0	2.8	281.00		n/a	10.0
193108-025	7.60	10	0.0	8.2	820.00		n/a	10.0
193108-026	7.40	15	0.0	6.2	414.00		n/a	6.7
193108-027	7.70	10	0.0	2.9	289.00		n/a	10.0
193261-001					ND		n/a	#DIV/0!
193261-002					ND		n/a	#DIV/0!
193261-003					ND		n/a	#DIV/0!
193261-004					ND		n/a	#DIV/0!
193268-004					ND		n/a	#DIV/0!
193268-005					ND		n/a	#DIV/0!
193268-006					ND		n/a	#DIV/0!
193128-001					ND		n/a	#DIV/0!
193128-002					ND		n/a	#DIV/0!

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LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: DMS 3/15/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/15/07
Batch No: 123169

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as $CaCO_3$ (mg/L)	Carbonate Alkalinity as $CaCO_3$ (mg/L)	Hydroxide Alkalinity as $CaCO_3$ (mg/L)
193108-022	0.0	270.0	270	270.000	0.000	0.000
193108-023	0.0	281.00	281.000	281.000	0.000	0.000
193108-025	0.0	820.00	820.000	820.000	0.000	0.000
193108-026	0.0	414.00	414.000	414.000	0.000	0.000
193108-027	0.0	289.00	289.000	289.000	0.000	0.000
193261-001	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-002	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-003	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-004	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-004	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-005	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-006	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-001	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-002	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!

790 **LIMITED VOLUME SAMPLES** (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/15/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123169 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193108-022	270.000	329.197	0.000	0.000
193108-023	281.000	342.608	0.000	0.000
193108-025	820.000	999.783	0.000	0.000
193108-026	414.000	504.768	0.000	0.000
193108-027	289.000	352.362	0.000	0.000
193261-001	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-002	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-003	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-004	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-004	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-005	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-006	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-001	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-002	ND	#DIV/0!	#DIV/0!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123166 Date: 3/15/07 Benchbook#: **BK2384**
Matrix: water Time: 9:30 Page: **74**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 100.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: C
NaCO3 Conc (mg/L): 100 U
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp. 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	4.9	100	—	<0.05		
	LCS	10.1	25	2.45	4.63		
	193108-2E	7.3	10	—	2.97		
	-3F	7.5	10	—	3.48		
5	-4G	7.2	10	—	7.89		
	-5F	7.2	10	—	2.25		
	-6M	6.8	25	—	<2mL		
	-6 ↓	6.8	100	—	3.16		
	-7AN	6.7	10	—	2.85		
10	MS-7	9.2	10	1.16	7.77		
	MSD-7 ↓	9.1	10	1.16	7.79		
	-8B	6.8	10	—	10.34		
	-9F	7.3	10	—	2.24		
	-10I	6.8	10	—	2.84		
15	-11F	6.9	10	—	9.82		
	-12G	8.0	10	—	4.15		
	-13J	7.4	10	—	5.35		
	-14D	7.6	10	—	3.68		
	-15	7.3	10	—	5.49		
20	-16F	7.3	10	—	2.21		
	-17U	7.1	10	—	3.03		
	MS-17	9.5		1.73	7.47		
	MSD17 ↓	9.5	↓	1.97	7.74		
	-18E	7.2	10	—	6.78		
	-19H	7.3	10	—	6.73		
	-20I	7.0	25	—	2.03		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/15/07 3/15/07

Analyst / Date **Reviewed by / Date**

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123169
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-022			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-023			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-025			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-026			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-027			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
QC379477	BLANK			Water	ALKALINITY	
QC379478	LCS			Water	ALKALINITY	
QC379479	MS	of 193108-023		Water	ALKALINITY	
QC379480	MSD	of 193108-023		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	11	0.20	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	56	2.0	10.00	122697	03/01/07 12:00	03/03/07 04:27
1065PZ7B	SAMPLE	193108-003	150	5.0	25.00	122697	03/01/07 12:45	03/03/07 09:43
1065PZ5AR	SAMPLE	193108-004	65	5.0	25.00	122697	03/01/07 13:20	03/03/07 10:00
1065PZ5B	SAMPLE	193108-005	39	2.0	10.00	122697	03/01/07 14:05	03/03/07 08:50
DUP0301072A	SAMPLE	193108-006	11	0.20	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	860	20	100.0	122697	03/01/07 08:20	03/02/07 19:42
1349MW100	SAMPLE	193108-008	820	20	100.0	122697	03/01/07 11:20	03/02/07 20:00
DAEGW06	SAMPLE	193108-009	140	2.0	10.00	122697	03/01/07 13:20	03/03/07 09:08
DUP0301073A	SAMPLE	193108-010	840	20	100.0	122697	03/01/07	03/03/07 14:58
DUP0301073B	SAMPLE	193108-011	820	20	100.0	122697	03/01/07	03/03/07 15:15
1213GW101	SAMPLE	193108-012	360	10	50.00	122699	03/02/07 08:50	03/04/07 00:53
DAEGW08	SAMPLE	193108-013	59	5.0	25.00	122697	03/01/07 16:12	03/03/07 13:30
LF02GW04	SAMPLE	193108-014	100	5.0	25.00	122697	03/01/07 15:02	03/03/07 13:13
1065PZ1A	SAMPLE	193108-015	57	5.0	25.00	122697	03/01/07 13:38	03/03/07 09:25
1065PZ2A	SAMPLE	193108-016	30	2.0	10.00	122697	03/01/07 10:32	03/03/07 02:25
1065PZ3A	SAMPLE	193108-017	50	2.0	10.00	122697	03/01/07 09:08	03/02/07 21:10
1065PZ4A	SAMPLE	193108-018	68	5.0	25.00	122697	03/01/07 11:12	03/03/07 05:02
1065MW101	SAMPLE	193108-019	44	5.0	25.00	122697	03/01/07 11:50	03/03/07 04:45
1065MW102	SAMPLE	193108-020	19	0.20	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	120	5.0	25.00	122697	03/01/07 15:40	03/03/07 12:55
DAEGW104	SAMPLE	193108-023	79	2.0	10.00	122699	03/02/07 09:30	03/03/07 20:13
DAEGW03	SAMPLE	193108-025	90	5.0	25.00	122699	03/02/07 09:40	03/04/07 00:01
DAEGW05	SAMPLE	193108-026	150	5.0	25.00	122699	03/02/07 08:40	03/03/07 21:05
DUP0302071A	SAMPLE	193108-027	78	2.0	10.00	122763	03/02/07 09:40	03/05/07 15:43
	BLANK	QC377478	ND	0.20	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.20	1.000	122699		03/03/07 19:55
	BLANK	QC377766	ND	0.20	1.000	122763		03/05/07 15:24

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	0.10	0.10	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	ND	0.10	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003	ND	0.10	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	0.22	0.10	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	ND	0.10	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006	ND	0.10	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	ND	0.10	122697	03/01/07 08:20	03/02/07 21:45
1349MW100	SAMPLE	193108-008	0.32	0.10	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009	0.24	0.10	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	ND	0.10	122697	03/01/07	03/03/07 15:33
DUP0301073B	SAMPLE	193108-011	0.26	0.10	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	ND	0.10	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND	0.10	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014	ND	0.10	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	0.20	0.10	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	0.27	0.10	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	0.16	0.10	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	0.14	0.10	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	0.25	0.10	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	0.10	0.10	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	ND	0.10	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	0.27	0.10	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	ND	0.10	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026	ND	0.10	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	0.29	0.10	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.10	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.10	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L		

Field ID	Type	Lab ID		Result	RL	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001		0.27	0.05	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002		4.0	0.05	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003		4.8	0.05	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	ND		0.05	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005		4.2	0.05	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006		0.28	0.05	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007		1.6	0.05	122697	03/01/07 08:20	03/02/07 21:45
1349MW100	SAMPLE	193108-008	ND		0.05	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009		0.09	0.05	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010		1.6	0.05	122697	03/01/07	03/03/07 15:33
DUP0301073B	SAMPLE	193108-011	ND		0.05	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	.	1.7	0.05	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND		0.05	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014		3.2	0.05	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015		0.71	0.05	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016		1.2	0.05	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017		0.31	0.05	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND		0.05	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND		0.05	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020		0.23	0.05	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022		3.9	0.05	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	ND		0.05	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025		0.22	0.05	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026		1.9	0.05	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	ND		0.05	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND		0.05	122697		03/02/07 19:25
	BLANK	QC377493	ND		0.05	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	ND	0.05	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	ND	0.05	1.000	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003	ND	0.05	1.000	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	ND	0.05	1.000	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	ND	0.05	1.000	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006	ND	0.05	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	ND	0.10	2.000	122697	03/01/07 08:20	03/02/07 22:20
1349MW100	SAMPLE	193108-008	ND	0.10	2.000	122697	03/01/07 11:20	03/03/07 07:05
DAEGW06	SAMPLE	193108-009	ND	0.05	1.000	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	ND	0.10	2.000	122697	03/01/07	03/03/07 16:08
DUP0301073B	SAMPLE	193108-011	ND	0.10	2.000	122697	03/01/07	03/03/07 18:28
1213GW101	SAMPLE	193108-012	ND	0.05	1.000	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND	0.05	1.000	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014	ND	0.05	1.000	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	ND	0.05	1.000	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	ND	0.05	1.000	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	ND	0.05	1.000	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND	0.05	1.000	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND	0.05	1.000	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	ND	0.05	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	ND	0.05	1.000	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	ND	0.05	1.000	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	ND	0.05	1.000	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026	ND	0.05	1.000	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	ND	0.05	1.000	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.05	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.05	1.000	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	5.7	0.50	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	64	5.0	10.00	122697	03/01/07 12:00	03/03/07 04:27
1065PZ7B	SAMPLE	193108-003	190	13	25.00	122697	03/01/07 12:45	03/03/07 09:43
1065PZ5AR	SAMPLE	193108-004	ND	0.50	1.000	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	70	5.0	10.00	122697	03/01/07 14:05	03/03/07 08:50
DUP0301072A	SAMPLE	193108-006	5.6	0.50	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	280	50	100.0	122697	03/01/07 08:20	03/02/07 19:42
1349MW100	SAMPLE	193108-008	0.54	0.50	1.000	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009	7.9	0.50	1.000	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	270	50	100.0	122697	03/01/07	03/03/07 14:58
DUP0301073B	SAMPLE	193108-011	0.59	0.50	1.000	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	150	25	50.00	122699	03/02/07 08:50	03/04/07 00:53
DAEGW08	SAMPLE	193108-013	69	13	25.00	122697	03/01/07 16:12	03/03/07 13:30
LF02GW04	SAMPLE	193108-014	31	0.50	1.000	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	7.7	0.50	1.000	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	39	0.50	1.000	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	33	0.50	1.000	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND	0.50	1.000	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND	0.50	1.000	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	15	0.50	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	68	13	25.00	122697	03/01/07 15:40	03/03/07 12:55
DAEGW104	SAMPLE	193108-023	14	0.50	1.000	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	110	13	25.00	122699	03/02/07 09:40	03/04/07 00:01
DAEGW05	SAMPLE	193108-026	110	13	25.00	122699	03/02/07 08:40	03/03/07 21:05
DUP0302071A	SAMPLE	193108-027	13	0.50	1.000	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.50	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.50	1.000	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Chloride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	LCS		QC377479		4.000	4.165	104	80-120			1.000	122697			03/02/07 20:52
1047MW101	MS	193108-001	QC377480	11.07	4.000	14.97	97	80-120			2.000	122697	03/01/07 09:30	03/02/07	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		4.000	14.96	97	80-120	0	25	2.000	122697	03/01/07 09:30	03/02/07	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	860.9	400.0	1,251	98	80-120			200.0	122697	03/01/07 08:20	03/02/07	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		400.0	1,261	100	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	50.30	20.00	69.07	94	80-120			10.00	122697	03/01/07 09:08	03/02/07	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		20.00	69.34	95	80-120	0	25	10.00	122697	03/01/07 09:08	03/02/07	03/03/07 00:22
	LCS		QC377494		4.000	4.137	103	80-120			1.000	122699			03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	79.01	20.00	98.46	97	80-120			10.00	122699	03/02/07 09:30	03/02/07	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		20.00	98.88	99	80-120	0	25	10.00	122699	03/02/07 09:30	03/02/07	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	89.50	100.0	187.4	98	80-120			50.00	122699	03/02/07 09:40	03/02/07	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		100.0	187.5	98	80-120	0	25	50.00	122699	03/02/07 09:40	03/02/07	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	149.9	50.00	198.9	98	80-120			25.00	122699	03/02/07 08:40	03/02/07	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		50.00	198.5	97	80-120	0	25	25.00	122699	03/02/07 08:40	03/02/07	03/03/07 21:40
	LCS		QC377767		4.000	4.040	101	80-120			1.000	122763			03/05/07 19:01
ZZZZZZZZZZ	MS	193128-002	QC377768	19,820	5,000	25,070	105	80-120			2,500	122763	03/05/07 09:00	03/05/07	03/05/07 17:56
ZZZZZZZZZZ	MSD	193128-002	QC377769		5,000	25,110	106	80-120	0	25	2,500	122763	03/05/07 09:00	03/05/07	03/05/07 18:13

RPD= Relative Percent Difference

3.0

Curtis & Tompkins, Ltd.

Batch QC Report

Fluoride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		2.000	2.050	103	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	0.1006	2.000	1.967	93	78-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		2.000	1.935	92	78-120	2	20	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	0.09321	200.0	192.9	96	78-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		200.0	190.8	95	78-120	1	20	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	0.1551	10.00	9.669	95	78-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		10.00	9.432	93	78-120	2	20	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		2.000	1.987	99	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	0.2736	10.00	9.581	93	78-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		10.00	9.225	90	78-120	4	20	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	0.06470	50.00	44.81	89	78-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		50.00	45.92	92	78-120	2	20	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	0.09114	25.00	23.17	92	78-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		25.00	23.11	92	78-120	0	20	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		1.000	1.037	104	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	0.2686	1.000	1.281	101	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		1.000	1.307	104	80-120	2	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	1.628	100.0	104.6	103	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		100.0	103.1	101	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	0.3078	5.000	5.445	103	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		5.000	5.250	99	80-120	4	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		1.000	1.033	103	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	0.03678	5.000	5.043	100	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		5.000	5.178	103	80-120	3	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	0.2167	25.00	25.53	101	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		25.00	26.15	104	80-120	2	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	1.926	12.50	14.46	100	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		12.50	14.83	103	80-120	2	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrite Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		1.000	1.010	101	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	<0.008079	1.000	1.020	102	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		1.000	1.007	101	80-120	1	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	<0.01616	100.0	99.87	100	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		100.0	100.5	101	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	<0.008079	5.000	5.132	103	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		5.000	5.087	102	80-120	1	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		1.000	1.016	102	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	<0.008079	5.000	5.155	103	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		5.000	5.265	105	80-120	2	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	<0.008079	25.00	24.74	99	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		25.00	24.29	97	80-120	2	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	<0.008079	12.50	12.75	102	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		12.50	12.31	99	80-120	4	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		10.00	10.27	103	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	5.691	10.00	15.85	102	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		10.00	15.81	101	80-120	0	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	282.9	1,000	1,294	101	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		1,000	1,304	102	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	33.34	50.00	84.34	102	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		50.00	83.91	101	80-120	1	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		10.00	10.28	103	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	13.65	50.00	64.76	102	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		50.00	64.71	102	80-120	0	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	108.5	250.0	362.9	102	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		250.0	365.9	103	80-120	1	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	105.0	125.0	232.6	102	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		125.0	235.3	104	80-120	1	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

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Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 2/28/07

CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

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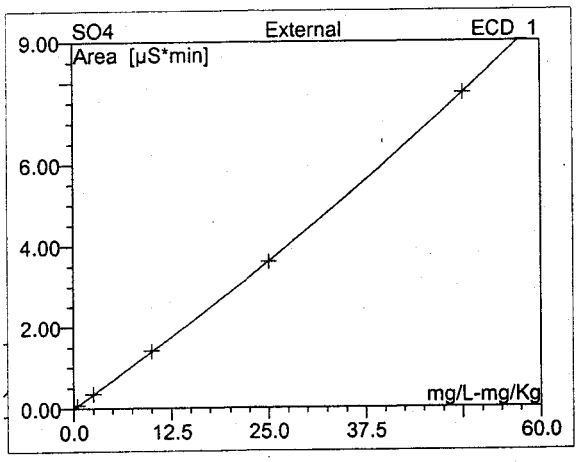
No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

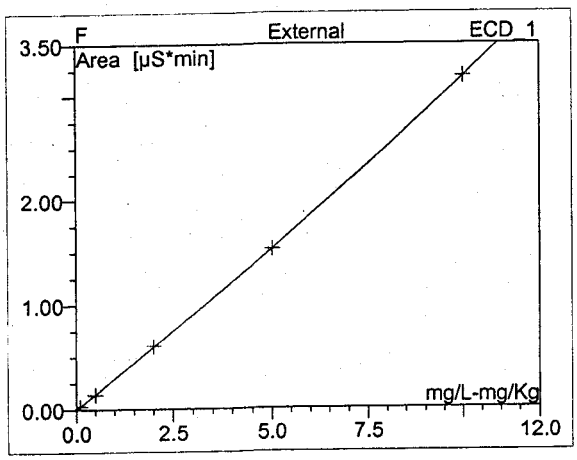
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

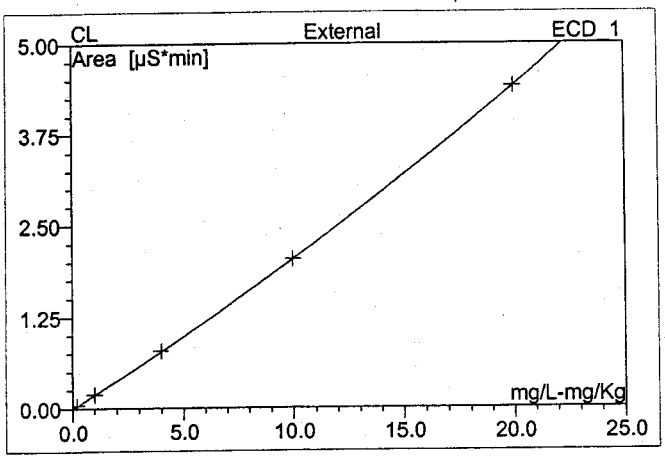


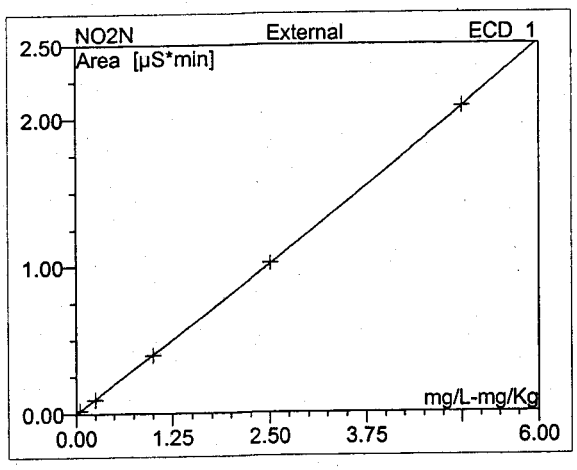
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

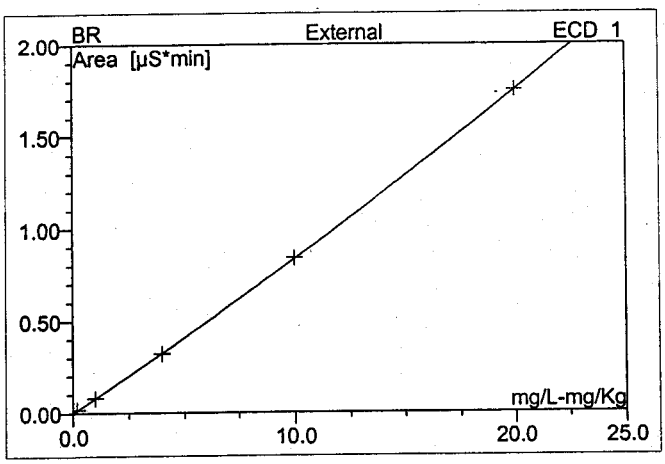
IC01 Calibration Batch Report

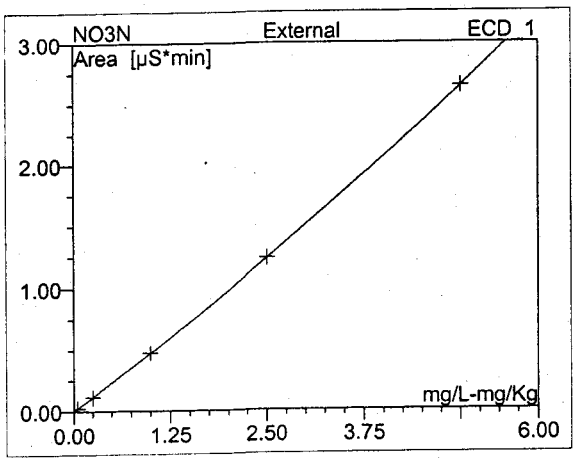
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

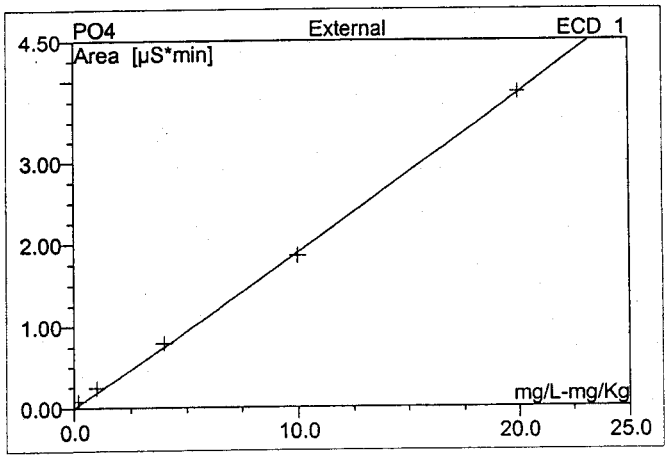












Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

Calibration Mode: Total
Auto Recalibrate: On

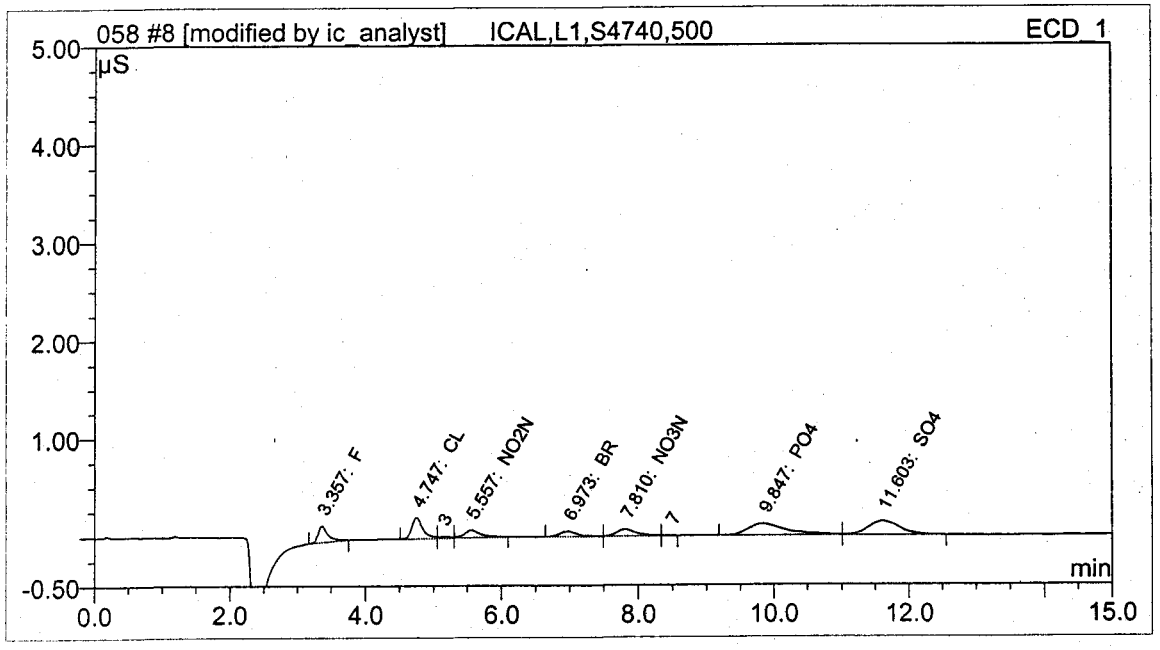
No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



ANALYZED BY: _____

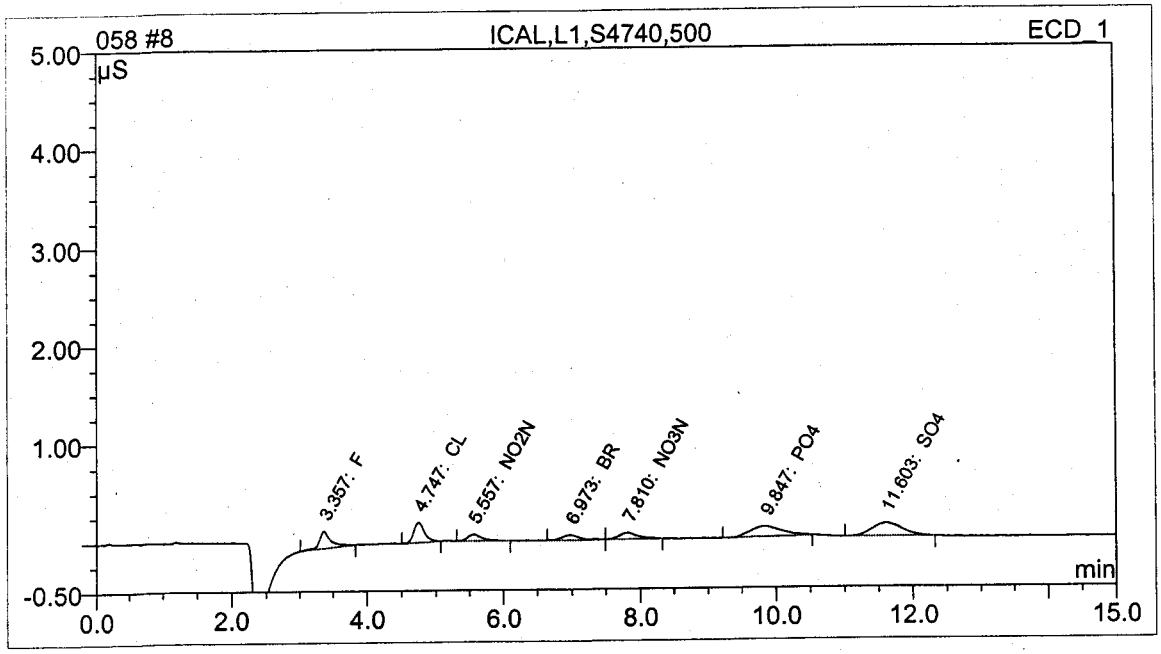
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

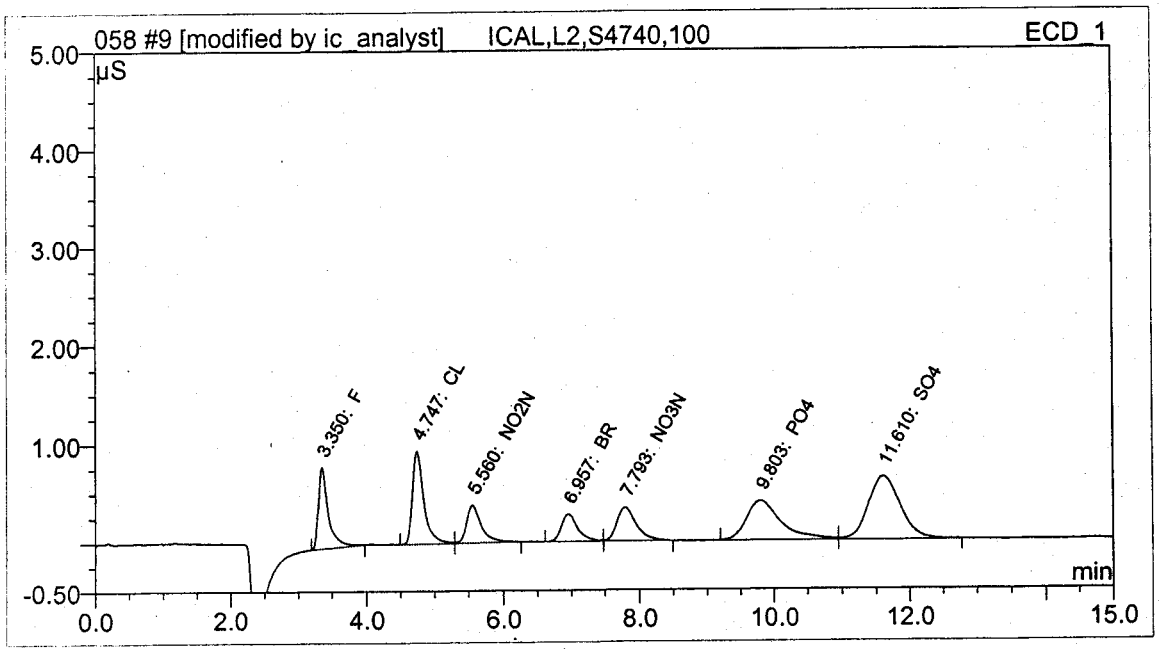
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

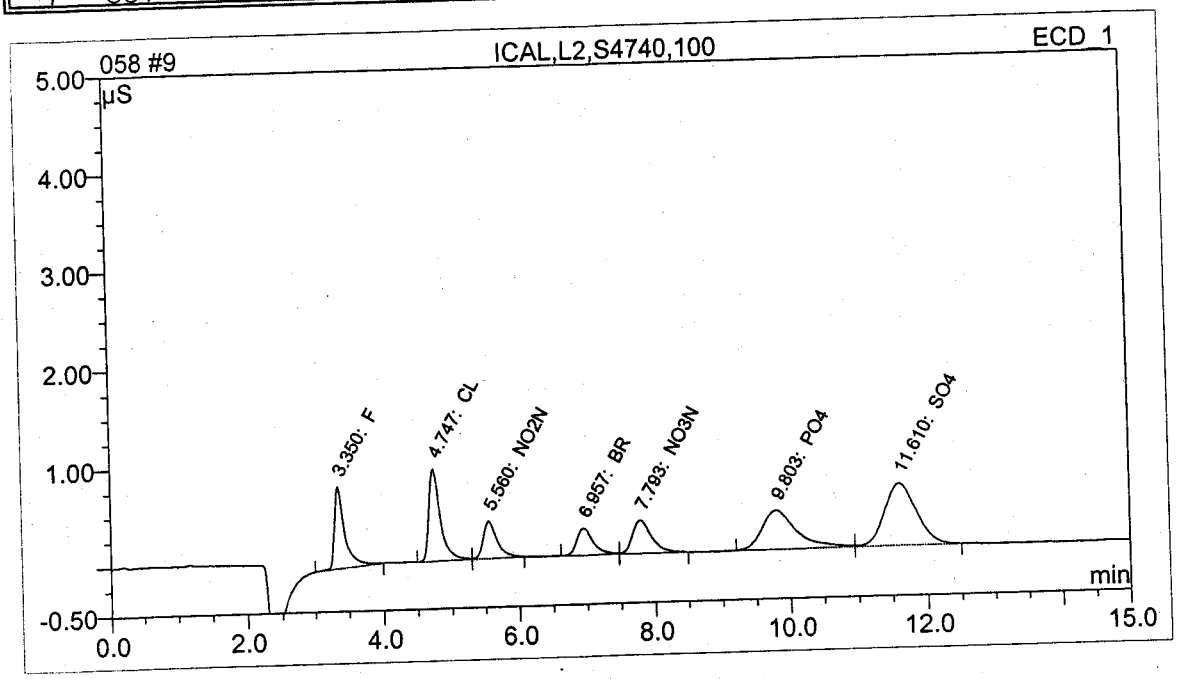
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

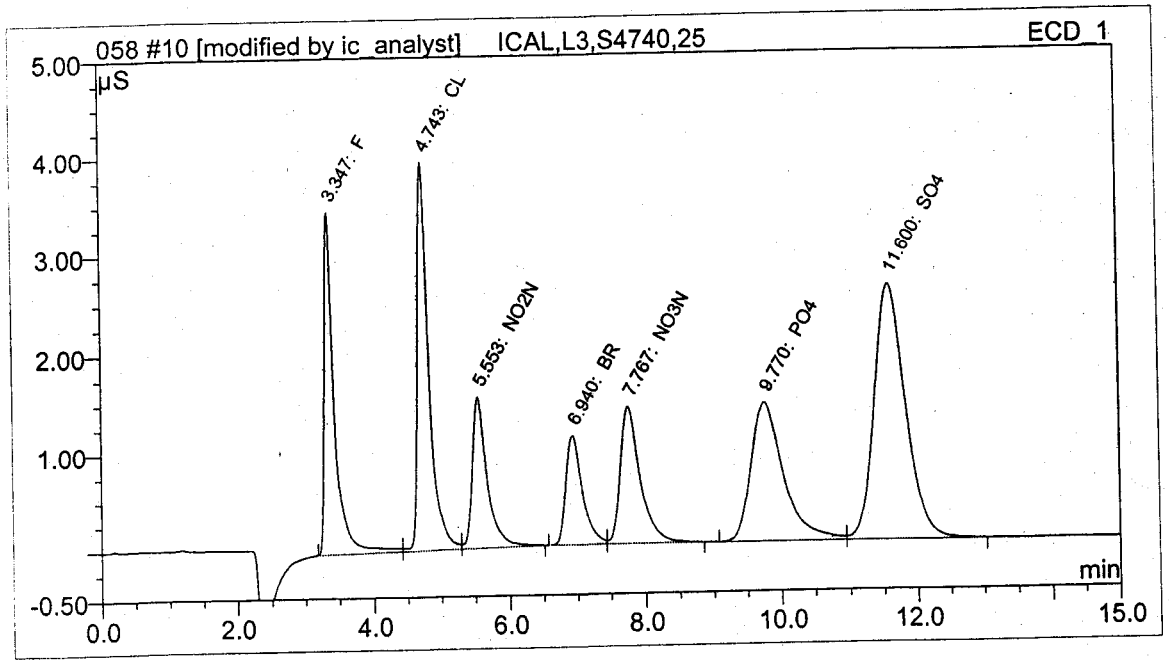
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

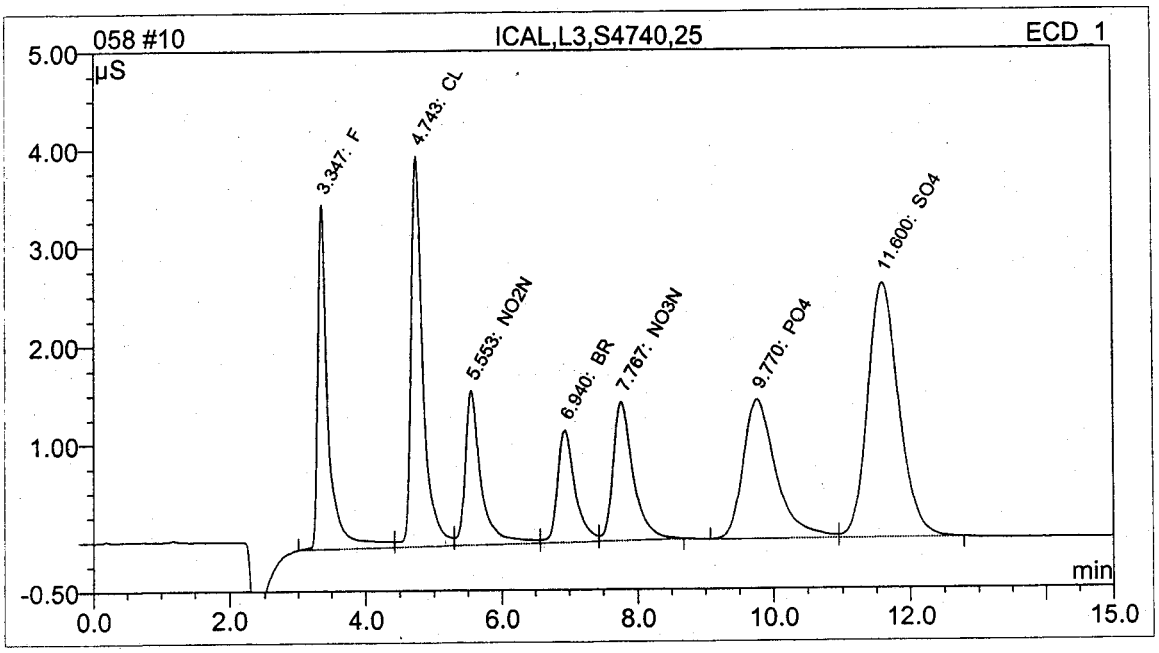
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

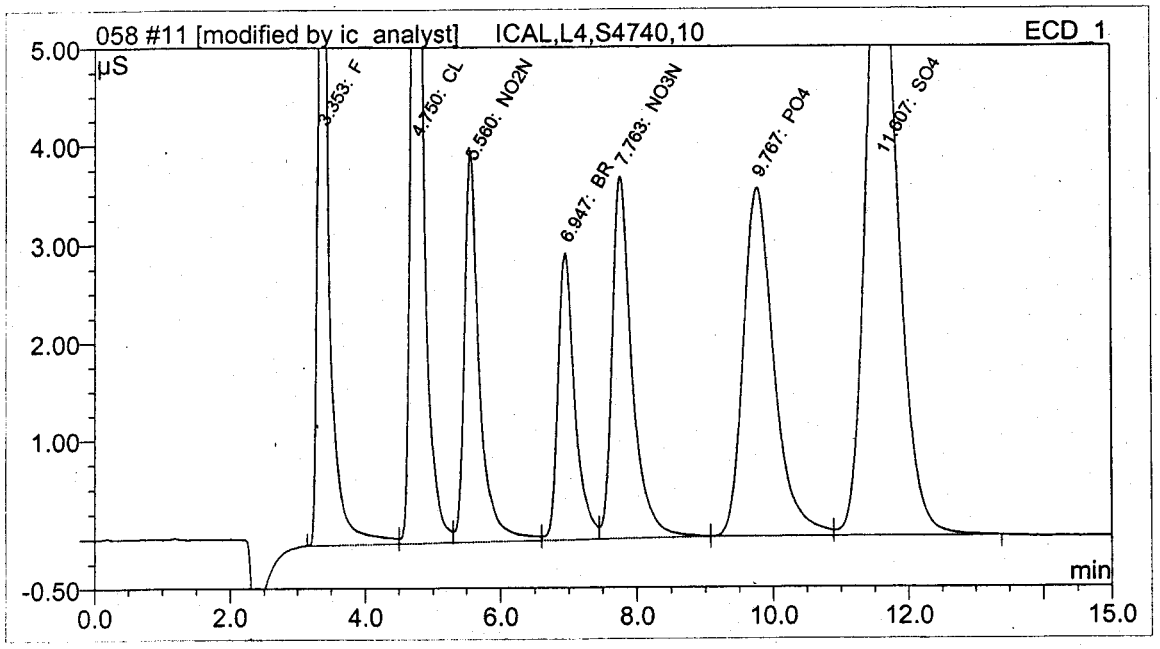
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

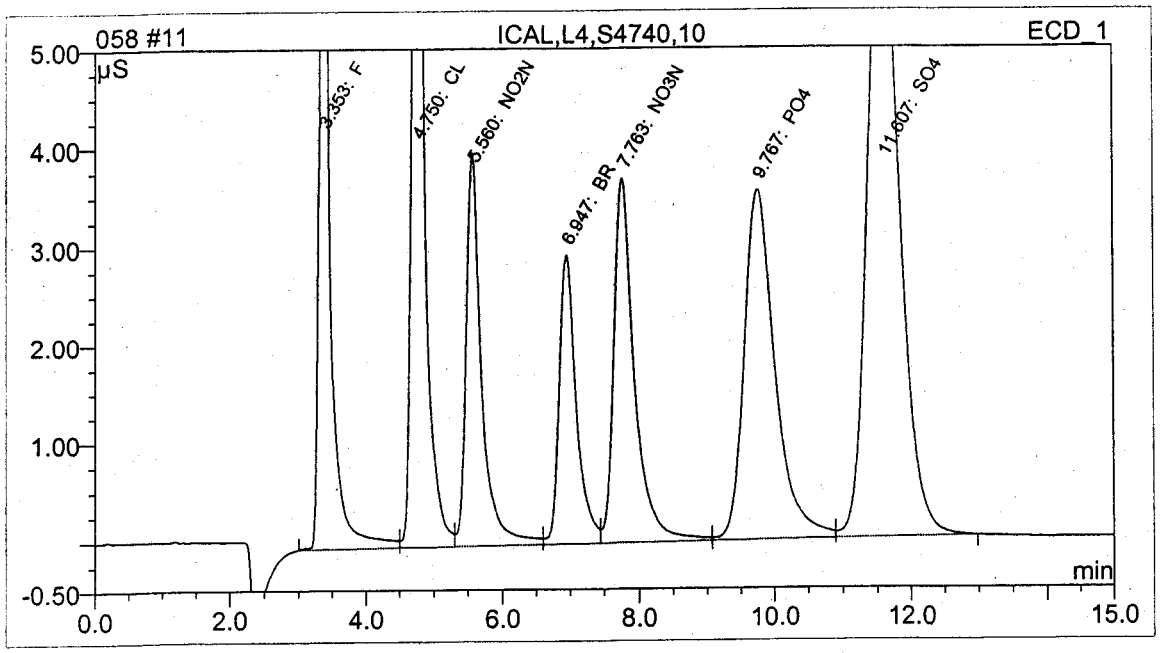
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

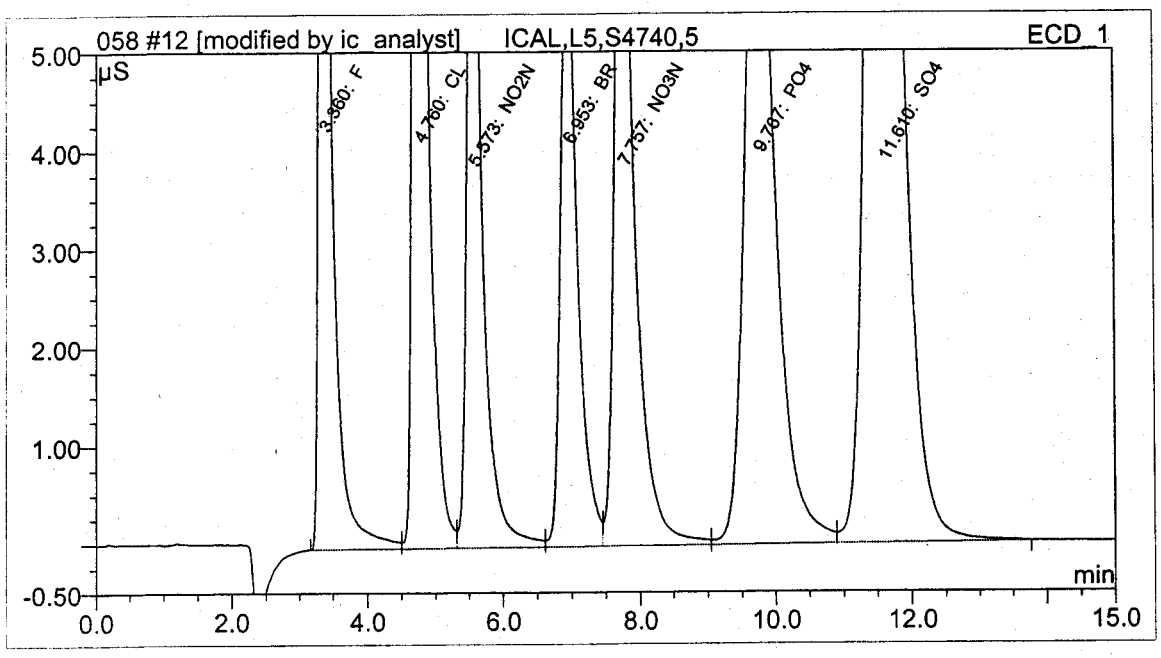
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

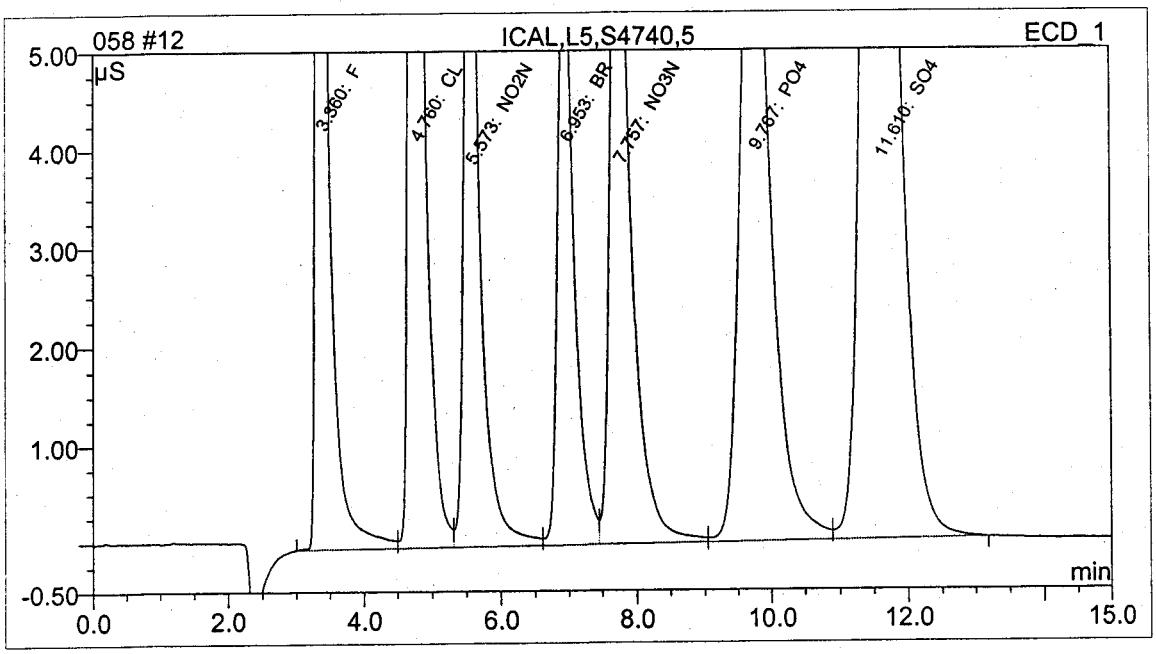
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01
Seqnum : 607084260013 File : 058_13
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

IDF : 1.0
Time : 27-FEB-2007 15:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

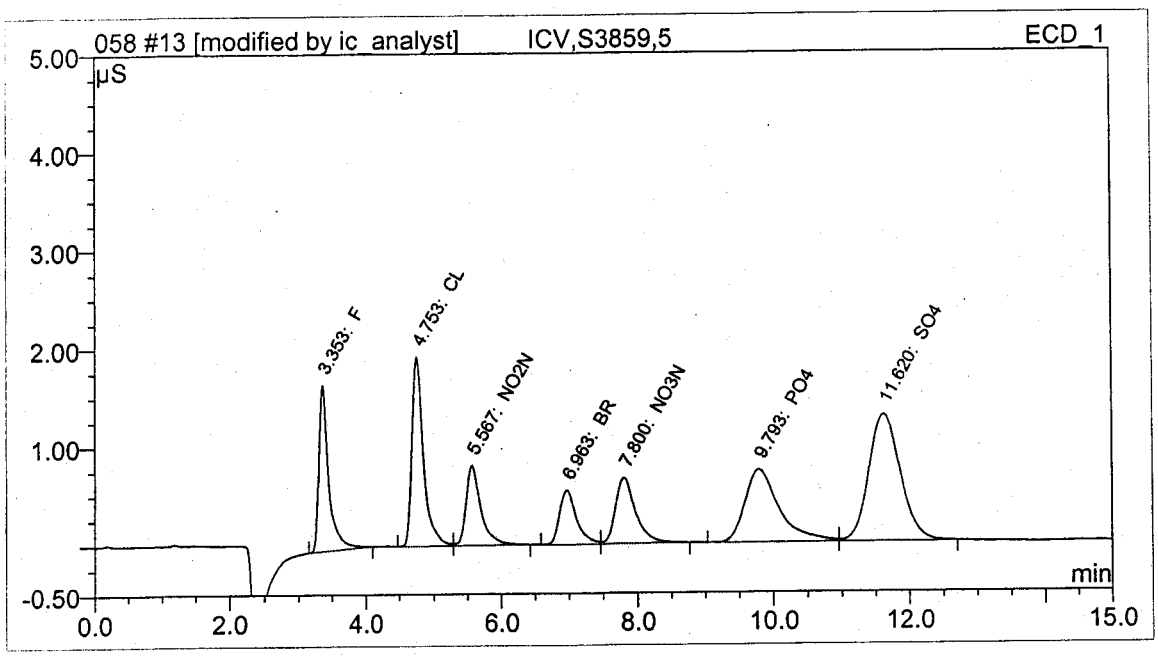
CW 3/1/07

+=high bias v=ICV

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

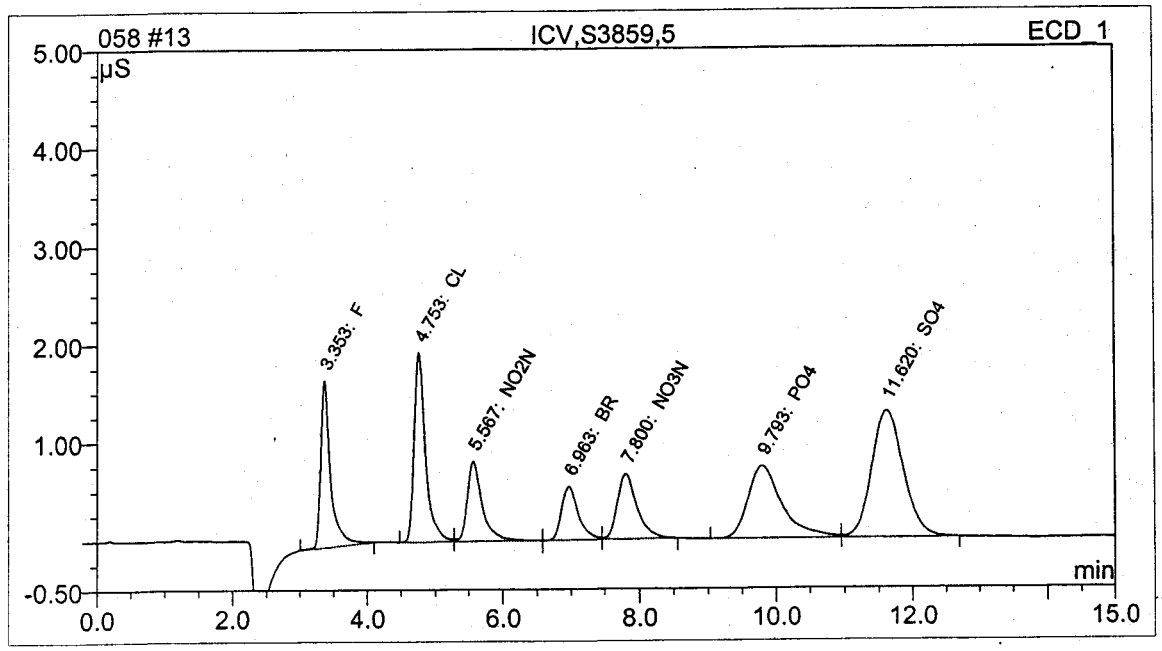
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260014 File : 058_14
Cal : 607084260001 Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:08

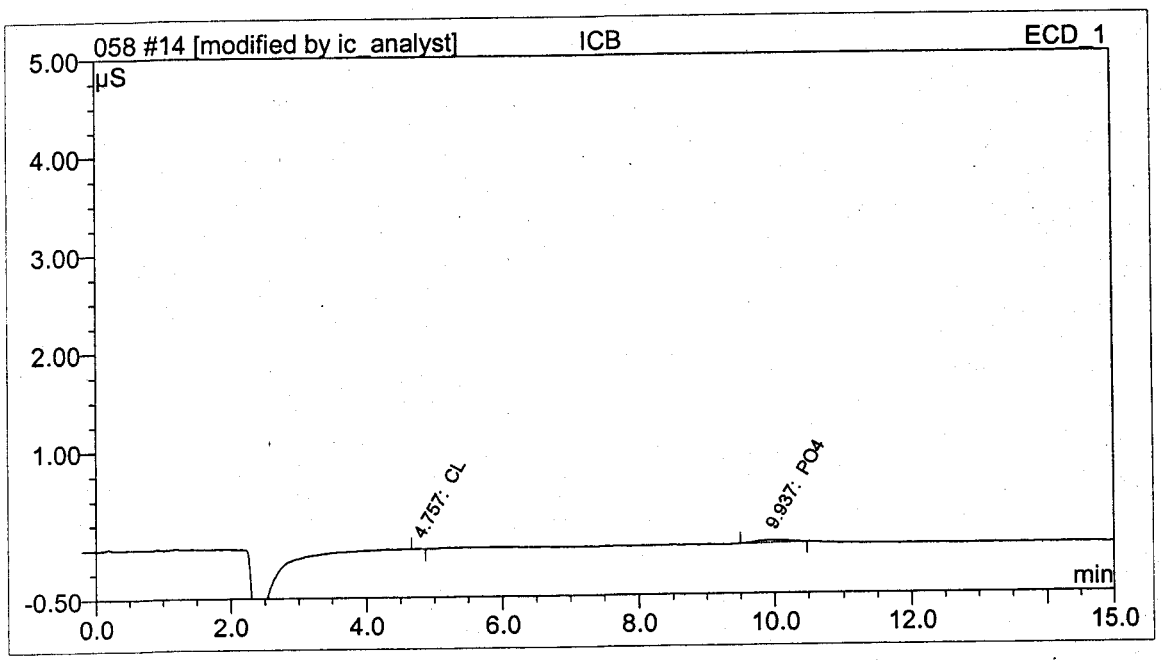
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

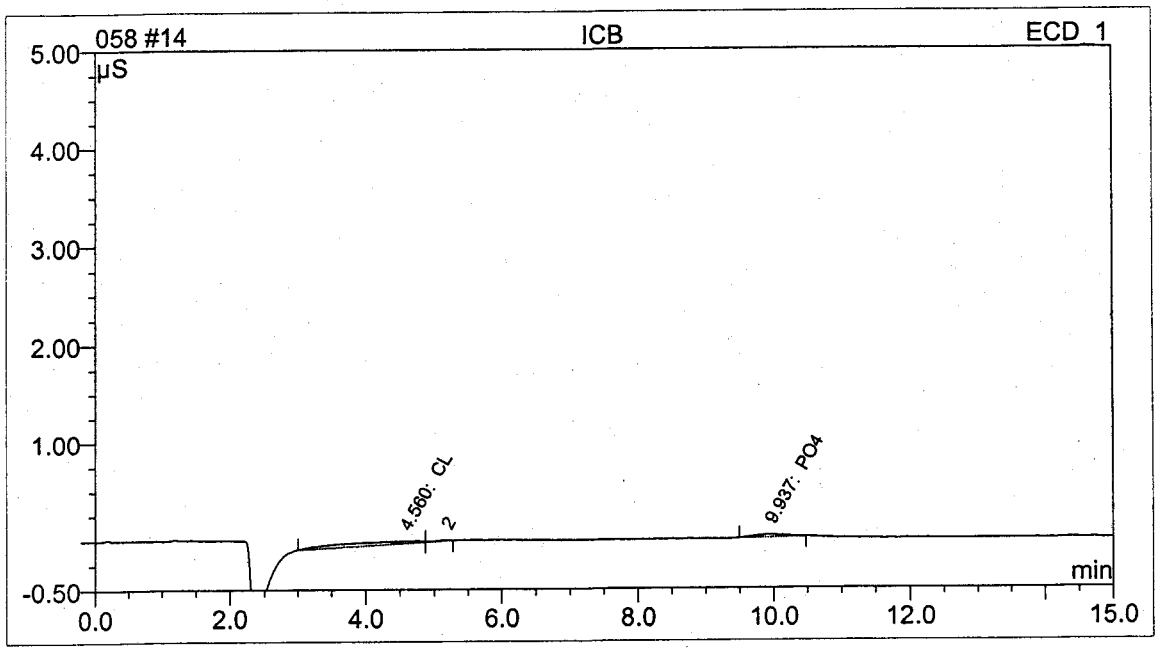
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260007 File : 058_7
Cal : 606441349001 Caldate: 02-NOV-2006

IDF : 1.0
Time : 27-FEB-2007 14:06

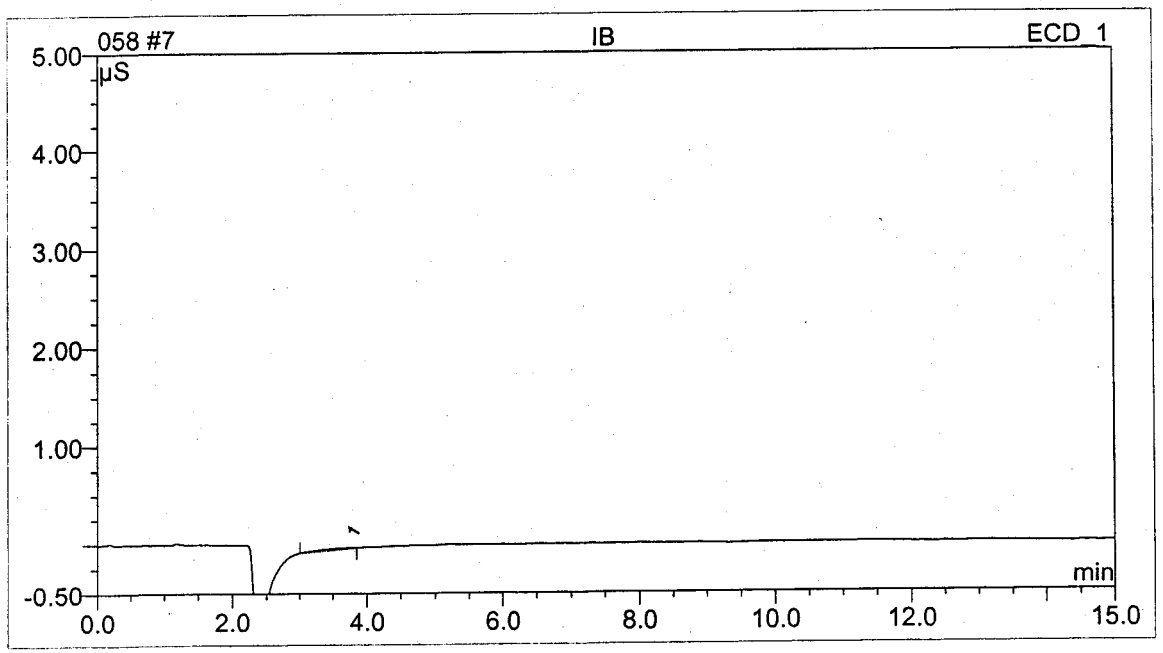
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MCS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 IC Water: EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Reviewer: MCH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 IC Water
EPA 300.0

Inst : IC03
Calnum : 627092916001 Cal Date: 05-MAR-2007

ICV 627092916007 (064_7 05-MAR-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

MKS 3/8/07

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Bromide	0.0796	0.0697	0.0681	0.0664	0.0690	QORG		0.06508	1.946E-4	0.0706	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Orthophosphate (as P)	0.2701	0.1554	0.1248	0.1245	0.1319	QORG		0.12009	5.805E-4	0.1614	0.999	0.990	N
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

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Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 3/5/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627092916001

Sequence: 064
Operator: ic_analyst

Printed: 3/6/2007 6:36:07 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-064	IB		1.0000	IC03-7AN	Finished	3/5/2007 12:36:49 PM	IC03-7AN_CAL
2	CAL-064	ICAL,L1,S4740,500		1.0000	IC03-7AN	Finished	3/5/2007 12:54:14 PM	IC03-7AN_CAL
3	CAL-064	ICAL,L2,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 1:11:38 PM	IC03-7AN_CAL
4	CAL-064	ICAL,L3,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 1:29:03 PM	IC03-7AN_CAL
5	CAL-064	ICAL,L4,S4740,10		1.0000	IC03-7AN	Finished	3/5/2007 1:46:27 PM	IC03-7AN_CAL
6	CAL-064	ICAL,L5,S4740,5		1.0000	IC03-7AN	Finished	3/5/2007 2:03:52 PM	IC03-7AN_CAL
7	CAL-064	ICV,S3859,5		1.0000	IC03-7AN	Finished	3/5/2007 2:21:16 PM	IC03-7AN_CAL
8	CAL-064	ICB		1.0000	IC03-7AN	Finished	3/5/2007 2:38:41 PM	IC03-7AN_CAL
9	122763	CCV,L,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 3:07:18 PM	IC03-7AN_CAL
10	122763	CCB/MB,QC377766		1.0000	IC03-7AN	Finished	3/5/2007 3:24:43 PM	IC03-7AN_CAL
11	122763	193108-027	J	10.0000	IC03-7AN	Finished	3/5/2007 3:43:54 PM	IC03-7AN_CAL
12	122763	MSS,193128-002	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:01:18 PM	IC03-7AN_CAL
13	122763	193128-001	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:18:43 PM	IC03-7AN_CAL
14	122763	MSS,193128-002	F	20.0000	IC03-7AN	Finished	3/5/2007 4:38:53 PM	IC03-7AN_CAL
15	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 4:56:18 PM	IC03-7AN_CAL
16	122763	193128-001	F	25.0000	IC03-7AN	Finished	3/5/2007 5:13:42 PM	IC03-7AN_CAL
17	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 5:31:07 PM	IC03-7AN_CAL
18	122763	MS,QC377768,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 5:56:29 PM	IC03-7AN_CAL
19	122763	MSD,QC377769,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 6:13:53 PM	IC03-7AN_CAL
20	122763	LCS,QC377767,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:01:14 PM	IC03-7AN_CAL
21	122763	CCV,M,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:18:38 PM	IC03-7AN_CAL
22	122763	CCB		1.0000	IC03-7AN	Finished	3/5/2007 7:36:03 PM	IC03-7AN_CAL
23	122763	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	3/5/2007 7:53:28 PM	IC03-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 064
Operator: ic_analyst
Printed: 3/6/2007 6:36:07 PM

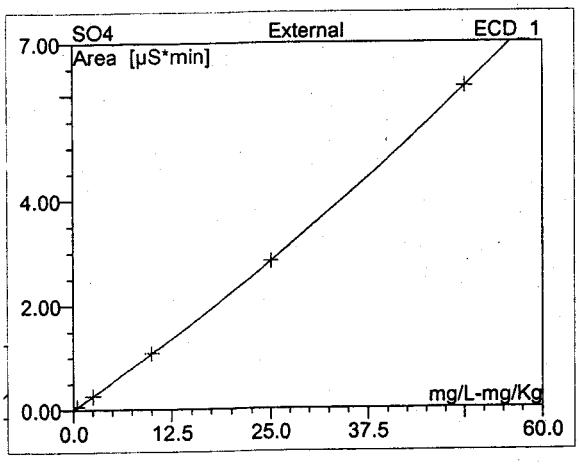
Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-064	IB		Unknown	25.0	MRS	1
2	CAL-064	ICAL,L1,S4740,500		Standard	25.0	MRS	1
3	CAL-064	ICAL,L2,S4740,100		Standard	25.0	MRS	1
4	CAL-064	ICAL,L3,S4740,25		Standard	25.0	MRS	1
5	CAL-064	ICAL,L4,S4740,10		Standard	25.0	MRS	1
6	CAL-064	ICAL,L5,S4740,5		Standard	25.0	MRS	1
7	CAL-064	ICV,S3859,5		Unknown	25.0	MRS	1
8	CAL-064	ICB		Unknown	25.0	MRS	1
9	122763	CCV,L,S4740,100		Unknown	25.0	MRS	1
10	122763	CCB/MB,QC377766		Unknown	25.0	MRS	1
11	122763	193108-027	J	Unknown	25.0	MRS	1
12	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
13	122763	193128-001	F	Unknown	25.0	MRS	1
14	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
15	122763	BLK		Unknown	25.0	MRS	1
16	122763	193128-001	F	Unknown	25.0	MRS	1
17	122763	BLK		Unknown	25.0	MRS	1
18	122763	MS,QC377768,S4740,50	F	Unknown	25.0	MRS	1
19	122763	MSD,QC377769,S4740,50	F	Unknown	25.0	MRS	1
20	122763	LCS,QC377767,S4740,25		Unknown	25.0	MRS	1
21	122763	CCV,M,S4740,25		Unknown	25.0	MRS	1
22	122763	CCB		Unknown	25.0	MRS	1
23	122763	SHUTDOWN		Unknown	25.0	MRS	1

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

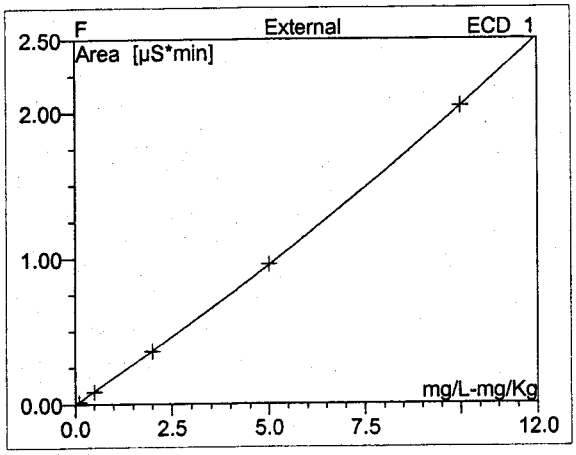
Sequence:	064	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	03/05/07 14:03	*Run Time:*	15.00

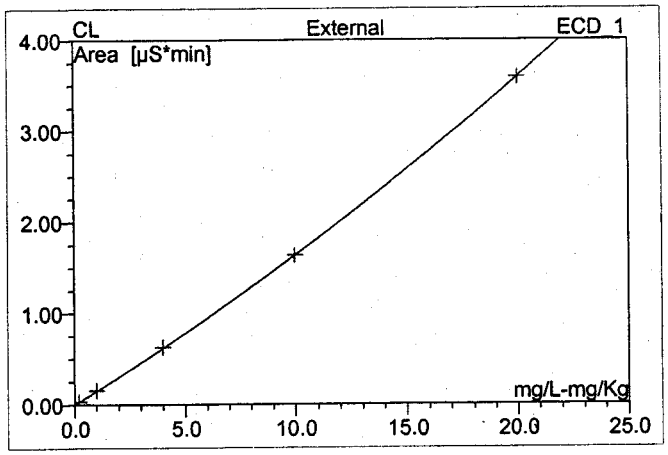


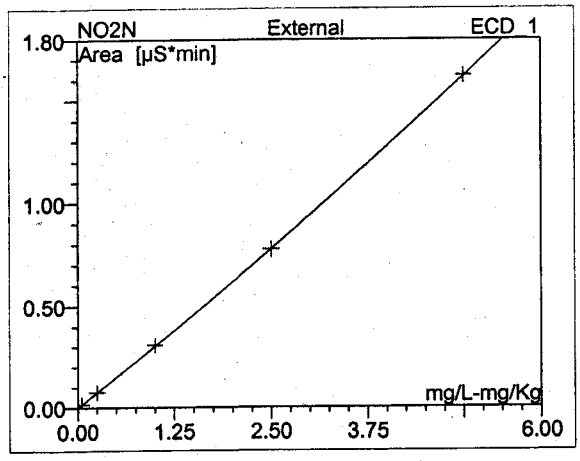
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.940	F	Quad	5	0.000000	0.176934	0.002701	99.949239
2	4.310	CL	Quad	5	0.000000	0.148797	0.001530	99.896081
3	5.083	NO2N	Quad	5	0.000000	0.297350	0.005328	99.974037
4	6.437	BR	Quad	5	0.000000	0.065083	0.000195	99.978297
5	7.193	NO3N	Quad	5	0.000000	0.364867	0.008136	99.955223
6	9.397	PO4	Quad	5	0.000000	0.120090	0.000581	99.931914
7	11.303	SO4	Quad	5	0.000000	0.103685	0.000386	99.912131
AVERAGE:					0.000000	0.182401	0.002694	99.942417

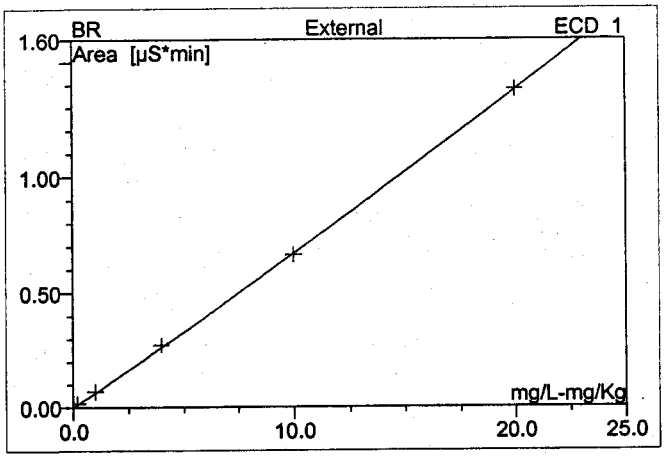
IC03 Calibration Batch Report

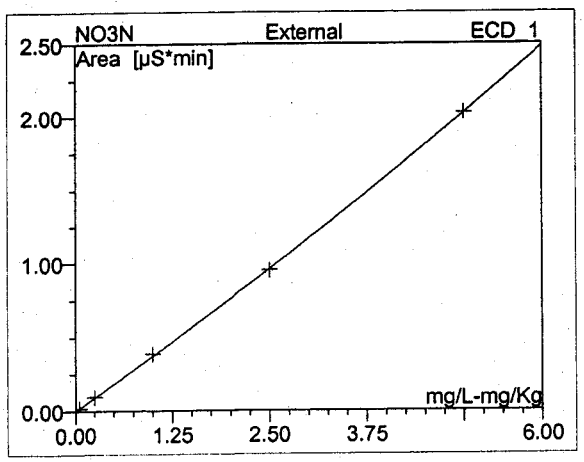
Sequence:	064	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	03/05/07 14:03	Run Time:	15.00

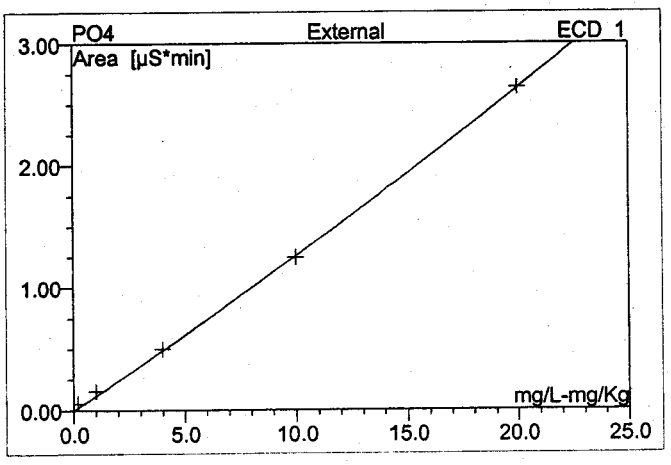






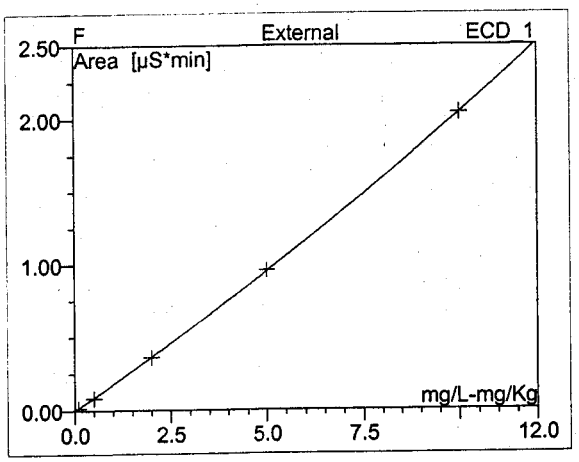


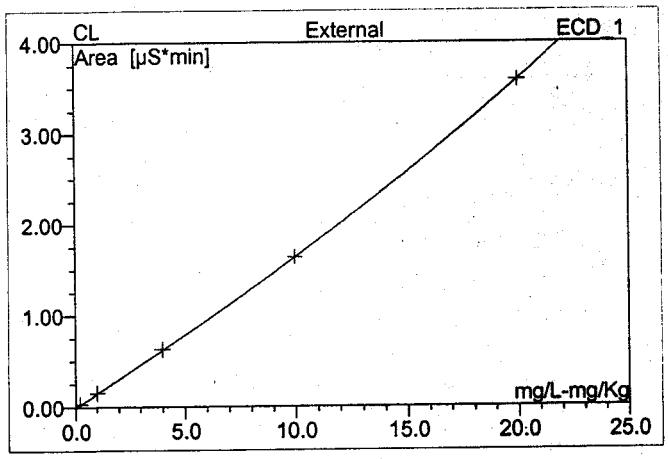


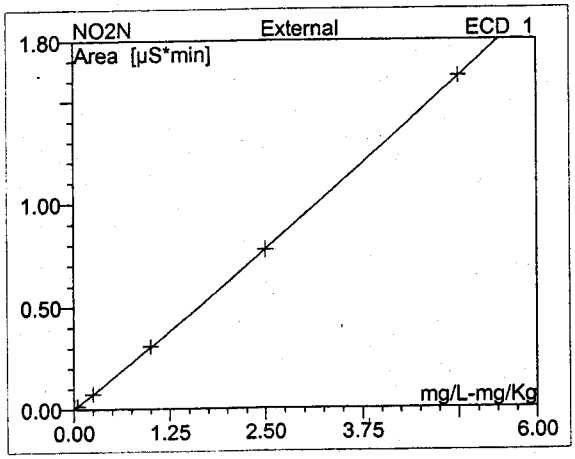


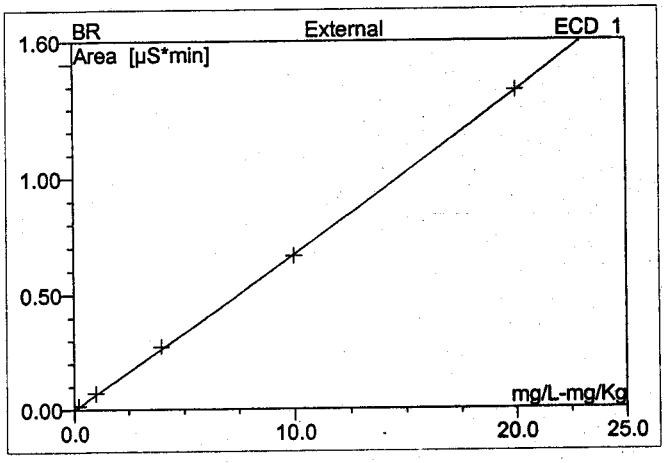
IC03 Calibration Batch Report

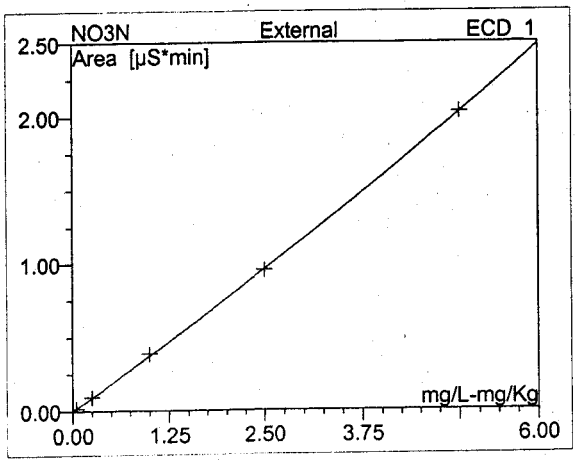
Sequence:	064	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Ini. Date/Time:	03/05/07 13:29	Run Time:	15.00

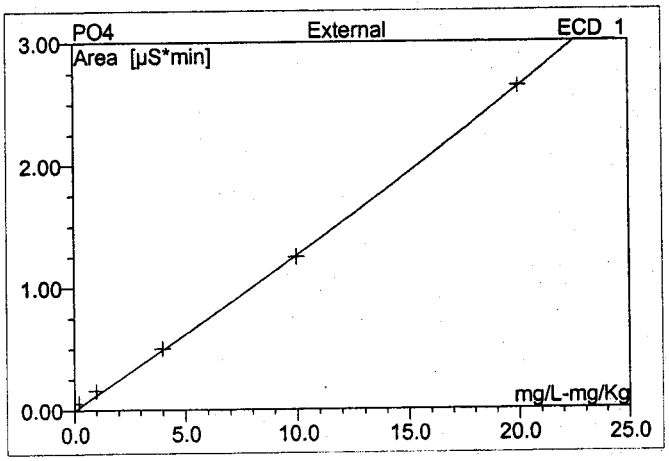




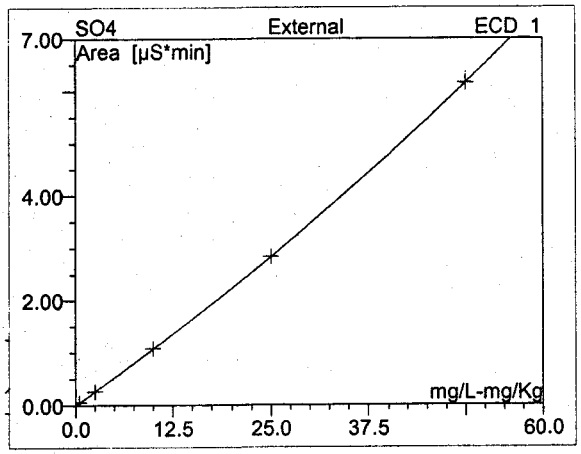








Sequence:	064	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	03/05/07 13:29	*Run Time:*	15.00



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.933	F	Quad	5	0.000000	0.176934	0.002701	99.949239
3	4.303	CL	Quad	5	0.000000	0.148797	0.001530	99.896081
4	5.080	NO2N	Quad	5	0.000000	0.297350	0.005328	99.974037
6	6.447	BR	Quad	5	0.000000	0.065083	0.000195	99.978297
7	7.227	NO3N	Quad	5	0.000000	0.364867	0.008136	99.955223
8	9.410	PO4	Quad	5	0.000000	0.120090	0.000581	99.931914
10	11.307	SO4	Quad	5	0.000000	0.103685	0.000386	99.912131
AVERAGE:					0.000000	0.182401	0.002694	99.942417

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
2	ICAL,L1,S474	0.013984	0.030060	0.015376	0.015928	0.017080	0.054026	0.059200
3	ICAL,L2,S474	0.082655	0.151891	0.074983	0.069681	0.094449	0.155444	0.260487
4	ICAL,L3,S474	0.360134	0.625490	0.306630	0.272305	0.386270	0.499382	1.077717
5	ICAL,L4,S474	0.956489	1.636939	0.774070	0.663674	0.954052	1.244935	2.831688
6	ICAL,L5,S474	2.038608	3.588720	1.620454	1.380808	2.029424	2.637050	6.148953

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
2	ICAL,L1,S474	0.106784	0.259206	0.094736	0.085782	0.086944	0.139904	0.192940
3	ICAL,L2,S474	0.559810	1.251968	0.476384	0.380274	0.439102	0.442038	0.871826
4	ICAL,L3,S474	2.519532	5.183898	1.963338	1.493146	1.805864	1.577264	3.668088
5	ICAL,L4,S474	7.021296	14.016320	5.023600	3.765102	4.656376	4.136188	9.753474
6	ICAL,L5,S474	16.054300	31.358586	10.620766	7.988634	10.098332	9.284974	21.808498

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
2	ICAL,L1,S474	0.078939	0.201601	0.051663	0.244555	0.046763	0.448900	0.569750
3	ICAL,L2,S474	0.463870	1.010297	0.251040	1.067238	0.257382	1.286394	2.489237
4	ICAL,L3,S474	1.975816	4.036139	1.012826	4.132878	1.034784	4.077992	10.020568
5	ICAL,L4,S474	5.021006	9.977518	2.491950	9.903984	2.477892	9.893477	24.987492
6	ICAL,L5,S474	9.996219	20.003673	5.001406	20.017697	5.003816	20.021116	50.002073

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

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Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100
1	*F*	*2.933 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*		*0.100000*	*0.500000*
2	CL	4.303 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.080 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.447 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.227 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.410 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.307 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5	Comment
1	*F*	*2.933 min*	*2.000000*	*5.000000*	*10.000000*	
2	CL	4.303 min	4.000000	10.000000	20.000000	
3	NO2N	5.080 min	1.000000	2.500000	5.000000	
4	BR	6.447 min	4.000000	10.000000	20.000000	
5	NO3N	7.227 min	1.000000	2.500000	5.000000	
6	PO4	9.410 min	4.000000	10.000000	20.000000	
7	SO4	11.307 min	10.000000	25.000000	50.000000	

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	*F*	*2.933 min*	*1.000000*	*0.100000*	*0.500000*	*2.000000*	*5.000000*	*10.000000*
2	CL	4.303 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
3	NO2N	5.080 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
4	BR	6.447 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.227 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
6	PO4	9.410 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
7	SO4	11.307 min	1.000000	0.500000	2.500000	10.000000	25.000000	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Comment
1	*F*	*2.933 min*	
2	CL	4.303 min	
3	NO2N	5.080 min	
4	BR	6.447 min	
5	NO3N	7.227 min	
6	PO4	9.410 min	
7	SO4	11.307 min	

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Calibration:

Calibration Mode: Total
Auto Recalibrate: On

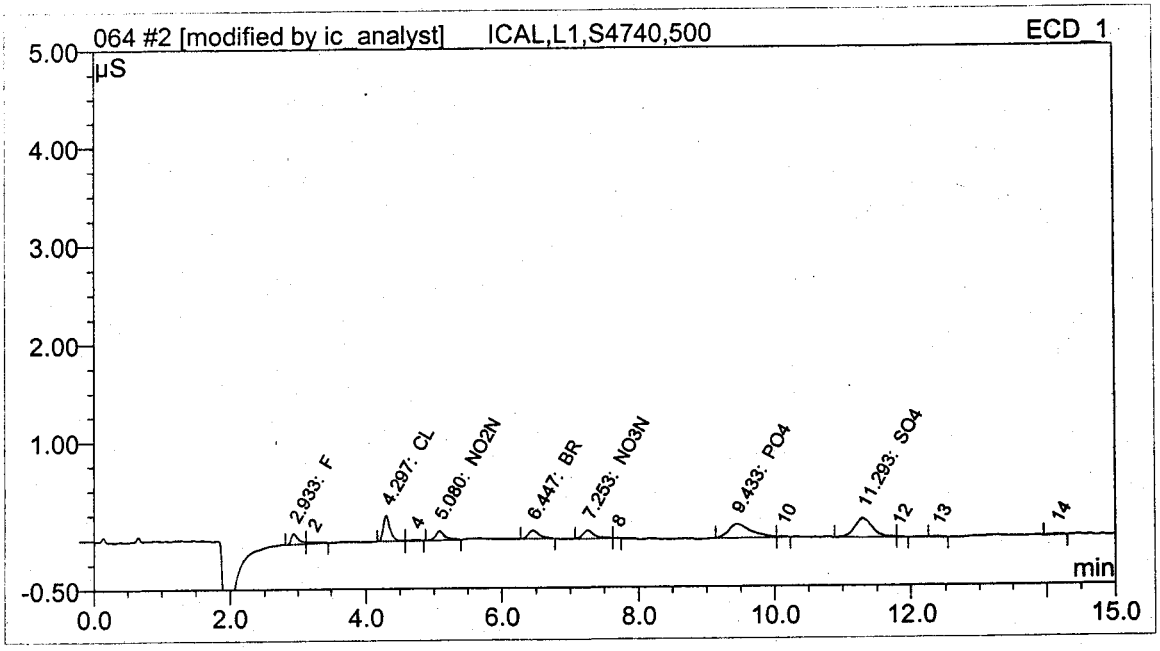
No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	3/5/2007 12:54:14 PM	Ok
2	☒	ICAL,L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	3/5/2007 1:11:38 PM	Ok
3	☒	ICAL,L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	3/5/2007 1:29:03 PM	Ok
4	☒	ICAL,L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	3/5/2007 1:46:27 PM	Ok
5	☒	ICAL,L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	3/5/2007 2:03:52 PM	Ok

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.013984	0.0789	0.0789	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.017080	0.0468	0.0468	
9	PO4	9.433	0.054026	0.4489	0.4489	
11	SO4	11.293	0.059200	0.5697	0.5697	



ANALYZED BY: _____

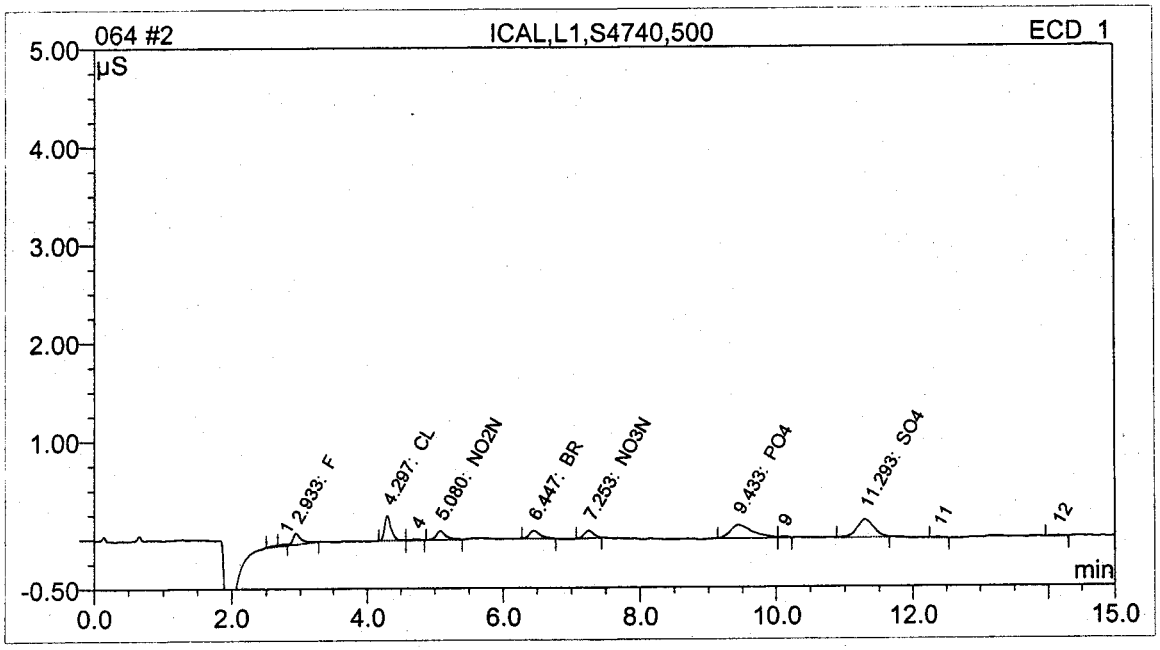
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.933	0.018469	0.1042	0.1042	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.012973	0.0355	0.0355	
8	PO4	9.433	0.054026	0.4489	0.4489	
10	SO4	11.293	0.053244	0.5126	0.5126	



ANALYZED BY: _____

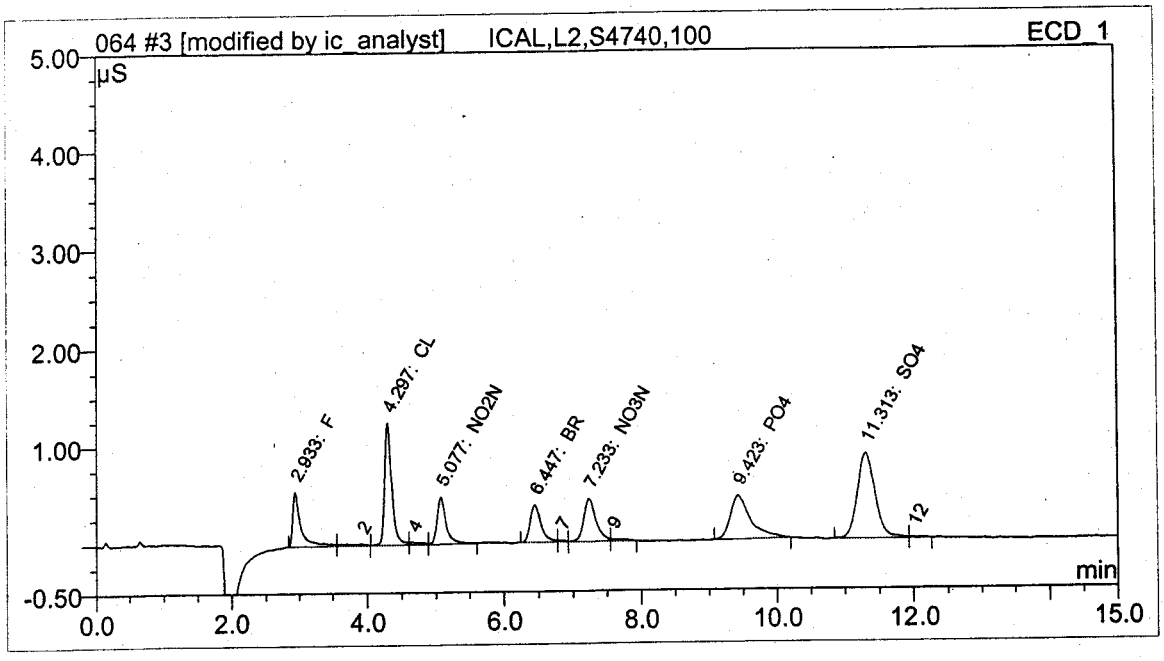
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.082655	0.4639	0.4639	
3	CL	4.297	0.151891	1.0103	1.0103	
5	NO2N	5.077	0.074983	0.2510	0.2510	
6	BR	6.447	0.069681	1.0672	1.0672	
8	NO3N	7.233	0.094449	0.2574	0.2574	
10	PO4	9.423	0.155444	1.2864	1.2864	
11	SO4	11.313	0.260487	2.4892	2.4892	



ANALYZED BY: _____

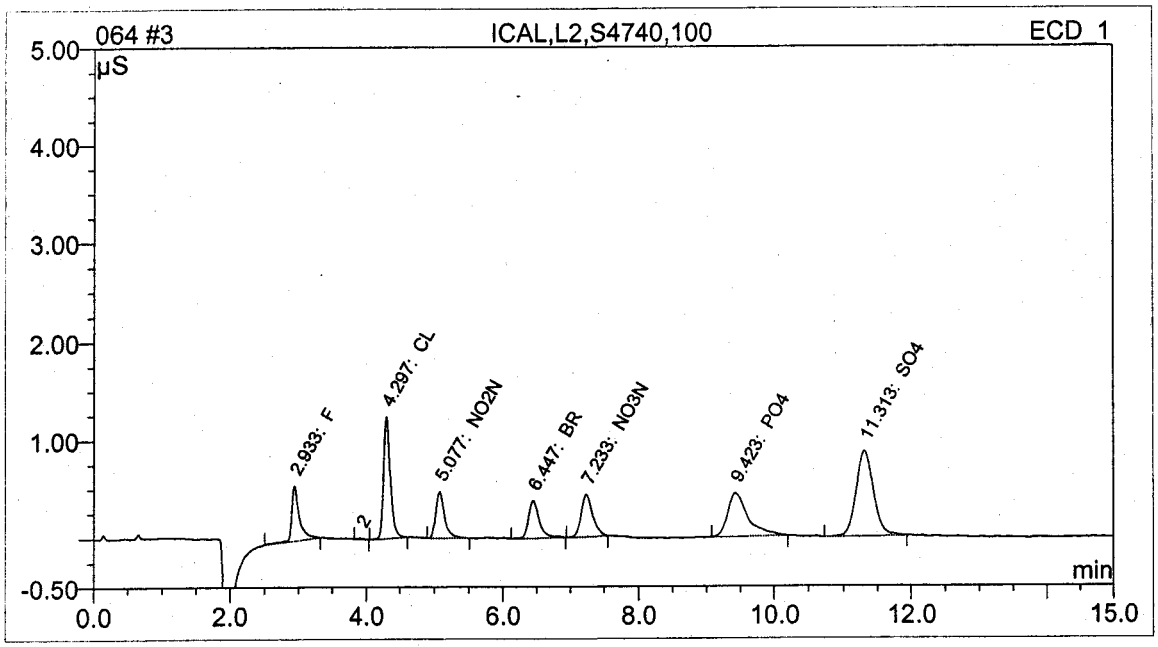
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.075978	0.4275	0.4275	
3	CL	4.297	0.146267	0.9742	0.9742	
4	NO2N	5.077	0.071148	0.2386	0.2386	
5	BR	6.447	0.071306	1.0913	1.0913	
6	NO3N	7.233	0.086565	0.2365	0.2365	
7	PO4	9.423	0.155444	1.2864	1.2864	
8	SO4	11.313	0.257897	2.4653	2.4653	



ANALYZED BY: _____

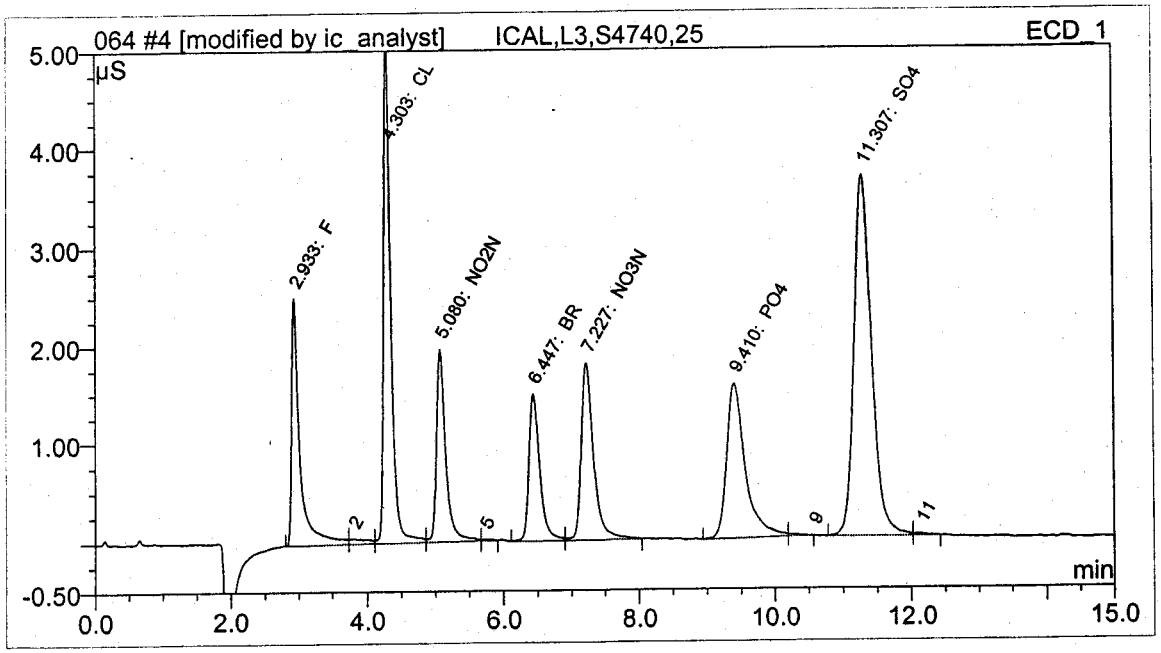
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.360134	1.9758	1.9758	
3	CL	4.303	0.625490	4.0361	4.0361	
4	NO2N	5.080	0.306630	1.0128	1.0128	
6	BR	6.447	0.272305	4.1329	4.1329	
7	NO3N	7.227	0.386270	1.0348	1.0348	
8	PO4	9.410	0.499382	4.0780	4.0780	
10	SO4	11.307	1.077717	10.0206	10.0206	



ANALYZED BY: _____

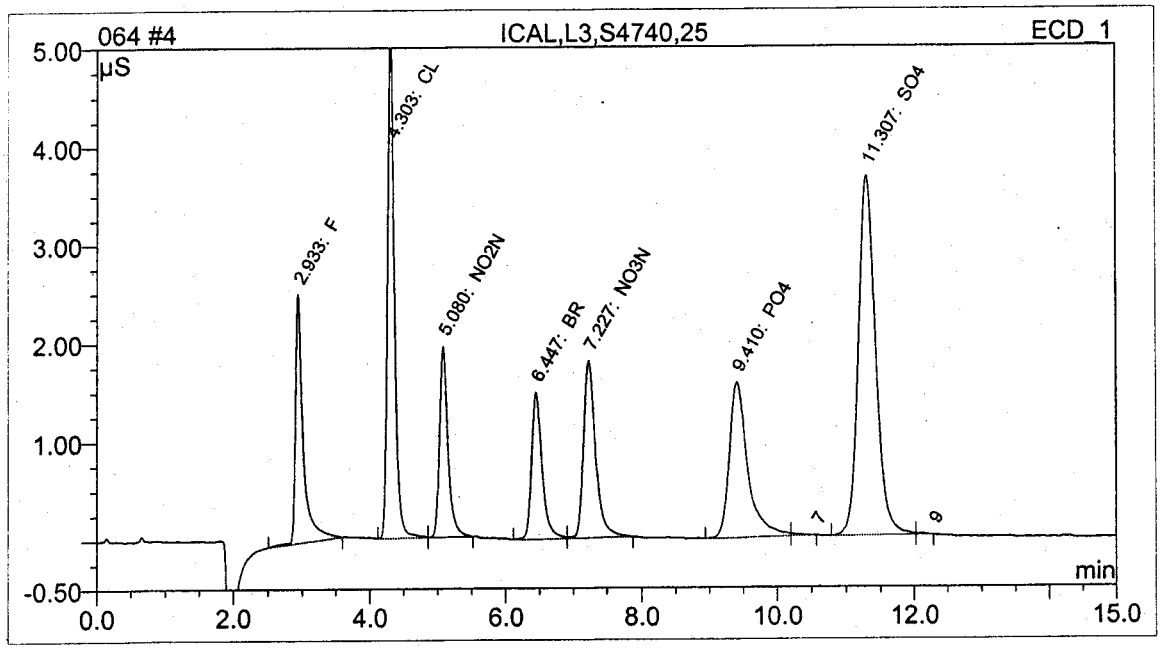
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.341403	1.9038	1.9038	
2	CL	4.303	0.603405	3.9382	3.9382	
3	NO2N	5.080	0.285535	0.9636	0.9636	
4	BR	6.447	0.269846	4.1069	4.1069	
5	NO3N	7.227	0.375155	1.0142	1.0142	
6	PO4	9.410	0.499382	4.0780	4.0780	
8	SO4	11.307	1.071996	9.9841	9.9841	



ANALYZED BY: _____

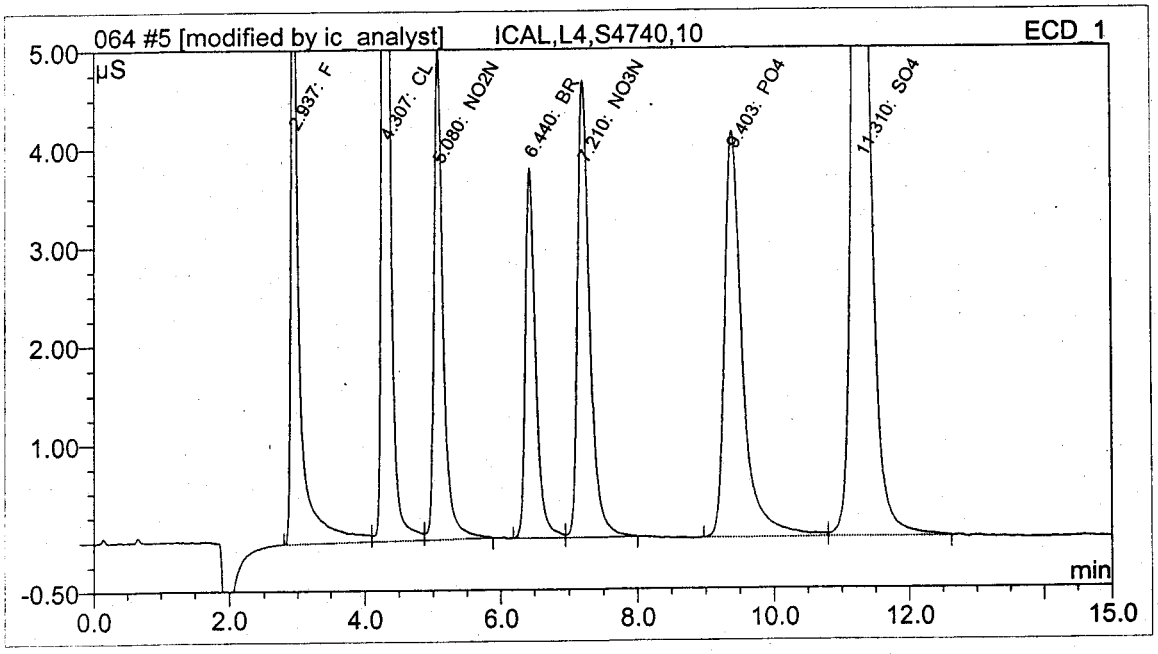
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.956489	5.0210	5.0210	
2	CL	4.307	1.636939	9.9775	9.9775	
3	NO2N	5.080	0.774070	2.4920	2.4920	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.244935	9.8935	9.8935	
7	SO4	11.310	2.831688	24.9875	24.9875	



ANALYZED BY: _____

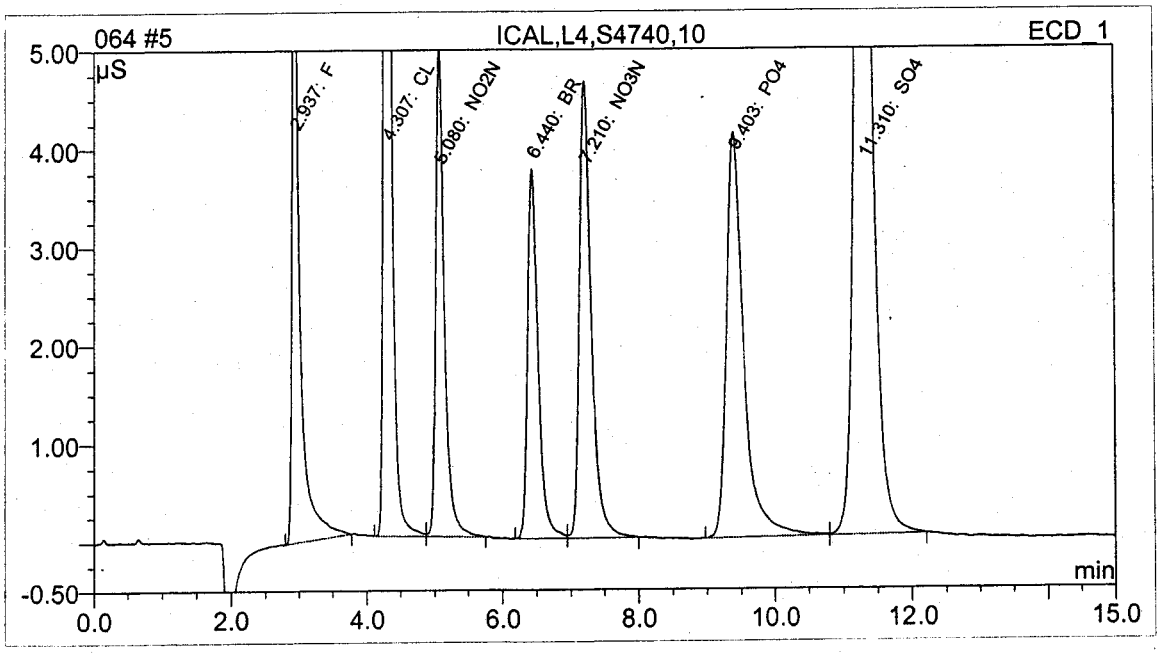
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.888070	4.9182	4.9182	
2	CL	4.307	1.598349	9.9117	9.9117	
3	NO2N	5.080	0.747696	2.4670	2.4670	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.228820	9.8560	9.8560	
7	SO4	11.310	2.789769	24.8832	24.8832	



ANALYZED BY: _____

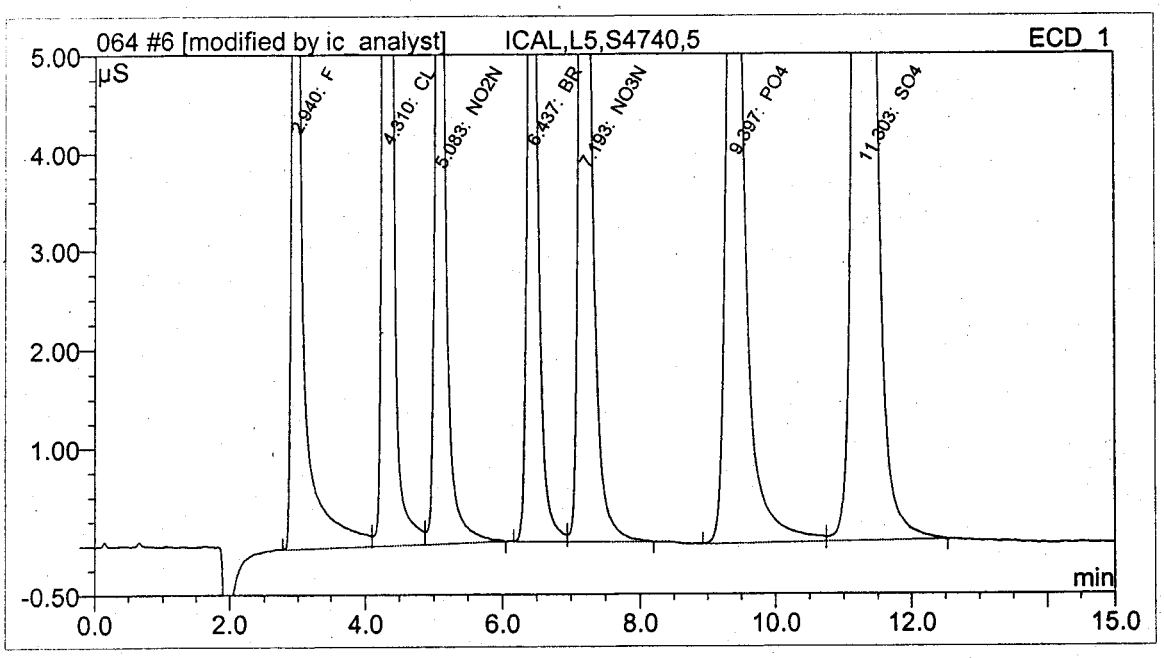
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.038608	9.9962	9.9962	
2	CL	4.310	3.588720	20.0037	20.0037	
3	NO2N	5.083	1.620454	5.0014	5.0014	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

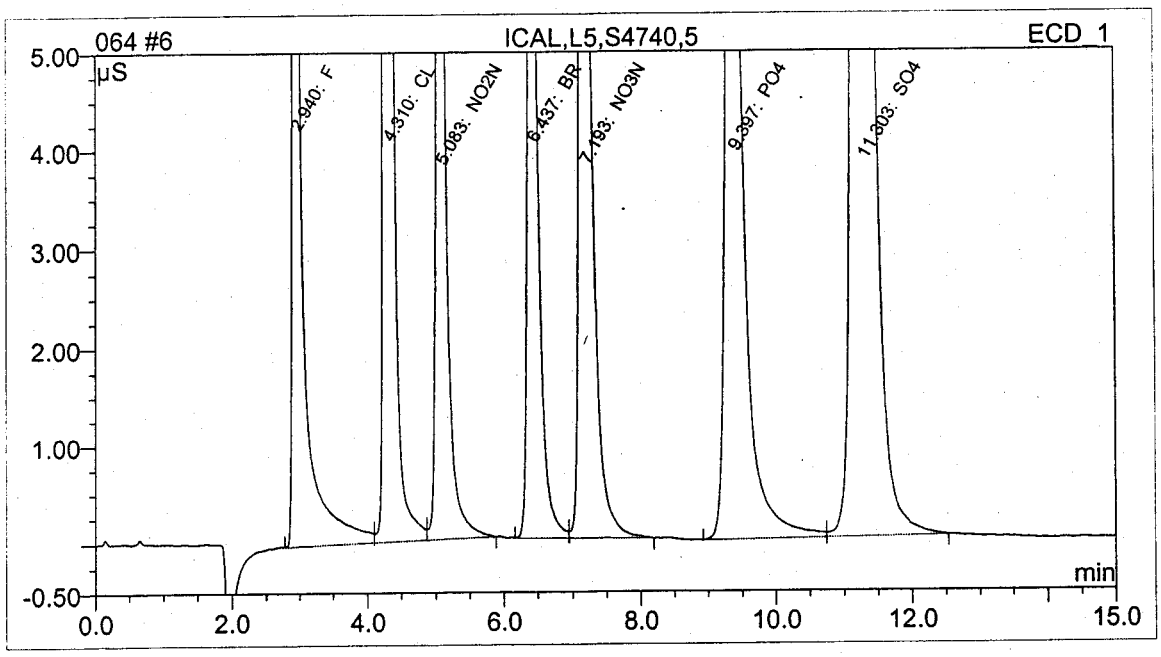
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 , 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.032875	9.9959	9.9959	
2	CL	4.310	3.580258	20.0032	20.0032	
3	NO2N	5.083	1.601110	5.0008	5.0008	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916007 File : 064_7 Time : 05-MAR-2007 14:21
Cal : 627092916001 Caldate: 05-MAR-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Bromide	0.0706	0.0714	2.000	2.181	mg/L	9	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Orthophosphate (as P)	0.1614	0.1250	2.000	2.060	mg/L	3	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

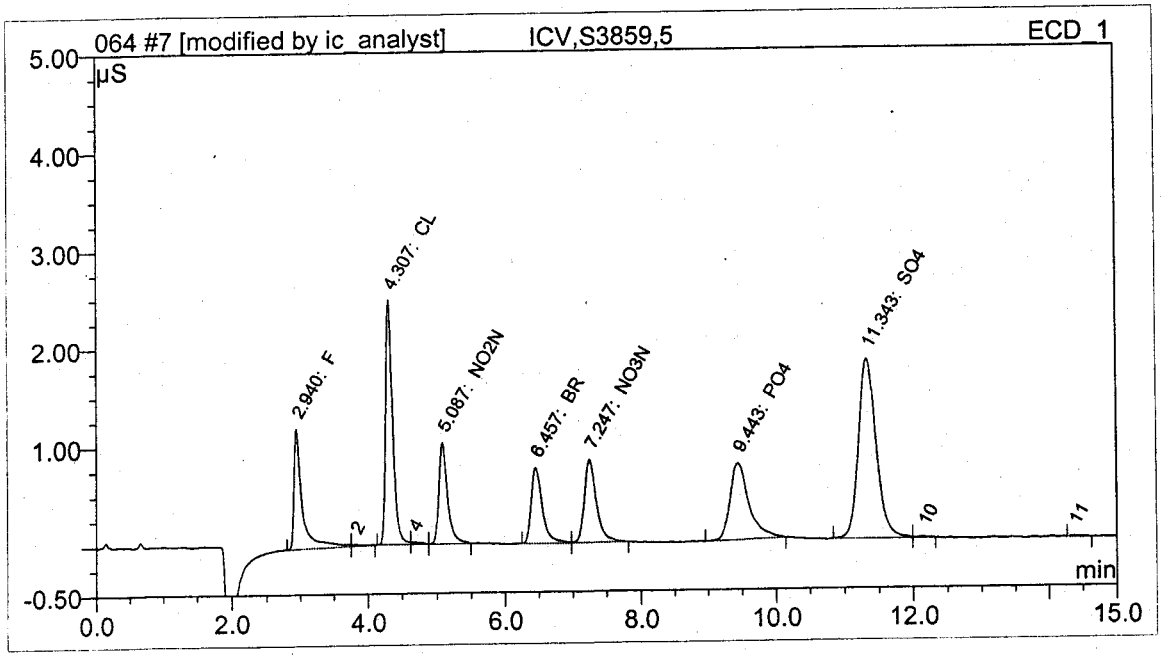
MRS 3/5/07

3/15/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180313	1.0037	1.0037	
3	CL	4.307	0.294964	1.9435	1.9435	
5	NO2N	5.087	0.155389	0.5178	0.5178	
6	BR	6.457	0.142892	2.1813	2.1813	
7	NO3N	7.247	0.177004	0.4800	0.4800	
8	PO4	9.443	0.249901	2.0604	2.0604	
9	SO4	11.343	0.538907	5.1007	5.1007	



ANALYZED BY: _____

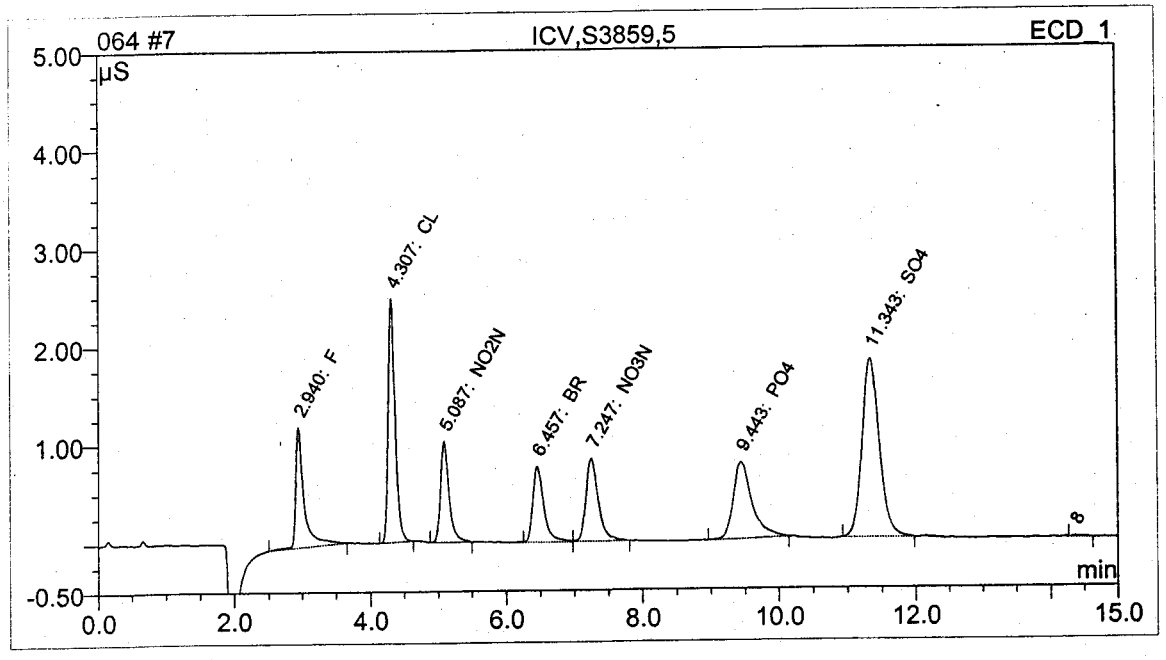
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.177111	0.9862	0.9862	
2	CL	4.307	0.289553	1.9085	1.9085	
3	NO2N	5.087	0.154283	0.5141	0.5141	
4	BR	6.457	0.142892	2.1813	2.1813	
5	NO3N	7.247	0.177004	0.4800	0.4800	
6	PO4	9.443	0.249901	2.0604	2.0604	
7	SO4	11.343	0.531317	5.0302	5.0302	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 627092916008 File : 064_8
Cal : 627092916001 Caldate: 05-MAR-2007

IDF : 1.0
Time : 05-MAR-2007 14:38

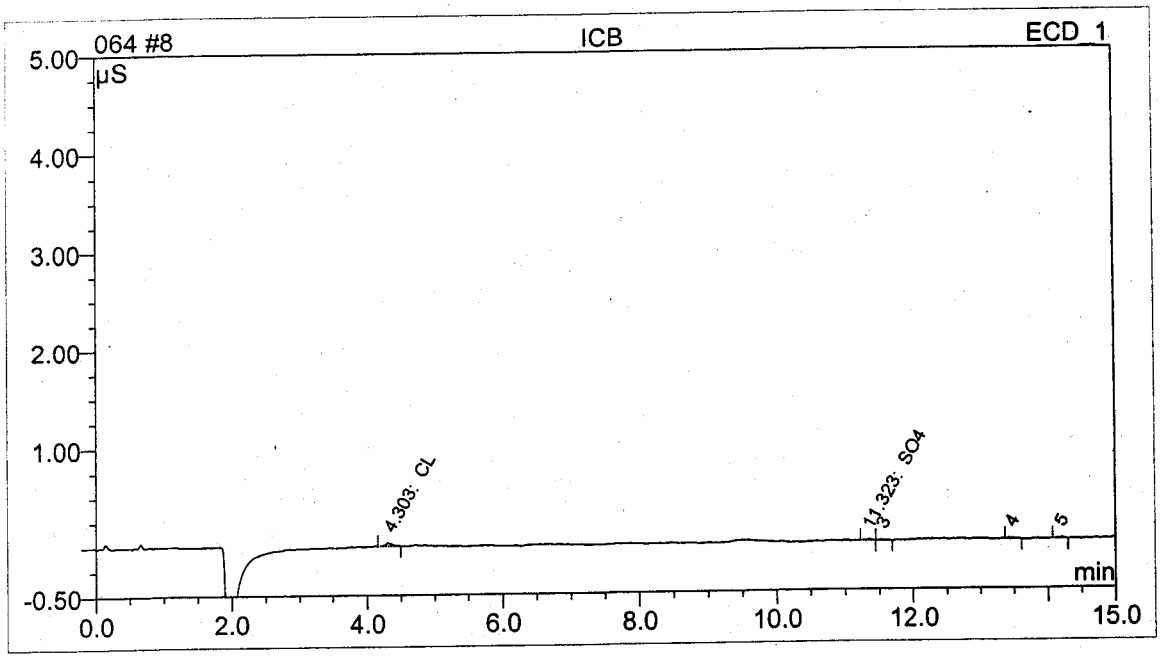
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	8
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:38 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.303	0.004707	0.0316	0.0316	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
2	SO4	11.323	0.001376	0.0133	0.0133	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

nst : IC03
eqnum : 627092916001
al : 627084271001

File : 064_1
Caldate: 27-FEB-2007

IDF : 1.0
Time : 05-MAR-2007 12:36

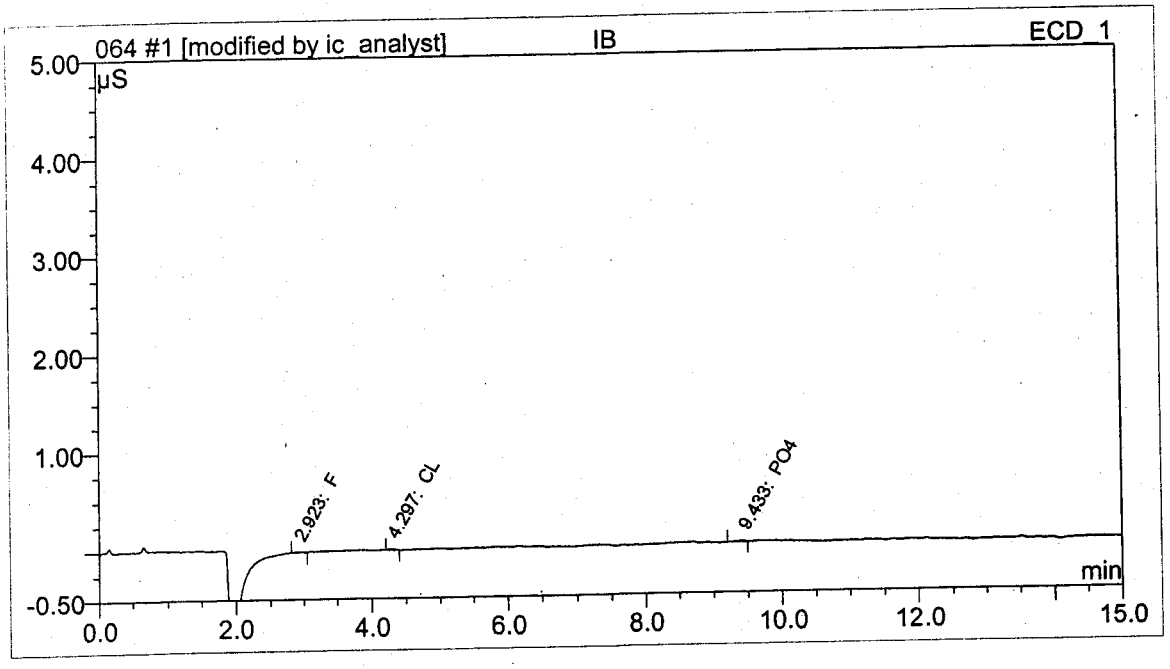
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.000712	0.0040	0.0040	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

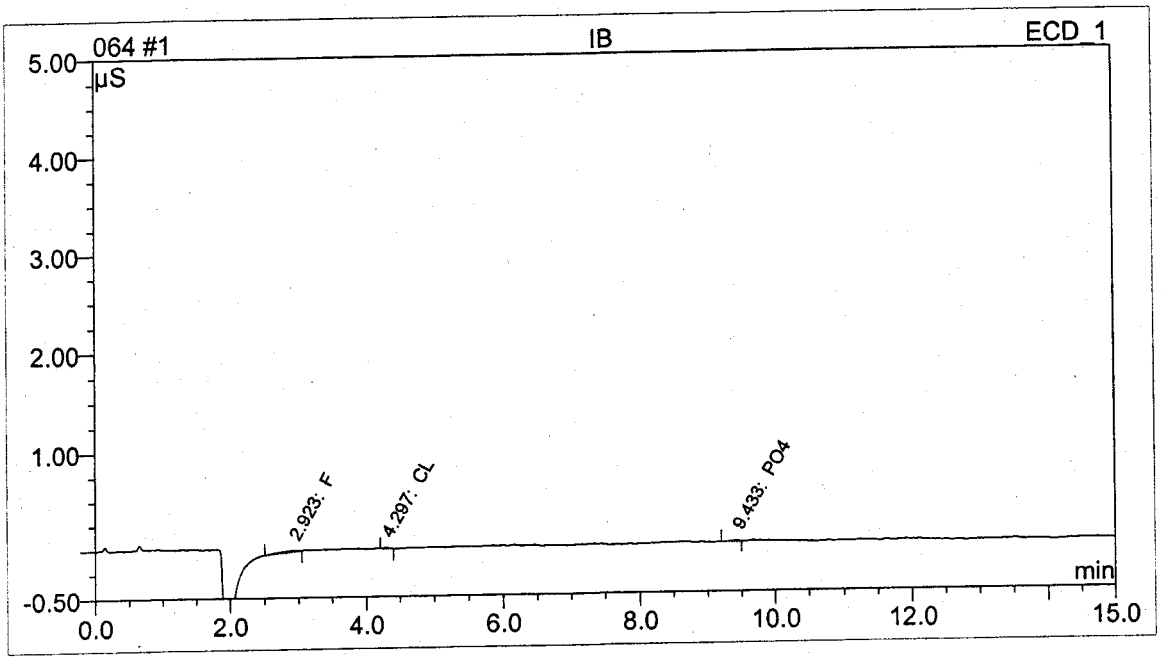
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.004858	0.0274	0.0274	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.2987	0.2993	0.5000	0.5071	mg/L	1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.2987	0.3011	2.0000	2.0151	mg/L	1	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.2987	0.3048	5.0000	4.9797	mg/L	0	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.2987	0.3035	2.0000	2.0313	mg/L	2	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.2987	0.3013	5.0000	4.9253	mg/L	-1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.2987	0.2968	2.0000	1.9872	mg/L	-1	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.2987	0.2995	5.0000	4.8974	mg/L	-2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.2987	0.3004	5.0000	4.9110	mg/L	-2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.2987	0.2779	0.5000	0.4709	mg/L	-6	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.2987	0.2965	2.0000	1.9849	mg/L	-1	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.2028	0.1879	1.0000	0.9923	mg/L	-1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.2028	0.2007	4.0000	4.1261	mg/L	3	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.2028	0.2074	10.000	10.147	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.2028	0.2040	4.0000	4.1919	mg/L	5	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.2028	0.2074	10.000	10.148	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.2028	0.2006	4.0000	4.1259	mg/L	3	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.2028	0.2084	10.000	10.192	mg/L	2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.2028	0.1921	1.0000	1.0142	mg/L	1	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.2028	0.2022	4.0000	4.1562	mg/L	4	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.1603	0.1481	1.0000	0.9855	mg/L	-1	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.1603	0.1550	4.0000	4.0026	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.4045	0.3887	0.2500	0.2458	mg/L	-2	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.4045	0.4046	1.0000	1.0150	mg/L	2	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.4045	0.4095	2.5000	2.5288	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.4045	0.4100	1.0000	1.0284	mg/L	3	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.4045	0.4087	2.5000	2.5238	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.4045	0.4015	1.0000	1.0074	mg/L	1	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.4045	0.4148	2.5000	2.5608	mg/L	2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.4045	0.4149	2.5000	2.5610	mg/L	2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.4045	0.3964	0.2500	0.2506	mg/L	0	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.4045	0.3999	1.0000	1.0035	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.4834	0.4641	0.2500	0.2494	mg/L	0	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.4834	0.4869	1.0000	1.0237	mg/L	2	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.4834	0.5059	2.5000	2.5497	mg/L	2	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.4834	0.4990	1.0000	1.0484	mg/L	5	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.4834	0.5056	2.5000	2.5487	mg/L	2	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.4834	0.4929	1.0000	1.0361	mg/L	4	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.4834	0.5113	2.5000	2.5755	mg/L	3	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.4834	0.5135	2.5000	2.5857	mg/L	3	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.4834	0.4760	0.2500	0.2557	mg/L	2	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.4834	0.4896	1.0000	1.0293	mg/L	3	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.3786	0.3755	0.2500	0.2558	mg/L	2	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.3786	0.3738	1.0000	1.0021	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.1465	0.1345	2.5000	2.4800	mg/L	-1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.1465	0.1424	10.000	10.268	mg/L	3	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.1465	0.1456	25.000	25.165	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.1465	0.1442	10.000	10.398	mg/L	4	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.1465	0.1458	25.000	25.195	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.1465	0.1429	10.000	10.306	mg/L	3	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.1465	0.1469	25.000	25.377	mg/L	2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.1465	0.1469	25.000	25.374	mg/L	1	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.1465	0.1408	2.5000	2.5964	mg/L	4	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.1465	0.1420	10.000	10.241	mg/L	2	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.1133	0.1043	2.5000	2.4923	mg/L	0	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.1133	0.1084	10.000	10.074	mg/L	1	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607089040008.1
File : 061_8
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC377478
Matrix : Water
Batch : 122697
Caldate: 27-FEB-2007

Time : 02-MAR-2007 19:25
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040021 File : 061_21 Time : 02-MAR-2007 23:12
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01376]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	[0.01251]	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040035 File : 061_35 Time : 03-MAR-2007 03:17
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.009208]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040051 File : 061_51 Time : 03-MAR-2007 07:58
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01347]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040065 File : 061_65 Time : 03-MAR-2007 12:03
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01739]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040082 File : 061_82 Time : 03-MAR-2007 17:00
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01380]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040090 File : 061_90 Time : 03-MAR-2007 19:20
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.07292]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607089040092.1
File : 061_92
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC377493
Matrix : Water
Batch : 122699
Caldate: 27-FEB-2007

Time : 03-MAR-2007 19:55
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040102 File : 061_102 Time : 03-MAR-2007 22:50
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01054]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040119 File : 061_119 Time : 04-MAR-2007 03:48
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01106]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC03
Seqnum : 627092916010.2
File : 064_10
Cal : 627092916001
IDF : 1.0
PDF : 1.0

Lab ID : QC377766
Matrix : Water
Batch : 122763
Caldate: 05-MAR-2007

Time : 05-MAR-2007 15:24
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916022 File : 064_22 Time : 05-MAR-2007 19:36
Cal : 627092916001 Caldate: 05-MAR-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

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Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	061_7	CCV	L	122697		02-MAR-2007 19:07	1.0	1	25			1	
008	061_8	CCB/MB	QC377478	122697	Water	02-MAR-2007 19:25	1.0		25				
009	061_9	MSS	193108-007	122697	Water	02-MAR-2007 19:42	100.0	2	25				
010	061_10	SAMPLE	193108-008	122697	Water	02-MAR-2007 20:00	100.0		25				
011	061_11	MS	QC377482	122697	Water	02-MAR-2007 20:17	200.0		25			1	
012	061_12	MSD	QC377483	122697	Water	02-MAR-2007 20:35	200.0		25			1	
013	061_13	LCS	QC377479	122697	Water	02-MAR-2007 20:52	1.0		25			1	
014	061_14	MSS	193108-017	122697	Water	02-MAR-2007 21:10	10.0	2	25				
015	061_15	MSS	193108-017	122697	Water	02-MAR-2007 21:27	1.0	3	25				1:CL=47.2137
016	061_16	MSS	193108-007	122697	Water	02-MAR-2007 21:45	1.0	4	25				2:CL=255.651
017	061_17	X	BLK	122697		02-MAR-2007 22:02	1.0						
018	061_18	MSS	193108-007	122697	Water	02-MAR-2007 22:20	2.0	4	25				2:CL=234.174
019	061_19	X	BLK	122697		02-MAR-2007 22:37	1.0						
020	061_20	CCV	M	122697		02-MAR-2007 22:55	1.0		25			1	
021	061_21	CCB		122697		02-MAR-2007 23:12	1.0		25				
022	061_22	X	CCV	122697		02-MAR-2007 23:30	1.0					1	
023	061_23	X	CCB	122697		02-MAR-2007 23:47	1.0						
024	061_24	MS	QC377484	122697	Water	03-MAR-2007 00:05	10.0		25			1	
025	061_25	MSD	QC377485	122697	Water	03-MAR-2007 00:22	10.0		25			1	
026	061_26	MSS	193108-001	122697	Water	03-MAR-2007 00:40	2.0	1	25				
027	061_27	MS	QC377480	122697	Water	03-MAR-2007 00:57	2.0		25			1	
028	061_28	MSD	QC377481	122697	Water	03-MAR-2007 01:15	2.0		25			1	
029	061_29	MSS	193108-001	122697	Water	03-MAR-2007 01:32	1.0	1	25				
030	061_30	SAMPLE	193108-006	122697	Water	03-MAR-2007 01:50	1.0		25				
031	061_31	SAMPLE	193108-006	122697	Water	03-MAR-2007 02:07	2.0		25				
032	061_32	SAMPLE	193108-016	122697	Water	03-MAR-2007 02:25	10.0		25				
033	061_33	SAMPLE	193108-016	122697	Water	03-MAR-2007 02:42	1.0	1	25				1:CL=29.1261
034	061_34	CCV	H	122697		03-MAR-2007 03:00	1.0		25			1	
035	061_35	CCB		122697		03-MAR-2007 03:17	1.0	1	25				
036	061_36	X	CCV	122697		03-MAR-2007 03:35	1.0					1	
037	061_37	X	CCB	122697		03-MAR-2007 03:52	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	061_38	SAMPLE	193108-020	122697	Water	03-MAR-2007 04:10	5.0		25				
039	061_39	SAMPLE	193108-002	122697	Water	03-MAR-2007 04:27	10.0		25				
040	061_40	SAMPLE	193108-019	122697	Water	03-MAR-2007 04:45	25.0		25				
041	061_41	SAMPLE	193108-018	122697	Water	03-MAR-2007 05:02	25.0		25				
042	061_42	SAMPLE	193108-020	122697	Water	03-MAR-2007 05:20	1.0		25				
043	061_43	SAMPLE	193108-002	122697	Water	03-MAR-2007 05:37	1.0	2	25				2:SO4=62.8326
044	061_44	SAMPLE	193108-019	122697	Water	03-MAR-2007 05:55	1.0	1	25				1:CL=42.6397
045	061_45	SAMPLE	193108-018	122697	Water	03-MAR-2007 06:13	1.0	1	25				1:CL=62.5765
046	061_46	SAMPLE	193108-008	122697	Water	03-MAR-2007 06:30	1.0		25				
047	061_47	X	BLK	122697		03-MAR-2007 06:48	1.0						
048	061_48	SAMPLE	193108-008	122697	Water	03-MAR-2007 07:05	2.0		25				
049	061_49	X	BLK	122697		03-MAR-2007 07:23	1.0						
050	061_50	CCV	M	122697		03-MAR-2007 07:40	1.0		25			1	
051	061_51	CCB		122697		03-MAR-2007 07:58	1.0		25				
052	061_52	X	CCV	122697		03-MAR-2007 08:15	1.0					1	
053	061_53	X	CCB	122697		03-MAR-2007 08:33	1.0						
054	061_54	SAMPLE	193108-005	122697	Water	03-MAR-2007 08:50	10.0		25				
055	061_55	SAMPLE	193108-009	122697	Water	03-MAR-2007 09:08	10.0		25				
056	061_56	SAMPLE	193108-015	122697	Water	03-MAR-2007 09:25	25.0		25				
057	061_57	SAMPLE	193108-003	122697	Water	03-MAR-2007 09:43	25.0		25				
058	061_58	SAMPLE	193108-004	122697	Water	03-MAR-2007 10:00	25.0		25				
059	061_59	SAMPLE	193108-005	122697	Water	03-MAR-2007 10:18	1.0	2	25				2:SO4=68.5134
060	061_60	SAMPLE	193108-009	122697	Water	03-MAR-2007 10:35	1.0	1	25				1:CL=110.128
061	061_61	SAMPLE	193108-015	122697	Water	03-MAR-2007 10:53	1.0	1	25				1:CL=54.4989
062	061_62	SAMPLE	193108-003	122697	Water	03-MAR-2007 11:10	1.0	2	25				2:SO4=170.670
063	061_63	SAMPLE	193108-004	122697	Water	03-MAR-2007 11:28	1.0	1	25				1:CL=60.8322
064	061_64	CCV	H	122697		03-MAR-2007 11:45	1.0		25			1	
065	061_65	CCB		122697		03-MAR-2007 12:03	1.0		25				
066	061_66	X	CCV	122697		03-MAR-2007 12:20	1.0					1	
067	061_67	X	CCB	122697		03-MAR-2007 12:38	1.0						
068	061_68	SAMPLE	193108-022	122697	Water	03-MAR-2007 12:55	25.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
069	061_69	SAMPLE	193108-014	122697	Water	03-MAR-2007 13:13	25.0		25				
070	061_70	SAMPLE	193108-013	122697	Water	03-MAR-2007 13:30	25.0		25				
071	061_71	SAMPLE	193108-022	122697	Water	03-MAR-2007 13:48	1.0	2	25				2:CL=97.8703
072	061_72	SAMPLE	193108-014	122697	Water	03-MAR-2007 14:05	1.0	1	25				1:CL=87.2118
073	061_73	SAMPLE	193108-013	122697	Water	03-MAR-2007 14:23	1.0	2	25				2:SO4=67.8176
074	061_74	X	BLK	122697		03-MAR-2007 14:40	1.0						
075	061_75	SAMPLE	193108-010	122697	Water	03-MAR-2007 14:58	100.0		25				
076	061_76	SAMPLE	193108-011	122697	Water	03-MAR-2007 15:15	100.0		25				
077	061_77	SAMPLE	193108-010	122697	Water	03-MAR-2007 15:33	1.0	2	25				2:CL=284.894
078	061_78	X	BLK	122697		03-MAR-2007 15:50	1.0						
079	061_79	SAMPLE	193108-010	122697	Water	03-MAR-2007 16:08	2.0	2	25				2:CL=232.371
080	061_80	X	BLK	122697		03-MAR-2007 16:25	1.0						
081	061_81	CCV	M	122697		03-MAR-2007 16:43	1.0		25			1	
082	061_82	CCB		122697		03-MAR-2007 17:00	1.0		25				
083	061_83	X	CCV	122697		03-MAR-2007 17:18	1.0					1	
084	061_84	X	CCB	122697		03-MAR-2007 17:35	1.0						
085	061_85	SAMPLE	193108-011	122697	Water	03-MAR-2007 17:53	1.0		25				
086	061_86	X	BLK	122697		03-MAR-2007 18:10	1.0						
087	061_87	SAMPLE	193108-011	122697	Water	03-MAR-2007 18:28	2.0		25				
088	061_88	X	BLK	122697		03-MAR-2007 18:45	1.0						
089	061_89	CCV	H	122697		03-MAR-2007 19:03	1.0		25			1	
090	061_90	CCB		122697		03-MAR-2007 19:20	1.0	1	25				
091	061_91	CCV	H	122699		03-MAR-2007 19:38	1.0		25			1	
092	061_92	CCB/MB	QC377493	122699	Water	03-MAR-2007 19:55	1.0		25				
093	061_93	MSS	193108-023	122699	Water	03-MAR-2007 20:13	10.0	1	25				
094	061_94	MS	QC377495	122699	Water	03-MAR-2007 20:30	10.0		25			1	
095	061_95	MSD	QC377496	122699	Water	03-MAR-2007 20:48	10.0		25			1	
096	061_96	MSS	193108-026	122699	Water	03-MAR-2007 21:05	25.0	1	25				
097	061_97	MS	QC377499	122699	Water	03-MAR-2007 21:23	25.0		25			1	
098	061_98	MSD	QC377500	122699	Water	03-MAR-2007 21:40	25.0		25			1	
099	061_99	SAMPLE	193093-001	122699	Water	03-MAR-2007 21:58	25.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
100	061_100	SAMPLE	193093-001	122699	Water	03-MAR-2007 22:15	1.0	1	25				2:SO4=218.941
101	061_101	CCV	L	122699		03-MAR-2007 22:33	1.0	1	25			1	
102	061_102	CCB		122699		03-MAR-2007 22:50	1.0		25				
103	061_103	X	CCV	122699		03-MAR-2007 23:08	1.0					1	
104	061_104	X	CCB	122699		03-MAR-2007 23:26	1.0						
105	061_105	LCS	QC377494	122699	Water	03-MAR-2007 23:43	1.0		25			1	
106	061_106	MSS	193108-025	122699	Water	04-MAR-2007 00:01	25.0		25				
107	061_107	MS	QC377497	122699	Water	04-MAR-2007 00:18	50.0		25			1	
108	061_108	MSD	QC377498	122699	Water	04-MAR-2007 00:36	50.0		25			1	
109	061_109	SAMPLE	193108-012	122699	Water	04-MAR-2007 00:53	50.0		25				
110	061_110	MSS	193108-023	122699	Water	04-MAR-2007 01:11	1.0	1	25				1:CL=69.8775
111	061_111	SAMPLE	193108-027	122699	Water	04-MAR-2007 01:28	1.0	1	25				1:CL=69.8309
112	061_112	MSS	193108-026	122699	Water	04-MAR-2007 01:46	1.0	2	25				2:CL=115.804
113	061_113	X	BLK	122699		04-MAR-2007 02:03	1.0						
114	061_114	MSS	193108-025	122699	Water	04-MAR-2007 02:21	1.0	2	25				2:SO4=105.922
115	061_115	X	BLK	122699		04-MAR-2007 02:38	1.0						
116	061_116	SAMPLE	193108-012	122699	Water	04-MAR-2007 02:56	1.0	2	25				2:SO4=136.097
117	061_117	X	BLK	122699		04-MAR-2007 03:13	1.0						
118	061_118	CCV	M	122699		04-MAR-2007 03:31	1.0		25			1	
119	061_119	CCB		122699		04-MAR-2007 03:48	1.0		25				
120	061_120	X	CCV	122699		04-MAR-2007 04:06	1.0					1	
121	061_121	X	CCB	122699		04-MAR-2007 04:23	1.0						
122	061_122	SAMPLE	193108-012	122699	Water	04-MAR-2007 04:41	2.0	2	25				2:CL=130.402
123	061_123	X	BLK	122699		04-MAR-2007 04:58	1.0						
124	061_124	CCV	H	122699		04-MAR-2007 05:16	1.0		25			1	
125	061_125	CCB		122699		04-MAR-2007 05:33	1.0	1	25				
126	061_126	X	CCV	122699		04-MAR-2007 05:51	1.0					1	
127	061_127	X	CCB	122699		04-MAR-2007 06:08	1.0						
128	061_128	X	BLK	122699		04-MAR-2007 06:26	1.0						
129	061_129	X	SHUTDOWN	122699		04-MAR-2007 06:43	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 627092916 Instrument: IC03 Ion Chromatograph Begun: 05-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	064_1	IB				05-MAR-2007 12:36	1.0			25				
002	064_2	ICAL	L1			05-MAR-2007 12:54	1.0						1	
003	064_3	ICAL	L2			05-MAR-2007 13:11	1.0						1	
004	064_4	ICAL	L3			05-MAR-2007 13:29	1.0						1	
005	064_5	ICAL	L4			05-MAR-2007 13:46	1.0						1	
006	064_6	ICAL	L5			05-MAR-2007 14:03	1.0						1	
007	064_7	ICV				05-MAR-2007 14:21	1.0			25			2	
008	064_8	ICB				05-MAR-2007 14:38	1.0			25				
009	064_9	CCV	L	122763		05-MAR-2007 15:07	1.0	2		25			1	
010	064_10	CCB/MB	QC377766	122763	Water	05-MAR-2007 15:24	1.0			25				
011	064_11	SAMPLE	193108-027	122763	Water	05-MAR-2007 15:43	10.0	2		25				
012	064_12	MSS	193128-002	122763	Water	05-MAR-2007 16:01	2000			25				
013	064_13	SAMPLE	193128-001	122763	Water	05-MAR-2007 16:18	2000			25				
014	064_14	MSS	193128-002	122763	Water	05-MAR-2007 16:38	20.0	1		25				
015	064_15	X	BLK	122763		05-MAR-2007 16:56	1.0							
016	064_16	SAMPLE	193128-001	122763	Water	05-MAR-2007 17:13	25.0	2		25				1:SO4=52.0044
017	064_17	X	BLK	122763		05-MAR-2007 17:31	1.0							
018	064_18	MS	QC377768	122763	Water	05-MAR-2007 17:56	2500			25			1	
019	064_19	MSD	QC377769	122763	Water	05-MAR-2007 18:13	2500			25			1	
020	064_20	LCS	QC377767	122763	Water	05-MAR-2007 19:01	1.0			25			1	
021	064_21	CCV	M	122763		05-MAR-2007 19:18	1.0			25			1	
022	064_22	CCB		122763		05-MAR-2007 19:36	1.0			25				
023	064_23	X	SHUTDOWN	122763		05-MAR-2007 19:53	1.0							

Stds used: 1=S4740 2=S3859

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193108-001	IC01	03/03/07 00:40	2.0					
193108-001	IC01	03/03/07 01:32	1.0	+	+	+	+	+
193108-002	IC01	03/03/07 04:27	10.0		+			+
193108-002	IC01	03/03/07 05:37	1.0	+		+	+	
193108-003	IC01	03/03/07 09:43	25.0		+			+
193108-003	IC01	03/03/07 11:10	1.0	+		+	+	
193108-004	IC01	03/03/07 10:00	25.0		+			
193108-004	IC01	03/03/07 11:28	1.0	+		+	+	+
193108-005	IC01	03/03/07 08:50	10.0		+			+
193108-005	IC01	03/03/07 10:18	1.0	+		+	+	
193108-006	IC01	03/03/07 01:50	1.0	+	+	+	+	+
193108-006	IC01	03/03/07 02:07	2.0					
193108-007	IC01	03/02/07 19:42	100.0		+			+
193108-007	IC01	03/02/07 21:45	1.0	+			+	
193108-007	IC01	03/02/07 22:20	2.0			+		
193108-008	IC01	03/02/07 20:00	100.0		+			
193108-008	IC01	03/03/07 06:30	1.0	+			+	+
193108-008	IC01	03/03/07 07:05	2.0			+		
193108-009	IC01	03/03/07 09:08	10.0		+			
193108-009	IC01	03/03/07 10:35	1.0	+		+	+	+
193108-010	IC01	03/03/07 14:58	100.0		+			+
193108-010	IC01	03/03/07 15:33	1.0	+			+	
193108-010	IC01	03/03/07 16:08	2.0			+		
193108-011	IC01	03/03/07 15:15	100.0		+			
193108-011	IC01	03/03/07 17:53	1.0	+			+	+
193108-011	IC01	03/03/07 18:28	2.0			+		
193108-012	IC01	03/04/07 00:53	50.0		+			+
193108-012	IC01	03/04/07 02:56	1.0	+		+	+	
193108-012	IC01	03/04/07 04:41	2.0					
193108-013	IC01	03/03/07 13:30	25.0		+			+
193108-013	IC01	03/03/07 14:23	1.0	+		+	+	
193108-014	IC01	03/03/07 13:13	25.0		+			
193108-014	IC01	03/03/07 14:05	1.0	+		+	+	+
193108-015	IC01	03/03/07 09:25	25.0		+			
193108-015	IC01	03/03/07 10:53	1.0	+		+	+	+
193108-016	IC01	03/03/07 02:25	10.0		+			

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193108-016	IC01	03/03/07 02:42	1.0	+		+	+	+
193108-017	IC01	03/02/07 21:10	10.0		+			
193108-017	IC01	03/02/07 21:27	1.0	+		+	+	+
193108-018	IC01	03/03/07 05:02	25.0		+			
193108-018	IC01	03/03/07 06:13	1.0	+		+	+	+
193108-019	IC01	03/03/07 04:45	25.0		+			
193108-019	IC01	03/03/07 05:55	1.0	+		+	+	+
193108-020	IC01	03/03/07 04:10	5.0					
193108-020	IC01	03/03/07 05:20	1.0	+	+	+	+	+
193108-022	IC01	03/03/07 12:55	25.0		+			+
193108-022	IC01	03/03/07 13:48	1.0	+		+	+	
193108-023	IC01	03/03/07 20:13	10.0		+			
193108-023	IC01	03/04/07 01:11	1.0	+		+	+	+
193108-025	IC01	03/04/07 00:01	25.0		+			+
193108-025	IC01	03/04/07 02:21	1.0	+		+	+	
193108-026	IC01	03/03/07 21:05	25.0		+			+
193108-026	IC01	03/04/07 01:46	1.0	+		+	+	
193108-027	IC01	03/04/07 01:28	1.0	+		+	+	+
193108-027	IC03	03/05/07 15:43	10.0		+			
QC377478	IC01	03/02/07 19:25	1.0	+	+	+	+	+
QC377479	IC01	03/02/07 20:52	1.0	+	+	+	+	+
QC377480	IC01	03/03/07 00:57	2.0	+	+	+	+	+
QC377481	IC01	03/03/07 01:15	2.0	+	+	+	+	+
QC377482	IC01	03/02/07 20:17	200.0	+	+	+	+	+
QC377483	IC01	03/02/07 20:35	200.0	+	+	+	+	+
QC377484	IC01	03/03/07 00:05	10.0	+	+	+	+	+
QC377485	IC01	03/03/07 00:22	10.0	+	+	+	+	+
QC377493	IC01	03/03/07 19:55	1.0	+	+	+	+	+
QC377494	IC01	03/03/07 23:43	1.0	+	+	+	+	+
QC377495	IC01	03/03/07 20:30	10.0	+	+	+	+	+

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC377496	IC01	03/03/07 20:48	10.0	+	+	+	+	+	
QC377497	IC01	03/04/07 00:18	50.0	+	+	+	+	+	
QC377498	IC01	03/04/07 00:36	50.0	+	+	+	+	+	
QC377499	IC01	03/03/07 21:23	25.0	+	+	+	+	+	
QC377500	IC01	03/03/07 21:40	25.0	+	+	+	+	+	
QC377766	IC03	03/05/07 15:24	1.0		+		+	+	
QC377767	IC03	03/05/07 19:01	1.0		+		+	+	
QC377768	IC03	03/05/07 17:56	2500		+		+	+	
QC377769	IC03	03/05/07 18:13	2500		+		+	+	

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122697
Date Started: 3/2/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193108-001 Ak	0.12	1x 2x	S	MSS
2	-002 E	0.82	1x 10x		
3	-003 F	1.41	1x 25x		
4	-004 G	1.50	1x 25x		
5	-005 F	0.71	1x 10x		
6	-006 M	0.13	1x 2x		
7	-007 As	3.51	100x 1x 2x		MSS
8	-008 D	4.06	100x 1x 2x		
9	-009 F	0.83	1x 10x		
10	-010 I	3.47	100x 1x 2x		
11	-011 F	4.06	100x 1x 2x		
12	-013 I	1.18	1x 25x		
13	-014 D	1.05	1x 25x		
14	-015 I	1.44	1x 25x		
15	-016 F	0.59	1x 10x		
16	-017 S	0.72	1x 10x		MSS
17	-018 E	1.37	1x 25x		
18	-019 H	1.27	1x 25x		
19	-020 I	0.26	1x 5x		
20	-022 A	1.02	1x 25x		
	Blank QC377478	N/A	1x	N/A	
	LCS QC377479		1x	N/A	
	MS QC377480 Ak		2x	S	MS of 193108-001 Ak
	MSD QC377481 Ak		2x		MSD of 193108-001 Ak
	MS QC377482 As		200x		MS of 193108-007 As
	MSD QC377483 As		200x		MSD of 193108-007 As
	MS QC377484 S		10x		MS of 193108-017 S
	MSD QC377485 S		10x		MSD of 193108-017 S

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MS 12/5/06	MS 3/2/07
BS/BSD Spiked with 0.2 mL of :	54740	
MS/MSD Spiked with 0.1 mL of :	54740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A106 50522	

MRJM 3/2/07
Extraction Chemist / Date

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Continued from page ____
Continued on page ____

AR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122697
Date Started: 02-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-002			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-004			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-007			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-009			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-020			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
QC377478	BLANK			Water		
QC377479	LCS			Water		
QC377480	MS	of 193108-001		Water		
QC377481	MSD	of 193108-001		Water		
QC377482	MS	of 193108-007		Water		
QC377483	MSD	of 193108-007		Water		
QC377484	MS	of 193108-017		Water		
QC377485	MSD	of 193108-017		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122699
Date Started: 3/2/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193093-001 H	1.10	25x 1x	S	
2	193108-012 G	2.08	1x 2x 50x		
3	-023 AB	0.77	1x 10x		MSS
4	-025 I	1.74	1x 25x		MSS
5	-026 H	1.38	1x 25x		MSS
6	-027 J	0.78	1x 10x		RR@10x for chloride
7	Blank QC377493	N/A	1x	N/A	
8	LCS QC377494		1x	N/A	
9	MS QC377495		10x	S	MS of 193108-023AB
10	MSD QC377496		10x		MSD of 193108-023AB
11	MS QC377497		50x		MS of 193108-025I
12	MSD QC377498		50x		MSD of 193108-025 I
13	MS QC377499		25x		MS of 193108-026H
14	MSD QC377500		25x		MSD of 193108-026H
15					
16					
17					
18					
19					
20					

MRS 3/2/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MRS 12/5/06	MRS 3/2/07
BS/BSD Spiked with 0.2 mL of :	54740	
MS/MSD Spiked with 0.1 mL of :	54740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #41065052 2	

MRS 3/2/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122699
Date Started: 02-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193093-001			Strategic Engineer	Water	NITRATE, SULFATE	07-MAR-2007
193108-012			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-023			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-025			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-026			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-027			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
QC377493	BLANK			Water		
QC377494	LCS			Water		
QC377495	MS	of 193108-023		Water		
QC377496	MSD	of 193108-023		Water		
QC377497	MS	of 193108-025		Water		
QC377498	MSD	of 193108-025		Water		
QC377499	MS	of 193108-026		Water		
QC377500	MSD	of 193108-026		Water		

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122763
Date Started: 3/5/07
Prep Chemist: MRS

BK 2431
Page 73

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193108-027 S	0.78 ~~10x~~ MS 3/5/07	10X ~~5~~ MS 3/5/07	S	
2	193128-001 F	58.0	2000x 25x	S	RR@25x for Br
3	↓ -002 F	51.9	2000x 20x	S	MSS RR@20x for Br
4	Blank QC377766	N/A	1x	N/A	
5	LCS QC377767	↓	1x	N/A	
6	MS QC377768 F		2500x	S	
7	MSD QC377769 F		2500x	S	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

MRS 3/5/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100X MRS 12/5/06 MS 3/5/07	MRS 3/5/07
BS/BSD Spiked with 0.2 mL of :	SY740	↓
MS/MSD Spiked with 0.1 mL of :	SY740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na	↓	
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A1065052 2	

MRS 3/5/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122763
Date Started: 05-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193108-027			Treadwell & Rollo	Water	CHLORIDE	14-MAR-2007
193128-001			New Logic Research	Water	CHLORIDE, NITRATE, SULFATE	15-MAR-2007
193128-002			New Logic Research	Water	CHLORIDE, NITRATE, SULFATE	15-MAR-2007
QC377766	BLANK			Water		
QC377767	LCS			Water		
QC377768	MS	of 193128-002		Water		
QC377769	MSD	of 193128-002		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/23/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123079
Field ID:	LF02GW04	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193108-014	ND	0.01
BLANK	QC379103	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123079
MSS Lab ID:	193166-017	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379104	0.01470	0.1630	0.1424	78	65-135		
MSD	QC379105		0.1630	0.1438	79	65-135	1	20
LCS	QC379106		0.1630	0.1690	104	75-125		

RPD= Relative Percent Difference

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/14/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/14/2007**
Wavelength:	578 nm	Batch:	123079
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1180	0.0846	0.0816	104%	90 - 110%
ICB	-0.0003	-0.0002	0.0000		
CCV	0.1163	0.0834	0.0816	102%	90 - 110%
CCB	-0.0005	-0.0004	0.0000		

905

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/14/2007**
Analysis Date: **3/14/2007**
Batch: 123079
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	inal Distill Vol (mL)	Distillate olored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1179	**0.1690**	0.020	0.5	16.3	0.163	**104**	
193166-17	50.0	50.0	20.0	1.00	0.0205	**0.0147**	0.010					
193166-17m	50.0	50.0	10.0	1.00	0.0993	**0.1424**	0.020	0.5	16.3	0.163	**78**	
193166-17m	50.0	50.0	10.0	1.00	0.1003	**0.1438**	0.020	0.5	16.3	0.163	**79**	**1**
193108-14	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
193137-5	50.0	50.0	20.0	1.00	0.0010	**ND**	0.010					
193175-5	50.0	50.0	20.0	1.00	0.0043	**ND**	0.010					
193197-4	50.0	50.0	20.0	1.00	0.0007	**ND**	0.010					
193226-7	50.0	50.0	20.0	1.00	0.0121	**ND**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

906

Reviewed by/ Date: 3/14/07

Polymer/Mix 193175 USD 193197 ORS 193226
Treed well 193168 193137 Notebook No. BK2451
PROJECT Weston 193166 Continued From Page

CN EPA 335.2M B 123079

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	ABS
193168-14	50	50	20	.0003
193137-5				.0010
193166-17				.0205
-17MS	+.5ml (16.32ug/ml dilnof S5101, 1ml – 50ml)		10	.0993
-17MSD	same as MS		10	.1003
193175-5			20	.0043
193197-4				.0007
193226-7				.0121
LCS	same as MS		10	.1179
MB			20	.0003
ICB				-.0003
ICV				.1180
CCV				.1163
CCB				-.0005

TV = .0816 mg/L

Tests for Cl^- & S negative
pH all >12
Sulfamic acid added to all samples.

Continued on Page

Read and Understood By

Signed 3-14-07 Date 907 Signed 3/14/07 Date

---) Quantitation Results Report (---

Date : 03-14-2007
Time : 10:23:10
Operator :

File Name : Data not stored yet

Sample Name : _/anide
Client Name : CAL 7.5/0C
Conc Units : ug/L
Dil. Factor : 1.00

Analytical Wavelength : 378 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 3 seconds

SAMPLE #	Sample Name	Wavelength	Func. Fac.	Concentration
1	ICB	Analytical	-0.0002	0.00002
2	ICV	Analytical	+0.1[illegible]	0.09650
3	193128-14	Analytical	+0.0003	1.9625E-04
4	193137-5	Analytical	+0.0010	7.0[illegible]E-01
5	193166-17	Analytical	-0.0205	0.01505
6	193166-17MS	Analytical	+0.0990	0.07254
7	193166-17MSD	Analytical	+0.1000	0.07354
8	193175-1	Analytical	+0.0043	0.00310
9	193197-4	Analytical	+0.0007	4.9238E-04
10	193226-7	Analytical	+0.0121	0.00891
11	LCS	Analytical	+0.1173	0.08645
12	MB	Analytical	+0.0001	8.0140E-04
13	CCV	Analytical	+0.1107	0.08131
14	CCB	Analytical	-0.0005	0.00000

(---) Standard Calibration Report (---

Date : [illegible]
Time : [illegible]
Operator :

File Name : C:\CW\DATA\CNTME.STD

Sample Name : cyanide
Client Name : CAL 7/6/02
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Regression Function : Concentration = 1.2335E-01, * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00200	0.0007	*****
2	0.00673	0.0125	-1.589 %
3	0.01746	0.0259	-7.1942 %
4	0.05236	0.0716	0.173 %
5	0.28730	0.1196	+2.385 %
6	0.13958	0.1316	0.587 %
7	0.17450	0.2071	+2.424 %

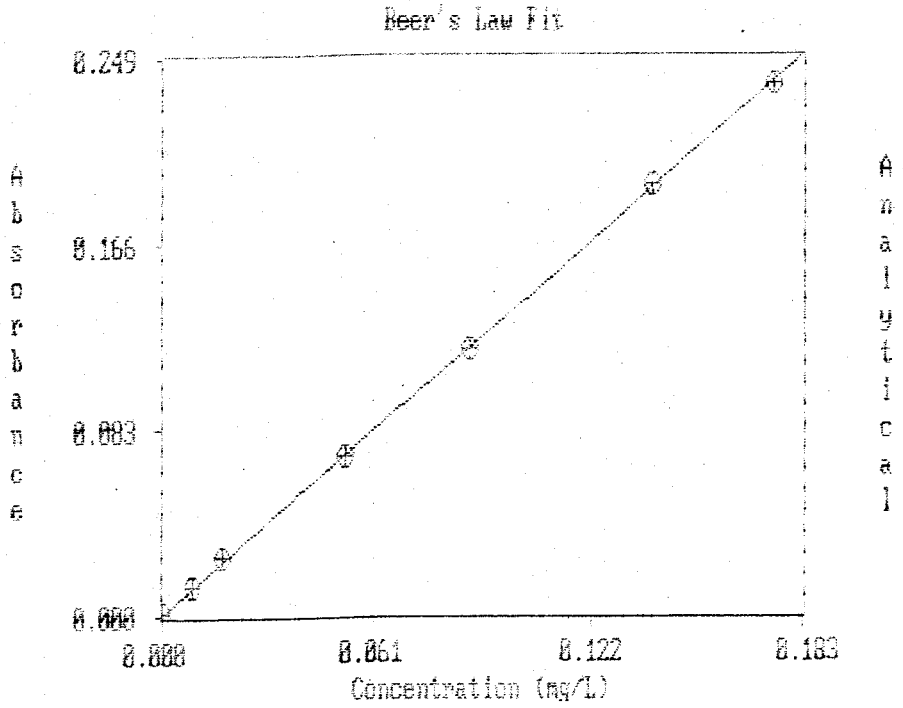
Date : 03-14-2007
Time : 12:23:07
Operator :

---> Standard Calibration Report <---

File Name : C:\UV\DATA\CN720.STD

Sample Name : Cyanide
Client Name : DRL 7/8/06
Conc. Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelength : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123079
Date Started: 14-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-014			Treadwell & Rollo	Water	CYANIDE	14-MAR-2007
193137-005			Treadwell & Rollo	Water	CYANIDE	15-MAR-2007
193166-017			Weston Solutions	Water	CYANIDE	16-MAR-2007
193175-005			Polymatrix	Water	CYANIDE	16-MAR-2007
193197-004			Union Sanitary Dis	Water	CYANIDE	13-MAR-2007
193226-007			URS Corporation	Water	CYANIDE	13-MAR-2007
QC379103	BLANK			Water	CYANIDE	
QC379104	MS	of 193166-017		Water	CYANIDE	
QC379105	MSD	of 193166-017		Water	CYANIDE	
QC379106	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Surfactants (MBAS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Batch#:	122694
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/05/07 13:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
DAEGW103	SAMPLE	193108-022	ND b	0.10	03/01/07 15:40
DAEGW104	SAMPLE	193108-023	ND b	0.10	03/02/07 09:30
DUP0302071A	SAMPLE	193108-027	ND b	0.10	03/02/07 09:40
	BLANK	QC377458	ND	0.10	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Surfactants (MBAS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Diln Fac:	1.000
Field ID:	DAEGW104	Batch#:	122694
MSS Lab ID:	193108-023	Sampled:	03/02/07 09:30
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/05/07 13:00

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC377459		0.6000	0.5731	96	80-120		
MS	QC377460	<0.1000	0.6000	0.4478	75	70-130		
MSD	QC377461		0.6000	0.5843	97	70-130	26	30

RPD= Relative Percent Difference

Analysis:	**Surfactants (MBAS)**	Analyst:	**DMB**
Method:	EPA 425.1 / SMWW 5540C	Analysis Date:	**3/5/2007**
Instrument:	Perkin-Elmer Lambda 25	Batch#:	122694
SOP#:	MBAS_rv4.doc	Matrix:	Water

Initial Calibration Data Calibrated: 1/31/07

mg/L	ug/100mL	ABS	RF
0.0	0	0.0000	
0.1	10	0.0174	0.00174
0.3	30	0.0495	0.00165
0.5	50	0.0784	0.00157
1.0	100	0.2066	0.00207
1.5	150	0.2864	0.00191

Correlation Coefficient = 0.9955
Avg Response Factor = 0.00179
%RSD = 11.3

Note: Average response used to calculate sample results

Calibration Verification Data

	vol (mL)	IDF	ABS	Conc.(mg/L)	TV (mg/L)	Recovery	Limits
ICV	100	1	0.1024	0.5731	0.6	95.5%	90-110%
ICB	100	1	-0.0060	ND			
CCV	100	1	0.1032	0.5776	0.6	96.3%	90-110%
CCB	100	1	-0.0040	ND			

Sample & Batch QC Data

C&T ID	vol (mL)	IDF	ABS	**Report (mg/L)**	RL (mg/L)	Spike Added (mL)	Spike Std Conc. (mg/L)	QC TV (mg/L)	**% Recovery**	**%RPD**
MB	100	1	-0.0060	**ND**	0.1					
LCS	100	1	0.1024	**0.5731**	0.1	1	60	0.6	**96**	
193108-023	100	1	0.0002	**ND**	0.1					
193108-023 MS	100	1	0.0800	**0.4478**	0.1	1	60	0.6	**75**	
193108-023 MSD	100	1	0.1044	**0.5843**	0.1	1	60	0.6	**97**	**26**
193108-022	100	1	-0.0030	**ND**	0.1					
193108-023	100	1	0.0002	**ND**	0.1					
193108-027	100	1	0.0000	**ND**	0.1					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

Reviewed by/ Date: Chm 3/7/07

MBAS

B 122694

Sample	Vol	Final Vol	ABS
★ ICV-LCS	100ml	100ml	0.1024
ICB-MB	↓	↓	-0.006
193108-022			-0.003
-023			0.0002
★ MS -023			0.0800
★ MSD -023			0.1044
-027			-0.000
★ CCV			0.1032
CCB			-0.004

★ Plus 1 ml of S 5500 (TV = 0.6 mg/L)

Continued on Page

Read and Understood By

Signed	Date		Signed	Date
DMB	3/5/07	916	Chm	3/7/07

Date : 3/5/2007 Time : 20:16:26

Concentration Results

Date: 3/5/2007 Time: 8:06:33 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 122694.RCO
Autozero performed: 3/5/2007 8:04:58 PM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
652.0	0.0	ICV_LCS	0.1024	1.0000	53.283	ug/100ml	
652.0	0.0	ICB_MB	-0.006	1.0000	-3.313*	ug/100ml	
652.0	0.0	108-22	-0.003	1.0000	-1.586*	ug/100ml	193108-022
652.0	0.0	108-23	0.0002	1.0000	0.0884	ug/100ml	193108-023
652.0	0.0	108-23MS	0.0800	1.0000	41.641	ug/100ml	MS
652.0	0.0	108-23MD	0.1044	1.0000	54.308	ug/100ml	MSD
652.0	0.0	108-27	-0.000	1.0000	-0.026*	ug/100ml	193108-027
652.0	0.0	CCV	0.1032	1.0000	53.704	ug/100ml	
652.0	0.0	CCB	-0.004	1.0000	-2.372*	ug/100ml	

CALIBRATION

Date: 3/5/2007 Time: 8:04:59 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: DMB

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
652.0	0.0	mbas107.A01	0.0000	ug/100ml	0.0000	
652.0	0.0	mbas107.A02	10.000	ug/100ml	0.0174	
652.0	0.0	mbas107.A03	30.000	ug/100ml	0.0495	
652.0	0.0	mbas107.A04	50.000	ug/100ml	0.0784	
652.0	0.0	mbas107.A05	100.00	ug/100ml	0.2066	
652.0	0.0	mbas107.A06	150.00	ug/100ml	0.2864	

Equation: y = 1.922358e-03 * x

Residual error: 0.010891
Correlation coefficient: 0.995477

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122694
Date Started: 05-MAR-2007
Batched by : David Bowden

Analysis : MBAS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-022			Treadwell & Rollo	Water	MBAS	14-MAR-2007
193108-023			Treadwell & Rollo	Water	MBAS	14-MAR-2007
193108-027			Treadwell & Rollo	Water	MBAS	14-MAR-2007
QC377458	BLANK			Water	MBAS	
QC377459	LCS			Water	MBAS	
QC377460	MS	of 193108-023		Water	MBAS	
QC377461	MSD	of 193108-023		Water	MBAS	

Analysis:	MBAS	Analysis Date:	3/11/2005
Method:	EPA 425.1	Analyst:	SY
Instrument:	HP UV/Vis		
Wavelength:	652		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.3
Units:	mg/L
1	0.273
2	0.291
3	0.325
4	0.339
5	0.323
6	0.296
7	0.298
Average:	0.307 mg/L
Std Deviation:	0.0231004
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0726** mg/L
Reporting Limit:	0.1 mg/L
Status:	PASS

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122845
Matrix:	Water	Sampled:	03/01/07
Units:	mg/L	Received:	03/02/07
Diln Fac:	1.000	Analyzed:	03/08/07

Field ID	Type	Lab ID	Result	RL
1047MW101	SAMPLE	193108-001	ND	0.04
1065PZ4B	SAMPLE	193108-002	ND	0.04
1065PZ7B	SAMPLE	193108-003	ND	0.04
1065PZ5AR	SAMPLE	193108-004	ND	0.04
1065PZ5B	SAMPLE	193108-005	ND	0.04
DUP0301072A	SAMPLE	193108-006	ND	0.04
1065PZ1A	SAMPLE	193108-015	ND	0.04
1065PZ2A	SAMPLE	193108-016	ND	0.04
1065PZ3A	SAMPLE	193108-017	ND	0.04
1065PZ4A	SAMPLE	193108-018	ND	0.04
1065MW101	SAMPLE	193108-019	ND	0.04
1065MW102	SAMPLE	193108-020	ND	0.04
	BLANK	QC378094	ND	0.04

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122845
Matrix:	Water	Sampled:	03/01/07
Units:	mg/L	Received:	03/02/07
Diln Fac:	1.000	Analyzed:	03/08/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
1047MW101	MS	193108-001	QC378095	<0.04000	0.3155	0.1966	62 *	75-125		
1047MW101	MSD	193108-001	QC378096		0.3155	0.1971	62 *	75-125	0	20
1065PZ3A	MS	193108-017	QC378097	<0.04000	0.3155	0.2147	68 *	75-125		
1065PZ3A	MSD	193108-017	QC378098		0.3155	0.2155	68 *	75-125	0	20
	LCS		QC378099		0.3155	0.2920	93	75-125		

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	3/8/2007
Instrument:	**HP UV-VIS Spectrometer**	Analysis Date:	3/8/2007
Wavelength:	626 nm	Batch:	122845
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r):	0.9990
Avg Rf:	0.6210
%RSD:	3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1813	0.2920	0.3155	93%	90 - 110%
ICB	-0.0005	-0.0008	0.0000		
CCV	0.1839	0.2962	0.3155	94%	90 - 110%
CCB	0.0009	0.0014	0.0000		
CCV	0.1795	0.2891	0.3155	92%	90 - 110%
CCB	0.0008	0.0013	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **122845**
Prep Date: **3/8/2007**
Analysis Date: **3/8/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0005		**ND**	0.040					
LCS	7.5000	1.0000	0.1813		**0.29197**	0.040	0.0500	47.3280	0.3155	**93**	
193108-1	7.5000	1.0000	0.0146		**ND**	0.040					
193108-1ms	7.5000	1.0000	0.1221		**0.19663**	0.040	0.0500	47.3280	0.3155	**62**	
193108-1ms	7.5000	1.0000	0.1224		**0.19712**	0.040	0.0500	47.3280	0.3155	**62**	**0**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

193108-17	7.5000	1.0000	0.0115		**ND**	0.040					
193108-17m	7.5000	1.0000	0.1333		**0.21467**	0.040	0.0500	47.3280	0.3155	**68**	
193108-17m	7.5000	1.0000	0.1338		**0.21548**	0.040	0.0500	47.3280	0.3155	**68**	**0**
193108-2	7.5000	1.0000	0.0048		**ND**	0.040					
193108-3	7.5000	1.0000	0.0049		**ND**	0.040					
193108-4	7.5000	1.0000	0.0049		**ND**	0.040					
193108-5	7.5000	1.0000	0.0051		**ND**	0.040					
193108-6	7.5000	1.0000	0.0055		**ND**	0.040					
193108-15	7.5000	1.0000	0.0096		**ND**	0.040					
193108-16	7.5000	1.0000	0.0116		**ND**	0.040					
193108-18	7.5000	1.0000	0.0066		**ND**	0.040					
193108-19	7.5000	1.0000	0.0062		**ND**	0.040					

193108-20	7.5000	1.0000	0.0056	**ND**	0.040

Reviewed by/ Date: 3/14/07

925

Sulfide EPA 376.2 B 122845

Sample	Vol (ml)	Final Vol (ml)	ABS	
193108-1	7.5	7.5	.0146	
-MS	+.05ml (47.328mg/L SF from 0455292)		.1221	
-MSD	same as MS		.1224	
-2			.0048	
-3			.0049	5 = std
-4			.0049	≈.4g 0455292 → 50ml DI H_2O
-5			.0051	
-6			.0055	1.0ml S^2
-15			.0096	5.0ml I, .0255N
-16			.0116	2.10ml S_2O_3, .0255N
-17			.0115	
				.1275
-17MS	+.05ml (47.328mg/L from 0455292)		.1333	-.05355
				$\frac{.07395 \times 16000}{1.0ml}$
-17MSD	same as MS		.1338	
				= 1183.20mg/L
-18			.0066	1:25 = 47.328 mg/L
-19			.0062	.05 — 7.5 = .3155 mg/L
-20			.0056	
LCS/ICV	same as MS		.1813	TV = .3155 mg/L
MB/ICV			-.0005	
CCV			.1839	
CCB			.0009	
CCV			.1795	
CCB			.0008	

Continued on Page

Read and Understood By

Signed: [illegible] Date: 3-8-07 Signed: [illegible] Date: 3/14/07

3-8-07 DM

Date : ~~01-09-2007~~
Time : 11:30:26
Operator : DM

---) Quantitation Results Report (---

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0005	0.00000
2	ICV/LCS	Analytical	+0.1813	0.30254
3	193108-1	Analytical	+0.0146	0.02437
4	193108-1MS	Analytical	+0.1221	0.20373
5	193108-1MSD	Analytical	+0.1224	0.20429
6	193108-2	Analytical	+0.0048	0.00797
7	193108-3	Analytical	+0.0049	0.00825
8	193108-4	Analytical	+0.0049	0.00817
9	193108-5	Analytical	+0.0051	0.00853
10	193108-6	Analytical	+0.0055	0.00919
11	CCV	Analytical	+0.1839	0.30699
12	CCB	Analytical	+0.0009	0.00150
13	193108-15	Analytical	+0.0096	0.01594
14	193108-16	Analytical	+0.0116	0.01943
15	193108-17	Analytical	+0.0115	0.01915
16	193108-17MS	Analytical	+0.1333	0.22242
17	193108-17MSD	Analytical	+0.1338	0.22326
18	193108-18	Analytical	+0.0066	0.01100
19	193108-19	Analytical	+0.0062	0.01034
20	193108-20	Analytical	+0.0056	0.00935
21	CCV	Analytical	+0.1795	0.29950

22	CCB	Analytical	+0.0008	0.00130

3-8-07 dm

Date : ~~01-09-2007~~
Time : 11:30:45
Operator : DM

---) Standard Calibration Report (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

3-8-07 [illegible]

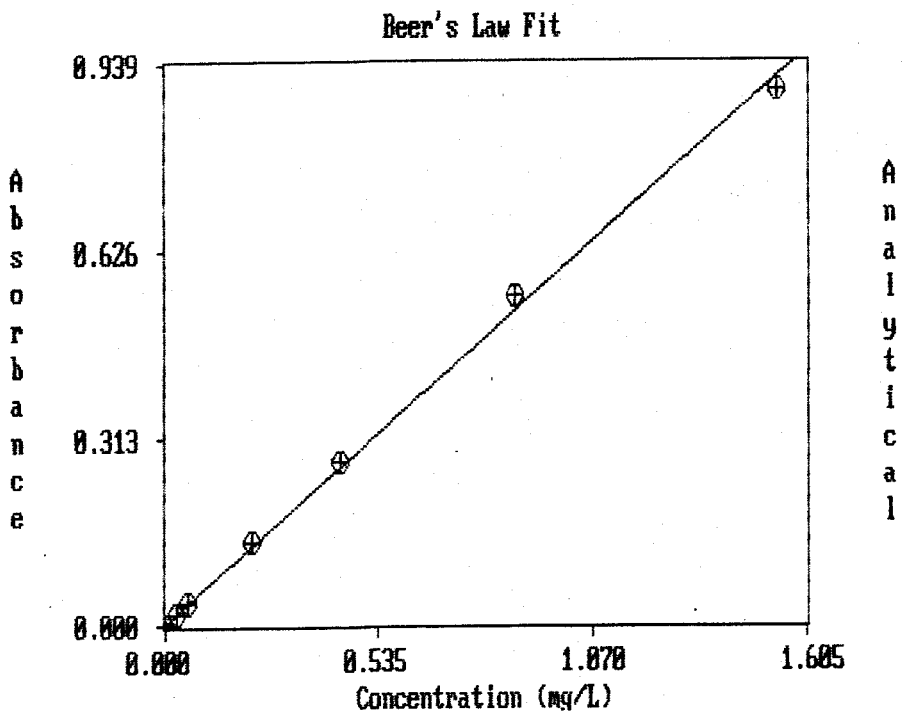
Date : ~~01-09-2007~~
Time : 11:30:46
Operator : DM

---) **Standard Calibration Report** (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122845
Date Started: 08-MAR-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-002			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-003			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-004			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-005			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-006			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-015			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-016			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-017			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-018			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-019			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-020			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
QC378094	BLANK			Water	SULFIDE	
QC378095	MS	of 193108-001		Water	SULFIDE	
QC378096	MSD	of 193108-001		Water	SULFIDE	
QC378097	MS	of 193108-017		Water	SULFIDE	
QC378098	MSD	of 193108-017		Water	SULFIDE	
QC378099	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/08/07

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled
1047MW101	SAMPLE	193108-001	ND	10	122885	03/01/07
1065PZ4B	SAMPLE	193108-002	420	10	122885	03/01/07
1065PZ7B	SAMPLE	193108-003	840	10	122885	03/01/07
1065PZ5AR	SAMPLE	193108-004	690	10	122885	03/01/07
1065PZ5B	SAMPLE	193108-005	430	10	122885	03/01/07
DUP0301072A	SAMPLE	193108-006	88	10	122885	03/01/07
1349MW01	SAMPLE	193108-007	1,810	10	122885	03/01/07
1349MW100	SAMPLE	193108-008	2,110	10	122885	03/01/07
DAEGW06	SAMPLE	193108-009	380	10	122885	03/01/07
DUP0301073A	SAMPLE	193108-010	1,860	10	122885	03/01/07
DUP0301073B	SAMPLE	193108-011	2,070	10	122885	03/01/07
DAEGW08	SAMPLE	193108-013	580	10	122885	03/01/07
LF02GW04	SAMPLE	193108-014	500	10	122885	03/01/07
1065PZ1A	SAMPLE	193108-015	660	10	122885	03/01/07
1065PZ2A	SAMPLE	193108-016	350	10	122885	03/01/07
1065PZ3A	SAMPLE	193108-017	360	10	122885	03/01/07
1065PZ4A	SAMPLE	193108-018	670	10	122885	03/01/07
1065MW101	SAMPLE	193108-019	760	10	122885	03/01/07
1065MW102	SAMPLE	193108-020	140	10	122885	03/01/07
DAEGW103	SAMPLE	193108-022	570	10	122886	03/01/07
DAEGW104	SAMPLE	193108-023	410	10	122886	03/02/07
DAEGW101	SAMPLE	193108-024	1,050	10	122886	03/02/07
DAEGW03	SAMPLE	193108-025	1,050	10	122886	03/02/07
DAEGW05	SAMPLE	193108-026	800	10	122886	03/02/07
DUP0302071A	SAMPLE	193108-027	440	10	122886	03/02/07
	BLANK	QC378275	ND	10	122885	
	BLANK	QC378281	ND	10	122886	

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/08/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Batch#	Sampled
	BS		QC378276		100.0	84.00		84	75-126			122885	
	BSD		QC378277		100.0	98.00		98	75-126	15	21	122885	
1047MW101	SDUP	193108-001	QC378278	<10.00		<10.00	10.00			NC	24	122885	03/01/07
1349MW01	SDUP	193108-007	QC378279	1,806		1,834	10.00			2	24	122885	03/01/07
1065PZ3A	SDUP	193108-017	QC378280	358.0		388.0	10.00			8	24	122885	03/01/07
	BS		QC378282		100.0	100.0		100	75-126			122886	
	BSD		QC378283		100.0	122.0		122	75-126	20	21	122886	
DAEGW104	SDUP	193108-023	QC378284	410.0		418.0	10.00			2	24	122886	03/02/07

933

NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

119.0

Curtis & Tompkins, Ltd.

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**08-Mar-07**
Matrix:	Water	Batch #:	**122885**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	54.9332	54.9327	-0.0005	ND	10					
BS	50	1	55.6485	55.6527	0.0042	84.0	10	1,000	5	100	**84**	
BSD	50	1	55.2893	55.2942	0.0049	98.0	10	1,000	5	100	**98**	**15.38**
193108-001	50	1	54.9360	54.9359	-0.0001	ND	10					
SDUP	50	1	54.3143	54.3148	0.0005	ND	10					**NC**
193108-007	50	1	52.7166	52.8069	0.0903	1,806.0	10					
SDUP	50	1	53.8666	53.9583	0.0917	1,834.0	10					**1.54**
193108-017	50	1	55.7408	55.7587	0.0179	358.0	10					
SDUP	50	1	51.5200	51.5394	0.0194	388.0	10					**8.04**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193108-001	50	1	54.9360	54.9359	-0.0001	ND	10
193108-002	50	1	54.7470	54.7681	0.0211	422.0	10
193108-003	50	1	54.7876	54.8298	0.0422	844.0	10
193108-004	50	1	49.0900	49.1246	0.0346	692.0	10
193108-005	50	1	54.0971	54.1185	0.0214	428.0	10
193108-006	50	1	55.0929	55.0973	0.0044	88.0	10
193108-007	50	1	52.7166	52.8069	0.0903	1,806.0	10
193108-008	50	1	54.8442	54.9497	0.1055	2,110.0	10
193108-009	50	1	55.1511	55.1703	0.0192	384.0	10
193108-010	50	1	53.7406	53.8336	0.0930	1,860.0	10
193108-011	50	1	54.9590	55.0627	0.1037	2,074.0	10
193108-013	50	1	55.8161	55.8450	0.0289	578.0	10
193108-014	50	1	54.0461	54.0713	0.0252	504.0	10
193108-015	50	1	54.6442	54.6773	0.0331	662.0	10
193108-016	50	1	56.5334	56.5508	0.0174	348.0	10
193108-017	50	1	55.7408	55.7587	0.0179	358.0	10
193108-018	50	1	57.2232	57.2569	0.0337	674.0	10
193108-019	50	1	57.8913	57.9295	0.0382	764.0	10
193108-020	50	1	58.3496	58.3567	0.0071	142.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/14/07

TDS (Total Dissolved Solids) - cont on pg. 80
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122885

Prep Date: 3/8/07
Prep Time: 17:30

Benchbook#: **BK 2420**
Page: **76**

Filter Mfg/ Lot#: Env. Exp 655914
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/8/07	3/9/07	3/9/07	3/11/07	3/11/07	3/11/07
Time:	19:20	8:30	10:30	12:00	13:45	14:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	
1	MB		50	G21	54.9332	54.9316	54.9312	X see page 80	
	BS		↓	G22	55.6485	55.6510	55.6519	55.6512	
	BSD		↓	G23	55.2893	55.2950	55.2930	55.2911	
	193108-1'	104.4	50	G24	54.9360	54.9342	54.9365	54.9348	
5	SDUP -1	↓		G25	54.3143	54.3148	54.3153	X	
	-2'	746		G26	54.7470	54.7677	54.7686	54.7681	X
	-3.	1249		G27	54.7876	54.8294	54.8307	54.8292	
	-4	1334		G28	49.0900	49.1231	49.1247	49.1246	X
	-5	630		G29	54.0971	54.1189	54.1205	54.1176	
10	-6	108.7		G30	55.0929	55.0968	55.0973	X	
	-7	3310		G31	52.7166	52.8123	52.8085	52.8067	
	SDUP-7	↓		G32	53.8666	53.9583	53.9583	X	
	-8	3700		G33	54.8442	54.9520	54.9536	54.9501	
	-9	764		G34	55.1511	55.1690	55.1723	55.1714	
15	-10	3210		G35	53.7406	53.8332	53.8336	X	
	-11	3690		G36	54.9590	54.0652	55.0663	55.0648	
	-12	1121		G37	55.8161	55.8445	55.8469	55.8455	
	-14	968		G38	54.0461	54.0707	54.0730	54.0710	
	-15	1008		G39	54.6442	54.6767	54.6779	54.6767	
20	-16	519		GOLF	56.5334	56.5489	56.5507	56.5508	X
	-17	660		GRAY	55.7408	55.7582	55.7587	X	
	SDUP -17	↓		GRIP	51.5200	51.5382	51.5396	51.5394	X
	-18	1268		GONE	57.2232	57.2559	57.2571	57.2569	X
	-19	1172		GNEE	57.8913	57.9294	57.9317	57.9289	
	-20	234	↓	GULF	58.3496	58.3562	58.3586	58.3562	

* Constant weight must be within 0.0005 from previous reading.

4th { ~~G29 → 54.1180~~, ~~G23 → 55.2942~~, ~~G31 → 52.8070~~, ~~G21 → 54.4325~~, ~~G37 → 55.8450~~, ~~GNEE → 57.9290~~, ~~G39 → 54.6770~~, ~~G22 → 55.6530~~

5th { ~~G23 →~~, ~~G21 →~~, G22 → } All Corrections DMB 3/13 See Pg 80

3/8/07
Analyst / Date

3/11/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122885 con't from page 76

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2420**
Page: **80**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In - 4	Out - 4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	3/11/07	3/12/07	3/12/07	3/13/07		
Time:	16:30	9:30	11:00			
Temp (C):	180	180	180	180		

	Sample # / Letter	EC Value (uS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	G21	54.9325	54.9327	X				
	G22	55.6515	55.6530	55.6527	X			
	G23	55.2947	55.2937	55.2942	X			
	G24	54.9360	54.9359	X				
5	/							
	/							
	G27	54.8299	54.8298	X				
	/							
	G29	54.1191	54.1206	54.1180	54.1185	X		
10	/							
	G31	52.8075	52.8083	52.8070	52.8069	X		
	/							
	G33	54.9497	X					
	G34	55.1704	55.1707	X				
15	/							
	G36	55.0630	55.0627					
	G37	55.8462	55.8474	55.8450	55.8450	X		
	G38	54.0713	X					
	G39	54.6784	54.6792	54.6770	54.6773	X		
20	/							
	GRAY							
	/							
	/							
	GNEE	57.9302	57.9313	57.9290	57.9295	X		
	GULF	58.3567	X					

* Constant weight must be within 0.0005 from previous reading.

Analyst / Date _____

Reviewed by / Date _____

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122885
Date Started: 08-MAR-2007
Batched by : David Bowden

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-002			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-003			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-004			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-005			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-006			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-007			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-008			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-009			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-010			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-011			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-013			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-014			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-015			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-016			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-017			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-018			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-019			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-020			Treadwell & Rollo	Water	TDS	14-MAR-2007
QC378275	BLANK			Water	TDS	
QC378276	BS			Water	TDS	
QC378277	BSD			Water	TDS	
QC378278	SDUP	of 193108-001		Water	TDS	
QC378279	SDUP	of 193108-007		Water	TDS	
QC378280	SDUP	of 193108-017		Water	TDS	

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SM/WW 2540C	Analysis Date:	**08-Mar-07**
Matrix:	Water	Batch #:	**122886**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	59.0021	59.0024	0.0003	ND	10					
BS	50	1	54.9724	54.9774	0.0050	100.0	10	1,000	5	100	**100**	
BSD	50	1	50.3560	50.3621	0.0061	122.0	10	1,000	5	100	**122**	**19.82**
193108-023	50	1	51.7992	51.8197	0.0205	410.0	10					
SDUP	50	1	53.0688	53.0897	0.0209	418.0	10					**1.93**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193108-022	50	1	52.2260	52.2546	0.0286	572.0	10
193108-023	50	1	51.7992	51.8197	0.0205	410.0	10
193108-024	50	1	48.1417	48.1944	0.0527	1,054.0	10
193108-025	50	1	49.2953	49.3479	0.0526	1,052.0	10
193108-026	50	1	58.1835	58.2236	0.0401	802.0	10
193108-027	50	1	58.2088	58.2308	0.0220	440.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/14/07

TDS (Total Dissolved Solids) ~~cont'd on pg. 87~~ DMB 3/12/07
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122886

Prep Date: 3/8/07
Prep Time: 19:30

Benchbook#: **BK 2420**
Page: **77**

Filter Mfg/ Lot#: Env. Exp. 655 614
Spike WS#: 35560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/8/07	3/9/07	3/9/07	3/11/07	3/11/07	3/11/07
Time:	19:45	8:30	10:30	12:00	13:45	14:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		~~50~~	JUL	59.0021	59.0024	59.0032	59.0029
	BS		50	FRA	54.9724	54.9772	54.9774	X
	BSD		50	MAR	50.3560	50.3621	50.3621	50.3621 47 3/11
	193108-22	836	50	5/10	52.2260	52.2544	52.2546	X
5	-23	656		TAB	51.7992	51.8197	51.8197	X
	SDUP-23			K	53.0688	53.0885	53.0904	53.0896 53.0897 DMB 3/13
	-24	1546		JAR	48.1417	48.1934	48.1945	48.1944
	-25	1626		MIA	49.2953	49.3463	49.3476	49.3479
	-26	1254		LAN	58.1835	58.2222	58.2234	58.2236
10	-27	688		GAVEL	58.2088	58.2301	58.2313	58.2308
15								
20								

* Constant weight must be within 0.0005 from previous reading.

DMB 3/8/07
Analyst / Date

3/11/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122886
Date Started: 08-MAR-2007
Batched by : David Bowden

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193108-022		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-023		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-024		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-025		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-026		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-027		Treadwell & Rollo	Water	TDS	14-MAR-2007
QC378281	BLANK		Water	TDS	
QC378282	BS		Water	TDS	
QC378283	BSD		Water	TDS	
QC378284	SDUP of 193108-023		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193108

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID	Sample ID	Lab ID
1047MW101	193108-001	1065PZ3A	193108-017
1065PZ4B	193108-002	1065PZ4A	193108-018
1065PZ7B	193108-003	1065MW101	193108-019
1065PZ5AR	193108-004	1065MW102	193108-020
1065PZ5B	193108-005	TB0301073A	193108-021
DUP0301072A	193108-006	DAEGW103	193108-022
1349MW01	193108-007	DAEGW104	193108-023
1349MW100	193108-008	DAEGW101	193108-024
DAEGW06	193108-009	DAEGW03	193108-025
DUP0301073A	193108-010	DAEGW05	193108-026
DUP0301073B	193108-011	DUP0302071A	193108-027
1213GW101	193108-012	1349MW100 RE	193108-028
DAEGW08	193108-013	DUP0301073B RE	193108-029
LF02GW04	193108-014	DAEGW08 RE	193108-030
1065PZ1A	193108-015	DAEGW03 RE	193108-031
1065PZ2A	193108-016	DAEGW05 RE	193108-032

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/23/07
Operations Manager

Signature: _____ Date: 3/23/07
Project Manager

NELAP # 01107CA

Page 1 of ___

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

This hardcopy data package contains sample and QC results for twenty seven water samples, requested for the above referenced project on 03/02/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Low recovery was observed for diesel C12-C24 in the MS of DAEGW104 (lab # 193108-023); the LCS was within limits. High RPD was also observed for diesel C12-C24 in the MS/MSD of DAEGW104 (lab # 193108-023); this analyte was not detected at or above the RL in the associated samples. Samples 1213GW101, DAEGW104, DAEGW103,DAEGW05, and DUP0302071A (lab #s 193108-012,-023,-025,-026, and -027, respectively) were initially prepared on 3/16/07 within hold time, however, an undetectable leak in the cooling system caused the extracts to dry rendering them unusable. The samples were re-extracted one day past the recommended hold time; affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the CCV analyzed 03/08/07 11:36; this analyte met minimum response criteria. No other analytical problems were encountered.

Pesticides (EPA 8081A):
High ICAL percent RSDs (relative standard deviations) were observed for beta-BHC and delta-BHC in the calibration analyzed 02/28/07 22:36; average ICAL %RSD met method requirements, and these analytes were not detected at or above the RL in the associated samples. High response was observed for methoxychlor in the ICV analyzed 03/01/07 01:49; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. High responses were observed for 4,4'-DDD and methoxychlor in the CCV analyzed 03/08/07 02:27; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for TCMX in 1349MW100 (lab # 193108-008), DUP0301073B (lab # 193108-011), and the method blank for batch 122778; the associated decachlorobiphenyl surrogate recoveries were within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
Low surrogate recoveries were observed for decachlorobiphenyl and TCMX in

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

Polychlorinated Biphenyls (PCBs) (EPA 8082):
many samples. These samples were re-extracted six and seven days past the recommended extraction hold time; affected data was qualified with "b". The re-extraction confirmed matrix effect on the surrogate recoveries of the original extraction. No target compounds were detected in the samples. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of DAEGW104 (lab # 193108-023); the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (UV) in 1349MW100 (lab # 193108-008) and DUP0301073B (lab # 193108-011), due to matrix interference; these high surrogate recoveries were confirmed by re-analysis. No other analytical problems were encountered.

Metals (EPA 6010B and SM 2340B) Water:
No analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
Responses exceeding the instrument's linear range were observed for magnesium and sodium in the MS/MSD of 1349MW01 (lab # 193108-007). High % differences were observed for calcium, manganese, and sodium in the serial dilution of 1047MW101 (lab # 193108-001) and the serial dilution of 1349MW01 (lab # 193108-007). Lead was detected above the RL in the method blank for batch 122987; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
Low recoveries were observed for sulfide in the MS/MSD of 1047MW101 (lab # 193108-001) and the MS/MSD of 1065PZ3A (lab # 193108-017); the LCS was within limits. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193108
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/02/07
Samples Received:	03/02/07

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

Surfactants (MBAS) (EPA 425.1):
This analysis was not detected on the COC until after the analyst became unavailable for the weekend. The samples were analyzed as soon as possible on Monday, one and two days past the recommended hold time; affected data was qualified with "b". No analytical problems were encountered.

Chain of Custody

193108

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2188
Page: 1 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): [signature]
Sent to Laboratory (Name): CFT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) /MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (15)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX/MTBE	Total Sulfide	TPHss (8015M)	dissolved metals (23)	PCB's 8082	dissolved metals (22)	COMMENTS / NOTES
1	1047 MW101	3/1/07	930			X		27		3		9	X			X	X		X		X			X	X				Collected MS/MSD
2	1065 PZ 4B		1200			X		3		1		5	X	X	X		X		X		X		X	X					
3	1065 PZ 7B		1245			X		3		1		5	X	X	X		X		X		X		X	X					
4	1065 PZ 5AR		1320			X		3		1		5	X	X	X		X		X		X		X	X					
5	1065 PZ 5B		1405			X		3		1		5	X	X	X		X		X		X		X	X					
6	DUP030107 2A		950			X		9		1		3	X			X	X		X		X			X	X				
7	1349 MW01		820			X		18		3		24	X	X	X	X	X	X			X	X				X			Collected MS/MSD
8	1349 MW100		1120			X		6		1		8	X	X	X	X	X	X			X	X				X	X		
9	DAE GW06		1320			X		3		1		6		X	X	X	X				X	X						X	
	~~DAE GW103~~		~~1540~~			X		6		2		9					X												
10	DUP030107 3A		—			X		6		1		8	X	X	X	X	X	X			X	X				X			
11	DUP030107 3B		—			X		6		1		8	X	X	X	X	X	X			X	X				X	X		
12	1213GW101	3/2/07	850			X		6		1		5	X	X	X	X	X					X						X	

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Sc, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** - 15: Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, NA, Pb, Ni, Zn)

RELINQUISHED BY: [signature]	DATE: 3/2/07	RECEIVED BY: [signature]	DATE: 3/2/7
PRINT NAME: Devin Raynal	FIRM: BTS	TIME: ~~1630~~ 1245	PRINT NAME: ADRIAN GRENIER	FIRM: CFT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193108

CHAIN OF CUSTODY RECORD
PRESIDIO OF SAN FRANCISCO

COC No. OP 2187
Page: 2 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS Pete Connish
Recorder (signature required): Pete
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260) MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 13, 9, 8, 7, 3, Other)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	PCBs 8082	Cyanide	Dissolved Metals 15	BTEX, MTBE	Total Sulfide	Molybdenum	COMMENTS / NOTES
13 DAEGW08	3/1/07	1612			X		6		1		8	X	X	X	X	X	X	X		X	X	X						
14 LF01GW04		1502			X				1	1	2					X		X		X			X					
15 1065 PZ 1A		1338			X		6		1		5	X	X	X	X	X				X				X		X		
16 1065 PZ 2A		1032			X		3		1		5	X	X	X		X				X				X	X	X		MS/MSD
17 1065 PZ 3A		908			X		9		3		15	X	X	X		X				X				X	X	X		
18 1065 PZ 4A		1112			X		3		1		5	X	X	X		X				X				X	X	X		
19 1065MW101		1150			X		3		1		5	X	X	X	X	X				X				X		X		
20 1065MW102		1238			X		6		1		5	X	X	X	X	X				X				X		X		
21 TB0301073A		—			X		2								X													
22 DAEGW103		1540			X		6		2		9	X	X	X	X	X	X			X	X	X					X	See below

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn))
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - X 15 Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni, Zn

RELINQUISHED BY: Pete	DATE: 3/2/07	RECEIVED BY: [signature]	DATE: 3/2/7
PRINT NAME: Pete Connish	FIRM: BTS / TIME: 1245	PRINT NAME: AARON CENTER	FIRM: C&T / TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM: / TIME:	PRINT NAME:	FIRM: / TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
Also run for: dissolved metals (23), MBAS, Total Hardness on DAEGW03

Method of Shipment: Courier rec'd, intact, cold Ag

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

193108

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2191
Page: 3 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS B.Summersett
Recorder (signature required):
Sent to Laboratory (Name): CAT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260) MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	MBA's	Total Hardness	Molybdenum	PCBs 8082	dissolved metals (22)	COMMENTS / NOTES
23	DAEGW104	3-2	930			X		18		6		27	X	X	X	X	X	X	X		X	X	X	X	X	X		MS/MSD
24	DAEGW101		750			X		6		1		3	X			X			X		X	X						low volume on Ambers liter
25	DAEGW03		940			X		6		1		8	X	X	X	X	X	X			X	X				X	X	
26	DAEGW05		840			X		6		1		8	X	X	X	X	X	X			X	X				X	X	
27	DAP030207 1A		940			X		6		2		9	X	X	X	X	X	X	X		X	X	X	X	X	X		

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other -**)

RELINQUISHED BY:	DATE: 3-2-07	RECEIVED BY:	DATE: 3/2/7
PRINT NAME: B.Summersett FIRM: BTS	TIME: 1245	PRINT NAME: Aaron Greenlee FIRM: CAT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment: courier rec'd w/ T&R to lab

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

193108

Steve Stanley

From: "Billy Jones" <wjones@blainetech.com>
To: "Steve Stanley" <steve@ctberk.com>
Cc: "Sucheon Sung" <ssung@blainetech.com>
Sent: Wednesday, March 07, 2007 4:47 PM
Subject: COC Correction

Steve,
Please change the sample ID on T&R Presidio COC #2187 which was submitted on 3/1/07.

Incorrect ID was listed as LF01GW04. Please change to LF02GW04. Contact us if you have any questions.
Thanks,
Billy

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193108 Date Received: 3-02-07 Number of Coolers: 11
Client: TREADWELL Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-02-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 1 over lip of cooler Seal date: 3-2-07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 4.1°C 2.8°C, 3.4°, 2.5° 3.8, 3.8, 4.4°, 3.7°, 3.0°, 4.5°, 3.6°

B. Login Phase
Date Logged In: 3-02-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziplock Bag VOA's in foam
2. Did all bottles arrive unbroken? ..... YES NO ★
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
★ Sample - 011 2 VOA's broken
7.) sample - 024 low Volume in Ambers
6.) HNO_3 (C49025) added to sample -008, -027,

Rev. 1, 4/95

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	122766
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	115	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4B	Batch#:	122918
Lab ID:	193108-002	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.0	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	93	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ7B	Batch#:	122918
Lab ID:	193108-003	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.3	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	101	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5AR	Batch#:	122918
Lab ID:	193108-004	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	82	65-135	EPA 8015B
Bromofluorobenzene (FID)	88	65-135	EPA 8015B
Trifluorotoluene (PID)	84	65-135	EPA 8021B
Bromofluorobenzene (PID)	88	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5B	Batch#:	122918
Lab ID:	193108-005	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.6	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	65-135	EPA 8015B
Bromofluorobenzene (FID)	98	65-135	EPA 8015B
Trifluorotoluene (PID)	98	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301072A	Batch#:	122766
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	122766
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	122766
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

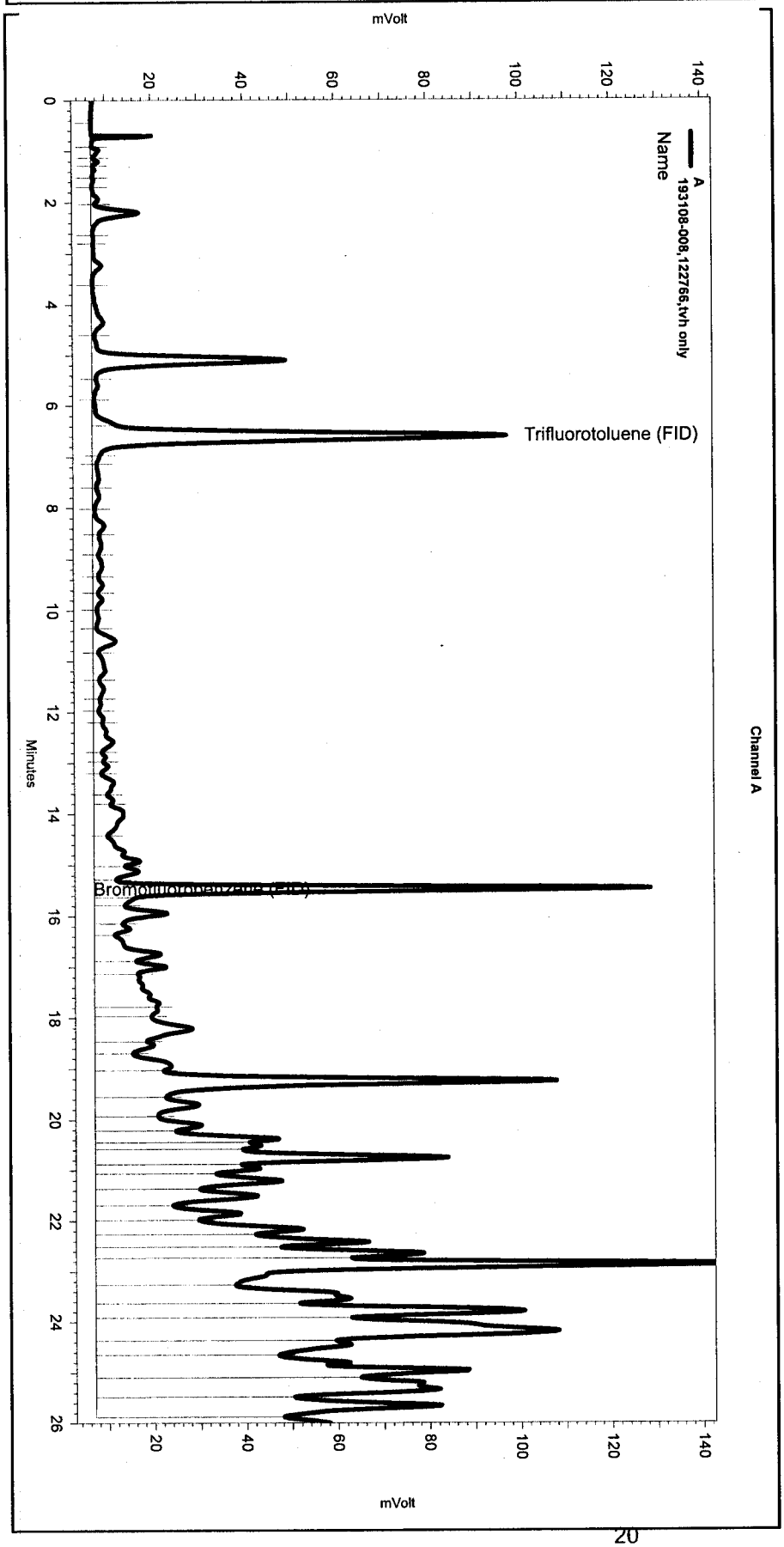
Analyte	Result	RL
Gasoline C7-C12	1,200 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	123	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-008,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_010
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 5:11:27 PM
Analysis Date: 3/7/2007 8:33:08 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: G1.3



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	6.376	0	0
Yes	Split Peak	6.966	0	0
Yes	Split Peak	15.638	0	0

1349 MW 100

20

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301073A	Batch#:	122766
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0301073B	Batch#:	122766
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

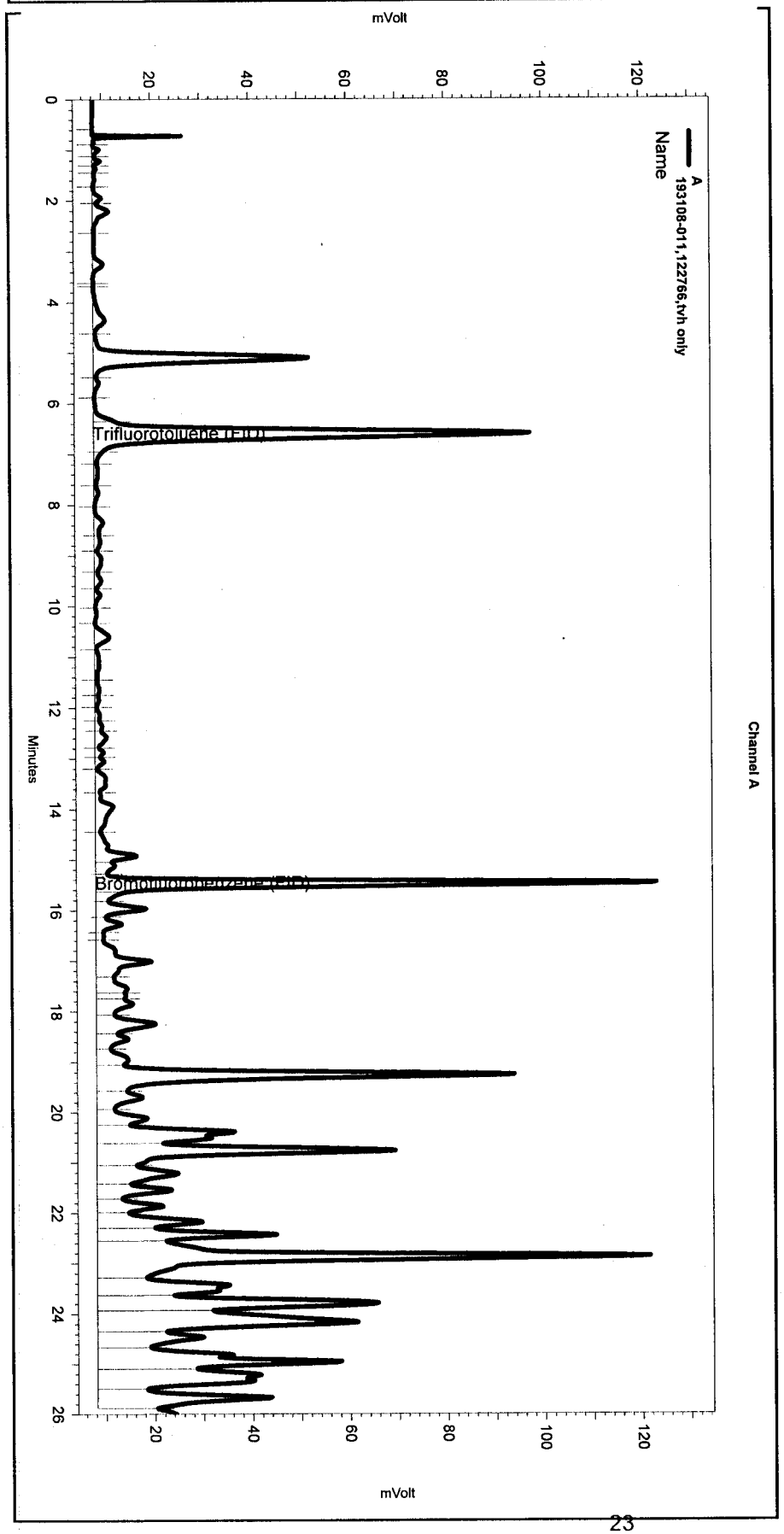
Analyte	Result	RL
Gasoline C7-C12	620 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	115	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-011,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_012
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 6:23:48 PM
Analysis Date: 3/7/2007 8:33:15 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: C1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	6.343	0	0
Yes	Split Peak	6.955	0	0
Yes	Split Peak	15.636	0	0

DUP 0301073B

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	122766
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW08	Batch#:	122766
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1A	Batch#:	122766
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

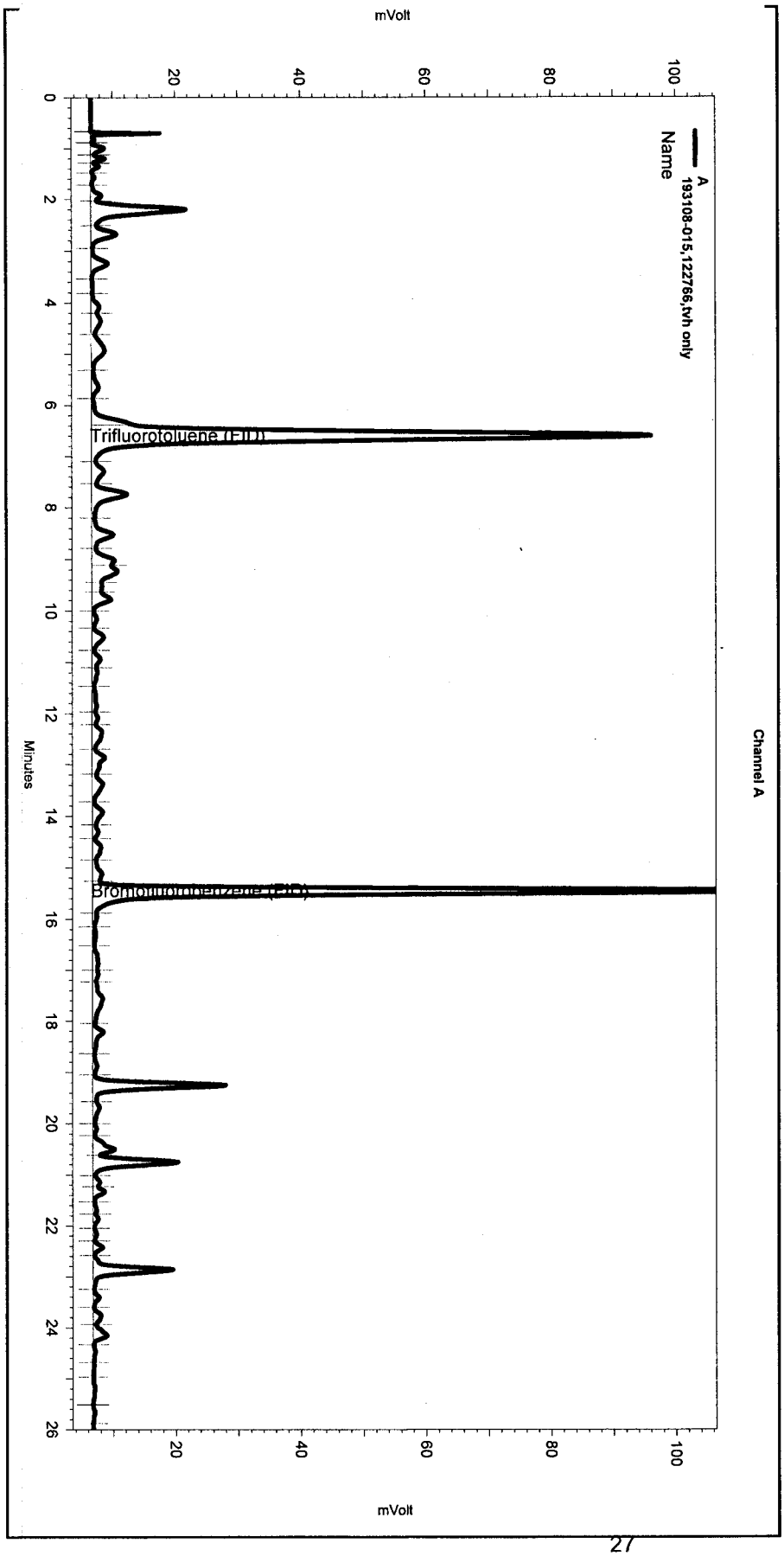
Analyte	Result	RL
Gasoline C7-C12	140 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	116	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **193108-015,122766,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_026
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/7/2007 2:51:05 AM
Analysis Date: 3/7/2007 8:34:10 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: C1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_026

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.377	0	0

1065 PZ 1A

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ2A	Batch#:	122918
Lab ID:	193108-016	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	88	65-135	EPA 8015B
Bromofluorobenzene (FID)	93	65-135	EPA 8015B
Trifluorotoluene (PID)	88	65-135	EPA 8021B
Bromofluorobenzene (PID)	93	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ3A	Batch#:	122918
Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.5	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	102	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4A	Batch#:	122918
Lab ID:	193108-018	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	86	65-135	EPA 8015B
Bromofluorobenzene (FID)	91	65-135	EPA 8015B
Trifluorotoluene (PID)	86	65-135	EPA 8021B
Bromofluorobenzene (PID)	91	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW101	Batch#:	122766
Lab ID:	193108-019	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	118	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW102	Batch#:	122766
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	112	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW103	Batch#:	122766
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	122766
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW101	Batch#:	122766
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW03	Batch#:	122766
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW05	Batch#:	122766
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0302071A	Batch#:	122766
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377779	Batch#:	122766
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378402	Batch#:	122918
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

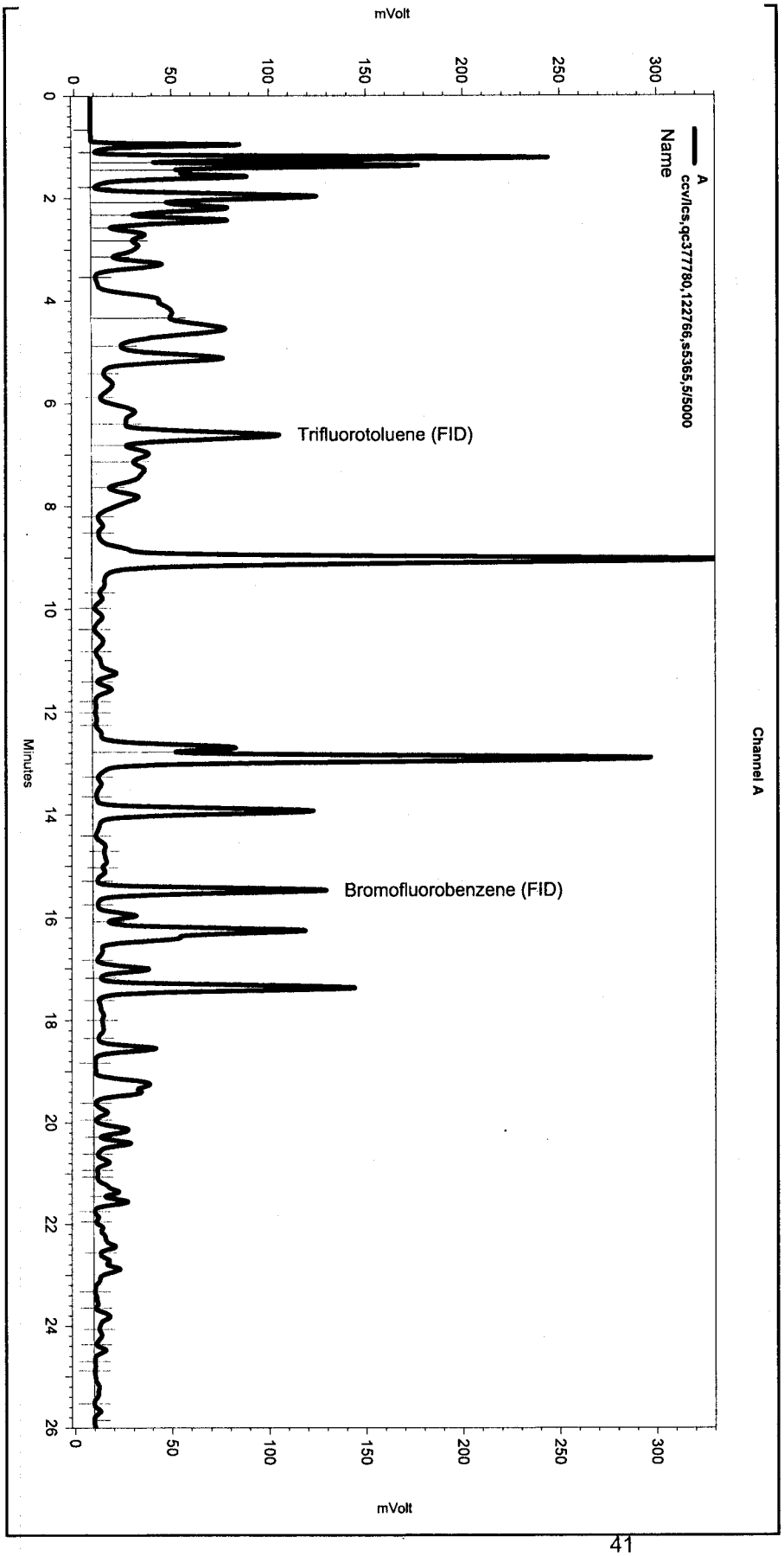
Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	65-135	EPA 8015B
Bromofluorobenzene (FID)	97	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	94	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq**
Sample Name: **ccv/lcs,qc377780,122766,s5365,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\065_002**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 10:13:19 AM
Analysis Date: 3/7/2007 8:32:34 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

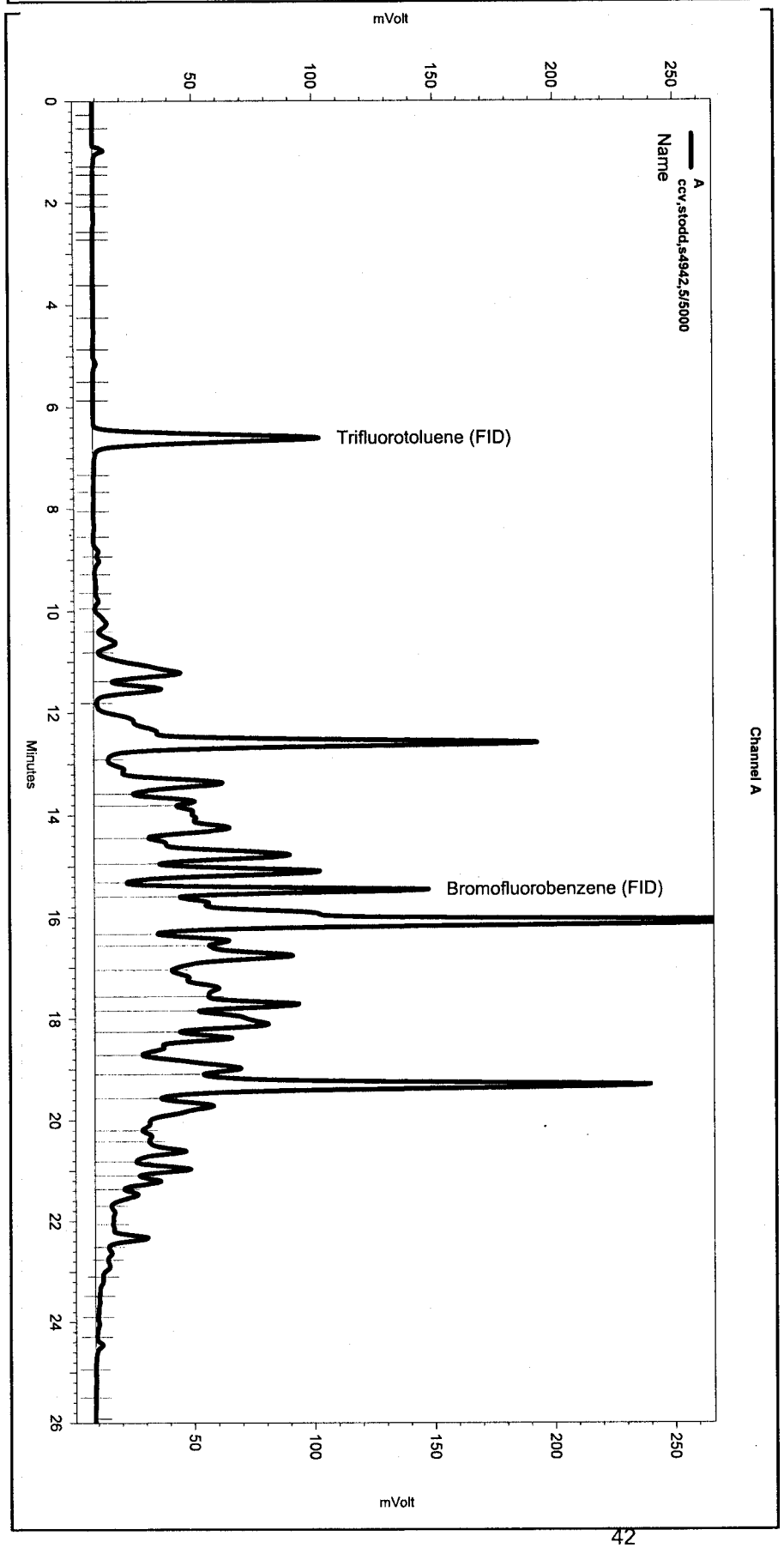
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Gasoline

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\065.seq
Sample Name: **ccv,stodd,s4942,5/5000**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_003
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/6/2007 11:40:43 AM
Analysis Date: 3/7/2007 8:32:39 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\065_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Stoddard Solvent

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377780	Batch#:	122766
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,937	97	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	117	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378405	Batch#:	122918
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,879	94	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	116	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	122918
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC378403

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.62	103	65-135
Benzene	20.00	21.34	107	65-135
Toluene	20.00	20.69	103	65-135
Ethylbenzene	20.00	21.76	109	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	65-135
Bromofluorobenzene (PID)	97	65-135

Type: BSD Lab ID: QC378404

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.03	95	65-135	8	35
Benzene	20.00	21.16	106	65-135	1	35
Toluene	20.00	20.38	102	65-135	2	35
Ethylbenzene	20.00	20.92	105	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (PID)	88	65-135
Bromofluorobenzene (PID)	92	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3A	Batch#:	122918
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378406

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	8.222	2,000	1,918	96	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	120	65-135

Type: MSD Lab ID: QC378407

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,931	96	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	122	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	122766
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/10/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377781

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	30.51	2,000	2,030	100	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	65-135
Bromofluorobenzene (FID)	128	65-135

Type: MSD Lab ID: QC377782

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,841	91	65-135	10	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	129	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	122766
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377783

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.74	2,000	1,888	93	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	113	65-135

Type: MSD Lab ID: QC377784

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,832	91	65-135	3	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	112	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	122766
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377785

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	23.26	2,000	1,852	91	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	114	65-135

Type: MSD Lab ID: QC377786

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,823	90	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	111	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 327063206001
Units : ng

Name : GC07 TVH 043
Date : 12-FEB-2007 16:37
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043_007	327063206007	TVH_1	12-FEB-2007 16:37	S5078 (1000X), S5029 (5000X)
L2	043_008	327063206008	TVH_2	12-FEB-2007 17:14	S5077 (1000X), S5029 (5000X)
L3	043_009	327063206009	TVH_3	12-FEB-2007 17:50	S5076 (1000X), S5029 (5000X)
L4	043_010	327063206010	TVH_4	12-FEB-2007 18:26	S5075 (2000X), S5029 (5000X)
L5	043_017	327063206017	TVH_5	13-FEB-2007 12:20	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1954.2	1665.2	1659.1	1714.5	1763.8	AVRG		5.71E-4		1751.4	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

50

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327063206001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8015B

Inst : GC07 Name : GC07 TVH 043
Calnum : 327063206001 Cal Date: 12-FEB-2007

ICV 327063206019 (043_019 13-FEB-2007) stds: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1751.4	1746.5	10000	9972	ng	0	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC07
Calnum : 327074193001
Units : ng

Name : GC07 STODDARD 051
Date : 20-FEB-2007 14:22
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_004	327074193004	STODD	20-FEB-2007 14:22	S4942 (1000X), S5029 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Stoddard Solvent C7-C12	A	2540.3	AVRG		3.94E-4		2540.3	0	0.995	20	

Analyte Spiked Amounts	Ch	L1	Units
Stoddard Solvent C7-C12	A	10000	ng

JCP 02/21/07 : 25402572 / 10000 = 2540.2572 = 2540.3

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Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	
Trifluorotoluene (PID)	B	1665.0	1682.0	1655.7	1654.7	1576.4	AVRG		6.07E-4		1646.8	2	0.995	20	
Bromofluorobenzene (PID)	B	4178.5	4347.3	4132.7	4316.5	4159.9	AVRG		2.37E-4		4227.0	2	0.995	20	
Trifluorotoluene (PID)	C	280.55	299.47	313.70	318.56	304.47	AVRG		0.00330		303.35	5	0.995	20	
Bromofluorobenzene (PID)	C	770.41	843.26	849.70	916.75	878.28	AVRG		0.00117		851.68	6	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327026521002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

54

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8021B

Inst : GC19
Calnum: 347094532001
Units : ng

Name : GC19 MBTXE 065
Date : 07-MAR-2007 00:19
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_015	347094532015	BTXE_1	07-MAR-2007 00:19	S5559 (1000X), S5345 (5000X)
L2	065_016	347094532016	BTXE_2	07-MAR-2007 00:57	S5558 (1250X), S5345 (5000X)
L3	065_017	347094532017	BTXE_3	07-MAR-2007 01:34	S5558 (500X), S5345 (5000X)
L4	065_018	347094532018	BTXE_4	07-MAR-2007 02:12	S5558 (125X), S5345 (5000X)
L5	065_019	347094532019	BTXE_5	07-MAR-2007 02:50	S5557 (1000X), S5345 (5000X)
L6	065_020	347094532020	BTXE_6	07-MAR-2007 03:27	S5557 (500X), S5345 (5000X)
L7	065_021	347094532021	BTXE_7	07-MAR-2007 04:05	S5557 (250X), S5345 (5000X)
L8	065_022	347094532022	MTBE_7	07-MAR-2007 04:43	S4993 (500X), S5345 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		3844.7	2928.8	2729.5	2707.7	2723.5	2789.1	2700.5	AVRG		3.43E-4		2917.7	14	0.995	20	
Benzene	B	15283	14070	13944	13606	13542	13399	13426		AVRG		7.20E-5		13895	5	0.995	20	
Toluene	B	17218	13683	13277	12748	12668	12299	12327		AVRG		7.43E-5		13460	13	0.995	20	
Ethylbenzene	B	12304	10889	11222	10989	11072	10619	10982		AVRG		8.97E-5		11154	5	0.995	20	
m,p-Xylenes	B	17544	14979	14768	14800	14896	14597	14193		AVRG		6.62E-5		15111	7	0.995	20	
o-Xylene	B	11831	10709	10758	10813	10894	10576	10704		AVRG		9.18E-5		10898	4	0.995	20	
MTBE	C		1161.4	849.60	882.72	1003.0	1059.5	1121.2	1126.9	AVRG		9.72E-4		1029.2	12	0.995	20	
Benzene	C	3050.8	2644.0	2630.1	2881.1	3091.0	3125.4	3166.7		AVRG		3.40E-4		2941.3	8	0.995	20	
Toluene	C	2697.2	2425.0	2498.8	2660.0	2896.6	2894.8	2940.4		AVRG		3.68E-4		2716.1	8	0.995	20	
Ethylbenzene	C	2160.4	2122.9	2208.3	2377.6	2637.4	2615.1	2656.7		AVRG		4.17E-4		2396.9	10	0.995	20	
m,p-Xylenes	C	2953.2	2781.4	2898.4	3066.5	3354.7	3334.8	3386.1		AVRG		3.21E-4		3110.7	8	0.995	20	
o-Xylene	C	2044.4	2043.3	2070.3	2247.6	2482.0	2485.6	2568.8		AVRG		4.39E-4		2277.4	10	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCVOA Water
EPA 8021B

Inst : GC19 Name : GC19 MBTXE 065
Calnum : 347094532001 Cal Date: 07-MAR-2007

ICV 347094532024 (065_024 07-MAR-2007) stds: S5206 (1000X), S5345 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2917.7	2567.6	100.0	88.00	ng	-12	15	
Benzene	B	13895	14504	100.0	104.4	ng	4	15	
Toluene	B	13460	13478	100.0	100.1	ng	0	15	
Ethylbenzene	B	11154	11607	100.0	104.1	ng	4	15	
m,p-Xylenes	B	15111	13169	200.0	174.3	ng	-13	15	
o-Xylene	B	10898	10825	100.0	99.33	ng	-1	15	
MTBE	C	1029.2	949.05	100.0	92.21	ng	-8	15	
Benzene	C	2941.3	3165.2	100.0	107.6	ng	8	15	
Toluene	C	2716.1	2916.1	100.0	107.4	ng	7	15	
Ethylbenzene	C	2396.9	2583.1	100.0	107.8	ng	8	15	
m,p-Xylenes	C	3110.7	2985.0	200.0	191.9	ng	-4	15	
o-Xylene	C	2277.4	2318.9	100.0	101.8	ng	2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347094532002
Units : ng

Name : GC19 TFT/BFB 065
Date : 07-MAR-2007 09:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_027	347094532027	TFT/BFB_1	07-MAR-2007 09:08	S5343 (5000X)
L2	065_028	347094532028	TFT/BFB_2	07-MAR-2007 09:48	S5344 (5000X)
L3	065_029	347094532029	TFT/BFB_3	07-MAR-2007 10:26	S5665 (5000X)
L4	065_030	347094532030	TFT/BFB_4	07-MAR-2007 11:04	S5346 (5000X)
L5	065_031	347094532031	TFT/BFB_5	07-MAR-2007 11:51	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1826.5	1624.8	1951.7	1889.3	1699.3	AVRG		5.56E-4		1798.3	7	0.995	20	
Bromofluorobenzene (FID)	A	788.41	783.36	1016.4	990.66	931.50	AVRG		0.00111		902.06	12	0.995	20	
Trifluorotoluene (PID)	B	4840.6	4318.4	5159.2	4899.1	4464.0	AVRG		2.11E-4		4736.3	7	0.995	20	
Bromofluorobenzene (PID)	B	6754.1	6717.9	8691.5	8480.4	7857.3	AVRG		1.30E-4		7700.2	12	0.995	20	
Trifluorotoluene (PID)	C	976.64	880.75	1115.3	1078.4	999.08	AVRG		9.90E-4		1010.0	9	0.995	20	
Bromofluorobenzene (PID)	C	1447.6	1451.4	1943.2	1912.3	1774.9	AVRG		5.86E-4		1705.9	14	0.995	20	

GS Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532002

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: QC377780 IDF : 1.0
Seqnum : 327094177002.2 File : 065_002 Time : 06-MAR-2007 10:13
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1696.2	10000	9685	ng	-3	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2749.3	450.0	550.9	ng	**22**	15	c+ u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2049.9	450.0	528.5	ng	**17**	15	c+ u
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1821.9	450.0	2703 >LR	ng	**501**	15	>LR c+ ***
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	948.87	450.0	259.3	ng	**-42**	15	c-
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4478.4	450.0	2366 >LR	ng	**426**	15	>LR c+ ***
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2373.2	450.0	252.6	ng	**-44**	15	c-

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135% [general version]

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131% [general version]

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327094177003 File : 065_003 Time : 06-MAR-2007 11:40
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2814.4	10000	11080	ng	11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2359.3	450.0	472.8	ng	5	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2623.1	450.0	676.3	ng	**50**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	855.45	450.0	233.8	ng	**-48**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2611.8	450.0	278.1	ng	**-38**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1488.3	450.0	2208	ng	**391**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5866.7	450.0	3100	ng	**589**	15	>LR c+ ***

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177014 File : 065_014 Time : 06-MAR-2007 19:36
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1633.5	15000	13990	ng	-7	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2719.4	450.0	544.9	ng	**21**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2008.5	450.0	517.8	ng	15	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	914.18	450.0	249.8	ng	**-44**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2214.5	450.0	235.8	ng	**-48**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2027.0	450.0	3007	ng	**568**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4202.6	450.0	2221	ng	**393**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177015 File : 065_015 Time : 06-MAR-2007 20:12
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1666.2	15000	14270	ng	-5	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2886.9	450.0	578.5	ng	**29**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2064.2	450.0	532.2	ng	**18**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	992.93	450.0	271.3	ng	**-40**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2278.2	450.0	242.5	ng	**-46**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2054.4	450.0	3048	ng	**577**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4275.0	450.0	2259	ng	**402**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327094177016 File : 065_016 Time : 06-MAR-2007 20:48
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2573.8	10000	10130	ng	1	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2419.6	450.0	484.8	ng	8	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2533.9	450.0	653.3	ng	**45**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	827.43	450.0	226.1	ng	**-50**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2385.4	450.0	253.9	ng	**-44**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1411.3	450.0	2094	ng	**365**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5094.8	450.0	2692	ng	**498**	15	>LR c+ ***

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177028 File : 065_028 Time : 07-MAR-2007 04:03
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1536.8	20000	17550	ng	-12	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2644.6	450.0	529.9	ng	**18**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2010.3	450.0	518.3	ng	15	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	908.06	450.0	248.1	ng	**-45**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2134.2	450.0	227.2	ng	**-50**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1999.0	450.0	2965	ng	**559**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4058.3	450.0	2144	ng	**377**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177029 File : 065_029 Time : 07-MAR-2007 04:39
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1581.0	20000	18050	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2859.6	450.0	573.0	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2082.8	450.0	537.0	ng	**19**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	1003.9	450.0	274.3	ng	**-39**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2249.4	450.0	239.5	ng	**-47**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2171.1	450.0	3221	ng	**616**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4300.3	450.0	2272	ng	**405**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327094177037 File : 065_037 Time : 07-MAR-2007 10:27
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1595.7	15000	13670	ng	-9	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2684.1	450.0	537.8	ng	**20**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1995.9	450.0	514.6	ng	14	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	907.62	450.0	248.0	ng	**-45**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	2176.5	450.0	231.7	ng	**-49**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1915.4	450.0	2841	ng	**531**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4231.7	450.0	2236	ng	**397**	15	>LR c+ ***

JCP 03/07/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/07/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778012 File : 071_012 Time : 12-MAR-2007 19:45
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1573.2	15000	13470	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2502.7	450.0	501.5	ng	11	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1939.1	450.0	499.9	ng	11	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	785.42	450.0	214.6	ng	**-52**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1932.0	450.0	205.7	ng	**-54**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2205.9	450.0	3272	ng	**627**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4706.0	450.0	2487	ng	**453**	15	>LR c+ ***

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: CW Date: 03/13/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778013 File : 071_013 Time : 12-MAR-2007 20:21
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1558.1	15000	13350	ng	-11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2547.4	450.0	510.5	ng	13	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1908.8	450.0	492.1	ng	9	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	804.08	450.0	219.7	ng	**-51**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1908.9	450.0	203.2	ng	**-55**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2287.9	450.0	3394	ng	**654**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4611.4	450.0	2437	ng	**441**	15	>LR c+ ***

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327102778024 File : 071_024 Time : 13-MAR-2007 02:59
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1598.9	20000	18260	ng	-9	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2913.9	450.0	583.9	ng	**30**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2091.0	450.0	539.1	ng	**20**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	882.31	450.0	241.1	ng	**-46**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1994.5	450.0	212.3	ng	**-53**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2345.7	450.0	3480	ng	**673**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4743.0	450.0	2506	ng	**457**	15	>LR c+ ***

JCP 03/13/07 [Trifluorotoluene (FID) A]: Passes limits of 72-136%

JCP 03/13/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/13/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias -=low bias >LR=overrange c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378405 IDF : 1.0
Seqnum : 347098705002.1 File : 068_002 Time : 09-MAR-2007 13:43
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1474.5	10000	9397	ng	-6	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1910.1	450.0	478.0	ng	6	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1049.6	450.0	523.6	ng	**16**	15	c+ u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5437.2	450.0	516.6	ng	15	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1227.0	450.0	546.6	ng	**21**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8852.4	450.0	517.3	ng	15	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1973.2	450.0	520.5	ng	**16**	15	c+

JCP 03/12/07 : Trifluorotoluene (PID) C passes limits of 65-135% [general version]

JCP 03/12/07 : Bromofluorobenzene (PID) C passes limits of 78-121% [general version]

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378403 IDF : 1.0
Seqnum : 347098705004.1 File : 068_004 Time : 09-MAR-2007 14:58
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	3007.5	100.0	103.1	ng	3	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	931.66	100.0	90.52	ng	-9	15	
Benzene	B	347094532001	07-MAR-2007	13895	14828	100.0	106.7	ng	7	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	3145.7	100.0	106.9	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13925	100.0	103.5	ng	3	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2920.0	100.0	107.5	ng	8	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12133	100.0	108.8	ng	9	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2597.0	100.0	108.3	ng	8	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15792	100.0	104.5	ng	5	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3343.3	100.0	107.5	ng	7	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11611	100.0	106.5	ng	7	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2427.7	100.0	106.6	ng	7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1636.2	450.0	409.4	ng	-9	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	871.86	450.0	434.9	ng	-3	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4285.8	450.0	407.2	ng	-10	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	914.48	450.0	407.4	ng	-9	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7434.2	450.0	434.5	ng	-3	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1634.0	450.0	431.0	ng	-4	15	

Analyst: JCP Date: 03/13/07 Reviewer: MCH Date: 03/14/07

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705013 File : 068_013 Time : 09-MAR-2007 21:58
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1745.7	450.0	436.8	ng	-3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	963.61	450.0	480.7	ng	7	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	3167.0	150.0	162.8	ng	9	15	
Benzene	B	347094532001	07-MAR-2007	13895	14974	150.0	161.6	ng	8	15	
Toluene	B	347094532001	07-MAR-2007	13460	13840	150.0	154.2	ng	3	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12110	150.0	162.9	ng	9	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15698	150.0	155.8	ng	4	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11656	150.0	160.4	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4675.1	450.0	444.2	ng	-1	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8282.6	450.0	484.0	ng	8	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	710.07	150.0	103.5	ng	**-31**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	3156.8	150.0	161.0	ng	7	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2911.7	150.0	160.8	ng	7	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2581.3	150.0	161.5	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3297.4	150.0	159.0	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2427.1	150.0	159.9	ng	7	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	970.26	450.0	432.3	ng	-4	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1776.5	450.0	468.6	ng	4	15	

JCP 03/12/07 : MTBE fails %D low on ChC. Report MTBE from ChB. ChC is for confirm only.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705014 File : 068_014 Time : 09-MAR-2007 22:36
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1684.2	450.0	421.4	ng	-6	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	930.80	450.0	464.3	ng	3	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2872.7	150.0	147.7	ng	-2	15	
Benzene	B	347094532001	07-MAR-2007	13895	14853	150.0	160.3	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13740	150.0	153.1	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11736	150.0	157.8	ng	5	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15998	150.0	158.8	ng	6	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11650	150.0	160.4	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4505.2	450.0	428.0	ng	-5	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8044.1	450.0	470.1	ng	4	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	679.34	150.0	99.01	ng	**-34**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	3114.3	150.0	158.8	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2880.7	150.0	159.1	ng	6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2573.4	150.0	161.0	ng	7	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3295.0	150.0	158.9	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2431.5	150.0	160.1	ng	7	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	929.27	450.0	414.0	ng	-8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1725.1	450.0	455.1	ng	1	15	

JCP 03/12/07 : MTBE fails %D low on ChC. Report MTBE from ChB. ChC is for confirm only.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

-=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705015 File : 068_015 Time : 09-MAR-2007 23:13
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1473.4	15000	14080	ng	-6	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1975.0	450.0	494.2	ng	10	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1123.2	450.0	560.3	ng	**25**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5403.4	450.0	513.4	ng	14	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9411.7	450.0	550.0	ng	**22**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1279.4	450.0	570.0	ng	**27**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2080.2	450.0	548.8	ng	**22**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705016 File : 068_016 Time : 09-MAR-2007 23:51
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1448.3	15000	13850	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2072.7	450.0	518.7	ng	15	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1138.2	450.0	567.8	ng	**26**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5499.7	450.0	522.5	ng	**16**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9596.9	450.0	560.8	ng	**25**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1322.0	450.0	589.0	ng	**31**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2142.3	450.0	565.1	ng	**26**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705029 File : 068_029 Time : 10-MAR-2007 08:00
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1719.9	450.0	430.4	ng	-4	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	953.80	450.0	475.8	ng	6	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2698.1	200.0	184.9	ng	-8	15	
Benzene	B	347094532001	07-MAR-2007	13895	14666	200.0	211.1	ng	6	15	
Toluene	B	347094532001	07-MAR-2007	13460	13623	200.0	202.4	ng	1	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11686	200.0	209.5	ng	5	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15884	200.0	210.2	ng	5	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11529	200.0	211.6	ng	6	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4596.2	450.0	436.7	ng	-3	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8020.4	450.0	468.7	ng	4	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	997.50	200.0	193.8	ng	-3	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3119.2	200.0	212.1	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2876.2	200.0	211.8	ng	6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2579.6	200.0	215.2	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3288.0	200.0	211.4	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2415.2	200.0	212.1	ng	6	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	929.10	450.0	413.9	ng	-8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1694.8	450.0	447.1	ng	-1	15	

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705030 File : 068_030 Time : 10-MAR-2007 08:38
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1679.7	450.0	420.3	ng	-7	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	915.51	450.0	456.7	ng	1	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2911.7	200.0	199.6	ng	0	15	
Benzene	B	347094532001	07-MAR-2007	13895	14684	200.0	211.4	ng	6	15	
Toluene	B	347094532001	07-MAR-2007	13460	13749	200.0	204.3	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11794	200.0	211.5	ng	6	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15375	200.0	203.5	ng	2	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11440	200.0	210.0	ng	5	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4469.9	450.0	424.7	ng	-6	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7901.2	450.0	461.7	ng	3	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	1033.0	200.0	200.7	ng	0	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3119.8	200.0	212.1	ng	6	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2862.1	200.0	210.7	ng	5	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2548.4	200.0	212.6	ng	6	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3223.8	200.0	207.3	ng	4	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2400.5	200.0	210.8	ng	5	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	902.37	450.0	402.0	ng	-11	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1671.5	450.0	440.9	ng	-2	15	

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705031 File : 068_031 Time : 10-MAR-2007 09:16
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1441.4	20000	18370	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1875.8	450.0	469.4	ng	4	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1049.9	450.0	523.8	ng	**16**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5058.5	450.0	480.6	ng	7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8626.9	450.0	504.2	ng	12	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1238.5	450.0	551.8	ng	**23**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1901.1	450.0	501.5	ng	11	15	

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limit sof 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705032 File : 068_032 Time : 10-MAR-2007 09:53
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1456.3	20000	18560	ng	-7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2061.3	450.0	515.8	ng	15	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1163.4	450.0	580.4	ng	**29**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5667.6	450.0	538.5	ng	**20**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9666.6	450.0	564.9	ng	**26**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1391.8	450.0	620.1	ng	**38**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2165.4	450.0	571.2	ng	**27**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347098705044 File : 068_044 Time : 10-MAR-2007 17:24
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1821.2	450.0	455.7	ng	1	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	998.70	450.0	498.2	ng	11	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	3003.8	150.0	154.4	ng	3	15	
Benzene	B	347094532001	07-MAR-2007	13895	14916	150.0	161.0	ng	7	15	
Toluene	B	347094532001	07-MAR-2007	13460	13788	150.0	153.7	ng	2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11974	150.0	161.0	ng	7	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15524	150.0	154.1	ng	3	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11538	150.0	158.8	ng	6	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4820.5	450.0	458.0	ng	2	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8379.8	450.0	489.7	ng	9	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	972.89	150.0	141.8	ng	-5	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3186.9	150.0	162.5	ng	8	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2921.8	150.0	161.4	ng	8	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2590.1	150.0	162.1	ng	8	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3292.5	150.0	158.8	ng	6	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2423.4	150.0	159.6	ng	6	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1005.0	450.0	447.7	ng	-1	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1810.0	450.0	477.5	ng	6	15	

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347098705046 File : 068_046 Time : 10-MAR-2007 18:40
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1400.4	15000	13390	ng	-11	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2001.9	450.0	500.9	ng	11	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1093.4	450.0	545.4	ng	**21**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5100.0	450.0	484.6	ng	8	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8956.9	450.0	523.4	ng	**16**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1242.5	450.0	553.6	ng	**23**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1989.1	450.0	524.7	ng	**17**	15	c+

JCP 03/12/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/12/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/12/07 Reviewer: MCH Date: 03/14/07

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	018_001	X	IB			01/18/07 10:01	1.0	1	
002	018_002	X	IB			01/18/07 10:49	1.0	1	
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1	
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1	
005	018_005	X	IB			01/18/07 18:01	1.0	1	
006	018_006	X	IB			01/18/07 18:37	1.0	1	
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1	
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1	
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1	
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1	
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1	
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1	
013	018_013	X	IB			01/18/07 22:54	1.0	1	
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1	
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1	
016	018_016	X	IB			01/19/07 00:43	1.0	1	
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1	
018	018_018	X	IB			01/19/07 01:56	1.0	1	
019	018_019	X	IB			01/19/07 02:32	1.0	1	
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1	
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1	
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1	
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1	
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1	
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1	
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1	
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1	
028	018_028	X	IB			01/19/07 08:41	1.0	1	
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1	
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1	
031	018_031	X	IB			01/19/07 12:18	1.0	1	
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15	
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16	
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17	
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18	
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19	

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327063206

Instrument : GC07 Begun : 02/12/07 08:31
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043_001	X	IB			02/12/07 08:31	1.0	1	
002	043_002	X	CCV			02/12/07 09:08	1.0	2 1	
003	043_003	X	CCV			02/12/07 09:44	1.0	3 1	
004	043_004	X	IB			02/12/07 11:42	1.0	1	
005	043_005	X	IB			02/12/07 15:25	1.0	1	
006	043_006	X	ICAL			02/12/07 16:01	1.0	4 1	
007	043_007	ICAL	TVH_1			02/12/07 16:37	1.0	4 1	
008	043_008	ICAL	TVH_2			02/12/07 17:14	1.0	5 1	
009	043_009	ICAL	TVH_3			02/12/07 17:50	1.0	6 1	
010	043_010	ICAL	TVH_4			02/12/07 18:26	1.0	7 1	
011	043_011	X	TVH_5			02/12/07 19:02	1.0	7 1	
012	043_012	X	IB			02/12/07 19:38	1.0	1	
013	043_013	X	ICV			02/12/07 20:14	1.0	3 1	
014	043_014	X	ICV			02/12/07 20:50	1.0	3 1	
015	043_015	X	IB			02/12/07 21:26	1.0	1	
016	043_016	CMARKER	CARBMARK			02/12/07 22:03	1.0	8 9 1	
017	043_017	ICAL	TVH_5			02/13/07 12:20	1.0	7 1	
018	043_018	X	IB			02/13/07 12:56	1.0	1	
019	043_019	ICV	TVH			02/13/07 13:32	1.0	3 1	

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327074193

Instrument : GC07 Begun : 02/20/07 12:33
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	051_001	X	IB			02/20/07 12:33	1.0	1	
002	051_002	X	CCV			02/20/07 13:10	1.0	2 1	
003	051_003	CCV/LCS	QC375803	Soil	122278	02/20/07 13:46	1.0	3 1	
004	051_004	ICAL	STODD			02/20/07 14:22	1.0	4 1	
005	051_005	BLANK	QC375802	Soil	122278	02/20/07 15:14	1.0	1	
006	051_006	MS	QC375804	Soil	122278	02/20/07 15:50	1.0	3 1	
007	051_007	MSD	QC375805	Soil	122278	02/20/07 16:27	1.0	3 1	
008	051_008	MSS	192789-001	Soil	122278	02/20/07 17:30	1.0	1	
009	051_009	SAMPLE	192789-002	Soil	122278	02/20/07 18:06	1.0	1	
010	051_010	SAMPLE	192789-003	Soil	122278	02/20/07 18:42	1.0	1	
011	051_011	SAMPLE	192789-004	Soil	122278	02/20/07 19:18	1.0	1	
012	051_012	CCV	TVH			02/20/07 19:54	1.0	3 1	
013	051_013	CCV	TVH			02/20/07 20:31	1.0	3 1	
014	051_014	CCV	STODD			02/20/07 21:07	1.0	4 1	
015	051_015	CCV	STODD			02/20/07 21:43	1.0	4 1	
016	051_016	CCV	JP4			02/20/07 22:19	1.0	5 1	
017	051_017	CCV	JP4			02/20/07 22:55	1.0	5 1	
018	051_018	MB	QC375836	Water	122286	02/20/07 23:32	1.0	1	
019	051_019	LCS	QC375837	Water	122286	02/21/07 00:08	666.7	1 3	
020	051_020	X	192322-001		122286	02/21/07 00:44	1.0	6 1	
021	051_021	MDL	192322-001	Water	122286	02/21/07 01:20	1.0	6 1	
022	051_022	MDL	192322-002	Water	122286	02/21/07 01:56	1.0	6 1	
023	051_023	MDL	192322-003	Water	122286	02/21/07 02:32	1.0	6 1	
024	051_024	MDL	192322-004	Water	122286	02/21/07 03:08	1.0	6 1	
025	051_025	MDL	192322-005	Water	122286	02/21/07 03:45	1.0	6 1	
026	051_026	MDL	192322-006	Water	122286	02/21/07 04:21	1.0	6 1	
027	051_027	MDL	192322-007	Water	122286	02/21/07 04:57	1.0	6 1	
028	051_028	CCV	TVH			02/21/07 05:33	1.0	3 1	
029	051_029	CCV	TVH			02/21/07 06:09	1.0	3 1	
030	051_030	CCV	JP4			02/21/07 06:45	1.0	5 1	
031	051_031	CCV	JP4			02/21/07 07:21	1.0	5 1	

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S4942 5=S4690 6=S4692

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327094177

Instrument : GC07 Begun : 03/06/07 09:37
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	065_001	X	IB			03/06/07 09:37	1.0	1
002	065_002	CCV/LCS	QC377780	Water	122766	03/06/07 10:13	1.0	2 1
003	065_003	CCV	STODD			03/06/07 11:40	1.0	3 1
004	065_004	BLANK	QC377779	Water	122766	03/06/07 12:16	1.0	1
005	065_005	SAMPLE	193167-001	Water	122766	03/06/07 13:21	1.0	1
006	065_006	MSS	193108-001	Water	122766	03/06/07 14:43	1.0	1
007	065_007	SAMPLE	193108-006	Water	122766	03/06/07 15:19	1.0	1
008	065_008	MSS	193108-007	Water	122766	03/06/07 15:55	1.0	1
009	065_009	SAMPLE	193167-002	Water	122766	03/06/07 16:35	1.0	1
010	065_010	SAMPLE	193108-008	Water	122766	03/06/07 17:11	1.0	1
011	065_011	SAMPLE	193108-010	Water	122766	03/06/07 17:47	1.0	1
012	065_012	SAMPLE	193108-011	Water	122766	03/06/07 18:23	1.0	1
013	065_013	X	IB			03/06/07 18:59	1.0	1
014	065_014	CCV	TVH			03/06/07 19:36	1.0	2 1
015	065_015	CCV	TVH			03/06/07 20:12	1.0	2 1
016	065_016	CCV	STODD			03/06/07 20:48	1.0	3 1
017	065_017	CCV	STODD			03/06/07 21:24	1.0	3 1
018	065_018	MS	QC377781	Water	122766	03/06/07 22:00	1.0	2 1
019	065_019	MSD	QC377782	Water	122766	03/06/07 22:37	1.0	2 1
020	065_020	MS	QC377783	Water	122766	03/06/07 23:13	1.0	2 1
021	065_021	MSD	QC377784	Water	122766	03/06/07 23:49	1.0	2 1
022	065_022	MS	QC377785	Water	122766	03/07/07 00:26	1.0	2 1
023	065_023	MSD	QC377786	Water	122766	03/07/07 01:02	1.0	2 1
024	065_024	SAMPLE	193108-012	Water	122766	03/07/07 01:38	1.0	1
025	065_025	SAMPLE	193108-013	Water	122766	03/07/07 02:14	1.0	1
026	065_026	SAMPLE	193108-015	Water	122766	03/07/07 02:51	1.0	1
027	065_027	SAMPLE	193108-019	Water	122766	03/07/07 03:27	1.0	1
028	065_028	CCV	TVH			03/07/07 04:03	1.0	2 1
029	065_029	CCV	TVH			03/07/07 04:39	1.0	2 1
030	065_030	SAMPLE	193108-020	Water	122766	03/07/07 05:15	1.0	1
031	065_031	SAMPLE	193108-022	Water	122766	03/07/07 05:51	1.0	1
032	065_032	MSS	193108-023	Water	122766	03/07/07 06:27	1.0	1
033	065_033	SAMPLE	193108-024	Water	122766	03/07/07 07:03	1.0	1
034	065_034	SAMPLE	193108-025	Water	122766	03/07/07 08:22	1.0	1
035	065_035	SAMPLE	193108-026	Water	122766	03/07/07 08:58	1.0	1
036	065_036	SAMPLE	193108-027	Water	122766	03/07/07 09:34	1.0	1
037	065_037	CCV	TVH			03/07/07 10:27	1.0	2 1

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5365 3=S4942

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347094532

Instrument : GC19 Begun : 03/06/07 15:32
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	065_001	X	IB			03/06/07 15:32	1.0	1	
002	065_002	X	ICAL			03/06/07 16:09	1.0	2 1	
003	065_003	X	ICAL			03/06/07 16:47	1.0	2 1	
004	065_004	X	ICAL			03/06/07 17:25	1.0	3 1	
005	065_005	X	ICAL			03/06/07 18:02	1.0	3 1	
006	065_006	X	ICAL			03/06/07 18:40	1.0	3 1	
007	065_007	X	ICAL			03/06/07 19:18	1.0	4 1	
008	065_008	X	ICAL			03/06/07 19:55	1.0	4 1	
009	065_009	X	ICAL			03/06/07 20:33	1.0	4 1	
010	065_010	X	ICAL			03/06/07 21:11	1.0	5 1	
011	065_011	X	IB			03/06/07 21:48	1.0	1	
012	065_012	X	ICV			03/06/07 22:26	1.0	6 1	
013	065_013	X	ICV			03/06/07 23:04	1.0	6 1	
014	065_014	X	IB			03/06/07 23:41	1.0	1	
015	065_015	ICAL	BTXE_1			03/07/07 00:19	1.0	2 1	
016	065_016	ICAL	BTXE_2			03/07/07 00:57	1.0	3 1	
017	065_017	ICAL	BTXE_3			03/07/07 01:34	1.0	3 1	
018	065_018	ICAL	BTXE_4			03/07/07 02:12	1.0	3 1	
019	065_019	ICAL	BTXE_5			03/07/07 02:50	1.0	4 1	
020	065_020	ICAL	BTXE_6			03/07/07 03:27	1.0	4 1	
021	065_021	ICAL	BTXE_7			03/07/07 04:05	1.0	4 1	
022	065_022	ICAL	MTBE_7			03/07/07 04:43	1.0	5 1	
023	065_023	X	IB			03/07/07 05:20	1.0	1	
024	065_024	ICV	MBTXE			03/07/07 05:58	1.0	6 1	
025	065_025	X	ICV			03/07/07 06:35	1.0	6 1	
026	065_026	X	IB			03/07/07 08:30	1.0	1	
027	065_027	ICAL	TFT/BFB_1			03/07/07 09:08	1.0	7	
028	065_028	ICAL	TFT/BFB_2			03/07/07 09:48	1.0	8	
029	065_029	ICAL	TFT/BFB_3			03/07/07 10:26	1.0	9	
030	065_030	ICAL	TFT/BFB_4			03/07/07 11:04	1.0	10	
031	065_031	ICAL	TFT/BFB_5			03/07/07 11:51	1.0	11	

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Standards used: 1=S5345 2=S5559 3=S5558 4=S5557 5=S4993 6=S5206 7=S5343 8=S5344 9=S5665 10=S5346 11=S5347

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347098705

Instrument : GC19 Begun : 03/09/07 13:05
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068_001	X	CCV			03/09/07 13:05	1.0	1 2
002	068_002	CCV/LCS	QC378405	Water	122918	03/09/07 13:43	1.0	3 2
003	068_003	CCV	COLEMAN			03/09/07 14:21	1.0	4 2
004	068_004	CCV/BS	QC378403	Water	122918	03/09/07 14:58	1.0	1 2
005	068_005	BLANK	QC378402	Water	122918	03/09/07 16:56	1.0	2
006	068_006	BSD	QC378404	Water	122918	03/09/07 17:34	1.0	1 2
007	068_007	MS	QC378406	Water	122918	03/09/07 18:12	1.0	3 2
008	068_008	MSD	QC378407	Water	122918	03/09/07 18:49	1.0	3 2
009	068_009	SAMPLE	193223-001	Water	122918	03/09/07 19:27	1.0	2
010	068_010	SAMPLE	193223-002	Water	122918	03/09/07 20:05	1.0	2
011	068_011	SAMPLE	193223-003	Water	122918	03/09/07 20:43	1.0	2
012	068_012	SAMPLE	193223-004	Water	122918	03/09/07 21:20	1.0	2
013	068_013	CCV	MBTXE			03/09/07 21:58	1.0	1 2
014	068_014	CCV	MBTXE			03/09/07 22:36	1.0	1 2
015	068_015	CCV	TVH			03/09/07 23:13	1.0	3 2
016	068_016	CCV	TVH			03/09/07 23:51	1.0	3 2
017	068_017	CCV	COLEMAN			03/10/07 00:28	1.0	4 2
018	068_018	CCV	COLEMAN			03/10/07 01:06	1.0	4 2
019	068_019	SAMPLE	193223-008	Water	122918	03/10/07 01:44	1.0	2
020	068_020	SAMPLE	193223-005	Water	122918	03/10/07 02:22	1.0	2
021	068_021	SAMPLE	193223-006	Water	122918	03/10/07 02:59	1.0	2
022	068_022	SAMPLE	193223-007	Water	122918	03/10/07 03:37	1.0	2
023	068_023	SAMPLE	193108-002	Water	122918	03/10/07 04:15	1.0	2
024	068_024	SAMPLE	193108-003	Water	122918	03/10/07 04:52	1.0	2
025	068_025	SAMPLE	193108-004	Water	122918	03/10/07 05:30	1.0	2
026	068_026	SAMPLE	193108-005	Water	122918	03/10/07 06:07	1.0	2
027	068_027	SAMPLE	193108-016	Water	122918	03/10/07 06:45	1.0	2
028	068_028	MSS	193108-017	Water	122918	03/10/07 07:23	1.0	2
029	068_029	CCV	MBTXE			03/10/07 08:00	1.0	1 2
030	068_030	CCV	MBTXE			03/10/07 08:38	1.0	1 2
031	068_031	CCV	TVH			03/10/07 09:16	1.0	3 2
032	068_032	CCV	TVH			03/10/07 09:53	1.0	3 2
033	068_033	CCV	COLEMAN			03/10/07 10:31	1.0	4 2
034	068_034	CCV	COLEMAN			03/10/07 11:08	1.0	4 2
035	068_035	SAMPLE	193248-003	Water	122918	03/10/07 11:46	1.0	2
036	068_036	SAMPLE	193108-018	Water	122918	03/10/07 12:24	1.0	2
037	068_037	SAMPLE	193256-001	Water	122918	03/10/07 13:01	1.0	2
038	068_038	SAMPLE	193248-001	Water	122918	03/10/07 13:39	1.0	2
039	068_039	SAMPLE	193248-002	Water	122918	03/10/07 14:16	1.0	2
040	068_040	MS	QC377781	Water	122766	03/10/07 14:54	1.0	3 2
041	068_041	MSD	QC377782	Water	122766	03/10/07 15:32	1.0	3 2
042	068_042	MS	QC377783	Water	122766	03/10/07 16:09	1.0	3 2
043	068_043	MSD	QC377784	Water	122766	03/10/07 16:47	1.0	3 2
044	068_044	CCV	MBTXE			03/10/07 17:24	1.0	1 2
045	068_045	X	MBTXE			03/10/07 18:02	1.0	1 2
046	068_046	CCV	TVH			03/10/07 18:40	1.0	3 2
047	068_047	CCV	TVH			03/10/07 19:17	1.0	3 2
048	068_048	MS	QC377785	Water	122766	03/10/07 19:55	1.0	3 2
049	068_049	MSD	QC377786	Water	122766	03/10/07 20:32	1.0	3 2
050	068_050	CCV	TVH			03/10/07 21:10	1.0	3 2
051	068_051	CCV	TVH			03/10/07 21:47	1.0	3 2

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347098705

Instrument : GC19 Begun : 03/09/07 13:05
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

Analyst: JCP Date: 03/12/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5345 3=S5365 4=S5067

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327102778

Instrument : GC07 Begun : 03/12/07 08:58
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071_001	X	IB			03/12/07 08:58	1.0	1	
002	071_002	CCV/LCS	QC378388	Water	122913	03/12/07 09:46	1.0	2 1	
003	071_003	BLANK	QC378387	Water	122913	03/12/07 11:21	1.0	1	
004	071_004	SAMPLE	193230-005	Water	122913	03/12/07 12:23	1.0	1	
005	071_005	MS	QC378400	Water	122913	03/12/07 13:00	1.0	2 1	
006	071_006	MSD	QC378401	Water	122913	03/12/07 13:36	1.0	2 1	
007	071_007	SAMPLE	193166-002	Water	122913	03/12/07 16:44	1.0	1	headspace > 1 mL
008	071_008	SAMPLE	193166-021	Water	122913	03/12/07 17:20	1.0	1	pH > 2
009	071_009	SAMPLE	193261-001	Water	122913	03/12/07 17:56	1.0	1	
010	071_010	SAMPLE	193261-002	Water	122913	03/12/07 18:33	1.0	1	
011	071_011	SAMPLE	193261-003	Water	122913	03/12/07 19:09	1.0	1	
012	071_012	CCV	TVH			03/12/07 19:45	1.0	2 1	
013	071_013	CCV	TVH			03/12/07 20:21	1.0	2 1	
014	071_014	MS	QC377783	Water	122766	03/12/07 20:58	1.0	2 1	
015	071_015	MSD	QC377784	Water	122766	03/12/07 21:34	1.0	2 1	
016	071_016	MS	QC377785	Water	122766	03/12/07 22:10	1.0	2 1	
017	071_017	MSD	QC377786	Water	122766	03/12/07 22:46	1.0	2 1	
018	071_018	SAMPLE	193261-004	Water	122913	03/12/07 23:22	1.0	1	
019	071_019	SAMPLE	193267-001	Water	122913	03/12/07 23:58	1.0	1	
020	071_020	SAMPLE	193267-002	Water	122913	03/13/07 00:35	1.0	1	
021	071_021	SAMPLE	193267-003	Water	122913	03/13/07 01:11	1.0	1	
022	071_022	SAMPLE	193267-004	Water	122913	03/13/07 01:47	1.0	1	
023	071_023	SAMPLE	193267-005	Water	122913	03/13/07 02:23	1.0	1	
024	071_024	CCV	TVH			03/13/07 02:59	1.0	2 1	
025	071_025	CCV	TVH			03/13/07 03:35	1.0	2 1	
026	071_026	SAMPLE	193267-006	Water	122913	03/13/07 04:11	1.0	1	
027	071_027	SAMPLE	193267-007	Water	122913	03/13/07 04:48	1.0	1	
028	071_028	SAMPLE	193267-008	Water	122913	03/13/07 05:24	1.0	1	
029	071_029	MSS	193208-001	Water	122913	03/13/07 06:00	1.0	1	
030	071_030	SAMPLE	193208-002	Water	122913	03/13/07 06:36	1.0	1	
031	071_031	SAMPLE	193208-003	Water	122913	03/13/07 07:12	1.0	1	
032	071_032	SAMPLE	193208-004	Water	122913	03/13/07 07:49	1.0	1	
033	071_033	SAMPLE	193208-005	Water	122913	03/13/07 08:25	1.0	1	
034	071_034	CCV	TVH			03/13/07 09:20	1.0	2 1	

Analyst: JCP Date: 03/13/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5365

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REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-001	Gasoline C7-C12	GC07	A	03/06/07 14:43
193108-001	Stoddard Solvent C7-C12	GC07	A	03/06/07 14:43
193108-001	Trifluorotoluene (FID)	GC07	A	03/06/07 14:43
193108-001	Bromofluorobenzene (FID)	GC07	A	03/06/07 14:43
193108-002	Gasoline C7-C12	GC19	A	03/10/07 04:15
193108-002	MTBE	GC19	B	03/10/07 04:15
193108-002	Benzene	GC19	B	03/10/07 04:15
193108-002	Toluene	GC19	B	03/10/07 04:15
193108-002	Ethylbenzene	GC19	B	03/10/07 04:15
193108-002	Trifluorotoluene (FID)	GC19	A	03/10/07 04:15
193108-002	Bromofluorobenzene (FID)	GC19	A	03/10/07 04:15
193108-002	Trifluorotoluene (PID)	GC19	B	03/10/07 04:15
193108-002	Bromofluorobenzene (PID)	GC19	B	03/10/07 04:15
193108-002	Xylene (total)	GC19	B	03/10/07 04:15
193108-003	Gasoline C7-C12	GC19	A	03/10/07 04:52
193108-003	MTBE	GC19	B	03/10/07 04:52
193108-003	Benzene	GC19	B	03/10/07 04:52
193108-003	Toluene	GC19	B	03/10/07 04:52
193108-003	Ethylbenzene	GC19	B	03/10/07 04:52
193108-003	Trifluorotoluene (FID)	GC19	A	03/10/07 04:52
193108-003	Bromofluorobenzene (FID)	GC19	A	03/10/07 04:52
193108-003	Trifluorotoluene (PID)	GC19	B	03/10/07 04:52
193108-003	Bromofluorobenzene (PID)	GC19	B	03/10/07 04:52
193108-003	Xylene (total)	GC19	B	03/10/07 04:52
193108-004	Gasoline C7-C12	GC19	A	03/10/07 05:30
193108-004	MTBE	GC19	B	03/10/07 05:30
193108-004	Benzene	GC19	B	03/10/07 05:30
193108-004	Toluene	GC19	B	03/10/07 05:30
193108-004	Ethylbenzene	GC19	B	03/10/07 05:30
193108-004	Trifluorotoluene (FID)	GC19	A	03/10/07 05:30
193108-004	Bromofluorobenzene (FID)	GC19	A	03/10/07 05:30
193108-004	Trifluorotoluene (PID)	GC19	B	03/10/07 05:30
193108-004	Bromofluorobenzene (PID)	GC19	B	03/10/07 05:30
193108-004	Xylene (total)	GC19	B	03/10/07 05:30
193108-005	Gasoline C7-C12	GC19	A	03/10/07 06:07
193108-005	MTBE	GC19	B	03/10/07 06:07
193108-005	Benzene	GC19	B	03/10/07 06:07
193108-005	Toluene	GC19	B	03/10/07 06:07
193108-005	Ethylbenzene	GC19	B	03/10/07 06:07
193108-005	Trifluorotoluene (FID)	GC19	A	03/10/07 06:07
193108-005	Bromofluorobenzene (FID)	GC19	A	03/10/07 06:07
193108-005	Trifluorotoluene (PID)	GC19	B	03/10/07 06:07
193108-005	Bromofluorobenzene (PID)	GC19	B	03/10/07 06:07
193108-005	Xylene (total)	GC19	B	03/10/07 06:07
193108-006	Gasoline C7-C12	GC07	A	03/06/07 15:19
193108-006	Stoddard Solvent C7-C12	GC07	A	03/06/07 15:19
193108-006	Trifluorotoluene (FID)	GC07	A	03/06/07 15:19
193108-006	Bromofluorobenzene (FID)	GC07	A	03/06/07 15:19

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	Gasoline C7-C12	GC07	A	03/06/07 15:55
193108-007	Trifluorotoluene (FID)	GC07	A	03/06/07 15:55
193108-007	Bromofluorobenzene (FID)	GC07	A	03/06/07 15:55
193108-008	Gasoline C7-C12	GC07	A	03/06/07 17:11
193108-008	Trifluorotoluene (FID)	GC07	A	03/06/07 17:11
193108-008	Bromofluorobenzene (FID)	GC07	A	03/06/07 17:11
193108-010	Gasoline C7-C12	GC07	A	03/06/07 17:47
193108-010	Trifluorotoluene (FID)	GC07	A	03/06/07 17:47
193108-010	Bromofluorobenzene (FID)	GC07	A	03/06/07 17:47
193108-011	Gasoline C7-C12	GC07	A	03/06/07 18:23
193108-011	Trifluorotoluene (FID)	GC07	A	03/06/07 18:23
193108-011	Bromofluorobenzene (FID)	GC07	A	03/06/07 18:23
193108-012	Gasoline C7-C12	GC07	A	03/07/07 01:38
193108-012	Trifluorotoluene (FID)	GC07	A	03/07/07 01:38
193108-012	Bromofluorobenzene (FID)	GC07	A	03/07/07 01:38
193108-013	Gasoline C7-C12	GC07	A	03/07/07 02:14
193108-013	Trifluorotoluene (FID)	GC07	A	03/07/07 02:14
193108-013	Bromofluorobenzene (FID)	GC07	A	03/07/07 02:14
193108-015	Gasoline C7-C12	GC07	A	03/07/07 02:51
193108-015	Trifluorotoluene (FID)	GC07	A	03/07/07 02:51
193108-015	Bromofluorobenzene (FID)	GC07	A	03/07/07 02:51
193108-016	Gasoline C7-C12	GC19	A	03/10/07 06:45
193108-016	MTBE	GC19	B	03/10/07 06:45
193108-016	Benzene	GC19	B	03/10/07 06:45
193108-016	Toluene	GC19	B	03/10/07 06:45
193108-016	Ethylbenzene	GC19	B	03/10/07 06:45
193108-016	Trifluorotoluene (FID)	GC19	A	03/10/07 06:45
193108-016	Bromofluorobenzene (FID)	GC19	A	03/10/07 06:45
193108-016	Trifluorotoluene (PID)	GC19	B	03/10/07 06:45
193108-016	Bromofluorobenzene (PID)	GC19	B	03/10/07 06:45
193108-016	Xylene (total)	GC19	B	03/10/07 06:45
193108-017	Gasoline C7-C12	GC19	A	03/10/07 07:23
193108-017	MTBE	GC19	B	03/10/07 07:23
193108-017	Benzene	GC19	B	03/10/07 07:23
193108-017	Toluene	GC19	B	03/10/07 07:23
193108-017	Ethylbenzene	GC19	B	03/10/07 07:23
193108-017	Trifluorotoluene (FID)	GC19	A	03/10/07 07:23
193108-017	Bromofluorobenzene (FID)	GC19	A	03/10/07 07:23
193108-017	Trifluorotoluene (PID)	GC19	B	03/10/07 07:23
193108-017	Bromofluorobenzene (PID)	GC19	B	03/10/07 07:23
193108-017	Xylene (total)	GC19	B	03/10/07 07:23
193108-018	Gasoline C7-C12	GC19	A	03/10/07 12:24
193108-018	MTBE	GC19	B	03/10/07 12:24
193108-018	Benzene	GC19	B	03/10/07 12:24
193108-018	Toluene	GC19	B	03/10/07 12:24

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-018	Ethylbenzene	GC19	B	03/10/07 12:24
193108-018	Trifluorotoluene (FID)	GC19	A	03/10/07 12:24
193108-018	Bromofluorobenzene (FID)	GC19	A	03/10/07 12:24
193108-018	Trifluorotoluene (PID)	GC19	B	03/10/07 12:24
193108-018	Bromofluorobenzene (PID)	GC19	B	03/10/07 12:24
193108-018	Xylene (total)	GC19	B	03/10/07 12:24
193108-019	Gasoline C7-C12	GC07	A	03/07/07 03:27
193108-019	Trifluorotoluene (FID)	GC07	A	03/07/07 03:27
193108-019	Bromofluorobenzene (FID)	GC07	A	03/07/07 03:27
193108-020	Gasoline C7-C12	GC07	A	03/07/07 05:15
193108-020	Trifluorotoluene (FID)	GC07	A	03/07/07 05:15
193108-020	Bromofluorobenzene (FID)	GC07	A	03/07/07 05:15
193108-022	Gasoline C7-C12	GC07	A	03/07/07 05:51
193108-022	Trifluorotoluene (FID)	GC07	A	03/07/07 05:51
193108-022	Bromofluorobenzene (FID)	GC07	A	03/07/07 05:51
193108-023	Gasoline C7-C12	GC07	A	03/07/07 06:27
193108-023	Trifluorotoluene (FID)	GC07	A	03/07/07 06:27
193108-023	Bromofluorobenzene (FID)	GC07	A	03/07/07 06:27
193108-024	Gasoline C7-C12	GC07	A	03/07/07 07:03
193108-024	Trifluorotoluene (FID)	GC07	A	03/07/07 07:03
193108-024	Bromofluorobenzene (FID)	GC07	A	03/07/07 07:03
193108-025	Gasoline C7-C12	GC07	A	03/07/07 08:22
193108-025	Trifluorotoluene (FID)	GC07	A	03/07/07 08:22
193108-025	Bromofluorobenzene (FID)	GC07	A	03/07/07 08:22
193108-026	Gasoline C7-C12	GC07	A	03/07/07 08:58
193108-026	Trifluorotoluene (FID)	GC07	A	03/07/07 08:58
193108-026	Bromofluorobenzene (FID)	GC07	A	03/07/07 08:58
193108-027	Gasoline C7-C12	GC07	A	03/07/07 09:34
193108-027	Trifluorotoluene (FID)	GC07	A	03/07/07 09:34
193108-027	Bromofluorobenzene (FID)	GC07	A	03/07/07 09:34
QC377779	Gasoline C7-C12	GC07	A	03/06/07 12:16
QC377779	Stoddard Solvent C7-C12	GC07	A	03/06/07 12:16
QC377779	Trifluorotoluene (FID)	GC07	A	03/06/07 12:16
QC377779	Bromofluorobenzene (FID)	GC07	A	03/06/07 12:16
QC377780	Gasoline C7-C12	GC07	A	03/06/07 10:13
QC377780	Trifluorotoluene (FID)	GC07	A	03/06/07 10:13
QC377780	Bromofluorobenzene (FID)	GC07	A	03/06/07 10:13
QC377781	Gasoline C7-C12	GC19	A	03/10/07 14:54
QC377781	Trifluorotoluene (FID)	GC19	A	03/10/07 14:54
QC377781	Bromofluorobenzene (FID)	GC19	A	03/10/07 14:54
QC377782	Gasoline C7-C12	GC19	A	03/10/07 15:32
QC377782	Trifluorotoluene (FID)	GC19	A	03/10/07 15:32

REPORTING SUMMARY FOR 193108 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377782	Bromofluorobenzene (FID)	GC19	A	03/10/07 15:32
QC377783	Gasoline C7-C12	GC07	A	03/12/07 20:58
QC377783	Trifluorotoluene (FID)	GC07	A	03/12/07 20:58
QC377783	Bromofluorobenzene (FID)	GC07	A	03/12/07 20:58
QC377784	Gasoline C7-C12	GC07	A	03/12/07 21:34
QC377784	Trifluorotoluene (FID)	GC07	A	03/12/07 21:34
QC377784	Bromofluorobenzene (FID)	GC07	A	03/12/07 21:34
QC377785	Gasoline C7-C12	GC07	A	03/12/07 22:10
QC377785	Trifluorotoluene (FID)	GC07	A	03/12/07 22:10
QC377785	Bromofluorobenzene (FID)	GC07	A	03/12/07 22:10
QC377786	Gasoline C7-C12	GC07	A	03/12/07 22:46
QC377786	Trifluorotoluene (FID)	GC07	A	03/12/07 22:46
QC377786	Bromofluorobenzene (FID)	GC07	A	03/12/07 22:46
QC378402	Gasoline C7-C12	GC19	A	03/09/07 16:56
QC378402	MTBE	GC19	B	03/09/07 16:56
QC378402	Benzene	GC19	B	03/09/07 16:56
QC378402	Toluene	GC19	B	03/09/07 16:56
QC378402	Ethylbenzene	GC19	B	03/09/07 16:56
QC378402	Trifluorotoluene (FID)	GC19	A	03/09/07 16:56
QC378402	Bromofluorobenzene (FID)	GC19	A	03/09/07 16:56
QC378402	Trifluorotoluene (PID)	GC19	B	03/09/07 16:56
QC378402	Bromofluorobenzene (PID)	GC19	B	03/09/07 16:56
QC378402	Xylene (total)	GC19	B	03/09/07 16:56
QC378403	MTBE	GC19	B	03/09/07 14:58
QC378403	Benzene	GC19	B	03/09/07 14:58
QC378403	Toluene	GC19	B	03/09/07 14:58
QC378403	Ethylbenzene	GC19	B	03/09/07 14:58
QC378403	Trifluorotoluene (PID)	GC19	B	03/09/07 14:58
QC378403	Bromofluorobenzene (PID)	GC19	B	03/09/07 14:58
QC378404	MTBE	GC19	B	03/09/07 17:34
QC378404	Benzene	GC19	B	03/09/07 17:34
QC378404	Toluene	GC19	B	03/09/07 17:34
QC378404	Ethylbenzene	GC19	B	03/09/07 17:34
QC378404	Trifluorotoluene (PID)	GC19	B	03/09/07 17:34
QC378404	Bromofluorobenzene (PID)	GC19	B	03/09/07 17:34
QC378405	Gasoline C7-C12	GC19	A	03/09/07 13:43
QC378405	Trifluorotoluene (FID)	GC19	A	03/09/07 13:43
QC378405	Bromofluorobenzene (FID)	GC19	A	03/09/07 13:43
QC378406	Gasoline C7-C12	GC19	A	03/09/07 18:12
QC378406	Trifluorotoluene (FID)	GC19	A	03/09/07 18:12
QC378406	Bromofluorobenzene (FID)	GC19	A	03/09/07 18:12
QC378407	Gasoline C7-C12	GC19	A	03/09/07 18:49
QC378407	Trifluorotoluene (FID)	GC19	A	03/09/07 18:49
QC378407	Bromofluorobenzene (FID)	GC19	A	03/09/07 18:49

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/22/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065PZ4B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-002	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID:	1065PZ7B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-003	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	117	65-135

Field ID:	1065PZ5AR	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-004	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Field ID:	1065PZ5B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-005	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW01	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/12/07
Lab ID:	193108-007	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID:	1349MW100	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-008	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	15,000	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID:	DAEGW06	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-009	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

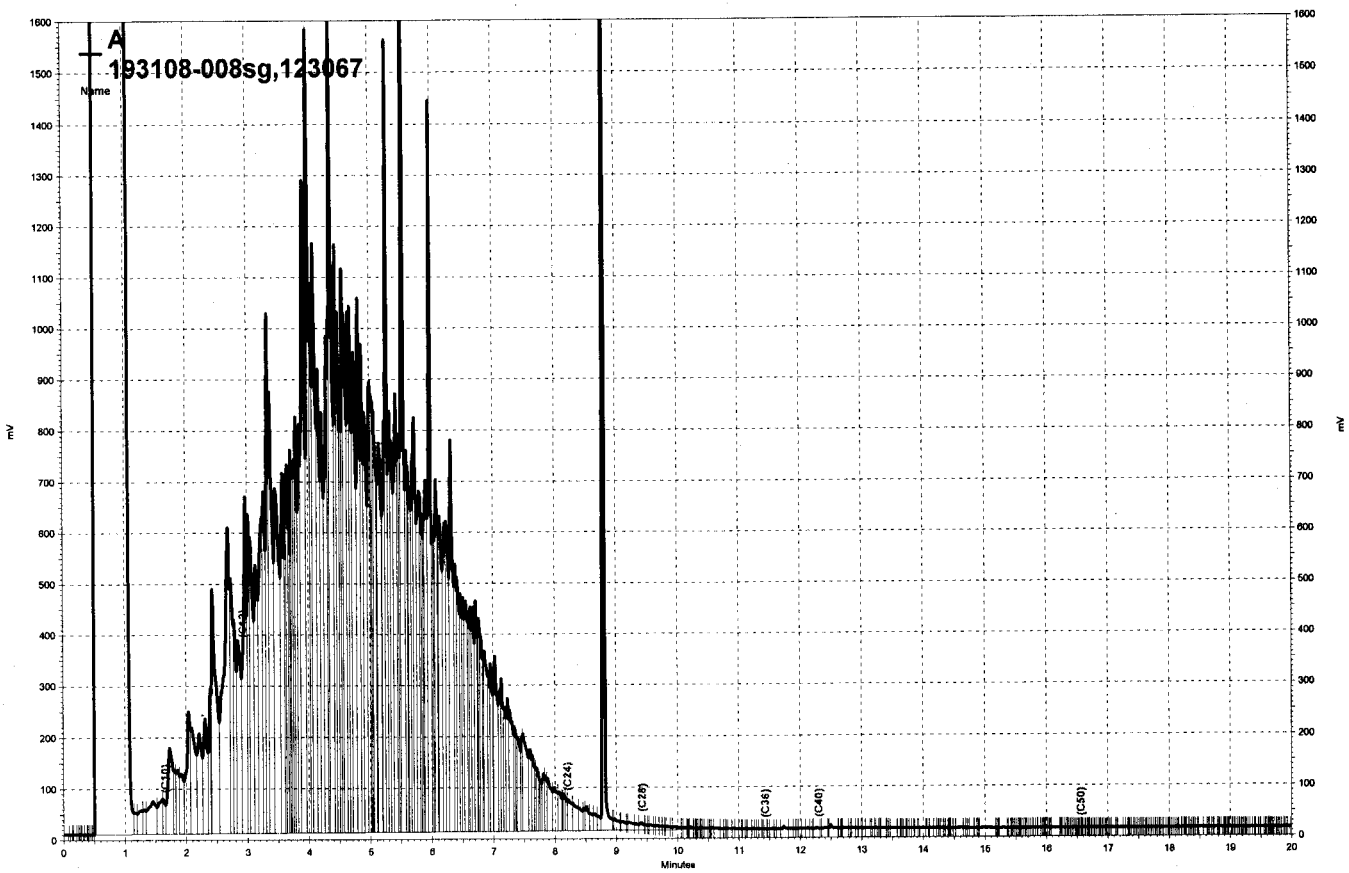
Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID:	DUP0301073A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-010	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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1349MW100

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DUP0301073B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-011	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	15,000	50
Motor Oil C24-C36	670 L Y	300

Surrogate	%REC	Limits
Hexacosane	113	65-135

Field ID:	1213GW101	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-012	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	115 b	65-135

Field ID:	DAEGW08	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-013	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

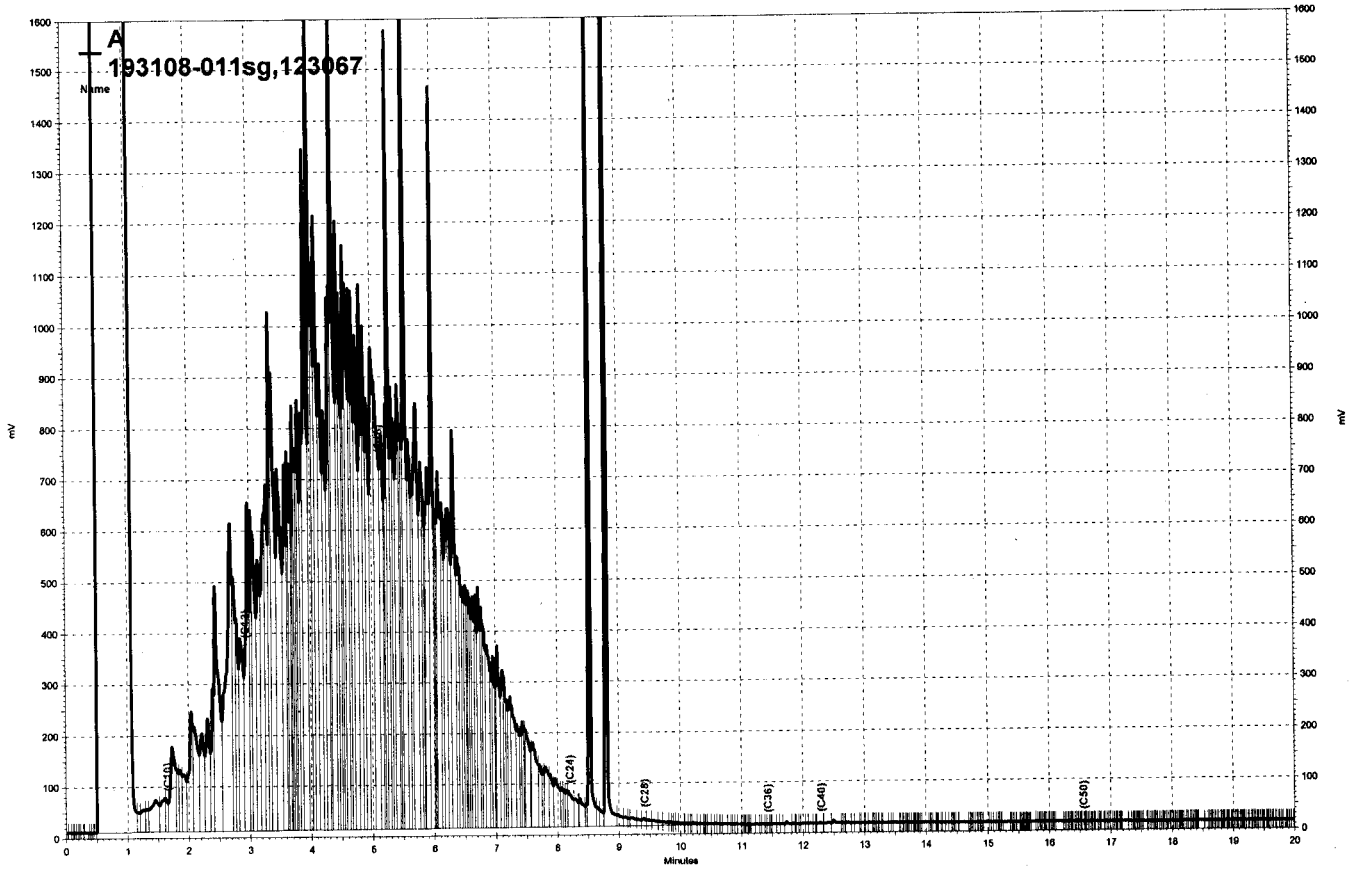
Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID:	1065PZ1A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-015	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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DUP0301073B

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065PZ2A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-016	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID:	1065PZ3A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-017	Analyzed:	03/14/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID:	1065PZ4A	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-018	Analyzed:	03/15/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	1065MW101	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-019	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	123	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1065MW102	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-020	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID:	DAEGW103	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/14/07
Lab ID:	193108-022	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	117	65-135

Field ID:	DAEGW104	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-023	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	92 b	65-135

Field ID:	DAEGW03	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-025	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	105 b	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-026	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	109 b	65-135

Field ID:	DUP0302071A	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/17/07
Lab ID:	193108-027	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	94 b	65-135

Type:	BLANK	Prepared:	03/12/07
Lab ID:	QC378776	Analyzed:	03/13/07
Batch#:	123002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	114	65-135

Type:	BLANK	Prepared:	03/13/07
Lab ID:	QC379052	Analyzed:	03/14/07
Batch#:	123067	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Type:	BLANK	Prepared:	03/14/07
Lab ID:	QC379228	Analyzed:	03/15/07
Batch#:	123108	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

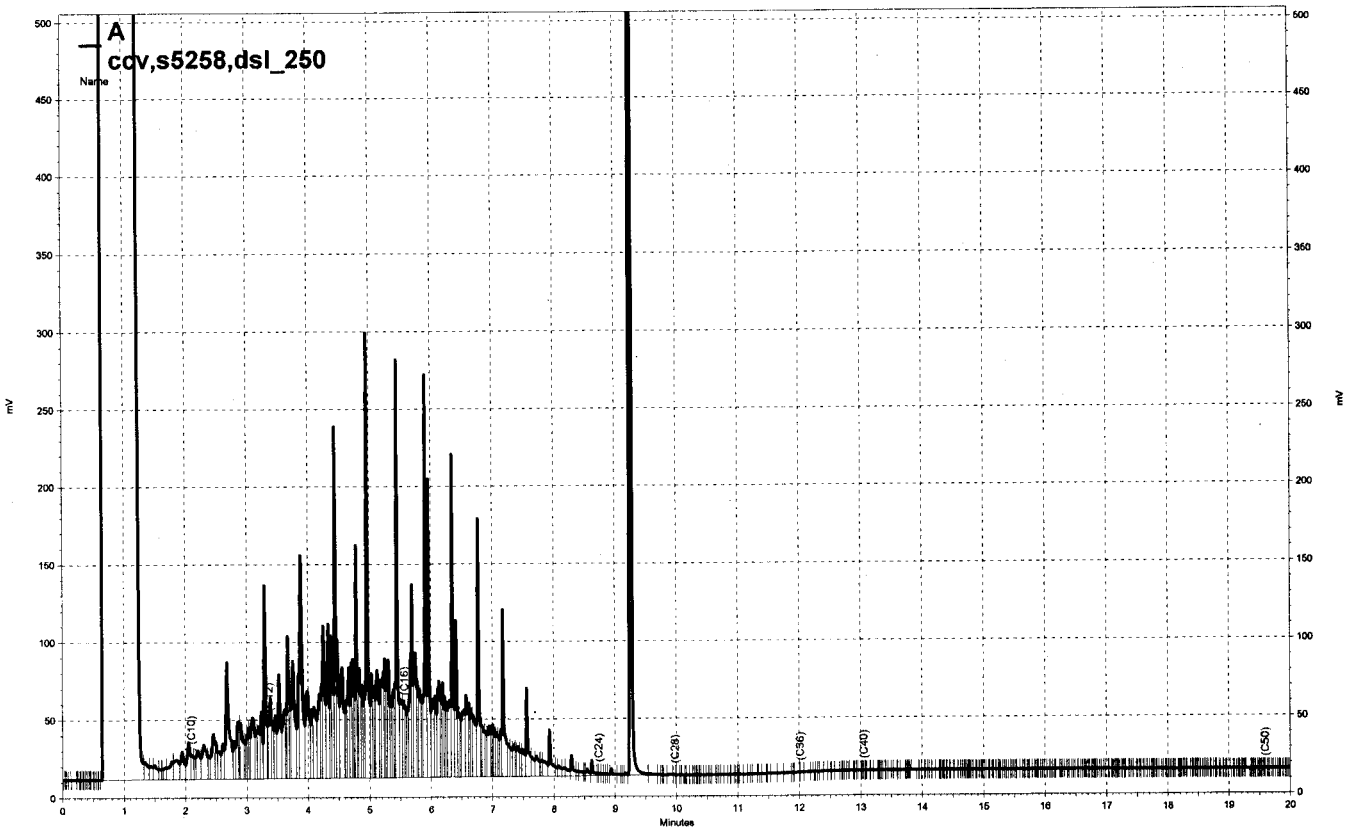
Surrogate	%REC	Limits
Hexacosane	111	65-135

Type:	BLANK	Prepared:	03/17/07
Lab ID:	QC379739	Analyzed:	03/19/07
Batch#:	123229	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit



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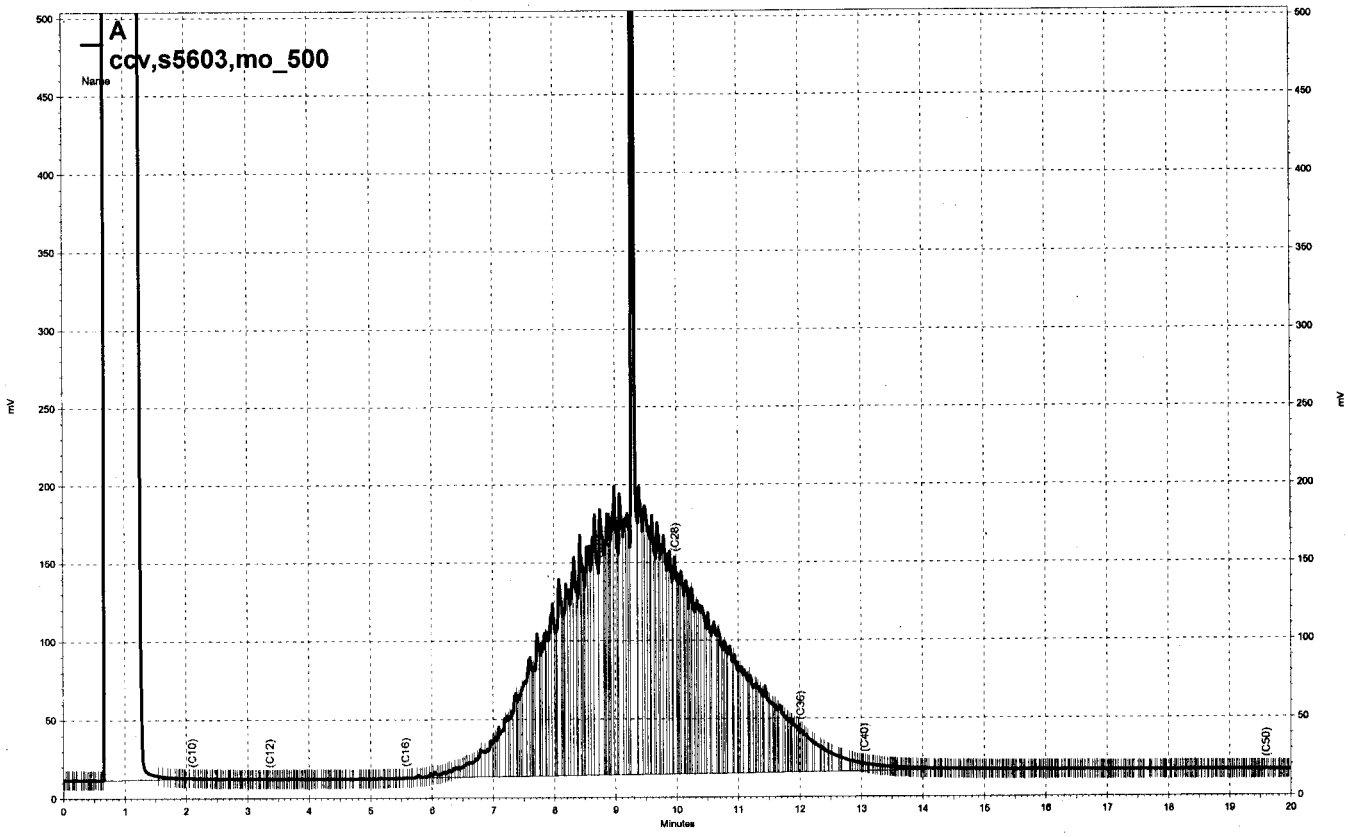
Diesel



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Motor Oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378777	Batch#:	123002
Matrix:	Water	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,487	99	65-135

Surrogate	%REC	Limits
Hexacosane	104	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379053	Batch#:	123067
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/14/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,183	87	65-135

Surrogate	%REC	Limits
Hexacosane	90	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379740	Batch#:	123229
Matrix:	Water	Prepared:	03/17/07
Units:	ug/L	Analyzed:	03/19/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,933	117	65-135

Surrogate	%REC	Limits
Hexacosane	119	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123108
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC379229

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,547	102	65-135

Surrogate	%REC	Limits
Hexacosane	114	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC379230

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,189	88	65-135	15	35

Surrogate	%REC	Limits
Hexacosane	99	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW01	Batch#:	123002
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC378778

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<17.91	2,500	2,499	100	65-135

Surrogate	%REC	Limits
Hexacosane	108	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC378779

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,204	88	65-135	13	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ3A	Batch#:	123067
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC379054

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<17.91	2,500	2,380	95	65-135

Surrogate	%REC	Limits
Hexacosane	100	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC379055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,484	99	65-135	4	35

Surrogate	%REC	Limits
Hexacosane	103	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	123229
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/17/07
Diln Fac:	1.000	Analyzed:	03/20/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC379741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<10.97	2,500	1,486	59 *	65-135

Surrogate	%REC	Limits
Hexacosane	74	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC379742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,410	96	65-135	47 *	35

Surrogate	%REC	Limits
Hexacosane	103	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

117

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

118

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date: 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117102790001
Units : mg/L

Name : Hexacosane
Date : 12-MAR-2007 20:05
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071a023	117102790023	HEX_10	12-MAR-2007 20:05	S4640
L2	071a024	117102790024	HEX_25	12-MAR-2007 20:33	S4641
L3	071a025	117102790025	HEX_50	12-MAR-2007 21:01	S5402
L4	071a026	117102790026	HEX_100	12-MAR-2007 21:29	S4644
L5	071a027	117102790027	HEX_200	12-MAR-2007 21:57	S4645
L6	071a033	117102790033	HEX_5	13-MAR-2007 12:16	S4639

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60718	67049	65965	69806	68232	69707	AVRG		1.49E-5		66913	5	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	10.000	25.000	50.000	100.00	200.00	5.0000	mg/L

120

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779001
Units : mg/L

Name : Diesel 14b
Date : 12-MAR-2007 17:56
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_014	227102779014	DSL_10	12-MAR-2007 17:56	S5413
L2	071_015	227102779015	DSL_100	12-MAR-2007 18:24	S5414
L3	071_016	227102779016	DSL_500	12-MAR-2007 18:53	S5416
L4	071_017	227102779017	DSL_1000	12-MAR-2007 19:22	S5417
L5	071_018	227102779018	DSL_5000	12-MAR-2007 19:50	S5411
L6	071_019	227102779019	DSL_7500	12-MAR-2007 20:18	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	31823	46248	53031	50789	51704	52394	AVRG		2.10E-5		47665	17	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

121

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227102779001

Name : Diesel 14b
Cal Date: 12-MAR-2007

ICV 227102779021 (071_021 12-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	47665	50636	500.0	531.2	mg/L	6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779003
Units : mg/L

Name : Motor oil 14b
Date : 12-MAR-2007 22:41
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_024	227102779024	MO_50	12-MAR-2007 22:41	S5523
L2	071_025	227102779025	MO_250	12-MAR-2007 23:09	S5524
L3	071_026	227102779026	MO_500	12-MAR-2007 23:38	S5525
L4	071_028	227102779028	MO_5000	13-MAR-2007 00:35	S5522
L5	071_036	227102779036	MO_1000	13-MAR-2007 12:33	S5526

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	39814	38246	37046	36590	38315	AVRG		2.63E-5		38002	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	5000.0	1000.0	mg/L

123

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779002
Units : mg/L

Name : Hexacosane 14b
Date : 13-MAR-2007 01:32
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_030	227102779030	HEX_5	13-MAR-2007 01:32	S4639
L2	071_031	227102779031	HEX_10	13-MAR-2007 02:01	S4640
L3	071_032	227102779032	HEX_50	13-MAR-2007 02:29	S5402
L4	071_033	227102779033	HEX_100	13-MAR-2007 02:58	S4644
L5	071_034	227102779034	HEX_200	13-MAR-2007 03:27	S4645

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	59294	61101	60945	63451	62267	AVRG		1.63E-5		61411	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Hexacosane	B	5.0000	10.000	50.000	100.00	200.00	mg/L

124

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475001
Units : mg/L

Name : diesel
Date : 24-OCT-2006 17:58
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Diesel C12-C24	10.000	100.00	250.00	500.00	1000.0	2500.0	5000.0	mg/L

125

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475003
Units : mg/L

Name : hexacosane
Date : 25-OCT-2006 01:54
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	Units
Hexacosane	5.0000	10.000	25.000	50.000	75.000	100.00	200.00	mg/L

127

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166428475003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166500697001
Units : mg/L

Name : Mo
Date : 13-DEC-2006 17:24
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

128

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

166500697001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

129

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

131

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG	.	1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

132

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151006
Standards: S5258

Run Name: DSL_250
File : 074a006

IDF : 1.0
Time : 15-MAR-2007 12:14

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	55569	250.0	238.5	mg/L	-5	15	
Hexacosane	117102790001	12-MAR-2007	66913	67282	50.00	50.28	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151007
Standards: S5603

Run Name: MO_500
File : 074a007

IDF : 1.0
Time : 15-MAR-2007 12:42

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	40666	500.0	490.5	mg/L	-2	15	
Hexacosane	117102790001	12-MAR-2007	66913	71023	50.00	53.07	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151019
Standards: S5259

Run Name: DSL_1000
File : 074a019

IDF : 1.0
Time : 15-MAR-2007 19:20

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	55455	1000	952.0	mg/L	-5	15	
Hexacosane	117102790001	12-MAR-2007	66913	69908	50.00	52.24	mg/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117107151020
Standards: S5603

Run Name: MO_500
File : 074a020

IDF : 1.0
Time : 15-MAR-2007 19:48

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	41848	500.0	504.7	mg/L	1	15	
Hexacosane	117102790001	12-MAR-2007	66913	72895	50.00	54.47	mg/L	9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851030
Standards: S5259

Run Name: DSL_1000
File : 077a030

IDF : 1.0
Time : 19-MAR-2007 06:01

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54146	1000	929.5	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60895	50.00	45.50	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851031 File : 077a031 Time : 19-MAR-2007 06:29
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	38931	500.0	469.6	mg/L	-6	15	
Hexacosane	117102790001	12-MAR-2007	66913	67337	50.00	50.32	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851041
Standards: S5258

Run Name: DSL_250
File : 077a041

IDF : 1.0
Time : 19-MAR-2007 11:20

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	56502	250.0	242.5	mg/L	-3	15	
Hexacosane	117102790001	12-MAR-2007	66913	66546	50.00	49.73	mg/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst — : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851042 File : 077a042 Time : 19-MAR-2007 11:48
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	39901	500.0	481.3	mg/L	-4	15	
Hexacosane	117102790001	12-MAR-2007	66913	68135	50.00	50.91	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_500 IDF : 1.0
Seqnum : 117111851056 File : 077a056 Time : 19-MAR-2007 18:59
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	58140	500.0	499.1	mg/L	0	15	
Hexacosane	117102790001	12-MAR-2007	66913	70571	50.00	52.73	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851057 File : 077a057 Time : 19-MAR-2007 19:28
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	39916	500.0	481.4	mg/L	-4	15	
Hexacosane	117102790001	12-MAR-2007	66913	66777	50.00	49.90	mg/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117111851074
Standards: S5259

Run Name: DSL_1000
File : 077a074

IDF : 1.0
Time : 20-MAR-2007 03:25

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54292	1000	932.1	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60733	50.00	45.38	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742009
Standards: S5259

Run Name: DSL_1000
File : 078_009

IDF : 1.0
Time : 19-MAR-2007 13:35

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	49536	1000	1039	mg/L	4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55046	50.00	44.82	mg/L	-10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742010 File : 078_010 Time : 19-MAR-2007 14:03
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	37296	500.0	490.7	mg/L	-2	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	62684	50.00	51.04	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742022
Standards: S5259

Run Name: DSL_1000
File : 078_022

IDF : 1.0
Time : 19-MAR-2007 20:03

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	52038	1000	1092	mg/L	9	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55927	50.00	45.53	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742023 File : 078_023 Time : 19-MAR-2007 20:31
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	34951	500.0	459.9	mg/L	-8	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	57919	50.00	47.16	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_250 IDF : 1.0
Seqnum : 167102767039 File : 071b039 Time : 13-MAR-2007 08:36
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	50395	250.0	260.6	mg/L	4	15	
Hexacosane	166428475003	25-OCT-2006	56893	60099	50.00	52.82	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767040
Standards: S5603

Run Name: MO_500
File : 071b040

IDF : 1.0
Time : 13-MAR-2007 09:10

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	36696	500.0	532.3	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	61474	50.00	54.03	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167102767054 File : 071b054 Time : 13-MAR-2007 17:38
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51674	500.0	534.4	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	63297	50.00	55.63	mg/L	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767055
Standards: S5603

Run Name: MO_500
File : 071b055

IDF : 1.0
Time : 13-MAR-2007 18:10

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	36361	500.0	527.4	mg/L	5	15	
Hexacosane	166428475003	25-OCT-2006	56893	61176	50.00	53.76	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767067
Standards: S5259

Run Name: DSL_1000
File : 071b067

IDF : 1.0
Time : 14-MAR-2007 00:59

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	50493	1000	1044	mg/L	4	15	
Hexacosane	166428475003	25-OCT-2006	56893	60847	50.00	53.48	mg/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167102767068
Standards: S5603

Run Name: MO_500
File : 071b068

IDF : 1.0
Time : 14-MAR-2007 01:34

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37099	500.0	538.1	mg/L	8	15	
Hexacosane	166428475003	25-OCT-2006	56893	61317	50.00	53.89	mg/L	8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167106029002 File : 073b002 Time : 14-MAR-2007 15:53
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	52679	500.0	544.8	mg/L	9	15	
Hexacosane	166428475003	25-OCT-2006	56893	63261	50.00	55.60	mg/L	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167106029003 File : 073b003 Time : 14-MAR-2007 16:25
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	38203	500.0	554.2	mg/L	11	15	
Hexacosane	166428475003	25-OCT-2006	56893	62670	50.00	55.08	mg/L	10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167106029016
Standards: S5259

Run Name: DSL_1000
File : 073b016

IDF : 1.0
Time : 15-MAR-2007 01:37

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	166428475001	24-OCT-2006	48345	51047	1000	1056	mg/L	6	15	
Hexacosane	166428475003	25-OCT-2006	56893	60220	50.00	52.92	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167106029017 File : 073b017 Time : 15-MAR-2007 02:11
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	166500697001	13-DEC-2006	34470	37010	500.0	536.8	mg/L	7	15	
Hexacosane	166428475003	25-OCT-2006	56893	60091	50.00	52.81	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177107148003
Standards: S5517

Run Name: DSL_500
File : 074a003

IDF : 1.0
Time : 15-MAR-2007 10:43

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	64834	500.0	530.6	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	81558	50.00	52.90	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177107148004 File : 074a004 Time : 15-MAR-2007 11:10
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	45463	500.0	504.4	mg/L	1	15	
Hexacosane	177062425003	13-FEB-2007	77085	81935	50.00	53.15	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_500 IDF : 1.0
Seqnum : 177107148014 File : 074a014 Time : 15-MAR-2007 15:56
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	65674	500.0	537.4	mg/L	7	15	
Hexacosane	177062425003	13-FEB-2007	77085	81035	50.00	52.56	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177107148015 File : 074a015 Time : 15-MAR-2007 16:24
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	50311	500.0	558.2	mg/L	12	15	
Hexacosane	177062425003	13-FEB-2007	77085	87911	50.00	57.02	mg/L	14	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177112801003
Standards: S5517

Run Name: DSL_500
File : 078a003

IDF : 1.0
Time : 19-MAR-2007 08:55

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63845	500.0	522.5	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	78636	50.00	51.01	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801004 File : 078a004 Time : 19-MAR-2007 09:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47343	500.0	525.2	mg/L	5	15	
Hexacosane	177062425003	13-FEB-2007	77085	78052	50.00	50.63	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177112801017
Standards: S5259

Run Name: DSL_1000
File : 078a017

IDF : 1.0
Time : 19-MAR-2007 18:55

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63620	1000	1041	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	70124	50.00	45.49	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801018 File : 078a018 Time : 19-MAR-2007 19:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47955	500.0	532.0	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	78434	50.00	50.87	mg/L	2	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166428475

Instrument : GC15B
Method : EPA 8015B

Begun : 10/24/06 13:15
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	297b001	X	IB			10/24/06 13:15	1.0		
002	297b002	X	IB			10/24/06 13:44	1.0		
003	297b003	X	IB			10/24/06 14:12	1.0		
004	297b004	X	IB			10/24/06 14:39	1.0		
005	297b005	X	CM			10/24/06 15:38	1.0	1	
006	297b006	CCV	DSL_250			10/24/06 16:05	1.0	2	
007	297b007	CCV	MO_500			10/24/06 16:33	1.0	3	
008	297b008	CCV	JET_250			10/24/06 17:00	1.0	4	
009	297b009	X	IB			10/24/06 17:31	1.0		
010	297b010	ICAL	DSL_10			10/24/06 17:58	1.0	5	
011	297b011	ICAL	DSL_100			10/24/06 18:26	1.0	6	
012	297b012	ICAL	DSL_250			10/24/06 18:53	1.0	7	
013	297b013	ICAL	DSL_500			10/24/06 19:21	1.0	8	
014	297b014	ICAL	DSL_1000			10/24/06 19:48	1.0	9	
015	297b015	ICAL	DSL_2500			10/24/06 20:15	1.0	10	
016	297b016	ICAL	DSL_5000			10/24/06 20:43	1.0	11	
017	297b017	ICV	DSL_500			10/24/06 21:15	10.0	12	
018	297b018	CCV	MO_500			10/24/06 21:43	1.0	3	
019	297b019	X	IB			10/24/06 22:13	1.0		
020	297b020	ICAL	MO_50			10/24/06 22:40	1.0	13	
021	297b021	ICAL	MOL_250			10/24/06 23:08	1.0	14	
022	297b022	ICAL	MO_500			10/24/06 23:35	1.0	15	
023	297b023	ICAL	MO_1000			10/25/06 00:03	1.0	16	
024	297b024	ICAL	MO_2500			10/25/06 00:30	1.0	17	
025	297b025	ICAL	MO_5000			10/25/06 00:58	1.0	18	
026	297b026	X	IB			10/25/06 01:26	1.0		
027	297b027	ICAL	HEX_5			10/25/06 01:54	1.0	19	
028	297b028	ICAL	HEX_10			10/25/06 02:21	1.0	20	
029	297b029	ICAL	HEX_25			10/25/06 02:48	1.0	21	
030	297b030	ICAL	HEX_50			10/25/06 03:15	1.0	22	
031	297b031	ICAL	HEX_75			10/25/06 03:43	1.0	23	
032	297b032	ICAL	HEX_100			10/25/06 04:10	1.0	24	
033	297b033	ICAL	HEX_200			10/25/06 04:37	1.0	25	
034	297b034	X	IB			10/25/06 05:05	1.0		
035	297b035	ICAL	JET_10			10/25/06 05:33	1.0	26	
036	297b036	ICAL	JET_100			10/25/06 06:00	1.0	27	
037	297b037	ICAL	JET_500			10/25/06 06:28	1.0	28	
038	297b038	ICAL	JET_1000			10/25/06 06:55	1.0	29	
039	297b039	ICAL	JET_2000			10/25/06 07:23	1.0	30	
040	297b040	ICAL	JET_3000			10/25/06 07:50	1.0	31	
041	297b041	ICAL	JET_5000			10/25/06 08:18	1.0	32	
042	297b042	X	IB			10/25/06 08:45	1.0		

Analyst: CP Date: 01/09/07 Reviewer: _____ Date: _____

Standards used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639 20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 166500697

Instrument : GC15B
Method : EPA 8015B

Begun : 12/13/06 16:57
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	347b001	X	IB				12/13/06 16:57	1.0	
002	347b002	ICAL	MO_50				12/13/06 17:24	1.0	1
003	347b003	ICAL	MO_250				12/13/06 17:52	1.0	2
004	347b004	ICAL	MO_500				12/13/06 18:20	1.0	3
005	347b005	ICAL	MO_1000				12/13/06 18:48	1.0	4
006	347b006	ICAL	MO_5000				12/13/06 19:15	1.0	5
007	347b007	CCV	MO_500				12/13/06 19:57	1.0	6
008	347b008	CCV	DSL_500				12/13/06 20:24	1.0	7
009	347b009	BLANK	QC367007	S	Soil	120048	12/13/06 20:52	1.0	
010	347b010	LCS	QC367008	S	Soil	120048	12/13/06 21:20	1.0	
011	347b011	SAMPLE	191106-005	S	Soil	120048	12/13/06 21:47	1.0	
012	347b012	SAMPLE	191106-006	S	Soil	120048	12/13/06 22:15	1.0	
013	347b013	SAMPLE	191106-007	S	Soil	120048	12/13/06 22:42	1.0	
014	347b014	SAMPLE	191106-004	S	Soil	120048	12/13/06 23:10	1.0	
015	347b015	SAMPLE	191106-002	S	Soil	120048	12/13/06 23:38	1.0	
016	347b016	SAMPLE	191106-003	S	Soil	120048	12/14/06 00:05	1.0	
017	347b017	X	IB				12/14/06 00:33	1.0	
018	347b018	MS	QC368074		Soil	120310	12/14/06 01:00	1.0	
019	347b019	MSD	QC368075		Soil	120310	12/14/06 01:28	1.0	
020	347b020	CCV	DSL_1000				12/14/06 01:56	1.0	8
021	347b021	CCV	MO_500				12/14/06 02:23	1.0	6
022	347b022	X	CCV				12/14/06 02:50	1.0	8
023	347b023	X	CCV				12/14/06 03:18	1.0	6
024	347b024	SAMPLE	191333-007	S	Soil	120188	12/14/06 03:45	1.0	
025	347b025	SAMPLE	191333-008	S	Soil	120188	12/14/06 04:13	1.0	
026	347b026	SAMPLE	191327-001	S	Water	120297	12/14/06 04:40	1.0	
027	347b027	SAMPLE	191327-002	S	Water	120297	12/14/06 05:08	1.0	
028	347b028	SAMPLE	191372-001	S	Water	120297	12/14/06 05:36	1.0	
029	347b029	X	IB				12/14/06 06:04	1.0	
030	347b030	SAMPLE	191372-002	S	Water	120297	12/14/06 06:31	1.0	
031	347b031	SAMPLE	191372-003	S	Water	120297	12/14/06 06:59	1.0	
032	347b032	SAMPLE	191372-004	S	Water	120297	12/14/06 07:26	1.0	
033	347b033	SAMPLE	191372-005	S	Water	120297	12/14/06 07:54	1.0	
034	347b034	CCV	DSL_250				12/14/06 08:22	1.0	9
035	347b035	CCV	MO_500				12/14/06 08:49	1.0	6

Standards used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	042a001	X	IB			02/11/07 16:08	1.0		
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1	
003	042a003	X	MO_500			02/11/07 17:03	1.0	2	
004	042a004	X	MO_500			02/11/07 17:47	1.0	2	
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2	
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1	
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1	
008	042a008	X	IB			02/11/07 20:45	1.0		
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3	
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4	
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5	
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6	
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7	
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8	
015	042a015	IB	CALIB			02/12/07 00:01	1.0		
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9	
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9	
018	042a018	X	IB			02/12/07 01:24	1.0		
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10	

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117102790

Instrument : GC11A
Method : EPA 8015B

Begun : 03/12/07 09:10
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071a001	X	PRIMER				03/12/07 09:10	1.0	
002	071a002	X	IB				03/12/07 09:38	1.0	
003	071a003	X	DSL_500				03/12/07 10:06	1.0	1
004	071a004	CCV	DSL_500				03/12/07 10:34	1.0	1
005	071a005	CCV	MO_500				03/12/07 11:02	1.0	2
006	071a006	CCV	JET_250				03/12/07 11:51	1.0	3
007	071a007	SAMPLE	193189-007	S	Water	122934	03/12/07 12:19	1.0	
008	071a008	SAMPLE	193189-006	S	Water	122934	03/12/07 12:47	1.0	
009	071a009	SAMPLE	193189-005	S	Water	122934	03/12/07 13:15	1.0	
010	071a010	SAMPLE	193189-004	S	Water	122934	03/12/07 13:43	1.0	
011	071a011	SAMPLE	193189-003	S	Water	122934	03/12/07 14:12	1.0	
012	071a012	X	IB				03/12/07 14:40	1.0	
013	071a013	SAMPLE	193189-002	S	Water	122934	03/12/07 15:08	1.0	
014	071a014	SAMPLE	193189-001	S	Water	122934	03/12/07 15:36	1.0	
015	071a015	SAMPLE	193190-001	S	Water	122934	03/12/07 16:05	1.0	
016	071a016	X	DSL_1000				03/12/07 16:33	1.0	4
017	071a017	CCV	MO_500				03/12/07 17:01	1.0	2
018	071a018	CCV	JET_250				03/12/07 17:29	1.0	3
019	071a019	CCV	DSL_1000				03/12/07 17:57	1.0	4
020	071a020	CCV	DSL_1000				03/12/07 18:37	1.0	4
021	071a021	IB	CALIB				03/12/07 19:09	1.0	
022	071a022	X	HEX_5				03/12/07 19:37	1.0	5
023	071a023	ICAL	HEX_10				03/12/07 20:05	1.0	6
024	071a024	ICAL	HEX_25				03/12/07 20:33	1.0	7
025	071a025	ICAL	HEX_50				03/12/07 21:01	1.0	8
026	071a026	ICAL	HEX_100				03/12/07 21:29	1.0	9
027	071a027	ICAL	HEX_200				03/12/07 21:57	1.0	10
028	071a028	IB	CALIB				03/12/07 22:25	1.0	
029	071a029	CCV	DSL_1000				03/12/07 22:52	1.0	4
030	071a030	CCV	MO_500				03/12/07 23:20	1.0	2
031	071a031	X	CCV				03/12/07 23:48	1.0	4
032	071a032	X	CCV				03/13/07 00:16	1.0	2
033	071a033	ICAL	HEX_5				03/13/07 12:16	1.0	5

Standards used: 1=S5517 2=S5603 3=S4560 4=S5259 5=S4639 6=S4640 7=S4641 8=S5402 9=S4644 10=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071b001	X	PRIMER				03/12/07 08:47	1.0	
002	071b002	X	IB				03/12/07 09:20	1.0	
003	071b003	X					03/12/07 09:52	1.0	1
004	071b004	X					03/12/07 10:25	1.0	2
005	071b005	CMARKER	C8-50				03/12/07 10:56	1.0	3
006	071b006	X	IB				03/12/07 11:28	1.0	
007	071b007	CCV	DSL_500				03/12/07 11:59	1.0	1
008	071b008	CCV	MO_500				03/12/07 12:31	1.0	2
009	071b009	X	IB				03/12/07 16:43	1.0	
010	071b010	CCV	DSL_500				03/12/07 17:13	1.0	1
011	071b011	CCV	MO_500				03/12/07 17:44	1.0	2
012	071b012	SAMPLE	193210-036		Water	122957	03/12/07 18:15	1.0	
013	071b013	SAMPLE	193210-044		Water	122957	03/12/07 18:47	1.0	
014	071b014	MSS	193066-001	S	Water	122957	03/12/07 19:18	1.0	
015	071b015	MS	QC378569	S	Water	122957	03/12/07 19:49	1.0	
016	071b016	MSD	QC378570	S	Water	122957	03/12/07 20:20	1.0	
017	071b017	BLANK	QC378567	S	Water	122957	03/12/07 20:52	1.0	
018	071b018	SAMPLE	193226-007	S	Water	122957	03/12/07 21:23	1.0	
019	071b019	X	IB				03/12/07 21:54	1.0	
020	071b020	LCS	QC378568	S	Water	122957	03/12/07 22:25	1.0	
021	071b021	SAMPLE	193066-003	S	Water	122957	03/12/07 22:56	1.0	
022	071b022	SAMPLE	193066-004	S	Water	122957	03/12/07 23:27	1.0	
023	071b023	CCV	DSL_1000				03/12/07 23:58	1.0	4
024	071b024	CCV	MO_500				03/13/07 00:30	1.0	2
025	071b025	X	CCV				03/13/07 01:02	1.0	4
026	071b026	X	CCV				03/13/07 01:33	1.0	2
027	071b027	SAMPLE	193066-002	S	Water	122957	03/13/07 02:05	1.0	
028	071b028	SAMPLE	193057-002	S	Water	122957	03/13/07 02:36	1.0	
029	071b029	SAMPLE	193057-003	S	Water	122957	03/13/07 03:08	1.0	
030	071b030	SAMPLE	193057-004	S	Water	122957	03/13/07 03:39	1.0	
031	071b031	SAMPLE	193276-006	S	Soil	122982	03/13/07 04:11	1.0	
032	071b032	X	IB				03/13/07 04:44	1.0	
033	071b033	SAMPLE	193276-007	S	Soil	122982	03/13/07 05:17	1.0	
034	071b034	SAMPLE	193276-008	S	Soil	122982	03/13/07 05:50	1.0	
035	071b035	SAMPLE	193276-014	S	Soil	122982	03/13/07 06:23	1.0	
036	071b036	SAMPLE	193276-015	S	Soil	122982	03/13/07 06:57	1.0	
037	071b037	SAMPLE	193276-013	S	Soil	122982	03/13/07 07:30	1.0	
038	071b038	X	IB				03/13/07 08:03	1.0	
039	071b039	CCV	DSL_250				03/13/07 08:36	1.0	5
040	071b040	CCV	MO_500				03/13/07 09:10	1.0	2
041	071b041	X	CCV				03/13/07 09:44	1.0	5
042	071b042	X	CCV				03/13/07 10:16	1.0	2
043	071b043	LCS	QC378777	S	Water	123002	03/13/07 11:53	1.0	
044	071b044	BLANK	QC378776	S	Water	123002	03/13/07 12:25	1.0	
045	071b045	SAMPLE	193218-024	S	Water	123002	03/13/07 12:56	1.0	
046	071b046	SAMPLE	193302-002		Soil	122982	03/13/07 13:28	1.0	
047	071b047	X	IB				03/13/07 13:59	1.0	
048	071b048	MSS	193108-007	S	Water	123002	03/13/07 14:30	1.0	
049	071b049	MS	QC378778	S	Water	123002	03/13/07 15:01	1.0	
050	071b050	MSD	QC378779	S	Water	123002	03/13/07 15:32	1.0	
051	071b051	SAMPLE	193108-002	S	Water	123002	03/13/07 16:03	1.0	
052	071b052	SAMPLE	193108-003	S	Water	123002	03/13/07 16:34	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167102767

Instrument : GC15B
Method : EPA 8015B

Begun : 03/12/07 08:47
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	071b053	SAMPLE	193108-004	S	Water	123002	03/13/07 17:06	1.0	
054	071b054	CCV	DSL_500				03/13/07 17:38	1.0	1
055	071b055	CCV	MO_500				03/13/07 18:10	1.0	2
056	071b056	SAMPLE	193108-005	S	Water	123002	03/13/07 18:42	1.0	
057	071b057	SAMPLE	193322-014	S	Soil	123035	03/13/07 19:15	1.0	
058	071b058	SAMPLE	193322-013	S	Soil	123035	03/13/07 19:48	1.0	
059	071b059	SAMPLE	193322-025	S	Soil	123035	03/13/07 20:23	1.0	
060	071b060	X	IB				03/13/07 20:59	1.0	
061	071b061	BLANK	QC378780	S	Water	123003	03/13/07 21:34	1.0	
062	071b062	LCS	QC378781	S	Water	123003	03/13/07 22:09	1.0	
063	071b063	MSS	193055-001	S	Water	123003	03/13/07 22:43	1.0	
064	071b064	MS	QC378782	S	Water	123003	03/13/07 23:17	1.0	
065	071b065	MSD	QC378783	S	Water	123003	03/13/07 23:51	1.0	
066	071b066	SAMPLE	193055-002	S	Water	123003	03/14/07 00:25	1.0	
067	071b067	CCV	DSL_1000				03/14/07 00:59	1.0	4
068	071b068	CCV	MO_500				03/14/07 01:34	1.0	2
069	071b069	X	CCV				03/14/07 02:08	1.0	4
070	071b070	X	CCV				03/14/07 02:43	1.0	2
071	071b071	SAMPLE	193055-003	S	Water	123003	03/14/07 03:17	1.0	
072	071b072	SAMPLE	193055-004	S	Water	123003	03/14/07 03:51	1.0	
073	071b073	SAMPLE	193055-005	S	Water	123003	03/14/07 04:25	1.0	
074	071b074	SAMPLE	193055-006	S	Water	123003	03/14/07 04:59	1.0	
075	071b075	SAMPLE	193055-007	S	Water	123003	03/14/07 05:34	1.0	
076	071b076	SAMPLE	193055-008	S	Water	123003	03/14/07 06:08	1.0	
077	071b077	SAMPLE	193055-011	S	Water	123003	03/14/07 06:43	1.0	
078	071b078	SAMPLE	193055-012	S	Water	123003	03/14/07 07:17	1.0	
079	071b079	X	IB				03/14/07 07:52	1.0	
080	071b080	CCV	DSL_250				03/14/07 08:26	1.0	5
081	071b081	CCV	MO_500				03/14/07 09:00	1.0	2
082	071b082	SAMPLE	193229-008	S	Soil	123027	03/14/07 09:53	40.0	
083	071b083	SAMPLE	193229-010	S	Soil	123027	03/14/07 10:28	20.0	
084	071b084	X	IB				03/14/07 11:02	1.0	
085	071b085	SAMPLE	193322-047	S	Soil	123064	03/14/07 11:43	1.0	
086	071b086	SAMPLE	193322-041	S	Soil	123064	03/14/07 12:15	1.0	
087	071b087	MS	QC378782	S	Water	123003	03/14/07 12:48	1.0	
088	071b088	MSD	QC378783	S	Water	123003	03/14/07 13:21	1.0	
089	071b089	CCV	DSL_250				03/14/07 14:06	1.0	5
090	071b090	CCV	MO_500				03/14/07 14:37	1.0	2

Standards used: 1=S5517 2=S5603 3=S4049 4=S5259 5=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227102779

Instrument : GC14B
Method : EPA 8015B

Begun : 03/12/07 08:59
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071_001	X	PRIMER			03/12/07 08:59	1.0		
002	071_002	X	IB			03/12/07 09:28	1.0		
003	071_003	X				03/12/07 09:57	1.0	1	
004	071_004	X				03/12/07 10:26	1.0	2	
005	071_005	X	IB			03/12/07 13:15	1.0		
006	071_006	X				03/12/07 13:43	1.0	3	
007	071_007	X				03/12/07 14:12	1.0		
008	071_008	X				03/12/07 14:40	1.0	1	
009	071_009	CMARKER	C8-50			03/12/07 15:09	1.0	3	
010	071_010	X				03/12/07 16:00	1.0	1	
011	071_011	X				03/12/07 16:28	1.0	2	
012	071_012	X	IB			03/12/07 16:58	1.0		
013	071_013	IB	CALIB			03/12/07 17:27	1.0		
014	071_014	ICAL	DSL_10			03/12/07 17:56	1.0	4	
015	071_015	ICAL	DSL_100			03/12/07 18:24	1.0	5	
016	071_016	ICAL	DSL_500			03/12/07 18:53	1.0	6	
017	071_017	ICAL	DSL_1000			03/12/07 19:22	1.0	7	
018	071_018	ICAL	DSL_5000			03/12/07 19:50	1.0	8	
019	071_019	ICAL	DSL_7500			03/12/07 20:18	1.0	9	
020	071_020	IB	CALIB			03/12/07 20:47	1.0		
021	071_021	ICV	DSL_500			03/12/07 21:16	1.0	10	
022	071_022	X	ICV			03/12/07 21:44	1.0	10	
023	071_023	IB	CALIB			03/12/07 22:12	1.0		
024	071_024	ICAL	MO_50			03/12/07 22:41	1.0	11	
025	071_025	ICAL	MO_250			03/12/07 23:09	1.0	12	
026	071_026	ICAL	MO_500			03/12/07 23:38	1.0	13	
027	071_027	X	MO_1000			03/13/07 00:06	1.0	14	
028	071_028	ICAL	MO_5000			03/13/07 00:35	1.0	15	
029	071_029	IB	CALIB			03/13/07 01:04	1.0		
030	071_030	ICAL	HEX_5			03/13/07 01:32	1.0	16	
031	071_031	ICAL	HEX_10			03/13/07 02:01	1.0	17	
032	071_032	ICAL	HEX_50			03/13/07 02:29	1.0	18	
033	071_033	ICAL	HEX_100			03/13/07 02:58	1.0	19	
034	071_034	ICAL	HEX_200			03/13/07 03:27	1.0	20	
035	071_035	X	IB			03/13/07 03:56	1.0		
036	071_036	ICAL	MO_1000			03/13/07 12:33	1.0	14	

Analyst: CP Date: 03/13/07 Reviewer: CW Date: 03/13/07

Standards used: 1=S5517 2=S5603 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S4639 17=S4640 18=S5402 19=S4644 20=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167106029

Instrument : GC15B
Method : EPA 8015B

Begun : 03/14/07 15:09
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	073b001	X	IB				03/14/07 15:09	1.0	
002	073b002	CCV	DSL_500				03/14/07 15:53	1.0	1
003	073b003	CCV	MO_500				03/14/07 16:25	1.0	2
004	073b004	BLANK	QC379052	S	Water	123067	03/14/07 18:01	1.0	
005	073b005	LCS	QC379053	S	Water	123067	03/14/07 19:28	1.0	
006	073b006	MSS	193108-017	S	Water	123067	03/14/07 20:00	1.0	
007	073b007	MS	QC379054	S	Water	123067	03/14/07 20:32	1.0	
008	073b008	MSD	QC379055	S	Water	123067	03/14/07 21:06	1.0	
009	073b009	SAMPLE	193244-001	S	Water	123067	03/14/07 21:41	1.0	
010	073b010	SAMPLE	193119-006	S	Water	123067	03/14/07 22:15	1.0	
011	073b011	X	IB				03/14/07 22:47	1.0	
012	073b012	SAMPLE	193119-005	S	Water	123067	03/14/07 23:20	1.0	
013	073b013	SAMPLE	193119-004	S	Water	123067	03/14/07 23:53	1.0	
014	073b014	SAMPLE	193119-002	S	Water	123067	03/15/07 00:28	1.0	
015	073b015	X	IB				03/15/07 01:02	1.0	
016	073b016	CCV	DSL_1000				03/15/07 01:37	1.0	3
017	073b017	CCV	MO_500				03/15/07 02:11	1.0	2
018	073b018	X	CCV				03/15/07 02:45	1.0	3
019	073b019	X	CCV				03/15/07 03:20	1.0	2
020	073b020	SAMPLE	193119-001	S	Water	123067	03/15/07 03:54	1.0	

Standards used: 1=S5517 2=S5603 3=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117107151

Instrument : GC11A
Method : EPA 8015B

Begun : 03/15/07 09:51
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	074a001	X	PRIMER				03/15/07 09:51	1.0	
002	074a002	X	IB				03/15/07 10:19	1.0	
003	074a003	CCV	DSL_500				03/15/07 10:47	1.0	1
004	074a004	CCV	MO_500				03/15/07 11:16	1.0	2
005	074a005	SAMPLE	193119-001	S	Water	123067	03/15/07 11:45	1.0	
006	074a006	CCV	DSL_250				03/15/07 12:14	1.0	3
007	074a007	CCV	MO_500				03/15/07 12:42	1.0	2
008	074a008	BS	QC379229	S	Water	123108	03/15/07 14:00	1.0	
009	074a009	BSD	QC379230	S	Water	123108	03/15/07 14:29	1.0	
010	074a010	BLANK	QC379228	S	Water	123108	03/15/07 14:57	1.0	
011	074a011	SAMPLE	193108-019	S	Water	123108	03/15/07 15:25	1.0	
012	074a012	SAMPLE	193108-020	S	Water	123108	03/15/07 15:53	1.0	
013	074a013	SAMPLE	193108-022	S	Water	123108	03/15/07 16:22	1.0	
014	074a014	SAMPLE	193345-003	S	Water	123108	03/15/07 16:50	1.0	
015	074a015	SAMPLE	193345-005	S	Water	123108	03/15/07 17:18	1.0	
016	074a016	X	IB				03/15/07 17:46	1.0	
017	074a017	LCS	QC379310	S	Soil	123131	03/15/07 18:23	1.0	
018	074a018	BLANK	QC379309	S	Soil	123131	03/15/07 18:51	1.0	
019	074a019	CCV	DSL_1000				03/15/07 19:20	1.0	4
020	074a020	CCV	MO_500				03/15/07 19:48	1.0	2
021	074a021	X	CCV				03/15/07 20:16	1.0	4
022	074a022	X	CCV				03/15/07 20:44	1.0	2
023	074a023	SAMPLE	193303-001	S	Miscell.	123131	03/15/07 21:12	1.0	
024	074a024	SAMPLE	193303-002	S	Miscell.	123131	03/15/07 21:40	1.0	
025	074a025	SAMPLE	193303-003	S	Miscell.	123131	03/15/07 22:08	1.0	
026	074a026	SAMPLE	193303-004	S	Miscell.	123131	03/15/07 22:36	1.0	
027	074a027	SAMPLE	193148-001	S	Soil	123131	03/15/07 23:04	1.0	
028	074a028	SAMPLE	193148-002	S	Soil	123131	03/15/07 23:32	3.0	
029	074a029	X	IB				03/16/07 00:00	1.0	
030	074a030	SAMPLE	193148-003	S	Soil	123131	03/16/07 00:28	1.0	
031	074a031	SAMPLE	193148-004	S	Soil	123131	03/16/07 00:56	1.0	
032	074a032	SAMPLE	193325-001	S	Soil	123131	03/16/07 01:24	1.0	
033	074a033	SAMPLE	193325-003	S	Soil	123131	03/16/07 01:53	1.0	
034	074a034	X	IB				03/16/07 02:21	1.0	
035	074a035	CCV	DSL_500				03/16/07 02:49	1.0	1
036	074a036	CCV	MO_500				03/16/07 03:17	1.0	2
037	074a037	X	CCV				03/16/07 03:45	1.0	1
038	074a038	X	CCV				03/16/07 04:13	1.0	2
039	074a039	MSS	193325-002	S	Soil	123131	03/16/07 04:42	1.0	
040	074a040	MS	QC379311	S	Soil	123131	03/16/07 05:10	1.0	
041	074a041	MSD	QC379312	S	Soil	123131	03/16/07 05:38	1.0	
042	074a042	SAMPLE	193325-009	S	Soil	123131	03/16/07 06:06	1.0	
043	074a043	SAMPLE	193325-010	S	Soil	123131	03/16/07 06:34	1.0	
044	074a044	X	IB				03/16/07 07:03	1.0	
045	074a045	CCV	DSL_1000				03/16/07 07:31	1.0	4
046	074a046	CCV	MO_500				03/16/07 07:59	1.0	2

Standards used: 1=S5517 2=S5603 3=S5258 4=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177107148

Instrument : GC17A
Method : EPA 8015B

Begun : 03/15/07 09:48
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	074a001	X	PRIMER				03/15/07 09:48	1.0	
002	074a002	X	IB				03/15/07 10:15	1.0	
003	074a003	CCV	DSL_500				03/15/07 10:43	1.0	1
004	074a004	CCV	MO_500				03/15/07 11:10	1.0	2
005	074a005	SAMPLE	193108-016	S	Water	123067	03/15/07 11:50	1.0	
006	074a006	SAMPLE	193108-018	S	Water	123067	03/15/07 12:18	1.0	
007	074a007	SAMPLE	193108-015	S	Water	123067	03/15/07 12:45	1.0	
008	074a008	SAMPLE	193108-013	S	Water	123067	03/15/07 13:13	1.0	
009	074a009	X	IB				03/15/07 13:40	1.0	
010	074a010	SAMPLE	193108-011	S	Water	123067	03/15/07 14:07	1.0	
011	074a011	SAMPLE	193108-010	S	Water	123067	03/15/07 14:35	1.0	
012	074a012	SAMPLE	193108-009	S	Water	123067	03/15/07 15:02	1.0	
013	074a013	SAMPLE	193108-008	S	Water	123067	03/15/07 15:29	1.0	
014	074a014	CCV	DSL_500				03/15/07 15:56	1.0	1
015	074a015	CCV	MO_500				03/15/07 16:24	1.0	2
016	074a016	CCV	DSL_250				03/15/07 18:46	1.0	3
017	074a017	CCV	MO_500				03/15/07 19:13	1.0	2
018	074a018	SAMPLE	193325-008	S	Soil	123131	03/15/07 19:42	1.0	
019	074a019	SAMPLE	193325-006	S	Soil	123131	03/15/07 20:09	1.0	
020	074a020	SAMPLE	193325-005	S	Soil	123131	03/15/07 20:37	1.0	
021	074a021	SAMPLE	193325-004	S	Soil	123131	03/15/07 21:04	1.0	
022	074a022	X	IB				03/15/07 21:32	1.0	
023	074a023	SAMPLE	193334-008		Soil	123122	03/15/07 21:59	1.0	
024	074a024	SAMPLE	193334-009		Soil	123122	03/15/07 22:26	1.0	
025	074a025	SAMPLE	193334-011		Soil	123122	03/15/07 22:54	1.0	
026	074a026	SAMPLE	193334-004		Soil	123122	03/15/07 23:21	1.0	
027	074a027	SAMPLE	193334-003		Soil	123122	03/15/07 23:48	1.0	
028	074a028	SAMPLE	193334-010		Soil	123122	03/16/07 00:16	1.0	
029	074a029	X	IB				03/16/07 00:43	1.0	
030	074a030	CCV	DSL_1000				03/16/07 01:10	1.0	4
031	074a031	X	MO_500				03/16/07 01:37	1.0	2
032	074a032	X	CCV				03/16/07 02:05	1.0	4
033	074a033	CCV	MO_500				03/16/07 02:32	1.0	2
034	074a034	SAMPLE	193334-012		Soil	123122	03/16/07 02:59	1.0	
035	074a035	SAMPLE	193334-006		Soil	123122	03/16/07 03:26	1.0	
036	074a036	X	DSL_1000				03/16/07 03:53	1.0	4
037	074a037	X	MO_500				03/16/07 04:20	1.0	2
038	074a038	CCV	DSL_1000				03/16/07 04:48	1.0	4
039	074a039	CCV	MO_500				03/16/07 05:15	1.0	2

Standards used: 1=S5517 2=S5603 3=S5258 4=S5259

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A
Method : EPA 8015B

Begun : 03/18/07 16:11
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	077a001	X	PRIMER				03/18/07 16:11	1.0	
002	077a002	X	IB				03/18/07 16:39	1.0	
003	077a003	CMARKER	C8-C50				03/18/07 17:07	1.0	1
004	077a004	IB	CALIB				03/18/07 17:35	1.0	
005	077a005	ICAL	JET_10				03/18/07 18:02	1.0	2
006	077a006	ICAL	JET_100				03/18/07 18:31	1.0	3
007	077a007	ICAL	JET_500				03/18/07 18:59	1.0	4
008	077a008	ICAL	JET_1000				03/18/07 19:27	1.0	5
009	077a009	ICAL	JET_3000				03/18/07 19:56	1.0	6
010	077a010	ICAL	JET_5000				03/18/07 20:24	1.0	7
011	077a011	IB	CALIB				03/18/07 20:52	1.0	
012	077a012	CCV	DSL_250				03/18/07 21:35	1.0	8
013	077a013	CCV	MO_500				03/18/07 22:04	1.0	9
014	077a014	CCV	JET_250				03/18/07 22:32	1.0	10
015	077a015	X	CCV				03/18/07 22:59	1.0	8
016	077a016	X	CCV				03/18/07 23:27	1.0	9
017	077a017	X	CCV				03/18/07 23:55	1.0	10
018	077a018	BLANK	QC379228	S	Water	123108	03/19/07 00:23	1.0	
019	077a019	SAMPLE	193291-004		Soil	123122	03/19/07 00:51	1.0	
020	077a020	MS	QC379287		Soil	123122	03/19/07 01:20	1.0	
021	077a021	MSD	QC379288		Soil	123122	03/19/07 01:48	1.0	
022	077a022	X	IB				03/19/07 02:15	1.0	
023	077a023	SAMPLE	193274-005	S	Water	123108	03/19/07 02:43	1.0	
024	077a024	SAMPLE	193274-006	S	Water	123108	03/19/07 03:12	1.0	
025	077a025	SAMPLE	193274-007	S	Water	123108	03/19/07 03:40	1.0	
026	077a026	SAMPLE	193274-008	S	Water	123108	03/19/07 04:08	1.0	
027	077a027	SAMPLE	193274-009	S	Water	123108	03/19/07 04:36	1.0	
028	077a028	SAMPLE	193274-010	S	Water	123108	03/19/07 05:04	1.0	
029	077a029	X	IB				03/19/07 05:32	1.0	
030	077a030	CCV	DSL_1000				03/19/07 06:01	1.0	11
031	077a031	CCV	MO_500				03/19/07 06:29	1.0	9
032	077a032	CCV	JET_250				03/19/07 06:57	1.0	10
033	077a033	SAMPLE	193274-011	S	Water	123108	03/19/07 07:35	1.0	
034	077a034	SAMPLE	193274-012	S	Water	123108	03/19/07 08:03	1.0	
035	077a035	SAMPLE	193274-013	S	Water	123108	03/19/07 08:31	1.0	
036	077a036	SAMPLE	193274-014	S	Water	123108	03/19/07 08:59	1.0	
037	077a037	SAMPLE	193274-015	S	Water	123108	03/19/07 09:27	1.0	
038	077a038	SAMPLE	193291-004		Soil	123122	03/19/07 09:55	1.0	
039	077a039	SAMPLE	193274-016	S	Water	123108	03/19/07 10:24	1.0	
040	077a040	BLANK	QC379739	S	Water	123229	03/19/07 10:52	1.0	
041	077a041	CCV	DSL_250				03/19/07 11:20	1.0	8
042	077a042	CCV	MO_500				03/19/07 11:48	1.0	9
043	077a043	CCV	JET_250				03/19/07 12:16	1.0	10
044	077a044	BLANK	QC378776	S	Water	123002	03/19/07 13:23	1.0	
045	077a045	SAMPLE	193227-002	S	Water	123002	03/19/07 13:51	1.0	
046	077a046	SAMPLE	193233-002	S	Water	123002	03/19/07 14:19	1.0	
047	077a047	SAMPLE	193233-003	S	Water	123002	03/19/07 14:47	1.0	
048	077a048	X	IB				03/19/07 15:15	1.0	
049	077a049	SAMPLE	193329-007	S	Water	123229	03/19/07 15:43	1.0	
050	077a050	MSS	193108-023	S	Water	123229	03/19/07 16:11	1.0	
051	077a051	MS	QC379741	S	Water	123229	03/19/07 16:39	1.0	
052	077a052	MSD	QC379742	S	Water	123229	03/19/07 17:07	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A
Method : EPA 8015B

Begun : 03/18/07 16:11
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	077a053	SAMPLE	193291-002	S	Soil	123122	03/19/07 17:35	1.0		
054	077a054	SAMPLE	193291-003	S	Soil	123122	03/19/07 18:03	1.0		
055	077a055	X	IB				03/19/07 18:31	1.0		
056	077a056	CCV	DSL_500				03/19/07 18:59	1.0	12	
057	077a057	CCV	MO_500				03/19/07 19:28	1.0	9	
058	077a058	CCV	JET_250				03/19/07 19:56	1.0	10	
059	077a059	X	CCV				03/19/07 20:24	1.0	12	
060	077a060	X	CCV				03/19/07 20:52	1.0	9	
061	077a061	X	CCV				03/19/07 21:20	1.0	10	
062	077a062	BLANK	QC379285	S	Soil	123122	03/19/07 21:48	1.0		
063	077a063	SAMPLE	193291-004	S	Soil	123122	03/19/07 22:16	1.0		
064	077a064	MSS	193291-005	S	Soil	123122	03/19/07 22:44	1.0		
065	077a065	SAMPLE	193291-006	S	Soil	123122	03/19/07 23:12	1.0		
066	077a066	MS	QC379287	S	Soil	123122	03/19/07 23:40	1.0		
067	077a067	MSD	QC379288	S	Soil	123122	03/20/07 00:08	1.0		
068	077a068	X	IB				03/20/07 00:36	1.0		
069	077a069	SAMPLE	193329-003	S	Water	123229	03/20/07 01:04	1.0		
070	077a070	SAMPLE	193329-004	S	Water	123229	03/20/07 01:33	1.0		
071	077a071	MS	QC379741	S	Water	123229	03/20/07 02:01	1.0		
072	077a072	MSD	QC379742	S	Water	123229	03/20/07 02:29	1.0		
073	077a073	X	IB				03/20/07 02:57	1.0		
074	077a074	CCV	DSL_1000				03/20/07 03:25	1.0	11	
075	077a075	CCV	MO_500				03/20/07 03:53	1.0	9	
076	077a076	CCV	JET_250				03/20/07 04:21	1.0	10	
077	077a077	X	CCV				03/20/07 04:50	1.0	11	
078	077a078	X	CCV				03/20/07 05:18	1.0	9	
079	077a079	X	CCV				03/20/07 05:46	1.0	10	
080	077a080	SAMPLE	193329-001	S	Water	123229	03/20/07 06:14	1.0		
081	077a081	SAMPLE	193329-002	S	Water	123229	03/20/07 06:43	1.0		
082	077a082	SAMPLE	193329-005	S	Water	123229	03/20/07 07:11	1.0		
083	077a083	SAMPLE	193329-006	S	Water	123229	03/20/07 07:39	1.0		
084	077a084	CCV	DSL_250				03/20/07 08:08	1.0	8	
085	077a085	CCV	MO_500				03/20/07 08:36	1.0	9	
086	077a086	CCV	JET_250				03/20/07 09:04	1.0	10	
087	077a087	X	CCV				03/20/07 09:32	1.0	8	

Standards used: 1=S4049 2=S4665 3=S4666 4=S4667 5=S4668 6=S4670 7=S4664 8=S5258 9=S5603 10=S4560 11=S5259 12=S5517

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177112801

Instrument : GC17A
Method : EPA 8015B

Begun : 03/19/07 08:01
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER				03/19/07 08:01	1.0	
002	078a002	X	IB				03/19/07 08:28	1.0	
003	078a003	CCV	DSL_500				03/19/07 08:55	1.0	1
004	078a004	CCV	MO_500				03/19/07 09:23	1.0	2
005	078a005	SAMPLE	193331-001		Soil	123183	03/19/07 10:49	1.0	
006	078a006	MSS	193384-001		Soil	123183	03/19/07 11:24	1.0	
007	078a007	SAMPLE	193331-001	S	Soil	123183	03/19/07 11:51	1.0	
008	078a008	X	IB				03/19/07 14:32	1.0	
009	078a009	LCS	QC379740	S	Water	123229	03/19/07 14:59	1.0	
010	078a010	SAMPLE	193108-012	S	Water	123229	03/19/07 15:44	1.0	
011	078a011	SAMPLE	193137-005	S	Water	123229	03/19/07 16:11	1.0	
012	078a012	SAMPLE	193108-025	S	Water	123229	03/19/07 16:38	1.0	
013	078a013	SAMPLE	193108-026	S	Water	123229	03/19/07 17:06	1.0	
014	078a014	SAMPLE	193217-001	S	Water	123238	03/19/07 17:33	1.0	
015	078a015	SAMPLE	193217-002	S	Water	123238	03/19/07 18:00	1.0	
016	078a016	X	IB				03/19/07 18:27	1.0	
017	078a017	CCV	DSL_1000				03/19/07 18:55	1.0	3
018	078a018	CCV	MO_500				03/19/07 19:23	1.0	2
019	078a019	X	CCV				03/19/07 19:50	1.0	3
020	078a020	X	CCV				03/19/07 20:17	1.0	2
021	078a021	BLANK	QC379743	S	Water	123230	03/19/07 20:44	1.0	
022	078a022	BS	QC379744	S	Water	123230	03/19/07 21:12	1.0	
023	078a023	BSD	QC379745	S	Water	123230	03/19/07 21:39	1.0	
024	078a024	SAMPLE	193174-001	S	Water	123230	03/19/07 22:06	1.0	
025	078a025	SAMPLE	193174-002	S	Water	123230	03/19/07 22:34	1.0	
026	078a026	SAMPLE	193174-003	S	Water	123230	03/19/07 23:01	1.0	
027	078a027	SAMPLE	193174-004	S	Water	123230	03/19/07 23:28	1.0	
028	078a028	SAMPLE	193174-005	S	Water	123230	03/19/07 23:55	1.0	
029	078a029	SAMPLE	193174-006	S	Water	123230	03/20/07 00:23	1.0	
030	078a030	SAMPLE	193174-007	S	Water	123230	03/20/07 00:50	1.0	
031	078a031	X	IB				03/20/07 01:17	1.0	
032	078a032	CCV	DSL_250				03/20/07 01:44	1.0	4
033	078a033	CCV	MO_500				03/20/07 02:12	1.0	2
034	078a034	X	CCV				03/20/07 02:40	1.0	4
035	078a035	X	CCV				03/20/07 03:07	1.0	2
036	078a036	SAMPLE	193174-008	S	Water	123230	03/20/07 03:34	1.0	
037	078a037	SAMPLE	193174-009	S	Water	123230	03/20/07 04:02	1.0	
038	078a038	SAMPLE	193174-010	S	Water	123230	03/20/07 04:29	1.0	
039	078a039	SAMPLE	193174-011	S	Water	123230	03/20/07 04:56	1.0	
040	078a040	SAMPLE	193174-012	S	Water	123230	03/20/07 05:23	1.0	
041	078a041	SAMPLE	193174-013	S	Water	123230	03/20/07 05:50	1.0	
042	078a042	SAMPLE	193174-014	S	Water	123230	03/20/07 06:17	1.0	
043	078a043	X	IB				03/20/07 06:45	1.0	
044	078a044	CCV	DSL_500				03/20/07 07:13	1.0	1
045	078a045	CCV	MO_500				03/20/07 07:40	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227112742

Instrument : GC14B
Method : EPA 8015B

Begun : 03/19/07 07:02
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078_001	X	PRIMER				03/19/07 07:02	1.0	
002	078_002	X	IB				03/19/07 07:30	1.0	
003	078_003	CCV	DSL_250				03/19/07 07:58	1.0	1
004	078_004	CCV	MO_500				03/19/07 08:26	1.0	2
005	078_005	X	IB				03/19/07 09:58	1.0	
006	078_006	X	IB				03/19/07 10:26	1.0	
007	078_007	X	IB				03/19/07 10:54	1.0	
008	078_008	MSS	193384-001	S	Soil	123183	03/19/07 11:44	1.0	
009	078_009	CCV	DSL_1000				03/19/07 13:35	1.0	3
010	078_010	CCV	MO_500				03/19/07 14:03	1.0	2
011	078_011	SAMPLE	193137-002	S	Water	123229	03/19/07 14:37	1.0	
012	078_012	SAMPLE	193137-003	S	Water	123229	03/19/07 15:05	1.0	
013	078_013	SAMPLE	193137-004	S	Water	123229	03/19/07 15:33	1.0	
014	078_014	SAMPLE	193137-001	S	Water	123229	03/19/07 16:20	1.0	
015	078_015	SAMPLE	193108-027	S	Water	123229	03/19/07 16:47	1.0	
016	078_016	X	IB				03/19/07 17:15	1.0	
017	078_017	BLANK	QC379769		Water	123238	03/19/07 17:43	1.0	
018	078_018	BLANK	QC379769	S	Water	123238	03/19/07 18:11	1.0	
019	078_019	LCS	QC379770	S	Water	123238	03/19/07 18:39	1.0	
020	078_020	SAMPLE	193241-001		Water	123238	03/19/07 19:07	1.0	
021	078_021	SAMPLE	193166-016	S	Water	123238	03/19/07 19:35	1.0	
022	078_022	CCV	DSL_1000				03/19/07 20:03	1.0	3
023	078_023	CCV	MO_500				03/19/07 20:31	1.0	2
024	078_024	X	CCV				03/19/07 20:59	1.0	3
025	078_025	X	CCV				03/19/07 21:27	1.0	2
026	078_026	MSS	193217-005	S	Water	123238	03/19/07 21:55	1.0	
027	078_027	MSS	193217-011	S	Water	123238	03/19/07 22:23	1.0	
028	078_028	MS	QC379771	S	Water	123238	03/19/07 22:51	1.0	
029	078_029	MSD	QC379772	S	Water	123238	03/19/07 23:19	1.0	
030	078_030	MS	QC379773	S	Water	123238	03/19/07 23:46	1.0	
031	078_031	MSD	QC379774	S	Water	123238	03/20/07 00:14	1.0	
032	078_032	X	IB				03/20/07 00:43	1.0	
033	078_033	SAMPLE	193217-010	S	Water	123238	03/20/07 01:10	1.0	
034	078_034	SAMPLE	193217-012	S	Water	123238	03/20/07 01:38	1.0	
035	078_035	SAMPLE	193217-003	S	Water	123238	03/20/07 02:06	1.0	
036	078_036	SAMPLE	193217-004	S	Water	123238	03/20/07 02:34	1.0	
037	078_037	X	DSL_250				03/20/07 03:02	1.0	1
038	078_038	X	MO_500				03/20/07 03:30	1.0	2
039	078_039	CCV	DSL_250				03/20/07 03:57	1.0	1
040	078_040	CCV	MO_500				03/20/07 04:25	1.0	2
041	078_041	SAMPLE	193217-006	S	Water	123238	03/20/07 04:53	1.0	
042	078_042	SAMPLE	193217-007	S	Water	123238	03/20/07 05:22	1.0	
043	078_043	SAMPLE	193217-008	S	Water	123238	03/20/07 05:50	1.0	
044	078_044	SAMPLE	193217-009	S	Water	123238	03/20/07 06:18	1.0	
045	078_045	X	IB				03/20/07 06:46	1.0	
046	078_046	CCV	DSL_500				03/20/07 07:14	1.0	4
047	078_047	CCV	MO_500				03/20/07 07:42	1.0	2

Standards used: 1=S5258 2=S5603 3=S5259 4=S5517

REPORTING SUMMARY FOR 193108 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193108-002	GC15B	03/13/07 16:03	1.0	+	+	+	
193108-003	GC15B	03/13/07 16:34	1.0	+	+	+	
193108-004	GC15B	03/13/07 17:06	1.0	+	+	+	
193108-005	GC15B	03/13/07 18:42	1.0	+	+	+	
193108-007	GC15B	03/13/07 14:30	1.0	+	+	+	
193108-008	GC17A	03/15/07 15:29	1.0	+	+	+	
193108-009	GC17A	03/15/07 15:02	1.0	+	+	+	
193108-010	GC17A	03/15/07 14:35	1.0	+	+	+	
193108-011	GC17A	03/15/07 14:07	1.0	+	+	+	
193108-012	GC17A	03/19/07 15:44	1.0	+	+	+	
193108-013	GC17A	03/15/07 13:13	1.0	+	+	+	
193108-015	GC17A	03/15/07 12:45	1.0	+	+	+	
193108-016	GC17A	03/15/07 11:50	1.0	+	+	+	
193108-017	GC15B	03/14/07 20:00	1.0	+	+	+	
193108-018	GC17A	03/15/07 12:18	1.0	+	+	+	
193108-019	GC11A	03/15/07 15:25	1.0	+	+	+	
193108-020	GC11A	03/15/07 15:53	1.0	+	+	+	
193108-022	GC11A	03/15/07 16:22	1.0	+	+	+	
193108-023	GC11A	03/19/07 16:11	1.0	+	+	+	
193108-025	GC17A	03/19/07 16:38	1.0	+	+	+	
193108-026	GC17A	03/19/07 17:06	1.0	+	+	+	
193108-027	GC14B	03/19/07 16:47	1.0	+	+	+	
QC378776	GC15B	03/13/07 12:25	1.0	+	+	+	
QC378776	GC17A	03/13/07 16:29	1.0				
QC378776	GC11A	03/19/07 13:23	1.0				
QC378777	GC15B	03/13/07 11:53	1.0	+		+	
QC378778	GC15B	03/13/07 15:01	1.0	+		+	

REPORTING SUMMARY FOR 193108 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
QC378779	GC15B	03/13/07 15:32	1.0	+		+	
QC379052	GC15B	03/14/07 18:01	1.0	+	+	+	
QC379052	GC14B	03/21/07 12:12	1.0				
QC379053	GC15B	03/14/07 19:28	1.0	+		+	
QC379054	GC15B	03/14/07 20:32	1.0	+		+	
QC379055	GC15B	03/14/07 21:06	1.0	+		+	
QC379228	GC11A	03/15/07 14:57	1.0	+	+	+	
QC379228	GC11A	03/19/07 00:23	1.0				
QC379229	GC11A	03/15/07 14:00	1.0	+		+	
QC379230	GC11A	03/15/07 14:29	1.0	+		+	
QC379739	GC11A	03/19/07 10:52	1.0	+	+	+	
QC379740	GC17A	03/19/07 14:59	1.0	+		+	
QC379741	GC11A	03/19/07 16:39	1.0				
QC379741	GC11A	03/20/07 02:01	1.0	+		+	
QC379742	GC11A	03/19/07 17:07	1.0				
QC379742	GC11A	03/20/07 02:29	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123002
Started By : JOM
Method : 3520C
Spike #1 ID: S5545

Prep Date : 12-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: JLM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	MSS
193218-024		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193227-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193233-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193233-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193235-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193251-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193251-008		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC378776	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC378777	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC378778	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC378779	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: MDW Date: 03/14/07 Reviewer: CP Date: 03/14/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123002
LIMS Analysis: TEH/M
Extracted by: JM
Date Extracted: 03/12/07

Extraction Method:
- ☐ mod. EPA 3510 sep. funnel
- ☒ mod. EPA 3520 cont. L/L
- ☐ _____

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Cleanup Method (if needed):
- ☒ EPA 3630 Silica Gel
- ☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-002 H	500	7	2.5	X	
-003 ↓	↓	↓	↓	↓	
-004 F					
-005 I					
-007 AA					
193218-024 J					MSS
193227-002 M				↓	Re-X
193235-002				X	
-003 ↓				X	
193235-001 K					
-002 L					
-003 K					
-004 L					
-005 K					
-006 L					
-007 K					
-008 L					
-009 J					
193281-003 B					
-008 C					
MB QC378776		N/A			
LCS 7		↓			
MS 8S		7			
MSD 9S	↓	↓	↓	↓	193108-007 ↓

JM 3/12/07

0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1420
Extraction End Time: 0825
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5545A	JM 3/12/07
S5627B	↓
FS065076	↓
EM46352 / EM46354	↓
1420	↓
0825	JM 3/13/07
N/A	↓
EM46111628	↓
✓	↓

Julie Shue 3/12/07
Extraction Chemist Date

Contined from Page —
Continued on Page —

Pamela Mangelf 3/13/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 3/13/07

Benchbook # **BK 2475**
Page 4

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-002	123002	1.0	1.0	
-003				
-004				
-005				
-007				MSS
193218-024				
193233-002				
-003				
193235-001				
-002				
-003				
-004				
-005				
-006				
-007				
-008				
-009				
193251-003				
-008				
MB QC378776				
LCS 7				
MS 8				
MSD 9				
				JLM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	N/A	JLM 3/13/07
☑ Extracts were cleaned up using 1.0 g cartridges	SP8247	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

3/13/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/13/07
Reviewed by / Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 3/13/07

Benchbook # **BK 2475**
Page 5

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193322-006	JLM ~~123300~~ 123035	1.0	1.0	MSS
-007	123035			
-008				
-009				
-013				
-014				
-015				
-016				
-021				
-022				
-023				
-025				
-029				
-030				
193322-031				
-032				
-036				
-037				
-038				
-039				
MB QC378892				
LCS 3				
MS 4				
MSD 5				
193227-002	123002			
				JLM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	N/A	JLM 3/13/07
☑ Extracts were cleaned up using 1.0 g cartridges	SP8247	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

JLM 3/13/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Pamela Maright 3/13/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123067
Started By : JOM
Method : 3520C
Spike #1 ID: S5545

Prep Date : 13-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	MSS
193108-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193119-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193244-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193315-001		Water	500	2.5	1	0.005	7	.5				TEH	
193315-002		Water	500	2.5	1	0.005	7	.5				TEH	
193315-003		Water	500	2.5	1	0.005	7	.5				TEH	
193315-004		Water	500	2.5	1	0.005	7	.5				TEH	
QC379052	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379053	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379054	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC379055	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: ATL Date: 03/15/07 Reviewer: CP Date: 03/15/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123067
LIMS Analysis: TEH/M
Extracted by: JDM
Date Extracted: 13 March 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640 GPC
☒ EPA 3630 Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-008 N	500	7	2.5	X	
09 I					
10 O					
11 L					
13 ↓					
15 K					
16 H					
17 X					MSS
18 I					
193119-001 J					
02 ↓					
04 K					
05 ↓					
06 J					
193244-001 B					
193315-001 D					
02 E					
03					
04 ↓					
MB QC379052		NA		X	
LCS 53					
MS 54		7			193108-017 V
MSD 55		7			

DDT 3/14/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S5545A	JDM 3/13/07
0.5 mL of TEH_SP was added to all spikes	S56276	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1715	
Extraction End Time:	1115	JDM 3/14/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	DDT 3/14/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205637	
Concentrated to volumes as noted above	✓	

Jeffrey Lee 3/13/07
Extraction Chemist Date

Contined from Page ___
Continued on Page ___

3/15/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 3-14-07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-008	123067	1.0	1.0	
009				
010				
011				
013				
015				
016				
017				MSS
018				
193119-001				
002				
004				
005				
006				
193244-001				
MB QC 379052				
LCS 53				
MS 54				
MSD 55				

DJT 3/14/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	DJT 3/14/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

3/14/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/14/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123108
Started By : JOM
Method : 3520C
Spike #1 ID: S5713

Prep Date : 14-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-020		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-022		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-013		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
193274-014		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
193274-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193274-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193345-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193345-005		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC379228	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379229	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379230	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: ATL Date: 03/16/07 Reviewer: CP Date: 03/19/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123108
LIMS Analysis: TEH/M
Extracted by: JOM
Date Extracted: 14 March 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-019 L	500	7	2.5	X	
20 L					
22 M					
193274-005 N					
06 M					
07 J					
08 N					
09 M					
10 J					
11 H					
12 G		6			
13 G		10			
14 G		10			
15 I		7			
16 I					
193345-003 A					
05 C					
MB QC379228		NA			
BS 29					
BSD 30					

DJT 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S5713A	JOM 3/14/07
0.5 mL of TEH_SP was added to all spikes	S5627B	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1500	
Extraction End Time:	0910	DFK 03/15/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	DJT 3/15/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205637	
Concentrated to volumes as noted above	✓	

Jessica Chee 3/14/07
Extraction Chemist Date

Contined from Page —
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3/15/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 3/15/07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-019	123108	1.0	1.0	
020				
022				
193274-005				
006				
007				
008				
009				
010				
011				
012				
013				
014				
015				
016				
193345-003				
005				
MB QC 379228				
BS 29				
BSD 30				

DJT 3/15/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	DJT 3/15/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP 8483	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47301	
Concentrated to volumes as noted above	✓	

3/15/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

3/15/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123229
Started By : KR
Method : 3520C
Spike #1 ID: S5713

Prep Date : 17-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: RFW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-023		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
193108-025		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-026		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-027		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-001		Water	450	2.5	1	0.005556	9	.5			3630C	TEHM	
193329-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-007		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
QC379739	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379740	LCS	Water	500	2.5	1	0.005		1	.5		3630C	TEH	2x surrogate
QC379741	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC379742	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123229
LIMS Analysis: TEHM
Extracted by: KR
Date Extracted: 17 MAR07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☑ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☑ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-012I	500	7	2.5	X	
23A4					MSS filter breaking - transferred after conc.
25M					
26M					
27Q					lost 5-10mL before conc.
193132-001E		7			
2H					
3G					
4G					pink extract
5L					
193329-001G	450	9			
2G	500	7			
3I					
4L					
5J					
6K					lost ~3 mL before conc
7H		10			
BLANK QC379739		NA			
LCS 40					possible dbl SURR *
MS 41AS		7			
MSD 42AS		7			
JDM 3/20/07					

	Mfg & Lot# / LIMS # / Time	Date/ Initials
* 1.0/0.5 mL of TEH_SURR was added to all samples	S5713 D	3/17/07 KR
0.5 mL of TEH_SP was added to all spikes	S5627 C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	P065076	
☑ Samples were continually extracted about 450 mL of CH_2Cl_2	EM97031/ EM96352	
EMPC H_2O Extraction Start Time:	1930	
Extraction End Time:	0830	JDM 3/18/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	KPW 3/19/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205037	
Concentrated to volumes as noted above	✓	

17 MAR 07
Extraction Chemist Date

Contined from Page 195
Continued on Page _____

Jessica Lee 3/20/07
Reviewed by Date

Curtis & Tompkins, Ltd.

Silica Gel Cleanup

EPA 3630c

Prep Chemist: JDM
Cleanup Date: 19 March 07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-012	123229	1.0	1.0	
23				
25				
26				
27				
193137-001				
02				
03				
04				
05				
193329-001				
02				
03				
04				
05				
06				
07				
MB QC319739				done by RFW
LCS 40				
MS 41				
MSD 42				
JDM 3/19/07				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	JDM 3/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM146354	
Concentrated to volumes as noted above	✓	

Jenine Lee 3/19/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Pamela Haglet 3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/22/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	122728
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301072A	Batch#:	122728
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW01	Batch#:	122784
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	122894
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	29	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	1.4	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW06	Batch#:	122726
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301073A	Batch#:	122726
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0301073B	Batch#:	122726
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	28	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	1.5	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	122784
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	1.1	0.5	
Benzene	1.0	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW08	Batch#:	122784
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1A	Batch#:	122784
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.07 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW101	Batch#:	122784
Lab ID:	193108-019	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW102	Batch#:	122784
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0301073A	Batch#:	122784
Lab ID:	193108-021	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW103	Batch#:	122784
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW104	Batch#:	122836
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW101	Batch#:	122836
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW03	Batch#:	122836
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.1 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	94	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW05	Batch#:	122836
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0302071A	Batch#:	122836
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377631	Batch#:	122726
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377635	Batch#:	122728
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377866	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378063	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378310	Batch#:	122894
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377636	Batch#:	122728
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.77	107	65-135
Benzene	25.00	26.71	107	65-135
Trichloroethene	25.00	25.98	104	65-135
Toluene	25.00	27.65	111	65-135
Chlorobenzene	25.00	25.48	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	90	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377872	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	30.00	36.08	120	65-135
Benzene	30.00	28.68	96	65-135
Trichloroethene	30.00	29.43	98	65-135
Toluene	30.00	28.69	96	65-135
Chlorobenzene	30.00	28.44	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378062	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	27.50	30.73	112	65-135
Benzene	27.50	25.10	91	65-135
Trichloroethene	27.50	25.51	93	65-135
Toluene	27.50	25.59	93	65-135
Chlorobenzene	27.50	24.13	88	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	92	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122726
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type: BS Lab ID: QC377629

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.80	115	65-135
Benzene	25.00	24.74	99	65-135
Trichloroethene	25.00	24.85	99	65-135
Toluene	25.00	24.74	99	65-135
Chlorobenzene	25.00	23.74	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	94	86-115

Type: BSD Lab ID: QC377630

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.75	111	65-135	4	35
Benzene	25.00	23.46	94	65-135	5	35
Trichloroethene	25.00	23.45	94	65-135	6	35
Toluene	25.00	23.60	94	65-135	5	35
Chlorobenzene	25.00	22.96	92	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	122894
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC378308

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.07	104	65-135
Benzene	25.00	23.06	92	65-135
Trichloroethene	25.00	22.93	92	65-135
Toluene	25.00	23.14	93	65-135
Chlorobenzene	25.00	22.64	91	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

Type: BSD Lab ID: QC378309

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.13	93	65-135	12	35
Benzene	25.00	22.44	90	65-135	3	35
Trichloroethene	25.00	21.94	88	65-135	4	35
Toluene	25.00	22.44	90	65-135	3	35
Chlorobenzene	25.00	22.07	88	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	122728
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377755

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	26.36	105	65-135
Benzene	<0.2500	25.00	26.00	104	65-135
Trichloroethene	<0.1151	25.00	25.35	101	65-135
Toluene	<0.1338	25.00	25.43	102	65-135
Chlorobenzene	<0.1569	25.00	24.49	98	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC377756

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.89	104	65-135	2	35
Benzene	25.00	25.03	100	65-135	4	35
Trichloroethene	25.00	24.39	98	65-135	4	35
Toluene	25.00	25.02	100	65-135	2	35
Chlorobenzene	25.00	23.59	94	65-135	4	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	93	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW01	Batch#:	122784
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377890

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	30.00	27.59	92	65-135
Benzene	<0.04131	30.00	23.31	78	65-135
Trichloroethene	<0.07621	30.00	23.16	77	65-135
Toluene	<0.08342	30.00	23.23	77	65-135
Chlorobenzene	<0.08963	30.00	22.61	75	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Type: MSD Lab ID: QC377891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	30.00	27.05	90	65-135	2	35
Benzene	30.00	22.85	76	65-135	2	35
Trichloroethene	30.00	22.83	76	65-135	1	35
Toluene	30.00	23.52	78	65-135	1	35
Chlorobenzene	30.00	21.95	73	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	90	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW104	Batch#:	122836
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378166

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	27.50	26.77	97	65-135
Benzene	<0.04131	27.50	23.68	86	65-135
Trichloroethene	<0.07621	27.50	22.96	83	65-135
Toluene	<0.08342	27.50	23.11	84	65-135
Chlorobenzene	<0.08963	27.50	21.88	80	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC378167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	27.50	25.81	94	65-135	4	35
Benzene	27.50	22.93	83	65-135	3	35
Trichloroethene	27.50	22.65	82	65-135	1	35
Toluene	27.50	22.50	82	65-135	3	35
Chlorobenzene	27.50	21.66	79	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447094064002 File : ec602 Time : 06-MAR-2007 08:14

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10004	21.77	
75	30.00% - 60.00% of mass 95	20480	44.57	
95		45952		
96	5.00% - 9.00% of mass 95	3057	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	28136	61.23	
175	5.00% - 9.00% of mass 174	2037	7.24	
176	> 95.00% and < 101.00% of mass 174	27728	98.55	
177	5.00% - 9.00% of mass 176	1812	6.53	

Analyst: BO Date: 03/06/07 Reviewer: LW Date: 03/06/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447095480002 File : ec702 Time : 07-MAR-2007 07:47

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6278	21.11	
75	30.00% - 60.00% of mass 95	12963	43.59	
95		29741		
96	5.00% - 9.00% of mass 95	1987	6.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	20736	69.72	
175	5.00% - 9.00% of mass 174	1614	7.78	
176	> 95.00% and < 101.00% of mass 174	19715	95.08	
177	5.00% - 9.00% of mass 176	1313	6.66	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/08/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447096916009 File : ec809 Time : 08-MAR-2007 11:20

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6657	20.28	
75	30.00% - 60.00% of mass 95	14340	43.68	
95		32826		
96	5.00% - 9.00% of mass 95	2070	6.31	
173	< 2.00% of mass 174	53	0.24	
174	> 50.00% and < 100.00% of mass 95	22494	68.52	
175	5.00% - 9.00% of mass 174	1658	7.37	
176	> 95.00% and < 101.00% of mass 174	22405	99.60	
177	5.00% - 9.00% of mass 176	1483	6.62	

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447098391006 File : ec906 Time : 09-MAR-2007 10:07

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10743	19.65	
75	30.00% - 60.00% of mass 95	22837	41.77	
95		54672		
96	5.00% - 9.00% of mass 95	3511	6.42	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	39493	72.24	
175	5.00% - 9.00% of mass 174	2894	7.33	
176	> 95.00% and < 101.00% of mass 174	37618	95.25	
177	5.00% - 9.00% of mass 176	2683	7.13	

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/12/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497038053008 File : jaq08 Time : 26-JAN-2007 15:00

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	77378	23.85	
75	30.00% - 60.00% of mass 95	148629	45.81	
95		324437		
96	5.00% - 9.00% of mass 95	22037	6.79	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	249066	76.77	
175	5.00% - 9.00% of mass 174	18514	7.43	
176	> 95.00% and < 101.00% of mass 174	244885	98.32	
177	5.00% - 9.00% of mass 176	15711	6.42	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497094080002 File : jc602 Time : 06-MAR-2007 08:31

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	131333	22.39	
75	30.00% - 60.00% of mass 95	262314	44.72	
95		586517		
96	5.00% - 9.00% of mass 95	39392	6.72	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	469333	80.02	
175	5.00% - 9.00% of mass 174	36490	7.77	
176	> 95.00% and < 101.00% of mass 174	459285	97.86	
177	5.00% - 9.00% of mass 176	30784	6.70	

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

CURTIS & TOMPKINS BFB TUNE FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497094080008 File : jc608 Time : 06-MAR-2007 11:30

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	131754	21.80	
75	30.00% - 60.00% of mass 95	271317	44.90	
95		604309		
96	5.00% - 9.00% of mass 95	40328	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	477674	79.04	
175	5.00% - 9.00% of mass 174	37269	7.80	
176	> 95.00% and < 101.00% of mass 174	473493	99.12	
177	5.00% - 9.00% of mass 176	32893	6.95	

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

447013464001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

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Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

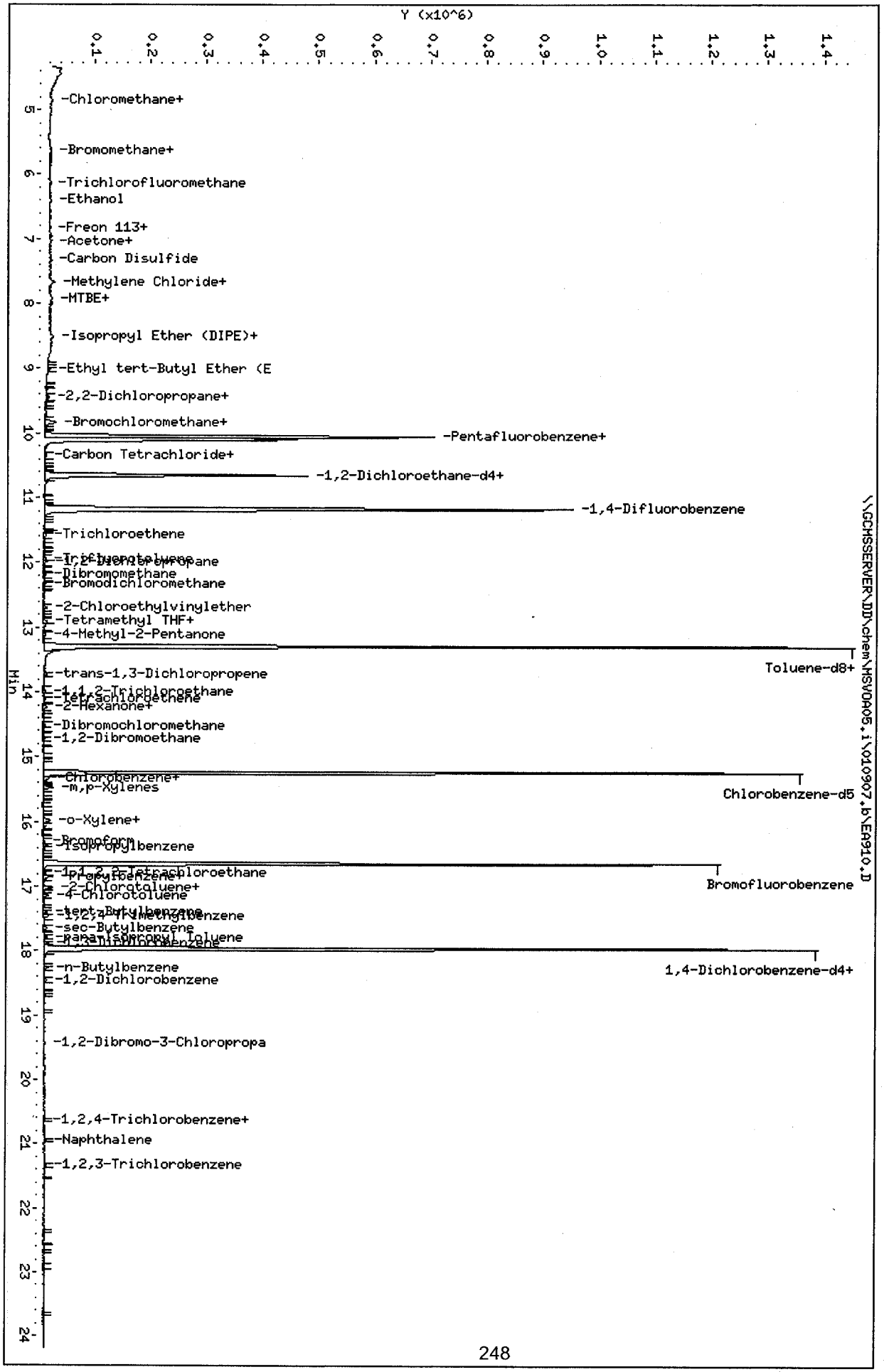
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:42

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
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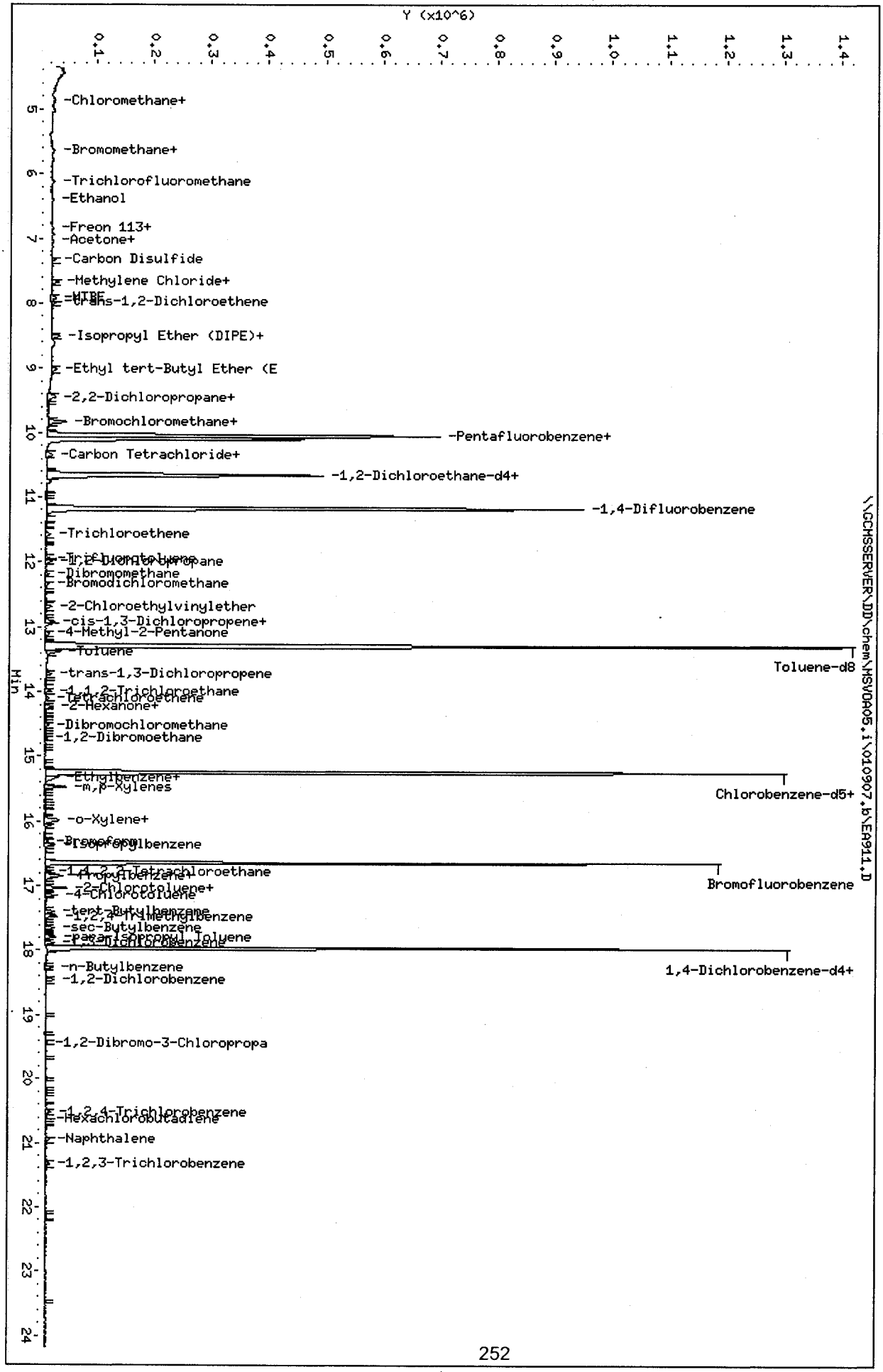
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

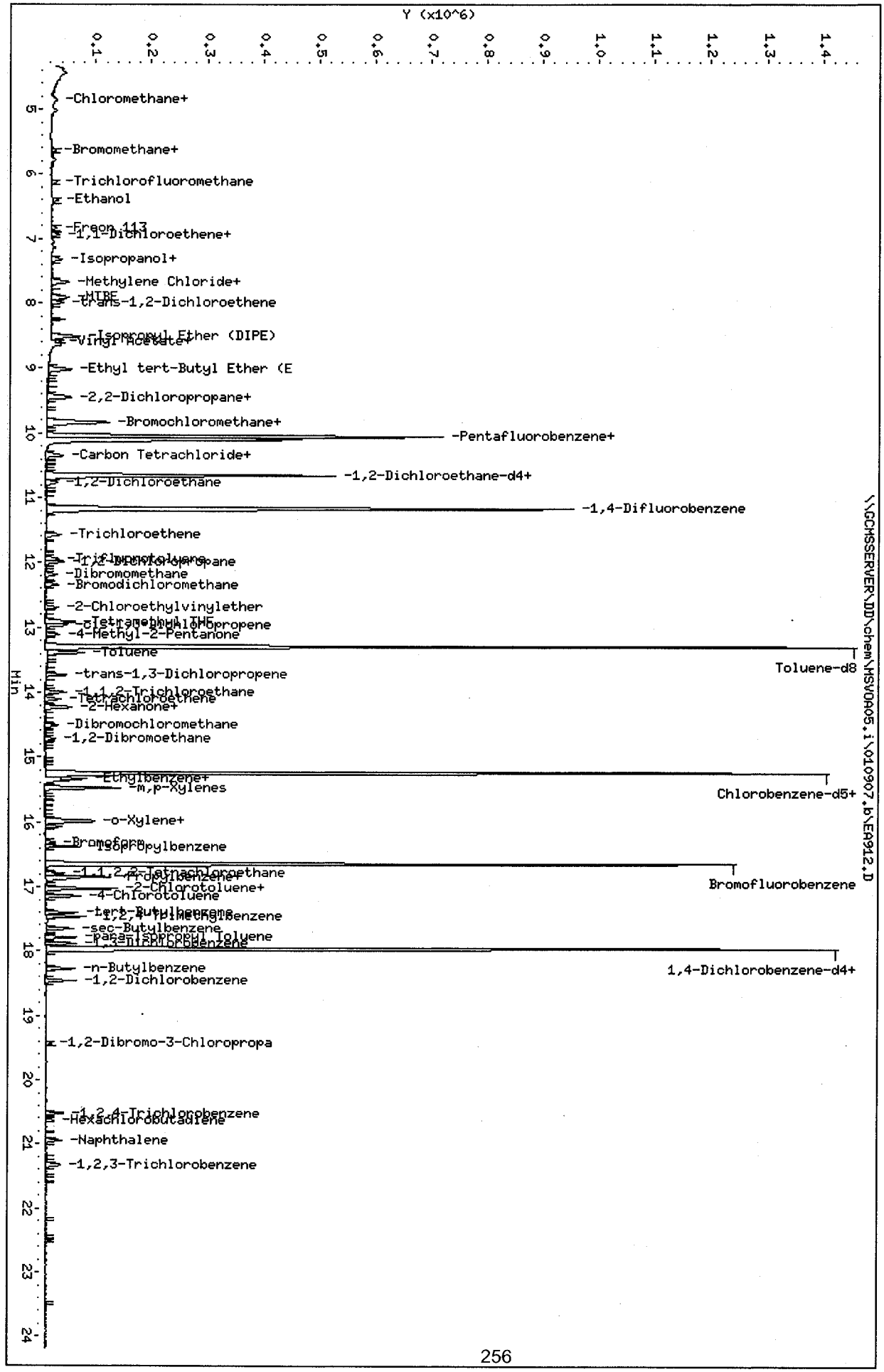
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Date : 09-JAN-2007 15:16
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

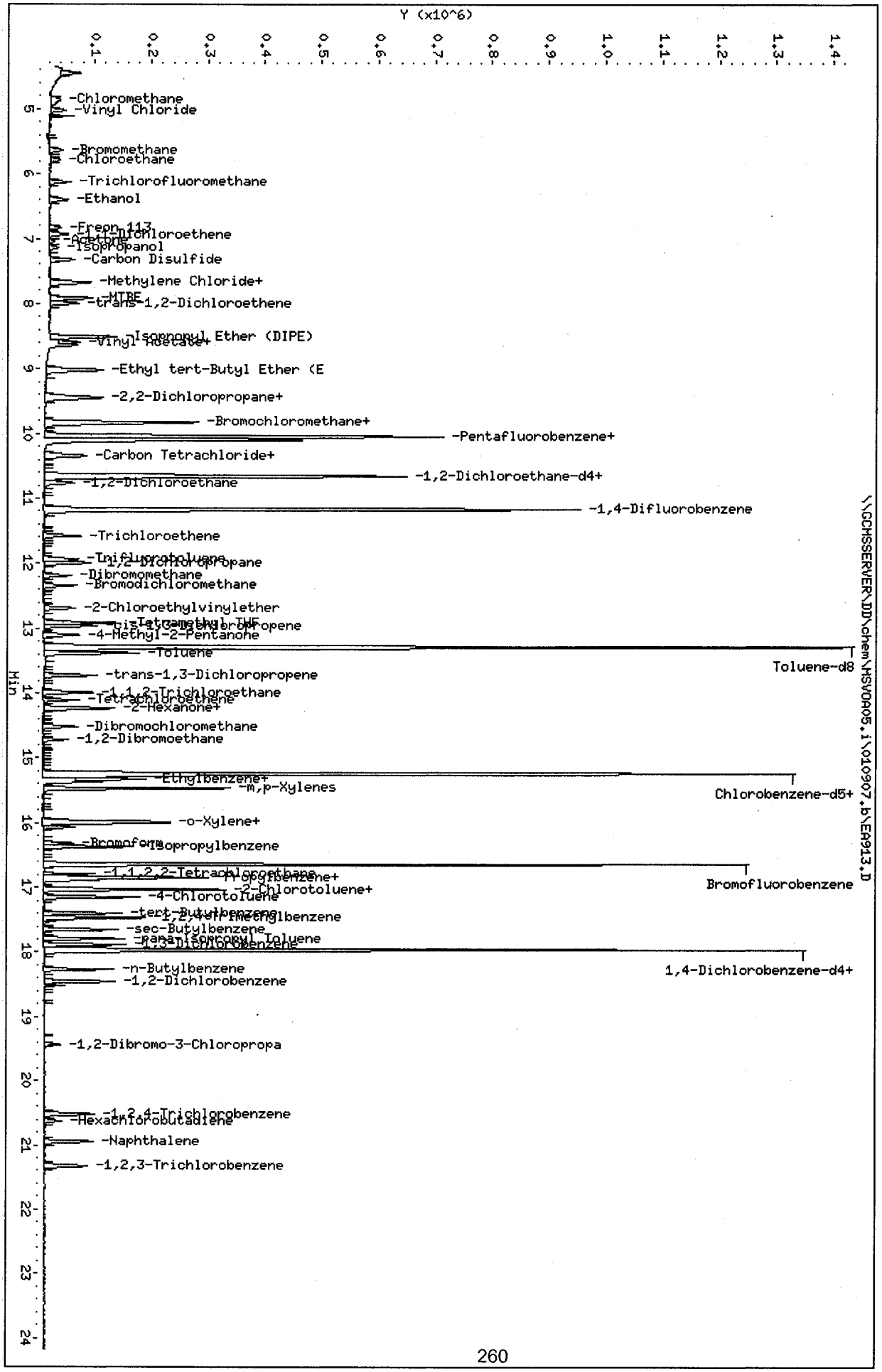
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Date : 09-JAN-2007 16:20
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5152,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
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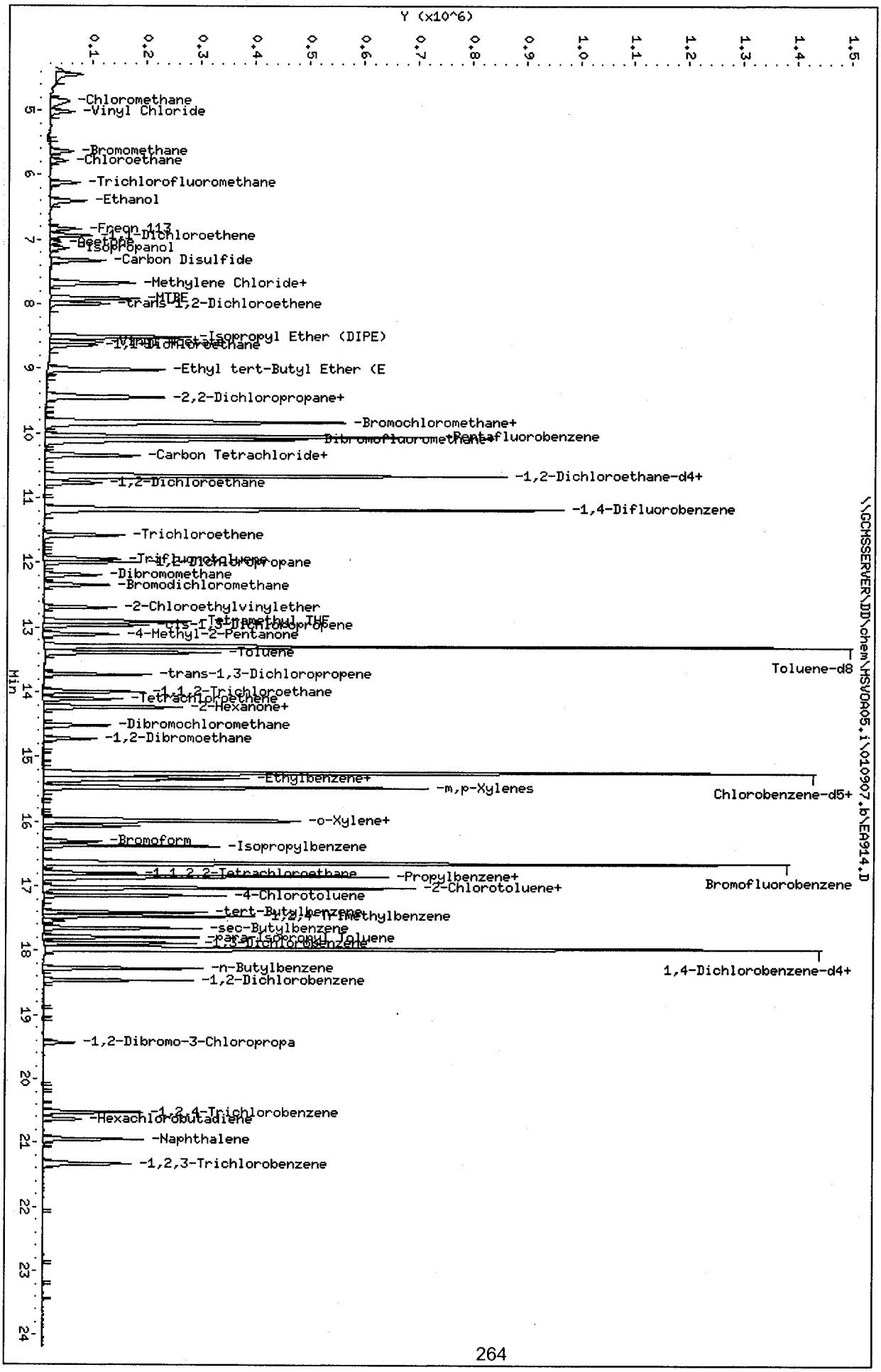

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Date : 09-JAN-2007 16:52
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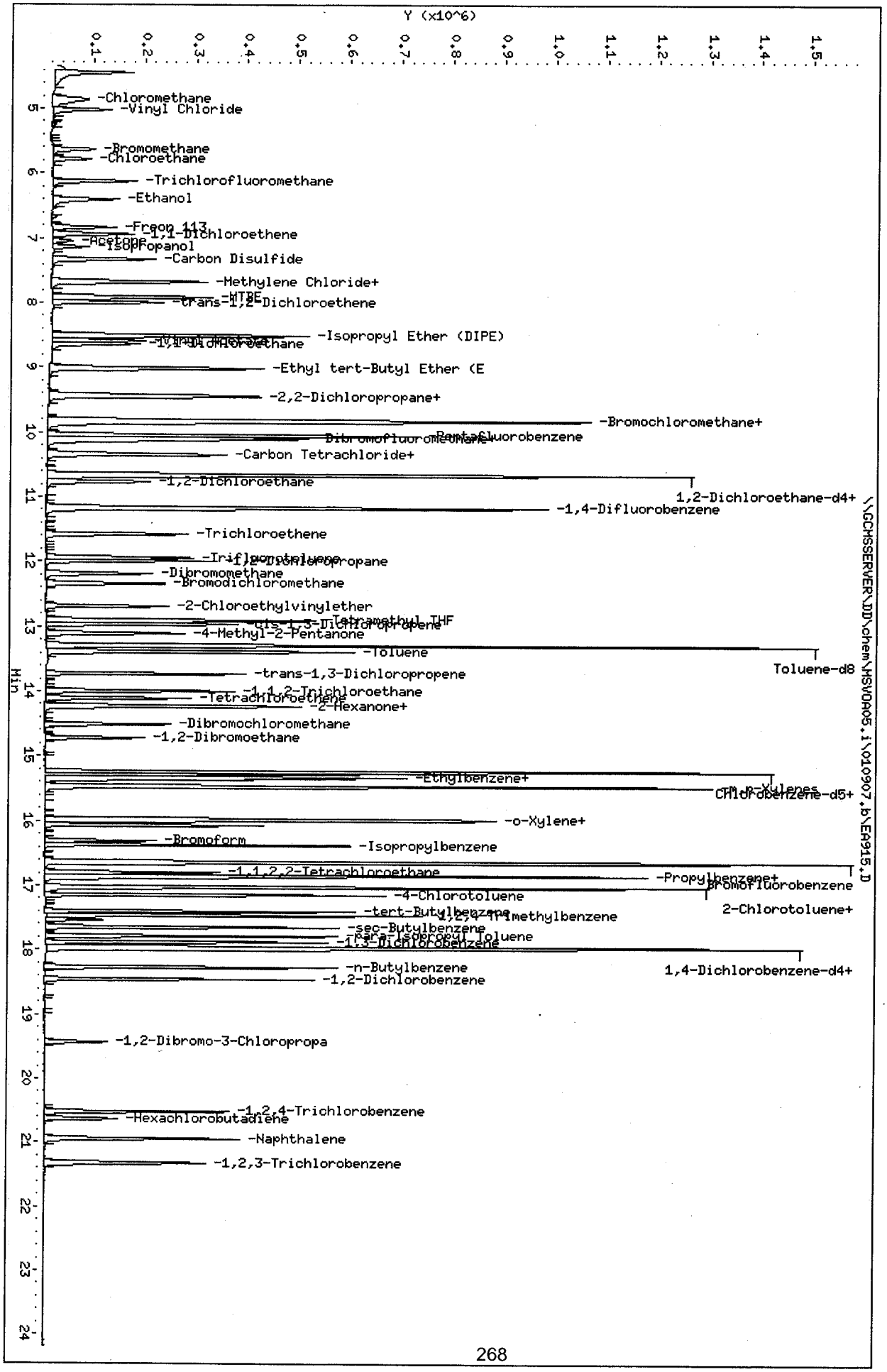
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
* 55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Date : 09-JAN-2007 17:24
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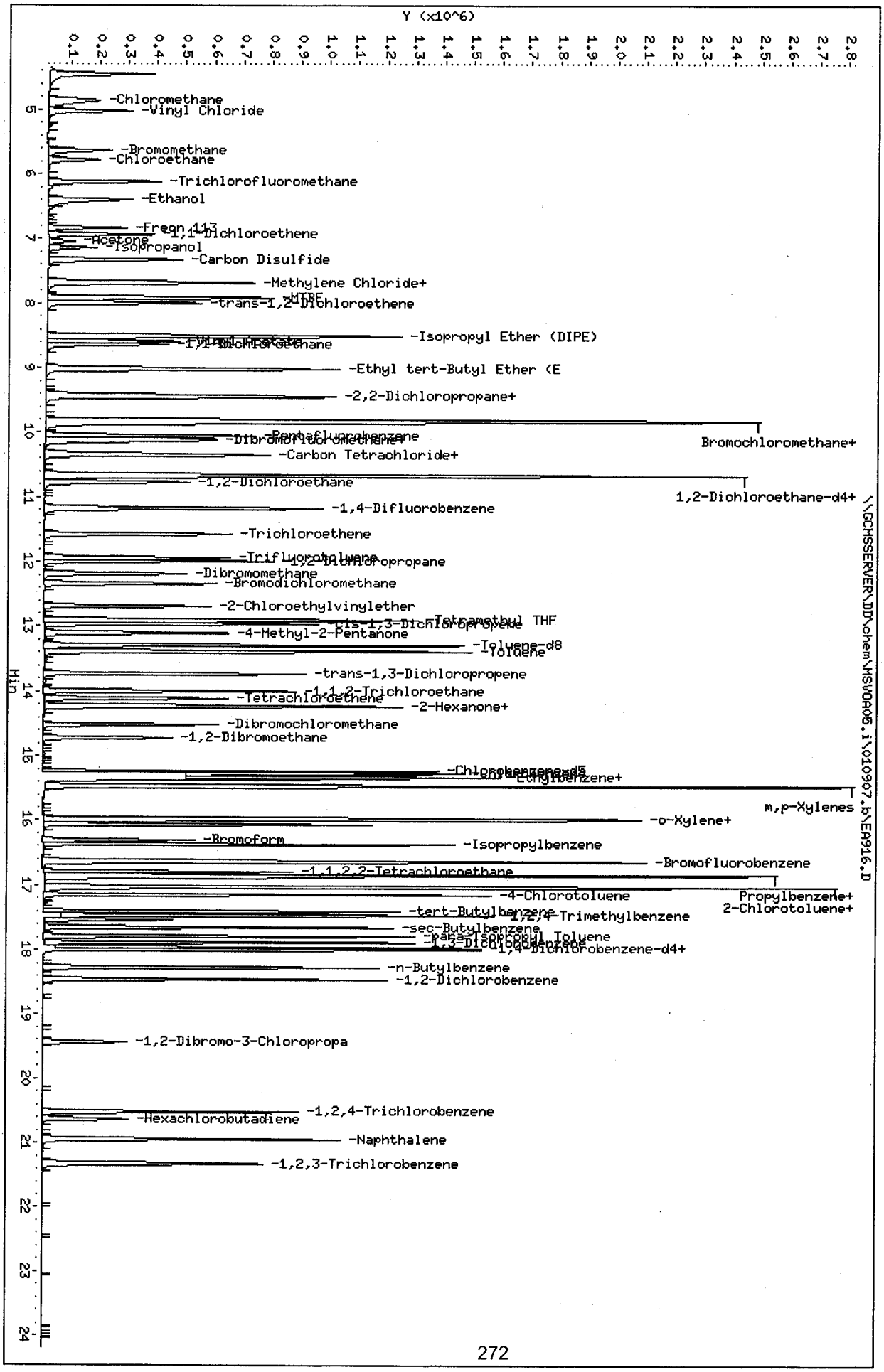
Sample Info: ICAL,S5170,0.01/100,S5152,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:49

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:56 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
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Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
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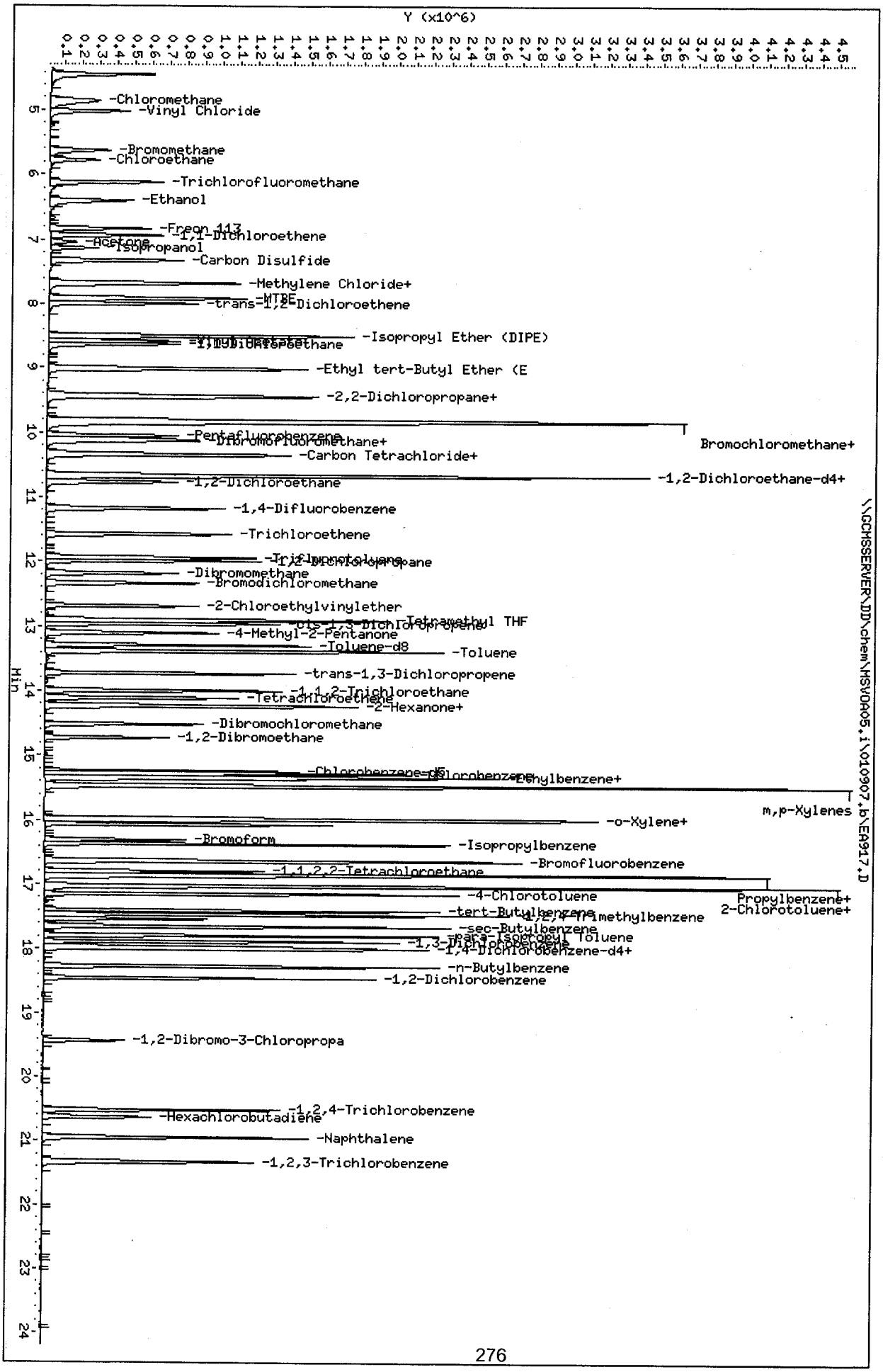
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:50

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
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Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
* 27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
* 36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

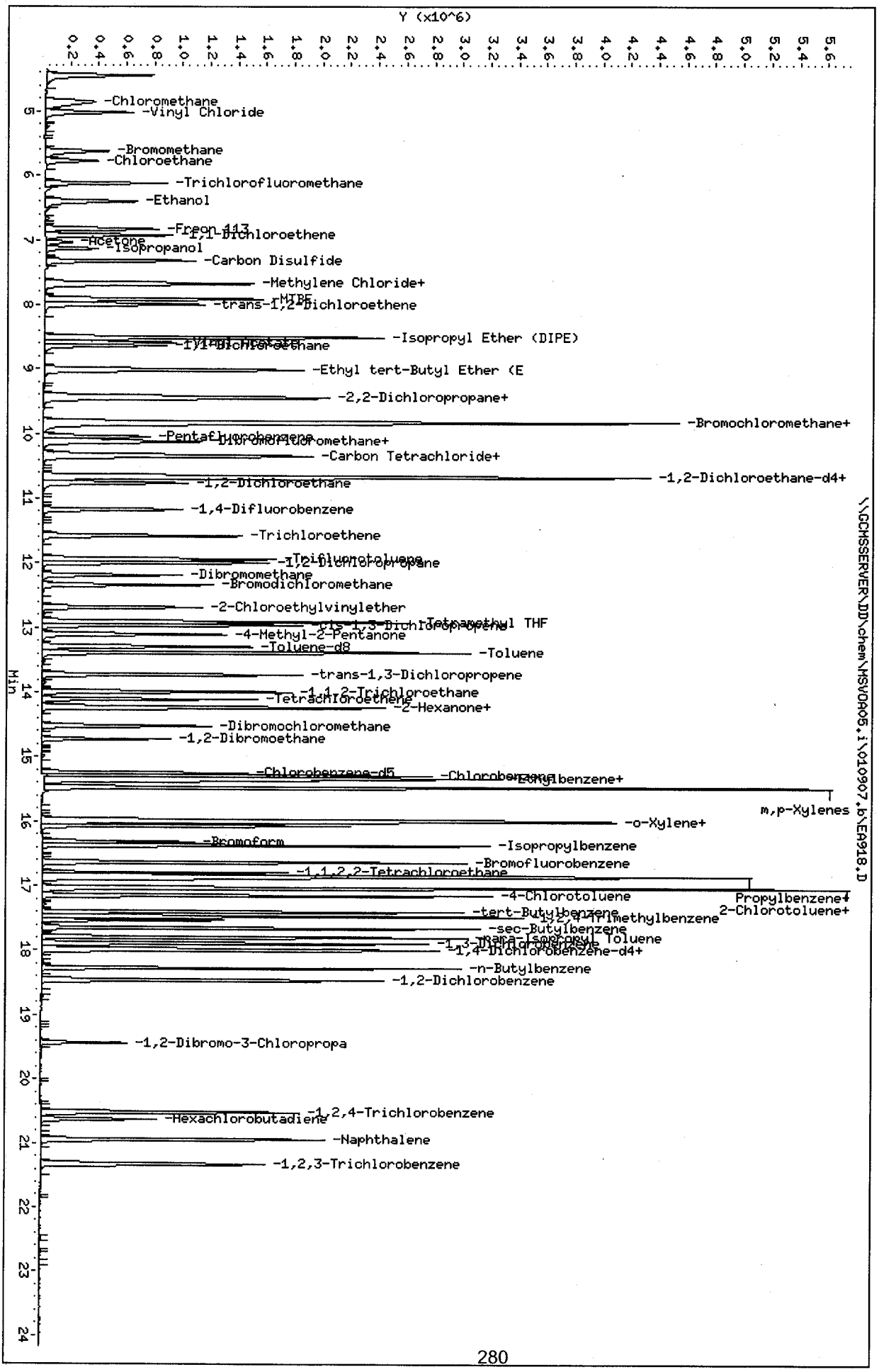
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum: 497038053001
Units : ug/L

Name : 826GOX10
Date : 26-JAN-2007 16:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaq11	497038053011	0.25/0.5PPB	26-JAN-2007 16:23	S5170 (2000000X), S5219 (1000000X), S4172 (2000000X), S5079 (5000X)
L2	jaq12	497038053012	0.5/1PPB	26-JAN-2007 16:56	S5170 (1000000X), S5219 (500000X), S4172 (1000000X), S5079 (5000X)
L3	jaq13	497038053013	2PPB	26-JAN-2007 17:28	S5170 (250000X), S5219 (250000X), S4172 (500000X), S5079 (5000X)
L4	jaq14	497038053014	5PPB	26-JAN-2007 18:01	S5170 (100000X), S5219 (100000X), S4172 (200000X), S5079 (5000X)
L5	jaq15	497038053015	10PPB	26-JAN-2007 18:34	S5170 (50000X), S5219 (50000X), S4172 (100000X), S5079 (5000X)
L6	jaq16	497038053016	20PPB	26-JAN-2007 19:06	S5170 (25000X), S5219 (25000X), S4172 (50000X), S5079 (5000X)
L7	jaq17	497038053017	50PPB	26-JAN-2007 19:39	S5170 (10000X), S5219 (10000X), S4172 (20000X), S5079 (5000X)
L8	jaq18	497038053018	75PPB	26-JAN-2007 20:12	S5170 (6667X), S5219 (6667X), S4172 (13330X), S5079 (5000X)
L9	jaq19	497038053019	100PPB	26-JAN-2007 20:44	S5170 (5000X), S5219 (5000X), S4172 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5702	0.5978m	0.5791m	0.5117m	0.5518m	0.5698m	0.5574m	0.5407m	AVRG		1.78629		0.5598	5	15	0.10	0.99	
Vinyl Chloride	0.4091m	0.4111m	0.4334m	0.4330m	0.4004m	0.4420m	0.4434	0.4439	0.4397m	AVRG		2.33402		0.4284	4	15	0.050	0.99	
Bromomethane		0.2306m	0.2441	0.2478	0.2302m	0.2430m	0.2624	0.2661	0.2682m	AVRG		4.01550		0.2490	6	15	0.050	0.99	
Chloroethane		0.2422m	0.2662	0.2571m	0.2473m	0.2571m	0.2624	0.2622	0.2588m	AVRG		3.89639		0.2566	3	15	0.050	0.99	
Acetone				0.1464	0.1417	0.1522	0.1261	0.1258	0.1342	AVRG		7.25989		0.1377	8	15	0.050	0.99	
1,1-Dichloroethene		0.2450m	0.2605m	0.2594	0.2333m	0.2576m	0.2366	0.2357	0.2456	AVRG		4.05340		0.2467	5	15	0.050	0.99	
Methylene Chloride			0.3473	0.3340	0.3160m	0.3234	0.3158	0.3166	0.3186m	AVRG		3.08128		0.3245	4	15	0.050	0.99	
Carbon Disulfide		1.1955	1.1420m	1.1328	1.0306m	1.1220m	1.0599	1.0524	1.0982	AVRG		0.90565		1.1042	5	15	0.050	0.99	
MTBE		0.8101	0.8879	0.8726m	0.8548	0.8912	0.8740m	0.8587	0.8710	AVRG		1.15603		0.8650	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3024	0.2929	0.2948	0.2742m	0.2901m	0.2836m	0.2735	0.2830	AVRG		3.48670		0.2868	4	15	0.050	0.99	
Vinyl Acetate				1.1386m	1.1379m	1.2067m	1.1239m	1.1534m	1.1166m	AVRG		0.87245		1.1462	3	15	0.050	0.99	
1,1-Dichloroethane		0.5934	0.6331m	0.6072m	0.5682m	0.5919	0.5641	0.5476	0.5548	AVRG		1.71665		0.5825	5	15	0.10	0.99	
2-Butanone			0.2271m	0.2252m	0.2183	0.2457m	0.2203	0.2116	0.2282	AVRG		4.44043		0.2252	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.3169	0.3283	0.3022	0.2998m	0.3109m	0.2991m	0.2946	0.2978	AVRG		3.26582		0.3062	4	15	0.050	0.99	
Chloroform		0.5297	0.5102	0.4927	0.4683m	0.4842	0.4605	0.4530	0.4537	AVRG		2.07676		0.4815	6	15	0.050	0.99	
1,1,1-Trichloroethane		0.3216	0.3305	0.3303	0.2948	0.3207	0.3044	0.3046	0.3232	AVRG		3.16186		0.3163	4	15	0.050	0.99	
Carbon Tetrachloride		0.1713	0.1622	0.1617	0.1456	0.1554m	0.1464	0.1514	0.1602	AVRG		6.37882		0.1568	6	15	0.050	0.99	
1,2-Dichloroethane		0.2347	0.2616	0.2581m	0.2562m	0.2634	0.2532	0.2512	0.2502	AVRG		3.94369		0.2536	4	15	0.050	0.99	
Benzene		0.7459	0.7821	0.7244m	0.6958	0.7270	0.6899	0.6930	0.6911	AVRG		1.39149		0.7187	5	15	0.050	0.99	
Trichloroethene		0.1960	0.1804	0.1698	0.1496m	0.1695	0.1593	0.1619	0.1650	AVRG		5.91977		0.1689	8	15	0.050	0.99	
1,2-Dichloropropane		0.2375	0.2319	0.2346m	0.2117m	0.2262m	0.2187	0.2155	0.2115	AVRG		4.47558		0.2234	5	15	0.050	0.99	
Bromodichloromethane		0.2243	0.2297	0.2187	0.2201	0.2317m	0.2240	0.2280	0.2246	AVRG		4.44164		0.2251	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2909m	0.3345m	0.3418m	0.3228	0.3546	0.3198	0.3398	0.3517	AVRG		3.01218		0.3320	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3082	0.3182m	0.3060	0.2928m	0.3158	0.3078	0.3098	0.3068	AVRG		3.24504		0.3082	2	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4374	0.4340	0.3929	0.4617	0.3990m	0.3770	0.3902	0.3813	AVRG		2.44402		0.4092	8	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2532m	0.2717	0.2714	0.2626	0.2789	0.2730	0.2778	0.2738	AVRG		3.69978		0.2703	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0772	0.1030	0.0918	0.0907	0.0959	0.0912	0.0932	0.0914	AVRG		10.8925		0.0918	8	15	0.050	0.99	
2-Hexanone			0.2261m	0.2142m	0.2213m	0.2535	0.2304	0.2257	0.2401	AVRG		4.34439		0.2302	6	15	0.050	0.99	
Tetrachloroethene		0.2047	0.1907	0.1883	0.1650	0.1905	0.1737m	0.1814	0.1884	AVRG		5.39515		0.1854	6	15	0.050	0.99	
Dibromochloromethane		0.1759	0.2308	0.2140	0.2051	0.2182	0.2133	0.2187	0.2210	AVRG		4.71402		0.2121	8	15	0.050	0.99	
Chlorobenzene		0.5657	0.5812	0.5274	0.4912m	0.5235m	0.4979	0.5225	0.5116	AVRG		1.89528		0.5276	6	15	0.30	0.99	
Ethylbenzene		0.9051	0.9876	0.8915	0.8355	0.8667	0.8194	0.8555	0.8454	AVRG		1.14177		0.8758	6	15	0.050	0.99	
m,p-Xylenes	0.3037	0.3336	0.3457	0.3123m	0.3191	0.3197	0.3067	0.3134	0.3120	AVRG		3.13997		0.3185	4	15	0.050	0.99	
o-Xylene		0.3356	0.3384	0.3134	0.3082	0.3148	0.3002	0.3108	0.3046	AVRG		3.16698		0.3158	4	15	0.050	0.99	
Styrene		0.5022	0.5860m	0.5371m	0.5122	0.5644	0.5372	0.5601	0.5443	AVRG		1.84183		0.5429	5	15	0.050	0.99	
Bromoform		0.1880	0.1722	0.1554	0.1554	0.1654	0.1558	0.1619	0.1642	AVRG		6.06883		0.1648	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6524	0.6948	0.6318	0.6018	0.6660	0.6091	0.6117	0.6164	AVRG		1.57353		0.6355	5	15	0.30	0.99	
Dibromofluoromethane	0.5407	0.5452	0.5423	0.5551	0.5518	0.5468	0.5492	0.5438	0.5476	AVRG		1.82833		0.5469	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3968	0.4007	0.3961	0.3972	0.3973	0.3918	0.3908	0.3935	0.3943	AVRG		2.52906		0.3954	1	15	0.050	0.99	
Toluene-d8	1.0761	1.0777	1.0805	1.0723	1.0823	1.0795	1.0767	1.0731	1.0652	AVRG		0.92943		1.0759	0	15	0.050	0.99	
Bromofluorobenzene	1.2129	1.2033	1.2171	1.2136	1.1902	1.1781	1.1523	1.1407	1.1451	AVRG		0.84481		1.1837	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

497038053001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497038053001 Cal Date: 26-JAN-2007 Type : WATER

ICV 497038053020 (jaq20 26-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 497038053021 (jaq21 26-JAN-2007) stds: S5052 (10000X), S5322 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497038053020	0.5598	0.4893	25.00	21.85	ug/L	-13	30	m
Vinyl Chloride	497038053020	0.4284	0.3821	25.00	22.29	ug/L	-11	20	m
Bromomethane	497038053020	0.2490	0.2265	25.00	22.74	ug/L	-9	30	m
Chloroethane	497038053020	0.2566	0.2530	25.00	24.64	ug/L	-1	30	m
Acetone	497038053021	0.1377	0.1420	25.00	25.77	ug/L	3	40	
1,1-Dichloroethene	497038053021	0.2467	0.2456	25.00	24.88	ug/L	0	20	
Methylene Chloride	497038053021	0.3245	0.3243	25.00	24.98	ug/L	0	30	
Carbon Disulfide	497038053021	1.1042	0.8505	25.00	19.26	ug/L	**-23**	30	!v- m
MTBE	497038053021	0.8650	0.8004	25.00	23.13	ug/L	-7	30	
trans-1,2-Dichloroethene	497038053021	0.2868	0.2826	25.00	24.64	ug/L	-1	30	
Vinyl Acetate	497038053021	1.1462	1.0327	25.00	22.53	ug/L	-10	40	m
1,1-Dichloroethane	497038053021	0.5825	0.5767	25.00	24.75	ug/L	-1	30	
2-Butanone	497038053021	0.2252	0.2315	25.00	25.70	ug/L	3	40	
cis-1,2-Dichloroethene	497038053021	0.3062	0.3223	25.00	26.31	ug/L	5	30	m
Chloroform	497038053021	0.4815	0.4837	25.00	25.11	ug/L	0	20	
1,1,1-Trichloroethane	497038053021	0.3163	0.3300	25.00	26.08	ug/L	4	30	m
Carbon Tetrachloride	497038053021	0.1568	0.1660	25.00	26.47	ug/L	6	30	
1,2-Dichloroethane	497038053021	0.2536	0.2527	25.00	24.92	ug/L	0	30	m
Benzene	497038053021	0.7187	0.7110	25.00	24.73	ug/L	-1	30	
Trichloroethene	497038053021	0.1689	0.1650	25.00	24.42	ug/L	-2	30	
1,2-Dichloropropane	497038053021	0.2234	0.2134	25.00	23.87	ug/L	-5	20	
Bromodichloromethane	497038053021	0.2251	0.2384	25.00	26.47	ug/L	6	30	m
4-Methyl-2-Pentanone	497038053021	0.3320	0.3212	25.00	24.19	ug/L	-3	40	
cis-1,3-Dichloropropene	497038053021	0.3082	0.3089	25.00	25.06	ug/L	0	30	
Toluene	497038053021	0.4092	0.4022	25.00	24.58	ug/L	-2	20	
trans-1,3-Dichloropropene	497038053021	0.2703	0.2535	25.00	23.45	ug/L	-6	30	
1,1,2-Trichloroethane	497038053021	0.0918	0.0944	25.00	25.71	ug/L	3	30	
2-Hexanone	497038053021	0.2302	0.2472	25.00	26.85	ug/L	7	40	
Tetrachloroethene	497038053021	0.1854	0.1951	25.00	26.31	ug/L	5	30	
Dibromochloromethane	497038053021	0.2121	0.2199	25.00	25.92	ug/L	4	30	
Chlorobenzene	497038053021	0.5276	0.5181	25.00	24.55	ug/L	-2	30	
Ethylbenzene	497038053021	0.8758	0.8976	25.00	25.62	ug/L	2	20	
m,p-Xylenes	497038053021	0.3185	0.3220	50.00	50.56	ug/L	1	30	
o-Xylene	497038053021	0.3158	0.3158	25.00	25.01	ug/L	0	30	
Styrene	497038053021	0.5429	0.5724	25.00	26.36	ug/L	5	30	
Bromoform	497038053021	0.1648	0.1631	25.00	24.75	ug/L	-1	30	
1,1,2,2-Tetrachloroethane	497038053021	0.6355	0.6193	25.00	24.36	ug/L	-3	30	

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Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:23 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.0005/1000,S5219,0.001/1000
Misc Info : S4172,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:03 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:23 Cal File: JAQ11.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.560	4.560	(0.428)	2535	0.50000	0.2662
2 Chloromethane	50	5.034	5.034	(0.473)	5069	0.50000	0.2829
3 Vinyl Chloride	62	5.221	5.221	(0.491)	6546	0.50000	0.4774(M)
4 Bromomethane	94	5.891	5.891	(0.554)	3347	0.50000	0.4199
5 Chloroethane	64	6.069	6.069	(0.570)	1935	0.50000	0.2356
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	4880	0.50000	0.4441
7 Ethanol	45	6.710	6.710	(0.630)	3237	25.0000	16.8374
8 Freon 113	101	7.350	7.350	(0.691)	793	0.25000	0.1069
9 Acetone	43	7.400	7.400	(0.695)	4185	0.25000	0.9494
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	887	0.25000	0.1123
11 Isopropanol	45	7.518	7.518	(0.706)	1872	2.50000	2.1586
12 Carbon Disulfide	76	7.824	7.824	(0.735)	8618	0.25000	0.2439
13 Methylene Chloride	84	8.100	8.100	(0.761)	3802	0.25000	0.3660
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.763)	1649	2.50000	1.6803
15 MTBE	73	8.494	8.494	(0.798)	6130	0.25000	0.2214
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	2257	0.25000	0.2459
18 Vinyl Acetate	43	9.145	9.145	(0.859)	12426	0.25000	0.3387
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	4220	0.25000	0.2263
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	12019	0.25000	0.2453
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	7432	0.25000	0.2129
22 2-Butanone	43	9.953	9.953	(0.935)	2308	0.25000	0.3202
23 cis-1,2-Dichloroethene	96	10.003	10.003	(0.940)	2488	0.25000	0.2539

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.943)	2193	0.25000	0.1981
25 Bromochloromethane	128	10.367	10.367	(0.974)	757	0.25000	0.1553
26 Chloroform	83	10.427	10.427	(0.980)	5576	0.25000	0.3618
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	48760	2.50000	10.1033
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1600020	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	865191	50.0000	49.4323
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	2194	0.25000	0.2167
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	2234	0.25000	0.1926
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	1328	0.25000	0.1676
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1002330	50.0000	50.1819
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	2887	0.25000	0.2253
35 Benzene	78	11.353	11.353	(0.961)	8860	0.25000	0.2440
36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.967)	5416	0.25000	0.2128
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525762	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	2421	0.25000	0.2837
39 Trifluorotoluene	146	12.586	12.586	(1.065)	1414	0.25000	0.1167
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	2497	0.25000	0.2212
41 Dibromomethane	93	12.783	12.783	(1.082)	1486	0.25000	0.2424
42 Bromodichloromethane	83	12.941	12.941	(1.095)	2246	0.25000	0.1974
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	3382	0.25000	0.2172
45 Tetramethyl THF	43	13.641	13.641	(1.154)	6620	0.25000	0.2484
46 4-Methyl-2-Pentanone	43	13.641	13.641	(1.154)	6620	0.25000	0.3947
47 Toluene-d8	98	13.966	13.966	(1.182)	2717903	50.0000	50.0069
48 Toluene	92	14.055	14.055	(1.189)	5930	0.25000	0.2869
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.208)	2914	0.25000	0.2134
50 1,1,2-Trichloroethane	85	14.538	14.538	(1.230)	874	0.25000	0.1884
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	3000	0.25000	0.2006
52 2-Hexanone	43	14.834	14.834	(0.937)	1217	0.25000	0.1274
53 Tetrachloroethene	166	14.804	14.804	(0.935)	1816	0.25000	0.2362
54 Dibromochloromethane	129	15.080	15.080	(0.953)	1689	0.25000	0.1919
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	1824	0.25000	0.2091
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2073470	50.0000	
57 Chlorobenzene	112	15.859	15.859	(1.002)	5136	0.25000	0.2347
58 1,1,1,2-Tetrachloroethane	131	15.918	15.918	(1.006)	1451	0.25000	0.1996
59 Ethylbenzene	91	15.958	15.958	(1.008)	9022	0.25000	0.2484
60 m,p-Xylenes	106	16.086	16.086	(1.016)	6298	0.50000	0.4768
61 o-Xylene	106	16.569	16.569	(1.047)	3225	0.25000	0.2462
62 Styrene	104	16.589	16.589	(1.048)	5266	0.25000	0.2338
63 Bromoform	173	16.835	16.835	(1.064)	2043	0.25000	0.2989
64 Isopropylbenzene	105	16.973	16.973	(0.916)	6782	0.25000	0.2283
65 Cyclohexanone	55	17.131	17.131	(0.925)	1418	2.50000	2.4111
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1124757	50.0000	51.2336
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	2100	0.25000	0.1781
68 1,2,3-Trichloropropane	75	17.358	17.358	(0.937)	3018	0.25000	0.2741
69 Bromobenzene	156	17.387	17.387	(0.939)	2273	0.25000	0.2609
70 Propylbenzene	91	17.436	17.436	(0.941)	8820	0.25000	0.2412
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	6823	0.25000	0.2628
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	4748	0.25000	0.2225
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	6022	0.25000	0.2496
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	4532	0.25000	0.2350
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	4301	0.25000	0.2237
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	5720	0.25000	0.2036
77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	4284	0.25000	0.2113
78 1,3-Dichlorobenzene	146	18.462	18.462	(0.997)	4523	0.25000	0.2917

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

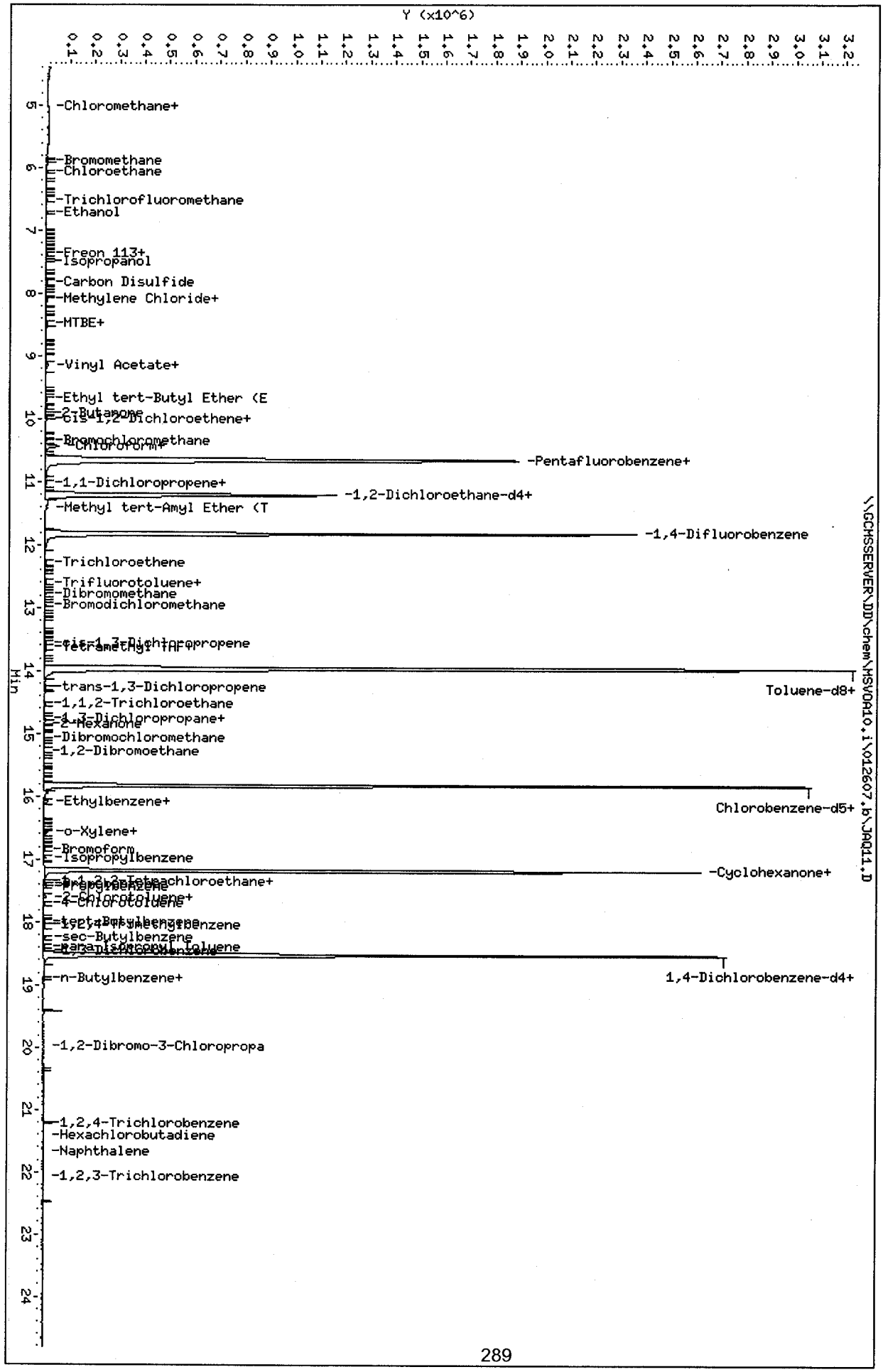
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	927324	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.001)	4544	0.25000	0.2851
81 n-Butylbenzene	91	18.886	18.886	(1.020)	3931	0.25000	0.2414
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	3574	0.25000	0.2389
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	150	0.25000	0.0823
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	2096	0.25000	0.3510
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	861	0.25000	0.2889
86 Naphthalene	128	21.676	21.676	(1.170)	1928	0.25000	0.1527
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1726	0.25000	0.3060

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Date : 26-JAN-2007 16:23
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5219,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:56 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.001/1000,S5219,0.002/1000
Misc Info : S4172,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:04 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:56 Cal File: JAQ12.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.576	4.576	(0.430)	7235	1.00000	0.7427(M)
2 Chloromethane	50	5.059	5.059	(0.476)	18667	1.00000	1.0185
3 Vinyl Chloride	62	5.216	5.216	(0.490)	13459	1.00000	0.9595(M)
4 Bromomethane	94	5.897	5.897	(0.554)	7548	1.00000	0.9258(M)
5 Chloroethane	64	6.074	6.074	(0.571)	7929	1.00000	0.9437(M)
6 Trichlorofluoromethane	101	6.528	6.528	(0.614)	9832	1.00000	0.8747
7 Ethanol	45	6.695	6.695	(0.629)	8655	50.0000	44.0061
8 Freon 113	101	7.356	7.356	(0.691)	3526	0.50000	0.4648
9 Acetone	43	7.395	7.395	(0.695)	4892	0.50000	1.0848(M)
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	4010	0.50000	0.4965(M)
11 Isopropanol	45	7.514	7.514	(0.706)	3895	5.00000	4.3903(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	19568	0.50000	0.5413
13 Methylene Chloride	84	8.095	8.095	(0.761)	6365	0.50000	0.5990(M)
14 tert-Butyl Alcohol (TBA)	59	8.115	8.115	(0.763)	4310	5.00000	4.2930
15 MTBE	73	8.490	8.490	(0.798)	13260	0.50000	0.4682
16 trans-1,2-Dichloroethene	96	8.539	8.539	(0.803)	4950	0.50000	0.5272
18 Vinyl Acetate	43	9.131	9.131	(0.858)	15549	0.50000	0.4143
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	9713	0.50000	0.5093
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	25375	0.50000	0.5062
21 Ethyl tert-Butyl Ether (ETBE)	59	9.702	9.702	(0.912)	16442	0.50000	0.4605
22 2-Butanone	43	9.949	9.949	(0.935)	3867	0.50000	0.5245
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	5187	0.50000	0.5174

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	6306	0.50000	0.5569
25 Bromochloromethane	128	10.363	10.363	(0.974)	2329	0.50000	0.4671
26 Chloroform	83	10.422	10.422	(0.980)	8670	0.50000	0.5499
27 Tetrahydrofuran	42	10.442	10.442	(0.981)	61535	5.00000	12.4633(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1636864	50.0000	
29 Dibromofluoromethane	113	10.669	10.669	(1.003)	892397	50.0000	49.8390
30 1,1,1-Trichloroethane	97	10.797	10.797	(1.015)	5264	0.50000	0.5084
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	6549	0.50000	0.5542
32 Carbon Tetrachloride	117	11.063	11.063	(0.936)	4408	0.50000	0.5462
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1031383	50.0000	50.6712
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	6041	0.50000	0.4628
35 Benzene	78	11.359	11.359	(0.961)	19199	0.50000	0.5189
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	12894	0.50000	0.4973
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2573874	50.0000	
38 Trichloroethene	95	12.276	12.276	(1.038)	5045	0.50000	0.5801
39 Trifluorotoluene	146	12.601	12.601	(1.066)	6166	0.50000	0.4994
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	6114	0.50000	0.5315
41 Dibromomethane	93	12.778	12.778	(1.081)	2626	0.50000	0.4204
42 Bromodichloromethane	83	12.956	12.956	(1.096)	5774	0.50000	0.4981
44 cis-1,3-Dichloropropene	75	13.567	13.567	(1.148)	7933	0.50000	0.5000
45 Tetramethyl THF	43	13.646	13.646	(1.154)	12460	0.50000	0.4589
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	7488	0.50000	0.4381(H)
47 Toluene-d8	98	13.962	13.962	(1.181)	2773774	50.0000	50.0809
48 Toluene	92	14.060	14.060	(1.189)	11257	0.50000	0.5344
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	6516	0.50000	0.4683(M)
50 1,1,2-Trichloroethane	85	14.524	14.524	(1.228)	1988	0.50000	0.4206
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	7415	0.50000	0.4943
52 2-Hexanone	43	14.809	14.809	(0.936)	3613	0.50000	0.3772
53 Tetrachloroethene	166	14.809	14.809	(0.936)	4259	0.50000	0.5522
54 Dibromochloromethane	129	15.086	15.086	(0.953)	3660	0.50000	0.4146
55 1,2-Dibromoethane	107	15.283	15.283	(1.293)	3828	0.50000	0.4307
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2080264	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	11768	0.50000	0.5360
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	3496	0.50000	0.4794
59 Ethylbenzene	91	15.953	15.953	(1.008)	18828	0.50000	0.5166
60 m,p-Xylenes	106	16.091	16.091	(1.017)	13879	1.00000	1.0474
61 o-Xylene	106	16.574	16.574	(1.047)	6981	0.50000	0.5313
62 Styrene	104	16.584	16.584	(1.048)	10447	0.50000	0.4624
63 Bromoform	173	16.840	16.840	(1.064)	3910	0.50000	0.5703
64 Isopropylbenzene	105	16.978	16.978	(0.917)	15942	0.50000	0.5306
65 Cyclohexanone	55	17.117	17.117	(0.924)	2707	5.00000	4.5494
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1128978	50.0000	50.8277
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	6121	0.50000	0.5132
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	7536	0.50000	0.6765
69 Bromobenzene	156	17.393	17.393	(0.939)	4426	0.50000	0.5021
70 Propylbenzene	91	17.442	17.442	(0.942)	19152	0.50000	0.5178
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	14066	0.50000	0.5355
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	10793	0.50000	0.5000
73 4-Chlorotoluene	91	17.708	17.708	(0.956)	13469	0.50000	0.5517
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	10033	0.50000	0.5142
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	8927	0.50000	0.4589
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	14915	0.50000	0.5249
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	10601	0.50000	0.5168
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	8321	0.50000	0.5304

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

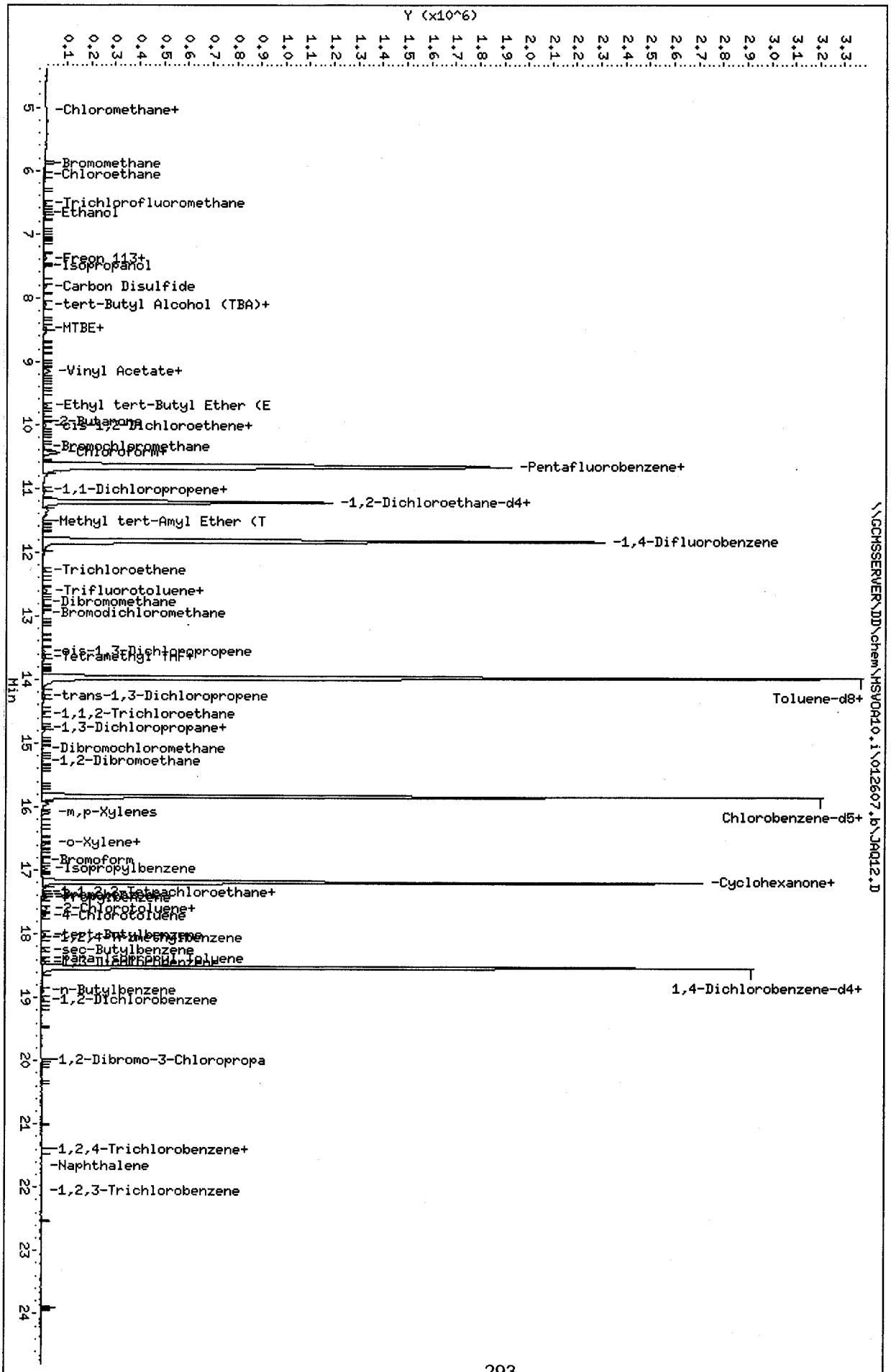
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	938237	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	9153	0.50000	0.5677
81 n-Butylbenzene	91	18.891	18.891	(1.020)	8333	0.50000	0.5058
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	7706	0.50000	0.5091
83 1,2-Dibromo-3-Chloropropane	75	19.995	19.995	(1.080)	383	0.50000	0.2078
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	3180	0.50000	0.5263
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	2029	0.50000	0.6729
86 Naphthalene	128	21.671	21.671	(1.170)	5279	0.50000	0.4133
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	2798	0.50000	0.4903

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Date : 26-JAN-2007 16:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5219,0.002/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 17:28 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/500,S5219,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:05 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 17:28 Cal File: JAQ13.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.575	4.575	(0.430)	18377	2.00000	1.9299(M)
2 Chloromethane	50	5.048	5.048	(0.475)	38262	2.00000	2.1358(M)
3 Vinyl Chloride	62	5.216	5.216	(0.490)	27735	2.00000	2.0228(M)
4 Bromomethane	94	5.896	5.896	(0.554)	15624	2.00000	1.9605
5 Chloroethane	64	6.064	6.064	(0.570)	17036	2.00000	2.0742
6 Trichlorofluoromethane	101	6.527	6.527	(0.614)	21663	2.00000	1.9716
7 Ethanol	45	6.705	6.705	(0.630)	39066	200.000	203.2028(M)
8 Freon 113	101	7.356	7.356	(0.691)	14598	2.00000	1.9690
9 Acetone	43	7.385	7.385	(0.694)	13299	2.00000	3.0171
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	16671	2.00000	2.1116(M)
11 Isopropanol	45	7.503	7.503	(0.705)	17751	20.0000	20.4691(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	73090	2.00000	2.0685(M)
13 Methylene Chloride	84	8.105	8.105	(0.762)	22230	2.00000	2.1404
14 tert-Butyl Alcohol (TBA)	59	8.125	8.125	(0.764)	19591	20.0000	19.9630
15 MTBE	73	8.480	8.480	(0.797)	56826	2.00000	2.0528
16 trans-1,2-Dichloroethene	96	8.529	8.529	(0.802)	18745	2.00000	2.0424
18 Vinyl Acetate	43	9.130	9.130	(0.858)	82474	2.00000	2.2485(M)
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	40519	2.00000	2.1736(M)
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	102783	2.00000	2.0979
21 Ethyl tert-Butyl Ether (ETBE)	59	9.692	9.692	(0.911)	72766	2.00000	2.0849
22 2-Butanone	43	9.949	9.949	(0.935)	14535	2.00000	2.0168(M)
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	21011	2.00000	2.1442

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	22956	2.00000	2.0740
25 Bromochloromethane	128	10.363	10.363	(0.974)	9569	2.00000	1.9633
26 Chloroform	83	10.422	10.422	(0.980)	32652	2.00000	2.1190
27 Tetrahydrofuran	42	10.441	10.441	(0.981)	133684	20.0000	27.6998(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1600031	50.0000	
29 Dibromofluoromethane	113	10.668	10.668	(1.003)	867760	50.0000	49.5787
30 1,1,1-Trichloroethane	97	10.796	10.796	(1.015)	21153	2.00000	2.0900
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	23288	2.00000	1.9879
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	16561	2.00000	2.0698
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1010779	50.0000	50.0873
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	26702	2.00000	2.0632
35 Benzene	78	11.358	11.358	(0.961)	79833	2.00000	2.1765
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	52839	2.00000	2.0556
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2551866	50.0000	
38 Trichloroethene	95	12.285	12.285	(1.039)	18415	2.00000	2.1359
39 Trifluorotoluene	146	12.591	12.591	(1.065)	25974	2.00000	2.1220
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	23667	2.00000	2.0754
41 Dibromomethane	93	12.778	12.778	(1.081)	13071	2.00000	2.1110
42 Bromodichloromethane	83	12.946	12.946	(1.095)	23450	2.00000	2.0407
44 cis-1,3-Dichloropropene	75	13.557	13.557	(1.147)	32480	2.00000	2.0651(M)
45 Tetramethyl THF	43	13.646	13.646	(1.154)	58138	2.00000	2.1598
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	34144	2.00000	2.0151(M)
47 Toluene-d8	98	13.961	13.961	(1.181)	2757182	50.0000	50.2107
48 Toluene	92	14.060	14.060	(1.189)	44304	2.00000	2.1215
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	27734	2.00000	2.0104
50 1,1,2-Trichloroethane	85	14.533	14.533	(1.229)	10510	2.00000	2.2430
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	30655	2.00000	2.0636
52 2-Hexanone	43	14.789	14.789	(0.935)	18632	2.00000	1.9646(M)
53 Tetrachloroethene	166	14.809	14.809	(0.936)	15714	2.00000	2.0577
54 Dibromochloromethane	129	15.085	15.085	(0.953)	19021	2.00000	2.1763
55 1,2-Dibromoethane	107	15.273	15.273	(1.292)	19499	2.00000	2.2129
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2060016	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	47893	2.00000	2.2031
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	15605	2.00000	2.1609
59 Ethylbenzene	91	15.953	15.953	(1.008)	81378	2.00000	2.2552
60 m,p-Xylenes	106	16.091	16.091	(1.017)	56977	4.00000	4.3423
61 o-Xylene	106	16.574	16.574	(1.047)	27885	2.00000	2.1434
62 Styrene	104	16.584	16.584	(1.048)	48290	2.00000	2.1587(M)
63 Bromoform	173	16.840	16.840	(1.064)	14187	2.00000	2.0897
64 Isopropylbenzene	105	16.978	16.978	(0.917)	63190	2.00000	2.1252
65 Cyclohexanone	55	17.116	17.116	(0.924)	12622	20.0000	21.4347
66 Bromofluorobenzene	95	17.175	17.175	(0.928)	1130086	50.0000	51.4096
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	25806	2.00000	2.1866
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	20828	2.00000	1.8894
69 Bromobenzene	156	17.392	17.392	(0.939)	19452	2.00000	2.2300
70 Propylbenzene	91	17.442	17.442	(0.942)	77111	2.00000	2.1067
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	60049	2.00000	2.3101
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	43770	2.00000	2.0489
73 4-Chlorotoluene	91	17.698	17.698	(0.956)	55051	2.00000	2.2788
74 tert-Butylbenzene	119	18.004	18.004	(0.972)	39220	2.00000	2.0314
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	39122	2.00000	2.0322
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	52834	2.00000	1.8788
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	37289	2.00000	1.8370
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	34911	2.00000	2.2489

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

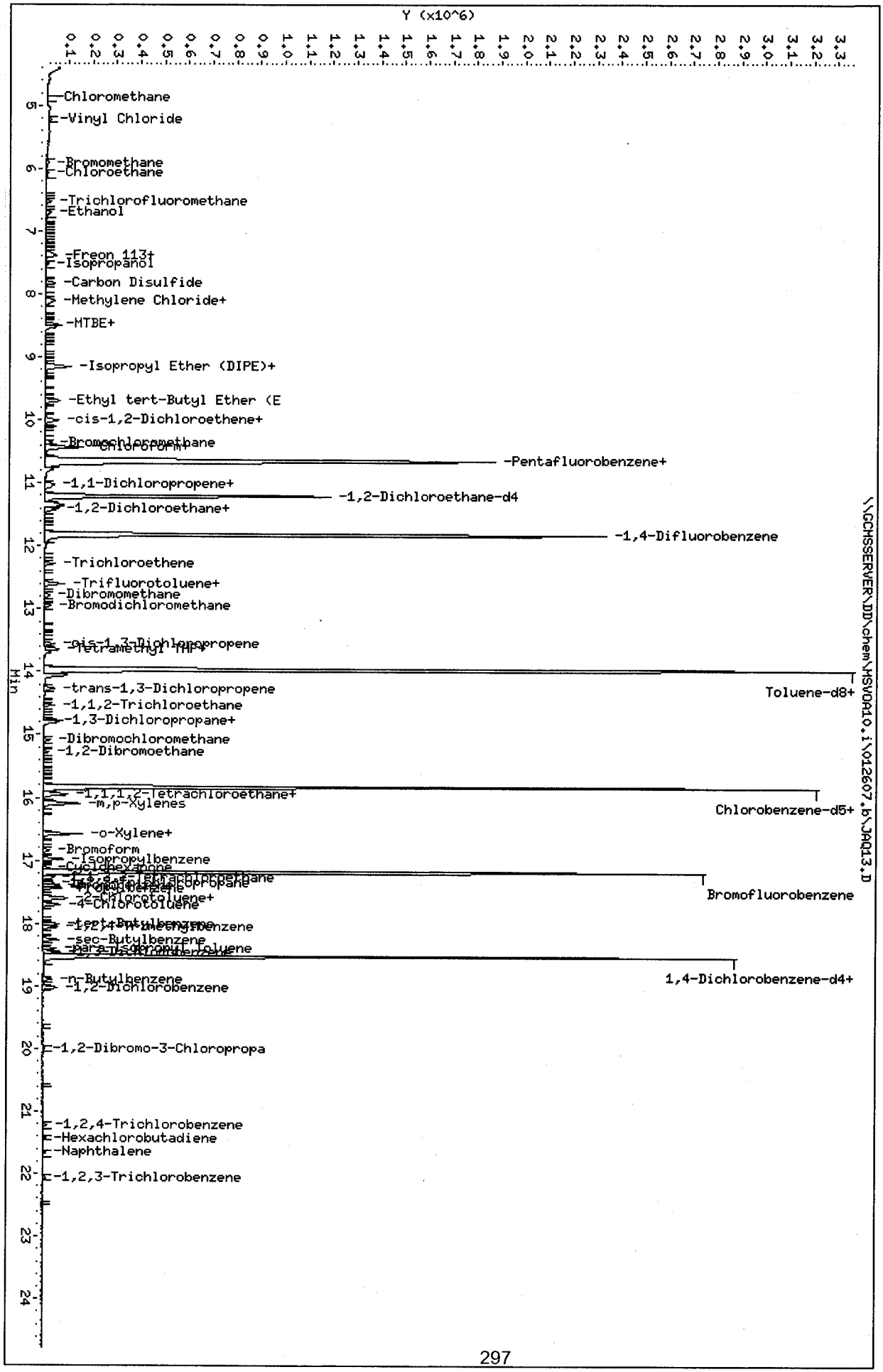
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.516	18.516	(1.000)	928528	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	36503	2.00000	2.2880
81 n-Butylbenzene	91	18.891	18.891	(1.020)	28101	2.00000	1.7235(M)
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	33310	2.00000	2.2237
83 1,2-Dibromo-3-Chloropropane	75	20.005	20.005	(1.080)	4355	2.00000	2.3883
84 1,2,4-Trichlorobenzene	180	21.218	21.218	(1.146)	10870	2.00000	1.8181
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	5429	2.00000	1.8194
86 Naphthalene	128	21.661	21.661	(1.170)	23362	2.00000	1.8484(M)
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	10856	2.00000	1.9223

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Date : 26-JAN-2007 17:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5219,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:01 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.005/500,S5219,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:07 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:01 Cal File: JAQ14.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.571	4.571	(0.429)	45057	5.00000	4.7352(M)
2 Chloromethane	50	5.044	5.044	(0.474)	92586	5.00000	5.1717(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	69233	5.00000	5.0531(M)
4 Bromomethane	94	5.892	5.892	(0.554)	39614	5.00000	4.9742
5 Chloroethane	64	6.079	6.079	(0.571)	41104	5.00000	5.0082(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	54275	5.00000	4.9431
7 Ethanol	45	6.690	6.690	(0.629)	96354	500.000	501.5352(M)
8 Freon 113	101	7.351	7.351	(0.691)	39830	5.00000	5.3761
9 Acetone	43	7.380	7.380	(0.693)	23401	5.00000	5.3125
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	41481	5.00000	5.2578
11 Isopropanol	45	7.499	7.499	(0.705)	42583	50.0000	49.1375(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	181127	5.00000	5.1296
13 Methylene Chloride	84	8.090	8.090	(0.760)	53405	5.00000	5.1458
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	48200	50.0000	49.1492(M)
15 MTBE	73	8.485	8.485	(0.797)	139526	5.00000	5.0438(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	47140	5.00000	5.1398
18 Vinyl Acetate	43	9.126	9.126	(0.857)	182058	5.00000	4.9670(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	97079	5.00000	5.2113(M)
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	254455	5.00000	5.1974(M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	179275	5.00000	5.1402(M)
22 2-Butanone	43	9.944	9.944	(0.934)	36000	5.00000	4.9988(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	48321	5.00000	4.9348

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	57419	5.00000	5.1914
25 Bromochloromethane	128	10.358	10.358	(0.973)	24836	5.00000	5.0994
26 Chloroform	83	10.427	10.427	(0.980)	78786	5.00000	5.1165
27 Tetrahydrofuran	42	10.437	10.437	(0.981)	258085	50.0000	53.5132
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1598923	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	887606	50.0000	50.7477
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	52814	5.00000	5.2219
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	60501	5.00000	5.1515
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	41379	5.00000	5.1586
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	1016175	50.0000	50.2275
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	66042	5.00000	5.0902(M)
35 Benzene	78	11.354	11.354	(0.961)	185323	5.00000	5.0399(M)
36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.967)	129813	5.00000	5.0375(M)
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2558326	50.0000	
38 Trichloroethene	95	12.281	12.281	(1.039)	43433	5.00000	5.0250
39 Trifluorotoluene	146	12.596	12.596	(1.066)	64491	5.00000	5.2554
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	60007	5.00000	5.2488(M)
41 Dibromomethane	93	12.783	12.783	(1.082)	32000	5.00000	5.1551
42 Bromodichloromethane	83	12.951	12.951	(1.096)	55962	5.00000	4.8579
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	78281	5.00000	4.9646
45 Tetramethyl THF	43	13.641	13.641	(1.154)	132056	5.00000	4.8934
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	87431	5.00000	5.1470(M)
47 Toluene-d8	98	13.966	13.966	(1.182)	2743323	50.0000	49.8321
48 Toluene	92	14.055	14.055	(1.189)	100505	5.00000	4.8007
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	69434	5.00000	5.0206
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	23486	5.00000	4.9997
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	74917	5.00000	4.9986(M)
52 2-Hexanone	43	14.785	14.785	(0.934)	44526	5.00000	4.6535(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	39144	5.00000	5.0804
54 Dibromochloromethane	129	15.090	15.090	(0.953)	44470	5.00000	5.0430
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	42530	5.00000	4.8145
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2078416	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	109608	5.00000	4.9975
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	35396	5.00000	4.8582
59 Ethylbenzene	91	15.958	15.958	(1.008)	185289	5.00000	5.0894
60 m,p-Xylenes	106	16.086	16.086	(1.016)	129806	10.0000	9.8052(M)
61 o-Xylene	106	16.569	16.569	(1.047)	65146	5.00000	4.9633
62 Styrene	104	16.579	16.579	(1.047)	111630	5.00000	4.9461(M)
63 Bromoform	173	16.845	16.845	(1.064)	32300	5.00000	4.7156
64 Isopropylbenzene	105	16.974	16.974	(0.916)	159446	5.00000	5.3219
65 Cyclohexanone	55	17.121	17.121	(0.924)	25839	50.0000	43.5472
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1135470	50.0000	51.2628
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	59115	5.00000	4.9709
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	51961	5.00000	4.6781
69 Bromobenzene	156	17.397	17.397	(0.939)	44439	5.00000	5.0560
70 Propylbenzene	91	17.437	17.437	(0.941)	189911	5.00000	5.1491
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	133716	5.00000	5.1051
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	107754	5.00000	5.0059(M)
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	122996	5.00000	5.0527
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	99337	5.00000	5.1062
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	91370	5.00000	4.7103
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	144987	5.00000	5.1167
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	99367	5.00000	4.8582
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	79859	5.00000	5.1054

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

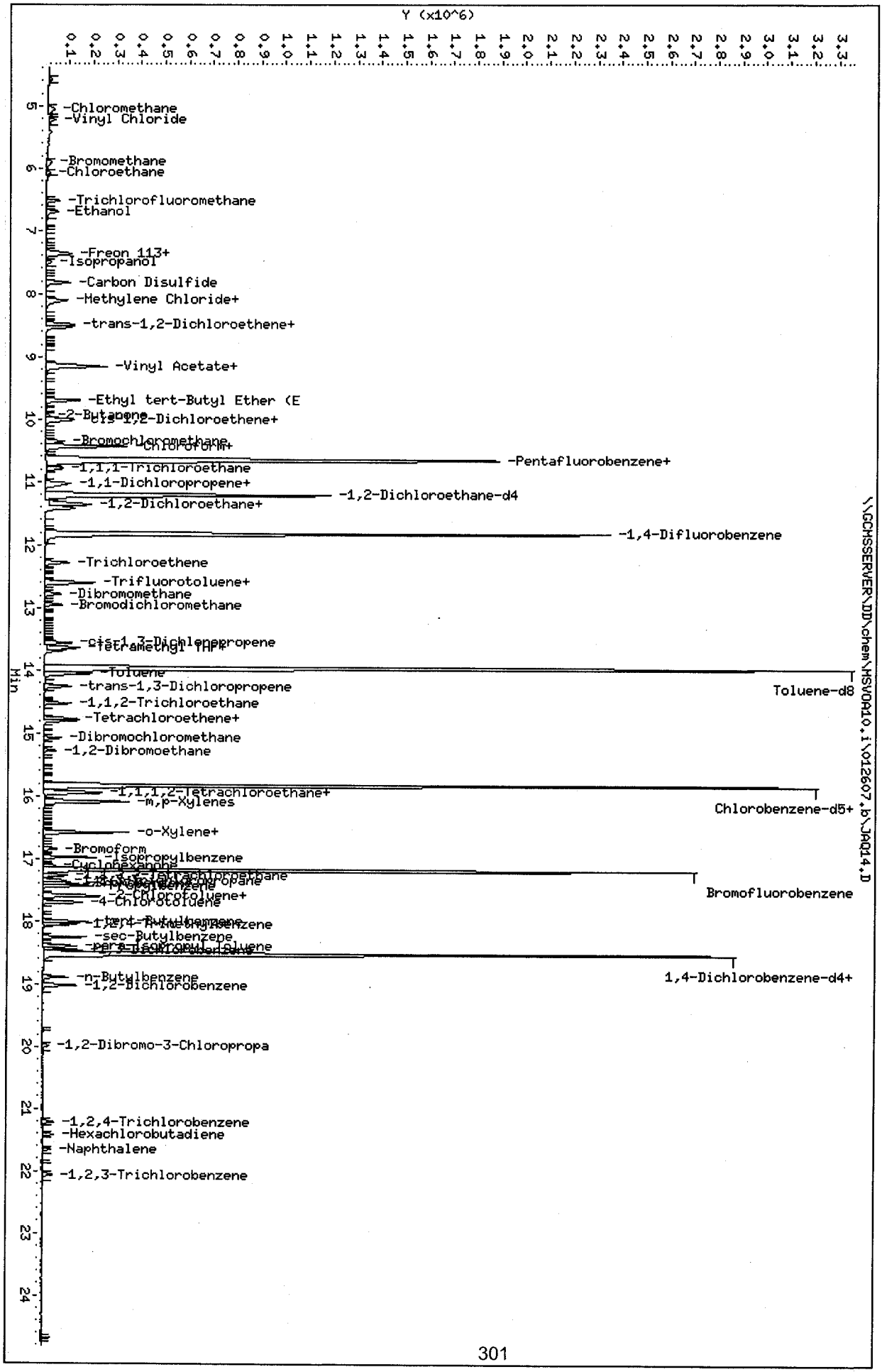
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	935622	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	78373	5.00000	4.8753
81 n-Butylbenzene	91	18.886	18.886	(1.020)	76759	5.00000	4.6722
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	75672	5.00000	5.0135
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	9331	5.00000	5.0784
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	26200	5.00000	4.3490(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	15257	5.00000	5.0743
86 Naphthalene	128	21.657	21.657	(1.169)	52322	5.00000	4.1084(M)
87 1,2,3-Trichlorobenzene	180	22.061	22.061	(1.191)	25002	5.00000	4.3937

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Date : 26-JAN-2007 18:01
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5219,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:34 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/100,S5219,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:08 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:34 Cal File: JAQ15.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	84494	10.0000	8.7838(M)
2 Chloromethane	50	5.053	5.053	(0.475)	165424	10.0000	9.1405(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	129444	10.0000	9.3456(M)
4 Bromomethane	94	5.891	5.891	(0.554)	74412	10.0000	9.2428(M)
5 Chloroethane	64	6.069	6.069	(0.570)	79961	10.0000	9.6374(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	106528	10.0000	9.5972(M)
7 Ethanol	45	6.690	6.690	(0.629)	195201	1000.00	1005.0648(M)
8 Freon 113	101	7.350	7.350	(0.691)	72575	10.0000	9.6900
9 Acetone	43	7.380	7.380	(0.693)	45813	10.0000	10.2882
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	75423	10.0000	9.4568(M)
11 Isopropanol	45	7.498	7.498	(0.705)	86791	100.000	99.0678(M)
12 Carbon Disulfide	76	7.823	7.823	(0.735)	333187	10.0000	9.3340(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	102157	10.0000	9.7369(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.762)	96548	100.000	97.3853(M)
15 MTBE	73	8.484	8.484	(0.797)	276342	10.0000	9.8818
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	88646	10.0000	9.5608(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	367875	10.0000	9.9280(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	183697	10.0000	9.7545(M)
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	488537	10.0000	9.8709
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	348567	10.0000	9.8862
22 2-Butanone	43	9.933	9.933	(0.933)	70586	10.0000	9.6954
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	96931	10.0000	9.7921(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	106663	10.0000	9.5395
25 Bromochloromethane	128	10.357	10.357	(0.973)	48823	10.0000	9.9161
26 Chloroform	83	10.426	10.426	(0.980)	151380	10.0000	9.7247(M)
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	469154	100.000	96.2264(M)
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1616394	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	891888	50.0000	50.4414
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	95313	10.0000	9.3221
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	110656	10.0000	9.3857(M)
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	74772	10.0000	9.2855
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1020366	50.0000	50.2394
34 1,2-Dichloroethane	62	11.323	11.323	(0.958)	131605	10.0000	10.1042(M)
35 Benzene	78	11.353	11.353	(0.961)	357416	10.0000	9.6823
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	251130	10.0000	9.7076
* 37 1,4-Difluorobenzene	114	11.816	11.816	(1.000)	2568270	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	76818	10.0000	8.8531(M)
39 Trifluorotoluene	146	12.595	12.595	(1.066)	113391	10.0000	9.2045(M)
40 1,2-Dichloropropane	63	12.595	12.595	(1.066)	108727	10.0000	9.4736(M)
41 Dibromomethane	93	12.773	12.773	(1.081)	62157	10.0000	9.9746
42 Bromodichloromethane	83	12.950	12.950	(1.096)	113047	10.0000	9.7753
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	150387	10.0000	9.5007(M)
45 Tetramethyl THF	43	13.640	13.640	(1.154)	264010	10.0000	9.7452
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	165790	10.0000	9.7222
47 Toluene-d8	98	13.966	13.966	(1.182)	2779653	50.0000	50.2966
48 Toluene	92	14.055	14.055	(1.189)	237133	10.0000	11.2830
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	134860	10.0000	9.7137
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	46608	10.0000	9.8836
51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	147957	10.0000	9.8331
52 2-Hexanone	43	14.784	14.784	(0.934)	92344	10.0000	9.6130(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	68864	10.0000	8.9026
54 Dibromochloromethane	129	15.080	15.080	(0.953)	85577	10.0000	9.6665
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	84326	10.0000	9.5090
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2086644	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	205003	10.0000	9.3101(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69112	10.0000	9.4485
59 Ethylbenzene	91	15.957	15.957	(1.008)	348677	10.0000	9.5394
60 m,p-Xylenes	106	16.086	16.086	(1.016)	266315	20.0000	20.0374
61 o-Xylene	106	16.569	16.569	(1.047)	128608	10.0000	9.7596
62 Styrene	104	16.578	16.578	(1.047)	213741	10.0000	9.4332
63 Bromoform	173	16.835	16.835	(1.064)	64859	10.0000	9.4318
64 Isopropylbenzene	105	16.973	16.973	(0.916)	279244	10.0000	9.1311(M)
65 Cyclohexanone	55	17.121	17.121	(0.924)	61691	100.000	101.8569
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1136659	50.0000	50.2738
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	114956	10.0000	9.4702
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	108093	10.0000	9.5340
69 Bromobenzene	156	17.397	17.397	(0.939)	84734	10.0000	9.4447
70 Propylbenzene	91	17.436	17.436	(0.941)	341476	10.0000	9.0705
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	248159	10.0000	9.2818
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	202459	10.0000	9.2144
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	224507	10.0000	9.0354
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	174361	10.0000	8.7806
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	182222	10.0000	9.2030
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	251902	10.0000	8.7093(M)
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	178033	10.0000	8.5274
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	146340	10.0000	9.1654

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

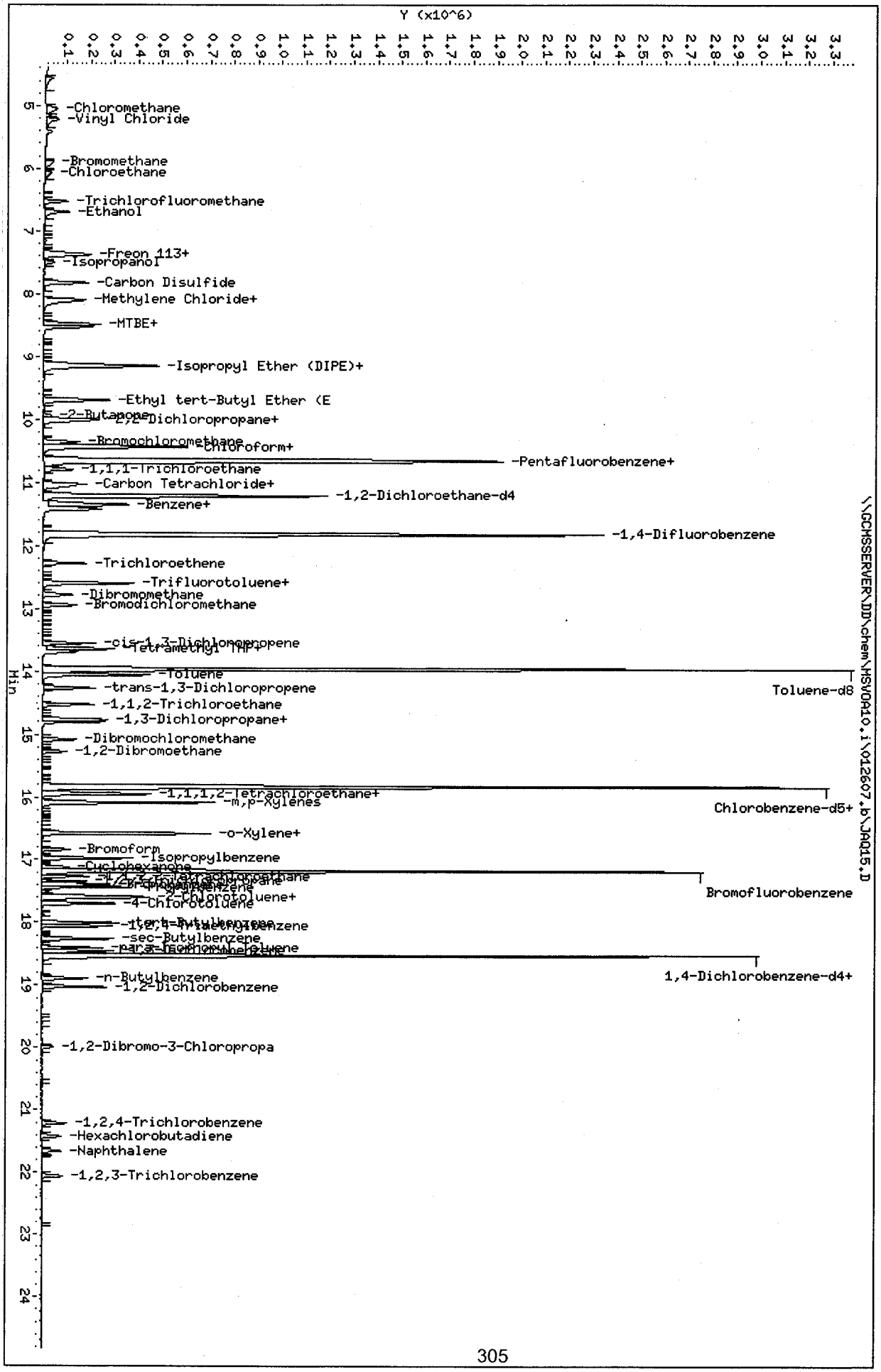
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	955028	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	145507	10.0000	8.8676
81 n-Butylbenzene	91	18.886	18.886	(1.020)	138129	10.0000	8.2369
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	142749	10.0000	9.2654
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	19208	10.0000	10.2417
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.145)	52214	10.0000	8.4911(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	25119	10.0000	8.1846
86 Naphthalene	128	21.656	21.656	(1.169)	107389	10.0000	8.2610(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	50728	10.0000	8.7336(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Date : 26-JAN-2007 18:34
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5219,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:06 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.004/100,S5219,0.004/100
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:09 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:06 Cal File: JAQ16.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	192804	20.0000	20.7696(M)
2 Chloromethane	50	5.053	5.053	(0.475)	344326	20.0000	19.7151(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	275789	20.0000	20.6328(M)
4 Bromomethane	94	5.891	5.891	(0.554)	151590	20.0000	19.5113(M)
5 Chloroethane	64	6.069	6.069	(0.570)	160389	20.0000	20.0315(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	220048	20.0000	20.5426
7 Ethanol	45	6.690	6.690	(0.629)	402306	2000.00	2146.4647
8 Freon 113	101	7.350	7.350	(0.691)	148890	20.0000	20.5997
9 Acetone	43	7.380	7.380	(0.693)	94992	20.0000	22.1052
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	160709	20.0000	20.8803(M)
11 Isopropanol	45	7.498	7.498	(0.705)	184113	200.000	217.7697(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	700052	20.0000	20.3221(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	201812	20.0000	19.9322
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	212561	200.000	222.1720(M)
15 MTBE	73	8.484	8.484	(0.797)	556038	20.0000	20.6039
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	180999	20.0000	20.2287(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	752930	20.0000	21.0559(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	369308	20.0000	20.3211
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	975758	20.0000	20.4296
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	692908	20.0000	20.3646
22 2-Butanone	43	9.934	9.934	(0.933)	153310	20.0000	21.8209(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	193973	20.0000	20.3054(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	217712	20.0000	20.1767
25 Bromochloromethane	128	10.357	10.357	(0.973)	98151	20.0000	20.6571(M)
26 Chloroform	83	10.426	10.426	(0.980)	302098	20.0000	20.1099
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	935923	200.000	198.9180
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1559883	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	852946	50.0000	49.9866
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	200085	20.0000	20.2784
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	233733	20.0000	20.2621
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	156195	20.0000	19.8247(M)
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	984510	50.0000	49.5427
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	264710	20.0000	20.7717
35 Benzene	78	11.353	11.353	(0.961)	730718	20.0000	20.2315
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	517690	20.0000	20.4529(M)
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2512865	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	170355	20.0000	20.0660
39 Trifluorotoluene	146	12.596	12.596	(1.066)	243316	20.0000	20.1868
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	227356	20.0000	20.2468(M)
41 Dibromomethane	93	12.783	12.783	(1.082)	129311	20.0000	21.2087
42 Bromodichloromethane	83	12.950	12.950	(1.096)	232895	20.0000	20.5827(M)
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	317451	20.0000	20.4973
45 Tetramethyl THF	43	13.641	13.641	(1.154)	569270	20.0000	21.4764
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	356407	20.0000	21.3613
47 Toluene-d8	98	13.966	13.966	(1.182)	2712669	50.0000	50.1668
48 Toluene	92	14.055	14.055	(1.189)	401018	20.0000	19.5015(M)
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	280298	20.0000	20.6346
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	96443	20.0000	20.9024
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	303268	20.0000	20.8741
52 2-Hexanone	43	14.774	14.774	(0.933)	204269	20.0000	22.0230
53 Tetrachloroethene	166	14.804	14.804	(0.935)	153538	20.0000	20.5572
54 Dibromochloromethane	129	15.080	15.080	(0.953)	175886	20.0000	20.5763
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	182455	20.0000	21.0282
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2014764	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	421896	20.0000	19.8437(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	145850	20.0000	20.6510
59 Ethylbenzene	91	15.958	15.958	(1.008)	698484	20.0000	19.7916
60 m,p-Xylenes	106	16.086	16.086	(1.016)	515329	40.0000	40.1565
61 o-Xylene	106	16.569	16.569	(1.047)	253697	20.0000	19.9391
62 Styrene	104	16.579	16.579	(1.047)	454840	20.0000	20.7900
63 Bromoform	173	16.835	16.835	(1.064)	133275	20.0000	20.0724
64 Isopropylbenzene	105	16.973	16.973	(0.916)	610402	20.0000	20.4406(M)
65 Cyclohexanone	55	17.111	17.111	(0.924)	144510	200.000	244.3451(M)
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1098649	50.0000	49.7631
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	248441	20.0000	20.9599
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	227603	20.0000	20.5585
69 Bromobenzene	156	17.397	17.397	(0.939)	179752	20.0000	20.5183
70 Propylbenzene	91	17.436	17.436	(0.941)	736056	20.0000	20.0225
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	514653	20.0000	19.7131
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	428199	20.0000	19.9579
73 4-Chlorotoluene	91	17.693	17.693	(0.955)	477184	20.0000	19.6672
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	391239	20.0000	20.1770
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	389708	20.0000	20.1560
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	574787	20.0000	20.3515
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	406884	20.0000	19.9584
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	306441	20.0000	19.6551

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

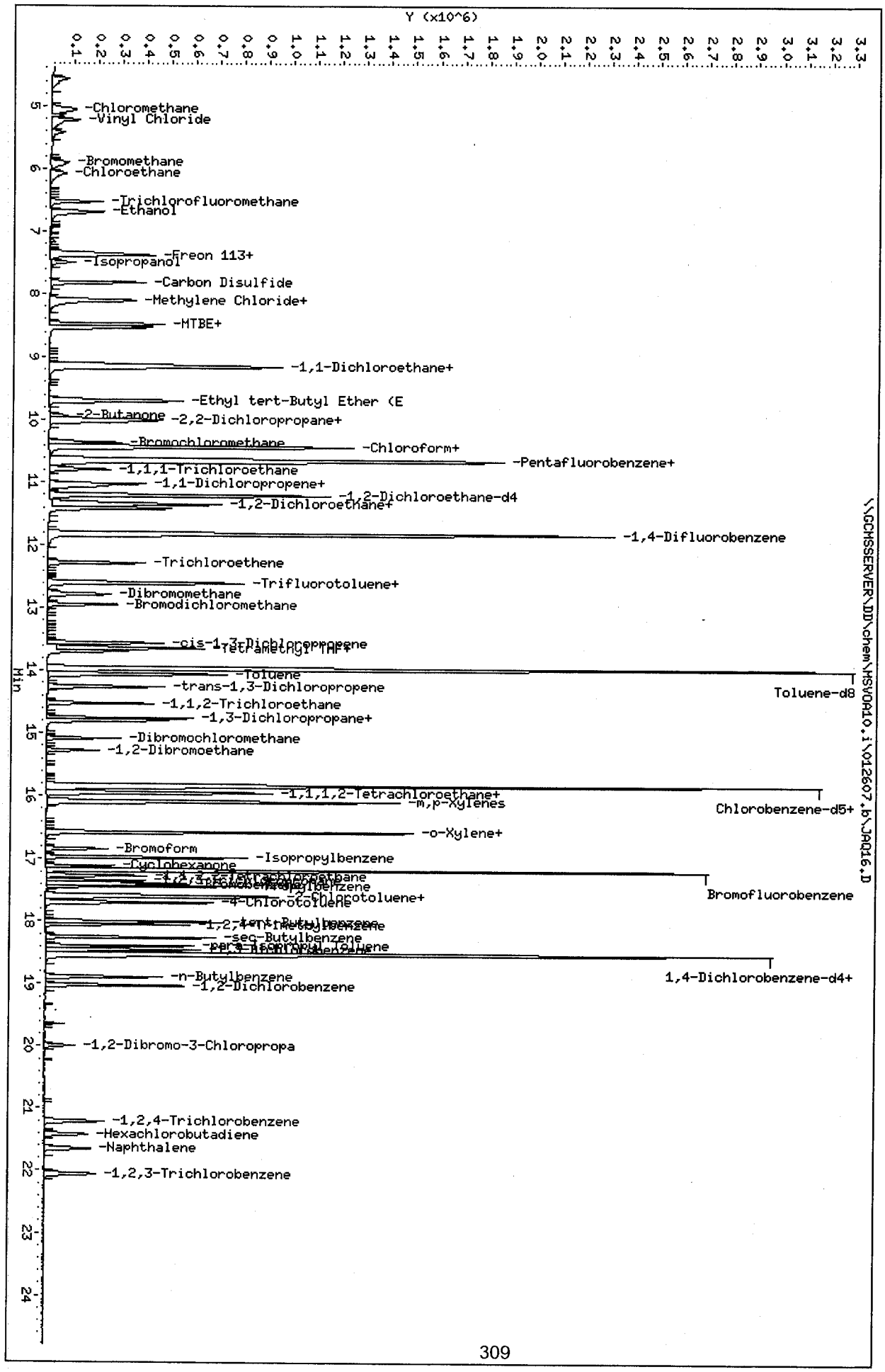
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	932565	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	318141	20.0000	19.8554
81 n-Butylbenzene	91	18.886	18.886	(1.020)	332009	20.0000	20.2754
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	303728	20.0000	20.1889
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	42724	20.0000	23.3292(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	120800	20.0000	20.1180(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	57572	20.0000	19.2108
86 Naphthalene	128	21.656	21.656	(1.169)	259513	20.0000	20.4441(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	116520	20.0000	20.5440(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Date : 26-JAN-2007 19:06
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.004/100,S5219,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:39 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.01/100,S5219,0.01/100
Misc Info : S4172,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:10 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:39 Cal File: JAQ17.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	520970	50.0000	56.2784
2 Chloromethane	50	5.044	5.044	(0.474)	886324	50.0000	50.8907(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	689712	50.0000	51.7446
4 Bromomethane	94	5.892	5.892	(0.554)	408210	50.0000	52.6886
5 Chloroethane	64	6.069	6.069	(0.570)	408130	50.0000	51.1157
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	561782	50.0000	52.5924
7 Ethanol	45	6.680	6.680	(0.628)	942062	5000.00	5040.3720
8 Freon 113	101	7.351	7.351	(0.691)	344262	50.0000	47.7639
9 Acetone	43	7.371	7.371	(0.692)	196148	50.0000	45.7728
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	368018	50.0000	47.9492
11 Isopropanol	45	7.489	7.489	(0.704)	433436	500.000	514.1075(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	1648704	50.0000	47.9952
13 Methylene Chloride	84	8.090	8.090	(0.760)	491188	50.0000	48.6488
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	496436	500.000	520.3372(M)
15 MTBE	73	8.475	8.475	(0.796)	1359574	50.0000	50.5201(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	441126	50.0000	49.4391(M)
18 Vinyl Acetate	43	9.116	9.116	(0.856)	1748211	50.0000	49.0264(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	877528	50.0000	48.4212
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	2337773	50.0000	49.0836
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	1709702	50.0000	50.3892
22 2-Butanone	43	9.924	9.924	(0.932)	342720	50.0000	48.9167
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	465253	50.0000	48.8400(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	507034	50.0000	47.1217(M)
25 Bromochloromethane	128	10.358	10.358	(0.973)	243803	50.0000	51.4552(M)
26 Chloroform	83	10.427	10.427	(0.980)	716284	50.0000	47.8151
27 Tetrahydrofuran	42	10.427	10.427	(0.980)	2095476	500.000	446.6143
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1555522	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	854225	50.0000	50.2019
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	473552	50.0000	48.1287
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	540790	50.0000	46.6546
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	369593	50.0000	46.6838
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	986905	50.0000	49.4239
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	639313	50.0000	49.9250
35 Benzene	78	11.354	11.354	(0.961)	1742148	50.0000	48.0027
36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	1253595	50.0000	49.2884
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525036	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	402225	50.0000	47.1494
39 Trifluorotoluene	146	12.596	12.596	(1.066)	574384	50.0000	47.4243
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	552323	50.0000	48.9491
41 Dibromomethane	93	12.783	12.783	(1.082)	304026	50.0000	49.6240
42 Bromodichloromethane	83	12.951	12.951	(1.096)	565585	50.0000	49.7443
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	777124	50.0000	49.9358
45 Tetramethyl THF	43	13.641	13.641	(1.154)	1381596	50.0000	51.8711
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	807610	50.0000	48.1709
47 Toluene-d8	98	13.966	13.966	(1.182)	2718680	50.0000	50.0356
48 Toluene	92	14.055	14.055	(1.189)	951856	50.0000	46.0657
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	689259	50.0000	50.4963
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	230237	50.0000	49.6596
51 1,3-Dichloropropane	76	14.755	14.755	(0.932)	702613	50.0000	47.4266
52 2-Hexanone	43	14.775	14.775	(0.933)	473392	50.0000	50.0517
53 Tetrachloroethene	166	14.804	14.804	(0.935)	356789	50.0000	46.8472(M)
54 Dibromochloromethane	129	15.081	15.081	(0.953)	438254	50.0000	50.2789
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	438278	50.0000	50.2687
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2054473	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	1022884	50.0000	47.1812
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	355870	50.0000	49.4139
59 Ethylbenzene	91	15.958	15.958	(1.008)	1683400	50.0000	46.7775
60 m,p-Xylenes	106	16.086	16.086	(1.016)	1260291	100.000	96.3088
61 o-Xylene	106	16.569	16.569	(1.047)	616795	50.0000	47.5396
62 Styrene	104	16.579	16.579	(1.047)	1103752	50.0000	49.4756
63 Bromoform	173	16.835	16.835	(1.064)	319994	50.0000	47.2624
64 Isopropylbenzene	105	16.973	16.973	(0.916)	1447868	50.0000	46.4376
65 Cyclohexanone	55	17.112	17.112	(0.924)	255178	500.000	413.2491(M)
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1122015	50.0000	48.6754
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	593081	50.0000	47.9229
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	533783	50.0000	46.1787
69 Bromobenzene	156	17.397	17.397	(0.939)	434644	50.0000	47.5188
70 Propylbenzene	91	17.437	17.437	(0.941)	1839895	50.0000	47.9364
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	1266357	50.0000	46.4581
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	1099261	50.0000	49.0720
73 4-Chlorotoluene	91	17.693	17.693	(0.955)	1177170	50.0000	46.4686
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	970054	50.0000	47.9153
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	1025019	50.0000	50.7763
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	1456185	50.0000	49.3821
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	1076521	50.0000	50.5757
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	761638	50.0000	46.7886

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

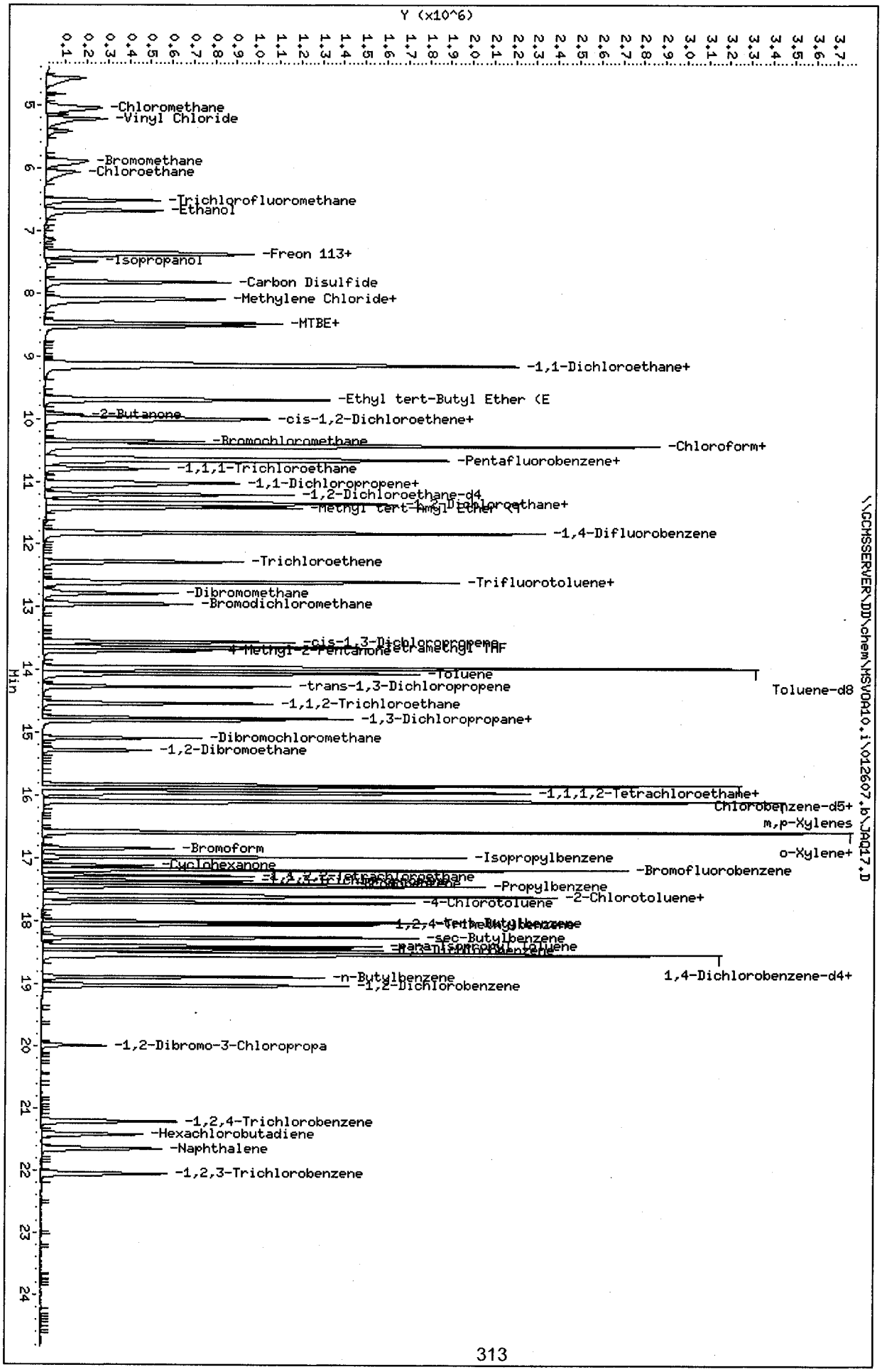
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	973680	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	779906	50.0000	46.6192
81 n-Butylbenzene	91	18.886	18.886	(1.020)	900061	50.0000	52.6447
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	752352	50.0000	47.8975
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	97414	50.0000	50.9462(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	320727	50.0000	51.1584(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	145319	50.0000	46.4429
86 Naphthalene	128	21.647	21.647	(1.169)	707854	50.0000	53.4092(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	312267	50.0000	52.7321

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Date : 26-JAN-2007 19:39
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5219,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:12 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.015/100,S5219,0.015/100
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:12 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:12 Cal File: JAQ18.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.564	4.564	(0.429)	809223	75.0000	85.8521
2 Chloromethane	50	5.048	5.048	(0.475)	1324306	75.0000	74.6772(M)
3 Vinyl Chloride	62	5.215	5.215	(0.490)	1054692	75.0000	77.7099
4 Bromomethane	94	5.895	5.895	(0.554)	632139	75.0000	80.1307
5 Chloroethane	64	6.073	6.073	(0.571)	622935	75.0000	76.6217
6 Trichlorofluoromethane	101	6.526	6.526	(0.614)	862577	75.0000	79.3061
7 Ethanol	45	6.684	6.684	(0.628)	1402318	7500.00	7368.5655
8 Freon 113	101	7.345	7.345	(0.690)	531114	75.0000	72.3689
9 Acetone	43	7.374	7.374	(0.693)	298898	75.0000	68.5015
10 1,1-Dichloroethene	96	7.384	7.384	(0.694)	559949	75.0000	71.6497
11 Isopropanol	45	7.493	7.493	(0.704)	620448	750.000	722.7494(M)
12 Carbon Disulfide	76	7.828	7.828	(0.736)	2500288	75.0000	71.4823
13 Methylene Chloride	84	8.094	8.094	(0.761)	752185	75.0000	73.1649
14 tert-Butyl Alcohol (TBA)	59	8.104	8.104	(0.762)	705157	750.000	725.8732
15 MTBE	73	8.479	8.479	(0.797)	2040096	75.0000	74.4501
16 trans-1,2-Dichloroethene	96	8.528	8.528	(0.802)	649716	75.0000	71.5130
18 Vinyl Acetate	43	9.110	9.110	(0.856)	2740359	75.0000	75.4739(M)
19 1,1-Dichloroethane	63	9.139	9.139	(0.859)	1300910	75.0000	70.4977
20 Isopropyl Ether (DIPE)	45	9.159	9.159	(0.861)	3477743	75.0000	71.7109
21 Ethyl tert-Butyl Ether (ETBE)	59	9.691	9.691	(0.911)	2557297	75.0000	74.0204
22 2-Butanone	43	9.928	9.928	(0.933)	502631	75.0000	70.4565
23 cis-1,2-Dichloroethene	96	9.997	9.997	(0.940)	699906	75.0000	72.1571

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.026	10.026	(0.943)	771300	75.0000	70.3981
25 Bromochloromethane	128	10.362	10.362	(0.974)	358502	75.0000	74.3079
26 Chloroform	83	10.421	10.421	(0.980)	1076170	75.0000	70.5527
27 Tetrahydrofuran	42	10.431	10.431	(0.981)	2980679	750.000	623.9051
* 28 Pentafluorobenzene	168	10.638	10.638	(1.000)	1583882	50.0000	
29 Dibromofluoromethane	113	10.667	10.667	(1.003)	861386	50.0000	49.7163
30 1,1,1-Trichloroethane	97	10.795	10.795	(1.015)	723687	75.0000	72.2338
31 1,1-Dichloropropene	75	11.022	11.022	(0.932)	843069	75.0000	72.7865
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	572881	75.0000	72.4149
33 1,2-Dichloroethane-d4	65	11.210	11.210	(0.948)	992977	50.0000	49.7648
34 1,2-Dichloroethane	62	11.318	11.318	(0.957)	950686	75.0000	74.2956
35 Benzene	78	11.357	11.357	(0.961)	2622858	75.0000	72.3231
36 Methyl tert-Amyl Ether (TAME)	73	11.417	11.417	(0.966)	1890516	75.0000	74.3857
* 37 1,4-Difluorobenzene	114	11.821	11.821	(1.000)	2523167	50.0000	
38 Trichloroethene	95	12.274	12.274	(1.038)	612822	75.0000	71.8891
39 Trifluorotoluene	146	12.590	12.590	(1.065)	893804	75.0000	73.8521
40 1,2-Dichloropropane	63	12.600	12.600	(1.066)	815449	75.0000	72.3220
41 Dibromomethane	93	12.777	12.777	(1.081)	465912	75.0000	76.1038
42 Bromodichloromethane	83	12.945	12.945	(1.095)	862862	75.0000	75.9466
44 cis-1,3-Dichloropropene	75	13.556	13.556	(1.147)	1172349	75.0000	75.3877
45 Tetramethyl THF	43	13.635	13.635	(1.153)	1938432	75.0000	72.8311
46 4-Methyl-2-Pentanone	43	13.694	13.694	(1.158)	1286035	75.0000	76.7639
47 Toluene-d8	98	13.960	13.960	(1.181)	2707504	50.0000	49.8668
48 Toluene	92	14.059	14.059	(1.189)	1476833	75.0000	71.5253
49 trans-1,3-Dichloropropene	75	14.256	14.256	(1.206)	1051431	75.0000	77.0868
50 1,1,2-Trichloroethane	85	14.522	14.522	(1.229)	352724	75.0000	76.1350
51 1,3-Dichloropropane	76	14.759	14.759	(0.933)	1109668	75.0000	74.7288
52 2-Hexanone	43	14.779	14.779	(0.934)	697186	75.0000	73.5421
53 Tetrachloroethene	166	14.808	14.808	(0.936)	560386	75.0000	73.4089
54 Dibromochloromethane	129	15.084	15.084	(0.953)	675604	75.0000	77.3288
55 1,2-Dibromoethane	107	15.272	15.272	(1.292)	676189	75.0000	77.6137
* 56 Chlorobenzene-d5	117	15.824	15.824	(1.000)	2059262	50.0000	
57 Chlorobenzene	112	15.863	15.863	(1.002)	1613995	75.0000	74.2735
58 1,1,1,2-Tetrachloroethane	131	15.932	15.932	(1.007)	546211	75.0000	75.6672
59 Ethylbenzene	91	15.952	15.952	(1.008)	2642627	75.0000	73.2613
60 m,p-Xylenes	106	16.080	16.080	(1.016)	1936065	150.000	147.6060
61 o-Xylene	106	16.573	16.573	(1.047)	960156	75.0000	73.8321
62 Styrene	104	16.573	16.573	(1.047)	1730073	75.0000	77.3700
63 Bromoform	173	16.839	16.839	(1.064)	500229	75.0000	73.7109
64 Isopropylbenzene	105	16.977	16.977	(0.917)	2283744	75.0000	72.0115
65 Cyclohexanone	55	17.115	17.115	(0.924)	408440	750.000	650.2945
66 Bromofluorobenzene	95	17.174	17.174	(0.928)	1129755	50.0000	48.1846
67 1,1,2,2-Tetrachloroethane	83	17.263	17.263	(0.932)	908682	75.0000	72.1862
68 1,2,3-Trichloropropane	75	17.352	17.352	(0.937)	817034	75.0000	69.4913(M)
69 Bromobenzene	156	17.391	17.391	(0.939)	690715	75.0000	74.2410
70 Propylbenzene	91	17.431	17.431	(0.941)	2929723	75.0000	75.0433
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	1996875	75.0000	72.0227
72 1,3,5-Trimethylbenzene	105	17.608	17.608	(0.951)	1770129	75.0000	77.6875
73 4-Chlorotoluene	91	17.697	17.697	(0.956)	1902006	75.0000	73.8152
74 tert-Butylbenzene	119	18.003	18.003	(0.972)	1586626	75.0000	77.0489
75 1,2,4-Trimethylbenzene	105	18.052	18.052	(0.975)	1674992	75.0000	81.5747
76 sec-Butylbenzene	105	18.259	18.259	(0.986)	2290862	75.0000	76.3775
77 para-Isopropyl Toluene	119	18.397	18.397	(0.994)	1756199	75.0000	81.1159
78 1,3-Dichlorobenzene	146	18.456	18.456	(0.997)	1238664	75.0000	74.8098

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

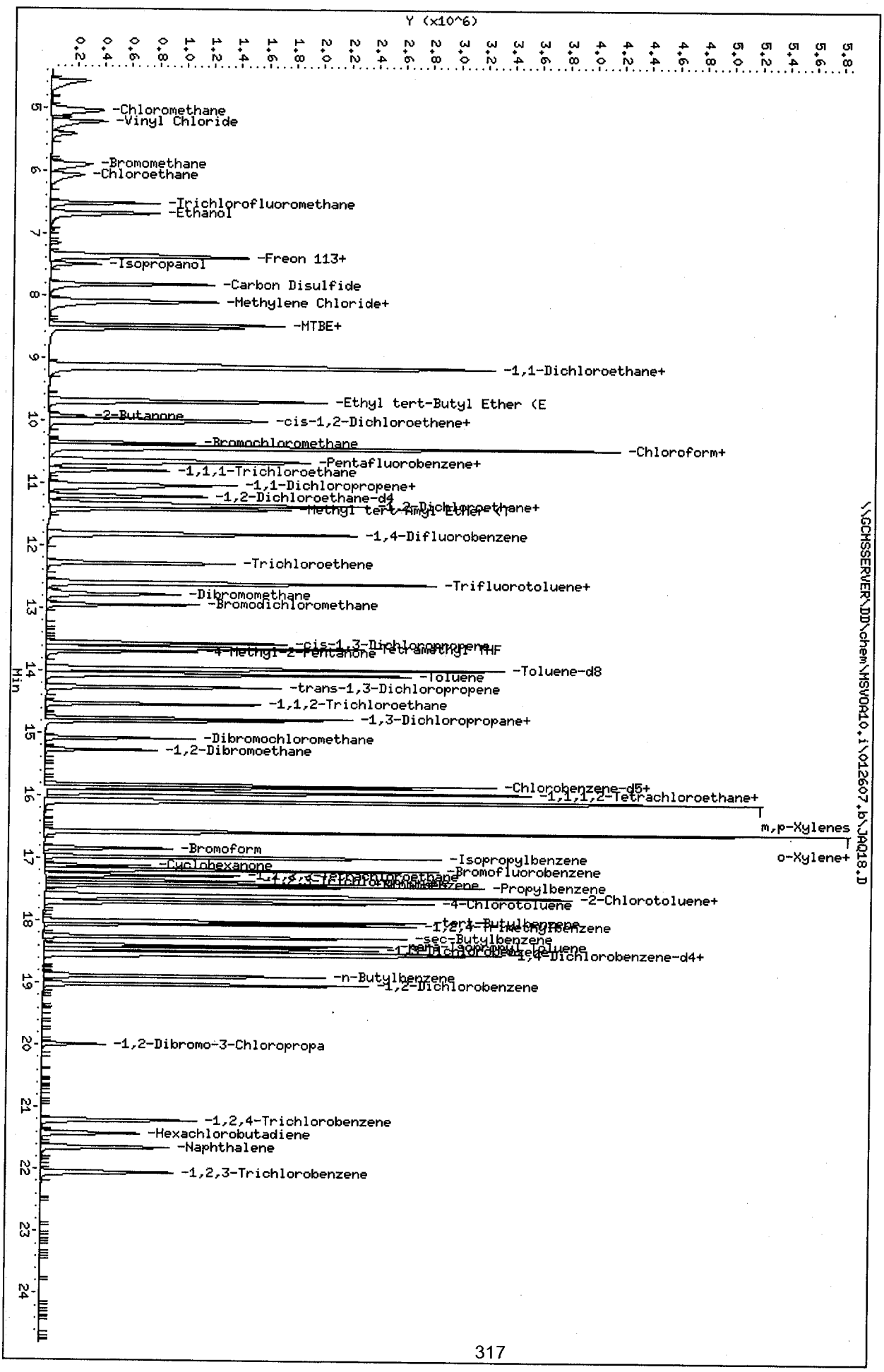
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.515	18.515	(1.000)	990383	50.0000	
80 1,4-Dichlorobenzene	146	18.545	18.545	(1.002)	1258167	75.0000	73.9392
81 n-Butylbenzene	91	18.880	18.880	(1.020)	1447562	75.0000	83.2402
82 1,2-Dichlorobenzene	146	19.018	19.018	(1.027)	1204009	75.0000	75.3589
83 1,2-Dibromo-3-Chloropropane	75	19.984	19.984	(1.079)	156657	75.0000	80.5478(M)
84 1,2,4-Trichlorobenzene	180	21.207	21.207	(1.145)	549002	75.0000	86.0931(M)
85 Hexachlorobutadiene	225	21.424	21.424	(1.157)	218719	75.0000	68.7222(M)
86 Naphthalene	128	21.651	21.651	(1.169)	1166161	75.0000	86.5057
87 1,2,3-Trichlorobenzene	180	22.055	22.055	(1.191)	526972	75.0000	87.4882

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Date : 26-JAN-2007 20:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5219,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:44 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.02/100,S5219,0.02/100
Misc Info : S4172,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:13 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:44 Cal File: JAQ19.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	1101474	100.000	115.8100
2 Chloromethane	50	5.054	5.054	(0.475)	1728322	100.000	96.5858(M)
3 Vinyl Chloride	62	5.212	5.212	(0.490)	1405434	100.000	102.6243(M)
4 Bromomethane	94	5.902	5.902	(0.555)	857330	100.000	107.7019(M)
5 Chloroethane	64	6.070	6.070	(0.571)	827102	100.000	100.8224(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	1157557	100.000	105.4728
7 Ethanol	45	6.681	6.681	(0.628)	1981668	10000.0	10319.4444
8 Freon 113	101.	7.352	7.352	(0.691)	808125	100.000	109.1269
9 Acetone	43	7.371	7.371	(0.693)	429094	100.000	97.4582
10 1,1-Dichloroethene	96	7.381	7.381	(0.694)	785094	100.000	99.5581
11 Isopropanol	45	7.490	7.490	(0.704)	904604	1000.00	1044.3109
12 Carbon Disulfide	76	7.825	7.825	(0.736)	3510437	100.000	99.4623
13 Methylene Chloride	84	8.091	8.091	(0.761)	1018464	100.000	98.1777(M)
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.762)	1045965	1000.00	1067.0409
15 MTBE	73	8.476	8.476	(0.797)	2783984	100.000	100.6864
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.802)	904479	100.000	98.6618
18 Vinyl Acetate	43	9.107	9.107	(0.856)	3568990	100.000	97.4145(M)
19 1,1-Dichloroethane	63	9.136	9.136	(0.859)	1773356	100.000	95.2385
20 Isopropyl Ether (DIPE)	45	9.156	9.156	(0.861)	4661169	100.000	95.2514
21 Ethyl tert-Butyl Ether (ETBE)	59	9.688	9.688	(0.911)	3510091	100.000	100.6880
22 2-Butanone	43	9.925	9.925	(0.933)	729524	100.000	101.3445
23 cis-1,2-Dichloroethene	96	9.994	9.994	(0.940)	951950	100.000	97.2619

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.024	10.024	(0.943)	1068977	100.000	96.6930
	25 Bromochloromethane	128	10.359	10.359	(0.974)	496480	100.000	101.9845
	26 Chloroform	83	10.418	10.418	(0.980)	1450169	100.000	94.2195
	27 Tetrahydrofuran	42	10.428	10.428	(0.981)	4159209	1000.00	862.7859
*	28 Pentafluorobenzene	168	10.635	10.635	(1.000)	1598210	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.003)	875112	50.0000	50.0557
	30 1,1,1-Trichloroethane	97	10.793	10.793	(1.015)	1033090	100.000	102.1920
	31 1,1-Dichloropropene	75	11.019	11.019	(0.932)	1198179	100.000	101.1903
	32 Carbon Tetrachloride	117	11.069	11.069	(0.937)	826457	100.000	102.1913
	33 1,2-Dichloroethane-d4	65	11.207	11.207	(0.948)	1017063	50.0000	49.8609
	34 1,2-Dichloroethane	62	11.315	11.315	(0.957)	1290572	100.000	98.6593
	35 Benzene	78	11.355	11.355	(0.961)	3565097	100.000	96.1620
	36 Methyl tert-Amyl Ether (TAME)	73	11.414	11.414	(0.966)	2595503	100.000	99.8988
*	37 1,4-Difluorobenzene	114	11.818	11.818	(1.000)	2579386	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	851032	100.000	97.6573
	39 Trifluorotoluene	146	12.587	12.587	(1.065)	1269449	100.000	102.6042
	40 1,2-Dichloropropane	63	12.597	12.597	(1.066)	1090870	100.000	94.6403
	41 Dibromomethane	93	12.774	12.774	(1.081)	630451	100.000	100.7357
	42 Bromodichloromethane	83	12.942	12.942	(1.095)	1158482	100.000	99.7439
	44 cis-1,3-Dichloropropene	75	13.553	13.553	(1.147)	1582601	100.000	99.5508
	45 Tetramethyl THF	43	13.632	13.632	(1.153)	2630251	100.000	96.6703
	46 4-Methyl-2-Pentanone	43	13.691	13.691	(1.159)	1814480	100.000	105.9465
	47 Toluene-d8	98	13.957	13.957	(1.181)	2747656	50.0000	49.5033
	48 Toluene	92	14.056	14.056	(1.189)	1966809	100.000	93.1794
	49 trans-1,3-Dichloropropene	75	14.253	14.253	(1.206)	1412656	100.000	101.3131
	50 1,1,2-Trichloroethane	85	14.519	14.519	(1.229)	471432	100.000	99.5401
	51 1,3-Dichloropropane	76	14.756	14.756	(0.933)	1507242	100.000	100.7873
	52 2-Hexanone	43	14.776	14.776	(0.934)	995713	100.000	104.2916
	53 Tetrachloroethene	166	14.805	14.805	(0.936)	781562	100.000	101.6607
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	916608	100.000	104.1743
	55 1,2-Dibromoethane	107	15.269	15.269	(1.292)	914347	100.000	102.6623
*	56 Chlorobenzene-d5	117	15.821	15.821	(1.000)	2073881	50.0000	
	57 Chlorobenzene	112	15.860	15.860	(1.002)	2121995	100.000	96.9625
	58 1,1,1,2-Tetrachloroethane	131	15.929	15.929	(1.007)	737484	100.000	101.4443
	59 Ethylbenzene	91	15.949	15.949	(1.008)	3506376	100.000	96.5217
	60 m,p-Xylenes	106	16.087	16.087	(1.017)	2588486	200.000	195.9556
	61 o-Xylene	106	16.570	16.570	(1.047)	1263431	100.000	96.4679
	62 Styrene	104	16.570	16.570	(1.047)	2257571	100.000	100.2484
	63 Bromoform	173	16.836	16.836	(1.064)	681020	100.000	99.6439
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	3148817	100.000	98.7673
	65 Cyclohexanone	55	17.112	17.112	(0.924)	709360	1000.00	1123.4657
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1140071	50.0000	48.3690
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.933)	1227449	100.000	96.9968
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	1105119	100.000	93.4999(M)
	69 Bromobenzene	156	17.388	17.388	(0.939)	896727	100.000	95.8774
	70 Propylbenzene	91	17.428	17.428	(0.941)	3978203	100.000	101.3639
	71 2-Chlorotoluene	91	17.586	17.586	(0.950)	2646632	100.000	94.9562
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	2376912	100.000	103.7698
	73 4-Chlorotoluene	91	17.694	17.694	(0.956)	2450484	100.000	94.6013
	74 tert-Butylbenzene	119	18.010	18.010	(0.973)	2198205	100.000	106.1870
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.975)	2255483	100.000	109.2682
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	3295336	100.000	109.2892
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.994)	2464620	100.000	113.2384
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.997)	1599483	100.000	96.0939

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

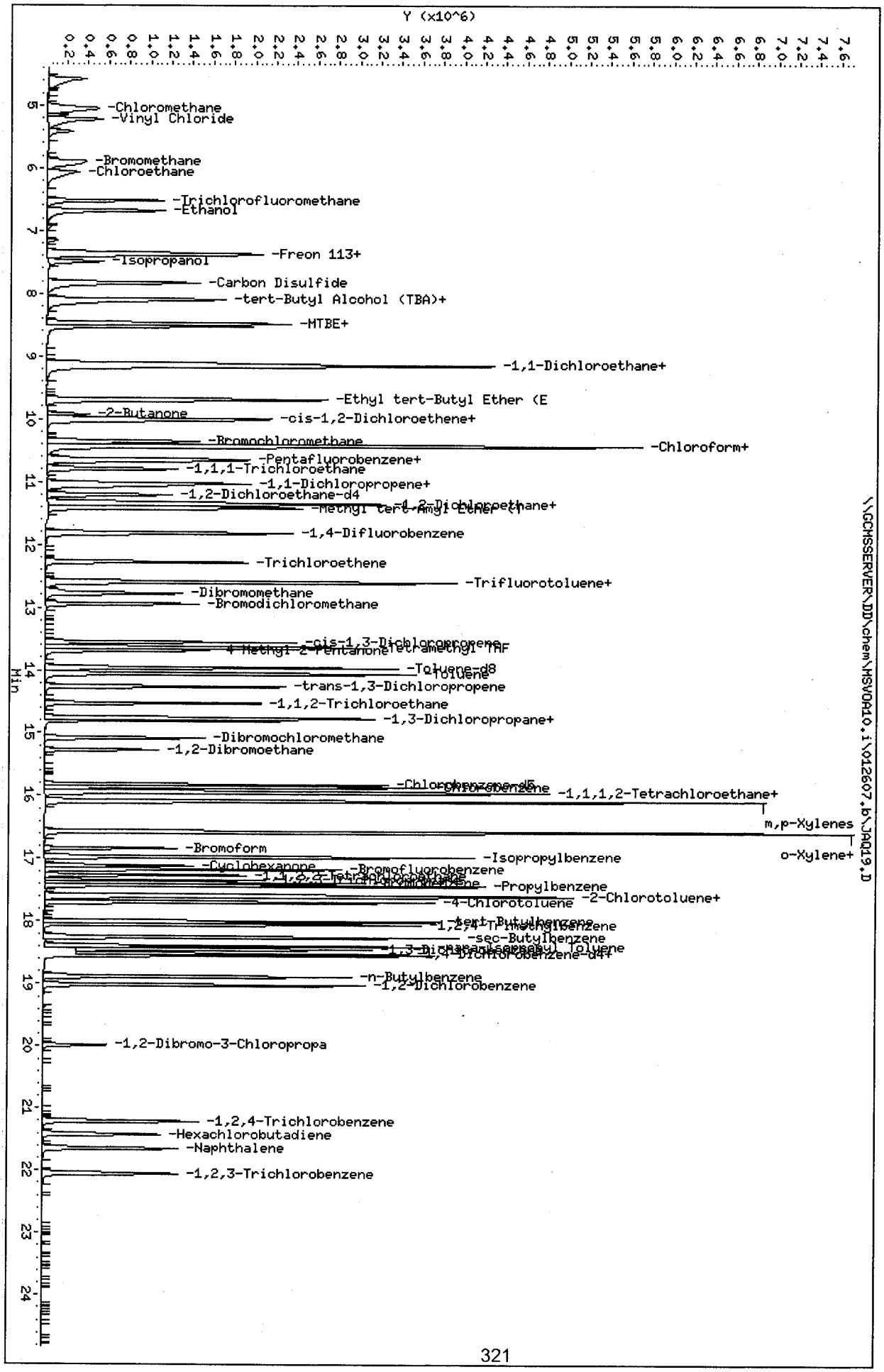
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	995616	50.0000	
80 1,4-Dichlorobenzene	146	18.542	18.542	(1.002)	1620839	100.000	94.7518
81 n-Butylbenzene	91	18.887	18.887	(1.020)	2083695	100.000	119.1905
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1555453	100.000	96.8440
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	213279	100.000	109.0846(M)
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	732219	100.000	114.2212
85 Hexachlorobutadiene	225	21.421	21.421	(1.157)	353650	100.000	110.5339(M)
86 Naphthalene	128	21.648	21.648	(1.169)	1604819	100.000	118.4196
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	687735	100.000	113.5780

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Date : 26-JAN-2007 20:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5219,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377629 IDF : 1.0
Seqnum : 447094064003.5 File : ec603 Time : 06-MAR-2007 08:31
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7775	25.00	21.04	ug/L	-16	30	0.1000	u
Vinyl Chloride	0.6995	0.6272	25.00	22.42	ug/L	-10	20	0.0500	u
Bromomethane	0.4143	0.3394	25.00	20.48	ug/L	-18	30	0.0500	u
Chloroethane	0.3917	0.3878	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2489	25.00	22.61	ug/L	-10	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3956	25.00	28.80	ug/L	15	20	0.0500	u
Methylene Chloride	0.5327	0.5518	25.00	25.90	ug/L	4	30	0.0500	u
Carbon Disulfide	1.5714	1.1312	25.00	18.00	ug/L	**-28**	30	0.0500	!c- u
MTBE	1.6725	1.4630	25.00	21.87	ug/L	-13	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4766	25.00	26.44	ug/L	6	30	0.0500	u
Vinyl Acetate	1.5725	1.6485	25.00	26.21	ug/L	5	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0712	25.00	28.18	ug/L	13	30	0.1000	u
2-Butanone	0.5135	0.4372	25.00	21.28	ug/L	-15	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6198	25.00	23.64	ug/L	-5	30	0.0500	u
Chloroform	1.0380	1.0077	25.00	24.27	ug/L	-3	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7092	25.00	26.24	ug/L	5	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3003	25.00	28.24	ug/L	13	30	0.0500	u
1,2-Dichloroethane	0.4996	0.5239	25.00	26.22	ug/L	5	30	0.0500	u
Benzene	1.3466	1.3325	25.00	24.74	ug/L	-1	30	0.0500	u
Trichloroethene	0.3340	0.3320	25.00	24.85	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5103	25.00	25.96	ug/L	4	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5303	25.00	20.60	ug/L	-18	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5877	25.00	23.03	ug/L	-8	30	0.0500	u
Toluene	0.8216	0.8129	25.00	24.74	ug/L	-1	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5098	25.00	21.48	ug/L	-14	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1900	25.00	23.52	ug/L	-6	30	0.0500	u
2-Hexanone	0.5472	0.4213	25.00	19.25	ug/L	-23	40	0.0500	u
Tetrachloroethene	0.2838	0.3319	25.00	29.23	ug/L	17	30	0.0500	u
Dibromochloromethane	0.4287	0.3964	25.00	23.12	ug/L	-8	30	0.0500	u
Chlorobenzene	1.0173	0.9660	25.00	23.74	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.7058	25.00	24.88	ug/L	0	20	0.0500	u
m,p-Xylenes	0.6280	0.6299	50.00	50.15	ug/L	0	30	0.0500	u
o-Xylene	0.6326	0.6316	25.00	24.96	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1287	25.00	24.05	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3042	25.00	23.31	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.1314	25.00	21.37	ug/L	-15	30	0.3000	u
Dibromofluoromethane	0.5927	0.5809	50.00	49.01	ug/L	-2	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4501	50.00	56.17	ug/L	12	30	0.0500	u
Toluene-d8	1.1589	1.1827	50.00	51.03	ug/L	2	30	0.0500	u
Bromofluorobenzene	1.2864	1.2148	50.00	47.22	ug/L	-6	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	776548	24.68	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1208246	17.21	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1059171	20.00	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	510227	23.94	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377872 IDF : 1.0
Seqnum : 447095480003.1 File : ec703 Time : 07-MAR-2007 08:02
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (8333X), S5614 (8333X), S5422 (8333X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7452	30.00	24.20	ug/L	-19	30	0.1000	u
Vinyl Chloride	0.6995	0.6157	30.00	26.41	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.3431	30.00	24.85	ug/L	-17	30	0.0500	u
Chloroethane	0.3917	0.3757	30.00	28.78	ug/L	-4	30	0.0500	u
Acetone	0.2753	0.2275	30.00	24.79	ug/L	-17	40	0.0500	u
1,1-Dichloroethene	0.3434	0.4131	30.00	36.08	ug/L	20	20	0.0500	u
Methylene Chloride	0.5327	0.5191	30.00	29.24	ug/L	-3	30	0.0500	u
Carbon Disulfide	1.5714	1.1458	30.00	21.87	ug/L	**-27**	30	0.0500	!c- u
MTBE	1.6725	1.4113	30.00	25.32	ug/L	-16	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4732	30.00	31.50	ug/L	5	30	0.0500	u
Vinyl Acetate	1.5725	1.5812	30.00	30.17	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0313	30.00	32.55	ug/L	9	30	0.1000	u
2-Butanone	0.5135	0.3893	30.00	22.74	ug/L	-24	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6056	30.00	27.71	ug/L	-8	30	0.0500	u
Chloroform	1.0380	0.9562	30.00	27.63	ug/L	-8	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7184	30.00	31.90	ug/L	6	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3088	30.00	34.85	ug/L	16	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4914	30.00	29.51	ug/L	-2	30	0.0500	u
Benzene	1.3466	1.2872	30.00	28.68	ug/L	-4	30	0.0500	u
Trichloroethene	0.3340	0.3277	30.00	29.43	ug/L	-2	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3558	30.00	25.25	ug/L	-16	20	0.0500	u
Bromodichloromethane	0.4914	0.4780	30.00	29.18	ug/L	-3	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5074	30.00	23.66	ug/L	-21	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5574	30.00	26.21	ug/L	-13	30	0.0500	u
Toluene	0.8216	0.7856	30.00	28.69	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4798	30.00	24.26	ug/L	-19	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1771	30.00	26.31	ug/L	-12	30	0.0500	u
2-Hexanone	0.5472	0.4144	30.00	22.72	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3442	30.00	36.38	ug/L	**21**	30	0.0500	!c+ u
Dibromochloromethane	0.4287	0.3872	30.00	27.10	ug/L	-10	30	0.0500	u
Chlorobenzene	1.0173	0.9644	30.00	28.44	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.6751	30.00	29.32	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6280	0.6233	60.00	59.55	ug/L	-1	30	0.0500	u
o-Xylene	0.6326	0.6182	30.00	29.32	ug/L	-2	30	0.0500	u
Styrene	1.1734	1.1135	30.00	28.47	ug/L	-5	30	0.0500	u
Bromoform	0.3263	0.3029	30.00	27.85	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0600	30.00	24.03	ug/L	-20	30	0.3000	u
Dibromofluoromethane	0.5927	0.5666	50.00	47.80	ug/L	-4	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4222	50.00	52.70	ug/L	5	30	0.0500	u
Toluene-d8	1.1589	1.1387	50.00	49.13	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1959	50.00	46.48	ug/L	-7	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	786634	26.29	10.05	10.05	0.00
1,4-Difluorobenzene	1030815	1231475	19.47	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1064066	20.56	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	521537	26.69	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning +=high bias -=low bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC378062 IDF : 1.0
Seqnum : 447096916010.2 File : ec810 Time : 08-MAR-2007 11:36
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (9091X), S5614 (9091X), S5422 (9091X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7962	27.50	23.70	ug/L	-14	30	0.1000	u
Vinyl Chloride	0.6995	0.6535	27.50	25.69	ug/L	-7	20	0.0500	u
Bromomethane	0.4143	0.3975	27.50	26.39	ug/L	-4	30	0.0500	u
Chloroethane	0.3917	0.4017	27.50	28.20	ug/L	3	30	0.0500	u
Acetone	0.2753	0.2187	27.50	21.85	ug/L	-21	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3838	27.50	30.73	ug/L	12	20	0.0500	u
Methylene Chloride	0.5327	0.4958	27.50	25.60	ug/L	-7	30	0.0500	u
Carbon Disulfide	1.5714	1.0704	27.50	18.73	ug/L	**-32**	30	0.0500	c- u ***
MTBE	1.6725	1.4879	27.50	24.47	ug/L	-11	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4530	27.50	27.64	ug/L	0	30	0.0500	u
Vinyl Acetate	1.5725	1.5914	27.50	27.83	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	0.9993	27.50	28.91	ug/L	5	30	0.1000	u
2-Butanone	0.5135	0.4032	27.50	21.59	ug/L	-21	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.5807	27.50	24.36	ug/L	-11	30	0.0500	u
Chloroform	1.0380	0.9198	27.50	24.37	ug/L	-11	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6944	27.50	28.26	ug/L	3	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3108	27.50	32.15	ug/L	17	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4699	27.50	25.87	ug/L	-6	30	0.0500	u
Benzene	1.3466	1.2292	27.50	25.10	ug/L	-9	30	0.0500	u
Trichloroethene	0.3340	0.3099	27.50	25.51	ug/L	-7	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3467	27.50	22.55	ug/L	-18	20	0.0500	u
Bromodichloromethane	0.4914	0.4646	27.50	26.00	ug/L	-5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5049	27.50	21.58	ug/L	-22	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5362	27.50	23.12	ug/L	-16	30	0.0500	u
Toluene	0.8216	0.7646	27.50	25.59	ug/L	-7	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4663	27.50	21.61	ug/L	**-21**	30	0.0500	!c- u
1,1,2-Trichloroethane	0.2020	0.1740	27.50	23.69	ug/L	-14	30	0.0500	u
2-Hexanone	0.5472	0.4159	27.50	20.91	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3249	27.50	31.48	ug/L	14	30	0.0500	u
Dibromochloromethane	0.4287	0.3769	27.50	24.18	ug/L	-12	30	0.0500	u
Chlorobenzene	1.0173	0.8928	27.50	24.13	ug/L	-12	30	0.3000	u
Ethylbenzene	1.7142	1.6006	27.50	25.68	ug/L	-7	20	0.0500	u
m,p-Xylenes	0.6280	0.5979	55.00	52.36	ug/L	-5	30	0.0500	u
o-Xylene	0.6326	0.5853	27.50	25.44	ug/L	-7	30	0.0500	u
Styrene	1.1734	1.0393	27.50	24.36	ug/L	-11	30	0.0500	u
Bromoform	0.3263	0.2850	27.50	24.02	ug/L	-13	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0339	27.50	21.48	ug/L	**-22**	30	0.3000	!c- u
Dibromofluoromethane	0.5927	0.5728	50.00	48.32	ug/L	-3	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4348	50.00	54.27	ug/L	9	30	0.0500	u
Toluene-d8	1.1589	1.1304	50.00	48.77	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1866	50.00	46.12	ug/L	-8	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	785522	26.12	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1234433	19.75	11.18	11.16	-0.02
Chlorobenzene-d5	882637	1064341	20.59	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	531739	29.17	17.97	17.96	-0.01

Analyst: BO Date: 03/12/07 Reviewer: ACM Date: 03/12/07

!=warning -=low bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: 40PPB IDF : 1.0
Seqnum : 447098391007 File : ec907 Time : 09-MAR-2007 10:23
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5618 (12500X), S5595 (12500X), S5194 (25000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.8791	40.00	38.06	ug/L	-5	30	0.1000	
Vinyl Chloride	0.6995	0.7056	40.00	40.35	ug/L	1	20	0.0500	
Bromomethane	0.4143	0.4349	40.00	42.00	ug/L	5	30	0.0500	
Chloroethane	0.3917	0.4048	40.00	41.33	ug/L	3	30	0.0500	
Acetone	0.2753	0.2482	40.00	36.06	ug/L	-10	40	0.0500	
1,1-Dichloroethene	0.3434	0.3408	40.00	39.69	ug/L	-1	20	0.0500	
Methylene Chloride	0.5327	0.5087	40.00	38.20	ug/L	-5	30	0.0500	
Carbon Disulfide	1.5714	1.2928	40.00	32.91	ug/L	-18	30	0.0500	
MTBE	1.6725	1.5399	40.00	36.83	ug/L	-8	30	0.0500	
trans-1,2-Dichloroethene	0.4507	0.4507	40.00	40.00	ug/L	0	30	0.0500	
Vinyl Acetate	1.5725	2.0002	40.00	50.88	ug/L	27	40	0.0500	
1,1-Dichloroethane	0.9505	1.0401	40.00	43.77	ug/L	9	30	0.1000	
2-Butanone	0.5135	0.4298	40.00	33.48	ug/L	-16	40	0.0500	
cis-1,2-Dichloroethene	0.6556	0.5903	40.00	36.01	ug/L	-10	30	0.0500	
Chloroform	1.0380	0.9922	40.00	38.23	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.6757	0.6570	40.00	38.89	ug/L	-3	30	0.0500	
Carbon Tetrachloride	0.2658	0.2815	40.00	42.36	ug/L	6	30	0.0500	
1,2-Dichloroethane	0.4996	0.5317	40.00	42.57	ug/L	6	30	0.0500	
Benzene	1.3466	1.2557	40.00	37.30	ug/L	-7	30	0.0500	
Trichloroethene	0.3340	0.3182	40.00	38.10	ug/L	-5	30	0.0500	
1,2-Dichloropropane	0.4228	0.3923	40.00	37.12	ug/L	-7	20	0.0500	
Bromodichloromethane	0.4914	0.4874	40.00	39.68	ug/L	-1	30	0.0500	
4-Methyl-2-Pentanone	0.6435	0.5538	40.00	34.42	ug/L	-14	40	0.0500	
cis-1,3-Dichloropropene	0.6379	0.5864	40.00	36.77	ug/L	-8	30	0.0500	
Toluene	0.8216	0.7873	40.00	38.33	ug/L	-4	20	0.0500	
trans-1,3-Dichloropropene	0.5933	0.5484	40.00	36.97	ug/L	-8	30	0.0500	
1,1,2-Trichloroethane	0.2020	0.1894	40.00	37.50	ug/L	-6	30	0.0500	
2-Hexanone	0.5472	0.4407	40.00	32.22	ug/L	-19	40	0.0500	
Tetrachloroethene	0.2838	0.3076	40.00	43.36	ug/L	8	30	0.0500	
Dibromochloromethane	0.4287	0.4108	40.00	38.34	ug/L	-4	30	0.0500	
Chlorobenzene	1.0173	0.9628	40.00	37.86	ug/L	-5	30	0.3000	
Ethylbenzene	1.7142	1.6074	40.00	37.51	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6280	0.6013	80.00	76.60	ug/L	-4	30	0.0500	
o-Xylene	0.6326	0.6013	40.00	38.02	ug/L	-5	30	0.0500	
Styrene	1.1734	1.0851	40.00	36.99	ug/L	-8	30	0.0500	
Bromoform	0.3263	0.3095	40.00	37.95	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	1.3236	1.1184	40.00	33.80	ug/L	-16	30	0.3000	
Dibromofluoromethane	0.5927	0.5741	50.00	48.43	ug/L	-3	30	0.0500	
1,2-Dichloroethane-d4	0.4006	0.4314	50.00	53.84	ug/L	8	30	0.0500	
Toluene-d8	1.1589	1.1505	50.00	49.64	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.2864	1.1810	50.00	45.91	ug/L	-8	30	0.0500	

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	764991	22.82	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1204009	16.80	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1034433	17.20	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	514170	24.90	17.97	17.97	0.00

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/12/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497094080003 File : jc603 Time : 06-MAR-2007 08:49
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (20000X), S5430 (20000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6431	25.00	28.72	ug/L	15	30	0.1000	
Vinyl Chloride	0.4284	0.5030	25.00	29.35	ug/L	17	20	0.0500	
Bromomethane	0.2490	0.2383	25.00	23.92	ug/L	-4	30	0.0500	
Chloroethane	0.2566	0.3101	25.00	30.21	ug/L	**21**	30	0.0500	!c+
Acetone	0.1377	0.1589	25.00	28.85	ug/L	15	40	0.0500	
1,1-Dichloroethene	0.2467	0.2389	25.00	24.21	ug/L	-3	20	0.0500	
Methylene Chloride	0.3245	0.3607	25.00	27.79	ug/L	11	30	0.0500	
Carbon Disulfide	1.1042	1.0543	25.00	23.87	ug/L	-5	30	0.0500	
MTBE	0.8650	0.8987	25.00	25.97	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.3102	25.00	27.04	ug/L	8	30	0.0500	
Vinyl Acetate	1.1462	1.0628	25.00	23.18	ug/L	-7	40	0.0500	m
1,1-Dichloroethane	0.5825	0.6246	25.00	26.81	ug/L	7	30	0.1000	
2-Butanone	0.2252	0.2212	25.00	24.56	ug/L	-2	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3342	25.00	27.29	ug/L	9	30	0.0500	
Chloroform	0.4815	0.5275	25.00	27.39	ug/L	10	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3247	25.00	25.67	ug/L	3	30	0.0500	
Carbon Tetrachloride	0.1568	0.1538	25.00	24.53	ug/L	-2	30	0.0500	
1,2-Dichloroethane	0.2536	0.2695	25.00	26.57	ug/L	6	30	0.0500	
Benzene	0.7187	0.7858	25.00	27.34	ug/L	9	30	0.0500	
Trichloroethene	0.1689	0.1849	25.00	27.36	ug/L	9	30	0.0500	
1,2-Dichloropropane	0.2234	0.2382	25.00	26.66	ug/L	7	20	0.0500	
Bromodichloromethane	0.2251	0.2455	25.00	27.26	ug/L	9	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3257	25.00	24.52	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3409	25.00	27.66	ug/L	11	30	0.0500	
Toluene	0.4092	0.4458	25.00	27.24	ug/L	9	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2957	25.00	27.35	ug/L	9	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.1039	25.00	28.30	ug/L	13	30	0.0500	
2-Hexanone	0.2302	0.0899	25.00	9.762	ug/L	**-61**	40	0.0500	c- ***
Tetrachloroethene	0.1854	0.1979	25.00	26.69	ug/L	7	30	0.0500	
Dibromochloromethane	0.2121	0.2233	25.00	26.31	ug/L	5	30	0.0500	
Chlorobenzene	0.5276	0.5642	25.00	26.73	ug/L	7	30	0.3000	
Ethylbenzene	0.8758	0.8920	25.00	25.46	ug/L	2	20	0.0500	
m,p-Xylenes	0.3185	0.3348	50.00	52.56	ug/L	5	30	0.0500	
o-Xylene	0.3158	0.3346	25.00	26.49	ug/L	6	30	0.0500	
Styrene	0.5429	0.5908	25.00	27.21	ug/L	9	30	0.0500	
Bromoform	0.1648	0.1657	25.00	25.14	ug/L	1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5646	25.00	22.21	ug/L	-11	30	0.3000	
Dibromofluoromethane	0.5469	0.5390	50.00	49.27	ug/L	-1	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3672	50.00	46.44	ug/L	-7	30	0.0500	
Toluene-d8	1.0759	1.1023	50.00	51.22	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1837	1.0683	50.00	45.13	ug/L	-10	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1664427	7.00	10.64	10.61	-0.03
1,4-Difluorobenzene	2525036	2733067	8.24	11.82	11.79	-0.03
Chlorobenzene-d5	2054473	2408276	17.22	15.83	15.81	-0.02
1,4-Dichlorobenzene-d4	973680	1237791	27.13	18.52	18.51	-0.01

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

!=warning +=high bias -=low bias c=CCV m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497094080009 File : jc609 Time : 06-MAR-2007 11:47
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (20000X), S5430 (20000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6202	25.00	27.70	ug/L	11	30	0.1000	
Vinyl Chloride	0.4284	0.4781	25.00	27.89	ug/L	12	20	0.0500	
Bromomethane	0.2490	0.2405	25.00	24.14	ug/L	-3	30	0.0500	
Chloroethane	0.2566	0.2961	25.00	28.84	ug/L	15	30	0.0500	
Acetone	0.1377	0.1313	25.00	23.82	ug/L	-5	40	0.0500	
1,1-Dichloroethene	0.2467	0.2173	25.00	22.02	ug/L	-12	20	0.0500	
Methylene Chloride	0.3245	0.3410	25.00	26.26	ug/L	5	30	0.0500	
Carbon Disulfide	1.1042	0.9433	25.00	21.36	ug/L	-15	30	0.0500	
MTBE	0.8650	0.8956	25.00	25.88	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.2864	25.00	24.97	ug/L	0	30	0.0500	
Vinyl Acetate	1.1462	1.2129	25.00	26.46	ug/L	6	40	0.0500	m
1,1-Dichloroethane	0.5825	0.5585	25.00	23.97	ug/L	-4	30	0.1000	
2-Butanone	0.2252	0.2313	25.00	25.67	ug/L	3	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3155	25.00	25.76	ug/L	3	30	0.0500	
Chloroform	0.4815	0.4683	25.00	24.31	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.2986	25.00	23.60	ug/L	-6	30	0.0500	
Carbon Tetrachloride	0.1568	0.1405	25.00	22.40	ug/L	-10	30	0.0500	
1,2-Dichloroethane	0.2536	0.2509	25.00	24.74	ug/L	-1	30	0.0500	
Benzene	0.7187	0.7074	25.00	24.61	ug/L	-2	30	0.0500	
Trichloroethene	0.1689	0.1648	25.00	24.39	ug/L	-2	30	0.0500	
1,2-Dichloropropane	0.2234	0.2157	25.00	24.13	ug/L	-3	20	0.0500	
Bromodichloromethane	0.2251	0.2217	25.00	24.62	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3424	25.00	25.78	ug/L	3	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3061	25.00	24.84	ug/L	-1	30	0.0500	
Toluene	0.4092	0.3986	25.00	24.35	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2687	25.00	24.85	ug/L	-1	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.0969	25.00	26.37	ug/L	5	30	0.0500	
2-Hexanone	0.2302	0.2103	25.00	22.84	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1854	0.1731	25.00	23.35	ug/L	-7	30	0.0500	
Dibromochloromethane	0.2121	0.2028	25.00	23.90	ug/L	-4	30	0.0500	
Chlorobenzene	0.5276	0.4964	25.00	23.52	ug/L	-6	30	0.3000	
Ethylbenzene	0.8758	0.7971	25.00	22.75	ug/L	-9	20	0.0500	
m,p-Xylenes	0.3185	0.3019	50.00	47.40	ug/L	-5	30	0.0500	
o-Xylene	0.3158	0.2968	25.00	23.50	ug/L	-6	30	0.0500	
Styrene	0.5429	0.5308	25.00	24.44	ug/L	-2	30	0.0500	
Bromoform	0.1648	0.1590	25.00	24.12	ug/L	-4	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5438	25.00	21.39	ug/L	-14	30	0.3000	
Dibromofluoromethane	0.5469	0.5301	50.00	48.46	ug/L	-3	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3624	50.00	45.82	ug/L	-8	30	0.0500	
Toluene-d8	1.0759	1.0988	50.00	51.07	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1837	1.0586	50.00	44.72	ug/L	-11	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1724105	10.84	10.64	10.61	-0.03
1,4-Difluorobenzene	2525036	2791374	10.55	11.82	11.80	-0.02
Chlorobenzene-d5	2054473	2441271	18.83	15.83	15.81	-0.02
1,4-Dichlorobenzene-d4	973680	1259430	29.35	18.52	18.51	-0.01

Analyst: ACM Date: 03/06/07 Reviewer: LW Date: 03/07/07

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447094064

Date : 03/06/07 Reference: ea916
Sequence : MSVOA05 ec6 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/BS	QC377629	776548	10.04	1208246	11.17	1059171	15.24	510227	17.96
004	BSD	QC377630	763694	10.04	1197810	11.17	1038738	15.24	511199	17.96
006	BLANK	QC377631	747702	10.04	1180591	11.18	1043718	15.24	497859	17.96
007	SAMPLE	193057-002	752250	10.04	1170931	11.17	1040485	15.24	495883	17.96
008	SAMPLE	193057-003	749780	10.04	1174193	11.18	1032901	15.24	496477	17.96
009	SAMPLE	193138-002	755622	10.05	1186549	11.17	1032070	15.24	498289	17.96
010	SAMPLE	193057-004	768468	10.04	1188346	11.18	1033077	15.24	495116	17.96
011	SAMPLE	193055-015	756572	10.05	1180471	11.17	1034736	15.24	492611	17.96
012	SAMPLE	193055-011	761433	10.04	1187952	11.17	1040043	15.24	492473	17.96
013	SAMPLE	193055-012	752867	10.04	1183080	11.17	1026826	15.24	493374	17.96
014	SAMPLE	193055-013	745484	10.04	1175652	11.17	1022265	15.24	497739	17.96
015	SAMPLE	193055-014	752487	10.05	1172489	11.17	1034000	15.24	490346	17.96
016	SAMPLE	193109-001	753816	10.04	1185362	11.17	1023242	15.23	488707	17.96
017	SAMPLE	193108-009	753478	10.04	1184844	11.17	1024652	15.24	489285	17.96
018	SAMPLE	193108-010	764166	10.05	1188063	11.17	1036814	15.24	489861	17.96
019	SAMPLE	193108-011	749292	10.05	1178575	11.17	1031665	15.24	513071	17.96
020	SAMPLE	193108-012	771060	10.04	1191930	11.17	1022775	15.24	500396	17.96
021	SAMPLE	192902-001	778498	10.05	1219271	11.17	1043830	15.24	494161	17.96
022	SAMPLE	193063-003	780915	10.05	1196436	11.17	1037794	15.24	495450	17.96
023	SAMPLE	193063-006	775676	10.04	1189273	11.17	1044918	15.24	509928	17.96
024	SAMPLE	193063-008	769215	10.05	1185614	11.17	1039304	15.24	505616	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447095480

Date : 03/07/07 Reference: ea916
Sequence : MSVOA05 ec7 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/LCS	QC377872	786634	10.05	1231475	11.17	1064066	15.24	521537	17.96
005	BLANK	QC377866	778009	10.04	1211595	11.17	1038221	15.24	488592	17.96
006	SAMPLE	193166-001	767496	10.04	1203760	11.17	1052475	15.24	492665	17.96
007	SAMPLE	193166-020	774397	10.04	726520	11.17	1048245	15.24	507861	17.96
008	SAMPLE	193108-021	773236	10.05	1211257	11.17	1047878	15.24	493908	17.96
009	SAMPLE	193108-012	756279	10.04	1195088	11.17	1037495	15.24	504739	17.96
010	MSS	193108-007	769176	10.05	1199256	11.17	1048830	15.24	487715	17.96
011	SAMPLE	193108-013	770484	10.04	1204213	11.17	1040957	15.24	499229	17.96
012	SAMPLE	193108-015	759611	10.04	1190762	11.17	1036051	15.24	500757	17.96
013	SAMPLE	193108-019	758788	10.04	1183861	11.17	1046826	15.24	501720	17.97
014	SAMPLE	193108-020	761022	10.04	1189398	11.17	1042326	15.24	494907	17.96
015	SAMPLE	193108-022	757539	10.04	1184717	11.17	1038417	15.24	495609	17.97
016	SAMPLE	193137-002	764305	10.05	1177433	11.17	1037131	15.24	493397	17.96
017	SAMPLE	193137-003	753312	10.05	1184996	11.17	1027569	15.24	488081	17.96
018	SAMPLE	193137-004	763841	10.05	1189205	11.17	1030890	15.24	498311	17.96
019	SAMPLE	193137-005	751604	10.04	1177386	11.17	1027733	15.24	492597	17.97
020	SAMPLE	193108-008	750910	10.04	1179478	11.17	1026001	15.24	504615	17.96
021	SAMPLE	193157-001	770331	10.04	1190644	11.17	1041977	15.24	499893	17.96
022	MS	QC377890	778919	10.04	1201614	11.17	1046349	15.24	516027	17.96
023	MSD	QC377891	774323	10.04	1188418	11.17	1051629	15.24	516759	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447096916

Date : 03/08/07 Reference: ea916
Sequence : MSVOA05 ec8 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
006	SAMPLE	193174-001	755318	10.05	1194071	11.17	1043644	15.24	494375	17.96
010	CCV/LCS	QC378062	785522	10.04	1234433	11.16	1064341	15.24	531739	17.96
012	BLANK	QC378063	769888	10.04	1203885	11.17	1055284	15.24	505730	17.96
013	SAMPLE	193174-001	757309	10.05	1189877	11.17	1046647	15.24	500155	17.96
014	SAMPLE	193174-002	758518	10.04	1201099	11.17	1042760	15.24	506978	17.96
015	SAMPLE	193174-003	766141	10.04	1204175	11.17	1055143	15.24	508687	17.96
016	SAMPLE	193174-004	771804	10.05	1214963	11.17	1056521	15.24	498792	17.96
017	SAMPLE	193174-005	775586	10.04	1227450	11.18	1070486	15.24	501073	17.96
018	SAMPLE	193174-006	761338	10.05	1214989	11.17	1062050	15.24	504268	17.96
019	SAMPLE	193174-007	763160	10.04	1193630	11.18	1054639	15.25	498797	17.97
020	SAMPLE	193174-008	759838	10.04	1197778	11.17	1055653	15.24	503827	17.96
021	MSS	193108-023	761369	10.05	1209465	11.17	1058519	15.24	506684	17.96
022	SAMPLE	193108-024	752941	10.04	1190513	11.17	1048211	15.24	500236	17.97
023	SAMPLE	193108-025	753425	10.04	1180444	11.17	1055205	15.24	504184	17.96
024	SAMPLE	193108-026	755461	10.05	1185634	11.17	1044599	15.24	504463	17.96
025	SAMPLE	193108-027	760380	10.04	1196983	11.17	1052497	15.24	508633	17.96
026	SAMPLE	193194-003	756414	10.04	1200676	11.17	1041634	15.24	497805	17.97
027	SAMPLE	193225-007	760237	10.04	1208636	11.17	1037073	15.24	500786	17.96
028	SAMPLE	193157-001	757772	10.04	1192504	11.17	1051605	15.25	494926	17.97
029	SAMPLE	193166-020	756583	10.05	1201050	11.17	1054670	15.24	499385	17.96
030	MS	QC378166	759163	10.05	1202423	11.17	1049394	15.24	517163	17.96
031	MSD	QC378167	761798	10.05	1207734	11.17	1057893	15.24	517701	17.96
035	SAMPLE	193050-001	753172	10.05	1181958	11.17	1035052	15.24	490606	17.96
036	SAMPLE	193050-002	753095	10.04	1183018	11.17	1045485	15.24	494660	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447098391

Date : 03/09/07 Reference: ea916
Sequence : MSVOA05 ec9 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
007	CCV	40PPB	764991	10.04	1204009	11.17	1034433	15.24	514170	17.97
008	BS	QC378308	775196	10.04	1210335	11.17	1057628	15.24	509503	17.96
009	BSD	QC378309	757934	10.04	1177641	11.17	1042895	15.24	507680	17.96
011	BLANK	QC378310	756438	10.05	1195196	11.17	1044725	15.24	500719	17.96
012	SAMPLE	193276-004	754409	10.05	1171058	11.17	1052883	15.24	502590	17.96
013	SAMPLE	193166-020	762314	10.04	1183574	11.17	1036235	15.24	510255	17.96
014	SAMPLE	193218-004	753191	10.04	1185465	11.17	1049147	15.24	501754	17.96
015	SAMPLE	193218-024	756719	10.04	1190156	11.17	1047979	15.24	499197	17.96
016	SAMPLE	193108-008	757915	10.04	1184197	11.17	1058270	15.25	519750	17.97
017	SAMPLE	193236-001	757897	10.05	1171868	11.17	1039850	15.24	499651	17.96
018	SAMPLE	193236-005	776145	10.05	1213807	11.17	1058712	15.24	497958	17.96
019	SAMPLE	193236-006	770835	10.04	1192337	11.17	1054320	15.24	499433	17.96
020	SAMPLE	193236-007	763025	10.04	1186451	11.17	1047990	15.24	499964	17.96
021	SAMPLE	193236-008	751221	10.04	1177463	11.17	1032397	15.24	494184	17.96
022	SAMPLE	193236-010	753622	10.05	1179635	11.17	1041111	15.24	495350	17.96
023	SAMPLE	193236-011	739183	10.04	1168616	11.18	1048511	15.24	497588	17.96
024	SAMPLE	193236-013	750035	10.05	1181576	11.17	1040050	15.24	493375	17.96
025	SAMPLE	193236-014	752569	10.05	1175988	11.17	1043711	15.24	500222	17.96
026	SAMPLE	193236-015	748941	10.04	1180583	11.17	1043405	15.24	498123	17.96
027	SAMPLE	193236-002	745722	10.04	1186914	11.17	1051345	15.24	497792	17.96
028	SAMPLE	193236-003	749737	10.04	1191924	11.18	1051910	15.24	493530	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497094080

Date : 03/06/07 Reference: jaq17
Sequence : MSVOA10 jc6 Analyzed : 01/26/07 19:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1555522	10.64	2525036	11.82	2054473	15.83	973680	18.52
		LOWER LIMIT	777761	10.14	1262518	11.32	1027237	15.33	486840	18.02
		UPPER LIMIT	3111044	11.14	5050072	12.32	4108946	16.33	1947360	19.02
003	CCV	25PPB	1664427	10.61	2733067	11.79	2408276	15.81	1237791	18.51
005	LCS	QC377636	1692963	10.61	2800580	11.79	2454941	15.81	1265133	18.51
006	BS	QC377637	1695410	10.61	2806073	11.79	2420002	15.81	1213349	18.51
007	BSD	QC377638	1696302	10.61	2781072	11.79	2430243	15.82	1243311	18.51
009	CCV	25PPB	1724105	10.61	2791374	11.80	2441271	15.81	1259430	18.51
012	BLANK	QC377635	1713725	10.62	2775517	11.80	2417088	15.81	1215690	18.51
013	MSS	193108-001	1652836	10.62	2687812	11.80	2396882	15.81	1234023	18.51
014	SAMPLE	193108-006	1689754	10.62	2806279	11.80	2472013	15.82	1236516	18.51
015	SAMPLE	193094-012	1712503	10.61	2836724	11.80	2498051	15.82	1239537	18.51
016	MDLCHECK	187659-009	1746648	10.62	2899118	11.80	2514849	15.82	1265493	18.51
017	SAMPLE	193145-002	1725844	10.61	2846860	11.79	2484798	15.82	1303017	18.51
018	SAMPLE	193168-001	1729008	10.61	2871902	11.79	2532771	15.82	1284508	18.51
019	SAMPLE	193152-002	1775051	10.62	2885268	11.80	2576206	15.82	1313924	18.51
020	SAMPLE	193152-003	1670303	10.61	2761895	11.79	2404625	15.81	1218242	18.52
021	SAMPLE	193152-004	1687168	10.62	2763122	11.80	2451164	15.82	1234846	18.51
022	SAMPLE	193094-005	1693598	10.62	2771918	11.80	2457666	15.81	1231709	18.51
023	SAMPLE	193094-002	1729490	10.61	2855778	11.79	2454714	15.82	1248802	18.51
024	SAMPLE	193167-001	1730051	10.61	2839053	11.79	2471153	15.82	1231455	18.51
025	SAMPLE	193167-002	1681793	10.61	2788329	11.80	2479313	15.81	1223752	18.51
026	SAMPLE	193167-003	1716938	10.61	2827280	11.79	2483903	15.81	1245334	18.51
027	SAMPLE	193152-001	1695332	10.62	2776459	11.80	2488075	15.81	1234821	18.51
028	SAMPLE	193145-001	1717827	10.62	2791285	11.80	2423401	15.82	1224335	18.52
029	MS	QC377755	1706662	10.62	2800748	11.80	2462542	15.83	1227644	18.52
030	MSD	QC377756	1721536	10.62	2821314	11.80	2461619	15.83	1237137	18.52

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447094064

Instrument : MSVOA05 Begun : 03/06/07 07:44
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec601	X	IB			03/06/07 07:44	1.0	1	
002	ec602	TUN	BFB			03/06/07 08:14	1.0	2	
003	ec603	CCV/BS	QC377629	Water	122726	03/06/07 08:31	1.0	3 4 5 1	
004	ec604	BSD	QC377630	Water	122726	03/06/07 09:14	1.0	3 4 5 1	
005	ec605	X	IB			03/06/07 09:46	1.0	1	
006	ec606	BLANK	QC377631	Water	122726	03/06/07 10:18	1.0	1	
007	ec607	SAMPLE	193057-002	Water	122726	03/06/07 10:53	1.0	1	pH > 2
008	ec608	SAMPLE	193057-003	Water	122726	03/06/07 11:25	1.0	1	pH > 2
009	ec609	SAMPLE	193138-002	Water	122726	03/06/07 11:57	1.429	1	
010	ec610	SAMPLE	193057-004	Water	122726	03/06/07 12:29	1.0	1	pH > 2
011	ec611	SAMPLE	193055-015	Water	122726	03/06/07 13:01	1.0	1	
012	ec612	SAMPLE	193055-011	Water	122726	03/06/07 13:33	1.0	1	
013	ec613	SAMPLE	193055-012	Water	122726	03/06/07 14:05	1.0	1	
014	ec614	SAMPLE	193055-013	Water	122726	03/06/07 14:37	1.0	1	
015	ec615	SAMPLE	193055-014	Water	122726	03/06/07 15:09	1.0	1	
016	ec616	SAMPLE	193109-001	Water	122726	03/06/07 15:41	1.0	1	
017	ec617	SAMPLE	193108-009	Water	122726	03/06/07 16:13	1.0	1	
018	ec618	SAMPLE	193108-010	Water	122726	03/06/07 16:45	1.0	1	
019	ec619	SAMPLE	193108-011	Water	122726	03/06/07 17:17	1.0	1	
020	ec620	SAMPLE	193108-012	Water	122726	03/06/07 17:49	2.0	1	
021	ec621	SAMPLE	192902-001	Water	122726	03/06/07 18:21	10.0	1	
022	ec622	SAMPLE	193063-003	Water	122726	03/06/07 18:52	1.0	1	
023	ec623	SAMPLE	193063-006	Water	122726	03/06/07 19:24	1.429	1	headspace <= 1 mL
024	ec624	SAMPLE	193063-008	Water	122726	03/06/07 19:56	1.0	1	headspace > 1 mL
025	ec625	X	IB			03/06/07 20:28	1.0	1	
026	ec626	X	IB			03/06/07 21:00	1.0	1	
027	ec627	X	IB			03/06/07 21:32	1.0	1	
028	ec628	X	TVH2000			03/06/07 22:04	1.0	1	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/07/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447095480

Instrument : MSVOA05
Method : EPA 8260B

Begun : 03/07/07 07:20
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec701	X	IB			03/07/07 07:20	1.0	1	
002	ec702	TUN	BFB			03/07/07 07:47	1.0	2	
003	ec703	CCV/LCS	QC377872	Water	122784	03/07/07 08:02	1.0	3 4 5 1	
004	ec704	X	IB			03/07/07 08:52	1.0	1	
005	ec705	BLANK	QC377866	Water	122784	03/07/07 09:24	1.0	1	
006	ec706	SAMPLE	193166-001	Water	122784	03/07/07 09:57	1.0	1	
007	ec707	SAMPLE	193166-020	Water	122784	03/07/07 10:29	1.0	1	pH > 2
008	ec708	SAMPLE	193108-021	Water	122784	03/07/07 11:01	1.0	1	
009	ec709	SAMPLE	193108-012	Water	122784	03/07/07 11:32	1.0	1	
010	ec710	MSS	193108-007	Water	122784	03/07/07 12:04	1.0	1	
011	ec711	SAMPLE	193108-013	Water	122784	03/07/07 12:36	1.0	1	
012	ec712	SAMPLE	193108-015	Water	122784	03/07/07 13:08	1.0	1	
013	ec713	SAMPLE	193108-019	Water	122784	03/07/07 13:40	1.0	1	
014	ec714	SAMPLE	193108-020	Water	122784	03/07/07 14:12	1.0	1	
015	ec715	SAMPLE	193108-022	Water	122784	03/07/07 14:44	1.0	1	
016	ec716	SAMPLE	193137-002	Water	122784	03/07/07 15:16	1.0	1	
017	ec717	SAMPLE	193137-003	Water	122784	03/07/07 15:48	1.0	1	
018	ec718	SAMPLE	193137-004	Water	122784	03/07/07 16:20	1.0	1	
019	ec719	SAMPLE	193137-005	Water	122784	03/07/07 16:52	1.0	1	
020	ec720	SAMPLE	193108-008	Water	122784	03/07/07 17:23	2.500	1	
021	ec721	SAMPLE	193157-001	Water	122784	03/07/07 17:55	25.0	1	
022	ec722	MS	QC377890	Water	122784	03/07/07 18:27	1.0	1 3 4 5	
023	ec723	MSD	QC377891	Water	122784	03/07/07 18:59	1.0	1 3 4 5	
024	ec724	X	IB			03/07/07 19:31	1.0	1	
025	ec725	X	IB			03/07/07 20:03	1.0	1	
026	ec726	X	IB			03/07/07 20:35	1.0	1	
027	ec727	X	TVH2000			03/07/07 21:07	1.0	1	

Analyst: BO Date: 03/08/07 Reviewer: LW Date: 03/08/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447096916

Instrument : MSVOA05 Begun : 03/08/07 07:16
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec801	X	IB			03/08/07 07:16	1.0	1	
002	ec802	X	BFB			03/08/07 07:45	1.0	2	
003	ec803	X	QC378062	Water	122836	03/08/07 08:01	1.0	3 4 5 1	
004	ec804	X	IB			03/08/07 08:59	1.0	1	
005	ec805	X	QC378063	Water	122836	03/08/07 09:31	1.0	1	
006	ec806	SAMPLE	193174-001	Water	122836	03/08/07 10:02	1.0	1	
007	ec807	X	BFB			03/08/07 10:33	1.0	2	
008	ec808	X	QC378062	Water	122836	03/08/07 10:49	1.0	3 4 5 1	
009	ec809	TUN	BFB			03/08/07 11:20	1.0	2	
010	ec810	CCV/LCS	QC378062	Water	122836	03/08/07 11:36	1.0	3 4 5 1	
011	ec811	X	IB			03/08/07 12:22	1.0	1	
012	ec812	BLANK	QC378063	Water	122836	03/08/07 12:54	1.0	1	
013	ec813	SAMPLE	193174-001	Water	122836	03/08/07 13:26	1.0	1	
014	ec814	SAMPLE	193174-002	Water	122836	03/08/07 13:58	1.0	1	
015	ec815	SAMPLE	193174-003	Water	122836	03/08/07 14:30	1.0	1	
016	ec816	SAMPLE	193174-004	Water	122836	03/08/07 15:02	1.0	1	
017	ec817	SAMPLE	193174-005	Water	122836	03/08/07 15:34	1.0	1	
018	ec818	SAMPLE	193174-006	Water	122836	03/08/07 16:06	1.0	1	
019	ec819	SAMPLE	193174-007	Water	122836	03/08/07 16:38	1.0	1	
020	ec820	SAMPLE	193174-008	Water	122836	03/08/07 17:10	1.0	1	
021	ec821	MSS	193108-023	Water	122836	03/08/07 17:41	1.0	1	
022	ec822	SAMPLE	193108-024	Water	122836	03/08/07 18:13	1.0	1	
023	ec823	SAMPLE	193108-025	Water	122836	03/08/07 18:45	1.0	1	
024	ec824	SAMPLE	193108-026	Water	122836	03/08/07 19:17	1.0	1	
025	ec825	SAMPLE	193108-027	Water	122836	03/08/07 19:49	1.0	1	
026	ec826	SAMPLE	193194-003	Water	122836	03/08/07 20:21	1.0	1	
027	ec827	SAMPLE	193225-007	Water	122836	03/08/07 20:53	1.0	1	
028	ec828	SAMPLE	193157-001	Water	122836	03/08/07 21:24	8.333	1	
029	ec829	SAMPLE	193166-020	Water	122836	03/08/07 21:56	1.0	1	pH > 2
030	ec830	MS	QC378166	Water	122836	03/08/07 22:28	1.0	1 3 4 5	
031	ec831	MSD	QC378167	Water	122836	03/08/07 23:00	1.0	1 3 4 5	
032	ec832	X	IB			03/08/07 23:32	1.0	1	
033	ec833	X	IB			03/09/07 00:04	1.0	1	
034	ec834	X	IB			03/09/07 00:36	1.0	1	
035	ec835	SAMPLE	193050-001	Water	122836	03/09/07 01:07	1.0	1	
036	ec836	SAMPLE	193050-002	Water	122836	03/09/07 01:39	1.0	1	
037	ec837	X	TVH2000			03/09/07 02:11	1.0	1	

BO 03/09/07 : ec810 used different aliquot of s5537

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

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CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447098391

Instrument : MSVOA05 Begun : 03/09/07 07:51
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec901	X	IB			03/09/07 07:51	1.0	1	
002	ec902	X	BFB			03/09/07 08:19	1.0	2	
003	ec903	X	QC378308	Water	122894	03/09/07 08:35	1.0	3 4 5 1	
004	ec904	X	BFB			03/09/07 09:17	1.0	2	
005	ec905	X	QC378308	Water	122894	03/09/07 09:33	1.0	3 4 5 1	
006	ec906	TUN	BFB			03/09/07 10:07	1.0	2	
007	ec907	CCV	40PPB			03/09/07 10:23	1.0	6 7 8 1	
008	ec908	BS	QC378308	Water	122894	03/09/07 11:16	1.0	3 4 5 1	
009	ec909	BSD	QC378309	Water	122894	03/09/07 11:48	1.0	3 4 5 1	
010	ec910	X	IB			03/09/07 12:20	1.0	1	
011	ec911	BLANK	QC378310	Water	122894	03/09/07 12:52	1.0	1	
012	ec912	SAMPLE	193276-004	Water	122894	03/09/07 13:24	1.0	1	
013	ec913	SAMPLE	193166-020	Water	122894	03/09/07 13:56	1.0	1	pH > 2
014	ec914	SAMPLE	193218-004	Water	122894	03/09/07 14:28	1.0	1	
015	ec915	SAMPLE	193218-024	Water	122894	03/09/07 14:59	1.0	1	
016	ec916	SAMPLE	193108-008	Water	122894	03/09/07 15:31	1.0	1	
017	ec917	SAMPLE	193236-001	Water	122894	03/09/07 16:03	1.0	1	
018	ec918	SAMPLE	193236-005	Water	122894	03/09/07 16:35	1.0	1	
019	ec919	SAMPLE	193236-006	Water	122894	03/09/07 17:07	1.0	1	
020	ec920	SAMPLE	193236-007	Water	122894	03/09/07 17:39	1.0	1	
021	ec921	SAMPLE	193236-008	Water	122894	03/09/07 18:11	1.0	1	
022	ec922	SAMPLE	193236-010	Water	122894	03/09/07 18:43	1.0	1	
023	ec923	SAMPLE	193236-011	Water	122894	03/09/07 19:15	1.0	1	
024	ec924	SAMPLE	193236-013	Water	122894	03/09/07 19:46	1.0	1	
025	ec925	SAMPLE	193236-014	Water	122894	03/09/07 20:18	1.0	1	
026	ec926	SAMPLE	193236-015	Water	122894	03/09/07 20:50	1.0	1	
027	ec927	SAMPLE	193236-002	Water	122894	03/09/07 21:22	3.333	1	
028	ec928	SAMPLE	193236-003	Water	122894	03/09/07 21:54	8.333	1	
029	ec929	X	IB			03/09/07 22:26	1.0	1	
030	ec930	X	IB			03/09/07 22:57	1.0	1	
031	ec931	X	IB			03/09/07 23:29	1.0	1	
032	ec932	X	TVH2000			03/10/07 00:01	1.0	1	

BO 03/09/07 : ec907 used new stds

Analyst: BO Date: 03/12/07 Reviewer: LW Date: 03/12/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422 6=S5618 7=S5595 8=S5194

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497038053

Instrument : MSVOA10 Begun : 01/26/07 10:13
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jaq01	X	IB			01/26/07 10:13	1.0	1	
002	jaq02	TUN	BFB			01/26/07 10:45	1.0	2	
003	jaq03	CCV	25PPB			01/26/07 11:03	1.0	3 4 5 1	
004	jaq04	TUN	BFB			01/26/07 11:48	1.0	2	
005	jaq05	CCV	25PPB			01/26/07 12:05	1.0	3 4 5 1	
006	jaq06	ICV/BS	QC373244	Water	121602	01/26/07 12:51	1.0	6 7 8 1	
007	jaq07	X	LP			01/26/07 14:26	1.0	1	
008	jaq08	TUN	BFB			01/26/07 15:00	1.0	2	
009	jaq09	X	IB			01/26/07 15:18	1.0	1	
010	jaq10	IB	CALIB			01/26/07 15:51	1.0	1	
011	jaq11	ICAL	0.25/0.5PPB			01/26/07 16:23	1.0	3 9 10 1	
012	jaq12	ICAL	0.5/1PPB			01/26/07 16:56	1.0	3 9 10 1	
013	jaq13	ICAL	2PPB			01/26/07 17:28	1.0	3 9 10 1	
014	jaq14	ICAL	5PPB			01/26/07 18:01	1.0	3 9 10 1	
015	jaq15	ICAL	10PPB			01/26/07 18:34	1.0	3 9 10 1	
016	jaq16	ICAL	20PPB			01/26/07 19:06	1.0	3 9 10 1	
017	jaq17	ICAL	50PPB			01/26/07 19:39	1.0	3 9 10 1	
018	jaq18	ICAL	75PPB			01/26/07 20:12	1.0	3 9 10 1	
019	jaq19	ICAL	100PPB			01/26/07 20:44	1.0	3 9 10 1	
020	jaq20	ICV	ICVGAS25PPB			01/26/07 21:17	1.0	8 1	
021	jaq21	ICV	ICV25PPB			01/26/07 21:50	1.0	7 6 1	
022	jaq22	X	IB			01/26/07 22:23	1.0	1	
023	jaq23	X	IB			01/26/07 22:56	1.0	1	
024	jaq24	X	IB			01/26/07 23:28	1.0	1	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5322 7=S5052 8=S5241 9=S5219 10=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497094080

Instrument : MSVOA10 Begun : 03/06/07 08:00
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jc601	X	IB			03/06/07 08:00	1.0	1	
002	jc602	TUN	BFB			03/06/07 08:31	1.0	2	
003	jc603	CCV	25PPB			03/06/07 08:49	1.0	3 4 1	
004	jc604	CCV	TVH1000PPB			03/06/07 09:23	1.0	5 1	
005	jc605	LCS	QC377636	Water	122728	03/06/07 09:55	1.0	6 7 8 1	
006	jc606	BS	QC377637	Water	122728	03/06/07 10:28	1.0	9 1	
007	jc607	BSD	QC377638	Water	122728	03/06/07 11:01	1.0	9 1	
008	jc608	TUN	BFB			03/06/07 11:30	1.0	2	
009	jc609	CCV	25PPB			03/06/07 11:47	1.0	3 4 1	
010	jc610	CCV	TVH800PPB			03/06/07 12:20	1.0	5 1	
011	jc611	X	IB			03/06/07 12:52	1.0	1	
012	jc612	BLANK	QC377635	Water	122728	03/06/07 13:25	1.0	1	
013	jc613	MSS	193108-001	Water	122728	03/06/07 13:58	1.0	1	
014	jc614	SAMPLE	193108-006	Water	122728	03/06/07 14:31	1.0	1	
015	jc615	SAMPLE	193094-012	Water	122728	03/06/07 15:04	1.0	1	
016	jc616	MDLCHECK	187659-009	Water	122728	03/06/07 15:37	1.0	5 1	
017	jc617	SAMPLE	193145-002	Water	122728	03/06/07 16:10	1.0	1	
018	jc618	SAMPLE	193168-001	Water	122728	03/06/07 16:42	1.0	1	pH > 2
019	jc619	SAMPLE	193152-002	Water	122728	03/06/07 17:15	1.0	1	
020	jc620	SAMPLE	193152-003	Water	122728	03/06/07 17:48	1.0	1	
021	jc621	SAMPLE	193152-004	Water	122728	03/06/07 18:20	1.0	1	
022	jc622	SAMPLE	193094-005	Water	122728	03/06/07 18:53	2.0	1	
023	jc623	SAMPLE	193094-002	Water	122728	03/06/07 19:25	3.333	1	
024	jc624	SAMPLE	193167-001	Water	122728	03/06/07 19:58	1.0	1	
025	jc625	SAMPLE	193167-002	Water	122728	03/06/07 20:30	1.0	1	
026	jc626	SAMPLE	193167-003	Water	122728	03/06/07 21:03	1.0	1	
027	jc627	SAMPLE	193152-001	Water	122728	03/06/07 21:36	2.500	1	
028	jc628	SAMPLE	193145-001	Water	122728	03/06/07 22:09	8.333	1	
029	jc629	MS	QC377755	Water	122728	03/06/07 22:42	1.0	1 6 7 8	
030	jc630	MSD	QC377756	Water	122728	03/06/07 23:15	1.0	1 6 7 8	
031	jc631	X	IB			03/06/07 23:47	1.0	1	

Analyst: ACM Date: 03/07/07 Reviewer: LW Date: 03/07/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5430 5=S5628 6=S5537 7=S5422 8=S5614 9=S5264

REPORTING SUMMARY FOR 193108 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACECCCTCZCCDICZCCXCBLBYYOTBCBCZR	M MEEELSBE AKELACA EPCBPMPAOECBZLLTYMAFAM4	E EA 1N E1 1 1MM1L1 A MKE1E11 2 MZ MOX E M1EF	2 3 2 2 3 2 2
193108-001	MSVOA10	03/06/07 13:58	1.0	| + | + | +

REPORTING SUMMARY FOR 193108 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	1,1,2-TCA	1,2,3-TCB	1,2,4-TCB	1,2-DCA	1,2-DCP	1,3-DCP	2-CEVE	2-CLETHYL	4-MEK	ACETONE	ACROLEIN	ACRYLONITRILE	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,2-DCE	CIS-1,3-DCP	DIBROMOCHLOROMETHANE	DIBROMOMETHANE	DICHLORODIFLUOROMETHANE	ETHYLBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROETHANE	IODOMETHANE	ISOPROPYLBENZENE	METHYLENE CHLORIDE	NAPHTHALENE	NITROBENZENE	PENTACHLOROETHANE	STYRENE	TCE	TETRACHLOROETHYLENE	TOLUENE	TRANS-1,2-DCE	TRANS-1,3-DCP	TRIBROMOBENZENE	TRIBROMOMETHANE	TRICHLOROFLUOROMETHANE	VINYL ACETATE	VINYL CHLORIDE	XYLENE (TOTAL)
QC377637	MSVOA10	03/06/07 10:28	1.0																																																				
QC377638	MSVOA10	03/06/07 11:01	1.0																																																				
QC377755	MSVOA10	03/06/07 22:42	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377756	MSVOA10	03/06/07 23:15	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377866	MSVOA05	03/07/07 09:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377872	MSVOA05	03/07/07 08:02	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377890	MSVOA05	03/07/07 18:27	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377891	MSVOA05	03/07/07 18:59	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378062	MSVOA05	03/08/07 11:36	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378063	MSVOA05	03/08/07 12:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378166	MSVOA05	03/08/07 22:28	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378167	MSVOA05	03/08/07 23:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378064	MSVOA06	03/08/07 08:35	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378065	MSVOA06	03/08/07 09:30	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378066	MSVOA06	03/08/07 11:02	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378308	MSVOA05	03/09/07 11:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378309	MSVOA05	03/09/07 11:48	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378310	MSVOA05	03/09/07 12:52	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/6/07
PREPPED BY: Zo

122726

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	192902-1		A	<2			5	m 10x, anomalous ~~void~~ run	A
2	193063-3		F	↓				m 1x, ~~total~~ OD	FOAM
3	-6		D	<2	100x			m 1.42x, OD	↓
4	-8		~~C~~A	↓	12mL/ev			m ~~1.42x~~, OD 1X	Load last
5	193057-2		C	7				1x	
6	-3		↓	↓				↓	
7	-4		↓	↓				↓	
8	193109-1		B	<2				1x PUT OFF	
9	193055-15		B	↓				m 1x, MECL2 ~~BL~~ +	TB
10	-11		↓	↓				1x	
11	-12		↓	↓				↓	
12	-13		↓	↓				↓	
13	-14		I	↓				↓	
14	193108-9		B	↓				1x	
15	-10		↓	↓				↓	
16	-11		↓	↓				2x	
17	-12		↓	<2				1x PUT OFF	
18	-13		↓	—					
19	193138-2 #		C	<2			5	m 1.42x, OD	
20									
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7/23/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/6/07
PREPPED BY.

WATER

12272g

16 + MS/MSD

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193094 - 2		D	<2			10	RR 3.3x OD	
2	12		B	↓			↓	RR 1X OD high NT	
3	193112 - 2		B	—				RR 1X Mod. MB contam	on MS9
4	~~192877 4~~							~~RR 1X PLE low~~	
5	187659 - 9			—			10	MDL v C25,16 TVH	
6	193151 - 1		B	—				1X	
7	2							62.5X	
8	3							2X	Put off
9	4							1X	
10	5							16.7X	
11	6		↓	—				50X	
12	193152 - 1		A	<2				~~3.3X~~ 2.5X	
13	2							1X	
14	3							~~8.3X~~ 1X	
15	4							1X	
16	193108 - 1		BCDE	<2				1X MS/MSD	
17	26		B	~~Bottle~~	~~Kn 3/6/07~~			RR 2X PLE OK	
18	193094 - 5		D	<2			10	8.3X	RUSH 3-F
19	193145 - 1		H					1X	
20	2			<2				1X	
21	193168 - 1		B	2.5				A	
22	193167 - 001		C	<2				A	
23	-002		D					TD	
24	-003		A						
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7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/7/07
PREPPED BY: Zie

122784 WATER

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193108-12		D	<2			5	MS 1x, OD	
2	193166-1		A	↓				TB	
3	↓ -20		↓	7				1x Comp. 7/13V Foam	Load test
4	193157-1		H	<2				2.5x	
5	193108-7		IJKL	<2				1x, MS/MS/MSD	
6	-8		F	↓				2.5x	
7	-13		B	<2				1x	
8	-15		↓						
9	-19		D						
10	-20		↓						
11	-21		A					TB	
12	-22		E					1x	
13	193137-2		B						
14	-3								
15	-4								
16	-5		↓	↓				↓	
17									
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 7/8/07
PREPPED BY: Zo

122836 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			E	—			5	m 1x, DP	Put OF m 6
1	193108-8		I	<2				m 8.3x, DP	
2	193157-1		B	7				m 1x, 5 amT	comm 7/13
3	193166-20		B	<2				m 10 MeCl2 + HCl	
4	193174-1		B						
5	-2								
6	-3		BDEF	<2				1x MSS/MS/MSD	
7	193108-23		D						
8	-24								
9	-25								
10	-26		B						
11	-27		A					1x	
12	193174-4								
13	-5								
14	-6								
15	-7								
16	-8		B				5	m 1x, clear —	
17	193194-3		A		NV			TB	
18	193225-7		C				5	m 1x, cu failure	
19	193174-1								
20									
21			A	<2			5	Storage Blank	
22	193050-1								
23	-2								
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7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/9/07
PREPPED BY: [illegible]

122894 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193166-20	✓	B	7			5	me 1x, surr ↑, run	1st
2	193108-8		D	<2				me 1x, MeCl2 HCl 9	
3	193218-4		↓	↓				me 1x, 13DCP check	(interference)
4	↓ -24							me 1x, out of clock	
5	193276-4		A	<2	low			TB	
6	193236-1		B	↓				1x	
7	-2			<2	<4			3.33x Freon 113	
8	-3			↓	↓			8.33x Freon 113	
9	-5			<2				1x	
10	-6								
11	-7								
12	-8								
13	-10								
14	-11								
15	-13								
16	-14								
17	-15								
18	-16		↓	↓				↓ ~~out of~~	out of
19	193218-24		D	<2			5	me 1x, out of clock	
20	19								
21									
22									
23									
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7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/22/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW01	Batch#:	122778
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	101	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	122778
Lab ID:	193108-008	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07

Analyte	Result	RL	Diln Fac	Analyzed
alpha-BHC	ND	0.05	1.000	03/13/07
beta-BHC	ND	0.05	1.000	03/13/07
gamma-BHC	1.7	0.1	2.000	03/08/07
delta-BHC	ND	0.05	1.000	03/13/07
Heptachlor	1.0 C	0.05	1.000	03/13/07
Aldrin	ND	0.05	1.000	03/13/07
Heptachlor epoxide	ND	0.05	1.000	03/13/07
Endosulfan I	ND	0.05	1.000	03/13/07
Dieldrin	ND	0.1	1.000	03/13/07
4,4'-DDE	ND	0.1	1.000	03/13/07
Endrin	ND	0.1	1.000	03/13/07
Endosulfan II	ND	0.1	1.000	03/13/07
Endosulfan sulfate	ND	0.1	1.000	03/13/07
4,4'-DDD	ND	0.1	1.000	03/13/07
4,4'-DDT	ND	0.1	1.000	03/13/07
alpha-Chlordane	0.08	0.05	1.000	03/13/07
gamma-Chlordane	ND	0.05	1.000	03/13/07
Methoxychlor	ND	0.5	1.000	03/13/07
Endrin ketone	ND	0.1	1.000	03/13/07
Toxaphene	ND	1.0	1.000	03/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	36 *	65-135	1.000	03/13/07
Decachlorobiphenyl	71	65-135	1.000	03/13/07

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0301073A	Batch#:	122778
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	79	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0301073B	Batch#:	122778
Lab ID:	193108-011	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07

Analyte	Result	RL	Diln Fac	Analyzed
alpha-BHC	ND	0.05	1.000	03/13/07
beta-BHC	ND	0.05	1.000	03/13/07
gamma-BHC	1.7	0.1	2.000	03/08/07
delta-BHC	ND	0.05	1.000	03/13/07
Heptachlor	0.9 C	0.05	1.000	03/13/07
Aldrin	ND	0.05	1.000	03/13/07
Heptachlor epoxide	ND	0.05	1.000	03/13/07
Endosulfan I	ND	0.05	1.000	03/13/07
Dieldrin	ND	0.1	1.000	03/13/07
4,4'-DDE	ND	0.1	1.000	03/13/07
Endrin	ND	0.1	1.000	03/13/07
Endosulfan II	ND	0.1	1.000	03/13/07
Endosulfan sulfate	ND	0.1	1.000	03/13/07
4,4'-DDD	ND	0.1	1.000	03/13/07
4,4'-DDT	ND	0.1	1.000	03/13/07
alpha-Chlordane	0.06	0.05	1.000	03/13/07
gamma-Chlordane	0.5 C	0.05	1.000	03/13/07
Methoxychlor	ND	0.5	1.000	03/13/07
Endrin ketone	ND	0.1	1.000	03/13/07
Toxaphene	ND	1.0	1.000	03/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	33 *	65-135	1.000	03/13/07
Decachlorobiphenyl	65	65-135	1.000	03/13/07

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW08	Batch#:	122778
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	86	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW103	Batch#:	122778
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	93	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW104	Batch#:	122778
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	101	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW03	Batch#:	122778
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.1

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	98	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW05	Batch#:	122778
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	89	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0302071A	Batch#:	122778
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	95	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377837	Batch#:	122778
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	94	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377838	Batch#:	122778
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1448	72	65-135
Heptachlor	0.2000	0.1405	70	65-135
Aldrin	0.2000	0.1461	73	65-135
Dieldrin	0.4000	0.3168	79	65-135
Endrin	0.4000	0.2999	75	65-135
4,4'-DDT	0.4000	0.3084	77	65-135

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	73	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW01	Batch#:	122778
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: MS Lab ID: QC377839

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.005935	0.1961	0.1878	96	65-135
Heptachlor	<0.006222	0.1961	0.1775	91	65-135
Aldrin	<0.004301	0.1961	0.1816	93	65-135
Dieldrin	<0.008854	0.3922	0.3621	92	65-135
Endrin	<0.01369	0.3922	0.3750	96	65-135
4,4'-DDT	<0.01487	0.3922	0.3793	97	65-135

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	97	65-135

Type: MSD Lab ID: QC377840

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1961	0.1875	96	65-135	0	35
Heptachlor	0.1961	0.1930	98	65-135	8	35
Aldrin	0.1961	0.1884	96	65-135	4	35
Dieldrin	0.3922	0.3547	90	65-135	2	35
Endrin	0.3922	0.3771	96	65-135	1	35
4,4'-DDT	0.3922	0.3872	99	65-135	2	35

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	98	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW104	Batch#:	122778
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: MS Lab ID: QC377841

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.005821	0.1923	0.1773	92	65-135
Heptachlor	<0.006103	0.1923	0.1443	75	65-135
Aldrin	<0.004218	0.1923	0.1468	76	65-135
Dieldrin	<0.008683	0.3846	0.3149	82	65-135
Endrin	<0.01343	0.3846	0.3108	81	65-135
4,4'-DDT	<0.01459	0.3846	0.2770	72	65-135

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	99	65-135

Type: MSD Lab ID: QC377842

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1923	0.1787	93	65-135	1	35
Heptachlor	0.1923	0.1699	88	65-135	16	35
Aldrin	0.1923	0.1742	91	65-135	17	35
Dieldrin	0.3846	0.3371	88	65-135	7	35
Endrin	0.3846	0.3553	92	65-135	13	35
4,4'-DDT	0.3846	0.3455	90	65-135	22	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	94	65-135

RPD= Relative Percent Difference

Confirmation Report for 193108 PEST Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193108-008	1349MW100	gamma-BHC	1.721	1.350	24	-22
193108-008	1349MW100	Heptachlor	0.9953 C	0.2741	114	-72
193108-008	1349MW100	alpha-Chlordane	0.07507	0.06383	16	-15
193108-011	DUP0301073B	gamma-BHC	1.659	1.274	26	-23
193108-011	DUP0301073B	Heptachlor	0.9274 C	0.3589	88	-61
193108-011	DUP0301073B	alpha-Chlordane	0.06213	0.06540	5	5
193108-011	DUP0301073B	gamma-Chlordane	0.5267 C	0.06374	157	-88

C=RPD between columns exceeds 40%

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807085473001
Units : pg

Name : gc23pest_059
Date : 28-FEB-2007 22:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	059_022	807085473022	PEST_1	28-FEB-2007 22:36	S5553
L2	059_023	807085473023	PEST_2	28-FEB-2007 22:58	S5554
L3	059_024	807085473024	PEST_3	28-FEB-2007 23:19	S5555
L4	059_025	807085473025	PEST_4	28-FEB-2007 23:40	S5556
L5	059_026	807085473026	PEST_5	01-MAR-2007 00:02	S5049
L6	059_027	807085473027	PEST_6	01-MAR-2007 00:23	S5050
L7	059_028	807085473028	PEST_7	01-MAR-2007 00:45	S5263

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	6115.5	6454.2	5846.2	6567.8	6724.9	5499.2	5269.4	AVRG		1.65E-4		6068.2	9	0.995	20	
gamma-BHC	A	5694.5	5871.8	5170.7	5857.7	5987.0	4877.3	4663.3	AVRG		1.84E-4		5446.0	10	0.995	20	
beta-BHC	A	3093.0	2690.8	2216.0	2503.9	2472.3	1948.7	1885.3	AVRG		4.16E-4		2401.4	18	0.995	20	
delta-BHC	A	7922.5	6793.0	5497.5	6304.0	6162.3	4857.5	4660.3	AVRG		1.66E-4		6028.1	19	0.995	20	
Heptachlor	A	4698.5	5110.4	4474.3	5399.9	5428.9	4253.5	4132.6	AVRG		2.09E-4		4785.4	11	0.995	20	
Aldrin	A	5412.0	5690.8	4952.4	5642.6	5636.0	4614.3	4339.9	AVRG		1.93E-4		5184.0	11	0.995	20	
Heptachlor epoxide	A	4867.0	5102.2	4413.5	5032.6	4990.3	4028.9	3731.9	AVRG		2.18E-4		4595.2	12	0.995	20	
gamma-Chlordane	A	4672.5	4955.6	4273.2	4933.9	4826.5	3944.0	3711.3	AVRG		2.24E-4		4473.8	11	0.995	20	
alpha-Chlordane	A	4527.5	4617.6	4059.4	4655.0	4486.4	3687.4	3454.6	AVRG		2.37E-4		4212.5	11	0.995	20	
4,4'-DDE	A	4043.8	4362.7	3612.4	4484.4	4278.4	3393.2	3037.6	AVRG		2.57E-4		3887.5	14	0.995	20	
Endosulfan I	A	4463.5	4447.8	4062.1	4760.8	4705.7	3752.4	3517.9	AVRG		2.36E-4		4244.3	11	0.995	20	
Dieldrin	A	4508.0	4778.4	4066.1	4733.7	4575.0	3715.6	3232.8	AVRG		2.36E-4		4229.9	14	0.995	20	
Endrin	A	3492.5	3832.8	3195.7	3928.1	3721.8	2952.9	2653.8	AVRG		2.94E-4		3396.8	14	0.995	20	
4,4'-DDD	A	3098.8	3559.3	2791.0	3450.0	3371.6	2540.2	2498.1	AVRG		3.29E-4		3044.1	14	0.995	20	
Endosulfan II	A	3837.3	3922.2	3429.1	4106.8	3660.0	3112.4	2642.9	AVRG		2.83E-4		3530.1	14	0.995	20	
4,4'-DDT	A	2764.5	3194.2	2641.9	3574.7	3233.0	2648.0	2454.1	AVRG		3.41E-4		2930.1	14	0.995	20	
Methoxychlor	A	1166.4	1310.4	1070.6	1421.1	1208.3	978.40	774.77	AVRG		8.83E-4		1132.8	19	0.995	20	
Endosulfan sulfate	A	3606.5	3665.1	2981.6	3582.4	3260.5	2653.7	2410.2	AVRG		3.16E-4		3165.7	16	0.995	20	
Endrin ketone	A	3997.8	4161.7	3390.9	4106.6	3677.8	3062.7	2658.5	AVRG		2.79E-4		3579.4	16	0.995	20	
TCMX	A	3358.3	3550.7	3285.1	3528.6	3627.0	2925.5	2781.3	AVRG		3.04E-4		3293.8	10	0.995	20	
Decachlorobiphenyl	A	2177.3	2599.7	2129.6	2815.6	2241.2	1986.2	1651.3	AVRG		4.49E-4		2228.7	17	0.995	20	
alpha-BHC	B	10809	10425	9337.1	9604.7	9797.3	9808.3	9035.8	AVRG		1.02E-4		9830.9	6	0.995	20	
gamma-BHC	B	11227	10378	8297.3	8673.7	8712.8	8769.8	8021.8	AVRG		1.09E-4		9154.3	13	0.995	20	
beta-BHC	B	5483.0	4160.2	3508.4	3482.9	3498.0	3434.4	3213.5	AVRG		2.61E-4		3825.8	**21**	0.995	20	rsd ***
delta-BHC	B	14236	10353	8784.7	8597.1	8867.6	8679.8	7889.2	AVRG		1.04E-4		9629.6	**22**	0.995	20	rsd ***
Heptachlor	B	8662.5	8368.8	7423.1	7748.2	7953.0	7843.8	7186.1	AVRG		1.27E-4		7883.6	6	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	9648.0	8777.2	7868.5	8006.2	8153.0	8086.7	7399.4	AVRG		1.21E-4		8277.0	9	0.995	20	
Heptachlor epoxide	B	8742.5	7878.0	6944.5	6974.2	7062.1	6924.7	6192.3	AVRG		1.38E-4		7245.5	11	0.995	20	
gamma-Chlordane	B	8552.0	7800.0	6824.1	6930.4	7049.0	7051.8	6385.4	AVRG		1.38E-4		7227.5	10	0.995	20	
alpha-Chlordane	B	7912.0	7105.4	6359.1	6591.1	6696.6	6580.5	5993.6	AVRG		1.48E-4		6748.3	9	0.995	20	
4,4'-DDE	B	7251.5	6730.5	5996.3	6253.4	6383.8	6206.8	5049.3	AVRG		1.60E-4		6267.4	11	0.995	20	
Endosulfan I	B	8241.0	7139.4	6319.4	6144.6	6244.3	6217.8	5626.9	AVRG		1.52E-4		6561.9	13	0.995	20	
Dieldrin	B	7889.3	7264.4	6410.2	6565.8	6674.3	6345.5	5131.2	AVRG		1.51E-4		6611.5	13	0.995	20	
Endrin	B	6419.8	5915.5	5107.9	5289.8	5382.8	5182.8	4246.5	AVRG		1.86E-4		5363.6	13	0.995	20	
4,4'-DDD	B	6069.8	5456.8	4823.1	4987.2	4976.1	5003.8	4165.7	AVRG		1.97E-4		5068.9	12	0.995	20	
Endosulfan II	B	6870.8	5969.8	5320.7	5726.8	5361.8	5164.3	4373.8	AVRG		1.80E-4		5541.1	14	0.995	20	
4,4'-DDT	B	5687.3	5259.6	4741.9	5067.5	5157.0	5206.7	4409.2	AVRG		1.97E-4		5075.6	8	0.995	20	
Methoxychlor	B	2387.0	2145.5	1868.4	1961.2	1895.0	1671.5	1232.5	AVRG		5.32E-4		1880.2	19	0.995	20	
Endosulfan sulfate	B	6506.5	5414.7	4664.0	4763.1	4674.3	4597.5	3904.8	AVRG		2.03E-4		4932.1	17	0.995	20	
Endrin ketone	B	7085.0	6075.4	5331.8	5481.1	5429.2	5261.9	4246.2	AVRG		1.80E-4		5558.7	16	0.995	20	
TCMX	B	5834.0	5686.8	5069.4	5191.3	5251.7	5172.2	4805.5	AVRG		1.89E-4		5287.3	7	0.995	20	
Decachlorobiphenyl	B	4371.0	4207.5	3709.2	4040.4	3853.4	3960.2	3655.9	AVRG		2.52E-4		3971.1	7	0.995	20	
Average EPA 8081A	A												(n=22)	14		20	
Average EPA 8081A	B												(n=22)	12		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_059
Calnum : 807085473001 Cal Date: 28-FEB-2007

ICV 807085473031 (059_031 01-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	6068.2	5358.7	25.00	22.08	pg	-12	15	
gamma-BHC	A	5446.0	4778.1	25.00	21.93	pg	-12	15	
beta-BHC	A	2401.4	1915.5	25.00	19.94	pg	**-20**	15	v- ***
delta-BHC	A	6028.1	5007.1	25.00	20.77	pg	**-17**	15	v- ***
Heptachlor	A	4785.4	4162.8	25.00	21.75	pg	-13	15	
Aldrin	A	5184.0	4599.3	25.00	22.18	pg	-11	15	
Heptachlor epoxide	A	4595.2	4034.0	25.00	21.95	pg	-12	15	
gamma-Chlordane	A	4473.8	4054.2	25.00	22.65	pg	-9	15	
alpha-Chlordane	A	4212.5	3705.7	25.00	21.99	pg	-12	15	
4,4'-DDE	A	3887.5	3711.3	25.00	23.87	pg	-5	15	
Endosulfan I	A	4244.3	3545.8	25.00	20.89	pg	**-16**	15	v- ***
Dieldrin	A	4229.9	3978.8	25.00	23.52	pg	-6	15	
Endrin	A	3396.8	3298.5	25.00	24.28	pg	-3	15	
4,4'-DDD	A	3044.1	2958.3	25.00	24.30	pg	-3	15	
Endosulfan II	A	3530.1	3305.2	25.00	23.41	pg	-6	15	
4,4'-DDT	A	2930.1	2809.4	25.00	23.97	pg	-4	15	
Methoxychlor	A	1132.8	1438.5	25.00	31.75	pg	**27**	15	v+ ***
Endosulfan sulfate	A	3165.7	2987.8	25.00	23.59	pg	-6	15	
Endrin ketone	A	3579.4	3522.4	25.00	24.60	pg	-2	15	
alpha-BHC	B	9830.9	9091.0	25.00	23.12	pg	-8	15	
gamma-BHC	B	9154.3	8367.2	25.00	22.85	pg	-9	15	
beta-BHC	B	3825.8	3234.8	25.00	21.14	pg	-15	15	
delta-BHC	B	9629.6	8297.8	25.00	21.54	pg	-14	15	
Heptachlor	B	7883.6	7380.5	25.00	23.40	pg	-6	15	
Aldrin	B	8277.0	7648.4	25.00	23.10	pg	-8	15	
Heptachlor epoxide	B	7245.5	6568.9	25.00	22.67	pg	-9	15	
gamma-Chlordane	B	7227.5	6745.7	25.00	23.33	pg	-7	15	
alpha-Chlordane	B	6748.3	6324.9	25.00	23.43	pg	-6	15	
4,4'-DDE	B	6267.4	6217.0	25.00	24.80	pg	-1	15	
Endosulfan I	B	6561.9	6020.6	25.00	22.94	pg	-8	15	
Dieldrin	B	6611.5	6419.4	25.00	24.27	pg	-3	15	
Endrin	B	5363.6	5419.9	25.00	25.26	pg	1	15	
4,4'-DDD	B	5068.9	4762.4	25.00	23.49	pg	-6	15	
Endosulfan II	B	5541.1	5207.6	25.00	23.49	pg	-6	15	
4,4'-DDT	B	5075.6	4848.1	25.00	23.88	pg	-4	15	
Methoxychlor	B	1880.2	2238.7	25.00	29.77	pg	**19**	15	v+ ***
Endosulfan sulfate	B	4932.1	4461.7	25.00	22.62	pg	-10	15	
Endrin ketone	B	5558.7	5221.4	25.00	23.48	pg	-6	15	
Average EPA 8081A	A	n=20					10	15	
Average EPA 8081A	B	n=20					8	15	

+=high bias -=low bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807102991001
Units : pg

Name : gc23pest_071
Date : 12-MAR-2007 20:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_018	807102991018	PEST_1	12-MAR-2007 20:02	S5553
L2	071_019	807102991019	PEST_2	12-MAR-2007 20:24	S5554
L3	071_020	807102991020	PEST_3	12-MAR-2007 20:45	S5555
L4	071_021	807102991021	PEST_4	12-MAR-2007 21:07	S5556
L5	071_022	807102991022	PEST_5	12-MAR-2007 21:28	S5049
L6	071_023	807102991023	PEST_6	12-MAR-2007 21:49	S5050
L7	071_024	807102991024	PEST_7	12-MAR-2007 22:11	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	8287.0	8058.0	7084.2	6450.4	7781.5	7196.6	6140.7	AVRG		1.37E-4		7285.5	11	0.995	20	
gamma-BHC	A	7685.0	7315.2	6305.2	5715.7	7032.6	6447.7	5570.9	AVRG		1.52E-4		6581.8	12	0.995	20	
beta-BHC	A	3095.0	2928.4	2536.5	2289.9	2848.4	2548.5	2289.8	AVRG		3.78E-4		2648.1	12	0.995	20	
delta-BHC	A	7865.5	7353.0	6225.3	5569.8	7232.0	6426.1	5629.1	AVRG		1.51E-4		6614.4	13	0.995	20	
Heptachlor	A	7061.0	6909.2	5846.8	5223.0	6670.1	6035.2	5240.0	AVRG		1.63E-4		6140.7	12	0.995	20	
Aldrin	A	7383.0	7000.8	6064.0	5394.5	6508.6	5980.0	5185.6	AVRG		1.61E-4		6216.6	13	0.995	20	
Heptachlor epoxide	A	6466.5	6208.2	5333.4	4709.8	5820.6	5240.0	4556.7	AVRG		1.83E-4		5476.4	13	0.995	20	
gamma-Chlordane	A	6326.0	6042.0	5931.0	4609.5	5730.7	5240.1	4648.2	AVRG		1.82E-4		5503.9	12	0.995	20	
alpha-Chlordane	A	5679.5	5906.6	4846.8	4488.6	5429.4	5019.6	4388.7	AVRG		1.96E-4		5108.5	11	0.995	20	
4,4'-DDE	A	5914.8	5544.2	4606.7	4006.1	5253.9	4670.3	3880.0	AVRG		2.07E-4		4839.4	16	0.995	20	
Endosulfan I	A	5736.5	5618.8	5025.3	4220.5	5485.7	4875.1	4360.5	AVRG		1.98E-4		5046.0	12	0.995	20	
Dieldrin	A	6185.5	5895.7	4968.6	4380.2	5518.9	4863.6	3946.9	AVRG		1.96E-4		5108.5	16	0.995	20	
Endrin	A	5318.0	4994.3	4129.3	3550.0	4688.8	4133.9	3466.7	AVRG		2.31E-4		4325.8	16	0.995	20	
4,4'-DDD	A	4665.8	4268.2	3556.8	3062.0	4163.8	3766.0	3232.3	AVRG		2.62E-4		3816.4	15	0.995	20	
Endosulfan II	A	5287.8	4906.4	4038.9	3541.4	4571.7	4019.6	3467.7	AVRG		2.35E-4		4261.9	16	0.995	20	
4,4'-DDT	A	4666.5	4529.0	3675.4	3162.4	4431.1	4004.5	3505.8	AVRG		2.50E-4		3996.4	14	0.995	20	
Methoxychlor	A	2148.9	1896.2	1492.0	1261.8	1727.5	1392.3		AVRG		6.05E-4		1653.1	20	0.995	20	
Endosulfan sulfate	A	4723.5	4400.2	3608.3	3073.6	4101.6	3672.3	3236.4	AVRG		2.61E-4		3830.8	16	0.995	20	
Endrin ketone	A	5529.5	5005.7	4116.5	3508.4	4729.0	4163.8	3492.8	AVRG		2.29E-4		4363.7	17	0.995	20	
TCMX	A	4485.0	4401.6	3829.2	3464.1	4099.7	3760.0	3207.8	AVRG		2.57E-4		3892.5	12	0.995	20	
Decachlorobiphenyl	A	4005.8	3708.2	2905.0	2467.0	3514.3	3034.9	2832.3	AVRG		3.12E-4		3209.6	17	0.995	20	
alpha-BHC	B	10379	9720.8	9185.8	9304.8	9341.7	9054.6	8238.2	AVRG		1.07E-4		9317.8	7	0.995	20	
gamma-BHC	B	10327	8906.2	8272.4	8372.2	8386.3	8023.0	7364.1	AVRG		1.17E-4		8521.5	11	0.995	20	
beta-BHC	B	3760.0	3533.6	3293.4	3339.2	3284.8	3079.7	2902.6	AVRG		3.02E-4		3313.3	8	0.995	20	
delta-BHC	B	9285.5	8811.2	8223.6	8557.3	8376.8	8132.5	7408.1	AVRG		1.19E-4		8399.3	7	0.995	20	
Heptachlor	B	8454.0	8021.6	7542.5	7710.8	7598.5	7156.8	6760.2	AVRG		1.31E-4		7606.3	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8790.5	8196.0	7792.6	7813.6	7763.5	7400.8	6843.9	AVRG		1.28E-4		7800.1	8	0.995	20	
Heptachlor epoxide	B	8002.5	7514.6	7027.2	6980.7	6926.6	6421.1	5915.4	AVRG		1.43E-4		6969.7	10	0.995	20	
gamma-Chlordane	B	7858.0	7429.4	6875.3	6965.6	6900.6	6487.2	6158.9	AVRG		1.44E-4		6953.6	8	0.995	20	
alpha-Chlordane	B	6847.5	7052.0	6504.1	6635.1	6608.6	6219.1	5837.2	AVRG		1.53E-4		6529.1	6	0.995	20	
4,4'-DDE	B	7323.0	6830.1	6308.5	6547.2	6376.3	5890.2	5096.6	AVRG		1.58E-4		6338.8	11	0.995	20	
Endosulfan I	B	7270.5	6953.4	6436.2	6445.6	6330.3	5873.0	5457.6	AVRG		1.56E-4		6395.2	10	0.995	20	
Dieldrin	B	7757.5	7306.0	6750.4	6812.5	6711.2	6128.7	5096.2	AVRG		1.50E-4		6651.8	13	0.995	20	
Endrin	B	6295.8	5776.3	5359.1	5473.8	5185.3	4745.9	4274.8	AVRG		1.89E-4		5301.6	12	0.995	20	
4,4'-DDD	B	6231.8	5746.1	5301.8	5462.1	5278.5	4796.5	4369.4	AVRG		1.88E-4		5312.3	11	0.995	20	
Endosulfan II	B	6138.5	6000.2	5397.2	5599.1	5438.2	5007.5	4334.7	AVRG		1.85E-4		5416.5	11	0.995	20	
4,4'-DDT	B	5267.3	5012.3	4765.4	5153.5	4940.4	4702.8	4415.9	AVRG		2.04E-4		4893.9	6	0.995	20	
Methoxychlor	B	2436.2	2150.3	1993.5	2072.8	1911.8	1591.5	1278.0	AVRG		5.21E-4		1919.2	20	0.995	20	
Endosulfan sulfate	B	5854.8	5385.8	4883.5	4961.6	4759.8	4321.7	3959.4	AVRG		2.05E-4		4875.2	13	0.995	20	
Endrin ketone	B	6845.5	6332.5	5723.3	5904.4	5679.2	5112.4	4372.3	AVRG		1.75E-4		5709.9	14	0.995	20	
TCMX	B	5686.3	5259.1	4933.2	4944.9	4923.6	4703.2	4308.6	AVRG		2.01E-4		4965.6	9	0.995	20	
Decachlorobiphenyl	B	4716.5	4361.6	3899.0	4138.3	3786.9	3424.9	3453.2	AVRG		2.52E-4		3968.6	12	0.995	20	
Average EPA 8081A	A												(n=22)	15		20	
Average EPA 8081A	B												(n=22)	10		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00		pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_071
Calnum : 807102991001 Cal Date: 12-MAR-2007

ICV 807102991027 (071_027 12-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	7285.5	6485.8	25.00	22.26	pg	-11	15	
gamma-BHC	A	6581.8	5846.4	25.00	22.21	pg	-11	15	
beta-BHC	A	2648.1	2307.7	25.00	21.79	pg	-13	15	
delta-BHC	A	6614.4	6045.2	25.00	22.85	pg	-9	15	
Heptachlor	A	6140.7	5329.8	25.00	21.70	pg	-13	15	
Aldrin	A	6216.6	5495.8	25.00	22.10	pg	-12	15	
Heptachlor epoxide	A	5476.4	4814.2	25.00	21.98	pg	-12	15	
gamma-Chlordane	A	5503.9	4927.7	25.00	22.38	pg	-10	15	
alpha-Chlordane	A	5108.5	4514.2	25.00	22.09	pg	-12	15	
4,4'-DDE	A	4839.4	4577.0	25.00	23.64	pg	-5	15	
Endosulfan I	A	5046.0	4608.2	25.00	22.83	pg	-9	15	
Dieldrin	A	5108.5	4802.8	25.00	23.50	pg	-6	15	
Endrin	A	4325.8	4152.0	25.00	24.00	pg	-4	15	
4,4'-DDD	A	3816.4	3520.7	25.00	23.06	pg	-8	15	
Endosulfan II	A	4261.9	4027.6	25.00	23.63	pg	-5	15	
4,4'-DDT	A	3996.4	3725.3	25.00	23.30	pg	-7	15	
Methoxychlor	A	1653.1	1887.4	25.00	28.54	pg	14	15	
Endosulfan sulfate	A	3830.8	3629.4	25.00	23.69	pg	-5	15	
Endrin ketone	A	4363.7	4210.0	25.00	24.12	pg	-4	15	
alpha-BHC	B	9317.8	8960.6	25.00	24.04	pg	-4	15	
gamma-BHC	B	8521.5	8058.8	25.00	23.64	pg	-5	15	
beta-BHC	B	3313.3	3135.7	25.00	23.66	pg	-5	15	
delta-BHC	B	8399.3	8530.4	25.00	25.39	pg	2	15	
Heptachlor	B	7606.3	7356.9	25.00	24.18	pg	-3	15	
Aldrin	B	7800.1	7506.9	25.00	24.06	pg	-4	15	
Heptachlor epoxide	B	6969.7	6580.6	25.00	23.60	pg	-6	15	
gamma-Chlordane	B	6953.6	6784.9	25.00	24.39	pg	-2	15	
alpha-Chlordane	B	6529.1	6357.4	25.00	24.34	pg	-3	15	
4,4'-DDE	B	6338.8	6326.6	25.00	24.95	pg	0	15	
Endosulfan I	B	6395.2	5959.5	25.00	23.30	pg	-7	15	
Dieldrin	B	6651.8	6557.3	25.00	24.64	pg	-1	15	
Endrin	B	5301.6	5571.4	25.00	26.27	pg	5	15	
4,4'-DDD	B	5312.3	5253.4	25.00	24.72	pg	-1	15	
Endosulfan II	B	5416.5	5525.2	25.00	25.50	pg	2	15	
4,4'-DDT	B	4893.9	4894.6	25.00	25.00	pg	0	15	
Methoxychlor	B	1919.2	2349.8	25.00	30.61	pg	**22**	15	v+ ***
Endosulfan sulfate	B	4875.2	4850.7	25.00	24.87	pg	-1	15	
Endrin ketone	B	5709.9	5846.1	25.00	25.60	pg	2	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807095556011 File : 066_011 Time : 07-MAR-2007 20:01

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	236213	9	15	
4,4'-DDE	A	2834			
4,4'-DDD	A	20620			
Endrin	A	139747	15	15	
Endrin aldehyde	A	9627			
Endrin ketone	A	15965			
4,4'-DDT	B	459078	5	15	
4,4'-DDE	B	2137			
4,4'-DDD	B	24560			
Endrin	B	254812	8	15	
Endrin aldehyde	B	3710			
Endrin ketone	B	19513			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807095556027 File : 066_027 Time : 08-MAR-2007 01:44

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	304179	9	15	
4,4'-DDE	A	2852			
4,4'-DDD	A	25893			
Endrin	A	180919	11	15	
Endrin aldehyde	A	8689			
Endrin ketone	A	13994			
4,4'-DDT	B	454617	7	15	
4,4'-DDE	B	1841			
4,4'-DDD	B	32340			
Endrin	B	260291	7	15	
Endrin aldehyde	B	3581			
Endrin ketone	B	17453			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807096981002 File : 067_002 Time : 08-MAR-2007 08:42

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	250387	10	15	
4,4'-DDE	A	2700			
4,4'-DDD	A	25256			
Endrin	A	154231	13	15	
Endrin aldehyde	A	7664			
Endrin ketone	A	15497			
4,4'-DDT	B	414071	8	15	
4,4'-DDE	B	2126			
4,4'-DDD	B	33396			
Endrin	B	253947	10	15	
Endrin aldehyde	B	5496			
Endrin ketone	B	22825			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807096981013 File : 067_013 Time : 08-MAR-2007 15:28

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	286608	9	15	
4,4'-DDE	A	3634			
4,4'-DDD	A	25213			
Endrin	A	174912	10	15	
Endrin aldehyde	A	7172			
Endrin ketone	A	12989			
4,4'-DDT	B	453871	7	15	
4,4'-DDE	B	2064			
4,4'-DDD	B	33883			
Endrin	B	267347	7	15	
Endrin aldehyde	B	3445			
Endrin ketone	B	15956			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991050 File : 071_050 Time : 13-MAR-2007 19:10

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	333760	3	15	
4,4'-DDE	A	3854			
4,4'-DDD	A	5025			
Endrin	A	196869	3	15	
Endrin aldehyde	A	1301			
Endrin ketone	A	5066			
4,4'-DDT	B	485481	5	15	
4,4'-DDE	B	2032			
4,4'-DDD	B	24119			
Endrin	B	257561	10	15	
Endrin aldehyde	B	7779			
Endrin ketone	B	22251			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991067 File : 071_067 Time : 14-MAR-2007 01:15

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	279505	5	15	
4,4'-DDE	A	2763			
4,4'-DDD	A	11143			
Endrin	A	170760	6	15	
Endrin aldehyde	A	2396			
Endrin ketone	A	8141			
4,4'-DDT	B	488740	8	15	
4,4'-DDE	B	2431			
4,4'-DDD	B	38259			
Endrin	B	272225	12	15	
Endrin aldehyde	B	8691			
Endrin ketone	B	29865			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807095556012 File : 066_012 Time : 07-MAR-2007 20:22
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6348.7	20.00	20.92	pg	5	15	
gamma-BHC	A	5446.0	5617.4	20.00	20.63	pg	3	15	
beta-BHC	A	2401.4	2318.0	20.00	19.30	pg	-3	15	
delta-BHC	A	6028.1	5717.2	20.00	18.97	pg	-5	15	
Heptachlor	A	4785.4	4904.3	20.00	20.50	pg	2	15	
Aldrin	A	5184.0	5370.3	20.00	20.72	pg	4	15	
Heptachlor epoxide	A	4595.2	4718.4	20.00	20.54	pg	3	15	
gamma-Chlordane	A	4473.8	4616.6	20.00	20.64	pg	3	15	
alpha-Chlordane	A	4212.5	4381.8	20.00	20.80	pg	4	15	
4,4'-DDE	A	3887.5	3994.4	40.00	41.10	pg	3	15	
Endosulfan I	A	4244.3	4322.1	20.00	20.37	pg	2	15	
Dieldrin	A	4229.9	4405.0	40.00	41.66	pg	4	15	
Endrin	A	3396.8	3352.1	40.00	39.47	pg	-1	15	
4,4'-DDD	A	3044.1	3089.7	40.00	40.60	pg	1	15	
Endosulfan II	A	3530.1	3734.6	40.00	42.32	pg	6	15	
4,4'-DDT	A	2930.1	3028.8	40.00	41.35	pg	3	15	
Methoxychlor	A	1132.8	1144.9	200.0	202.1	pg	1	15	
Endosulfan sulfate	A	3165.7	3186.1	40.00	40.26	pg	1	15	
Endrin ketone	A	3579.4	3721.0	40.00	41.58	pg	4	15	
TCMX	A	3293.8	3394.8	40.00	41.23	pg	3	15	
Decachlorobiphenyl	A	2228.7	2445.9	40.00	43.90	pg	10	15	
alpha-BHC	B	9830.9	9981.3	20.00	20.31	pg	2	15	
gamma-BHC	B	9154.3	9037.9	20.00	19.75	pg	-1	15	
beta-BHC	B	3825.8	3544.3	20.00	18.53	pg	-7	15	rsd ***
delta-BHC	B	9629.6	8662.3	20.00	17.99	pg	-10	15	rsd ***
Heptachlor	B	7883.6	8059.8	20.00	20.45	pg	2	15	
Aldrin	B	8277.0	8296.0	20.00	20.05	pg	0	15	
Heptachlor epoxide	B	7245.5	7180.7	20.00	19.82	pg	-1	15	
gamma-Chlordane	B	7227.5	7086.6	20.00	19.61	pg	-2	15	
alpha-Chlordane	B	6748.3	6593.7	20.00	19.54	pg	-2	15	
4,4'-DDE	B	6267.4	6458.9	40.00	41.22	pg	3	15	
Endosulfan I	B	6561.9	6526.3	20.00	19.89	pg	-1	15	
Dieldrin	B	6611.5	6682.7	40.00	40.43	pg	1	15	
Endrin	B	5363.6	5262.5	40.00	39.25	pg	-2	15	
4,4'-DDD	B	5068.9	5024.9	40.00	39.65	pg	-1	15	
Endosulfan II	B	5541.1	5003.8	40.00	36.12	pg	-10	15	
4,4'-DDT	B	5075.6	4729.4	40.00	37.27	pg	-7	15	
Methoxychlor	B	1880.2	1727.6	200.0	183.8	pg	-8	15	
Endosulfan sulfate	B	4932.1	4498.3	40.00	36.48	pg	-9	15	
Endrin ketone	B	5558.7	5125.4	40.00	36.88	pg	-8	15	
TCMX	B	5287.3	5442.4	40.00	41.17	pg	3	15	
Decachlorobiphenyl	B	3971.1	3542.4	40.00	35.68	pg	-11	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					4	15	

rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807095556029 File : 066_029 Time : 08-MAR-2007 02:27
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6972.4	10.00	11.49	pg	15	15	
gamma-BHC	A	5446.0	6081.0	10.00	11.17	pg	12	15	
beta-BHC	A	2401.4	2527.4	10.00	10.52	pg	5	15	
delta-BHC	A	6028.1	6292.4	10.00	10.44	pg	4	15	
Heptachlor	A	4785.4	5433.7	10.00	11.35	pg	14	15	
Aldrin	A	5184.0	5914.7	10.00	11.41	pg	14	15	
Heptachlor epoxide	A	4595.2	5281.5	10.00	11.49	pg	15	15	
gamma-Chlordane	A	4473.8	5100.0	10.00	11.40	pg	14	15	
alpha-Chlordane	A	4212.5	4708.9	10.00	11.18	pg	12	15	
4,4'-DDE	A	3887.5	4631.7	20.00	23.83	pg	**19**	15	c+ ***
Endosulfan I	A	4244.3	4678.9	10.00	11.02	pg	10	15	
Dieldrin	A	4229.9	4973.6	20.00	23.52	pg	**18**	15	c+ ***
Endrin	A	3396.8	3936.6	20.00	23.18	pg	**16**	15	c+ ***
4,4'-DDD	A	3044.1	3999.0	20.00	26.27	pg	**31**	15	c+ ***
Endosulfan II	A	3530.1	4182.3	20.00	23.70	pg	**18**	15	c+ ***
4,4'-DDT	A	2930.1	3413.7	20.00	23.30	pg	**17**	15	c+ ***
Methoxychlor	A	1132.8	1483.9	100.0	131.0	pg	**31**	15	c+ ***
Endosulfan sulfate	A	3165.7	3858.5	20.00	24.38	pg	**22**	15	c+ ***
Endrin ketone	A	3579.4	4608.4	20.00	25.75	pg	**29**	15	c+ ***
TCMX	A	3293.8	3862.1	20.00	23.45	pg	**17**	15	c+
Decachlorobiphenyl	A	2228.7	3287.7	20.00	29.50	pg	**48**	15	c+
alpha-BHC	B	9830.9	10349	10.00	10.53	pg	5	15	
gamma-BHC	B	9154.3	9391.9	10.00	10.26	pg	3	15	
beta-BHC	B	3825.8	3692.6	10.00	9.652	pg	-3	15	rsd ***
delta-BHC	B	9629.6	9232.5	10.00	9.588	pg	-4	15	rsd ***
Heptachlor	B	7883.6	8245.7	10.00	10.46	pg	5	15	
Aldrin	B	8277.0	8541.0	10.00	10.32	pg	3	15	
Heptachlor epoxide	B	7245.5	7613.2	10.00	10.51	pg	5	15	
gamma-Chlordane	B	7227.5	7492.2	10.00	10.37	pg	4	15	
alpha-Chlordane	B	6748.3	7029.8	10.00	10.42	pg	4	15	
4,4'-DDE	B	6267.4	6863.1	20.00	21.90	pg	10	15	
Endosulfan I	B	6561.9	6975.3	10.00	10.63	pg	6	15	
Dieldrin	B	6611.5	7267.1	20.00	21.98	pg	10	15	
Endrin	B	5363.6	5779.6	20.00	21.55	pg	8	15	
4,4'-DDD	B	5068.9	5944.0	20.00	23.45	pg	**17**	15	c+ ***
Endosulfan II	B	5541.1	5861.3	20.00	21.16	pg	6	15	
4,4'-DDT	B	5075.6	4929.2	20.00	19.42	pg	-3	15	
Methoxychlor	B	1880.2	2186.0	100.0	116.3	pg	**16**	15	c+ ***
Endosulfan sulfate	B	4932.1	5386.7	20.00	21.84	pg	9	15	
Endrin ketone	B	5558.7	6162.3	20.00	22.17	pg	11	15	
TCMX	B	5287.3	5764.5	20.00	21.81	pg	9	15	
Decachlorobiphenyl	B	3971.1	4511.1	20.00	22.72	pg	14	15	
Average EPA 8081A	A	(n=22)					**18**	15	ac ***
Average EPA 8081A	B	(n=22)					7	15	

+=high bias ac=average CCV drift out c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807096981003 File : 067_003 Time : 08-MAR-2007 09:04
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	5690.8	10.00	9.378	pg	-6	15	
gamma-BHC	A	5446.0	5029.2	10.00	9.235	pg	-8	15	
beta-BHC	A	2401.4	2051.9	10.00	8.545	pg	-15	15	
delta-BHC	A	6028.1	5047.1	10.00	8.373	pg	**-16**	15	c- ***
Heptachlor	A	4785.4	4384.6	10.00	9.162	pg	-8	15	
Aldrin	A	5184.0	4812.0	10.00	9.282	pg	-7	15	
Heptachlor epoxide	A	4595.2	4203.2	10.00	9.147	pg	-9	15	
gamma-Chlordane	A	4473.8	4055.2	10.00	9.064	pg	-9	15	
alpha-Chlordane	A	4212.5	3919.0	10.00	9.303	pg	-7	15	
4,4'-DDE	A	3887.5	3635.5	20.00	18.70	pg	-6	15	
Endosulfan I	A	4244.3	3833.8	10.00	9.033	pg	-10	15	
Dieldrin	A	4229.9	3952.7	20.00	18.69	pg	-7	15	
Endrin	A	3396.8	3156.6	20.00	18.59	pg	-7	15	
4,4'-DDD	A	3044.1	2948.6	20.00	19.37	pg	-3	15	
Endosulfan II	A	3530.1	3292.8	20.00	18.66	pg	-7	15	
4,4'-DDT	A	2930.1	2770.6	20.00	18.91	pg	-5	15	
Methoxychlor	A	1132.8	1143.9	100.0	101.0	pg	1	15	
Endosulfan sulfate	A	3165.7	2921.8	20.00	18.46	pg	-8	15	
Endrin ketone	A	3579.4	3381.9	20.00	18.90	pg	-6	15	
TCMX	A	3293.8	3121.4	20.00	18.95	pg	-5	15	
Decachlorobiphenyl	A	2228.7	2363.5	20.00	21.21	pg	6	15	
alpha-BHC	B	9830.9	10480	10.00	10.66	pg	7	15	
gamma-BHC	B	9154.3	9560.5	10.00	10.44	pg	4	15	
beta-BHC	B	3825.8	3694.9	10.00	9.658	pg	-3	15	rsd ***
delta-BHC	B	9629.6	9218.7	10.00	9.573	pg	-4	15	rsd ***
Heptachlor	B	7883.6	8334.2	10.00	10.57	pg	6	15	
Aldrin	B	8277.0	8751.7	10.00	10.57	pg	6	15	
Heptachlor epoxide	B	7245.5	7587.4	10.00	10.47	pg	5	15	
gamma-Chlordane	B	7227.5	7456.0	10.00	10.32	pg	3	15	
alpha-Chlordane	B	6748.3	6964.1	10.00	10.32	pg	3	15	
4,4'-DDE	B	6267.4	6723.1	20.00	21.45	pg	7	15	
Endosulfan I	B	6561.9	6895.1	10.00	10.51	pg	5	15	
Dieldrin	B	6611.5	7145.9	20.00	21.62	pg	8	15	
Endrin	B	5363.6	5641.0	20.00	21.03	pg	5	15	
4,4'-DDD	B	5068.9	5777.1	20.00	22.79	pg	14	15	
Endosulfan II	B	5541.1	5694.9	20.00	20.55	pg	3	15	
4,4'-DDT	B	5075.6	4774.6	20.00	18.81	pg	-6	15	
Methoxychlor	B	1880.2	2065.1	100.0	109.8	pg	10	15	
Endosulfan sulfate	B	4932.1	5210.2	20.00	21.13	pg	6	15	
Endrin ketone	B	5558.7	6026.9	20.00	21.68	pg	8	15	
TCMX	B	5287.3	5792.6	20.00	21.91	pg	10	15	
Decachlorobiphenyl	B	3971.1	4217.8	20.00	21.24	pg	6	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					6	15	

-=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807096981015 File : 067_015 Time : 08-MAR-2007 16:38
Cal : 807085473001 Caldate : 28-FEB-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	6068.2	6266.1	20.00	20.65	pg	3	15	
gamma-BHC	A	5446.0	5591.6	20.00	20.53	pg	3	15	
beta-BHC	A	2401.4	2339.1	20.00	19.48	pg	-3	15	
delta-BHC	A	6028.1	5830.5	20.00	19.34	pg	-3	15	
Heptachlor	A	4785.4	5062.5	20.00	21.16	pg	6	15	
Aldrin	A	5184.0	5278.6	20.00	20.36	pg	2	15	
Heptachlor epoxide	A	4595.2	4663.3	20.00	20.30	pg	1	15	
gamma-Chlordane	A	4473.8	4576.4	20.00	20.46	pg	2	15	
alpha-Chlordane	A	4212.5	4395.6	20.00	20.87	pg	4	15	
4,4'-DDE	A	3887.5	4124.2	40.00	42.44	pg	6	15	
Endosulfan I	A	4244.3	4370.3	20.00	20.59	pg	3	15	
Dieldrin	A	4229.9	4451.3	40.00	42.09	pg	5	15	
Endrin	A	3396.8	3588.3	40.00	42.25	pg	6	15	
4,4'-DDD	A	3044.1	3355.9	40.00	44.10	pg	10	15	
Endosulfan II	A	3530.1	3702.1	40.00	41.95	pg	5	15	
4,4'-DDT	A	2930.1	3085.2	40.00	42.12	pg	5	15	
Methoxychlor	A	1132.8	1269.3	200.0	224.1	pg	12	15	
Endosulfan sulfate	A	3165.7	3272.9	40.00	41.35	pg	3	15	
Endrin ketone	A	3579.4	3844.4	40.00	42.96	pg	7	15	
TCMX	A	3293.8	3301.0	40.00	40.09	pg	0	15	
Decachlorobiphenyl	A	2228.7	2647.5	40.00	47.52	pg	**19**	15	c+
alpha-BHC	B	9830.9	9020.5	20.00	18.35	pg	-8	15	
gamma-BHC	B	9154.3	8032.9	20.00	17.55	pg	-12	15	
beta-BHC	B	3825.8	3202.0	20.00	16.74	pg	**-16**	15	c- rsd ***
delta-BHC	B	9629.6	8129.8	20.00	16.89	pg	**-16**	15	c- rsd ***
Heptachlor	B	7883.6	7299.3	20.00	18.52	pg	-7	15	
Aldrin	B	8277.0	7404.2	20.00	17.89	pg	-11	15	
Heptachlor epoxide	B	7245.5	6533.6	20.00	18.03	pg	-10	15	
gamma-Chlordane	B	7227.5	6484.7	20.00	17.94	pg	-10	15	
alpha-Chlordane	B	6748.3	6194.8	20.00	18.36	pg	-8	15	
4,4'-DDE	B	6267.4	6141.6	40.00	39.20	pg	-2	15	
Endosulfan I	B	6561.9	6019.3	20.00	18.35	pg	-8	15	
Dieldrin	B	6611.5	6393.2	40.00	38.68	pg	-3	15	
Endrin	B	5363.6	5186.5	40.00	38.68	pg	-3	15	
4,4'-DDD	B	5068.9	5285.2	40.00	41.71	pg	4	15	
Endosulfan II	B	5541.1	5276.4	40.00	38.09	pg	-5	15	
4,4'-DDT	B	5075.6	4807.9	40.00	37.89	pg	-5	15	
Methoxychlor	B	1880.2	2039.0	200.0	216.9	pg	8	15	
Endosulfan sulfate	B	4932.1	4852.8	40.00	39.36	pg	-2	15	
Endrin ketone	B	5558.7	5651.1	40.00	40.67	pg	2	15	
TCMX	B	5287.3	4928.5	40.00	37.29	pg	-7	15	
Decachlorobiphenyl	B	3971.1	4020.3	40.00	40.50	pg	1	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					7	15	

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807102991053 File : 071_053 Time : 13-MAR-2007 20:14
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7065.1	20.00	19.40	pg	-3	15	
gamma-BHC	A	6581.8	6303.2	20.00	19.15	pg	-4	15	
beta-BHC	A	2648.1	2530.2	20.00	19.11	pg	-4	15	
delta-BHC	A	6614.4	6233.3	20.00	18.85	pg	-6	15	
Heptachlor	A	6140.7	5919.6	20.00	19.28	pg	-4	15	
Aldrin	A	6216.6	5920.9	20.00	19.05	pg	-5	15	
Heptachlor epoxide	A	5476.4	5196.6	20.00	18.98	pg	-5	15	
gamma-Chlordane	A	5503.9	5061.9	20.00	18.39	pg	-8	15	
alpha-Chlordane	A	5108.5	4868.0	20.00	19.06	pg	-5	15	
4,4'-DDE	A	4839.4	4526.7	40.00	37.41	pg	-6	15	
Endosulfan I	A	5046.0	4836.0	20.00	19.17	pg	-4	15	
Dieldrin	A	5108.5	4836.3	40.00	37.87	pg	-5	15	
Endrin	A	4325.8	4057.6	40.00	37.52	pg	-6	15	
4,4'-DDD	A	3816.4	3581.3	40.00	37.54	pg	-6	15	
Endosulfan II	A	4261.9	3911.6	40.00	36.71	pg	-8	15	
4,4'-DDT	A	3996.4	3716.5	40.00	37.20	pg	-7	15	
Methoxychlor	A	1653.1	1483.3	200.0	179.5	pg	-10	15	
Endosulfan sulfate	A	3830.8	3547.3	40.00	37.04	pg	-7	15	
Endrin ketone	A	4363.7	4010.6	40.00	36.76	pg	-8	15	
TCMX	A	3892.5	3833.8	40.00	39.40	pg	-2	15	
Decachlorobiphenyl	A	3209.6	2928.2	40.00	36.49	pg	-9	15	
alpha-BHC	B	9317.8	9571.9	20.00	20.55	pg	3	15	
gamma-BHC	B	8521.5	8656.4	20.00	20.32	pg	2	15	
beta-BHC	B	3313.3	3470.9	20.00	20.95	pg	5	15	
delta-BHC	B	8399.3	8675.2	20.00	20.66	pg	3	15	
Heptachlor	B	7606.3	7812.7	20.00	20.54	pg	3	15	
Aldrin	B	7800.1	7737.1	20.00	19.84	pg	-1	15	
Heptachlor epoxide	B	6969.7	7136.7	20.00	20.48	pg	2	15	
gamma-Chlordane	B	6953.6	7156.4	20.00	20.58	pg	3	15	
alpha-Chlordane	B	6529.1	6848.2	20.00	20.98	pg	5	15	
4,4'-DDE	B	6338.8	6684.8	40.00	42.18	pg	5	15	
Endosulfan I	B	6395.2	6631.8	20.00	20.74	pg	4	15	
Dieldrin	B	6651.8	6996.3	40.00	42.07	pg	5	15	
Endrin	B	5301.6	5266.7	40.00	39.74	pg	-1	15	
4,4'-DDD	B	5312.3	5753.0	40.00	43.32	pg	8	15	
Endosulfan II	B	5416.5	5757.0	40.00	42.51	pg	6	15	
4,4'-DDT	B	4893.9	5034.8	40.00	41.15	pg	3	15	
Methoxychlor	B	1919.2	2068.9	200.0	215.6	pg	8	15	
Endosulfan sulfate	B	4875.2	5135.7	40.00	42.14	pg	5	15	
Endrin ketone	B	5709.9	6204.9	40.00	43.47	pg	9	15	
TCMX	B	4965.6	5078.1	40.00	40.91	pg	2	15	
Decachlorobiphenyl	B	3968.6	4231.5	40.00	42.65	pg	7	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807102991070 File : 071_070 Time : 14-MAR-2007 02:19
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7995.4	10.00	10.97	pg	10	15	
gamma-BHC	A	6581.8	7162.2	10.00	10.88	pg	9	15	
beta-BHC	A	2648.1	2896.5	10.00	10.94	pg	9	15	
delta-BHC	A	6614.4	7116.3	10.00	10.76	pg	8	15	
Heptachlor	A	6140.7	6766.7	10.00	11.02	pg	10	15	
Aldrin	A	6216.6	6778.8	10.00	10.90	pg	9	15	
Heptachlor epoxide	A	5476.4	5946.1	10.00	10.86	pg	9	15	
gamma-Chlordane	A	5503.9	5825.1	10.00	10.58	pg	6	15	
alpha-Chlordane	A	5108.5	5452.8	10.00	10.67	pg	7	15	
4,4'-DDE	A	4839.4	5144.5	20.00	21.26	pg	6	15	
Endosulfan I	A	5046.0	5583.1	10.00	11.06	pg	11	15	
Dieldrin	A	5108.5	5481.8	20.00	21.46	pg	7	15	
Endrin	A	4325.8	4632.5	20.00	21.42	pg	7	15	
4,4'-DDD	A	3816.4	3965.0	20.00	20.78	pg	4	15	
Endosulfan II	A	4261.9	4401.5	20.00	20.65	pg	3	15	
4,4'-DDT	A	3996.4	4107.6	20.00	20.56	pg	3	15	
Methoxychlor	A	1653.1	1615.5	100.0	97.72	pg	-2	15	
Endosulfan sulfate	A	3830.8	3939.4	20.00	20.57	pg	3	15	
Endrin ketone	A	4363.7	4423.4	20.00	20.27	pg	1	15	
TCMX	A	3892.5	4426.7	20.00	22.74	pg	14	15	
Decachlorobiphenyl	A	3209.6	3066.5	20.00	19.11	pg	-4	15	
alpha-BHC	B	9317.8	8932.8	10.00	9.587	pg	-4	15	
gamma-BHC	B	8521.5	8270.7	10.00	9.706	pg	-3	15	
beta-BHC	B	3313.3	3281.0	10.00	9.902	pg	-1	15	
delta-BHC	B	8399.3	8225.7	10.00	9.793	pg	-2	15	
Heptachlor	B	7606.3	7331.8	10.00	9.639	pg	-4	15	
Aldrin	B	7800.1	7622.8	10.00	9.773	pg	-2	15	
Heptachlor epoxide	B	6969.7	6838.9	10.00	9.812	pg	-2	15	
gamma-Chlordane	B	6953.6	6727.1	10.00	9.674	pg	-3	15	
alpha-Chlordane	B	6529.1	6432.2	10.00	9.852	pg	-1	15	
4,4'-DDE	B	6338.8	6187.0	20.00	19.52	pg	-2	15	
Endosulfan I	B	6395.2	6340.1	10.00	9.914	pg	-1	15	
Dieldrin	B	6651.8	6565.5	20.00	19.74	pg	-1	15	
Endrin	B	5301.6	5039.3	20.00	19.01	pg	-5	15	
4,4'-DDD	B	5312.3	5395.4	20.00	20.31	pg	2	15	
Endosulfan II	B	5416.5	5313.9	20.00	19.62	pg	-2	15	
4,4'-DDT	B	4893.9	4444.1	20.00	18.16	pg	-9	15	
Methoxychlor	B	1919.2	1879.2	100.0	97.92	pg	-2	15	
Endosulfan sulfate	B	4875.2	4789.9	20.00	19.65	pg	-2	15	
Endrin ketone	B	5709.9	5724.8	20.00	20.05	pg	0	15	
TCMX	B	4965.6	4920.1	20.00	19.82	pg	-1	15	
Decachlorobiphenyl	B	3968.6	3889.4	20.00	19.60	pg	-2	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					2	15	

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	059_001	X	HEX			28-FEB-2007 08:33	1.0							
002	059_002	PEM	PEM			28-FEB-2007 08:54	1.0			1			1	
003	059_003	X	PEST_3			28-FEB-2007 09:16	1.0	11		1			2 ac	
004	059_004	X	PRIMER			28-FEB-2007 12:36	1.0							
005	059_005	X	PRIMER			28-FEB-2007 12:57	1.0							
006	059_006	X	PRIMER			28-FEB-2007 13:18	1.0							
007	059_007	X	HEX			28-FEB-2007 14:30	1.0							
008	059_008	X	PEM			28-FEB-2007 14:51	1.0						1	
010	059_010	X	HEX			28-FEB-2007 16:16	1.0							
011	059_011	X	PEM			28-FEB-2007 17:07	1.0			1			1	
012	059_012	X	PEST_3			28-FEB-2007 17:31	1.0	21		1			2 ac	
013	059_013	X	PRIMER			28-FEB-2007 19:24	1.0							
014	059_014	X	PRIMER			28-FEB-2007 19:45	1.0							
015	059_015	X	PRIMER			28-FEB-2007 20:07	1.0							
016	059_016	X	PRIMER			28-FEB-2007 20:28	1.0							
017	059_017	X	PRIMER			28-FEB-2007 20:49	1.0							
018	059_018	X	HEX			28-FEB-2007 21:11	1.0							
019	059_019	X	HEX			28-FEB-2007 21:32	1.0							
020	059_020	PEM	PEM			28-FEB-2007 21:54	1.0			1			1	
021	059_021	X	HEX			28-FEB-2007 22:15	1.0							
022	059_022	ICAL	PEST_1			28-FEB-2007 22:36	1.0						3	
023	059_023	ICAL	PEST_2			28-FEB-2007 22:58	1.0						4	
024	059_024	ICAL	PEST_3			28-FEB-2007 23:19	1.0						2	
025	059_025	ICAL	PEST_4			28-FEB-2007 23:40	1.0						5	
026	059_026	ICAL	PEST_5			01-MAR-2007 00:02	1.0						6	
027	059_027	ICAL	PEST_6			01-MAR-2007 00:23	1.0						7	
028	059_028	ICAL	PEST_7			01-MAR-2007 00:45	1.0						8	
029	059_029	X	HEX			01-MAR-2007 01:06	1.0							
030	059_030	X	HEX			01-MAR-2007 01:27	1.0							
031	059_031	ICV	ICV			01-MAR-2007 01:49	1.0	7		1			9	2:XYL246=215.922

Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807085473 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 28-FEB-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
032	059_032	X	ICV			01-MAR-2007 02:10	1.0	8		1			9	2:CL10BZ=219.667
033	059_033	X	HEX			01-MAR-2007 02:31	1.0							

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Stds used: 1=S5053 2=S5555 3=S5553 4=S5554 5=S5556 6=S5049 7=S5050 8=S5263 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807095556 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	066_001	X	HEX			07-MAR-2007 08:36	1.0						
002	066_002	X	PEM			07-MAR-2007 08:57	1.0	1.0			1	1	
003	066_003	X	PEST_3			07-MAR-2007 09:19	1.0	1.0	2		1	2	
004	066_004	CCV	PEST_3			07-MAR-2007 15:53	1.0	1.0	2		1	2	
005	066_005	PEM	PEM			07-MAR-2007 16:14	1.0	1.0			1	1	
006	066_006	X	HEX			07-MAR-2007 16:36	1.0						
007	066_007	BLANK	QC377837	122778	Water	07-MAR-2007 18:34	1.0	0.01		2	1		
008	066_008	LCS	QC377838	122778	Water	07-MAR-2007 18:55	1.0	0.01	2		1		
009	066_009	SAMPLE	193169-001	122778	Water	07-MAR-2007 19:18	1.0	0.009434			1		
010	066_010	X	HEX			07-MAR-2007 19:39	1.0						
011	066_011	PEM	PEM			07-MAR-2007 20:01	1.0	1.0			1	1	
012	066_012	CCV	PEST_4			07-MAR-2007 20:22	1.0	1.0	2		1	3	
013	066_013	X	PEST_4			07-MAR-2007 20:43	1.0					3	
014	066_014	X	PEM			07-MAR-2007 21:05	1.0					1	
015	066_015	X	HEX			07-MAR-2007 21:26	1.0						
016	066_016	MSS	193108-007	122778	Water	07-MAR-2007 21:48	1.0	0.009804			1	>ac	
017	066_017	SAMPLE	193108-008	122778	Water	07-MAR-2007 22:09	1.0	0.01	12	2	1	>ac	4:BHCGAM=151.664
018	066_018	SAMPLE	193108-010	122778	Water	07-MAR-2007 22:31	1.0	0.01			1	>ac	
019	066_019	SAMPLE	193108-011	122778	Water	07-MAR-2007 22:52	1.0	0.009901	7	3	1	>ac	3:BHCBET=397.135
020	066_020	SAMPLE	193108-013	122778	Water	07-MAR-2007 23:14	1.0	0.009709			1	>ac	
021	066_021	SAMPLE	193108-022	122778	Water	07-MAR-2007 23:35	1.0	0.009901			1	>ac	
022	066_022	MSS	193108-023	122778	Water	07-MAR-2007 23:57	1.0	0.009615			1	>ac	
023	066_023	SAMPLE	193108-025	122778	Water	08-MAR-2007 00:18	1.0	0.01053		1	1	>ac	
024	066_024	SAMPLE	193108-026	122778	Water	08-MAR-2007 00:39	1.0	0.009434			1	>ac	
025	066_025	SAMPLE	193108-027	122778	Water	08-MAR-2007 01:01	1.0	0.009709			1	>ac	
026	066_026	X	HEX			08-MAR-2007 01:22	1.0						
027	066_027	PEM	PEM			08-MAR-2007 01:44	1.0	1.0			1	1	
028	066_028	X	PEST_3			08-MAR-2007 02:05	1.0	1.0	20		1	2 ac	
029	066_029	CCV	PEST_3			08-MAR-2007 02:27	1.0	1.0	14		1	2 ac	
030	066_030	X	PEM			08-MAR-2007 02:48	1.0					1	

Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807095556 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 07-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	066_031	X	HEX			08-MAR-2007 03:09	1.0						
032	066_032	MS	QC377839	122778	Water	08-MAR-2007 03:31	1.0	0.009804	13	1	1	<ac	
033	066_033	MSD	QC377840	122778	Water	08-MAR-2007 03:52	1.0	0.009804	13	3	1	<ac	
034	066_034	MS	QC377841	122778	Water	08-MAR-2007 04:14	1.0	0.009615	13	1	1	<ac	
035	066_035	MSD	QC377842	122778	Water	08-MAR-2007 04:35	1.0	0.009615	13	2	1	<ac	
036	066_036	X	HEX			08-MAR-2007 04:57	1.0						
037	066_037	PEM	PEM			08-MAR-2007 05:18	1.0	1.0			1	1	
038	066_038	CCV	PEST_5			08-MAR-2007 05:40	1.0	1.0	2		1	4	
039	066_039	CCV	PEST_5			08-MAR-2007 06:01	1.0					4	
040	066_040	X	PEM			08-MAR-2007 06:23	1.0					1	
041	066_041	X	HEX			08-MAR-2007 06:44	1.0						

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Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807096981 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 08-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	067_001	X	HEX			08-MAR-2007 08:21	1.0						
002	067_002	PEM	PEM			08-MAR-2007 08:42	1.0	1.0			1	1	
003	067_003	CCV	PEST_3			08-MAR-2007 09:04	1.0	1.0	3		1	2	
004	067_004	X	HEX			08-MAR-2007 11:30	1.0						
005	067_005	MS	QC377839	122778	Water	08-MAR-2007 11:51	1.0	0.009804	3		1		
006	067_006	MSD	QC377840	122778	Water	08-MAR-2007 12:12	1.0	0.009804	3		1		
007	067_007	MS	QC377841	122778	Water	08-MAR-2007 12:34	1.0	0.009615	3		1		
008	067_008	MSD	QC377842	122778	Water	08-MAR-2007 12:55	1.0	0.009615	3		1		
009	067_009	SAMPLE	193108-008	122778	Water	08-MAR-2007 13:17	2.0	0.01	3	2	1		
010	067_010	SAMPLE	193108-011	122778	Water	08-MAR-2007 13:38	2.0	0.009901	3	2	1		1:BHCBET=261.257
011	067_011	SAMPLE	193108-011	122778	Water	08-MAR-2007 14:15	10.0	0.009901	3	1	1		
012	067_012	X	HEX			08-MAR-2007 15:06	1.0						
013	067_013	PEM	PEM			08-MAR-2007 15:28	1.0	1.0			1	1	
014	067_014	X	PEST_4			08-MAR-2007 15:49	1.0	1.0	9		1	3	
015	067_015	CCV	PEST_4			08-MAR-2007 16:38	1.0	1.0	2		1	3	
016	067_016	X	HEX			08-MAR-2007 18:19	1.0						
017	067_017	SAMPLE	193210-027	122843	Soil	08-MAR-2007 19:19	1.0	0.6653	10	1	1	>ac	
018	067_018	SAMPLE	193210-028	122843	Soil	08-MAR-2007 19:41	1.0	0.6581	9	1	1	>ac	
019	067_019	SAMPLE	193210-029	122843	Soil	08-MAR-2007 20:02	1.0	0.666	9	1	1	>ac	
020	067_020	SAMPLE	193210-030	122843	Soil	08-MAR-2007 20:24	1.0	0.6607	7	1	1	>ac	
021	067_021	SAMPLE	193210-035	122843	Soil	08-MAR-2007 20:45	1.0	0.6651	9		1	>ac	
022	067_022	X	QC378089	122843	Soil	08-MAR-2007 21:06	1.0	0.6596	13	8	1	>ac	
023	067_023	X	QC378090	122843	Soil	08-MAR-2007 21:28	1.0	0.6609	13	7	1	>ac	
024	067_024	X	HEX			08-MAR-2007 21:49	1.0						
025	067_025	PEM	PEM			08-MAR-2007 22:11	1.0	1.0			1	1	
026	067_026	CCV	PEST_5			08-MAR-2007 22:32	1.0	1.0	13		1	4 ac	
027	067_027	X	PEST_5			08-MAR-2007 22:54	1.0	1.0	13		1	4 ac	
028	067_028	X	PEM			08-MAR-2007 23:15	1.0					1	
029	067_029	X	HEX			08-MAR-2007 23:36	1.0						

Stds used: 1=S5053 2=S5555 3=S5556 4=S5049
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	071_001	X	PRIMER			12-MAR-2007 12:31	1.0						
002	071_002	X	PRIMER			12-MAR-2007 12:53	1.0						
003	071_003	X	PRIMER			12-MAR-2007 13:14	1.0						
004	071_004	X	PRIMER			12-MAR-2007 13:35	1.0						
005	071_005	X	HEX			12-MAR-2007 13:57	1.0						
006	071_006	X	PEST_3			12-MAR-2007 14:18	1.0	1.0	25		1	1 ac	
007	071_007	X	PEST_3			12-MAR-2007 14:40	1.0	1.0	36		1	1 ac	
008	071_008	X	PEM			12-MAR-2007 15:01	1.0	1.0			1	2	
009	071_009	X	PEST_4			12-MAR-2007 15:35	1.0	1.0	20		1	3 ac	
010	071_010	X	PEST_4			12-MAR-2007 16:00	1.0	1.0	27		1	3 ac	
011	071_011	X	PRIMER			12-MAR-2007 17:33	1.0						
012	071_012	X	PRIMER			12-MAR-2007 17:54	1.0						
013	071_013	X	PRIMER			12-MAR-2007 18:16	1.0						
014	071_014	X	PRIMER			12-MAR-2007 18:37	1.0						
015	071_015	X	HEX			12-MAR-2007 18:58	1.0						
016	071_016	PEM	PEM			12-MAR-2007 19:20	1.0	1.0			1	2	
017	071_017	X	HEX			12-MAR-2007 19:41	1.0						
018	071_018	ICAL	PEST_1			12-MAR-2007 20:02	1.0	1.0				4	
019	071_019	ICAL	PEST_2			12-MAR-2007 20:24	1.0	1.0				5	
020	071_020	ICAL	PEST_3			12-MAR-2007 20:45	1.0	1.0				1	
021	071_021	ICAL	PEST_4			12-MAR-2007 21:07	1.0	1.0				3	
022	071_022	ICAL	PEST_5			12-MAR-2007 21:28	1.0	1.0				6	
023	071_023	ICAL	PEST_6			12-MAR-2007 21:49	1.0	1.0				7	
024	071_024	ICAL	PEST_7			12-MAR-2007 22:11	1.0	1.0				8	
025	071_025	X	HEX			12-MAR-2007 22:32	1.0						
026	071_026	X	HEX			12-MAR-2007 22:53	1.0						
027	071_027	ICV	ICV			12-MAR-2007 23:15	1.0	1.0	3		1	9	2:XYL246=211.331
028	071_028	X	ICV			12-MAR-2007 23:36	1.0	1.0	4		1	9	2:CL10BZ=229.806
029	071_029	X	HEX			12-MAR-2007 23:57	1.0						
030	071_030	PEM	PEM			13-MAR-2007 11:00	1.0	1.0			1	2	

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	071_031	SAMPLE	193154-019	122843	Soil	13-MAR-2007 11:28	1.0	0.662			1		
032	071_032	X	HEX			13-MAR-2007 12:05	1.0						
033	071_033	PEM	PEM			13-MAR-2007 12:26	1.0	1.0			1	2	
034	071_034	CCV	PEST_3			13-MAR-2007 12:48	1.0	1.0			1	1	
035	071_035	X	HEX			13-MAR-2007 13:31	1.0						
036	071_036	ICAL	TOXAPHENE			13-MAR-2007 13:52	1.0	1.0				10	
037	071_037	X	TOXAPHENE			13-MAR-2007 14:13	1.0					10	
038	071_038	X	HEX			13-MAR-2007 14:34	1.0						
039	071_039	BLANK	QC378642	122973	Soil	13-MAR-2007 14:56	1.0	0.6669			1		
040	071_040	LCS	QC378643	122973	Soil	13-MAR-2007 15:17	1.0	0.6625			1		
041	071_041	MSS	193210-016	122973	Soil	13-MAR-2007 15:39	1.0	0.6669			1		
042	071_042	SAMPLE	193210-017	122973	Soil	13-MAR-2007 16:00	1.0	0.6633			1		
043	071_043	SAMPLE	193210-018	122973	Soil	13-MAR-2007 16:21	1.0	0.6603			1		
044	071_044	SAMPLE	193210-019	122973	Soil	13-MAR-2007 16:42	1.0	0.6579			1		
045	071_045	SAMPLE	193210-020	122973	Soil	13-MAR-2007 17:04	1.0	0.6577			1		
046	071_046	SAMPLE	193210-037	122973	Soil	13-MAR-2007 17:25	1.0	0.6594			1		
047	071_047	SAMPLE	193210-038	122973	Soil	13-MAR-2007 17:47	1.0	0.6607			1		
048	071_048	SAMPLE	193210-039	122973	Soil	13-MAR-2007 18:08	1.0	0.6638			1		
049	071_049	X	HEX			13-MAR-2007 18:30	1.0						
050	071_050	PEM	PEM			13-MAR-2007 19:10	1.0	1.0			1	2	
051	071_051	X	TOXAPHENE			13-MAR-2007 19:31	1.0	1.0	1		1	10	
052	071_052	CCV	TOXAPHENE			13-MAR-2007 19:53	1.0	1.0			1	10	
053	071_053	CCV	PEST_4			13-MAR-2007 20:14	1.0	1.0			1	3	
054	071_054	X	PEST_4			13-MAR-2007 20:36	1.0					3	
055	071_055	X	PEM			13-MAR-2007 20:57	1.0					2	
056	071_056	X	HEX			13-MAR-2007 21:19	1.0						
057	071_057	BLANK	QC377837	122778	Water	13-MAR-2007 21:40	1.0	0.01		3	1		
058	071_058	LCS	QC377838	122778	Water	13-MAR-2007 22:02	1.0	0.01			1		
059	071_059	SAMPLE	193108-008	122778	Water	13-MAR-2007 22:23	1.0	0.01	2	1	1		2:BHCGAM=102.821
060	071_060	SAMPLE	193108-011	122778	Water	13-MAR-2007 22:45	1.0	0.009901	1	1	1		1:BHCGAM=110.640

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193108 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
061	071_061	MSS	193210-027	122843	Soil	13-MAR-2007 23:06	1.0	0.6653	1		
062	071_062	SAMPLE	193210-028	122843	Soil	13-MAR-2007 23:28	1.0	0.6581	1		
063	071_063	SAMPLE	193210-029	122843	Soil	13-MAR-2007 23:49	1.0	0.666	1		
064	071_064	SAMPLE	193210-030	122843	Soil	14-MAR-2007 00:11	1.0	0.6607	1		
065	071_065	SAMPLE	193210-035	122843	Soil	14-MAR-2007 00:32	1.0	0.6651	1		
066	071_066	X	HEX			14-MAR-2007 00:54	1.0				
067	071_067	PEM	PEM			14-MAR-2007 01:15	1.0	1.0	1	2	
068	071_068	CCV	TOXAPHENE			14-MAR-2007 01:37	1.0	1.0	1	10	
069	071_069	X	TOXAPHENE			14-MAR-2007 01:58	1.0			10	
070	071_070	CCV	PEST_3			14-MAR-2007 02:19	1.0	1.0	1	1	
071	071_071	X	PEST_3			14-MAR-2007 02:41	1.0			1	
072	071_072	X	PEM			14-MAR-2007 03:02	1.0			2	
073	071_073	X	HEX			14-MAR-2007 03:24	1.0				
074	071_074	BLANK	QC378784	123004	Water	14-MAR-2007 03:45	1.0	0.01	1		
075	071_075	BS	QC378785	123004	Water	14-MAR-2007 04:07	1.0	0.01	1		
076	071_076	BSD	QC378786	123004	Water	14-MAR-2007 04:29	1.0	0.01	1		
077	071_077	SAMPLE	193261-001	123004	Water	14-MAR-2007 04:50	1.0	0.009804	1		
078	071_078	SAMPLE	193261-002	123004	Water	14-MAR-2007 05:12	1.0	0.009709	1		
079	071_079	SAMPLE	193261-003	123004	Water	14-MAR-2007 05:33	1.0	0.009804	1		
080	071_080	SAMPLE	193261-004	123004	Water	14-MAR-2007 05:55	1.0	0.009709	1		
081	071_081	SAMPLE	193335-001	123004	Water	14-MAR-2007 06:16	1.0	0.009804	1		
082	071_082	X	HEX			14-MAR-2007 06:38	1.0				
083	071_083	PEM	PEM			14-MAR-2007 06:59	1.0	1.0	1	2	
084	071_084	CCV	PEST_4			14-MAR-2007 07:21	1.0	1.0	1	3	
085	071_085	X	PEST_4			14-MAR-2007 07:42	1.0			3	
086	071_086	X	PEM			14-MAR-2007 08:04	1.0			2	
087	071_087	X	HEX			14-MAR-2007 08:26	1.0				

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	alpha-BHC	GC23	B	03/07/07 21:48
193108-007	beta-BHC	GC23	B	03/07/07 21:48
193108-007	gamma-BHC	GC23	B	03/07/07 21:48
193108-007	delta-BHC	GC23	B	03/07/07 21:48
193108-007	Heptachlor	GC23	B	03/07/07 21:48
193108-007	Aldrin	GC23	B	03/07/07 21:48
193108-007	Heptachlor epoxide	GC23	B	03/07/07 21:48
193108-007	Endosulfan I	GC23	B	03/07/07 21:48
193108-007	Dieldrin	GC23	B	03/07/07 21:48
193108-007	4,4'-DDE	GC23	B	03/07/07 21:48
193108-007	Endrin	GC23	B	03/07/07 21:48
193108-007	Endosulfan II	GC23	B	03/07/07 21:48
193108-007	Endosulfan sulfate	GC23	B	03/07/07 21:48
193108-007	4,4'-DDD	GC23	B	03/07/07 21:48
193108-007	4,4'-DDT	GC23	B	03/07/07 21:48
193108-007	alpha-Chlordane	GC23	B	03/07/07 21:48
193108-007	gamma-Chlordane	GC23	B	03/07/07 21:48
193108-007	Methoxychlor	GC23	B	03/07/07 21:48
193108-007	Endrin ketone	GC23	B	03/07/07 21:48
193108-007	Toxaphene	GC23	B	03/07/07 21:48
193108-007	TCMX	GC23	B	03/07/07 21:48
193108-007	Decachlorobiphenyl	GC23	B	03/07/07 21:48
193108-008	alpha-BHC	GC23	A	03/13/07 22:23
193108-008	beta-BHC	GC23	A	03/13/07 22:23
193108-008	gamma-BHC	GC23	A	03/08/07 13:17
193108-008	delta-BHC	GC23	A	03/13/07 22:23
193108-008	Heptachlor	GC23	A	03/13/07 22:23
193108-008	Aldrin	GC23	A	03/13/07 22:23
193108-008	Heptachlor epoxide	GC23	A	03/13/07 22:23
193108-008	Endosulfan I	GC23	A	03/13/07 22:23
193108-008	Dieldrin	GC23	A	03/13/07 22:23
193108-008	4,4'-DDE	GC23	A	03/13/07 22:23
193108-008	Endrin	GC23	A	03/13/07 22:23
193108-008	Endosulfan II	GC23	A	03/13/07 22:23
193108-008	Endosulfan sulfate	GC23	A	03/13/07 22:23
193108-008	4,4'-DDD	GC23	A	03/13/07 22:23
193108-008	4,4'-DDT	GC23	A	03/13/07 22:23
193108-008	alpha-Chlordane	GC23	A	03/13/07 22:23
193108-008	gamma-Chlordane	GC23	A	03/13/07 22:23
193108-008	Methoxychlor	GC23	A	03/13/07 22:23
193108-008	Endrin ketone	GC23	A	03/13/07 22:23
193108-008	Toxaphene	GC23	A	03/13/07 22:23
193108-008	TCMX	GC23	A	03/13/07 22:23
193108-008	Decachlorobiphenyl	GC23	A	03/13/07 22:23
193108-010	alpha-BHC	GC23	B	03/07/07 22:31
193108-010	beta-BHC	GC23	B	03/07/07 22:31
193108-010	gamma-BHC	GC23	B	03/07/07 22:31
193108-010	delta-BHC	GC23	B	03/07/07 22:31
193108-010	Heptachlor	GC23	B	03/07/07 22:31
193108-010	Aldrin	GC23	B	03/07/07 22:31
193108-010	Heptachlor epoxide	GC23	B	03/07/07 22:31
193108-010	Endosulfan I	GC23	B	03/07/07 22:31

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-010	Dieldrin	GC23	B	03/07/07 22:31
193108-010	4,4'-DDE	GC23	B	03/07/07 22:31
193108-010	Endrin	GC23	B	03/07/07 22:31
193108-010	Endosulfan II	GC23	B	03/07/07 22:31
193108-010	Endosulfan sulfate	GC23	B	03/07/07 22:31
193108-010	4,4'-DDD	GC23	B	03/07/07 22:31
193108-010	4,4'-DDT	GC23	B	03/07/07 22:31
193108-010	alpha-Chlordane	GC23	B	03/07/07 22:31
193108-010	gamma-Chlordane	GC23	B	03/07/07 22:31
193108-010	Methoxychlor	GC23	B	03/07/07 22:31
193108-010	Endrin ketone	GC23	B	03/07/07 22:31
193108-010	Toxaphene	GC23	B	03/07/07 22:31
193108-010	TCMX	GC23	B	03/07/07 22:31
193108-010	Decachlorobiphenyl	GC23	B	03/07/07 22:31
193108-011	alpha-BHC	GC23	A	03/13/07 22:45
193108-011	beta-BHC	GC23	A	03/13/07 22:45
193108-011	gamma-BHC	GC23	A	03/08/07 13:38
193108-011	delta-BHC	GC23	A	03/13/07 22:45
193108-011	Heptachlor	GC23	A	03/13/07 22:45
193108-011	Aldrin	GC23	A	03/13/07 22:45
193108-011	Heptachlor epoxide	GC23	A	03/13/07 22:45
193108-011	Endosulfan I	GC23	A	03/13/07 22:45
193108-011	Dieldrin	GC23	A	03/13/07 22:45
193108-011	4,4'-DDE	GC23	A	03/13/07 22:45
193108-011	Endrin	GC23	A	03/13/07 22:45
193108-011	Endosulfan II	GC23	A	03/13/07 22:45
193108-011	Endosulfan sulfate	GC23	A	03/13/07 22:45
193108-011	4,4'-DDD	GC23	A	03/13/07 22:45
193108-011	4,4'-DDT	GC23	A	03/13/07 22:45
193108-011	alpha-Chlordane	GC23	A	03/13/07 22:45
193108-011	gamma-Chlordane	GC23	A	03/13/07 22:45
193108-011	Methoxychlor	GC23	A	03/13/07 22:45
193108-011	Endrin ketone	GC23	A	03/13/07 22:45
193108-011	Toxaphene	GC23	A	03/13/07 22:45
193108-011	TCMX	GC23	A	03/13/07 22:45
193108-011	Decachlorobiphenyl	GC23	A	03/13/07 22:45
193108-013	alpha-BHC	GC23	B	03/07/07 23:14
193108-013	beta-BHC	GC23	B	03/07/07 23:14
193108-013	gamma-BHC	GC23	B	03/07/07 23:14
193108-013	delta-BHC	GC23	B	03/07/07 23:14
193108-013	Heptachlor	GC23	B	03/07/07 23:14
193108-013	Aldrin	GC23	B	03/07/07 23:14
193108-013	Heptachlor epoxide	GC23	B	03/07/07 23:14
193108-013	Endosulfan I	GC23	B	03/07/07 23:14
193108-013	Dieldrin	GC23	B	03/07/07 23:14
193108-013	4,4'-DDE	GC23	B	03/07/07 23:14
193108-013	Endrin	GC23	B	03/07/07 23:14
193108-013	Endosulfan II	GC23	B	03/07/07 23:14
193108-013	Endosulfan sulfate	GC23	B	03/07/07 23:14
193108-013	4,4'-DDD	GC23	B	03/07/07 23:14
193108-013	4,4'-DDT	GC23	B	03/07/07 23:14
193108-013	alpha-Chlordane	GC23	B	03/07/07 23:14

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-013	gamma-Chlordane	GC23	B	03/07/07 23:14
193108-013	Methoxychlor	GC23	B	03/07/07 23:14
193108-013	Endrin ketone	GC23	B	03/07/07 23:14
193108-013	Toxaphene	GC23	B	03/07/07 23:14
193108-013	TCMX	GC23	B	03/07/07 23:14
193108-013	Decachlorobiphenyl	GC23	B	03/07/07 23:14
193108-022	alpha-BHC	GC23	B	03/07/07 23:35
193108-022	beta-BHC	GC23	B	03/07/07 23:35
193108-022	gamma-BHC	GC23	B	03/07/07 23:35
193108-022	delta-BHC	GC23	B	03/07/07 23:35
193108-022	Heptachlor	GC23	B	03/07/07 23:35
193108-022	Aldrin	GC23	B	03/07/07 23:35
193108-022	Heptachlor epoxide	GC23	B	03/07/07 23:35
193108-022	Endosulfan I	GC23	B	03/07/07 23:35
193108-022	Dieldrin	GC23	B	03/07/07 23:35
193108-022	4,4'-DDE	GC23	B	03/07/07 23:35
193108-022	Endrin	GC23	B	03/07/07 23:35
193108-022	Endosulfan II	GC23	B	03/07/07 23:35
193108-022	Endosulfan sulfate	GC23	B	03/07/07 23:35
193108-022	4,4'-DDD	GC23	B	03/07/07 23:35
193108-022	4,4'-DDT	GC23	B	03/07/07 23:35
193108-022	alpha-Chlordane	GC23	B	03/07/07 23:35
193108-022	gamma-Chlordane	GC23	B	03/07/07 23:35
193108-022	Methoxychlor	GC23	B	03/07/07 23:35
193108-022	Endrin ketone	GC23	B	03/07/07 23:35
193108-022	Toxaphene	GC23	A	03/07/07 23:35
193108-022	TCMX	GC23	B	03/07/07 23:35
193108-022	Decachlorobiphenyl	GC23	B	03/07/07 23:35
193108-023	alpha-BHC	GC23	B	03/07/07 23:57
193108-023	beta-BHC	GC23	B	03/07/07 23:57
193108-023	gamma-BHC	GC23	B	03/07/07 23:57
193108-023	delta-BHC	GC23	B	03/07/07 23:57
193108-023	Heptachlor	GC23	B	03/07/07 23:57
193108-023	Aldrin	GC23	B	03/07/07 23:57
193108-023	Heptachlor epoxide	GC23	B	03/07/07 23:57
193108-023	Endosulfan I	GC23	B	03/07/07 23:57
193108-023	Dieldrin	GC23	B	03/07/07 23:57
193108-023	4,4'-DDE	GC23	B	03/07/07 23:57
193108-023	Endrin	GC23	B	03/07/07 23:57
193108-023	Endosulfan II	GC23	B	03/07/07 23:57
193108-023	Endosulfan sulfate	GC23	B	03/07/07 23:57
193108-023	4,4'-DDD	GC23	B	03/07/07 23:57
193108-023	4,4'-DDT	GC23	B	03/07/07 23:57
193108-023	alpha-Chlordane	GC23	B	03/07/07 23:57
193108-023	gamma-Chlordane	GC23	B	03/07/07 23:57
193108-023	Methoxychlor	GC23	B	03/07/07 23:57
193108-023	Endrin ketone	GC23	B	03/07/07 23:57
193108-023	Toxaphene	GC23	B	03/07/07 23:57
193108-023	TCMX	GC23	B	03/07/07 23:57
193108-023	Decachlorobiphenyl	GC23	B	03/07/07 23:57
193108-025	alpha-BHC	GC23	B	03/08/07 00:18

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-025	beta-BHC	GC23	B	03/08/07 00:18
193108-025	gamma-BHC	GC23	B	03/08/07 00:18
193108-025	delta-BHC	GC23	B	03/08/07 00:18
193108-025	Heptachlor	GC23	B	03/08/07 00:18
193108-025	Aldrin	GC23	B	03/08/07 00:18
193108-025	Heptachlor epoxide	GC23	B	03/08/07 00:18
193108-025	Endosulfan I	GC23	B	03/08/07 00:18
193108-025	Dieldrin	GC23	B	03/08/07 00:18
193108-025	4,4'-DDE	GC23	B	03/08/07 00:18
193108-025	Endrin	GC23	B	03/08/07 00:18
193108-025	Endosulfan II	GC23	B	03/08/07 00:18
193108-025	Endosulfan sulfate	GC23	B	03/08/07 00:18
193108-025	4,4'-DDD	GC23	B	03/08/07 00:18
193108-025	4,4'-DDT	GC23	B	03/08/07 00:18
193108-025	alpha-Chlordane	GC23	B	03/08/07 00:18
193108-025	gamma-Chlordane	GC23	B	03/08/07 00:18
193108-025	Methoxychlor	GC23	B	03/08/07 00:18
193108-025	Endrin ketone	GC23	B	03/08/07 00:18
193108-025	Toxaphene	GC23	B	03/08/07 00:18
193108-025	TCMX	GC23	B	03/08/07 00:18
193108-025	Decachlorobiphenyl	GC23	B	03/08/07 00:18
193108-026	alpha-BHC	GC23	B	03/08/07 00:39
193108-026	beta-BHC	GC23	B	03/08/07 00:39
193108-026	gamma-BHC	GC23	B	03/08/07 00:39
193108-026	delta-BHC	GC23	B	03/08/07 00:39
193108-026	Heptachlor	GC23	B	03/08/07 00:39
193108-026	Aldrin	GC23	B	03/08/07 00:39
193108-026	Heptachlor epoxide	GC23	B	03/08/07 00:39
193108-026	Endosulfan I	GC23	B	03/08/07 00:39
193108-026	Dieldrin	GC23	B	03/08/07 00:39
193108-026	4,4'-DDE	GC23	B	03/08/07 00:39
193108-026	Endrin	GC23	B	03/08/07 00:39
193108-026	Endosulfan II	GC23	B	03/08/07 00:39
193108-026	Endosulfan sulfate	GC23	B	03/08/07 00:39
193108-026	4,4'-DDD	GC23	B	03/08/07 00:39
193108-026	4,4'-DDT	GC23	B	03/08/07 00:39
193108-026	alpha-Chlordane	GC23	B	03/08/07 00:39
193108-026	gamma-Chlordane	GC23	B	03/08/07 00:39
193108-026	Methoxychlor	GC23	B	03/08/07 00:39
193108-026	Endrin ketone	GC23	B	03/08/07 00:39
193108-026	Toxaphene	GC23	A	03/08/07 00:39
193108-026	TCMX	GC23	B	03/08/07 00:39
193108-026	Decachlorobiphenyl	GC23	B	03/08/07 00:39
193108-027	alpha-BHC	GC23	B	03/08/07 01:01
193108-027	beta-BHC	GC23	B	03/08/07 01:01
193108-027	gamma-BHC	GC23	B	03/08/07 01:01
193108-027	delta-BHC	GC23	B	03/08/07 01:01
193108-027	Heptachlor	GC23	B	03/08/07 01:01
193108-027	Aldrin	GC23	B	03/08/07 01:01
193108-027	Heptachlor epoxide	GC23	B	03/08/07 01:01
193108-027	Endosulfan I	GC23	B	03/08/07 01:01
193108-027	Dieldrin	GC23	B	03/08/07 01:01

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-027	4,4'-DDE	GC23	B	03/08/07 01:01
193108-027	Endrin	GC23	B	03/08/07 01:01
193108-027	Endosulfan II	GC23	B	03/08/07 01:01
193108-027	Endosulfan sulfate	GC23	B	03/08/07 01:01
193108-027	4,4'-DDD	GC23	B	03/08/07 01:01
193108-027	4,4'-DDT	GC23	B	03/08/07 01:01
193108-027	alpha-Chlordane	GC23	B	03/08/07 01:01
193108-027	gamma-Chlordane	GC23	B	03/08/07 01:01
193108-027	Methoxychlor	GC23	B	03/08/07 01:01
193108-027	Endrin ketone	GC23	B	03/08/07 01:01
193108-027	Toxaphene	GC23	A	03/08/07 01:01
193108-027	TCMX	GC23	B	03/08/07 01:01
193108-027	Decachlorobiphenyl	GC23	B	03/08/07 01:01
QC377837	alpha-BHC	GC23	A	03/13/07 21:40
QC377837	beta-BHC	GC23	A	03/13/07 21:40
QC377837	gamma-BHC	GC23	A	03/13/07 21:40
QC377837	delta-BHC	GC23	A	03/13/07 21:40
QC377837	Heptachlor	GC23	A	03/13/07 21:40
QC377837	Aldrin	GC23	A	03/13/07 21:40
QC377837	Heptachlor epoxide	GC23	A	03/13/07 21:40
QC377837	Endosulfan I	GC23	A	03/13/07 21:40
QC377837	Dieldrin	GC23	A	03/13/07 21:40
QC377837	4,4'-DDE	GC23	A	03/13/07 21:40
QC377837	Endrin	GC23	A	03/13/07 21:40
QC377837	Endosulfan II	GC23	A	03/13/07 21:40
QC377837	Endosulfan sulfate	GC23	A	03/13/07 21:40
QC377837	4,4'-DDD	GC23	A	03/13/07 21:40
QC377837	4,4'-DDT	GC23	A	03/13/07 21:40
QC377837	alpha-Chlordane	GC23	A	03/13/07 21:40
QC377837	gamma-Chlordane	GC23	A	03/13/07 21:40
QC377837	Methoxychlor	GC23	A	03/13/07 21:40
QC377837	Endrin ketone	GC23	A	03/13/07 21:40
QC377837	Toxaphene	GC23	A	03/13/07 21:40
QC377837	TCMX	GC23	B	03/13/07 21:40
QC377837	Decachlorobiphenyl	GC23	B	03/13/07 21:40
QC377838	gamma-BHC	GC23	A	03/13/07 22:02
QC377838	Heptachlor	GC23	A	03/13/07 22:02
QC377838	Aldrin	GC23	A	03/13/07 22:02
QC377838	Dieldrin	GC23	A	03/13/07 22:02
QC377838	Endrin	GC23	A	03/13/07 22:02
QC377838	4,4'-DDT	GC23	A	03/13/07 22:02
QC377838	TCMX	GC23	A	03/13/07 22:02
QC377838	Decachlorobiphenyl	GC23	A	03/13/07 22:02
QC377839	gamma-BHC	GC23	A	03/08/07 11:51
QC377839	Heptachlor	GC23	A	03/08/07 11:51
QC377839	Aldrin	GC23	A	03/08/07 11:51
QC377839	Dieldrin	GC23	A	03/08/07 11:51
QC377839	Endrin	GC23	A	03/08/07 11:51
QC377839	4,4'-DDT	GC23	A	03/08/07 11:51
QC377839	TCMX	GC23	A	03/08/07 11:51
QC377839	Decachlorobiphenyl	GC23	B	03/08/07 11:51

REPORTING SUMMARY FOR 193108 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377840	gamma-BHC	GC23	A	03/08/07 12:12
QC377840	Heptachlor	GC23	A	03/08/07 12:12
QC377840	Aldrin	GC23	A	03/08/07 12:12
QC377840	Dieldrin	GC23	A	03/08/07 12:12
QC377840	Endrin	GC23	A	03/08/07 12:12
QC377840	4,4'-DDT	GC23	A	03/08/07 12:12
QC377840	TCMX	GC23	A	03/08/07 12:12
QC377840	Decachlorobiphenyl	GC23	B	03/08/07 12:12
QC377841	gamma-BHC	GC23	A	03/08/07 12:34
QC377841	Heptachlor	GC23	A	03/08/07 12:34
QC377841	Aldrin	GC23	A	03/08/07 12:34
QC377841	Dieldrin	GC23	A	03/08/07 12:34
QC377841	Endrin	GC23	A	03/08/07 12:34
QC377841	4,4'-DDT	GC23	A	03/08/07 12:34
QC377841	TCMX	GC23	A	03/08/07 12:34
QC377841	Decachlorobiphenyl	GC23	B	03/08/07 12:34
QC377842	gamma-BHC	GC23	A	03/08/07 12:55
QC377842	Heptachlor	GC23	A	03/08/07 12:55
QC377842	Aldrin	GC23	A	03/08/07 12:55
QC377842	Dieldrin	GC23	A	03/08/07 12:55
QC377842	Endrin	GC23	A	03/08/07 12:55
QC377842	4,4'-DDT	GC23	A	03/08/07 12:55
QC377842	TCMX	GC23	A	03/08/07 12:55
QC377842	Decachlorobiphenyl	GC23	B	03/08/07 12:55

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Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 18:29

Batch Number : 122778
Date Extracted: 06-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5243H
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007		Treadwell & Rollo	Water	1020	mL	10	0.009804	1	7	.025	0		8081		MSS
193108-008		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193108-010		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193108-011		Treadwell & Rollo	Water	1010	mL	10	0.009901	1	7	.025	0		8081		
193108-013		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193108-022		Treadwell & Rollo	Water	1010	mL	10	0.009901	1	7	.025	0		8081		
193108-023		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	7	.025	0		8081		MSS
193108-025		Treadwell & Rollo	Water	950	mL	10	0.010526	1	7	.025	0		8081		
193108-026		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193108-027		Treadwell & Rollo	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193169-001		Strategic Engineering & Scienc	Water	1060	mL	10	0.009434	1	10	.025	0		8081		
QC377837	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC377838	LCS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC377839	MS	of 193108-007	Water	1020	mL	10	0.009804	1	7	.025	.025		8081		
QC377840	MSD	of 193108-007	Water	1020	mL	10	0.009804	1	7	.025	.025		8081		
QC377841	MS	of 193108-023	Water	1040	mL	10	0.009615	1	7	.025	.025		8081		
QC377842	MSD	of 193108-023	Water	1040	mL	10	0.009615	1	7	.025	.025		8081		

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Prep Chemist: Jessie Mee Reviewed By: Pamela Hoyt Date: 3/8/07

Relinquished By: J Galvez Received By: [illegible] Date: 3/8/07

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 122778
LIMS Analysis: 8081
Extracted by: JOM
Date Extracted: 6 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-007 AE	1020	7	10.0		MSS
08 M	1000				
10 N	1000				
11 M	1010				
13 K	1030				
22 N	~~1000~~ JOM 3/6/07 1010				
25 L	950				
26 O	1060				
27 N	1030				
23 AM	1040				MSS
193169-001 J	1060	10			
MB QC377837	1000	NA			
LCS 38	1000				
MS 39	1020	7			193108-007 AB
MSD 40	1020				AG
MS 41	1040				193108-023 AR blackish H_2O
MSD 42	1040				AL yellowish H_2O

JOM 3/8/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	S5616A	JOM 3/6/07
0.025 mL of matrix spiking solution was added to all spikes	S5243H	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1740	
Extraction End Time:	1200	JOM 3/7/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	3/8/07 JDG
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ Granular Na_2SO_4	EM46011620	
Exchanged 2x with Hexane	JTBC80254	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	

[signature] 3/6/07
Extraction Chemist Date

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Continued on Page ___

Pamela Mayfield 3/8/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Florisil Cleanup** **EPA 3620B**

Prep Chemist: RFW

Cleanup Date: 3/12/07

Benchbook # **BK 2427**

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Sample #	Extraction Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193210-016	122973	1.0	1.0	MSS
-017				
-018				
-019				
-020				
-037				
-038				
-039				
MB QC 378642				
LCS 43				
MS 44				
MSD 45				
193108-008	122778			H_2O^s; by request from analysts
-011				
MB QC 377837				
LCS 38				

JOM 3/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☒ Extracts were cleaned up using Florisil cartridges	SP3687	RCW 3/12/07
Florisil cartridges/ columns rinsed 3x with Hexane	JTB C43E40	
Extracts were eluted with 90 mL 9:1 Hexane/Acetone — Hexane		
Acetone	EM46296	
Concentrated to volumes as noted above	✓	

Extraction Chemist / Date

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Continued from page ___

Continued on page ___

3/13/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/23/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW100	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-008	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	0.99
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	49 *	65-135
Decachlorobiphenyl	21 *	65-135

Field ID:	DUP0301073B	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-011	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.98
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	46 *	65-135
Decachlorobiphenyl	22 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW08	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-013	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	36 *	65-135

Field ID:	DAEGW103	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-022	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.98
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	71	65-135
Decachlorobiphenyl	24 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW104	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-023	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	36 *	65-135

Field ID:	DAEGW03	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-025	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	50 *	65-135
Decachlorobiphenyl	38 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-026	Analyzed:	03/11/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	47 *	65-135
Decachlorobiphenyl	37 *	65-135

Field ID:	DUP0302071A	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/08/07
Lab ID:	193108-027	Analyzed:	03/10/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	26 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	1349MW100 RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-028	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.97
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	48 * b	65-135
Decachlorobiphenyl	43 * b	65-135

Field ID:	DUP0301073B RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-029	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.98
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	48 * b	65-135
Decachlorobiphenyl	42 * b	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW08 RE	Sampled:	03/01/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-030	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.48
Aroclor-1221	ND b	0.96
Aroclor-1232	ND b	0.48
Aroclor-1242	ND b	0.48
Aroclor-1248	ND b	0.48
Aroclor-1254	ND b	0.48
Aroclor-1260	ND b	0.48

Surrogate	%REC	Limits
TCMX	69 b	65-135
Decachlorobiphenyl	39 * b	65-135

Field ID:	DAEGW03 RE	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-031	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.49
Aroclor-1221	ND b	0.98
Aroclor-1232	ND b	0.49
Aroclor-1242	ND b	0.49
Aroclor-1248	ND b	0.49
Aroclor-1254	ND b	0.49
Aroclor-1260	ND b	0.49

Surrogate	%REC	Limits
TCMX	52 * b	65-135
Decachlorobiphenyl	54 * b	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Field ID:	DAEGW05 RE	Sampled:	03/02/07
Type:	SAMPLE	Prepared:	03/13/07
Lab ID:	193108-032	Analyzed:	03/15/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND b	0.50
Aroclor-1221	ND b	1.0
Aroclor-1232	ND b	0.50
Aroclor-1242	ND b	0.50
Aroclor-1248	ND b	0.50
Aroclor-1254	ND b	0.50
Aroclor-1260	ND b	0.50

Surrogate	%REC	Limits
TCMX	68 b	65-135
Decachlorobiphenyl	53 * b	65-135

Type:	BLANK	Prepared:	03/08/07
Lab ID:	QC378222	Analyzed:	03/09/07
Batch#:	122872	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	75	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	03/02/07

Type:	BLANK	Prepared:	03/13/07
Lab ID:	QC379056	Analyzed:	03/14/07
Batch#:	123068	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	62 *	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378223	Batch#:	122872
Matrix:	Water	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/09/07

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	4.171	83	65-135

Surrogate	%REC	Limits
TCMX	101	65-135
Decachlorobiphenyl	78	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	123068
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: BS
Lab ID: QC379057
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.680	114	65-135

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	60 *	65-135

Type: BSD
Lab ID: QC379058
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	5.006	100	65-135	13	35

Surrogate	%REC	Limits
TCMX	88	65-135
Decachlorobiphenyl	55 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DAEGW104	Batch#:	122872
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/09/07

Type: MS Cleanup Method: EPA 3665A
Lab ID: QC378224

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1242	<0.1180	4.762	3.638	76	65-135

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	29 *	65-135

Type: MSD Cleanup Method: EPA 3665A
Lab ID: QC378225

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	4.762	3.634	76	65-135	0	34

Surrogate	%REC	Limits
TCMX	80	65-135
Decachlorobiphenyl	24 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257090163001
Units : pg

Name : ar1660_062
Date : 03-MAR-2007 19:07
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	062_011	257090163011	PCB10_2	03-MAR-2007 19:07	S5483
L2	062_012	257090163012	PCB25_5	03-MAR-2007 19:34	S5484
L3	062_013	257090163013	PCB100_20	03-MAR-2007 20:00	S4996
L4	062_014	257090163014	PCB250_50	03-MAR-2007 20:26	S4997
L5	062_015	257090163015	PCB500_100	03-MAR-2007 20:53	S4998
L6	062_016	257090163016	PCB750_150	03-MAR-2007 21:19	S5227
L7	062_017	257090163017	PCB1000_200	03-MAR-2007 21:46	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	986.00	1213.7	1047.0	934.46	884.45	941.49	908.47	AVRG		0.00101		987.94	11	.99	20	
Aroclor-1016 Peak # 2	A	1628.1	1541.2	1398.9	1239.9	1235.2	1393.9	1259.0	AVRG		7.22E-4		1385.2	11	.99	20	
Aroclor-1016 Peak # 3	A	418.20	558.20	657.13	589.24	560.66	614.72	550.05	AVRG		0.00177		564.03	13	.99	20	
Aroclor-1016 Peak # 4	A	374.60	510.64	481.76	428.50	395.19	443.63	396.44	AVRG		0.00231		432.97	11	.99	20	
Aroclor-1016 Peak # 5	A	543.90	689.96	611.54	540.04	515.03	578.05	509.59	AVRG		0.00176		569.73	11	.99	20	
Aroclor-1260 Peak # 1	A	1945.9	2511.4	2185.0	1901.5	1971.9	2296.9	1863.9	AVRG		4.77E-4		2096.6	12	.99	20	
Aroclor-1260 Peak # 2	A	1389.0	2001.0	1734.1	1510.0	1558.5	1904.1	1510.1	AVRG		6.03E-4		1658.1	14	.99	20	
Aroclor-1260 Peak # 3	A	1286.5	1525.6	1322.8	1150.7	1142.3	1340.3	1092.7	AVRG		7.90E-4		1265.8	12	.99	20	
Aroclor-1260 Peak # 4	A	835.30	1328.5	1110.9	995.34	1003.2	1182.6	995.47	AVRG		9.39E-4		1064.5	15	.99	20	
Aroclor-1260 Peak # 5	A	2734.8	3409.0	3046.7	2607.3	2731.2	3105.0	2431.7	AVRG		3.49E-4		2866.5	12	.99	20	
TCMX	A	30110	34956	32377	32182	31084	29116	26551	AVRG		3.24E-5		30911	9	.99	20	
Decachlorobiphenyl	A	21947	28116	23618	21623	21352	22909	17423	AVRG		4.46E-5		22427	14	.99	20	
Aroclor-1016 Peak # 1	B	506.50	505.64	484.07	388.07	405.21	395.44	391.18	AVRG		0.00228		439.44	13	.99	20	
Aroclor-1016 Peak # 2	B	1094.5	1048.4	1080.5	853.47	913.24	929.65	934.21	AVRG		0.00102		979.13	10	.99	20	
Aroclor-1016 Peak # 3	B	485.00	492.84	444.53	331.28	355.29	341.89	345.38	AVRG		0.00250		399.46	18	.99	20	
Aroclor-1016 Peak # 4	B	360.50	342.68	332.74	245.17	268.27	258.91	260.35	AVRG		0.00338		295.52	16	.99	20	
Aroclor-1016 Peak # 5	B	473.80	449.64	433.83	305.10	347.22	325.68	325.52	AVRG		0.00263		380.11	18	.99	20	
Aroclor-1260 Peak # 1	B	1103.2	1055.6	993.69	677.84	822.65	758.93	796.37	AVRG		0.00113		886.90	18	.99	20	
Aroclor-1260 Peak # 2	B	1671.3	1563.0	1447.7	971.95	1243.6	1148.3	1182.4	AVRG		7.59E-4		1318.3	19	.99	20	
Aroclor-1260 Peak # 3	B	1838.0	1525.3	1503.7	1032.1	1299.2	1206.2	1258.7	AVRG		7.24E-4		1380.5	19	.99	20	
Aroclor-1260 Peak # 4	B	1007.2	970.64	901.82	588.16	736.21	667.33	697.71	AVRG		0.00126		795.58	20	.99	20	
Aroclor-1260 Peak # 5	B	2835.4	2536.2	2329.0	1569.8	2098.9	1846.7	1860.5	AVRG		4.64E-4		2153.8	20	.99	20	
TCMX	B	26468	21975	21492	17899	19033	18451	17172	AVRG		4.91E-5		20356	16	.99	20	
Decachlorobiphenyl	B		19819	17402	11595	15792	13852	13410	AVRG		6.53E-5		15312	19	.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B		5.0000	20.000	50.000	100.00	150.00	200.00	pg

425

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

257090163001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PCBS Water
EPA 8082

Inst : GC22 Name : ar1660_062
Calnum : 257090163001 Cal Date: 03-MAR-2007

ICV 257090163020 (062_020 03-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	987.94		250.0	235.8	pg	-6	15	
Aroclor-1260	A	2096.6		250.0	270.9	pg	8	15	
Aroclor-1016	B	439.44		250.0	220.3	pg	-12	15	
Aroclor-1260	B	886.90		250.0	219.4	pg	-12	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257092782001
Units : pg

Name : ar1242
Date : 05-MAR-2007 13:28
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_007	257092782007	AR1242	05-MAR-2007 13:28	S5239

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	836.22	AVRG		0.00120		836.22	0	.99	20	
Aroclor-1242 Peak # 2	A	1084.3	AVRG		9.22E-4		1084.3	0	.99	20	
Aroclor-1242 Peak # 3	A	527.18	AVRG		0.00190		527.18	0	.99	20	
Aroclor-1242 Peak # 4	A	502.96	AVRG		0.00199		502.96	0	.99	20	
Aroclor-1242 Peak # 5	A	489.37	AVRG		0.00204		489.37	0	.99	20	
Aroclor-1242 Peak # 1	B	355.60	AVRG		0.00281		355.60	0	.99	20	
Aroclor-1242 Peak # 2	B	713.93	AVRG		0.00140		713.93	0	.99	20	
Aroclor-1242 Peak # 3	B	444.37	AVRG		0.00225		444.37	0	.99	20	
Aroclor-1242 Peak # 4	B	221.90	AVRG		0.00451		221.90	0	.99	20	
Aroclor-1242 Peak # 5	B	295.69	AVRG		0.00338		295.69	0	.99	20	

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Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257103122001
Units : pg

Name : 1660_071
Date : 12-MAR-2007 17:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_006	257103122006	PCB10_2	12-MAR-2007 17:36	S5483
L2	071_007	257103122007	PCB25_5	12-MAR-2007 18:02	S5484
L3	071_008	257103122008	PCB100_20	12-MAR-2007 18:29	S4996
L4	071_009	257103122009	PCB250_50	12-MAR-2007 18:55	S4997
L5	071_010	257103122010	PCB500_100	12-MAR-2007 19:22	S4998
L6	071_011	257103122011	PCB750_150	12-MAR-2007 19:48	S5227
L7	071_012	257103122012	PCB1000_200	12-MAR-2007 20:14	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	1148.7	1095.6	1111.1	966.15	817.74	903.27	930.70	AVRG		0.00100		996.18	12	.99	20	
Aroclor-1016 Peak # 2	A	1342.4	1385.2	1449.3	1325.1	1175.9	1380.5	1475.9	AVRG		7.34E-4		1362.1	7	.99	20	
Aroclor-1016 Peak # 3	A	597.80	559.44	656.04	598.44	511.78	568.47	603.45	AVRG		0.00171		585.06	8	.99	20	
Aroclor-1016 Peak # 4	A	378.10	405.52	446.45	401.34	338.75	361.82	391.90	AVRG		0.00257		389.13	9	.99	20	
Aroclor-1016 Peak # 5	A	667.30	649.64	669.16	606.22	520.26	575.48	610.12	AVRG		0.00163		614.02	9	.99	20	
Aroclor-1260 Peak # 1	A	2260.7	2217.4	2258.9	2143.2	2028.7	2210.1	2285.6	AVRG		4.54E-4		2200.6	4	.99	20	
Aroclor-1260 Peak # 2	A	1879.6	1844.9	1918.8	1787.4	1686.4	1887.8	2042.4	AVRG		5.37E-4		1863.9	6	.99	20	
Aroclor-1260 Peak # 3	A	1561.1	1166.5	1266.2	1174.9	1095.9	1178.6	1255.5	AVRG		8.05E-4		1242.7	12	.99	20	
Aroclor-1260 Peak # 4	A	3102.1	2924.0	3038.0	3027.6	2898.8	3041.4	3025.2	AVRG		3.32E-4		3008.2	2	.99	20	
Aroclor-1260 Peak # 5	A	1509.3	1397.4	1495.1	1418.8	1327.9	1470.6	1564.0	AVRG		6.87E-4		1454.7	5	.99	20	
TCMX	A	34845	31892	34012	33399	29284	29869	26488	AVRG		3.18E-5		31398	10	.99	20	
Decachlorobiphenyl	A	21658	20994	21971	22411	20771	20458	17498	AVRG		4.80E-5		20823	8	.99	20	
Aroclor-1016 Peak # 1	B	545.70	499.00	417.50	403.95	380.80	334.89	401.77	AVRG		0.00235		426.23	17	.99	20	
Aroclor-1016 Peak # 2	B	1194.7	1111.2	936.58	892.60	855.35	766.44	950.70	AVRG		0.00104		958.23	15	.99	20	
Aroclor-1016 Peak # 3	B	699.20	661.20	532.62	511.42	486.74	436.54	540.28	AVRG		0.00181		552.57	17	.99	20	
Aroclor-1016 Peak # 4	B	346.10	338.36	268.57	263.22	247.78	223.73	269.05	AVRG		0.00358		279.54	16	.99	20	
Aroclor-1016 Peak # 5	B	467.70	438.80	331.97	331.13	311.25	280.88	343.77	AVRG		0.00279		357.93	19	.99	20	
Aroclor-1260 Peak # 1	B	1515.8	1582.4	1126.0	1112.2	1150.6	1043.9	1343.9	AVRG		7.89E-4		1267.8	17	.99	20	
Aroclor-1260 Peak # 2	B	1057.0	1027.9	762.21	751.70	746.88	684.53	910.09	AVRG		0.00118		848.61	18	.99	20	
Aroclor-1260 Peak # 3	B	895.10	889.12	639.43	638.10	634.73	579.63	776.73	AVRG		0.00139		721.83	18	.99	20	
Aroclor-1260 Peak # 4	B	2237.1	2294.6	1651.7	1705.0	1809.9	1658.8	2111.3	AVRG		5.20E-4		1924.0	15	.99	20	
Aroclor-1260 Peak # 5	B	1125.4	1160.2	845.69	851.66	869.37	788.31	1056.7	AVRG		0.00105		956.76	16	.99	20	
TCMX	B	21813	20655	17169	16709	17334	15631	17398	AVRG		5.52E-5		18101	12	.99	20	
Decachlorobiphenyl	B	16028	16543	11873	12344	13416	12115	14415	AVRG		7.24E-5		13819	14	.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

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Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_071
Calnum : 257103122001 Cal Date: 12-MAR-2007

ICV 257103122014 (071_014 12-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	996.18		250.0	220.5	pg	-12	15	
Aroclor-1260	A	2200.6		250.0	231.4	pg	-7	15	
Aroclor-1016	B	426.23		250.0	222.2	pg	-11	15	
Aroclor-1260	B	1267.8		250.0	234.8	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257104282001
Units : pg

Name : ar1242
Date : 13-MAR-2007 12:17
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_004	257104282004	AR1242	13-MAR-2007 12:17	S5688

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	729.21	AVRG		0.00137		729.21	0	.99	20	
Aroclor-1242 Peak # 2	A	903.51	AVRG		0.00111		903.51	0	.99	20	
Aroclor-1242 Peak # 3	A	409.56	AVRG		0.00244		409.56	0	.99	20	
Aroclor-1242 Peak # 4	A	433.30	AVRG		0.00231		433.30	0	.99	20	
Aroclor-1242 Peak # 5	A	418.97	AVRG		0.00239		418.97	0	.99	20	
Aroclor-1242 Peak # 1	B	284.85	AVRG		0.00351		284.85	0	.99	20	
Aroclor-1242 Peak # 2	B	668.87	AVRG		0.00150		668.87	0	.99	20	
Aroclor-1242 Peak # 3	B	360.03	AVRG		0.00278		360.03	0	.99	20	
Aroclor-1242 Peak # 4	B	176.23	AVRG		0.00567		176.23	0	.99	20	
Aroclor-1242 Peak # 5	B	232.92	AVRG		0.00429		232.92	0	.99	20	

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Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	254.80	pg	2	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	240.69	pg	-4	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	488.88	pg	-2	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	447.76	pg	-10	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	677.73	pg	-10	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	689.89	pg	-8	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	247.85	pg	-1	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	243.36	pg	-3	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	431.57	pg	-14	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	462.25	pg	-8	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	743.29	pg	-1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	673.67	pg	-10	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	509.31	pg	2	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	474.93	pg	-5	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	232.01	pg	-7	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	251.94	pg	1	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1242

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648007	09-MAR-2007 15:44	257092782001	05-MAR-2007			250.00	227.09	pg	-9	15	
GC22	B	257098648007	09-MAR-2007 15:44	257092782001	05-MAR-2007			250.00	230.41	pg	-8	15	
GC22	A	257098648026	10-MAR-2007 00:07	257092782001	05-MAR-2007			250.00	225.68	pg	-10	15	
GC22	B	257098648026	10-MAR-2007 00:07	257092782001	05-MAR-2007			250.00	214.50	pg	-14	15	
GC22	A	257098648045	10-MAR-2007 08:28	257092782001	05-MAR-2007			250.00	238.46	pg	-5	15	
GC22	B	257098648045	10-MAR-2007 08:28	257092782001	05-MAR-2007			250.00	233.33	pg	-7	15	
GC22	A	257101495015	11-MAR-2007 22:19	257092782001	05-MAR-2007			250.00	242.25	pg	-3	15	
GC22	B	257101495015	11-MAR-2007 22:19	257092782001	05-MAR-2007			250.00	217.40	pg	-13	15	
GC22	A	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	277.17	pg	11	15	
GC22	B	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	275.72	pg	10	15	
GC22	A	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	282.26	pg	13	15	
GC22	B	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	281.75	pg	13	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	247.77	pg	-1	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007			250.00	225.41	pg	-10	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	539.70	pg	8	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007			500.00	465.75	pg	-7	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	725.51	pg	-3	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007			750.00	741.12	pg	-1	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	246.96	pg	-1	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007			250.00	246.32	pg	-1	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	486.40	pg	-3	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007			500.00	457.84	pg	-8	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	802.65	pg	7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	820.69	pg	9	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	516.61	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	534.32	pg	7	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	253.08	pg	1	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007			250.00	269.81	pg	8	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	30911	34336	50.000	55.541	pg	11	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	20356	19670	50.000	48.316	pg	-3	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	30911	33608	100.00	108.72	pg	9	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	20356	18941	100.00	93.050	pg	-7	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	30911	29775	150.00	144.49	pg	-4	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	20356	18823	150.00	138.71	pg	-8	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	30911	32830	50.000	53.104	pg	6	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	20356	18919	50.000	46.472	pg	-7	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	30911	29569	100.00	95.658	pg	-4	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	20356	19839	100.00	97.462	pg	-3	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	31398	29246	150.00	139.72	pg	-7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	18101	17058	150.00	141.35	pg	-6	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	31398	34984	100.00	111.42	pg	11	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	18101	19523	100.00	107.85	pg	8	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	31398	32365	50.000	51.539	pg	3	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	18101	17484	50.000	48.295	pg	-3	15	

CONTINUING CALIBRATION SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	22427	20493	50.000	45.689	pg	-9	15	
GC22	B	257098648003	09-MAR-2007 13:59	257090163001	03-MAR-2007	15312	14296	50.000	46.682	pg	-7	15	
GC22	A	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	22427	22879	100.00	102.01	pg	2	15	
GC22	B	257098648022	09-MAR-2007 22:21	257090163001	03-MAR-2007	15312	15121	100.00	98.757	pg	-1	15	
GC22	A	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	22427	19549	150.00	130.75	pg	-13	15	
GC22	B	257098648041	10-MAR-2007 06:43	257090163001	03-MAR-2007	15312	16322	150.00	159.89	pg	7	15	
GC22	A	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	22427	20859	50.000	46.505	pg	-7	15	
GC22	B	257101495002	11-MAR-2007 12:02	257090163001	03-MAR-2007	15312	16414	50.000	53.600	pg	7	15	
GC22	A	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	22427	22263	100.00	99.267	pg	-1	15	
GC22	B	257101495011	11-MAR-2007 20:33	257090163001	03-MAR-2007	15312	15349	100.00	100.25	pg	0	15	
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	20823	20971	150.00	151.07	pg	1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	13819	16166	150.00	175.47	pg	**17**	15	c+
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	20823	21438	100.00	102.96	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	13819	15104	100.00	109.30	pg	9	15	
GC22	A	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	20823	23885	50.000	57.353	pg	15	15	
GC22	B	257106081039	15-MAR-2007 08:49	257103122001	12-MAR-2007	13819	15913	50.000	57.577	pg	15	15	

+=high bias c=CCV

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257090163 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 03-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	062_001	X	PRIMER			03-MAR-2007 14:43	1.0						
002	062_002	X	PRIMER			03-MAR-2007 15:10	1.0						
003	062_003	X	PRIMER			03-MAR-2007 15:36	1.0						
004	062_004	X	PRIMER			03-MAR-2007 16:03	1.0						
005	062_005	X	PRIMER			03-MAR-2007 16:29	1.0						
006	062_006	X	PRIMER			03-MAR-2007 16:55	1.0						
007	062_007	X	PRIMER			03-MAR-2007 17:22	1.0						
008	062_008	X	HEX			03-MAR-2007 17:48	1.0						
009	062_009	X	HEX			03-MAR-2007 18:15	1.0						
010	062_010	X	HEX			03-MAR-2007 18:41	1.0						
011	062_011	ICAL	PCB10_2			03-MAR-2007 19:07	1.0					1	
012	062_012	ICAL	PCB25_5			03-MAR-2007 19:34	1.0					2	
013	062_013	ICAL	PCB100_20			03-MAR-2007 20:00	1.0					3	
014	062_014	ICAL	PCB250_50			03-MAR-2007 20:26	1.0					4	
015	062_015	ICAL	PCB500_100			03-MAR-2007 20:53	1.0					5	
016	062_016	ICAL	PCB750_150			03-MAR-2007 21:19	1.0					6	
017	062_017	ICAL	PCB1000_200			03-MAR-2007 21:46	1.0					7	
018	062_018	X	HEX			03-MAR-2007 22:12	1.0						
019	062_019	X	ULTRA_1660			03-MAR-2007 22:38	1.0					8	
020	062_020	ICV	ULTRA_1660			03-MAR-2007 23:05	1.0		1			8	
021	062_021	X	HEX			03-MAR-2007 23:31	1.0						

Stds used: 1=S5483 2=S5484 3=S4996 4=S4997 5=S4998 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	064_001	X	HEX			05-MAR-2007 10:22	1.0						
002	064_002	X	HEX			05-MAR-2007 10:49	1.0						
003	064_003	X	HEX			05-MAR-2007 11:15	1.0						
004	064_004	CCV	PCB750_150			05-MAR-2007 11:41	1.0	1.0			1	1	
005	064_005	X	PCB750_150			05-MAR-2007 12:08	1.0	1.0			1	1	
006	064_006	X	AR1242			05-MAR-2007 13:01	1.0					2	
007	064_007	ICAL	AR1242			05-MAR-2007 13:28	1.0	1.0				2	
008	064_008	X	AR2154			05-MAR-2007 14:51	1.0					3	
009	064_009	X	AR2154			05-MAR-2007 15:17	1.0					3	
010	064_010	X	AR1248			05-MAR-2007 15:44	1.0					4	
011	064_011	X	HEX			05-MAR-2007 16:10	1.0						
012	064_012	BLANK	QC377462	122695	Soil	05-MAR-2007 16:37	1.0	0.664			1		
013	064_013	MSS	193078-001	122695	Soil	05-MAR-2007 17:33	1.0	0.664			1		
014	064_014	SAMPLE	193061-021	122695	Soil	05-MAR-2007 17:59	1.0	0.6662			1		
015	064_015	SAMPLE	193061-022	122695	Soil	05-MAR-2007 18:26	1.0	0.6656		1	1		
016	064_016	SAMPLE	193061-023	122695	Soil	05-MAR-2007 18:52	1.0	0.6653			1		
017	064_017	SAMPLE	193061-024	122695	Soil	05-MAR-2007 19:19	1.0	0.6633			1		
018	064_018	SAMPLE	193061-025	122695	Soil	05-MAR-2007 19:45	1.0	0.6616		1	1		
019	064_019	LCS	QC377463	122695	Soil	05-MAR-2007 20:11	1.0	0.6642			1		
020	064_020	MS	QC377464	122695	Soil	05-MAR-2007 20:38	1.0	0.6664		2	1		
021	064_021	MSD	QC377465	122695	Soil	05-MAR-2007 21:04	1.0	0.6598		1	1		
022	064_022	X	HEX			05-MAR-2007 21:31	1.0						
023	064_023	CCV	PCB500_100			05-MAR-2007 21:57	1.0	1.0			1	5	
024	064_024	X	PCB500_100			05-MAR-2007 22:24	1.0	1.0	4		1	5	
025	064_025	CCV	AR1242			05-MAR-2007 22:50	1.0	1.0			1	2	
026	064_026	X	AR1242			05-MAR-2007 23:17	1.0	1.0			1	2	
027	064_027	X	AR2154			05-MAR-2007 23:43	1.0					3	
028	064_028	X	AR2154			06-MAR-2007 00:09	1.0					3	
029	064_029	X	AR1248			06-MAR-2007 00:36	1.0					4	
030	064_030	X	HEX			06-MAR-2007 01:02	1.0						
031	064_031	SAMPLE	193101-001	122695	Soil	06-MAR-2007 01:29	1.0	0.6629			1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257092782 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 05-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	064_032	SAMPLE	193101-002	122695	Soil	06-MAR-2007 01:55	1.0	0.666		1	1		
033	064_033	SAMPLE	193101-003	122695	Soil	06-MAR-2007 02:22	1.0	0.6645			1		
034	064_034	SAMPLE	193101-004	122695	Soil	06-MAR-2007 02:48	1.0	0.662		1	1		
035	064_035	SAMPLE	193101-005	122695	Soil	06-MAR-2007 03:15	1.0	0.6594			1		
036	064_036	SAMPLE	193101-006	122695	Soil	06-MAR-2007 03:41	1.0	0.664			1		
037	064_037	SAMPLE	193101-007	122695	Soil	06-MAR-2007 04:08	1.0	0.664			1		
038	064_038	SAMPLE	193101-008	122695	Soil	06-MAR-2007 04:34	1.0	0.6649	3		1		5:PCB101=3722.58
039	064_039	SAMPLE	193101-009	122695	Soil	06-MAR-2007 05:00	1.0	0.6633			1		
040	064_040	X	HEX			06-MAR-2007 05:27	1.0						
041	064_041	CCV	PCB250_50			06-MAR-2007 05:53	1.0	1.0			1	6	
042	064_042	X	PCB250_50			06-MAR-2007 06:20	1.0	1.0			1	6	
043	064_043	X	AR2154			06-MAR-2007 06:46	1.0					3	
044	064_044	X	AR2154			06-MAR-2007 07:13	1.0					3	
045	064_045	X	AR1248			06-MAR-2007 07:39	1.0					4	
046	064_046	X	HEX			06-MAR-2007 08:05	1.0						
047	064_047	SAMPLE	193075-001	122695	Soil	06-MAR-2007 08:32	1.0	0.6649			1		
048	064_048	SAMPLE	193075-002	122695	Soil	06-MAR-2007 08:58	1.0	0.6629			1		
049	064_049	SAMPLE	193075-003	122695	Soil	06-MAR-2007 09:25	1.0	0.6631			1		
050	064_050	X	HEX			06-MAR-2007 09:51	1.0						
051	064_051	SAMPLE	193055-006	122679	Water	06-MAR-2007 10:25	1.0	0.02358		2	1		
052	064_052	X	193055-009	122679	Water	06-MAR-2007 10:52	1.0	0.02381		4	1		
053	064_053	SAMPLE	193055-011	122679	Water	06-MAR-2007 11:18	1.0	0.02451			1		
054	064_054	X	HEX			06-MAR-2007 11:45	1.0						
055	064_055	CCV	PCB500_100			06-MAR-2007 12:11	1.0	1.0			1	5	
056	064_056	X	PCB500_100			06-MAR-2007 12:38	1.0	1.0			1	5	
057	064_057	X	AR2154			06-MAR-2007 13:04	1.0					3	
058	064_058	X	HEX			06-MAR-2007 13:30	1.0						
059	064_059	X	193055-009	122679	Water	06-MAR-2007 13:56	1.0	0.02381		4	1		

Stds used: 1=S5227 2=S5239 3=S5257 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257098648 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 09-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	068_001	X	TOX SCREEN			09-MAR-2007 12:08	1.0						
002	068_002	X	HEX			09-MAR-2007 13:32	1.0						
003	068_003	CCV	PCB250_50			09-MAR-2007 13:59	1.0	1.0			1	1	
004	068_004	X	PCB250_50			09-MAR-2007 14:25	1.0					1	
005	068_005	CCV	AR2154			09-MAR-2007 14:51	1.0					2	
006	068_006	CCV	AR2154			09-MAR-2007 15:18	1.0					2	
007	068_007	CCV	AR1242			09-MAR-2007 15:44	1.0	1.0			1	3	
008	068_008	X	AR1242			09-MAR-2007 16:11	1.0					3	
009	068_009	CCV	AR1248			09-MAR-2007 16:37	1.0					4	
010	068_010	X	HEX			09-MAR-2007 17:04	1.0						
011	068_011	BLANK	QC378222	122872	Water	09-MAR-2007 17:30	1.0	0.025			1		
012	068_012	LCS	QC378223	122872	Water	09-MAR-2007 17:57	1.0	0.025			1		
013	068_013	SAMPLE	193108-008	122872	Water	09-MAR-2007 18:23	1.0	0.02475		4	1		
014	068_014	SAMPLE	193108-011	122872	Water	09-MAR-2007 18:50	1.0	0.02451		4	1		
015	068_015	SAMPLE	193108-013	122872	Water	09-MAR-2007 19:16	1.0	0.02381		4	1		
016	068_016	SAMPLE	193108-022	122872	Water	09-MAR-2007 19:42	1.0	0.02451		2	1		
017	068_017	MSS	193108-023	122872	Water	09-MAR-2007 20:09	1.0	0.02358		2	1		
018	068_018	SAMPLE	193108-025	122872	Water	09-MAR-2007 20:35	1.0	0.02404		4	1		
019	068_019	MS	QC378224	122872	Water	09-MAR-2007 21:02	1.0	0.02381		2	1		
020	068_020	MSD	QC378225	122872	Water	09-MAR-2007 21:28	1.0	0.02381		2	1		
021	068_021	X	HEX			09-MAR-2007 21:55	1.0						
022	068_022	CCV	PCB500_100			09-MAR-2007 22:21	1.0	1.0			1	5	
023	068_023	X	PCB500_100			09-MAR-2007 22:47	1.0					5	
024	068_024	CCV	AR2154			09-MAR-2007 23:14	1.0					2	
025	068_025	CCV	AR2154			09-MAR-2007 23:40	1.0					2	
026	068_026	CCV	AR1242			10-MAR-2007 00:07	1.0	1.0			1	3	
027	068_027	X	AR1242			10-MAR-2007 00:33	1.0					3	
028	068_028	CCV	AR1248			10-MAR-2007 00:59	1.0					4	
029	068_029	X	HEX			10-MAR-2007 01:26	1.0						
030	068_030	BLANK	QC378376	122911	Soil	10-MAR-2007 01:52	1.0	0.8205			1		
031	068_031	SAMPLE	193260-004	122911	Soil	10-MAR-2007 02:19	1.0	0.8303			1		

Stds used: 1=S4997 2=S5257 3=S5239 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257098648 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 09-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	068_032	LCS	QC378377	122911	Soil	10-MAR-2007 02:45	1.0	0.8248			1		
033	068_033	SAMPLE	193108-026	122872	Water	10-MAR-2007 03:11	1.0	0.02427		4	1		
034	068_034	SAMPLE	193108-027	122872	Water	10-MAR-2007 03:38	1.0	0.02404		2	1		
035	068_035	SAMPLE	193226-007	122872	Water	10-MAR-2007 04:04	1.0	0.025			1		
036	068_036	SAMPLE	193230-001	122872	Water	10-MAR-2007 04:31	1.0	0.02475			1		
037	068_037	SAMPLE	193230-002	122872	Water	10-MAR-2007 04:57	1.0	0.02427			1		
038	068_038	SAMPLE	193230-003	122872	Water	10-MAR-2007 05:24	1.0	0.02427			1		
039	068_039	SAMPLE	193230-004	122872	Water	10-MAR-2007 05:50	1.0	0.02427			1		
040	068_040	X	HEX			10-MAR-2007 06:16	1.0						
041	068_041	CCV	PCB750_150			10-MAR-2007 06:43	1.0	1.0			1	6	
042	068_042	X	PCB750_150			10-MAR-2007 07:09	1.0					6	
043	068_043	CCV	AR2154			10-MAR-2007 07:36	1.0					2	
044	068_044	CCV	AR2154			10-MAR-2007 08:02	1.0					2	
045	068_045	CCV	AR1242			10-MAR-2007 08:28	1.0	1.0			1	3	
046	068_046	X	AR1242			10-MAR-2007 08:55	1.0					3	
047	068_047	CCV	AR1248			10-MAR-2007 09:21	1.0					4	
048	068_048	X	HEX			10-MAR-2007 09:48	1.0						

Stds used: 1=S4997 2=S5257 3=S5239 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257101495 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 11-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	070_001	X	HEX			11-MAR-2007 11:35	1.0						
002	070_002	CCV	PCB250_50			11-MAR-2007 12:02	1.0	1.0			1	1	
003	070_003	X	PCB250_50			11-MAR-2007 12:28	1.0					1	
004	070_004	X	HEX			11-MAR-2007 16:28	1.0						
005	070_005	SAMPLE	193108-008	122872	Water	11-MAR-2007 16:54	1.0	0.02475		4	1		
006	070_006	SAMPLE	193108-011	122872	Water	11-MAR-2007 17:21	1.0	0.02451		4	1		
007	070_007	SAMPLE	193108-013	122872	Water	11-MAR-2007 17:47	1.0	0.02381		4	1		
008	070_008	SAMPLE	193108-025	122872	Water	11-MAR-2007 19:13	1.0	0.02404		4	1		
009	070_009	SAMPLE	193108-026	122872	Water	11-MAR-2007 19:40	1.0	0.02427		4	1		
010	070_010	X	HEX			11-MAR-2007 20:06	1.0						
011	070_011	CCV	PCB500_100			11-MAR-2007 20:33	1.0	1.0			1	2	
012	070_012	X	PCB500_100			11-MAR-2007 20:59	1.0	1.0	1		1	2	
013	070_013	ICAL	AR2154			11-MAR-2007 21:26	1.0	1.0			1	3	
014	070_014	CCV	AR2154			11-MAR-2007 21:52	1.0	1.0	4		1	3	
015	070_015	CCV	AR1242			11-MAR-2007 22:19	1.0	1.0			1	4	
016	070_016	X	AR1242			11-MAR-2007 22:45	1.0					4	
017	070_017	X	HEX			11-MAR-2007 23:11	1.0						
018	070_018	SAMPLE	193226-006	122911	Soil	11-MAR-2007 23:38	1.0	0.8317		3	1		
019	070_019	SAMPLE	193226-008	122911	Soil	12-MAR-2007 00:04	1.0	0.8319		1	1		
020	070_020	SAMPLE	193229-001	122911	Soil	12-MAR-2007 00:31	1.0	0.8297	1		1		
021	070_021	X	193229-002	122911	Soil	12-MAR-2007 00:57	1.0	0.827	13		1		15:PCB126=1697.58
022	070_022	X	193229-003	122911	Soil	12-MAR-2007 01:23	1.0	0.8224	1		1		
023	070_023	X	193229-004	122911	Soil	12-MAR-2007 01:50	1.0	0.8256	1		1		
024	070_024	SAMPLE	193229-007	122911	Soil	12-MAR-2007 02:16	1.0	0.8264			1		
025	070_025	SAMPLE	193229-008	122911	Soil	12-MAR-2007 02:42	1.0	0.8306		2	1		
026	070_026	MS	QC378378	122911	Soil	12-MAR-2007 03:09	1.0	0.8308			1		
027	070_027	MSD	QC378379	122911	Soil	12-MAR-2007 03:35	1.0	0.8311			1		
028	070_028	X	HEX			12-MAR-2007 04:01	1.0						
029	070_029	X	PCB750_150			12-MAR-2007 04:28	1.0	1.0	1		1	5	2:PCB126=1005.96
030	070_030	CCV	PCB750_150			12-MAR-2007 04:54	1.0	1.0	1		1	5	
031	070_031	CCV	AR2154			12-MAR-2007 05:21	1.0	1.0			1	3	

Stds used: 1=S4997 2=S4998 3=S5257 4=S5239 5=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257101495 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 11-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	070_032	X	AR2154			12-MAR-2007 05:47	1.0	1.0			1	3	
033	070_033	CCV	AR1242			12-MAR-2007 06:14	1.0	1.0			1	4	
034	070_034	X	AR1242			12-MAR-2007 06:40	1.0					4	
035	070_035	X	HEX			12-MAR-2007 07:07	1.0						
036	070_036	SAMPLE	193229-009	122911	Soil	12-MAR-2007 07:33	1.0	0.827			1		
037	070_037	SAMPLE	193229-010	122911	Soil	12-MAR-2007 07:59	1.0	0.8319			1		
038	070_038	SAMPLE	193229-011	122911	Soil	12-MAR-2007 08:26	1.0	0.8267			1		
039	070_039	SAMPLE	193234-001	122911	Soil	12-MAR-2007 08:52	1.0	0.8317			1		
040	070_040	MSS	193234-004	122911	Soil	12-MAR-2007 09:19	1.0	0.8284			1		
041	070_041	SAMPLE	193234-005	122911	Soil	12-MAR-2007 09:45	1.0	0.8284			1		
042	070_042	SAMPLE	193234-009	122911	Soil	12-MAR-2007 10:12	1.0	0.8256			1		
043	070_043	SAMPLE	193234-011	122911	Soil	12-MAR-2007 10:38	1.0	0.8322			1		
044	070_044	SAMPLE	193283-001	122911	Soil	12-MAR-2007 11:05	1.0	0.8275		1	1		
045	070_045	X	HEX			12-MAR-2007 11:31	1.0						
046	070_046	CCV	PCB500_100			12-MAR-2007 11:58	1.0	1.0	1		1	2	
047	070_047	X	PCB500_100			12-MAR-2007 12:24	1.0	1.0	1		1	2	
048	070_048	CCV	AR2154			12-MAR-2007 12:50	1.0	1.0			1	3	
049	070_049	X	AR2154			12-MAR-2007 13:17	1.0	1.0			1	3	
050	070_050	X	HEX			12-MAR-2007 13:43	1.0						

Stds used: 1=S4997 2=S4998 3=S5257 4=S5239 5=S5227

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257103122 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	071_001	X	PCB500_100			12-MAR-2007 14:42	1.0						1	
002	071_002	X	PCB500_100			12-MAR-2007 15:09	1.0						1	
003	071_003	X	PCB500_100			12-MAR-2007 15:46	1.0	1		1			1	
004	071_004	X	HEX			12-MAR-2007 16:43	1.0							
005	071_005	X	HEX			12-MAR-2007 17:09	1.0							
006	071_006	ICAL	PCB10_2			12-MAR-2007 17:36	1.0						2	
007	071_007	ICAL	PCB25_5			12-MAR-2007 18:02	1.0						3	
008	071_008	ICAL	PCB100_20			12-MAR-2007 18:29	1.0						4	
009	071_009	ICAL	PCB250_50			12-MAR-2007 18:55	1.0						5	
010	071_010	ICAL	PCB500_100			12-MAR-2007 19:22	1.0						1	
011	071_011	ICAL	PCB750_150			12-MAR-2007 19:48	1.0						6	
012	071_012	ICAL	PCB1000_200			12-MAR-2007 20:14	1.0						7	
013	071_013	X	HEX			12-MAR-2007 20:41	1.0							
014	071_014	ICV	ULTRA_1660			12-MAR-2007 21:07	1.0			1			8	
015	071_015	X	ULTRA_1660			12-MAR-2007 21:34	1.0	2		1			8	
016	071_016	X	HEX			12-MAR-2007 22:00	1.0							

Stds used: 1=S4998 2=S5483 3=S5484 4=S4996 5=S4997 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	072_001	CCV	PCB500_100			13-MAR-2007 10:02	1.0	1.0			1	1	
002	072_002	X	PCB500_100			13-MAR-2007 10:28	1.0	1.0	4		1	1	
003	072_003	X	AR1242			13-MAR-2007 11:51	1.0	1.0	1		1	2	
004	072_004	ICAL	AR1242			13-MAR-2007 12:17	1.0	1.0			1	2	
005	072_005	CCV	AR2154			13-MAR-2007 12:44	1.0	1.0			1	3	
006	072_006	X	AR2154			13-MAR-2007 13:10	1.0	1.0			1	3	
007	072_007	CCV	AR1248			13-MAR-2007 14:19	1.0					4	
008	072_008	ICAL	AR1248			13-MAR-2007 14:45	1.0	1.0				4	
009	072_009	CCV	AR1232			13-MAR-2007 15:12	1.0					5	
010	072_010	X	HEX			13-MAR-2007 15:38	1.0						
011	072_011	BLANK	QC378900	123037	Miscel	13-MAR-2007 16:05	1.0	50.0			1		
012	072_012	BLANK	QC378910	123039	Soil	13-MAR-2007 16:31	1.0	0.8221			1		
013	072_013	SAMPLE	193121-001	123037	Miscel	13-MAR-2007 16:57	1.0	49.98	1		1		2:PCB122=1203.02
014	072_014	SAMPLE	193229-002	122911	Soil	13-MAR-2007 17:24	2.0	0.827			1		
015	072_015	SAMPLE	193229-003	122911	Soil	13-MAR-2007 17:52	1.0	0.8224			1		
016	072_016	SAMPLE	193229-004	122911	Soil	13-MAR-2007 18:19	1.0	0.8256			1		
017	072_017	BS	QC378901	123037	Miscel	13-MAR-2007 18:51	1.0	50.0			1		
018	072_018	BSD	QC378902	123037	Miscel	13-MAR-2007 19:18	1.0	50.0			1		
019	072_019	LCS	QC378911	123039	Soil	13-MAR-2007 19:44	1.0	0.8317		1	1		
020	072_020	X	HEX			13-MAR-2007 20:11	1.0						
021	072_021	CCV	PCB250_50			13-MAR-2007 20:37	1.0	1.0			1	6	
022	072_022	X	PCB250_50			13-MAR-2007 21:04	1.0	1.0	1		1	6	
023	072_023	CCV	AR1242			13-MAR-2007 21:30	1.0	1.0			1	2	
024	072_024	X	AR1242			13-MAR-2007 21:57	1.0	1.0	1		1	2	
025	072_025	CCV	AR2154			13-MAR-2007 22:23	1.0	1.0			1	3	
026	072_026	X	AR2154			13-MAR-2007 22:50	1.0	1.0	1		1	3	
027	072_027	CCV	AR1248			13-MAR-2007 23:16	1.0	1.0			1	4	
028	072_028	CCV	AR1232			13-MAR-2007 23:43	1.0					5	
029	072_029	X	HEX			14-MAR-2007 00:09	1.0						
030	072_030	SAMPLE	193280-001	123039	Soil	14-MAR-2007 00:36	1.0	0.8457			1		
031	072_031	SAMPLE	193280-002	123039	Soil	14-MAR-2007 01:02	1.0	0.8466			1		

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	072_032	SAMPLE	193280-003	123039	Soil	14-MAR-2007 01:29	1.0					
033	072_033	SAMPLE	193280-004	123039	Soil	14-MAR-2007 01:55	1.0	0.8232		1		
034	072_034	SAMPLE	193280-005	123039	Soil	14-MAR-2007 02:22	1.0	0.8221		1		
035	072_035	SAMPLE	193280-006	123039	Soil	14-MAR-2007 02:48	1.0	0.8342		1		
036	072_036	SAMPLE	193280-007	123039	Soil	14-MAR-2007 03:15	1.0	0.8237		1		
037	072_037	SAMPLE	193280-008	123039	Soil	14-MAR-2007 03:41	10.0	0.8353		1		
038	072_038	SAMPLE	193280-009	123039	Soil	14-MAR-2007 04:08	1.0	0.8375		1		
039	072_039	SAMPLE	193280-010	123039	Soil	14-MAR-2007 04:34	1.0	0.835		1		
040	072_040	X	HEX			14-MAR-2007 05:01	1.0					
041	072_041	X	PCB500_100			14-MAR-2007 05:27	1.0	1.0		1	1	
042	072_042	CCV	PCB500_100			14-MAR-2007 05:54	1.0	1.0		1	1	
043	072_043	CCV	AR2154			14-MAR-2007 06:20	1.0	1.0		1	3	
044	072_044	X	AR2154			14-MAR-2007 06:47	1.0	1.0	1	1	3	
045	072_045	CCV	AR1248			14-MAR-2007 07:13	1.0	1.0		1	4	
046	072_046	X	HEX			14-MAR-2007 07:40	1.0					
047	072_047	SAMPLE	193280-011	123039	Soil	14-MAR-2007 08:06	1.0	0.8386		1		
048	072_048	SAMPLE	193280-012	123039	Soil	14-MAR-2007 08:33	1.0	0.8409		1		
049	072_049	SAMPLE	193280-013	123039	Soil	14-MAR-2007 08:59	2.0	0.8245		1		
050	072_050	SAMPLE	193314-001	123039	Soil	14-MAR-2007 09:26	1.0	0.8289		1		
051	072_051	SAMPLE	193314-002	123039	Soil	14-MAR-2007 09:52	1.0	0.827	2	1		3:PCB122=5298.41
052	072_052	SAMPLE	193314-003	123039	Soil	14-MAR-2007 10:19	1.0	0.8205		1		
053	072_053	SAMPLE	193314-004	123039	Soil	14-MAR-2007 10:45	5.0	0.8213		1		
054	072_054	X	193314-005	123039	Soil	14-MAR-2007 11:12	5.0	0.8322		1		
055	072_055	SAMPLE	193314-006	123039	Soil	14-MAR-2007 11:38	2.0	0.8218		1		
056	072_056	SAMPLE	193314-007	123039	Soil	14-MAR-2007 12:05	2.0	0.821		1		
057	072_057	X	HEX			14-MAR-2007 12:31	1.0					
058	072_058	CCV	PCB250_50			14-MAR-2007 12:57	1.0	1.0		1	6	
059	072_059	X	PCB250_50			14-MAR-2007 13:24	1.0				6	
060	072_060	CCV	AR2154			14-MAR-2007 13:50	1.0	1.0		1	3	
061	072_061	X	AR2154			14-MAR-2007 14:17	1.0				3	
062	072_062	CCV	AR1248			14-MAR-2007 14:43	1.0	1.0			4	

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	072_063	X	HEX			14-MAR-2007 15:09	1.0					

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Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	073_001	CCV	PCB750_150			14-MAR-2007 16:01	1.0	1.0			1	1	
002	073_002	X	PCB750_150			14-MAR-2007 16:27	1.0					1	
003	073_003	CCV	AR1242			14-MAR-2007 16:54	1.0	1.0			1	2	
004	073_004	X	AR1242			14-MAR-2007 17:20	1.0	1.0			1	2	
005	073_005	CCV	AR2154			14-MAR-2007 17:50	1.0	1.0			1	3	
006	073_006	X	AR2154			14-MAR-2007 18:17	1.0	1.0			1	3	
007	073_007	ICAL	AR1248			14-MAR-2007 18:43	1.0	1.0			1	4	
008	073_008	X	HEX			14-MAR-2007 19:10	1.0						
009	073_009	BLANK	QC379056	123068	Water	14-MAR-2007 19:36	1.0	0.025		1	1		
010	073_010	SAMPLE	193280-003	123039	Soil	14-MAR-2007 20:02	1.0	0.8401			1		
011	073_011	SAMPLE	193280-004	123039	Soil	14-MAR-2007 20:29	1.0	0.8232			1		
012	073_012	SAMPLE	193280-008	123039	Soil	14-MAR-2007 20:55	2.0	0.8353			1		
013	073_013	SAMPLE	193280-013	123039	Soil	14-MAR-2007 21:22	1.0	0.8245			1		
014	073_014	BS	QC379057	123068	Water	14-MAR-2007 21:48	1.0	0.025		2	1		
015	073_015	BSD	QC379058	123068	Water	14-MAR-2007 22:15	1.0	0.025		2	1		
016	073_016	MSS	193314-005	123039	Soil	14-MAR-2007 22:41	1.0	0.8322			1		
017	073_017	MS	QC378912	123039	Soil	14-MAR-2007 23:08	1.0	0.8292		1	1		
018	073_018	MSD	QC378913	123039	Soil	14-MAR-2007 23:34	1.0	0.8306		1	1		
019	073_019	X	HEX			15-MAR-2007 00:00	1.0						
020	073_020	CCV	PCB500_100			15-MAR-2007 00:27	1.0	1.0			1	5	
021	073_021	X	PCB500_100			15-MAR-2007 00:53	1.0	1.0			1	5	
022	073_022	CCV	AR1242			15-MAR-2007 01:20	1.0	1.0			1	2	
023	073_023	X	AR1242			15-MAR-2007 01:46	1.0	1.0	1		1	2	
024	073_024	CCV	AR2154			15-MAR-2007 02:13	1.0	1.0			1	3	
025	073_025	X	AR2154			15-MAR-2007 02:39	1.0	1.0			1	3	
026	073_026	CCV	AR1248			15-MAR-2007 03:06	1.0	1.0			1	4	
027	073_027	X	HEX			15-MAR-2007 03:32	1.0						
028	073_028	SAMPLE	193108-028	123068	Water	15-MAR-2007 03:58	1.0	0.02427	18	4	1	sh	
029	073_029	SAMPLE	193108-029	123068	Water	15-MAR-2007 04:25	1.0	0.02451	18	4	1	sh	
030	073_030	SAMPLE	193108-030	123068	Water	15-MAR-2007 04:51	1.0	0.02404	18	3	1	sh	

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 193108 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	073_031	SAMPLE	193108-031	123068	Water	15-MAR-2007 05:18	1.0	0.02451	18	4	1	sh	
032	073_032	SAMPLE	193108-032	123068	Water	15-MAR-2007 05:44	1.0	0.025	18	3	1	sh	
033	073_033	SAMPLE	193261-001	123068	Water	15-MAR-2007 06:11	1.0	0.03125			1		
034	073_034	SAMPLE	193261-002	123068	Water	15-MAR-2007 06:37	1.0	0.02427			1		
035	073_035	SAMPLE	193261-003	123068	Water	15-MAR-2007 07:03	1.0	0.02381			1		
036	073_036	SAMPLE	193261-004	123068	Water	15-MAR-2007 07:30	1.0	0.02358			1		
037	073_037	SAMPLE	193347-001	123068	Water	15-MAR-2007 07:56	1.0	0.02358	1	2	1	2:PCB126=1419.49	
038	073_038	X	HEX			15-MAR-2007 08:23	1.0						
039	073_039	CCV	PCB250_50			15-MAR-2007 08:49	1.0	1.0			1	6	
040	073_040	X	PCB250_50			15-MAR-2007 09:16	1.0	1.0	1		1	6	
041	073_041	CCV	AR2154			15-MAR-2007 09:42	1.0					3	
042	073_042	CCV	AR2154			15-MAR-2007 10:08	1.0					3	
043	073_043	X	HEX			15-MAR-2007 10:35	1.0						

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Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-008	Aroclor-1016	GC22	A	03/11/07 16:54
193108-008	Aroclor-1221	GC22	A	03/11/07 16:54
193108-008	Aroclor-1232	GC22	A	03/11/07 16:54
193108-008	Aroclor-1242	GC22	A	03/11/07 16:54
193108-008	Aroclor-1248	GC22	A	03/11/07 16:54
193108-008	Aroclor-1254	GC22	A	03/11/07 16:54
193108-008	Aroclor-1260	GC22	A	03/11/07 16:54
193108-008	TCMX	GC22	A	03/11/07 16:54
193108-008	Decachlorobiphenyl	GC22	A	03/11/07 16:54
193108-011	Aroclor-1016	GC22	A	03/11/07 17:21
193108-011	Aroclor-1221	GC22	A	03/11/07 17:21
193108-011	Aroclor-1232	GC22	A	03/11/07 17:21
193108-011	Aroclor-1242	GC22	A	03/11/07 17:21
193108-011	Aroclor-1248	GC22	A	03/11/07 17:21
193108-011	Aroclor-1254	GC22	A	03/11/07 17:21
193108-011	Aroclor-1260	GC22	A	03/11/07 17:21
193108-011	TCMX	GC22	A	03/11/07 17:21
193108-011	Decachlorobiphenyl	GC22	A	03/11/07 17:21
193108-013	Aroclor-1016	GC22	A	03/11/07 17:47
193108-013	Aroclor-1221	GC22	A	03/11/07 17:47
193108-013	Aroclor-1232	GC22	A	03/11/07 17:47
193108-013	Aroclor-1242	GC22	A	03/11/07 17:47
193108-013	Aroclor-1248	GC22	A	03/11/07 17:47
193108-013	Aroclor-1254	GC22	A	03/11/07 17:47
193108-013	Aroclor-1260	GC22	A	03/11/07 17:47
193108-013	TCMX	GC22	A	03/11/07 17:47
193108-013	Decachlorobiphenyl	GC22	A	03/11/07 17:47
193108-022	Aroclor-1016	GC22	A	03/09/07 19:42
193108-022	Aroclor-1221	GC22	A	03/09/07 19:42
193108-022	Aroclor-1232	GC22	A	03/09/07 19:42
193108-022	Aroclor-1242	GC22	A	03/09/07 19:42
193108-022	Aroclor-1248	GC22	A	03/09/07 19:42
193108-022	Aroclor-1254	GC22	A	03/09/07 19:42
193108-022	Aroclor-1260	GC22	A	03/09/07 19:42
193108-022	TCMX	GC22	A	03/09/07 19:42
193108-022	Decachlorobiphenyl	GC22	A	03/09/07 19:42
193108-023	Aroclor-1016	GC22	A	03/09/07 20:09
193108-023	Aroclor-1221	GC22	A	03/09/07 20:09
193108-023	Aroclor-1232	GC22	A	03/09/07 20:09
193108-023	Aroclor-1242	GC22	A	03/09/07 20:09
193108-023	Aroclor-1248	GC22	A	03/09/07 20:09
193108-023	Aroclor-1254	GC22	A	03/09/07 20:09
193108-023	Aroclor-1260	GC22	A	03/09/07 20:09
193108-023	TCMX	GC22	A	03/09/07 20:09
193108-023	Decachlorobiphenyl	GC22	A	03/09/07 20:09
193108-025	Aroclor-1016	GC22	A	03/11/07 19:13
193108-025	Aroclor-1221	GC22	A	03/11/07 19:13
193108-025	Aroclor-1232	GC22	A	03/11/07 19:13
193108-025	Aroclor-1242	GC22	A	03/11/07 19:13

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-025	Aroclor-1248	GC22	A	03/11/07 19:13
193108-025	Aroclor-1254	GC22	A	03/11/07 19:13
193108-025	Aroclor-1260	GC22	A	03/11/07 19:13
193108-025	TCMX	GC22	A	03/11/07 19:13
193108-025	Decachlorobiphenyl	GC22	A	03/11/07 19:13
193108-026	Aroclor-1016	GC22	A	03/11/07 19:40
193108-026	Aroclor-1221	GC22	A	03/11/07 19:40
193108-026	Aroclor-1232	GC22	A	03/11/07 19:40
193108-026	Aroclor-1242	GC22	A	03/11/07 19:40
193108-026	Aroclor-1248	GC22	A	03/11/07 19:40
193108-026	Aroclor-1254	GC22	A	03/11/07 19:40
193108-026	Aroclor-1260	GC22	A	03/11/07 19:40
193108-026	TCMX	GC22	A	03/11/07 19:40
193108-026	Decachlorobiphenyl	GC22	A	03/11/07 19:40
193108-027	Aroclor-1016	GC22	A	03/10/07 03:38
193108-027	Aroclor-1221	GC22	A	03/10/07 03:38
193108-027	Aroclor-1232	GC22	A	03/10/07 03:38
193108-027	Aroclor-1242	GC22	A	03/10/07 03:38
193108-027	Aroclor-1248	GC22	A	03/10/07 03:38
193108-027	Aroclor-1254	GC22	A	03/10/07 03:38
193108-027	Aroclor-1260	GC22	A	03/10/07 03:38
193108-027	TCMX	GC22	A	03/10/07 03:38
193108-027	Decachlorobiphenyl	GC22	A	03/10/07 03:38
193108-028	Aroclor-1016	GC22	A	03/15/07 03:58
193108-028	Aroclor-1221	GC22	A	03/15/07 03:58
193108-028	Aroclor-1232	GC22	A	03/15/07 03:58
193108-028	Aroclor-1242	GC22	A	03/15/07 03:58
193108-028	Aroclor-1248	GC22	A	03/15/07 03:58
193108-028	Aroclor-1254	GC22	A	03/15/07 03:58
193108-028	Aroclor-1260	GC22	A	03/15/07 03:58
193108-028	TCMX	GC22	A	03/15/07 03:58
193108-028	Decachlorobiphenyl	GC22	A	03/15/07 03:58
193108-029	Aroclor-1016	GC22	A	03/15/07 04:25
193108-029	Aroclor-1221	GC22	A	03/15/07 04:25
193108-029	Aroclor-1232	GC22	A	03/15/07 04:25
193108-029	Aroclor-1242	GC22	A	03/15/07 04:25
193108-029	Aroclor-1248	GC22	A	03/15/07 04:25
193108-029	Aroclor-1254	GC22	A	03/15/07 04:25
193108-029	Aroclor-1260	GC22	A	03/15/07 04:25
193108-029	TCMX	GC22	A	03/15/07 04:25
193108-029	Decachlorobiphenyl	GC22	A	03/15/07 04:25
193108-030	Aroclor-1016	GC22	A	03/15/07 04:51
193108-030	Aroclor-1221	GC22	A	03/15/07 04:51
193108-030	Aroclor-1232	GC22	A	03/15/07 04:51
193108-030	Aroclor-1242	GC22	A	03/15/07 04:51
193108-030	Aroclor-1248	GC22	A	03/15/07 04:51
193108-030	Aroclor-1254	GC22	A	03/15/07 04:51
193108-030	Aroclor-1260	GC22	A	03/15/07 04:51
193108-030	TCMX	GC22	B	03/15/07 04:51

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-030	Decachlorobiphenyl	GC22	B	03/15/07 04:51
193108-031	Aroclor-1016	GC22	A	03/15/07 05:18
193108-031	Aroclor-1221	GC22	A	03/15/07 05:18
193108-031	Aroclor-1232	GC22	A	03/15/07 05:18
193108-031	Aroclor-1242	GC22	A	03/15/07 05:18
193108-031	Aroclor-1248	GC22	A	03/15/07 05:18
193108-031	Aroclor-1254	GC22	A	03/15/07 05:18
193108-031	Aroclor-1260	GC22	A	03/15/07 05:18
193108-031	TCMX	GC22	A	03/15/07 05:18
193108-031	Decachlorobiphenyl	GC22	A	03/15/07 05:18
193108-032	Aroclor-1016	GC22	A	03/15/07 05:44
193108-032	Aroclor-1221	GC22	A	03/15/07 05:44
193108-032	Aroclor-1232	GC22	A	03/15/07 05:44
193108-032	Aroclor-1242	GC22	A	03/15/07 05:44
193108-032	Aroclor-1248	GC22	A	03/15/07 05:44
193108-032	Aroclor-1254	GC22	A	03/15/07 05:44
193108-032	Aroclor-1260	GC22	A	03/15/07 05:44
193108-032	TCMX	GC22	B	03/15/07 05:44
193108-032	Decachlorobiphenyl	GC22	B	03/15/07 05:44
QC378222	Aroclor-1016	GC22	A	03/09/07 17:30
QC378222	Aroclor-1221	GC22	A	03/09/07 17:30
QC378222	Aroclor-1232	GC22	A	03/09/07 17:30
QC378222	Aroclor-1242	GC22	A	03/09/07 17:30
QC378222	Aroclor-1248	GC22	A	03/09/07 17:30
QC378222	Aroclor-1254	GC22	A	03/09/07 17:30
QC378222	Aroclor-1260	GC22	A	03/09/07 17:30
QC378222	TCMX	GC22	A	03/09/07 17:30
QC378222	Decachlorobiphenyl	GC22	A	03/09/07 17:30
QC379056	Aroclor-1016	GC22	A	03/14/07 19:36
QC379056	Aroclor-1221	GC22	A	03/14/07 19:36
QC379056	Aroclor-1232	GC22	A	03/14/07 19:36
QC379056	Aroclor-1242	GC22	A	03/14/07 19:36
QC379056	Aroclor-1248	GC22	A	03/14/07 19:36
QC379056	Aroclor-1254	GC22	A	03/14/07 19:36
QC379056	Aroclor-1260	GC22	A	03/14/07 19:36
QC379056	TCMX	GC22	A	03/14/07 19:36
QC379056	Decachlorobiphenyl	GC22	A	03/14/07 19:36
QC378223	Aroclor-1242	GC22	A	03/09/07 17:57
QC378223	TCMX	GC22	A	03/09/07 17:57
QC378223	Decachlorobiphenyl	GC22	A	03/09/07 17:57
QC378224	Aroclor-1242	GC22	A	03/09/07 21:02
QC378224	TCMX	GC22	A	03/09/07 21:02
QC378224	Decachlorobiphenyl	GC22	A	03/09/07 21:02
QC378225	Aroclor-1242	GC22	A	03/09/07 21:28
QC378225	TCMX	GC22	A	03/09/07 21:28
QC378225	Decachlorobiphenyl	GC22	A	03/09/07 21:28

REPORTING SUMMARY FOR 193108 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379057	Aroclor-1242	GC22	A	03/14/07 21:48
QC379057	TCMX	GC22	A	03/14/07 21:48
QC379057	Decachlorobiphenyl	GC22	A	03/14/07 21:48
QC379058	Aroclor-1242	GC22	A	03/14/07 22:15
QC379058	TCMX	GC22	A	03/14/07 22:15
QC379058	Decachlorobiphenyl	GC22	A	03/14/07 22:15

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 16:46

Batch Number : 123068
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-028		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193108-029		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-030		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193108-031		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-032		Treadwell & Rollo	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
193217-014		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193217-015		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-016		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-017		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-001		Blasland, Bouck & Lee	Water	800	mL	25	0.031250	1	7	.05	0		PCB	3665A	
193261-002		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-003		Blasland, Bouck & Lee	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193261-004		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193347-001		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	9	.05	0		PCB	3665A	
QC379056	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC379057	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC379058	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: for JOM Reviewed By: Date: 3/15/07

Relinquished By: Received By: Date: 3/15/07

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 123068
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
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Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193108-028	1030	7	25.0	alias of 193108-008 O
29	1020			11 H
30	1040			13 M
31	1020			25 J
32	1000			26 K
193217-001 14 J	1030			
15 K	1050			
16 L	1050			
17 J	1030			
193261-001 M	800			limited sample; contained twigs
02 L	1030			
03 K	1050			
04 N	1060			
193347-001 B	1060	9		H_2O contains free product (oily)
MB QC379056	1000	NA		
BS 57				
BSD 58				

JXM 3/14/07

0.05 mL of surrogate solution was added to all samples
0.05 mL of spike solution AR1242 was added to all spikes
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1750
Extraction End Time: 1200
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~granular~~ powder Na2SO4
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #
Centrifuged for 1min; 10mL transferred to labelled vial

Mfg & Lot# / LIMS # / Time	Date/ Initials
SE616A	JOM 3/13/07
S545BA	
EM47031 / EM47011	
1750	
1200	JXM 3/14/07
N/A	
EM46320628	
STBC38639	
FS065076	
✓	

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Jerine Mae 3/13/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

3/15/07
Reviewed by **Date**

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Curtis & Tompkins Laboratories Sample Preparation Summary 09-MAR-2007 11:24

Batch Number : 122872
Date Extracted: 08-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-008		Treadwell & Rollo	Water	1010	mL	25	0.024752	1	7	.05	0		PCB	3665A	
193108-011		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-013		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193108-022		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-023		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	MSS
193108-025		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193108-026		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193108-027		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193226-007		URS Corporation	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
193230-001		Blasland, Bouck & Lee	Water	1010	mL	25	0.024752	1	5	.05	0		PCB	3665A	
193230-002		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
193230-003		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
193230-004		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	5	.05	0		PCB	3665A	
QC378222	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC378223	LCS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC378224	MS	of 193108-023	Water	1050	mL	25	0.023810	1	7	.05	.05		PCB	3665A	
QC378225	MSD	of 193108-023	Water	1050	mL	25	0.023810	1	7	.05	.05		PCB	3665A	

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Prep Chemist: SPK for Tom Reviewed By: Pamela Mayfield Date: 3/9/07

Relinquished By: [signature] Received By: [signature] Date: 3-11-07

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 122872
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 8 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
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Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193108-008 L	1010	7	25.0	
-011 I	1020			
-013 J	1050			
-022 O	1020			
-023 AX	1060			MS
-025 O	1040			
-026 L	1030			
-027 M	1040			
193226 -007 M	1000			
193230-001 N	1010	5 STK 03/8/07		
-002 L	1030	5 STK 03/8/07		
-003 N	1030	5		
-004 K	1030	5		
MB QC378227	1000	NA		
LCS 23				
MS 24	1050	7		193108-023 AV
MSD 25				AW
				JCM 3/9/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616B	JM 3/8/07
0.05 mL of spike solution AR1242 was added to all spikes	S5458A	
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47010 / EM46352	
Extraction Start Time:	1430	
Extraction End Time:	0830	JCM 3/9/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTBC43E40	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	FS065076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jessica Mee 3/8/07
Extraction Chemist **Date**

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Continued on Page ____

Pamela Nagle 3/9/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/23/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW01	Batch#:	122719
Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	0.02 J	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	74	65-135
1-Methylnaphthalene (F)	71	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Sampled:	03/01/07
Lab ID:	193108-008	Received:	03/02/07
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/09/07
Batch#:	122719		

Analyte	Result	RL	MDL	Diln Fac
Naphthalene	ND	0.97		1.000
Acenaphthylene	ND	1.9		1.000
Acenaphthene	ND	0.97		1.000
Fluorene	16	4.9		5.000
Phenanthrene	25	2.4		5.000
Anthracene	1.2	0.49	0.02	1.000
Fluoranthene	7.0	0.39	0.005	1.000
Pyrene	2.9	0.19		1.000
Benzo(a)anthracene	1.9	0.10		1.000
Chrysene	1.7	0.10		1.000
Benzo(b)fluoranthene	0.21	0.19		1.000
Benzo(k)fluoranthene	0.14	0.10		1.000
Benzo(a)pyrene	ND	0.10		1.000
Dibenz(a,h)anthracene	ND	0.19		1.000
Benzo(g,h,i)perylene	ND	0.19		1.000
Indeno(1,2,3-cd)pyrene	ND	0.14		1.000

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	179 *	65-135	1.000
1-Methylnaphthalene (F)	133	65-135	1.000

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW06	Batch#:	122719
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	78	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0301073A	Batch#:	122719
Lab ID:	193108-010	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.98	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.98	
Fluorene	ND	0.98	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0301073B	Sampled:	03/01/07
Lab ID:	193108-011	Received:	03/02/07
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/09/07
Batch#:	122719		

Analyte	Result	RL	MDL	Diln Fac
Naphthalene	ND	1.0		1.000
Acenaphthylene	ND	2.0		1.000
Acenaphthene	3.8	1.0		1.000
Fluorene	11	1.0		1.000
Phenanthrene	15	2.5		5.000
Anthracene	0.63	0.50	0.02	1.000
Fluoranthene	3.9	0.40	0.005	1.000
Pyrene	1.3	0.20		1.000
Benzo(a)anthracene	ND	0.10		1.000
Chrysene	0.85	0.10		1.000
Benzo(b)fluoranthene	ND	0.20		1.000
Benzo(k)fluoranthene	ND	0.10		1.000
Benzo(a)pyrene	ND	0.10		1.000
Dibenz(a,h)anthracene	ND	0.20		1.000
Benzo(g,h,i)perylene	ND	0.20		1.000
Indeno(1,2,3-cd)pyrene	ND	0.14		1.000

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	146 *	65-135	1.000
1-Methylnaphthalene (F)	108	65-135	1.000

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1213GW101	Batch#:	122719
Lab ID:	193108-012	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND.	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	86	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW08	Batch#:	122719
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.04 J	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	92	65-135
1-Methylnaphthalene (F)	89	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW103	Batch#:	122719
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	83	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW104	Batch#:	122719
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	84	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW101	Batch#:	122719
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/09/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.2	
Acenaphthylene	ND	2.4	
Acenaphthene	ND	1.2	
Fluorene	ND	1.2	
Phenanthrene	ND	0.61	
Anthracene	ND	0.61	0.02
Fluoranthene	ND	0.48	0.006
Pyrene	ND	0.24	
Benzo(a)anthracene	ND	0.12	
Chrysene	ND	0.12	
Benzo(b)fluoranthene	ND	0.24	
Benzo(k)fluoranthene	ND	0.12	
Benzo(a)pyrene	ND	0.12	
Dibenz(a,h)anthracene	ND	0.24	
Benzo(g,h,i)perylene	ND	0.24	
Indeno(1,2,3-cd)pyrene	ND	0.17	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	78	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW03	Batch#:	122775
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	78	65-135
1-Methylnaphthalene (F)	75	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW05	Batch#:	122775
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.1	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.1	
Fluorene	ND	1.1	
Phenanthrene	ND	0.53	
Anthracene	ND	0.53	0.02
Fluoranthene	ND	0.42	0.006
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.11	
Chrysene	ND	0.11	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.11	
Benzo(a)pyrene	ND	0.11	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	ND	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.15	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0302071A	Batch#:	122775
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377598	Batch#:	122719
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/06/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377822	Batch#:	122775
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	70	65-135
1-Methylnaphthalene (F)	68	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377599	Batch#:	122719
Matrix:	Water	Prepared:	03/05/07
Units:	ug/L	Analyzed:	03/06/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.548	95	50-135
Fluorene	2.000	1.997	100	65-135
Pyrene	1.000	0.9904	99	65-135
Benzo(a)pyrene	1.000	1.065	106	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	90	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Matrix:	Water	Batch#:	122775
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: BS Lab ID: QC377823

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.832	88	50-135
Fluorene	2.000	1.850	93	65-135
Pyrene	1.000	0.9476	95	65-135
Benzo(a)pyrene	1.000	1.007	101	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	84	65-135
1-Methylnaphthalene (F)	82	65-135

Type: BSD Lab ID: QC377824

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	10.00	8.592	86	50-135	3	35
Fluorene	2.000	1.754	88	65-135	5	35
Pyrene	1.000	0.8865	89	65-135	7	35
Benzo(a)pyrene	1.000	0.9384	94	65-135	7	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW01	Batch#:	122719
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: MS Lab ID: QC377600

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09091	9.709	8.797	91	50-135
Fluorene	<0.009457	1.942	1.792	92	65-135
Pyrene	<0.003815	0.9709	0.8500	88	65-135
Benzo(a)pyrene	<0.01503	0.9709	0.7500	77	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	85	65-135

Type: MSD Lab ID: QC377601

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.709	8.519	88	50-135	3	35
Fluorene	1.942	1.777	92	65-135	1	35
Pyrene	0.9709	0.8417	87	65-135	1	35
Benzo(a)pyrene	0.9709	0.7107	73	65-135	5	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	84	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW104	Batch#:	122719
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/05/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: MS Lab ID: QC377602

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.08918	9.524	8.812	93	50-135
Fluorene	<0.009277	1.905	1.763	93	65-135
Pyrene	<0.003743	0.9524	0.6964	73	65-135
Benzo(a)pyrene	<0.01474	0.9524	0.4533	48 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	79	65-135
1-Methylnaphthalene (F)	76	65-135

Type: MSD Lab ID: QC377603

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.524	8.273	87	50-135	6	35
Fluorene	1.905	1.674	88	65-135	5	35
Pyrene	0.9524	0.7378	77	65-135	6	35
Benzo(a)pyrene	0.9524	0.4425	46 *	65-135	2	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	73	65-135
1-Methylnaphthalene (F)	69	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Confirmation Report for 193108 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193108-007	1349MW01	Fluoranthene	0.02450 J	0.05898	83	141
193108-008	1349MW100	Fluorene	16.39	9.929	49	-39
193108-008	1349MW100	Phenanthrene	25.37	24.23	5	-4
193108-008	1349MW100	Anthracene	1.175	4.092	111	248
193108-008	1349MW100	Fluoranthene	7.033	33.24	130	373
193108-008	1349MW100	Pyrene	2.871	28.20	163	882
193108-008	1349MW100	Benzo(a)anthracene	1.854	11.49	144	520
193108-008	1349MW100	Chrysene	1.688	4.519	91	168
193108-008	1349MW100	Benzo(b)fluoranthene	0.2084	0.3215	43	54
193108-008	1349MW100	Benzo(k)fluoranthene	0.1352	0.5381	120	298
193108-011	DUP0301073B	Acenaphthene	3.829	4.020	5	5
193108-011	DUP0301073B	Fluorene	10.53	7.127	39	-32
193108-011	DUP0301073B	Phenanthrene	15.10	12.79	17	-15
193108-011	DUP0301073B	Anthracene	0.6319	2.220	111	251
193108-011	DUP0301073B	Fluoranthene	3.888	16.69	124	329
193108-011	DUP0301073B	Pyrene	1.317	13.74	165	943
193108-011	DUP0301073B	Chrysene	0.8473	2.022	82	139
193108-013	DAEGW08	Fluoranthene	0.03801 J	0.04988	27	31

J=estimated

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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HPLC04 METHOD 8310 NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

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RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

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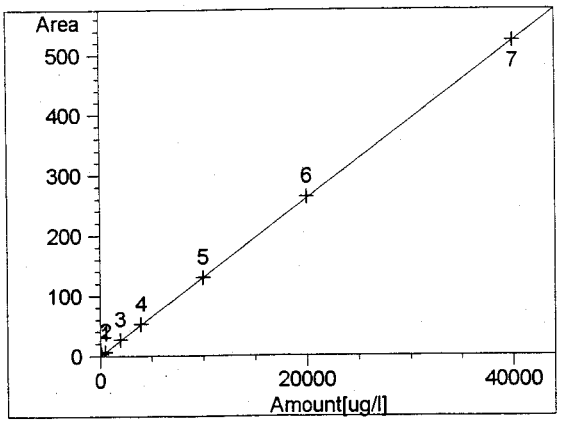
RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

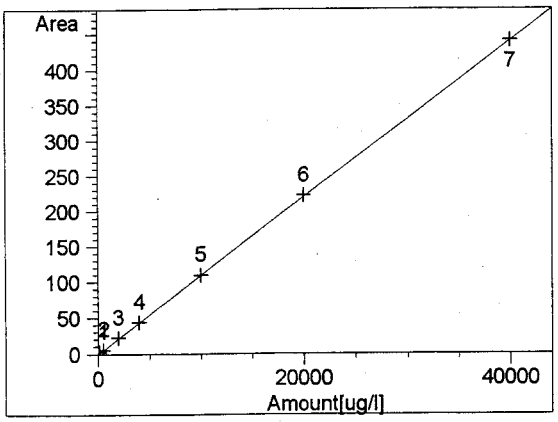
Peak Sum Table

No Entries in table

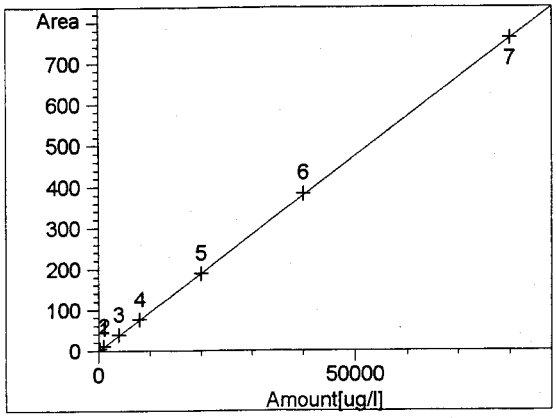
Calibration Curves



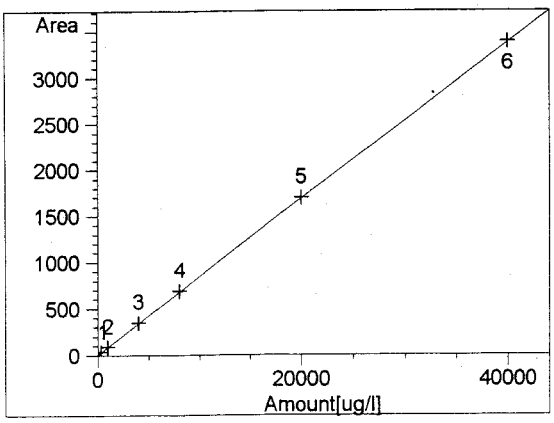
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



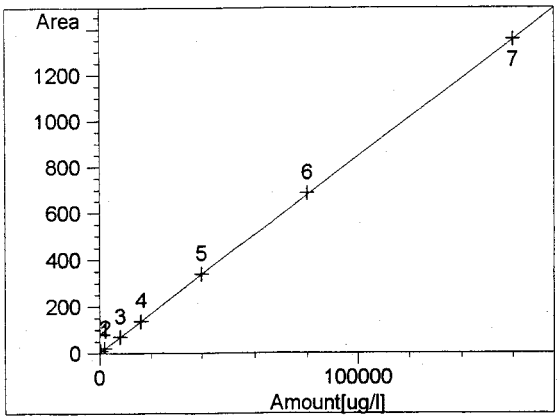
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



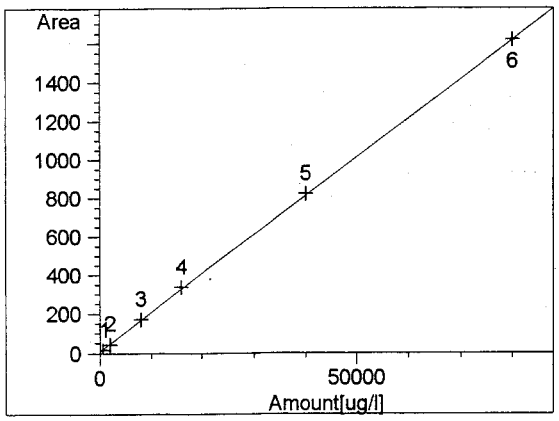
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



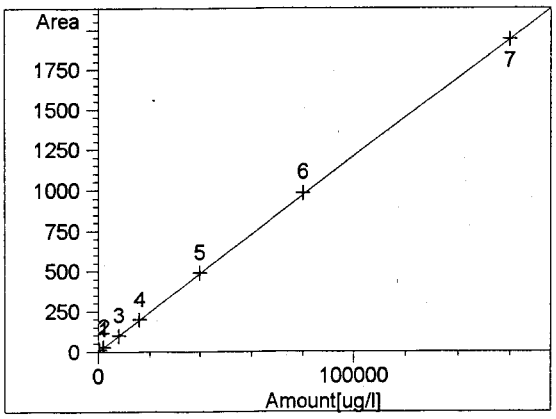
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



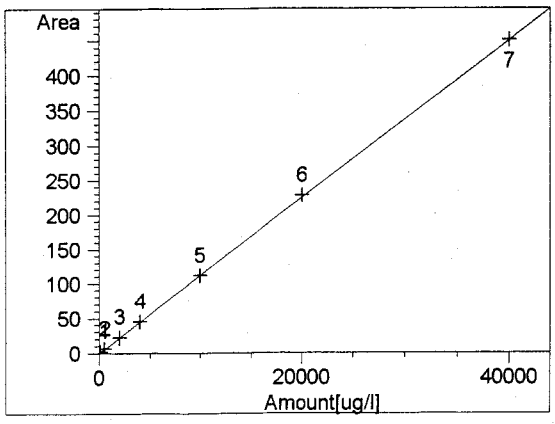
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



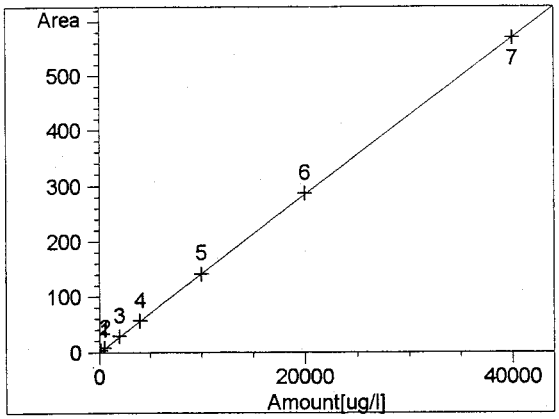
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



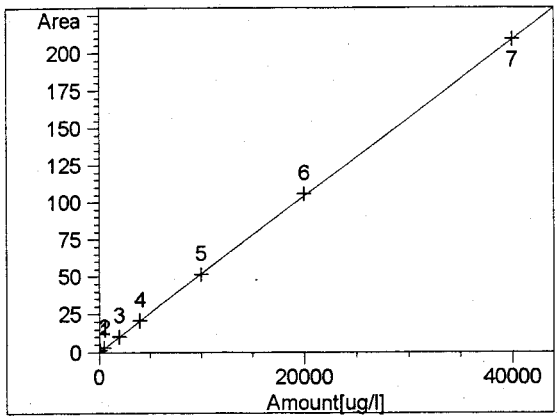
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



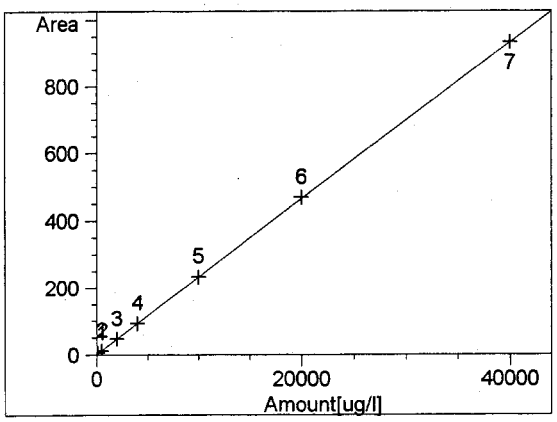
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



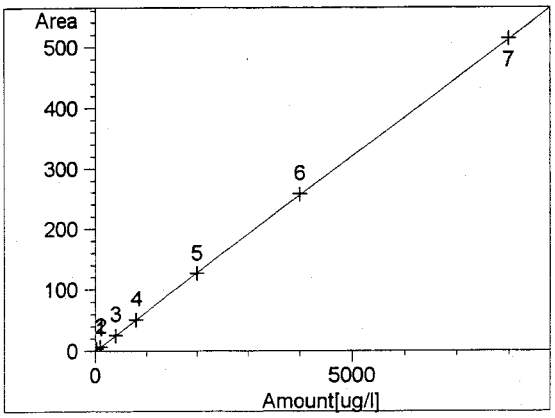
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



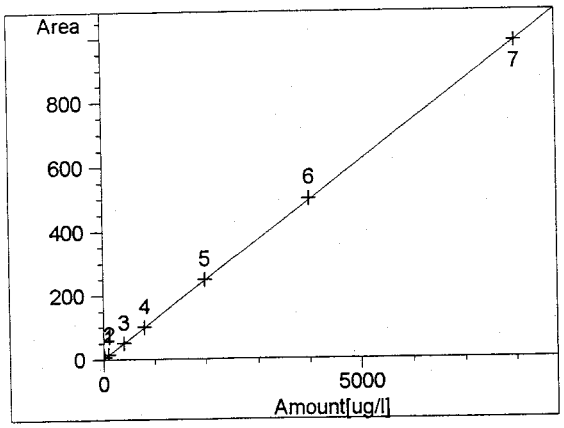
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



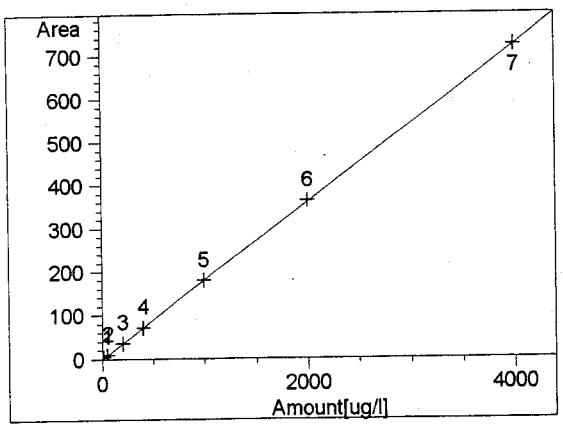
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



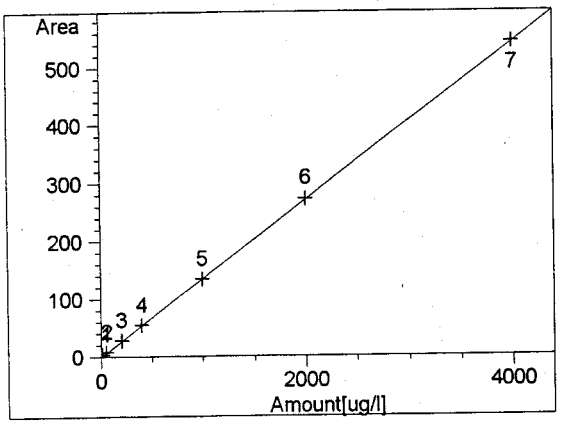
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



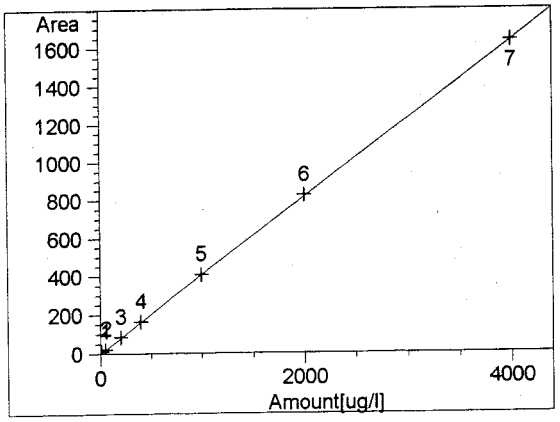
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



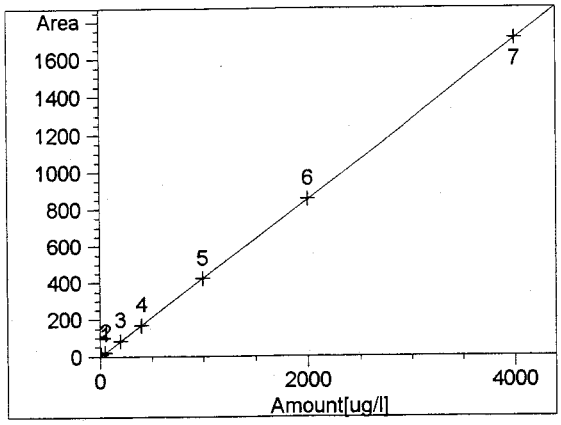
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



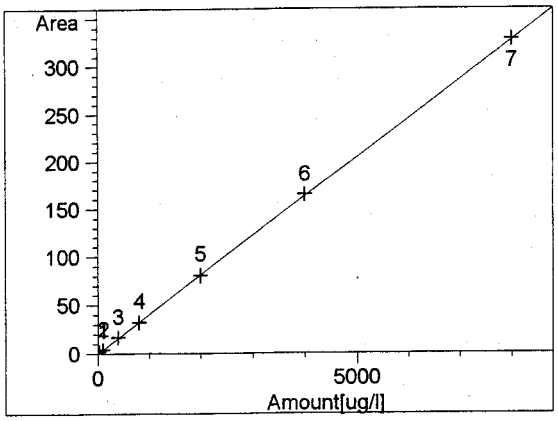
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



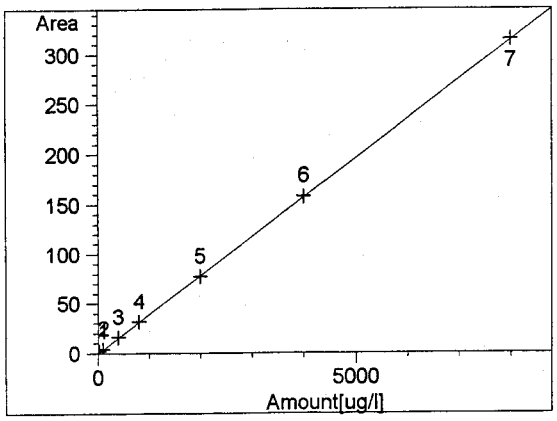
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



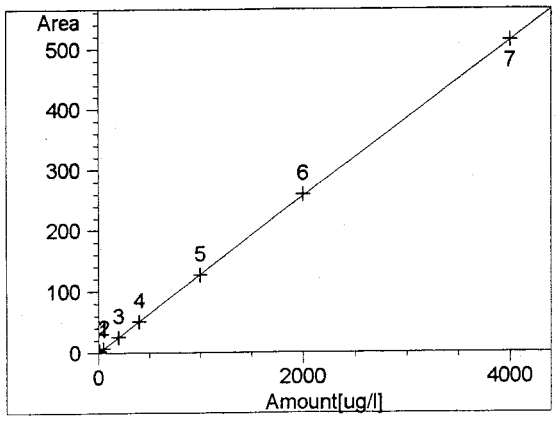
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



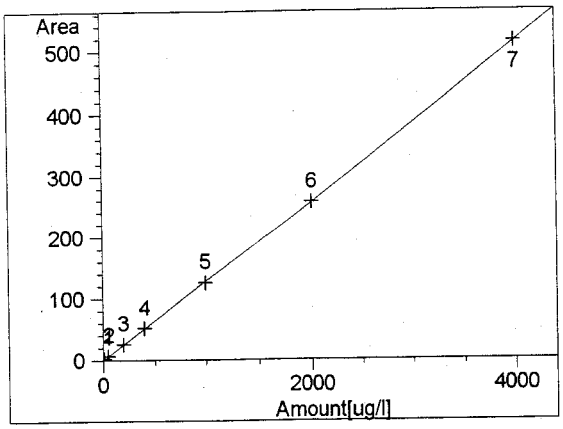
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
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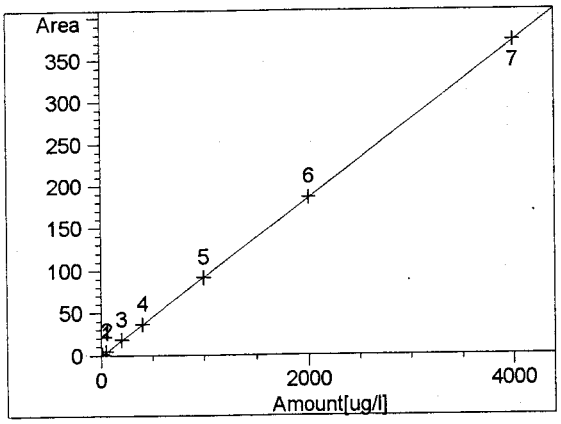
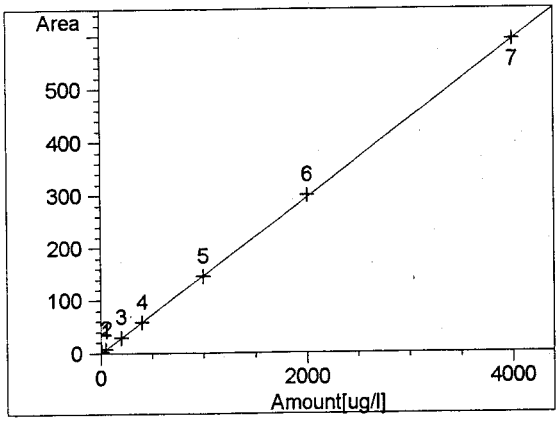
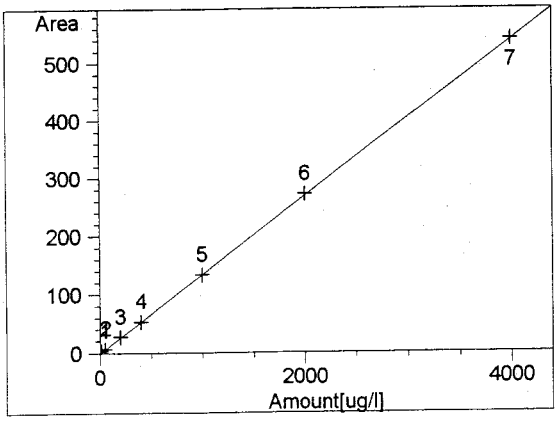


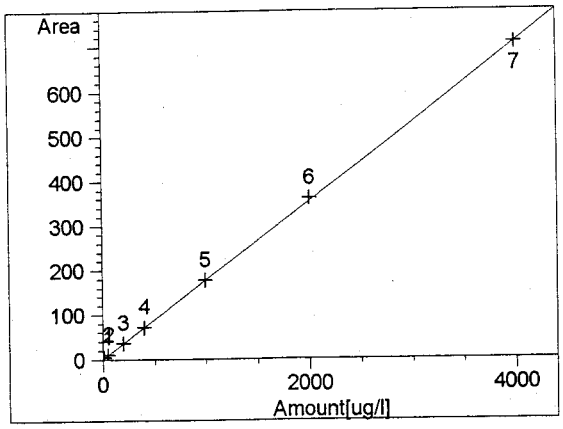
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



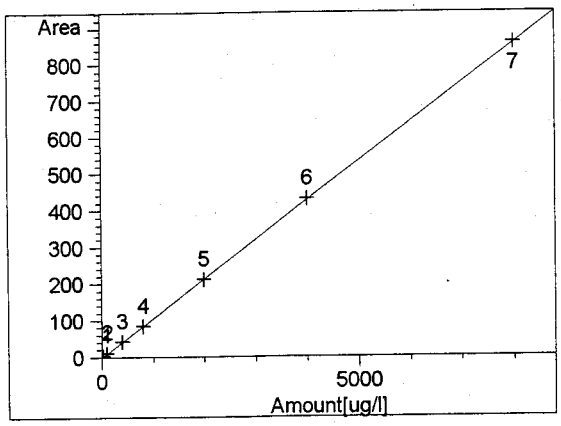
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



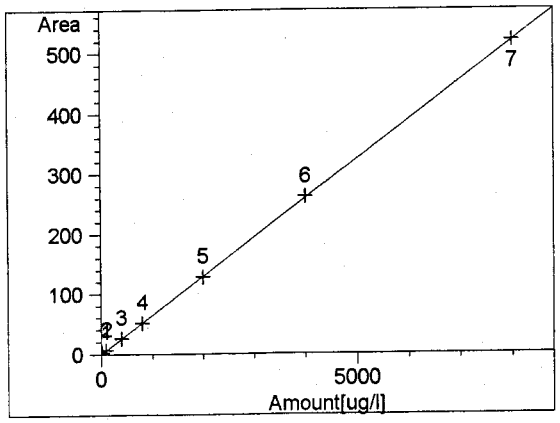
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



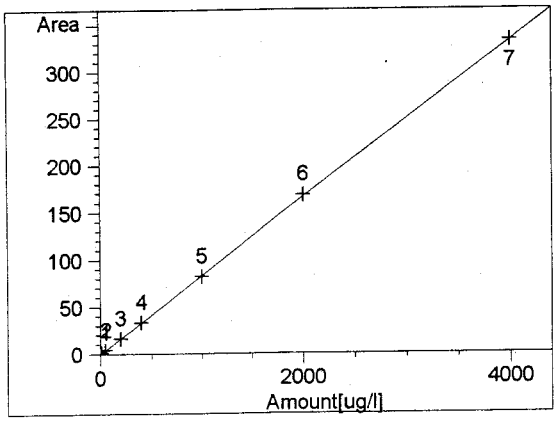
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



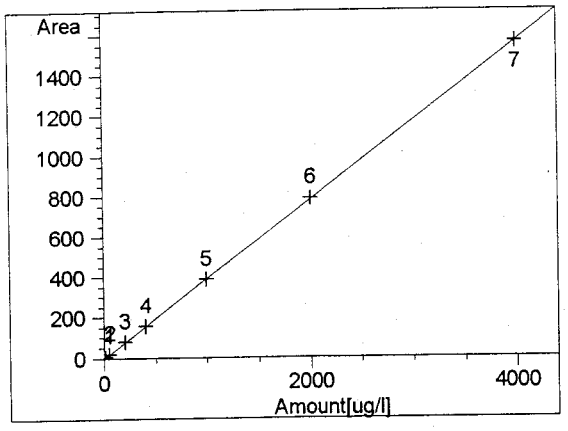
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



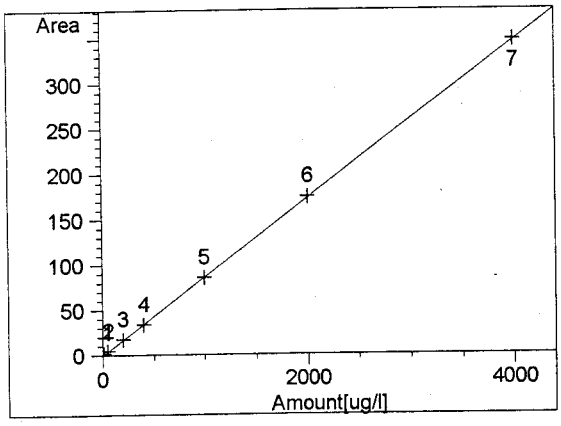
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



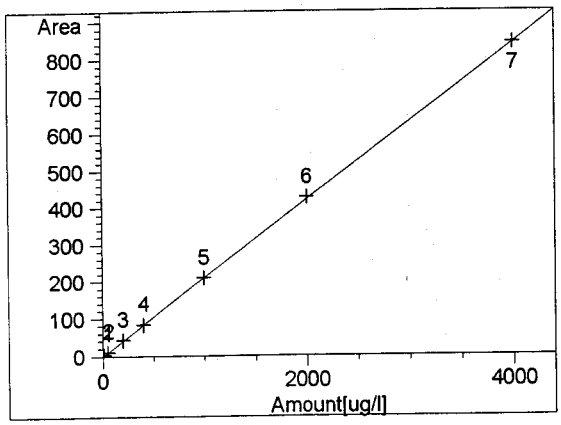
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



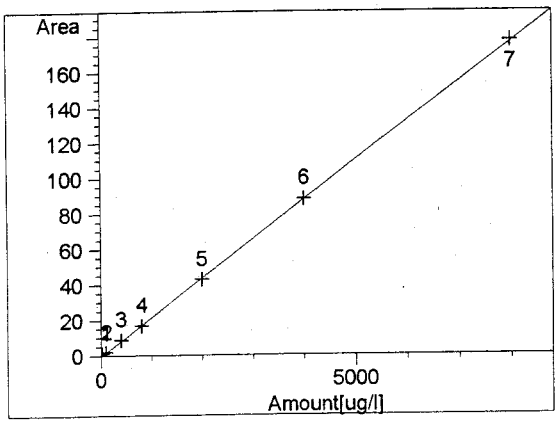
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



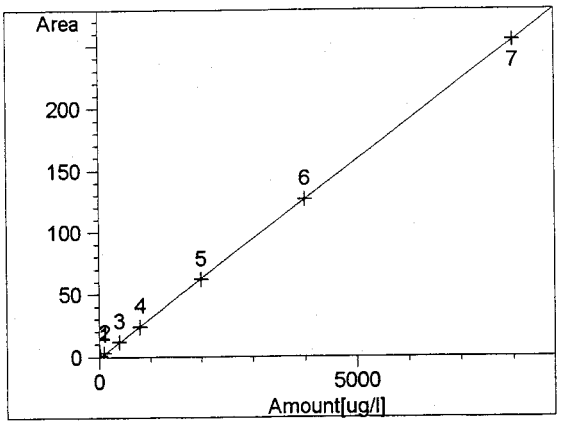
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



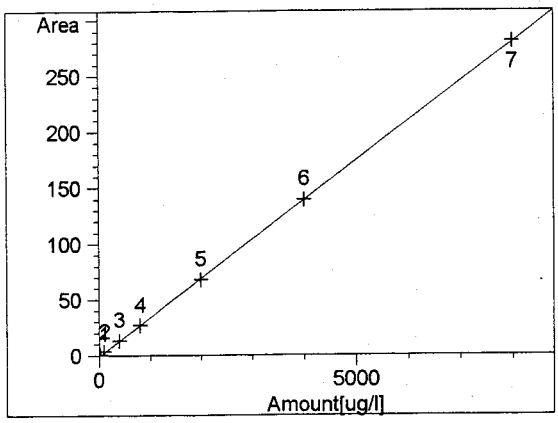
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



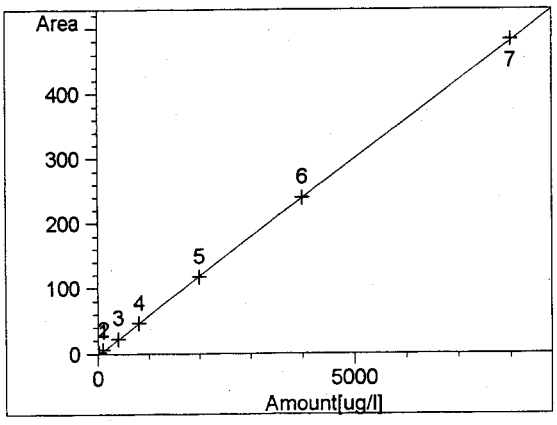
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



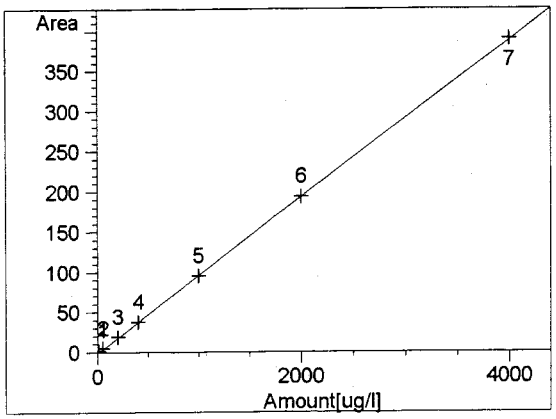
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

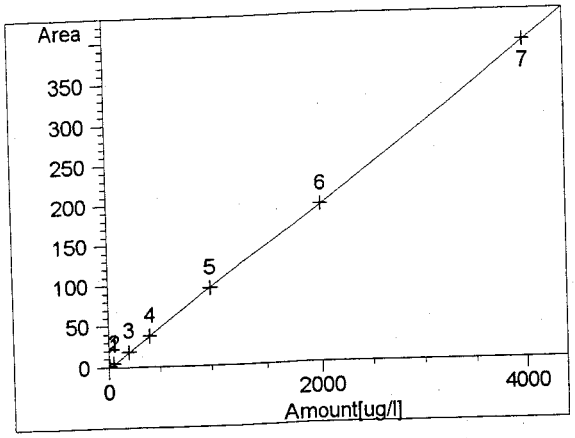


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194013 File : 06500013 Time : 06-MAR-2007 16:13
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4087	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8292	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4107	ug/L	3	15	
Fluorene	1	0.0637	0.0640	800.0	806.9	ug/L	1	15	
Phenanthrene	1	0.1810	0.1780	400.0	396.2	ug/L	-1	15	
Anthracene	1	0.4065	0.4380	400.0	429.2	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	829.9	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0957	400.0	419.3	ug/L	5	15	
Chrysene	1	0.1350	0.1357	400.0	404.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1062	800.0	804.4	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0819	400.0	398.1	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0937	400.0	440.5	ug/L	10	15	
Dibenz(a,h)anthracene	1	0.0213	0.0207	800.0	776.4	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0358	800.0	846.3	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0950	400.0	402.9	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16230	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	8000	8329	ug/L	4	15	
Pyrene	2	0.1252	0.1326	400.0	416.4	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16610	ug/L	4	15	
Naphthalene	3	0.0110	0.0107	4000	3891	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3964	ug/L	-1	15	
Fluorene	3	0.1247	0.1211	800.0	775.6	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1316	400.0	389.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4508	400.0	427.2	ug/L	7	15	
Fluoranthene	3	0.0390	0.0398	800.0	815.9	ug/L	2	15	
Pyrene	3	0.1264	0.1263	400.0	398.5	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1498	400.0	408.5	ug/L	2	15	
Chrysene	3	0.1780	0.1742	400.0	389.9	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0631	800.0	782.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3807	400.0	390.6	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2261	400.0	430.5	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0295	800.0	769.1	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0594	800.0	814.0	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0932	400.0	393.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15560	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297094194028 File : 06500028 Time : 07-MAR-2007 00:07
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	20000	20600	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	10000	10150	ug/L	2	15	
Fluorene	1	0.0637	0.0642	2000	2006	ug/L	0	15	
Phenanthrene	1	0.1810	0.1783	1000	988.4	ug/L	-1	15	
Anthracene	1	0.4065	0.4374	1000	1069	ug/L	7	15	
Fluoranthene	1	0.0404	0.0424	2000	2073	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0959	1000	1037	ug/L	4	15	
Chrysene	1	0.1350	0.1358	1000	1008	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1070	2000	2005	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0835	1000	1006	ug/L	1	15	
Benzo(a)pyrene	1	0.0828	0.0956	1000	1107	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0215	2000	1969	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0309	0.0366	2000	2111	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0979	1000	1017	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	40000	40180	ug/L	0	15	
Acenaphthylene	2	0.0861	0.0872	20000	20560	ug/L	3	15	
Pyrene	2	0.1252	0.1329	1000	1036	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0207	40000	40650	ug/L	2	15	
Naphthalene	3	0.0110	0.0106	10000	9580	ug/L	-4	15	
Acenaphthene	3	0.0234	0.0230	10000	9841	ug/L	-2	15	
Fluorene	3	0.1247	0.1204	2000	1942	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1313	1000	968.9	ug/L	-3	15	
Anthracene	3	0.4222	0.4499	1000	1059	ug/L	6	15	
Fluoranthene	3	0.0390	0.0394	2000	2011	ug/L	1	15	
Pyrene	3	0.1264	0.1259	1000	984.1	ug/L	-2	15	
Benzo(a)anthracene	3	0.1453	0.1500	1000	1016	ug/L	2	15	
Chrysene	3	0.1780	0.1730	1000	973.9	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0638	2000	1968	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3826	1000	979.2	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2292	1000	1087	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0299	2000	1904	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0567	0.0601	2000	2019	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0950	1000	981.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0118	40000	38600	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297094194044 File : 06500044 Time : 07-MAR-2007 08:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4109	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0100	8000	8428	ug/L	5	15	
Acenaphthene	1	0.0053	0.0054	4000	4157	ug/L	4	15	
Fluorene	1	0.0637	0.0652	800.0	821.0	ug/L	3	15	
Phenanthrene	1	0.1810	0.1810	400.0	402.9	ug/L	1	15	
Anthracene	1	0.4065	0.4459	400.0	436.9	ug/L	9	15	
Fluoranthene	1	0.0404	0.0431	800.0	848.4	ug/L	6	15	
Benzo(a)anthracene	1	0.0899	0.0972	400.0	425.6	ug/L	6	15	
Chrysene	1	0.1350	0.1382	400.0	411.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1073	800.0	813.1	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0787	0.0841	400.0	408.8	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0962	400.0	451.9	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0214	800.0	801.3	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0367	800.0	867.1	ug/L	8	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0958	400.0	406.3	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16390	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0901	8000	8457	ug/L	6	15	
Pyrene	2	0.1252	0.1353	400.0	424.5	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	16000	16780	ug/L	5	15	
Naphthalene	3	0.0110	0.0108	4000	3945	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0236	4000	4038	ug/L	1	15	
Fluorene	3	0.1247	0.1228	800.0	786.7	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1355	400.0	401.1	ug/L	0	15	
Anthracene	3	0.4222	0.4582	400.0	434.1	ug/L	9	15	
Fluoranthene	3	0.0390	0.0404	800.0	827.8	ug/L	3	15	
Pyrene	3	0.1264	0.1310	400.0	413.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1532	400.0	417.6	ug/L	4	15	
Chrysene	3	0.1780	0.1771	400.0	396.3	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0645	800.0	800.3	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3853	0.3857	400.0	395.7	ug/L	-1	15	
Benzo(a)pyrene	3	0.2065	0.2305	400.0	438.9	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0296	800.0	773.0	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0602	800.0	824.3	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0959	400.0	404.0	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	16000	15860	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297095975002 File : 06600002 Time : 07-MAR-2007 16:07
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	2000	2027	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	4000	4154	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	2000	2044	ug/L	2	15	
Fluorene	1	0.0637	0.0641	400.0	408.7	ug/L	2	15	
Phenanthrene	1	0.1810	0.1790	200.0	200.6	ug/L	0	15	
Anthracene	1	0.4065	0.4410	200.0	217.1	ug/L	9	15	
Fluoranthene	1	0.0404	0.0432	400.0	428.5	ug/L	7	15	
Benzo(a)anthracene	1	0.0899	0.0961	200.0	214.6	ug/L	7	15	
Chrysene	1	0.1350	0.1370	200.0	205.3	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1047	400.0	404.1	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0829	200.0	204.4	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0928	200.0	223.2	ug/L	12	15	
Dibenz(a,h)anthracene	1	0.0213	0.0199	400.0	389.1	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	400.0	424.4	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0926	200.0	203.6	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	8000	8098	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0889	4000	4139	ug/L	3	15	
Pyrene	2	0.1252	0.1342	200.0	212.7	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8193	ug/L	2	15	
Naphthalene	3	0.0110	0.0109	2000	1991	ug/L	0	15	
Acenaphthene	3	0.0234	0.0239	2000	2032	ug/L	2	15	
Fluorene	3	0.1247	0.1225	400.0	387.3	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1353	200.0	201.2	ug/L	1	15	
Anthracene	3	0.4222	0.4568	200.0	218.6	ug/L	9	15	
Fluoranthene	3	0.0390	0.0397	400.0	409.6	ug/L	2	15	
Pyrene	3	0.1264	0.1304	200.0	208.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1522	200.0	209.7	ug/L	5	15	
Chrysene	3	0.1780	0.1760	200.0	195.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0632	400.0	396.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3785	200.0	194.9	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2281	200.0	218.4	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0286	400.0	388.5	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0587	400.0	415.3	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0866	200.0	189.6	ug/L	-5	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	8000	7905	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297095975019 File : 06600019 Time : 08-MAR-2007 01:04
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10250	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	20000	20810	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	10000	10220	ug/L	2	15	
Fluorene	1	0.0637	0.0648	2000	2026	ug/L	1	15	
Phenanthrene	1	0.1810	0.1800	1000	997.9	ug/L	0	15	
Anthracene	1	0.4065	0.4421	1000	1080	ug/L	8	15	
Fluoranthene	1	0.0404	0.0427	2000	2092	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0969	1000	1048	ug/L	5	15	
Chrysene	1	0.1350	0.1368	1000	1015	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1077	2000	2019	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0844	1000	1017	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0971	1000	1125	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	2000	1980	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0368	2000	2123	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0980	1000	1017	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40610	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0881	20000	20780	ug/L	4	15	
Pyrene	2	0.1252	0.1337	1000	1042	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41040	ug/L	3	15	
Naphthalene	3	0.0110	0.0107	10000	9696	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	10000	9940	ug/L	-1	15	
Fluorene	3	0.1247	0.1214	2000	1958	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1319	1000	972.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4540	1000	1069	ug/L	7	15	
Fluoranthene	3	0.0390	0.0399	2000	2033	ug/L	2	15	
Pyrene	3	0.1264	0.1267	1000	990.4	ug/L	-1	15	
Benzo(a)anthracene	3	0.1453	0.1507	1000	1020	ug/L	2	15	
Chrysene	3	0.1780	0.1742	1000	980.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0641	2000	1975	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3833	1000	980.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2312	1000	1097	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0301	2000	1918	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0603	2000	2026	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0951	1000	982.4	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	40000	39050	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297097355018 File : 06700018 Time : 08-MAR-2007 23:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4074	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0097	8000	8214	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	4000	4026	ug/L	1	15	
Fluorene	1	0.0637	0.0638	800.0	803.8	ug/L	0	15	
Phenanthrene	1	0.1810	0.1778	400.0	395.9	ug/L	-1	15	
Anthracene	1	0.4065	0.4368	400.0	428.0	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	830.5	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0951	400.0	416.7	ug/L	4	15	
Chrysene	1	0.1350	0.1351	400.0	402.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1050	800.0	795.5	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0816	400.0	396.7	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0926	400.0	435.3	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0203	800.0	763.1	ug/L	-5	15	
Benzo(g,h,i)perylene	1	0.0309	0.0355	800.0	840.0	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0915	400.0	388.8	ug/L	-3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16090	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0880	8000	8255	ug/L	3	15	
Pyrene	2	0.1252	0.1315	400.0	412.9	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0211	16000	16380	ug/L	2	15	
Naphthalene	3	0.0110	0.0107	4000	3887	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3955	ug/L	-1	15	
Fluorene	3	0.1247	0.1205	800.0	771.3	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1311	400.0	388.0	ug/L	-3	15	
Anthracene	3	0.4222	0.4488	400.0	425.3	ug/L	6	15	
Fluoranthene	3	0.0390	0.0395	800.0	809.2	ug/L	1	15	
Pyrene	3	0.1264	0.1268	400.0	400.1	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1494	400.0	407.5	ug/L	2	15	
Chrysene	3	0.1780	0.1735	400.0	388.2	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0630	800.0	782.1	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	400.0	387.2	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2257	400.0	429.8	ug/L	7	15	
Dibenz(a,h)anthracene	3	0.0303	0.0285	800.0	743.6	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0575	800.0	788.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0931	400.0	392.6	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15510	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297097355029 File : 06700029 Time : 09-MAR-2007 05:20
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	10000	10180	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20750	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10240	ug/L	2	15	
Fluorene	1	0.0637	0.0646	2000	2019	ug/L	1	15	
Phenanthrene	1	0.1810	0.1797	1000	996.1	ug/L	0	15	
Anthracene	1	0.4065	0.4422	1000	1080	ug/L	8	15	
Fluoranthene	1	0.0404	0.0430	2000	2105	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0965	1000	1044	ug/L	4	15	
Chrysene	1	0.1350	0.1365	1000	1013	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1076	2000	2017	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0836	1000	1008	ug/L	1	15	
Benzo(a)pyrene	1	0.0828	0.0960	1000	1112	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	2000	1979	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0368	2000	2125	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0973	1000	1011	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40500	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0877	20000	20680	ug/L	3	15	
Pyrene	2	0.1252	0.1342	1000	1047	ug/L	5	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0207	40000	40700	ug/L	2	15	
Naphthalene	3	0.0110	0.0106	10000	9631	ug/L	-4	15	
Acenaphthene	3	0.0234	0.0232	10000	9929	ug/L	-1	15	
Fluorene	3	0.1247	0.1211	2000	1952	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1307	1000	964.4	ug/L	-4	15	
Anthracene	3	0.4222	0.4541	1000	1069	ug/L	7	15	
Fluoranthene	3	0.0390	0.0396	2000	2021	ug/L	1	15	
Pyrene	3	0.1264	0.1253	1000	979.6	ug/L	-2	15	
Benzo(a)anthracene	3	0.1453	0.1505	1000	1019	ug/L	2	15	
Chrysene	3	0.1780	0.1718	1000	967.1	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0639	2000	1971	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3831	1000	980.4	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2292	1000	1087	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0296	2000	1888	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0598	2000	2010	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0958	1000	989.0	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0122	0.0118	40000	38840	ug/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297098623002 File : 06800002 Time : 09-MAR-2007 12:14
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	2000	2025	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	4000	4164	ug/L	4	15	
Acenaphthene	1	0.0053	0.0052	2000	2012	ug/L	1	15	
Fluorene	1	0.0637	0.0635	400.0	405.3	ug/L	1	15	
Phenanthrene	1	0.1810	0.1774	200.0	198.8	ug/L	-1	15	
Anthracene	1	0.4065	0.4397	200.0	216.5	ug/L	8	15	
Fluoranthene	1	0.0404	0.0413	400.0	410.4	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0932	200.0	208.5	ug/L	4	15	
Chrysene	1	0.1350	0.1328	200.0	199.0	ug/L	-1	15	
Benzo(b)fluoranthene	1	0.1023	0.1039	400.0	400.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0802	200.0	197.8	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0900	200.0	216.8	ug/L	8	15	
Dibenz(a,h)anthracene	1	0.0213	0.0202	400.0	394.3	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	400.0	424.2	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0867	200.0	191.5	ug/L	-4	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8057	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0884	4000	4116	ug/L	3	15	
Pyrene	2	0.1252	0.1320	200.0	209.4	ug/L	5	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8168	ug/L	2	15	
Naphthalene	3	0.0110	0.0109	2000	1982	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0236	2000	2010	ug/L	1	15	
Fluorene	3	0.1247	0.1209	400.0	382.1	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1349	200.0	200.7	ug/L	0	15	
Anthracene	3	0.4222	0.4553	200.0	217.9	ug/L	9	15	
Fluoranthene	3	0.0390	0.0398	400.0	411.5	ug/L	3	15	
Pyrene	3	0.1264	0.1330	200.0	212.5	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1508	200.0	207.8	ug/L	4	15	
Chrysene	3	0.1780	0.1738	200.0	192.5	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0638	0.0627	400.0	392.8	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3764	200.0	193.8	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2271	200.0	217.5	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0285	400.0	387.4	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0578	400.0	409.5	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0916	200.0	200.0	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	8000	7884	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193108 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297098623007 File : 06800007 Time : 09-MAR-2007 14:52
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4082	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0098	8000	8286	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	4000	4074	ug/L	2	15	
Fluorene	1	0.0637	0.0642	800.0	809.3	ug/L	1	15	
Phenanthrene	1	0.1810	0.1793	400.0	399.1	ug/L	0	15	
Anthracene	1	0.4065	0.4422	400.0	433.3	ug/L	8	15	
Fluoranthene	1	0.0404	0.0418	800.0	823.2	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0960	400.0	420.7	ug/L	5	15	
Chrysene	1	0.1350	0.1362	400.0	405.7	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1058	800.0	802.0	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0819	400.0	398.3	ug/L	0	15	
Benzo(a)pyrene	1	0.0828	0.0924	400.0	434.3	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0205	800.0	769.5	ug/L	-4	15	
Benzo(g,h,i)perylene	1	0.0309	0.0351	800.0	829.1	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0915	400.0	388.5	ug/L	-3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16310	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0890	8000	8355	ug/L	4	15	
Pyrene	2	0.1252	0.1326	400.0	416.1	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	16000	16720	ug/L	4	15	
Naphthalene	3	0.0110	0.0106	4000	3865	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0233	4000	3974	ug/L	-1	15	
Fluorene	3	0.1247	0.1205	800.0	771.5	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1322	400.0	391.2	ug/L	-2	15	
Anthracene	3	0.4222	0.4559	400.0	432.0	ug/L	8	15	
Fluoranthene	3	0.0390	0.0395	800.0	809.4	ug/L	1	15	
Pyrene	3	0.1264	0.1285	400.0	405.2	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1508	400.0	411.3	ug/L	3	15	
Chrysene	3	0.1780	0.1728	400.0	386.7	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0633	800.0	785.9	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3811	400.0	391.0	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2285	400.0	435.1	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0289	800.0	753.5	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0587	800.0	804.8	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0932	400.0	392.9	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15570	ug/L	-3	15	

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06500001	X	IB - 065			06-MAR-2007 09:54	1.0						
002	06500002	CCV	L			06-MAR-2007 10:25	1.0	1.0			10	1	
003	06500003	X	IB			06-MAR-2007 10:57	1.0						
004	06500004	X,SAMPL	193055-005	122665	Water	06-MAR-2007 11:29	1.0						
005	06500005	X,SAMPL	193055-006	122665	Water	06-MAR-2007 12:00	1.0						
006	06500006	SAMPLE	193055-011	122665	Water	06-MAR-2007 12:32	1.0	0.002			10		
007	06500007	SAMPLE	193055-012	122665	Water	06-MAR-2007 13:03	1.0	0.001961			10		
008	06500008	SAMPLE	193055-013	122665	Water	06-MAR-2007 13:35	1.0	0.002105			10		
009	06500009	SAMPLE	193055-014	122665	Water	06-MAR-2007 14:07	1.0	0.002051			10		
010	06500010	SAMPLE	193093-002	122665	Water	06-MAR-2007 14:38	1.0	0.001887			10		
011	06500011	SAMPLE	193093-001	122665	Water	06-MAR-2007 15:10	1.0	0.001887		1	10		
012	06500012	X	IB			06-MAR-2007 15:42	1.0						
013	06500013	CCV	M			06-MAR-2007 16:13	1.0	1.0			10	2	
014	06500014	X	CCV			06-MAR-2007 16:45	1.0					2	
015	06500015	X	IB			06-MAR-2007 17:16	1.0						
016	06500016	BLANK	QC377524	122706	Soil	06-MAR-2007 17:48	1.0	0.06614			10		
017	06500017	MSS	193048-015	122706	Soil	06-MAR-2007 18:19	1.0	0.06631			10		
018	06500018	LCS	QC377525	122706	Soil	06-MAR-2007 18:51	1.0	0.06581			10		
019	06500019	X,MS	QC377526	122706	Soil	06-MAR-2007 19:23	1.0						
020	06500020	MSD	QC377527	122706	Soil	06-MAR-2007 19:54	1.0	0.06662			10		
021	06500021	X	IB			06-MAR-2007 20:26	1.0						
022	06500022	BLANK	QC377598	122719	Water	06-MAR-2007 20:57	1.0	0.002			10		
023	06500023	SAMPLE	193049-010	122706	Soil	06-MAR-2007 21:29	1.0	0.06594			10		
024	06500024	SAMPLE	193051-010	122706	Soil	06-MAR-2007 22:01	1.0	0.0659			10		
025	06500025	SAMPLE	193049-005	122706	Soil	06-MAR-2007 22:32	1.0	0.06651			10		
026	06500026	LCS	QC377599	122719	Water	06-MAR-2007 23:04	1.0	0.002			10		
027	06500027	X	IB			06-MAR-2007 23:36	1.0						
028	06500028	CCV	H			07-MAR-2007 00:07	1.0	1.0			10	3	
029	06500029	X	CCV			07-MAR-2007 00:39	1.0					3	
030	06500030	X	IB			07-MAR-2007 01:10	1.0						
031	06500031	MSS	193108-007	122719	Water	07-MAR-2007 01:42	1.0	0.001942			10		

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297094194 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 06-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	06500032	SAMPLE	193108-009	122719	Water	07-MAR-2007 02:14	1.0	0.001923			10		
033	06500033	MSS	193108-023	122719	Water	07-MAR-2007 02:45	1.0	0.001905			10		
034	06500034	MS	QC377600	122719	Water	07-MAR-2007 03:17	1.0	0.001942			10		
035	06500035	MSD	QC377601	122719	Water	07-MAR-2007 03:48	1.0	0.001942			10		
036	06500036	MS	QC377602	122719	Water	07-MAR-2007 04:20	1.0	0.001905		4	10		
037	06500037	MSD	QC377603	122719	Water	07-MAR-2007 04:52	1.0	0.001905		2	10		
038	06500038	X	IB			07-MAR-2007 05:23	1.0						
039	06500039	SAMPLE	193118-010	122719	Water	07-MAR-2007 05:55	1.0	0.001942	4		10		4:PYR=40300.0
040	06500040	SAMPLE	193118-011	122719	Water	07-MAR-2007 06:27	1.0	0.001887	9		10		9:PYR=81669.6
041	06500041	SAMPLE	193118-012	122719	Water	07-MAR-2007 06:58	1.0	0.001887	12	2	10		14:MTNPH1=96604.7
042	06500042	X	IB			07-MAR-2007 07:30	1.0						
043	06500043	X	IB			07-MAR-2007 08:01	1.0						
044	06500044	CCV	M			07-MAR-2007 08:33	1.0	1.0			10	2	
045	06500045	X	CCV			07-MAR-2007 09:05	1.0					2	
046	06500046	X	IB			07-MAR-2007 09:36	1.0						
047	06500047	SAMPLE	193055-005	122665	Water	07-MAR-2007 10:08	1.0	0.001887			10		
048	06500048	SAMPLE	193055-006	122665	Water	07-MAR-2007 10:39	1.0	0.001887			10		
049	06500049	MS	QC377526	122706	Soil	07-MAR-2007 11:11	1.0	0.06664			10		
050	06500050	X	IB			07-MAR-2007 11:43	1.0						
051	06500051	CCV	L			07-MAR-2007 12:14	1.0	1.0			10	1	
052	06500052	X	CCV			07-MAR-2007 12:46	1.0					1	
053	06500053	X	IB			07-MAR-2007 13:17	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297095975 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 07-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06600001	X	IB - 066			07-MAR-2007 15:35	1.0						
002	06600002	CCV	L			07-MAR-2007 16:07	1.0	1.0			10	1	
003	06600003	X	CCV			07-MAR-2007 16:38	1.0					1	
004	06600004	X	IB			07-MAR-2007 17:10	1.0						
005	06600005	BLANK	QC377822	122775	Water	07-MAR-2007 17:42	1.0	0.002			10		
006	06600006	BS	QC377823	122775	Water	07-MAR-2007 18:13	1.0	0.002			10		
007	06600007	BSD	QC377824	122775	Water	07-MAR-2007 18:45	1.0	0.002			10		
008	06600008	X	IB			07-MAR-2007 19:16	1.0						
009	06600009	SAMPLE	193169-001	122775	Water	07-MAR-2007 19:48	1.0	0.001887			10		
010	06600010	SAMPLE	193108-025	122775	Water	07-MAR-2007 20:20	1.0	0.001942			10		
011	06600011	SAMPLE	193108-026	122775	Water	07-MAR-2007 20:51	1.0	0.002105			10		
012	06600012	SAMPLE	193108-027	122775	Water	07-MAR-2007 21:23	1.0	0.001905			10		
013	06600013	SAMPLE	193137-001	122775	Water	07-MAR-2007 21:55	1.0	0.001905		2	10		
014	06600014	SAMPLE	193118-011	122719	Water	07-MAR-2007 22:26	4.0	0.001887	2		10		2:PYR=21706.7
015	06600015	X	IB			07-MAR-2007 22:58	1.0						
016	06600016	SAMPLE	193118-012	122719	Water	07-MAR-2007 23:29	20.0	0.001887			10		
017	06600017	X	IB			08-MAR-2007 00:01	1.0						
018	06600018	X	IB			08-MAR-2007 00:33	1.0						
019	06600019	CCV	H			08-MAR-2007 01:04	1.0	1.0			10	2	
020	06600020	X	CCV			08-MAR-2007 01:36	1.0					2	
021	06600021	X	IB			08-MAR-2007 02:07	1.0						
022	06600022	X,SAMPL	193064-002	122719	Water	08-MAR-2007 02:39	1.0						

Stds used: 1=S5286 2=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297097355 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 08-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06700001	X	IB - 067			08-MAR-2007 14:35	1.0						
002	06700002	X,CCV	L			08-MAR-2007 15:07	1.0	1.0	10		10	1	
003	06700003	X	CCV			08-MAR-2007 15:39	1.0					1	
004	06700004	X	IB			08-MAR-2007 16:10	1.0						
005	06700005	X	IB			08-MAR-2007 16:42	1.0						
006	06700006	X	IB			08-MAR-2007 17:13	1.0						
007	06700007	X	IB - 067			08-MAR-2007 17:45	1.0						
008	06700008	CCV	L			08-MAR-2007 18:17	1.0	1.0			10	1	
009	06700009	X	CCV			08-MAR-2007 18:48	1.0					1	
010	06700010	X	IB			08-MAR-2007 19:20	1.0						
011	06700011	SAMPLE	193137-001	122775	Water	08-MAR-2007 19:51	1.0	0.001905			10		
012	06700012	SAMPLE	193064-002	122719	Water	08-MAR-2007 20:23	1.0	0.001923			10		
013	06700013	SAMPLE	193064-004	122719	Water	08-MAR-2007 20:55	1.0	0.001887			10		
014	06700014	SAMPLE	193065-002	122719	Water	08-MAR-2007 21:26	1.0	0.001905			10		
015	06700015	SAMPLE	193065-004	122719	Water	08-MAR-2007 21:58	1.0	0.001887			10		
016	06700016	SAMPLE	193065-006	122719	Water	08-MAR-2007 22:30	1.0	0.002105			10		
017	06700017	X	IB			08-MAR-2007 23:01	1.0						
018	06700018	CCV	M			08-MAR-2007 23:33	1.0	1.0			10	2	
019	06700019	X	CCV			09-MAR-2007 00:04	1.0					2	
020	06700020	X	IB			09-MAR-2007 00:36	1.0						
021	06700021	SAMPLE	193108-010	122719	Water	09-MAR-2007 01:08	1.0	0.001961			10		
022	06700022	SAMPLE	193108-012	122719	Water	09-MAR-2007 01:39	1.0	0.001887			10		
023	06700023	SAMPLE	193108-013	122719	Water	09-MAR-2007 02:11	1.0	0.001923			10		
024	06700024	SAMPLE	193108-022	122719	Water	09-MAR-2007 02:42	1.0	0.001923			10		
025	06700025	SAMPLE	193108-024	122719	Water	09-MAR-2007 03:14	1.0	0.002424			10		
026	06700026	SAMPLE	193108-008	122719	Water	09-MAR-2007 03:46	1.0	0.001942	6	2	10		6:FLA=17120.7
027	06700027	SAMPLE	193108-011	122719	Water	09-MAR-2007 04:17	1.0	0.002	4	1	10		4:PHAN=8540.50
028	06700028	X	IB			09-MAR-2007 04:49	1.0						
029	06700029	CCV	H			09-MAR-2007 05:20	1.0	1.0			10	3	
030	06700030	X	CCV			09-MAR-2007 05:52	1.0					3	
031	06700031	X	IB			09-MAR-2007 06:24	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 193108 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297098623 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 09-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06800001	X	IB - 068			09-MAR-2007 11:43	1.0						
002	06800002	CCV	L			09-MAR-2007 12:14	1.0	1.0			10	1	
003	06800003	X	IB			09-MAR-2007 12:46	1.0						
004	06800004	SAMPLE	193108-011	122719	Water	09-MAR-2007 13:18	5.0	0.002	1		10		
005	06800005	SAMPLE	193108-008	122719	Water	09-MAR-2007 13:49	5.0	0.001942	2		10		
006	06800006	X	IB			09-MAR-2007 14:21	1.0						
007	06800007	CCV	M			09-MAR-2007 14:52	1.0	1.0			10	2	
008	06800008	X	IB			09-MAR-2007 15:24	1.0						

513

Stds used: 1=S5286 2=S5285

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-007	Naphthalene	HPLC04	1	03/07/07 01:42
193108-007	Acenaphthylene	HPLC04	1	03/07/07 01:42
193108-007	Acenaphthene	HPLC04	1	03/07/07 01:42
193108-007	Fluorene	HPLC04	1	03/07/07 01:42
193108-007	Phenanthrene	HPLC04	3	03/07/07 01:42
193108-007	Anthracene	HPLC04	3	03/07/07 01:42
193108-007	Fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Pyrene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(a)anthracene	HPLC04	3	03/07/07 01:42
193108-007	Chrysene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(b)fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(k)fluoranthene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(a)pyrene	HPLC04	3	03/07/07 01:42
193108-007	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 01:42
193108-007	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 01:42
193108-007	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 01:42
193108-007	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 01:42
193108-007	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 01:42
193108-008	Naphthalene	HPLC04	1	03/09/07 03:46
193108-008	Acenaphthylene	HPLC04	1	03/09/07 03:46
193108-008	Acenaphthene	HPLC04	1	03/09/07 03:46
193108-008	Fluorene	HPLC04	1	03/09/07 13:49
193108-008	Phenanthrene	HPLC04	3	03/09/07 13:49
193108-008	Anthracene	HPLC04	3	03/09/07 03:46
193108-008	Fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Pyrene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(a)anthracene	HPLC04	3	03/09/07 03:46
193108-008	Chrysene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(b)fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(k)fluoranthene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(a)pyrene	HPLC04	3	03/09/07 03:46
193108-008	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 03:46
193108-008	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 03:46
193108-008	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 03:46
193108-008	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 03:46
193108-008	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 03:46
193108-009	Naphthalene	HPLC04	1	03/07/07 02:14
193108-009	Acenaphthylene	HPLC04	1	03/07/07 02:14
193108-009	Acenaphthene	HPLC04	1	03/07/07 02:14
193108-009	Fluorene	HPLC04	1	03/07/07 02:14
193108-009	Phenanthrene	HPLC04	3	03/07/07 02:14
193108-009	Anthracene	HPLC04	3	03/07/07 02:14
193108-009	Fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Pyrene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(a)anthracene	HPLC04	3	03/07/07 02:14
193108-009	Chrysene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(b)fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(k)fluoranthene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(a)pyrene	HPLC04	3	03/07/07 02:14
193108-009	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 02:14
193108-009	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 02:14
193108-009	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 02:14

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-009	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 02:14
193108-009	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 02:14
193108-010	Naphthalene	HPLC04	1	03/09/07 01:08
193108-010	Acenaphthylene	HPLC04	1	03/09/07 01:08
193108-010	Acenaphthene	HPLC04	1	03/09/07 01:08
193108-010	Fluorene	HPLC04	1	03/09/07 01:08
193108-010	Phenanthrene	HPLC04	3	03/09/07 01:08
193108-010	Anthracene	HPLC04	3	03/09/07 01:08
193108-010	Fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Pyrene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(a)anthracene	HPLC04	3	03/09/07 01:08
193108-010	Chrysene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(b)fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(k)fluoranthene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(a)pyrene	HPLC04	3	03/09/07 01:08
193108-010	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 01:08
193108-010	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 01:08
193108-010	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 01:08
193108-010	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 01:08
193108-010	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 01:08
193108-011	Naphthalene	HPLC04	1	03/09/07 04:17
193108-011	Acenaphthylene	HPLC04	1	03/09/07 04:17
193108-011	Acenaphthene	HPLC04	1	03/09/07 04:17
193108-011	Fluorene	HPLC04	1	03/09/07 04:17
193108-011	Phenanthrene	HPLC04	3	03/09/07 13:18
193108-011	Anthracene	HPLC04	3	03/09/07 04:17
193108-011	Fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Pyrene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(a)anthracene	HPLC04	3	03/09/07 04:17
193108-011	Chrysene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(b)fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(k)fluoranthene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(a)pyrene	HPLC04	3	03/09/07 04:17
193108-011	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 04:17
193108-011	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 04:17
193108-011	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 04:17
193108-011	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 04:17
193108-011	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 04:17
193108-012	Naphthalene	HPLC04	1	03/09/07 01:39
193108-012	Acenaphthylene	HPLC04	1	03/09/07 01:39
193108-012	Acenaphthene	HPLC04	1	03/09/07 01:39
193108-012	Fluorene	HPLC04	1	03/09/07 01:39
193108-012	Phenanthrene	HPLC04	3	03/09/07 01:39
193108-012	Anthracene	HPLC04	3	03/09/07 01:39
193108-012	Fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Pyrene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(a)anthracene	HPLC04	3	03/09/07 01:39
193108-012	Chrysene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(b)fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(k)fluoranthene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(a)pyrene	HPLC04	3	03/09/07 01:39

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-012	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 01:39
193108-012	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 01:39
193108-012	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 01:39
193108-012	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 01:39
193108-012	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 01:39
193108-013	Naphthalene	HPLC04	1	03/09/07 02:11
193108-013	Acenaphthylene	HPLC04	1	03/09/07 02:11
193108-013	Acenaphthene	HPLC04	1	03/09/07 02:11
193108-013	Fluorene	HPLC04	1	03/09/07 02:11
193108-013	Phenanthrene	HPLC04	3	03/09/07 02:11
193108-013	Anthracene	HPLC04	3	03/09/07 02:11
193108-013	Fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Pyrene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(a)anthracene	HPLC04	3	03/09/07 02:11
193108-013	Chrysene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(b)fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(k)fluoranthene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(a)pyrene	HPLC04	3	03/09/07 02:11
193108-013	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 02:11
193108-013	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 02:11
193108-013	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 02:11
193108-013	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 02:11
193108-013	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 02:11
193108-022	Naphthalene	HPLC04	1	03/09/07 02:42
193108-022	Acenaphthylene	HPLC04	1	03/09/07 02:42
193108-022	Acenaphthene	HPLC04	1	03/09/07 02:42
193108-022	Fluorene	HPLC04	1	03/09/07 02:42
193108-022	Phenanthrene	HPLC04	3	03/09/07 02:42
193108-022	Anthracene	HPLC04	3	03/09/07 02:42
193108-022	Fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Pyrene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(a)anthracene	HPLC04	3	03/09/07 02:42
193108-022	Chrysene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(b)fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(k)fluoranthene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(a)pyrene	HPLC04	3	03/09/07 02:42
193108-022	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 02:42
193108-022	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 02:42
193108-022	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 02:42
193108-022	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 02:42
193108-022	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 02:42
193108-023	Naphthalene	HPLC04	1	03/07/07 02:45
193108-023	Acenaphthylene	HPLC04	1	03/07/07 02:45
193108-023	Acenaphthene	HPLC04	1	03/07/07 02:45
193108-023	Fluorene	HPLC04	1	03/07/07 02:45
193108-023	Phenanthrene	HPLC04	3	03/07/07 02:45
193108-023	Anthracene	HPLC04	3	03/07/07 02:45
193108-023	Fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Pyrene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(a)anthracene	HPLC04	3	03/07/07 02:45
193108-023	Chrysene	HPLC04	3	03/07/07 02:45

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-023	Benzo(b)fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(k)fluoranthene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(a)pyrene	HPLC04	3	03/07/07 02:45
193108-023	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 02:45
193108-023	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 02:45
193108-023	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 02:45
193108-023	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 02:45
193108-023	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 02:45
193108-024	Naphthalene	HPLC04	1	03/09/07 03:14
193108-024	Acenaphthylene	HPLC04	1	03/09/07 03:14
193108-024	Acenaphthene	HPLC04	1	03/09/07 03:14
193108-024	Fluorene	HPLC04	1	03/09/07 03:14
193108-024	Phenanthrene	HPLC04	3	03/09/07 03:14
193108-024	Anthracene	HPLC04	3	03/09/07 03:14
193108-024	Fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Pyrene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(a)anthracene	HPLC04	3	03/09/07 03:14
193108-024	Chrysene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(b)fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(k)fluoranthene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(a)pyrene	HPLC04	3	03/09/07 03:14
193108-024	Dibenz(a,h)anthracene	HPLC04	3	03/09/07 03:14
193108-024	Benzo(g,h,i)perylene	HPLC04	3	03/09/07 03:14
193108-024	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/09/07 03:14
193108-024	1-Methylnaphthalene (UV)	HPLC04	1	03/09/07 03:14
193108-024	1-Methylnaphthalene (F)	HPLC04	3	03/09/07 03:14
193108-025	Naphthalene	HPLC04	1	03/07/07 20:20
193108-025	Acenaphthylene	HPLC04	1	03/07/07 20:20
193108-025	Acenaphthene	HPLC04	1	03/07/07 20:20
193108-025	Fluorene	HPLC04	1	03/07/07 20:20
193108-025	Phenanthrene	HPLC04	3	03/07/07 20:20
193108-025	Anthracene	HPLC04	3	03/07/07 20:20
193108-025	Fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Pyrene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(a)anthracene	HPLC04	3	03/07/07 20:20
193108-025	Chrysene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(b)fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(k)fluoranthene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(a)pyrene	HPLC04	3	03/07/07 20:20
193108-025	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 20:20
193108-025	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 20:20
193108-025	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 20:20
193108-025	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 20:20
193108-025	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 20:20
193108-026	Naphthalene	HPLC04	1	03/07/07 20:51
193108-026	Acenaphthylene	HPLC04	1	03/07/07 20:51
193108-026	Acenaphthene	HPLC04	1	03/07/07 20:51
193108-026	Fluorene	HPLC04	1	03/07/07 20:51
193108-026	Phenanthrene	HPLC04	3	03/07/07 20:51
193108-026	Anthracene	HPLC04	3	03/07/07 20:51
193108-026	Fluoranthene	HPLC04	3	03/07/07 20:51

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193108-026	Pyrene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(a)anthracene	HPLC04	3	03/07/07 20:51
193108-026	Chrysene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(b)fluoranthene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(k)fluoranthene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(a)pyrene	HPLC04	3	03/07/07 20:51
193108-026	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 20:51
193108-026	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 20:51
193108-026	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 20:51
193108-026	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 20:51
193108-026	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 20:51
193108-027	Naphthalene	HPLC04	1	03/07/07 21:23
193108-027	Acenaphthylene	HPLC04	1	03/07/07 21:23
193108-027	Acenaphthene	HPLC04	1	03/07/07 21:23
193108-027	Fluorene	HPLC04	1	03/07/07 21:23
193108-027	Phenanthrene	HPLC04	3	03/07/07 21:23
193108-027	Anthracene	HPLC04	3	03/07/07 21:23
193108-027	Fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Pyrene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(a)anthracene	HPLC04	3	03/07/07 21:23
193108-027	Chrysene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(b)fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(k)fluoranthene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(a)pyrene	HPLC04	3	03/07/07 21:23
193108-027	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 21:23
193108-027	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 21:23
193108-027	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 21:23
193108-027	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 21:23
193108-027	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 21:23
QC377598	Naphthalene	HPLC04	1	03/06/07 20:57
QC377598	Acenaphthylene	HPLC04	1	03/06/07 20:57
QC377598	Acenaphthene	HPLC04	1	03/06/07 20:57
QC377598	Fluorene	HPLC04	1	03/06/07 20:57
QC377598	Phenanthrene	HPLC04	3	03/06/07 20:57
QC377598	Anthracene	HPLC04	3	03/06/07 20:57
QC377598	Fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Pyrene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(a)anthracene	HPLC04	3	03/06/07 20:57
QC377598	Chrysene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(b)fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(k)fluoranthene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(a)pyrene	HPLC04	3	03/06/07 20:57
QC377598	Dibenz(a,h)anthracene	HPLC04	3	03/06/07 20:57
QC377598	Benzo(g,h,i)perylene	HPLC04	3	03/06/07 20:57
QC377598	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/06/07 20:57
QC377598	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 20:57
QC377598	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 20:57
QC377599	Naphthalene	HPLC04	1	03/06/07 23:04
QC377599	Fluorene	HPLC04	1	03/06/07 23:04
QC377599	Pyrene	HPLC04	3	03/06/07 23:04
QC377599	Benzo(a)pyrene	HPLC04	3	03/06/07 23:04

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377599	1-Methylnaphthalene (UV)	HPLC04	1	03/06/07 23:04
QC377599	1-Methylnaphthalene (F)	HPLC04	3	03/06/07 23:04
QC377600	Naphthalene	HPLC04	1	03/07/07 03:17
QC377600	Fluorene	HPLC04	1	03/07/07 03:17
QC377600	Pyrene	HPLC04	3	03/07/07 03:17
QC377600	Benzo(a)pyrene	HPLC04	3	03/07/07 03:17
QC377600	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 03:17
QC377600	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 03:17
QC377601	Naphthalene	HPLC04	1	03/07/07 03:48
QC377601	Fluorene	HPLC04	1	03/07/07 03:48
QC377601	Pyrene	HPLC04	3	03/07/07 03:48
QC377601	Benzo(a)pyrene	HPLC04	3	03/07/07 03:48
QC377601	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 03:48
QC377601	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 03:48
QC377602	Naphthalene	HPLC04	1	03/07/07 04:20
QC377602	Fluorene	HPLC04	1	03/07/07 04:20
QC377602	Pyrene	HPLC04	3	03/07/07 04:20
QC377602	Benzo(a)pyrene	HPLC04	3	03/07/07 04:20
QC377602	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 04:20
QC377602	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 04:20
QC377603	Naphthalene	HPLC04	1	03/07/07 04:52
QC377603	Fluorene	HPLC04	1	03/07/07 04:52
QC377603	Pyrene	HPLC04	3	03/07/07 04:52
QC377603	Benzo(a)pyrene	HPLC04	3	03/07/07 04:52
QC377603	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 04:52
QC377603	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 04:52
QC377822	Naphthalene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthylene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthene	HPLC04	1	03/07/07 17:42
QC377822	Fluorene	HPLC04	1	03/07/07 17:42
QC377822	Phenanthrene	HPLC04	3	03/07/07 17:42
QC377822	Anthracene	HPLC04	3	03/07/07 17:42
QC377822	Fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Pyrene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Chrysene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(b)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(k)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)pyrene	HPLC04	3	03/07/07 17:42
QC377822	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 17:42
QC377822	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 17:42
QC377822	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 17:42
QC377822	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 17:42
QC377823	Naphthalene	HPLC04	1	03/07/07 18:13
QC377823	Fluorene	HPLC04	1	03/07/07 18:13
QC377823	Pyrene	HPLC04	3	03/07/07 18:13
QC377823	Benzo(a)pyrene	HPLC04	3	03/07/07 18:13

REPORTING SUMMARY FOR 193108 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC377823	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:13
QC377823	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:13
QC377824	Naphthalene	HPLC04	1	03/07/07 18:45
QC377824	Fluorene	HPLC04	1	03/07/07 18:45
QC377824	Pyrene	HPLC04	3	03/07/07 18:45
QC377824	Benzo(a)pyrene	HPLC04	3	03/07/07 18:45
QC377824	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:45
QC377824	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:45

Curtis & Tompkins Laboratories Sample Preparation Summary 06-MAR-2007 16:10

Batch Number : 122719
Date Extracted: 05-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5126Q
Spike #2 ID : S5518A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193064-002			URS Corporation	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193064-004			URS Corporation	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193065-002			URS Corporation	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193065-004			URS Corporation	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193065-006			URS Corporation	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193108-007			Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		MSS
193108-008			Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193108-009			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-010			Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193108-011			Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	.1	0		8310		
193108-012			Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193108-013			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-022			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193108-023			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		MSS
193108-024			Treadwell & Rollo	Water	825	mL	2	0.002424	1	7	.1	0		8310		
193118-010			Burns & McDonnell	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193118-011			Burns & McDonnell	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193118-012			Burns & McDonnell	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377598	BLANK			Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377599	LCS			Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377600	MS	of 193108-007		Water	1030	mL	2	0.001942	1	7	.1	1		8310		
QC377601	MSD	of 193108-007		Water	1030	mL	2	0.001942	1	7	.1	1		8310		
QC377602	MS	of 193108-023		Water	1050	mL	2	0.001905	1	7	.1	1		8310		
QC377603	MSD	of 193108-023		Water	1050	mL	2	0.001905	1	7	.1	1		8310		

Prep Chemist: Jessie Mee Reviewed By: [signature] Date: 03/07/07

Relinquished By: [signature] Received By: [signature] Date: 07MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

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LIMS Batch No: 192719
LIMS Analysis: 8310
Extracted by: JOM
Date Extracted: 5 March 07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193064-002 A	1040	7	2.0		
04	1060				
193065-002	1050				
04	1060				
06	950				
193108-007 X	1030				MSS
08K	RFW 3/5/07 ~~1000~~ 1030				
09H	1040				
10M	1020				
11K	1000				
12L	1060				
13O	1040				**
22P	1040				
23AO	1050				MSS
24J	825				
193118-010F	1030				loose receiver lost some sample (~5mL)
11	1060				
12	1060				
MB BC37759B	1000	NA			*
LCS 599	1000				
MS 600	1030	7			193108-007 Y
MSD 601	1030				Z
MS 602	1050				193108-023 AP
MSD 603	1050				AU

JOM 3/5/07

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 & HPLC H_2O
Extraction Start Time: 1625
Extraction End Time: 1830
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ Granular Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5126Q* / S5244E** / D	JOM 3/5/07
S5518A	
EM47010 / EM46352	
	SFK 03/06/07
N/A	3/6/07
EM46111628	
EM46173	
✓	
N/A	
whatman 0100	

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Contined from Page _____
Continued on Page _____

Extraction Chemist 3/5/07 Date

Reviewed by 03/06/07 Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **07-MAR-2007 15:45**

Batch Number : 122775
Date Extracted: 06-MAR-2007
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5244E
Spike #2 ID : S5518A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-025		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193108-026		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193108-027		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193137-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193169-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377822	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377823	BS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377824	BSD		Water	1000	mL	2	0.002000	1		.1	1		8310		

Prep Chemist: _____ Reviewed By: _____ Date: 3/8/07

Relinquished By: _____ Received By: _____ Date: 08MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 122775
LIMS Analysis: 8310
Extracted by: RFW
Date Extracted: 03/06/07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-025 K	1030	7	2.0		
-026 J	950				*
-027 L	1050				*
193137-001 D	1050				
193169-001 G	1060	11			
MB QC377822	1000	NA			
BS 23					
BSD 24					
					SXM 3/7/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.1 mL of surrogate solution was added to all samples	55244E/55673A*	RFW 3/6/07
1.0 mL of matrix spiking solution was added to all spikes	55518A	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2	EM46354	
Extraction Start Time:	DW 3/6/07 ~~1550~~ 1545	
Extraction End Time:	10:57	RFW 3/7/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SXM 3/7/07
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ brown Na2SO4	EM46111628	
Exchanged 2x with Acetonitrile	EM46173	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume		
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	N/A	
Extracts filtered with 0.45 um PTFE syringe filter	Whatman 0108	

SXM for RFW 3/6/07

SXM 3/8/07 3/7/07

Extraction Chemist **Date**

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Contined from Page ___
Continued on Page ___

3/8/07

Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/23/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Batch#:	122986
Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	8,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	6,800	500
Manganese	ND	10
Nickel	ND	20
Potassium	1,400	500
Sodium	7,100	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4B	Batch#:	122986
Lab ID:	193108-002	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	27,000	500
Chromium	31	10
Copper	1.2	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	53,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	840	500
Sodium	59,000	500
Vanadium	14	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7B	Batch#:	122986
Lab ID:	193108-003	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	64,000	500
Chromium	30	10
Copper	1.6	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	83,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	500	500
Sodium	94,000	500
Vanadium	14	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5AR	Batch#:	122986
Lab ID:	193108-004	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	27	5.0
Cadmium	ND	1.0
Calcium	81,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	32,000	100
Lead	ND	3.0
Magnesium	75,000	500
Manganese	1,900	10
Nickel	ND	20
Potassium	5,900	500
Sodium	86,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5B	Batch#:	122986
Lab ID:	193108-005	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	31,000	500
Chromium	21	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	38,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	54,000	500
Vanadium	16	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301072A	Batch#:	122986
Lab ID:	193108-006	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	8,500	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	6,600	500
Manganese	ND	10
Nickel	ND	20
Potassium	1,400	500
Sodium	7,500	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Sampled:	03/01/07
Lab ID:	193108-007	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	32	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	1.5	1.0	10.00
Calcium	110,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	11	1.0	10.00
Iron	110	100	10.00
Lead	ND	3.0	10.00
Magnesium	230,000	500	50.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	2,000	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	250,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	25	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Sampled:	03/01/07
Lab ID:	193108-008	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	7.5	5.0	10.00
Barium	730	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	150,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	33,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	200,000	500	10.00
Manganese	15,000	10	100.0
Nickel	ND	20	10.00
Potassium	2,200	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	400,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW06	Batch#:	122987
Lab ID:	193108-009	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	57	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	35,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	1.9	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	63,000	500
Manganese	16	10
Nickel	ND	20
Potassium	960	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	35,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301073A	Sampled:	03/01/07
Lab ID:	193108-010	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	31	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	1.4	1.0	10.00
Calcium	110,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	1.4	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	210,000	500	50.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	2,000	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	230,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	25	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0301073B	Sampled:	03/01/07
Lab ID:	193108-011	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	7.8	5.0	10.00
Barium	660	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	130,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	31,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	180,000	500	10.00
Manganese	14,000	10	100.0
Nickel	ND	20	10.00
Potassium	2,100	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	360,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Sampled:	03/02/07
Lab ID:	193108-012	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	23	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	19,000	500	10.00
Chromium	67	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	76,000	500	10.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	1,100	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	290,000	500	50.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW08	Batch#:	122987
Lab ID:	193108-013	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	81	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	51,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	91,000	500
Manganese	240	10
Nickel	45	20
Potassium	500	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	68,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	21	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF02GW04	Batch#:	122987
Lab ID:	193108-014	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	6.5	5.0
Barium	97	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	22,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	86,000	500
Manganese	52	10
Nickel	ND	20
Potassium	1,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	61,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1A	Batch#:	122986
Lab ID:	193108-015	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	15	5.0
Cadmium	ND	1.0
Calcium	29,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	17,000	100
Lead	ND	3.0
Magnesium	44,000	500
Manganese	82	10
Nickel	ND	20
Potassium	1,100	500
Sodium	180,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	122986
Lab ID:	193108-016	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	6.2	5.0
Cadmium	ND	1.0
Calcium	19,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	8,100	100
Lead	ND	3.0
Magnesium	29,000	500
Manganese	1,100	10
Nickel	ND	20
Potassium	3,600	500
Sodium	71,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3A	Batch#:	122986
Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	46,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	51,000	500
Manganese	14	10
Nickel	ND	20
Potassium	1,300	500
Sodium	24,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4A	Sampled:	03/01/07
Lab ID:	193108-018	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07
Batch#:	122986		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	12	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	58,000	500	10.00
Chromium	ND	10	10.00
Copper	ND	1.0	10.00
Iron	37,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	73,000	500	10.00
Manganese	2,100	10	50.00
Nickel	ND	20	10.00
Potassium	6,600	500	10.00
Sodium	110,000	500	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW101	Sampled:	03/01/07
Lab ID:	193108-019	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07
Batch#:	122986		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	24	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	22,000	500	10.00
Chromium	ND	10	10.00
Copper	ND	1.0	10.00
Iron	22,000	100	10.00
Lead	ND	3.0	10.00
Magnesium	38,000	500	10.00
Manganese	57	10	10.00
Nickel	ND	20	10.00
Potassium	5,800	500	10.00
Sodium	210,000	500	50.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW102	Batch#:	122986
Lab ID:	193108-020	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	18,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	1,300	100
Lead	ND	3.0
Magnesium	12,000	500
Manganese	250	10
Nickel	ND	20
Potassium	3,400	500
Sodium	76,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW103	Batch#:	122987
Lab ID:	193108-022	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	150	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	41,000	500
Chromium	19	10
Cobalt	ND	10
Copper	2.3	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	44,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	830	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	94,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	77	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	49,000	500
Manganese	510	10
Nickel	ND	20
Potassium	1,200	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW101	Batch#:	122987
Lab ID:	193108-024	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	72	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	190,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	2.7	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	90,000	500
Manganese	410	10
Nickel	31	20
Potassium	27,000	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	53,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW03	Batch#:	122987
Lab ID:	193108-025	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	88	10
Beryllium	ND	2.0
Cadmium	4.8	1.0
Calcium	68,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	140,000	500
Manganese	410	10
Nickel	ND	20
Potassium	890	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	130,000	500
Thallium	ND	1.0
Vanadium	13	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW05	Batch#:	122987
Lab ID:	193108-026	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	70	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	67,000	500
Chromium	11	10
Cobalt	13	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	96,000	500
Manganese	160	10
Nickel	1,000	20
Potassium	1,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	83,000	500
Thallium	ND	1.0
Vanadium	10	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0302071A	Batch#:	122987
Lab ID:	193108-027	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	76	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	520	10
Nickel	ND	20
Potassium	1,300	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378693	Batch#:	122986
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/13/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	ND	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Batch#:	122987
Lab ID:	QC378700	Prepared:	03/12/07
Matrix:	Filtrate	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	ND	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	ND	500	1.000
Chromium	ND	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	5.3 b	3.0	1.000
Magnesium	ND	500	1.000
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	ND	500	1.000
Selenium	ND	5.0	10.00
Silver	ND	1.0	1.000
Sodium	ND	500	1.000
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DAEGW103	Sampled:	03/01/07
Lab ID:	193108-022	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

97.2

00555

Curtis & Tompkins, Ltd.

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DUP0302071A	Sampled:	03/02/07
Lab ID:	193108-027	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

192.0

00555A

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	ICAP
Analyte:	Molybdenum	Diln Fac:	1.000
Type:	BLANK	Batch#:	122751
Lab ID:	QC377727	Prepared:	03/06/07
Matrix:	Water	Analyzed:	03/06/07
Units:	ug/L		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

193.0

00555B

Curtis & Tompkins, Ltd.

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Sampled:	03/02/07
Field ID:	DAEGW104	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	193108-023	ND	5.0	10.00
BLANK	QC378700	ND	5.0	1.000

ND= Not Detected
RL= Reporting Limit

188.0

00555C

Curtis & Tompkins, Ltd.

Hardness (Total)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	122751
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/06/07

Field ID	Type	Lab ID	Result	RL	Sampled
DAEGW103	SAMPLE	193108-022	350	3.3	03/01/07
DAEGW104	SAMPLE	193108-023	370	3.3	03/02/07
DUP0302071A	SAMPLE	193108-027	330	3.3	03/02/07
	BLANK	QC377727	ND	3.3	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	Lab ID	Matrix	Result	RL	Batch#	Sampled
1349MW01	SAMPLE	193108-007	Filtrate	ND	0.20	123057	03/01/07
1349MW100	SAMPLE	193108-008	Filtrate	ND	0.20	123057	03/01/07
DUP0301073A	SAMPLE	193108-010	Filtrate	ND	0.20	123057	03/01/07
DUP0301073B	SAMPLE	193108-011	Filtrate	ND	0.20	123057	03/01/07
DAEGW103	SAMPLE	193108-022	Filtrate	ND	0.20	123057	03/01/07
DAEGW104	SAMPLE	193108-023	Filtrate	ND	0.20	123058	03/02/07
DAEGW101	SAMPLE	193108-024	Filtrate	ND	0.20	123057	03/02/07
DUP0302071A	SAMPLE	193108-027	Filtrate	ND	0.20	123057	03/02/07
	BLANK	QC378996	Water	ND	0.20	123057	
	BLANK	QC379003	Water	ND	0.20	123058	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122986
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/13/07

Type: BS Lab ID: QC378694

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,445	94	80-120
Antimony	100.0	96.74	97	80-120
Arsenic	100.0	96.68	97	80-120
Cadmium	100.0	98.82	99	80-120
Calcium	10,000	10,370	104	80-120
Chromium	100.0	109.2	109	80-120
Copper	100.0	104.2	104	80-120
Iron	10,000	11,420	114	80-120
Lead	100.0	104.4	104	80-120
Magnesium	10,000	9,279	93	80-120
Manganese	100.0	109.5	110	80-120
Nickel	100.0	114.7	115	80-120
Potassium	10,000	10,070	101	80-120
Sodium	10,000	10,080	101	80-120
Vanadium	100.0	106.7	107	80-120
Zinc	100.0	95.98	96	80-120

Type: BSD Lab ID: QC378695

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,276	93	80-120	2	20
Antimony	100.0	97.02	97	80-120	0	20
Arsenic	100.0	96.43	96	80-120	0	20
Cadmium	100.0	98.95	99	80-120	0	20
Calcium	10,000	10,230	102	80-120	1	20
Chromium	100.0	106.4	106	80-120	3	20
Copper	100.0	102.8	103	80-120	1	20
Iron	10,000	11,360	114	80-120	1	20
Lead	100.0	104.0	104	80-120	0	20
Magnesium	10,000	9,224	92	80-120	1	20
Manganese	100.0	106.8	107	80-120	2	20
Nickel	100.0	111.9	112	80-120	2	20
Potassium	10,000	9,847	98	80-120	2	20
Sodium	10,000	9,987	100	80-120	1	20
Vanadium	100.0	104.6	105	80-120	2	20
Zinc	100.0	96.52	97	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122987
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: BS Lab ID: QC378701

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,190	102	80-120
Antimony	100.0	101.0	101	80-120
Arsenic	100.0	101.1	101	80-120
Barium	100.0	102.3	102	80-120
Beryllium	100.0	113.4	113	80-120
Cadmium	100.0	102.1	102	80-120
Calcium	10,000	10,310	103	80-120
Chromium	100.0	105.2	105	80-120
Cobalt	100.0	107.0	107	80-120
Copper	100.0	107.2	107	80-120
Iron	10,000	10,260	103	80-120
Lead	100.0	103.5	104	80-120
Magnesium	10,000	10,300	103	80-120
Manganese	100.0	104.9	105	80-120
Nickel	100.0	107.4	107	80-120
Potassium	10,000	10,280	103	80-120
Selenium	100.0	94.55	95	80-120
Silver	100.0	115.2	115	80-120
Sodium	10,000	10,220	102	80-120
Thallium	50.00	50.42	101	80-120
Vanadium	100.0	106.2	106	80-120
Zinc	100.0	103.4	103	80-120

Type: BSD Lab ID: QC378702

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,939	99	80-120	2	20
Antimony	100.0	100.1	100	80-120	1	20
Arsenic	100.0	97.60	98	80-120	4	20
Barium	100.0	101.4	101	80-120	1	20
Beryllium	100.0	111.3	111	80-120	2	20
Cadmium	100.0	100.1	100	80-120	2	20
Calcium	10,000	10,210	102	80-120	1	20
Chromium	100.0	104.3	104	80-120	1	20
Cobalt	100.0	105.1	105	80-120	2	20
Copper	100.0	105.2	105	80-120	2	20
Iron	10,000	10,170	102	80-120	1	20
Lead	100.0	101.4	101	80-120	2	20
Magnesium	10,000	10,020	100	80-120	3	20
Manganese	100.0	104.0	104	80-120	1	20
Nickel	100.0	108.0	108	80-120	1	20
Potassium	10,000	10,030	100	80-120	2	20
Selenium	100.0	91.28	91	80-120	4	20
Silver	100.0	114.6	115	80-120	1	20
Sodium	10,000	10,260	103	80-120	0	20
Thallium	50.00	50.19	100	80-120	0	20
Vanadium	100.0	105.1	105	80-120	1	20
Zinc	100.0	105.7	106	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122751
Field ID:	DAEGW104	Sampled:	03/02/07
MSS Lab ID:	193108-023	Received:	03/02/07
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/06/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC377728		400.0	426.7	107	80-120		
BSD	QC377729		400.0	432.7	108	80-120	1	20
MS	QC377732	5.017	400.0	435.4	108	75-125		
MSD	QC377733		400.0	433.0	107	75-125	1	20

RPD= Relative Percent Difference

Batch QC Report

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Received:	03/02/07
Matrix:	Filtrate	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/15/07
Batch#:	122987		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled
	BS		QC378701		100.0	101.4	101	80-120			1.000	
	BSD		QC378702		100.0	99.71	100	80-120	2	20	1.000	
1349MW01	MS	193108-007	QC378703	2.949	100.0	101.9	99	75-125			10.00	03/01/07
1349MW01	MSD	193108-007	QC378704		100.0	102.7	100	75-125	1	20	10.00	03/01/07
DAEGW104	MS	193108-023	QC378711	1.985	100.0	101.0	99	75-125			10.00	03/02/07
DAEGW104	MSD	193108-023	QC378712		100.0	101.9	100	75-125	1	20	10.00	03/02/07

RPD= Relative Percent Difference

189.2

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00569A

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Received:	03/02/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled
	BS		QC378997	Water		5.000	5.280	106	80-120			123057	
	BSD		QC378998	Water		5.000	5.100	102	80-120	3	20	123057	
1349MW01	MS	193108-007	QC379000	Filtrate	<0.05753	5.000	5.310	106	75-125			123057	03/01/07
1349MW01	MSD	193108-007	QC379001	Filtrate		5.000	5.280	106	75-125	1	20	123057	03/01/07
	BS		QC379004	Water		5.000	5.090	102	80-120			123058	
	BSD		QC379005	Water		5.000	5.160	103	80-120	1	20	123058	
DAEGW104	MS	193108-023	QC379007	Filtrate	<0.02083	5.000	5.420	108	75-125			123058	03/02/07
DAEGW104	MSD	193108-023	QC379008	Filtrate		5.000	5.440	109	75-125	0	20	123058	03/02/07

561

RPD= Relative Percent Difference

168.0

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Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Batch#:	122986
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Type: MS Lab ID: QC378696

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	9,979	100	75-125
Antimony	0.9124	100.0	102.5	102	75-125
Arsenic	1.216	100.0	104.9	104	75-125
Cadmium	<0.05768	100.0	104.5	105	75-125
Calcium	8,029	10,000	18,960	109	75-125
Chromium	1.237	100.0	108.4	107	75-125
Copper	<0.2776	100.0	109.8	110	75-125
Iron	<19.37	10,000	12,020	120	75-125
Lead	<0.1276	100.0	108.8	109	75-125
Magnesium	6,828	10,000	16,530	97	75-125
Manganese	0.2437	100.0	108.5	108	75-125
Nickel	2.121	100.0	115.3	113	75-125
Potassium	1,417	10,000	11,710	103	75-125
Sodium	7,079	10,000	18,630	116	75-125
Vanadium	4.427	100.0	109.0	105	75-125
Zinc	<0.6189	100.0	115.7	116	75-125

Type: MSD Lab ID: QC378697

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,998	100	75-125	0	20
Antimony	100.0	102.0	101	75-125	0	20
Arsenic	100.0	105.7	104	75-125	1	20
Cadmium	100.0	105.3	105	75-125	1	20
Calcium	10,000	18,640	106	75-125	2	20
Chromium	100.0	109.5	108	75-125	1	20
Copper	100.0	112.5	113	75-125	2	20
Iron	10,000	12,040	120	75-125	0	20
Lead	100.0	108.5	109	75-125	0	20
Magnesium	10,000	16,400	96	75-125	1	20
Manganese	100.0	107.8	108	75-125	1	20
Nickel	100.0	117.9	116	75-125	2	20
Potassium	10,000	11,720	103	75-125	0	20
Sodium	10,000	18,490	114	75-125	1	20
Vanadium	100.0	108.1	104	75-125	1	20
Zinc	100.0	116.3	116	75-125	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ3A	Batch#:	122986
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/13/07

Type: MS Lab ID: QC378713

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	9,839	98	75-125
Antimony	<0.09301	100.0	100.8	101	75-125
Arsenic	0.6427	100.0	102.2	102	75-125
Cadmium	<0.05768	100.0	103.3	103	75-125
Calcium	45,970	10,000	56,000	100 NM	75-125
Chromium	6.696	100.0	110.4	104	75-125
Copper	0.8371	100.0	104.8	104	75-125
Iron	<19.37	10,000	11,880	119	75-125
Lead	<0.1276	100.0	106.2	106	75-125
Magnesium	50,530	10,000	60,210	97 NM	75-125
Manganese	14.13	100.0	120.2	106	75-125
Nickel	10.55	100.0	118.3	108	75-125
Potassium	1,296	10,000	11,460	102	75-125
Sodium	24,020	10,000	32,030	80	75-125
Vanadium	7.225	100.0	109.3	102	75-125
Zinc	6.177	100.0	107.9	102	75-125

Type: MSD Lab ID: QC378714

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,825	98	75-125	0	20
Antimony	100.0	99.75	100	75-125	1	20
Arsenic	100.0	103.5	103	75-125	1	20
Cadmium	100.0	103.6	104	75-125	0	20
Calcium	10,000	54,510	85 NM	75-125	3	20
Chromium	100.0	112.0	105	75-125	1	20
Copper	100.0	104.0	103	75-125	1	20
Iron	10,000	12,090	121	75-125	2	20
Lead	100.0	105.6	106	75-125	1	20
Magnesium	10,000	58,990	85 NM	75-125	2	20
Manganese	100.0	120.9	107	75-125	1	20
Nickel	100.0	119.3	109	75-125	1	20
Potassium	10,000	11,390	101	75-125	1	20
Sodium	10,000	31,500	75	75-125	2	20
Vanadium	100.0	110.3	103	75-125	1	20
Zinc	100.0	105.9	100	75-125	2	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MS Lab ID: QC378703

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	66.69	10,000	9,970	99	75-125
Antimony	0.4574	100.0	105.1	105	75-125
Arsenic	3.457	100.0	108.2	105	75-125
Barium	31.65	100.0	136.1	104	75-125
Beryllium	0.4358	100.0	109.3	109	75-125
Cadmium	1.539	100.0	103.3	102	75-125
Calcium	110,200	10,000	117,100	69 NM	75-125
Chromium	1.786	100.0	106.0	104	75-125
Cobalt	0.6710	100.0	105.1	104	75-125
Copper	10.53	100.0	106.4	96	75-125
Iron	111.7	10,000	10,420	103	75-125
Lead	0.5740	100.0	100.8	100	75-125
Magnesium	227,000	10,000	217,100 >LR	-99 NM	75-125
Manganese	8.773	100.0	111.4	103	75-125
Nickel	10.41	100.0	115.0	105	75-125
Potassium	2,019	10,000	12,000	100	75-125
Selenium	0.5676	100.0	102.1	102	75-125
Silver	0.4637	100.0	113.8	113	75-125
Sodium	250,800	10,000	249,400 >LR	-14 NM	75-125
Thallium	0.5191	50.00	50.01	99	75-125
Vanadium	6.960	100.0	119.8	113	75-125
Zinc	25.36	100.0	126.7	101	75-125

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MSD Lab ID: QC378704

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,030	100	75-125	1	20
Antimony	100.0	105.4	105	75-125	0	20
Arsenic	100.0	107.1	104	75-125	1	20
Barium	100.0	137.5	106	75-125	1	20
Beryllium	100.0	110.3	110	75-125	1	20
Cadmium	100.0	105.1	104	75-125	2	20
Calcium	10,000	123,900	137 NM	75-125	6	20
Chromium	100.0	104.6	103	75-125	1	20
Cobalt	100.0	103.2	103	75-125	2	20
Copper	100.0	106.4	96	75-125	0	20
Iron	10,000	10,360	102	75-125	1	20
Lead	100.0	100.9	100	75-125	0	20
Magnesium	10,000	230,000 >LR	30 NM	75-125	NC	20
Manganese	100.0	111.0	102	75-125	0	20
Nickel	100.0	115.5	105	75-125	0	20
Potassium	10,000	12,140	101	75-125	1	20
Selenium	100.0	99.91	99	75-125	2	20
Silver	100.0	113.6	113	75-125	0	20
Sodium	10,000	257,900 >LR	71 NM	75-125	NC	20
Thallium	50.00	50.56	100	75-125	1	20
Vanadium	100.0	120.0	113	75-125	0	20
Zinc	100.0	122.8	97	75-125	3	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MS Lab ID: QC378711

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	9.787	10,000	9,861	99	75-125
Antimony	0.1388	100.0	102.3	102	75-125
Arsenic	1.782	100.0	102.2	100	75-125
Barium	76.71	100.0	180.1	103	75-125
Beryllium	<0.1733	100.0	108.9	109	75-125
Cadmium	<0.05768	100.0	104.4	104	75-125
Calcium	44,580	10,000	54,400	98 NM	75-125
Chromium	0.7995	100.0	102.3	102	75-125
Cobalt	0.1873	100.0	103.6	103	75-125
Copper	<0.2776	100.0	103.2	103	75-125
Iron	<19.37	10,000	10,280	103	75-125
Lead	0.3637	100.0	101.7	101	75-125
Magnesium	48,720	10,000	58,180	95 NM	75-125
Manganese	510.3	100.0	611.3	101 NM	75-125
Nickel	1.581	100.0	105.7	104	75-125
Potassium	1,205	10,000	11,230	100	75-125
Selenium	<0.2730	100.0	102.7	103	75-125
Silver	<0.07903	100.0	113.8	114	75-125
Sodium	37,790	10,000	47,650	99	75-125
Thallium	<0.2993	50.00	37.49	75	75-125
Vanadium	<0.2578	100.0	99.29	99	75-125
Zinc	17.10	100.0	116.1	99	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW104	Batch#:	122987
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/02/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	10.00	Analyzed:	03/15/07

Type: MSD Lab ID: QC378712

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,921	99	75-125	1	20
Antimony	100.0	101.2	101	75-125	1	20
Arsenic	100.0	103.9	102	75-125	2	20
Barium	100.0	176.5	100	75-125	2	20
Beryllium	100.0	108.6	109	75-125	0	20
Cadmium	100.0	102.7	103	75-125	2	20
Calcium	10,000	53,100	85 NM	75-125	2	20
Chromium	100.0	103.3	103	75-125	1	20
Cobalt	100.0	104.6	104	75-125	1	20
Copper	100.0	106.9	107	75-125	4	20
Iron	10,000	10,260	103	75-125	0	20
Lead	100.0	102.5	102	75-125	1	20
Magnesium	10,000	56,340	76 NM	75-125	3	20
Manganese	100.0	597.8	88 NM	75-125	2	20
Nickel	100.0	107.0	105	75-125	1	20
Potassium	10,000	11,180	100	75-125	0	20
Selenium	100.0	102.4	102	75-125	0	20
Silver	100.0	113.0	113	75-125	1	20
Sodium	10,000	46,600	88	75-125	2	20
Thallium	50.00	37.86	76	75-125	1	20
Vanadium	100.0	100.2	100	75-125	1	20
Zinc	100.0	122.0	105	75-125	5	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1047MW101	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	122986
MSS Lab ID:	193108-001	Sampled:	03/01/07
Lab ID:	QC378698	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Aluminum	ND	100.0	ND	500.0	NC	10
Antimony	ND	1.000	ND	5.000	NC	10
Arsenic	ND	5.000	ND	5.000	NC	10
Cadmium	ND	1.000	ND	5.000	NC	10
Calcium	8,029	500.0	9,268	500.0	15 *	10
Chromium	ND	10.00	ND	10.00	NC	10
Copper	ND	1.000	ND	5.000	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Lead	ND	3.000	ND	5.000	NC	10
Magnesium	6,828	500.0	6,684	500.0	2	10
Manganese	ND	10.00	ND	10.00	NC	10
Nickel	ND	20.00	2.345 J	20.00	NC	10
Potassium	1,417	500.0	1,359	500.0	NC	10
Sodium	7,079	500.0	7,907	500.0	12 *	10
Vanadium	ND	10.00	3.008 J	10.00	NC	10
Zinc	ND	20.00	46.57 J	50.00	NC	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW01	Units:	ug/L
Type:	Serial Dilution	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378705	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/15/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac
Aluminum	ND	100.0	150.4 J	500.0	NC	10	50.00
Antimony	ND	1.000	1.356 J	5.000	NC	10	50.00
Arsenic	ND	5.000	9.528	5.000	NC	10	50.00
Barium	31.65	10.00	31.58	10.00	0	10	50.00
Beryllium	ND	2.000	1.065 J	5.000	NC	10	50.00
Cadmium	1.539	1.000	2.155 J	5.000	NC	10	50.00
Calcium	110,200	500.0	118,500	500.0	8	10	50.00
Chromium	ND	10.00	2.790 J	10.00	NC	10	50.00
Cobalt	ND	10.00	0.5626 J	10.00	NC	10	50.00
Copper	10.53	1.000	ND	5.000	NC	10	50.00
Iron	111.7	100.0	ND	500.0	NC	10	50.00
Lead	ND	3.000	2.724 J	5.000	NC	10	50.00
Magnesium	227,000	500.0	222,300	2,500	2	10	250.0
Manganese	ND	10.00	10.36	10.00	18 *	10	50.00
Nickel	ND	20.00	14.50 J	20.00	NC	10	50.00
Potassium	2,019	500.0	2,468	500.0	NC	10	50.00
Selenium	ND	5.000	ND	5.000	NC	10	50.00
Silver	ND	1.000	1.061 J	5.000	NC	10	50.00
Sodium	250,800	500.0	251,200	2,500	0	10	250.0
Thallium	ND	1.000	1.656 J	2.500	NC	10	50.00
Vanadium	ND	10.00	40.56	10.00	NC	10	50.00
Zinc	25.36	20.00	39.48	20.00	NC	10	50.00

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Units:	ug/L
Field ID:	DAEGW104	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122751
MSS Lab ID:	193108-023	Sampled:	03/02/07
Lab ID:	QC377805	Received:	03/02/07
Matrix:	Water	Analyzed:	03/06/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
5.017	5.000	6.577 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Molybdenum

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Molybdenum	Units:	ug/L
Field ID:	1349MW01	Diln Fac:	250.0
Type:	Serial Dilution	Batch#:	122987
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378705	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/15/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	5.000	5.672 J	25.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

190.0

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Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	1349MW01	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123057
MSS Lab ID:	193108-007	Sampled:	03/01/07
Lab ID:	QC378999	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	DAEGW104	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123058
MSS Lab ID:	193108-023	Sampled:	03/02/07
Lab ID:	QC379006	Received:	03/02/07
Matrix:	Filtrate	Analyzed:	03/13/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6010B

Type : PDS
Inst : MET09
Seqnum: 97094389039
File : 030607ar
IDF : 1.0
Lab ID: QC377806
Matrix: Water
Batch : 122751
Time : 06-MAR-2007 15:57
Cal : 97094389001
MSS : 193108-023
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4884 (100X), S4885 (100X)

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	97094389035	21570	R	2000	22780	R	61	75-125	: u
Antimony	97094389035	1.106	A	500.0	485.6	A	97	75-125	u
Arsenic	97094389040	9.898	A	100.0	114.9	A	105	75-125	u
Barium	97094389035	293.8	A	2000	2304	A	101	75-125	u
Beryllium	97094389035	0.7734	A	50.00	53.38	A	105	75-125	u
Cadmium	97094389035	ND	A	50.00	49.53	A	99	75-125	u
Calcium	97094389035	48080	R	20000	67890	R	99	75-125	u
Chromium	97094389035	100.0	A	200.0	297.2	A	99	75-125	u
Cobalt	97094389035	22.17	A	500.0	484.6	A	92	75-125	u
Copper	97094389035	35.98	A	250.0	283.7	A	99	75-125	u
Iron	97094389035	36540	R	1000	36600	R	6	75-125	: u
Lead	97094389035	9.155	A	100.0	105.0	A	96	75-125	u
Magnesium	97094389035	61400	R	20000	79580	R	91	75-125	u
Manganese	97094389035	4916	A	50.00	4870	A	-91	75-125	: u
Molybdenum	97094389035	5.017	A	400.0	419.0	A	103	75-125	u
Nickel	97094389035	121.5	A	500.0	600.5	A	96	75-125	u
Potassium	97094389035	4102	R	10000	13960	R	99	75-125	u
Selenium	97094389035	ND	A	100.0	102.9	A	103	75-125	u
Silver	97094389035	ND	A	50.00	48.60	A	97	75-125	u
Sodium	97094389035	42300	R	20000	60270	R	90	75-125	u
Thallium	97094389035	2.073	A	100.0	108.7	A	107	75-125	u
Vanadium	97094389035	63.35	A	500.0	564.3	A	100	75-125	u
Zinc	97094389035	105.8	A	500.0	622.7	A	103	75-125	u
Boron	97094389035	54.54	A	1000	1121	A	107	75-125	u
Tin	97094389035	ND	A	1000	979.6	A	98	75-125	u
Titanium	97094389035	493.0	A	1000	1537	A	104	75-125	u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	3574688	3360570	-5.99

:=recovery not meaningful u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67103428094
File : c12t0094
IDF : 10.0
Lab ID: 193108-001
Matrix: Filtrate
Batch : 122986
Time : 13-MAR-2007 04:11
Cal : 67103428001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67103428098
File : c12t0098
IDF : 10.0
Lab ID: QC378699
Matrix: Filtrate
Batch : 122986
Time : 13-MAR-2007 04:32
Cal : 67103428001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	16.76	A	10000	9301	A	93	75-125	u
Arsenic	0.2115	E	100.0	97.56	E	97	75-125	u
Barium	0.7227	A	100.0	97.01	A	96	75-125	u
Beryllium	0.09331	A	100.0	111.1	A	111	75-125	u
Cadmium	0.08367	A	100.0	97.59	A	98	75-125	u
Calcium	852.0	A	10000	10560	A	97	75-125	u
Chromium	0.2384	E	100.0	100.2	E	100	75-125	u
Copper	0.2823	E	100.0	97.86	E	98	75-125	u
Lead	0.1000	A	100.0	100.1	A	100	75-125	u
Magnesium	677.2	A	10000	9936	A	93	75-125	u
Manganese	0.8125	E	100.0	100.9	E	100	75-125	u
Nickel	0.3672	E	100.0	103.4	E	103	75-125	u
Potassium	156.1	A	10000	9824	A	97	75-125	u
Silver	0.09812	A	100.0	95.65	A	96	75-125	u
Sodium	761.8	E	10000	10280	E	95	75-125	u
Thallium	0.08550	A	50.00	48.36	A	97	75-125	u
Vanadium	0.5106	E	100.0	99.81	E	99	75-125	u
Zinc	1.007	E	100.0	97.39	E	96	75-125	u

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	672761	443509	-34.08
Scandium	A	1282606	1026001	-20.01
Scandium	E	35324	27786	-21.34
Germanium	E	19198	15510	-19.21
Indium	A	1826336	1467429	-19.65
Bismuth	A	1431311	1138292	-20.47
Terbium	A	2265507	1926073	-14.98

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280107
File : c14t0107
IDF : 10.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:03
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280111
File : c14t0111
IDF : 10.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:24
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	6.669	A	10000	9524	A	95	75-125	u
Arsenic	0.3457	E	100.0	98.16	E	98	75-125	u
Barium	3.165	A	100.0	102.7	A	100	75-125	u
Beryllium	0.04358	A	100.0	105.7	A	106	75-125	u
Cadmium	0.1539	A	100.0	99.24	A	99	75-125	u
Calcium	11020	A	10000	20940 >LR	A	99	75-125	>LR **b***
Chromium	0.1786	E	100.0	97.97	E	98	75-125	u
Cobalt	0.06710	E	100.0	97.71	E	98	75-125	u
Copper	1.053	E	100.0	98.06	E	97	75-125	u
Iron	11.17	H	10000	9954	H	99	75-125	u
Lead	0.05740	A	100.0	97.06	A	97	75-125	u
Manganese	0.8773	E	100.0	98.74	E	98	75-125	u
Nickel	1.041	E	100.0	99.57	E	99	75-125	u
Potassium	201.9	A	10000	9998	A	98	75-125	>ib **b***
Selenium	0.05676	H	100.0	98.83	H	99	75-125	u
Silver	0.04637	A	100.0	98.81	A	99	75-125	u
Thallium	0.05191	A	50.00	49.63	A	99	75-125	u
Vanadium	0.6960	E	100.0	99.39	E	99	75-125	u
Zinc	2.536	E	100.0	97.48	E	95	75-125	u

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1018511	-16.15
Scandium	A	1291021	1250369	-3.15
Scandium	E	94503	90174	-4.58
Scandium	H	842013	829761	-1.46
Germanium	H	169845	167226	-1.54
Germanium	E	39701	37577	-5.35
Indium	A	1596397	1456898	-8.74
Bismuth	A	1672268	1460669	-12.65
Terbium	A	2400096	2274536	-5.23

>=closing >LR=overrange b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280107
File : c14t0107
IDF : 10.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:03
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280143
File : c14t0143
IDF : 10.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 08:26
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	6.669	A	10000	9396	A	94	75-125	
Antimony	0.04574	A	100.0	98.74	A	99	75-125	u
Arsenic	0.3457	E	100.0	98.81	E	98	75-125	
Barium	3.165	A	100.0	101.1	A	98	75-125	
Beryllium	0.04358	A	100.0	104.1	A	104	75-125	
Cadmium	0.1539	A	100.0	97.78	A	98	75-125	
Calcium	11020.	A	10000	20520 >LR	A	95	75-125	>LR **b***
Chromium	0.1786	E	100.0	98.52	E	98	75-125	
Cobalt	0.06710	E	100.0	98.10	E	98	75-125	
Copper	1.053	E	100.0	97.58	E	97	75-125	
Iron	11.17	H	10000	9784	H	98	75-125	
Lead	0.05740	A	100.0	95.55	A	95	75-125	
Manganese	0.8773	E	100.0	98.52	E	98	75-125	
Molybdenum	0.08127	A	100.0	94.81	A	95	75-125	u
Nickel	1.041	E	100.0	99.54	E	98	75-125	
Potassium	201.9	A	10000	9776	A	96	75-125	u
Selenium	0.05676	H	100.0	98.07	H	98	75-125	
Silver	0.04637	A	100.0	96.49	A	96	75-125	
Thallium	0.05191	A	50.00	48.34	A	97	75-125	
Vanadium	0.6960	E	100.0	99.32	E	99	75-125	
Zinc	2.536	E	100.0	97.87	E	95	75-125	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1019261	-16.09
Scandium	A	1291021	1238339	-4.08
Scandium	E	94503	87417	-7.50
Scandium	H	842013	801153	-4.85
Germanium	H	169845	160568	-5.46
Germanium	E	39701	36710	-7.53
Indium	A	1596397	1450144	-9.16
Bismuth	A	1672268	1461319	-12.61
Yttrium	A	1593478	1544448	-3.08
Terbium	A	2400096	2266377	-5.57

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67106280108
File : c14t0108
IDF : 50.0
Lab ID: 193108-007
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 05:08
Cal : 67106280001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67106280146
File : c14t0146
IDF : 50.0
Lab ID: QC378706
Matrix: Filtrate
Batch : 122987
Time : 15-MAR-2007 08:43
Cal : 67106280001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	4.976	A	10000	9444	A	94	75-125	
Antimony	0.02724	A	100.0	95.18	A	95	75-125	
Arsenic	0.1427	E	100.0	99.28	E	99	75-125	
Barium	0.6462	A	100.0	100.0	A	99	75-125	
Beryllium	0.02156	A	100.0	104.0	A	104	75-125	
Cadmium	0.04274	A	100.0	97.82	A	98	75-125	
Calcium	23.76	A	10000	11810	A	94	75-125	u
Chromium	ND	E	100.0	98.74	E	99	75-125	
Cobalt	ND	E	100.0	98.74	E	99	75-125	
Copper	ND	E	100.0	98.60	E	99	75-125	
Iron	ND	H	10000	9744	H	97	75-125	
Lead	0.05214	A	100.0	96.70	A	97	75-125	
Magnesium	4540	A	10000	13620	A	91	75-125	u
Manganese	0.1931	E	100.0	98.08	E	98	75-125	
Molybdenum	0.05898	A	100.0	95.02	A	95	75-125	u
Nickel	0.2568	E	100.0	100.2	E	100	75-125	
Selenium	ND	H	100.0	97.64	H	98	75-125	
Silver	0.02478	A	100.0	95.36	A	95	75-125	
Sodium	5016	E	10000	14400	E	94	75-125	u
Thallium	0.03146	A	50.00	48.18	A	96	75-125	
Vanadium	0.7640	E	100.0	98.84	E	98	75-125	
Zinc	0.8256	E	100.0	97.62	E	97	75-125	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1214699	1052228	-13.38
Scandium	A	1291021	1268793	-1.72
Scandium	E	94503	89605	-5.18
Scandium	H	842013	821664	-2.42
Germanium	H	169845	166086	-2.21
Germanium	E	39701	37842	-4.68
Indium	A	1596397	1501178	-5.96
Bismuth	A	1672268	1511695	-9.60
Yttrium	A	1593478	1563999	-1.85
Terbium	A	2400096	2302057	-4.08

u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6010B

Inst : MET09
Calnum : 97094389001
Units : ug/L

Date : 06-MAR-2007 13:09
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	030607ar	97094389002	CRIM08	06-MAR-2007 13:13	S5393
L2	030607ar	97094389003	CS100	06-MAR-2007 13:17	S5428
L3	030607ar	97094389004	CS1K	06-MAR-2007 13:20	S5427
L4	030607ar	97094389005	CS10K	06-MAR-2007 13:22	S5323
L5	030607ar	97094389006	CS100K	06-MAR-2007 13:26	S5561

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	24.825	20.755	21.070	20.760		LOR0	0.00000	0.04816		21.852	1.000	0.995	
Arsenic	A	10.817	10.317	10.381	10.288		LOR0	0.00000	0.09719		10.451	1.000	0.995	
Barium	A	105.30	97.881	99.782	95.864		LOR0	0.00000	0.01043		99.707	1.000	0.995	
Beryllium	A	3769.6	3886.2	3946.4			LOR0	0.00000	2.53E-4		3867.4	1.000	0.995	
Boron	A	186.50		187.42	188.92		LOR0	0.00000	0.00529		187.61	1.000	0.995	
Cadmium	A	179.29	184.20	181.93	174.20		LOR0	0.00000	0.00574		179.91	1.000	0.995	
Chromium	A	185.86	178.94	173.87	168.30		LOR0	0.00000	0.00594		176.74	1.000	0.995	
Cobalt	A	57.230	55.296	56.789	55.901		LOR0	0.00000	0.01789		56.304	1.000	0.995	
Copper	A	183.82	185.91	188.17	185.42		LOR0	0.00000	0.00539		185.83	1.000	0.995	
Lead	A	63.907	54.062	54.941	52.571		LOR0	0.00000	0.01901		56.370	1.000	0.995	
Manganese	A	513.70	517.54	507.70	474.06		LOR0	0.00000	0.00211		503.25	1.000	0.995	
Molybdenum	A	41.109	44.745	43.896	42.607		LOR0	0.00000	0.02346		43.089	1.000	0.995	
Nickel	A	92.067	92.785	93.265	89.851		LOR0	0.00000	0.01113		91.992	1.000	0.995	
Selenium	A	14.157	13.429	13.924	13.961		LOR0	0.00000	0.07163		13.868	1.000	0.995	
Silver	A	462.17	491.15	490.21	478.24		LOR0	0.00000	0.00208		480.44	1.000	0.995	
Thallium	A	7.1235	9.0019	8.8275	8.4082		LOR0	0.00000	0.11887		8.3403	1.000	0.995	
Tin	A	20.181	19.669	20.469	19.921		LOR0	0.00000	0.05018		20.060	1.000	0.995	
Titanium	A	716.69	725.67	713.15	662.45		LOR0	0.00000	0.00151		704.49	1.000	0.995	
Vanadium	A	176.49	192.50	190.40	189.00		LOR0	0.00000	0.00529		187.09	1.000	0.995	
Zinc	A	88.790	83.202	83.561	81.528		LOR0	0.00000	0.01226		84.270	1.000	0.995	
Aluminum	R	0.9689		0.9572	0.9119	0.9032	LOR0	0.00000	1.10702		0.9353	1.000	0.995	
Calcium	R	11.306		10.127	9.3847	8.8865	LOR0	0.00000	0.11247		9.9260	1.000	0.995	
Iron	R	4.9714		5.0548	4.8488	4.6018	LOR0	0.00000	0.21719		4.8692	1.000	0.995	
Magnesium	R	1.3341		1.4055	1.3342	1.2608	LOR0	0.00000	0.79269		1.3337	1.000	0.995	
Potassium	R	3.5360		3.0984	3.0706	2.9978	LOR0	0.00000	0.33349		3.1757	1.000	0.995	
Sodium	R	288.47		317.15	298.46	282.04	LOR0	0.00000	0.00354		296.53	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Antimony	A	5.0000	100.00	1000.0	10000.0		ug/L
Arsenic	A	5.0000	100.00	1000.0	10000.0		ug/L
Barium	A	5.0000	100.00	1000.0	10000.0		ug/L
Beryllium	A	2.0000	100.00	1000.0			ug/L
Boron	A	100.00		1000.0	10000.0		ug/L
Cadmium	A	5.0000	100.00	1000.0	10000.0		ug/L
Chromium	A	5.0000	100.00	1000.0	10000.0		ug/L
Cobalt	A	5.0000	100.00	1000.0	10000.0		ug/L
Copper	A	5.0000	100.00	1000.0	10000.0		ug/L
Lead	A	3.0000	100.00	1000.0	10000.0		ug/L
Manganese	A	5.0000	100.00	1000.0	10000.0		ug/L
Molybdenum	A	5.0000	100.00	1000.0	10000.0		ug/L
Nickel	A	5.0000	100.00	1000.0	10000.0		ug/L
Selenium	A	5.0000	100.00	1000.0	10000.0		ug/L
Silver	A	5.0000	100.00	1000.0	2000.0		ug/L
Thallium	A	5.0000	100.00	1000.0	10000.0		ug/L
Tin	A	40.000	100.00	1000.0	10000.0		ug/L
Titanium	A	10.000	100.00	1000.0	10000.0		ug/L
Vanadium	A	5.0000	100.00	1000.0	10000.0		ug/L
Zinc	A	20.000	100.00	1000.0	10000.0		ug/L
Aluminum	R	100.00		1000.0	10000.0	100000	ug/L
Calcium	R	200.00		1000.0	10000.0	100000	ug/L
Iron	R	100.00		1000.0	10000.0	100000	ug/L
Magnesium	R	200.00		1000.0	10000.0	100000	ug/L
Potassium	R	500.00		1000.0	10000.0	100000	ug/L
Sodium	R	500.00		1000.0	10000.0	100000	ug/L

579

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

97094389001

Sequence No.: 1
Sample ID: ICALBLK,
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/6/2007 1:09:36 PM
Data Type: Reprocessed on 3/6/2007 1:52:51 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-1274.7	66.90	5.25%	[0.00]	ug/L
Al 308.215 R	45.6	1.19	2.60%	[0.00]	ug/L
As 188.979	-24.5	6.84	27.93%	[0.00]	ug/L
B 249.677	492.2	26.40	5.36%	[0.00]	ug/L
Ba 233.527	-40.4	4.54	11.23%	[0.00]	ug/L
Be 313.107	-1894.8	115.77	6.11%	[0.00]	ug/L
Ca 315.887 R	333.0	14.01	4.21%	[0.00]	ug/L
Cd 214.440	-116.2	14.56	12.53%	[0.00]	ug/L
Co 228.616	-46.5	5.74	12.33%	[0.00]	ug/L
Cr 267.716	-170.7	9.53	5.59%	[0.00]	ug/L
Cu 324.752	3245.4	45.79	1.41%	[0.00]	ug/L
Fe 238.204 R	-263.8	3.62	1.37%	[0.00]	ug/L
K 766.490 R	449.9	147.62	32.81%	[0.00]	ug/L
Mg 279.077 R	-365.2	2.40	0.66%	[0.00]	ug/L
Mn 257.610	-328.3	13.41	4.09%	[0.00]	ug/L
Mo 202.031	24.5	1.67	6.83%	[0.00]	ug/L
Na 589.592 R	22925.4	1558.71	6.80%	[0.00]	ug/L
Ni 231.604	705.6	12.87	1.82%	[0.00]	ug/L
Pb 220.353	-191.0	20.56	10.76%	[0.00]	ug/L
Sb 206.836	-126.7	3.06	2.42%	[0.00]	ug/L
Se 196.026	5.0	12.37	249.76%	[0.00]	ug/L
Ti 334.940 R	227.2	41.30	18.18%	[0.00]	ug/L
Tl 190.801	-53.2	25.21	47.41%	[0.00]	ug/L
V 292.402	-1829.0	73.99	4.05%	[0.00]	ug/L
Zn 206.200	-15.6	8.20	52.72%	[0.00]	ug/L
Sn 189.927	52.8	7.74	14.67%	[0.00]	ug/L

Sequence No.: 2
Sample ID: ICAL,CRIM08
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/6/2007 1:13:33 PM
Data Type: Reprocessed on 3/6/2007 1:52:55 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CRIM08

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CRIM08

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3574688.2	24011.08	0.67%	100.0	%
Y	341848.8	9173.97	2.68%	100.0	%
Ag 328.068†	2310.9	277.37	12.00%	[5.0]	ug/L
Al 308.215 R†	96.9	6.69	6.91%	[100]	ug/L
As 188.979†	54.1	12.33	22.80%	[5.0]	ug/L
B 249.677†	18649.7	700.83	3.76%	[100]	ug/L
Ba 233.527†	526.5	7.55	1.43%	[5.0]	ug/L
Be 313.107†	7539.2	153.88	2.04%	[2.0]	ug/L
Ca 315.887 R†	2261.2	62.80	2.78%	[200]	ug/L
Cd 214.440†	896.5	3.94	0.44%	[5.0]	ug/L
Co 228.616†	286.1	8.57	3.00%	[5.0]	ug/L
Cr 267.716†	929.3	6.25	0.67%	[5.0]	ug/L
Cu 324.752†	919.1	63.54	6.91%	[5.0]	ug/L
Fe 238.204 R†	497.1	7.98	1.60%	[100]	ug/L
K 766.490 R†	1768.0	345.08	19.52%	[500]	ug/L
Mg 279.077 R†	266.8	7.80	2.92%	[200]	ug/L
Mn 257.610†	2568.5	10.13	0.39%	[5.0]	ug/L
Mo 202.031†	205.5	2.16	1.05%	[5.0]	ug/L
Na 589.592 R†	144234.2	3747.69	2.60%	[500]	ug/L
Ni 231.604†	460.3	7.16	1.56%	[5.0]	ug/L
Pb 220.353†	191.7	6.29	3.28%	[3.0]	ug/L
Sb 206.836†	124.1	30.59	24.64%	[5.0]	ug/L
Se 196.026†	70.8	44.20	62.44%	[5.0]	ug/L
Ti 334.940 R†	7166.9	263.66	3.68%	[10]	ug/L
Tl 190.801†	35.6	26.45	74.25%	[5.0]	ug/L
V 292.402†	882.4	91.61	10.38%	[5.0]	ug/L
Zn 206.200†	1775.8	17.28	0.97%	[20]	ug/L
Sn 189.927†	807.2	7.48	0.93%	[40]	ug/L

Sequence No.: 3
Sample ID: ICAL,CS100
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/6/2007 1:17:34 PM
Data Type: Reprocessed on 3/6/2007 1:52:58 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3593017.5	77208.10	2.15%	100.5	%
Y	341573.9	3700.59	1.08%	99.92	%
Ag 328.068†	49115.0	1187.26	2.42%	[100]	ug/L
As 188.979†	1031.7	31.20	3.02%	[100]	ug/L
Ba 233.527†	9788.1	186.70	1.91%	[100]	ug/L
Be 313.107†	388622.3	835.08	0.21%	[100]	ug/L
Cd 214.440†	18420.3	841.83	4.57%	[100]	ug/L
Co 228.616†	5529.6	103.35	1.87%	[100]	ug/L
Cr 267.716†	17893.9	495.32	2.77%	[100]	ug/L
Cu 324.752†	18590.6	508.83	2.74%	[100]	ug/L
Mn 257.610†	51754.1	1383.75	2.67%	[100]	ug/L
Mo 202.031†	4474.5	90.28	2.02%	[100]	ug/L
Ni 231.604†	9278.5	351.56	3.79%	[100]	ug/L
Pb 220.353†	5406.2	96.52	1.79%	[100]	ug/L
Sb 206.836†	2075.5	75.12	3.62%	[100]	ug/L
Se 196.026†	1342.9	32.91	2.45%	[100]	ug/L
Ti 334.940 R†	72566.7	2082.97	2.87%	[100]	ug/L
Tl 190.801†	900.2	33.74	3.75%	[100]	ug/L
V 292.402†	19250.1	462.08	2.40%	[100]	ug/L
Zn 206.200†	8320.2	152.38	1.83%	[100]	ug/L
Sn 189.927†	1966.9	42.50	2.16%	[100]	ug/L

Sequence No.: 4
Sample ID: ICAL,CS1K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/6/2007 1:20:37 PM
Data Type: Reprocessed on 3/6/2007 1:53:00 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3624324.3	11409.15	0.31%	101.4	%
Y	338508.0	7898.39	2.33%	99.02	%
Ag 328.068†	490210.3	1030.72	0.21%	[1000]	ug/L
Al 308.215 R†	957.2	26.28	2.75%	[1000]	ug/L
As 188.979†	10381.0	42.75	0.41%	[1000]	ug/L
B 249.677†	187419.1	387.46	0.21%	[1000]	ug/L
Ba 233.527†	99782.4	175.78	0.18%	[1000]	ug/L
Be 313.107†	3946393.9	10576.02	0.27%	[1000]	ug/L
Ca 315.887 R†	10126.9	308.70	3.05%	[1000]	ug/L
Cd 214.440†	181933.6	465.73	0.26%	[1000]	ug/L
Co 228.616†	56788.9	508.72	0.90%	[1000]	ug/L
Cr 267.716†	173874.2	485.72	0.28%	[1000]	ug/L
Cu 324.752†	188171.8	1096.95	0.58%	[1000]	ug/L
Fe 238.204 R†	5054.8	160.37	3.17%	[1000]	ug/L
K 766.490 R†	3098.4	173.09	5.59%	[1000]	ug/L
Mg 279.077 R†	1405.5	50.99	3.63%	[1000]	ug/L
Mn 257.610†	507702.3	1034.80	0.20%	[1000]	ug/L
Mo 202.031†	43895.9	624.43	1.42%	[1000]	ug/L
Na 589.592 R†	317154.3	8295.46	2.62%	[1000]	ug/L
Ni 231.604†	93265.4	238.84	0.26%	[1000]	ug/L
Pb 220.353†	54940.9	895.45	1.63%	[1000]	ug/L
Sb 206.836†	21070.4	191.85	0.91%	[1000]	ug/L
Se 196.026†	13923.7	256.30	1.84%	[1000]	ug/L
Ti 334.940 R†	713149.1	1997.69	0.28%	[1000]	ug/L
Tl 190.801†	8827.5	102.82	1.16%	[1000]	ug/L
V 292.402†	190395.3	357.30	0.19%	[1000]	ug/L
Zn 206.200†	83560.8	368.67	0.44%	[1000]	ug/L
Sn 189.927†	20468.6	262.96	1.28%	[1000]	ug/L

Sequence No.: 5
Sample ID: ICAL,CS10K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/6/2007 1:22:46 PM
Data Type: Reprocessed on 3/6/2007 1:53:03 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3479744.7	16363.86	0.47%	97.34	%
Y	323300.5	4790.00	1.48%	94.57	%
Ag 328.068†	956480.6	6457.53	0.68%	[2000]	ug/L
Al 308.215 R†	9118.9	88.47	0.97%	[10000]	ug/L
As 188.979†	102880.3	1521.05	1.48%	[10000]	ug/L
B 249.677†	1889210.4	11437.62	0.61%	[10000]	ug/L
Ba 233.527†	958641.9	6423.47	0.67%	[10000]	ug/L
Ca 315.887 R†	93847.1	448.11	0.48%	[10000]	ug/L
Cd 214.440†	1741976.3	19957.21	1.15%	[10000]	ug/L
Co 228.616†	559014.2	3961.38	0.71%	[10000]	ug/L
Cr 267.716†	1683012.9	10422.25	0.62%	[10000]	ug/L
Cu 324.752†	1854233.8	8509.27	0.46%	[10000]	ug/L
Fe 238.204 R†	48487.9	268.88	0.55%	[10000]	ug/L
K 766.490 R†	30705.6	102.49	0.33%	[10000]	ug/L
Mg 279.077 R†	13341.9	100.47	0.75%	[10000]	ug/L
Mn 257.610†	4740627.0	34547.69	0.73%	[10000]	ug/L
Mo 202.031†	426071.3	7873.52	1.85%	[10000]	ug/L
Na 589.592 R†	2984614.3	27638.74	0.93%	[10000]	ug/L
Ni 231.604†	898510.5	7653.51	0.85%	[10000]	ug/L
Pb 220.353†	525714.3	7980.84	1.52%	[10000]	ug/L
Sb 206.836†	207595.8	4013.73	1.93%	[10000]	ug/L
Se 196.026†	139610.6	2607.78	1.87%	[10000]	ug/L
Ti 334.940 R†	6624457.5	39508.29	0.60%	[10000]	ug/L
Tl 190.801†	84081.8	687.52	0.82%	[10000]	ug/L
V 292.402†	1889964.0	11015.75	0.58%	[10000]	ug/L
Zn 206.200†	815284.5	8086.51	0.99%	[10000]	ug/L
Sn 189.927†	199213.9	3851.43	1.93%	[10000]	ug/L

Sequence No.: 6
Sample ID: ICAL,CS100K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/6/2007 1:26:08 PM
Data Type: Reprocessed on 3/6/2007 1:53:04 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	156.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3172444.0	16228.63	0.51%	88.75	%
Y	315715.3	7816.50	2.48%	92.36	%
Al 308.215 Rt	90323.5	1184.51	1.31%	[100000]	ug/L
Ca 315.887 Rt	888651.7	9529.97	1.07%	[100000]	ug/L
Fe 238.204 Rt	460177.2	5054.54	1.10%	[100000]	ug/L
K 766.490 Rt	299781.4	4085.93	1.36%	[100000]	ug/L
Mg 279.077 Rt	126079.3	1598.02	1.27%	[100000]	ug/L
Na 589.592 Rt	28204237.6	1136279.77	4.03%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	480.7	0.00000	0.999950	
Al 308.215 R	4	Lin Thru 0	0.0	0.9033	0.00000	0.999999	
As 188.979	4	Lin Thru 0	0.0	10.29	0.00000	1.000000	
B 249.677	3	Lin Thru 0	0.0	188.9	0.00000	1.000000	
Ba 233.527	4	Lin Thru 0	0.0	95.90	0.00000	0.999992	
Be 313.107	3	Lin Thru 0	0.0	3946	0.00000	0.999999	
Ca 315.887 R	4	Lin Thru 0	0.0	8.892	0.00000	0.999984	
Cd 214.440	4	Lin Thru 0	0.0	174.3	0.00000	0.999990	
Co 228.616	4	Lin Thru 0	0.0	55.91	0.00000	0.999999	
Cr 267.716	4	Lin Thru 0	0.0	168.4	0.00000	0.999994	
Cu 324.752	4	Lin Thru 0	0.0	185.5	0.00000	0.999999	
Fe 238.204 R	4	Lin Thru 0	0.0	4.604	0.00000	0.999985	
K 766.490 R	4	Lin Thru 0	0.0	2.999	0.00000	0.999997	
Mg 279.077 R	4	Lin Thru 0	0.0	1.262	0.00000	0.999983	
Mn 257.610	4	Lin Thru 0	0.0	474.4	0.00000	0.999975	
Mo 202.031	4	Lin Thru 0	0.0	42.62	0.00000	0.999995	
Na 589.592 R	4	Lin Thru 0	0.0	282.2	0.00000	0.999983	
Ni 231.604	4	Lin Thru 0	0.0	89.89	0.00000	0.999993	
Pb 220.353	4	Lin Thru 0	0.0	52.60	0.00000	0.999990	
Sb 206.836	4	Lin Thru 0	0.0	20.76	0.00000	0.999999	
Se 196.026	4	Lin Thru 0	0.0	13.96	0.00000	1.000000	
Ti 334.940 R	4	Lin Thru 0	0.0	663.0	0.00000	0.999971	
Tl 190.801	4	Lin Thru 0	0.0	8.412	0.00000	0.999988	
V 292.402	4	Lin Thru 0	0.0	189.0	0.00000	1.000000	
Zn 206.200	4	Lin Thru 0	0.0	81.55	0.00000	0.999997	
Sn 189.927	4	Lin Thru 0	0.0	19.93	0.00000	0.999996	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389007 File : 030607ar Time : 06-MAR-2007 13:29
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5324

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	21.852	21.924	5000	5280	ug/L	6	10	
Arsenic	A	10.451	11.128	5000	5408	ug/L	8	10	
Barium	A	99.707	99.673	5000	5197	ug/L	4	10	
Beryllium	A	3867.4	4000.5	500.0	506.9	ug/L	1	10	
Boron	A	187.61	195.35	5000	5171	ug/L	3	10	
Cadmium	A	179.91	181.24	5000	5200	ug/L	4	10	
Chromium	A	176.74	173.49	5000	5153	ug/L	3	10	
Cobalt	A	56.304	57.408	5000	5123	ug/L	2	10	
Copper	A	185.83	185.63	5000	5005	ug/L	0	10	
Lead	A	56.370	54.317	5000	5164	ug/L	3	10	
Manganese	A	503.25	486.32	5000	5126	ug/L	3	10	
Molybdenum	A	43.089	45.892	5000	5384	ug/L	8	10	
Nickel	A	91.992	91.531	5000	5092	ug/L	2	10	
Selenium	A	13.868	14.618	5000	5235	ug/L	5	10	
Silver	A	480.44	477.26	1000	992.9	ug/L	-1	10	
Thallium	A	8.3403	8.8757	5000	5275	ug/L	6	10	
Tin	A	20.060	20.437	5000	5128	ug/L	3	10	
Titanium	A	704.49	672.11	5000	5069	ug/L	1	10	
Vanadium	A	187.09	193.41	5000	5116	ug/L	2	10	
Zinc	A	84.270	84.031	5000	5152	ug/L	3	10	
Aluminum	R	0.9353	0.9088	20000	20120	ug/L	1	10	
Calcium	R	9.9260	9.2677	20000	20850	ug/L	4	10	
Iron	R	4.8692	4.8037	20000	20870	ug/L	4	10	
Magnesium	R	1.3337	1.3142	20000	20840	ug/L	4	10	
Potassium	R	3.1757	3.0492	20000	20340	ug/L	2	10	
Sodium	R	296.53	292.56	20000	20730	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3338173	-6.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389020 File : 030607ar Time : 06-MAR-2007 14:30
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.051	5000	5070	ug/L	1	10	
Arsenic	A	10.451	10.674	5000	5187	ug/L	4	10	
Barium	A	99.707	98.227	5000	5121	ug/L	2	10	
Beryllium	A	3867.4	3963.3	500.0	502.2	ug/L	0	10	
Boron	A	187.61	193.26	5000	5115	ug/L	2	10	
Cadmium	A	179.91	178.38	5000	5118	ug/L	2	10	
Chromium	A	176.74	171.33	5000	5088	ug/L	2	10	
Cobalt	A	56.304	55.499	5000	4952	ug/L	-1	10	
Copper	A	185.83	183.07	5000	4936	ug/L	-1	10	
Lead	A	56.370	52.619	5000	5002	ug/L	0	10	
Manganese	A	503.25	478.23	5000	5040	ug/L	1	10	
Molybdenum	A	43.089	44.374	5000	5206	ug/L	4	10	
Nickel	A	91.992	90.510	5000	5035	ug/L	1	10	
Selenium	A	13.868	14.046	5000	5031	ug/L	1	10	
Silver	A	480.44	461.85	1000	960.9	ug/L	-4	10	
Thallium	A	8.3403	8.4920	5000	5047	ug/L	1	10	
Tin	A	20.060	19.696	5000	4942	ug/L	-1	10	
Titanium	A	704.49	662.84	5000	4999	ug/L	0	10	
Vanadium	A	187.09	190.87	5000	5049	ug/L	1	10	
Zinc	A	84.270	83.221	5000	5103	ug/L	2	10	
Aluminum	R	0.9353	0.8705	20000	19270	ug/L	-4	10	
Calcium	R	9.9260	8.9335	20000	20090	ug/L	0	10	
Iron	R	4.8692	4.6489	20000	20190	ug/L	1	10	
Magnesium	R	1.3337	1.2758	20000	20230	ug/L	1	10	
Potassium	R	3.1757	2.9350	20000	19580	ug/L	-2	10	
Sodium	R	296.53	276.10	20000	19570	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3434150	-3.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389029 File : 030607ar Time : 06-MAR-2007 15:03
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	20.940	5000	5043	ug/L	1	10	
Arsenic	A	10.451	10.545	5000	5125	ug/L	2	10	
Barium	A	99.707	97.435	5000	5080	ug/L	2	10	
Beryllium	A	3867.4	3930.2	500.0	498.0	ug/L	0	10	
Boron	A	187.61	190.62	5000	5045	ug/L	1	10	
Cadmium	A	179.91	176.38	5000	5060	ug/L	1	10	
Chromium	A	176.74	169.64	5000	5038	ug/L	1	10	
Cobalt	A	56.304	54.935	5000	4902	ug/L	-2	10	
Copper	A	185.83	182.44	5000	4919	ug/L	-2	10	
Lead	A	56.370	51.741	5000	4919	ug/L	-2	10	
Manganese	A	503.25	475.13	5000	5008	ug/L	0	10	
Molybdenum	A	43.089	44.136	5000	5178	ug/L	4	10	
Nickel	A	91.992	89.331	5000	4969	ug/L	-1	10	
Selenium	A	13.868	14.063	5000	5037	ug/L	1	10	
Silver	A	480.44	460.38	1000	957.8	ug/L	-4	10	
Thallium	A	8.3403	8.5603	5000	5088	ug/L	2	10	
Tin	A	20.060	19.480	5000	4888	ug/L	-2	10	
Titanium	A	704.49	660.97	5000	4985	ug/L	0	10	
Vanadium	A	187.09	189.47	5000	5012	ug/L	0	10	
Zinc	A	84.270	81.720	5000	5010	ug/L	0	10	
Aluminum	R	0.9353	0.9006	20000	19940	ug/L	0	10	
Calcium	R	9.9260	9.1503	20000	20580	ug/L	3	10	
Iron	R	4.8692	4.7772	20000	20750	ug/L	4	10	
Magnesium	R	1.3337	1.3030	20000	20660	ug/L	3	10	
Potassium	R	3.1757	3.0158	20000	20110	ug/L	1	10	
Sodium	R	296.53	291.92	20000	20690	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3350831	-6.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389043 File : 030607ar Time : 06-MAR-2007 16:11
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.324	5000	5135	ug/L	3	10	
Arsenic	A	10.451	10.804	5000	5250	ug/L	5	10	
Barium	A	99.707	98.791	5000	5151	ug/L	3	10	
Beryllium	A	3867.4	3973.5	500.0	503.5	ug/L	1	10	
Boron	A	187.61	193.71	5000	5127	ug/L	3	10	
Cadmium	A	179.91	178.58	5000	5123	ug/L	2	10	
Chromium	A	176.74	171.93	5000	5106	ug/L	2	10	
Cobalt	A	56.304	56.003	5000	4997	ug/L	0	10	
Copper	A	185.83	184.49	5000	4974	ug/L	-1	10	
Lead	A	56.370	53.110	5000	5049	ug/L	1	10	
Manganese	A	503.25	480.38	5000	5063	ug/L	1	10	
Molybdenum	A	43.089	45.040	5000	5284	ug/L	6	10	
Nickel	A	91.992	90.772	5000	5049	ug/L	1	10	
Selenium	A	13.868	14.380	5000	5150	ug/L	3	10	
Silver	A	480.44	464.29	1000	966.0	ug/L	-3	10	
Thallium	A	8.3403	8.9810	5000	5338	ug/L	7	10	
Tin	A	20.060	19.873	5000	4986	ug/L	0	10	
Titanium	A	704.49	665.92	5000	5022	ug/L	0	10	
Vanadium	A	187.09	191.70	5000	5071	ug/L	1	10	
Zinc	A	84.270	83.762	5000	5136	ug/L	3	10	
Aluminum	R	0.9353	0.8934	20000	19780	ug/L	-1	10	
Calcium	R	9.9260	9.1188	20000	20510	ug/L	3	10	
Iron	R	4.8692	4.7845	20000	20780	ug/L	4	10	
Magnesium	R	1.3337	1.3000	20000	20610	ug/L	3	10	
Potassium	R	3.1757	3.0173	20000	20120	ug/L	1	10	
Sodium	R	296.53	291.37	20000	20650	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3443157	-3.68

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389058 File : 030607ar Time : 06-MAR-2007 17:09
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	20.716	5000	4989	ug/L	0	10	
Arsenic	A	10.451	10.441	5000	5074	ug/L	1	10	
Barium	A	99.707	96.314	5000	5021	ug/L	0	10	
Beryllium	A	3867.4	3896.3	500.0	493.7	ug/L	-1	10	
Boron	A	187.61	192.27	5000	5089	ug/L	2	10	
Cadmium	A	179.91	179.41	5000	5147	ug/L	3	10	
Chromium	A	176.74	167.47	5000	4974	ug/L	-1	10	
Cobalt	A	56.304	54.066	5000	4824	ug/L	-4	10	
Copper	A	185.83	178.66	5000	4817	ug/L	-4	10	
Lead	A	56.370	51.370	5000	4884	ug/L	-2	10	
Manganese	A	503.25	478.19	5000	5040	ug/L	1	10	
Molybdenum	A	43.089	44.843	5000	5261	ug/L	5	10	
Nickel	A	91.992	88.576	5000	4927	ug/L	-1	10	
Selenium	A	13.868	13.869	5000	4967	ug/L	-1	10	
Silver	A	480.44	451.38	1000	939.1	ug/L	-6	10	
Thallium	A	8.3403	8.2901	5000	4927	ug/L	-1	10	
Tin	A	20.060	19.421	5000	4873	ug/L	-3	10	
Titanium	A	704.49	657.11	5000	4956	ug/L	-1	10	
Vanadium	A	187.09	186.77	5000	4941	ug/L	-1	10	
Zinc	A	84.270	81.427	5000	4993	ug/L	0	10	
Aluminum	R	0.9353	0.8899	20000	19700	ug/L	-1	10	
Calcium	R	9.9260	9.1840	20000	20660	ug/L	3	10	
Iron	R	4.8692	4.8853	20000	21220	ug/L	6	10	
Magnesium	R	1.3337	1.2901	20000	20450	ug/L	2	10	
Potassium	R	3.1757	3.1058	20000	20720	ug/L	4	10	
Sodium	R	296.53	305.46	20000	21650	ug/L	8	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3607468	0.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389068 File : 030607ar Time : 06-MAR-2007 17:44
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	21.852	21.553	5000	5190	ug/L	4	10	
Arsenic	A	10.451	10.922	5000	5308	ug/L	6	10	
Barium	A	99.707	98.835	5000	5153	ug/L	3	10	
Beryllium	A	3867.4	3975.4	500.0	503.8	ug/L	1	10	
Boron	A	187.61	195.39	5000	5172	ug/L	3	10	
Cadmium	A	179.91	186.06	5000	5338	ug/L	7	10	
Chromium	A	176.74	172.30	5000	5117	ug/L	2	10	
Cobalt	A	56.304	56.053	5000	5002	ug/L	0	10	
Copper	A	185.83	181.49	5000	4893	ug/L	-2	10	
Lead	A	56.370	53.538	5000	5090	ug/L	2	10	
Manganese	A	503.25	488.27	5000	5146	ug/L	3	10	
Molybdenum	A	43.089	44.908	5000	5268	ug/L	5	10	
Nickel	A	91.992	91.320	5000	5080	ug/L	2	10	
Selenium	A	13.868	14.406	5000	5159	ug/L	3	10	
Silver	A	480.44	464.70	1000	966.8	ug/L	-3	10	
Thallium	A	8.3403	8.5029	5000	5054	ug/L	1	10	
Tin	A	20.060	20.232	5000	5077	ug/L	2	10	
Titanium	A	704.49	663.54	5000	5004	ug/L	0	10	
Vanadium	A	187.09	191.75	5000	5072	ug/L	1	10	
Zinc	A	84.270	84.443	5000	5177	ug/L	4	10	
Aluminum	R	0.9353	0.8930	20000	19770	ug/L	-1	10	
Calcium	R	9.9260	9.1611	20000	20610	ug/L	3	10	
Iron	R	4.8692	4.8619	20000	21120	ug/L	6	10	
Magnesium	R	1.3337	1.2836	20000	20350	ug/L	2	10	
Potassium	R	3.1757	3.0753	20000	20510	ug/L	3	10	
Sodium	R	296.53	299.53	20000	21230	ug/L	6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3567383	-0.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389008 File : 030607ar Time : 06-MAR-2007 13:39
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2399]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[8.255]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.2963]	5.000	0.1091	ug/L	!ib
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[0.4339]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[1.747]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[74.34]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3638118	1.77

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389022 File : 030607ar Time : 06-MAR-2007 14:37
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.3018]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[10.51]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3095]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.3567]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.3140]	5.000	0.3034	ug/L	!ib
Copper	A	[0.8541]	5.000	0.8535	ug/L	!ib
Lead	A	[1.300]	3.000	0.6892	ug/L	!ib
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[3.327]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.832]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[44.68]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3578732	0.11

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389031 File : 030607ar Time : 06-MAR-2007 15:10
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.4289]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[9.762]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.4566]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.3937]	5.000	0.2448	ug/L	!ib
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	[1.036]	5.000	0.8535	ug/L	!ib
Lead	A	[1.432]	3.000	0.6892	ug/L	!ib
Manganese	A	[0.4850]	5.000	0.4388	ug/L	!ib
Molybdenum	A	[1.960]	5.000	0.4140	ug/L	!ib
Nickel	A	[0.3837]	5.000	0.3660	ug/L	!ib
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.252]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[54.80]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3591134	0.46

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389045 File : 030607ar Time : 06-MAR-2007 16:19
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2444]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[5.669]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3161]	5.000	0.1091	ug/L	!ib
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[1.880]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[3.917]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[44.81]	500.0	39.71	ug/L	!ib
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3576183	0.04

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389061 File : 030607ar Time : 06-MAR-2007 17:20
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.3103]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[22.82]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3429]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.4595]	5.000	0.2448	ug/L	!ib
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[0.6761]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	[2.550]	5.000	1.616	ug/L	!ib
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[198.4]	500.0	39.71	ug/L	!ib
Sodium	R	1261	500.0	17.18	ug/L	ib ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3819252	6.84

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389071 File : 030607ar Time : 06-MAR-2007 17:54
Cal : 97094389001 Caldate: 06-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.4094]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[17.18]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.4261]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.4358]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.3154]	5.000	0.3034	ug/L	!ib
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	[0.4525]	5.000	0.4388	ug/L	!ib
Molybdenum	A	ND	5.000	0.4140	ug/L	
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[109.9]	500.0	39.71	ug/L	!ib
Sodium	R	555.8	500.0	17.18	ug/L	ib ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3870017	8.26

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389009 File : 030607ar Time : 06-MAR-2007 13:43
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5626

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[1.806]	5.000	ug/L	
Arsenic	A	[1.824]	5.000	ug/L	
Barium	A	[-1.027]	5.000	ug/L	
Beryllium	A	[-0.5392]	2.000	ug/L	
Boron	A	[30.76]	100.0	ug/L	
Cadmium	A	[0.5297]	5.000	ug/L	
Cobalt	A	[-0.01453]	5.000	ug/L	
Lead	A	[2.103]	3.000	ug/L	
Molybdenum	A	[0.08987]	5.000	ug/L	
Selenium	A	[-0.8484]	5.000	ug/L	
Silver	A	[1.896]	5.000	ug/L	
Thallium	A	[0.3636]	5.000	ug/L	
Tin	A	[-5.004]	40.00	ug/L	
Zinc	A	[13.82]	20.00	ug/L	
Potassium	R	[114.9]	500.0	ug/L	
Sodium	R	[-11.77]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19240	ug/L	96
Copper	A	20000	20410	ug/L	102
Manganese	A	20000	18800	ug/L	94
Nickel	A	20000	17590	ug/L	88
Titanium	A	20000	20110	ug/L	101
Vanadium	A	20000	20070	ug/L	100
Aluminum	R	500000	514500	ug/L	103
Calcium	R	500000	511200	ug/L	102
Iron	R	200000	198900	ug/L	99
Magnesium	R	500000	520500	ug/L	104

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	2978489	-16.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389010 File : 030607ar Time : 06-MAR-2007 13:45
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	515.9	ug/L	3	20	
Arsenic	A	500.0	527.9	ug/L	6	20	
Barium	A	500.0	516.3	ug/L	3	20	
Beryllium	A	500.0	513.2	ug/L	3	20	
Cadmium	A	1000	972.4	ug/L	-3	20	
Chromium	A	500.0	509.8	ug/L	2	20	
Cobalt	A	500.0	445.2	ug/L	-11	20	
Copper	A	500.0	538.8	ug/L	8	20	
Lead	A	1000	914.6	ug/L	-9	20	
Manganese	A	500.0	512.7	ug/L	3	20	
Molybdenum	A	500.0	528.2	ug/L	6	20	
Nickel	A	1000	890.3	ug/L	-11	20	
Selenium	A	500.0	498.1	ug/L	0	20	
Silver	A	1000	998.0	ug/L	0	20	
Thallium	A	500.0	456.3	ug/L	-9	20	
Titanium	A	20000	20240	ug/L	1		
Vanadium	A	500.0	528.7	ug/L	6	20	
Zinc	A	1000	950.0	ug/L	-5	20	
Aluminum	R	500000	481800	ug/L	-4		
Calcium	R	500000	467600	ug/L	-6		
Iron	R	200000	183600	ug/L	-8		
Magnesium	R	500000	472100	ug/L	-6		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	2940888	-17.73

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389027 File : 030607ar Time : 06-MAR-2007 14:57
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	501.3	ug/L	0	20	
Arsenic	A	500.0	545.6	ug/L	9	20	
Barium	A	500.0	522.7	ug/L	5	20	
Beryllium	A	500.0	519.3	ug/L	4	20	
Cadmium	A	1000	1007	ug/L	1	20	
Chromium	A	500.0	515.3	ug/L	3	20	
Cobalt	A	500.0	454.3	ug/L	-9	20	
Copper	A	500.0	532.9	ug/L	7	20	
Lead	A	1000	932.7	ug/L	-7	20	
Manganese	A	500.0	520.4	ug/L	4	20	
Molybdenum	A	500.0	533.1	ug/L	7	20	
Nickel	A	1000	928.7	ug/L	-7	20	
Selenium	A	500.0	530.1	ug/L	6	20	
Silver	A	1000	998.4	ug/L	0	20	
Thallium	A	500.0	482.3	ug/L	-4	20	
Titanium	A	20000	20370	ug/L	2		
Vanadium	A	500.0	531.1	ug/L	6	20	
Zinc	A	1000	993.2	ug/L	-1	20	
Aluminum	R	500000	461400	ug/L	-8		
Calcium	R	500000	466800	ug/L	-7		
Iron	R	200000	183600	ug/L	-8		
Magnesium	R	500000	476300	ug/L	-5		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3032258	-15.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09 IDF : 1.0
Seqnum : 97094389066 File : 030607ar Time : 06-MAR-2007 17:38
Cal : 97094389001 Caldate: 06-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	498.5	ug/L	0	20	
Arsenic	A	500.0	560.6	ug/L	12	20	
Barium	A	500.0	515.6	ug/L	3	20	
Beryllium	A	500.0	514.2	ug/L	3	20	
Cadmium	A	1000	1007	ug/L	1	20	
Chromium	A	500.0	506.4	ug/L	1	20	
Cobalt	A	500.0	445.2	ug/L	-11	20	
Copper	A	500.0	525.3	ug/L	5	20	
Lead	A	1000	923.8	ug/L	-8	20	
Manganese	A	500.0	518.0	ug/L	4	20	
Molybdenum	A	500.0	529.5	ug/L	6	20	
Nickel	A	1000	911.1	ug/L	-9	20	
Selenium	A	500.0	513.2	ug/L	3	20	
Silver	A	1000	997.4	ug/L	0	20	
Thallium	A	500.0	470.0	ug/L	-6	20	
Titanium	A	20000	20110	ug/L	1		
Vanadium	A	500.0	525.3	ug/L	5	20	
Zinc	A	1000	962.3	ug/L	-4	20	
Aluminum	R	500000	485000	ug/L	-3		
Calcium	R	500000	472100	ug/L	-6		
Iron	R	200000	188700	ug/L	-6		
Magnesium	R	500000	473300	ug/L	-5		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3574688	3128224	-12.49

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	030607ar	ICALBLK				06-MAR-2007 13:09	1.0	1.0					
002	030607ar	ICAL	CRIM08			06-MAR-2007 13:13	1.0	1.0				1	
003	030607ar	ICAL	CS100			06-MAR-2007 13:17	1.0	1.0				2	
004	030607ar	ICAL	CS1K			06-MAR-2007 13:20	1.0	1.0				3	
005	030607ar	ICAL	CS10K			06-MAR-2007 13:22	1.0	1.0				4	
006	030607ar	ICAL	CS100K			06-MAR-2007 13:26	1.0	1.0				5	
007	030607ar	ICV				06-MAR-2007 13:29	1.0	1.0			5000	6	
008	030607ar	ICB				06-MAR-2007 13:39	1.0	1.0			5000		
009	030607ar	ICSA				06-MAR-2007 13:43	1.0	1.0			5000	7	10:MG=520500
010	030607ar	ICSAB				06-MAR-2007 13:45	1.0	1.0			5000	8	5:AL=481801
011	030607ar	BLANK	QC377704	122747	Filtra	06-MAR-2007 13:58	1.0	1.0			5000		
012	030607ar	BS	QC377705	122747	Filtra	06-MAR-2007 14:02	1.0	1.0			5000		
013	030607ar	BSD	QC377706	122747	Filtra	06-MAR-2007 14:05	1.0	1.0			5000		
014	030607ar	MSS	193002-002	122747	Filtra	06-MAR-2007 14:09	1.0	1.0	1		5000		1:NA=132241
015	030607ar	MS	QC377707	122747	Filtra	06-MAR-2007 14:13	1.0	1.0			5000		1:NA=145608
016	030607ar	MSD	QC377708	122747	Filtra	06-MAR-2007 14:16	1.0	1.0			5000		1:NA=145973
017	030607ar	SER	QC377709	122747	Filtra	06-MAR-2007 14:19	5.0	1.0		1	5000		
018	030607ar	PDS	QC377710	122747	Filtra	06-MAR-2007 14:23	1.0	1.0			5000	9 10	1:NA=149804
019	030607ar	X	RINSE			06-MAR-2007 14:26	1.0						
020	030607ar	CCV				06-MAR-2007 14:30	1.0	1.0			5000	11	
021	030607ar	X	FLUSH			06-MAR-2007 14:33	1.0						
022	030607ar	CCB				06-MAR-2007 14:37	1.0	1.0			5000		
023	030607ar	SAMPLE	193002-003	122747	Filtra	06-MAR-2007 14:41	1.0	1.0			5000		1:NA=101735
024	030607ar	SAMPLE	193018-001	122747	Water	06-MAR-2007 14:45	1.0	1.0			5000		
025	030607ar	SAMPLE	193018-002	122747	Water	06-MAR-2007 14:49	1.0	1.0			5000		1:NA=551524
026	030607ar	SAMPLE	193018-006	122747	Water	06-MAR-2007 14:54	1.0	1.0			5000		1:NA=137035
027	030607ar	ICSAB				06-MAR-2007 14:57	1.0	1.0			5000	8	5:MG=476276
028	030607ar	X	RINSE			06-MAR-2007 14:59	1.0						
029	030607ar	CCV				06-MAR-2007 15:03	1.0	1.0			5000	11	
030	030607ar	X	FLUSH			06-MAR-2007 15:06	1.0						
031	030607ar	CCB				06-MAR-2007 15:10	1.0	1.0			5000		

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	030607ar	BLANK	QC377727	122751	Water	06-MAR-2007 15:35	1.0	1.0		5000		
033	030607ar	BS	QC377728	122751	Water	06-MAR-2007 15:39	1.0	1.0		5000		
034	030607ar	BSD	QC377729	122751	Water	06-MAR-2007 15:42	1.0	1.0		5000		
035	030607ar	MSS	193108-023	122751	Water	06-MAR-2007 15:45	1.0	1.0	1	5000		
036	030607ar	MS	QC377732	122751	Water	06-MAR-2007 15:48	1.0	1.0		5000		
037	030607ar	MSD	QC377733	122751	Water	06-MAR-2007 15:51	1.0	1.0		5000		
038	030607ar	SER	QC377805	122751	Water	06-MAR-2007 15:54	5.0	1.0		5000		
039	030607ar	PDS	QC377806	122751	Water	06-MAR-2007 15:57	1.0	1.0		5000	9 10	
040	030607ar	MSS	193108-023	122751	Water	06-MAR-2007 16:01	1.0	1.0		5000		
041	030607ar	SAMPLE	193097-001	122751	Water	06-MAR-2007 16:04	1.0	1.0		5000		
042	030607ar	X	RINSE			06-MAR-2007 16:08	1.0					
043	030607ar	CCV				06-MAR-2007 16:11	1.0	1.0		5000	11	
044	030607ar	X	FLUSH			06-MAR-2007 16:15	1.0					
045	030607ar	CCB				06-MAR-2007 16:19	1.0	1.0		5000		
046	030607ar	SAMPLE	193097-019	122751	Water	06-MAR-2007 16:23	1.0	1.0		5000		
047	030607ar	SAMPLE	193014-001	122751	Water	06-MAR-2007 16:27	1.0	1.0		5000		1:CA=10435 603
048	030607ar	SAMPLE	193014-003	122751	Water	06-MAR-2007 16:31	1.0	1.0		5000		
049	030607ar	SAMPLE	193014-005	122751	Water	06-MAR-2007 16:35	1.0	1.0		5000		
050	030607ar	SAMPLE	193125-001	122751	Water	06-MAR-2007 16:39	1.0	1.0		5000		
051	030607ar	SAMPLE	193128-001	122751	Water	06-MAR-2007 16:42	1.0	1.0	4	5000		4:CA=2103697
052	030607ar	SAMPLE	193128-002	122751	Water	06-MAR-2007 16:47	1.0	1.0	4	5000		4:CA=1430652
053	030607ar	SAMPLE	193099-001	122751	Water	06-MAR-2007 16:53	1.0	1.0		5000		2:MG=311697
054	030607ar	SAMPLE	193098-004	122751	Water	06-MAR-2007 16:57	1.0	1.0		5000		1:NA=126682
055	030607ar	SAMPLE	193087-001	122751	Water	06-MAR-2007 17:00	1.0	1.0		5000		
056	030607ar	X	RINSE			06-MAR-2007 17:04	1.0					
057	030607ar	X				06-MAR-2007 17:08	1.0					
058	030607ar	CCV				06-MAR-2007 17:09	1.0	1.0		5000	11	
059	030607ar	X	FLUSH			06-MAR-2007 17:13	1.0					
060	030607ar	X				06-MAR-2007 17:17	1.0					
061	030607ar	CCB				06-MAR-2007 17:20	1.0	1.0	1	5000		
062	030607ar	SAMPLE	193145-001	122751	Filtra	06-MAR-2007 17:24	1.0	1.0	1	5000		1:NA=131983

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97094389 Instrument: MET09 PE ICP MET09 Begun: 06-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	030607ar	SAMPLE	193145-002	122751	Filtra	06-MAR-2007 17:28	1.0	1.0	1	5000		1:NA=169958
064	030607ar	SAMPLE	193108-022	122751	Water	06-MAR-2007 17:32	1.0	1.0		5000		1:NA=101354
065	030607ar	SAMPLE	193108-027	122751	Water	06-MAR-2007 17:35	1.0	1.0		5000		
066	030607ar	ICSAB				06-MAR-2007 17:38	1.0	1.0		5000	8	5:AL=484958
067	030607ar	X	RINSE			06-MAR-2007 17:40	1.0					
068	030607ar	CCV				06-MAR-2007 17:44	1.0	1.0		5000	11	
069	030607ar	X	FLUSH			06-MAR-2007 17:47	1.0					
070	030607ar	X				06-MAR-2007 17:51	1.0					
071	030607ar	CCB				06-MAR-2007 17:54	1.0	1.0	1	5000		

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Stds used: 1=S5393 2=~~S5428~~ 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/7/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67103428001
Units : ug/L

Date : 12-MAR-2007 20:06
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c12t0005	67103428005		12-MAR-2007 20:12	S5645
L2	c12t0006	67103428006		12-MAR-2007 20:17	S5648
L3	c12t0007	67103428007		12-MAR-2007 20:22	S5649
L4	c12t0008	67103428008		12-MAR-2007 20:27	S5650
L5	c12t0009	67103428009		12-MAR-2007 20:33	S5644
L6	c12t0010	67103428010		12-MAR-2007 20:39	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7783	0.6225	0.6293	0.5900	0.5820	0.5425	BLNK	-4.2566	1.81708		0.6241	0.999	0.995	
Antimony	A	0.3566	0.2923	0.2929	0.2870	0.2935	0.2772	BLNK	-0.0345	3.56579		0.2999	0.999	0.995	
Barium	A	0.4848	0.1162	0.1181	0.0960	0.0922	0.0867	BLNK	-0.1048	11.3932		0.1657	0.999	0.995	
Beryllium	A	0.3200	0.3104	0.3298	0.3224	0.3193	0.2817	BLNK	-0.0302	3.45778		0.3139	0.996	0.995	
Cadmium	A	0.1059	0.0918	0.0919	0.0905	0.0891	0.0828	BLNK	-0.0232	11.8967		0.0920	0.999	0.995	
Calcium	A	0.1105	0.0415	0.0338	0.0243	0.0229	0.0214	BLNK	-26.817	46.1314		0.0424	0.999	0.995	
Lead	A	0.9910	0.7937	0.7767	0.7377	0.7253	0.6810	BLNK	-0.0742	1.45007		0.7842	0.999	0.995	
Magnesium	A	0.6027	0.5569	0.5031	0.4769	0.4645	0.4329	BLNK	-8.7158	2.27753		0.5062	0.999	0.995	
Molybdenum	A	0.2551	0.2260	0.2335	0.2227	0.2222	0.2149	BLNK	-0.0353	4.62193		0.2291	1.000	0.995	
Potassium	A	4.9515	1.5736	1.1941	0.7736	0.7259	0.6783	BLNK	-62.083	1.45912		1.6495	0.999	0.995	
Silver	A	0.4011	0.3840	0.3803	0.3753	0.3759	0.3473	BLNK	-0.0245	2.83282		0.3773	0.998	0.995	
Thallium	A	1.1173	0.9488	0.9327	0.8922	0.9574	0.8984	BLNK	-0.0275	1.09910		0.9578	0.999	0.995	
Arsenic	E	0.6852	0.6070	0.6606	0.6264	0.6080	0.5743	BLNK	-0.0388	1.72115		0.6269	0.999	0.995	
Chromium	E	7.6866	4.0039	3.5518	3.2499	3.1223	2.9505	BLNK	-0.1600	0.33530		4.0942	0.999	0.995	
Cobalt	E	5.5374	5.3292	5.3485	5.3135	5.0610	4.7282	BLNK	-0.0108	0.20853		5.2197	0.999	0.995	
Copper	E	21.575	10.634	9.0022	7.3859	6.8890	6.3789	BLNK	-0.2095	0.15445		10.311	0.999	0.995	
Manganese	E	2.6878	2.0869	2.0008	1.8806	1.8141	1.7006	BLNK	-0.0480	0.58034		2.0285	0.999	0.995	
Nickel	E	3.8071	1.8669	1.7576	1.4548	1.3377	1.2420	BLNK	-0.1534	0.79343		1.9110	0.999	0.995	
Sodium	E	2.5275	1.0359	0.8639	0.6481	0.5605	0.5326	BLNK	-29.686	1.86076		1.0281	0.999	0.995	
Vanadium	E	5.7138	3.1214	2.7717	2.4990	2.4443	2.3186	BLNK	-0.1918	0.42712		3.1448	0.999	0.995	
Zinc	E			7.6415	1.4656	1.1206	1.0202	BLNK	-2.0445	0.97255		2.8120	0.997	0.995	
Iron	H	1.6815	1.4080	1.4303	1.3427	1.2353	1.1963	BLNK	-1.9159	0.83039		1.3824	1.000	0.995	
Selenium	H	0.2397	0.2216	0.1997	0.2215	0.2066	0.1992	BLNK	-0.0044	4.98301		0.2147	1.000	0.995	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E			1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

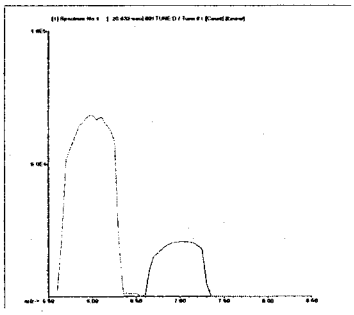
Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

6020 QC Tune Report

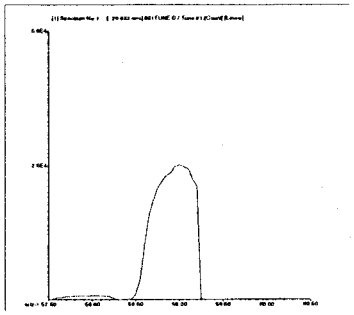
Data File: C:\ICPCHEM\1\DATA\07C12t00.B\001TUNE.D
Date Acquired: Mar 12 2007 07:48 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

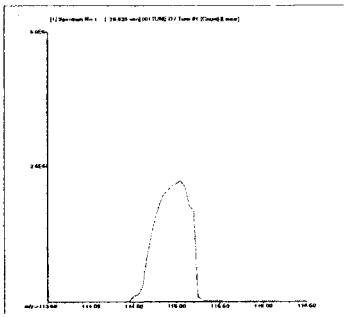
Element	Actual	Required	Flag
7 Li	1.08	5.00	
59 Co	0.72	5.00	
115 In	1.06	5.00	
205 Tl	0.98	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



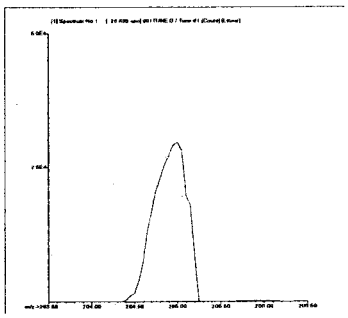
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004C
Date Acquired: Mar 12 2007 08:04 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:08 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	672760.88	A	6400.00	0.95
7	(Li)		P		
9	Be	117.78	P	39.77	33.77
23	Na	11273.71	P	422.10	3.74
24	Mg	98078.36	P	23310.00	23.77
27	Al	60061.39	P	9198.00	15.31
39	K	1091342.00	A	21770.00	1.99
44	Ca	14907.68	P	1101.00	7.39
45	Sc	90742.55	P	345.30	0.38
45	Sc	35324.06	P	566.20	1.60
45	Sc	1282606.00	A	11440.00	0.89
51	V	317.42	P	18.07	5.69
52	Cr	337.42	P	41.19	12.21
55	Mn	58.52	P	12.88	22.01
56	Fe	4186.97	P	80.50	1.92
59	Co	37.04	P	28.55	77.08
60	Ni	136.67	P	20.37	14.91
63	Cu	521.13	P	43.38	8.32
65	Cu	240.75	P	20.56	8.54
66	Zn	807.44	P	59.88	7.42
72	Ge	25353.95	P	113.20	0.45
72	Ge	19198.17	P	248.40	1.29
75	As	8.67	P	2.31	26.64
78	Se	0.44	P	0.38	86.60
89	Y	1853201.00	A	26870.00	1.45
98	Mo	283.35	P	40.56	14.31
107	Ag	315.57	P	24.57	7.79
111	Cd	71.11	P	25.46	35.80
115	In	1826335.00	A	13940.00	0.76
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	353.36	P	35.28	9.98
137	Ba	416.69	P	20.82	5.00
159	Tb	2265507.00	A	21230.00	0.94
205	Tl	714.50	P	121.00	16.94
208	Pb	2319.07	P	158.30	6.83
209	Bi	1431311.00	A	16460.00	1.15

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 12 2007 08:09 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:08 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	678491.38	A	8627.00	1.27
7 (Li)		P		
9 Be	434.47	P	50.92	11.72
23 Na	18416.88	P	662.20	3.60
24 Mg	154287.50	P	1427.00	0.92
27 Al	199217.70	P	1070.00	0.54
39 K	1267369.00	A	8584.00	0.68
44 Ca	28295.84	P	137.30	0.49
45 Sc	93048.34	P	931.30	1.00
45 Sc	36439.83	P	423.90	1.16
45 Sc	1279924.00	A	13670.00	1.07
51 V	416.31	P	17.44	4.19
52 Cr	560.02	P	19.28	3.44
55 Mn	195.93	P	12.24	6.25
56 Fe	31291.96	P	462.40	1.48
59 Co	403.34	P	30.97	7.68
60 Ni	277.41	P	5.70	2.06
63 Cu	846.70	P	20.58	2.43
65 Cu	421.86	P	17.01	4.03
66 Zn	2250.21	P	63.61	2.83
72 Ge	25948.72	P	185.40	0.71
72 Ge	19621.72	P	43.74	0.22
75 As	26.89	P	4.02	14.95
78 Se	12.44	P	1.54	12.38
89 Y	1821761.00	A	13600.00	0.75
98 Mo	930.07	P	93.88	10.09
99 (Ru)	2.22	P	1.93	86.62
107 Ag	1452.36	P	26.74	1.84
111 Cd	383.35	P	41.77	10.90
115 In	1810471.00	A	7689.00	0.42
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1291.23	P	42.22	3.27
137 Ba	2160.26	P	35.12	1.63
159 Tb	2228029.00	A	7967.00	0.36
205 Tl	1572.39	P	87.72	5.58
208 Pb	4416.03	P	268.80	6.09
209 Bi	1407546.00	A	6179.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	678491.38	1.27	672760.88	100.9	80 - 120	
45 Sc	93048.34	1.00	90742.55	102.5	80 - 120	
45 Sc	36439.83	1.16	35324.06	103.2	80 - 120	
45 Sc	1279924.00	1.07	1282606.30	99.8	80 - 120	
72 Ge	25948.72	0.71	25353.96	102.3	80 - 120	
72 Ge	19621.72	0.22	19198.17	102.2	80 - 120	
89 Y	1821761.30	0.75	1853200.60	98.3	80 - 120	
115 In	1810471.40	0.42	1826335.60	99.1	80 - 120	
159 Tb	2228029.30	0.36	2265507.00	98.3	80 - 120	
209 Bi	1407546.30	0.44	1431310.80	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

610

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 12 2007 08:15 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:13 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	694977.00	A	2734.00	0.39
7 (Li)		P		
9 Be	2156.90	P	23.34	1.08
23 Na	38468.13	P	147.60	0.38
24 Mg	734533.81	M	21750.00	2.96
27 Al	821299.50	A	12100.00	1.47
39 K	2076168.00	A	22620.00	1.09
44 Ca	54777.21	P	1700.00	3.10
45 Sc	94523.60	P	460.40	0.49
45 Sc	37137.96	P	350.60	0.94
45 Sc	1319455.00	A	16430.00	1.25
51 V	1159.32	P	30.07	2.59
52 Cr	1486.77	P	29.46	1.98
55 Mn	775.22	P	37.92	4.89
56 Fe	133088.09	P	630.00	0.47
59 Co	1979.06	P	7.29	0.37
60 Ni	693.36	P	28.87	4.16
63 Cu	2117.59	P	61.60	2.91
65 Cu	1043.76	P	12.88	1.23
66 Zn	2681.03	P	56.60	2.11
72 Ge	26368.77	P	339.30	1.29
72 Ge	19913.63	P	53.43	0.27
75 As	120.89	P	7.34	6.07
78 Se	58.45	P	2.69	4.61
89 Y	1876675.00	A	25970.00	1.38
98 Mo	4241.94	P	273.40	6.45
99 (Ru)	0.00	P	0.00	0.00
107 Ag	7010.95	P	60.51	0.86
111 Cd	1676.84	P	83.54	4.98
115 In	1826165.00	A	16320.00	0.89
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5337.93	P	120.40	2.26
137 Ba	2632.59	P	207.10	7.87
159 Tb	2263881.00	A	44190.00	1.95
205 Tl	6790.94	P	33.40	0.49
208 Pb	17970.10	P	450.50	2.51
209 Bi	1431570.00	A	16570.00	1.16

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	694977.00	0.39	672760.88	103.3	80 - 120	
45 Sc	94523.60	0.49	90742.55	104.2	80 - 120	
45 Sc	37137.96	0.94	35324.06	105.1	80 - 120	
45 Sc	1319455.50	1.25	1282606.30	102.9	80 - 120	
72 Ge	26368.77	1.29	25353.96	104.0	80 - 120	
72 Ge	19913.64	0.27	19198.17	103.7	80 - 120	
89 Y	1876675.10	1.38	1853200.60	101.3	80 - 120	
115 In	1826165.40	0.89	1826335.60	100.0	80 - 120	
159 Tb	2263880.50	1.95	2265507.00	99.9	80 - 120	
209 Bi	1431569.60	1.16	1431310.80	100.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 12 2007 08:20 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:18 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	685553.13	A	8563.00	1.25
7 (Li)		P		
9 Be	4521.98	P	93.99	2.08
23 Na	62838.53	P	225.00	0.36
24 Mg	1291836.00	A	10920.00	0.85
27 Al	1616190.00	A	16870.00	1.04
39 K	3066603.00	A	13690.00	0.45
44 Ca	86719.78	P	627.30	0.72
45 Sc	90596.98	P	400.80	0.44
45 Sc	36373.43	P	412.90	1.14
45 Sc	1284110.00	A	10680.00	0.83
51 V	2016.10	P	29.51	1.46
52 Cr	2583.60	P	11.55	0.45
55 Mn	1454.91	P	65.87	4.53
56 Fe	259160.50	P	158.20	0.06
59 Co	3889.85	P	101.10	2.60
60 Ni	1278.59	P	21.21	1.66
63 Cu	3519.00	P	59.06	1.68
65 Cu	1776.06	P	66.69	3.75
66 Zn	2987.02	P	51.69	1.73
72 Ge	25531.65	P	316.90	1.24
72 Ge	19544.95	P	16.41	0.08
75 As	258.23	P	8.88	3.44
78 Se	102.00	P	4.16	4.08
89 Y	1837792.00	A	8214.00	0.45
98 Mo	8583.06	P	96.00	1.12
99 (Ru)	1.11	P	1.93	173.24
107 Ag	13679.55	P	269.50	1.97
111 Cd	3306.09	P	61.97	1.87
115 In	1798289.00	A	22390.00	1.25
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10532.28	P	193.40	1.84
137 Ba	5286.80	P	250.20	4.73
159 Tb	2237557.00	A	17940.00	0.80
205 Tl	13157.28	P	323.10	2.46
208 Pb	34755.50	P	102.40	0.29
209 Bi	1410482.00	A	13740.00	0.97

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	685553.06	1.25	672760.88	101.9	80 - 120	
45 Sc	90596.98	0.44	90742.55	99.8	80 - 120	
45 Sc	36373.43	1.14	35324.06	103.0	80 - 120	
45 Sc	1284110.50	0.83	1282606.30	100.1	80 - 120	
72 Ge	25531.65	1.24	25353.96	100.7	80 - 120	
72 Ge	19544.95	0.08	19198.17	101.8	80 - 120	
89 Y	1837792.50	0.45	1853200.60	99.2	80 - 120	
115 In	1798288.90	1.25	1826335.60	98.5	80 - 120	
159 Tb	2237556.80	0.80	2265507.00	98.8	80 - 120	
209 Bi	1410482.50	0.97	1431310.80	98.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

612

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 12 2007 08:25 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:24 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	691113.81	A	7944.00	1.15
7 (Li)		P		
9 Be	44557.23	P	358.20	0.80
23 Na	478735.50	P	2653.00	0.55
24 Mg	12476940.00	A	38180.00	0.31
27 Al	15434640.00	A	100800.00	0.65
39 K	20238950.00	A	128600.00	0.64
44 Ca	635172.88	P	3960.00	0.62
45 Sc	91827.04	P	615.40	0.67
45 Sc	36934.78	P	170.60	0.46
45 Sc	1308061.00	A	5772.00	0.44
51 V	18459.97	P	248.70	1.35
52 Cr	24006.50	P	183.20	0.76
55 Mn	13891.43	P	139.50	1.00
56 Fe	2465920.00	A	11150.00	0.45
59 Co	39249.58	P	264.40	0.67
60 Ni	10746.43	P	162.70	1.51
63 Cu	29310.37	P	193.40	0.66
65 Cu	14482.80	P	108.40	0.75
66 Zn	5816.47	P	37.49	0.64
72 Ge	25709.04	P	306.70	1.19
72 Ge	19844.26	P	192.70	0.97
75 As	2486.02	P	21.34	0.86
78 Se	1138.94	P	10.96	0.96
89 Y	1850130.00	A	21580.00	1.17
98 Mo	82416.04	P	300.60	0.36
99 (Ru)	7.78	P	1.93	24.75
107 Ag	136184.09	P	573.50	0.42
111 Cd	32822.91	P	279.10	0.85
115 In	1814409.00	A	7988.00	0.44
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	104145.70	P	375.80	0.36
137 Ba	43283.35	P	407.60	0.94
159 Tb	2255012.00	A	7868.00	0.35
205 Tl	126048.90	P	1855.00	1.47
208 Pb	332694.19	P	3209.00	0.96
209 Bi	1412713.00	A	1960.00	0.14

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	691113.81	1.15	672760.88	102.7	80 - 120	
45 Sc	91827.05	0.67	90742.55	101.2	80 - 120	
45 Sc	36934.78	0.46	35324.06	104.6	80 - 120	
45 Sc	1308060.50	0.44	1282606.30	102.0	80 - 120	
72 Ge	25709.04	1.19	25353.96	101.4	80 - 120	
72 Ge	19844.26	0.97	19198.17	103.4	80 - 120	
89 Y	1850130.10	1.17	1853200.60	99.8	80 - 120	
115 In	1814409.40	0.44	1826335.60	99.3	80 - 120	
159 Tb	2255012.00	0.35	2265507.00	99.5	80 - 120	
209 Bi	1412712.80	0.14	1431310.80	98.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 12 2007 08:30 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	677083.19	A	4479.00	0.66
7 (Li)		P		
9 Be	432288.69	P	3929.00	0.91
23 Na	4202490.00	A	30260.00	0.72
24 Mg	###########	A	1232000.00	1.01
27 Al	###########	A	709900.00	0.46
39 K	###########	A	1240000.00	0.65
44 Ca	6017839.00	A	41060.00	0.68
45 Sc	94421.19	P	389.40	0.41
45 Sc	37489.30	P	346.60	0.92
45 Sc	1314186.00	A	8837.00	0.67
51 V	183256.20	P	305.80	0.17
52 Cr	234087.50	P	1253.00	0.54
55 Mn	136010.20	P	379.90	0.28
56 Fe	23326620.00	A	76160.00	0.33
59 Co	379447.09	P	1556.00	0.41
60 Ni	100293.20	P	104.00	0.10
63 Cu	272674.09	P	779.50	0.29
65 Cu	133392.41	P	510.70	0.38
66 Zn	44355.38	P	91.00	0.21
72 Ge	25783.19	P	127.60	0.49
72 Ge	19790.87	P	93.59	0.47
75 As	24064.36	P	129.60	0.54
78 Se	10652.81	P	85.62	0.80
89 Y	1838449.00	A	13690.00	0.74
98 Mo	817017.13	P	6957.00	0.85
99 (Ru)	36.67	P	12.02	32.78
107 Ag	1309827.00	A	4719.00	0.36
111 Cd	310358.19	P	2828.00	0.91
115 In	1742209.00	A	14850.00	0.85
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1022511.00	A	3721.00	0.36
137 Ba	409592.19	P	3421.00	0.84
159 Tb	2220177.00	A	17650.00	0.79
205 Tl	1268248.00	A	9969.00	0.79
208 Pb	3220794.00	A	26350.00	0.82
209 Bi	1324739.00	A	6012.00	0.45

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	677083.19	0.66	672760.88	100.6	80 - 120	
45 Sc	94421.20	0.41	90742.55	104.1	80 - 120	
45 Sc	37489.30	0.92	35324.06	106.1	80 - 120	
45 Sc	1314186.00	0.67	1282606.30	102.5	80 - 120	
72 Ge	25783.19	0.49	25353.96	101.7	80 - 120	
72 Ge	19790.87	0.47	19198.17	103.1	80 - 120	
89 Y	1838449.10	0.74	1853200.60	99.2	80 - 120	
115 In	1742208.80	0.85	1826335.60	95.4	80 - 120	
159 Tb	2220177.30	0.79	2265507.00	98.0	80 - 120	
209 Bi	1324739.00	0.45	1431310.80	92.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C12t00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 12 2007 08:37 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 12 2007 08:35 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	662555.38	A	1802.00	0.27
7 (Li)		P		
9 Be	746495.50	A	610.00	0.08
23 Na	7932156.00	A	49980.00	0.63
24 Mg	###########	A	591300.00	0.26
27 Al	###########	A	1453000.00	0.51
39 K	###########	A	411800.00	0.12
44 Ca	11271110.00	A	16720.00	0.15
45 Sc	91265.47	P	1278.00	1.40
45 Sc	37237.45	P	465.20	1.25
45 Sc	1316070.00	A	7647.00	0.58
51 V	345312.91	P	1339.00	0.39
52 Cr	439426.31	P	2783.00	0.63
55 Mn	253279.91	P	1002.00	0.40
56 Fe	43666368.00	A	221500.00	0.51
59 Co	704190.13	P	2353.00	0.33
60 Ni	184977.09	P	345.20	0.19
63 Cu	494594.41	P	2855.00	0.58
65 Cu	243433.50	P	1640.00	0.67
66 Zn	79104.31	P	211.10	0.27
72 Ge	24523.21	P	253.80	1.03
72 Ge	19385.09	P	168.40	0.87
75 As	44530.93	P	117.60	0.26
78 Se	19533.35	P	192.10	0.98
89 Y	1814803.00	A	12270.00	0.68
98 Mo	1560286.00	A	5438.00	0.35
99 (Ru)	60.00	P	8.82	14.70
107 Ag	2344843.00	A	8878.00	0.38
111 Cd	559069.31	P	481.30	0.09
115 In	1688014.00	A	10980.00	0.65
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1871939.00	A	7209.00	0.39
137 Ba	755844.88	P	4982.00	0.66
159 Tb	2179423.00	A	20470.00	0.94
205 Tl	2289599.00	A	13630.00	0.60
208 Pb	5936212.00	A	22010.00	0.37
209 Bi	1274335.00	A	8531.00	0.67

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	662555.44	0.27	672760.88	98.5	80 - 120	
45 Sc	91265.48	1.40	90742.55	100.6	80 - 120	
45 Sc	37237.45	1.25	35324.06	105.4	80 - 120	
45 Sc	1316069.90	0.58	1282606.30	102.6	80 - 120	
72 Ge	24523.21	1.03	25353.96	96.7	80 - 120	
72 Ge	19385.09	0.87	19198.17	101.0	80 - 120	
89 Y	1814803.30	0.68	1853200.60	97.9	80 - 120	
115 In	1688014.40	0.65	1826335.60	92.4	80 - 120	
159 Tb	2179423.00	0.94	2265507.00	96.2	80 - 120	
209 Bi	1274335.40	0.67	1431310.80	89.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C12t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428012 File : c12t0012 Time : 12-MAR-2007 20:50
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6241	0.5183	10000	9413	ug/L	-6	10	
Antimony	A	0.2999	0.2653	100.0	94.57	ug/L	-5	10	
Barium	A	0.1657	0.0827	100.0	94.10	ug/L	-6	10	
Beryllium	A	0.3139	0.2907	100.0	100.5	ug/L	1	10	
Cadmium	A	0.0920	0.0797	100.0	94.85	ug/L	-5	10	
Calcium	A	0.0424	0.0206	10000	9459	ug/L	-5	10	
Lead	A	0.7842	0.6532	100.0	94.64	ug/L	-5	10	
Magnesium	A	0.5062	0.4163	10000	9472	ug/L	-5	10	
Molybdenum	A	0.2291	0.2038	100.0	94.14	ug/L	-6	10	
Potassium	A	1.6495	0.6597	10000	9564	ug/L	-4	10	
Silver	A	0.3773	0.3674	100.0	104.1	ug/L	4	10	
Thallium	A	0.9578	0.8238	50.00	45.24	ug/L	-10	10	
Arsenic	E	0.6269	0.5937	100.0	102.2	ug/L	2	10	
Chromium	E	4.0942	2.9826	100.0	99.85	ug/L	0	10	
Cobalt	E	5.2197	4.7575	100.0	99.20	ug/L	-1	10	
Copper	E	10.311	6.4585	100.0	99.54	ug/L	0	10	
Manganese	E	2.0285	1.7123	100.0	99.32	ug/L	-1	10	
Nickel	E	1.9110	1.2660	100.0	100.3	ug/L	0	10	
Sodium	E	1.0281	0.5277	10000	9790	ug/L	-2	10	
Vanadium	E	3.1448	2.3142	100.0	98.65	ug/L	-1	10	
Zinc	E	2.8120	1.0523	100.0	100.3	ug/L	0	10	
Iron	H	1.3824	1.2212	10000	10140	ug/L	1	10	
Selenium	H	0.2147	0.2067	100.0	103.0	ug/L	3	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	691518	2.79
Scandium	A	1282606	1364637	6.40
Scandium	E	35324	37131	5.12
Scandium	H	90743	86581	-4.59
Germanium	H	25354	23721	-6.44
Germanium	E	19198	19516	1.66
Indium	A	1826336	1808139	-1.00
Bismuth	A	1431311	1357521	-5.16
Yttrium	A	1853201	1891408	2.06
Terbium	A	2265507	2297843	1.43

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428035 File : c12t0035 Time : 12-MAR-2007 22:53
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5326	10000	9674	ug/L	-3	10	
Antimony	A	0.2999	0.2824	100.0	100.6	ug/L	1	10	
Barium	A	0.1657	0.0863	100.0	98.22	ug/L	-2	10	
Beryllium	A	0.3139	0.3130	100.0	108.2	ug/L	8	10	
Cadmium	A	0.0920	0.0842	100.0	100.2	ug/L	0	10	
Calcium	A	0.0424	0.0217	10000	9970	ug/L	0	10	
Lead	A	0.7842	0.6892	100.0	99.87	ug/L	0	10	
Magnesium	A	0.5062	0.4244	10000	9656	ug/L	-3	10	
Molybdenum	A	0.2291	0.2133	100.0	98.56	ug/L	-1	10	
Potassium	A	1.6495	0.6844	10000	9924	ug/L	-1	10	
Silver	A	0.3773	0.3829	100.0	108.4	ug/L	8	10	
Thallium	A	0.9578	0.8495	50.00	46.65	ug/L	-7	10	
Arsenic	E	0.6269	0.5834	100.0	100.4	ug/L	0	10	
Chromium	E	4.0942	3.0339	100.0	101.6	ug/L	2	10	
Cobalt	E	5.2197	4.8755	100.0	101.7	ug/L	2	10	
Copper	E	10.311	6.3131	100.0	97.30	ug/L	-3	10	
Manganese	E	2.0285	1.7371	100.0	100.8	ug/L	1	10	
Nickel	E	1.9110	1.2979	100.0	102.8	ug/L	3	10	
Sodium	E	1.0281	0.5232	10000	9707	ug/L	-3	10	
Vanadium	E	3.1448	2.3325	100.0	99.43	ug/L	-1	10	
Zinc	E	2.8120	1.0365	100.0	98.75	ug/L	-1	10	
Iron	H	1.3824	1.2521	10000	10400	ug/L	4	10	
Selenium	H	0.2147	0.2106	100.0	104.9	ug/L	5	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	558143	-17.04
Scandium	A	1282606	1188859	-7.31
Scandium	E	35324	32615	-7.67
Scandium	H	90743	68305	-24.73
Germanium	H	25354	19200	-24.27
Germanium	E	19198	17998	-6.25
Indium	A	1826336	1639568	-10.23
Bismuth	A	1431311	1276764	-10.80
Yttrium	A	1853201	1720957	-7.14
Terbium	A	2265507	2117912	-6.51

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428053 File : c12t0053 Time : 13-MAR-2007 00:30
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5300	10000	9626	ug/L	-4	10	
Antimony	A	0.2999	0.2785	100.0	99.26	ug/L	-1	10	
Barium	A	0.1657	0.0863	100.0	98.16	ug/L	-2	10	
Beryllium	A	0.3139	0.3047	100.0	105.3	ug/L	5	10	
Cadmium	A	0.0920	0.0835	100.0	99.27	ug/L	-1	10	
Calcium	A	0.0424	0.0214	10000	9846	ug/L	-2	10	
Lead	A	0.7842	0.6931	100.0	100.4	ug/L	0	10	
Magnesium	A	0.5062	0.4252	10000	9675	ug/L	-3	10	
Molybdenum	A	0.2291	0.2125	100.0	98.16	ug/L	-2	10	
Potassium	A	1.6495	0.6837	10000	9914	ug/L	-1	10	
Silver	A	0.3773	0.3804	100.0	107.7	ug/L	8	10	
Thallium	A	0.9578	0.8487	50.00	46.61	ug/L	-7	10	
Arsenic	E	0.6269	0.5872	100.0	101.0	ug/L	1	10	
Chromium	E	4.0942	3.0290	100.0	101.4	ug/L	1	10	
Cobalt	E	5.2197	4.8594	100.0	101.3	ug/L	1	10	
Copper	E	10.311	6.3705	100.0	98.19	ug/L	-2	10	
Manganese	E	2.0285	1.7282	100.0	100.2	ug/L	0	10	
Nickel	E	1.9110	1.2987	100.0	102.9	ug/L	3	10	
Sodium	E	1.0281	0.5255	10000	9748	ug/L	-3	10	
Vanadium	E	3.1448	2.3406	100.0	99.78	ug/L	0	10	
Zinc	E	2.8120	1.0390	100.0	99.00	ug/L	-1	10	
Iron	H	1.3824	1.2446	10000	10330	ug/L	3	10	
Selenium	H	0.2147	0.2115	100.0	105.4	ug/L	5	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	576134	-14.36
Scandium	A	1282606	1192710	-7.01
Scandium	E	35324	32387	-8.31
Scandium	H	90743	64338	-29.10
Germanium	H	25354	17939	-29.25
Germanium	E	19198	17648	-8.07
Indium	A	1826336	1623229	-11.12
Bismuth	A	1431311	1250140	-12.66
Yttrium	A	1853201	1688058	-8.91
Terbium	A	2265507	2068362	-8.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428071 File : c12t0071 Time : 13-MAR-2007 02:07
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5315	10000	9654	ug/L	-3	10	
Antimony	A	0.2999	0.2769	100.0	98.70	ug/L	-1	10	
Barium	A	0.1657	0.0858	100.0	97.59	ug/L	-2	10	
Beryllium	A	0.3139	0.3119	100.0	107.8	ug/L	8	10	
Cadmium	A	0.0920	0.0826	100.0	98.22	ug/L	-2	10	
Calcium	A	0.0424	0.0215	10000	9868	ug/L	-1	10	
Lead	A	0.7842	0.6926	100.0	100.4	ug/L	0	10	
Magnesium	A	0.5062	0.4250	10000	9672	ug/L	-3	10	
Molybdenum	A	0.2291	0.2126	100.0	98.22	ug/L	-2	10	
Potassium	A	1.6495	0.6832	10000	9907	ug/L	-1	10	
Silver	A	0.3773	0.3770	100.0	106.8	ug/L	7	10	
Thallium	A	0.9578	0.8460	50.00	46.47	ug/L	-7	10	
Arsenic	E	0.6269	0.5806	100.0	99.89	ug/L	0	10	
Chromium	E	4.0942	2.9271	100.0	97.98	ug/L	-2	10	
Cobalt	E	5.2197	4.6783	100.0	97.55	ug/L	-2	10	
Copper	E	10.311	6.2005	100.0	95.56	ug/L	-4	10	
Manganese	E	2.0285	1.6710	100.0	96.93	ug/L	-3	10	
Nickel	E	1.9110	1.2462	100.0	98.72	ug/L	-1	10	
Sodium	E	1.0281	0.5103	10000	9465	ug/L	-5	10	
Vanadium	E	3.1448	2.2720	100.0	96.85	ug/L	-3	10	
Zinc	E	2.8120	1.0134	100.0	96.51	ug/L	-3	10	
Iron	H	1.3824	1.2713	10000	10550	ug/L	6	10	
Selenium	H	0.2147	0.2177	100.0	108.5	ug/L	9	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	539267	-19.84
Scandium	A	1282606	1139836	-11.13
Scandium	E	35324	32252	-8.70
Scandium	H	90743	53236	-41.33
Germanium	H	25354	15001	-40.83
Germanium	E	19198	17357	-9.59
Indium	A	1826336	1554148	-14.90
Bismuth	A	1431311	1197989	-16.30
Yttrium	A	1853201	1601360	-13.59
Terbium	A	2265507	1999397	-11.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428079 File : c12t0079 Time : 13-MAR-2007 02:49
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5230	10000	9499	ug/L	-5	10	
Antimony	A	0.2999	0.2771	100.0	98.76	ug/L	-1	10	
Barium	A	0.1657	0.0853	100.0	97.09	ug/L	-3	10	
Beryllium	A	0.3139	0.3118	100.0	107.8	ug/L	8	10	
Cadmium	A	0.0920	0.0829	100.0	98.65	ug/L	-1	10	
Calcium	A	0.0424	0.0213	10000	9780	ug/L	-2	10	
Lead	A	0.7842	0.6828	100.0	98.94	ug/L	-1	10	
Magnesium	A	0.5062	0.4201	10000	9560	ug/L	-4	10	
Molybdenum	A	0.2291	0.2099	100.0	96.99	ug/L	-3	10	
Potassium	A	1.6495	0.6749	10000	9786	ug/L	-2	10	
Silver	A	0.3773	0.3752	100.0	106.3	ug/L	6	10	
Thallium	A	0.9578	0.8333	50.00	45.76	ug/L	-8	10	
Arsenic	E	0.6269	0.5802	100.0	99.83	ug/L	0	10	
Chromium	E	4.0942	2.9441	100.0	98.55	ug/L	-1	10	
Cobalt	E	5.2197	4.7033	100.0	98.07	ug/L	-2	10	
Copper	E	10.311	6.2583	100.0	96.45	ug/L	-4	10	
Manganese	E	2.0285	1.6913	100.0	98.11	ug/L	-2	10	
Nickel	E	1.9110	1.2611	100.0	99.91	ug/L	0	10	
Sodium	E	1.0281	0.5113	10000	9484	ug/L	-5	10	
Vanadium	E	3.1448	2.2852	100.0	97.41	ug/L	-3	10	
Zinc	E	2.8120	1.0145	100.0	96.62	ug/L	-3	10	
Iron	H	1.3824	1.2523	10000	10400	ug/L	4	10	
Selenium	H	0.2147	0.2120	100.0	105.6	ug/L	6	10	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	548426	-18.48
Scandium	A	1282606	1172070	-8.62
Scandium	E	35324	32661	-7.54
Scandium	H	90743	59740	-34.17
Germanium	H	25354	16910	-33.30
Germanium	E	19198	17592	-8.37
Indium	A	1826336	1585016	-13.21
Bismuth	A	1431311	1232457	-13.89
Yttrium	A	1853201	1660700	-10.39
Terbium	A	2265507	2053112	-9.38

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428102 File : c12t0102 Time : 13-MAR-2007 04:54
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5132	10000	9321	ug/L	-7	10	
Antimony	A	0.2999	0.2737	100.0	97.54	ug/L	-2	10	
Barium	A	0.1657	0.0836	100.0	95.18	ug/L	-5	10	
Beryllium	A	0.3139	0.3135	100.0	108.4	ug/L	8	10	
Cadmium	A	0.0920	0.0819	100.0	97.39	ug/L	-3	10	
Calcium	A	0.0424	0.0213	10000	9819	ug/L	-2	10	
Lead	A	0.7842	0.6893	100.0	99.88	ug/L	0	10	
Magnesium	A	0.5062	0.4107	10000	9346	ug/L	-7	10	
Molybdenum	A	0.2291	0.2083	100.0	96.26	ug/L	-4	10	
Potassium	A	1.6495	0.6733	10000	9762	ug/L	-2	10	
Silver	A	0.3773	0.3677	100.0	104.2	ug/L	4	10	
Thallium	A	0.9578	0.8364	50.00	45.93	ug/L	-8	10	
Arsenic	E	0.6269	0.5780	100.0	99.44	ug/L	-1	10	
Chromium	E	4.0942	2.9790	100.0	99.72	ug/L	0	10	
Cobalt	E	5.2197	4.8089	100.0	100.3	ug/L	0	10	
Copper	E	10.311	6.2648	100.0	96.55	ug/L	-3	10	
Manganese	E	2.0285	1.7045	100.0	98.87	ug/L	-1	10	
Nickel	E	1.9110	1.2842	100.0	101.7	ug/L	2	10	
Sodium	E	1.0281	0.5160	10000	9572	ug/L	-4	10	
Vanadium	E	3.1448	2.3014	100.0	98.10	ug/L	-2	10	
Zinc	E	2.8120	1.0256	100.0	97.69	ug/L	-2	10	
Iron	H	1.3824	1.3170	10000	10930	ug/L	9	10	
Selenium	H	0.2147	0.2338	100.0	116.5	ug/L	**17**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	473857	-29.57
Scandium	A	1282606	1061584	-17.23
Scandium	E	35324	28613	-19.00
Scandium	H	90743	40785	-55.05
Germanium	H	25354	11477	-54.73
Germanium	E	19198	15769	-17.86
Indium	A	1826336	1503074	-17.70
Bismuth	A	1431311	1180026	-17.56
Yttrium	A	1853201	1549197	-16.40
Terbium	A	2265507	1960410	-13.47

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428122 File : c12t0122 Time : 13-MAR-2007 06:42
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5132	10000	9321	ug/L	-7	10	
Antimony	A	0.2999	0.2771	100.0	98.78	ug/L	-1	10	
Barium	A	0.1657	0.0859	100.0	97.73	ug/L	-2	10	
Beryllium	A	0.3139	0.3168	100.0	109.5	ug/L	10	10	
Cadmium	A	0.0920	0.0832	100.0	98.96	ug/L	-1	10	
Calcium	A	0.0424	0.0214	10000	9854	ug/L	-1	10	
Lead	A	0.7842	0.6983	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5062	0.4086	10000	9297	ug/L	-7	10	
Molybdenum	A	0.2291	0.2106	100.0	97.31	ug/L	-3	10	
Potassium	A	1.6495	0.6721	10000	9745	ug/L	-3	10	
Silver	A	0.3773	0.3727	100.0	105.6	ug/L	6	10	
Thallium	A	0.9578	0.8456	50.00	46.44	ug/L	-7	10	
Arsenic	E	0.6269	0.5958	100.0	102.5	ug/L	3	10	
Chromium	E	4.0942	3.0291	100.0	101.4	ug/L	1	10	
Cobalt	E	5.2197	4.8941	100.0	102.0	ug/L	2	10	
Copper	E	10.311	6.3756	100.0	98.26	ug/L	-2	10	
Manganese	E	2.0285	1.7342	100.0	100.6	ug/L	1	10	
Nickel	E	1.9110	1.3082	100.0	103.6	ug/L	4	10	
Sodium	E	1.0281	0.5122	10000	9502	ug/L	-5	10	
Vanadium	E	3.1448	2.3485	100.0	100.1	ug/L	0	10	
Zinc	E	2.8120	1.0383	100.0	98.93	ug/L	-1	10	
Iron	H	1.3824	1.3170	10000	10930	ug/L	9	10	
Selenium	H	0.2147	0.2355	100.0	117.3	ug/L	**17**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	472755	-29.73
Scandium	A	1282606	1065035	-16.96
Scandium	E	35324	28329	-19.80
Scandium	H	90743	38017	-58.10
Germanium	H	25354	10663	-57.94
Germanium	E	19198	15612	-18.68
Indium	A	1826336	1483105	-18.79
Bismuth	A	1431311	1166025	-18.53
Yttrium	A	1853201	1539145	-16.95
Terbium	A	2265507	1928184	-14.89

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428133 File : c12t0133 Time : 13-MAR-2007 07:41
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6241	0.5038	10000	9150	ug/L	-9	10	
Antimony	A	0.2999	0.2770	100.0	98.75	ug/L	-1	10	
Barium	A	0.1657	0.0853	100.0	97.03	ug/L	-3	10	
Beryllium	A	0.3139	0.3199	100.0	110.6	ug/L	**11**	10	c+ ***
Cadmium	A	0.0920	0.0825	100.0	98.15	ug/L	-2	10	
Calcium	A	0.0424	0.0212	10000	9740	ug/L	-3	10	
Lead	A	0.7842	0.7013	100.0	101.6	ug/L	2	10	
Magnesium	A	0.5062	0.3998	10000	9098	ug/L	-9	10	
Molybdenum	A	0.2291	0.2116	100.0	97.74	ug/L	-2	10	
Potassium	A	1.6495	0.6637	10000	9622	ug/L	-4	10	
Silver	A	0.3773	0.3660	100.0	103.6	ug/L	4	10	
Thallium	A	0.9578	0.8636	50.00	47.43	ug/L	-5	10	
Arsenic	E	0.6269	0.5870	100.0	101.0	ug/L	1	10	
Chromium	E	4.0942	3.0016	100.0	100.5	ug/L	1	10	
Cobalt	E	5.2197	4.8566	100.0	101.3	ug/L	1	10	
Copper	E	10.311	6.2833	100.0	96.84	ug/L	-3	10	
Manganese	E	2.0285	1.7214	100.0	99.85	ug/L	0	10	
Nickel	E	1.9110	1.2975	100.0	102.8	ug/L	3	10	
Sodium	E	1.0281	0.5030	10000	9331	ug/L	-7	10	
Vanadium	E	3.1448	2.3288	100.0	99.28	ug/L	-1	10	
Zinc	E	2.8120	1.0216	100.0	97.31	ug/L	-3	10	
Iron	H	1.3824	1.3550	10000	11250	ug/L	**13**	10	c+ ***
Selenium	H	0.2147	0.2383	100.0	118.7	ug/L	**19**	10	c+ ***

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	428613	-36.29
Scandium	A	1282606	988902	-22.90
Scandium	E	35324	26811	-24.10
Scandium	H	90743	30985	-65.85
Germanium	H	25354	8880	-64.98
Germanium	E	19198	14902	-22.38
Indium	A	1826336	1402853	-23.19
Bismuth	A	1431311	1086892	-24.06
Yttrium	A	1853201	1436916	-22.46
Terbium	A	2265507	1825095	-19.44

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428016 File : c12t0016 Time : 12-MAR-2007 21:12
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01134]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6379]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005031]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	684230	1.70
Scandium	A	1282606	1283346	0.06
Scandium	E	35324	36574	3.54
Scandium	H	90743	84145	-7.27
Germanium	H	25354	23489	-7.36
Germanium	E	19198	19539	1.78
Indium	A	1826336	1801004	-1.39
Bismuth	A	1431311	1394169	-2.59
Yttrium	A	1853201	1826368	-1.45
Terbium	A	2265507	2202376	-2.79

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428039 File : c12t0039 Time : 12-MAR-2007 23:16
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005643]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02103]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.5666]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.04013]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	572260	-14.94
Scandium	A	1282606	1163598	-9.28
Scandium	E	35324	32687	-7.47
Scandium	H	90743	61980	-31.70
Germanium	H	25354	17377	-31.46
Germanium	E	19198	18080	-5.82
Indium	A	1826336	1675623	-8.25
Bismuth	A	1431311	1323445	-7.54
Yttrium	A	1853201	1706921	-7.89
Terbium	A	2265507	2089215	-7.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428055 File : c12t0055 Time : 13-MAR-2007 00:41
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02720]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03372]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04280]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03839]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6521]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005668]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	584178	-13.17
Scandium	A	1282606	1163969	-9.25
Scandium	E	35324	32628	-7.63
Scandium	H	90743	57838	-36.26
Germanium	H	25354	16537	-34.78
Germanium	E	19198	17927	-6.62
Indium	A	1826336	1674348	-8.32
Bismuth	A	1431311	1323160	-7.56
Yttrium	A	1853201	1688471	-8.89
Terbium	A	2265507	2093106	-7.61

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428074 File : c12t0074 Time : 13-MAR-2007 02:23
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02406]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02451]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002595]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01812]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.7417]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006318]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	544480	-19.07
Scandium	A	1282606	1123633	-12.39
Scandium	E	35324	31267	-11.49
Scandium	H	90743	54186	-40.29
Germanium	H	25354	15564	-38.61
Germanium	E	19198	17129	-10.78
Indium	A	1826336	1609502	-11.87
Bismuth	A	1431311	1276154	-10.84
Yttrium	A	1853201	1608566	-13.20
Terbium	A	2265507	2002503	-11.61

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428081 File : c12t0081 Time : 13-MAR-2007 03:01
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02799]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04404]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02440]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6701]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02533]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	551101	-18.08
Scandium	A	1282606	1138251	-11.25
Scandium	E	35324	31981	-9.46
Scandium	H	90743	51956	-42.74
Germanium	H	25354	14941	-41.07
Germanium	E	19198	17315	-9.81
Indium	A	1826336	1629017	-10.80
Bismuth	A	1431311	1300721	-9.12
Yttrium	A	1853201	1634215	-11.82
Terbium	A	2265507	2043455	-9.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428104 File : c12t0104 Time : 13-MAR-2007 05:05
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.008642]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01148]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01870]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.6076]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01058]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	474440	-29.48
Scandium	A	1282606	1037054	-19.14
Scandium	E	35324	28268	-19.98
Scandium	H	90743	38966	-57.06
Germanium	H	25354	11104	-56.20
Germanium	E	19198	15761	-17.90
Indium	A	1826336	1531016	-16.17
Bismuth	A	1431311	1240650	-13.32
Yttrium	A	1853201	1530048	-17.44
Terbium	A	2265507	1944778	-14.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428124 File : c12t0124 Time : 13-MAR-2007 06:53
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01155]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01210]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.04039]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.5734]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006862]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	477506	-29.02
Scandium	A	1282606	1047977	-18.29
Scandium	E	35324	28366	-19.70
Scandium	H	90743	35035	-61.39
Germanium	H	25354	9998	-60.57
Germanium	E	19198	15927	-17.04
Indium	A	1826336	1541219	-15.61
Bismuth	A	1431311	1236345	-13.62
Yttrium	A	1853201	1548762	-16.43
Terbium	A	2265507	1948190	-14.01

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428137 File : c12t0137 Time : 13-MAR-2007 08:03
Cal : 67103428001 Caldate: 12-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.0007652]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01073]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01625]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01168]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.03035]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.7339]	1.000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01347]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	450096	-33.10
Scandium	A	1282606	985472	-23.17
Scandium	E	35324	26551	-24.84
Scandium	H	90743	31786	-64.97
Germanium	H	25354	9303	-63.31
Germanium	E	19198	14925	-22.26
Indium	A	1826336	1455882	-20.28
Bismuth	A	1431311	1171665	-18.14
Yttrium	A	1853201	1460955	-21.17
Terbium	A	2265507	1848797	-18.39

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428017 File : c12t0017 Time : 12-MAR-2007 21:17
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04117]	0.1000	ug/L	
Barium	A	0.9511	0.1000	ug/L	
Beryllium	A	[0.01171]	0.1000	ug/L	
Cadmium	A	1.548	0.1000	ug/L	
Lead	A	0.4455	0.1000	ug/L	
Silver	A	0.1900	0.1000	ug/L	
Thallium	A	[0.03663]	0.05000	ug/L	
Arsenic	E	0.2527	0.1000	ug/L	
Chromium	E	1.384	0.1000	ug/L	
Cobalt	E	0.2132	0.1000	ug/L	
Copper	E	1.344	0.1000	ug/L	
Manganese	E	0.5839	0.1000	ug/L	
Nickel	E	1.224	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.103	1.000	ug/L	
Selenium	H	[0.06435]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99920	ug/L	100
Calcium	A	300000	303400	ug/L	101
Magnesium	A	100000	98290	ug/L	98
Molybdenum	A	2000	2033	ug/L	102
Potassium	A	100000	100000	ug/L	100
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	244100	ug/L	98

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	529020	-21.37
Scandium	A	1282606	1131558	-11.78
Scandium	E	35324	33312	-5.70
Scandium	H	90743	86427	-4.76
Germanium	H	25354	21783	-14.08
Germanium	E	19198	17051	-11.18
Indium	A	1826336	1424690	-21.99
Bismuth	A	1431311	986296	-31.09
Yttrium	A	1853201	1552431	-16.23
Terbium	A	2265507	1890899	-16.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428018 File : c12t0018 Time : 12-MAR-2007 21:23
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101700	ug/L	2		
Cadmium	A	100.0	96.58	ug/L	-3	20	
Calcium	A	300000	309200	ug/L	3		
Magnesium	A	100000	98880	ug/L	-1		
Molybdenum	A	2000	2068	ug/L	3		
Potassium	A	100000	101600	ug/L	2		
Silver	A	50.00	42.45	ug/L	-15	20	
Arsenic	E	100.0	104.4	ug/L	4	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	193.2	ug/L	-3	20	
Copper	E	200.0	184.1	ug/L	-8	20	
Manganese	E	200.0	205.7	ug/L	3	20	
Nickel	E	200.0	188.3	ug/L	-6	20	
Sodium	E	250000	256500	ug/L	3		
Vanadium	E	200.0	215.1	ug/L	8	20	
Zinc	E	100.0	89.30	ug/L	-11	20	
Iron	H	250000	245300	ug/L	-2		
Selenium	H	100.0	96.48	ug/L	-4	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	84375	-7.02
Scandium	A	1282606	1088750	-15.11
Scandium	E	35324	31352	-11.24
Germanium	H	25354	21080	-16.86
Germanium	E	19198	16036	-16.47
Indium	A	1826336	1387046	-24.05
Yttrium	A	1853201	1508758	-18.59

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428084 File : c12t0084 Time : 13-MAR-2007 03:17
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04476]	0.1000	ug/L	
Barium	A	0.9359	0.1000	ug/L	
Beryllium	A	[0.01268]	0.1000	ug/L	
Cadmium	A	1.566	0.1000	ug/L	
Lead	A	0.4620	0.1000	ug/L	
Silver	A	0.2004	0.1000	ug/L	
Thallium	A	[0.02999]	0.05000	ug/L	
Arsenic	E	0.2739	0.1000	ug/L	
Chromium	E	1.385	0.1000	ug/L	
Cobalt	E	0.2314	0.1000	ug/L	
Copper	E	1.340	0.1000	ug/L	
Manganese	E	0.6164	0.1000	ug/L	
Nickel	E	1.143	0.1000	ug/L	
Vanadium	E	[0.008384]	0.1000	ug/L	
Zinc	E	2.149	1.000	ug/L	
Selenium	H	[0.08698]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	97410	ug/L	97
Calcium	A	300000	297700	ug/L	99
Magnesium	A	100000	94690	ug/L	95
Molybdenum	A	2000	1994	ug/L	100
Potassium	A	100000	98330	ug/L	98
Sodium	E	250000	235000	ug/L	94
Iron	H	250000	248200	ug/L	99

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	457003	-32.07
Scandium	A	1282606	1025111	-20.08
Scandium	E	35324	29971	-15.15
Scandium	H	90743	55112	-39.27
Germanium	H	25354	14025	-44.68
Germanium	E	19198	15477	-19.38
Indium	A	1826336	1314511	-28.02
Bismuth	A	1431311	919593	-35.75
Yttrium	A	1853201	1422418	-23.25
Terbium	A	2265507	1738620	-23.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428085 File : c12t0085 Time : 13-MAR-2007 03:22
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100500	ug/L	1		
Cadmium	A	100.0	96.78	ug/L	-3	20	
Calcium	A	300000	310000	ug/L	3		
Magnesium	A	100000	97610	ug/L	-2		
Molybdenum	A	2000	2072	ug/L	4		
Potassium	A	100000	101700	ug/L	2		
Silver	A	50.00	42.39	ug/L	-15	20	
Arsenic	E	100.0	103.9	ug/L	4	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	194.8	ug/L	-3	20	
Copper	E	200.0	180.8	ug/L	-10	20	
Manganese	E	200.0	204.9	ug/L	2	20	
Nickel	E	200.0	190.0	ug/L	-5	20	
Sodium	E	250000	248100	ug/L	-1		
Vanadium	E	200.0	214.1	ug/L	7	20	
Zinc	E	100.0	87.55	ug/L	-12	20	
Iron	H	250000	258700	ug/L	3		
Selenium	H	100.0	106.8	ug/L	7	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	53189	-41.38
Scandium	A	1282606	963391	-24.89
Scandium	E	35324	27839	-21.19
Germanium	H	25354	13555	-46.54
Germanium	E	19198	14666	-23.61
Indium	A	1826336	1267081	-30.62
Yttrium	A	1853201	1355100	-26.88

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428140 File : c12t0140 Time : 13-MAR-2007 08:19
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04964]	0.1000	ug/L	
Barium	A	0.9407	0.1000	ug/L	
Beryllium	A	[0.007333]	0.1000	ug/L	
Cadmium	A	1.514	0.1000	ug/L	
Lead	A	0.4665	0.1000	ug/L	
Silver	A	0.1818	0.1000	ug/L	
Thallium	A	[0.02353]	0.05000	ug/L	
Arsenic	E	0.2347	0.1000	ug/L	
Chromium	E	1.429	0.1000	ug/L	
Cobalt	E	0.2249	0.1000	ug/L	
Copper	E	1.310	0.1000	ug/L	
Manganese	E	0.6310	0.1000	ug/L	
Nickel	E	1.185	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.946	1.000	ug/L	
Selenium	H	[0.07561]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100500	ug/L	101
Calcium	A	300000	312100	ug/L	104
Magnesium	A	100000	97410	ug/L	97
Molybdenum	A	2000	2056	ug/L	103
Potassium	A	100000	103400	ug/L	103
Sodium	E	250000	233600	ug/L	93
Iron	H	250000	263500	ug/L	105

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	672761	363271	-46.00
Scandium	A	1282606	825760	-35.62
Scandium	E	35324	24898	-29.52
Scandium	H	90743	34557	-61.92
Germanium	H	25354	8987	-64.55
Germanium	E	19198	13426	-30.07
Indium	A	1826336	1134908	-37.86
Bismuth	A	1431311	816988	-42.92
Yttrium	A	1853201	1199913	-35.25
Terbium	A	2265507	1504944	-33.57

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67103428141 File : c12t0141 Time : 13-MAR-2007 08:24
Cal : 67103428001 Caldate: 12-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102000	ug/L	2		
Cadmium	A	100.0	98.06	ug/L	-2	20	
Calcium	A	300000	321900	ug/L	7		
Magnesium	A	100000	98760	ug/L	-1		
Molybdenum	A	2000	2101	ug/L	5		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	42.60	ug/L	-15	20	
Arsenic	E	100.0	105.0	ug/L	5	20	
Chromium	E	200.0	208.3	ug/L	4	20	
Cobalt	E	200.0	194.8	ug/L	-3	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	204.7	ug/L	2	20	
Nickel	E	200.0	190.2	ug/L	-5	20	
Sodium	E	250000	238700	ug/L	-5		
Vanadium	E	200.0	214.5	ug/L	7	20	
Zinc	E	100.0	88.14	ug/L	-12	20	
Iron	H	250000	272300	ug/L	9		
Selenium	H	100.0	112.9	ug/L	13	20	

ISTD (ICALBLK c12t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	90743	32226	-64.49
Scandium	A	1282606	773384	-39.70
Scandium	E	35324	23616	-33.14
Germanium	H	25354	8548	-66.29
Germanium	E	19198	12524	-34.76
Indium	A	1826336	1079770	-40.88
Yttrium	A	1853201	1132326	-38.90

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67103428

Date : 03/12/07 Reference: c12t0004
Sequence : MET06 c12t0 Analyzed : 03/12/07 20:06

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	672761	1282606	35324	90743	25354	19198	1826336	1431311	1853201	2265507
		LOWER LIMIT	201828	384782	10597	27223	7606	5759	547901	429393	555960	679652
		UPPER LIMIT	807313	1539127	42389	108891	30425	23038	2191603	1717573	2223841	2718608
016	ICB		684230	1283346	36574	84145	23489	19539	1801004	1394169	1826368	2202376
017	ICSA		529020	1131558	33312	86427	21783	17051	1424690	986296	1552431	1890899
018	ICSAB		484285	1088750	31352	84375	21080	16036	1387046	948270	1508758	1852688
023	BLANK	QC378765	395544	943631	25079	55213	17072	15990	1592670	1284645	1599844	2091640
024	BS	QC378766	456667	1092899	28724	64448	17744	15792	1646985	1264276	1722537	2157504
025	BSD	QC378767	438382	1049545	27591	61081	16927	15471	1611971	1240322	1669571	2108602
027	MSS	193222-001	604247	1227283	34198	63625	17746	18654	1702644	1293885	1764788	2148294
028	SER	QC378770	620715	1244672	33829	62738	17838	18611	1758675	1368113	1787782	2165300
029	MS	QC378768	559342	1193067	33653	65293	18078	18084	1662919	1280364	1728362	2105969
030	MSD	QC378769	537637	1168429	32153	63472	17654	17391	1633668	1262621	1697725	2074101
031	PDS	QC378771	508023	1141120	30985	63989	17728	16933	1562159	1190260	1665016	2038774
035	CCV		558143	1188859	32615	68305	19200	17998	1639568	1276764	1720957	2117912
039	CCB		572260	1163598	32687	61980	17377	18080	1675623	1323445	1706921	2089215
040	MSS	193222-001	589981	1181191	32214	59575	16980	18087	1685045	1325659	1698265	2101327
041	SER	QC378770	569453	1146839	31906	59606	17118	17889	1664830	1331133	1664475	2069335
042	MS	QC378768	568344	1151778	32740	60234	17203	18011	1662077	1316914	1686033	2077770
043	MSD	QC378769	582421	1185524	31884	59552	16993	17663	1688159	1342552	1721819	2131097
044	PDS	QC378771	527188	1146295	31017	61163	16943	17008	1585819	1242635	1664081	2045854
045	SAMPLE	193222-002	594825	1201589	33326	54399	15121	18180	1656413	1256792	1704312	2074426
046	SAMPLE	193222-003	574859	1201550	32661	53254	15117	17989	1680508	1290237	1728000	2114854
047	SAMPLE	193222-004	567162	1196318	33225	51132	14258	17862	1631204	1251287	1698072	2061843
048	SAMPLE	193222-005	550632	1114699	31346	51378	14641	17360	1614847	1282887	1616873	2031588
049	SAMPLE	193222-006	527889	1085768	29961	51851	14809	16722	1578406	1268165	1589206	1978003
053	CCV		576134	1192710	32387	64338	17939	17648	1623229	1250140	1688058	2068362
055	CCB		584178	1163969	32628	57838	16537	17927	1674348	1323160	1688471	2093106
058	SAMPLE	193222-007	554616	1176110	31270	51717	14529	17109	1636149	1241954	1668416	2061211
059	SAMPLE	193222-008	534427	1110405	31134	47945	13612	17318	1619520	1272286	1615783	2015162
060	SAMPLE	193222-001	571599	1166916	31887	46467	12933	17402	1592260	1229872	1639644	2021659
061	SAMPLE	193222-002	578305	1178764	32466	43089	11823	17581	1629297	1248761	1664868	2048944
062	SAMPLE	193222-003	538810	1152552	31148	44988	12728	17223	1591841	1234593	1644349	2016668
063	SAMPLE	193222-004	544809	1160726	31816	48210	13329	17194	1556335	1205877	1622267	1999430
064	SAMPLE	193222-005	517347	1057406	30085	50792	14494	16695	1520094	1221905	1536127	1932974
065	SAMPLE	193222-006	518930	1072875	29790	52614	15022	16647	1567247	1261356	1555977	1981551
066	SAMPLE	193222-007	535176	1146821	31479	53337	14854	17244	1579610	1216148	1625893	2023302
067	SAMPLE	193222-008	522818	1079035	30347	51889	14766	16978	1570777	1247356	1555908	1968860
071	CCV		539267	1139836	32252	53236	15001	17357	1554148	1197989	1601360	1999397
074	CCB		544480	1123633	31267	54186	15564	17129	1609502	1276154	1608566	2002503
079	CCV		548426	1172070	32661	59740	16910	17592	1585016	1232457	1660700	2053112
081	CCB		551101	1138251	31981	51956	14941	17315	1629017	1300721	1634215	2043455
084	ICSA		457003	1025111	29971	55112	14025	15477	1314511	919593	1422418	1738620
085	ICSAB		407122	963391	27839	53189	13555	14666	1267081	873326	1355100	1671175
090	BLANK	QC378693	359013	923596	24528	38198	11135	14684	1559003	1260896	1551050	2048933
091	BS	QC378694	359375	918109	23935	38671	10916	13873	1492432	1163421	1518326	1999554
092	BSD	QC378695	364206	927837	24488	38567	10698	14081	1477053	1149929	1516548	1976403
094	MSS	193108-001	446223	1009823	27576	42974	12426	15767	1571698	1266396	1537696	1997871
095	SER	QC378698	457731	1008095	27665	42347	12286	15997	1523636	1238196	1527336	1925385
096	MS	QC378696	447358	1015518	27498	41827	12074	15455	1526734	1234713	1522312	1948708
097	MSD	QC378697	448613	1021156	27673	42236	12225	15784	1538409	1236802	1526656	1963729

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67103428

Date : 03/12/07 Reference: c12t0004
Sequence : MET06 c12t0 Analyzed : 03/12/07 20:06

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
098	PDS	QC378699	443509	1026001	27786	42295	11912	15510	1467429	1138292	1516133	1926073
102	CCV		473857	1061584	28613	40785	11477	15769	1503074	1180026	1549197	1960410
104	CCB		474440	1037054	28268	38966	11104	15761	1531016	1240650	1530048	1944778
109	MSS	193108-017	439082	1001599	26439	41156	11695	14890	1477817	1201158	1487476	1900315
110	MS	QC378713	451949	1015044	27257	39530	11368	15459	1472549	1190402	1498153	1903126
111	MSD	QC378714	449613	1006610	26979	37876	10956	15409	1472782	1179727	1501270	1901718
112	SAMPLE	193108-002	440007	992053	26705	37557	10725	15079	1449181	1173752	1461417	1868294
113	SAMPLE	193108-003	448132	1003836	27212	36707	10466	15195	1454462	1155626	1480575	1884568
114	SAMPLE	193108-004	436034	985690	27109	36428	10288	15111	1426877	1144274	1445481	1861987
115	SAMPLE	193108-005	435328	980375	26814	37683	10911	15121	1436787	1153627	1448461	1859238
116	SAMPLE	193108-006	443369	992770	27290	38390	11208	15479	1477890	1197973	1472565	1884217
117	SAMPLE	193108-015	446649	1023080	27559	39731	11466	15389	1485863	1166414	1501081	1913045
118	SAMPLE	193108-016	449878	1016974	27854	40885	11861	15894	1492114	1194520	1507421	1905302
122	CCV		472755	1065035	28329	38017	10663	15612	1483105	1166025	1539145	1928184

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c12t0001	TUN				12-MAR-2007 19:48	1.0	1.0				1	
002	c12t0002	X	RINSE			12-MAR-2007 19:56	1.0					2	
003	c12t0003	X	RINSE			12-MAR-2007 20:01	1.0					2	
004	c12t0004	ICALBLK	CALBLANK			12-MAR-2007 20:06	1.0	1.0				2	
005	c12t0005	ICAL				12-MAR-2007 20:12	1.0	1.0				3	
006	c12t0006	ICAL				12-MAR-2007 20:17	1.0	1.0				4	
007	c12t0007	ICAL				12-MAR-2007 20:22	1.0	1.0				5	
008	c12t0008	ICAL				12-MAR-2007 20:27	1.0	1.0				6	
009	c12t0009	ICAL				12-MAR-2007 20:33	1.0	1.0				7	
010	c12t0010	ICAL				12-MAR-2007 20:39	1.0	1.0				8	
011	c12t0011	X	RINSE			12-MAR-2007 20:44	1.0					2	
012	c12t0012	ICV				12-MAR-2007 20:50	1.0	1.0			1	9	
013	c12t0013	X	RINSE			12-MAR-2007 20:56	1.0					2	
014	c12t0014	X				12-MAR-2007 21:01	1.0					2	
015	c12t0015	X				12-MAR-2007 21:07	1.0					2	
016	c12t0016	ICB				12-MAR-2007 21:12	1.0	1.0			1	2	640
017	c12t0017	ICSA				12-MAR-2007 21:17	1.0	1.0			1	10 2	7:CA=303400
018	c12t0018	ICSAB				12-MAR-2007 21:23	1.0	1.0			1	11 2	10:CA=309200
019	c12t0019	X	RINSE			12-MAR-2007 21:28	1.0					2	
020	c12t0020	X	RINSE			12-MAR-2007 21:33	1.0					2	
021	c12t0021	X	RINSE			12-MAR-2007 21:39	1.0					2	
022	c12t0022	X	RINSE			12-MAR-2007 21:44	1.0					2	
023	c12t0023	BLANK	QC378765	123000	Water	12-MAR-2007 21:49	1.0	1.0			1	2	
024	c12t0024	BS	QC378766	123000	Water	12-MAR-2007 21:55	1.0	1.0			1	2	
025	c12t0025	BSD	QC378767	123000	Water	12-MAR-2007 22:00	1.0	1.0			1	2	
026	c12t0026	X	RINSE			12-MAR-2007 22:05	1.0					2	
027	c12t0027	MSS	193222-001	123000	Water	12-MAR-2007 22:11	10.0	1.0	2		1	2	2:CA=36360.0
028	c12t0028	SER	QC378770	123000	Water	12-MAR-2007 22:16	50.0	1.0	2	3	1	2	
029	c12t0029	MS	QC378768	123000	Water	12-MAR-2007 22:21	10.0	1.0			1	2	2:CA=37220.0
030	c12t0030	MSD	QC378769	123000	Water	12-MAR-2007 22:27	10.0	1.0			1	2	2:CA=38600.0
031	c12t0031	PDS	QC378771	123000	Water	12-MAR-2007 22:32	10.0	1.0			1	12	2:CA=45920.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c12t0032	X	RINSE			12-MAR-2007 22:37	1.0					2	
033	c12t0033	X	RINSE			12-MAR-2007 22:42	1.0					2	
034	c12t0034	X	RINSE			12-MAR-2007 22:48	1.0					2	
035	c12t0035	CCV				12-MAR-2007 22:53	1.0	1.0			1	13	
036	c12t0036	X	RINSE			12-MAR-2007 22:58	1.0					2	
037	c12t0037	X				12-MAR-2007 23:05	1.0					2	
038	c12t0038	X				12-MAR-2007 23:10	1.0					2	
039	c12t0039	CCB				12-MAR-2007 23:16	1.0	1.0			1	2	
040	c12t0040	MSS	193222-001	123000	Water	12-MAR-2007 23:21	50.0	1.0	1		1	2	
041	c12t0041	SER	QC378770	123000	Water	12-MAR-2007 23:27	250.0	1.0			1	2	
042	c12t0042	MS	QC378768	123000	Water	12-MAR-2007 23:32	50.0	1.0			1	2	
043	c12t0043	MSD	QC378769	123000	Water	12-MAR-2007 23:37	50.0	1.0			1	2	
044	c12t0044	PDS	QC378771	123000	Water	12-MAR-2007 23:43	50.0	1.0			1	12	
045	c12t0045	SAMPLE	193222-002	123000	Water	12-MAR-2007 23:48	10.0	1.0	3		1	2	2:CA=38150.0
046	c12t0046	SAMPLE	193222-003	123000	Water	12-MAR-2007 23:53	10.0	1.0	1		1	2	1:MN=302.900
047	c12t0047	SAMPLE	193222-004	123000	Water	12-MAR-2007 23:58	10.0	1.0	5		1	2	3:CA=31960.0
048	c12t0048	SAMPLE	193222-005	123000	Water	13-MAR-2007 00:04	10.0	1.0	1		1	2	
049	c12t0049	SAMPLE	193222-006	123000	Water	13-MAR-2007 00:09	10.0	1.0			1	2	
050	c12t0050	X	RINSE			13-MAR-2007 00:15	1.0					2	
051	c12t0051	X	RINSE			13-MAR-2007 00:20	1.0					2	
052	c12t0052	X	RINSE			13-MAR-2007 00:25	1.0					2	
053	c12t0053	CCV				13-MAR-2007 00:30	1.0	1.0			1	13	
054	c12t0054	X	RINSE			13-MAR-2007 00:36	1.0					2	
055	c12t0055	CCB				13-MAR-2007 00:41	1.0	1.0			1	2	
056	c12t0056	X				13-MAR-2007 00:46	1.0					2	
057	c12t0057	X				13-MAR-2007 00:52	1.0					2	
058	c12t0058	SAMPLE	193222-007	123000	Water	13-MAR-2007 00:57	10.0	1.0	1		1	2	1:CA=47620.0
059	c12t0059	SAMPLE	193222-008	123000	Water	13-MAR-2007 01:03	10.0	1.0			1	2	
060	c12t0060	SAMPLE	193222-001	123000	Filtra	13-MAR-2007 01:08	10.0	1.0	2		1	2	2:CA=36670.0
061	c12t0061	SAMPLE	193222-002	123000	Filtra	13-MAR-2007 01:13	10.0	1.0	2		1	2	2:CA=40080.0
062	c12t0062	SAMPLE	193222-003	123000	Filtra	13-MAR-2007 01:19	10.0	1.0	1		1	2	1:MN=301.100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c12t0063	SAMPLE	193222-004	123000	Filtra	13-MAR-2007 01:24	10.0	1.0	3		1	2	3:CA=30990.0
064	c12t0064	SAMPLE	193222-005	123000	Filtra	13-MAR-2007 01:29	10.0	1.0	1		1	2	
065	c12t0065	SAMPLE	193222-006	123000	Filtra	13-MAR-2007 01:35	10.0	1.0			1	2	
066	c12t0066	SAMPLE	193222-007	123000	Filtra	13-MAR-2007 01:40	10.0	1.0	1		1	2	1:CA=50890.0
067	c12t0067	SAMPLE	193222-008	123000	Filtra	13-MAR-2007 01:46	10.0	1.0			1	2	
068	c12t0068	X	RINSE			13-MAR-2007 01:51	1.0					2	
069	c12t0069	X	RINSE			13-MAR-2007 01:56	1.0					2	
070	c12t0070	X	RINSE			13-MAR-2007 02:02	1.0					2	
071	c12t0071	CCV				13-MAR-2007 02:07	1.0	1.0			1	13	
072	c12t0072	X	RINSE			13-MAR-2007 02:12	1.0					2	
073	c12t0073	X				13-MAR-2007 02:17	1.0					2	
074	c12t0074	CCB				13-MAR-2007 02:23	1.0	1.0			1	2	
075	c12t0075	X				13-MAR-2007 02:28	1.0					2	
076	c12t0076	X	RINSE			13-MAR-2007 02:33	1.0					2	
077	c12t0077	X	RINSE			13-MAR-2007 02:39	1.0					2	
078	c12t0078	X	RINSE			13-MAR-2007 02:44	1.0					2	
079	c12t0079	CCV				13-MAR-2007 02:49	1.0	1.0			1	13	
080	c12t0080	X	RINSE			13-MAR-2007 02:55	1.0					2	
081	c12t0081	CCB				13-MAR-2007 03:01	1.0	1.0			1	2	
082	c12t0082	X				13-MAR-2007 03:06	1.0					2	
083	c12t0083	X				13-MAR-2007 03:11	1.0					2	
084	c12t0084	ICSA				13-MAR-2007 03:17	1.0	1.0			1	10 2	7:CA=297700
085	c12t0085	ICSAB				13-MAR-2007 03:22	1.0	1.0			1	11 2	10:CA=310000
086	c12t0086	X	RINSE			13-MAR-2007 03:27	1.0					2	
087	c12t0087	X	RINSE			13-MAR-2007 03:33	1.0					2	
088	c12t0088	X	RINSE			13-MAR-2007 03:38	1.0					2	
089	c12t0089	X	RINSE			13-MAR-2007 03:44	1.0					2	
090	c12t0090	BLANK	QC378693	122986	Filtra	13-MAR-2007 03:49	1.0	1.0	1		1	2	
091	c12t0091	BS	QC378694	122986	Filtra	13-MAR-2007 03:54	1.0	1.0	1	1	1	2	
092	c12t0092	BSD	QC378695	122986	Filtra	13-MAR-2007 03:59	1.0	1.0	1	1	1	2	
093	c12t0093	X	RINSE			13-MAR-2007 04:05	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/13/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c12t0094	MSS	193108-001	122986	Filtra	13-MAR-2007 04:11	10.0	1.0	3		1	2	
095	c12t0095	SER	QC378698	122986	Filtra	13-MAR-2007 04:16	50.0	1.0		1	1	2	
096	c12t0096	MS	QC378696	122986	Filtra	13-MAR-2007 04:21	10.0	1.0			1	2	
097	c12t0097	MSD	QC378697	122986	Filtra	13-MAR-2007 04:27	10.0	1.0			1	2	
098	c12t0098	PDS	QC378699	122986	Filtra	13-MAR-2007 04:32	10.0	1.0			1	12	
099	c12t0099	X	RINSE			13-MAR-2007 04:38	1.0					2	
100	c12t0100	X	RINSE			13-MAR-2007 04:44	1.0					2	
101	c12t0101	X	RINSE			13-MAR-2007 04:49	1.0					2	
102	c12t0102	CCV				13-MAR-2007 04:54	1.0	1.0	1		1	13	
103	c12t0103	X	RINSE			13-MAR-2007 04:59	1.0					2	
104	c12t0104	CCB				13-MAR-2007 05:05	1.0	1.0			1	2	
105	c12t0105	X				13-MAR-2007 05:10	1.0					2	
106	c12t0106	X				13-MAR-2007 05:15	1.0					2	
107	c12t0107	TUN				13-MAR-2007 05:20	1.0	1.0				1	
108	c12t0108	X	RINSE			13-MAR-2007 05:28	1.0					2	
109	c12t0109	MSS	193108-017	122986	Filtra	13-MAR-2007 05:33	10.0	1.0			1	2	643
110	c12t0110	MS	QC378713	122986	Filtra	13-MAR-2007 05:38	10.0	1.0	1		1	2	
111	c12t0111	MSD	QC378714	122986	Filtra	13-MAR-2007 05:44	10.0	1.0	1	2	1	2	
112	c12t0112	SAMPLE	193108-002	122986	Filtra	13-MAR-2007 05:49	10.0	1.0			1	2	
113	c12t0113	SAMPLE	193108-003	122986	Filtra	13-MAR-2007 05:54	10.0	1.0			1	2	
114	c12t0114	SAMPLE	193108-004	122986	Filtra	13-MAR-2007 05:59	10.0	1.0			1	2	
115	c12t0115	SAMPLE	193108-005	122986	Filtra	13-MAR-2007 06:05	10.0	1.0			1	2	
116	c12t0116	SAMPLE	193108-006	122986	Filtra	13-MAR-2007 06:10	10.0	1.0			1	2	
117	c12t0117	SAMPLE	193108-015	122986	Filtra	13-MAR-2007 06:16	10.0	1.0			1	2	
118	c12t0118	SAMPLE	193108-016	122986	Filtra	13-MAR-2007 06:21	10.0	1.0			1	2	
119	c12t0119	X	RINSE			13-MAR-2007 06:26	1.0					2	
120	c12t0120	X	RINSE			13-MAR-2007 06:32	1.0					2	
121	c12t0121	X	RINSE			13-MAR-2007 06:37	1.0					2	
122	c12t0122	CCV				13-MAR-2007 06:42	1.0	1.0	1		1	13	
123	c12t0123	X	RINSE			13-MAR-2007 06:48	1.0					2	
124	c12t0124	CCB				13-MAR-2007 06:53	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67103428 Instrument: MET06 Agilent ICP-MS MET06 Begun: 12-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c12t0125	X				13-MAR-2007 06:58	1.0					2	
126	c12t0126	X				13-MAR-2007 07:04	1.0					2	
127	c12t0127	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 07:09	10.0	1.0	2		1	2	1:MN=210.300
128	c12t0128	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 07:14	10.0	1.0	2		1	2	1:NA=20120.0
129	c12t0129	SAMPLE	193108-020	122986	Filtra	13-MAR-2007 07:20	10.0	1.0	1		1	2	
130	c12t0130	X	RINSE			13-MAR-2007 07:25	1.0					2	
131	c12t0131	X	RINSE			13-MAR-2007 07:31	1.0					2	
132	c12t0132	X	RINSE			13-MAR-2007 07:36	1.0					2	
133	c12t0133	CCV				13-MAR-2007 07:41	1.0	1.0	3		1	13 2	
134	c12t0134	X	RINSE			13-MAR-2007 07:46	1.0					2	
135	c12t0135	X				13-MAR-2007 07:52	1.0					13 2	
136	c12t0136	X	RINSE			13-MAR-2007 07:57	1.0					2	
137	c12t0137	CCB				13-MAR-2007 08:03	1.0	1.0			1	2	
138	c12t0138	X				13-MAR-2007 08:08	1.0					2	
139	c12t0139	X				13-MAR-2007 08:13	1.0					2	
140	c12t0140	ICSA				13-MAR-2007 08:19	1.0	1.0			1	10 2	7:CA=312100
141	c12t0141	ICSAB				13-MAR-2007 08:24	1.0	1.0			1	11 2	10:CA=321900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/13/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67104645001
Units : ug/L

Date : 13-MAR-2007 16:23
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c13q0005	67104645005		13-MAR-2007 16:29	S5645
L2	c13q0006	67104645006		13-MAR-2007 16:34	S5648
L3	c13q0007	67104645007		13-MAR-2007 16:46	S5649
L4	c13q0008	67104645008		13-MAR-2007 16:53	S5650
L5	c13q0009	67104645009		13-MAR-2007 16:58	S5644
L6	c13q0010	67104645010		13-MAR-2007 17:03	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.9625	0.7166	0.6806	0.5676	0.5765	0.5634	BLNK	-5.3856	1.76731		0.6779	1.000	0.995	
Antimony	A	0.2912	0.2547	0.2948	0.2386	0.2438	0.2536	BLNK	-0.0165	3.97445		0.2628	1.000	0.995	
Barium	A	5.1262	0.9338	0.5405	0.1274	0.0879	0.0849	BLNK	-3.9358	11.9672		1.1501	1.000	0.995	
Beryllium	A	0.2939	0.2657	0.2811	0.2641	0.2638	0.2471	BLNK	-0.0039	3.99285		0.2693	0.999	0.995	
Cadmium	A	0.0918	0.0815	0.0935	0.0814	0.0820	0.0803	BLNK	-0.0022	12.4048		0.0851	1.000	0.995	
Calcium	A	0.1636	0.0503	0.0396	0.0232	0.0224	0.0218	BLNK	-55.952	45.8384		0.0535	1.000	0.995	
Lead	A	1.0245	0.7167	0.7267	0.6110	0.6221	0.6139	BLNK	-0.0621	1.62521		0.7192	1.000	0.995	
Magnesium	A	0.6547	0.5459	0.5357	0.4535	0.4591	0.4461	BLNK	-2.2585	2.22879		0.5158	1.000	0.995	
Molybdenum	A	0.2359	0.2024	0.2254	0.1980	0.2024	0.2190	BLNK	-0.0168	4.63748		0.2138	0.999	0.995	
Potassium	A	3.8670	1.3668	1.1168	0.7152	0.7002	0.6812	BLNK	-46.273	1.46391		1.4079	1.000	0.995	
Silver	A	0.4007	0.3565	0.3935	0.3488	0.3572	0.3486	BLNK	-0.0073	2.85461		0.3676	1.000	0.995	
Thallium	A	1.0677	0.8678	0.9221	0.8324	0.9492	1.0183	BLNK	-0.0171	0.99614		0.9429	0.999	0.995	
Arsenic	E	0.8624	0.6993	0.5704	0.5666	0.5798	0.5741	BLNK	-0.0367	1.73884		0.6421	1.000	0.995	
Chromium	E	6.7639	3.7852	3.1950	2.9957	2.9208	2.9001	BLNK	-0.1150	0.34454		3.7601	1.000	0.995	
Cobalt	E	5.2407	5.1706	4.8567	4.9443	4.8114	4.7202	BLNK	-0.0069	0.21103		4.9573	1.000	0.995	
Copper	E	21.502	12.418	8.9271	7.0876	6.6896	6.5303	BLNK	-0.5183	0.15285		10.526	1.000	0.995	
Manganese	E	3.0961	2.0527	1.8159	1.7881	1.7462	1.7197	BLNK	-0.0743	0.57993		2.0365	1.000	0.995	
Nickel	E	3.0408	1.7693	1.5011	1.3560	1.2681	1.2332	BLNK	-0.1707	0.80702		1.6947	1.000	0.995	
Sodium	E	2.0557	0.9654	0.7225	0.6220	0.5673	0.5612	BLNK	-26.987	1.78073		0.9157	1.000	0.995	
Vanadium	E	6.4105	3.0811	2.5443	2.2833	2.2547	2.2746	BLNK	-0.1786	0.44089		3.1414	1.000	0.995	
Zinc	E	21.465	13.539	3.2734	1.4356	1.0995	1.0287	BLNK	-3.1487	0.97688		6.9734	0.999	0.995	
Iron	H	1.9532	1.5860	1.5738	1.5313	1.4144	1.3971	BLNK	-4.4694	0.71404		1.5760	1.000	0.995	
Selenium	H	0.2852	0.2631	0.2865	0.3136	0.3030	0.2934	BLNK	-0.0684	3.38713		0.2908	1.000	0.995	

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Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

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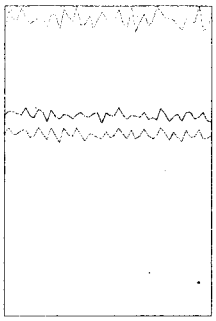
Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

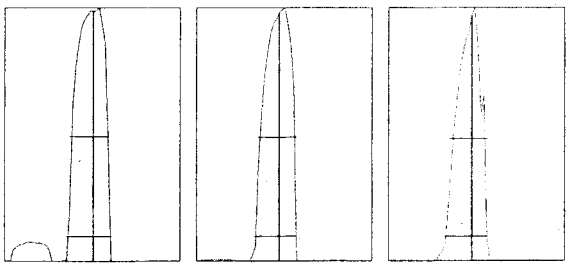
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	12535.0	12948.1	1.90	0.30
89	50,000	29078.0	29246.3	2.37	0.30
205	20,000	19392.0	19121.2	2.49	1.20

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.156%
Doubly Charged: 70/140 2.058%



m/z:	7	89	205
Height:	12,898	28,728	19,065
Axis:	7.05	88.95	204.95
W-50%:	0.65	0.65	0.60
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	7 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-130 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	1 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0017
Axis Offset	:	-0.03
QP Bias	:	-2 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

			m/z	Count(Mean)	RSD%
He Gas:	4	mL/min	51	14.0	26.78
Optional Gas:	---	%	59	2643.5	2.80
QP Focus:	-10	V	89	2227.4	2.54
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-13	V			

Integration Time: 0.1000sec

Tune File : h2.u

			m/z	Count(Mean)	RSD%
H2 Gas:	4	mL/min	59	523.5	14.61
Optional Gas:	---	%	78	0.1	342.56
QP Focus:	-8	V	89	5324.9	11.02
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-15	V			

Integration Time: 0.1000sec

Generated : Mar 13, 2007 15:52:32
Printed : Mar 13, 2007 15:54:11

P/A Factor Tuning Report

Acquired:Mar 13 2007 03:57 pm

Mass[amu]	Element	P/A Factor
6	Li	0.061896
7	(Li)	0.065211
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.089975
45	Sc	0.088317
51	V	0.083384
52	Cr	0.093107
55	Mn	0.096350
56	Fe	Sensitivity too high
59	Co	0.099044
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.101644
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.110216
111	Cd	Sensitivity too low
115	In	0.109855
118	(In)	0.110033
121	Sb	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.112625
205	Tl	0.118235
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.119102
209	Bi	0.120032

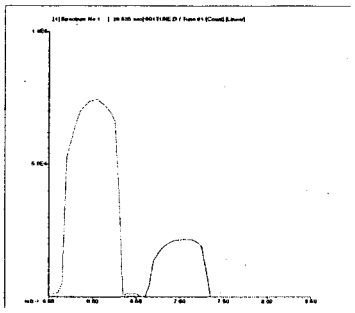
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C13q00.B\001TUNE.D
Date Acquired:	Mar 13 2007 04:05 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.26	5.00	
59 Co	1.00	5.00	
115 In	0.51	5.00	
205 Tl	0.56	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

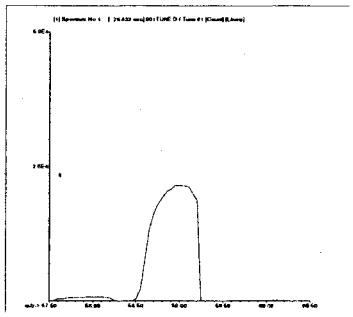
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

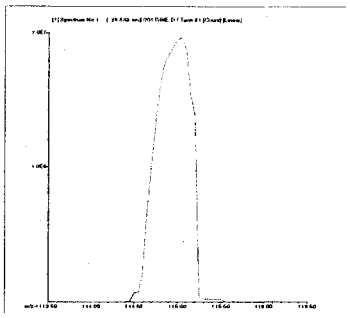
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



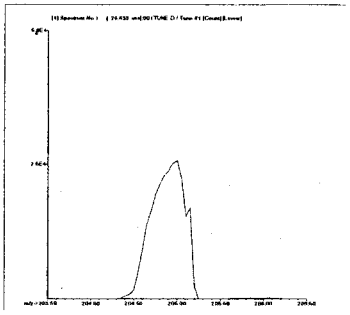
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004C
Date Acquired: Mar 13 2007 04:21 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:25 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	735115.69	A	9677.00	1.32
7	(Li)		P		
9	Be	14.44	P	5.09	35.25
23	Na	8725.18	P	156.00	1.79
24	Mg	21524.91	P	376.90	1.75
27	Al	64730.16	P	1551.00	2.40
39	K	671559.69	P	3793.00	0.56
44	Ca	25932.17	P	95.52	0.37
45	Sc	23412.11	P	167.80	0.72
45	Sc	28787.09	P	326.10	1.13
45	Sc	1062377.00	A	14210.00	1.34
51	V	233.34	P	25.63	10.98
52	Cr	192.23	P	8.82	4.59
55	Mn	73.70	P	11.98	16.25
56	Fe	2930.41	P	859.20	29.32
59	Co	18.89	P	1.11	5.88
60	Ni	121.85	P	11.13	9.13
63	Cu	1035.24	P	31.14	3.01
65	Cu	527.42	P	15.33	2.91
66	Zn	983.75	P	24.00	2.44
72	Ge	6030.63	P	70.62	1.17
72	Ge	15262.54	P	114.20	0.75
75	As	6.44	P	1.39	21.54
78	Se	2.44	P	1.39	56.78
89	Y	1639670.00	A	8544.00	0.52
98	Mo	118.89	P	5.09	4.28
107	Ag	81.11	P	24.57	30.29
111	Cd	5.56	P	3.85	69.28
115	In	1591912.00	A	5109.00	0.32
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	132.23	P	20.09	15.19
137	Ba	13131.37	P	171.50	1.31
159	Tb	1996313.00	A	10040.00	0.50
205	Tl	397.80	P	38.63	9.71
208	Pb	1526.76	P	131.70	8.63
209	Bi	1159222.00	A	10140.00	0.87

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 13 2007 04:26 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:25 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	734846.38	A	9560.00	1.30
7 (Li)		P		
9 Be	432.25	P	50.15	11.60
23 Na	12240.06	P	453.30	3.70
24 Mg	140636.09	P	493.00	0.35
27 Al	206751.80	P	969.00	0.47
39 K	830652.31	A	5967.00	0.72
44 Ca	35142.12	P	102.10	0.29
45 Sc	25238.92	P	378.60	1.50
45 Sc	29781.10	P	861.80	2.89
45 Sc	1074119.00	A	8961.00	0.83
51 V	381.49	P	19.32	5.06
52 Cr	402.97	P	29.70	7.37
55 Mn	184.45	P	23.52	12.75
56 Fe	9857.99	P	92.87	0.94
59 Co	312.23	P	15.56	4.98
60 Ni	181.11	P	20.03	11.06
63 Cu	675.58	P	36.23	5.36
65 Cu	326.30	P	3.90	1.20
66 Zn	674.10	P	14.50	2.15
72 Ge	6623.87	P	109.50	1.65
72 Ge	15706.42	P	245.30	1.56
75 As	27.11	P	4.02	14.82
78 Se	3.78	P	1.02	26.95
89 Y	1654068.00	A	17240.00	1.04
98 Mo	780.05	P	60.83	7.80
99 (Ru)	0.00	P	0.00	0.00
107 Ag	1274.55	P	64.50	5.06
111 Cd	292.24	P	28.35	9.70
115 In	1591241.00	A	19510.00	1.23
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	926.73	P	44.85	4.84
137 Ba	20549.74	P	169.30	0.82
159 Tb	2004381.00	A	11880.00	0.59
205 Tl	1206.77	P	37.57	3.11
208 Pb	4107.09	P	78.11	1.90
209 Bi	1130286.00	M	33950.00	3.00

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	734846.44	1.30	735115.69	100.0	80 - 120	
45 Sc	25238.92	1.50	23412.12	107.8	80 - 120	
45 Sc	29781.10	2.89	28787.09	103.5	80 - 120	
45 Sc	1074119.50	0.83	1062376.60	101.1	80 - 120	
72 Ge	6623.86	1.65	6030.63	109.8	80 - 120	
72 Ge	15706.42	1.56	15262.54	102.9	80 - 120	
89 Y	1654067.60	1.04	1639670.30	100.9	80 - 120	
115 In	1591241.10	1.23	1591912.00	100.0	80 - 120	
159 Tb	2004381.00	0.59	1996313.30	100.4	80 - 120	
209 Bi	1130286.00	3.00	1159221.60	97.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 13 2007 04:32 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:30 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	752806.31	A	1077.00	0.14
7 (Li)		P		
9 Be	2000.21	P	64.90	3.24
23 Na	28966.68	P	612.90	2.12
24 Mg	603833.63	P	5084.00	0.84
27 Al	792568.81	P	3368.00	0.42
39 K	1511635.00	A	8799.00	0.58
44 Ca	55589.97	P	911.40	1.64
45 Sc	27044.15	P	303.80	1.12
45 Sc	30005.10	P	252.60	0.84
45 Sc	1106111.00	A	15980.00	1.44
51 V	924.49	P	34.66	3.75
52 Cr	1135.62	P	18.96	1.67
55 Mn	615.95	P	28.77	4.67
56 Fe	42888.54	P	287.90	0.67
59 Co	1551.22	P	39.08	2.52
60 Ni	530.76	P	22.34	4.21
63 Cu	1984.98	P	48.96	2.47
65 Cu	993.75	P	21.27	2.14
66 Zn	2163.90	P	39.51	1.83
72 Ge	7011.48	P	98.64	1.41
72 Ge	15984.10	P	82.56	0.52
75 As	111.78	P	3.67	3.29
78 Se	18.44	P	2.69	14.61
89 Y	1712874.00	A	18730.00	1.09
98 Mo	3467.22	P	124.60	3.59
99 (Ru)	5.56	P	1.93	34.65
107 Ag	5872.60	P	118.60	2.02
111 Cd	1342.35	P	44.77	3.34
115 In	1647611.00	A	19210.00	1.17
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4198.59	P	270.50	6.44
137 Ba	19465.91	P	209.80	1.08
159 Tb	2084639.00	A	26550.00	1.27
205 Tl	5207.91	P	74.27	1.43
208 Pb	14942.92	P	392.80	2.63
209 Bi	1200418.00	A	26690.00	2.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	752806.31	0.14	735115.69	102.4	80 - 120	
45 Sc	27044.15	1.12	23412.12	115.5	80 - 120	
45 Sc	30005.11	0.84	28787.09	104.2	80 - 120	
45 Sc	1106110.80	1.44	1062376.60	104.1	80 - 120	
72 Ge	7011.48	1.41	6030.63	116.3	80 - 120	
72 Ge	15984.10	0.52	15262.54	104.7	80 - 120	
89 Y	1712874.50	1.09	1639670.30	104.5	80 - 120	
115 In	1647611.40	1.17	1591912.00	103.5	80 - 120	
159 Tb	2084638.90	1.27	1996313.30	104.4	80 - 120	
209 Bi	1200418.10	2.22	1159221.60	103.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 13 2007 04:44 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	705774.63	A	35230.00	4.99
7 (Li)		P		
9 Be	3958.46	P	70.04	1.77
23 Na	45841.97	P	379.80	0.83
24 Mg	1069425.00	A	10390.00	0.97
27 Al	1358796.00	A	13560.00	1.00
39 K	2230404.00	A	372.00	0.02
44 Ca	79005.76	P	423.40	0.54
45 Sc	22758.44	P	34.52	0.15
45 Sc	31782.96	P	1694.00	5.33
45 Sc	1003217.00	A	82140.00	8.19
51 V	1614.93	P	19.42	1.20
52 Cr	2026.84	P	26.27	1.30
55 Mn	1150.80	P	72.29	6.28
56 Fe	71635.95	P	228.20	0.32
59 Co	3081.49	P	17.64	0.57
60 Ni	953.01	P	35.44	3.72
63 Cu	2980.72	P	42.47	1.42
65 Cu	1447.50	P	45.62	3.15
66 Zn	1094.13	P	34.36	3.14
72 Ge	5850.92	P	92.63	1.58
72 Ge	16715.37	P	606.60	3.63
75 As	190.45	P	3.42	1.80
78 Se	33.56	P	3.67	10.94
89 Y	1559396.00	A	133500.00	8.56
98 Mo	6994.27	P	76.95	1.10
99 (Ru)	0.00	P	0.00	0.00
107 Ag	11861.17	P	32.40	0.27
111 Cd	2814.86	P	75.18	2.67
115 In	1513954.00	A	124300.00	8.21
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8876.57	P	126.10	1.42
137 Ba	20555.40	P	159.00	0.77
159 Tb	1912696.00	A	168700.00	8.82
205 Tl	10143.28	P	133.70	1.32
208 Pb	27675.12	P	626.10	2.26
209 Bi	1106262.00	M	100400.00	9.08

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705774.56	4.99	735115.69	96.0	80 - 120	
45 Sc	22758.45	0.15	23412.12	97.2	80 - 120	
45 Sc	31782.96	5.33	28787.09	110.4	80 - 120	
45 Sc	1003217.40	8.19	1062376.60	94.4	80 - 120	
72 Ge	5850.92	1.58	6030.63	97.0	80 - 120	
72 Ge	16715.37	3.63	15262.54	109.5	80 - 120	
89 Y	1559396.40	8.56	1639670.30	95.1	80 - 120	
115 In	1513953.50	8.21	1591912.00	95.1	80 - 120	
159 Tb	1912695.60	8.82	1996313.30	95.8	80 - 120	
209 Bi	1106261.60	9.08	1159221.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 13 2007 04:51 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:49 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	763591.63	A	27270.00	3.57
7 (Li)		P		
9 Be	40290.04	P	237.60	0.59
23 Na	372354.19	P	1193.00	0.32
24 Mg	10108980.00	A	43380.00	0.43
27 Al	12650910.00	A	118400.00	0.94
39 K	15945000.00	A	50140.00	0.31
44 Ca	516743.59	P	2934.00	0.57
45 Sc	21069.55	P	109.40	0.52
45 Sc	29933.87	P	180.80	0.60
45 Sc	1116917.00	A	61080.00	5.47
51 V	13668.94	P	115.60	0.85
52 Cr	17934.46	P	150.20	0.84
55 Mn	10704.90	P	123.70	1.16
56 Fe	645275.81	P	4734.00	0.73
59 Co	29600.86	P	294.60	1.00
60 Ni	8117.23	P	181.30	2.23
63 Cu	22485.17	P	81.20	0.36
65 Cu	11164.55	P	73.20	0.66
66 Zn	4553.76	P	133.40	2.93
72 Ge	5400.36	P	10.09	0.19
72 Ge	15862.86	P	122.80	0.77
75 As	1797.46	P	22.67	1.26
78 Se	338.67	P	19.91	5.88
89 Y	1707484.00	A	75560.00	4.43
98 Mo	67547.29	P	642.10	0.95
99 (Ru)	11.11	P	3.85	34.64
107 Ag	114840.20	P	1132.00	0.99
111 Cd	26807.27	P	500.40	1.87
115 In	1648783.00	A	75490.00	4.58
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	78557.77	P	478.60	0.61
137 Ba	53338.47	P	249.80	0.47
159 Tb	2096947.00	A	95390.00	4.55
205 Tl	99822.75	P	210.30	0.21
208 Pb	255900.91	P	710.90	0.28
209 Bi	1200119.00	A	41920.00	3.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	763591.56	3.57	735115.69	103.9	80 - 120	
45 Sc	21069.55	0.52	23412.12	90.0	80 - 120	
45 Sc	29933.87	0.60	28787.09	104.0	80 - 120	
45 Sc	1116917.50	5.47	1062376.60	105.1	80 - 120	
72 Ge	5400.36	0.19	6030.63	89.5	80 - 120	
72 Ge	15862.86	0.77	15262.54	103.9	80 - 120	
89 Y	1707483.90	4.43	1639670.30	104.1	80 - 120	
115 In	1648783.40	4.58	1591912.00	103.6	80 - 120	
159 Tb	2096947.50	4.55	1996313.30	105.0	80 - 120	
209 Bi	1200118.50	3.49	1159221.60	103.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 13 2007 04:56 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 04:54 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	735560.63	A	9127.00	1.24
7 (Li)		P		
9 Be	388091.41	P	2782.00	0.72
23 Na	3311316.00	A	23100.00	0.70
24 Mg	97883408.00	A	369700.00	0.38
27 Al	############	A	463000.00	0.38
39 K	############	A	331900.00	0.22
44 Ca	4782789.00	A	18850.00	0.39
45 Sc	21732.42	P	210.90	0.97
45 Sc	29185.26	P	198.10	0.68
45 Sc	1066045.00	A	10370.00	0.97
51 V	131608.20	P	484.90	0.37
52 Cr	170488.41	P	785.40	0.46
55 Mn	101923.40	P	182.00	0.18
56 Fe	6147439.00	A	13930.00	0.23
59 Co	280836.91	P	895.60	0.32
60 Ni	74014.14	P	240.20	0.32
63 Cu	199792.00	P	689.70	0.35
65 Cu	98664.59	P	226.70	0.23
66 Zn	32837.11	P	452.50	1.38
72 Ge	5475.58	P	50.66	0.93
72 Ge	14933.31	P	114.90	0.77
75 As	17317.48	P	115.10	0.66
78 Se	3318.42	P	69.91	2.11
89 Y	1595375.00	A	6869.00	0.43
98 Mo	645700.31	P	3149.00	0.49
99 (Ru)	45.56	P	1.93	4.23
107 Ag	1060101.00	A	6543.00	0.62
111 Cd	243194.91	P	1141.00	0.47
115 In	1483762.00	A	5905.00	0.40
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	723547.00	P	1908.00	0.26
137 Ba	338947.31	P	225.70	0.07
159 Tb	1927210.00	A	3536.00	0.18
205 Tl	918503.19	P	3083.00	0.34
208 Pb	2397853.00	A	8379.00	0.35
209 Bi	967700.81	P	2282.00	0.24

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735560.56	1.24	735115.69	100.1	80 - 120	
45 Sc	21732.42	0.97	23412.12	92.8	80 - 120	
45 Sc	29185.26	0.68	28787.09	101.4	80 - 120	
45 Sc	1066044.90	0.97	1062376.60	100.3	80 - 120	
72 Ge	5475.58	0.93	6030.63	90.8	80 - 120	
72 Ge	14933.31	0.77	15262.54	97.8	80 - 120	
89 Y	1595375.10	0.43	1639670.30	97.3	80 - 120	
115 In	1483761.80	0.40	1591912.00	93.2	80 - 120	
159 Tb	1927210.40	0.18	1996313.30	96.5	80 - 120	
209 Bi	967700.81	0.24	1159221.60	83.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C13q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 13 2007 05:01 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 13 2007 05:00 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	715948.63	A	4802.00	0.67
7 (Li)		P		
9 Be	707567.88	A	2754.00	0.39
23 Na	6293969.00	A	46750.00	0.74
24 Mg	###########	A	236000.00	0.13
27 Al	###########	A	344700.00	0.15
39 K	###########	A	226100.00	0.08
44 Ca	9175356.00	A	15180.00	0.17
45 Sc	21042.45	P	180.80	0.86
45 Sc	28040.41	P	223.30	0.80
45 Sc	1054532.00	A	4546.00	0.43
51 V	255115.59	P	578.50	0.23
52 Cr	325284.19	P	3096.00	0.95
55 Mn	192886.41	P	1362.00	0.71
56 Fe	11759350.00	A	47090.00	0.40
59 Co	529405.81	P	267.30	0.05
60 Ni	138317.80	P	491.40	0.36
63 Cu	367192.59	P	423.90	0.12
65 Cu	181847.00	P	862.00	0.47
66 Zn	57840.53	P	366.20	0.63
72 Ge	5180.28	P	54.47	1.05
72 Ge	14057.95	P	127.40	0.91
75 As	32279.79	P	267.10	0.83
78 Se	6078.92	P	47.70	0.78
89 Y	1514760.00	A	12500.00	0.83
98 Mo	1327049.00	A	8534.00	0.64
99 (Ru)	68.89	P	15.03	21.82
107 Ag	1934783.00	A	5348.00	0.28
111 Cd	445557.59	P	1478.00	0.33
115 In	1387640.00	A	13700.00	0.99
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1407568.00	A	7913.00	0.56
137 Ba	621156.50	P	1486.00	0.24
159 Tb	1829047.00	A	4781.00	0.26
205 Tl	1812933.00	A	11170.00	0.62
208 Pb	4491443.00	A	16500.00	0.37
209 Bi	890285.31	P	7569.00	0.85

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	715948.63	0.67	735115.69	97.4	80 - 120	
45 Sc	21042.45	0.86	23412.12	89.9	80 - 120	
45 Sc	28040.41	0.80	28787.09	97.4	80 - 120	
45 Sc	1054532.10	0.43	1062376.60	99.3	80 - 120	
72 Ge	5180.28	1.05	6030.63	85.9	80 - 120	
72 Ge	14057.95	0.91	15262.54	92.1	80 - 120	
89 Y	1514760.00	0.83	1639670.30	92.4	80 - 120	
115 In	1387639.80	0.99	1591912.00	87.2	80 - 120	
159 Tb	1829046.60	0.26	1996313.30	91.6	80 - 120	
209 Bi	890285.31	0.85	1159221.60	76.8	80 - 120	ISFail

ISTD Ref File : C:\ICPCHEM\1\DATA\07C13q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Fail**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645014 File : c13q0014 Time : 13-MAR-2007 17:25
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5653, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6779	0.5586	10000	9866	ug/L	-1	10	
Antimony	A	0.2628	0.2444	100.0	97.13	ug/L	-3	10	
Barium	A	1.1501	0.0808	100.0	92.75	ug/L	-7	10	
Beryllium	A	0.2693	0.2559	100.0	102.2	ug/L	2	10	
Cadmium	A	0.0851	0.0800	100.0	99.28	ug/L	-1	10	
Calcium	A	0.0535	0.0219	10000	9977	ug/L	0	10	
Lead	A	0.7192	0.6046	100.0	98.19	ug/L	-2	10	
Magnesium	A	0.5158	0.4464	10000	9948	ug/L	-1	10	
Molybdenum	A	0.2138	0.1998	100.0	92.63	ug/L	-7	10	
Potassium	A	1.4079	0.6850	10000	9982	ug/L	0	10	
Silver	A	0.3676	0.3779	100.0	107.9	ug/L	8	10	
Thallium	A	0.9429	0.9056	50.00	45.08	ug/L	-10	10	
Arsenic	E	0.6421	0.5798	100.0	100.8	ug/L	1	10	
Chromium	E	3.7601	2.9068	100.0	100.0	ug/L	0	10	
Cobalt	E	4.9573	4.7186	100.0	99.57	ug/L	0	10	
Copper	E	10.526	6.4952	100.0	98.76	ug/L	-1	10	
Manganese	E	2.0365	1.7067	100.0	98.90	ug/L	-1	10	
Nickel	E	1.6947	1.2494	100.0	100.7	ug/L	1	10	
Sodium	E	0.9157	0.5511	10000	9787	ug/L	-2	10	
Vanadium	E	3.1414	2.2290	100.0	98.09	ug/L	-2	10	
Zinc	E	6.9734	1.0440	100.0	98.84	ug/L	-1	10	
Iron	H	1.5760	1.4293	10000	10200	ug/L	2	10	
Selenium	H	0.2908	0.3075	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	758383	3.17
Scandium	A	1062377	1101608	3.69
Scandium	E	28787	29877	3.79
Scandium	H	23412	20850	-10.94
Germanium	H	6031	5180	-14.11
Germanium	E	15263	15258	-0.03
Indium	A	1591912	1517864	-4.65
Bismuth	A	1159222	982476	-15.25
Yttrium	A	1639670	1633252	-0.39
Terbium	A	1996313	1972545	-1.19

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645028 File : c13q0028 Time : 13-MAR-2007 18:43
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5474	10000	9669	ug/L	-3	10	
Antimony	A	0.2628	0.2509	100.0	99.68	ug/L	0	10	
Barium	A	1.1501	0.0820	100.0	94.20	ug/L	-6	10	
Beryllium	A	0.2693	0.2615	100.0	104.4	ug/L	4	10	
Cadmium	A	0.0851	0.0814	100.0	101.0	ug/L	1	10	
Calcium	A	0.0535	0.0222	10000	10100	ug/L	1	10	
Lead	A	0.7192	0.6236	100.0	101.3	ug/L	1	10	
Magnesium	A	0.5158	0.4354	10000	9701	ug/L	-3	10	
Molybdenum	A	0.2138	0.2018	100.0	93.55	ug/L	-6	10	
Potassium	A	1.4079	0.6888	10000	10040	ug/L	0	10	
Silver	A	0.3676	0.3799	100.0	108.5	ug/L	9	10	
Thallium	A	0.9429	0.9132	50.00	45.47	ug/L	-9	10	
Arsenic	E	0.6421	0.5872	100.0	102.1	ug/L	2	10	
Chromium	E	3.7601	2.9725	100.0	102.3	ug/L	2	10	
Cobalt	E	4.9573	4.8962	100.0	103.3	ug/L	3	10	
Copper	E	10.526	6.4666	100.0	98.32	ug/L	-2	10	
Manganese	E	2.0365	1.7460	100.0	101.2	ug/L	1	10	
Nickel	E	1.6947	1.2894	100.0	103.9	ug/L	4	10	
Sodium	E	0.9157	0.5422	10000	9629	ug/L	-4	10	
Vanadium	E	3.1414	2.2768	100.0	100.2	ug/L	0	10	
Zinc	E	6.9734	1.0553	100.0	99.95	ug/L	0	10	
Iron	H	1.5760	1.5188	10000	10840	ug/L	8	10	
Selenium	H	0.2908	0.3409	100.0	115.4	ug/L	**15**	10	c+ ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	594507	-19.13
Scandium	A	1062377	931401	-12.33
Scandium	E	28787	25139	-12.67
Scandium	H	23412	12778	-45.42
Germanium	H	6031	3114	-48.36
Germanium	E	15263	13486	-11.64
Indium	A	1591912	1413929	-11.18
Bismuth	A	1159222	952819	-17.81
Yttrium	A	1639670	1506984	-8.09
Terbium	A	1996313	1874910	-6.08

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645044 File : c13q0044 Time : 13-MAR-2007 20:09
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5539	10000	9784	ug/L	-2	10	
Antimony	A	0.2628	0.2491	100.0	99.00	ug/L	-1	10	
Barium	A	1.1501	0.0815	100.0	93.60	ug/L	-6	10	
Beryllium	A	0.2693	0.2625	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0851	0.0811	100.0	100.6	ug/L	1	10	
Calcium	A	0.0535	0.0223	10000	10160	ug/L	2	10	
Lead	A	0.7192	0.6289	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5158	0.4419	10000	9846	ug/L	-2	10	
Molybdenum	A	0.2138	0.2025	100.0	93.90	ug/L	-6	10	
Potassium	A	1.4079	0.6943	10000	10120	ug/L	1	10	
Silver	A	0.3676	0.3746	100.0	106.9	ug/L	7	10	
Thallium	A	0.9429	0.9088	50.00	45.24	ug/L	-10	10	
Arsenic	E	0.6421	0.5841	100.0	101.5	ug/L	2	10	
Chromium	E	3.7601	2.9676	100.0	102.1	ug/L	2	10	
Cobalt	E	4.9573	4.8918	100.0	103.2	ug/L	3	10	
Copper	E	10.526	6.5274	100.0	99.25	ug/L	-1	10	
Manganese	E	2.0365	1.7505	100.0	101.4	ug/L	1	10	
Nickel	E	1.6947	1.2938	100.0	104.2	ug/L	4	10	
Sodium	E	0.9157	0.5487	10000	9743	ug/L	-3	10	
Vanadium	E	3.1414	2.2767	100.0	100.2	ug/L	0	10	
Zinc	E	6.9734	1.0577	100.0	100.2	ug/L	0	10	
Iron	H	1.5760	1.5209	10000	10850	ug/L	9	10	
Selenium	H	0.2908	0.3556	100.0	120.4	ug/L	**20**	10	c+ ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	613951	-16.48
Scandium	A	1062377	932416	-12.23
Scandium	E	28787	25273	-12.21
Scandium	H	23412	10153	-56.63
Germanium	H	6031	2410	-60.04
Germanium	E	15263	13471	-11.74
Indium	A	1591912	1419670	-10.82
Bismuth	A	1159222	967942	-16.50
Yttrium	A	1639670	1499622	-8.54
Terbium	A	1996313	1876171	-6.02

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645067 File : c13q0067 Time : 13-MAR-2007 22:12
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5612	10000	9913	ug/L	-1	10	
Antimony	A	0.2628	0.2488	100.0	98.86	ug/L	-1	10	
Barium	A	1.1501	0.0805	100.0	92.37	ug/L	-8	10	
Beryllium	A	0.2693	0.2739	100.0	109.3	ug/L	9	10	
Cadmium	A	0.0851	0.0807	100.0	100.2	ug/L	0	10	
Calcium	A	0.0535	0.0229	10000	10430	ug/L	4	10	
Lead	A	0.7192	0.6230	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5158	0.4439	10000	9892	ug/L	-1	10	
Molybdenum	A	0.2138	0.2041	100.0	94.63	ug/L	-5	10	
Potassium	A	1.4079	0.7116	10000	10370	ug/L	4	10	
Silver	A	0.3676	0.3639	100.0	103.9	ug/L	4	10	
Thallium	A	0.9429	0.8941	50.00	44.51	ug/L	**-11**	10	c- ***
Arsenic	E	0.6421	0.5789	100.0	100.6	ug/L	1	10	
Chromium	E	3.7601	3.0703	100.0	105.7	ug/L	6	10	
Cobalt	E	4.9573	5.1359	100.0	108.4	ug/L	8	10	
Copper	E	10.526	6.4495	100.0	98.06	ug/L	-2	10	
Manganese	E	2.0365	1.7983	100.0	104.2	ug/L	4	10	
Nickel	E	1.6947	1.3619	100.0	109.7	ug/L	10	10	
Sodium	E	0.9157	0.5460	10000	9696	ug/L	-3	10	
Vanadium	E	3.1414	2.3386	100.0	102.9	ug/L	3	10	
Zinc	E	6.9734	1.0376	100.0	98.21	ug/L	-2	10	
Iron	H	1.5760	1.7192	10000	12270	ug/L	**23**	10	c+ i- ***
Selenium	H	0.2908	0.4366	100.0	147.8	ug/L	**48**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	430782	-41.40
Scandium	A	1062377	681099	-35.89
Scandium	E	28787	17595	-38.88
Scandium	H	23412	3319	**-85.82 ***
Germanium	H	6031	735	**-87.81 ***
Germanium	E	15263	10014	-34.39
Indium	A	1591912	1166215	-26.74
Bismuth	A	1159222	834709	-27.99
Yttrium	A	1639670	1191857	-27.31
Terbium	A	1996313	1571131	-21.30

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645089 File : c13q0089 Time : 14-MAR-2007 00:10
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5601	10000	9892	ug/L	-1	10	
Antimony	A	0.2628	0.2475	100.0	98.35	ug/L	-2	10	
Barium	A	1.1501	0.0804	100.0	92.26	ug/L	-8	10	
Beryllium	A	0.2693	0.2683	100.0	107.1	ug/L	7	10	
Cadmium	A	0.0851	0.0806	100.0	99.94	ug/L	0	10	
Calcium	A	0.0535	0.0228	10000	10370	ug/L	4	10	
Lead	A	0.7192	0.6162	100.0	100.1	ug/L	0	10	
Magnesium	A	0.5158	0.4451	10000	9918	ug/L	-1	10	
Molybdenum	A	0.2138	0.2036	100.0	94.41	ug/L	-6	10	
Potassium	A	1.4079	0.7072	10000	10310	ug/L	3	10	
Silver	A	0.3676	0.3645	100.0	104.0	ug/L	4	10	
Thallium	A	0.9429	0.8849	50.00	44.06	ug/L	**-12**	10	c- ***
Arsenic	E	0.6421	0.5799	100.0	100.8	ug/L	1	10	
Chromium	E	3.7601	3.0307	100.0	104.3	ug/L	4	10	
Cobalt	E	4.9573	5.0557	100.0	106.7	ug/L	7	10	
Copper	E	10.526	6.4891	100.0	98.67	ug/L	-1	10	
Manganese	E	2.0365	1.7631	100.0	102.2	ug/L	2	10	
Nickel	E	1.6947	1.3507	100.0	108.8	ug/L	9	10	
Sodium	E	0.9157	0.5415	10000	9616	ug/L	-4	10	
Vanadium	E	3.1414	2.3049	100.0	101.4	ug/L	1	10	
Zinc	E	6.9734	1.0454	100.0	98.97	ug/L	-1	10	
Iron	H	1.5760	1.8717	10000	13360	ug/L	**34**	10	c+ i- ***
Selenium	H	0.2908	0.5505	100.0	186.4	ug/L	**86**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	466559	-36.53
Scandium	A	1062377	723141	-31.93
Scandium	E	28787	18326	-36.34
Scandium	H	23412	1987	**-91.51 ***
Germanium	H	6031	388	**-93.57 ***
Germanium	E	15263	10245	-32.87
Indium	A	1591912	1193032	-25.06
Bismuth	A	1159222	854005	-26.33
Yttrium	A	1639670	1228324	-25.09
Terbium	A	1996313	1607498	-19.48

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645099 File : c13q0099 Time : 14-MAR-2007 01:04
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6779	0.5614	10000	9916	ug/L	-1	10	
Antimony	A	0.2628	0.2460	100.0	97.76	ug/L	-2	10	
Barium	A	1.1501	0.0811	100.0	93.06	ug/L	-7	10	
Beryllium	A	0.2693	0.2672	100.0	106.7	ug/L	7	10	
Cadmium	A	0.0851	0.0801	100.0	99.41	ug/L	-1	10	
Calcium	A	0.0535	0.0228	10000	10380	ug/L	4	10	
Lead	A	0.7192	0.6189	100.0	100.5	ug/L	1	10	
Magnesium	A	0.5158	0.4450	10000	9915	ug/L	-1	10	
Molybdenum	A	0.2138	0.2003	100.0	92.89	ug/L	-7	10	
Potassium	A	1.4079	0.7113	10000	10370	ug/L	4	10	
Silver	A	0.3676	0.3636	100.0	103.8	ug/L	4	10	
Thallium	A	0.9429	0.8815	50.00	43.89	ug/L	**-12**	10	c- ***
Arsenic	E	0.6421	0.5819	100.0	101.2	ug/L	1	10	
Chromium	E	3.7601	3.0173	100.0	103.8	ug/L	4	10	
Cobalt	E	4.9573	5.0436	100.0	106.4	ug/L	6	10	
Copper	E	10.526	6.4133	100.0	97.51	ug/L	-2	10	
Manganese	E	2.0365	1.7590	100.0	101.9	ug/L	2	10	
Nickel	E	1.6947	1.3523	100.0	109.0	ug/L	9	10	
Sodium	E	0.9157	0.5362	10000	9521	ug/L	-5	10	
Vanadium	E	3.1414	2.2938	100.0	101.0	ug/L	1	10	
Zinc	E	6.9734	1.0280	100.0	97.27	ug/L	-3	10	
Iron	H	1.5760	1.8538	10000	13230	ug/L	**32**	10	c+ i- ***
Selenium	H	0.2908	0.5376	100.0	182.0	ug/L	**82**	10	c+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	478021	-34.97
Scandium	A	1062377	735138	-30.80
Scandium	E	28787	18401	-36.08
Scandium	H	23412	2021	**-91.37 ***
Germanium	H	6031	393	**-93.48 ***
Germanium	E	15263	10391	-31.92
Indium	A	1591912	1209475	-24.02
Bismuth	A	1159222	859926	-25.82
Yttrium	A	1639670	1255490	-23.43
Terbium	A	1996313	1611371	-19.28

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645017 File : c13q0017 Time : 13-MAR-2007 17:41
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	1.716	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007430]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.003934]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.07643]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.07389]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06003]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03707]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	748490	1.82
Scandium	A	1062377	1074057	1.10
Scandium	E	28787	29924	3.95
Scandium	H	23412	18529	-20.86
Germanium	H	6031	4795	-20.49
Germanium	E	15263	15889	4.10
Indium	A	1591912	1577058	-0.93
Bismuth	A	1159222	1127120	-2.77
Yttrium	A	1639670	1651641	0.73
Terbium	A	1996313	1984415	-0.60

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645031 File : c13q0031 Time : 13-MAR-2007 18:59
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.378	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005678]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01899]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	604051	-17.83
Scandium	A	1062377	916831	-13.70
Scandium	E	28787	25109	-12.78
Scandium	H	23412	12065	-48.47
Germanium	H	6031	3090	-48.76
Germanium	E	15263	13884	-9.03
Indium	A	1591912	1495883	-6.03
Bismuth	A	1159222	1123261	-3.10
Yttrium	A	1639670	1517763	-7.43
Terbium	A	1996313	1928268	-3.41

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645047 File : c13q0047 Time : 13-MAR-2007 20:25
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.619	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01317]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01828]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02440]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04245]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02546]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.08418]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	624286	-15.08
Scandium	A	1062377	921347	-13.27
Scandium	E	28787	25291	-12.14
Scandium	H	23412	9218	-60.63
Germanium	H	6031	2232	-62.99
Germanium	E	15263	13926	-8.76
Indium	A	1591912	1479288	-7.07
Bismuth	A	1159222	1101875	-4.95
Yttrium	A	1639670	1520322	-7.28
Terbium	A	1996313	1918710	-3.89

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645069 File : c13q0069 Time : 13-MAR-2007 22:23
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.872	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005146]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01643]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01754]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03567]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01730]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005671]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i-
Selenium	H	ND	0.1000	0.004672	ug/L	i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	430152	-41.49
Scandium	A	1062377	680649	-35.93
Scandium	E	28787	17700	-38.51
Scandium	H	23412	3806	**-83.74 ***
Germanium	H	6031	867	**-85.62 ***
Germanium	E	15263	10329	-32.32
Indium	A	1591912	1229567	-22.76
Bismuth	A	1159222	937516	-19.13
Yttrium	A	1639670	1213110	-26.01
Terbium	A	1996313	1622605	-18.72

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645091 File : c13q0091 Time : 14-MAR-2007 00:21
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	3.057	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006703]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008792]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01299]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02589]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.007086]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03313]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i-
Selenium	H	[0.06585]	0.1000	0.004672	ug/L	!ib i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	454940	-38.11
Scandium	A	1062377	709385	-33.23
Scandium	E	28787	18091	-37.16
Scandium	H	23412	2418	**-89.67 ***
Germanium	H	6031	546	**-90.95 ***
Germanium	E	15263	10466	-31.43
Indium	A	1591912	1242893	-21.92
Bismuth	A	1159222	945621	-18.43
Yttrium	A	1639670	1236452	-24.59
Terbium	A	1996313	1618940	-18.90

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645101 File : c13q0101 Time : 14-MAR-2007 01:15
Cal : 67104645001 Caldate: 13-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	2.174	0.1000	0	ug/L	ib ***
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006123]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008225]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.02800]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.008189]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[8.600]	10.00	4.329	ug/L	!ib i-
Selenium	H	0.1397	0.1000	0.004672	ug/L	i- ib ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	456501	-37.90
Scandium	A	1062377	711442	-33.03
Scandium	E	28787	18210	-36.74
Scandium	H	23412	1824	**-92.21 ***
Germanium	H	6031	363	**-93.98 ***
Germanium	E	15263	10510	-31.14
Indium	A	1591912	1248630	-21.56
Bismuth	A	1159222	943798	-18.58
Yttrium	A	1639670	1233469	-24.77
Terbium	A	1996313	1624677	-18.62

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645019 File : c13q0019 Time : 13-MAR-2007 17:52
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06422]	0.1000	ug/L	
Barium	A	0.1694	0.1000	ug/L	
Beryllium	A	[0.02417]	0.1000	ug/L	
Cadmium	A	1.729	0.1000	ug/L	
Lead	A	0.5025	0.1000	ug/L	
Silver	A	0.2056	0.1000	ug/L	
Thallium	A	[0.03333]	0.05000	ug/L	
Arsenic	E	0.2939	0.1000	ug/L	
Chromium	E	1.463	0.1000	ug/L	
Cobalt	E	0.2266	0.1000	ug/L	
Copper	E	1.225	0.1000	ug/L	
Manganese	E	0.6376	0.1000	ug/L	
Nickel	E	1.794	0.1000	ug/L	
Vanadium	E	[0.05544]	0.1000	ug/L	
Zinc	E	0.8166	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107600	ug/L	108
Calcium	A	300000	324700	ug/L	108
Magnesium	A	100000	105000	ug/L	105
Molybdenum	A	2000	2172	ug/L	109
Potassium	A	100000	108100	ug/L	108
Sodium	E	250000	269300	ug/L	108
Iron	H	250000	240100	ug/L	96

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	655590	-10.82
Scandium	A	1062377	946357	-10.92
Scandium	E	28787	26535	-7.82
Scandium	H	23412	20439	-12.70
Germanium	H	6031	4380	-27.37
Germanium	E	15263	12435	-18.53
Indium	A	1591912	1108134	-30.39
Bismuth	A	1159222	611251	-47.27
Yttrium	A	1639670	1210893	-26.15
Terbium	A	1996313	1371533	-31.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645020 File : c13q0020 Time : 13-MAR-2007 17:57
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	108500	ug/L	9		
Cadmium	A	100.0	95.25	ug/L	-5	20	
Calcium	A	300000	328200	ug/L	9		
Magnesium	A	100000	106500	ug/L	7		
Molybdenum	A	2000	2182	ug/L	9		
Potassium	A	100000	109100	ug/L	9		
Silver	A	50.00	42.16	ug/L	-16	20	
Arsenic	E	100.0	98.19	ug/L	-2	20	
Chromium	E	200.0	209.2	ug/L	5	20	
Cobalt	E	200.0	187.6	ug/L	-6	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	203.2	ug/L	2	20	
Nickel	E	200.0	179.7	ug/L	-10	20	
Sodium	E	250000	273200	ug/L	9		
Vanadium	E	200.0	214.7	ug/L	7	20	
Zinc	E	100.0	86.26	ug/L	-14	20	
Iron	H	250000	248000	ug/L	-1		
Selenium	H	100.0	93.29	ug/L	-7	20	

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	19212	-17.94
Scandium	A	1062377	889159	-16.30
Scandium	E	28787	24551	-14.72
Germanium	H	6031	4203	-30.31
Germanium	E	15263	11457	-24.93
Indium	A	1591912	1051217	-33.97
Yttrium	A	1639670	1163651	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645049 File : c13q0049 Time : 13-MAR-2007 20:35
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05421]	0.1000	ug/L	
Barium	A	0.3789	0.1000	ug/L	
Beryllium	A	[0.02364]	0.1000	ug/L	
Cadmium	A	1.724	0.1000	ug/L	
Lead	A	0.5039	0.1000	ug/L	
Silver	A	0.1992	0.1000	ug/L	
Thallium	A	[0.02827]	0.05000	ug/L	
Arsenic	E	0.2741	0.1000	ug/L	
Chromium	E	1.488	0.1000	ug/L	
Cobalt	E	0.2304	0.1000	ug/L	
Copper	E	1.197	0.1000	ug/L	
Manganese	E	0.6888	0.1000	ug/L	
Nickel	E	1.822	0.1000	ug/L	
Vanadium	E	[0.06247]	0.1000	ug/L	
Zinc	E	0.9149	0.1000	ug/L	
Selenium	H	[0.04925]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107000	ug/L	107
Calcium	A	300000	326700	ug/L	109
Magnesium	A	100000	104200	ug/L	104
Molybdenum	A	2000	2112	ug/L	106
Potassium	A	100000	108000	ug/L	108
Sodium	E	250000	256900	ug/L	103
Iron	H	250000	261700	ug/L	105

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	558969	-23.96
Scandium	A	1062377	816765	-23.12
Scandium	E	28787	22917	-20.39
Scandium	H	23412	9411	-59.80
Germanium	H	6031	1926	-68.06
Germanium	E	15263	11242	-26.34
Indium	A	1591912	1037872	-34.80
Bismuth	A	1159222	623621	-46.20
Yttrium	A	1639670	1133858	-30.85
Terbium	A	1996313	1356945	-32.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645050 File : c13q0050 Time : 13-MAR-2007 20:41
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	107200	ug/L	7		
Cadmium	A	100.0	93.47	ug/L	-7	20	
Calcium	A	300000	329500	ug/L	10		
Magnesium	A	100000	104600	ug/L	5		
Molybdenum	A	2000	2148	ug/L	7		
Potassium	A	100000	108800	ug/L	9		
Silver	A	50.00	40.87	ug/L	-18	20	
Arsenic	E	100.0	98.31	ug/L	-2	20	
Chromium	E	200.0	212.1	ug/L	6	20	
Cobalt	E	200.0	192.8	ug/L	-4	20	
Copper	E	200.0	182.3	ug/L	-9	20	
Manganese	E	200.0	206.7	ug/L	3	20	
Nickel	E	200.0	184.1	ug/L	-8	20	
Sodium	E	250000	264100	ug/L	6		
Vanadium	E	200.0	217.2	ug/L	9	20	
Zinc	E	100.0	85.99	ug/L	-14	20	
Iron	H	250000	263800	ug/L	6		
Selenium	H	100.0	107.9	ug/L	8	20	i-

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	8461	-63.86
Scandium	A	1062377	761577	-28.31
Scandium	E	28787	20482	-28.85
Germanium	H	6031	1806	**-70.05 ***
Germanium	E	15263	9961	-34.74
Indium	A	1591912	978682	-38.52
Yttrium	A	1639670	1066301	-34.97

-=low bias i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645104 File : c13q0104 Time : 14-MAR-2007 01:31
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05759]	0.1000	ug/L	
Barium	A	1.147	0.1000	ug/L	
Beryllium	A	[0.03148]	0.1000	ug/L	
Cadmium	A	1.640	0.1000	ug/L	
Lead	A	0.5488	0.1000	ug/L	
Silver	A	0.1879	0.1000	ug/L	
Thallium	A	[0.03830]	0.05000	ug/L	
Arsenic	E	0.2916	0.1000	ug/L	
Chromium	E	1.571	0.1000	ug/L	
Cobalt	E	0.2546	0.1000	ug/L	
Copper	E	1.284	0.1000	ug/L	
Manganese	E	0.6896	0.1000	ug/L	
Nickel	E	1.940	0.1000	ug/L	
Vanadium	E	[0.06107]	0.1000	ug/L	
Zinc	E	1.003	0.1000	ug/L	
Selenium	H	[0.02311]	0.1000	ug/L	i-

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	108700	ug/L	109
Calcium	A	300000	333900	ug/L	111
Magnesium	A	100000	106300	ug/L	106
Molybdenum	A	2000	2182	ug/L	109
Potassium	A	100000	110500	ug/L	111
Sodium	E	250000	259900	ug/L	104
Iron	H	250000	305200	ug/L	122

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	735116	444953	-39.47
Scandium	A	1062377	643118	-39.46
Scandium	E	28787	16412	-42.99
Scandium	H	23412	2004	**-91.44 ***
Germanium	H	6031	376	**-93.77 ***
Germanium	E	15263	8514	-44.22
Indium	A	1591912	890664	-44.05
Bismuth	A	1159222	572765	-50.59
Yttrium	A	1639670	931387	-43.20
Terbium	A	1996313	1183866	-40.70

-=low bias i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67104645105 File : c13q0105 Time : 14-MAR-2007 01:37
Cal : 67104645001 Caldate: 13-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	110300	ug/L	10		
Cadmium	A	100.0	96.41	ug/L	-4	20	
Calcium	A	300000	343900	ug/L	15		
Magnesium	A	100000	107700	ug/L	8		
Molybdenum	A	2000	2245	ug/L	12		
Potassium	A	100000	113600	ug/L	14		
Silver	A	50.00	41.85	ug/L	-16	20	
Arsenic	E	100.0	97.28	ug/L	-3	20	
Chromium	E	200.0	221.8	ug/L	11	20	
Cobalt	E	200.0	204.0	ug/L	2	20	
Copper	E	200.0	182.6	ug/L	-9	20	
Manganese	E	200.0	213.9	ug/L	7	20	
Nickel	E	200.0	197.0	ug/L	-2	20	
Sodium	E	250000	260900	ug/L	4		
Vanadium	E	200.0	225.3	ug/L	13	20	
Zinc	E	100.0	85.06	ug/L	-15	20	
Iron	H	250000	297200	ug/L	19		i-
Selenium	H	100.0	148.1	ug/L	**48**	20	ab+ i- ***

ISTD (ICALBLK c13q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	23412	2100	**-91.03 ***
Scandium	A	1062377	602321	-43.30
Scandium	E	28787	15175	-47.29
Germanium	H	6031	400	**-93.37 ***
Germanium	E	15263	7921	-48.10
Indium	A	1591912	832676	-47.69
Yttrium	A	1639670	875971	-46.58

+=high bias -=low bias ab=ICSAB i=ISTD failure

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67104645

Date : 03/13/07 Reference: c13q0004
Sequence : MET06 c13q0 Analyzed : 03/13/07 16:23

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	735116	1062377	28787	23412	6031	15263	1591912	1159222	1639670	1996313
		LOWER LIMIT	220535	318713	8636	7024	1809	4579	477574	347767	491901	598894
		UPPER LIMIT	882139	1274852	34545	28095	7237	18315	1910294	1391066	1967604	2395576
017	ICB		748490	1074057	29924	18529	4795	15889	1577058	1127120	1651641	1984415
019	ICSA		655590	946357	26535	20439	4380	12435	1108134	611251	1210893	1371533
020	ICSAB		612853	889159	24551	19212	4203	11457	1051217	588946	1163651	1326370
025	SER	QC378770	587629	958442	24093	12256	3117	13516	1534743	1096892	1575465	1958529
028	CCV		594507	931401	25139	12778	3114	13486	1413929	952819	1506984	1874910
031	CCB		604051	916831	25109	12065	3090	13884	1495883	1123261	1517763	1928268
033	MSS	193108-001	585851	891884	24086	12030	3034	13549	1490772	1113004	1506813	1934416
034	SAMPLE	193108-004	535357	830842	22919	10978	2738	12429	1356619	970489	1400042	1806411
035	SAMPLE	193108-006	546575	835282	22693	12914	3291	12751	1415218	1046318	1421111	1846583
036	SAMPLE	193108-018	549089	854295	22868	12466	3208	12657	1378921	971901	1412083	1823002
037	SAMPLE	193108-018	585871	883869	24036	11804	3003	13267	1434299	1045689	1456377	1866783
038	SAMPLE	193108-019	557663	866385	23368	10625	2627	12653	1383176	970019	1422620	1820670
039	SAMPLE	193108-019	590641	903631	24177	10029	2518	13415	1449457	1046532	1475058	1882280
040	SAMPLE	193108-020	591646	888776	23914	9395	2336	13431	1453480	1043020	1469821	1890795
044	CCV		613951	932416	25273	10153	2410	13471	1419670	967942	1499622	1876171
047	CCB		624286	921347	25291	9218	2232	13926	1479288	1101875	1520322	1918710
049	ICSA		558969	816765	22917	9411	1926	11242	1037872	623621	1133858	1356945
050	ICSAB		516767	761577	20482	8461	1806 *	9961	978682	591466	1066301	1287028
055	BLANK	QC378923	386846	621679	15886	4123 *	996 *	9552	1145979	890381	1122931	1513817
056	BS	QC378924	389538	628479	16171	4031 *	950 *	9492	1158760	877409	1144105	1534192
057	BSD	QC378925	388802	625058	16144	4208 *	1015 *	9361	1167531	882502	1141352	1535531
059	MSS	193234-004	408864	674165	17966	4768 *	1153 *	10329	1213832	913713	1262343	1610032
060	SER	QC378928	423899	676490	17529	4608 *	1070 *	10219	1236222	949003	1226285	1650319
061	MS	QC378926	436221	718214	18694	4064 *	925 *	10569	1261886	935469	1331600	1672778
062	MSD	QC378927	420714	696732	18065	3480 *	807 *	10267	1209539	899429	1288754	1604573
063	PDS	QC378929	419899	686108	17635	3411 *	768 *	9748	1152940	824040	1246016	1564703
067	CCV		430782	681099	17595	3319 *	735 *	10014	1166215	834709	1191857	1571131
069	CCB		430152	680649	17700	3806 *	867 *	10329	1229567	937516	1213110	1622605
072	SAMPLE	193165-001	463806	755917	19341	2656 *	550 *	11189	1297664	971638	1343912	1694537
076	BLANK	QC378903	417990	668374	17359	2906 *	659 *	10838	1252121	912016	1250448	1710985
077	BS	QC378904	436454	703071	18170	2983 *	609 *	9927	1234836	854925	1262536	1684913
078	BSD	QC378905	432402	690201	17626	2843 *	538 *	9757	1217212	854889	1238939	1657555
080	MSS	193230-001	460896	718013	17774	2407 *	557 *	10417	1281731	977227	1269992	1676830
081	SER	QC378908	458095	725933	17226	2402 *	510 *	10236	1282889	987916	1267048	1681339
082	MS	QC378906	455338	717809	18303	2242 *	451 *	10498	1249725	925331	1255180	1643100
083	MSD	QC378907	450352	706827	18096	2531 *	563 *	10408	1241543	923415	1236867	1630360
084	PDS	QC378909	459882	710809	17531	2701 *	599 *	9952	1182570	848963	1220019	1606337
085	SAMPLE	193230-002	465096	720318	18315	2986 *	698 *	10526	1274858	969629	1258278	1655638
089	CCV		466559	723141	18326	1987 *	388 *	10245	1193032	854005	1228324	1607498
091	CCB		454940	709385	18091	2418 *	546 *	10466	1242893	945621	1236452	1618940
094	SAMPLE	193230-003	471397	723047	18296	2201 *	448 *	10693	1261104	964957	1246890	1635480
095	SAMPLE	193230-004	467375	721130	18395	2060 *	413 *	10691	1242795	941307	1242727	1627588
099	CCV		478021	735138	18401	2021 *	393 *	10391	1209475	859926	1255490	1611371
101	CCB		456501	711442	18210	1824 *	363 *	10510	1248630	943798	1233469	1624677
104	ICSA		444953	643118	16412	2004 *	376 *	8514	890664	572765	931387	1183866
105	ICSAB		410077	602321	15175	2100 *	400 *	7921	832676	534500	875971	1111844

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c13q0001	TUN				13-MAR-2007 16:05	1.0	1.0				1	
002	c13q0002	X	RINSE			13-MAR-2007 16:13	1.0					2	
003	c13q0003	X	RINSE			13-MAR-2007 16:18	1.0					2	
004	c13q0004	ICALBLK	CALBLANK			13-MAR-2007 16:23	1.0	1.0				2	
005	c13q0005	ICAL				13-MAR-2007 16:29	1.0	1.0				3	
006	c13q0006	ICAL				13-MAR-2007 16:34	1.0	1.0				4	
007	c13q0007	ICAL				13-MAR-2007 16:46	1.0	1.0				5	
008	c13q0008	ICAL				13-MAR-2007 16:53	1.0	1.0				6	
009	c13q0009	ICAL				13-MAR-2007 16:58	1.0	1.0				7	
010	c13q0010	ICAL				13-MAR-2007 17:03	1.0	1.0				8	
011	c13q0011	X	RINSE			13-MAR-2007 17:09	1.0					2	
012	c13q0012	X				13-MAR-2007 17:15	1.0					9 2	
013	c13q0013	X	RINSE			13-MAR-2007 17:20	1.0					2	
014	c13q0014	ICV				13-MAR-2007 17:25	1.0	1.0			1	9 2	
015	c13q0015	X	RINSE			13-MAR-2007 17:30	1.0					2	
016	c13q0016	X				13-MAR-2007 17:36	1.0					2	
017	c13q0017	ICB				13-MAR-2007 17:41	1.0	1.0	1		1	2	
018	c13q0018	X				13-MAR-2007 17:46	1.0					2	
019	c13q0019	ICSA				13-MAR-2007 17:52	1.0	1.0			1	10 2	7:CA=324700
020	c13q0020	ICSAB				13-MAR-2007 17:57	1.0	1.0			1	11 2	10:CA=328200
021	c13q0021	X	RINSE			13-MAR-2007 18:05	1.0					2	
022	c13q0022	X	RINSE			13-MAR-2007 18:11	1.0					2	
023	c13q0023	X	RINSE			13-MAR-2007 18:16	1.0					2	
024	c13q0024	X	RINSE			13-MAR-2007 18:21	1.0					2	
025	c13q0025	SER	QC378770	123000	Water	13-MAR-2007 18:27	50.0	1.0	2	1	1	2	
026	c13q0026	X	RINSE			13-MAR-2007 18:32	1.0					2	
027	c13q0027	X	RINSE			13-MAR-2007 18:38	1.0					2	
028	c13q0028	CCV				13-MAR-2007 18:43	1.0	1.0	1		1	12 2	
029	c13q0029	X	RINSE			13-MAR-2007 18:48	1.0					2	
030	c13q0030	X				13-MAR-2007 18:54	1.0					2	
031	c13q0031	CCB				13-MAR-2007 18:59	1.0	1.0	1		1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c13q0032	X				13-MAR-2007 19:04	1.0					2	
033	c13q0033	MSS	193108-001	122986	Filtra	13-MAR-2007 19:10	10.0	1.0	1		1	2	
034	c13q0034	SAMPLE	193108-004	122986	Filtra	13-MAR-2007 19:15	10.0	1.0			1	2	
035	c13q0035	SAMPLE	193108-006	122986	Filtra	13-MAR-2007 19:20	10.0	1.0			1	2	
036	c13q0036	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 19:26	10.0	1.0	1		1	2	1:MN=214.800
037	c13q0037	SAMPLE	193108-018	122986	Filtra	13-MAR-2007 19:31	50.0	1.0			1	2	
038	c13q0038	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 19:37	10.0	1.0	1		1	2	1:NA=20410.0
039	c13q0039	SAMPLE	193108-019	122986	Filtra	13-MAR-2007 19:42	50.0	1.0			1	2	
040	c13q0040	SAMPLE	193108-020	122986	Filtra	13-MAR-2007 19:47	10.0	1.0			1	2	
041	c13q0041	X	RINSE			13-MAR-2007 19:53	1.0					2	
042	c13q0042	X	RINSE			13-MAR-2007 19:58	1.0					2	
043	c13q0043	X	RINSE			13-MAR-2007 20:03	1.0					2	
044	c13q0044	CCV				13-MAR-2007 20:09	1.0	1.0	1		1	12 2	
045	c13q0045	X	RINSE			13-MAR-2007 20:14	1.0					2	
046	c13q0046	X				13-MAR-2007 20:19	1.0					2	
047	c13q0047	CCB				13-MAR-2007 20:25	1.0	1.0	1		1	2	
048	c13q0048	X				13-MAR-2007 20:30	1.0					2	
049	c13q0049	ICSA				13-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=326700
050	c13q0050	ICSAB				13-MAR-2007 20:41	1.0	1.0			1	11 2	10:CA=329500
051	c13q0051	X	RINSE			13-MAR-2007 20:46	1.0					2	
052	c13q0052	X	RINSE			13-MAR-2007 20:52	1.0					2	
053	c13q0053	X	RINSE			13-MAR-2007 20:57	1.0					2	
054	c13q0054	X	RINSE			13-MAR-2007 21:02	1.0					2	
055	c13q0055	BLANK	QC378923	123041	Soil	13-MAR-2007 21:08	5.0	50.0	7		1	2	
056	c13q0056	BS	QC378924	123041	Soil	13-MAR-2007 21:13	50.0	50.0	4	4	1	2	
057	c13q0057	BSD	QC378925	123041	Soil	13-MAR-2007 21:19	50.0	50.0	5	4	1	2	
058	c13q0058	X	RINSE			13-MAR-2007 21:24	1.0					2	
059	c13q0059	MSS	193234-004	123041	Soil	13-MAR-2007 21:29	50.0	49.50	3		1	2	
060	c13q0060	SER	QC378928	123041	Soil	13-MAR-2007 21:35	250.0	49.50			1	2	
061	c13q0061	MS	QC378926	123041	Soil	13-MAR-2007 21:40	50.0	48.08	1	2	1	2	
062	c13q0062	MSD	QC378927	123041	Soil	13-MAR-2007 21:45	50.0	44.64	1	1	1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c13q0063	PDS	QC378929	123041	Soil	13-MAR-2007 21:50	50.0	49.50	1	1	1	13 14 2	
064	c13q0064	X	RINSE			13-MAR-2007 21:56	1.0					2	
065	c13q0065	X	RINSE			13-MAR-2007 22:01	1.0					2	
066	c13q0066	X	RINSE			13-MAR-2007 22:07	1.0					2	
067	c13q0067	CCV				13-MAR-2007 22:12	1.0	1.0	3		1	12 2	
068	c13q0068	X	RINSE			13-MAR-2007 22:17	1.0					2	
069	c13q0069	CCB				13-MAR-2007 22:23	1.0	1.0	1		1	2	
070	c13q0070	X				13-MAR-2007 22:28	1.0					2	
071	c13q0071	X				13-MAR-2007 22:33	1.0					2	
072	c13q0072	SAMPLE	193165-001	123041	Soil	13-MAR-2007 22:39	50.0	48.08	3		1	2	
073	c13q0073	X	RINSE			13-MAR-2007 22:44	1.0					2	
074	c13q0074	X	RINSE			13-MAR-2007 22:50	1.0					2	
075	c13q0075	X	RINSE			13-MAR-2007 22:55	1.0					2	
076	c13q0076	BLANK	QC378903	123038	Filtra	13-MAR-2007 23:00	1.0	1.0	2		1	2	
077	c13q0077	BS	QC378904	123038	Filtra	13-MAR-2007 23:06	1.0	1.0	4	2	1	2	
078	c13q0078	BSD	QC378905	123038	Filtra	13-MAR-2007 23:11	1.0	1.0	4	2	1	2	679
079	c13q0079	X	RINSE			13-MAR-2007 23:16	1.0					2	
080	c13q0080	MSS	193230-001	123038	Filtra	13-MAR-2007 23:22	10.0	1.0	2		1	2	
081	c13q0081	SER	QC378908	123038	Filtra	13-MAR-2007 23:27	50.0	1.0	1		1	2	
082	c13q0082	MS	QC378906	123038	Filtra	13-MAR-2007 23:32	10.0	1.0	2	2	1	2	
083	c13q0083	MSD	QC378907	123038	Filtra	13-MAR-2007 23:38	10.0	1.0	2	2	1	2	
084	c13q0084	PDS	QC378909	123038	Filtra	13-MAR-2007 23:43	10.0	1.0	2	2	1	13 14 2	
085	c13q0085	SAMPLE	193230-002	123038	Filtra	13-MAR-2007 23:48	10.0	1.0	2		1	2	
086	c13q0086	X	RINSE			13-MAR-2007 23:54	1.0					2	
087	c13q0087	X	RINSE			13-MAR-2007 23:59	1.0					2	
088	c13q0088	X	RINSE			14-MAR-2007 00:05	1.0					2	
089	c13q0089	CCV				14-MAR-2007 00:10	1.0	1.0	3		1	12 2	
090	c13q0090	X	RINSE			14-MAR-2007 00:15	1.0					2	
091	c13q0091	CCB				14-MAR-2007 00:21	1.0	1.0	1		1	2	
092	c13q0092	X				14-MAR-2007 00:26	1.0					2	
093	c13q0093	X				14-MAR-2007 00:32	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67104645 Instrument: MET06 Agilent ICP-MS MET06 Begun: 13-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c13q0094	SAMPLE	193230-003	123038	Filtra	14-MAR-2007 00:37	10.0	1.0	3		1	2	
095	c13q0095	SAMPLE	193230-004	123038	Filtra	14-MAR-2007 00:42	10.0	1.0	5		1	2	
096	c13q0096	X	RINSE			14-MAR-2007 00:48	1.0					2	
097	c13q0097	X	RINSE			14-MAR-2007 00:53	1.0					2	
098	c13q0098	X	RINSE			14-MAR-2007 00:58	1.0					2	
099	c13q0099	CCV				14-MAR-2007 01:04	1.0	1.0	3		1	12 2	
100	c13q0100	X	RINSE			14-MAR-2007 01:10	1.0					2	
101	c13q0101	CCB				14-MAR-2007 01:15	1.0	1.0	2		1	2	
102	c13q0102	X				14-MAR-2007 01:21	1.0					2	
103	c13q0103	X				14-MAR-2007 01:26	1.0					2	
104	c13q0104	ICSA				14-MAR-2007 01:31	1.0	1.0			1	10 2	7:CA=333900
105	c13q0105	ICSAB				14-MAR-2007 01:37	1.0	1.0	1		1	11 2	11:CA=343900

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/13/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67106280001
Units : ug/L

Date : 14-MAR-2007 19:39
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c14t0005	67106280005		14-MAR-2007 19:44	S5645
L2	c14t0006	67106280006		14-MAR-2007 19:49	S5648
L3	c14t0007	67106280007		14-MAR-2007 19:54	S5649
L4	c14t0008	67106280008		14-MAR-2007 20:00	S5650
L5	c14t0009	67106280009		14-MAR-2007 20:05	S5644
L6	c14t0010	67106280010		14-MAR-2007 20:10	S5646

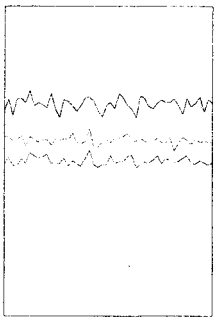
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8735	0.7102	0.6864	0.6447	0.6119	0.6411	BLNK	-1.0342	1.57429		0.6946	1.000	0.995	
Antimony	A	0.3703	0.3028	0.2967	0.2850	0.2758	0.2971	BLNK	-0.0184	3.41580		0.3046	0.999	0.995	
Barium	A	0.4011	0.1512	0.1066	0.0731	0.0673	0.0704	BLNK	-0.1662	14.3500		0.1449	1.000	0.995	
Beryllium	A	0.2413	0.2557	0.2505	0.2528	0.2475	0.2358	BLNK	-0.0008	4.19880		0.2473	0.999	0.995	
Cadmium	A	0.0989	0.0871	0.0872	0.0853	0.0810	0.0848	BLNK	-0.0037	11.8984		0.0874	1.000	0.995	
Calcium	A	0.1240	0.0433	0.0322	0.0223	0.0202	0.0211	BLNK	-42.916	48.0069		0.0438	1.000	0.995	
Lead	A	1.4284	0.9726	0.8470	0.7490	0.7212	0.7572	BLNK	-0.0522	1.33385		0.9125	0.999	0.995	
Magnesium	A	0.7216	0.6124	0.6020	0.5662	0.5280	0.5513	BLNK	-0.5891	1.82943		0.5969	1.000	0.995	
Molybdenum	A	0.2528	0.2257	0.2169	0.2069	0.2011	0.2155	BLNK	-0.0069	4.70367		0.2198	0.999	0.995	
Potassium	A	6.7202	1.8843	1.2834	0.7145	0.6288	0.6566	BLNK	-89.143	1.54416		1.9813	0.999	0.995	
Silver	A	0.3819	0.3351	0.3381	0.3314	0.3080	0.3280	BLNK	-0.0069	3.08629		0.3371	0.999	0.995	
Thallium	A	1.0082	0.8759	0.8465	0.8180	0.8355	0.8752	BLNK	-0.0139	1.15342		0.8765	0.999	0.995	
Arsenic	E	1.4776	0.7322	0.6272	0.5410	0.5370	0.5157	BLNK	-0.1967	1.92526		0.7385	1.000	0.995	
Chromium	E	5.6898	2.8894	2.5556	2.1869	2.1562	2.0923	BLNK	-0.1630	0.47548		2.9284	1.000	0.995	
Cobalt	E	3.3541	3.2164	3.1146	3.0621	3.0093	2.9304	BLNK	-0.0029	0.33940		3.1145	1.000	0.995	
Copper	E	44.599	13.071	9.1024	5.2949	4.7842	4.5157	BLNK	-0.6607	0.21967		13.561	0.999	0.995	
Manganese	E	2.2840	1.7424	1.5984	1.5161	1.5127	1.4549	BLNK	-0.0269	0.68199		1.6848	1.000	0.995	
Nickel	E	2.4311	1.1372	0.9823	0.7870	0.7563	0.7194	BLNK	-0.1481	1.37689		1.1356	0.999	0.995	
Sodium	E	4.8752	1.4914	1.0773	0.6209	0.5781	0.5561	BLNK	-71.845	1.79169		1.5332	1.000	0.995	
Vanadium	E	43.908	9.6439	5.3037	2.0187	1.7949	1.7471	BLNK	-2.4585	0.57776		10.736	1.000	0.995	
Zinc	E	38.750	8.7193	4.1757	1.3458	0.9650	0.8946	BLNK	-2.8972	1.11908		9.1417	0.999	0.995	
Iron	H	0.9288	0.8542	0.8120	0.7726	0.7391	0.7395	BLNK	-0.8768	1.35235		0.8077	1.000	0.995	
Selenium	H	0.1243	0.1173	0.1209	0.1154	0.1107	0.1092	BLNK	-0.0173	9.13221		0.1163	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

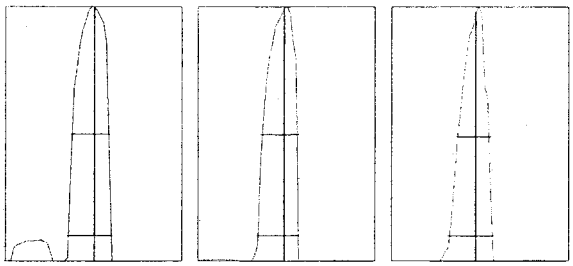
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	13721.0	13678.3	3.08	0.10
89	50,000	24761.0	25038.8	2.60	0.30
205	50,000	28020.0	28388.1	2.13	0.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.011%
Doubly Charged: 70/140 1.287%



m/z:	7	89	205
Height:	13,849	25,370	28,075
Axis:	7.05	89.00	204.95
W-50%:	0.65	0.65	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	1550	W	Extract 1	0	V	AMU Gain	142	
RF Matching	1.7	V	Extract 2	-150	V	AMU Offset	125	
Smpl Depth	9	mm	Omega Bias-ce	-30	V	Axis Gain	1.0017	
Torch-H	1.3	mm	Omega Lens-ce	0	V	Axis Offset	-0.03	
Torch-V	0.4	mm	Cell Entrance	-30	V	QP Bias	-3	V
Carrier Gas	1.05	L/min	QP Focus	5	V			
Makeup Gas	0	L/min	Cell Exit	-30	V	===Detector Parameters===		
Optional Gas	---	%				Discriminator	8	mV
Nebulizer Pump	0.1	rps	===Octopole Parameters===			Analog HV	1770	V
Sample Pump	---	rps	OctP RF	160	V	Pulse HV	1420	V
S/C Temp	2	degC	OctP Bias	-6	V			

===Reaction Cell===

Reaction Mode	OFF							
H2 Gas	0	mL/min	He Gas	0	mL/min	Optional Gas	---	%

Tune File : he.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
He Gas:	3.5	mL/min	51	79.8	12.48	
Optional Gas:	---	%	59	3633.2	2.52	
QP Focus:	-10	V	89	4247.1	2.97	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-14	V				

Tune File : h2.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
H2 Gas:	3	mL/min	59	3493.3	3.42	
Optional Gas:	---	%	78	0.4	188.98	
QP Focus:	-8	V	89	13417.0	2.54	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-16	V				

Generated : Mar 14, 2007 13:11:19
Printed : Mar 14, 2007 13:12:56

P/A Factor Tuning Report

Acquired:Mar 14 2007 01:23 pm

Mass[amu]	Element	P/A Factor
6	Li	0.065699
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.092689
45	Sc	0.091624
51	V	0.091674
52	Cr	0.096135
55	Mn	0.098313
56	Fe	0.098500
59	Co	0.101783
60	Ni	Sensitivity too low
63	Cu	0.105448
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103974
98	Mo	0.102873
99	(Ru)	Sensitivity too low
107	Ag	0.111454
111	Cd	Sensitivity too low
115	In	0.111544
118	(In)	0.110865
121	Sb	0.108983
137	Ba	Sensitivity too low
159	Tb	0.113548
205	Tl	0.117970
206	(Pb)	0.117654
207	(Pb)	0.117670
208	Pb	0.118585
209	Bi	0.118695

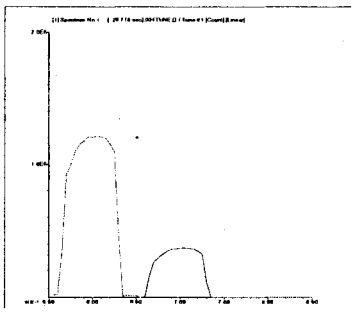
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1420 V

6020 QC Tune Report

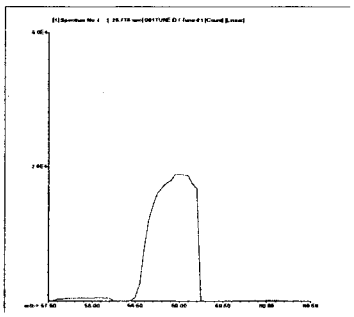
Data File: C:\ICPCHEM\1\DATA\07C14t00.B\001TUNE.D
Date Acquired: Mar 14 2007 07:20 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

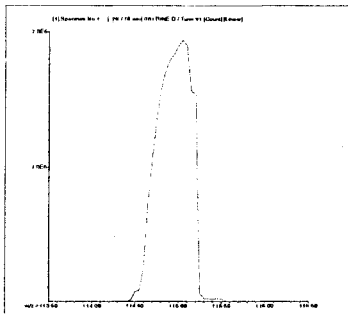
Element	Actual	Required	Flag
7 Li	0.68	5.00	
59 Co	0.94	5.00	
115 In	2.14	5.00	
205 Tl	0.88	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



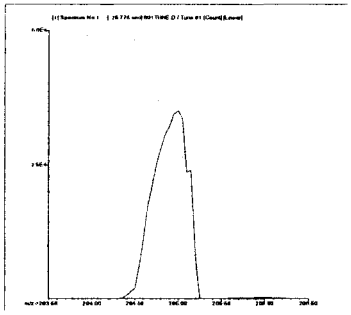
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004C
Date Acquired: Mar 14 2007 07:37 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:40 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1214699.00	A	23850.00	1.96
7	(Li)		P		
9	Be	4.44	P	3.85	86.60
23	Na	75788.24	P	442.70	0.58
24	Mg	8312.74	P	390.30	4.70
27	Al	16965.06	P	863.60	5.09
39	K	1489877.00	A	16130.00	1.08
44	Ca	23056.17	P	574.40	2.49
45	Sc	842012.63	M	7481.00	0.89
45	Sc	94503.46	P	272.10	0.29
45	Sc	1291021.00	A	41990.00	3.25
51	V	8042.76	P	155.30	1.93
52	Cr	647.80	P	8.89	1.37
55	Mn	74.45	P	13.88	18.64
56	Fe	10917.67	P	190.70	1.75
59	Co	16.30	P	4.21	25.82
60	Ni	203.34	P	12.37	6.08
63	Cu	2388.38	P	65.11	2.73
65	Cu	1155.62	P	35.61	3.08
66	Zn	2055.36	P	34.88	1.70
72	Ge	169845.41	P	1396.00	0.82
72	Ge	39700.66	P	430.90	1.09
75	As	81.11	P	6.05	7.46
78	Se	6.44	P	1.93	29.87
89	Y	1593478.00	A	59090.00	3.71
98	Mo	46.67	P	12.02	25.76
107	Ag	71.11	P	8.39	11.80
111	Cd	10.00	P	3.33	33.33
115	In	1596397.00	A	37890.00	2.37
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	172.23	P	23.41	13.59
137	Ba	556.70	P	58.98	10.60
159	Tb	2400096.00	A	77260.00	3.22
205	Tl	404.47	P	81.95	20.26
208	Pb	1879.02	P	43.38	2.31
209	Bi	1672268.00	A	55490.00	3.32

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 14 2007 07:42 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1204475.00	A	9451.00	0.78
7 (Li)		P		
9 Be	581.14	P	47.42	8.16
23 Na	93521.14	P	194.20	0.21
24 Mg	186616.91	P	748.50	0.40
27 Al	225911.91	P	524.80	0.23
39 K	1737951.00	A	6189.00	0.36
44 Ca	32080.47	P	130.20	0.41
45 Sc	845309.00	M	6251.00	0.74
45 Sc	95915.59	P	484.50	0.51
45 Sc	1293208.00	A	13630.00	1.05
51 V	8422.97	P	37.93	0.45
52 Cr	1091.54	P	28.58	2.62
55 Mn	438.16	P	10.96	2.50
56 Fe	157017.20	P	1041.00	0.66
59 Co	643.36	P	14.19	2.21
60 Ni	466.31	P	24.15	5.18
63 Cu	3561.61	P	16.14	0.45
65 Cu	1723.46	P	34.02	1.97
66 Zn	3094.82	P	34.93	1.13
72 Ge	170686.00	P	1459.00	0.85
72 Ge	39934.34	P	478.20	1.20
75 As	118.00	P	4.67	3.96
78 Se	42.44	P	3.15	7.42
89 Y	1581912.00	A	8229.00	0.52
98 Mo	800.06	P	55.08	6.88
99 (Ru)	10.00	P	8.82	88.19
107 Ag	1215.66	P	43.51	3.58
111 Cd	314.46	P	32.38	10.30
115 In	1591845.00	A	18070.00	1.14
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1178.99	P	24.12	2.05
137 Ba	1921.32	P	61.68	3.21
159 Tb	2394815.00	A	17760.00	0.74
205 Tl	1695.73	P	45.51	2.68
208 Pb	6842.10	P	281.30	4.11
209 Bi	1682109.00	A	7342.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1204474.90	0.78	1214699.10	99.2	80 - 120	
45 Sc	845309.00	0.74	842012.63	100.4	80 - 120	
45 Sc	95915.59	0.51	94503.46	101.5	80 - 120	
45 Sc	1293207.80	1.05	1291020.90	100.2	80 - 120	
72 Ge	170686.05	0.85	169845.42	100.5	80 - 120	
72 Ge	39934.34	1.20	39700.66	100.6	80 - 120	
89 Y	1581912.40	0.52	1593477.80	99.3	80 - 120	
115 In	1591845.50	1.14	1596397.00	99.7	80 - 120	
159 Tb	2394814.80	0.74	2400095.80	99.8	80 - 120	
209 Bi	1682108.60	0.44	1672267.60	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 14 2007 07:47 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:45 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1209533.00	A	9363.00	0.77
7 (Li)		P		
9 Be	3092.65	P	98.47	3.18
23 Na	142441.50	P	613.90	0.43
24 Mg	793325.13	A	14880.00	1.88
27 Al	920071.69	A	20620.00	2.24
39 K	2440965.00	A	25320.00	1.04
44 Ca	56133.15	P	1603.00	2.86
45 Sc	833619.81	M	7570.00	0.91
45 Sc	95510.14	P	456.70	0.48
45 Sc	1295402.00	A	11710.00	0.90
51 V	9210.87	P	79.74	0.87
52 Cr	2759.56	P	30.48	1.10
55 Mn	1664.19	P	14.33	0.86
56 Fe	712079.13	P	3317.00	0.47
59 Co	3071.85	P	18.68	0.61
60 Ni	1085.98	P	44.04	4.06
63 Cu	5185.10	P	55.07	1.06
65 Cu	2482.10	P	66.73	2.69
66 Zn	3458.61	P	88.92	2.57
72 Ge	169612.41	P	1349.00	0.80
72 Ge	39667.17	P	115.20	0.29
75 As	290.45	P	10.46	3.60
78 Se	198.89	P	7.90	3.97
89 Y	1586006.00	A	10980.00	0.69
98 Mo	3580.61	P	126.70	3.54
99 (Ru)	12.22	P	5.09	41.66
107 Ag	5362.38	P	38.66	0.72
111 Cd	1393.46	P	62.46	4.48
115 In	1600281.00	A	16380.00	1.02
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4845.48	P	26.73	0.55
137 Ba	3642.85	P	233.00	6.40
159 Tb	2408998.00	A	25810.00	1.07
205 Tl	7372.41	P	75.42	1.02
208 Pb	23428.23	P	130.90	0.56
209 Bi	1683452.00	A	13050.00	0.78

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1209533.40	0.77	1214699.10	99.6	80 - 120	
45 Sc	833619.81	0.91	842012.63	99.0	80 - 120	
45 Sc	95510.14	0.48	94503.46	101.1	80 - 120	
45 Sc	1295402.50	0.90	1291020.90	100.3	80 - 120	
72 Ge	169612.41	0.80	169845.42	99.9	80 - 120	
72 Ge	39667.17	0.29	39700.66	99.9	80 - 120	
89 Y	1586005.60	0.69	1593477.80	99.5	80 - 120	
115 In	1600281.40	1.02	1596397.00	100.2	80 - 120	
159 Tb	2408997.80	1.07	2400095.80	100.4	80 - 120	
209 Bi	1683452.00	0.78	1672267.60	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 14 2007 07:52 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:51 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1241454.00	A	12900.00	1.04
7 (Li)		P		
9 Be	6218.21	P	102.70	1.65
23 Na	205767.41	P	187.40	0.09
24 Mg	1575486.00	A	15580.00	0.99
27 Al	1796355.00	A	18760.00	1.04
39 K	3358506.00	A	14060.00	0.42
44 Ca	84358.67	P	273.90	0.32
45 Sc	848932.63	M	8168.00	0.96
45 Sc	95506.52	P	359.00	0.38
45 Sc	1308758.00	A	27580.00	2.11
51 V	10130.40	P	99.46	0.98
52 Cr	4881.64	P	63.01	1.29
55 Mn	3052.96	P	100.20	3.28
56 Fe	1378620.00	A	7597.00	0.55
59 Co	5949.11	P	55.10	0.93
60 Ni	1876.44	P	20.86	1.11
63 Cu	7286.04	P	81.31	1.12
65 Cu	3495.67	P	83.14	2.38
66 Zn	3341.92	P	104.50	3.13
72 Ge	170742.20	P	1422.00	0.83
72 Ge	40023.01	P	288.30	0.72
75 As	502.01	P	16.17	3.22
78 Se	412.68	P	9.02	2.19
89 Y	1629717.00	A	9334.00	0.57
98 Mo	7069.86	P	85.19	1.21
99 (Ru)	12.22	P	1.93	15.75
107 Ag	11029.28	P	94.60	0.86
111 Cd	2843.74	P	98.51	3.46
115 In	1630943.00	A	15180.00	0.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	9678.27	P	138.50	1.43
137 Ba	5180.07	P	139.90	2.70
159 Tb	2430055.00	A	26280.00	1.08
205 Tl	14503.13	P	162.40	1.12
208 Pb	41164.20	P	606.90	1.47
209 Bi	1713377.00	A	6735.00	0.39

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1241453.60	1.04	1214699.10	102.2	80 - 120	
45 Sc	848932.63	0.96	842012.63	100.8	80 - 120	
45 Sc	95506.52	0.38	94503.46	101.1	80 - 120	
45 Sc	1308758.40	2.11	1291020.90	101.4	80 - 120	
72 Ge	170742.16	0.83	169845.42	100.5	80 - 120	
72 Ge	40023.01	0.72	39700.66	100.8	80 - 120	
89 Y	1629717.40	0.57	1593477.80	102.3	80 - 120	
115 In	1630943.10	0.93	1596397.00	102.2	80 - 120	
159 Tb	2430054.80	1.08	2400095.80	101.2	80 - 120	
209 Bi	1713376.50	0.39	1672267.60	102.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

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Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 14 2007 07:58 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 07:56 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1231495.00	A	13890.00	1.13
7 (Li)		P		
9 Be	62270.10	P	941.40	1.51
23 Na	1212073.00	A	12660.00	1.04
24 Mg	14897020.00	A	81330.00	0.55
27 Al	16962050.00	A	76510.00	0.45
39 K	18800300.00	A	188100.00	1.00
44 Ca	585503.13	P	1453.00	0.25
45 Sc	844027.69	A	11500.00	1.36
45 Sc	97642.59	P	1869.00	1.91
45 Sc	1315695.00	A	18670.00	1.42
51 V	39406.90	P	453.60	1.15
52 Cr	42693.39	P	222.60	0.52
55 Mn	29599.75	P	161.40	0.55
56 Fe	13041660.00	A	71930.00	0.55
59 Co	59778.95	P	610.70	1.02
60 Ni	15366.32	P	236.10	1.54
63 Cu	43030.45	P	386.00	0.90
65 Cu	21070.06	P	144.30	0.68
66 Zn	10936.98	P	240.90	2.20
72 Ge	171947.50	P	716.10	0.42
72 Ge	40635.55	P	276.70	0.68
75 As	4396.27	P	63.16	1.44
78 Se	3968.59	P	120.20	3.03
89 Y	1629772.00	A	22540.00	1.38
98 Mo	67421.43	P	518.10	0.77
99 (Ru)	13.33	P	11.55	86.62
107 Ag	107484.00	P	376.40	0.35
111 Cd	27659.01	P	596.80	2.16
115 In	1621967.00	A	13530.00	0.83
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	92441.16	P	362.50	0.39
137 Ba	36046.27	P	495.60	1.37
159 Tb	2467045.00	A	24940.00	1.01
205 Tl	139233.91	P	1385.00	0.99
208 Pb	369540.91	P	1134.00	0.31
209 Bi	1702100.00	A	18510.00	1.09

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1231495.10	1.13	1214699.10	101.4	80 - 120	
45 Sc	844027.69	1.36	842012.63	100.2	80 - 120	
45 Sc	97642.59	1.91	94503.46	103.3	80 - 120	
45 Sc	1315695.30	1.42	1291020.90	101.9	80 - 120	
72 Ge	171947.55	0.42	169845.42	101.2	80 - 120	
72 Ge	40635.55	0.68	39700.66	102.4	80 - 120	
89 Y	1629771.80	1.38	1593477.80	102.3	80 - 120	
115 In	1621967.10	0.83	1596397.00	101.6	80 - 120	
159 Tb	2467045.30	1.01	2400095.80	102.8	80 - 120	
209 Bi	1702099.50	1.09	1672267.60	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 14 2007 08:03 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 08:01 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1176467.00	A	95270.00	8.10
7 (Li)		P		
9 Be	579765.00	P	2911.00	0.50
23 Na	10560360.00	A	76770.00	0.73
24 Mg	###########	A	191800.00	0.14
27 Al	###########	A	528100.00	0.33
39 K	###########	A	1244000.00	0.76
44 Ca	5268178.00	A	49080.00	0.93
45 Sc	833040.00	M	17620.00	2.12
45 Sc	91341.44	P	468.50	0.51
45 Sc	1316057.00	A	144000.00	10.94
51 V	327886.91	P	1548.00	0.47
52 Cr	393896.50	P	936.90	0.24
55 Mn	276356.69	P	2704.00	0.98
56 Fe	###########	A	789900.00	0.64
59 Co	549741.00	P	2459.00	0.45
60 Ni	138167.09	P	736.70	0.53
63 Cu	362201.91	P	1592.00	0.44
65 Cu	174924.70	P	776.10	0.44
66 Zn	73057.00	P	520.30	0.71
72 Ge	166257.91	P	2757.00	1.66
72 Ge	37854.01	P	165.70	0.44
75 As	40656.27	P	219.20	0.54
78 Se	36806.70	P	308.60	0.84
89 Y	1604599.00	A	173200.00	10.79
98 Mo	640626.13	P	3756.00	0.59
99 (Ru)	13.33	P	6.67	50.00
107 Ag	964766.38	P	6213.00	0.64
111 Cd	253626.20	P	1856.00	0.73
115 In	1575992.00	A	156500.00	9.93
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	863757.63	P	4413.00	0.51
137 Ba	324926.91	P	2538.00	0.78
159 Tb	2428562.00	A	250800.00	10.33
205 Tl	1348062.00	A	7447.00	0.55
208 Pb	3478722.00	A	12830.00	0.37
209 Bi	1623403.00	A	150300.00	9.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1176466.60	8.10	1214699.10	96.9	80 - 120	
45 Sc	833039.94	2.12	842012.63	98.9	80 - 120	
45 Sc	91341.44	0.51	94503.46	96.7	80 - 120	
45 Sc	1316057.40	10.94	1291020.90	101.9	80 - 120	
72 Ge	166257.89	1.66	169845.42	97.9	80 - 120	
72 Ge	37854.01	0.44	39700.66	95.3	80 - 120	
89 Y	1604598.60	10.79	1593477.80	100.7	80 - 120	
115 In	1575991.80	9.93	1596397.00	98.7	80 - 120	
159 Tb	2428562.30	10.33	2400095.80	101.2	80 - 120	
209 Bi	1623403.00	9.26	1672267.60	97.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

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Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C14t00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 14 2007 08:08 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 14 2007 08:06 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1092022.00	A	3848.00	0.35
7	(Li)		P		
9	Be	1030016.00	A	4571.00	0.44
23	Na	20224540.00	A	154000.00	0.76
24	Mg	############	A	705900.00	0.27
27	Al	############	A	1899000.00	0.61
39	K	############	A	1291000.00	0.41
44	Ca	10171540.00	A	45950.00	0.45
45	Sc	808282.31	M	8373.00	1.04
45	Sc	90933.69	P	1500.00	1.65
45	Sc	1207414.00	A	12440.00	1.03
51	V	635327.31	P	5119.00	0.81
52	Cr	760888.50	P	5446.00	0.72
55	Mn	529075.81	P	2162.00	0.41
56	Fe	############	A	2192000.00	0.92
59	Co	1065648.00	A	3772.00	0.35
60	Ni	261636.30	P	147.40	0.06
63	Cu	680580.63	P	5753.00	0.85
65	Cu	328232.31	P	1504.00	0.46
66	Zn	134835.41	P	773.40	0.57
72	Ge	160961.41	P	1105.00	0.69
72	Ge	37689.56	P	705.80	1.87
75	As	77727.62	P	974.60	1.25
78	Se	70307.51	P	476.50	0.68
89	Y	1484046.00	A	8630.00	0.58
98	Mo	1279239.00	A	7072.00	0.55
99	(Ru)	30.00	P	14.53	48.43
107	Ag	1884234.00	A	15690.00	0.83
111	Cd	487174.09	P	771.60	0.16
115	In	1436284.00	A	16170.00	1.13
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1706524.00	A	9994.00	0.59
137	Ba	632233.88	P	1537.00	0.24
159	Tb	2246637.00	A	6590.00	0.29
205	Tl	2586877.00	A	12390.00	0.48
208	Pb	6804158.00	A	28650.00	0.42
209	Bi	1477909.00	A	5241.00	0.35

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1092021.50	0.35	1214699.10	89.9	80 - 120	
45	Sc	808282.25	1.04	842012.63	96.0	80 - 120	
45	Sc	90933.69	1.65	94503.46	96.2	80 - 120	
45	Sc	1207414.50	1.03	1291020.90	93.5	80 - 120	
72	Ge	160961.41	0.69	169845.42	94.8	80 - 120	
72	Ge	37689.56	1.87	39700.66	94.9	80 - 120	
89	Y	1484045.90	0.58	1593477.80	93.1	80 - 120	
115	In	1436284.00	1.13	1596397.00	90.0	80 - 120	
159	Tb	2246636.80	0.29	2400095.80	93.6	80 - 120	
209	Bi	1477909.30	0.35	1672267.60	88.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C14t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280012 File : c14t0012 Time : 14-MAR-2007 20:21
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6946	0.6495	10000	10220	ug/L	2	10	
Antimony	A	0.3046	0.2907	100.0	99.27	ug/L	-1	10	
Barium	A	0.1449	0.0704	100.0	100.8	ug/L	1	10	
Beryllium	A	0.2473	0.2544	100.0	106.8	ug/L	7	10	
Cadmium	A	0.0874	0.0857	100.0	101.9	ug/L	2	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7574	100.0	101.0	ug/L	1	10	
Magnesium	A	0.5969	0.5616	10000	10270	ug/L	3	10	
Molybdenum	A	0.2198	0.2125	100.0	99.95	ug/L	0	10	
Potassium	A	1.9813	0.6632	10000	10150	ug/L	2	10	
Silver	A	0.3371	0.3263	100.0	100.7	ug/L	1	10	
Thallium	A	0.8765	0.8725	50.00	50.30	ug/L	1	10	
Arsenic	E	0.7385	0.5325	100.0	102.3	ug/L	2	10	
Chromium	E	2.9284	2.1565	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0343	100.0	103.0	ug/L	3	10	
Copper	E	13.561	4.7560	100.0	103.8	ug/L	4	10	
Manganese	E	1.6848	1.4992	100.0	102.2	ug/L	2	10	
Nickel	E	1.1356	0.7559	100.0	103.9	ug/L	4	10	
Sodium	E	1.5332	0.5704	10000	10150	ug/L	2	10	
Vanadium	E	10.736	1.8024	100.0	101.7	ug/L	2	10	
Zinc	E	9.1417	0.9602	100.0	104.6	ug/L	5	10	
Iron	H	0.8077	0.7492	10000	10130	ug/L	1	10	
Selenium	H	0.1163	0.1123	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1143660	-5.85
Scandium	A	1291021	1247216	-3.39
Scandium	E	94503	91835	-2.82
Scandium	H	842013	823953	-2.14
Germanium	H	169845	163787	-3.57
Germanium	E	39701	38160	-3.88
Indium	A	1596397	1504668	-5.75
Bismuth	A	1672268	1555808	-6.96
Yttrium	A	1593478	1531617	-3.88
Terbium	A	2400096	2334701	-2.72

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280035 File : c14t0035 Time : 14-MAR-2007 22:26
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6441	10000	10140	ug/L	1	10	
Antimony	A	0.3046	0.2982	100.0	101.9	ug/L	2	10	
Barium	A	0.1449	0.0724	100.0	103.7	ug/L	4	10	
Beryllium	A	0.2473	0.2595	100.0	109.0	ug/L	9	10	
Cadmium	A	0.0874	0.0874	100.0	104.0	ug/L	4	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7656	100.0	102.1	ug/L	2	10	
Magnesium	A	0.5969	0.5550	10000	10150	ug/L	2	10	
Molybdenum	A	0.2198	0.2140	100.0	100.6	ug/L	1	10	
Potassium	A	1.9813	0.6644	10000	10170	ug/L	2	10	
Silver	A	0.3371	0.3361	100.0	103.7	ug/L	4	10	
Thallium	A	0.8765	0.8733	50.00	50.35	ug/L	1	10	
Arsenic	E	0.7385	0.5409	100.0	103.9	ug/L	4	10	
Chromium	E	2.9284	2.1821	100.0	103.6	ug/L	4	10	
Cobalt	E	3.1145	3.0634	100.0	104.0	ug/L	4	10	
Copper	E	13.561	4.8091	100.0	105.0	ug/L	5	10	
Manganese	E	1.6848	1.5075	100.0	102.8	ug/L	3	10	
Nickel	E	1.1356	0.7689	100.0	105.7	ug/L	6	10	
Sodium	E	1.5332	0.5726	10000	10190	ug/L	2	10	
Vanadium	E	10.736	1.8263	100.0	103.1	ug/L	3	10	
Zinc	E	9.1417	0.9581	100.0	104.3	ug/L	4	10	
Iron	H	0.8077	0.7663	10000	10360	ug/L	4	10	
Selenium	H	0.1163	0.1140	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1128538	-7.09
Scandium	A	1291021	1277067	-1.08
Scandium	E	94503	92584	-2.03
Scandium	H	842013	835430	-0.78
Germanium	H	169845	168980	-0.51
Germanium	E	39701	38672	-2.59
Indium	A	1596397	1493244	-6.46
Bismuth	A	1672268	1548687	-7.39
Yttrium	A	1593478	1549122	-2.78
Terbium	A	2400096	2318739	-3.39

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280052 File : c14t0052 Time : 14-MAR-2007 23:57
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6433	10000	10130	ug/L	1	10	
Antimony	A	0.3046	0.2954	100.0	100.9	ug/L	1	10	
Barium	A	0.1449	0.0722	100.0	103.4	ug/L	3	10	
Beryllium	A	0.2473	0.2588	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0862	100.0	102.6	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10190	ug/L	2	10	
Lead	A	0.9125	0.7665	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5550	10000	10150	ug/L	2	10	
Molybdenum	A	0.2198	0.2118	100.0	99.60	ug/L	0	10	
Potassium	A	1.9813	0.6654	10000	10190	ug/L	2	10	
Silver	A	0.3371	0.3331	100.0	102.8	ug/L	3	10	
Thallium	A	0.8765	0.8678	50.00	50.03	ug/L	0	10	
Arsenic	E	0.7385	0.5327	100.0	102.4	ug/L	2	10	
Chromium	E	2.9284	2.1631	100.0	102.7	ug/L	3	10	
Cobalt	E	3.1145	3.0246	100.0	102.7	ug/L	3	10	
Copper	E	13.561	4.7532	100.0	103.8	ug/L	4	10	
Manganese	E	1.6848	1.4920	100.0	101.7	ug/L	2	10	
Nickel	E	1.1356	0.7608	100.0	104.6	ug/L	5	10	
Sodium	E	1.5332	0.5655	10000	10060	ug/L	1	10	
Vanadium	E	10.736	1.8026	100.0	101.7	ug/L	2	10	
Zinc	E	9.1417	0.9517	100.0	103.6	ug/L	4	10	
Iron	H	0.8077	0.7690	10000	10400	ug/L	4	10	
Selenium	H	0.1163	0.1135	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1139389	-6.20
Scandium	A	1291021	1285567	-0.42
Scandium	E	94503	94511	0.01
Scandium	H	842013	843863	0.22
Germanium	H	169845	171473	0.96
Germanium	E	39701	39450	-0.63
Indium	A	1596397	1516717	-4.99
Bismuth	A	1672268	1557067	-6.89
Yttrium	A	1593478	1575062	-1.16
Terbium	A	2400096	2328556	-2.98

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280075 File : c14t0075 Time : 15-MAR-2007 02:03
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6410	10000	10090	ug/L	1	10	
Antimony	A	0.3046	0.2960	100.0	101.1	ug/L	1	10	
Barium	A	0.1449	0.0732	100.0	104.9	ug/L	5	10	
Beryllium	A	0.2473	0.2607	100.0	109.5	ug/L	10	10	
Cadmium	A	0.0874	0.0872	100.0	103.7	ug/L	4	10	
Calcium	A	0.0438	0.0213	10000	10210	ug/L	2	10	
Lead	A	0.9125	0.7694	100.0	102.6	ug/L	3	10	
Magnesium	A	0.5969	0.5532	10000	10120	ug/L	1	10	
Molybdenum	A	0.2198	0.2122	100.0	99.79	ug/L	0	10	
Potassium	A	1.9813	0.6685	10000	10230	ug/L	2	10	
Silver	A	0.3371	0.3376	100.0	104.2	ug/L	4	10	
Thallium	A	0.8765	0.8677	50.00	50.03	ug/L	0	10	
Arsenic	E	0.7385	0.5373	100.0	103.2	ug/L	3	10	
Chromium	E	2.9284	2.1733	100.0	103.2	ug/L	3	10	
Cobalt	E	3.1145	3.0661	100.0	104.1	ug/L	4	10	
Copper	E	13.561	4.7909	100.0	104.6	ug/L	5	10	
Manganese	E	1.6848	1.5121	100.0	103.1	ug/L	3	10	
Nickel	E	1.1356	0.7687	100.0	105.7	ug/L	6	10	
Sodium	E	1.5332	0.5620	10000	9997	ug/L	0	10	
Vanadium	E	10.736	1.8295	100.0	103.2	ug/L	3	10	
Zinc	E	9.1417	0.9503	100.0	103.4	ug/L	3	10	
Iron	H	0.8077	0.7598	10000	10270	ug/L	3	10	
Selenium	H	0.1163	0.1129	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1083621	-10.79
Scandium	A	1291021	1266717	-1.88
Scandium	E	94503	92028	-2.62
Scandium	H	842013	837284	-0.56
Germanium	H	169845	169695	-0.09
Germanium	E	39701	38703	-2.51
Indium	A	1596397	1504795	-5.74
Bismuth	A	1672268	1543975	-7.67
Yttrium	A	1593478	1568498	-1.57
Terbium	A	2400096	2299347	-4.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280090 File : c14t0090 Time : 15-MAR-2007 03:24
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6414	10000	10100	ug/L	1	10	
Antimony	A	0.3046	0.2937	100.0	100.3	ug/L	0	10	
Barium	A	0.1449	0.0722	100.0	103.4	ug/L	3	10	
Beryllium	A	0.2473	0.2560	100.0	107.5	ug/L	8	10	
Cadmium	A	0.0874	0.0863	100.0	102.7	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7670	100.0	102.3	ug/L	2	10	
Magnesium	A	0.5969	0.5531	10000	10120	ug/L	1	10	
Molybdenum	A	0.2198	0.2122	100.0	99.79	ug/L	0	10	
Potassium	A	1.9813	0.6683	10000	10230	ug/L	2	10	
Silver	A	0.3371	0.3315	100.0	102.3	ug/L	2	10	
Thallium	A	0.8765	0.8751	50.00	50.45	ug/L	1	10	
Arsenic	E	0.7385	0.5281	100.0	101.5	ug/L	2	10	
Chromium	E	2.9284	2.1572	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0425	100.0	103.3	ug/L	3	10	
Copper	E	13.561	4.7142	100.0	102.9	ug/L	3	10	
Manganese	E	1.6848	1.5047	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7636	100.0	105.0	ug/L	5	10	
Sodium	E	1.5332	0.5644	10000	10040	ug/L	0	10	
Vanadium	E	10.736	1.8134	100.0	102.3	ug/L	2	10	
Zinc	E	9.1417	0.9434	100.0	102.7	ug/L	3	10	
Iron	H	0.8077	0.7616	10000	10300	ug/L	3	10	
Selenium	H	0.1163	0.1133	100.0	103.5	ug/L	4	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1097106	-9.68
Scandium	A	1291021	1260258	-2.38
Scandium	E	94503	91318	-3.37
Scandium	H	842013	826305	-1.87
Germanium	H	169845	168483	-0.80
Germanium	E	39701	38781	-2.32
Indium	A	1596397	1501227	-5.96
Bismuth	A	1672268	1528868	-8.58
Yttrium	A	1593478	1554437	-2.45
Terbium	A	2400096	2294105	-4.42

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280115 File : c14t0115 Time : 15-MAR-2007 05:46
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6312	10000	9936	ug/L	-1	10	
Antimony	A	0.3046	0.2860	100.0	97.66	ug/L	-2	10	
Barium	A	0.1449	0.0720	100.0	103.1	ug/L	3	10	
Beryllium	A	0.2473	0.2586	100.0	108.6	ug/L	9	10	
Cadmium	A	0.0874	0.0843	100.0	100.3	ug/L	0	10	
Calcium	A	0.0438	0.0211	10000	10100	ug/L	1	10	
Lead	A	0.9125	0.7498	100.0	99.96	ug/L	0	10	
Magnesium	A	0.5969	0.5423	10000	9920	ug/L	-1	10	
Molybdenum	A	0.2198	0.2081	100.0	97.90	ug/L	-2	10	
Potassium	A	1.9813	0.6615	10000	10130	ug/L	1	10	
Silver	A	0.3371	0.3273	100.0	101.0	ug/L	1	10	
Thallium	A	0.8765	0.8589	50.00	49.52	ug/L	-1	10	
Arsenic	E	0.7385	0.5274	100.0	101.3	ug/L	1	10	
Chromium	E	2.9284	2.1256	100.0	100.9	ug/L	1	10	
Cobalt	E	3.1145	3.0171	100.0	102.4	ug/L	2	10	
Copper	E	13.561	4.7243	100.0	103.1	ug/L	3	10	
Manganese	E	1.6848	1.4820	100.0	101.0	ug/L	1	10	
Nickel	E	1.1356	0.7519	100.0	103.4	ug/L	3	10	
Sodium	E	1.5332	0.5476	10000	9740	ug/L	-3	10	
Vanadium	E	10.736	1.7953	100.0	101.3	ug/L	1	10	
Zinc	E	9.1417	0.9288	100.0	101.0	ug/L	1	10	
Iron	H	0.8077	0.7505	10000	10150	ug/L	2	10	
Selenium	H	0.1163	0.1100	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1073409	-11.63
Scandium	A	1291021	1296768	0.45
Scandium	E	94503	94306	-0.21
Scandium	H	842013	850061	0.96
Germanium	H	169845	175737	3.47
Germanium	E	39701	39521	-0.45
Indium	A	1596397	1560309	-2.26
Bismuth	A	1672268	1554232	-7.06
Yttrium	A	1593478	1611598	1.14
Terbium	A	2400096	2367432	-1.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280120 File : c14t0120 Time : 15-MAR-2007 06:15
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6304	10000	9923	ug/L	-1	10	
Antimony	A	0.3046	0.2932	100.0	100.1	ug/L	0	10	
Barium	A	0.1449	0.0726	100.0	104.1	ug/L	4	10	
Beryllium	A	0.2473	0.2587	100.0	108.6	ug/L	9	10	
Cadmium	A	0.0874	0.0864	100.0	102.8	ug/L	3	10	
Calcium	A	0.0438	0.0211	10000	10090	ug/L	1	10	
Lead	A	0.9125	0.7611	100.0	101.5	ug/L	2	10	
Magnesium	A	0.5969	0.5440	10000	9952	ug/L	0	10	
Molybdenum	A	0.2198	0.2108	100.0	99.15	ug/L	-1	10	
Potassium	A	1.9813	0.6622	10000	10140	ug/L	1	10	
Silver	A	0.3371	0.3347	100.0	103.3	ug/L	3	10	
Thallium	A	0.8765	0.8693	50.00	50.12	ug/L	0	10	
Arsenic	E	0.7385	0.5352	100.0	102.8	ug/L	3	10	
Chromium	E	2.9284	2.1628	100.0	102.7	ug/L	3	10	
Cobalt	E	3.1145	3.0526	100.0	103.6	ug/L	4	10	
Copper	E	13.561	4.7584	100.0	103.9	ug/L	4	10	
Manganese	E	1.6848	1.4961	100.0	102.0	ug/L	2	10	
Nickel	E	1.1356	0.7656	100.0	105.3	ug/L	5	10	
Sodium	E	1.5332	0.5572	10000	9912	ug/L	-1	10	
Vanadium	E	10.736	1.8123	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9456	100.0	102.9	ug/L	3	10	
Iron	H	0.8077	0.7638	10000	10330	ug/L	3	10	
Selenium	H	0.1163	0.1129	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087655	-10.46
Scandium	A	1291021	1303993	1.00
Scandium	E	94503	93801	-0.74
Scandium	H	842013	855473	1.60
Germanium	H	169845	176148	3.71
Germanium	E	39701	39657	-0.11
Indium	A	1596397	1535095	-3.84
Bismuth	A	1672268	1551876	-7.20
Yttrium	A	1593478	1603829	0.65
Terbium	A	2400096	2351823	-2.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67106280139 File : c14t0139 IDF : 1.0
Cal : 67106280001 Caldate: 14-MAR-2007 Time : 15-MAR-2007 08:03
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6299	10000	9916	ug/L	-1	10	
Antimony	A	0.3046	0.2924	100.0	99.85	ug/L	0	10	
Barium	A	0.1449	0.0732	100.0	104.8	ug/L	5	10	
Beryllium	A	0.2473	0.2590	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0856	100.0	101.8	ug/L	2	10	
Calcium	A	0.0438	0.0211	10000	10060	ug/L	1	10	
Lead	A	0.9125	0.7593	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5969	0.5394	10000	9867	ug/L	-1	10	
Molybdenum	A	0.2198	0.2111	100.0	99.28	ug/L	-1	10	
Potassium	A	1.9813	0.6639	10000	10160	ug/L	2	10	
Silver	A	0.3371	0.3318	100.0	102.4	ug/L	2	10	
Thallium	A	0.8765	0.8694	50.00	50.12	ug/L	0	10	
Arsenic	E	0.7385	0.5272	100.0	101.3	ug/L	1	10	
Chromium	E	2.9284	2.1462	100.0	101.9	ug/L	2	10	
Cobalt	E	3.1145	3.0395	100.0	103.2	ug/L	3	10	
Copper	E	13.561	4.6968	100.0	102.5	ug/L	3	10	
Manganese	E	1.6848	1.4890	100.0	101.5	ug/L	2	10	
Nickel	E	1.1356	0.7628	100.0	104.9	ug/L	5	10	
Sodium	E	1.5332	0.5480	10000	9746	ug/L	-3	10	
Vanadium	E	10.736	1.8105	100.0	102.1	ug/L	2	10	
Zinc	E	9.1417	0.9328	100.0	101.5	ug/L	2	10	
Iron	H	0.8077	0.7520	10000	10170	ug/L	2	10	
Selenium	H	0.1163	0.1121	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1088042	-10.43
Scandium	A	1291021	1314575	1.82
Scandium	E	94503	95452	1.00
Scandium	H	842013	867126	2.98
Germanium	H	169845	177781	4.67
Germanium	E	39701	40362	1.67
Indium	A	1596397	1563988	-2.03
Bismuth	A	1672268	1571144	-6.05
Yttrium	A	1593478	1622543	1.82
Terbium	A	2400096	2377557	-0.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280158 File : c14t0158 Time : 15-MAR-2007 09:48
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6235	10000	9814	ug/L	-2	10	
Antimony	A	0.3046	0.2901	100.0	99.08	ug/L	-1	10	
Barium	A	0.1449	0.0718	100.0	102.8	ug/L	3	10	
Beryllium	A	0.2473	0.2579	100.0	108.3	ug/L	8	10	
Cadmium	A	0.0874	0.0839	100.0	99.78	ug/L	0	10	
Calcium	A	0.0438	0.0209	10000	9989	ug/L	0	10	
Lead	A	0.9125	0.7494	100.0	99.91	ug/L	0	10	
Magnesium	A	0.5969	0.5383	10000	9847	ug/L	-2	10	
Molybdenum	A	0.2198	0.2082	100.0	97.94	ug/L	-2	10	
Potassium	A	1.9813	0.6579	10000	10070	ug/L	1	10	
Silver	A	0.3371	0.3263	100.0	100.7	ug/L	1	10	
Thallium	A	0.8765	0.8616	50.00	49.67	ug/L	-1	10	
Arsenic	E	0.7385	0.5343	100.0	102.7	ug/L	3	10	
Chromium	E	2.9284	2.1360	100.0	101.4	ug/L	1	10	
Cobalt	E	3.1145	3.0195	100.0	102.5	ug/L	3	10	
Copper	E	13.561	4.7193	100.0	103.0	ug/L	3	10	
Manganese	E	1.6848	1.4844	100.0	101.2	ug/L	1	10	
Nickel	E	1.1356	0.7579	100.0	104.2	ug/L	4	10	
Sodium	E	1.5332	0.5472	10000	9732	ug/L	-3	10	
Vanadium	E	10.736	1.7978	100.0	101.4	ug/L	1	10	
Zinc	E	9.1417	0.9424	100.0	102.6	ug/L	3	10	
Iron	H	0.8077	0.7490	10000	10130	ug/L	1	10	
Selenium	H	0.1163	0.1124	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087329	-10.49
Scandium	A	1291021	1305548	1.13
Scandium	E	94503	93918	-0.62
Scandium	H	842013	838348	-0.44
Germanium	H	169845	169422	-0.25
Germanium	E	39701	39375	-0.82
Indium	A	1596397	1577099	-1.21
Bismuth	A	1672268	1579551	-5.54
Yttrium	A	1593478	1627297	2.12
Terbium	A	2400096	2401895	0.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280179 File : c14t0179 Time : 15-MAR-2007 11:44
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6172	10000	9715	ug/L	-3	10	
Antimony	A	0.3046	0.2936	100.0	100.3	ug/L	0	10	
Barium	A	0.1449	0.0719	100.0	103.0	ug/L	3	10	
Beryllium	A	0.2473	0.2550	100.0	107.1	ug/L	7	10	
Cadmium	A	0.0874	0.0846	100.0	100.6	ug/L	1	10	
Calcium	A	0.0438	0.0210	10000	10030	ug/L	0	10	
Lead	A	0.9125	0.7550	100.0	100.7	ug/L	1	10	
Magnesium	A	0.5969	0.5276	10000	9652	ug/L	-3	10	
Molybdenum	A	0.2198	0.2090	100.0	98.32	ug/L	-2	10	
Potassium	A	1.9813	0.6550	10000	10020	ug/L	0	10	
Silver	A	0.3371	0.3269	100.0	100.9	ug/L	1	10	
Thallium	A	0.8765	0.8509	50.00	49.06	ug/L	-2	10	
Arsenic	E	0.7385	0.5379	100.0	103.4	ug/L	3	10	
Chromium	E	2.9284	2.1494	100.0	102.0	ug/L	2	10	
Cobalt	E	3.1145	3.0378	100.0	103.1	ug/L	3	10	
Copper	E	13.561	4.6719	100.0	102.0	ug/L	2	10	
Manganese	E	1.6848	1.5047	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7600	100.0	104.5	ug/L	5	10	
Sodium	E	1.5332	0.5525	10000	9828	ug/L	-2	10	
Vanadium	E	10.736	1.8117	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9379	100.0	102.1	ug/L	2	10	
Iron	H	0.8077	0.7608	10000	10290	ug/L	3	10	
Selenium	H	0.1163	0.1115	100.0	101.8	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1012026	-16.69
Scandium	A	1291021	1243416	-3.69
Scandium	E	94503	89165	-5.65
Scandium	H	842013	790627	-6.10
Germanium	H	169845	162363	-4.41
Germanium	E	39701	37935	-4.45
Indium	A	1596397	1508684	-5.49
Bismuth	A	1672268	1552302	-7.17
Yttrium	A	1593478	1556823	-2.30
Terbium	A	2400096	2325784	-3.10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280184 File : c14t0184 Time : 15-MAR-2007 12:12
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6300	10000	9917	ug/L	-1	10	
Antimony	A	0.3046	0.2993	100.0	102.2	ug/L	2	10	
Barium	A	0.1449	0.0739	100.0	105.9	ug/L	6	10	
Beryllium	A	0.2473	0.2596	100.0	109.0	ug/L	9	10	
Cadmium	A	0.0874	0.0858	100.0	102.1	ug/L	2	10	
Calcium	A	0.0438	0.0214	10000	10230	ug/L	2	10	
Lead	A	0.9125	0.7665	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5385	10000	9851	ug/L	-1	10	
Molybdenum	A	0.2198	0.2135	100.0	100.4	ug/L	0	10	
Potassium	A	1.9813	0.6704	10000	10260	ug/L	3	10	
Silver	A	0.3371	0.3333	100.0	102.9	ug/L	3	10	
Thallium	A	0.8765	0.8734	50.00	50.35	ug/L	1	10	
Arsenic	E	0.7385	0.5440	100.0	104.5	ug/L	5	10	
Chromium	E	2.9284	2.1581	100.0	102.4	ug/L	2	10	
Cobalt	E	3.1145	3.0549	100.0	103.7	ug/L	4	10	
Copper	E	13.561	4.7319	100.0	103.3	ug/L	3	10	
Manganese	E	1.6848	1.5134	100.0	103.2	ug/L	3	10	
Nickel	E	1.1356	0.7639	100.0	105.0	ug/L	5	10	
Sodium	E	1.5332	0.5518	10000	9815	ug/L	-2	10	
Vanadium	E	10.736	1.8299	100.0	103.3	ug/L	3	10	
Zinc	E	9.1417	0.9466	100.0	103.0	ug/L	3	10	
Iron	H	0.8077	0.7509	10000	10150	ug/L	2	10	
Selenium	H	0.1163	0.1113	100.0	101.6	ug/L	2	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1023936	-15.70
Scandium	A	1291021	1248231	-3.31
Scandium	E	94503	91314	-3.37
Scandium	H	842013	826173	-1.88
Germanium	H	169845	168585	-0.74
Germanium	E	39701	38794	-2.28
Indium	A	1596397	1513694	-5.18
Bismuth	A	1672268	1541437	-7.82
Yttrium	A	1593478	1559249	-2.15
Terbium	A	2400096	2319430	-3.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280204 File : c14t0204 Time : 15-MAR-2007 14:13
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6946	0.6280	10000	9885	ug/L	-1	10	
Antimony	A	0.3046	0.2979	100.0	101.7	ug/L	2	10	
Barium	A	0.1449	0.0735	100.0	105.3	ug/L	5	10	
Beryllium	A	0.2473	0.2590	100.0	108.7	ug/L	9	10	
Cadmium	A	0.0874	0.0862	100.0	102.5	ug/L	3	10	
Calcium	A	0.0438	0.0213	10000	10200	ug/L	2	10	
Lead	A	0.9125	0.7667	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5969	0.5390	10000	9860	ug/L	-1	10	
Molybdenum	A	0.2198	0.2125	100.0	99.92	ug/L	0	10	
Potassium	A	1.9813	0.6694	10000	10250	ug/L	3	10	
Silver	A	0.3371	0.3312	100.0	102.2	ug/L	2	10	
Thallium	A	0.8765	0.8654	50.00	49.89	ug/L	0	10	
Arsenic	E	0.7385	0.5410	100.0	104.0	ug/L	4	10	
Chromium	E	2.9284	2.1428	100.0	101.7	ug/L	2	10	
Cobalt	E	3.1145	3.0259	100.0	102.7	ug/L	3	10	
Copper	E	13.561	4.6603	100.0	101.7	ug/L	2	10	
Manganese	E	1.6848	1.5055	100.0	102.6	ug/L	3	10	
Nickel	E	1.1356	0.7576	100.0	104.2	ug/L	4	10	
Sodium	E	1.5332	0.5508	10000	9797	ug/L	-2	10	
Vanadium	E	10.736	1.8115	100.0	102.2	ug/L	2	10	
Zinc	E	9.1417	0.9411	100.0	102.4	ug/L	2	10	
Iron	H	0.8077	0.7485	10000	10120	ug/L	1	10	
Selenium	H	0.1163	0.1110	100.0	101.4	ug/L	1	10	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1018121	-16.18
Scandium	A	1291021	1235249	-4.32
Scandium	E	94503	92685	-1.92
Scandium	H	842013	820657	-2.54
Germanium	H	169845	167661	-1.29
Germanium	E	39701	39241	-1.16
Indium	A	1596397	1511943	-5.29
Bismuth	A	1672268	1558351	-6.81
Yttrium	A	1593478	1552047	-2.60
Terbium	A	2400096	2320381	-3.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280015 File : c14t0015 Time : 14-MAR-2007 20:37
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005983]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01203]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03659]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06965]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.07287]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.08188]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06344]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02216]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1189514	-2.07
Scandium	A	1291021	1253306	-2.92
Scandium	E	94503	94153	-0.37
Scandium	H	842013	829837	-1.45
Germanium	H	169845	167034	-1.66
Germanium	E	39701	39155	-1.37
Indium	A	1596397	1560436	-2.25
Bismuth	A	1672268	1629474	-2.56
Yttrium	A	1593478	1531263	-3.90
Terbium	A	2400096	2350809	-2.05

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280037 File : c14t0037 Time : 14-MAR-2007 22:37
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002782]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01589]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01398]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.006848]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01630]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1208102	-0.54
Scandium	A	1291021	1312747	1.68
Scandium	E	94503	95286	0.83
Scandium	H	842013	854603	1.50
Germanium	H	169845	174963	3.01
Germanium	E	39701	40481	1.97
Indium	A	1596397	1623141	1.68
Bismuth	A	1672268	1670833	-0.09
Yttrium	A	1593478	1621148	1.74
Terbium	A	2400096	2410236	0.42

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280054 File : c14t0054 Time : 15-MAR-2007 00:08
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002634]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009931]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02400]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06387]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06586]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05653]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02568]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1212723	-0.16
Scandium	A	1291021	1337380	3.59
Scandium	E	94503	95212	0.75
Scandium	H	842013	857751	1.87
Germanium	H	169845	174046	2.47
Germanium	E	39701	40133	1.09
Indium	A	1596397	1635033	2.42
Bismuth	A	1672268	1685122	0.77
Yttrium	A	1593478	1634806	2.59
Terbium	A	2400096	2433334	1.38

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280077 File : c14t0077 Time : 15-MAR-2007 02:14
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001208]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008754]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01137]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1137787	-6.33
Scandium	A	1291021	1299468	0.65
Scandium	E	94503	95058	0.59
Scandium	H	842013	848929	0.82
Germanium	H	169845	176767	4.08
Germanium	E	39701	40145	1.12
Indium	A	1596397	1595563	-0.05
Bismuth	A	1672268	1647187	-1.50
Yttrium	A	1593478	1602169	0.55
Terbium	A	2400096	2374814	-1.05

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280093 File : c14t0093 Time : 15-MAR-2007 03:43
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03094]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03221]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.760]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.184]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01498]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02552]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01965]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03460]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02576]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1152496	-5.12
Scandium	A	1291021	1297585	0.51
Scandium	E	94503	95742	1.31
Scandium	H	842013	842329	0.04
Germanium	H	169845	174171	2.55
Germanium	E	39701	39877	0.44
Indium	A	1596397	1599809	0.21
Bismuth	A	1672268	1643485	-1.72
Yttrium	A	1593478	1594455	0.06
Terbium	A	2400096	2376420	-0.99

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280118 File : c14t0118 Time : 15-MAR-2007 06:02
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02516]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02558]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.904]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	10.00	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01189]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03070]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02294]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[4.743]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05025]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1157498	-4.71
Scandium	A	1291021	1348054	4.42
Scandium	E	94503	101183	7.07
Scandium	H	842013	905377	7.53
Germanium	H	169845	187647	10.48
Germanium	E	39701	42809	7.83
Indium	A	1596397	1670831	4.66
Bismuth	A	1672268	1687124	0.89
Yttrium	A	1593478	1691065	6.12
Terbium	A	2400096	2461195	2.55

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280122 File : c14t0122 Time : 15-MAR-2007 06:26
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01172]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01682]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01729]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01441]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01402]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.883]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07248]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1156020	-4.83
Scandium	A	1291021	1345794	4.24
Scandium	E	94503	98998	4.76
Scandium	H	842013	889917	5.69
Germanium	H	169845	184862	8.84
Germanium	E	39701	41830	5.36
Indium	A	1596397	1654447	3.64
Bismuth	A	1672268	1689667	1.04
Yttrium	A	1593478	1670382	4.83
Terbium	A	2400096	2445466	1.89

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280141 File : c14t0141 Time : 15-MAR-2007 08:15
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003738]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009201]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01977]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04350]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05918]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05203]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03266]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.04102]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1139378	-6.20
Scandium	A	1291021	1356536	5.07
Scandium	E	94503	97309	2.97
Scandium	H	842013	868186	3.11
Germanium	H	169845	180757	6.42
Germanium	E	39701	40999	3.27
Indium	A	1596397	1658497	3.89
Bismuth	A	1672268	1701486	1.75
Yttrium	A	1593478	1676970	5.24
Terbium	A	2400096	2456092	2.33

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280160 File : c14t0160 Time : 15-MAR-2007 10:00
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.004098]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009133]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.979]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02892]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.003059]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01780]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1110714	-8.56
Scandium	A	1291021	1291098	0.01
Scandium	E	94503	95284	0.83
Scandium	H	842013	839154	-0.34
Germanium	H	169845	176320	3.81
Germanium	E	39701	40668	2.44
Indium	A	1596397	1602960	0.41
Bismuth	A	1672268	1655865	-0.98
Yttrium	A	1593478	1609623	1.01
Terbium	A	2400096	2387794	-0.51

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280181 File : c14t0181 Time : 15-MAR-2007 11:56
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001717]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01019]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	16.50	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007582]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02380]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01197]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1307	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01189]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1046592	-13.84
Scandium	A	1291021	1256372	-2.68
Scandium	E	94503	94001	-0.53
Scandium	H	842013	831503	-1.25
Germanium	H	169845	173412	2.10
Germanium	E	39701	39777	0.19
Indium	A	1596397	1566039	-1.90
Bismuth	A	1672268	1642775	-1.76
Yttrium	A	1593478	1576199	-1.08
Terbium	A	2400096	2327683	-3.02

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280186 File : c14t0186 Time : 15-MAR-2007 12:26
Cal : 67106280001 Caldate: 14-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003554]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01432]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	13.00	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04501]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06192]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.09164]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04376]	0.1000	0.001252	ug/L	!ib
Sodium	E	12.44	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1514	0.1000	0.01127	ug/L	ib ***
Iron	H	[4.990]	10.00	4.329	ug/L	!ib
Selenium	H	[0.04549]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1087127	-10.50
Scandium	A	1291021	1304212	1.02
Scandium	E	94503	94571	0.07
Scandium	H	842013	845068	0.36
Germanium	H	169845	175993	3.62
Germanium	E	39701	40404	1.77
Indium	A	1596397	1624096	1.74
Bismuth	A	1672268	1670975	-0.08
Yttrium	A	1593478	1638625	2.83
Terbium	A	2400096	2413131	0.54

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67106280206
Cal : 67106280001

File : c14t0206
Caldate: 14-MAR-2007

IDF : 1.0
Time : 15-MAR-2007 14:27

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03219]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.362]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	15.72	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.002657]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04098]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01210]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1834	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01122]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	1092994	-10.02
Scandium	A	1291021	1281884	-0.71
Scandium	E	94503	97393	3.06
Scandium	H	842013	822072	-2.37
Germanium	H	169845	170602	0.45
Germanium	E	39701	41143	3.63
Indium	A	1596397	1608061	0.73
Bismuth	A	1672268	1673078	0.05
Yttrium	A	1593478	1604128	0.67
Terbium	A	2400096	2377813	-0.93

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280017 File : c14t0017 Time : 14-MAR-2007 20:48
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08928]	0.1000	ug/L	
Barium	A	6.473	0.1000	ug/L	
Beryllium	A	[0.02325]	0.1000	ug/L	
Cadmium	A	2.058	0.1000	ug/L	
Lead	A	0.5482	0.1000	ug/L	
Silver	A	0.2284	0.1000	ug/L	
Thallium	A	[0.03798]	0.05000	ug/L	
Arsenic	E	0.5856	0.1000	ug/L	
Chromium	E	1.467	0.1000	ug/L	
Cobalt	E	0.2519	0.1000	ug/L	
Copper	E	1.630	0.1000	ug/L	
Manganese	E	0.8874	0.1000	ug/L	
Nickel	E	1.984	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.886	0.1000	ug/L	
Selenium	H	0.7528	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99620	ug/L	100
Calcium	A	300000	303200	ug/L	101
Magnesium	A	100000	97270	ug/L	97
Molybdenum	A	2000	2070	ug/L	104
Potassium	A	100000	100400	ug/L	100
Sodium	E	250000	257100	ug/L	103
Iron	H	250000	248000	ug/L	99

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	903535	-25.62
Scandium	A	1291021	1128348	-12.60
Scandium	E	94503	81063	-14.22
Scandium	H	842013	726281	-13.74
Germanium	H	169845	146944	-13.48
Germanium	E	39701	34533	-13.02
Indium	A	1596397	1323556	-17.09
Bismuth	A	1672268	1281708	-23.36
Yttrium	A	1593478	1400300	-12.12
Terbium	A	2400096	2156713	-10.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280018 File : c14t0018 Time : 14-MAR-2007 20:53
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	102.1	ug/L	2	20	
Calcium	A	300000	310700	ug/L	4		
Magnesium	A	100000	98480	ug/L	-2		
Molybdenum	A	2000	2056	ug/L	3		
Potassium	A	100000	101900	ug/L	2		
Silver	A	50.00	45.69	ug/L	-9	20	
Arsenic	E	100.0	102.8	ug/L	3	20	
Chromium	E	200.0	212.9	ug/L	6	20	
Cobalt	E	200.0	197.1	ug/L	-1	20	
Copper	E	200.0	179.2	ug/L	-10	20	
Manganese	E	200.0	209.7	ug/L	5	20	
Nickel	E	200.0	195.9	ug/L	-2	20	
Sodium	E	250000	261900	ug/L	5		
Vanadium	E	200.0	217.8	ug/L	9	20	
Zinc	E	100.0	90.08	ug/L	-10	20	
Iron	H	250000	246700	ug/L	-1		
Selenium	H	100.0	95.61	ug/L	-4	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	733478	-12.89
Scandium	A	1291021	1112893	-13.80
Scandium	E	94503	79123	-16.28
Germanium	H	169845	148935	-12.31
Germanium	E	39701	34497	-13.11
Indium	A	1596397	1319128	-17.37
Yttrium	A	1593478	1409664	-11.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280057 File : c14t0057 Time : 15-MAR-2007 00:24
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07319]	0.1000	ug/L	
Barium	A	6.619	0.1000	ug/L	
Beryllium	A	[0.02474]	0.1000	ug/L	
Cadmium	A	2.046	0.1000	ug/L	
Lead	A	0.5331	0.1000	ug/L	
Silver	A	0.2191	0.1000	ug/L	
Thallium	A	[0.03573]	0.05000	ug/L	
Arsenic	E	0.5527	0.1000	ug/L	
Chromium	E	1.397	0.1000	ug/L	
Cobalt	E	0.2494	0.1000	ug/L	
Copper	E	1.561	0.1000	ug/L	
Manganese	E	0.8441	0.1000	ug/L	
Nickel	E	1.938	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.669	0.1000	ug/L	
Selenium	H	0.5092	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94820	ug/L	95
Calcium	A	300000	294900	ug/L	98
Magnesium	A	100000	92690	ug/L	93
Molybdenum	A	2000	1974	ug/L	99
Potassium	A	100000	96820	ug/L	97
Sodium	E	250000	243400	ug/L	97
Iron	H	250000	243600	ug/L	97

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	934501	-23.07
Scandium	A	1291021	1210565	-6.23
Scandium	E	94503	86554	-8.41
Scandium	H	842013	754296	-10.42
Germanium	H	169845	153646	-9.54
Germanium	E	39701	36814	-7.27
Indium	A	1596397	1406925	-11.87
Bismuth	A	1672268	1348530	-19.36
Yttrium	A	1593478	1521326	-4.53
Terbium	A	2400096	2274590	-5.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280058 File : c14t0058 Time : 15-MAR-2007 00:29
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100000	ug/L	0		
Cadmium	A	100.0	103.0	ug/L	3	20	
Calcium	A	300000	308900	ug/L	3		
Magnesium	A	100000	97290	ug/L	-3		
Molybdenum	A	2000	2077	ug/L	4		
Potassium	A	100000	101400	ug/L	1		
Silver	A	50.00	46.37	ug/L	-7	20	
Arsenic	E	100.0	105.1	ug/L	5	20	
Chromium	E	200.0	214.9	ug/L	7	20	
Cobalt	E	200.0	199.7	ug/L	0	20	
Copper	E	200.0	182.7	ug/L	-9	20	
Manganese	E	200.0	208.9	ug/L	4	20	
Nickel	E	200.0	198.9	ug/L	-1	20	
Sodium	E	250000	261500	ug/L	5		
Vanadium	E	200.0	220.5	ug/L	10	20	
Zinc	E	100.0	91.50	ug/L	-9	20	
Iron	H	250000	250700	ug/L	0		
Selenium	H	100.0	98.55	ug/L	-1	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	734922	-12.72
Scandium	A	1291021	1120935	-13.17
Scandium	E	94503	79411	-15.97
Germanium	H	169845	148950	-12.30
Germanium	E	39701	34327	-13.54
Indium	A	1596397	1319838	-17.32
Yttrium	A	1593478	1404296	-11.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280095 File : c14t0095 Time : 15-MAR-2007 03:54
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08974]	0.1000	ug/L	
Barium	A	7.111	0.1000	ug/L	
Beryllium	A	[0.03864]	0.1000	ug/L	
Cadmium	A	2.194	0.1000	ug/L	
Lead	A	0.5644	0.1000	ug/L	
Silver	A	0.2313	0.1000	ug/L	
Thallium	A	[0.03803]	0.05000	ug/L	
Arsenic	E	0.6118	0.1000	ug/L	
Chromium	E	1.444	0.1000	ug/L	
Cobalt	E	0.2596	0.1000	ug/L	
Copper	E	1.577	0.1000	ug/L	
Manganese	E	0.8925	0.1000	ug/L	
Nickel	E	2.028	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.849	0.1000	ug/L	
Selenium	H	0.7936	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98500	ug/L	99
Calcium	A	300000	304600	ug/L	102
Magnesium	A	100000	95530	ug/L	96
Molybdenum	A	2000	2044	ug/L	102
Potassium	A	100000	100500	ug/L	101
Sodium	E	250000	247100	ug/L	99
Iron	H	250000	246800	ug/L	99

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	893493	-26.44
Scandium	A	1291021	1185327	-8.19
Scandium	E	94503	85016	-10.04
Scandium	H	842013	760159	-9.72
Germanium	H	169845	154290	-9.16
Germanium	E	39701	36402	-8.31
Indium	A	1596397	1377710	-13.70
Bismuth	A	1672268	1312855	-21.49
Yttrium	A	1593478	1479699	-7.14
Terbium	A	2400096	2227161	-7.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280096 File : c14t0096 Time : 15-MAR-2007 03:59
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98180	ug/L	-2		
Cadmium	A	100.0	101.9	ug/L	2	20	
Calcium	A	300000	307700	ug/L	3		
Magnesium	A	100000	95320	ug/L	-5		
Molybdenum	A	2000	2041	ug/L	2		
Potassium	A	100000	99940	ug/L	0		
Silver	A	50.00	45.50	ug/L	-9	20	
Arsenic	E	100.0	102.1	ug/L	2	20	
Chromium	E	200.0	210.0	ug/L	5	20	
Cobalt	E	200.0	194.5	ug/L	-3	20	
Copper	E	200.0	178.6	ug/L	-11	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	194.9	ug/L	-3	20	
Sodium	E	250000	253000	ug/L	1		
Vanadium	E	200.0	215.3	ug/L	8	20	
Zinc	E	100.0	88.46	ug/L	-12	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	96.73	ug/L	-3	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	769175	-8.65
Scandium	A	1291021	1166035	-9.68
Scandium	E	94503	82627	-12.57
Germanium	H	169845	156968	-7.58
Germanium	E	39701	35704	-10.07
Indium	A	1596397	1365202	-14.48
Yttrium	A	1593478	1475085	-7.43

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280163 File : c14t0163 Time : 15-MAR-2007 10:16
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06682]	0.1000	ug/L	
Barium	A	2.520	0.1000	ug/L	
Beryllium	A	[0.02401]	0.1000	ug/L	
Cadmium	A	2.075	0.1000	ug/L	
Lead	A	0.4886	0.1000	ug/L	
Silver	A	0.2077	0.1000	ug/L	
Thallium	A	[0.03882]	0.05000	ug/L	
Arsenic	E	0.4938	0.1000	ug/L	
Chromium	E	1.386	0.1000	ug/L	
Cobalt	E	0.2350	0.1000	ug/L	
Copper	E	1.200	0.1000	ug/L	
Manganese	E	0.7264	0.1000	ug/L	
Nickel	E	1.450	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.141	0.1000	ug/L	
Selenium	H	0.8692	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93440	ug/L	93
Calcium	A	300000	291200	ug/L	97
Magnesium	A	100000	90750	ug/L	91
Molybdenum	A	2000	1954	ug/L	98
Potassium	A	100000	96110	ug/L	96
Sodium	E	250000	236300	ug/L	95
Iron	H	250000	235800	ug/L	94

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	857869	-29.38
Scandium	A	1291021	1155607	-10.49
Scandium	E	94503	83014	-12.16
Scandium	H	842013	747045	-11.28
Germanium	H	169845	153377	-9.70
Germanium	E	39701	35997	-9.33
Indium	A	1596397	1357176	-14.99
Bismuth	A	1672268	1295416	-22.54
Yttrium	A	1593478	1464074	-8.12
Terbium	A	2400096	2196164	-8.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280164 File : c14t0164 Time : 15-MAR-2007 10:22
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	105.6	ug/L	6	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	97150	ug/L	-3		
Molybdenum	A	2000	2114	ug/L	6		
Potassium	A	100000	103400	ug/L	3		
Silver	A	50.00	47.23	ug/L	-6	20	
Arsenic	E	100.0	103.7	ug/L	4	20	
Chromium	E	200.0	208.4	ug/L	4	20	
Cobalt	E	200.0	194.4	ug/L	-3	20	
Copper	E	200.0	178.6	ug/L	-11	20	
Manganese	E	200.0	204.5	ug/L	2	20	
Nickel	E	200.0	193.2	ug/L	-3	20	
Sodium	E	250000	247500	ug/L	-1		
Vanadium	E	200.0	214.7	ug/L	7	20	
Zinc	E	100.0	88.97	ug/L	-11	20	
Iron	H	250000	247000	ug/L	-1		
Selenium	H	100.0	96.05	ug/L	-4	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	734702	-12.74
Scandium	A	1291021	1098817	-14.89
Scandium	E	94503	80659	-14.65
Germanium	H	169845	150607	-11.33
Germanium	E	39701	34803	-12.34
Indium	A	1596397	1308970	-18.00
Yttrium	A	1593478	1395914	-12.40

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280209 File : c14t0209 Time : 15-MAR-2007 15:07
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06498]	0.1000	ug/L	
Barium	A	2.864	0.1000	ug/L	
Beryllium	A	[0.03440]	0.1000	ug/L	
Cadmium	A	2.092	0.1000	ug/L	
Lead	A	0.4873	0.1000	ug/L	
Silver	A	0.2175	0.1000	ug/L	
Thallium	A	[0.03533]	0.05000	ug/L	
Arsenic	E	0.5701	0.1000	ug/L	
Chromium	E	1.386	0.1000	ug/L	
Cobalt	E	0.2471	0.1000	ug/L	
Copper	E	1.213	0.1000	ug/L	
Manganese	E	0.7479	0.1000	ug/L	
Nickel	E	1.393	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.354	0.1000	ug/L	
Selenium	H	0.8657	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92990	ug/L	93
Calcium	A	300000	293100	ug/L	98
Magnesium	A	100000	89840	ug/L	90
Molybdenum	A	2000	1973	ug/L	99
Potassium	A	100000	96130	ug/L	96
Sodium	E	250000	233300	ug/L	93
Iron	H	250000	237800	ug/L	95

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1214699	855614	-29.56
Scandium	A	1291021	1184416	-8.26
Scandium	E	94503	87657	-7.24
Scandium	H	842013	750003	-10.93
Germanium	H	169845	152373	-10.29
Germanium	E	39701	37993	-4.30
Indium	A	1596397	1395115	-12.61
Bismuth	A	1672268	1336414	-20.08
Yttrium	A	1593478	1495794	-6.13
Terbium	A	2400096	2246675	-6.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67106280210 File : c14t0210 Time : 15-MAR-2007 15:13
Cal : 67106280001 Caldate: 14-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96300	ug/L	-4		
Cadmium	A	100.0	102.3	ug/L	2	20	
Calcium	A	300000	305900	ug/L	2		
Magnesium	A	100000	93020	ug/L	-7		
Molybdenum	A	2000	2034	ug/L	2		
Potassium	A	100000	100100	ug/L	0		
Silver	A	50.00	45.72	ug/L	-9	20	
Arsenic	E	100.0	102.7	ug/L	3	20	
Chromium	E	200.0	205.6	ug/L	3	20	
Cobalt	E	200.0	190.4	ug/L	-5	20	
Copper	E	200.0	174.7	ug/L	-13	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	190.0	ug/L	-5	20	
Sodium	E	250000	246300	ug/L	-1		
Vanadium	E	200.0	213.5	ug/L	7	20	
Zinc	E	100.0	87.89	ug/L	-12	20	
Iron	H	250000	246300	ug/L	-1		
Selenium	H	100.0	95.25	ug/L	-5	20	

ISTD (ICALBLK c14t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	842013	763049	-9.38
Scandium	A	1291021	1186520	-8.09
Scandium	E	94503	86692	-8.27
Germanium	H	169845	156372	-7.93
Germanium	E	39701	37529	-5.47
Indium	A	1596397	1408781	-11.75
Yttrium	A	1593478	1521792	-4.50

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1214699	1291021	94503	842013	169845	39701	1596397	1672268	1593478	2400096
		LOWER LIMIT	364410	387306	28351	252604	50954	11910	478919	501680	478043	720029
		UPPER LIMIT	1457639	1549225	113404	1010415	203814	47641	1915676	2006722	1912174	2880115
015	ICB		1189514	1253306	94153	829837	167034	39155	1560436	1629474	1531263	2350809
017	ICSA		903535	1128348	81063	726281	146944	34533	1323556	1281708	1400300	2156713
018	ICSAB		887873	1112893	79123	733478	148935	34497	1319128	1293005	1409664	2179714
023	BLANK	QC378923	1190353	1315644	98369	869571	178626	41675	1634684	1718820	1632827	2439543
024	BS	QC378924	1156729	1278024	94917	840691	169327	39680	1577712	1658975	1571448	2375496
025	BSD	QC378925	1166562	1301222	96167	853170	171648	40186	1595028	1672366	1608458	2408157
027	MSS	193234-004	1125200	1269472	91717	822360	160860	37954	1514969	1618615	1614433	2324964
028	SER	QC378928	1163262	1289801	95159	858196	172376	39683	1566747	1653453	1597829	2379758
029	MS	QC378926	1157318	1320254	95340	846820	166680	39142	1576166	1653374	1695063	2410207
030	MSD	QC378927	1179648	1365259	99277	882826	174704	40713	1602300	1661612	1735443	2410149
031	PDS	QC378929	1083443	1268707	93121	853835	168335	38265	1470491	1537445	1615860	2304408
035	CCV		1128538	1277067	92584	835430	168980	38672	1493244	1548687	1549122	2318739
037	CCB		1208102	1312747	95286	854603	174963	40481	1623141	1670833	1621148	2410236
040	SAMPLE	193234-001	1225880	1384299	101588	932176	182424	41225	1627675	1699197	1710582	2454415
041	SAMPLE	193234-002	1219021	1463001	106618	940619	181268	42331	1646484	1689288	1819585	2476901
042	SAMPLE	193234-003	1226596	1448083	105834	940326	180782	41890	1617867	1680490	1796293	2457048
043	SAMPLE	193234-005	1197967	1367922	99890	891413	176348	40870	1611556	1679801	1745879	2434501
044	SAMPLE	193234-008	1196413	1440393	106539	958963	182813	41894	1605701	1660871	1785304	2435422
045	SAMPLE	193234-009	1191551	1366092	99854	881512	175038	40996	1605846	1668750	1721565	2432141
046	SAMPLE	193234-010	1238220	1466877	106834	948708	181590	42215	1649982	1705152	1810890	2489201
047	SAMPLE	193234-011	1236562	1418660	101823	908967	180322	41992	1664349	1718921	1738285	2479234
048	SAMPLE	193234-012	1211046	1446579	106754	948415	181047	42279	1632586	1670899	1780110	2452598
052	CCV		1139389	1285567	94511	843863	171473	39450	1516717	1557067	1575062	2328556
054	CCB		1212723	1337380	95212	857751	174046	40133	1635033	1685122	1634806	2433334
057	ICSA		934501	1210565	86554	754296	153646	36814	1406925	1348530	1521326	2274590
058	ICSAB		853036	1120935	79411	734922	148950	34327	1319838	1269784	1404296	2146970
063	BLANK	QC378903	1021908	1166824	83653	769879	195501	41086	1444718	1535220	1469195	2238044
064	BS	QC378904	990222	1149880	82210	778323	157497	34183	1381306	1443028	1420622	2179492
065	BSD	QC378905	995782	1142177	81126	751219	154459	33698	1375563	1446438	1413210	2180594
067	MSS	193230-001	1139248	1277408	92390	841801	173598	39552	1571201	1653945	1575748	2337541
068	SER	QC378908	1137367	1281010	94204	841727	176622	40059	1579244	1628002	1589872	2331094
069	MS	QC378906	1108964	1270245	91923	838340	171575	39189	1552997	1602364	1572373	2317772
070	MSD	QC378907	1125565	1271691	93287	838120	172817	39519	1567331	1604101	1572043	2341696
071	PDS	QC378909	1086450	1267159	91717	833233	168801	38313	1506106	1518228	1552858	2307447
075	CCV		1083621	1266717	92028	837284	169695	38703	1504795	1543975	1568498	2299347
077	CCB		1137787	1299468	95058	848929	176767	40145	1595563	1647187	1602169	2374814
080	SAMPLE	193230-002	1154224	1299282	94227	849331	179226	40474	1599767	1671284	1598030	2362340
081	SAMPLE	193230-003	1151285	1286508	94547	850355	177597	40731	1600531	1671570	1590130	2357091
082	SAMPLE	193230-004	1133722	1273761	92546	842622	173144	39235	1573461	1634365	1585761	2346247
083	SAMPLE	193261-001	1127150	1289319	93692	839588	172727	39703	1574395	1635583	1579254	2338461
084	SAMPLE	193261-002	1131329	1275937	93449	847341	174556	39574	1576259	1632021	1576052	2352692
085	SAMPLE	193261-003	1136118	1288956	94445	843537	176097	40325	1592844	1649704	1588951	2359428
086	SAMPLE	193261-004	1123412	1250469	91492	837650	170698	38826	1551853	1614336	1547577	2301270
090	CCV		1097106	1260258	91318	826305	168483	38781	1501227	1528868	1554437	2294105
093	CCB		1152496	1297585	95742	842329	174171	39877	1599809	1643485	1594455	2376420
095	ICSA		893493	1185327	85016	760159	154290	36402	1377710	1312855	1479699	2227161
096	ICSAB		852118	1166035	82627	769175	156968	35704	1365202	1298016	1475085	2191093
101	BLANK	QC378700	982584	1140874	81934	765175	215704 *	43170	1403231	1468155	1436840	2186452

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
102	BS	QC378701	961362	1129770	81141	764485	158939	33696	1362387	1417973	1412395	2151900
105	BSD	QC378702	977706	1156580	81684	771061	161923	34137	1382358	1418474	1448447	2167673
107	MSS	193108-007	1134370	1346515	97441	867707	182164	40704	1564417	1546643	1640473	2387766
108	MSS	193108-007	1191069	1377518	99886	883687	186964	42344	1662965	1644642	1689438	2448596
109	MS	QC378703	1131852	1349632	95897	871488	180590	40012	1574326	1547473	1650257	2399215
110	MSD	QC378704	1119532	1334086	96942	879097	181583	40382	1555309	1528838	1628993	2363598
111	PDS	QC378706	1018511	1250369	90174	829761	167226	37577	1456898	1460669	1550512	2274536
115	CCV		1073409	1296768	94306	850061	175737	39521	1560309	1554232	1611598	2367432
118	CCB		1157498	1348054	101183	905377	187647	42809	1670831	1687124	1691065	2461195
119	BLANK	QC378700	1035306	1198778	86729	811723	226010 *	44220	1463394	1521174	1506127	2264179
120	CCV		1087655	1303993	93801	855473	176148	39657	1535095	1551876	1603829	2351823
122	CCB		1156020	1345794	98998	889917	184862	41830	1654447	1689667	1670382	2445466
124	BLANK	QC378700	1109687	1313175	95398	852171	181928	40305	1618993	1667262	1628025	2409134
125	MSS	193108-023	1132233	1313521	95775	869215	181864	40344	1586335	1613803	1619320	2385569
126	MS	QC378711	1114691	1325938	94793	860691	178662	40377	1574742	1612346	1623027	2392317
127	MSD	QC378712	1152051	1354493	97149	886452	182736	40943	1627271	1651955	1671036	2467319
129	BS	QC378701	1018333	1197243	84382	739554	159817	35520	1442828	1481098	1494832	2256052
130	BSD	QC378702	988611	1188104	83517	783387	165360	35141	1421253	1461247	1482120	2213106
132	MSS	193108-007	1150656	1349168	96288	864590	181311	40116	1580528	1568783	1644997	2418555
133	SER	QC378705	1195119	1402317	101825	883261	187589	42898	1678660	1678601	1709589	2468339
134	MS	QC378703	1120894	1338582	96383	872531	180717	40582	1564121	1557940	1632609	2381976
135	MSD	QC378704	1105402	1326020	96821	881219	181740	40339	1552887	1514432	1597019	2349903
139	CCV		1088042	1314575	95452	867126	177781	40362	1563988	1571144	1622543	2377557
141	CCB		1139378	1356536	97309	868186	180757	40999	1658497	1701486	1676970	2456092
143	PDS	QC378706	1019261	1238339	87417	801153	160568	36710	1450144	1461319	1544448	2266377
145	SER	QC378705	1141932	1317600	95995	866408	182267	41186	1620229	1634263	1631925	2391609
146	PDS	QC378706	1052228	1268793	89605	821664	166086	37842	1501178	1511695	1563999	2302057
148	BLANK	QC378903	1017164	1168163	83686	781317	202994	40280	1431016	1519193	1471186	2222952
149	BLANK	QC378903	1044022	1204393	85697	795976	192515	38642	1464270	1549231	1497613	2259525
150	SAMPLE	193261-003	1090937	1248235	91457	832185	171893	38974	1550117	1600132	1547623	2301266
151	SAMPLE	193108-008	1041778	1250932	90811	838120	165839	38240	1482211	1474586	1519582	2272472
152	SAMPLE	193108-009	1124023	1305662	93070	840532	174103	39673	1554075	1592983	1595779	2350251
153	SAMPLE	193108-010	1110250	1282644	93779	841847	175412	39177	1519039	1502906	1552994	2289772
154	SAMPLE	193108-011	1058492	1256121	91597	832864	166681	38128	1478103	1471478	1535124	2245338
158	CCV		1087329	1305548	93918	838348	169422	39375	1577099	1579551	1627297	2401895
160	CCB		1110714	1291098	95284	839154	176320	40668	1602960	1655865	1609623	2387794
162	SAMPLE	193108-012	1084882	1286703	91964	832890	173176	39295	1538193	1557839	1571014	2335083
163	ICSA		857869	1155607	83014	747045	153377	35997	1357176	1295416	1464074	2196164
164	ICSAB		797425	1098817	80659	734702	150607	34803	1308970	1259975	1395914	2096220
169	SAMPLE	193108-013	1005703	1218729	89440	804052	168482	38375	1486821	1533339	1521675	2271126
170	SAMPLE	193108-014	1013673	1221595	89927	805990	168550	38554	1488547	1523395	1513379	2257611
171	SAMPLE	193108-022	1018023	1239429	91386	830287	171935	39088	1542677	1568728	1551552	2321916
172	SAMPLE	193108-024	1002523	1218318	89793	813038	170010	38228	1478392	1497779	1504770	2238545
173	SAMPLE	193108-025	1020570	1227727	89920	824273	171934	38492	1471361	1510502	1510538	2251850
174	SAMPLE	193108-026	1021743	1228830	90920	810932	169238	38622	1482125	1524066	1516815	2260176
175	SAMPLE	193108-027	1028821	1230190	91398	841430	176130	39032	1482891	1539031	1516523	2268489
179	CCV		1012026	1243416	89165	790627	162363	37935	1508684	1552302	1556823	2325784
181	CCB		1046592	1256372	94001	831503	173412	39777	1566039	1642775	1576199	2327683
184	CCV		1023936	1248231	91314	826173	168585	38794	1513694	1541437	1559249	2319430
187	CCB		1080732	1282658	94839	841535	175968	40621	1599052	1645514	1610676	2393843
189	SAMPLE	193108-022	1051290	1271655	92709	828731	171882	39883	1573301	1602085	1586258	2369828
195	SAMPLE	193108-008	1065537	1256399	93331	833331	170142	39334	1569539	1601807	1575503	2327713

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67106280

Date : 03/14/07 Reference: c14t0004
Sequence : MET06 c14t0 Analyzed : 03/14/07 19:39

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
196	SAMPLE	193108-010	1091135	1285246	96440	837244	173081	40951	1584628	1603640	1589284	2352688
197	SAMPLE	193108-011	1054497	1239742	94547	828022	171201	39957	1562175	1589800	1558321	2329913
198	SAMPLE	193108-012	1057820	1245816	94127	830687	174182	40410	1554405	1601910	1561016	2319476
199	SAMPLE	193108-008	1059146	1246468	95530	834321	171278	40090	1568765	1600694	1551424	2334801
200	SAMPLE	193108-011	1057270	1248063	97297	839190	174923	40959	1572572	1621669	1560021	2351579
204	CCV		1018121	1235249	92685	820657	167661	39241	1511943	1558351	1552047	2320381
206	CCB		1092994	1281884	97393	822072	170602	41143	1608061	1673078	1604128	2377813
209	ICSA		855614	1184416	87657	750003	152373	37993	1395115	1336414	1495794	2246675
210	ICSAB		825742	1186520	86692	763049	156372	37529	1408781	1337567	1521792	2265292

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c14t0001	TUN				14-MAR-2007 19:20	1.0	1.0				1	
002	c14t0002	X	RINSE			14-MAR-2007 19:28	1.0					2	
003	c14t0003	X	RINSE			14-MAR-2007 19:33	1.0					2	
004	c14t0004	ICALBLK	CALBLANK			14-MAR-2007 19:39	1.0	1.0				2	
005	c14t0005	ICAL				14-MAR-2007 19:44	1.0	1.0				3	
006	c14t0006	ICAL				14-MAR-2007 19:49	1.0	1.0				4	
007	c14t0007	ICAL				14-MAR-2007 19:54	1.0	1.0				5	
008	c14t0008	ICAL				14-MAR-2007 20:00	1.0	1.0				6	
009	c14t0009	ICAL				14-MAR-2007 20:05	1.0	1.0				7	
010	c14t0010	ICAL				14-MAR-2007 20:10	1.0	1.0				8	
011	c14t0011	X	RINSE			14-MAR-2007 20:16	1.0					2	
012	c14t0012	ICV				14-MAR-2007 20:21	1.0	1.0			1	9	
013	c14t0013	X	RINSE			14-MAR-2007 20:26	1.0					2	
014	c14t0014	X				14-MAR-2007 20:32	1.0					2	
015	c14t0015	ICB				14-MAR-2007 20:37	1.0	1.0			1	2	
016	c14t0016	X				14-MAR-2007 20:42	1.0					2	731
017	c14t0017	ICSA				14-MAR-2007 20:48	1.0	1.0			1	10 2	7:CA=303200
018	c14t0018	ICSAB				14-MAR-2007 20:53	1.0	1.0			1	11 2	10:CA=310700
019	c14t0019	X	RINSE			14-MAR-2007 20:59	1.0					2	
020	c14t0020	X	RINSE			14-MAR-2007 21:04	1.0					2	
021	c14t0021	X	RINSE			14-MAR-2007 21:09	1.0					2	
022	c14t0022	X	RINSE			14-MAR-2007 21:15	1.0					2	
023	c14t0023	BLANK	QC378923	123041	Soil	14-MAR-2007 21:20	5.0	50.0	1		1	2	
024	c14t0024	BS	QC378924	123041	Soil	14-MAR-2007 21:25	50.0	50.0		1	1	2	
025	c14t0025	BSD	QC378925	123041	Soil	14-MAR-2007 21:31	50.0	50.0		2	1	2	
026	c14t0026	X	RINSE			14-MAR-2007 21:37	1.0					2	
027	c14t0027	MSS	193234-004	123041	Soil	14-MAR-2007 21:42	50.0	49.50			1	2	
028	c14t0028	SER	QC378928	123041	Soil	14-MAR-2007 21:47	250.0	49.50		4	1	2	
029	c14t0029	MS	QC378926	123041	Soil	14-MAR-2007 21:53	50.0	48.08		1	1	2	
030	c14t0030	MSD	QC378927	123041	Soil	14-MAR-2007 21:58	50.0	44.64			1	2	
031	c14t0031	PDS	QC378929	123041	Soil	14-MAR-2007 22:04	50.0	49.50			1	12	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGA Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
032	c14t0032	X	RINSE			14-MAR-2007 22:10	1.0			2	
033	c14t0033	X	RINSE			14-MAR-2007 22:16	1.0			2	
034	c14t0034	X	RINSE			14-MAR-2007 22:21	1.0			2	
035	c14t0035	CCV				14-MAR-2007 22:26	1.0	1.0	1	13	
036	c14t0036	X	RINSE			14-MAR-2007 22:32	1.0			2	
037	c14t0037	CCB				14-MAR-2007 22:37	1.0	1.0	1	2	
038	c14t0038	X				14-MAR-2007 22:43	1.0			2	
039	c14t0039	X				14-MAR-2007 22:48	1.0			2	
040	c14t0040	SAMPLE	193234-001	123041	Soil	14-MAR-2007 22:53	50.0	50.51	1	2	
041	c14t0041	SAMPLE	193234-002	123041	Soil	14-MAR-2007 22:58	50.0	52.08	1	2	
042	c14t0042	SAMPLE	193234-003	123041	Soil	14-MAR-2007 23:04	50.0	51.02	1	2	1:MN=297.200
043	c14t0043	SAMPLE	193234-005	123041	Soil	14-MAR-2007 23:09	50.0	49.50	1	2	
044	c14t0044	SAMPLE	193234-008	123041	Soil	14-MAR-2007 23:14	50.0	48.54	1	2	
045	c14t0045	SAMPLE	193234-009	123041	Soil	14-MAR-2007 23:20	50.0	52.63	1	2	1:MN=314.800
046	c14t0046	SAMPLE	193234-010	123041	Soil	14-MAR-2007 23:25	50.0	50.51	1	2	1:MN=266.600
047	c14t0047	SAMPLE	193234-011	123041	Soil	14-MAR-2007 23:30	50.0	44.25	1	2	
048	c14t0048	SAMPLE	193234-012	123041	Soil	14-MAR-2007 23:36	50.0	49.50	1	2	
049	c14t0049	X	RINSE			14-MAR-2007 23:41	1.0			2	
050	c14t0050	X	RINSE			14-MAR-2007 23:46	1.0			2	
051	c14t0051	X	RINSE			14-MAR-2007 23:52	1.0			2	
052	c14t0052	CCV				14-MAR-2007 23:57	1.0	1.0	1	13	
053	c14t0053	X	RINSE			15-MAR-2007 00:02	1.0			2	
054	c14t0054	CCB				15-MAR-2007 00:08	1.0	1.0	1	2	
055	c14t0055	X				15-MAR-2007 00:13	1.0			2	
056	c14t0056	X				15-MAR-2007 00:19	1.0			2	
057	c14t0057	ICSA				15-MAR-2007 00:24	1.0	1.0	1	10 2	7:CA=294900
058	c14t0058	ICSAB				15-MAR-2007 00:29	1.0	1.0	1	11 2	10:CA=308900
059	c14t0059	X	RINSE			15-MAR-2007 00:35	1.0			2	
060	c14t0060	X	RINSE			15-MAR-2007 00:40	1.0			2	
061	c14t0061	X	RINSE			15-MAR-2007 00:46	1.0			2	
062	c14t0062	X	RINSE			15-MAR-2007 00:51	1.0			2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCH Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c14t0063	BLANK	QC378903	123038	Filtra	15-MAR-2007 00:56	1.0	1.0	1		1	2	
064	c14t0064	BS	QC378904	123038	Filtra	15-MAR-2007 01:02	1.0	1.0			1	2	
065	c14t0065	BSD	QC378905	123038	Filtra	15-MAR-2007 01:08	1.0	1.0			1	2	
066	c14t0066	X	RINSE			15-MAR-2007 01:15	1.0					2	
067	c14t0067	MSS	193230-001	123038	Filtra	15-MAR-2007 01:20	10.0	1.0			1	2	
068	c14t0068	SER	QC378908	123038	Filtra	15-MAR-2007 01:26	50.0	1.0	1		1	2	
069	c14t0069	MS	QC378906	123038	Filtra	15-MAR-2007 01:31	10.0	1.0			1	2	
070	c14t0070	MSD	QC378907	123038	Filtra	15-MAR-2007 01:36	10.0	1.0			1	2	
071	c14t0071	PDS	QC378909	123038	Filtra	15-MAR-2007 01:42	10.0	1.0			1	12	
072	c14t0072	X	RINSE			15-MAR-2007 01:47	1.0					2	
073	c14t0073	X	RINSE			15-MAR-2007 01:52	1.0					2	
074	c14t0074	X	RINSE			15-MAR-2007 01:58	1.0					2	
075	c14t0075	CCV				15-MAR-2007 02:03	1.0	1.0			1	13	
076	c14t0076	X	RINSE			15-MAR-2007 02:09	1.0					2	
077	c14t0077	CCB				15-MAR-2007 02:14	1.0	1.0			1	2	
078	c14t0078	X				15-MAR-2007 02:19	1.0					2	
079	c14t0079	X				15-MAR-2007 02:25	1.0					2	
080	c14t0080	SAMPLE	193230-002	123038	Filtra	15-MAR-2007 02:30	10.0	1.0			1	2	
081	c14t0081	SAMPLE	193230-003	123038	Filtra	15-MAR-2007 02:36	10.0	1.0			1	2	
082	c14t0082	SAMPLE	193230-004	123038	Filtra	15-MAR-2007 02:41	10.0	1.0			1	2	
083	c14t0083	SAMPLE	193261-001	123038	Filtra	15-MAR-2007 02:46	10.0	1.0			1	2	
084	c14t0084	SAMPLE	193261-002	123038	Filtra	15-MAR-2007 02:52	10.0	1.0			1	2	
085	c14t0085	SAMPLE	193261-003	123038	Filtra	15-MAR-2007 02:57	10.0	1.0	1		1	2	
086	c14t0086	SAMPLE	193261-004	123038	Filtra	15-MAR-2007 03:02	10.0	1.0			1	2	
087	c14t0087	X	RINSE			15-MAR-2007 03:08	1.0					2	
088	c14t0088	X	RINSE			15-MAR-2007 03:13	1.0					2	
089	c14t0089	X	RINSE			15-MAR-2007 03:19	1.0					2	
090	c14t0090	CCV				15-MAR-2007 03:24	1.0	1.0			1	13	
091	c14t0091	X	RINSE			15-MAR-2007 03:32	1.0					2	
092	c14t0092	X				15-MAR-2007 03:37	1.0					2	
093	c14t0093	CCB				15-MAR-2007 03:43	1.0	1.0			1	2	

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCH Date: 3/18/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c14t0094	X				15-MAR-2007 03:48	1.0					2	
095	c14t0095	ICSA				15-MAR-2007 03:54	1.0	1.0			1	10 2	7:CA=304600
096	c14t0096	ICSAB				15-MAR-2007 03:59	1.0	1.0			1	11 2	10:CA=307700
097	c14t0097	X	RINSE			15-MAR-2007 04:05	1.0					2	
098	c14t0098	X	RINSE			15-MAR-2007 04:10	1.0					2	
099	c14t0099	X	RINSE			15-MAR-2007 04:15	1.0					2	
100	c14t0100	X	RINSE			15-MAR-2007 04:21	1.0					2	
101	c14t0101	BLANK	QC378700	122987	Filtra	15-MAR-2007 04:26	1.0	1.0			1	2	
102	c14t0102	BS	QC378701	122987	Filtra	15-MAR-2007 04:32	1.0	1.0			1	2	
103	c14t0103	TUN				15-MAR-2007 04:37	1.0	1.0				1	
104	c14t0104	X	RINSE			15-MAR-2007 04:45	1.0					2	
105	c14t0105	BSD	QC378702	122987	Filtra	15-MAR-2007 04:50	1.0	1.0			1	2	
106	c14t0106	X	RINSE			15-MAR-2007 04:57	1.0					2	
107	c14t0107	MSS	193108-007	122987	Filtra	15-MAR-2007 05:03	10.0	1.0	2		1	2	2:NA=24070.0
108	c14t0108	MSS	193108-007	122987	Filtra	15-MAR-2007 05:08	50.0	1.0	1		1	2	
109	c14t0109	MS	QC378703	122987	Filtra	15-MAR-2007 05:13	10.0	1.0	1		1	2	2:NA=24940.0
110	c14t0110	MSD	QC378704	122987	Filtra	15-MAR-2007 05:19	10.0	1.0	1		1	2	2:NA=25790.0
111	c14t0111	PDS	QC378706	122987	Filtra	15-MAR-2007 05:24	10.0	1.0	2		1	12	3:NA=33760.0
112	c14t0112	X	RINSE			15-MAR-2007 05:30	1.0					2	
113	c14t0113	X	RINSE			15-MAR-2007 05:35	1.0					2	
114	c14t0114	X	RINSE			15-MAR-2007 05:41	1.0					2	
115	c14t0115	CCV				15-MAR-2007 05:46	1.0	1.0			1	13	
116	c14t0116	X	RINSE			15-MAR-2007 05:51	1.0					2	
117	c14t0117	X				15-MAR-2007 05:57	1.0		2		1	2	
118	c14t0118	CCB				15-MAR-2007 06:02	1.0	1.0	1		1	2	
119	c14t0119	BLANK	QC378700	122987	Filtra	15-MAR-2007 06:08	1.0	1.0			1	2	
120	c14t0120	CCV				15-MAR-2007 06:15	1.0	1.0			1	13 2	
121	c14t0121	X	RINSE			15-MAR-2007 06:20	1.0					2	
122	c14t0122	CCB				15-MAR-2007 06:26	1.0	1.0			1	2	
123	c14t0123	X				15-MAR-2007 06:31	1.0					2	
124	c14t0124	BLANK	QC378700	122987	Filtra	15-MAR-2007 06:38	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RCA Date: 3/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c14t0125	MSS	193108-023	122987	Filtra	15-MAR-2007 06:44	10.0	1.0			1	2	
126	c14t0126	MS	QC378711	122987	Filtra	15-MAR-2007 06:49	10.0	1.0			1	2	
127	c14t0127	MSD	QC378712	122987	Filtra	15-MAR-2007 06:54	10.0	1.0			1	2	
128	c14t0128	X	RINSE			15-MAR-2007 07:00	1.0					2	
129	c14t0129	BS	QC378701	122987	Filtra	15-MAR-2007 07:05	1.0	1.0			1	2	
130	c14t0130	BSD	QC378702	122987	Filtra	15-MAR-2007 07:12	1.0	1.0			1	2	
131	c14t0131	X	RINSE			15-MAR-2007 07:19	1.0					2	
132	c14t0132	MSS	193108-007	122987	Filtra	15-MAR-2007 07:25	10.0	1.0	2		1	2	2:NA=24110.0
133	c14t0133	SER	QC378705	122987	Filtra	15-MAR-2007 07:30	50.0	1.0		1	1	2	
134	c14t0134	MS	QC378703	122987	Filtra	15-MAR-2007 07:36	10.0	1.0			1	2	2:NA=24250.0
135	c14t0135	MSD	QC378704	122987	Filtra	15-MAR-2007 07:42	10.0	1.0			1	2	2:NA=25860.0
136	c14t0136	X	RINSE			15-MAR-2007 07:47	1.0					2	
137	c14t0137	X	RINSE			15-MAR-2007 07:52	1.0					2	
138	c14t0138	X	RINSE			15-MAR-2007 07:58	1.0					2	
139	c14t0139	CCV				15-MAR-2007 08:03	1.0	1.0			1	13 2	
140	c14t0140	X	RINSE			15-MAR-2007 08:09	1.0					2	
141	c14t0141	CCB				15-MAR-2007 08:15	1.0	1.0			1	2	
142	c14t0142	X				15-MAR-2007 08:20	1.0					2	
143	c14t0143	PDS	QC378706	122987	Filtra	15-MAR-2007 08:26	10.0	1.0	1		1	12 14 2	3:NA=34070.0
144	c14t0144	X	RINSE			15-MAR-2007 08:32	1.0					2	
145	c14t0145	SER	QC378705	122987	Filtra	15-MAR-2007 08:38	250.0	1.0	1		1	2	
146	c14t0146	PDS	QC378706	122987	Filtra	15-MAR-2007 08:43	50.0	1.0			1	12 14 2	
147	c14t0147	X	RINSE			15-MAR-2007 08:48	1.0					2	
148	c14t0148	BLANK	QC378903	123038	Filtra	15-MAR-2007 08:54	1.0	1.0			1	2	
149	c14t0149	BLANK	QC378903	123038	Filtra	15-MAR-2007 08:59	1.0	1.0			1	2	
150	c14t0150	SAMPLE	193261-003	123038	Filtra	15-MAR-2007 09:05	10.0	1.0			1	2	
151	c14t0151	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 09:10	10.0	1.0	2		1	2	2:NA=39600.0
152	c14t0152	SAMPLE	193108-009	122987	Filtra	15-MAR-2007 09:16	10.0	1.0			1	2	
153	c14t0153	SAMPLE	193108-010	122987	Filtra	15-MAR-2007 09:21	10.0	1.0	2		1	2	2:NA=23650.0
154	c14t0154	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 09:26	10.0	1.0	2		1	2	2:NA=36420.0
155	c14t0155	X	RINSE			15-MAR-2007 09:32	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: PeA Date: 3/15/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c14t0156	X	RINSE			15-MAR-2007 09:37	1.0					2	
157	c14t0157	X	RINSE			15-MAR-2007 09:43	1.0					2	
158	c14t0158	CCV				15-MAR-2007 09:48	1.0	1.0			1	13 2	
159	c14t0159	X	RINSE			15-MAR-2007 09:54	1.0					2	
160	c14t0160	CCB				15-MAR-2007 10:00	1.0	1.0			1	2	
161	c14t0161	X				15-MAR-2007 10:05	1.0					2	
162	c14t0162	SAMPLE	193108-012	122987	Filtra	15-MAR-2007 10:11	10.0	1.0	1		1	2	1:NA=30210.0
163	c14t0163	ICSA				15-MAR-2007 10:16	1.0	1.0			1	10 2	7:CA=291200
164	c14t0164	ICSAB				15-MAR-2007 10:22	1.0	1.0			1	11 2	10:CA=315900
165	c14t0165	X	RINSE			15-MAR-2007 10:27	1.0					2	
166	c14t0166	X	RINSE			15-MAR-2007 10:33	1.0					2	
167	c14t0167	X	RINSE			15-MAR-2007 10:38	1.0					2	
168	c14t0168	X	RINSE			15-MAR-2007 10:44	1.0					2	
169	c14t0169	SAMPLE	193108-013	122987	Filtra	15-MAR-2007 10:49	10.0	1.0			1	2	
170	c14t0170	SAMPLE	193108-014	122987	Filtra	15-MAR-2007 10:55	10.0	1.0			1	2	
171	c14t0171	SAMPLE	193108-022	122987	Filtra	15-MAR-2007 11:00	10.0	1.0	1		1	2	
172	c14t0172	SAMPLE	193108-024	122987	Filtra	15-MAR-2007 11:06	10.0	1.0			1	2	
173	c14t0173	SAMPLE	193108-025	122987	Filtra	15-MAR-2007 11:11	10.0	1.0			1	2	
174	c14t0174	SAMPLE	193108-026	122987	Filtra	15-MAR-2007 11:16	10.0	1.0			1	2	
175	c14t0175	SAMPLE	193108-027	122987	Filtra	15-MAR-2007 11:22	10.0	1.0			1	2	
176	c14t0176	X	RINSE			15-MAR-2007 11:27	1.0					2	
177	c14t0177	X	RINSE			15-MAR-2007 11:33	1.0					2	
178	c14t0178	X	RINSE			15-MAR-2007 11:38	1.0					2	
179	c14t0179	CCV				15-MAR-2007 11:44	1.0	1.0			1	13 2	
180	c14t0180	X	RINSE			15-MAR-2007 11:50	1.0					2	
181	c14t0181	CCB				15-MAR-2007 11:56	1.0	1.0	2		1	2	
182	c14t0182	X				15-MAR-2007 12:01	1.0					2	
183	c14t0183	X	RINSE			15-MAR-2007 12:07	1.0					2	
184	c14t0184	CCV				15-MAR-2007 12:12	1.0	1.0			1	13 2	
185	c14t0185	X	RINSE			15-MAR-2007 12:18	1.0					2	
186	c14t0186	X				15-MAR-2007 12:26	1.0	1.0	3		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGH Date: 3/15/07

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67106280 Instrument: MET06 Agilent ICP-MS MET06 Begun: 14-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c14t0187	CCB				15-MAR-2007 12:31	1.0	1.0	2		1	2	
188	c14t0188	X				15-MAR-2007 12:37	1.0					2	
189	c14t0189	SAMPLE	193108-022	122987	Filtra	15-MAR-2007 12:42	10.0	1.0			1	2	
190	c14t0190	X	RINSE			15-MAR-2007 12:53	1.0					2	
191	c14t0191	X	NO SAMPLE			15-MAR-2007 12:59	1.0					2	
192	c14t0192	X	NO SAMPLE			15-MAR-2007 13:04	1.0					2	
193	c14t0193	TUN				15-MAR-2007 13:09	1.0	1.0				1	
194	c14t0194	X	RINSE			15-MAR-2007 13:16	1.0					2	
195	c14t0195	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 13:22	50.0	1.0	3		1	2	1:MN=304.000
196	c14t0196	SAMPLE	193108-010	122987	Filtra	15-MAR-2007 13:27	50.0	1.0	2		1	2	
197	c14t0197	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 13:33	50.0	1.0	2		1	2	1:MN=275.400
198	c14t0198	SAMPLE	193108-012	122987	Filtra	15-MAR-2007 13:38	50.0	1.0	1		1	2	
199	c14t0199	SAMPLE	193108-008	122987	Filtra	15-MAR-2007 13:44	100.0	1.0	2		1	2	
200	c14t0200	SAMPLE	193108-011	122987	Filtra	15-MAR-2007 13:49	100.0	1.0	1		1	2	
201	c14t0201	X	RINSE			15-MAR-2007 13:54	1.0					2	
202	c14t0202	X	RINSE			15-MAR-2007 14:02	1.0					2	
203	c14t0203	X	RINSE			15-MAR-2007 14:08	1.0					2	
204	c14t0204	CCV				15-MAR-2007 14:13	1.0	1.0			1	13 2	
205	c14t0205	X	RINSE			15-MAR-2007 14:19	1.0					2	
206	c14t0206	CCB				15-MAR-2007 14:27	1.0	1.0	2		1	2	
207	c14t0207	X				15-MAR-2007 14:40	1.0					2	
208	c14t0208	X				15-MAR-2007 15:01	1.0					2	
209	c14t0209	ICSA				15-MAR-2007 15:07	1.0	1.0			1	10 2	7:CA=293100
210	c14t0210	ICSAB				15-MAR-2007 15:13	1.0	1.0			1	11 2	10:CA=305900

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Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654 14=S5055

Analyst: RGA Date: 3/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	HARD	CA	MG	MO	
193108-022	MET09	03/06/07 17:32	1.0		+	+	+	
193108-023	MET09	03/06/07 15:45	1.0		+	+	+	
193108-023	MET09	03/06/07 16:01	1.0					
193108-027	MET09	03/06/07 17:35	1.0		+	+	+	
QC377727	MET09	03/06/07 15:35	1.0		+	+	+	
QC377728	MET09	03/06/07 15:39	1.0		+	+	+	
QC377729	MET09	03/06/07 15:42	1.0		+	+	+	
QC377732	MET09	03/06/07 15:48	1.0		+	+	+	
QC377733	MET09	03/06/07 15:51	1.0		+	+	+	
QC377805	MET09	03/06/07 15:54	5.0		+	+	+	
QC377806	MET09	03/06/07 15:57	1.0		+	+	+	

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
193108-001	MET06	03/13/07 04:11	10.0																								
193108-001	MET06	03/13/07 19:10	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-002	MET06	03/13/07 05:49	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-003	MET06	03/13/07 05:54	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-004	MET06	03/13/07 05:59	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	
193108-004	MET06	03/13/07 19:15	10.0																								+
193108-005	MET06	03/13/07 06:05	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-006	MET06	03/13/07 06:10	10.0	+	+	+			+	+	+			+	+	+	+			+	+			+		+	
193108-006	MET06	03/13/07 19:20	10.0										+														+
193108-007	MET04	03/13/07 16:13	1.0															+									
193108-007	MET06	03/15/07 05:03	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
193108-007	MET06	03/15/07 05:08	50.0													+			+					+			
193108-007	MET06	03/15/07 07:25	10.0																								
193108-008	MET04	03/13/07 16:21	1.0															+									
193108-008	MET06	03/15/07 09:10	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
193108-008	MET06	03/15/07 13:22	50.0																					+			
193108-008	MET06	03/15/07 13:44	100.0														+										
193108-009	MET06	03/15/07 09:16	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-010	MET04	03/13/07 16:24	1.0															+									
193108-010	MET06	03/15/07 09:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
193108-010	MET06	03/15/07 13:27	50.0													+								+			
193108-011	MET04	03/13/07 16:26	1.0															+									
193108-011	MET06	03/15/07 09:26	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
193108-011	MET06	03/15/07 13:33	50.0																					+			
193108-011	MET06	03/15/07 13:49	100.0														+										
193108-012	MET06	03/15/07 10:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
193108-012	MET06	03/15/07 13:38	50.0																					+			
193108-013	MET06	03/15/07 10:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-014	MET06	03/15/07 10:55	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-015	MET06	03/13/07 06:16	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-016	MET06	03/13/07 06:21	10.0	+	+	+			+	+	+		+	+	+	+	+			+	+			+		+	+
193108-017	MET06	03/13/07 05:33	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
193108-018	MET06	03/13/07 07:09	10.0	+	+	+			+	+	+		+		+	+				+	+			+		+	+
193108-018	MET06	03/13/07 19:26	10.0											+													
193108-018	MET06	03/13/07 19:31	50.0														+										
193108-019	MET06	03/13/07 07:14	10.0	+	+	+			+	+	+		+		+	+	+			+	+					+	+
193108-019	MET06	03/13/07 19:37	10.0											+													
193108-019	MET06	03/13/07 19:42	50.0																					+			
193108-020	MET06	03/13/07 07:20	10.0	+	+	+			+	+	+		+		+	+	+			+	+			+		+	+
193108-020	MET06	03/13/07 19:47	10.0											+													
193108-022	MET04	03/13/07 16:33	1.0															+									
193108-022	MET06	03/15/07 11:00	10.0	+	+	+	+	+	+	+	+	+	+		+	+	+			+	+	+	+	+	+	+	+
193108-022	MET06	03/15/07 12:42	10.0											+													
193108-023	MET14	03/13/07 17:35	1.0															+									
193108-023	MET06	03/15/07 06:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
193108-024	MET04	03/13/07 16:35	1.0															+									
193108-024	MET06	03/15/07 11:06	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-025	MET06	03/15/07 11:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-026	MET06	03/15/07 11:16	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193108-027	MET04	03/13/07 16:37	1.0															+									
193108-027	MET06	03/15/07 11:22	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378693	MET06	03/13/07 03:49	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378694	MET06	03/13/07 03:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378695	MET06	03/13/07 03:59	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378696	MET06	03/13/07 04:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378697	MET06	03/13/07 04:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378698	MET06	03/13/07 04:16	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC378699	MET06	03/13/07 04:32	10.0	+		+	+	+	+	+	+		+		+	+	+			+	+		+	+	+	+	+
QC378713	MET06	03/13/07 05:38	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378714	MET06	03/13/07 05:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+
QC378700	MET06	03/15/07 04:26	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+	+	+	+

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	MO	NI	K	SE	AG	NA	TL	V	ZN
QC378700	MET06	03/15/07 06:08	1.0																								
QC378700	MET06	03/15/07 06:38	10.0																			+					
QC378701	MET06	03/15/07 04:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378701	MET06	03/15/07 07:05	1.0																								
QC378702	MET06	03/15/07 04:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378702	MET06	03/15/07 07:12	1.0																								
QC378703	MET06	03/15/07 05:13	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378703	MET06	03/15/07 07:36	10.0																								
QC378704	MET06	03/15/07 05:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378704	MET06	03/15/07 07:42	10.0																								
QC378705	MET06	03/15/07 07:30	50.0	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+		+	+	+
QC378705	MET06	03/15/07 08:38	250.0													+			+					+			
QC378706	MET06	03/15/07 05:24	10.0	+		+	+	+	+		+	+	+	+	+		+			+		+	+		+	+	+
QC378706	MET06	03/15/07 08:26	10.0		+														+		+						
QC378706	MET06	03/15/07 08:43	50.0							+						+			+					+			
QC378711	MET06	03/15/07 06:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378712	MET06	03/15/07 06:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
QC378996	MET04	03/13/07 16:06	1.0															+									
QC378997	MET04	03/13/07 16:08	1.0															+									
QC378998	MET04	03/13/07 16:10	1.0															+									
QC378999	MET04	03/13/07 16:15	5.0															+									
QC379000	MET04	03/13/07 16:17	1.0															+									
QC379001	MET04	03/13/07 16:19	1.0															+									
QC379003	MET14	03/13/07 17:28	1.0															+									
QC379004	MET14	03/13/07 17:31	1.0															+									
QC379005	MET14	03/13/07 17:33	1.0															+									
QC379006	MET14	03/13/07 17:37	5.0															+									
QC379007	MET14	03/13/07 17:39	1.0															+									

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193108 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEC	CDA	CRO	COU	FEB	PBG	MGN	HG+	MOI	NI	K	SE	AGA	NAL	TL	V	ZN
QC379008	MET14	03/13/07 17:42	1.0																				

00742

Curtis & Tompkins Laboratories Sample Preparation Summary 06-MAR-2007 18:14

Batch Number : 122751
Date Extracted: 06-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 3010A

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4884
Spike #2 ID : S4885
Spike #3 ID :
SOP Version : 3010A_ICP_rv8

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193014-001		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193014-003		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193014-005		Arcadis	Water	50	mL	50	1.000000	1					AS, CR, FE, MN		
193087-001		Kensington Laboratories	Water	50	mL	50	1.000000	1					AG, CD, CR, (more)		
193097-001		Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193097-019		Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193098-004		ConocoPhillips	Water	50	mL	50	1.000000	1					CU, NI, ZN		
193099-001		Malcolm Pirnie,Inc.	Water	50	mL	50	1.000000	1					T26/ICP		
193108-022		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193108-023		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193108-027		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193125-001		Clayton Group Services	Water	50	mL	50	1.000000	1					T26/ICP		
193128-001		New Logic Research	Water	50	mL	50	1.000000	1					AL, B, BA, C(more)		
193128-002		New Logic Research	Water	50	mL	50	1.000000	1					AL, B, BA, C(more)		
193145-001		URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193145-002		URS Corporation	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC377727	BLANK		Water	50	mL	50	1.000000	1					ICAP		
QC377728	BS		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377729	BSD		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377732	MS	of 193108-023	Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377733	MSD	of 193108-023	Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC377805	SER	of 193108-023	Water	50	mL	50	1.000000	1					ICAP		
QC377806	PDS	of 193108-023	Water	50	mL	50	1.000000	1					ICAP		

743

Prep Chemist: [signature] 3/6/07 Reviewed By: [signature] Date: 3/6/07

Relinquished By: [signature] 3/6/07 Received By: [signature] Date: 3/6/07

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 122751
Date Digested: 3/6/07
Digested by: KA

Digestion Method
☒ EPA 3010a for ICP
☐ EPA 200.7
☐ _____

BK 2471
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Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
LCS	↓	↓	↓	
BSD				
MS-01A				
MSD-01				
— 113097-01				
19				
014-01				
03				
05				
— 125-01 E				
128-01				
02				
— 099-01 C				
— 098-04 A				
— 087-01				FIELD FILTERED
145-01 D				
- 02				
— MS-03W				
MSD-03				
108-03				
- 22H				
27G	✓	✓	✓	

Reagent ID or LIMS #	Initials / Date
95	KA 3/6
34884	↓
34885	
045075 BATCH	
046035 022707	
	✓

— digestion temperature (90-95 degrees C)
5 mL of spike solution was added to all spikes

☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples
1:1 HCl added to all samples
☐ filtered thru' Whatman # 541

KA 3/6/07
Prep Chemist Signature / Date

3/6/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-MAR-2007 18:23**

Batch Number : 122986
Date Extracted: 12-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193108-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
QC378693	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC378694	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378695	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378696	MS	of 193108-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378697	MSD	of 193108-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378698	SER	of 193108-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378699	PDS	of 193108-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378713	MS	of 193108-017		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378714	MSD	of 193108-017		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		

Prep Chemist: For K. Gaines Reviewed By: Date: 3/12/07

Relinquished By: Received By: Date: 3/12/07

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 122986
Date Digested: 3/12/07
Digested by: KEA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50		
BS				
BSD				
MS-01AC				FIELD FILTERED
MSD-01				
193108-01				
MS-17N				
MSD-17				
193108-17				
-02F				
-03E				
-04F				
-05G				
-06L				
-15J				
-16G				
-18F				
-19F				
-20H				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KEA 3/12
.5 mL of spike solution was added to all spikes	S5054	
	S5055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date 3/12/07

Reviewer Signature / Date 3/12/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-MAR-2007 18:09**

Batch Number : 122987
Date Extracted: 12-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-009			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-025			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-026			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193108-027			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378700	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378701	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378702	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378703	MS	of 193108-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378704	MSD	of 193108-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378705	SER	of 193108-007		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378706	PDS	of 193108-007		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378711	MS	of 193108-023		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378712	MSD	of 193108-023		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: For K. Gaines Reviewed By: Date: 3/12/07

Relinquished By: Received By: Date: 3/12/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 127987
Date Digested: 3/12/07
Digested by: KWA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 79
Continued From: /
Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS -07				FIELD FILTERED
MSD -07				
193108-07				
MS - 23				
MSD - 23				
193108 - 23				
- 08				
- 09				
- 10				
- 11				
- 12				
- 13				
- 14				
- 22				
- 24				
- 25				
- 26				
- 27				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KWA 3/12
.5 mL of spike solution was added to all spikes	35054	
	35055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

KWA 3/12/07
Prep Chemist Signature / Date

3/12/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
Calnum : 47104621001
Units : ug/L

Date : 13-MAR-2007 15:41
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	123057	47104621002	STD02REP1	13-MAR-2007 15:43	S5707 (500X)
L2	123057	47104621003	STD03REP1	13-MAR-2007 15:45	S5707 (200X)
L3	123057	47104621004	STD04REP1	13-MAR-2007 15:48	S5707 (50X)
L4	123057	47104621005	STD05REP1	13-MAR-2007 15:50	S5707 (20X)
L5	123057	47104621006	STD06REP1	13-MAR-2007 15:52	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3440.0	2574.0	2530.0	2524.2	2408.0	LINR	-0.1086	4.17E-4		2695.2	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

749

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47104621001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 031307 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.16695e-4

C -1.08611e-1

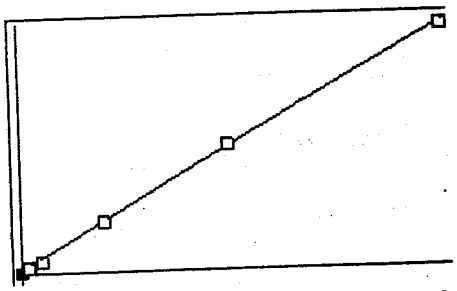
Rho .999778

Type

μ Abs.
24080

Accepted

New



Include S1 Rep 1 ☑

13-Mar-07 15:52

Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.018	.018	305	1	305		
02	.20000	.178	-.022	689	0%	688		
03	.50000	.428	-.072	1288	0%	1287		
04	2.0000	2.00	-.000	5060	0%	5060		
05	5.0000	5.15	.150	12622	0%	12621		
06	10.000	9.93	-.075	24080	0%	24080		

NUM

Ready

Folder: 031307
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	15:41:42 13 Mar 07	HG		
Hg	.000	ppb	305					
		Bkgd 1	15548840					
*** Standard: 2 Rep: 1				Seq: 2	15:43:52 13 Mar 07	HG		
Hg	.200	ppb	688					
		Bkgd 1	15545738					
*** Standard: 3 Rep: 1				Seq: 3	15:45:58 13 Mar 07	HG		
Hg	.500	ppb	1287					
		Bkgd 1	15544827					
*** Standard: 4 Rep: 1				Seq: 4	15:48:08 13 Mar 07	HG		
Hg	2.00	ppb	5060					
		Bkgd 1	15552388					
*** Standard: 5 Rep: 1				Seq: 5	15:50:13 13 Mar 07	HG		
Hg	5.00	ppb	12621					
		Bkgd 1	15551581					
*** Standard: 6 Rep: 1				Seq: 6	15:52:19 13 Mar 07	HG		
Hg	10.0	ppb	24080					
		Bkgd 1	15546178					
*** Check Standard: 2			Ck2S5709	Seq: 7	15:54:24 13 Mar 07	HG		
Line	Flag		Intensities					
Hg	L		6466					
		Bkgd 1	15537431					
*** Check Standard: 2			Ck2S5709	Seq: 8	16:02:17 13 Mar 07	HG		
Line	Flag		Intensities					
Hg			12842					
		Bkgd 1	15512054					
*** Check Standard: 1			Ck1ICB	Seq: 9	16:04:42 13 Mar 07	HG		
Line	Flag		Intensities					
Hg			77					
		Bkgd 1	15504486					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 13-MAR-2007

HydraAA HG Analyzer
SOP Version: HG_water_rv7

equence: 47104621 Instrument: MET04
nalytical Method: EPA 7470A
nalyte: Mercury

#.	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
01	123057	ICALBLK	STD01REP1				13-MAR-2007 15:41	1.0	1.0									
02	123057	ICAL	STD02REP1				13-MAR-2007 15:43	1.0	1.0									
03	123057	ICAL	STD03REP1				13-MAR-2007 15:45	1.0	1.0									
04	123057	ICAL	STD04REP1				13-MAR-2007 15:48	1.0	1.0									
05	123057	ICAL	STD05REP1				13-MAR-2007 15:50	1.0	1.0									
06	123057	ICAL	STD06REP1				13-MAR-2007 15:52	1.0	1.0									
07	123057	X					13-MAR-2007 15:54	1.0							ug/L	105		
08	123057	ICV					13-MAR-2007 16:02	1.0	1.0	2	5.000	47104621001	5.240					
09	123057	ICB					13-MAR-2007 16:04	1.0	1.0			47104621001	ND	0.20	ug/L			u
10	123057	BLANK	QC378996		123057	Water	13-MAR-2007 16:06	1.0	1.0			47104621001	ND	0.20	ug/L			u
11	123057	BS	QC378997		123057	Water	13-MAR-2007 16:08	1.0	1.0		5.000	47104621001	5.280	0.20	ug/L	106		
12	123057	BSD	QC378998		123057	Water	13-MAR-2007 16:10	1.0	1.0		5.000	47104621001	5.100	0.20	ug/L	102	3	u
13	123057	MSS	193108-007		123057	Filtra	13-MAR-2007 16:13	1.0	1.0			47104621001	ND	0.20	ug/L			u
14	123057	SER	QC378999	193108-007	123057	Filtra	13-MAR-2007 16:15	5.0	1.0			47104621001	ND	1.0	ug/L		--	u
15	123057	MS	QC379000	193108-007	123057	Filtra	13-MAR-2007 16:17	1.0	1.0		5.000	47104621001	5.310	0.20	ug/L	106		u
16	123057	MSD	QC379001	193108-007	123057	Filtra	13-MAR-2007 16:19	1.0	1.0		5.000	47104621001	5.280	0.20	ug/L	106	1	u
17	123057	SAMPLE	193108-008		123057	Filtra	13-MAR-2007 16:21	1.0	1.0			47104621001	ND	0.20	ug/L			u
18	123057	SAMPLE	193108-010		123057	Filtra	13-MAR-2007 16:24	1.0	1.0			47104621001	ND	0.20	ug/L			u
19	123057	SAMPLE	193108-011		123057	Filtra	13-MAR-2007 16:26	1.0	1.0			47104621001	ND	0.20	ug/L			u
20	123057	CCV					13-MAR-2007 16:28	1.0	1.0	3	2.500	47104621001	2.610		ug/L	104		
21	123057	CCB					13-MAR-2007 16:30	1.0	1.0			47104621001	[0.03700]	0.20	ug/L			
22	123057	SAMPLE	193108-022		123057	Filtra	13-MAR-2007 16:33	1.0	1.0			47104621001	ND	0.20	ug/L			u
23	123057	SAMPLE	193108-024		123057	Filtra	13-MAR-2007 16:35	1.0	1.0			47104621001	ND	0.20	ug/L			u
24	123057	SAMPLE	193108-027		123057	Filtra	13-MAR-2007 16:37	1.0	1.0			47104621001	ND	0.20	ug/L			u
25	123057	SAMPLE	193261-001		123057	Filtra	13-MAR-2007 16:39	1.0	1.0			47104621001	ND	0.20	ug/L			u
26	123057	SAMPLE	193261-002		123057	Filtra	13-MAR-2007 16:42	1.0	1.0			47104621001	ND	0.20	ug/L			u
27	123057	SAMPLE	193261-003		123057	Filtra	13-MAR-2007 16:45	1.0	1.0			47104621001	ND	0.20	ug/L			u
28	123057	SAMPLE	193261-004		123057	Filtra	13-MAR-2007 16:47	1.0	1.0			47104621001	ND	0.20	ug/L			u
29	123057	SAMPLE	193267-001		123057	Filtra	13-MAR-2007 16:50	1.0	1.0			47104621001	ND	0.20	ug/L			u
30	123057	SAMPLE	193267-002		123057	Filtra	13-MAR-2007 16:52	1.0	1.0			47104621001	ND	0.20	ug/L			u
31	123057	SAMPLE	193267-003		123057	Filtra	13-MAR-2007 16:54	1.0	1.0			47104621001	ND	0.20	ug/L			u
32	123057	CCV					13-MAR-2007 16:57	1.0	1.0	3	2.500	47104621001	2.600		ug/L	104		
33	123057	CCB					13-MAR-2007 16:59	1.0	1.0			47104621001	[0.02000]	0.20	ug/L			
34	123057	SAMPLE	193267-004		123057	Filtra	13-MAR-2007 17:01	1.0	1.0			47104621001	ND	0.20	ug/L			u
35	123057	SAMPLE	193267-005		123057	Filtra	13-MAR-2007 17:04	1.0	1.0			47104621001	ND	0.20	ug/L			u
36	123057	SAMPLE	193267-006		123057	Filtra	13-MAR-2007 17:06	1.0	1.0			47104621001	ND	0.20	ug/L			u
37	123057	SAMPLE	193267-007		123057	Filtra	13-MAR-2007 17:08	1.0	1.0			47104621001	ND	0.20	ug/L			u
38	123057	SAMPLE	193267-008		123057	Filtra	13-MAR-2007 17:11	1.0	1.0			47104621001	ND	0.20	ug/L			u
39	123057	SAMPLE	193322-052		123057	Filtra	13-MAR-2007 17:13	1.0	1.0			47104621001	ND	0.20	ug/L			u
40	123057	CCV					13-MAR-2007 17:15	1.0	1.0	3	2.500	47104621001	2.700		ug/L	108		
41	123057	CCB					13-MAR-2007 17:18	1.0	1.0			47104621001	[0.01200]	0.20	ug/L			

Stds used: 1=S5707 2=S5709 3=S5710
Flags used: u=use

Analyst: [signature] Date: 3/13/07

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:13

Batch Number : 123057
Date Extracted: 13-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-022		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-024		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193108-027		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193261-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193261-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193267-001		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-002		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-003		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-004		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-005		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-006		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-007		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193267-008		PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/HG		
193322-052		URS Corporation	Filtrate	50	mL	50	1.000000	1					HG		
QC378996	BLANK		Water	50	mL	50	1.000000	1					HG		
QC378997	BS		Water	50	mL	50	1.000000	1		2.5			HG		
QC378998	BSD		Water	50	mL	50	1.000000	1		2.5			HG		
QC378999	SER	of 193108-007	Filtrate	50	mL	50	1.000000	1					HG		
QC379000	MS	of 193108-007	Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379001	MSD	of 193108-007	Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379002	PDS	of 193108-007	Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist: 3/13/07 Reviewed By: Date: 3/13/07

Relinquished By: 3/13/07 Received By: Date: 3/13/07

Curtis & Tompkins, L

Water Digestion for Mercury

BK 2452
Page 40

LIMS Batch #: 123057
Date Digested: 3/13/07
Digested by: [illegible]

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193108-007 MBS AR	50	50	N	Filtrate (F.F.)
-008 I				
-010 H				
-011 G				
-022 J				
-024 H				
-027 I				
193261-001 H				
-002				
-003				
-004				
193267-001				Filtrate
-002				
-003				
-004				
-005				
-006				
-007				
-008				
193322-052				water
Blank				
BS				
BSD				
MS 193108-007 AR				Filtrate (F.F.)
MSD				

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	S5707	[illegible] 3/13/07
ICAL Source WS#	S5707	
ICV / CCV WS#	S5709/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	1:15 / 95°C	
Time OFF/ Temperature OFF	3:15 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030807	
5% $K_2S_2O_8$	K2030807	
NaCl.hydroxylamine hydrochloride	Hy030207	
Stannous Chloride	SnCl2 031107	
☐ filtered thru' 0.45 um syringe filter	MILLIPORE R6AN 48332	

[illegible] 3/13/07
Analyst / Date

754

Continued from page X

Continued on page X

[illegible] 3/13/07
Reviewed by / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Reviewer: ---
Type : WATER

Inst : MET14
Calnum : 847104647001
Units : ug/L

Date : 13-MAR-2007 16:07
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	123061	847104647002	STD02REP1	13-MAR-2007 16:09	S5707 (500X)
L2	123061	847104647003	STD03REP1	13-MAR-2007 16:11	S5707 (200X)
L3	123061	847104647004	STD04REP1	13-MAR-2007 16:14	S5707 (50X)
L4	123061	847104647005	STD05REP1	13-MAR-2007 16:16	S5707 (20X)
L5	123061	847104647006	STD06REP1	13-MAR-2007 16:18	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3490.0	2580.0	2631.0	2601.6	2470.5	LINR	-0.1062	4.05E-4		2754.6	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

755

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

84710464700

WinHg Database 1.5

File Utility Help

RN RN

BUSY Dataset/Proto 031307 /hgppb

Protocol hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.05463e-4

C -1.06243e-1

Rho .999712

Type Linear

Calibrated

Accepted

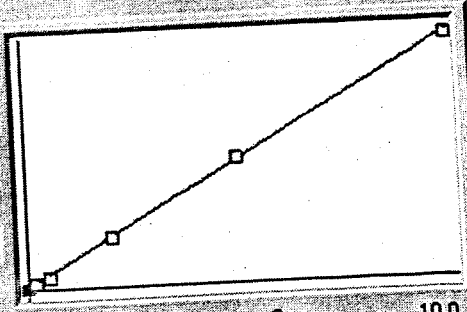
Accept

µ Abs.

24705

Accepted

New



13-Mar-07 16:18

Conc. 10.0

Include S1 Rep 1 2 3 4 5

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.000	.000	263	0	263		
02	.20000	.177	-.023	699	0%	698		
03	.50000	.417	-.083	1290	0%	1290		
04	2.0000	2.03	.027	5263	0%	5262		
05	5.0000	5.17	.168	13008	0%	13008		
06	10.000	9.91	-.089	24706	0%	24705		

NUM SCRL

Ready

Folder: 031307
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	16:07:28 13 Mar 07			HG
Hg	.000	ppb	263					
		Bkgd 1	15783510					
*** Standard: 2 Rep: 1				Seq: 2	16:09:32 13 Mar 07			HG
Hg	.200	ppb	698					
		Bkgd 1	15780087					
*** Standard: 3 Rep: 1				Seq: 3	16:11:37 13 Mar 07			HG
Hg	.500	ppb	1290					
		Bkgd 1	15773918					
*** Standard: 4 Rep: 1				Seq: 4	16:14:14 13 Mar 07			HG
Hg	2.00	ppb	5262					
		Bkgd 1	15781425					
*** Standard: 5 Rep: 1				Seq: 5	16:16:19 13 Mar 07			HG
Hg	5.00	ppb	13008					
		Bkgd 1	15782001					
*** Standard: 6 Rep: 1				Seq: 6	16:18:26 13 Mar 07			HG
Hg	10.0	ppb	24705					
		Bkgd 1	15777264					
*** Check Standard: 2			Ck2S5709	Seq: 7	16:20:42 13 Mar 07			HG
Line	Flag		Intensities					
Hg	L		6798					
		Bkgd 1	15770864					
*** Check Standard: 2			Ck2S5709	Seq: 8	16:27:45 13 Mar 07			HG
Line	Flag		Intensities					
Hg			13045					
		Bkgd 1	15765552					
*** Check Standard: 1			Ck1ICB	Seq: 9	16:30:09 13 Mar 07			HG
Line	Flag		Intensities					
Hg			-182					
		Bkgd 1	15765155					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 13-MAR-2007

Sequence: 847104647 Instrument: MET14 HydraAA HG Analyzer MET14
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	123061	ICALBLK	STD01REP1				13-MAR-2007 16:07	1.0	1.0									
002	123061	ICAL	STD02REP1				13-MAR-2007 16:09	1.0	1.0									
003	123061	ICAL	STD03REP1				13-MAR-2007 16:11	1.0	1.0									
004	123061	ICAL	STD04REP1				13-MAR-2007 16:14	1.0	1.0									
005	123061	ICAL	STD05REP1				13-MAR-2007 16:16	1.0	1.0									
006	123061	ICAL	STD06REP1				13-MAR-2007 16:18	1.0	1.0									
007	123061	X					13-MAR-2007 16:20	1.0										
008	123061	ICV					13-MAR-2007 16:27	1.0	1.0	2	5.000	847104647001	5.180		ug/L	104		
009	123061	ICB					13-MAR-2007 16:30	1.0	1.0			847104647001	ND	0.20	ug/L			
010	123061	BLANK	QC379021		123061	Air	13-MAR-2007 16:32	1.0	50.0			847104647001	ND	0.020	ug/s			u
011	123061	BS	QC379022		123061	Air	13-MAR-2007 16:34	1.0	50.0		0.2500	847104647001	0.2615	0.020	ug/s	105		u
012	123061	BSD	QC379023		123061	Air	13-MAR-2007 16:36	1.0	50.0		0.2500	847104647001	0.2655	0.020	ug/s	106	2	u
013	123061	MSS	192995-001 H		123061	Air	13-MAR-2007 16:38	1.0	146.7			847104647001	3.7 >LR	0.029	ug/s			>LR sh
014	123061	SDUP	QC379024 H	192995-001	123061	Air	13-MAR-2007 16:40	1.0	146.7			847104647001	3.8 >LR	0.029	ug/s		--	>LR b*
015	123061	MSS	192995-002 H		123061	Air	13-MAR-2007 16:43	1.0	166.7			847104647001	0.10	0.033	ug/s			sh b*
016	123061	SDUP	QC379025 H	192995-002	123061	Air	13-MAR-2007 16:45	1.0	166.7			847104647001	0.11	0.033	ug/s		13	u
017	123061	MSS	192995-003 H		123061	Air	13-MAR-2007 16:47	1.0	208.3			847104647001	0.063	0.042	ug/s			sh b*
018	123061	SDUP	QC379026 H	192995-003	123061	Air	13-MAR-2007 16:49	1.0	208.3			847104647001	0.060	0.042	ug/s		6	u
019	123061	SSPIKE	QC379027 H	192995-003	123061	Air	13-MAR-2007 16:51	1.0	208.3		1.042	847104647001	1.104	0.042	ug/s	100		u
020	123061	CCV					13-MAR-2007 16:54	1.0	1.0	3	2.500	847104647001	2.650		ug/L	106		
021	123061	CCB					13-MAR-2007 16:56	1.0	1.0			847104647001	ND	0.20	ug/L			
022	123061	MSS	192995-004 H		123061	Air	13-MAR-2007 16:58	1.0	103.3			847104647001	ND	0.021	ug/s			sh b*
023	123061	SDUP	QC379028 H	192995-004	123061	Air	13-MAR-2007 17:00	1.0	103.3			847104647001	ND	0.021	ug/s		--	u
024	123061	MSS	192995-001 H		123061	Air	13-MAR-2007 17:03	5.0	146.7			847104647001	3.9	0.15	ug/s			sh b*
025	123061	SDUP	QC379024 H	192995-001	123061	Air	13-MAR-2007 17:05	5.0	146.7			847104647001	3.8	0.15	ug/s		3	u
026	123061	CCV					13-MAR-2007 17:07	1.0	1.0	3	2.500	847104647001	2.710		ug/L	108		
027	123061	CCB					13-MAR-2007 17:09	1.0	1.0			847104647001	[0.05300]	0.20	ug/L			ib

Stds used: 1=S5707 2=S5709 3=S5710
Flags used: !=warning >LR=overrange b=noncompliant ib=instrument blank sh=out of sample hold u=use

Analyst: [signature] Date: 3/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847104719 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 13-MAR-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	123058	X					13-MAR-2007 17:19	1.0	1.0	1	2.500	847104647001	-0.09900		ug/L	-4		c- b*
002	123058	CCV					13-MAR-2007 17:24	1.0	1.0	1	2.500	847104647001	2.610		ug/L	104		
003	123058	CCB					13-MAR-2007 17:26	1.0	1.0			847104647001	ND	0.20	ug/L			
004	123058	BLANK	QC379003		123058	Water	13-MAR-2007 17:28	1.0	1.0			847104647001	ND	0.20	ug/L			u
005	123058	BS	QC379004		123058	Water	13-MAR-2007 17:31	1.0	1.0		5.000	847104647001	5.090	0.20	ug/L	102		u
006	123058	BSD	QC379005		123058	Water	13-MAR-2007 17:33	1.0	1.0		5.000	847104647001	5.160	0.20	ug/L	103	1	u
007	123058	MSS	193108-023		123058	Filtra	13-MAR-2007 17:35	1.0	1.0			847104647001	ND	0.20	ug/L			u
008	123058	SER	QC379006	193108-023	123058	Filtra	13-MAR-2007 17:37	5.0	1.0			847104647001	ND	1.0	ug/L		--	u
009	123058	MS	QC379007	193108-023	123058	Filtra	13-MAR-2007 17:39	1.0	1.0		5.000	847104647001	5.420	0.20	ug/L	108		u
010	123058	MSD	QC379008	193108-023	123058	Filtra	13-MAR-2007 17:42	1.0	1.0		5.000	847104647001	5.440	0.20	ug/L	109	0	u
011	123058	SAMPLE	193330-001		123058	Filtra	13-MAR-2007 17:45	1.0	1.0			847104647001	ND	0.20	ug/L			u
012	123058	SAMPLE	193330-002		123058	Filtra	13-MAR-2007 17:47	1.0	1.0			847104647001	ND	0.20	ug/L			u
013	123058	SAMPLE	193330-003		123058	Filtra	13-MAR-2007 17:49	1.0	1.0			847104647001	ND	0.20	ug/L			u
014	123058	CCV					13-MAR-2007 17:52	1.0	1.0	1	2.500	847104647001	2.670		ug/L	107		
015	123058	CCB					13-MAR-2007 17:54	1.0	1.0			847104647001	ND	0.20	ug/L			
016	123058	SAMPLE	193330-004		123058	Filtra	13-MAR-2007 17:56	1.0	1.0			847104647001	ND	0.20	ug/L			u
017	123058	SAMPLE	193330-005		123058	Filtra	13-MAR-2007 17:58	1.0	1.0			847104647001	ND	0.20	ug/L			u
018	123058	SAMPLE	193330-006		123058	Filtra	13-MAR-2007 18:00	1.0	1.0			847104647001	ND	0.20	ug/L			u
019	123058	SAMPLE	193330-007		123058	Filtra	13-MAR-2007 18:03	1.0	1.0			847104647001	ND	0.20	ug/L			u
020	123058	SAMPLE	193330-008		123058	Filtra	13-MAR-2007 18:05	1.0	1.0			847104647001	ND	0.20	ug/L			u
021	123058	SAMPLE	193335-001		123058	Filtra	13-MAR-2007 18:08	1.0	1.0			847104647001	ND	0.20	ug/L			u
022	123058	SAMPLE	193342-001		123058	Filtra	13-MAR-2007 18:10	1.0	1.0			847104647001	0.031 J	0.20	ug/L			u
023	123058	SAMPLE	193346-001		123058	Filtra	13-MAR-2007 18:12	1.0	1.0			847104647001	ND	0.20	ug/L			u
024	123058	SAMPLE	193346-002		123058	Filtra	13-MAR-2007 18:14	1.0	1.0			847104647001	ND	0.20	ug/L			u
025	123058	SAMPLE	193346-003		123058	Filtra	13-MAR-2007 18:17	1.0	1.0			847104647001	ND	0.20	ug/L			u
026	123058	CCV					13-MAR-2007 18:19	1.0	1.0	1	2.500	847104647001	2.690		ug/L	108		
027	123058	CCB					13-MAR-2007 18:21	1.0	1.0			847104647001	ND	0.20	ug/L			
028	123058	SAMPLE	193346-004		123058	Filtra	13-MAR-2007 18:24	1.0	1.0			847104647001	ND	0.20	ug/L			u
029	123058	SAMPLE	193346-005		123058	Filtra	13-MAR-2007 18:26	1.0	1.0			847104647001	0.043 J	0.20	ug/L			u
030	123058	SAMPLE	193346-006		123058	Filtra	13-MAR-2007 18:28	1.0	1.0			847104647001	ND	0.20	ug/L			u
031	123058	SAMPLE	193346-007		123058	Filtra	13-MAR-2007 18:31	1.0	1.0			847104647001	0.082 J	0.20	ug/L			u
032	123058	SAMPLE	193346-008		123058	Filtra	13-MAR-2007 18:33	1.0	1.0			847104647001	ND	0.20	ug/L			u
033	123058	CCV					13-MAR-2007 18:36	1.0	1.0	1	2.500	847104647001	2.750		ug/L	110		
034	123058	CCB					13-MAR-2007 18:39	1.0	1.0			847104647001	ND	0.20	ug/L			

Stds used: 1=S5710
Flags used: -=low bias b=noncompliant c=CCV u=use

Analyst: [signature] Date: 3/13/07

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:15

Batch Number : 123058
Date Extracted: 13-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193330-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193330-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193335-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					TAL/HG		
193342-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
193346-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
QC379003	BLANK			Water	50	mL	50	1.000000	1					HG		
QC379004	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC379005	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC379006	SER	of 193108-023		Filtrate	50	mL	50	1.000000	1					HG		
QC379007	MS	of 193108-023		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379008	MSD	of 193108-023		Filtrate	50	mL	50	1.000000	1		2.5			HG		
QC379009	PDS	of 193108-023		Filtrate	50	mL	50	1.000000	1					HG		

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Prep Chemist: 3/13/07 Reviewed By: Date: 3/13/07

Relinquished By: 3/13/07 Received By: Date: 3/13/07

ns, Ltd.

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

Batch #: 123058

Digested: 3/13/07

Digested by: ZA

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193108-023 MSS	Y	50	50	N	Filtrate (C.F.)
193330-001	G				
-002					
-003					
-004					
-005					
-006					
-007					
-008					
193335-001	J				
193342-001	G				
193346-001					
-002					
-003					
-004					
-005					
-006					
-007					
-008					
-009					
Blank	3/13/07				Water
BS					
BSD					
MS 193108-023	Y				Filtrate (C.F.)
MSD					

25 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	S5707	3/13/07
ICAL Source WS#	S5707	
ICV / CCV WS#	S5709/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	1:15 / 95°C	
Time OFF/ Temperature OFF	3:15 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030907	
5% $K_2S_2O_8$	K030907	
NaCl.hydroxylamine hydrochloride	H4030107	
Stannous Chloride	SnCl2031307	
☐ filtered thru' 0.45 um syringe filter	Millipore RLAN43832	

Ls / Dat
3/13/07

3/17/07

Prep Chemist / Date

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Continued from page X

Continued on page X

3/13/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/23/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/23/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1047MW101	Batch#:	123101
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-001	Analyzed:	03/14/07

Analyte	Result	RL
Alkalinity, Bicarbonate	33	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	33	1.0

Field ID:	1065PZ4B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-002	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID:	1065PZ7B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-003	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	350	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	350	10

Field ID:	1065PZ5AR	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-004	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	790	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	790	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1065PZ5B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-005	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	230	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	230	10

Field ID:	DUP0301072A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-006	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	32	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	32	10

Field ID:	1349MW01	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-007	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Field ID:	1349MW100	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-008	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	1,000	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,000	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW06	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-009	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	220	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	220	10

Field ID:	DUP0301073A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-010	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	280	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	280	10

Field ID:	DUP0301073B	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-011	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	980	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	980	10

Field ID:	1213GW101	Batch#:	123166
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-012	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	420	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	420	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW08	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-013	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID:	LF02GW04	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-014	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	370	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	370	10

Field ID:	1065PZ1A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-015	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	550	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	550	10

Field ID:	1065PZ2A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-016	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	220	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	220	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	1065PZ3A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-017	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	300	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	300	10

Field ID:	1065PZ4A	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-018	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	680	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	680	10

Field ID:	1065MW101	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-019	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	670	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	670	10

Field ID:	1065MW102	Batch#:	123166
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-020	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	81	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	81	4.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DAEGW103	Batch#:	123169
Type:	SAMPLE	Sampled:	03/01/07
Lab ID:	193108-022	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	270	10

Field ID:	DAEGW104	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-023	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	280	10
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	280	10

Field ID:	DAEGW03	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-025	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	820	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	820	10

Field ID:	DAEGW05	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-026	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	410	6.7

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Received:	03/02/07

Field ID:	DUP0302071A	Batch#:	123169
Type:	SAMPLE	Sampled:	03/02/07
Lab ID:	193108-027	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

Type:	BLANK	Batch#:	123101
Lab ID:	QC379188	Analyzed:	03/14/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type:	BLANK	Batch#:	123166
Lab ID:	QC379459	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type:	BLANK	Batch#:	123169
Lab ID:	QC379477	Analyzed:	03/15/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379189	Batch#:	123101
Matrix:	Water	Analyzed:	03/14/07

Spiked	Result	%REC	Limits
200.0	192.0	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379460	Batch#:	123166
Matrix:	Water	Analyzed:	03/15/07

Spiked	Result	%REC	Limits
200.0	185.2	93	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379478	Batch#:	123169
Matrix:	Water	Analyzed:	03/15/07

Spiked	Result	%REC	Limits
200.0	191.2	96	90-110

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1047MW101	Batch#:	123101
MSS Lab ID:	193108-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379190	32.60	200.0	224.0	96	69-112		
MSD	QC379191		200.0	226.0	97	69-112	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1349MW01	Batch#:	123166
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379461	285.0	500.0	777.0	98	69-112		
MSD	QC379462		500.0	779.0	99	69-112	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1065PZ3A	Batch#:	123166
MSS Lab ID:	193108-017	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379463	303.0	500.0	747.0	89	69-112		
MSD	QC379464		500.0	774.0	97	69-112	4	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	DAEGW104	Batch#:	123169
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379479	281.0	500.0	752.0	94	69-112		
MSD	QC379480		500.0	756.0	95	69-112	1	25

RPD= Relative Percent Difference

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/14/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123101** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.3	4.8	192.00			4.0	96	
193108-001	6.8	100	0.0	3.3	32.60		n/a	1.0		
MS	10.1	25	2.2	5.6	224.00			4.0	96	
MSD	9.9	25	2.2	5.7	226.00			4.0	97	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-001	6.80	100	0.0	3.3	32.60		n/a	1.0
193222-001	8.20	10	0.0	3.6	362.00		n/a	10.0
193222-002	7.80	10	0.0	3.7	367.00		n/a	10.0
193222-003	7.30	10	0.0	3.6	358.00		n/a	10.0
193222-004	7.60	10	0.0	5.9	593.00		n/a	10.0
193222-005	6.90	100	0.0	2.6	26.10		n/a	1.0
193222-006	6.70	100	0.0	3.3	32.80		n/a	1.0
193222-007	8.10	10	0.0	3.2	318.00		n/a	10.0
193222-008	7.00	100	0.0	2.6	25.80		n/a	1.0
193225-001	7.90	10	0.0	2.3	229.00		n/a	10.0
193227-002	7.20	10	0.0	12.1	1208.00		n/a	10.0
193230-001	4.70	100	0.0	0.2	rpt low alk	0.29	ND	1.0
193230-002	5.30	100	0.0	0.5	rpt low alk	0.70	3.400	1.0
193230-003	5.70	100	0.0	1.4	rpt low alk	1.65	11.700	1.0
193230-004	5.70	100	0.0	5.3	53.20		n/a	1.0

779

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMK 3/15/07

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/14/07
Batch No: 123101

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as $CaCO_3$ (mg/L)	Carbonate Alkalinity as $CaCO_3$ (mg/L)	Hydroxide Alkalinity as $CaCO_3$ (mg/L)
193108-001	0.0	32.6	32.6	32.600	0.000	0.000
193222-001	0.0	362.00	362.000	362.000	0.000	0.000
193222-002	0.0	367.00	367.000	367.000	0.000	0.000
193222-003	0.0	358.00	358.000	358.000	0.000	0.000
193222-004	0.0	593.00	593.000	593.000	0.000	0.000
193222-005	0.0	26.10	26.100	26.100	0.000	0.000
193222-006	0.0	32.80	32.800	32.800	0.000	0.000
193222-007	0.0	318.00	318.000	318.000	0.000	0.000
193222-008	0.0	25.80	25.800	25.800	0.000	0.000
193225-001	0.0	229.00	229.000	229.000	0.000	0.000
193227-002	0.0	1208.00	1208.000	1208.000	0.000	0.000
193230-001	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193230-002	0.0	#VALUE!	3.400	not applicable	not applicable	not applicable
193230-003	0.0	#VALUE!	11.700	not applicable	not applicable	not applicable
193230-004	0.0	53.20	53.200	53.200	0.000	0.000

780

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/14/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123101 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
193108-001	32.600	39.747	0.000	0.000
193222-001	362.000	441.367	0.000	0.000
193222-002	367.000	447.464	0.000	0.000
193222-003	358.000	436.490	0.000	0.000
193222-004	593.000	723.014	0.000	0.000
193222-005	26.100	31.822	0.000	0.000
193222-006	32.800	39.991	0.000	0.000
193222-007	318.000	387.721	0.000	0.000
193222-008	25.800	31.457	0.000	0.000
193225-001	229.000	279.208	0.000	0.000
193227-002	1208.000	1472.850	0.000	0.000
193230-001	ND	not applicable	not applicable	not applicable
193230-002	3.400	not applicable	not applicable	not applicable
193230-003	11.700	not applicable	not applicable	not applicable
193230-004	53.200	64.864	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd

LIMS Batch #: 123101
Matrix: water

Date: 3/14/07
Time: 9:20

Benchbook#: **BK2384**
Page: **73**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55635
Slope: 100.6
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	4.9	100	—	<0.05		
	LCS	10.1	25	2.32	4.80		
	193108-1 A	6.6	25	—	<1 mL		
	-1	6.8	100	—	3.26		
5	MS-1	10.1	25	2.17	5.61		
	MSD-1	9.9	↓	2.24	5.65		
	193222-1 F	8.2	10	—	3.62		
	-2	7.8	10	—	3.67		
	-3	7.3	10	—	3.58		
10	-4	7.6	10	—	5.93		
	-5	7.1	25	—	<2mL		
	-5	6.9	100	—	2.61		
	-6	6.7	25	—	<2mL		
	-6	6.7	100	—	3.28		
15	-7	8.1	10	—	3.18		
	-8	~~7.1~~ 7.1	25	—	<2mL		
	-8	7.0	100	—	2.58		
	193225-1 F	7.9	10	—	2.29		
	193227-2 I	7.2	10	—	12.08		
20	193230-1 I	5.0	25	—	~~<0.05~~ <2mL		
	-1	4.7	100	—	0.15	0.29	
	-2	5.3	25	—	<2 mL		
	-2	5.3	100	—	0.52	0.70	
	-3	6.3	25	—	<2mL		
	-3	5.7	100	—	1.41	1.65	
	-4	5.6	25	—	<2mL		
	-4 I	5.7	100	—	5.32		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/14/07
Analyst / Date

3/14/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123101
Date Started: 14-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193222-001			MWH	Water	ALKALINITY	13-MAR-2007
193222-002			MWH	Water	ALKALINITY	13-MAR-2007
193222-003			MWH	Water	ALKALINITY	13-MAR-2007
193222-004			MWH	Water	ALKALINITY	13-MAR-2007
193222-005			MWH	Water	ALKALINITY	13-MAR-2007
193222-006			MWH	Water	ALKALINITY	13-MAR-2007
193222-007			MWH	Water	ALKALINITY	13-MAR-2007
193222-008			MWH	Water	ALKALINITY	13-MAR-2007
193225-001			Kennedy/Jenks Cons	Water	ALKALINITY	13-MAR-2007
193227-002			Innovative Technic	Water	ALKALINITY	13-MAR-2007
193230-001			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-002			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-003			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
193230-004			Blasland, Bouck &	Water	ALKALINITY	13-MAR-2007
QC379188	BLANK			Water	ALKALINITY	
QC379189	LCS			Water	ALKALINITY	
QC379190	MS	of 193108-001		Water	ALKALINITY	
QC379191	MSD	of 193108-001		Water	ALKALINITY	

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1 /** SMWW 2320B Analysis Date: **03/15/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123166** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.5	4.6	185.20			4.0	93	
193108-007	6.7	10	0.0	2.9	285.00		n/a	10.0		
MS	9.2	10	1.2	7.8	777.00			10.0	98	
MSD	9.1	10	1.2	7.8	779.00			10.0	99	0
193108-017	7.10	10	0.0	3.0	303.00	n/a		10.0		
MS	9.5	10	1.7	7.5	747.00			10.0	89	
MSD	9.5	10	2.0	7.7	774.00			10.0	94	4

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-002	7.30	10	0.0	3.0	297.00		n/a	10.0
193108-003	7.50	10	0.0	3.5	348.00		n/a	10.0
193108-004	7.20	10	0.0	7.9	789.00		n/a	10.0
193108-005	7.20	10	0.0	2.3	225.00		n/a	10.0
193108-006	6.80	100	0.0	3.2	31.60		n/a	1.0
193108-007	6.70	10	0.0	2.9	285.00		n/a	10.0
193108-008	6.80	10	0.0	10.3	1034.00		n/a	10.0
193108-009	7.30	10	0.0	2.2	224.00		n/a	10.0
193108-010	6.80	10	0.0	2.8	284.00		n/a	10.0
193108-011	6.90	10	0.0	9.8	982.00		n/a	10.0
193108-012	8.00	10	0.0	4.2	415.00		n/a	10.0
193108-013	7.40	10	0.0	5.4	535.00		n/a	10.0
193108-014	7.60	10	0.0	3.7	368.00		n/a	10.0
193108-015	7.30	10	0.0	5.5	549.00		n/a	10.0
193108-016	7.30	10	0.0	2.2	221.00		n/a	10.0
193108-017	7.10	10	0.0	3.0	303.00		n/a	10.0
193108-018	7.20	10	0.0	6.8	678.00		n/a	10.0
193108-019	7.30	10	0.0	6.7	673.00		n/a	10.0
193108-020	7.00	25	0.0	2.0	81.20		n/a	4.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: 3/15/07

Analysis: **Alkalinity** Analyst: SJ H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Analysis Date: 03/15/07

Batch No: 123166

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193108-002	0.0	297.0	297	297.000	0.000	0.000
193108-003	0.0	348.00	348.000	348.000	0.000	0.000
193108-004	0.0	789.00	789.000	789.000	0.000	0.000
193108-005	0.0	225.00	225.000	225.000	0.000	0.000
193108-006	0.0	31.60	31.600	31.600	0.000	0.000
193108-007	0.0	285.00	285.000	285.000	0.000	0.000
193108-008	0.0	1034.00	1034.000	1034.000	0.000	0.000
193108-009	0.0	224.00	224.000	224.000	0.000	0.000
193108-010	0.0	284.00	284.000	284.000	0.000	0.000
193108-011	0.0	982.00	982.000	982.000	0.000	0.000
193108-012	0.0	415.00	415.000	415.000	0.000	0.000
193108-013	0.0	535.00	535.000	535.000	0.000	0.000
193108-014	0.0	368.00	368.000	368.000	0.000	0.000
193108-015	0.0	549.00	549.000	549.000	0.000	0.000
193108-016	0.0	221.00	221.000	221.000	0.000	0.000
193108-017	0.0	303.00	303.000	303.000	0.000	0.000
193108-018	0.0	678.00	678.000	678.000	0.000	0.000
193108-019	0.0	673.00	673.000	673.000	0.000	0.000
193108-020	0.0	81.20	81.200	81.200	0.000	0.000

785

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/15/07 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 123166 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193108-002	297.000	362.116	0.000	0.000
193108-003	348.000	424.298	0.000	0.000
193108-004	789.000	961.986	0.000	0.000
193108-005	225.000	274.331	0.000	0.000
193108-006	31.600	38.528	0.000	0.000
193108-007	285.000	347.485	0.000	0.000
193108-008	1034.000	1260.701	0.000	0.000
193108-009	224.000	273.111	0.000	0.000
193108-010	284.000	346.266	0.000	0.000
193108-011	982.000	1197.301	0.000	0.000
193108-012	415.000	505.988	0.000	0.000
193108-013	535.000	652.297	0.000	0.000
193108-014	368.000	448.683	0.000	0.000
193108-015	549.000	669.367	0.000	0.000
193108-016	221.000	269.454	0.000	0.000
193108-017	303.000	369.432	0.000	0.000
193108-018	678.000	826.650	0.000	0.000
193108-019	673.000	820.553	0.000	0.000
193108-020	81.200	99.003	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123169
Matrix: water

Date: 3/15/07
Time: 16:30

Benchbook#: **BK2384**
Page: **75**

CAL-ph 4.0: SS#: 5779
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 100.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: rwk 3229-Y
(lot #6248 Exp. 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	9.9	100	—	<0.05		
	LCS	9.9	25	2.35	4.78		
	193108-22A	7.2	10	—	2.70		
	-23AB	7.6	10	—	2.81		
5	MS -23	9.7	10	2.10	7.52		
	MSD -23	9.7	10	2.19	7.56		
	-25 I	7.6	10	—	8.20		
	-26 H	7.4	15	—	6.21		
	-27 J	7.7	10	—	2.89		
10							
15							
20							

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/15/07
Analyst / Date

3/15/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123166
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-002			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-003			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-004			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-005			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-006			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-007			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-008			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-009			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-010			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-011			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-012			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-013			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-014			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-015			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-016			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-017			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-018			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-019			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-020			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
QC379459	BLANK			Water	ALKALINITY	
QC379460	LCS			Water	ALKALINITY	
QC379461	MS	of 193108-007		Water	ALKALINITY	
QC379462	MSD	of 193108-007		Water	ALKALINITY	
QC379463	MS	of 193108-017		Water	ALKALINITY	
QC379464	MSD	of 193108-017		Water	ALKALINITY	

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/15/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123169** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.0	0.0	ND			1.0		
LCS	9.9	25	2.4	4.8	191.20			4.0	96	
193108-023	7.6	10	0.0	2.8	281.00		n/a	10.0		
MS	9.7	10	2.1	7.5	752.00			10.0	94	
MSD	9.7	10	2.2	7.6	756.00			10.0	95	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193108-022	7.20	10	0.0	2.7	270.00		n/a	10.0
193108-023	7.60	10	0.0	2.8	281.00		n/a	10.0
193108-025	7.60	10	0.0	8.2	820.00		n/a	10.0
193108-026	7.40	15	0.0	6.2	414.00		n/a	6.7
193108-027	7.70	10	0.0	2.9	289.00		n/a	10.0
193261-001					ND		n/a	#DIV/0!
193261-002					ND		n/a	#DIV/0!
193261-003					ND		n/a	#DIV/0!
193261-004					ND		n/a	#DIV/0!
193268-004					ND		n/a	#DIV/0!
193268-005					ND		n/a	#DIV/0!
193268-006					ND		n/a	#DIV/0!
193128-001					ND		n/a	#DIV/0!
193128-002					ND		n/a	#DIV/0!

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LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: DMS 3/15/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/15/07
Batch No: 123169

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as $CaCO_3$ (mg/L)	Carbonate Alkalinity as $CaCO_3$ (mg/L)	Hydroxide Alkalinity as $CaCO_3$ (mg/L)
193108-022	0.0	270.0	270	270.000	0.000	0.000
193108-023	0.0	281.00	281.000	281.000	0.000	0.000
193108-025	0.0	820.00	820.000	820.000	0.000	0.000
193108-026	0.0	414.00	414.000	414.000	0.000	0.000
193108-027	0.0	289.00	289.000	289.000	0.000	0.000
193261-001	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-002	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-003	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-004	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-004	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-005	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-006	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-001	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-002	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!

790 **LIMITED VOLUME SAMPLES** (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 03/15/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123169 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193108-022	270.000	329.197	0.000	0.000
193108-023	281.000	342.608	0.000	0.000
193108-025	820.000	999.783	0.000	0.000
193108-026	414.000	504.768	0.000	0.000
193108-027	289.000	352.362	0.000	0.000
193261-001	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-002	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-003	ND	#DIV/0!	#DIV/0!	#VALUE!
193261-004	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-004	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-005	ND	#DIV/0!	#DIV/0!	#VALUE!
193268-006	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-001	ND	#DIV/0!	#DIV/0!	#VALUE!
193128-002	ND	#DIV/0!	#DIV/0!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123166 Date: 3/15/07 Benchbook#: **BK2384**
Matrix: water Time: 9:30 Page: **74**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 100.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: C
NaCO3 Conc (mg/L): 100 U
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp. 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	4.9	100	—	<0.05		
	LCS	10.1	25	2.45	4.63		
	193108-2E	7.3	10	—	2.97		
	-3F	7.5	10	—	3.48		
5	-4G	7.2	10	—	7.89		
	-5F	7.2	10	—	2.25		
	-6M	6.8	25	—	<2mL		
	-6 ↓	6.8	100	—	3.16		
	-7AN	6.7	10	—	2.85		
10	MS-7	9.2	10	1.16	7.77		
	MSD-7 ↓	9.1	10	1.16	7.79		
	-8B	6.8	10	—	10.34		
	-9F	7.3	10	—	2.24		
	-10I	6.8	10	—	2.84		
15	-11F	6.9	10	—	9.82		
	-12G	8.0	10	—	4.15		
	-13J	7.4	10	—	5.35		
	-14D	7.6	10	—	3.68		
	-15	7.3	10	—	5.49		
20	-16F	7.3	10	—	2.21		
	-17U	7.1	10	—	3.03		
	MS-17	9.5		1.73	7.47		
	MSD17 ↓	9.5	↓	1.97	7.74		
	-18E	7.2	10	—	6.78		
	-19H	7.3	10	—	6.73		
	-20I	7.0	25	—	2.03		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/15/07 3/15/07

Analyst / Date **Reviewed by / Date**

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123169
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-022			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-023			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-025			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-026			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
193108-027			Treadwell & Rollo	Water	ALKALINITY	14-MAR-2007
QC379477	BLANK			Water	ALKALINITY	
QC379478	LCS			Water	ALKALINITY	
QC379479	MS	of 193108-023		Water	ALKALINITY	
QC379480	MSD	of 193108-023		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	11	0.20	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	56	2.0	10.00	122697	03/01/07 12:00	03/03/07 04:27
1065PZ7B	SAMPLE	193108-003	150	5.0	25.00	122697	03/01/07 12:45	03/03/07 09:43
1065PZ5AR	SAMPLE	193108-004	65	5.0	25.00	122697	03/01/07 13:20	03/03/07 10:00
1065PZ5B	SAMPLE	193108-005	39	2.0	10.00	122697	03/01/07 14:05	03/03/07 08:50
DUP0301072A	SAMPLE	193108-006	11	0.20	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	860	20	100.0	122697	03/01/07 08:20	03/02/07 19:42
1349MW100	SAMPLE	193108-008	820	20	100.0	122697	03/01/07 11:20	03/02/07 20:00
DAEGW06	SAMPLE	193108-009	140	2.0	10.00	122697	03/01/07 13:20	03/03/07 09:08
DUP0301073A	SAMPLE	193108-010	840	20	100.0	122697	03/01/07	03/03/07 14:58
DUP0301073B	SAMPLE	193108-011	820	20	100.0	122697	03/01/07	03/03/07 15:15
1213GW101	SAMPLE	193108-012	360	10	50.00	122699	03/02/07 08:50	03/04/07 00:53
DAEGW08	SAMPLE	193108-013	59	5.0	25.00	122697	03/01/07 16:12	03/03/07 13:30
LF02GW04	SAMPLE	193108-014	100	5.0	25.00	122697	03/01/07 15:02	03/03/07 13:13
1065PZ1A	SAMPLE	193108-015	57	5.0	25.00	122697	03/01/07 13:38	03/03/07 09:25
1065PZ2A	SAMPLE	193108-016	30	2.0	10.00	122697	03/01/07 10:32	03/03/07 02:25
1065PZ3A	SAMPLE	193108-017	50	2.0	10.00	122697	03/01/07 09:08	03/02/07 21:10
1065PZ4A	SAMPLE	193108-018	68	5.0	25.00	122697	03/01/07 11:12	03/03/07 05:02
1065MW101	SAMPLE	193108-019	44	5.0	25.00	122697	03/01/07 11:50	03/03/07 04:45
1065MW102	SAMPLE	193108-020	19	0.20	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	120	5.0	25.00	122697	03/01/07 15:40	03/03/07 12:55
DAEGW104	SAMPLE	193108-023	79	2.0	10.00	122699	03/02/07 09:30	03/03/07 20:13
DAEGW03	SAMPLE	193108-025	90	5.0	25.00	122699	03/02/07 09:40	03/04/07 00:01
DAEGW05	SAMPLE	193108-026	150	5.0	25.00	122699	03/02/07 08:40	03/03/07 21:05
DUP0302071A	SAMPLE	193108-027	78	2.0	10.00	122763	03/02/07 09:40	03/05/07 15:43
	BLANK	QC377478	ND	0.20	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.20	1.000	122699		03/03/07 19:55
	BLANK	QC377766	ND	0.20	1.000	122763		03/05/07 15:24

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	0.10	0.10	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	ND	0.10	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003	ND	0.10	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	0.22	0.10	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	ND	0.10	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006	ND	0.10	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	ND	0.10	122697	03/01/07 08:20	03/02/07 21:45
1349MW100	SAMPLE	193108-008	0.32	0.10	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009	0.24	0.10	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	ND	0.10	122697	03/01/07	03/03/07 15:33
DUP0301073B	SAMPLE	193108-011	0.26	0.10	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	ND	0.10	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND	0.10	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014	ND	0.10	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	0.20	0.10	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	0.27	0.10	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	0.16	0.10	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	0.14	0.10	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	0.25	0.10	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	0.10	0.10	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	ND	0.10	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	0.27	0.10	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	ND	0.10	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026	ND	0.10	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	0.29	0.10	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.10	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.10	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L		

Field ID	Type	Lab ID		Result	RL	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001		0.27	0.05	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002		4.0	0.05	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003		4.8	0.05	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	ND		0.05	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005		4.2	0.05	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006		0.28	0.05	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007		1.6	0.05	122697	03/01/07 08:20	03/02/07 21:45
1349MW100	SAMPLE	193108-008	ND		0.05	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009		0.09	0.05	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010		1.6	0.05	122697	03/01/07	03/03/07 15:33
DUP0301073B	SAMPLE	193108-011	ND		0.05	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	.	1.7	0.05	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND		0.05	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014		3.2	0.05	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015		0.71	0.05	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016		1.2	0.05	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017		0.31	0.05	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND		0.05	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND		0.05	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020		0.23	0.05	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022		3.9	0.05	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	ND		0.05	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025		0.22	0.05	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026		1.9	0.05	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	ND		0.05	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND		0.05	122697		03/02/07 19:25
	BLANK	QC377493	ND		0.05	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	ND	0.05	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	ND	0.05	1.000	122697	03/01/07 12:00	03/03/07 05:37
1065PZ7B	SAMPLE	193108-003	ND	0.05	1.000	122697	03/01/07 12:45	03/03/07 11:10
1065PZ5AR	SAMPLE	193108-004	ND	0.05	1.000	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	ND	0.05	1.000	122697	03/01/07 14:05	03/03/07 10:18
DUP0301072A	SAMPLE	193108-006	ND	0.05	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	ND	0.10	2.000	122697	03/01/07 08:20	03/02/07 22:20
1349MW100	SAMPLE	193108-008	ND	0.10	2.000	122697	03/01/07 11:20	03/03/07 07:05
DAEGW06	SAMPLE	193108-009	ND	0.05	1.000	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	ND	0.10	2.000	122697	03/01/07	03/03/07 16:08
DUP0301073B	SAMPLE	193108-011	ND	0.10	2.000	122697	03/01/07	03/03/07 18:28
1213GW101	SAMPLE	193108-012	ND	0.05	1.000	122699	03/02/07 08:50	03/04/07 02:56
DAEGW08	SAMPLE	193108-013	ND	0.05	1.000	122697	03/01/07 16:12	03/03/07 14:23
LF02GW04	SAMPLE	193108-014	ND	0.05	1.000	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	ND	0.05	1.000	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	ND	0.05	1.000	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	ND	0.05	1.000	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND	0.05	1.000	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND	0.05	1.000	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	ND	0.05	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	ND	0.05	1.000	122697	03/01/07 15:40	03/03/07 13:48
DAEGW104	SAMPLE	193108-023	ND	0.05	1.000	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	ND	0.05	1.000	122699	03/02/07 09:40	03/04/07 02:21
DAEGW05	SAMPLE	193108-026	ND	0.05	1.000	122699	03/02/07 08:40	03/04/07 01:46
DUP0302071A	SAMPLE	193108-027	ND	0.05	1.000	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.05	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.05	1.000	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1047MW101	SAMPLE	193108-001	5.7	0.50	1.000	122697	03/01/07 09:30	03/03/07 01:32
1065PZ4B	SAMPLE	193108-002	64	5.0	10.00	122697	03/01/07 12:00	03/03/07 04:27
1065PZ7B	SAMPLE	193108-003	190	13	25.00	122697	03/01/07 12:45	03/03/07 09:43
1065PZ5AR	SAMPLE	193108-004	ND	0.50	1.000	122697	03/01/07 13:20	03/03/07 11:28
1065PZ5B	SAMPLE	193108-005	70	5.0	10.00	122697	03/01/07 14:05	03/03/07 08:50
DUP0301072A	SAMPLE	193108-006	5.6	0.50	1.000	122697	03/01/07 09:50	03/03/07 01:50
1349MW01	SAMPLE	193108-007	280	50	100.0	122697	03/01/07 08:20	03/02/07 19:42
1349MW100	SAMPLE	193108-008	0.54	0.50	1.000	122697	03/01/07 11:20	03/03/07 06:30
DAEGW06	SAMPLE	193108-009	7.9	0.50	1.000	122697	03/01/07 13:20	03/03/07 10:35
DUP0301073A	SAMPLE	193108-010	270	50	100.0	122697	03/01/07	03/03/07 14:58
DUP0301073B	SAMPLE	193108-011	0.59	0.50	1.000	122697	03/01/07	03/03/07 17:53
1213GW101	SAMPLE	193108-012	150	25	50.00	122699	03/02/07 08:50	03/04/07 00:53
DAEGW08	SAMPLE	193108-013	69	13	25.00	122697	03/01/07 16:12	03/03/07 13:30
LF02GW04	SAMPLE	193108-014	31	0.50	1.000	122697	03/01/07 15:02	03/03/07 14:05
1065PZ1A	SAMPLE	193108-015	7.7	0.50	1.000	122697	03/01/07 13:38	03/03/07 10:53
1065PZ2A	SAMPLE	193108-016	39	0.50	1.000	122697	03/01/07 10:32	03/03/07 02:42
1065PZ3A	SAMPLE	193108-017	33	0.50	1.000	122697	03/01/07 09:08	03/02/07 21:27
1065PZ4A	SAMPLE	193108-018	ND	0.50	1.000	122697	03/01/07 11:12	03/03/07 06:13
1065MW101	SAMPLE	193108-019	ND	0.50	1.000	122697	03/01/07 11:50	03/03/07 05:55
1065MW102	SAMPLE	193108-020	15	0.50	1.000	122697	03/01/07 12:38	03/03/07 05:20
DAEGW103	SAMPLE	193108-022	68	13	25.00	122697	03/01/07 15:40	03/03/07 12:55
DAEGW104	SAMPLE	193108-023	14	0.50	1.000	122699	03/02/07 09:30	03/04/07 01:11
DAEGW03	SAMPLE	193108-025	110	13	25.00	122699	03/02/07 09:40	03/04/07 00:01
DAEGW05	SAMPLE	193108-026	110	13	25.00	122699	03/02/07 08:40	03/03/07 21:05
DUP0302071A	SAMPLE	193108-027	13	0.50	1.000	122699	03/02/07 09:40	03/04/07 01:28
	BLANK	QC377478	ND	0.50	1.000	122697		03/02/07 19:25
	BLANK	QC377493	ND	0.50	1.000	122699		03/03/07 19:55

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Chloride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	LCS		QC377479		4.000	4.165	104	80-120			1.000	122697			03/02/07 20:52
1047MW101	MS	193108-001	QC377480	11.07	4.000	14.97	97	80-120			2.000	122697	03/01/07 09:30	03/02/07	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		4.000	14.96	97	80-120	0	25	2.000	122697	03/01/07 09:30	03/02/07	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	860.9	400.0	1,251	98	80-120			200.0	122697	03/01/07 08:20	03/02/07	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		400.0	1,261	100	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	50.30	20.00	69.07	94	80-120			10.00	122697	03/01/07 09:08	03/02/07	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		20.00	69.34	95	80-120	0	25	10.00	122697	03/01/07 09:08	03/02/07	03/03/07 00:22
	LCS		QC377494		4.000	4.137	103	80-120			1.000	122699			03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	79.01	20.00	98.46	97	80-120			10.00	122699	03/02/07 09:30	03/02/07	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		20.00	98.88	99	80-120	0	25	10.00	122699	03/02/07 09:30	03/02/07	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	89.50	100.0	187.4	98	80-120			50.00	122699	03/02/07 09:40	03/02/07	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		100.0	187.5	98	80-120	0	25	50.00	122699	03/02/07 09:40	03/02/07	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	149.9	50.00	198.9	98	80-120			25.00	122699	03/02/07 08:40	03/02/07	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		50.00	198.5	97	80-120	0	25	25.00	122699	03/02/07 08:40	03/02/07	03/03/07 21:40
	LCS		QC377767		4.000	4.040	101	80-120			1.000	122763			03/05/07 19:01
ZZZZZZZZZZ	MS	193128-002	QC377768	19,820	5,000	25,070	105	80-120			2,500	122763	03/05/07 09:00	03/05/07	03/05/07 17:56
ZZZZZZZZZZ	MSD	193128-002	QC377769		5,000	25,110	106	80-120	0	25	2,500	122763	03/05/07 09:00	03/05/07	03/05/07 18:13

RPD= Relative Percent Difference

3.0

Curtis & Tompkins, Ltd.

Batch QC Report

Fluoride

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		2.000	2.050	103	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	0.1006	2.000	1.967	93	78-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		2.000	1.935	92	78-120	2	20	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	0.09321	200.0	192.9	96	78-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		200.0	190.8	95	78-120	1	20	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	0.1551	10.00	9.669	95	78-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		10.00	9.432	93	78-120	2	20	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		2.000	1.987	99	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	0.2736	10.00	9.581	93	78-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		10.00	9.225	90	78-120	4	20	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	0.06470	50.00	44.81	89	78-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		50.00	45.92	92	78-120	2	20	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	0.09114	25.00	23.17	92	78-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		25.00	23.11	92	78-120	0	20	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		1.000	1.037	104	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	0.2686	1.000	1.281	101	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		1.000	1.307	104	80-120	2	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	1.628	100.0	104.6	103	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		100.0	103.1	101	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	0.3078	5.000	5.445	103	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		5.000	5.250	99	80-120	4	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		1.000	1.033	103	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	0.03678	5.000	5.043	100	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		5.000	5.178	103	80-120	3	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	0.2167	25.00	25.53	101	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		25.00	26.15	104	80-120	2	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	1.926	12.50	14.46	100	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		12.50	14.83	103	80-120	2	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrite Nitrogen

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		1.000	1.010	101	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	<0.008079	1.000	1.020	102	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		1.000	1.007	101	80-120	1	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	<0.01616	100.0	99.87	100	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		100.0	100.5	101	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	<0.008079	5.000	5.132	103	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		5.000	5.087	102	80-120	1	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		1.000	1.016	102	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	<0.008079	5.000	5.155	103	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		5.000	5.265	105	80-120	2	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	<0.008079	25.00	24.74	99	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		25.00	24.29	97	80-120	2	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	<0.008079	12.50	12.75	102	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		12.50	12.31	99	80-120	4	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	03/02/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Analyzed
	LCS		QC377479		10.00	10.27	103	80-120			1.000	122697		03/02/07 20:52
1047MW101	MS	193108-001	QC377480	5.691	10.00	15.85	102	80-120			2.000	122697	03/01/07 09:30	03/03/07 00:57
1047MW101	MSD	193108-001	QC377481		10.00	15.81	101	80-120	0	25	2.000	122697	03/01/07 09:30	03/03/07 01:15
1349MW01	MS	193108-007	QC377482	282.9	1,000	1,294	101	80-120			200.0	122697	03/01/07 08:20	03/02/07 20:17
1349MW01	MSD	193108-007	QC377483		1,000	1,304	102	80-120	1	25	200.0	122697	03/01/07 08:20	03/02/07 20:35
1065PZ3A	MS	193108-017	QC377484	33.34	50.00	84.34	102	80-120			10.00	122697	03/01/07 09:08	03/03/07 00:05
1065PZ3A	MSD	193108-017	QC377485		50.00	83.91	101	80-120	1	25	10.00	122697	03/01/07 09:08	03/03/07 00:22
	LCS		QC377494		10.00	10.28	103	80-120			1.000	122699		03/03/07 23:43
DAEGW104	MS	193108-023	QC377495	13.65	50.00	64.76	102	80-120			10.00	122699	03/02/07 09:30	03/03/07 20:30
DAEGW104	MSD	193108-023	QC377496		50.00	64.71	102	80-120	0	25	10.00	122699	03/02/07 09:30	03/03/07 20:48
DAEGW03	MS	193108-025	QC377497	108.5	250.0	362.9	102	80-120			50.00	122699	03/02/07 09:40	03/04/07 00:18
DAEGW03	MSD	193108-025	QC377498		250.0	365.9	103	80-120	1	25	50.00	122699	03/02/07 09:40	03/04/07 00:36
DAEGW05	MS	193108-026	QC377499	105.0	125.0	232.6	102	80-120			25.00	122699	03/02/07 08:40	03/03/07 21:23
DAEGW05	MSD	193108-026	QC377500		125.0	235.3	104	80-120	1	25	25.00	122699	03/02/07 08:40	03/03/07 21:40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

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Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 2/28/07

CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

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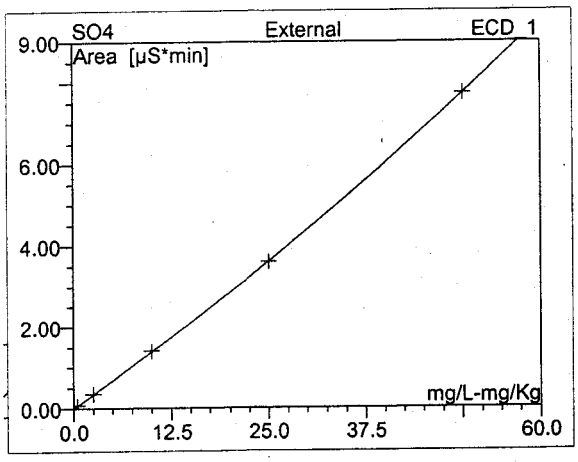
No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

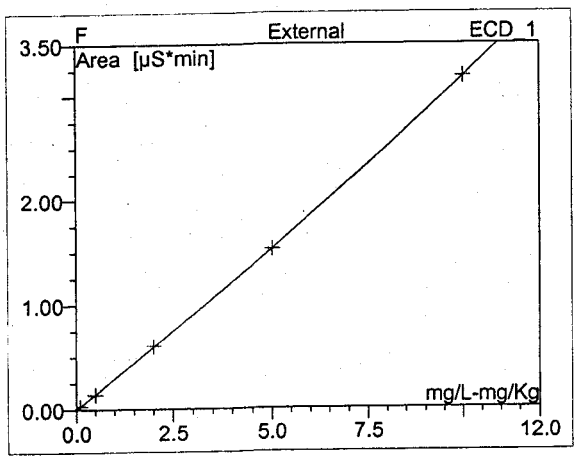
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

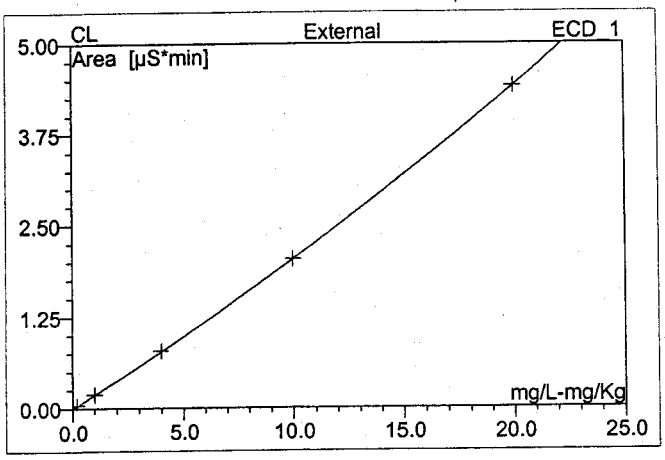


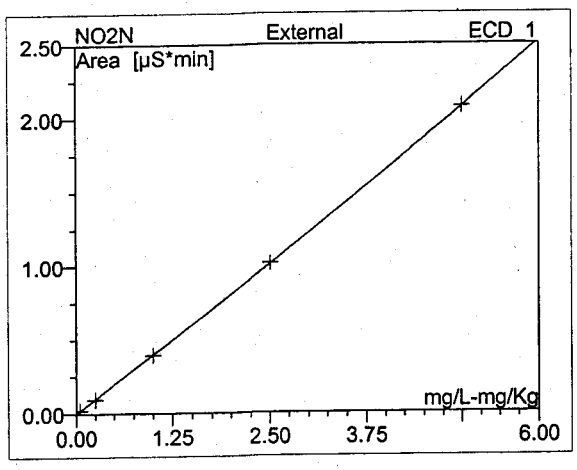
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

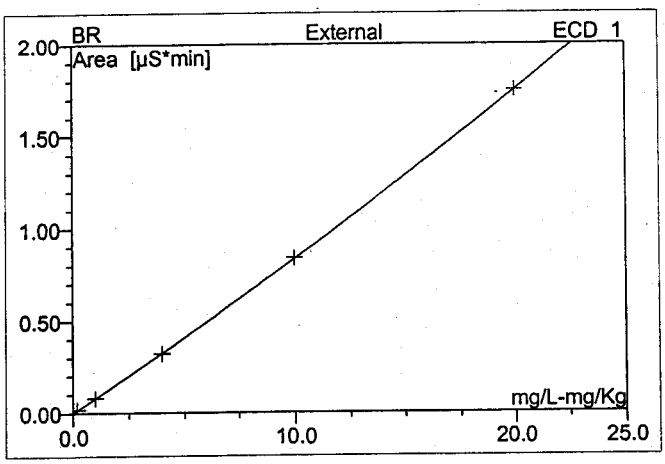
IC01 Calibration Batch Report

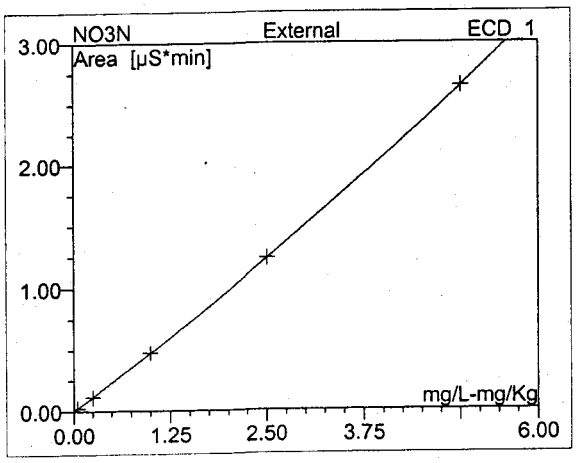
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

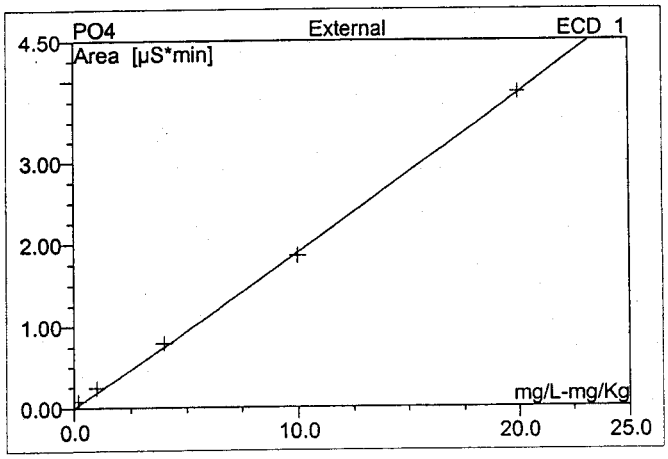












Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

Calibration Mode: Total
Auto Recalibrate: On

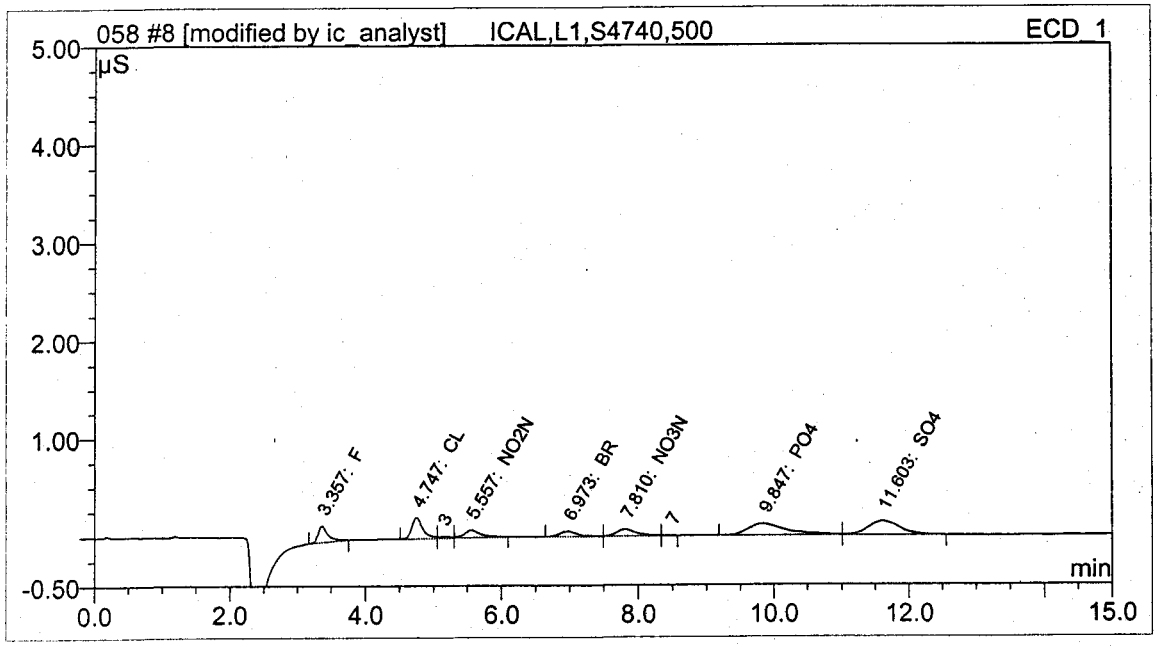
No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



ANALYZED BY: _____

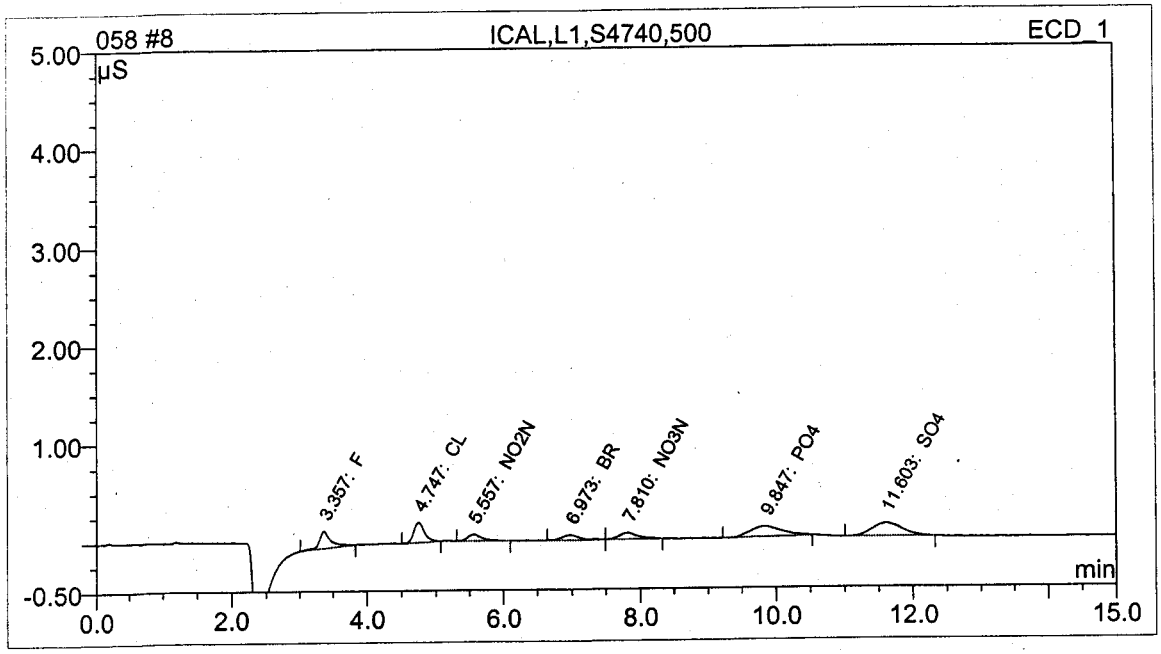
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

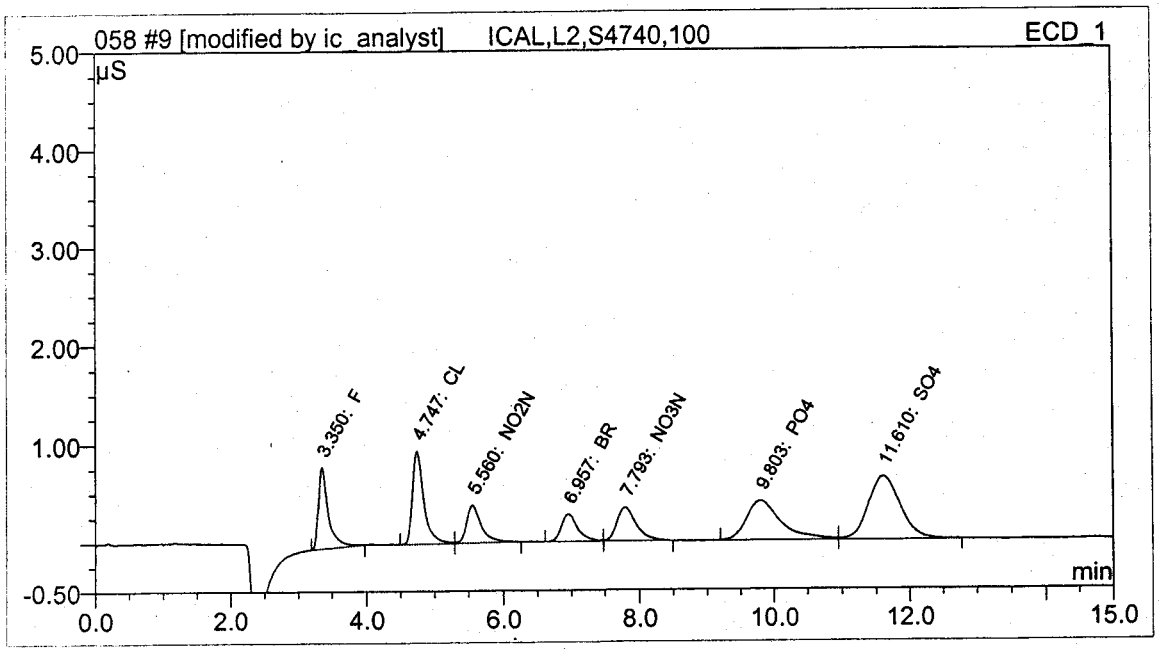
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

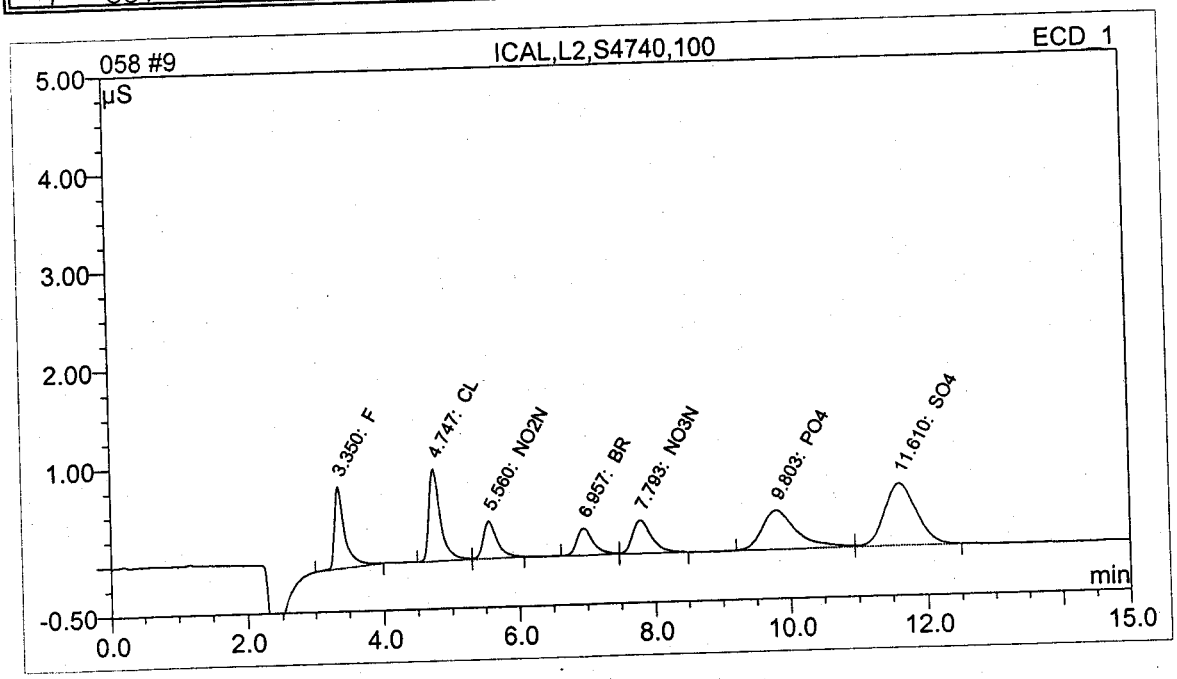
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

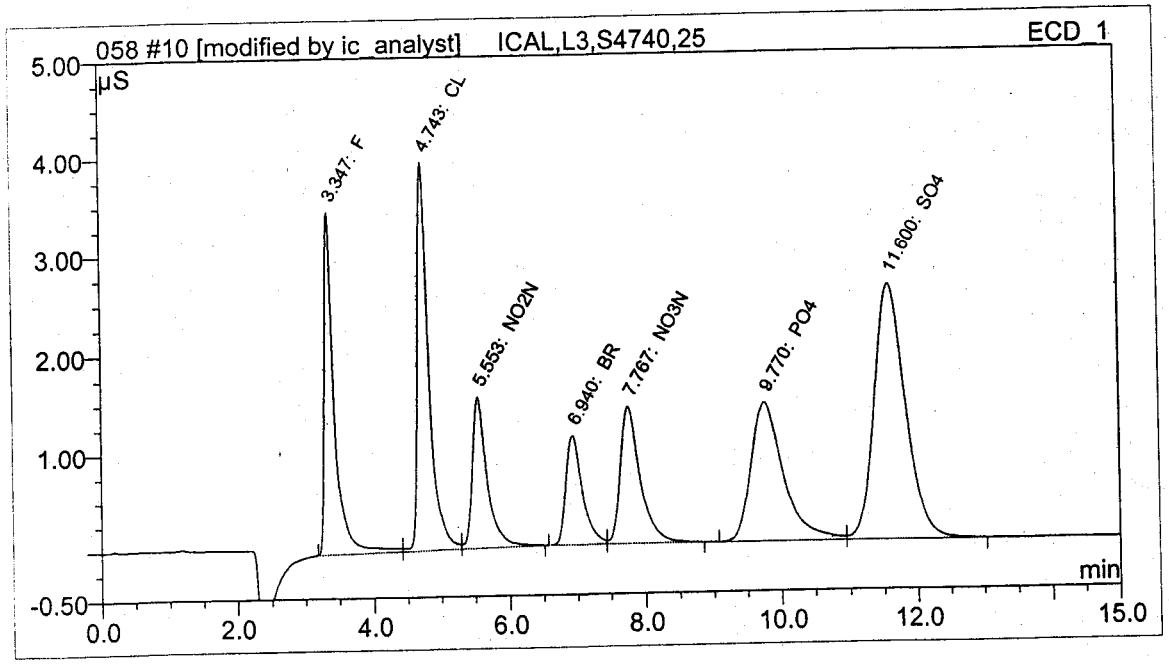
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

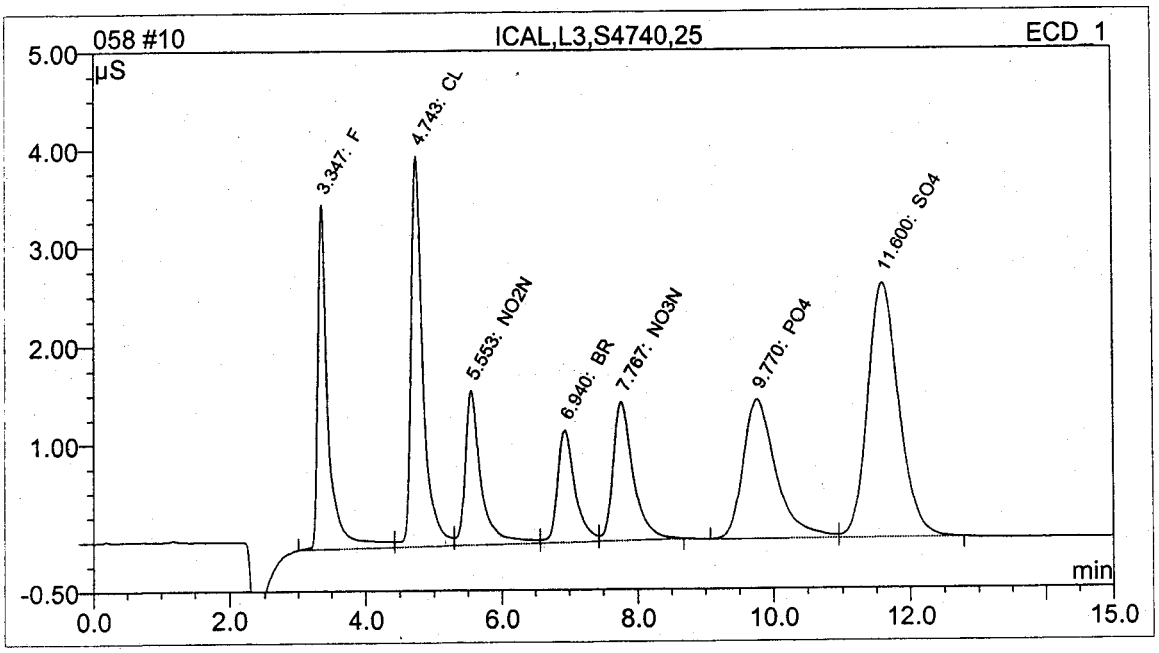
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

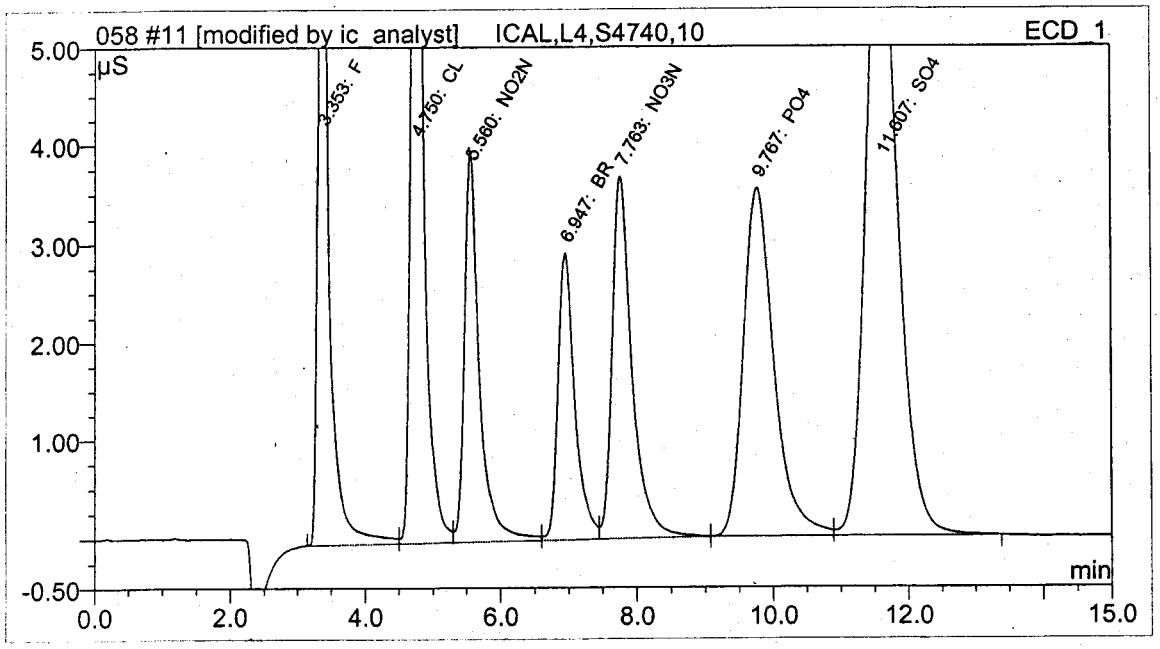
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

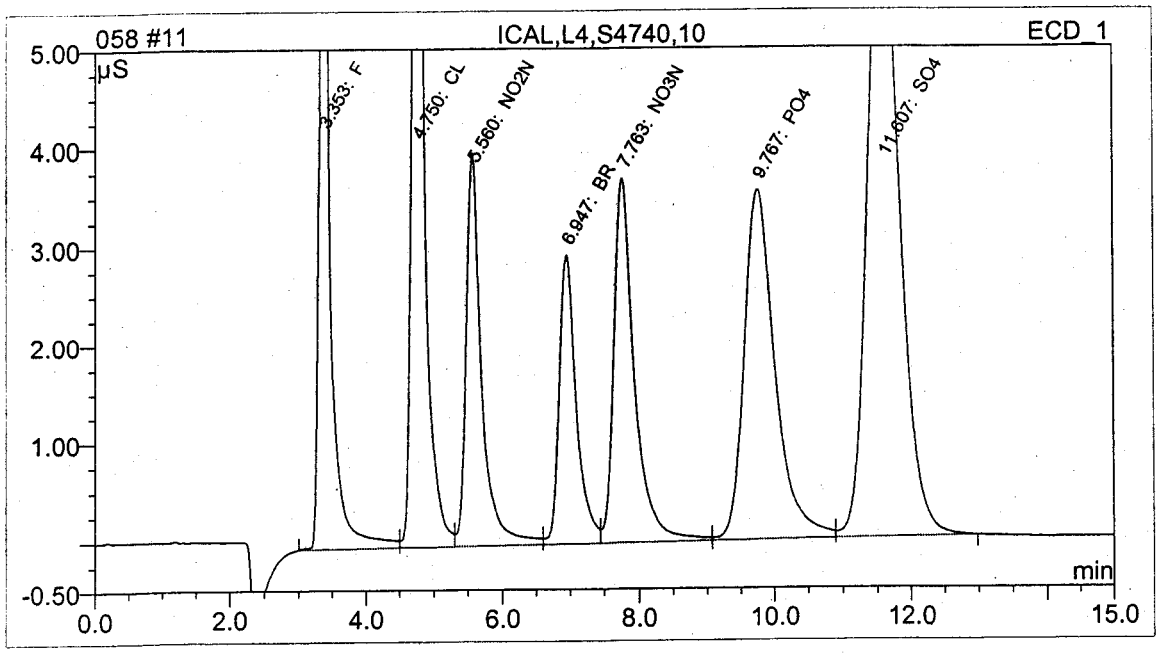
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

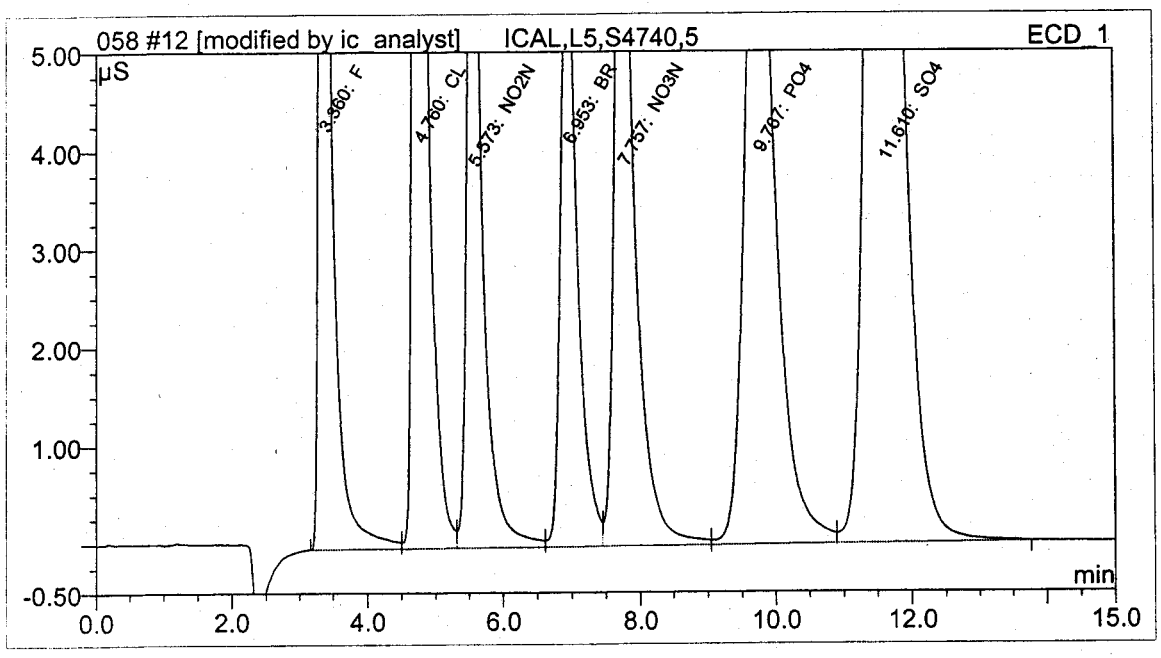
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

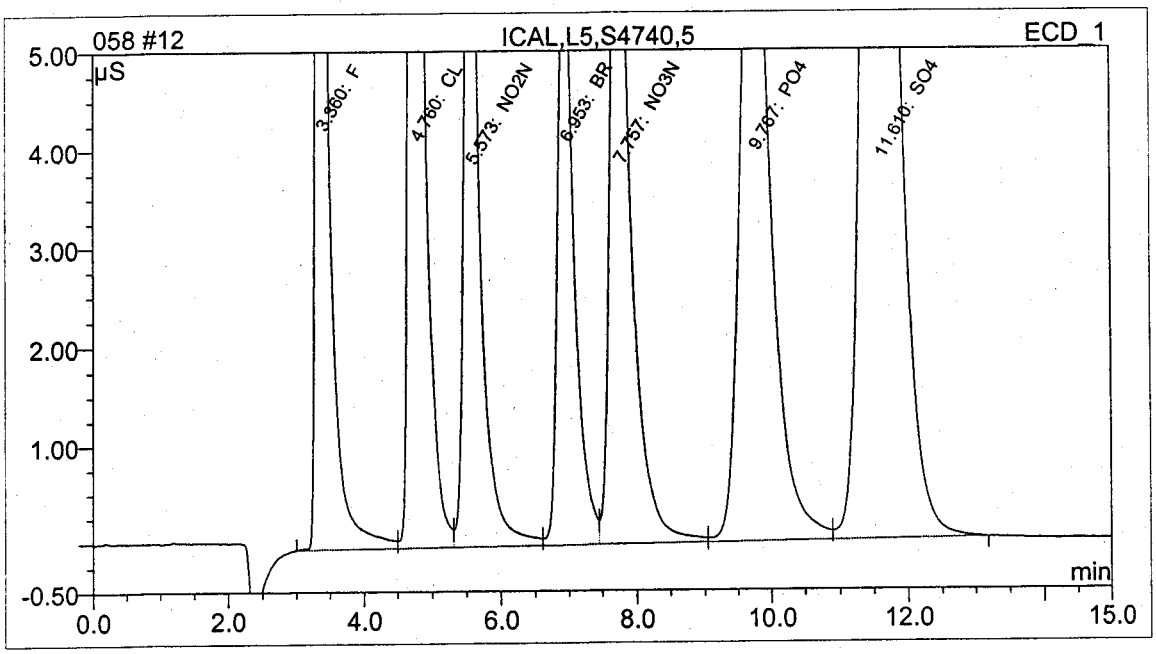
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01
Seqnum : 607084260013 File : 058_13
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

IDF : 1.0
Time : 27-FEB-2007 15:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

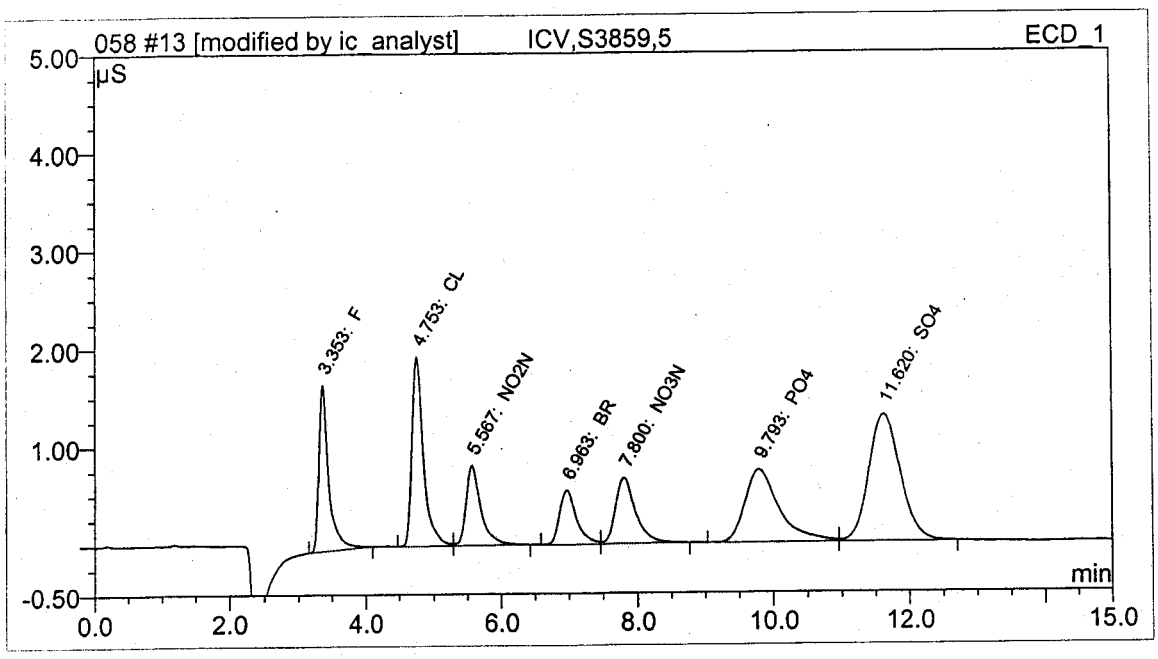
CW 3/1/07

+=high bias v=ICV

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

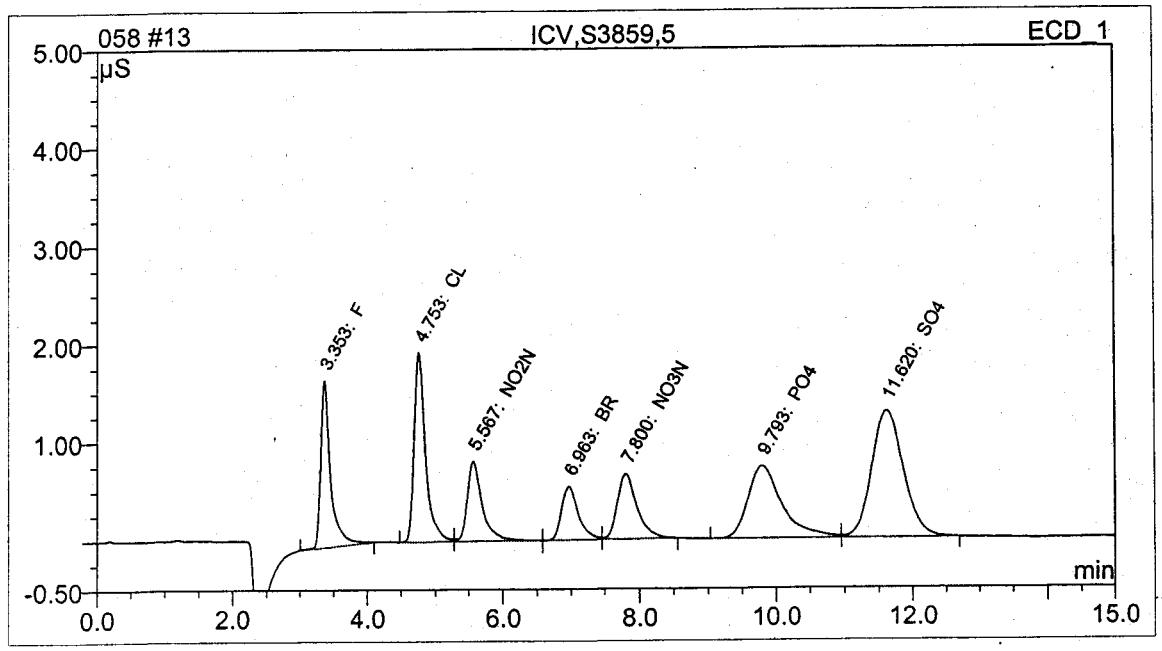
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260014 File : 058_14
Cal : 607084260001 Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:08

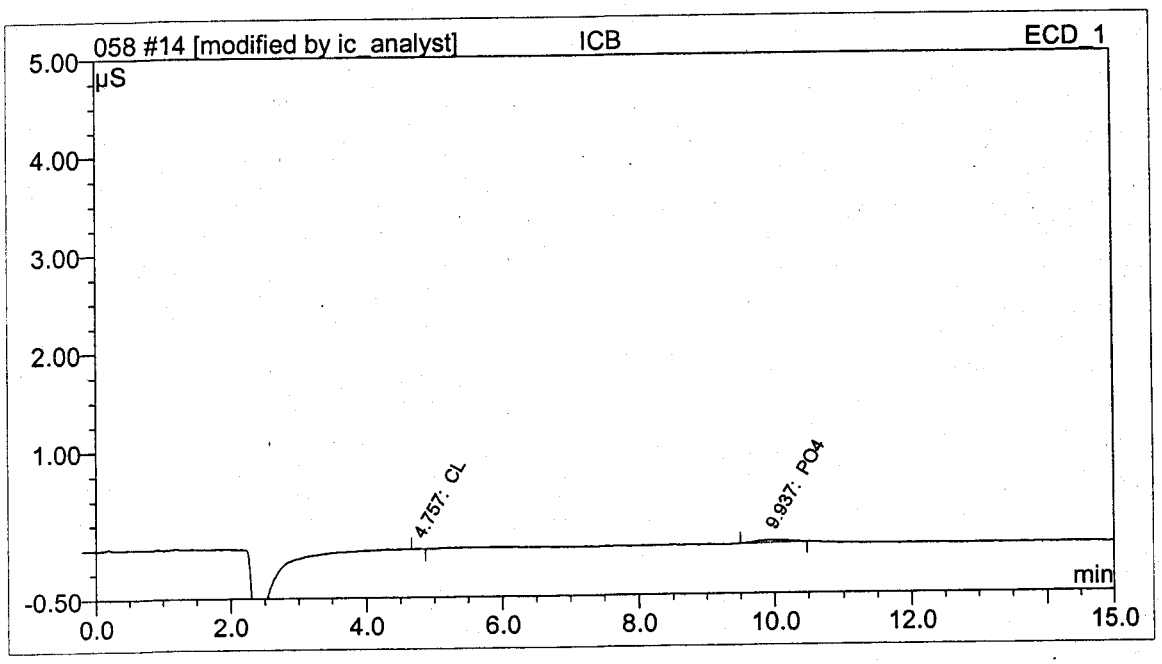
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

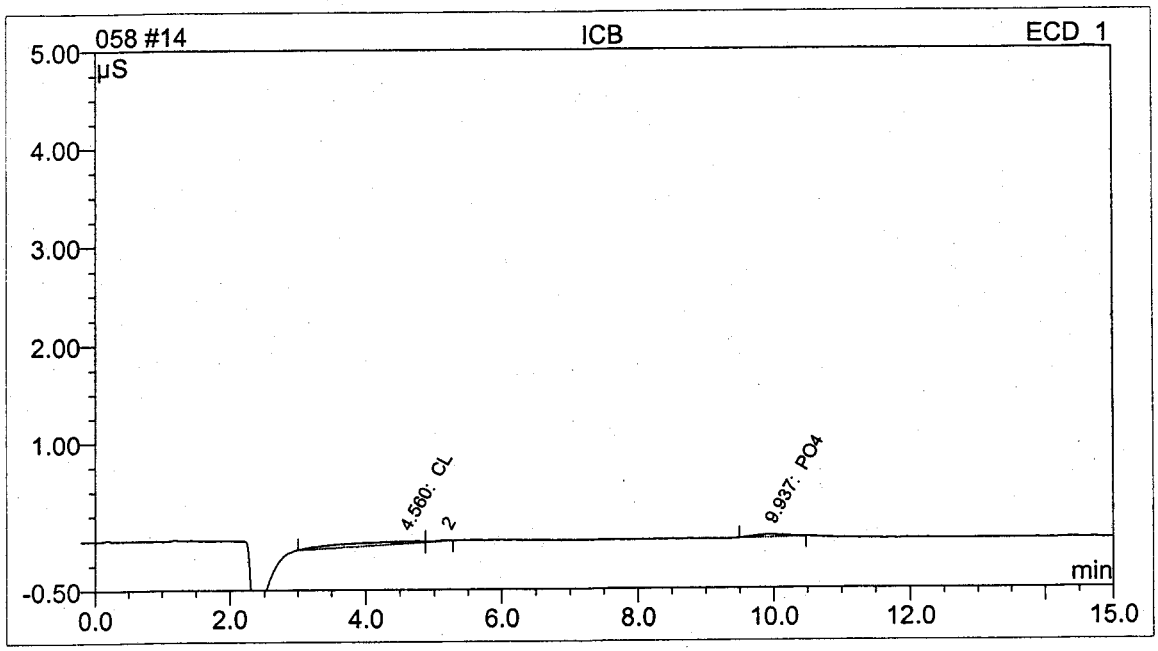
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260007 File : 058_7
Cal : 606441349001 Caldate: 02-NOV-2006

IDF : 1.0
Time : 27-FEB-2007 14:06

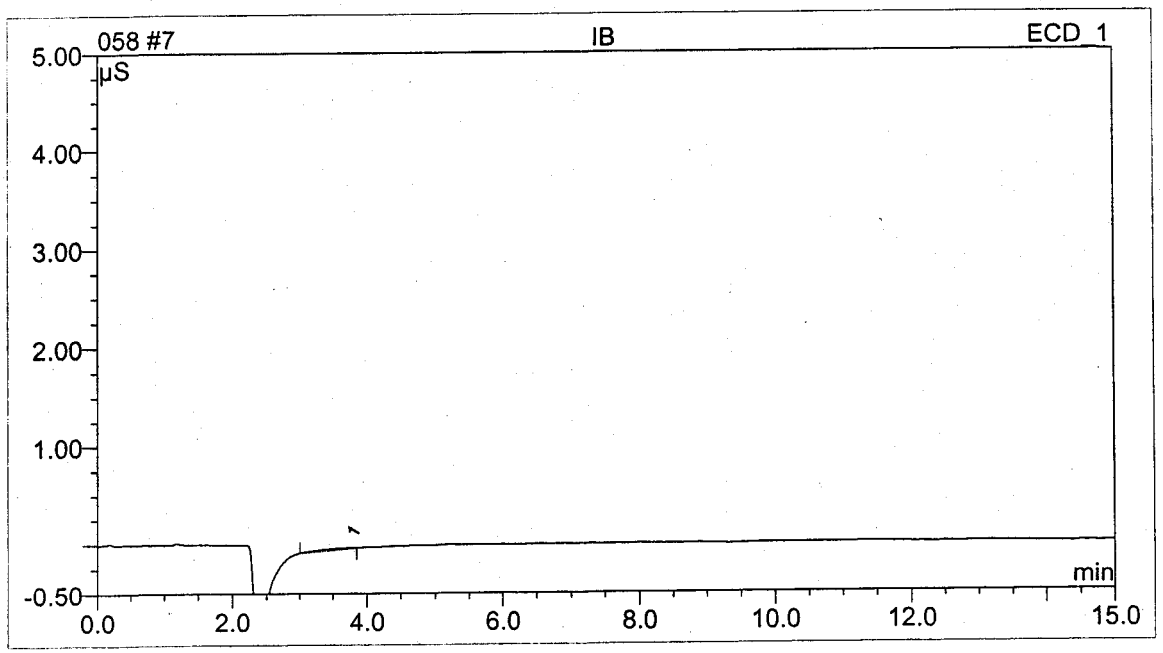
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MCS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193108 IC Water: EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Reviewer: MCH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193108 IC Water
EPA 300.0

Inst : IC03
Calnum : 627092916001 Cal Date: 05-MAR-2007

ICV 627092916007 (064_7 05-MAR-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

MKS 3/8/07

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Bromide	0.0796	0.0697	0.0681	0.0664	0.0690	QORG		0.06508	1.946E-4	0.0706	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Orthophosphate (as P)	0.2701	0.1554	0.1248	0.1245	0.1319	QORG		0.12009	5.805E-4	0.1614	0.999	0.990	N
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

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Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 3/5/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627092916001

Sequence: 064
Operator: ic_analyst

Printed: 3/6/2007 6:36:07 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-064	IB		1.0000	IC03-7AN	Finished	3/5/2007 12:36:49 PM	IC03-7AN_CAL
2	CAL-064	ICAL,L1,S4740,500		1.0000	IC03-7AN	Finished	3/5/2007 12:54:14 PM	IC03-7AN_CAL
3	CAL-064	ICAL,L2,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 1:11:38 PM	IC03-7AN_CAL
4	CAL-064	ICAL,L3,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 1:29:03 PM	IC03-7AN_CAL
5	CAL-064	ICAL,L4,S4740,10		1.0000	IC03-7AN	Finished	3/5/2007 1:46:27 PM	IC03-7AN_CAL
6	CAL-064	ICAL,L5,S4740,5		1.0000	IC03-7AN	Finished	3/5/2007 2:03:52 PM	IC03-7AN_CAL
7	CAL-064	ICV,S3859,5		1.0000	IC03-7AN	Finished	3/5/2007 2:21:16 PM	IC03-7AN_CAL
8	CAL-064	ICB		1.0000	IC03-7AN	Finished	3/5/2007 2:38:41 PM	IC03-7AN_CAL
9	122763	CCV,L,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 3:07:18 PM	IC03-7AN_CAL
10	122763	CCB/MB,QC377766		1.0000	IC03-7AN	Finished	3/5/2007 3:24:43 PM	IC03-7AN_CAL
11	122763	193108-027	J	10.0000	IC03-7AN	Finished	3/5/2007 3:43:54 PM	IC03-7AN_CAL
12	122763	MSS,193128-002	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:01:18 PM	IC03-7AN_CAL
13	122763	193128-001	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:18:43 PM	IC03-7AN_CAL
14	122763	MSS,193128-002	F	20.0000	IC03-7AN	Finished	3/5/2007 4:38:53 PM	IC03-7AN_CAL
15	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 4:56:18 PM	IC03-7AN_CAL
16	122763	193128-001	F	25.0000	IC03-7AN	Finished	3/5/2007 5:13:42 PM	IC03-7AN_CAL
17	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 5:31:07 PM	IC03-7AN_CAL
18	122763	MS,QC377768,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 5:56:29 PM	IC03-7AN_CAL
19	122763	MSD,QC377769,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 6:13:53 PM	IC03-7AN_CAL
20	122763	LCS,QC377767,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:01:14 PM	IC03-7AN_CAL
21	122763	CCV,M,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:18:38 PM	IC03-7AN_CAL
22	122763	CCB		1.0000	IC03-7AN	Finished	3/5/2007 7:36:03 PM	IC03-7AN_CAL
23	122763	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	3/5/2007 7:53:28 PM	IC03-7AN_CAL

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Sequence: 064
Operator: ic_analyst
Printed: 3/6/2007 6:36:07 PM

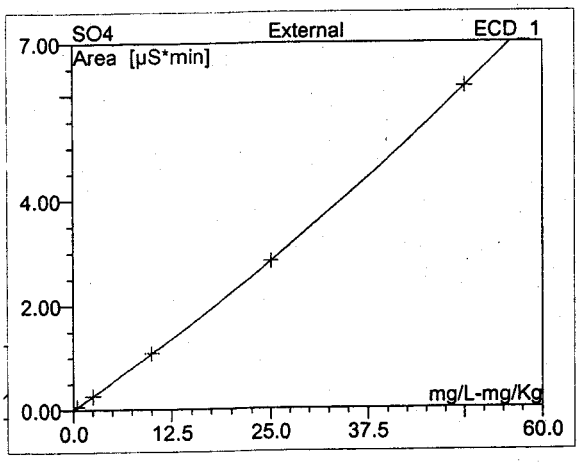
Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-064	IB		Unknown	25.0	MRS	1
2	CAL-064	ICAL,L1,S4740,500		Standard	25.0	MRS	1
3	CAL-064	ICAL,L2,S4740,100		Standard	25.0	MRS	1
4	CAL-064	ICAL,L3,S4740,25		Standard	25.0	MRS	1
5	CAL-064	ICAL,L4,S4740,10		Standard	25.0	MRS	1
6	CAL-064	ICAL,L5,S4740,5		Standard	25.0	MRS	1
7	CAL-064	ICV,S3859,5		Unknown	25.0	MRS	1
8	CAL-064	ICB		Unknown	25.0	MRS	1
9	122763	CCV,L,S4740,100		Unknown	25.0	MRS	1
10	122763	CCB/MB,QC377766		Unknown	25.0	MRS	1
11	122763	193108-027	J	Unknown	25.0	MRS	1
12	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
13	122763	193128-001	F	Unknown	25.0	MRS	1
14	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
15	122763	BLK		Unknown	25.0	MRS	1
16	122763	193128-001	F	Unknown	25.0	MRS	1
17	122763	BLK		Unknown	25.0	MRS	1
18	122763	MS,QC377768,S4740,50	F	Unknown	25.0	MRS	1
19	122763	MSD,QC377769,S4740,50	F	Unknown	25.0	MRS	1
20	122763	LCS,QC377767,S4740,25		Unknown	25.0	MRS	1
21	122763	CCV,M,S4740,25		Unknown	25.0	MRS	1
22	122763	CCB		Unknown	25.0	MRS	1
23	122763	SHUTDOWN		Unknown	25.0	MRS	1

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

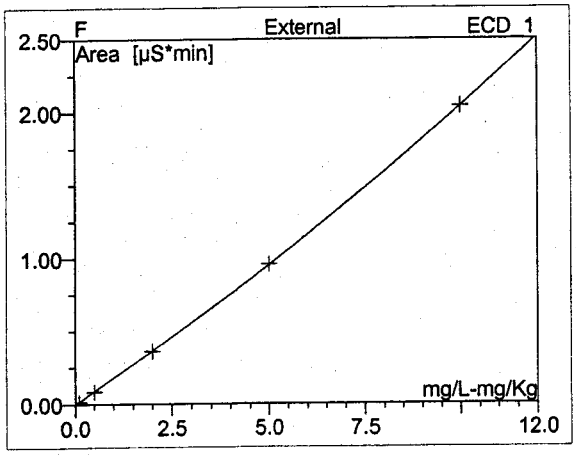
Sequence:	064	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	03/05/07 14:03	*Run Time:*	15.00

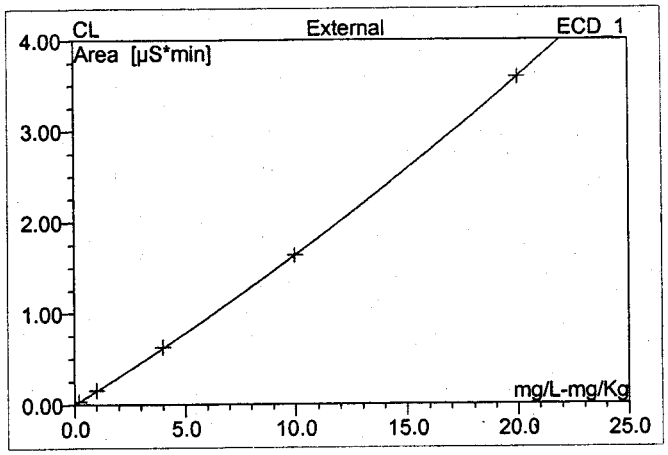


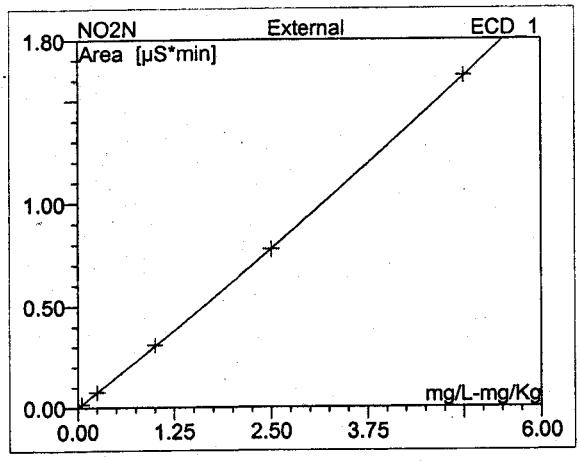
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.940	F	Quad	5	0.000000	0.176934	0.002701	99.949239
2	4.310	CL	Quad	5	0.000000	0.148797	0.001530	99.896081
3	5.083	NO2N	Quad	5	0.000000	0.297350	0.005328	99.974037
4	6.437	BR	Quad	5	0.000000	0.065083	0.000195	99.978297
5	7.193	NO3N	Quad	5	0.000000	0.364867	0.008136	99.955223
6	9.397	PO4	Quad	5	0.000000	0.120090	0.000581	99.931914
7	11.303	SO4	Quad	5	0.000000	0.103685	0.000386	99.912131
AVERAGE:					0.000000	0.182401	0.002694	99.942417

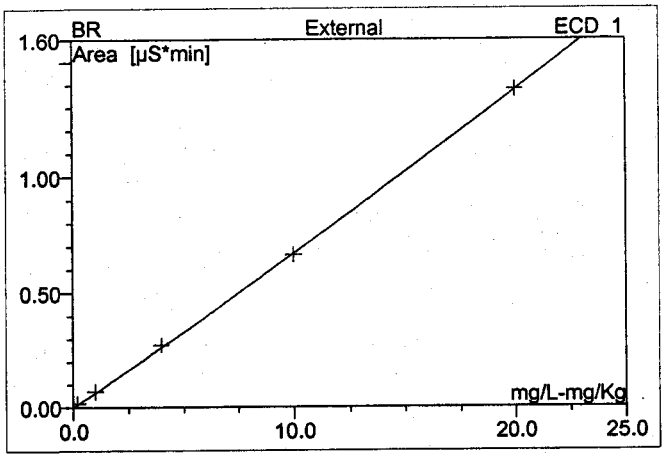
IC03 Calibration Batch Report

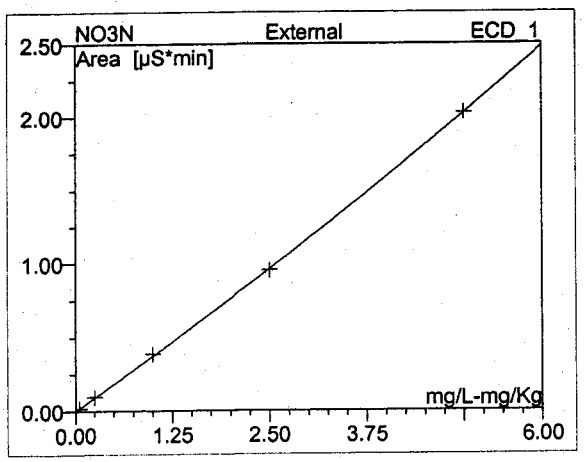
Sequence:	064	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	03/05/07 14:03	Run Time:	15.00

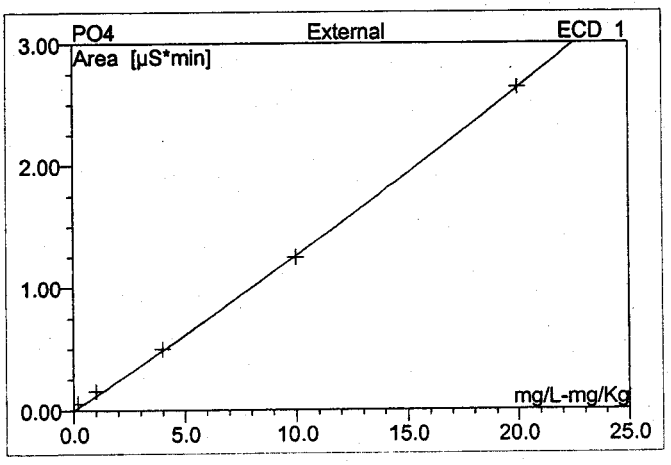






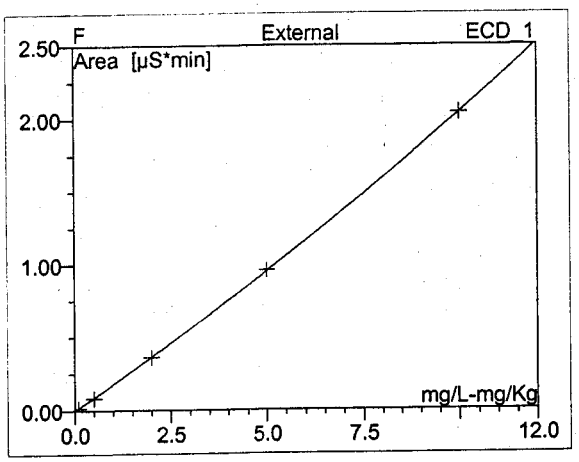


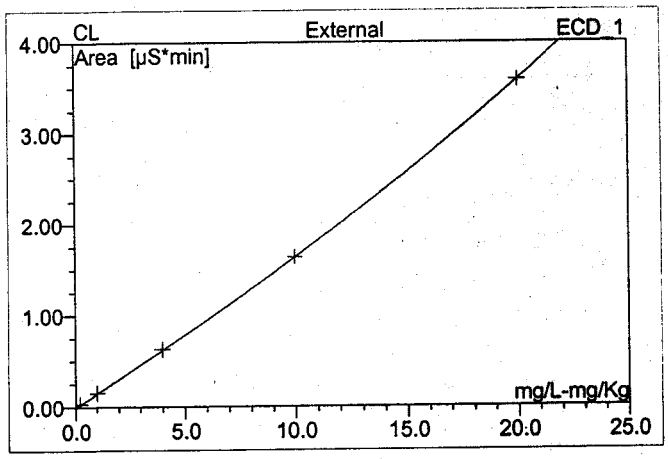


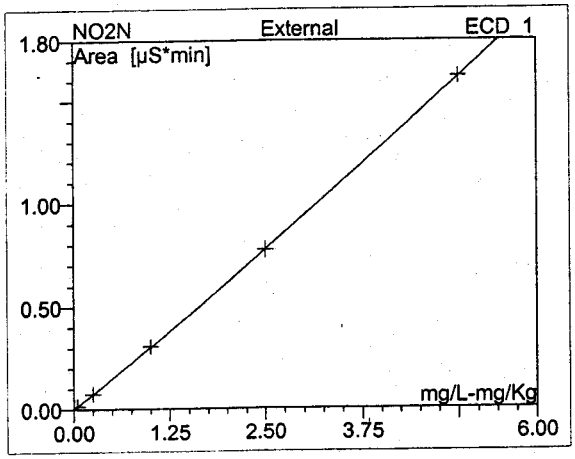


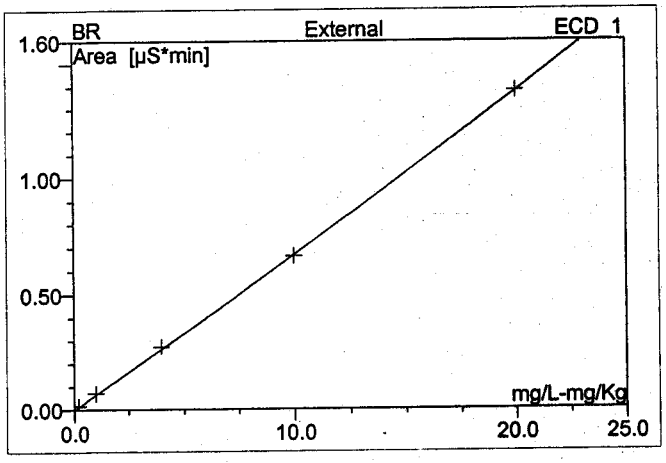
IC03 Calibration Batch Report

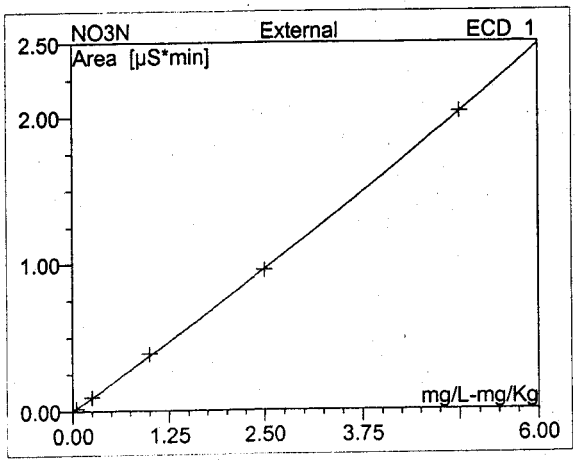
Sequence:	064	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Ini. Date/Time:	03/05/07 13:29	Run Time:	15.00

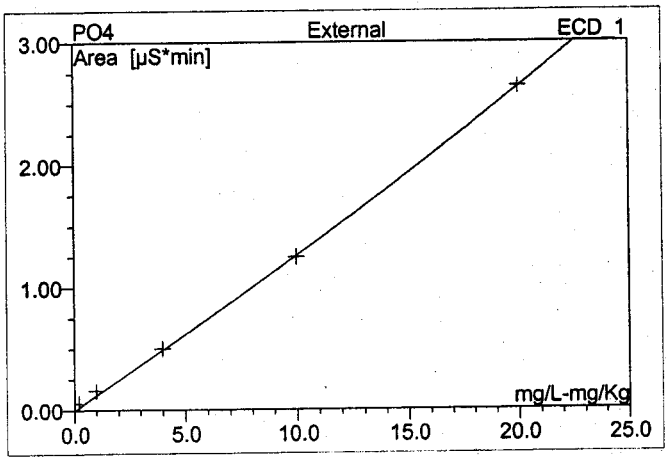




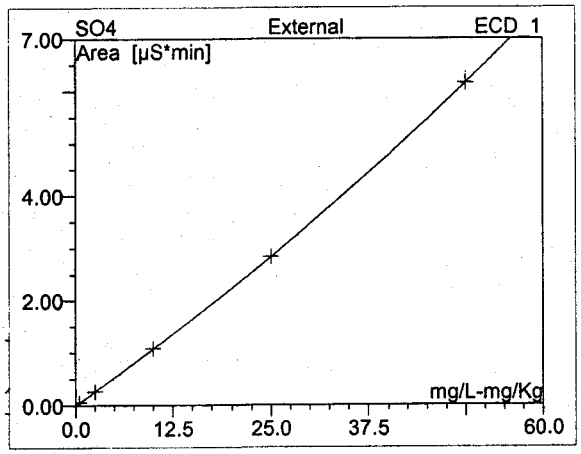








Sequence:	064	*Inj. Vol.:*	25.0
Program:	IC03-7AN	*Operator:*	n.a.
Inj. Date/Time:	03/05/07 13:29	*Run Time:*	15.00



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.933	F	Quad	5	0.000000	0.176934	0.002701	99.949239
3	4.303	CL	Quad	5	0.000000	0.148797	0.001530	99.896081
4	5.080	NO2N	Quad	5	0.000000	0.297350	0.005328	99.974037
6	6.447	BR	Quad	5	0.000000	0.065083	0.000195	99.978297
7	7.227	NO3N	Quad	5	0.000000	0.364867	0.008136	99.955223
8	9.410	PO4	Quad	5	0.000000	0.120090	0.000581	99.931914
10	11.307	SO4	Quad	5	0.000000	0.103685	0.000386	99.912131
AVERAGE:					0.000000	0.182401	0.002694	99.942417

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
2	ICAL,L1,S474	0.013984	0.030060	0.015376	0.015928	0.017080	0.054026	0.059200
3	ICAL,L2,S474	0.082655	0.151891	0.074983	0.069681	0.094449	0.155444	0.260487
4	ICAL,L3,S474	0.360134	0.625490	0.306630	0.272305	0.386270	0.499382	1.077717
5	ICAL,L4,S474	0.956489	1.636939	0.774070	0.663674	0.954052	1.244935	2.831688
6	ICAL,L5,S474	2.038608	3.588720	1.620454	1.380808	2.029424	2.637050	6.148953

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
2	ICAL,L1,S474	0.106784	0.259206	0.094736	0.085782	0.086944	0.139904	0.192940
3	ICAL,L2,S474	0.559810	1.251968	0.476384	0.380274	0.439102	0.442038	0.871826
4	ICAL,L3,S474	2.519532	5.183898	1.963338	1.493146	1.805864	1.577264	3.668088
5	ICAL,L4,S474	7.021296	14.016320	5.023600	3.765102	4.656376	4.136188	9.753474
6	ICAL,L5,S474	16.054300	31.358586	10.620766	7.988634	10.098332	9.284974	21.808498

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
2	ICAL,L1,S474	0.078939	0.201601	0.051663	0.244555	0.046763	0.448900	0.569750
3	ICAL,L2,S474	0.463870	1.010297	0.251040	1.067238	0.257382	1.286394	2.489237
4	ICAL,L3,S474	1.975816	4.036139	1.012826	4.132878	1.034784	4.077992	10.020568
5	ICAL,L4,S474	5.021006	9.977518	2.491950	9.903984	2.477892	9.893477	24.987492
6	ICAL,L5,S474	9.996219	20.003673	5.001406	20.017697	5.003816	20.021116	50.002073

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

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Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100
1	*F*	*2.933 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*		*0.100000*	*0.500000*
2	CL	4.303 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.080 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.447 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.227 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.410 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.307 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5	Comment
1	*F*	*2.933 min*	*2.000000*	*5.000000*	*10.000000*	
2	CL	4.303 min	4.000000	10.000000	20.000000	
3	NO2N	5.080 min	1.000000	2.500000	5.000000	
4	BR	6.447 min	4.000000	10.000000	20.000000	
5	NO3N	7.227 min	1.000000	2.500000	5.000000	
6	PO4	9.410 min	4.000000	10.000000	20.000000	
7	SO4	11.307 min	10.000000	25.000000	50.000000	

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	*F*	*2.933 min*	*1.000000*	*0.100000*	*0.500000*	*2.000000*	*5.000000*	*10.000000*
2	CL	4.303 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
3	NO2N	5.080 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
4	BR	6.447 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.227 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
6	PO4	9.410 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
7	SO4	11.307 min	1.000000	0.500000	2.500000	10.000000	25.000000	50.000000

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Comment
1	*F*	*2.933 min*	
2	CL	4.303 min	
3	NO2N	5.080 min	
4	BR	6.447 min	
5	NO3N	7.227 min	
6	PO4	9.410 min	
7	SO4	11.307 min	

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Calibration:

Calibration Mode: Total
Auto Recalibrate: On

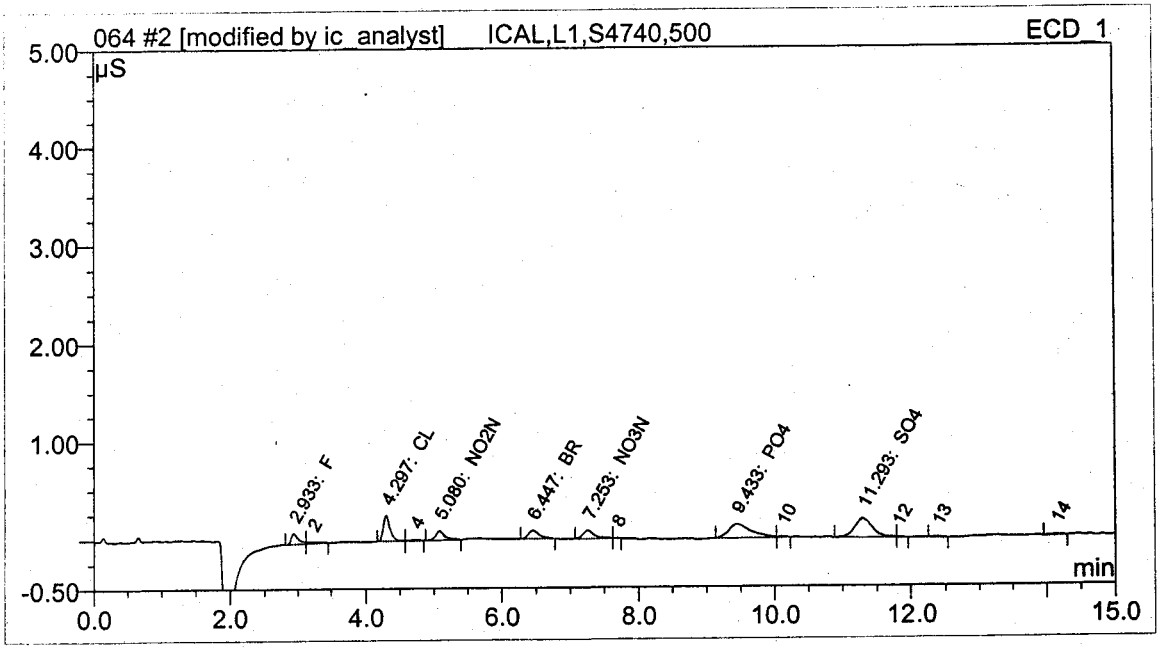
No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	3/5/2007 12:54:14 PM	Ok
2	☒	ICAL,L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	3/5/2007 1:11:38 PM	Ok
3	☒	ICAL,L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	3/5/2007 1:29:03 PM	Ok
4	☒	ICAL,L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	3/5/2007 1:46:27 PM	Ok
5	☒	ICAL,L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	3/5/2007 2:03:52 PM	Ok

Chromeleon © Dionex Corporation, Version 6.50 SP4 Build 1000

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.013984	0.0789	0.0789	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.017080	0.0468	0.0468	
9	PO4	9.433	0.054026	0.4489	0.4489	
11	SO4	11.293	0.059200	0.5697	0.5697	



ANALYZED BY: _____

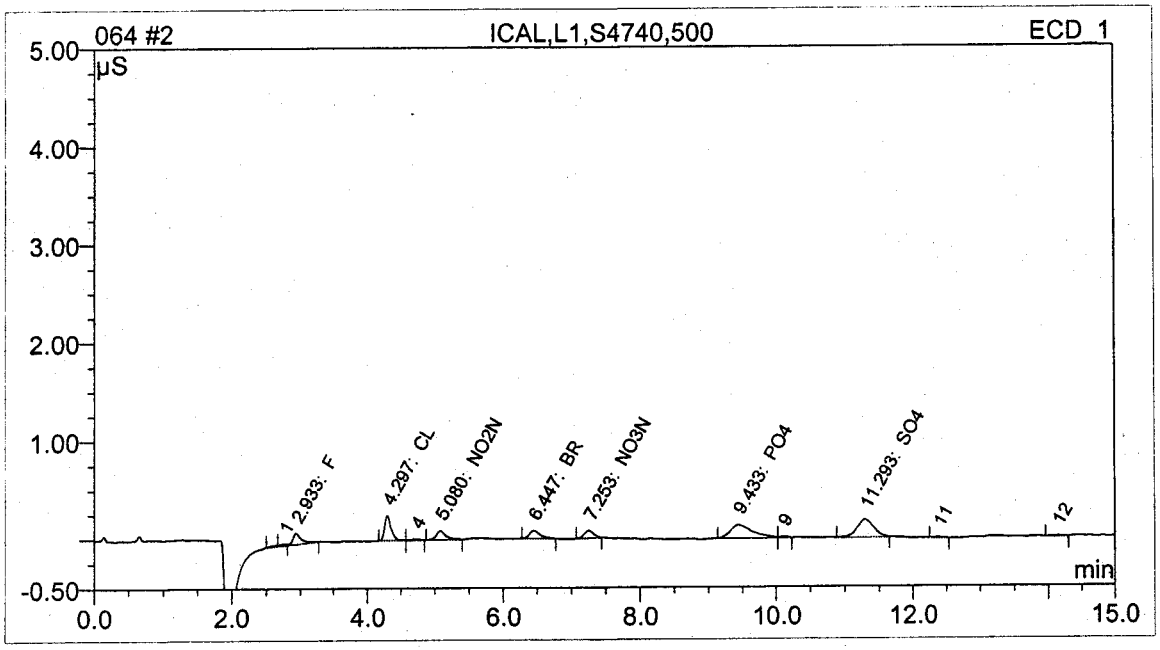
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.933	0.018469	0.1042	0.1042	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.012973	0.0355	0.0355	
8	PO4	9.433	0.054026	0.4489	0.4489	
10	SO4	11.293	0.053244	0.5126	0.5126	



ANALYZED BY: _____

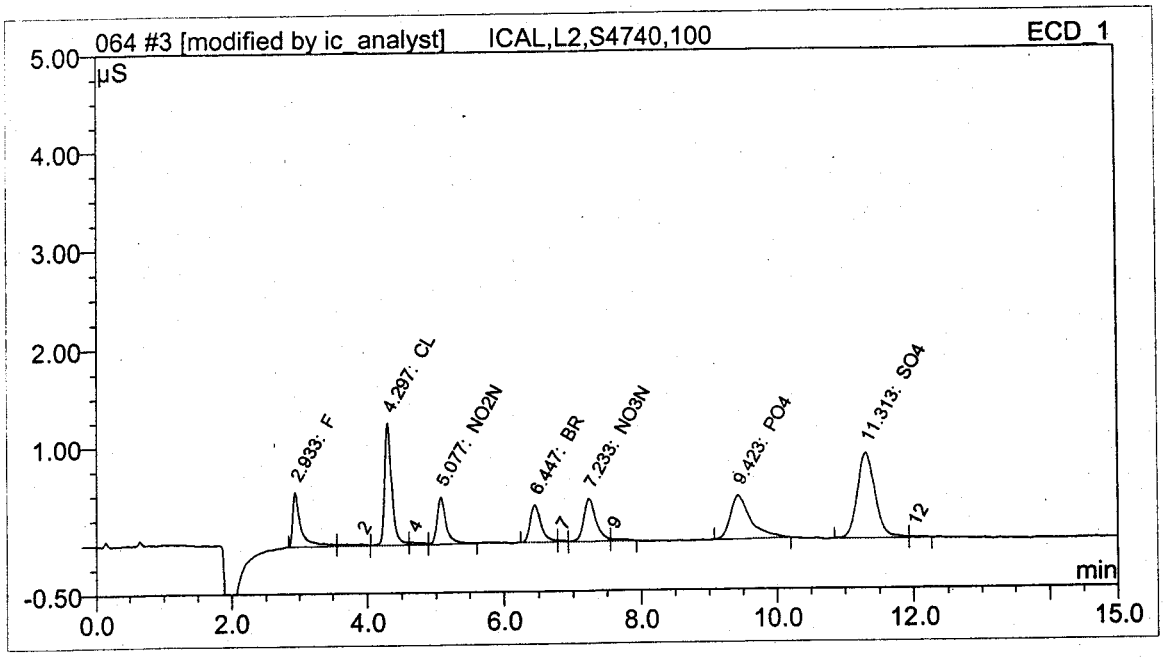
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.082655	0.4639	0.4639	
3	CL	4.297	0.151891	1.0103	1.0103	
5	NO2N	5.077	0.074983	0.2510	0.2510	
6	BR	6.447	0.069681	1.0672	1.0672	
8	NO3N	7.233	0.094449	0.2574	0.2574	
10	PO4	9.423	0.155444	1.2864	1.2864	
11	SO4	11.313	0.260487	2.4892	2.4892	



ANALYZED BY: _____

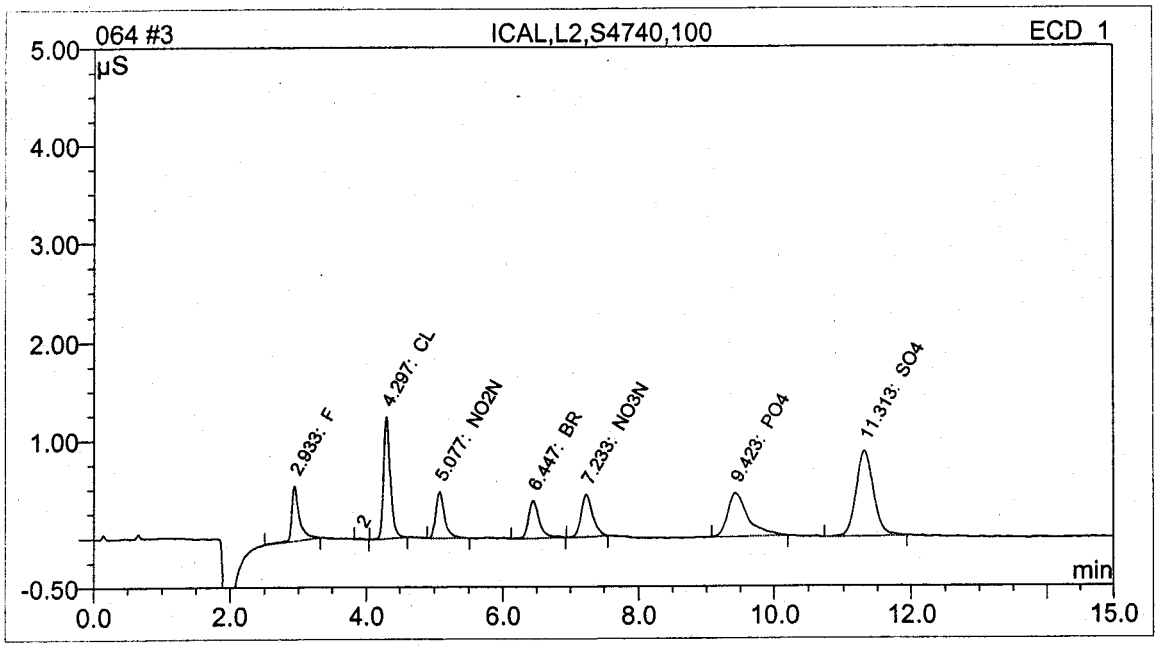
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.075978	0.4275	0.4275	
3	CL	4.297	0.146267	0.9742	0.9742	
4	NO2N	5.077	0.071148	0.2386	0.2386	
5	BR	6.447	0.071306	1.0913	1.0913	
6	NO3N	7.233	0.086565	0.2365	0.2365	
7	PO4	9.423	0.155444	1.2864	1.2864	
8	SO4	11.313	0.257897	2.4653	2.4653	



ANALYZED BY: _____

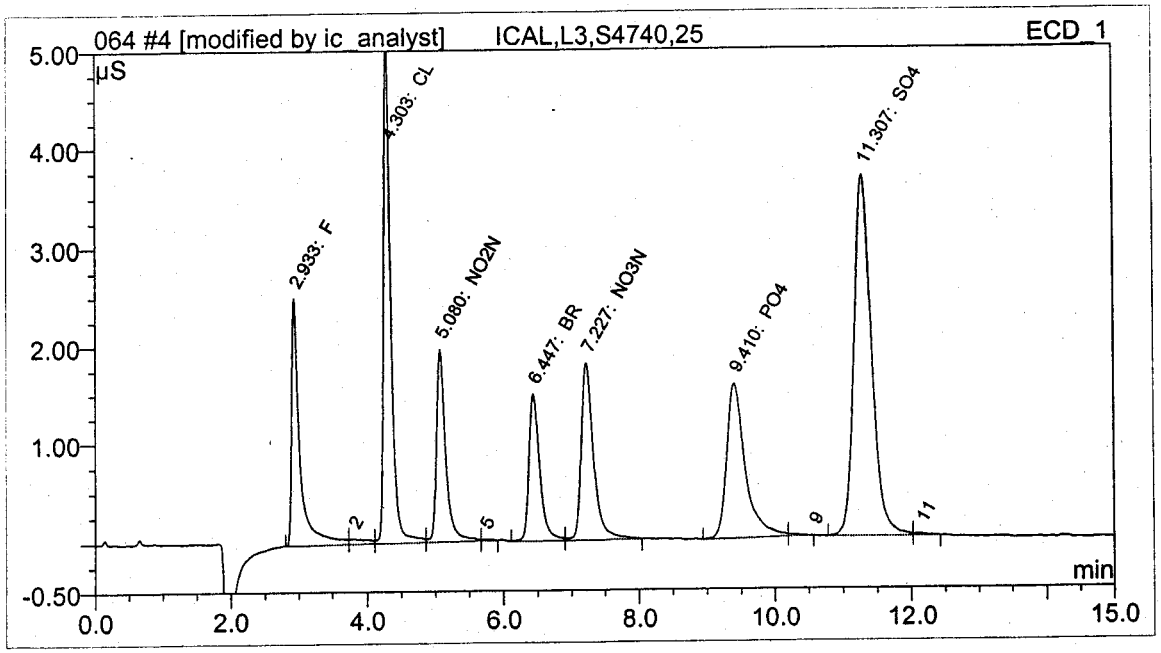
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.360134	1.9758	1.9758	
3	CL	4.303	0.625490	4.0361	4.0361	
4	NO2N	5.080	0.306630	1.0128	1.0128	
6	BR	6.447	0.272305	4.1329	4.1329	
7	NO3N	7.227	0.386270	1.0348	1.0348	
8	PO4	9.410	0.499382	4.0780	4.0780	
10	SO4	11.307	1.077717	10.0206	10.0206	



ANALYZED BY: _____

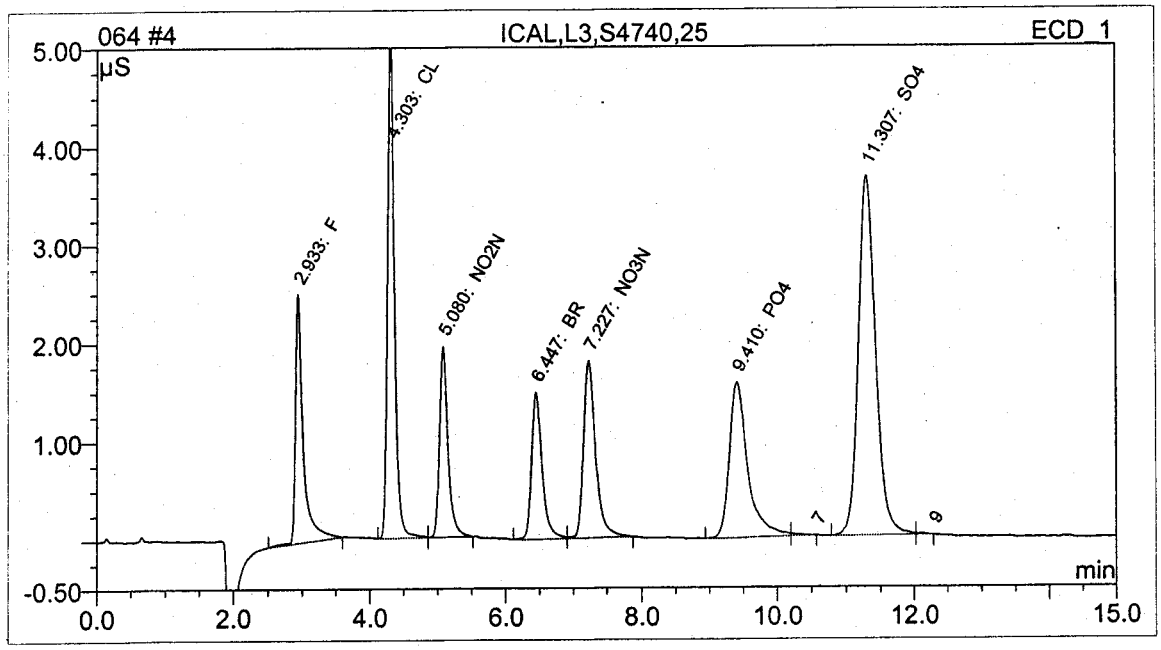
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.341403	1.9038	1.9038	
2	CL	4.303	0.603405	3.9382	3.9382	
3	NO2N	5.080	0.285535	0.9636	0.9636	
4	BR	6.447	0.269846	4.1069	4.1069	
5	NO3N	7.227	0.375155	1.0142	1.0142	
6	PO4	9.410	0.499382	4.0780	4.0780	
8	SO4	11.307	1.071996	9.9841	9.9841	



ANALYZED BY: _____

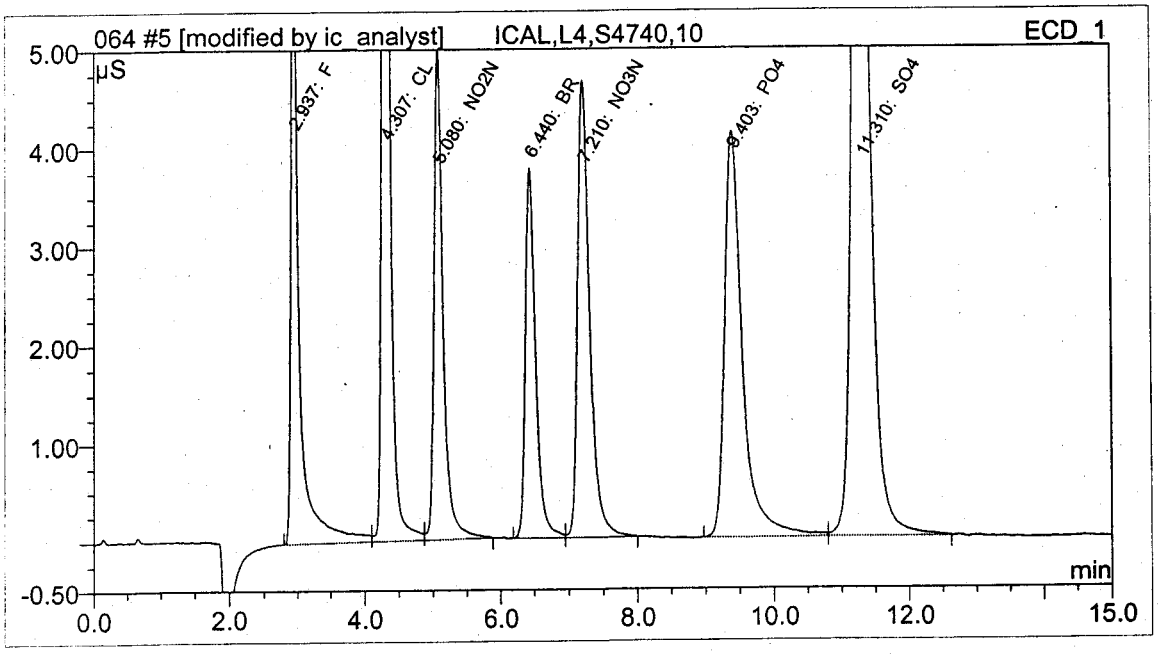
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.956489	5.0210	5.0210	
2	CL	4.307	1.636939	9.9775	9.9775	
3	NO2N	5.080	0.774070	2.4920	2.4920	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.244935	9.8935	9.8935	
7	SO4	11.310	2.831688	24.9875	24.9875	



ANALYZED BY: _____

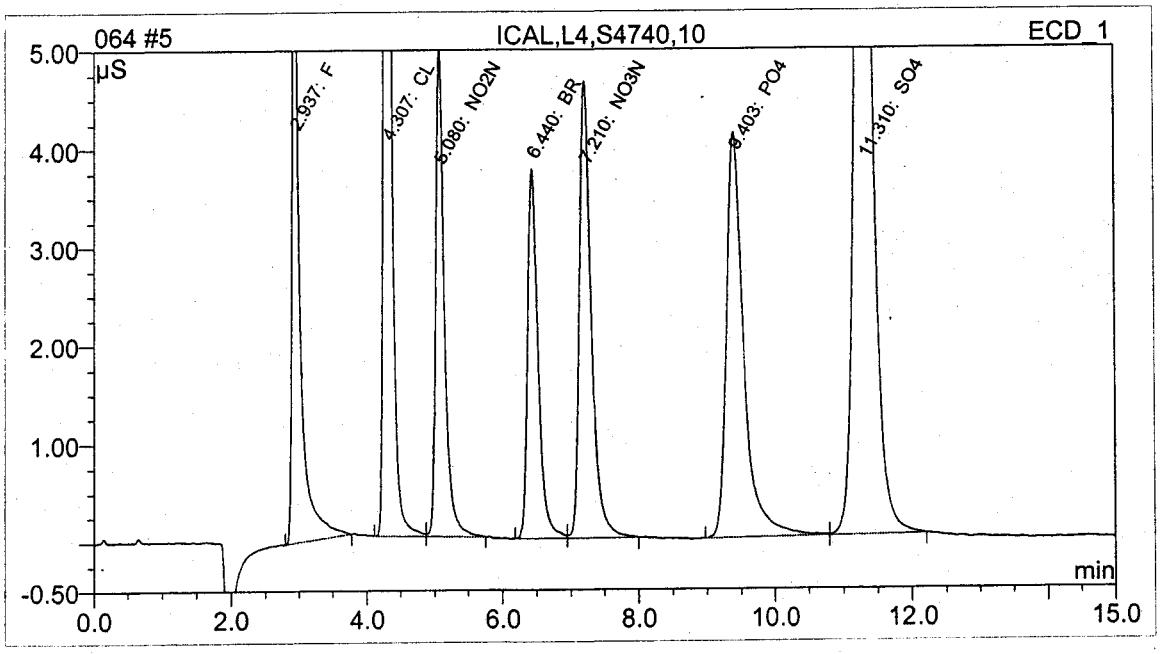
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.888070	4.9182	4.9182	
2	CL	4.307	1.598349	9.9117	9.9117	
3	NO2N	5.080	0.747696	2.4670	2.4670	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.228820	9.8560	9.8560	
7	SO4	11.310	2.789769	24.8832	24.8832	



ANALYZED BY: _____

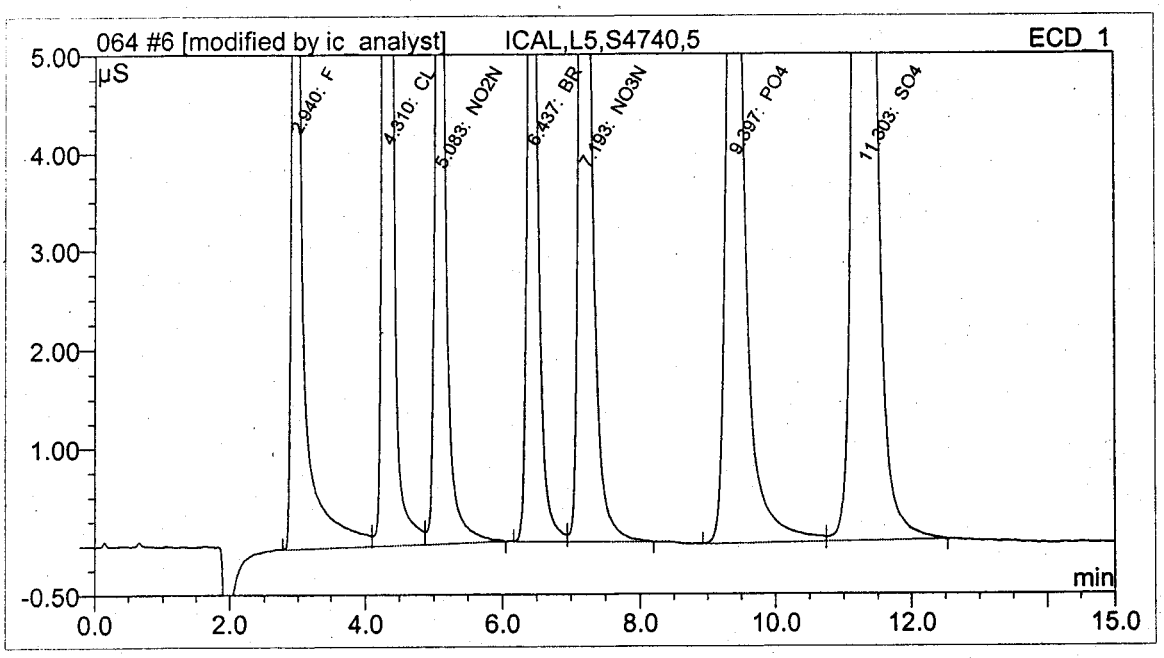
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.038608	9.9962	9.9962	
2	CL	4.310	3.588720	20.0037	20.0037	
3	NO2N	5.083	1.620454	5.0014	5.0014	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

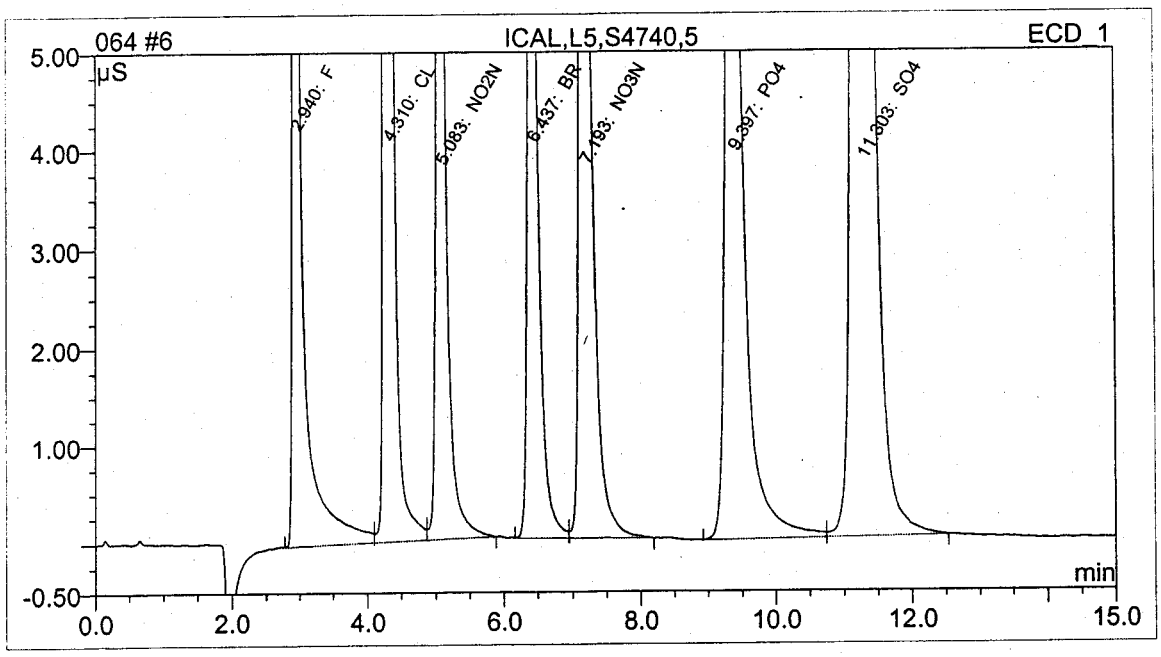
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 , 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.032875	9.9959	9.9959	
2	CL	4.310	3.580258	20.0032	20.0032	
3	NO2N	5.083	1.601110	5.0008	5.0008	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916007 File : 064_7 Time : 05-MAR-2007 14:21
Cal : 627092916001 Caldate: 05-MAR-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Bromide	0.0706	0.0714	2.000	2.181	mg/L	9	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Orthophosphate (as P)	0.1614	0.1250	2.000	2.060	mg/L	3	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

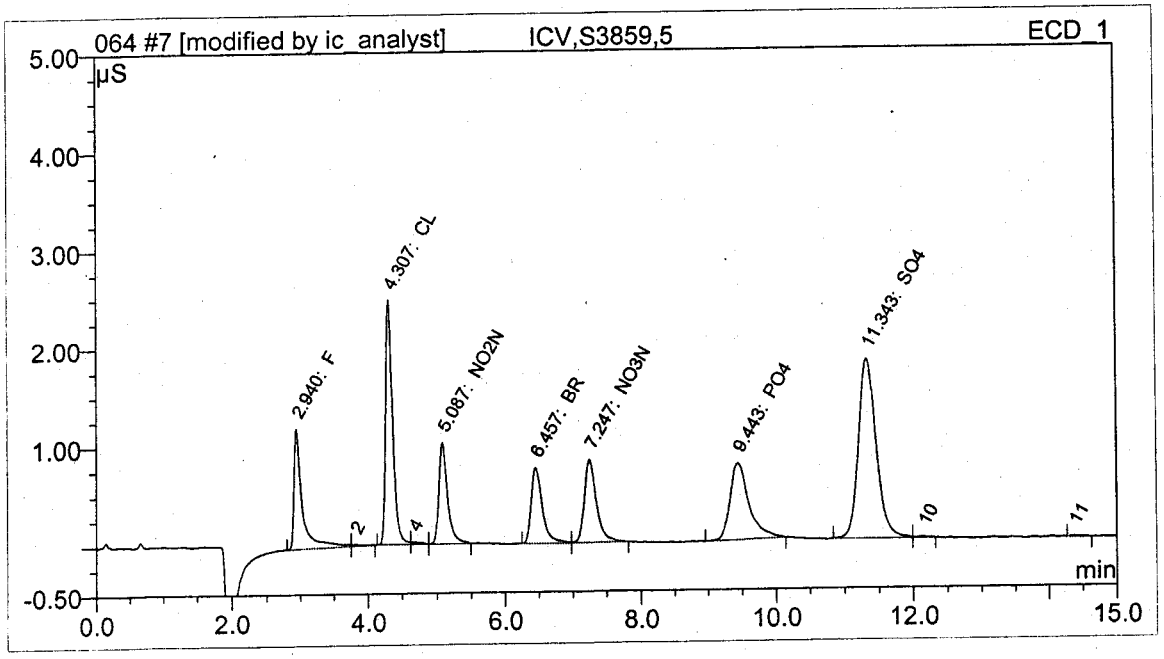
MRS 3/5/07

3/15/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180313	1.0037	1.0037	
3	CL	4.307	0.294964	1.9435	1.9435	
5	NO2N	5.087	0.155389	0.5178	0.5178	
6	BR	6.457	0.142892	2.1813	2.1813	
7	NO3N	7.247	0.177004	0.4800	0.4800	
8	PO4	9.443	0.249901	2.0604	2.0604	
9	SO4	11.343	0.538907	5.1007	5.1007	



ANALYZED BY: _____

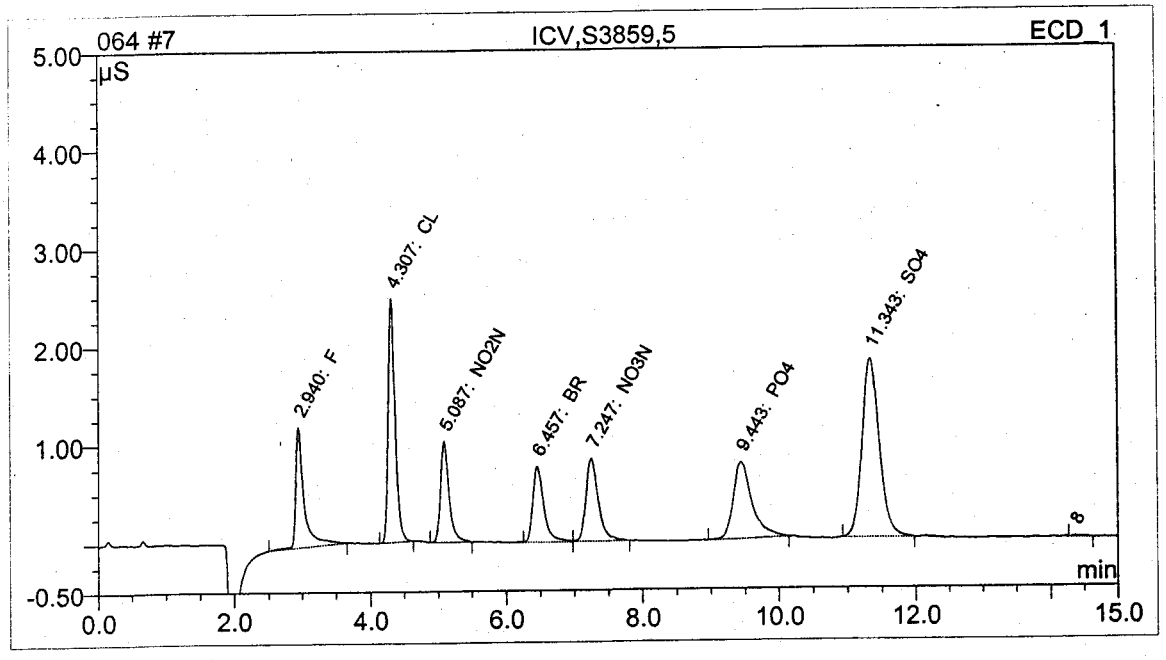
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.177111	0.9862	0.9862	
2	CL	4.307	0.289553	1.9085	1.9085	
3	NO2N	5.087	0.154283	0.5141	0.5141	
4	BR	6.457	0.142892	2.1813	2.1813	
5	NO3N	7.247	0.177004	0.4800	0.4800	
6	PO4	9.443	0.249901	2.0604	2.0604	
7	SO4	11.343	0.531317	5.0302	5.0302	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 627092916008 File : 064_8
Cal : 627092916001 Caldate: 05-MAR-2007

IDF : 1.0
Time : 05-MAR-2007 14:38

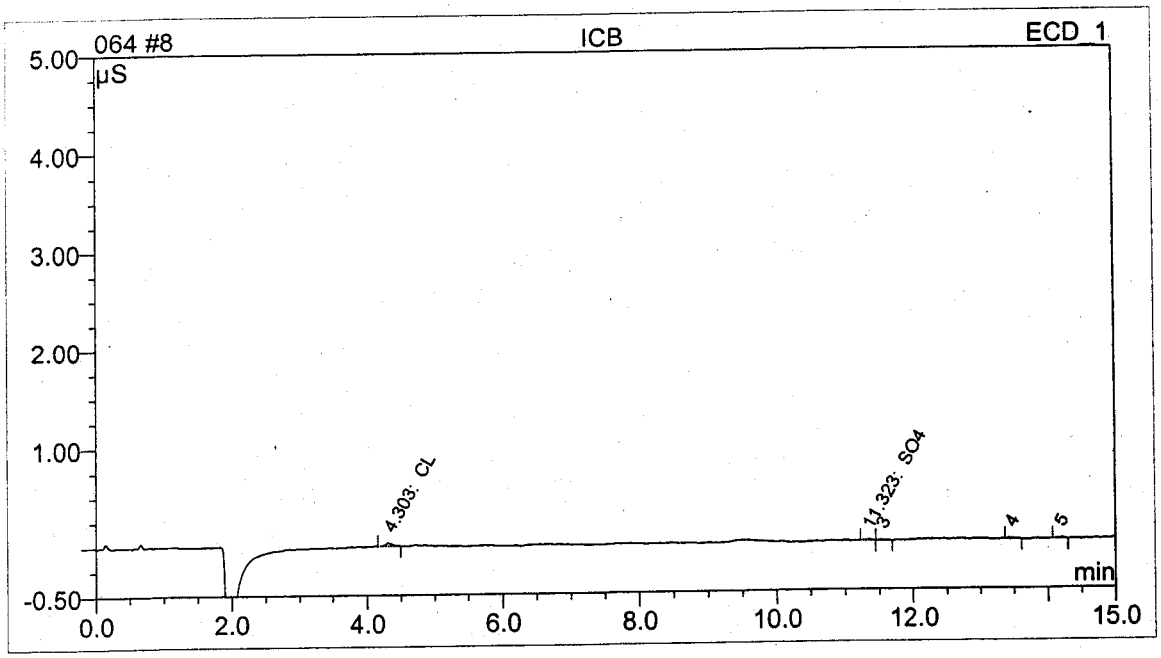
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	8
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:38 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.303	0.004707	0.0316	0.0316	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
2	SO4	11.323	0.001376	0.0133	0.0133	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

nst : IC03
eqnum : 627092916001
al : 627084271001

File : 064_1
Caldate: 27-FEB-2007

IDF : 1.0
Time : 05-MAR-2007 12:36

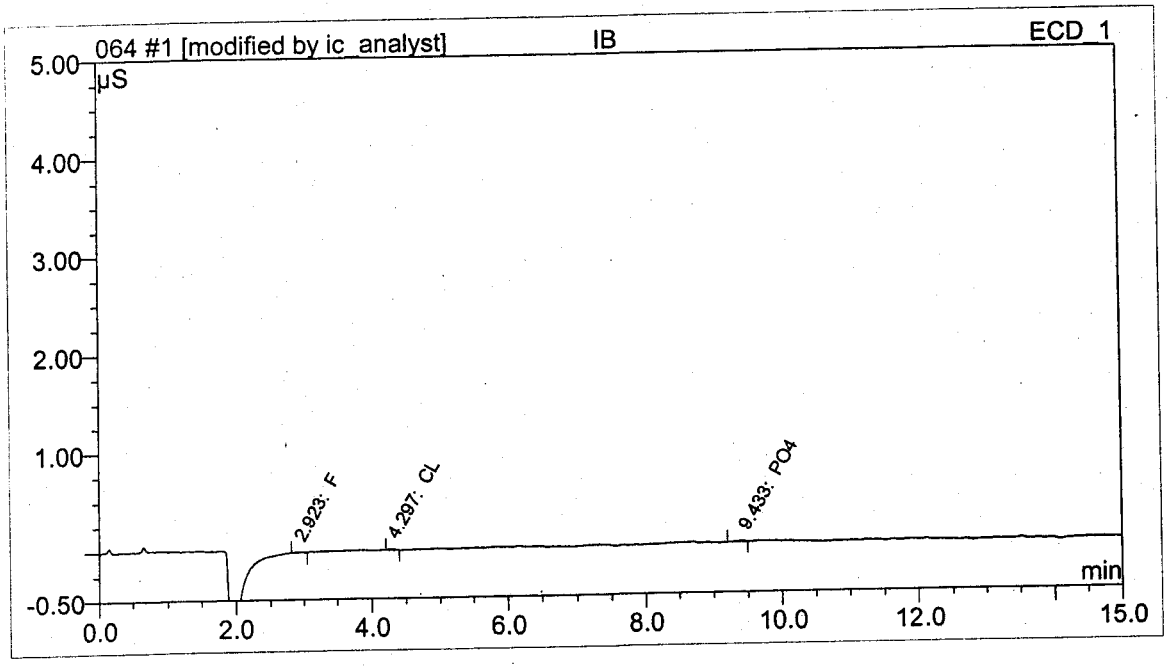
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.000712	0.0040	0.0040	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

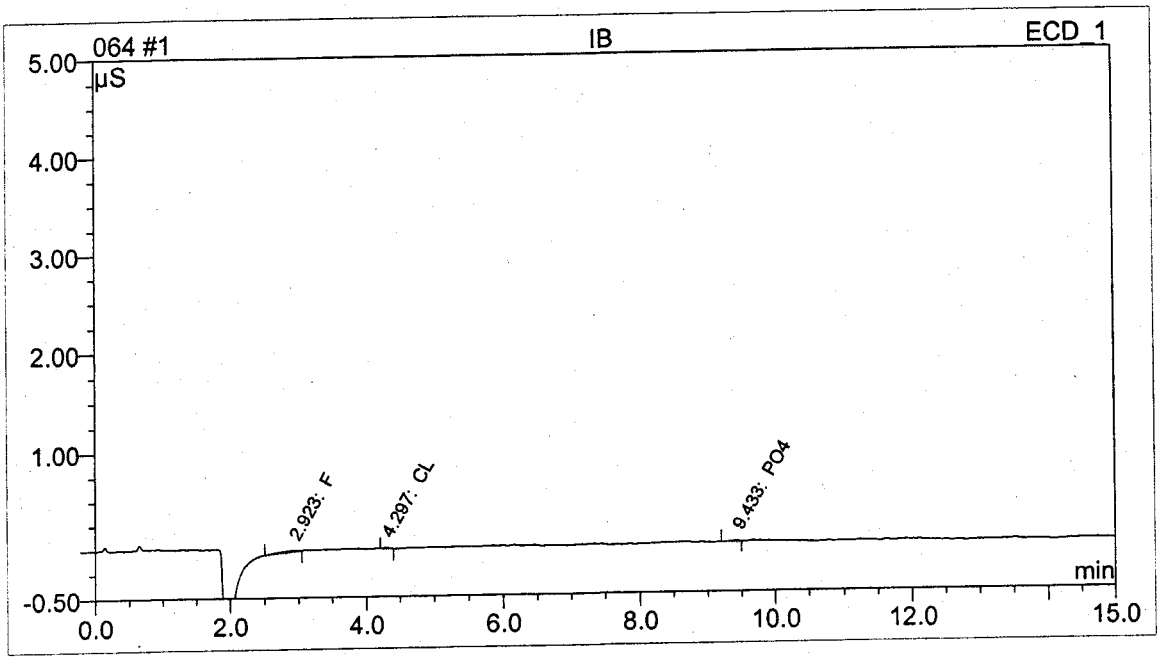
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.004858	0.0274	0.0274	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.2987	0.2993	0.5000	0.5071	mg/L	1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.2987	0.3011	2.0000	2.0151	mg/L	1	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.2987	0.3048	5.0000	4.9797	mg/L	0	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.2987	0.3035	2.0000	2.0313	mg/L	2	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.2987	0.3013	5.0000	4.9253	mg/L	-1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.2987	0.2968	2.0000	1.9872	mg/L	-1	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.2987	0.2995	5.0000	4.8974	mg/L	-2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.2987	0.3004	5.0000	4.9110	mg/L	-2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.2987	0.2779	0.5000	0.4709	mg/L	-6	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.2987	0.2965	2.0000	1.9849	mg/L	-1	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.2028	0.1879	1.0000	0.9923	mg/L	-1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.2028	0.2007	4.0000	4.1261	mg/L	3	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.2028	0.2074	10.000	10.147	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.2028	0.2040	4.0000	4.1919	mg/L	5	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.2028	0.2074	10.000	10.148	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.2028	0.2006	4.0000	4.1259	mg/L	3	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.2028	0.2084	10.000	10.192	mg/L	2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.2028	0.1921	1.0000	1.0142	mg/L	1	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.2028	0.2022	4.0000	4.1562	mg/L	4	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.1603	0.1481	1.0000	0.9855	mg/L	-1	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.1603	0.1550	4.0000	4.0026	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.4045	0.3887	0.2500	0.2458	mg/L	-2	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.4045	0.4046	1.0000	1.0150	mg/L	2	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.4045	0.4095	2.5000	2.5288	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.4045	0.4100	1.0000	1.0284	mg/L	3	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.4045	0.4087	2.5000	2.5238	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.4045	0.4015	1.0000	1.0074	mg/L	1	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.4045	0.4148	2.5000	2.5608	mg/L	2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.4045	0.4149	2.5000	2.5610	mg/L	2	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.4045	0.3964	0.2500	0.2506	mg/L	0	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.4045	0.3999	1.0000	1.0035	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.4834	0.4641	0.2500	0.2494	mg/L	0	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.4834	0.4869	1.0000	1.0237	mg/L	2	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.4834	0.5059	2.5000	2.5497	mg/L	2	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.4834	0.4990	1.0000	1.0484	mg/L	5	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.4834	0.5056	2.5000	2.5487	mg/L	2	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.4834	0.4929	1.0000	1.0361	mg/L	4	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.4834	0.5113	2.5000	2.5755	mg/L	3	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.4834	0.5135	2.5000	2.5857	mg/L	3	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.4834	0.4760	0.2500	0.2557	mg/L	2	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.4834	0.4896	1.0000	1.0293	mg/L	3	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.3786	0.3755	0.2500	0.2558	mg/L	2	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.3786	0.3738	1.0000	1.0021	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607089040007	02-MAR-2007 19:07	607084260001	27-FEB-2007	0.1465	0.1345	2.5000	2.4800	mg/L	-1	10	
IC01	P	607089040020	02-MAR-2007 22:55	607084260001	27-FEB-2007	0.1465	0.1424	10.000	10.268	mg/L	3	10	
IC01	P	607089040034	03-MAR-2007 03:00	607084260001	27-FEB-2007	0.1465	0.1456	25.000	25.165	mg/L	1	10	
IC01	P	607089040050	03-MAR-2007 07:40	607084260001	27-FEB-2007	0.1465	0.1442	10.000	10.398	mg/L	4	10	
IC01	P	607089040064	03-MAR-2007 11:45	607084260001	27-FEB-2007	0.1465	0.1458	25.000	25.195	mg/L	1	10	
IC01	P	607089040081	03-MAR-2007 16:43	607084260001	27-FEB-2007	0.1465	0.1429	10.000	10.306	mg/L	3	10	
IC01	P	607089040089	03-MAR-2007 19:03	607084260001	27-FEB-2007	0.1465	0.1469	25.000	25.377	mg/L	2	10	
IC01	P	607089040091	03-MAR-2007 19:38	607084260001	27-FEB-2007	0.1465	0.1469	25.000	25.374	mg/L	1	10	
IC01	P	607089040101	03-MAR-2007 22:33	607084260001	27-FEB-2007	0.1465	0.1408	2.5000	2.5964	mg/L	4	10	
IC01	P	607089040118	04-MAR-2007 03:31	607084260001	27-FEB-2007	0.1465	0.1420	10.000	10.241	mg/L	2	10	
IC03	P	627092916009	05-MAR-2007 15:07	627092916001	05-MAR-2007	0.1133	0.1043	2.5000	2.4923	mg/L	0	10	
IC03	P	627092916021	05-MAR-2007 19:18	627092916001	05-MAR-2007	0.1133	0.1084	10.000	10.074	mg/L	1	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607089040008.1
File : 061_8
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC377478
Matrix : Water
Batch : 122697
Caldate: 27-FEB-2007

Time : 02-MAR-2007 19:25
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040021 File : 061_21 Time : 02-MAR-2007 23:12
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01376]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	[0.01251]	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040035 File : 061_35 Time : 03-MAR-2007 03:17
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.009208]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040051 File : 061_51 Time : 03-MAR-2007 07:58
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01347]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040065 File : 061_65 Time : 03-MAR-2007 12:03
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01739]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040082 File : 061_82 Time : 03-MAR-2007 17:00
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01380]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040090 File : 061_90 Time : 03-MAR-2007 19:20
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.07292]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607089040092.1
File : 061_92
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC377493
Matrix : Water
Batch : 122699
Caldate: 27-FEB-2007

Time : 03-MAR-2007 19:55
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040102 File : 061_102 Time : 03-MAR-2007 22:50
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01054]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607089040119 File : 061_119 Time : 04-MAR-2007 03:48
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01106]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193108 IC Water
EPA 300.0

Inst : IC03
Seqnum : 627092916010.2
File : 064_10
Cal : 627092916001
IDF : 1.0
PDF : 1.0

Lab ID : QC377766
Matrix : Water
Batch : 122763
Caldate: 05-MAR-2007

Time : 05-MAR-2007 15:24
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193108 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916022 File : 064_22 Time : 05-MAR-2007 19:36
Cal : 627092916001 Caldate: 05-MAR-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

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Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	061_7	CCV	L	122697		02-MAR-2007 19:07	1.0	1	25			1	
008	061_8	CCB/MB	QC377478	122697	Water	02-MAR-2007 19:25	1.0		25				
009	061_9	MSS	193108-007	122697	Water	02-MAR-2007 19:42	100.0	2	25				
010	061_10	SAMPLE	193108-008	122697	Water	02-MAR-2007 20:00	100.0		25				
011	061_11	MS	QC377482	122697	Water	02-MAR-2007 20:17	200.0		25			1	
012	061_12	MSD	QC377483	122697	Water	02-MAR-2007 20:35	200.0		25			1	
013	061_13	LCS	QC377479	122697	Water	02-MAR-2007 20:52	1.0		25			1	
014	061_14	MSS	193108-017	122697	Water	02-MAR-2007 21:10	10.0	2	25				
015	061_15	MSS	193108-017	122697	Water	02-MAR-2007 21:27	1.0	3	25				1:CL=47.2137
016	061_16	MSS	193108-007	122697	Water	02-MAR-2007 21:45	1.0	4	25				2:CL=255.651
017	061_17	X	BLK	122697		02-MAR-2007 22:02	1.0						
018	061_18	MSS	193108-007	122697	Water	02-MAR-2007 22:20	2.0	4	25				2:CL=234.174
019	061_19	X	BLK	122697		02-MAR-2007 22:37	1.0						
020	061_20	CCV	M	122697		02-MAR-2007 22:55	1.0		25			1	
021	061_21	CCB		122697		02-MAR-2007 23:12	1.0		25				
022	061_22	X	CCV	122697		02-MAR-2007 23:30	1.0					1	
023	061_23	X	CCB	122697		02-MAR-2007 23:47	1.0						
024	061_24	MS	QC377484	122697	Water	03-MAR-2007 00:05	10.0		25			1	
025	061_25	MSD	QC377485	122697	Water	03-MAR-2007 00:22	10.0		25			1	
026	061_26	MSS	193108-001	122697	Water	03-MAR-2007 00:40	2.0	1	25				
027	061_27	MS	QC377480	122697	Water	03-MAR-2007 00:57	2.0		25			1	
028	061_28	MSD	QC377481	122697	Water	03-MAR-2007 01:15	2.0		25			1	
029	061_29	MSS	193108-001	122697	Water	03-MAR-2007 01:32	1.0	1	25				
030	061_30	SAMPLE	193108-006	122697	Water	03-MAR-2007 01:50	1.0		25				
031	061_31	SAMPLE	193108-006	122697	Water	03-MAR-2007 02:07	2.0		25				
032	061_32	SAMPLE	193108-016	122697	Water	03-MAR-2007 02:25	10.0		25				
033	061_33	SAMPLE	193108-016	122697	Water	03-MAR-2007 02:42	1.0	1	25				1:CL=29.1261
034	061_34	CCV	H	122697		03-MAR-2007 03:00	1.0		25			1	
035	061_35	CCB		122697		03-MAR-2007 03:17	1.0	1	25				
036	061_36	X	CCV	122697		03-MAR-2007 03:35	1.0					1	
037	061_37	X	CCB	122697		03-MAR-2007 03:52	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	061_38	SAMPLE	193108-020	122697	Water	03-MAR-2007 04:10	5.0		25				
039	061_39	SAMPLE	193108-002	122697	Water	03-MAR-2007 04:27	10.0		25				
040	061_40	SAMPLE	193108-019	122697	Water	03-MAR-2007 04:45	25.0		25				
041	061_41	SAMPLE	193108-018	122697	Water	03-MAR-2007 05:02	25.0		25				
042	061_42	SAMPLE	193108-020	122697	Water	03-MAR-2007 05:20	1.0		25				
043	061_43	SAMPLE	193108-002	122697	Water	03-MAR-2007 05:37	1.0	2	25				2:SO4=62.8326
044	061_44	SAMPLE	193108-019	122697	Water	03-MAR-2007 05:55	1.0	1	25				1:CL=42.6397
045	061_45	SAMPLE	193108-018	122697	Water	03-MAR-2007 06:13	1.0	1	25				1:CL=62.5765
046	061_46	SAMPLE	193108-008	122697	Water	03-MAR-2007 06:30	1.0		25				
047	061_47	X	BLK	122697		03-MAR-2007 06:48	1.0						
048	061_48	SAMPLE	193108-008	122697	Water	03-MAR-2007 07:05	2.0		25				
049	061_49	X	BLK	122697		03-MAR-2007 07:23	1.0						
050	061_50	CCV	M	122697		03-MAR-2007 07:40	1.0		25			1	
051	061_51	CCB		122697		03-MAR-2007 07:58	1.0		25				
052	061_52	X	CCV	122697		03-MAR-2007 08:15	1.0					1	
053	061_53	X	CCB	122697		03-MAR-2007 08:33	1.0						
054	061_54	SAMPLE	193108-005	122697	Water	03-MAR-2007 08:50	10.0		25				
055	061_55	SAMPLE	193108-009	122697	Water	03-MAR-2007 09:08	10.0		25				
056	061_56	SAMPLE	193108-015	122697	Water	03-MAR-2007 09:25	25.0		25				
057	061_57	SAMPLE	193108-003	122697	Water	03-MAR-2007 09:43	25.0		25				
058	061_58	SAMPLE	193108-004	122697	Water	03-MAR-2007 10:00	25.0		25				
059	061_59	SAMPLE	193108-005	122697	Water	03-MAR-2007 10:18	1.0	2	25				2:SO4=68.5134
060	061_60	SAMPLE	193108-009	122697	Water	03-MAR-2007 10:35	1.0	1	25				1:CL=110.128
061	061_61	SAMPLE	193108-015	122697	Water	03-MAR-2007 10:53	1.0	1	25				1:CL=54.4989
062	061_62	SAMPLE	193108-003	122697	Water	03-MAR-2007 11:10	1.0	2	25				2:SO4=170.670
063	061_63	SAMPLE	193108-004	122697	Water	03-MAR-2007 11:28	1.0	1	25				1:CL=60.8322
064	061_64	CCV	H	122697		03-MAR-2007 11:45	1.0		25			1	
065	061_65	CCB		122697		03-MAR-2007 12:03	1.0		25				
066	061_66	X	CCV	122697		03-MAR-2007 12:20	1.0					1	
067	061_67	X	CCB	122697		03-MAR-2007 12:38	1.0						
068	061_68	SAMPLE	193108-022	122697	Water	03-MAR-2007 12:55	25.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
069	061_69	SAMPLE	193108-014	122697	Water	03-MAR-2007 13:13	25.0		25				
070	061_70	SAMPLE	193108-013	122697	Water	03-MAR-2007 13:30	25.0		25				
071	061_71	SAMPLE	193108-022	122697	Water	03-MAR-2007 13:48	1.0	2	25				2:CL=97.8703
072	061_72	SAMPLE	193108-014	122697	Water	03-MAR-2007 14:05	1.0	1	25				1:CL=87.2118
073	061_73	SAMPLE	193108-013	122697	Water	03-MAR-2007 14:23	1.0	2	25				2:SO4=67.8176
074	061_74	X	BLK	122697		03-MAR-2007 14:40	1.0						
075	061_75	SAMPLE	193108-010	122697	Water	03-MAR-2007 14:58	100.0		25				
076	061_76	SAMPLE	193108-011	122697	Water	03-MAR-2007 15:15	100.0		25				
077	061_77	SAMPLE	193108-010	122697	Water	03-MAR-2007 15:33	1.0	2	25				2:CL=284.894
078	061_78	X	BLK	122697		03-MAR-2007 15:50	1.0						
079	061_79	SAMPLE	193108-010	122697	Water	03-MAR-2007 16:08	2.0	2	25				2:CL=232.371
080	061_80	X	BLK	122697		03-MAR-2007 16:25	1.0						
081	061_81	CCV	M	122697		03-MAR-2007 16:43	1.0		25			1	
082	061_82	CCB		122697		03-MAR-2007 17:00	1.0		25				
083	061_83	X	CCV	122697		03-MAR-2007 17:18	1.0					1	
084	061_84	X	CCB	122697		03-MAR-2007 17:35	1.0						
085	061_85	SAMPLE	193108-011	122697	Water	03-MAR-2007 17:53	1.0		25				
086	061_86	X	BLK	122697		03-MAR-2007 18:10	1.0						
087	061_87	SAMPLE	193108-011	122697	Water	03-MAR-2007 18:28	2.0		25				
088	061_88	X	BLK	122697		03-MAR-2007 18:45	1.0						
089	061_89	CCV	H	122697		03-MAR-2007 19:03	1.0		25			1	
090	061_90	CCB		122697		03-MAR-2007 19:20	1.0	1	25				
091	061_91	CCV	H	122699		03-MAR-2007 19:38	1.0		25			1	
092	061_92	CCB/MB	QC377493	122699	Water	03-MAR-2007 19:55	1.0		25				
093	061_93	MSS	193108-023	122699	Water	03-MAR-2007 20:13	10.0	1	25				
094	061_94	MS	QC377495	122699	Water	03-MAR-2007 20:30	10.0		25			1	
095	061_95	MSD	QC377496	122699	Water	03-MAR-2007 20:48	10.0		25			1	
096	061_96	MSS	193108-026	122699	Water	03-MAR-2007 21:05	25.0	1	25				
097	061_97	MS	QC377499	122699	Water	03-MAR-2007 21:23	25.0		25			1	
098	061_98	MSD	QC377500	122699	Water	03-MAR-2007 21:40	25.0		25			1	
099	061_99	SAMPLE	193093-001	122699	Water	03-MAR-2007 21:58	25.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 607089040 Instrument: IC01 Ion Chromatograph Begun: 02-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
100	061_100	SAMPLE	193093-001	122699	Water	03-MAR-2007 22:15	1.0	1	25				2:SO4=218.941
101	061_101	CCV	L	122699		03-MAR-2007 22:33	1.0	1	25			1	
102	061_102	CCB		122699		03-MAR-2007 22:50	1.0		25				
103	061_103	X	CCV	122699		03-MAR-2007 23:08	1.0					1	
104	061_104	X	CCB	122699		03-MAR-2007 23:26	1.0						
105	061_105	LCS	QC377494	122699	Water	03-MAR-2007 23:43	1.0		25			1	
106	061_106	MSS	193108-025	122699	Water	04-MAR-2007 00:01	25.0		25				
107	061_107	MS	QC377497	122699	Water	04-MAR-2007 00:18	50.0		25			1	
108	061_108	MSD	QC377498	122699	Water	04-MAR-2007 00:36	50.0		25			1	
109	061_109	SAMPLE	193108-012	122699	Water	04-MAR-2007 00:53	50.0		25				
110	061_110	MSS	193108-023	122699	Water	04-MAR-2007 01:11	1.0	1	25				1:CL=69.8775
111	061_111	SAMPLE	193108-027	122699	Water	04-MAR-2007 01:28	1.0	1	25				1:CL=69.8309
112	061_112	MSS	193108-026	122699	Water	04-MAR-2007 01:46	1.0	2	25				2:CL=115.804
113	061_113	X	BLK	122699		04-MAR-2007 02:03	1.0						
114	061_114	MSS	193108-025	122699	Water	04-MAR-2007 02:21	1.0	2	25				2:SO4=105.922
115	061_115	X	BLK	122699		04-MAR-2007 02:38	1.0						
116	061_116	SAMPLE	193108-012	122699	Water	04-MAR-2007 02:56	1.0	2	25				2:SO4=136.097
117	061_117	X	BLK	122699		04-MAR-2007 03:13	1.0						
118	061_118	CCV	M	122699		04-MAR-2007 03:31	1.0		25			1	
119	061_119	CCB		122699		04-MAR-2007 03:48	1.0		25				
120	061_120	X	CCV	122699		04-MAR-2007 04:06	1.0					1	
121	061_121	X	CCB	122699		04-MAR-2007 04:23	1.0						
122	061_122	SAMPLE	193108-012	122699	Water	04-MAR-2007 04:41	2.0	2	25				2:CL=130.402
123	061_123	X	BLK	122699		04-MAR-2007 04:58	1.0						
124	061_124	CCV	H	122699		04-MAR-2007 05:16	1.0		25			1	
125	061_125	CCB		122699		04-MAR-2007 05:33	1.0	1	25				
126	061_126	X	CCV	122699		04-MAR-2007 05:51	1.0					1	
127	061_127	X	CCB	122699		04-MAR-2007 06:08	1.0						
128	061_128	X	BLK	122699		04-MAR-2007 06:26	1.0						
129	061_129	X	SHUTDOWN	122699		04-MAR-2007 06:43	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Sequence: 627092916 Instrument: IC03 Ion Chromatograph Begun: 05-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	064_1	IB				05-MAR-2007 12:36	1.0			25				
002	064_2	ICAL	L1			05-MAR-2007 12:54	1.0						1	
003	064_3	ICAL	L2			05-MAR-2007 13:11	1.0						1	
004	064_4	ICAL	L3			05-MAR-2007 13:29	1.0						1	
005	064_5	ICAL	L4			05-MAR-2007 13:46	1.0						1	
006	064_6	ICAL	L5			05-MAR-2007 14:03	1.0						1	
007	064_7	ICV				05-MAR-2007 14:21	1.0			25			2	
008	064_8	ICB				05-MAR-2007 14:38	1.0			25				
009	064_9	CCV	L	122763		05-MAR-2007 15:07	1.0	2		25			1	
010	064_10	CCB/MB	QC377766	122763	Water	05-MAR-2007 15:24	1.0			25				
011	064_11	SAMPLE	193108-027	122763	Water	05-MAR-2007 15:43	10.0	2		25				
012	064_12	MSS	193128-002	122763	Water	05-MAR-2007 16:01	2000			25				
013	064_13	SAMPLE	193128-001	122763	Water	05-MAR-2007 16:18	2000			25				
014	064_14	MSS	193128-002	122763	Water	05-MAR-2007 16:38	20.0	1		25				
015	064_15	X	BLK	122763		05-MAR-2007 16:56	1.0							
016	064_16	SAMPLE	193128-001	122763	Water	05-MAR-2007 17:13	25.0	2		25				1:SO4=52.0044
017	064_17	X	BLK	122763		05-MAR-2007 17:31	1.0							
018	064_18	MS	QC377768	122763	Water	05-MAR-2007 17:56	2500			25			1	
019	064_19	MSD	QC377769	122763	Water	05-MAR-2007 18:13	2500			25			1	
020	064_20	LCS	QC377767	122763	Water	05-MAR-2007 19:01	1.0			25			1	
021	064_21	CCV	M	122763		05-MAR-2007 19:18	1.0			25			1	
022	064_22	CCB		122763		05-MAR-2007 19:36	1.0			25				
023	064_23	X	SHUTDOWN	122763		05-MAR-2007 19:53	1.0							

Stds used: 1=S4740 2=S3859

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193108-001	IC01	03/03/07 00:40	2.0					
193108-001	IC01	03/03/07 01:32	1.0	+	+	+	+	+
193108-002	IC01	03/03/07 04:27	10.0		+			+
193108-002	IC01	03/03/07 05:37	1.0	+		+	+	
193108-003	IC01	03/03/07 09:43	25.0		+			+
193108-003	IC01	03/03/07 11:10	1.0	+		+	+	
193108-004	IC01	03/03/07 10:00	25.0		+			
193108-004	IC01	03/03/07 11:28	1.0	+		+	+	+
193108-005	IC01	03/03/07 08:50	10.0		+			+
193108-005	IC01	03/03/07 10:18	1.0	+		+	+	
193108-006	IC01	03/03/07 01:50	1.0	+	+	+	+	+
193108-006	IC01	03/03/07 02:07	2.0					
193108-007	IC01	03/02/07 19:42	100.0		+			+
193108-007	IC01	03/02/07 21:45	1.0	+			+	
193108-007	IC01	03/02/07 22:20	2.0			+		
193108-008	IC01	03/02/07 20:00	100.0		+			
193108-008	IC01	03/03/07 06:30	1.0	+			+	+
193108-008	IC01	03/03/07 07:05	2.0			+		
193108-009	IC01	03/03/07 09:08	10.0		+			
193108-009	IC01	03/03/07 10:35	1.0	+		+	+	+
193108-010	IC01	03/03/07 14:58	100.0		+			+
193108-010	IC01	03/03/07 15:33	1.0	+			+	
193108-010	IC01	03/03/07 16:08	2.0			+		
193108-011	IC01	03/03/07 15:15	100.0		+			
193108-011	IC01	03/03/07 17:53	1.0	+			+	+
193108-011	IC01	03/03/07 18:28	2.0			+		
193108-012	IC01	03/04/07 00:53	50.0		+			+
193108-012	IC01	03/04/07 02:56	1.0	+		+	+	
193108-012	IC01	03/04/07 04:41	2.0					
193108-013	IC01	03/03/07 13:30	25.0		+			+
193108-013	IC01	03/03/07 14:23	1.0	+		+	+	
193108-014	IC01	03/03/07 13:13	25.0		+			
193108-014	IC01	03/03/07 14:05	1.0	+		+	+	+
193108-015	IC01	03/03/07 09:25	25.0		+			
193108-015	IC01	03/03/07 10:53	1.0	+		+	+	+
193108-016	IC01	03/03/07 02:25	10.0		+			

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193108-016	IC01	03/03/07 02:42	1.0	+		+	+	+
193108-017	IC01	03/02/07 21:10	10.0		+			
193108-017	IC01	03/02/07 21:27	1.0	+		+	+	+
193108-018	IC01	03/03/07 05:02	25.0		+			
193108-018	IC01	03/03/07 06:13	1.0	+		+	+	+
193108-019	IC01	03/03/07 04:45	25.0		+			
193108-019	IC01	03/03/07 05:55	1.0	+		+	+	+
193108-020	IC01	03/03/07 04:10	5.0					
193108-020	IC01	03/03/07 05:20	1.0	+	+	+	+	+
193108-022	IC01	03/03/07 12:55	25.0		+			+
193108-022	IC01	03/03/07 13:48	1.0	+		+	+	
193108-023	IC01	03/03/07 20:13	10.0		+			
193108-023	IC01	03/04/07 01:11	1.0	+		+	+	+
193108-025	IC01	03/04/07 00:01	25.0		+			+
193108-025	IC01	03/04/07 02:21	1.0	+		+	+	
193108-026	IC01	03/03/07 21:05	25.0		+			+
193108-026	IC01	03/04/07 01:46	1.0	+		+	+	
193108-027	IC01	03/04/07 01:28	1.0	+		+	+	+
193108-027	IC03	03/05/07 15:43	10.0		+			
QC377478	IC01	03/02/07 19:25	1.0	+	+	+	+	+
QC377479	IC01	03/02/07 20:52	1.0	+	+	+	+	+
QC377480	IC01	03/03/07 00:57	2.0	+	+	+	+	+
QC377481	IC01	03/03/07 01:15	2.0	+	+	+	+	+
QC377482	IC01	03/02/07 20:17	200.0	+	+	+	+	+
QC377483	IC01	03/02/07 20:35	200.0	+	+	+	+	+
QC377484	IC01	03/03/07 00:05	10.0	+	+	+	+	+
QC377485	IC01	03/03/07 00:22	10.0	+	+	+	+	+
QC377493	IC01	03/03/07 19:55	1.0	+	+	+	+	+
QC377494	IC01	03/03/07 23:43	1.0	+	+	+	+	+
QC377495	IC01	03/03/07 20:30	10.0	+	+	+	+	+

REPORTING SUMMARY FOR 193108 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC377496	IC01	03/03/07 20:48	10.0	+	+	+	+	+	
QC377497	IC01	03/04/07 00:18	50.0	+	+	+	+	+	
QC377498	IC01	03/04/07 00:36	50.0	+	+	+	+	+	
QC377499	IC01	03/03/07 21:23	25.0	+	+	+	+	+	
QC377500	IC01	03/03/07 21:40	25.0	+	+	+	+	+	
QC377766	IC03	03/05/07 15:24	1.0		+		+	+	
QC377767	IC03	03/05/07 19:01	1.0		+		+	+	
QC377768	IC03	03/05/07 17:56	2500		+		+	+	
QC377769	IC03	03/05/07 18:13	2500		+		+	+	

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122697
Date Started: 3/2/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193108-001 Ak	0.12	1x 2x	S	MSS
2	-002 E	0.82	1x 10x		
3	-003 F	1.41	1x 25x		
4	-004 G	1.50	1x 25x		
5	-005 F	0.71	1x 10x		
6	-006 M	0.13	1x 2x		
7	-007 As	3.51	100x 1x 2x		MSS
8	-008 D	4.06	100x 1x 2x		
9	-009 F	0.83	1x 10x		
10	-010 I	3.47	100x 1x 2x		
11	-011 F	4.06	100x 1x 2x		
12	-013 I	1.18	1x 25x		
13	-014 D	1.05	1x 25x		
14	-015 I	1.44	1x 25x		
15	-016 F	0.59	1x 10x		
16	-017 S	0.72	1x 10x		MSS
17	-018 E	1.37	1x 25x		
18	-019 H	1.27	1x 25x		
19	-020 I	0.26	1x 5x		
20	-022 A	1.02	1x 25x		
	Blank QC377478	N/A	1x	N/A	
	LCS QC377479		1x	N/A	
	MS QC377480 Ak		2x	S	MS of 193108-001 Ak
	MSD QC377481 Ak		2x		MSD of 193108-001 Ak
	MS QC377482 As		200x		MS of 193108-007 As
	MSD QC377483 As		200x		MSD of 193108-007 As
	MS QC377484 S		10x		MS of 193108-017 S
	MSD QC377485 S		10x		MSD of 193108-017 S

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MS 12/5/06	MS 3/2/07
BS/BSD Spiked with 0.2 mL of :	54740	
MS/MSD Spiked with 0.1 mL of :	54740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A106 50522	

MRJM 3/2/07
Extraction Chemist / Date

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Continued from page ____
Continued on page ____

AR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122697
Date Started: 02-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-002			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-004			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-007			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-009			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-020			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
QC377478	BLANK			Water		
QC377479	LCS			Water		
QC377480	MS	of 193108-001		Water		
QC377481	MSD	of 193108-001		Water		
QC377482	MS	of 193108-007		Water		
QC377483	MSD	of 193108-007		Water		
QC377484	MS	of 193108-017		Water		
QC377485	MSD	of 193108-017		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122699
Date Started: 3/2/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193093-001 H	1.10	25x 1x	S	
2	193108-012 G	2.08	1x 2x 50x		
3	-023 AB	0.77	1x 10x		MSS
4	-025 I	1.74	1x 25x		MSS
5	-026 H	1.38	1x 25x		MSS
6	-027 J	0.78	1x 10x		RR@10x for chloride
7	Blank QC377493	N/A	1x	N/A	
8	LCS QC377494		1x	N/A	
9	MS QC377495		10x	S	MS of 193108-023AB
10	MSD QC377496		10x		MSD of 193108-023AB
11	MS QC377497		50x		MS of 193108-025I
12	MSD QC377498		50x		MSD of 193108-025 I
13	MS QC377499		25x		MS of 193108-026H
14	MSD QC377500		25x		MSD of 193108-026H
15					
16					
17					
18					
19					
20					

MRS 3/2/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MRS 12/5/06	MRS 3/2/07
BS/BSD Spiked with 0.2 mL of :	54740	
MS/MSD Spiked with 0.1 mL of :	54740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #41065052 2	

MRS 3/2/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122699
Date Started: 02-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193093-001			Strategic Engineer	Water	NITRATE, SULFATE	07-MAR-2007
193108-012			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-023			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-025			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-026			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
193108-027			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE, SULFATE	14-MAR-2007
QC377493	BLANK			Water		
QC377494	LCS			Water		
QC377495	MS	of 193108-023		Water		
QC377496	MSD	of 193108-023		Water		
QC377497	MS	of 193108-025		Water		
QC377498	MSD	of 193108-025		Water		
QC377499	MS	of 193108-026		Water		
QC377500	MSD	of 193108-026		Water		

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122763
Date Started: 3/5/07
Prep Chemist: MRS

BK 2431
Page 73

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193108-027 S	0.78 ~~10x~~ MS 3/5/07	10X ~~5~~ MS 3/5/07	S	
2	193128-001 F	58.0	2000x 25x	S	RR@25x for Br
3	↓ -002 F	51.9	2000x 20x	S	MSS RR@20x for Br
4	Blank QC377766	N/A	1x	N/A	
5	LCS QC377767	↓	1x	N/A	
6	MS QC377768 F		2500x	S	
7	MSD QC377769 F		2500x	S	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

MRS 3/5/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100X MRS 12/5/06 MS 3/5/07	MRS 3/5/07
BS/BSD Spiked with 0.2 mL of :	SY740	↓
MS/MSD Spiked with 0.1 mL of :	SY740	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na	↓	
P: OnGuard II P		
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #A1065052 2	

MRS 3/5/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 3/6/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122763
Date Started: 05-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193108-027			Treadwell & Rollo	Water	CHLORIDE	14-MAR-2007
193128-001			New Logic Research	Water	CHLORIDE, NITRATE, SULFATE	15-MAR-2007
193128-002			New Logic Research	Water	CHLORIDE, NITRATE, SULFATE	15-MAR-2007
QC377766	BLANK			Water		
QC377767	LCS			Water		
QC377768	MS	of 193128-002		Water		
QC377769	MSD	of 193128-002		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/23/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123079
Field ID:	LF02GW04	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193108-014	ND	0.01
BLANK	QC379103	ND	0.01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123079
MSS Lab ID:	193166-017	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379104	0.01470	0.1630	0.1424	78	65-135		
MSD	QC379105		0.1630	0.1438	79	65-135	1	20
LCS	QC379106		0.1630	0.1690	104	75-125		

RPD= Relative Percent Difference

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/14/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/14/2007**
Wavelength:	578 nm	Batch:	123079
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1180	0.0846	0.0816	104%	90 - 110%
ICB	-0.0003	-0.0002	0.0000		
CCV	0.1163	0.0834	0.0816	102%	90 - 110%
CCB	-0.0005	-0.0004	0.0000		

905

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/14/2007**
Analysis Date: **3/14/2007**
Batch: 123079
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	inal Distill Vol (mL)	Distillate olored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1179	**0.1690**	0.020	0.5	16.3	0.163	**104**	
193166-17	50.0	50.0	20.0	1.00	0.0205	**0.0147**	0.010					
193166-17m	50.0	50.0	10.0	1.00	0.0993	**0.1424**	0.020	0.5	16.3	0.163	**78**	
193166-17m	50.0	50.0	10.0	1.00	0.1003	**0.1438**	0.020	0.5	16.3	0.163	**79**	**1**
193108-14	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
193137-5	50.0	50.0	20.0	1.00	0.0010	**ND**	0.010					
193175-5	50.0	50.0	20.0	1.00	0.0043	**ND**	0.010					
193197-4	50.0	50.0	20.0	1.00	0.0007	**ND**	0.010					
193226-7	50.0	50.0	20.0	1.00	0.0121	**ND**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

906

Reviewed by/ Date: 3/14/07

Polymer/Mix 193175 USD 193197 ORS 193226
Treed well 193168 193137 Notebook No. BK2451
PROJECT Weston 193166 Continued From Page

CN EPA 335.2M B 123079

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	ABS
193168-14	50	50	20	.0003
193137-5				.0010
193166-17				.0205
-17MS	+.5ml (16.32ug/ml dilnof S5101, 1ml – 50ml)		10	.0993
-17MSD	same as MS		10	.1003
193175-5			20	.0043
193197-4				.0007
193226-7				.0121
LCS	same as MS		10	.1179
MB			20	.0003
ICB				-.0003
ICV				.1180
CCV				.1163
CCB				-.0005

TV = .0816 mg/L

Tests for Cl^- & S negative
pH all >12
Sulfamic acid added to all samples.

Continued on Page

Read and Understood By

Signed 3-14-07 Date 907 Signed 3/14/07 Date

---) Quantitation Results Report (---

Date : 03-14-2007
Time : 10:23:10
Operator :

File Name : Data not stored yet

Sample Name : _/anide
Client Name : CAL 7.5/0C
Conc Units : ug/L
Dil. Factor : 1.00

Analytical Wavelength : 378 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 3 seconds

SAMPLE #	Sample Name	Wavelength	Func. Fac.	Concentration
1	ICB	Analytical	-0.0002	0.00002
2	ICV	Analytical	+0.1[illegible]	0.09650
3	193128-14	Analytical	+0.0003	1.9625E-04
4	193137-5	Analytical	+0.0010	7.0[illegible]E-01
5	193166-17	Analytical	-0.0205	0.01505
6	193166-17MS	Analytical	+0.0990	0.07254
7	193166-17MSD	Analytical	+0.1000	0.07354
8	193175-1	Analytical	+0.0043	0.00310
9	193197-4	Analytical	+0.0007	4.9238E-04
10	193226-7	Analytical	+0.0121	0.00891
11	LCS	Analytical	+0.1173	0.08645
12	MB	Analytical	+0.0001	8.0140E-04
13	CCV	Analytical	+0.1107	0.08131
14	CCB	Analytical	-0.0005	0.00000

(---) Standard Calibration Report (---

Date : [illegible]
Time : [illegible]
Operator :

File Name : C:\CW\DATA\CNTME.STD

Sample Name : cyanide
Client Name : CAL 7/6/02
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Regression Function : Concentration = 1.2335E-01, * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00200	0.0007	*****
2	0.00673	0.0125	-1.589 %
3	0.01746	0.0259	-7.1942 %
4	0.05236	0.0716	0.173 %
5	0.28730	0.1196	+2.385 %
6	0.13958	0.1316	0.587 %
7	0.17450	0.2071	+2.424 %

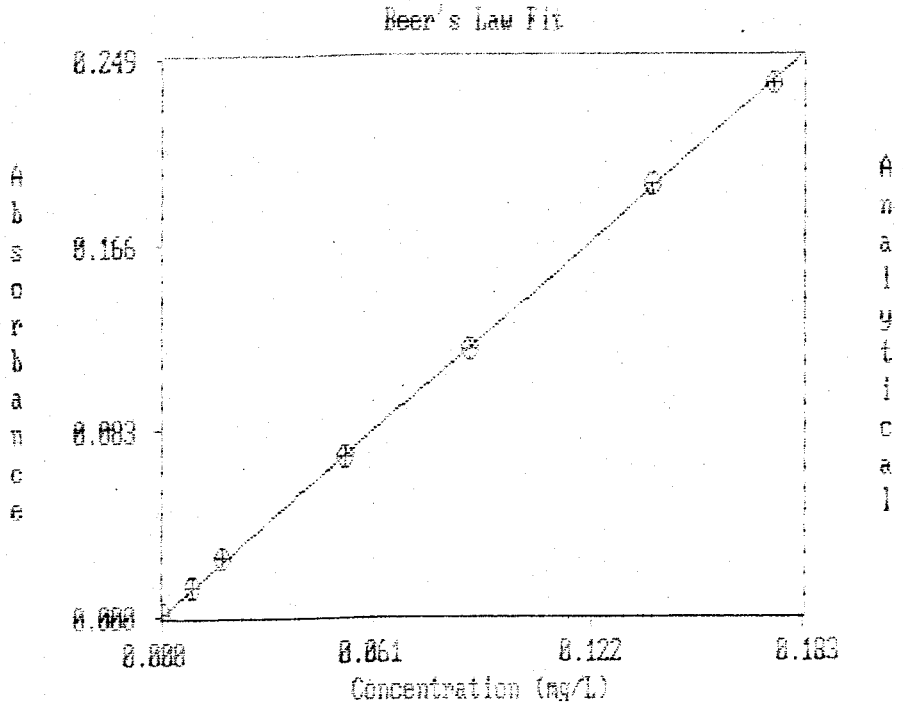
Date : 03-14-2007
Time : 12:23:07
Operator :

---> Standard Calibration Report <---

File Name : C:\UV\DATA\CN720.STD

Sample Name : Cyanide
Client Name : DRL 7/8/06
Conc. Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelength : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123079
Date Started: 14-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-014			Treadwell & Rollo	Water	CYANIDE	14-MAR-2007
193137-005			Treadwell & Rollo	Water	CYANIDE	15-MAR-2007
193166-017			Weston Solutions	Water	CYANIDE	16-MAR-2007
193175-005			Polymatrix	Water	CYANIDE	16-MAR-2007
193197-004			Union Sanitary Dis	Water	CYANIDE	13-MAR-2007
193226-007			URS Corporation	Water	CYANIDE	13-MAR-2007
QC379103	BLANK			Water	CYANIDE	
QC379104	MS	of 193166-017		Water	CYANIDE	
QC379105	MSD	of 193166-017		Water	CYANIDE	
QC379106	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Surfactants (MBAS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Batch#:	122694
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/05/07 13:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
DAEGW103	SAMPLE	193108-022	ND b	0.10	03/01/07 15:40
DAEGW104	SAMPLE	193108-023	ND b	0.10	03/02/07 09:30
DUP0302071A	SAMPLE	193108-027	ND b	0.10	03/02/07 09:40
	BLANK	QC377458	ND	0.10	

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Surfactants (MBAS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Diln Fac:	1.000
Field ID:	DAEGW104	Batch#:	122694
MSS Lab ID:	193108-023	Sampled:	03/02/07 09:30
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/05/07 13:00

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC377459		0.6000	0.5731	96	80-120		
MS	QC377460	<0.1000	0.6000	0.4478	75	70-130		
MSD	QC377461		0.6000	0.5843	97	70-130	26	30

RPD= Relative Percent Difference

Analysis:	**Surfactants (MBAS)**	Analyst:	**DMB**
Method:	EPA 425.1 / SMWW 5540C	Analysis Date:	**3/5/2007**
Instrument:	Perkin-Elmer Lambda 25	Batch#:	122694
SOP#:	MBAS_rv4.doc	Matrix:	Water

Initial Calibration Data Calibrated: 1/31/07

mg/L	ug/100mL	ABS	RF
0.0	0	0.0000	
0.1	10	0.0174	0.00174
0.3	30	0.0495	0.00165
0.5	50	0.0784	0.00157
1.0	100	0.2066	0.00207
1.5	150	0.2864	0.00191

Correlation Coefficient = 0.9955
Avg Response Factor = 0.00179
%RSD = 11.3

Note: Average response used to calculate sample results

Calibration Verification Data

	vol (mL)	IDF	ABS	Conc.(mg/L)	TV (mg/L)	Recovery	Limits
ICV	100	1	0.1024	0.5731	0.6	95.5%	90-110%
ICB	100	1	-0.0060	ND			
CCV	100	1	0.1032	0.5776	0.6	96.3%	90-110%
CCB	100	1	-0.0040	ND			

Sample & Batch QC Data

C&T ID	vol (mL)	IDF	ABS	**Report (mg/L)**	RL (mg/L)	Spike Added (mL)	Spike Std Conc. (mg/L)	QC TV (mg/L)	**% Recovery**	**%RPD**
MB	100	1	-0.0060	**ND**	0.1					
LCS	100	1	0.1024	**0.5731**	0.1	1	60	0.6	**96**	
193108-023	100	1	0.0002	**ND**	0.1					
193108-023 MS	100	1	0.0800	**0.4478**	0.1	1	60	0.6	**75**	
193108-023 MSD	100	1	0.1044	**0.5843**	0.1	1	60	0.6	**97**	**26**
193108-022	100	1	-0.0030	**ND**	0.1					
193108-023	100	1	0.0002	**ND**	0.1					
193108-027	100	1	0.0000	**ND**	0.1					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

Reviewed by/ Date: Chm 3/7/07

MBAS

B 122694

Sample	Vol	Final Vol	ABS
★ ICV-LCS	100ml	100ml	0.1024
ICB-MB	↓	↓	-0.006
193108-022			-0.003
-023			0.0002
★ MS -023			0.0800
★ MSD -023			0.1044
-027			-0.000
★ CCV			0.1032
CCB			-0.004

★ Plus 1 ml of S 5500 (TV = 0.6 mg/L)

Continued on Page

Read and Understood By

Signed	Date		Signed	Date
DMB	3/5/07	916	Chm	3/7/07

Date : 3/5/2007 Time : 20:16:26

Concentration Results

Date: 3/5/2007 Time: 8:06:33 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 122694.RCO
Autozero performed: 3/5/2007 8:04:58 PM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
652.0	0.0	ICV_LCS	0.1024	1.0000	53.283	ug/100ml	
652.0	0.0	ICB_MB	-0.006	1.0000	-3.313*	ug/100ml	
652.0	0.0	108-22	-0.003	1.0000	-1.586*	ug/100ml	193108-022
652.0	0.0	108-23	0.0002	1.0000	0.0884	ug/100ml	193108-023
652.0	0.0	108-23MS	0.0800	1.0000	41.641	ug/100ml	MS
652.0	0.0	108-23MD	0.1044	1.0000	54.308	ug/100ml	MSD
652.0	0.0	108-27	-0.000	1.0000	-0.026*	ug/100ml	193108-027
652.0	0.0	CCV	0.1032	1.0000	53.704	ug/100ml	
652.0	0.0	CCB	-0.004	1.0000	-2.372*	ug/100ml	

CALIBRATION

Date: 3/5/2007 Time: 8:04:59 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: DMB

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
652.0	0.0	mbas107.A01	0.0000	ug/100ml	0.0000	
652.0	0.0	mbas107.A02	10.000	ug/100ml	0.0174	
652.0	0.0	mbas107.A03	30.000	ug/100ml	0.0495	
652.0	0.0	mbas107.A04	50.000	ug/100ml	0.0784	
652.0	0.0	mbas107.A05	100.00	ug/100ml	0.2066	
652.0	0.0	mbas107.A06	150.00	ug/100ml	0.2864	

Equation: y = 1.922358e-03 * x

Residual error: 0.010891
Correlation coefficient: 0.995477

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122694
Date Started: 05-MAR-2007
Batched by : David Bowden

Analysis : MBAS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-022			Treadwell & Rollo	Water	MBAS	14-MAR-2007
193108-023			Treadwell & Rollo	Water	MBAS	14-MAR-2007
193108-027			Treadwell & Rollo	Water	MBAS	14-MAR-2007
QC377458	BLANK			Water	MBAS	
QC377459	LCS			Water	MBAS	
QC377460	MS	of 193108-023		Water	MBAS	
QC377461	MSD	of 193108-023		Water	MBAS	

Analysis:	MBAS	Analysis Date:	3/11/2005
Method:	EPA 425.1	Analyst:	SY
Instrument:	HP UV/Vis		
Wavelength:	652		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.3
Units:	mg/L
1	0.273
2	0.291
3	0.325
4	0.339
5	0.323
6	0.296
7	0.298
Average:	0.307 mg/L
Std Deviation:	0.0231004
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0726** mg/L
Reporting Limit:	0.1 mg/L
Status:	PASS

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122845
Matrix:	Water	Sampled:	03/01/07
Units:	mg/L	Received:	03/02/07
Diln Fac:	1.000	Analyzed:	03/08/07

Field ID	Type	Lab ID	Result	RL
1047MW101	SAMPLE	193108-001	ND	0.04
1065PZ4B	SAMPLE	193108-002	ND	0.04
1065PZ7B	SAMPLE	193108-003	ND	0.04
1065PZ5AR	SAMPLE	193108-004	ND	0.04
1065PZ5B	SAMPLE	193108-005	ND	0.04
DUP0301072A	SAMPLE	193108-006	ND	0.04
1065PZ1A	SAMPLE	193108-015	ND	0.04
1065PZ2A	SAMPLE	193108-016	ND	0.04
1065PZ3A	SAMPLE	193108-017	ND	0.04
1065PZ4A	SAMPLE	193108-018	ND	0.04
1065MW101	SAMPLE	193108-019	ND	0.04
1065MW102	SAMPLE	193108-020	ND	0.04
	BLANK	QC378094	ND	0.04

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	122845
Matrix:	Water	Sampled:	03/01/07
Units:	mg/L	Received:	03/02/07
Diln Fac:	1.000	Analyzed:	03/08/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
1047MW101	MS	193108-001	QC378095	<0.04000	0.3155	0.1966	62 *	75-125		
1047MW101	MSD	193108-001	QC378096		0.3155	0.1971	62 *	75-125	0	20
1065PZ3A	MS	193108-017	QC378097	<0.04000	0.3155	0.2147	68 *	75-125		
1065PZ3A	MSD	193108-017	QC378098		0.3155	0.2155	68 *	75-125	0	20
	LCS		QC378099		0.3155	0.2920	93	75-125		

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	3/8/2007
Instrument:	**HP UV-VIS Spectrometer**	Analysis Date:	3/8/2007
Wavelength:	626 nm	Batch:	122845
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r):	0.9990
Avg Rf:	0.6210
%RSD:	3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1813	0.2920	0.3155	93%	90 - 110%
ICB	-0.0005	-0.0008	0.0000		
CCV	0.1839	0.2962	0.3155	94%	90 - 110%
CCB	0.0009	0.0014	0.0000		
CCV	0.1795	0.2891	0.3155	92%	90 - 110%
CCB	0.0008	0.0013	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **122845**
Prep Date: **3/8/2007**
Analysis Date: **3/8/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0005		**ND**	0.040					
LCS	7.5000	1.0000	0.1813		**0.29197**	0.040	0.0500	47.3280	0.3155	**93**	
193108-1	7.5000	1.0000	0.0146		**ND**	0.040					
193108-1ms	7.5000	1.0000	0.1221		**0.19663**	0.040	0.0500	47.3280	0.3155	**62**	
193108-1ms	7.5000	1.0000	0.1224		**0.19712**	0.040	0.0500	47.3280	0.3155	**62**	**0**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

193108-17	7.5000	1.0000	0.0115		**ND**	0.040					
193108-17m	7.5000	1.0000	0.1333		**0.21467**	0.040	0.0500	47.3280	0.3155	**68**	
193108-17m	7.5000	1.0000	0.1338		**0.21548**	0.040	0.0500	47.3280	0.3155	**68**	**0**
193108-2	7.5000	1.0000	0.0048		**ND**	0.040					
193108-3	7.5000	1.0000	0.0049		**ND**	0.040					
193108-4	7.5000	1.0000	0.0049		**ND**	0.040					
193108-5	7.5000	1.0000	0.0051		**ND**	0.040					
193108-6	7.5000	1.0000	0.0055		**ND**	0.040					
193108-15	7.5000	1.0000	0.0096		**ND**	0.040					
193108-16	7.5000	1.0000	0.0116		**ND**	0.040					
193108-18	7.5000	1.0000	0.0066		**ND**	0.040					
193108-19	7.5000	1.0000	0.0062		**ND**	0.040					

193108-20	7.5000	1.0000	0.0056	**ND**	0.040

Reviewed by/ Date: 3/14/07

925

Sulfide EPA 376.2 B 122845

Sample	Vol (ml)	Final Vol (ml)	ABS	
193108-1	7.5	7.5	.0146	
-MS	+.05ml (47.328mg/L SF from 0455292)		.1221	
-MSD	same as MS		.1224	
-2			.0048	
-3			.0049	5 = std
-4			.0049	≈.4g 0455292 → 50ml DI H_2O
-5			.0051	
-6			.0055	1.0ml S^2
-15			.0096	5.0ml I, .0255N
-16			.0116	2.10ml S_2O_3, .0255N
-17			.0115	
				.1275
-17MS	+.05ml (47.328mg/L from 0455292)		.1333	-.05355
				$\frac{.07395 \times 16000}{1.0ml}$
-17MSD	same as MS		.1338	
				= 1183.20mg/L
-18			.0066	1:25 = 47.328 mg/L
-19			.0062	.05 — 7.5 = .3155 mg/L
-20			.0056	
LCS/ICV	same as MS		.1813	TV = .3155 mg/L
MB/ICV			-.0005	
CCV			.1839	
CCB			.0009	
CCV			.1795	
CCB			.0008	

Continued on Page

Read and Understood By

Signed: [illegible] Date: 3-8-07 Signed: [illegible] Date: 3/14/07

3-8-07 DM

Date : ~~01-09-2007~~
Time : 11:30:26
Operator : DM

---) Quantitation Results Report (---

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0005	0.00000
2	ICV/LCS	Analytical	+0.1813	0.30254
3	193108-1	Analytical	+0.0146	0.02437
4	193108-1MS	Analytical	+0.1221	0.20373
5	193108-1MSD	Analytical	+0.1224	0.20429
6	193108-2	Analytical	+0.0048	0.00797
7	193108-3	Analytical	+0.0049	0.00825
8	193108-4	Analytical	+0.0049	0.00817
9	193108-5	Analytical	+0.0051	0.00853
10	193108-6	Analytical	+0.0055	0.00919
11	CCV	Analytical	+0.1839	0.30699
12	CCB	Analytical	+0.0009	0.00150
13	193108-15	Analytical	+0.0096	0.01594
14	193108-16	Analytical	+0.0116	0.01943
15	193108-17	Analytical	+0.0115	0.01915
16	193108-17MS	Analytical	+0.1333	0.22242
17	193108-17MSD	Analytical	+0.1338	0.22326
18	193108-18	Analytical	+0.0066	0.01100
19	193108-19	Analytical	+0.0062	0.01034
20	193108-20	Analytical	+0.0056	0.00935
21	CCV	Analytical	+0.1795	0.29950

22	CCB	Analytical	+0.0008	0.00130

3-8-07 dm

Date : ~~01-09-2007~~
Time : 11:30:45
Operator : DM

---) Standard Calibration Report (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

3-8-07 [illegible]

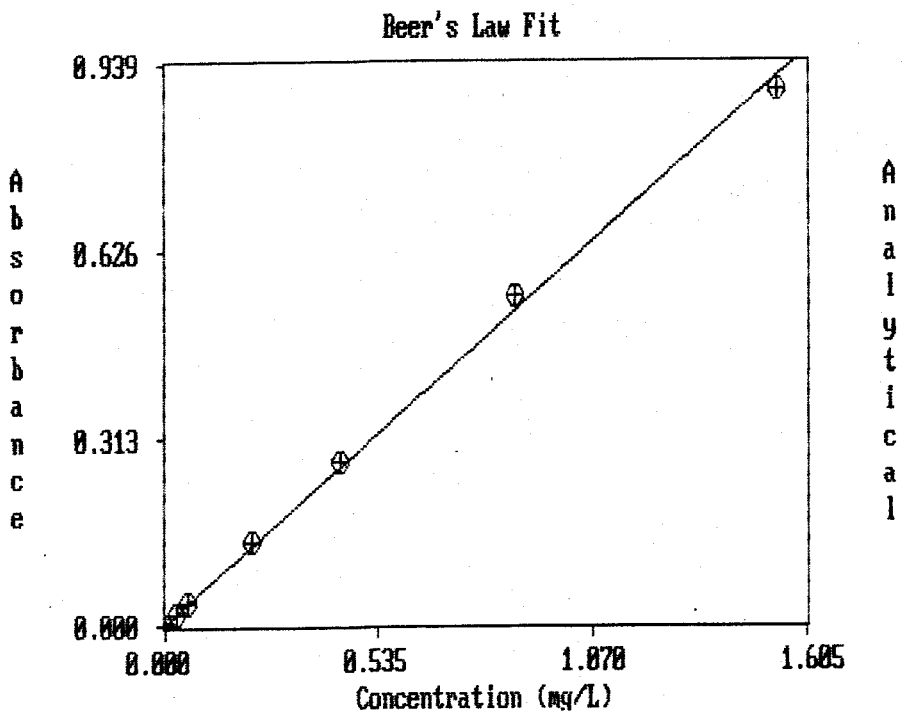
Date : ~~01-09-2007~~
Time : 11:30:46
Operator : DM

---) **Standard Calibration Report** (---

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122845
Date Started: 08-MAR-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-002			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-003			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-004			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-005			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-006			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-015			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-016			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-017			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-018			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-019			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
193108-020			Treadwell & Rollo	Water	SULFIDE	14-MAR-2007
QC378094	BLANK			Water	SULFIDE	
QC378095	MS	of 193108-001		Water	SULFIDE	
QC378096	MSD	of 193108-001		Water	SULFIDE	
QC378097	MS	of 193108-017		Water	SULFIDE	
QC378098	MSD	of 193108-017		Water	SULFIDE	
QC378099	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/08/07

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled
1047MW101	SAMPLE	193108-001	ND	10	122885	03/01/07
1065PZ4B	SAMPLE	193108-002	420	10	122885	03/01/07
1065PZ7B	SAMPLE	193108-003	840	10	122885	03/01/07
1065PZ5AR	SAMPLE	193108-004	690	10	122885	03/01/07
1065PZ5B	SAMPLE	193108-005	430	10	122885	03/01/07
DUP0301072A	SAMPLE	193108-006	88	10	122885	03/01/07
1349MW01	SAMPLE	193108-007	1,810	10	122885	03/01/07
1349MW100	SAMPLE	193108-008	2,110	10	122885	03/01/07
DAEGW06	SAMPLE	193108-009	380	10	122885	03/01/07
DUP0301073A	SAMPLE	193108-010	1,860	10	122885	03/01/07
DUP0301073B	SAMPLE	193108-011	2,070	10	122885	03/01/07
DAEGW08	SAMPLE	193108-013	580	10	122885	03/01/07
LF02GW04	SAMPLE	193108-014	500	10	122885	03/01/07
1065PZ1A	SAMPLE	193108-015	660	10	122885	03/01/07
1065PZ2A	SAMPLE	193108-016	350	10	122885	03/01/07
1065PZ3A	SAMPLE	193108-017	360	10	122885	03/01/07
1065PZ4A	SAMPLE	193108-018	670	10	122885	03/01/07
1065MW101	SAMPLE	193108-019	760	10	122885	03/01/07
1065MW102	SAMPLE	193108-020	140	10	122885	03/01/07
DAEGW103	SAMPLE	193108-022	570	10	122886	03/01/07
DAEGW104	SAMPLE	193108-023	410	10	122886	03/02/07
DAEGW101	SAMPLE	193108-024	1,050	10	122886	03/02/07
DAEGW03	SAMPLE	193108-025	1,050	10	122886	03/02/07
DAEGW05	SAMPLE	193108-026	800	10	122886	03/02/07
DUP0302071A	SAMPLE	193108-027	440	10	122886	03/02/07
	BLANK	QC378275	ND	10	122885	
	BLANK	QC378281	ND	10	122886	

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193108	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Received:	03/02/07
Units:	mg/L	Analyzed:	03/08/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Batch#	Sampled
	BS		QC378276		100.0	84.00		84	75-126			122885	
	BSD		QC378277		100.0	98.00		98	75-126	15	21	122885	
1047MW101	SDUP	193108-001	QC378278	<10.00		<10.00	10.00			NC	24	122885	03/01/07
1349MW01	SDUP	193108-007	QC378279	1,806		1,834	10.00			2	24	122885	03/01/07
1065PZ3A	SDUP	193108-017	QC378280	358.0		388.0	10.00			8	24	122885	03/01/07
	BS		QC378282		100.0	100.0		100	75-126			122886	
	BSD		QC378283		100.0	122.0		122	75-126	20	21	122886	
DAEGW104	SDUP	193108-023	QC378284	410.0		418.0	10.00			2	24	122886	03/02/07

933

NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

119.0

Curtis & Tompkins, Ltd.

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**08-Mar-07**
Matrix:	Water	Batch #:	**122885**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	54.9332	54.9327	-0.0005	ND	10					
BS	50	1	55.6485	55.6527	0.0042	84.0	10	1,000	5	100	**84**	
BSD	50	1	55.2893	55.2942	0.0049	98.0	10	1,000	5	100	**98**	**15.38**
193108-001	50	1	54.9360	54.9359	-0.0001	ND	10					
SDUP	50	1	54.3143	54.3148	0.0005	ND	10					**NC**
193108-007	50	1	52.7166	52.8069	0.0903	1,806.0	10					
SDUP	50	1	53.8666	53.9583	0.0917	1,834.0	10					**1.54**
193108-017	50	1	55.7408	55.7587	0.0179	358.0	10					
SDUP	50	1	51.5200	51.5394	0.0194	388.0	10					**8.04**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193108-001	50	1	54.9360	54.9359	-0.0001	ND	10
193108-002	50	1	54.7470	54.7681	0.0211	422.0	10
193108-003	50	1	54.7876	54.8298	0.0422	844.0	10
193108-004	50	1	49.0900	49.1246	0.0346	692.0	10
193108-005	50	1	54.0971	54.1185	0.0214	428.0	10
193108-006	50	1	55.0929	55.0973	0.0044	88.0	10
193108-007	50	1	52.7166	52.8069	0.0903	1,806.0	10
193108-008	50	1	54.8442	54.9497	0.1055	2,110.0	10
193108-009	50	1	55.1511	55.1703	0.0192	384.0	10
193108-010	50	1	53.7406	53.8336	0.0930	1,860.0	10
193108-011	50	1	54.9590	55.0627	0.1037	2,074.0	10
193108-013	50	1	55.8161	55.8450	0.0289	578.0	10
193108-014	50	1	54.0461	54.0713	0.0252	504.0	10
193108-015	50	1	54.6442	54.6773	0.0331	662.0	10
193108-016	50	1	56.5334	56.5508	0.0174	348.0	10
193108-017	50	1	55.7408	55.7587	0.0179	358.0	10
193108-018	50	1	57.2232	57.2569	0.0337	674.0	10
193108-019	50	1	57.8913	57.9295	0.0382	764.0	10
193108-020	50	1	58.3496	58.3567	0.0071	142.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/14/07

TDS (Total Dissolved Solids) - cont on pg. 80
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122885

Prep Date: 3/8/07
Prep Time: 17:30

Benchbook#: **BK 2420**
Page: **76**

Filter Mfg/ Lot#: Env. Exp 655914
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/8/07	3/9/07	3/9/07	3/11/07	3/11/07	3/11/07
Time:	19:20	8:30	10:30	12:00	13:45	14:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	
1	MB		50	G21	54.9332	54.9316	54.9312	X see page 80	
	BS		↓	G22	55.6485	55.6510	55.6519	55.6512	
	BSD		↓	G23	55.2893	55.2950	55.2930	55.2911	
	193108-1'	104.4	50	G24	54.9360	54.9342	54.9365	54.9348	
5	SDUP -1	↓		G25	54.3143	54.3148	54.3153	X	
	-2'	746		G26	54.7470	54.7677	54.7686	54.7681	X
	-3.	1249		G27	54.7876	54.8294	54.8307	54.8292	
	-4	1334		G28	49.0900	49.1231	49.1247	49.1246	X
	-5	630		G29	54.0971	54.1189	54.1205	54.1176	
10	-6	108.7		G30	55.0929	55.0968	55.0973	X	
	-7	3310		G31	52.7166	52.8123	52.8085	52.8067	
	SDUP-7	↓		G32	53.8666	53.9583	53.9583	X	
	-8	3700		G33	54.8442	54.9520	54.9536	54.9501	
	-9	764		G34	55.1511	55.1690	55.1723	55.1714	
15	-10	3210		G35	53.7406	53.8332	53.8336	X	
	-11	3690		G36	54.9590	54.0652	55.0663	55.0648	
	-12	1121		G37	55.8161	55.8445	55.8469	55.8455	
	-14	968		G38	54.0461	54.0707	54.0730	54.0710	
	-15	1008		G39	54.6442	54.6767	54.6779	54.6767	
20	-16	519		GOLF	56.5334	56.5489	56.5507	56.5508	X
	-17	660		GRAY	55.7408	55.7582	55.7587	X	
	SDUP -17	↓		GRIP	51.5200	51.5382	51.5396	51.5394	X
	-18	1268		GONE	57.2232	57.2559	57.2571	57.2569	X
	-19	1172		GNEE	57.8913	57.9294	57.9317	57.9289	
	-20	234	↓	GULF	58.3496	58.3562	58.3586	58.3562	

* Constant weight must be within 0.0005 from previous reading.

4th { ~~G29 → 54.1180~~, ~~G23 → 55.2942~~, ~~G31 → 52.8070~~, ~~G21 → 54.4325~~, ~~G37 → 55.8450~~, ~~GNEE → 57.9290~~, ~~G39 → 54.6770~~, ~~G22 → 55.6530~~

5th { ~~G23 →~~, ~~G21 →~~, G22 → } All Corrections DMB 3/13 See Pg 80

3/8/07
Analyst / Date

3/11/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122885 con't from page 76

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2420**
Page: **80**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In - 4	Out - 4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	3/11/07	3/12/07	3/12/07	3/13/07		
Time:	16:30	9:30	11:00			
Temp (C):	180	180	180	180		

	Sample # / Letter	EC Value (uS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	G21	54.9325	54.9327	X				
	G22	55.6515	55.6530	55.6527	X			
	G23	55.2947	55.2937	55.2942	X			
	G24	54.9360	54.9359	X				
5	/							
	/							
	G27	54.8299	54.8298	X				
	/							
	G29	54.1191	54.1206	54.1180	54.1185	X		
10	/							
	G31	52.8075	52.8083	52.8070	52.8069	X		
	/							
	G33	54.9497	X					
	G34	55.1704	55.1707	X				
15	/							
	G36	55.0630	55.0627					
	G37	55.8462	55.8474	55.8450	55.8450	X		
	G38	54.0713	X					
	G39	54.6784	54.6792	54.6770	54.6773	X		
20	/							
	GRAY							
	/							
	/							
	GNEE	57.9302	57.9313	57.9290	57.9295	X		
	GULF	58.3567	X					

* Constant weight must be within 0.0005 from previous reading.

Analyst / Date _____

Reviewed by / Date _____

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122885
Date Started: 08-MAR-2007
Batched by : David Bowden

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-001			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-002			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-003			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-004			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-005			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-006			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-007			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-008			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-009			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-010			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-011			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-013			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-014			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-015			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-016			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-017			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-018			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-019			Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-020			Treadwell & Rollo	Water	TDS	14-MAR-2007
QC378275	BLANK			Water	TDS	
QC378276	BS			Water	TDS	
QC378277	BSD			Water	TDS	
QC378278	SDUP	of 193108-001		Water	TDS	
QC378279	SDUP	of 193108-007		Water	TDS	
QC378280	SDUP	of 193108-017		Water	TDS	

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SM/WW 2540C	Analysis Date:	**08-Mar-07**
Matrix:	Water	Batch #:	**122886**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	59.0021	59.0024	0.0003	ND	10					
BS	50	1	54.9724	54.9774	0.0050	100.0	10	1,000	5	100	**100**	
BSD	50	1	50.3560	50.3621	0.0061	122.0	10	1,000	5	100	**122**	**19.82**
193108-023	50	1	51.7992	51.8197	0.0205	410.0	10					
SDUP	50	1	53.0688	53.0897	0.0209	418.0	10					**1.93**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193108-022	50	1	52.2260	52.2546	0.0286	572.0	10
193108-023	50	1	51.7992	51.8197	0.0205	410.0	10
193108-024	50	1	48.1417	48.1944	0.0527	1,054.0	10
193108-025	50	1	49.2953	49.3479	0.0526	1,052.0	10
193108-026	50	1	58.1835	58.2236	0.0401	802.0	10
193108-027	50	1	58.2088	58.2308	0.0220	440.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/14/07

TDS (Total Dissolved Solids) ~~cont'd on pg. 87~~ DMB 3/12/07
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122886

Prep Date: 3/8/07
Prep Time: 19:30

Benchbook#: **BK 2420**
Page: **77**

Filter Mfg/ Lot#: Env. Exp. 655 614
Spike WS#: 35560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/8/07	3/9/07	3/9/07	3/11/07	3/11/07	3/11/07
Time:	19:45	8:30	10:30	12:00	13:45	14:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		~~50~~	JUL	59.0021	59.0024	59.0032	59.0029
	BS		50	FRA	54.9724	54.9772	54.9774	X
	BSD		50	MAR	50.3560	50.3621	50.3621	50.3621 47 3/11
	193108-22	836	50	5/10	52.2260	52.2544	52.2546	X
5	-23	656		TAB	51.7992	51.8197	51.8197	X
	SDUP-23			K	53.0688	53.0885	53.0904	53.0896 53.0897 DMB 3/13
	-24	1546		JAR	48.1417	48.1934	48.1945	48.1944
	-25	1626		MIA	49.2953	49.3463	49.3476	49.3479
	-26	1254		LAN	58.1835	58.2222	58.2234	58.2236
10	-27	688		GAVEL	58.2088	58.2301	58.2313	58.2308
15								
20								

* Constant weight must be within 0.0005 from previous reading.

DMB 3/8/07
Analyst / Date

3/11/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122886
Date Started: 08-MAR-2007
Batched by : David Bowden

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193108-022		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-023		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-024		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-025		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-026		Treadwell & Rollo	Water	TDS	14-MAR-2007
193108-027		Treadwell & Rollo	Water	TDS	14-MAR-2007
QC378281	BLANK		Water	TDS	
QC378282	BS		Water	TDS	
QC378283	BSD		Water	TDS	
QC378284	SDUP of 193108-023		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193137

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
514AGW101	193137-001
937GW37	193137-002
937GW35	193137-003
937GW32R	193137-004
NKGW04	193137-005
FB0302071A	193137-006
TB0302071A	193137-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/26/07
Operations Manager

Signature: _____ Date: 3/23/07
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193137**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/05/07**
Samples Received:	**03/05/07**

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 03/05/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Low recovery was observed for diesel C12-C24 in the MS of DAEGW104 (lab # 193108-023); the LCS was within limits. High RPD was also observed for diesel C12-C24 in the MS/MSD of DAEGW104 (lab # 193108-023); this analyte was not detected at or above the RL in the associated samples. All samples were initially prepared on 3/16/07 within hold time, however, an undetectable leak in the cooling system caused the extracts to dry rendering them unusable. The samples were re-extracted one day past the recommended hold time; affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
No analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

NDMA (EPA 1625):
Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

#
43.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193137

CHAIN OF CUSTODY RECORD
PRESIDIO OF SAN FRANCISCO

COC No. OP 2189
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required):
Sent to Laboratory (Name): C+T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) /MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX/MTBE	NDMA	Cyanide				COMMENTS / NOTES
1	514GW101	3/2/07	1015			X		3				4	X	X	X							X	X						HCL is 3 containers
2	937GW37		1145			X		6				2	X	X	X	X													
3	937GW35		1220			X		6				2	X	X	X	X						~~X~~	~~X~~						
4	937GW32R		1345			X		6				2	X	X	X	X						~~X~~	~~X~~						
5	NKGW04		1342			X		6		1	1	4	X	X	X	X			X		X				X				Time is 1345
6	FB030207iA		1310			X						2												X					
7	TB030207iA		—			X		2					•			•								~~X~~					No NDMA

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY:	DATE: ~~3/2/07~~ 3/5/07	RECEIVED BY:	DATE: 3/5/7
PRINT NAME: Devin Raynal	FIRM: BTS	TIME: ~~1400~~	PRINT NAME: Aaron Gewiler	FIRM: CTT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold

Method of Shipment:
White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Samples cold & Intact

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193137 Date Received: 3-05-07 Number of Coolers: 1
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-05-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler?..... YES NO
   How many and where? 1 over lid of cooler Seal date: 3-5-07 Seal name: VE
3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO
4. Were custody papers dry and intact when received?..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO
6. Did you sign the custody papers in the appropriate place?..... YES NO
7. Was project identifiable from custody papers?..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 2.9°C

B. Login Phase
Date Logged In: 3-05-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bags
2. Did all bottles arrive unbroken?..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)?.. YES NO
4. Did bottle labels agree with custody papers?..... YES NO
5. Were appropriate containers used for the tests indicated?..... YES NO
6. Were correct preservatives added to samples?..... YES NO
7. Was sufficient amount of sample sent for tests indicated?..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES NO
9. Was the client contacted concerning this sample delivery?..... YES NO
   If YES, give details below.
   Who was called?_____ By whom?_____ Date:_____

Additional Comments:

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	514AGW101	Batch#:	122855
Lab ID:	193137-001	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	7.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	65-135	EPA 8015B
Bromofluorobenzene (FID)	112	65-135	EPA 8015B
Trifluorotoluene (PID)	104	65-135	EPA 8021B
Bromofluorobenzene (PID)	109	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW37	Batch#:	122810
Lab ID:	193137-002	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

14.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW35	Batch#:	122810
Lab ID:	193137-003	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	107	65-135

ND= Not Detected
RL= Reporting Limit

15.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW32R	Batch#:	122810
Lab ID:	193137-004	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	107	65-135

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	NKGW04	Batch#:	122810
Lab ID:	193137-005	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	117	65-135

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377954	Batch#:	122810
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	65-135	EPA 8015B
Bromofluorobenzene (FID)	105	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378133	Batch#:	122855
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	65-135	EPA 8015B
Bromofluorobenzene (FID)	109	65-135	EPA 8015B
Trifluorotoluene (PID)	102	65-135	EPA 8021B
Bromofluorobenzene (PID)	108	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377956	Batch#:	122810
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,862	93	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	65-135
Bromofluorobenzene (FID)	110	65-135

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378134	Batch#:	122855
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,804	90	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	112	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378137	Batch#:	122855
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.92	95	65-135
Benzene	20.00	20.53	103	65-135
Toluene	20.00	19.89	99	65-135
Ethylbenzene	20.00	20.70	103	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	65-135
Bromofluorobenzene (PID)	112	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	122810
MSS Lab ID:	193189-001	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377957

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.32	2,000	1,856	92	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	115	65-135

Type: MSD Lab ID: QC377958

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,990	99	65-135	7	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	119	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	122855
MSS Lab ID:	193235-001	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378135

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	8.033	2,000	1,959	98	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	121	65-135

Type: MSD Lab ID: QC378136

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,909	95	65-135	3	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	65-135
Bromofluorobenzene (FID)	131	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCVOA Water: EPA 8021B

Inst : GC19
Calnum: 347094532001
Units : ng

Name : GC19 MBTXE 065
Date : 07-MAR-2007 00:19
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_015	347094532015	BTXE_1	07-MAR-2007 00:19	S5559 (1000X), S5345 (5000X)
L2	065_016	347094532016	BTXE_2	07-MAR-2007 00:57	S5558 (1250X), S5345 (5000X)
L3	065_017	347094532017	BTXE_3	07-MAR-2007 01:34	S5558 (500X), S5345 (5000X)
L4	065_018	347094532018	BTXE_4	07-MAR-2007 02:12	S5558 (125X), S5345 (5000X)
L5	065_019	347094532019	BTXE_5	07-MAR-2007 02:50	S5557 (1000X), S5345 (5000X)
L6	065_020	347094532020	BTXE_6	07-MAR-2007 03:27	S5557 (500X), S5345 (5000X)
L7	065_021	347094532021	BTXE_7	07-MAR-2007 04:05	S5557 (250X), S5345 (5000X)
L8	065_022	347094532022	MTBE_7	07-MAR-2007 04:43	S4993 (500X), S5345 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		3844.7	2928.8	2729.5	2707.7	2723.5	2789.1	2700.5	AVRG		3.43E-4		2917.7	14	0.995	20	
Benzene	B	15283	14070	13944	13606	13542	13399	13426		AVRG		7.20E-5		13895	5	0.995	20	
Toluene	B	17218	13683	13277	12748	12668	12299	12327		AVRG		7.43E-5		13460	13	0.995	20	
Ethylbenzene	B	12304	10889	11222	10989	11072	10619	10982		AVRG		8.97E-5		11154	5	0.995	20	
m,p-Xylenes	B	17544	14979	14768	14800	14896	14597	14193		AVRG		6.62E-5		15111	7	0.995	20	
o-Xylene	B	11831	10709	10758	10813	10894	10576	10704		AVRG		9.18E-5		10898	4	0.995	20	
MTBE	C		1161.4	849.60	882.72	1003.0	1059.5	1121.2	1126.9	AVRG		9.72E-4		1029.2	12	0.995	20	
Benzene	C	3050.8	2644.0	2630.1	2881.1	3091.0	3125.4	3166.7		AVRG		3.40E-4		2941.3	8	0.995	20	
Toluene	C	2697.2	2425.0	2498.8	2660.0	2896.6	2894.8	2940.4		AVRG		3.68E-4		2716.1	8	0.995	20	
Ethylbenzene	C	2160.4	2122.9	2208.3	2377.6	2637.4	2615.1	2656.7		AVRG		4.17E-4		2396.9	10	0.995	20	
m,p-Xylenes	C	2953.2	2781.4	2898.4	3066.5	3354.7	3334.8	3386.1		AVRG		3.21E-4		3110.7	8	0.995	20	
o-Xylene	C	2044.4	2043.3	2070.3	2247.6	2482.0	2485.6	2568.8		AVRG		4.39E-4		2277.4	10	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 GCVOA Water
EPA 8021B

Inst : GC19 Name : GC19 MBTXE 065
Calnum : 347094532001 Cal Date: 07-MAR-2007

ICV 347094532024 (065_024 07-MAR-2007) stds: S5206 (1000X), S5345 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2917.7	2567.6	100.0	88.00	ng	-12	15	
Benzene	B	13895	14504	100.0	104.4	ng	4	15	
Toluene	B	13460	13478	100.0	100.1	ng	0	15	
Ethylbenzene	B	11154	11607	100.0	104.1	ng	4	15	
m,p-Xylenes	B	15111	13169	200.0	174.3	ng	-13	15	
o-Xylene	B	10898	10825	100.0	99.33	ng	-1	15	
MTBE	C	1029.2	949.05	100.0	92.21	ng	-8	15	
Benzene	C	2941.3	3165.2	100.0	107.6	ng	8	15	
Toluene	C	2716.1	2916.1	100.0	107.4	ng	7	15	
Ethylbenzene	C	2396.9	2583.1	100.0	107.8	ng	8	15	
m,p-Xylenes	C	3110.7	2985.0	200.0	191.9	ng	-4	15	
o-Xylene	C	2277.4	2318.9	100.0	101.8	ng	2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347094532002
Units : ng

Name : GC19 TFT/BFB 065
Date : 07-MAR-2007 09:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_027	347094532027	TFT/BFB_1	07-MAR-2007 09:08	S5343 (5000X)
L2	065_028	347094532028	TFT/BFB_2	07-MAR-2007 09:48	S5344 (5000X)
L3	065_029	347094532029	TFT/BFB_3	07-MAR-2007 10:26	S5665 (5000X)
L4	065_030	347094532030	TFT/BFB_4	07-MAR-2007 11:04	S5346 (5000X)
L5	065_031	347094532031	TFT/BFB_5	07-MAR-2007 11:51	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1826.5	1624.8	1951.7	1889.3	1699.3	AVRG		5.56E-4		1798.3	7	0.995	20	
Bromofluorobenzene (FID)	A	788.41	783.36	1016.4	990.66	931.50	AVRG		0.00111		902.06	12	0.995	20	
Trifluorotoluene (PID)	B	4840.6	4318.4	5159.2	4899.1	4464.0	AVRG		2.11E-4		4736.3	7	0.995	20	
Bromofluorobenzene (PID)	B	6754.1	6717.9	8691.5	8480.4	7857.3	AVRG		1.30E-4		7700.2	12	0.995	20	
Trifluorotoluene (PID)	C	976.64	880.75	1115.3	1078.4	999.08	AVRG		9.90E-4		1010.0	9	0.995	20	
Bromofluorobenzene (PID)	C	1447.6	1451.4	1943.2	1912.3	1774.9	AVRG		5.86E-4		1705.9	14	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532002

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377955 IDF : 1.0
Seqnum : 347095815002.5 File : 066_002 Time : 07-MAR-2007 13:33
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	2835.9	100.0	97.20	ng	-3	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	904.08	100.0	87.84	ng	-12	15	
Benzene	B	347094532001	07-MAR-2007	13895	14240	100.0	102.5	ng	2	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	2994.5	100.0	101.8	ng	2	15	
Toluene	B	347094532001	07-MAR-2007	13460	13171	100.0	97.85	ng	-2	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2784.3	100.0	102.5	ng	3	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11415	100.0	102.3	ng	2	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2449.2	100.0	102.2	ng	2	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15276	100.0	101.1	ng	1	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3129.0	100.0	100.6	ng	1	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11107	100.0	101.9	ng	2	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2309.7	100.0	101.4	ng	1	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1761.1	450.0	440.7	ng	-2	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	931.12	450.0	464.5	ng	3	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4567.7	450.0	434.0	ng	-4	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	971.21	450.0	432.7	ng	-4	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7825.4	450.0	457.3	ng	2	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1721.5	450.0	454.1	ng	1	15	

Analyst: JCP Date: 03/09/07 Reviewer: CW Date: 03/15/07

u=use

347095815002.5

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC377956 IDF : 1.0
Seqnum : 347095815003.5 File : 066_003 Time : 07-MAR-2007 14:10
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1461.0	10000	9311	ng	-7	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1896.9	450.0	474.7	ng	5	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	991.45	450.0	494.6	ng	10	15	u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5164.8	450.0	490.7	ng	9	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1141.5	450.0	508.6	ng	13	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8342.9	450.0	487.6	ng	8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1824.7	450.0	481.4	ng	7	15	

Analyst: JCP Date: 03/09/07 Reviewer: CW Date: 03/15/07

u=use

347095815003.5

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347095815013.1 File : 066_013 Time : 07-MAR-2007 20:46
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1923.0	450.0	481.2	ng	7	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1057.1	450.0	527.3	ng	**17**	15	c+
MTBE	B	347094532001	07-MAR-2007	2917.7	2857.5	150.0	146.9	ng	-2	15	
Benzene	B	347094532001	07-MAR-2007	13895	15379	150.0	166.0	ng	11	15	
Toluene	B	347094532001	07-MAR-2007	13460	14237	150.0	158.7	ng	6	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12317	150.0	165.6	ng	10	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	16901	150.0	167.8	ng	12	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	12217	150.0	168.2	ng	12	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5175.7	450.0	491.7	ng	9	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9109.5	450.0	532.4	ng	**18**	15	c+
MTBE	C	347094532001	07-MAR-2007	1029.2	994.54	150.0	145.0	ng	-3	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3311.1	150.0	168.9	ng	13	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	3082.4	150.0	170.2	ng	13	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2763.8	150.0	173.0	ng	15	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3554.7	150.0	171.4	ng	14	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2598.4	150.0	171.1	ng	14	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1096.4	450.0	488.5	ng	9	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1994.8	450.0	526.2	ng	**17**	15	c+

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/08/07 : Bromofluorobenzene (PID) B and C pass limits of 78-121%

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/08/07

+=high bias c=CCV

347095815013.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347095815014.1 File : 066_014 Time : 07-MAR-2007 21:24
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1541.7	15000	14740	ng	-2	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2029.1	450.0	507.7	ng	13	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1104.1	450.0	550.8	ng	**22**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5495.4	450.0	522.1	ng	**16**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9465.6	450.0	553.2	ng	**23**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1346.7	450.0	600.0	ng	**33**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2142.2	450.0	565.1	ng	**26**	15	c+

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/08/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/08/07

+=high bias c=CCV

347095815014.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347095815015 File : 066_015 Time : 07-MAR-2007 22:02
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1563.0	15000	14940	ng	0	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2029.0	450.0	507.7	ng	13	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1125.7	450.0	561.6	ng	**25**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5504.0	450.0	522.9	ng	**16**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9541.1	450.0	557.6	ng	**24**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1370.5	450.0	610.6	ng	**36**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2184.2	450.0	576.2	ng	**28**	15	c+

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/08/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV

347095815015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347095815027 File : 066_027 Time : 08-MAR-2007 05:34
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1845.5	450.0	461.8	ng	3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1025.0	450.0	511.3	ng	14	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	3055.6	200.0	209.5	ng	5	15	
Benzene	B	347094532001	07-MAR-2007	13895	15582	200.0	224.3	ng	12	15	
Toluene	B	347094532001	07-MAR-2007	13460	14315	200.0	212.7	ng	6	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12262	200.0	219.9	ng	10	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	16587	200.0	219.5	ng	10	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	12101	200.0	222.1	ng	11	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4864.6	450.0	462.2	ng	3	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8712.0	450.0	509.1	ng	13	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	1136.0	200.0	220.8	ng	10	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3492.8	200.0	237.5	ng	**19**	15	c+ ***
Toluene	C	347094532001	07-MAR-2007	2716.1	3209.0	200.0	236.3	ng	**18**	15	c+ ***
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2844.6	200.0	237.4	ng	**19**	15	c+ ***
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3701.3	200.0	238.0	ng	**19**	15	c+ ***
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2701.1	200.0	237.2	ng	**19**	15	c+ ***
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1047.9	450.0	466.9	ng	4	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1975.7	450.0	521.2	ng	**16**	15	c+

JCP 03/08/07 : Several analytes fails high on ChC. Report PID results from ChB. ChC is for confirm only.

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV

347095815027

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347095815029 File : 066_029 Time : 08-MAR-2007 06:49
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1520.6	20000	19380	ng	-3	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2095.5	450.0	524.4	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1158.1	450.0	577.7	ng	**28**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5595.7	450.0	531.7	ng	**18**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9456.9	450.0	552.7	ng	**23**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1518.6	450.0	676.6	ng	**50**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2215.9	450.0	584.5	ng	**30**	15	c+

JCP 03/08/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/08/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV

347095815029

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347095815030 File : 066_030 Time : 08-MAR-2007 07:26
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1541.3	20000	19650	ng	-2	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1980.5	450.0	495.6	ng	10	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1109.3	450.0	553.4	ng	**23**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5378.9	450.0	511.1	ng	14	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9090.8	450.0	531.3	ng	**18**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1523.4	450.0	678.7	ng	**51**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2184.6	450.0	576.3	ng	**28**	15	c+

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/08/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV

347095815030

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347095815034 File : 066_034 Time : 08-MAR-2007 10:54
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1548.3	15000	14800	ng	-1	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2136.2	450.0	534.5	ng	**19**	15	c+
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1198.5	450.0	597.9	ng	**33**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	6005.0	450.0	570.5	ng	**27**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	10651	450.0	622.4	ng	**38**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1507.9	450.0	671.8	ng	**49**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2477.7	450.0	653.6	ng	**45**	15	c+

JCP 03/08/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/08/07 [Bromofluorobenzene (FID) A]: Fails high for limits of 78-131% due to co-elution with matrix.

JCP 03/09/07 [Bromofluorobenzene (FID) A]: Passes Job 193137 specific limits of 65-135%

Analyst: JCP Date: 03/08/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV

347095815034

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378137 IDF : 1.0
Seqnum : 347097186001.3 File : 067_001 Time : 08-MAR-2007 11:46
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	2760.3	100.0	94.60	ng	-5	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	951.74	100.0	92.47	ng	-8	15	
Benzene	B	347094532001	07-MAR-2007	13895	14266	100.0	102.7	ng	3	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	3098.0	100.0	105.3	ng	5	15	
Toluene	B	347094532001	07-MAR-2007	13460	13385	100.0	99.44	ng	-1	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2908.0	100.0	107.1	ng	7	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11543	100.0	103.5	ng	3	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2531.6	100.0	105.6	ng	6	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15366	100.0	101.7	ng	2	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3321.3	100.0	106.8	ng	7	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11134	100.0	102.2	ng	2	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2400.7	100.0	105.4	ng	5	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1831.0	450.0	458.2	ng	2	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1003.2	450.0	500.5	ng	11	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4822.8	450.0	458.2	ng	2	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1059.1	450.0	471.9	ng	5	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8591.9	450.0	502.1	ng	12	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1946.8	450.0	513.6	ng	14	15	

Analyst: JCP Date: 03/09/07 Reviewer: CW Date: 03/15/07

u=use

347097186001.3

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC378134 IDF : 1.0
Seqnum : 347097186002.3 File : 067_002 Time : 08-MAR-2007 12:23
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1415.4	10000	9020	ng	-10	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1876.5	450.0	469.5	ng	4	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1010.8	450.0	504.3	ng	12	15	u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5222.0	450.0	496.2	ng	10	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1193.9	450.0	531.9	ng	**18**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8409.4	450.0	491.4	ng	9	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1934.2	450.0	510.2	ng	13	15	

JCP 03/09/07 : PID surrogates are not applicable. [general version]

Analyst: JCP Date: 03/09/07 Reviewer: CW Date: 03/15/07

+=high bias c=CCV u=use

347097186002.3

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347097186013 File : 067_013 Time : 08-MAR-2007 20:07
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1846.3	450.0	462.0	ng	3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	994.75	450.0	496.2	ng	10	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2948.2	150.0	151.6	ng	1	15	
Benzene	B	347094532001	07-MAR-2007	13895	14999	150.0	161.9	ng	8	15	
Toluene	B	347094532001	07-MAR-2007	13460	13952	150.0	155.5	ng	4	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	12120	150.0	163.0	ng	9	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	16072	150.0	159.5	ng	6	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11706	150.0	161.1	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4894.9	450.0	465.1	ng	3	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8507.2	450.0	497.2	ng	10	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	895.64	150.0	130.5	ng	-13	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3271.4	150.0	166.8	ng	11	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	3029.3	150.0	167.3	ng	12	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2702.3	150.0	169.1	ng	13	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3476.6	150.0	167.6	ng	12	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2514.4	150.0	165.6	ng	10	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1043.9	450.0	465.1	ng	3	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1885.3	450.0	497.3	ng	11	15	

Analyst: JCP Date: 03/09/07 Reviewer: MCH Date: 03/10/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347097186015 File : 067_015 Time : 08-MAR-2007 21:23
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1494.3	15000	14280	ng	-5	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1995.9	450.0	499.4	ng	11	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1074.9	450.0	536.2	ng	**19**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5203.5	450.0	494.4	ng	10	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8962.9	450.0	523.8	ng	**16**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1272.6	450.0	567.0	ng	**26**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2022.2	450.0	533.4	ng	**19**	15	c+

JCP 03/09/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/09/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/09/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV

347097186015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347097186016 File : 067_016 Time : 08-MAR-2007 22:00
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1473.7	15000	14090	ng	-6	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1948.6	450.0	487.6	ng	8	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1089.8	450.0	543.7	ng	**21**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5267.1	450.0	500.4	ng	11	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9118.7	450.0	532.9	ng	**18**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1299.2	450.0	578.8	ng	**29**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2072.9	450.0	546.8	ng	**22**	15	c+

JCP 03/09/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/09/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/09/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV

347097186016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347097186027 File : 067_027 Time : 09-MAR-2007 04:55
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1645.9	450.0	411.8	ng	-8	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	908.59	450.0	453.3	ng	1	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2883.9	200.0	197.7	ng	-1	15	
Benzene	B	347094532001	07-MAR-2007	13895	14764	200.0	212.5	ng	6	15	
Toluene	B	347094532001	07-MAR-2007	13460	13574	200.0	201.7	ng	1	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11657	200.0	209.0	ng	5	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15679	200.0	207.5	ng	4	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11502	200.0	211.1	ng	6	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4408.2	450.0	418.8	ng	-7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7774.2	450.0	454.3	ng	1	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	1053.4	200.0	204.7	ng	2	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	3200.6	200.0	217.6	ng	9	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2942.6	200.0	216.7	ng	8	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2616.6	200.0	218.3	ng	9	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3321.4	200.0	213.5	ng	7	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2464.7	200.0	216.4	ng	8	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	917.58	450.0	408.8	ng	-9	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1678.0	450.0	442.6	ng	-2	15	

Analyst: JCP Date: 03/09/07 Reviewer: MCH Date: 03/10/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347097186029 File : 067_029 Time : 09-MAR-2007 06:10
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1485.8	20000	18940	ng	-5	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2132.9	450.0	533.7	ng	**19**	15	c+
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1163.5	450.0	580.4	ng	**29**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	6069.9	450.0	576.7	ng	**28**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	10515	450.0	614.5	ng	**37**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1505.8	450.0	670.9	ng	**49**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	2379.0	450.0	627.6	ng	**39**	15	c+

JCP 03/09/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/09/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/09/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/09/07 Reviewer: MCH Date: 03/10/07

+=high bias c=CCV

347097186029

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	029_001	X	IB			01/29/07 08:26	1.0	1
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1
004	029_004	X	IB			01/29/07 14:53	1.0	1
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1
011	029_011	X	IB			01/29/07 19:16	1.0	1
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1
014	029_014	X	IB			01/29/07 21:09	1.0	1
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1
016	029_016	X	IB			01/29/07 22:25	1.0	1
017	029_017	X	IB			01/29/07 23:02	1.0	1
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1
027	029_027	X	IB			01/30/07 05:18	1.0	1
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1
030	029_030	X	IB			01/30/07 08:29	1.0	1
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347094532

Instrument : GC19 Begun : 03/06/07 15:32
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	065_001	X	IB			03/06/07 15:32	1.0	1
002	065_002	X	ICAL			03/06/07 16:09	1.0	2 1
003	065_003	X	ICAL			03/06/07 16:47	1.0	2 1
004	065_004	X	ICAL			03/06/07 17:25	1.0	3 1
005	065_005	X	ICAL			03/06/07 18:02	1.0	3 1
006	065_006	X	ICAL			03/06/07 18:40	1.0	3 1
007	065_007	X	ICAL			03/06/07 19:18	1.0	4 1
008	065_008	X	ICAL			03/06/07 19:55	1.0	4 1
009	065_009	X	ICAL			03/06/07 20:33	1.0	4 1
010	065_010	X	ICAL			03/06/07 21:11	1.0	5 1
011	065_011	X	IB			03/06/07 21:48	1.0	1
012	065_012	X	ICV			03/06/07 22:26	1.0	6 1
013	065_013	X	ICV			03/06/07 23:04	1.0	6 1
014	065_014	X	IB			03/06/07 23:41	1.0	1
015	065_015	ICAL	BTXE_1			03/07/07 00:19	1.0	2 1
016	065_016	ICAL	BTXE_2			03/07/07 00:57	1.0	3 1
017	065_017	ICAL	BTXE_3			03/07/07 01:34	1.0	3 1
018	065_018	ICAL	BTXE_4			03/07/07 02:12	1.0	3 1
019	065_019	ICAL	BTXE_5			03/07/07 02:50	1.0	4 1
020	065_020	ICAL	BTXE_6			03/07/07 03:27	1.0	4 1
021	065_021	ICAL	BTXE_7			03/07/07 04:05	1.0	4 1
022	065_022	ICAL	MTBE_7			03/07/07 04:43	1.0	5 1
023	065_023	X	IB			03/07/07 05:20	1.0	1
024	065_024	ICV	MBTXE			03/07/07 05:58	1.0	6 1
025	065_025	X	ICV			03/07/07 06:35	1.0	6 1
026	065_026	X	IB			03/07/07 08:30	1.0	1
027	065_027	ICAL	TFT/BFB_1			03/07/07 09:08	1.0	7
028	065_028	ICAL	TFT/BFB_2			03/07/07 09:48	1.0	8
029	065_029	ICAL	TFT/BFB_3			03/07/07 10:26	1.0	9
030	065_030	ICAL	TFT/BFB_4			03/07/07 11:04	1.0	10
031	065_031	ICAL	TFT/BFB_5			03/07/07 11:51	1.0	11

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Standards used: 1=S5345 2=S5559 3=S5558 4=S5557 5=S4993 6=S5206 7=S5343 8=S5344 9=S5665 10=S5346 11=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347095815

Instrument : GC19 Begun : 03/07/07 12:55
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	066_001	X	IB			03/07/07 12:55	1.0	1
002	066_002	CCV/LCS	QC377955	Water	122810	03/07/07 13:33	1.0	2 1
003	066_003	CCV/LCS	QC377956	Water	122810	03/07/07 14:10	1.0	3 1
004	066_004	BLANK	QC377954	Water	122810	03/07/07 15:07	1.0	1
005	066_005	MS	QC377957	Water	122810	03/07/07 15:45	1.0	3 1
006	066_006	MSD	QC377958	Water	122810	03/07/07 16:23	1.0	3 1
007	066_007	SAMPLE	193116-017	Water	122810	03/07/07 17:00	1.0	1
008	066_008	SAMPLE	193184-010	Water	122810	03/07/07 17:38	1.0	1
009	066_009	SAMPLE	193184-023	Water	122810	03/07/07 18:16	1.0	1
010	066_010	MSS	193189-001	Water	122810	03/07/07 18:53	1.0	1
011	066_011	SAMPLE	193189-002	Water	122810	03/07/07 19:31	1.0	1
012	066_012	X	MBTXE			03/07/07 20:09	1.0	2 1
013	066_013	CCV	MBTXE			03/07/07 20:46	1.0	2 1
014	066_014	CCV	TVH			03/07/07 21:24	1.0	3 1
015	066_015	CCV	TVH			03/07/07 22:02	1.0	3 1
016	066_016	SAMPLE	193189-003	Water	122810	03/07/07 22:39	1.0	1
017	066_017	SAMPLE	193189-004	Water	122810	03/07/07 23:17	1.0	1
018	066_018	SAMPLE	193189-005	Water	122810	03/07/07 23:55	1.0	1
019	066_019	SAMPLE	193189-006	Water	122810	03/08/07 00:32	1.0	1
020	066_020	X	IB			03/08/07 01:10	1.0	1
021	066_021	SAMPLE	193189-007	Water	122810	03/08/07 01:48	1.0	1
022	066_022	SAMPLE	193189-008	Water	122810	03/08/07 02:25	1.0	1
023	066_023	SAMPLE	193190-001	Water	122810	03/08/07 03:03	1.0	1
024	066_024	SAMPLE	193137-001	Water	122810	03/08/07 03:41	1.0	1
025	066_025	SAMPLE	193137-002	Water	122810	03/08/07 04:18	1.0	1
026	066_026	SAMPLE	193137-003	Water	122810	03/08/07 04:56	1.0	1
027	066_027	CCV	MBTXE			03/08/07 05:34	1.0	2 1
028	066_028	CCV	MBTXE			03/08/07 06:11	1.0	2 1
029	066_029	CCV	TVH			03/08/07 06:49	1.0	3 1
030	066_030	CCV	TVH			03/08/07 07:26	1.0	3 1
031	066_031	SAMPLE	193137-004	Water	122810	03/08/07 08:04	1.0	1
032	066_032	SAMPLE	193137-005	Water	122810	03/08/07 08:42	1.0	1
033	066_033	X	TVH			03/08/07 10:02	1.0	3 1
034	066_034	CCV	TVH			03/08/07 10:54	1.0	3 1

Analyst: JCP Date: 03/08/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5313 3=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347097186

Instrument : GC19 Begun : 03/08/07 11:46
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	067_001	CCV/LCS	QC378137	Water	122855	03/08/07 11:46	1.0	1 2	
002	067_002	CCV/LCS	QC378134	Water	122855	03/08/07 12:23	1.0	3 2	
003	067_003	BLANK	QC378133	Water	122855	03/08/07 13:23	1.0	2	
004	067_004	SAMPLE	193189-008	Water	122855	03/08/07 14:00	1.0	2	
005	067_005	SAMPLE	193137-001	Water	122855	03/08/07 14:38	1.0	2	
006	067_006	SAMPLE	193189-003	Water	122855	03/08/07 15:16	1.0	2	
007	067_007	X	IB			03/08/07 16:21	1.0	2	
008	067_008	X	IB			03/08/07 16:59	1.0	2	
009	067_009	SAMPLE	193129-008	Water	122855	03/08/07 17:37	1.0	2	headspace > 1 mL
010	067_010	SAMPLE	193189-004	Water	122855	03/08/07 18:14	5.0	2	
011	067_011	SAMPLE	193189-005	Water	122855	03/08/07 18:52	25.0	2	
012	067_012	SAMPLE	193189-006	Water	122855	03/08/07 19:30	100.0	2	
013	067_013	CCV	MBTXE			03/08/07 20:07	1.0	1 2	
014	067_014	CCV	MBTXE			03/08/07 20:45	1.0	1 2	
015	067_015	CCV	TVH			03/08/07 21:23	1.0	3 2	
016	067_016	CCV	TVH			03/08/07 22:00	1.0	3 2	
017	067_017	MS	QC378135	Water	122855	03/08/07 22:38	1.0	3 2	
018	067_018	MSD	QC378136	Water	122855	03/08/07 23:16	1.0	3 2	
019	067_019	SAMPLE	193189-007	Water	122855	03/08/07 23:53	25.0	2	
020	067_020	SAMPLE	193190-001	Water	122855	03/09/07 00:31	25.0	2	
021	067_021	SAMPLE	193210-036	Water	122855	03/09/07 01:09	1.0	2	
022	067_022	SAMPLE	193210-044	Water	122855	03/09/07 01:46	1.0	2	
023	067_023	MSS	193235-001	Water	122855	03/09/07 02:24	1.0	2	
024	067_024	SAMPLE	193235-002	Water	122855	03/09/07 03:01	1.0	2	
025	067_025	SAMPLE	193235-003	Water	122855	03/09/07 03:39	1.0	2	
026	067_026	SAMPLE	193235-004	Water	122855	03/09/07 04:17	1.0	2	
027	067_027	CCV	MBTXE			03/09/07 04:55	1.0	1 2	
028	067_028	CCV	MBTXE			03/09/07 05:32	1.0	1 2	
029	067_029	CCV	TVH			03/09/07 06:10	1.0	3 2	
030	067_030	CCV	TVH			03/09/07 06:47	1.0	3 2	
031	067_031	SAMPLE	193235-005	Water	122855	03/09/07 07:25	1.0	2	
032	067_032	SAMPLE	193235-006	Water	122855	03/09/07 08:03	1.0	2	
033	067_033	SAMPLE	193235-007	Water	122855	03/09/07 08:40	1.0	2	
034	067_034	SAMPLE	193235-008	Water	122855	03/09/07 09:18	1.0	2	
035	067_035	SAMPLE	193235-009	Water	122855	03/09/07 09:55	1.0	2	
036	067_036	SAMPLE	193189-007	Water	122855	03/09/07 10:33	25.0	2	
037	067_037	CCV	MBTXE			03/09/07 11:38	1.0	1 2	
038	067_038	CCV	TVH			03/09/07 12:16	1.0	3 2	

Analyst: JCP Date: 03/09/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5345 3=S5365

REPORTING SUMMARY FOR 193137 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193137-001	Gasoline C7-C12	GC19	A	03/08/07 14:38
193137-001	MTBE	GC19	B	03/08/07 14:38
193137-001	Benzene	GC19	B	03/08/07 14:38
193137-001	Toluene	GC19	B	03/08/07 14:38
193137-001	Ethylbenzene	GC19	B	03/08/07 14:38
193137-001	Trifluorotoluene (FID)	GC19	A	03/08/07 14:38
193137-001	Bromofluorobenzene (FID)	GC19	A	03/08/07 14:38
193137-001	Trifluorotoluene (PID)	GC19	B	03/08/07 14:38
193137-001	Bromofluorobenzene (PID)	GC19	B	03/08/07 14:38
193137-001	Xylene (total)	GC19	B	03/08/07 14:38
193137-002	Gasoline C7-C12	GC19	A	03/08/07 04:18
193137-002	Trifluorotoluene (FID)	GC19	A	03/08/07 04:18
193137-002	Bromofluorobenzene (FID)	GC19	A	03/08/07 04:18
193137-003	Gasoline C7-C12	GC19	A	03/08/07 04:56
193137-003	Trifluorotoluene (FID)	GC19	A	03/08/07 04:56
193137-003	Bromofluorobenzene (FID)	GC19	A	03/08/07 04:56
193137-004	Gasoline C7-C12	GC19	A	03/08/07 08:04
193137-004	Trifluorotoluene (FID)	GC19	A	03/08/07 08:04
193137-004	Bromofluorobenzene (FID)	GC19	A	03/08/07 08:04
193137-005	Gasoline C7-C12	GC19	A	03/08/07 08:42
193137-005	Trifluorotoluene (FID)	GC19	A	03/08/07 08:42
193137-005	Bromofluorobenzene (FID)	GC19	A	03/08/07 08:42
QC377954	Gasoline C7-C12	GC19	A	03/07/07 15:07
QC377954	Trifluorotoluene (FID)	GC19	A	03/07/07 15:07
QC377954	Bromofluorobenzene (FID)	GC19	A	03/07/07 15:07
QC377954	Trifluorotoluene (PID)	GC19	B	03/07/07 15:07
QC377954	Bromofluorobenzene (PID)	GC19	B	03/07/07 15:07
QC377956	Gasoline C7-C12	GC19	A	03/07/07 14:10
QC377956	Trifluorotoluene (FID)	GC19	A	03/07/07 14:10
QC377956	Bromofluorobenzene (FID)	GC19	A	03/07/07 14:10
QC377957	Gasoline C7-C12	GC19	A	03/07/07 15:45
QC377957	Trifluorotoluene (FID)	GC19	A	03/07/07 15:45
QC377957	Bromofluorobenzene (FID)	GC19	A	03/07/07 15:45
QC377958	Gasoline C7-C12	GC19	A	03/07/07 16:23
QC377958	Trifluorotoluene (FID)	GC19	A	03/07/07 16:23
QC377958	Bromofluorobenzene (FID)	GC19	A	03/07/07 16:23
QC378133	Gasoline C7-C12	GC19	A	03/08/07 13:23
QC378133	MTBE	GC19	B	03/08/07 13:23
QC378133	Benzene	GC19	B	03/08/07 13:23
QC378133	Toluene	GC19	B	03/08/07 13:23
QC378133	Ethylbenzene	GC19	B	03/08/07 13:23
QC378133	Trifluorotoluene (FID)	GC19	A	03/08/07 13:23
QC378133	Bromofluorobenzene (FID)	GC19	A	03/08/07 13:23
QC378133	Trifluorotoluene (PID)	GC19	B	03/08/07 13:23
QC378133	Bromofluorobenzene (PID)	GC19	B	03/08/07 13:23

REPORTING SUMMARY FOR 193137 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC378133	Xylene (total)	GC19	B	03/08/07 13:23
QC378134	Gasoline C7-C12	GC19	A	03/08/07 12:23
QC378134	Trifluorotoluene (FID)	GC19	A	03/08/07 12:23
QC378134	Bromofluorobenzene (FID)	GC19	A	03/08/07 12:23
QC378135	Gasoline C7-C12	GC19	A	03/08/07 22:38
QC378135	Trifluorotoluene (FID)	GC19	A	03/08/07 22:38
QC378135	Bromofluorobenzene (FID)	GC19	A	03/08/07 22:38
QC378136	Gasoline C7-C12	GC19	A	03/08/07 23:16
QC378136	Trifluorotoluene (FID)	GC19	A	03/08/07 23:16
QC378136	Bromofluorobenzene (FID)	GC19	A	03/08/07 23:16
QC378137	MTBE	GC19	B	03/08/07 11:46
QC378137	Benzene	GC19	B	03/08/07 11:46
QC378137	Toluene	GC19	B	03/08/07 11:46
QC378137	Ethylbenzene	GC19	B	03/08/07 11:46
QC378137	Trifluorotoluene (PID)	GC19	B	03/08/07 11:46
QC378137	Bromofluorobenzene (PID)	GC19	B	03/08/07 11:46

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/23/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/02/07
Units:	ug/L	Received:	03/05/07
Diln Fac:	1.000	Prepared:	03/17/07
Batch#:	123229	Analyzed:	03/19/07

Field ID: 514AGW101 Lab ID: 193137-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	115 b	65-135

Field ID: 937GW37 Lab ID: 193137-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	93 b	65-135

Field ID: 937GW35 Lab ID: 193137-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	86 b	65-135

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/02/07
Units:	ug/L	Received:	03/05/07
Diln Fac:	1.000	Prepared:	03/17/07
Batch#:	123229	Analyzed:	03/19/07

Field ID:	937GW32R	Lab ID:	193137-004
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	104 b	65-135

Field ID:	NKGW04	Lab ID:	193137-005
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND b	50
Motor Oil C24-C36	ND b	300

Surrogate	%REC	Limits
Hexacosane	97 b	65-135

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC379739		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

b= See narrative
ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379740	Batch#:	123229
Matrix:	Water	Prepared:	03/17/07
Units:	ug/L	Analyzed:	03/19/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,933	117	65-135

Surrogate	%REC	Limits
Hexacosane	119	65-135

40.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW104	Batch#:	123229
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Prepared:	03/17/07
Diln Fac:	1.000	Analyzed:	03/20/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC379741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<10.97	2,500	1,486	59 *	65-135

Surrogate	%REC	Limits
Hexacosane	74	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC379742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,410	96	65-135	47 *	35

Surrogate	%REC	Limits
Hexacosane	103	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

41.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC11A
Calnum: 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00055

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date: 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117102790001
Units : mg/L

Name : Hexacosane
Date : 12-MAR-2007 20:05
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071a023	117102790023	HEX_10	12-MAR-2007 20:05	S4640
L2	071a024	117102790024	HEX_25	12-MAR-2007 20:33	S4641
L3	071a025	117102790025	HEX_50	12-MAR-2007 21:01	S5402
L4	071a026	117102790026	HEX_100	12-MAR-2007 21:29	S4644
L5	071a027	117102790027	HEX_200	12-MAR-2007 21:57	S4645
L6	071a033	117102790033	HEX_5	13-MAR-2007 12:16	S4639

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60718	67049	65965	69806	68232	69707	AVRG		1.49E-5		66913	5	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	10.000	25.000	50.000	100.00	200.00	5.0000	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00057

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779001
Units : mg/L

Name : Diesel 14b
Date : 12-MAR-2007 17:56
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_014	227102779014	DSL_10	12-MAR-2007 17:56	S5413
L2	071_015	227102779015	DSL_100	12-MAR-2007 18:24	S5414
L3	071_016	227102779016	DSL_500	12-MAR-2007 18:53	S5416
L4	071_017	227102779017	DSL_1000	12-MAR-2007 19:22	S5417
L5	071_018	227102779018	DSL_5000	12-MAR-2007 19:50	S5411
L6	071_019	227102779019	DSL_7500	12-MAR-2007 20:18	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	31823	46248	53031	50789	51704	52394	AVRG		2.10E-5		47665	17	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227102779001

Name : Diesel 14b
Cal Date: 12-MAR-2007

ICV 227102779021 (071_021 12-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	47665	50636	500.0	531.2	mg/L	6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779003
Units : mg/L

Name : Motor oil 14b
Date : 12-MAR-2007 22:41
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_024	227102779024	MO_50	12-MAR-2007 22:41	S5523
L2	071_025	227102779025	MO_250	12-MAR-2007 23:09	S5524
L3	071_026	227102779026	MO_500	12-MAR-2007 23:38	S5525
L4	071_028	227102779028	MO_5000	13-MAR-2007 00:35	S5522
L5	071_036	227102779036	MO_1000	13-MAR-2007 12:33	S5526

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	39814	38246	37046	36590	38315	AVRG		2.63E-5		38002	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	5000.0	1000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779002
Units : mg/L

Name : Hexacosane 14b
Date : 13-MAR-2007 01:32
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_030	227102779030	HEX_5	13-MAR-2007 01:32	S4639
L2	071_031	227102779031	HEX_10	13-MAR-2007 02:01	S4640
L3	071_032	227102779032	HEX_50	13-MAR-2007 02:29	S5402
L4	071_033	227102779033	HEX_100	13-MAR-2007 02:58	S4644
L5	071_034	227102779034	HEX_200	13-MAR-2007 03:27	S4645

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	59294	61101	60945	63451	62267	AVRG		1.63E-5		61411	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Hexacosane	B	5.0000	10.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

000061

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG		1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00055

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_1000 IDF : 1.0
Seqnum : 117111851030 File : 077a030 Time : 19-MAR-2007 06:01
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54146	1000	929.5	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60895	50.00	45.50	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851031 File : 077a031 Time : 19-MAR-2007 06:29
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	38931	500.0	469.6	mg/L	-6	15	
Hexacosane	117102790001	12-MAR-2007	66913	67337	50.00	50.32	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_250 IDF : 1.0
Seqnum : 117111851041 File : 077a041 Time : 19-MAR-2007 11:20
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	56502	250.0	242.5	mg/L	-3	15	
Hexacosane	117102790001	12-MAR-2007	66913	66546	50.00	49.73	mg/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: MO_500 IDF : 1.0
Seqnum : 117111851042 File : 077a042 Time : 19-MAR-2007 11:48
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	39901	500.0	481.3	mg/L	-4	15	
Hexacosane	117102790001	12-MAR-2007	66913	68135	50.00	50.91	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_500 IDF : 1.0
Seqnum : 117111851056 File : 077a056 Time : 19-MAR-2007 18:59
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	58140	500.0	499.1	mg/L	0	15	
Hexacosane	117102790001	12-MAR-2007	66913	70571	50.00	52.73	mg/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC11A Run Name: DSL_1000 IDF : 1.0
Seqnum : 117111851074 File : 077a074 Time : 20-MAR-2007 03:25
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	54292	1000	932.1	mg/L	-7	15	
Hexacosane	117102790001	12-MAR-2007	66913	60733	50.00	45.38	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_1000 IDF : 1.0
Seqnum : 227112742009 File : 078_009 Time : 19-MAR-2007 13:35
Standards: S5259

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	49536	1000	1039	mg/L	4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55046	50.00	44.82	mg/L	-10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742010 File : 078_010 Time : 19-MAR-2007 14:03
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	37296	500.0	490.7	mg/L	-2	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	62684	50.00	51.04	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_1000 IDF : 1.0
Seqnum : 227112742022 File : 078_022 Time : 19-MAR-2007 20:03
Standards: S5259

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	52038	1000	1092	mg/L	9	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55927	50.00	45.53	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742023 File : 078_023 Time : 19-MAR-2007 20:31
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	34951	500.0	459.9	mg/L	-8	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	57919	50.00	47.16	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_500 IDF : 1.0
Seqnum : 177112801003 File : 078a003 Time : 19-MAR-2007 08:55
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63845	500.0	522.5	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	78636	50.00	51.01	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801004 File : 078a004 Time : 19-MAR-2007 09:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47343	500.0	525.2	mg/L	5	15	
Hexacosane	177062425003	13-FEB-2007	77085	78052	50.00	50.63	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177112801017 File : 078a017 Time : 19-MAR-2007 18:55
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63620	1000	1041	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	70124	50.00	45.49	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801018 File : 078a018 Time : 19-MAR-2007 19:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47955	500.0	532.0	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	78434	50.00	50.87	mg/L	2	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	042a001	X	IB			02/11/07 16:08	1.0		
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1	
003	042a003	X	MO_500			02/11/07 17:03	1.0	2	
004	042a004	X	MO_500			02/11/07 17:47	1.0	2	
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2	
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1	
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1	
008	042a008	X	IB			02/11/07 20:45	1.0		
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3	
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4	
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5	
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6	
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7	
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8	
015	042a015	IB	CALIB			02/12/07 00:01	1.0		
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9	
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9	
018	042a018	X	IB			02/12/07 01:24	1.0		
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10	

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117102790

Instrument : GC11A
Method : EPA 8015B

Begun : 03/12/07 09:10
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071a001	X	PRIMER				03/12/07 09:10	1.0	
002	071a002	X	IB				03/12/07 09:38	1.0	
003	071a003	X	DSL_500				03/12/07 10:06	1.0	1
004	071a004	CCV	DSL_500				03/12/07 10:34	1.0	1
005	071a005	CCV	MO_500				03/12/07 11:02	1.0	2
006	071a006	CCV	JET_250				03/12/07 11:51	1.0	3
007	071a007	SAMPLE	193189-007	S	Water	122934	03/12/07 12:19	1.0	
008	071a008	SAMPLE	193189-006	S	Water	122934	03/12/07 12:47	1.0	
009	071a009	SAMPLE	193189-005	S	Water	122934	03/12/07 13:15	1.0	
010	071a010	SAMPLE	193189-004	S	Water	122934	03/12/07 13:43	1.0	
011	071a011	SAMPLE	193189-003	S	Water	122934	03/12/07 14:12	1.0	
012	071a012	X	IB				03/12/07 14:40	1.0	
013	071a013	SAMPLE	193189-002	S	Water	122934	03/12/07 15:08	1.0	
014	071a014	SAMPLE	193189-001	S	Water	122934	03/12/07 15:36	1.0	
015	071a015	SAMPLE	193190-001	S	Water	122934	03/12/07 16:05	1.0	
016	071a016	X	DSL_1000				03/12/07 16:33	1.0	4
017	071a017	CCV	MO_500				03/12/07 17:01	1.0	2
018	071a018	CCV	JET_250				03/12/07 17:29	1.0	3
019	071a019	CCV	DSL_1000				03/12/07 17:57	1.0	4
020	071a020	CCV	DSL_1000				03/12/07 18:37	1.0	4
021	071a021	IB	CALIB				03/12/07 19:09	1.0	
022	071a022	X	HEX_5				03/12/07 19:37	1.0	5
023	071a023	ICAL	HEX_10				03/12/07 20:05	1.0	6
024	071a024	ICAL	HEX_25				03/12/07 20:33	1.0	7
025	071a025	ICAL	HEX_50				03/12/07 21:01	1.0	8
026	071a026	ICAL	HEX_100				03/12/07 21:29	1.0	9
027	071a027	ICAL	HEX_200				03/12/07 21:57	1.0	10
028	071a028	IB	CALIB				03/12/07 22:25	1.0	
029	071a029	CCV	DSL_1000				03/12/07 22:52	1.0	4
030	071a030	CCV	MO_500				03/12/07 23:20	1.0	2
031	071a031	X	CCV				03/12/07 23:48	1.0	4
032	071a032	X	CCV				03/13/07 00:16	1.0	2
033	071a033	ICAL	HEX_5				03/13/07 12:16	1.0	5

Standards used: 1=S5517 2=S5603 3=S4560 4=S5259 5=S4639 6=S4640 7=S4641 8=S5402 9=S4644 10=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227102779

Instrument : GC14B
Method : EPA 8015B

Begun : 03/12/07 08:59
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071_001	X	PRIMER			03/12/07 08:59	1.0		
002	071_002	X	IB			03/12/07 09:28	1.0		
003	071_003	X				03/12/07 09:57	1.0	1	
004	071_004	X				03/12/07 10:26	1.0	2	
005	071_005	X	IB			03/12/07 13:15	1.0		
006	071_006	X				03/12/07 13:43	1.0	3	
007	071_007	X				03/12/07 14:12	1.0		
008	071_008	X				03/12/07 14:40	1.0	1	
009	071_009	CMARKER	C8-50			03/12/07 15:09	1.0	3	
010	071_010	X				03/12/07 16:00	1.0	1	
011	071_011	X				03/12/07 16:28	1.0	2	
012	071_012	X	IB			03/12/07 16:58	1.0		
013	071_013	IB	CALIB			03/12/07 17:27	1.0		
014	071_014	ICAL	DSL_10			03/12/07 17:56	1.0	4	
015	071_015	ICAL	DSL_100			03/12/07 18:24	1.0	5	
016	071_016	ICAL	DSL_500			03/12/07 18:53	1.0	6	
017	071_017	ICAL	DSL_1000			03/12/07 19:22	1.0	7	
018	071_018	ICAL	DSL_5000			03/12/07 19:50	1.0	8	
019	071_019	ICAL	DSL_7500			03/12/07 20:18	1.0	9	
020	071_020	IB	CALIB			03/12/07 20:47	1.0		
021	071_021	ICV	DSL_500			03/12/07 21:16	1.0	10	
022	071_022	X	ICV			03/12/07 21:44	1.0	10	
023	071_023	IB	CALIB			03/12/07 22:12	1.0		
024	071_024	ICAL	MO_50			03/12/07 22:41	1.0	11	
025	071_025	ICAL	MO_250			03/12/07 23:09	1.0	12	
026	071_026	ICAL	MO_500			03/12/07 23:38	1.0	13	
027	071_027	X	MO_1000			03/13/07 00:06	1.0	14	
028	071_028	ICAL	MO_5000			03/13/07 00:35	1.0	15	
029	071_029	IB	CALIB			03/13/07 01:04	1.0		
030	071_030	ICAL	HEX_5			03/13/07 01:32	1.0	16	
031	071_031	ICAL	HEX_10			03/13/07 02:01	1.0	17	
032	071_032	ICAL	HEX_50			03/13/07 02:29	1.0	18	
033	071_033	ICAL	HEX_100			03/13/07 02:58	1.0	19	
034	071_034	ICAL	HEX_200			03/13/07 03:27	1.0	20	
035	071_035	X	IB			03/13/07 03:56	1.0		
036	071_036	ICAL	MO_1000			03/13/07 12:33	1.0	14	

Analyst: CP Date: 03/13/07 Reviewer: CW Date: 03/13/07

Standards used: 1=S5517 2=S5603 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S4639 17=S4640 18=S5402 19=S4644 20=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A
Method : EPA 8015B

Begun : 03/18/07 16:11
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	077a001	X	PRIMER				03/18/07 16:11	1.0	
002	077a002	X	IB				03/18/07 16:39	1.0	
003	077a003	CMARKER	C8-C50				03/18/07 17:07	1.0	1
004	077a004	IB	CALIB				03/18/07 17:35	1.0	
005	077a005	ICAL	JET_10				03/18/07 18:02	1.0	2
006	077a006	ICAL	JET_100				03/18/07 18:31	1.0	3
007	077a007	ICAL	JET_500				03/18/07 18:59	1.0	4
008	077a008	ICAL	JET_1000				03/18/07 19:27	1.0	5
009	077a009	ICAL	JET_3000				03/18/07 19:56	1.0	6
010	077a010	ICAL	JET_5000				03/18/07 20:24	1.0	7
011	077a011	IB	CALIB				03/18/07 20:52	1.0	
012	077a012	CCV	DSL_250				03/18/07 21:35	1.0	8
013	077a013	CCV	MO_500				03/18/07 22:04	1.0	9
014	077a014	CCV	JET_250				03/18/07 22:32	1.0	10
015	077a015	X	CCV				03/18/07 22:59	1.0	8
016	077a016	X	CCV				03/18/07 23:27	1.0	9
017	077a017	X	CCV				03/18/07 23:55	1.0	10
018	077a018	BLANK	QC379228	S	Water	123108	03/19/07 00:23	1.0	
019	077a019	SAMPLE	193291-004		Soil	123122	03/19/07 00:51	1.0	
020	077a020	MS	QC379287		Soil	123122	03/19/07 01:20	1.0	
021	077a021	MSD	QC379288		Soil	123122	03/19/07 01:48	1.0	
022	077a022	X	IB				03/19/07 02:15	1.0	
023	077a023	SAMPLE	193274-005	S	Water	123108	03/19/07 02:43	1.0	
024	077a024	SAMPLE	193274-006	S	Water	123108	03/19/07 03:12	1.0	
025	077a025	SAMPLE	193274-007	S	Water	123108	03/19/07 03:40	1.0	
026	077a026	SAMPLE	193274-008	S	Water	123108	03/19/07 04:08	1.0	
027	077a027	SAMPLE	193274-009	S	Water	123108	03/19/07 04:36	1.0	
028	077a028	SAMPLE	193274-010	S	Water	123108	03/19/07 05:04	1.0	
029	077a029	X	IB				03/19/07 05:32	1.0	
030	077a030	CCV	DSL_1000				03/19/07 06:01	1.0	11
031	077a031	CCV	MO_500				03/19/07 06:29	1.0	9
032	077a032	CCV	JET_250				03/19/07 06:57	1.0	10
033	077a033	SAMPLE	193274-011	S	Water	123108	03/19/07 07:35	1.0	
034	077a034	SAMPLE	193274-012	S	Water	123108	03/19/07 08:03	1.0	
035	077a035	SAMPLE	193274-013	S	Water	123108	03/19/07 08:31	1.0	
036	077a036	SAMPLE	193274-014	S	Water	123108	03/19/07 08:59	1.0	
037	077a037	SAMPLE	193274-015	S	Water	123108	03/19/07 09:27	1.0	
038	077a038	SAMPLE	193291-004		Soil	123122	03/19/07 09:55	1.0	
039	077a039	SAMPLE	193274-016	S	Water	123108	03/19/07 10:24	1.0	
040	077a040	BLANK	QC379739	S	Water	123229	03/19/07 10:52	1.0	
041	077a041	CCV	DSL_250				03/19/07 11:20	1.0	8
042	077a042	CCV	MO_500				03/19/07 11:48	1.0	9
043	077a043	CCV	JET_250				03/19/07 12:16	1.0	10
044	077a044	BLANK	QC378776	S	Water	123002	03/19/07 13:23	1.0	
045	077a045	SAMPLE	193227-002	S	Water	123002	03/19/07 13:51	1.0	
046	077a046	SAMPLE	193233-002	S	Water	123002	03/19/07 14:19	1.0	
047	077a047	SAMPLE	193233-003	S	Water	123002	03/19/07 14:47	1.0	
048	077a048	X	IB				03/19/07 15:15	1.0	
049	077a049	SAMPLE	193329-007	S	Water	123229	03/19/07 15:43	1.0	
050	077a050	MSS	193108-023	S	Water	123229	03/19/07 16:11	1.0	
051	077a051	MS	QC379741	S	Water	123229	03/19/07 16:39	1.0	
052	077a052	MSD	QC379742	S	Water	123229	03/19/07 17:07	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117111851

Instrument : GC11A Begun : 03/18/07 16:11
Method : EPA 8015B SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	077a053	SAMPLE	193291-002	S	Soil	123122	03/19/07 17:35	1.0	
054	077a054	SAMPLE	193291-003	S	Soil	123122	03/19/07 18:03	1.0	
055	077a055	X	IB				03/19/07 18:31	1.0	
056	077a056	CCV	DSL_500				03/19/07 18:59	1.0	12
057	077a057	CCV	MO_500				03/19/07 19:28	1.0	9
058	077a058	CCV	JET_250				03/19/07 19:56	1.0	10
059	077a059	X	CCV				03/19/07 20:24	1.0	12
060	077a060	X	CCV				03/19/07 20:52	1.0	9
061	077a061	X	CCV				03/19/07 21:20	1.0	10
062	077a062	BLANK	QC379285	S	Soil	123122	03/19/07 21:48	1.0	
063	077a063	SAMPLE	193291-004	S	Soil	123122	03/19/07 22:16	1.0	
064	077a064	MSS	193291-005	S	Soil	123122	03/19/07 22:44	1.0	
065	077a065	SAMPLE	193291-006	S	Soil	123122	03/19/07 23:12	1.0	
066	077a066	MS	QC379287	S	Soil	123122	03/19/07 23:40	1.0	
067	077a067	MSD	QC379288	S	Soil	123122	03/20/07 00:08	1.0	
068	077a068	X	IB				03/20/07 00:36	1.0	
069	077a069	SAMPLE	193329-003	S	Water	123229	03/20/07 01:04	1.0	
070	077a070	SAMPLE	193329-004	S	Water	123229	03/20/07 01:33	1.0	
071	077a071	MS	QC379741	S	Water	123229	03/20/07 02:01	1.0	
072	077a072	MSD	QC379742	S	Water	123229	03/20/07 02:29	1.0	
073	077a073	X	IB				03/20/07 02:57	1.0	
074	077a074	CCV	DSL_1000				03/20/07 03:25	1.0	11
075	077a075	CCV	MO_500				03/20/07 03:53	1.0	9
076	077a076	CCV	JET_250				03/20/07 04:21	1.0	10
077	077a077	X	CCV				03/20/07 04:50	1.0	11
078	077a078	X	CCV				03/20/07 05:18	1.0	9
079	077a079	X	CCV				03/20/07 05:46	1.0	10
080	077a080	SAMPLE	193329-001	S	Water	123229	03/20/07 06:14	1.0	
081	077a081	SAMPLE	193329-002	S	Water	123229	03/20/07 06:43	1.0	
082	077a082	SAMPLE	193329-005	S	Water	123229	03/20/07 07:11	1.0	
083	077a083	SAMPLE	193329-006	S	Water	123229	03/20/07 07:39	1.0	
084	077a084	CCV	DSL_250				03/20/07 08:08	1.0	8
085	077a085	CCV	MO_500				03/20/07 08:36	1.0	9
086	077a086	CCV	JET_250				03/20/07 09:04	1.0	10
087	077a087	X	CCV				03/20/07 09:32	1.0	8

Standards used: 1=S4049 2=S4665 3=S4666 4=S4667 5=S4668 6=S4670 7=S4664 8=S5258 9=S5603 10=S4560 11=S5259 12=S5517

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177112801

Instrument : GC17A
Method : EPA 8015B

Begun : 03/19/07 08:01
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER				03/19/07 08:01	1.0	
002	078a002	X	IB				03/19/07 08:28	1.0	
003	078a003	CCV	DSL_500				03/19/07 08:55	1.0	1
004	078a004	CCV	MO_500				03/19/07 09:23	1.0	2
005	078a005	SAMPLE	193331-001		Soil	123183	03/19/07 10:49	1.0	
006	078a006	MSS	193384-001		Soil	123183	03/19/07 11:24	1.0	
007	078a007	SAMPLE	193331-001	S	Soil	123183	03/19/07 11:51	1.0	
008	078a008	X	IB				03/19/07 14:32	1.0	
009	078a009	LCS	QC379740	S	Water	123229	03/19/07 14:59	1.0	
010	078a010	SAMPLE	193108-012	S	Water	123229	03/19/07 15:44	1.0	
011	078a011	SAMPLE	193137-005	S	Water	123229	03/19/07 16:11	1.0	
012	078a012	SAMPLE	193108-025	S	Water	123229	03/19/07 16:38	1.0	
013	078a013	SAMPLE	193108-026	S	Water	123229	03/19/07 17:06	1.0	
014	078a014	SAMPLE	193217-001	S	Water	123238	03/19/07 17:33	1.0	
015	078a015	SAMPLE	193217-002	S	Water	123238	03/19/07 18:00	1.0	
016	078a016	X	IB				03/19/07 18:27	1.0	
017	078a017	CCV	DSL_1000				03/19/07 18:55	1.0	3
018	078a018	CCV	MO_500				03/19/07 19:23	1.0	2
019	078a019	X	CCV				03/19/07 19:50	1.0	3
020	078a020	X	CCV				03/19/07 20:17	1.0	2
021	078a021	BLANK	QC379743	S	Water	123230	03/19/07 20:44	1.0	
022	078a022	BS	QC379744	S	Water	123230	03/19/07 21:12	1.0	
023	078a023	BSD	QC379745	S	Water	123230	03/19/07 21:39	1.0	
024	078a024	SAMPLE	193174-001	S	Water	123230	03/19/07 22:06	1.0	
025	078a025	SAMPLE	193174-002	S	Water	123230	03/19/07 22:34	1.0	
026	078a026	SAMPLE	193174-003	S	Water	123230	03/19/07 23:01	1.0	
027	078a027	SAMPLE	193174-004	S	Water	123230	03/19/07 23:28	1.0	
028	078a028	SAMPLE	193174-005	S	Water	123230	03/19/07 23:55	1.0	
029	078a029	SAMPLE	193174-006	S	Water	123230	03/20/07 00:23	1.0	
030	078a030	SAMPLE	193174-007	S	Water	123230	03/20/07 00:50	1.0	
031	078a031	X	IB				03/20/07 01:17	1.0	
032	078a032	CCV	DSL_250				03/20/07 01:44	1.0	4
033	078a033	CCV	MO_500				03/20/07 02:12	1.0	2
034	078a034	X	CCV				03/20/07 02:40	1.0	4
035	078a035	X	CCV				03/20/07 03:07	1.0	2
036	078a036	SAMPLE	193174-008	S	Water	123230	03/20/07 03:34	1.0	
037	078a037	SAMPLE	193174-009	S	Water	123230	03/20/07 04:02	1.0	
038	078a038	SAMPLE	193174-010	S	Water	123230	03/20/07 04:29	1.0	
039	078a039	SAMPLE	193174-011	S	Water	123230	03/20/07 04:56	1.0	
040	078a040	SAMPLE	193174-012	S	Water	123230	03/20/07 05:23	1.0	
041	078a041	SAMPLE	193174-013	S	Water	123230	03/20/07 05:50	1.0	
042	078a042	SAMPLE	193174-014	S	Water	123230	03/20/07 06:17	1.0	
043	078a043	X	IB				03/20/07 06:45	1.0	
044	078a044	CCV	DSL_500				03/20/07 07:13	1.0	1
045	078a045	CCV	MO_500				03/20/07 07:40	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227112742

Instrument : GC14B
Method : EPA 8015B

Begun : 03/19/07 07:02
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078_001	X	PRIMER				03/19/07 07:02	1.0	
002	078_002	X	IB				03/19/07 07:30	1.0	
003	078_003	CCV	DSL_250				03/19/07 07:58	1.0	1
004	078_004	CCV	MO_500				03/19/07 08:26	1.0	2
005	078_005	X	IB				03/19/07 09:58	1.0	
006	078_006	X	IB				03/19/07 10:26	1.0	
007	078_007	X	IB				03/19/07 10:54	1.0	
008	078_008	MSS	193384-001	S	Soil	123183	03/19/07 11:44	1.0	
009	078_009	CCV	DSL_1000				03/19/07 13:35	1.0	3
010	078_010	CCV	MO_500				03/19/07 14:03	1.0	2
011	078_011	SAMPLE	193137-002	S	Water	123229	03/19/07 14:37	1.0	
012	078_012	SAMPLE	193137-003	S	Water	123229	03/19/07 15:05	1.0	
013	078_013	SAMPLE	193137-004	S	Water	123229	03/19/07 15:33	1.0	
014	078_014	SAMPLE	193137-001	S	Water	123229	03/19/07 16:20	1.0	
015	078_015	SAMPLE	193108-027	S	Water	123229	03/19/07 16:47	1.0	
016	078_016	X	IB				03/19/07 17:15	1.0	
017	078_017	BLANK	QC379769		Water	123238	03/19/07 17:43	1.0	
018	078_018	BLANK	QC379769	S	Water	123238	03/19/07 18:11	1.0	
019	078_019	LCS	QC379770	S	Water	123238	03/19/07 18:39	1.0	
020	078_020	SAMPLE	193241-001		Water	123238	03/19/07 19:07	1.0	
021	078_021	SAMPLE	193166-016	S	Water	123238	03/19/07 19:35	1.0	
022	078_022	CCV	DSL_1000				03/19/07 20:03	1.0	3
023	078_023	CCV	MO_500				03/19/07 20:31	1.0	2
024	078_024	X	CCV				03/19/07 20:59	1.0	3
025	078_025	X	CCV				03/19/07 21:27	1.0	2
026	078_026	MSS	193217-005	S	Water	123238	03/19/07 21:55	1.0	
027	078_027	MSS	193217-011	S	Water	123238	03/19/07 22:23	1.0	
028	078_028	MS	QC379771	S	Water	123238	03/19/07 22:51	1.0	
029	078_029	MSD	QC379772	S	Water	123238	03/19/07 23:19	1.0	
030	078_030	MS	QC379773	S	Water	123238	03/19/07 23:46	1.0	
031	078_031	MSD	QC379774	S	Water	123238	03/20/07 00:14	1.0	
032	078_032	X	IB				03/20/07 00:43	1.0	
033	078_033	SAMPLE	193217-010	S	Water	123238	03/20/07 01:10	1.0	
034	078_034	SAMPLE	193217-012	S	Water	123238	03/20/07 01:38	1.0	
035	078_035	SAMPLE	193217-003	S	Water	123238	03/20/07 02:06	1.0	
036	078_036	SAMPLE	193217-004	S	Water	123238	03/20/07 02:34	1.0	
037	078_037	X	DSL_250				03/20/07 03:02	1.0	1
038	078_038	X	MO_500				03/20/07 03:30	1.0	2
039	078_039	CCV	DSL_250				03/20/07 03:57	1.0	1
040	078_040	CCV	MO_500				03/20/07 04:25	1.0	2
041	078_041	SAMPLE	193217-006	S	Water	123238	03/20/07 04:53	1.0	
042	078_042	SAMPLE	193217-007	S	Water	123238	03/20/07 05:22	1.0	
043	078_043	SAMPLE	193217-008	S	Water	123238	03/20/07 05:50	1.0	
044	078_044	SAMPLE	193217-009	S	Water	123238	03/20/07 06:18	1.0	
045	078_045	X	IB				03/20/07 06:46	1.0	
046	078_046	CCV	DSL_500				03/20/07 07:14	1.0	4
047	078_047	CCV	MO_500				03/20/07 07:42	1.0	2

Standards used: 1=S5258 2=S5603 3=S5259 4=S5517

REPORTING SUMMARY FOR 193137 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193137-001	GC14B	03/19/07 16:20	1.0	+	+	+	
193137-002	GC14B	03/19/07 14:37	1.0	+	+	+	
193137-003	GC14B	03/19/07 15:05	1.0	+	+	+	
193137-004	GC14B	03/19/07 15:33	1.0	+	+	+	
193137-005	GC17A	03/19/07 16:11	1.0	+	+	+	
QC379739	GC11A	03/19/07 10:52	1.0	+	+	+	
QC379740	GC17A	03/19/07 14:59	1.0	+		+	
QC379741	GC11A	03/19/07 16:39	1.0				
QC379741	GC11A	03/20/07 02:01	1.0	+		+	
QC379742	GC11A	03/19/07 17:07	1.0				
QC379742	GC11A	03/20/07 02:29	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123229
Started By : KR
Method : 3520C
Spike #1 ID: S5713

Prep Date : 17-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: RFW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193108-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-023		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
193108-025		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-026		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193108-027		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193137-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-001		Water	450	2.5	1	0.005556	9	.5			3630C	TEHM	
193329-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193329-007		Water	500	2.5	1	0.005	10	.5			3630C	TEHM	
QC379739	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379740	LCS	Water	500	2.5	1	0.005		1	.5		3630C	TEH	2x surrogate
QC379741	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC379742	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123229
LIMS Analysis: TEHM
Extracted by: KR
Date Extracted: 17 MAR07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☑ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☑ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-012I	500	7	2.5	X	
23A4					MSS filter breaking - transferred after conc.
25M					
26M					
27Q					lost 5-10mL before conc.
193137-001E		7			
2H		1			
3G					
4G					pink extract
5L					
193329-001G	450	9			
2G	500	7			
3I					
4L					
5J					
6K					lost ~3 mL before conc.
7H		10			
BLANK QC379739		NA			
LCS 40					possible dbl SURR *
MS 41AS		7			
MSD 42AS		7			
JDM 3/20/07					

* 1.0/0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4

☑ Samples were continually extracted about 450 mL of CH_2Cl_2
EHPLC H_2O

☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above

	Mfg & Lot# / LIMS # / Time	Date/ Initials
	S5713 D	3/17/07 KR
	S5627 C	
	FS065076	
	EM197031/ EM196352	
Extraction Start Time:	1430	
Extraction End Time:	0830	JDM 3/18/07
	NA	KRW 3/19/07
	EM462056 37	
	✓	

17 MAR 07
Extraction Chemist Date

Contined from Page —
Continued on Page —

3/20/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JDM
Cleanup Date: 19 March 07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193108-012	123229	1.0	1.0	
23				
25				
26				
27				
193137-001				
02				
03				
04				
05				
193329-001				
02				
03				
04				
05				
06				
07				
MB QC379739				done by RFW
LCS 40				
MS 41				
MSD 42				
JDM 3/19/07				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	JDM ~~[illegible]~~ JDM 3/19/07 3/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM46354	
Concentrated to volumes as noted above	✓	

Jerrie Mee 3/19/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Pamela Maglet 3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW37	Batch#:	122784
Lab ID:	193137-002	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

2.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW35	Batch#:	122784
Lab ID:	193137-003	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	1.9	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW32R	Batch#:	122784
Lab ID:	193137-004	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	113	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

4.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW04	Batch#:	122784
Lab ID:	193137-005	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377866	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC377872	Batch#:	122784
Matrix:	Water	Analyzed:	03/07/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	30.00	36.08	120	65-135
Benzene	30.00	28.68	96	65-135
Trichloroethene	30.00	29.43	98	65-135
Toluene	30.00	28.69	96	65-135
Chlorobenzene	30.00	28.44	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW01	Batch#:	122784
MSS Lab ID:	193108-007	Sampled:	03/01/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/07/07
Diln Fac:	1.000		

Type: MS Lab ID: QC377890

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	30.00	27.59	92	65-135
Benzene	<0.04131	30.00	23.31	78	65-135
Trichloroethene	<0.07621	30.00	23.16	77	65-135
Toluene	<0.08342	30.00	23.23	77	65-135
Chlorobenzene	<0.08963	30.00	22.61	75	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

Type: MSD Lab ID: QC377891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	30.00	27.05	90	65-135	2	35
Benzene	30.00	22.85	76	65-135	2	35
Trichloroethene	30.00	22.83	76	65-135	1	35
Toluene	30.00	23.52	78	65-135	1	35
Chlorobenzene	30.00	21.95	73	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	90	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193137 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193137 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193137 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447095480002 File : ec702 Time : 07-MAR-2007 07:47

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6278	21.11	
75	30.00% - 60.00% of mass 95	12963	43.59	
95		29741		
96	5.00% - 9.00% of mass 95	1987	6.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	20736	69.72	
175	5.00% - 9.00% of mass 174	1614	7.78	
176	> 95.00% and < 101.00% of mass 174	19715	95.08	
177	5.00% - 9.00% of mass 176	1313	6.66	

Analyst: BO Date: 03/07/07 Reviewer: LW Date: 03/08/07

447095480002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

D=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

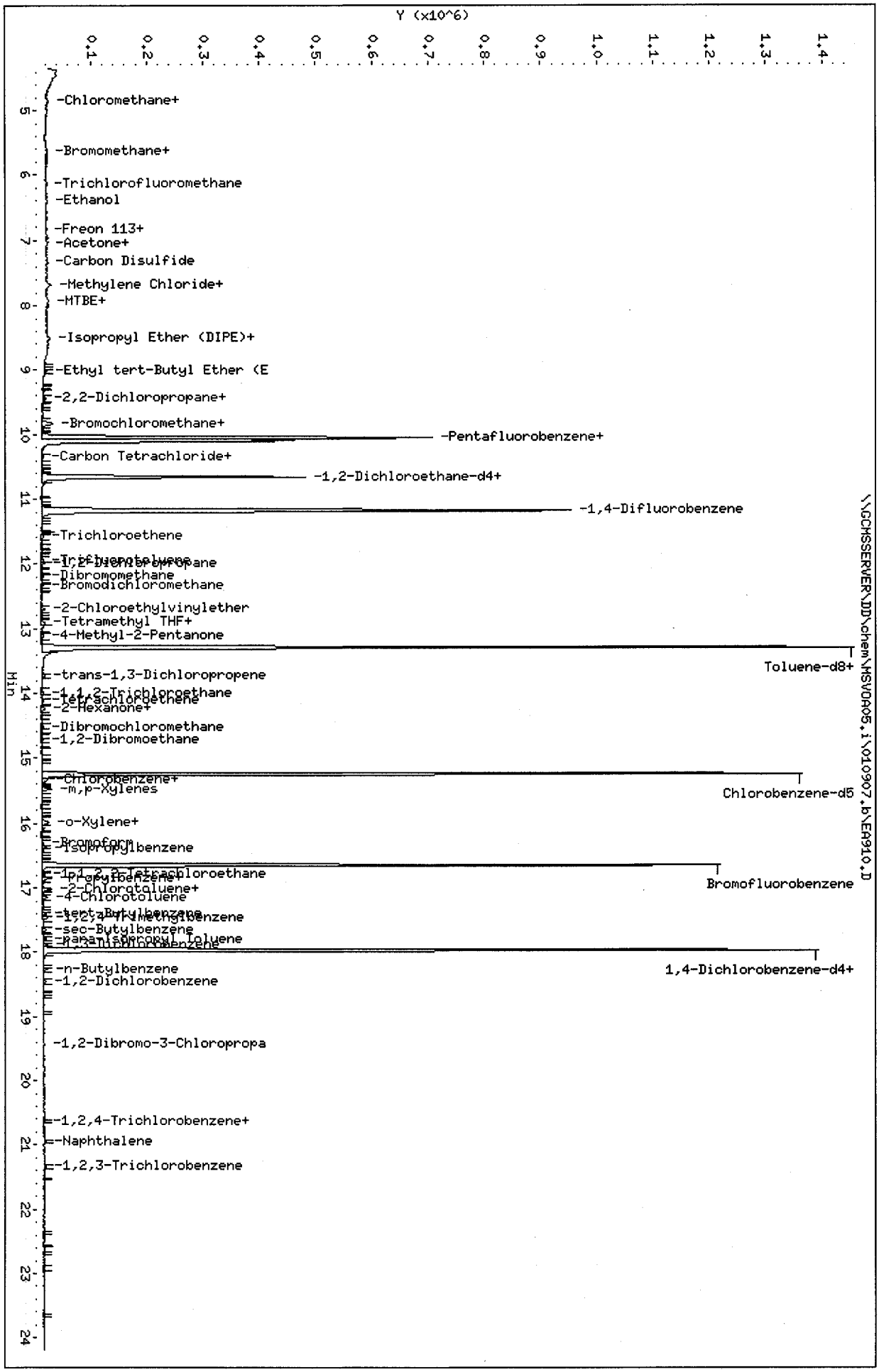
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
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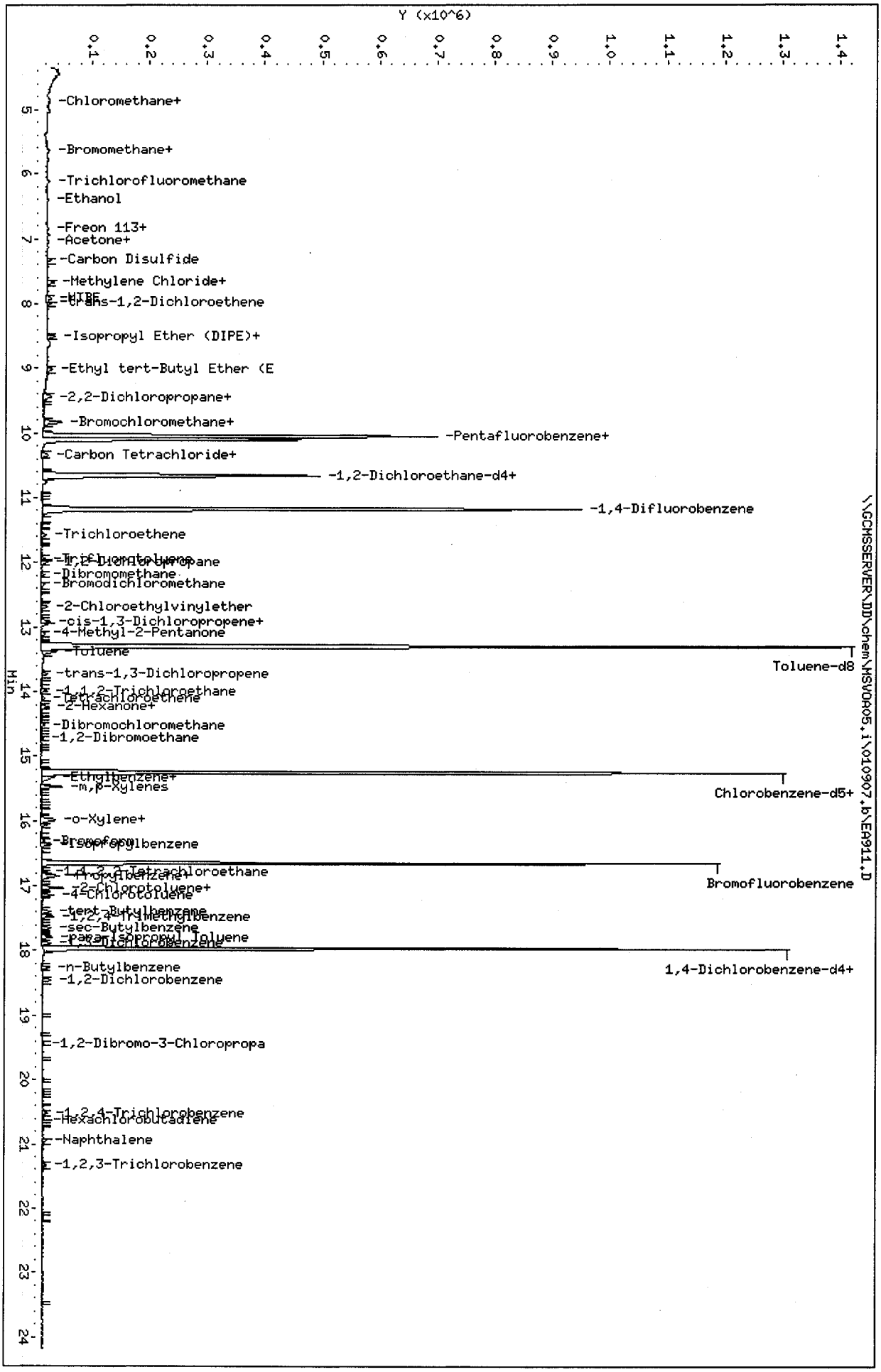
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

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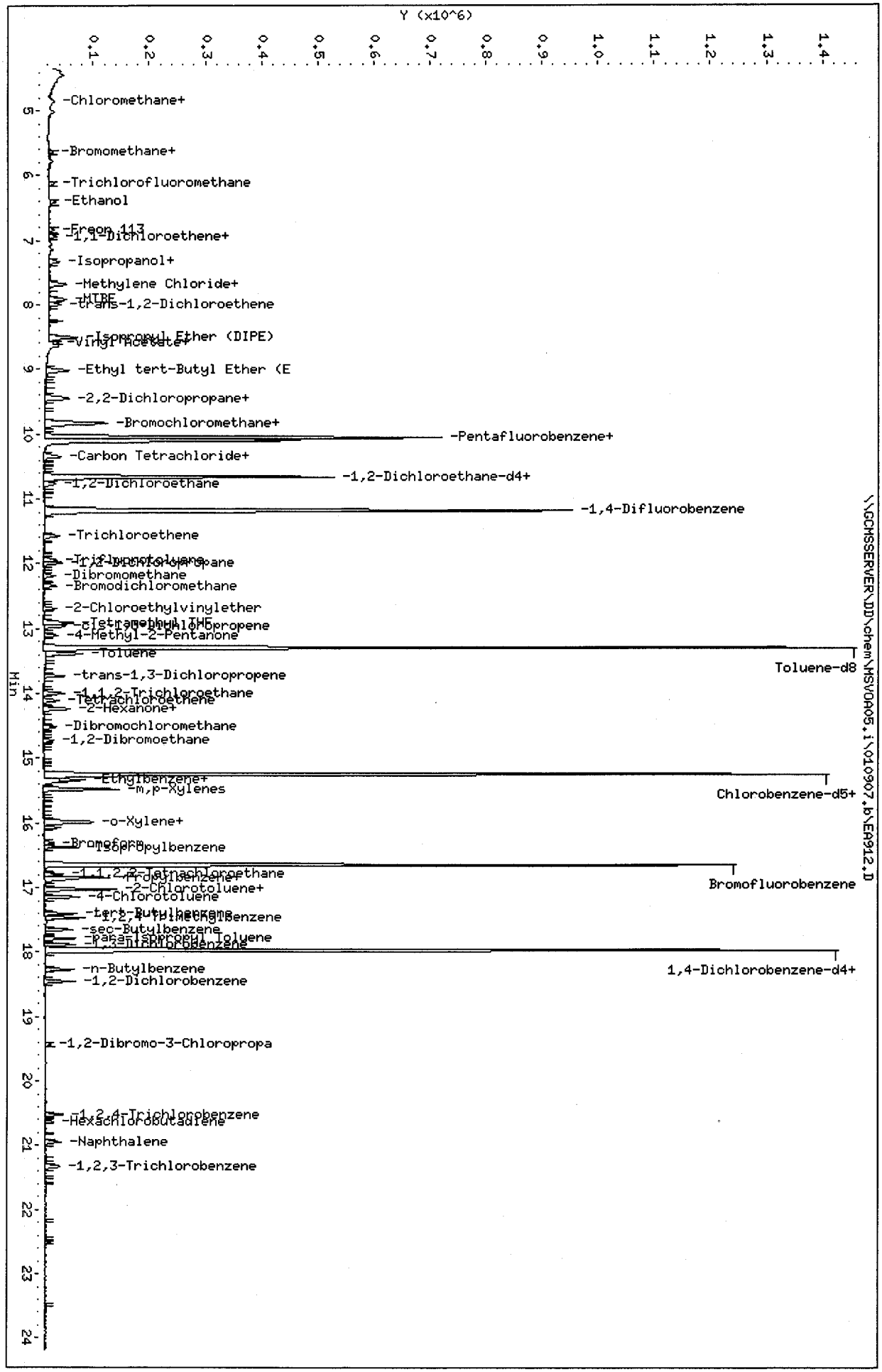
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

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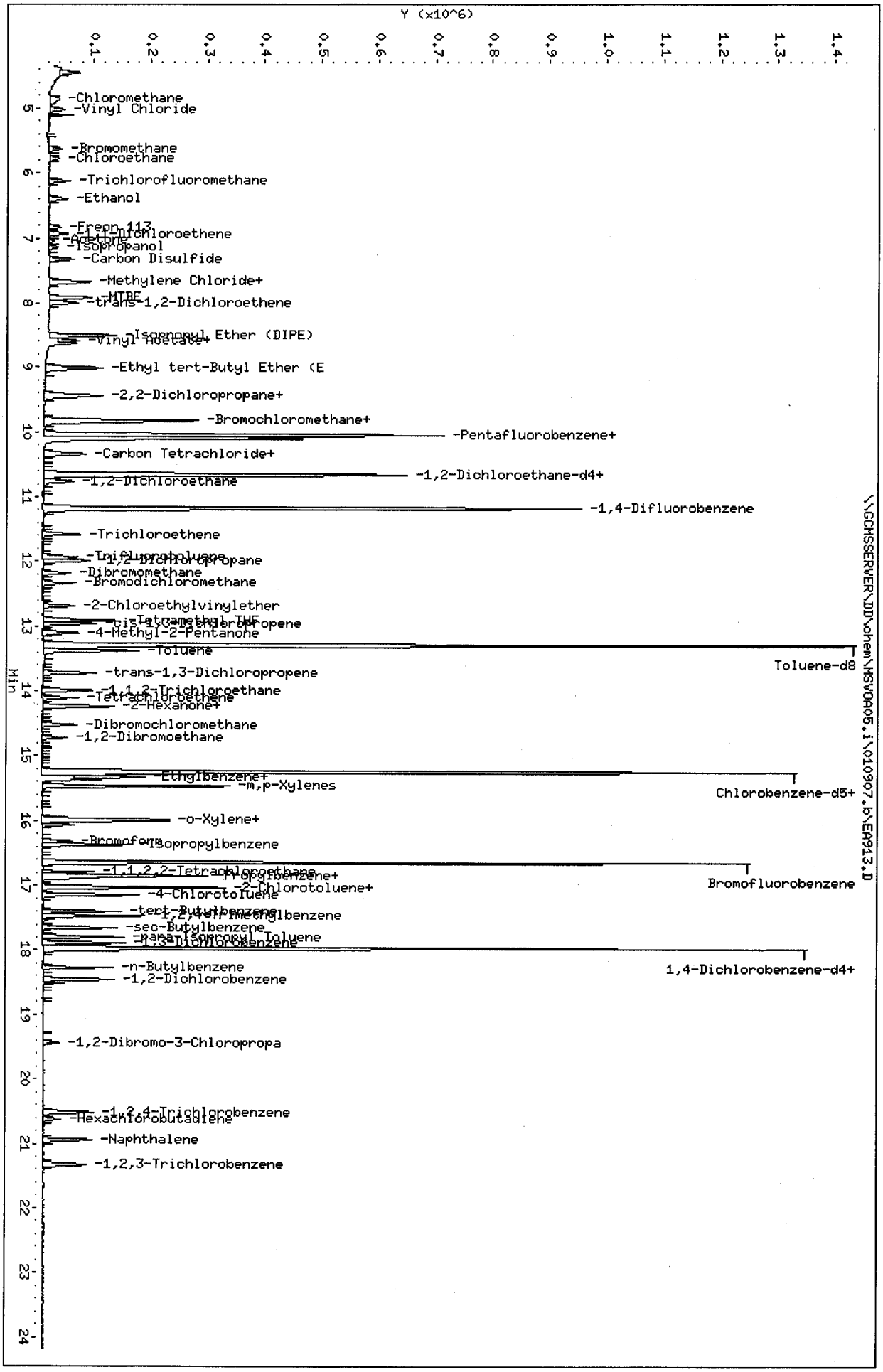
Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

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Misc Info : S4713,0.001/100,10PPB
Comment :
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Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
	18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
	19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
	21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
	22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
	23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
	24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
	25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
	26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
*	27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
	28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
	29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
	30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
	31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
	32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
	33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
	34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
	35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
*	36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
	37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
	38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
	39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
	40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
	41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
	42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
	43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
	44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
	45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
	46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
	47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
	48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
	49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
	50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
	51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
	52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
	53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
	54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
*	55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
	56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
	57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
	58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
	59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
	60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
	61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
	62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
	63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

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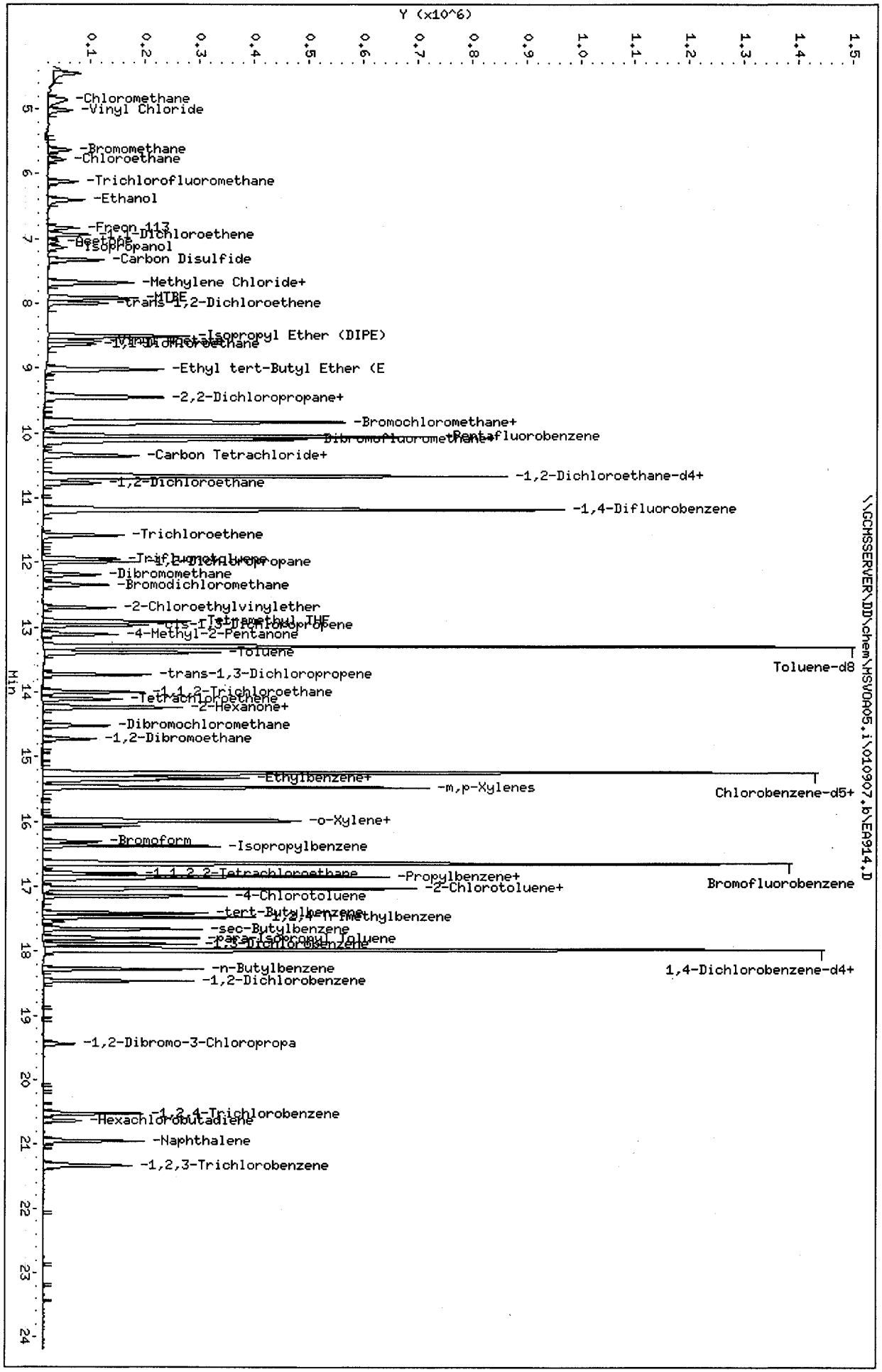
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
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Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

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Instrument: MSVOA05.i
Operator: VOC
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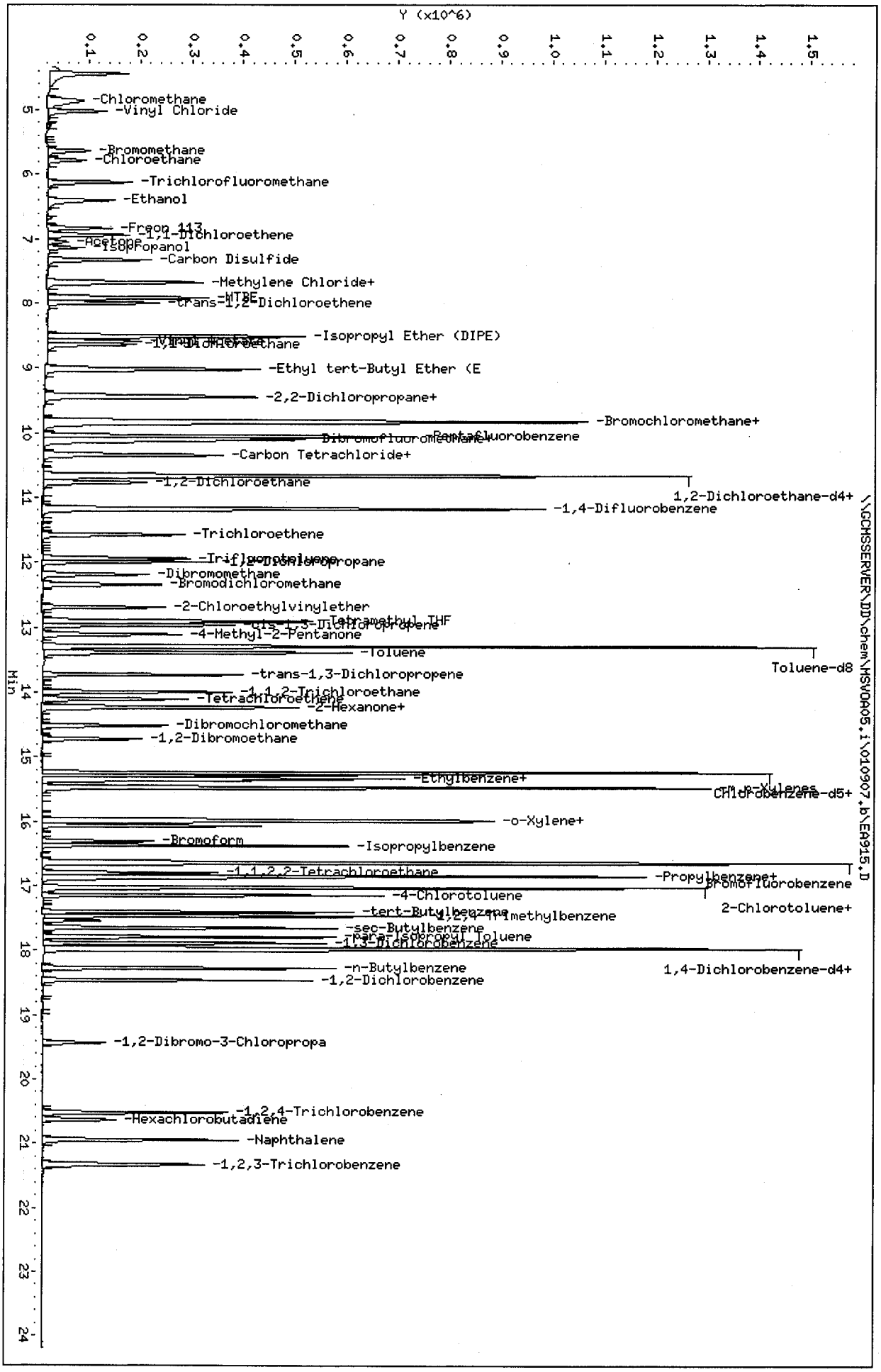

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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.01/100,S5152,0.01/100,
Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
	18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
	19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
	21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
	22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
	23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
	24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
	25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
	26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
	29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
	30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
	33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
	34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
	37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
	38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
	40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
	46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
	47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
	50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
	51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
*	55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
	57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
	60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
	61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
	62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

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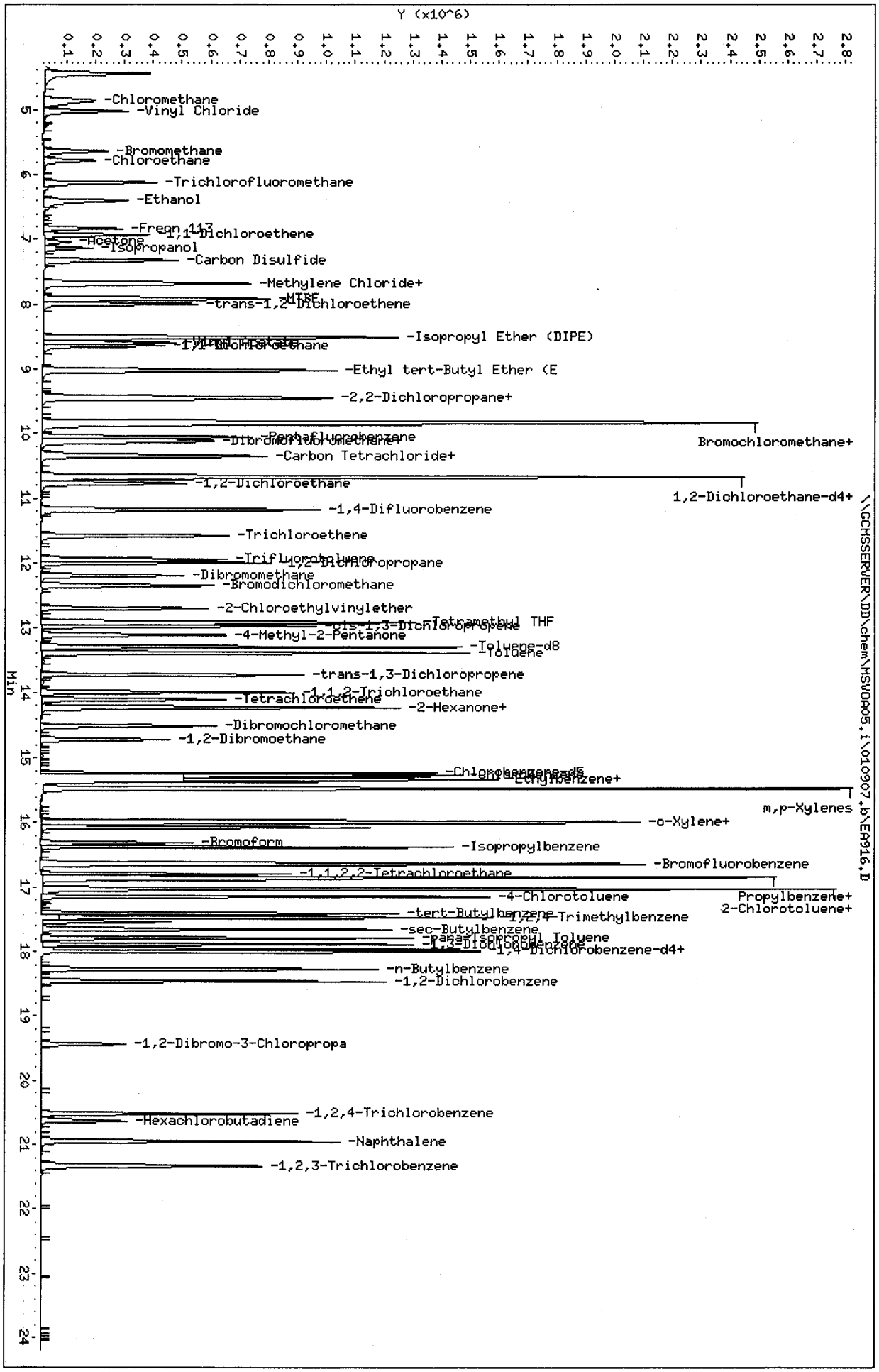
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Date : 09-JAN-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5152,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:56 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

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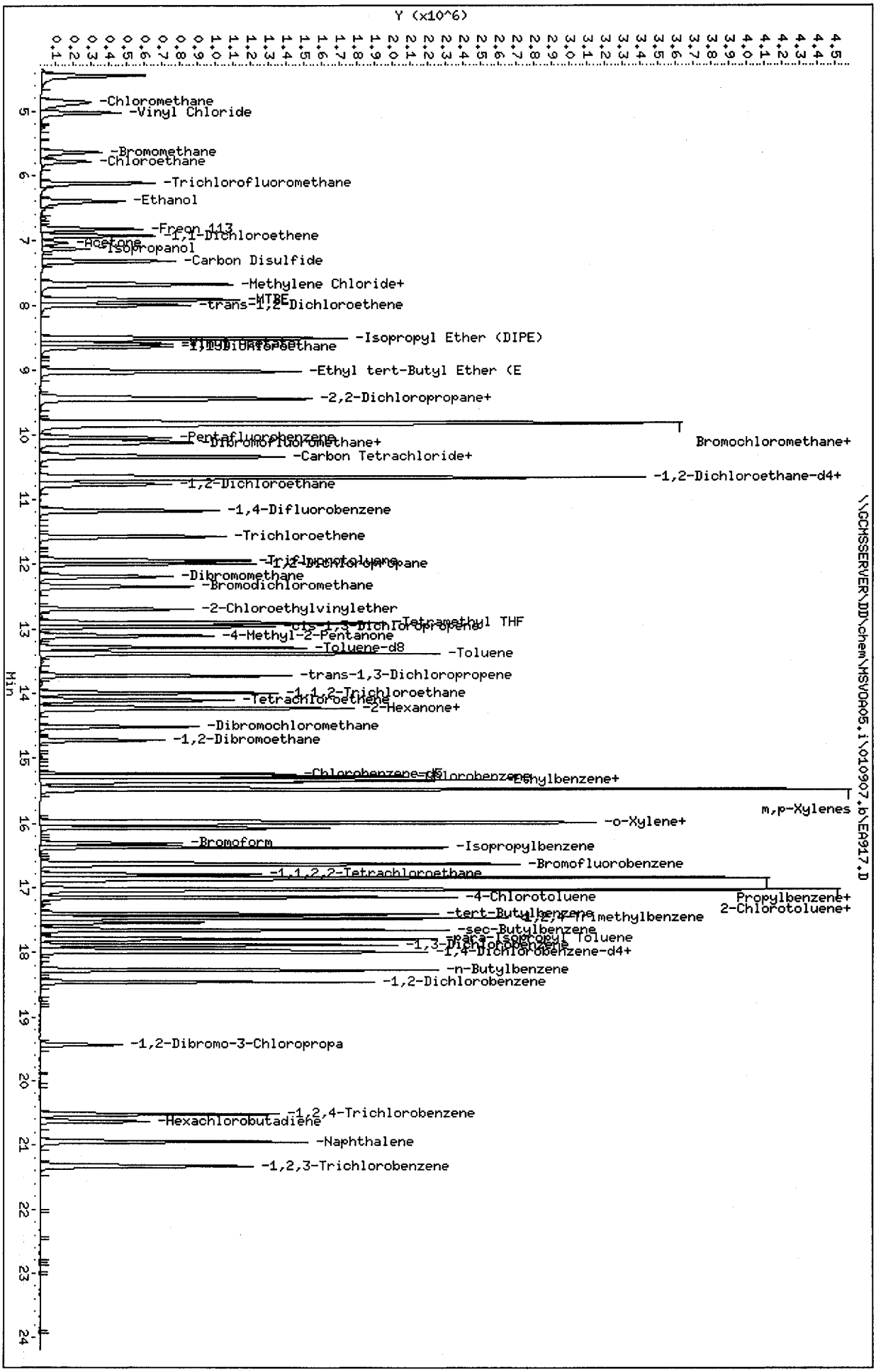
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Date : 09-JAN-2007 17:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5152,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
	18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
	19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
	21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
	22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
	24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
	25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
	26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
*	27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
	28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
	30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
	32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
	33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
	35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
*	36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
	37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
	38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
	40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
	41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
	42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
	43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
	44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
	45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
	46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
	47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
	48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
	49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
	50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
	51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
	52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
	53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
	54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
	56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
	57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
	58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
	59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
	60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
	61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
	62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
	63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

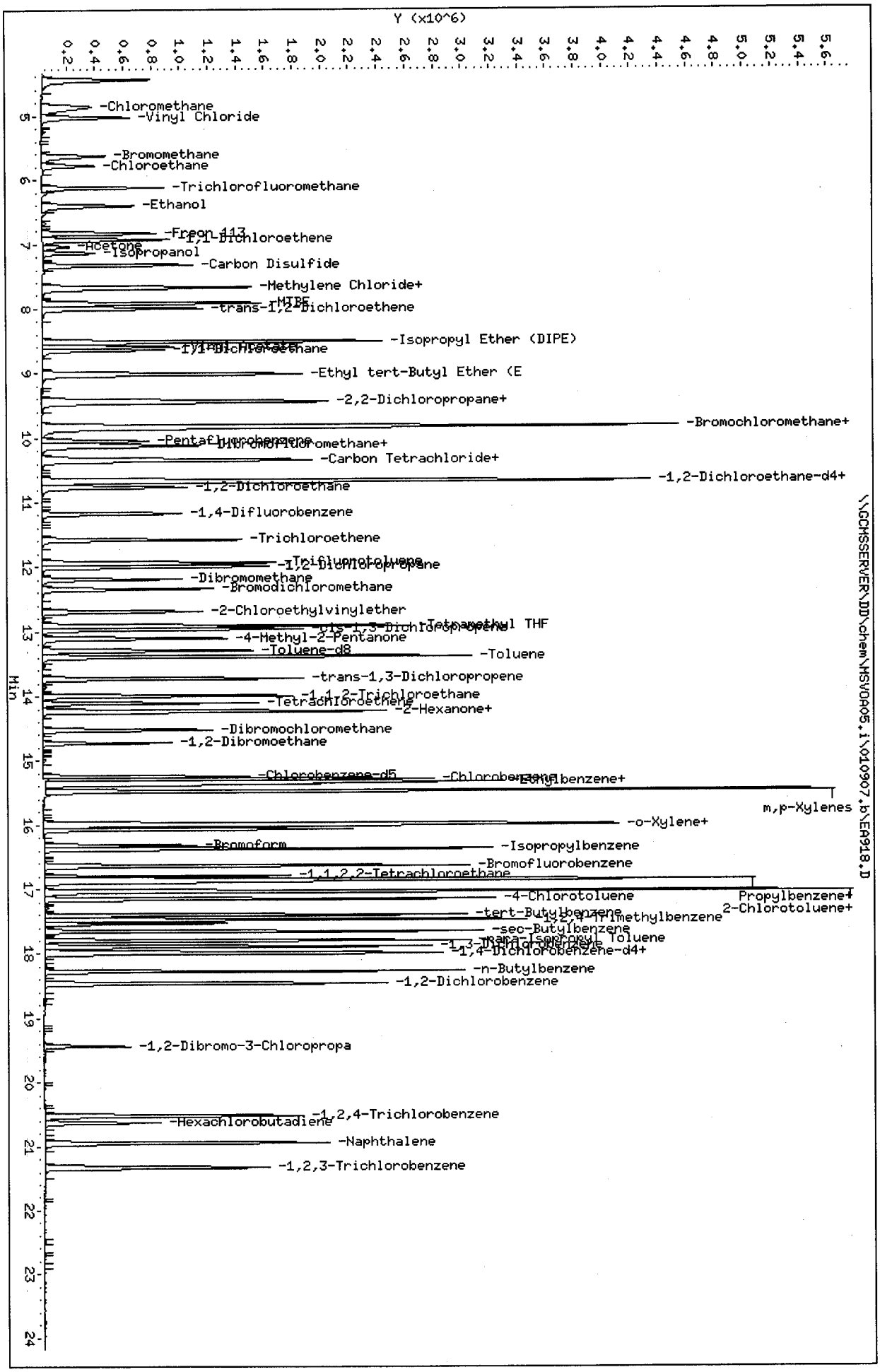
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193137 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC377872 IDF : 1.0
Seqnum : 447095480003.2 File : ec703 Time : 07-MAR-2007 08:02
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (8333X), S5614 (8333X), S5422 (8333X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7452	30.00	24.20	ug/L	-19	30	0.1000	u
Vinyl Chloride	0.6995	0.6157	30.00	26.41	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.3431	30.00	24.85	ug/L	-17	30	0.0500	u
Chloroethane	0.3917	0.3757	30.00	28.78	ug/L	-4	30	0.0500	u
Acetone	0.2753	0.2275	30.00	24.79	ug/L	-17	40	0.0500	u
1,1-Dichloroethene	0.3434	0.4131	30.00	36.08	ug/L	20	20	0.0500	u
Methylene Chloride	0.5327	0.5191	30.00	29.24	ug/L	-3	30	0.0500	u
Carbon Disulfide	1.5714	1.1458	30.00	21.87	ug/L	**-27**	30	0.0500	!c- u
MTBE	1.6725	1.4113	30.00	25.32	ug/L	-16	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4732	30.00	31.50	ug/L	5	30	0.0500	u
Vinyl Acetate	1.5725	1.5812	30.00	30.17	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0313	30.00	32.55	ug/L	9	30	0.1000	u
2-Butanone	0.5135	0.3893	30.00	22.74	ug/L	-24	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6056	30.00	27.71	ug/L	-8	30	0.0500	u
Chloroform	1.0380	0.9562	30.00	27.63	ug/L	-8	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.7184	30.00	31.90	ug/L	6	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3088	30.00	34.85	ug/L	16	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4914	30.00	29.51	ug/L	-2	30	0.0500	u
Benzene	1.3466	1.2872	30.00	28.68	ug/L	-4	30	0.0500	u
Trichloroethene	0.3340	0.3277	30.00	29.43	ug/L	-2	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3558	30.00	25.25	ug/L	-16	20	0.0500	u
Bromodichloromethane	0.4914	0.4780	30.00	29.18	ug/L	-3	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5074	30.00	23.66	ug/L	-21	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5574	30.00	26.21	ug/L	-13	30	0.0500	u
Toluene	0.8216	0.7856	30.00	28.69	ug/L	-4	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4798	30.00	24.26	ug/L	-19	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1771	30.00	26.31	ug/L	-12	30	0.0500	u
2-Hexanone	0.5472	0.4144	30.00	22.72	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3442	30.00	36.38	ug/L	**21**	30	0.0500	!c+ u
Dibromochloromethane	0.4287	0.3872	30.00	27.10	ug/L	-10	30	0.0500	u
Chlorobenzene	1.0173	0.9644	30.00	28.44	ug/L	-5	30	0.3000	u
Ethylbenzene	1.7142	1.6751	30.00	29.32	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.6280	0.6233	60.00	59.55	ug/L	-1	30	0.0500	u
o-Xylene	0.6326	0.6182	30.00	29.32	ug/L	-2	30	0.0500	u
Styrene	1.1734	1.1135	30.00	28.47	ug/L	-5	30	0.0500	u
Bromoform	0.3263	0.3029	30.00	27.85	ug/L	-7	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0600	30.00	24.03	ug/L	-20	30	0.3000	u
Dibromofluoromethane	0.5927	0.5666	50.00	47.80	ug/L	-4	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4222	50.00	52.70	ug/L	5	30	0.0500	u
Toluene-d8	1.1589	1.1387	50.00	49.13	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1959	50.00	46.48	ug/L	-7	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	786634	26.29	10.05	10.05	0.00
1,4-Difluorobenzene	1030815	1231475	19.47	11.18	11.17	-0.01
Chlorobenzene-d5	882637	1064066	20.56	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	521537	26.69	17.97	17.96	-0.01

Analyst: BO Date: 03/08/07 Reviewer: ACM Date: 03/09/07

!=warning +=high bias -=low bias c=CCV u=use

447095480003.2

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447095480

Date : 03/07/07
Sequence : MSVOA05 ec7

Reference: ea916
Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
003	CCV/LCS	QC377872	786634	10.05	1231475	11.17	1064066	15.24	521537	17.96
005	BLANK	QC377866	778009	10.04	1211595	11.17	1038221	15.24	488592	17.96
006	SAMPLE	193166-001	767496	10.04	1203760	11.17	1052475	15.24	492665	17.96
007	SAMPLE	193166-020	774397	10.04	726520	11.17	1048245	15.24	507861	17.96
008	SAMPLE	193108-021	773236	10.05	1211257	11.17	1047878	15.24	493908	17.96
009	SAMPLE	193108-012	756279	10.04	1195088	11.17	1037495	15.24	504739	17.96
010	MSS	193108-007	769176	10.05	1199256	11.17	1048830	15.24	487715	17.96
011	SAMPLE	193108-013	770484	10.04	1204213	11.17	1040957	15.24	499229	17.96
012	SAMPLE	193108-015	759611	10.04	1190762	11.17	1036051	15.24	500757	17.96
013	SAMPLE	193108-019	758788	10.04	1183861	11.17	1046826	15.24	501720	17.97
014	SAMPLE	193108-020	761022	10.04	1189398	11.17	1042326	15.24	494907	17.96
015	SAMPLE	193108-022	757539	10.04	1184717	11.17	1038417	15.24	495609	17.97
016	SAMPLE	193137-002	764305	10.05	1177433	11.17	1037131	15.24	493397	17.96
017	SAMPLE	193137-003	753312	10.05	1184996	11.17	1027569	15.24	488081	17.96
018	SAMPLE	193137-004	763841	10.05	1189205	11.17	1030890	15.24	498311	17.96
019	SAMPLE	193137-005	751604	10.04	1177386	11.17	1027733	15.24	492597	17.97
020	SAMPLE	193108-008	750910	10.04	1179478	11.17	1026001	15.24	504615	17.96
021	SAMPLE	193157-001	770331	10.04	1190644	11.17	1041977	15.24	499893	17.96
022	MS	QC377890	778919	10.04	1201614	11.17	1046349	15.24	516027	17.96
023	MSD	QC377891	774323	10.04	1188418	11.17	1051629	15.24	516759	17.96

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447095480

Instrument : MSVOA05 Begun : 03/07/07 07:20
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec701	X	IB			03/07/07 07:20	1.0	1	
002	ec702	TUN	BFB			03/07/07 07:47	1.0	2	
003	ec703	CCV/LCS	QC377872	Water	122784	03/07/07 08:02	1.0	3 4 5 1	
004	ec704	X	IB			03/07/07 08:52	1.0	1	
005	ec705	BLANK	QC377866	Water	122784	03/07/07 09:24	1.0	1	
006	ec706	SAMPLE	193166-001	Water	122784	03/07/07 09:57	1.0	1	
007	ec707	SAMPLE	193166-020	Water	122784	03/07/07 10:29	1.0	1	pH > 2
008	ec708	SAMPLE	193108-021	Water	122784	03/07/07 11:01	1.0	1	
009	ec709	SAMPLE	193108-012	Water	122784	03/07/07 11:32	1.0	1	
010	ec710	MSS	193108-007	Water	122784	03/07/07 12:04	1.0	1	
011	ec711	SAMPLE	193108-013	Water	122784	03/07/07 12:36	1.0	1	
012	ec712	SAMPLE	193108-015	Water	122784	03/07/07 13:08	1.0	1	
013	ec713	SAMPLE	193108-019	Water	122784	03/07/07 13:40	1.0	1	
014	ec714	SAMPLE	193108-020	Water	122784	03/07/07 14:12	1.0	1	
015	ec715	SAMPLE	193108-022	Water	122784	03/07/07 14:44	1.0	1	
016	ec716	SAMPLE	193137-002	Water	122784	03/07/07 15:16	1.0	1	
017	ec717	SAMPLE	193137-003	Water	122784	03/07/07 15:48	1.0	1	
018	ec718	SAMPLE	193137-004	Water	122784	03/07/07 16:20	1.0	1	
019	ec719	SAMPLE	193137-005	Water	122784	03/07/07 16:52	1.0	1	
020	ec720	SAMPLE	193108-008	Water	122784	03/07/07 17:23	2.500	1	
021	ec721	SAMPLE	193157-001	Water	122784	03/07/07 17:55	25.0	1	
022	ec722	MS	QC377890	Water	122784	03/07/07 18:27	1.0	1 3 4 5	
023	ec723	MSD	QC377891	Water	122784	03/07/07 18:59	1.0	1 3 4 5	
024	ec724	X	IB			03/07/07 19:31	1.0	1	
025	ec725	X	IB			03/07/07 20:03	1.0	1	
026	ec726	X	IB			03/07/07 20:35	1.0	1	
027	ec727	X	TVH2000			03/07/07 21:07	1.0	1	

Analyst: BO Date: 03/08/07 Reviewer: LW Date: 03/08/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

REPORTING SUMMARY FOR 193137 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCAD	MCMDV	DMDTT	CDBTD	BMDBD	THPDC	EXXTS	TPDDB	BLCCT	DTCAC	ECCCT	CZCCD	ICZCC	XCBLB	YYOTB	CBCZR	MMEEE	LSBEA	NEE1E	1A1M1	L1AMK	1E1122	MZMOX	EEMF1	E2A3E	2
193137-002	MSVOA05	03/07/07 15:16	1.0	+++++++

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/7/07
PREPPED BY: [illegible]

122784 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193108-12		D	<2			5	MS 1X, OD	
2	193166-1		A	↓				TB	Load Rest
3	↓ -20		↓	7				1X Comp. 7/13V Foam	
4	193157-1		H	<2				2.5X	
5	193108-7		IJKL	<2				1X, MST/MS/MSD	
6	-8		F	↓				2.5X	
7	-13		B	<2				1X	
8	-15		↓						
9	-19		D					↓	
10	-20		↓					TB	
11	-21		A					1X	
12	-22		E						
13	193137-2		B						
14	-3								
15	-4								
16	-5		↓	↓				↓	
17									
18									
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PREPFORM.XLS

7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	122775
Lab ID:	193137-001	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/08/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.02 J	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	88	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC377822	Batch#:	122775
Matrix:	Water	Prepared:	03/06/07
Units:	ug/L	Analyzed:	03/07/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	70	65-135
1-Methylnaphthalene (F)	68	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

10.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Matrix:	Water	Batch#:	122775
Units:	ug/L	Prepared:	03/06/07
Diln Fac:	1.000	Analyzed:	03/07/07

Type: BS Lab ID: QC377823

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.832	88	50-135
Fluorene	2.000	1.850	93	65-135
Pyrene	1.000	0.9476	95	65-135
Benzo(a)pyrene	1.000	1.007	101	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	84	65-135
1-Methylnaphthalene (F)	82	65-135

Type: BSD Lab ID: QC377824

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	10.00	8.592	86	50-135	3	35
Fluorene	2.000	1.754	88	65-135	5	35
Pyrene	1.000	0.8865	89	65-135	7	35
Benzo(a)pyrene	1.000	0.9384	94	65-135	7	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference

Confirmation Report for 193137 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193137-001	514AGW101	Fluoranthene	0.02089 J	0.06845	106	228

J=estimated

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193137 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

296366536003

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193137 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

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Calibration Table

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NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

HPLC04 METHOD 8310

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

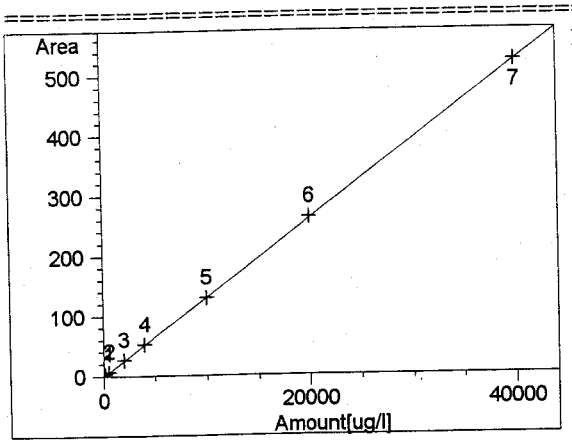
Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

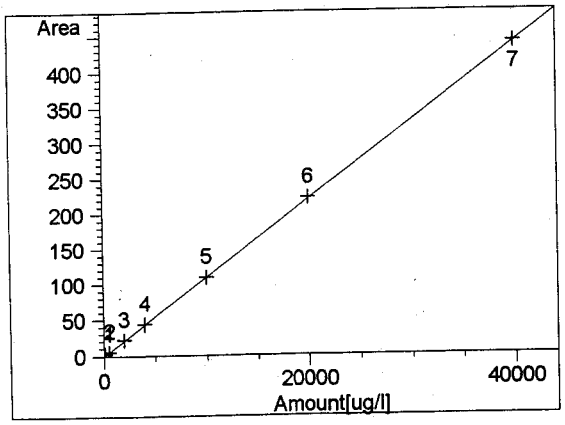
Peak Sum Table

No Entries in table

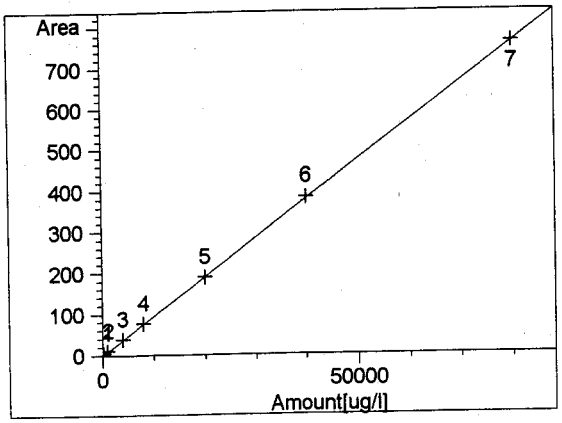
Calibration Curves



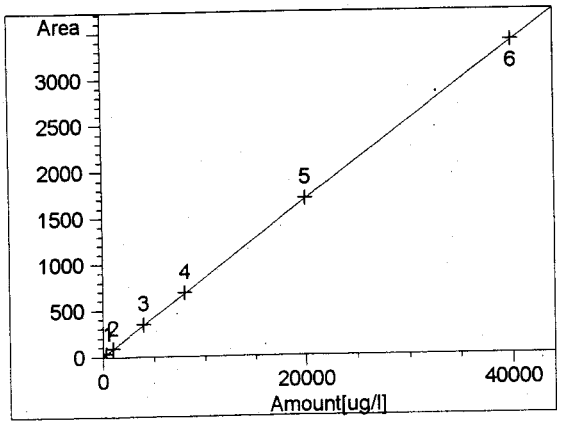
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



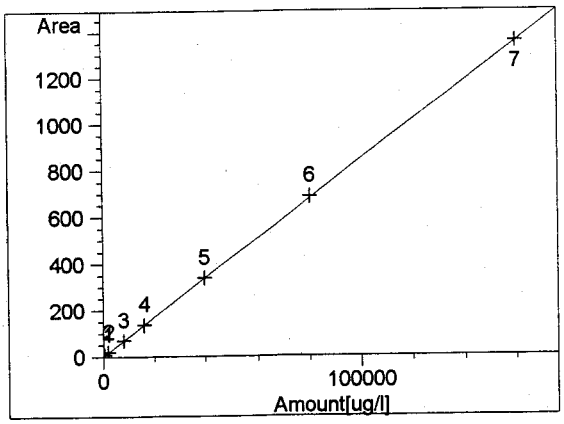
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



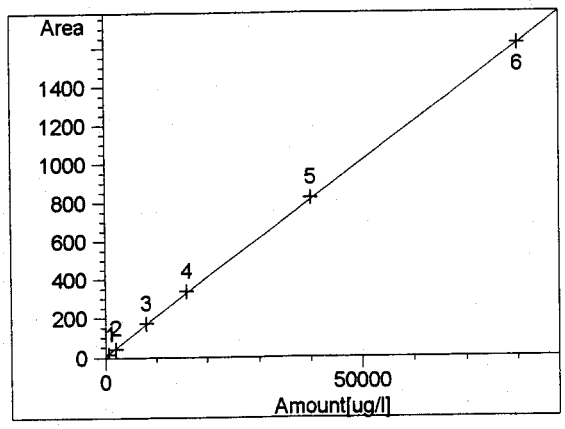
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



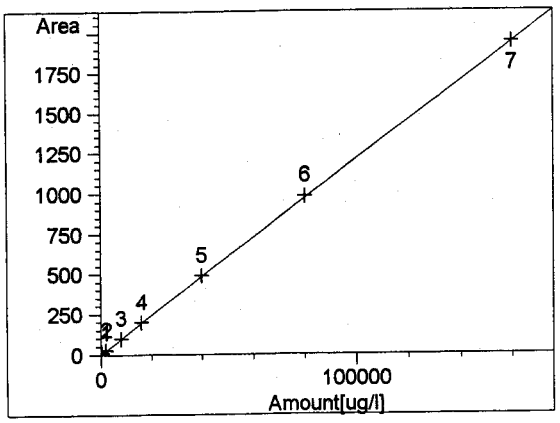
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



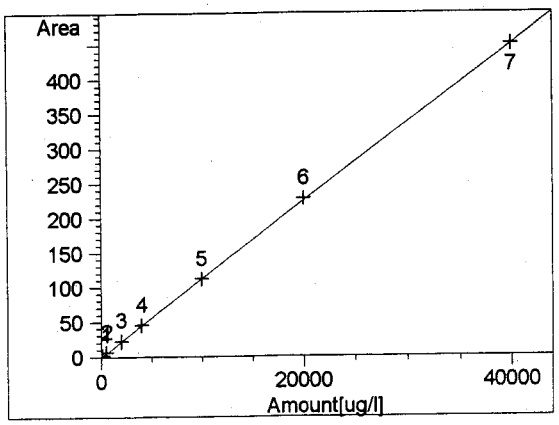
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



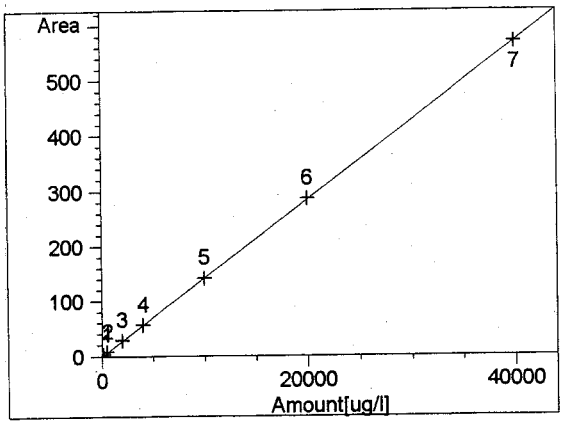
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



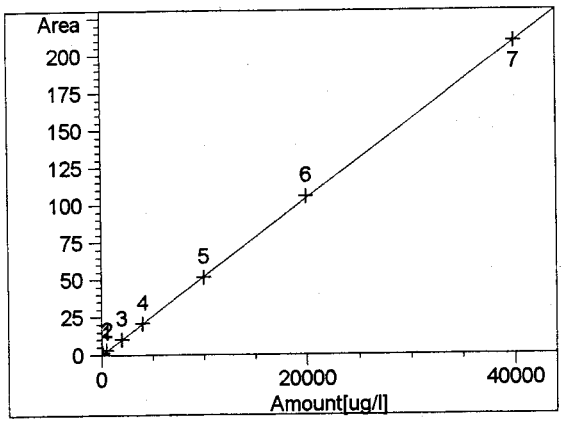
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



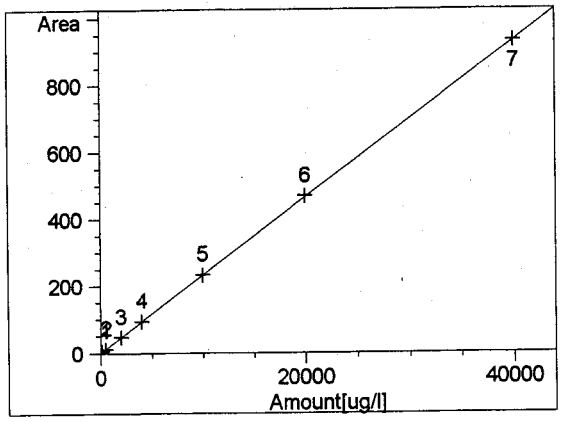
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



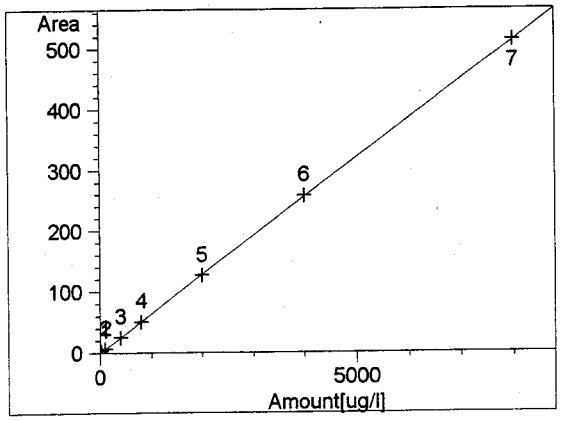
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



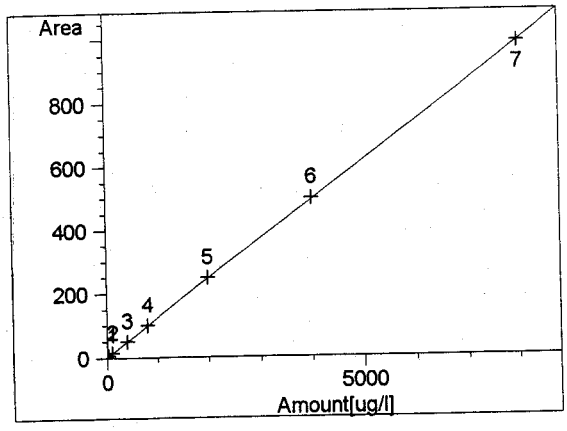
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



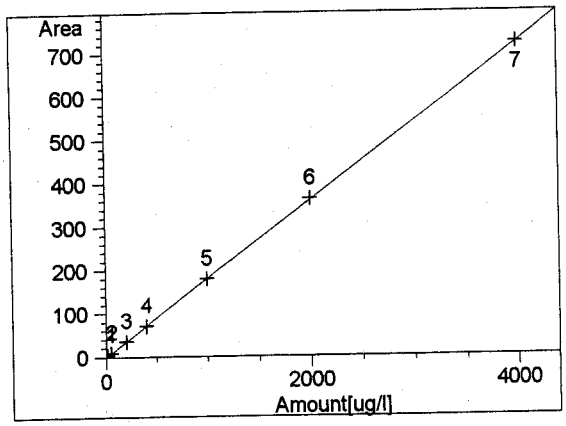
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



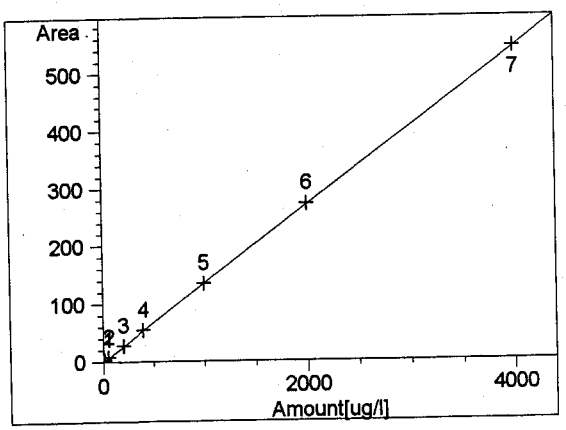
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



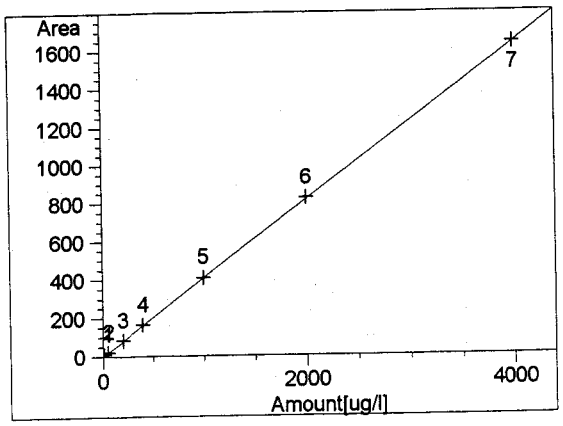
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



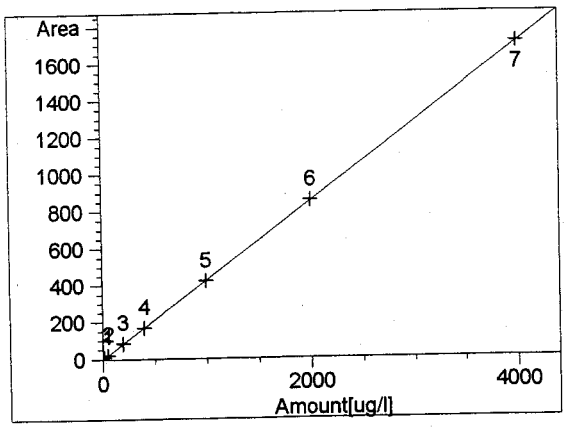
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



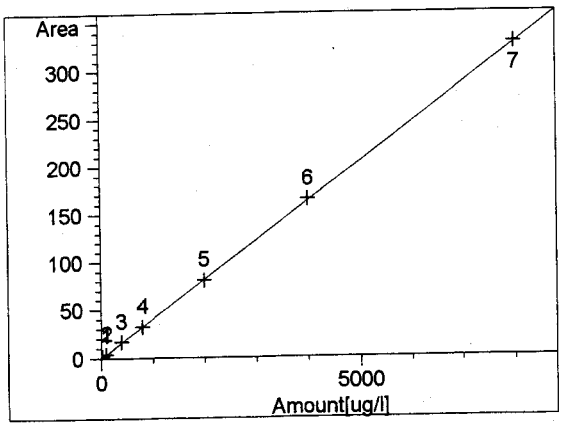
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



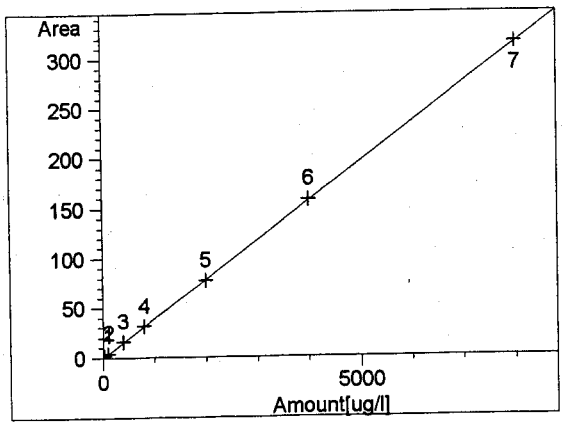
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



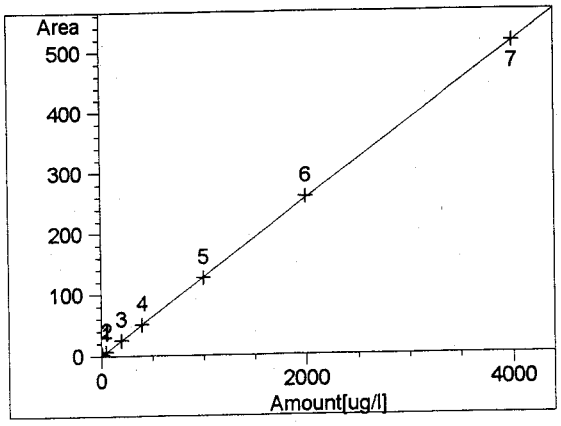
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



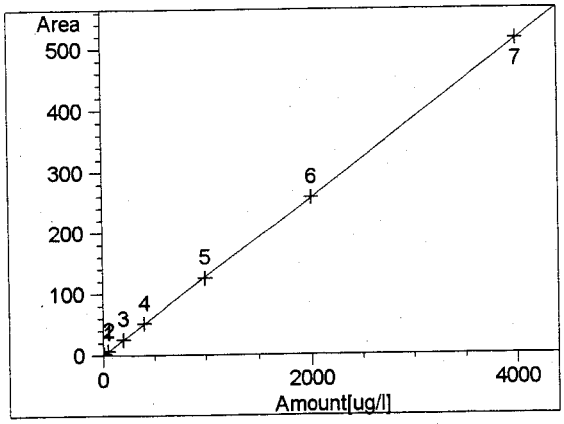
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



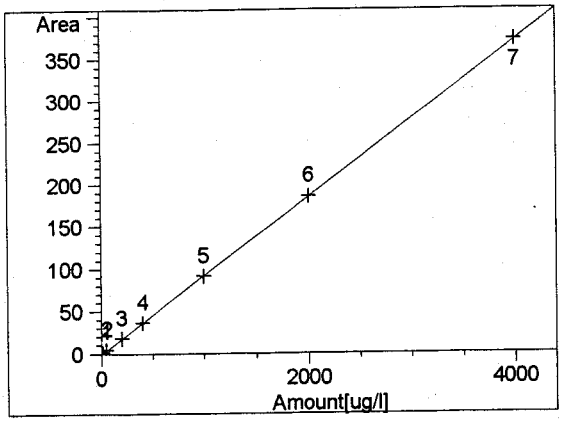
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



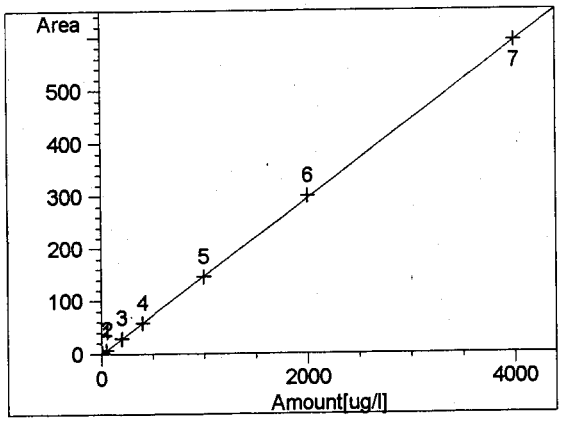
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



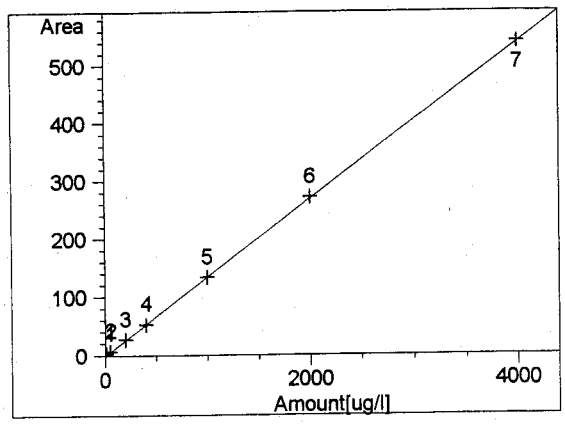
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



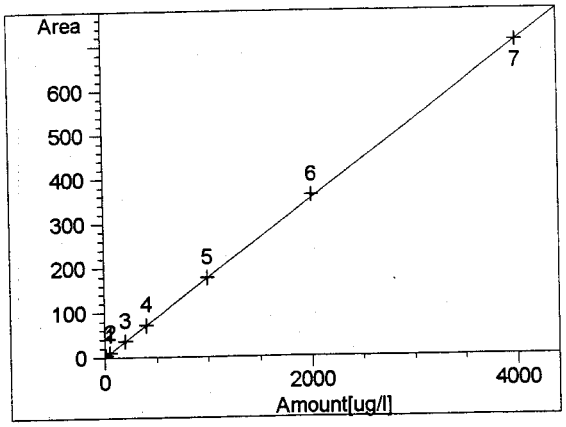
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



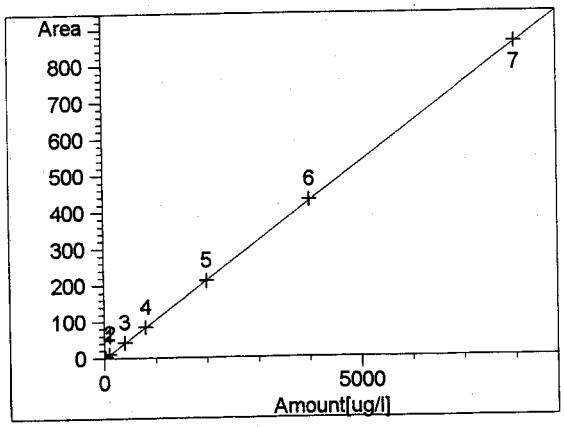
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



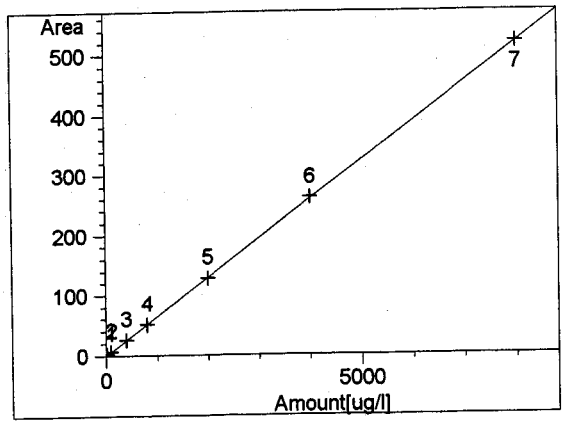
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



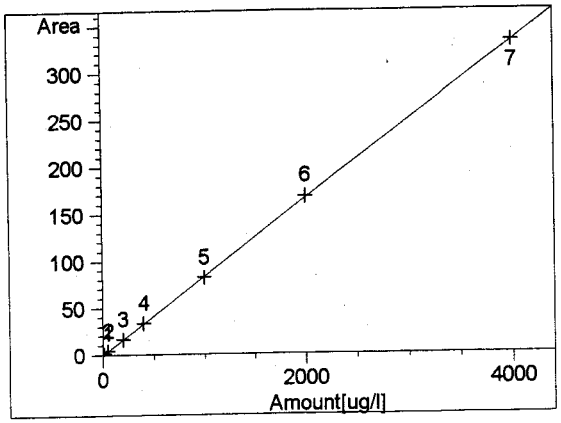
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



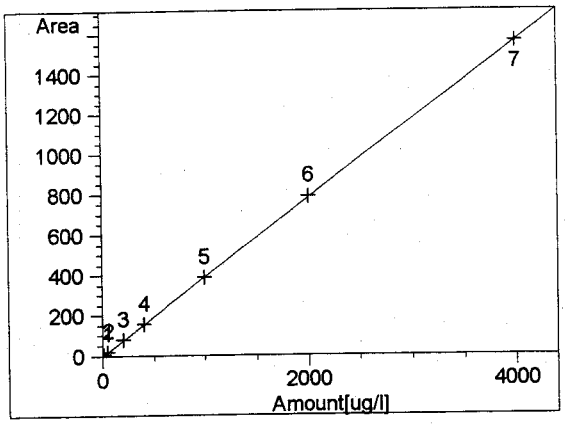
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



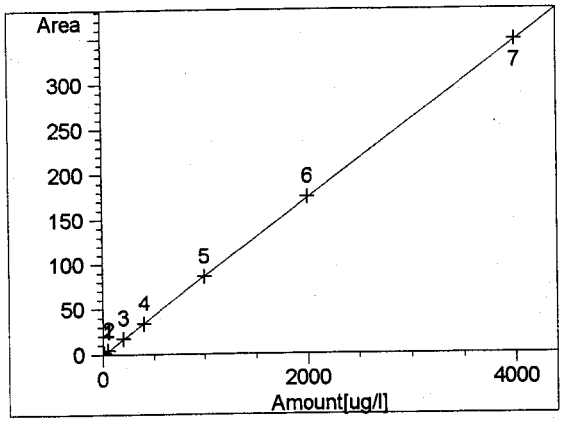
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



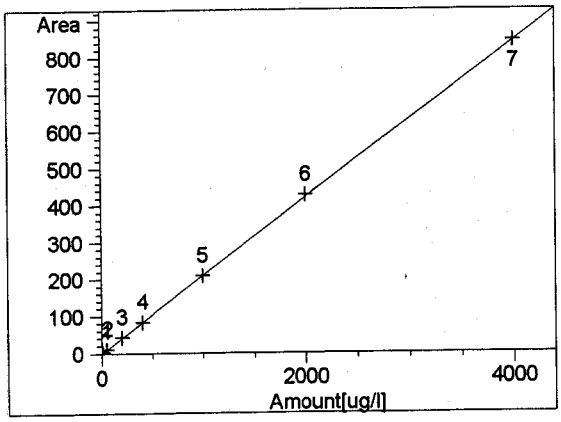
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



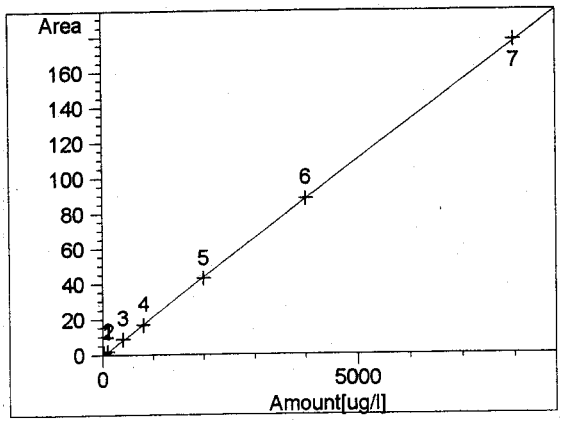
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



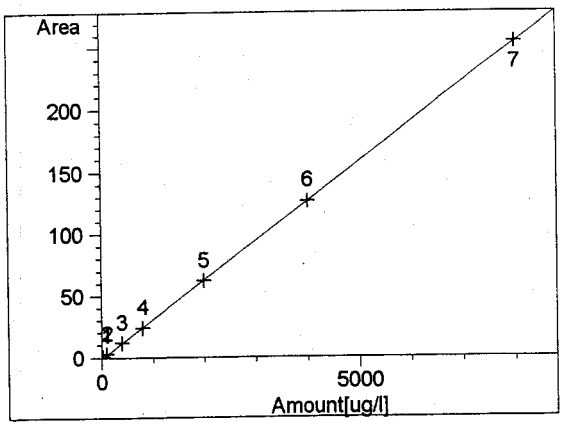
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



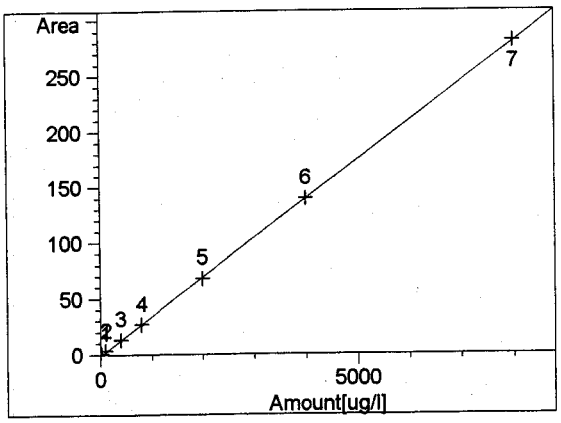
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



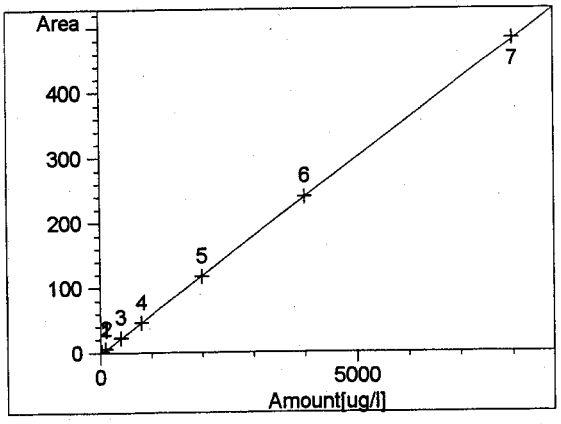
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



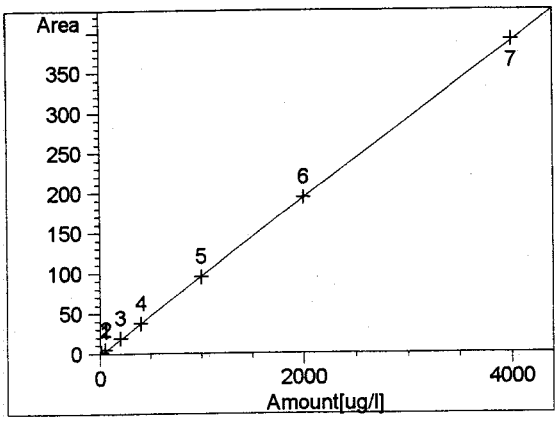
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

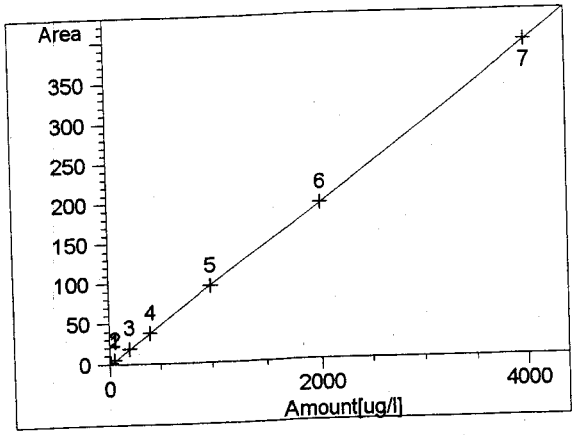


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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HPLC 4 9/12/2006 11:12:04 AM HPL

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297095975002 File : 06600002 Time : 07-MAR-2007 16:07
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	2000	2027	ug/L	1	15	
Acenaphthylene	1	0.0095	0.0098	4000	4154	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	2000	2044	ug/L	2	15	
Fluorene	1	0.0637	0.0641	400.0	408.7	ug/L	2	15	
Phenanthrene	1	0.1810	0.1790	200.0	200.6	ug/L	0	15	
Anthracene	1	0.4065	0.4410	200.0	217.1	ug/L	9	15	
Fluoranthene	1	0.0404	0.0432	400.0	428.5	ug/L	7	15	
Benzo(a)anthracene	1	0.0899	0.0961	200.0	214.6	ug/L	7	15	
Chrysene	1	0.1350	0.1370	200.0	205.3	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1047	400.0	404.1	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0829	200.0	204.4	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0928	200.0	223.2	ug/L	12	15	
Dibenz(a,h)anthracene	1	0.0213	0.0199	400.0	389.1	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0345	400.0	424.4	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0926	200.0	203.6	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	8000	8098	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0889	4000	4139	ug/L	3	15	
Pyrene	2	0.1252	0.1342	200.0	212.7	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8193	ug/L	2	15	
Naphthalene	3	0.0110	0.0109	2000	1991	ug/L	0	15	
Acenaphthene	3	0.0234	0.0239	2000	2032	ug/L	2	15	
Fluorene	3	0.1247	0.1225	400.0	387.3	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1353	200.0	201.2	ug/L	1	15	
Anthracene	3	0.4222	0.4568	200.0	218.6	ug/L	9	15	
Fluoranthene	3	0.0390	0.0397	400.0	409.6	ug/L	2	15	
Pyrene	3	0.1264	0.1304	200.0	208.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1522	200.0	209.7	ug/L	5	15	
Chrysene	3	0.1780	0.1760	200.0	195.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0632	400.0	396.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3785	200.0	194.9	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2281	200.0	218.4	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0286	400.0	388.5	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0567	0.0587	400.0	415.3	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0866	200.0	189.6	ug/L	-5	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	8000	7905	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297095975019 File : 06600019 Time : 08-MAR-2007 01:04
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10250	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	20000	20810	ug/L	4	15	
Acenaphthene	1	0.0053	0.0053	10000	10220	ug/L	2	15	
Fluorene	1	0.0637	0.0648	2000	2026	ug/L	1	15	
Phenanthrene	1	0.1810	0.1800	1000	997.9	ug/L	0	15	
Anthracene	1	0.4065	0.4421	1000	1080	ug/L	8	15	
Fluoranthene	1	0.0404	0.0427	2000	2092	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0969	1000	1048	ug/L	5	15	
Chrysene	1	0.1350	0.1368	1000	1015	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1077	2000	2019	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0844	1000	1017	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0971	1000	1125	ug/L	13	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	2000	1980	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0368	2000	2123	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0980	1000	1017	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40610	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0881	20000	20780	ug/L	4	15	
Pyrene	2	0.1252	0.1337	1000	1042	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41040	ug/L	3	15	
Naphthalene	3	0.0110	0.0107	10000	9696	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	10000	9940	ug/L	-1	15	
Fluorene	3	0.1247	0.1214	2000	1958	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1319	1000	972.7	ug/L	-3	15	
Anthracene	3	0.4222	0.4540	1000	1069	ug/L	7	15	
Fluoranthene	3	0.0390	0.0399	2000	2033	ug/L	2	15	
Pyrene	3	0.1264	0.1267	1000	990.4	ug/L	-1	15	
Benzo(a)anthracene	3	0.1453	0.1507	1000	1020	ug/L	2	15	
Chrysene	3	0.1780	0.1742	1000	980.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0641	2000	1975	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3833	1000	980.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2312	1000	1097	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0301	2000	1918	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0603	2000	2026	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0951	1000	982.4	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	40000	39050	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297097355008 File : 06700008 Time : 08-MAR-2007 18:17
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2051	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0098	4000	4128	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	2000	2047	ug/L	2	15	
Fluorene	1	0.0637	0.0641	400.0	409.2	ug/L	2	15	
Phenanthrene	1	0.1810	0.1792	200.0	200.7	ug/L	0	15	
Anthracene	1	0.4065	0.4428	200.0	218.0	ug/L	9	15	
Fluoranthene	1	0.0404	0.0431	400.0	427.1	ug/L	7	15	
Benzo(a)anthracene	1	0.0899	0.0965	200.0	215.4	ug/L	8	15	
Chrysene	1	0.1350	0.1367	200.0	204.8	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1023	0.1046	400.0	403.5	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0797	200.0	196.7	ug/L	-2	15	
Benzo(a)pyrene	1	0.0828	0.0901	200.0	217.2	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0200	400.0	390.0	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0309	0.0351	400.0	431.2	ug/L	8	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0891	200.0	196.4	ug/L	-2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	8000	8102	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0892	4000	4152	ug/L	4	15	
Pyrene	2	0.1252	0.1332	200.0	211.2	ug/L	6	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0217	8000	8197	ug/L	2	15	
Naphthalene	3	0.0110	0.0108	2000	1972	ug/L	-1	15	
Acenaphthene	3	0.0234	0.0235	2000	2002	ug/L	0	15	
Fluorene	3	0.1247	0.1216	400.0	384.4	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1334	200.0	198.4	ug/L	-1	15	
Anthracene	3	0.4222	0.4543	200.0	217.5	ug/L	9	15	
Fluoranthene	3	0.0390	0.0398	400.0	410.7	ug/L	3	15	
Pyrene	3	0.1264	0.1289	200.0	206.3	ug/L	3	15	
Benzo(a)anthracene	3	0.1453	0.1511	200.0	208.1	ug/L	4	15	
Chrysene	3	0.1780	0.1757	200.0	194.7	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0629	400.0	394.3	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3786	200.0	194.9	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2277	200.0	218.0	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0282	400.0	383.8	ug/L	-4	15	
Benzo(g,h,i)perylene	3	0.0567	0.0571	400.0	404.6	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0915	200.0	199.6	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	8000	7813	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193137 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297097355018 File : 06700018 Time : 08-MAR-2007 23:33
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	4000	4074	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0097	8000	8214	ug/L	3	15	
Acenaphthene	1	0.0053	0.0053	4000	4026	ug/L	1	15	
Fluorene	1	0.0637	0.0638	800.0	803.8	ug/L	0	15	
Phenanthrene	1	0.1810	0.1778	400.0	395.9	ug/L	-1	15	
Anthracene	1	0.4065	0.4368	400.0	428.0	ug/L	7	15	
Fluoranthene	1	0.0404	0.0422	800.0	830.5	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0951	400.0	416.7	ug/L	4	15	
Chrysene	1	0.1350	0.1351	400.0	402.3	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1050	800.0	795.5	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0816	400.0	396.7	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0926	400.0	435.3	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0203	800.0	763.1	ug/L	-5	15	
Benzo(g,h,i)perylene	1	0.0309	0.0355	800.0	840.0	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0915	400.0	388.8	ug/L	-3	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	16000	16090	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0880	8000	8255	ug/L	3	15	
Pyrene	2	0.1252	0.1315	400.0	412.9	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0211	16000	16380	ug/L	2	15	
Naphthalene	3	0.0110	0.0107	4000	3887	ug/L	-3	15	
Acenaphthene	3	0.0234	0.0232	4000	3955	ug/L	-1	15	
Fluorene	3	0.1247	0.1205	800.0	771.3	ug/L	-4	15	
Phenanthrene	3	0.1356	0.1311	400.0	388.0	ug/L	-3	15	
Anthracene	3	0.4222	0.4488	400.0	425.3	ug/L	6	15	
Fluoranthene	3	0.0390	0.0395	800.0	809.2	ug/L	1	15	
Pyrene	3	0.1264	0.1268	400.0	400.1	ug/L	0	15	
Benzo(a)anthracene	3	0.1453	0.1494	400.0	407.5	ug/L	2	15	
Chrysene	3	0.1780	0.1735	400.0	388.2	ug/L	-3	15	
Benzo(b)fluoranthene	3	0.0638	0.0630	800.0	782.1	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	400.0	387.2	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2257	400.0	429.8	ug/L	7	15	
Dibenz(a,h)anthracene	3	0.0303	0.0285	800.0	743.6	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0575	800.0	788.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0931	400.0	392.6	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0119	16000	15510	ug/L	-3	15	

297097355018

SEQUENCE SUMMARY FOR 193137 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193137 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297095975 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 07-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06600001	X	IB - 066			07-MAR-2007 15:35	1.0						
002	06600002	CCV	L			07-MAR-2007 16:07	1.0	1.0			10	1	
003	06600003	X	CCV			07-MAR-2007 16:38	1.0					1	
004	06600004	X	IB			07-MAR-2007 17:10	1.0						
005	06600005	BLANK	QC377822	122775	Water	07-MAR-2007 17:42	1.0	0.002			10		
006	06600006	BS	QC377823	122775	Water	07-MAR-2007 18:13	1.0	0.002			10		
007	06600007	BSD	QC377824	122775	Water	07-MAR-2007 18:45	1.0	0.002			10		
008	06600008	X	IB			07-MAR-2007 19:16	1.0						
009	06600009	SAMPLE	193169-001	122775	Water	07-MAR-2007 19:48	1.0	0.001887			10		
010	06600010	SAMPLE	193108-025	122775	Water	07-MAR-2007 20:20	1.0	0.001942			10		
011	06600011	SAMPLE	193108-026	122775	Water	07-MAR-2007 20:51	1.0	0.002105			10		
012	06600012	SAMPLE	193108-027	122775	Water	07-MAR-2007 21:23	1.0	0.001905			10		
013	06600013	SAMPLE	193137-001	122775	Water	07-MAR-2007 21:55	1.0	0.001905		2	10		
014	06600014	SAMPLE	193118-011	122719	Water	07-MAR-2007 22:26	4.0	0.001887	2		10		2:PYR=21706.7
015	06600015	X	IB			07-MAR-2007 22:58	1.0						
016	06600016	SAMPLE	193118-012	122719	Water	07-MAR-2007 23:29	20.0	0.001887			10		
017	06600017	X	IB			08-MAR-2007 00:01	1.0						
018	06600018	X	IB			08-MAR-2007 00:33	1.0						
019	06600019	CCV	H			08-MAR-2007 01:04	1.0	1.0			10	2	
020	06600020	X	CCV			08-MAR-2007 01:36	1.0					2	
021	06600021	X	IB			08-MAR-2007 02:07	1.0						
022	06600022	X,SAMPL	193064-002	122719	Water	08-MAR-2007 02:39	1.0						

Stds used: 1=S5286 2=S5284

SEQUENCE SUMMARY FOR 193137 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297097355 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 08-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	06700001	X	IB - 067			08-MAR-2007 14:35	1.0						
002	06700002	X,CCV	L			08-MAR-2007 15:07	1.0	1.0	10		10	1	
003	06700003	X	CCV			08-MAR-2007 15:39	1.0					1	
004	06700004	X	IB			08-MAR-2007 16:10	1.0						
005	06700005	X	IB			08-MAR-2007 16:42	1.0						
006	06700006	X	IB			08-MAR-2007 17:13	1.0						
007	06700007	X	IB - 067			08-MAR-2007 17:45	1.0						
008	06700008	CCV	L			08-MAR-2007 18:17	1.0	1.0			10	1	
009	06700009	X	CCV			08-MAR-2007 18:48	1.0					1	
010	06700010	X	IB			08-MAR-2007 19:20	1.0						
011	06700011	SAMPLE	193137-001	122775	Water	08-MAR-2007 19:51	1.0	0.001905			10		
012	06700012	SAMPLE	193064-002	122719	Water	08-MAR-2007 20:23	1.0						
013	06700013	SAMPLE	193064-004	122719	Water	08-MAR-2007 20:55	1.0						
014	06700014	SAMPLE	193065-002	122719	Water	08-MAR-2007 21:26	1.0						
015	06700015	SAMPLE	193065-004	122719	Water	08-MAR-2007 21:58	1.0						
016	06700016	SAMPLE	193065-006	122719	Water	08-MAR-2007 22:30	1.0						
017	06700017	X	IB			08-MAR-2007 23:01	1.0						
018	06700018	CCV	M			08-MAR-2007 23:33	1.0	1.0			10	2	
019	06700019	X	CCV			09-MAR-2007 00:04	1.0					2	
020	06700020	X	IB			09-MAR-2007 00:36	1.0						
021	06700021	SAMPLE	193108-010	122719	Water	09-MAR-2007 01:08	1.0						
022	06700022	SAMPLE	193108-012	122719	Water	09-MAR-2007 01:39	1.0						
023	06700023	SAMPLE	193108-013	122719	Water	09-MAR-2007 02:11	1.0						
024	06700024	SAMPLE	193108-022	122719	Water	09-MAR-2007 02:42	1.0						
025	06700025	SAMPLE	193108-024	122719	Water	09-MAR-2007 03:14	1.0						
026	06700026	SAMPLE	193108-008	122719	Water	09-MAR-2007 03:46	1.0	0.001942	6	2	10		6:FLA=17120.7
027	06700027	SAMPLE	193108-011	122719	Water	09-MAR-2007 04:17	1.0	0.002	4	1	10		4:PHAN=8540.50
028	06700028	X	IB			09-MAR-2007 04:49	1.0						
029	06700029	CCV	H			09-MAR-2007 05:20	1.0	1.0			10	3	
030	06700030	X	CCV			09-MAR-2007 05:52	1.0					3	
031	06700031	X	IB			09-MAR-2007 06:24	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 193137 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193137-001	Naphthalene	HPLC04	1	03/08/07 19:51
193137-001	Acenaphthylene	HPLC04	1	03/08/07 19:51
193137-001	Acenaphthene	HPLC04	1	03/08/07 19:51
193137-001	Fluorene	HPLC04	1	03/08/07 19:51
193137-001	Phenanthrene	HPLC04	3	03/08/07 19:51
193137-001	Anthracene	HPLC04	3	03/08/07 19:51
193137-001	Fluoranthene	HPLC04	3	03/08/07 19:51
193137-001	Pyrene	HPLC04	3	03/08/07 19:51
193137-001	Benzo(a)anthracene	HPLC04	3	03/08/07 19:51
193137-001	Chrysene	HPLC04	3	03/08/07 19:51
193137-001	Benzo(b)fluoranthene	HPLC04	3	03/08/07 19:51
193137-001	Benzo(k)fluoranthene	HPLC04	3	03/08/07 19:51
193137-001	Benzo(a)pyrene	HPLC04	3	03/08/07 19:51
193137-001	Dibenz(a,h)anthracene	HPLC04	3	03/08/07 19:51
193137-001	Benzo(g,h,i)perylene	HPLC04	3	03/08/07 19:51
193137-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/08/07 19:51
193137-001	1-Methylnaphthalene (UV)	HPLC04	1	03/08/07 19:51
193137-001	1-Methylnaphthalene (F)	HPLC04	3	03/08/07 19:51
QC377822	Naphthalene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthylene	HPLC04	1	03/07/07 17:42
QC377822	Acenaphthene	HPLC04	1	03/07/07 17:42
QC377822	Fluorene	HPLC04	1	03/07/07 17:42
QC377822	Phenanthrene	HPLC04	3	03/07/07 17:42
QC377822	Anthracene	HPLC04	3	03/07/07 17:42
QC377822	Fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Pyrene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Chrysene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(b)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(k)fluoranthene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(a)pyrene	HPLC04	3	03/07/07 17:42
QC377822	Dibenz(a,h)anthracene	HPLC04	3	03/07/07 17:42
QC377822	Benzo(g,h,i)perylene	HPLC04	3	03/07/07 17:42
QC377822	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/07/07 17:42
QC377822	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 17:42
QC377822	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 17:42
QC377823	Naphthalene	HPLC04	1	03/07/07 18:13
QC377823	Fluorene	HPLC04	1	03/07/07 18:13
QC377823	Pyrene	HPLC04	3	03/07/07 18:13
QC377823	Benzo(a)pyrene	HPLC04	3	03/07/07 18:13
QC377823	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:13
QC377823	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:13
QC377824	Naphthalene	HPLC04	1	03/07/07 18:45
QC377824	Fluorene	HPLC04	1	03/07/07 18:45
QC377824	Pyrene	HPLC04	3	03/07/07 18:45
QC377824	Benzo(a)pyrene	HPLC04	3	03/07/07 18:45
QC377824	1-Methylnaphthalene (UV)	HPLC04	1	03/07/07 18:45
QC377824	1-Methylnaphthalene (F)	HPLC04	3	03/07/07 18:45

Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 15:45

Batch Number : 122775
Date Extracted: 06-MAR-2007
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5244E
Spike #2 ID : S5518A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-025		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193108-026		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193108-027		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193137-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193169-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
QC377822	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC377823	BS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC377824	BSD		Water	1000	mL	2	0.002000	1		.1	1		8310		

Prep Chemist: _____ Reviewed By: _____ Date: 3/8/07

Relinquished By: _____ Received By: _____ Date: 08MAR2007

00188

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

Page 20

LIMS Batch No: 122775
LIMS Analysis: 8310
Extracted by: RFW
Date Extracted: 03/06/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193108-025 K	1030	7	2.0		
-026 J	950				*
-027 L	1050				*
193137-001 D	1050				
193169-001 G	1060	"			
MB QC377822	1000	NA			
BS 23					
BSD 24					
					SXM 317107

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: ~~1550~~ 1545
Extraction End Time: 10:57
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ brown Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
55244E/55673A*	RFW 3/6/07
55518A	
EM46354	
10:57	
N/A	SXM 3/7/07
EM46111628	
EM46173	
N/A	
Whatman 0108	

SXM for RFW 3/6/07

SXM 3/8/07 317107

Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

3/8/07

Reviewed by **Date**

00189

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/23/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW04	Batch#:	122924
Lab ID:	193137-005	Sampled:	03/02/07
Matrix:	Filtrate	Received:	03/05/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	36	10
Beryllium	ND	2.0
Cadmium	4.9	1.0
Calcium	20,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	34,000	500
Manganese	59	10
Nickel	ND	20
Potassium	780	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	40,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	57	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378443	Batch#:	122924
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	03/02/07
Field ID:	NKGW04	Received:	03/05/07
Units:	ug/L	Prepared:	03/07/07
Diln Fac:	1.000	Analyzed:	03/08/07
Batch#:	122820		

Type	Lab ID	Matrix	Result	RL
SAMPLE	193137-005	Filtrate	ND	0.20
BLANK	QC377999	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

31.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122924
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	1.000	Analyzed:	03/10/07

Type: BS Lab ID: QC378444

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,851	99	80-120
Antimony	100.0	95.50	96	80-120
Arsenic	100.0	92.45	92	80-120
Barium	100.0	99.37	99	80-120
Beryllium	100.0	97.84	98	80-120
Cadmium	100.0	99.12	99	80-120
Calcium	10,000	10,150	102	80-120
Chromium	100.0	104.8	105	80-120
Cobalt	100.0	106.2	106	80-120
Copper	100.0	98.61	99	80-120
Iron	10,000	10,190	102	80-120
Lead	100.0	101.7	102	80-120
Magnesium	10,000	9,748	97	80-120
Manganese	100.0	102.7	103	80-120
Nickel	100.0	105.1	105	80-120
Potassium	10,000	10,160	102	80-120
Selenium	100.0	91.02	91	80-120
Silver	100.0	107.5	108	80-120
Sodium	10,000	9,874	99	80-120
Thallium	50.00	49.91	100	80-120
Vanadium	100.0	102.5	103	80-120
Zinc	100.0	94.10	94	80-120

Type: BSD Lab ID: QC378445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,583	96	80-120	3	20
Antimony	100.0	92.60	93	80-120	3	20
Arsenic	100.0	92.01	92	80-120	0	20
Barium	100.0	98.16	98	80-120	1	20
Beryllium	100.0	96.92	97	80-120	1	20
Cadmium	100.0	96.15	96	80-120	3	20
Calcium	10,000	9,862	99	80-120	3	20
Chromium	100.0	100.9	101	80-120	4	20
Cobalt	100.0	102.6	103	80-120	3	20
Copper	100.0	97.43	97	80-120	1	20
Iron	10,000	9,842	98	80-120	3	20
Lead	100.0	98.73	99	80-120	3	20
Magnesium	10,000	9,549	95	80-120	2	20
Manganese	100.0	98.38	98	80-120	4	20
Nickel	100.0	102.1	102	80-120	3	20
Potassium	10,000	9,908	99	80-120	3	20
Selenium	100.0	93.47	93	80-120	3	20
Silver	100.0	104.2	104	80-120	3	20
Sodium	10,000	9,549	95	80-120	3	20
Thallium	50.00	48.32	97	80-120	3	20
Vanadium	100.0	99.25	99	80-120	3	20
Zinc	100.0	96.27	96	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122820
Field ID:	ZZZZZZZZZZ	Sampled:	03/01/07
MSS Lab ID:	193066-001	Received:	03/01/07
Matrix:	Water	Prepared:	03/07/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378000		5.000	5.110	102	80-120		
BSD	QC378001		5.000	4.990	100	80-120	2	20
MS	QC378003	<0.05753	5.000	5.470	109	75-125		
MSD	QC378004		5.000	5.540	111	75-125	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Batch#:	122924
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378446

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	10,060	101	75-125
Antimony	0.2700	100.0	94.81	95	75-125
Arsenic	<0.3366	100.0	97.88	98	75-125
Barium	34.01	100.0	133.8	100	75-125
Beryllium	<0.1733	100.0	93.81	94	75-125
Cadmium	<0.05768	100.0	99.25	99	75-125
Calcium	11,030	10,000	20,980	100	75-125
Chromium	3.892	100.0	102.3	98	75-125
Cobalt	<0.07247	100.0	100.7	101	75-125
Copper	<0.2776	100.0	100.5	101	75-125
Iron	<19.37	10,000	9,851	99	75-125
Lead	<0.1276	100.0	99.22	99	75-125
Magnesium	19,770	10,000	29,050	93	75-125
Manganese	<0.1082	100.0	98.98	99	75-125
Nickel	5.010	100.0	106.1	101	75-125
Potassium	126.3	10,000	10,150	100	75-125
Selenium	1.548	100.0	98.93	97	75-125
Silver	<0.07903	100.0	102.9	103	75-125
Sodium	35,990	10,000	43,710	77	75-125
Thallium	<0.2993	50.00	46.14	92	75-125
Vanadium	2.296	100.0	99.10	97	75-125
Zinc	9.868	100.0	121.5	112	75-125

Type: MSD Lab ID: QC378447

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,080	101	75-125	0	20
Antimony	100.0	95.28	95	75-125	0	20
Arsenic	100.0	95.95	96	75-125	2	20
Barium	100.0	134.8	101	75-125	1	20
Beryllium	100.0	93.01	93	75-125	1	20
Cadmium	100.0	98.82	99	75-125	0	20
Calcium	10,000	21,440	104	75-125	2	20
Chromium	100.0	101.4	98	75-125	1	20
Cobalt	100.0	98.58	99	75-125	2	20
Copper	100.0	98.48	98	75-125	2	20
Iron	10,000	9,845	98	75-125	0	20
Lead	100.0	99.26	99	75-125	0	20
Magnesium	10,000	29,430	97	75-125	1	20
Manganese	100.0	97.68	98	75-125	1	20
Nickel	100.0	104.7	100	75-125	1	20
Potassium	10,000	10,220	101	75-125	1	20
Selenium	100.0	98.73	97	75-125	0	20
Silver	100.0	101.2	101	75-125	2	20
Sodium	10,000	44,970	90	75-125	3	20
Thallium	50.00	45.35	91	75-125	2	20
Vanadium	100.0	98.47	96	75-125	1	20
Zinc	100.0	109.7	100	75-125	10	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378508

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	38.94	10,000	10,170	101	75-125
Antimony	2.153	100.0	94.85	93	75-125
Arsenic	3.031	100.0	98.79	96	75-125
Barium	40.48	100.0	140.4	100	75-125
Beryllium	0.3423	100.0	93.82	93	75-125
Cadmium	0.4589	100.0	99.66	99	75-125
Calcium	16,710	10,000	25,600	89	75-125
Chromium	6.235	100.0	103.3	97	75-125
Cobalt	2.470	100.0	101.3	99	75-125
Copper	2.527	100.0	99.63	97	75-125
Iron	<19.37	10,000	10,360	104	75-125
Lead	0.5239	100.0	98.51	98	75-125
Magnesium	45,530	10,000	53,690	82 NM	75-125
Manganese	3.705	100.0	99.84	96	75-125
Nickel	7.760	100.0	105.2	97	75-125
Potassium	218.7	10,000	10,280	101	75-125
Selenium	<0.2730	100.0	101.2	101	75-125
Silver	0.2372	100.0	101.9	102	75-125
Sodium	122,700	10,000	129,700	70 NM	75-125
Thallium	<0.2993	50.00	46.29	93	75-125
Vanadium	10.52	100.0	108.4	98	75-125
Zinc	15.16	100.0	106.9	92	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MSD Lab ID: QC378509

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,010	100	75-125	2	20
Antimony	100.0	94.80	93	75-125	0	20
Arsenic	100.0	103.4	100	75-125	5	20
Barium	100.0	141.3	101	75-125	1	20
Beryllium	100.0	96.66	96	75-125	3	20
Cadmium	100.0	98.78	98	75-125	1	20
Calcium	10,000	25,820	91	75-125	1	20
Chromium	100.0	106.3	100	75-125	3	20
Cobalt	100.0	103.7	101	75-125	2	20
Copper	100.0	103.3	101	75-125	4	20
Iron	10,000	9,963	100	75-125	4	20
Lead	100.0	97.45	97	75-125	1	20
Magnesium	10,000	53,890	84 NM	75-125	0	20
Manganese	100.0	103.2	99	75-125	3	20
Nickel	100.0	108.7	101	75-125	3	20
Potassium	10,000	10,150	99	75-125	1	20
Selenium	100.0	100.3	100	75-125	1	20
Silver	100.0	101.9	102	75-125	0	20
Sodium	10,000	136,900	142 NM	75-125	5	20
Thallium	50.00	46.27	93	75-125	0	20
Vanadium	100.0	112.0	101	75-125	3	20
Zinc	100.0	111.3	96	75-125	4	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193217-011	Batch#:	122924
Lab ID:	QC378448	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	ND	500.0	NC	10	03/10/07
Antimony	ND	1.000	ND	5.000	NC	10	03/10/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/10/07
Barium	34.01	10.00	35.46	10.00	4	10	03/10/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/10/07
Cadmium	ND	1.000	ND	5.000	NC	10	03/10/07
Calcium	11,030	500.0	9,906	500.0	10	10	03/11/07
Chromium	ND	10.00	4.388 J	10.00	NC	10	03/10/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/10/07
Copper	ND	1.000	10.93	5.000	NC	10	03/10/07
Iron	ND	100.0	ND	500.0	NC	10	03/10/07
Lead	ND	3.000	ND	5.000	NC	10	03/10/07
Magnesium	19,770	500.0	20,110	500.0	2	10	03/10/07
Manganese	ND	10.00	ND	10.00	NC	10	03/10/07
Nickel	ND	20.00	4.802 J	20.00	NC	10	03/10/07
Potassium	ND	500.0	ND	500.0	NC	10	03/10/07
Selenium	ND	5.000	ND	5.000	NC	10	03/10/07
Silver	ND	1.000	ND	5.000	NC	10	03/10/07
Sodium	35,990	500.0	37,770	500.0	5	10	03/10/07
Thallium	ND	1.000	ND	2.500	NC	10	03/10/07
Vanadium	ND	10.00	3.316 J	10.00	NC	10	03/11/07
Zinc	ND	20.00	33.39	20.00	NC	10	03/10/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122820
MSS Lab ID:	193066-001	Sampled:	03/01/07
Lab ID:	QC378002	Received:	03/01/07
Matrix:	Water	Analyzed:	03/08/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

33.0

00201

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67098941155
File : c09q0155
IDF : 10.0
Lab ID: 193217-011
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:07
Cal : 67098941001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67098941159
File : c09q0159
IDF : 10.0
Lab ID: QC378449
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:28
Cal : 67098941001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	9833	A	98	75-125	u
Antimony	0.02700	A	100.0	89.86	A	90	75-125	u
Arsenic	ND	E	100.0	95.98	E	96	75-125	u
Barium	3.401	A	100.0	100.4	A	97	75-125	u
Beryllium	ND	A	100.0	93.63	A	94	75-125	u
Cadmium	ND	A	100.0	95.18	A	95	75-125	u
Calcium	1103	A	10000	10840	A	97	75-125	u
Chromium	0.3892	E	100.0	98.77	E	98	75-125	u
Cobalt	ND	E	100.0	99.00	E	99	75-125	u
Copper	ND	E	100.0	96.40	E	96	75-125	u
Iron	ND	H	10000	9650	H	97	75-125	u
Lead	ND	A	100.0	94.78	A	95	75-125	u
Magnesium	1977	A	10000	11730	A	98	75-125	u
Manganese	ND	E	100.0	97.18	E	97	75-125	u
Molybdenum	0.02324	A	100.0	93.72	A	94	75-125	u
Nickel	0.5010	E	100.0	98.85	E	98	75-125	u
Potassium	12.63	A	10000	9837	A	98	75-125	u
Selenium	0.1548	H	100.0	96.14	H	96	75-125	u
Silver	ND	A	100.0	93.46	A	93	75-125	u
Sodium	3599	E	10000	13130	E	95	75-125	u
Thallium	ND	A	50.00	48.43	A	97	75-125	u
Vanadium	0.2296	E	100.0	97.72	E	97	75-125	<ib **b***
Zinc	0.9868	E	100.0	96.92	E	96	75-125	u

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	916634	848479	-7.44
Scandium	A	1517730	1389680	-8.44
Scandium	E	45344	41278	-8.97
Scandium	H	422488	400627	-5.17
Germanium	H	101123	92227	-8.80
Germanium	E	22511	20273	-9.94
Indium	A	1832636	1608487	-12.23
Bismuth	A	1296680	1054667	-18.66
Yttrium	A	1904354	1714680	-9.96
Terbium	A	2253622	2038945	-9.53

<=opening b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

ıst : MET06
ılnum : 67098941001
ıits : ug/L

Date : 09-MAR-2007 17:19
X Axis : R

Reviewer: ---

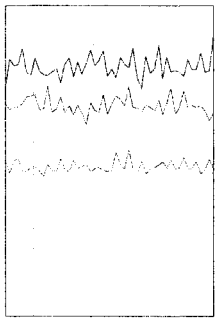
vel	File	Seqnum	Sample ID	Analyzed	Stds
1	c09q0005	67098941005		09-MAR-2007 17:24	S5645
2	c09q0006	67098941006		09-MAR-2007 17:30	S5648
3	c09q0007	67098941007		09-MAR-2007 17:35	S5649
4	c09q0008	67098941008		09-MAR-2007 17:40	S5650
5	c09q0009	67098941009		09-MAR-2007 17:45	S5644
6	c09q0010	67098941010		09-MAR-2007 17:51	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
uminum	A	1.0127	0.7158	0.9799	0.6571	0.6506	0.6379	BLNK	-2.7680	1.56167		0.7757	1.000	0.995	
timony	A	0.4072	0.3297	0.3209	0.3088	0.3210	0.3280	BLNK	-0.0253	3.06281		0.3359	1.000	0.995	
rium	A	0.2869	0.1534	0.1078	0.0939	0.0939	0.0920	BLNK	-0.0593	10.8298		0.1380	1.000	0.995	
ryllium	A	0.4058	0.3557	0.3589	0.3440	0.3622	0.3632	BLNK	-0.0182	2.75552		0.3650	1.000	0.995	
dmium	A	0.1047	0.0922	0.0946	0.0890	0.0893	0.0891	BLNK	-0.0150	11.2216		0.0932	1.000	0.995	
lcium	A	0.4388	0.1041	0.0686	0.0289	0.0225	0.0217	BLNK	-196.48	46.3423		0.1141	1.000	0.995	
ad	A	1.2340	0.7613	0.7042	0.6332	0.6489	0.6511	BLNK	-0.0342	1.53737		0.7721	1.000	0.995	
gnesium	A	0.7525	0.6043	0.5811	0.5519	0.5437	0.5391	BLNK	-2.0795	1.85184		0.5954	1.000	0.995	
lybdenum	A	0.3454	0.2488	0.2413	0.2297	0.2313	0.2385	BLNK	-0.0518	4.22014		0.2558	1.000	0.995	
tassium	A	6.1144	1.8034	1.2709	0.7751	0.7208	0.7085	BLNK	-75.952	1.41296		1.8988	1.000	0.995	
lver	A	0.4626	0.4039	0.4088	0.3924	0.3962	0.3967	BLNK	-0.0218	2.52204		0.4101	1.000	0.995	
allium	A	2.0362	1.0312	0.9444	0.8483	0.8877	0.9593	BLNK	-0.0717	1.05940		1.1178	0.999	0.995	
senic	E	0.8142	0.7223	0.6739	0.6537	0.6486	0.6551	BLNK	-0.0505	1.53000		0.6946	1.000	0.995	
romium	E	7.6612	4.2433	3.7835	3.3656	3.2742	3.3048	BLNK	-0.1249	0.30337		4.2721	1.000	0.995	
balt	E	6.9414	5.6712	5.7061	5.4273	5.2102	5.1704	BLNK	-0.0378	0.19314		5.6878	1.000	0.995	
pper	E	26.371	12.548	12.909	8.5491	8.0398	7.9605	BLNK	-0.1957	0.12550		12.730	1.000	0.995	
nganese	E	2.8387	1.9797	1.8652	1.6900	1.6583	1.6796	BLNK	-0.0526	0.59708		1.9519	1.000	0.995	
ckel	E	3.1866	1.8564	1.7358	1.5047	1.4304	1.4170	BLNK	-0.1223	0.70485		1.8551	1.000	0.995	
dium	E	4.2421	1.4197	1.0752	0.7329	0.6813	0.6907	BLNK	-49.142	1.45605		1.4736	1.000	0.995	
nadium	E		3.1157	2.8036	2.5744	2.5588	2.5967	BLNK	-0.2606	0.38686		2.7298	1.000	0.995	
nc	E	22.520	5.2400	3.6163	1.4390	1.2153	1.1544	BLNK	-1.2930	0.86364		5.8642	0.999	0.995	
on	H	1.4541	1.0813	1.0554	0.9382	0.9387	0.9241	BLNK	-5.9496	1.07910		1.0653	1.000	0.995	
lenium	H	0.1985	0.1550	0.1620	0.1459	0.1491	0.1481	BLNK	-0.0515	6.74561		0.1598	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
uminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
timony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
rium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
lcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ad	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
gnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
tassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
allium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
senic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
romium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
balt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
pper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
nganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ckel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
nadium	E		0.5000	1.0000	10.000	100.00	200.00	ug/L
nc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
on	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

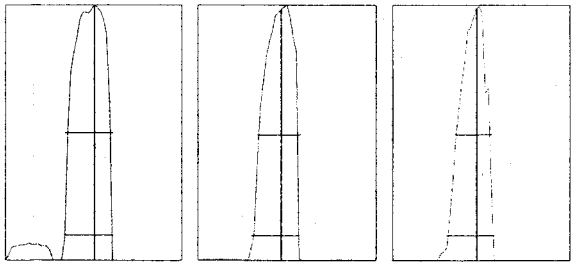
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17941.0	16037.2	4.41	0.80
89	50,000	32655.0	33846.0	3.86	0.80
205	50,000	23764.0	24112.8	3.77	3.00

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.881%
Doubly Charged: 70/140 1.423%



m/z:	7	89	205
Height:	16,264	33,712	23,918
Axis:	7.05	88.95	204.95
W-50%:	0.80	0.70	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===		===Ion Lenses===		===Q-Pole Parameters===	
RF Power :	1550 W	Extract 1 :	0 V	AMU Gain :	142
RF Matching :	1.7 V	Extract 2 :	-160 V	AMU Offset :	123
Smpl Depth :	9 mm	Omega Bias-ce :	-32 V	Axis Gain :	1.0015
Torch-H :	0.9 mm	Omega Lens-ce :	0 V	Axis Offset :	-0.03
Torch-V :	0.6 mm	Cell Entrance :	-30 V	QP Bias :	-3 V
Carrier Gas :	1.03 L/min	QP Focus :	2 V		
Makeup Gas :	0 L/min	Cell Exit :	-30 V	===Detector Parameters===	
Optional Gas :	--- %			Discriminator :	8 mV
Nebulizer Pump :	0.1 rps	===Octopole Parameters===		Analog HV :	1810 V
Sample Pump :	--- rps	OctP RF :	160 V	Pulse HV :	1430 V
S/C Temp :	2 degC	OctP Bias :	-6 V		

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min Integration Time: 0.1000sec
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	14.4	29.57
59	3669.5	4.92
89	2311.9	6.04

Tune File : h2.u
H2 Gas: 4 mL/min Integration Time: 0.1000sec
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2559.4	4.64
78	0.1	342.56
89	20073.3	3.99

Generated : Mar 09, 2007 15:47:05
Printed : Mar 09, 2007 15:48:45

P/A Factor Tuning Report

Acquired:Mar 9 2007 04:34 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059504
7	(Li)	Sensitivity too low
9	Be	0.068785
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086430
45	Sc	0.086036
51	V	0.087935
52	Cr	0.091605
55	Mn	0.093940
56	Fe	Sensitivity too high
59	Co	0.097332
60	Ni	0.101235
63	Cu	0.105051
65	Cu	0.104224
66	Zn	Sensitivity too low
72	Ge	0.102011
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.099997
98	Mo	0.100647
99	(Ru)	Sensitivity too low
107	Ag	0.110998
111	Cd	Sensitivity too low
115	In	0.109935
118	(In)	0.109589
121	Sb	0.108305
137	Ba	Sensitivity too low
159	Tb	0.112040
205	Tl	0.119958
206	(Pb)	0.119539
207	(Pb)	0.119266
208	Pb	0.119009
209	Bi	0.120139

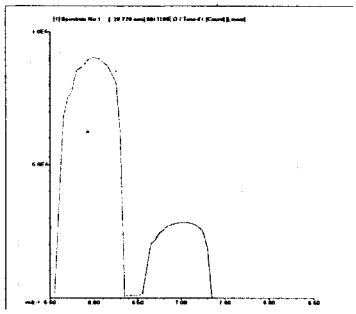
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1430 V

6020 QC Tune Report

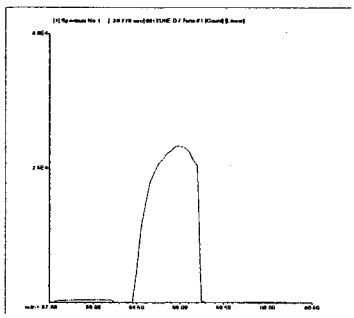
Data File: C:\ICPCHEM\1\DATA\07C09q00.B\001TUNE.D
Date Acquired: Mar 9 2007 05:01 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

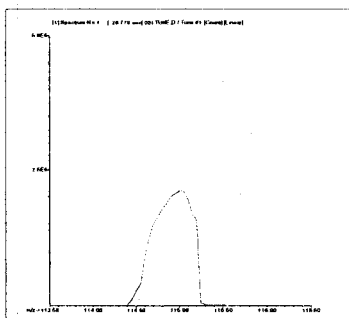
Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	1.01	5.00	
115 In	0.95	5.00	
205 Tl	0.34	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



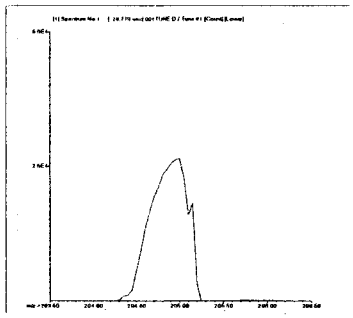
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004C
Date Acquired: Mar 9 2007 05:17 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	916633.81	A	13710.00	1.50
7	(Li)		P		
9	Be	121.12	P	20.37	16.82
23	Na	30607.30	P	507.90	1.66
24	Mg	34040.43	P	3613.00	10.61
27	Al	53745.65	P	3790.00	7.05
39	K	1631212.00	A	9044.00	0.55
44	Ca	128692.70	P	2817.00	2.19
45	Sc	422487.81	P	6740.00	1.60
45	Sc	45344.33	P	679.40	1.50
45	Sc	1517729.00	A	29070.00	1.92
51	V	610.76	P	6.70	1.10
52	Cr	373.71	P	43.91	11.75
55	Mn	80.00	P	15.28	19.10
56	Fe	46731.86	P	14490.00	31.01
59	Co	178.15	P	74.74	41.95
60	Ni	157.41	P	15.41	9.79
63	Cu	702.62	P	59.89	8.52
65	Cu	322.60	P	17.01	5.27
66	Zn	673.73	P	52.62	7.81
72	Ge	101122.60	P	1933.00	1.91
72	Ge	22510.59	P	340.00	1.51
75	As	14.89	P	2.14	14.39
78	Se	15.56	P	8.88	57.07
89	Y	1904354.00	A	44640.00	2.34
98	Mo	466.70	P	68.08	14.59
107	Ag	316.69	P	32.83	10.37
111	Cd	48.89	P	13.47	27.55
115	In	1832636.00	A	36180.00	1.97
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	302.25	P	53.89	17.83
137	Ba	246.68	P	14.53	5.89
159	Tb	2253621.00	A	40930.00	1.82
205	Tl	1753.54	P	125.50	7.16
208	Pb	1002.30	P	51.69	5.16
209	Bi	1296680.00	A	24510.00	1.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 9 2007 05:22 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	932362.81	A	20880.00	2.24
7 (Li)		P		
9 Be	756.72	P	98.38	13.00
23 Na	37989.20	P	453.20	1.19
24 Mg	224754.59	P	7900.00	3.51
27 Al	302506.91	P	11730.00	3.88
39 K	1825330.00	A	17170.00	0.94
44 Ca	130970.30	P	1091.00	0.83
45 Sc	408674.50	P	2821.00	0.69
45 Sc	44781.21	P	467.30	1.04
45 Sc	1493194.00	A	42010.00	2.81
51 V	532.98	P	30.60	5.74
52 Cr	686.32	P	40.92	5.96
55 Mn	254.08	P	23.13	9.10
56 Fe	118836.00	P	1660.00	1.40
59 Co	621.87	P	42.32	6.81
60 Ni	285.56	P	41.83	14.65
63 Cu	1174.14	P	53.03	4.52
65 Cu	556.31	P	28.21	5.07
66 Zn	1003.01	P	10.08	1.01
72 Ge	98470.08	P	1233.00	1.25
72 Ge	22271.34	P	380.30	1.71
75 As	36.22	P	6.47	17.88
78 Se	39.11	P	3.79	9.69
89 Y	1825115.00	A	33830.00	1.85
98 Mo	1261.22	P	55.01	4.36
99 (Ru)	5.56	P	5.09	91.65
107 Ag	1651.28	P	171.70	10.40
111 Cd	373.35	P	10.00	2.68
115 In	1783367.00	A	42550.00	2.39
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1452.36	P	44.27	3.05
137 Ba	1256.78	P	122.50	9.75
159 Tb	2191961.00	A	33700.00	1.54
205 Tl	2639.27	P	130.30	4.94
208 Pb	5411.80	P	287.80	5.32
209 Bi	1295684.00	A	22450.00	1.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	932362.81	2.24	916633.81	101.7	80 - 120	
45 Sc	408674.50	0.69	422487.78	96.7	80 - 120	
45 Sc	44781.21	1.04	45344.33	98.8	80 - 120	
45 Sc	1493194.10	2.81	1517729.50	98.4	80 - 120	
72 Ge	98470.09	1.25	101122.62	97.4	80 - 120	
72 Ge	22271.34	1.71	22510.59	98.9	80 - 120	
89 Y	1825115.60	1.85	1904353.90	95.8	80 - 120	
115 In	1783367.30	2.39	1832635.80	97.3	80 - 120	
159 Tb	2191960.80	1.54	2253621.50	97.3	80 - 120	
209 Bi	1295683.50	1.73	1296679.60	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 9 2007 05:28 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	938807.00	A	31990.00	3.41
7 (Li)		P		
9 Be	3338.29	P	91.68	2.75
23 Na	61838.99	P	267.50	0.43
24 Mg	887612.00	A	6993.00	0.79
27 Al	1051503.00	A	6508.00	0.62
39 K	2649391.00	A	9411.00	0.36
44 Ca	152952.09	P	1604.00	1.05
45 Sc	396918.41	P	3853.00	0.97
45 Sc	43558.08	P	93.97	0.22
45 Sc	1472874.00	A	90400.00	6.14
51 V	1357.12	P	17.37	1.28
52 Cr	1848.29	P	11.88	0.64
55 Mn	862.26	P	68.06	7.89
56 Fe	429154.81	P	3539.00	0.82
59 Co	2470.25	P	6.67	0.27
60 Ni	808.55	P	42.01	5.20
63 Cu	2671.40	P	100.80	3.77
65 Cu	1305.63	P	73.14	5.60
66 Zn	1115.62	P	65.52	5.87
72 Ge	94500.77	P	1088.00	1.15
72 Ge	21288.65	P	62.48	0.29
75 As	153.78	P	9.98	6.49
78 Se	146.45	P	2.69	1.84
89 Y	1798577.00	A	97930.00	5.44
98 Mo	4463.12	P	173.00	3.88
99 (Ru)	3.33	P	3.33	99.99
107 Ag	7066.54	P	119.80	1.70
111 Cd	1614.61	P	6.95	0.43
115 In	1752938.00	A	86430.00	4.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5764.79	P	214.70	3.72
137 Ba	3256.08	P	37.18	1.14
159 Tb	2126610.00	A	122200.00	5.75
205 Tl	6444.11	P	149.40	2.32
208 Pb	16149.21	P	194.10	1.20
209 Bi	1250766.00	A	52740.00	4.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	938806.94	3.41	916633.81	102.4	80 - 120	
45 Sc	396918.34	0.97	422487.78	93.9	80 - 120	
45 Sc	43558.09	0.22	45344.33	96.1	80 - 120	
45 Sc	1472874.40	6.14	1517729.50	97.0	80 - 120	
72 Ge	94500.77	1.15	101122.62	93.5	80 - 120	
72 Ge	21288.65	0.29	22510.59	94.6	80 - 120	
89 Y	1798577.30	5.44	1904353.90	94.4	80 - 120	
115 In	1752937.90	4.93	1832635.80	95.7	80 - 120	
159 Tb	2126610.30	5.75	2253621.50	94.4	80 - 120	
209 Bi	1250765.50	4.22	1296679.60	96.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 9 2007 05:33 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	949084.19	A	9162.00	0.97
7 (Li)		P		
9 Be	6811.84	P	232.60	3.41
23 Na	95789.79	P	1074.00	1.12
24 Mg	1730903.00	A	10410.00	0.60
27 Al	2918482.00	A	12270.00	0.42
39 K	3785269.00	A	32530.00	0.86
44 Ca	204370.91	P	1217.00	0.60
45 Sc	397183.91	P	1449.00	0.36
45 Sc	44549.42	P	784.20	1.76
45 Sc	1489234.00	A	3171.00	0.21
51 V	2498.03	P	61.50	2.46
52 Cr	3370.45	P	18.99	0.56
55 Mn	1661.60	P	60.28	3.63
56 Fe	838345.88	P	9281.00	1.11
59 Co	5084.31	P	137.60	2.71
60 Ni	1546.40	P	37.92	2.45
63 Cu	5637.86	P	106.10	1.88
65 Cu	2732.15	P	39.14	1.43
66 Zn	1579.00	P	28.37	1.80
72 Ge	93877.58	P	842.10	0.90
72 Ge	21839.15	P	398.60	1.83
75 As	294.45	P	15.91	5.40
78 Se	304.23	P	13.42	4.41
89 Y	1819868.00	A	9355.00	0.51
98 Mo	8782.03	P	107.40	1.22
99 (Ru)	8.89	P	7.70	86.60
107 Ag	14229.08	P	356.00	2.50
111 Cd	3293.87	P	68.88	2.09
115 In	1740483.00	A	15200.00	0.87
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	11168.36	P	104.50	0.94
137 Ba	4606.53	P	100.00	2.17
159 Tb	2136014.00	A	12900.00	0.60
205 Tl	11629.12	P	152.00	1.31
208 Pb	30079.75	P	392.70	1.31
209 Bi	1231391.00	A	5079.00	0.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	949084.25	0.97	916633.81	103.5	80 - 120	
45 Sc	397183.91	0.36	422487.78	94.0	80 - 120	
45 Sc	44549.42	1.76	45344.33	98.2	80 - 120	
45 Sc	1489233.60	0.21	1517729.50	98.1	80 - 120	
72 Ge	93877.59	0.90	101122.62	92.8	80 - 120	
72 Ge	21839.15	1.83	22510.59	97.0	80 - 120	
89 Y	1819868.10	0.51	1904353.90	95.6	80 - 120	
115 In	1740483.30	0.87	1832635.80	95.0	80 - 120	
159 Tb	2136014.30	0.60	2253621.50	94.8	80 - 120	
209 Bi	1231391.50	0.41	1296679.60	95.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 9 2007 05:38 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	953547.69	A	5058.00	0.53
7 (Li)		P		
9 Be	65607.67	P	560.40	0.85
23 Na	659608.88	M	10880.00	1.65
24 Mg	16405000.00	A	198800.00	1.21
27 Al	19529830.00	A	256400.00	1.31
39 K	23039840.00	A	412900.00	1.79
44 Ca	859148.50	A	11770.00	1.37
45 Sc	420468.81	P	3267.00	0.78
45 Sc	45001.15	P	673.60	1.50
45 Sc	1486259.00	A	16170.00	1.09
51 V	23167.72	P	273.30	1.18
52 Cr	30292.32	P	567.70	1.87
55 Mn	15208.72	P	62.77	0.41
56 Fe	7888894.00	A	73960.00	0.94
59 Co	48839.70	P	54.53	0.11
60 Ni	13540.73	P	115.50	0.85
63 Cu	37717.90	P	216.00	0.57
65 Cu	18160.82	P	87.32	0.48
66 Zn	6348.18	P	74.39	1.17
72 Ge	99980.46	P	690.90	0.69
72 Ge	22059.47	P	121.70	0.55
75 As	2883.88	P	67.19	2.33
78 Se	2917.66	P	30.15	1.03
89 Y	1813408.00	A	12890.00	0.71
98 Mo	83302.12	P	664.60	0.80
99 (Ru)	8.89	P	3.85	43.30
107 Ag	136468.59	P	646.80	0.47
111 Cd	30939.46	P	781.80	2.53
115 In	1739030.00	A	5424.00	0.31
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	107386.70	P	911.50	0.85
137 Ba	40617.30	P	69.58	0.17
159 Tb	2162836.00	A	33710.00	1.56
205 Tl	104980.10	P	557.90	0.53
208 Pb	273865.41	P	1220.00	0.45
209 Bi	1237622.00	A	11940.00	0.96

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	953547.69	0.53	916633.81	104.0	80 - 120	
45 Sc	420468.78	0.78	422487.78	99.5	80 - 120	
45 Sc	45001.15	1.50	45344.33	99.2	80 - 120	
45 Sc	1486258.60	1.09	1517729.50	97.9	80 - 120	
72 Ge	99980.46	0.69	101122.62	98.9	80 - 120	
72 Ge	22059.47	0.55	22510.59	98.0	80 - 120	
89 Y	1813408.10	0.71	1904353.90	95.2	80 - 120	
115 In	1739030.00	0.31	1832635.80	94.9	80 - 120	
159 Tb	2162836.30	1.56	2253621.50	96.0	80 - 120	
209 Bi	1237622.30	0.96	1296679.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 9 2007 05:43 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937081.13	A	13910.00	1.48
7 (Li)		P		
9 Be	678743.38	A	9766.00	1.44
23 Na	6060036.00	A	29480.00	0.49
24 Mg	############	A	2117000.00	1.31
27 Al	############	A	896500.00	0.46
39 K	############	A	283100.00	0.13
44 Ca	6669938.00	A	43570.00	0.65
45 Sc	417386.59	P	4148.00	0.99
45 Sc	44474.40	P	190.70	0.43
45 Sc	1484756.00	A	7937.00	0.53
51 V	227598.30	P	964.40	0.42
52 Cr	291237.91	P	3252.00	1.12
55 Mn	147500.59	P	1378.00	0.93
56 Fe	78356888.00	A	123000.00	0.16
59 Co	463440.59	P	1395.00	0.30
60 Ni	127227.70	P	98.41	0.08
63 Cu	345450.91	P	2709.00	0.78
65 Cu	168927.00	P	856.30	0.51
66 Zn	52219.91	P	563.60	1.08
72 Ge	96489.86	P	674.50	0.70
72 Ge	21483.78	P	34.36	0.16
75 As	27869.04	P	191.00	0.69
78 Se	28766.99	P	215.50	0.75
89 Y	1797811.00	A	17520.00	0.97
98 Mo	831617.00	P	7351.00	0.88
99 (Ru)	15.56	P	1.93	12.38
107 Ag	1334873.00	A	3153.00	0.24
111 Cd	301002.50	P	2325.00	0.77
115 In	1684578.00	A	6999.00	0.42
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1081536.00	A	3378.00	0.31
137 Ba	398705.59	P	1559.00	0.39
159 Tb	2122223.00	A	3772.00	0.18
205 Tl	1060299.00	A	10890.00	1.03
208 Pb	2754297.00	A	28250.00	1.03
209 Bi	1194464.00	A	2339.00	0.20

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937081.13	1.48	916633.81	102.2	80 - 120	
45 Sc	417386.63	0.99	422487.78	98.8	80 - 120	
45 Sc	44474.40	0.43	45344.33	98.1	80 - 120	
45 Sc	1484755.80	0.53	1517729.50	97.8	80 - 120	
72 Ge	96489.86	0.70	101122.62	95.4	80 - 120	
72 Ge	21483.78	0.16	22510.59	95.4	80 - 120	
89 Y	1797810.80	0.97	1904353.90	94.4	80 - 120	
115 In	1684578.30	0.42	1832635.80	91.9	80 - 120	
159 Tb	2122223.30	0.18	2253621.50	94.2	80 - 120	
209 Bi	1194464.50	0.20	1296679.60	92.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 9 2007 05:49 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	919698.63	A	29050.00	3.16
7	(Li)		P		
9	Be	1335686.00	A	25390.00	1.90
23	Na	12161390.00	A	61600.00	0.51
24	Mg	###########	A	3708000.00	1.15
27	Al	###########	A	4124000.00	1.08
39	K	###########	A	2118000.00	0.50
44	Ca	12977620.00	A	83180.00	0.64
45	Sc	418632.19	P	4688.00	1.12
45	Sc	44021.58	P	239.60	0.54
45	Sc	1497570.00	A	26740.00	1.79
51	V	457253.09	P	5817.00	1.27
52	Cr	581941.31	P	6741.00	1.16
55	Mn	295765.09	P	3685.00	1.25
56	Fe	###########	A	119200.00	0.08
59	Co	910429.63	M	5028.00	0.55
60	Ni	249501.00	P	584.90	0.23
63	Cu	673206.63	P	2546.00	0.38
65	Cu	327244.31	P	3420.00	1.05
66	Zn	97625.27	P	281.50	0.29
72	Ge	95738.95	P	862.10	0.90
72	Ge	21149.96	P	529.80	2.51
75	As	55405.40	P	441.80	0.80
78	Se	56713.07	P	265.30	0.47
89	Y	1812733.00	A	51040.00	2.82
98	Mo	1728550.00	A	9631.00	0.56
99	(Ru)	36.67	P	12.02	32.78
107	Ag	2630364.00	A	25940.00	0.99
111	Cd	590731.88	P	5359.00	0.91
115	In	1658619.00	A	38650.00	2.33
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2175337.00	A	14340.00	0.66
137	Ba	783535.38	P	10300.00	1.31
159	Tb	2130470.00	A	64450.00	3.03
205	Tl	2179188.00	A	39910.00	1.83
208	Pb	5545149.00	A	12410.00	0.22
209	Bi	1136089.00	A	29000.00	2.55

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	919698.63	3.16	916633.81	100.3	80 - 120	
45	Sc	418632.25	1.12	422487.78	99.1	80 - 120	
45	Sc	44021.58	0.54	45344.33	97.1	80 - 120	
45	Sc	1497570.50	1.79	1517729.50	98.7	80 - 120	
72	Ge	95738.95	0.90	101122.62	94.7	80 - 120	
72	Ge	21149.96	2.51	22510.59	94.0	80 - 120	
89	Y	1812733.30	2.82	1904353.90	95.2	80 - 120	
115	In	1658618.80	2.33	1832635.80	90.5	80 - 120	
159	Tb	2130470.50	3.03	2253621.50	94.5	80 - 120	
209	Bi	1136089.50	2.55	1296679.60	87.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941015 File : c09q0015 Time : 09-MAR-2007 18:28
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7757	0.6568	10000	10250	ug/L	3	10	
Antimony	A	0.3359	0.3195	100.0	97.82	ug/L	-2	10	
Barium	A	0.1380	0.0924	100.0	99.95	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.23	ug/L	-1	10	
Cadmium	A	0.0932	0.0888	100.0	99.59	ug/L	0	10	
Calcium	A	0.1141	0.0223	10000	10140	ug/L	1	10	
Lead	A	0.7721	0.6345	100.0	97.51	ug/L	-2	10	
Magnesium	A	0.5954	0.5528	10000	10230	ug/L	2	10	
Molybdenum	A	0.2558	0.2307	100.0	97.32	ug/L	-3	10	
Potassium	A	1.8988	0.7353	10000	10310	ug/L	3	10	
Silver	A	0.4101	0.4208	100.0	106.1	ug/L	6	10	
Thallium	A	1.1178	0.8895	50.00	47.05	ug/L	-6	10	
Arsenic	E	0.6946	0.6606	100.0	101.0	ug/L	1	10	
Chromium	E	4.2721	3.2821	100.0	99.45	ug/L	-1	10	
Cobalt	E	5.6878	5.1156	100.0	98.76	ug/L	-1	10	
Copper	E	12.730	7.8162	100.0	97.90	ug/L	-2	10	
Manganese	E	1.9519	1.6406	100.0	97.90	ug/L	-2	10	
Nickel	E	1.8551	1.4033	100.0	98.79	ug/L	-1	10	
Sodium	E	1.4736	0.6636	10000	9613	ug/L	-4	10	
Vanadium	E	3.2665	2.5368	100.0	97.88	ug/L	-2	10	
Zinc	E	5.8642	1.1702	100.0	99.77	ug/L	0	10	
Iron	H	1.0653	0.9073	10000	9785	ug/L	-2	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	938532	2.39
Scandium	A	1517730	1448345	-4.57
Scandium	E	45344	45386	0.09
Scandium	H	422488	427092	1.09
Germanium	H	101123	98414	-2.68
Germanium	E	22511	21784	-3.23
Indium	A	1832636	1634980	-10.79
Bismuth	A	1296680	1096500	-15.44
Yttrium	A	1904354	1748838	-8.17
Terbium	A	2253622	2025126	-10.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941046 File : c09q0046 Time : 09-MAR-2007 21:24
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3185	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0915	100.0	98.99	ug/L	-1	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.24	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	9991	ug/L	0	10	
Lead	A	0.7721	0.6252	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5954	0.5461	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2285	100.0	96.37	ug/L	-4	10	
Potassium	A	1.8988	0.7217	10000	10120	ug/L	1	10	
Silver	A	0.4101	0.4173	100.0	105.2	ug/L	5	10	
Thallium	A	1.1178	0.8698	50.00	46.00	ug/L	-8	10	
Arsenic	E	0.6946	0.6551	100.0	100.2	ug/L	0	10	
Chromium	E	4.2721	3.2245	100.0	97.70	ug/L	-2	10	
Cobalt	E	5.6878	5.0576	100.0	97.64	ug/L	-2	10	
Copper	E	12.730	7.8226	100.0	97.98	ug/L	-2	10	
Manganese	E	1.9519	1.6229	100.0	96.84	ug/L	-3	10	
Nickel	E	1.8551	1.3804	100.0	97.17	ug/L	-3	10	
Sodium	E	1.4736	0.6569	10000	9516	ug/L	-5	10	
Vanadium	E	3.2665	2.5129	100.0	96.95	ug/L	-3	10	
Zinc	E	5.8642	1.1526	100.0	98.25	ug/L	-2	10	
Iron	H	1.0653	0.9145	10000	9863	ug/L	-1	10	
Selenium	H	0.1598	0.1454	100.0	98.03	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	905174	-1.25
Scandium	A	1517730	1441531	-5.02
Scandium	E	45344	45193	-0.33
Scandium	H	422488	420497	-0.47
Germanium	H	101123	96743	-4.33
Germanium	E	22511	21533	-4.34
Indium	A	1832636	1642773	-10.36
Bismuth	A	1296680	1088318	-16.07
Yttrium	A	1904354	1748927	-8.16
Terbium	A	2253622	2043585	-9.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941068 File : c09q0068 Time : 09-MAR-2007 23:20
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6489	10000	10130	ug/L	1	10	
Antimony	A	0.3359	0.3132	100.0	95.90	ug/L	-4	10	
Barium	A	0.1380	0.0925	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0875	100.0	98.20	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9947	ug/L	-1	10	
Lead	A	0.7721	0.6311	100.0	96.98	ug/L	-3	10	
Magnesium	A	0.5954	0.5452	10000	10090	ug/L	1	10	
Molybdenum	A	0.2558	0.2257	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4190	100.0	105.6	ug/L	6	10	
Thallium	A	1.1178	0.8838	50.00	46.74	ug/L	-7	10	
Arsenic	E	0.6946	0.6568	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.2029	100.0	97.04	ug/L	-3	10	
Cobalt	E	5.6878	4.9833	100.0	96.21	ug/L	-4	10	
Copper	E	12.730	7.7997	100.0	97.69	ug/L	-2	10	
Manganese	E	1.9519	1.6174	100.0	96.52	ug/L	-3	10	
Nickel	E	1.8551	1.3802	100.0	97.16	ug/L	-3	10	
Sodium	E	1.4736	0.6559	10000	9501	ug/L	-5	10	
Vanadium	E	3.2665	2.4945	100.0	96.24	ug/L	-4	10	
Zinc	E	5.8642	1.1539	100.0	98.36	ug/L	-2	10	
Iron	H	1.0653	0.8929	10000	9630	ug/L	-4	10	
Selenium	H	0.1598	0.1429	100.0	96.34	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	913999	-0.29
Scandium	A	1517730	1455726	-4.09
Scandium	E	45344	46412	2.35
Scandium	H	422488	435589	3.10
Germanium	H	101123	100000	-1.11
Germanium	E	22511	21916	-2.64
Indium	A	1832636	1638663	-10.58
Bismuth	A	1296680	1053580	-18.75
Yttrium	A	1904354	1768625	-7.13
Terbium	A	2253622	2008550	-10.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941084 File : c09q0084 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 00:46
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6509	10000	10160	ug/L	2	10	
Antimony	A	0.3359	0.3181	100.0	97.39	ug/L	-3	10	
Barium	A	0.1380	0.0921	100.0	99.73	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.22	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.31	ug/L	-2	10	
Calcium	A	0.1141	0.0221	10000	10060	ug/L	1	10	
Lead	A	0.7721	0.6278	100.0	96.48	ug/L	-4	10	
Magnesium	A	0.5954	0.5504	10000	10190	ug/L	2	10	
Molybdenum	A	0.2558	0.2258	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7317	10000	10260	ug/L	3	10	
Silver	A	0.4101	0.4203	100.0	106.0	ug/L	6	10	
Thallium	A	1.1178	0.9101	50.00	48.14	ug/L	-4	10	
Arsenic	E	0.6946	0.6458	100.0	98.75	ug/L	-1	10	
Chromium	E	4.2721	3.1412	100.0	95.17	ug/L	-5	10	
Cobalt	E	5.6878	4.9028	100.0	94.65	ug/L	-5	10	
Copper	E	12.730	7.6681	100.0	96.04	ug/L	-4	10	
Manganese	E	1.9519	1.5949	100.0	95.17	ug/L	-5	10	
Nickel	E	1.8551	1.3436	100.0	94.58	ug/L	-5	10	
Sodium	E	1.4736	0.6503	10000	9420	ug/L	-6	10	
Vanadium	E	3.2665	2.4434	100.0	94.26	ug/L	-6	10	
Zinc	E	5.8642	1.1383	100.0	97.02	ug/L	-3	10	
Iron	H	1.0653	0.8882	10000	9578	ug/L	-4	10	
Selenium	H	0.1598	0.1422	100.0	95.85	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	906941	-1.06
Scandium	A	1517730	1427826	-5.92
Scandium	E	45344	46819	3.25
Scandium	H	422488	433588	2.63
Germanium	H	101123	98832	-2.27
Germanium	E	22511	21976	-2.37
Indium	A	1832636	1596458	-12.89
Bismuth	A	1296680	999596	-22.91
Yttrium	A	1904354	1745906	-8.32
Terbium	A	2253622	1966364	-12.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941108 File : c09q0108 Time : 10-MAR-2007 02:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3146	100.0	96.33	ug/L	-4	10	
Barium	A	0.1380	0.0900	100.0	97.39	ug/L	-3	10	
Beryllium	A	0.3650	0.3389	100.0	93.37	ug/L	-7	10	
Cadmium	A	0.0932	0.0876	100.0	98.30	ug/L	-2	10	
Calcium	A	0.1141	0.0216	10000	9797	ug/L	-2	10	
Lead	A	0.7721	0.6453	100.0	99.17	ug/L	-1	10	
Magnesium	A	0.5954	0.5421	10000	10040	ug/L	0	10	
Molybdenum	A	0.2558	0.2243	100.0	94.60	ug/L	-5	10	
Potassium	A	1.8988	0.7140	10000	10010	ug/L	0	10	
Silver	A	0.4101	0.4102	100.0	103.4	ug/L	3	10	
Thallium	A	1.1178	0.8558	50.00	45.26	ug/L	-9	10	
Arsenic	E	0.6946	0.6477	100.0	99.04	ug/L	-1	10	
Chromium	E	4.2721	3.2139	100.0	97.38	ug/L	-3	10	
Cobalt	E	5.6878	5.0239	100.0	96.99	ug/L	-3	10	
Copper	E	12.730	7.6729	100.0	96.10	ug/L	-4	10	
Manganese	E	1.9519	1.6212	100.0	96.74	ug/L	-3	10	
Nickel	E	1.8551	1.3680	100.0	96.30	ug/L	-4	10	
Sodium	E	1.4736	0.6621	10000	9591	ug/L	-4	10	
Vanadium	E	3.2665	2.4901	100.0	96.07	ug/L	-4	10	
Zinc	E	5.8642	1.1431	100.0	97.43	ug/L	-3	10	
Iron	H	1.0653	0.8920	10000	9620	ug/L	-4	10	
Selenium	H	0.1598	0.1432	100.0	96.52	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902889	-1.50
Scandium	A	1517730	1401113	-7.68
Scandium	E	45344	42563	-6.13
Scandium	H	422488	416586	-1.40
Germanium	H	101123	94956	-6.10
Germanium	E	22511	20421	-9.28
Indium	A	1832636	1614720	-11.89
Bismuth	A	1296680	1141281	-11.98
Yttrium	A	1904354	1722254	-9.56
Terbium	A	2253622	2048074	-9.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941129 File : c09q0129 Time : 10-MAR-2007 04:47
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6496	10000	10140	ug/L	1	10	
Antimony	A	0.3359	0.3148	100.0	96.40	ug/L	-4	10	
Barium	A	0.1380	0.0916	100.0	99.16	ug/L	-1	10	
Beryllium	A	0.3650	0.3472	100.0	95.65	ug/L	-4	10	
Cadmium	A	0.0932	0.0881	100.0	98.86	ug/L	-1	10	
Calcium	A	0.1141	0.0216	10000	9816	ug/L	-2	10	
Lead	A	0.7721	0.6451	100.0	99.14	ug/L	-1	10	
Magnesium	A	0.5954	0.5462	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2295	100.0	96.80	ug/L	-3	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4116	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.8799	50.00	46.54	ug/L	-7	10	
Arsenic	E	0.6946	0.6545	100.0	100.1	ug/L	0	10	
Chromium	E	4.2721	3.2320	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0486	100.0	97.47	ug/L	-3	10	
Copper	E	12.730	7.7084	100.0	96.55	ug/L	-3	10	
Manganese	E	1.9519	1.6244	100.0	96.93	ug/L	-3	10	
Nickel	E	1.8551	1.3782	100.0	97.02	ug/L	-3	10	
Sodium	E	1.4736	0.6695	10000	9699	ug/L	-3	10	
Vanadium	E	3.2665	2.5089	100.0	96.80	ug/L	-3	10	
Zinc	E	5.8642	1.1481	100.0	97.86	ug/L	-2	10	
Iron	H	1.0653	0.8988	10000	9693	ug/L	-3	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	892003	-2.69
Scandium	A	1517730	1400371	-7.73
Scandium	E	45344	43765	-3.48
Scandium	H	422488	424248	0.42
Germanium	H	101123	96829	-4.25
Germanium	E	22511	20956	-6.91
Indium	A	1832636	1610854	-12.10
Bismuth	A	1296680	1101593	-15.05
Yttrium	A	1904354	1703888	-10.53
Terbium	A	2253622	2032098	-9.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941141 File : c09q0141 Time : 10-MAR-2007 05:51
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6544	10000	10220	ug/L	2	10	
Antimony	A	0.3359	0.3165	100.0	96.91	ug/L	-3	10	
Barium	A	0.1380	0.0926	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3447	100.0	94.95	ug/L	-5	10	
Cadmium	A	0.0932	0.0893	100.0	100.2	ug/L	0	10	
Calcium	A	0.1141	0.0219	10000	9973	ug/L	0	10	
Lead	A	0.7721	0.6463	100.0	99.32	ug/L	-1	10	
Magnesium	A	0.5954	0.5481	10000	10150	ug/L	2	10	
Molybdenum	A	0.2558	0.2280	100.0	96.16	ug/L	-4	10	
Potassium	A	1.8988	0.7275	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4162	100.0	104.9	ug/L	5	10	
Thallium	A	1.1178	0.9000	50.00	47.60	ug/L	-5	10	
Arsenic	E	0.6946	0.6445	100.0	98.56	ug/L	-1	10	
Chromium	E	4.2721	3.1910	100.0	96.68	ug/L	-3	10	
Cobalt	E	5.6878	4.9869	100.0	96.28	ug/L	-4	10	
Copper	E	12.730	7.5974	100.0	95.15	ug/L	-5	10	
Manganese	E	1.9519	1.6027	100.0	95.64	ug/L	-4	10	
Nickel	E	1.8551	1.3612	100.0	95.82	ug/L	-4	10	
Sodium	E	1.4736	0.6527	10000	9455	ug/L	-5	10	
Vanadium	E	3.2665	2.4771	100.0	95.57	ug/L	-4	10	
Zinc	E	5.8642	1.1282	100.0	96.14	ug/L	-4	10	
Iron	H	1.0653	0.8772	10000	9460	ug/L	-5	10	
Selenium	H	0.1598	0.1423	100.0	95.94	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902061	-1.59
Scandium	A	1517730	1405467	-7.40
Scandium	E	45344	44656	-1.52
Scandium	H	422488	428923	1.52
Germanium	H	101123	98288	-2.80
Germanium	E	22511	21386	-5.00
Indium	A	1832636	1598338	-12.78
Bismuth	A	1296680	1083588	-16.43
Yttrium	A	1904354	1727094	-9.31
Terbium	A	2253622	2021728	-10.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941165 File : c09q0165 Time : 10-MAR-2007 08:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6447	10000	10070	ug/L	1	10	
Antimony	A	0.3359	0.3126	100.0	95.73	ug/L	-4	10	
Barium	A	0.1380	0.0921	100.0	99.64	ug/L	0	10	
Beryllium	A	0.3650	0.3385	100.0	93.25	ug/L	-7	10	
Cadmium	A	0.0932	0.0881	100.0	98.87	ug/L	-1	10	
Calcium	A	0.1141	0.0217	10000	9857	ug/L	-1	10	
Lead	A	0.7721	0.6393	100.0	98.25	ug/L	-2	10	
Magnesium	A	0.5954	0.5385	10000	9971	ug/L	0	10	
Molybdenum	A	0.2558	0.2286	100.0	96.41	ug/L	-4	10	
Potassium	A	1.8988	0.7223	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4120	100.0	103.9	ug/L	4	10	
Thallium	A	1.1178	0.9042	50.00	47.82	ug/L	-4	10	
Arsenic	E	0.6946	0.6460	100.0	98.79	ug/L	-1	10	
Chromium	E	4.2721	3.2867	100.0	99.59	ug/L	0	10	
Cobalt	E	5.6878	5.1088	100.0	98.63	ug/L	-1	10	
Copper	E	12.730	7.6466	100.0	95.77	ug/L	-4	10	
Manganese	E	1.9519	1.6359	100.0	97.62	ug/L	-2	10	
Nickel	E	1.8551	1.4041	100.0	98.84	ug/L	-1	10	
Sodium	E	1.4736	0.6613	10000	9580	ug/L	-4	10	
Vanadium	E	3.2665	2.5532	100.0	98.51	ug/L	-1	10	
Zinc	E	5.8642	1.1318	100.0	96.46	ug/L	-4	10	
Iron	H	1.0653	0.8954	10000	9657	ug/L	-3	10	
Selenium	H	0.1598	0.1445	100.0	97.41	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	877950	-4.22
Scandium	A	1517730	1386999	-8.61
Scandium	E	45344	41993	-7.39
Scandium	H	422488	407840	-3.47
Germanium	H	101123	93340	-7.70
Germanium	E	22511	20616	-8.42
Indium	A	1832636	1594481	-13.00
Bismuth	A	1296680	1064061	-17.94
Yttrium	A	1904354	1696157	-10.93
Terbium	A	2253622	2011171	-10.76

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941184 File : c09q0184 Time : 10-MAR-2007 09:41
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6482	10000	10120	ug/L	1	10	
Antimony	A	0.3359	0.3123	100.0	95.62	ug/L	-4	10	
Barium	A	0.1380	0.0927	100.0	100.3	ug/L	0	10	
Beryllium	A	0.3650	0.3425	100.0	94.36	ug/L	-6	10	
Cadmium	A	0.0932	0.0877	100.0	98.40	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	10010	ug/L	0	10	
Lead	A	0.7721	0.6466	100.0	99.38	ug/L	-1	10	
Magnesium	A	0.5954	0.5479	10000	10140	ug/L	1	10	
Molybdenum	A	0.2558	0.2280	100.0	96.17	ug/L	-4	10	
Potassium	A	1.8988	0.7311	10000	10250	ug/L	3	10	
Silver	A	0.4101	0.4091	100.0	103.2	ug/L	3	10	
Thallium	A	1.1178	0.9135	50.00	48.32	ug/L	-3	10	
Arsenic	E	0.6946	0.6497	100.0	99.35	ug/L	-1	10	
Chromium	E	4.2721	3.2258	100.0	97.74	ug/L	-2	10	
Cobalt	E	5.6878	5.0421	100.0	97.34	ug/L	-3	10	
Copper	E	12.730	7.6852	100.0	96.26	ug/L	-4	10	
Manganese	E	1.9519	1.6235	100.0	96.88	ug/L	-3	10	
Nickel	E	1.8551	1.3739	100.0	96.72	ug/L	-3	10	
Sodium	E	1.4736	0.6556	10000	9497	ug/L	-5	10	
Vanadium	E	3.2665	2.5359	100.0	97.84	ug/L	-2	10	
Zinc	E	5.8642	1.1397	100.0	97.14	ug/L	-3	10	
Iron	H	1.0653	0.8807	10000	9498	ug/L	-5	10	
Selenium	H	0.1598	0.1440	100.0	97.11	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	860804	-6.09
Scandium	A	1517730	1351596	-10.95
Scandium	E	45344	42354	-6.59
Scandium	H	422488	401343	-5.00
Germanium	H	101123	91432	-9.58
Germanium	E	22511	20368	-9.52
Indium	A	1832636	1567188	-14.48
Bismuth	A	1296680	1025975	-20.88
Yttrium	A	1904354	1661744	-12.74
Terbium	A	2253622	1953400	-13.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941199 File : c09q0199 Time : 10-MAR-2007 11:02
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6474	10000	10110	ug/L	1	10	
Antimony	A	0.3359	0.3139	100.0	96.12	ug/L	-4	10	
Barium	A	0.1380	0.0933	100.0	101.0	ug/L	1	10	
Beryllium	A	0.3650	0.3363	100.0	92.66	ug/L	-7	10	
Cadmium	A	0.0932	0.0890	100.0	99.82	ug/L	0	10	
Calcium	A	0.1141	0.0220	10000	10000	ug/L	0	10	
Lead	A	0.7721	0.6465	100.0	99.35	ug/L	-1	10	
Magnesium	A	0.5954	0.5405	10000	10010	ug/L	0	10	
Molybdenum	A	0.2558	0.2296	100.0	96.84	ug/L	-3	10	
Potassium	A	1.8988	0.7303	10000	10240	ug/L	2	10	
Silver	A	0.4101	0.4118	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.9148	50.00	48.38	ug/L	-3	10	
Arsenic	E	0.6946	0.6505	100.0	99.48	ug/L	-1	10	
Chromium	E	4.2721	3.2322	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0229	100.0	96.97	ug/L	-3	10	
Copper	E	12.730	7.6274	100.0	95.53	ug/L	-4	10	
Manganese	E	1.9519	1.6365	100.0	97.66	ug/L	-2	10	
Nickel	E	1.8551	1.3697	100.0	96.42	ug/L	-4	10	
Sodium	E	1.4736	0.6520	10000	9444	ug/L	-6	10	
Vanadium	E	3.2665	2.5242	100.0	97.39	ug/L	-3	10	
Zinc	E	5.8642	1.1393	100.0	97.10	ug/L	-3	10	
Iron	H	1.0653	0.9014	10000	9721	ug/L	-3	10	
Selenium	H	0.1598	0.1438	100.0	96.97	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	864908	-5.64
Scandium	A	1517730	1350162	-11.04
Scandium	E	45344	42695	-5.84
Scandium	H	422488	393397	-6.89
Germanium	H	101123	91024	-9.99
Germanium	E	22511	20572	-8.61
Indium	A	1832636	1550003	-15.42
Bismuth	A	1296680	1023495	-21.07
Yttrium	A	1904354	1653281	-13.18
Terbium	A	2253622	1946954	-13.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941224 File : c09q0224 Time : 10-MAR-2007 13:17
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6411	10000	10010	ug/L	0	10	
Antimony	A	0.3359	0.3184	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0936	100.0	101.3	ug/L	1	10	
Beryllium	A	0.3650	0.3456	100.0	95.20	ug/L	-5	10	
Cadmium	A	0.0932	0.0885	100.0	99.34	ug/L	-1	10	
Calcium	A	0.1141	0.0218	10000	9909	ug/L	-1	10	
Lead	A	0.7721	0.6388	100.0	98.18	ug/L	-2	10	
Magnesium	A	0.5954	0.5365	10000	9933	ug/L	-1	10	
Molybdenum	A	0.2558	0.2299	100.0	96.98	ug/L	-3	10	
Potassium	A	1.8988	0.7272	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4129	100.0	104.1	ug/L	4	10	
Thallium	A	1.1178	0.8941	50.00	47.29	ug/L	-5	10	
Arsenic	E	0.6946	0.6460	100.0	98.78	ug/L	-1	10	
Chromium	E	4.2721	3.1376	100.0	95.06	ug/L	-5	10	
Cobalt	E	5.6878	4.8490	100.0	93.61	ug/L	-6	10	
Copper	E	12.730	7.4539	100.0	93.35	ug/L	-7	10	
Manganese	E	1.9519	1.5907	100.0	94.92	ug/L	-5	10	
Nickel	E	1.8551	1.3302	100.0	93.64	ug/L	-6	10	
Sodium	E	1.4736	0.6290	10000	9110	ug/L	-9	10	
Vanadium	E	3.2665	2.4374	100.0	94.03	ug/L	-6	10	
Zinc	E	5.8642	1.1170	100.0	95.18	ug/L	-5	10	
Iron	H	1.0653	0.8878	10000	9575	ug/L	-4	10	
Selenium	H	0.1598	0.1436	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	837171	-8.67
Scandium	A	1517730	1374157	-9.46
Scandium	E	45344	44698	-1.43
Scandium	H	422488	402269	-4.79
Germanium	H	101123	93003	-8.03
Germanium	E	22511	21285	-5.44
Indium	A	1832636	1584817	-13.52
Bismuth	A	1296680	1070250	-17.46
Yttrium	A	1904354	1683860	-11.58
Terbium	A	2253622	2002425	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941236 File : c09q0236 Time : 10-MAR-2007 14:21
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6402	10000	9995	ug/L	0	10	
Antimony	A	0.3359	0.3123	100.0	95.63	ug/L	-4	10	
Barium	A	0.1380	0.0938	100.0	101.6	ug/L	2	10	
Beryllium	A	0.3650	0.3433	100.0	94.58	ug/L	-5	10	
Cadmium	A	0.0932	0.0876	100.0	98.34	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9944	ug/L	-1	10	
Lead	A	0.7721	0.6340	100.0	97.44	ug/L	-3	10	
Magnesium	A	0.5954	0.5392	10000	9983	ug/L	0	10	
Molybdenum	A	0.2558	0.2285	100.0	96.39	ug/L	-4	10	
Potassium	A	1.8988	0.7249	10000	10170	ug/L	2	10	
Silver	A	0.4101	0.4089	100.0	103.1	ug/L	3	10	
Thallium	A	1.1178	0.8683	50.00	45.92	ug/L	-8	10	
Arsenic	E	0.6946	0.6566	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.1900	100.0	96.65	ug/L	-3	10	
Cobalt	E	5.6878	4.9703	100.0	95.96	ug/L	-4	10	
Copper	E	12.730	7.4873	100.0	93.77	ug/L	-6	10	
Manganese	E	1.9519	1.6423	100.0	98.00	ug/L	-2	10	
Nickel	E	1.8551	1.3516	100.0	95.15	ug/L	-5	10	
Sodium	E	1.4736	0.6475	10000	9378	ug/L	-6	10	
Vanadium	E	3.2665	2.5091	100.0	96.81	ug/L	-3	10	
Zinc	E	5.8642	1.1323	100.0	96.49	ug/L	-4	10	
Iron	H	1.0653	0.9100	10000	9814	ug/L	-2	10	
Selenium	H	0.1598	0.1443	100.0	97.30	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	843785	-7.95
Scandium	A	1517730	1361270	-10.31
Scandium	E	45344	44250	-2.41
Scandium	H	422488	395586	-6.37
Germanium	H	101123	91504	-9.51
Germanium	E	22511	21253	-5.59
Indium	A	1832636	1578633	-13.86
Bismuth	A	1296680	1061930	-18.10
Yttrium	A	1904354	1668555	-12.38
Terbium	A	2253622	1965560	-12.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941018 File : c09q0018 Time : 09-MAR-2007 18:44
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01955]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01321]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005369]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	981613	7.09
Scandium	A	1517730	1476487	-2.72
Scandium	E	45344	48015	5.89
Scandium	H	422488	440455	4.25
Germanium	H	101123	102714	1.57
Germanium	E	22511	22945	1.93
Indium	A	1832636	1719452	-6.18
Bismuth	A	1296680	1139959	-12.09
Yttrium	A	1904354	1797451	-5.61
Terbium	A	2253622	2047526	-9.15

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67098941018

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941049 File : c09q0049 Time : 09-MAR-2007 21:40
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02630]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03014]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	960350	4.77
Scandium	A	1517730	1481310	-2.40
Scandium	E	45344	46876	3.38
Scandium	H	422488	431598	2.16
Germanium	H	101123	100676	-0.44
Germanium	E	22511	22327	-0.82
Indium	A	1832636	1735890	-5.28
Bismuth	A	1296680	1191218	-8.13
Yttrium	A	1904354	1834279	-3.68
Terbium	A	2253622	2106807	-6.51

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941070 File : c09q0070 Time : 09-MAR-2007 23:32
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03474]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02445]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02347]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01432]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.09417]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	972695	6.12
Scandium	A	1517730	1482231	-2.34
Scandium	E	45344	48846	7.72
Scandium	H	422488	439316	3.98
Germanium	H	101123	101199	0.08
Germanium	E	22511	23094	2.59
Indium	A	1832636	1729036	-5.65
Bismuth	A	1296680	1149784	-11.33
Yttrium	A	1904354	1823495	-4.25
Terbium	A	2253622	2056781	-8.73

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67098941070

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941086 File : c09q0086 Time : 10-MAR-2007 00:57
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01420]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01617]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06679]	0.1000	0.01127	ug/L	!ib
Iron	H	[6.752]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05645]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	956334	4.33
Scandium	A	1517730	1439257	-5.17
Scandium	E	45344	47503	4.76
Scandium	H	422488	447019	5.81
Germanium	H	101123	103188	2.04
Germanium	E	22511	22596	0.38
Indium	A	1832636	1677042	-8.49
Bismuth	A	1296680	1137040	-12.31
Yttrium	A	1904354	1765145	-7.31
Terbium	A	2253622	2002557	-11.14

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941112 File : c09q0112
Cal : 67098941001 Caldate: 09-MAR-2007
IDF : 1.0
Time : 10-MAR-2007 03:15

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.304]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01359]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002636]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	[8.887]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03640]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	924797	0.89
Scandium	A	1517730	1376821	-9.28
Scandium	E	45344	43697	-3.63
Scandium	H	422488	415130	-1.74
Germanium	H	101123	96819	-4.26
Germanium	E	22511	21189	-5.87
Indium	A	1832636	1642742	-10.36
Bismuth	A	1296680	1174900	-9.39
Yttrium	A	1904354	1721832	-9.58
Terbium	A	2253622	2056685	-8.74

!=warning ib=instrument blank

67098941112

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941131 File : c09q0131 Time : 10-MAR-2007 04:58
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.272]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1030	0.1000	0	ug/L	ib ***
Zinc	E	[0.01550]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	931971	1.67
Scandium	A	1517730	1401473	-7.66
Scandium	E	45344	44948	-0.87
Scandium	H	422488	427514	1.19
Germanium	H	101123	99355	-1.75
Germanium	E	22511	21712	-3.55
Indium	A	1832636	1658452	-9.50
Bismuth	A	1296680	1156128	-10.84
Yttrium	A	1904354	1730428	-9.13
Terbium	A	2253622	2037464	-9.59

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941143 File : c09q0143
Cal : 67098941001 Caldate: 09-MAR-2007

IDF : 1.0
Time : 10-MAR-2007 06:02

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005149]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1026	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01709]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	934611	1.96
Scandium	A	1517730	1381267	-8.99
Scandium	E	45344	45098	-0.54
Scandium	H	422488	405569	-4.00
Germanium	H	101123	95993	-5.07
Germanium	E	22511	21660	-3.78
Indium	A	1832636	1649358	-10.00
Bismuth	A	1296680	1134689	-12.49
Yttrium	A	1904354	1705681	-10.43
Terbium	A	2253622	2028289	-10.00

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67098941143

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941168 File : c09q0168 Time : 10-MAR-2007 08:16
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006930]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01414]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.754]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	907910	-0.95
Scandium	A	1517730	1373491	-9.50
Scandium	E	45344	43250	-4.62
Scandium	H	422488	410259	-2.89
Germanium	H	101123	95168	-5.89
Germanium	E	22511	20961	-6.88
Indium	A	1832636	1620162	-11.59
Bismuth	A	1296680	1145144	-11.69
Yttrium	A	1904354	1687177	-11.40
Terbium	A	2253622	2010187	-10.80

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941186 File : c09q0186 Time : 10-MAR-2007 09:52
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03559]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.192]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.831]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008371]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	911932	-0.51
Scandium	A	1517730	1387391	-8.59
Scandium	E	45344	44235	-2.45
Scandium	H	422488	414992	-1.77
Germanium	H	101123	96866	-4.21
Germanium	E	22511	21633	-3.90
Indium	A	1832636	1653626	-9.77
Bismuth	A	1296680	1169511	-9.81
Yttrium	A	1904354	1707120	-10.36
Terbium	A	2253622	2039560	-9.50

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67098941186

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941201 File : c09q0201 Time : 10-MAR-2007 11:13
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009775]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	887722	-3.15
Scandium	A	1517730	1370772	-9.68
Scandium	E	45344	45085	-0.57
Scandium	H	422488	410915	-2.74
Germanium	H	101123	96368	-4.70
Germanium	E	22511	21710	-3.56
Indium	A	1832636	1630628	-11.02
Bismuth	A	1296680	1121425	-13.52
Yttrium	A	1904354	1710361	-10.19
Terbium	A	2253622	1982461	-12.03

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941227 File : c09q0227 Time : 10-MAR-2007 13:33
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.264]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	868425	-5.26
Scandium	A	1517730	1350039	-11.05
Scandium	E	45344	44352	-2.19
Scandium	H	422488	385028	-8.87
Germanium	H	101123	90590	-10.42
Germanium	E	22511	21655	-3.80
Indium	A	1832636	1609789	-12.16
Bismuth	A	1296680	1100157	-15.16
Yttrium	A	1904354	1653506	-13.17
Terbium	A	2253622	1965147	-12.80

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941239 File : c09q0239 Time : 10-MAR-2007 14:38
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.682]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	871768	-4.89
Scandium	A	1517730	1336030	-11.97
Scandium	E	45344	45051	-0.65
Scandium	H	422488	390025	-7.68
Germanium	H	101123	92251	-8.77
Germanium	E	22511	21613	-3.99
Indium	A	1832636	1593414	-13.05
Bismuth	A	1296680	1085987	-16.25
Yttrium	A	1904354	1648046	-13.46
Terbium	A	2253622	1958145	-13.11

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941020 File : c09q0020 Time : 09-MAR-2007 18:55
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04119]	0.1000	ug/L	
Barium	A	0.8910	0.1000	ug/L	
Beryllium	A	[0.01908]	0.1000	ug/L	
Cadmium	A	1.182	0.1000	ug/L	
Lead	A	0.4316	0.1000	ug/L	
Silver	A	0.1913	0.1000	ug/L	
Thallium	A	[0.01043]	0.05000	ug/L	
Arsenic	E	0.2169	0.1000	ug/L	
Chromium	E	1.352	0.1000	ug/L	
Cobalt	E	0.1939	0.1000	ug/L	
Copper	E	1.203	0.1000	ug/L	
Manganese	E	0.7121	0.1000	ug/L	
Nickel	E	1.102	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.186	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92200	ug/L	92
Calcium	A	300000	283800	ug/L	95
Magnesium	A	100000	87740	ug/L	88
Molybdenum	A	2000	1904	ug/L	95
Potassium	A	100000	93880	ug/L	94
Sodium	E	250000	233700	ug/L	93
Iron	H	250000	227000	ug/L	91

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	648481	-29.25
Scandium	A	1517730	1232034	-18.82
Scandium	E	45344	37927	-16.36
Scandium	H	422488	382036	-9.57
Germanium	H	101123	82401	-18.51
Germanium	E	22511	18306	-18.68
Indium	A	1832636	1405228	-23.32
Bismuth	A	1296680	853887	-34.15
Yttrium	A	1904354	1563770	-17.88
Terbium	A	2253622	1834242	-18.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941021 File : c09q0021 Time : 09-MAR-2007 19:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100600	ug/L	1		
Cadmium	A	100.0	104.3	ug/L	4	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	96430	ug/L	-4		
Molybdenum	A	2000	2117	ug/L	6		
Potassium	A	100000	104600	ug/L	5		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	112.5	ug/L	13	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	204.3	ug/L	2	20	
Copper	E	200.0	189.2	ug/L	-5	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	198.2	ug/L	-1	20	
Sodium	E	250000	264600	ug/L	6		
Vanadium	E	200.0	219.0	ug/L	10	20	
Zinc	E	100.0	95.94	ug/L	-4	20	
Iron	H	250000	255700	ug/L	2		
Selenium	H	100.0	104.2	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	360675	-14.63
Scandium	A	1517730	1155038	-23.90
Scandium	E	45344	34371	-24.20
Germanium	H	101123	78650	-22.22
Germanium	E	22511	16695	-25.83
Indium	A	1832636	1377995	-24.81
Yttrium	A	1904354	1538086	-19.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941089 File : c09q0089 Time : 10-MAR-2007 01:13
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03290]	0.1000	ug/L	
Barium	A	0.9061	0.1000	ug/L	
Beryllium	A	[0.004327]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4286	0.1000	ug/L	
Silver	A	0.1833	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1964	0.1000	ug/L	
Chromium	E	1.316	0.1000	ug/L	
Cobalt	E	0.1764	0.1000	ug/L	
Copper	E	1.164	0.1000	ug/L	
Manganese	E	0.7559	0.1000	ug/L	
Nickel	E	1.117	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.161	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93020	ug/L	93
Calcium	A	300000	284500	ug/L	95
Magnesium	A	100000	88550	ug/L	89
Molybdenum	A	2000	1864	ug/L	93
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	233900	ug/L	94
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	623862	-31.94
Scandium	A	1517730	1236772	-18.51
Scandium	E	45344	39129	-13.71
Scandium	H	422488	393799	-6.79
Germanium	H	101123	84184	-16.75
Germanium	E	22511	18594	-17.40
Indium	A	1832636	1368055	-25.35
Bismuth	A	1296680	819714	-36.78
Yttrium	A	1904354	1557710	-18.20
Terbium	A	2253622	1742704	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941090 File : c09q0090 Time : 10-MAR-2007 01:19
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99800	ug/L	0		
Cadmium	A	100.0	100.9	ug/L	1	20	
Calcium	A	300000	317200	ug/L	6		
Magnesium	A	100000	94790	ug/L	-5		
Molybdenum	A	2000	2061	ug/L	3		
Potassium	A	100000	103000	ug/L	3		
Silver	A	50.00	45.27	ug/L	-9	20	
Arsenic	E	100.0	110.8	ug/L	11	20	
Chromium	E	200.0	213.7	ug/L	7	20	
Cobalt	E	200.0	201.6	ug/L	1	20	
Copper	E	200.0	189.5	ug/L	-5	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	196.9	ug/L	-2	20	
Sodium	E	250000	266900	ug/L	7		
Vanadium	E	200.0	218.5	ug/L	9	20	
Zinc	E	100.0	95.65	ug/L	-4	20	
Iron	H	250000	250100	ug/L	0		
Selenium	H	100.0	103.7	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	377102	-10.74
Scandium	A	1517730	1167169	-23.10
Scandium	E	45344	35564	-21.57
Germanium	H	101123	80404	-20.49
Germanium	E	22511	17120	-23.95
Indium	A	1832636	1376611	-24.88
Yttrium	A	1904354	1543286	-18.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941146 File : c09q0146 Time : 10-MAR-2007 06:18
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03552]	0.1000	ug/L	
Barium	A	0.8836	0.1000	ug/L	
Beryllium	A	[0.004092]	0.1000	ug/L	
Cadmium	A	1.389	0.1000	ug/L	
Lead	A	0.4272	0.1000	ug/L	
Silver	A	0.1743	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1982	0.1000	ug/L	
Chromium	E	1.308	0.1000	ug/L	
Cobalt	E	0.1737	0.1000	ug/L	
Copper	E	1.218	0.1000	ug/L	
Manganese	E	0.7907	0.1000	ug/L	
Nickel	E	1.129	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.209	0.1000	ug/L	
Selenium	H	[0.04071]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91160	ug/L	91
Calcium	A	300000	280800	ug/L	94
Magnesium	A	100000	86910	ug/L	87
Molybdenum	A	2000	1830	ug/L	92
Potassium	A	100000	93540	ug/L	94
Sodium	E	250000	229700	ug/L	92
Iron	H	250000	221000	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	609904	-33.46
Scandium	A	1517730	1241471	-18.20
Scandium	E	45344	39241	-13.46
Scandium	H	422488	393129	-6.95
Germanium	H	101123	83730	-17.20
Germanium	E	22511	18443	-18.07
Indium	A	1832636	1380517	-24.67
Bismuth	A	1296680	834170	-35.67
Yttrium	A	1904354	1579303	-17.07
Terbium	A	2253622	1770798	-21.42

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941147 File : c09q0147 Time : 10-MAR-2007 06:23
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97750	ug/L	-2		
Cadmium	A	100.0	99.56	ug/L	0	20	
Calcium	A	300000	314400	ug/L	5		
Magnesium	A	100000	92990	ug/L	-7		
Molybdenum	A	2000	2025	ug/L	1		
Potassium	A	100000	102300	ug/L	2		
Silver	A	50.00	44.82	ug/L	-10	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	212.3	ug/L	6	20	
Cobalt	E	200.0	201.7	ug/L	1	20	
Copper	E	200.0	189.0	ug/L	-6	20	
Manganese	E	200.0	202.3	ug/L	1	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	258400	ug/L	3		
Vanadium	E	200.0	217.7	ug/L	9	20	
Zinc	E	100.0	94.73	ug/L	-5	20	
Iron	H	250000	246800	ug/L	-1		
Selenium	H	100.0	105.0	ug/L	5	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	373132	-11.68
Scandium	A	1517730	1174322	-22.63
Scandium	E	45344	35245	-22.27
Germanium	H	101123	78759	-22.12
Germanium	E	22511	16937	-24.76
Indium	A	1832636	1378645	-24.77
Yttrium	A	1904354	1545629	-18.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941204 File : c09q0204 Time : 10-MAR-2007 11:29
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03299]	0.1000	ug/L	
Barium	A	0.9235	0.1000	ug/L	
Beryllium	A	[0.01135]	0.1000	ug/L	
Cadmium	A	1.459	0.1000	ug/L	
Lead	A	0.4326	0.1000	ug/L	
Silver	A	0.1740	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2265	0.1000	ug/L	
Chromium	E	1.284	0.1000	ug/L	
Cobalt	E	0.1813	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.7650	0.1000	ug/L	
Nickel	E	1.079	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.106	0.1000	ug/L	
Selenium	H	[0.005864]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93090	ug/L	93
Calcium	A	300000	285200	ug/L	95
Magnesium	A	100000	88160	ug/L	88
Molybdenum	A	2000	1839	ug/L	92
Potassium	A	100000	94450	ug/L	94
Sodium	E	250000	222900	ug/L	89
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	599910	-34.55
Scandium	A	1517730	1191263	-21.51
Scandium	E	45344	39252	-13.44
Scandium	H	422488	370202	-12.38
Germanium	H	101123	79661	-21.22
Germanium	E	22511	18466	-17.97
Indium	A	1832636	1345356	-26.59
Bismuth	A	1296680	827534	-36.18
Yttrium	A	1904354	1528690	-19.73
Terbium	A	2253622	1742765	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941205 File : c09q0205 Time : 10-MAR-2007 11:34
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99200	ug/L	-1		
Cadmium	A	100.0	100.8	ug/L	1	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93600	ug/L	-6		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	103900	ug/L	4		
Silver	A	50.00	45.81	ug/L	-8	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	199.3	ug/L	0	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	201.8	ug/L	1	20	
Nickel	E	200.0	192.6	ug/L	-4	20	
Sodium	E	250000	257100	ug/L	3		
Vanadium	E	200.0	216.5	ug/L	8	20	
Zinc	E	100.0	92.80	ug/L	-7	20	
Iron	H	250000	244900	ug/L	-2		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	357716	-15.33
Scandium	A	1517730	1134866	-25.23
Scandium	E	45344	35275	-22.21
Germanium	H	101123	76421	-24.43
Germanium	E	22511	17153	-23.80
Indium	A	1832636	1337539	-27.02
Yttrium	A	1904354	1493682	-21.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941241 File : c09q0241 Time : 10-MAR-2007 14:48
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04069]	0.1000	ug/L	
Barium	A	0.9376	0.1000	ug/L	
Beryllium	A	[0.01409]	0.1000	ug/L	
Cadmium	A	1.455	0.1000	ug/L	
Lead	A	0.4407	0.1000	ug/L	
Silver	A	0.1966	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2228	0.1000	ug/L	
Chromium	E	1.292	0.1000	ug/L	
Cobalt	E	0.1760	0.1000	ug/L	
Copper	E	1.153	0.1000	ug/L	
Manganese	E	0.7582	0.1000	ug/L	
Nickel	E	1.069	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.073	0.1000	ug/L	
Selenium	H	[0.01115]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90460	ug/L	90
Calcium	A	300000	281600	ug/L	94
Magnesium	A	100000	86780	ug/L	87
Molybdenum	A	2000	1848	ug/L	92
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	225600	ug/L	90
Iron	H	250000	221300	ug/L	89

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	581542	-36.56
Scandium	A	1517730	1188280	-21.71
Scandium	E	45344	38831	-14.36
Scandium	H	422488	360357	-14.71
Germanium	H	101123	77698	-23.16
Germanium	E	22511	18316	-18.63
Indium	A	1832636	1350980	-26.28
Bismuth	A	1296680	805630	-37.87
Yttrium	A	1904354	1518776	-20.25
Terbium	A	2253622	1735412	-22.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941242 File : c09q0242 Time : 10-MAR-2007 14:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98070	ug/L	-2		
Cadmium	A	100.0	102.0	ug/L	2	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93340	ug/L	-7		
Molybdenum	A	2000	2063	ug/L	3		
Potassium	A	100000	102700	ug/L	3		
Silver	A	50.00	45.92	ug/L	-8	20	
Arsenic	E	100.0	110.5	ug/L	11	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	198.5	ug/L	-1	20	
Copper	E	200.0	183.1	ug/L	-8	20	
Manganese	E	200.0	203.3	ug/L	2	20	
Nickel	E	200.0	191.8	ug/L	-4	20	
Sodium	E	250000	255700	ug/L	2		
Vanadium	E	200.0	216.4	ug/L	8	20	
Zinc	E	100.0	94.32	ug/L	-6	20	
Iron	H	250000	248400	ug/L	-1		
Selenium	H	100.0	103.9	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	341093	-19.27
Scandium	A	1517730	1130423	-25.52
Scandium	E	45344	35247	-22.27
Germanium	H	101123	73516	-27.30
Germanium	E	22511	17085	-24.10
Indium	A	1832636	1317155	-28.13
Yttrium	A	1904354	1464552	-23.09

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07
Sequence : MET06 c09q0

Reference: c09q0004
Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	916634	1517730	45344	422488	101123	22511	1832636	1296680	1904354	2253622
		LOWER LIMIT	274990	455319	13603	126746	30337	6753	549791	389004	571306	676087
		UPPER LIMIT	1099961	1821276	54413	506985	121347	27013	2199163	1556016	2285225	2704346
018	ICB		981613	1476487	48015	440455	102714	22945	1719452	1139959	1797451	2047526
020	ICSA		648481	1232034	37927	382036	82401	18306	1405228	853887	1563770	1834242
021	ICSAB		582795	1155038	34371	360675	78650	16695	1377995	852495	1538086	1858666
026	BLANK	QC378336	863017	1374446	40965	392999	94008	21107	1741851	1286874	1773795	2195119
027	BS	QC378337	903666	1450057	41163	388071	92268	20779	1801605	1302872	1850641	2246110
028	BSD	QC378338	891566	1424703	42379	393068	92980	21472	1743629	1260863	1790909	2194284
031	BLANK	QC378414	773387	1276190	36872	361754	96338	21188	1651727	1282988	1687273	2200427
032	BLANK	QC378443	789285	1298089	37453	363119	94068	20836	1700706	1299604	1726652	2223508
033	MSS	193165-002	963383	1545789	46469	430915	98342	22091	1775714	1244051	1946540	2199596
034	SER	QC378341	942026	1458038	45757	418392	97918	22288	1725568	1217037	1826667	2130441
035	MS	QC378339	936660	1499541	47583	427121	96530	22532	1715638	1173677	1889410	2105941
046	CCV		905174	1441531	45193	420497	96743	21533	1642773	1088318	1748927	2043585
049	CCB		960350	1481310	46876	431598	100676	22327	1735890	1191213	1834279	2106807
055	PDS	QC378342	932148	1530176	46941	434367	96736	21744	1669597	1089202	1883003	2066072
056	SAMPLE	193165-001	952322	1503979	48239	437535	99049	22729	1705989	1152210	1870686	2074860
057	SAMPLE	193165-003	955852	1538633	48962	454552	102101	22982	1713938	1125330	1917433	2039358
058	SAMPLE	193165-004	967423	1611432	49819	451634	101145	23117	1771979	1175909	1986668	2109743
059	SAMPLE	193165-005	958524	1547831	50371	454257	101846	23535	1725335	1146647	1912778	2053880
060	SAMPLE	193165-006	998493	1589246	50471	451513	100990	23296	1742402	1149353	1949706	2087054
061	SAMPLE	193165-007	985003	1554322	50500	445054	100327	23450	1728953	1154781	1938419	2071529
062	SAMPLE	193165-008	966327	1544798	49344	436334	99819	23055	1711720	1122555	1888204	2043452
063	SAMPLE	193165-009	974905	1554277	50365	450694	100022	22841	1699669	1118344	1920211	2016418
068	CCV		913999	1455726	46412	435589	100000	21916	1638663	1053580	1768625	2008550
070	CCB		972695	1482231	48846	439316	101199	23094	1729036	1149784	1823495	2056781
073	SAMPLE	193165-010	972938	1575158	50135	449325	100503	23182	1720829	1157854	1929263	2050582
074	SAMPLE	193165-011	975873	1542417	50568	452792	102354	23468	1694315	1119077	1918120	2037129
075	SAMPLE	193202-001	931098	1425498	46924	441100	95914	21109	1540175	988222	1664166	1919982
076	SAMPLE	193202-002	892840	1408129	46358	442730	95059	20576	1514132	966987	1645724	1892526
077	SAMPLE	193202-003	884224	1409245	46402	436810	94649	21024	1528446	971327	1647355	1882595
078	SAMPLE	193202-004	979622	1536923	50318	455917	98767	22488	1643810	1056711	1884832	1984488
079	SAMPLE	193284-002	985109	1563781	50390	461985	99286	22565	1666916	1120661	1902848	2022684
084	CCV		906941	1427826	46819	433588	98832	21976	1596458	999596	1745906	1966364
086	CCB		956334	1439257	47503	447019	103188	22596	1677042	1137040	1765145	2002557
089	ICSA		623862	1236772	39129	393799	84184	18594	1368055	819714	1557710	1742704
090	ICSAB		561457	1167169	35564	377102	80404	17120	1376611	843178	1543286	1807188
095	BS	QC378415	951663	1540367	46965	435249	99965	22851	1765502	1196154	1891418	2190349
096	BSD	QC378416	972110	1564246	48675	450177	102955	23095	1775978	1174581	1907655	2180968
098	MSS	193253-001	900374	1470155	44821	426156	98578	22048	1696248	1112262	1798822	2090852
099	SER	QC378419	914606	1460055	45132	432481	101180	22233	1727773	1174234	1788889	2087437
100	MS	QC378417	895098	1430428	44507	428004	99395	21837	1649439	1121106	1760805	2075003
101	MSD	QC378418	885257	1434266	45009	427402	99071	21845	1667025	1121793	1753445	2057510
102	PDS	QC378420	847821	1411196	43324	423901	96610	20891	1630536	1085080	1742969	2056899
103	SAMPLE	193187-001	918129	1435477	44353	420441	99735	21884	1725870	1224680	1776904	2136736
108	CCV		902889	1401113	42563	416586	94956	20421	1614720	1141281	1722254	2048074
112	CCB		924797	1376821	43697	415130	96819	21189	1642742	1174900	1721832	2056685
113	SAMPLE	193187-002	915561	1411896	44401	418141	97508	21510	1638461	1154585	1730795	2048808
114	SAMPLE	193187-003	933709	1422558	44410	429762	100039	21633	1664179	1200909	1728641	2057104
117	SAMPLE	193199-001	929726	1419568	44602	429071	99163	21549	1664107	1146977	1737917	2052217

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07
Sequence : MET06 c09q0

Reference: c09q0004
Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
118	SAMPLE	193199-002	932691	1390850	43974	431171	99853	21510	1655169	1172327	1691733	2046235
119	SAMPLE	193199-003	936944	1414304	44140	417129	96955	21489	1648685	1155529	1705058	2032738
120	SAMPLE	193199-001	946352	1422379	45055	421941	97812	21548	1648097	1153561	1722060	2049120
121	SAMPLE	193199-002	942567	1433867	44565	421458	98054	21584	1663931	1163545	1699936	2039926
122	SAMPLE	193199-003	952437	1446828	45382	430507	100087	21696	1676750	1175834	1739698	2073121
123	SAMPLE	193205-001	949568	1431059	45483	436405	101828	22282	1667530	1148422	1726428	2053644
124	SAMPLE	193205-001	948968	1437818	44929	433466	100551	22049	1681861	1165414	1721645	2079978
129	CCV		892003	1400371	43765	424248	96829	20956	1610854	1101593	1703888	2032098
131	CCB		931971	1401473	44948	427514	99355	21712	1658452	1156128	1730428	2037464
134	SAMPLE	193243-001	947965	1433971	46256	435667	100466	22327	1684774	1162270	1760832	2067419
135	SAMPLE	193243-002	957304	1423797	45498	429285	99618	21958	1663899	1147299	1721760	2048812
136	SAMPLE	193253-002	917746	1414906	45173	432833	99044	21785	1603894	1074395	1699662	1987469
141	CCV		902061	1405467	44656	428923	98288	21386	1598338	1083588	1727094	2021728
143	CCB		934611	1381267	45098	405569	95993	21660	1649358	1134689	1705681	2028289
146	ICSA		609904	1241471	39241	393129	83730	18443	1380517	834170	1579303	1770798
147	ICSAB		537186	1174322	35245	373132	78759	16937	1378645	849147	1545629	1807773
152	BS	QC378444	774667	1349726	37917	375806	90392	19624	1623415	1150738	1732090	2155849
153	BSD	QC378445	780202	1356481	38136	372594	87668	19413	1624802	1134141	1732764	2106738
155	MSS	193217-011	876175	1397755	42642	406502	96903	21306	1693493	1149050	1734483	2067021
156	SER	QC378448	910334	1423010	43940	418688	98954	21933	1713381	1169658	1770301	2086307
157	MS	QC378446	878725	1398327	42721	405316	94597	20828	1637704	1135399	1734896	2057123
158	MSD	QC378447	879618	1401030	42650	400368	94637	21009	1649654	1146196	1709242	2046195
159	PDS	QC378449	848479	1389680	41278	400627	92227	20273	1608487	1054667	1714680	2038945
160	MSS	193217-021	874711	1412957	43902	412116	96445	21443	1658392	1135002	1733128	2038837
165	CCV		877950	1386999	41993	407840	93340	20616	1594481	1064061	1696157	2011171
168	CCB		907910	1373491	43250	410259	95168	20961	1620162	1145144	1687177	2010187
170	MS	QC378508	912084	1422763	43430	389480	92155	21390	1645528	1128938	1729205	2048852
171	MSD	QC378509	902677	1458695	43230	412918	95654	21056	1677263	1145594	1768214	2092280
172	SAMPLE	193055-023	914402	1434056	44367	419669	97864	21640	1641566	1125705	1733193	2039891
173	SAMPLE	193137-005	916075	1399875	43942	414996	97876	21409	1631266	1130292	1704359	2029941
174	SAMPLE	193217-010	903153	1397147	46164	402020	94234	22237	1623538	1138800	1686493	2016948
175	SAMPLE	193217-012	929033	1369759	42723	398156	93314	21027	1614797	1130902	1667710	1999508
176	SAMPLE	193217-014	928068	1419487	43460	401097	93310	21296	1651660	1154989	1723765	2060619
177	SAMPLE	193217-015	906972	1367926	42440	399515	93425	20638	1591180	1115691	1653183	1990920
178	SAMPLE	193217-016	911090	1396387	43884	412339	95839	21268	1612838	1125303	1691322	2020074
179	SAMPLE	193217-017	873427	1316326	43497	405946	94980	21139	1553156	1075831	1593753	1916399
184	CCV		860804	1351596	42354	401343	91432	20368	1567188	1025975	1661744	1953400
186	CCB		911932	1387391	44235	414992	96866	21633	1653626	1169511	1707120	2039560
189	SAMPLE	193217-018	859967	1381365	43631	403383	94147	21348	1588849	1046023	1668635	1947997
190	SAMPLE	193217-019	868431	1370522	43518	410454	95686	21190	1596118	1090920	1658624	1968888
191	SAMPLE	193217-020	895527	1384994	44484	407285	95147	21679	1588874	1066025	1674548	1966732
192	SAMPLE	193217-022	857166	1298783	44247	414967	96445	21405	1506101	1008142	1579921	1867394
193	SAMPLE	193217-023	917649	1354117	44102	407100	95980	21289	1623050	1121830	1664556	1984836
194	SAMPLE	193217-024	911929	1363987	43635	398225	93370	21181	1599712	1093031	1661086	1992253
199	CCV		864908	1350162	42695	393397	91024	20572	1550003	1023495	1653281	1946954
201	CCB		887722	1370772	45085	410915	96368	21710	1630628	1121425	1710361	1982461
204	ICSA		599910	1191263	39252	370202	79661	18466	1345356	827534	1528690	1742765
205	ICSAB		509434	1134866	35275	357716	76421	17153	1337539	829867	1493682	1765605
210	MSS	193193-001	836904	1335937	41413	377991	90337	21005	1666574	1206508	1701705	2084946
213	SER	QC378193	846561	1383067	43359	386934	93511	21520	1693543	1205709	1736518	2113365
214	MS	QC378191	851733	1377327	42849	390804	92855	21443	1667822	1187527	1730195	2099191
215	MSD	QC378192	834606	1352257	42763	385310	91048	21142	1635785	1153761	1682318	2053411

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07
Sequence : MET06 c09q0

Reference: c09q0004
Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
216	PDS	QC378194	807162	1373965	42602	384827	89411	20904	1609006	1101960	1712302	2054536
217	SAMPLE	193193-006	837697	1351619	42847	383925	91549	21489	1648575	1171136	1680832	2045000
218	SAMPLE	193193-013	850323	1381844	43488	386328	92324	21786	1672280	1172422	1713891	2068810
219	SAMPLE	193027-012	851969	1374048	44520	389682	92872	21830	1641570	1118909	1697619	2008910
224	CCV		837171	1374157	44698	402269	93003	21285	1584817	1070250	1683860	2002425
227	CCB		868425	1350039	44352	385028	90590	21655	1609789	1100157	1653506	1965147
229	SAMPLE	193027-011	866645	1356505	44718	390336	92548	21997	1600466	1043536	1658608	1947958
230	SAMPLE	193027-012	910423	1413487	45570	392055	93011	22167	1666863	1130964	1721437	2042000
231	SAMPLE	193027-013	868936	1377052	45188	386345	91538	22177	1623029	1121886	1698277	1970489
236	CCV		843785	1361270	44250	395586	91504	21253	1578633	1061930	1668555	1965560
239	CCB		871768	1336030	45051	390025	92251	21613	1593414	1085987	1648046	1958145
241	ICSA		581542	1188280	38831	360357	77698	18316	1350980	805630	1518776	1735412
242	ICSAB		496559	1130423	35247	341093	73516	17085	1317155	801642	1464552	1737562

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09q0001	TUN				09-MAR-2007 17:01	1.0	1.0				1	
002	c09q0002	X	RINSE			09-MAR-2007 17:09	1.0					2	
003	c09q0003	X	RINSE			09-MAR-2007 17:14	1.0					2	
004	c09q0004	ICALBLK	CALBLANK			09-MAR-2007 17:19	1.0	1.0				2	
005	c09q0005	ICAL				09-MAR-2007 17:24	1.0	1.0				3	
006	c09q0006	ICAL				09-MAR-2007 17:30	1.0	1.0				4	
007	c09q0007	ICAL				09-MAR-2007 17:35	1.0	1.0				5	
008	c09q0008	ICAL				09-MAR-2007 17:40	1.0	1.0				6	
009	c09q0009	ICAL				09-MAR-2007 17:45	1.0	1.0				7	
010	c09q0010	ICAL				09-MAR-2007 17:51	1.0	1.0				8	
011	c09q0011	X	RINSE			09-MAR-2007 17:58	1.0					2	
012	c09q0012	X				09-MAR-2007 18:04	1.0					9 2	
013	c09q0013	X	RINSE			09-MAR-2007 18:09	1.0					2	
014	c09q0014	X				09-MAR-2007 18:14	1.0					2	
015	c09q0015	ICV				09-MAR-2007 18:28	1.0	1.0			1	9	
016	c09q0016	X	RINSE			09-MAR-2007 18:33	1.0					2	
017	c09q0017	X				09-MAR-2007 18:39	1.0					2	
018	c09q0018	ICB				09-MAR-2007 18:44	1.0	1.0			1	2	
019	c09q0019	X				09-MAR-2007 18:49	1.0					2	
020	c09q0020	ICSA				09-MAR-2007 18:55	1.0	1.0			1	10 2	7:CA=283800
021	c09q0021	ICSAB				09-MAR-2007 19:00	1.0	1.0			1	11 2	11:CA=322800
022	c09q0022	X	RINSE			09-MAR-2007 19:05	1.0					2	
023	c09q0023	X	RINSE			09-MAR-2007 19:11	1.0					2	
024	c09q0024	X	RINSE			09-MAR-2007 19:16	1.0					2	
025	c09q0025	X	RINSE			09-MAR-2007 19:21	1.0					2	
026	c09q0026	BLANK	QC378336	122902	Soil	09-MAR-2007 19:27	5.0	50.0	1		1	2	
027	c09q0027	BS	QC378337	122902	Soil	09-MAR-2007 19:32	50.0	50.0	1	1	1	2	
028	c09q0028	BSD	QC378338	122902	Soil	09-MAR-2007 19:37	50.0	50.0		1	1	2	
029	c09q0029	X	RINSE			09-MAR-2007 19:42	1.0					2	
030	c09q0030	X	RINSE			09-MAR-2007 19:48	1.0					2	
031	c09q0031	BLANK	QC378414	122921	Filtra	09-MAR-2007 20:02	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09q0032	BLANK	QC378443	122924	Filtra	09-MAR-2007 20:07	1.0	1.0			1	2	
033	c09q0033	MSS	193165-002	122902	Soil	09-MAR-2007 20:13	50.0	50.0	1		1	2	1:MN=324.000
034	c09q0034	SER	QC378341	122902	Soil	09-MAR-2007 20:18	250.0	50.0		2	1	2	
035	c09q0035	MS	QC378339	122902	Soil	09-MAR-2007 20:23	50.0	50.0			1	2	1:MN=373.800
036	c09q0036	X	RINSE			09-MAR-2007 20:28	1.0					2	
037	c09q0037	X	RINSE			09-MAR-2007 20:34	1.0					2	
038	c09q0038	X	RINSE			09-MAR-2007 20:39	1.0					2	
039	c09q0039	X	RINSE			09-MAR-2007 20:44	1.0					2	
040	c09q0040	X				09-MAR-2007 20:50	1.0					12 2	
041	c09q0041	X	RINSE			09-MAR-2007 20:57	1.0					2	
042	c09q0042	X	RINSE			09-MAR-2007 21:03	1.0					2	
043	c09q0043	X	RINSE			09-MAR-2007 21:08	1.0					2	
044	c09q0044	X	RINSE			09-MAR-2007 21:14	1.0					2	
045	c09q0045	X	RINSE			09-MAR-2007 21:19	1.0					2	
046	c09q0046	CCV				09-MAR-2007 21:24	1.0	1.0			1	12 2	
047	c09q0047	X	RINSE			09-MAR-2007 21:29	1.0					2	
048	c09q0048	X				09-MAR-2007 21:35	1.0					2	
049	c09q0049	CCB				09-MAR-2007 21:40	1.0	1.0			1	2	
050	c09q0050	X				09-MAR-2007 21:45	1.0					2	
051	c09q0051	X				09-MAR-2007 21:51	1.0					2	
052	c09q0052	X				09-MAR-2007 21:56	1.0					2	
053	c09q0053	X				09-MAR-2007 22:01	1.0					2	
054	c09q0054	X	RINSE			09-MAR-2007 22:07	1.0					2	
055	c09q0055	PDS	QC378342	122902	Soil	09-MAR-2007 22:12	50.0	50.0			1	13 14 2	1:MN=431.000
056	c09q0056	SAMPLE	193165-001	122902	Soil	09-MAR-2007 22:17	50.0	46.73			1	2	
057	c09q0057	SAMPLE	193165-003	122902	Soil	09-MAR-2007 22:22	50.0	48.08			1	2	
058	c09q0058	SAMPLE	193165-004	122902	Soil	09-MAR-2007 22:27	50.0	47.62			1	2	
059	c09q0059	SAMPLE	193165-005	122902	Soil	09-MAR-2007 22:33	50.0	48.54			1	2	
060	c09q0060	SAMPLE	193165-006	122902	Soil	09-MAR-2007 22:38	50.0	43.48			1	2	
061	c09q0061	SAMPLE	193165-007	122902	Soil	09-MAR-2007 22:43	50.0	45.45			1	2	
062	c09q0062	SAMPLE	193165-008	122902	Soil	09-MAR-2007 22:49	50.0	49.02			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c09q0063	SAMPLE	193165-009	122902	Soil	09-MAR-2007 22:54	50.0	46.73			1	2	
064	c09q0064	X	RINSE			09-MAR-2007 22:59	1.0					2	
065	c09q0065	X	RINSE			09-MAR-2007 23:04	1.0					2	
066	c09q0066	X	RINSE			09-MAR-2007 23:10	1.0					2	
067	c09q0067	X	RINSE			09-MAR-2007 23:15	1.0					2	
068	c09q0068	CCV				09-MAR-2007 23:20	1.0	1.0			1	12 2	
069	c09q0069	X	RINSE			09-MAR-2007 23:27	1.0					2	
070	c09q0070	CCB				09-MAR-2007 23:32	1.0	1.0			1	2	
071	c09q0071	X				09-MAR-2007 23:37	1.0	1.0			1	2	
072	c09q0072	X				09-MAR-2007 23:43	1.0	1.0			1	2	
073	c09q0073	SAMPLE	193165-010	122902	Soil	09-MAR-2007 23:48	50.0	45.05			1	2	
074	c09q0074	SAMPLE	193165-011	122902	Soil	09-MAR-2007 23:53	50.0	46.73			1	2	
075	c09q0075	SAMPLE	193202-001	122902	Soil	09-MAR-2007 23:58	50.0	44.25	2		1	2	4:MG=71880.0
076	c09q0076	SAMPLE	193202-002	122902	Soil	10-MAR-2007 00:04	50.0	44.64	2		1	2	4:MG=77300.0
077	c09q0077	SAMPLE	193202-003	122902	Soil	10-MAR-2007 00:09	50.0	48.08	2		1	2	4:MG=71980.0
078	c09q0078	SAMPLE	193202-004	122902	Soil	10-MAR-2007 00:14	50.0	46.30			1	2	
079	c09q0079	SAMPLE	193284-002	122902	Soil	10-MAR-2007 00:20	50.0	46.30			1	2	
080	c09q0080	X	RINSE			10-MAR-2007 00:25	1.0					2	
081	c09q0081	X	RINSE			10-MAR-2007 00:30	1.0					2	
082	c09q0082	X	RINSE			10-MAR-2007 00:36	1.0					2	
083	c09q0083	X	RINSE			10-MAR-2007 00:41	1.0					2	
084	c09q0084	CCV				10-MAR-2007 00:46	1.0	1.0			1	12 2	
085	c09q0085	X	RINSE			10-MAR-2007 00:52	1.0					2	
086	c09q0086	CCB				10-MAR-2007 00:57	1.0	1.0			1	2	
087	c09q0087	X				10-MAR-2007 01:03	1.0	1.0	1		1	2	
088	c09q0088	X				10-MAR-2007 01:08	1.0	1.0			1	2	
089	c09q0089	ICSA				10-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=284500
090	c09q0090	ICSAB				10-MAR-2007 01:19	1.0	1.0			1	11 2	11:CA=317200
091	c09q0091	X	RINSE			10-MAR-2007 01:24	1.0					2	
092	c09q0092	X	RINSE			10-MAR-2007 01:29	1.0					2	
093	c09q0093	X	RINSE			10-MAR-2007 01:35	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RKA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c09q0094	X	RINSE			10-MAR-2007 01:40	1.0					2	
095	c09q0095	BS	QC378415	122921	Filtra	10-MAR-2007 01:45	1.0	1.0			1	2	
096	c09q0096	BSD	QC378416	122921	Filtra	10-MAR-2007 01:50	1.0	1.0			1	2	
097	c09q0097	X	RINSE			10-MAR-2007 01:56	1.0					2	
098	c09q0098	MSS	193253-001	122921	Filtra	10-MAR-2007 02:01	10.0	1.0	8		1	2	1:NA=33180.0
099	c09q0099	SER	QC378419	122921	Filtra	10-MAR-2007 02:06	50.0	1.0		1	1	2	
100	c09q0100	MS	QC378417	122921	Filtra	10-MAR-2007 02:11	10.0	1.0			1	2	1:NA=32780.0
101	c09q0101	MSD	QC378418	122921	Filtra	10-MAR-2007 02:17	10.0	1.0			1	2	1:NA=33200.0
102	c09q0102	PDS	QC378420	122921	Filtra	10-MAR-2007 02:22	10.0	1.0	1		1	13 14 2	2:NA=42700.0
103	c09q0103	SAMPLE	193187-001	122921	Water	10-MAR-2007 02:27	10.0	1.0	9		1	2	
104	c09q0104	X	RINSE			10-MAR-2007 02:32	1.0					2	
105	c09q0105	X	RINSE			10-MAR-2007 02:38	1.0					2	
106	c09q0106	X	RINSE			10-MAR-2007 02:43	1.0					2	
107	c09q0107	X	RINSE			10-MAR-2007 02:48	1.0					2	
108	c09q0108	CCV				10-MAR-2007 02:54	1.0	1.0			1	12 2	
109	c09q0109	X	RINSE			10-MAR-2007 02:59	1.0					2	
110	c09q0110	X				10-MAR-2007 03:04	1.0	1.0	2		1	2	
111	c09q0111	X				10-MAR-2007 03:10	1.0	1.0	2		1	2	
112	c09q0112	CCB				10-MAR-2007 03:15	1.0	1.0			1	2	
113	c09q0113	SAMPLE	193187-002	122921	Water	10-MAR-2007 03:20	10.0	1.0	1		1	2	
114	c09q0114	SAMPLE	193187-003	122921	Water	10-MAR-2007 03:26	10.0	1.0	1		1	2	
115	c09q0115	TUN				10-MAR-2007 03:30	1.0	1.0				1	
116	c09q0116	X	RINSE			10-MAR-2007 03:38	1.0					2	
117	c09q0117	SAMPLE	193199-001	122921	Water	10-MAR-2007 03:43	10.0	1.0	1		1	2	
118	c09q0118	SAMPLE	193199-002	122921	Water	10-MAR-2007 03:48	10.0	1.0	1		1	2	
119	c09q0119	SAMPLE	193199-003	122921	Water	10-MAR-2007 03:54	10.0	1.0	1		1	2	
120	c09q0120	SAMPLE	193199-001	122921	Filtra	10-MAR-2007 03:59	10.0	1.0	1		1	2	
121	c09q0121	SAMPLE	193199-002	122921	Filtra	10-MAR-2007 04:04	10.0	1.0	1		1	2	
122	c09q0122	SAMPLE	193199-003	122921	Filtra	10-MAR-2007 04:10	10.0	1.0	1		1	2	
123	c09q0123	SAMPLE	193205-001	122921	Water	10-MAR-2007 04:15	10.0	1.0	1		1	2	
124	c09q0124	SAMPLE	193205-001	122921	Filtra	10-MAR-2007 04:20	10.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RUA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c09q0125	X	RINSE			10-MAR-2007 04:26	1.0					2	
126	c09q0126	X	RINSE			10-MAR-2007 04:31	1.0					2	
127	c09q0127	X	RINSE			10-MAR-2007 04:36	1.0					2	
128	c09q0128	X	RINSE			10-MAR-2007 04:42	1.0					2	
129	c09q0129	CCV				10-MAR-2007 04:47	1.0	1.0			1	12 2	
130	c09q0130	X	RINSE			10-MAR-2007 04:52	1.0					2	
131	c09q0131	CCB				10-MAR-2007 04:58	1.0	1.0	1		1	2	
132	c09q0132	X				10-MAR-2007 05:03	1.0	1.0	2		1	2	
133	c09q0133	X				10-MAR-2007 05:08	1.0	1.0	1		1	2	
134	c09q0134	SAMPLE	193243-001	122921	Water	10-MAR-2007 05:14	10.0	1.0			1	2	
135	c09q0135	SAMPLE	193243-002	122921	Water	10-MAR-2007 05:19	10.0	1.0			1	2	
136	c09q0136	SAMPLE	193253-002	122921	Filtra	10-MAR-2007 05:24	10.0	1.0			1	2	1:NA=23670.0
137	c09q0137	X	RINSE			10-MAR-2007 05:30	1.0					2	
138	c09q0138	X	RINSE			10-MAR-2007 05:35	1.0					2	
139	c09q0139	X	RINSE			10-MAR-2007 05:40	1.0					2	
140	c09q0140	X	RINSE			10-MAR-2007 05:46	1.0					2	
141	c09q0141	CCV				10-MAR-2007 05:51	1.0	1.0			1	12 2	
142	c09q0142	X	RINSE			10-MAR-2007 05:56	1.0					2	
143	c09q0143	CCB				10-MAR-2007 06:02	1.0	1.0	1		1	2	
144	c09q0144	X				10-MAR-2007 06:07	1.0	1.0	1		1	2	
145	c09q0145	X				10-MAR-2007 06:12	1.0	1.0	1		1	2	
146	c09q0146	ICSA				10-MAR-2007 06:18	1.0	1.0			1	10 2	7:CA=280800
147	c09q0147	ICSAB				10-MAR-2007 06:23	1.0	1.0			1	11 2	11:CA=314400
148	c09q0148	X	RINSE			10-MAR-2007 06:28	1.0					2	
149	c09q0149	X	RINSE			10-MAR-2007 06:34	1.0					2	
150	c09q0150	X	RINSE			10-MAR-2007 06:39	1.0					2	
151	c09q0151	X	RINSE			10-MAR-2007 06:44	1.0					2	
152	c09q0152	BS	QC378444	122924	Filtra	10-MAR-2007 06:50	1.0	1.0			1	2	
153	c09q0153	BSD	QC378445	122924	Filtra	10-MAR-2007 06:55	1.0	1.0			1	2	
154	c09q0154	X	RINSE			10-MAR-2007 07:01	1.0					2	
155	c09q0155	MSS	193217-011	122924	Filtra	10-MAR-2007 07:07	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RAA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c09q0156	SER	QC378448	122924	Filtra	10-MAR-2007 07:12	50.0	1.0	1	1	1	2	
157	c09q0157	MS	QC378446	122924	Filtra	10-MAR-2007 07:17	10.0	1.0	1		1	2	
158	c09q0158	MSD	QC378447	122924	Filtra	10-MAR-2007 07:23	10.0	1.0	1		1	2	
159	c09q0159	PDS	QC378449	122924	Filtra	10-MAR-2007 07:28	10.0	1.0	1		1	13 14 2	
160	c09q0160	MSS	193217-021	122924	Filtra	10-MAR-2007 07:33	10.0	1.0			1	2	
161	c09q0161	X	RINSE			10-MAR-2007 07:39	1.0					2	
162	c09q0162	X	RINSE			10-MAR-2007 07:44	1.0					2	
163	c09q0163	X	RINSE			10-MAR-2007 07:49	1.0					2	
164	c09q0164	X	RINSE			10-MAR-2007 07:55	1.0					2	
165	c09q0165	CCV				10-MAR-2007 08:00	1.0	1.0			1	12 2	
166	c09q0166	X	RINSE			10-MAR-2007 08:05	1.0					2	
167	c09q0167	X				10-MAR-2007 08:11	1.0	1.0	2		1	2	
168	c09q0168	CCB				10-MAR-2007 08:16	1.0	1.0			1	2	
169	c09q0169	X				10-MAR-2007 08:21	1.0	1.0			1	2	
170	c09q0170	MS	QC378508	122924	Filtra	10-MAR-2007 08:27	10.0	1.0			1	2	
171	c09q0171	MSD	QC378509	122924	Filtra	10-MAR-2007 08:32	10.0	1.0			1	2	
172	c09q0172	SAMPLE	193055-023	122924	Water	10-MAR-2007 08:37	10.0	1.0			1	2	
173	c09q0173	SAMPLE	193137-005	122924	Filtra	10-MAR-2007 08:43	10.0	1.0			1	2	
174	c09q0174	SAMPLE	193217-010	122924	Filtra	10-MAR-2007 08:48	10.0	1.0			1	2	
175	c09q0175	SAMPLE	193217-012	122924	Filtra	10-MAR-2007 08:53	10.0	1.0			1	2	
176	c09q0176	SAMPLE	193217-014	122924	Filtra	10-MAR-2007 08:59	10.0	1.0			1	2	
177	c09q0177	SAMPLE	193217-015	122924	Filtra	10-MAR-2007 09:04	10.0	1.0			1	2	
178	c09q0178	SAMPLE	193217-016	122924	Filtra	10-MAR-2007 09:09	10.0	1.0			1	2	
179	c09q0179	SAMPLE	193217-017	122924	Filtra	10-MAR-2007 09:15	10.0	1.0			1	2	
180	c09q0180	X	RINSE			10-MAR-2007 09:20	1.0					2	
181	c09q0181	X	RINSE			10-MAR-2007 09:25	1.0					2	
182	c09q0182	X	RINSE			10-MAR-2007 09:31	1.0					2	
183	c09q0183	X	RINSE			10-MAR-2007 09:36	1.0					2	
184	c09q0184	CCV				10-MAR-2007 09:41	1.0	1.0			1	12 2	
185	c09q0185	X	RINSE			10-MAR-2007 09:47	1.0					2	
186	c09q0186	CCB				10-MAR-2007 09:52	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RAH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c09q0187	X				10-MAR-2007 09:57	1.0	1.0			1	2	
188	c09q0188	X				10-MAR-2007 10:03	1.0	1.0	3		1	2	
189	c09q0189	SAMPLE	193217-018	122924	Filtra	10-MAR-2007 10:08	10.0	1.0	1		1	2	1:NA=29570.0
190	c09q0190	SAMPLE	193217-019	122924	Filtra	10-MAR-2007 10:13	10.0	1.0	1		1	2	1:NA=20670.0
191	c09q0191	SAMPLE	193217-020	122924	Filtra	10-MAR-2007 10:19	10.0	1.0	1		1	2	1:NA=22410.0
192	c09q0192	SAMPLE	193217-022	122924	Filtra	10-MAR-2007 10:24	10.0	1.0	1		1	2	1:NA=20810.0
193	c09q0193	SAMPLE	193217-023	122924	Filtra	10-MAR-2007 10:30	10.0	1.0			1	2	
194	c09q0194	SAMPLE	193217-024	122924	Filtra	10-MAR-2007 10:35	10.0	1.0			1	2	
195	c09q0195	X	RINSE			10-MAR-2007 10:40	1.0					2	
196	c09q0196	X	RINSE			10-MAR-2007 10:46	1.0					2	
197	c09q0197	X	RINSE			10-MAR-2007 10:51	1.0					2	
198	c09q0198	X	RINSE			10-MAR-2007 10:57	1.0					2	
199	c09q0199	CCV				10-MAR-2007 11:02	1.0	1.0			1	12 2	
200	c09q0200	X	RINSE			10-MAR-2007 11:07	1.0					2	
201	c09q0201	CCB				10-MAR-2007 11:13	1.0	1.0			1	2	
202	c09q0202	X				10-MAR-2007 11:18	1.0	1.0			1	2	
203	c09q0203	X				10-MAR-2007 11:23	1.0	1.0			1	2	
204	c09q0204	ICSA				10-MAR-2007 11:29	1.0	1.0			1	10 2	7:CA=285200
205	c09q0205	ICSAB				10-MAR-2007 11:34	1.0	1.0			1	11 2	10:CA=315900
206	c09q0206	X	RINSE			10-MAR-2007 11:39	1.0					2	
207	c09q0207	X	RINSE			10-MAR-2007 11:45	1.0					2	
208	c09q0208	X	RINSE			10-MAR-2007 11:50	1.0					2	
209	c09q0209	X	RINSE			10-MAR-2007 11:56	1.0					2	
210	c09q0210	MSS	193193-001	122866	Filtra	10-MAR-2007 12:01	10.0	1.0			1	2	
211	c09q0211	TUN				10-MAR-2007 12:05	1.0	1.0				1	
212	c09q0212	X	RINSE			10-MAR-2007 12:13	1.0					2	
213	c09q0213	SER	QC378193	122866	Filtra	10-MAR-2007 12:18	50.0	1.0		2	1	2	
214	c09q0214	MS	QC378191	122866	Filtra	10-MAR-2007 12:24	10.0	1.0		1	1	2	
215	c09q0215	MSD	QC378192	122866	Filtra	10-MAR-2007 12:29	10.0	1.0		1	1	2	
216	c09q0216	PDS	QC378194	122866	Filtra	10-MAR-2007 12:34	10.0	1.0			1	13 14 2	
217	c09q0217	SAMPLE	193193-006	122866	Filtra	10-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
218	c09q0218	SAMPLE	193193-013	122866	Filtra	10-MAR-2007 12:45	10.0	1.0	1		1	2	
219	c09q0219	SAMPLE	193027-012	122867	Filtra	10-MAR-2007 12:50	50.0	1.0			1	2	
220	c09q0220	X	RINSE			10-MAR-2007 12:56	1.0					2	
221	c09q0221	X	RINSE			10-MAR-2007 13:01	1.0					2	
222	c09q0222	X	RINSE			10-MAR-2007 13:06	1.0					2	
223	c09q0223	X	RINSE			10-MAR-2007 13:12	1.0					2	
224	c09q0224	CCV				10-MAR-2007 13:17	1.0	1.0			1	12 2	
225	c09q0225	X	RINSE			10-MAR-2007 13:23	1.0					2	
226	c09q0226	X				10-MAR-2007 13:28	1.0	1.0	4		1	2	
227	c09q0227	CCB				10-MAR-2007 13:33	1.0	1.0			1	2	
228	c09q0228	X				10-MAR-2007 13:39	1.0	1.0			1	2	
229	c09q0229	SAMPLE	193027-011	122867	Water	10-MAR-2007 13:44	20.0	1.0			1	2	
230	c09q0230	SAMPLE	193027-012	122867	Water	10-MAR-2007 13:49	50.0	1.0			1	2	
231	c09q0231	SAMPLE	193027-013	122867	Water	10-MAR-2007 13:55	20.0	1.0			1	2	
232	c09q0232	X	RINSE			10-MAR-2007 14:00	1.0					2	
233	c09q0233	X	RINSE			10-MAR-2007 14:05	1.0					2	
234	c09q0234	X	RINSE			10-MAR-2007 14:11	1.0					2	
235	c09q0235	X	RINSE			10-MAR-2007 14:16	1.0					2	
236	c09q0236	CCV				10-MAR-2007 14:21	1.0	1.0			1	12 2	
237	c09q0237	X	RINSE			10-MAR-2007 14:27	1.0					2	
238	c09q0238	X				10-MAR-2007 14:32	1.0	1.0	5		1	2	
239	c09q0239	CCB				10-MAR-2007 14:38	1.0	1.0			1	2	
240	c09q0240	X				10-MAR-2007 14:43	1.0	1.0			1	2	
241	c09q0241	ICSA				10-MAR-2007 14:48	1.0	1.0			1	10 2	7:CA=281600
242	c09q0242	ICSAB				10-MAR-2007 14:54	1.0	1.0			1	11 2	10:CA=315900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: Pett Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67101597001
Units : ug/L

Date : 11-MAR-2007 13:35
X Axis : R

Reviewer: ---

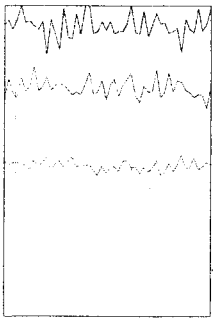
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c11n0005	67101597005		11-MAR-2007 13:40	S5645
L2	c11n0006	67101597006		11-MAR-2007 13:46	S5648
L3	c11n0007	67101597007		11-MAR-2007 13:51	S5649
L4	c11n0008	67101597008		11-MAR-2007 13:56	S5650
L5	c11n0009	67101597009		11-MAR-2007 14:01	S5644
L6	c11n0010	67101597010		11-MAR-2007 14:06	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7797	0.6602	0.6737	0.6368	0.6275	0.5950	BLNK	-0.7320	1.66246		0.6622	0.999	0.995	
Antimony	A	0.3235	0.2940	0.2939	0.2903	0.2967	0.2868	BLNK	-0.0114	3.46274		0.2975	1.000	0.995	
Barium	A	0.2790	0.1027	0.1154	0.0958	0.0920	0.0875	BLNK	-0.0155	11.3143		0.1287	0.999	0.995	
Beryllium	A	0.3327	0.3285	0.3369	0.3336	0.3416	0.3349	BLNK	-0.0020	2.97424		0.3347	1.000	0.995	
Cadmium	A	0.0869	0.0796	0.0892	0.0856	0.0835	0.0805	BLNK	-0.0027	12.3239		0.0842	1.000	0.995	
Calcium	A	0.2503	0.0646	0.0460	0.0245	0.0217	0.0205	BLNK	-118.21	48.5240		0.0713	0.999	0.995	
Lead	A	0.8656	0.7170	0.7208	0.6788	0.6635	0.6425	BLNK	-0.0210	1.54628		0.7147	1.000	0.995	
Magnesium	A	0.6343	0.5469	0.5573	0.5217	0.5101	0.4820	BLNK	-0.6918	2.05039		0.5421	0.999	0.995	
Molybdenum	A	0.2472	0.2300	0.2389	0.2271	0.2237	0.2255	BLNK	-0.0067	4.44166		0.2321	1.000	0.995	
Potassium	A	6.5780	1.8867	1.3292	0.7862	0.7289	0.6907	BLNK	-82.405	1.43897		1.9999	0.999	0.995	
Silver	A	0.3675	0.3641	0.3689	0.3579	0.3633	0.3508	BLNK	-0.0064	2.83022		0.3621	1.000	0.995	
Thallium	A	1.4676	0.9616	0.9212	0.8746	0.9153	0.8932	BLNK	-0.0414	1.11473		1.0056	1.000	0.995	
Arsenic	E	0.9187	0.6487	0.6670	0.6390	0.6251	0.6001	BLNK	-0.0420	1.65282		0.6831	1.000	0.995	
Chromium	E	6.4330	3.9322	3.5828	3.1755	3.1526	2.9789	BLNK	-0.1056	0.33200		3.8759	0.999	0.995	
Cobalt	E	5.2760	4.9399	5.2270	5.0645	4.9438	4.6485	BLNK	-0.0015	0.21239		5.0166	0.999	0.995	
Copper	E	19.117	10.270	9.2750	8.0920	7.6121	7.1405	BLNK	-0.1409	0.13831		10.251	0.999	0.995	
Manganese	E	2.0495	1.7367	1.7195	1.6453	1.6331	1.5350	BLNK	-0.0173	0.64325		1.7199	0.999	0.995	
Nickel	E	2.7116	1.6311	1.6764	1.3942	1.3366	1.2437	BLNK	-0.1049	0.79255		1.6656	0.999	0.995	
Sodium	E	3.3500	1.2333	1.0132	0.7270	0.6721	0.6461	BLNK	-41.172	1.53903		1.2736	1.000	0.995	
Vanadium	E	6.4071	3.2784	2.9968	2.5025	2.4916	2.3588	BLNK	-0.1671	0.41962		3.3392	0.999	0.995	
Zinc	E	20.742	4.8340	6.3245	1.3469	1.1345	1.0530	BLNK	-1.4141	0.94280		5.9058	0.998	0.995	
Iron	H	1.0920	0.9782	1.0156	0.9293	0.9007	0.8645	BLNK	-0.5784	1.14701		0.9634	1.000	0.995	
Selenium	H	0.1631	0.1456	0.1597	0.1555	0.1496	0.1370	BLNK	-0.0062	7.16537		0.1518	0.998	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

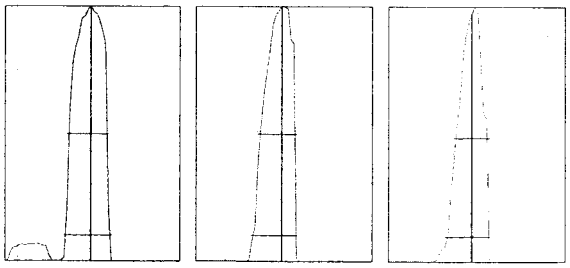
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19928.0	18753.4	4.35	1.00
89	50,000	37452.0	36828.8	3.90	0.80
205	50,000	24422.0	24217.8	3.22	2.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.985%
Doubly Charged: 70/140 2.163%



m/z:	7	89	205
Height:	18,927	36,897	23,621
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.04 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-5 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
He Gas:	4	mL/min	51	26.8	26.85	
Optional Gas:	---	%	59	3764.5	3.57	
QP Focus:	-10	V	89	2364.6	3.67	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-13	V				

Tune File : h2.u

			m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
H2 Gas:	4	mL/min	59	2690.7	5.11	
Optional Gas:	---	%	78	0.2	231.46	
QP Focus:	-8	V	89	18472.2	4.21	
Cell Exit:	-38	V				
OctP Bias:	-18	V				
QP Bias:	-15	V				

Generated : Mar 11, 2007 12:49:40
Printed : Mar 11, 2007 12:51:19

P/A Factor Tuning Report

Acquired:Mar 11 2007 01:00 pm

Mass [amu]	Element	P/A Factor
6	Li	0.064990
7	(Li)	Sensitivity too low
9	Be	0.074241
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091195
45	Sc	0.090963
51	V	0.092550
52	Cr	0.096217
55	Mn	0.098412
56	Fe	Sensitivity too high
59	Co	0.100893
60	Ni	Sensitivity too low
63	Cu	0.108212
65	Cu	0.107611
66	Zn	Sensitivity too low
72	Ge	0.105571
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103605
98	Mo	0.104388
99	(Ru)	Sensitivity too low
107	Ag	0.113364
111	Cd	Sensitivity too low
115	In	0.112154
118	(In)	0.111256
121	Sb	0.110585
137	Ba	Sensitivity too low
159	Tb	0.114120
205	Tl	0.120270
206	(Pb)	0.120189
207	(Pb)	0.120232
208	Pb	0.119703
209	Bi	0.120469

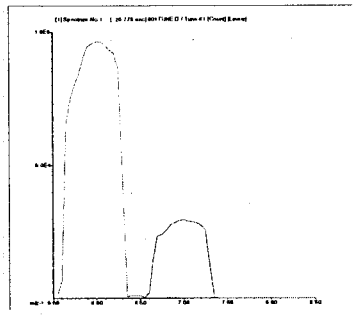
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

6020 QC Tune Report

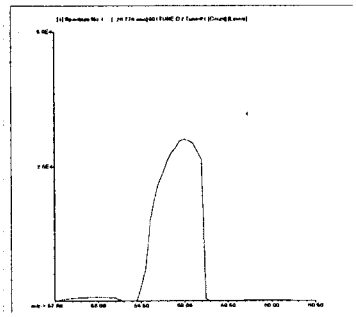
Data File: C:\ICPCHEM\1\DATA\07C11n00.B\001TUNE.D
Date Acquired: Mar 11 2007 01:17 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

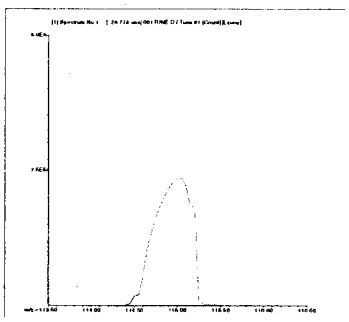
Element	Actual	Required	Flag
7 Li	0.31	5.00	
59 Co	0.46	5.00	
115 In	1.05	5.00	
205 Tl	0.72	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



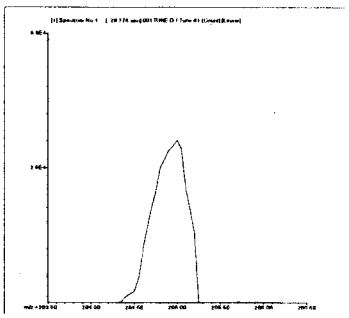
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004C
Date Acquired: Mar 11 2007 01:33 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	914016.31	A	10480.00	1.15
7	(Li)		P		
9	Be	12.22	P	5.09	41.66
23	Na	21398.87	P	249.90	1.17
24	Mg	10005.18	P	421.70	4.21
27	Al	13058.89	P	278.90	2.14
39	K	1698730.00	A	3644.00	0.21
44	Ca	72282.13	P	2201.00	3.05
45	Sc	339061.09	P	1139.00	0.34
45	Sc	39996.86	P	179.00	0.45
45	Sc	1483318.00	A	17720.00	1.19
51	V	318.53	P	34.07	10.70
52	Cr	254.45	P	13.10	5.15
55	Mn	21.48	P	1.70	7.90
56	Fe	3419.72	P	30.52	0.89
59	Co	5.56	P	1.93	34.65
60	Ni	105.93	P	5.25	4.96
63	Cu	383.34	P	35.76	9.33
65	Cu	178.89	P	20.37	11.39
66	Zn	564.09	P	27.32	4.84
72	Ge	77432.61	P	80.66	0.10
72	Ge	18807.66	P	97.30	0.52
75	As	9.56	P	1.02	10.65
78	Se	1.33	P	0.67	50.00
89	Y	1804800.00	A	16040.00	0.89
98	Mo	54.45	P	10.18	18.70
107	Ag	80.00	P	6.67	8.33
111	Cd	7.78	P	5.09	65.47
115	In	1776838.00	A	21300.00	1.20
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	116.67	P	10.00	8.57
137	Ba	61.11	P	10.18	16.66
159	Tb	2230978.00	A	34340.00	1.54
205	Tl	1010.08	P	40.00	3.96
208	Pb	606.70	P	10.00	1.65
209	Bi	1361245.00	A	12200.00	0.90

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 11 2007 01:38 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	925835.00	A	19290.00	2.08
7 (Li)		P		
9 Be	615.59	P	19.53	3.17
23 Na	27732.04	P	586.70	2.12
24 Mg	190104.80	P	1073.00	0.56
27 Al	233693.50	P	1226.00	0.52
39 K	1971530.00	A	11640.00	0.59
44 Ca	75032.58	P	1193.00	1.59
45 Sc	344107.81	P	843.70	0.25
45 Sc	41388.66	P	256.70	0.62
45 Sc	1498586.00	A	10080.00	0.67
51 V	530.39	P	29.45	5.55
52 Cr	532.61	P	28.92	5.43
55 Mn	169.63	P	18.60	10.97
56 Fe	75157.48	P	1144.00	1.52
59 Co	436.68	P	26.46	6.06
60 Ni	224.45	P	17.46	7.78
63 Cu	748.92	P	14.19	1.89
65 Cu	362.97	P	39.48	10.88
66 Zn	812.63	P	6.51	0.80
72 Ge	78328.36	P	132.30	0.17
72 Ge	19589.46	P	105.20	0.54
75 As	36.00	P	2.67	7.41
78 Se	25.56	P	3.79	14.83
89 Y	1858633.00	A	17890.00	0.96
98 Mo	918.96	P	40.33	4.39
99 (Ru)	11.11	P	8.39	75.50
107 Ag	1344.56	P	65.19	4.85
111 Cd	317.79	P	25.24	7.94
115 In	1828997.00	A	19380.00	1.06
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1183.43	P	46.32	3.91
137 Ba	1264.55	P	5.10	0.40
159 Tb	2266466.00	A	10910.00	0.48
205 Tl	2003.57	P	132.50	6.61
208 Pb	3923.72	P	60.27	1.54
209 Bi	1365602.00	A	24000.00	1.76

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	925835.00	2.08	914016.31	101.3	80 - 120	
45 Sc	344107.81	0.25	339061.13	101.5	80 - 120	
45 Sc	41388.66	0.62	39996.86	103.5	80 - 120	
45 Sc	1498586.00	0.67	1483317.60	101.0	80 - 120	
72 Ge	78328.36	0.17	77432.61	101.2	80 - 120	
72 Ge	19589.46	0.54	18807.66	104.2	80 - 120	
89 Y	1858632.60	0.96	1804800.40	103.0	80 - 120	
115 In	1828996.90	1.06	1776837.60	102.9	80 - 120	
159 Tb	2266466.50	0.48	2230977.80	101.6	80 - 120	
209 Bi	1365602.10	1.76	1361245.10	100.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 11 2007 01:43 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937823.81	A	6224.00	0.66
7 (Li)		P		
9 Be	3080.44	P	40.42	1.31
23 Na	50986.19	P	592.00	1.16
24 Mg	837286.38	A	3021.00	0.36
27 Al	1010774.00	A	5005.00	0.50
39 K	2888643.00	A	14210.00	0.49
44 Ca	98971.37	P	560.40	0.57
45 Sc	345030.69	P	1666.00	0.48
45 Sc	41342.93	P	328.20	0.79
45 Sc	1531079.00	A	12120.00	0.79
51 V	1355.64	P	62.58	4.62
52 Cr	1625.67	P	11.71	0.72
55 Mn	718.17	P	44.67	6.22
56 Fe	337522.31	P	2890.00	0.86
59 Co	2042.03	P	41.60	2.04
60 Ni	674.47	P	35.95	5.33
63 Cu	2006.47	P	92.11	4.59
65 Cu	990.42	P	34.36	3.47
66 Zn	944.12	P	35.84	3.80
72 Ge	78924.04	P	539.40	0.68
72 Ge	19536.44	P	203.10	1.04
75 As	126.67	P	10.35	8.17
78 Se	114.89	P	13.42	11.68
89 Y	1868140.00	A	19480.00	1.04
98 Mo	4296.40	P	88.37	2.06
99 (Ru)	12.22	P	1.92	15.74
107 Ag	6739.69	P	96.66	1.43
111 Cd	1473.47	P	69.86	4.74
115 In	1850896.00	A	13410.00	0.72
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5441.30	P	73.60	1.35
137 Ba	2350.29	P	131.00	5.57
159 Tb	2288938.00	A	6597.00	0.29
205 Tl	6684.22	P	326.70	4.89
208 Pb	16410.34	P	323.90	1.97
209 Bi	1390616.00	A	8860.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937823.81	0.66	914016.31	102.6	80 - 120	
45 Sc	345030.69	0.48	339061.13	101.8	80 - 120	
45 Sc	41342.93	0.79	39996.86	103.4	80 - 120	
45 Sc	1531079.30	0.79	1483317.60	103.2	80 - 120	
72 Ge	78924.04	0.68	77432.61	101.9	80 - 120	
72 Ge	19536.44	1.04	18807.66	103.9	80 - 120	
89 Y	1868140.00	1.04	1804800.40	103.5	80 - 120	
115 In	1850896.00	0.72	1776837.60	104.2	80 - 120	
159 Tb	2288938.00	0.29	2230977.80	102.6	80 - 120	
209 Bi	1390615.90	0.64	1361245.10	102.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 11 2007 01:49 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	915792.00	A	8758.00	0.96
7 (Li)		P		
9 Be	6171.53	P	159.10	2.58
23 Na	83963.03	P	607.20	0.72
24 Mg	1686488.00	A	18770.00	1.11
27 Al	2038663.00	A	8525.00	0.42
39 K	4021900.00	A	7872.00	0.20
44 Ca	139294.80	P	1229.00	0.88
45 Sc	346555.09	P	2125.00	0.61
45 Sc	41436.95	P	385.80	0.93
45 Sc	1513238.00	A	24650.00	1.63
51 V	2483.58	P	77.97	3.14
52 Cr	2968.87	P	79.60	2.68
55 Mn	1424.90	P	47.54	3.34
56 Fe	703939.00	P	5234.00	0.74
59 Co	4331.83	P	62.27	1.44
60 Ni	1389.35	P	55.93	4.03
63 Cu	3670.15	P	30.12	0.82
65 Cu	1808.29	P	25.76	1.42
66 Zn	2502.85	P	41.36	1.65
72 Ge	79028.66	P	352.70	0.45
72 Ge	19787.51	P	195.40	0.99
75 As	264.00	P	13.13	4.97
78 Se	252.45	P	12.81	5.07
89 Y	1854459.00	A	23840.00	1.29
98 Mo	8863.18	P	287.30	3.24
99 (Ru)	12.22	P	6.94	56.77
107 Ag	13474.92	P	183.00	1.36
111 Cd	3258.29	P	45.39	1.39
115 In	1826288.00	A	17690.00	0.97
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10734.66	P	253.80	2.36
137 Ba	5243.47	P	140.20	2.67
159 Tb	2272728.00	A	18870.00	0.83
205 Tl	12623.35	P	244.70	1.94
208 Pb	32763.25	P	488.80	1.49
209 Bi	1370337.00	A	23330.00	1.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	915791.94	0.96	914016.31	100.2	80 - 120	
45 Sc	346555.06	0.61	339061.13	102.2	80 - 120	
45 Sc	41436.96	0.93	39996.86	103.6	80 - 120	
45 Sc	1513238.30	1.63	1483317.60	102.0	80 - 120	
72 Ge	79028.66	0.45	77432.61	102.1	80 - 120	
72 Ge	19787.51	0.99	18807.66	105.2	80 - 120	
89 Y	1854459.40	1.29	1804800.40	102.8	80 - 120	
115 In	1826288.30	0.97	1776837.60	102.8	80 - 120	
159 Tb	2272728.00	0.83	2230977.80	101.9	80 - 120	
209 Bi	1370336.60	1.70	1361245.10	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 11 2007 01:54 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	928096.50	A	7530.00	0.81
7 (Li)		P		
9 Be	61912.26	P	769.40	1.24
23 Na	608612.13	P	1966.00	0.32
24 Mg	15938670.00	A	73420.00	0.46
27 Al	19451340.00	A	161300.00	0.83
39 K	24016490.00	A	81250.00	0.34
44 Ca	747481.63	P	2162.00	0.29
45 Sc	349240.09	P	468.70	0.13
45 Sc	41863.36	P	556.10	1.33
45 Sc	1527563.00	A	18820.00	1.23
51 V	20951.97	P	269.30	1.29
52 Cr	26584.40	P	35.38	0.13
55 Mn	13773.90	P	20.05	0.15
56 Fe	6490921.00	A	37350.00	0.58
59 Co	42397.70	P	87.32	0.21
60 Ni	11672.75	P	77.76	0.67
63 Cu	31714.51	P	195.40	0.62
65 Cu	15322.58	P	103.60	0.68
66 Zn	5278.84	P	91.01	1.72
72 Ge	80134.09	P	519.90	0.65
72 Ge	19597.26	P	137.50	0.70
75 As	2504.24	P	90.03	3.60
78 Se	2492.24	P	9.17	0.37
89 Y	1869155.00	A	15550.00	0.83
98 Mo	84910.69	P	844.10	0.99
99 (Ru)	16.67	P	6.67	40.00
107 Ag	130279.20	P	1152.00	0.88
111 Cd	31163.36	P	432.00	1.39
115 In	1819963.00	A	12020.00	0.66
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	105681.10	P	1618.00	1.53
137 Ba	43349.24	P	293.00	0.68
159 Tb	2262846.00	A	26660.00	1.18
205 Tl	119126.90	P	816.40	0.69
208 Pb	307197.81	P	456.80	0.15
209 Bi	1362154.00	A	12560.00	0.92

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	928096.56	0.81	914016.31	101.5	80 - 120	
45 Sc	349240.09	0.13	339061.13	103.0	80 - 120	
45 Sc	41863.36	1.33	39996.86	104.7	80 - 120	
45 Sc	1527562.90	1.23	1483317.60	103.0	80 - 120	
72 Ge	80134.09	0.65	77432.61	103.5	80 - 120	
72 Ge	19597.26	0.70	18807.66	104.2	80 - 120	
89 Y	1869155.10	0.83	1804800.40	103.6	80 - 120	
115 In	1819963.10	0.66	1776837.60	102.4	80 - 120	
159 Tb	2262846.30	1.18	2230977.80	101.4	80 - 120	
209 Bi	1362153.90	0.92	1361245.10	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 11 2007 01:59 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	885035.50	A	9139.00	1.03
7 (Li)		P		
9 Be	604657.19	P	4870.00	0.81
23 Na	5609490.00	A	68990.00	1.23
24 Mg	###########	A	899700.00	0.57
27 Al	###########	A	2278000.00	1.17
39 K	###########	A	2348000.00	1.04
44 Ca	6727684.00	A	46250.00	0.69
45 Sc	360595.50	P	813.30	0.23
45 Sc	41733.74	P	122.10	0.29
45 Sc	1549179.00	A	8568.00	0.55
51 V	207966.80	P	631.80	0.30
52 Cr	263142.41	P	1229.00	0.47
55 Mn	136311.30	P	618.20	0.45
56 Fe	64959420.00	A	270300.00	0.42
59 Co	412646.59	P	3518.00	0.85
60 Ni	111561.50	P	700.70	0.63
63 Cu	300003.81	P	2643.00	0.88
65 Cu	145962.80	P	402.80	0.28
66 Zn	44711.09	P	190.60	0.43
72 Ge	80709.42	P	374.20	0.46
72 Ge	19705.54	P	34.58	0.18
75 As	24636.74	P	172.30	0.70
78 Se	24139.73	P	137.00	0.57
89 Y	1872389.00	A	20740.00	1.11
98 Mo	837844.19	P	11970.00	1.43
99 (Ru)	34.45	P	13.47	39.11
107 Ag	1304533.00	A	24510.00	1.88
111 Cd	299794.91	P	5650.00	1.88
115 In	1795535.00	A	18630.00	1.04
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	1065274.00	A	6231.00	0.58
137 Ba	418490.59	P	5897.00	1.41
159 Tb	2275105.00	A	15730.00	0.69
205 Tl	1200463.00	A	14640.00	1.22
208 Pb	3018941.00	A	31250.00	1.04
209 Bi	1311667.00	A	14710.00	1.12

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	885035.50	1.03	914016.31	96.8	80 - 120	
45 Sc	360595.50	0.23	339061.13	106.4	80 - 120	
45 Sc	41733.74	0.29	39996.86	104.3	80 - 120	
45 Sc	1549178.60	0.55	1483317.60	104.4	80 - 120	
72 Ge	80709.42	0.46	77432.61	104.2	80 - 120	
72 Ge	19705.54	0.18	18807.66	104.8	80 - 120	
89 Y	1872389.10	1.11	1804800.40	103.7	80 - 120	
115 In	1795535.00	1.04	1776837.60	101.1	80 - 120	
159 Tb	2275105.30	0.69	2230977.80	102.0	80 - 120	
209 Bi	1311666.50	1.12	1361245.10	96.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 11 2007 02:04 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 02:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	845869.38	A	8570.00	1.01
7	(Li)		P		
9	Be	1133152.00	A	26100.00	2.30
23	Na	10932670.00	A	31920.00	0.29
24	Mg	############	A	5672000.00	1.94
27	Al	############	A	8055000.00	2.23
39	K	############	A	8347000.00	1.99
44	Ca	12443510.00	A	287200.00	2.31
45	Sc	368407.91	P	6951.00	1.89
45	Sc	42308.40	P	510.70	1.21
45	Sc	1516671.00	A	34620.00	2.28
51	V	399151.00	P	2067.00	0.52
52	Cr	504107.31	P	4263.00	0.85
55	Mn	259746.91	P	981.60	0.38
56	Fe	############	A	1516000.00	1.19
59	Co	786640.13	P	5154.00	0.66
60	Ni	210473.20	P	1754.00	0.83
63	Cu	560092.81	P	2050.00	0.37
65	Cu	274376.59	P	1414.00	0.52
66	Zn	82598.06	P	204.50	0.25
72	Ge	82567.25	P	598.80	0.73
72	Ge	19609.88	P	99.58	0.51
75	As	47072.36	P	341.90	0.73
78	Se	45255.18	P	571.00	1.26
89	Y	1822665.00	A	28870.00	1.58
98	Mo	1644168.00	A	39220.00	2.39
99	(Ru)	64.45	P	12.62	19.58
107	Ag	2419848.00	A	54600.00	2.26
111	Cd	555505.31	P	6635.00	1.19
115	In	1724202.00	A	23490.00	1.36
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1978358.00	A	43160.00	2.18
137	Ba	785086.19	P	14250.00	1.82
159	Tb	2243654.00	A	37170.00	1.66
205	Tl	2261116.00	A	36300.00	1.61
208	Pb	5766329.00	A	72050.00	1.25
209	Bi	1265896.00	A	23490.00	1.86

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	845869.38	1.01	914016.31	92.5	80 - 120	
45	Sc	368407.94	1.89	339061.13	108.7	80 - 120	
45	Sc	42308.40	1.21	39996.86	105.8	80 - 120	
45	Sc	1516670.60	2.28	1483317.60	102.2	80 - 120	
72	Ge	82567.25	0.73	77432.61	106.6	80 - 120	
72	Ge	19609.88	0.51	18807.66	104.3	80 - 120	
89	Y	1822665.40	1.58	1804800.40	101.0	80 - 120	
115	In	1724201.90	1.36	1776837.60	97.0	80 - 120	
159	Tb	2243654.00	1.66	2230977.80	100.6	80 - 120	
209	Bi	1265895.60	1.86	1361245.10	93.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597016 File : c11n0016 Time : 11-MAR-2007 14:40
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6622	0.6235	10000	10360	ug/L	4	10	
Antimony	A	0.2975	0.3089	100.0	107.0	ug/L	7	10	
Barium	A	0.1287	0.0915	100.0	103.5	ug/L	4	10	
Beryllium	A	0.3347	0.3314	100.0	98.56	ug/L	-1	10	
Cadmium	A	0.0842	0.0831	100.0	102.5	ug/L	3	10	
Calcium	A	0.0713	0.0216	10000	10380	ug/L	4	10	
Lead	A	0.7147	0.6431	100.0	99.43	ug/L	-1	10	
Magnesium	A	0.5421	0.5105	10000	10470	ug/L	5	10	
Molybdenum	A	0.2321	0.2239	100.0	99.46	ug/L	-1	10	
Potassium	A	1.9999	0.7228	10000	10320	ug/L	3	10	
Silver	A	0.3621	0.3899	100.0	110.3	ug/L	10	10	
Thallium	A	1.0056	0.8794	50.00	48.98	ug/L	-2	10	
Arsenic	E	0.6831	0.6298	100.0	104.1	ug/L	4	10	
Chromium	E	3.8759	3.0649	100.0	101.7	ug/L	2	10	
Cobalt	E	5.0166	4.7371	100.0	100.6	ug/L	1	10	
Copper	E	10.251	7.3230	100.0	101.1	ug/L	1	10	
Manganese	E	1.7199	1.5822	100.0	101.8	ug/L	2	10	
Nickel	E	1.6656	1.2817	100.0	101.5	ug/L	2	10	
Sodium	E	1.2736	0.6568	10000	10070	ug/L	1	10	
Vanadium	E	3.3392	2.4160	100.0	101.2	ug/L	1	10	
Zinc	E	5.9058	1.1217	100.0	104.3	ug/L	4	10	
Iron	H	0.9634	0.9059	10000	10390	ug/L	4	10	
Selenium	H	0.1518	0.1448	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	920893	0.75
Scandium	A	1483318	1532446	3.31
Scandium	E	39997	42978	7.45
Scandium	H	339061	350356	3.33
Germanium	H	77433	79881	3.16
Germanium	E	18808	19922	5.92
Indium	A	1776838	1787538	0.60
Bismuth	A	1361245	1284782	-5.62
Yttrium	A	1804800	1879207	4.12
Terbium	A	2230978	2243464	0.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597038 File : c11n0038 Time : 11-MAR-2007 16:40
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5900	10000	9808	ug/L	-2	10	
Antimony	A	0.2975	0.3014	100.0	104.4	ug/L	4	10	
Barium	A	0.1287	0.0864	100.0	97.70	ug/L	-2	10	
Beryllium	A	0.3347	0.3027	100.0	90.02	ug/L	-10	10	
Cadmium	A	0.0842	0.0786	100.0	96.91	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9943	ug/L	-1	10	
Lead	A	0.7147	0.5990	100.0	92.61	ug/L	-7	10	
Magnesium	A	0.5421	0.4839	10000	9922	ug/L	-1	10	
Molybdenum	A	0.2321	0.2117	100.0	94.03	ug/L	-6	10	
Potassium	A	1.9999	0.6954	10000	9924	ug/L	-1	10	
Silver	A	0.3621	0.3776	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8567	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6831	0.6033	100.0	99.68	ug/L	0	10	
Chromium	E	3.8759	2.9271	100.0	97.07	ug/L	-3	10	
Cobalt	E	5.0166	4.5113	100.0	95.82	ug/L	-4	10	
Copper	E	10.251	6.8447	100.0	94.53	ug/L	-5	10	
Manganese	E	1.7199	1.5380	100.0	98.91	ug/L	-1	10	
Nickel	E	1.6656	1.2219	100.0	96.73	ug/L	-3	10	
Sodium	E	1.2736	0.6305	10000	9662	ug/L	-3	10	
Vanadium	E	3.3392	2.2989	100.0	96.30	ug/L	-4	10	
Zinc	E	5.9058	1.0575	100.0	98.28	ug/L	-2	10	
Iron	H	0.9634	0.9065	10000	10400	ug/L	4	10	
Selenium	H	0.1518	0.1385	100.0	99.22	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917861	0.42
Scandium	A	1483318	1570616	5.89
Scandium	E	39997	43857	9.65
Scandium	H	339061	336429	-0.78
Germanium	H	77433	78961	1.97
Germanium	E	18808	20769	10.43
Indium	A	1776838	1840619	3.59
Bismuth	A	1361245	1283949	-5.68
Yttrium	A	1804800	1921443	6.46
Terbium	A	2230978	2296357	2.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597058 File : c11n0058 Time : 11-MAR-2007 18:59
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5894	10000	9797	ug/L	-2	10	
Antimony	A	0.2975	0.2971	100.0	102.9	ug/L	3	10	
Barium	A	0.1287	0.0872	100.0	98.67	ug/L	-1	10	
Beryllium	A	0.3347	0.3050	100.0	90.71	ug/L	-9	10	
Cadmium	A	0.0842	0.0785	100.0	96.70	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5883	100.0	90.94	ug/L	-9	10	
Magnesium	A	0.5421	0.4833	10000	9908	ug/L	-1	10	
Molybdenum	A	0.2321	0.2099	100.0	93.24	ug/L	-7	10	
Potassium	A	1.9999	0.6950	10000	9919	ug/L	-1	10	
Silver	A	0.3621	0.3779	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8136	50.00	45.31	ug/L	-9	10	
Arsenic	E	0.6831	0.6065	100.0	100.2	ug/L	0	10	
Chromium	E	3.8759	2.9215	100.0	96.89	ug/L	-3	10	
Cobalt	E	5.0166	4.5019	100.0	95.62	ug/L	-4	10	
Copper	E	10.251	6.7154	100.0	92.74	ug/L	-7	10	
Manganese	E	1.7199	1.5513	100.0	99.77	ug/L	0	10	
Nickel	E	1.6656	1.2156	100.0	96.24	ug/L	-4	10	
Sodium	E	1.2736	0.6259	10000	9592	ug/L	-4	10	
Vanadium	E	3.3392	2.3119	100.0	96.84	ug/L	-3	10	
Zinc	E	5.9058	1.0542	100.0	97.97	ug/L	-2	10	
Iron	H	0.9634	0.8894	10000	10200	ug/L	2	10	
Selenium	H	0.1518	0.1389	100.0	99.50	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	912804	-0.13
Scandium	A	1483318	1555714	4.88
Scandium	E	39997	45395	13.50
Scandium	H	339061	316695	-6.60
Germanium	H	77433	74471	-3.82
Germanium	E	18808	21713	15.45
Indium	A	1776838	1814333	2.11
Bismuth	A	1361245	1229389	-9.69
Yttrium	A	1804800	1908693	5.76
Terbium	A	2230978	2232736	0.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597072 File : c11n0072 Time : 11-MAR-2007 20:14
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5901	10000	9810	ug/L	-2	10	
Antimony	A	0.2975	0.2952	100.0	102.2	ug/L	2	10	
Barium	A	0.1287	0.0872	100.0	98.60	ug/L	-1	10	
Beryllium	A	0.3347	0.2986	100.0	88.80	ug/L	**-11**	10	c- ***
Cadmium	A	0.0842	0.0775	100.0	95.48	ug/L	-5	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5948	100.0	91.95	ug/L	-8	10	
Magnesium	A	0.5421	0.4812	10000	9865	ug/L	-1	10	
Molybdenum	A	0.2321	0.2089	100.0	92.77	ug/L	-7	10	
Potassium	A	1.9999	0.6966	10000	9941	ug/L	-1	10	
Silver	A	0.3621	0.3747	100.0	106.0	ug/L	6	10	
Thallium	A	1.0056	0.7968	50.00	44.37	ug/L	**-11**	10	c- ***
Arsenic	E	0.6831	0.5985	100.0	98.88	ug/L	-1	10	
Chromium	E	3.8759	2.8758	100.0	95.37	ug/L	-5	10	
Cobalt	E	5.0166	4.4104	100.0	93.67	ug/L	-6	10	
Copper	E	10.251	6.7307	100.0	92.95	ug/L	-7	10	
Manganese	E	1.7199	1.5283	100.0	98.29	ug/L	-2	10	
Nickel	E	1.6656	1.1932	100.0	94.46	ug/L	-6	10	
Sodium	E	1.2736	0.6285	10000	9632	ug/L	-4	10	
Vanadium	E	3.3392	2.2624	100.0	94.77	ug/L	-5	10	
Zinc	E	5.9058	1.0555	100.0	98.09	ug/L	-2	10	
Iron	H	0.9634	0.9005	10000	10330	ug/L	3	10	
Selenium	H	0.1518	0.1394	100.0	99.85	ug/L	0	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917720	0.41
Scandium	A	1483318	1533714	3.40
Scandium	E	39997	44243	10.62
Scandium	H	339061	314905	-7.12
Germanium	H	77433	73650	-4.89
Germanium	E	18808	20782	10.50
Indium	A	1776838	1792631	0.89
Bismuth	A	1361245	1212255	-10.95
Yttrium	A	1804800	1870131	3.62
Terbium	A	2230978	2178779	-2.34

-=low bias c=CCV

67101597072

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597018 File : c11n0018 Time : 11-MAR-2007 14:50
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003508]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01038]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.07495]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02791]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	963727	5.44
Scandium	A	1483318	1572576	6.02
Scandium	E	39997	45367	13.43
Scandium	H	339061	367200	8.30
Germanium	H	77433	84025	8.51
Germanium	E	18808	21238	12.92
Indium	A	1776838	1872261	5.37
Bismuth	A	1361245	1357645	-0.26
Yttrium	A	1804800	1912994	5.99
Terbium	A	2230978	2279148	2.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597040 File : c11n0040 Time : 11-MAR-2007 16:50
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01001]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01068]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01309]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001891]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01247]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005017]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01104]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	972249	6.37
Scandium	A	1483318	1654236	11.52
Scandium	E	39997	45255	13.15
Scandium	H	339061	332262	-2.01
Germanium	H	77433	78694	1.63
Germanium	E	18808	21341	13.47
Indium	A	1776838	1999046	12.51
Bismuth	A	1361245	1404744	3.20
Yttrium	A	1804800	2040525	13.06
Terbium	A	2230978	2416702	8.32

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597060 File : c11n0060 Time : 11-MAR-2007 19:09
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007192]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007118]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01108]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008521]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	calc
Manganese	E	[0.01312]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01515]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006840]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	973914	6.55
Scandium	A	1483318	1592762	7.38
Scandium	E	39997	47412	18.54
Scandium	H	339061	350704	3.43
Germanium	H	77433	81005	4.61
Germanium	E	18808	22154	17.79
Indium	A	1776838	1931902	8.73
Bismuth	A	1361245	1311613	-3.65
Yttrium	A	1804800	1959638	8.58
Terbium	A	2230978	2295376	2.89

!=warning calc=check quantitation ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597074 File : c11n0074 Time : 11-MAR-2007 20:25
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006054]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04629]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05015]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06346]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05053]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.02667]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.510]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07756]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	962389	5.29
Scandium	A	1483318	1576613	6.29
Scandium	E	39997	45713	14.29
Scandium	H	339061	315018	-7.09
Germanium	H	77433	75067	-3.06
Germanium	E	18808	21426	13.92
Indium	A	1776838	1895828	6.70
Bismuth	A	1361245	1309292	-3.82
Yttrium	A	1804800	1943884	7.71
Terbium	A	2230978	2278473	2.13

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597020 File : c11n0020 Time : 11-MAR-2007 15:01
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06348]	0.1000	ug/L	
Barium	A	0.9957	0.1000	ug/L	
Beryllium	A	[0.02693]	0.1000	ug/L	
Cadmium	A	1.769	0.1000	ug/L	
Lead	A	0.4565	0.1000	ug/L	
Silver	A	0.2096	0.1000	ug/L	
Thallium	A	[0.01561]	0.05000	ug/L	
Arsenic	E	0.2250	0.1000	ug/L	
Chromium	E	1.376	0.1000	ug/L	
Cobalt	E	0.2179	0.1000	ug/L	
Copper	E	1.289	0.1000	ug/L	
Manganese	E	0.6159	0.1000	ug/L	
Nickel	E	1.190	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.295	0.1000	ug/L	
Selenium	H	[0.08705]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95040	ug/L	95
Calcium	A	300000	295300	ug/L	98
Magnesium	A	100000	92340	ug/L	92
Molybdenum	A	2000	1940	ug/L	97
Potassium	A	100000	96420	ug/L	96
Sodium	E	250000	250000	ug/L	100
Iron	H	250000	236600	ug/L	95

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	622890	-31.85
Scandium	A	1483318	1366945	-7.85
Scandium	E	39997	38907	-2.72
Scandium	H	339061	342995	1.16
Germanium	H	77433	70980	-8.33
Germanium	E	18808	17767	-5.53
Indium	A	1776838	1533682	-13.68
Bismuth	A	1361245	982053	-27.86
Yttrium	A	1804800	1703322	-5.62
Terbium	A	2230978	2012659	-9.79

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597021 File : c11n0021 Time : 11-MAR-2007 15:06
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95930	ug/L	-4		
Cadmium	A	100.0	99.12	ug/L	-1	20	
Calcium	A	300000	300800	ug/L	0		
Magnesium	A	100000	92760	ug/L	-7		
Molybdenum	A	2000	1985	ug/L	-1		
Potassium	A	100000	97110	ug/L	-3		
Silver	A	50.00	41.98	ug/L	-16	20	
Arsenic	E	100.0	107.4	ug/L	7	20	
Chromium	E	200.0	203.6	ug/L	2	20	
Cobalt	E	200.0	190.3	ug/L	-5	20	
Copper	E	200.0	184.2	ug/L	-8	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	186.5	ug/L	-7	20	
Sodium	E	250000	255400	ug/L	2		
Vanadium	E	200.0	208.5	ug/L	4	20	
Zinc	E	100.0	91.73	ug/L	-8	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	327471	-3.42
Scandium	A	1483318	1355444	-8.62
Scandium	E	39997	36971	-7.57
Germanium	H	77433	68911	-11.01
Germanium	E	18808	16797	-10.69
Indium	A	1776838	1540719	-13.29
Yttrium	A	1804800	1696682	-5.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597076 File : c11n0076 Time : 11-MAR-2007 20:35
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05860]	0.1000	ug/L	
Barium	A	0.9563	0.1000	ug/L	
Beryllium	A	[0.02353]	0.1000	ug/L	
Cadmium	A	1.766	0.1000	ug/L	
Lead	A	0.4196	0.1000	ug/L	
Silver	A	0.2067	0.1000	ug/L	
Thallium	A	[0.008457]	0.05000	ug/L	
Arsenic	E	0.2697	0.1000	ug/L	
Chromium	E	1.414	0.1000	ug/L	
Cobalt	E	0.2241	0.1000	ug/L	
Copper	E	1.245	0.1000	ug/L	
Manganese	E	0.6715	0.1000	ug/L	
Nickel	E	1.218	0.1000	ug/L	
Vanadium	E	[0.008865]	0.1000	ug/L	
Zinc	E	1.293	0.1000	ug/L	
Selenium	H	[0.06983]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93670	ug/L	94
Calcium	A	300000	293900	ug/L	98
Magnesium	A	100000	91190	ug/L	91
Molybdenum	A	2000	1933	ug/L	97
Potassium	A	100000	96180	ug/L	96
Sodium	E	250000	252500	ug/L	101
Iron	H	250000	248400	ug/L	99

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	634364	-30.60
Scandium	A	1483318	1398346	-5.73
Scandium	E	39997	39660	-0.84
Scandium	H	339061	290010	-14.47
Germanium	H	77433	61783	-20.21
Germanium	E	18808	18488	-1.70
Indium	A	1776838	1561861	-12.10
Bismuth	A	1361245	925157	-32.04
Yttrium	A	1804800	1733946	-3.93
Terbium	A	2230978	1999275	-10.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597077 File : c11n0077 Time : 11-MAR-2007 20:41
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94960	ug/L	-5		
Cadmium	A	100.0	98.29	ug/L	-2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	91140	ug/L	-9		
Molybdenum	A	2000	1963	ug/L	-2		
Potassium	A	100000	98330	ug/L	-2		
Silver	A	50.00	42.24	ug/L	-16	20	
Arsenic	E	100.0	104.8	ug/L	5	20	
Chromium	E	200.0	195.6	ug/L	-2	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	174.2	ug/L	-13	20	
Manganese	E	200.0	195.0	ug/L	-3	20	
Nickel	E	200.0	179.0	ug/L	-11	20	
Sodium	E	250000	247100	ug/L	-1		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	88.37	ug/L	-12	20	
Iron	H	250000	251500	ug/L	1		
Selenium	H	100.0	104.9	ug/L	5	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	296240	-12.63
Scandium	A	1483318	1371514	-7.54
Scandium	E	39997	39151	-2.11
Germanium	H	77433	62930	-18.73
Germanium	E	18808	17980	-4.40
Indium	A	1776838	1548140	-12.87
Yttrium	A	1804800	1741446	-3.51

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67101597

Date : 03/11/07
Sequence : MET06 c11n0

Reference: c11n0004
Analyzed : 03/11/07 13:35

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	914016	1483318	39997	339061	77433	18808	1776838	1361245	1804800	2230978
		LOWER LIMIT	274205	444995	11999	101718	23230	5642	533051	408374	541440	669293
		UPPER LIMIT	1096820	1779982	47996	406873	92919	22569	2132206	1633494	2165760	2677174
018	ICB		963727	1572576	45367	367200	84025	21238	1872261	1357645	1912994	2279148
020	ICSA		622890	1366945	38907	342995	70980	17767	1533682	982053	1703322	2012659
021	ICSAB		569366	1355444	36971	327471	68911	16797	1540719	993926	1696682	2031170
026	BLANK	QC378535	836682	1424803	35209	292671	86773	21570	1778537	1349027	1836250	2282868
029	BS	QC378536	857144	1509285	39009	312458	72064	18496	1783183	1278068	1892531	2282399
030	BSD	QC378537	861203	1551355	39808	312548	72278	18604	1818445	1300675	1921066	2331298
034	MSS	193066-001	905777	1534515	43316	336255	78628	20673	1840908	1296053	1897043	2285615
038	CCV		917861	1570616	43857	336429	78961	20769	1840619	1283949	1921443	2296357
040	CCB		972249	1654236	45255	332262	78694	21341	1999046	1404744	2040525	2416702
042	BS	QC378337	916735	1554349	46552	334374	77400	21627	1838868	1287103	1907305	2269070
043	BSD	QC378338	956175	1670608	44594	322061	75429	20778	1975288	1353371	2046837	2424406
047	SER	QC378540	948814	1539747	44575	333366	79284	21447	1885021	1333434	1908735	2266445
048	MS	QC378538	888940	1533453	44081	333016	77306	20867	1827973	1254901	1888221	2236691
049	MSD	QC378539	892914	1550233	45009	336293	78781	21092	1851017	1270897	1915967	2255171
050	PDS	QC378541	883046	1581029	44322	331567	76282	20539	1844645	1244265	1939659	2289320
051	SAMPLE	193027-011	902112	1515017	44761	316048	75068	21252	1789200	1232903	1846622	2192746
052	SAMPLE	193027-012	882580	1581851	43375	338263	76935	20257	1795750	1245605	1928783	2250666
053	SAMPLE	193027-013	904920	1548607	44564	311777	73257	21323	1856592	1308079	1928518	2276958
058	CCV		912804	1555714	45395	316695	74471	21713	1814333	1229389	1908693	2232736
060	CCB		973914	1592762	47412	350704	81005	22154	1931902	1311613	1959638	2295376
062	BLANK	QC378542	865408	1466928	43484	292592	71811	21234	1788078	1266761	1850296	2194448
063	BLANK	QC378535	871445	1495662	41130	277041	70359	20773	1809097	1285728	1865840	2204232
065	SER	QC378448	963257	1559864	45540	322173	78179	21671	1903583	1293108	1912874	2252355
066	MSS	193217-011	934690	1563946	47186	323026	77667	22504	1876638	1291462	1921464	2270499
067	SAMPLE	193217-018	952386	1588525	46465	328076	77146	22226	1866653	1243191	1915643	2234811
068	SAMPLE	193217-019	900674	1475273	45702	316215	75969	22007	1789383	1258662	1810646	2142271
069	SAMPLE	193217-020	920841	1477998	45777	290497	70800	21769	1820574	1246372	1853182	2190742
070	SAMPLE	193217-022	903970	1491228	43775	301535	72670	21196	1795919	1213745	1841718	2170505
072	CCV		917720	1533714	44243	314905	73650	20782	1792631	1212255	1870131	2178779
074	CCB		962389	1576613	45713	315018	75067	21426	1895828	1309292	1943884	2278473
076	ICSA		634364	1398346	39660	290010	61783	18488	1561861	925157	1733946	1999275
077	ICSAB		549824	1371514	39151	296240	62930	17980	1548140	933015	1741446	2001537

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c11n0001	TUN				11-MAR-2007 13:17	1.0	1.0				1	
002	c11n0002	X	RINSE			11-MAR-2007 13:24	1.0					2	
003	c11n0003	X	RINSE			11-MAR-2007 13:30	1.0					2	
004	c11n0004	ICALBLK	CALBLANK			11-MAR-2007 13:35	1.0	1.0				2	
005	c11n0005	ICAL				11-MAR-2007 13:40	1.0	1.0				3	
006	c11n0006	ICAL				11-MAR-2007 13:46	1.0	1.0				4	
007	c11n0007	ICAL				11-MAR-2007 13:51	1.0	1.0				5	
008	c11n0008	ICAL				11-MAR-2007 13:56	1.0	1.0				6	
009	c11n0009	ICAL				11-MAR-2007 14:01	1.0	1.0				7	
010	c11n0010	ICAL				11-MAR-2007 14:06	1.0	1.0				8	
011	c11n0011	X	RINSE			11-MAR-2007 14:12	1.0					2	
012	c11n0012	X				11-MAR-2007 14:19	1.0					9 2	
013	c11n0013	X	RINSE			11-MAR-2007 14:24	1.0					2	
014	c11n0014	X				11-MAR-2007 14:29	1.0					9 2	
015	c11n0015	X	RINSE			11-MAR-2007 14:35	1.0					2	
016	c11n0016	ICV				11-MAR-2007 14:40	1.0	1.0			1	9	
017	c11n0017	X	RINSE			11-MAR-2007 14:45	1.0					2	
018	c11n0018	ICB				11-MAR-2007 14:50	1.0	1.0			1	2	
019	c11n0019	X				11-MAR-2007 14:56	1.0					2	
020	c11n0020	ICSA				11-MAR-2007 15:01	1.0	1.0			1	10 2	7:CA=295300
021	c11n0021	ICSAB				11-MAR-2007 15:06	1.0	1.0			1	11 2	9:CA=300800
022	c11n0022	X	RINSE			11-MAR-2007 15:12	1.0					2	
023	c11n0023	X	RINSE			11-MAR-2007 15:17	1.0					2	
024	c11n0024	X	RINSE			11-MAR-2007 15:23	1.0					2	
025	c11n0025	X	RINSE			11-MAR-2007 15:30	1.0					2	
026	c11n0026	BLANK	QC378535	122949	Water	11-MAR-2007 15:36	1.0	1.0			1	2	
027	c11n0027	XBS	QC378337	122902	Soil	11-MAR-2007 15:41	100.0	50.0			1	2	
028	c11n0028	XBSD	QC378338	122902	Soil	11-MAR-2007 15:46	100.0	50.0			1	2	
029	c11n0029	BS	QC378536	122949	Water	11-MAR-2007 15:52	1.0	1.0			1	2	
030	c11n0030	BSD	QC378537	122949	Water	11-MAR-2007 15:57	1.0	1.0			1	2	
031	c11n0031	XBS	QC378337	122902	Soil	11-MAR-2007 16:02	50.0	50.0		1	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11n0032	XBSD	QC378338	122902	Soil	11-MAR-2007 16:08	50.0	50.0		1	1	2	
033	c11n0033	X	RINSE			11-MAR-2007 16:13	1.0					2	
034	c11n0034	MSS	193066-001	122949	Water	11-MAR-2007 16:18	10.0	1.0	1		1	2	1:NA=43290.0
035	c11n0035	X	RINSE			11-MAR-2007 16:24	1.0					2	
036	c11n0036	X	RINSE			11-MAR-2007 16:29	1.0					2	
037	c11n0037	X	RINSE			11-MAR-2007 16:35	1.0					2	
038	c11n0038	CCV				11-MAR-2007 16:40	1.0	1.0			1	12 2	
039	c11n0039	X	RINSE			11-MAR-2007 16:45	1.0					2	
040	c11n0040	CCB				11-MAR-2007 16:50	1.0	1.0			1	2	
041	c11n0041	X				11-MAR-2007 16:56	1.0					2	
042	c11n0042	BS	QC378337	122902	Soil	11-MAR-2007 17:01	5.0	50.0			1	2	
043	c11n0043	BSD	QC378338	122902	Soil	11-MAR-2007 17:07	5.0	50.0			1	2	
044	c11n0044	X	RINSE			11-MAR-2007 17:14	1.0					2	
045	c11n0045	X	RINSE			11-MAR-2007 17:19	1.0					2	
046	c11n0046	X	RINSE			11-MAR-2007 17:24	1.0					2	
047	c11n0047	SER	QC378540	122949	Water	11-MAR-2007 17:30	50.0	1.0	1	1	1	2	
048	c11n0048	MS	QC378538	122949	Water	11-MAR-2007 17:35	10.0	1.0			1	2	1:NA=42850.0
049	c11n0049	MSD	QC378539	122949	Water	11-MAR-2007 17:40	10.0	1.0			1	2	1:NA=40870.0
050	c11n0050	PDS	QC378541	122949	Water	11-MAR-2007 17:45	10.0	1.0			1	13 14 2	1:NA=52430.0
051	c11n0051	SAMPLE	193027-011	122949	Water	11-MAR-2007 17:51	10.0	1.0	1		1	2	1:NA=20640.0
052	c11n0052	SAMPLE	193027-012	122949	Water	11-MAR-2007 17:56	10.0	1.0	1		1	2	1:MN=546.100
053	c11n0053	SAMPLE	193027-013	122949	Water	11-MAR-2007 18:01	10.0	1.0	1		1	2	1:MN=355.100
054	c11n0054	XMSS	193165-002	122902	Soil	11-MAR-2007 18:07	100.0	50.0			1	2	
055	c11n0055	X	RINSE			11-MAR-2007 18:14	1.0					2	
056	c11n0056	X	RINSE			11-MAR-2007 18:19	1.0					2	
057	c11n0057	X	RINSE			11-MAR-2007 18:25	1.0					2	
058	c11n0058	CCV				11-MAR-2007 18:59	1.0	1.0			1	12 2	
059	c11n0059	X	RINSE			11-MAR-2007 19:04	1.0					2	
060	c11n0060	CCB				11-MAR-2007 19:09	1.0	1.0			1	2	
061	c11n0061	X				11-MAR-2007 19:15	1.0					2	
062	c11n0062	BLANK	QC378542	122950	Filtra	11-MAR-2007 19:20	1.0	1.0	2		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00289

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11n0063	BLANK	QC378535	122949	Water	11-MAR-2007 19:26	1.0	1.0	2		1	2	
064	c11n0064	XSER	NO SAMPLE	122902	Soil	11-MAR-2007 19:31	500.0					2	
065	c11n0065	SER	QC378448	122924	Filtra	11-MAR-2007 19:37	50.0	1.0	4		1	2	
066	c11n0066	MSS	193217-011	122924	Filtra	11-MAR-2007 19:42	10.0	1.0	2		1	2	
067	c11n0067	SAMPLE	193217-018	122924	Filtra	11-MAR-2007 19:47	20.0	1.0	2		1	2	
068	c11n0068	SAMPLE	193217-019	122924	Filtra	11-MAR-2007 19:53	20.0	1.0	2		1	2	
069	c11n0069	SAMPLE	193217-020	122924	Filtra	11-MAR-2007 19:58	20.0	1.0	2		1	2	
070	c11n0070	SAMPLE	193217-022	122924	Filtra	11-MAR-2007 20:03	20.0	1.0	2		1	2	
071	c11n0071	X	RINSE			11-MAR-2007 20:09	1.0					2	
072	c11n0072	CCV				11-MAR-2007 20:14	1.0	1.0	2		1	12 2	
073	c11n0073	X	RINSE			11-MAR-2007 20:19	1.0					2	
074	c11n0074	CCB				11-MAR-2007 20:25	1.0	1.0			1	2	
075	c11n0075	X				11-MAR-2007 20:30	1.0					2	
076	c11n0076	ICSA				11-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=293900
077	c11n0077	ICSAB				11-MAR-2007 20:41	1.0	1.0			1	11 2	8:CA=302800

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: Pert Date: 3/11/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193137 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193137-005	MET04	03/08/07 17:46	1.0															+								
193137-005	MET06	03/10/07 08:43	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC377999	MET04	03/08/07 16:48	1.0															+								
QC378000	MET04	03/08/07 16:50	1.0															+								
QC378001	MET04	03/08/07 16:53	1.0															+								
QC378002	MET04	03/08/07 16:57	5.0															+								
QC378003	MET04	03/08/07 17:00	1.0															+								
QC378004	MET04	03/08/07 17:02	1.0															+								
QC378443	MET06	03/09/07 20:07	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378444	MET06	03/10/07 06:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378445	MET06	03/10/07 06:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378446	MET06	03/10/07 07:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378447	MET06	03/10/07 07:23	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378448	MET06	03/10/07 07:12	50.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+		+
QC378448	MET06	03/11/07 19:37	50.0							+															+	
QC378449	MET06	03/10/07 07:28	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378508	MET06	03/10/07 08:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378509	MET06	03/10/07 08:32	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+

Curtis & Tompkins Laboratories Sample Preparation Summary 12-MAR-2007 16:07

Batch Number : 122924
Date Extracted: 09-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-023			Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
193137-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-021			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193217-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
QC378443	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC378444	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378445	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378446	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378447	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378448	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378449	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1				ICAP		
QC378508	MS	of 193217-021		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378509	MSD	of 193217-021		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		

Prep Chemist: for K. Gaines Reviewed By: RAT Date: 3/12/07

Relinquished By: RAT Received By: RAT Date: 3/12/07

00291

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 122924
Date Digested: 3/9/07
Digested by: [illegible]

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 75
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50		
BS				
BSD				
MS-11 Y				
MSD 11				
193217-11				
MS 21 L				
MSD 21				
193217-21				
-10 R				
-12 I				
-14 B				
-15 G				
-16 7				
-17				
-18 E				
-19				
-20				
-22				
-23				
-24				
137-105 H				
055-23-D				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	[illegible] 3/9
.5 mL of spike solution was added to all spikes	95054	
	95055	
concentrated HCl	C33036 B3A1LK	
concentrated HNO3	C45025	
☐ filtered thru' Whatman # 541		

[illegible] 3/9/07
Prep Chemist Signature / Date

[illegible] 3-9-07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
Calnum : 47097469001
Units : ug/L

Date : 08-MAR-2007 16:29
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	122820	47097469002	STD02REP1	08-MAR-2007 16:32	S5681 (500X)
L2	122820	47097469003	STD03REP1	08-MAR-2007 16:35	S5681 (200X)
L3	122820	47097469004	STD04REP1	08-MAR-2007 16:37	S5681 (50X)
L4	122820	47097469005	STD05REP1	08-MAR-2007 16:39	S5681 (20X)
L5	122820	47097469006	STD06REP1	08-MAR-2007 16:42	S5681 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	2680.0	1984.0	1743.0	1690.2	1649.1	LINR	-0.1464	6.14E-4		1949.3	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47097469001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 030807a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 6.14118e-4

C -1.46381e-1

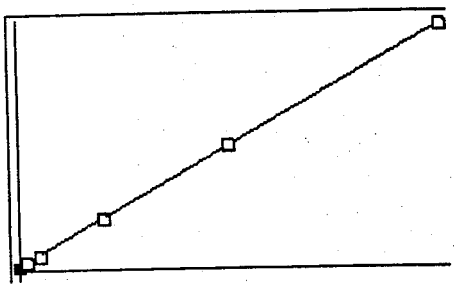
Rho .999966

Type

µ Abs.
16491

Accepted

New



Include S1 Rep 1

08-Mar-07 16:42 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.035	.035	296	1	296		
02	.20000	.183	-.017	536	0%	536		
03	.50000	.463	-.037	992	0%	992		
04	2.0000	1.99	-.006	3486	0%	3486		
05	5.0000	5.04	.044	8452	0%	8451		
06	10.000	9.98	-.019	16492	0%	16491		

NUM

Ready

Folder: 030807a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	16:29:51 08 Mar 07	HG		
Hg	.000	ppb	296					
		Bkgd 1	12644329					
*** Standard: 2 Rep: 1				Seq: 2	16:32:40 08 Mar 07	HG		
Hg	.200	ppb	536					
		Bkgd 1	12635500					
*** Standard: 3 Rep: 1				Seq: 3	16:35:00 08 Mar 07	HG		
Hg	.500	ppb	992					
		Bkgd 1	12635125					
*** Standard: 4 Rep: 1				Seq: 4	16:37:08 08 Mar 07	HG		
Hg	2.00	ppb	3486					
		Bkgd 1	12629555					
*** Standard: 5 Rep: 1				Seq: 5	16:39:54 08 Mar 07	HG		
Hg	5.00	ppb	8451					
		Bkgd 1	12635866					
*** Standard: 6 Rep: 1				Seq: 6	16:42:22 08 Mar 07	HG		
Hg	10.0	ppb	16491					
		Bkgd 1	12635089					
*** Check Standard: 2			Ck2S5683	Seq: 7	16:44:28 08 Mar 07	HG		
Line	Flag		Intensities					
Hg			8664					
		Bkgd 1	12629771					
*** Check Standard: 1			Ck1ICB	Seq: 8	16:46:43 08 Mar 07	HG		
Line	Flag		Intensities					
Hg			140					
		Bkgd 1	12638036					
*** Sample ID: qc377999			122820,1	Seq: 9	16:48:52 08 Mar 07	HG		
Hg	-.136	ppb	17					
		Bkgd 1	12638602					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 08-MAR-2007

Sequence: 47097469 Instrument: MET04 HydraAA HG Analyzer
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	122820	ICALBLK	STD01REP1				08-MAR-2007 16:29	1.0	1.0									
002	122820	ICAL	STD02REP1				08-MAR-2007 16:32	1.0	1.0									
003	122820	ICAL	STD03REP1				08-MAR-2007 16:35	1.0	1.0									
004	122820	ICAL	STD04REP1				08-MAR-2007 16:37	1.0	1.0									
005	122820	ICAL	STD05REP1				08-MAR-2007 16:39	1.0	1.0									
006	122820	ICAL	STD06REP1				08-MAR-2007 16:42	1.0	1.0									
007	122820	ICV					08-MAR-2007 16:44	1.0	1.0	2	5.000	47097469001	5.170		ug/L	103		
008	122820	ICB					08-MAR-2007 16:46	1.0	1.0			47097469001	ND	0.20	ug/L			u
009	122820	BLANK	QC377999		122820	Water	08-MAR-2007 16:48	1.0	1.0			47097469001	ND	0.20	ug/L			u
010	122820	BS	QC378000		122820	Water	08-MAR-2007 16:50	1.0	1.0		5.000	47097469001	5.110	0.20	ug/L	102		u
011	122820	BSD	QC378001		122820	Water	08-MAR-2007 16:53	1.0	1.0		5.000	47097469001	4.990	0.20	ug/L	100	2	u
012	122820	MSS	193066-001		122820	Water	08-MAR-2007 16:55	1.0	1.0			47097469001	ND	0.20	ug/L			u
013	122820	SER	QC378002	193066-001	122820	Water	08-MAR-2007 16:57	5.0	1.0			47097469001	ND	1.0	ug/L		--	u
014	122820	MS	QC378003	193066-001	122820	Water	08-MAR-2007 17:00	1.0	1.0		5.000	47097469001	5.470	0.20	ug/L	109		u
015	122820	MSD	QC378004	193066-001	122820	Water	08-MAR-2007 17:02	1.0	1.0		5.000	47097469001	5.540	0.20	ug/L	111	1	u
016	122820	SAMPLE	193055-005		122820	Filtra	08-MAR-2007 17:05	1.0	1.0			47097469001	ND	0.20	ug/L			u
017	122820	SAMPLE	193055-006		122820	Filtra	08-MAR-2007 17:07	1.0	1.0			47097469001	ND	0.20	ug/L			u
018	122820	SAMPLE	193055-008		122820	Filtra	08-MAR-2007 17:09	1.0	1.0			47097469001	ND	0.20	ug/L			u
019	122820	CCV					08-MAR-2007 17:11	1.0	1.0	3	2.500	47097469001	2.550		ug/L	102		
020	122820	CCB					08-MAR-2007 17:13	1.0	1.0			47097469001	ND	0.20	ug/L			u
021	122820	SAMPLE	193055-011		122820	Filtra	08-MAR-2007 17:16	1.0	1.0			47097469001	ND	0.20	ug/L			u
022	122820	SAMPLE	193055-012		122820	Filtra	08-MAR-2007 17:18	1.0	1.0			47097469001	ND	0.20	ug/L			u
023	122820	SAMPLE	193055-013		122820	Filtra	08-MAR-2007 17:20	1.0	1.0			47097469001	ND	0.20	ug/L			u
024	122820	SAMPLE	193055-014		122820	Filtra	08-MAR-2007 17:22	1.0	1.0			47097469001	ND	0.20	ug/L			u
025	122820	SAMPLE	193057-002		122820	Filtra	08-MAR-2007 17:24	1.0	1.0			47097469001	ND	0.20	ug/L			u
026	122820	SAMPLE	193057-003		122820	Filtra	08-MAR-2007 17:27	1.0	1.0			47097469001	ND	0.20	ug/L			u
027	122820	SAMPLE	193057-004		122820	Filtra	08-MAR-2007 17:29	1.0	1.0			47097469001	ND	0.20	ug/L			u
028	122820	SAMPLE	193066-002		122820	Water	08-MAR-2007 17:31	1.0	1.0			47097469001	ND	0.20	ug/L			u
029	122820	SAMPLE	193066-003		122820	Water	08-MAR-2007 17:33	1.0	1.0			47097469001	ND	0.20	ug/L			u
030	122820	SAMPLE	193066-004		122820	Water	08-MAR-2007 17:35	1.0	1.0			47097469001	4.070		ug/L	81		
031	122820	CCV					08-MAR-2007 17:37	1.0	1.0	4	5.000	47097469001	ND	0.20	ug/L			
032	122820	CCB					08-MAR-2007 17:39	1.0	1.0			47097469001	ND	0.20	ug/L			u
033	122820	SAMPLE	193087-001		122820	Water	08-MAR-2007 17:41	1.0	1.0			47097469001	ND	0.20	ug/L			u
034	122820	SAMPLE	193114-001		122820	Water	08-MAR-2007 17:44	1.0	1.0			47097469001	ND	0.20	ug/L			u
035	122820	SAMPLE	193137-005		122820	Filtra	08-MAR-2007 17:46	1.0	1.0			47097469001	ND	0.20	ug/L			u
036	122820	SAMPLE	193187-001		122820	Water	08-MAR-2007 17:48	1.0	1.0			47097469001	ND	0.20	ug/L			u
037	122820	SAMPLE	193187-002		122820	Water	08-MAR-2007 17:50	1.0	1.0			47097469001	ND	0.20	ug/L			u
038	122820	SAMPLE	193187-003		122820	Water	08-MAR-2007 17:52	1.0	1.0			47097469001	6.230		ug/L	83		
039	122820	CCV					08-MAR-2007 17:54	1.0	1.0	5	7.500	47097469001	ND	0.20	ug/L			
040	122820	CCB					08-MAR-2007 17:56	1.0	1.0			47097469001						

Stds used: 1=S5681 2=S5683 3=S5684 4=S5685 5=S5686
Flags used: u=use

Analyst: _____ Date: _____

Curtis & Tompkins Laboratories Sample Preparation Summary 07-MAR-2007 14:23

Batch Number : 122820
Date Extracted: 07-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5681
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193055-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193057-002			Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
193057-003			Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
193057-004			Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
193066-001			Sullivan International Group,	Water	50	mL	50	1.000000	1				TAL/HG		
193066-002			Sullivan International Group,	Water	50	mL	50	1.000000	1				TAL/HG		
193066-003			Sullivan International Group,	Water	50	mL	50	1.000000	1				TAL/HG		
193066-004			Sullivan International Group,	Water	50	mL	50	1.000000	1				TAL/HG		
193087-001			Kensington Laboratories	Water	50	mL	50	1.000000	1				HG		
193114-001			CH2M Hill	Water	50	mL	50	1.000000	1				T26/HG		
193137-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
193187-001			URS Corporation	Water	50	mL	50	1.000000	1				T26/HG		
193187-002			URS Corporation	Water	50	mL	50	1.000000	1				T26/HG		
193187-003			URS Corporation	Water	50	mL	50	1.000000	1				T26/HG		
QC377999	BLANK			Water	50	mL	50	1.000000	1				HG		
QC378000	BS			Water	50	mL	50	1.000000	1	2.5			HG		
QC378001	BSD			Water	50	mL	50	1.000000	1	2.5			HG		
QC378002	SER	of 193066-001		Water	50	mL	50	1.000000	1				HG		
QC378003	MS	of 193066-001		Water	50	mL	50	1.000000	1	2.5			HG		
QC378004	MSD	of 193066-001		Water	50	mL	50	1.000000	1	2.5			HG		
QC378005	PDS	of 193066-001		Water	50	mL	50	1.000000	1				HG		

Prep Chemist: [signature] 3/7/07 Reviewed By: [signature] Date: 3/7/07

Relinquished By: [signature] 3/7/07 Received By: [signature] Date: 3/7/07

00227

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 122820

Date Digested: 3/7/07

Digested by: ZA

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193055-005	F	50	50	N	Filtrate (F.F.)
-006	F				
-008	P				
-011	H				Filtrate (F.F.)
-012					
-013					
-014	B				
193057-002	I				Filtrate (F.F.)
-003	I				
-004	M				
193066-001 MSS	P				water
-002	H				
-003					
-004					
193087-001	A				
193114-001					
193137-005	H				Filtrate (F.F.)
193187-001	A				water
-002					
-003					
Blank					
BS					
BSD					
MS 193066-001	P				
MSD					

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	SS681	3/7/07
ICAL Source WS#	SS681	
ICV / CCV WS#	SS683/84/85/86	
Digestion of Samples & Standards: Time ON / Temperature ON	11:00 / 95°C	
Time OFF/ Temperature OFF	1:00 / 95°C	
concentrated H_2SO_4	BH1041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	K_2 030807	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	$SnCl_2$ 030607	
☐ filtered thru' 0.45 um syringe filter	[illegible]	

3/7/07

Prep Chemist / Date

Continued from page X

Continued on page X

3/7/07

Reviewed By / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/23/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/23/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123079
Field ID:	NKGW04	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	mg/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193137-005	ND	0.01
BLANK	QC379103	ND	0.01

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123079
MSS Lab ID:	193166-017	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379104	0.01470	0.1630	0.1424	78	65-135		
MSD	QC379105		0.1630	0.1438	79	65-135	1	20
LCS	QC379106		0.1630	0.1690	104	75-125		

RPD= Relative Percent Difference

35.0

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/14/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/14/2007**
Wavelength:	578 nm	Batch:	123079
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1180	0.0846	0.0816	104%	90 - 110%
ICB	-0.0003	-0.0002	0.0000		
CCV	0.1163	0.0834	0.0816	102%	90 - 110%
CCB	-0.0005	-0.0004	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/14/2007**
Analysis Date: **3/14/2007**
Batch: 123079
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	inal Distill Vol (mL)	Distillate olored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1179	**0.1690**	0.020	0.5	16.3	0.163	**104**	
193166-17	50.0	50.0	20.0	1.00	0.0205	**0.0147**	0.010					
193166-17m	50.0	50.0	10.0	1.00	0.0993	**0.1424**	0.020	0.5	16.3	0.163	**78**	
193166-17m	50.0	50.0	10.0	1.00	0.1003	**0.1438**	0.020	0.5	16.3	0.163	**79**	**1**
193108-14	50.0	50.0	20.0	1.00	0.0003	**ND**	0.010					
193137-5	50.0	50.0	20.0	1.00	0.0010	**ND**	0.010					
193175-5	50.0	50.0	20.0	1.00	0.0043	**ND**	0.010					
193197-4	50.0	50.0	20.0	1.00	0.0007	**ND**	0.010					
193226-7	50.0	50.0	20.0	1.00	0.0121	**ND**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

Reviewed by/ Date: 3/14/07

Polymatrix 193175 USD 193197 DRS 193226
Treated well 193108 193137
PROJECT Weston 193166

Notebook No. BK2451 93

Continued From Page

CN EPA 335.2M B 123079

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	ABS
193108-14	50	50	20	.0003
193137-5				.0010
193166-17				.0205
-17MS	+1.5ml (16.32ug/ml dilut of S5101, 1ml – 50ml)		10	.0993
-17MSD	same as MS		10	.1003
193175-5			20	.0043
193197-4				.0007
193226-7				.0121
LCS	same as MS		10	.1179
MB			20	.0003
ICB				-.0003
ICV				.1180
CCV				.1163
CCB				-.0005

TV = .0816 mg/L

Tests for Cl^- & S negative
pH all >12
Sulfamic acid added to all samples.

Continued on Page

Read and Understood By

Signed 3-14-07 Date Signed 3/14/07 Date

---) Quantitation Results Report (---

Date : 03-14-2007
Time : 12:27:12
Operator :

File Name : Data not stored yet

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	-0.0003	0.00000
2	ICV	Analytical	+0.1160	0.08650
3	193108-14	Analytical	+0.0003	1.902E-04
4	193137-5	Analytical	+0.0010	7.609E-04
5	193166-17	Analytical	+0.0205	0.01505
6	193166-17MS	Analytical	+0.0993	0.07294
7	193166-17MSD	Analytical	+0.1003	0.07354
8	193175-1	Analytical	+0.0042	0.00313
9	193197-4	Analytical	+0.0007	4.923E-04
10	193226-7	Analytical	+0.0121	0.00891
11	LCS	Analytical	+0.1178	0.08645
12	MB	Analytical	+0.0003	2.014E-04
13	CCV	Analytical	+0.1163	0.08531
14	CCB	Analytical	-0.0005	0.00000

---) Standard Calibration Report (---

Date : 03-14-2007
Time : 12:09:28
Operator :

ile Name : C:\UV\DATA\DN706.STD

ample Name : cyanide
olvent Name : CAL 776/0E
onc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = 17.333E-01 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00300	0.0007	*****
2	0.00673	0.0126	-4.523 %
3	0.01746	0.0259	-7.942 %
4	0.05238	0.0716	-0.375 %
5	0.08730	0.1186	+0.385 %
6	0.13968	0.1916	-0.583 %
7	0.17460	0.2371	+0.424 %

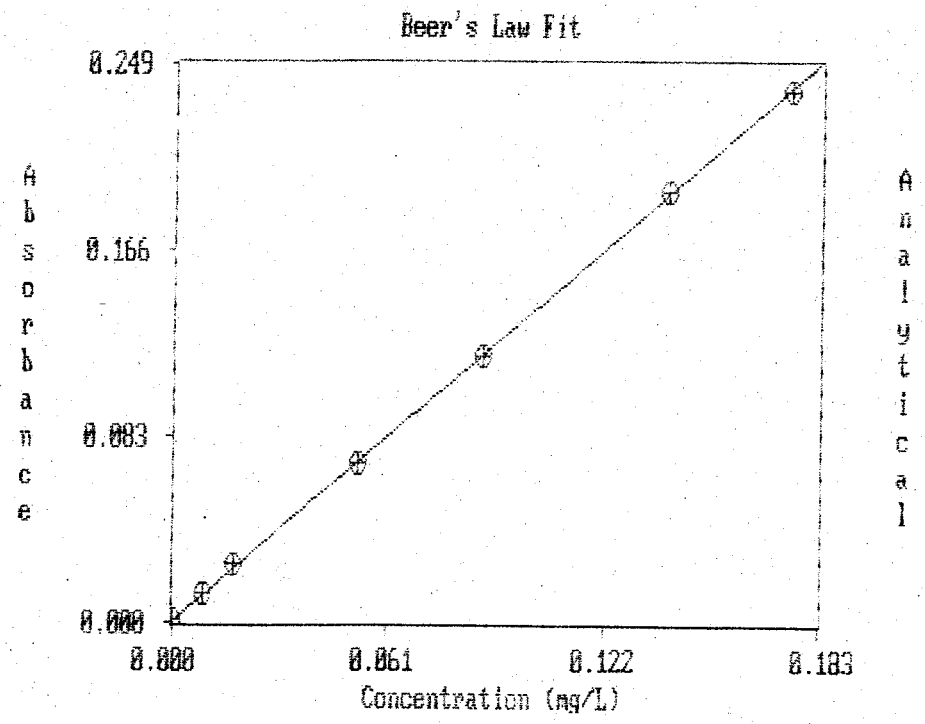
---> Standard Calibration Report <---

Date : 03-14-2007
Time : 12:09:05
Operator :

File Name : C:\UV\DATA\CN706.STD

Sample Name : Cyanide
Solvent Name : CAL 7/6/06
Conc. Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123079
Date Started: 14-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193108-014			Treadwell & Rollo	Water	CYANIDE	14-MAR-2007
193137-005			Treadwell & Rollo	Water	CYANIDE	15-MAR-2007
193166-017			Weston Solutions	Water	CYANIDE	16-MAR-2007
193175-005			Polymatrix	Water	CYANIDE	16-MAR-2007
193197-004			Union Sanitary Dis	Water	CYANIDE	13-MAR-2007
193226-007			URS Corporation	Water	CYANIDE	13-MAR-2007
QC379103	BLANK			Water	CYANIDE	
QC379104	MS	of 193166-017		Water	CYANIDE	
QC379105	MSD	of 193166-017		Water	CYANIDE	
QC379106	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	122887
Field ID:	NKGW04	Sampled:	03/02/07
Matrix:	Water	Received:	03/05/07
Units:	mg/L	Analyzed:	03/08/07

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	193137-005	4,900	50	5.000
BLANK	QC378285	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

36.0

00312

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193137	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	122887
MSS Lab ID:	193066-001	Sampled:	03/01/07
Matrix:	Water	Received:	03/01/07
Units:	mg/L	Analyzed:	03/08/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC378286		100.0	124.0		124	75-126		
BSD	QC378287		100.0	126.0		126	75-126	2	21
SDUP	QC378288	1,262		1,278	10.00			1	24

RL= Reporting Limit
RPD= Relative Percent Difference

37.0

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122887
Date Started: 08-MAR-2007
Batched by : David Bowden

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193066-001		Sullivan Internati	Water	TDS	13-MAR-2007
193066-002		Sullivan Internati	Water	TDS	13-MAR-2007
193066-003		Sullivan Internati	Water	TDS	13-MAR-2007
193066-004		Sullivan Internati	Water	TDS	13-MAR-2007
193112-001		CH2M Hill	Water	TDS	14-MAR-2007
193112-002		CH2M Hill	Water	TDS	14-MAR-2007
193112-003		CH2M Hill	Water	TDS	14-MAR-2007
193112-004		CH2M Hill	Water	TDS	14-MAR-2007
193112-005		CH2M Hill	Water	TDS	14-MAR-2007
193112-006		CH2M Hill	Water	TDS	14-MAR-2007
193112-007		CH2M Hill	Water	TDS	14-MAR-2007
193112-008		CH2M Hill	Water	TDS	14-MAR-2007
193112-009		CH2M Hill	Water	TDS	14-MAR-2007
193112-010		CH2M Hill	Water	TDS	14-MAR-2007
193119-004		Sullivan Internati	Water	TDS	15-MAR-2007
193119-005		Sullivan Internati	Water	TDS	15-MAR-2007
193137-005		Treadwell & Rollo	Water	TDS	15-MAR-2007
QC378285	BLANK		Water	TDS	
QC378286	BS		Water	TDS	
QC378287	BSD		Water	TDS	
QC378288	SDUP of 193066-001		Water	TDS	

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWWW 2540C	Analysis Date:	**08-Mar-07**
Matrix:	Water	Batch #:	**122887**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	55.8202	55.8206	0.0004	ND	10					
BS	50	1	54.9044	54.9106	0.0062	124.0	10	1,000	5	100	**124**	
BSD	50	1	54.9898	54.9961	0.0063	126.0	10	1,000	5	100	**126**	**1.60**
193066-001	50	1	55.3828	55.4459	0.0631	1,262.0	10					
SDUP	50	1	54.1625	54.2264	0.0639	1,278.0	10					**1.26**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193066-001	50	1	55.3828	55.4459	0.0631	1,262.0	10
193066-002	50	1	53.9170	53.9811	0.0641	1,282.0	10
193066-003	50	1	53.4748	53.5389	0.0641	1,282.0	10
193066-004	50	1	53.7578	53.8153	0.0575	1,150.0	10
193112-001	50	1	54.5473	54.6240	0.0767	1,534.0	10
193112-002	5	10	27.1299	27.2280	0.0981	19,620.0	100
193112-003	5	10	26.3502	26.4339	0.0837	16,740.0	100
193112-004	5	10	24.3754	24.4725	0.0971	19,420.0	100
193112-005	5	10	24.0975	24.2239	0.1264	25,280.0	100
193112-006	10	5	25.1664	25.2794	0.1130	11,300.0	50
193112-007	5	10	24.6951	24.7681	0.0730	14,600.0	100
193112-008	15	3.333	27.4083	27.5523	0.1440	9,600.0	33
193112-009	5	10	26.2149	26.3190	0.1041	20,820.0	100
193112-010	5	10	24.8578	24.9401	0.0823	16,460.0	100
193119-004	1	50	24.4064	24.4509	0.0445	44,500.0	500
193119-005	20	2.5	25.4321	25.5385	0.1064	5,320.0	25
193137-005	10	5	50.3409	50.3899	0.0490	4,900.0	50

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/14/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 122887

Prep Date: 3/8/07
Prep Time: 20:00

Benchbook#: **BK 2420**
Page: **78**

Filter Mfg/ Lot#: Env Exp 655614
Spike WS#: S5560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/8/07	3/9/07	3/9/07	3/11/07	3/11/07	3/11/07
Time:	21:15	8:30	10:30	12:00	13:45	14:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	GULP	55.8202	55.8210	55.8221	55.8206
	BS			GAP	54.9044	54.9102	54.9103	54.9106
	BSD			G40	54.9898	54.9964	54.9961	~~54.9967~~ X
	193066-1	1940	50	GATE	55.3828	55.4446	55.4457	55.4444
5	~~MSDUP-1~~			G41	54.1625	54.2260	54.2264	X
	-2	1943		GUESS	53.9170	53.9800	53.9812	53.9799
	-3	1968		G42	53.4748	53.5387	53.5389	X
	-4	1635		G43	53.7578	53.8143	53.8157	53.8135
	193112-1	2330	50	G44	54.5473	54.6226	54.6239	54.6224
10	-2	28,300	5	PAXTON	27.1299	27.2307	27.2317	27.2296
*	-3	24,400		PBR	26.3502	26.4342	26.4327	X
	-4	26,900		IPA	24.3754	24.4718	24.4729	24.4725 X
	-5	34,600		URU	24.0975	24.2250	24.2266	24.2252
	-6	17,9800	10	ARM	25.1664	25.2825	25.2833	25.2821
15	-7	21,400	5	IO	24.6951	24.7689	24.7701	24.7686
	-8	13,700	15	PAGO	27.4083	27.5519	27.5523	X
	-9	31,000	5	OPP	26.2149	26.3190	26.3211	26.3195
	-10	23,500		AL	24.8578	24.9397	24.9401	X
	193119-4	53,200	1	MSA	24.4064	24.4509	24.4509	X
20	-5	8190	20	BOMB	25.4321	25.5389	25.5400	25.5390
	193137-005	19500	10	SAV	50.3409	50.3899	50.3899	X

* Constant weight must be within 0.0005 from previous reading.

* PBR was broken

3/8/07
Analyst / Date

3/11/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch#: 122887 con't

Prep Date:
Prep Time:

Benchbook#: **BK 2420**
Page: **79**

Filter Mfg/ Lot#:
Spike WS#:

Spike WS Conc (mg/L):
Spike Vol Added (mL):

	In -4	Out -4	In-~~3~~ 5 (2 3/12)	Out-2	In-3	Out-3
Date:	3/11/07	3/12/07	3/12/07			
Time:	15:30	9:30	11:00			
Temp (C):	180	180	180			

	Sample # / ~~Letter~~ (4th)	EC Value (uS/cm) (5th)	Sample Vol. Filtered (mL) (6th)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	55.8207	~~55.8210~~						
	54.9110	X						
	X							
	55.4454	55.4459	X					
5								
	53.9808	53.9811	X					
	53.8153	53.8153	X					
	54.6244	54.6240	X					
10	27.2282	27.2280	X					
	24.2243	24.2239	X					
	25.2798	25.2794	X					
15	24.7681	X						
	26.3190	X						
20	25.5385	X						

* Constant weight must be within 0.0005 from previous reading.

3/11/07
Analyst / Date

3/12/07
Reviewed by / Date

NDMA

PACIFIC ANALYTICAL, INC.

6056 Corte Del Cedro • Carlsbad, CA 92011
(760) 496-2200 • FAX (760) 496-2211

NARRATIVE REPORT
Method 1625M Semivolatiles

03/16/07

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

Attn: Steve Stanley

PA Reference: 2948, 2953, 2956

Samples: FB0302071A, NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B, DW030807A

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 1000 mL aliquot was spiked with 0.01 ug of N-Nitrosodimethylamine-d6 and extracted with continuous liquid-liquid extractors for 24 hours. The sample extract was concentrated to a final volume of 0.10 mL and spiked with 0.01 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL. A recent method detection limit study suggests the instrument is capable of detecting N-Nitrosodimethylamine (NNDMA) at a concentration of 0.0005 ug/L in a 1 liter sample.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.002 ug of NNDMA and 0.01 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. The laboratory blanks associated with the samples have no NNDMA detected.

Matrix Spike/Matrix Spike Duplicate

Two aliquots of sample NKGW02 were spiked with 0.01 ug of NNDMA and its label, extracted and analyzed like the sample.

Samples

Samples NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B and DW030807A have NNDMA detected at concentrations which exceed the method detection limit..

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

FB0302071A

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2948-001
Lab File ID: 7C1519
Date Sampled: 03/02/07
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1800

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	45 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW04

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2948-002
Lab File ID: 7C1520
Date Sampled: 03/02/07
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1842

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0009	J	0.0020	44 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11871

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11871
Lab File ID: 7C1515
Date Sampled:
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1510

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	51 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11872

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11872
Lab File ID: 7C1516
Date Sampled:
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1553

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	55 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q58

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q58
Lab File ID: 7C1511
Date Sampled:
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1221

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0022	0.0020	50 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q58DUP

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q58DUP
Lab File ID: 7C1512
Date Sampled:
Date Extracted: 03/08/07
Date Analyzed: 03/15/07
Time Analyzed: 1303

Compound	Sample Conc ug/L		Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0020	J	0.0020	48 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

On-going Accuracy (P&R) Check

Sample: P&R Q58 Lab ID: P&R Q58 File: 7C1511
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 1221
Initial Size: 1000.0000 Final Size: 0.1000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.02183	109	70 - 130	50	25 - 175

On-going Accuracy (P&R) Check

Sample: P&R Q58DUP Lab ID: P&R Q58DUP File: 7C1512
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 1303
Initial Size: 1000.0000 Final Size: 0.1000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.01999	100	70 - 130	48	25 - 175

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs: Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.133	0.133	0.127	0.128	0.130	0.130	1.9

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs:
Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
N-Nitrosodimethylami	999999	0.184	0.427	0.819	4.095	8.188

CONCENTRATIONS OF CALIBRATION STANDARDS

	Compound	Ical Type	Resp Ref	Calibration Standards Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1	2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2	N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3	N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

I = internal standard; L = labeled compound; U = unlabeled native
O = compound referenced to internal standard

Sample No.: 0.02 PPM STD NSTD0.02 Analyzed: 03/15/07 0807
File ID: 7C1505 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0519

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03/16/07

Raw Datafile : 7C1505 Quan DB : 7C1505
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	-1	51158785	bb	1086	1087	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6788672	bb	152	152	80	N-Nitrosodimethylamine-d6
3	86	49	89	0	1249100	!!	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.05 PPM STD NSTD0.05 Analyzed: 03/15/07 0850
File ID: 7C1506 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/~~07~~ 0519
03/16/07

Raw Datafile : 7C1506 Quan DB : 7C1506
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	-1	48900994	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6496083	vv	152	152	80	N-Nitrosodimethylamine-d6
3	94	59	92	0	2776235	vv	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.10 PPM STD NSTD0.10 Analyzed: 03/15/07 0933
File ID: 7C1507 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/~~07~~ 08 0520

V33(1267

Raw Datafile : 7C1507 Quan DB : 7C1507
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	93	100	-1	48440195	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	94	67	84	0	6166152	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	68	93	0	5047360	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.50 PPM STD NSTD0.50 Analyzed: 03/15/07 1015
File ID: 7C1508 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/~~07~~ 0521
03/16/07

Raw Datafile : 7C1508
Find DB : NNDMA

Quan DB : 7C1508
Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	94	100	0	55381118	bb	1087	1087	190	2,2'-Difluorobiphenyl
2	96	69	84	0	7103816	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	87	95	0	29088944	bv	157	157	74	N-Nitrosodimethylamine

Sample No.: 1.00 PPM STD NSTD1.00 Analyzed: 03/15/07 1057
File ID: 7C1509 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/07 0522

Raw Datafile : 7C1509 Quan DB : 7C1509
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	50250806	bv	1087	1088	190	2,2'-Difluorobiphenyl
2	97	70	85	0	6553843	bv	152	152	80	N-Nitrosodimethylamine-d6
3	100	91	94	0	53664544	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 5.00 PPM STD NSTD5.00 Analyzed: 03/15/07 1139
File ID: 7C1510 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0522

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03/16/07

Raw Datafile : 7C1510 Quan DB : 7C1510
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	0	41180765	vb	1088	1088	190	2,2'-Difluorobiphenyl
2	91	65	86	1	5366427	bv	153	152	80	N-Nitrosodimethylamine-d6
3	100	94	95	0	221817374	bv	157	157	74	N-Nitrosodimethylamine

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2ND SRC DAI

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 7C1523
Date Sampled:
Date Extracted:
Date Analyzed: 03/15/07
Time Analyzed: 2049

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.0891	0.1000	89 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

Daily Calibration Check

Sample: 0.10 PPM 2ND SRC DAI Lab ID: NSTD0.10 File: 7C1523
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 2049
Initial Size: 1000.0000 Final Size: 1.0000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.08913	89	80 - 120	100	25 - 175

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1241

Cal File: 7C15 Date: 3/15/07

Notes: NDMA Curtis + Tompkins

Taped	Sample ID	File Name	OK	Description	OP
		7C1501		Warm-up	CB
		02			
		03			
		04			
	WSTD0.02	05		0.02 ug/ml NDMA Std	
	WSTD0.05	06		0.05	
	WSTD0.10	07		0.10	
	WSTD0.50	08		0.50	
	WSTD1.00	09		1.00	
	WSTD5.00	10		5.00	
	RRQ58	11			
	RRQ58Rep	12			
	RRQ59	13			
	RRQ59Rep	14			
	11871	15			
	11872	16			
	11873	17			
	11874	18			
	2948-001	19			
	2948-002	20			
	2953-001	21			
	2953-001MS	22			
	WSTD0.10	23		0.10 ug/ml NDMA 2nd Std Daily	
	2953-001MS	24			
	2953-002	25			

03/06/00 Reviewed by: _____ on: _____

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1242

Cal File: 7C15 Date: 3/15/07

Notes: 10 blank

Taped	Sample ID	File Name	OK	Description	OP
	2956-001	7C1526			CB
	2956-002	27			
	2956-003	28			
	2956-004	29			

03/06/00 Reviewed by: _____ on: _____

EXTRACTION LOG: Method NDMA 625M

CLIENT	JOB #
Curtis Tompkins	2948

Extraction Date: 3/8/07

Extraction Method: Liquid (Light) — Extraction Solvent: CH_2Cl_2 — Lot #: 46347 — Initials: CB

Matrix: Water — Other Reagents: Ascorbic Acid — Lot #: 3/8/07

	LABEL	DATE MADE	CONC.	VOL. ADDED	DATE SPIKED	INITIALS	COMMENTS
1. Surrogate Spike	NDMA & 1,4-Dioxane Labels	2/19/07	0.02 mg/mL	0.5 mL	3/8/07	CB	
2. Matrix Spike	NDMA + 1,4-Dioxane Neat Vials	2/16/07	0.02 mg/mL	0.1 mL	3/8/07	CB	
3.							
4. Internal Standard	NDMA-IS	6/20/06	1 mg/mL	10 uL	3/9/07	CB	

Sample #	Sample Size Extracted	% Moisture Solids	Extract. pH	Standards 1	2	3	4	Initial Extract Vol. A	Aliquot Removed for Prep B	Volume After Prep C	Calculated Final Vol: A/B x C	Comments: (Cleanup method used, info about unusual sample/extract behavior)
RRQ58	1000mL	NA	NA	X	X		X	100uL	100uL	100uL	100uL	
RRQ58Dup				X	X		X					
11871				X			X					
11872				X			X					
2948-001				X			X					
2948-002				X			X					Extract dark Klarown color

Pacific Analytical, Inc.

QA Review _____

LEVEL III

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 193137
Site: Presidio

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
FB0302071A	03/02 13:10	Water	NDMA	193137-006	

Notes:	Relinquished By:	Received By:
	Date/Time: 3/6/07 5:30pm.	Date/Time: 3/7/07 8/5

Signature on this form constitutes a firm Purchase Order for the services requested above.

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 193137
Site: Presidio

LEVEL III

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Standard Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
NKGW04	03/02 13:42	Water	NDMA	193137-005	
~~FB0302071A~~	~~03/02 13:10~~	~~Water~~	~~NDMA~~	~~193137-006~~	

Notes:	Relinquished By:	Received By:
Additional sample added 3/7/07. SS	Date/Time:	Date/Time: 3/8/07 7:45

Also need the C&T EDD we worked out last time.

Signature on this form constitutes a firm Purchase Order for the services requested above.

Pacific Analytical, inc.

SAMPLE LOG-IN SHEET -- *Initial*

JOB #	LOG-IN DATE
2948	3/7/07

Received By (print name): Chris Burbach

Received By (signature): [signature]

CLIENT Curtist Tompkins

# of Coolers: 1

TEMP: 3°C

Received From Cal overnight

Custody seals	Present Intact / Absent* Broken
Custody Seal #'s	
Airbill	Airbill Present / Sticker Absent*
Airbill #	C101290000404038
Date Rec'd	3/7/07
Time Rec'd	815
Chain of Custody or Traffic Reports	Present / Absent*
Sample Label	Present / Absent*
Sample ID #'s on COC	Listed / Not Listed
Sample Condition	Intact / Broken / Leaking
Does information on Custody records, reports and sample tags agree?	Yes / No

LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
2948-001	FB0502071A	NWMA	1	AL	WW	OK

* COMMENTS

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other

Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container

00315

Pacific Analytical, inc.

SAMPLE LOG-IN SHEET -- *Initial*

JOB #	LOG-IN DATE
2948	3/8/07

Received By (*print name*): Chris Burbach

Received By (*signature*): [signature]

CLIENT: Curtis & Tompkins

Received From: Courier night

# of Coolers: 1

TEMP: 5°C

Custody seals	*Present* *Absent* * / *Intact* *Broken*
Custody Seal #'s	
Airbill	*Airbill* *Sticker* *Present* *Absent* *
Airbill #	CU2900004062
Date Rec'd	3/8/07
Time Rec'd	745
Chain of Custody or Traffic Reports	*Present* *Absent* *
Sample Label	*Present* *Absent* *
Sample ID #'s on COC	*Listed* *Not Listed*
Sample Condition	*Intact* *Broken* *Leaking*
Does information on Custody records, reports and sample tags agree?	*Yes* *No*

LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
2948-002	NK6W04	NDMA	1	AL	WW	OK

* COMMENTS

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other

Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container

35

00036

2948 Curtis & Tompkins, 2 X NDMA (TAT: 30)

Updated 3/8/07 03

Lab ID	NDMA
2948-001	P___
2948-002	P___
~~2948-003~~	~~P___~~ 03 3/8/07

Lab ID	Cust ID	Sampled	Rec'vd	Login ID
2948-001	FB0302071A	03/02/07	03/07/07	01956
2948-002	NKGW04	03/02/07	03/08/07	01957
~~2948-003~~	~~NOSAMPLE~~	~~03/02/07~~	~~03/08/07~~	~~01957~~ 03 3/8/07

Lab ID	Description	Comment
2948-001	1 X AL	OK
2948-002	1 X AL	OK
~~2948-003~~		~~OK~~ 03 3/8/07

Login	Loggin by	Shipper	Shipper Code	CofC
01956	Chris J. Burbach	UPS	1Z15070011344988454	OK
01957	Chris J. Burbach	California Overnight	C10129000040462	-

1

08 Mar 2007, 07:55:42

00317

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193174

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
937GW38	193174-001
937GW06	193174-002
937GW39	193174-003
937GW42	193174-004
937GW108	193174-005
937GW12	193174-006
937GW103	193174-007
937GW102	193174-008
937GW103RB937GW102	193174-009
937GW104	193174-010
979GW111R	193174-011
979GW117	193174-012
937GW105	193174-013
937GW106	193174-014
937GW107	193174-015
979GW109	193174-016
979GW110	193174-017
979GW109RB979GW110	193174-018
979GW112	193174-019
TB0305072A	193174-020

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/26/07
Operations Manager

Signature: _____ Date: 3/23/07
Project Manager

NELAP # 01107CA

00001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193174**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/06/07**
Samples Received:	**03/06/07**

This hardcopy data package contains sample and QC results for twenty water samples, requested for the above referenced project on 03/06/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the CCV analyzed 03/08/07 11:36; this analyte met minimum response criteria. High surrogate recoveries were observed for bromofluorobenzene in many samples; no associated target analytes were detected in the sample. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193174

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2194
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): Blaine Tech Brian Pound
Recorder (signature required): Brian Pound
Sent to Laboratory (Name): Curtis & Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	COMMENTS / NOTES
1	937GW38	3-5-07	1040			X		6				1	X	X	X	X							
2	937GW06	↓	1115			X		6				1	X	X	X	X							
3	937GW39		1155			X		6				1	X	X	X	X							
4	937GW42		1250			X		6				1	X	X	X	X							
5	937GW108		1320			X		6				1	X	X	X	X							
6	937GW12		1515			X		6				1	X	X	X	X							
7	937GW103		1420			X		6				1	X	X	X	X							
8	937GW102		1500			X		6				1	X	X	X	X							
9	937GW103RB937GW102	↓	1430			X		6				1	X	X	X	X							

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: Brian Pound DATE: 3/6/07
PRINT NAME: Brian Pound FIRM: Blaine Tech TIME:
RECEIVED BY: [signature] DATE: 3/6/07
PRINT NAME: Aaron Greiner FIRM: CTT TIME: 1300

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2193
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal / P. Cornish
Recorder (signature required): [signature]
Sent to Laboratory (Name): C+T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) / MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	COMMENTS / NOTES
-10	937GW104	3/5/07	0928			X		6				2	X	X	X	X							
11	979GW111R		1045			X		6				1	X	X	X	X							Only 1L NP Amber Submitted
-12	979GW117		1135			X		6				1	X	X	X	X							
-13	937GW105		1210			X		6				1	X	X	X	X							
-14	937GW106		1245			X		6				1	X	X	X	X							
15	937GW107		1320			X		6				1	X	X	X	X							
-16	979GW109		1402			X		6				1	X	X	X	X							
17	979GW110		1450			X		6				1	X	X	X	X							
18	979GW109RB979GW110		1412			X		6				1	X	X	X	X							
-19	979GW112		1535			X		6				1	X	X	X	X							
20	TB030507 2A					X		2								X							

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 3/6/07	RECEIVED BY: [signature]	DATE: 3/6/07
PRINT NAME: Devin Raynal FIRM: BTS	TIME:	PRINT NAME: AARON CRENIER FIRM: C+T	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 · Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193174 Date Received: 3-06-2007 Number of Coolers: 2
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-06-2007 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 1 over lip of cooler Seal date: 3-6-07 Seal name: B
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 2.9°C, 1.2°C

B. Login Phase
Date Logged In: 3-06-2007 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bag
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123048
Units:	ug/L	Sampled:	03/05/07
Diln Fac:	1.000	Received:	03/06/07

Field ID:	937GW38	Lab ID:	193174-001
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	109	65-135

Field ID:	937GW06	Lab ID:	193174-002
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	104	65-135

Field ID:	937GW39	Lab ID:	193174-003
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	107	65-135

Field ID:	937GW42	Lab ID:	193174-004
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	110	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123048
Units:	ug/L	Sampled:	03/05/07
Diln Fac:	1.000	Received:	03/06/07

Field ID:	937GW108	Lab ID:	193174-005
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	72 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	124	65-135

Field ID:	937GW12	Lab ID:	193174-006
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	108	65-135

Field ID:	937GW103	Lab ID:	193174-007
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	108	65-135

Field ID:	937GW102	Lab ID:	193174-008
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

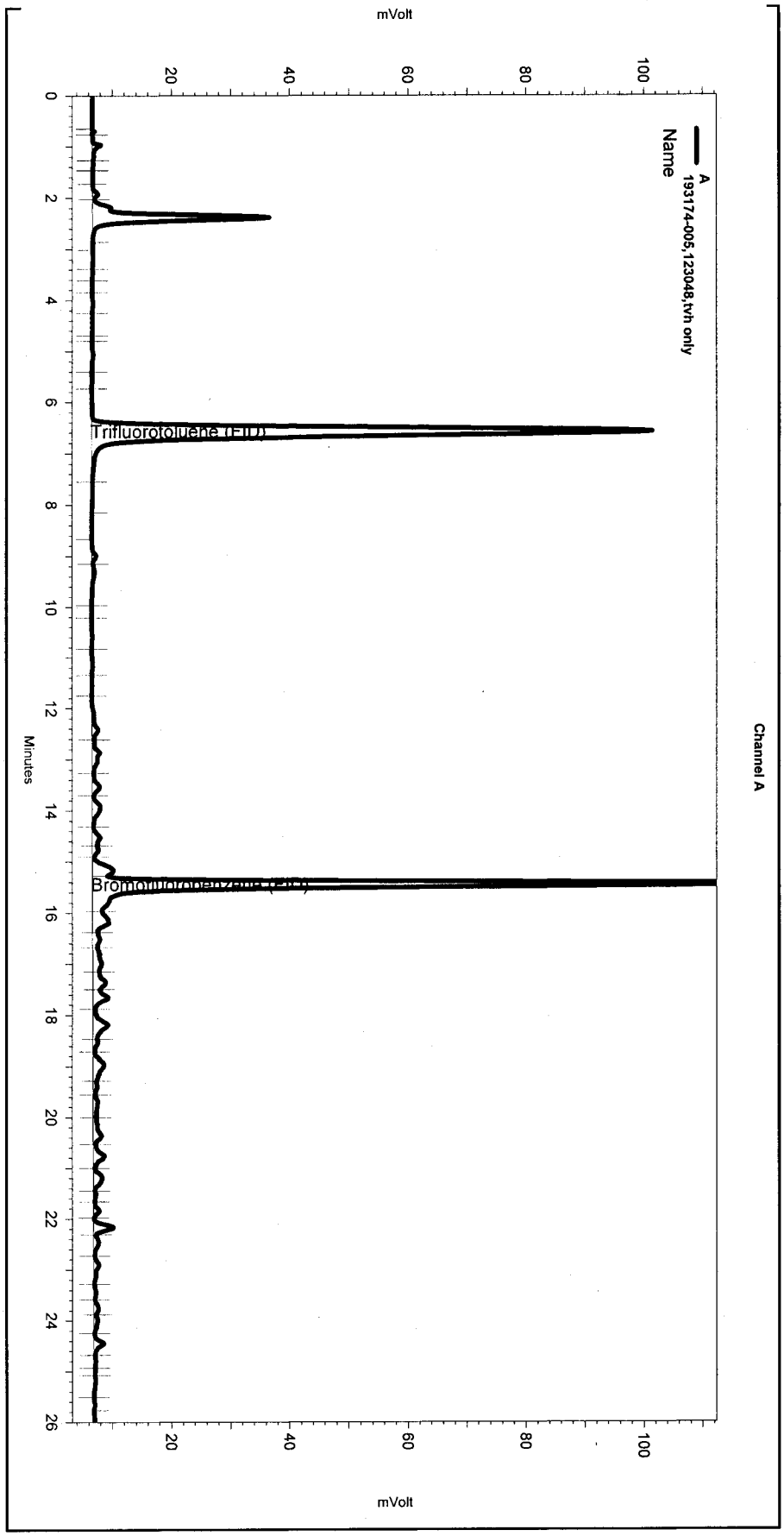
Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	65-135
Bromofluorobenzene (FID)	102	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

2.0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\073.seq
Sample Name: **193174-005,123048,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\073_014
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/14/2007 7:57:17 PM
Analysis Date: 3/15/2007 9:27:39 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\073_014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

937GW108

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123048
Units:	ug/L	Sampled:	03/05/07
Diln Fac:	1.000	Received:	03/06/07

Field ID:	937GW103RB937GW102	Lab ID:	193174-009
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	108	65-135

Field ID:	937GW104	Lab ID:	193174-010
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	110	65-135

Field ID:	979GW111R	Lab ID:	193174-011
Type:	SAMPLE	Analyzed:	03/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	65-135
Bromofluorobenzene (FID)	104	65-135

Field ID:	979GW117	Lab ID:	193174-012
Type:	SAMPLE	Analyzed:	03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	111	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123048
Units:	ug/L	Sampled:	03/05/07
Diln Fac:	1.000	Received:	03/06/07

Field ID:	937GW105	Lab ID:	193174-013
Type:	SAMPLE	Analyzed:	03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	110	65-135

Field ID:	937GW106	Lab ID:	193174-014
Type:	SAMPLE	Analyzed:	03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	109	65-135

Field ID:	937GW107	Lab ID:	193174-015
Type:	SAMPLE	Analyzed:	03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	109	65-135

Field ID:	979GW109	Lab ID:	193174-016
Type:	SAMPLE	Analyzed:	03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	108	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123048
Units:	ug/L	Sampled:	03/05/07
Diln Fac:	1.000	Received:	03/06/07

Field ID: 979GW110 Lab ID: 193174-017
Type: SAMPLE Analyzed: 03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	114	65-135

Field ID: 979GW109RB979GW110 Lab ID: 193174-018
Type: SAMPLE Analyzed: 03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	105	65-135

Field ID: 979GW112 Lab ID: 193174-019
Type: SAMPLE Analyzed: 03/15/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	110	65-135

Type: BLANK Analyzed: 03/14/07
Lab ID: QC378953

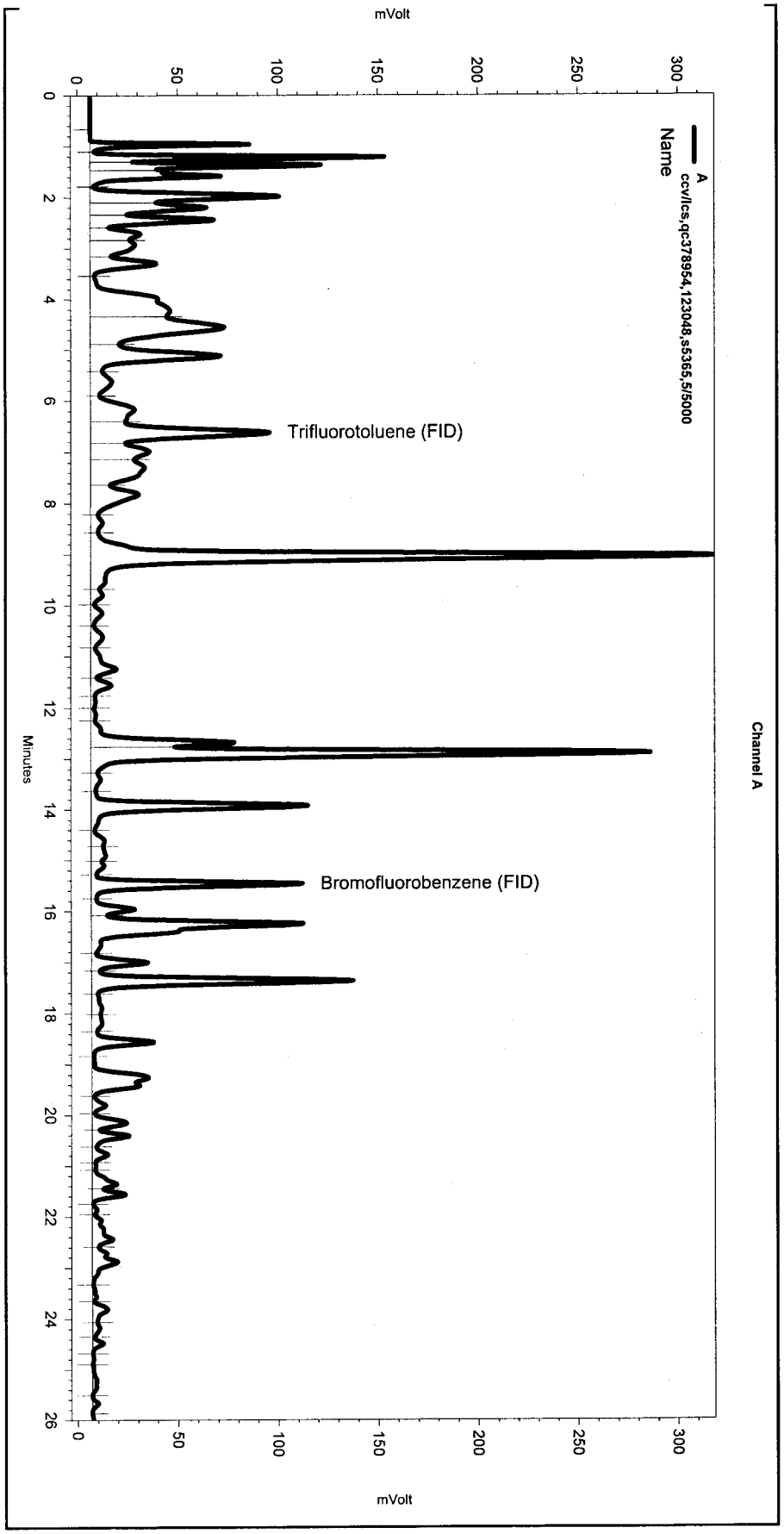
Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	65-135
Bromofluorobenzene (FID)	111	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\073.seq**
Sample Name: **ccv/lcs,qc378954,123048,s5365,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\073_002**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe045.met

Software Version 3.1.7
Run Date: 3/14/2007 10:43:31 AM
Analysis Date: 3/15/2007 9:26:46 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\073_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Gasoline

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378954	Batch#:	123048
Matrix:	Water	Analyzed:	03/14/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,896	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	65-135
Bromofluorobenzene (FID)	105	65-135

3.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW38	Batch#:	123048
MSS Lab ID:	193174-001	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378955

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.61	2,000	2,023	100	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	65-135
Bromofluorobenzene (FID)	111	65-135

Type: MSD Lab ID: QC378956

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,006	99	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	123	65-135
Bromofluorobenzene (FID)	113	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 327063206001
Units : ng

Name : GC07 TVH 043
Date : 12-FEB-2007 16:37
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043_007	327063206007	TVH_1	12-FEB-2007 16:37	S5078 (1000X), S5029 (5000X)
L2	043_008	327063206008	TVH_2	12-FEB-2007 17:14	S5077 (1000X), S5029 (5000X)
L3	043_009	327063206009	TVH_3	12-FEB-2007 17:50	S5076 (1000X), S5029 (5000X)
L4	043_010	327063206010	TVH_4	12-FEB-2007 18:26	S5075 (2000X), S5029 (5000X)
L5	043_017	327063206017	TVH_5	13-FEB-2007 12:20	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1954.2	1665.2	1659.1	1714.5	1763.8	AVRG		5.71E-4		1751.4	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Name : GC07 TVH 043
Calnum : 327063206001 Cal Date: 12-FEB-2007

ICV 327063206019 (043_019 13-FEB-2007) stds: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1751.4	1746.5	10000	9972	ng	0	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: QC378954 IDF : 1.0
Seqnum : 327105727002.1 File : 073_002 Time : 14-MAR-2007 10:43
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1660.6	10000	9482	ng	-5	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2567.2	450.0	514.4	ng	14	15	u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1838.3	450.0	473.9	ng	5	15	u

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

u=use

327105727002.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327105727012 File : 073_012 Time : 14-MAR-2007 18:45
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1621.4	15000	13890	ng	-7	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2578.9	450.0	516.8	ng	15	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2008.4	450.0	517.8	ng	15	15	

JCP 03/15/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

327105727012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327105727013 File : 073_013 Time : 14-MAR-2007 19:21
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1598.8	15000	13690	ng	-9	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2632.3	450.0	527.5	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1986.0	450.0	512.0	ng	14	15	

JCP 03/15/07 [Trifluorotoluene (FID) A]: Passes limits of 65-135%

JCP 03/15/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

+=high bias c=CCV

327105727013

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327105727024 File : 073_024 Time : 15-MAR-2007 01:59
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1581.6	20000	18060	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2696.7	450.0	540.4	ng	**20**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2009.2	450.0	518.0	ng	15	15	

JCP 03/15/07 [Trifluorotoluene (FID) A]: Passes limits of 65-135%

JCP 03/15/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

+=high bias c=CCV

327105727024

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327105727025 File : 073_025 Time : 15-MAR-2007 02:35
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1578.5	20000	18030	ng	-10	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2809.4	450.0	563.0	ng	**25**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2022.5	450.0	521.4	ng	**16**	15	c+

JCP 03/15/07 [Trifluorotoluene (FID) A]: Passes limits of 65-135%

JCP 03/15/07 [Bromofluorobenzene (FID) A]: Passes limits of 65-135%

JCP 03/15/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

+=high bias c=CCV

327105727025

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327105727031 File : 073_031 Time : 15-MAR-2007 06:12
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1506.0	15000	12900	ng	-14	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2528.8	450.0	506.7	ng	13	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1983.8	450.0	511.5	ng	14	15	

JCP 03/15/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/15/07 Reviewer: MCH Date: 03/16/07

327105727031

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	018_001	X	IB			01/18/07 10:01	1.0	1	
002	018_002	X	IB			01/18/07 10:49	1.0	1	
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1	
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1	
005	018_005	X	IB			01/18/07 18:01	1.0	1	
006	018_006	X	IB			01/18/07 18:37	1.0	1	
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1	
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1	
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1	
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1	
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1	
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1	
013	018_013	X	IB			01/18/07 22:54	1.0	1	
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1	
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1	
016	018_016	X	IB			01/19/07 00:43	1.0	1	
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1	
018	018_018	X	IB			01/19/07 01:56	1.0	1	
019	018_019	X	IB			01/19/07 02:32	1.0	1	
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1	
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1	
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1	
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1	
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1	
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1	
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1	
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1	
028	018_028	X	IB			01/19/07 08:41	1.0	1	
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1	
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1	
031	018_031	X	IB			01/19/07 12:18	1.0	1	
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15	
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16	
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17	
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18	
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19	

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327063206

Instrument : GC07 Begun : 02/12/07 08:31
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043_001	X	IB			02/12/07 08:31	1.0	1	
002	043_002	X	CCV			02/12/07 09:08	1.0	2 1	
003	043_003	X	CCV			02/12/07 09:44	1.0	3 1	
004	043_004	X	IB			02/12/07 11:42	1.0	1	
005	043_005	X	IB			02/12/07 15:25	1.0	1	
006	043_006	X	ICAL			02/12/07 16:01	1.0	4 1	
007	043_007	ICAL	TVH_1			02/12/07 16:37	1.0	4 1	
008	043_008	ICAL	TVH_2			02/12/07 17:14	1.0	5 1	
009	043_009	ICAL	TVH_3			02/12/07 17:50	1.0	6 1	
010	043_010	ICAL	TVH_4			02/12/07 18:26	1.0	7 1	
011	043_011	X	TVH_5			02/12/07 19:02	1.0	7 1	
012	043_012	X	IB			02/12/07 19:38	1.0	1	
013	043_013	X	ICV			02/12/07 20:14	1.0	3 1	
014	043_014	X	ICV			02/12/07 20:50	1.0	3 1	
015	043_015	X	IB			02/12/07 21:26	1.0	1	
016	043_016	CMARKER	CARBMARK			02/12/07 22:03	1.0	8 9 1	
017	043_017	ICAL	TVH_5			02/13/07 12:20	1.0	7 1	
018	043_018	X	IB			02/13/07 12:56	1.0	1	
019	043_019	ICV	TVH			02/13/07 13:32	1.0	3 1	

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327105727

Instrument : GC07 Begun : 03/14/07 10:07
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	073_001	X	IB			03/14/07 10:07	1.0	1
002	073_002	CCV/LCS	QC378954	Water	123048	03/14/07 10:43	1.0	2 1
003	073_003	BLANK	QC378953	Water	123048	03/14/07 13:18	1.0	1
004	073_004	MS	QC378955	Water	123048	03/14/07 13:55	1.0	2 1
005	073_005	MSD	QC378956	Water	123048	03/14/07 14:31	1.0	2 1
006	073_006	MSS	193174-001	Water	123048	03/14/07 15:07	1.0	1
007	073_007	MS	QC378955	Water	123048	03/14/07 15:43	1.0	2 1
008	073_008	MSD	QC378956	Water	123048	03/14/07 16:20	1.0	2 1
009	073_009	SAMPLE	193174-002	Water	123048	03/14/07 16:56	1.0	1
010	073_010	SAMPLE	193174-003	Water	123048	03/14/07 17:32	1.0	1
011	073_011	SAMPLE	193174-004	Water	123048	03/14/07 18:08	1.0	1
012	073_012	CCV	TVH			03/14/07 18:45	1.0	2 1
013	073_013	CCV	TVH			03/14/07 19:21	1.0	2 1
014	073_014	SAMPLE	193174-005	Water	123048	03/14/07 19:57	1.0	1
015	073_015	SAMPLE	193174-006	Water	123048	03/14/07 20:33	1.0	1
016	073_016	SAMPLE	193174-007	Water	123048	03/14/07 21:09	1.0	1
017	073_017	SAMPLE	193174-008	Water	123048	03/14/07 21:46	1.0	1
018	073_018	SAMPLE	193174-009	Water	123048	03/14/07 22:22	1.0	1
019	073_019	SAMPLE	193174-010	Water	123048	03/14/07 22:58	1.0	1
020	073_020	SAMPLE	193174-011	Water	123048	03/14/07 23:34	1.0	1
021	073_021	SAMPLE	193174-012	Water	123048	03/15/07 00:10	1.0	1
022	073_022	SAMPLE	193174-013	Water	123048	03/15/07 00:46	1.0	1
023	073_023	SAMPLE	193174-014	Water	123048	03/15/07 01:22	1.0	1
024	073_024	CCV	TVH			03/15/07 01:59	1.0	2 1
025	073_025	CCV	TVH			03/15/07 02:35	1.0	2 1
026	073_026	SAMPLE	193174-015	Water	123048	03/15/07 03:11	1.0	1
027	073_027	SAMPLE	193174-016	Water	123048	03/15/07 03:47	1.0	1
028	073_028	SAMPLE	193174-017	Water	123048	03/15/07 04:23	1.0	1
029	073_029	SAMPLE	193174-018	Water	123048	03/15/07 04:59	1.0	1
030	073_030	SAMPLE	193174-019	Water	123048	03/15/07 05:36	1.0	1
031	073_031	CCV	TVH			03/15/07 06:12	1.0	2 1
032	073_032	CCV	TVH			03/15/07 06:48	1.0	2 1

Analyst: JCP Date: 03/15/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5365

REPORTING SUMMARY FOR 193174 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
193174-001	GC07	03/14/07 15:07	1.0	+		+	+	
193174-002	GC07	03/14/07 16:56	1.0	+		+	+	
193174-003	GC07	03/14/07 17:32	1.0	+		+	+	
193174-004	GC07	03/14/07 18:08	1.0	+		+	+	
193174-005	GC07	03/14/07 19:57	1.0	+		+	+	
193174-006	GC07	03/14/07 20:33	1.0	+		+	+	
193174-007	GC07	03/14/07 21:09	1.0	+		+	+	
193174-008	GC07	03/14/07 21:46	1.0	+		+	+	
193174-009	GC07	03/14/07 22:22	1.0	+		+	+	
193174-010	GC07	03/14/07 22:58	1.0	+		+	+	
193174-011	GC07	03/14/07 23:34	1.0	+		+	+	
193174-012	GC07	03/15/07 00:10	1.0	+		+	+	
193174-013	GC07	03/15/07 00:46	1.0	+		+	+	
193174-014	GC07	03/15/07 01:22	1.0	+		+	+	
193174-015	GC07	03/15/07 03:11	1.0	+		+	+	
193174-016	GC07	03/15/07 03:47	1.0	+		+	+	
193174-017	GC07	03/15/07 04:23	1.0	+		+	+	
193174-018	GC07	03/15/07 04:59	1.0	+		+	+	
193174-019	GC07	03/15/07 05:36	1.0	+		+	+	
QC378953	GC07	03/14/07 13:18	1.0	+		+	+	
QC378954	GC07	03/14/07 10:43	1.0	+		+	+	
QC378955	GC07	03/14/07 13:55	1.0					
QC378955	GC07	03/14/07 15:43	1.0	+		+	+	
QC378956	GC07	03/14/07 14:31	1.0					
QC378956	GC07	03/14/07 16:20	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

Field ID:	937GW38	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-001	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

Field ID:	937GW06	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-002	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	65-135

Field ID:	937GW39	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-003	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	114	65-135

Field ID:	937GW42	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-004	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	111	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

Field ID:	937GW108	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-005	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	65 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Field ID:	937GW12	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-006	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID:	937GW103	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-007	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

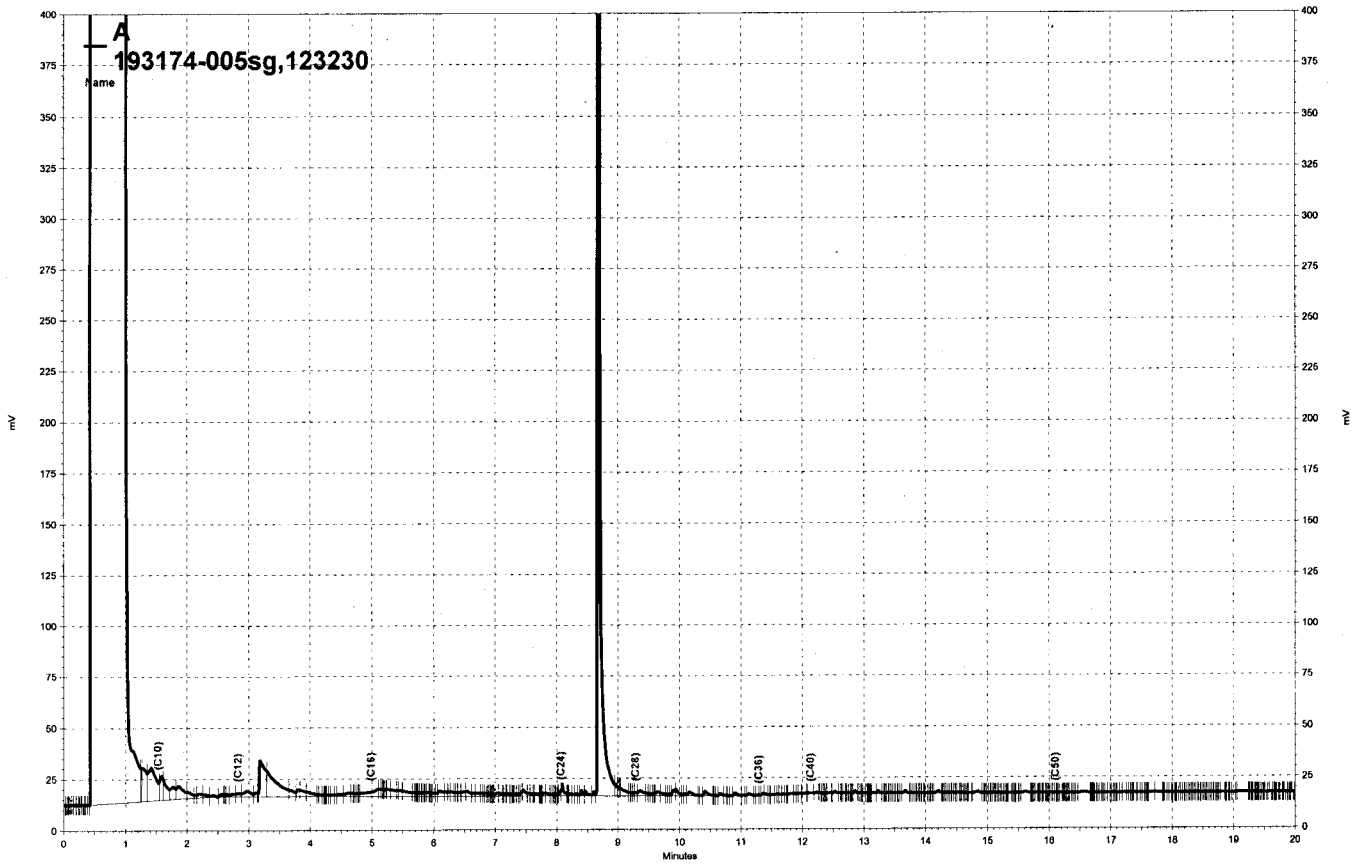
Field ID:	937GW102	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-008	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

35.0



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937GW108

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

Field ID:	937GW103RB937GW102	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-009	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

Field ID:	937GW104	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-010	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID:	979GW111R	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-011	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Field ID:	979GW117	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-012	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

Field ID:	937GW105	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-013	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID:	937GW106	Prepared:	03/17/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-014	Cleanup Method:	EPA 3630C
Batch#:	123230		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	123	65-135

Field ID:	937GW107	Prepared:	03/18/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-015	Cleanup Method:	EPA 3630C
Batch#:	123240		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

Field ID:	979GW109	Prepared:	03/18/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-016	Cleanup Method:	EPA 3630C
Batch#:	123240		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

Field ID:	979GW110	Prepared:	03/18/07
Type:	SAMPLE	Analyzed:	03/19/07
Lab ID:	193174-017	Cleanup Method:	EPA 3630C
Batch#:	123240		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID:	979GW109RB979GW110	Prepared:	03/18/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-018	Cleanup Method:	EPA 3630C
Batch#:	123240		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Field ID:	979GW112	Prepared:	03/18/07
Type:	SAMPLE	Analyzed:	03/20/07
Lab ID:	193174-019	Cleanup Method:	EPA 3630C
Batch#:	123240		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

Type:	BLANK	Prepared:	03/17/07
Lab ID:	QC379743	Analyzed:	03/19/07
Batch#:	123230	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/05/07
Units:	ug/L	Received:	03/06/07
Diln Fac:	1.000		

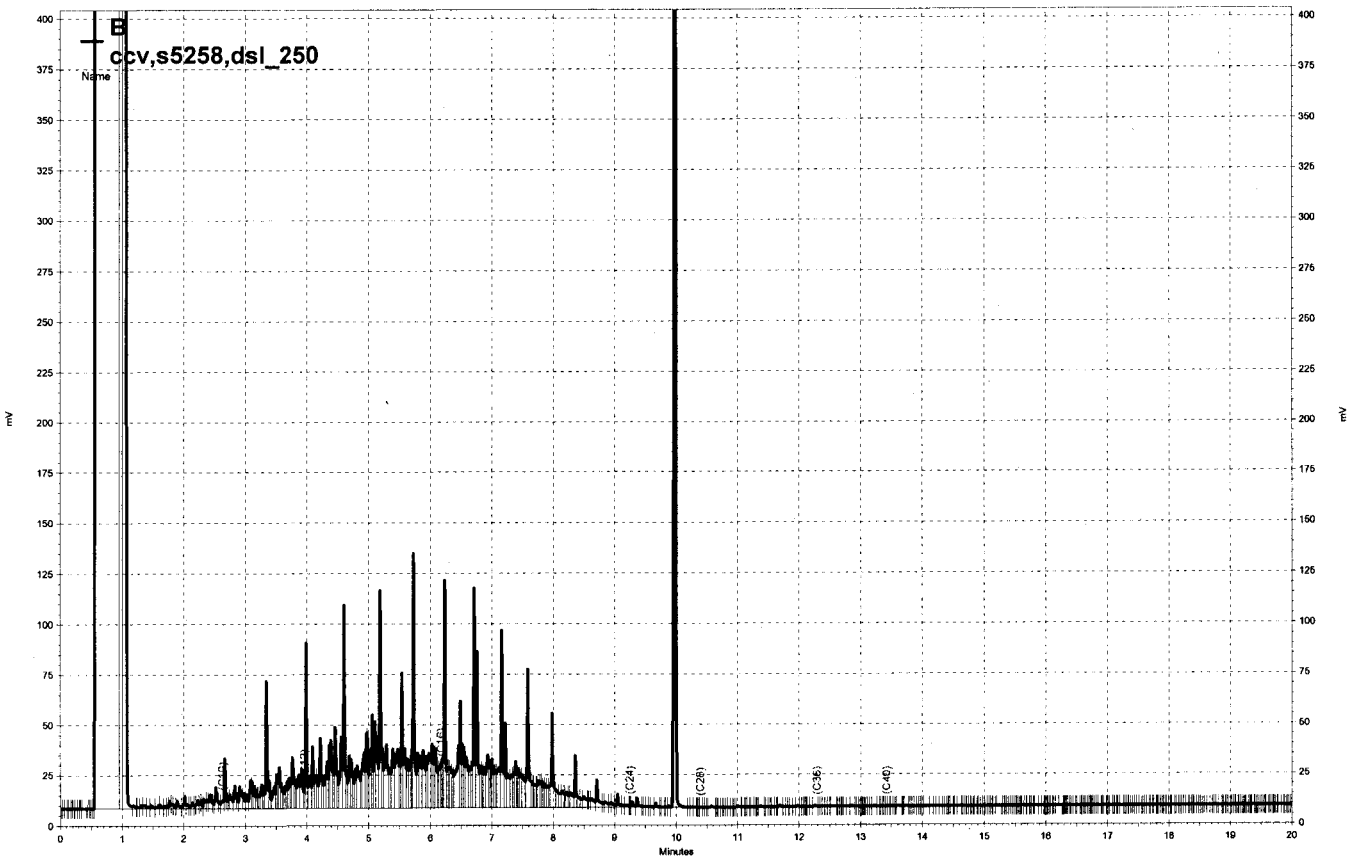
Type:	BLANK	Prepared:	03/18/07
Lab ID:	QC379779	Analyzed:	03/19/07
Batch#:	123240	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

35.0



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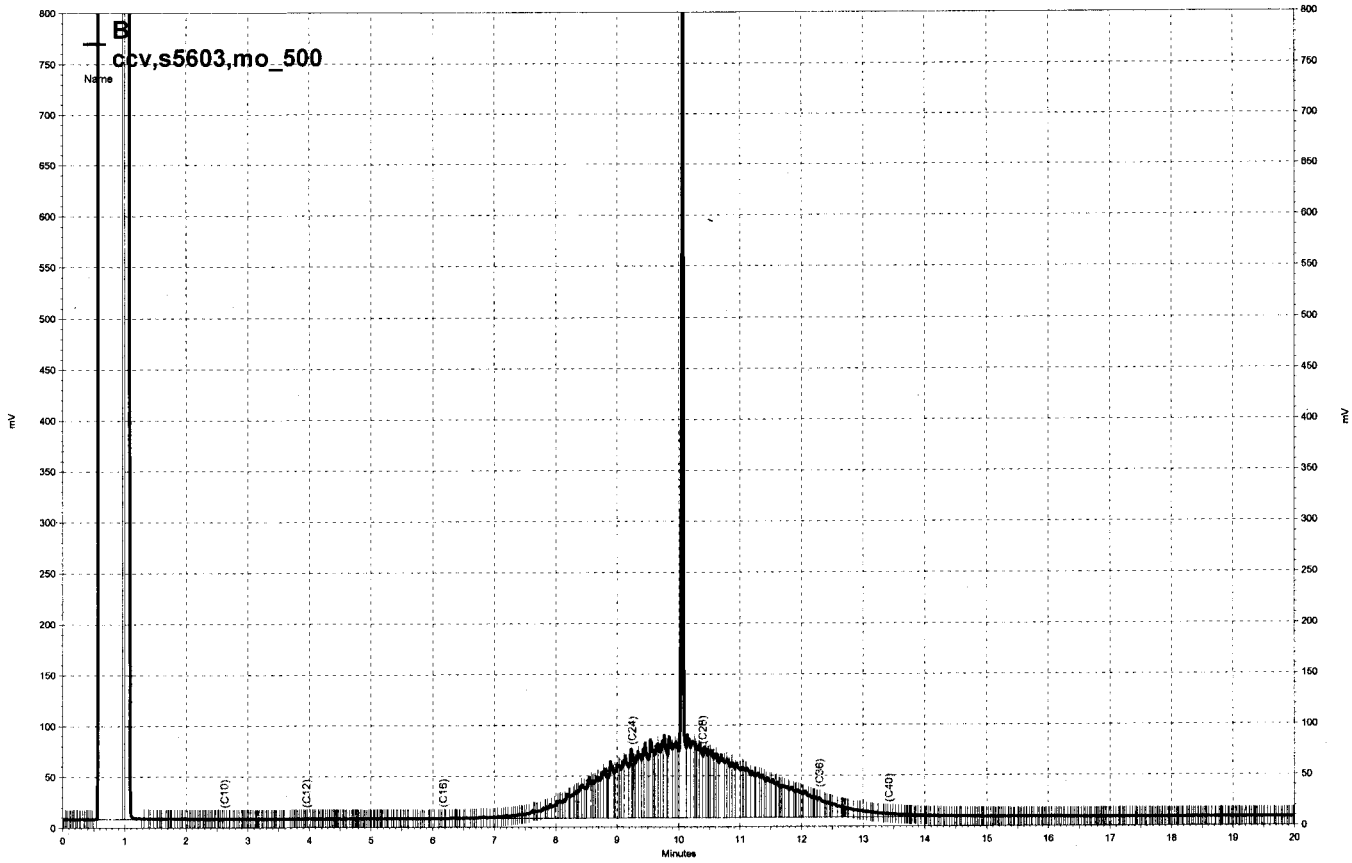
Diesel



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Motor Oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123230
Units:	ug/L	Prepared:	03/17/07
Diln Fac:	1.000	Analyzed:	03/19/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC379744

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,503	100	65-135

Surrogate	%REC	Limits
Hexacosane	96	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC379745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,594	104	65-135	4	35

Surrogate	%REC	Limits
Hexacosane	99	65-135

RPD= Relative Percent Difference

36.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123240
Units:	ug/L	Prepared:	03/18/07
Diln Fac:	1.000	Analyzed:	03/19/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC379780

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,411	96	65-135

Surrogate	%REC	Limits
Hexacosane	95	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC379781

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,499	100	65-135	4	35

Surrogate	%REC	Limits
Hexacosane	101	65-135

RPD= Relative Percent Difference

37.0

00042

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941001
Units : mg/L

Name : Diesel
Date : 18-MAR-2007 22:50
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b009	167111941009	DSL_10	18-MAR-2007 22:50	S5413
L2	077b010	167111941010	DSL_100	18-MAR-2007 23:25	S5414
L3	077b011	167111941011	DSL_500	19-MAR-2007 00:00	S5416
L4	077b012	167111941012	DSL_1000	19-MAR-2007 00:34	S5417
L5	077b013	167111941013	DSL_5000	19-MAR-2007 01:08	S5411
L6	077b014	167111941014	DSL_7500	19-MAR-2007 01:43	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	22063	23377	24356	24223	23797	22760	AVRG		4.27E-5		23429	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 167111941001

Name : Diesel
Cal Date: 18-MAR-2007

ICV 167111941017 (077b017 19-MAR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	23429	26659	500.0	568.9	mg/L	14	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941002
Units : mg/L

Name : Motor Oil
Date : 19-MAR-2007 04:40
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b019	167111941019	MO_50	19-MAR-2007 04:40	S5523
L2	077b020	167111941020	MO_250	19-MAR-2007 05:18	S5524
L3	077b021	167111941021	MO_500	19-MAR-2007 05:55	S5525
L4	077b022	167111941022	MO_1000	19-MAR-2007 06:33	S5526
L5	077b023	167111941023	MO_5000	19-MAR-2007 07:12	S5522
L6	077b024	167111941024	MO_7500	19-MAR-2007 07:52	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	18220	18647	17325	17179	15108	14755	AVRG		5.93E-5		16872	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941003
Units : mg/L

Name : Hexacosane
Date : 19-MAR-2007 09:06
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b026	167111941026	HEX_5	19-MAR-2007 09:06	S4639
L2	077b027	167111941027	HEX_10	19-MAR-2007 09:46	S4640
L3	077b028	167111941028	HEX_25	19-MAR-2007 10:24	S4641
L4	077b029	167111941029	HEX_50	19-MAR-2007 10:59	S5402
L5	077b030	167111941030	HEX_100	19-MAR-2007 11:35	S4644
L6	077b031	167111941031	HEX_200	19-MAR-2007 12:11	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Hexacosane	27535	28894	27859	26085	27324	27043	AVRG		3.64E-5		27456	3	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG		1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_250 IDF : 1.0
Seqnum : 167113362003 File : 078b003 Time : 19-MAR-2007 18:20
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167111941001	18-MAR-2007	23429	23689	250.0	252.8	mg/L	1	15	
Hexacosane	167111941003	19-MAR-2007	27456	26868	50.00	48.93	mg/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167113362004 File : 078b004 Time : 19-MAR-2007 18:56
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167111941002	19-MAR-2007	16872	18550	500.0	549.7	mg/L	10	15	
Hexacosane	167111941003	19-MAR-2007	27456	28649	50.00	52.17	mg/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167113362017 File : 078b017 Time : 20-MAR-2007 02:55
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167111941001	18-MAR-2007	23429	25148	500.0	536.7	mg/L	7	15	
Hexacosane	167111941003	19-MAR-2007	27456	29143	50.00	53.07	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167113362018 File : 078b018 Time : 20-MAR-2007 03:30
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167111941002	19-MAR-2007	16872	18118	500.0	536.9	mg/L	7	15	
Hexacosane	167111941003	19-MAR-2007	27456	28016	50.00	51.02	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177112801017 File : 078a017 Time : 19-MAR-2007 18:55
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63620	1000	1041	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	70124	50.00	45.49	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801018 File : 078a018 Time : 19-MAR-2007 19:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47955	500.0	532.0	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	78434	50.00	50.87	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_250 IDF : 1.0
Seqnum : 177112801032 File : 078a032 Time : 20-MAR-2007 01:44
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	65718	250.0	268.9	mg/L	8	15	
Hexacosane	177062425003	13-FEB-2007	77085	68414	50.00	44.38	mg/L	-11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801033 File : 078a033 Time : 20-MAR-2007 02:12
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	48039	500.0	532.9	mg/L	7	15	
Hexacosane	177062425003	13-FEB-2007	77085	76850	50.00	49.85	mg/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_500 IDF : 1.0
Seqnum : 177112801044 File : 078a044 Time : 20-MAR-2007 07:13
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	66242	500.0	542.1	mg/L	8	15	
Hexacosane	177062425003	13-FEB-2007	77085	74386	50.00	48.25	mg/L	-4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801045 File : 078a045 Time : 20-MAR-2007 07:40
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	51701	500.0	573.6	mg/L	15	15	
Hexacosane	177062425003	13-FEB-2007	77085	80755	50.00	52.38	mg/L	5	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167111941

Instrument : GC15B
Method : EPA 8015B

Begun : 03/18/07 17:41
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	077b001	X	PRIMER			03/18/07 17:41	1.0		
002	077b002	X	IB			03/18/07 18:15	1.0		
003	077b003	CMARKER	C8-C50			03/18/07 18:52	1.0	1	
004	077b004	CCV	DSL_250			03/18/07 19:28	1.0	2	
005	077b005	CCV	MO_500			03/18/07 20:03	1.0	3	
006	077b006	CCV	DSL_500			03/18/07 21:04	1.0	4	
007	077b007	CCV	MO_500			03/18/07 21:42	1.0	3	
008	077b008	IB	CALIB			03/18/07 22:16	1.0		
009	077b009	ICAL	DSL_10			03/18/07 22:50	1.0	5	
010	077b010	ICAL	DSL_100			03/18/07 23:25	1.0	6	
011	077b011	ICAL	DSL_500			03/19/07 00:00	1.0	7	
012	077b012	ICAL	DSL_1000			03/19/07 00:34	1.0	8	
013	077b013	ICAL	DSL_5000			03/19/07 01:08	1.0	9	
014	077b014	ICAL	DSL_7500			03/19/07 01:43	1.0	10	
015	077b015	IB	CALIB			03/19/07 02:18	1.0		
016	077b016	X	DSL_500			03/19/07 02:52	1.0	11	
017	077b017	ICV	DSL_500			03/19/07 03:27	1.0	11	
018	077b018	IB	CALIB			03/19/07 04:04	1.0		
019	077b019	ICAL	MO_50			03/19/07 04:40	1.0	12	
020	077b020	ICAL	MO_250			03/19/07 05:18	1.0	13	
021	077b021	ICAL	MO_500			03/19/07 05:55	1.0	14	
022	077b022	ICAL	MO_1000			03/19/07 06:33	1.0	15	
023	077b023	ICAL	MO_5000			03/19/07 07:12	1.0	16	
024	077b024	ICAL	MO_7500			03/19/07 07:52	1.0	17	
025	077b025	IB	CALIB			03/19/07 08:31	1.0		
026	077b026	ICAL	HEX_5			03/19/07 09:06	1.0	18	
027	077b027	ICAL	HEX_10			03/19/07 09:46	1.0	19	
028	077b028	ICAL	HEX_25			03/19/07 10:24	1.0	20	
029	077b029	ICAL	HEX_50			03/19/07 10:59	1.0	21	
030	077b030	ICAL	HEX_100			03/19/07 11:35	1.0	22	
031	077b031	ICAL	HEX_200			03/19/07 12:11	1.0	23	
032	077b032	IB	CALIB			03/19/07 12:47	1.0		
033	077b033	ICAL	JET_10			03/19/07 13:22	1.0	24	
034	077b034	ICAL	JET_100			03/19/07 13:56	1.0	25	
035	077b035	ICAL	JET_500			03/19/07 14:30	1.0	26	
036	077b036	ICAL	JET_1000			03/19/07 15:04	1.0	27	
037	077b037	ICAL	JET_3000			03/19/07 15:39	1.0	28	
038	077b038	ICAL	JET_5000			03/19/07 16:13	1.0	29	
039	077b039	IB	CALIB			03/19/07 16:48	1.0		

Analyst: DLM Date: 03/19/07 Reviewer: MCH Date: 03/19/07

Standards used: 1=S4049 2=S5258 3=S5603 4=S5517 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645 24=S4665 25=S4666 26=S4667 27=S4668 28=S4670 29=S4664

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167113362

Instrument : GC15B
Method : EPA 8015B

Begun : 03/19/07 17:22
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078b001	X	IB				03/19/07 17:22	1.0	
003	078b003	CCV	DSL_250				03/19/07 18:20	1.0	1
004	078b004	CCV	MO_500				03/19/07 18:56	1.0	2
005	078b005	CCV	JET_250				03/19/07 19:31	1.0	3
006	078b006	BLANK	QC379769	S	Water	123238	03/19/07 20:06	1.0	
007	078b007	BLANK	QC379779	S	Water	123240	03/19/07 20:46	1.0	
008	078b008	BS	QC379780	S	Water	123240	03/19/07 21:21	1.0	
009	078b009	BSD	QC379781	S	Water	123240	03/19/07 21:57	1.0	
010	078b010	SAMPLE	193174-015	S	Water	123240	03/19/07 22:36	1.0	
011	078b011	SAMPLE	193174-016	S	Water	123240	03/19/07 23:13	1.0	
012	078b012	SAMPLE	193174-017	S	Water	123240	03/19/07 23:49	1.0	
013	078b013	SAMPLE	193174-018	S	Water	123240	03/20/07 00:26	1.0	
014	078b014	SAMPLE	193174-019	S	Water	123240	03/20/07 01:05	1.0	
015	078b015	SAMPLE	193373-001	S	Water	123240	03/20/07 01:40	1.0	
016	078b016	X	IB				03/20/07 02:17	1.0	
017	078b017	CCV	DSL_500				03/20/07 02:55	1.0	4
018	078b018	CCV	MO_500				03/20/07 03:30	1.0	2
019	078b019	CCV	JET_250				03/20/07 04:05	1.0	3
020	078b020	X	CCV				03/20/07 04:43	1.0	4
021	078b021	X	CCV				03/20/07 05:22	1.0	2
022	078b022	X	CCV				03/20/07 06:04	1.0	3
023	078b023	SAMPLE	193445-004	S	Water	123240	03/20/07 06:44	1.0	
024	078b024	SAMPLE	193445-005	S	Water	123240	03/20/07 07:25	1.0	
025	078b025	SAMPLE	193373-006	S	Water	123240	03/20/07 08:08	1.0	
026	078b026	SAMPLE	193373-007	S	Water	123240	03/20/07 08:44	1.0	
027	078b027	X	FLOOR POLISH IN DCM				03/20/07 09:26	1.0	
028	078b028	X	IB				03/20/07 10:03	1.0	
029	078b029	CCV	DSL_1000				03/20/07 10:43	1.0	5
030	078b030	X					03/20/07 11:23	1.0	2
031	078b031	CCV	JET_250				03/20/07 12:00	1.0	3
032	078b032	CCV	KERO_250				03/20/07 12:43	1.0	6
033	078b033	CCV	MO_500				03/20/07 13:21	1.0	2
034	078b034	LCS	QC379895	S	Water	123267	03/20/07 14:00	1.0	
035	078b035	BLANK	QC379894		Water	123267	03/20/07 14:41	1.0	
036	078b036	BLANK	QC379894	S	Water	123267	03/20/07 15:19	1.0	
037	078b037	SAMPLE	193267-007		Water	123267	03/20/07 15:55	1.0	
038	078b038	SAMPLE	193166-016	S	Water	123238	03/20/07 16:33	1.0	
039	078b039	CCV	DSL_1000				03/20/07 17:09	1.0	5
040	078b040	CCV	MO_500				03/20/07 17:48	1.0	2
041	078b041	CCV	JET_250				03/20/07 18:25	1.0	3
042	078b042	CCV	KERO_250				03/20/07 19:01	1.0	6
043	078b043	MSS	193404-001	S	Water	123267	03/20/07 19:42	1.0	
044	078b044	MSS	193404-008	S	Water	123267	03/20/07 20:24	1.0	
045	078b045	MS	QC379896	S	Water	123267	03/20/07 21:00	1.0	
046	078b046	MSD	QC379897	S	Water	123267	03/20/07 21:40	1.0	
047	078b047	MS	QC379898	S	Water	123267	03/20/07 22:17	1.0	
048	078b048	MSD	QC379899	S	Water	123267	03/20/07 22:57	1.0	
049	078b049	X	IB				03/20/07 23:37	1.0	
050	078b050	SAMPLE	193404-002	S	Water	123267	03/21/07 00:13	1.0	
051	078b051	SAMPLE	193404-003	S	Water	123267	03/21/07 00:53	1.0	
052	078b052	SAMPLE	193404-004	S	Water	123267	03/21/07 01:32	1.0	
053	078b053	SAMPLE	193404-005	S	Water	123267	03/21/07 02:13	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167113362

Instrument : GC15B
Method : EPA 8015B

Begun : 03/19/07 17:22
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
054	078b054	X	IB				03/21/07 02:52	1.0	
055	078b055	CCV	DSL_500				03/21/07 03:28	1.0	4
056	078b056	CCV	MO_500				03/21/07 04:08	1.0	2
057	078b057	CCV	JET_250				03/21/07 04:47	1.0	3
058	078b058	X	CCV				03/21/07 05:28	1.0	4
059	078b059	X	MO_500				03/21/07 06:09	1.0	2
060	078b060	X	CCV				03/21/07 06:49	1.0	3
061	078b061	SAMPLE	193404-006	S	Water	123267	03/21/07 07:28	1.0	
062	078b062	SAMPLE	193404-007	S	Water	123267	03/21/07 08:10	1.0	
063	078b063	SAMPLE	193449-008	S	Soil	123283	03/21/07 08:54	1.0	
064	078b064	SAMPLE	193449-010	S	Soil	123283	03/21/07 09:50	1.0	
065	078b065	SAMPLE	193449-009	S	Soil	123283	03/21/07 10:32	1.0	
066	078b066	SAMPLE	193449-007	S	Soil	123283	03/21/07 11:23	3.0	
067	078b067	MS	QC379966	S	Soil	123283	03/21/07 12:14	1.0	
068	078b068	MSD	QC379967	S	Soil	123283	03/21/07 12:57	1.0	
069	078b069	SAMPLE	193449-009	S	Soil	123283	03/21/07 13:35	5.0	
070	078b070	X	IB				03/21/07 14:14	1.0	
071	078b071	CCV	DSL_250				03/21/07 14:50	1.0	1
072	078b072	CCV	MO_500				03/21/07 15:27	1.0	2
073	078b073	CCV	JET_250				03/21/07 16:04	1.0	3

Standards used: 1=S5258 2=S5603 3=S5749 4=S5517 5=S5259 6=S5255

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177112801

Instrument : GC17A
Method : EPA 8015B

Begun : 03/19/07 08:01
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER				03/19/07 08:01	1.0	
002	078a002	X	IB				03/19/07 08:28	1.0	
003	078a003	CCV	DSL_500				03/19/07 08:55	1.0	1
004	078a004	CCV	MO_500				03/19/07 09:23	1.0	2
005	078a005	SAMPLE	193331-001		Soil	123183	03/19/07 10:49	1.0	
006	078a006	MSS	193384-001		Soil	123183	03/19/07 11:24	1.0	
007	078a007	SAMPLE	193331-001	S	Soil	123183	03/19/07 11:51	1.0	
008	078a008	X	IB				03/19/07 14:32	1.0	
009	078a009	LCS	QC379740	S	Water	123229	03/19/07 14:59	1.0	
010	078a010	SAMPLE	193108-012	S	Water	123229	03/19/07 15:44	1.0	
011	078a011	SAMPLE	193137-005	S	Water	123229	03/19/07 16:11	1.0	
012	078a012	SAMPLE	193108-025	S	Water	123229	03/19/07 16:38	1.0	
013	078a013	SAMPLE	193108-026	S	Water	123229	03/19/07 17:06	1.0	
014	078a014	SAMPLE	193217-001	S	Water	123238	03/19/07 17:33	1.0	
015	078a015	SAMPLE	193217-002	S	Water	123238	03/19/07 18:00	1.0	
016	078a016	X	IB				03/19/07 18:27	1.0	
017	078a017	CCV	DSL_1000				03/19/07 18:55	1.0	3
018	078a018	CCV	MO_500				03/19/07 19:23	1.0	2
019	078a019	X	CCV				03/19/07 19:50	1.0	3
020	078a020	X	CCV				03/19/07 20:17	1.0	2
021	078a021	BLANK	QC379743	S	Water	123230	03/19/07 20:44	1.0	
022	078a022	BS	QC379744	S	Water	123230	03/19/07 21:12	1.0	
023	078a023	BSD	QC379745	S	Water	123230	03/19/07 21:39	1.0	
024	078a024	SAMPLE	193174-001	S	Water	123230	03/19/07 22:06	1.0	
025	078a025	SAMPLE	193174-002	S	Water	123230	03/19/07 22:34	1.0	
026	078a026	SAMPLE	193174-003	S	Water	123230	03/19/07 23:01	1.0	
027	078a027	SAMPLE	193174-004	S	Water	123230	03/19/07 23:28	1.0	
028	078a028	SAMPLE	193174-005	S	Water	123230	03/19/07 23:55	1.0	
029	078a029	SAMPLE	193174-006	S	Water	123230	03/20/07 00:23	1.0	
030	078a030	SAMPLE	193174-007	S	Water	123230	03/20/07 00:50	1.0	
031	078a031	X	IB				03/20/07 01:17	1.0	
032	078a032	CCV	DSL_250				03/20/07 01:44	1.0	4
033	078a033	CCV	MO_500				03/20/07 02:12	1.0	2
034	078a034	X	CCV				03/20/07 02:40	1.0	4
035	078a035	X	CCV				03/20/07 03:07	1.0	2
036	078a036	SAMPLE	193174-008	S	Water	123230	03/20/07 03:34	1.0	
037	078a037	SAMPLE	193174-009	S	Water	123230	03/20/07 04:02	1.0	
038	078a038	SAMPLE	193174-010	S	Water	123230	03/20/07 04:29	1.0	
039	078a039	SAMPLE	193174-011	S	Water	123230	03/20/07 04:56	1.0	
040	078a040	SAMPLE	193174-012	S	Water	123230	03/20/07 05:23	1.0	
041	078a041	SAMPLE	193174-013	S	Water	123230	03/20/07 05:50	1.0	
042	078a042	SAMPLE	193174-014	S	Water	123230	03/20/07 06:17	1.0	
043	078a043	X	IB				03/20/07 06:45	1.0	
044	078a044	CCV	DSL_500				03/20/07 07:13	1.0	1
045	078a045	CCV	MO_500				03/20/07 07:40	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

REPORTING SUMMARY FOR 193174 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193174-001	GC17A	03/19/07 22:06	1.0	+	+	+	
193174-002	GC17A	03/19/07 22:34	1.0	+	+	+	
193174-003	GC17A	03/19/07 23:01	1.0	+	+	+	
193174-004	GC17A	03/19/07 23:28	1.0	+	+	+	
193174-005	GC17A	03/19/07 23:55	1.0	+	+	+	
193174-006	GC17A	03/20/07 00:23	1.0	+	+	+	
193174-007	GC17A	03/20/07 00:50	1.0	+	+	+	
193174-008	GC17A	03/20/07 03:34	1.0	+	+	+	
193174-009	GC17A	03/20/07 04:02	1.0	+	+	+	
193174-010	GC17A	03/20/07 04:29	1.0	+	+	+	
193174-011	GC17A	03/20/07 04:56	1.0	+	+	+	
193174-012	GC17A	03/20/07 05:23	1.0	+	+	+	
193174-013	GC17A	03/20/07 05:50	1.0	+	+	+	
193174-014	GC17A	03/20/07 06:17	1.0	+	+	+	
193174-015	GC15B	03/19/07 22:36	1.0	+	+	+	
193174-016	GC15B	03/19/07 23:13	1.0	+	+	+	
193174-017	GC15B	03/19/07 23:49	1.0	+	+	+	
193174-018	GC15B	03/20/07 00:26	1.0	+	+	+	
193174-019	GC15B	03/20/07 01:05	1.0	+	+	+	
QC379743	GC17A	03/19/07 20:44	1.0	+	+	+	
QC379744	GC17A	03/19/07 21:12	1.0	+		+	
QC379745	GC17A	03/19/07 21:39	1.0	+		+	
QC379779	GC15B	03/19/07 20:46	1.0	+	+	+	
QC379780	GC15B	03/19/07 21:21	1.0	+		+	
QC379781	GC15B	03/19/07 21:57	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123230
Started By : KR
Method : 3520C
Spike #1 ID: S5713

Prep Date : 17-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: JXM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193174-001		Water	500	2.5	1	0.005	9	.5			3630C	TEHM	
193174-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193174-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC379743	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379744	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379745	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123230
LIMS Analysis: TEHM
Extracted by: KR
Date Extracted: 17 MAR 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☑ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☑ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193174-001G	500	9	2.5	X	
2		7			
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
BLANK QC319743		NA			* temporarily JXM 3/19/07 while the next day while 3520-ing
BS 44					
BSD 45					
					JXM 3/19/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	SS713 D	3/17/07 KR
0.5 mL of TEH_SP was added to all spikes	SS677 C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	ES0065076	
☑ Samples were continually extracted about 450 mL of CH_2Cl_2 & MLC H_2O	EM47081 / EM47011	
Extraction Start Time:	1530	
Extraction End Time:	0930 / 1100 *	JXM 3/18/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JXM 3/18/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes as noted above	✓	

17 MAR 07
Extraction Chemist Date

Contined from Page 2
Continued on Page _____

3/20/07
Reviewed by Date

00068

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 3/19/07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193174-001	123230	1.0	1.0	
002				
003				
004		0.5	0.5	
005		1.0	1.0	
006				
007				
008				
009				
010		0.5	0.5	
011		1.0	1.0	
012				
013				
014				
~~DJT~~ 015 3/19/07 MB	QC3M743			
016 BS	44			
017 BSD	45			
3/19/07 MB LCS				
				DJT 3/19/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	DJT 3/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM46354	
Concentrated to volumes as noted above	✓	

3/19/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

3/20/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 123240
Started By : JOM
Method : 3520C
Spike #1 ID: S5713

Prep Date : 18-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: JOM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193174-015		Water	500	2.5	1	0.005	6	.5			3630C	TEHM	
193174-016		Water	500	2.5	1	0.005	6	.5			3630C	TEHM	
193174-017		Water	500	2.5	1	0.005	6	.5			3630C	TEHM	
193174-018		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
193174-019		Water	500	2.5	1	0.005	6	.5			3630C	TEHM	
193373-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-006		Water	500	2.5	1	0.005	8	.5			3630C	TEHM	
193373-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193373-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193445-004		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
193445-005		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC379779	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC379780	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC379781	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123240
LIMS Analysis: TEH/M
Extracted by: DM
Date Extracted: 18 March 07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193174-015 G	500	6	2.5	X	
16					
17					
18		5			
19		6			
193373-001 L		7			
06 M		8			
07		7			
08					
09					
10					
11 I					
12 I					
193445-004 C					
05 B					
MB QC379779		NA			
BS 80					
BSD 81					
JDM 3/19/07					

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S5713D	JDM 3/18/07
0.5 mL of TEH_SP was added to all spikes	S5627C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	F5065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2	EM46305 / EM47011	
& HPLC H_2O Extraction Start Time:	1435	
Extraction End Time:	0900	SFK 03/19/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	JDM 3/19/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes as noted above	✓	JDM 3/19/07

Jessica Lee 3/18/07
Extraction Chemist Date

Contined from Page ___
Continued on Page ___

20 MAR 07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JDM
Cleanup Date: 19 March 07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193174-015	123240	1.0	1.0	
16				
17				
18				
19				
193373-001				
06				
07				
08				
09				
10				
11				
12				
193445-004				
05				
MB QC379779				
BS 80				
BSD 81				
JDM 3/19/07				

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	JDM 3/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM147031	
Concentrated to volumes as noted above	✓	

Jessie Nee 3/19/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

20 MAR 07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW38	Batch#:	122836
Lab ID:	193174-001	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

7.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW06	Batch#:	122836
Lab ID:	193174-002	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

8.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW39	Batch#:	122836
Lab ID:	193174-003	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

9.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW42	Batch#:	122836
Lab ID:	193174-004	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	0.5 J	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	9.3	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	21	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.2 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

10.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW108	Batch#:	122836
Lab ID:	193174-005	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.1 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	99	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

11.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW12	Batch#:	122836
Lab ID:	193174-006	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

12.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW103	Batch#:	122836
Lab ID:	193174-007	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

13.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW102	Batch#:	122836
Lab ID:	193174-008	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	3.4	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.1	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

14.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW103RB937GW102	Batch#:	123062
Lab ID:	193174-009	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	141 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

15.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW104	Batch#:	123062
Lab ID:	193174-010	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	2.0	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	6.7	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	107	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	141 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

16.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW111R	Batch#:	123062
Lab ID:	193174-011	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	0.5	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	4.4	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	3.2	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	27	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	138 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

17.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW117	Batch#:	123062
Lab ID:	193174-012	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	150 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

18.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW105	Batch#:	123062
Lab ID:	193174-013	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	146 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW106	Batch#:	123062
Lab ID:	193174-014	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.1	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.2 J	0.5	0.08
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	151 *	86-115

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

20.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW107	Batch#:	123132
Lab ID:	193174-015	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	8.8	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	13	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

21.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW109	Batch#:	123132
Lab ID:	193174-016	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

22.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW110	Batch#:	123132
Lab ID:	193174-017	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	1.4	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	12	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

23.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW109RB979GW110	Batch#:	123132
Lab ID:	193174-018	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

24.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW112	Batch#:	123132
Lab ID:	193174-019	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	3.0	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	7.7	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	8.2	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	19	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

25.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0305072A	Batch#:	123062
Lab ID:	193174-020	Sampled:	03/05/07
Matrix:	Water	Received:	03/06/07
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	136 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

26.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378063	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379031	Batch#:	123062
Matrix:	Water	Analyzed:	03/13/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	133 *	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

31.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379313	Batch#:	123132
Matrix:	Water	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

32.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378062	Batch#:	122836
Matrix:	Water	Analyzed:	03/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	27.50	30.73	112	65-135
Benzene	27.50	25.10	91	65-135
Trichloroethene	27.50	25.51	93	65-135
Toluene	27.50	25.59	93	65-135
Chlorobenzene	27.50	24.13	88	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	109	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	92	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123062
Units:	ug/L	Analyzed:	03/13/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379029

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.96	104	65-135
Benzene	25.00	25.95	104	65-135
Trichloroethene	25.00	26.00	104	65-135
Toluene	25.00	26.13	105	65-135
Chlorobenzene	25.00	25.61	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	98	86-115

Type: BSD Lab ID: QC379030

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.68	103	65-135	1	35
Benzene	25.00	25.73	103	65-135	1	35
Trichloroethene	25.00	25.51	102	65-135	2	35
Toluene	25.00	26.37	105	65-135	1	35
Chlorobenzene	25.00	25.60	102	65-135	0	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	100	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123132
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379314

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.38	110	65-135
Benzene	25.00	27.37	109	65-135
Trichloroethene	25.00	27.79	111	65-135
Toluene	25.00	28.01	112	65-135
Chlorobenzene	25.00	26.67	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	92	86-115

Type: BSD Lab ID: QC379315

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.13	113	65-135	3	35
Benzene	25.00	27.94	112	65-135	2	35
Trichloroethene	25.00	27.94	112	65-135	1	35
Toluene	25.00	28.37	113	65-135	1	35
Chlorobenzene	25.00	26.30	105	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	92	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193174	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW104	Batch#:	122836
MSS Lab ID:	193108-023	Sampled:	03/02/07
Matrix:	Water	Received:	03/02/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC378166

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	27.50	26.77	97	65-135
Benzene	<0.04131	27.50	23.68	86	65-135
Trichloroethene	<0.07621	27.50	22.96	83	65-135
Toluene	<0.08342	27.50	23.11	84	65-135
Chlorobenzene	<0.08963	27.50	21.88	80	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	114	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC378167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	27.50	25.81	94	65-135	4	35
Benzene	27.50	22.93	83	65-135	3	35
Trichloroethene	27.50	22.65	82	65-135	1	35
Toluene	27.50	22.50	82	65-135	3	35
Chlorobenzene	27.50	21.66	79	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: BFB IDF : 1.0
Seqnum : 437102839013 File : dcc13 Time : 12-MAR-2007 22:15

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8645	24.84	
75	30.00% - 60.00% of mass 95	19794	56.88	
95		34797		
96	5.00% - 9.00% of mass 95	2418	6.95	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	22391	64.35	
175	5.00% - 9.00% of mass 174	1660	7.41	
176	> 95.00% and < 101.00% of mass 174	22154	98.94	
177	5.00% - 9.00% of mass 176	1451	6.55	

Analyst: WNH Date: 03/13/07 Reviewer: LW Date: 03/14/07

437102839013

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: BFB IDF : 1.0
Seqnum : 437104436004 File : dcd04 Time : 13-MAR-2007 14:44

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10567	24.88	
75	30.00% - 60.00% of mass 95	23691	55.79	
95		42466		
96	5.00% - 9.00% of mass 95	2748	6.47	
173	< 2.00% of mass 174	86	0.29	
174	> 50.00% and < 100.00% of mass 95	30077	70.83	
175	5.00% - 9.00% of mass 174	2144	7.13	
176	> 95.00% and < 101.00% of mass 174	28805	95.77	
177	5.00% - 9.00% of mass 176	1760	6.11	

Analyst: WNH Date: 03/14/07 Reviewer: LW Date: 03/14/07

437104436004

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447096916009 File : ec809 Time : 08-MAR-2007 11:20

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	6657	20.28	
75	30.00% - 60.00% of mass 95	14340	43.68	
95		32826		
96	5.00% - 9.00% of mass 95	2070	6.31	
173	< 2.00% of mass 174	53	0.24	
174	> 50.00% and < 100.00% of mass 95	22494	68.52	
175	5.00% - 9.00% of mass 174	1658	7.37	
176	> 95.00% and < 101.00% of mass 174	22405	99.60	
177	5.00% - 9.00% of mass 176	1483	6.62	

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

447096916009

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497038053008 File : jaq08 Time : 26-JAN-2007 15:00

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	77378	23.85	
75	30.00% - 60.00% of mass 95	148629	45.81	
95		324437		
96	5.00% - 9.00% of mass 95	22037	6.79	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	249066	76.77	
175	5.00% - 9.00% of mass 174	18514	7.43	
176	> 95.00% and < 101.00% of mass 174	244885	98.32	
177	5.00% - 9.00% of mass 176	15711	6.42	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

497038053008

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497107091002 File : jcf02 Time : 15-MAR-2007 09:20

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	113330	21.98	
75	30.00% - 60.00% of mass 95	228778	44.38	
95		515489		
96	5.00% - 9.00% of mass 95	34242	6.64	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	426346	82.71	
175	5.00% - 9.00% of mass 174	32509	7.63	
176	> 95.00% and < 101.00% of mass 174	426154	99.95	
177	5.00% - 9.00% of mass 176	27786	6.52	

Analyst: ACM Date: 03/15/07 Reviewer: LW Date: 03/16/07

497107091002

CURTIS & TOMPKINS BFB TUNE FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497107091008 File : jcf08 Time : 15-MAR-2007 12:13

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	127514	22.32	
75	30.00% - 60.00% of mass 95	257386	45.04	
95		571413		
96	5.00% - 9.00% of mass 95	37154	6.50	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	471424	82.50	
175	5.00% - 9.00% of mass 174	37029	7.85	
176	> 95.00% and < 101.00% of mass 174	466944	99.05	
177	5.00% - 9.00% of mass 176	30376	6.51	

Analyst: ACM Date: 03/15/07 Reviewer: LW Date: 03/16/07

497107091008

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 MSVOA Water: EPA 8260B

Inst : MSVOA04
Calnum: 437102839004
Units : ug/L

Name : 826GOX04
Date : 13-MAR-2007 00:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	dcc17	437102839017	0.25/0.5PPB	13-MAR-2007 00:23	S5618 (2000000X), S5595 (1000000X), S5194 (2000000X), S5426 (5000X)
L2	dcc18	437102839018	0.5/1.0PPB	13-MAR-2007 00:56	S5618 (1000000X), S5595 (500000X), S5194 (1000000X), S5426 (5000X)
L3	dcc19	437102839019	2.0PPB	13-MAR-2007 01:28	S5618 (250000X), S5595 (250000X), S5194 (500000X), S5426 (5000X)
L4	dcc20	437102839020	5.0PPB	13-MAR-2007 02:01	S5618 (100000X), S5595 (100000X), S5194 (200000X), S5426 (5000X)
L5	dcc21	437102839021	10.0PPB	13-MAR-2007 02:34	S5618 (50000X), S5595 (50000X), S5194 (100000X), S5426 (5000X)
L6	dcc22	437102839022	20.0PPB	13-MAR-2007 03:06	S5618 (25000X), S5595 (25000X), S5194 (50000X), S5426 (5000X)
L7	dcc23	437102839023	50.0PPB	13-MAR-2007 03:39	S5618 (10000X), S5595 (10000X), S5194 (20000X), S5426 (5000X)
L8	dcc24	437102839024	75.0PPB	13-MAR-2007 04:11	S5618 (6667X), S5595 (6667X), S5194 (13330X), S5426 (5000X)
L9	dcc25	437102839025	100.0PPB	13-MAR-2007 04:44	S5618 (5000X), S5595 (5000X), S5194 (10000X), S5426 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		1.2349m	1.4114m	1.2784	1.2343	1.2627	1.2200	1.2053	1.2180	AVRG		0.79484		1.2581	5	15	0.10	0.99	
Vinyl Chloride	0.8460	0.8109m	1.0472	0.9997	1.0061	1.0968	1.0304	1.0243	0.9882	AVRG		1.01700		0.9833	10	15	0.050	0.99	
Bromomethane		0.5458	0.6494	0.6322	0.6371m	0.6675	0.6879	0.6948	0.6700	AVRG		1.54298		0.6481	7	15	0.050	0.99	
Chloroethane		0.5535m	0.6623m	0.5484	0.5368m	0.5644	0.5554	0.5585	0.5091	AVRG		1.78233		0.5611	8	15	0.050	0.99	
Acetone				0.5589	0.4572	0.4999	0.4726	0.4518	0.4295	AVRG		2.09071		0.4783	10	15	0.050	0.99	
1,1-Dichloroethene		0.7953	0.7415	0.5980	0.5903	0.6150	0.5500			AVRG		1.54231		0.6484	15	15	0.050	0.99	
Methylene Chloride		0.8179	0.8987	0.8377	0.8391	0.8521	0.7916	0.7460	0.7417	AVRG		1.22609		0.8156	7	15	0.050	0.99	
Carbon Disulfide		2.6785	2.7134	2.4004	2.2634	2.3755	2.2111	2.0612	1.9691	AVRG		0.42843		2.3341	11	15	0.050	0.99	
MTBE		2.1081m	2.3244	2.2163	2.2919	2.3258	2.1809	2.0562	1.9506	AVRG		0.45834		2.1818	6	15	0.050	0.99	
trans-1,2-Dichloroethene		0.7867	0.7805	0.6874	0.6550	0.7117	0.6706	0.6279	0.6136	AVRG		1.44576		0.6917	9	15	0.050	0.99	
Vinyl Acetate		1.8396	2.3535	2.0866	2.2195	1.7750	1.9690	1.6731	1.4951	AVRG		0.51909		1.9264	15	15	0.050	0.99	
1,1-Dichloroethane		1.4581	1.6143	1.4183	1.4152	1.5126	1.3670	1.2985	1.2517	AVRG		0.70573		1.4170	8	15	0.10	0.99	
2-Butanone			0.5725	0.5845	0.4993	0.5156	0.4865	0.4537	0.4358	AVRG		1.97300		0.5068	11	15	0.050	0.99	
cis-1,2-Dichloroethene		0.8981m	0.8390	0.7392	0.7383	0.7685	0.7074	0.6748	0.6638	AVRG		1.32688		0.7536	11	15	0.050	0.99	
Chloroform		1.3998	1.5815	1.5350	1.5119	1.5380	1.4582	1.3629	1.2801	AVRG		0.68568		1.4584	7	15	0.050	0.99	
1,1,1-Trichloroethane		0.8617	0.9988	0.9300	0.9452	1.0592	1.0479	1.0073	0.9716	AVRG		1.02278		0.9777	7	15	0.050	0.99	
Carbon Tetrachloride		0.4145	0.4341	0.4033	0.4283	0.4982	0.5037	0.4900	0.4782	AVRG		2.19170		0.4563	9	15	0.050	0.99	
1,2-Dichloroethane		0.9476	0.9637	0.9345	0.9343	0.8943	0.8722	0.8184	0.7713	AVRG		1.12102		0.8920	8	15	0.050	0.99	
Benzene		2.0320	1.9339	1.8157	1.7324	1.8005	1.6587	1.5369	1.4694	AVRG		0.57226		1.7475	11	15	0.050	0.99	
Trichloroethene		0.5076	0.5120	0.4909	0.4785	0.5336	0.4892	0.4657	0.4639	AVRG		2.02972		0.4927	5	15	0.050	0.99	
1,2-Dichloropropane		0.5832	0.6219	0.5633	0.5395	0.5633	0.5131	0.4796	0.4713	AVRG		1.84538		0.5419	10	15	0.050	0.99	
Bromodichloromethane		0.5619	0.6649	0.6667	0.7128	0.7728	0.7568	0.7251	0.6882	AVRG		1.44163		0.6937	10	15	0.050	0.99	
4-Methyl-2-Pentanone		0.6461	0.5572	0.6111	0.5925	0.6000	0.6143	0.5995	0.5908	AVRG		1.66266		0.6014	4	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6214	0.7180	0.7090	0.7283	0.7697	0.7476	0.7172	0.6995	AVRG		1.40085		0.7139	6	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9722	1.0365	0.9751	0.9927	1.0445	1.0185	0.9559	0.9354	AVRG		1.00873		0.9913	4	15	0.050	0.99	
trans-1,3-Dichloropropene		0.5851	0.6697	0.6676	0.6892	0.7595	0.7447	0.7082	0.6867	AVRG		1.45174		0.6888	8	15	0.050	0.99	
1,1,2-Trichloroethane		0.1996	0.2769	0.2608	0.2615	0.2757	0.2601	0.2449	0.2376	AVRG		3.96580		0.2522	10	15	0.050	0.99	
2-Hexanone		0.4691	0.3449	0.3730	0.3945	0.4103	0.3929	0.3982	0.3998	AVRG		2.51353		0.3978	9	15	0.050	0.99	
Tetrachloroethene		0.4331	0.5425	0.4714	0.4746	0.5162	0.5009	0.4805	0.4783	AVRG		2.05256		0.4872	7	15	0.050	0.99	
Dibromochloromethane		0.3397	0.4440	0.4506	0.4978	0.5648	0.5739	0.5689	0.5411	LINR	0.20212	1.79845		0.4976	0.999	15	0.050	0.99	
Chlorobenzene		1.0852	1.2182	1.1479	1.1484	1.2158	1.1388	1.0898	1.0485	AVRG		0.87983		1.1366	5	15	0.30	0.99	
Ethylbenzene		2.1168	2.4354	2.2594	2.2566	2.3548	2.0994	1.9177	1.7342	AVRG		0.46581		2.1468	11	15	0.050	0.99	
m,p-Xylenes	0.6384	0.6556	0.7908	0.7454	0.7485	0.7834	0.7202	0.6819	0.6406	AVRG		1.40519		0.7116	8	15	0.050	0.99	
o-Xylene		0.6906	0.7657	0.7626	0.7544	0.8033	0.7444	0.7241	0.6937	AVRG		1.34708		0.7423	5	15	0.050	0.99	
Styrene		1.0657	1.2856	1.2615	1.2577	1.3195	1.2161	1.1604	1.1035	AVRG		0.82730		1.2087	7	15	0.050	0.99	
Bromoform		0.1600	0.2652	0.2916	0.3231	0.3743	0.3862	0.4012	0.3917	LINR	1.05423	2.50672		0.3242	1.000	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.3069	1.3290	1.4028	1.3518	1.2631	1.2123	1.1573	1.0954	AVRG		0.79063		1.2648	8	15	0.30	0.99	
Dibromofluoromethane	0.5614	0.5744	0.5951	0.6033	0.6070	0.6118	0.5991	0.5954	0.5881	AVRG		1.68676		0.5929	3	15	0.050	0.99	
1,2-Dichloroethane-d4	0.6241	0.6437	0.6462	0.6440	0.6095	0.6043	0.5777	0.5460	0.5158	AVRG		1.66320		0.6012	8	15	0.050	0.99	
Toluene-d8	1.1273	1.1469	1.1523	1.1394	1.1184	1.1403	1.1501	1.1317	1.1353	AVRG		0.87877		1.1380	1	15	0.050	0.99	
Bromofluorobenzene	1.2961	1.2644	1.2813	1.2603	1.2199	1.1906	1.1485	1.1228	1.0930	AVRG		0.82745		1.2085	6	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000			ug/L
Methylene Chloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: WNH Date: 03/14/07 Reviewer: LW Date: 03/15/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA04 Name : 826GOX04
Calnum : 437102839004 Cal Date: 13-MAR-2007 Type : WATER

ICV 437102839027 (dcc27 13-MAR-2007) stds: S5614 (10000X), S5426 (5000X)
ICV 437102839028 (dcc28 13-MAR-2007) stds: S5537 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	437102839027	1.2581	1.1019	25.00	21.90	ug/L	-12	30	
Vinyl Chloride	437102839027	0.9833	0.9270	25.00	23.57	ug/L	-6	20	
Bromomethane	437102839027	0.6481	0.5768	25.00	22.25	ug/L	-11	30	m
Chloroethane	437102839027	0.5611	0.5075	25.00	22.61	ug/L	-10	30	
Acetone	437102839028	0.4783	0.3878	25.00	20.27	ug/L	-19	40	
1,1-Dichloroethene	437102839028	0.6484	0.7078	25.00	27.29	ug/L	9	20	
Methylene Chloride	437102839028	0.8156	0.9118	25.00	27.95	ug/L	12	30	
Carbon Disulfide	437102839028	2.3341	2.1614	25.00	23.15	ug/L	-7	30	
MTBE	437102839028	2.1818	2.2430	25.00	25.70	ug/L	3	30	
trans-1,2-Dichloroethene	437102839028	0.6917	0.7572	25.00	27.37	ug/L	9	30	
Vinyl Acetate	437102839028	1.9264	2.1012	25.00	27.27	ug/L	9	40	
1,1-Dichloroethane	437102839028	1.4170	1.5174	25.00	26.77	ug/L	7	30	
2-Butanone	437102839028	0.5068	0.4586	25.00	22.62	ug/L	-10	40	
cis-1,2-Dichloroethene	437102839028	0.7536	0.8175	25.00	27.12	ug/L	8	30	
Chloroform	437102839028	1.4584	1.5264	25.00	26.17	ug/L	5	20	
1,1,1-Trichloroethane	437102839028	0.9777	1.0860	25.00	27.77	ug/L	11	30	
Carbon Tetrachloride	437102839028	0.4563	0.5269	25.00	28.87	ug/L	15	30	
1,2-Dichloroethane	437102839028	0.8920	0.8581	25.00	24.05	ug/L	-4	30	
Benzene	437102839028	1.7475	1.8147	25.00	25.96	ug/L	4	30	
Trichloroethene	437102839028	0.4927	0.5143	25.00	26.10	ug/L	4	30	
1,2-Dichloropropane	437102839028	0.5419	0.5433	25.00	25.07	ug/L	0	20	
Bromodichloromethane	437102839028	0.6937	0.8109	25.00	29.23	ug/L	17	30	
4-Methyl-2-Pentanone	437102839028	0.6014	0.6000	25.00	24.94	ug/L	0	40	
cis-1,3-Dichloropropene	437102839028	0.7139	0.7857	25.00	27.52	ug/L	10	30	
Toluene	437102839028	0.9913	1.0674	25.00	26.92	ug/L	8	20	
trans-1,3-Dichloropropene	437102839028	0.6888	0.7223	25.00	26.21	ug/L	5	30	
1,1,2-Trichloroethane	437102839028	0.2522	0.2695	25.00	26.72	ug/L	7	30	
2-Hexanone	437102839028	0.3978	0.3820	25.00	24.00	ug/L	-4	40	
Tetrachloroethene	437102839028	0.4872	0.5184	25.00	26.60	ug/L	6	30	
Dibromochloromethane	437102839028	0.4976	0.5701	25.00	25.83	ug/L	3	30	
Chlorobenzene	437102839028	1.1366	1.1975	25.00	26.34	ug/L	5	30	
Ethylbenzene	437102839028	2.1468	2.2943	25.00	26.72	ug/L	7	20	
m,p-Xylenes	437102839028	0.7116	0.7832	50.00	55.03	ug/L	10	30	
o-Xylene	437102839028	0.7423	0.7929	25.00	26.70	ug/L	7	30	
Styrene	437102839028	1.2087	1.3273	25.00	27.45	ug/L	10	30	
Bromoform	437102839028	0.3242	0.3908	25.00	25.54	ug/L	2	30	
1,1,2,2-Tetrachloroethane	437102839028	1.2648	1.3053	25.00	25.80	ug/L	3	30	

m=manual integration

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC17.D
Report Date: 13-Mar-2007 14:23

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC17.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 00:23 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.0005/1000,S5595,0.001/1000,
Misc Info : S5194,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 14:23 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 00:23 Cal File: DCC17.D
Als bottle: 22 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.827	4.827	(0.459)	8191	0.50000	0.4167
2 Chloromethane	50	5.240	5.240	(0.498)	10360	0.50000	0.5697(M)
3 Vinyl Chloride	62	5.408	5.408	(0.514)	6072	0.50000	0.4301
4 Bromomethane	94	6.048	6.048	(0.575)	3820	0.50000	0.4099
5 Chloroethane	64	6.176	6.176	(0.587)	4172	0.50000	0.5179(M)
6 Trichlorofluoromethane	101	6.541	6.541	(0.622)	7528	0.50000	0.4174
7 Ethanol	45	6.807	6.807	(0.647)	1231	0.50000	13.0099(M)
8 Freon 113	101	7.250	7.250	(0.689)	2063	0.25000	0.2282
9 1,1-Dichloroethene	96	7.378	7.378	(0.701)	2477	0.50000	0.2661(M)
10 Acetone	43	7.486	7.486	(0.712)	13276	0.50000	1.9335
11 Isopropanol	45	7.575	7.575	(0.720)	4284	0.50000	6.6492
12 Carbon Disulfide	76	7.762	7.762	(0.738)	11353	0.50000	0.3388
13 Methylene Chloride	84	8.097	8.097	(0.770)	3872	0.25000	0.3307
14 tert-Butyl Alcohol (TBA)	59	8.117	8.117	(0.772)	2115	0.50000	2.4263
15 MTBE	73	8.363	8.363	(0.795)	7901	0.50000	0.2513
16 trans-1,2-Dichloroethene	96	8.432	8.432	(0.801)	3030	0.50000	0.3051
17 Isopropyl Ether (DIPE)	45	8.973	8.973	(0.853)	12389	0.50000	0.2574
18 Vinyl Acetate	43	9.033	9.033	(0.859)	6597	0.25000	0.2385
19 1,1-Dichloroethane	63	9.082	9.082	(0.863)	5297	0.50000	0.2604
20 Ethyl tert-Butyl Ether (ETBE)	59	9.476	9.476	(0.901)	8212	0.50000	0.2230
21 2-Butanone	43	9.909	9.909	(0.942)	3560	0.50000	0.4892
22 2,2-Dichloropropane	77	9.889	9.889	(0.940)	3272	0.50000	0.2560

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC17.D
Report Date: 13-Mar-2007 14:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.909	9.909	(0.942)	3235	0.50000	0.2990
24 Bromochloromethane	128	10.274	10.274	(0.977)	1078	0.50000	0.2059(M)
25 Tetrahydrofuran	42	10.293	10.293	(0.978)	10916	0.50000	2.8019
26 Chloroform	83	10.313	10.313	(0.980)	5093	0.50000	0.2432
* 27 Pentafluorobenzene	168	10.520	10.520	(1.000)	717769	50.0000	
28 Dibromofluoromethane	113	10.559	10.559	(1.004)	402979	50.0000	47.3500
29 1,1,1-Trichloroethane	97	10.599	10.599	(1.007)	2740	0.50000	0.1952
30 Carbon Tetrachloride	117	10.796	10.796	(0.926)	1811	0.25000	0.1828
31 1,1-Dichloropropene	75	10.825	10.825	(0.929)	3779	0.50000	0.2541
32 1,2-Dichloroethane-d4	65	11.121	11.121	(0.954)	677376	50.0000	51.9015
33 Benzene	78	11.140	11.140	(0.956)	12535	0.50000	0.3304(M)
34 Methyl tert-Amyl Ether (TAME)	73	11.150	11.150	(0.957)	6557	0.50000	0.2460
35 1,2-Dichloroethane	62	11.229	11.229	(0.964)	5416	0.50000	0.2797
* 36 1,4-Difluorobenzene	114	11.653	11.653	(1.000)	1085338	50.0000	
37 Trichloroethene	95	12.056	12.056	(1.035)	2463	0.50000	0.2303
38 Trifluorotoluene	146	12.411	12.411	(1.065)	3600	0.50000	0.2484
39 1,2-Dichloropropane	63	12.460	12.460	(1.069)	3411	0.50000	0.2899
40 Dibromomethane	93	12.647	12.647	(1.085)	1959	0.50000	0.2398
41 Bromodichloromethane	83	12.805	12.805	(1.099)	2520	0.50000	0.1673
42 2-Chloroethylvinylether	63	13.150	13.150	(1.128)	1298	0.50000	0.4018
43 Tetramethyl THF	43	13.386	13.386	(1.149)	6287	0.50000	0.2573
44 cis-1,3-Dichloropropene	75	13.425	13.425	(1.152)	3605	0.50000	0.2326
45 4-Methyl-2-Pentanone	43	13.573	13.573	(1.165)	4102	0.50000	0.3141
46 Toluene-d8	98	13.760	13.760	(1.181)	1223465	50.0000	49.5301
47 Toluene	92	13.859	13.859	(1.189)	5302	0.50000	0.2463
48 trans-1,3-Dichloropropene	75	14.194	14.194	(1.218)	3274	0.50000	0.2189
49 1,1,2-Trichloroethane	85	14.460	14.460	(1.241)	1143	0.50000	0.2088
50 Tetrachloroethene	166	14.588	14.588	(0.928)	1848	0.50000	0.2026
51 2-Hexanone	43	14.686	14.686	(0.934)	2890	0.50000	0.3880(M)
52 1,3-Dichloropropane	76	14.706	14.706	(0.935)	4264	0.50000	0.2327
53 Dibromochloromethane	129	14.982	14.982	(0.953)	1683	0.50000	0.3638
54 1,2-Dibromoethane	107	15.189	15.189	(1.303)	2298	0.50000	0.2315
* 55 Chlorobenzene-d5	117	15.720	15.720	(1.000)	935935	50.0000	
56 Chlorobenzene	112	15.760	15.760	(1.002)	5027	0.50000	0.2362
57 Ethylbenzene	91	15.809	15.809	(1.006)	9740	0.50000	0.2423
58 1,1,1,2-Tetrachloroethane	131	15.839	15.839	(1.008)	1160	0.50000	0.1510
59 m,p-Xylenes	106	15.957	15.957	(1.015)	5975	0.50000	0.4485
60 o-Xylene	106	16.459	16.459	(1.047)	2947	0.50000	0.2120
61 Styrene	104	16.489	16.489	(1.049)	4509	0.50000	0.1992
62 Bromoform	173	16.784	16.784	(1.068)	1070	0.50000	1.1975
63 Isopropylbenzene	105	16.863	16.863	(0.913)	7697	0.50000	0.2406
64 Cyclohexanone	55	17.119	17.119	(0.927)	5275	0.50000	0.6170
65 Bromofluorobenzene	95	17.129	17.129	(0.927)	600592	50.0000	53.6221
66 1,1,2,2-Tetrachloroethane	83	17.267	17.267	(0.935)	2699	0.50000	0.2302
67 Bromobenzene	156	17.336	17.336	(0.939)	2354	0.50000	0.2593
68 Propylbenzene	91	17.336	17.336	(0.939)	10860	0.50000	0.2648
69 1,2,3-Trichloropropane	110	17.365	17.365	(0.940)	829	0.50000	0.2695
70 2-Chlorotoluene	91	17.513	17.513	(0.948)	8363	0.50000	0.2755
71 1,3,5-Trimethylbenzene	105	17.533	17.533	(0.949)	6369	0.50000	0.2465
72 4-Chlorotoluene	91	17.641	17.641	(0.955)	7848	0.50000	0.2726
73 tert-Butylbenzene	119	17.917	17.917	(0.970)	5060	0.50000	0.2462
74 1,2,4-Trimethylbenzene	105	17.976	17.976	(0.973)	6000	0.50000	0.2285
75 sec-Butylbenzene	105	18.163	18.163	(0.983)	6800	0.50000	0.2206
76 para-Isopropyl Toluene	119	18.301	18.301	(0.991)	5270	0.50000	0.2301

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC17.D
Report Date: 13-Mar-2007 14:23

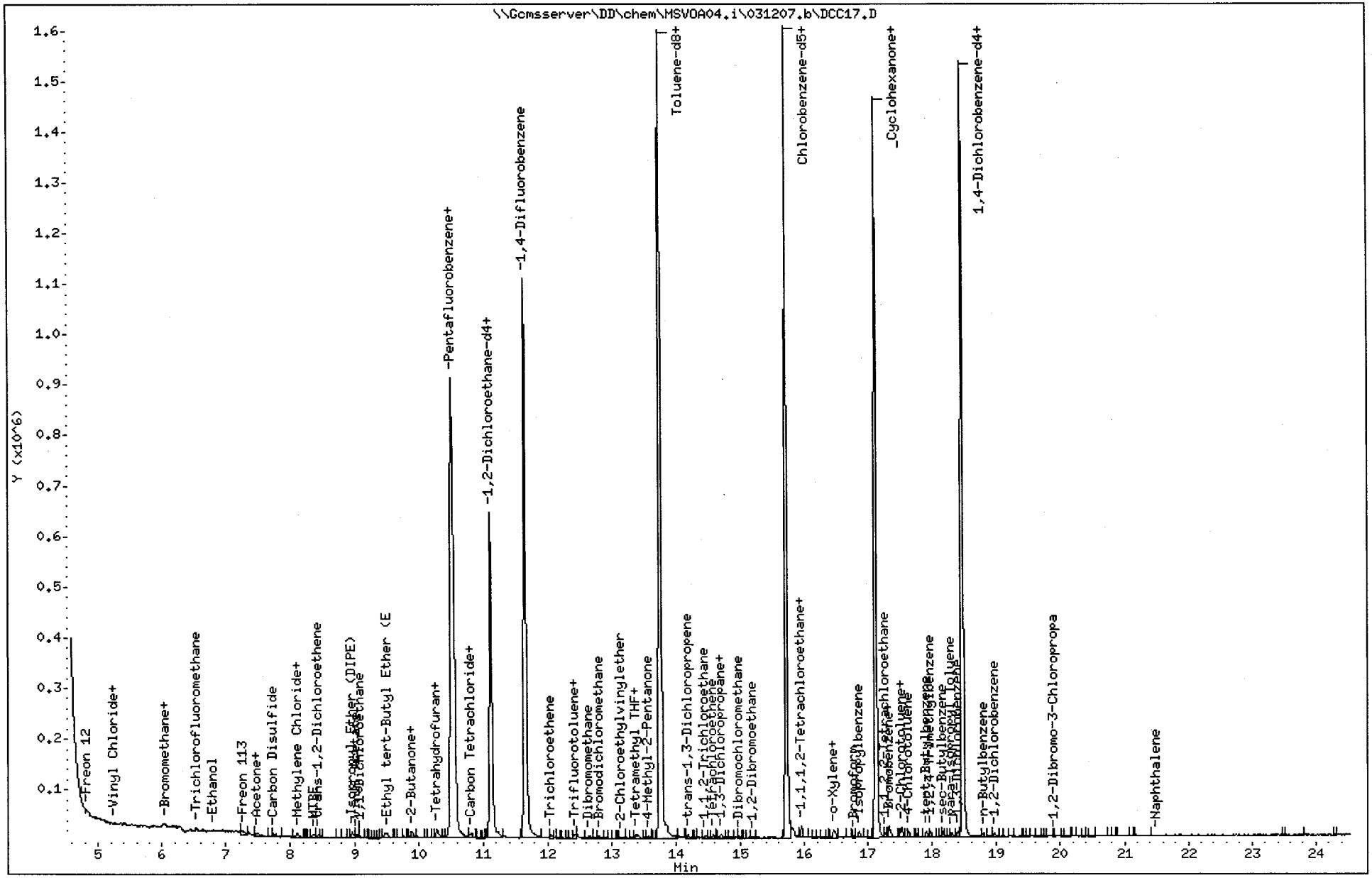
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.390	18.390	(0.996)	3745	0.50000	0.2396
* 78 1,4-Dichlorobenzene-d4	152	18.468	18.468	(1.000)	463393	50.0000	
79 1,4-Dichlorobenzene	146	18.498	18.498	(1.002)	3841	0.50000	0.2491
80 n-Butylbenzene	91	18.794	18.794	(1.018)	4167	0.50000	0.1961
81 1,2-Dichlorobenzene	146	18.971	18.971	(1.027)	3378	0.50000	0.2331
82 1,2-Dibromo-3-Chloropropane	75	19.936	19.936	(1.079)	211	0.25000	0.1416
85 Naphthalene	128	21.492	21.492	(1.164)	193	0.25000	0.0459

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC17.D
Date : 13-MAR-2007 00:23
Client ID: DYNA P&T
Sample Info: ICAL,S5618,0.0005/1000,S5595,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC18.D
Report Date: 13-Mar-2007 16:48

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 00:56 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.001/1000,S5595,0.002/1000,
Misc Info : S5194,0.001/1000,0.5/1.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 16:48 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 00:56 Cal File: DCC18.D
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.847	4.847	(0.461)	15345	1.00000	0.7702
2 Chloromethane	50	5.260	5.260	(0.500)	17970	1.00000	0.9815(M)
3 Vinyl Chloride	62	5.418	5.418	(0.515)	11800	1.00000	0.8246(M)
4 Bromomethane	94	6.029	6.029	(0.573)	7942	1.00000	0.8408
5 Chloroethane	64	6.186	6.186	(0.588)	8054	1.00000	0.9864(M)
6 Trichlorofluoromethane	101	6.541	6.541	(0.622)	14634	1.00000	0.8004
7 Ethanol	45	6.817	6.817	(0.648)	6050	50.0000	63.0754(M)
8 Freon 113	101	7.250	7.250	(0.689)	4152	0.50000	0.4532
9 1,1-Dichloroethene	96	7.358	7.358	(0.699)	5787	0.50000	0.6133
10 Acetone	43	7.477	7.477	(0.711)	13024	0.50000	1.8711
11 Isopropanol	45	7.565	7.565	(0.719)	4513	5.00000	6.9099(M)
12 Carbon Disulfide	76	7.762	7.762	(0.738)	19489	0.50000	0.5737
13 Methylene Chloride	84	8.097	8.097	(0.770)	5951	0.50000	0.5014
14 tert-Butyl Alcohol (TBA)	59	8.137	8.137	(0.773)	4659	5.00000	5.2724(M)
15 MTBE	73	8.363	8.363	(0.795)	15339	0.50000	0.4831(M)
16 trans-1,2-Dichloroethene	96	8.442	8.442	(0.802)	5724	0.50000	0.5686
17 Isopropyl Ether (DIPE)	45	8.964	8.964	(0.852)	25240	0.50000	0.5173
18 Vinyl Acetate	43	9.043	9.043	(0.860)	13385	0.50000	0.4774
19 1,1-Dichloroethane	63	9.092	9.092	(0.864)	10609	0.50000	0.5145
20 Ethyl tert-Butyl Ether (ETBE)	59	9.476	9.476	(0.901)	18587	0.50000	0.4980
21 2-Butanone	43	9.900	9.900	(0.941)	6524	0.50000	0.8845(M)
22 2,2-Dichloropropane	77	9.890	9.890	(0.940)	6710	0.50000	0.5179

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC18.D
Report Date: 13-Mar-2007 16:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.909	9.909	(0.942)	6535	0.50000	0.5958(M)
24 Bromochloromethane	128	10.264	10.264	(0.976)	2469	0.50000	0.4654
25 Tetrahydrofuran	42	10.294	10.294	(0.978)	21418	5.00000	5.4232
26 Chloroform	83	10.313	10.313	(0.980)	10185	0.50000	0.4799
* 27 Pentafluorobenzene	168	10.520	10.520	(1.000)	727608	50.0000	
28 Dibromofluoromethane	113	10.560	10.560	(1.004)	417951	50.0000	48.4451
29 1,1,1-Trichloroethane	97	10.599	10.599	(1.007)	6270	0.50000	0.4406
30 Carbon Tetrachloride	117	10.806	10.806	(0.927)	4524	0.50000	0.4542
31 1,1-Dichloropropene	75	10.826	10.826	(0.929)	8316	0.50000	0.5561
32 1,2-Dichloroethane-d4	65	11.121	11.121	(0.954)	702584	50.0000	53.5298
33 Benzene	78	11.141	11.141	(0.956)	22179	0.50000	0.5814
34 Methyl tert-Amyl Ether (TAME)	73	11.151	11.151	(0.957)	13425	0.50000	0.5008
35 1,2-Dichloroethane	62	11.229	11.229	(0.964)	10343	0.50000	0.5311
* 36 1,4-Difluorobenzene	114	11.653	11.653	(1.000)	1091484	50.0000	
37 Trichloroethene	95	12.047	12.047	(1.034)	5540	0.50000	0.5151
38 Trifluorotoluene	146	12.411	12.411	(1.065)	7500	0.50000	0.5146
39 1,2-Dichloropropane	63	12.461	12.461	(1.069)	6366	0.50000	0.5381
40 Dibromomethane	93	12.648	12.648	(1.085)	4129	0.50000	0.5027
41 Bromodichloromethane	83	12.805	12.805	(1.099)	6133	0.50000	0.4050
42 2-Chloroethylvinylether	63	13.150	13.150	(1.128)	2719	1.00000	0.8370
43 Tetramethyl THF	43	13.386	13.386	(1.149)	12238	0.50000	0.4981
44 cis-1,3-Dichloropropene	75	13.426	13.426	(1.152)	6783	0.50000	0.4352
45 4-Methyl-2-Pentanone	43	13.574	13.574	(1.165)	7052	0.50000	0.5371
46 Toluene-d8	98	13.761	13.761	(1.181)	1251844	50.0000	50.3936
47 Toluene	92	13.859	13.859	(1.189)	10611	0.50000	0.4903
48 trans-1,3-Dichloropropene	75	14.194	14.194	(1.218)	6386	0.50000	0.4246
49 1,1,2-Trichloroethane	85	14.450	14.450	(1.240)	2179	0.50000	0.3958
50 Tetrachloroethene	166	14.578	14.578	(0.927)	4163	0.50000	0.4445
51 2-Hexanone	43	14.696	14.696	(0.935)	4509	0.50000	0.5896
52 1,3-Dichloropropane	76	14.696	14.696	(0.935)	9840	0.50000	0.5229
53 Dibromochloromethane	129	14.982	14.982	(0.953)	3265	0.50000	0.5075
54 1,2-Dibromoethane	107	15.189	15.189	(1.303)	4878	0.50000	0.4887
* 55 Chlorobenzene-d5	117	15.721	15.721	(1.000)	961116	50.0000	
56 Chlorobenzene	112	15.760	15.760	(1.002)	10430	0.50000	0.4773
57 Ethylbenzene	91	15.809	15.809	(1.006)	20345	0.50000	0.4930
58 1,1,1,2-Tetrachloroethane	131	15.839	15.839	(1.008)	3345	0.50000	0.4241
59 m,p-Xylenes	106	15.957	15.957	(1.015)	12603	1.00000	0.9213
60 o-Xylene	106	16.459	16.459	(1.047)	6637	0.50000	0.4651
61 Styrene	104	16.479	16.479	(1.048)	10243	0.50000	0.4408
62 Bromoform	173	16.785	16.785	(1.068)	1538	0.50000	1.2547
63 Isopropylbenzene	105	16.863	16.863	(0.913)	16318	0.50000	0.4882
64 _Cyclohexanone	55	17.110	17.110	(0.926)	7797	0.50000	0.8726
65 Bromofluorobenzene	95	17.129	17.129	(0.927)	612286	50.0000	52.3102
66 1,1,2,2-Tetrachloroethane	83	17.267	17.267	(0.935)	6329	0.50000	0.5166
67 Bromobenzene	156	17.336	17.336	(0.939)	4385	0.50000	0.4622
68 Propylbenzene	91	17.336	17.336	(0.939)	22854	0.50000	0.5333
69 1,2,3-Trichloropropane	110	17.356	17.356	(0.940)	1510	0.50000	0.4698
70 2-Chlorotoluene	91	17.513	17.513	(0.948)	16446	0.50000	0.5185
71 1,3,5-Trimethylbenzene	105	17.523	17.523	(0.949)	13238	0.50000	0.4904
72 4-Chlorotoluene	91	17.641	17.641	(0.955)	15066	0.50000	0.5008
73 tert-Butylbenzene	119	17.907	17.907	(0.970)	10732	0.50000	0.4997
74 1,2,4-Trimethylbenzene	105	17.976	17.976	(0.973)	12436	0.50000	0.4533
75 sec-Butylbenzene	105	18.163	18.163	(0.983)	14605	0.50000	0.4534
76 para-Isopropyl Toluene	119	18.301	18.301	(0.991)	9897	0.50000	0.4135

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC18.D
Report Date: 13-Mar-2007 16:48

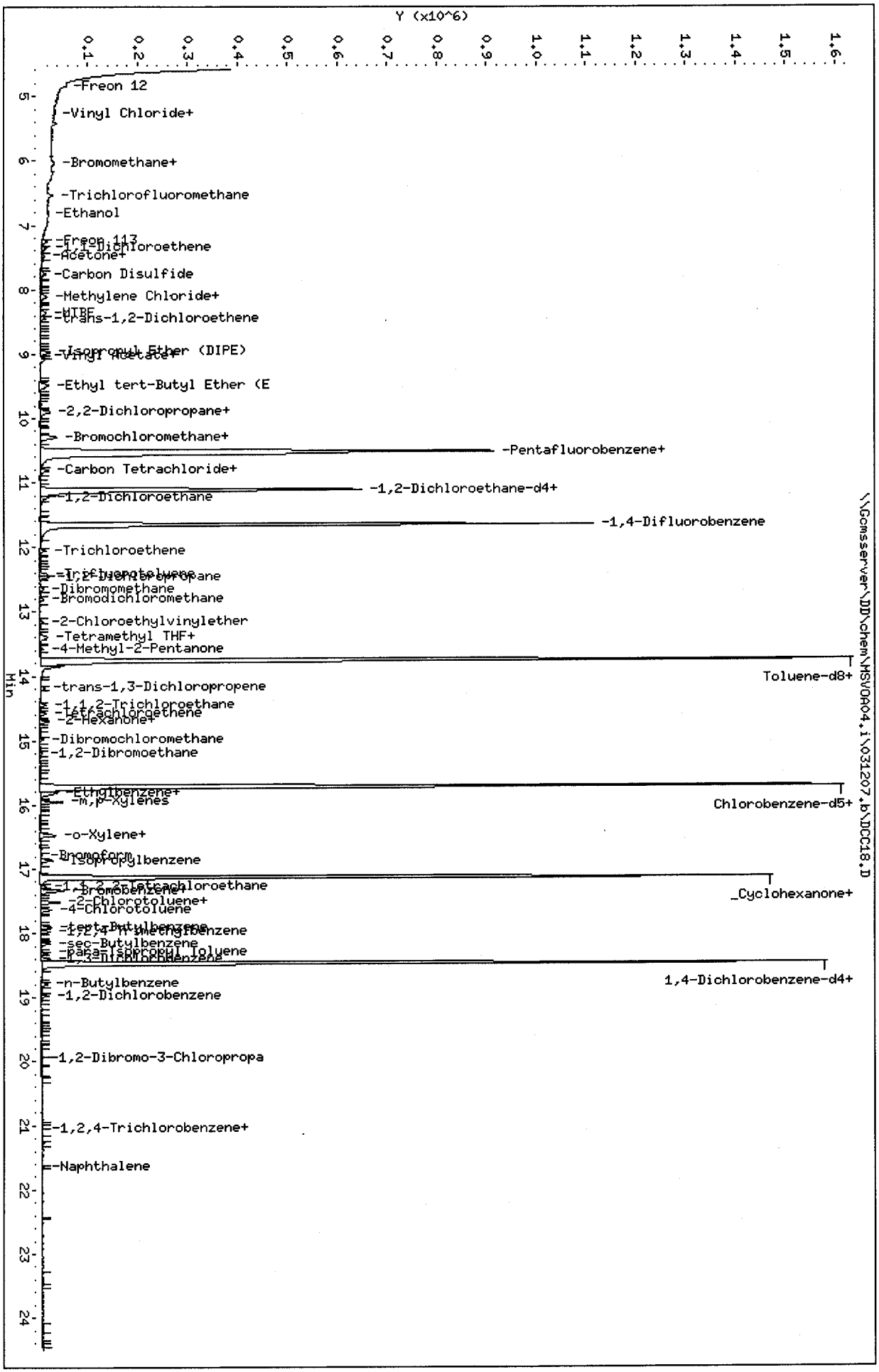
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.400	18.400	(0.996)	8015	0.50000	0.4907
* 78 1,4-Dichlorobenzene-d4	152	18.469	18.469	(1.000)	484263	50.0000	
79 1,4-Dichlorobenzene	146	18.498	18.498	(1.002)	7927	0.50000	0.4919
80 n-Butylbenzene	91	18.794	18.794	(1.018)	8586	0.50000	0.3866
81 1,2-Dichlorobenzene	146	18.971	18.971	(1.027)	7040	0.50000	0.4650
82 1,2-Dibromo-3-Chloropropane	75	19.946	19.946	(1.080)	725	0.50000	0.4655
83 1,2,4-Trichlorobenzene	180	21.049	21.049	(1.140)	289	0.50000	0.0644
84 Hexachlorobutadiene	225	21.158	21.158	(1.146)	592	0.50000	0.2220(M)
85 Naphthalene	128	21.473	21.473	(1.163)	180	0.50000	0.0410(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC18.D
Date : 13-MAR-2007 00:56
Client ID: DYNA P&T
Sample Info: ICAL,S5618,0.001/1000,S5595,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC19.D
Report Date: 13-Mar-2007 14:26

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 01:28 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.002/500,S5595,0.002/500,
Misc Info : S5194,0.001/500,2.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 14:26 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 01:28 Cal File: DCC19.D
Als bottle: 24 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.843	4.843	(0.461)	37056	2.00000	1.9249
2 Chloromethane	50	5.256	5.256	(0.500)	39692	2.00000	2.2286(M)
3 Vinyl Chloride	62	5.424	5.424	(0.516)	29450	2.00000	2.1299
4 Bromomethane	94	6.034	6.034	(0.574)	18264	2.00000	2.0010
5 Chloroethane	64	6.192	6.192	(0.589)	18626	2.00000	2.3609(M)
6 Trichlorofluoromethane	101	6.537	6.537	(0.622)	34884	2.00000	1.9746
7 Ethanol	45	6.812	6.812	(0.648)	19731	200.000	212.8884(M)
8 Freon 113	101	7.266	7.266	(0.691)	20095	2.00000	2.2699
9 1,1-Dichloroethene	96	7.364	7.364	(0.700)	20853	2.00000	2.2872
10 Acetone	43	7.482	7.482	(0.712)	22651	2.00000	3.3678
11 Isopropanol	45	7.561	7.561	(0.719)	13309	20.0000	21.0887
12 Carbon Disulfide	76	7.758	7.758	(0.738)	76310	2.00000	2.3250
13 Methylene Chloride	84	8.103	8.103	(0.771)	25273	2.00000	2.2036
14 tert-Butyl Alcohol (TBA)	59	8.122	8.122	(0.772)	19316	20.0000	22.6223
15 MTBE	73	8.369	8.369	(0.796)	65369	2.00000	2.1230
16 trans-1,2-Dichloroethene	96	8.438	8.438	(0.802)	21949	2.00000	2.2567
17 Isopropyl Ether (DIPE)	45	8.970	8.970	(0.853)	104657	2.00000	2.2199
18 Vinyl Acetate	43	9.038	9.038	(0.860)	66186	2.00000	2.4433
19 1,1-Dichloroethane	63	9.088	9.088	(0.864)	45400	2.00000	2.2785
20 Ethyl tert-Butyl Ether (ETBE)	59	9.482	9.482	(0.902)	77998	2.00000	2.1628
21 2-Butanone	43	9.895	9.895	(0.941)	16100	2.00000	2.2590
22 2,2-Dichloropropane	77	9.895	9.895	(0.941)	29008	2.00000	2.3173

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC19.D
Report Date: 13-Mar-2007 14:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.915	9.915	(0.943)	23595	2.00000	2.2264
24	Bromochloromethane	128	10.270	10.270	(0.977)	11188	2.00000	2.1825
25	Tetrahydrofuran	42	10.289	10.289	(0.978)	84807	20.0000	22.2235
26	Chloroform	83	10.309	10.309	(0.980)	44476	2.00000	2.1687
* 27	Pentafluorobenzene	168	10.516	10.516	(1.000)	703072	50.0000	
28	Dibromofluoromethane	113	10.555	10.555	(1.004)	418405	50.0000	50.1902
29	1,1,1-Trichloroethane	97	10.595	10.595	(1.007)	28090	2.00000	2.0431
30	Carbon Tetrachloride	117	10.792	10.792	(0.926)	18883	2.00000	1.9027
31	1,1-Dichloropropene	75	10.821	10.821	(0.929)	32128	2.00000	2.1562
32	1,2-Dichloroethane-d4	65	11.117	11.117	(0.954)	702810	50.0000	53.7404
33	Benzene	78	11.136	11.136	(0.956)	84129	2.00000	2.2133
34	Methyl tert-Amyl Ether (TAME)	73	11.156	11.156	(0.958)	56882	2.00000	2.1297
35	1,2-Dichloroethane	62	11.235	11.235	(0.964)	41923	2.00000	2.1606
* 36	1,4-Difluorobenzene	114	11.649	11.649	(1.000)	1087557	50.0000	
37	Trichloroethene	95	12.062	12.062	(1.036)	22275	2.00000	2.0786
38	Trifluorotoluene	146	12.417	12.417	(1.066)	31326	2.00000	2.1575
39	1,2-Dichloropropane	63	12.456	12.456	(1.069)	27054	2.00000	2.2952
40	Dibromomethane	93	12.653	12.653	(1.086)	16988	2.00000	2.0761
41	Bromodichloromethane	83	12.801	12.801	(1.099)	28926	2.00000	1.9171
42	2-Chloroethylvinylether	63	13.156	13.156	(1.129)	5944	2.00000	1.8364
43	Tetramethyl THF	43	13.392	13.392	(1.150)	50895	2.00000	2.0792
44	cis-1,3-Dichloropropene	75	13.431	13.431	(1.153)	31234	2.00000	2.0115
45	4-Methyl-2-Pentanone	43	13.579	13.579	(1.166)	24241	2.00000	1.8529
46	Toluene-d8	98	13.766	13.766	(1.182)	1253213	50.0000	50.6309
47	Toluene	92	13.855	13.855	(1.189)	45092	2.00000	2.0911
48	trans-1,3-Dichloropropene	75	14.190	14.190	(1.218)	29134	2.00000	1.9444
49	1,1,2-Trichloroethane	85	14.456	14.456	(1.241)	12045	2.00000	2.1961
50	Tetrachloroethene	166	14.584	14.584	(0.928)	20606	2.00000	2.2271
51	2-Hexanone	43	14.692	14.692	(0.935)	13099	2.00000	1.7337
52	1,3-Dichloropropane	76	14.702	14.702	(0.935)	40802	2.00000	2.1948
53	Dibromochloromethane	129	14.978	14.978	(0.953)	16864	2.00000	1.7991
54	1,2-Dibromoethane	107	15.185	15.185	(1.304)	20651	2.00000	2.0765
* 55	Chlorobenzene-d5	117	15.716	15.716	(1.000)	949550	50.0000	
56	Chlorobenzene	112	15.756	15.756	(1.002)	46271	2.00000	2.1436
57	Ethylbenzene	91	15.815	15.815	(1.006)	92501	2.00000	2.2688
58	1,1,1,2-Tetrachloroethane	131	15.845	15.845	(1.008)	15025	2.00000	1.9284
59	m,p-Xylenes	106	15.953	15.953	(1.015)	60070	4.00000	4.4447
60	o-Xylene	106	16.455	16.455	(1.047)	29083	2.00000	2.0629
61	Styrene	104	16.485	16.485	(1.049)	48829	2.00000	2.1271
62	Bromoform	173	16.780	16.780	(1.068)	10074	2.00000	2.3839
63	Isopropylbenzene	105	16.859	16.859	(0.913)	77621	2.00000	2.3585
64	_Cyclohexanone	55	17.105	17.105	(0.926)	13869	2.00000	1.5765
65	Bromofluorobenzene	95	17.125	17.125	(0.927)	610936	50.0000	53.0095
66	1,1,2,2-Tetrachloroethane	83	17.273	17.273	(0.935)	25347	2.00000	2.1014
67	Bromobenzene	156	17.332	17.332	(0.938)	21402	2.00000	2.2911
68	Propylbenzene	91	17.342	17.342	(0.939)	100412	2.00000	2.3801
69	1,2,3-Trichloropropane	110	17.361	17.361	(0.940)	6854	2.00000	2.1658
70	2-Chlorotoluene	91	17.519	17.519	(0.948)	75421	2.00000	2.4152
71	1,3,5-Trimethylbenzene	105	17.529	17.529	(0.949)	61239	2.00000	2.3040
72	4-Chlorotoluene	91	17.637	17.637	(0.955)	68366	2.00000	2.3081
73	tert-Butylbenzene	119	17.913	17.913	(0.970)	44767	2.00000	2.1171
74	1,2,4-Trimethylbenzene	105	17.972	17.972	(0.973)	59954	2.00000	2.2198
75	sec-Butylbenzene	105	18.159	18.159	(0.983)	69481	2.00000	2.1910
76	para-Isopropyl Toluene	119	18.307	18.307	(0.991)	46769	2.00000	1.9847

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC19.D
Report Date: 13-Mar-2007 14:26

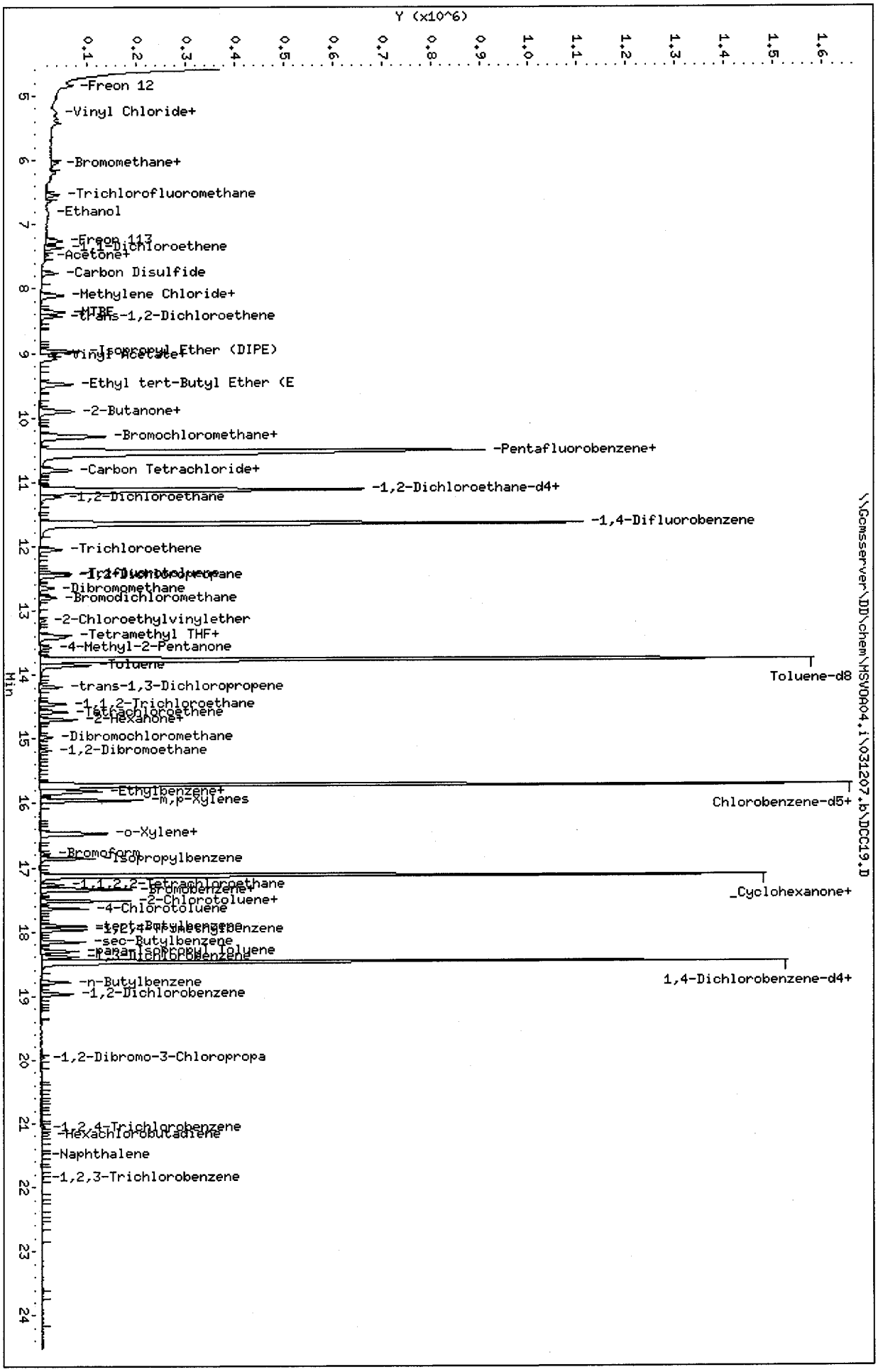
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.396	18.396	(0.996)	32785	2.00000	2.0387
* 78 1,4-Dichlorobenzene-d4	152	18.474	18.474	(1.000)	476821	50.0000	
79 1,4-Dichlorobenzene	146	18.504	18.504	(1.002)	32371	2.00000	2.0403
80 n-Butylbenzene	91	18.790	18.790	(1.017)	40378	2.00000	1.8468
81 1,2-Dichlorobenzene	146	18.967	18.967	(1.027)	30386	2.00000	2.0383
82 1,2-Dibromo-3-Chloropropane	75	19.942	19.942	(1.079)	2737	2.00000	1.7851
83 1,2,4-Trichlorobenzene	180	21.055	21.055	(1.140)	2827	2.00000	0.6407
84 Hexachlorobutadiene	225	21.173	21.173	(1.146)	3500	2.00000	1.3333
85 Naphthalene	128	21.469	21.469	(1.162)	713	2.00000	0.1650
86 1,2,3-Trichlorobenzene	180	21.863	21.863	(1.183)	372	2.00000	0.1498

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC19.D
Date : 13-MAR-2007 01:28
Client ID: DYNA P&T
Sample Info: ICAL,S5618,0.002/500,S5595,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC20.D
Report Date: 13-Mar-2007 16:50

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC20.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 02:01 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.005/500,S5595,0.005/500,
Misc Info : S5194,0.0025/500,5.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 16:50 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 02:01 Cal File: DCC20.D
Als bottle: 25 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.838	4.838	(0.460)	99014	5.00000	5.1566
2 Chloromethane	50	5.261	5.261	(0.500)	89656	5.00000	5.0807
3 Vinyl Chloride	62	5.419	5.419	(0.515)	70108	5.00000	5.0834
4 Bromomethane	94	6.039	6.039	(0.574)	44335	5.00000	4.8697
5 Chloroethane	64	6.187	6.187	(0.588)	38462	5.00000	4.8875
6 Trichlorofluoromethane	101	6.542	6.542	(0.622)	88374	5.00000	5.0152
7 Ethanol	45	6.817	6.817	(0.648)	47976	500.000	519.1200(M)
8 Freon 113	101	7.261	7.261	(0.690)	44061	5.00000	4.9897
9 1,1-Dichloroethene	96	7.359	7.359	(0.699)	41940	5.00000	4.6117
10 Acetone	43	7.477	7.477	(0.711)	39196	5.00000	5.8425
11 Isopropanol	45	7.556	7.556	(0.718)	35287	50.0000	56.0555
12 Carbon Disulfide	76	7.753	7.753	(0.737)	168342	5.00000	5.1421
13 Methylene Chloride	84	8.108	8.108	(0.771)	58751	5.00000	5.1357
14 tert-Butyl Alcohol (TBA)	59	8.127	8.127	(0.773)	45218	50.0000	53.0919
15 MTBE	73	8.364	8.364	(0.795)	155432	5.00000	5.0791
16 trans-1,2-Dichloroethene	96	8.433	8.433	(0.802)	48210	5.00000	4.9693
17 Isopropyl Ether (DIPE)	45	8.975	8.975	(0.853)	248938	5.00000	5.2938
18 Vinyl Acetate	43	9.034	9.034	(0.859)	146335	5.00000	5.4157
19 1,1-Dichloroethane	63	9.083	9.083	(0.863)	99467	5.00000	5.0048
20 Ethyl tert-Butyl Ether (ETBE)	59	9.477	9.477	(0.901)	182005	5.00000	5.0596
21 2-Butanone	43	9.891	9.891	(0.940)	40994	5.00000	5.7665
22 2,2-Dichloropropane	77	9.891	9.891	(0.940)	60794	5.00000	4.8689

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC20.D
Report Date: 13-Mar-2007 16:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.910	9.910	(0.942)	51839	5.00000	4.9040
24	Bromochloromethane	128	10.275	10.275	(0.977)	27058	5.00000	5.2917
25	Tetrahydrofuran	42	10.285	10.285	(0.978)	216017	50.0000	56.7500
26	Chloroform	83	10.314	10.314	(0.980)	107649	5.00000	5.2625
* 27	Pentafluorobenzene	168	10.521	10.521	(1.000)	701298	50.0000	
28	Dibromofluoromethane	113	10.560	10.560	(1.004)	423072	50.0000	50.8784
29	1,1,1-Trichloroethane	97	10.610	10.610	(1.008)	65221	5.00000	4.7559
30	Carbon Tetrachloride	117	10.797	10.797	(0.926)	43473	5.00000	4.4191
31	1,1-Dichloropropene	75	10.816	10.816	(0.928)	74340	5.00000	5.0333
32	1,2-Dichloroethane-d4	65	11.122	11.122	(0.954)	694255	50.0000	53.5548
33	Benzene	78	11.141	11.141	(0.956)	195741	5.00000	5.1953
34	Methyl tert-Amyl Ether (TAME)	73	11.151	11.151	(0.957)	137524	5.00000	5.1945
35	1,2-Dichloroethane	62	11.230	11.230	(0.964)	100748	5.00000	5.2382
* 36	1,4-Difluorobenzene	114	11.654	11.654	(1.000)	1078041	50.0000	
37	Trichloroethene	95	12.048	12.048	(1.034)	52925	5.00000	4.9823
38	Trifluorotoluene	146	12.422	12.422	(1.066)	70949	5.00000	4.9296
39	1,2-Dichloropropane	63	12.461	12.461	(1.069)	60722	5.00000	5.1971
40	Dibromomethane	93	12.648	12.648	(1.085)	42889	5.00000	5.2877
41	Bromodichloromethane	83	12.806	12.806	(1.099)	71870	5.00000	4.8054
42	2-Chloroethylvinylether	63	13.151	13.151	(1.128)	16523	5.00000	5.1500
43	Tetramethyl THF	43	13.387	13.387	(1.149)	127970	5.00000	5.2742
44	cis-1,3-Dichloropropene	75	13.427	13.427	(1.152)	76434	5.00000	4.9660
45	4-Methyl-2-Pentanone	43	13.574	13.574	(1.165)	65881	5.00000	5.0804
46	Toluene-d8	98	13.761	13.761	(1.181)	1228326	50.0000	50.0635
47	Toluene	92	13.860	13.860	(1.189)	105125	5.00000	4.9183
48	trans-1,3-Dichloropropene	75	14.185	14.185	(1.217)	71968	5.00000	4.8457
49	1,1,2-Trichloroethane	85	14.451	14.451	(1.240)	28118	5.00000	5.1719
50	Tetrachloroethene	166	14.579	14.579	(0.927)	43899	5.00000	4.8379
51	2-Hexanone	43	14.697	14.697	(0.935)	34736	5.00000	4.6878
52	1,3-Dichloropropane	76	14.707	14.707	(0.935)	95158	5.00000	5.2194
53	Dibromochloromethane	129	14.983	14.983	(0.953)	41966	5.00000	4.2544
54	1,2-Dibromoethane	107	15.190	15.190	(1.303)	49271	5.00000	4.9980
* 55	Chlorobenzene-d5	117	15.722	15.722	(1.000)	931238	50.0000	
56	Chlorobenzene	112	15.761	15.761	(1.002)	106898	5.00000	5.0498
57	Ethylbenzene	91	15.810	15.810	(1.006)	210400	5.00000	5.2621
58	1,1,1,2-Tetrachloroethane	131	15.840	15.840	(1.008)	35845	5.00000	4.6912
59	m,p-Xylenes	106	15.958	15.958	(1.015)	138828	10.0000	10.4742
60	o-Xylene	106	16.460	16.460	(1.047)	71018	5.00000	5.1365
61	Styrene	104	16.480	16.480	(1.048)	117478	5.00000	5.2183
62	Bromoform	173	16.785	16.785	(1.068)	27152	5.00000	4.7086
63	Isopropylbenzene	105	16.864	16.864	(0.913)	181144	5.00000	5.4290
64	_Cyclohexanone	55	17.110	17.110	(0.926)	21845	5.00000	2.4492
65	Bromofluorobenzene	95	17.130	17.130	(0.927)	609244	50.0000	52.1404
66	1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.935)	67813	5.00000	5.5453
67	Bromobenzene	156	17.337	17.337	(0.939)	49656	5.00000	5.2430
68	Propylbenzene	91	17.337	17.337	(0.939)	232978	5.00000	5.4469
69	1,2,3-Trichloropropane	110	17.366	17.366	(0.940)	17254	5.00000	5.3776
70	2-Chlorotoluene	91	17.514	17.514	(0.948)	175197	5.00000	5.5338
71	1,3,5-Trimethylbenzene	105	17.524	17.524	(0.949)	141398	5.00000	5.2473
72	4-Chlorotoluene	91	17.642	17.642	(0.955)	160746	5.00000	5.3528
73	tert-Butylbenzene	119	17.908	17.908	(0.970)	107147	5.00000	4.9979
74	1,2,4-Trimethylbenzene	105	17.977	17.977	(0.973)	142407	5.00000	5.2007
75	sec-Butylbenzene	105	18.164	18.164	(0.983)	160061	5.00000	4.9784
76	para-Isopropyl Toluene	119	18.302	18.302	(0.991)	113712	5.00000	4.7596

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC20.D
Report Date: 13-Mar-2007 16:50

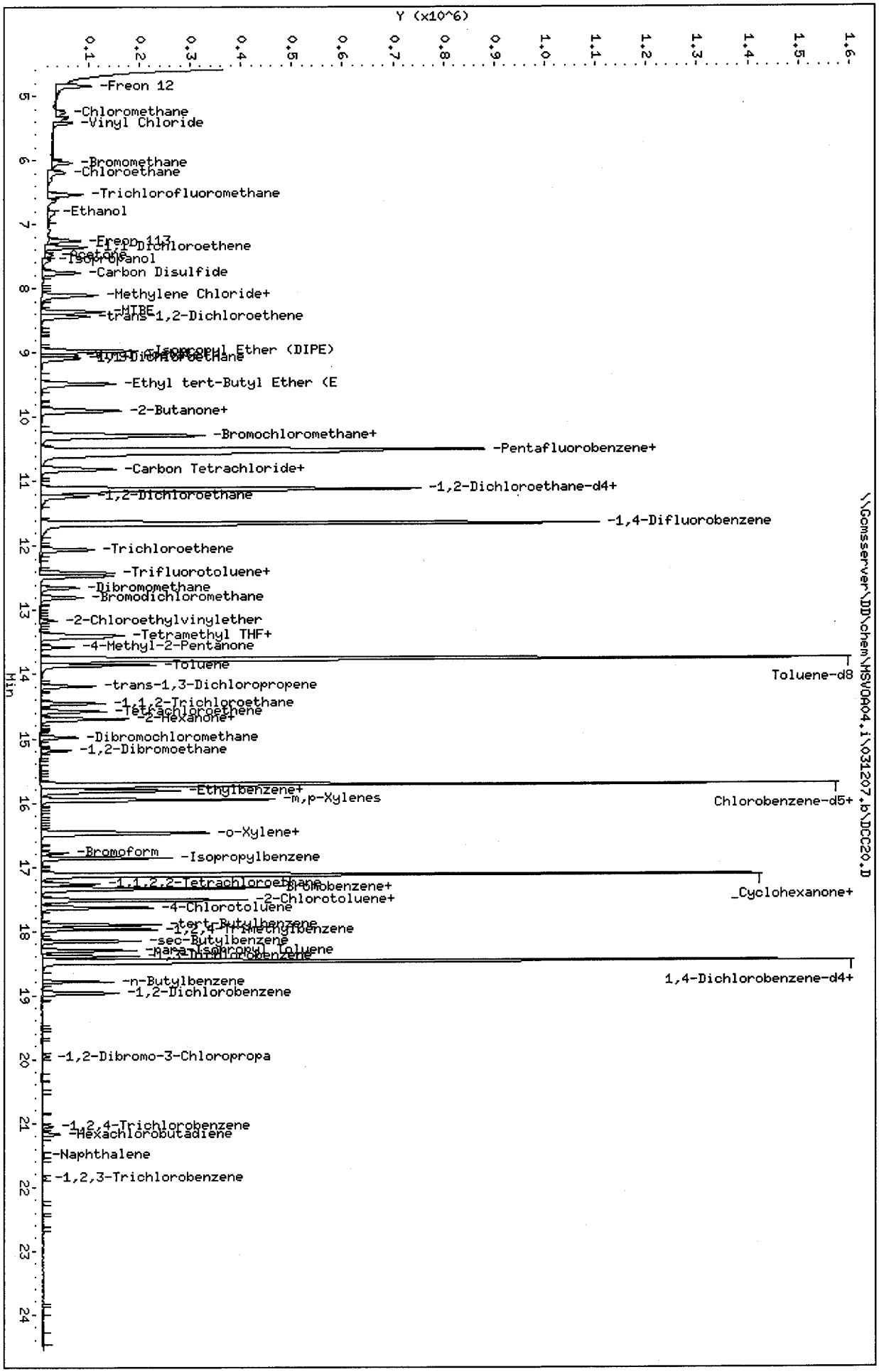
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.391	18.391	(0.996)	86301	5.00000	5.2932
* 78 1,4-Dichlorobenzene-d4	152	18.470	18.470	(1.000)	483427	50.0000	
79 1,4-Dichlorobenzene	146	18.499	18.499	(1.002)	80890	5.00000	5.0288
80 n-Butylbenzene	91	18.785	18.785	(1.017)	96955	5.00000	4.3741
81 1,2-Dichlorobenzene	146	18.972	18.972	(1.027)	73775	5.00000	4.8813
82 1,2-Dibromo-3-Chloropropane	75	19.957	19.957	(1.081)	6483	5.00000	4.1705
83 1,2,4-Trichlorobenzene	180	21.060	21.060	(1.140)	8763	5.00000	1.9588
84 Hexachlorobutadiene	225	21.168	21.168	(1.146)	9697	5.00000	3.6435
85 Naphthalene	128	21.474	21.474	(1.163)	3685	5.00000	0.8414
86 1,2,3-Trichlorobenzene	180	21.858	21.858	(1.183)	3175	5.00000	1.2614

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC20.D
Date : 13-MAR-2007 02:01
Client ID: DYNA P&T
Sample Info: ICAL,S5618,0.005/500,S5595,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC21.D
Report Date: 13-Mar-2007 16:51

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC21.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 02:34 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.002/100,S5595,0.002/100,
Misc Info : S5194,0.001/100,10.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 16:51 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 02:34 Cal File: DCC21.D
Als bottle: 26 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.837	4.837	(0.460)	208670	10.0000	10.6693
2 Chloromethane	50	5.261	5.261	(0.500)	176336	10.0000	9.8106
3 Vinyl Chloride	62	5.418	5.418	(0.515)	143741	10.0000	10.2324
4 Bromomethane	94	6.029	6.029	(0.573)	91025	10.0000	9.8310(M)
5 Chloroethane	64	6.187	6.187	(0.588)	76689	10.0000	9.5675(M)
6 Trichlorofluoromethane	101	6.532	6.532	(0.621)	192084	10.0000	10.7020
7 Ethanol	45	6.827	6.827	(0.649)	92815	1000.00	985.9910
8 Freon 113	101	7.260	7.260	(0.690)	88686	10.0000	9.8604
9 1,1-Dichloroethene	96	7.359	7.359	(0.699)	84336	10.0000	9.1046
10 Acetone	43	7.477	7.477	(0.711)	65314	10.0000	9.5582
11 Isopropanol	45	7.556	7.556	(0.718)	67155	100.000	104.7352
12 Carbon Disulfide	76	7.753	7.753	(0.737)	323353	10.0000	9.6970
13 Methylene Chloride	84	8.107	8.107	(0.771)	119883	10.0000	10.2886
14 tert-Butyl Alcohol (TBA)	59	8.127	8.127	(0.773)	89567	100.000	103.2466
15 MTBE	73	8.364	8.364	(0.795)	327431	10.0000	10.5046
16 trans-1,2-Dichloroethene	96	8.432	8.432	(0.802)	93575	10.0000	9.4696
17 Isopropyl Ether (DIPE)	45	8.974	8.974	(0.853)	501229	10.0000	10.4646
18 Vinyl Acetate	43	9.033	9.033	(0.859)	317088	10.0000	11.5213
19 1,1-Dichloroethane	63	9.083	9.083	(0.863)	202179	10.0000	9.9874
20 Ethyl tert-Butyl Ether (ETBE)	59	9.477	9.477	(0.901)	378012	10.0000	10.3170
21 2-Butanone	43	9.890	9.890	(0.940)	71326	10.0000	9.8504
22 2,2-Dichloropropane	77	9.890	9.890	(0.940)	125185	10.0000	9.8433

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC21.D
Report Date: 13-Mar-2007 16:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.910	9.910	(0.942)	105481	10.0000	9.7968
24 Bromochloromethane	128	10.274	10.274	(0.977)	53654	10.0000	10.3019
25 Tetrahydrofuran	42	10.294	10.294	(0.978)	403776	100.000	104.1429
26 Chloroform	83	10.314	10.314	(0.980)	215990	10.0000	10.3664
* 27 Pentafluorobenzene	168	10.521	10.521	(1.000)	714318	50.0000	
28 Dibromofluoromethane	113	10.560	10.560	(1.004)	433562	50.0000	51.1896
29 1,1,1-Trichloroethane	97	10.599	10.599	(1.007)	135036	10.0000	9.6674
30 Carbon Tetrachloride	117	10.796	10.796	(0.926)	94501	10.0000	9.3875
31 1,1-Dichloropropene	75	10.816	10.816	(0.928)	145881	10.0000	9.6524
32 1,2-Dichloroethane-d4	65	11.121	11.121	(0.954)	672381	50.0000	50.6867
33 Benzene	78	11.141	11.141	(0.956)	382231	10.0000	9.9141
34 Methyl tert-Amyl Ether (TAME)	73	11.151	11.151	(0.957)	282698	10.0000	10.4350
35 1,2-Dichloroethane	62	11.230	11.230	(0.964)	206146	10.0000	10.4742
* 36 1,4-Difluorobenzene	114	11.653	11.653	(1.000)	1103154	50.0000	
37 Trichloroethene	95	12.057	12.057	(1.035)	105578	10.0000	9.7127
38 Trifluorotoluene	146	12.412	12.412	(1.065)	141385	10.0000	9.5999
39 1,2-Dichloropropane	63	12.461	12.461	(1.069)	119020	10.0000	9.9549
40 Dibromomethane	93	12.648	12.648	(1.085)	82935	10.0000	9.9922
41 Bromodichloromethane	83	12.806	12.806	(1.099)	157268	10.0000	10.2761
42 2-Chloroethylvinylether	63	13.160	13.160	(1.129)	34193	10.0000	10.4149
43 Tetramethyl THF	43	13.387	13.387	(1.149)	259795	10.0000	10.4635
44 cis-1,3-Dichloropropene	75	13.426	13.426	(1.152)	160684	10.0000	10.2023
45 4-Methyl-2-Pentanone	43	13.574	13.574	(1.165)	130723	10.0000	9.8512
46 Toluene-d8	98	13.761	13.761	(1.181)	1233789	50.0000	49.1414
47 Toluene	92	13.860	13.860	(1.189)	219015	10.0000	10.0134
48 trans-1,3-Dichloropropene	75	14.185	14.185	(1.217)	152067	10.0000	10.0059
49 1,1,2-Trichloroethane	85	14.451	14.451	(1.240)	57695	10.0000	10.3705
50 Tetrachloroethene	166	14.579	14.579	(0.927)	89842	10.0000	9.7411
51 2-Hexanone	43	14.687	14.687	(0.934)	74681	10.0000	9.9158
52 1,3-Dichloropropane	76	14.707	14.707	(0.935)	189320	10.0000	10.2164
53 Dibromochloromethane	129	14.982	14.982	(0.953)	94236	10.0000	9.1547
54 1,2-Dibromoethane	107	15.189	15.189	(1.303)	100043	10.0000	9.9173
* 55 Chlorobenzene-d5	117	15.721	15.721	(1.000)	946532	50.0000	
56 Chlorobenzene	112	15.761	15.761	(1.002)	217391	10.0000	10.1036
57 Ethylbenzene	91	15.810	15.810	(1.006)	427188	10.0000	10.5115
58 1,1,1,2-Tetrachloroethane	131	15.839	15.839	(1.008)	78743	10.0000	10.1390
59 m,p-Xylenes	106	15.958	15.958	(1.015)	283396	20.0000	21.0360
60 o-Xylene	106	16.460	16.460	(1.047)	142810	10.0000	10.1621
61 Styrene	104	16.480	16.480	(1.048)	238083	10.0000	10.4046
62 Bromoform	173	16.785	16.785	(1.068)	61172	10.0000	9.1543
63 Isopropylbenzene	105	16.864	16.864	(0.913)	362701	10.0000	10.4208
64 _Cyclohexanone	55	17.110	17.110	(0.926)	35283	10.0000	3.7923
65 Bromofluorobenzene	95	17.130	17.130	(0.927)	615178	50.0000	50.4711
66 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.935)	136336	10.0000	10.6876
67 Bromobenzene	156	17.337	17.337	(0.939)	101475	10.0000	10.2714
68 Propylbenzene	91	17.337	17.337	(0.939)	474013	10.0000	10.6240
69 1,2,3-Trichloropropane	110	17.366	17.366	(0.940)	34325	10.0000	10.2559
70 2-Chlorotoluene	91	17.514	17.514	(0.948)	345486	10.0000	10.4613
71 1,3,5-Trimethylbenzene	105	17.524	17.524	(0.949)	295468	10.0000	10.5115
72 4-Chlorotoluene	91	17.642	17.642	(0.955)	324347	10.0000	10.3540
73 tert-Butylbenzene	119	17.908	17.908	(0.970)	229896	10.0000	10.2802
74 1,2,4-Trimethylbenzene	105	17.977	17.977	(0.973)	300862	10.0000	10.5332
75 sec-Butylbenzene	105	18.164	18.164	(0.983)	347581	10.0000	10.3639
76 para-Isopropyl Toluene	119	18.302	18.302	(0.991)	258358	10.0000	10.3669

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC21.D
Report Date: 13-Mar-2007 16:51

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.390	18.390	(0.996)	174874	10.0000	10.2822
* 78 1,4-Dichlorobenzene-d4	152	18.469	18.469	(1.000)	504280	50.0000	
79 1,4-Dichlorobenzene	146	18.499	18.499	(1.002)	169132	10.0000	10.0798
80 n-Butylbenzene	91	18.784	18.784	(1.017)	235141	10.0000	10.1696
81 1,2-Dichlorobenzene	146	18.972	18.972	(1.027)	162984	10.0000	10.3379
82 1,2-Dibromo-3-Chloropropane	75	19.947	19.947	(1.080)	15933	10.0000	9.8258
83 1,2,4-Trichlorobenzene	180	21.050	21.050	(1.140)	29174	10.0000	6.2518
84 Hexachlorobutadiene	225	21.168	21.168	(1.146)	23574	10.0000	8.4914
85 Naphthalene	128	21.483	21.483	(1.163)	18092	10.0000	3.9602
86 1,2,3-Trichlorobenzene	180	21.857	21.857	(1.183)	13639	10.0000	5.1948

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC21.D
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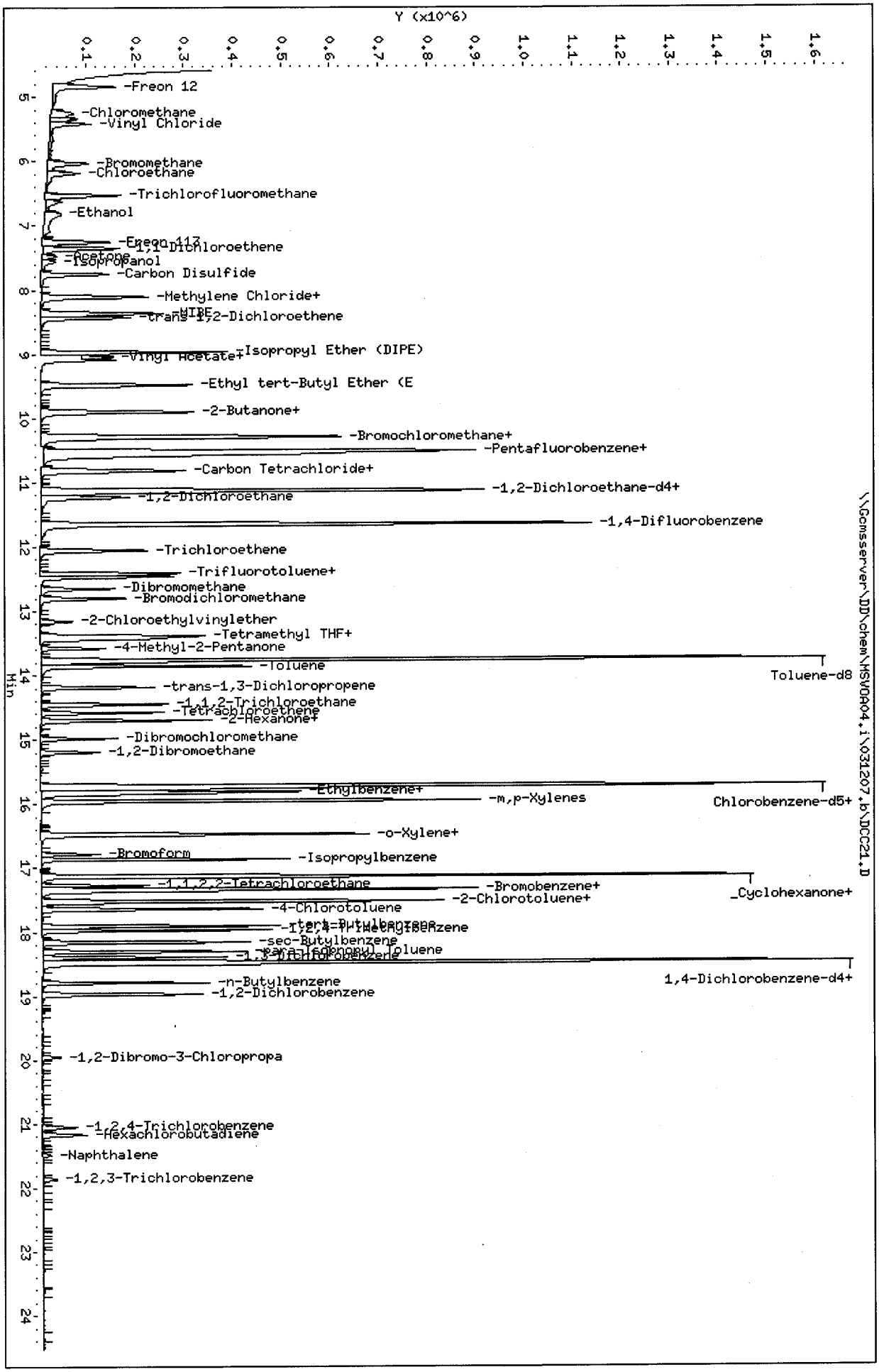
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC22.D
Report Date: 13-Mar-2007 14:31

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC22.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 03:06 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.004/100,S5595,0.004/100,
Misc Info : S5194,0.002/100,20.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 14:31 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 03:06 Cal File: DCC22.D
Als bottle: 27 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.838	4.838	(0.460)	451939	20.0000	23.0184
2 Chloromethane	50	5.252	5.252	(0.499)	362189	20.0000	19.9387
3 Vinyl Chloride	62	5.419	5.419	(0.515)	314608	20.0000	22.3092
4 Bromomethane	94	6.040	6.040	(0.574)	191476	20.0000	20.5684
5 Chloroethane	64	6.187	6.187	(0.588)	161902	20.0000	20.1203
6 Trichlorofluoromethane	101	6.542	6.542	(0.622)	411265	20.0000	22.8251
7 Ethanol	45	6.818	6.818	(0.648)	200860	2000.00	2124.8130
8 Freon 113	101	7.261	7.261	(0.690)	198508	20.0000	21.9853
9 1,1-Dichloroethene	96	7.359	7.359	(0.700)	176419	20.0000	18.9719
10 Acetone	43	7.478	7.478	(0.711)	143390	20.0000	20.9029
11 Isopropanol	45	7.566	7.566	(0.719)	132314	200.000	205.5589
12 Carbon Disulfide	76	7.763	7.763	(0.738)	681395	20.0000	20.3552
13 Methylene Chloride	84	8.108	8.108	(0.771)	244415	20.0000	20.8951
14 tert-Butyl Alcohol (TBA)	59	8.128	8.128	(0.773)	177680	200.000	204.0247
15 MTBE	73	8.364	8.364	(0.795)	667135	20.0000	21.2438
16 trans-1,2-Dichloroethene	96	8.433	8.433	(0.802)	204139	20.0000	20.5786
17 Isopropyl Ether (DIPE)	45	8.975	8.975	(0.853)	1052043	20.0000	21.8795
18 Vinyl Acetate	43	9.044	9.044	(0.860)	509146	20.0000	18.4282
19 1,1-Dichloroethane	63	9.093	9.093	(0.864)	433880	20.0000	21.3503
20 Ethyl tert-Butyl Ether (ETBE)	59	9.477	9.477	(0.901)	792933	20.0000	21.5577
21 2-Butanone	43	9.891	9.891	(0.940)	147898	20.0000	20.3462
22 2,2-Dichloropropane	77	9.891	9.891	(0.940)	270646	20.0000	21.1985

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC22.D
Report Date: 13-Mar-2007 14:31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.910	9.910	(0.942)	220428	20.0000	20.3935
	24 Bromochloromethane	128	10.275	10.275	(0.977)	110472	20.0000	21.1292
	25 Tetrahydrofuran	42	10.285	10.285	(0.978)	743800	200.000	191.1003
	26 Chloroform	83	10.314	10.314	(0.980)	441157	20.0000	21.0914
*	27 Pentafluorobenzene	168	10.521	10.521	(1.000)	717093	50.0000	
	28 Dibromofluoromethane	113	10.560	10.560	(1.004)	438699	50.0000	51.5957
	29 1,1,1-Trichloroethane	97	10.600	10.600	(1.007)	303813	20.0000	21.6662
	30 Carbon Tetrachloride	117	10.797	10.797	(0.926)	220911	20.0000	21.8369
	31 1,1-Dichloropropene	75	10.817	10.817	(0.928)	317886	20.0000	20.9298
	32 1,2-Dichloroethane-d4	65	11.122	11.122	(0.954)	669933	50.0000	50.2537
	33 Benzene	78	11.142	11.142	(0.956)	798435	20.0000	20.6075
	34 Methyl tert-Amyl Ether (TAME)	73	11.151	11.151	(0.957)	573657	20.0000	21.0709
	35 1,2-Dichloroethane	62	11.230	11.230	(0.964)	396587	20.0000	20.0513
*	36 1,4-Difluorobenzene	114	11.654	11.654	(1.000)	1108607	50.0000	
	37 Trichloroethene	95	12.058	12.058	(1.035)	236609	20.0000	21.6600
	38 Trifluorotoluene	146	12.412	12.412	(1.065)	304863	20.0000	20.5982
	39 1,2-Dichloropropane	63	12.461	12.461	(1.069)	249805	20.0000	20.7912
	40 Dibromomethane	93	12.649	12.649	(1.085)	173755	20.0000	20.8314
	41 Bromodichloromethane	83	12.796	12.796	(1.098)	342709	20.0000	22.2829
	42 2-Chloroethylvinylether	63	13.151	13.151	(1.128)	77158	20.0000	23.3861
	43 Tetramethyl THF	43	13.387	13.387	(1.149)	536115	20.0000	21.4864
	44 cis-1,3-Dichloropropene	75	13.427	13.427	(1.152)	341315	20.0000	21.5645
	45 4-Methyl-2-Pentanone	43	13.574	13.574	(1.165)	266068	20.0000	19.9520
	46 Toluene-d8	98	13.762	13.762	(1.181)	1264182	50.0000	50.1043
	47 Toluene	92	13.860	13.860	(1.189)	463170	20.0000	21.0720
	48 trans-1,3-Dichloropropene	75	14.185	14.185	(1.217)	336775	20.0000	22.0505
	49 1,1,2-Trichloroethane	85	14.451	14.451	(1.240)	122279	20.0000	21.8713
	50 Tetrachloroethene	166	14.579	14.579	(0.927)	197111	20.0000	21.1909
	51 2-Hexanone	43	14.687	14.687	(0.934)	156683	20.0000	20.6276
	52 1,3-Dichloropropane	76	14.707	14.707	(0.935)	389540	20.0000	20.8432
	53 Dibromochloromethane	129	14.983	14.983	(0.953)	215682	20.0000	20.5189
	54 1,2-Dibromoethane	107	15.190	15.190	(1.303)	209575	20.0000	20.6732
*	55 Chlorobenzene-d5	117	15.722	15.722	(1.000)	954611	50.0000	
	56 Chlorobenzene	112	15.761	15.761	(1.002)	464265	20.0000	21.3948
	57 Ethylbenzene	91	15.810	15.810	(1.006)	899175	20.0000	21.9381
	58 1,1,1,2-Tetrachloroethane	131	15.840	15.840	(1.008)	171691	20.0000	21.9200
	59 m,p-Xylenes	106	15.948	15.948	(1.014)	598257	40.0000	44.0318
	60 o-Xylene	106	16.460	16.460	(1.047)	306751	20.0000	21.6432
	61 Styrene	104	16.480	16.480	(1.048)	503846	20.0000	21.8325
	62 Bromoform	173	16.785	16.785	(1.068)	142935	20.0000	19.8209
	63 Isopropylbenzene	105	16.864	16.864	(0.913)	771919	20.0000	21.2520
	64 _Cyclohexanone	55	17.110	17.110	(0.926)	225089	20.0000	23.1832
	65 Bromofluorobenzene	95	17.130	17.130	(0.927)	626537	50.0000	49.2564
	66 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.935)	265879	20.0000	19.9724
	67 Bromobenzene	156	17.337	17.337	(0.939)	215626	20.0000	20.9146
	68 Propylbenzene	91	17.337	17.337	(0.939)	1001151	20.0000	21.5017
	69 1,2,3-Trichloropropane	110	17.367	17.367	(0.940)	70498	20.0000	20.1843
	70 2-Chlorotoluene	91	17.514	17.514	(0.948)	732527	20.0000	21.2547
	71 1,3,5-Trimethylbenzene	105	17.524	17.524	(0.949)	637125	20.0000	21.7196
	72 4-Chlorotoluene	91	17.642	17.642	(0.955)	694537	20.0000	21.2456
	73 tert-Butylbenzene	119	17.908	17.908	(0.970)	505244	20.0000	21.6495
	74 1,2,4-Trimethylbenzene	105	17.977	17.977	(0.973)	650522	20.0000	21.8239
	75 sec-Butylbenzene	105	18.164	18.164	(0.983)	780781	20.0000	22.3085
	76 para-Isopropyl Toluene	119	18.302	18.302	(0.991)	593858	20.0000	22.8341

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC22.D
Report Date: 13-Mar-2007 14:31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.391	18.391	(0.996)	378682	20.0000	21.3359
* 78 1,4-Dichlorobenzene-d4	152	18.470	18.470	(1.000)	526257	50.0000	
79 1,4-Dichlorobenzene	146	18.499	18.499	(1.002)	373556	20.0000	21.3333
80 n-Butylbenzene	91	18.785	18.785	(1.017)	564106	20.0000	23.3783
81 1,2-Dichlorobenzene	146	18.972	18.972	(1.027)	352402	20.0000	21.4191
82 1,2-Dibromo-3-Chloropropane	75	19.947	19.947	(1.080)	33666	20.0000	19.8948
83 1,2,4-Trichlorobenzene	180	21.050	21.050	(1.140)	95769	20.0000	19.6658
84 Hexachlorobutadiene	225	21.169	21.169	(1.146)	61471	20.0000	21.2173
85 Naphthalene	128	21.484	21.484	(1.163)	75986	20.0000	15.9383
86 1,2,3-Trichlorobenzene	180	21.858	21.858	(1.183)	49429	20.0000	18.0404

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC22.D
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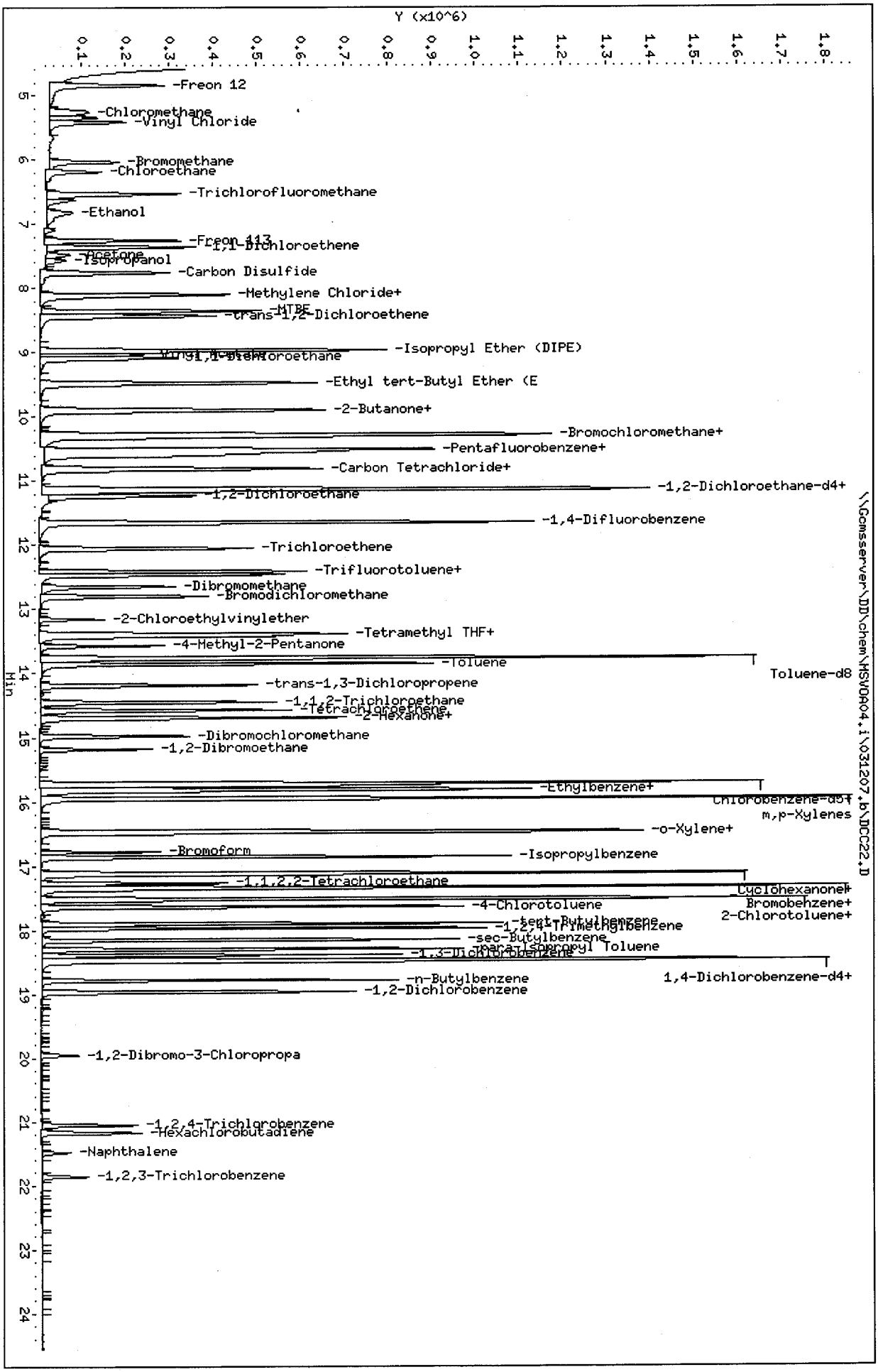
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



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Report Date: 13-Mar-2007 14:33

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC23.D
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Inj Date : 13-MAR-2007 03:39 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
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Misc Info : S5194,0.005/100,50.0PPB
Comment :
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Meth Date : 13-Mar-2007 14:33 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 03:39 Cal File: DCC23.D
Als bottle: 28 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.837	4.837	(0.460)	1020776	50.0000	51.1748
2 Chloromethane	50	5.251	5.251	(0.499)	888794	50.0000	48.1608
3 Vinyl Chloride	62	5.418	5.418	(0.515)	750644	50.0000	52.3938
4 Bromomethane	94	6.039	6.039	(0.574)	501174	50.0000	52.9914
5 Chloroethane	64	6.186	6.186	(0.588)	404657	50.0000	49.4994
6 Trichlorofluoromethane	101	6.541	6.541	(0.622)	955994	50.0000	52.2248
7 Ethanol	45	6.817	6.817	(0.648)	458021	5000.00	4769.1731
8 Freon 113	101	7.260	7.260	(0.690)	450102	50.0000	49.0678
9 1,1-Dichloroethene	96	7.359	7.359	(0.699)	400699	50.0000	42.4146
10 Acetone	43	7.477	7.477	(0.711)	344332	50.0000	49.4078
11 Isopropanol	45	7.565	7.565	(0.719)	307925	500.000	470.8754
12 Carbon Disulfide	76	7.762	7.762	(0.738)	1610851	50.0000	47.3655
13 Methylene Chloride	84	8.107	8.107	(0.771)	576716	50.0000	48.5299
14 tert-Butyl Alcohol (TBA)	59	8.127	8.127	(0.773)	410036	500.000	463.4433
15 MTBE	73	8.363	8.363	(0.795)	1588852	50.0000	49.8003
16 trans-1,2-Dichloroethene	96	8.432	8.432	(0.802)	488574	50.0000	48.4787
17 Isopropyl Ether (DIPE)	45	8.974	8.974	(0.853)	2343615	50.0000	47.9756
18 Vinyl Acetate	43	9.043	9.043	(0.860)	1434438	50.0000	51.1037
19 1,1-Dichloroethane	63	9.092	9.092	(0.864)	995865	50.0000	48.2354
20 Ethyl tert-Butyl Ether (ETBE)	59	9.476	9.476	(0.901)	1865617	50.0000	49.9252
21 2-Butanone	43	9.890	9.890	(0.940)	354409	50.0000	47.9907
22 2,2-Dichloropropane	77	9.890	9.890	(0.940)	641490	50.0000	49.4567

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC23.D
Report Date: 13-Mar-2007 14:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.910	9.910	(0.942)	515382	50.0000	46.9338
24	Bromochloromethane	128	10.274	10.274	(0.977)	261971	50.0000	49.3191
25	Tetrahydrofuran	42	10.284	10.284	(0.978)	1715349	500.000	433.7987
26	Chloroform	83	10.313	10.313	(0.980)	1062325	50.0000	49.9920
* 27	Pentafluorobenzene	168	10.520	10.520	(1.000)	728526	50.0000	
28	Dibromofluoromethane	113	10.560	10.560	(1.004)	436495	50.0000	50.5308
29	1,1,1-Trichloroethane	97	10.599	10.599	(1.007)	763447	50.0000	53.5902
30	Carbon Tetrachloride	117	10.806	10.806	(0.927)	563656	50.0000	55.1952
31	1,1-Dichloropropene	75	10.826	10.826	(0.929)	750120	50.0000	48.9260
32	1,2-Dichloroethane-d4	65	11.121	11.121	(0.954)	646477	50.0000	48.0401
33	Benzene	78	11.141	11.141	(0.956)	1856264	50.0000	47.4613
34	Methyl tert-Amyl Ether (TAME)	73	11.151	11.151	(0.957)	1362190	50.0000	49.5658
35	1,2-Dichloroethane	62	11.229	11.229	(0.964)	976014	50.0000	48.8848
* 36	1,4-Difluorobenzene	114	11.653	11.653	(1.000)	1119087	50.0000	
37	Trichloroethene	95	12.057	12.057	(1.035)	547469	50.0000	49.6479
38	Trifluorotoluene	146	12.411	12.411	(1.065)	742976	50.0000	49.7295
39	1,2-Dichloropropane	63	12.461	12.461	(1.069)	574204	50.0000	47.3433
40	Dibromomethane	93	12.648	12.648	(1.085)	421490	50.0000	50.0591
41	Bromodichloromethane	83	12.805	12.805	(1.099)	846927	50.0000	54.5515
42	2-Chloroethylvinylether	63	13.150	13.150	(1.128)	181638	50.0000	54.5378
43	Tetramethyl THF	43	13.387	13.387	(1.149)	1241800	50.0000	49.3028
44	cis-1,3-Dichloropropene	75	13.426	13.426	(1.152)	836621	50.0000	52.3633
45	4-Methyl-2-Pentanone	43	13.574	13.574	(1.165)	687476	50.0000	51.0701
46	Toluene-d8	98	13.761	13.761	(1.181)	1287014	50.0000	50.5315
47	Toluene	92	13.859	13.859	(1.189)	1139769	50.0000	51.3685
48	trans-1,3-Dichloropropene	75	14.184	14.184	(1.217)	833403	50.0000	54.0565
49	1,1,2-Trichloroethane	85	14.450	14.450	(1.240)	291072	50.0000	51.5748
50	Tetrachloroethene	166	14.578	14.578	(0.927)	491730	50.0000	51.4057
51	2-Hexanone	43	14.687	14.687	(0.934)	385693	50.0000	49.3759
52	1,3-Dichloropropane	76	14.706	14.706	(0.935)	929549	50.0000	48.3650
53	Dibromochloromethane	129	14.982	14.982	(0.953)	563449	50.0000	51.8131
54	1,2-Dibromoethane	107	15.189	15.189	(1.303)	525017	50.0000	51.3046
* 55	Chlorobenzene-d5	117	15.721	15.721	(1.000)	981704	50.0000	
56	Chlorobenzene	112	15.760	15.760	(1.002)	1117940	50.0000	50.0966
57	Ethylbenzene	91	15.810	15.810	(1.006)	2060981	50.0000	48.8961
58	1,1,1,2-Tetrachloroethane	131	15.839	15.839	(1.008)	430011	50.0000	53.3849
59	m,p-Xylenes	106	15.957	15.957	(1.015)	1414036	100.000	101.2010
60	o-Xylene	106	16.460	16.460	(1.047)	730740	50.0000	50.1355
61	Styrene	104	16.479	16.479	(1.048)	1193876	50.0000	50.3051
62	Bromoform	173	16.785	16.785	(1.068)	379163	50.0000	49.4626
63	Isopropylbenzene	105	16.863	16.863	(0.913)	1809648	50.0000	47.7393
64	_Cyclohexanone	55	17.110	17.110	(0.926)	531607	50.0000	52.4642
65	Bromofluorobenzene	95	17.129	17.129	(0.927)	630778	50.0000	47.5166
66	1,1,2,2-Tetrachloroethane	83	17.267	17.267	(0.935)	665807	50.0000	47.9234
67	Bromobenzene	156	17.336	17.336	(0.939)	515654	50.0000	47.9247
68	Propylbenzene	91	17.336	17.336	(0.939)	2249342	50.0000	46.2895
69	1,2,3-Trichloropropane	110	17.366	17.366	(0.940)	175812	50.0000	48.2323
70	2-Chlorotoluene	91	17.514	17.514	(0.948)	1642893	50.0000	45.6766
71	1,3,5-Trimethylbenzene	105	17.523	17.523	(0.949)	1473123	50.0000	48.1194
72	4-Chlorotoluene	91	17.642	17.642	(0.955)	1615110	50.0000	47.3402
73	tert-Butylbenzene	119	17.908	17.908	(0.970)	1207541	50.0000	49.5794
74	1,2,4-Trimethylbenzene	105	17.976	17.976	(0.973)	1542987	50.0000	49.6005
75	sec-Butylbenzene	105	18.164	18.164	(0.983)	1836138	50.0000	50.2690
76	para-Isopropyl Toluene	119	18.302	18.302	(0.991)	1443866	50.0000	53.1963

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC23.D
Report Date: 13-Mar-2007 14:33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.390	18.390	(0.996)	910918	50.0000	49.1778
* 78 1,4-Dichlorobenzene-d4	152	18.469	18.469	(1.000)	549218	50.0000	
79 1,4-Dichlorobenzene	146	18.499	18.499	(1.002)	918219	50.0000	50.2461
80 n-Butylbenzene	91	18.784	18.784	(1.017)	1408263	50.0000	55.9229
81 1,2-Dichlorobenzene	146	18.971	18.971	(1.027)	875997	50.0000	51.0176
82 1,2-Dibromo-3-Chloropropane	75	19.956	19.956	(1.081)	92587	50.0000	52.4266
83 1,2,4-Trichlorobenzene	180	21.050	21.050	(1.140)	301204	50.0000	59.2654
84 Hexachlorobutadiene	225	21.168	21.168	(1.146)	161500	50.0000	53.4129
85 Naphthalene	128	21.483	21.483	(1.163)	299100	50.0000	60.1146
86 1,2,3-Trichlorobenzene	180	21.857	21.857	(1.183)	174099	50.0000	60.8855

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC23.D
Date : 13-MAR-2007 03:39
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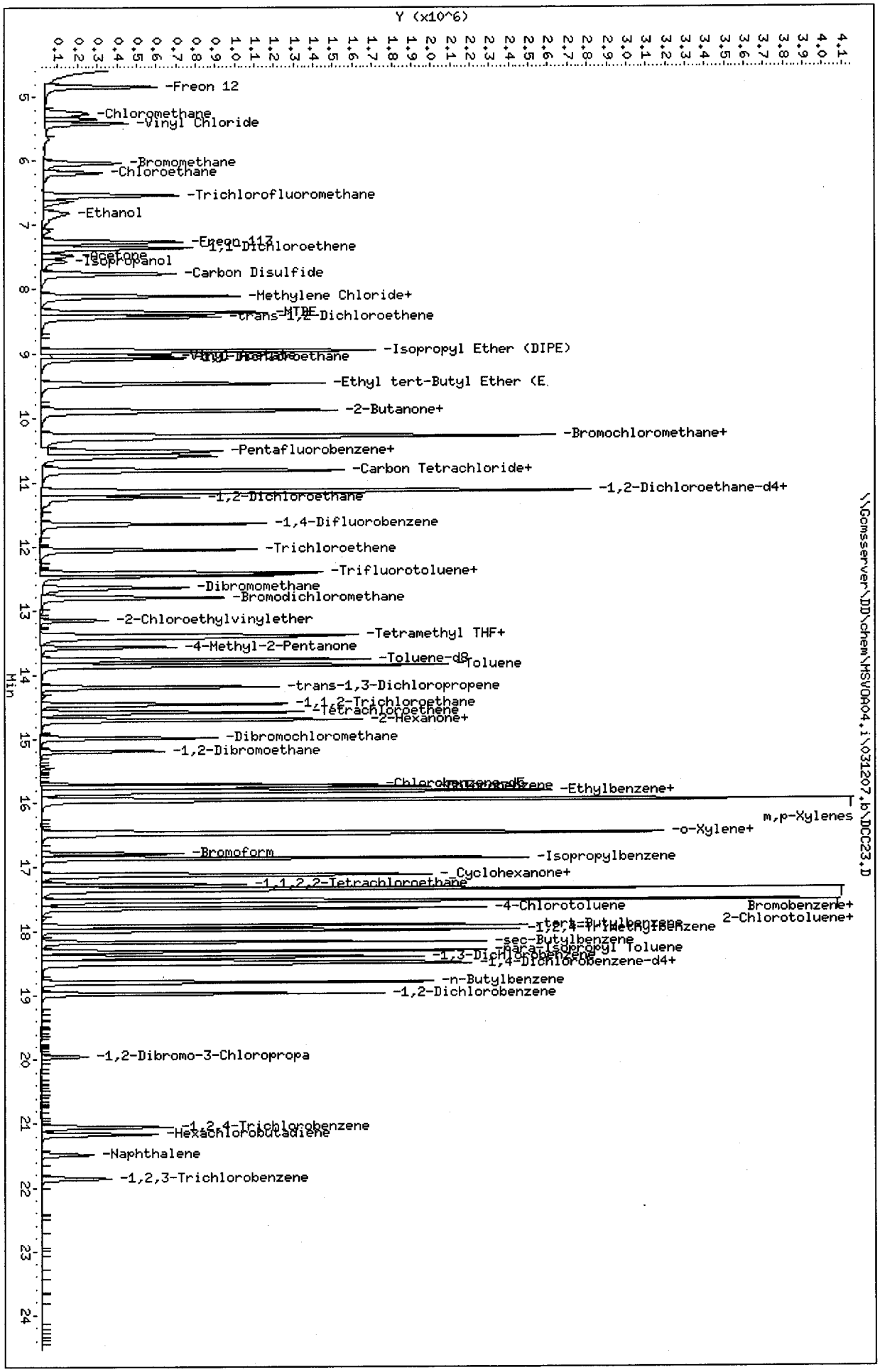
Sample Info: ICAL,S5618,0.01/100,S5595,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC24.D
Report Date: 13-Mar-2007 14:35

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC24.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 04:11 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.015/100,S5595,0.015/100,
Misc Info : S5194,0.0075/100,75.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 14:34 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 04:11 Cal File: DCC24.D
Als bottle: 29 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.836	4.836	(0.460)	1574297	75.0000	77.1020
2 Chloromethane	50	5.250	5.250	(0.499)	1348277	75.0000	71.3715
3 Vinyl Chloride	62	5.417	5.417	(0.515)	1145808	75.0000	78.1288
4 Bromomethane	94	6.028	6.028	(0.573)	777241	75.0000	80.2834
5 Chloroethane	64	6.185	6.185	(0.588)	624795	75.0000	74.6627
6 Trichlorofluoromethane	101	6.540	6.540	(0.622)	1428542	75.0000	76.2373
7 Ethanol	45	6.816	6.816	(0.648)	700187	7500.00	7122.3727
8 Freon 113	101	7.259	7.259	(0.690)	651346	75.0000	69.3666
9 1,1-Dichloroethene	96	7.357	7.357	(0.699)	570546	75.0000	58.9984
10 Acetone	43	7.476	7.476	(0.711)	505343	75.0000	70.8366
11 Isopropanol	45	7.564	7.564	(0.719)	458986	750.000	685.6673
12 Carbon Disulfide	76	7.761	7.761	(0.738)	2305689	75.0000	66.2309
13 Methylene Chloride	84	8.106	8.106	(0.771)	834445	75.0000	68.5959
14 tert-Butyl Alcohol (TBA)	59	8.126	8.126	(0.772)	616843	750.000	681.0864
15 MTBE	73	8.362	8.362	(0.795)	2300158	75.0000	70.4303
16 trans-1,2-Dichloroethene	96	8.431	8.431	(0.801)	702388	75.0000	68.0849
17 Isopropyl Ether (DIPE)	45	8.973	8.973	(0.853)	3287206	75.0000	65.7377
18 Vinyl Acetate	43	9.042	9.042	(0.860)	1871612	75.0000	65.1388
19 1,1-Dichloroethane	63	9.091	9.091	(0.864)	1452491	75.0000	68.7278
20 Ethyl tert-Butyl Ether (ETBE)	59	9.475	9.475	(0.901)	2650761	75.0000	69.2980
21 2-Butanone	43	9.889	9.889	(0.940)	507506	75.0000	67.1347
22 2,2-Dichloropropane	77	9.889	9.889	(0.940)	908382	75.0000	68.4159

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC24.D
Report Date: 13-Mar-2007 14:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.908	9.908	(0.942)	754819	75.0000	67.1510
24	Bromochloromethane	128	10.273	10.273	(0.977)	381166	75.0000	70.1018
25	Tetrahydrofuran	42	10.283	10.283	(0.978)	2442717	750.000	603.4786
26	Chloroform	83	10.312	10.312	(0.980)	1524521	75.0000	70.0857
* 27	Pentafluorobenzene	168	10.519	10.519	(1.000)	745748	50.0000	
28	Dibromofluoromethane	113	10.558	10.558	(1.004)	444034	50.0000	50.2165
29	1,1,1-Trichloroethane	97	10.598	10.598	(1.007)	1126833	75.0000	77.2715
30	Carbon Tetrachloride	117	10.805	10.805	(0.927)	846934	75.0000	80.5430
31	1,1-Dichloropropene	75	10.824	10.824	(0.929)	1090745	75.0000	69.0913
32	1,2-Dichloroethane-d4	65	11.120	11.120	(0.954)	629124	50.0000	45.4023
33	Benzene	78	11.140	11.140	(0.956)	2656537	75.0000	65.9640
34	Methyl tert-Amyl Ether (TAME)	73	11.159	11.159	(0.958)	1972250	75.0000	69.6943
35	1,2-Dichloroethane	62	11.238	11.238	(0.964)	1414580	75.0000	68.8077
* 36	1,4-Difluorobenzene	114	11.652	11.652	(1.000)	1152319	50.0000	
37	Trichloroethene	95	12.056	12.056	(1.035)	804985	75.0000	70.8958
38	Trifluorotoluene	146	12.420	12.420	(1.066)	1097853	75.0000	71.3633
39	1,2-Dichloropropane	63	12.459	12.459	(1.069)	828909	75.0000	66.3729
40	Dibromomethane	93	12.647	12.647	(1.085)	614696	75.0000	70.9002
41	Bromodichloromethane	83	12.804	12.804	(1.099)	1253310	75.0000	78.3990
42	2-Chloroethylvinylether	63	13.159	13.159	(1.129)	269080	75.0000	78.4627
43	Tetramethyl THF	43	13.385	13.385	(1.149)	1813787	75.0000	69.9355
44	cis-1,3-Dichloropropene	75	13.425	13.425	(1.152)	1239732	75.0000	75.3560
45	4-Methyl-2-Pentanone	43	13.572	13.572	(1.165)	1036220	75.0000	74.7571
46	Toluene-d8	98	13.760	13.760	(1.181)	1304029	50.0000	49.7230
47	Toluene	92	13.858	13.858	(1.189)	1652224	75.0000	72.3170
48	trans-1,3-Dichloropropene	75	14.193	14.193	(1.218)	1224079	75.0000	77.1070
49	1,1,2-Trichloroethane	85	14.459	14.459	(1.241)	423340	75.0000	72.8480
50	Tetrachloroethene	166	14.587	14.587	(0.928)	718339	75.0000	73.9657
51	2-Hexanone	43	14.695	14.695	(0.935)	595363	75.0000	75.0710
52	1,3-Dichloropropane	76	14.705	14.705	(0.935)	1345700	75.0000	68.9642
53	Dibromochloromethane	129	14.981	14.981	(0.953)	850544	75.0000	76.9385
54	1,2-Dibromoethane	107	15.188	15.188	(1.303)	779911	75.0000	74.0149
* 55	Chlorobenzene-d5	117	15.720	15.720	(1.000)	996699	50.0000	
56	Chlorobenzene	112	15.759	15.759	(1.002)	1629270	75.0000	71.9117
57	Ethylbenzene	91	15.818	15.818	(1.006)	2867073	75.0000	66.9971
58	1,1,1,2-Tetrachloroethane	131	15.838	15.838	(1.008)	645445	75.0000	78.9251
59	m,p-Xylenes	106	15.956	15.956	(1.015)	2038945	150.000	143.7297
60	o-Xylene	106	16.458	16.458	(1.047)	1082528	75.0000	73.1540
61	Styrene	104	16.488	16.488	(1.049)	1734827	75.0000	71.9988
62	Bromoform	173	16.783	16.783	(1.068)	599750	75.0000	76.4734
63	Isopropylbenzene	105	16.862	16.862	(0.913)	2561224	75.0000	65.8084
64	_Cyclohexanone	55	17.108	17.108	(0.926)	878820	75.0000	84.4743
65	Bromofluorobenzene	95	17.128	17.128	(0.927)	633126	50.0000	46.4527
66	1,1,2,2-Tetrachloroethane	83	17.276	17.276	(0.935)	978862	75.0000	68.6235
67	Bromobenzene	156	17.335	17.335	(0.939)	776877	75.0000	70.3243
68	Propylbenzene	91	17.345	17.345	(0.939)	3112442	75.0000	62.3850
69	1,2,3-Trichloropropane	110	17.365	17.365	(0.940)	271579	75.0000	72.5668
70	2-Chlorotoluene	91	17.512	17.512	(0.948)	2341760	75.0000	63.4131
71	1,3,5-Trimethylbenzene	105	17.532	17.532	(0.949)	2089192	75.0000	66.4678
72	4-Chlorotoluene	91	17.640	17.640	(0.955)	2347044	75.0000	67.0041
73	tert-Butylbenzene	119	17.906	17.906	(0.970)	1763908	75.0000	70.5387
74	1,2,4-Trimethylbenzene	105	17.975	17.975	(0.973)	2230137	75.0000	69.8244
75	sec-Butylbenzene	105	18.162	18.162	(0.983)	2674937	75.0000	71.3281
76	para-Isopropyl Toluene	119	18.300	18.300	(0.991)	2128619	75.0000	76.3844

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC24.D
Report Date: 13-Mar-2007 14:35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.399	18.399	(0.996)	1345621	75.0000	70.7562
* 78 1,4-Dichlorobenzene-d4	152	18.468	18.468	(1.000)	563888	50.0000	
79 1,4-Dichlorobenzene	146	18.497	18.497	(1.002)	1379020	75.0000	73.4986
80 n-Butylbenzene	91	18.793	18.793	(1.018)	2094888	75.0000	81.0250
81 1,2-Dichlorobenzene	146	18.970	18.970	(1.027)	1314479	75.0000	74.5629
82 1,2-Dibromo-3-Chloropropane	75	19.955	19.955	(1.081)	154117	75.0000	84.9971
83 1,2,4-Trichlorobenzene	180	21.058	21.058	(1.140)	518023	75.0000	99.2754
84 Hexachlorobutadiene	225	21.166	21.166	(1.146)	256413	75.0000	82.5973
85 Naphthalene	128	21.482	21.482	(1.163)	575172	75.0000	112.5936
86 1,2,3-Trichlorobenzene	180	21.866	21.866	(1.184)	312061	75.0000	106.2941

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC24.D
Date : 13-MAR-2007 04:11
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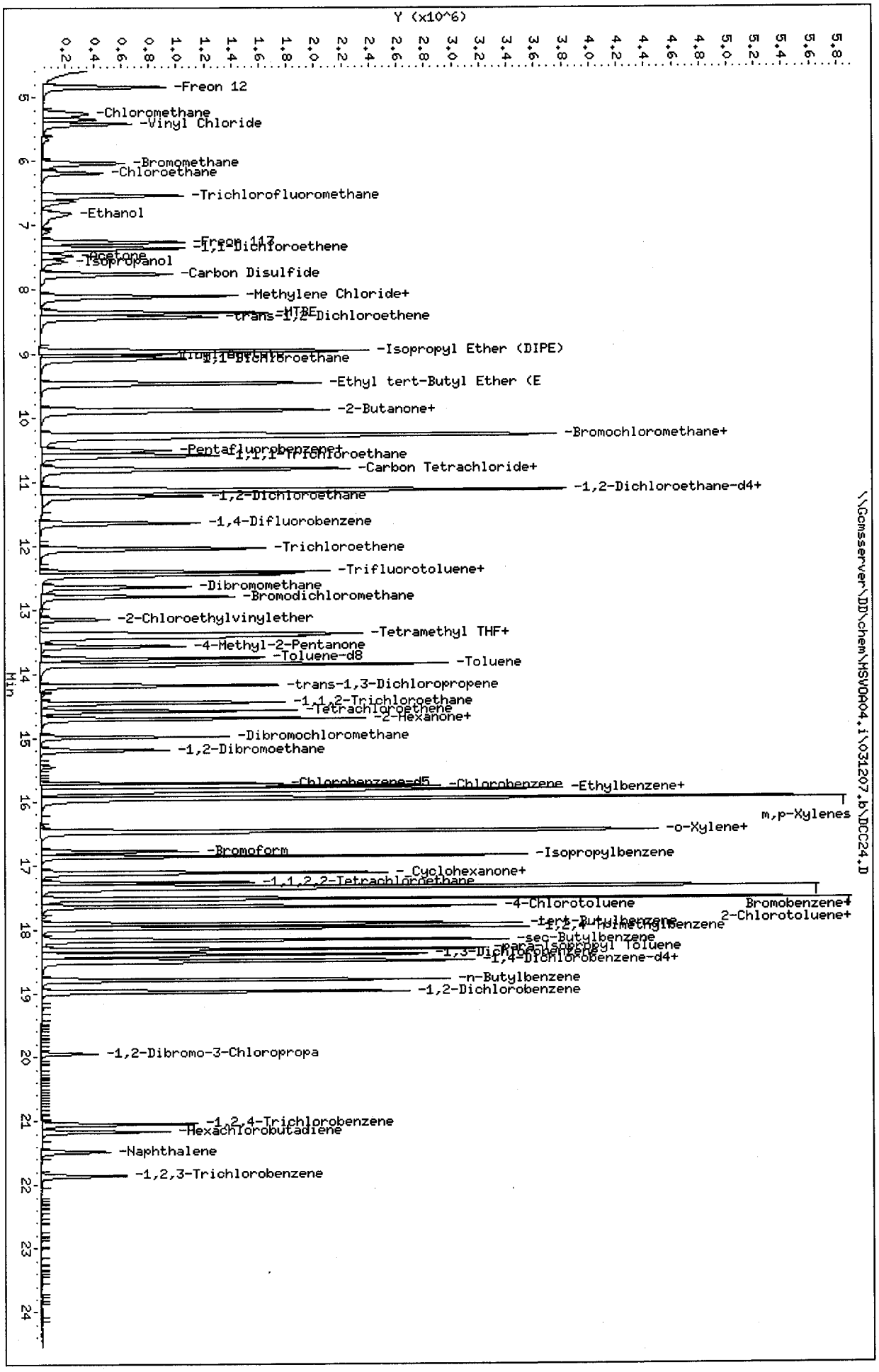
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC25.D
Report Date: 13-Mar-2007 14:36

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC25.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-MAR-2007 04:44 MS Autotune Date: 29-JAN-2007 10:51
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S5618,0.02/100,S5595,0.02/100,
Misc Info : S5194,0.01/100,100.0PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\826GOX04.m
Meth Date : 13-Mar-2007 14:36 chemist Quant Type: ISTD
Cal Date : 13-MAR-2007 04:44 Cal File: DCC25.D
Als bottle: 30 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.836	4.836	(0.460)	2097796	100.000	96.6527
2 Chloromethane	50	5.249	5.249	(0.499)	1931019	100.000	96.1622
3 Vinyl Chloride	62	5.417	5.417	(0.515)	1566760	100.000	100.5017
4 Bromomethane	94	6.028	6.028	(0.573)	1062175	100.000	103.2138
5 Chloroethane	64	6.185	6.185	(0.588)	807104	100.000	90.7335
6 Trichlorofluoromethane	101	6.530	6.530	(0.621)	1865793	100.000	93.6720
7 Ethanol	45	6.816	6.816	(0.648)	986264	10000.0	9437.9043
8 Freon 113	101	7.259	7.259	(0.690)	967295	100.000	96.9102
9 1,1-Dichloroethene	96	7.357	7.357	(0.699)	856026	100.000	83.2738
10 Acetone	43	7.475	7.475	(0.711)	680878	100.000	89.7868
11 Isopropanol	45	7.564	7.564	(0.719)	635661	1000.00	893.3287
12 Carbon Disulfide	76	7.761	7.761	(0.738)	3121947	100.000	84.3640
13 Methylene Chloride	84	8.106	8.106	(0.771)	1175887	100.000	90.9364
14 tert-Butyl Alcohol (TBA)	59	8.126	8.126	(0.772)	832713	1000.00	864.9573
15 MTBE	73	8.362	8.362	(0.795)	3092617	100.000	89.0840
16 trans-1,2-Dichloroethene	96	8.431	8.431	(0.801)	972839	100.000	88.7128
17 Isopropyl Ether (DIPE)	45	8.973	8.973	(0.853)	4359312	100.000	82.0120
18 Vinyl Acetate	43	9.042	9.042	(0.860)	2370446	100.000	77.6114
19 1,1-Dichloroethane	63	9.091	9.091	(0.864)	1984540	100.000	88.3386
20 Ethyl tert-Butyl Ether (ETBE)	59	9.475	9.475	(0.901)	3572092	100.000	87.8506
21 2-Butanone	43	9.889	9.889	(0.940)	690964	100.000	85.9870
22 2,2-Dichloropropane	77	9.889	9.889	(0.940)	1250405	100.000	88.5954

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC25.D
Report Date: 13-Mar-2007 14:36

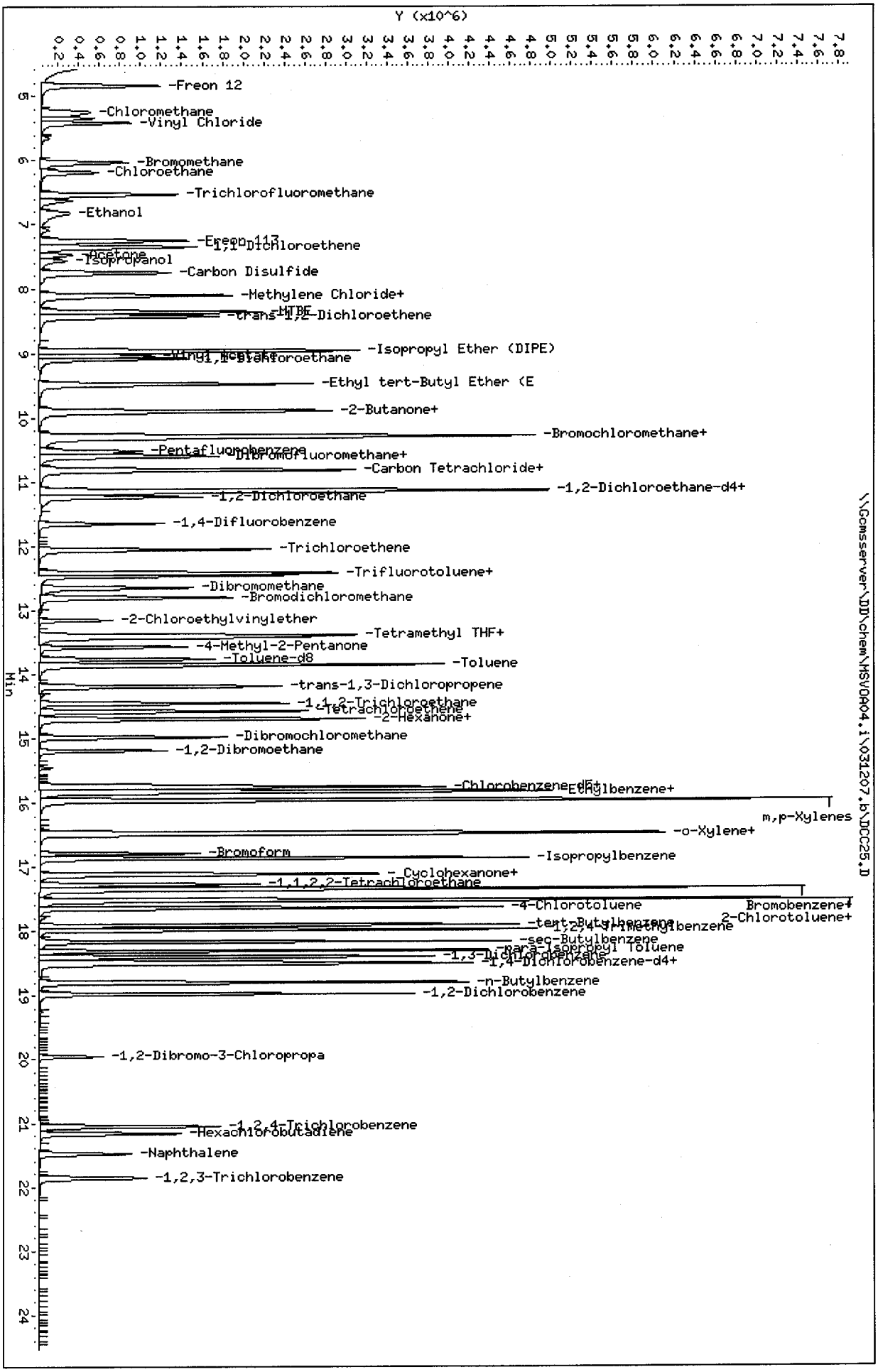
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.908	9.908	(0.942)	1052453	100.000	88.0814
	24 Bromochloromethane	128	10.273	10.273	(0.977)	527025	100.000	91.1839
	25 Tetrahydrofuran	42	10.283	10.283	(0.978)	3106254	1000.00	721.9339
	26 Chloroform	83	10.312	10.312	(0.980)	2029599	100.000	87.7765
*	27 Pentafluorobenzene	168	10.519	10.519	(1.000)	792721	50.0000	
	28 Dibromofluoromethane	113	10.558	10.558	(1.004)	466238	50.0000	49.6032
	29 1,1,1-Trichloroethane	97	10.598	10.598	(1.007)	1540401	100.000	99.3723
	30 Carbon Tetrachloride	117	10.805	10.805	(0.927)	1166787	100.000	104.7994
	31 1,1-Dichloropropene	75	10.824	10.824	(0.929)	1490097	100.000	89.1463
	32 1,2-Dichloroethane-d4	65	11.120	11.120	(0.954)	629257	50.0000	42.8903
	33 Benzene	78	11.139	11.139	(0.956)	3585498	100.000	84.0871
	34 Methyl tert-Amyl Ether (TAME)	73	11.159	11.159	(0.958)	2627330	100.000	87.6877
	35 1,2-Dichloroethane	62	11.238	11.238	(0.964)	1882051	100.000	86.4628
*	36 1,4-Difluorobenzene	114	11.652	11.652	(1.000)	1220068	50.0000	
	37 Trichloroethene	95	12.056	12.056	(1.035)	1131880	100.000	94.1503
	38 Trifluorotoluene	146	12.420	12.420	(1.066)	1579825	100.000	96.9904
	39 1,2-Dichloropropane	63	12.459	12.459	(1.069)	1150020	100.000	86.9717
	40 Dibromomethane	93	12.646	12.646	(1.085)	836720	100.000	91.1498
	41 Bromodichloromethane	83	12.804	12.804	(1.099)	1679337	100.000	99.2153
	42 2-Chloroethylvinylether	63	13.159	13.159	(1.129)	386087	100.000	106.3300
	43 Tetramethyl THF	43	13.385	13.385	(1.149)	2388960	100.000	86.9980
	44 cis-1,3-Dichloropropene	75	13.425	13.425	(1.152)	1706980	100.000	97.9957
	45 4-Methyl-2-Pentanone	43	13.572	13.572	(1.165)	1441638	100.000	98.2303
	46 Toluene-d8	98	13.759	13.759	(1.181)	1385090	50.0000	49.8812
	47 Toluene	92	13.858	13.858	(1.189)	2282472	100.000	94.3552
	48 trans-1,3-Dichloropropene	75	14.193	14.193	(1.218)	1675606	100.000	99.6885
	49 1,1,2-Trichloroethane	85	14.459	14.459	(1.241)	579859	100.000	94.2409
	50 Tetrachloroethene	166	14.577	14.577	(0.927)	1027563	100.000	98.1825
	51 2-Hexanone	43	14.695	14.695	(0.935)	858868	100.000	100.4942
	52 1,3-Dichloropropane	76	14.705	14.705	(0.935)	1812946	100.000	86.2154
	53 Dibromochloromethane	129	14.981	14.981	(0.953)	1162344	100.000	97.5134
	54 1,2-Dibromoethane	107	15.188	15.188	(1.303)	1055758	100.000	94.6296
*	55 Chlorobenzene-d5	117	15.720	15.720	(1.000)	1074088	50.0000	
	56 Chlorobenzene	112	15.759	15.759	(1.002)	2252416	100.000	92.2527
	57 Ethylbenzene	91	15.818	15.818	(1.006)	3725351	100.000	80.7809
	58 1,1,1,2-Tetrachloroethane	131	15.848	15.848	(1.008)	898235	100.000	101.9225
	59 m,p-Xylenes	106	15.956	15.956	(1.015)	2752388	200.000	180.0425
	60 o-Xylene	106	16.458	16.458	(1.047)	1490269	100.000	93.4518
	61 Styrene	104	16.488	16.488	(1.049)	2370460	100.000	91.2906
	62 Bromoform	173	16.783	16.783	(1.068)	841431	100.000	99.2412
	63 Isopropylbenzene	105	16.862	16.862	(0.913)	3414439	100.000	82.1552
	64 _Cyclohexanone	55	17.108	17.108	(0.926)	1402531	100.000	126.2463
	65 Bromofluorobenzene	95	17.128	17.128	(0.927)	658163	50.0000	45.2206
	66 1,1,2,2-Tetrachloroethane	83	17.276	17.276	(0.935)	1319232	100.000	86.6073
	67 Bromobenzene	156	17.335	17.335	(0.939)	1076322	100.000	91.2383
	68 Propylbenzene	91	17.345	17.345	(0.939)	4041854	100.000	75.8649
	69 1,2,3-Trichloropropane	110	17.364	17.364	(0.940)	373631	100.000	93.4903
	70 2-Chlorotoluene	91	17.512	17.512	(0.948)	3078072	100.000	78.0543
	71 1,3,5-Trimethylbenzene	105	17.532	17.532	(0.949)	2792238	100.000	83.1892
	72 4-Chlorotoluene	91	17.640	17.640	(0.955)	3126475	100.000	83.5828
	73 tert-Butylbenzene	119	17.906	17.906	(0.970)	2402650	100.000	89.9754
	74 1,2,4-Trimethylbenzene	105	17.975	17.975	(0.973)	2986399	100.000	87.5598
	75 sec-Butylbenzene	105	18.162	18.162	(0.983)	3578523	100.000	89.3578
	76 para-Isopropyl Toluene	119	18.310	18.310	(0.991)	2880121	100.000	96.7830

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC25.D
Report Date: 13-Mar-2007 14:36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.399	18.399	(0.996)	1865366	100.000	91.8517
* 78 1,4-Dichlorobenzene-d4	152	18.468	18.468	(1.000)	602159	50.0000	
79 1,4-Dichlorobenzene	146	18.497	18.497	(1.002)	1864516	100.000	93.0586
80 n-Butylbenzene	91	18.793	18.793	(1.018)	2881543	100.000	104.3674
81 1,2-Dichlorobenzene	146	18.970	18.970	(1.027)	1798348	100.000	95.5267
82 1,2-Dibromo-3-Chloropropane	75	19.955	19.955	(1.081)	229060	100.000	118.2999
83 1,2,4-Trichlorobenzene	180	21.058	21.058	(1.140)	830681	100.000	149.0763
84 Hexachlorobutadiene	225	21.176	21.176	(1.147)	395064	100.000	119.1722
85 Naphthalene	128	21.482	21.482	(1.163)	1055684	100.000	193.5226
86 1,2,3-Trichlorobenzene	180	21.866	21.866	(1.184)	530215	100.000	169.1233

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\031207.b\DCC25.D
Date : 13-MAR-2007 04:44
Client ID: DYNA P&T
Sample Info: ICAL,S5618,0.02/100,S5595,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA04.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

M=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

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Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

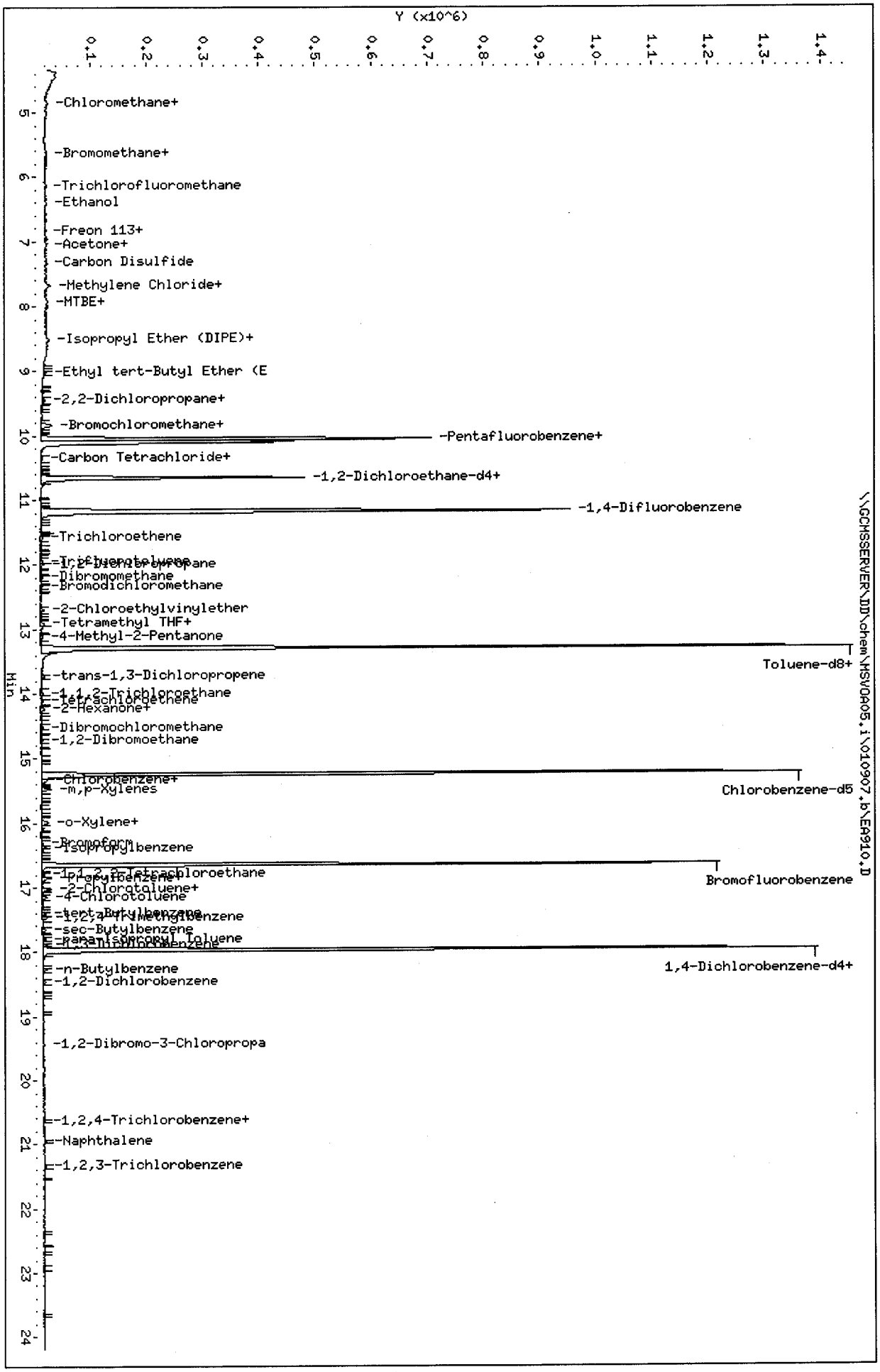
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

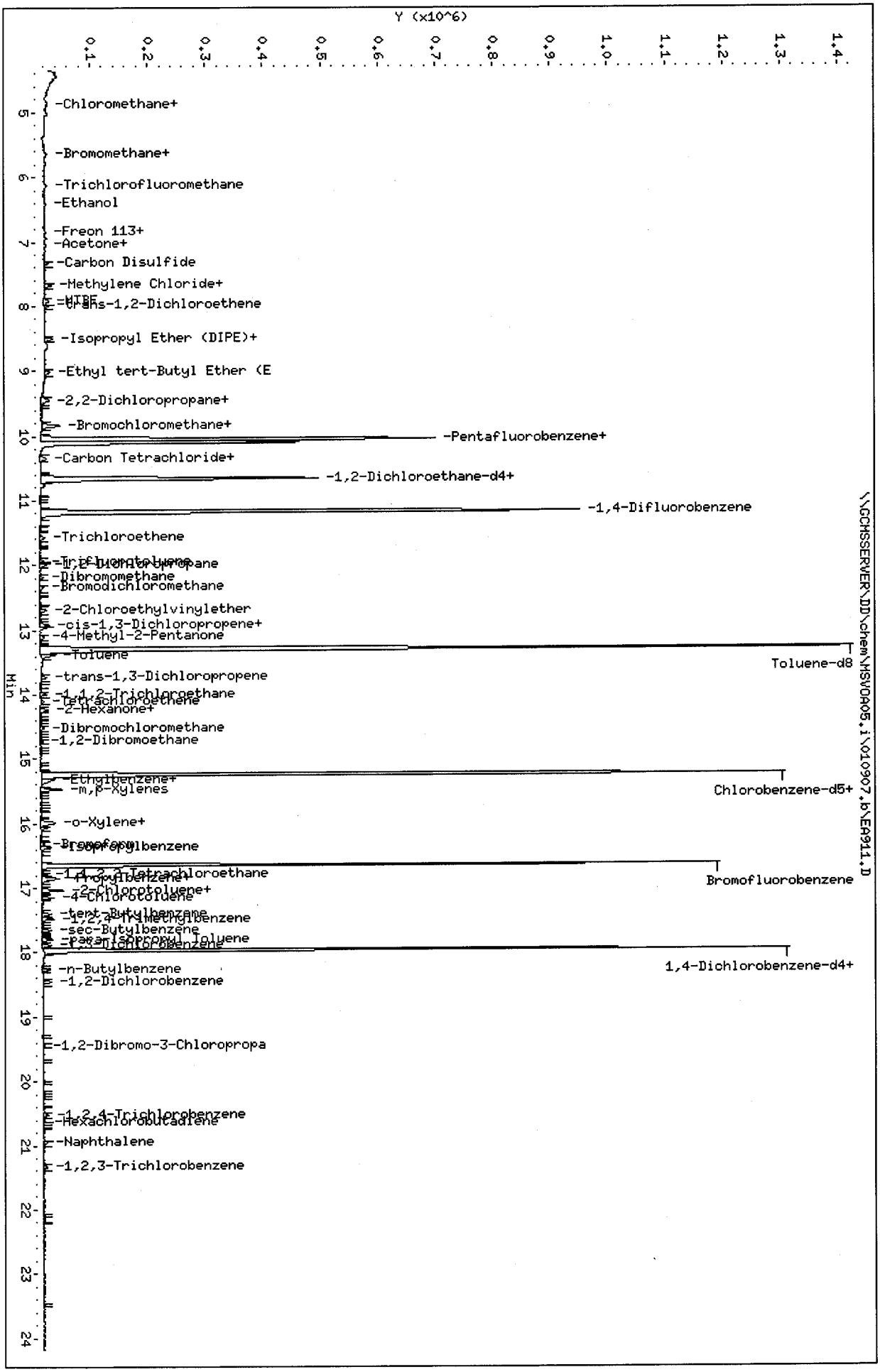
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: D'NA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

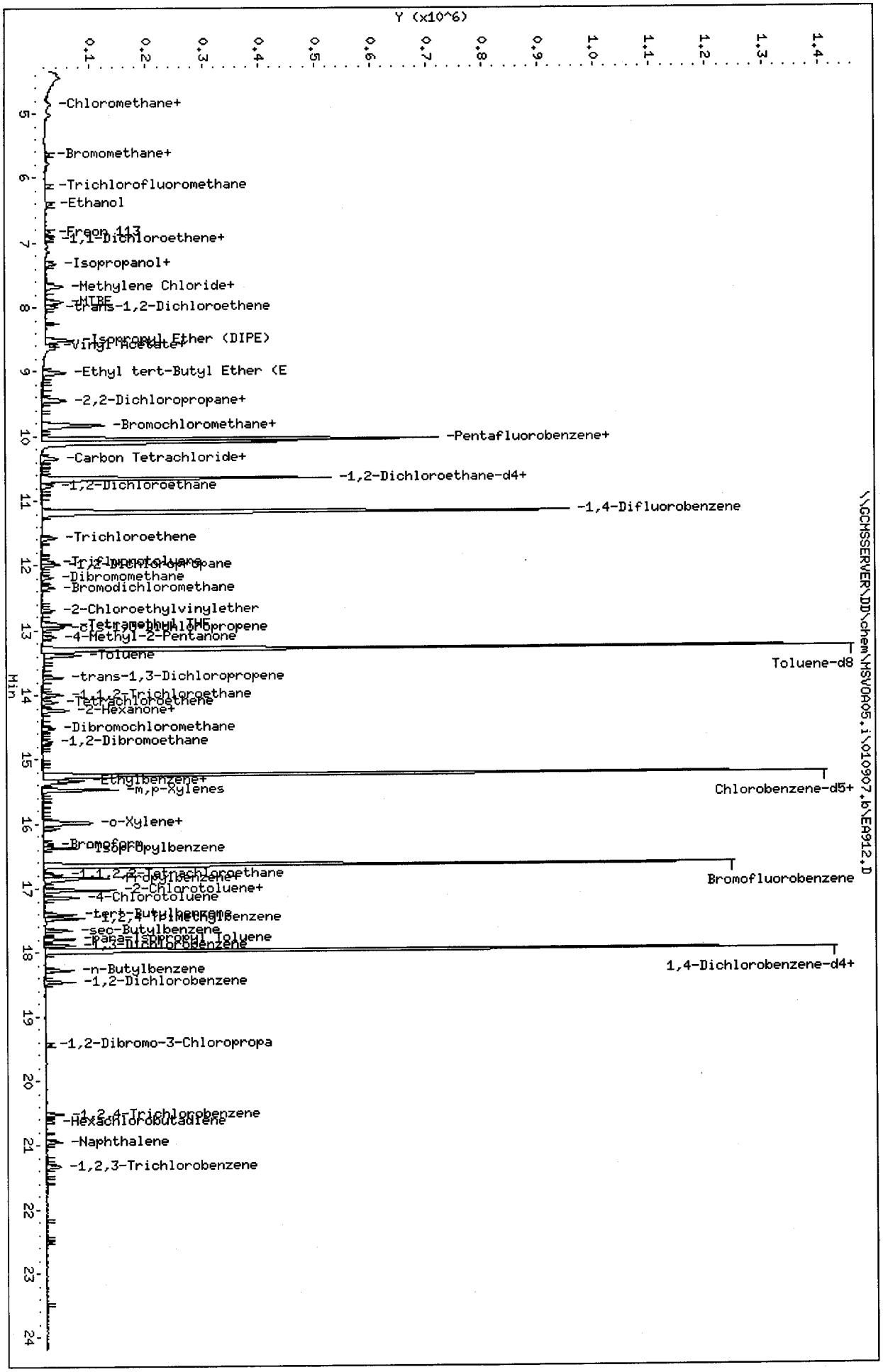
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Date : 09-JAN-2007 15:16
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

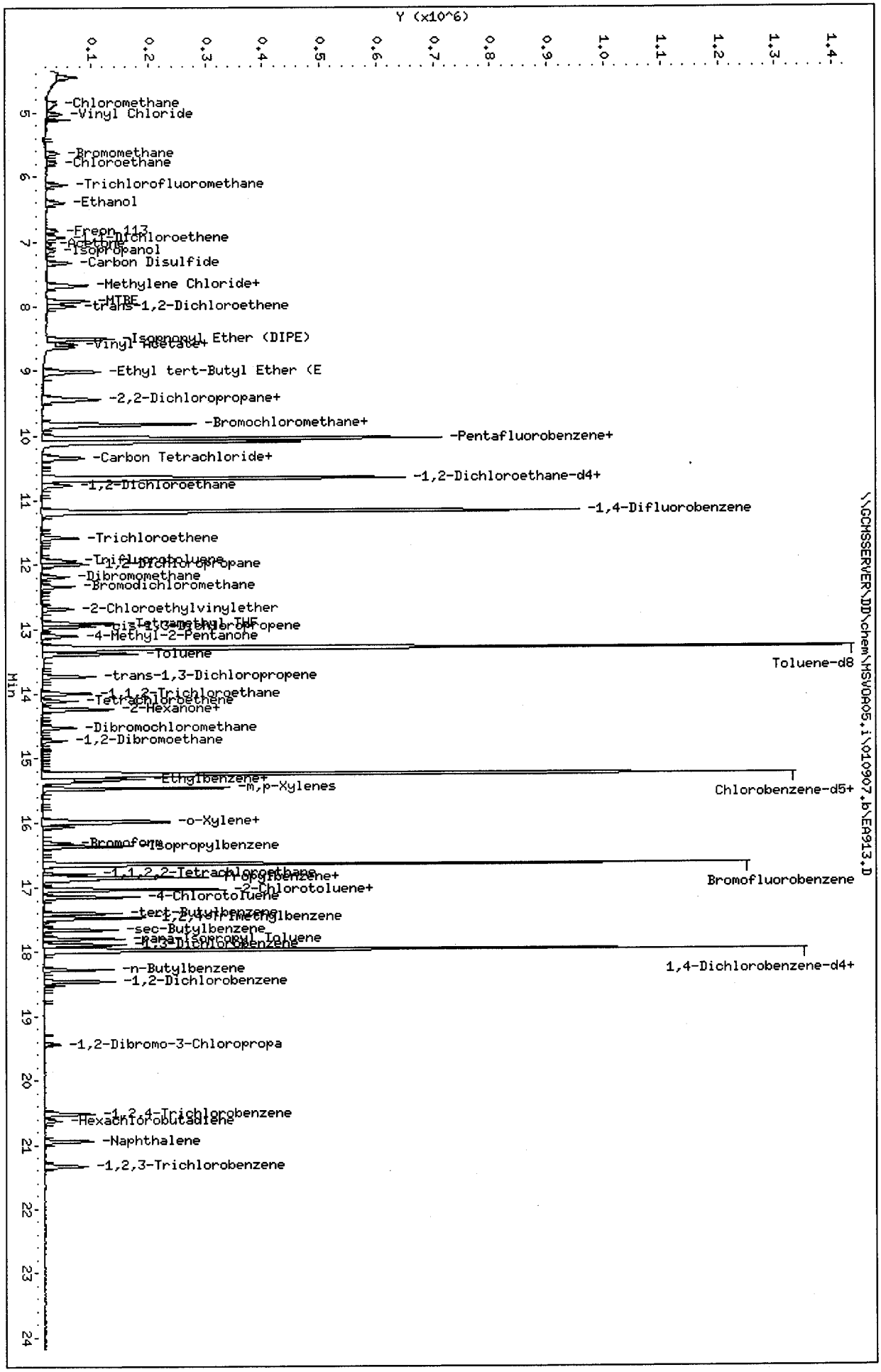
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
	18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
	19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
	21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
	22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
	23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
	24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
	25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
	26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
*	27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
	28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
	29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
	30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
	31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
	32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
	33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
	34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
	35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
*	36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
	37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
	38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
	39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
	40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
	41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
	42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
	43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
	44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
	45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
	46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
	47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
	48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
	49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
	50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
	51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
	52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
	53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
	54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
*	55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
	56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
	57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
	58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
	59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
	60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
	61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
	62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
	63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

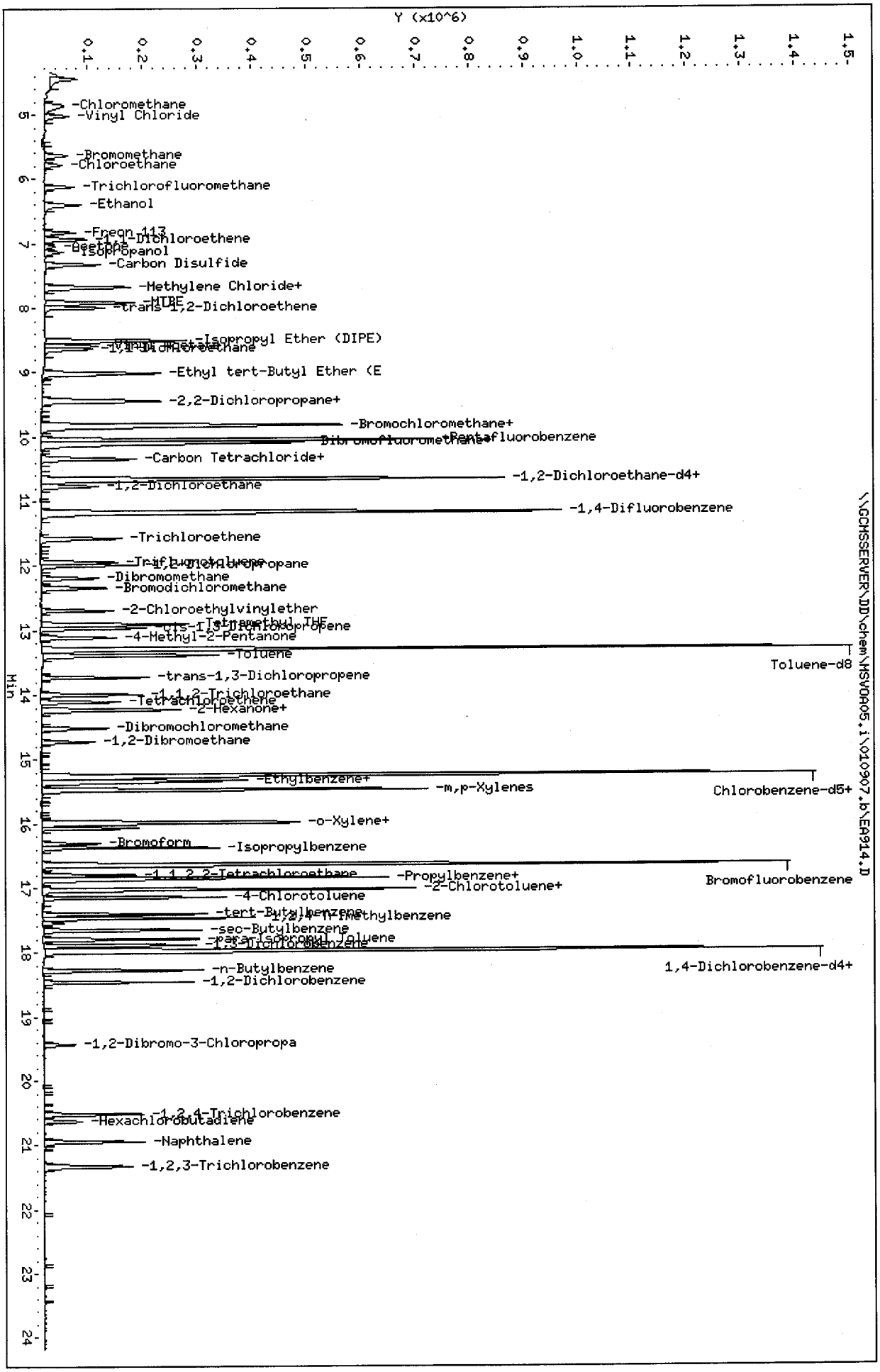
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Date : 09-JAN-2007 16:20
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5152,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
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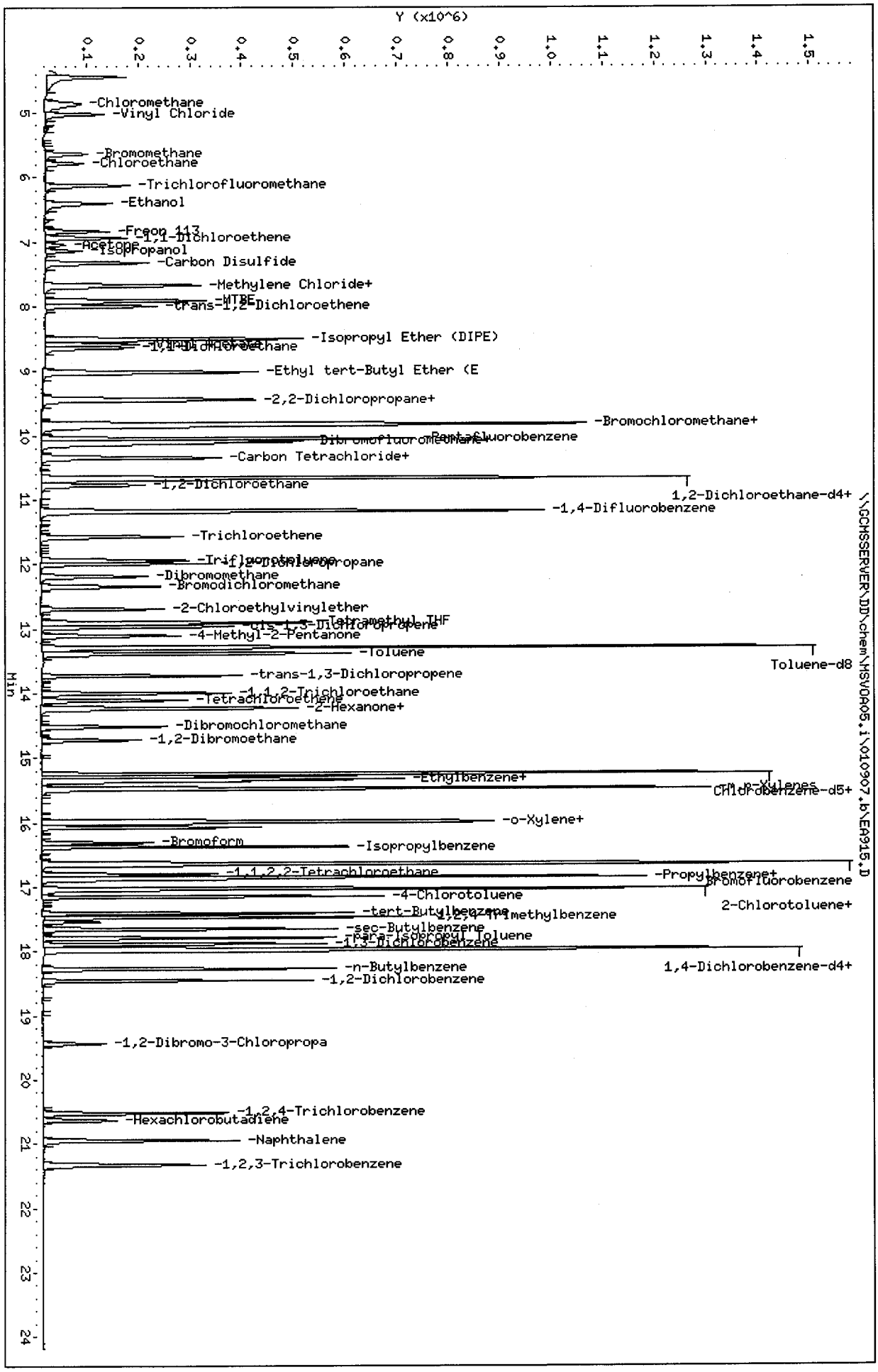
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.01/100,S5152,0.01/100,
Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
	18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
	19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
	21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
	22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
	23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
	24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
	25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
	26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
	29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
	30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
	33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
	34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
	37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
	38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
	40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
	46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
	47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
	50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
	51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
*	55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
	57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
	60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
	61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
	62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Date : 09-JAN-2007 17:24
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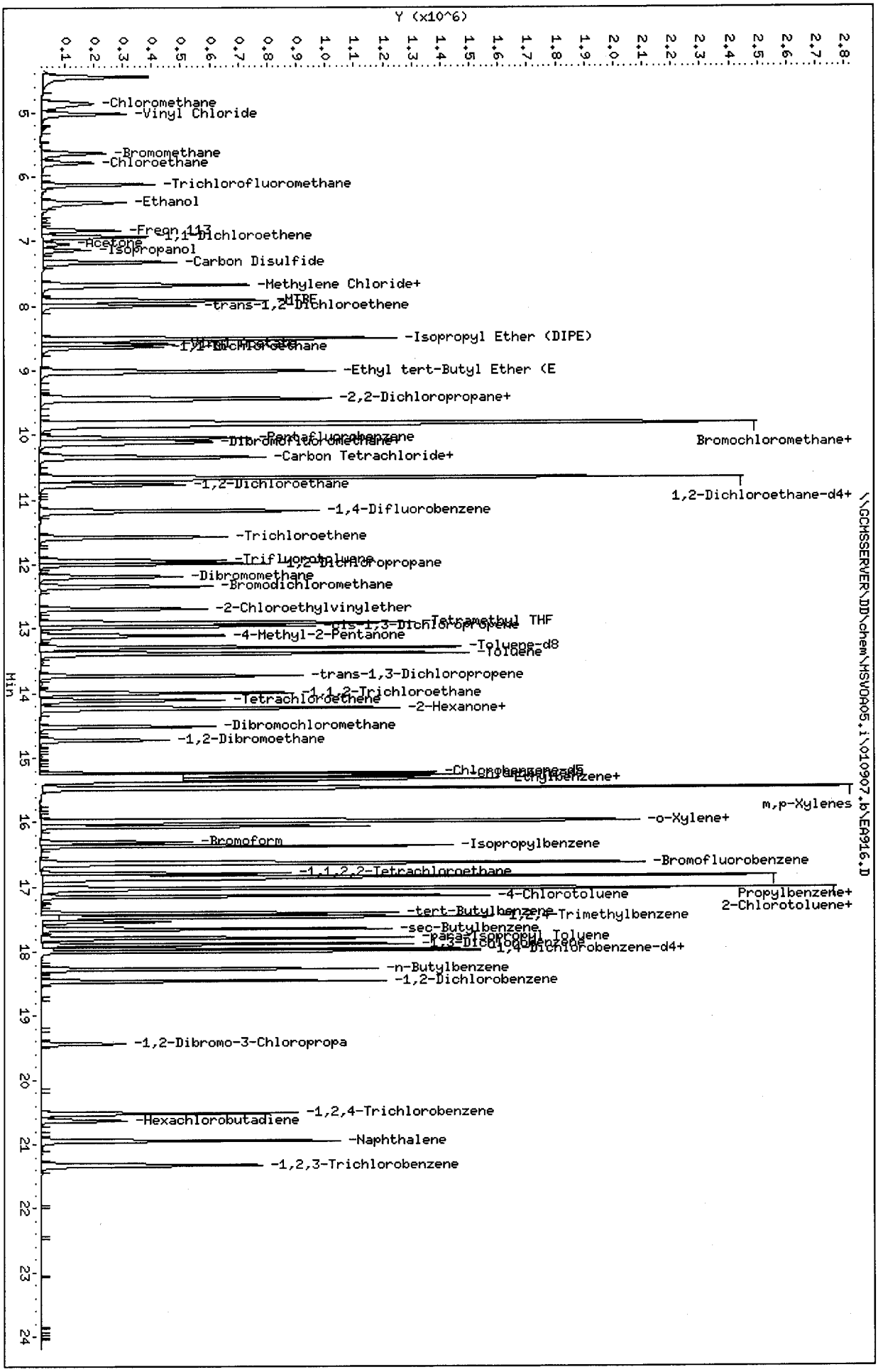
Sample Info: ICAL,S5170,0.01/100,S5152,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:56 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
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Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
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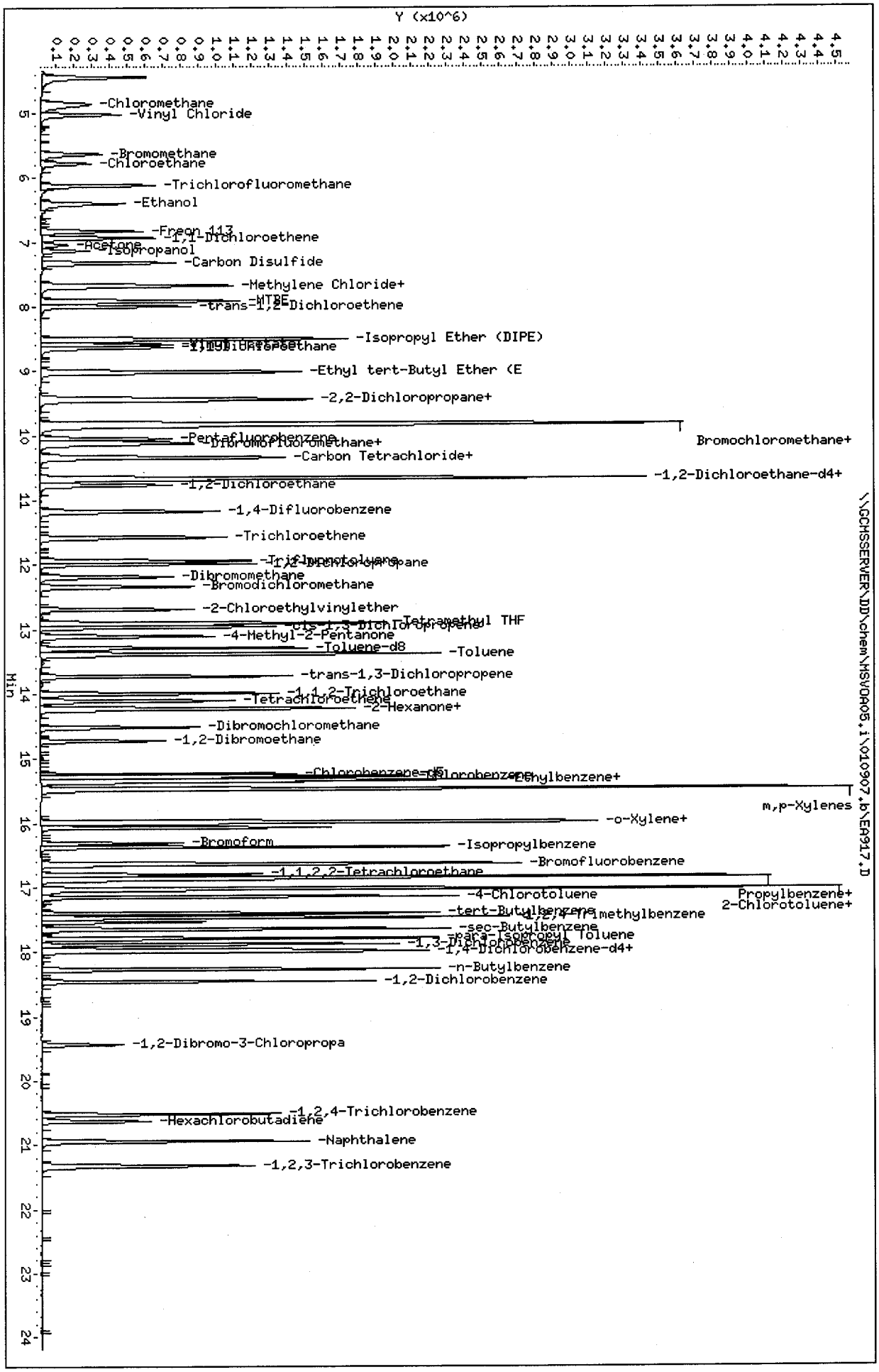
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:50

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
	18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
	19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
	21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
	22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
	24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
	25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
	26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
*	27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
	28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
	30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
	32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
	33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
	35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
*	36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
	37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
	38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
	40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
	41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
	42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
	43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
	44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
	45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
	46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
	47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
	48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
	49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
	50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
	51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
	52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
	53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
	54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
	56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
	57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
	58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
	59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
	60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
	61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
	62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
	63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

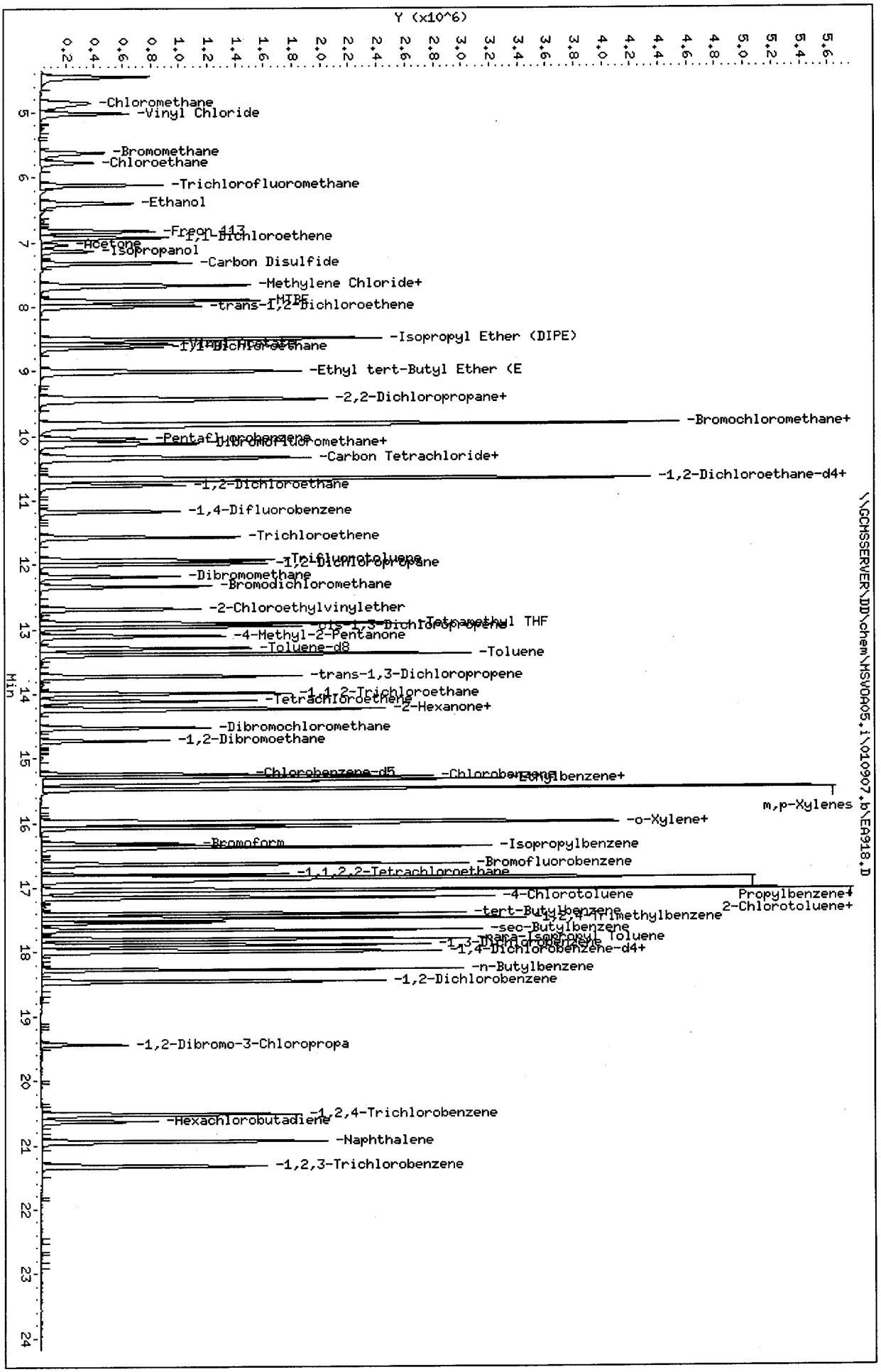
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193174 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum: 497038053001
Units : ug/L

Name : 826GOX10
Date : 26-JAN-2007 16:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaq11	497038053011	0.25/0.5PPB	26-JAN-2007 16:23	S5170 (2000000X), S5219 (1000000X), S4172 (2000000X), S5079 (5000X)
L2	jaq12	497038053012	0.5/1PPB	26-JAN-2007 16:56	S5170 (1000000X), S5219 (500000X), S4172 (1000000X), S5079 (5000X)
L3	jaq13	497038053013	2PPB	26-JAN-2007 17:28	S5170 (250000X), S5219 (250000X), S4172 (500000X), S5079 (5000X)
L4	jaq14	497038053014	5PPB	26-JAN-2007 18:01	S5170 (100000X), S5219 (100000X), S4172 (200000X), S5079 (5000X)
L5	jaq15	497038053015	10PPB	26-JAN-2007 18:34	S5170 (50000X), S5219 (50000X), S4172 (100000X), S5079 (5000X)
L6	jaq16	497038053016	20PPB	26-JAN-2007 19:06	S5170 (25000X), S5219 (25000X), S4172 (50000X), S5079 (5000X)
L7	jaq17	497038053017	50PPB	26-JAN-2007 19:39	S5170 (10000X), S5219 (10000X), S4172 (20000X), S5079 (5000X)
L8	jaq18	497038053018	75PPB	26-JAN-2007 20:12	S5170 (6667X), S5219 (6667X), S4172 (13330X), S5079 (5000X)
L9	jaq19	497038053019	100PPB	26-JAN-2007 20:44	S5170 (5000X), S5219 (5000X), S4172 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5702	0.5978m	0.5791m	0.5117m	0.5518m	0.5698m	0.5574m	0.5407m	AVRG		1.78629		0.5598	5	15	0.10	0.99	
Vinyl Chloride	0.4091m	0.4111m	0.4334m	0.4330m	0.4004m	0.4420m	0.4434	0.4439	0.4397m	AVRG		2.33402		0.4284	4	15	0.050	0.99	
Bromomethane		0.2306m	0.2441	0.2478	0.2302m	0.2430m	0.2624	0.2661	0.2682m	AVRG		4.01550		0.2490	6	15	0.050	0.99	
Chloroethane		0.2422m	0.2662	0.2571m	0.2473m	0.2571m	0.2624	0.2622	0.2588m	AVRG		3.89639		0.2566	3	15	0.050	0.99	
Acetone				0.1464	0.1417	0.1522	0.1261	0.1258	0.1342	AVRG		7.25989		0.1377	8	15	0.050	0.99	
1,1-Dichloroethene		0.2450m	0.2605m	0.2594	0.2333m	0.2576m	0.2366	0.2357	0.2456	AVRG		4.05340		0.2467	5	15	0.050	0.99	
Methylene Chloride			0.3473	0.3340	0.3160m	0.3234	0.3158	0.3166	0.3186m	AVRG		3.08128		0.3245	4	15	0.050	0.99	
Carbon Disulfide		1.1955	1.1420m	1.1328	1.0306m	1.1220m	1.0599	1.0524	1.0982	AVRG		0.90565		1.1042	5	15	0.050	0.99	
MTBE		0.8101	0.8879	0.8726m	0.8548	0.8912	0.8740m	0.8587	0.8710	AVRG		1.15603		0.8650	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3024	0.2929	0.2948	0.2742m	0.2901m	0.2836m	0.2735	0.2830	AVRG		3.48670		0.2868	4	15	0.050	0.99	
Vinyl Acetate				1.1386m	1.1379m	1.2067m	1.1239m	1.1534m	1.1166m	AVRG		0.87245		1.1462	3	15	0.050	0.99	
1,1-Dichloroethane		0.5934	0.6331m	0.6072m	0.5682m	0.5919	0.5641	0.5476	0.5548	AVRG		1.71665		0.5825	5	15	0.10	0.99	
2-Butanone			0.2271m	0.2252m	0.2183	0.2457m	0.2203	0.2116	0.2282	AVRG		4.44043		0.2252	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.3169	0.3283	0.3022	0.2998m	0.3109m	0.2991m	0.2946	0.2978	AVRG		3.26582		0.3062	4	15	0.050	0.99	
Chloroform		0.5297	0.5102	0.4927	0.4683m	0.4842	0.4605	0.4530	0.4537	AVRG		2.07676		0.4815	6	15	0.050	0.99	
1,1,1-Trichloroethane		0.3216	0.3305	0.3303	0.2948	0.3207	0.3044	0.3046	0.3232	AVRG		3.16186		0.3163	4	15	0.050	0.99	
Carbon Tetrachloride		0.1713	0.1622	0.1617	0.1456	0.1554m	0.1464	0.1514	0.1602	AVRG		6.37882		0.1568	6	15	0.050	0.99	
1,2-Dichloroethane		0.2347	0.2616	0.2581m	0.2562m	0.2634	0.2532	0.2512	0.2502	AVRG		3.94369		0.2536	4	15	0.050	0.99	
Benzene		0.7459	0.7821	0.7244m	0.6958	0.7270	0.6899	0.6930	0.6911	AVRG		1.39149		0.7187	5	15	0.050	0.99	
Trichloroethene		0.1960	0.1804	0.1698	0.1496m	0.1695	0.1593	0.1619	0.1650	AVRG		5.91977		0.1689	8	15	0.050	0.99	
1,2-Dichloropropane		0.2375	0.2319	0.2346m	0.2117m	0.2262m	0.2187	0.2155	0.2115	AVRG		4.47558		0.2234	5	15	0.050	0.99	
Bromodichloromethane		0.2243	0.2297	0.2187	0.2201	0.2317m	0.2240	0.2280	0.2246	AVRG		4.44164		0.2251	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2909m	0.3345m	0.3418m	0.3228	0.3546	0.3198	0.3398	0.3517	AVRG		3.01218		0.3320	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3082	0.3182m	0.3060	0.2928m	0.3158	0.3078	0.3098	0.3068	AVRG		3.24504		0.3082	2	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4374	0.4340	0.3929	0.4617	0.3990m	0.3770	0.3902	0.3813	AVRG		2.44402		0.4092	8	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2532m	0.2717	0.2714	0.2626	0.2789	0.2730	0.2778	0.2738	AVRG		3.69978		0.2703	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0772	0.1030	0.0918	0.0907	0.0959	0.0912	0.0932	0.0914	AVRG		10.8925		0.0918	8	15	0.050	0.99	
2-Hexanone			0.2261m	0.2142m	0.2213m	0.2535	0.2304	0.2257	0.2401	AVRG		4.34439		0.2302	6	15	0.050	0.99	
Tetrachloroethene		0.2047	0.1907	0.1883	0.1650	0.1905	0.1737m	0.1814	0.1884	AVRG		5.39515		0.1854	6	15	0.050	0.99	
Dibromochloromethane		0.1759	0.2308	0.2140	0.2051	0.2182	0.2133	0.2187	0.2210	AVRG		4.71402		0.2121	8	15	0.050	0.99	
Chlorobenzene		0.5657	0.5812	0.5274	0.4912m	0.5235m	0.4979	0.5225	0.5116	AVRG		1.89528		0.5276	6	15	0.30	0.99	
Ethylbenzene		0.9051	0.9876	0.8915	0.8355	0.8667	0.8194	0.8555	0.8454	AVRG		1.14177		0.8758	6	15	0.050	0.99	
m,p-Xylenes	0.3037	0.3336	0.3457	0.3123m	0.3191	0.3197	0.3067	0.3134	0.3120	AVRG		3.13997		0.3185	4	15	0.050	0.99	
o-Xylene		0.3356	0.3384	0.3134	0.3082	0.3148	0.3002	0.3108	0.3046	AVRG		3.16698		0.3158	4	15	0.050	0.99	
Styrene		0.5022	0.5860m	0.5371m	0.5122	0.5644	0.5372	0.5601	0.5443	AVRG		1.84183		0.5429	5	15	0.050	0.99	
Bromoform		0.1880	0.1722	0.1554	0.1554	0.1654	0.1558	0.1619	0.1642	AVRG		6.06883		0.1648	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6524	0.6948	0.6318	0.6018	0.6660	0.6091	0.6117	0.6164	AVRG		1.57353		0.6355	5	15	0.30	0.99	
Dibromofluoromethane	0.5407	0.5452	0.5423	0.5551	0.5518	0.5468	0.5492	0.5438	0.5476	AVRG		1.82833		0.5469	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3968	0.4007	0.3961	0.3972	0.3973	0.3918	0.3908	0.3935	0.3943	AVRG		2.52906		0.3954	1	15	0.050	0.99	
Toluene-d8	1.0761	1.0777	1.0805	1.0723	1.0823	1.0795	1.0767	1.0731	1.0652	AVRG		0.92943		1.0759	0	15	0.050	0.99	
Bromofluorobenzene	1.2129	1.2033	1.2171	1.2136	1.1902	1.1781	1.1523	1.1407	1.1451	AVRG		0.84481		1.1837	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497038053001 Cal Date: 26-JAN-2007 Type : WATER

ICV 497038053020 (jaq20 26-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 497038053021 (jaq21 26-JAN-2007) stds: S5052 (10000X), S5322 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497038053020	0.5598	0.4893	25.00	21.85	ug/L	-13	30	m
Vinyl Chloride	497038053020	0.4284	0.3821	25.00	22.29	ug/L	-11	20	m
Bromomethane	497038053020	0.2490	0.2265	25.00	22.74	ug/L	-9	30	m
Chloroethane	497038053020	0.2566	0.2530	25.00	24.64	ug/L	-1	30	m
Acetone	497038053021	0.1377	0.1420	25.00	25.77	ug/L	3	40	
1,1-Dichloroethene	497038053021	0.2467	0.2456	25.00	24.88	ug/L	0	20	
Methylene Chloride	497038053021	0.3245	0.3243	25.00	24.98	ug/L	0	30	
Carbon Disulfide	497038053021	1.1042	0.8505	25.00	19.26	ug/L	**-23**	30	!v- m
MTBE	497038053021	0.8650	0.8004	25.00	23.13	ug/L	-7	30	
trans-1,2-Dichloroethene	497038053021	0.2868	0.2826	25.00	24.64	ug/L	-1	30	
Vinyl Acetate	497038053021	1.1462	1.0327	25.00	22.53	ug/L	-10	40	m
1,1-Dichloroethane	497038053021	0.5825	0.5767	25.00	24.75	ug/L	-1	30	
2-Butanone	497038053021	0.2252	0.2315	25.00	25.70	ug/L	3	40	
cis-1,2-Dichloroethene	497038053021	0.3062	0.3223	25.00	26.31	ug/L	5	30	m
Chloroform	497038053021	0.4815	0.4837	25.00	25.11	ug/L	0	20	
1,1,1-Trichloroethane	497038053021	0.3163	0.3300	25.00	26.08	ug/L	4	30	m
Carbon Tetrachloride	497038053021	0.1568	0.1660	25.00	26.47	ug/L	6	30	
1,2-Dichloroethane	497038053021	0.2536	0.2527	25.00	24.92	ug/L	0	30	m
Benzene	497038053021	0.7187	0.7110	25.00	24.73	ug/L	-1	30	
Trichloroethene	497038053021	0.1689	0.1650	25.00	24.42	ug/L	-2	30	
1,2-Dichloropropane	497038053021	0.2234	0.2134	25.00	23.87	ug/L	-5	20	
Bromodichloromethane	497038053021	0.2251	0.2384	25.00	26.47	ug/L	6	30	m
4-Methyl-2-Pentanone	497038053021	0.3320	0.3212	25.00	24.19	ug/L	-3	40	
cis-1,3-Dichloropropene	497038053021	0.3082	0.3089	25.00	25.06	ug/L	0	30	
Toluene	497038053021	0.4092	0.4022	25.00	24.58	ug/L	-2	20	
trans-1,3-Dichloropropene	497038053021	0.2703	0.2535	25.00	23.45	ug/L	-6	30	
1,1,2-Trichloroethane	497038053021	0.0918	0.0944	25.00	25.71	ug/L	3	30	
2-Hexanone	497038053021	0.2302	0.2472	25.00	26.85	ug/L	7	40	
Tetrachloroethene	497038053021	0.1854	0.1951	25.00	26.31	ug/L	5	30	
Dibromochloromethane	497038053021	0.2121	0.2199	25.00	25.92	ug/L	4	30	
Chlorobenzene	497038053021	0.5276	0.5181	25.00	24.55	ug/L	-2	30	
Ethylbenzene	497038053021	0.8758	0.8976	25.00	25.62	ug/L	2	20	
m,p-Xylenes	497038053021	0.3185	0.3220	50.00	50.56	ug/L	1	30	
o-Xylene	497038053021	0.3158	0.3158	25.00	25.01	ug/L	0	30	
Styrene	497038053021	0.5429	0.5724	25.00	26.36	ug/L	5	30	
Bromoform	497038053021	0.1648	0.1631	25.00	24.75	ug/L	-1	30	
1,1,2,2-Tetrachloroethane	497038053021	0.6355	0.6193	25.00	24.36	ug/L	-3	30	

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Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Lab Smp Id:
Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:23
MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA
Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.0005/1000,S5219,0.001/1000
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Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:03 msvoa10
Quant Type: ISTD
Cal Date : 26-JAN-2007 16:23
Cal File: JAQ11.D
Als bottle: 11
Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.560	4.560	(0.428)	2535	0.50000	0.2662
2 Chloromethane	50	5.034	5.034	(0.473)	5069	0.50000	0.2829
3 Vinyl Chloride	62	5.221	5.221	(0.491)	6546	0.50000	0.4774(M)
4 Bromomethane	94	5.891	5.891	(0.554)	3347	0.50000	0.4199
5 Chloroethane	64	6.069	6.069	(0.570)	1935	0.50000	0.2356
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	4880	0.50000	0.4441
7 Ethanol	45	6.710	6.710	(0.630)	3237	25.0000	16.8374
8 Freon 113	101	7.350	7.350	(0.691)	793	0.25000	0.1069
9 Acetone	43	7.400	7.400	(0.695)	4185	0.25000	0.9494
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	887	0.25000	0.1123
11 Isopropanol	45	7.518	7.518	(0.706)	1872	2.50000	2.1586
12 Carbon Disulfide	76	7.824	7.824	(0.735)	8618	0.25000	0.2439
13 Methylene Chloride	84	8.100	8.100	(0.761)	3802	0.25000	0.3660
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.763)	1649	2.50000	1.6803
15 MTBE	73	8.494	8.494	(0.798)	6130	0.25000	0.2214
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	2257	0.25000	0.2459
18 Vinyl Acetate	43	9.145	9.145	(0.859)	12426	0.25000	0.3387
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	4220	0.25000	0.2263
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	12019	0.25000	0.2453
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	7432	0.25000	0.2129
22 2-Butanone	43	9.953	9.953	(0.935)	2308	0.25000	0.3202
23 cis-1,2-Dichloroethene	96	10.003	10.003	(0.940)	2488	0.25000	0.2539

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.943)	2193	0.25000	0.1981
25 Bromochloromethane	128	10.367	10.367	(0.974)	757	0.25000	0.1553
26 Chloroform	83	10.427	10.427	(0.980)	5576	0.25000	0.3618
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	48760	2.50000	10.1033
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1600020	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	865191	50.0000	49.4323
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	2194	0.25000	0.2167
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	2234	0.25000	0.1926
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	1328	0.25000	0.1676
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1002330	50.0000	50.1819
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	2887	0.25000	0.2253
35 Benzene	78	11.353	11.353	(0.961)	8860	0.25000	0.2440
36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.967)	5416	0.25000	0.2128
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525762	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	2421	0.25000	0.2837
39 Trifluorotoluene	146	12.586	12.586	(1.065)	1414	0.25000	0.1167
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	2497	0.25000	0.2212
41 Dibromomethane	93	12.783	12.783	(1.082)	1486	0.25000	0.2424
42 Bromodichloromethane	83	12.941	12.941	(1.095)	2246	0.25000	0.1974
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	3382	0.25000	0.2172
45 Tetramethyl THF	43	13.641	13.641	(1.154)	6620	0.25000	0.2484
46 4-Methyl-2-Pentanone	43	13.641	13.641	(1.154)	6620	0.25000	0.3947
47 Toluene-d8	98	13.966	13.966	(1.182)	2717903	50.0000	50.0069
48 Toluene	92	14.055	14.055	(1.189)	5930	0.25000	0.2869
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.208)	2914	0.25000	0.2134
50 1,1,2-Trichloroethane	85	14.538	14.538	(1.230)	874	0.25000	0.1884
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	3000	0.25000	0.2006
52 2-Hexanone	43	14.834	14.834	(0.937)	1217	0.25000	0.1274
53 Tetrachloroethene	166	14.804	14.804	(0.935)	1816	0.25000	0.2362
54 Dibromochloromethane	129	15.080	15.080	(0.953)	1689	0.25000	0.1919
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	1824	0.25000	0.2091
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2073470	50.0000	
57 Chlorobenzene	112	15.859	15.859	(1.002)	5136	0.25000	0.2347
58 1,1,1,2-Tetrachloroethane	131	15.918	15.918	(1.006)	1451	0.25000	0.1996
59 Ethylbenzene	91	15.958	15.958	(1.008)	9022	0.25000	0.2484
60 m,p-Xylenes	106	16.086	16.086	(1.016)	6298	0.50000	0.4768
61 o-Xylene	106	16.569	16.569	(1.047)	3225	0.25000	0.2462
62 Styrene	104	16.589	16.589	(1.048)	5266	0.25000	0.2338
63 Bromoform	173	16.835	16.835	(1.064)	2043	0.25000	0.2989
64 Isopropylbenzene	105	16.973	16.973	(0.916)	6782	0.25000	0.2283
65 Cyclohexanone	55	17.131	17.131	(0.925)	1418	2.50000	2.4111
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1124757	50.0000	51.2336
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	2100	0.25000	0.1781
68 1,2,3-Trichloropropane	75	17.358	17.358	(0.937)	3018	0.25000	0.2741
69 Bromobenzene	156	17.387	17.387	(0.939)	2273	0.25000	0.2609
70 Propylbenzene	91	17.436	17.436	(0.941)	8820	0.25000	0.2412
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	6823	0.25000	0.2628
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	4748	0.25000	0.2225
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	6022	0.25000	0.2496
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	4532	0.25000	0.2350
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	4301	0.25000	0.2237
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	5720	0.25000	0.2036
77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	4284	0.25000	0.2113
78 1,3-Dichlorobenzene	146	18.462	18.462	(0.997)	4523	0.25000	0.2917

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

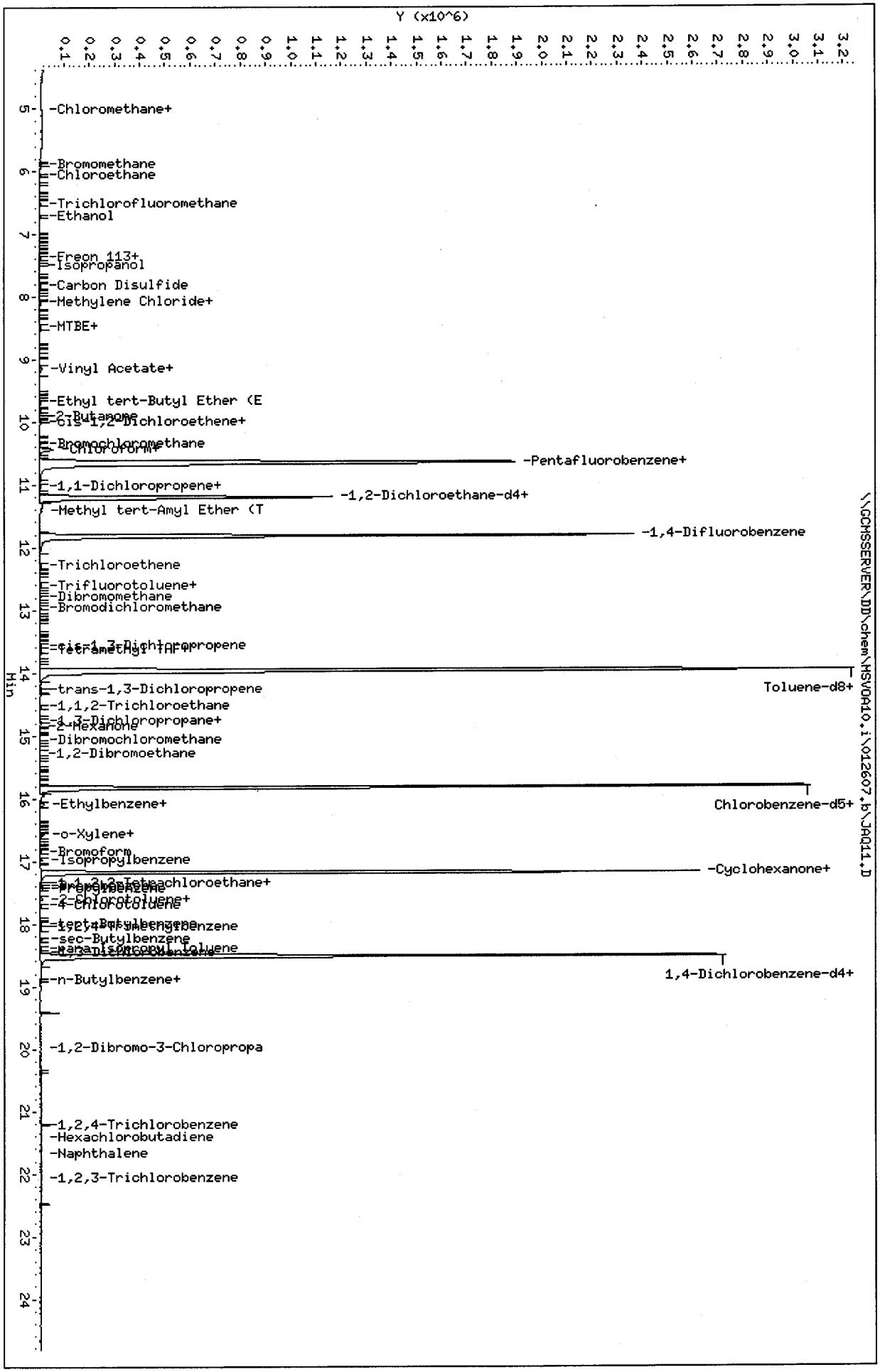
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	927324	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.001)	4544	0.25000	0.2851
81 n-Butylbenzene	91	18.886	18.886	(1.020)	3931	0.25000	0.2414
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	3574	0.25000	0.2389
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	150	0.25000	0.0823
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	2096	0.25000	0.3510
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	861	0.25000	0.2889
86 Naphthalene	128	21.676	21.676	(1.170)	1928	0.25000	0.1527
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1726	0.25000	0.3060

QC Flag Legend

M - Compound response manually integrated.

Data File: \\CCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Date : 26-JAN-2007 16:23
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5219,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:56 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.001/1000,S5219,0.002/1000
Misc Info : S4172,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:04 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:56 Cal File: JAQ12.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.576	4.576	(0.430)	7235	1.00000	0.7427(M)
2 Chloromethane	50	5.059	5.059	(0.476)	18667	1.00000	1.0185
3 Vinyl Chloride	62	5.216	5.216	(0.490)	13459	1.00000	0.9595(M)
4 Bromomethane	94	5.897	5.897	(0.554)	7548	1.00000	0.9258(M)
5 Chloroethane	64	6.074	6.074	(0.571)	7929	1.00000	0.9437(M)
6 Trichlorofluoromethane	101	6.528	6.528	(0.614)	9832	1.00000	0.8747
7 Ethanol	45	6.695	6.695	(0.629)	8655	50.0000	44.0061
8 Freon 113	101	7.356	7.356	(0.691)	3526	0.50000	0.4648
9 Acetone	43	7.395	7.395	(0.695)	4892	0.50000	1.0848(M)
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	4010	0.50000	0.4965(M)
11 Isopropanol	45	7.514	7.514	(0.706)	3895	5.00000	4.3903(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	19568	0.50000	0.5413
13 Methylene Chloride	84	8.095	8.095	(0.761)	6365	0.50000	0.5990(M)
14 tert-Butyl Alcohol (TBA)	59	8.115	8.115	(0.763)	4310	5.00000	4.2930
15 MTBE	73	8.490	8.490	(0.798)	13260	0.50000	0.4682
16 trans-1,2-Dichloroethene	96	8.539	8.539	(0.803)	4950	0.50000	0.5272
18 Vinyl Acetate	43	9.131	9.131	(0.858)	15549	0.50000	0.4143
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	9713	0.50000	0.5093
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	25375	0.50000	0.5062
21 Ethyl tert-Butyl Ether (ETBE)	59	9.702	9.702	(0.912)	16442	0.50000	0.4605
22 2-Butanone	43	9.949	9.949	(0.935)	3867	0.50000	0.5245
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	5187	0.50000	0.5174

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	6306	0.50000	0.5569
25 Bromochloromethane	128	10.363	10.363	(0.974)	2329	0.50000	0.4671
26 Chloroform	83	10.422	10.422	(0.980)	8670	0.50000	0.5499
27 Tetrahydrofuran	42	10.442	10.442	(0.981)	61535	5.00000	12.4633(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1636864	50.0000	
29 Dibromofluoromethane	113	10.669	10.669	(1.003)	892397	50.0000	49.8390
30 1,1,1-Trichloroethane	97	10.797	10.797	(1.015)	5264	0.50000	0.5084
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	6549	0.50000	0.5542
32 Carbon Tetrachloride	117	11.063	11.063	(0.936)	4408	0.50000	0.5462
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1031383	50.0000	50.6712
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	6041	0.50000	0.4628
35 Benzene	78	11.359	11.359	(0.961)	19199	0.50000	0.5189
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	12894	0.50000	0.4973
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2573874	50.0000	
38 Trichloroethene	95	12.276	12.276	(1.038)	5045	0.50000	0.5801
39 Trifluorotoluene	146	12.601	12.601	(1.066)	6166	0.50000	0.4994
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	6114	0.50000	0.5315
41 Dibromomethane	93	12.778	12.778	(1.081)	2626	0.50000	0.4204
42 Bromodichloromethane	83	12.956	12.956	(1.096)	5774	0.50000	0.4981
44 cis-1,3-Dichloropropene	75	13.567	13.567	(1.148)	7933	0.50000	0.5000
45 Tetramethyl THF	43	13.646	13.646	(1.154)	12460	0.50000	0.4589
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	7488	0.50000	0.4381(H)
47 Toluene-d8	98	13.962	13.962	(1.181)	2773774	50.0000	50.0809
48 Toluene	92	14.060	14.060	(1.189)	11257	0.50000	0.5344
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	6516	0.50000	0.4683(M)
50 1,1,2-Trichloroethane	85	14.524	14.524	(1.228)	1988	0.50000	0.4206
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	7415	0.50000	0.4943
52 2-Hexanone	43	14.809	14.809	(0.936)	3613	0.50000	0.3772
53 Tetrachloroethene	166	14.809	14.809	(0.936)	4259	0.50000	0.5522
54 Dibromochloromethane	129	15.086	15.086	(0.953)	3660	0.50000	0.4146
55 1,2-Dibromoethane	107	15.283	15.283	(1.293)	3828	0.50000	0.4307
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2080264	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	11768	0.50000	0.5360
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	3496	0.50000	0.4794
59 Ethylbenzene	91	15.953	15.953	(1.008)	18828	0.50000	0.5166
60 m,p-Xylenes	106	16.091	16.091	(1.017)	13879	1.00000	1.0474
61 o-Xylene	106	16.574	16.574	(1.047)	6981	0.50000	0.5313
62 Styrene	104	16.584	16.584	(1.048)	10447	0.50000	0.4624
63 Bromoform	173	16.840	16.840	(1.064)	3910	0.50000	0.5703
64 Isopropylbenzene	105	16.978	16.978	(0.917)	15942	0.50000	0.5306
65 Cyclohexanone	55	17.117	17.117	(0.924)	2707	5.00000	4.5494
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1128978	50.0000	50.8277
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	6121	0.50000	0.5132
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	7536	0.50000	0.6765
69 Bromobenzene	156	17.393	17.393	(0.939)	4426	0.50000	0.5021
70 Propylbenzene	91	17.442	17.442	(0.942)	19152	0.50000	0.5178
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	14066	0.50000	0.5355
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	10793	0.50000	0.5000
73 4-Chlorotoluene	91	17.708	17.708	(0.956)	13469	0.50000	0.5517
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	10033	0.50000	0.5142
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	8927	0.50000	0.4589
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	14915	0.50000	0.5249
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	10601	0.50000	0.5168
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	8321	0.50000	0.5304

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

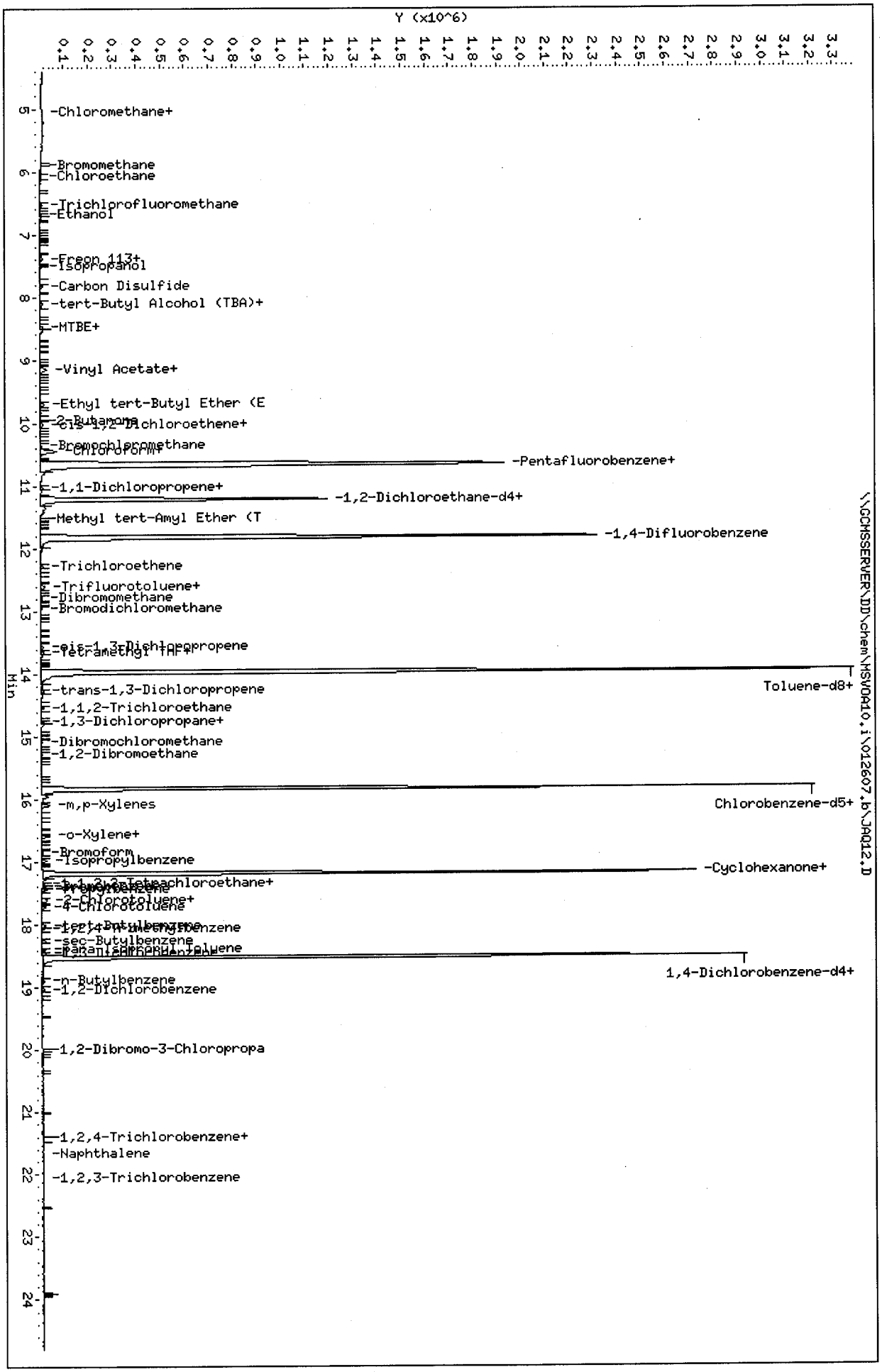
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	938237	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	9153	0.50000	0.5677
81 n-Butylbenzene	91	18.891	18.891	(1.020)	8333	0.50000	0.5058
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	7706	0.50000	0.5091
83 1,2-Dibromo-3-Chloropropane	75	19.995	19.995	(1.080)	383	0.50000	0.2078
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	3180	0.50000	0.5263
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	2029	0.50000	0.6729
86 Naphthalene	128	21.671	21.671	(1.170)	5279	0.50000	0.4133
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	2798	0.50000	0.4903

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Date : 26-JAN-2007 16:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5219,0.002/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Lab Smp Id:
Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 17:28
MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA
Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/500,S5219,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:05 msvoa10
Quant Type: ISTD
Cal Date : 26-JAN-2007 17:28
Cal File: JAQ13.D
Als bottle: 13
Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.575	4.575	(0.430)	18377	2.00000	1.9299(M)
2 Chloromethane	50	5.048	5.048	(0.475)	38262	2.00000	2.1358(M)
3 Vinyl Chloride	62	5.216	5.216	(0.490)	27735	2.00000	2.0228(M)
4 Bromomethane	94	5.896	5.896	(0.554)	15624	2.00000	1.9605
5 Chloroethane	64	6.064	6.064	(0.570)	17036	2.00000	2.0742
6 Trichlorofluoromethane	101	6.527	6.527	(0.614)	21663	2.00000	1.9716
7 Ethanol	45	6.705	6.705	(0.630)	39066	200.000	203.2028(M)
8 Freon 113	101	7.356	7.356	(0.691)	14598	2.00000	1.9690
9 Acetone	43	7.385	7.385	(0.694)	13299	2.00000	3.0171
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	16671	2.00000	2.1116(M)
11 Isopropanol	45	7.503	7.503	(0.705)	17751	20.0000	20.4691(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	73090	2.00000	2.0685(M)
13 Methylene Chloride	84	8.105	8.105	(0.762)	22230	2.00000	2.1404
14 tert-Butyl Alcohol (TBA)	59	8.125	8.125	(0.764)	19591	20.0000	19.9630
15 MTBE	73	8.480	8.480	(0.797)	56826	2.00000	2.0528
16 trans-1,2-Dichloroethene	96	8.529	8.529	(0.802)	18745	2.00000	2.0424
18 Vinyl Acetate	43	9.130	9.130	(0.858)	82474	2.00000	2.2485(M)
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	40519	2.00000	2.1736(M)
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	102783	2.00000	2.0979
21 Ethyl tert-Butyl Ether (ETBE)	59	9.692	9.692	(0.911)	72766	2.00000	2.0849
22 2-Butanone	43	9.949	9.949	(0.935)	14535	2.00000	2.0168(M)
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	21011	2.00000	2.1442

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	22956	2.00000	2.0740
25 Bromochloromethane	128	10.363	10.363	(0.974)	9569	2.00000	1.9633
26 Chloroform	83	10.422	10.422	(0.980)	32652	2.00000	2.1190
27 Tetrahydrofuran	42	10.441	10.441	(0.981)	133684	20.0000	27.6998(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1600031	50.0000	
29 Dibromofluoromethane	113	10.668	10.668	(1.003)	867760	50.0000	49.5787
30 1,1,1-Trichloroethane	97	10.796	10.796	(1.015)	21153	2.00000	2.0900
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	23288	2.00000	1.9879
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	16561	2.00000	2.0698
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1010779	50.0000	50.0873
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	26702	2.00000	2.0632
35 Benzene	78	11.358	11.358	(0.961)	79833	2.00000	2.1765
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	52839	2.00000	2.0556
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2551866	50.0000	
38 Trichloroethene	95	12.285	12.285	(1.039)	18415	2.00000	2.1359
39 Trifluorotoluene	146	12.591	12.591	(1.065)	25974	2.00000	2.1220
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	23667	2.00000	2.0754
41 Dibromomethane	93	12.778	12.778	(1.081)	13071	2.00000	2.1110
42 Bromodichloromethane	83	12.946	12.946	(1.095)	23450	2.00000	2.0407
44 cis-1,3-Dichloropropene	75	13.557	13.557	(1.147)	32480	2.00000	2.0651(M)
45 Tetramethyl THF	43	13.646	13.646	(1.154)	58138	2.00000	2.1598
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	34144	2.00000	2.0151(M)
47 Toluene-d8	98	13.961	13.961	(1.181)	2757182	50.0000	50.2107
48 Toluene	92	14.060	14.060	(1.189)	44304	2.00000	2.1215
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	27734	2.00000	2.0104
50 1,1,2-Trichloroethane	85	14.533	14.533	(1.229)	10510	2.00000	2.2430
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	30655	2.00000	2.0636
52 2-Hexanone	43	14.789	14.789	(0.935)	18632	2.00000	1.9646(M)
53 Tetrachloroethene	166	14.809	14.809	(0.936)	15714	2.00000	2.0577
54 Dibromochloromethane	129	15.085	15.085	(0.953)	19021	2.00000	2.1763
55 1,2-Dibromoethane	107	15.273	15.273	(1.292)	19499	2.00000	2.2129
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2060016	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	47893	2.00000	2.2031
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	15605	2.00000	2.1609
59 Ethylbenzene	91	15.953	15.953	(1.008)	81378	2.00000	2.2552
60 m,p-Xylenes	106	16.091	16.091	(1.017)	56977	4.00000	4.3423
61 o-Xylene	106	16.574	16.574	(1.047)	27885	2.00000	2.1434
62 Styrene	104	16.584	16.584	(1.048)	48290	2.00000	2.1587(M)
63 Bromoform	173	16.840	16.840	(1.064)	14187	2.00000	2.0897
64 Isopropylbenzene	105	16.978	16.978	(0.917)	63190	2.00000	2.1252
65 Cyclohexanone	55	17.116	17.116	(0.924)	12622	20.0000	21.4347
66 Bromofluorobenzene	95	17.175	17.175	(0.928)	1130086	50.0000	51.4096
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	25806	2.00000	2.1866
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	20828	2.00000	1.8894
69 Bromobenzene	156	17.392	17.392	(0.939)	19452	2.00000	2.2300
70 Propylbenzene	91	17.442	17.442	(0.942)	77111	2.00000	2.1067
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	60049	2.00000	2.3101
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	43770	2.00000	2.0489
73 4-Chlorotoluene	91	17.698	17.698	(0.956)	55051	2.00000	2.2788
74 tert-Butylbenzene	119	18.004	18.004	(0.972)	39220	2.00000	2.0314
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	39122	2.00000	2.0322
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	52834	2.00000	1.8788
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	37289	2.00000	1.8370
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	34911	2.00000	2.2489

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

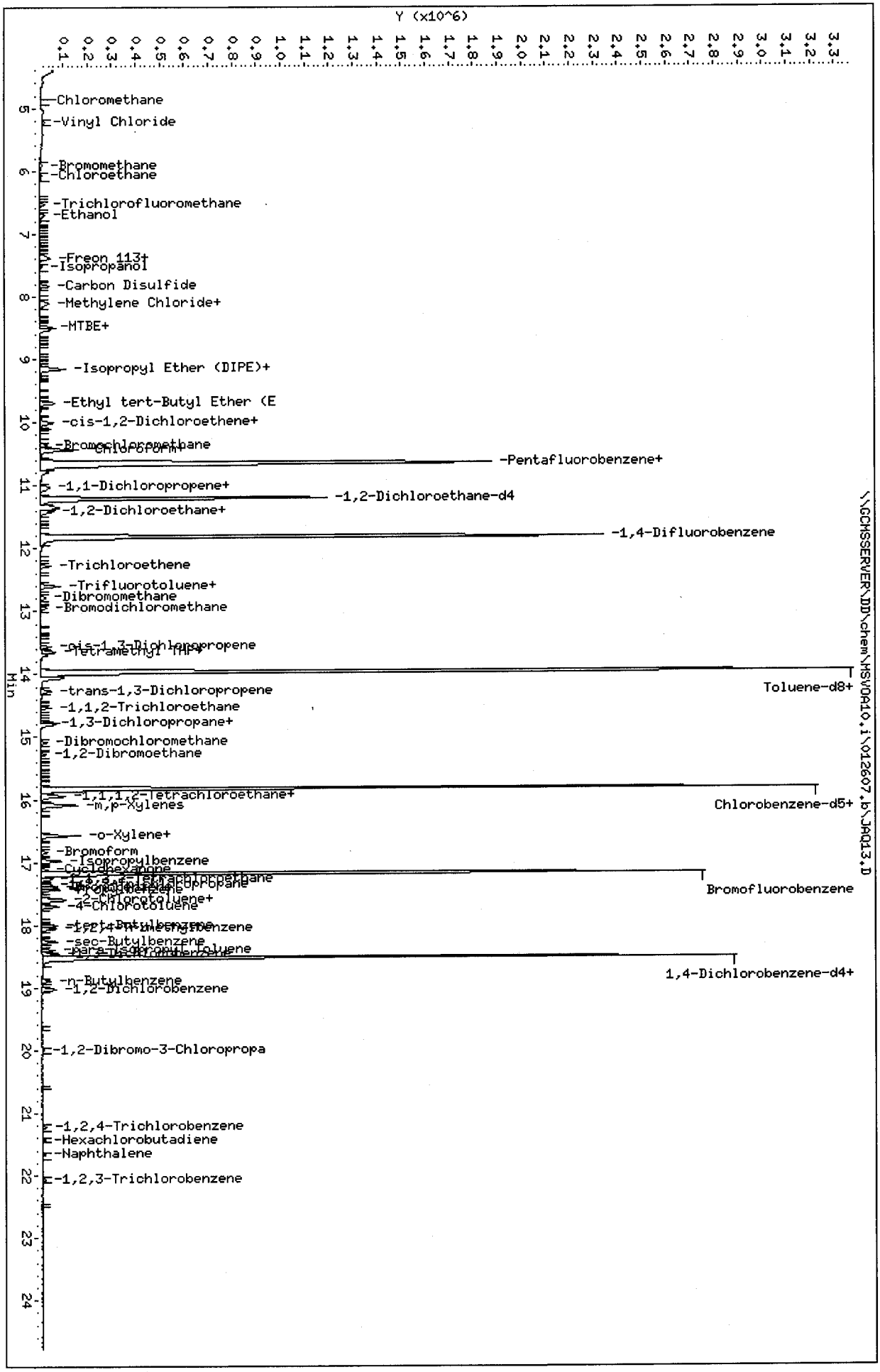
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.516	18.516	(1.000)	928528	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	36503	2.00000	2.2880
81 n-Butylbenzene	91	18.891	18.891	(1.020)	28101	2.00000	1.7235(M)
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	33310	2.00000	2.2237
83 1,2-Dibromo-3-Chloropropane	75	20.005	20.005	(1.080)	4355	2.00000	2.3883
84 1,2,4-Trichlorobenzene	180	21.218	21.218	(1.146)	10870	2.00000	1.8181
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	5429	2.00000	1.8194
86 Naphthalene	128	21.661	21.661	(1.170)	23362	2.00000	1.8484(M)
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	10856	2.00000	1.9223

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Date : 26-JAN-2007 17:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5219,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:01 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.005/500,S5219,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:07 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:01 Cal File: JAQ14.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.571	4.571	(0.429)	45057	5.00000	4.7352(M)
2 Chloromethane	50	5.044	5.044	(0.474)	92586	5.00000	5.1717(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	69233	5.00000	5.0531(M)
4 Bromomethane	94	5.892	5.892	(0.554)	39614	5.00000	4.9742
5 Chloroethane	64	6.079	6.079	(0.571)	41104	5.00000	5.0082(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	54275	5.00000	4.9431
7 Ethanol	45	6.690	6.690	(0.629)	96354	500.000	501.5352(M)
8 Freon 113	101	7.351	7.351	(0.691)	39830	5.00000	5.3761
9 Acetone	43	7.380	7.380	(0.693)	23401	5.00000	5.3125
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	41481	5.00000	5.2578
11 Isopropanol	45	7.499	7.499	(0.705)	42583	50.0000	49.1375(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	181127	5.00000	5.1296
13 Methylene Chloride	84	8.090	8.090	(0.760)	53405	5.00000	5.1458
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	48200	50.0000	49.1492(M)
15 MTBE	73	8.485	8.485	(0.797)	139526	5.00000	5.0438(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	47140	5.00000	5.1398
18 Vinyl Acetate	43	9.126	9.126	(0.857)	182058	5.00000	4.9670(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	97079	5.00000	5.2113(M)
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	254455	5.00000	5.1974(M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	179275	5.00000	5.1402(M)
22 2-Butanone	43	9.944	9.944	(0.934)	36000	5.00000	4.9988(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	48321	5.00000	4.9348

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	57419	5.00000	5.1914
25 Bromochloromethane	128	10.358	10.358	(0.973)	24836	5.00000	5.0994
26 Chloroform	83	10.427	10.427	(0.980)	78786	5.00000	5.1165
27 Tetrahydrofuran	42	10.437	10.437	(0.981)	258085	50.0000	53.5132
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1598923	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	887606	50.0000	50.7477
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	52814	5.00000	5.2219
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	60501	5.00000	5.1515
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	41379	5.00000	5.1586
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	1016175	50.0000	50.2275
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	66042	5.00000	5.0902(M)
35 Benzene	78	11.354	11.354	(0.961)	185323	5.00000	5.0399(M)
36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.967)	129813	5.00000	5.0375(M)
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2558326	50.0000	
38 Trichloroethene	95	12.281	12.281	(1.039)	43433	5.00000	5.0250
39 Trifluorotoluene	146	12.596	12.596	(1.066)	64491	5.00000	5.2554
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	60007	5.00000	5.2488(M)
41 Dibromomethane	93	12.783	12.783	(1.082)	32000	5.00000	5.1551
42 Bromodichloromethane	83	12.951	12.951	(1.096)	55962	5.00000	4.8579
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	78281	5.00000	4.9646
45 Tetramethyl THF	43	13.641	13.641	(1.154)	132056	5.00000	4.8934
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	87431	5.00000	5.1470(M)
47 Toluene-d8	98	13.966	13.966	(1.182)	2743323	50.0000	49.8321
48 Toluene	92	14.055	14.055	(1.189)	100505	5.00000	4.8007
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	69434	5.00000	5.0206
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	23486	5.00000	4.9997
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	74917	5.00000	4.9986(M)
52 2-Hexanone	43	14.785	14.785	(0.934)	44526	5.00000	4.6535(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	39144	5.00000	5.0804
54 Dibromochloromethane	129	15.090	15.090	(0.953)	44470	5.00000	5.0430
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	42530	5.00000	4.8145
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2078416	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	109608	5.00000	4.9975
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	35396	5.00000	4.8582
59 Ethylbenzene	91	15.958	15.958	(1.008)	185289	5.00000	5.0894
60 m,p-Xylenes	106	16.086	16.086	(1.016)	129806	10.0000	9.8052(M)
61 o-Xylene	106	16.569	16.569	(1.047)	65146	5.00000	4.9633
62 Styrene	104	16.579	16.579	(1.047)	111630	5.00000	4.9461(M)
63 Bromoform	173	16.845	16.845	(1.064)	32300	5.00000	4.7156
64 Isopropylbenzene	105	16.974	16.974	(0.916)	159446	5.00000	5.3219
65 Cyclohexanone	55	17.121	17.121	(0.924)	25839	50.0000	43.5472
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1135470	50.0000	51.2628
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	59115	5.00000	4.9709
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	51961	5.00000	4.6781
69 Bromobenzene	156	17.397	17.397	(0.939)	44439	5.00000	5.0560
70 Propylbenzene	91	17.437	17.437	(0.941)	189911	5.00000	5.1491
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	133716	5.00000	5.1051
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	107754	5.00000	5.0059(M)
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	122996	5.00000	5.0527
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	99337	5.00000	5.1062
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	91370	5.00000	4.7103
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	144987	5.00000	5.1167
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	99367	5.00000	4.8582
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	79859	5.00000	5.1054

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

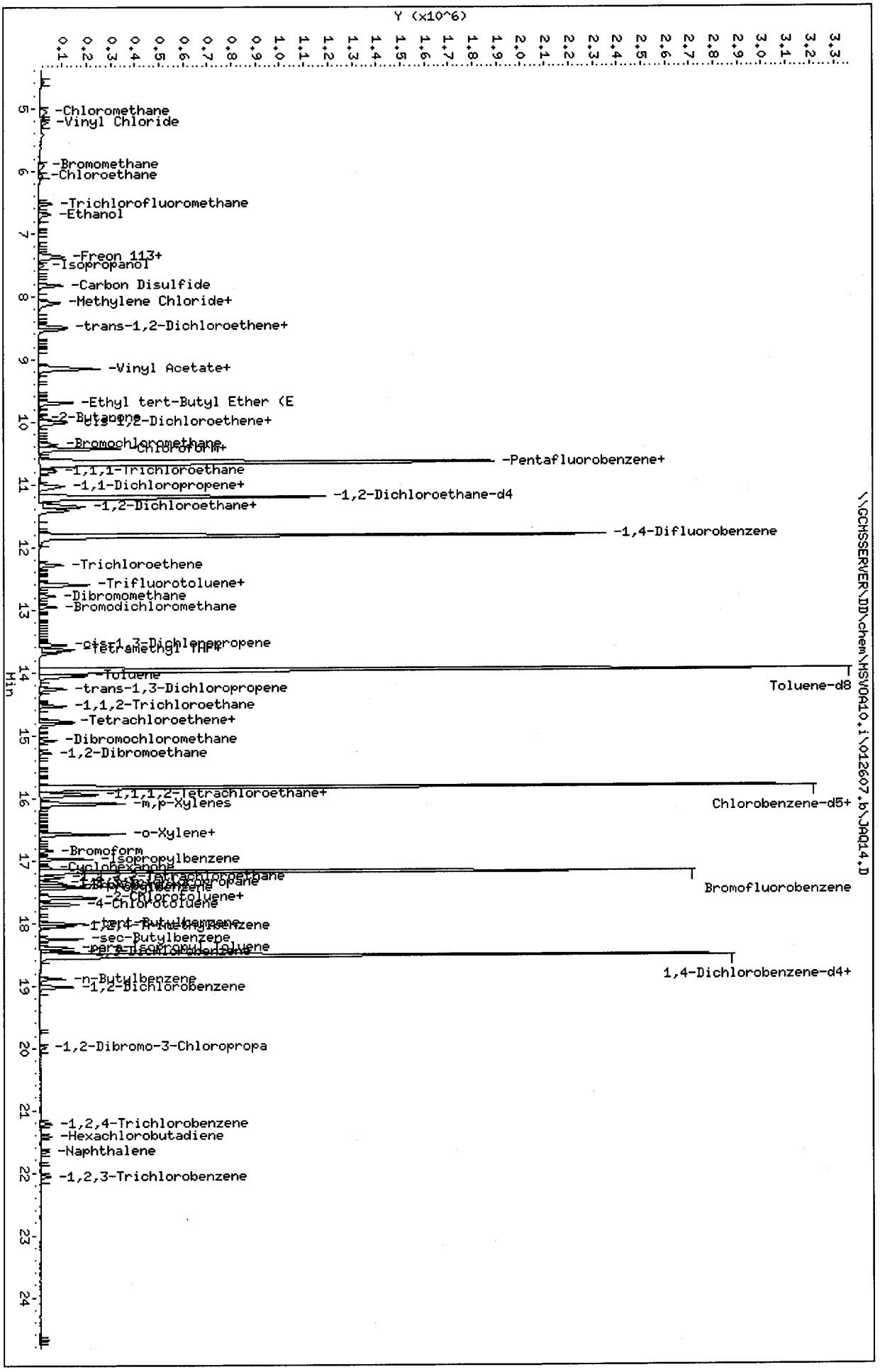
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	935622	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	78373	5.00000	4.8753
81 n-Butylbenzene	91	18.886	18.886	(1.020)	76759	5.00000	4.6722
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	75672	5.00000	5.0135
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	9331	5.00000	5.0784
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	26200	5.00000	4.3490(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	15257	5.00000	5.0743
86 Naphthalene	128	21.657	21.657	(1.169)	52322	5.00000	4.1084(M)
87 1,2,3-Trichlorobenzene	180	22.061	22.061	(1.191)	25002	5.00000	4.3937

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Date : 26-JAN-2007 18:01
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5219,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:34 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/100,S5219,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:08 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:34 Cal File: JAQ15.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	84494	10.0000	8.7838(M)
2 Chloromethane	50	5.053	5.053	(0.475)	165424	10.0000	9.1405(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	129444	10.0000	9.3456(M)
4 Bromomethane	94	5.891	5.891	(0.554)	74412	10.0000	9.2428(M)
5 Chloroethane	64	6.069	6.069	(0.570)	79961	10.0000	9.6374(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	106528	10.0000	9.5972(M)
7 Ethanol	45	6.690	6.690	(0.629)	195201	1000.00	1005.0648(M)
8 Freon 113	101	7.350	7.350	(0.691)	72575	10.0000	9.6900
9 Acetone	43	7.380	7.380	(0.693)	45813	10.0000	10.2882
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	75423	10.0000	9.4568(M)
11 Isopropanol	45	7.498	7.498	(0.705)	86791	100.000	99.0678(M)
12 Carbon Disulfide	76	7.823	7.823	(0.735)	333187	10.0000	9.3340(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	102157	10.0000	9.7369(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.762)	96548	100.000	97.3853(M)
15 MTBE	73	8.484	8.484	(0.797)	276342	10.0000	9.8818
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	88646	10.0000	9.5608(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	367875	10.0000	9.9280(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	183697	10.0000	9.7545(M)
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	488537	10.0000	9.8709
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	348567	10.0000	9.8862
22 2-Butanone	43	9.933	9.933	(0.933)	70586	10.0000	9.6954
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	96931	10.0000	9.7921(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	106663	10.0000	9.5395
25 Bromochloromethane	128	10.357	10.357	(0.973)	48823	10.0000	9.9161
26 Chloroform	83	10.426	10.426	(0.980)	151380	10.0000	9.7247(M)
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	469154	100.000	96.2264(M)
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1616394	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	891888	50.0000	50.4414
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	95313	10.0000	9.3221
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	110656	10.0000	9.3857(M)
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	74772	10.0000	9.2855
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1020366	50.0000	50.2394
34 1,2-Dichloroethane	62	11.323	11.323	(0.958)	131605	10.0000	10.1042(M)
35 Benzene	78	11.353	11.353	(0.961)	357416	10.0000	9.6823
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	251130	10.0000	9.7076
* 37 1,4-Difluorobenzene	114	11.816	11.816	(1.000)	2568270	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	76818	10.0000	8.8531(M)
39 Trifluorotoluene	146	12.595	12.595	(1.066)	113391	10.0000	9.2045(M)
40 1,2-Dichloropropane	63	12.595	12.595	(1.066)	108727	10.0000	9.4736(M)
41 Dibromomethane	93	12.773	12.773	(1.081)	62157	10.0000	9.9746
42 Bromodichloromethane	83	12.950	12.950	(1.096)	113047	10.0000	9.7753
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	150387	10.0000	9.5007(M)
45 Tetramethyl THF	43	13.640	13.640	(1.154)	264010	10.0000	9.7452
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	165790	10.0000	9.7222
47 Toluene-d8	98	13.966	13.966	(1.182)	2779653	50.0000	50.2966
48 Toluene	92	14.055	14.055	(1.189)	237133	10.0000	11.2830
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	134860	10.0000	9.7137
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	46608	10.0000	9.8836
51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	147957	10.0000	9.8331
52 2-Hexanone	43	14.784	14.784	(0.934)	92344	10.0000	9.6130(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	68864	10.0000	8.9026
54 Dibromochloromethane	129	15.080	15.080	(0.953)	85577	10.0000	9.6665
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	84326	10.0000	9.5090
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2086644	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	205003	10.0000	9.3101(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69112	10.0000	9.4485
59 Ethylbenzene	91	15.957	15.957	(1.008)	348677	10.0000	9.5394
60 m,p-Xylenes	106	16.086	16.086	(1.016)	266315	20.0000	20.0374
61 o-Xylene	106	16.569	16.569	(1.047)	128608	10.0000	9.7596
62 Styrene	104	16.578	16.578	(1.047)	213741	10.0000	9.4332
63 Bromoform	173	16.835	16.835	(1.064)	64859	10.0000	9.4318
64 Isopropylbenzene	105	16.973	16.973	(0.916)	279244	10.0000	9.1311(M)
65 Cyclohexanone	55	17.121	17.121	(0.924)	61691	100.000	101.8569
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1136659	50.0000	50.2738
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	114956	10.0000	9.4702
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	108093	10.0000	9.5340
69 Bromobenzene	156	17.397	17.397	(0.939)	84734	10.0000	9.4447
70 Propylbenzene	91	17.436	17.436	(0.941)	341476	10.0000	9.0705
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	248159	10.0000	9.2818
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	202459	10.0000	9.2144
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	224507	10.0000	9.0354
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	174361	10.0000	8.7806
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	182222	10.0000	9.2030
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	251902	10.0000	8.7093(M)
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	178033	10.0000	8.5274
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	146340	10.0000	9.1654

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

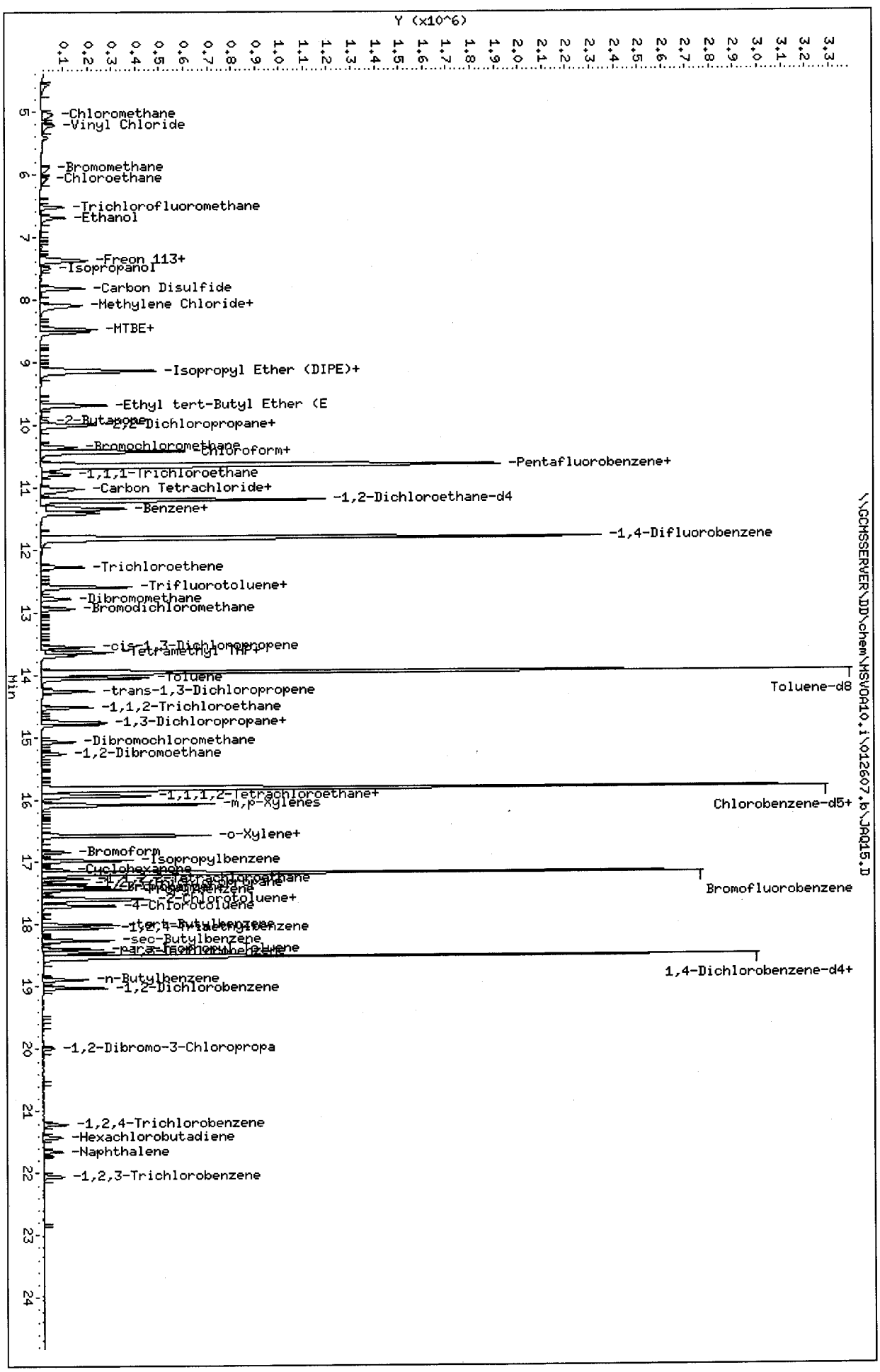
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	955028	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	145507	10.0000	8.8676
81 n-Butylbenzene	91	18.886	18.886	(1.020)	138129	10.0000	8.2369
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	142749	10.0000	9.2654
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	19208	10.0000	10.2417
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.145)	52214	10.0000	8.4911(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	25119	10.0000	8.1846
86 Naphthalene	128	21.656	21.656	(1.169)	107389	10.0000	8.2610(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	50728	10.0000	8.7336(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Date : 26-JAN-2007 18:34
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5219,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:06 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.004/100,S5219,0.004/100
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:09 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:06 Cal File: JAQ16.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	192804	20.0000	20.7696(M)
2 Chloromethane	50	5.053	5.053	(0.475)	344326	20.0000	19.7151(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	275789	20.0000	20.6328(M)
4 Bromomethane	94	5.891	5.891	(0.554)	151590	20.0000	19.5113(M)
5 Chloroethane	64	6.069	6.069	(0.570)	160389	20.0000	20.0315(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	220048	20.0000	20.5426
7 Ethanol	45	6.690	6.690	(0.629)	402306	2000.00	2146.4647
8 Freon 113	101	7.350	7.350	(0.691)	148890	20.0000	20.5997
9 Acetone	43	7.380	7.380	(0.693)	94992	20.0000	22.1052
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	160709	20.0000	20.8803(M)
11 Isopropanol	45	7.498	7.498	(0.705)	184113	200.000	217.7697(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	700052	20.0000	20.3221(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	201812	20.0000	19.9322
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	212561	200.000	222.1720(M)
15 MTBE	73	8.484	8.484	(0.797)	556038	20.0000	20.6039
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	180999	20.0000	20.2287(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	752930	20.0000	21.0559(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	369308	20.0000	20.3211
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	975758	20.0000	20.4296
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	692908	20.0000	20.3646
22 2-Butanone	43	9.934	9.934	(0.933)	153310	20.0000	21.8209(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	193973	20.0000	20.3054(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	217712	20.0000	20.1767
	25 Bromochloromethane	128	10.357	10.357	(0.973)	98151	20.0000	20.6571(M)
	26 Chloroform	83	10.426	10.426	(0.980)	302098	20.0000	20.1099
	27 Tetrahydrofuran	42	10.436	10.436	(0.981)	935923	200.000	198.9180
*	28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1559883	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.002)	852946	50.0000	49.9866
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	200085	20.0000	20.2784
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	233733	20.0000	20.2621
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	156195	20.0000	19.8247(M)
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	984510	50.0000	49.5427
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	264710	20.0000	20.7717
	35 Benzene	78	11.353	11.353	(0.961)	730718	20.0000	20.2315
	36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	517690	20.0000	20.4529(M)
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2512865	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	170355	20.0000	20.0660
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	243316	20.0000	20.1868
	40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	227356	20.0000	20.2468(M)
	41 Dibromomethane	93	12.783	12.783	(1.082)	129311	20.0000	21.2087
	42 Bromodichloromethane	83	12.950	12.950	(1.096)	232895	20.0000	20.5827(M)
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	317451	20.0000	20.4973
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	569270	20.0000	21.4764
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	356407	20.0000	21.3613
	47 Toluene-d8	98	13.966	13.966	(1.182)	2712669	50.0000	50.1668
	48 Toluene	92	14.055	14.055	(1.189)	401018	20.0000	19.5015(M)
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	280298	20.0000	20.6346
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	96443	20.0000	20.9024
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	303268	20.0000	20.8741
	52 2-Hexanone	43	14.774	14.774	(0.933)	204269	20.0000	22.0230
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	153538	20.0000	20.5572
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175886	20.0000	20.5763
	55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	182455	20.0000	21.0282
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2014764	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	421896	20.0000	19.8437(M)
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	145850	20.0000	20.6510
	59 Ethylbenzene	91	15.958	15.958	(1.008)	698484	20.0000	19.7916
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	515329	40.0000	40.1565
	61 o-Xylene	106	16.569	16.569	(1.047)	253697	20.0000	19.9391
	62 Styrene	104	16.579	16.579	(1.047)	454840	20.0000	20.7900
	63 Bromoform	173	16.835	16.835	(1.064)	133275	20.0000	20.0724
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	610402	20.0000	20.4406(M)
	65 Cyclohexanone	55	17.111	17.111	(0.924)	144510	200.000	244.3451(M)
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1098649	50.0000	49.7631
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	248441	20.0000	20.9599
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	227603	20.0000	20.5585
	69 Bromobenzene	156	17.397	17.397	(0.939)	179752	20.0000	20.5183
	70 Propylbenzene	91	17.436	17.436	(0.941)	736056	20.0000	20.0225
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	514653	20.0000	19.7131
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	428199	20.0000	19.9579
	73 4-Chlorotoluene	91	17.693	17.693	(0.955)	477184	20.0000	19.6672
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	391239	20.0000	20.1770
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	389708	20.0000	20.1560
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	574787	20.0000	20.3515
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	406884	20.0000	19.9584
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	306441	20.0000	19.6551

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

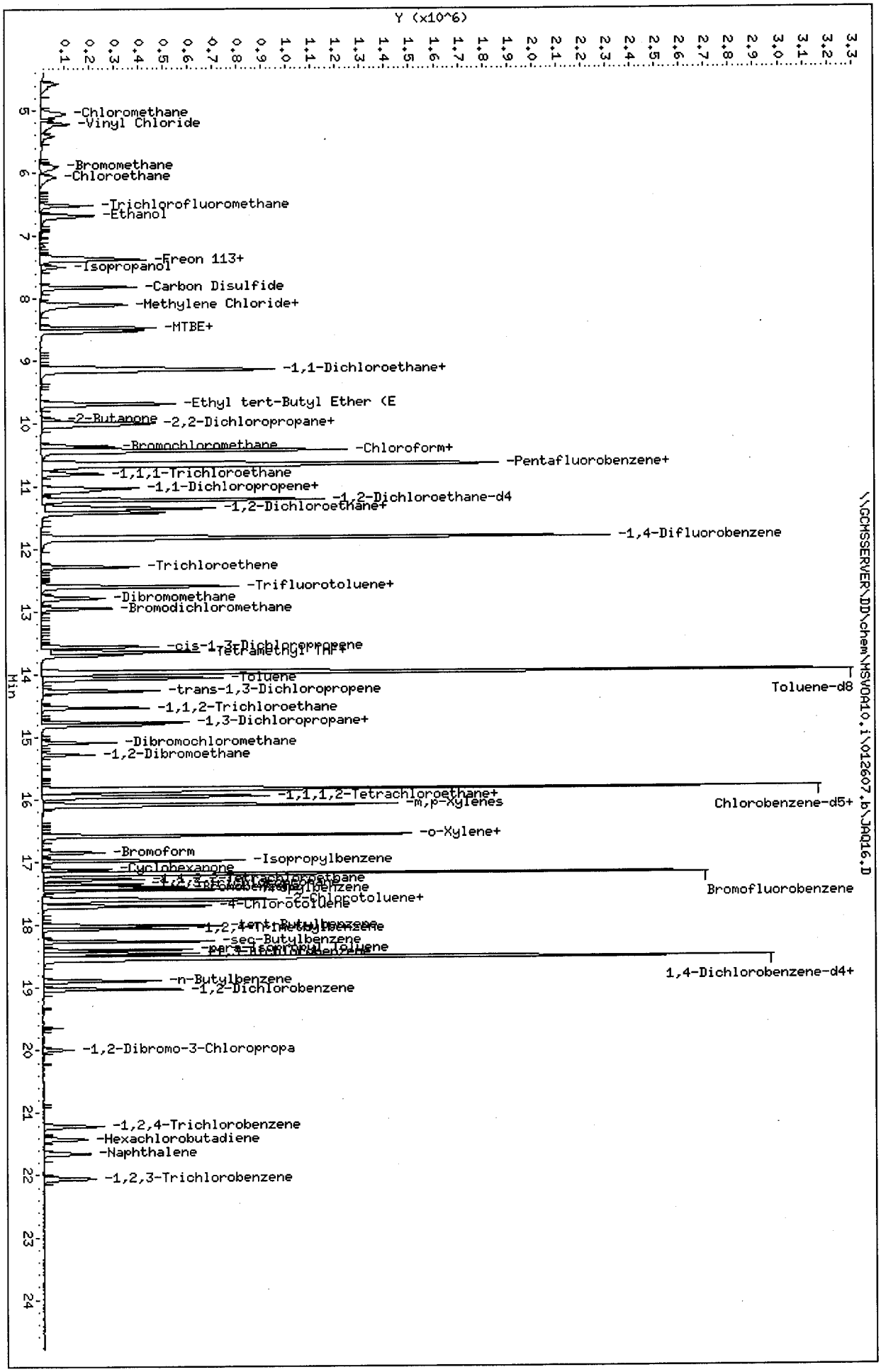
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	932565	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	318141	20.0000	19.8554
81 n-Butylbenzene	91	18.886	18.886	(1.020)	332009	20.0000	20.2754
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	303728	20.0000	20.1889
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	42724	20.0000	23.3292(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	120800	20.0000	20.1180(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	57572	20.0000	19.2108
86 Naphthalene	128	21.656	21.656	(1.169)	259513	20.0000	20.4441(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	116520	20.0000	20.5440(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Date : 26-JAN-2007 19:06
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.004/100,S5219,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Lab Smp Id:
Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:39
MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA
Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.01/100,S5219,0.01/100
Misc Info : S4172,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:10 msvoa10
Quant Type: ISTD
Cal Date : 26-JAN-2007 19:39
Cal File: JAQ17.D
Als bottle: 17
Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	520970	50.0000	56.2784
2 Chloromethane	50	5.044	5.044	(0.474)	886324	50.0000	50.8907(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	689712	50.0000	51.7446
4 Bromomethane	94	5.892	5.892	(0.554)	408210	50.0000	52.6886
5 Chloroethane	64	6.069	6.069	(0.570)	408130	50.0000	51.1157
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	561782	50.0000	52.5924
7 Ethanol	45	6.680	6.680	(0.628)	942062	5000.00	5040.3720
8 Freon 113	101	7.351	7.351	(0.691)	344262	50.0000	47.7639
9 Acetone	43	7.371	7.371	(0.692)	196148	50.0000	45.7728
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	368018	50.0000	47.9492
11 Isopropanol	45	7.489	7.489	(0.704)	433436	500.000	514.1075(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	1648704	50.0000	47.9952
13 Methylene Chloride	84	8.090	8.090	(0.760)	491188	50.0000	48.6488
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	496436	500.000	520.3372(M)
15 MTBE	73	8.475	8.475	(0.796)	1359574	50.0000	50.5201(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	441126	50.0000	49.4391(M)
18 Vinyl Acetate	43	9.116	9.116	(0.856)	1748211	50.0000	49.0264(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	877528	50.0000	48.4212
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	2337773	50.0000	49.0836
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	1709702	50.0000	50.3892
22 2-Butanone	43	9.924	9.924	(0.932)	342720	50.0000	48.9167
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	465253	50.0000	48.8400(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	507034	50.0000	47.1217(M)
25 Bromochloromethane	128	10.358	10.358	(0.973)	243803	50.0000	51.4552(M)
26 Chloroform	83	10.427	10.427	(0.980)	716284	50.0000	47.8151
27 Tetrahydrofuran	42	10.427	10.427	(0.980)	2095476	500.000	446.6143
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1555522	50.0000	
29 Dibromofluoromethane	113	10.664	10.664	(1.002)	854225	50.0000	50.2019
30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	473552	50.0000	48.1287
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	540790	50.0000	46.6546
32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	369593	50.0000	46.6838
33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	986905	50.0000	49.4239
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	639313	50.0000	49.9250
35 Benzene	78	11.354	11.354	(0.961)	1742148	50.0000	48.0027
36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	1253595	50.0000	49.2884
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525036	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	402225	50.0000	47.1494
39 Trifluorotoluene	146	12.596	12.596	(1.066)	574384	50.0000	47.4243
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	552323	50.0000	48.9491
41 Dibromomethane	93	12.783	12.783	(1.082)	304026	50.0000	49.6240
42 Bromodichloromethane	83	12.951	12.951	(1.096)	565585	50.0000	49.7443
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	777124	50.0000	49.9358
45 Tetramethyl THF	43	13.641	13.641	(1.154)	1381596	50.0000	51.8711
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	807610	50.0000	48.1709
47 Toluene-d8	98	13.966	13.966	(1.182)	2718680	50.0000	50.0356
48 Toluene	92	14.055	14.055	(1.189)	951856	50.0000	46.0657
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	689259	50.0000	50.4963
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	230237	50.0000	49.6596
51 1,3-Dichloropropane	76	14.755	14.755	(0.932)	702613	50.0000	47.4266
52 2-Hexanone	43	14.775	14.775	(0.933)	473392	50.0000	50.0517
53 Tetrachloroethene	166	14.804	14.804	(0.935)	356789	50.0000	46.8472(M)
54 Dibromochloromethane	129	15.081	15.081	(0.953)	438254	50.0000	50.2789
55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	438278	50.0000	50.2687
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2054473	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	1022884	50.0000	47.1812
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	355870	50.0000	49.4139
59 Ethylbenzene	91	15.958	15.958	(1.008)	1683400	50.0000	46.7775
60 m,p-Xylenes	106	16.086	16.086	(1.016)	1260291	100.000	96.3088
61 o-Xylene	106	16.569	16.569	(1.047)	616795	50.0000	47.5396
62 Styrene	104	16.579	16.579	(1.047)	1103752	50.0000	49.4756
63 Bromoform	173	16.835	16.835	(1.064)	319994	50.0000	47.2624
64 Isopropylbenzene	105	16.973	16.973	(0.916)	1447868	50.0000	46.4376
65 Cyclohexanone	55	17.112	17.112	(0.924)	255178	500.000	413.2491(M)
66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1122015	50.0000	48.6754
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	593081	50.0000	47.9229
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	533783	50.0000	46.1787
69 Bromobenzene	156	17.397	17.397	(0.939)	434644	50.0000	47.5188
70 Propylbenzene	91	17.437	17.437	(0.941)	1839895	50.0000	47.9364
71 2-Chlorotoluene	91	17.585	17.585	(0.949)	1266357	50.0000	46.4581
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	1099261	50.0000	49.0720
73 4-Chlorotoluene	91	17.693	17.693	(0.955)	1177170	50.0000	46.4686
74 tert-Butylbenzene	119	18.009	18.009	(0.972)	970054	50.0000	47.9153
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	1025019	50.0000	50.7763
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	1456185	50.0000	49.3821
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	1076521	50.0000	50.5757
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	761638	50.0000	46.7886

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

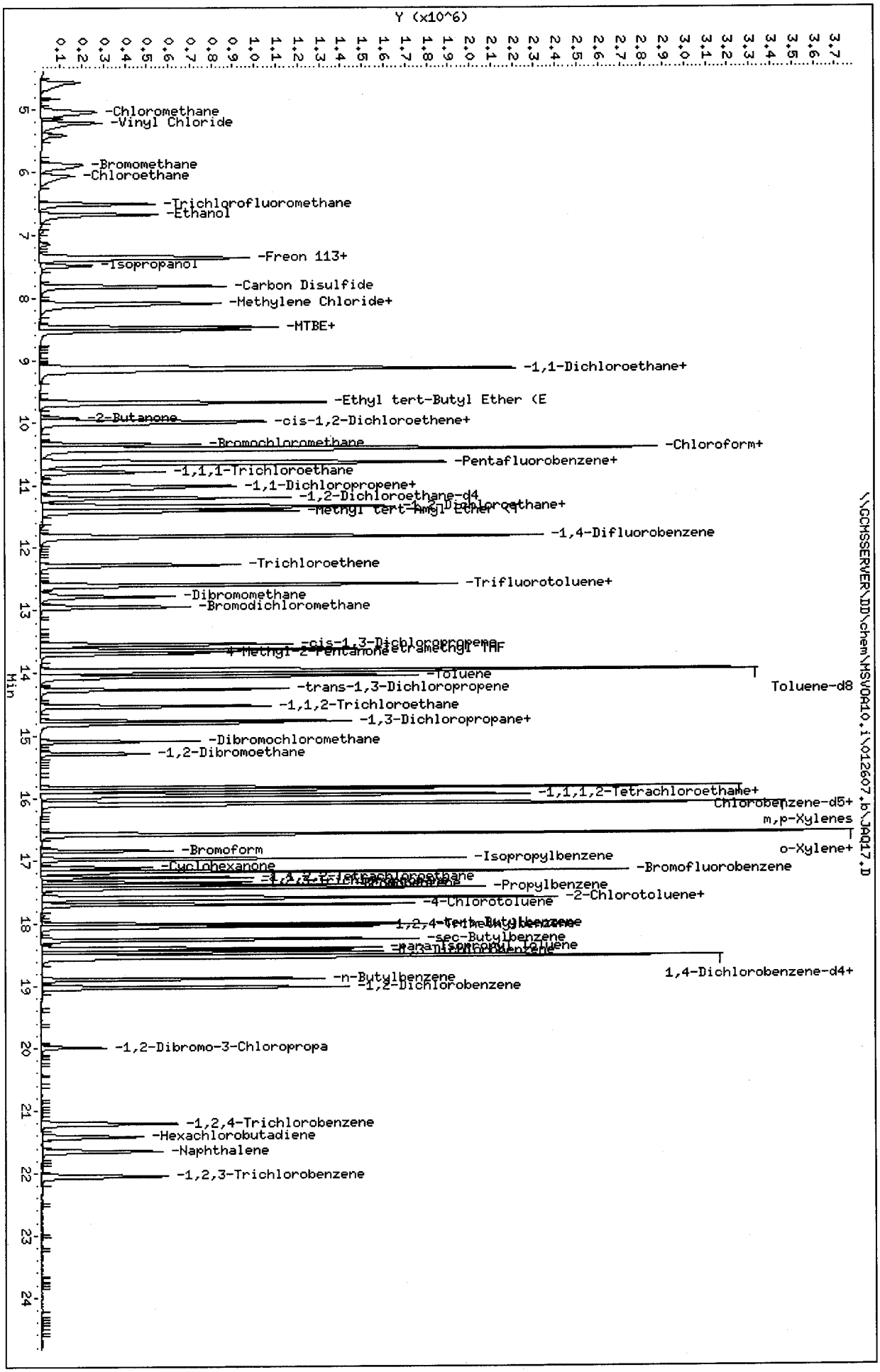
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	973680	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	779906	50.0000	46.6192
81 n-Butylbenzene	91	18.886	18.886	(1.020)	900061	50.0000	52.6447
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	752352	50.0000	47.8975
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	97414	50.0000	50.9462(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	320727	50.0000	51.1584(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	145319	50.0000	46.4429
86 Naphthalene	128	21.647	21.647	(1.169)	707854	50.0000	53.4092(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	312267	50.0000	52.7321

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Date : 26-JAN-2007 19:39
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5219,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:12 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.015/100,S5219,0.015/100
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:12 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:12 Cal File: JAQ18.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.564	4.564	(0.429)	809223	75.0000	85.8521
2 Chloromethane	50	5.048	5.048	(0.475)	1324306	75.0000	74.6772(M)
3 Vinyl Chloride	62	5.215	5.215	(0.490)	1054692	75.0000	77.7099
4 Bromomethane	94	5.895	5.895	(0.554)	632139	75.0000	80.1307
5 Chloroethane	64	6.073	6.073	(0.571)	622935	75.0000	76.6217
6 Trichlorofluoromethane	101	6.526	6.526	(0.614)	862577	75.0000	79.3061
7 Ethanol	45	6.684	6.684	(0.628)	1402318	7500.00	7368.5655
8 Freon 113	101	7.345	7.345	(0.690)	531114	75.0000	72.3689
9 Acetone	43	7.374	7.374	(0.693)	298898	75.0000	68.5015
10 1,1-Dichloroethene	96	7.384	7.384	(0.694)	559949	75.0000	71.6497
11 Isopropanol	45	7.493	7.493	(0.704)	620448	750.000	722.7494(M)
12 Carbon Disulfide	76	7.828	7.828	(0.736)	2500288	75.0000	71.4823
13 Methylene Chloride	84	8.094	8.094	(0.761)	752185	75.0000	73.1649
14 tert-Butyl Alcohol (TBA)	59	8.104	8.104	(0.762)	705157	750.000	725.8732
15 MTBE	73	8.479	8.479	(0.797)	2040096	75.0000	74.4501
16 trans-1,2-Dichloroethene	96	8.528	8.528	(0.802)	649716	75.0000	71.5130
18 Vinyl Acetate	43	9.110	9.110	(0.856)	2740359	75.0000	75.4739(M)
19 1,1-Dichloroethane	63	9.139	9.139	(0.859)	1300910	75.0000	70.4977
20 Isopropyl Ether (DIPE)	45	9.159	9.159	(0.861)	3477743	75.0000	71.7109
21 Ethyl tert-Butyl Ether (ETBE)	59	9.691	9.691	(0.911)	2557297	75.0000	74.0204
22 2-Butanone	43	9.928	9.928	(0.933)	502631	75.0000	70.4565
23 cis-1,2-Dichloroethene	96	9.997	9.997	(0.940)	699906	75.0000	72.1571

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.026	10.026	(0.943)	771300	75.0000	70.3981
	25 Bromochloromethane	128	10.362	10.362	(0.974)	358502	75.0000	74.3079
	26 Chloroform	83	10.421	10.421	(0.980)	1076170	75.0000	70.5527
	27 Tetrahydrofuran	42	10.431	10.431	(0.981)	2980679	750.000	623.9051
*	28 Pentafluorobenzene	168	10.638	10.638	(1.000)	1583882	50.0000	
	29 Dibromofluoromethane	113	10.667	10.667	(1.003)	861386	50.0000	49.7163
	30 1,1,1-Trichloroethane	97	10.795	10.795	(1.015)	723687	75.0000	72.2338
	31 1,1-Dichloropropene	75	11.022	11.022	(0.932)	843069	75.0000	72.7865
	32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	572881	75.0000	72.4149
	33 1,2-Dichloroethane-d4	65	11.210	11.210	(0.948)	992977	50.0000	49.7648
	34 1,2-Dichloroethane	62	11.318	11.318	(0.957)	950686	75.0000	74.2956
	35 Benzene	78	11.357	11.357	(0.961)	2622858	75.0000	72.3231
	36 Methyl tert-Amyl Ether (TAME)	73	11.417	11.417	(0.966)	1890516	75.0000	74.3857
*	37 1,4-Difluorobenzene	114	11.821	11.821	(1.000)	2523167	50.0000	
	38 Trichloroethene	95	12.274	12.274	(1.038)	612822	75.0000	71.8891
	39 Trifluorotoluene	146	12.590	12.590	(1.065)	893804	75.0000	73.8521
	40 1,2-Dichloropropane	63	12.600	12.600	(1.066)	815449	75.0000	72.3220
	41 Dibromomethane	93	12.777	12.777	(1.081)	465912	75.0000	76.1038
	42 Bromodichloromethane	83	12.945	12.945	(1.095)	862862	75.0000	75.9466
	44 cis-1,3-Dichloropropene	75	13.556	13.556	(1.147)	1172349	75.0000	75.3877
	45 Tetramethyl THF	43	13.635	13.635	(1.153)	1938432	75.0000	72.8311
	46 4-Methyl-2-Pentanone	43	13.694	13.694	(1.158)	1286035	75.0000	76.7639
	47 Toluene-d8	98	13.960	13.960	(1.181)	2707504	50.0000	49.8668
	48 Toluene	92	14.059	14.059	(1.189)	1476833	75.0000	71.5253
	49 trans-1,3-Dichloropropene	75	14.256	14.256	(1.206)	1051431	75.0000	77.0868
	50 1,1,2-Trichloroethane	85	14.522	14.522	(1.229)	352724	75.0000	76.1350
	51 1,3-Dichloropropane	76	14.759	14.759	(0.933)	1109668	75.0000	74.7288
	52 2-Hexanone	43	14.779	14.779	(0.934)	697186	75.0000	73.5421
	53 Tetrachloroethene	166	14.808	14.808	(0.936)	560386	75.0000	73.4089
	54 Dibromochloromethane	129	15.084	15.084	(0.953)	675604	75.0000	77.3288
	55 1,2-Dibromoethane	107	15.272	15.272	(1.292)	676189	75.0000	77.6137
*	56 Chlorobenzene-d5	117	15.824	15.824	(1.000)	2059262	50.0000	
	57 Chlorobenzene	112	15.863	15.863	(1.002)	1613995	75.0000	74.2735
	58 1,1,1,2-Tetrachloroethane	131	15.932	15.932	(1.007)	546211	75.0000	75.6672
	59 Ethylbenzene	91	15.952	15.952	(1.008)	2642627	75.0000	73.2613
	60 m,p-Xylenes	106	16.080	16.080	(1.016)	1936065	150.000	147.6060
	61 o-Xylene	106	16.573	16.573	(1.047)	960156	75.0000	73.8321
	62 Styrene	104	16.573	16.573	(1.047)	1730073	75.0000	77.3700
	63 Bromoform	173	16.839	16.839	(1.064)	500229	75.0000	73.7109
	64 Isopropylbenzene	105	16.977	16.977	(0.917)	2283744	75.0000	72.0115
	65 Cyclohexanone	55	17.115	17.115	(0.924)	408440	750.000	650.2945
	66 Bromofluorobenzene	95	17.174	17.174	(0.928)	1129755	50.0000	48.1846
	67 1,1,2,2-Tetrachloroethane	83	17.263	17.263	(0.932)	908682	75.0000	72.1862
	68 1,2,3-Trichloropropane	75	17.352	17.352	(0.937)	817034	75.0000	69.4913(M)
	69 Bromobenzene	156	17.391	17.391	(0.939)	690715	75.0000	74.2410
	70 Propylbenzene	91	17.431	17.431	(0.941)	2929723	75.0000	75.0433
	71 2-Chlorotoluene	91	17.589	17.589	(0.950)	1996875	75.0000	72.0227
	72 1,3,5-Trimethylbenzene	105	17.608	17.608	(0.951)	1770129	75.0000	77.6875
	73 4-Chlorotoluene	91	17.697	17.697	(0.956)	1902006	75.0000	73.8152
	74 tert-Butylbenzene	119	18.003	18.003	(0.972)	1586626	75.0000	77.0489
	75 1,2,4-Trimethylbenzene	105	18.052	18.052	(0.975)	1674992	75.0000	81.5747
	76 sec-Butylbenzene	105	18.259	18.259	(0.986)	2290862	75.0000	76.3775
	77 para-Isopropyl Toluene	119	18.397	18.397	(0.994)	1756199	75.0000	81.1159
	78 1,3-Dichlorobenzene	146	18.456	18.456	(0.997)	1238664	75.0000	74.8098

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

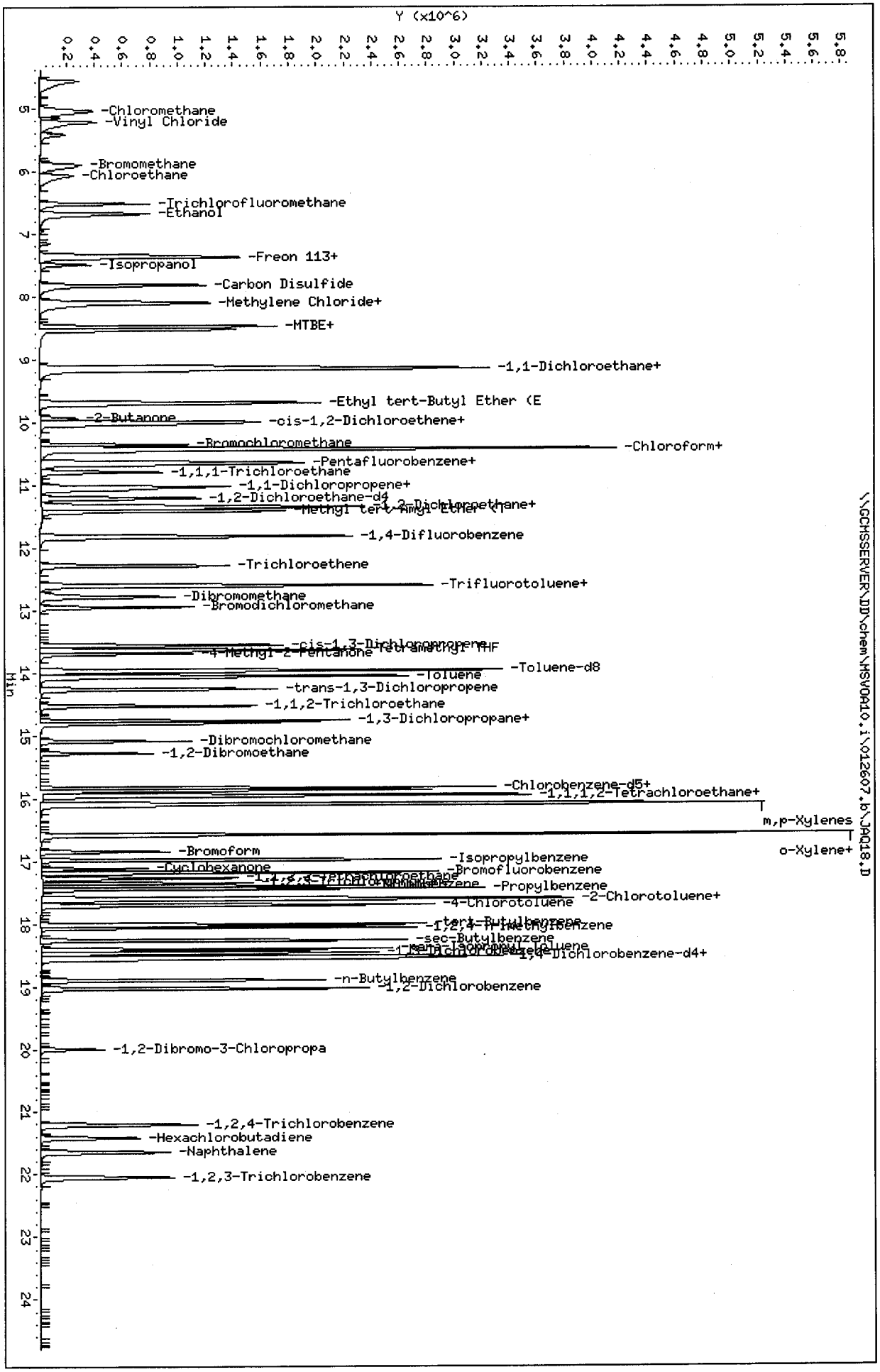
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.515	18.515	(1.000)	990383	50.0000	
80 1,4-Dichlorobenzene	146	18.545	18.545	(1.002)	1258167	75.0000	73.9392
81 n-Butylbenzene	91	18.880	18.880	(1.020)	1447562	75.0000	83.2402
82 1,2-Dichlorobenzene	146	19.018	19.018	(1.027)	1204009	75.0000	75.3589
83 1,2-Dibromo-3-Chloropropane	75	19.984	19.984	(1.079)	156657	75.0000	80.5478(M)
84 1,2,4-Trichlorobenzene	180	21.207	21.207	(1.145)	549002	75.0000	86.0931(M)
85 Hexachlorobutadiene	225	21.424	21.424	(1.157)	218719	75.0000	68.7222(M)
86 Naphthalene	128	21.651	21.651	(1.169)	1166161	75.0000	86.5057
87 1,2,3-Trichlorobenzene	180	22.055	22.055	(1.191)	526972	75.0000	87.4882

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Date : 26-JAN-2007 20:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5219,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:44 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.02/100,S5219,0.02/100
Misc Info : S4172,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:13 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:44 Cal File: JAQ19.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	1101474	100.000	115.8100
2 Chloromethane	50	5.054	5.054	(0.475)	1728322	100.000	96.5858(M)
3 Vinyl Chloride	62	5.212	5.212	(0.490)	1405434	100.000	102.6243(M)
4 Bromomethane	94	5.902	5.902	(0.555)	857330	100.000	107.7019(M)
5 Chloroethane	64	6.070	6.070	(0.571)	827102	100.000	100.8224(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	1157557	100.000	105.4728
7 Ethanol	45	6.681	6.681	(0.628)	1981668	10000.0	10319.4444
8 Freon 113	101	7.352	7.352	(0.691)	808125	100.000	109.1269
9 Acetone	43	7.371	7.371	(0.693)	429094	100.000	97.4582
10 1,1-Dichloroethene	96	7.381	7.381	(0.694)	785094	100.000	99.5581
11 Isopropanol	45	7.490	7.490	(0.704)	904604	1000.00	1044.3109
12 Carbon Disulfide	76	7.825	7.825	(0.736)	3510437	100.000	99.4623
13 Methylene Chloride	84	8.091	8.091	(0.761)	1018464	100.000	98.1777(M)
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.762)	1045965	1000.00	1067.0409
15 MTBE	73	8.476	8.476	(0.797)	2783984	100.000	100.6864
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.802)	904479	100.000	98.6618
18 Vinyl Acetate	43	9.107	9.107	(0.856)	3568990	100.000	97.4145(M)
19 1,1-Dichloroethane	63	9.136	9.136	(0.859)	1773356	100.000	95.2385
20 Isopropyl Ether (DIPE)	45	9.156	9.156	(0.861)	4661169	100.000	95.2514
21 Ethyl tert-Butyl Ether (ETBE)	59	9.688	9.688	(0.911)	3510091	100.000	100.6880
22 2-Butanone	43	9.925	9.925	(0.933)	729524	100.000	101.3445
23 cis-1,2-Dichloroethene	96	9.994	9.994	(0.940)	951950	100.000	97.2619

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.024	10.024	(0.943)	1068977	100.000	96.6930
	25 Bromochloromethane	128	10.359	10.359	(0.974)	496480	100.000	101.9845
	26 Chloroform	83	10.418	10.418	(0.980)	1450169	100.000	94.2195
	27 Tetrahydrofuran	42	10.428	10.428	(0.981)	4159209	1000.00	862.7859
*	28 Pentafluorobenzene	168	10.635	10.635	(1.000)	1598210	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.003)	875112	50.0000	50.0557
	30 1,1,1-Trichloroethane	97	10.793	10.793	(1.015)	1033090	100.000	102.1920
	31 1,1-Dichloropropene	75	11.019	11.019	(0.932)	1198179	100.000	101.1903
	32 Carbon Tetrachloride	117	11.069	11.069	(0.937)	826457	100.000	102.1913
	33 1,2-Dichloroethane-d4	65	11.207	11.207	(0.948)	1017063	50.0000	49.8609
	34 1,2-Dichloroethane	62	11.315	11.315	(0.957)	1290572	100.000	98.6593
	35 Benzene	78	11.355	11.355	(0.961)	3565097	100.000	96.1620
	36 Methyl tert-Amyl Ether (TAME)	73	11.414	11.414	(0.966)	2595503	100.000	99.8988
*	37 1,4-Difluorobenzene	114	11.818	11.818	(1.000)	2579386	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	851032	100.000	97.6573
	39 Trifluorotoluene	146	12.587	12.587	(1.065)	1269449	100.000	102.6042
	40 1,2-Dichloropropane	63	12.597	12.597	(1.066)	1090870	100.000	94.6403
	41 Dibromomethane	93	12.774	12.774	(1.081)	630451	100.000	100.7357
	42 Bromodichloromethane	83	12.942	12.942	(1.095)	1158482	100.000	99.7439
	44 cis-1,3-Dichloropropene	75	13.553	13.553	(1.147)	1582601	100.000	99.5508
	45 Tetramethyl THF	43	13.632	13.632	(1.153)	2630251	100.000	96.6703
	46 4-Methyl-2-Pentanone	43	13.691	13.691	(1.159)	1814480	100.000	105.9465
	47 Toluene-d8	98	13.957	13.957	(1.181)	2747656	50.0000	49.5033
	48 Toluene	92	14.056	14.056	(1.189)	1966809	100.000	93.1794
	49 trans-1,3-Dichloropropene	75	14.253	14.253	(1.206)	1412656	100.000	101.3131
	50 1,1,2-Trichloroethane	85	14.519	14.519	(1.229)	471432	100.000	99.5401
	51 1,3-Dichloropropane	76	14.756	14.756	(0.933)	1507242	100.000	100.7873
	52 2-Hexanone	43	14.776	14.776	(0.934)	995713	100.000	104.2916
	53 Tetrachloroethene	166	14.805	14.805	(0.936)	781562	100.000	101.6607
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	916608	100.000	104.1743
	55 1,2-Dibromoethane	107	15.269	15.269	(1.292)	914347	100.000	102.6623
*	56 Chlorobenzene-d5	117	15.821	15.821	(1.000)	2073881	50.0000	
	57 Chlorobenzene	112	15.860	15.860	(1.002)	2121995	100.000	96.9625
	58 1,1,1,2-Tetrachloroethane	131	15.929	15.929	(1.007)	737484	100.000	101.4443
	59 Ethylbenzene	91	15.949	15.949	(1.008)	3506376	100.000	96.5217
	60 m,p-Xylenes	106	16.087	16.087	(1.017)	2588486	200.000	195.9556
	61 o-Xylene	106	16.570	16.570	(1.047)	1263431	100.000	96.4679
	62 Styrene	104	16.570	16.570	(1.047)	2257571	100.000	100.2484
	63 Bromoform	173	16.836	16.836	(1.064)	681020	100.000	99.6439
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	3148817	100.000	98.7673
	65 Cyclohexanone	55	17.112	17.112	(0.924)	709360	1000.00	1123.4657
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1140071	50.0000	48.3690
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.933)	1227449	100.000	96.9968
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	1105119	100.000	93.4999(M)
	69 Bromobenzene	156	17.388	17.388	(0.939)	896727	100.000	95.8774
	70 Propylbenzene	91	17.428	17.428	(0.941)	3978203	100.000	101.3639
	71 2-Chlorotoluene	91	17.586	17.586	(0.950)	2646632	100.000	94.9562
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	2376912	100.000	103.7698
	73 4-Chlorotoluene	91	17.694	17.694	(0.956)	2450484	100.000	94.6013
	74 tert-Butylbenzene	119	18.010	18.010	(0.973)	2198205	100.000	106.1870
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.975)	2255483	100.000	109.2682
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	3295336	100.000	109.2892
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.994)	2464620	100.000	113.2384
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.997)	1599483	100.000	96.0939

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	995616	50.0000	
80 1,4-Dichlorobenzene	146	18.542	18.542	(1.002)	1620839	100.000	94.7518
81 n-Butylbenzene	91	18.887	18.887	(1.020)	2083695	100.000	119.1905
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1555453	100.000	96.8440
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	213279	100.000	109.0846(M)
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	732219	100.000	114.2212
85 Hexachlorobutadiene	225	21.421	21.421	(1.157)	353650	100.000	110.5339(M)
86 Naphthalene	128	21.648	21.648	(1.169)	1604819	100.000	118.4196
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	687735	100.000	113.5780

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Date : 26-JAN-2007 20:44
Client ID: DYNA P&T
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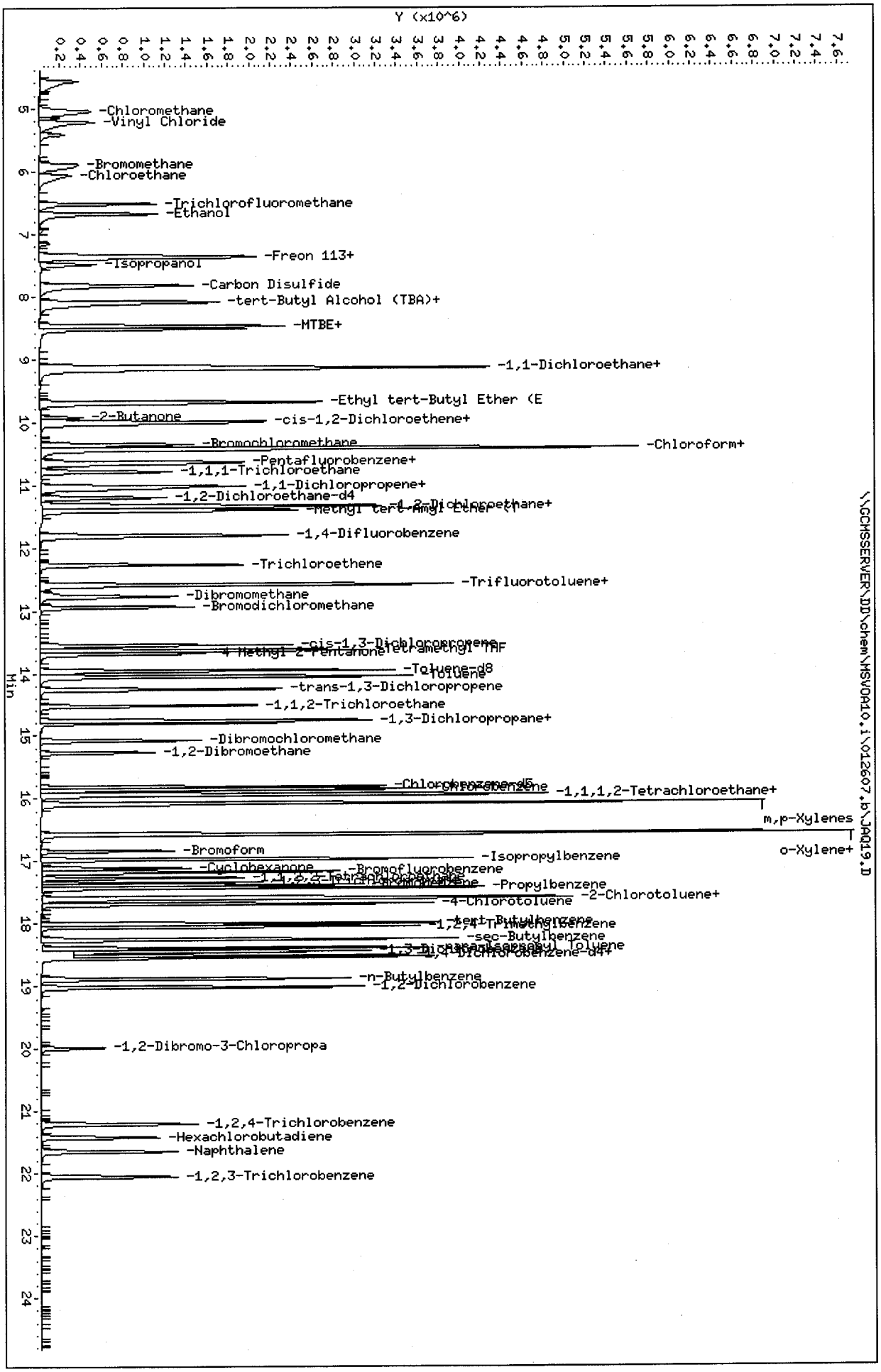
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: 30PPB IDF : 1.0
Seqnum : 437104436005 File : dcd05 Time : 13-MAR-2007 15:14
Cal : 437102839004 Caldate : 13-MAR-2007 Caltype : WATER
Standards: S5618 (16670X), S5595 (16670X), S5194 (33330X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	1.2581	1.2019	30.00	28.66	ug/L	-4	30	0.1000	
Vinyl Chloride	0.9833	1.0196	30.00	31.11	ug/L	4	20	0.0500	
Bromomethane	0.6481	0.6086	30.00	28.17	ug/L	-6	30	0.0500	
Chloroethane	0.5611	0.5315	30.00	28.42	ug/L	-5	30	0.0500	
Acetone	0.4783	0.4831	30.00	30.30	ug/L	1	40	0.0500	
1,1-Dichloroethene	0.6484	0.5329	30.00	24.66	ug/L	-18	20	0.0500	
Methylene Chloride	0.8156	0.7597	30.00	27.94	ug/L	-7	30	0.0500	
Carbon Disulfide	2.3341	2.0945	30.00	26.92	ug/L	-10	30	0.0500	
MTBE	2.1818	2.3556	30.00	32.39	ug/L	8	30	0.0500	
trans-1,2-Dichloroethene	0.6917	0.6280	30.00	27.24	ug/L	-9	30	0.0500	
Vinyl Acetate	1.9264	2.1050	30.00	32.78	ug/L	9	40	0.0500	
1,1-Dichloroethane	1.4170	1.3668	30.00	28.94	ug/L	-4	30	0.1000	
2-Butanone	0.5068	0.4930	30.00	29.18	ug/L	-3	40	0.0500	
cis-1,2-Dichloroethene	0.7536	0.6850	30.00	27.27	ug/L	-9	30	0.0500	
Chloroform	1.4584	1.4055	30.00	28.91	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.9777	1.0478	30.00	32.15	ug/L	7	30	0.0500	
Carbon Tetrachloride	0.4563	0.5438	30.00	35.76	ug/L	19	30	0.0500	
1,2-Dichloroethane	0.8920	0.8393	30.00	28.23	ug/L	-6	30	0.0500	
Benzene	1.7475	1.6298	30.00	27.98	ug/L	-7	30	0.0500	
Trichloroethene	0.4927	0.4684	30.00	28.52	ug/L	-5	30	0.0500	
1,2-Dichloropropane	0.5419	0.5006	30.00	27.71	ug/L	-8	20	0.0500	
Bromodichloromethane	0.6937	0.7682	30.00	33.22	ug/L	11	30	0.0500	
4-Methyl-2-Pentanone	0.6014	0.5935	30.00	29.60	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.7139	0.7709	30.00	32.40	ug/L	8	30	0.0500	
Toluene	0.9913	0.9689	30.00	29.32	ug/L	-2	20	0.0500	
trans-1,3-Dichloropropene	0.6888	0.7793	30.00	33.94	ug/L	13	30	0.0500	
1,1,2-Trichloroethane	0.2522	0.2522	30.00	30.00	ug/L	0	30	0.0500	
2-Hexanone	0.3978	0.3723	30.00	28.07	ug/L	-6	40	0.0500	
Tetrachloroethene	0.4872	0.4775	30.00	29.40	ug/L	-2	30	0.0500	
Dibromochloromethane	0.4976	0.5609	30.00	30.47	ug/L	2	30	0.0500	
Chlorobenzene	1.1366	1.0901	30.00	28.77	ug/L	-4	30	0.3000	
Ethylbenzene	2.1468	2.0393	30.00	28.50	ug/L	-5	20	0.0500	
m,p-Xylenes	0.7116	0.7013	60.00	59.13	ug/L	-1	30	0.0500	
o-Xylene	0.7423	0.7240	30.00	29.26	ug/L	-2	30	0.0500	
Styrene	1.2087	1.1923	30.00	29.59	ug/L	-1	30	0.0500	
Bromoform	0.3242	0.3933	30.00	30.63	ug/L	2	30	0.1000	
1,1,2,2-Tetrachloroethane	1.2648	1.2323	30.00	29.23	ug/L	-3	30	0.3000	
Dibromofluoromethane	0.5929	0.6052	50.00	51.04	ug/L	2	30	0.0500	
1,2-Dichloroethane-d4	0.6012	0.5928	50.00	49.29	ug/L	-1	30	0.0500	
Toluene-d8	1.1380	1.1272	50.00	49.53	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.2085	1.1406	50.00	47.19	ug/L	-6	30	0.0500	

ISTD (ICAL dcc23)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	728526	727172	-0.19	10.52	10.52	0.00
1,4-Difluorobenzene	1119087	1106006	-1.17	11.65	11.66	0.01
Chlorobenzene-d5	981704	999817	1.85	15.72	15.72	0.00
1,4-Dichlorobenzene-d4	549218	546967	-0.41	18.47	18.47	0.00

WNH 03/14/07 : Calibrated for 8010, 8020, and 8260-short list only

Analyst: WNH Date: 03/14/07 Reviewer: LW Date: 03/15/07

437104436005

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC378062 IDF : 1.0
Seqnum : 447096916010.5 File : ec810 Time : 08-MAR-2007 11:36
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (9091X), S5614 (9091X), S5422 (9091X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7962	27.50	23.70	ug/L	-14	30	0.1000	u
Vinyl Chloride	0.6995	0.6535	27.50	25.69	ug/L	-7	20	0.0500	u
Bromomethane	0.4143	0.3975	27.50	26.39	ug/L	-4	30	0.0500	u
Chloroethane	0.3917	0.4017	27.50	28.20	ug/L	3	30	0.0500	u
Acetone	0.2753	0.2187	27.50	21.85	ug/L	-21	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3838	27.50	30.73	ug/L	12	20	0.0500	u
Methylene Chloride	0.5327	0.4958	27.50	25.60	ug/L	-7	30	0.0500	u
Carbon Disulfide	1.5714	1.0704	27.50	18.73	ug/L	**-32**	30	0.0500	c- u ***
MTBE	1.6725	1.4879	27.50	24.47	ug/L	-11	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4530	27.50	27.64	ug/L	0	30	0.0500	u
Vinyl Acetate	1.5725	1.5914	27.50	27.83	ug/L	1	40	0.0500	u
1,1-Dichloroethane	0.9505	0.9993	27.50	28.91	ug/L	5	30	0.1000	u
2-Butanone	0.5135	0.4032	27.50	21.59	ug/L	-21	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.5807	27.50	24.36	ug/L	-11	30	0.0500	u
Chloroform	1.0380	0.9198	27.50	24.37	ug/L	-11	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6944	27.50	28.26	ug/L	3	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3108	27.50	32.15	ug/L	17	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4699	27.50	25.87	ug/L	-6	30	0.0500	u
Benzene	1.3466	1.2292	27.50	25.10	ug/L	-9	30	0.0500	u
Trichloroethene	0.3340	0.3099	27.50	25.51	ug/L	-7	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3467	27.50	22.55	ug/L	-18	20	0.0500	u
Bromodichloromethane	0.4914	0.4646	27.50	26.00	ug/L	-5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5049	27.50	21.58	ug/L	-22	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5362	27.50	23.12	ug/L	-16	30	0.0500	u
Toluene	0.8216	0.7646	27.50	25.59	ug/L	-7	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.4663	27.50	21.61	ug/L	**-21**	30	0.0500	!c- u
1,1,2-Trichloroethane	0.2020	0.1740	27.50	23.69	ug/L	-14	30	0.0500	u
2-Hexanone	0.5472	0.4159	27.50	20.91	ug/L	-24	40	0.0500	u
Tetrachloroethene	0.2838	0.3249	27.50	31.48	ug/L	14	30	0.0500	u
Dibromochloromethane	0.4287	0.3769	27.50	24.18	ug/L	-12	30	0.0500	u
Chlorobenzene	1.0173	0.8928	27.50	24.13	ug/L	-12	30	0.3000	u
Ethylbenzene	1.7142	1.6006	27.50	25.68	ug/L	-7	20	0.0500	u
m,p-Xylenes	0.6280	0.5979	55.00	52.36	ug/L	-5	30	0.0500	u
o-Xylene	0.6326	0.5853	27.50	25.44	ug/L	-7	30	0.0500	u
Styrene	1.1734	1.0393	27.50	24.36	ug/L	-11	30	0.0500	u
Bromoform	0.3263	0.2850	27.50	24.02	ug/L	-13	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.0339	27.50	21.48	ug/L	**-22**	30	0.3000	!c- u
Dibromofluoromethane	0.5927	0.5728	50.00	48.32	ug/L	-3	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4348	50.00	54.27	ug/L	9	30	0.0500	u
Toluene-d8	1.1589	1.1304	50.00	48.77	ug/L	-2	30	0.0500	u
Bromofluorobenzene	1.2864	1.1866	50.00	46.12	ug/L	-8	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	785522	26.12	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	1234433	19.75	11.18	11.16	-0.02
Chlorobenzene-d5	882637	1064341	20.59	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	531739	29.17	17.97	17.96	-0.01

Analyst: WNH Date: 03/16/07 Reviewer: LW Date: 03/16/07

!=warning -=low bias c=CCV u=use

447096916010.5

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 30PPB IDF : 1.0
Seqnum : 497107091003 File : jcf03 Time : 15-MAR-2007 09:37
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (16670X), S5430 (16670X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6371	30.00	34.14	ug/L	14	30	0.1000	
Vinyl Chloride	0.4284	0.4748	30.00	33.25	ug/L	11	20	0.0500	
Bromomethane	0.2490	0.2459	30.00	29.62	ug/L	-1	30	0.0500	
Chloroethane	0.2566	0.2931	30.00	34.26	ug/L	14	30	0.0500	
Acetone	0.1377	0.1526	30.00	33.24	ug/L	11	40	0.0500	
1,1-Dichloroethene	0.2467	0.2112	30.00	25.68	ug/L	-14	20	0.0500	
Methylene Chloride	0.3245	0.3213	30.00	29.70	ug/L	-1	30	0.0500	
Carbon Disulfide	1.1042	0.8270	30.00	22.47	ug/L	**-25**	30	0.0500	!c-
MTBE	0.8650	0.8515	30.00	29.53	ug/L	-2	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.2734	30.00	28.60	ug/L	-5	30	0.0500	
Vinyl Acetate	1.1462	1.0872	30.00	28.46	ug/L	-5	40	0.0500	m
1,1-Dichloroethane	0.5825	0.5761	30.00	29.67	ug/L	-1	30	0.1000	
2-Butanone	0.2252	0.2297	30.00	30.60	ug/L	2	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3123	30.00	30.60	ug/L	2	30	0.0500	
Chloroform	0.4815	0.4966	30.00	30.94	ug/L	3	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3325	30.00	31.54	ug/L	5	30	0.0500	
Carbon Tetrachloride	0.1568	0.1593	30.00	30.49	ug/L	2	30	0.0500	
1,2-Dichloroethane	0.2536	0.2613	30.00	30.91	ug/L	3	30	0.0500	
Benzene	0.7187	0.7342	30.00	30.65	ug/L	2	30	0.0500	
Trichloroethene	0.1689	0.1769	30.00	31.42	ug/L	5	30	0.0500	
1,2-Dichloropropane	0.2234	0.2293	30.00	30.79	ug/L	3	20	0.0500	
Bromodichloromethane	0.2251	0.2345	30.00	31.25	ug/L	4	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3285	30.00	29.68	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3234	30.00	31.49	ug/L	5	30	0.0500	
Toluene	0.4092	0.4266	30.00	31.28	ug/L	4	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2852	30.00	31.65	ug/L	6	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.1000	30.00	32.67	ug/L	9	30	0.0500	
2-Hexanone	0.2302	0.2082	30.00	27.14	ug/L	-10	40	0.0500	
Tetrachloroethene	0.1854	0.2007	30.00	32.48	ug/L	8	30	0.0500	
Dibromochloromethane	0.2121	0.2140	30.00	30.26	ug/L	1	30	0.0500	
Chlorobenzene	0.5276	0.5423	30.00	30.83	ug/L	3	30	0.3000	
Ethylbenzene	0.8758	0.8842	30.00	30.29	ug/L	1	20	0.0500	
m,p-Xylenes	0.3185	0.3267	60.00	61.55	ug/L	3	30	0.0500	
o-Xylene	0.3158	0.3289	30.00	31.25	ug/L	4	30	0.0500	
Styrene	0.5429	0.5708	30.00	31.54	ug/L	5	30	0.0500	
Bromoform	0.1648	0.1679	30.00	30.57	ug/L	2	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5480	30.00	25.87	ug/L	-14	30	0.3000	
Dibromofluoromethane	0.5469	0.5482	50.00	50.11	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3751	50.00	47.44	ug/L	-5	30	0.0500	
Toluene-d8	1.0759	1.0927	50.00	50.78	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1837	1.0707	50.00	45.23	ug/L	-10	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1547110	-0.54	10.64	10.62	-0.02
1,4-Difluorobenzene	2525036	2538675	0.54	11.82	11.80	-0.02
Chlorobenzene-d5	2054473	2230466	8.57	15.83	15.83	0.00
1,4-Dichlorobenzene-d4	973680	1143932	17.49	18.52	18.52	0.00

Analyst: ACM Date: 03/15/07 Reviewer: LW Date: 03/16/07

!=warning -=low bias c=CCV m=manual integration

497107091003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193174 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 30PPB IDF : 1.0
Seqnum : 497107091009 File : jcf09 Time : 15-MAR-2007 12:30
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5618 (16670X), S5617 (16670X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.6178	30.00	33.11	ug/L	10	30	0.1000	
Vinyl Chloride	0.4284	0.4443	30.00	31.11	ug/L	4	20	0.0500	
Bromomethane	0.2490	0.2742	30.00	33.04	ug/L	10	30	0.0500	
Chloroethane	0.2566	0.2926	30.00	34.20	ug/L	14	30	0.0500	
Acetone	0.1377	0.1530	30.00	33.32	ug/L	11	40	0.0500	
1,1-Dichloroethene	0.2467	0.2125	30.00	25.84	ug/L	-14	20	0.0500	
Methylene Chloride	0.3245	0.3252	30.00	30.06	ug/L	0	30	0.0500	
Carbon Disulfide	1.1042	0.8015	30.00	21.78	ug/L	**-27**	30	0.0500	!c-
MTBE	0.8650	0.8648	30.00	29.99	ug/L	0	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.2735	30.00	28.61	ug/L	-5	30	0.0500	
Vinyl Acetate	1.1462	1.1719	30.00	30.67	ug/L	2	40	0.0500	m
1,1-Dichloroethane	0.5825	0.5844	30.00	30.10	ug/L	0	30	0.1000	
2-Butanone	0.2252	0.2259	30.00	30.09	ug/L	0	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3164	30.00	31.00	ug/L	3	30	0.0500	
Chloroform	0.4815	0.4990	30.00	31.09	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3192	30.00	30.28	ug/L	1	30	0.0500	
Carbon Tetrachloride	0.1568	0.1625	30.00	31.09	ug/L	4	30	0.0500	
1,2-Dichloroethane	0.2536	0.2556	30.00	30.24	ug/L	1	30	0.0500	
Benzene	0.7187	0.7302	30.00	30.48	ug/L	2	30	0.0500	
Trichloroethene	0.1689	0.1737	30.00	30.84	ug/L	3	30	0.0500	
1,2-Dichloropropane	0.2234	0.2283	30.00	30.65	ug/L	2	20	0.0500	
Bromodichloromethane	0.2251	0.2338	30.00	31.16	ug/L	4	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3249	30.00	29.36	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3228	30.00	31.43	ug/L	5	30	0.0500	
Toluene	0.4092	0.4224	30.00	30.97	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2857	30.00	31.71	ug/L	6	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.0985	30.00	32.19	ug/L	7	30	0.0500	
2-Hexanone	0.2302	0.2015	30.00	26.26	ug/L	-12	40	0.0500	
Tetrachloroethene	0.1854	0.1926	30.00	31.18	ug/L	4	30	0.0500	
Dibromochloromethane	0.2121	0.2154	30.00	30.46	ug/L	2	30	0.0500	
Chlorobenzene	0.5276	0.5249	30.00	29.85	ug/L	-1	30	0.3000	
Ethylbenzene	0.8758	0.8797	30.00	30.13	ug/L	0	20	0.0500	
m,p-Xylenes	0.3185	0.3230	60.00	60.86	ug/L	1	30	0.0500	
o-Xylene	0.3158	0.3091	30.00	29.36	ug/L	-2	30	0.0500	
Styrene	0.5429	0.5639	30.00	31.16	ug/L	4	30	0.0500	
Bromoform	0.1648	0.1628	30.00	29.64	ug/L	-1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5571	30.00	26.30	ug/L	-12	30	0.3000	
Dibromofluoromethane	0.5469	0.5358	50.00	48.98	ug/L	-2	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3743	50.00	47.33	ug/L	-5	30	0.0500	
Toluene-d8	1.0759	1.0778	50.00	50.09	ug/L	0	30	0.0500	
Bromofluorobenzene	1.1837	1.1049	50.00	46.67	ug/L	-7	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1552885	-0.17	10.64	10.63	-0.01
1,4-Difluorobenzene	2525036	2507575	-0.69	11.82	11.81	-0.01
Chlorobenzene-d5	2054473	2217029	7.91	15.83	15.82	-0.01
1,4-Dichlorobenzene-d4	973680	1111587	14.16	18.52	18.51	-0.01

Analyst: ACM Date: 03/15/07 Reviewer: LW Date: 03/16/07

!=warning -=low bias c=CCV m=manual integration

497107091009

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 437104436

Date : 03/13/07 Reference: dcc23
Sequence : MSVOA04 dcd Analyzed : 03/13/07 03:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	728526	10.52	1119087	11.65	981704	15.72	549218	18.47
		LOWER LIMIT	364263	10.02	559544	11.15	490852	15.22	274609	17.97
		UPPER LIMIT	1457052	11.02	2238174	12.15	1963408	16.22	1098436	18.97
005	CCV	30PPB	727172	10.52	1106006	11.66	999817	15.72	546967	18.47
006	BS	QC379029	739604	10.53	1135958	11.66	1006040	15.73	538069	18.47
007	BSD	QC379030	719353	10.52	1104389	11.66	967345	15.72	519010	18.47
009	BLANK	QC379031	723658	10.51	1082486	11.66	947061	15.72	355768	18.47
010	SAMPLE	193174-020	712349	10.52	1088843	11.65	943010	15.72	348628	18.47
011	SAMPLE	193174-009	701079	10.52	1045308	11.65	928939	15.72	317867	18.47
012	SAMPLE	193174-010	708884	10.53	1071907	11.66	959689	15.72	326596	18.47
013	SAMPLE	193174-011	728919	10.53	1108939	11.66	971201	15.72	343681	18.47
014	SAMPLE	193174-012	639011	10.51	966176	11.65	855213	15.71	281066	18.47
015	SAMPLE	193174-013	624600	10.52	953496	11.65	851164	15.72	280264	18.46
016	SAMPLE	193174-014	651135	10.51	996057	11.64	888705	15.71	281376	18.47
017	SAMPLE	193174-015	624150	10.51	947358	11.65	846524	15.71	263181 *	18.46
018	SAMPLE	193174-016	626598	10.51	970141	11.65	851743	15.72	269207 *	18.46
019	SAMPLE	193174-017	623945	10.52	952586	11.65	843445	15.72	262711 *	18.46
020	SAMPLE	193174-018	608924	10.51	918233	11.65	821377	15.72	239673 *	18.46
021	SAMPLE	193174-019	600333	10.52	929101	11.65	824442	15.72	252098 *	18.46

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447096916

Date : 03/08/07 Reference: ea916
Sequence : MSVOA05 ec8 Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
006	SAMPLE	193174-001	755318	10.05	1194071	11.17	1043644	15.24	494375	17.96
010	CCV/LCS	QC378062	785522	10.04	1234433	11.16	1064341	15.24	531739	17.96
012	BLANK	QC378063	769888	10.04	1203885	11.17	1055284	15.24	505730	17.96
013	SAMPLE	193174-001	757309	10.05	1189877	11.17	1046647	15.24	500155	17.96
014	SAMPLE	193174-002	758518	10.04	1201099	11.17	1042760	15.24	506978	17.96
015	SAMPLE	193174-003	766141	10.04	1204175	11.17	1055143	15.24	508687	17.96
016	SAMPLE	193174-004	771804	10.05	1214963	11.17	1056521	15.24	498792	17.96
017	SAMPLE	193174-005	775586	10.04	1227450	11.18	1070486	15.24	501073	17.96
018	SAMPLE	193174-006	761338	10.05	1214989	11.17	1062050	15.24	504268	17.96
019	SAMPLE	193174-007	763160	10.04	1193630	11.18	1054639	15.25	498797	17.97
020	SAMPLE	193174-008	759838	10.04	1197778	11.17	1055653	15.24	503827	17.96
021	MSS	193108-023	761369	10.05	1209465	11.17	1058519	15.24	506684	17.96
022	SAMPLE	193108-024	752941	10.04	1190513	11.17	1048211	15.24	500236	17.97
023	SAMPLE	193108-025	753425	10.04	1180444	11.17	1055205	15.24	504184	17.96
024	SAMPLE	193108-026	755461	10.05	1185634	11.17	1044599	15.24	504463	17.96
025	SAMPLE	193108-027	760380	10.04	1196983	11.17	1052497	15.24	508633	17.96
026	SAMPLE	193194-003	756414	10.04	1200676	11.17	1041634	15.24	497805	17.97
027	SAMPLE	193225-007	760237	10.04	1208636	11.17	1037073	15.24	500786	17.96
028	SAMPLE	193157-001	757772	10.04	1192504	11.17	1051605	15.25	494926	17.97
029	SAMPLE	193166-020	756583	10.05	1201050	11.17	1054670	15.24	499385	17.96
030	MS	QC378166	759163	10.05	1202423	11.17	1049394	15.24	517163	17.96
031	MSD	QC378167	761798	10.05	1207734	11.17	1057893	15.24	517701	17.96
035	SAMPLE	193050-001	753172	10.05	1181958	11.17	1035052	15.24	490606	17.96
036	SAMPLE	193050-002	753095	10.04	1183018	11.17	1045485	15.24	494660	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497107091

Date : 03/15/07 Reference: jaq17
Sequence : MSVOA10 jcf Analyzed : 01/26/07 19:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1555522	10.64	2525036	11.82	2054473	15.83	973680	18.52
		LOWER LIMIT	777761	10.14	1262518	11.32	1027237	15.33	486840	18.02
		UPPER LIMIT	3111044	11.14	5050072	12.32	4108946	16.33	1947360	19.02
003	CCV	30PPB	1547110	10.62	2538675	11.80	2230466	15.83	1143932	18.52
004	BS	QC379314	1532267	10.61	2509063	11.81	2165259	15.82	1113942	18.51
005	BSD	QC379315	1526219	10.62	2507741	11.80	2206739	15.83	1139816	18.52
009	CCV	30PPB	1552885	10.63	2507575	11.81	2217029	15.82	1111587	18.51
011	BLANK	QC379313	1512034	10.62	2463504	11.80	2187849	15.82	1094440	18.52
012	SAMPLE	193339-008	1537172	10.63	2490320	11.81	2213459	15.82	1095171	18.52
013	SAMPLE	193339-007	1515005	10.63	2462945	11.80	2174558	15.83	1086731	18.52
014	SAMPLE	193191-008	1487795	10.62	2438615	11.80	2161004	15.83	1069651	18.52
015	SAMPLE	193174-015	1494938	10.63	2432131	11.80	2169598	15.83	1083456	18.52
016	SAMPLE	193174-016	1508225	10.63	2474690	11.81	2180735	15.83	1062978	18.52
017	SAMPLE	193174-017	1479570	10.63	2445758	11.81	2181593	15.82	1075388	18.52
018	SAMPLE	193174-018	1481214	10.63	2450574	11.81	2166736	15.82	1066539	18.53
019	SAMPLE	193174-019	1481284	10.62	2435374	11.81	2149168	15.82	1075967	18.52
020	SAMPLE	193175-005	1504524	10.62	2450483	11.81	2193842	15.82	1087702	18.52
021	SAMPLE	193311-001	1527646	10.63	2472550	11.81	2139563	15.82	1116808	18.51
022	SAMPLE	193351-005	1449814	10.63	2389273	11.81	2104056	15.82	1111087	18.52
023	SAMPLE	193351-004	1512743	10.63	2500349	11.81	2208492	15.83	1128859	18.52
024	SAMPLE	193351-006	1546257	10.63	2466989	11.81	2183593	15.83	1158082	18.52
025	SAMPLE	193351-008	1516042	10.63	2470780	11.81	2195546	15.82	1165101	18.51
026	SAMPLE	193351-002	1549600	10.63	2518460	11.81	2223136	15.83	1170230	18.52
027	SAMPLE	193351-003	1541730	10.62	2520100	11.81	2209160	15.83	1183452	18.52
028	SAMPLE	193351-007	1538287	10.63	2513035	11.81	2235366	15.82	1185127	18.51
029	SAMPLE	193351-009	1515275	10.62	2494100	11.81	2163192	15.82	1144225	18.51
030	SAMPLE	193311-002	1544099	10.62	2563974	11.81	2247112	15.82	1179326	18.52

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 437102839

Instrument : MSVOA04 Begun : 03/12/07 09:59
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	dcc01	X	IB			03/12/07 09:59	1.0	1	
002	dcc02	X	BFB			03/12/07 10:30	1.0	2	
003	dcc03	X	25PPB			03/12/07 11:12	1.0	3 4 5 1	
004	dcc04	X	IB			03/12/07 12:38	1.0	1	
005	dcc05	X	IB			03/12/07 13:19	1.0	1	
006	dcc06	X	IB			03/12/07 14:26	1.0	1	
007	dcc07	X	IB			03/12/07 14:59	1.0	1	
008	dcc08	X	IB			03/12/07 19:36	1.0	1	
009	dcc09	X	IB			03/12/07 20:09	1.0	1	
010	dcc10	X	IB			03/12/07 20:42	1.0	1	
011	dcc11	X	25PPB			03/12/07 21:15	1.0	3 4 5 1	
012	dcc12	X	IB			03/12/07 21:48	1.0	1	
013	dcc13	TUN	BFB			03/12/07 22:15	1.0	2	
014	dcc14	X	LP			03/12/07 22:45	1.0	1	
015	dcc15	X	IB			03/12/07 23:18	1.0	1	
016	dcc16	IB	CALIB IB			03/12/07 23:50	1.0	1	
017	dcc17	ICAL	0.25/0.5PPB			03/13/07 00:23	1.0	3 4 5 1	
018	dcc18	ICAL	0.5/1.0PPB			03/13/07 00:56	1.0	3 4 5 1	
019	dcc19	ICAL	2.0PPB			03/13/07 01:28	1.0	3 4 5 1	
020	dcc20	ICAL	5.0PPB			03/13/07 02:01	1.0	3 4 5 1	
021	dcc21	ICAL	10.0PPB			03/13/07 02:34	1.0	3 4 5 1	
022	dcc22	ICAL	20.0PPB			03/13/07 03:06	1.0	3 4 5 1	
023	dcc23	ICAL	50.0PPB			03/13/07 03:39	1.0	3 4 5 1	
024	dcc24	ICAL	75.0PPB			03/13/07 04:11	1.0	3 4 5 1	
025	dcc25	ICAL	100.0PPB			03/13/07 04:44	1.0	3 4 5 1	
026	dcc26	IB				03/13/07 05:17	1.0	1	
027	dcc27	ICV	25PPB			03/13/07 05:49	1.0	6 1	
028	dcc28	ICV	25PPB			03/13/07 06:22	1.0	7 8 1	
029	dcc29	X	IB			03/13/07 06:55	1.0	1	
030	dcc30	X	IB			03/13/07 07:27	1.0	1	
031	dcc31	X	IB			03/13/07 08:00	1.0	1	

Analyst: WNH Date: 03/13/07 Reviewer: LW Date: 03/14/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5595 5=S5194 6=S5614 7=S5537 8=S5422

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 437104436

Instrument : MSVOA04 Begun : 03/13/07 12:36
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	dcd01	X	IB			03/13/07 12:36	1.0	1
002	dcd02	X	BFB			03/13/07 13:08	1.0	2
003	dcd03	X	IB			03/13/07 13:55	1.0	1
004	dcd04	TUN	BFB			03/13/07 14:44	1.0	2
005	dcd05	CCV	30PPB			03/13/07 15:14	1.0	3 4 5 1
006	dcd06	BS	QC379029	Water	123062	03/13/07 17:21	1.0	6 7 8 1
007	dcd07	BSD	QC379030	Water	123062	03/13/07 17:54	1.0	6 7 8 1
008	dcd08	X	IB			03/13/07 18:46	1.0	1
009	dcd09	BLANK	QC379031	Water	123062	03/13/07 19:18	1.0	1
010	dcd10	SAMPLE	193174-020	Water	123062	03/13/07 19:51	1.0	1
011	dcd11	SAMPLE	193174-009	Water	123062	03/13/07 20:23	1.0	1
012	dcd12	SAMPLE	193174-010	Water	123062	03/13/07 20:56	1.0	1
013	dcd13	SAMPLE	193174-011	Water	123062	03/13/07 21:28	1.0	1
014	dcd14	SAMPLE	193174-012	Water	123062	03/13/07 22:01	1.0	1
015	dcd15	SAMPLE	193174-013	Water	123062	03/13/07 22:34	1.0	1
016	dcd16	SAMPLE	193174-014	Water	123062	03/13/07 23:07	1.0	1
017	dcd17	SAMPLE	193174-015	Water	123062	03/13/07 23:39	1.0	1
018	dcd18	SAMPLE	193174-016	Water	123062	03/14/07 00:12	1.0	1
019	dcd19	SAMPLE	193174-017	Water	123062	03/14/07 00:44	1.0	1
020	dcd20	SAMPLE	193174-018	Water	123062	03/14/07 01:17	1.0	1
021	dcd21	SAMPLE	193174-019	Water	123062	03/14/07 01:50	1.0	1
022	dcd22	X	IB			03/14/07 02:22	1.0	1
023	dcd23	X	IB			03/14/07 02:55	1.0	1
024	dcd24	X	IB			03/14/07 03:27	1.0	1

Analyst: WNH Date: 03/14/07 Reviewer: LW Date: 03/14/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5595 5=S5194 6=S5422 7=S5614 8=S5537

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447096916

Instrument : MSVOA05 Begun : 03/08/07 07:16
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ec801	X	IB			03/08/07 07:16	1.0	1	
002	ec802	X	BFB			03/08/07 07:45	1.0	2	
003	ec803	X	QC378062	Water	122836	03/08/07 08:01	1.0	3 4 5 1	
004	ec804	X	IB			03/08/07 08:59	1.0	1	
005	ec805	X	QC378063	Water	122836	03/08/07 09:31	1.0	1	
006	ec806	SAMPLE	193174-001	Water	122836	03/08/07 10:02	1.0	1	
007	ec807	X	BFB			03/08/07 10:33	1.0	2	
008	ec808	X	QC378062	Water	122836	03/08/07 10:49	1.0	3 4 5 1	
009	ec809	TUN	BFB			03/08/07 11:20	1.0	2	
010	ec810	CCV/LCS	QC378062	Water	122836	03/08/07 11:36	1.0	3 4 5 1	
011	ec811	X	IB			03/08/07 12:22	1.0	1	
012	ec812	BLANK	QC378063	Water	122836	03/08/07 12:54	1.0	1	
013	ec813	SAMPLE	193174-001	Water	122836	03/08/07 13:26	1.0	1	
014	ec814	SAMPLE	193174-002	Water	122836	03/08/07 13:58	1.0	1	
015	ec815	SAMPLE	193174-003	Water	122836	03/08/07 14:30	1.0	1	
016	ec816	SAMPLE	193174-004	Water	122836	03/08/07 15:02	1.0	1	
017	ec817	SAMPLE	193174-005	Water	122836	03/08/07 15:34	1.0	1	
018	ec818	SAMPLE	193174-006	Water	122836	03/08/07 16:06	1.0	1	
019	ec819	SAMPLE	193174-007	Water	122836	03/08/07 16:38	1.0	1	
020	ec820	SAMPLE	193174-008	Water	122836	03/08/07 17:10	1.0	1	
021	ec821	MSS	193108-023	Water	122836	03/08/07 17:41	1.0	1	
022	ec822	SAMPLE	193108-024	Water	122836	03/08/07 18:13	1.0	1	
023	ec823	SAMPLE	193108-025	Water	122836	03/08/07 18:45	1.0	1	
024	ec824	SAMPLE	193108-026	Water	122836	03/08/07 19:17	1.0	1	
025	ec825	SAMPLE	193108-027	Water	122836	03/08/07 19:49	1.0	1	
026	ec826	SAMPLE	193194-003	Water	122836	03/08/07 20:21	1.0	1	
027	ec827	SAMPLE	193225-007	Water	122836	03/08/07 20:53	1.0	1	
028	ec828	SAMPLE	193157-001	Water	122836	03/08/07 21:24	8.333	1	
029	ec829	SAMPLE	193166-020	Water	122836	03/08/07 21:56	1.0	1	pH > 2
030	ec830	MS	QC378166	Water	122836	03/08/07 22:28	1.0	1 3 4 5	
031	ec831	MSD	QC378167	Water	122836	03/08/07 23:00	1.0	1 3 4 5	
032	ec832	X	IB			03/08/07 23:32	1.0	1	
033	ec833	X	IB			03/09/07 00:04	1.0	1	
034	ec834	X	IB			03/09/07 00:36	1.0	1	
035	ec835	SAMPLE	193050-001	Water	122836	03/09/07 01:07	1.0	1	
036	ec836	SAMPLE	193050-002	Water	122836	03/09/07 01:39	1.0	1	
037	ec837	X	TVH2000			03/09/07 02:11	1.0	1	

BO 03/09/07 : ec810 used different aliquot of s5537

Analyst: BO Date: 03/09/07 Reviewer: LW Date: 03/09/07

Standards used: 1=S5426 2=S5117 3=S5537 4=S5614 5=S5422

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497038053

Instrument : MSVOA10 Begun : 01/26/07 10:13
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jaq01	X	IB			01/26/07 10:13	1.0	1
002	jaq02	TUN	BFB			01/26/07 10:45	1.0	2
003	jaq03	CCV	25PPB			01/26/07 11:03	1.0	3 4 5 1
004	jaq04	TUN	BFB			01/26/07 11:48	1.0	2
005	jaq05	CCV	25PPB			01/26/07 12:05	1.0	3 4 5 1
006	jaq06	ICV/BS	QC373244	Water	121602	01/26/07 12:51	1.0	6 7 8 1
007	jaq07	X	LP			01/26/07 14:26	1.0	1
008	jaq08	TUN	BFB			01/26/07 15:00	1.0	2
009	jaq09	X	IB			01/26/07 15:18	1.0	1
010	jaq10	IB	CALIB			01/26/07 15:51	1.0	1
011	jaq11	ICAL	0.25/0.5PPB			01/26/07 16:23	1.0	3 9 10 1
012	jaq12	ICAL	0.5/1PPB			01/26/07 16:56	1.0	3 9 10 1
013	jaq13	ICAL	2PPB			01/26/07 17:28	1.0	3 9 10 1
014	jaq14	ICAL	5PPB			01/26/07 18:01	1.0	3 9 10 1
015	jaq15	ICAL	10PPB			01/26/07 18:34	1.0	3 9 10 1
016	jaq16	ICAL	20PPB			01/26/07 19:06	1.0	3 9 10 1
017	jaq17	ICAL	50PPB			01/26/07 19:39	1.0	3 9 10 1
018	jaq18	ICAL	75PPB			01/26/07 20:12	1.0	3 9 10 1
019	jaq19	ICAL	100PPB			01/26/07 20:44	1.0	3 9 10 1
020	jaq20	ICV	ICVGAS25PPB			01/26/07 21:17	1.0	8 1
021	jaq21	ICV	ICV25PPB			01/26/07 21:50	1.0	7 6 1
022	jaq22	X	IB			01/26/07 22:23	1.0	1
023	jaq23	X	IB			01/26/07 22:56	1.0	1
024	jaq24	X	IB			01/26/07 23:28	1.0	1

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5322 7=S5052 8=S5241 9=S5219 10=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497107091

Instrument : MSVOA10 Begun : 03/15/07 08:51
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jcf01	X	IB			03/15/07 08:51	1.0	1	
002	jcf02	TUN	BFB			03/15/07 09:20	1.0	2	
003	jcf03	CCV	30PPB			03/15/07 09:37	1.0	3 4 1	
004	jcf04	BS	QC379314	Water	123132	03/15/07 10:10	1.0	5 6 7 1	
005	jcf05	BSD	QC379315	Water	123132	03/15/07 10:43	1.0	5 6 7 1	
006	jcf06	X	BFB			03/15/07 11:12	1.0	2	
007	jcf07	X	30PPB			03/15/07 11:28	1.0	3 4 1	
008	jcf08	TUN	BFB			03/15/07 12:13	1.0	2	
009	jcf09	CCV	30PPB			03/15/07 12:30	1.0	3 8 1	
010	jcf10	X	IB			03/15/07 13:02	1.0	1	
011	jcf11	BLANK	QC379313	Water	123132	03/15/07 13:35	1.0	1	
012	jcf12	SAMPLE	193339-008	Water	123132	03/15/07 14:07	1.0	1	
013	jcf13	SAMPLE	193339-007	Water	123132	03/15/07 14:40	1.0	1	
014	jcf14	SAMPLE	193191-008	Water	123132	03/15/07 15:12	1.0	1	headspace <= 1 mL
015	jcf15	SAMPLE	193174-015	Water	123132	03/15/07 15:45	1.0	1	
016	jcf16	SAMPLE	193174-016	Water	123132	03/15/07 16:17	1.0	1	
017	jcf17	SAMPLE	193174-017	Water	123132	03/15/07 16:50	1.0	1	
018	jcf18	SAMPLE	193174-018	Water	123132	03/15/07 17:23	1.0	1	
019	jcf19	SAMPLE	193174-019	Water	123132	03/15/07 17:57	1.0	1	
020	jcf20	SAMPLE	193175-005	Water	123132	03/15/07 18:29	1.0	1	
021	jcf21	SAMPLE	193311-001	Water	123132	03/15/07 19:02	12.50	1	
022	jcf22	SAMPLE	193351-005	Water	123132	03/15/07 19:34	20.0	1	headspace <= 1 mL
023	jcf23	SAMPLE	193351-004	Water	123132	03/15/07 20:07	40.0	1	headspace <= 1 mL
024	jcf24	SAMPLE	193351-006	Water	123132	03/15/07 20:39	40.0	1	headspace <= 1 mL
025	jcf25	SAMPLE	193351-008	Water	123132	03/15/07 21:12	50.0	1	headspace <= 1 mL
026	jcf26	SAMPLE	193351-002	Water	123132	03/15/07 21:44	62.50	1	headspace <= 1 mL
027	jcf27	SAMPLE	193351-003	Water	123132	03/15/07 22:17	71.43	1	headspace <= 1 mL, pH > 2
028	jcf28	SAMPLE	193351-007	Water	123132	03/15/07 22:49	71.43	1	headspace <= 1 mL
029	jcf29	SAMPLE	193351-009	Water	123132	03/15/07 23:22	71.43	1	headspace <= 1 mL
030	jcf30	SAMPLE	193311-002	Water	123132	03/15/07 23:55	166.7	1	
031	jcf31	X	IB			03/16/07 00:27	1.0	1	
032	jcf32	X	IB			03/16/07 01:00	1.0	1	
033	jcf33	X	IB			03/16/07 01:33	1.0	1	
034	jcf34	X	IB			03/16/07 02:05	1.0	1	
035	jcf35	X	NEWVIAL			03/16/07 02:38	1.0	1	

Analyst: WNH Date: 03/16/07 Reviewer: LW Date: 03/16/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5430 5=S5537 6=S5422 7=S5614 8=S5617

REPORTING SUMMARY FOR 193174 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM	VRE	BCE	CLE	AC1	DCE	MTN	CCE	MCT	DDE	TC1	VDT	DCC	MCC	DCC	TCL	TCA	CCC	DCC	BZC	TCC	DDD	BIA	MCK	DCE	BCE	DCE	TZ1	HCC	PXC	DCC	EBE	XCB	XLA	TLL	SBL	TYY	PMO	DTX	DBE	BCM	BZF	BAM	BB4
193174-001	MSVOA06	03/07/07 11:58	1.0	|	|	|

REPORTING SUMMARY FOR 193174 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM	VCR	BCL	CAC	DCT	MTD	CEE	MCC	DCT	MCC	DTA	TCC	TCL	CDA	BCL	TZC	DCC	BDD	MIC	DZC	BCC	DXX	TCB	HLB	PYY	DOT	CBC	EBC	XZL	XLT	STY	TMM	PAF	DAM	DM4	BCE	BZF
193174-018	MSVOA04	03/09/07 23:41	1.0																																					
193174-018	MSVOA04	03/14/07 01:17	1.0																																					
193174-018	MSVOA10	03/15/07 17:23	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
193174-019	MSVOA04	03/10/07 00:14	1.0																																					
193174-019	MSVOA04	03/14/07 01:50	1.0																																					
193174-019	MSVOA10	03/15/07 17:57	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
193174-020	MSVOA04	03/09/07 18:14	1.0																																					
193174-020	MSVOA04	03/13/07 19:51	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377869	MSVOA06	03/07/07 08:30	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377870	MSVOA06	03/07/07 09:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC377871	MSVOA06	03/07/07 10:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378062	MSVOA05	03/08/07 11:36	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378063	MSVOA05	03/08/07 12:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378166	MSVOA05	03/08/07 22:28	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378167	MSVOA05	03/08/07 23:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378411	MSVOA04	03/09/07 15:01	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378412	MSVOA04	03/09/07 15:33	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378413	MSVOA04	03/09/07 16:39	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379029	MSVOA04	03/13/07 17:21	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379030	MSVOA04	03/13/07 17:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379031	MSVOA04	03/13/07 19:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379313	MSVOA10	03/15/07 13:35	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379314	MSVOA10	03/15/07 10:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379315	MSVOA10	03/15/07 10:43	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 7/8/07
PREPPED BY: [illegible]

122836 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			E	—			5	1x, 10	PUT OF m 6
1	193108-8		I	<2				8.3x, DD	
2	193157-1		B	7				1x, 5 mT	cont 7d3
3	193166-20		B	<2				1x MeCl2 + HCl	
4	193174-1		B						
5	-2								
6	-3		BDEF	<2				1x MSS/MS/MSD	
7	193108-23		D						
8	-24								
9	-25								
0	-26		B						
1	-27		A					1x	
2	193174-4								
3	-5								
4	-6								
5	-7								
16	-8		B				5	1x, clear	
17	193194-3		A		NV			TB	
18	193225-7		C				5	1x, cu failure	
19	193174-1								
20									
21			A	<2			5	Storage Blank	
22	193050-1								
23	-2								
24									
25									
26									
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42									

PREPFORM.XLS

7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/13/07

PREPPED BY.

WATER

123062

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193174-009		E	<2		4	4	1X	
2	010		D						
3	011								
4	012								
5	013		A			5			
6	014		C					RR ISTD out low	
7	015								
8	016								
9	017								
10	018		D						
11	019		C						
12	020		B					TB	
13									
14									
15									
16									
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PREPFORM.XLS

7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/15/07
PREPPED BY: Lee

WATER

123132

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193191 - 008		A	<2	1mL		10	RR 1X Fr 113 curve +	
2	193339 - 007		BC					EB	
3	008		A		W			TB	
4	193311 - 001		B	<2				12.5X Nasty! Load lot	
5	002		B					167X	
6	193175 - 005		A	<2				1X comp. (1-4)	
7	193174 - 015		D					RR 1X IS	
8	016							RR 1X	
9	017							RR 1X	
10	018		E					RR 1X	
11	019		D					RR 1X	
12	193351 2		C	<2	tiny Bubble			62.5X Nasty, load lot	
13	3		A	3	1/2 mL			71.4X	
14	4		B	<2	tiny Bubble			40X	
15	5		C					20X	
16	6							40X	
17	7				1/2 mL Bubble			71.4X	
18	8							50X	
19	9				tiny Bubble			71.4X	
20									
21									
22									
23									
24									
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193213

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
NKSW100	193213-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: Operations Manager Date: 3/13/07

Signature: Project Manager Date: 3/13/07

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193213**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/07/07**
Samples Received:	**03/07/07**

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 03/07/07. The sample was received cold and intact.

Metals (EPA 6020 and EPA 7470A) Water:

Copper was detected above the RL in the method blank for batch 122867. The total copper result in the water was greater than ten times the detection in the blank. The filtrate sample was reprepared in batch 122910 for copper only. The associated blank was ND at 1.0 ug/L. All copper results were reported from batch 122910. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:

No analytical problems were encountered.

#
22.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193213

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2200
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): P. Cornish BTS
Recorder (signature required): Pcornish
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

ok per J Graber 3/14/07

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)							COMMENTS / NOTES
-1	NKSW100	3/7/07	1050			X				1		1							X	X									~~24 TAT~~ 48 hr TAT - Diss. Metals to be filtered @ Lab.
													•			•													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: Pcornish	DATE: 3/7/07	RECEIVED BY: [signature]	DATE: 3/7/6
PRINT NAME: P. Cornish FIRM: BTS	TIME:	PRINT NAME: AARON GRENIER FIRM: C&T	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES: rec'd intact + cold

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193213 Date Received: 3-07-2007 Number of Coolers: 1
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-07-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over of cooler Seal date: 3-7-07 Seal name: COC 2200
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 4.1°C

B. Login Phase
Date Logged In: 3-07-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

METALS

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKSW100	Batch#:	122867
Lab ID:	193213-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	9,200	100	10.00	03/08/07
Antimony	ND	1.0	10.00	03/08/07
Arsenic	ND	5.0	10.00	03/08/07
Barium	160	10	10.00	03/08/07
Beryllium	ND	2.0	10.00	03/08/07
Cadmium	ND	1.0	10.00	03/08/07
Calcium	12,000	500	10.00	03/08/07
Chromium	32	10	10.00	03/08/07
Cobalt	57	10	10.00	03/08/07
Copper	46	1.0	10.00	03/08/07
Iron	11,000	100	10.00	03/08/07
Lead	100	3.0	10.00	03/08/07
Magnesium	10,000	500	10.00	03/08/07
Manganese	4,200	10	50.00	03/09/07
Nickel	76	20	10.00	03/08/07
Potassium	2,000	500	10.00	03/08/07
Selenium	ND	5.0	10.00	03/08/07
Silver	ND	1.0	10.00	03/08/07
Sodium	35,000	500	10.00	03/08/07
Thallium	ND	1.0	10.00	03/08/07
Vanadium	32	10	10.00	03/08/07
Zinc	130	20	10.00	03/08/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 6020
Project#:	2893.04.51		
Field ID:	NKSW100	Units:	ug/L
Lab ID:	193213-001	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/07/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep
Aluminum	340	100	10.00	122867	03/08/07	03/08/07	200.8
Antimony	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Arsenic	ND	5.0	10.00	122867	03/08/07	03/08/07	200.8
Barium	67	10	10.00	122867	03/08/07	03/08/07	200.8
Beryllium	ND	2.0	10.00	122867	03/08/07	03/08/07	200.8
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Calcium	10,000	500	10.00	122867	03/08/07	03/08/07	200.8
Chromium	ND	10	10.00	122867	03/08/07	03/08/07	200.8
Cobalt	13	10	10.00	122867	03/08/07	03/08/07	200.8
Copper	8.5	1.0	1.000	122910	03/09/07	03/09/07	METHOD
Iron	520	100	10.00	122867	03/08/07	03/08/07	200.8
Lead	3.6	3.0	10.00	122867	03/08/07	03/08/07	200.8
Magnesium	8,300	500	10.00	122867	03/08/07	03/08/07	200.8
Manganese	2,400	10	20.00	122867	03/08/07	03/09/07	200.8
Nickel	31	20	10.00	122867	03/08/07	03/08/07	200.8
Potassium	1,100	500	10.00	122867	03/08/07	03/08/07	200.8
Selenium	ND	5.0	10.00	122867	03/08/07	03/08/07	200.8
Silver	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Sodium	33,000	500	10.00	122867	03/08/07	03/08/07	200.8
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07	200.8
Zinc	180	20	10.00	122867	03/08/07	03/08/07	200.8

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378195	Batch#:	122867
Matrix:	Filtrate	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	1.4 b	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Diln Fac:	1.000
Type:	BLANK	Batch#:	122910
Lab ID:	QC378369	Prepared:	03/09/07
Matrix:	Filtrate	Analyzed:	03/09/07
Units:	ug/L		

Result	RL
ND	1.0

ND= Not Detected
RL= Reporting Limit

18.0

: 00010

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122880
Field ID:	NKSW100	Sampled:	03/07/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type	Lab ID	Result	RL
SAMPLE	193213-001	0.23	0.20
BLANK	QC378247	ND	0.20

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	03/07/07
Field ID:	NKSW100	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07
Batch#:	122880		

Type	Lab ID	Matrix	Result	RL
SAMPLE	193213-001	Filtrate	ND	0.20
BLANK	QC378247	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122867
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: BS Lab ID: QC378196

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,190	102	80-120
Antimony	100.0	96.83	97	80-120
Arsenic	100.0	102.5	103	80-120
Barium	100.0	101.0	101	80-120
Beryllium	100.0	113.3	113	80-120
Cadmium	100.0	103.1	103	80-120
Calcium	10,000	10,510	105	80-120
Chromium	100.0	104.7	105	80-120
Cobalt	100.0	106.1	106	80-120
Copper	100.0	110.3	110	80-120
Iron	10,000	10,380	104	80-120
Lead	100.0	106.3	106	80-120
Magnesium	10,000	10,290	103	80-120
Manganese	100.0	105.7	106	80-120
Nickel	100.0	106.1	106	80-120
Potassium	10,000	10,440	104	80-120
Selenium	100.0	104.3	104	80-120
Silver	100.0	106.2	106	80-120
Sodium	10,000	10,310	103	80-120
Thallium	50.00	49.26	99	80-120
Vanadium	100.0	103.4	103	80-120
Zinc	100.0	105.4	105	80-120

Type: BSD Lab ID: QC378197

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,150	102	80-120	0	20
Antimony	100.0	97.23	97	80-120	0	20
Arsenic	100.0	101.5	102	80-120	1	20
Barium	100.0	100.4	100	80-120	1	20
Beryllium	100.0	112.0	112	80-120	1	20
Cadmium	100.0	102.8	103	80-120	0	20
Calcium	10,000	10,410	104	80-120	1	20
Chromium	100.0	102.9	103	80-120	2	20
Cobalt	100.0	103.5	104	80-120	2	20
Copper	100.0	107.7	108	80-120	2	20
Iron	10,000	10,340	103	80-120	0	20
Lead	100.0	104.6	105	80-120	2	20
Magnesium	10,000	10,230	102	80-120	1	20
Manganese	100.0	103.1	103	80-120	2	20
Nickel	100.0	103.6	104	80-120	2	20
Potassium	10,000	10,370	104	80-120	1	20
Selenium	100.0	104.1	104	80-120	0	20
Silver	100.0	109.3	109	80-120	3	20
Sodium	10,000	10,060	101	80-120	2	20
Thallium	50.00	48.56	97	80-120	1	20
Vanadium	100.0	101.0	101	80-120	2	20
Zinc	100.0	104.0	104	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122910
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378370	100.0	106.8	107	80-120		
BSD	QC378371	100.0	97.80	98	80-120	9	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122880
Field ID:	NKSW100	Sampled:	03/07/07
MSS Lab ID:	193213-001	Received:	03/07/07
Matrix:	Water	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378249		5.000	5.060	101	80-120		
BSD	QC378250		5.000	5.070	101	80-120	0	20
MS	QC378252	0.2260	5.000	5.720	110	75-125		
MSD	QC378253		5.000	5.550	106	75-125	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	10.00	Analyzed:	03/08/07

Type: MS Lab ID: QC378198

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	11.29	10,000	10,460	104	75-125
Antimony	0.2766	100.0	101.7	101	75-125
Arsenic	1.056	100.0	102.4	101	75-125
Barium	64.90	100.0	171.4	107	75-125
Beryllium	<0.1733	100.0	107.8	108	75-125
Cadmium	0.08808	100.0	106.1	106	75-125
Calcium	50,710	10,000	63,770	131 NM	75-125
Chromium	1.625	100.0	104.4	103	75-125
Cobalt	0.6119	100.0	103.7	103	75-125
Copper	1.000	100.0	106.5	106	75-125
Iron	19.82	10,000	10,620	106	75-125
Lead	0.2554	100.0	104.3	104	75-125
Magnesium	80,910	10,000	95,930	150 NM	75-125
Manganese	20.32	100.0	124.9	105	75-125
Nickel	8.444	100.0	114.3	106	75-125
Potassium	579.9	10,000	11,190	106	75-125
Selenium	<0.2730	100.0	104.9	105	75-125
Silver	<0.07903	100.0	106.5	107	75-125
Sodium	40,840	10,000	52,100	113 NM	75-125
Thallium	0.5334	50.00	48.16	95	75-125
Vanadium	8.269	100.0	110.2	102	75-125
Zinc	20.18	100.0	129.1	109	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	10.00	Analyzed:	03/08/07

Type: MSD Lab ID: QC378199

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,000	100	75-125	4	20
Antimony	100.0	96.63	96	75-125	5	20
Arsenic	100.0	100.1	99	75-125	2	20
Barium	100.0	163.7	99	75-125	5	20
Beryllium	100.0	103.6	104	75-125	4	20
Cadmium	100.0	101.7	102	75-125	4	20
Calcium	10,000	60,270	96 NM	75-125	6	20
Chromium	100.0	100.5	99	75-125	4	20
Cobalt	100.0	100.9	100	75-125	3	20
Copper	100.0	101.5	101	75-125	5	20
Iron	10,000	10,270	103	75-125	3	20
Lead	100.0	100.4	100	75-125	4	20
Magnesium	10,000	90,460	96 NM	75-125	6	20
Manganese	100.0	120.8	100	75-125	3	20
Nickel	100.0	109.1	101	75-125	5	20
Potassium	10,000	10,620	100	75-125	5	20
Selenium	100.0	102.6	103	75-125	2	20
Silver	100.0	103.5	104	75-125	3	20
Sodium	10,000	49,960	91 NM	75-125	4	20
Thallium	50.00	47.15	93	75-125	2	20
Vanadium	100.0	106.7	98	75-125	3	20
Zinc	100.0	120.0	100	75-125	7	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122910
Field ID:	NKSW100	Sampled:	03/07/07
MSS Lab ID:	193213-001	Received:	03/07/07
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378372	8.545	100.0	109.7	101	75-125		
MSD	QC378373		100.0	110.0	101	75-125	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Lab ID:	QC378200	Received:	02/28/07
Matrix:	Filtrate	Analyzed:	03/08/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Aluminum	ND	100.0	61.32 J	500.0	NC	10
Antimony	ND	1.000	0.8131 J	5.000	NC	10
Arsenic	ND	5.000	ND	5.000	NC	10
Barium	64.90	10.00	67.28	10.00	4	10
Beryllium	ND	2.000	ND	5.000	NC	10
Cadmium	ND	1.000	0.5533 J	5.000	NC	10
Calcium	50,710	500.0	51,770	500.0	2	10
Chromium	ND	10.00	ND	10.00	NC	10
Cobalt	ND	10.00	0.4214 J	10.00	NC	10
Copper	3.823	1.000	2.150 J	5.000	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Lead	ND	3.000	0.6680 J	5.000	NC	10
Magnesium	80,910	500.0	85,070	500.0	5	10
Manganese	20.32	10.00	21.12	10.00	4	10
Nickel	ND	20.00	8.486 J	20.00	NC	10
Potassium	579.9	500.0	510.8	500.0	NC	10
Selenium	ND	5.000	ND	5.000	NC	10
Silver	ND	1.000	ND	5.000	NC	10
Sodium	40,840	500.0	44,180	500.0	8	10
Thallium	ND	1.000	1.614 J	2.500	NC	10
Vanadium	ND	10.00	8.609 J	10.00	NC	10
Zinc	20.18	20.00	17.21 J	20.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

17.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Units:	ug/L
Field ID:	NKSW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122910
MSS Lab ID:	193213-001	Sampled:	03/07/07
Lab ID:	QC378374	Received:	03/07/07
Matrix:	Filtrate	Analyzed:	03/09/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
8.545	1.000	8.479	1.216	NC	10

NC= Not Calculated
RL= Reporting Limit

21.0

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	NKSW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122880
MSS Lab ID:	193213-001	Sampled:	03/07/07
Lab ID:	QC378251	Received:	03/07/07
Matrix:	Water	Analyzed:	03/08/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.2260	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

12.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET06
Seqnum: 67097451031
File : c08q0031
IDF : 10.0
Lab ID: QC378201
Matrix: Filtrate
Batch : 122867
Time : 08-MAR-2007 18:54
Cal : 67097451001
MSS : 193027-002
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67097451027	1.129	A	10000	9973	A	100	75-125	u
Antimony	67097451027	0.02766	A	100.0	93.60	A	94	75-125	u
Arsenic	67097451027	0.1056	E	100.0	99.70	E	100	75-125	u
Barium	67097451027	6.490	A	100.0	106.3	A	100	75-125	u
Beryllium	67097451027	ND	A	100.0	104.6	A	105	75-125	u
Cadmium	67097451027	0.008808	A	100.0	101.7	A	102	75-125	u
Calcium	67097451027	5071	A	10000	14980	A	99	75-125	u
Chromium	67097451027	0.1625	E	100.0	99.52	E	99	75-125	u
Cobalt	67097451027	0.06119	E	100.0	99.55	E	99	75-125	u
Copper	67097451027	0.3823	E	100.0	100.1	E	100	75-125	u
Iron	67097451027	1.982	H	10000	10180	H	102	75-125	u
Lead	67097451027	0.02554	A	100.0	101.5	A	101	75-125	u
Magnesium	67097451027	8091	A	10000	18060	A	100	75-125	u
Manganese	67097451027	2.032	E	100.0	102.4	E	100	75-125	u
Molybdenum	67097451027	0.04173	A	100.0	93.30	A	93	75-125	u
Nickel	67097451027	0.8444	E	100.0	100.3	E	99	75-125	u
Potassium	67097451027	57.99	A	10000	10070	A	100	75-125	u
Selenium	67097451027	ND	H	100.0	102.0	H	102	75-125	u
Silver	67097451027	ND	A	100.0	95.98	A	96	75-125	u
Sodium	67097451059	4084	E	10000	13760	E	97	75-125	u
Thallium	67097451027	0.05334	A	50.00	48.40	A	97	75-125	u
Vanadium	67097451027	0.8269	E	100.0	99.49	E	99	75-125	u
Zinc	67097451027	2.018	E	100.0	102.1	E	100	75-125	u

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1013061	935297	-7.68
Scandium	A	1199967	1165840	-2.84
Scandium	E	36567	34621	-5.32
Scandium	H	372754	348450	-6.52
Germanium	H	86607	80029	-7.60
Germanium	E	18002	16819	-6.57
Indium	A	1570978	1441782	-8.22
Bismuth	A	1225637	1122477	-8.42
Yttrium	A	1590566	1510841	-5.01
Terbium	A	2128023	2032155	-4.51

1=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET05
Seqnum: 57098723031
File : c09n0031
IDF : 1.0
Lab ID: 193213-001
Matrix: Filtrate
Batch : 122910
Time : 09-MAR-2007 15:26
Cal : 57098723001
Units : ug/L

Type : PDS
Inst : MET05
Seqnum: 57098723042
File : c09n0042
IDF : 1.0
Lab ID: QC378375
Matrix: Filtrate
Batch : 122910
Time : 09-MAR-2007 16:10
Cal : 57098723001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	317.5	10000	9730	94	75-125	u
Antimony	5.901	100.0	87.62	82	75-125	>c+ **b***
Arsenic	1.034	100.0	99.58	99	75-125	u
Barium	46.77	100.0	144.3	98	75-125	u
Beryllium	ND	100.0	95.86	96	75-125	u
Cadmium	ND	100.0	94.48	94	75-125	u
Calcium	10080	10000	19100	90	75-125	u
Chromium	3.909	100.0	99.76	96	75-125	u
Cobalt	14.73	100.0	109.7	95	75-125	u
Copper	8.545	100.0	103.7	95	75-125	u
Iron	472.8	10000	10030	96	75-125	u
Lead	3.037	100.0	98.36	95	75-125	u
Magnesium	8598	10000	17810	92	75-125	u
Molybdenum	0.6936	100.0	94.38	94	75-125	u
Nickel	24.57	100.0	119.8	95	75-125	u
Potassium	1191	10000	10450	93	75-125	u
Selenium	ND	100.0	103.0	103	75-125	u
Silver	ND	100.0	95.08	95	75-125	>c+ **b***
Thallium	ND	50.00	47.64	95	75-125	u
Vanadium	2.000	100.0	96.90	95	75-125	u
Zinc	121.2	100.0	219.6 >LR	98	75-125	>LR **b***

ISTD (ICALBLK c09n0004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	635034	578852	-8.85
Scandium	457323	436982	-4.45
Germanium	99176	100794	1.63
Indium	739965	698801	-5.56
Bismuth	555318	557350	0.37

MISSING READINGS: **MN NA**

+=high bias >=closing >LR=overrange b=noncompliant c=CCV u=use

57098723042

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67097451001
Units : ug/L

Date : 08-MAR-2007 16:29
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08q0005	67097451005		08-MAR-2007 16:35	S5645
L2	c08q0006	67097451006		08-MAR-2007 16:40	S5648
L3	c08q0007	67097451007		08-MAR-2007 16:45	S5649
L4	c08q0008	67097451008		08-MAR-2007 16:50	S5650
L5	c08q0009	67097451009		08-MAR-2007 16:55	S5644
L6	c08q0010	67097451010		08-MAR-2007 17:01	S5646

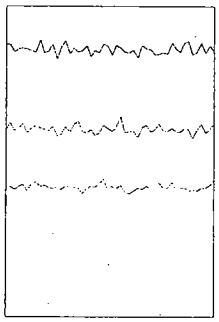
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	1.1527	0.7050	0.9499	0.6094	0.6018	0.6007	BLNK	-0.7301	1.66411		0.7699	1.000	0.995	
Antimony	A	0.3249	0.2880	0.2876	0.2704	0.2723	0.2906	BLNK	-0.0125	3.48587		0.2890	0.999	0.995	
Barium	A	0.2079	0.1280	0.0918	0.0820	0.0823	0.0812	BLNK	-0.0266	12.2764		0.1122	1.000	0.995	
Beryllium	A	0.2343	0.2539	0.2476	0.2426	0.2426	0.2335	BLNK	-0.0063	4.24879		0.2424	1.000	0.995	
Cadmium	A	0.0867	0.0821	0.0838	0.0772	0.0761	0.0767	BLNK	-0.0005	13.0582		0.0804	1.000	0.995	
Calcium	A	0.1100	0.0356	0.0274	0.0208	0.0206	0.0204	BLNK	-16.273	48.9445		0.0391	1.000	0.995	
Lead	A	1.0848	0.7323	0.6884	0.6079	0.6075	0.6064	BLNK	-0.0245	1.64871		0.7212	1.000	0.995	
Magnesium	A	1.0005	0.6156	0.5631	0.5020	0.4913	0.4846	BLNK	-1.9669	2.05813		0.6095	1.000	0.995	
Molybdenum	A	0.4571	0.2378	0.2200	0.1990	0.1994	0.2184	BLNK	-0.0171	4.66084		0.2553	0.998	0.995	
Potassium	A	9.5673	2.4651	1.5950	0.7817	0.7033	0.6925	BLNK	-123.66	1.45018		2.6341	1.000	0.995	
Silver	A	0.3647	0.3474	0.3426	0.3244	0.3286	0.3373	BLNK	-0.0063	2.98043		0.3408	1.000	0.995	
Thallium	A	0.9773	0.8394	0.8298	0.7916	0.8126	0.8820	BLNK	-0.0134	1.15229		0.8555	0.998	0.995	
Arsenic	E	0.7901	0.6392	0.5866	0.5671	0.5797	0.5830	BLNK	-0.0296	1.71771		0.6243	1.000	0.995	
Chromium	E	6.1033	3.6346	3.2994	2.8891	2.8850	2.8658	BLNK	-0.1175	0.34872		3.6129	1.000	0.995	
Cobalt	E	5.0362	4.8433	4.7685	4.6370	4.6140	4.5453	BLNK	-0.0046	0.21934		4.7407	1.000	0.995	
Copper	E	51.659	15.535	11.092	7.2223	6.6865	6.6007	BLNK	-0.6877	0.15172		16.466	1.000	0.995	
Manganese	E	2.4657	1.6963	1.6144	1.5041	1.5103	1.4934	BLNK	-0.0257	0.66819		1.7140	1.000	0.995	
Nickel	E	3.0370	1.5765	1.4445	1.2642	1.2323	1.2048	BLNK	-0.1247	0.82681		1.6265	1.000	0.995	
Sodium	E	4.2292	1.2969	0.9669	0.6466	0.5785	0.5721	BLNK	-55.516	1.74946		1.3817	1.000	0.995	
Vanadium	E	6.9544	3.2927	2.8125	2.3286	2.3502	2.3504	BLNK	-0.2126	0.42603		3.3481	1.000	0.995	
Zinc	E	20.850	5.1013	3.0654	1.1895	0.9794	0.9307	BLNK	-2.1334	1.07675		5.3526	1.000	0.995	
Iron	H	1.1490	0.9716	0.9715	0.8678	0.8462	0.8366	BLNK	-1.8814	1.19268		0.9404	1.000	0.995	
Selenium	H	0.1657	0.1442	0.1522	0.1407	0.1394	0.1356	BLNK	-0.0094	7.33173		0.1463	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

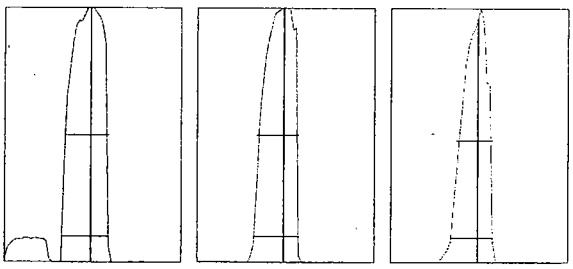
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17029.0	17193.3	1.74	2.00
89	50,000	31252.0	30184.1	2.28	1.00
205	50,000	21889.0	20832.3	2.35	4.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.071%
Doubly Charged: 70/140 1.094%



m/z:	7	89	205
Height:	17,252	30,198	20,744
Axis:	7.00	89.00	205.00
W-50%:	0.75	0.70	0.60
W-10%:	0.800	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1550	W
RF Matching	1.7	V
Smpl Depth	9	mm
Torch-H	0.9	mm
Torch-V	0.8	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-150	V
Omega Bias-ce	-30	V
Omega Lens-ce	0	V
Cell Entrance	-30	V
QP Focus	2	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	160	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	142	
AMU Offset	123	
Axis Gain	1.0015	
Axis Offset	-0.03	
QP Bias	-1	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1760	V
Pulse HV	1380	V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	25.1	25.03
59	3401.6	3.22
89	2230.5	3.23

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -15 V

m/z	Count(Mean)	RSD%
59	2487.6	3.60
78	0.2	215.60
89	19452.5	2.27

Integration Time: 0.1000sec

Generated : Mar 08, 2007 11:27:05
Printed : Mar 08, 2007 11:28:44

P/A Factor Tuning Report

Acquired:Mar 8 2007 11:38 am

Mass[amu]	Element	P/A Factor
6	Li	0.066905
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091118
45	Sc	0.090710
51	V	0.092022
52	Cr	0.094958
55	Mn	0.096330
56	Fe	Sensitivity too high
59	Co	0.097720
60	Ni	Sensitivity too low
63	Cu	0.103508
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.101248
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.108093
111	Cd	Sensitivity too low
115	In	0.106904
118	(In)	0.106124
121	Sb	0.106081
137	Ba	Sensitivity too low
159	Tb	0.108382
205	Tl	0.111849
206	(Pb)	0.111566
207	(Pb)	Sensitivity too low
208	Pb	0.111648
209	Bi	0.112033

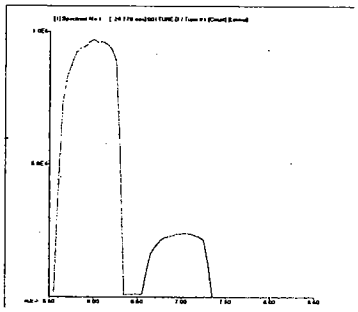
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1760 V
Pulse HV: 1380 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C08q00.B\001TUNE.D
Date Acquired:	Mar 8 2007 04:11 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.73	5.00	
59 Co	0.41	5.00	
115 In	0.85	5.00	
205 Tl	0.41	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

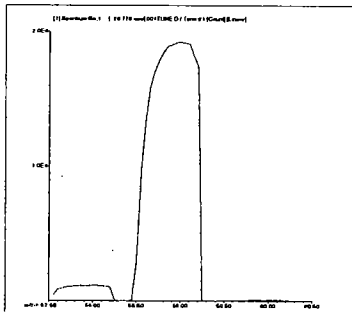
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

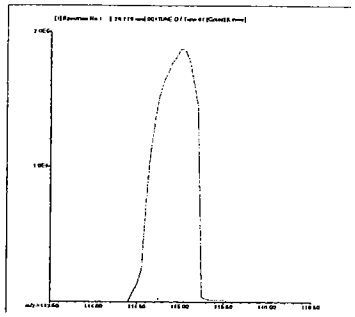
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



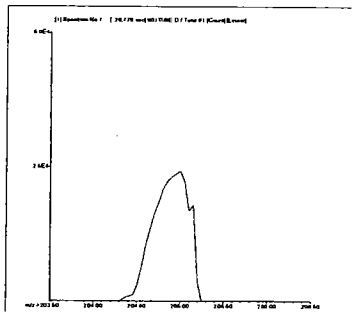
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004C
Date Acquired: Mar 8 2007 04:27 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1013060.00	A	13830.00	1.37
7	(Li)		P		
9	Be	30.00	P	5.77	19.25
23	Na	23208.36	P	306.90	1.32
24	Mg	22933.43	P	312.30	1.36
27	Al	10527.56	P	192.00	1.82
39	K	2046302.00	A	3268.00	0.16
44	Ca	7981.43	P	405.80	5.08
45	Sc	372753.69	P	1740.00	0.47
45	Sc	36566.75	P	167.50	0.46
45	Sc	1199967.00	A	13020.00	1.09
51	V	364.82	P	33.49	9.18
52	Cr	246.30	P	15.73	6.39
55	Mn	28.15	P	1.70	6.03
56	Fe	11760.94	P	416.60	3.54
59	Co	15.19	P	1.70	11.18
60	Ni	110.37	P	13.71	12.42
63	Cu	1631.60	P	87.16	5.34
65	Cu	793.37	P	40.07	5.05
66	Zn	713.36	P	8.68	1.22
72	Ge	86606.83	P	587.70	0.68
72	Ge	18001.75	P	116.90	0.65
75	As	6.22	P	3.67	59.01
78	Se	2.22	P	1.93	86.62
89	Y	1590566.00	A	13280.00	0.83
98	Mo	116.67	P	10.00	8.57
107	Ag	66.67	P	23.09	34.63
111	Cd	1.11	P	1.93	173.24
115	In	1570978.00	A	5300.00	0.34
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	112.23	P	3.85	3.43
137	Ba	92.23	P	8.39	9.10
159	Tb	2128023.00	A	11630.00	0.55
205	Tl	284.46	P	28.35	9.97
208	Pb	633.36	P	47.26	7.46
209	Bi	1225637.00	A	3066.00	0.25

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 8 2007 04:32 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1012702.00	A	3311.00	0.33
7 (Li)		P		
9 Be	474.47	P	10.18	2.15
23 Na	30956.98	P	2568.00	8.30
24 Mg	239996.80	P	3783.00	1.58
27 Al	276505.19	P	4065.00	1.47
39 K	2294810.00	A	3505.00	0.15
44 Ca	26383.05	P	740.20	2.81
45 Sc	369511.19	P	1569.00	0.42
45 Sc	36587.92	P	245.50	0.67
45 Sc	1199349.00	A	8660.00	0.72
51 V	508.90	P	13.47	2.65
52 Cr	446.68	P	39.77	8.90
55 Mn	180.37	P	11.13	6.17
56 Fe	84911.80	P	708.40	0.83
59 Co	368.53	P	3.90	1.06
60 Ni	222.23	P	5.77	2.60
63 Cu	1873.85	P	29.20	1.56
65 Cu	855.22	P	8.34	0.98
66 Zn	756.33	P	7.40	0.98
72 Ge	86491.93	P	119.00	0.14
72 Ge	18137.46	P	75.16	0.41
75 As	28.67	P	3.06	10.66
78 Se	28.67	P	1.76	6.15
89 Y	1574295.00	A	3315.00	0.21
98 Mo	1439.03	P	55.93	3.89
99 (Ru)	1.11	P	1.93	173.24
107 Ag	1150.09	P	29.06	2.53
111 Cd	273.35	P	26.67	9.76
115 In	1576816.00	A	8757.00	0.56
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1024.52	P	7.70	0.75
137 Ba	881.18	P	29.88	3.39
159 Tb	2118878.00	A	5478.00	0.26
205 Tl	1235.66	P	74.12	6.00
208 Pb	4597.17	P	41.64	0.91
209 Bi	1264356.00	A	4292.00	0.34

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1012702.40	0.33	1013060.50	100.0	80 - 120	
45 Sc	369511.16	0.42	372753.66	99.1	80 - 120	
45 Sc	36587.92	0.67	36566.75	100.1	80 - 120	
45 Sc	1199349.50	0.72	1199967.40	99.9	80 - 120	
72 Ge	86491.93	0.14	86606.83	99.9	80 - 120	
72 Ge	18137.46	0.41	18001.75	100.8	80 - 120	
89 Y	1574295.10	0.21	1590565.80	99.0	80 - 120	
115 In	1576816.10	0.56	1570978.00	100.4	80 - 120	
159 Tb	2118878.00	0.26	2128023.00	99.6	80 - 120	
209 Bi	1264356.30	0.34	1225636.90	103.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 8 2007 04:38 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1013560.00	A	30940.00	3.05
7 (Li)		P		
9 Be	2572.54	P	43.51	1.69
23 Na	47258.86	P	741.10	1.57
24 Mg	728350.19	M	20290.00	2.79
27 Al	833119.69	A	42020.00	5.04
39 K	2916269.00	A	40340.00	1.38
44 Ca	42042.86	P	3808.00	9.06
45 Sc	372923.69	P	2833.00	0.76
45 Sc	36443.14	P	171.70	0.47
45 Sc	1185302.00	A	56360.00	4.75
51 V	1200.07	P	39.77	3.31
52 Cr	1324.52	P	16.37	1.24
55 Mn	618.17	P	7.23	1.17
56 Fe	362342.91	P	4573.00	1.26
59 Co	1764.95	P	35.07	1.99
60 Ni	574.46	P	27.65	4.81
63 Cu	2804.76	P	67.37	2.40
65 Cu	1342.30	P	24.04	1.79
66 Zn	921.15	P	2.94	0.32
72 Ge	87198.08	P	414.70	0.48
72 Ge	18058.15	P	183.50	1.02
75 As	115.33	P	14.53	12.60
78 Se	125.78	P	2.78	2.21
89 Y	1558725.00	A	73130.00	4.69
98 Mo	3690.65	P	338.40	9.17
99 (Ru)	2.22	P	3.85	173.20
107 Ag	5415.71	P	169.40	3.13
111 Cd	1279.00	P	62.40	4.88
115 In	1560483.00	A	66820.00	4.28
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4486.47	P	66.72	1.49
137 Ba	2681.48	P	72.45	2.70
159 Tb	2097513.00	A	86360.00	4.12
205 Tl	5231.28	P	20.83	0.40
208 Pb	15342.02	P	87.71	0.57
209 Bi	1247103.00	A	35870.00	2.88

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1013560.40	3.05	1013060.50	100.0	80 - 120	
45 Sc	372923.66	0.76	372753.66	100.0	80 - 120	
45 Sc	36443.14	0.47	36566.75	99.7	80 - 120	
45 Sc	1185302.50	4.75	1199967.40	98.8	80 - 120	
72 Ge	87198.08	0.48	86606.83	100.7	80 - 120	
72 Ge	18058.15	1.02	18001.75	100.3	80 - 120	
89 Y	1558725.40	4.69	1590565.80	98.0	80 - 120	
115 In	1560482.60	4.28	1570978.00	99.3	80 - 120	
159 Tb	2097513.50	4.12	2128023.00	98.6	80 - 120	
209 Bi	1247103.10	2.88	1225636.90	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 8 2007 04:43 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:41 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1021859.00	A	15590.00	1.53
7	(Li)		P		
9	Be	5061.07	P	130.00	2.57
23	Na	72123.06	P	694.60	0.96
24	Mg	1344593.00	A	6841.00	0.51
27	Al	2268366.00	A	6362.00	0.28
39	K	3808722.00	A	28610.00	0.75
44	Ca	65501.42	P	866.40	1.32
45	Sc	359441.31	P	37030.00	10.30
45	Sc	37295.30	P	199.50	0.53
45	Sc	1194022.00	A	10870.00	0.91
51	V	2097.96	P	49.65	2.37
52	Cr	2460.98	P	26.31	1.07
55	Mn	1204.14	P	19.76	1.64
56	Fe	693472.50	P	3330.00	0.48
59	Co	3556.79	P	64.81	1.82
60	Ni	1077.46	P	16.12	1.50
63	Cu	4059.53	P	89.00	2.19
65	Cu	1999.43	P	15.41	0.77
66	Zn	1121.91	P	60.09	5.36
72	Ge	84931.13	P	7293.00	8.59
72	Ge	18298.79	P	76.73	0.42
75	As	214.67	P	16.83	7.84
78	Se	257.56	P	6.58	2.55
89	Y	1557698.00	A	7702.00	0.49
98	Mo	6854.18	P	64.38	0.94
99	(Ru)	0.00	P	0.00	0.00
107	Ag	10692.33	P	48.26	0.45
111	Cd	2613.69	P	78.81	3.02
115	In	1560701.00	A	22350.00	1.43
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	8976.65	P	154.00	1.72
137	Ba	3866.26	P	73.45	1.90
159	Tb	2104923.00	A	19080.00	0.91
205	Tl	10230.04	P	165.80	1.62
208	Pb	28981.62	P	246.50	0.85
209	Bi	1232834.00	A	5389.00	0.44

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1021858.50	1.53	1013060.50	100.9	80 - 120	
45	Sc	359441.34	10.30	372753.66	96.4	80 - 120	
45	Sc	37295.30	0.53	36566.75	102.0	80 - 120	
45	Sc	1194022.10	0.91	1199967.40	99.5	80 - 120	
72	Ge	84931.13	8.59	86606.83	98.1	80 - 120	
72	Ge	18298.79	0.42	18001.75	101.7	80 - 120	
89	Y	1557698.30	0.49	1590565.80	97.9	80 - 120	
115	In	1560701.40	1.43	1570978.00	99.3	80 - 120	
159	Tb	2104923.00	0.91	2128023.00	98.9	80 - 120	
209	Bi	1232833.60	0.44	1225636.90	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 8 2007 04:48 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1024251.00	A	3472.00	0.34
7 (Li)		P		
9 Be	49705.71	P	602.60	1.21
23 Na	474902.59	P	3587.00	0.76
24 Mg	12172400.00	A	27720.00	0.23
27 Al	14775450.00	A	78340.00	0.53
39 K	18955170.00	A	116200.00	0.61
44 Ca	504329.00	P	1777.00	0.35
45 Sc	366855.09	P	5600.00	1.53
45 Sc	36723.08	P	296.20	0.81
45 Sc	1212380.00	A	10540.00	0.87
51 V	17102.70	P	196.90	1.15
52 Cr	21217.93	P	133.30	0.63
55 Mn	11045.17	P	269.40	2.44
56 Fe	6365849.00	A	28320.00	0.44
59 Co	34056.86	P	301.40	0.88
60 Ni	9285.01	P	114.40	1.23
63 Cu	26134.09	P	242.70	0.93
65 Cu	12852.30	P	41.22	0.32
66 Zn	4303.67	P	107.20	2.49
72 Ge	85823.54	P	444.10	0.52
72 Ge	18097.05	P	437.20	2.42
75 As	2050.83	P	68.76	3.35
78 Se	2415.34	P	16.74	0.69
89 Y	1584152.00	A	17870.00	1.13
98 Mo	63028.04	P	617.10	0.98
99 (Ru)	6.67	P	6.67	100.00
107 Ag	101327.60	P	474.60	0.47
111 Cd	24103.13	P	492.70	2.04
115 In	1561864.00	A	3759.00	0.24
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	84465.49	P	418.60	0.50
137 Ba	34959.99	P	344.00	0.98
159 Tb	2131716.00	A	19150.00	0.90
205 Tl	96812.59	P	100.20	0.10
208 Pb	259175.70	P	1678.00	0.65
209 Bi	1223014.00	A	4297.00	0.35

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1024251.10	0.34	1013060.50	101.1	80 - 120	
45 Sc	366855.09	1.53	372753.66	98.4	80 - 120	
45 Sc	36723.07	0.81	36566.75	100.4	80 - 120	
45 Sc	1212380.30	0.87	1199967.40	101.0	80 - 120	
72 Ge	85823.54	0.52	86606.83	99.1	80 - 120	
72 Ge	18097.05	2.42	18001.75	100.5	80 - 120	
89 Y	1584152.30	1.13	1590565.80	99.6	80 - 120	
115 In	1561864.40	0.24	1570978.00	99.4	80 - 120	
159 Tb	2131716.30	0.90	2128023.00	100.2	80 - 120	
209 Bi	1223014.40	0.35	1225636.90	99.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 8 2007 04:53 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	994305.13	A	14380.00	1.45
7 (Li)		P		
9 Be	482423.50	P	2135.00	0.44
23 Na	4144367.00	A	29080.00	0.70
24 Mg	############	A	525700.00	0.44
27 Al	############	A	345900.00	0.24
39 K	############	A	1349000.00	0.79
44 Ca	5003393.00	A	6044.00	0.12
45 Sc	368472.00	P	1834.00	0.50
45 Sc	35819.73	P	172.70	0.48
45 Sc	1213143.00	A	5608.00	0.46
51 V	168366.09	P	358.80	0.21
52 Cr	206675.30	P	480.00	0.23
55 Mn	108191.40	P	290.70	0.27
56 Fe	62359352.00	A	82150.00	0.13
59 Co	330534.81	P	795.30	0.24
60 Ni	88279.73	P	378.80	0.43
63 Cu	235659.70	P	552.20	0.23
65 Cu	115273.10	P	403.10	0.35
66 Zn	34518.17	P	50.72	0.15
72 Ge	83935.73	P	177.70	0.21
72 Ge	17622.01	P	39.49	0.22
75 As	20431.92	P	59.95	0.29
78 Se	23403.51	P	264.00	1.13
89 Y	1572316.00	A	10580.00	0.67
98 Mo	627131.69	P	1210.00	0.19
99 (Ru)	20.00	P	5.77	28.87
107 Ag	996675.50	M	27680.00	2.78
111 Cd	230967.91	P	208.20	0.09
115 In	1516644.00	A	8719.00	0.57
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	826053.63	P	2027.00	0.25
137 Ba	346619.09	P	2293.00	0.66
159 Tb	2104649.00	A	4667.00	0.22
205 Tl	951570.50	P	5845.00	0.61
208 Pb	2557175.00	A	23450.00	0.92
209 Bi	1171127.00	A	13420.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	994305.06	1.45	1013060.50	98.1	80 - 120	
45 Sc	368471.97	0.50	372753.66	98.9	80 - 120	
45 Sc	35819.73	0.48	36566.75	98.0	80 - 120	
45 Sc	1213143.30	0.46	1199967.40	101.1	80 - 120	
72 Ge	83935.73	0.21	86606.83	96.9	80 - 120	
72 Ge	17622.01	0.22	18001.75	97.9	80 - 120	
89 Y	1572316.10	0.67	1590565.80	98.9	80 - 120	
115 In	1516644.10	0.57	1570978.00	96.5	80 - 120	
159 Tb	2104648.50	0.22	2128023.00	98.9	80 - 120	
209 Bi	1171127.50	1.15	1225636.90	95.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 8 2007 04:59 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1003222.00	A	8263.00	0.82
7	(Li)		P		
9	Be	937117.81	A	2006.00	0.21
23	Na	8391806.00	A	37610.00	0.45
24	Mg	############	A	1278000.00	0.53
27	Al	############	A	1801000.00	0.60
39	K	############	A	2146000.00	0.62
44	Ca	10233730.00	A	31810.00	0.31
45	Sc	381257.09	P	2387.00	0.63
45	Sc	36668.89	P	180.90	0.49
45	Sc	1253633.00	A	5948.00	0.47
51	V	344740.09	P	1121.00	0.33
52	Cr	420346.50	P	1722.00	0.41
55	Mn	219045.59	P	675.40	0.31
56	Fe	############	A	360000.00	0.28
59	Co	666670.13	P	1243.00	0.19
60	Ni	176712.80	P	633.80	0.36
63	Cu	466217.41	P	465.70	0.10
65	Cu	228606.59	P	629.20	0.28
66	Zn	65736.89	P	490.00	0.75
72	Ge	85791.71	P	674.20	0.79
72	Ge	17659.07	P	178.70	1.01
75	As	41174.46	P	90.76	0.22
78	Se	46544.54	P	94.91	0.20
89	Y	1616985.00	A	18060.00	1.12
98	Mo	1412552.00	A	10440.00	0.74
99	(Ru)	40.00	P	15.28	38.20
107	Ag	2064443.00	A	4179.00	0.20
111	Cd	469356.91	P	2076.00	0.44
115	In	1530155.00	A	8645.00	0.56
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1778426.00	A	10830.00	0.61
137	Ba	692421.38	P	3389.00	0.49
159	Tb	2130573.00	A	9313.00	0.44
205	Tl	2006506.00	A	19400.00	0.97
208	Pb	5167879.00	A	24100.00	0.47
209	Bi	1137427.00	A	2496.00	0.22

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1003222.10	0.82	1013060.50	99.0	80 - 120	
45	Sc	381257.13	0.63	372753.66	102.3	80 - 120	
45	Sc	36668.89	0.49	36566.75	100.3	80 - 120	
45	Sc	1253633.30	0.47	1199967.40	104.5	80 - 120	
72	Ge	85791.72	0.79	86606.83	99.1	80 - 120	
72	Ge	17659.07	1.01	18001.75	98.1	80 - 120	
89	Y	1616984.60	1.12	1590565.80	101.7	80 - 120	
115	In	1530155.50	0.56	1570978.00	97.4	80 - 120	
159	Tb	2130573.30	0.44	2128023.00	100.1	80 - 120	
209	Bi	1137427.50	0.22	1225636.90	92.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451012 File : c08q0012
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5653, S5290

IDF : 1.0
Time : 08-MAR-2007 17:12

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7699	0.6118	10000	10180	ug/L	2	10	
Antimony	A	0.2890	0.2844	100.0	99.14	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2490	100.0	105.8	ug/L	6	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0211	10000	10300	ug/L	3	10	
Lead	A	0.7212	0.6120	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.5004	10000	10300	ug/L	3	10	
Molybdenum	A	0.2553	0.2031	100.0	94.65	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3667	100.0	109.3	ug/L	9	10	
Thallium	A	0.8555	0.8042	50.00	46.32	ug/L	-7	10	
Arsenic	E	0.6243	0.5902	100.0	101.3	ug/L	1	10	
Chromium	E	3.6129	2.8630	100.0	99.72	ug/L	0	10	
Cobalt	E	4.7407	4.5130	100.0	98.99	ug/L	-1	10	
Copper	E	16.466	6.5882	100.0	99.27	ug/L	-1	10	
Manganese	E	1.7140	1.4797	100.0	98.85	ug/L	-1	10	
Nickel	E	1.6265	1.2077	100.0	99.73	ug/L	0	10	
Sodium	E	1.3817	0.5631	10000	9795	ug/L	-2	10	
Vanadium	E	3.3481	2.3136	100.0	98.35	ug/L	-2	10	
Zinc	E	5.3526	0.9346	100.0	98.50	ug/L	-2	10	
Iron	H	0.9404	0.8617	10000	10280	ug/L	3	10	
Selenium	H	0.1463	0.1394	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	993023	-1.98
Scandium	A	1199967	1230321	2.53
Scandium	E	36567	37452	2.42
Scandium	H	372754	379475	1.80
Germanium	H	86607	86294	-0.36
Germanium	E	18002	18172	0.95
Indium	A	1570978	1528510	-2.70
Bismuth	A	1225637	1169624	-4.57
Yttrium	A	1590566	1608372	1.12
Terbium	A	2128023	2118179	-0.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451035 File : c08q0035
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 08-MAR-2007 19:15

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5976	10000	9944	ug/L	-1	10	
Antimony	A	0.2890	0.2789	100.0	97.22	ug/L	-3	10	
Barium	A	0.1122	0.0810	100.0	99.35	ug/L	-1	10	
Beryllium	A	0.2424	0.2408	100.0	102.3	ug/L	2	10	
Cadmium	A	0.0804	0.0768	100.0	100.2	ug/L	0	10	
Calcium	A	0.0391	0.0206	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6136	100.0	101.1	ug/L	1	10	
Magnesium	A	0.6095	0.4869	10000	10020	ug/L	0	10	
Molybdenum	A	0.2553	0.2000	100.0	93.22	ug/L	-7	10	
Potassium	A	2.6341	0.7070	10000	10130	ug/L	1	10	
Silver	A	0.3408	0.3574	100.0	106.5	ug/L	7	10	
Thallium	A	0.8555	0.8058	50.00	46.41	ug/L	-7	10	
Arsenic	E	0.6243	0.5852	100.0	100.5	ug/L	1	10	
Chromium	E	3.6129	2.8788	100.0	100.3	ug/L	0	10	
Cobalt	E	4.7407	4.5364	100.0	99.50	ug/L	-1	10	
Copper	E	16.466	6.5685	100.0	98.97	ug/L	-1	10	
Manganese	E	1.7140	1.4937	100.0	99.78	ug/L	0	10	
Nickel	E	1.6265	1.2157	100.0	100.4	ug/L	0	10	
Sodium	E	1.3817	0.5608	10000	9755	ug/L	-2	10	
Vanadium	E	3.3481	2.3185	100.0	98.56	ug/L	-1	10	
Zinc	E	5.3526	0.9447	100.0	99.59	ug/L	0	10	
Iron	H	0.9404	0.8465	10000	10090	ug/L	1	10	
Selenium	H	0.1463	0.1367	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	976980	-3.56
Scandium	A	1199967	1212037	1.01
Scandium	E	36567	36160	-1.11
Scandium	H	372754	366620	-1.65
Germanium	H	86607	84668	-2.24
Germanium	E	18002	17682	-1.78
Indium	A	1570978	1529707	-2.63
Bismuth	A	1225637	1204439	-1.73
Yttrium	A	1590566	1587526	-0.19
Terbium	A	2128023	2143028	0.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451053 File : c08q0053
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 08-MAR-2007 20:51

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5978	10000	9948	ug/L	-1	10	
Antimony	A	0.2890	0.2774	100.0	96.67	ug/L	-3	10	
Barium	A	0.1122	0.0805	100.0	98.74	ug/L	-1	10	
Beryllium	A	0.2424	0.2456	100.0	104.3	ug/L	4	10	
Cadmium	A	0.0804	0.0774	100.0	101.1	ug/L	1	10	
Calcium	A	0.0391	0.0207	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6099	100.0	100.5	ug/L	1	10	
Magnesium	A	0.6095	0.4884	10000	10050	ug/L	1	10	
Molybdenum	A	0.2553	0.2010	100.0	93.67	ug/L	-6	10	
Potassium	A	2.6341	0.7053	10000	10100	ug/L	1	10	
Silver	A	0.3408	0.3577	100.0	106.6	ug/L	7	10	
Thallium	A	0.8555	0.7886	50.00	45.42	ug/L	-9	10	
Arsenic	E	0.6243	0.5809	100.0	99.75	ug/L	0	10	
Chromium	E	3.6129	2.8852	100.0	100.5	ug/L	1	10	
Cobalt	E	4.7407	4.5454	100.0	99.70	ug/L	0	10	
Copper	E	16.466	6.5969	100.0	99.40	ug/L	-1	10	
Manganese	E	1.7140	1.4877	100.0	99.38	ug/L	-1	10	
Nickel	E	1.6265	1.2178	100.0	100.6	ug/L	1	10	
Sodium	E	1.3817	0.5571	10000	9690	ug/L	-3	10	
Vanadium	E	3.3481	2.3339	100.0	99.22	ug/L	-1	10	
Zinc	E	5.3526	0.9375	100.0	98.82	ug/L	-1	10	
Iron	H	0.9404	0.8382	10000	9995	ug/L	0	10	
Selenium	H	0.1463	0.1387	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	994494	-1.83
Scandium	A	1199967	1234033	2.84
Scandium	E	36567	36386	-0.49
Scandium	H	372754	366011	-1.81
Germanium	H	86607	83572	-3.50
Germanium	E	18002	17867	-0.75
Indium	A	1570978	1541819	-1.86
Bismuth	A	1225637	1205901	-1.61
Yttrium	A	1590566	1613323	1.43
Terbium	A	2128023	2151819	1.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451071 File : c08q0071
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 08-MAR-2007 22:27

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6077	10000	10110	ug/L	1	10	
Antimony	A	0.2890	0.2823	100.0	98.39	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.2	ug/L	1	10	
Beryllium	A	0.2424	0.2476	100.0	105.2	ug/L	5	10	
Cadmium	A	0.0804	0.0781	100.0	102.0	ug/L	2	10	
Calcium	A	0.0391	0.0209	10000	10210	ug/L	2	10	
Lead	A	0.7212	0.6119	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.4947	10000	10180	ug/L	2	10	
Molybdenum	A	0.2553	0.2043	100.0	95.19	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3617	100.0	107.8	ug/L	8	10	
Thallium	A	0.8555	0.8023	50.00	46.21	ug/L	-8	10	
Arsenic	E	0.6243	0.5977	100.0	102.6	ug/L	3	10	
Chromium	E	3.6129	2.9420	100.0	102.5	ug/L	3	10	
Cobalt	E	4.7407	4.6206	100.0	101.3	ug/L	1	10	
Copper	E	16.466	6.7409	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.5065	100.0	100.6	ug/L	1	10	
Nickel	E	1.6265	1.2339	100.0	101.9	ug/L	2	10	
Sodium	E	1.3817	0.5653	10000	9834	ug/L	-2	10	
Vanadium	E	3.3481	2.3746	100.0	101.0	ug/L	1	10	
Zinc	E	5.3526	0.9669	100.0	102.0	ug/L	2	10	
Iron	H	0.9404	0.8489	10000	10120	ug/L	1	10	
Selenium	H	0.1463	0.1419	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1007714	-0.53
Scandium	A	1199967	1230946	2.58
Scandium	E	36567	36295	-0.74
Scandium	H	372754	362889	-2.65
Germanium	H	86607	83036	-4.12
Germanium	E	18002	17673	-1.83
Indium	A	1570978	1534001	-2.35
Bismuth	A	1225637	1177160	-3.96
Yttrium	A	1590566	1602188	0.73
Terbium	A	2128023	2125033	-0.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451080 File : c08q0080
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 08-MAR-2007 23:15

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6081	10000	10120	ug/L	1	10	
Antimony	A	0.2890	0.2812	100.0	98.02	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2424	0.2463	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0779	100.0	101.7	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10250	ug/L	3	10	
Lead	A	0.7212	0.6110	100.0	100.7	ug/L	1	10	
Magnesium	A	0.6095	0.4943	10000	10170	ug/L	2	10	
Molybdenum	A	0.2553	0.2017	100.0	93.98	ug/L	-6	10	
Potassium	A	2.6341	0.7175	10000	10280	ug/L	3	10	
Silver	A	0.3408	0.3600	100.0	107.3	ug/L	7	10	
Thallium	A	0.8555	0.8024	50.00	46.22	ug/L	-8	10	
Arsenic	E	0.6243	0.5961	100.0	102.4	ug/L	2	10	
Chromium	E	3.6129	2.9160	100.0	101.6	ug/L	2	10	
Cobalt	E	4.7407	4.5752	100.0	100.4	ug/L	0	10	
Copper	E	16.466	6.7418	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.4970	100.0	100.0	ug/L	0	10	
Nickel	E	1.6265	1.2256	100.0	101.2	ug/L	1	10	
Sodium	E	1.3817	0.5631	10000	9796	ug/L	-2	10	
Vanadium	E	3.3481	2.3581	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9607	100.0	101.3	ug/L	1	10	
Iron	H	0.9404	0.8503	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1016973	0.39
Scandium	A	1199967	1234805	2.90
Scandium	E	36567	36623	0.15
Scandium	H	372754	361464	-3.03
Germanium	H	86607	82598	-4.63
Germanium	E	18002	17734	-1.49
Indium	A	1570978	1549734	-1.35
Bismuth	A	1225637	1185379	-3.28
Yttrium	A	1590566	1623593	2.08
Terbium	A	2128023	2144502	0.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451108 File : c08q0108 Time : 09-MAR-2007 01:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6036	10000	10040	ug/L	0	10	
Antimony	A	0.2890	0.2844	100.0	99.12	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2468	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0804	0.0786	100.0	102.6	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10330	ug/L	3	10	
Lead	A	0.7212	0.6510	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4928	10000	10140	ug/L	1	10	
Molybdenum	A	0.2553	0.2073	100.0	96.62	ug/L	-3	10	
Potassium	A	2.6341	0.7188	10000	10300	ug/L	3	10	
Silver	A	0.3408	0.3435	100.0	102.4	ug/L	2	10	
Thallium	A	0.8555	0.8283	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6243	0.5861	100.0	100.6	ug/L	1	10	
Chromium	E	3.6129	2.9295	100.0	102.0	ug/L	2	10	
Cobalt	E	4.7407	4.6441	100.0	101.9	ug/L	2	10	
Copper	E	16.466	6.6127	100.0	99.64	ug/L	0	10	
Manganese	E	1.7140	1.5159	100.0	101.3	ug/L	1	10	
Nickel	E	1.6265	1.2430	100.0	102.6	ug/L	3	10	
Sodium	E	1.3817	0.5543	10000	9641	ug/L	-4	10	
Vanadium	E	3.3481	2.3567	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9437	100.0	99.47	ug/L	-1	10	
Iron	H	0.9404	0.8543	10000	10190	ug/L	2	10	
Selenium	H	0.1463	0.1402	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	802534	-20.78
Scandium	A	1199967	998035	-16.83
Scandium	E	36567	28975	-20.76
Scandium	H	372754	286227	-23.21
Germanium	H	86607	67373	-22.21
Germanium	E	18002	14500	-19.45
Indium	A	1570978	1303525	-17.02
Bismuth	A	1225637	1059860	-13.53
Yttrium	A	1590566	1323469	-16.79
Terbium	A	2128023	1852290	-12.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67097451126 File : c08q0126
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 09-MAR-2007 03:24

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6040	10000	10050	ug/L	1	10	
Antimony	A	0.2890	0.2842	100.0	99.06	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2472	100.0	105.0	ug/L	5	10	
Cadmium	A	0.0804	0.0791	100.0	103.3	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10310	ug/L	3	10	
Lead	A	0.7212	0.6511	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4924	10000	10130	ug/L	1	10	
Molybdenum	A	0.2553	0.2078	100.0	96.81	ug/L	-3	10	
Potassium	A	2.6341	0.7207	10000	10330	ug/L	3	10	
Silver	A	0.3408	0.3450	100.0	102.8	ug/L	3	10	
Thallium	A	0.8555	0.8337	50.00	48.02	ug/L	-4	10	
Arsenic	E	0.6243	0.5910	100.0	101.5	ug/L	2	10	
Chromium	E	3.6129	2.9573	100.0	103.0	ug/L	3	10	
Cobalt	E	4.7407	4.6909	100.0	102.9	ug/L	3	10	
Copper	E	16.466	6.6326	100.0	99.94	ug/L	0	10	
Manganese	E	1.7140	1.5339	100.0	102.5	ug/L	3	10	
Nickel	E	1.6265	1.2505	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5546	10000	9646	ug/L	-4	10	
Vanadium	E	3.3481	2.3732	100.0	100.9	ug/L	1	10	
Zinc	E	5.3526	0.9557	100.0	100.8	ug/L	1	10	
Iron	H	0.9404	0.8499	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1413	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	818786	-19.18
Scandium	A	1199967	1015317	-15.39
Scandium	E	36567	29231	-20.06
Scandium	H	372754	292217	-21.61
Germanium	H	86607	68066	-21.41
Germanium	E	18002	14662	-18.55
Indium	A	1570978	1316310	-16.21
Bismuth	A	1225637	1059562	-13.55
Yttrium	A	1590566	1341682	-15.65
Terbium	A	2128023	1874636	-11.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451143 File : c08q0143 Time : 09-MAR-2007 04:55
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6022	10000	10020	ug/L	0	10	
Antimony	A	0.2890	0.2826	100.0	98.51	ug/L	-1	10	
Barium	A	0.1122	0.0817	100.0	100.3	ug/L	0	10	
Beryllium	A	0.2424	0.2465	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10280	ug/L	3	10	
Lead	A	0.7212	0.6517	100.0	107.4	ug/L	7	10	
Magnesium	A	0.6095	0.4918	10000	10120	ug/L	1	10	
Molybdenum	A	0.2553	0.2063	100.0	96.14	ug/L	-4	10	
Potassium	A	2.6341	0.7141	10000	10230	ug/L	2	10	
Silver	A	0.3408	0.3429	100.0	102.2	ug/L	2	10	
Thallium	A	0.8555	0.8286	50.00	47.72	ug/L	-5	10	
Arsenic	E	0.6243	0.5939	100.0	102.0	ug/L	2	10	
Chromium	E	3.6129	2.9660	100.0	103.3	ug/L	3	10	
Cobalt	E	4.7407	4.6845	100.0	102.7	ug/L	3	10	
Copper	E	16.466	6.6402	100.0	100.0	ug/L	0	10	
Manganese	E	1.7140	1.5437	100.0	103.1	ug/L	3	10	
Nickel	E	1.6265	1.2513	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5611	10000	9761	ug/L	-2	10	
Vanadium	E	3.3481	2.3854	100.0	101.4	ug/L	1	10	
Zinc	E	5.3526	0.9542	100.0	100.6	ug/L	1	10	
Iron	H	0.9404	0.8481	10000	10110	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825273	-18.54
Scandium	A	1199967	1021873	-14.84
Scandium	E	36567	29100	-20.42
Scandium	H	372754	287690	-22.82
Germanium	H	86607	67198	-22.41
Germanium	E	18002	14624	-18.76
Indium	A	1570978	1318609	-16.06
Bismuth	A	1225637	1066402	-12.99
Yttrium	A	1590566	1344691	-15.46
Terbium	A	2128023	1874906	-11.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451015 File : c08q0015 Time : 08-MAR-2007 17:28
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.05890]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06340]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.642]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05478]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04820]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04860]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05038]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1073870	6.00
Scandium	A	1199967	1256938	4.75
Scandium	E	36567	38473	5.21
Scandium	H	372754	385873	3.52
Germanium	H	86607	89505	3.35
Germanium	E	18002	19023	5.67
Indium	A	1570978	1636995	4.20
Bismuth	A	1225637	1262297	2.99
Yttrium	A	1590566	1648430	3.64
Terbium	A	2128023	2191757	2.99

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67097451038 File : c08q0038
Cal : 67097451001 Caldate: 08-MAR-2007
IDF : 1.0
Time : 08-MAR-2007 19:32

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02556]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03569]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[7.257]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01100]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.005974]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1001395	-1.15
Scandium	A	1199967	1191926	-0.67
Scandium	E	36567	36102	-1.27
Scandium	H	372754	360289	-3.34
Germanium	H	86607	83997	-3.01
Germanium	E	18002	17843	-0.88
Indium	A	1570978	1581958	0.70
Bismuth	A	1225637	1247179	1.76
Yttrium	A	1590566	1571235	-1.22
Terbium	A	2128023	2133582	0.26

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67097451057 File : c08q0057
Cal : 67097451001 Caldate: 08-MAR-2007
IDF : 1.0
Time : 08-MAR-2007 21:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01637]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01486]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.452]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01958]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01008]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.002456]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005985]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1037587	2.42
Scandium	A	1199967	1232946	2.75
Scandium	E	36567	37318	2.05
Scandium	H	372754	364473	-2.22
Germanium	H	86607	84688	-2.22
Germanium	E	18002	18349	1.93
Indium	A	1570978	1592703	1.38
Bismuth	A	1225637	1238227	1.03
Yttrium	A	1590566	1617067	1.67
Terbium	A	2128023	2159508	1.48

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451074 File : c08q0074 Time : 08-MAR-2007 22:43
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02060]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02318]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005848]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.003819]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01111]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1021251	0.81
Scandium	A	1199967	1209430	0.79
Scandium	E	36567	36911	0.94
Scandium	H	372754	358359	-3.86
Germanium	H	86607	83118	-4.03
Germanium	E	18002	18296	1.63
Indium	A	1570978	1579316	0.53
Bismuth	A	1225637	1224235	-0.11
Yttrium	A	1590566	1589335	-0.08
Terbium	A	2128023	2128027	0.00

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451083 File : c08q0083 Time : 08-MAR-2007 23:31
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001860]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.004952]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.001227]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03703]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[5.296]	10.00	4.329	ug/L	!ib
Selenium	H	[0.02784]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1015614	0.25
Scandium	A	1199967	1194890	-0.42
Scandium	E	36567	36508	-0.16
Scandium	H	372754	360691	-3.24
Germanium	H	86607	83013	-4.15
Germanium	E	18002	17827	-0.97
Indium	A	1570978	1557142	-0.88
Bismuth	A	1225637	1205567	-1.64
Yttrium	A	1590566	1568778	-1.37
Terbium	A	2128023	2081668	-2.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451111 File : c08q0111 Time : 09-MAR-2007 02:03
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005955]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007007]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.005084]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	822009	-18.86
Scandium	A	1199967	998362	-16.80
Scandium	E	36567	29327	-19.80
Scandium	H	372754	293945	-21.14
Germanium	H	86607	70181	-18.97
Germanium	E	18002	14960	-16.90
Indium	A	1570978	1354502	-13.78
Bismuth	A	1225637	1118204	-8.77
Yttrium	A	1590566	1348087	-15.24
Terbium	A	2128023	1873226	-11.97

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67097451129 File : c08q0129
Cal : 67097451001 Caldate: 08-MAR-2007
IDF : 1.0
Time : 09-MAR-2007 03:40

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.07214]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06213]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.762]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01400]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008845]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01087]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850862	-16.01
Scandium	A	1199967	1021811	-14.85
Scandium	E	36567	30122	-17.62
Scandium	H	372754	292255	-21.60
Germanium	H	86607	69873	-19.32
Germanium	E	18002	15317	-14.91
Indium	A	1570978	1376799	-12.36
Bismuth	A	1225637	1141064	-6.90
Yttrium	A	1590566	1367443	-14.03
Terbium	A	2128023	1912303	-10.14

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451147 File : c08q0147 Time : 09-MAR-2007 05:17
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02957]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02532]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02658]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02283]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02980]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.008714]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01918]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850460	-16.05
Scandium	A	1199967	1031697	-14.02
Scandium	E	36567	30982	-15.27
Scandium	H	372754	301131	-19.21
Germanium	H	86607	71265	-17.71
Germanium	E	18002	15611	-13.28
Indium	A	1570978	1377183	-12.34
Bismuth	A	1225637	1149145	-6.24
Yttrium	A	1590566	1377021	-13.43
Terbium	A	2128023	1919450	-9.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451017 File : c08q0017 Time : 08-MAR-2007 17:38
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06190]	0.1000	ug/L	
Barium	A	1.108	0.1000	ug/L	
Beryllium	A	[0.03485]	0.1000	ug/L	
Cadmium	A	1.676	0.1000	ug/L	
Lead	A	0.4987	0.1000	ug/L	
Silver	A	0.2110	0.1000	ug/L	
Thallium	A	0.05584	0.05000	ug/L	
Arsenic	E	0.3292	0.1000	ug/L	
Chromium	E	1.463	0.1000	ug/L	
Cobalt	E	0.2484	0.1000	ug/L	
Copper	E	2.131	0.1000	ug/L	
Manganese	E	0.8835	0.1000	ug/L	
Nickel	E	1.350	0.1000	ug/L	
Vanadium	E	0.1866	0.1000	ug/L	
Zinc	E	1.294	0.1000	ug/L	
Selenium	H	[0.07223]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99280	ug/L	99
Calcium	A	300000	309700	ug/L	103
Magnesium	A	100000	96080	ug/L	96
Molybdenum	A	2000	2055	ug/L	103
Potassium	A	100000	101600	ug/L	102
Sodium	E	250000	257300	ug/L	103
Iron	H	250000	242800	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825510	-18.51
Scandium	A	1199967	1161981	-3.17
Scandium	E	36567	34573	-5.45
Scandium	H	372754	370712	-0.55
Germanium	H	86607	76805	-11.32
Germanium	E	18002	16545	-8.09
Indium	A	1570978	1371368	-12.71
Bismuth	A	1225637	891432	-27.27
Yttrium	A	1590566	1516370	-4.66
Terbium	A	2128023	1979918	-6.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451018 File : c08q0018 Time : 08-MAR-2007 17:44
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103500	ug/L	4		
Cadmium	A	100.0	102.4	ug/L	2	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	100100	ug/L	0		
Molybdenum	A	2000	2143	ug/L	7		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	45.49	ug/L	-9	20	
Arsenic	E	100.0	105.2	ug/L	5	20	
Chromium	E	200.0	206.9	ug/L	3	20	
Cobalt	E	200.0	192.7	ug/L	-4	20	
Copper	E	200.0	185.8	ug/L	-7	20	
Manganese	E	200.0	203.2	ug/L	2	20	
Nickel	E	200.0	188.9	ug/L	-6	20	
Sodium	E	250000	266000	ug/L	6		
Vanadium	E	200.0	211.0	ug/L	6	20	
Zinc	E	100.0	90.31	ug/L	-10	20	
Iron	H	250000	246600	ug/L	-1		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	364864	-2.12
Scandium	A	1199967	1092779	-8.93
Scandium	E	36567	33405	-8.65
Germanium	H	86607	75884	-12.38
Germanium	E	18002	15854	-11.93
Indium	A	1570978	1302188	-17.11
Yttrium	A	1590566	1444006	-9.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451086 File : c08q0086 Time : 08-MAR-2007 23:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06628]	0.1000	ug/L	
Barium	A	1.180	0.1000	ug/L	
Beryllium	A	[0.04090]	0.1000	ug/L	
Cadmium	A	1.781	0.1000	ug/L	
Lead	A	0.5239	0.1000	ug/L	
Silver	A	0.2302	0.1000	ug/L	
Thallium	A	[0.04523]	0.05000	ug/L	
Arsenic	E	0.3374	0.1000	ug/L	
Chromium	E	1.481	0.1000	ug/L	
Cobalt	E	0.2575	0.1000	ug/L	
Copper	E	3.064	0.1000	ug/L	
Manganese	E	1.033	0.1000	ug/L	
Nickel	E	1.389	0.1000	ug/L	
Vanadium	E	0.1824	0.1000	ug/L	
Zinc	E	1.298	0.1000	ug/L	
Selenium	H	[0.05560]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99290	ug/L	99
Calcium	A	300000	310700	ug/L	104
Magnesium	A	100000	95810	ug/L	96
Molybdenum	A	2000	2067	ug/L	103
Potassium	A	100000	102000	ug/L	102
Sodium	E	250000	253300	ug/L	101
Iron	H	250000	240700	ug/L	96

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	754659	-25.51
Scandium	A	1199967	1059145	-11.74
Scandium	E	36567	31365	-14.23
Scandium	H	372754	332469	-10.81
Germanium	H	86607	68907	-20.44
Germanium	E	18002	15157	-15.80
Indium	A	1570978	1271270	-19.08
Bismuth	A	1225637	863039	-29.58
Yttrium	A	1590566	1397665	-12.13
Terbium	A	2128023	1837340	-13.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451087 File : c08q0087 Time : 08-MAR-2007 23:53
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103200	ug/L	3		
Cadmium	A	100.0	103.3	ug/L	3	20	
Calcium	A	300000	323800	ug/L	8		
Magnesium	A	100000	99360	ug/L	-1		
Molybdenum	A	2000	2132	ug/L	7		
Potassium	A	100000	106400	ug/L	6		
Silver	A	50.00	45.77	ug/L	-8	20	
Arsenic	E	100.0	106.6	ug/L	7	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	196.6	ug/L	-2	20	
Copper	E	200.0	188.9	ug/L	-6	20	
Manganese	E	200.0	205.3	ug/L	3	20	
Nickel	E	200.0	192.8	ug/L	-4	20	
Sodium	E	250000	261600	ug/L	5		
Vanadium	E	200.0	215.3	ug/L	8	20	
Zinc	E	100.0	91.46	ug/L	-9	20	
Iron	H	250000	244600	ug/L	-2		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	322082	-13.59
Scandium	A	1199967	1007537	-16.04
Scandium	E	36567	29999	-17.96
Germanium	H	86607	67669	-21.87
Germanium	E	18002	14348	-20.30
Indium	A	1570978	1224392	-22.06
Yttrium	A	1590566	1346588	-15.34

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451148 File : c08q0148 Time : 09-MAR-2007 05:22
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05209]	0.1000	ug/L	
Barium	A	1.183	0.1000	ug/L	
Beryllium	A	[0.02993]	0.1000	ug/L	
Cadmium	A	1.812	0.1000	ug/L	
Lead	A	0.5462	0.1000	ug/L	
Silver	A	0.2144	0.1000	ug/L	
Thallium	A	[0.04274]	0.05000	ug/L	
Arsenic	E	0.3068	0.1000	ug/L	
Chromium	E	1.497	0.1000	ug/L	
Cobalt	E	0.2400	0.1000	ug/L	
Copper	E	2.332	0.1000	ug/L	
Manganese	E	0.9592	0.1000	ug/L	
Nickel	E	1.324	0.1000	ug/L	
Vanadium	E	0.1515	0.1000	ug/L	
Zinc	E	1.255	0.1000	ug/L	
Selenium	H	[0.08294]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102200	ug/L	102
Calcium	A	300000	319300	ug/L	106
Magnesium	A	100000	98390	ug/L	98
Molybdenum	A	2000	2104	ug/L	105
Potassium	A	100000	105700	ug/L	106
Sodium	E	250000	244400	ug/L	98
Iron	H	250000	241600	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	696986	-31.20
Scandium	A	1199967	956700	-20.27
Scandium	E	36567	29153	-20.27
Scandium	H	372754	294703	-20.94
Germanium	H	86607	62607	-27.71
Germanium	E	18002	14237	-20.91
Indium	A	1570978	1161016	-26.10
Bismuth	A	1225637	835343	-31.84
Yttrium	A	1590566	1277919	-19.66
Terbium	A	2128023	1700256	-20.10

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451149 File : c08q0149 Time : 09-MAR-2007 05:28
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104700	ug/L	5		
Cadmium	A	100.0	102.6	ug/L	3	20	
Calcium	A	300000	328000	ug/L	9		
Magnesium	A	100000	100700	ug/L	1		
Molybdenum	A	2000	2127	ug/L	6		
Potassium	A	100000	108000	ug/L	8		
Silver	A	50.00	45.34	ug/L	-9	20	
Arsenic	E	100.0	101.6	ug/L	2	20	
Chromium	E	200.0	205.1	ug/L	3	20	
Cobalt	E	200.0	191.9	ug/L	-4	20	
Copper	E	200.0	181.1	ug/L	-9	20	
Manganese	E	200.0	202.9	ug/L	1	20	
Nickel	E	200.0	187.6	ug/L	-6	20	
Sodium	E	250000	249300	ug/L	0		
Vanadium	E	200.0	209.8	ug/L	5	20	
Zinc	E	100.0	87.79	ug/L	-12	20	
Iron	H	250000	240500	ug/L	-4		
Selenium	H	100.0	100.0	ug/L	0	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	284297	-23.73
Scandium	A	1199967	873446	-27.21
Scandium	E	36567	27008	-26.14
Germanium	H	86607	60432	-30.22
Germanium	E	18002	13168	-26.85
Indium	A	1570978	1098772	-30.06
Yttrium	A	1590566	1193051	-24.99

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07
Sequence : MET06 c08q0

Reference: c08q0004
Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1013061	1199967	36567	372754	86607	18002	1570978	1225637	1590566	2128023
		LOWER LIMIT	303918	359990	10970	111826	25982	5401	471293	367691	477170	638407
		UPPER LIMIT	1215673	1439960	43880	447304	103928	21602	1885174	1470764	1908679	2553628
015	ICB		1073870	1256938	38473	385873	89505	19023	1636995	1262297	1648430	2191757
017	ICSA		825510	1161981	34573	370712	76805	16545	1371368	891432	1516370	1979918
018	ICSAB		775998	1092779	33405	364864	75884	15854	1302188	851784	1444006	1874691
023	BLANK	QC378195	869219	1100012	33070	341082	80562	16555	1428563	1183106	1446525	2007479
024	BS	QC378196	816702	1043661	30751	325031	73377	14776	1331121	1076493	1374607	1916093
025	BSD	QC378197	842726	1080137	32271	329206	74095	15376	1362809	1091947	1421969	1951109
027	MSS	193027-002	955365	1160485	35022	353024	82989	17348	1487016	1183221	1505334	2066741
028	SER	QC378200	969238	1171428	35044	360919	84589	17636	1517374	1212178	1531244	2078425
029	MS	QC378198	946709	1147205	34684	349184	81194	17257	1468891	1179013	1493719	2047309
030	MSD	QC378199	968032	1186615	35331	356109	82608	17594	1509048	1199126	1543135	2105512
031	PDS	QC378201	935297	1165840	34621	348450	80029	16819	1441782	1122477	1510841	2032155
035	CCV		976980	1212037	36160	366620	84668	17682	1529707	1204439	1587526	2143028
038	CCB		1001395	1191926	36102	360289	83997	17843	1581958	1247179	1571235	2133582
040	BLANK	QC378195	803493	990038	29763	295637	94368	19325	1276063	1071319	1298996	1860477
041	BLANK	QC377794	909233	1120219	33806	336878	78319	16649	1469032	1205760	1478181	2047961
042	SAMPLE	193213-001	990462	1203289	36120	363039	85105	18126	1564022	1250855	1573931	2135949
043	SAMPLE	193213-001	995235	1217337	36500	369332	85092	17972	1560132	1239454	1612003	2125902
044	SAMPLE	193027-001	991927	1209051	36563	366695	84965	17812	1553872	1221600	1565217	2125392
045	SAMPLE	193027-003	977187	1200968	36163	356145	83402	17948	1529507	1195224	1544080	2096356
046	SAMPLE	193027-004	983937	1204589	36037	360390	84311	17912	1526956	1182636	1543247	2092675
047	SAMPLE	193027-005	989739	1212076	37255	370990	86672	18338	1529078	1197560	1570577	2097958
048	SAMPLE	193027-006	984145	1189425	35682	358717	83388	17734	1528623	1200353	1546690	2077608
049	SAMPLE	193027-007	992037	1205563	36305	361039	84214	18166	1527431	1194429	1542035	2078638
053	CCV		994494	1234033	36386	366011	83572	17867	1541819	1205901	1613323	2151819
057	CCB		1037587	1232946	37318	364473	84688	18349	1592703	1238227	1617067	2159508
058	SER	QC378200	1020119	1197573	36093	361574	84950	18008	1540351	1207422	1566766	2079615
059	MSS	193027-002	1003023	1196272	36032	352657	81876	17803	1531135	1189848	1556140	2106174
060	SAMPLE	193027-008	994305	1182219	36127	347312	81174	17831	1485007	1146825	1527880	2045231
061	SAMPLE	193027-011	1016985	1214670	36901	368427	84189	18009	1552296	1170252	1581727	2112020
062	SAMPLE	193027-012	1018657	1221362	36455	365182	83837	17745	1536849	1155538	1580981	2098723
063	SAMPLE	193027-013	1023793	1214129	35941	360734	83075	17819	1545510	1196461	1567642	2095725
064	SAMPLE	193027-014	982461	1187910	35817	355574	82189	17850	1500549	1177083	1530967	2047942
065	SAMPLE	193027-015	995495	1194048	36244	357121	82248	17949	1510771	1184665	1536922	2068163
066	SAMPLE	193027-011	1004402	1227507	36695	365949	83344	18084	1548046	1178575	1581880	2126809
067	SAMPLE	193027-012	987791	1247499	36501	363308	81616	17816	1495661	1143652	1590622	2082181
071	CCV		1007714	1230946	36295	362889	83036	17673	1534001	1177160	1602188	2125033
074	CCB		1021251	1209430	36911	358359	83118	18296	1579316	1224235	1589335	2128027
076	SAMPLE	193027-013	992860	1208386	35954	356356	82135	17932	1529561	1191141	1595080	2087711
080	CCV		1016973	1234805	36623	361464	82598	17734	1549734	1185379	1623593	2144502
083	CCB		1015614	1194890	36508	360691	83013	17827	1557142	1205567	1568778	2081668
086	ICSA		754659	1059145	31365	332469	68907	15157	1271270	863039	1397665	1837340
087	ICSAB		719339	1007537	29999	322082	67669	14348	1224392	820014	1346588	1763641
096	BLANK	QC378188	700167	894688	26028	263274	67328	14136	1202348	1017610	1208407	1758305
097	BS	QC378189	698519	924785	26468	271234	61803	12976	1213731	961025	1237650	1772410
098	BSD	QC378190	729639	950649	27346	278162	64038	13527	1242892	975549	1271230	1802881
100	MSS	193193-001	795700	991149	29031	290321	70014	14933	1349704	1127191	1327062	1863300
101	SER	QC378193	814920	992522	29119	286173	68885	14967	1345011	1123463	1329423	1865825
104	MS	QC378191	790553	970652	28580	280839	67202	14563	1302536	1088233	1303159	1836179

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07
Sequence : MET06 c08q0

Reference: c08q0004
Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
108	CCV		802534	998035	28975	286227	67373	14500	1303525	1059860	1323469	1852290
111	CCB		822009	998362	29327	293945	70181	14960	1354502	1118204	1348087	1873226
113	MSD	QC378192	796757	975880	29021	289995	68692	14846	1298834	1070367	1292600	1820193
114	PDS	QC378194	794422	1000639	28480	287976	67111	14263	1283608	1017337	1318315	1832672
115	SAMPLE	193193-002	813398	1007016	29488	290643	69726	15022	1361530	1122945	1341474	1882422
116	SAMPLE	193193-003	814347	998705	29380	289020	69383	15132	1357344	1120102	1329974	1871280
117	SAMPLE	193193-004	801785	980488	29110	289236	69431	14904	1331974	1096440	1307758	1837707
118	SAMPLE	193193-005	808069	990777	28920	286745	68690	14723	1335747	1117818	1318251	1842971
119	SAMPLE	193193-006	814741	996211	29136	291738	69818	15018	1331964	1110220	1313871	1854367
120	SAMPLE	193193-007	803446	986562	29054	292279	69311	14903	1323472	1099768	1307700	1843275
121	SAMPLE	193193-008	805857	980365	28964	289233	69157	14845	1325685	1098324	1304181	1839750
122	SAMPLE	193193-009	807155	973597	28851	286455	68306	14811	1323514	1092534	1300361	1828819
126	CCV		818786	1015317	29231	292217	68066	14662	1316310	1059562	1341682	1874636
129	CCB		850862	1021811	30122	292255	69873	15317	1376799	1141064	1367443	1912303
131	SAMPLE	193193-010	817886	980868	29203	288883	68762	14766	1320879	1095804	1311393	1838159
132	SAMPLE	193193-011	822605	1001696	29238	289636	69014	14824	1338120	1110859	1315919	1850468
133	SAMPLE	193193-012	820858	994421	29419	289023	68500	14826	1327358	1101565	1314710	1852623
134	SAMPLE	193193-013	813887	983215	28791	287451	68565	14760	1310632	1084009	1299104	1826144
135	SAMPLE	193193-014	822530	981205	29013	284449	67873	14956	1311875	1097038	1298493	1839655
136	SAMPLE	193193-015	815529	983141	28863	281368	67354	14840	1313939	1104257	1300418	1825008
137	SAMPLE	193193-016	824016	991204	29320	287244	68643	14783	1329733	1104989	1315354	1841475
138	SAMPLE	193193-017	819010	983989	29237	288661	69210	15106	1326953	1097992	1300849	1834339
139	SAMPLE	193193-018	824529	1001139	29749	291213	69250	15030	1348851	1131000	1330524	1871635
143	CCV		825273	1021873	29100	287690	67198	14624	1318609	1066402	1344691	1874906
147	CCB		850460	1031697	30982	301131	71265	15611	1377183	1149145	1377021	1919450
148	ICSA		696986	956700	29153	294703	62607	14237	1161016	835343	1277919	1700256
149	ICSAB		636669	873446	27008	284297	60432	13168	1098772	794956	1193051	1624351

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00061

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	c08q0001	TUN				08-MAR-2007 16:11	1.0	1.0		1	
002	c08q0002	X	RINSE			08-MAR-2007 16:19	1.0			2	
003	c08q0003	X	RINSE			08-MAR-2007 16:24	1.0			2	
004	c08q0004	ICALBLK	CALBLANK			08-MAR-2007 16:29	1.0	1.0		2	
005	c08q0005	ICAL				08-MAR-2007 16:35	1.0	1.0		3	
006	c08q0006	ICAL				08-MAR-2007 16:40	1.0	1.0		4	
007	c08q0007	ICAL				08-MAR-2007 16:45	1.0	1.0		5	
008	c08q0008	ICAL				08-MAR-2007 16:50	1.0	1.0		6	
009	c08q0009	ICAL				08-MAR-2007 16:55	1.0	1.0		7	
010	c08q0010	ICAL				08-MAR-2007 17:01	1.0	1.0		8	
011	c08q0011	X	RINSE			08-MAR-2007 17:06	1.0			2	
012	c08q0012	ICV				08-MAR-2007 17:12	1.0	1.0	1	9 2	
013	c08q0013	X	RINSE			08-MAR-2007 17:17	1.0			2	
014	c08q0014	X				08-MAR-2007 17:22	1.0			2	
015	c08q0015	ICB				08-MAR-2007 17:28	1.0	1.0	1	2	
016	c08q0016	X				08-MAR-2007 17:33	1.0			2	
017	c08q0017	ICSA				08-MAR-2007 17:38	1.0	1.0	1	10 2	7:CA=309700
018	c08q0018	ICSAB				08-MAR-2007 17:44	1.0	1.0	1	11 2	10:CA=322800
019	c08q0019	X	RINSE			08-MAR-2007 17:49	1.0			2	
020	c08q0020	X	RINSE			08-MAR-2007 17:54	1.0			2	
021	c08q0021	X	RINSE			08-MAR-2007 18:00	1.0			2	
022	c08q0022	X	RINSE			08-MAR-2007 18:05	1.0			2	
023	c08q0023	BLANK	QC378195	122867	Filtra	08-MAR-2007 18:10	1.0	1.0	1	2	
024	c08q0024	BS	QC378196	122867	Filtra	08-MAR-2007 18:16	1.0	1.0	1	2	
025	c08q0025	BSD	QC378197	122867	Filtra	08-MAR-2007 18:22	1.0	1.0	1	2	
026	c08q0026	X	RINSE			08-MAR-2007 18:28	1.0			2	
027	c08q0027	MSS	193027-002	122867	Filtra	08-MAR-2007 18:33	10.0	1.0	1	2	
028	c08q0028	SER	QC378200	122867	Filtra	08-MAR-2007 18:38	50.0	1.0	1	2	
029	c08q0029	MS	QC378198	122867	Filtra	08-MAR-2007 18:44	10.0	1.0	1	2	
030	c08q0030	MSD	QC378199	122867	Filtra	08-MAR-2007 18:49	10.0	1.0	1	2	
031	c08q0031	PDS	QC378201	122867	Filtra	08-MAR-2007 18:54	10.0	1.0	1	12 13 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: PCH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c08q0032	X	RINSE			08-MAR-2007 18:59	1.0					2	
033	c08q0033	X	RINSE			08-MAR-2007 19:05	1.0					2	
034	c08q0034	X	RINSE			08-MAR-2007 19:10	1.0					2	
035	c08q0035	CCV				08-MAR-2007 19:15	1.0	1.0			1	14 2	
036	c08q0036	X	RINSE			08-MAR-2007 19:21	1.0					2	
037	c08q0037	X				08-MAR-2007 19:26	1.0					2	
038	c08q0038	CCB				08-MAR-2007 19:32	1.0	1.0			1	2	
039	c08q0039	X				08-MAR-2007 19:37	1.0					2	
040	c08q0040	BLANK	QC378195	122867	Filtra	08-MAR-2007 19:42	1.0	1.0			1	2	
041	c08q0041	BLANK	QC377794	122769	Filtra	08-MAR-2007 19:48	1.0	1.0			1	2	
042	c08q0042	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 19:53	10.0	1.0	1		1	2	1:MN=238.700
043	c08q0043	SAMPLE	193213-001	122867	Water	08-MAR-2007 19:58	10.0	1.0	1		1	2	1:MN=435.500
044	c08q0044	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 20:04	10.0	1.0			1	2	
045	c08q0045	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 20:09	10.0	1.0			1	2	
046	c08q0046	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 20:14	10.0	1.0			1	2	
047	c08q0047	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 20:20	10.0	1.0			1	2	
048	c08q0048	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 20:25	10.0	1.0			1	2	
049	c08q0049	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 20:30	10.0	1.0			1	2	
050	c08q0050	X	RINSE			08-MAR-2007 20:35	1.0					2	
051	c08q0051	X	RINSE			08-MAR-2007 20:41	1.0					2	
052	c08q0052	X	RINSE			08-MAR-2007 20:46	1.0					2	
053	c08q0053	CCV				08-MAR-2007 20:51	1.0	1.0			1	14 2	
054	c08q0054	X	RINSE			08-MAR-2007 20:57	1.0					2	
055	c08q0055	X				08-MAR-2007 21:02	1.0	1.0	1		1	2	
056	c08q0056	X				08-MAR-2007 21:07	1.0	1.0	1		1	2	
057	c08q0057	CCB				08-MAR-2007 21:13	1.0	1.0			1	2	
058	c08q0058	SER	QC378200	122867	Filtra	08-MAR-2007 21:18	50.0	1.0			1	2	
059	c08q0059	MSS	193027-002	122867	Filtra	08-MAR-2007 21:23	10.0	1.0			1	2	
060	c08q0060	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 21:29	10.0	1.0			1	2	
061	c08q0061	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 21:34	10.0	1.0			1	2	
062	c08q0062	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 21:39	10.0	1.0	1		1	2	1:MN=569.900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: Reff Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00063

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c08q0063	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 21:45	10.0	1.0			1	2	
064	c08q0064	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 21:50	10.0	1.0			1	2	
065	c08q0065	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 21:55	10.0	1.0			1	2	
066	c08q0066	SAMPLE	193027-011	122867	Water	08-MAR-2007 22:01	10.0	1.0	1		1	2	1:NA=20640.0
067	c08q0067	SAMPLE	193027-012	122867	Water	08-MAR-2007 22:06	10.0	1.0	1		1	2	1:MN=531.500
068	c08q0068	X	RINSE			08-MAR-2007 22:11	1.0					2	
069	c08q0069	X	RINSE			08-MAR-2007 22:16	1.0					2	
070	c08q0070	X	RINSE			08-MAR-2007 22:22	1.0					2	
071	c08q0071	CCV				08-MAR-2007 22:27	1.0	1.0			1	14 2	
072	c08q0072	X	RINSE			08-MAR-2007 22:33	1.0					2	
073	c08q0073	X				08-MAR-2007 22:38	1.0	1.0	1		1	2	
074	c08q0074	CCB				08-MAR-2007 22:43	1.0	1.0			1	2	
075	c08q0075	X				08-MAR-2007 22:49	1.0	1.0	1		1	2	
076	c08q0076	SAMPLE	193027-013	122867	Water	08-MAR-2007 22:54	10.0	1.0	1		1	2	1:MN=341.700
077	c08q0077	X	RINSE			08-MAR-2007 22:59	1.0					2	
078	c08q0078	X	RINSE			08-MAR-2007 23:05	1.0					2	
079	c08q0079	X	RINSE			08-MAR-2007 23:10	1.0					2	
080	c08q0080	CCV				08-MAR-2007 23:15	1.0	1.0			1	14 2	
081	c08q0081	X	RINSE			08-MAR-2007 23:21	1.0					2	
082	c08q0082	X				08-MAR-2007 23:26	1.0	1.0	1		1	2	
083	c08q0083	CCB				08-MAR-2007 23:31	1.0	1.0			1	2	
084	c08q0084	X				08-MAR-2007 23:37	1.0	1.0			1	2	
085	c08q0085	X				08-MAR-2007 23:42	1.0	1.0			1	10 2	7:CA=311900
086	c08q0086	ICSA				08-MAR-2007 23:47	1.0	1.0			1	10 2	7:CA=310700
087	c08q0087	ICSAB				08-MAR-2007 23:53	1.0	1.0			1	11 2	10:CA=323800
088	c08q0088	X	RINSE			08-MAR-2007 23:58	1.0					2	
089	c08q0089	X	RINSE			09-MAR-2007 00:04	1.0					2	
090	c08q0090	X	RINSE			09-MAR-2007 00:09	1.0					2	
091	c08q0091	X				09-MAR-2007 00:14	1.0	1.0			1	11 2	10:CA=321600
092	c08q0092	X	RINSE			09-MAR-2007 00:20	1.0					2	
093	c08q0093	X	RINSE			09-MAR-2007 00:25	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RGA Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c08q0094	X	RINSE			09-MAR-2007 00:30	1.0					2	
095	c08q0095	X	RINSE			09-MAR-2007 00:36	1.0					2	
096	c08q0096	BLANK	QC378188	122866	Filtra	09-MAR-2007 00:41	1.0	1.0			1	2	
097	c08q0097	BS	QC378189	122866	Filtra	09-MAR-2007 00:46	1.0	1.0			1	2	
098	c08q0098	BSD	QC378190	122866	Filtra	09-MAR-2007 00:52	1.0	1.0			1	2	
099	c08q0099	X	RINSE			09-MAR-2007 00:58	1.0					2	
100	c08q0100	MSS	193193-001	122866	Filtra	09-MAR-2007 01:03	10.0	1.0	2		1	2	
101	c08q0101	SER	QC378193	122866	Filtra	09-MAR-2007 01:09	50.0	1.0	1		1	2	
102	c08q0102	TUN				09-MAR-2007 01:13	1.0	1.0				1	
103	c08q0103	X	RINSE			09-MAR-2007 01:21	1.0					2	
104	c08q0104	MS	QC378191	122866	Filtra	09-MAR-2007 01:26	10.0	1.0		1	1	2	
105	c08q0105	X	RINSE			09-MAR-2007 01:31	1.0					2	
106	c08q0106	X	RINSE			09-MAR-2007 01:37	1.0					2	
107	c08q0107	X	RINSE			09-MAR-2007 01:42	1.0					2	
108	c08q0108	CCV				09-MAR-2007 01:47	1.0	1.0			1	14 2	
109	c08q0109	X	RINSE			09-MAR-2007 01:53	1.0					2	
110	c08q0110	X				09-MAR-2007 01:58	1.0	1.0	1		1	2	
111	c08q0111	CCB				09-MAR-2007 02:03	1.0	1.0			1	2	
112	c08q0112	X				09-MAR-2007 02:09	1.0	1.0			1	2	
113	c08q0113	MSD	QC378192	122866	Filtra	09-MAR-2007 02:14	10.0	1.0		1	1	2	
114	c08q0114	PDS	QC378194	122866	Filtra	09-MAR-2007 02:19	10.0	1.0			1	12 13 2	
115	c08q0115	SAMPLE	193193-002	122866	Filtra	09-MAR-2007 02:25	10.0	1.0			1	2	
116	c08q0116	SAMPLE	193193-003	122866	Filtra	09-MAR-2007 02:30	10.0	1.0			1	2	
117	c08q0117	SAMPLE	193193-004	122866	Filtra	09-MAR-2007 02:36	10.0	1.0			1	2	
118	c08q0118	SAMPLE	193193-005	122866	Filtra	09-MAR-2007 02:41	10.0	1.0			1	2	
119	c08q0119	SAMPLE	193193-006	122866	Filtra	09-MAR-2007 02:46	10.0	1.0	1		1	2	
120	c08q0120	SAMPLE	193193-007	122866	Filtra	09-MAR-2007 02:52	10.0	1.0			1	2	
121	c08q0121	SAMPLE	193193-008	122866	Filtra	09-MAR-2007 02:57	10.0	1.0			1	2	
122	c08q0122	SAMPLE	193193-009	122866	Filtra	09-MAR-2007 03:03	10.0	1.0			1	2	
123	c08q0123	X	RINSE			09-MAR-2007 03:08	1.0					2	
124	c08q0124	X	RINSE			09-MAR-2007 03:13	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RLH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

5988

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c08q0125	X	RINSE			09-MAR-2007 03:19	1.0					2	
126	c08q0126	CCV				09-MAR-2007 03:24	1.0	1.0			1	14 2	
127	c08q0127	X	RINSE			09-MAR-2007 03:30	1.0					2	
128	c08q0128	X				09-MAR-2007 03:35	1.0					2	
129	c08q0129	CCB				09-MAR-2007 03:40	1.0	1.0			1	2	
130	c08q0130	X				09-MAR-2007 03:46	1.0					2	
131	c08q0131	SAMPLE	193193-010	122866	Filtra	09-MAR-2007 03:51	10.0	1.0			1	2	1:MN=226.200
132	c08q0132	SAMPLE	193193-011	122866	Filtra	09-MAR-2007 03:56	10.0	1.0			1	2	
133	c08q0133	SAMPLE	193193-012	122866	Filtra	09-MAR-2007 04:02	10.0	1.0			1	2	
134	c08q0134	SAMPLE	193193-013	122866	Filtra	09-MAR-2007 04:07	10.0	1.0	1		1	2	
135	c08q0135	SAMPLE	193193-014	122866	Filtra	09-MAR-2007 04:13	10.0	1.0			1	2	
136	c08q0136	SAMPLE	193193-015	122866	Filtra	09-MAR-2007 04:18	10.0	1.0			1	2	
137	c08q0137	SAMPLE	193193-016	122866	Filtra	09-MAR-2007 04:23	10.0	1.0			1	2	
138	c08q0138	SAMPLE	193193-017	122866	Filtra	09-MAR-2007 04:29	10.0	1.0			1	2	
139	c08q0139	SAMPLE	193193-018	122866	Filtra	09-MAR-2007 04:34	10.0	1.0			1	2	
140	c08q0140	X	RINSE			09-MAR-2007 04:39	1.0					2	
141	c08q0141	X	RINSE			09-MAR-2007 04:45	1.0					2	
142	c08q0142	X	RINSE			09-MAR-2007 04:50	1.0					2	
143	c08q0143	CCV				09-MAR-2007 04:55	1.0	1.0			1	14 2	
144	c08q0144	X	RINSE			09-MAR-2007 05:01	1.0					2	
145	c08q0145	X				09-MAR-2007 05:06	1.0					2	
146	c08q0146	X				09-MAR-2007 05:11	1.0					2	
147	c08q0147	CCB				09-MAR-2007 05:17	1.0	1.0			1	2	
148	c08q0148	ICSA				09-MAR-2007 05:22	1.0	1.0			1	10 2	7:CA=319300
149	c08q0149	ICSAB				09-MAR-2007 05:28	1.0	1.0			1	11 2	10:CA=328000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RCS Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57097652001
Units : ug/L

Date : 08-MAR-2007 19:45
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08t0005	57097652005		08-MAR-2007 19:49	S5645
L2	c08t0006	57097652006		08-MAR-2007 19:53	S5647
L3	c08t0007	57097652007		08-MAR-2007 19:57	S5649
L4	c08t0008	57097652008		08-MAR-2007 20:01	S5650
L5	c08t0009	57097652009		08-MAR-2007 20:05	S5644
L6	c08t0010	57097652010		08-MAR-2007 20:09	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	3.0039	2.1010	0.9974	0.9568	0.9007	0.9280	BLNK	-2.8035	1.08409		1.4813	1.000	0.995	
Antimony	0.8783	0.6142	0.2964	0.2834	0.2833	0.2926	BLNK	-0.0578	3.44061		0.4414	1.000	0.995	
Arsenic	0.3229	1.1725	0.6391	0.6256	0.6076	0.6160	BLNK	0.09137	1.62688		0.6639	1.000	0.995	
Barium	0.4555	0.3943	0.1195	0.0940	0.0953	0.1001	BLNK	-0.0533	10.0907		0.2098	0.999	0.995	
Beryllium	0.7868	0.5788	0.2799	0.2868	0.2774	0.2911	BLNK	-0.0251	3.46851		0.4168	0.999	0.995	
Cadmium	2.8429	2.1531	0.9517	0.8448	0.7930	0.8018	BLNK	-0.1230	1.25075		1.3979	1.000	0.995	
Calcium	0.1343	0.0757	0.0322	0.0243	0.0237	0.0240	BLNK	-24.053	41.8865		0.0524	1.000	0.995	
Chromium	32.816	17.985	6.1530	3.7146	3.3569	3.3400	BLNK	-0.6412	0.30022		11.227	1.000	0.995	
Cobalt	10.192	7.4693	3.9887	3.8033	3.6607	3.6810	BLNK	-0.0253	0.27199		5.4658	1.000	0.995	
Copper	11.162	5.0149	1.7518	1.1018	1.0058	1.0145	BLNK	-0.7592	0.99183		3.5084	1.000	0.995	
Iron	0.4488	0.2592	0.1068	0.0890	0.0852	0.0863	BLNK	-24.612	11.6315		0.1792	1.000	0.995	
Lead	4.6897	2.5862	1.2299	1.1913	1.1587	1.2034	BLNK	-0.0751	0.83762		2.0099	1.000	0.995	
Magnesium	0.3535	0.2640	0.1292	0.1284	0.1171	0.1207	BLNK	-3.1611	8.33391		0.1855	1.000	0.995	
Manganese	15.867	11.684	4.9071	4.5123	4.2696	4.3117	BLNK	-0.0793	0.23247		7.5920	1.000	0.995	
Molybdenum	4.2224	3.0046	1.4613	1.3932	1.3417	1.3738	BLNK	-0.0806	0.73164		2.1328	1.000	0.995	
Nickel	2.8143	2.3773	0.9706	0.8921	0.8356	0.8469	BLNK	-0.0724	1.18435		1.4561	1.000	0.995	
Potassium	9.9569	5.0111	1.6691	0.9364	0.8127	0.8375	BLNK	-104.20	1.20859		3.2040	1.000	0.995	
Selenium	-0.470	0.0615	0.0228	0.0617	0.0589	0.0581	BLNK	0.40869	17.1278		-0.035	1.000	0.995	
Silver	9.3928	7.5647	3.6128	3.5551	3.3840	3.3347	BLNK	-0.0349	0.29902		5.1407	1.000	0.995	
Sodium	21.271	9.6445	3.0372	1.4735	1.2568	1.3156	BLNK	-159.09	0.77430		6.3331	0.999	0.995	
Thallium	3.4619	2.1978	0.9363	0.8512	0.8480	0.8955	BLNK	-0.1051	1.13027		1.5318	0.999	0.995	
Vanadium	25.707	13.998	5.6590	4.1699	3.9714	4.0567	BLNK	-0.3621	0.24808		9.5938	1.000	0.995	
Zinc	10.855	6.6243	2.5650	0.7275	0.5814	0.5717	BLNK	-4.9307	1.79544		3.6542	0.999	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Barium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Calcium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Copper	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Iron	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Lead	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Magnesium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Potassium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Silver	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Sodium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.0500	0.1250	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L

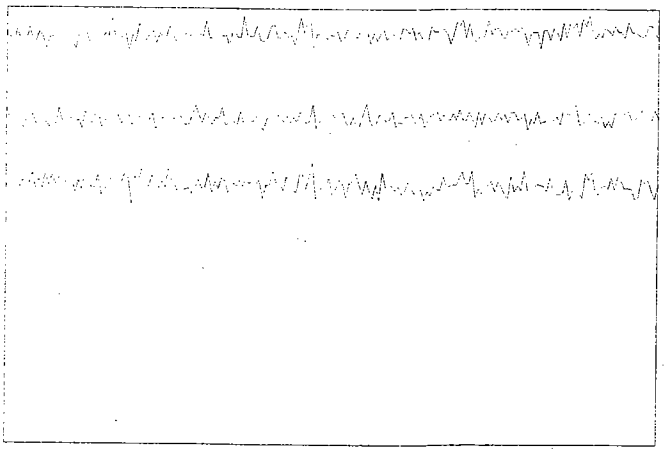
00057

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

57097652001

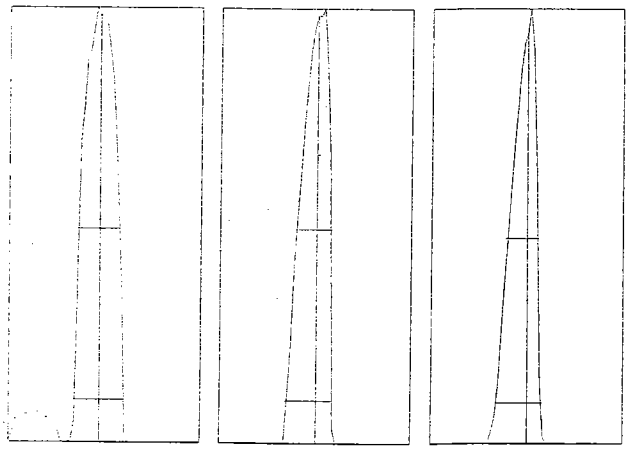
Tune Report

Tune File : ATUNE.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.329%
Doubly Charged:	70/140	0.995%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	11960.0	11888.4	2.76	4.30
89	20,000	14983.0	14949.5	1.64	3.70
205	10,000	9323.0	9416.7	1.63	8.10
156/140	1	0.401%	0.342%	15.71	
70/140	2	1.128%	1.123%	9.84	



m/z:	7	89	205
Height:	11,961	15,471	9,568
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.60	0.55
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:17

Tune Report

Tune File : ATUNE.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-142 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-2 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-6 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:20

P/A Factor Tuning Report

Acquired:Mar 8 2007 07:27 pm

Mass[amu]	Element	P/A Factor
6	Li	0.076571
9	Be	0.085387
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.101249
44	Ca	0.103704
45	Sc	0.101262
51	V	0.101596
52	Cr	0.102554
53	Cr	0.101506
54	Fe	Sensitivity too high
55	Mn	0.104745
57	Fe	0.107281
59	Co	0.106313
60	Ni	0.108379
63	Cu	0.105922
65	Cu	0.109337
66	Zn	0.106277
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.105182
95	Mo	0.105910
98	Mo	0.105555
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108676
111	Cd	Sensitivity too low
114	Cd	0.108326
115	In	0.108334
118	(In)	0.114628
121	Sb	0.107993
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.112311
166	Er	Sensitivity too low
205	Tl	0.113826
206	(Pb)	0.111982
207	(Pb)	0.112040
208	Pb	0.114755
209	Bi	0.111177

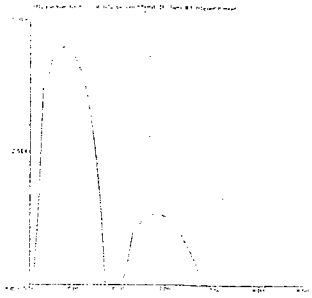
===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\001TUNE.D
Date Acquired:	Mar 8 2007 07:32 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.43	5.00	
59 Co	0.58	5.00	
115 In	1.93	5.00	
205 Tl	3.52	5.00	



7 Li

Mass Calib.

Actual: 6.90

Required: 6.90 - 7.10

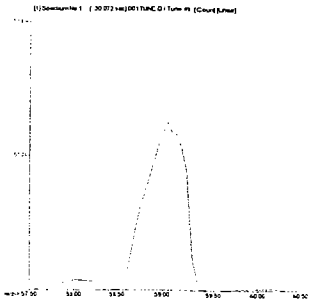
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.05

Required: 58.90 - 59.10

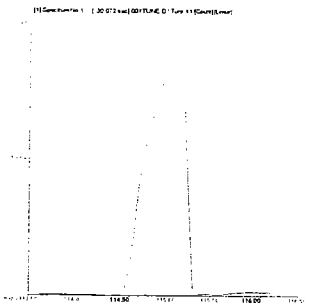
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



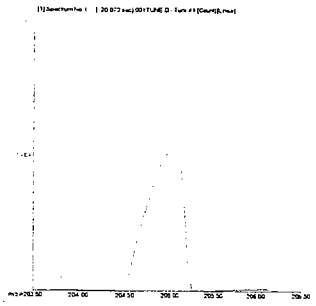
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 205.00
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004C
Date Acquired:	Mar 8 2007 07:45 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 07:48 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	382625.50	P	4192.00	1.10
9	Be	55.56	P	16.78	30.20
23	Na	1463632.00	A	32750.00	2.24
26	Mg	2705.56	P	460.80	17.03
27	Al	18440.00	P	2542.00	13.79
39	K	614014.13	M	10650.00	1.73
44	Ca	4090.21	P	114.50	2.80
45	Sc	356151.09	P	5436.00	1.53
51	V	1993.19	P	633.20	31.77
52	Cr	2908.89	P	101.50	3.49
55	Mn	464.44	P	22.19	4.78
57	Fe	2882.22	P	179.40	6.22
59	Co	126.67	P	3.33	2.63
60	Ni	83.33	P	14.53	17.44
65	Cu	1042.21	P	40.05	3.84
66	Zn	3738.89	P	187.10	5.00
72	Ge	68084.00	P	1033.00	1.52
75	As	-75.04	P	165.70	220.81
82	Se	-31.78	P	74.72	235.13
95	Mo	150.00	P	10.00	6.67
109	Ag	158.89	P	18.95	11.93
111	Cd	134.18	P	36.62	27.29
115	In	641888.38	P	15010.00	2.34
121	Sb	215.56	P	18.95	8.79
137	Ba	67.78	P	5.09	7.51
205	Tl	993.33	P	52.39	5.27
208	Pb	960.00	P	97.13	10.12
209	Bi	534873.31	P	16060.00	3.00

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\005CALI.D\005CALI.D#
Date Acquired:	Mar 8 2007 07:49 pm
Operator:	
Sample Name:	s5645
Misc Info:	
Vial Number:	1102
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 07:48 pm
Sample Type:	CalStd
Total Dil Factor:	1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	382023.31	P	2041.00	0.53
9 Be	601.11	P	37.17	6.18
23 Na	1503425.00	A	4866.00	0.32
26 Mg	24985.55	P	823.20	3.29
27 Al	212304.41	P	3921.00	1.85
39 K	703755.13	M	15500.00	2.20
44 Ca	9494.60	P	51.16	0.54
45 Sc	353404.41	P	1211.00	0.34
51 V	3569.71	P	515.00	14.43
52 Cr	4560.00	P	86.22	1.89
55 Mn	2204.44	P	51.68	2.34
57 Fe	6235.56	P	76.98	1.23
59 Co	1416.67	P	97.70	6.90
60 Ni	391.11	P	15.75	4.03
65 Cu	1551.00	P	30.24	1.95
66 Zn	1508.89	P	111.00	7.36
72 Ge	69476.22	P	742.80	1.07
75 As	45.34	P	112.60	248.33
82 Se	-64.89	P	63.01	97.10
95 Mo	586.67	P	0.00	0.00
109 Ag	1304.44	P	86.30	6.62
111 Cd	395.01	P	4.83	1.22
115 In	634322.19	P	1679.00	0.26
121 Sb	1114.44	P	144.30	12.95
137 Ba	577.78	P	33.55	5.81
205 Tl	1894.44	P	80.30	4.24
208 Pb	5132.22	P	141.80	2.76
209 Bi	547127.81	P	11240.00	2.05

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	382023.31	0.5343	382625.53	99.84	80 - 120	
45 Sc	353404.44	0.3427	356151.13	99.23	80 - 120	
72 Ge	69476.227	1.0691	68084	102.04	80 - 120	
115 In	634322.25	0.2647	641888.44	98.82	80 - 120	
209 Bi	547127.75	2.0544	534873.31	102.29	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 8 2007 07:53 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:52 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	384011.09	P	3865.00	1.01
9 Be	1111.11	P	26.74	2.41
23 Na	1734515.00	A	28380.00	1.64
26 Mg	47478.89	P	330.70	0.70
27 Al	377773.31	P	3140.00	0.83
39 K	901043.38	A	4836.00	0.54
44 Ca	13606.43	P	266.30	1.96
45 Sc	359692.19	P	5389.00	1.50
51 V	4749.47	P	909.20	19.14
52 Cr	6103.33	P	182.70	2.99
55 Mn	3965.55	P	78.62	1.98
57 Fe	8796.67	P	140.10	1.59
59 Co	2534.44	P	78.34	3.09
60 Ni	806.67	P	27.28	3.38
65 Cu	1702.02	P	18.36	1.08
66 Zn	2248.89	P	104.00	4.62
72 Ge	67886.22	P	863.40	1.27
75 As	398.84	P	126.90	31.82
82 Se	21.33	P	55.69	261.05
95 Mo	1020.00	P	38.44	3.77
109 Ag	2567.78	P	176.60	6.88
111 Cd	730.43	P	35.68	4.88
115 In	633797.63	P	11420.00	1.80
121 Sb	1946.67	P	57.83	2.97
137 Ba	1248.89	P	76.33	6.11
205 Tl	2928.89	P	98.45	3.36
208 Pb	6897.78	P	225.20	3.26
209 Bi	533421.13	P	15520.00	2.91

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	384011.13	1.0065	382625.53	100.36	80 - 120	
45 Sc	359692.22	1.4982	356151.13	100.99	80 - 120	
72 Ge	67886.227	1.2718	68084	99.71	80 - 120	
115 In	633797.63	1.8018	641888.44	98.74	80 - 120	
209 Bi	533421.06	2.9095	534873.31	99.73	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- : Max. Number of Failures Allowed
0 :ISTD Failures 0 : Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 8 2007 07:57 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:56 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	380241.09	P	790.80	0.21
9 Be	2128.89	P	77.27	3.63
23 Na	2155032.00	A	37940.00	1.76
26 Mg	91665.55	P	857.90	0.94
27 Al	707641.63	A	9545.00	1.35
39 K	1184236.00	A	8960.00	0.76
44 Ca	22855.67	P	341.20	1.49
45 Sc	354767.81	P	1519.00	0.43
51 V	7717.43	P	36.38	0.47
52 Cr	8390.00	P	195.00	2.32
55 Mn	6692.22	P	197.40	2.95
57 Fe	14566.67	P	86.60	0.59
59 Co	5438.89	P	89.21	1.64
60 Ni	1323.33	P	60.83	4.60
65 Cu	2388.49	P	88.59	3.71
66 Zn	3497.78	P	62.92	1.80
72 Ge	68189.56	P	618.10	0.91
75 As	870.56	P	176.40	20.26
82 Se	30.67	P	76.88	250.70
95 Mo	1993.33	P	89.69	4.50
109 Ag	4927.78	P	193.80	3.93
111 Cd	1298.17	P	71.28	5.49
115 In	632419.38	P	6772.00	1.07
121 Sb	3748.89	P	65.18	1.74
137 Ba	1511.11	P	63.62	4.21
205 Tl	4991.11	P	136.70	2.74
208 Pb	13117.78	P	321.40	2.45
209 Bi	533381.13	P	13900.00	2.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	380241.13	0.208	382625.53	99.38	80 - 120	
45 Sc	354767.78	0.4282	356151.13	99.61	80 - 120	
72 Ge	68189.555	0.9064	68084	100.16	80 - 120	
115 In	632419.44	1.0708	641888.44	98.52	80 - 120	
209 Bi	533381.06	2.606	534873.31	99.72	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 8 2007 08:01 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:00 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	377210.00	P	5557.00	1.47
9 Be	21627.78	P	506.40	2.34
23 Na	10415160.00	A	50730.00	0.49
26 Mg	907348.00	A	10950.00	1.21
27 Al	6762383.00	A	56650.00	0.84
39 K	6618201.00	A	102400.00	1.55
44 Ca	171515.30	P	2450.00	1.43
45 Sc	353636.69	P	10260.00	2.90
51 V	57513.29	P	967.30	1.68
52 Cr	51242.22	P	614.10	1.20
55 Mn	62231.11	P	743.40	1.19
57 Fe	122738.90	P	1246.00	1.02
59 Co	52470.00	P	256.40	0.49
60 Ni	12305.55	P	46.71	0.38
65 Cu	15200.35	P	102.00	0.67
66 Zn	10034.44	P	127.00	1.27
72 Ge	69016.89	P	2128.00	3.08
75 As	8632.10	P	146.10	1.69
82 Se	851.56	P	19.43	2.28
95 Mo	19213.33	P	239.50	1.25
109 Ag	49048.89	P	775.20	1.58
111 Cd	11653.62	P	75.75	0.65
115 In	629155.63	P	23230.00	3.69
121 Sb	35627.78	P	586.90	1.65
137 Ba	11826.67	P	410.40	3.47
205 Tl	45233.33	P	1452.00	3.21
208 Pb	126563.30	P	2367.00	1.87
209 Bi	531631.13	P	24270.00	4.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	377210	1.4732	382625.53	98.58	80 - 120	
45 Sc	353636.66	2.9013	356151.13	99.29	80 - 120	
72 Ge	69016.891	3.0833	68084	101.37	80 - 120	
115 In	629155.56	3.6923	641888.44	98.02	80 - 120	
209 Bi	531631.06	4.5652	534873.31	99.39	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 8 2007 08:05 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:04 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	373712.19	P	1810.00	0.48
9	Be	207304.41	P	2672.00	1.29
23	Na	90023152.00	A	1710000.00	1.90
26	Mg	8386911.00	A	46300.00	0.55
27	Al	64515760.00	A	528300.00	0.82
39	K	58208472.00	A	1053000.00	1.81
44	Ca	1694354.00	A	21570.00	1.27
45	Sc	358163.31	P	2622.00	0.73
51	V	553296.88	P	2631.00	0.48
52	Cr	467685.59	P	1428.00	0.31
55	Mn	594856.69	P	6080.00	1.02
57	Fe	1186831.00	A	15360.00	1.29
59	Co	510035.59	P	2636.00	0.52
60	Ni	116422.20	P	223.70	0.19
65	Cu	140136.00	P	858.40	0.61
66	Zn	81007.78	P	669.60	0.83
72	Ge	69665.33	P	637.40	0.91
75	As	84657.81	P	117.70	0.14
82	Se	8212.22	P	99.18	1.21
95	Mo	186937.80	P	891.70	0.48
109	Ag	471474.41	P	2182.00	0.46
111	Cd	110479.40	P	1283.00	1.16
115	In	617066.19	P	3151.00	0.51
121	Sb	349661.09	P	668.10	0.19
137	Ba	117647.80	P	685.30	0.58
205	Tl	443657.81	P	15330.00	3.46
208	Pb	1212110.00	P	24020.00	1.98
209	Bi	523178.91	P	15890.00	3.04

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	373712.22	0.4843	382625.53	97.67	80 - 120	
45	Sc	358163.31	0.7321	356151.13	100.56	80 - 120	
72	Ge	69665.336	0.915	68084	102.32	80 - 120	
115	In	617066.25	0.5106	641888.44	96.13	80 - 120	
209	Bi	523178.91	3.0372	534873.31	97.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 8 2007 08:09 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:08 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	356940.00	P	3970.00	1.11
9 Be	415618.91	P	4831.00	1.16
23 Na	181920990.00	A	1627000.00	0.89
26 Mg	16693900.00	A	25740.00	0.15
27 Al	128312700.00	A	650000.00	0.51
39 K	115795500.00	A	1428000.00	1.23
44 Ca	3315358.00	A	56870.00	1.72
45 Sc	345755.50	P	5411.00	1.57
51 V	1103045.00	A	32820.00	2.98
52 Cr	908162.63	A	23590.00	2.60
55 Mn	1172304.00	A	6307.00	0.54
57 Fe	2347149.00	A	28470.00	1.21
59 Co	1000815.00	A	5505.00	0.55
60 Ni	230261.09	P	3222.00	1.40
65 Cu	275846.91	P	1967.00	0.71
66 Zn	155450.00	P	544.40	0.35
72 Ge	67972.44	P	276.40	0.41
75 As	167473.20	P	1021.00	0.61
82 Se	15783.33	P	65.03	0.41
95 Mo	373536.69	P	3577.00	0.96
109 Ag	906682.00	A	6562.00	0.72
111 Cd	217994.09	P	2585.00	1.19
115 In	586728.81	P	5508.00	0.94
121 Sb	686725.63	P	2424.00	0.35
137 Ba	234900.00	P	575.10	0.24
205 Tl	889681.13	P	21970.00	2.47
208 Pb	2390938.00	A	45060.00	1.88
209 Bi	496742.19	P	10660.00	2.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	356940	1.1122	382625.53	93.29	80 - 120	
45 Sc	345755.53	1.565	356151.13	97.08	80 - 120	
72 Ge	67972.445	0.4066	68084	99.84	80 - 120	
115 In	586728.88	0.9388	641888.44	91.41	80 - 120	
209 Bi	496742.22	2.146	534873.31	92.87	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652012 File : c08t0012 Time : 08-MAR-2007 20:17
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.4813	0.8893	10000	9638	ug/L	-4	10	
Antimony	0.4414	0.2775	100.0	95.44	ug/L	-5	10	
Arsenic	0.6639	0.6026	100.0	98.13	ug/L	-2	10	
Barium	0.2098	0.0922	100.0	93.03	ug/L	-7	10	
Beryllium	0.4168	0.2685	100.0	93.11	ug/L	-7	10	
Cadmium	1.3979	0.7805	100.0	97.50	ug/L	-3	10	
Calcium	0.0524	0.0229	10000	9589	ug/L	-4	10	
Chromium	11.227	3.2792	100.0	97.81	ug/L	-2	10	
Cobalt	5.4658	3.5242	100.0	95.83	ug/L	-4	10	
Copper	3.5084	0.9585	100.0	94.31	ug/L	-6	10	
Iron	0.1792	0.0830	10000	9627	ug/L	-4	10	
Lead	2.0099	1.1246	100.0	94.12	ug/L	-6	10	
Magnesium	0.1855	0.1167	10000	9722	ug/L	-3	10	
Manganese	7.5920	4.1174	100.0	95.64	ug/L	-4	10	
Molybdenum	2.1328	1.3116	100.0	95.88	ug/L	-4	10	
Nickel	1.4561	0.8061	100.0	95.39	ug/L	-5	10	
Potassium	3.2040	0.7992	10000	9555	ug/L	-4	10	
Selenium	-0.035	0.0579	100.0	99.63	ug/L	0	10	
Silver	5.1407	3.4670	100.0	103.6	ug/L	4	10	
Sodium	6.3331	1.2622	10000	9614	ug/L	-4	10	
Thallium	1.5318	0.8161	50.00	46.01	ug/L	-8	10	
Vanadium	9.5938	3.8285	100.0	94.62	ug/L	-5	10	
Zinc	3.6542	0.5536	100.0	94.47	ug/L	-6	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	376541	-1.59
Scandium	356151	356369	0.06
Germanium	68084	70240	3.17
Indium	641888	620910	-3.27
Bismuth	534873	526316	-1.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

:nst : MET05
Seqnum : 57097652033 File : c08t0033 IDF : 1.0
:al : 57097652001 Caldate: 08-MAR-2007 Time : 08-MAR-2007 21:41
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.9155	10000	9922	ug/L	-1	10	
Antimony	0.4414	0.2764	100.0	95.03	ug/L	-5	10	
Arsenic	0.6639	0.5928	100.0	96.53	ug/L	-3	10	
Barium	0.2098	0.0922	100.0	93.02	ug/L	-7	10	
Beryllium	0.4168	0.2728	100.0	94.59	ug/L	-5	10	
Cadmium	1.3979	0.7255	100.0	90.62	ug/L	-9	10	
Calcium	0.0524	0.0229	10000	9574	ug/L	-4	10	
Chromium	11.227	3.1344	100.0	93.46	ug/L	-7	10	
Cobalt	5.4658	3.4635	100.0	94.18	ug/L	-6	10	
Copper	3.5084	0.9544	100.0	93.90	ug/L	-6	10	
Iron	0.1792	0.0809	10000	9385	ug/L	-6	10	
Lead	2.0099	1.1243	100.0	94.10	ug/L	-6	10	
Magnesium	0.1855	0.1202	10000	10020	ug/L	0	10	
Manganese	7.5920	3.9852	100.0	92.57	ug/L	-7	10	
Molybdenum	2.1328	1.2510	100.0	91.45	ug/L	-9	10	
Nickel	1.4561	0.7964	100.0	94.25	ug/L	-6	10	
Potassium	3.2040	0.8123	10000	9714	ug/L	-3	10	
Selenium	-0.035	0.0563	100.0	96.80	ug/L	-3	10	
Silver	5.1407	3.2546	100.0	97.28	ug/L	-3	10	
Sodium	6.3331	1.3097	10000	9982	ug/L	0	10	
Thallium	1.5318	0.8123	50.00	45.80	ug/L	-8	10	
Vanadium	9.5938	3.6728	100.0	90.75	ug/L	-9	10	
Zinc	3.6542	0.5653	100.0	96.57	ug/L	-3	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	354818	-7.27
Scandium	356151	327529	-8.04
Germanium	68084	68935	1.25
Indium	641888	571477	-10.97
Bismuth	534873	526006	-1.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652051 File : c08t0051 Time : 08-MAR-2007 22:53
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8857	10000	9599	ug/L	-4	10	
Antimony	0.4414	0.2726	100.0	93.75	ug/L	-6	10	
Arsenic	0.6639	0.5744	100.0	93.54	ug/L	-6	10	
Barium	0.2098	0.0896	100.0	90.40	ug/L	-10	10	
Beryllium	0.4168	0.2647	100.0	91.79	ug/L	-8	10	
Cadmium	1.3979	0.7072	100.0	88.33	ug/L	**-12**	10	c- ***
Calcium	0.0524	0.0225	10000	9383	ug/L	-6	10	
Chromium	11.227	3.0685	100.0	91.48	ug/L	-9	10	
Cobalt	5.4658	3.3730	100.0	91.72	ug/L	-8	10	
Copper	3.5084	0.9295	100.0	91.43	ug/L	-9	10	
Iron	0.1792	0.0804	10000	9333	ug/L	-7	10	
Lead	2.0099	1.0995	100.0	92.02	ug/L	-8	10	
Magnesium	0.1855	0.1163	10000	9686	ug/L	-3	10	
Manganese	7.5920	3.9477	100.0	91.69	ug/L	-8	10	
Molybdenum	2.1328	1.2041	100.0	88.02	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7727	100.0	91.44	ug/L	-9	10	
Potassium	3.2040	0.7838	10000	9369	ug/L	-6	10	
Selenium	-0.035	0.0546	100.0	93.95	ug/L	-6	10	
Silver	5.1407	3.1565	100.0	94.35	ug/L	-6	10	
Sodium	6.3331	1.2515	10000	9531	ug/L	-5	10	
Thallium	1.5318	0.7918	50.00	44.64	ug/L	**-11**	10	c- ***
Vanadium	9.5938	3.5832	100.0	88.53	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5466	100.0	93.21	ug/L	-7	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384233	0.42
Scandium	356151	354410	-0.49
Germanium	68084	74430	9.32
Indium	641888	609388	-5.06
Bismuth	534873	562534	5.17

=low bias c=CCV

57097652051

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652067 File : c08t0067 Time : 08-MAR-2007 23:57
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8911	10000	9658	ug/L	-3	10	
Antimony	0.4414	0.2739	100.0	94.16	ug/L	-6	10	
Arsenic	0.6639	0.5771	100.0	93.98	ug/L	-6	10	
Barium	0.2098	0.0899	100.0	90.66	ug/L	-9	10	
Beryllium	0.4168	0.2664	100.0	92.37	ug/L	-8	10	
Cadmium	1.3979	0.6967	100.0	87.02	ug/L	**-13**	10	c- ***
Calcium	0.0524	0.0226	10000	9432	ug/L	-6	10	
Chromium	11.227	3.0743	100.0	91.65	ug/L	-8	10	
Cobalt	5.4658	3.4579	100.0	94.03	ug/L	-6	10	
Copper	3.5084	0.9449	100.0	92.96	ug/L	-7	10	
Iron	0.1792	0.0825	10000	9568	ug/L	-4	10	
Lead	2.0099	1.1107	100.0	92.96	ug/L	-7	10	
Magnesium	0.1855	0.1181	10000	9837	ug/L	-2	10	
Manganese	7.5920	4.0463	100.0	93.99	ug/L	-6	10	
Molybdenum	2.1328	1.2018	100.0	87.85	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7956	100.0	94.16	ug/L	-6	10	
Potassium	3.2040	0.7828	10000	9356	ug/L	-6	10	
Selenium	-0.035	0.0551	100.0	94.79	ug/L	-5	10	
Silver	5.1407	3.1065	100.0	92.86	ug/L	-7	10	
Sodium	6.3331	1.2834	10000	9778	ug/L	-2	10	
Thallium	1.5318	0.7973	50.00	44.95	ug/L	-10	10	
Vanadium	9.5938	3.5824	100.0	88.51	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5597	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	364333	-4.78
Scandium	356151	333904	-6.25
Germanium	68084	71338	4.78
Indium	641888	568976	-11.36
Bismuth	534873	534394	-0.09

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652015 File : c08t0015 Time : 08-MAR-2007 20:29
Cal : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.04973]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1181	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	[0.02385]	0.1000	0.01579	ug/L	!ib
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	374762	-2.06
Scandium	356151	351811	-1.22
Germanium	68084	70476	3.51
Indium	641888	634789	-1.11
Bismuth	534873	545702	2.02

warning ib=instrument blank

57097652015

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57097652035
Cal : 57097652001

File : c08t0035
Caldate: 08-MAR-2007

IDF : 1.0
Time : 08-MAR-2007 21:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	[0.007363]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	ND	0.1000	0.3448	ug/L	
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	368761	-3.62
Scandium	356151	334843	-5.98
Germanium	68084	71147	4.50
Indium	641888	604863	-5.77
Bismuth	534873	554307	3.63

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

:nst : MET05 IDF : 1.0
:eqnum : 57097652053 File : c08t0053 Time : 08-MAR-2007 23:01
:al : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	0.2424	0.1000	0.007794	ug/L	ib ***
Barium	[0.005533]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01349]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	[0.05450]	0.1000	0.01770	ug/L	!ib
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.2074	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384741	0.55
Scandium	356151	351291	-1.36
Germanium	68084	74704	9.72
Indium	641888	629371	-1.95
Bismuth	534873	577159	7.91

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57097652069 File : c08t0069
Cal : 57097652001 Caldate: 08-MAR-2007

IDF : 1.0
Time : 09-MAR-2007 00:05

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.08079]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	0.1683	0.1000	0.01770	ug/L	ib ***
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1993	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	378116	-1.18
Scandium	356151	340741	-4.33
Germanium	68084	73735	8.30
Indium	641888	600089	-6.51
Bismuth	534873	565333	5.69

warning ib=instrument blank

57097652069

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652017 File : c08t0017 Time : 08-MAR-2007 20:37
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.05647]	0.1000	ug/L	
Arsenic	0.9454	0.1000	ug/L	
Barium	1.306	0.1000	ug/L	
Beryllium	[0.01425]	0.1000	ug/L	
Cadmium	[0.07967]	0.1000	ug/L	
Chromium	1.932	0.1000	ug/L	
Cobalt	0.4899	0.1000	ug/L	
Copper	1.808	0.1000	ug/L	
Lead	0.6184	0.1000	ug/L	
Manganese	0.7207	0.1000	ug/L	
Nickel	2.596	0.1000	ug/L	
Selenium	0.5051	0.1000	ug/L	
Silver	0.2024	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1178	0.1000	ug/L	
Zinc	[0.08790]	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	121500	ug/L	122
Calcium	300000	355500	ug/L	119
Iron	250000	255300	ug/L	102
Magnesium	100000	119800	ug/L	120
Molybdenum	2000	2202	ug/L	110
Potassium	100000	120100	ug/L	120
Sodium	250000	279700	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	282773	-26.10
Scandium	356151	280052	-21.37
Germanium	68084	62234	-8.59
Indium	641888	464218	-27.68
Bismuth	534873	375342	-29.83

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652018 File : c08t0018 Time : 08-MAR-2007 20:41
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	109600	ug/L	10		
Arsenic	100.0	100.1	ug/L	0	20	
Cadmium	100.0	91.08	ug/L	-9	20	
Calcium	300000	318300	ug/L	6		
Chromium	200.0	213.5	ug/L	7	20	
Cobalt	200.0	202.7	ug/L	1	20	
Copper	200.0	190.6	ug/L	-5	20	
Iron	250000	235000	ug/L	-6		
Magnesium	100000	108900	ug/L	9		
Manganese	200.0	209.2	ug/L	5	20	
Molybdenum	2000	2020	ug/L	1		
Nickel	200.0	196.5	ug/L	-2	20	
Potassium	100000	109300	ug/L	9		
Selenium	100.0	81.78	ug/L	-18	20	
Silver	50.00	41.37	ug/L	-17	20	
Sodium	250000	251400	ug/L	1		
Vanadium	200.0	221.0	ug/L	11	20	
Zinc	100.0	83.41	ug/L	-17	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	289056	-18.84
Germanium	68084	61867	-9.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

nst : MET05
eqnum : 57097652072 File : c08t0072
al : 57097652001 Caldate: 08-MAR-2007
tandards: S5651, S5290

IDF : 1.0
Time : 09-MAR-2007 00:17

Analyte	Quant	RL	Units	Flags
Antimony	[0.04686]	0.1000	ug/L	
Arsenic	0.7403	0.1000	ug/L	
Barium	1.371	0.1000	ug/L	
Beryllium	[0.005095]	0.1000	ug/L	
Cadmium	[0.03532]	0.1000	ug/L	
Chromium	1.947	0.1000	ug/L	
Cobalt	0.5032	0.1000	ug/L	
Copper	1.487	0.1000	ug/L	
Lead	0.6051	0.1000	ug/L	
Manganese	0.7752	0.1000	ug/L	
Nickel	2.521	0.1000	ug/L	
Selenium	0.4467	0.1000	ug/L	
Silver	0.1922	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1686	0.1000	ug/L	
Zinc	0.1352	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	349100	ug/L	116
Iron	250000	257600	ug/L	103
Magnesium	100000	118400	ug/L	118
Molybdenum	2000	2147	ug/L	107
Potassium	100000	117600	ug/L	118
Sodium	250000	280100	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	286739	-25.06
Scandium	356151	273610	-23.18
Germanium	68084	59624	-12.43
Indium	641888	441697	-31.19
Bismuth	534873	359606	-32.77

57097652072

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652073 File : c08t0073 Time : 09-MAR-2007 00:21
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107300	ug/L	7		
Arsenic	100.0	97.46	ug/L	-3	20	
Cadmium	100.0	86.13	ug/L	-14	20	
Calcium	300000	316100	ug/L	5		
Chromium	200.0	212.1	ug/L	6	20	
Cobalt	200.0	200.9	ug/L	0	20	
Copper	200.0	187.6	ug/L	-6	20	
Iron	250000	234900	ug/L	-6		
Magnesium	100000	105500	ug/L	6		
Manganese	200.0	207.9	ug/L	4	20	
Molybdenum	2000	1947	ug/L	-3		
Nickel	200.0	194.7	ug/L	-3	20	
Potassium	100000	107200	ug/L	7		
Selenium	100.0	78.75	ug/L	**-21**	20	ab- ***
Silver	50.00	39.37	ug/L	**-21**	20	ab- ***
Sodium	250000	253500	ug/L	1		
Vanadium	200.0	222.0	ug/L	11	20	
Zinc	100.0	82.18	ug/L	-18	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	277282	-22.14
Germanium	68084	59868	-12.07

-=low bias ab=ICSAB

57097652073

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

	IS1 (LI) READING	IS2 (SC) READING	IS3 (GE) READING	IS4 (IN) READING	IS5 (BI) READING	IS6 (TB) READING
ICALBLK STD	382626	356151	68084	641888	534873	629138
LOWER LIMIT	114788	106845	20425	192567	160462	188741
UPPER LIMIT	459151	427381	81701	770266	641848	754965

TYPE	SAMPLE	#						
ICB		015	374762	351811	70476	634789	545702	636819
ICSA		017	282773	280052	62234	464218	375342	523658
BLANK	QC378195	021	286751	265483	56170	467751	429380	479219
BS	QC378196	022	299261	269324	56317	464251	428812	495240
BSD	QC378197	023	304341	280663	57799	485844	440986	513617
MSS	193027-002	025	301590	281504	60861	473293	427058	511978
SER	QC378200	026	354330	323999	68648	567375	510768	591833
MS	QC378198	027	289210	272002	59259	446566	404090	492266
MSD	QC378199	028	302662	286557	60386	465383	417702	509972
CCV		033	354818	327529	68935	571477	526006	615202
CCB		035	368761	334843	71147	604863	554307	623597
BLANK	QC377794	038	288832	252909	66050	411535	343680	416729
SAMPLE	193213-001	039	317491	285287	62766	490930	471486	530648
SAMPLE	193213-001	040	353919	354557	65682	566096	490310	594053
SAMPLE	193027-001	041	304074	279260	60448	465164	427753	507988
SAMPLE	193027-003	042	306136	284770	62395	473615	442913	524578
SAMPLE	193027-004	043	296000	276433	61460	454660	425547	506572
SAMPLE	193027-005	044	304380	274887	62667	463824	445334	519516
SAMPLE	193027-006	045	301292	278263	63516	463376	441544	519511
SAMPLE	193027-007	046	313447	284828	64052	476699	448937	528018
SAMPLE	193027-008	047	300129	278130	62491	456999	426996	514842
CCV		051	384233	354410	74430	609388	562534	655934
CCB		053	384741	351291	74704	629371	577159	647367
SAMPLE	193027-011	056	323316	291899	62248	474956	414950	523872
SAMPLE	193027-012	057	308964	292548	62176	475526	423213	536579
SAMPLE	193027-013	058	327521	297913	65723	496938	458516	542464
SAMPLE	193027-014	059	317217	300733	65780	490236	456550	533196
SAMPLE	193027-015	060	320247	289779	65837	480362	464587	533033

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

TYPE	SAMPLE	#						
SAMPLE	193027-011	061	315396	285662	64537	462211	433890	534166
SAMPLE	193027-012	062	306337	330700	62107	454814	425383	534035
SAMPLE	193027-013	063	332340	312672	65892	517199	453802	557848
CCV		067	364333	333904	71338	568976	534394	613162
CCB		069	378116	340741	73735	600089	565333	626156
ICSA		072	286739	273610	59624	441697	359606	499152

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c08t0001	TUN				08-MAR-2007 19:32	1.0	1.0				1	
002	c08t0002	X	RINSE			08-MAR-2007 19:37	1.0					2	
003	c08t0003	X	RINSE			08-MAR-2007 19:41	1.0					2	
004	c08t0004	ICALBLK	CALBLANK			08-MAR-2007 19:45	1.0	1.0				2	
005	c08t0005	ICAL				08-MAR-2007 19:49	1.0	1.0				3	
006	c08t0006	ICAL				08-MAR-2007 19:53	1.0	1.0				4	
007	c08t0007	ICAL				08-MAR-2007 19:57	1.0	1.0				5	
008	c08t0008	ICAL				08-MAR-2007 20:01	1.0	1.0				6	
009	c08t0009	ICAL				08-MAR-2007 20:05	1.0	1.0				7	
010	c08t0010	ICAL				08-MAR-2007 20:09	1.0	1.0				8	
011	c08t0011	X	RINSE			08-MAR-2007 20:13	1.0					2	
012	c08t0012	ICV				08-MAR-2007 20:17	1.0	1.0			1	9	
013	c08t0013	X	RINSE			08-MAR-2007 20:21	1.0					2	
014	c08t0014	X				08-MAR-2007 20:25	1.0	1.0				2	
015	c08t0015	ICB				08-MAR-2007 20:29	1.0	1.0	1		1	2	
016	c08t0016	X				08-MAR-2007 20:33	1.0	1.0				2	
017	c08t0017	ICSA				08-MAR-2007 20:37	1.0	1.0			1	10 2	7:CA=355500
018	c08t0018	ICSAB				08-MAR-2007 20:41	1.0	1.0			1	11 2	11:CA=318300
019	c08t0019	X	RINSE			08-MAR-2007 20:45	1.0					2	
020	c08t0020	X	RINSE			08-MAR-2007 20:49	1.0					2	
021	c08t0021	BLANK	QC378195	122867	Filtra	08-MAR-2007 20:53	1.0	1.0			1	2	
022	c08t0022	BS	QC378196	122867	Filtra	08-MAR-2007 20:57	1.0	1.0			1	2	
023	c08t0023	BSD	QC378197	122867	Filtra	08-MAR-2007 21:01	1.0	1.0			1	2	
024	c08t0024	X	RINSE			08-MAR-2007 21:05	1.0					2	
025	c08t0025	MSS	193027-002	122867	Filtra	08-MAR-2007 21:09	1.0	1.0	3		1	2	3:MG=77730.0
026	c08t0026	SER	QC378200	122867	Filtra	08-MAR-2007 21:13	5.0	1.0	1	1	1	2	
027	c08t0027	MS	QC378198	122867	Filtra	08-MAR-2007 21:17	1.0	1.0	1		1	2	3:MG=89390.0
028	c08t0028	MSD	QC378199	122867	Filtra	08-MAR-2007 21:21	1.0	1.0	1		1	2	3:MG=83750.0
029	c08t0029	PDS	QC378201	122867	Filtra	08-MAR-2007 21:25	50.0	1.0			1	12	3:MG=84700.0
030	c08t0030	X	RINSE			08-MAR-2007 21:29	1.0					2	
031	c08t0031	X	RINSE			08-MAR-2007 21:33	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RCH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c08t0032	X	RINSE			08-MAR-2007 21:37	1.0					2	
033	c08t0033	CCV				08-MAR-2007 21:41	1.0	1.0			1	13	
034	c08t0034	X	RINSE			08-MAR-2007 21:45	1.0					2	
035	c08t0035	CCB				08-MAR-2007 21:49	1.0	1.0			1	2	
036	c08t0036	X				08-MAR-2007 21:53	1.0	1.0				2	
037	c08t0037	X				08-MAR-2007 21:57	1.0	1.0				2	
038	c08t0038	BLANK	QC377794	122769	Filtra	08-MAR-2007 22:01	1.0	1.0	4		1	2	
039	c08t0039	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 22:05	1.0	1.0	5		1	2	2:NA=33040.0
040	c08t0040	SAMPLE	193213-001	122867	Water	08-MAR-2007 22:09	1.0	1.0	5		1	2	2:NA=30470.0
041	c08t0041	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 22:13	1.0	1.0	6		1	2	3:NA=76650.0
042	c08t0042	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 22:17	1.0	1.0	6		1	2	3:NA=67770.0
043	c08t0043	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 22:21	1.0	1.0	6		1	2	3:NA=77290.0
044	c08t0044	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 22:25	1.0	1.0	5		1	2	3:MG=88070.0
045	c08t0045	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 22:29	1.0	1.0	6		1	2	3:NA=67140.0
046	c08t0046	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 22:33	1.0	1.0	6		1	2	3:MG=63870.0
047	c08t0047	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 22:37	1.0	1.0	6		1	2	3:NA=108300
048	c08t0048	X	RINSE			08-MAR-2007 22:41	1.0					2	
049	c08t0049	X	RINSE			08-MAR-2007 22:45	1.0					2	
050	c08t0050	X	RINSE			08-MAR-2007 22:49	1.0					2	
051	c08t0051	CCV				08-MAR-2007 22:53	1.0	1.0	4		1	13	
052	c08t0052	X	RINSE			08-MAR-2007 22:57	1.0					2	
053	c08t0053	CCB				08-MAR-2007 23:01	1.0	1.0	2		1	2	
054	c08t0054	X				08-MAR-2007 23:05	1.0	1.0				2	
055	c08t0055	X				08-MAR-2007 23:09	1.0	1.0				2	
056	c08t0056	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 23:13	1.0	1.0	6		1	2	3:NA=192700
057	c08t0057	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 23:17	1.0	1.0	7		1	2	4:NA=178400
058	c08t0058	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 23:21	1.0	1.0	7		1	2	4:NA=46740.0
059	c08t0059	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 23:25	1.0	1.0	5		1	2	2:MG=55170.0
060	c08t0060	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 23:29	1.0	1.0	7		1	2	4:CA=60370.0
061	c08t0061	SAMPLE	193027-011	122867	Water	08-MAR-2007 23:33	1.0	1.0	6		1	2	3:NA=201700
062	c08t0062	SAMPLE	193027-012	122867	Water	08-MAR-2007 23:37	1.0	1.0	9		1	2	6:NA=152100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RUH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c08t0063	SAMPLE	193027-013	122867	Water	08-MAR-2007 23:41	1.0	1.0	9		1	2	6:FE=94170.0
064	c08t0064	X	RINSE			08-MAR-2007 23:45	1.0					2	
065	c08t0065	X	RINSE			08-MAR-2007 23:49	1.0					2	
066	c08t0066	X	RINSE			08-MAR-2007 23:53	1.0					2	
067	c08t0067	CCV				08-MAR-2007 23:57	1.0	1.0	3		1	13	
068	c08t0068	X	RINSE			09-MAR-2007 00:01	1.0					2	
069	c08t0069	CCB				09-MAR-2007 00:05	1.0	1.0	2		1	2	
070	c08t0070	X				09-MAR-2007 00:09	1.0	1.0				2	
071	c08t0071	X				09-MAR-2007 00:13	1.0	1.0				2	
072	c08t0072	ICSA				09-MAR-2007 00:17	1.0	1.0			1	10 2	7:CA=349100
073	c08t0073	ICSAB				09-MAR-2007 00:21	1.0	1.0	2		1	11 2	11:CA=316100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RLH Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57098723001
Units : ug/L

Date : 09-MAR-2007 13:36
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c09n0005	57098723005		09-MAR-2007 13:40	S5645
L2	c09n0006	57098723006		09-MAR-2007 13:44	S5647
L3	c09n0007	57098723007		09-MAR-2007 13:48	S5649
L4	c09n0008	57098723008		09-MAR-2007 13:52	S5650
L5	c09n0009	57098723009		09-MAR-2007 13:56	S5644
L6	c09n0010	57098723010		09-MAR-2007 14:00	S5646

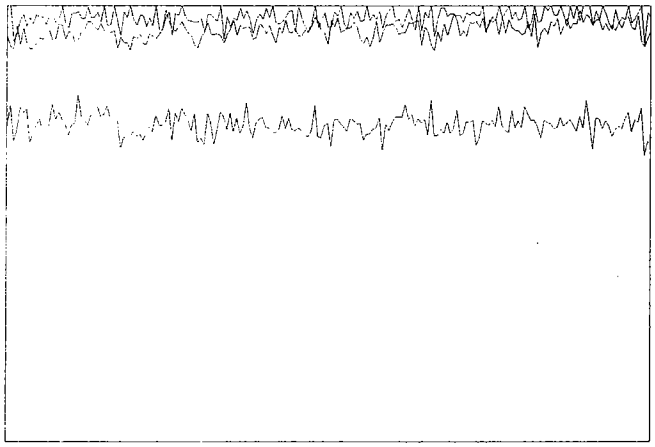
Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	2.8042	2.1844	1.0745	1.0107	1.0232	1.0155	BLNK	-0.8871	0.98329		1.5187	1.000	0.995	
Antimony	0.6149	0.5009	0.2444	0.2357	0.2435	0.2496	BLNK	-0.0260	4.02692		0.3482	1.000	0.995	
Arsenic	3.1881	2.2147	0.7619	0.6050	0.5972	0.5931	BLNK	-0.2885	1.68660		1.3267	1.000	0.995	
Barium	0.2163	0.2162	0.1187	0.0823	0.0829	0.0861	BLNK	-0.0255	11.7073		0.1338	1.000	0.995	
Beryllium	0.6295	0.5457	0.2594	0.2563	0.2600	0.2675	BLNK	-0.0086	3.75919		0.3697	1.000	0.995	
Cadmium	2.1671	1.4586	0.6981	0.6410	0.6220	0.6235	BLNK	-0.0830	1.60534		1.0350	1.000	0.995	
Calcium	0.0908	0.0603	0.0260	0.0224	0.0230	0.0226	BLNK	-11.814	44.0716		0.0408	1.000	0.995	
Chromium	29.638	14.524	5.0464	2.9299	2.7711	2.6674	BLNK	-0.8293	0.37385		9.5962	1.000	0.995	
Cobalt	8.4510	6.6624	3.1841	3.1800	3.1521	3.1711	BLNK	-0.0080	0.31574		4.6335	1.000	0.995	
Copper	5.7769	6.7614	1.3582	1.2523	0.9450	0.9386	BLNK	-0.3359	1.06548		2.8387	1.000	0.995	
Iron	0.3605	0.2136	0.0886	0.0719	0.0712	0.0707	BLNK	-25.633	14.1432		0.1461	1.000	0.995	
Lead	3.1257	2.4025	1.1761	1.1294	1.1625	1.1783	BLNK	-0.0217	0.85113		1.6958	1.000	0.995	
Magnesium	0.3547	0.2791	0.1386	0.1370	0.1324	0.1325	BLNK	-0.7814	7.54841		0.1957	1.000	0.995	
Manganese	11.412	8.1722	3.7114	3.4853	3.4679	3.4588	BLNK	-0.0690	0.28909		5.6179	1.000	0.995	
Molybdenum	3.5302	2.4362	1.2379	1.1876	1.2057	1.2507	BLNK	-0.0117	0.80545		1.8081	1.000	0.995	
Nickel	2.4800	1.9147	0.8330	0.7541	0.7333	0.7303	BLNK	-0.0682	1.36865		1.2409	1.000	0.995	
Potassium	9.0303	4.6626	1.5355	0.8905	0.8343	0.8434	BLNK	-81.869	1.19407		2.9661	1.000	0.995	
Selenium	0.1706	0.1337	0.0586	0.0583	0.0577	0.0560	BLNK	0.56516	17.6854		0.0892	1.000	0.995	
Silver	7.0364	5.7352	2.7519	2.6818	2.6363	2.6158	BLNK	-0.0096	0.38170		3.9096	1.000	0.995	
Sodium	11.567	6.4196	2.2978	1.4988	1.4178	1.4154	BLNK	-52.060	0.70846		4.1028	1.000	0.995	
Thallium	2.7017	1.9041	0.8664	0.8519	0.8820	0.9034	BLNK	-0.0375	1.11281		1.3516	1.000	0.995	
Vanadium	32.678	14.725	4.9847	3.4262	3.3422	3.3396	BLNK	-0.7916	0.30084		10.416	1.000	0.995	
Zinc	6.8320	4.5286	1.2010	0.6161	0.5533	0.5336	BLNK	-0.8545	1.86948		2.3774	1.000	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Barium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Calcium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Copper	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Iron	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Lead	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Magnesium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Potassium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Silver	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Sodium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.0500	0.1250	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

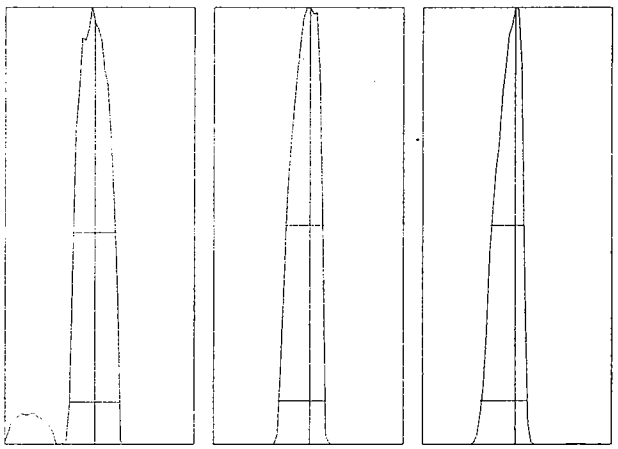
Tune Report

Tune File : nogas.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.382%
Doubly Charged:	70/140	1.828%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13638.0	14541.5	3.38	4.10
89	20,000	19443.0	19509.6	2.31	4.70
205	10,000	9442.0	9429.8	2.12	6.30
156/140	1	0.397%	0.395%	14.10	
70/140	5	1.848%	1.914%	7.67	



m/z:	7	89	205
Height:	14,614	19,754	9,564
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.65	0.55
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 09, 2007 12:11:56
Printed : Mar 09, 2007 12:11:59 : 00099

Tune Report

Tune File : nogas.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-115 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-2 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-6 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 09, 2007 12:11:56
Printed : Mar 09, 2007 12:12:01 : 00100

P/A Factor Tuning Report

Acquired:Mar 9 2007 00:49 pm

Mass[amu]	Element	P/A Factor
6	Li	0.075421
9	Be	0.083917
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.099165
44	Ca	0.103338
45	Sc	0.099348
51	V	0.101107
52	Cr	0.102126
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.104319
57	Fe	0.106832
59	Co	0.105851
60	Ni	0.105981
63	Cu	0.105565
65	Cu	0.106701
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.103212
95	Mo	0.104928
98	Mo	0.103349
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.107921
111	Cd	Sensitivity too low
114	Cd	0.106323
115	In	0.106365
118	(In)	0.113278
121	Sb	0.107436
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.108631
166	Er	Sensitivity too low
205	Tl	0.111743
206	(Pb)	0.109923
207	(Pb)	0.113010
208	Pb	0.112820
209	Bi	0.112954

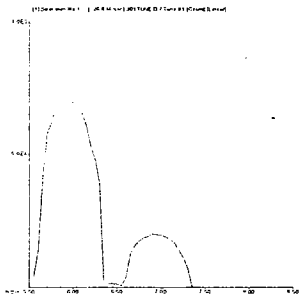
===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

6020 QC Tune Report

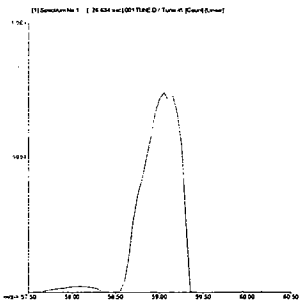
Data File: C:\ICPCHEM\1\DATA\07C09n00.B\001TUNE.D
Date Acquired: Mar 9 2007 01:23 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

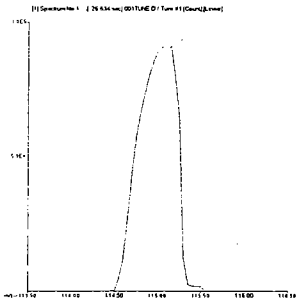
Element	Actual	Required	Flag
7 Li	1.64	5.00	
59 Co	1.43	5.00	
115 In	0.38	5.00	
205 Tl	1.21	5.00	



7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.10
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

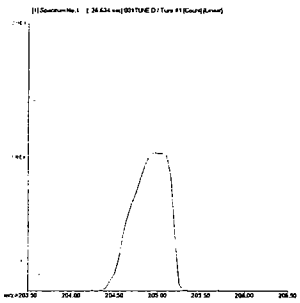
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004C
Date Acquired: Mar 9 2007 01:36 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:39 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	635034.31	A	9041.00	1.42
9	Be	28.89	P	15.40	53.31
23	Na	671960.50	M	13170.00	1.96
26	Mg	945.56	P	193.30	20.44
27	Al	8241.11	P	1466.00	17.79
39	K	627002.63	M	9071.00	1.45
44	Ca	2451.12	P	77.00	3.14
45	Sc	457323.31	P	5056.00	1.11
51	V	5222.83	P	811.70	15.54
52	Cr	4400.00	P	57.83	1.31
55	Mn	473.33	P	47.26	9.98
57	Fe	3595.55	P	172.00	4.78
59	Co	50.00	P	20.82	41.64
60	Ni	98.89	P	13.47	13.62
65	Cu	625.55	P	70.42	11.26
66	Zn	906.67	P	46.67	5.15
72	Ge	99175.78	P	731.80	0.74
75	As	339.83	P	105.20	30.96
82	Se	-63.56	P	35.44	55.76
95	Mo	28.89	P	5.09	17.63
109	Ag	50.00	P	15.28	30.56
111	Cd	102.45	P	13.64	13.31
115	In	739964.69	M	13620.00	1.84
121	Sb	95.56	P	10.18	10.65
137	Ba	32.22	P	5.09	15.80
205	Tl	374.44	P	46.71	12.47
208	Pb	283.33	P	17.32	6.11
209	Bi	555317.81	P	3746.00	0.67

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 9 2007 01:40 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:39 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	629102.63	A	11750.00	1.87
9 Be	792.22	P	35.01	4.42
23 Na	1049144.00	A	26130.00	2.49
26 Mg	32171.11	P	757.10	2.35
27 Al	254300.00	P	4682.00	1.84
39 K	819012.00	A	10620.00	1.30
44 Ca	8231.70	P	109.60	1.33
45 Sc	453492.19	P	7029.00	1.55
51 V	6574.03	P	189.60	2.88
52 Cr	5962.22	P	95.24	1.60
55 Mn	2295.55	P	87.58	3.82
57 Fe	7253.33	P	173.60	2.39
59 Co	1700.00	P	81.10	4.77
60 Ni	498.89	P	11.71	2.35
65 Cu	1162.08	P	11.71	1.01
66 Zn	1374.44	P	22.19	1.61
72 Ge	100585.10	P	587.80	0.58
75 As	642.40	P	313.40	48.79
82 Se	34.22	P	43.13	126.03
95 Mo	710.00	P	49.33	6.95
109 Ag	1415.56	P	30.25	2.14
111 Cd	436.22	P	74.77	17.14
115 In	739578.13	P	9249.00	1.25
121 Sb	908.89	P	91.31	10.05
137 Ba	320.00	P	26.03	8.13
205 Tl	1512.22	P	61.13	4.04
208 Pb	3497.78	P	130.40	3.73
209 Bi	559732.19	P	6521.00	1.17

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	629102.63	1.8677	635034.25	99.07	80 - 120	
45 Sc	453492.22	1.55	457323.31	99.16	80 - 120	
72 Ge	100585.12	0.5844	99175.781	101.42	80 - 120	
115 In	739578.13	1.2506	739964.75	99.95	80 - 120	
209 Bi	559732.25	1.165	555317.75	100.79	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 9 2007 01:44 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:43 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	598083.38	A	4241.00	0.71
9 Be	1632.22	P	92.16	5.65
23 Na	1432860.00	A	11600.00	0.81
26 Mg	62306.66	P	1627.00	2.61
27 Al	487652.31	M	8581.00	1.76
39 K	1040770.00	A	262.90	0.03
44 Ca	13460.44	P	426.00	3.16
45 Sc	446511.09	P	7330.00	1.64
51 V	7387.60	P	662.90	8.97
52 Cr	7283.33	P	166.00	2.28
55 Mn	4097.78	P	56.80	1.39
57 Fe	10712.22	P	114.20	1.07
59 Co	3340.00	P	150.10	4.49
60 Ni	960.00	P	62.27	6.49
65 Cu	3390.84	P	54.81	1.62
66 Zn	2271.11	P	32.37	1.43
72 Ge	100302.70	P	1073.00	1.07
75 As	1110.18	P	107.70	9.70
82 Se	66.89	P	25.27	37.78
95 Mo	1222.22	P	71.91	5.88
109 Ag	2875.55	P	71.83	2.50
111 Cd	731.24	P	35.68	4.88
115 In	724410.81	P	11210.00	1.55
121 Sb	1814.44	P	42.21	2.33
137 Ba	783.33	P	32.83	4.19
205 Tl	2630.00	P	52.39	1.99
208 Pb	6636.67	P	75.35	1.14
209 Bi	552504.38	P	6686.00	1.21

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	598083.44	0.7091	635034.25	94.18	80 - 120	
45 Sc	446511.09	1.6416	457323.31	97.64	80 - 120	
72 Ge	100302.66	1.0698	99175.781	101.14	80 - 120	
115 In	724410.75	1.5475	739964.75	97.90	80 - 120	
209 Bi	552504.44	1.2101	555317.75	99.49	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 9 2007 01:48 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	610295.00	A	17000.00	2.79
9 Be	3165.56	P	55.01	1.74
23 Na	2062323.00	A	32680.00	1.58
26 Mg	124406.70	P	1338.00	1.08
27 Al	964288.31	A	17960.00	1.86
39 K	1378007.00	A	17100.00	1.24
44 Ca	23326.79	P	430.70	1.85
45 Sc	448761.09	P	3652.00	0.81
51 V	10066.86	P	1022.00	10.15
52 Cr	10196.67	P	49.10	0.48
55 Mn	7500.00	P	107.10	1.43
57 Fe	17905.55	P	468.80	2.62
59 Co	6432.22	P	287.20	4.47
60 Ni	1683.33	P	77.96	4.63
65 Cu	2743.89	P	113.40	4.13
66 Zn	2426.67	P	3.33	0.14
72 Ge	101035.80	P	834.90	0.83
75 As	1539.18	P	270.00	17.54
82 Se	118.67	P	96.76	81.54
95 Mo	2501.11	P	119.80	4.79
109 Ag	5560.00	P	110.10	1.98
111 Cd	1410.52	P	5.11	0.36
115 In	742585.69	P	6538.00	0.88
121 Sb	3630.00	P	92.07	2.54
137 Ba	1763.33	P	41.77	2.37
205 Tl	4813.33	P	187.70	3.90
208 Pb	13071.11	P	242.20	1.85
209 Bi	555924.38	P	10140.00	1.82

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	610295.06	2.7855	635034.25	96.10	80 - 120	
45 Sc	448761.09	0.8138	457323.31	98.13	80 - 120	
72 Ge	101035.78	0.8263	99175.781	101.88	80 - 120	
115 In	742585.69	0.8804	739964.75	100.35	80 - 120	
209 Bi	555924.44	1.824	555317.75	100.11	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 9 2007 01:52 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:50 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	616527.81	A	14170.00	2.30
9 Be	31583.33	P	395.80	1.25
23 Na	13405550.00	A	199000.00	1.48
26 Mg	1225290.00	A	7963.00	0.65
27 Al	9038961.00	A	34880.00	0.39
39 K	7964548.00	A	62070.00	0.78
44 Ca	199989.30	P	908.70	0.45
45 Sc	447234.41	P	7418.00	1.66
51 V	69786.60	P	149.80	0.21
52 Cr	59677.78	P	148.80	0.25
55 Mn	70990.00	P	124.70	0.18
57 Fe	146348.91	P	96.40	0.07
59 Co	64765.55	P	711.20	1.10
60 Ni	15361.11	P	179.90	1.17
65 Cu	25506.80	P	248.60	0.97
66 Zn	12550.00	P	127.70	1.02
72 Ge	101855.50	P	1385.00	1.36
75 As	12322.86	P	160.20	1.30
82 Se	1188.00	P	62.02	5.22
95 Mo	24188.89	P	108.40	0.45
109 Ag	54626.67	P	843.40	1.54
111 Cd	13057.81	P	347.50	2.66
115 In	738596.50	P	9510.00	1.29
121 Sb	34813.33	P	379.50	1.09
137 Ba	12156.67	P	233.40	1.92
205 Tl	47741.11	P	742.70	1.56
208 Pb	126571.10	P	1504.00	1.19
209 Bi	560392.19	P	9281.00	1.66

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	616527.81	2.2984	635034.25	97.09	80 - 120	
45 Sc	447234.41	1.6586	457323.31	97.79	80 - 120	
72 Ge	101855.55	1.3598	99175.781	102.70	80 - 120	
115 In	738596.5	1.2876	739964.75	99.82	80 - 120	
209 Bi	560392.25	1.6562	555317.75	100.91	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 9 2007 01:56 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:54 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	586004.38	A	10430.00	1.78
9 Be	304685.50	P	6282.00	2.06
23 Na	122194000.00	A	1039000.00	0.85
26 Mg	11412640.00	A	246000.00	2.16
27 Al	88177472.00	A	1071000.00	1.21
39 K	71903128.00	A	687000.00	0.96
44 Ca	1979111.00	A	11400.00	0.58
45 Sc	430917.81	P	696.90	0.16
51 V	673690.81	M	18270.00	2.71
52 Cr	558596.63	P	9333.00	1.67
55 Mn	699061.13	P	10120.00	1.45
57 Fe	1434243.00	A	34130.00	2.38
59 Co	635421.13	P	5492.00	0.86
60 Ni	147814.41	P	1245.00	0.84
65 Cu	190493.59	P	1479.00	0.78
66 Zn	111537.80	P	636.20	0.57
72 Ge	100796.90	P	586.60	0.58
75 As	120380.80	P	195.50	0.16
82 Se	11641.11	P	74.68	0.64
95 Mo	243064.41	P	686.20	0.28
109 Ag	531448.88	P	3504.00	0.66
111 Cd	125388.10	P	674.60	0.54
115 In	699991.63	P	4469.00	0.64
121 Sb	340925.50	P	3462.00	1.02
137 Ba	116022.20	P	543.00	0.47
205 Tl	480567.69	P	7188.00	1.50
208 Pb	1266888.00	P	7474.00	0.59
209 Bi	544937.69	P	7544.00	1.38

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	586004.44	1.7799	635034.25	92.28	80 - 120	
45 Sc	430917.78	0.1617	457323.31	94.23	80 - 120	
72 Ge	100796.88	0.582	99175.781	101.63	80 - 120	
115 In	699991.63	0.6384	739964.75	94.60	80 - 120	
209 Bi	544937.75	1.3844	555317.75	98.13	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 9 2007 02:00 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:58 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	568247.88	A	2430.00	0.43
9 Be	608168.00	A	14210.00	2.34
23 Na	236140100.00	A	2687000.00	1.14
26 Mg	22102670.00	A	318300.00	1.44
27 Al	169436610.00	A	3023000.00	1.78
39 K	140723900.00	A	2736000.00	1.94
44 Ca	3778242.00	A	111700.00	2.96
45 Sc	417092.19	P	5140.00	1.23
51 V	1296507.00	A	18750.00	1.45
52 Cr	1035534.00	A	4506.00	0.44
55 Mn	1342780.00	A	38190.00	2.84
57 Fe	2745968.00	A	43880.00	1.60
59 Co	1231099.00	A	25690.00	2.09
60 Ni	283527.81	P	4323.00	1.52
65 Cu	364380.91	P	1429.00	0.39
66 Zn	207173.30	P	1762.00	0.85
72 Ge	97056.00	P	36.70	0.04
75 As	230271.91	P	1178.00	0.51
82 Se	21736.67	P	147.60	0.68
95 Mo	485571.09	P	4439.00	0.91
109 Ag	1015510.00	A	25110.00	2.47
111 Cd	242060.41	P	4940.00	2.04
115 In	665089.63	P	5861.00	0.88
121 Sb	664032.19	P	1779.00	0.27
137 Ba	228987.80	P	1544.00	0.67
205 Tl	940057.81	P	6674.00	0.71
208 Pb	2452236.00	A	24390.00	0.99
209 Bi	520275.59	P	2423.00	0.47

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	568247.88	0.4276	635034.25	89.48	80 - 120	
45 Sc	417092.22	1.2323	457323.31	91.20	80 - 120	
72 Ge	97056	0.0378	99175.781	97.86	80 - 120	
115 In	665089.63	0.8812	739964.75	89.88	80 - 120	
209 Bi	520275.56	0.4657	555317.75	93.69	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723014 File : c09n0014 Time : 09-MAR-2007 14:19
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.5187	1.0097	10000	9928	ug/L	-1	10	
Antimony	0.3482	0.2727	100.0	109.8	ug/L	10	10	
Arsenic	1.3267	0.6148	100.0	103.4	ug/L	3	10	
Barium	0.1338	0.0836	100.0	97.86	ug/L	-2	10	
Beryllium	0.3697	0.2591	100.0	97.40	ug/L	-3	10	
Cadmium	1.0350	0.6343	100.0	101.7	ug/L	2	10	
Calcium	0.0408	0.0230	10000	10110	ug/L	1	10	
Chromium	9.5962	2.8401	100.0	105.3	ug/L	5	10	
Cobalt	4.6335	3.1825	100.0	100.5	ug/L	1	10	
Copper	2.8387	0.9381	100.0	99.61	ug/L	0	10	
Iron	0.1461	0.0729	10000	10290	ug/L	3	10	
Lead	1.6958	1.1627	100.0	98.94	ug/L	-1	10	
Magnesium	0.1957	0.1329	10000	10030	ug/L	0	10	
Manganese	5.6179	3.5281	100.0	101.9	ug/L	2	10	
Molybdenum	1.8081	1.2492	100.0	100.6	ug/L	1	10	
Nickel	1.2409	0.7480	100.0	102.3	ug/L	2	10	
Potassium	2.9661	0.8271	10000	9794	ug/L	-2	10	
Selenium	0.0892	0.0585	100.0	104.0	ug/L	4	10	
Silver	3.9096	2.8754	100.0	109.7	ug/L	10	10	
Sodium	4.1028	1.4215	10000	10020	ug/L	0	10	
Thallium	1.3516	0.8570	50.00	47.65	ug/L	-5	10	
Vanadium	10.416	3.4196	100.0	102.1	ug/L	2	10	
Zinc	2.3774	0.5498	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	604721	-4.77
Scandium	457323	441947	-3.36
Germanium	99176	101248	2.09
Indium	739965	708495	-4.25
Bismuth	555318	548609	-1.21

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723036 File : c09n0036 Time : 09-MAR-2007 15:46
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.5187	1.0417	10000	10240	ug/L	2	10	
Antimony	0.3482	0.2737	100.0	110.2	ug/L	10	10	
Arsenic	1.3267	0.6074	100.0	102.2	ug/L	2	10	
Barium	0.1338	0.0851	100.0	99.58	ug/L	0	10	
Beryllium	0.3697	0.2534	100.0	95.24	ug/L	-5	10	
Cadmium	1.0350	0.6265	100.0	100.5	ug/L	1	10	
Calcium	0.0408	0.0230	10000	10140	ug/L	1	10	
Chromium	9.5962	2.7053	100.0	100.3	ug/L	0	10	
Cobalt	4.6335	3.1264	100.0	98.70	ug/L	-1	10	
Copper	2.8387	0.9349	100.0	99.27	ug/L	-1	10	
Iron	0.1461	0.0708	10000	9994	ug/L	0	10	
Lead	1.6958	1.1559	100.0	98.36	ug/L	-2	10	
Magnesium	0.1957	0.1378	10000	10400	ug/L	4	10	
Manganese	5.6179	3.4157	100.0	98.67	ug/L	-1	10	
Molybdenum	1.8081	1.2150	100.0	97.85	ug/L	-2	10	
Nickel	1.2409	0.7321	100.0	100.1	ug/L	0	10	
Potassium	2.9661	0.8635	10000	10230	ug/L	2	10	
Selenium	0.0892	0.0580	100.0	103.2	ug/L	3	10	
Silver	3.9096	2.8246	100.0	107.8	ug/L	8	10	
Sodium	4.1028	1.4679	10000	10350	ug/L	4	10	
Thallium	1.3516	0.8586	50.00	47.73	ug/L	-5	10	
Vanadium	10.416	3.2383	100.0	96.63	ug/L	-3	10	
Zinc	2.3774	0.5504	100.0	102.0	ug/L	2	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	590115	-7.07
Scandium	457323	414764	-9.31
Germanium	99176	100431	1.27
Indium	739965	693121	-6.33
Bismuth	555318	571696	2.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723049 File : c09n0049 Time : 09-MAR-2007 16:38
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.5187	1.0282	10000	10110	ug/L	1	10	
Antimony	0.3482	0.2765	100.0	111.3	ug/L	**11**	10	c+ ***
Arsenic	1.3267	0.6127	100.0	103.0	ug/L	3	10	
Barium	0.1338	0.0843	100.0	98.65	ug/L	-1	10	
Beryllium	0.3697	0.2542	100.0	95.56	ug/L	-4	10	
Cadmium	1.0350	0.6463	100.0	103.7	ug/L	4	10	
Calcium	0.0408	0.0232	10000	10190	ug/L	2	10	
Chromium	9.5962	2.7706	100.0	102.8	ug/L	3	10	
Cobalt	4.6335	3.1254	100.0	98.67	ug/L	-1	10	
Copper	2.8387	0.9323	100.0	99.00	ug/L	-1	10	
Iron	0.1461	0.0706	10000	9966	ug/L	0	10	
Lead	1.6958	1.1649	100.0	99.12	ug/L	-1	10	
Magnesium	0.1957	0.1353	10000	10220	ug/L	2	10	
Manganese	5.6179	3.4503	100.0	99.67	ug/L	0	10	
Molybdenum	1.8081	1.2451	100.0	100.3	ug/L	0	10	
Nickel	1.2409	0.7367	100.0	100.8	ug/L	1	10	
Potassium	2.9661	0.8478	10000	10040	ug/L	0	10	
Selenium	0.0892	0.0584	100.0	103.9	ug/L	4	10	
Silver	3.9096	2.9309	100.0	111.9	ug/L	**12**	10	c+ ***
Sodium	4.1028	1.4422	10000	10170	ug/L	2	10	
Thallium	1.3516	0.8557	50.00	47.57	ug/L	-5	10	
Vanadium	10.416	3.4080	100.0	101.7	ug/L	2	10	
Zinc	2.3774	0.5407	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	615117	-3.14
Scandium	457323	437747	-4.28
Germanium	99176	100357	1.19
Indium	739965	710987	-3.92
Bismuth	555318	564852	1.72

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723017 File : c09n0017 Time : 09-MAR-2007 14:30
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	[0.07792]	0.1000	0.01065	ug/L	!ib
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	[0.009459]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.01476]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.3026	0.1000	0.3448	ug/L	ib ***
Silver	[0.01985]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	622394	-1.99
Scandium	457323	438780	-4.05
Germanium	99176	105743	6.62
Indium	739965	733993	-0.81
Bismuth	555318	567794	2.25

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723038 File : c09n0038 Time : 09-MAR-2007 15:54
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	0.2208	0.1000	0.01065	ug/L	ib ***
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	[0.02165]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01969]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.02707]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	0.1483	0.1000	0.01770	ug/L	ib ***
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	ND	0.1000	0.3448	ug/L	
Silver	[0.03289]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	604932	-4.74
Scandium	457323	426293	-6.79
Germanium	99176	102338	3.19
Indium	739965	731328	-1.17
Bismuth	555318	584791	5.31

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723051 File : c09n0051 Time : 09-MAR-2007 16:45
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	0.1622	0.1000	0.01065	ug/L	ib ***
Arsenic	[0.01587]	0.1000	0.007794	ug/L	!ib
Barium	[0.02202]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01623]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.02160]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	[0.09373]	0.1000	0.01770	ug/L	!ib
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.4071	0.1000	0.3448	ug/L	ib ***
Silver	[0.02612]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	640775	0.90
Scandium	457323	448699	-1.89
Germanium	99176	103842	4.70
Indium	739965	754842	2.01
Bismuth	555318	587404	5.78

!=warning ib=instrument blank

57098723051

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723019 File : c09n0019 Time : 09-MAR-2007 14:38
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	0.2211	0.1000	ug/L	
Arsenic	0.5836	0.1000	ug/L	
Barium	1.518	0.1000	ug/L	
Beryllium	[0.02571]	0.1000	ug/L	
Cadmium	[0.05938]	0.1000	ug/L	
Chromium	1.963	0.1000	ug/L	
Cobalt	0.5362	0.1000	ug/L	
Copper	2.275	0.1000	ug/L	
Lead	0.7213	0.1000	ug/L	
Manganese	0.8173	0.1000	ug/L	
Nickel	3.100	0.1000	ug/L	
Selenium	[0]	0.1000	ug/L	
Silver	0.2362	0.1000	ug/L	
Thallium	[0.03384]	0.05000	ug/L	
Vanadium	[0]	0.1000	ug/L	
Zinc	4.588	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	131900	ug/L	132
Calcium	300000	390000	ug/L	130
Iron	250000	280800	ug/L	112
Magnesium	100000	134000	ug/L	134
Molybdenum	2000	2372	ug/L	119
Potassium	100000	125900	ug/L	126
Sodium	250000	304100	ug/L	122

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	426154	-32.89
Scandium	457323	328213	-28.23
Germanium	99176	88162	-11.11
Indium	739965	536850	-27.45
Bismuth	555318	400048	-27.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723020 File : c09n0020 Time : 09-MAR-2007 14:42
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	116800	ug/L	17		
Arsenic	100.0	104.9	ug/L	5	20	
Cadmium	100.0	102.0	ug/L	2	20	
Calcium	300000	347500	ug/L	16		
Chromium	200.0	233.4	ug/L	17	20	
Cobalt	200.0	217.0	ug/L	9	20	
Copper	200.0	200.8	ug/L	0	20	
Iron	250000	256700	ug/L	3		
Magnesium	100000	116500	ug/L	17		
Manganese	200.0	229.6	ug/L	15	20	
Molybdenum	2000	2196	ug/L	10		
Nickel	200.0	211.9	ug/L	6	20	
Potassium	100000	113700	ug/L	14		
Selenium	100.0	86.35	ug/L	-14	20	
Silver	50.00	46.58	ug/L	-7	20	
Sodium	250000	264900	ug/L	6		
Vanadium	200.0	239.3	ug/L	20	20	
Zinc	100.0	90.68	ug/L	-9	20	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Scandium	457323	344197	-24.74
Germanium	99176	86719	-12.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723053 File : c09n0053 Time : 09-MAR-2007 16:53
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	0.3773	0.1000	ug/L	
Arsenic	0.5247	0.1000	ug/L	
Barium	1.545	0.1000	ug/L	
Beryllium	[0.03650]	0.1000	ug/L	
Cadmium	0.1949	0.1000	ug/L	
Chromium	1.950	0.1000	ug/L	
Cobalt	0.5438	0.1000	ug/L	
Copper	2.262	0.1000	ug/L	
Lead	0.7353	0.1000	ug/L	
Manganese	0.8836	0.1000	ug/L	
Nickel	3.148	0.1000	ug/L	
Selenium	[0]	0.1000	ug/L	
Silver	0.2416	0.1000	ug/L	
Thallium	[0.03261]	0.05000	ug/L	
Vanadium	[0]	0.1000	ug/L	
Zinc	4.393	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	130400	ug/L	130
Calcium	300000	388300	ug/L	129
Iron	250000	281200	ug/L	112
Magnesium	100000	131200	ug/L	131
Molybdenum	2000	2415	ug/L	121
Potassium	100000	127300	ug/L	127
Sodium	250000	0	ug/L	0

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	450615	-29.04
Scandium	457323	336904	-26.33
Germanium	99176	87016	-12.26
Indium	739965	540989	-26.89
Bismuth	555318	405359	-27.00

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723054 File : c09n0054 Time : 09-MAR-2007 16:57
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	115000	ug/L	15		
Arsenic	100.0	102.7	ug/L	3	20	
Cadmium	100.0	101.3	ug/L	1	20	
Calcium	300000	342000	ug/L	14		
Chromium	200.0	235.4	ug/L	18	20	
Cobalt	200.0	213.9	ug/L	7	20	
Copper	200.0	196.2	ug/L	-2	20	
Iron	250000	253400	ug/L	1		
Magnesium	100000	114900	ug/L	15		
Manganese	200.0	226.6	ug/L	13	20	
Molybdenum	2000	2201	ug/L	10		
Nickel	200.0	208.8	ug/L	4	20	
Potassium	100000	112800	ug/L	13		
Selenium	100.0	85.20	ug/L	-15	20	
Silver	50.00	46.62	ug/L	-7	20	
Sodium	250000	262000	ug/L	5		
Vanadium	200.0	239.1	ug/L	20	20	
Zinc	100.0	87.96	ug/L	-12	20	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Scandium	457323	355991	-22.16
Germanium	99176	86515	-12.77

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57098723

Date : 03/09/07 Reference: c09n0004
Sequence : MET05 c09n0 Analyzed : 03/09/07 13:36

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	635034	457323	99176	739965	555318
		LOWER LIMIT	190510	137197	29753	221989	166595
		UPPER LIMIT	762041	548788	119011	887958	666381
017	ICB		622394	438780	105743	733993	567794
019	ICSA		426154	328213	88162	536850	400048
020	ICSAB		445899	344197	86719	559565	414612
025	BLANK	QC378188	507591	339131	80649	553612	452717
026	BLANK	QC378369	517807	345208	74929	566020	469933
027	BLANK	QC378195	528017	352473	79219	583187	478822
028	BS	QC378370	522288	351647	76645	565246	455218
029	BSD	QC378371	501163	343224	79084	542681	433718
031	MSS	193213-001	587263	434063	106079	726073	587090
032	SER	QC378374	584414	412112	100434	696328	581058
033	MS	QC378372	571927	422702	100770	687344	549847
036	CCV		590115	414764	100431	693121	571696
038	CCB		604932	426293	102338	731328	584791
041	MSD	QC378373	597717	427804	101683	698853	561739
042	PDS	QC378375	578852	436982	100794	698801	557350
043	SAMPLE	193213-001	620645	441991	102313	744557	582497
045	SAMPLE	193213-001	632659	444073	102247	743156	577671
049	CCV		615117	437747	100357	710987	564852
051	CCB		640775	448699	103842	754842	587404
053	ICSA		450615	336904	87016	540989	405359
054	ICSAB		464563	355991	86515	571623	425571

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57098723 Instrument: MET05 Agilent ICP-MS Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09n0001	TUN				09-MAR-2007 13:23	1.0	1.0				1	
002	c09n0002	X	RINSE			09-MAR-2007 13:28	1.0					2	
003	c09n0003	X	RINSE			09-MAR-2007 13:32	1.0					2	
004	c09n0004	ICALBLK	CALBLANK			09-MAR-2007 13:36	1.0	1.0				2	
005	c09n0005	ICAL				09-MAR-2007 13:40	1.0	1.0				3	
006	c09n0006	ICAL				09-MAR-2007 13:44	1.0	1.0				4	
007	c09n0007	ICAL				09-MAR-2007 13:48	1.0	1.0				5	
008	c09n0008	ICAL				09-MAR-2007 13:52	1.0	1.0				6	
009	c09n0009	ICAL				09-MAR-2007 13:56	1.0	1.0				7	
010	c09n0010	ICAL				09-MAR-2007 14:00	1.0	1.0				8	
011	c09n0011	X	RINSE			09-MAR-2007 14:04	1.0					2	
012	c09n0012	X				09-MAR-2007 14:08	1.0					9 2	
013	c09n0013	X	RINSE			09-MAR-2007 14:12	1.0					2	
014	c09n0014	ICV				09-MAR-2007 14:19	1.0	1.0			1	9	
015	c09n0015	X	RINSE			09-MAR-2007 14:22	1.0					2	
016	c09n0016	X				09-MAR-2007 14:26	1.0					2	
017	c09n0017	ICB				09-MAR-2007 14:30	1.0	1.0	1		1	2	
018	c09n0018	X				09-MAR-2007 14:34	1.0					2	
019	c09n0019	ICSA				09-MAR-2007 14:38	1.0	1.0			1	10 2	7:CA=390000
020	c09n0020	ICSAB				09-MAR-2007 14:42	1.0	1.0			1	11 2	13:CA=347500
021	c09n0021	X	RINSE			09-MAR-2007 14:46	1.0					2	
022	c09n0022	X	RINSE			09-MAR-2007 14:50	1.0					2	
023	c09n0023	X	RINSE			09-MAR-2007 14:54	1.0					2	
024	c09n0024	X	RINSE			09-MAR-2007 14:58	1.0					2	
025	c09n0025	BLANK	QC378188	122866	Water	09-MAR-2007 15:02	1.0	1.0			1	2	
026	c09n0026	BLANK	QC378369	122910	Filtra	09-MAR-2007 15:06	1.0	1.0			1	2	
027	c09n0027	BLANK	QC378195	122867	Filtra	09-MAR-2007 15:10	1.0	1.0			1	2	
028	c09n0028	BS	QC378370	122910	Filtra	09-MAR-2007 15:14	1.0	1.0		2	1	2	
029	c09n0029	BSD	QC378371	122910	Filtra	09-MAR-2007 15:18	1.0	1.0		2	1	2	
030	c09n0030	X	RINSE			09-MAR-2007 15:22	1.0					2	
031	c09n0031	MSS	193213-001	122910	Filtra	09-MAR-2007 15:26	1.0	1.0	2		1	2	2:NA=32390.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: PEH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57098723 Instrument: MET05 Agilent ICP-MS Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00123

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09n0032	SER	QC378374	122910	Filtra	09-MAR-2007 15:30	5.0	1.0	4	1	1	2	1:MN=572.800
033	c09n0033	MS	QC378372	122910	Filtra	09-MAR-2007 15:34	1.0	1.0	1		1	2	3:NA=41620.0
034	c09n0034	X	RINSE			09-MAR-2007 15:38	1.0					2	
035	c09n0035	X	RINSE			09-MAR-2007 15:42	1.0					2	
036	c09n0036	CCV				09-MAR-2007 15:46	1.0	1.0			1	12 2	
037	c09n0037	X	RINSE			09-MAR-2007 15:50	1.0					2	
038	c09n0038	CCB				09-MAR-2007 15:54	1.0	1.0	2		1	2	
039	c09n0039	X				09-MAR-2007 15:58	1.0	1.0	3		1	2	
040	c09n0040	X				09-MAR-2007 16:02	1.0	1.0	2		1	2	
041	c09n0041	MSD	QC378373	122910	Filtra	09-MAR-2007 16:06	1.0	1.0	3		1	2	3:NA=42540.0
042	c09n0042	PDS	QC378375	122910	Filtra	09-MAR-2007 16:10	1.0	1.0	3		1	13 14 2	3:NA=40820.0
043	c09n0043	SAMPLE	193213-001	122867	Filtra	09-MAR-2007 16:14	20.0	1.0	2		1	2	
044	c09n0044	XSER	193213-001	122910	Water	09-MAR-2007 16:18	100.0					2	
045	c09n0045	SAMPLE	193213-001	122867	Water	09-MAR-2007 16:22	50.0	1.0	2		1	2	
046	c09n0046	X	RINSE			09-MAR-2007 16:26	1.0					2	
047	c09n0047	X	RINSE			09-MAR-2007 16:30	1.0					2	
048	c09n0048	X	RINSE			09-MAR-2007 16:34	1.0					2	
049	c09n0049	CCV				09-MAR-2007 16:38	1.0	1.0	2		1	12 2	
050	c09n0050	X	RINSE			09-MAR-2007 16:41	1.0					2	
051	c09n0051	CCB				09-MAR-2007 16:45	1.0	1.0	2		1	2	
052	c09n0052	X				09-MAR-2007 16:49	1.0					2	
053	c09n0053	ICSA				09-MAR-2007 16:53	1.0	1.0	1		1	10 2	6:CA=388300
054	c09n0054	ICSAB				09-MAR-2007 16:57	1.0	1.0			1	11 2	12:CA=342000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLB Date: 3/9/07

REPORTING SUMMARY FOR 193213 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193213-001	MET14	03/08/07 19:08	1.0															+								
193213-001	MET06	03/08/07 19:58	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193213-001	MET05	03/08/07 22:09	1.0																							
193213-001	MET05	03/09/07 16:22	50.0														+									
QC378195	MET06	03/08/07 18:10	1.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC378195	MET06	03/08/07 19:42	1.0																							
QC378195	MET05	03/08/07 20:53	1.0										+													
QC378195	MET05	03/09/07 15:10	1.0																							
QC378196	MET06	03/08/07 18:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378196	MET05	03/08/07 20:57	1.0																							
QC378197	MET06	03/08/07 18:22	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378197	MET05	03/08/07 21:01	1.0																							
QC378198	MET06	03/08/07 18:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378198	MET05	03/08/07 21:17	1.0																							
QC378199	MET06	03/08/07 18:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378199	MET05	03/08/07 21:21	1.0																							
QC378200	MET06	03/08/07 18:38	50.0							+						+							+			+
QC378200	MET05	03/08/07 21:13	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
QC378200	MET06	03/08/07 21:18	50.0																							
QC378201	MET06	03/08/07 18:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378201	MET05	03/08/07 21:25	50.0																							
QC378247	MET14	03/08/07 18:58	1.0															+								
QC378248	MET14	03/08/07 19:00	1.0															+								
QC378249	MET14	03/08/07 19:04	1.0															+								
QC378250	MET14	03/08/07 19:06	1.0															+								
QC378251	MET14	03/08/07 19:10	5.0															+								
QC378252	MET14	03/08/07 19:12	1.0															+								
QC378253	MET14	03/08/07 19:14	1.0															+								
QC378254	MET14	03/08/07 19:18	1.0															+								
QC378255	MET14	03/08/07 19:25	1.0															+								

Curtis & Tompkins Laboratories Sample Preparation Summary 08-MAR-2007 15:16

Batch Number : 122867
Date Extracted: 08-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-011			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193213-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193213-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC378195	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378196	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378197	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378198	MS	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378199	MSD	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378200	SER	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378201	PDS	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/8/07 Reviewed By: [signature] Date: 3/8/07

Relinquished By: [signature] 3/8/07 Received By: [signature] Date: 3/8/07

00125

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 1223867
Date Digested: 3/8/07
Digested by: KLA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 72
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK	50	50	N	
BS				
BSD				
MS-02B				FILTERED
MSD-02				
193027-02				
-01A				
-03				
-04				
-05D				
-06A				
-07D				
-08				
-11B				
-12				
-13D				
-14				
-15				
213-01A				FILTERED IN LAB
027-11				
-12				
-13F				
213-01B				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/8
1.5 mL of spike solution was added to all spikes	53054	
	53095	
concentrated HCl	C33036 BAKER	
concentrated HNO3	049025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date: 3/8/07

Reviewer Signature / Date: AA 3/8/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847097599001
Units : ug/L

Date : 08-MAR-2007 18:39
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	122880	847097599002	STD02REP1	08-MAR-2007 18:41	S5681 (500X)
L2	122880	847097599003	STD03REP1	08-MAR-2007 18:44	S5681 (200X)
L3	122880	847097599004	STD04REP1	08-MAR-2007 18:47	S5681 (50X)
L4	122880	847097599005	STD05REP1	08-MAR-2007 18:49	S5681 (20X)
L5	122880	847097599006	STD06REP1	08-MAR-2007 18:51	S5681 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3265.0	3034.0	2605.0	2361.2	2292.2	LINR	-0.1773	4.42E-4		2711.5	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847097599001

00127

WinHg Database 1.5

File Utility Help

RN⇩ RN⇧ ?

Protocol hgppb | BUSY | Dataset/Proto 030807b /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.41986e-4

C -1.77348e-1

Rho .999818

Type Linear

☑ Calibrated

☑ Accepted

Accept

µ Abs. 22922

Accepted

New

Include S1 Rep 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5 ☐

08-Mar-07 18:51 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.024	.024	347	1	346		
02	.20000	.111	-.089	654	0%	653		
03	.50000	.493	-.007	1518	0%	1517		
04	2.0000	2.13	.125	5210	0%	5210		
05	5.0000	5.04	.041	11806	0%	11806		
06	10.000	9.95	-.046	22923	0%	22922		

Ready NUM

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 18:39:28 08 Mar 07 HG

Hg	.000	ppb	346
		Bkgd 1	15689396

*** Standard: 2 Rep: 1 Seq: 2 18:41:46 08 Mar 07 HG

Hg	.200	ppb	653
		Bkgd 1	15679436

*** Standard: 3 Rep: 1 Seq: 3 18:44:24 08 Mar 07 HG

Hg	.500	ppb	1517
		Bkgd 1	15680540

*** Standard: 4 Rep: 1 Seq: 4 18:47:00 08 Mar 07 HG

Hg	2.00	ppb	5210
		Bkgd 1	15667265

*** Standard: 5 Rep: 1 Seq: 5 18:49:24 08 Mar 07 HG

Hg	5.00	ppb	11806
		Bkgd 1	15660307

*** Standard: 6 Rep: 1 Seq: 6 18:51:28 08 Mar 07 HG

Hg	10.0	ppb	22922
		Bkgd 1	15660172

*** Check Standard: 2 Ck2S5683 Seq: 7 18:54:24 08 Mar 07 HG

Line	Flag		Intensities
Hg			12285
		Bkgd 1	15664999

*** Check Standard: 1 Ck1ICB Seq: 8 18:56:28 08 Mar 07 HG

Line	Flag		Intensities
Hg			76
		Bkgd 1	15671517

*** Sample ID: qc378247 Seq: 9 18:58:32 08 Mar 07 HG

122880,1

Hg	-.117	ppb	136
		Bkgd 1	15682782

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847097599 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 08-MAR-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	122880	ICALBLK	STD01REP1				08-MAR-2007 18:39	1.0	1.0									
002	122880	ICAL	STD02REP1				08-MAR-2007 18:41	1.0	1.0									
003	122880	ICAL	STD03REP1				08-MAR-2007 18:44	1.0	1.0									
004	122880	ICAL	STD04REP1				08-MAR-2007 18:47	1.0	1.0									
005	122880	ICAL	STD05REP1				08-MAR-2007 18:49	1.0	1.0									
006	122880	ICAL	STD06REP1				08-MAR-2007 18:51	1.0	1.0									
007	122880	ICV					08-MAR-2007 18:54	1.0	1.0	2	5.000	847097599001	5.250		ug/L	105		
008	122880	ICB					08-MAR-2007 18:56	1.0	1.0			847097599001	ND	0.20	ug/L			
009	122880	BLANK	QC378247		122880	Water	08-MAR-2007 18:58	1.0	1.0			847097599001	ND	0.20	ug/L			u
010	122880	BLANK	QC378248		122880	TCLP L	08-MAR-2007 19:00	1.0	5.0			847097599001	ND	1.0	ug/L			u
011	122880	BS	QC378249		122880	Water	08-MAR-2007 19:04	1.0	1.0		5.000	847097599001	5.060	0.20	ug/L	101		u
012	122880	BSD	QC378250		122880	Water	08-MAR-2007 19:06	1.0	1.0		5.000	847097599001	5.070	0.20	ug/L	101	0	u
013	122880	MSS	193213-001		122880	Water	08-MAR-2007 19:08	1.0	1.0			847097599001	0.23	0.20	ug/L			u
014	122880	SER	QC378251	193213-001	122880	Water	08-MAR-2007 19:10	5.0	1.0			847097599001	ND	1.0	ug/L		--	u
015	122880	MS	QC378252	193213-001	122880	Water	08-MAR-2007 19:12	1.0	1.0		5.000	847097599001	5.720	0.20	ug/L	110		u
016	122880	MSD	QC378253	193213-001	122880	Water	08-MAR-2007 19:14	1.0	1.0		5.000	847097599001	5.550	0.20	ug/L	106	3	u
017	122880	MSS	193103-001		122880	TCLP L	08-MAR-2007 19:16	1.0	5.0			847097599001	ND	2.0	ug/L			u
018	122880	MS	QC378254	193103-001	122880	TCLP L	08-MAR-2007 19:18	1.0	5.0		25.00	847097599001	27.65	1.0	ug/L	111		u
019	122880	CCV					08-MAR-2007 19:20	1.0	1.0	3	2.500	847097599001	2.750		ug/L	110		
020	122880	CCB					08-MAR-2007 19:22	1.0	1.0			847097599001	ND	0.20	ug/L			
021	122880	MSD	QC378255	193103-001	122880	TCLP L	08-MAR-2007 19:25	1.0	5.0		25.00	847097599001	27.75	1.0	ug/L	111	0	u
022	122880	SAMPLE	193184-010		122880	Water	08-MAR-2007 19:27	1.0	1.0			847097599001	ND	0.20	ug/L			u
023	122880	SAMPLE	193184-023		122880	Water	08-MAR-2007 19:30	1.0	1.0			847097599001	ND	0.20	ug/L			u
024	122880	SAMPLE	193213-001		122880	Filtra	08-MAR-2007 19:33	1.0	1.0			847097599001	ND	0.20	ug/L			u
025	122880	SAMPLE	193218-004		122880	Water	08-MAR-2007 19:35	1.0	1.0			847097599001	ND	0.20	ug/L			u
026	122880	SAMPLE	193218-006		122880	Water	08-MAR-2007 19:37	1.0	1.0			847097599001	ND	0.20	ug/L			u
027	122880	SAMPLE	193218-014		122880	Water	08-MAR-2007 19:39	1.0	1.0			847097599001	0.24	0.20	ug/L			u
028	122880	SAMPLE	193218-015		122880	Water	08-MAR-2007 19:42	1.0	1.0			847097599001	ND	0.20	ug/L			u
029	122880	SAMPLE	193218-024		122880	Water	08-MAR-2007 19:44	1.0	1.0			847097599001	5.420		ug/L	108		
030	122880	CCV					08-MAR-2007 19:46	1.0	1.0	4	5.000	847097599001	ND	0.20	ug/L			
031	122880	CCB					08-MAR-2007 19:49	1.0	1.0									

Stds used: 1=S5681 2=S5683 3=S5684 4=S5685
Flags used: u=use

Analyst: [signature] Date: 3/8/07

Curtis & Tompkins Laboratories Sample Preparation Summary 08-MAR-2007 18:29

Batch Number : 122880
Date Extracted: 08-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5681
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193103-001			ConocoPhillips Company	TCLP Leach	10	mL	50	5.000000	1					HG		
193184-010			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193184-023			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193213-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193213-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
193218-004			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-006			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-014			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-015			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-024			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
QC378247	BLANK			Water	50	mL	50	1.000000	1					HG		
QC378248	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
QC378249	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC378250	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC378251	SER	of 193213-001		Water	50	mL	50	1.000000	1					HG		
QC378252	MS	of 193213-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378253	MSD	of 193213-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378254	MS	of 193103-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
QC378255	MSD	of 193103-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
QC378256	PDS	of 193213-001		Water	50	mL	50	1.000000	1					HG		

Prep Chemist: ZAbbott 3/8/07 Reviewed By: RCA Date: 3/8/07

Relinquished By: ZAbbott 3/8/07 Received By: ZAbbott Date: 3/8/07

00131

Curtis & Tompkins, Ltd.

Water Digestion for Mercury

LIMS Batch #: 122880
Date Digested: 3/8/07
Digested by: [illegible]

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

BK 2452
Page 33

Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments (3/8/07)
193103-001 MSS		10	50	N	~~already 19293~~ TCLP leachate
193104-010	H	50			water
↓ -023	↓	↓			↓
193213-001	B				
193213-001					Filtrate
193218-004	H				water
↓ -006	↓				↓
-014					
-015					
-024					
Blank		↓			water
Blank		10			TCLP leachate
BS		50			water
BSD		↓			↓
MS 193213-001	B				
MSD ↓	↓				
MS 193103-001		10			TCLP leachate
MSD ↓		↓			↓

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	SS681	3/8/07
ICAL Source WS#	SS681	
ICV / CCV WS#	SS683 / 84 / 85 / 86	
Digestion of Samples & Standards: Time ON / Temperature ON	11:25 / 95°C	
Time OFF/ Temperature OFF	1:25 / 95°C	
concentrated H_2SO_4	BU1041	
concentrated HNO_3	CU9025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	K2030807	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	SnCl2 030807	
☐ filtered thru' 0.45 um syringe filter	Millipore RAW 43032	

Prep Chemist / Date: 3/8/07

Continued from page X

Continued on page X

Reviewed by / Date: 5/8/07

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193213

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
NKSW100	193213-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/13/07
Operations Manager

Signature: _____ Date: 3/13/07
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193213**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/07/07**
Samples Received:	**03/07/07**

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 03/07/07. The sample was received cold and intact.

Metals (EPA 6020 and EPA 7470A) Water:

Copper was detected above the RL in the method blank for batch 122867. The total copper result in the water was greater than ten times the detection in the blank. The filtrate sample was reprepared in batch 122910 for copper only. The associated blank was ND at 1.0 ug/L. All copper results were reported from batch 122910. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:

No analytical problems were encountered.

#
22.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193213

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2200
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): P. Cornish BTS
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

OK per J Graber 3/14/07 [illegible]

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	COMMENTS / NOTES
NKSW100	3/7/07	1050			X				1		1							X	X			24 TAT ~~48 hr TAT~~ - Diss. Metals to be filtered @ Lab.

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) **(13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) **(9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) **(8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) **(3** - Al, Fe, and Cr) **(Other** -)

RELINQUISHED BY: [signature]	DATE: 3/7/07	RECEIVED BY: [signature]	DATE: 3/7/6
PRINT NAME: P. Cornish FIRM: BTS	TIME:	PRINT NAME: AARON GRENIER FIRM: CFT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 · Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193213 Date Received: 3-07-2007 Number of Coolers: 1
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-07-07 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over lid of cooler Seal date: 3-7-07 Seal name: OC 2200
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 4.1°C

B. Login Phase
Date Logged In: 3-07-07 By (print) Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

METALS

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKSW100	Batch#:	122867
Lab ID:	193213-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	9,200	100	10.00	03/08/07
Antimony	ND	1.0	10.00	03/08/07
Arsenic	ND	5.0	10.00	03/08/07
Barium	160	10	10.00	03/08/07
Beryllium	ND	2.0	10.00	03/08/07
Cadmium	ND	1.0	10.00	03/08/07
Calcium	12,000	500	10.00	03/08/07
Chromium	32	10	10.00	03/08/07
Cobalt	57	10	10.00	03/08/07
Copper	46	1.0	10.00	03/08/07
Iron	11,000	100	10.00	03/08/07
Lead	100	3.0	10.00	03/08/07
Magnesium	10,000	500	10.00	03/08/07
Manganese	4,200	10	50.00	03/09/07
Nickel	76	20	10.00	03/08/07
Potassium	2,000	500	10.00	03/08/07
Selenium	ND	5.0	10.00	03/08/07
Silver	ND	1.0	10.00	03/08/07
Sodium	35,000	500	10.00	03/08/07
Thallium	ND	1.0	10.00	03/08/07
Vanadium	32	10	10.00	03/08/07
Zinc	130	20	10.00	03/08/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 6020
Project#:	2893.04.51		
Field ID:	NKSW100	Units:	ug/L
Lab ID:	193213-001	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/07/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep
Aluminum	340	100	10.00	122867	03/08/07	03/08/07	200.8
Antimony	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Arsenic	ND	5.0	10.00	122867	03/08/07	03/08/07	200.8
Barium	67	10	10.00	122867	03/08/07	03/08/07	200.8
Beryllium	ND	2.0	10.00	122867	03/08/07	03/08/07	200.8
Cadmium	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Calcium	10,000	500	10.00	122867	03/08/07	03/08/07	200.8
Chromium	ND	10	10.00	122867	03/08/07	03/08/07	200.8
Cobalt	13	10	10.00	122867	03/08/07	03/08/07	200.8
Copper	8.5	1.0	1.000	122910	03/09/07	03/09/07	METHOD
Iron	520	100	10.00	122867	03/08/07	03/08/07	200.8
Lead	3.6	3.0	10.00	122867	03/08/07	03/08/07	200.8
Magnesium	8,300	500	10.00	122867	03/08/07	03/08/07	200.8
Manganese	2,400	10	20.00	122867	03/08/07	03/09/07	200.8
Nickel	31	20	10.00	122867	03/08/07	03/08/07	200.8
Potassium	1,100	500	10.00	122867	03/08/07	03/08/07	200.8
Selenium	ND	5.0	10.00	122867	03/08/07	03/08/07	200.8
Silver	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Sodium	33,000	500	10.00	122867	03/08/07	03/08/07	200.8
Thallium	ND	1.0	10.00	122867	03/08/07	03/08/07	200.8
Vanadium	ND	10	10.00	122867	03/08/07	03/08/07	200.8
Zinc	180	20	10.00	122867	03/08/07	03/08/07	200.8

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378195	Batch#:	122867
Matrix:	Filtrate	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	1.4 b	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Diln Fac:	1.000
Type:	BLANK	Batch#:	122910
Lab ID:	QC378369	Prepared:	03/09/07
Matrix:	Filtrate	Analyzed:	03/09/07
Units:	ug/L		

Result	RL
ND	1.0

ND= Not Detected
RL= Reporting Limit

18.0

:00010

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122880
Field ID:	NKSW100	Sampled:	03/07/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type	Lab ID	Result	RL
SAMPLE	193213-001	0.23	0.20
BLANK	QC378247	ND	0.20

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	03/07/07
Field ID:	NKSW100	Received:	03/07/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07
Batch#:	122880		

Type	Lab ID	Matrix	Result	RL
SAMPLE	193213-001	Filtrate	ND	0.20
BLANK	QC378247	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122867
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	1.000	Analyzed:	03/08/07

Type: BS Lab ID: QC378196

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,190	102	80-120
Antimony	100.0	96.83	97	80-120
Arsenic	100.0	102.5	103	80-120
Barium	100.0	101.0	101	80-120
Beryllium	100.0	113.3	113	80-120
Cadmium	100.0	103.1	103	80-120
Calcium	10,000	10,510	105	80-120
Chromium	100.0	104.7	105	80-120
Cobalt	100.0	106.1	106	80-120
Copper	100.0	110.3	110	80-120
Iron	10,000	10,380	104	80-120
Lead	100.0	106.3	106	80-120
Magnesium	10,000	10,290	103	80-120
Manganese	100.0	105.7	106	80-120
Nickel	100.0	106.1	106	80-120
Potassium	10,000	10,440	104	80-120
Selenium	100.0	104.3	104	80-120
Silver	100.0	106.2	106	80-120
Sodium	10,000	10,310	103	80-120
Thallium	50.00	49.26	99	80-120
Vanadium	100.0	103.4	103	80-120
Zinc	100.0	105.4	105	80-120

Type: BSD Lab ID: QC378197

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,150	102	80-120	0	20
Antimony	100.0	97.23	97	80-120	0	20
Arsenic	100.0	101.5	102	80-120	1	20
Barium	100.0	100.4	100	80-120	1	20
Beryllium	100.0	112.0	112	80-120	1	20
Cadmium	100.0	102.8	103	80-120	0	20
Calcium	10,000	10,410	104	80-120	1	20
Chromium	100.0	102.9	103	80-120	2	20
Cobalt	100.0	103.5	104	80-120	2	20
Copper	100.0	107.7	108	80-120	2	20
Iron	10,000	10,340	103	80-120	0	20
Lead	100.0	104.6	105	80-120	2	20
Magnesium	10,000	10,230	102	80-120	1	20
Manganese	100.0	103.1	103	80-120	2	20
Nickel	100.0	103.6	104	80-120	2	20
Potassium	10,000	10,370	104	80-120	1	20
Selenium	100.0	104.1	104	80-120	0	20
Silver	100.0	109.3	109	80-120	3	20
Sodium	10,000	10,060	101	80-120	2	20
Thallium	50.00	48.56	97	80-120	1	20
Vanadium	100.0	101.0	101	80-120	2	20
Zinc	100.0	104.0	104	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122910
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378370	100.0	106.8	107	80-120		
BSD	QC378371	100.0	97.80	98	80-120	9	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	122880
Field ID:	NKSW100	Sampled:	03/07/07
MSS Lab ID:	193213-001	Received:	03/07/07
Matrix:	Water	Prepared:	03/08/07
Units:	ug/L	Analyzed:	03/08/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378249		5.000	5.060	101	80-120		
BSD	QC378250		5.000	5.070	101	80-120	0	20
MS	QC378252	0.2260	5.000	5.720	110	75-125		
MSD	QC378253		5.000	5.550	106	75-125	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	10.00	Analyzed:	03/08/07

Type: MS Lab ID: QC378198

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	11.29	10,000	10,460	104	75-125
Antimony	0.2766	100.0	101.7	101	75-125
Arsenic	1.056	100.0	102.4	101	75-125
Barium	64.90	100.0	171.4	107	75-125
Beryllium	<0.1733	100.0	107.8	108	75-125
Cadmium	0.08808	100.0	106.1	106	75-125
Calcium	50,710	10,000	63,770	131 NM	75-125
Chromium	1.625	100.0	104.4	103	75-125
Cobalt	0.6119	100.0	103.7	103	75-125
Copper	1.000	100.0	106.5	106	75-125
Iron	19.82	10,000	10,620	106	75-125
Lead	0.2554	100.0	104.3	104	75-125
Magnesium	80,910	10,000	95,930	150 NM	75-125
Manganese	20.32	100.0	124.9	105	75-125
Nickel	8.444	100.0	114.3	106	75-125
Potassium	579.9	10,000	11,190	106	75-125
Selenium	<0.2730	100.0	104.9	105	75-125
Silver	<0.07903	100.0	106.5	107	75-125
Sodium	40,840	10,000	52,100	113 NM	75-125
Thallium	0.5334	50.00	48.16	95	75-125
Vanadium	8.269	100.0	110.2	102	75-125
Zinc	20.18	100.0	129.1	109	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Matrix:	Filtrate	Received:	02/28/07
Units:	ug/L	Prepared:	03/08/07
Diln Fac:	10.00	Analyzed:	03/08/07

Type: MSD Lab ID: QC378199

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,000	100	75-125	4	20
Antimony	100.0	96.63	96	75-125	5	20
Arsenic	100.0	100.1	99	75-125	2	20
Barium	100.0	163.7	99	75-125	5	20
Beryllium	100.0	103.6	104	75-125	4	20
Cadmium	100.0	101.7	102	75-125	4	20
Calcium	10,000	60,270	96 NM	75-125	6	20
Chromium	100.0	100.5	99	75-125	4	20
Cobalt	100.0	100.9	100	75-125	3	20
Copper	100.0	101.5	101	75-125	5	20
Iron	10,000	10,270	103	75-125	3	20
Lead	100.0	100.4	100	75-125	4	20
Magnesium	10,000	90,460	96 NM	75-125	6	20
Manganese	100.0	120.8	100	75-125	3	20
Nickel	100.0	109.1	101	75-125	5	20
Potassium	10,000	10,620	100	75-125	5	20
Selenium	100.0	102.6	103	75-125	2	20
Silver	100.0	103.5	104	75-125	3	20
Sodium	10,000	49,960	91 NM	75-125	4	20
Thallium	50.00	47.15	93	75-125	2	20
Vanadium	100.0	106.7	98	75-125	3	20
Zinc	100.0	120.0	100	75-125	7	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Batch#:	122910
Field ID:	NKSW100	Sampled:	03/07/07
MSS Lab ID:	193213-001	Received:	03/07/07
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378372	8.545	100.0	109.7	101	75-125		
MSD	QC378373		100.0	110.0	101	75-125	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ7A	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	122867
MSS Lab ID:	193027-002	Sampled:	02/27/07
Lab ID:	QC378200	Received:	02/28/07
Matrix:	Filtrate	Analyzed:	03/08/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Aluminum	ND	100.0	61.32 J	500.0	NC	10
Antimony	ND	1.000	0.8131 J	5.000	NC	10
Arsenic	ND	5.000	ND	5.000	NC	10
Barium	64.90	10.00	67.28	10.00	4	10
Beryllium	ND	2.000	ND	5.000	NC	10
Cadmium	ND	1.000	0.5533 J	5.000	NC	10
Calcium	50,710	500.0	51,770	500.0	2	10
Chromium	ND	10.00	ND	10.00	NC	10
Cobalt	ND	10.00	0.4214 J	10.00	NC	10
Copper	3.823	1.000	2.150 J	5.000	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Lead	ND	3.000	0.6680 J	5.000	NC	10
Magnesium	80,910	500.0	85,070	500.0	5	10
Manganese	20.32	10.00	21.12	10.00	4	10
Nickel	ND	20.00	8.486 J	20.00	NC	10
Potassium	579.9	500.0	510.8	500.0	NC	10
Selenium	ND	5.000	ND	5.000	NC	10
Silver	ND	1.000	ND	5.000	NC	10
Sodium	40,840	500.0	44,180	500.0	8	10
Thallium	ND	1.000	1.614 J	2.500	NC	10
Vanadium	ND	10.00	8.609 J	10.00	NC	10
Zinc	20.18	20.00	17.21 J	20.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Copper	Units:	ug/L
Field ID:	NKSW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122910
MSS Lab ID:	193213-001	Sampled:	03/07/07
Lab ID:	QC378374	Received:	03/07/07
Matrix:	Filtrate	Analyzed:	03/09/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
8.545	1.000	8.479	1.216	NC	10

NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	193213	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	NKSW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122880
MSS Lab ID:	193213-001	Sampled:	03/07/07
Lab ID:	QC378251	Received:	03/07/07
Matrix:	Water	Analyzed:	03/08/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.2260	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

12.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET06
Seqnum: 67097451031
File : c08q0031
IDF : 10.0
Lab ID: QC378201
Matrix: Filtrate
Batch : 122867
Time : 08-MAR-2007 18:54
Cal : 67097451001
MSS : 193027-002
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67097451027	1.129	A	10000	9973	A	100	75-125	u
Antimony	67097451027	0.02766	A	100.0	93.60	A	94	75-125	u
Arsenic	67097451027	0.1056	E	100.0	99.70	E	100	75-125	u
Barium	67097451027	6.490	A	100.0	106.3	A	100	75-125	u
Beryllium	67097451027	ND	A	100.0	104.6	A	105	75-125	u
Cadmium	67097451027	0.008808	A	100.0	101.7	A	102	75-125	u
Calcium	67097451027	5071	A	10000	14980	A	99	75-125	u
Chromium	67097451027	0.1625	E	100.0	99.52	E	99	75-125	u
Cobalt	67097451027	0.06119	E	100.0	99.55	E	99	75-125	u
Copper	67097451027	0.3823	E	100.0	100.1	E	100	75-125	u
Iron	67097451027	1.982	H	10000	10180	H	102	75-125	u
Lead	67097451027	0.02554	A	100.0	101.5	A	101	75-125	u
Magnesium	67097451027	8091	A	10000	18060	A	100	75-125	u
Manganese	67097451027	2.032	E	100.0	102.4	E	100	75-125	u
Molybdenum	67097451027	0.04173	A	100.0	93.30	A	93	75-125	u
Nickel	67097451027	0.8444	E	100.0	100.3	E	99	75-125	u
Potassium	67097451027	57.99	A	10000	10070	A	100	75-125	u
Selenium	67097451027	ND	H	100.0	102.0	H	102	75-125	u
Silver	67097451027	ND	A	100.0	95.98	A	96	75-125	u
Sodium	67097451059	4084	E	10000	13760	E	97	75-125	u
Thallium	67097451027	0.05334	A	50.00	48.40	A	97	75-125	u
Vanadium	67097451027	0.8269	E	100.0	99.49	E	99	75-125	u
Zinc	67097451027	2.018	E	100.0	102.1	E	100	75-125	u

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1013061	935297	-7.68
Scandium	A	1199967	1165840	-2.84
Scandium	E	36567	34621	-5.32
Scandium	H	372754	348450	-6.52
Germanium	H	86607	80029	-7.60
Germanium	E	18002	16819	-6.57
Indium	A	1570978	1441782	-8.22
Bismuth	A	1225637	1122477	-8.42
Yttrium	A	1590566	1510841	-5.01
Terbium	A	2128023	2032155	-4.51

1=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET05
Seqnum: 57098723031
File : c09n0031
IDF : 1.0
Lab ID: 193213-001
Matrix: Filtrate
Batch : 122910
Time : 09-MAR-2007 15:26
Cal : 57098723001
Units : ug/L

Type : PDS
Inst : MET05
Seqnum: 57098723042
File : c09n0042
IDF : 1.0
Lab ID: QC378375
Matrix: Filtrate
Batch : 122910
Time : 09-MAR-2007 16:10
Cal : 57098723001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	317.5	10000	9730	94	75-125	u
Antimony	5.901	100.0	87.62	82	75-125	>c+ **b***
Arsenic	1.034	100.0	99.58	99	75-125	u
Barium	46.77	100.0	144.3	98	75-125	u
Beryllium	ND	100.0	95.86	96	75-125	u
Cadmium	ND	100.0	94.48	94	75-125	u
Calcium	10080	10000	19100	90	75-125	u
Chromium	3.909	100.0	99.76	96	75-125	u
Cobalt	14.73	100.0	109.7	95	75-125	u
Copper	8.545	100.0	103.7	95	75-125	u
Iron	472.8	10000	10030	96	75-125	u
Lead	3.037	100.0	98.36	95	75-125	u
Magnesium	8598	10000	17810	92	75-125	u
Molybdenum	0.6936	100.0	94.38	94	75-125	u
Nickel	24.57	100.0	119.8	95	75-125	u
Potassium	1191	10000	10450	93	75-125	u
Selenium	ND	100.0	103.0	103	75-125	u
Silver	ND	100.0	95.08	95	75-125	>c+ **b***
Thallium	ND	50.00	47.64	95	75-125	u
Vanadium	2.000	100.0	96.90	95	75-125	u
Zinc	121.2	100.0	219.6 >LR	98	75-125	>LR **b***

ISTD (ICALBLK c09n0004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	635034	578852	-8.85
Scandium	457323	436982	-4.45
Germanium	99176	100794	1.63
Indium	739965	698801	-5.56
Bismuth	555318	557350	0.37

MISSING READINGS: **MN NA**

+=high bias >=closing >LR=overrange b=noncompliant c=CCV u=use

57098723042

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67097451001
Units : ug/L

Date : 08-MAR-2007 16:29
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08q0005	67097451005		08-MAR-2007 16:35	S5645
L2	c08q0006	67097451006		08-MAR-2007 16:40	S5648
L3	c08q0007	67097451007		08-MAR-2007 16:45	S5649
L4	c08q0008	67097451008		08-MAR-2007 16:50	S5650
L5	c08q0009	67097451009		08-MAR-2007 16:55	S5644
L6	c08q0010	67097451010		08-MAR-2007 17:01	S5646

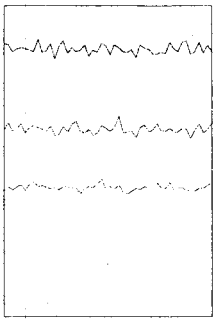
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	1.1527	0.7050	0.9499	0.6094	0.6018	0.6007	BLNK	-0.7301	1.66411		0.7699	1.000	0.995	
Antimony	A	0.3249	0.2880	0.2876	0.2704	0.2723	0.2906	BLNK	-0.0125	3.48587		0.2890	0.999	0.995	
Barium	A	0.2079	0.1280	0.0918	0.0820	0.0823	0.0812	BLNK	-0.0266	12.2764		0.1122	1.000	0.995	
Beryllium	A	0.2343	0.2539	0.2476	0.2426	0.2426	0.2335	BLNK	-0.0063	4.24879		0.2424	1.000	0.995	
Cadmium	A	0.0867	0.0821	0.0838	0.0772	0.0761	0.0767	BLNK	-0.0005	13.0582		0.0804	1.000	0.995	
Calcium	A	0.1100	0.0356	0.0274	0.0208	0.0206	0.0204	BLNK	-16.273	48.9445		0.0391	1.000	0.995	
Lead	A	1.0848	0.7323	0.6884	0.6079	0.6075	0.6064	BLNK	-0.0245	1.64871		0.7212	1.000	0.995	
Magnesium	A	1.0005	0.6156	0.5631	0.5020	0.4913	0.4846	BLNK	-1.9669	2.05813		0.6095	1.000	0.995	
Molybdenum	A	0.4571	0.2378	0.2200	0.1990	0.1994	0.2184	BLNK	-0.0171	4.66084		0.2553	0.998	0.995	
Potassium	A	9.5673	2.4651	1.5950	0.7817	0.7033	0.6925	BLNK	-123.66	1.45018		2.6341	1.000	0.995	
Silver	A	0.3647	0.3474	0.3426	0.3244	0.3286	0.3373	BLNK	-0.0063	2.98043		0.3408	1.000	0.995	
Thallium	A	0.9773	0.8394	0.8298	0.7916	0.8126	0.8820	BLNK	-0.0134	1.15229		0.8555	0.998	0.995	
Arsenic	E	0.7901	0.6392	0.5866	0.5671	0.5797	0.5830	BLNK	-0.0296	1.71771		0.6243	1.000	0.995	
Chromium	E	6.1033	3.6346	3.2994	2.8891	2.8850	2.8658	BLNK	-0.1175	0.34872		3.6129	1.000	0.995	
Cobalt	E	5.0362	4.8433	4.7685	4.6370	4.6140	4.5453	BLNK	-0.0046	0.21934		4.7407	1.000	0.995	
Copper	E	51.659	15.535	11.092	7.2223	6.6865	6.6007	BLNK	-0.6877	0.15172		16.466	1.000	0.995	
Manganese	E	2.4657	1.6963	1.6144	1.5041	1.5103	1.4934	BLNK	-0.0257	0.66819		1.7140	1.000	0.995	
Nickel	E	3.0370	1.5765	1.4445	1.2642	1.2323	1.2048	BLNK	-0.1247	0.82681		1.6265	1.000	0.995	
Sodium	E	4.2292	1.2969	0.9669	0.6466	0.5785	0.5721	BLNK	-55.516	1.74946		1.3817	1.000	0.995	
Vanadium	E	6.9544	3.2927	2.8125	2.3286	2.3502	2.3504	BLNK	-0.2126	0.42603		3.3481	1.000	0.995	
Zinc	E	20.850	5.1013	3.0654	1.1895	0.9794	0.9307	BLNK	-2.1334	1.07675		5.3526	1.000	0.995	
Iron	H	1.1490	0.9716	0.9715	0.8678	0.8462	0.8366	BLNK	-1.8814	1.19268		0.9404	1.000	0.995	
Selenium	H	0.1657	0.1442	0.1522	0.1407	0.1394	0.1356	BLNK	-0.0094	7.33173		0.1463	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

nstrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

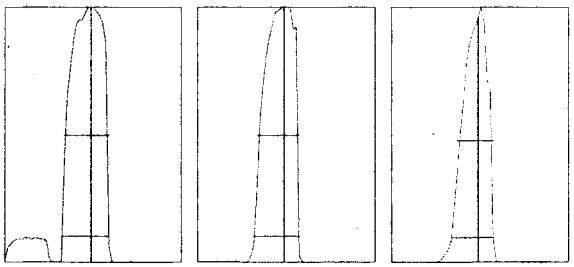
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17029.0	17193.3	1.74	2.00
89	50,000	31252.0	30184.1	2.28	1.00
205	50,000	21889.0	20832.3	2.35	4.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.071%
Doubly Charged: 70/140 1.094%



m/z:	7	89	205
Height:	17,252	30,198	20,744
Axis:	7.00	89.00	205.00
W-50%:	0.75	0.70	0.60
W-10%:	0.800	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.8 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-150 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	123
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-1 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1760 V
Pulse HV	:	1380 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

			m/z	Count(Mean)	RSD%
He Gas:	4	mL/min	51	25.1	25.03
Optional Gas:	---	%	59	3401.6	3.22
QP Focus:	-10	V	89	2230.5	3.23
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-13	V			

Integration Time: 0.1000sec

Tune File : h2.u

			m/z	Count(Mean)	RSD%
H2 Gas:	4	mL/min	59	2487.6	3.60
Optional Gas:	---	%	78	0.2	215.60
QP Focus:	-8	V	89	19452.5	2.27
Cell Exit:	-38	V			
OctP Bias:	-18	V			
QP Bias:	-15	V			

Integration Time: 0.1000sec

Generated : Mar 08, 2007 11:27:05
Printed : Mar 08, 2007 11:28:44

P/A Factor Tuning Report

Acquired:Mar 8 2007 11:38 am

Mass[amu]	Element	P/A Factor
6	Li	0.066905
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091118
45	Sc	0.090710
51	V	0.092022
52	Cr	0.094958
55	Mn	0.096330
56	Fe	Sensitivity too high
59	Co	0.097720
60	Ni	Sensitivity too low
63	Cu	0.103508
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.101248
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.108093
111	Cd	Sensitivity too low
115	In	0.106904
118	(In)	0.106124
121	Sb	0.106081
137	Ba	Sensitivity too low
159	Tb	0.108382
205	Tl	0.111849
206	(Pb)	0.111566
207	(Pb)	Sensitivity too low
208	Pb	0.111648
209	Bi	0.112033

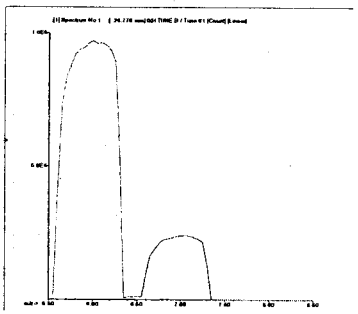
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1760 V
Pulse HV: 1380 V

6020 QC Tune Report

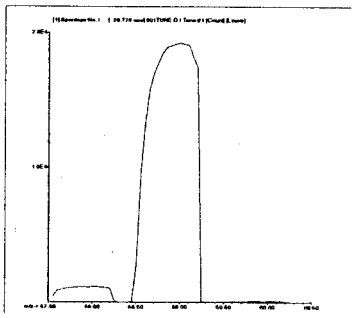
Data File: C:\ICPCHEM\1\DATA\07C08q00.B\001TUNE.D
Date Acquired: Mar 8 2007 04:11 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

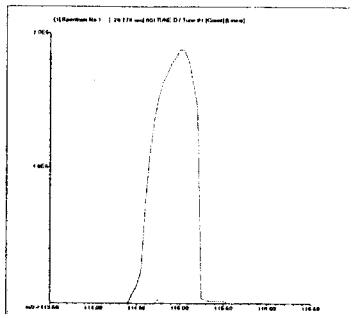
Element	Actual	Required	Flag
7 Li	1.73	5.00	
59 Co	0.41	5.00	
115 In	0.85	5.00	
205 Tl	0.41	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



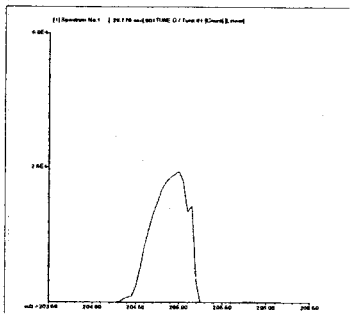
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 204.95
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004C
Date Acquired: Mar 8 2007 04:27 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1013060.00	A	13830.00	1.37
7	(Li)		P		
9	Be	30.00	P	5.77	19.25
23	Na	23208.36	P	306.90	1.32
24	Mg	22933.43	P	312.30	1.36
27	Al	10527.56	P	192.00	1.82
39	K	2046302.00	A	3268.00	0.16
44	Ca	7981.43	P	405.80	5.08
45	Sc	372753.69	P	1740.00	0.47
45	Sc	36566.75	P	167.50	0.46
45	Sc	1199967.00	A	13020.00	1.09
51	V	364.82	P	33.49	9.18
52	Cr	246.30	P	15.73	6.39
55	Mn	28.15	P	1.70	6.03
56	Fe	11760.94	P	416.60	3.54
59	Co	15.19	P	1.70	11.18
60	Ni	110.37	P	13.71	12.42
63	Cu	1631.60	P	87.16	5.34
65	Cu	793.37	P	40.07	5.05
66	Zn	713.36	P	8.68	1.22
72	Ge	86606.83	P	587.70	0.68
72	Ge	18001.75	P	116.90	0.65
75	As	6.22	P	3.67	59.01
78	Se	2.22	P	1.93	86.62
89	Y	1590566.00	A	13280.00	0.83
98	Mo	116.67	P	10.00	8.57
107	Ag	66.67	P	23.09	34.63
111	Cd	1.11	P	1.93	173.24
115	In	1570978.00	A	5300.00	0.34
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	112.23	P	3.85	3.43
137	Ba	92.23	P	8.39	9.10
159	Tb	2128023.00	A	11630.00	0.55
205	Tl	284.46	P	28.35	9.97
208	Pb	633.36	P	47.26	7.46
209	Bi	1225637.00	A	3066.00	0.25

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 8 2007 04:32 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1012702.00	A	3311.00	0.33
7	(Li)		P		
9	Be	474.47	P	10.18	2.15
23	Na	30956.98	P	2568.00	8.30
24	Mg	239996.80	P	3783.00	1.58
27	Al	276505.19	P	4065.00	1.47
39	K	2294810.00	A	3505.00	0.15
44	Ca	26383.05	P	740.20	2.81
45	Sc	369511.19	P	1569.00	0.42
45	Sc	36587.92	P	245.50	0.67
45	Sc	1199349.00	A	8660.00	0.72
51	V	508.90	P	13.47	2.65
52	Cr	446.68	P	39.77	8.90
55	Mn	180.37	P	11.13	6.17
56	Fe	84911.80	P	708.40	0.83
59	Co	368.53	P	3.90	1.06
60	Ni	222.23	P	5.77	2.60
63	Cu	1873.85	P	29.20	1.56
65	Cu	855.22	P	8.34	0.98
66	Zn	756.33	P	7.40	0.98
72	Ge	86491.93	P	119.00	0.14
72	Ge	18137.46	P	75.16	0.41
75	As	28.67	P	3.06	10.66
78	Se	28.67	P	1.76	6.15
89	Y	1574295.00	A	3315.00	0.21
98	Mo	1439.03	P	55.93	3.89
99	(Ru)	1.11	P	1.93	173.24
107	Ag	1150.09	P	29.06	2.53
111	Cd	273.35	P	26.67	9.76
115	In	1576816.00	A	8757.00	0.56
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1024.52	P	7.70	0.75
137	Ba	881.18	P	29.88	3.39
159	Tb	2118878.00	A	5478.00	0.26
205	Tl	1235.66	P	74.12	6.00
208	Pb	4597.17	P	41.64	0.91
209	Bi	1264356.00	A	4292.00	0.34

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1012702.40	0.33	1013060.50	100.0	80 - 120	
45	Sc	369511.16	0.42	372753.66	99.1	80 - 120	
45	Sc	36587.92	0.67	36566.75	100.1	80 - 120	
45	Sc	1199349.50	0.72	1199967.40	99.9	80 - 120	
72	Ge	86491.93	0.14	86606.83	99.9	80 - 120	
72	Ge	18137.46	0.41	18001.75	100.8	80 - 120	
89	Y	1574295.10	0.21	1590565.80	99.0	80 - 120	
115	In	1576816.10	0.56	1570978.00	100.4	80 - 120	
159	Tb	2118878.00	0.26	2128023.00	99.6	80 - 120	
209	Bi	1264356.30	0.34	1225636.90	103.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 8 2007 04:38 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1013560.00	A	30940.00	3.05
7	(Li)		P		
9	Be	2572.54	P	43.51	1.69
23	Na	47258.86	P	741.10	1.57
24	Mg	728350.19	M	20290.00	2.79
27	Al	833119.69	A	42020.00	5.04
39	K	2916269.00	A	40340.00	1.38
44	Ca	42042.86	P	3808.00	9.06
45	Sc	372923.69	P	2833.00	0.76
45	Sc	36443.14	P	171.70	0.47
45	Sc	1185302.00	A	56360.00	4.75
51	V	1200.07	P	39.77	3.31
52	Cr	1324.52	P	16.37	1.24
55	Mn	618.17	P	7.23	1.17
56	Fe	362342.91	P	4573.00	1.26
59	Co	1764.95	P	35.07	1.99
60	Ni	574.46	P	27.65	4.81
63	Cu	2804.76	P	67.37	2.40
65	Cu	1342.30	P	24.04	1.79
66	Zn	921.15	P	2.94	0.32
72	Ge	87198.08	P	414.70	0.48
72	Ge	18058.15	P	183.50	1.02
75	As	115.33	P	14.53	12.60
78	Se	125.78	P	2.78	2.21
89	Y	1558725.00	A	73130.00	4.69
98	Mo	3690.65	P	338.40	9.17
99	(Ru)	2.22	P	3.85	173.20
107	Ag	5415.71	P	169.40	3.13
111	Cd	1279.00	P	62.40	4.88
115	In	1560483.00	A	66820.00	4.28
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	4486.47	P	66.72	1.49
137	Ba	2681.48	P	72.45	2.70
159	Tb	2097513.00	A	86360.00	4.12
205	Tl	5231.28	P	20.83	0.40
208	Pb	15342.02	P	87.71	0.57
209	Bi	1247103.00	A	35870.00	2.88

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1013560.40	3.05	1013060.50	100.0	80 - 120	
45	Sc	372923.66	0.76	372753.66	100.0	80 - 120	
45	Sc	36443.14	0.47	36566.75	99.7	80 - 120	
45	Sc	1185302.50	4.75	1199967.40	98.8	80 - 120	
72	Ge	87198.08	0.48	86606.83	100.7	80 - 120	
72	Ge	18058.15	1.02	18001.75	100.3	80 - 120	
89	Y	1558725.40	4.69	1590565.80	98.0	80 - 120	
115	In	1560482.60	4.28	1570978.00	99.3	80 - 120	
159	Tb	2097513.50	4.12	2128023.00	98.6	80 - 120	
209	Bi	1247103.10	2.88	1225636.90	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 8 2007 04:43 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:41 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1021859.00	A	15590.00	1.53
7 (Li)		P		
9 Be	5061.07	P	130.00	2.57
23 Na	72123.06	P	694.60	0.96
24 Mg	1344593.00	A	6841.00	0.51
27 Al	2268366.00	A	6362.00	0.28
39 K	3808722.00	A	28610.00	0.75
44 Ca	65501.42	P	866.40	1.32
45 Sc	359441.31	P	37030.00	10.30
45 Sc	37295.30	P	199.50	0.53
45 Sc	1194022.00	A	10870.00	0.91
51 V	2097.96	P	49.65	2.37
52 Cr	2460.98	P	26.31	1.07
55 Mn	1204.14	P	19.76	1.64
56 Fe	693472.50	P	3330.00	0.48
59 Co	3556.79	P	64.81	1.82
60 Ni	1077.46	P	16.12	1.50
63 Cu	4059.53	P	89.00	2.19
65 Cu	1999.43	P	15.41	0.77
66 Zn	1121.91	P	60.09	5.36
72 Ge	84931.13	P	7293.00	8.59
72 Ge	18298.79	P	76.73	0.42
75 As	214.67	P	16.83	7.84
78 Se	257.56	P	6.58	2.55
89 Y	1557698.00	A	7702.00	0.49
98 Mo	6854.18	P	64.38	0.94
99 (Ru)	0.00	P	0.00	0.00
107 Ag	10692.33	P	48.26	0.45
111 Cd	2613.69	P	78.81	3.02
115 In	1560701.00	A	22350.00	1.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8976.65	P	154.00	1.72
137 Ba	3866.26	P	73.45	1.90
159 Tb	2104923.00	A	19080.00	0.91
205 Tl	10230.04	P	165.80	1.62
208 Pb	28981.62	P	246.50	0.85
209 Bi	1232834.00	A	5389.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1021858.50	1.53	1013060.50	100.9	80 - 120	
45 Sc	359441.34	10.30	372753.66	96.4	80 - 120	
45 Sc	37295.30	0.53	36566.75	102.0	80 - 120	
45 Sc	1194022.10	0.91	1199967.40	99.5	80 - 120	
72 Ge	84931.13	8.59	86606.83	98.1	80 - 120	
72 Ge	18298.79	0.42	18001.75	101.7	80 - 120	
89 Y	1557698.30	0.49	1590565.80	97.9	80 - 120	
115 In	1560701.40	1.43	1570978.00	99.3	80 - 120	
159 Tb	2104923.00	0.91	2128023.00	98.9	80 - 120	
209 Bi	1232833.60	0.44	1225636.90	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 8 2007 04:48 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1024251.00	A	3472.00	0.34
7	(Li)		P		
9	Be	49705.71	P	602.60	1.21
23	Na	474902.59	P	3587.00	0.76
24	Mg	12172400.00	A	27720.00	0.23
27	Al	14775450.00	A	78340.00	0.53
39	K	18955170.00	A	116200.00	0.61
44	Ca	504329.00	P	1777.00	0.35
45	Sc	366855.09	P	5600.00	1.53
45	Sc	36723.08	P	296.20	0.81
45	Sc	1212380.00	A	10540.00	0.87
51	V	17102.70	P	196.90	1.15
52	Cr	21217.93	P	133.30	0.63
55	Mn	11045.17	P	269.40	2.44
56	Fe	6365849.00	A	28320.00	0.44
59	Co	34056.86	P	301.40	0.88
60	Ni	9285.01	P	114.40	1.23
63	Cu	26134.09	P	242.70	0.93
65	Cu	12852.30	P	41.22	0.32
66	Zn	4303.67	P	107.20	2.49
72	Ge	85823.54	P	444.10	0.52
72	Ge	18097.05	P	437.20	2.42
75	As	2050.83	P	68.76	3.35
78	Se	2415.34	P	16.74	0.69
89	Y	1584152.00	A	17870.00	1.13
98	Mo	63028.04	P	617.10	0.98
99	(Ru)	6.67	P	6.67	100.00
107	Ag	101327.60	P	474.60	0.47
111	Cd	24103.13	P	492.70	2.04
115	In	1561864.00	A	3759.00	0.24
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	84465.49	P	418.60	0.50
137	Ba	34959.99	P	344.00	0.98
159	Tb	2131716.00	A	19150.00	0.90
205	Tl	96812.59	P	100.20	0.10
208	Pb	259175.70	P	1678.00	0.65
209	Bi	1223014.00	A	4297.00	0.35

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1024251.10	0.34	1013060.50	101.1	80 - 120	
45	Sc	366855.09	1.53	372753.66	98.4	80 - 120	
45	Sc	36723.07	0.81	36566.75	100.4	80 - 120	
45	Sc	1212380.30	0.87	1199967.40	101.0	80 - 120	
72	Ge	85823.54	0.52	86606.83	99.1	80 - 120	
72	Ge	18097.05	2.42	18001.75	100.5	80 - 120	
89	Y	1584152.30	1.13	1590565.80	99.6	80 - 120	
115	In	1561864.40	0.24	1570978.00	99.4	80 - 120	
159	Tb	2131716.30	0.90	2128023.00	100.2	80 - 120	
209	Bi	1223014.40	0.35	1225636.90	99.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 8 2007 04:53 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	994305.13	A	14380.00	1.45
7 (Li)		P		
9 Be	482423.50	P	2135.00	0.44
23 Na	4144367.00	A	29080.00	0.70
24 Mg	############	A	525700.00	0.44
27 Al	############	A	345900.00	0.24
39 K	############	A	1349000.00	0.79
44 Ca	5003393.00	A	6044.00	0.12
45 Sc	368472.00	P	1834.00	0.50
45 Sc	35819.73	P	172.70	0.48
45 Sc	1213143.00	A	5608.00	0.46
51 V	168366.09	P	358.80	0.21
52 Cr	206675.30	P	480.00	0.23
55 Mn	108191.40	P	290.70	0.27
56 Fe	62359352.00	A	82150.00	0.13
59 Co	330534.81	P	795.30	0.24
60 Ni	88279.73	P	378.80	0.43
63 Cu	235659.70	P	552.20	0.23
65 Cu	115273.10	P	403.10	0.35
66 Zn	34518.17	P	50.72	0.15
72 Ge	83935.73	P	177.70	0.21
72 Ge	17622.01	P	39.49	0.22
75 As	20431.92	P	59.95	0.29
78 Se	23403.51	P	264.00	1.13
89 Y	1572316.00	A	10580.00	0.67
98 Mo	627131.69	P	1210.00	0.19
99 (Ru)	20.00	P	5.77	28.87
107 Ag	996675.50	M	27680.00	2.78
111 Cd	230967.91	P	208.20	0.09
115 In	1516644.00	A	8719.00	0.57
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	826053.63	P	2027.00	0.25
137 Ba	346619.09	P	2293.00	0.66
159 Tb	2104649.00	A	4667.00	0.22
205 Tl	951570.50	P	5845.00	0.61
208 Pb	2557175.00	A	23450.00	0.92
209 Bi	1171127.00	A	13420.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	994305.06	1.45	1013060.50	98.1	80 - 120	
45 Sc	368471.97	0.50	372753.66	98.9	80 - 120	
45 Sc	35819.73	0.48	36566.75	98.0	80 - 120	
45 Sc	1213143.30	0.46	1199967.40	101.1	80 - 120	
72 Ge	83935.73	0.21	86606.83	96.9	80 - 120	
72 Ge	17622.01	0.22	18001.75	97.9	80 - 120	
89 Y	1572316.10	0.67	1590565.80	98.9	80 - 120	
115 In	1516644.10	0.57	1570978.00	96.5	80 - 120	
159 Tb	2104648.50	0.22	2128023.00	98.9	80 - 120	
209 Bi	1171127.50	1.15	1225636.90	95.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 8 2007 04:59 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 08 2007 04:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1003222.00	A	8263.00	0.82
7	(Li)		P		
9	Be	937117.81	A	2006.00	0.21
23	Na	8391806.00	A	37610.00	0.45
24	Mg	############	A	1278000.00	0.53
27	Al	############	A	1801000.00	0.60
39	K	############	A	2146000.00	0.62
44	Ca	10233730.00	A	31810.00	0.31
45	Sc	381257.09	P	2387.00	0.63
45	Sc	36668.89	P	180.90	0.49
45	Sc	1253633.00	A	5948.00	0.47
51	V	344740.09	P	1121.00	0.33
52	Cr	420346.50	P	1722.00	0.41
55	Mn	219045.59	P	675.40	0.31
56	Fe	############	A	360000.00	0.28
59	Co	666670.13	P	1243.00	0.19
60	Ni	176712.80	P	633.80	0.36
63	Cu	466217.41	P	465.70	0.10
65	Cu	228606.59	P	629.20	0.28
66	Zn	65736.89	P	490.00	0.75
72	Ge	85791.71	P	674.20	0.79
72	Ge	17659.07	P	178.70	1.01
75	As	41174.46	P	90.76	0.22
78	Se	46544.54	P	94.91	0.20
89	Y	1616985.00	A	18060.00	1.12
98	Mo	1412552.00	A	10440.00	0.74
99	(Ru)	40.00	P	15.28	38.20
107	Ag	2064443.00	A	4179.00	0.20
111	Cd	469356.91	P	2076.00	0.44
115	In	1530155.00	A	8645.00	0.56
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1778426.00	A	10830.00	0.61
137	Ba	692421.38	P	3389.00	0.49
159	Tb	2130573.00	A	9313.00	0.44
205	Tl	2006506.00	A	19400.00	0.97
208	Pb	5167879.00	A	24100.00	0.47
209	Bi	1137427.00	A	2496.00	0.22

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1003222.10	0.82	1013060.50	99.0	80 - 120	
45	Sc	381257.13	0.63	372753.66	102.3	80 - 120	
45	Sc	36668.89	0.49	36566.75	100.3	80 - 120	
45	Sc	1253633.30	0.47	1199967.40	104.5	80 - 120	
72	Ge	85791.72	0.79	86606.83	99.1	80 - 120	
72	Ge	17659.07	1.01	18001.75	98.1	80 - 120	
89	Y	1616984.60	1.12	1590565.80	101.7	80 - 120	
115	In	1530155.50	0.56	1570978.00	97.4	80 - 120	
159	Tb	2130573.30	0.44	2128023.00	100.1	80 - 120	
209	Bi	1137427.50	0.22	1225636.90	92.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451012 File : c08q0012 Time : 08-MAR-2007 17:12
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5653, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7699	0.6118	10000	10180	ug/L	2	10	
Antimony	A	0.2890	0.2844	100.0	99.14	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2490	100.0	105.8	ug/L	6	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0211	10000	10300	ug/L	3	10	
Lead	A	0.7212	0.6120	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.5004	10000	10300	ug/L	3	10	
Molybdenum	A	0.2553	0.2031	100.0	94.65	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3667	100.0	109.3	ug/L	9	10	
Thallium	A	0.8555	0.8042	50.00	46.32	ug/L	-7	10	
Arsenic	E	0.6243	0.5902	100.0	101.3	ug/L	1	10	
Chromium	E	3.6129	2.8630	100.0	99.72	ug/L	0	10	
Cobalt	E	4.7407	4.5130	100.0	98.99	ug/L	-1	10	
Copper	E	16.466	6.5882	100.0	99.27	ug/L	-1	10	
Manganese	E	1.7140	1.4797	100.0	98.85	ug/L	-1	10	
Nickel	E	1.6265	1.2077	100.0	99.73	ug/L	0	10	
Sodium	E	1.3817	0.5631	10000	9795	ug/L	-2	10	
Vanadium	E	3.3481	2.3136	100.0	98.35	ug/L	-2	10	
Zinc	E	5.3526	0.9346	100.0	98.50	ug/L	-2	10	
Iron	H	0.9404	0.8617	10000	10280	ug/L	3	10	
Selenium	H	0.1463	0.1394	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	993023	-1.98
Scandium	A	1199967	1230321	2.53
Scandium	E	36567	37452	2.42
Scandium	H	372754	379475	1.80
Germanium	H	86607	86294	-0.36
Germanium	E	18002	18172	0.95
Indium	A	1570978	1528510	-2.70
Bismuth	A	1225637	1169624	-4.57
Yttrium	A	1590566	1608372	1.12
Terbium	A	2128023	2118179	-0.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451035 File : c08q0035 Time : 08-MAR-2007 19:15
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5976	10000	9944	ug/L	-1	10	
Antimony	A	0.2890	0.2789	100.0	97.22	ug/L	-3	10	
Barium	A	0.1122	0.0810	100.0	99.35	ug/L	-1	10	
Beryllium	A	0.2424	0.2408	100.0	102.3	ug/L	2	10	
Cadmium	A	0.0804	0.0768	100.0	100.2	ug/L	0	10	
Calcium	A	0.0391	0.0206	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6136	100.0	101.1	ug/L	1	10	
Magnesium	A	0.6095	0.4869	10000	10020	ug/L	0	10	
Molybdenum	A	0.2553	0.2000	100.0	93.22	ug/L	-7	10	
Potassium	A	2.6341	0.7070	10000	10130	ug/L	1	10	
Silver	A	0.3408	0.3574	100.0	106.5	ug/L	7	10	
Thallium	A	0.8555	0.8058	50.00	46.41	ug/L	-7	10	
Arsenic	E	0.6243	0.5852	100.0	100.5	ug/L	1	10	
Chromium	E	3.6129	2.8788	100.0	100.3	ug/L	0	10	
Cobalt	E	4.7407	4.5364	100.0	99.50	ug/L	-1	10	
Copper	E	16.466	6.5685	100.0	98.97	ug/L	-1	10	
Manganese	E	1.7140	1.4937	100.0	99.78	ug/L	0	10	
Nickel	E	1.6265	1.2157	100.0	100.4	ug/L	0	10	
Sodium	E	1.3817	0.5608	10000	9755	ug/L	-2	10	
Vanadium	E	3.3481	2.3185	100.0	98.56	ug/L	-1	10	
Zinc	E	5.3526	0.9447	100.0	99.59	ug/L	0	10	
Iron	H	0.9404	0.8465	10000	10090	ug/L	1	10	
Selenium	H	0.1463	0.1367	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	976980	-3.56
Scandium	A	1199967	1212037	1.01
Scandium	E	36567	36160	-1.11
Scandium	H	372754	366620	-1.65
Germanium	H	86607	84668	-2.24
Germanium	E	18002	17682	-1.78
Indium	A	1570978	1529707	-2.63
Bismuth	A	1225637	1204439	-1.73
Yttrium	A	1590566	1587526	-0.19
Terbium	A	2128023	2143028	0.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451053 File : c08q0053 Time : 08-MAR-2007 20:51
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.5978	10000	9948	ug/L	-1	10	
Antimony	A	0.2890	0.2774	100.0	96.67	ug/L	-3	10	
Barium	A	0.1122	0.0805	100.0	98.74	ug/L	-1	10	
Beryllium	A	0.2424	0.2456	100.0	104.3	ug/L	4	10	
Cadmium	A	0.0804	0.0774	100.0	101.1	ug/L	1	10	
Calcium	A	0.0391	0.0207	10000	10090	ug/L	1	10	
Lead	A	0.7212	0.6099	100.0	100.5	ug/L	1	10	
Magnesium	A	0.6095	0.4884	10000	10050	ug/L	1	10	
Molybdenum	A	0.2553	0.2010	100.0	93.67	ug/L	-6	10	
Potassium	A	2.6341	0.7053	10000	10100	ug/L	1	10	
Silver	A	0.3408	0.3577	100.0	106.6	ug/L	7	10	
Thallium	A	0.8555	0.7886	50.00	45.42	ug/L	-9	10	
Arsenic	E	0.6243	0.5809	100.0	99.75	ug/L	0	10	
Chromium	E	3.6129	2.8852	100.0	100.5	ug/L	1	10	
Cobalt	E	4.7407	4.5454	100.0	99.70	ug/L	0	10	
Copper	E	16.466	6.5969	100.0	99.40	ug/L	-1	10	
Manganese	E	1.7140	1.4877	100.0	99.38	ug/L	-1	10	
Nickel	E	1.6265	1.2178	100.0	100.6	ug/L	1	10	
Sodium	E	1.3817	0.5571	10000	9690	ug/L	-3	10	
Vanadium	E	3.3481	2.3339	100.0	99.22	ug/L	-1	10	
Zinc	E	5.3526	0.9375	100.0	98.82	ug/L	-1	10	
Iron	H	0.9404	0.8382	10000	9995	ug/L	0	10	
Selenium	H	0.1463	0.1387	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	994494	-1.83
Scandium	A	1199967	1234033	2.84
Scandium	E	36567	36386	-0.49
Scandium	H	372754	366011	-1.81
Germanium	H	86607	83572	-3.50
Germanium	E	18002	17867	-0.75
Indium	A	1570978	1541819	-1.86
Bismuth	A	1225637	1205901	-1.61
Yttrium	A	1590566	1613323	1.43
Terbium	A	2128023	2151819	1.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451071 File : c08q0071 Time : 08-MAR-2007 22:27
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6077	10000	10110	ug/L	1	10	
Antimony	A	0.2890	0.2823	100.0	98.39	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.2	ug/L	1	10	
Beryllium	A	0.2424	0.2476	100.0	105.2	ug/L	5	10	
Cadmium	A	0.0804	0.0781	100.0	102.0	ug/L	2	10	
Calcium	A	0.0391	0.0209	10000	10210	ug/L	2	10	
Lead	A	0.7212	0.6119	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6095	0.4947	10000	10180	ug/L	2	10	
Molybdenum	A	0.2553	0.2043	100.0	95.19	ug/L	-5	10	
Potassium	A	2.6341	0.7165	10000	10270	ug/L	3	10	
Silver	A	0.3408	0.3617	100.0	107.8	ug/L	8	10	
Thallium	A	0.8555	0.8023	50.00	46.21	ug/L	-8	10	
Arsenic	E	0.6243	0.5977	100.0	102.6	ug/L	3	10	
Chromium	E	3.6129	2.9420	100.0	102.5	ug/L	3	10	
Cobalt	E	4.7407	4.6206	100.0	101.3	ug/L	1	10	
Copper	E	16.466	6.7409	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.5065	100.0	100.6	ug/L	1	10	
Nickel	E	1.6265	1.2339	100.0	101.9	ug/L	2	10	
Sodium	E	1.3817	0.5653	10000	9834	ug/L	-2	10	
Vanadium	E	3.3481	2.3746	100.0	101.0	ug/L	1	10	
Zinc	E	5.3526	0.9669	100.0	102.0	ug/L	2	10	
Iron	H	0.9404	0.8489	10000	10120	ug/L	1	10	
Selenium	H	0.1463	0.1419	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1007714	-0.53
Scandium	A	1199967	1230946	2.58
Scandium	E	36567	36295	-0.74
Scandium	H	372754	362889	-2.65
Germanium	H	86607	83036	-4.12
Germanium	E	18002	17673	-1.83
Indium	A	1570978	1534001	-2.35
Bismuth	A	1225637	1177160	-3.96
Yttrium	A	1590566	1602188	0.73
Terbium	A	2128023	2125033	-0.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451080 File : c08q0080 Time : 08-MAR-2007 23:15
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6081	10000	10120	ug/L	1	10	
Antimony	A	0.2890	0.2812	100.0	98.02	ug/L	-2	10	
Barium	A	0.1122	0.0825	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2424	0.2463	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0779	100.0	101.7	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10250	ug/L	3	10	
Lead	A	0.7212	0.6110	100.0	100.7	ug/L	1	10	
Magnesium	A	0.6095	0.4943	10000	10170	ug/L	2	10	
Molybdenum	A	0.2553	0.2017	100.0	93.98	ug/L	-6	10	
Potassium	A	2.6341	0.7175	10000	10280	ug/L	3	10	
Silver	A	0.3408	0.3600	100.0	107.3	ug/L	7	10	
Thallium	A	0.8555	0.8024	50.00	46.22	ug/L	-8	10	
Arsenic	E	0.6243	0.5961	100.0	102.4	ug/L	2	10	
Chromium	E	3.6129	2.9160	100.0	101.6	ug/L	2	10	
Cobalt	E	4.7407	4.5752	100.0	100.4	ug/L	0	10	
Copper	E	16.466	6.7418	100.0	101.6	ug/L	2	10	
Manganese	E	1.7140	1.4970	100.0	100.0	ug/L	0	10	
Nickel	E	1.6265	1.2256	100.0	101.2	ug/L	1	10	
Sodium	E	1.3817	0.5631	10000	9796	ug/L	-2	10	
Vanadium	E	3.3481	2.3581	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9607	100.0	101.3	ug/L	1	10	
Iron	H	0.9404	0.8503	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1016973	0.39
Scandium	A	1199967	1234805	2.90
Scandium	E	36567	36623	0.15
Scandium	H	372754	361464	-3.03
Germanium	H	86607	82598	-4.63
Germanium	E	18002	17734	-1.49
Indium	A	1570978	1549734	-1.35
Bismuth	A	1225637	1185379	-3.28
Yttrium	A	1590566	1623593	2.08
Terbium	A	2128023	2144502	0.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451108 File : c08q0108 Time : 09-MAR-2007 01:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6036	10000	10040	ug/L	0	10	
Antimony	A	0.2890	0.2844	100.0	99.12	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2468	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0804	0.0786	100.0	102.6	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10330	ug/L	3	10	
Lead	A	0.7212	0.6510	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4928	10000	10140	ug/L	1	10	
Molybdenum	A	0.2553	0.2073	100.0	96.62	ug/L	-3	10	
Potassium	A	2.6341	0.7188	10000	10300	ug/L	3	10	
Silver	A	0.3408	0.3435	100.0	102.4	ug/L	2	10	
Thallium	A	0.8555	0.8283	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6243	0.5861	100.0	100.6	ug/L	1	10	
Chromium	E	3.6129	2.9295	100.0	102.0	ug/L	2	10	
Cobalt	E	4.7407	4.6441	100.0	101.9	ug/L	2	10	
Copper	E	16.466	6.6127	100.0	99.64	ug/L	0	10	
Manganese	E	1.7140	1.5159	100.0	101.3	ug/L	1	10	
Nickel	E	1.6265	1.2430	100.0	102.6	ug/L	3	10	
Sodium	E	1.3817	0.5543	10000	9641	ug/L	-4	10	
Vanadium	E	3.3481	2.3567	100.0	100.2	ug/L	0	10	
Zinc	E	5.3526	0.9437	100.0	99.47	ug/L	-1	10	
Iron	H	0.9404	0.8543	10000	10190	ug/L	2	10	
Selenium	H	0.1463	0.1402	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	802534	-20.78
Scandium	A	1199967	998035	-16.83
Scandium	E	36567	28975	-20.76
Scandium	H	372754	286227	-23.21
Germanium	H	86607	67373	-22.21
Germanium	E	18002	14500	-19.45
Indium	A	1570978	1303525	-17.02
Bismuth	A	1225637	1059860	-13.53
Yttrium	A	1590566	1323469	-16.79
Terbium	A	2128023	1852290	-12.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451126 File : c08q0126 Time : 09-MAR-2007 03:24
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6040	10000	10050	ug/L	1	10	
Antimony	A	0.2890	0.2842	100.0	99.06	ug/L	-1	10	
Barium	A	0.1122	0.0823	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2424	0.2472	100.0	105.0	ug/L	5	10	
Cadmium	A	0.0804	0.0791	100.0	103.3	ug/L	3	10	
Calcium	A	0.0391	0.0211	10000	10310	ug/L	3	10	
Lead	A	0.7212	0.6511	100.0	107.3	ug/L	7	10	
Magnesium	A	0.6095	0.4924	10000	10130	ug/L	1	10	
Molybdenum	A	0.2553	0.2078	100.0	96.81	ug/L	-3	10	
Potassium	A	2.6341	0.7207	10000	10330	ug/L	3	10	
Silver	A	0.3408	0.3450	100.0	102.8	ug/L	3	10	
Thallium	A	0.8555	0.8337	50.00	48.02	ug/L	-4	10	
Arsenic	E	0.6243	0.5910	100.0	101.5	ug/L	2	10	
Chromium	E	3.6129	2.9573	100.0	103.0	ug/L	3	10	
Cobalt	E	4.7407	4.6909	100.0	102.9	ug/L	3	10	
Copper	E	16.466	6.6326	100.0	99.94	ug/L	0	10	
Manganese	E	1.7140	1.5339	100.0	102.5	ug/L	3	10	
Nickel	E	1.6265	1.2505	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5546	10000	9646	ug/L	-4	10	
Vanadium	E	3.3481	2.3732	100.0	100.9	ug/L	1	10	
Zinc	E	5.3526	0.9557	100.0	100.8	ug/L	1	10	
Iron	H	0.9404	0.8499	10000	10140	ug/L	1	10	
Selenium	H	0.1463	0.1413	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	818786	-19.18
Scandium	A	1199967	1015317	-15.39
Scandium	E	36567	29231	-20.06
Scandium	H	372754	292217	-21.61
Germanium	H	86607	68066	-21.41
Germanium	E	18002	14662	-18.55
Indium	A	1570978	1316310	-16.21
Bismuth	A	1225637	1059562	-13.55
Yttrium	A	1590566	1341682	-15.65
Terbium	A	2128023	1874636	-11.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451143 File : c08q0143 Time : 09-MAR-2007 04:55
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7699	0.6022	10000	10020	ug/L	0	10	
Antimony	A	0.2890	0.2826	100.0	98.51	ug/L	-1	10	
Barium	A	0.1122	0.0817	100.0	100.3	ug/L	0	10	
Beryllium	A	0.2424	0.2465	100.0	104.7	ug/L	5	10	
Cadmium	A	0.0804	0.0784	100.0	102.3	ug/L	2	10	
Calcium	A	0.0391	0.0210	10000	10280	ug/L	3	10	
Lead	A	0.7212	0.6517	100.0	107.4	ug/L	7	10	
Magnesium	A	0.6095	0.4918	10000	10120	ug/L	1	10	
Molybdenum	A	0.2553	0.2063	100.0	96.14	ug/L	-4	10	
Potassium	A	2.6341	0.7141	10000	10230	ug/L	2	10	
Silver	A	0.3408	0.3429	100.0	102.2	ug/L	2	10	
Thallium	A	0.8555	0.8286	50.00	47.72	ug/L	-5	10	
Arsenic	E	0.6243	0.5939	100.0	102.0	ug/L	2	10	
Chromium	E	3.6129	2.9660	100.0	103.3	ug/L	3	10	
Cobalt	E	4.7407	4.6845	100.0	102.7	ug/L	3	10	
Copper	E	16.466	6.6402	100.0	100.0	ug/L	0	10	
Manganese	E	1.7140	1.5437	100.0	103.1	ug/L	3	10	
Nickel	E	1.6265	1.2513	100.0	103.3	ug/L	3	10	
Sodium	E	1.3817	0.5611	10000	9761	ug/L	-2	10	
Vanadium	E	3.3481	2.3854	100.0	101.4	ug/L	1	10	
Zinc	E	5.3526	0.9542	100.0	100.6	ug/L	1	10	
Iron	H	0.9404	0.8481	10000	10110	ug/L	1	10	
Selenium	H	0.1463	0.1415	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825273	-18.54
Scandium	A	1199967	1021873	-14.84
Scandium	E	36567	29100	-20.42
Scandium	H	372754	287690	-22.82
Germanium	H	86607	67198	-22.41
Germanium	E	18002	14624	-18.76
Indium	A	1570978	1318609	-16.06
Bismuth	A	1225637	1066402	-12.99
Yttrium	A	1590566	1344691	-15.46
Terbium	A	2128023	1874906	-11.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451015 File : c08q0015 Time : 08-MAR-2007 17:28
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.05890]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06340]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.642]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05478]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.04820]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04860]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05038]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1073870	6.00
Scandium	A	1199967	1256938	4.75
Scandium	E	36567	38473	5.21
Scandium	H	372754	385873	3.52
Germanium	H	86607	89505	3.35
Germanium	E	18002	19023	5.67
Indium	A	1570978	1636995	4.20
Bismuth	A	1225637	1262297	2.99
Yttrium	A	1590566	1648430	3.64
Terbium	A	2128023	2191757	2.99

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451038 File : c08q0038 Time : 08-MAR-2007 19:32
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02556]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03569]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[7.257]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01100]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.005974]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1001395	-1.15
Scandium	A	1199967	1191926	-0.67
Scandium	E	36567	36102	-1.27
Scandium	H	372754	360289	-3.34
Germanium	H	86607	83997	-3.01
Germanium	E	18002	17843	-0.88
Indium	A	1570978	1581958	0.70
Bismuth	A	1225637	1247179	1.76
Yttrium	A	1590566	1571235	-1.22
Terbium	A	2128023	2133582	0.26

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451057 File : c08q0057 Time : 08-MAR-2007 21:13
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01637]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01486]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.452]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01958]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01008]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.002456]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005985]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1037587	2.42
Scandium	A	1199967	1232946	2.75
Scandium	E	36567	37318	2.05
Scandium	H	372754	364473	-2.22
Germanium	H	86607	84688	-2.22
Germanium	E	18002	18349	1.93
Indium	A	1570978	1592703	1.38
Bismuth	A	1225637	1238227	1.03
Yttrium	A	1590566	1617067	1.67
Terbium	A	2128023	2159508	1.48

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451074 File : c08q0074 Time : 08-MAR-2007 22:43
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02060]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02318]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005848]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.003819]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01111]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1021251	0.81
Scandium	A	1199967	1209430	0.79
Scandium	E	36567	36911	0.94
Scandium	H	372754	358359	-3.86
Germanium	H	86607	83118	-4.03
Germanium	E	18002	18296	1.63
Indium	A	1570978	1579316	0.53
Bismuth	A	1225637	1224235	-0.11
Yttrium	A	1590566	1589335	-0.08
Terbium	A	2128023	2128027	0.00

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451083 File : c08q0083 Time : 08-MAR-2007 23:31
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001860]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.004952]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.001227]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03703]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[5.296]	10.00	4.329	ug/L	!ib
Selenium	H	[0.02784]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	1015614	0.25
Scandium	A	1199967	1194890	-0.42
Scandium	E	36567	36508	-0.16
Scandium	H	372754	360691	-3.24
Germanium	H	86607	83013	-4.15
Germanium	E	18002	17827	-0.97
Indium	A	1570978	1557142	-0.88
Bismuth	A	1225637	1205567	-1.64
Yttrium	A	1590566	1568778	-1.37
Terbium	A	2128023	2081668	-2.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451111 File : c08q0111 Time : 09-MAR-2007 02:03
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005955]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007007]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.005084]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	822009	-18.86
Scandium	A	1199967	998362	-16.80
Scandium	E	36567	29327	-19.80
Scandium	H	372754	293945	-21.14
Germanium	H	86607	70181	-18.97
Germanium	E	18002	14960	-16.90
Indium	A	1570978	1354502	-13.78
Bismuth	A	1225637	1118204	-8.77
Yttrium	A	1590566	1348087	-15.24
Terbium	A	2128023	1873226	-11.97

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451129 File : c08q0129 Time : 09-MAR-2007 03:40
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.07214]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06213]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.762]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01400]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008845]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01087]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850862	-16.01
Scandium	A	1199967	1021811	-14.85
Scandium	E	36567	30122	-17.62
Scandium	H	372754	292255	-21.60
Germanium	H	86607	69873	-19.32
Germanium	E	18002	15317	-14.91
Indium	A	1570978	1376799	-12.36
Bismuth	A	1225637	1141064	-6.90
Yttrium	A	1590566	1367443	-14.03
Terbium	A	2128023	1912303	-10.14

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451147 File : c08q0147 Time : 09-MAR-2007 05:17
Cal : 67097451001 Caldate: 08-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02957]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02532]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02658]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02283]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02980]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.008714]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01918]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	850460	-16.05
Scandium	A	1199967	1031697	-14.02
Scandium	E	36567	30982	-15.27
Scandium	H	372754	301131	-19.21
Germanium	H	86607	71265	-17.71
Germanium	E	18002	15611	-13.28
Indium	A	1570978	1377183	-12.34
Bismuth	A	1225637	1149145	-6.24
Yttrium	A	1590566	1377021	-13.43
Terbium	A	2128023	1919450	-9.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451017 File : c08q0017 Time : 08-MAR-2007 17:38
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06190]	0.1000	ug/L	
Barium	A	1.108	0.1000	ug/L	
Beryllium	A	[0.03485]	0.1000	ug/L	
Cadmium	A	1.676	0.1000	ug/L	
Lead	A	0.4987	0.1000	ug/L	
Silver	A	0.2110	0.1000	ug/L	
Thallium	A	0.05584	0.05000	ug/L	
Arsenic	E	0.3292	0.1000	ug/L	
Chromium	E	1.463	0.1000	ug/L	
Cobalt	E	0.2484	0.1000	ug/L	
Copper	E	2.131	0.1000	ug/L	
Manganese	E	0.8835	0.1000	ug/L	
Nickel	E	1.350	0.1000	ug/L	
Vanadium	E	0.1866	0.1000	ug/L	
Zinc	E	1.294	0.1000	ug/L	
Selenium	H	[0.07223]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99280	ug/L	99
Calcium	A	300000	309700	ug/L	103
Magnesium	A	100000	96080	ug/L	96
Molybdenum	A	2000	2055	ug/L	103
Potassium	A	100000	101600	ug/L	102
Sodium	E	250000	257300	ug/L	103
Iron	H	250000	242800	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	825510	-18.51
Scandium	A	1199967	1161981	-3.17
Scandium	E	36567	34573	-5.45
Scandium	H	372754	370712	-0.55
Germanium	H	86607	76805	-11.32
Germanium	E	18002	16545	-8.09
Indium	A	1570978	1371368	-12.71
Bismuth	A	1225637	891432	-27.27
Yttrium	A	1590566	1516370	-4.66
Terbium	A	2128023	1979918	-6.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451018 File : c08q0018 Time : 08-MAR-2007 17:44
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103500	ug/L	4		
Cadmium	A	100.0	102.4	ug/L	2	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	100100	ug/L	0		
Molybdenum	A	2000	2143	ug/L	7		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	45.49	ug/L	-9	20	
Arsenic	E	100.0	105.2	ug/L	5	20	
Chromium	E	200.0	206.9	ug/L	3	20	
Cobalt	E	200.0	192.7	ug/L	-4	20	
Copper	E	200.0	185.8	ug/L	-7	20	
Manganese	E	200.0	203.2	ug/L	2	20	
Nickel	E	200.0	188.9	ug/L	-6	20	
Sodium	E	250000	266000	ug/L	6		
Vanadium	E	200.0	211.0	ug/L	6	20	
Zinc	E	100.0	90.31	ug/L	-10	20	
Iron	H	250000	246600	ug/L	-1		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	364864	-2.12
Scandium	A	1199967	1092779	-8.93
Scandium	E	36567	33405	-8.65
Germanium	H	86607	75884	-12.38
Germanium	E	18002	15854	-11.93
Indium	A	1570978	1302188	-17.11
Yttrium	A	1590566	1444006	-9.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451086 File : c08q0086 Time : 08-MAR-2007 23:47
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06628]	0.1000	ug/L	
Barium	A	1.180	0.1000	ug/L	
Beryllium	A	[0.04090]	0.1000	ug/L	
Cadmium	A	1.781	0.1000	ug/L	
Lead	A	0.5239	0.1000	ug/L	
Silver	A	0.2302	0.1000	ug/L	
Thallium	A	[0.04523]	0.05000	ug/L	
Arsenic	E	0.3374	0.1000	ug/L	
Chromium	E	1.481	0.1000	ug/L	
Cobalt	E	0.2575	0.1000	ug/L	
Copper	E	3.064	0.1000	ug/L	
Manganese	E	1.033	0.1000	ug/L	
Nickel	E	1.389	0.1000	ug/L	
Vanadium	E	0.1824	0.1000	ug/L	
Zinc	E	1.298	0.1000	ug/L	
Selenium	H	[0.05560]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99290	ug/L	99
Calcium	A	300000	310700	ug/L	104
Magnesium	A	100000	95810	ug/L	96
Molybdenum	A	2000	2067	ug/L	103
Potassium	A	100000	102000	ug/L	102
Sodium	E	250000	253300	ug/L	101
Iron	H	250000	240700	ug/L	96

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	754659	-25.51
Scandium	A	1199967	1059145	-11.74
Scandium	E	36567	31365	-14.23
Scandium	H	372754	332469	-10.81
Germanium	H	86607	68907	-20.44
Germanium	E	18002	15157	-15.80
Indium	A	1570978	1271270	-19.08
Bismuth	A	1225637	863039	-29.58
Yttrium	A	1590566	1397665	-12.13
Terbium	A	2128023	1837340	-13.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451087 File : c08q0087 Time : 08-MAR-2007 23:53
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	103200	ug/L	3		
Cadmium	A	100.0	103.3	ug/L	3	20	
Calcium	A	300000	323800	ug/L	8		
Magnesium	A	100000	99360	ug/L	-1		
Molybdenum	A	2000	2132	ug/L	7		
Potassium	A	100000	106400	ug/L	6		
Silver	A	50.00	45.77	ug/L	-8	20	
Arsenic	E	100.0	106.6	ug/L	7	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	196.6	ug/L	-2	20	
Copper	E	200.0	188.9	ug/L	-6	20	
Manganese	E	200.0	205.3	ug/L	3	20	
Nickel	E	200.0	192.8	ug/L	-4	20	
Sodium	E	250000	261600	ug/L	5		
Vanadium	E	200.0	215.3	ug/L	8	20	
Zinc	E	100.0	91.46	ug/L	-9	20	
Iron	H	250000	244600	ug/L	-2		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	322082	-13.59
Scandium	A	1199967	1007537	-16.04
Scandium	E	36567	29999	-17.96
Germanium	H	86607	67669	-21.87
Germanium	E	18002	14348	-20.30
Indium	A	1570978	1224392	-22.06
Yttrium	A	1590566	1346588	-15.34

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451148 File : c08q0148 Time : 09-MAR-2007 05:22
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05209]	0.1000	ug/L	
Barium	A	1.183	0.1000	ug/L	
Beryllium	A	[0.02993]	0.1000	ug/L	
Cadmium	A	1.812	0.1000	ug/L	
Lead	A	0.5462	0.1000	ug/L	
Silver	A	0.2144	0.1000	ug/L	
Thallium	A	[0.04274]	0.05000	ug/L	
Arsenic	E	0.3068	0.1000	ug/L	
Chromium	E	1.497	0.1000	ug/L	
Cobalt	E	0.2400	0.1000	ug/L	
Copper	E	2.332	0.1000	ug/L	
Manganese	E	0.9592	0.1000	ug/L	
Nickel	E	1.324	0.1000	ug/L	
Vanadium	E	0.1515	0.1000	ug/L	
Zinc	E	1.255	0.1000	ug/L	
Selenium	H	[0.08294]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102200	ug/L	102
Calcium	A	300000	319300	ug/L	106
Magnesium	A	100000	98390	ug/L	98
Molybdenum	A	2000	2104	ug/L	105
Potassium	A	100000	105700	ug/L	106
Sodium	E	250000	244400	ug/L	98
Iron	H	250000	241600	ug/L	97

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1013061	696986	-31.20
Scandium	A	1199967	956700	-20.27
Scandium	E	36567	29153	-20.27
Scandium	H	372754	294703	-20.94
Germanium	H	86607	62607	-27.71
Germanium	E	18002	14237	-20.91
Indium	A	1570978	1161016	-26.10
Bismuth	A	1225637	835343	-31.84
Yttrium	A	1590566	1277919	-19.66
Terbium	A	2128023	1700256	-20.10

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67097451149 File : c08q0149 Time : 09-MAR-2007 05:28
Cal : 67097451001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104700	ug/L	5		
Cadmium	A	100.0	102.6	ug/L	3	20	
Calcium	A	300000	328000	ug/L	9		
Magnesium	A	100000	100700	ug/L	1		
Molybdenum	A	2000	2127	ug/L	6		
Potassium	A	100000	108000	ug/L	8		
Silver	A	50.00	45.34	ug/L	-9	20	
Arsenic	E	100.0	101.6	ug/L	2	20	
Chromium	E	200.0	205.1	ug/L	3	20	
Cobalt	E	200.0	191.9	ug/L	-4	20	
Copper	E	200.0	181.1	ug/L	-9	20	
Manganese	E	200.0	202.9	ug/L	1	20	
Nickel	E	200.0	187.6	ug/L	-6	20	
Sodium	E	250000	249300	ug/L	0		
Vanadium	E	200.0	209.8	ug/L	5	20	
Zinc	E	100.0	87.79	ug/L	-12	20	
Iron	H	250000	240500	ug/L	-4		
Selenium	H	100.0	100.0	ug/L	0	20	

ISTD (ICALBLK c08q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	372754	284297	-23.73
Scandium	A	1199967	873446	-27.21
Scandium	E	36567	27008	-26.14
Germanium	H	86607	60432	-30.22
Germanium	E	18002	13168	-26.85
Indium	A	1570978	1098772	-30.06
Yttrium	A	1590566	1193051	-24.99

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07
Sequence : MET06 c08q0

Reference: c08q0004
Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1013061	1199967	36567	372754	86607	18002	1570978	1225637	1590566	2128023
		LOWER LIMIT	303918	359990	10970	111826	25982	5401	471293	367691	477170	638407
		UPPER LIMIT	1215673	1439960	43880	447304	103928	21602	1885174	1470764	1908679	2553628
015	ICB		1073870	1256938	38473	385873	89505	19023	1636995	1262297	1648430	2191757
017	ICSA		825510	1161981	34573	370712	76805	16545	1371368	891432	1516370	1979918
018	ICSAB		775998	1092779	33405	364864	75884	15854	1302188	851784	1444006	1874691
023	BLANK	QC378195	869219	1100012	33070	341082	80562	16555	1428563	1183106	1446525	2007479
024	BS	QC378196	816702	1043661	30751	325031	73377	14776	1331121	1076493	1374607	1916093
025	BSD	QC378197	842726	1080137	32271	329206	74095	15376	1362809	1091947	1421969	1951109
027	MSS	193027-002	955365	1160485	35022	353024	82989	17348	1487016	1183221	1505334	2066741
028	SER	QC378200	969238	1171428	35044	360919	84589	17636	1517374	1212178	1531244	2078425
029	MS	QC378198	946709	1147205	34684	349184	81194	17257	1468891	1179013	1493719	2047309
030	MSD	QC378199	968032	1186615	35331	356109	82608	17594	1509048	1199126	1543135	2105512
031	PDS	QC378201	935297	1165840	34621	348450	80029	16819	1441782	1122477	1510841	2032155
035	CCV		976980	1212037	36160	366620	84668	17682	1529707	1204439	1587526	2143028
038	CCB		1001395	1191926	36102	360289	83997	17843	1581958	1247179	1571235	2133582
040	BLANK	QC378195	803493	990038	29763	295637	94368	19325	1276063	1071319	1298996	1860477
041	BLANK	QC377794	909233	1120219	33806	336878	78319	16649	1469032	1205760	1478181	2047961
042	SAMPLE	193213-001	990462	1203289	36120	363039	85105	18126	1564022	1250855	1573931	2135949
043	SAMPLE	193213-001	995235	1217337	36500	369332	85092	17972	1560132	1239454	1612003	2125902
044	SAMPLE	193027-001	991927	1209051	36563	366695	84965	17812	1553872	1221600	1565217	2125392
045	SAMPLE	193027-003	977187	1200968	36163	356145	83402	17948	1529507	1195224	1544080	2096356
046	SAMPLE	193027-004	983937	1204589	36037	360390	84311	17912	1526956	1182636	1543247	2092675
047	SAMPLE	193027-005	989739	1212076	37255	370990	86672	18338	1529078	1197560	1570577	2097958
048	SAMPLE	193027-006	984145	1189425	35682	358717	83388	17734	1528623	1200353	1546690	2077608
049	SAMPLE	193027-007	992037	1205563	36305	361039	84214	18166	1527431	1194429	1542035	2078638
053	CCV		994494	1234033	36386	366011	83572	17867	1541819	1205901	1613323	2151819
057	CCB		1037587	1232946	37318	364473	84688	18349	1592703	1238227	1617067	2159508
058	SER	QC378200	1020119	1197573	36093	361574	84950	18008	1540351	1207422	1566766	2079615
059	MSS	193027-002	1003023	1196272	36032	352657	81876	17803	1531135	1189848	1556140	2106174
060	SAMPLE	193027-008	994305	1182219	36127	347312	81174	17831	1485007	1146825	1527880	2045231
061	SAMPLE	193027-011	1016985	1214670	36901	368427	84189	18009	1552296	1170252	1581727	2112020
062	SAMPLE	193027-012	1018657	1221362	36455	365182	83837	17745	1536849	1155538	1580981	2098723
063	SAMPLE	193027-013	1023793	1214129	35941	360734	83075	17819	1545510	1196461	1567642	2095725
064	SAMPLE	193027-014	982461	1187910	35817	355574	82189	17850	1500549	1177083	1530967	2047942
065	SAMPLE	193027-015	995495	1194048	36244	357121	82248	17949	1510771	1184665	1536922	2068163
066	SAMPLE	193027-011	1004402	1227507	36695	365949	83344	18084	1548046	1178575	1581880	2126809
067	SAMPLE	193027-012	987791	1247499	36501	363308	81616	17816	1495661	1143652	1590622	2082181
071	CCV		1007714	1230946	36295	362889	83036	17673	1534001	1177160	1602188	2125033
074	CCB		1021251	1209430	36911	358359	83118	18296	1579316	1224235	1589335	2128027
076	SAMPLE	193027-013	992860	1208386	35954	356356	82135	17932	1529561	1191141	1595080	2087711
080	CCV		1016973	1234805	36623	361464	82598	17734	1549734	1185379	1623593	2144502
083	CCB		1015614	1194890	36508	360691	83013	17827	1557142	1205567	1568778	2081668
086	ICSA		754659	1059145	31365	332469	68907	15157	1271270	863039	1397665	1837340
087	ICSAB		719339	1007537	29999	322082	67669	14348	1224392	820014	1346588	1763641
096	BLANK	QC378188	700167	894688	26028	263274	67328	14136	1202348	1017610	1208407	1758305
097	BS	QC378189	698519	924785	26468	271234	61803	12976	1213731	961025	1237650	1772410
098	BSD	QC378190	729639	950649	27346	278162	64038	13527	1242892	975549	1271230	1802881
100	MSS	193193-001	795700	991149	29031	290321	70014	14933	1349704	1127191	1327062	1863300
101	SER	QC378193	814920	992522	29119	286173	68885	14967	1345011	1123463	1329423	1865825
104	MS	QC378191	790553	970652	28580	280839	67202	14563	1302536	1088233	1303159	1836179

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67097451

Date : 03/08/07
Sequence : MET06 c08q0

Reference: c08q0004
Analyzed : 03/08/07 16:29

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
108	CCV		802534	998035	28975	286227	67373	14500	1303525	1059860	1323469	1852290
111	CCB		822009	998362	29327	293945	70181	14960	1354502	1118204	1348087	1873226
113	MSD	QC378192	796757	975880	29021	289995	68692	14846	1298834	1070367	1292600	1820193
114	PDS	QC378194	794422	1000639	28480	287976	67111	14263	1283608	1017337	1318315	1832672
115	SAMPLE	193193-002	813398	1007016	29488	290643	69726	15022	1361530	1122945	1341474	1882422
116	SAMPLE	193193-003	814347	998705	29380	289020	69383	15132	1357344	1120102	1329974	1871280
117	SAMPLE	193193-004	801785	980488	29110	289236	69431	14904	1331974	1096440	1307758	1837707
118	SAMPLE	193193-005	808069	990777	28920	286745	68690	14723	1335747	1117818	1318251	1842971
119	SAMPLE	193193-006	814741	996211	29136	291738	69818	15018	1331964	1110220	1313871	1854367
120	SAMPLE	193193-007	803446	986562	29054	292279	69311	14903	1323472	1099768	1307700	1843275
121	SAMPLE	193193-008	805857	980365	28964	289233	69157	14845	1325685	1098324	1304181	1839750
122	SAMPLE	193193-009	807155	973597	28851	286455	68306	14811	1323514	1092534	1300361	1828819
126	CCV		818786	1015317	29231	292217	68066	14662	1316310	1059562	1341682	1874636
129	CCB		850862	1021811	30122	292255	69873	15317	1376799	1141064	1367443	1912303
131	SAMPLE	193193-010	817886	980868	29203	288883	68762	14766	1320879	1095804	1311393	1838159
132	SAMPLE	193193-011	822605	1001696	29238	289636	69014	14824	1338120	1110859	1315919	1850468
133	SAMPLE	193193-012	820858	994421	29419	289023	68500	14826	1327358	1101565	1314710	1852623
134	SAMPLE	193193-013	813887	983215	28791	287451	68565	14760	1310632	1084009	1299104	1826144
135	SAMPLE	193193-014	822530	981205	29013	284449	67873	14956	1311875	1097038	1298493	1839655
136	SAMPLE	193193-015	815529	983141	28863	281368	67354	14840	1313939	1104257	1300418	1825008
137	SAMPLE	193193-016	824016	991204	29320	287244	68643	14783	1329733	1104989	1315354	1841475
138	SAMPLE	193193-017	819010	983989	29237	288661	69210	15106	1326953	1097992	1300849	1834339
139	SAMPLE	193193-018	824529	1001139	29749	291213	69250	15030	1348851	1131000	1330524	1871635
143	CCV		825273	1021873	29100	287690	67198	14624	1318609	1066402	1344691	1874906
147	CCB		850460	1031697	30982	301131	71265	15611	1377183	1149145	1377021	1919450
148	ICSA		696986	956700	29153	294703	62607	14237	1161016	835343	1277919	1700256
149	ICSAB		636669	873446	27008	284297	60432	13168	1098772	794956	1193051	1624351

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	c08q0001	TUN				08-MAR-2007 16:11	1.0	1.0			1	
002	c08q0002	X	RINSE			08-MAR-2007 16:19	1.0				2	
003	c08q0003	X	RINSE			08-MAR-2007 16:24	1.0				2	
004	c08q0004	ICALBLK	CALBLANK			08-MAR-2007 16:29	1.0	1.0			2	
005	c08q0005	ICAL				08-MAR-2007 16:35	1.0	1.0			3	
006	c08q0006	ICAL				08-MAR-2007 16:40	1.0	1.0			4	
007	c08q0007	ICAL				08-MAR-2007 16:45	1.0	1.0			5	
008	c08q0008	ICAL				08-MAR-2007 16:50	1.0	1.0			6	
009	c08q0009	ICAL				08-MAR-2007 16:55	1.0	1.0			7	
010	c08q0010	ICAL				08-MAR-2007 17:01	1.0	1.0			8	
011	c08q0011	X	RINSE			08-MAR-2007 17:06	1.0				2	
012	c08q0012	ICV				08-MAR-2007 17:12	1.0	1.0		1	9 2	
013	c08q0013	X	RINSE			08-MAR-2007 17:17	1.0				2	
014	c08q0014	X				08-MAR-2007 17:22	1.0				2	
015	c08q0015	ICB				08-MAR-2007 17:28	1.0	1.0		1	2	
016	c08q0016	X				08-MAR-2007 17:33	1.0				2	
017	c08q0017	ICSA				08-MAR-2007 17:38	1.0	1.0		1	10 2	7:CA=309700
018	c08q0018	ICSAB				08-MAR-2007 17:44	1.0	1.0		1	11 2	10:CA=322800
019	c08q0019	X	RINSE			08-MAR-2007 17:49	1.0				2	
020	c08q0020	X	RINSE			08-MAR-2007 17:54	1.0				2	
021	c08q0021	X	RINSE			08-MAR-2007 18:00	1.0				2	
022	c08q0022	X	RINSE			08-MAR-2007 18:05	1.0				2	
023	c08q0023	BLANK	QC378195	122867	Filtra	08-MAR-2007 18:10	1.0	1.0		1	2	
024	c08q0024	BS	QC378196	122867	Filtra	08-MAR-2007 18:16	1.0	1.0		1	2	
025	c08q0025	BSD	QC378197	122867	Filtra	08-MAR-2007 18:22	1.0	1.0		1	2	
026	c08q0026	X	RINSE			08-MAR-2007 18:28	1.0				2	
027	c08q0027	MSS	193027-002	122867	Filtra	08-MAR-2007 18:33	10.0	1.0		1	2	
028	c08q0028	SER	QC378200	122867	Filtra	08-MAR-2007 18:38	50.0	1.0		1	2	
029	c08q0029	MS	QC378198	122867	Filtra	08-MAR-2007 18:44	10.0	1.0		1	2	
030	c08q0030	MSD	QC378199	122867	Filtra	08-MAR-2007 18:49	10.0	1.0		1	2	
031	c08q0031	PDS	QC378201	122867	Filtra	08-MAR-2007 18:54	10.0	1.0		1	12 13 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: PEH Date: 3/9/07

00061

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c08q0032	X	RINSE			08-MAR-2007 18:59	1.0					2	
033	c08q0033	X	RINSE			08-MAR-2007 19:05	1.0					2	
034	c08q0034	X	RINSE			08-MAR-2007 19:10	1.0					2	
035	c08q0035	CCV				08-MAR-2007 19:15	1.0	1.0			1	14 2	
036	c08q0036	X	RINSE			08-MAR-2007 19:21	1.0					2	
037	c08q0037	X				08-MAR-2007 19:26	1.0					2	
038	c08q0038	CCB				08-MAR-2007 19:32	1.0	1.0			1	2	
039	c08q0039	X				08-MAR-2007 19:37	1.0					2	
040	c08q0040	BLANK	QC378195	122867	Filtra	08-MAR-2007 19:42	1.0	1.0			1	2	
041	c08q0041	BLANK	QC377794	122769	Filtra	08-MAR-2007 19:48	1.0	1.0			1	2	
042	c08q0042	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 19:53	10.0	1.0	1		1	2	1:MN=238.700
043	c08q0043	SAMPLE	193213-001	122867	Water	08-MAR-2007 19:58	10.0	1.0	1		1	2	1:MN=435.500
044	c08q0044	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 20:04	10.0	1.0			1	2	
045	c08q0045	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 20:09	10.0	1.0			1	2	
046	c08q0046	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 20:14	10.0	1.0			1	2	
047	c08q0047	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 20:20	10.0	1.0			1	2	
048	c08q0048	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 20:25	10.0	1.0			1	2	
049	c08q0049	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 20:30	10.0	1.0			1	2	
050	c08q0050	X	RINSE			08-MAR-2007 20:35	1.0					2	
051	c08q0051	X	RINSE			08-MAR-2007 20:41	1.0					2	
052	c08q0052	X	RINSE			08-MAR-2007 20:46	1.0					2	
053	c08q0053	CCV				08-MAR-2007 20:51	1.0	1.0			1	14 2	
054	c08q0054	X	RINSE			08-MAR-2007 20:57	1.0					2	
055	c08q0055	X				08-MAR-2007 21:02	1.0	1.0	1		1	2	
056	c08q0056	X				08-MAR-2007 21:07	1.0	1.0	1		1	2	
057	c08q0057	CCB				08-MAR-2007 21:13	1.0	1.0			1	2	
058	c08q0058	SER	QC378200	122867	Filtra	08-MAR-2007 21:18	50.0	1.0			1	2	
059	c08q0059	MSS	193027-002	122867	Filtra	08-MAR-2007 21:23	10.0	1.0			1	2	
060	c08q0060	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 21:29	10.0	1.0			1	2	
061	c08q0061	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 21:34	10.0	1.0			1	2	
062	c08q0062	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 21:39	10.0	1.0	1		1	2	1:MN=569.900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RebA Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c08q0063	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 21:45	10.0	1.0			1	2	
064	c08q0064	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 21:50	10.0	1.0			1	2	
065	c08q0065	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 21:55	10.0	1.0			1	2	
066	c08q0066	SAMPLE	193027-011	122867	Water	08-MAR-2007 22:01	10.0	1.0	1		1	2	1:NA=20640.0
067	c08q0067	SAMPLE	193027-012	122867	Water	08-MAR-2007 22:06	10.0	1.0	1		1	2	1:MN=531.500
068	c08q0068	X	RINSE			08-MAR-2007 22:11	1.0					2	
069	c08q0069	X	RINSE			08-MAR-2007 22:16	1.0					2	
070	c08q0070	X	RINSE			08-MAR-2007 22:22	1.0					2	
071	c08q0071	CCV				08-MAR-2007 22:27	1.0	1.0			1	14 2	
072	c08q0072	X	RINSE			08-MAR-2007 22:33	1.0					2	
073	c08q0073	X				08-MAR-2007 22:38	1.0	1.0	1		1	2	
074	c08q0074	CCB				08-MAR-2007 22:43	1.0	1.0			1	2	
075	c08q0075	X				08-MAR-2007 22:49	1.0	1.0	1		1	2	
076	c08q0076	SAMPLE	193027-013	122867	Water	08-MAR-2007 22:54	10.0	1.0	1		1	2	1:MN=341.700
077	c08q0077	X	RINSE			08-MAR-2007 22:59	1.0					2	
078	c08q0078	X	RINSE			08-MAR-2007 23:05	1.0					2	
079	c08q0079	X	RINSE			08-MAR-2007 23:10	1.0					2	
080	c08q0080	CCV				08-MAR-2007 23:15	1.0	1.0			1	14 2	
081	c08q0081	X	RINSE			08-MAR-2007 23:21	1.0					2	
082	c08q0082	X				08-MAR-2007 23:26	1.0	1.0	1		1	2	
083	c08q0083	CCB				08-MAR-2007 23:31	1.0	1.0			1	2	
084	c08q0084	X				08-MAR-2007 23:37	1.0	1.0			1	2	
085	c08q0085	X				08-MAR-2007 23:42	1.0	1.0			1	10 2	7:CA=311900
086	c08q0086	ICSA				08-MAR-2007 23:47	1.0	1.0			1	10 2	7:CA=310700
087	c08q0087	ICSAB				08-MAR-2007 23:53	1.0	1.0			1	11 2	10:CA=323800
088	c08q0088	X	RINSE			08-MAR-2007 23:58	1.0					2	
089	c08q0089	X	RINSE			09-MAR-2007 00:04	1.0					2	
090	c08q0090	X	RINSE			09-MAR-2007 00:09	1.0					2	
091	c08q0091	X				09-MAR-2007 00:14	1.0	1.0			1	11 2	10:CA=321600
092	c08q0092	X	RINSE			09-MAR-2007 00:20	1.0					2	
093	c08q0093	X	RINSE			09-MAR-2007 00:25	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RGA Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c08q0094	X	RINSE			09-MAR-2007 00:30	1.0					2	
095	c08q0095	X	RINSE			09-MAR-2007 00:36	1.0					2	
096	c08q0096	BLANK	QC378188	122866	Filtra	09-MAR-2007 00:41	1.0	1.0			1	2	
097	c08q0097	BS	QC378189	122866	Filtra	09-MAR-2007 00:46	1.0	1.0			1	2	
098	c08q0098	BSD	QC378190	122866	Filtra	09-MAR-2007 00:52	1.0	1.0			1	2	
099	c08q0099	X	RINSE			09-MAR-2007 00:58	1.0					2	
100	c08q0100	MSS	193193-001	122866	Filtra	09-MAR-2007 01:03	10.0	1.0	2		1	2	
101	c08q0101	SER	QC378193	122866	Filtra	09-MAR-2007 01:09	50.0	1.0	1		1	2	
102	c08q0102	TUN				09-MAR-2007 01:13	1.0	1.0				1	
103	c08q0103	X	RINSE			09-MAR-2007 01:21	1.0					2	
104	c08q0104	MS	QC378191	122866	Filtra	09-MAR-2007 01:26	10.0	1.0		1	1	2	
105	c08q0105	X	RINSE			09-MAR-2007 01:31	1.0					2	
106	c08q0106	X	RINSE			09-MAR-2007 01:37	1.0					2	
107	c08q0107	X	RINSE			09-MAR-2007 01:42	1.0					2	
108	c08q0108	CCV				09-MAR-2007 01:47	1.0	1.0			1	14 2	
109	c08q0109	X	RINSE			09-MAR-2007 01:53	1.0					2	
110	c08q0110	X				09-MAR-2007 01:58	1.0	1.0	1		1	2	
111	c08q0111	CCB				09-MAR-2007 02:03	1.0	1.0			1	2	
112	c08q0112	X				09-MAR-2007 02:09	1.0	1.0			1	2	
113	c08q0113	MSD	QC378192	122866	Filtra	09-MAR-2007 02:14	10.0	1.0		1	1	2	
114	c08q0114	PDS	QC378194	122866	Filtra	09-MAR-2007 02:19	10.0	1.0			1	12 13 2	
115	c08q0115	SAMPLE	193193-002	122866	Filtra	09-MAR-2007 02:25	10.0	1.0			1	2	
116	c08q0116	SAMPLE	193193-003	122866	Filtra	09-MAR-2007 02:30	10.0	1.0			1	2	
117	c08q0117	SAMPLE	193193-004	122866	Filtra	09-MAR-2007 02:36	10.0	1.0			1	2	
118	c08q0118	SAMPLE	193193-005	122866	Filtra	09-MAR-2007 02:41	10.0	1.0			1	2	
119	c08q0119	SAMPLE	193193-006	122866	Filtra	09-MAR-2007 02:46	10.0	1.0	1		1	2	
120	c08q0120	SAMPLE	193193-007	122866	Filtra	09-MAR-2007 02:52	10.0	1.0			1	2	
121	c08q0121	SAMPLE	193193-008	122866	Filtra	09-MAR-2007 02:57	10.0	1.0			1	2	
122	c08q0122	SAMPLE	193193-009	122866	Filtra	09-MAR-2007 03:03	10.0	1.0			1	2	
123	c08q0123	X	RINSE			09-MAR-2007 03:08	1.0					2	
124	c08q0124	X	RINSE			09-MAR-2007 03:13	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RLH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67097451 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00065

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c08q0125	X	RINSE			09-MAR-2007 03:19	1.0					2	
126	c08q0126	CCV				09-MAR-2007 03:24	1.0	1.0			1	14 2	
127	c08q0127	X	RINSE			09-MAR-2007 03:30	1.0					2	
128	c08q0128	X				09-MAR-2007 03:35	1.0					2	
129	c08q0129	CCB				09-MAR-2007 03:40	1.0	1.0			1	2	
130	c08q0130	X				09-MAR-2007 03:46	1.0					2	
131	c08q0131	SAMPLE	193193-010	122866	Filtra	09-MAR-2007 03:51	10.0	1.0			1	2	1:MN=226.200
132	c08q0132	SAMPLE	193193-011	122866	Filtra	09-MAR-2007 03:56	10.0	1.0			1	2	
133	c08q0133	SAMPLE	193193-012	122866	Filtra	09-MAR-2007 04:02	10.0	1.0			1	2	
134	c08q0134	SAMPLE	193193-013	122866	Filtra	09-MAR-2007 04:07	10.0	1.0	1		1	2	
135	c08q0135	SAMPLE	193193-014	122866	Filtra	09-MAR-2007 04:13	10.0	1.0			1	2	
136	c08q0136	SAMPLE	193193-015	122866	Filtra	09-MAR-2007 04:18	10.0	1.0			1	2	
137	c08q0137	SAMPLE	193193-016	122866	Filtra	09-MAR-2007 04:23	10.0	1.0			1	2	
138	c08q0138	SAMPLE	193193-017	122866	Filtra	09-MAR-2007 04:29	10.0	1.0			1	2	
139	c08q0139	SAMPLE	193193-018	122866	Filtra	09-MAR-2007 04:34	10.0	1.0			1	2	
140	c08q0140	X	RINSE			09-MAR-2007 04:39	1.0					2	
141	c08q0141	X	RINSE			09-MAR-2007 04:45	1.0					2	
142	c08q0142	X	RINSE			09-MAR-2007 04:50	1.0					2	
143	c08q0143	CCV				09-MAR-2007 04:55	1.0	1.0			1	14 2	
144	c08q0144	X	RINSE			09-MAR-2007 05:01	1.0					2	
145	c08q0145	X				09-MAR-2007 05:06	1.0					2	
146	c08q0146	X				09-MAR-2007 05:11	1.0					2	
147	c08q0147	CCB				09-MAR-2007 05:17	1.0	1.0			1	2	
148	c08q0148	ICSA				09-MAR-2007 05:22	1.0	1.0			1	10 2	7:CA=319300
149	c08q0149	ICSAB				09-MAR-2007 05:28	1.0	1.0			1	11 2	10:CA=328000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654

Analyst: RCK Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57097652001
Units : ug/L

Date : 08-MAR-2007 19:45
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c08t0005	57097652005		08-MAR-2007 19:49	S5645
L2	c08t0006	57097652006		08-MAR-2007 19:53	S5647
L3	c08t0007	57097652007		08-MAR-2007 19:57	S5649
L4	c08t0008	57097652008		08-MAR-2007 20:01	S5650
L5	c08t0009	57097652009		08-MAR-2007 20:05	S5644
L6	c08t0010	57097652010		08-MAR-2007 20:09	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	3.0039	2.1010	0.9974	0.9568	0.9007	0.9280	BLNK	-2.8035	1.08409		1.4813	1.000	0.995	
Antimony	0.8783	0.6142	0.2964	0.2834	0.2833	0.2926	BLNK	-0.0578	3.44061		0.4414	1.000	0.995	
Arsenic	0.3229	1.1725	0.6391	0.6256	0.6076	0.6160	BLNK	0.09137	1.62688		0.6639	1.000	0.995	
Barium	0.4555	0.3943	0.1195	0.0940	0.0953	0.1001	BLNK	-0.0533	10.0907		0.2098	0.999	0.995	
Beryllium	0.7868	0.5788	0.2799	0.2868	0.2774	0.2911	BLNK	-0.0251	3.46851		0.4168	0.999	0.995	
Cadmium	2.8429	2.1531	0.9517	0.8448	0.7930	0.8018	BLNK	-0.1230	1.25075		1.3979	1.000	0.995	
Calcium	0.1343	0.0757	0.0322	0.0243	0.0237	0.0240	BLNK	-24.053	41.8865		0.0524	1.000	0.995	
Chromium	32.816	17.985	6.1530	3.7146	3.3569	3.3400	BLNK	-0.6412	0.30022		11.227	1.000	0.995	
Cobalt	10.192	7.4693	3.9887	3.8033	3.6607	3.6810	BLNK	-0.0253	0.27199		5.4658	1.000	0.995	
Copper	11.162	5.0149	1.7518	1.1018	1.0058	1.0145	BLNK	-0.7592	0.99183		3.5084	1.000	0.995	
Iron	0.4488	0.2592	0.1068	0.0890	0.0852	0.0863	BLNK	-24.612	11.6315		0.1792	1.000	0.995	
Lead	4.6897	2.5862	1.2299	1.1913	1.1587	1.2034	BLNK	-0.0751	0.83762		2.0099	1.000	0.995	
Magnesium	0.3535	0.2640	0.1292	0.1284	0.1171	0.1207	BLNK	-3.1611	8.33391		0.1855	1.000	0.995	
Manganese	15.867	11.684	4.9071	4.5123	4.2696	4.3117	BLNK	-0.0793	0.23247		7.5920	1.000	0.995	
Molybdenum	4.2224	3.0046	1.4613	1.3932	1.3417	1.3738	BLNK	-0.0806	0.73164		2.1328	1.000	0.995	
Nickel	2.8143	2.3773	0.9706	0.8921	0.8356	0.8469	BLNK	-0.0724	1.18435		1.4561	1.000	0.995	
Potassium	9.9569	5.0111	1.6691	0.9364	0.8127	0.8375	BLNK	-104.20	1.20859		3.2040	1.000	0.995	
Selenium	-0.470	0.0615	0.0228	0.0617	0.0589	0.0581	BLNK	0.40869	17.1278		-0.035	1.000	0.995	
Silver	9.3928	7.5647	3.6128	3.5551	3.3840	3.3347	BLNK	-0.0349	0.29902		5.1407	1.000	0.995	
Sodium	21.271	9.6445	3.0372	1.4735	1.2568	1.3156	BLNK	-159.09	0.77430		6.3331	0.999	0.995	
Thallium	3.4619	2.1978	0.9363	0.8512	0.8480	0.8955	BLNK	-0.1051	1.13027		1.5318	0.999	0.995	
Vanadium	25.707	13.998	5.6590	4.1699	3.9714	4.0567	BLNK	-0.3621	0.24808		9.5938	1.000	0.995	
Zinc	10.855	6.6243	2.5650	0.7275	0.5814	0.5717	BLNK	-4.9307	1.79544		3.6542	0.999	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Barium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Calcium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Copper	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Iron	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Lead	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Magnesium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Potassium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Silver	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Sodium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.0500	0.1250	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L

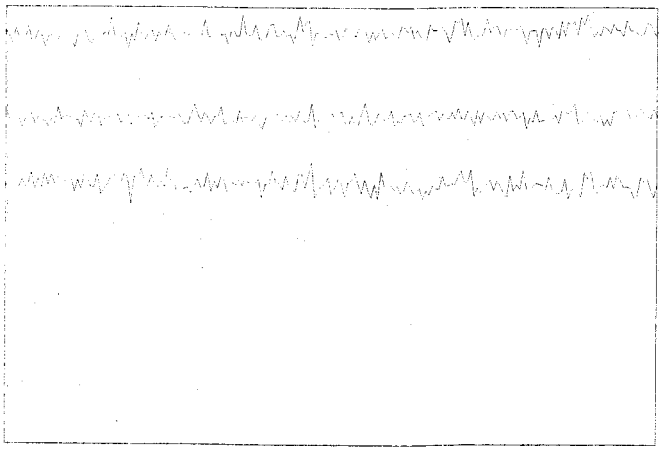
00067

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

57097652001

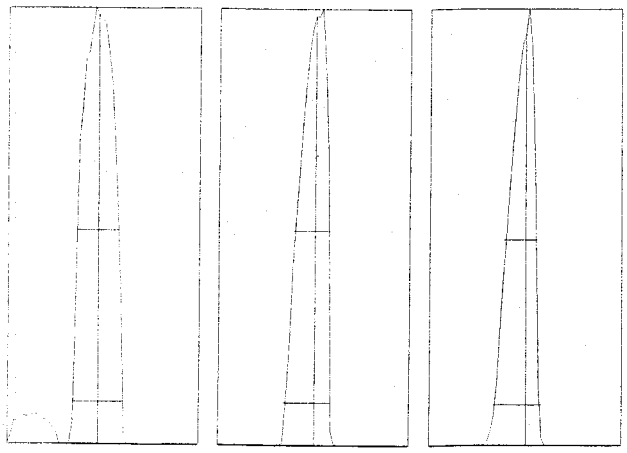
Tune Report

Tune File : ATUNE.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.329%
Doubly Charged:	70/140	0.995%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	11960.0	11888.4	2.76	4.30
89	20,000	14983.0	14949.5	1.64	3.70
205	10,000	9323.0	9416.7	1.63	8.10
156/140	1	0.401%	0.342%	15.71	
70/140	2	1.128%	1.123%	9.84	



m/z:	7	89	205
Height:	11,961	15,471	9,568
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.60	0.55
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:17

Tune Report

Tune File : ATUNE.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-142 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-2 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-6 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 08, 2007 19:10:15
Printed : Mar 08, 2007 19:10:20

P/A Factor Tuning Report

Acquired:Mar 8 2007 07:27 pm

Mass[amu]	Element	P/A Factor
6	Li	0.076571
9	Be	0.085387
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.101249
44	Ca	0.103704
45	Sc	0.101262
51	V	0.101596
52	Cr	0.102554
53	Cr	0.101506
54	Fe	Sensitivity too high
55	Mn	0.104745
57	Fe	0.107281
59	Co	0.106313
60	Ni	0.108379
63	Cu	0.105922
65	Cu	0.109337
66	Zn	0.106277
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.105182
95	Mo	0.105910
98	Mo	0.105555
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108676
111	Cd	Sensitivity too low
114	Cd	0.108326
115	In	0.108334
118	(In)	0.114628
121	Sb	0.107993
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.112311
166	Er	Sensitivity too low
205	Tl	0.113826
206	(Pb)	0.111982
207	(Pb)	0.112040
208	Pb	0.114755
209	Bi	0.111177

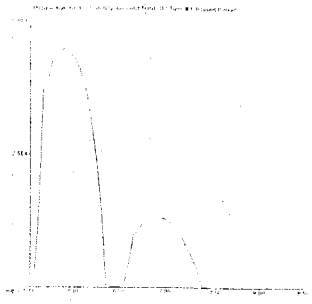
===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

6020 QC Tune Report

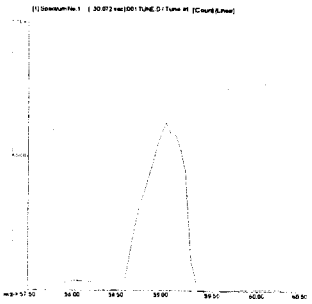
Data File: C:\ICPCHEM\1\DATA\07C08t00.B\001TUNE.D
Date Acquired: Mar 8 2007 07:32 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

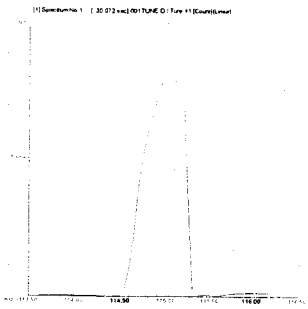
Element	Actual	Required	Flag
7 Li	1.43	5.00	
59 Co	0.58	5.00	
115 In	1.93	5.00	
205 Tl	3.52	5.00	



7 Li
Mass Calib.
Actual: 6.90
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



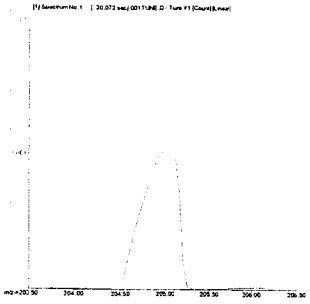
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 205.00
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004C
Date Acquired:	Mar 8 2007 07:45 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 08 2007 07:48 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	382625.50	P	4192.00	1.10
9	Be	55.56	P	16.78	30.20
23	Na	1463632.00	A	32750.00	2.24
26	Mg	2705.56	P	460.80	17.03
27	Al	18440.00	P	2542.00	13.79
39	K	614014.13	M	10650.00	1.73
44	Ca	4090.21	P	114.50	2.80
45	Sc	356151.09	P	5436.00	1.53
51	V	1993.19	P	633.20	31.77
52	Cr	2908.89	P	101.50	3.49
55	Mn	464.44	P	22.19	4.78
57	Fe	2882.22	P	179.40	6.22
59	Co	126.67	P	3.33	2.63
60	Ni	83.33	P	14.53	17.44
65	Cu	1042.21	P	40.05	3.84
66	Zn	3738.89	P	187.10	5.00
72	Ge	68084.00	P	1033.00	1.52
75	As	-75.04	P	165.70	220.81
82	Se	-31.78	P	74.72	235.13
95	Mo	150.00	P	10.00	6.67
109	Ag	158.89	P	18.95	11.93
111	Cd	134.18	P	36.62	27.29
115	In	641888.38	P	15010.00	2.34
121	Sb	215.56	P	18.95	8.79
137	Ba	67.78	P	5.09	7.51
205	Tl	993.33	P	52.39	5.27
208	Pb	960.00	P	97.13	10.12
209	Bi	534873.31	P	16060.00	3.00

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 8 2007 07:49 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:48 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	382023.31	P	2041.00	0.53
9 Be	601.11	P	37.17	6.18
23 Na	1503425.00	A	4866.00	0.32
26 Mg	24985.55	P	823.20	3.29
27 Al	212304.41	P	3921.00	1.85
39 K	703755.13	M	15500.00	2.20
44 Ca	9494.60	P	51.16	0.54
45 Sc	353404.41	P	1211.00	0.34
51 V	3569.71	P	515.00	14.43
52 Cr	4560.00	P	86.22	1.89
55 Mn	2204.44	P	51.68	2.34
57 Fe	6235.56	P	76.98	1.23
59 Co	1416.67	P	97.70	6.90
60 Ni	391.11	P	15.75	4.03
65 Cu	1551.00	P	30.24	1.95
66 Zn	1508.89	P	111.00	7.36
72 Ge	69476.22	P	742.80	1.07
75 As	45.34	P	112.60	248.33
82 Se	-64.89	P	63.01	97.10
95 Mo	586.67	P	0.00	0.00
109 Ag	1304.44	P	86.30	6.62
111 Cd	395.01	P	4.83	1.22
115 In	634322.19	P	1679.00	0.26
121 Sb	1114.44	P	144.30	12.95
137 Ba	577.78	P	33.55	5.81
205 Tl	1894.44	P	80.30	4.24
208 Pb	5132.22	P	141.80	2.76
209 Bi	547127.81	P	11240.00	2.05

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	382023.31	0.5343	382625.53	99.84	80 - 120	
45 Sc	353404.44	0.3427	356151.13	99.23	80 - 120	
72 Ge	69476.227	1.0691	68084	102.04	80 - 120	
115 In	634322.25	0.2647	641888.44	98.82	80 - 120	
209 Bi	547127.75	2.0544	534873.31	102.29	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 8 2007 07:53 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:52 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	384011.09	P	3865.00	1.01
9 Be	1111.11	P	26.74	2.41
23 Na	1734515.00	A	28380.00	1.64
26 Mg	47478.89	P	330.70	0.70
27 Al	377773.31	P	3140.00	0.83
39 K	901043.38	A	4836.00	0.54
44 Ca	13606.43	P	266.30	1.96
45 Sc	359692.19	P	5389.00	1.50
51 V	4749.47	P	909.20	19.14
52 Cr	6103.33	P	182.70	2.99
55 Mn	3965.55	P	78.62	1.98
57 Fe	8796.67	P	140.10	1.59
59 Co	2534.44	P	78.34	3.09
60 Ni	806.67	P	27.28	3.38
65 Cu	1702.02	P	18.36	1.08
66 Zn	2248.89	P	104.00	4.62
72 Ge	67886.22	P	863.40	1.27
75 As	398.84	P	126.90	31.82
82 Se	21.33	P	55.69	261.05
95 Mo	1020.00	P	38.44	3.77
109 Ag	2567.78	P	176.60	6.88
111 Cd	730.43	P	35.68	4.88
115 In	633797.63	P	11420.00	1.80
121 Sb	1946.67	P	57.83	2.97
137 Ba	1248.89	P	76.33	6.11
205 Tl	2928.89	P	98.45	3.36
208 Pb	6897.78	P	225.20	3.26
209 Bi	533421.13	P	15520.00	2.91

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	384011.13	1.0065	382625.53	100.36	80 - 120	
45 Sc	359692.22	1.4982	356151.13	100.99	80 - 120	
72 Ge	67886.227	1.2718	68084	99.71	80 - 120	
115 In	633797.63	1.8018	641888.44	98.74	80 - 120	
209 Bi	533421.06	2.9095	534873.31	99.73	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- : Max. Number of Failures Allowed
0 :ISTD Failures 0 : Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 8 2007 07:57 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 07:56 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	380241.09	P	790.80	0.21
9 Be	2128.89	P	77.27	3.63
23 Na	2155032.00	A	37940.00	1.76
26 Mg	91665.55	P	857.90	0.94
27 Al	707641.63	A	9545.00	1.35
39 K	1184236.00	A	8960.00	0.76
44 Ca	22855.67	P	341.20	1.49
45 Sc	354767.81	P	1519.00	0.43
51 V	7717.43	P	36.38	0.47
52 Cr	8390.00	P	195.00	2.32
55 Mn	6692.22	P	197.40	2.95
57 Fe	14566.67	P	86.60	0.59
59 Co	5438.89	P	89.21	1.64
60 Ni	1323.33	P	60.83	4.60
65 Cu	2388.49	P	88.59	3.71
66 Zn	3497.78	P	62.92	1.80
72 Ge	68189.56	P	618.10	0.91
75 As	870.56	P	176.40	20.26
82 Se	30.67	P	76.88	250.70
95 Mo	1993.33	P	89.69	4.50
109 Ag	4927.78	P	193.80	3.93
111 Cd	1298.17	P	71.28	5.49
115 In	632419.38	P	6772.00	1.07
121 Sb	3748.89	P	65.18	1.74
137 Ba	1511.11	P	63.62	4.21
205 Tl	4991.11	P	136.70	2.74
208 Pb	13117.78	P	321.40	2.45
209 Bi	533381.13	P	13900.00	2.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	380241.13	0.208	382625.53	99.38	80 - 120	
45 Sc	354767.78	0.4282	356151.13	99.61	80 - 120	
72 Ge	68189.555	0.9064	68084	100.16	80 - 120	
115 In	632419.44	1.0708	641888.44	98.52	80 - 120	
209 Bi	533381.06	2.606	534873.31	99.72	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 8 2007 08:01 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:00 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	377210.00	P	5557.00	1.47
9 Be	21627.78	P	506.40	2.34
23 Na	10415160.00	A	50730.00	0.49
26 Mg	907348.00	A	10950.00	1.21
27 Al	6762383.00	A	56650.00	0.84
39 K	6618201.00	A	102400.00	1.55
44 Ca	171515.30	P	2450.00	1.43
45 Sc	353636.69	P	10260.00	2.90
51 V	57513.29	P	967.30	1.68
52 Cr	51242.22	P	614.10	1.20
55 Mn	62231.11	P	743.40	1.19
57 Fe	122738.90	P	1246.00	1.02
59 Co	52470.00	P	256.40	0.49
60 Ni	12305.55	P	46.71	0.38
65 Cu	15200.35	P	102.00	0.67
66 Zn	10034.44	P	127.00	1.27
72 Ge	69016.89	P	2128.00	3.08
75 As	8632.10	P	146.10	1.69
82 Se	851.56	P	19.43	2.28
95 Mo	19213.33	P	239.50	1.25
109 Ag	49048.89	P	775.20	1.58
111 Cd	11653.62	P	75.75	0.65
115 In	629155.63	P	23230.00	3.69
121 Sb	35627.78	P	586.90	1.65
137 Ba	11826.67	P	410.40	3.47
205 Tl	45233.33	P	1452.00	3.21
208 Pb	126563.30	P	2367.00	1.87
209 Bi	531631.13	P	24270.00	4.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	377210	1.4732	382625.53	98.58	80 - 120	
45 Sc	353636.66	2.9013	356151.13	99.29	80 - 120	
72 Ge	69016.891	3.0833	68084	101.37	80 - 120	
115 In	629155.56	3.6923	641888.44	98.02	80 - 120	
209 Bi	531631.06	4.5652	534873.31	99.39	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 8 2007 08:05 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:04 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	373712.19	P	1810.00	0.48
9	Be	207304.41	P	2672.00	1.29
23	Na	90023152.00	A	1710000.00	1.90
26	Mg	8386911.00	A	46300.00	0.55
27	Al	64515760.00	A	528300.00	0.82
39	K	58208472.00	A	1053000.00	1.81
44	Ca	1694354.00	A	21570.00	1.27
45	Sc	358163.31	P	2622.00	0.73
51	V	553296.88	P	2631.00	0.48
52	Cr	467685.59	P	1428.00	0.31
55	Mn	594856.69	P	6080.00	1.02
57	Fe	1186831.00	A	15360.00	1.29
59	Co	510035.59	P	2636.00	0.52
60	Ni	116422.20	P	223.70	0.19
65	Cu	140136.00	P	858.40	0.61
66	Zn	81007.78	P	669.60	0.83
72	Ge	69665.33	P	637.40	0.91
75	As	84657.81	P	117.70	0.14
82	Se	8212.22	P	99.18	1.21
95	Mo	186937.80	P	891.70	0.48
109	Ag	471474.41	P	2182.00	0.46
111	Cd	110479.40	P	1283.00	1.16
115	In	617066.19	P	3151.00	0.51
121	Sb	349661.09	P	668.10	0.19
137	Ba	117647.80	P	685.30	0.58
205	Tl	443657.81	P	15330.00	3.46
208	Pb	1212110.00	P	24020.00	1.98
209	Bi	523178.91	P	15890.00	3.04

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	373712.22	0.4843	382625.53	97.67	80 - 120	
45	Sc	358163.31	0.7321	356151.13	100.56	80 - 120	
72	Ge	69665.336	0.915	68084	102.32	80 - 120	
115	In	617066.25	0.5106	641888.44	96.13	80 - 120	
209	Bi	523178.91	3.0372	534873.31	97.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C08t00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 8 2007 08:09 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 08 2007 08:08 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	356940.00	P	3970.00	1.11
9 Be	415618.91	P	4831.00	1.16
23 Na	181920990.00	A	1627000.00	0.89
26 Mg	16693900.00	A	25740.00	0.15
27 Al	128312700.00	A	650000.00	0.51
39 K	115795500.00	A	1428000.00	1.23
44 Ca	3315358.00	A	56870.00	1.72
45 Sc	345755.50	P	5411.00	1.57
51 V	1103045.00	A	32820.00	2.98
52 Cr	908162.63	A	23590.00	2.60
55 Mn	1172304.00	A	6307.00	0.54
57 Fe	2347149.00	A	28470.00	1.21
59 Co	1000815.00	A	5505.00	0.55
60 Ni	230261.09	P	3222.00	1.40
65 Cu	275846.91	P	1967.00	0.71
66 Zn	155450.00	P	544.40	0.35
72 Ge	67972.44	P	276.40	0.41
75 As	167473.20	P	1021.00	0.61
82 Se	15783.33	P	65.03	0.41
95 Mo	373536.69	P	3577.00	0.96
109 Ag	906682.00	A	6562.00	0.72
111 Cd	217994.09	P	2585.00	1.19
115 In	586728.81	P	5508.00	0.94
121 Sb	686725.63	P	2424.00	0.35
137 Ba	234900.00	P	575.10	0.24
205 Tl	889681.13	P	21970.00	2.47
208 Pb	2390938.00	A	45060.00	1.88
209 Bi	496742.19	P	10660.00	2.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	356940	1.1122	382625.53	93.29	80 - 120	
45 Sc	345755.53	1.565	356151.13	97.08	80 - 120	
72 Ge	67972.445	0.4066	68084	99.84	80 - 120	
115 In	586728.88	0.9388	641888.44	91.41	80 - 120	
209 Bi	496742.22	2.146	534873.31	92.87	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C08t00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652012 File : c08t0012 Time : 08-MAR-2007 20:17
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.4813	0.8893	10000	9638	ug/L	-4	10	
Antimony	0.4414	0.2775	100.0	95.44	ug/L	-5	10	
Arsenic	0.6639	0.6026	100.0	98.13	ug/L	-2	10	
Barium	0.2098	0.0922	100.0	93.03	ug/L	-7	10	
Beryllium	0.4168	0.2685	100.0	93.11	ug/L	-7	10	
Cadmium	1.3979	0.7805	100.0	97.50	ug/L	-3	10	
Calcium	0.0524	0.0229	10000	9589	ug/L	-4	10	
Chromium	11.227	3.2792	100.0	97.81	ug/L	-2	10	
Cobalt	5.4658	3.5242	100.0	95.83	ug/L	-4	10	
Copper	3.5084	0.9585	100.0	94.31	ug/L	-6	10	
Iron	0.1792	0.0830	10000	9627	ug/L	-4	10	
Lead	2.0099	1.1246	100.0	94.12	ug/L	-6	10	
Magnesium	0.1855	0.1167	10000	9722	ug/L	-3	10	
Manganese	7.5920	4.1174	100.0	95.64	ug/L	-4	10	
Molybdenum	2.1328	1.3116	100.0	95.88	ug/L	-4	10	
Nickel	1.4561	0.8061	100.0	95.39	ug/L	-5	10	
Potassium	3.2040	0.7992	10000	9555	ug/L	-4	10	
Selenium	-0.035	0.0579	100.0	99.63	ug/L	0	10	
Silver	5.1407	3.4670	100.0	103.6	ug/L	4	10	
Sodium	6.3331	1.2622	10000	9614	ug/L	-4	10	
Thallium	1.5318	0.8161	50.00	46.01	ug/L	-8	10	
Vanadium	9.5938	3.8285	100.0	94.62	ug/L	-5	10	
Zinc	3.6542	0.5536	100.0	94.47	ug/L	-6	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	376541	-1.59
Scandium	356151	356369	0.06
Germanium	68084	70240	3.17
Indium	641888	620910	-3.27
Bismuth	534873	526316	-1.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

:nst : MET05
;eqnum : 57097652033 File : c08t0033
:al : 57097652001 Caldate: 08-MAR-2007
;tandards: S5654

IDF : 1.0
Time : 08-MAR-2007 21:41

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.9155	10000	9922	ug/L	-1	10	
Antimony	0.4414	0.2764	100.0	95.03	ug/L	-5	10	
Arsenic	0.6639	0.5928	100.0	96.53	ug/L	-3	10	
Barium	0.2098	0.0922	100.0	93.02	ug/L	-7	10	
Beryllium	0.4168	0.2728	100.0	94.59	ug/L	-5	10	
Cadmium	1.3979	0.7255	100.0	90.62	ug/L	-9	10	
Calcium	0.0524	0.0229	10000	9574	ug/L	-4	10	
Chromium	11.227	3.1344	100.0	93.46	ug/L	-7	10	
Cobalt	5.4658	3.4635	100.0	94.18	ug/L	-6	10	
Copper	3.5084	0.9544	100.0	93.90	ug/L	-6	10	
Iron	0.1792	0.0809	10000	9385	ug/L	-6	10	
Lead	2.0099	1.1243	100.0	94.10	ug/L	-6	10	
Magnesium	0.1855	0.1202	10000	10020	ug/L	0	10	
Manganese	7.5920	3.9852	100.0	92.57	ug/L	-7	10	
Molybdenum	2.1328	1.2510	100.0	91.45	ug/L	-9	10	
Nickel	1.4561	0.7964	100.0	94.25	ug/L	-6	10	
Potassium	3.2040	0.8123	10000	9714	ug/L	-3	10	
Selenium	-0.035	0.0563	100.0	96.80	ug/L	-3	10	
Silver	5.1407	3.2546	100.0	97.28	ug/L	-3	10	
Sodium	6.3331	1.3097	10000	9982	ug/L	0	10	
Thallium	1.5318	0.8123	50.00	45.80	ug/L	-8	10	
Vanadium	9.5938	3.6728	100.0	90.75	ug/L	-9	10	
Zinc	3.6542	0.5653	100.0	96.57	ug/L	-3	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	354818	-7.27
Scandium	356151	327529	-8.04
Germanium	68084	68935	1.25
Indium	641888	571477	-10.97
Bismuth	534873	526006	-1.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57097652051 File : c08t0051
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5654

IDF : 1.0
Time : 08-MAR-2007 22:53

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8857	10000	9599	ug/L	-4	10	
Antimony	0.4414	0.2726	100.0	93.75	ug/L	-6	10	
Arsenic	0.6639	0.5744	100.0	93.54	ug/L	-6	10	
Barium	0.2098	0.0896	100.0	90.40	ug/L	-10	10	
Beryllium	0.4168	0.2647	100.0	91.79	ug/L	-8	10	
Cadmium	1.3979	0.7072	100.0	88.33	ug/L	**-12**	10	c- ***
Calcium	0.0524	0.0225	10000	9383	ug/L	-6	10	
Chromium	11.227	3.0685	100.0	91.48	ug/L	-9	10	
Cobalt	5.4658	3.3730	100.0	91.72	ug/L	-8	10	
Copper	3.5084	0.9295	100.0	91.43	ug/L	-9	10	
Iron	0.1792	0.0804	10000	9333	ug/L	-7	10	
Lead	2.0099	1.0995	100.0	92.02	ug/L	-8	10	
Magnesium	0.1855	0.1163	10000	9686	ug/L	-3	10	
Manganese	7.5920	3.9477	100.0	91.69	ug/L	-8	10	
Molybdenum	2.1328	1.2041	100.0	88.02	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7727	100.0	91.44	ug/L	-9	10	
Potassium	3.2040	0.7838	10000	9369	ug/L	-6	10	
Selenium	-0.035	0.0546	100.0	93.95	ug/L	-6	10	
Silver	5.1407	3.1565	100.0	94.35	ug/L	-6	10	
Sodium	6.3331	1.2515	10000	9531	ug/L	-5	10	
Thallium	1.5318	0.7918	50.00	44.64	ug/L	**-11**	10	c- ***
Vanadium	9.5938	3.5832	100.0	88.53	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5466	100.0	93.21	ug/L	-7	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384233	0.42
Scandium	356151	354410	-0.49
Germanium	68084	74430	9.32
Indium	641888	609388	-5.06
Bismuth	534873	562534	5.17

=low bias c=CCV

57097652051

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652067 File : c08t0067 Time : 08-MAR-2007 23:57
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5654

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.4813	0.8911	10000	9658	ug/L	-3	10	
Antimony	0.4414	0.2739	100.0	94.16	ug/L	-6	10	
Arsenic	0.6639	0.5771	100.0	93.98	ug/L	-6	10	
Barium	0.2098	0.0899	100.0	90.66	ug/L	-9	10	
Beryllium	0.4168	0.2664	100.0	92.37	ug/L	-8	10	
Cadmium	1.3979	0.6967	100.0	87.02	ug/L	**-13**	10	c- ***
Calcium	0.0524	0.0226	10000	9432	ug/L	-6	10	
Chromium	11.227	3.0743	100.0	91.65	ug/L	-8	10	
Cobalt	5.4658	3.4579	100.0	94.03	ug/L	-6	10	
Copper	3.5084	0.9449	100.0	92.96	ug/L	-7	10	
Iron	0.1792	0.0825	10000	9568	ug/L	-4	10	
Lead	2.0099	1.1107	100.0	92.96	ug/L	-7	10	
Magnesium	0.1855	0.1181	10000	9837	ug/L	-2	10	
Manganese	7.5920	4.0463	100.0	93.99	ug/L	-6	10	
Molybdenum	2.1328	1.2018	100.0	87.85	ug/L	**-12**	10	c- ***
Nickel	1.4561	0.7956	100.0	94.16	ug/L	-6	10	
Potassium	3.2040	0.7828	10000	9356	ug/L	-6	10	
Selenium	-0.035	0.0551	100.0	94.79	ug/L	-5	10	
Silver	5.1407	3.1065	100.0	92.86	ug/L	-7	10	
Sodium	6.3331	1.2834	10000	9778	ug/L	-2	10	
Thallium	1.5318	0.7973	50.00	44.95	ug/L	-10	10	
Vanadium	9.5938	3.5824	100.0	88.51	ug/L	**-11**	10	c- ***
Zinc	3.6542	0.5597	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	364333	-4.78
Scandium	356151	333904	-6.25
Germanium	68084	71338	4.78
Indium	641888	568976	-11.36
Bismuth	534873	534394	-0.09

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652015 File : c08t0015 Time : 08-MAR-2007 20:29
Cal : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.04973]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1181	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	[0.02385]	0.1000	0.01579	ug/L	!ib
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	374762	-2.06
Scandium	356151	351811	-1.22
Germanium	68084	70476	3.51
Indium	641888	634789	-1.11
Bismuth	534873	545702	2.02

warning ib=instrument blank

57097652015

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57097652035
Cal : 57097652001

File : c08t0035
Caldate: 08-MAR-2007

IDF : 1.0
Time : 08-MAR-2007 21:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	[0.007363]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	ND	0.1000	0.3448	ug/L	
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	368761	-3.62
Scandium	356151	334843	-5.98
Germanium	68084	71147	4.50
Indium	641888	604863	-5.77
Bismuth	534873	554307	3.63

warning ib=instrument blank

57097652035

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

:nst : MET05 IDF : 1.0
:eqnum : 57097652053 File : c08t0053 Time : 08-MAR-2007 23:01
:al : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	0.2424	0.1000	0.007794	ug/L	ib ***
Barium	[0.005533]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01349]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	[0.05450]	0.1000	0.01770	ug/L	!ib
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.2074	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	384741	0.55
Scandium	356151	351291	-1.36
Germanium	68084	74704	9.72
Indium	641888	629371	-1.95
Bismuth	534873	577159	7.91

warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652069 File : c08t0069 Time : 09-MAR-2007 00:05
Cal : 57097652001 Caldate: 08-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	ND	0.1000	0.01065	ug/L	
Arsenic	[0.08079]	0.1000	0.007794	ug/L	!ib
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	ND	0.1000	0.003448	ug/L	
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	ND	0.1000	0.002798	ug/L	
Magnesium	ND	10.00	17.25	ug/L	
Manganese	0.1683	0.1000	0.01770	ug/L	ib ***
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.1993	0.1000	0.3448	ug/L	ib ***
Silver	ND	0.1000	0.009973	ug/L	
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	378116	-1.18
Scandium	356151	340741	-4.33
Germanium	68084	73735	8.30
Indium	641888	600089	-6.51
Bismuth	534873	565333	5.69

warning ib=instrument blank

57097652069

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652017 File : c08t0017 Time : 08-MAR-2007 20:37
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.05647]	0.1000	ug/L	
Arsenic	0.9454	0.1000	ug/L	
Barium	1.306	0.1000	ug/L	
Beryllium	[0.01425]	0.1000	ug/L	
Cadmium	[0.07967]	0.1000	ug/L	
Chromium	1.932	0.1000	ug/L	
Cobalt	0.4899	0.1000	ug/L	
Copper	1.808	0.1000	ug/L	
Lead	0.6184	0.1000	ug/L	
Manganese	0.7207	0.1000	ug/L	
Nickel	2.596	0.1000	ug/L	
Selenium	0.5051	0.1000	ug/L	
Silver	0.2024	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1178	0.1000	ug/L	
Zinc	[0.08790]	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	121500	ug/L	122
Calcium	300000	355500	ug/L	119
Iron	250000	255300	ug/L	102
Magnesium	100000	119800	ug/L	120
Molybdenum	2000	2202	ug/L	110
Potassium	100000	120100	ug/L	120
Sodium	250000	279700	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	282773	-26.10
Scandium	356151	280052	-21.37
Germanium	68084	62234	-8.59
Indium	641888	464218	-27.68
Bismuth	534873	375342	-29.83

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652018 File : c08t0018 Time : 08-MAR-2007 20:41
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	109600	ug/L	10		
Arsenic	100.0	100.1	ug/L	0	20	
Cadmium	100.0	91.08	ug/L	-9	20	
Calcium	300000	318300	ug/L	6		
Chromium	200.0	213.5	ug/L	7	20	
Cobalt	200.0	202.7	ug/L	1	20	
Copper	200.0	190.6	ug/L	-5	20	
Iron	250000	235000	ug/L	-6		
Magnesium	100000	108900	ug/L	9		
Manganese	200.0	209.2	ug/L	5	20	
Molybdenum	2000	2020	ug/L	1		
Nickel	200.0	196.5	ug/L	-2	20	
Potassium	100000	109300	ug/L	9		
Selenium	100.0	81.78	ug/L	-18	20	
Silver	50.00	41.37	ug/L	-17	20	
Sodium	250000	251400	ug/L	1		
Vanadium	200.0	221.0	ug/L	11	20	
Zinc	100.0	83.41	ug/L	-17	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	289056	-18.84
Germanium	68084	61867	-9.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

nst : MET05 IDF : 1.0
eqnum : 57097652072 File : c08t0072 Time : 09-MAR-2007 00:17
al : 57097652001 Caldate: 08-MAR-2007
tandards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.04686]	0.1000	ug/L	
Arsenic	0.7403	0.1000	ug/L	
Barium	1.371	0.1000	ug/L	
Beryllium	[0.005095]	0.1000	ug/L	
Cadmium	[0.03532]	0.1000	ug/L	
Chromium	1.947	0.1000	ug/L	
Cobalt	0.5032	0.1000	ug/L	
Copper	1.487	0.1000	ug/L	
Lead	0.6051	0.1000	ug/L	
Manganese	0.7752	0.1000	ug/L	
Nickel	2.521	0.1000	ug/L	
Selenium	0.4467	0.1000	ug/L	
Silver	0.1922	0.1000	ug/L	
Thallium	[0]	0.05000	ug/L	
Vanadium	0.1686	0.1000	ug/L	
Zinc	0.1352	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	349100	ug/L	116
Iron	250000	257600	ug/L	103
Magnesium	100000	118400	ug/L	118
Molybdenum	2000	2147	ug/L	107
Potassium	100000	117600	ug/L	118
Sodium	250000	280100	ug/L	112

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Lithium	382626	286739	-25.06
Scandium	356151	273610	-23.18
Germanium	68084	59624	-12.43
Indium	641888	441697	-31.19
Bismuth	534873	359606	-32.77

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57097652073 File : c08t0073 Time : 09-MAR-2007 00:21
Cal : 57097652001 Caldate: 08-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107300	ug/L	7		
Arsenic	100.0	97.46	ug/L	-3	20	
Cadmium	100.0	86.13	ug/L	-14	20	
Calcium	300000	316100	ug/L	5		
Chromium	200.0	212.1	ug/L	6	20	
Cobalt	200.0	200.9	ug/L	0	20	
Copper	200.0	187.6	ug/L	-6	20	
Iron	250000	234900	ug/L	-6		
Magnesium	100000	105500	ug/L	6		
Manganese	200.0	207.9	ug/L	4	20	
Molybdenum	2000	1947	ug/L	-3		
Nickel	200.0	194.7	ug/L	-3	20	
Potassium	100000	107200	ug/L	7		
Selenium	100.0	78.75	ug/L	**-21**	20	ab- ***
Silver	50.00	39.37	ug/L	**-21**	20	ab- ***
Sodium	250000	253500	ug/L	1		
Vanadium	200.0	222.0	ug/L	11	20	
Zinc	100.0	82.18	ug/L	-18	20	

ISTD (ICALBLK c08t0004)	ICALBLK Abund	Abund	%Drift
Scandium	356151	277282	-22.14
Germanium	68084	59868	-12.07

-=low bias ab=ICSAB

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

	IS1 (LI) READING	IS2 (SC) READING	IS3 (GE) READING	IS4 (IN) READING	IS5 (BI) READING	IS6 (TB) READING
ICALBLK STD	382626	356151	68084	641888	534873	629138
LOWER LIMIT	114788	106845	20425	192567	160462	188741
UPPER LIMIT	459151	427381	81701	770266	641848	754965

TYPE	SAMPLE	#						
ICB		015	374762	351811	70476	634789	545702	636819
ICSA		017	282773	280052	62234	464218	375342	523658
BLANK	QC378195	021	286751	265483	56170	467751	429380	479219
BS	QC378196	022	299261	269324	56317	464251	428812	495240
BSD	QC378197	023	304341	280663	57799	485844	440986	513617
MSS	193027-002	025	301590	281504	60861	473293	427058	511978
SER	QC378200	026	354330	323999	68648	567375	510768	591833
MS	QC378198	027	289210	272002	59259	446566	404090	492266
MSD	QC378199	028	302662	286557	60386	465383	417702	509972
CCV		033	354818	327529	68935	571477	526006	615202
CCB		035	368761	334843	71147	604863	554307	623597
BLANK	QC377794	038	288832	252909	66050	411535	343680	416729
SAMPLE	193213-001	039	317491	285287	62766	490930	471486	530648
SAMPLE	193213-001	040	353919	354557	65682	566096	490310	594053
SAMPLE	193027-001	041	304074	279260	60448	465164	427753	507988
SAMPLE	193027-003	042	306136	284770	62395	473615	442913	524578
SAMPLE	193027-004	043	296000	276433	61460	454660	425547	506572
SAMPLE	193027-005	044	304380	274887	62667	463824	445334	519516
SAMPLE	193027-006	045	301292	278263	63516	463376	441544	519511
SAMPLE	193027-007	046	313447	284828	64052	476699	448937	528018
SAMPLE	193027-008	047	300129	278130	62491	456999	426996	514842
CCV		051	384233	354410	74430	609388	562534	655934
CCB		053	384741	351291	74704	629371	577159	647367
SAMPLE	193027-011	056	323316	291899	62248	474956	414950	523872
SAMPLE	193027-012	057	308964	292548	62176	475526	423213	536579
SAMPLE	193027-013	058	327521	297913	65723	496938	458516	542464
SAMPLE	193027-014	059	317217	300733	65780	490236	456550	533196
SAMPLE	193027-015	060	320247	289779	65837	480362	464587	533033

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 08-MAR-2007
Sequence: 57097652 (c08t0)
Instrument ID: MET05

ICALBLK Filename: c08t0004
Date Analyzed: 08-MAR-2007
Time Analyzed: 19:45

TYPE	SAMPLE	#						
SAMPLE	193027-011	061	315396	285662	64537	462211	433890	534166
SAMPLE	193027-012	062	306337	330700	62107	454814	425383	534035
SAMPLE	193027-013	063	332340	312672	65892	517199	453802	557848
CCV		067	364333	333904	71338	568976	534394	613162
CCB		069	378116	340741	73735	600089	565333	626156
ICSA		072	286739	273610	59624	441697	359606	499152

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

15000

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c08t0001	TUN				08-MAR-2007 19:32	1.0	1.0				1	
002	c08t0002	X	RINSE			08-MAR-2007 19:37	1.0					2	
003	c08t0003	X	RINSE			08-MAR-2007 19:41	1.0					2	
004	c08t0004	ICALBLK	CALBLANK			08-MAR-2007 19:45	1.0	1.0				2	
005	c08t0005	ICAL				08-MAR-2007 19:49	1.0	1.0				3	
006	c08t0006	ICAL				08-MAR-2007 19:53	1.0	1.0				4	
007	c08t0007	ICAL				08-MAR-2007 19:57	1.0	1.0				5	
008	c08t0008	ICAL				08-MAR-2007 20:01	1.0	1.0				6	
009	c08t0009	ICAL				08-MAR-2007 20:05	1.0	1.0				7	
010	c08t0010	ICAL				08-MAR-2007 20:09	1.0	1.0				8	
011	c08t0011	X	RINSE			08-MAR-2007 20:13	1.0					2	
012	c08t0012	ICV				08-MAR-2007 20:17	1.0	1.0			1	9	
013	c08t0013	X	RINSE			08-MAR-2007 20:21	1.0					2	
014	c08t0014	X				08-MAR-2007 20:25	1.0	1.0				2	
015	c08t0015	ICB				08-MAR-2007 20:29	1.0	1.0	1		1	2	
016	c08t0016	X				08-MAR-2007 20:33	1.0	1.0				2	
017	c08t0017	ICSA				08-MAR-2007 20:37	1.0	1.0			1	10 2	7:CA=355500
018	c08t0018	ICSAB				08-MAR-2007 20:41	1.0	1.0			1	11 2	11:CA=318300
019	c08t0019	X	RINSE			08-MAR-2007 20:45	1.0					2	
020	c08t0020	X	RINSE			08-MAR-2007 20:49	1.0					2	
021	c08t0021	BLANK	QC378195	122867	Filtra	08-MAR-2007 20:53	1.0	1.0			1	2	
022	c08t0022	BS	QC378196	122867	Filtra	08-MAR-2007 20:57	1.0	1.0			1	2	
023	c08t0023	BSD	QC378197	122867	Filtra	08-MAR-2007 21:01	1.0	1.0			1	2	
024	c08t0024	X	RINSE			08-MAR-2007 21:05	1.0					2	
025	c08t0025	MSS	193027-002	122867	Filtra	08-MAR-2007 21:09	1.0	1.0	3		1	2	3:MG=77730.0
026	c08t0026	SER	QC378200	122867	Filtra	08-MAR-2007 21:13	5.0	1.0	1	1	1	2	
027	c08t0027	MS	QC378198	122867	Filtra	08-MAR-2007 21:17	1.0	1.0	1		1	2	3:MG=89390.0
028	c08t0028	MSD	QC378199	122867	Filtra	08-MAR-2007 21:21	1.0	1.0	1		1	2	3:MG=83750.0
029	c08t0029	PDS	QC378201	122867	Filtra	08-MAR-2007 21:25	50.0	1.0			1	12	3:MG=84700.0
030	c08t0030	X	RINSE			08-MAR-2007 21:29	1.0					2	
031	c08t0031	X	RINSE			08-MAR-2007 21:33	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RCH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR ..
032	c08t0032	X	RINSE			08-MAR-2007 21:37	1.0				2	
033	c08t0033	CCV				08-MAR-2007 21:41	1.0	1.0		1	13	
034	c08t0034	X	RINSE			08-MAR-2007 21:45	1.0				2	
035	c08t0035	CCB				08-MAR-2007 21:49	1.0	1.0		1	2	
036	c08t0036	X				08-MAR-2007 21:53	1.0	1.0			2	
037	c08t0037	X				08-MAR-2007 21:57	1.0	1.0			2	
038	c08t0038	BLANK	QC377794	122769	Filtra	08-MAR-2007 22:01	1.0	1.0	4	1	2	
039	c08t0039	SAMPLE	193213-001	122867	Filtra	08-MAR-2007 22:05	1.0	1.0	5	1	2	2:NA=33040.0
040	c08t0040	SAMPLE	193213-001	122867	Water	08-MAR-2007 22:09	1.0	1.0	5	1	2	2:NA=30470.0
041	c08t0041	SAMPLE	193027-001	122867	Filtra	08-MAR-2007 22:13	1.0	1.0	6	1	2	3:NA=76650.0
042	c08t0042	SAMPLE	193027-003	122867	Filtra	08-MAR-2007 22:17	1.0	1.0	6	1	2	3:NA=67770.0
043	c08t0043	SAMPLE	193027-004	122867	Filtra	08-MAR-2007 22:21	1.0	1.0	6	1	2	3:NA=77290.0
044	c08t0044	SAMPLE	193027-005	122867	Filtra	08-MAR-2007 22:25	1.0	1.0	5	1	2	3:MG=88070.0
045	c08t0045	SAMPLE	193027-006	122867	Filtra	08-MAR-2007 22:29	1.0	1.0	6	1	2	3:NA=67140.0
046	c08t0046	SAMPLE	193027-007	122867	Filtra	08-MAR-2007 22:33	1.0	1.0	6	1	2	3:MG=63870.0
047	c08t0047	SAMPLE	193027-008	122867	Filtra	08-MAR-2007 22:37	1.0	1.0	6	1	2	3:NA=108300
048	c08t0048	X	RINSE			08-MAR-2007 22:41	1.0				2	
049	c08t0049	X	RINSE			08-MAR-2007 22:45	1.0				2	
050	c08t0050	X	RINSE			08-MAR-2007 22:49	1.0				2	
051	c08t0051	CCV				08-MAR-2007 22:53	1.0	1.0	4	1	13	
052	c08t0052	X	RINSE			08-MAR-2007 22:57	1.0				2	
053	c08t0053	CCB				08-MAR-2007 23:01	1.0	1.0	2	1	2	
054	c08t0054	X				08-MAR-2007 23:05	1.0	1.0			2	
055	c08t0055	X				08-MAR-2007 23:09	1.0	1.0			2	
056	c08t0056	SAMPLE	193027-011	122867	Filtra	08-MAR-2007 23:13	1.0	1.0	6	1	2	3:NA=192700
057	c08t0057	SAMPLE	193027-012	122867	Filtra	08-MAR-2007 23:17	1.0	1.0	7	1	2	4:NA=178400
058	c08t0058	SAMPLE	193027-013	122867	Filtra	08-MAR-2007 23:21	1.0	1.0	7	1	2	4:NA=46740.0
059	c08t0059	SAMPLE	193027-014	122867	Filtra	08-MAR-2007 23:25	1.0	1.0	5	1	2	2:MG=55170.0
060	c08t0060	SAMPLE	193027-015	122867	Filtra	08-MAR-2007 23:29	1.0	1.0	7	1	2	4:CA=60370.0
061	c08t0061	SAMPLE	193027-011	122867	Water	08-MAR-2007 23:33	1.0	1.0	6	1	2	3:NA=201700
062	c08t0062	SAMPLE	193027-012	122867	Water	08-MAR-2007 23:37	1.0	1.0	9	1	2	6:NA=152100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RCH Date: 3/9/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57097652 Instrument: MET05 Agilent ICP-MS Begun: 08-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR ..
063	c08t0063	SAMPLE	193027-013	122867	Water	08-MAR-2007 23:41	1.0	1.0	9		1	2	6:FE=94170.0
064	c08t0064	X	RINSE			08-MAR-2007 23:45	1.0					2	
065	c08t0065	X	RINSE			08-MAR-2007 23:49	1.0					2	
066	c08t0066	X	RINSE			08-MAR-2007 23:53	1.0					2	
067	c08t0067	CCV				08-MAR-2007 23:57	1.0	1.0	3		1	13	
068	c08t0068	X	RINSE			09-MAR-2007 00:01	1.0					2	
069	c08t0069	CCB				09-MAR-2007 00:05	1.0	1.0	2		1	2	
070	c08t0070	X				09-MAR-2007 00:09	1.0	1.0				2	
071	c08t0071	X				09-MAR-2007 00:13	1.0	1.0				2	
072	c08t0072	ICSA				09-MAR-2007 00:17	1.0	1.0			1	10 2	7:CA=349100
073	c08t0073	ICSAB				09-MAR-2007 00:21	1.0	1.0	2		1	11 2	11:CA=316100

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: RLH Date: 3/9/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET05
alnum : 57098723001
nits : ug/L

Date : 09-MAR-2007 13:36
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c09n0005	57098723005		09-MAR-2007 13:40	S5645
L2	c09n0006	57098723006		09-MAR-2007 13:44	S5647
L3	c09n0007	57098723007		09-MAR-2007 13:48	S5649
L4	c09n0008	57098723008		09-MAR-2007 13:52	S5650
L5	c09n0009	57098723009		09-MAR-2007 13:56	S5644
L6	c09n0010	57098723010		09-MAR-2007 14:00	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
luminum	2.8042	2.1844	1.0745	1.0107	1.0232	1.0155	BLNK	-0.8871	0.98329		1.5187	1.000	0.995	
ntimony	0.6149	0.5009	0.2444	0.2357	0.2435	0.2496	BLNK	-0.0260	4.02692		0.3482	1.000	0.995	
rsenic	3.1881	2.2147	0.7619	0.6050	0.5972	0.5931	BLNK	-0.2885	1.68660		1.3267	1.000	0.995	
arium	0.2163	0.2162	0.1187	0.0823	0.0829	0.0861	BLNK	-0.0255	11.7073		0.1338	1.000	0.995	
eryllium	0.6295	0.5457	0.2594	0.2563	0.2600	0.2675	BLNK	-0.0086	3.75919		0.3697	1.000	0.995	
admium	2.1671	1.4586	0.6981	0.6410	0.6220	0.6235	BLNK	-0.0830	1.60534		1.0350	1.000	0.995	
alcium	0.0908	0.0603	0.0260	0.0224	0.0230	0.0226	BLNK	-11.814	44.0716		0.0408	1.000	0.995	
hromium	29.638	14.524	5.0464	2.9299	2.7711	2.6674	BLNK	-0.8293	0.37385		9.5962	1.000	0.995	
obalt	8.4510	6.6624	3.1841	3.1800	3.1521	3.1711	BLNK	-0.0080	0.31574		4.6335	1.000	0.995	
opper	5.7769	6.7614	1.3582	1.2523	0.9450	0.9386	BLNK	-0.3359	1.06548		2.8387	1.000	0.995	
ron	0.3605	0.2136	0.0886	0.0719	0.0712	0.0707	BLNK	-25.633	14.1432		0.1461	1.000	0.995	
ead	3.1257	2.4025	1.1761	1.1294	1.1625	1.1783	BLNK	-0.0217	0.85113		1.6958	1.000	0.995	
agnesium	0.3547	0.2791	0.1386	0.1370	0.1324	0.1325	BLNK	-0.7814	7.54841		0.1957	1.000	0.995	
anganese	11.412	8.1722	3.7114	3.4853	3.4679	3.4588	BLNK	-0.0690	0.28909		5.6179	1.000	0.995	
olybdenum	3.5302	2.4362	1.2379	1.1876	1.2057	1.2507	BLNK	-0.0117	0.80545		1.8081	1.000	0.995	
ickel	2.4800	1.9147	0.8330	0.7541	0.7333	0.7303	BLNK	-0.0682	1.36865		1.2409	1.000	0.995	
otassium	9.0303	4.6626	1.5355	0.8905	0.8343	0.8434	BLNK	-81.869	1.19407		2.9661	1.000	0.995	
elenium	0.1706	0.1337	0.0586	0.0583	0.0577	0.0560	BLNK	0.56516	17.6854		0.0892	1.000	0.995	
ilver	7.0364	5.7352	2.7519	2.6818	2.6363	2.6158	BLNK	-0.0096	0.38170		3.9096	1.000	0.995	
odium	11.567	6.4196	2.2978	1.4988	1.4178	1.4154	BLNK	-52.060	0.70846		4.1028	1.000	0.995	
hallium	2.7017	1.9041	0.8664	0.8519	0.8820	0.9034	BLNK	-0.0375	1.11281		1.3516	1.000	0.995	
anadium	32.678	14.725	4.9847	3.4262	3.3422	3.3396	BLNK	-0.7916	0.30084		10.416	1.000	0.995	
inc	6.8320	4.5286	1.2010	0.6161	0.5533	0.5336	BLNK	-0.8545	1.86948		2.3774	1.000	0.995	

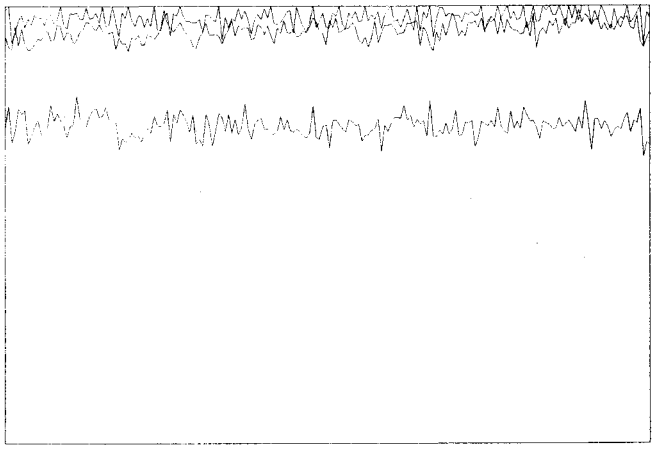
00097

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Barium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Calcium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Copper	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Iron	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Lead	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Magnesium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Potassium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Silver	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Sodium	10.000	25.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.0500	0.1250	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.1000	0.2500	1.0000	10.000	100.00	200.00	ug/L

nstrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

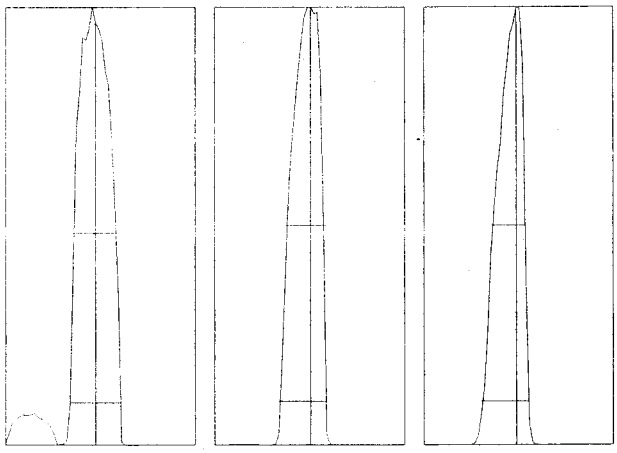
Tune Report

Tune File : nogas.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.382%
Doubly Charged:	70/140	1.828%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13638.0	14541.5	3.38	4.10
89	20,000	19443.0	19509.6	2.31	4.70
205	10,000	9442.0	9429.8	2.12	6.30
156/140	1	0.397%	0.395%	14.10	
70/140	5	1.848%	1.914%	7.67	



m/z:	7	89	205
Height:	14,614	19,754	9,564
Axis:	6.95	89.05	205.00
W-50%:	0.70	0.65	0.55
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 09, 2007 12:11:56
Printed : Mar 09, 2007 12:11:59 : 00099

Tune Report

Tune File : nogas.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1290 W	Extract 1	:	-115 V	AMU Gain	:	131
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	124
Smpl Depth	:	6.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9988
Torch-H	:	-1.1 mm	Einzel 2	:	8 V	Axis Offset	:	0.09
Torch-V	:	0.6 mm	Omega Bias	:	-45 V	QP Bias	:	-2 V
Carrier Gas	:	1.06 L/min	Omega (+)	:	1 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-1 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.1 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-6 V	Analog HV	:	1800 V
Sample Pump	:	--- rps				Pulse HV	:	1360 V
S/C Temp	:	2 degC						

Generated : Mar 09, 2007 12:11:56
Printed : Mar 09, 2007 12:12:01 : 00100

P/A Factor Tuning Report

Acquired:Mar 9 2007 00:49 pm

Mass[amu]	Element	P/A Factor
6	Li	0.075421
9	Be	0.083917
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.099165
44	Ca	0.103338
45	Sc	0.099348
51	V	0.101107
52	Cr	0.102126
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.104319
57	Fe	0.106832
59	Co	0.105851
60	Ni	0.105981
63	Cu	0.105565
65	Cu	0.106701
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.103212
95	Mo	0.104928
98	Mo	0.103349
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.107921
111	Cd	Sensitivity too low
114	Cd	0.106323
115	In	0.106365
118	(In)	0.113278
121	Sb	0.107436
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.108631
166	Er	Sensitivity too low
205	Tl	0.111743
206	(Pb)	0.109923
207	(Pb)	0.113010
208	Pb	0.112820
209	Bi	0.112954

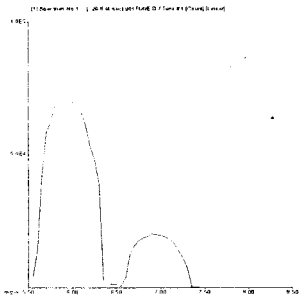
===Detector Parameters===
Discriminator: 9.1 mV
Analog HV: 1800 V
Pulse HV: 1360 V

6020 QC Tune Report

Data File:	**C:\ICPCHEM\1\DATA\07C09n00.B\001TUNE.D**
Date Acquired:	**Mar 9 2007 01:23 pm**
Acq. Method:	**TN6020.M**
Operator:	
Sample Name:	**tun,s5641**
Misc Info:	
Vial Number:	**1307**
Current Method:	**C:\ICPCHEM\1\METHODS\TN6020.M**

RSD (%)

Element	Actual	Required	Flag
7 Li	1.64	5.00	
59 Co	1.43	5.00	
115 In	0.38	5.00	
205 Tl	1.21	5.00	



7 Li

Mass Calib.

Actual: 6.95

Required: 6.90 - 7.10

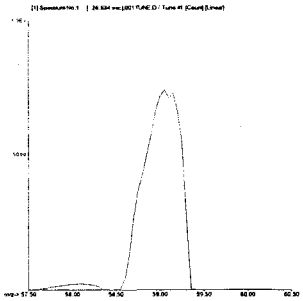
Flag:

Peak Width

Actual: 0.70

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.10

Required: 58.90 - 59.10

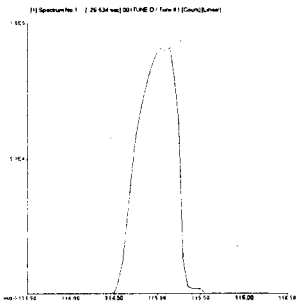
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



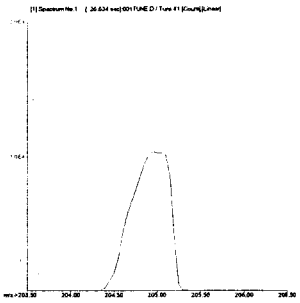
115 In

Mass Calib.

Actual:	115.05	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	205.00	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004C
Date Acquired: Mar 9 2007 01:36 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:39 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	635034.31	A	9041.00	1.42
9	Be	28.89	P	15.40	53.31
23	Na	671960.50	M	13170.00	1.96
26	Mg	945.56	P	193.30	20.44
27	Al	8241.11	P	1466.00	17.79
39	K	627002.63	M	9071.00	1.45
44	Ca	2451.12	P	77.00	3.14
45	Sc	457323.31	P	5056.00	1.11
51	V	5222.83	P	811.70	15.54
52	Cr	4400.00	P	57.83	1.31
55	Mn	473.33	P	47.26	9.98
57	Fe	3595.55	P	172.00	4.78
59	Co	50.00	P	20.82	41.64
60	Ni	98.89	P	13.47	13.62
65	Cu	625.55	P	70.42	11.26
66	Zn	906.67	P	46.67	5.15
72	Ge	99175.78	P	731.80	0.74
75	As	339.83	P	105.20	30.96
82	Se	-63.56	P	35.44	55.76
95	Mo	28.89	P	5.09	17.63
109	Ag	50.00	P	15.28	30.56
111	Cd	102.45	P	13.64	13.31
115	In	739964.69	M	13620.00	1.84
121	Sb	95.56	P	10.18	10.65
137	Ba	32.22	P	5.09	15.80
205	Tl	374.44	P	46.71	12.47
208	Pb	283.33	P	17.32	6.11
209	Bi	555317.81	P	3746.00	0.67

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 9 2007 01:40 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:39 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	629102.63	A	11750.00	1.87
9	Be	792.22	P	35.01	4.42
23	Na	1049144.00	A	26130.00	2.49
26	Mg	32171.11	P	757.10	2.35
27	Al	254300.00	P	4682.00	1.84
39	K	819012.00	A	10620.00	1.30
44	Ca	8231.70	P	109.60	1.33
45	Sc	453492.19	P	7029.00	1.55
51	V	6574.03	P	189.60	2.88
52	Cr	5962.22	P	95.24	1.60
55	Mn	2295.55	P	87.58	3.82
57	Fe	7253.33	P	173.60	2.39
59	Co	1700.00	P	81.10	4.77
60	Ni	498.89	P	11.71	2.35
65	Cu	1162.08	P	11.71	1.01
66	Zn	1374.44	P	22.19	1.61
72	Ge	100585.10	P	587.80	0.58
75	As	642.40	P	313.40	48.79
82	Se	34.22	P	43.13	126.03
95	Mo	710.00	P	49.33	6.95
109	Ag	1415.56	P	30.25	2.14
111	Cd	436.22	P	74.77	17.14
115	In	739578.13	P	9249.00	1.25
121	Sb	908.89	P	91.31	10.05
137	Ba	320.00	P	26.03	8.13
205	Tl	1512.22	P	61.13	4.04
208	Pb	3497.78	P	130.40	3.73
209	Bi	559732.19	P	6521.00	1.17

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	629102.63	1.8677	635034.25	99.07	80 - 120	
45	Sc	453492.22	1.55	457323.31	99.16	80 - 120	
72	Ge	100585.12	0.5844	99175.781	101.42	80 - 120	
115	In	739578.13	1.2506	739964.75	99.95	80 - 120	
209	Bi	559732.25	1.165	555317.75	100.79	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 9 2007 01:44 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:43 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	598083.38	A	4241.00	0.71
9 Be	1632.22	P	92.16	5.65
23 Na	1432860.00	A	11600.00	0.81
26 Mg	62306.66	P	1627.00	2.61
27 Al	487652.31	M	8581.00	1.76
39 K	1040770.00	A	262.90	0.03
44 Ca	13460.44	P	426.00	3.16
45 Sc	446511.09	P	7330.00	1.64
51 V	7387.60	P	662.90	8.97
52 Cr	7283.33	P	166.00	2.28
55 Mn	4097.78	P	56.80	1.39
57 Fe	10712.22	P	114.20	1.07
59 Co	3340.00	P	150.10	4.49
60 Ni	960.00	P	62.27	6.49
65 Cu	3390.84	P	54.81	1.62
66 Zn	2271.11	P	32.37	1.43
72 Ge	100302.70	P	1073.00	1.07
75 As	1110.18	P	107.70	9.70
82 Se	66.89	P	25.27	37.78
95 Mo	1222.22	P	71.91	5.88
109 Ag	2875.55	P	71.83	2.50
111 Cd	731.24	P	35.68	4.88
115 In	724410.81	P	11210.00	1.55
121 Sb	1814.44	P	42.21	2.33
137 Ba	783.33	P	32.83	4.19
205 Tl	2630.00	P	52.39	1.99
208 Pb	6636.67	P	75.35	1.14
209 Bi	552504.38	P	6686.00	1.21

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	598083.44	0.7091	635034.25	94.18	80 - 120	
45 Sc	446511.09	1.6416	457323.31	97.64	80 - 120	
72 Ge	100302.66	1.0698	99175.781	101.14	80 - 120	
115 In	724410.75	1.5475	739964.75	97.90	80 - 120	
209 Bi	552504.44	1.2101	555317.75	99.49	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 9 2007 01:48 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	610295.00	A	17000.00	2.79
9 Be	3165.56	P	55.01	1.74
23 Na	2062323.00	A	32680.00	1.58
26 Mg	124406.70	P	1338.00	1.08
27 Al	964288.31	A	17960.00	1.86
39 K	1378007.00	A	17100.00	1.24
44 Ca	23326.79	P	430.70	1.85
45 Sc	448761.09	P	3652.00	0.81
51 V	10066.86	P	1022.00	10.15
52 Cr	10196.67	P	49.10	0.48
55 Mn	7500.00	P	107.10	1.43
57 Fe	17905.55	P	468.80	2.62
59 Co	6432.22	P	287.20	4.47
60 Ni	1683.33	P	77.96	4.63
65 Cu	2743.89	P	113.40	4.13
66 Zn	2426.67	P	3.33	0.14
72 Ge	101035.80	P	834.90	0.83
75 As	1539.18	P	270.00	17.54
82 Se	118.67	P	96.76	81.54
95 Mo	2501.11	P	119.80	4.79
109 Ag	5560.00	P	110.10	1.98
111 Cd	1410.52	P	5.11	0.36
115 In	742585.69	P	6538.00	0.88
121 Sb	3630.00	P	92.07	2.54
137 Ba	1763.33	P	41.77	2.37
205 Tl	4813.33	P	187.70	3.90
208 Pb	13071.11	P	242.20	1.85
209 Bi	555924.38	P	10140.00	1.82

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	610295.06	2.7855	635034.25	96.10	80 - 120	
45 Sc	448761.09	0.8138	457323.31	98.13	80 - 120	
72 Ge	101035.78	0.8263	99175.781	101.88	80 - 120	
115 In	742585.69	0.8804	739964.75	100.35	80 - 120	
209 Bi	555924.44	1.824	555317.75	100.11	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 9 2007 01:52 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:50 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	616527.81	A	14170.00	2.30
9 Be	31583.33	P	395.80	1.25
23 Na	13405550.00	A	199000.00	1.48
26 Mg	1225290.00	A	7963.00	0.65
27 Al	9038961.00	A	34880.00	0.39
39 K	7964548.00	A	62070.00	0.78
44 Ca	199989.30	P	908.70	0.45
45 Sc	447234.41	P	7418.00	1.66
51 V	69786.60	P	149.80	0.21
52 Cr	59677.78	P	148.80	0.25
55 Mn	70990.00	P	124.70	0.18
57 Fe	146348.91	P	96.40	0.07
59 Co	64765.55	P	711.20	1.10
60 Ni	15361.11	P	179.90	1.17
65 Cu	25506.80	P	248.60	0.97
66 Zn	12550.00	P	127.70	1.02
72 Ge	101855.50	P	1385.00	1.36
75 As	12322.86	P	160.20	1.30
82 Se	1188.00	P	62.02	5.22
95 Mo	24188.89	P	108.40	0.45
109 Ag	54626.67	P	843.40	1.54
111 Cd	13057.81	P	347.50	2.66
115 In	738596.50	P	9510.00	1.29
121 Sb	34813.33	P	379.50	1.09
137 Ba	12156.67	P	233.40	1.92
205 Tl	47741.11	P	742.70	1.56
208 Pb	126571.10	P	1504.00	1.19
209 Bi	560392.19	P	9281.00	1.66

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	616527.81	2.2984	635034.25	97.09	80 - 120	
45 Sc	447234.41	1.6586	457323.31	97.79	80 - 120	
72 Ge	101855.55	1.3598	99175.781	102.70	80 - 120	
115 In	738596.5	1.2876	739964.75	99.82	80 - 120	
209 Bi	560392.25	1.6562	555317.75	100.91	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 9 2007 01:56 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:54 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	586004.38	A	10430.00	1.78
9 Be	304685.50	P	6282.00	2.06
23 Na	122194000.00	A	1039000.00	0.85
26 Mg	11412640.00	A	246000.00	2.16
27 Al	88177472.00	A	1071000.00	1.21
39 K	71903128.00	A	687000.00	0.96
44 Ca	1979111.00	A	11400.00	0.58
45 Sc	430917.81	P	696.90	0.16
51 V	673690.81	M	18270.00	2.71
52 Cr	558596.63	P	9333.00	1.67
55 Mn	699061.13	P	10120.00	1.45
57 Fe	1434243.00	A	34130.00	2.38
59 Co	635421.13	P	5492.00	0.86
60 Ni	147814.41	P	1245.00	0.84
65 Cu	190493.59	P	1479.00	0.78
66 Zn	111537.80	P	636.20	0.57
72 Ge	100796.90	P	586.60	0.58
75 As	120380.80	P	195.50	0.16
82 Se	11641.11	P	74.68	0.64
95 Mo	243064.41	P	686.20	0.28
109 Ag	531448.88	P	3504.00	0.66
111 Cd	125388.10	P	674.60	0.54
115 In	699991.63	P	4469.00	0.64
121 Sb	340925.50	P	3462.00	1.02
137 Ba	116022.20	P	543.00	0.47
205 Tl	480567.69	P	7188.00	1.50
208 Pb	1266888.00	P	7474.00	0.59
209 Bi	544937.69	P	7544.00	1.38

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	586004.44	1.7799	635034.25	92.28	80 - 120	
45 Sc	430917.78	0.1617	457323.31	94.23	80 - 120	
72 Ge	100796.88	0.582	99175.781	101.63	80 - 120	
115 In	699991.63	0.6384	739964.75	94.60	80 - 120	
209 Bi	544937.75	1.3844	555317.75	98.13	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09n00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 9 2007 02:00 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 09 2007 01:58 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	568247.88	A	2430.00	0.43
9	Be	608168.00	A	14210.00	2.34
23	Na	236140100.00	A	2687000.00	1.14
26	Mg	22102670.00	A	318300.00	1.44
27	Al	169436610.00	A	3023000.00	1.78
39	K	140723900.00	A	2736000.00	1.94
44	Ca	3778242.00	A	111700.00	2.96
45	Sc	417092.19	P	5140.00	1.23
51	V	1296507.00	A	18750.00	1.45
52	Cr	1035534.00	A	4506.00	0.44
55	Mn	1342780.00	A	38190.00	2.84
57	Fe	2745968.00	A	43880.00	1.60
59	Co	1231099.00	A	25690.00	2.09
60	Ni	283527.81	P	4323.00	1.52
65	Cu	364380.91	P	1429.00	0.39
66	Zn	207173.30	P	1762.00	0.85
72	Ge	97056.00	P	36.70	0.04
75	As	230271.91	P	1178.00	0.51
82	Se	21736.67	P	147.60	0.68
95	Mo	485571.09	P	4439.00	0.91
109	Ag	1015510.00	A	25110.00	2.47
111	Cd	242060.41	P	4940.00	2.04
115	In	665089.63	P	5861.00	0.88
121	Sb	664032.19	P	1779.00	0.27
137	Ba	228987.80	P	1544.00	0.67
205	Tl	940057.81	P	6674.00	0.71
208	Pb	2452236.00	A	24390.00	0.99
209	Bi	520275.59	P	2423.00	0.47

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	568247.88	0.4276	635034.25	89.48	80 - 120	
45	Sc	417092.22	1.2323	457323.31	91.20	80 - 120	
72	Ge	97056	0.0378	99175.781	97.86	80 - 120	
115	In	665089.63	0.8812	739964.75	89.88	80 - 120	
209	Bi	520275.56	0.4657	555317.75	93.69	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09n00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723014 File : c09n0014 Time : 09-MAR-2007 14:19
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.5187	1.0097	10000	9928	ug/L	-1	10	
Antimony	0.3482	0.2727	100.0	109.8	ug/L	10	10	
Arsenic	1.3267	0.6148	100.0	103.4	ug/L	3	10	
Barium	0.1338	0.0836	100.0	97.86	ug/L	-2	10	
Beryllium	0.3697	0.2591	100.0	97.40	ug/L	-3	10	
Cadmium	1.0350	0.6343	100.0	101.7	ug/L	2	10	
Calcium	0.0408	0.0230	10000	10110	ug/L	1	10	
Chromium	9.5962	2.8401	100.0	105.3	ug/L	5	10	
Cobalt	4.6335	3.1825	100.0	100.5	ug/L	1	10	
Copper	2.8387	0.9381	100.0	99.61	ug/L	0	10	
Iron	0.1461	0.0729	10000	10290	ug/L	3	10	
Lead	1.6958	1.1627	100.0	98.94	ug/L	-1	10	
Magnesium	0.1957	0.1329	10000	10030	ug/L	0	10	
Manganese	5.6179	3.5281	100.0	101.9	ug/L	2	10	
Molybdenum	1.8081	1.2492	100.0	100.6	ug/L	1	10	
Nickel	1.2409	0.7480	100.0	102.3	ug/L	2	10	
Potassium	2.9661	0.8271	10000	9794	ug/L	-2	10	
Selenium	0.0892	0.0585	100.0	104.0	ug/L	4	10	
Silver	3.9096	2.8754	100.0	109.7	ug/L	10	10	
Sodium	4.1028	1.4215	10000	10020	ug/L	0	10	
Thallium	1.3516	0.8570	50.00	47.65	ug/L	-5	10	
Vanadium	10.416	3.4196	100.0	102.1	ug/L	2	10	
Zinc	2.3774	0.5498	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	604721	-4.77
Scandium	457323	441947	-3.36
Germanium	99176	101248	2.09
Indium	739965	708495	-4.25
Bismuth	555318	548609	-1.21

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723036 File : c09n0036 Time : 09-MAR-2007 15:46
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.5187	1.0417	10000	10240	ug/L	2	10	
Antimony	0.3482	0.2737	100.0	110.2	ug/L	10	10	
Arsenic	1.3267	0.6074	100.0	102.2	ug/L	2	10	
Barium	0.1338	0.0851	100.0	99.58	ug/L	0	10	
Beryllium	0.3697	0.2534	100.0	95.24	ug/L	-5	10	
Cadmium	1.0350	0.6265	100.0	100.5	ug/L	1	10	
Calcium	0.0408	0.0230	10000	10140	ug/L	1	10	
Chromium	9.5962	2.7053	100.0	100.3	ug/L	0	10	
Cobalt	4.6335	3.1264	100.0	98.70	ug/L	-1	10	
Copper	2.8387	0.9349	100.0	99.27	ug/L	-1	10	
Iron	0.1461	0.0708	10000	9994	ug/L	0	10	
Lead	1.6958	1.1559	100.0	98.36	ug/L	-2	10	
Magnesium	0.1957	0.1378	10000	10400	ug/L	4	10	
Manganese	5.6179	3.4157	100.0	98.67	ug/L	-1	10	
Molybdenum	1.8081	1.2150	100.0	97.85	ug/L	-2	10	
Nickel	1.2409	0.7321	100.0	100.1	ug/L	0	10	
Potassium	2.9661	0.8635	10000	10230	ug/L	2	10	
Selenium	0.0892	0.0580	100.0	103.2	ug/L	3	10	
Silver	3.9096	2.8246	100.0	107.8	ug/L	8	10	
Sodium	4.1028	1.4679	10000	10350	ug/L	4	10	
Thallium	1.3516	0.8586	50.00	47.73	ug/L	-5	10	
Vanadium	10.416	3.2383	100.0	96.63	ug/L	-3	10	
Zinc	2.3774	0.5504	100.0	102.0	ug/L	2	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	590115	-7.07
Scandium	457323	414764	-9.31
Germanium	99176	100431	1.27
Indium	739965	693121	-6.33
Bismuth	555318	571696	2.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723049 File : c09n0049 Time : 09-MAR-2007 16:38
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.5187	1.0282	10000	10110	ug/L	1	10	
Antimony	0.3482	0.2765	100.0	111.3	ug/L	**11**	10	c+ ***
Arsenic	1.3267	0.6127	100.0	103.0	ug/L	3	10	
Barium	0.1338	0.0843	100.0	98.65	ug/L	-1	10	
Beryllium	0.3697	0.2542	100.0	95.56	ug/L	-4	10	
Cadmium	1.0350	0.6463	100.0	103.7	ug/L	4	10	
Calcium	0.0408	0.0232	10000	10190	ug/L	2	10	
Chromium	9.5962	2.7706	100.0	102.8	ug/L	3	10	
Cobalt	4.6335	3.1254	100.0	98.67	ug/L	-1	10	
Copper	2.8387	0.9323	100.0	99.00	ug/L	-1	10	
Iron	0.1461	0.0706	10000	9966	ug/L	0	10	
Lead	1.6958	1.1649	100.0	99.12	ug/L	-1	10	
Magnesium	0.1957	0.1353	10000	10220	ug/L	2	10	
Manganese	5.6179	3.4503	100.0	99.67	ug/L	0	10	
Molybdenum	1.8081	1.2451	100.0	100.3	ug/L	0	10	
Nickel	1.2409	0.7367	100.0	100.8	ug/L	1	10	
Potassium	2.9661	0.8478	10000	10040	ug/L	0	10	
Selenium	0.0892	0.0584	100.0	103.9	ug/L	4	10	
Silver	3.9096	2.9309	100.0	111.9	ug/L	**12**	10	c+ ***
Sodium	4.1028	1.4422	10000	10170	ug/L	2	10	
Thallium	1.3516	0.8557	50.00	47.57	ug/L	-5	10	
Vanadium	10.416	3.4080	100.0	101.7	ug/L	2	10	
Zinc	2.3774	0.5407	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	615117	-3.14
Scandium	457323	437747	-4.28
Germanium	99176	100357	1.19
Indium	739965	710987	-3.92
Bismuth	555318	564852	1.72

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723017 File : c09n0017 Time : 09-MAR-2007 14:30
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	[0.07792]	0.1000	0.01065	ug/L	!ib
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	ND	0.1000	0.004941	ug/L	
Beryllium	[0.009459]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.01476]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	ND	0.1000	0.01770	ug/L	
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.3026	0.1000	0.3448	ug/L	ib ***
Silver	[0.01985]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	622394	-1.99
Scandium	457323	438780	-4.05
Germanium	99176	105743	6.62
Indium	739965	733993	-0.81
Bismuth	555318	567794	2.25

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723038 File : c09n0038 Time : 09-MAR-2007 15:54
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	0.2208	0.1000	0.01065	ug/L	ib ***
Arsenic	ND	0.1000	0.007794	ug/L	
Barium	[0.02165]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01969]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.02707]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	0.1483	0.1000	0.01770	ug/L	ib ***
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	ND	0.1000	0.3448	ug/L	
Silver	[0.03289]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	604932	-4.74
Scandium	457323	426293	-6.79
Germanium	99176	102338	3.19
Indium	739965	731328	-1.17
Bismuth	555318	584791	5.31

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723051 File : c09n0051 Time : 09-MAR-2007 16:45
Cal : 57098723001 Caldate: 09-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	10.00	17.57	ug/L	
Antimony	0.1622	0.1000	0.01065	ug/L	ib ***
Arsenic	[0.01587]	0.1000	0.007794	ug/L	!ib
Barium	[0.02202]	0.1000	0.004941	ug/L	!ib
Beryllium	[0.01623]	0.1000	0.003448	ug/L	!ib
Cadmium	ND	0.1000	0.02184	ug/L	
Calcium	ND	10.00	47.08	ug/L	
Chromium	ND	0.1000	0	ug/L	
Cobalt	ND	0.1000	0.02311	ug/L	
Copper	ND	0.1000	0.1462	ug/L	
Iron	ND	10.00	37.55	ug/L	
Lead	[0.02160]	0.1000	0.002798	ug/L	!ib
Magnesium	ND	10.00	17.25	ug/L	
Manganese	[0.09373]	0.1000	0.01770	ug/L	!ib
Molybdenum	ND	0.1000	0.3646	ug/L	
Nickel	ND	0.1000	0.1408	ug/L	
Potassium	ND	10.00	14.03	ug/L	
Selenium	0.4071	0.1000	0.3448	ug/L	ib ***
Silver	[0.02612]	0.1000	0.009973	ug/L	!ib
Sodium	ND	10.00	38.51	ug/L	
Thallium	ND	0.05000	0	ug/L	
Vanadium	ND	0.1000	0.01579	ug/L	
Zinc	ND	0.1000	0.3575	ug/L	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	640775	0.90
Scandium	457323	448699	-1.89
Germanium	99176	103842	4.70
Indium	739965	754842	2.01
Bismuth	555318	587404	5.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723019 File : c09n0019 Time : 09-MAR-2007 14:38
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	0.2211	0.1000	ug/L	
Arsenic	0.5836	0.1000	ug/L	
Barium	1.518	0.1000	ug/L	
Beryllium	[0.02571]	0.1000	ug/L	
Cadmium	[0.05938]	0.1000	ug/L	
Chromium	1.963	0.1000	ug/L	
Cobalt	0.5362	0.1000	ug/L	
Copper	2.275	0.1000	ug/L	
Lead	0.7213	0.1000	ug/L	
Manganese	0.8173	0.1000	ug/L	
Nickel	3.100	0.1000	ug/L	
Selenium	[0]	0.1000	ug/L	
Silver	0.2362	0.1000	ug/L	
Thallium	[0.03384]	0.05000	ug/L	
Vanadium	[0]	0.1000	ug/L	
Zinc	4.588	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	131900	ug/L	132
Calcium	300000	390000	ug/L	130
Iron	250000	280800	ug/L	112
Magnesium	100000	134000	ug/L	134
Molybdenum	2000	2372	ug/L	119
Potassium	100000	125900	ug/L	126
Sodium	250000	304100	ug/L	122

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	426154	-32.89
Scandium	457323	328213	-28.23
Germanium	99176	88162	-11.11
Indium	739965	536850	-27.45
Bismuth	555318	400048	-27.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723020 File : c09n0020 Time : 09-MAR-2007 14:42
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	116800	ug/L	17		
Arsenic	100.0	104.9	ug/L	5	20	
Cadmium	100.0	102.0	ug/L	2	20	
Calcium	300000	347500	ug/L	16		
Chromium	200.0	233.4	ug/L	17	20	
Cobalt	200.0	217.0	ug/L	9	20	
Copper	200.0	200.8	ug/L	0	20	
Iron	250000	256700	ug/L	3		
Magnesium	100000	116500	ug/L	17		
Manganese	200.0	229.6	ug/L	15	20	
Molybdenum	2000	2196	ug/L	10		
Nickel	200.0	211.9	ug/L	6	20	
Potassium	100000	113700	ug/L	14		
Selenium	100.0	86.35	ug/L	-14	20	
Silver	50.00	46.58	ug/L	-7	20	
Sodium	250000	264900	ug/L	6		
Vanadium	200.0	239.3	ug/L	20	20	
Zinc	100.0	90.68	ug/L	-9	20	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Scandium	457323	344197	-24.74
Germanium	99176	86719	-12.56

57098723020

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723053 File : c09n0053 Time : 09-MAR-2007 16:53
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	0.3773	0.1000	ug/L	
Arsenic	0.5247	0.1000	ug/L	
Barium	1.545	0.1000	ug/L	
Beryllium	[0.03650]	0.1000	ug/L	
Cadmium	0.1949	0.1000	ug/L	
Chromium	1.950	0.1000	ug/L	
Cobalt	0.5438	0.1000	ug/L	
Copper	2.262	0.1000	ug/L	
Lead	0.7353	0.1000	ug/L	
Manganese	0.8836	0.1000	ug/L	
Nickel	3.148	0.1000	ug/L	
Selenium	[0]	0.1000	ug/L	
Silver	0.2416	0.1000	ug/L	
Thallium	[0.03261]	0.05000	ug/L	
Vanadium	[0]	0.1000	ug/L	
Zinc	4.393	0.1000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	130400	ug/L	130
Calcium	300000	388300	ug/L	129
Iron	250000	281200	ug/L	112
Magnesium	100000	131200	ug/L	131
Molybdenum	2000	2415	ug/L	121
Potassium	100000	127300	ug/L	127
Sodium	250000	0	ug/L	0

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Lithium	635034	450615	-29.04
Scandium	457323	336904	-26.33
Germanium	99176	87016	-12.26
Indium	739965	540989	-26.89
Bismuth	555318	405359	-27.00

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57098723054 File : c09n0054 Time : 09-MAR-2007 16:57
Cal : 57098723001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	115000	ug/L	15		
Arsenic	100.0	102.7	ug/L	3	20	
Cadmium	100.0	101.3	ug/L	1	20	
Calcium	300000	342000	ug/L	14		
Chromium	200.0	235.4	ug/L	18	20	
Cobalt	200.0	213.9	ug/L	7	20	
Copper	200.0	196.2	ug/L	-2	20	
Iron	250000	253400	ug/L	1		
Magnesium	100000	114900	ug/L	15		
Manganese	200.0	226.6	ug/L	13	20	
Molybdenum	2000	2201	ug/L	10		
Nickel	200.0	208.8	ug/L	4	20	
Potassium	100000	112800	ug/L	13		
Selenium	100.0	85.20	ug/L	-15	20	
Silver	50.00	46.62	ug/L	-7	20	
Sodium	250000	262000	ug/L	5		
Vanadium	200.0	239.1	ug/L	20	20	
Zinc	100.0	87.96	ug/L	-12	20	

ISTD (ICALBLK c09n0004)	ICALBLK Abund	Abund	%Drift
Scandium	457323	355991	-22.16
Germanium	99176	86515	-12.77

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57098723

Date : 03/09/07 Reference: c09n0004
Sequence : MET05 c09n0 Analyzed : 03/09/07 13:36

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	635034	457323	99176	739965	555318
		LOWER LIMIT	190510	137197	29753	221989	166595
		UPPER LIMIT	762041	548788	119011	887958	666381
017	ICB		622394	438780	105743	733993	567794
019	ICSA		426154	328213	88162	536850	400048
020	ICSAB		445899	344197	86719	559565	414612
025	BLANK	QC378188	507591	339131	80649	553612	452717
026	BLANK	QC378369	517807	345208	74929	566020	469933
027	BLANK	QC378195	528017	352473	79219	583187	478822
028	BS	QC378370	522288	351647	76645	565246	455218
029	BSD	QC378371	501163	343224	79084	542681	433718
031	MSS	193213-001	587263	434063	106079	726073	587090
032	SER	QC378374	584414	412112	100434	696328	581058
033	MS	QC378372	571927	422702	100770	687344	549847
036	CCV		590115	414764	100431	693121	571696
038	CCB		604932	426293	102338	731328	584791
041	MSD	QC378373	597717	427804	101683	698853	561739
042	PDS	QC378375	578852	436982	100794	698801	557350
043	SAMPLE	193213-001	620645	441991	102313	744557	582497
045	SAMPLE	193213-001	632659	444073	102247	743156	577671
049	CCV		615117	437747	100357	710987	564852
051	CCB		640775	448699	103842	754842	587404
053	ICSA		450615	336904	87016	540989	405359
054	ICSAB		464563	355991	86515	571623	425571

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57098723 Instrument: MET05 Agilent ICP-MS Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09n0001	TUN				09-MAR-2007 13:23	1.0	1.0				1	
002	c09n0002	X	RINSE			09-MAR-2007 13:28	1.0					2	
003	c09n0003	X	RINSE			09-MAR-2007 13:32	1.0					2	
004	c09n0004	ICALBLK	CALBLANK			09-MAR-2007 13:36	1.0	1.0				2	
005	c09n0005	ICAL				09-MAR-2007 13:40	1.0	1.0				3	
006	c09n0006	ICAL				09-MAR-2007 13:44	1.0	1.0				4	
007	c09n0007	ICAL				09-MAR-2007 13:48	1.0	1.0				5	
008	c09n0008	ICAL				09-MAR-2007 13:52	1.0	1.0				6	
009	c09n0009	ICAL				09-MAR-2007 13:56	1.0	1.0				7	
010	c09n0010	ICAL				09-MAR-2007 14:00	1.0	1.0				8	
011	c09n0011	X	RINSE			09-MAR-2007 14:04	1.0					2	
012	c09n0012	X				09-MAR-2007 14:08	1.0					9 2	
013	c09n0013	X	RINSE			09-MAR-2007 14:12	1.0					2	
014	c09n0014	ICV				09-MAR-2007 14:19	1.0	1.0			1	9	
015	c09n0015	X	RINSE			09-MAR-2007 14:22	1.0					2	
016	c09n0016	X				09-MAR-2007 14:26	1.0					2	
017	c09n0017	ICB				09-MAR-2007 14:30	1.0	1.0	1		1	2	
018	c09n0018	X				09-MAR-2007 14:34	1.0					2	
019	c09n0019	ICSA				09-MAR-2007 14:38	1.0	1.0			1	10 2	7:CA=390000
020	c09n0020	ICSAB				09-MAR-2007 14:42	1.0	1.0			1	11 2	13:CA=347500
021	c09n0021	X	RINSE			09-MAR-2007 14:46	1.0					2	
022	c09n0022	X	RINSE			09-MAR-2007 14:50	1.0					2	
023	c09n0023	X	RINSE			09-MAR-2007 14:54	1.0					2	
024	c09n0024	X	RINSE			09-MAR-2007 14:58	1.0					2	
025	c09n0025	BLANK	QC378188	122866	Water	09-MAR-2007 15:02	1.0	1.0			1	2	
026	c09n0026	BLANK	QC378369	122910	Filtra	09-MAR-2007 15:06	1.0	1.0			1	2	
027	c09n0027	BLANK	QC378195	122867	Filtra	09-MAR-2007 15:10	1.0	1.0			1	2	
028	c09n0028	BS	QC378370	122910	Filtra	09-MAR-2007 15:14	1.0	1.0		2	1	2	
029	c09n0029	BSD	QC378371	122910	Filtra	09-MAR-2007 15:18	1.0	1.0		2	1	2	
030	c09n0030	X	RINSE			09-MAR-2007 15:22	1.0					2	
031	c09n0031	MSS	193213-001	122910	Filtra	09-MAR-2007 15:26	1.0	1.0	2		1	2	2:NA=32390.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/9/07

00122

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57098723 Instrument: MET05 Agilent ICP-MS Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

00123

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09n0032	SER	QC378374	122910	Filtra	09-MAR-2007 15:30	5.0	1.0	4	1	1	2	1:MN=572.800
033	c09n0033	MS	QC378372	122910	Filtra	09-MAR-2007 15:34	1.0	1.0	1		1	2	3:NA=41620.0
034	c09n0034	X	RINSE			09-MAR-2007 15:38	1.0					2	
035	c09n0035	X	RINSE			09-MAR-2007 15:42	1.0					2	
036	c09n0036	CCV				09-MAR-2007 15:46	1.0	1.0			1	12 2	
037	c09n0037	X	RINSE			09-MAR-2007 15:50	1.0					2	
038	c09n0038	CCB				09-MAR-2007 15:54	1.0	1.0	2		1	2	
039	c09n0039	X				09-MAR-2007 15:58	1.0	1.0	3		1	2	
040	c09n0040	X				09-MAR-2007 16:02	1.0	1.0	2		1	2	
041	c09n0041	MSD	QC378373	122910	Filtra	09-MAR-2007 16:06	1.0	1.0	3		1	2	3:NA=42540.0
042	c09n0042	PDS	QC378375	122910	Filtra	09-MAR-2007 16:10	1.0	1.0	3		1	13 14 2	3:NA=40820.0
043	c09n0043	SAMPLE	193213-001	122867	Filtra	09-MAR-2007 16:14	20.0	1.0	2		1	2	
044	c09n0044	XSER	193213-001	122910	Water	09-MAR-2007 16:18	100.0					2	
045	c09n0045	SAMPLE	193213-001	122867	Water	09-MAR-2007 16:22	50.0	1.0	2		1	2	
046	c09n0046	X	RINSE			09-MAR-2007 16:26	1.0					2	
047	c09n0047	X	RINSE			09-MAR-2007 16:30	1.0					2	
048	c09n0048	X	RINSE			09-MAR-2007 16:34	1.0					2	
049	c09n0049	CCV				09-MAR-2007 16:38	1.0	1.0	2		1	12 2	
050	c09n0050	X	RINSE			09-MAR-2007 16:41	1.0					2	
051	c09n0051	CCB				09-MAR-2007 16:45	1.0	1.0	2		1	2	
052	c09n0052	X				09-MAR-2007 16:49	1.0					2	
053	c09n0053	ICSA				09-MAR-2007 16:53	1.0	1.0	1		1	10 2	6:CA=388300
054	c09n0054	ICSAB				09-MAR-2007 16:57	1.0	1.0			1	11 2	12:CA=342000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5647 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLB Date: 3/9/07

REPORTING SUMMARY FOR 193213 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEB	CDC	CAC	CRC	COC	CUC	FEF	PBP	MGM	MNM	HGH	NIN	K	SES	AGA	NAN	TLT	V	ZNZ
193213-001	MET14	03/08/07 19:08	1.0														+								
193213-001	MET06	03/08/07 19:58	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
193213-001	MET05	03/08/07 22:09	1.0																						
193213-001	MET05	03/09/07 16:22	50.0													+									
QC378195	MET06	03/08/07 18:10	1.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC378195	MET06	03/08/07 19:42	1.0																						
QC378195	MET05	03/08/07 20:53	1.0									+													
QC378195	MET05	03/09/07 15:10	1.0																						
QC378196	MET06	03/08/07 18:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378196	MET05	03/08/07 20:57	1.0																						
QC378197	MET06	03/08/07 18:22	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378197	MET05	03/08/07 21:01	1.0																						
QC378198	MET06	03/08/07 18:44	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378198	MET05	03/08/07 21:17	1.0																						
QC378199	MET06	03/08/07 18:49	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378199	MET05	03/08/07 21:21	1.0																						
QC378200	MET06	03/08/07 18:38	50.0						+						+							+			+
QC378200	MET05	03/08/07 21:13	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
QC378200	MET06	03/08/07 21:18	50.0																						
QC378201	MET06	03/08/07 18:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378201	MET05	03/08/07 21:25	50.0																						
QC378247	MET14	03/08/07 18:58	1.0														+								
QC378248	MET14	03/08/07 19:00	1.0														+								
QC378249	MET14	03/08/07 19:04	1.0														+								
QC378250	MET14	03/08/07 19:06	1.0														+								
QC378251	MET14	03/08/07 19:10	5.0														+								
QC378252	MET14	03/08/07 19:12	1.0														+								
QC378253	MET14	03/08/07 19:14	1.0														+								
QC378254	MET14	03/08/07 19:18	1.0														+								
QC378255	MET14	03/08/07 19:25	1.0														+								

Curtis & Tompkins Laboratories Sample Preparation Summary 08-MAR-2007 15:16

Batch Number : 122867
Date Extracted: 08-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193027-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193027-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-011			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-013			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193027-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193027-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193213-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193213-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC378195	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378196	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378197	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378198	MS	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378199	MSD	of 193027-002		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378200	SER	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378201	PDS	of 193027-002		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/8/07 Reviewed By: [signature] Date: 3/8/07

Relinquished By: [signature] 3/8/07 Received By: [signature] Date: 3/8/07

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 1223867
Date Digested: 3/8/07
Digested by: KLA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 72
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLANK	50	50	N	
BS				
BSD				
MS-07B				FIELD FILTERED
MSD-07				
193027-02				
-01A				
-03				
-04				
-05D				
-06A				
-07D				
-08				
-11B				
-12				
-13D				
-14				
-15				
213-01A				FILTERED IN LAB
027-11				
-12				
-13E				
213-01B				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/8
1.5 mL of spike solution was added to all spikes	530054	
	530093	
concentrated HCl	C33036 BAKER	
concentrated HNO3	049025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date: 3/8/07

Reviewer Signature / Date: AA 3/8/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847097599001
Units : ug/L

Date : 08-MAR-2007 18:39
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	122880	847097599002	STD02REP1	08-MAR-2007 18:41	S5681 (500X)
L2	122880	847097599003	STD03REP1	08-MAR-2007 18:44	S5681 (200X)
L3	122880	847097599004	STD04REP1	08-MAR-2007 18:47	S5681 (50X)
L4	122880	847097599005	STD05REP1	08-MAR-2007 18:49	S5681 (20X)
L5	122880	847097599006	STD06REP1	08-MAR-2007 18:51	S5681 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	3265.0	3034.0	2605.0	2361.2	2292.2	LINR	-0.1773	4.42E-4		2711.5	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Mercury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

001127

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847097599001

WinHg Database 1.5

File Utility Help

RN⇩ RN⇧ ?

Protocol hgppb | BUSY | Dataset/Proto 030807b /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.41986e-4

C -1.77348e-1

Rho .999818

Type Linear

Calibrated

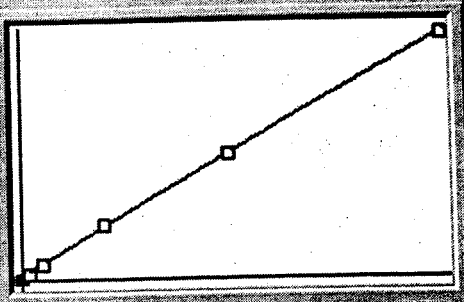
Accepted

Accept

µ Abs. 22922

Accepted

New



Include S1 Rep 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5 ☐

08-Mar-07 18:51 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.024	-.024	347	1	346		
02	.20000	.111	-.089	654	0%	653		
03	.50000	.493	-.007	1518	0%	1517		
04	2.0000	2.13	.125	5210	0%	5210		
05	5.0000	5.04	.041	11806	0%	11806		
06	10.000	9.95	-.046	22923	0%	22922		

Ready NUM

Folder: 030807b
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 18:39:28 08 Mar 07 HG

Hg	.000	ppb	346
		Bkgd 1	15689396

*** Standard: 2 Rep: 1 Seq: 2 18:41:46 08 Mar 07 HG

Hg	.200	ppb	653
		Bkgd 1	15679436

*** Standard: 3 Rep: 1 Seq: 3 18:44:24 08 Mar 07 HG

Hg	.500	ppb	1517
		Bkgd 1	15680540

*** Standard: 4 Rep: 1 Seq: 4 18:47:00 08 Mar 07 HG

Hg	2.00	ppb	5210
		Bkgd 1	15667265

*** Standard: 5 Rep: 1 Seq: 5 18:49:24 08 Mar 07 HG

Hg	5.00	ppb	11806
		Bkgd 1	15660307

*** Standard: 6 Rep: 1 Seq: 6 18:51:28 08 Mar 07 HG

Hg	10.0	ppb	22922
		Bkgd 1	15660172

*** Check Standard: 2 Ck2S5683 Seq: 7 18:54:24 08 Mar 07 HG

Line	Flag		Intensities
Hg			12285
		Bkgd 1	15664999

*** Check Standard: 1 Ck1ICB Seq: 8 18:56:28 08 Mar 07 HG

Line	Flag		Intensities
Hg			76
		Bkgd 1	15671517

*** Sample ID: qc378247 Seq: 9 18:58:32 08 Mar 07 HG

122880,1

Hg	-.117	ppb	136
		Bkgd 1	15682782

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847097599 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 08-MAR-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	122880	ICALBLK	STD01REP1				08-MAR-2007 18:39	1.0	1.0									
002	122880	ICAL	STD02REP1				08-MAR-2007 18:41	1.0	1.0									
003	122880	ICAL	STD03REP1				08-MAR-2007 18:44	1.0	1.0									
004	122880	ICAL	STD04REP1				08-MAR-2007 18:47	1.0	1.0									
005	122880	ICAL	STD05REP1				08-MAR-2007 18:49	1.0	1.0									
006	122880	ICAL	STD06REP1				08-MAR-2007 18:51	1.0	1.0									
007	122880	ICV					08-MAR-2007 18:54	1.0	1.0	2	5.000	847097599001	5.250		ug/L	105		
008	122880	ICB					08-MAR-2007 18:56	1.0	1.0			847097599001	ND	0.20	ug/L			
009	122880	BLANK	QC378247		122880	Water	08-MAR-2007 18:58	1.0	1.0			847097599001	ND	0.20	ug/L			u
010	122880	BLANK	QC378248		122880	TCLP L	08-MAR-2007 19:00	1.0	5.0			847097599001	ND	1.0	ug/L			u
011	122880	BS	QC378249		122880	Water	08-MAR-2007 19:04	1.0	1.0		5.000	847097599001	5.060	0.20	ug/L	101		u
012	122880	BSD	QC378250		122880	Water	08-MAR-2007 19:06	1.0	1.0		5.000	847097599001	5.070	0.20	ug/L	101	0	u
013	122880	MSS	193213-001		122880	Water	08-MAR-2007 19:08	1.0	1.0			847097599001	0.23	0.20	ug/L			u
014	122880	SER	QC378251	193213-001	122880	Water	08-MAR-2007 19:10	5.0	1.0			847097599001	ND	1.0	ug/L		--	u
015	122880	MS	QC378252	193213-001	122880	Water	08-MAR-2007 19:12	1.0	1.0		5.000	847097599001	5.720	0.20	ug/L	110		u
016	122880	MSD	QC378253	193213-001	122880	Water	08-MAR-2007 19:14	1.0	1.0		5.000	847097599001	5.550	0.20	ug/L	106	3	u
017	122880	MSS	193103-001		122880	TCLP L	08-MAR-2007 19:16	1.0	5.0			847097599001	ND	2.0	ug/L			u
018	122880	MS	QC378254	193103-001	122880	TCLP L	08-MAR-2007 19:18	1.0	5.0		25.00	847097599001	27.65	1.0	ug/L	111		u
019	122880	CCV					08-MAR-2007 19:20	1.0	1.0	3	2.500	847097599001	2.750		ug/L	110		
020	122880	CCB					08-MAR-2007 19:22	1.0	1.0			847097599001	ND	0.20	ug/L			
021	122880	MSD	QC378255	193103-001	122880	TCLP L	08-MAR-2007 19:25	1.0	5.0		25.00	847097599001	27.75	1.0	ug/L	111	0	u
022	122880	SAMPLE	193184-010		122880	Water	08-MAR-2007 19:27	1.0	1.0			847097599001	ND	0.20	ug/L			u
023	122880	SAMPLE	193184-023		122880	Water	08-MAR-2007 19:30	1.0	1.0			847097599001	ND	0.20	ug/L			u
024	122880	SAMPLE	193213-001		122880	Filtra	08-MAR-2007 19:33	1.0	1.0			847097599001	ND	0.20	ug/L			u
025	122880	SAMPLE	193218-004		122880	Water	08-MAR-2007 19:35	1.0	1.0			847097599001	ND	0.20	ug/L			u
026	122880	SAMPLE	193218-006		122880	Water	08-MAR-2007 19:37	1.0	1.0			847097599001	ND	0.20	ug/L			u
027	122880	SAMPLE	193218-014		122880	Water	08-MAR-2007 19:39	1.0	1.0			847097599001	ND	0.20	ug/L			u
028	122880	SAMPLE	193218-015		122880	Water	08-MAR-2007 19:42	1.0	1.0			847097599001	0.24	0.20	ug/L			u
029	122880	SAMPLE	193218-024		122880	Water	08-MAR-2007 19:44	1.0	1.0			847097599001	ND	0.20	ug/L			u
030	122880	CCV					08-MAR-2007 19:46	1.0	1.0	4	5.000	847097599001	5.420		ug/L	108		
031	122880	CCB					08-MAR-2007 19:49	1.0	1.0			847097599001	ND	0.20	ug/L			

Stds used: 1=S5681 2=S5683 3=S5684 4=S5685
Flags used: u=use

Analyst: [signature] Date: 3/8/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **08-MAR-2007 18:29**

Batch Number : 122880
Date Extracted: 08-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5681
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193103-001			ConocoPhillips Company	TCLP Leach	10	mL	50	5.000000	1					HG		
193184-010			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193184-023			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193213-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193213-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
193218-004			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-006			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-014			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-015			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
193218-024			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
QC378247	BLANK			Water	50	mL	50	1.000000	1					HG		
QC378248	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
QC378249	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC378250	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC378251	SER	of 193213-001		Water	50	mL	50	1.000000	1					HG		
QC378252	MS	of 193213-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378253	MSD	of 193213-001		Water	50	mL	50	1.000000	1		2.5			HG		
QC378254	MS	of 193103-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
QC378255	MSD	of 193103-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
QC378256	PDS	of 193213-001		Water	50	mL	50	1.000000	1					HG		

Prep Chemist: ZAbbott 3/8/07 Reviewed By: RH Date: 3/8/07

Relinquished By: ZAbbott 3/8/07 Received By: ZAbbott Date: 3/8/07

00131

Curtis & Tompkins, Ltd.

Water Digestion for Mercury

BK 2452
Page 33

LIMS Batch #: 122880
Date Digested: 3/8/07
Digested by: [illegible]

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193103-001 MSS	10	50	N	~~aliased 19993~~ TCLP Leachate
193104-010 H	50			water
↓ -023 ↓	↓			↓
193213-001 B				
193213-001				Filtrate
193218-004 H				water
↓ -006				
-014				
-015				
↓ -024 ↓	↓			↓
Blank				water
Blank	10			TCLP Leachate
BS	50			water
BSD	↓			↓
MS 193213-001 B				
MSD ↓ ↓	↓			↓
MS 193103-001	10			TCLP leachate
MSD ↓	↓	↓	↓	↓

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	SS681	3/8/07
ICAL Source WS#	SS681	
ICV / CCV WS#	SS683 / 84 / 85 / 86	
Digestion of Samples & Standards: Time ON / Temperature ON	11:25 / 95°C	
Time OFF/ Temperature OFF	1:25, 95°C	
concentrated H_2SO_4	BU1041	
concentrated HNO_3	CU9025	
5% $KMnO_4$	K030107	
5% $K_2S_2O_8$	$K_2$030807	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	$SnCl_2$ 030807	
☐ filtered thru' 0.45 um syringe filter	MILLIPORE RAN 43032	

Prep Chemist / Date: 3/8/07

Continued from page X

Continued on page X

Reviewed by / Date: 5/8/07

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193217

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID	Sample ID	Lab ID
979GW113	193217-001	TB0306072A	193217-013
979GW113RB979GW114	193217-002	LF08GW01	193217-014
979GW114	193217-003	LF08GW02B	193217-015
979GW115	193217-004	LF08GW03	193217-016
979GW116	193217-005	LF08GW06	193217-017
950GW108	193217-006	HWGW100	193217-018
DUP0306071A	193217-007	HWGW101	193217-019
DUP0306071B	193217-008	BHWGW01	193217-020
937GW101	193217-009	BHWGW04	193217-021
1065PZ2B	193217-010	BHWGW05	193217-022
NKGW02	193217-011	BHWGW05RBBHWGW01	193217-023
DUP0306071C	193217-012	DUP0306073A	193217-024

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/26/07
Operations Manager

Signature: _____ Date: 3/23/07
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193217**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/07/07**
Samples Received:	**03/07/07**

This hardcopy data package contains sample and QC results for twenty four water samples, requested for the above referenced project on 03/07/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
Low recovery was observed for gasoline C7-C12 in the MSD of NKGW02 (lab # 193217-011); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
High responses were observed for diesel C12-C24 in the CCV analyzed 03/20/07 03:57 and the CCV analyzed 03/20/07 07:14; this analyte was not detected at or above the RL in the associated samples. High responses were observed for motor oil C24-C36 in the CCV analyzed 03/20/07 04:25 and the CCV analyzed 03/20/07 07:42; this analyte was not detected at or above the RL in the associated samples. High surrogate recoveries were observed for hexacosane in 979GW114 (lab # 193217-003) and 979GW116 (lab # 193217-005); no target analytes were detected in these samples. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for bromomethane in the CCV analyzed 03/15/07 22:40; this analyte met minimum response criteria. Low response was observed for carbon disulfide in the CCV analyzed 03/19/07 15:55; this analyte met minimum response criteria. High surrogate recoveries were observed for 1,2-dichloroethane-d4 in many samples. Low surrogate recovery was observed for bromofluorobenzene in the MSD of BHWGW04 (lab # 193217-021). No other analytical problems were encountered.

Pesticides (EPA 8081A):
High response was observed for 4,4'-DDD in the CCV analyzed 03/15/07 20:54; average CCV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
Low surrogate recoveries were observed for decachlorobiphenyl in the method blank/BS/BSD for batch 123068; the corresponding TCMX surrogate recoveries were within limits. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193217**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**03/07/07**
Samples Received:	**03/07/07**

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for pyrene in the MS/MSD for batch 123065; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (F) and 1-methylnaphthalene (UV) in the MS/MSD for batch 123065; the parent sample was not a project sample. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):
No analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

NDMA (EPA 1625):
Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193217

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2195
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal / P. Cornish
Recorder (signature required):
Sent to Laboratory (Name): CFT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893
TURNAROUND TIME: 10 Days

REQUESTED ANALYSES

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) / MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (15)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX / MTBE	Total Sulfide	Diss. Metals (23)	Cyanide	NDMA 1625	COMMENTS / NOTES
1	9796W113	3/6/07	0845			X		6				1	X	X	X	X												
2	9796W113RB9796W114		0900			X		6				1	X	X	X	X												
3	9796W114		0930			X		6				1	X	X	X	X												
4	9796W115		0955			X		6				1	X	X	X	X												
5	9796W116		1055	CF21		X		6				1	X	X	X	X												
6	9506W108		1150			X		6				1	X	X	X	X												MS/MSD CK
7	DUP030607 1A		1005			X		6				1	X	X	X	X												
8	DUP030607 1B		1105			X		6				1	X	X	X	X												
	~~9796W115CL~~		~~1010~~																									
9	9376W101		1330			X		6				1	X	X	X	X												
10	1065 P22B		1420			X		3	1			4	X	X	X	X	X		X		X		X	X				
11	NKGW02		1352			X		16	3	3		12	X	X	X	X					X				X	X	X	
12	DUP030607 1C		1402			X		6	1	1		4	X	X	X	X					X				X	X	X	
13	TB030607 2A		—			X		2								X												

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - 15 - Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Pb, Ni, Zn)

RELINQUISHED BY: [signature] DATE: 3/8/07
PRINT NAME: Devin Raynal FIRM: BTS TIME:
RECEIVED BY: [signature]
PRINT NAME: Aaron Greuter FIRM: CFT DATE: 3/7/6 TIME: 1300

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd intact + cold

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Samples Cold & Intact

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193217

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2198
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): Blaine Tech Brian Pound
Recorder (signature required): [signature]
Sent to Laboratory (Name): Curtis & Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

REQUESTED ANALYSES

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23) 22, 13, 9, 8, 7, 3, Other)	Metals - Dissolved [3] (23) 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	PCBs (8082)	Total Sulfide (3162)	Cyanide (9012)	COMMENTS / NOTES
14	LF08GW01	3-6	1540			X		3		1	1	7				X	X	X	X		X	X	X	X	X	
15	LF08GW02B		1330			X		3		1	1	7				X	X	X	X		X	X	X	X	X	
16	LF08GW03		1410			X		3		1	1	7				X	X	X	X		X	X	X	X	X	
17	LF08GW06		1455			X		3		1	1	7				X	X	X	X		X	X	X	X	X	
18	HWGW100		1215			X		3		1	1	7				X	X	X	X		X	X	X	X	X	
19	HWGW101		1135			X		3		1		1				X	X			X						
20	BHWGW01		1035			X		3		1		1				X	X			X						
21	BHWGW04		845			X		3		1		1				X	X			X						
22	BHWGW05		955			X		9		3		3				X	X			X						MS/MSD
23	BHWGW05RBBHWGW01		1010			X		3		1		1				X	X			X						
24	DUF030673A		—			X		3		1		1				X	X			X						

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)

RELINQUISHED BY: [signature] DATE: 3/7/07
PRINT NAME: Brian Pound FIRM: Blaine Tech TIME:
RECEIVED BY: [signature]
PRINT NAME: AARON GRENIER FIRM: CTT DATE: 3/7/6 TIME: 1300

RELINQUISHED BY: DATE:
PRINT NAME: FIRM: TIME:
RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS / LABORATORY NOTES: rec'd intact & cold [signature]

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Samples cold & Intact

CURTIS & TOMPKINS, LTD. BERKELEY

LOGIN CHANGE FORM

Reason for change: X Client Request By: G.Shenker
Login Review Data Review

Date/Time: 3/12/07 19:48 Initials: SES

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
193217-010		1065PZ2B	Water	Cancel	8260	3/19

Steve Stanley

From: "Gil Shenker" <gshenker@treadwellrollo.com>
To: "Steve Stanley" <steve@ctberk.com>; "Joshua Graber" <jdgraber@treadwellrollo.com>
Cc: "Carole Nuttall" <cnuttall@treadwellrollo.com>; "Greg Johnson" <gejohnson@treadwellrollo.com>; <ssung@blainetech.com>
Sent: Monday, March 12, 2007 6:19 PM
Subject: RE: 2893.04.51 - C&T Login Summary (193217)

HI Steve,

Sample 1065PZ2B was marked on the chain for VOCs/MTBE, however these analyses are not needed for this sample location.

Thank you,

-Gil

From: Steve Stanley [mailto:steve@ctberk.com]
Sent: Friday, March 09, 2007 11:13 PM
To: Joshua Graber
Cc: Carole Nuttall; Gil Shenker; Greg Johnson; ssung@blainetech.com
Subject: 2893.04.51 - C&T Login Summary (193217)

C&T Login Summary for 193217

Project:

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 · Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193217 Date Received: 03-07-2007 Number of Coolers: 4
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 03-07-2007 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 1 over lip of cooler Seal date: 3-7-07 Seal name: [illegible]
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 2.7°C, 2.4, 2.1, 2.9

B. Login Phase
Date Logged In 3-07-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bag
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
4.) Sample-005 has 21 containers for MS/MSD per SES instructions

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW113	Batch#:	123146
Lab ID:	193217-001	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	117	65-135

ND= Not Detected
RL= Reporting Limit

51.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW113RB979GW114	Batch#:	123146
Lab ID:	193217-002	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

52.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW114	Batch#:	123146
Lab ID:	193217-003	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	118	65-135

ND= Not Detected
RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW115	Batch#:	123146
Lab ID:	193217-004	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

54.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW116	Batch#:	123146
Lab ID:	193217-005	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

55.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	950GW108	Batch#:	123146
Lab ID:	193217-006	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

56.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0306071A	Batch#:	123146
Lab ID:	193217-007	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	103	65-135

ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0306071B	Batch#:	123146
Lab ID:	193217-008	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	106	65-135

ND= Not Detected
RL= Reporting Limit

58.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW101	Batch#:	123146
Lab ID:	193217-009	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ2B	Batch#:	123146
Lab ID:	193217-010	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.3	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	94	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

60.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	NKGW02	Batch#:	123146
Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	97	65-135

ND= Not Detected
RL= Reporting Limit

61.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0306071C	Batch#:	123146
Lab ID:	193217-012	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

62.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379362	Batch#:	123146
Matrix:	Water	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	65-135	EPA 8015B
Bromofluorobenzene (FID)	102	65-135	EPA 8015B
Trifluorotoluene (PID)	95	65-135	EPA 8021B
Bromofluorobenzene (PID)	102	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379365	Batch#:	123146
Matrix:	Water	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,910	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	117	65-135

65.0

00024

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	123146
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379363

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.64	93	65-135
Benzene	20.00	19.69	98	65-135
Toluene	20.00	19.58	98	65-135
Ethylbenzene	20.00	20.81	104	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	88	65-135
Bromofluorobenzene (PID)	97	65-135

Type: BSD Lab ID: QC379364

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	17.92	90	65-135	4	35
Benzene	20.00	19.66	98	65-135	0	35
Toluene	20.00	19.40	97	65-135	1	35
Ethylbenzene	20.00	20.14	101	65-135	3	35

Surrogate	%REC	Limits
Trifluorotoluene (PID)	83	65-135
Bromofluorobenzene (PID)	88	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	979GW116	Batch#:	123146
MSS Lab ID:	193217-005	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379366

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	9.111	2,000	1,643	82	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	65-135
Bromofluorobenzene (FID)	126	65-135

Type: MSD Lab ID: QC379367

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,485	74	65-135	10	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	126	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	NKGW02	Batch#:	123146
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379368

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	6.300	2,000	1,305	65	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	118	65-135

Type: MSD Lab ID: QC379369

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,201	60 *	65-135	8	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	124	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

67.0

Confirmation Report for 193217 MBTXE Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
193217-010	1065PZ2B	MTBE	2.324	1.636	35	-30

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCVOA Water: EPA 8021B

Inst : GC19
Calnum: 347094532001
Units : ng

Name : GC19 MBTXE 065
Date : 07-MAR-2007 00:19
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_015	347094532015	BTXE_1	07-MAR-2007 00:19	S5559 (1000X), S5345 (5000X)
L2	065_016	347094532016	BTXE_2	07-MAR-2007 00:57	S5558 (1250X), S5345 (5000X)
L3	065_017	347094532017	BTXE_3	07-MAR-2007 01:34	S5558 (500X), S5345 (5000X)
L4	065_018	347094532018	BTXE_4	07-MAR-2007 02:12	S5558 (125X), S5345 (5000X)
L5	065_019	347094532019	BTXE_5	07-MAR-2007 02:50	S5557 (1000X), S5345 (5000X)
L6	065_020	347094532020	BTXE_6	07-MAR-2007 03:27	S5557 (500X), S5345 (5000X)
L7	065_021	347094532021	BTXE_7	07-MAR-2007 04:05	S5557 (250X), S5345 (5000X)
L8	065_022	347094532022	MTBE_7	07-MAR-2007 04:43	S4993 (500X), S5345 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		3844.7	2928.8	2729.5	2707.7	2723.5	2789.1	2700.5	AVRG		3.43E-4		2917.7	14	0.995	20	
Benzene	B	15283	14070	13944	13606	13542	13399	13426		AVRG		7.20E-5		13895	5	0.995	20	
Toluene	B	17218	13683	13277	12748	12668	12299	12327		AVRG		7.43E-5		13460	13	0.995	20	
Ethylbenzene	B	12304	10889	11222	10989	11072	10619	10982		AVRG		8.97E-5		11154	5	0.995	20	
m,p-Xylenes	B	17544	14979	14768	14800	14896	14597	14193		AVRG		6.62E-5		15111	7	0.995	20	
o-Xylene	B	11831	10709	10758	10813	10894	10576	10704		AVRG		9.18E-5		10898	4	0.995	20	
MTBE	C		1161.4	849.60	882.72	1003.0	1059.5	1121.2	1126.9	AVRG		9.72E-4		1029.2	12	0.995	20	
Benzene	C	3050.8	2644.0	2630.1	2881.1	3091.0	3125.4	3166.7		AVRG		3.40E-4		2941.3	8	0.995	20	
Toluene	C	2697.2	2425.0	2498.8	2660.0	2896.6	2894.8	2940.4		AVRG		3.68E-4		2716.1	8	0.995	20	
Ethylbenzene	C	2160.4	2122.9	2208.3	2377.6	2637.4	2615.1	2656.7		AVRG		4.17E-4		2396.9	10	0.995	20	
m,p-Xylenes	C	2953.2	2781.4	2898.4	3066.5	3354.7	3334.8	3386.1		AVRG		3.21E-4		3110.7	8	0.995	20	
o-Xylene	C	2044.4	2043.3	2070.3	2247.6	2482.0	2485.6	2568.8		AVRG		4.39E-4		2277.4	10	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 GCVOA Water
EPA 8021B

Inst : GC19
Calnum : 347094532001

Name : GC19 MBTXE 065
Cal Date: 07-MAR-2007

ICV 347094532024 (065_024 07-MAR-2007) stds: S5206 (1000X), S5345 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2917.7	2567.6	100.0	88.00	ng	-12	15	
Benzene	B	13895	14504	100.0	104.4	ng	4	15	
Toluene	B	13460	13478	100.0	100.1	ng	0	15	
Ethylbenzene	B	11154	11607	100.0	104.1	ng	4	15	
m,p-Xylenes	B	15111	13169	200.0	174.3	ng	-13	15	
o-Xylene	B	10898	10825	100.0	99.33	ng	-1	15	
MTBE	C	1029.2	949.05	100.0	92.21	ng	-8	15	
Benzene	C	2941.3	3165.2	100.0	107.6	ng	8	15	
Toluene	C	2716.1	2916.1	100.0	107.4	ng	7	15	
Ethylbenzene	C	2396.9	2583.1	100.0	107.8	ng	8	15	
m,p-Xylenes	C	3110.7	2985.0	200.0	191.9	ng	-4	15	
o-Xylene	C	2277.4	2318.9	100.0	101.8	ng	2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347094532002
Units : ng

Name : GC19 TFT/BFB 065
Date : 07-MAR-2007 09:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_027	347094532027	TFT/BFB_1	07-MAR-2007 09:08	S5343 (5000X)
L2	065_028	347094532028	TFT/BFB_2	07-MAR-2007 09:48	S5344 (5000X)
L3	065_029	347094532029	TFT/BFB_3	07-MAR-2007 10:26	S5665 (5000X)
L4	065_030	347094532030	TFT/BFB_4	07-MAR-2007 11:04	S5346 (5000X)
L5	065_031	347094532031	TFT/BFB_5	07-MAR-2007 11:51	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1826.5	1624.8	1951.7	1889.3	1699.3	AVRG		5.56E-4		1798.3	7	0.995	20	
Bromofluorobenzene (FID)	A	788.41	783.36	1016.4	990.66	931.50	AVRG		0.00111		902.06	12	0.995	20	
Trifluorotoluene (PID)	B	4840.6	4318.4	5159.2	4899.1	4464.0	AVRG		2.11E-4		4736.3	7	0.995	20	
Bromofluorobenzene (PID)	B	6754.1	6717.9	8691.5	8480.4	7857.3	AVRG		1.30E-4		7700.2	12	0.995	20	
Trifluorotoluene (PID)	C	976.64	880.75	1115.3	1078.4	999.08	AVRG		9.90E-4		1010.0	9	0.995	20	
Bromofluorobenzene (PID)	C	1447.6	1451.4	1943.2	1912.3	1774.9	AVRG		5.86E-4		1705.9	14	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC379363 IDF : 1.0
Seqnum : 347107313001.1 File : 074_001 Time : 15-MAR-2007 12:33
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	2719.4	100.0	93.20	ng	-7	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	894.31	100.0	86.89	ng	-13	15	
Benzene	B	347094532001	07-MAR-2007	13895	13680	100.0	98.45	ng	-2	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	2719.3	100.0	92.45	ng	-8	15	
Toluene	B	347094532001	07-MAR-2007	13460	13178	100.0	97.91	ng	-2	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2596.5	100.0	95.59	ng	-4	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11606	100.0	104.1	ng	4	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2335.3	100.0	97.43	ng	-3	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15552	100.0	102.9	ng	3	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3044.2	100.0	97.86	ng	-2	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11275	100.0	103.5	ng	3	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2205.7	100.0	96.85	ng	-3	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1561.9	450.0	390.8	ng	-13	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	900.45	450.0	449.2	ng	0	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4168.2	450.0	396.0	ng	-12	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	821.54	450.0	366.0	ng	**-19**	15	c-
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7449.3	450.0	435.3	ng	-3	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1521.6	450.0	401.4	ng	-11	15	

JCP 03/16/07 : Trifluorotoluene (PID) C passes limits of 65-135% [general version]

Analyst: JCP Date: 03/19/07 Reviewer: MCH Date: 03/19/07

-=low bias c=CCV u=use

347107313001.1

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC379365 IDF : 1.0
Seqnum : 347107313002.1 File : 074_002 Time : 15-MAR-2007 13:11
Standards: S5365 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1498.4	10000	9550	ng	-5	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1869.2	450.0	467.7	ng	4	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1051.2	450.0	524.4	ng	**17**	15	c+ u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5325.7	450.0	506.0	ng	12	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1095.5	450.0	488.1	ng	8	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8652.0	450.0	505.6	ng	12	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1843.2	450.0	486.2	ng	8	15	

JCP 03/16/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131% [general version]

JCP 03/16/07 : PID surrogates are not applicable. [general version]

Analyst: JCP Date: 03/19/07 Reviewer: MCH Date: 03/19/07

+=high bias c=CCV u=use

347107313002.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347107313011 File : 074_011 Time : 15-MAR-2007 19:14
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1651.0	450.0	413.1	ng	-8	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	903.35	450.0	450.6	ng	0	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2618.4	150.0	134.6	ng	-10	15	
Benzene	B	347094532001	07-MAR-2007	13895	13742	150.0	148.3	ng	-1	15	
Toluene	B	347094532001	07-MAR-2007	13460	13163	150.0	146.7	ng	-2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11298	150.0	151.9	ng	1	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15154	150.0	150.4	ng	0	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11005	150.0	151.5	ng	1	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4333.0	450.0	411.7	ng	-9	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7498.8	450.0	438.2	ng	-3	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	887.56	150.0	129.4	ng	-14	15	
Benzene	C	347094532001	07-MAR-2007	2941.3	2724.8	150.0	139.0	ng	-7	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2550.8	150.0	140.9	ng	-6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2302.6	150.0	144.1	ng	-4	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	2953.0	150.0	142.4	ng	-5	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2176.6	150.0	143.4	ng	-4	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	832.95	450.0	371.1	ng	**-18**	15	c-
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1524.1	450.0	402.1	ng	-11	15	

JCP 03/16/07 : Trifluorotoluene (PID) C passes limits of 65-135%

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

-=low bias c=CCV

347107313011

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347107313013 File : 074_013 Time : 15-MAR-2007 20:29
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1464.5	15000	14000	ng	-7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1899.4	450.0	475.3	ng	6	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1028.5	450.0	513.1	ng	14	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4833.5	450.0	459.2	ng	2	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8436.3	450.0	493.0	ng	10	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1087.7	450.0	484.6	ng	8	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1701.3	450.0	448.8	ng	0	15	

JCP 03/16/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

347107313013

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347107313014 File : 074_014 Time : 15-MAR-2007 21:07
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1502.3	15000	14360	ng	-4	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2055.8	450.0	514.4	ng	14	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1114.8	450.0	556.1	ng	**24**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5212.7	450.0	495.3	ng	10	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9083.0	450.0	530.8	ng	**18**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1200.2	450.0	534.7	ng	**19**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1926.5	450.0	508.2	ng	13	15	

JCP 03/16/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/16/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

+=high bias c=CCV

347107313014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347107313025 File : 074_025 Time : 16-MAR-2007 04:01
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1656.0	450.0	414.4	ng	-8	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	960.45	450.0	479.1	ng	6	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2700.5	200.0	185.1	ng	-7	15	
Benzene	B	347094532001	07-MAR-2007	13895	14075	200.0	202.6	ng	1	15	
Toluene	B	347094532001	07-MAR-2007	13460	13496	200.0	200.5	ng	0	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11651	200.0	208.9	ng	4	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	16146	200.0	213.7	ng	7	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11651	200.0	213.8	ng	7	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4383.4	450.0	416.5	ng	-7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8143.6	450.0	475.9	ng	6	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	176.70	200.0	34.34	ng	**-83**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	2800.7	200.0	190.4	ng	-5	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2681.4	200.0	197.4	ng	-1	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2451.4	200.0	204.5	ng	2	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3151.1	200.0	202.6	ng	1	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2319.7	200.0	203.7	ng	2	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	839.08	450.0	373.8	ng	**-17**	15	c-
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1624.4	450.0	428.5	ng	-5	15	

JCP 03/16/07 : MTBE fails low on ChC. Report MTBE from ChB. ChC is for confirm only.

JCP 03/16/07 : Trifluorotoluene (PID) C passes limits of 65-135%

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

-=low bias c=CCV

347107313025

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347107313027 File : 074_027 Time : 16-MAR-2007 05:17
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1490.6	20000	19000	ng	-5	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1970.0	450.0	493.0	ng	10	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1073.4	450.0	535.5	ng	**19**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5429.7	450.0	515.9	ng	15	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9249.5	450.0	540.5	ng	**20**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1250.8	450.0	557.3	ng	**24**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1901.6	450.0	501.6	ng	11	15	

JCP 03/16/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/16/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

+=high bias c=CCV

347107313027

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347107313028 File : 074_028 Time : 16-MAR-2007 05:54
Standards: S5365 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1448.8	20000	18470	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2048.4	450.0	512.6	ng	14	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1124.2	450.0	560.8	ng	**25**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5531.4	450.0	525.5	ng	**17**	15	c+
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9385.7	450.0	548.5	ng	**22**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1289.7	450.0	574.6	ng	**28**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1958.9	450.0	516.8	ng	15	15	

JCP 03/16/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/16/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

+=high bias c=CCV

347107313028

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347107313039 File : 074_039 Time : 16-MAR-2007 13:12
Standards: S5365 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1445.1	15000	13810	ng	-8	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	2010.3	450.0	503.0	ng	12	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1092.7	450.0	545.1	ng	**21**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5137.6	450.0	488.1	ng	8	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9072.7	450.0	530.2	ng	**18**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1193.3	450.0	531.7	ng	**18**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1900.5	450.0	501.3	ng	11	15	

JCP 03/16/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/16/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/16/07 Reviewer: MCH Date: 03/19/07

+=high bias c=CCV

347107313039

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347094532

Instrument : GC19
Method : EPA 8015B, EPA 8021B

Begun : 03/06/07 15:32
SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	065_001	X	IB			03/06/07 15:32	1.0	1
002	065_002	X	ICAL			03/06/07 16:09	1.0	2 1
003	065_003	X	ICAL			03/06/07 16:47	1.0	2 1
004	065_004	X	ICAL			03/06/07 17:25	1.0	3 1
005	065_005	X	ICAL			03/06/07 18:02	1.0	3 1
006	065_006	X	ICAL			03/06/07 18:40	1.0	3 1
007	065_007	X	ICAL			03/06/07 19:18	1.0	4 1
008	065_008	X	ICAL			03/06/07 19:55	1.0	4 1
009	065_009	X	ICAL			03/06/07 20:33	1.0	4 1
010	065_010	X	ICAL			03/06/07 21:11	1.0	5 1
011	065_011	X	IB			03/06/07 21:48	1.0	1
012	065_012	X	ICV			03/06/07 22:26	1.0	6 1
013	065_013	X	ICV			03/06/07 23:04	1.0	6 1
014	065_014	X	IB			03/06/07 23:41	1.0	1
015	065_015	ICAL	BTXE_1			03/07/07 00:19	1.0	2 1
016	065_016	ICAL	BTXE_2			03/07/07 00:57	1.0	3 1
017	065_017	ICAL	BTXE_3			03/07/07 01:34	1.0	3 1
018	065_018	ICAL	BTXE_4			03/07/07 02:12	1.0	3 1
019	065_019	ICAL	BTXE_5			03/07/07 02:50	1.0	4 1
020	065_020	ICAL	BTXE_6			03/07/07 03:27	1.0	4 1
021	065_021	ICAL	BTXE_7			03/07/07 04:05	1.0	4 1
022	065_022	ICAL	MTBE_7			03/07/07 04:43	1.0	5 1
023	065_023	X	IB			03/07/07 05:20	1.0	1
024	065_024	ICV	MBTXE			03/07/07 05:58	1.0	6 1
025	065_025	X	ICV			03/07/07 06:35	1.0	6 1
026	065_026	X	IB			03/07/07 08:30	1.0	1
027	065_027	ICAL	TFT/BFB_1			03/07/07 09:08	1.0	7
028	065_028	ICAL	TFT/BFB_2			03/07/07 09:48	1.0	8
029	065_029	ICAL	TFT/BFB_3			03/07/07 10:26	1.0	9
030	065_030	ICAL	TFT/BFB_4			03/07/07 11:04	1.0	10
031	065_031	ICAL	TFT/BFB_5			03/07/07 11:51	1.0	11

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Standards used: 1=S5345 2=S5559 3=S5558 4=S5557 5=S4993 6=S5206 7=S5343 8=S5344 9=S5665 10=S5346 11=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347107313

Instrument : GC19 Begun : 03/15/07 12:33
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	074_001	CCV/BS	QC379363	Water	123146	03/15/07 12:33	1.0	1 2
002	074_002	CCV/LCS	QC379365	Water	123146	03/15/07 13:11	1.0	3 2
003	074_003	BLANK	QC379362	Water	123146	03/15/07 14:13	1.0	2
004	074_004	BSD	QC379364	Water	123146	03/15/07 14:50	1.0	1 2
005	074_005	SAMPLE	193431-001	Water	123146	03/15/07 15:28	1.0	2
006	074_006	SAMPLE	193431-002	Water	123146	03/15/07 16:06	1.0	2
007	074_007	SAMPLE	193431-003	Water	123146	03/15/07 16:43	1.0	2
008	074_008	SAMPLE	193431-004	Water	123146	03/15/07 17:21	1.0	2
009	074_009	SAMPLE	193217-010	Water	123146	03/15/07 17:59	1.0	2
010	074_010	SAMPLE	193416-003	Water	123146	03/15/07 18:36	1.0	2
011	074_011	CCV	MBTXE			03/15/07 19:14	1.0	1 2
012	074_012	CCV	MBTXE			03/15/07 19:52	1.0	1 2
013	074_013	CCV	TVH			03/15/07 20:29	1.0	3 2
014	074_014	CCV	TVH			03/15/07 21:07	1.0	3 2
015	074_015	MS	QC379366	Water	123146	03/15/07 21:45	1.0	3 2
016	074_016	MSD	QC379367	Water	123146	03/15/07 22:22	1.0	3 2
017	074_017	MS	QC379368	Water	123146	03/15/07 23:00	1.0	3 2
018	074_018	MSD	QC379369	Water	123146	03/15/07 23:38	1.0	3 2
019	074_019	SAMPLE	193254-001	Water	123146	03/16/07 00:15	1.0	2
020	074_020	SAMPLE	193217-001	Water	123146	03/16/07 00:53	1.0	2
021	074_021	SAMPLE	193217-002	Water	123146	03/16/07 01:31	1.0	2
022	074_022	SAMPLE	193217-003	Water	123146	03/16/07 02:08	1.0	2
023	074_023	SAMPLE	193217-004	Water	123146	03/16/07 02:46	1.0	2
024	074_024	MSS	193217-005	Water	123146	03/16/07 03:24	1.0	2
025	074_025	CCV	MBTXE			03/16/07 04:01	1.0	1 2
026	074_026	CCV	MBTXE			03/16/07 04:39	1.0	1 2
027	074_027	CCV	TVH			03/16/07 05:17	1.0	3 2
028	074_028	CCV	TVH			03/16/07 05:54	1.0	3 2
029	074_029	SAMPLE	193217-006	Water	123146	03/16/07 06:32	1.0	2
030	074_030	SAMPLE	193217-007	Water	123146	03/16/07 07:10	1.0	2
031	074_031	SAMPLE	193217-008	Water	123146	03/16/07 07:47	1.0	2
032	074_032	SAMPLE	193217-009	Water	123146	03/16/07 08:25	1.0	2
033	074_033	MSS	193217-011	Water	123146	03/16/07 09:02	1.0	2
034	074_034	SAMPLE	193217-012	Water	123146	03/16/07 09:40	1.0	2
035	074_035	SAMPLE	193416-001	Water	123146	03/16/07 10:18	1.0	2
036	074_036	SAMPLE	193416-004	Water	123146	03/16/07 10:55	1.0	2
037	074_037	X	IB			03/16/07 11:33	1.0	2
038	074_038	SAMPLE	193416-004	Water	123146	03/16/07 12:22	10.0	2
039	074_039	CCV	TVH			03/16/07 13:12	1.0	3 2

Analyst: JCP Date: 03/16/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5345 3=S5365

Fill / Refresh / Search / Process /

Errors

GC19 / 03/16/07

Review ...

#	Type		Sample ID	Matrix	Batch	File	Time	P	Cal	IDF	QC	Chs	
001	X	D	CCV			075_001	14:12			1.0			
002	CCV/LCS	D	QC379616	Water	123200	075_002	14:49			1.0	OK	3	Edit
003	CCV/LCS	D	QC379615	Water	123200	075_003	15:27			1.0	OK	10	Edit
004	BLANK	D	QC379614	Water	123200	075_004	16:23			1.0	2	11	Edit
005	MS	D	QC379645	Water	123200	075_005	17:01			1.0	1	3	Edit MSS
006	MSD	D	QC379646	Water	123200	075_006	17:39			1.0	OK	3	Edit MSS
007	MSS	D	193262-004	Water	123200	075_007	18:17			1.0	2	11	Edit
008	SAMPLE	D	193262-005	Water	123200	075_008	19:19			1.0	1	11	Edit
009	SAMPLE	D	193262-008	Water	123200	075_009	19:57			1.0	1	11	Edit
010	SAMPLE	D	193262-010	Water	123200	075_010	20:34			1.0	1	3	Edit
011	SAMPLE	D	193262-011	Water	123200	075_011	21:12			1.0	1	RR	Edit
012	CCV	D	MBTXE			075_012	21:50			1.0	OK		
013	CCV	D	MBTXE			075_013	22:27			1.0	OK		
014	CCV	D	TVH			075_014	23:05			1.0	OK		
015	X	D	TVH			075_015	23:42			1.0			
016	SAMPLE	D	193262-012	Water	123200	075_016	00:20			1.0	1	RR	Edit
017	SAMPLE	D	193262-013	Water	123200	075_017	00:58			1.0	1	RR	Edit
018	SAMPLE	D	193262-014	Water	123200	075_018	01:36			1.0	1	RR	Edit
019	SAMPLE	D	193262-015	Water	123200	075_019	02:13			1.0	1	RR	Edit
020	SAMPLE	D	193262-016	Water	123200	075_020	02:51			1.0	1	RR	Edit
021	SAMPLE	D	193262-017	Water	123200	075_021	03:28			1.0	1	3	Edit
022	SAMPLE	D	193262-018	Water	123200	075_022	04:06			1.0	1	3	Edit
023	SAMPLE	D	193432-001	Water	123200	075_023	04:44			1.0	OK	RR	Edit
024	SAMPLE	D	193444-001	Water	123200	075_024	05:21			1.0	OK	RR	Edit
025	SAMPLE	D	193444-002	Water	123200	075_025	05:59			1.0	OK	RR	Edit
026	CCV	D	MBTXE			075_026	06:37			1.0	OK		
027	X	D	CCV			075_027	07:14			1.0			
028	CCV	D	TVH			075_028	07:52			1.0	OK		
029	CCV	D	TVH			075_029	08:30			1.0	OK		
030	MS	D	QC379366	Water	123146	075_030	09:07			1.0	OK	RR	Edit MSS
031	MSD	D	QC379367	Water	123146	075_031	09:45			1.0	2	RR	Edit MSS
032	MS	D	QC379368	Water	123146	075_032	10:22			1.0	1		Edit MSS
033	MSD	D	QC379369	Water	123146	075_033	11:00			1.0	1		Edit MSS

ms/msd re-runs.

☐	034	SAMPLE	D	193262-019	Water	123200	075_034	11:37		1.0	1	3	Edit
☐	035	SAMPLE	D	193262-022	Water	123200	075_035	12:15		1.0	1	3	Edit
☐	036	SAMPLE	D	193262-023	Water	123200	075_036	12:53		1.0	1	3	Edit
☐	037	CCV	D	TVH			075_037	13:30		1.0	OK		
☐	038	CCV	D	TVH			075_038	14:08		1.0	OK		

Fill / Refresh / Search / Errors / Print> / Tasks>

Fix / Process NP >

Create calibration

Create MDL study for: EPA 8015B

Select MSS or conf links / Edit runs for

-- all --

Show document chromatogram pages

Delete / Locks

☐ caltype:

☐ search ICALs

☐ search MSS

☐ switch roles for:

-- all --

☑ no printing

REPORTING SUMMARY FOR 193217 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-001	Gasoline C7-C12	GC19	A	03/16/07 00:53
193217-001	Trifluorotoluene (FID)	GC19	A	03/16/07 00:53
193217-001	Bromofluorobenzene (FID)	GC19	A	03/16/07 00:53
193217-002	Gasoline C7-C12	GC19	A	03/16/07 01:31
193217-002	Trifluorotoluene (FID)	GC19	A	03/16/07 01:31
193217-002	Bromofluorobenzene (FID)	GC19	A	03/16/07 01:31
193217-003	Gasoline C7-C12	GC19	A	03/16/07 02:08
193217-003	Trifluorotoluene (FID)	GC19	A	03/16/07 02:08
193217-003	Bromofluorobenzene (FID)	GC19	A	03/16/07 02:08
193217-004	Gasoline C7-C12	GC19	A	03/16/07 02:46
193217-004	Trifluorotoluene (FID)	GC19	A	03/16/07 02:46
193217-004	Bromofluorobenzene (FID)	GC19	A	03/16/07 02:46
193217-005	Gasoline C7-C12	GC19	A	03/16/07 03:24
193217-005	Trifluorotoluene (FID)	GC19	A	03/16/07 03:24
193217-005	Bromofluorobenzene (FID)	GC19	A	03/16/07 03:24
193217-006	Gasoline C7-C12	GC19	A	03/16/07 06:32
193217-006	Trifluorotoluene (FID)	GC19	A	03/16/07 06:32
193217-006	Bromofluorobenzene (FID)	GC19	A	03/16/07 06:32
193217-007	Gasoline C7-C12	GC19	A	03/16/07 07:10
193217-007	Trifluorotoluene (FID)	GC19	A	03/16/07 07:10
193217-007	Bromofluorobenzene (FID)	GC19	A	03/16/07 07:10
193217-008	Gasoline C7-C12	GC19	A	03/16/07 07:47
193217-008	Trifluorotoluene (FID)	GC19	A	03/16/07 07:47
193217-008	Bromofluorobenzene (FID)	GC19	A	03/16/07 07:47
193217-009	Gasoline C7-C12	GC19	A	03/16/07 08:25
193217-009	Trifluorotoluene (FID)	GC19	A	03/16/07 08:25
193217-009	Bromofluorobenzene (FID)	GC19	A	03/16/07 08:25
193217-010	Gasoline C7-C12	GC19	A	03/15/07 17:59
193217-010	MTBE	GC19	B	03/15/07 17:59
193217-010	Benzene	GC19	B	03/15/07 17:59
193217-010	Toluene	GC19	B	03/15/07 17:59
193217-010	Ethylbenzene	GC19	B	03/15/07 17:59
193217-010	Trifluorotoluene (FID)	GC19	A	03/15/07 17:59
193217-010	Bromofluorobenzene (FID)	GC19	A	03/15/07 17:59
193217-010	Trifluorotoluene (PID)	GC19	B	03/15/07 17:59
193217-010	Bromofluorobenzene (PID)	GC19	B	03/15/07 17:59
193217-010	Xylene (total)	GC19	B	03/15/07 17:59
193217-011	Gasoline C7-C12	GC19	A	03/16/07 09:02
193217-011	Trifluorotoluene (FID)	GC19	A	03/16/07 09:02
193217-011	Bromofluorobenzene (FID)	GC19	A	03/16/07 09:02
193217-012	Gasoline C7-C12	GC19	A	03/16/07 09:40
193217-012	Trifluorotoluene (FID)	GC19	A	03/16/07 09:40
193217-012	Bromofluorobenzene (FID)	GC19	A	03/16/07 09:40

REPORTING SUMMARY FOR 193217 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379362	Gasoline C7-C12	GC19	A	03/15/07 14:13
QC379362	MTBE	GC19	B	03/15/07 14:13
QC379362	Benzene	GC19	B	03/15/07 14:13
QC379362	Toluene	GC19	B	03/15/07 14:13
QC379362	Ethylbenzene	GC19	B	03/15/07 14:13
QC379362	Trifluorotoluene (FID)	GC19	A	03/15/07 14:13
QC379362	Bromofluorobenzene (FID)	GC19	A	03/15/07 14:13
QC379362	Trifluorotoluene (PID)	GC19	B	03/15/07 14:13
QC379362	Bromofluorobenzene (PID)	GC19	B	03/15/07 14:13
QC379362	Xylene (total)	GC19	B	03/15/07 14:13
QC379363	MTBE	GC19	B	03/15/07 12:33
QC379363	Benzene	GC19	B	03/15/07 12:33
QC379363	Toluene	GC19	B	03/15/07 12:33
QC379363	Ethylbenzene	GC19	B	03/15/07 12:33
QC379363	Trifluorotoluene (PID)	GC19	B	03/15/07 12:33
QC379363	Bromofluorobenzene (PID)	GC19	B	03/15/07 12:33
QC379364	MTBE	GC19	B	03/15/07 14:50
QC379364	Benzene	GC19	B	03/15/07 14:50
QC379364	Toluene	GC19	B	03/15/07 14:50
QC379364	Ethylbenzene	GC19	B	03/15/07 14:50
QC379364	Trifluorotoluene (PID)	GC19	B	03/15/07 14:50
QC379364	Bromofluorobenzene (PID)	GC19	B	03/15/07 14:50
QC379365	Gasoline C7-C12	GC19	A	03/15/07 13:11
QC379365	Trifluorotoluene (FID)	GC19	A	03/15/07 13:11
QC379365	Bromofluorobenzene (FID)	GC19	A	03/15/07 13:11
QC379366	Gasoline C7-C12	GC19	A	03/15/07 21:45
QC379366	Trifluorotoluene (FID)	GC19	A	03/15/07 21:45
QC379366	Bromofluorobenzene (FID)	GC19	A	03/15/07 21:45
QC379367	Gasoline C7-C12	GC19	A	03/15/07 22:22
QC379367	Trifluorotoluene (FID)	GC19	A	03/15/07 22:22
QC379367	Bromofluorobenzene (FID)	GC19	A	03/15/07 22:22
QC379368	Gasoline C7-C12	GC19	A	03/15/07 23:00
QC379368	Trifluorotoluene (FID)	GC19	A	03/15/07 23:00
QC379368	Bromofluorobenzene (FID)	GC19	A	03/15/07 23:00
QC379369	Gasoline C7-C12	GC19	A	03/15/07 23:38
QC379369	Trifluorotoluene (FID)	GC19	A	03/15/07 23:38
QC379369	Bromofluorobenzene (FID)	GC19	A	03/15/07 23:38

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/23/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/18/07
Batch#:	123238		

Field ID: 979GW113
Type: SAMPLE
Lab ID: 193217-001

Analyzed: 03/19/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	127	65-135

Field ID: 979GW113RB979GW114
Type: SAMPLE
Lab ID: 193217-002

Analyzed: 03/19/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	126	65-135

Field ID: 979GW114
Type: SAMPLE
Lab ID: 193217-003

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	154 *	65-135

Field ID: 979GW115
Type: SAMPLE
Lab ID: 193217-004

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	130	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

121.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/18/07
Batch#:	123238		

Field ID: 979GW116
Type: SAMPLE
Lab ID: 193217-005

Analyzed: 03/19/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	146 *	65-135

Field ID: 950GW108
Type: SAMPLE
Lab ID: 193217-006

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	132	65-135

Field ID: DUP0306071A
Type: SAMPLE
Lab ID: 193217-007

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	121	65-135

Field ID: DUP0306071B
Type: SAMPLE
Lab ID: 193217-008

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	118	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/18/07
Batch#:	123238		

Field ID: 937GW101
Type: SAMPLE
Lab ID: 193217-009

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	118	65-135

Field ID: 1065PZ2B
Type: SAMPLE
Lab ID: 193217-010

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	127	65-135

Field ID: NKGW02
Type: SAMPLE
Lab ID: 193217-011

Analyzed: 03/19/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	125	65-135

Field ID: DUP0306071C
Type: SAMPLE
Lab ID: 193217-012

Analyzed: 03/20/07
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	124	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

121.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/18/07
Batch#:	123238		

Type:	BLANK	Analyzed:	03/19/07
Lab ID:	QC379769	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	110	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

121.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379770	Batch#:	123238
Matrix:	Water	Prepared:	03/18/07
Units:	ug/L	Analyzed:	03/19/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,656	106	65-135

Surrogate	%REC	Limits
Hexacosane	101	65-135

122.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779001
Units : mg/L

Name : Diesel 14b
Date : 12-MAR-2007 17:56
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_014	227102779014	DSL_10	12-MAR-2007 17:56	S5413
L2	071_015	227102779015	DSL_100	12-MAR-2007 18:24	S5414
L3	071_016	227102779016	DSL_500	12-MAR-2007 18:53	S5416
L4	071_017	227102779017	DSL_1000	12-MAR-2007 19:22	S5417
L5	071_018	227102779018	DSL_5000	12-MAR-2007 19:50	S5411
L6	071_019	227102779019	DSL_7500	12-MAR-2007 20:18	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	31823	46248	53031	50789	51704	52394	AVRG		2.10E-5		47665	17	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227102779001

Name : Diesel 14b
Cal Date: 12-MAR-2007

ICV 227102779021 (071_021 12-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	47665	50636	500.0	531.2	mg/L	6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779003
Units : mg/L

Name : Motor oil 14b
Date : 12-MAR-2007 22:41
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_024	227102779024	MO_50	12-MAR-2007 22:41	S5523
L2	071_025	227102779025	MO_250	12-MAR-2007 23:09	S5524
L3	071_026	227102779026	MO_500	12-MAR-2007 23:38	S5525
L4	071_028	227102779028	MO_5000	13-MAR-2007 00:35	S5522
L5	071_036	227102779036	MO_1000	13-MAR-2007 12:33	S5526

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	39814	38246	37046	36590	38315	AVRG		2.63E-5		38002	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	5000.0	1000.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227102779003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227102779002
Units : mg/L

Name : Hexacosane 14b
Date : 13-MAR-2007 01:32
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_030	227102779030	HEX_5	13-MAR-2007 01:32	S4639
L2	071_031	227102779031	HEX_10	13-MAR-2007 02:01	S4640
L3	071_032	227102779032	HEX_50	13-MAR-2007 02:29	S5402
L4	071_033	227102779033	HEX_100	13-MAR-2007 02:58	S4644
L5	071_034	227102779034	HEX_200	13-MAR-2007 03:27	S4645

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	59294	61101	60945	63451	62267	AVRG		1.63E-5		61411	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Hexacosane	B	5.0000	10.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941001
Units : mg/L

Name : Diesel
Date : 18-MAR-2007 22:50
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b009	167111941009	DSL_10	18-MAR-2007 22:50	S5413
L2	077b010	167111941010	DSL_100	18-MAR-2007 23:25	S5414
L3	077b011	167111941011	DSL_500	19-MAR-2007 00:00	S5416
L4	077b012	167111941012	DSL_1000	19-MAR-2007 00:34	S5417
L5	077b013	167111941013	DSL_5000	19-MAR-2007 01:08	S5411
L6	077b014	167111941014	DSL_7500	19-MAR-2007 01:43	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	22063	23377	24356	24223	23797	22760	AVRG		4.27E-5		23429	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

167111941001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 167111941001

Name : Diesel
Cal Date: 18-MAR-2007

ICV 167111941017 (077b017 19-MAR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	23429	26659	500.0	568.9	mg/L	14	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941002
Units : mg/L

Name : Motor Oil
Date : 19-MAR-2007 04:40
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b019	167111941019	MO_50	19-MAR-2007 04:40	S5523
L2	077b020	167111941020	MO_250	19-MAR-2007 05:18	S5524
L3	077b021	167111941021	MO_500	19-MAR-2007 05:55	S5525
L4	077b022	167111941022	MO_1000	19-MAR-2007 06:33	S5526
L5	077b023	167111941023	MO_5000	19-MAR-2007 07:12	S5522
L6	077b024	167111941024	MO_7500	19-MAR-2007 07:52	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	18220	18647	17325	17179	15108	14755	AVRG		5.93E-5		16872	10	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC15B
Calnum: 167111941003
Units : mg/L

Name : Hexacosane
Date : 19-MAR-2007 09:06
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	077b026	167111941026	HEX_5	19-MAR-2007 09:06	S4639
L2	077b027	167111941027	HEX_10	19-MAR-2007 09:46	S4640
L3	077b028	167111941028	HEX_25	19-MAR-2007 10:24	S4641
L4	077b029	167111941029	HEX_50	19-MAR-2007 10:59	S5402
L5	077b030	167111941030	HEX_100	19-MAR-2007 11:35	S4644
L6	077b031	167111941031	HEX_200	19-MAR-2007 12:11	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	27535	28894	27859	26085	27324	27043	AVRG		3.64E-5		27456	3	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG		1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742009
Standards: S5259

Run Name: DSL_1000
File : 078_009

IDF : 1.0
Time : 19-MAR-2007 13:35

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	49536	1000	1039	mg/L	4	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55046	50.00	44.82	mg/L	-10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742022
Standards: S5259

Run Name: DSL_1000
File : 078_022

IDF : 1.0
Time : 19-MAR-2007 20:03

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	52038	1000	1092	mg/L	9	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	55927	50.00	45.53	mg/L	-9	15	

227112742022

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742023 File : 078_023 Time : 19-MAR-2007 20:31
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	34951	500.0	459.9	mg/L	-8	15	
Hexacosane	B	227102779002	13-MAR-2007	61411	57919	50.00	47.16	mg/L	-6	15	

227112742023

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_250 IDF : 1.0
Seqnum : 227112742039 File : 078_039 Time : 20-MAR-2007 03:57
Standards: S5258

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	64224	250.0	336.9	mg/L	**35**	15	c+ ***
Hexacosane	B	227102779002	13-MAR-2007	61411	74196	50.00	60.41	mg/L	**21**	15	c+

DLM 03/20/07 : RR affected samples

CP 03/20/07 : use for ND samples

+=high bias c=CCV

227112742039

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742040 File : 078_040 Time : 20-MAR-2007 04:25
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	45216	500.0	594.9	mg/L	**19**	15	c+ ***
Hexacosane	B	227102779002	13-MAR-2007	61411	74941	50.00	61.02	mg/L	**22**	15	c+

DLM 03/20/07 : RR affected samples

CP 03/20/07 : use for ND samples

+=high bias c=CCV

227112742040

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227112742046
Standards: S5517

Run Name: DSL_500
File : 078_046

IDF : 1.0
Time : 20-MAR-2007 07:14

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227102779001	12-MAR-2007	47665	65642	500.0	688.6	mg/L	**38**	15	c+ ***
Hexacosane	B	227102779002	13-MAR-2007	61411	77970	50.00	63.48	mg/L	**27**	15	c+

DLM 03/20/07 : RR affected samples

CP 03/20/07 : use for ND samples in bracket.

+=high bias c=CCV

227112742046

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227112742047 File : 078_047 Time : 20-MAR-2007 07:42
Standards: S5603

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227102779003	12-MAR-2007	38002	45687	500.0	601.1	mg/L	**20**	15	c+ ***
Hexacosane	B	227102779002	13-MAR-2007	61411	78175	50.00	63.65	mg/L	**27**	15	c+

DLM 03/20/07 : RR affected samples

CP 03/20/07 : use for ND samples

+=high bias c=CCV

227112742047

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_250 IDF : 1.0
Seqnum : 167113362003 File : 078b003 Time : 19-MAR-2007 18:20
Standards: S5258

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167111941001	18-MAR-2007	23429	23689	250.0	252.8	mg/L	1	15	
Hexacosane	167111941003	19-MAR-2007	27456	26868	50.00	48.93	mg/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167113362004 File : 078b004 Time : 19-MAR-2007 18:56
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167111941002	19-MAR-2007	16872	18550	500.0	549.7	mg/L	10	15	
Hexacosane	167111941003	19-MAR-2007	27456	28649	50.00	52.17	mg/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC15B Run Name: DSL_500 IDF : 1.0
Seqnum : 167113362017 File : 078b017 Time : 20-MAR-2007 02:55
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167111941001	18-MAR-2007	23429	25148	500.0	536.7	mg/L	7	15	
Hexacosane	167111941003	19-MAR-2007	27456	29143	50.00	53.07	mg/L	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC15B Run Name: MO_500 IDF : 1.0
Seqnum : 167113362018 File : 078b018 Time : 20-MAR-2007 03:30
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167111941002	19-MAR-2007	16872	18118	500.0	536.9	mg/L	7	15	
Hexacosane	167111941003	19-MAR-2007	27456	28016	50.00	51.02	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177112801003
Standards: S5517

Run Name: DSL_500
File : 078a003

IDF : 1.0
Time : 19-MAR-2007 08:55

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63845	500.0	522.5	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	78636	50.00	51.01	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801004 File : 078a004 Time : 19-MAR-2007 09:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47343	500.0	525.2	mg/L	5	15	
Hexacosane	177062425003	13-FEB-2007	77085	78052	50.00	50.63	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177112801017 File : 078a017 Time : 19-MAR-2007 18:55
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63620	1000	1041	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	70124	50.00	45.49	mg/L	-9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177112801018 File : 078a018 Time : 19-MAR-2007 19:23
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47955	500.0	532.0	mg/L	6	15	
Hexacosane	177062425003	13-FEB-2007	77085	78434	50.00	50.87	mg/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177114261014 File : 079a014 Time : 20-MAR-2007 16:24
Standards: S5603

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	47383	500.0	525.7	mg/L	5	15	
Hexacosane	177062425003	13-FEB-2007	77085	74812	50.00	48.53	mg/L	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177114261016 File : 079a016 Time : 20-MAR-2007 17:19
Standards: S5259

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	63310	1000	1036	mg/L	4	15	
Hexacosane	177062425003	13-FEB-2007	77085	62384	50.00	40.46	mg/L	**-19**	15	c-

-=low bias c=CCV

177114261016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177114261029
Standards: S5603

Run Name: MO_500
File : 079a029

IDF : 1.0
Time : 20-MAR-2007 23:14

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	51786	500.0	574.5	mg/L	15	15	
Hexacosane	177062425003	13-FEB-2007	77085	80453	50.00	52.18	mg/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_500 IDF : 1.0
Seqnum : 177114261030 File : 079a030 Time : 20-MAR-2007 23:42
Standards: S5517

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	65101	500.0	532.7	mg/L	7	15	
Hexacosane	177062425003	13-FEB-2007	77085	69585	50.00	45.14	mg/L	-10	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227102779

Instrument : GC14B
Method : EPA 8015B

Begun : 03/12/07 08:59
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	071_001	X	PRIMER			03/12/07 08:59	1.0	
002	071_002	X	IB			03/12/07 09:28	1.0	
003	071_003	X				03/12/07 09:57	1.0	1
004	071_004	X				03/12/07 10:26	1.0	2
005	071_005	X	IB			03/12/07 13:15	1.0	
006	071_006	X				03/12/07 13:43	1.0	3
007	071_007	X				03/12/07 14:12	1.0	
008	071_008	X				03/12/07 14:40	1.0	1
009	071_009	CMARKER	C8-50			03/12/07 15:09	1.0	3
010	071_010	X				03/12/07 16:00	1.0	1
011	071_011	X				03/12/07 16:28	1.0	2
012	071_012	X	IB			03/12/07 16:58	1.0	
013	071_013	IB	CALIB			03/12/07 17:27	1.0	
014	071_014	ICAL	DSL_10			03/12/07 17:56	1.0	4
015	071_015	ICAL	DSL_100			03/12/07 18:24	1.0	5
016	071_016	ICAL	DSL_500			03/12/07 18:53	1.0	6
017	071_017	ICAL	DSL_1000			03/12/07 19:22	1.0	7
018	071_018	ICAL	DSL_5000			03/12/07 19:50	1.0	8
019	071_019	ICAL	DSL_7500			03/12/07 20:18	1.0	9
020	071_020	IB	CALIB			03/12/07 20:47	1.0	
021	071_021	ICV	DSL_500			03/12/07 21:16	1.0	10
022	071_022	X	ICV			03/12/07 21:44	1.0	10
023	071_023	IB	CALIB			03/12/07 22:12	1.0	
024	071_024	ICAL	MO_50			03/12/07 22:41	1.0	11
025	071_025	ICAL	MO_250			03/12/07 23:09	1.0	12
026	071_026	ICAL	MO_500			03/12/07 23:38	1.0	13
027	071_027	X	MO_1000			03/13/07 00:06	1.0	14
028	071_028	ICAL	MO_5000			03/13/07 00:35	1.0	15
029	071_029	IB	CALIB			03/13/07 01:04	1.0	
030	071_030	ICAL	HEX_5			03/13/07 01:32	1.0	16
031	071_031	ICAL	HEX_10			03/13/07 02:01	1.0	17
032	071_032	ICAL	HEX_50			03/13/07 02:29	1.0	18
033	071_033	ICAL	HEX_100			03/13/07 02:58	1.0	19
034	071_034	ICAL	HEX_200			03/13/07 03:27	1.0	20
035	071_035	X	IB			03/13/07 03:56	1.0	
036	071_036	ICAL	MO_1000			03/13/07 12:33	1.0	14

Analyst: CP Date: 03/13/07 Reviewer: CW Date: 03/13/07

Standards used: 1=S5517 2=S5603 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S4639 17=S4640 18=S5402 19=S4644 20=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167111941

Instrument : GC15B
Method : EPA 8015B

Begun : 03/18/07 17:41
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	077b001	X	PRIMER			03/18/07 17:41	1.0	
002	077b002	X	IB			03/18/07 18:15	1.0	
003	077b003	CMARKER	C8-C50			03/18/07 18:52	1.0	1
004	077b004	CCV	DSL_250			03/18/07 19:28	1.0	2
005	077b005	CCV	MO_500			03/18/07 20:03	1.0	3
006	077b006	CCV	DSL_500			03/18/07 21:04	1.0	4
007	077b007	CCV	MO_500			03/18/07 21:42	1.0	3
008	077b008	IB	CALIB			03/18/07 22:16	1.0	
009	077b009	ICAL	DSL_10			03/18/07 22:50	1.0	5
010	077b010	ICAL	DSL_100			03/18/07 23:25	1.0	6
011	077b011	ICAL	DSL_500			03/19/07 00:00	1.0	7
012	077b012	ICAL	DSL_1000			03/19/07 00:34	1.0	8
013	077b013	ICAL	DSL_5000			03/19/07 01:08	1.0	9
014	077b014	ICAL	DSL_7500			03/19/07 01:43	1.0	10
015	077b015	IB	CALIB			03/19/07 02:18	1.0	
016	077b016	X	DSL_500			03/19/07 02:52	1.0	11
017	077b017	ICV	DSL_500			03/19/07 03:27	1.0	11
018	077b018	IB	CALIB			03/19/07 04:04	1.0	
019	077b019	ICAL	MO_50			03/19/07 04:40	1.0	12
020	077b020	ICAL	MO_250			03/19/07 05:18	1.0	13
021	077b021	ICAL	MO_500			03/19/07 05:55	1.0	14
022	077b022	ICAL	MO_1000			03/19/07 06:33	1.0	15
023	077b023	ICAL	MO_5000			03/19/07 07:12	1.0	16
024	077b024	ICAL	MO_7500			03/19/07 07:52	1.0	17
025	077b025	IB	CALIB			03/19/07 08:31	1.0	
026	077b026	ICAL	HEX_5			03/19/07 09:06	1.0	18
027	077b027	ICAL	HEX_10			03/19/07 09:46	1.0	19
028	077b028	ICAL	HEX_25			03/19/07 10:24	1.0	20
029	077b029	ICAL	HEX_50			03/19/07 10:59	1.0	21
030	077b030	ICAL	HEX_100			03/19/07 11:35	1.0	22
031	077b031	ICAL	HEX_200			03/19/07 12:11	1.0	23
032	077b032	IB	CALIB			03/19/07 12:47	1.0	
033	077b033	ICAL	JET_10			03/19/07 13:22	1.0	24
034	077b034	ICAL	JET_100			03/19/07 13:56	1.0	25
035	077b035	ICAL	JET_500			03/19/07 14:30	1.0	26
036	077b036	ICAL	JET_1000			03/19/07 15:04	1.0	27
037	077b037	ICAL	JET_3000			03/19/07 15:39	1.0	28
038	077b038	ICAL	JET_5000			03/19/07 16:13	1.0	29
039	077b039	IB	CALIB			03/19/07 16:48	1.0	

Analyst: DLM Date: 03/19/07 Reviewer: MCH Date: 03/19/07

Standards used: 1=S4049 2=S5258 3=S5603 4=S5517 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645 24=S4665 25=S4666 26=S4667 27=S4668 28=S4670 29=S4664

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167113362

Instrument : GC15B
Method : EPA 8015B

Begun : 03/19/07 17:22
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078b001	X	IB				03/19/07 17:22	1.0	
003	078b003	CCV	DSL_250				03/19/07 18:20	1.0	1
004	078b004	CCV	MO_500				03/19/07 18:56	1.0	2
005	078b005	CCV	JET_250				03/19/07 19:31	1.0	3
006	078b006	BLANK	QC379769	S	Water	123238	03/19/07 20:06	1.0	
007	078b007	BLANK	QC379779	S	Water	123240	03/19/07 20:46	1.0	
008	078b008	BS	QC379780	S	Water	123240	03/19/07 21:21	1.0	
009	078b009	BSD	QC379781	S	Water	123240	03/19/07 21:57	1.0	
010	078b010	SAMPLE	193174-015	S	Water	123240	03/19/07 22:36	1.0	
011	078b011	SAMPLE	193174-016	S	Water	123240	03/19/07 23:13	1.0	
012	078b012	SAMPLE	193174-017	S	Water	123240	03/19/07 23:49	1.0	
013	078b013	SAMPLE	193174-018	S	Water	123240	03/20/07 00:26	1.0	
014	078b014	SAMPLE	193174-019	S	Water	123240	03/20/07 01:05	1.0	
015	078b015	SAMPLE	193373-001	S	Water	123240	03/20/07 01:40	1.0	
016	078b016	X	IB				03/20/07 02:17	1.0	
017	078b017	CCV	DSL_500				03/20/07 02:55	1.0	4
018	078b018	CCV	MO_500				03/20/07 03:30	1.0	2
019	078b019	CCV	JET_250				03/20/07 04:05	1.0	3
020	078b020	X	CCV				03/20/07 04:43	1.0	4
021	078b021	X	CCV				03/20/07 05:22	1.0	2
022	078b022	X	CCV				03/20/07 06:04	1.0	3
023	078b023	SAMPLE	193445-004	S	Water	123240	03/20/07 06:44	1.0	
024	078b024	SAMPLE	193445-005	S	Water	123240	03/20/07 07:25	1.0	
025	078b025	SAMPLE	193373-006	S	Water	123240	03/20/07 08:08	1.0	
026	078b026	SAMPLE	193373-007	S	Water	123240	03/20/07 08:44	1.0	
027	078b027	X	FLOOR POLISH IN DCM				03/20/07 09:26	1.0	
028	078b028	X	IB				03/20/07 10:03	1.0	
029	078b029	CCV	DSL_1000				03/20/07 10:43	1.0	5
030	078b030	X					03/20/07 11:23	1.0	2
031	078b031	CCV	JET_250				03/20/07 12:00	1.0	3
032	078b032	CCV	KERO_250				03/20/07 12:43	1.0	6
033	078b033	CCV	MO_500				03/20/07 13:21	1.0	2
034	078b034	LCS	QC379895	S	Water	123267	03/20/07 14:00	1.0	
035	078b035	BLANK	QC379894		Water	123267	03/20/07 14:41	1.0	
036	078b036	BLANK	QC379894	S	Water	123267	03/20/07 15:19	1.0	
037	078b037	SAMPLE	193267-007		Water	123267	03/20/07 15:55	1.0	
038	078b038	SAMPLE	193166-016	S	Water	123238	03/20/07 16:33	1.0	
039	078b039	CCV	DSL_1000				03/20/07 17:09	1.0	5
040	078b040	CCV	MO_500				03/20/07 17:48	1.0	2
041	078b041	CCV	JET_250				03/20/07 18:25	1.0	3
042	078b042	CCV	KERO_250				03/20/07 19:01	1.0	6
043	078b043	MSS	193404-001	S	Water	123267	03/20/07 19:42	1.0	
044	078b044	MSS	193404-008	S	Water	123267	03/20/07 20:24	1.0	
045	078b045	MS	QC379896	S	Water	123267	03/20/07 21:00	1.0	
046	078b046	MSD	QC379897	S	Water	123267	03/20/07 21:40	1.0	
047	078b047	MS	QC379898	S	Water	123267	03/20/07 22:17	1.0	
048	078b048	MSD	QC379899	S	Water	123267	03/20/07 22:57	1.0	
049	078b049	X	IB				03/20/07 23:37	1.0	
050	078b050	SAMPLE	193404-002	S	Water	123267	03/21/07 00:13	1.0	
051	078b051	SAMPLE	193404-003	S	Water	123267	03/21/07 00:53	1.0	
052	078b052	SAMPLE	193404-004	S	Water	123267	03/21/07 01:32	1.0	
053	078b053	SAMPLE	193404-005	S	Water	123267	03/21/07 02:13	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167113362

Instrument : GC15B
Method : EPA 8015B

Begun : 03/19/07 17:22
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
054	078b054	X	IB				03/21/07 02:52	1.0	
055	078b055	CCV	DSL_500				03/21/07 03:28	1.0	4
056	078b056	CCV	MO_500				03/21/07 04:08	1.0	2
057	078b057	CCV	JET_250				03/21/07 04:47	1.0	3
058	078b058	X	CCV				03/21/07 05:28	1.0	4
059	078b059	X	MO_500				03/21/07 06:09	1.0	2
060	078b060	X	CCV				03/21/07 06:49	1.0	3
061	078b061	SAMPLE	193404-006	S	Water	123267	03/21/07 07:28	1.0	
062	078b062	SAMPLE	193404-007	S	Water	123267	03/21/07 08:10	1.0	
063	078b063	SAMPLE	193449-008	S	Soil	123283	03/21/07 08:54	1.0	
064	078b064	SAMPLE	193449-010	S	Soil	123283	03/21/07 09:50	1.0	
065	078b065	SAMPLE	193449-009	S	Soil	123283	03/21/07 10:32	1.0	
066	078b066	SAMPLE	193449-007	S	Soil	123283	03/21/07 11:23	3.0	
067	078b067	MS	QC379966	S	Soil	123283	03/21/07 12:14	1.0	
068	078b068	MSD	QC379967	S	Soil	123283	03/21/07 12:57	1.0	
069	078b069	SAMPLE	193449-009	S	Soil	123283	03/21/07 13:35	5.0	
070	078b070	X	IB				03/21/07 14:14	1.0	
071	078b071	CCV	DSL_250				03/21/07 14:50	1.0	1
072	078b072	CCV	MO_500				03/21/07 15:27	1.0	2
073	078b073	CCV	JET_250				03/21/07 16:04	1.0	3

Standards used: 1=S5258 2=S5603 3=S5749 4=S5517 5=S5259 6=S5255

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177112801

Instrument : GC17A
Method : EPA 8015B

Begun : 03/19/07 08:01
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER				03/19/07 08:01	1.0	
002	078a002	X	IB				03/19/07 08:28	1.0	
003	078a003	CCV	DSL_500				03/19/07 08:55	1.0	1
004	078a004	CCV	MO_500				03/19/07 09:23	1.0	2
005	078a005	SAMPLE	193331-001		Soil	123183	03/19/07 10:49	1.0	
006	078a006	MSS	193384-001		Soil	123183	03/19/07 11:24	1.0	
007	078a007	SAMPLE	193331-001	S	Soil	123183	03/19/07 11:51	1.0	
008	078a008	X	IB				03/19/07 14:32	1.0	
009	078a009	LCS	QC379740	S	Water	123229	03/19/07 14:59	1.0	
010	078a010	SAMPLE	193108-012	S	Water	123229	03/19/07 15:44	1.0	
011	078a011	SAMPLE	193137-005	S	Water	123229	03/19/07 16:11	1.0	
012	078a012	SAMPLE	193108-025	S	Water	123229	03/19/07 16:38	1.0	
013	078a013	SAMPLE	193108-026	S	Water	123229	03/19/07 17:06	1.0	
014	078a014	SAMPLE	193217-001	S	Water	123238	03/19/07 17:33	1.0	
015	078a015	SAMPLE	193217-002	S	Water	123238	03/19/07 18:00	1.0	
016	078a016	X	IB				03/19/07 18:27	1.0	
017	078a017	CCV	DSL_1000				03/19/07 18:55	1.0	3
018	078a018	CCV	MO_500				03/19/07 19:23	1.0	2
019	078a019	X	CCV				03/19/07 19:50	1.0	3
020	078a020	X	CCV				03/19/07 20:17	1.0	2
021	078a021	BLANK	QC379743	S	Water	123230	03/19/07 20:44	1.0	
022	078a022	BS	QC379744	S	Water	123230	03/19/07 21:12	1.0	
023	078a023	BSD	QC379745	S	Water	123230	03/19/07 21:39	1.0	
024	078a024	SAMPLE	193174-001	S	Water	123230	03/19/07 22:06	1.0	
025	078a025	SAMPLE	193174-002	S	Water	123230	03/19/07 22:34	1.0	
026	078a026	SAMPLE	193174-003	S	Water	123230	03/19/07 23:01	1.0	
027	078a027	SAMPLE	193174-004	S	Water	123230	03/19/07 23:28	1.0	
028	078a028	SAMPLE	193174-005	S	Water	123230	03/19/07 23:55	1.0	
029	078a029	SAMPLE	193174-006	S	Water	123230	03/20/07 00:23	1.0	
030	078a030	SAMPLE	193174-007	S	Water	123230	03/20/07 00:50	1.0	
031	078a031	X	IB				03/20/07 01:17	1.0	
032	078a032	CCV	DSL_250				03/20/07 01:44	1.0	4
033	078a033	CCV	MO_500				03/20/07 02:12	1.0	2
034	078a034	X	CCV				03/20/07 02:40	1.0	4
035	078a035	X	CCV				03/20/07 03:07	1.0	2
036	078a036	SAMPLE	193174-008	S	Water	123230	03/20/07 03:34	1.0	
037	078a037	SAMPLE	193174-009	S	Water	123230	03/20/07 04:02	1.0	
038	078a038	SAMPLE	193174-010	S	Water	123230	03/20/07 04:29	1.0	
039	078a039	SAMPLE	193174-011	S	Water	123230	03/20/07 04:56	1.0	
040	078a040	SAMPLE	193174-012	S	Water	123230	03/20/07 05:23	1.0	
041	078a041	SAMPLE	193174-013	S	Water	123230	03/20/07 05:50	1.0	
042	078a042	SAMPLE	193174-014	S	Water	123230	03/20/07 06:17	1.0	
043	078a043	X	IB				03/20/07 06:45	1.0	
044	078a044	CCV	DSL_500				03/20/07 07:13	1.0	1
045	078a045	CCV	MO_500				03/20/07 07:40	1.0	2

Standards used: 1=S5517 2=S5603 3=S5259 4=S5258

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227112742

Instrument : GC14B
Method : EPA 8015B

Begun : 03/19/07 07:02
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078_001	X	PRIMER				03/19/07 07:02	1.0	
002	078_002	X	IB				03/19/07 07:30	1.0	
003	078_003	CCV	DSL_250				03/19/07 07:58	1.0	1
004	078_004	CCV	MO_500				03/19/07 08:26	1.0	2
005	078_005	X	IB				03/19/07 09:58	1.0	
006	078_006	X	IB				03/19/07 10:26	1.0	
007	078_007	X	IB				03/19/07 10:54	1.0	
008	078_008	MSS	193384-001	S	Soil	123183	03/19/07 11:44	1.0	
009	078_009	CCV	DSL_1000				03/19/07 13:35	1.0	3
010	078_010	CCV	MO_500				03/19/07 14:03	1.0	2
011	078_011	SAMPLE	193137-002	S	Water	123229	03/19/07 14:37	1.0	
012	078_012	SAMPLE	193137-003	S	Water	123229	03/19/07 15:05	1.0	
013	078_013	SAMPLE	193137-004	S	Water	123229	03/19/07 15:33	1.0	
014	078_014	SAMPLE	193137-001	S	Water	123229	03/19/07 16:20	1.0	
015	078_015	SAMPLE	193108-027	S	Water	123229	03/19/07 16:47	1.0	
016	078_016	X	IB				03/19/07 17:15	1.0	
017	078_017	BLANK	QC379769		Water	123238	03/19/07 17:43	1.0	
018	078_018	BLANK	QC379769	S	Water	123238	03/19/07 18:11	1.0	
019	078_019	LCS	QC379770	S	Water	123238	03/19/07 18:39	1.0	
020	078_020	SAMPLE	193241-001		Water	123238	03/19/07 19:07	1.0	
021	078_021	SAMPLE	193166-016	S	Water	123238	03/19/07 19:35	1.0	
022	078_022	CCV	DSL_1000				03/19/07 20:03	1.0	3
023	078_023	CCV	MO_500				03/19/07 20:31	1.0	2
024	078_024	X	CCV				03/19/07 20:59	1.0	3
025	078_025	X	CCV				03/19/07 21:27	1.0	2
026	078_026	MSS	193217-005	S	Water	123238	03/19/07 21:55	1.0	
027	078_027	MSS	193217-011	S	Water	123238	03/19/07 22:23	1.0	
028	078_028	MS	QC379771	S	Water	123238	03/19/07 22:51	1.0	
029	078_029	MSD	QC379772	S	Water	123238	03/19/07 23:19	1.0	
030	078_030	MS	QC379773	S	Water	123238	03/19/07 23:46	1.0	
031	078_031	MSD	QC379774	S	Water	123238	03/20/07 00:14	1.0	
032	078_032	X	IB				03/20/07 00:43	1.0	
033	078_033	SAMPLE	193217-010	S	Water	123238	03/20/07 01:10	1.0	
034	078_034	SAMPLE	193217-012	S	Water	123238	03/20/07 01:38	1.0	
035	078_035	SAMPLE	193217-003	S	Water	123238	03/20/07 02:06	1.0	
036	078_036	SAMPLE	193217-004	S	Water	123238	03/20/07 02:34	1.0	
037	078_037	X	DSL_250				03/20/07 03:02	1.0	1
038	078_038	X	MO_500				03/20/07 03:30	1.0	2
039	078_039	CCV	DSL_250				03/20/07 03:57	1.0	1
040	078_040	CCV	MO_500				03/20/07 04:25	1.0	2
041	078_041	SAMPLE	193217-006	S	Water	123238	03/20/07 04:53	1.0	
042	078_042	SAMPLE	193217-007	S	Water	123238	03/20/07 05:22	1.0	
043	078_043	SAMPLE	193217-008	S	Water	123238	03/20/07 05:50	1.0	
044	078_044	SAMPLE	193217-009	S	Water	123238	03/20/07 06:18	1.0	
045	078_045	X	IB				03/20/07 06:46	1.0	
046	078_046	CCV	DSL_500				03/20/07 07:14	1.0	4
047	078_047	CCV	MO_500				03/20/07 07:42	1.0	2

Standards used: 1=S5258 2=S5603 3=S5259 4=S5517

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177114261

Instrument : GC17A
Method : EPA 8015B

Begun : 03/20/07 08:21
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	079a001	X	IB				03/20/07 08:21	1.0	
002	079a002	CCV	DSL_500				03/20/07 08:48	1.0	1
003	079a003	CCV	MO_500				03/20/07 09:15	1.0	2
004	079a004	CCV	KERO_250				03/20/07 11:43	1.0	3
005	079a005	SAMPLE	193267-001		Water	123267	03/20/07 12:18	1.0	
006	079a006	SAMPLE	193267-002		Water	123267	03/20/07 12:46	1.0	
007	079a007	SAMPLE	193267-003		Water	123267	03/20/07 13:13	1.0	
008	079a008	SAMPLE	193267-004		Water	123267	03/20/07 13:40	1.0	
009	079a009	SAMPLE	193267-005		Water	123267	03/20/07 14:08	1.0	
010	079a010	SAMPLE	193267-006		Water	123267	03/20/07 14:35	1.0	
011	079a011	SAMPLE	193267-007		Water	123267	03/20/07 15:02	1.0	
012	079a012	SAMPLE	193267-008		Water	123267	03/20/07 15:30	1.0	
013	079a013	X	DSL_1000				03/20/07 15:57	1.0	4
014	079a014	CCV	MO_500				03/20/07 16:24	1.0	2
015	079a015	CCV	KERO_250				03/20/07 16:52	1.0	3
016	079a016	CCV	DSL_1000				03/20/07 17:19	1.0	4
017	079a017	MS	QC379771	S	Water	123238	03/20/07 17:46	1.0	
018	079a018	MSD	QC379772	S	Water	123238	03/20/07 18:13	1.0	
019	079a019	MS	QC379773	S	Water	123238	03/20/07 18:41	1.0	
020	079a020	MSD	QC379774	S	Water	123238	03/20/07 19:08	1.0	
021	079a021	X	IB				03/20/07 19:35	1.0	
022	079a022	BLANK	QC379997		Miscell.	123290	03/20/07 20:03	1.0	
023	079a023	BS	QC379998		Miscell.	123290	03/20/07 20:30	1.0	
024	079a024	BSD	QC379999		Miscell.	123290	03/20/07 20:58	1.0	
025	079a025	SAMPLE	193464-004		Miscell.	123290	03/20/07 21:25	1.0	
026	079a026	X	IB				03/20/07 21:53	1.0	
027	079a027	SAMPLE	193248-002	S	Water	123267	03/20/07 22:20	1.0	
028	079a028	SAMPLE	193248-003	S	Water	123267	03/20/07 22:47	1.0	
029	079a029	CCV	MO_500				03/20/07 23:14	1.0	2
030	079a030	CCV	DSL_500				03/20/07 23:42	1.0	1
031	079a031	X	CCV				03/21/07 00:09	1.0	2
032	079a032	X	CCV				03/21/07 00:36	1.0	1
033	079a033	MSS	193449-001	S	Soil	123283	03/21/07 01:03	1.0	
034	079a034	MS	QC379966	S	Soil	123283	03/21/07 01:30	1.0	
035	079a035	MSD	QC379967	S	Soil	123283	03/21/07 01:57	1.0	
036	079a036	X	IB				03/21/07 02:25	1.0	
037	079a037	SAMPLE	193449-002	S	Soil	123283	03/21/07 02:52	1.0	
038	079a038	SAMPLE	193449-003	S	Soil	123283	03/21/07 03:19	1.0	
039	079a039	SAMPLE	193449-004	S	Soil	123283	03/21/07 03:46	1.0	
040	079a040	SAMPLE	193449-005	S	Soil	123283	03/21/07 04:13	1.0	
041	079a041	SAMPLE	193449-006	S	Soil	123283	03/21/07 04:41	3.0	
042	079a042	X	IB				03/21/07 05:08	1.0	
043	079a043	CCV	MO_500				03/21/07 05:36	1.0	2
044	079a044	CCV	DSL_250				03/21/07 06:03	1.0	5

Standards used: 1=S5517 2=S5603 3=S5255 4=S5259 5=S5258

REPORTING SUMMARY FOR 193217 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193217-001	GC17A	03/19/07 17:33	1.0	+	+	+	
193217-002	GC17A	03/19/07 18:00	1.0	+	+	+	
193217-003	GC14B	03/20/07 02:06	1.0	+	+	+	
193217-004	GC14B	03/20/07 02:34	1.0	+	+	+	
193217-005	GC14B	03/19/07 21:55	1.0	+	+	+	
193217-006	GC14B	03/20/07 04:53	1.0	+	+	+	
193217-007	GC14B	03/20/07 05:22	1.0	+	+	+	
193217-008	GC14B	03/20/07 05:50	1.0	+	+	+	
193217-009	GC14B	03/20/07 06:18	1.0	+	+	+	
193217-010	GC14B	03/20/07 01:10	1.0	+	+	+	
193217-011	GC14B	03/19/07 22:23	1.0	+	+	+	
193217-012	GC14B	03/20/07 01:38	1.0	+	+	+	
QC379769	GC14B	03/19/07 17:43	1.0				
QC379769	GC14B	03/19/07 18:11	1.0				
QC379769	GC15B	03/19/07 20:06	1.0	+	+	+	
QC379770	GC14B	03/19/07 18:39	1.0	+		+	
QC379771	GC14B	03/19/07 22:51	1.0				
QC379771	GC17A	03/20/07 17:46	1.0	+		+	
QC379772	GC14B	03/19/07 23:19	1.0				
QC379772	GC17A	03/20/07 18:13	1.0	+		+	
QC379773	GC14B	03/19/07 23:46	1.0				
QC379773	GC17A	03/20/07 18:41	1.0	+		+	
QC379774	GC14B	03/20/07 00:14	1.0				
QC379774	GC17A	03/20/07 19:08	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123238
Started By : RFW
Method : 3520C
Spike #1 ID: S5713

Prep Date : 18-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193166-016		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-001		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-002		Water	500	2.5	1	0.005	6	.5			3630	TEHM	
193217-003		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-004		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-005		Water	500	2.5	1	0.005	7	.5			3630	TEHM	mss
193217-006		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-007		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-008		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-009		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-010		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193217-011		Water	500	2.5	1	0.005	7	.5			3630	TEHM	mss
193217-012		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193241-001		Water	500	2.5	1	0.005	7	.5				TEH	
193381-001		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193381-002		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193381-003		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
193381-004		Water	500	2.5	1	0.005	7	.5			3630	TEHM	
QC379769	BLANK	Water	500	2.5	1	0.005		.5			3630	TEH	
QC379770	LCS	Water	500	2.5	1	0.005		.5	.5		3630	TEH	
QC379771	MS	Water	500	2.5	1	0.005	7	.5	.5		3630	TEH	
QC379772	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630	TEH	
QC379773	MS	Water	500	2.5	1	0.005	7	.5	.5		3630	TEH	
QC379774	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630	TEH	

Analyst: MDW Date: 03/20/07 Reviewer: CP Date: 03/21/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

LIMS Batch No: 123238
LIMS Analysis: TEH/M
Extracted by: RFW
Date Extracted: 3/18/07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193166-016D	500	7	2.5	X	
193217-001G		7			
002G		6			possible 2x surr.
003G		7			
004G					
005U					MSS
006G					
007G					
008G					
009G					
010H					
011AE					MSS
012J					
193241-001B					
193561-001G				X	
002A					
003D					
004E					
MB QC379769		NA			
LCS 70					
MS 71		7			193217-005T
MSD 72					
MS 73					193217-011AB
MSD 74					

JOM 3/20/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	~~556~~ 3/18/07 55713D	RFW 3/18/07
0.5 mL of TEH_SP was added to all spikes	55627C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 + HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1435	
Extraction End Time:	08:45	DJT 3/19/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46205237	
Concentrated to volumes as noted above	✓	

3/18/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

3/20/07
Reviewed by Date

00100

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DOT
Cleanup Date: 3/19/07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193166-016	123238	0.5	0.5	
193217-001				
-002				
-003				
-004				
-005				MSS
-006		1.0	1.0	
-007				
-008				
-009				
-010				
-011				MSS
-012				
193381-001				
-002				
-003				
-004				
MB QC379769				
LCS 70				
MS 71				
MSD 72				
MS 73				
MSD 74				
				DOT 3/19/07

☐ Extracts were cleaned up using C&T assembled ___g columns
☒ Extracts were cleaned up using 1.0g cartridges
Extracts were eluted with 4.0 mL CH_2Cl_2
Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	DOT 3/19/07
SP 8243	
EM46354	
✓	

DOT 3/19/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

Jerine Chee 3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/23/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW113	Batch#:	123142
Lab ID:	193217-001	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC		Limits
Dibromofluoromethane	104		80-123
1,2-Dichloroethane-d4	118	*	76-114
Toluene-d8	102		88-110
Bromofluorobenzene	96		86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

79.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW113RB979GW114	Batch#:	123142
Lab ID:	193217-002	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	119 *	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	96	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW114	Batch#:	123243
Lab ID:	193217-003	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.4	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	2.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW115	Batch#:	123243
Lab ID:	193217-004	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.5	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

82.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW116	Batch#:	123243
Lab ID:	193217-005	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	2.2	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	37	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

83.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	950GW108	Batch#:	123243
Lab ID:	193217-006	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	2.500		

Analyte	Result	RL	MDL
Chloromethane	ND	2.5	
Vinyl Chloride	4.5	1.3	
Bromomethane	ND	2.5	
Chloroethane	ND	2.5	
Acetone	ND	25	
1,1-Dichloroethene	ND	1.3	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	1.3	
MTBE	ND	1.3	
trans-1,2-Dichloroethene	63	1.3	
Vinyl Acetate	ND	25	
1,1-Dichloroethane	ND	1.3	
2-Butanone	ND	25	
cis-1,2-Dichloroethene	160	1.3	
Chloroform	ND	1.3	
1,1,1-Trichloroethane	ND	1.3	
Carbon Tetrachloride	ND	1.3	
1,2-Dichloroethane	ND	1.3	
Benzene	ND	1.3	0.6
Trichloroethene	ND	1.3	
1,2-Dichloropropane	ND	1.3	
Bromodichloromethane	ND	1.3	
4-Methyl-2-Pentanone	ND	25	
cis-1,3-Dichloropropene	ND	1.3	
Toluene	ND	1.3	
trans-1,3-Dichloropropene	ND	1.3	
1,1,2-Trichloroethane	ND	1.3	
2-Hexanone	ND	25	
Tetrachloroethene	ND	1.3	
Dibromochloromethane	ND	1.3	
Chlorobenzene	ND	1.3	
Ethylbenzene	ND	1.3	
Styrene	ND	1.3	
Bromoform	ND	2.5	
1,1,2,2-Tetrachloroethane	ND	1.3	
Xylene (total)	ND	2.5	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

84.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0306071A	Batch#:	123201
Lab ID:	193217-007	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.5	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

85.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0306071B	Batch#:	123142
Lab ID:	193217-008	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	3.4	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	38	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	127 *	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	97	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

86.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW101	Batch#:	123142
Lab ID:	193217-009	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	2.5	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.6	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-123
1,2-Dichloroethane-d4	128 *	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	99	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

87.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW02	Batch#:	123261
Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	122 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

88.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0306071C	Batch#:	123142
Lab ID:	193217-012	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-123
1,2-Dichloroethane-d4	132 *	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	100	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

89.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0306072A	Batch#:	123142
Lab ID:	193217-013	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	0.5	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	119 *	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	94	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

90.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	LF08GW01	Batch#:	123142
Lab ID:	193217-014	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	127 *	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	98	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

91.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	LF08GW02B	Batch#:	123142
Lab ID:	193217-015	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC		Limits
Dibromofluoromethane	113		80-123
1,2-Dichloroethane-d4	130	*	76-114
Toluene-d8	102		88-110
Bromofluorobenzene	97		86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

92.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	LF08GW03	Batch#:	123142
Lab ID:	193217-016	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-123
1,2-Dichloroethane-d4	130 *	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	98	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

93.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	LF08GW06	Batch#:	123142
Lab ID:	193217-017	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-123
1,2-Dichloroethane-d4	129 *	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	99	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

94.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	HWGW100	Batch#:	123142
Lab ID:	193217-018	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	1.2	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-123
1,2-Dichloroethane-d4	130 *	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	99	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

95.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	HWGW101	Batch#:	123142
Lab ID:	193217-019	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-123
1,2-Dichloroethane-d4	132 *	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	98	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

96.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	BHWGW01	Batch#:	123201
Lab ID:	193217-020	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	0.7	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	1.0	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

97.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	BHWGW04	Batch#:	123144
Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

98.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	BHWGW05	Batch#:	123144
Lab ID:	193217-022	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

99.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	BHWGW05RBBHWGW01	Batch#:	123144
Lab ID:	193217-023	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	97	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

100.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0306073A	Batch#:	123144
Lab ID:	193217-024	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

101.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379349	Batch#:	123142
Matrix:	Water	Analyzed:	03/15/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	118 *	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	94	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

102.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379530	Batch#:	123144
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	89	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

104.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379619	Batch#:	123201
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

105.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379792	Batch#:	123243
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379829	Batch#:	123243
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

107.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379862	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

108.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379891	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.55	110	65-135
Benzene	25.00	25.21	101	65-135
Trichloroethene	25.00	24.77	99	65-135
Toluene	25.00	26.52	106	65-135
Chlorobenzene	25.00	24.00	96	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	91	86-115

116.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123142
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379347

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.79	111	65-135
Benzene	25.00	27.97	112	65-135
Trichloroethene	25.00	25.52	102	65-135
Toluene	25.00	26.27	105	65-135
Chlorobenzene	25.00	24.98	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	90	86-115

Type: BSD Lab ID: QC379348

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.66	107	65-135	4	35
Benzene	25.00	26.22	105	65-135	6	35
Trichloroethene	25.00	24.10	96	65-135	6	35
Toluene	25.00	24.77	99	65-135	6	35
Chlorobenzene	25.00	23.44	94	65-135	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	93	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123144
Units:	ug/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379355

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	31.39	126	65-135
Benzene	25.00	26.52	106	65-135
Trichloroethene	25.00	26.12	104	65-135
Toluene	25.00	24.67	99	65-135
Chlorobenzene	25.00	23.81	95	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	87	86-115

Type: BSD Lab ID: QC379356

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.02	120	65-135	4	35
Benzene	25.00	25.01	100	65-135	6	35
Trichloroethene	25.00	24.25	97	65-135	7	35
Toluene	25.00	23.86	95	65-135	3	35
Chlorobenzene	25.00	23.98	96	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-123
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	96	88-110
Bromofluorobenzene	86	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123201
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379620

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.97	120	65-135
Benzene	25.00	27.18	109	65-135
Trichloroethene	25.00	26.15	105	65-135
Toluene	25.00	25.77	103	65-135
Chlorobenzene	25.00	23.53	94	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	89	86-115

Type: BSD Lab ID: QC379621

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	31.37	125	65-135	5	35
Benzene	25.00	26.00	104	65-135	4	35
Trichloroethene	25.00	25.01	100	65-135	4	35
Toluene	25.00	24.35	97	65-135	6	35
Chlorobenzene	25.00	24.27	97	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	96	88-110
Bromofluorobenzene	88	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123243
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379793

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.99	116	65-135
Benzene	25.00	27.95	112	65-135
Trichloroethene	25.00	27.12	108	65-135
Toluene	25.00	28.00	112	65-135
Chlorobenzene	25.00	25.32	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	93	86-115

Type: BSD Lab ID: QC379794

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.32	105	65-135	10	35
Benzene	25.00	26.80	107	65-135	4	35
Trichloroethene	25.00	27.04	108	65-135	0	35
Toluene	25.00	26.73	107	65-135	5	35
Chlorobenzene	25.00	25.33	101	65-135	0	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	93	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	BHWGW04	Batch#:	123144
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379531

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1010	25.00	30.10	120	65-135
Benzene	<0.1164	25.00	26.89	108	65-135
Trichloroethene	<0.1059	25.00	25.59	102	65-135
Toluene	<0.06248	25.00	24.75	99	65-135
Chlorobenzene	<0.1633	25.00	25.34	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	88	86-115

Type: MSD Lab ID: QC379532

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.76	107	65-135	12	35
Benzene	25.00	25.31	101	65-135	6	35
Trichloroethene	25.00	23.79	95	65-135	7	35
Toluene	25.00	24.61	98	65-135	1	35
Chlorobenzene	25.00	23.91	96	65-135	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	84 *	86-115

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

111.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	123201
MSS Lab ID:	193312-003	Sampled:	03/06/07
Matrix:	Water	Received:	03/09/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379669

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1010	25.00	29.95	120	65-135
Benzene	0.1720	25.00	26.14	104	65-135
Trichloroethene	<0.1059	25.00	25.23	101	65-135
Toluene	<0.06248	25.00	23.74	95	65-135
Chlorobenzene	<0.1633	25.00	22.26	89	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	87	86-115

Type: MSD Lab ID: QC379670

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.68	119	65-135	1	35
Benzene	25.00	25.77	102	65-135	1	35
Trichloroethene	25.00	24.75	99	65-135	2	35
Toluene	25.00	24.11	96	65-135	2	35
Chlorobenzene	25.00	24.02	96	65-135	8	35

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	87	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW116	Batch#:	123243
MSS Lab ID:	193217-005	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379820

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	0.1323	25.00	26.54	106	65-135
Benzene	<0.2500	25.00	27.28	109	65-135
Trichloroethene	<0.1151	25.00	26.27	105	65-135
Toluene	<0.1338	25.00	27.34	109	65-135
Chlorobenzene	<0.1569	25.00	25.37	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	92	86-115

Type: MSD Lab ID: QC379821

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.74	102	65-135	3	35
Benzene	25.00	26.05	104	65-135	5	35
Trichloroethene	25.00	25.32	101	65-135	4	35
Toluene	25.00	25.83	103	65-135	6	35
Chlorobenzene	25.00	24.01	96	65-135	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	92	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW02	Batch#:	123261
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379910

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1169	25.00	30.30	121	65-135
Benzene	<0.06286	25.00	27.20	109	65-135
Trichloroethene	<0.08502	25.00	25.18	101	65-135
Toluene	<0.1220	25.00	25.50	102	65-135
Chlorobenzene	<0.1069	25.00	24.97	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	120 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	91	86-115

Type: MSD Lab ID: QC379911

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.71	115	65-135	5	35
Benzene	25.00	26.51	106	65-135	3	35
Trichloroethene	25.00	24.30	97	65-135	4	35
Toluene	25.00	24.68	99	65-135	3	35
Chlorobenzene	25.00	24.45	98	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	121 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	93	86-115

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447107015008 File : ecf08 Time : 15-MAR-2007 11:07

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	9386	20.89	
75	30.00% - 60.00% of mass 95	20250	45.07	
95		44933		
96	5.00% - 9.00% of mass 95	3062	6.81	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	32149	71.55	
175	5.00% - 9.00% of mass 174	2321	7.22	
176	> 95.00% and < 101.00% of mass 174	31002	96.43	
177	5.00% - 9.00% of mass 176	1938	6.25	

Analyst: BO Date: 03/15/07 Reviewer: LW Date: 03/16/07

447107015008

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447112790018 File : ecj18 Time : 19-MAR-2007 15:39

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8084	18.62	
75	30.00% - 60.00% of mass 95	18678	43.02	
95		43418		
96	5.00% - 9.00% of mass 95	2837	6.53	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	31514	72.58	
175	5.00% - 9.00% of mass 174	2218	7.04	
176	> 95.00% and < 101.00% of mass 174	29944	95.02	
177	5.00% - 9.00% of mass 176	2060	6.88	

Analyst: BO Date: 03/19/07 Reviewer: LW Date: 03/20/07

447112790018

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477017193001 File : hac01 Time : 11-JAN-2007 22:33

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8155	25.58	
75	30.00% - 60.00% of mass 95	15166	47.58	
95		31878		
96	5.00% - 9.00% of mass 95	2033	6.38	
173	< 2.00% of mass 174	110	0.60	
174	> 50.00% and < 100.00% of mass 95	18202	57.10	
175	5.00% - 9.00% of mass 174	1444	7.93	
176	> 95.00% and < 101.00% of mass 174	18013	98.96	
177	5.00% - 9.00% of mass 176	1143	6.35	

Analyst: TEW Date: 01/12/07 Reviewer: LW Date: 01/12/07

477017193001

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477107158003 File : hcf03 Time : 15-MAR-2007 10:45

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	21628	29.99	
75	30.00% - 60.00% of mass 95	37040	51.36	
95		72117		
96	5.00% - 9.00% of mass 95	5151	7.14	
173	< 2.00% of mass 174	213	0.55	
174	> 50.00% and < 100.00% of mass 95	38909	53.95	
175	5.00% - 9.00% of mass 174	2901	7.46	
176	> 95.00% and < 101.00% of mass 174	38288	98.40	
177	5.00% - 9.00% of mass 176	2589	6.76	

Analyst: TEW Date: 03/16/07 Reviewer: LW Date: 03/16/07

477107158003

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477107158021 File : hcf21 Time : 15-MAR-2007 22:10

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	18474	28.83	
75	30.00% - 60.00% of mass 95	33018	51.53	
95		64074		
96	5.00% - 9.00% of mass 95	4001	6.24	
173	< 2.00% of mass 174	99	0.29	
174	> 50.00% and < 100.00% of mass 95	34373	53.65	
175	5.00% - 9.00% of mass 174	2698	7.85	
176	> 95.00% and < 101.00% of mass 174	33804	98.34	
177	5.00% - 9.00% of mass 176	2873	8.50	

Analyst: TEW Date: 03/16/07 Reviewer: LW Date: 03/16/07

477107158021

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 477108668002 File : hcg02 Time : 16-MAR-2007 11:49

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	9960	25.19	
75	30.00% - 60.00% of mass 95	19660	49.73	
95		39532		
96	5.00% - 9.00% of mass 95	2468	6.24	
173	< 2.00% of mass 174	185	0.73	
174	> 50.00% and < 100.00% of mass 95	25375	64.19	
175	5.00% - 9.00% of mass 174	2032	8.01	
176	> 95.00% and < 101.00% of mass 174	24620	97.02	
177	5.00% - 9.00% of mass 176	1552	6.30	

Analyst: SJD Date: 03/17/07 Reviewer: LW Date: 03/19/07

477108668002

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497038053008 File : jaq08 Time : 26-JAN-2007 15:00

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	77378	23.85	
75	30.00% - 60.00% of mass 95	148629	45.81	
95		324437		
96	5.00% - 9.00% of mass 95	22037	6.79	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	249066	76.77	
175	5.00% - 9.00% of mass 174	18514	7.43	
176	> 95.00% and < 101.00% of mass 174	244885	98.32	
177	5.00% - 9.00% of mass 176	15711	6.42	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

497038053008

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497112758002 File : jcj02 Time : 19-MAR-2007 07:47

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	113381	22.02	
75	30.00% - 60.00% of mass 95	226240	43.94	
95		514922		
96	5.00% - 9.00% of mass 95	34594	6.72	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	405802	78.81	
175	5.00% - 9.00% of mass 174	30405	7.49	
176	> 95.00% and < 101.00% of mass 174	404373	99.65	
177	5.00% - 9.00% of mass 176	25813	6.38	

Analyst: ACM Date: 03/19/07 Reviewer: LW Date: 03/19/07

497112758002

CURTIS & TOMPKINS BFB TUNE FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497112758015 File : jcj15 Time : 19-MAR-2007 15:19

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	216042	22.22	
75	30.00% - 60.00% of mass 95	437376	44.98	
95		972288		
96	5.00% - 9.00% of mass 95	64781	6.66	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	772181	79.42	
175	5.00% - 9.00% of mass 174	58781	7.61	
176	> 95.00% and < 101.00% of mass 174	762538	98.75	
177	5.00% - 9.00% of mass 176	50960	6.68	

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

497112758015

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

M=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

447013464001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

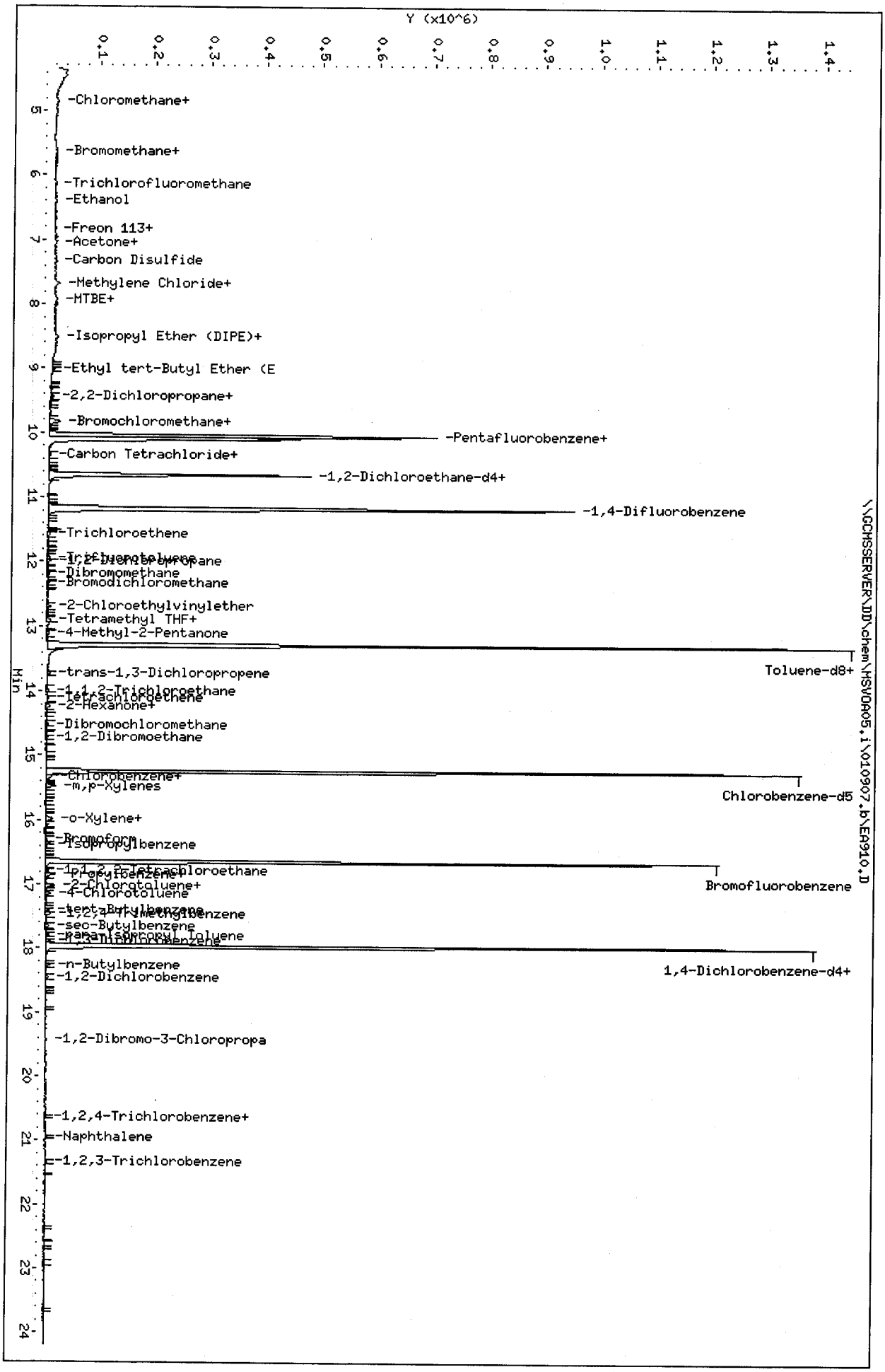
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id:
Inj Date : 09-JAN-2007 14:44
Operator : VOC
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target
Cal Date : 09-JAN-2007 18:28
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PC_MSVOA07

Client Smp ID: DYNA P&T
MS Autotune Date: 08-JAN-2007 15:49
Inst ID: MSVOA05.i

Quant Type: ISTD
Cal File: EA918.D
Calibration Sample, Level: 1

Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

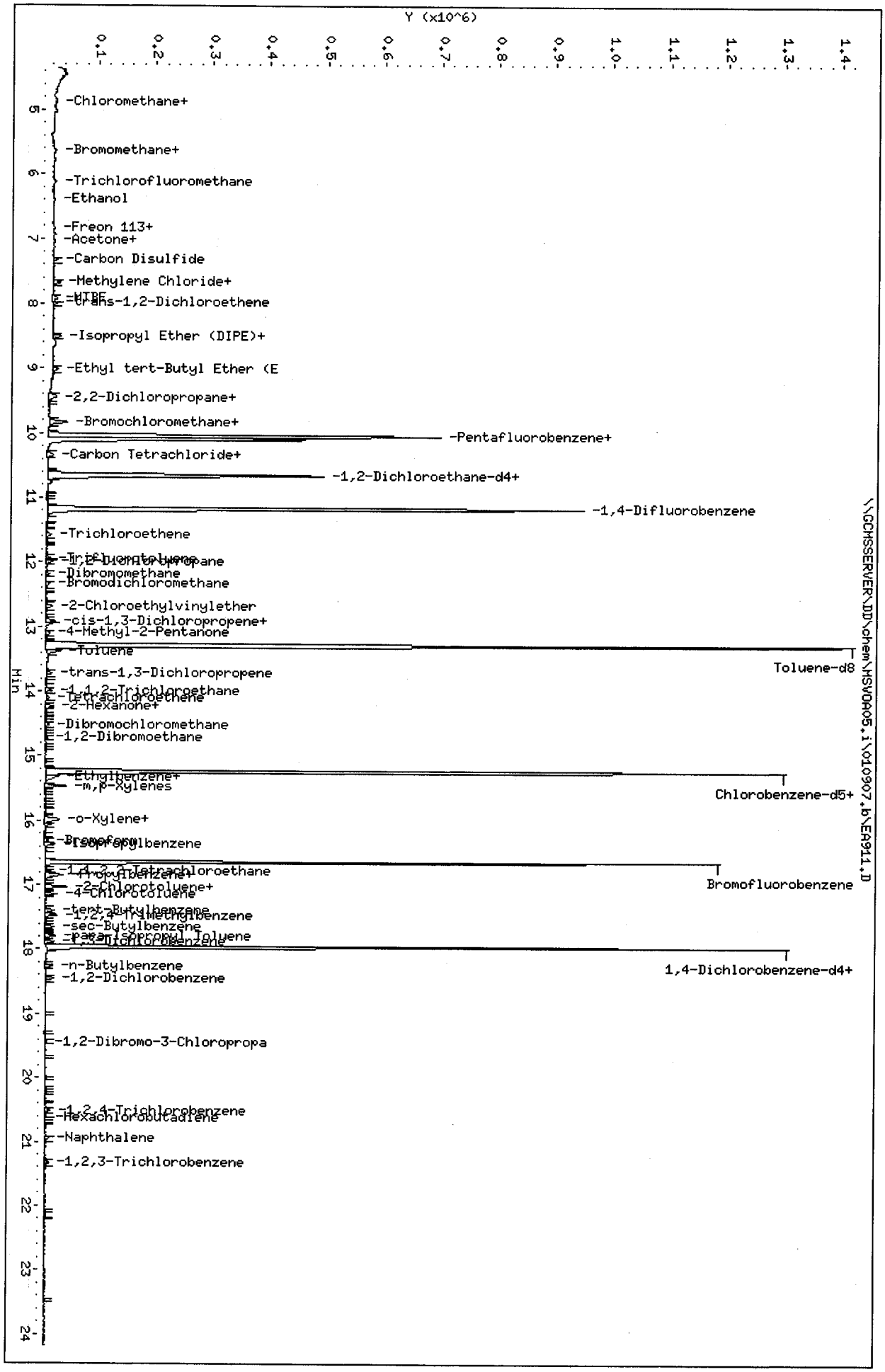
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

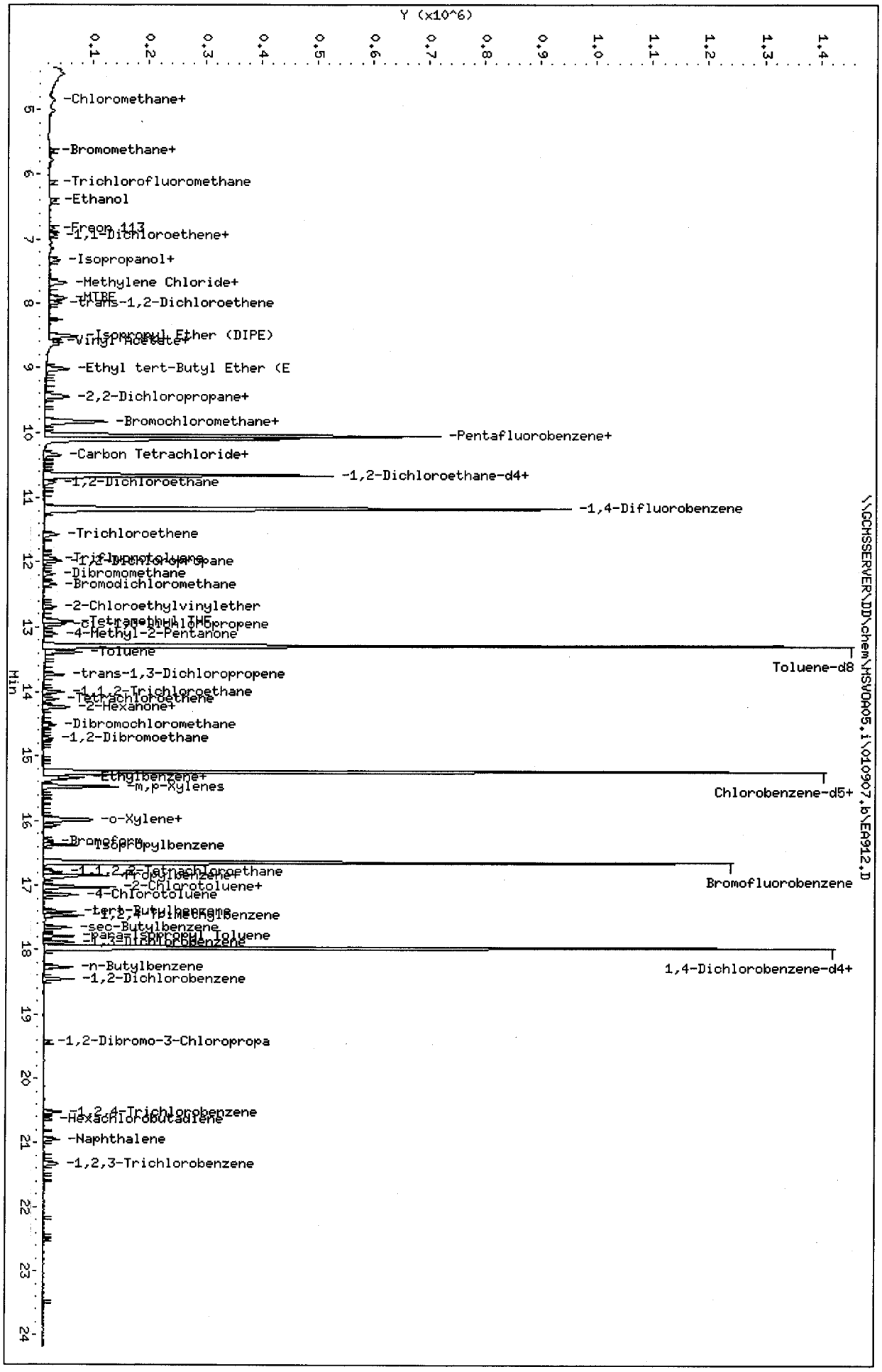
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Date : 09-JAN-2007 15:16
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

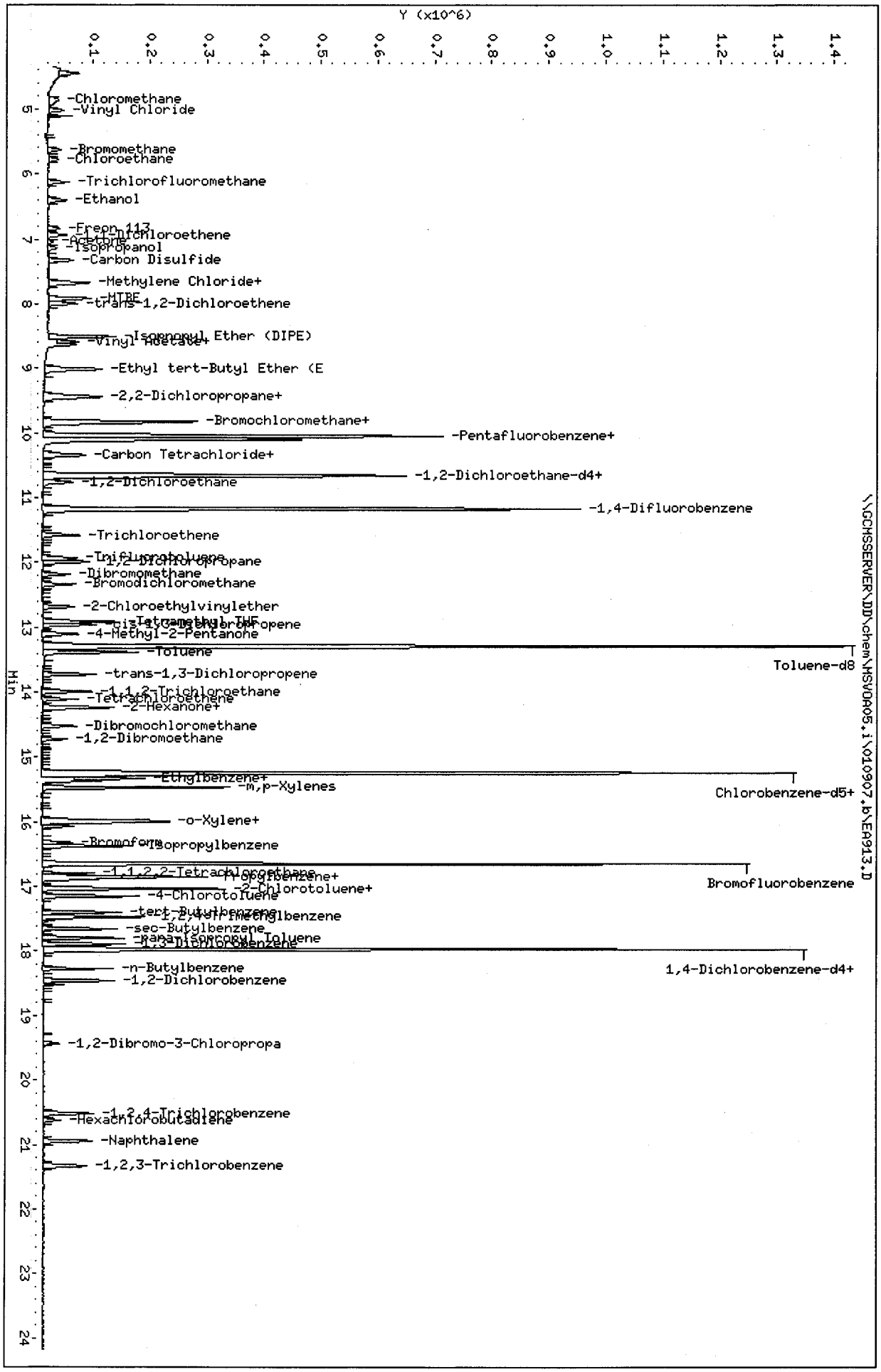
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
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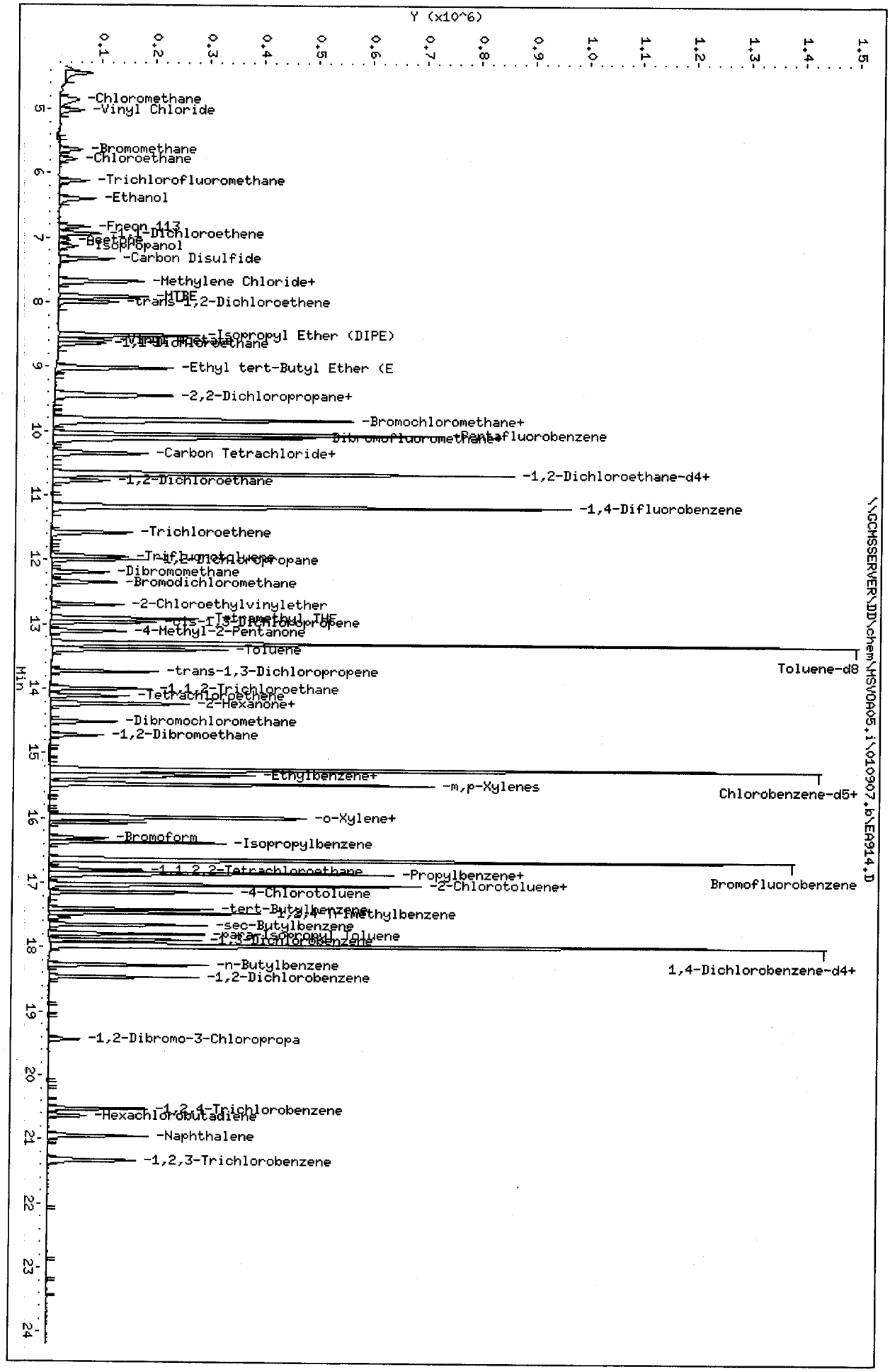
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

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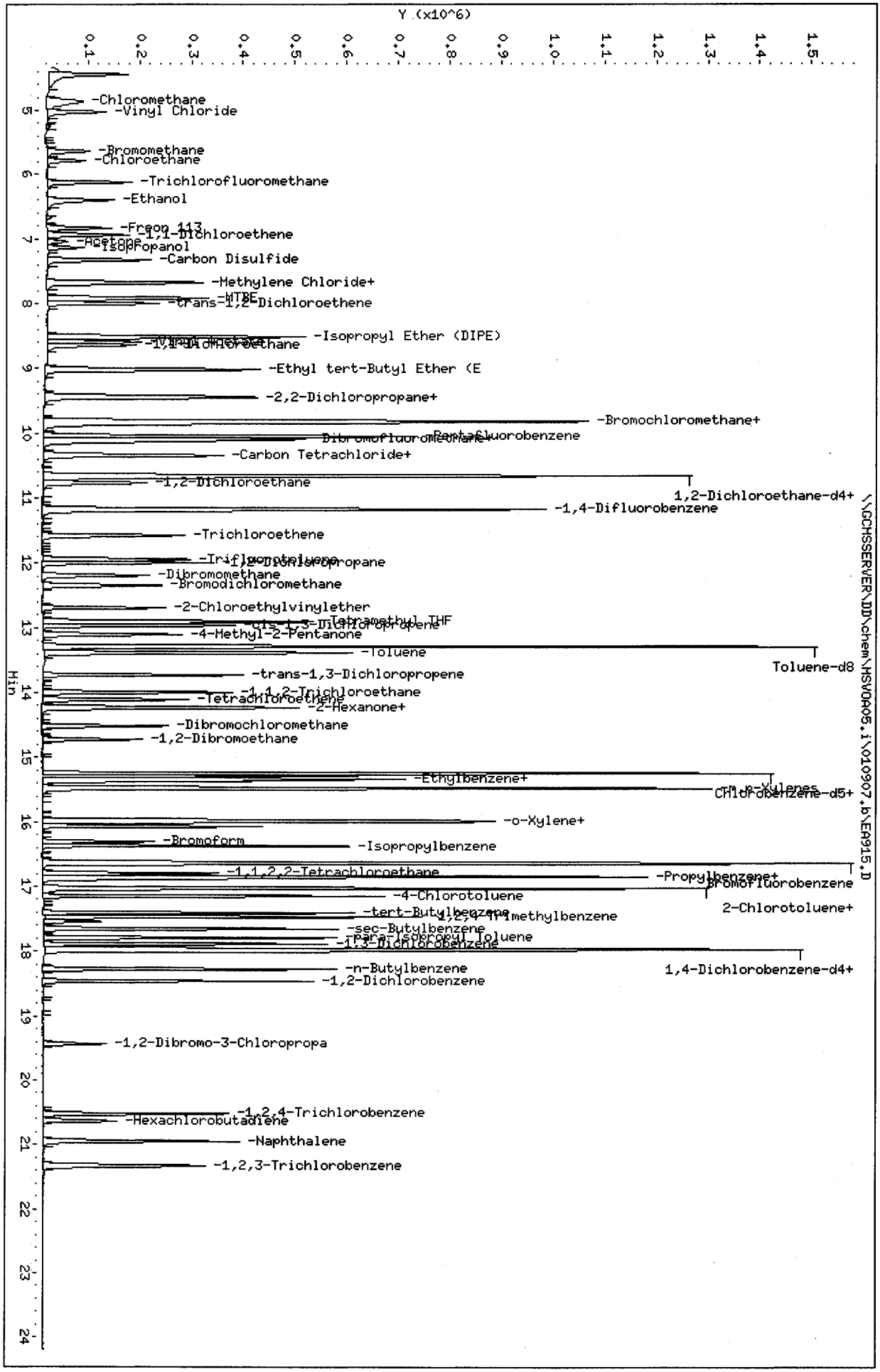
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
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Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.005/100,50PPB
Comment :
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Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
	18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
	19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
	21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
	22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
	23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
	24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
	25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
	26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
	29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
	30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
	33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
	34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
	37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
	38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
	40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
	46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
	47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
	50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
	51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
*	55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
	57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
	60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
	61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
	62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
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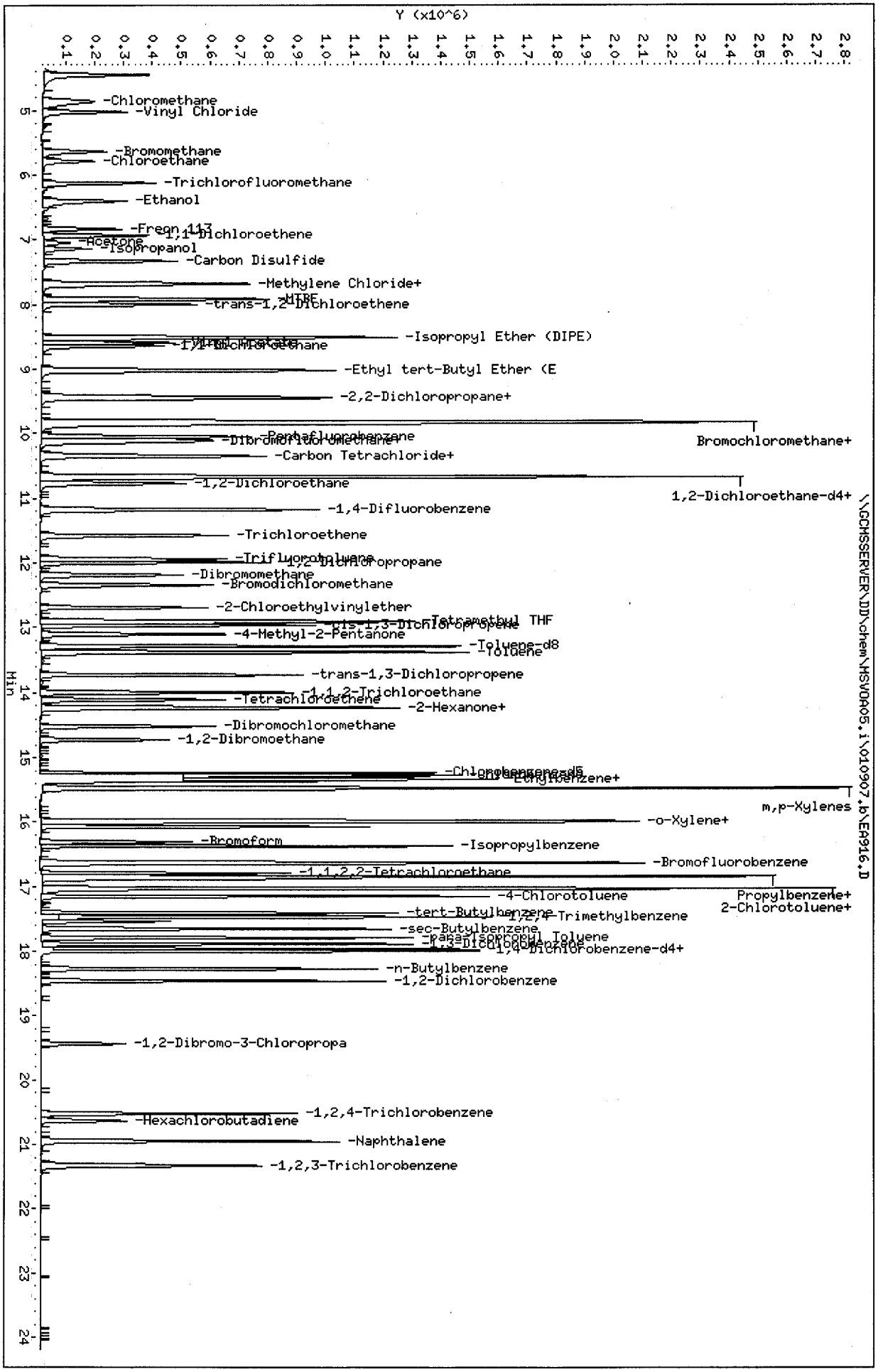
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:49

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Lab Smp Id: Client Smp ID: DYNA P&T
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Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.0075/100,75PPB
Comment :
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Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

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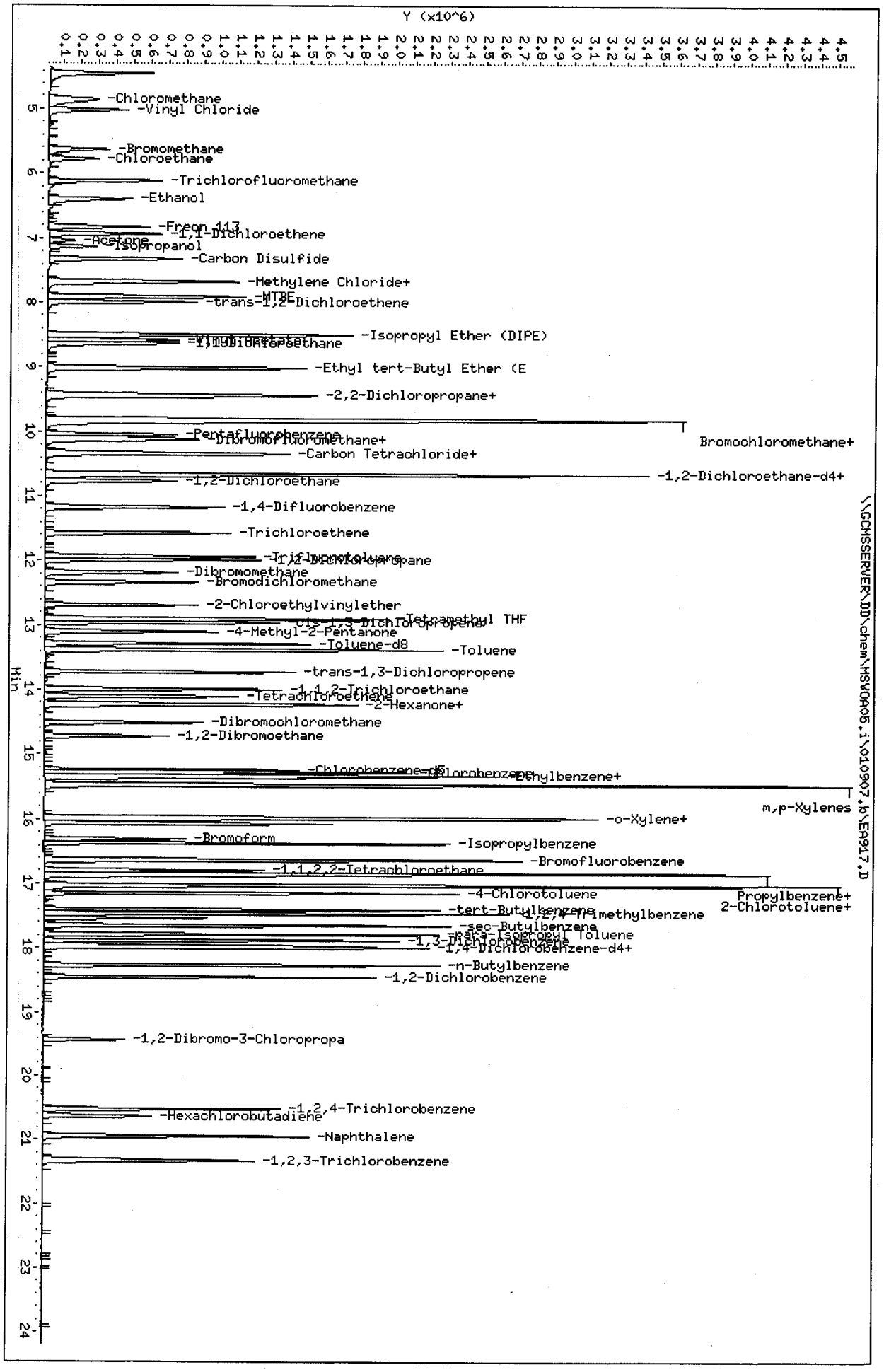
Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:50

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
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Misc Info : S4713,0.01/100,100PPB
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Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
* 27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
* 36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

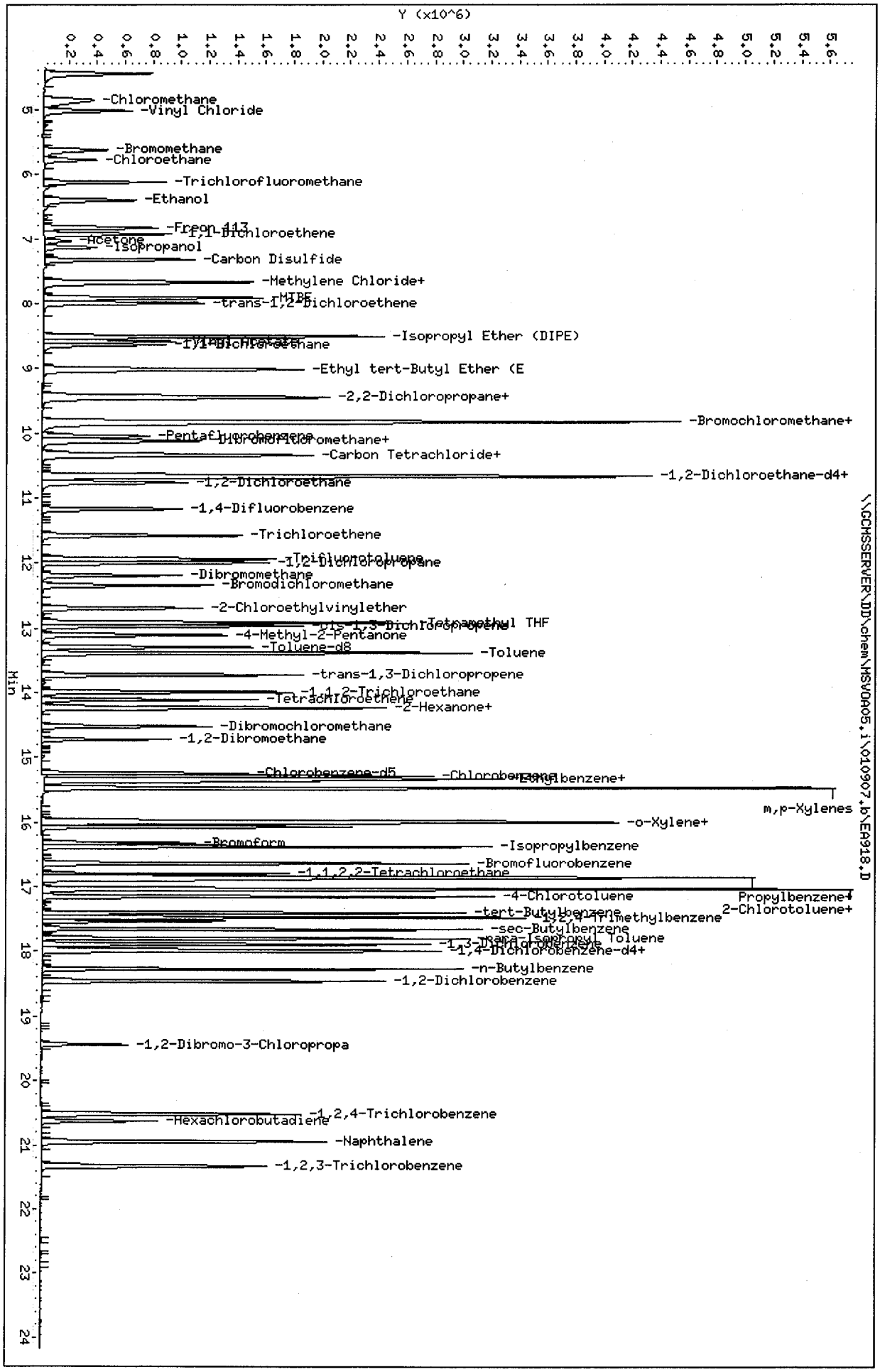
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 MSVOA Water: EPA 8260B

Inst : MSVOA08
Calnum: 477017193004
Units : ug/L

Name : 826GOX8
Date : 12-JAN-2007 00:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hac04	477017193004	0.25/0.5PPB	12-JAN-2007 00:23	S5152 (1000000X), S5170 (2000000X), S4713 (2000000X), S5079 (5000X)
L2	hac05	477017193005	0.5/1PPB	12-JAN-2007 01:01	S5152 (500000X), S5170 (1000000X), S4713 (1000000X), S5079 (5000X)
L3	hac06	477017193006	2PPB	12-JAN-2007 01:38	S5152 (250000X), S5170 (250000X), S4713 (500000X), S5079 (5000X)
L4	hac07	477017193007	5PPB	12-JAN-2007 02:15	S5152 (100000X), S5170 (100000X), S4713 (200000X), S5079 (5000X)
L5	hac08	477017193008	10PPB	12-JAN-2007 02:52	S5152 (50000X), S5170 (50000X), S4713 (100000X), S5079 (5000X)
L6	hac09	477017193009	20PPB	12-JAN-2007 03:29	S5152 (25000X), S5170 (25000X), S4713 (50000X), S5079 (5000X)
L7	hac10	477017193010	50PPB	12-JAN-2007 04:06	S5152 (10000X), S5170 (10000X), S4713 (20000X), S5079 (5000X)
L8	hac11	477017193011	75PPB	12-JAN-2007 04:43	S5152 (6667X), S5170 (6667X), S4713 (13330X), S5079 (5000X)
L9	hac12	477017193012	100PPB	12-JAN-2007 05:20	S5152 (5000X), S5170 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8806m	0.8058m	0.9504m	0.8173m	0.8968	0.8626	0.8204	0.7838	AVRG		1.17343		0.8522	7	15	0.10	0.99	
Vinyl Chloride	0.6275m	0.5395m	0.5830m	0.7172m	0.6221m	0.6854m	0.6979	0.6718	0.6304	AVRG		1.55851		0.6416	9	15	0.050	0.99	
Bromomethane		0.1923m	0.1603m	0.1682m	0.2089m	0.2466m	0.2531	0.2856	0.2855	QUAD	1.15385	3.95679	-0.01856	0.2251	0.999	15	0.050	0.99	
Chloroethane		0.2660m	0.2863m	0.3706m	0.3185m	0.3398	0.3516	0.3444	0.3233	AVRG		3.07633		0.3251	11	15	0.050	0.99	
Acetone				0.2780	0.3176	0.2564	0.2241	0.2901	0.2110	AVRG		3.80409		0.2629	15	15	0.050	0.99	
1,1-Dichloroethene		0.3208m	0.2726	0.2882	0.2962	0.2976	0.2927	0.3177	0.3169	AVRG		3.32984		0.3003	6	15	0.050	0.99	
Methylene Chloride			0.4606m	0.4829	0.4669	0.4651	0.4434m	0.4553	0.4293	AVRG		2.18504		0.4577	4	15	0.050	0.99	
Carbon Disulfide		1.5636	1.4603m	1.6680	1.5942	1.6172	1.4664	1.6998	1.6542	AVRG		0.62875		1.5905	6	15	0.050	0.99	
MTBE		1.5665m	1.3935	1.6422	1.6230	1.6527	1.5561	1.6054	1.4739	AVRG		0.63932		1.5642	6	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3866	0.3437	0.4016	0.4022	0.3921	0.3698	0.4047	0.3884	AVRG		2.58975		0.3861	5	15	0.050	0.99	
Vinyl Acetate			1.1636	1.0235	1.2109	1.2448	1.1327	1.1680		AVRG		0.86411		1.1573	7	15	0.050	0.99	
1,1-Dichloroethane		0.9673	0.9269	1.0715	1.0196	1.0222	0.9504	0.9804	0.8882	AVRG		1.02216		0.9783	6	15	0.10	0.99	
2-Butanone			0.3171m	0.3679	0.3908	0.3539	0.3240	0.3624	0.3060	AVRG		2.89012		0.3460	9	15	0.050	0.99	
cis-1,2-Dichloroethene		0.4464	0.4142	0.4778	0.4395	0.4330	0.4275	0.4314	0.4046	AVRG		2.30269		0.4343	5	15	0.050	0.99	
Chloroform		1.0950	0.7997	0.9241	0.8720	0.8804	0.8290	0.8293	0.7549	AVRG		1.14542		0.8730	12	15	0.050	0.99	
1,1,1-Trichloroethane		0.6184	0.5331	0.6062	0.6076	0.6067	0.5642	0.6396	0.6009	AVRG		1.67477		0.5971	6	15	0.050	0.99	
Carbon Tetrachloride		0.2395	0.1751	0.2103	0.2086	0.2060	0.2000	0.2284	0.2291	AVRG		4.71409		0.2121	10	15	0.050	0.99	
1,2-Dichloroethane		0.4006	0.3435	0.4069	0.3980	0.3982	0.3892	0.3820	0.3571	AVRG		2.60133		0.3844	6	15	0.050	0.99	
Benzene		0.7419	0.6900	0.7593	0.7475	0.7363	0.6900	0.6831	0.6553	AVRG		1.40264		0.7129	5	15	0.050	0.99	
Trichloroethene		0.1932	0.1805	0.1980	0.1893	0.1916	0.1801	0.1987	0.1887	AVRG		5.26322		0.1900	4	15	0.050	0.99	
1,2-Dichloropropane		0.2278	0.2153m	0.2530	0.2476	0.2558	0.2478	0.2412m	0.2362	AVRG		4.15663		0.2406	6	15	0.050	0.99	
Bromodichloromethane		0.2582	0.2462	0.2933	0.3009	0.2998	0.3081	0.2935	0.2847	AVRG		3.50168		0.2856	8	15	0.050	0.99	
4-Methyl-2-Pentanone			0.2865	0.3244	0.3466	0.3477	0.3362	0.3408	0.3180	AVRG		3.04331		0.3286	7	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3376	0.3073	0.3552	0.3609	0.3637	0.3588	0.3466	0.3412	AVRG		2.88676		0.3464	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4933	0.4296	0.4822	0.4536	0.4388	0.4227	0.4333	0.4107	AVRG		2.24464		0.4455	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.3087	0.3020	0.3642	0.3613	0.3458	0.3515	0.3361	0.3318	AVRG		2.96140		0.3377	7	15	0.050	0.99	
1,1,2-Trichloroethane		0.0722	0.0914	0.1106	0.1093	0.1047	0.1031	0.1011	0.0953	AVRG		10.1558		0.0985	13	15	0.050	0.99	
2-Hexanone			0.2338	0.2817	0.3151	0.2899	0.2685	0.2979	0.2668	AVRG		3.58278		0.2791	9	15	0.050	0.99	
Tetrachloroethene		0.1641	0.1213	0.1398	0.1281	0.1349	0.1240	0.1485	0.1478	AVRG		7.21771		0.1385	10	15	0.050	0.99	
Dibromochloromethane		0.2079	0.2087	0.2432	0.2413	0.2408	0.2460	0.2448	0.2421	AVRG		4.26720		0.2343	7	15	0.050	0.99	
Chlorobenzene		0.6262	0.5700	0.6463	0.6150	0.5858	0.5456	0.5632	0.5499	AVRG		1.70146		0.5877	6	15	0.30	0.99	
Ethylbenzene		1.1160	1.0891	1.1934	1.1053	1.0926	0.9722	1.0033	0.9821	AVRG		0.93523		1.0693	7	15	0.050	0.99	
m,p-Xylenes	0.3420	0.3961	0.3798	0.4233	0.3822	0.3958	0.3373	0.3443	0.3191	AVRG		2.71100		0.3689	9	15	0.050	0.99	
o-Xylene		0.3921	0.3623	0.4108	0.3856	0.3870	0.3502	0.3563	0.3369	AVRG		2.68366		0.3726	7	15	0.050	0.99	
Styrene		0.6194	0.6059	0.7032	0.6766	0.7020	0.6317	0.6324	0.5918	AVRG		1.54948		0.6454	7	15	0.050	0.99	
Bromoform		0.1375	0.1129	0.1338	0.1332	0.1350	0.1329	0.1356	0.1369	AVRG		7.56310		0.1322	6	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.7116	0.7269	0.8660	0.8562	0.8336	0.7908	0.7637	0.7685	AVRG		1.26635		0.7897	7	15	0.30	0.99	
Dibromofluoromethane	0.8849	0.9036	0.8935	0.9312	0.9037	0.9131	0.8911	0.8864	0.8527	AVRG		1.11659		0.8956	2	15	0.050	0.99	
1,2-Dichloroethane-d4	0.6018	0.6166	0.6200	0.6400	0.6236	0.6341	0.6139	0.5597	0.5498	AVRG		1.64845		0.6066	5	15	0.050	0.99	
Toluene-d8	1.1325	1.1451	1.1195	1.1656	1.1678	1.1169	1.1470	1.1131	1.1177	AVRG		0.88018		1.1361	2	15	0.050	0.99	
Bromofluorobenzene	1.7048	1.7354	1.6901	1.7118	1.7291	1.6810	1.6744	1.5998	1.6097	AVRG		0.59460		1.6818	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate			2.0000	5.0000	10.000	20.000	50.000	75.000		ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: TEW Date: 01/12/07 Reviewer: LW Date: 01/12/07

M=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 477017193004 Cal Date: 12-JAN-2007 Type : WATER

ICV 477017193013 (hac13 12-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 477017193014 (hac14 12-JAN-2007) stds: S5052 (10000X), S5168 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	477017193013	0.8522	0.7396	25.00	21.70	ug/L	-13	30	m
Vinyl Chloride	477017193013	0.6416	0.5460	25.00	21.27	ug/L	-15	20	
Bromomethane	477017193013	0.2251	0.2130	25.00	21.69	ug/L	-13	30	m
Chloroethane	477017193013	0.3251	0.3110	25.00	23.92	ug/L	-4	30	
Acetone	477017193014	0.2629	0.2119	25.00	20.15	ug/L	-19	40	
1,1-Dichloroethene	477017193014	0.3003	0.3317	25.00	27.61	ug/L	10	20	
Methylene Chloride	477017193014	0.4577	0.4833	25.00	26.40	ug/L	6	30	
Carbon Disulfide	477017193014	1.5905	1.3237	25.00	20.81	ug/L	-17	30	
MTBE	477017193014	1.5642	1.3592	25.00	21.72	ug/L	-13	30	
trans-1,2-Dichloroethene	477017193014	0.3861	0.4023	25.00	26.04	ug/L	4	30	
Vinyl Acetate	477017193014	1.1573	1.0199	25.00	22.03	ug/L	-12	40	
1,1-Dichloroethane	477017193014	0.9783	0.9634	25.00	24.62	ug/L	-2	30	
2-Butanone	477017193014	0.3460	0.3148	25.00	22.74	ug/L	-9	40	
cis-1,2-Dichloroethene	477017193014	0.4343	0.4508	25.00	25.95	ug/L	4	30	
Chloroform	477017193014	0.8730	0.8312	25.00	23.80	ug/L	-5	20	
1,1,1-Trichloroethane	477017193014	0.5971	0.5928	25.00	24.82	ug/L	-1	30	
Carbon Tetrachloride	477017193014	0.2121	0.2249	25.00	26.51	ug/L	6	30	
1,2-Dichloroethane	477017193014	0.3844	0.3561	25.00	23.16	ug/L	-7	30	
Benzene	477017193014	0.7129	0.7037	25.00	24.67	ug/L	-1	30	
Trichloroethene	477017193014	0.1900	0.1902	25.00	25.03	ug/L	0	30	
1,2-Dichloropropane	477017193014	0.2406	0.2278	25.00	23.67	ug/L	-5	20	
Bromodichloromethane	477017193014	0.2856	0.3014	25.00	26.39	ug/L	6	30	
4-Methyl-2-Pentanone	477017193014	0.3286	0.3114	25.00	23.69	ug/L	-5	40	
cis-1,3-Dichloropropene	477017193014	0.3464	0.3457	25.00	24.95	ug/L	0	30	
Toluene	477017193014	0.4455	0.4491	25.00	25.20	ug/L	1	20	
trans-1,3-Dichloropropene	477017193014	0.3377	0.3081	25.00	22.81	ug/L	-9	30	
1,1,2-Trichloroethane	477017193014	0.0985	0.0961	25.00	24.39	ug/L	-2	30	
2-Hexanone	477017193014	0.2791	0.2680	25.00	24.00	ug/L	-4	40	
Tetrachloroethene	477017193014	0.1385	0.1567	25.00	28.28	ug/L	13	30	
Dibromochloromethane	477017193014	0.2343	0.2470	25.00	26.35	ug/L	5	30	
Chlorobenzene	477017193014	0.5877	0.6046	25.00	25.72	ug/L	3	30	
Ethylbenzene	477017193014	1.0693	1.1282	25.00	26.38	ug/L	6	20	
m,p-Xylenes	477017193014	0.3689	0.3804	50.00	51.56	ug/L	3	30	
o-Xylene	477017193014	0.3726	0.4019	25.00	26.96	ug/L	8	30	
Styrene	477017193014	0.6454	0.7059	25.00	27.35	ug/L	9	30	
Bromoform	477017193014	0.1322	0.1374	25.00	25.98	ug/L	4	30	
1,1,2,2-Tetrachloroethane	477017193014	0.7897	0.7537	25.00	23.86	ug/L	-5	30	

m=manual integration

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 00:23 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.001/1000,S5170,0.0005/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:54 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 00:23 Cal File: HAC04.D
Als bottle: 4 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.794	4.794	(0.461)	2282	0.50000	0.9130
2 Chloromethane	50	5.306	5.306	(0.511)	1880	0.50000	0.1164(a)
3 Vinyl Chloride	62	5.374	5.374	(0.517)	5946	0.50000	0.4889(aM)
4 Bromomethane	94	6.004	6.004	(0.578)	912	0.50000	1.3442
5 Chloroethane	64	6.151	6.151	(0.592)	1474	0.50000	0.2392(a)
6 Trichlorofluoromethane	101	6.476	6.476	(0.623)	4959	0.50000	0.7223
7 Ethanol	45	6.712	6.712	(0.646)	3349	25.0000	23.3386(A)
8 Freon 113	101	7.174	7.174	(0.690)	1274	0.25000	0.6514
9 1,1-Dichloroethene	96	7.292	7.292	(0.702)	1267	0.25000	0.2226(a)
10 Acetone	43	7.371	7.371	(0.709)	3790	0.25000	0.7607
11 Isopropanol	45	7.450	7.450	(0.717)	1922	2.50000	2.2888(A)
12 Carbon Disulfide	76	7.696	7.696	(0.741)	7610	0.25000	0.2524(a)
13 tert-Butyl Alcohol (TBA)	59	8.010	8.010	(0.771)	2674	2.50000	2.5197(A)
14 Methylene Chloride	84	8.030	8.030	(0.773)	1660	0.25000	0.1913(a)
15 MTBE	73	8.256	8.256	(0.795)	5560	0.25000	0.1875(a)
16 trans-1,2-Dichloroethene	96	8.355	8.355	(0.804)	1833	0.25000	0.2504(a)
17 Isopropyl Ether (DIPE)	45	8.856	8.856	(0.852)	12623	0.25000	0.2275(aA)
18 Vinyl Acetate	43	8.925	8.925	(0.859)	4150	0.25000	0.1892(a)
19 1,1-Dichloroethane	63	8.994	8.994	(0.866)	4417	0.25000	0.2382(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.348	9.348	(0.900)	7349	0.25000	0.2164(aA)
21 2-Butanone	43	9.771	9.771	(0.940)	1833	0.25000	0.2795(a)
22 2,2-Dichloropropane	77	9.781	9.781	(0.941)	3046	0.25000	0.2610(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.791	9.791	(0.942)	2137	0.25000	0.2596(a)
	24 Tetrahydrofuran	42	10.174	10.174	(0.979)	15730	2.50000	4.1245(A)
	25 Bromochloromethane	128	10.145	10.145	(0.976)	508	0.25000	0.1408(a)
	26 Chloroform	83	10.184	10.184	(0.980)	4676	0.25000	0.2826(a)
*	27 Pentafluorobenzene	168	10.391	10.391	(1.000)	947546	50.0000	
	28 Dibromofluoromethane	113	10.440	10.440	(1.005)	838446	50.0000	49.4015
	29 1,1,1-Trichloroethane	97	10.479	10.479	(1.009)	2787	0.25000	0.2462(a)
	30 Carbon Tetrachloride	117	10.656	10.656	(0.926)	621	0.25000	0.0689(a)
	31 1,1-Dichloropropene	75	10.695	10.695	(0.929)	2881	0.25000	0.2618(a)
	32 1,2-Dichloroethane-d4	65	10.991	10.991	(0.955)	1276950	50.0000	49.6023
	33 Benzene	78	11.010	11.010	(0.956)	7851	0.25000	0.2594(a)
	34 Methyl tert-Amyl Ether (TAME)	73	11.010	11.010	(0.956)	3378	0.25000	0.1197(aA)
	35 1,2-Dichloroethane	62	11.099	11.099	(0.964)	3721	0.25000	0.2280(a)
*	36 1,4-Difluorobenzene	114	11.512	11.512	(1.000)	2121859	50.0000	
	37 Trichloroethene	95	11.915	11.915	(1.035)	1634	0.25000	0.2026(a)
	38 Trifluorotoluene	146	12.269	12.269	(1.066)	1811	0.25000	0.2386(aA)
	39 1,2-Dichloropropane	63	12.328	12.328	(1.071)	2413	0.25000	0.2363(a)
	40 Dibromomethane	93	12.495	12.495	(1.085)	574	0.25000	0.0992(a)
	41 Bromodichloromethane	83	12.663	12.663	(1.100)	2516	0.25000	0.2076(a)
	42 2-Chloroethylvinylether	63	12.997	12.997	(1.129)	193	0.50000	0.1240(a)
	43 Tetramethyl THF	43	13.233	13.233	(1.150)	5906	0.25000	0.2153(aA)
	44 cis-1,3-Dichloropropene	75	13.263	13.263	(1.152)	3412	0.25000	0.2320(a)
	45 4-Methyl-2-Pentanone	43	13.400	13.400	(1.164)	3101	0.25000	0.2223(a)
	46 Toluene-d8	98	13.597	13.597	(1.181)	2402974	50.0000	49.8394
	47 Toluene	92	13.686	13.686	(1.189)	5081	0.25000	0.2687(a)
	48 trans-1,3-Dichloropropene	75	14.010	14.010	(1.217)	3724	0.25000	0.2598(a)
	49 1,1,2-Trichloroethane	85	14.286	14.286	(1.241)	716	0.25000	0.1713(a)
	50 Tetrachloroethene	166	14.394	14.394	(0.927)	1419	0.25000	0.2963(a)
	51 2-Hexanone	43	14.512	14.512	(0.935)	1545	0.25000	0.1601(a)
	52 1,3-Dichloropropane	76	14.522	14.522	(0.935)	3503	0.25000	0.2407(a)
	53 Dibromochloromethane	129	14.807	14.807	(0.954)	1351	0.25000	0.1668(a)
	54 1,2-Dibromoethane	107	15.004	15.004	(1.303)	1566	0.25000	0.1895(a)
*	55 Chlorobenzene-d5	117	15.525	15.525	(1.000)	1727725	50.0000	
	56 Chlorobenzene	112	15.564	15.564	(1.003)	5049	0.25000	0.2486(a)
	57 Ethylbenzene	91	15.613	15.613	(1.006)	9674	0.25000	0.2618(a)
	58 1,1,1,2-Tetrachloroethane	131	15.643	15.643	(1.008)	1607	0.25000	0.2496(a)
	59 m,p-Xylenes	106	15.751	15.751	(1.015)	5908	0.50000	0.4635(a)
	60 o-Xylene	106	16.253	16.253	(1.047)	3189	0.25000	0.2476(a)
	61 Styrene	104	16.282	16.282	(1.049)	5294	0.25000	0.2373(a)
	62 Bromoform	173	16.587	16.587	(1.068)	2102	0.25000	0.4600(a)
	63 Isopropylbenzene	105	16.646	16.646	(0.913)	7816	0.25000	0.2406(a)
	65 Bromofluorobenzene	95	16.912	16.912	(0.927)	1157640	50.0000	50.6834
	66 1,1,2,2-Tetrachloroethane	83	17.049	17.049	(0.935)	2558	0.25000	0.2385(a)
	67 Bromobenzene	156	17.128	17.128	(0.939)	1687	0.25000	0.2577(a)
	68 Propylbenzene	91	17.118	17.118	(0.939)	11441	0.25000	0.2836(a)
	69 1,2,3-Trichloropropane	110	17.148	17.148	(0.940)	700	0.25000	0.2483(a)
	70 2-Chlorotoluene	91	17.295	17.295	(0.948)	8206	0.25000	0.2777(a)
	71 1,3,5-Trimethylbenzene	105	17.295	17.295	(0.948)	7055	0.25000	0.2678(a)
	72 4-Chlorotoluene	91	17.413	17.413	(0.955)	7268	0.25000	0.2530(a)
	73 tert-Butylbenzene	119	17.679	17.679	(0.969)	4878	0.25000	0.2500(a)
	74 1,2,4-Trimethylbenzene	105	17.738	17.738	(0.972)	6948	0.25000	0.2484(a)
	75 sec-Butylbenzene	105	17.925	17.925	(0.983)	7198	0.25000	0.2343(a)
	76 para-Isopropyl Toluene	119	18.072	18.072	(0.991)	5589	0.25000	0.2462(a)
	77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	3896	0.25000	0.3089(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Report Date: 12-Jan-2007 15:55

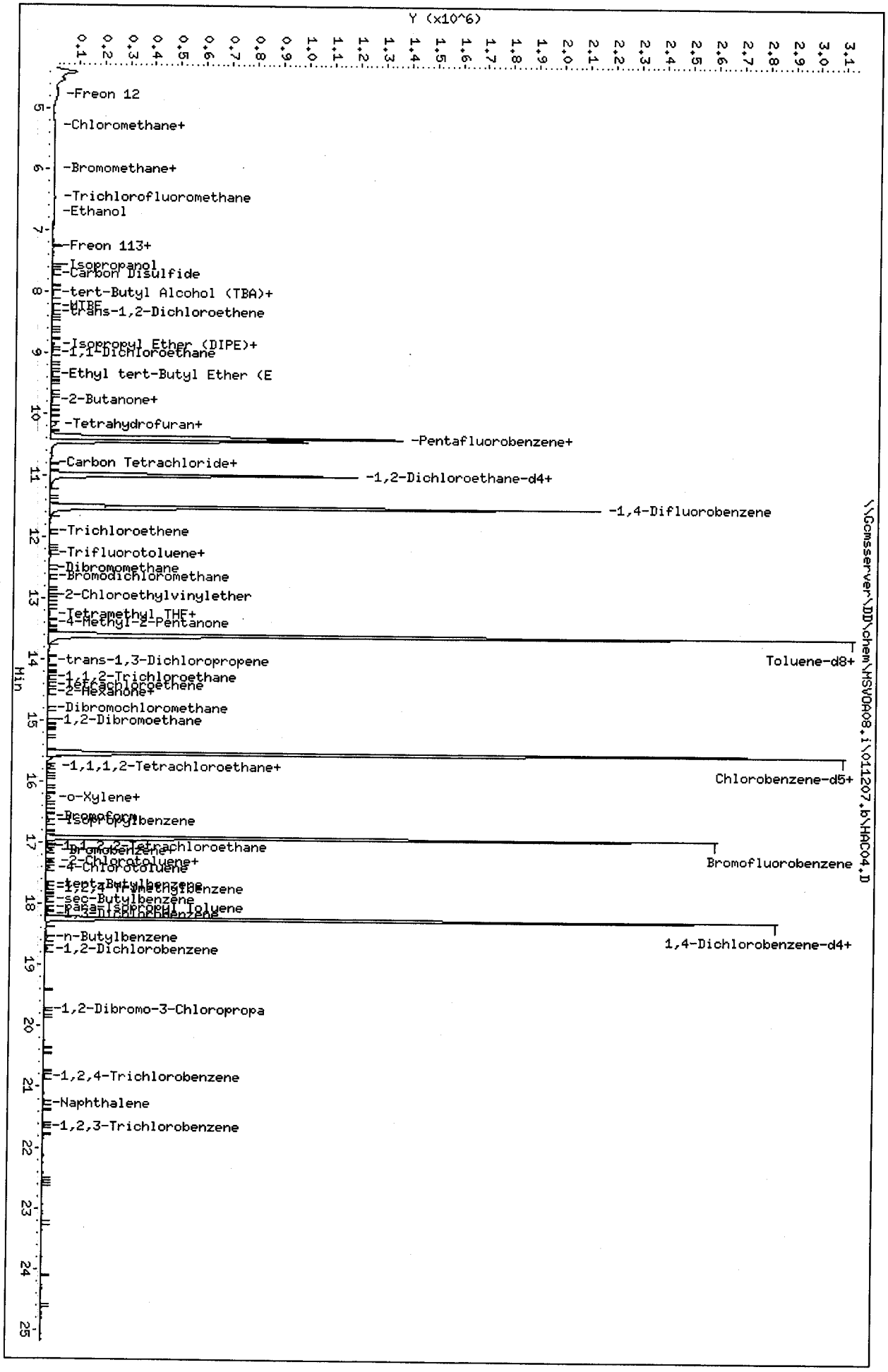
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.239	18.239	(1.000)	679048	50.0000	
79 1,4-Dichlorobenzene	146	18.269	18.269	(1.002)	3968	0.25000	0.3179(a)
80 n-Butylbenzene	91	18.544	18.544	(1.017)	5917	0.25000	0.2763(a)
81 1,2-Dichlorobenzene	146	18.741	18.741	(1.028)	3222	0.25000	0.2782(a)
82 1,2-Dibromo-3-Chloropropane	75	19.725	19.725	(1.081)	537	0.25000	0.2714(a)
83 1,2,4-Trichlorobenzene	180	20.826	20.826	(1.142)	1122	0.25000	0.2959(a)
85 Naphthalene	128	21.279	21.279	(1.167)	2015	0.25000	0.2357(a)
86 1,2,3-Trichlorobenzene	180	21.643	21.643	(1.187)	617	0.25000	0.1885(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC04.D
Date : 12-JAN-2007 00:23
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.001/1000,S5170,0.0005/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 01:01 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/1000,S5170,0.001/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:44 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 01:01 Cal File: HAC05.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.777	4.777	(0.460)	8108	1.00000	1.3749(M)
2 Chloromethane	50	5.288	5.288	(0.509)	16629	1.00000	1.0332(M)
3 Vinyl Chloride	62	5.377	5.377	(0.518)	10189	1.00000	0.8408(M)
4 Bromomethane	94	5.986	5.986	(0.577)	3632	1.00000	1.9141(M)
5 Chloroethane	64	6.124	6.124	(0.590)	5023	1.00000	0.8182(M)
6 Trichlorofluoromethane	101	6.468	6.468	(0.623)	9516	1.00000	1.0654
7 Ethanol	45	6.734	6.734	(0.649)	9854	50.0000	68.9120(AM)
8 Freon 113	101	7.177	7.177	(0.691)	2248	0.50000	0.8202
9 1,1-Dichloroethene	96	7.275	7.275	(0.701)	3029	0.50000	0.5340(M)
11 Isopropanol	45	7.452	7.452	(0.718)	4638	5.00000	5.5426(A)
12 Carbon Disulfide	76	7.698	7.698	(0.741)	14764	0.50000	0.4915(a)
13 tert-Butyl Alcohol (TBA)	59	8.013	8.013	(0.772)	5634	5.00000	5.3276(A)
14 Methylene Chloride	84	8.032	8.032	(0.774)	5379	0.50000	0.6223(M)
15 MTBE	73	8.268	8.268	(0.796)	14791	0.50000	0.5007(M)
16 trans-1,2-Dichloroethene	96	8.337	8.337	(0.803)	3650	0.50000	0.5005
17 Isopropyl Ether (DIPE)	45	8.858	8.858	(0.853)	27795	0.50000	0.5027(A)
18 Vinyl Acetate	43	8.918	8.918	(0.859)	12360	0.50000	0.5655
19 1,1-Dichloroethane	63	8.986	8.986	(0.865)	9134	0.50000	0.4943(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.360	9.360	(0.901)	16956	0.50000	0.5012(A)
21 2-Butanone	43	9.773	9.773	(0.941)	3530	0.50000	0.5402(M)
22 2,2-Dichloropropane	77	9.773	9.773	(0.941)	5898	0.50000	0.5072
23 cis-1,2-Dichloroethene	96	9.803	9.803	(0.944)	4215	0.50000	0.5139

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 Tetrahydrofuran	42	10.176	10.176	(0.980)	27401	5.00000	7.2100(AM)
	25 Bromochloromethane	128	10.167	10.167	(0.979)	1985	0.50000	0.5522
	26 Chloroform	83	10.186	10.186	(0.981)	10339	0.50000	0.6270
*	27 Pentafluorobenzene	168	10.383	10.383	(1.000)	944231	50.0000	
	28 Dibromofluoromethane	113	10.442	10.442	(1.006)	853226	50.0000	50.4488
	29 1,1,1-Trichloroethane	97	10.481	10.481	(1.009)	5839	0.50000	0.5178
	30 Carbon Tetrachloride	117	10.688	10.688	(0.928)	5132	0.50000	0.5645
	31 1,1-Dichloropropene	75	10.708	10.708	(0.930)	5408	0.50000	0.4866(a)
	32 1,2-Dichloroethane-d4	65	10.993	10.993	(0.955)	1321378	50.0000	50.8254
	33 Benzene	78	11.013	11.013	(0.956)	15897	0.50000	0.5202
	34 Methyl tert-Amyl Ether (TAME)	73	11.013	11.013	(0.956)	14161	0.50000	0.4972(aA)
	35 1,2-Dichloroethane	62	11.111	11.111	(0.965)	8584	0.50000	0.5210
*	36 1,4-Difluorobenzene	114	11.514	11.514	(1.000)	2142844	50.0000	
	37 Trichloroethene	95	11.927	11.927	(1.036)	4139	0.50000	0.5083
	38 Trifluorotoluene	146	12.262	12.262	(1.065)	3641	0.50000	0.4750(aA)
	39 1,2-Dichloropropane	63	12.321	12.321	(1.070)	4881	0.50000	0.4734(a)
	40 Dibromomethane	93	12.508	12.508	(1.086)	2729	0.50000	0.4671(a)
	41 Bromodichloromethane	83	12.665	12.665	(1.100)	5532	0.50000	0.4519(a)
	42 2-Chloroethylvinylether	63	12.990	12.990	(1.128)	327	1.00000	0.2080(a)
	43 Tetramethyl THF	43	13.226	13.226	(1.149)	12322	0.50000	0.4448(aAM)
	44 cis-1,3-Dichloropropene	75	13.265	13.265	(1.152)	7234	0.50000	0.4872(a)
	45 4-Methyl-2-Pentanone	43	13.403	13.403	(1.164)	7054	0.50000	0.5009
	46 Toluene-d8	98	13.599	13.599	(1.181)	2453759	50.0000	50.3943
	47 Toluene	92	13.698	13.698	(1.190)	10570	0.50000	0.5536
	48 trans-1,3-Dichloropropene	75	14.022	14.022	(1.218)	6615	0.50000	0.4570(a)
	49 1,1,2-Trichloroethane	85	14.278	14.278	(1.240)	1548	0.50000	0.3668(a)
	50 Tetrachloroethene	166	14.416	14.416	(0.928)	2886	0.50000	0.5921
	51 2-Hexanone	43	14.504	14.504	(0.934)	4798	0.50000	0.4886(a)
	52 1,3-Dichloropropane	76	14.524	14.524	(0.935)	7364	0.50000	0.4971(a)
	53 Dibromochloromethane	129	14.789	14.789	(0.952)	3657	0.50000	0.4436(a)
	54 1,2-Dibromoethane	107	15.006	15.006	(1.303)	3623	0.50000	0.4342(a)
*	55 Chlorobenzene-d5	117	15.527	15.527	(1.000)	1758898	50.0000	
	56 Chlorobenzene	112	15.566	15.566	(1.003)	11014	0.50000	0.5327
	57 Ethylbenzene	91	15.616	15.616	(1.006)	19629	0.50000	0.5218
	58 1,1,1,2-Tetrachloroethane	131	15.645	15.645	(1.008)	2653	0.50000	0.4049(a)
	59 m,p-Xylenes	106	15.753	15.753	(1.015)	13935	1.00000	1.0739
	60 o-Xylene	106	16.255	16.255	(1.047)	6896	0.50000	0.5260
	61 Styrene	104	16.275	16.275	(1.048)	10894	0.50000	0.4798(a)
	62 Bromoform	173	16.580	16.580	(1.068)	2418	0.50000	0.5198
	63 Isopropylbenzene	105	16.648	16.648	(0.913)	18028	0.50000	0.5614
	65 Bromofluorobenzene	95	16.914	16.914	(0.927)	1164975	50.0000	51.5943
	66 1,1,2,2-Tetrachloroethane	83	17.052	17.052	(0.935)	4777	0.50000	0.4505(a)
	67 Bromobenzene	156	17.120	17.120	(0.939)	3828	0.50000	0.5915
	68 Propylbenzene	91	17.120	17.120	(0.939)	21558	0.50000	0.5407
	69 1,2,3-Trichloropropane	110	17.140	17.140	(0.940)	1033	0.50000	0.3707(a)
	70 2-Chlorotoluene	91	17.298	17.298	(0.948)	17545	0.50000	0.6007
	71 1,3,5-Trimethylbenzene	105	17.298	17.298	(0.948)	15021	0.50000	0.5769
	72 4-Chlorotoluene	91	17.416	17.416	(0.955)	16395	0.50000	0.5775
	73 tert-Butylbenzene	119	17.671	17.671	(0.969)	9372	0.50000	0.4859(a)
	74 1,2,4-Trimethylbenzene	105	17.750	17.750	(0.973)	14930	0.50000	0.5399
	75 sec-Butylbenzene	105	17.927	17.927	(0.983)	15648	0.50000	0.5153
	76 para-Isopropyl Toluene	119	18.065	18.065	(0.990)	12673	0.50000	0.5647
	77 1,3-Dichlorobenzene	146	18.163	18.163	(0.996)	7722	0.50000	0.6194
*	78 1,4-Dichlorobenzene-d4	152	18.242	18.242	(1.000)	671287	50.0000	

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC05.D
Report Date: 12-Jan-2007 16:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
79 1,4-Dichlorobenzene	146	18.271	18.271	(1.002)	7093	0.50000	0.5749
80 n-Butylbenzene	91	18.547	18.547	(1.017)	11501	0.50000	0.5434
81 1,2-Dichlorobenzene	146	18.743	18.743	(1.027)	6274	0.50000	0.5480
82 1,2-Dibromo-3-Chloropropane	75	19.727	19.727	(1.081)	954	0.50000	0.4878(aM)
83 1,2,4-Trichlorobenzene	180	20.838	20.838	(1.142)	2095	0.50000	0.5589
84 Hexachlorobutadiene	225	20.947	20.947	(1.148)	253	0.50000	0.4941(aM)
85 Naphthalene	128	21.271	21.271	(1.166)	4671	0.50000	0.4222(a)
86 1,2,3-Trichlorobenzene	180	21.645	21.645	(1.187)	1334	0.50000	0.4124(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\HSVOA08.i\011207.b\HAC05.D
Date : 12-JAN-2007 01:01
Client ID: DYNA P&T
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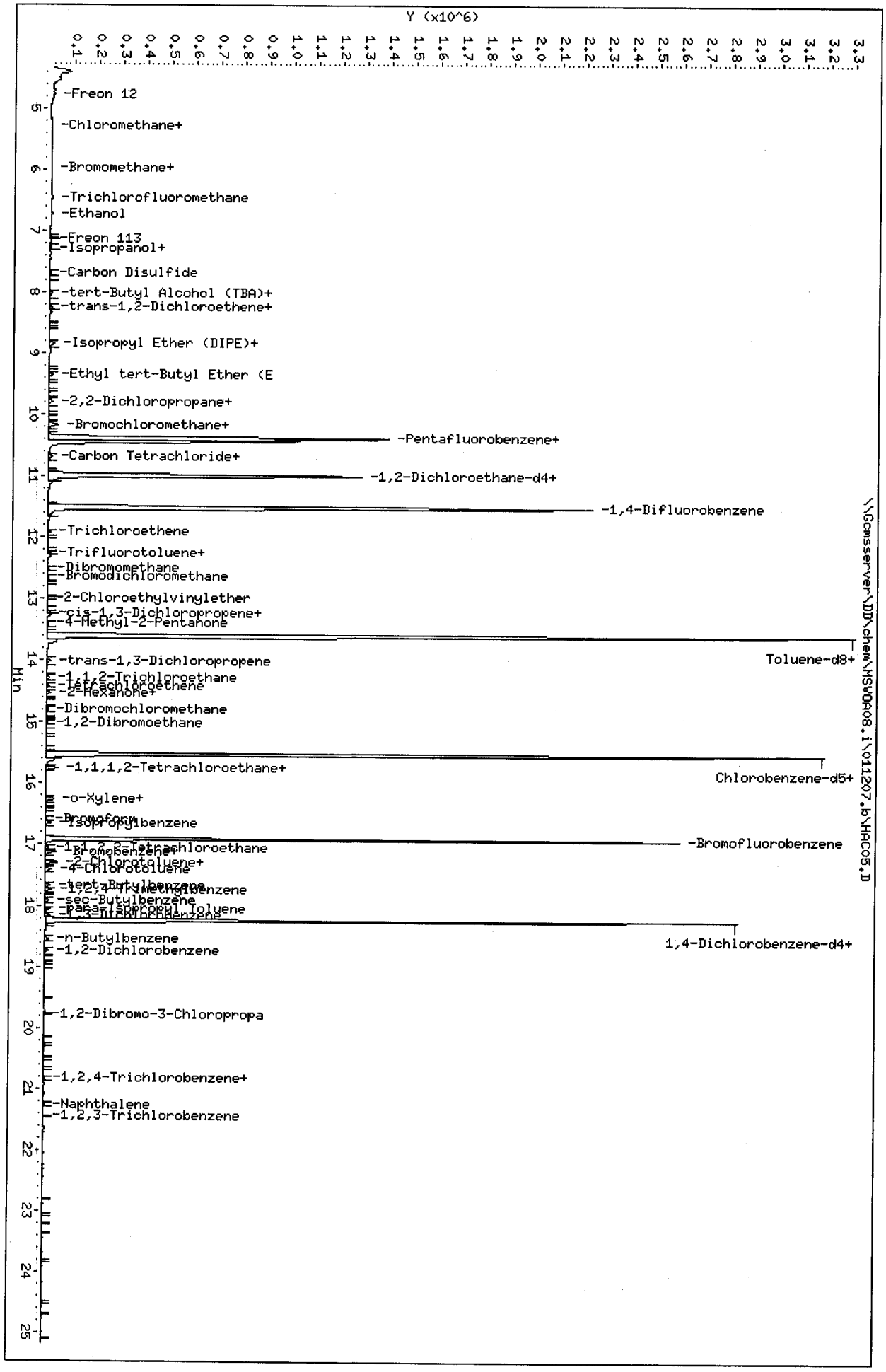
Purge Volume: 5.0
Column phase: RTX 624

Instrument: HSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 01:38 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/500,S5170,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:57 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 01:38 Cal File: HAC06.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.775	4.775	(0.460)	18611	2.00000	2.1933(M)
2 Chloromethane	50	5.287	5.287	(0.509)	30707	2.00000	1.8910(M)
3 Vinyl Chloride	62	5.375	5.375	(0.517)	22217	2.00000	1.8171(M)
4 Bromomethane	94	5.985	5.985	(0.576)	6107	2.00000	2.4201(M)
5 Chloroethane	64	6.133	6.133	(0.590)	10911	2.00000	1.7615(M)
6 Trichlorofluoromethane	101	6.467	6.467	(0.622)	19399	2.00000	1.7938(M)
7 Ethanol	45	6.723	6.723	(0.647)	29620	200.000	205.2954(AM)
8 Freon 113	101	7.185	7.185	(0.691)	9208	2.00000	2.0040
9 1,1-Dichloroethene	96	7.293	7.293	(0.702)	10389	2.00000	1.8155
10 Acetone	43	7.392	7.392	(0.711)	13770	2.00000	2.7490(M)
11 Isopropanol	45	7.451	7.451	(0.717)	14768	20.0000	17.4912(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	55649	2.00000	1.8362(M)
13 tert-Butyl Alcohol (TBA)	59	8.011	8.011	(0.771)	20144	20.0000	18.8787(AM)
14 Methylene Chloride	84	8.031	8.031	(0.773)	17553	2.00000	2.0128(M)
15 MTBE	73	8.257	8.257	(0.795)	53105	2.00000	1.7817
16 trans-1,2-Dichloroethene	96	8.336	8.336	(0.802)	13099	2.00000	1.7803
17 Isopropyl Ether (DIPE)	45	8.857	8.857	(0.852)	103073	2.00000	1.8478(AM)
18 Vinyl Acetate	43	8.916	8.916	(0.858)	44342	2.00000	2.0108
19 1,1-Dichloroethane	63	8.995	8.995	(0.866)	35323	2.00000	1.8948
20 Ethyl tert-Butyl Ether (ETBE)	59	9.359	9.359	(0.901)	59736	2.00000	1.7500(A)
21 2-Butanone	43	9.772	9.772	(0.940)	12085	2.00000	1.8330(M)
22 2,2-Dichloropropane	77	9.782	9.782	(0.941)	22199	2.00000	1.8922

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.801	9.801	(0.943)	15783	2.00000	1.9073
	24 Tetrahydrofuran	42	10.165	10.165	(0.978)	79172	20.0000	20.6468(A)
	25 Bromochloromethane	128	10.156	10.156	(0.977)	6161	2.00000	1.6987
	26 Chloroform	83	10.195	10.195	(0.981)	30477	2.00000	1.8320
*	27 Pentafluorobenzene	168	10.392	10.392	(1.000)	952723	50.0000	
	28 Dibromofluoromethane	113	10.441	10.441	(1.005)	851235	50.0000	49.8825
	29 1,1,1-Trichloroethane	97	10.480	10.480	(1.009)	20315	2.00000	1.7855
	30 Carbon Tetrachloride	117	10.687	10.687	(0.928)	15244	2.00000	1.6505
	31 1,1-Dichloropropene	75	10.697	10.697	(0.929)	20694	2.00000	1.8331
	32 1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1349775	50.0000	51.1042
	33 Benzene	78	11.021	11.021	(0.957)	60082	2.00000	1.9355
	34 Methyl tert-Amyl Ether (TAME)	73	11.021	11.021	(0.957)	53232	2.00000	1.8399(A)
	35 1,2-Dichloroethane	62	11.110	11.110	(0.965)	29913	2.00000	1.7872
*	36 1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2176954	50.0000	
	37 Trichloroethene	95	11.916	11.916	(1.035)	15720	2.00000	1.9003
	38 Trifluorotoluene	146	12.260	12.260	(1.065)	13998	2.00000	1.7976(A)
	39 1,2-Dichloropropane	63	12.319	12.319	(1.070)	18746	2.00000	1.7896(M)
	40 Dibromomethane	93	12.516	12.516	(1.087)	9630	2.00000	1.6224
	41 Bromodichloromethane	83	12.654	12.654	(1.099)	21438	2.00000	1.7241
	42 2-Chloroethylvinylether	63	12.998	12.998	(1.129)	1363	2.00000	0.8537
	43 Tetramethyl THF	43	13.224	13.224	(1.149)	48441	2.00000	1.7213(A)
	44 cis-1,3-Dichloropropene	75	13.273	13.273	(1.153)	26757	2.00000	1.7740
	45 4-Methyl-2-Pentanone	43	13.401	13.401	(1.164)	24944	2.00000	1.7435
	46 Toluene-d8	98	13.598	13.598	(1.181)	2437199	50.0000	49.2699
	47 Toluene	92	13.696	13.696	(1.190)	37405	2.00000	1.9284
	48 trans-1,3-Dichloropropene	75	14.021	14.021	(1.218)	26297	2.00000	1.7886
	49 1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	7955	2.00000	1.8555
	50 Tetrachloroethene	166	14.414	14.414	(0.928)	8286	2.00000	1.7511
	51 2-Hexanone	43	14.503	14.503	(0.934)	15970	2.00000	1.6753
	52 1,3-Dichloropropane	76	14.523	14.523	(0.935)	26572	2.00000	1.8477
	53 Dibromochloromethane	129	14.798	14.798	(0.953)	14256	2.00000	1.7812
	54 1,2-Dibromoethane	107	15.005	15.005	(1.303)	14705	2.00000	1.7349
*	55 Chlorobenzene-d5	117	15.526	15.526	(1.000)	1707623	50.0000	
	56 Chlorobenzene	112	15.565	15.565	(1.003)	38931	2.00000	1.9395
	57 Ethylbenzene	91	15.614	15.614	(1.006)	74391	2.00000	2.0371
	58 1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	12069	2.00000	1.8973
	59 m,p-Xylenes	106	15.752	15.752	(1.015)	51889	4.00000	4.1189
	60 o-Xylene	106	16.254	16.254	(1.047)	24744	2.00000	1.9443
	61 Styrene	104	16.273	16.273	(1.048)	41387	2.00000	1.8777
	62 Bromoform	173	16.578	16.578	(1.068)	7711	2.00000	1.7076
	63 Isopropylbenzene	105	16.647	16.647	(0.913)	64110	2.00000	1.9808
	65 Bromofluorobenzene	95	16.913	16.913	(0.927)	1143584	50.0000	50.2470
	66 1,1,2,2-Tetrachloroethane	83	17.050	17.050	(0.935)	19675	2.00000	1.8411
	67 Bromobenzene	156	17.119	17.119	(0.939)	11163	2.00000	1.7114
	68 Propylbenzene	91	17.119	17.119	(0.939)	82479	2.00000	2.0523
	69 1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	5938	2.00000	2.1144
	70 2-Chlorotoluene	91	17.296	17.296	(0.948)	59290	2.00000	2.0142
	71 1,3,5-Trimethylbenzene	105	17.296	17.296	(0.948)	52226	2.00000	1.9902
	72 4-Chlorotoluene	91	17.414	17.414	(0.955)	56445	2.00000	1.9725
	73 tert-Butylbenzene	119	17.680	17.680	(0.969)	35798	2.00000	1.8416
	74 1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	55200	2.00000	1.9805
	75 sec-Butylbenzene	105	17.926	17.926	(0.983)	58611	2.00000	1.9151
	76 para-Isopropyl Toluene	119	18.063	18.063	(0.990)	43159	2.00000	1.9082
	77 1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	24197	2.00000	1.9257

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Report Date: 12-Jan-2007 15:58

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	676630	50.0000	
79 1,4-Dichlorobenzene	146	18.270	18.270	(1.002)	23841	2.00000	1.9170
80 n-Butylbenzene	91	18.545	18.545	(1.017)	42067	2.00000	1.9719
81 1,2-Dichlorobenzene	146	18.742	18.742	(1.027)	21876	2.00000	1.8957
82 1,2-Dibromo-3-Chloropropane	75	19.726	19.726	(1.081)	3691	2.00000	1.8726
83 1,2,4-Trichlorobenzene	180	20.837	20.837	(1.142)	6471	2.00000	1.7128
84 Hexachlorobutadiene	225	20.945	20.945	(1.148)	1225	2.00000	1.8734
85 Naphthalene	128	21.270	21.270	(1.166)	18977	2.00000	1.4068
86 1,2,3-Trichlorobenzene	180	21.654	21.654	(1.187)	5383	2.00000	1.6510

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC06.D
Date : 12-JAN-2007 01:38
Client ID: DYNA P&T
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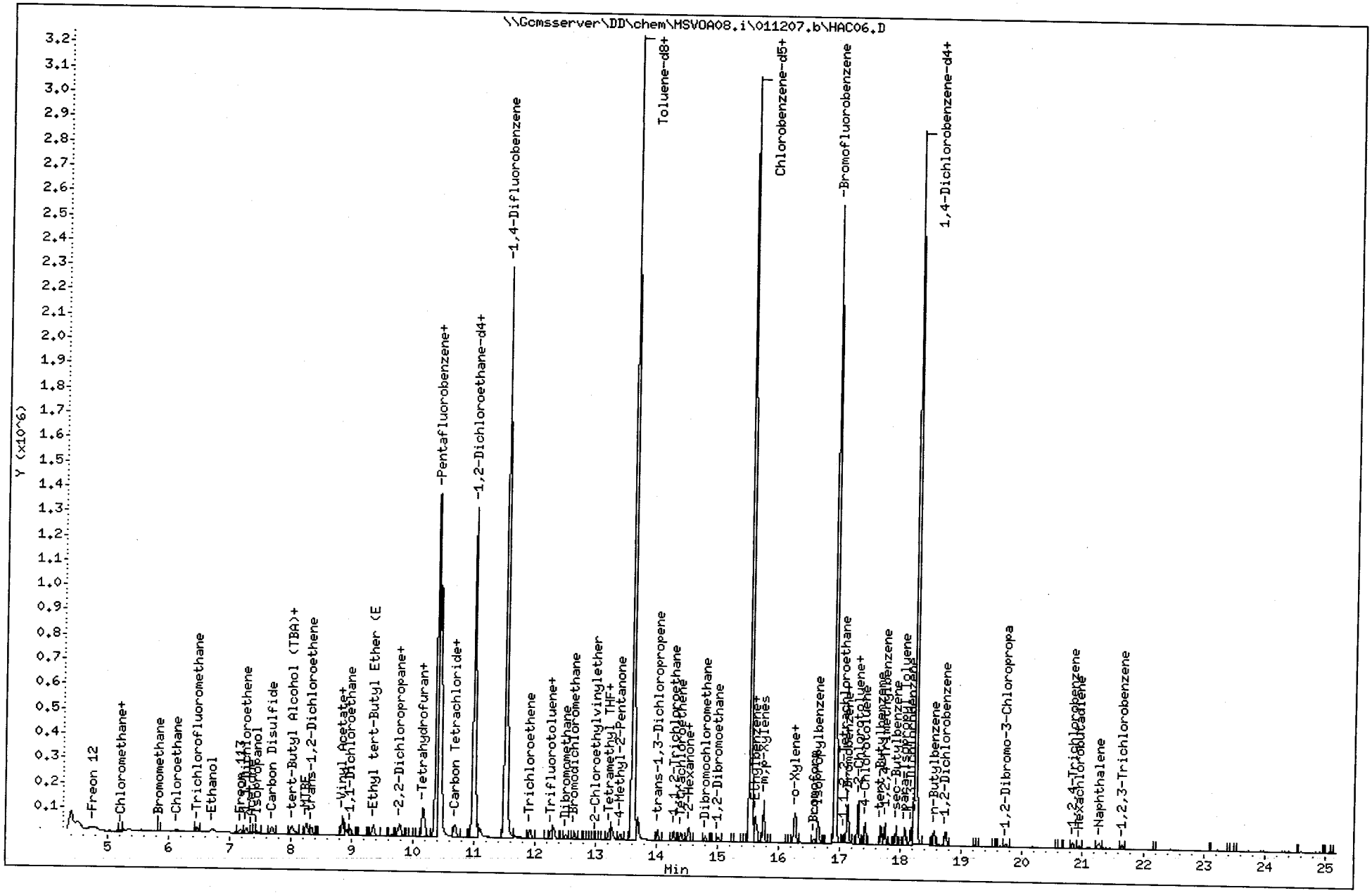
Instrument: MSVOA08.i

Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 02:15 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.005/500,S5170,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 15:59 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 02:15 Cal File: HAC07.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.790	4.790	(0.461)	63344	5.00000	5.7391(M)
2 Chloromethane	50	5.292	5.292	(0.510)	89901	5.00000	5.5760(M)
3 Vinyl Chloride	62	5.371	5.371	(0.517)	67845	5.00000	5.5889(M)
4 Bromomethane	94	5.981	5.981	(0.576)	15914	5.00000	4.4690(M)
5 Chloroethane	64	6.138	6.138	(0.591)	35057	5.00000	5.7004(M)
6 Trichlorofluoromethane	101	6.472	6.472	(0.623)	68481	5.00000	5.4791(M)
7 Ethanol	45	6.728	6.728	(0.648)	79367	500.000	554.0309(AM)
8 Freon 113	101	7.171	7.171	(0.690)	28203	5.00000	5.2510(M)
9 1,1-Dichloroethene	96	7.279	7.279	(0.701)	27258	5.00000	4.7975
10 Acetone	43	7.377	7.377	(0.710)	26301	5.00000	5.2884
11 Isopropanol	45	7.456	7.456	(0.718)	46213	50.0000	55.1267(AM)
12 Carbon Disulfide	76	7.692	7.692	(0.741)	157787	5.00000	5.2438
13 tert-Butyl Alcohol (TBA)	59	8.007	8.007	(0.771)	56415	50.0000	53.2501(A)
14 Methylene Chloride	84	8.036	8.036	(0.774)	45684	5.00000	5.2762
15 MTBE	73	8.262	8.262	(0.795)	155348	5.00000	5.2495
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	37992	5.00000	5.2006
17 Isopropyl Ether (DIPE)	45	8.853	8.853	(0.852)	291641	5.00000	5.2657(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	96815	5.00000	4.4219
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	101354	5.00000	5.4759
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	174817	5.00000	5.1580(A)
21 2-Butanone	43	9.767	9.767	(0.940)	34802	5.00000	5.3164
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	61541	5.00000	5.2833

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.943)	45197	5.00000	5.5010
	24 Tetrahydrofuran	42	10.161	10.161	(0.978)	214737	50.0000	56.4011(A)
	25 Bromochloromethane	128	10.161	10.161	(0.978)	17952	5.00000	4.9851
	26 Chloroform	83	10.190	10.190	(0.981)	87416	5.00000	5.2924
*	27 Pentafluorobenzene	168	10.387	10.387	(1.000)	945947	50.0000	
	28 Dibromofluoromethane	113	10.436	10.436	(1.005)	880900	50.0000	51.9906
	29 1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	57347	5.00000	5.0765
	30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	44455	5.00000	4.9575
	31 1,1-Dichloropropene	75	10.692	10.692	(0.928)	55987	5.00000	5.1082
	32 1,2-Dichloroethane-d4	65	10.997	10.997	(0.955)	1352774	50.0000	52.7530
	33 Benzene	78	11.016	11.016	(0.956)	160490	5.00000	5.3252
	34 Methyl tert-Amyl Ether (TAME)	73	11.016	11.016	(0.956)	149663	5.00000	5.3282(A)
	35 1,2-Dichloroethane	62	11.105	11.105	(0.964)	85994	5.00000	5.2918
*	36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2113598	50.0000	
	37 Trichloroethene	95	11.911	11.911	(1.034)	41859	5.00000	5.2118
	38 Trifluorotoluene	146	12.266	12.266	(1.065)	37744	5.00000	4.9925(A)
	39 1,2-Dichloropropane	63	12.315	12.315	(1.069)	53475	5.00000	5.2582
	40 Dibromomethane	93	12.511	12.511	(1.086)	29767	5.00000	5.1654
	41 Bromodichloromethane	83	12.659	12.659	(1.099)	61986	5.00000	5.1347
	42 2-Chloroethylvinylether	63	12.984	12.984	(1.127)	3827	5.00000	2.4688
	43 Tetramethyl THF	43	13.220	13.220	(1.148)	146492	5.00000	5.3617(A)
	44 cis-1,3-Dichloropropene	75	13.269	13.269	(1.152)	75076	5.00000	5.1269
	45 4-Methyl-2-Pentanone	43	13.407	13.407	(1.164)	68559	5.00000	4.9358
	46 Toluene-d8	98	13.603	13.603	(1.181)	2463520	50.0000	51.2949
	47 Toluene	92	13.692	13.692	(1.189)	101927	5.00000	5.4123
	48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	76980	5.00000	5.3929
	49 1,1,2-Trichloroethane	85	14.282	14.282	(1.240)	23377	5.00000	5.6163
	50 Tetrachloroethene	166	14.410	14.410	(0.928)	23802	5.00000	5.0438
	51 2-Hexanone	43	14.508	14.508	(0.934)	47977	5.00000	5.0466
	52 1,3-Dichloropropane	76	14.528	14.528	(0.935)	76138	5.00000	5.3088
	53 Dibromochloromethane	129	14.803	14.803	(0.953)	41413	5.00000	5.1883
	54 1,2-Dibromoethane	107	15.010	15.010	(1.303)	43903	5.00000	5.3350
*	55 Chlorobenzene-d5	117	15.531	15.531	(1.000)	1703028	50.0000	
	56 Chlorobenzene	112	15.561	15.561	(1.002)	110059	5.00000	5.4978
	57 Ethylbenzene	91	15.610	15.610	(1.005)	203231	5.00000	5.5802
	58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.007)	35900	5.00000	5.6589
	59 m,p-Xylenes	106	15.747	15.747	(1.014)	144173	10.0000	11.4752
	60 o-Xylene	106	16.249	16.249	(1.046)	69956	5.00000	5.5118
	61 Styrene	104	16.279	16.279	(1.048)	119753	5.00000	5.4477
	62 Bromoform	173	16.574	16.574	(1.067)	22781	5.00000	5.0584
	63 Isopropylbenzene	105	16.642	16.642	(0.913)	176966	5.00000	5.2959
	65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1195875	50.0000	50.8925
	66 1,1,2,2-Tetrachloroethane	83	17.056	17.056	(0.935)	60497	5.00000	5.4831
	67 Bromobenzene	156	17.124	17.124	(0.939)	36053	5.00000	5.3536
	68 Propylbenzene	91	17.115	17.115	(0.939)	229605	5.00000	5.5338
	69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	16213	5.00000	5.5918
	70 2-Chlorotoluene	91	17.292	17.292	(0.948)	167683	5.00000	5.5175
	71 1,3,5-Trimethylbenzene	105	17.292	17.292	(0.948)	145345	5.00000	5.3647
	72 4-Chlorotoluene	91	17.419	17.419	(0.955)	160635	5.00000	5.4372
	73 tert-Butylbenzene	119	17.675	17.675	(0.969)	105218	5.00000	5.2429
	74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	154384	5.00000	5.3650
	75 sec-Butylbenzene	105	17.921	17.921	(0.983)	164306	5.00000	5.2000
	76 para-Isopropyl Toluene	119	18.069	18.069	(0.991)	117384	5.00000	5.0268
	77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	66529	5.00000	5.1284

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Report Date: 12-Jan-2007 15:59

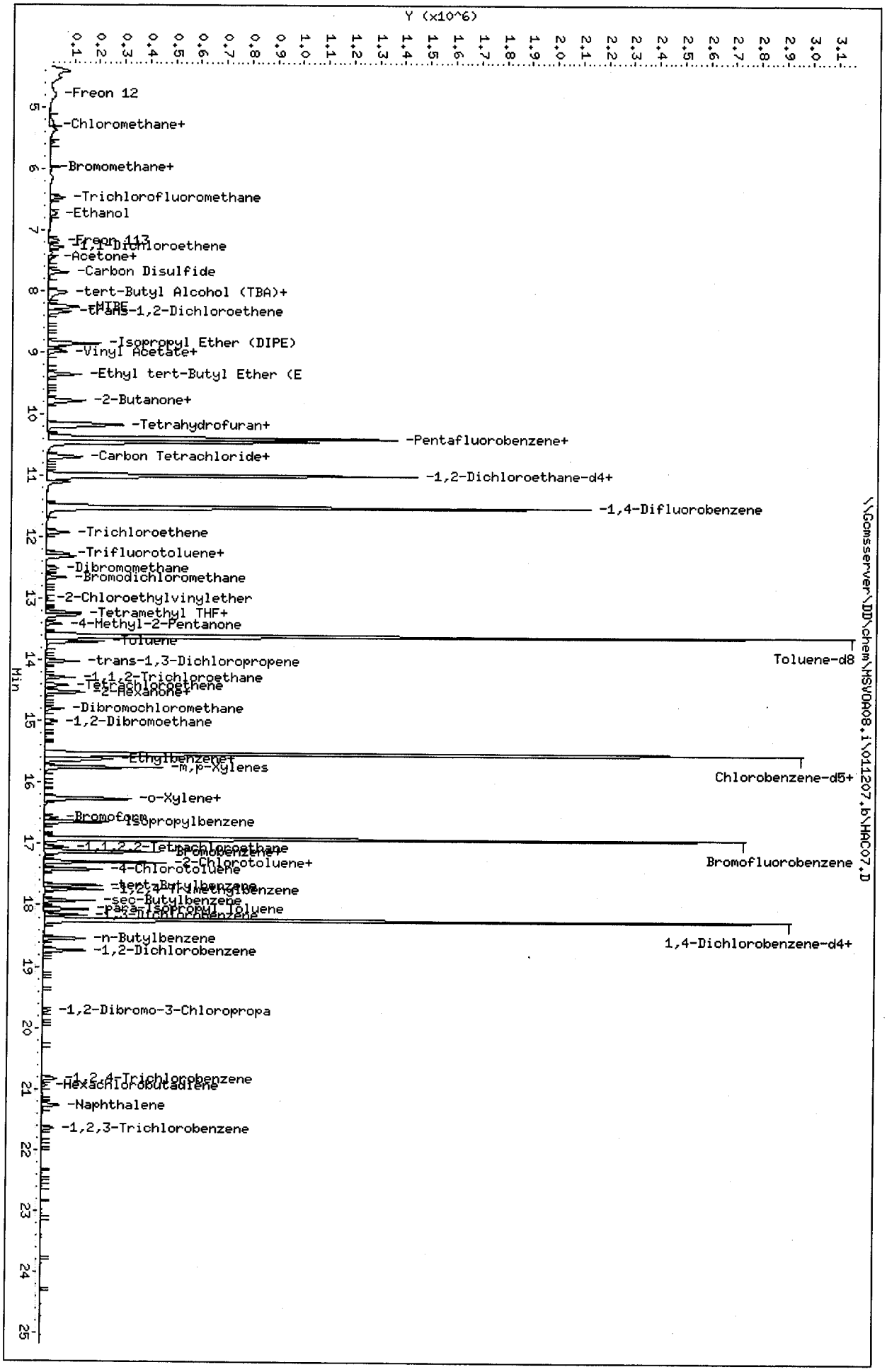
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.236	18.236	(1.000)	698594	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	67499	5.00000	5.2570
80 n-Butylbenzene	91	18.551	18.551	(1.017)	113575	5.00000	5.1565
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	61669	5.00000	5.1761
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	10389	5.00000	5.1052
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	19595	5.00000	5.0237
84 Hexachlorobutadiene	225	20.941	20.941	(1.148)	3695	5.00000	5.1855
85 Naphthalene	128	21.265	21.265	(1.166)	68868	5.00000	4.6870
86 1,2,3-Trichlorobenzene	180	21.659	21.659	(1.188)	16206	5.00000	4.8143

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Comsserver\DD\chem\MSVOA08.i\011207.b\HAC07.D
Date : 12-JAN-2007 02:15
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.005/500,S5170,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Report Date: 12-Jan-2007 16:00

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 02:52 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.002/100,S5170,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:00 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 02:52 Cal File: HAC08.D
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	85522	10.0000	7.5746
2 Chloromethane	50	5.262	5.262	(0.507)	152754	10.0000	9.5903(M)
3 Vinyl Chloride	62	5.361	5.361	(0.516)	116265	10.0000	9.6948(M)
4 Bromomethane	94	6.000	6.000	(0.578)	39043	10.0000	9.3383(M)
5 Chloroethane	64	6.138	6.138	(0.591)	59520	10.0000	9.7966(M)
6 Trichlorofluoromethane	101	6.472	6.472	(0.623)	100539	10.0000	7.9715
7 Ethanol	45	6.718	6.718	(0.647)	152548	1000.00	1077.9054(AM)
8 Freon 113	101	7.170	7.170	(0.690)	55283	10.0000	9.9069
9 1,1-Dichloroethene	96	7.279	7.279	(0.701)	55355	10.0000	9.8619
10 Acetone	43	7.377	7.377	(0.710)	59367	10.0000	12.0831
11 Isopropanol	45	7.446	7.446	(0.717)	89958	100.000	108.6220(A)
12 Carbon Disulfide	76	7.692	7.692	(0.741)	297963	10.0000	10.0235
13 tert-Butyl Alcohol (TBA)	59	8.006	8.006	(0.771)	108809	100.000	103.9611(A)
14 Methylene Chloride	84	8.026	8.026	(0.773)	87267	10.0000	10.2021
15 MTBE	73	8.252	8.252	(0.795)	303347	10.0000	10.3762
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	75168	10.0000	10.4153
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	580316	10.0000	10.6060(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	226322	10.0000	10.4635
19 1,1-Dichloroethane	63	8.980	8.980	(0.865)	190568	10.0000	10.4220
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	351881	10.0000	10.5094(A)
21 2-Butanone	43	9.767	9.767	(0.940)	73034	10.0000	11.2933
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	116663	10.0000	10.1380

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Report Date: 12-Jan-2007 16:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.943)	82145	10.0000	10.1204
24 Tetrahydrofuran	42	10.160	10.160	(0.978)	414540	100.000	110.2116(A)
25 Bromochloromethane	128	10.160	10.160	(0.978)	37455	10.0000	10.5283
26 Chloroform	83	10.190	10.190	(0.981)	162974	10.0000	9.9877
* 27 Pentafluorobenzene	168	10.387	10.387	(1.000)	934516	50.0000	
28 Dibromofluoromethane	113	10.436	10.436	(1.005)	844520	50.0000	50.4531
29 1,1,1-Trichloroethane	97	10.475	10.475	(1.009)	113556	10.0000	10.1753
30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	87855	10.0000	9.8345
31 1,1-Dichloropropene	75	10.701	10.701	(0.929)	107213	10.0000	9.8192
32 1,2-Dichloroethane-d4	65	10.987	10.987	(0.954)	1313043	50.0000	51.3978
33 Benzene	78	11.016	11.016	(0.956)	314804	10.0000	10.4852
34 Methyl tert-Amyl Ether (TAME)	73	11.016	11.016	(0.956)	297224	10.0000	10.6218(A)
35 1,2-Dichloroethane	62	11.105	11.105	(0.964)	167600	10.0000	10.3528
* 36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2105614	50.0000	
37 Trichloroethene	95	11.921	11.921	(1.035)	79704	10.0000	9.9614
38 Trifluorotoluene	146	12.265	12.265	(1.065)	71228	10.0000	9.4572(A)
39 1,2-Dichloropropane	63	12.314	12.314	(1.069)	104274	10.0000	10.2922
40 Dibromomethane	93	12.511	12.511	(1.086)	60686	10.0000	10.5708
41 Bromodichloromethane	83	12.659	12.659	(1.099)	126704	10.0000	10.5355
42 2-Chloroethylvinylether	63	12.993	12.993	(1.128)	16187	10.0000	10.4822
43 Tetramethyl THF	43	13.219	13.219	(1.148)	302389	10.0000	11.1096(A)
44 cis-1,3-Dichloropropene	75	13.269	13.269	(1.152)	151985	10.0000	10.4184
45 4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	145962	10.0000	10.5481
46 Toluene-d8	98	13.593	13.593	(1.180)	2458874	50.0000	51.3923
47 Toluene	92	13.691	13.691	(1.189)	191039	10.0000	10.1826
48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	152143	10.0000	10.6989
49 1,1,2-Trichloroethane	85	14.282	14.282	(1.240)	46032	10.0000	11.1011
50 Tetrachloroethene	166	14.409	14.409	(0.928)	44248	10.0000	9.2449
51 2-Hexanone	43	14.498	14.498	(0.934)	108868	10.0000	11.2909
52 1,3-Dichloropropane	76	14.528	14.528	(0.936)	154141	10.0000	10.5969
53 Dibromochloromethane	129	14.803	14.803	(0.954)	83357	10.0000	10.2966
54 1,2-Dibromoethane	107	15.009	15.009	(1.303)	88675	10.0000	10.8165
* 55 Chlorobenzene-d5	117	15.521	15.521	(1.000)	1727268	50.0000	
56 Chlorobenzene	112	15.560	15.560	(1.003)	212452	10.0000	10.4638
57 Ethylbenzene	91	15.609	15.609	(1.006)	381840	10.0000	10.3373
58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	68194	10.0000	10.5987
59 m,p-Xylenes	106	15.747	15.747	(1.015)	264046	20.0000	20.7214
60 o-Xylene	106	16.249	16.249	(1.047)	133200	10.0000	10.3476
61 Styrene	104	16.268	16.268	(1.048)	233746	10.0000	10.4843
62 Bromoform	173	16.573	16.573	(1.068)	46002	10.0000	10.0713
63 Isopropylbenzene	105	16.642	16.642	(0.913)	327795	10.0000	9.9913
65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1185941	50.0000	51.4046
66 1,1,2,2-Tetrachloroethane	83	17.045	17.045	(0.935)	117447	10.0000	10.8420
67 Bromobenzene	156	17.114	17.114	(0.939)	70668	10.0000	10.6881
68 Propylbenzene	91	17.114	17.114	(0.939)	423147	10.0000	10.3873
69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	31232	10.0000	10.9713
70 2-Chlorotoluene	91	17.291	17.291	(0.948)	315120	10.0000	10.5610
71 1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	279794	10.0000	10.5185
72 4-Chlorotoluene	91	17.409	17.409	(0.955)	300658	10.0000	10.3653
73 tert-Butylbenzene	119	17.675	17.675	(0.969)	197744	10.0000	10.0359
74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	293488	10.0000	10.3879
75 sec-Butylbenzene	105	17.921	17.921	(0.983)	301471	10.0000	9.7177
76 para-Isopropyl Toluene	119	18.059	18.059	(0.990)	228261	10.0000	9.9560
77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	128169	10.0000	10.0629

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Report Date: 12-Jan-2007 16:00

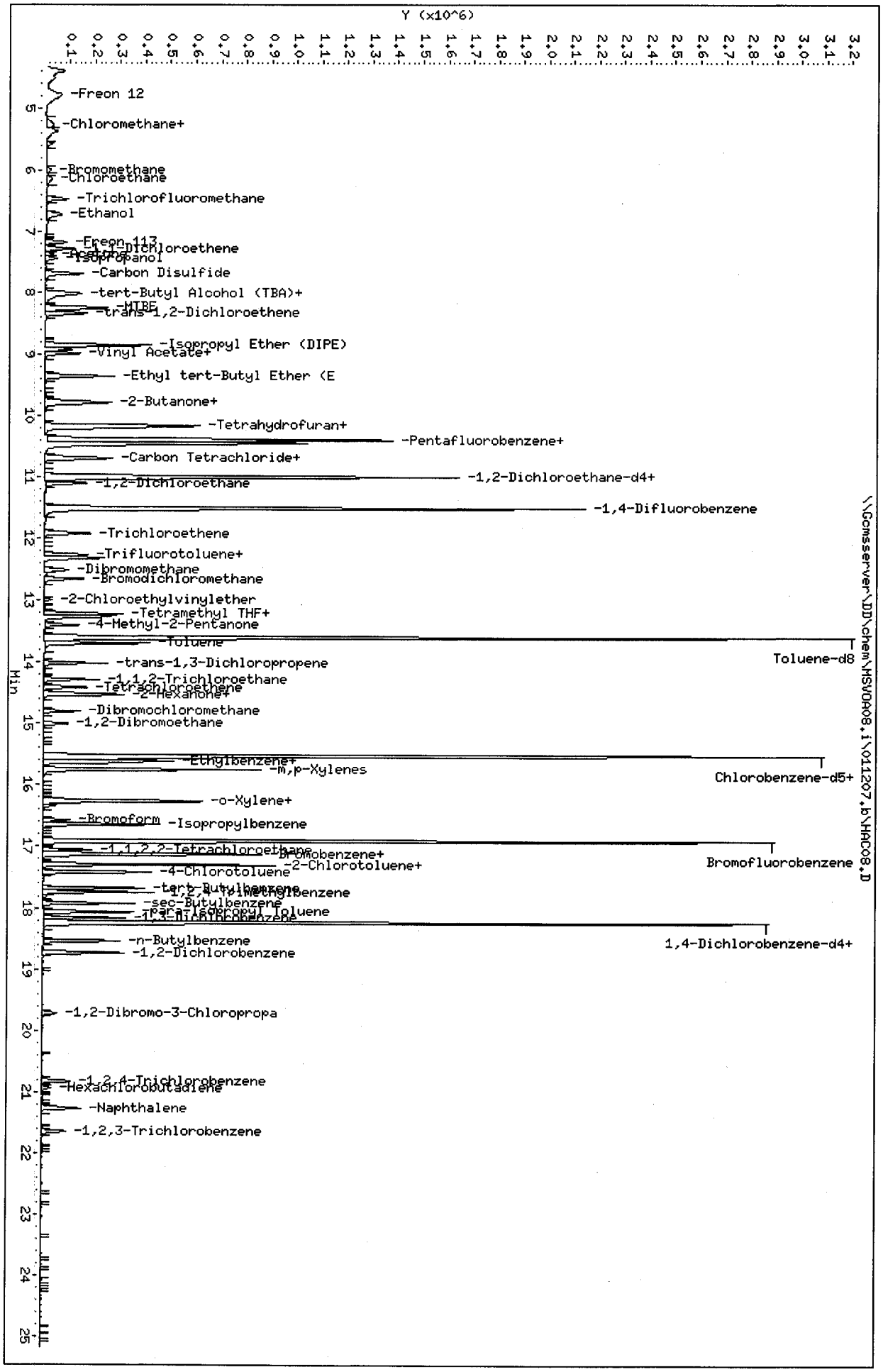
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.236	18.236	(1.000)	685890	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	124211	10.0000	9.8531
80 n-Butylbenzene	91	18.540	18.540	(1.017)	211090	10.0000	9.7614
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	120578	10.0000	10.3080
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	20876	10.0000	10.4487
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	37492	10.0000	9.7901
84 Hexachlorobutadiene	225	20.940	20.940	(1.148)	7034	10.0000	9.8282
85 Naphthalene	128	21.265	21.265	(1.166)	154007	10.0000	10.4951
86 1,2,3-Trichlorobenzene	180	21.649	21.649	(1.187)	34437	10.0000	10.4197

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC08.D
Date : 12-JAN-2007 02:52
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.002/100,S5170,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEM
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 03:29 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.004/100,S5170,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:02 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 03:29 Cal File: HAC09.D
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.785	4.785	(0.461)	232296	20.0000	18.8980
2 Chloromethane	50	5.277	5.277	(0.508)	342969	20.0000	21.0477
3 Vinyl Chloride	62	5.366	5.366	(0.517)	262103	20.0000	21.3635(M)
4 Bromomethane	94	5.985	5.985	(0.577)	94289	20.0000	20.2144(M)
5 Chloroethane	64	6.143	6.143	(0.592)	129960	20.0000	20.9091
6 Trichlorofluoromethane	101	6.477	6.477	(0.624)	259701	20.0000	19.5914
7 Ethanol	45	6.723	6.723	(0.648)	293657	2000.00	2028.2651(AM)
8 Freon 113	101	7.176	7.176	(0.691)	122721	20.0000	20.5476
9 1,1-Dichloroethene	96	7.284	7.284	(0.702)	113798	20.0000	19.8176
10 Acetone	43	7.372	7.372	(0.710)	98059	20.0000	19.5088
11 Isopropanol	45	7.441	7.441	(0.717)	172289	200.000	203.3509(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	618426	20.0000	20.3355
13 tert-Butyl Alcohol (TBA)	59	8.002	8.002	(0.771)	217327	200.000	202.9692(A)
14 Methylene Chloride	84	8.031	8.031	(0.774)	177873	20.0000	20.3265
15 MTBE	73	8.258	8.258	(0.795)	632029	20.0000	21.1323
16 trans-1,2-Dichloroethene	96	8.346	8.346	(0.804)	149961	20.0000	20.3109
17 Isopropyl Ether (DIPE)	45	8.848	8.848	(0.852)	1180273	20.0000	21.0854(A)
18 Vinyl Acetate	43	8.917	8.917	(0.859)	476042	20.0000	21.5134
19 1,1-Dichloroethane	63	8.985	8.985	(0.865)	390922	20.0000	20.8978
20 Ethyl tert-Butyl Ether (ETBE)	59	9.349	9.349	(0.901)	723417	20.0000	21.1194(A)
21 2-Butanone	43	9.762	9.762	(0.940)	135332	20.0000	20.4554
22 2,2-Dichloropropane	77	9.772	9.772	(0.941)	242414	20.0000	20.5915

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.792	9.792	(0.943)	165569	20.0000	19.9392
	24 Tetrahydrofuran	42	10.156	10.156	(0.978)	808007	200.000	209.9841(A)
	25 Bromochloromethane	128	10.156	10.156	(0.978)	74838	20.0000	20.5627
	26 Chloroform	83	10.195	10.195	(0.982)	336692	20.0000	20.1692
*	27 Pentafluorobenzene	168	10.382	10.382	(1.000)	956041	50.0000	
	28 Dibromofluoromethane	113	10.431	10.431	(1.005)	872965	50.0000	50.9783
	29 1,1,1-Trichloroethane	97	10.480	10.480	(1.009)	232026	20.0000	20.3229
	30 Carbon Tetrachloride	117	10.687	10.687	(0.928)	178767	20.0000	19.4236
	31 1,1-Dichloropropene	75	10.697	10.697	(0.929)	226930	20.0000	20.1733
	32 1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1375525	50.0000	52.2623
	33 Benzene	78	11.012	11.012	(0.956)	638926	20.0000	20.6558
	34 Methyl tert-Amyl Ether (TAME)	73	11.012	11.012	(0.956)	615566	20.0000	21.3522(A)
	35 1,2-Dichloroethane	62	11.100	11.100	(0.964)	345554	20.0000	20.7184
*	36 1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2169322	50.0000	
	37 Trichloroethene	95	11.916	11.916	(1.035)	166237	20.0000	20.1662
	38 Trifluorotoluene	146	12.261	12.261	(1.065)	152507	20.0000	19.6544(A)
	39 1,2-Dichloropropane	63	12.320	12.320	(1.070)	221963	20.0000	21.2651
	40 Dibromomethane	93	12.507	12.507	(1.086)	126857	20.0000	21.4480
	41 Bromodichloromethane	83	12.654	12.654	(1.099)	260182	20.0000	20.9990
	42 2-Chloroethylvinylether	63	12.988	12.988	(1.128)	34152	20.0000	21.4663
	43 Tetramethyl THF	43	13.215	13.215	(1.148)	611480	20.0000	21.8056(A)
	44 cis-1,3-Dichloropropene	75	13.264	13.264	(1.152)	315554	20.0000	20.9957
	45 4-Methyl-2-Pentanone	43	13.402	13.402	(1.164)	301704	20.0000	21.1627
	46 Toluene-d8	98	13.598	13.598	(1.181)	2422921	50.0000	49.1536
	47 Toluene	92	13.687	13.687	(1.189)	380717	20.0000	19.6967
	48 trans-1,3-Dichloropropene	75	14.011	14.011	(1.217)	300068	20.0000	20.4815
	49 1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	90869	20.0000	21.2704
	50 Tetrachloroethene	166	14.405	14.405	(0.928)	94039	20.0000	19.4727
	51 2-Hexanone	43	14.503	14.503	(0.934)	202069	20.0000	20.7701
	52 1,3-Dichloropropane	76	14.523	14.523	(0.935)	301080	20.0000	20.5141
	53 Dibromochloromethane	129	14.798	14.798	(0.953)	167880	20.0000	20.5523
	54 1,2-Dibromoethane	107	15.005	15.005	(1.303)	177558	20.0000	21.0223
*	55 Chlorobenzene-d5	117	15.526	15.526	(1.000)	1742813	50.0000	
	56 Chlorobenzene	112	15.565	15.565	(1.003)	408385	20.0000	19.9347
	57 Ethylbenzene	91	15.615	15.615	(1.006)	761680	20.0000	20.4366
	58 1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	136680	20.0000	21.0533
	59 m,p-Xylenes	106	15.752	15.752	(1.015)	551840	40.0000	42.9202
	60 o-Xylene	106	16.254	16.254	(1.047)	269777	20.0000	20.7706
	61 Styrene	104	16.274	16.274	(1.048)	489376	20.0000	21.7544
	62 Bromoform	173	16.579	16.579	(1.068)	94100	20.0000	20.4177
	63 Isopropylbenzene	105	16.647	16.647	(0.913)	691321	20.0000	20.1770
	65 Bromofluorobenzene	95	16.913	16.913	(0.927)	1204149	50.0000	49.9774
	66 1,1,2,2-Tetrachloroethane	83	17.051	17.051	(0.935)	238847	20.0000	21.1126
	67 Bromobenzene	156	17.119	17.119	(0.939)	140399	20.0000	20.3328
	68 Propylbenzene	91	17.110	17.110	(0.938)	891308	20.0000	20.9505
	69 1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	62928	20.0000	21.1670
	70 2-Chlorotoluene	91	17.297	17.297	(0.948)	620600	20.0000	19.9157
	71 1,3,5-Trimethylbenzene	105	17.297	17.297	(0.948)	556069	20.0000	20.0170
	72 4-Chlorotoluene	91	17.415	17.415	(0.955)	607283	20.0000	20.0472
	73 tert-Butylbenzene	119	17.670	17.670	(0.969)	430730	20.0000	20.9321
	74 1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	603261	20.0000	20.4455
	75 sec-Butylbenzene	105	17.926	17.926	(0.983)	658834	20.0000	20.3353
	76 para-Isopropyl Toluene	119	18.064	18.064	(0.990)	479362	20.0000	20.0205
	77 1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	262263	20.0000	19.7167

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Report Date: 12-Jan-2007 16:02

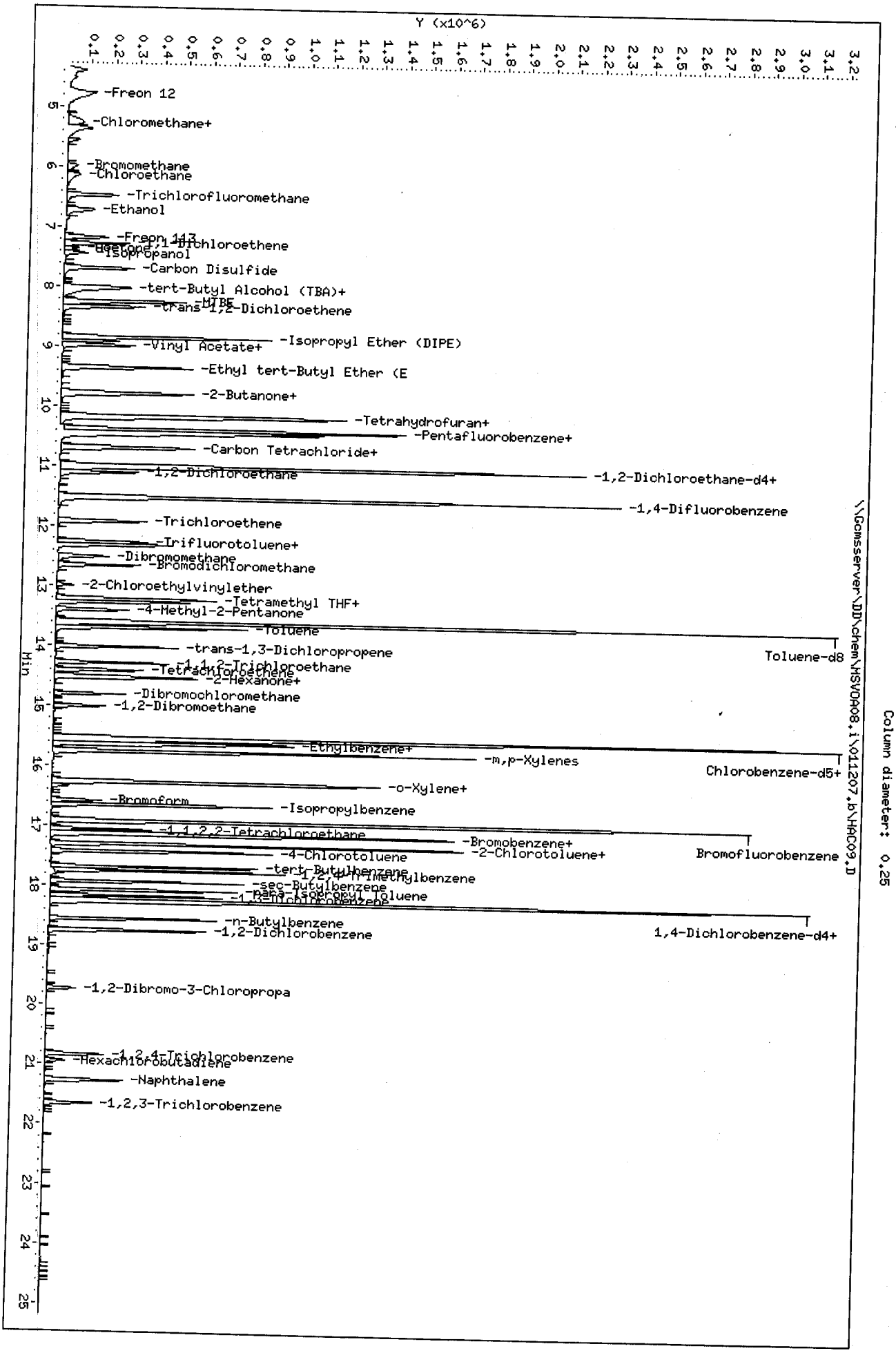
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	716308	50.0000	
79 1,4-Dichlorobenzene	146	18.270	18.270	(1.002)	265425	20.0000	20.1610
80 n-Butylbenzene	91	18.546	18.546	(1.017)	450025	20.0000	19.9268
81 1,2-Dichlorobenzene	146	18.733	18.733	(1.027)	245315	20.0000	20.0811
82 1,2-Dibromo-3-Chloropropane	75	19.716	19.716	(1.081)	42406	20.0000	20.3235
83 1,2,4-Trichlorobenzene	180	20.828	20.828	(1.142)	81285	20.0000	20.3242
84 Hexachlorobutadiene	225	20.946	20.946	(1.148)	16651	20.0000	21.4976
85 Naphthalene	128	21.260	21.260	(1.166)	329414	20.0000	21.1772
86 1,2,3-Trichlorobenzene	180	21.644	21.644	(1.187)	73497	20.0000	21.2939

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC09.D
Date : 12-JAN-2007 03:29
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.004/100,S5170,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 04:06 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.01/100,S5170,0.01/100,
Misc Info : S4713,0.005/100,50PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:03 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 04:06 Cal File: HAC10.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.786	4.786	(0.461)	706089	50.0000	53.3657
2 Chloromethane	50	5.278	5.278	(0.508)	865096	50.0000	50.6076
3 Vinyl Chloride	62	5.376	5.376	(0.518)	699990	50.0000	54.3869
4 Bromomethane	94	5.986	5.986	(0.577)	253853	50.0000	48.2567
5 Chloroethane	64	6.133	6.133	(0.591)	352633	50.0000	54.0816
6 Trichlorofluoromethane	101	6.478	6.478	(0.624)	742465	50.0000	52.7845
7 Ethanol	45	6.723	6.723	(0.648)	708269	5000.00	4663.1920(AM)
8 Freon 113	101	7.186	7.186	(0.692)	316826	50.0000	46.9763
9 1,1-Dichloroethene	96	7.284	7.284	(0.702)	293535	50.0000	48.7279
10 Acetone	43	7.373	7.373	(0.710)	224715	50.0000	42.6164
11 Isopropanol	45	7.451	7.451	(0.718)	435166	500.000	489.6031(A)
12 Carbon Disulfide	76	7.697	7.697	(0.741)	1470730	50.0000	46.1001
13 tert-Butyl Alcohol (TBA)	59	8.002	8.002	(0.771)	538035	500.000	478.9914(A)
14 Methylene Chloride	84	8.032	8.032	(0.774)	444739	50.0000	48.4461(M)
15 MTBE	73	8.258	8.258	(0.795)	1560692	50.0000	49.7425
16 trans-1,2-Dichloroethene	96	8.346	8.346	(0.804)	370885	50.0000	47.8841
17 Isopropyl Ether (DIPE)	45	8.848	8.848	(0.852)	2935414	50.0000	49.9885(A)
18 Vinyl Acetate	43	8.917	8.917	(0.859)	1136064	50.0000	48.9404
19 1,1-Dichloroethane	63	8.986	8.986	(0.865)	953185	50.0000	48.5724
20 Ethyl tert-Butyl Ether (ETBE)	59	9.350	9.350	(0.901)	1849928	50.0000	51.4813(A)
21 2-Butanone	43	9.763	9.763	(0.940)	324976	50.0000	46.8232
22 2,2-Dichloropropane	77	9.772	9.772	(0.941)	587015	50.0000	47.5315

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.802	9.802	(0.944)	428721	50.0000	49.2157
24 Tetrahydrofuran	42	10.156	10.156	(0.978)	1928975	500.000	477.8577(A)
25 Bromochloromethane	128	10.166	10.166	(0.979)	190184	50.0000	49.8120
26 Chloroform	83	10.195	10.195	(0.982)	831393	50.0000	47.4749
* 27 Pentafluorobenzene	168	10.382	10.382	(1.000)	1002942	50.0000	
28 Dibromofluoromethane	113	10.441	10.441	(1.006)	893756	50.0000	49.7517
29 1,1,1-Trichloroethane	97	10.481	10.481	(1.009)	565848	50.0000	47.2443
30 Carbon Tetrachloride	117	10.687	10.687	(0.928)	445494	50.0000	47.1371
31 1,1-Dichloropropene	75	10.697	10.697	(0.929)	549785	50.0000	47.5945
32 1,2-Dichloroethane-d4	65	10.992	10.992	(0.955)	1367637	50.0000	50.6021
33 Benzene	78	11.012	11.012	(0.956)	1537186	50.0000	48.3945
34 Methyl tert-Amyl Ether (TAME)	73	11.012	11.012	(0.956)	1489929	50.0000	50.3283(A)
35 1,2-Dichloroethane	62	11.100	11.100	(0.964)	866893	50.0000	50.6155
* 36 1,4-Difluorobenzene	114	11.513	11.513	(1.000)	2227647	50.0000	
37 Trichloroethene	95	11.917	11.917	(1.035)	401134	50.0000	47.3876
38 Trifluorotoluene	146	12.261	12.261	(1.065)	378404	50.0000	47.4901(A)
39 1,2-Dichloropropane	63	12.320	12.320	(1.070)	551939	50.0000	51.4939
40 Dibromomethane	93	12.507	12.507	(1.086)	318863	50.0000	52.4996
41 Bromodichloromethane	83	12.654	12.654	(1.099)	686362	50.0000	53.9452
42 2-Chloroethylvinylether	63	12.989	12.989	(1.128)	59130	50.0000	36.1931
43 Tetramethyl THF	43	13.215	13.215	(1.148)	1471998	50.0000	51.1178(A)
44 cis-1,3-Dichloropropene	75	13.264	13.264	(1.152)	799329	50.0000	51.7917
45 4-Methyl-2-Pentanone	43	13.402	13.402	(1.164)	748930	50.0000	51.1576
46 Toluene-d8	98	13.599	13.599	(1.181)	2555074	50.0000	50.4774
47 Toluene	92	13.697	13.697	(1.190)	941543	50.0000	47.4362
48 trans-1,3-Dichloropropene	75	14.012	14.012	(1.217)	783016	50.0000	52.0465
49 1,1,2-Trichloroethane	85	14.277	14.277	(1.240)	229648	50.0000	52.3481
50 Tetrachloroethene	166	14.405	14.405	(0.928)	229062	50.0000	44.7448
51 2-Hexanone	43	14.494	14.494	(0.933)	496119	50.0000	48.1056
52 1,3-Dichloropropane	76	14.523	14.523	(0.935)	778238	50.0000	50.0211
53 Dibromochloromethane	129	14.799	14.799	(0.953)	454411	50.0000	52.4785
54 1,2-Dibromoethane	107	15.005	15.005	(1.303)	445550	50.0000	51.3705
* 55 Chlorobenzene-d5	117	15.526	15.526	(1.000)	1847481	50.0000	
56 Chlorobenzene	112	15.566	15.566	(1.003)	1007944	50.0000	46.4138
57 Ethylbenzene	91	15.615	15.615	(1.006)	1796160	50.0000	45.4625
58 1,1,1,2-Tetrachloroethane	131	15.644	15.644	(1.008)	342279	50.0000	49.7355
59 m,p-Xylenes	106	15.753	15.753	(1.015)	1246195	100.000	91.4336
60 o-Xylene	106	16.254	16.254	(1.047)	647005	50.0000	46.9920
61 Styrene	104	16.274	16.274	(1.048)	1167003	50.0000	48.9381
62 Bromoform	173	16.579	16.579	(1.068)	245574	50.0000	50.2657
63 Isopropylbenzene	105	16.648	16.648	(0.913)	1623993	50.0000	45.9682
65 Bromofluorobenzene	95	16.913	16.913	(0.927)	1236726	50.0000	49.7809
66 1,1,2,2-Tetrachloroethane	83	17.051	17.051	(0.935)	584057	50.0000	50.0696
67 Bromobenzene	156	17.120	17.120	(0.939)	333626	50.0000	46.8588
68 Propylbenzene	91	17.110	17.110	(0.938)	1950680	50.0000	44.4682
69 1,2,3-Trichloropropane	110	17.139	17.139	(0.940)	152283	50.0000	49.6779
70 2-Chlorotoluene	91	17.297	17.297	(0.948)	1476902	50.0000	45.9656
71 1,3,5-Trimethylbenzene	105	17.297	17.297	(0.948)	1334713	50.0000	46.5968
72 4-Chlorotoluene	91	17.415	17.415	(0.955)	1442056	50.0000	46.1681
73 tert-Butylbenzene	119	17.671	17.671	(0.969)	1016689	50.0000	47.9173
74 1,2,4-Trimethylbenzene	105	17.739	17.739	(0.973)	1427082	50.0000	46.9071
75 sec-Butylbenzene	105	17.926	17.926	(0.983)	1572606	50.0000	47.0752
76 para-Isopropyl Toluene	119	18.064	18.064	(0.990)	1162397	50.0000	47.0828
77 1,3-Dichlorobenzene	146	18.162	18.162	(0.996)	632672	50.0000	46.1289

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Report Date: 12-Jan-2007 16:03

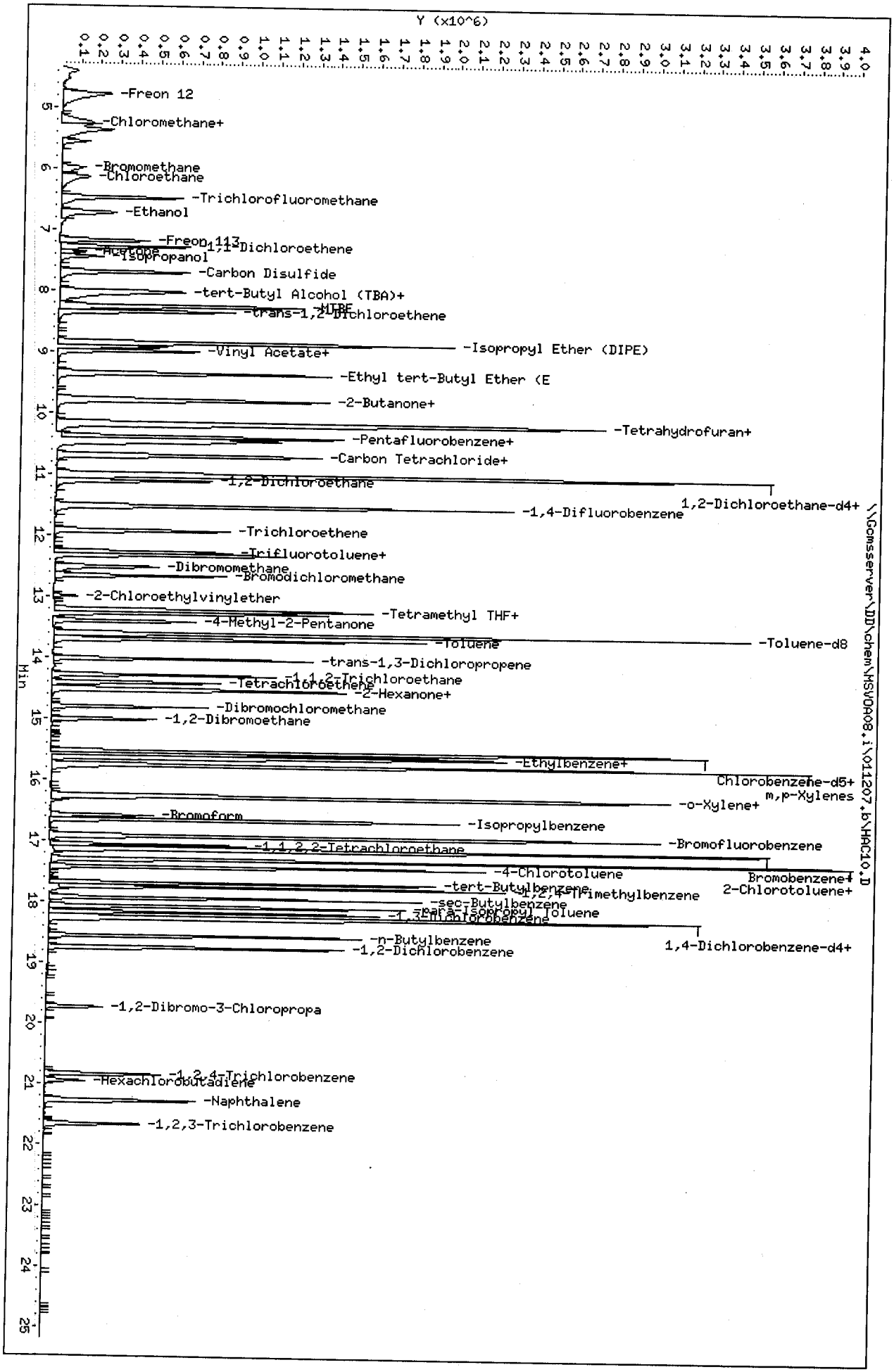
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.241	18.241	(1.000)	738590	50.0000	
79 1,4-Dichlorobenzene	146	18.271	18.271	(1.002)	638866	50.0000	47.0627
80 n-Butylbenzene	91	18.546	18.546	(1.017)	1064915	50.0000	45.7313
81 1,2-Dichlorobenzene	146	18.733	18.733	(1.027)	598563	50.0000	47.5193
82 1,2-Dibromo-3-Chloropropane	75	19.716	19.716	(1.081)	107335	50.0000	49.8895
83 1,2,4-Trichlorobenzene	180	20.828	20.828	(1.142)	192279	50.0000	46.6263
84 Hexachlorobutadiene	225	20.946	20.946	(1.148)	40504	50.0000	47.0097
85 Naphthalene	128	21.261	21.261	(1.166)	814433	50.0000	49.2251
86 1,2,3-Trichlorobenzene	180	21.654	21.654	(1.187)	181130	50.0000	50.8948

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC10.D
Date : 12-JAN-2007 04:06
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.01/100,S5170,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 12-JAN-2007 04:43 MS Autotune Date: 27-JUL-2006 09:42
Operator : TEW Inst ID: MSVOA08.i
Smp Info : ICAL,S5152,0.015/100,S5170,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:04 chemist Quant Type: ISTD
Cal Date : 12-JAN-2007 04:43 Cal File: HAC11.D
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	1085603	75.0000	76.6683
2 Chloromethane	50	5.262	5.262	(0.507)	1315319	75.0000	72.2036
3 Vinyl Chloride	62	5.370	5.370	(0.517)	1076970	75.0000	78.5203
4 Bromomethane	94	5.980	5.980	(0.576)	457888	75.0000	77.3958
5 Chloroethane	64	6.137	6.137	(0.591)	552153	75.0000	79.4626
6 Trichlorofluoromethane	101	6.482	6.482	(0.624)	1177445	75.0000	78.3785
7 Ethanol	45	6.718	6.718	(0.647)	1163121	7500.00	7185.9814(A)
8 Freon 113	101	7.180	7.180	(0.691)	620113	75.0000	78.2587
9 1,1-Dichloroethene	96	7.288	7.288	(0.702)	509270	75.0000	79.3308
10 Acetone	43	7.377	7.377	(0.710)	465031	75.0000	82.7567
11 Isopropanol	45	7.446	7.446	(0.717)	706104	750.000	745.4766(A)
12 Carbon Disulfide	76	7.701	7.701	(0.741)	2725209	75.0000	80.1576
13 tert-Butyl Alcohol (TBA)	59	7.996	7.996	(0.770)	885879	750.000	740.0614(A)
14 Methylene Chloride	84	8.036	8.036	(0.774)	729931	75.0000	74.6126
15 MTBE	73	8.252	8.252	(0.795)	2573785	75.0000	76.9767
16 trans-1,2-Dichloroethene	96	8.351	8.351	(0.804)	648843	75.0000	78.6082
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	4715548	75.0000	75.3545(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	1872608	75.0000	75.6986
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	1571804	75.0000	75.1600
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	2975632	75.0000	77.7053(A)
21 2-Butanone	43	9.757	9.757	(0.939)	580948	75.0000	78.5458
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	1006445	75.0000	76.4713

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.796	9.796	(0.943)	691579	75.0000	74.4984
	24 Tetrahydrofuran	42	10.160	10.160	(0.978)	2936943	750.000	682.7216(A)
	25 Bromochloromethane	128	10.170	10.170	(0.979)	311244	75.0000	76.4957
	26 Chloroform	83	10.200	10.200	(0.982)	1329519	75.0000	71.2408
*	27 Pentafluorobenzene	168	10.387	10.387	(1.000)	1068808	50.0000	
	28 Dibromofluoromethane	113	10.436	10.436	(1.005)	947399	50.0000	49.4878
	29 1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	1025457	75.0000	80.3421
	30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	825397	75.0000	80.7629
	31 1,1-Dichloropropene	75	10.701	10.701	(0.929)	1006170	75.0000	80.5496
	32 1,2-Dichloroethane-d4	65	10.996	10.996	(0.955)	1348312	50.0000	46.1334
	33 Benzene	78	11.016	11.016	(0.956)	2468454	75.0000	71.8658
	34 Methyl tert-Amyl Ether (TAME)	73	11.006	11.006	(0.956)	2313279	75.0000	72.2608(A)
	35 1,2-Dichloroethane	62	11.105	11.105	(0.964)	1380193	75.0000	74.5221
*	36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2408901	50.0000	
	37 Trichloroethene	95	11.921	11.921	(1.035)	717905	75.0000	78.4277
	38 Trifluorotoluene	146	12.265	12.265	(1.065)	737756	75.0000	85.6226(A)
	39 1,2-Dichloropropane	63	12.314	12.314	(1.069)	871591	75.0000	75.1977(M)
	40 Dibromomethane	93	12.511	12.511	(1.086)	507845	75.0000	77.3233
	41 Bromodichloromethane	83	12.659	12.659	(1.099)	1060412	75.0000	77.0728
	42 2-Chloroethylvinylether	63	12.993	12.993	(1.128)	141549	75.0000	80.1222
	43 Tetramethyl THF	43	13.209	13.209	(1.147)	2328817	75.0000	74.7873(A)
	44 cis-1,3-Dichloropropene	75	13.268	13.268	(1.152)	1252330	75.0000	75.0379
	45 4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	1231433	75.0000	77.7870
	46 Toluene-d8	98	13.593	13.593	(1.180)	2681427	50.0000	48.9877
	47 Toluene	92	13.691	13.691	(1.189)	1565522	75.0000	72.9385
	48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	1214550	75.0000	74.6558
	49 1,1,2-Trichloroethane	85	14.281	14.281	(1.240)	365302	75.0000	77.0048
	50 Tetrachloroethene	166	14.409	14.409	(0.928)	433677	75.0000	80.3704
	51 2-Hexanone	43	14.498	14.498	(0.934)	870215	75.0000	80.0528
	52 1,3-Dichloropropane	76	14.527	14.527	(0.936)	1221071	75.0000	74.4600
	53 Dibromochloromethane	129	14.803	14.803	(0.954)	715168	75.0000	78.3576
	54 1,2-Dibromoethane	107	15.009	15.009	(1.303)	727782	75.0000	77.5973
*	55 Chlorobenzene-d5	117	15.521	15.521	(1.000)	1947329	50.0000	
	56 Chlorobenzene	112	15.560	15.560	(1.003)	1644961	75.0000	71.8633
	57 Ethylbenzene	91	15.609	15.609	(1.006)	2930740	75.0000	70.3763
	58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	545291	75.0000	75.1719
	59 m,p-Xylenes	106	15.747	15.747	(1.015)	2011473	150.000	140.0151
	60 o-Xylene	106	16.249	16.249	(1.047)	1040660	75.0000	71.7078
	61 Styrene	104	16.278	16.278	(1.049)	1847360	75.0000	73.4966
	62 Bromoform	173	16.573	16.573	(1.068)	396183	75.0000	76.9353
	63 Isopropylbenzene	105	16.642	16.642	(0.912)	2657293	75.0000	72.0269
	65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1233935	50.0000	47.5625
	66 1,1,2,2-Tetrachloroethane	83	17.045	17.045	(0.934)	883604	75.0000	72.5370
	67 Bromobenzene	156	17.114	17.114	(0.938)	522083	75.0000	70.2187
	68 Propylbenzene	91	17.114	17.114	(0.938)	3108819	75.0000	67.8644
	69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	235613	75.0000	73.6027
	70 2-Chlorotoluene	91	17.291	17.291	(0.948)	2207118	75.0000	65.7792
	71 1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	2043082	75.0000	68.3025
	72 4-Chlorotoluene	91	17.419	17.419	(0.955)	2245511	75.0000	68.8427
	73 tert-Butylbenzene	119	17.675	17.675	(0.969)	1691574	75.0000	76.3445
	74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	2260276	75.0000	71.1433
	75 sec-Butylbenzene	105	17.921	17.921	(0.982)	2655378	75.0000	76.1169
	76 para-Isopropyl Toluene	119	18.068	18.068	(0.990)	1884605	75.0000	73.0988
	77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	1014464	75.0000	70.8294

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Report Date: 12-Jan-2007 16:05

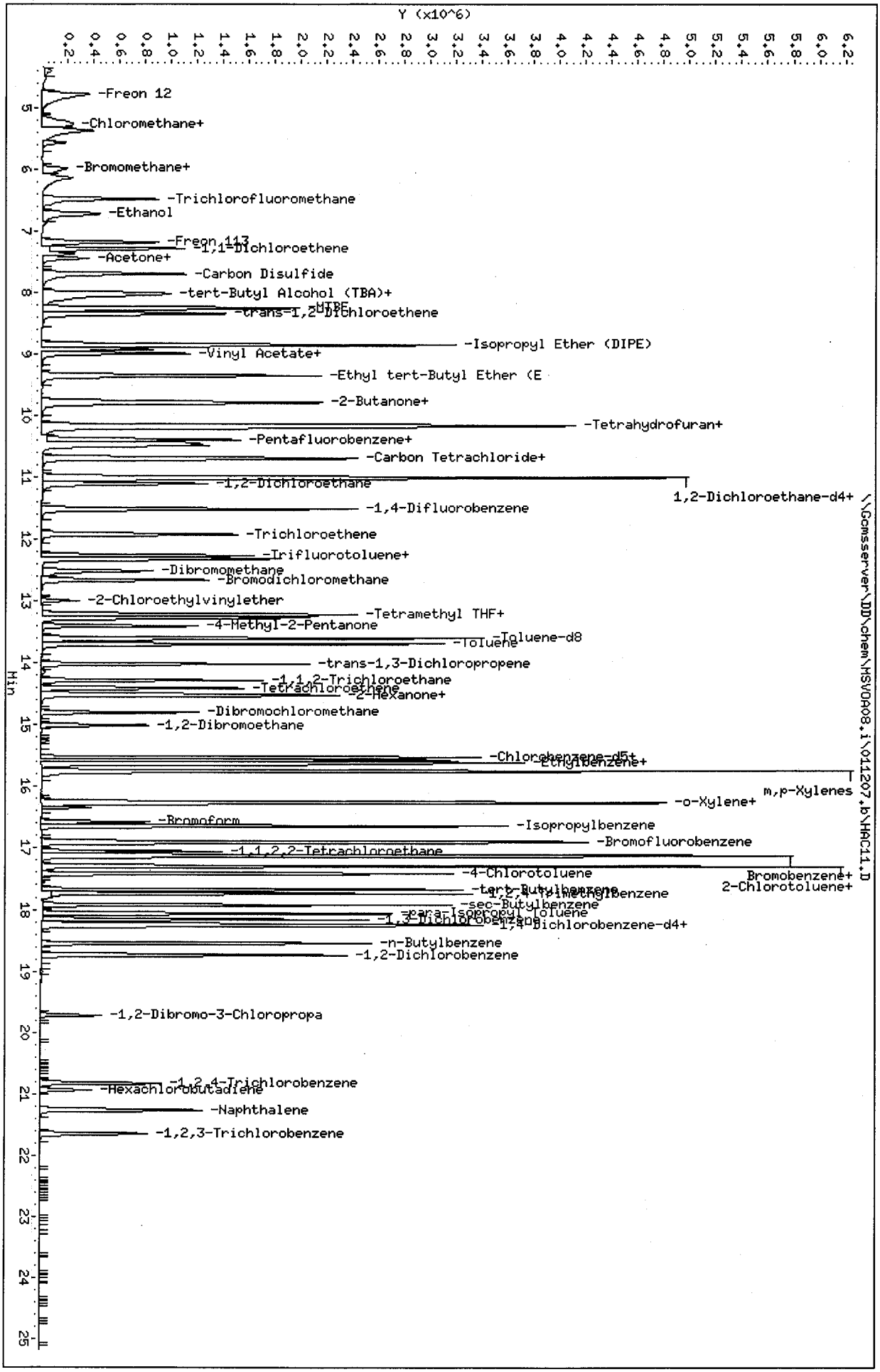
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.245	18.245	(1.000)	771296	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.001)	1020533	75.0000	71.9907
80 n-Butylbenzene	91	18.540	18.540	(1.016)	1789446	75.0000	73.5868
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.027)	961003	75.0000	73.0580
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	167943	75.0000	74.7501
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	329539	75.0000	76.5225
84 Hexachlorobutadiene	225	20.940	20.940	(1.148)	78360	75.0000	77.3023
85 Naphthalene	128	21.265	21.265	(1.165)	1332973	75.0000	74.9324
86 1,2,3-Trichlorobenzene	180	21.648	21.648	(1.187)	312981	75.0000	84.2139

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC11.D
Date : 12-JAN-2007 04:43
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.015/100,S5170,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: TEW
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Lab Smp Id:
Inj Date : 12-JAN-2007 05:20
Operator : TEW
Smp Info : ICAL,S5152,0.02/100,S5170,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\826GOX8.m
Meth Date : 12-Jan-2007 16:06 chemist
Cal Date : 12-JAN-2007 05:20
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.10
Processing Host: PC_MSVOA04

Client Smp ID: DYNA P&T
MS Autotune Date: 27-JUL-2006 09:42
Inst ID: MSVOA08.i

Quant Type: ISTD
Cal File: HAC12.D
Calibration Sample, Level: 8

Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.780	4.780	(0.460)	1438714	100.000	97.1856
2 Chloromethane	50	5.262	5.262	(0.507)	1748057	100.000	91.9709
3 Vinyl Chloride	62	5.370	5.370	(0.517)	1405897	100.000	98.2423
4 Bromomethane	94	5.990	5.990	(0.577)	636724	100.000	98.9913
5 Chloroethane	64	6.137	6.137	(0.591)	721073	100.000	99.4602
6 Trichlorofluoromethane	101	6.482	6.482	(0.624)	1504920	100.000	95.9353
7 Ethanol	45	6.718	6.718	(0.647)	1490604	10000.0	8826.5355(A)
8 Freon 113	101	7.180	7.180	(0.691)	889096	100.000	98.7349
9 1,1-Dichloroethene	96	7.288	7.288	(0.702)	706740	100.000	105.5165
10 Acetone	43	7.377	7.377	(0.710)	470675	100.000	80.2803
11 Isopropanol	45	7.446	7.446	(0.717)	935631	1000.00	946.7532(A)
12 Carbon Disulfide	76	7.701	7.701	(0.741)	3689435	100.000	104.0092
13 tert-Butyl Alcohol (TBA)	59	7.996	7.996	(0.770)	1156954	1000.00	926.3524(A)
14 Methylene Chloride	84	8.026	8.026	(0.773)	957435	100.000	93.8007
15 MTBE	73	8.252	8.252	(0.795)	3287183	100.000	94.2275
16 trans-1,2-Dichloroethene	96	8.341	8.341	(0.803)	866150	100.000	100.5746
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.852)	5863479	100.000	89.8047(A)
18 Vinyl Acetate	43	8.921	8.921	(0.859)	2864336	100.000	110.9767
19 1,1-Dichloroethane	63	8.990	8.990	(0.866)	1981013	100.000	90.7909
20 Ethyl tert-Butyl Ether (ETBE)	59	9.354	9.354	(0.901)	3669169	100.000	91.8345(A)
21 2-Butanone	43	9.757	9.757	(0.939)	682448	100.000	88.4346
22 2,2-Dichloropropane	77	9.777	9.777	(0.941)	1330680	100.000	96.9056

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.796	9.796	(0.943)	902285	100.000	93.1571
24 Tetrahydrofuran	42	10.160	10.160	(0.978)	3687563	1000.00	821.5886(A)
25 Bromochloromethane	128	10.160	10.160	(0.978)	404139	100.000	95.1993
26 Chloroform	83	10.200	10.200	(0.982)	1683648	100.000	86.4673
* 27 Pentafluorobenzene	168	10.386	10.386	(1.000)	1115149	50.0000	
28 Dibromofluoromethane	113	10.436	10.436	(1.005)	950874	50.0000	47.6053
29 1,1,1-Trichloroethane	97	10.485	10.485	(1.009)	1340292	100.000	100.6450
30 Carbon Tetrachloride	117	10.682	10.682	(0.927)	1101339	100.000	108.0014
31 1,1-Dichloropropene	75	10.701	10.701	(0.929)	1335954	100.000	107.1872
32 1,2-Dichloroethane-d4	65	10.986	10.986	(0.954)	1321592	50.0000	45.3192
33 Benzene	78	11.016	11.016	(0.956)	3150179	100.000	91.9162
34 Methyl tert-Amyl Ether (TAME)	73	11.006	11.006	(0.956)	2938544	100.000	91.9954(A)
35 1,2-Dichloroethane	62	11.104	11.104	(0.964)	1716411	100.000	92.8809
* 36 1,4-Difluorobenzene	114	11.518	11.518	(1.000)	2403585	50.0000	
37 Trichloroethene	95	11.921	11.921	(1.035)	906915	100.000	99.2953
38 Trifluorotoluene	146	12.265	12.265	(1.065)	1012977	100.000	117.8242(A)
39 1,2-Dichloropropane	63	12.314	12.314	(1.069)	1135379	100.000	98.1730
40 Dibromomethane	93	12.511	12.511	(1.086)	662548	100.000	101.1011
41 Bromodichloromethane	83	12.659	12.659	(1.099)	1368591	100.000	99.6919
42 2-Chloroethylvinylether	63	12.993	12.993	(1.128)	191490	100.000	108.6304
43 Tetramethyl THF	43	13.209	13.209	(1.147)	2971972	100.000	95.6526(A)
44 cis-1,3-Dichloropropene	75	13.268	13.268	(1.152)	1640377	100.000	98.5065
45 4-Methyl-2-Pentanone	43	13.396	13.396	(1.163)	1528728	100.000	96.7801
46 Toluene-d8	98	13.593	13.593	(1.180)	2686562	50.0000	49.1901
47 Toluene	92	13.691	13.691	(1.189)	1974103	100.000	92.1779
48 trans-1,3-Dichloropropene	75	14.016	14.016	(1.217)	1595018	100.000	98.2592
49 1,1,2-Trichloroethane	85	14.281	14.281	(1.240)	458178	100.000	96.7965
50 Tetrachloroethene	166	14.409	14.409	(0.928)	575792	100.000	106.6745
51 2-Hexanone	43	14.498	14.498	(0.934)	1039458	100.000	95.5921
52 1,3-Dichloropropane	76	14.527	14.527	(0.936)	1544268	100.000	94.1390
53 Dibromochloromethane	129	14.803	14.803	(0.954)	943008	100.000	103.2889
54 1,2-Dibromoethane	107	15.009	15.009	(1.303)	937904	100.000	100.2220
* 55 Chlorobenzene-d5	117	15.521	15.521	(1.000)	1947935	50.0000	
56 Chlorobenzene	112	15.560	15.560	(1.003)	2142393	100.000	93.5655
57 Ethylbenzene	91	15.609	15.609	(1.006)	3826192	100.000	91.8504
58 1,1,1,2-Tetrachloroethane	131	15.639	15.639	(1.008)	725732	100.000	100.0157
59 m,p-Xylenes	106	15.747	15.747	(1.015)	2485984	200.000	172.9911
60 o-Xylene	106	16.249	16.249	(1.047)	1312396	100.000	90.4039
61 Styrene	104	16.278	16.278	(1.049)	2305685	100.000	91.7024
62 Bromoform	173	16.573	16.573	(1.068)	533475	100.000	103.5640
63 Isopropylbenzene	105	16.642	16.642	(0.913)	3471203	100.000	93.9766
65 Bromofluorobenzene	95	16.908	16.908	(0.927)	1243053	50.0000	47.8570
66 1,1,2,2-Tetrachloroethane	83	17.055	17.055	(0.935)	1186965	100.000	97.3248
67 Bromobenzene	156	17.114	17.114	(0.939)	693428	100.000	93.1534
68 Propylbenzene	91	17.114	17.114	(0.939)	4151252	100.000	90.5127
69 1,2,3-Trichloropropane	110	17.144	17.144	(0.940)	305247	100.000	95.2423
70 2-Chlorotoluene	91	17.291	17.291	(0.948)	2820140	100.000	83.9495
71 1,3,5-Trimethylbenzene	105	17.291	17.291	(0.948)	2643238	100.000	88.2615
72 4-Chlorotoluene	91	17.419	17.419	(0.955)	2909888	100.000	89.1051
73 tert-Butylbenzene	119	17.675	17.675	(0.969)	2289569	100.000	103.2107
74 1,2,4-Trimethylbenzene	105	17.744	17.744	(0.973)	2891569	100.000	90.9055
75 sec-Butylbenzene	105	17.921	17.921	(0.983)	3586017	100.000	102.6718
76 para-Isopropyl Toluene	119	18.068	18.068	(0.991)	2576063	100.000	99.8000
77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	1309739	100.000	91.3368

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Report Date: 12-Jan-2007 16:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.235	18.235	(1.000)	772213	50.0000	
79 1,4-Dichlorobenzene	146	18.265	18.265	(1.002)	1342265	100.000	94.5740
80 n-Butylbenzene	91	18.540	18.540	(1.017)	2501872	100.000	102.7615
81 1,2-Dichlorobenzene	146	18.737	18.737	(1.028)	1266236	100.000	96.1483
82 1,2-Dibromo-3-Chloropropane	75	19.721	19.721	(1.081)	227489	100.000	101.1334
83 1,2,4-Trichlorobenzene	180	20.832	20.832	(1.142)	462569	100.000	107.2859
84 Hexachlorobutadiene	225	20.950	20.950	(1.149)	115894	100.000	99.3088
85 Naphthalene	128	21.265	21.265	(1.166)	1839963	100.000	100.1538
86 1,2,3-Trichlorobenzene	180	21.658	21.658	(1.188)	423942	100.000	113.9348

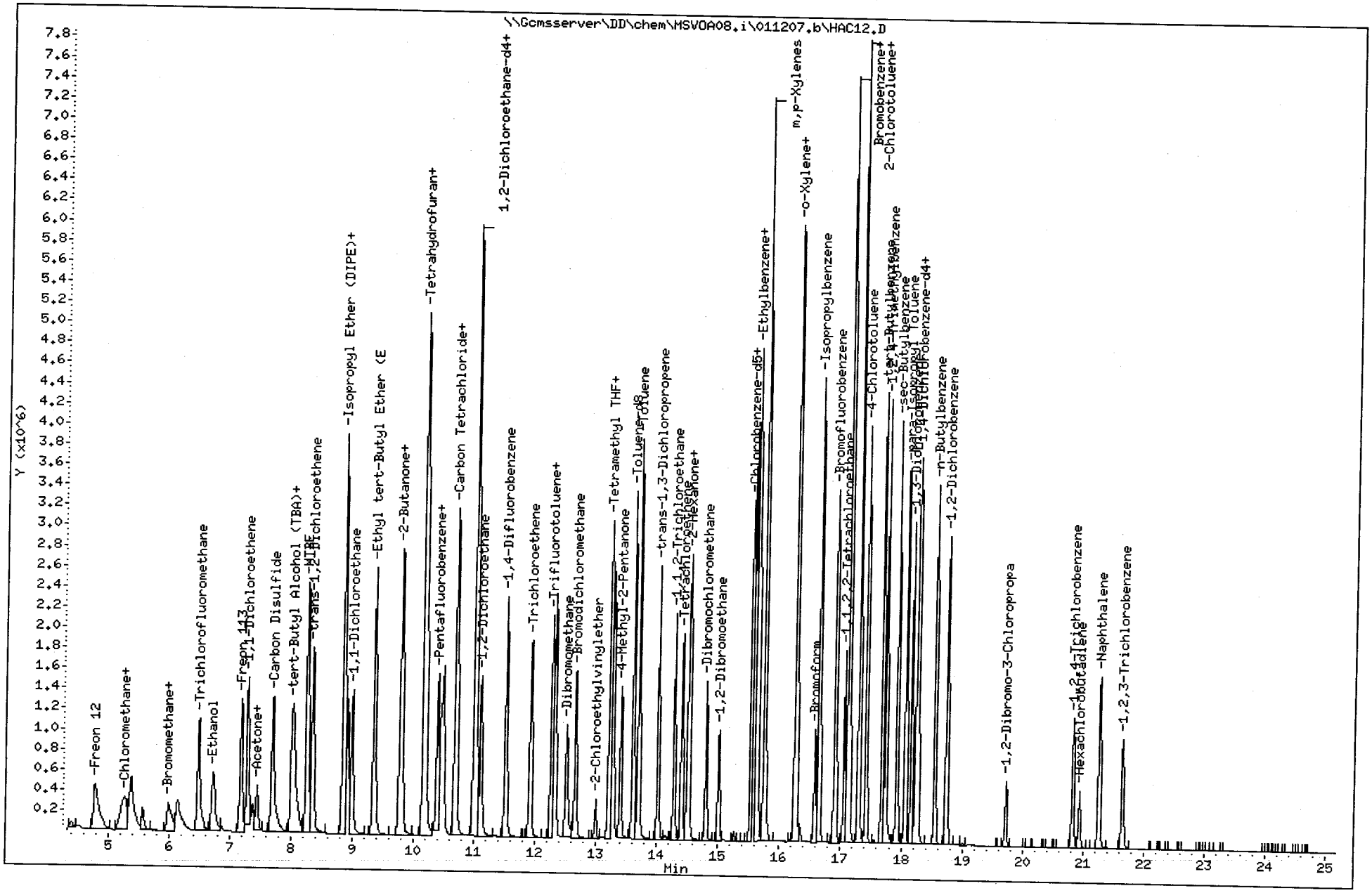
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\011207.b\HAC12.D
Date : 12-JAN-2007 05:20
Client ID: DYNA P&T
Sample Info: ICAL,S5152,0.02/100,S5170,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i

Operator: TEW
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum: 497038053001
Units : ug/L

Name : 826GOX10
Date : 26-JAN-2007 16:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaq11	497038053011	0.25/0.5PPB	26-JAN-2007 16:23	S5170 (2000000X), S5219 (1000000X), S4172 (2000000X), S5079 (5000X)
L2	jaq12	497038053012	0.5/1PPB	26-JAN-2007 16:56	S5170 (1000000X), S5219 (500000X), S4172 (1000000X), S5079 (5000X)
L3	jaq13	497038053013	2PPB	26-JAN-2007 17:28	S5170 (250000X), S5219 (250000X), S4172 (500000X), S5079 (5000X)
L4	jaq14	497038053014	5PPB	26-JAN-2007 18:01	S5170 (100000X), S5219 (100000X), S4172 (200000X), S5079 (5000X)
L5	jaq15	497038053015	10PPB	26-JAN-2007 18:34	S5170 (50000X), S5219 (50000X), S4172 (100000X), S5079 (5000X)
L6	jaq16	497038053016	20PPB	26-JAN-2007 19:06	S5170 (25000X), S5219 (25000X), S4172 (50000X), S5079 (5000X)
L7	jaq17	497038053017	50PPB	26-JAN-2007 19:39	S5170 (10000X), S5219 (10000X), S4172 (20000X), S5079 (5000X)
L8	jaq18	497038053018	75PPB	26-JAN-2007 20:12	S5170 (6667X), S5219 (6667X), S4172 (13330X), S5079 (5000X)
L9	jaq19	497038053019	100PPB	26-JAN-2007 20:44	S5170 (5000X), S5219 (5000X), S4172 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5702	0.5978m	0.5791m	0.5117m	0.5518m	0.5698m	0.5574m	0.5407m	AVRG		1.78629		0.5598	5	15	0.10	0.99	
Vinyl Chloride	0.4091m	0.4111m	0.4334m	0.4330m	0.4004m	0.4420m	0.4434	0.4439	0.4397m	AVRG		2.33402		0.4284	4	15	0.050	0.99	
Bromomethane		0.2306m	0.2441	0.2478	0.2302m	0.2430m	0.2624	0.2661	0.2682m	AVRG		4.01550		0.2490	6	15	0.050	0.99	
Chloroethane		0.2422m	0.2662	0.2571m	0.2473m	0.2571m	0.2624	0.2622	0.2588m	AVRG		3.89639		0.2566	3	15	0.050	0.99	
Acetone				0.1464	0.1417	0.1522	0.1261	0.1258	0.1342	AVRG		7.25989		0.1377	8	15	0.050	0.99	
1,1-Dichloroethene		0.2450m	0.2605m	0.2594	0.2333m	0.2576m	0.2366	0.2357	0.2456	AVRG		4.05340		0.2467	5	15	0.050	0.99	
Methylene Chloride			0.3473	0.3340	0.3160m	0.3234	0.3158	0.3166	0.3186m	AVRG		3.08128		0.3245	4	15	0.050	0.99	
Carbon Disulfide		1.1955	1.1420m	1.1328	1.0306m	1.1220m	1.0599	1.0524	1.0982	AVRG		0.90565		1.1042	5	15	0.050	0.99	
MTBE		0.8101	0.8879	0.8726m	0.8548	0.8912	0.8740m	0.8587	0.8710	AVRG		1.15603		0.8650	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3024	0.2929	0.2948	0.2742m	0.2901m	0.2836m	0.2735	0.2830	AVRG		3.48670		0.2868	4	15	0.050	0.99	
Vinyl Acetate				1.1386m	1.1379m	1.2067m	1.1239m	1.1534m	1.1166m	AVRG		0.87245		1.1462	3	15	0.050	0.99	
1,1-Dichloroethane		0.5934	0.6331m	0.6072m	0.5682m	0.5919	0.5641	0.5476	0.5548	AVRG		1.71665		0.5825	5	15	0.10	0.99	
2-Butanone			0.2271m	0.2252m	0.2183	0.2457m	0.2203	0.2116	0.2282	AVRG		4.44043		0.2252	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.3169	0.3283	0.3022	0.2998m	0.3109m	0.2991m	0.2946	0.2978	AVRG		3.26582		0.3062	4	15	0.050	0.99	
Chloroform		0.5297	0.5102	0.4927	0.4683m	0.4842	0.4605	0.4530	0.4537	AVRG		2.07676		0.4815	6	15	0.050	0.99	
1,1,1-Trichloroethane		0.3216	0.3305	0.3303	0.2948	0.3207	0.3044	0.3046	0.3232	AVRG		3.16186		0.3163	4	15	0.050	0.99	
Carbon Tetrachloride		0.1713	0.1622	0.1617	0.1456	0.1554m	0.1464	0.1514	0.1602	AVRG		6.37882		0.1568	6	15	0.050	0.99	
1,2-Dichloroethane		0.2347	0.2616	0.2581m	0.2562m	0.2634	0.2532	0.2512	0.2502	AVRG		3.94369		0.2536	4	15	0.050	0.99	
Benzene		0.7459	0.7821	0.7244m	0.6958	0.7270	0.6899	0.6930	0.6911	AVRG		1.39149		0.7187	5	15	0.050	0.99	
Trichloroethene		0.1960	0.1804	0.1698	0.1496m	0.1695	0.1593	0.1619	0.1650	AVRG		5.91977		0.1689	8	15	0.050	0.99	
1,2-Dichloropropane		0.2375	0.2319	0.2346m	0.2117m	0.2262m	0.2187	0.2155	0.2115	AVRG		4.47558		0.2234	5	15	0.050	0.99	
Bromodichloromethane		0.2243	0.2297	0.2187	0.2201	0.2317m	0.2240	0.2280	0.2246	AVRG		4.44164		0.2251	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2909m	0.3345m	0.3418m	0.3228	0.3546	0.3198	0.3398	0.3517	AVRG		3.01218		0.3320	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3082	0.3182m	0.3060	0.2928m	0.3158	0.3078	0.3098	0.3068	AVRG		3.24504		0.3082	2	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4374	0.4340	0.3929	0.4617	0.3990m	0.3770	0.3902	0.3813	AVRG		2.44402		0.4092	8	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2532m	0.2717	0.2714	0.2626	0.2789	0.2730	0.2778	0.2738	AVRG		3.69978		0.2703	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0772	0.1030	0.0918	0.0907	0.0959	0.0912	0.0932	0.0914	AVRG		10.8925		0.0918	8	15	0.050	0.99	
2-Hexanone			0.2261m	0.2142m	0.2213m	0.2535	0.2304	0.2257	0.2401	AVRG		4.34439		0.2302	6	15	0.050	0.99	
Tetrachloroethene		0.2047	0.1907	0.1883	0.1650	0.1905	0.1737m	0.1814	0.1884	AVRG		5.39515		0.1854	6	15	0.050	0.99	
Dibromochloromethane		0.1759	0.2308	0.2140	0.2051	0.2182	0.2133	0.2187	0.2210	AVRG		4.71402		0.2121	8	15	0.050	0.99	
Chlorobenzene		0.5657	0.5812	0.5274	0.4912m	0.5235m	0.4979	0.5225	0.5116	AVRG		1.89528		0.5276	6	15	0.30	0.99	
Ethylbenzene		0.9051	0.9876	0.8915	0.8355	0.8667	0.8194	0.8555	0.8454	AVRG		1.14177		0.8758	6	15	0.050	0.99	
m,p-Xylenes	0.3037	0.3336	0.3457	0.3123m	0.3191	0.3197	0.3067	0.3134	0.3120	AVRG		3.13997		0.3185	4	15	0.050	0.99	
o-Xylene		0.3356	0.3384	0.3134	0.3082	0.3148	0.3002	0.3108	0.3046	AVRG		3.16698		0.3158	4	15	0.050	0.99	
Styrene		0.5022	0.5860m	0.5371m	0.5122	0.5644	0.5372	0.5601	0.5443	AVRG		1.84183		0.5429	5	15	0.050	0.99	
Bromoform		0.1880	0.1722	0.1554	0.1554	0.1654	0.1558	0.1619	0.1642	AVRG		6.06883		0.1648	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6524	0.6948	0.6318	0.6018	0.6660	0.6091	0.6117	0.6164	AVRG		1.57353		0.6355	5	15	0.30	0.99	
Dibromofluoromethane	0.5407	0.5452	0.5423	0.5551	0.5518	0.5468	0.5492	0.5438	0.5476	AVRG		1.82833		0.5469	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3968	0.4007	0.3961	0.3972	0.3973	0.3918	0.3908	0.3935	0.3943	AVRG		2.52906		0.3954	1	15	0.050	0.99	
Toluene-d8	1.0761	1.0777	1.0805	1.0723	1.0823	1.0795	1.0767	1.0731	1.0652	AVRG		0.92943		1.0759	0	15	0.050	0.99	
Bromofluorobenzene	1.2129	1.2033	1.2171	1.2136	1.1902	1.1781	1.1523	1.1407	1.1451	AVRG		0.84481		1.1837	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497038053001 Cal Date: 26-JAN-2007 Type : WATER

ICV 497038053020 (jaq20 26-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 497038053021 (jaq21 26-JAN-2007) stds: S5052 (10000X), S5322 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497038053020	0.5598	0.4893	25.00	21.85	ug/L	-13	30	m
Vinyl Chloride	497038053020	0.4284	0.3821	25.00	22.29	ug/L	-11	20	m
Bromomethane	497038053020	0.2490	0.2265	25.00	22.74	ug/L	-9	30	m
Chloroethane	497038053020	0.2566	0.2530	25.00	24.64	ug/L	-1	30	m
Acetone	497038053021	0.1377	0.1420	25.00	25.77	ug/L	3	40	
1,1-Dichloroethene	497038053021	0.2467	0.2456	25.00	24.88	ug/L	0	20	
Methylene Chloride	497038053021	0.3245	0.3243	25.00	24.98	ug/L	0	30	
Carbon Disulfide	497038053021	1.1042	0.8505	25.00	19.26	ug/L	**-23**	30	!v- m
MTBE	497038053021	0.8650	0.8004	25.00	23.13	ug/L	-7	30	
trans-1,2-Dichloroethene	497038053021	0.2868	0.2826	25.00	24.64	ug/L	-1	30	
Vinyl Acetate	497038053021	1.1462	1.0327	25.00	22.53	ug/L	-10	40	m
1,1-Dichloroethane	497038053021	0.5825	0.5767	25.00	24.75	ug/L	-1	30	
2-Butanone	497038053021	0.2252	0.2315	25.00	25.70	ug/L	3	40	
cis-1,2-Dichloroethene	497038053021	0.3062	0.3223	25.00	26.31	ug/L	5	30	m
Chloroform	497038053021	0.4815	0.4837	25.00	25.11	ug/L	0	20	
1,1,1-Trichloroethane	497038053021	0.3163	0.3300	25.00	26.08	ug/L	4	30	m
Carbon Tetrachloride	497038053021	0.1568	0.1660	25.00	26.47	ug/L	6	30	
1,2-Dichloroethane	497038053021	0.2536	0.2527	25.00	24.92	ug/L	0	30	m
Benzene	497038053021	0.7187	0.7110	25.00	24.73	ug/L	-1	30	
Trichloroethene	497038053021	0.1689	0.1650	25.00	24.42	ug/L	-2	30	
1,2-Dichloropropane	497038053021	0.2234	0.2134	25.00	23.87	ug/L	-5	20	
Bromodichloromethane	497038053021	0.2251	0.2384	25.00	26.47	ug/L	6	30	m
4-Methyl-2-Pentanone	497038053021	0.3320	0.3212	25.00	24.19	ug/L	-3	40	
cis-1,3-Dichloropropene	497038053021	0.3082	0.3089	25.00	25.06	ug/L	0	30	
Toluene	497038053021	0.4092	0.4022	25.00	24.58	ug/L	-2	20	
trans-1,3-Dichloropropene	497038053021	0.2703	0.2535	25.00	23.45	ug/L	-6	30	
1,1,2-Trichloroethane	497038053021	0.0918	0.0944	25.00	25.71	ug/L	3	30	
2-Hexanone	497038053021	0.2302	0.2472	25.00	26.85	ug/L	7	40	
Tetrachloroethene	497038053021	0.1854	0.1951	25.00	26.31	ug/L	5	30	
Dibromochloromethane	497038053021	0.2121	0.2199	25.00	25.92	ug/L	4	30	
Chlorobenzene	497038053021	0.5276	0.5181	25.00	24.55	ug/L	-2	30	
Ethylbenzene	497038053021	0.8758	0.8976	25.00	25.62	ug/L	2	20	
m,p-Xylenes	497038053021	0.3185	0.3220	50.00	50.56	ug/L	1	30	
o-Xylene	497038053021	0.3158	0.3158	25.00	25.01	ug/L	0	30	
Styrene	497038053021	0.5429	0.5724	25.00	26.36	ug/L	5	30	
Bromoform	497038053021	0.1648	0.1631	25.00	24.75	ug/L	-1	30	
1,1,2,2-Tetrachloroethane	497038053021	0.6355	0.6193	25.00	24.36	ug/L	-3	30	

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Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Lab Smp Id:
Inj Date : 26-JAN-2007 16:23
Operator : VOA
Smp Info : ICAL,S5170,0.0005/1000,S5219,0.001/1000
Misc Info : S4172,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:03 msvoa10
Cal Date : 26-JAN-2007 16:23
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.10
Processing Host: PC_MSVOA10

Client Smp ID: DYNA P&T
MS Autotune Date: 10-JUL-2006 14:50
Inst ID: MSVOA10.i
Quant Type: ISTD
Cal File: JAQ11.D
Calibration Sample, Level: 1
Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.560	4.560	(0.428)	2535	0.50000	0.2662
2 Chloromethane	50	5.034	5.034	(0.473)	5069	0.50000	0.2829
3 Vinyl Chloride	62	5.221	5.221	(0.491)	6546	0.50000	0.4774(M)
4 Bromomethane	94	5.891	5.891	(0.554)	3347	0.50000	0.4199
5 Chloroethane	64	6.069	6.069	(0.570)	1935	0.50000	0.2356
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	4880	0.50000	0.4441
7 Ethanol	45	6.710	6.710	(0.630)	3237	25.0000	16.8374
8 Freon 113	101	7.350	7.350	(0.691)	793	0.25000	0.1069
9 Acetone	43	7.400	7.400	(0.695)	4185	0.25000	0.9494
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	887	0.25000	0.1123
11 Isopropanol	45	7.518	7.518	(0.706)	1872	2.50000	2.1586
12 Carbon Disulfide	76	7.824	7.824	(0.735)	8618	0.25000	0.2439
13 Methylene Chloride	84	8.100	8.100	(0.761)	3802	0.25000	0.3660
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.763)	1649	2.50000	1.6803
15 MTBE	73	8.494	8.494	(0.798)	6130	0.25000	0.2214
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	2257	0.25000	0.2459
18 Vinyl Acetate	43	9.145	9.145	(0.859)	12426	0.25000	0.3387
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	4220	0.25000	0.2263
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	12019	0.25000	0.2453
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	7432	0.25000	0.2129
22 2-Butanone	43	9.953	9.953	(0.935)	2308	0.25000	0.3202
23 cis-1,2-Dichloroethene	96	10.003	10.003	(0.940)	2488	0.25000	0.2539

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.943)	2193	0.25000	0.1981
	25 Bromochloromethane	128	10.367	10.367	(0.974)	757	0.25000	0.1553
	26 Chloroform	83	10.427	10.427	(0.980)	5576	0.25000	0.3618
	27 Tetrahydrofuran	42	10.436	10.436	(0.981)	48760	2.50000	10.1033
*	28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1600020	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.002)	865191	50.0000	49.4323
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	2194	0.25000	0.2167
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	2234	0.25000	0.1926
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	1328	0.25000	0.1676
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1002330	50.0000	50.1819
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	2887	0.25000	0.2253
	35 Benzene	78	11.353	11.353	(0.961)	8860	0.25000	0.2440
	36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.967)	5416	0.25000	0.2128
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525762	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	2421	0.25000	0.2837
	39 Trifluorotoluene	146	12.586	12.586	(1.065)	1414	0.25000	0.1167
	40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	2497	0.25000	0.2212
	41 Dibromomethane	93	12.783	12.783	(1.082)	1486	0.25000	0.2424
	42 Bromodichloromethane	83	12.941	12.941	(1.095)	2246	0.25000	0.1974
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	3382	0.25000	0.2172
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	6620	0.25000	0.2484
	46 4-Methyl-2-Pentanone	43	13.641	13.641	(1.154)	6620	0.25000	0.3947
	47 Toluene-d8	98	13.966	13.966	(1.182)	2717903	50.0000	50.0069
	48 Toluene	92	14.055	14.055	(1.189)	5930	0.25000	0.2869
	49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.208)	2914	0.25000	0.2134
	50 1,1,2-Trichloroethane	85	14.538	14.538	(1.230)	874	0.25000	0.1884
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	3000	0.25000	0.2006
	52 2-Hexanone	43	14.834	14.834	(0.937)	1217	0.25000	0.1274
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	1816	0.25000	0.2362
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	1689	0.25000	0.1919
	55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	1824	0.25000	0.2091
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2073470	50.0000	
	57 Chlorobenzene	112	15.859	15.859	(1.002)	5136	0.25000	0.2347
	58 1,1,1,2-Tetrachloroethane	131	15.918	15.918	(1.006)	1451	0.25000	0.1996
	59 Ethylbenzene	91	15.958	15.958	(1.008)	9022	0.25000	0.2484
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	6298	0.50000	0.4768
	61 o-Xylene	106	16.569	16.569	(1.047)	3225	0.25000	0.2462
	62 Styrene	104	16.589	16.589	(1.048)	5266	0.25000	0.2338
	63 Bromoform	173	16.835	16.835	(1.064)	2043	0.25000	0.2989
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	6782	0.25000	0.2283
	65 Cyclohexanone	55	17.131	17.131	(0.925)	1418	2.50000	2.4111
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1124757	50.0000	51.2336
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	2100	0.25000	0.1781
	68 1,2,3-Trichloropropane	75	17.358	17.358	(0.937)	3018	0.25000	0.2741
	69 Bromobenzene	156	17.387	17.387	(0.939)	2273	0.25000	0.2609
	70 Propylbenzene	91	17.436	17.436	(0.941)	8820	0.25000	0.2412
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	6823	0.25000	0.2628
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	4748	0.25000	0.2225
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	6022	0.25000	0.2496
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	4532	0.25000	0.2350
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	4301	0.25000	0.2237
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	5720	0.25000	0.2036
	77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	4284	0.25000	0.2113
	78 1,3-Dichlorobenzene	146	18.462	18.462	(0.997)	4523	0.25000	0.2917

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

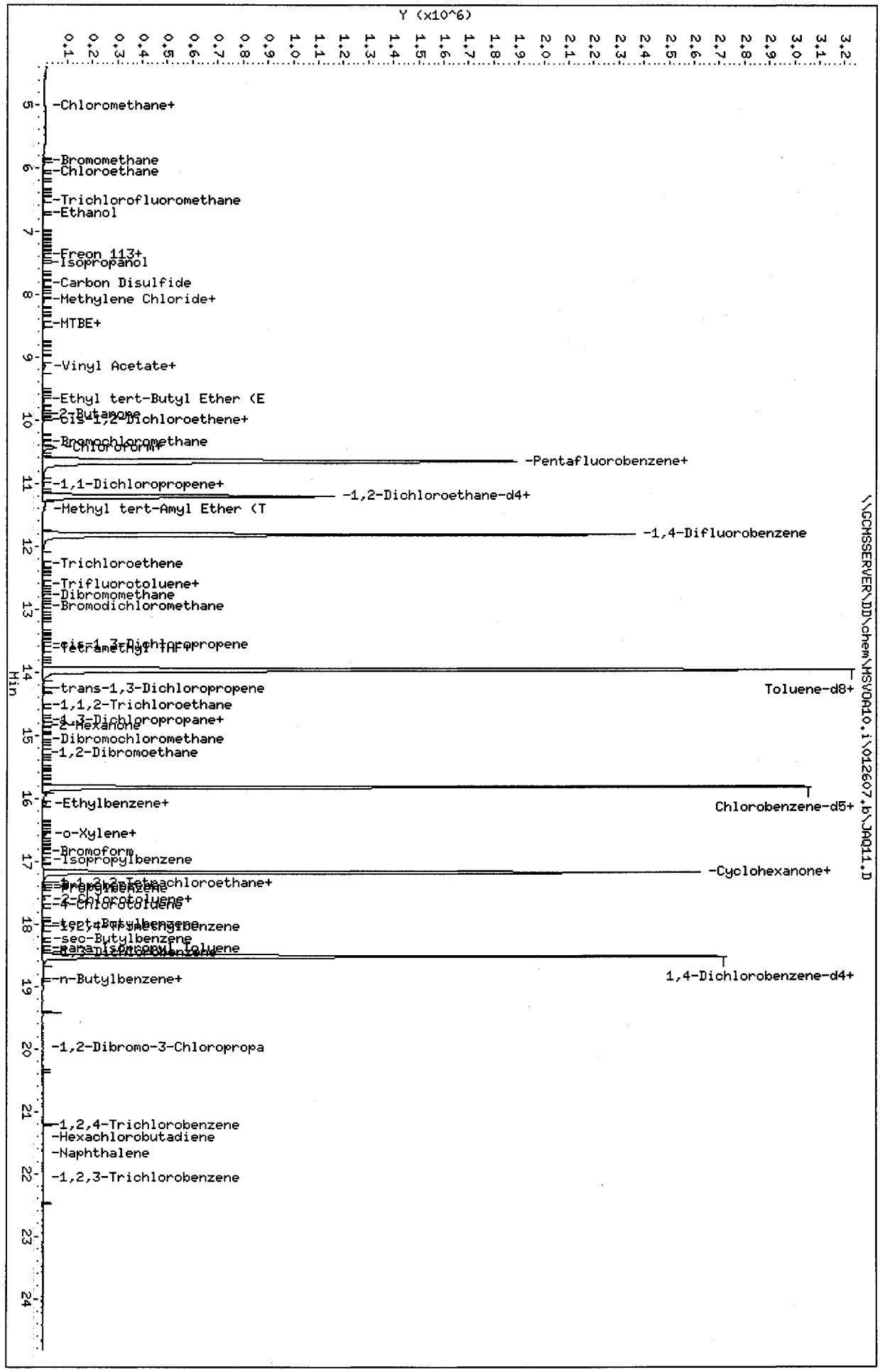
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	927324	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.001)	4544	0.25000	0.2851
81 n-Butylbenzene	91	18.886	18.886	(1.020)	3931	0.25000	0.2414
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	3574	0.25000	0.2389
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	150	0.25000	0.0823
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	2096	0.25000	0.3510
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	861	0.25000	0.2889
86 Naphthalene	128	21.676	21.676	(1.170)	1928	0.25000	0.1527
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1726	0.25000	0.3060

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Date : 26-JAN-2007 16:23
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5219,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:56 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.001/1000,S5219,0.002/1000
Misc Info : S4172,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:04 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:56 Cal File: JAQ12.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.576	4.576	(0.430)	7235	1.00000	0.7427(M)
2 Chloromethane	50	5.059	5.059	(0.476)	18667	1.00000	1.0185
3 Vinyl Chloride	62	5.216	5.216	(0.490)	13459	1.00000	0.9595(M)
4 Bromomethane	94	5.897	5.897	(0.554)	7548	1.00000	0.9258(M)
5 Chloroethane	64	6.074	6.074	(0.571)	7929	1.00000	0.9437(M)
6 Trichlorofluoromethane	101	6.528	6.528	(0.614)	9832	1.00000	0.8747
7 Ethanol	45	6.695	6.695	(0.629)	8655	50.0000	44.0061
8 Freon 113	101	7.356	7.356	(0.691)	3526	0.50000	0.4648
9 Acetone	43	7.395	7.395	(0.695)	4892	0.50000	1.0848(M)
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	4010	0.50000	0.4965(M)
11 Isopropanol	45	7.514	7.514	(0.706)	3895	5.00000	4.3903(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	19568	0.50000	0.5413
13 Methylene Chloride	84	8.095	8.095	(0.761)	6365	0.50000	0.5990(M)
14 tert-Butyl Alcohol (TBA)	59	8.115	8.115	(0.763)	4310	5.00000	4.2930
15 MTBE	73	8.490	8.490	(0.798)	13260	0.50000	0.4682
16 trans-1,2-Dichloroethene	96	8.539	8.539	(0.803)	4950	0.50000	0.5272
18 Vinyl Acetate	43	9.131	9.131	(0.858)	15549	0.50000	0.4143
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	9713	0.50000	0.5093
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	25375	0.50000	0.5062
21 Ethyl tert-Butyl Ether (ETBE)	59	9.702	9.702	(0.912)	16442	0.50000	0.4605
22 2-Butanone	43	9.949	9.949	(0.935)	3867	0.50000	0.5245
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	5187	0.50000	0.5174

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	2,2-Dichloropropane	77	10.018	10.018	(0.942)	6306	0.50000	0.5569
25	Bromochloromethane	128	10.363	10.363	(0.974)	2329	0.50000	0.4671
26	Chloroform	83	10.422	10.422	(0.980)	8670	0.50000	0.5499
27	Tetrahydrofuran	42	10.442	10.442	(0.981)	61535	5.00000	12.4633(M)
* 28	Pentafluorobenzene	168	10.639	10.639	(1.000)	1636864	50.0000	
29	Dibromofluoromethane	113	10.669	10.669	(1.003)	892397	50.0000	49.8390
30	1,1,1-Trichloroethane	97	10.797	10.797	(1.015)	5264	0.50000	0.5084
31	1,1-Dichloropropene	75	11.023	11.023	(0.932)	6549	0.50000	0.5542
32	Carbon Tetrachloride	117	11.063	11.063	(0.936)	4408	0.50000	0.5462
33	1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1031383	50.0000	50.6712
34	1,2-Dichloroethane	62	11.319	11.319	(0.957)	6041	0.50000	0.4628
35	Benzene	78	11.359	11.359	(0.961)	19199	0.50000	0.5189
36	Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	12894	0.50000	0.4973
* 37	1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2573874	50.0000	
38	Trichloroethene	95	12.276	12.276	(1.038)	5045	0.50000	0.5801
39	Trifluorotoluene	146	12.601	12.601	(1.066)	6166	0.50000	0.4994
40	1,2-Dichloropropane	63	12.601	12.601	(1.066)	6114	0.50000	0.5315
41	Dibromomethane	93	12.778	12.778	(1.081)	2626	0.50000	0.4204
42	Bromodichloromethane	83	12.956	12.956	(1.096)	5774	0.50000	0.4981
44	cis-1,3-Dichloropropene	75	13.567	13.567	(1.148)	7933	0.50000	0.5000
45	Tetramethyl THF	43	13.646	13.646	(1.154)	12460	0.50000	0.4589
46	4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	7488	0.50000	0.4381(H)
47	Toluene-d8	98	13.962	13.962	(1.181)	2773774	50.0000	50.0809
48	Toluene	92	14.060	14.060	(1.189)	11257	0.50000	0.5344
49	trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	6516	0.50000	0.4683(M)
50	1,1,2-Trichloroethane	85	14.524	14.524	(1.228)	1988	0.50000	0.4206
51	1,3-Dichloropropane	76	14.760	14.760	(0.933)	7415	0.50000	0.4943
52	2-Hexanone	43	14.809	14.809	(0.936)	3613	0.50000	0.3772
53	Tetrachloroethene	166	14.809	14.809	(0.936)	4259	0.50000	0.5522
54	Dibromochloromethane	129	15.086	15.086	(0.953)	3660	0.50000	0.4146
55	1,2-Dibromoethane	107	15.283	15.283	(1.293)	3828	0.50000	0.4307
* 56	Chlorobenzene-d5	117	15.825	15.825	(1.000)	2080264	50.0000	
57	Chlorobenzene	112	15.864	15.864	(1.002)	11768	0.50000	0.5360
58	1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	3496	0.50000	0.4794
59	Ethylbenzene	91	15.953	15.953	(1.008)	18828	0.50000	0.5166
60	m,p-Xylenes	106	16.091	16.091	(1.017)	13879	1.00000	1.0474
61	o-Xylene	106	16.574	16.574	(1.047)	6981	0.50000	0.5313
62	Styrene	104	16.584	16.584	(1.048)	10447	0.50000	0.4624
63	Bromoform	173	16.840	16.840	(1.064)	3910	0.50000	0.5703
64	Isopropylbenzene	105	16.978	16.978	(0.917)	15942	0.50000	0.5306
65	Cyclohexanone	55	17.117	17.117	(0.924)	2707	5.00000	4.5494
66	Bromofluorobenzene	95	17.176	17.176	(0.928)	1128978	50.0000	50.8277
67	1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	6121	0.50000	0.5132
68	1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	7536	0.50000	0.6765
69	Bromobenzene	156	17.393	17.393	(0.939)	4426	0.50000	0.5021
70	Propylbenzene	91	17.442	17.442	(0.942)	19152	0.50000	0.5178
71	2-Chlorotoluene	91	17.590	17.590	(0.950)	14066	0.50000	0.5355
72	1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	10793	0.50000	0.5000
73	4-Chlorotoluene	91	17.708	17.708	(0.956)	13469	0.50000	0.5517
74	tert-Butylbenzene	119	18.014	18.014	(0.973)	10033	0.50000	0.5142
75	1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	8927	0.50000	0.4589
76	sec-Butylbenzene	105	18.260	18.260	(0.986)	14915	0.50000	0.5249
77	para-Isopropyl Toluene	119	18.398	18.398	(0.994)	10601	0.50000	0.5168
78	1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	8321	0.50000	0.5304

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

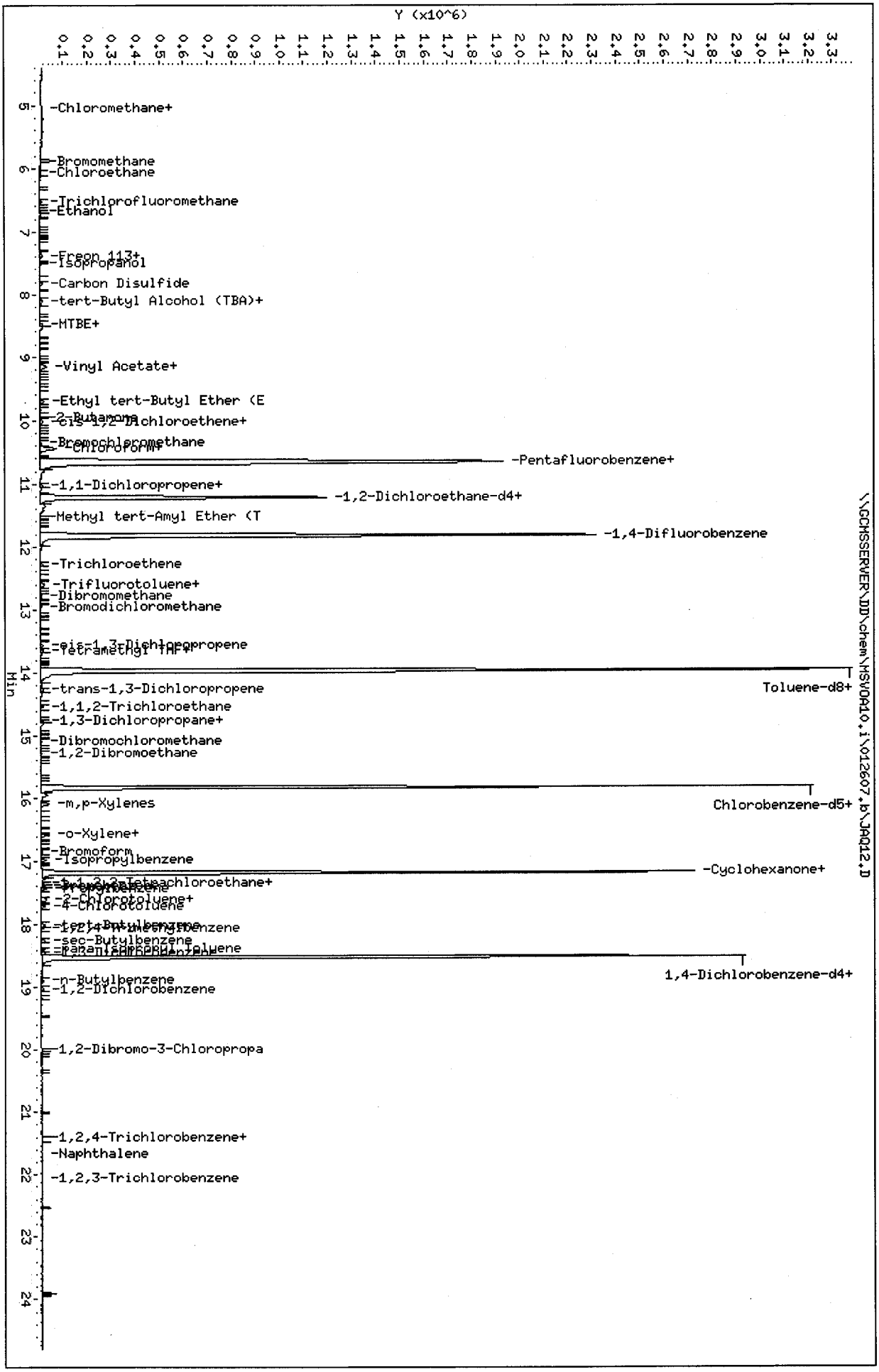
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	938237	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	9153	0.50000	0.5677
81 n-Butylbenzene	91	18.891	18.891	(1.020)	8333	0.50000	0.5058
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	7706	0.50000	0.5091
83 1,2-Dibromo-3-Chloropropane	75	19.995	19.995	(1.080)	383	0.50000	0.2078
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	3180	0.50000	0.5263
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	2029	0.50000	0.6729
86 Naphthalene	128	21.671	21.671	(1.170)	5279	0.50000	0.4133
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	2798	0.50000	0.4903

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Date : 26-JAN-2007 16:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5219,0.002/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 17:28 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/500,S5219,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:05 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 17:28 Cal File: JAQ13.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.575	4.575	(0.430)	18377	2.00000	1.9299(M)
2 Chloromethane	50	5.048	5.048	(0.475)	38262	2.00000	2.1358(M)
3 Vinyl Chloride	62	5.216	5.216	(0.490)	27735	2.00000	2.0228(M)
4 Bromomethane	94	5.896	5.896	(0.554)	15624	2.00000	1.9605
5 Chloroethane	64	6.064	6.064	(0.570)	17036	2.00000	2.0742
6 Trichlorofluoromethane	101	6.527	6.527	(0.614)	21663	2.00000	1.9716
7 Ethanol	45	6.705	6.705	(0.630)	39066	200.000	203.2028(M)
8 Freon 113	101	7.356	7.356	(0.691)	14598	2.00000	1.9690
9 Acetone	43	7.385	7.385	(0.694)	13299	2.00000	3.0171
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	16671	2.00000	2.1116(M)
11 Isopropanol	45	7.503	7.503	(0.705)	17751	20.0000	20.4691(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	73090	2.00000	2.0685(M)
13 Methylene Chloride	84	8.105	8.105	(0.762)	22230	2.00000	2.1404
14 tert-Butyl Alcohol (TBA)	59	8.125	8.125	(0.764)	19591	20.0000	19.9630
15 MTBE	73	8.480	8.480	(0.797)	56826	2.00000	2.0528
16 trans-1,2-Dichloroethene	96	8.529	8.529	(0.802)	18745	2.00000	2.0424
18 Vinyl Acetate	43	9.130	9.130	(0.858)	82474	2.00000	2.2485(M)
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	40519	2.00000	2.1736(M)
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	102783	2.00000	2.0979
21 Ethyl tert-Butyl Ether (ETBE)	59	9.692	9.692	(0.911)	72766	2.00000	2.0849
22 2-Butanone	43	9.949	9.949	(0.935)	14535	2.00000	2.0168(M)
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	21011	2.00000	2.1442

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	22956	2.00000	2.0740
	25 Bromochloromethane	128	10.363	10.363	(0.974)	9569	2.00000	1.9633
	26 Chloroform	83	10.422	10.422	(0.980)	32652	2.00000	2.1190
	27 Tetrahydrofuran	42	10.441	10.441	(0.981)	133684	20.0000	27.6998(M)
*	28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1600031	50.0000	
	29 Dibromofluoromethane	113	10.668	10.668	(1.003)	867760	50.0000	49.5787
	30 1,1,1-Trichloroethane	97	10.796	10.796	(1.015)	21153	2.00000	2.0900
	31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	23288	2.00000	1.9879
	32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	16561	2.00000	2.0698
	33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1010779	50.0000	50.0873
	34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	26702	2.00000	2.0632
	35 Benzene	78	11.358	11.358	(0.961)	79833	2.00000	2.1765
	36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	52839	2.00000	2.0556
*	37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2551866	50.0000	
	38 Trichloroethene	95	12.285	12.285	(1.039)	18415	2.00000	2.1359
	39 Trifluorotoluene	146	12.591	12.591	(1.065)	25974	2.00000	2.1220
	40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	23667	2.00000	2.0754
	41 Dibromomethane	93	12.778	12.778	(1.081)	13071	2.00000	2.1110
	42 Bromodichloromethane	83	12.946	12.946	(1.095)	23450	2.00000	2.0407
	44 cis-1,3-Dichloropropene	75	13.557	13.557	(1.147)	32480	2.00000	2.0651(M)
	45 Tetramethyl THF	43	13.646	13.646	(1.154)	58138	2.00000	2.1598
	46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	34144	2.00000	2.0151(M)
	47 Toluene-d8	98	13.961	13.961	(1.181)	2757182	50.0000	50.2107
	48 Toluene	92	14.060	14.060	(1.189)	44304	2.00000	2.1215
	49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	27734	2.00000	2.0104
	50 1,1,2-Trichloroethane	85	14.533	14.533	(1.229)	10510	2.00000	2.2430
	51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	30655	2.00000	2.0636
	52 2-Hexanone	43	14.789	14.789	(0.935)	18632	2.00000	1.9646(M)
	53 Tetrachloroethene	166	14.809	14.809	(0.936)	15714	2.00000	2.0577
	54 Dibromochloromethane	129	15.085	15.085	(0.953)	19021	2.00000	2.1763
	55 1,2-Dibromoethane	107	15.273	15.273	(1.292)	19499	2.00000	2.2129
*	56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2060016	50.0000	
	57 Chlorobenzene	112	15.864	15.864	(1.002)	47893	2.00000	2.2031
	58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	15605	2.00000	2.1609
	59 Ethylbenzene	91	15.953	15.953	(1.008)	81378	2.00000	2.2552
	60 m,p-Xylenes	106	16.091	16.091	(1.017)	56977	4.00000	4.3423
	61 o-Xylene	106	16.574	16.574	(1.047)	27885	2.00000	2.1434
	62 Styrene	104	16.584	16.584	(1.048)	48290	2.00000	2.1587(M)
	63 Bromoform	173	16.840	16.840	(1.064)	14187	2.00000	2.0897
	64 Isopropylbenzene	105	16.978	16.978	(0.917)	63190	2.00000	2.1252
	65 Cyclohexanone	55	17.116	17.116	(0.924)	12622	20.0000	21.4347
	66 Bromofluorobenzene	95	17.175	17.175	(0.928)	1130086	50.0000	51.4096
	67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	25806	2.00000	2.1866
	68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	20828	2.00000	1.8894
	69 Bromobenzene	156	17.392	17.392	(0.939)	19452	2.00000	2.2300
	70 Propylbenzene	91	17.442	17.442	(0.942)	77111	2.00000	2.1067
	71 2-Chlorotoluene	91	17.589	17.589	(0.950)	60049	2.00000	2.3101
	72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	43770	2.00000	2.0489
	73 4-Chlorotoluene	91	17.698	17.698	(0.956)	55051	2.00000	2.2788
	74 tert-Butylbenzene	119	18.004	18.004	(0.972)	39220	2.00000	2.0314
	75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	39122	2.00000	2.0322
	76 sec-Butylbenzene	105	18.260	18.260	(0.986)	52834	2.00000	1.8788
	77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	37289	2.00000	1.8370
	78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	34911	2.00000	2.2489

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

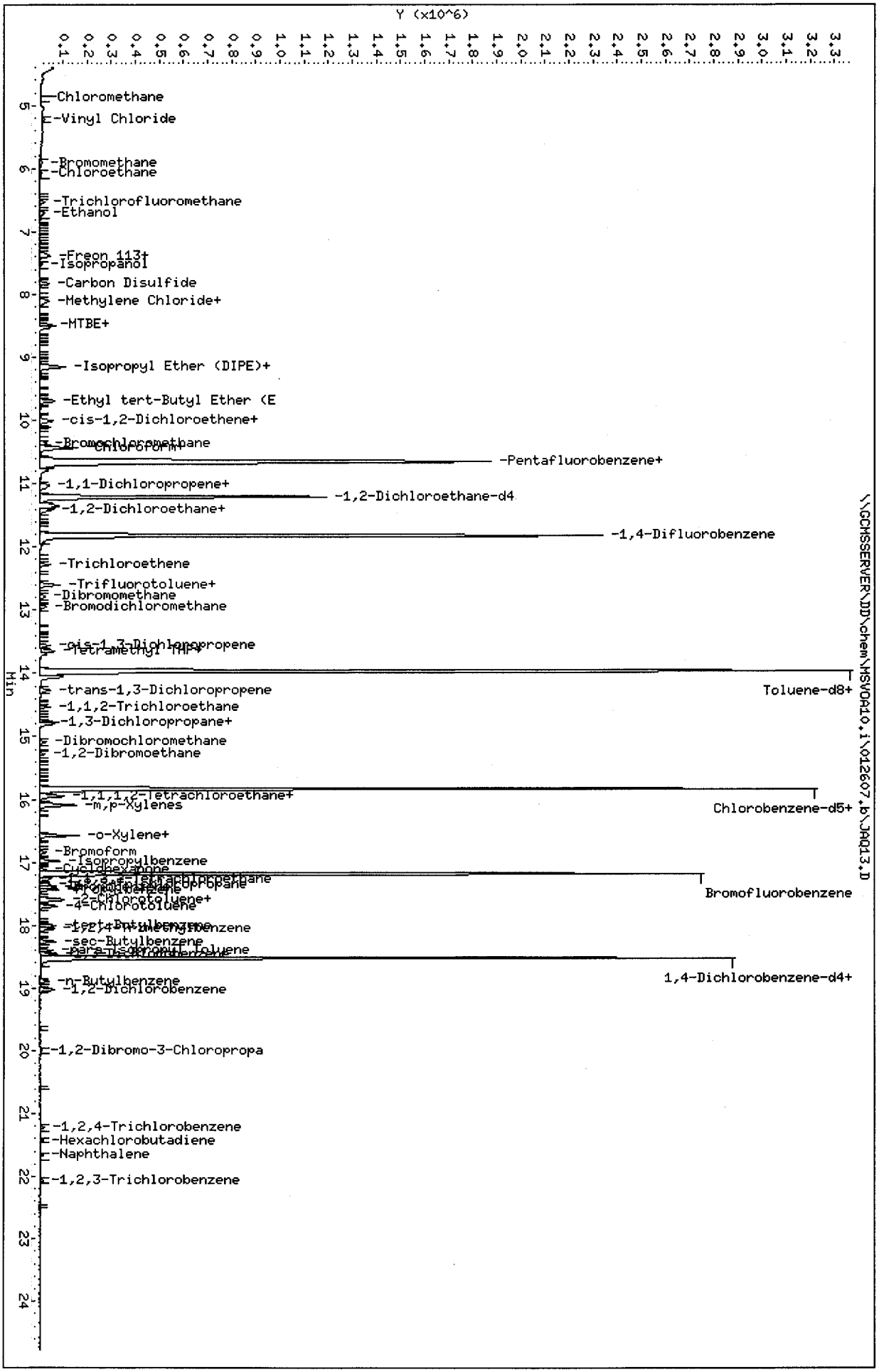
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.516	18.516	(1.000)	928528	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	36503	2.00000	2.2880
81 n-Butylbenzene	91	18.891	18.891	(1.020)	28101	2.00000	1.7235(M)
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	33310	2.00000	2.2237
83 1,2-Dibromo-3-Chloropropane	75	20.005	20.005	(1.080)	4355	2.00000	2.3883
84 1,2,4-Trichlorobenzene	180	21.218	21.218	(1.146)	10870	2.00000	1.8181
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	5429	2.00000	1.8194
86 Naphthalene	128	21.661	21.661	(1.170)	23362	2.00000	1.8484(M)
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	10856	2.00000	1.9223

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Date : 26-JAN-2007 17:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5219,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Lab Smp Id:
Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:01
MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA
Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.005/500,S5219,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:07 msvoa10
Quant Type: ISTD
Cal Date : 26-JAN-2007 18:01
Cal File: JAQ14.D
Als bottle: 14
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.571	4.571	(0.429)	45057	5.00000	4.7352(M)
2 Chloromethane	50	5.044	5.044	(0.474)	92586	5.00000	5.1717(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	69233	5.00000	5.0531(M)
4 Bromomethane	94	5.892	5.892	(0.554)	39614	5.00000	4.9742
5 Chloroethane	64	6.079	6.079	(0.571)	41104	5.00000	5.0082(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	54275	5.00000	4.9431
7 Ethanol	45	6.690	6.690	(0.629)	96354	500.000	501.5352(M)
8 Freon 113	101	7.351	7.351	(0.691)	39830	5.00000	5.3761
9 Acetone	43	7.380	7.380	(0.693)	23401	5.00000	5.3125
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	41481	5.00000	5.2578
11 Isopropanol	45	7.499	7.499	(0.705)	42583	50.0000	49.1375(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	181127	5.00000	5.1296
13 Methylene Chloride	84	8.090	8.090	(0.760)	53405	5.00000	5.1458
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	48200	50.0000	49.1492(M)
15 MTBE	73	8.485	8.485	(0.797)	139526	5.00000	5.0438(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	47140	5.00000	5.1398
18 Vinyl Acetate	43	9.126	9.126	(0.857)	182058	5.00000	4.9670(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	97079	5.00000	5.2113(M)
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	254455	5.00000	5.1974(M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	179275	5.00000	5.1402(M)
22 2-Butanone	43	9.944	9.944	(0.934)	36000	5.00000	4.9988(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	48321	5.00000	4.9348

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	57419	5.00000	5.1914
	25 Bromochloromethane	128	10.358	10.358	(0.973)	24836	5.00000	5.0994
	26 Chloroform	83	10.427	10.427	(0.980)	78786	5.00000	5.1165
	27 Tetrahydrofuran	42	10.437	10.437	(0.981)	258085	50.0000	53.5132
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1598923	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.002)	887606	50.0000	50.7477
	30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	52814	5.00000	5.2219
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	60501	5.00000	5.1515
	32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	41379	5.00000	5.1586
	33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	1016175	50.0000	50.2275
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	66042	5.00000	5.0902(M)
	35 Benzene	78	11.354	11.354	(0.961)	185323	5.00000	5.0399(M)
	36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.967)	129813	5.00000	5.0375(M)
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2558326	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	43433	5.00000	5.0250
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	64491	5.00000	5.2554
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	60007	5.00000	5.2488(M)
	41 Dibromomethane	93	12.783	12.783	(1.082)	32000	5.00000	5.1551
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	55962	5.00000	4.8579
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	78281	5.00000	4.9646
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	132056	5.00000	4.8934
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	87431	5.00000	5.1470(M)
	47 Toluene-d8	98	13.966	13.966	(1.182)	2743323	50.0000	49.8321
	48 Toluene	92	14.055	14.055	(1.189)	100505	5.00000	4.8007
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	69434	5.00000	5.0206
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	23486	5.00000	4.9997
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	74917	5.00000	4.9986(M)
	52 2-Hexanone	43	14.785	14.785	(0.934)	44526	5.00000	4.6535(M)
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	39144	5.00000	5.0804
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	44470	5.00000	5.0430
	55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	42530	5.00000	4.8145
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2078416	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	109608	5.00000	4.9975
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	35396	5.00000	4.8582
	59 Ethylbenzene	91	15.958	15.958	(1.008)	185289	5.00000	5.0894
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	129806	10.0000	9.8052(M)
	61 o-Xylene	106	16.569	16.569	(1.047)	65146	5.00000	4.9633
	62 Styrene	104	16.579	16.579	(1.047)	111630	5.00000	4.9461(M)
	63 Bromoform	173	16.845	16.845	(1.064)	32300	5.00000	4.7156
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	159446	5.00000	5.3219
	65 Cyclohexanone	55	17.121	17.121	(0.924)	25839	50.0000	43.5472
	66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1135470	50.0000	51.2628
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	59115	5.00000	4.9709
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	51961	5.00000	4.6781
	69 Bromobenzene	156	17.397	17.397	(0.939)	44439	5.00000	5.0560
	70 Propylbenzene	91	17.437	17.437	(0.941)	189911	5.00000	5.1491
	71 2-Chlorotoluene	91	17.585	17.585	(0.949)	133716	5.00000	5.1051
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	107754	5.00000	5.0059(M)
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	122996	5.00000	5.0527
	74 tert-Butylbenzene	119	18.009	18.009	(0.972)	99337	5.00000	5.1062
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	91370	5.00000	4.7103
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	144987	5.00000	5.1167
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	99367	5.00000	4.8582
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	79859	5.00000	5.1054

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

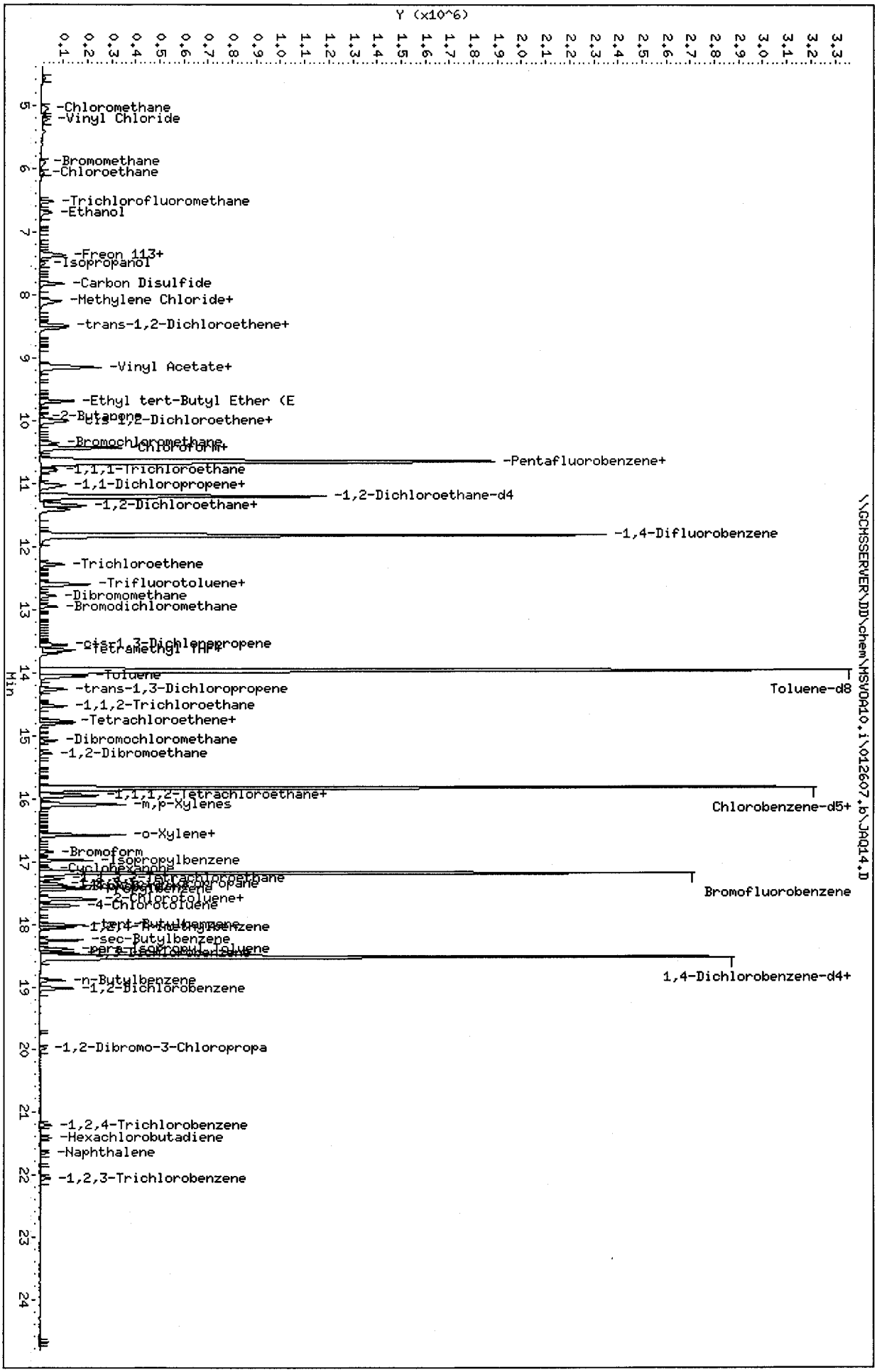
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	935622	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	78373	5.00000	4.8753
81 n-Butylbenzene	91	18.886	18.886	(1.020)	76759	5.00000	4.6722
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	75672	5.00000	5.0135
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	9331	5.00000	5.0784
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	26200	5.00000	4.3490(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	15257	5.00000	5.0743
86 Naphthalene	128	21.657	21.657	(1.169)	52322	5.00000	4.1084(M)
87 1,2,3-Trichlorobenzene	180	22.061	22.061	(1.191)	25002	5.00000	4.3937

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Date : 26-JAN-2007 18:01
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5219,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:34 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/100,S5219,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:08 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 18:34 Cal File: JAQ15.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	84494	10.0000	8.7838(M)
2 Chloromethane	50	5.053	5.053	(0.475)	165424	10.0000	9.1405(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	129444	10.0000	9.3456(M)
4 Bromomethane	94	5.891	5.891	(0.554)	74412	10.0000	9.2428(M)
5 Chloroethane	64	6.069	6.069	(0.570)	79961	10.0000	9.6374(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	106528	10.0000	9.5972(M)
7 Ethanol	45	6.690	6.690	(0.629)	195201	1000.00	1005.0648(M)
8 Freon 113	101	7.350	7.350	(0.691)	72575	10.0000	9.6900
9 Acetone	43	7.380	7.380	(0.693)	45813	10.0000	10.2882
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	75423	10.0000	9.4568(M)
11 Isopropanol	45	7.498	7.498	(0.705)	86791	100.000	99.0678(M)
12 Carbon Disulfide	76	7.823	7.823	(0.735)	333187	10.0000	9.3340(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	102157	10.0000	9.7369(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.762)	96548	100.000	97.3853(M)
15 MTBE	73	8.484	8.484	(0.797)	276342	10.0000	9.8818
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	88646	10.0000	9.5608(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	367875	10.0000	9.9280(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	183697	10.0000	9.7545(M)
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	488537	10.0000	9.8709
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	348567	10.0000	9.8862
22 2-Butanone	43	9.933	9.933	(0.933)	70586	10.0000	9.6954
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	96931	10.0000	9.7921(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	106663	10.0000	9.5395
	25 Bromochloromethane	128	10.357	10.357	(0.973)	48823	10.0000	9.9161
	26 Chloroform	83	10.426	10.426	(0.980)	151380	10.0000	9.7247(M)
	27 Tetrahydrofuran	42	10.436	10.436	(0.981)	469154	100.000	96.2264(M)
*	28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1616394	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.002)	891888	50.0000	50.4414
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	95313	10.0000	9.3221
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	110656	10.0000	9.3857(M)
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	74772	10.0000	9.2855
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1020366	50.0000	50.2394
	34 1,2-Dichloroethane	62	11.323	11.323	(0.958)	131605	10.0000	10.1042(M)
	35 Benzene	78	11.353	11.353	(0.961)	357416	10.0000	9.6823
	36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	251130	10.0000	9.7076
*	37 1,4-Difluorobenzene	114	11.816	11.816	(1.000)	2568270	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	76818	10.0000	8.8531(M)
	39 Trifluorotoluene	146	12.595	12.595	(1.066)	113391	10.0000	9.2045(M)
	40 1,2-Dichloropropane	63	12.595	12.595	(1.066)	108727	10.0000	9.4736(M)
	41 Dibromomethane	93	12.773	12.773	(1.081)	62157	10.0000	9.9746
	42 Bromodichloromethane	83	12.950	12.950	(1.096)	113047	10.0000	9.7753
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	150387	10.0000	9.5007(M)
	45 Tetramethyl THF	43	13.640	13.640	(1.154)	264010	10.0000	9.7452
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	165790	10.0000	9.7222
	47 Toluene-d8	98	13.966	13.966	(1.182)	2779653	50.0000	50.2966
	48 Toluene	92	14.055	14.055	(1.189)	237133	10.0000	11.2830
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	134860	10.0000	9.7137
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	46608	10.0000	9.8836
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	147957	10.0000	9.8331
	52 2-Hexanone	43	14.784	14.784	(0.934)	92344	10.0000	9.6130(M)
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	68864	10.0000	8.9026
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	85577	10.0000	9.6665
	55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	84326	10.0000	9.5090
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2086644	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	205003	10.0000	9.3101(M)
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69112	10.0000	9.4485
	59 Ethylbenzene	91	15.957	15.957	(1.008)	348677	10.0000	9.5394
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	266315	20.0000	20.0374
	61 o-Xylene	106	16.569	16.569	(1.047)	128608	10.0000	9.7596
	62 Styrene	104	16.578	16.578	(1.047)	213741	10.0000	9.4332
	63 Bromoform	173	16.835	16.835	(1.064)	64859	10.0000	9.4318
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	279244	10.0000	9.1311(M)
	65 Cyclohexanone	55	17.121	17.121	(0.924)	61691	100.000	101.8569
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1136659	50.0000	50.2738
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	114956	10.0000	9.4702
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	108093	10.0000	9.5340
	69 Bromobenzene	156	17.397	17.397	(0.939)	84734	10.0000	9.4447
	70 Propylbenzene	91	17.436	17.436	(0.941)	341476	10.0000	9.0705
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	248159	10.0000	9.2818
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	202459	10.0000	9.2144
	73 4-Chlorotoluene	91	17.702	17.702	(0.956)	224507	10.0000	9.0354
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	174361	10.0000	8.7806
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	182222	10.0000	9.2030
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	251902	10.0000	8.7093(M)
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	178033	10.0000	8.5274
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	146340	10.0000	9.1654

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

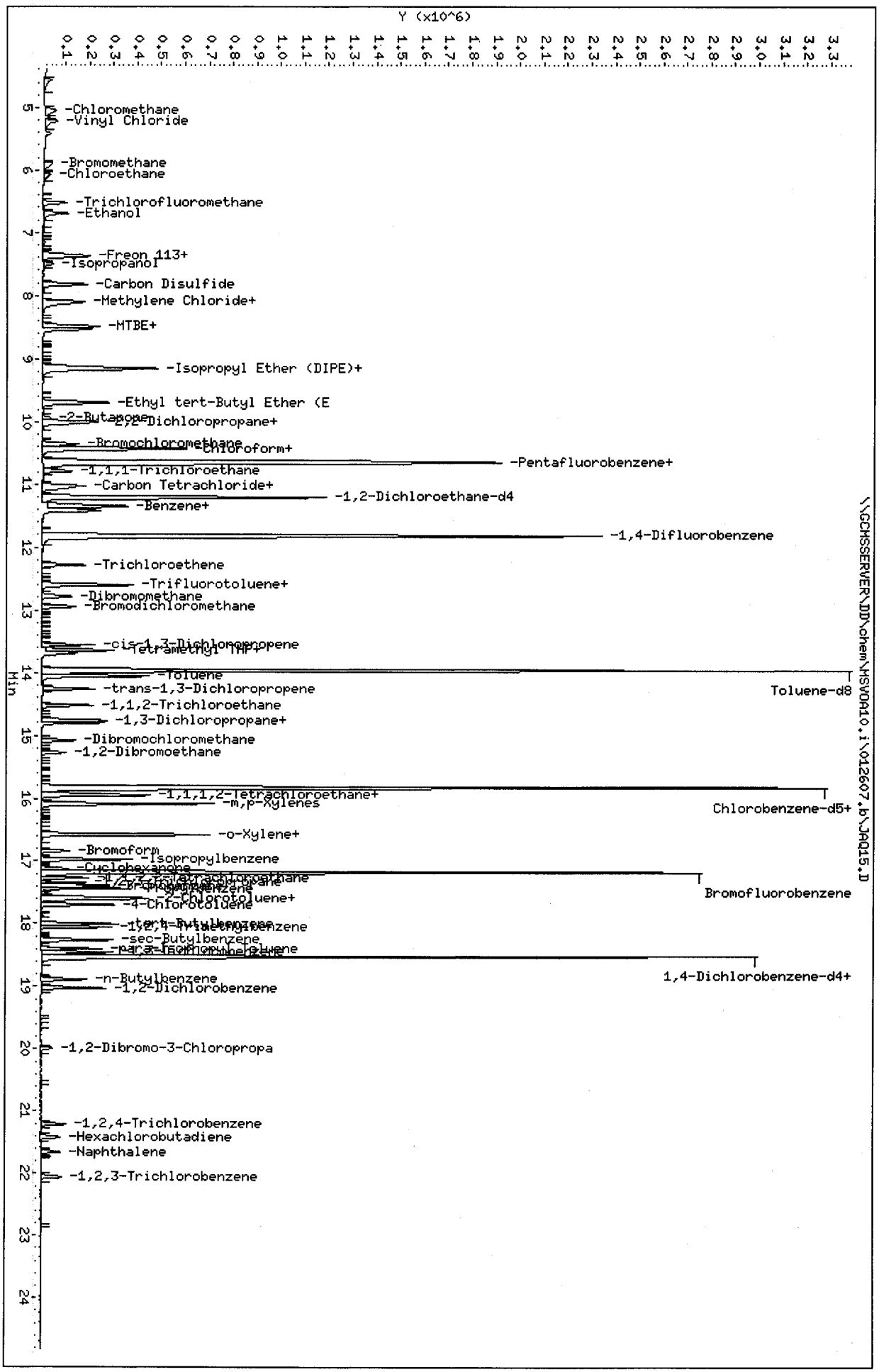
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	955028	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	145507	10.0000	8.8676
81 n-Butylbenzene	91	18.886	18.886	(1.020)	138129	10.0000	8.2369
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	142749	10.0000	9.2654
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	19208	10.0000	10.2417
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.145)	52214	10.0000	8.4911(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	25119	10.0000	8.1846
86 Naphthalene	128	21.656	21.656	(1.169)	107389	10.0000	8.2610(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	50728	10.0000	8.7336(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Date : 26-JAN-2007 18:34
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5219,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:06 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.004/100,S5219,0.004/100
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:09 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:06 Cal File: JAQ16.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	192804	20.0000	20.7696(M)
2 Chloromethane	50	5.053	5.053	(0.475)	344326	20.0000	19.7151(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	275789	20.0000	20.6328(M)
4 Bromomethane	94	5.891	5.891	(0.554)	151590	20.0000	19.5113(M)
5 Chloroethane	64	6.069	6.069	(0.570)	160389	20.0000	20.0315(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	220048	20.0000	20.5426
7 Ethanol	45	6.690	6.690	(0.629)	402306	2000.00	2146.4647
8 Freon 113	101	7.350	7.350	(0.691)	148890	20.0000	20.5997
9 Acetone	43	7.380	7.380	(0.693)	94992	20.0000	22.1052
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	160709	20.0000	20.8803(M)
11 Isopropanol	45	7.498	7.498	(0.705)	184113	200.000	217.7697(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	700052	20.0000	20.3221(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	201812	20.0000	19.9322
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	212561	200.000	222.1720(M)
15 MTBE	73	8.484	8.484	(0.797)	556038	20.0000	20.6039
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	180999	20.0000	20.2287(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	752930	20.0000	21.0559(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	369308	20.0000	20.3211
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	975758	20.0000	20.4296
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	692908	20.0000	20.3646
22 2-Butanone	43	9.934	9.934	(0.933)	153310	20.0000	21.8209(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	193973	20.0000	20.3054(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	217712	20.0000	20.1767
	25 Bromochloromethane	128	10.357	10.357	(0.973)	98151	20.0000	20.6571(M)
	26 Chloroform	83	10.426	10.426	(0.980)	302098	20.0000	20.1099
	27 Tetrahydrofuran	42	10.436	10.436	(0.981)	935923	200.000	198.9180
*	28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1559883	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.002)	852946	50.0000	49.9866
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	200085	20.0000	20.2784
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	233733	20.0000	20.2621
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	156195	20.0000	19.8247(M)
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	984510	50.0000	49.5427
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	264710	20.0000	20.7717
	35 Benzene	78	11.353	11.353	(0.961)	730718	20.0000	20.2315
	36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	517690	20.0000	20.4529(M)
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2512865	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	170355	20.0000	20.0660
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	243316	20.0000	20.1868
	40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	227356	20.0000	20.2468(M)
	41 Dibromomethane	93	12.783	12.783	(1.082)	129311	20.0000	21.2087
	42 Bromodichloromethane	83	12.950	12.950	(1.096)	232895	20.0000	20.5827(M)
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	317451	20.0000	20.4973
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	569270	20.0000	21.4764
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	356407	20.0000	21.3613
	47 Toluene-d8	98	13.966	13.966	(1.182)	2712669	50.0000	50.1668
	48 Toluene	92	14.055	14.055	(1.189)	401018	20.0000	19.5015(M)
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	280298	20.0000	20.6346
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	96443	20.0000	20.9024
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	303268	20.0000	20.8741
	52 2-Hexanone	43	14.774	14.774	(0.933)	204269	20.0000	22.0230
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	153538	20.0000	20.5572
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175886	20.0000	20.5763
	55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	182455	20.0000	21.0282
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2014764	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	421896	20.0000	19.8437(M)
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	145850	20.0000	20.6510
	59 Ethylbenzene	91	15.958	15.958	(1.008)	698484	20.0000	19.7916
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	515329	40.0000	40.1565
	61 o-Xylene	106	16.569	16.569	(1.047)	253697	20.0000	19.9391
	62 Styrene	104	16.579	16.579	(1.047)	454840	20.0000	20.7900
	63 Bromoform	173	16.835	16.835	(1.064)	133275	20.0000	20.0724
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	610402	20.0000	20.4406(M)
	65 Cyclohexanone	55	17.111	17.111	(0.924)	144510	200.000	244.3451(M)
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1098649	50.0000	49.7631
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	248441	20.0000	20.9599
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	227603	20.0000	20.5585
	69 Bromobenzene	156	17.397	17.397	(0.939)	179752	20.0000	20.5183
	70 Propylbenzene	91	17.436	17.436	(0.941)	736056	20.0000	20.0225
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	514653	20.0000	19.7131
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	428199	20.0000	19.9579
	73 4-Chlorotoluene	91	17.693	17.693	(0.955)	477184	20.0000	19.6672
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	391239	20.0000	20.1770
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	389708	20.0000	20.1560
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	574787	20.0000	20.3515
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	406884	20.0000	19.9584
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	306441	20.0000	19.6551

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

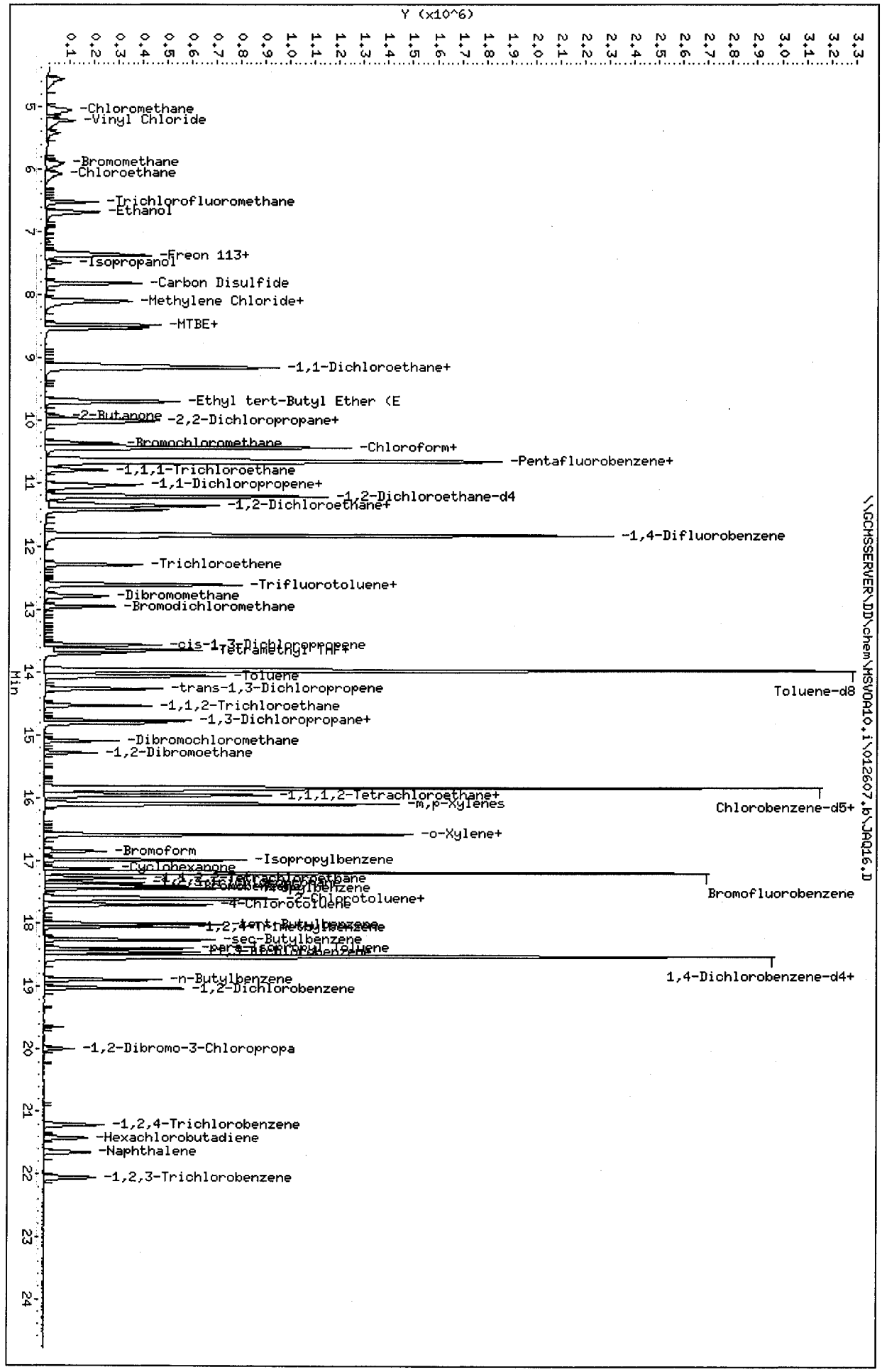
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	932565	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	318141	20.0000	19.8554
81 n-Butylbenzene	91	18.886	18.886	(1.020)	332009	20.0000	20.2754
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	303728	20.0000	20.1889
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	42724	20.0000	23.3292(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	120800	20.0000	20.1180(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	57572	20.0000	19.2108
86 Naphthalene	128	21.656	21.656	(1.169)	259513	20.0000	20.4441(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	116520	20.0000	20.5440(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Date : 26-JAN-2007 19:06
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.004/100,S5219,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Lab Smp Id:
Inj Date : 26-JAN-2007 19:39
Operator : VOA
Smp Info : ICAL,S5170,0.01/100,S5219,0.01/100
Misc Info : S4172,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:10 msvoa10
Cal Date : 26-JAN-2007 19:39
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.10
Processing Host: PC_MSVOA10

Client Smp ID: DYNA P&T
MS Autotune Date: 10-JUL-2006 14:50
Inst ID: MSVOA10.i

Quant Type: ISTD
Cal File: JAQ17.D
Calibration Sample, Level: 7

Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	520970	50.0000	56.2784
2 Chloromethane	50	5.044	5.044	(0.474)	886324	50.0000	50.8907(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	689712	50.0000	51.7446
4 Bromomethane	94	5.892	5.892	(0.554)	408210	50.0000	52.6886
5 Chloroethane	64	6.069	6.069	(0.570)	408130	50.0000	51.1157
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	561782	50.0000	52.5924
7 Ethanol	45	6.680	6.680	(0.628)	942062	5000.00	5040.3720
8 Freon 113	101	7.351	7.351	(0.691)	344262	50.0000	47.7639
9 Acetone	43	7.371	7.371	(0.692)	196148	50.0000	45.7728
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	368018	50.0000	47.9492
11 Isopropanol	45	7.489	7.489	(0.704)	433436	500.000	514.1075(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	1648704	50.0000	47.9952
13 Methylene Chloride	84	8.090	8.090	(0.760)	491188	50.0000	48.6488
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	496436	500.000	520.3372(M)
15 MTBE	73	8.475	8.475	(0.796)	1359574	50.0000	50.5201(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	441126	50.0000	49.4391(M)
18 Vinyl Acetate	43	9.116	9.116	(0.856)	1748211	50.0000	49.0264(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	877528	50.0000	48.4212
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	2337773	50.0000	49.0836
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	1709702	50.0000	50.3892
22 2-Butanone	43	9.924	9.924	(0.932)	342720	50.0000	48.9167
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	465253	50.0000	48.8400(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	507034	50.0000	47.1217(M)
	25 Bromochloromethane	128	10.358	10.358	(0.973)	243803	50.0000	51.4552(M)
	26 Chloroform	83	10.427	10.427	(0.980)	716284	50.0000	47.8151
	27 Tetrahydrofuran	42	10.427	10.427	(0.980)	2095476	500.000	446.6143
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1555522	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.002)	854225	50.0000	50.2019
	30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	473552	50.0000	48.1287
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	540790	50.0000	46.6546
	32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	369593	50.0000	46.6838
	33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	986905	50.0000	49.4239
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	639313	50.0000	49.9250
	35 Benzene	78	11.354	11.354	(0.961)	1742148	50.0000	48.0027
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	1253595	50.0000	49.2884
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525036	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	402225	50.0000	47.1494
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	574384	50.0000	47.4243
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	552323	50.0000	48.9491
	41 Dibromomethane	93	12.783	12.783	(1.082)	304026	50.0000	49.6240
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	565585	50.0000	49.7443
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	777124	50.0000	49.9358
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	1381596	50.0000	51.8711
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	807610	50.0000	48.1709
	47 Toluene-d8	98	13.966	13.966	(1.182)	2718680	50.0000	50.0356
	48 Toluene	92	14.055	14.055	(1.189)	951856	50.0000	46.0657
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	689259	50.0000	50.4963
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	230237	50.0000	49.6596
	51 1,3-Dichloropropane	76	14.755	14.755	(0.932)	702613	50.0000	47.4266
	52 2-Hexanone	43	14.775	14.775	(0.933)	473392	50.0000	50.0517
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	356789	50.0000	46.8472(M)
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	438254	50.0000	50.2789
	55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	438278	50.0000	50.2687
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2054473	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	1022884	50.0000	47.1812
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	355870	50.0000	49.4139
	59 Ethylbenzene	91	15.958	15.958	(1.008)	1683400	50.0000	46.7775
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	1260291	100.000	96.3088
	61 o-Xylene	106	16.569	16.569	(1.047)	616795	50.0000	47.5396
	62 Styrene	104	16.579	16.579	(1.047)	1103752	50.0000	49.4756
	63 Bromoform	173	16.835	16.835	(1.064)	319994	50.0000	47.2624
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	1447868	50.0000	46.4376
	65 Cyclohexanone	55	17.112	17.112	(0.924)	255178	500.000	413.2491(M)
	66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1122015	50.0000	48.6754
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	593081	50.0000	47.9229
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	533783	50.0000	46.1787
	69 Bromobenzene	156	17.397	17.397	(0.939)	434644	50.0000	47.5188
	70 Propylbenzene	91	17.437	17.437	(0.941)	1839895	50.0000	47.9364
	71 2-Chlorotoluene	91	17.585	17.585	(0.949)	1266357	50.0000	46.4581
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	1099261	50.0000	49.0720
	73 4-Chlorotoluene	91	17.693	17.693	(0.955)	1177170	50.0000	46.4686
	74 tert-Butylbenzene	119	18.009	18.009	(0.972)	970054	50.0000	47.9153
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	1025019	50.0000	50.7763
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	1456185	50.0000	49.3821
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	1076521	50.0000	50.5757
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	761638	50.0000	46.7886

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

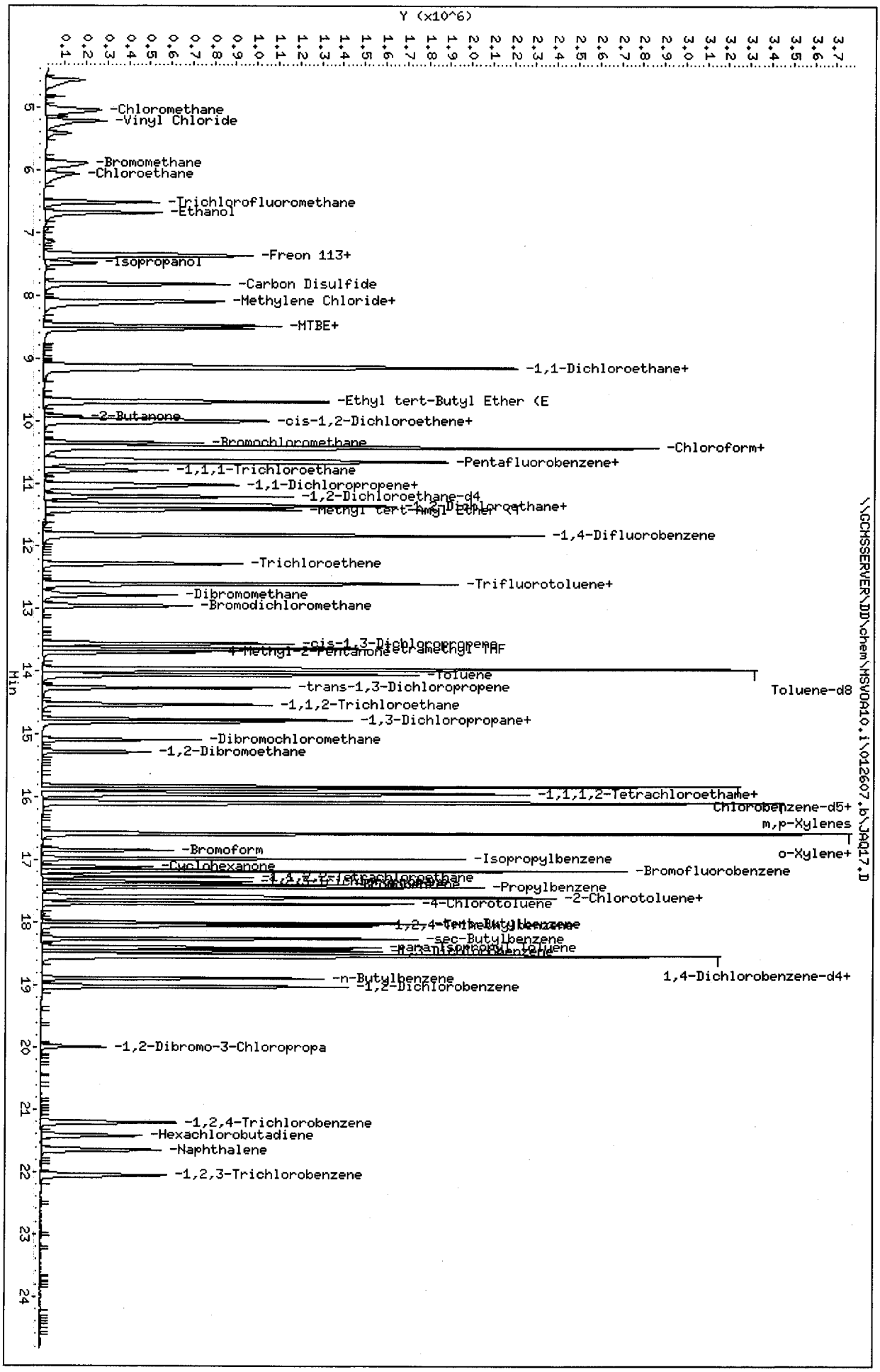
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	973680	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	779906	50.0000	46.6192
81 n-Butylbenzene	91	18.886	18.886	(1.020)	900061	50.0000	52.6447
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	752352	50.0000	47.8975
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	97414	50.0000	50.9462(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	320727	50.0000	51.1584(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	145319	50.0000	46.4429
86 Naphthalene	128	21.647	21.647	(1.169)	707854	50.0000	53.4092(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	312267	50.0000	52.7321

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Date : 26-JAN-2007 19:39
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.01/100,S5219,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:12 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.015/100,S5219,0.015/100
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:12 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:12 Cal File: JAQ18.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.564	4.564	(0.429)	809223	75.0000	85.8521
2 Chloromethane	50	5.048	5.048	(0.475)	1324306	75.0000	74.6772(M)
3 Vinyl Chloride	62	5.215	5.215	(0.490)	1054692	75.0000	77.7099
4 Bromomethane	94	5.895	5.895	(0.554)	632139	75.0000	80.1307
5 Chloroethane	64	6.073	6.073	(0.571)	622935	75.0000	76.6217
6 Trichlorofluoromethane	101	6.526	6.526	(0.614)	862577	75.0000	79.3061
7 Ethanol	45	6.684	6.684	(0.628)	1402318	7500.00	7368.5655
8 Freon 113	101	7.345	7.345	(0.690)	531114	75.0000	72.3689
9 Acetone	43	7.374	7.374	(0.693)	298898	75.0000	68.5015
10 1,1-Dichloroethene	96	7.384	7.384	(0.694)	559949	75.0000	71.6497
11 Isopropanol	45	7.493	7.493	(0.704)	620448	750.000	722.7494(M)
12 Carbon Disulfide	76	7.828	7.828	(0.736)	2500288	75.0000	71.4823
13 Methylene Chloride	84	8.094	8.094	(0.761)	752185	75.0000	73.1649
14 tert-Butyl Alcohol (TBA)	59	8.104	8.104	(0.762)	705157	750.000	725.8732
15 MTBE	73	8.479	8.479	(0.797)	2040096	75.0000	74.4501
16 trans-1,2-Dichloroethene	96	8.528	8.528	(0.802)	649716	75.0000	71.5130
18 Vinyl Acetate	43	9.110	9.110	(0.856)	2740359	75.0000	75.4739(M)
19 1,1-Dichloroethane	63	9.139	9.139	(0.859)	1300910	75.0000	70.4977
20 Isopropyl Ether (DIPE)	45	9.159	9.159	(0.861)	3477743	75.0000	71.7109
21 Ethyl tert-Butyl Ether (ETBE)	59	9.691	9.691	(0.911)	2557297	75.0000	74.0204
22 2-Butanone	43	9.928	9.928	(0.933)	502631	75.0000	70.4565
23 cis-1,2-Dichloroethene	96	9.997	9.997	(0.940)	699906	75.0000	72.1571

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.026	10.026	(0.943)	771300	75.0000	70.3981
	25 Bromochloromethane	128	10.362	10.362	(0.974)	358502	75.0000	74.3079
	26 Chloroform	83	10.421	10.421	(0.980)	1076170	75.0000	70.5527
	27 Tetrahydrofuran	42	10.431	10.431	(0.981)	2980679	750.000	623.9051
*	28 Pentafluorobenzene	168	10.638	10.638	(1.000)	1583882	50.0000	
	29 Dibromofluoromethane	113	10.667	10.667	(1.003)	861386	50.0000	49.7163
	30 1,1,1-Trichloroethane	97	10.795	10.795	(1.015)	723687	75.0000	72.2338
	31 1,1-Dichloropropene	75	11.022	11.022	(0.932)	843069	75.0000	72.7865
	32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	572881	75.0000	72.4149
	33 1,2-Dichloroethane-d4	65	11.210	11.210	(0.948)	992977	50.0000	49.7648
	34 1,2-Dichloroethane	62	11.318	11.318	(0.957)	950686	75.0000	74.2956
	35 Benzene	78	11.357	11.357	(0.961)	2622858	75.0000	72.3231
	36 Methyl tert-Amyl Ether (TAME)	73	11.417	11.417	(0.966)	1890516	75.0000	74.3857
*	37 1,4-Difluorobenzene	114	11.821	11.821	(1.000)	2523167	50.0000	
	38 Trichloroethene	95	12.274	12.274	(1.038)	612822	75.0000	71.8891
	39 Trifluorotoluene	146	12.590	12.590	(1.065)	893804	75.0000	73.8521
	40 1,2-Dichloropropane	63	12.600	12.600	(1.066)	815449	75.0000	72.3220
	41 Dibromomethane	93	12.777	12.777	(1.081)	465912	75.0000	76.1038
	42 Bromodichloromethane	83	12.945	12.945	(1.095)	862862	75.0000	75.9466
	44 cis-1,3-Dichloropropene	75	13.556	13.556	(1.147)	1172349	75.0000	75.3877
	45 Tetramethyl THF	43	13.635	13.635	(1.153)	1938432	75.0000	72.8311
	46 4-Methyl-2-Pentanone	43	13.694	13.694	(1.158)	1286035	75.0000	76.7639
	47 Toluene-d8	98	13.960	13.960	(1.181)	2707504	50.0000	49.8668
	48 Toluene	92	14.059	14.059	(1.189)	1476833	75.0000	71.5253
	49 trans-1,3-Dichloropropene	75	14.256	14.256	(1.206)	1051431	75.0000	77.0868
	50 1,1,2-Trichloroethane	85	14.522	14.522	(1.229)	352724	75.0000	76.1350
	51 1,3-Dichloropropane	76	14.759	14.759	(0.933)	1109668	75.0000	74.7288
	52 2-Hexanone	43	14.779	14.779	(0.934)	697186	75.0000	73.5421
	53 Tetrachloroethene	166	14.808	14.808	(0.936)	560386	75.0000	73.4089
	54 Dibromochloromethane	129	15.084	15.084	(0.953)	675604	75.0000	77.3288
	55 1,2-Dibromoethane	107	15.272	15.272	(1.292)	676189	75.0000	77.6137
*	56 Chlorobenzene-d5	117	15.824	15.824	(1.000)	2059262	50.0000	
	57 Chlorobenzene	112	15.863	15.863	(1.002)	1613995	75.0000	74.2735
	58 1,1,1,2-Tetrachloroethane	131	15.932	15.932	(1.007)	546211	75.0000	75.6672
	59 Ethylbenzene	91	15.952	15.952	(1.008)	2642627	75.0000	73.2613
	60 m,p-Xylenes	106	16.080	16.080	(1.016)	1936065	150.000	147.6060
	61 o-Xylene	106	16.573	16.573	(1.047)	960156	75.0000	73.8321
	62 Styrene	104	16.573	16.573	(1.047)	1730073	75.0000	77.3700
	63 Bromoform	173	16.839	16.839	(1.064)	500229	75.0000	73.7109
	64 Isopropylbenzene	105	16.977	16.977	(0.917)	2283744	75.0000	72.0115
	65 Cyclohexanone	55	17.115	17.115	(0.924)	408440	750.000	650.2945
	66 Bromofluorobenzene	95	17.174	17.174	(0.928)	1129755	50.0000	48.1846
	67 1,1,2,2-Tetrachloroethane	83	17.263	17.263	(0.932)	908682	75.0000	72.1862
	68 1,2,3-Trichloropropane	75	17.352	17.352	(0.937)	817034	75.0000	69.4913(M)
	69 Bromobenzene	156	17.391	17.391	(0.939)	690715	75.0000	74.2410
	70 Propylbenzene	91	17.431	17.431	(0.941)	2929723	75.0000	75.0433
	71 2-Chlorotoluene	91	17.589	17.589	(0.950)	1996875	75.0000	72.0227
	72 1,3,5-Trimethylbenzene	105	17.608	17.608	(0.951)	1770129	75.0000	77.6875
	73 4-Chlorotoluene	91	17.697	17.697	(0.956)	1902006	75.0000	73.8152
	74 tert-Butylbenzene	119	18.003	18.003	(0.972)	1586626	75.0000	77.0489
	75 1,2,4-Trimethylbenzene	105	18.052	18.052	(0.975)	1674992	75.0000	81.5747
	76 sec-Butylbenzene	105	18.259	18.259	(0.986)	2290862	75.0000	76.3775
	77 para-Isopropyl Toluene	119	18.397	18.397	(0.994)	1756199	75.0000	81.1159
	78 1,3-Dichlorobenzene	146	18.456	18.456	(0.997)	1238664	75.0000	74.8098

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

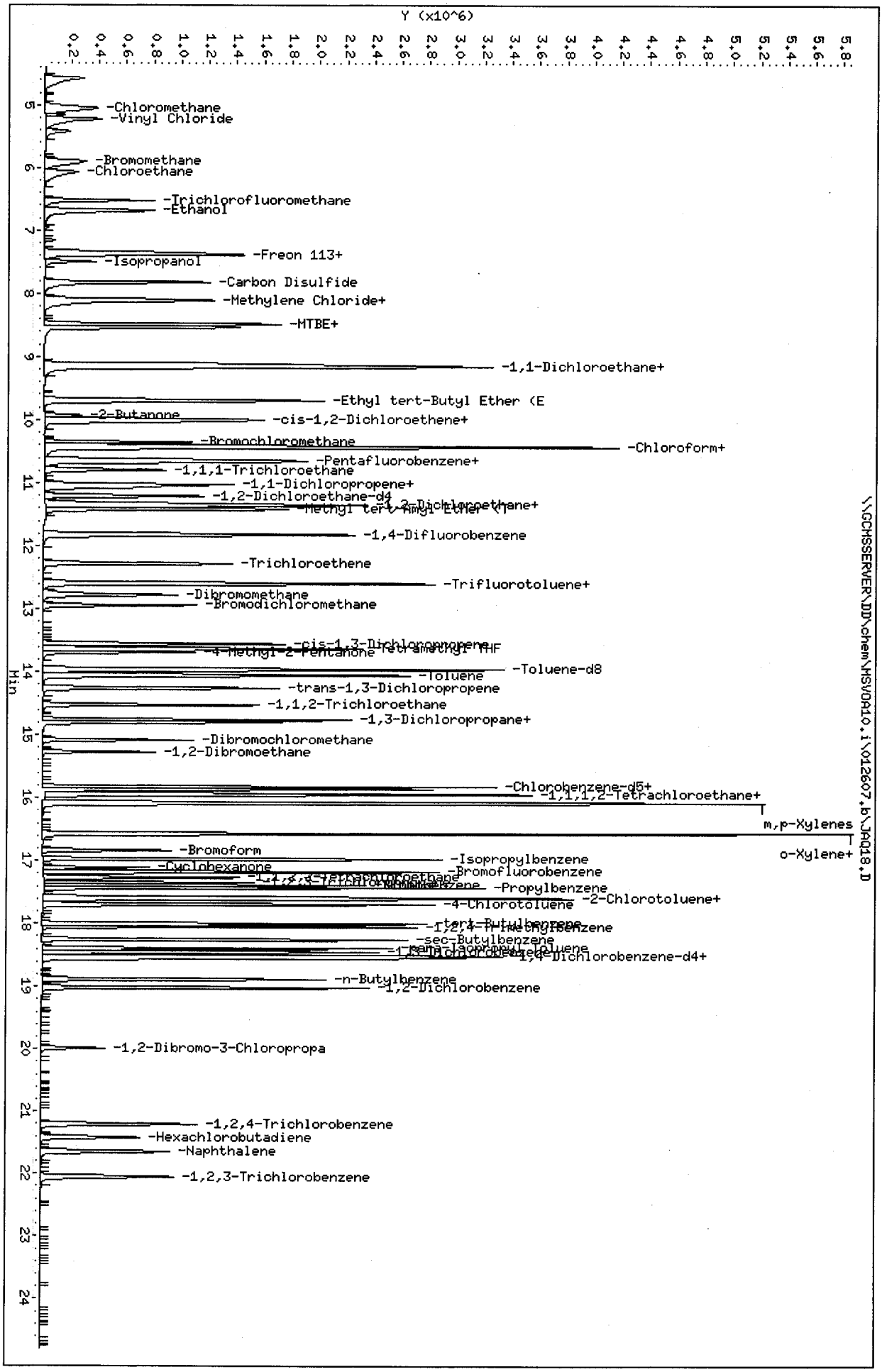
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.515	18.515	(1.000)	990383	50.0000	
80 1,4-Dichlorobenzene	146	18.545	18.545	(1.002)	1258167	75.0000	73.9392
81 n-Butylbenzene	91	18.880	18.880	(1.020)	1447562	75.0000	83.2402
82 1,2-Dichlorobenzene	146	19.018	19.018	(1.027)	1204009	75.0000	75.3589
83 1,2-Dibromo-3-Chloropropane	75	19.984	19.984	(1.079)	156657	75.0000	80.5478(M)
84 1,2,4-Trichlorobenzene	180	21.207	21.207	(1.145)	549002	75.0000	86.0931(M)
85 Hexachlorobutadiene	225	21.424	21.424	(1.157)	218719	75.0000	68.7222(M)
86 Naphthalene	128	21.651	21.651	(1.169)	1166161	75.0000	86.5057
87 1,2,3-Trichlorobenzene	180	22.055	22.055	(1.191)	526972	75.0000	87.4882

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Date : 26-JAN-2007 20:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5219,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:44 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.02/100,S5219,0.02/100
Misc Info : S4172,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:13 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:44 Cal File: JAQ19.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	1101474	100.000	115.8100
2 Chloromethane	50	5.054	5.054	(0.475)	1728322	100.000	96.5858(M)
3 Vinyl Chloride	62	5.212	5.212	(0.490)	1405434	100.000	102.6243(M)
4 Bromomethane	94	5.902	5.902	(0.555)	857330	100.000	107.7019(M)
5 Chloroethane	64	6.070	6.070	(0.571)	827102	100.000	100.8224(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	1157557	100.000	105.4728
7 Ethanol	45	6.681	6.681	(0.628)	1981668	10000.0	10319.4444
8 Freon 113	101	7.352	7.352	(0.691)	808125	100.000	109.1269
9 Acetone	43	7.371	7.371	(0.693)	429094	100.000	97.4582
10 1,1-Dichloroethene	96	7.381	7.381	(0.694)	785094	100.000	99.5581
11 Isopropanol	45	7.490	7.490	(0.704)	904604	1000.00	1044.3109
12 Carbon Disulfide	76	7.825	7.825	(0.736)	3510437	100.000	99.4623
13 Methylene Chloride	84	8.091	8.091	(0.761)	1018464	100.000	98.1777(M)
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.762)	1045965	1000.00	1067.0409
15 MTBE	73	8.476	8.476	(0.797)	2783984	100.000	100.6864
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.802)	904479	100.000	98.6618
18 Vinyl Acetate	43	9.107	9.107	(0.856)	3568990	100.000	97.4145(M)
19 1,1-Dichloroethane	63	9.136	9.136	(0.859)	1773356	100.000	95.2385
20 Isopropyl Ether (DIPE)	45	9.156	9.156	(0.861)	4661169	100.000	95.2514
21 Ethyl tert-Butyl Ether (ETBE)	59	9.688	9.688	(0.911)	3510091	100.000	100.6880
22 2-Butanone	43	9.925	9.925	(0.933)	729524	100.000	101.3445
23 cis-1,2-Dichloroethene	96	9.994	9.994	(0.940)	951950	100.000	97.2619

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.024	10.024	(0.943)	1068977	100.000	96.6930
	25 Bromochloromethane	128	10.359	10.359	(0.974)	496480	100.000	101.9845
	26 Chloroform	83	10.418	10.418	(0.980)	1450169	100.000	94.2195
	27 Tetrahydrofuran	42	10.428	10.428	(0.981)	4159209	1000.00	862.7859
*	28 Pentafluorobenzene	168	10.635	10.635	(1.000)	1598210	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.003)	875112	50.0000	50.0557
	30 1,1,1-Trichloroethane	97	10.793	10.793	(1.015)	1033090	100.000	102.1920
	31 1,1-Dichloropropene	75	11.019	11.019	(0.932)	1198179	100.000	101.1903
	32 Carbon Tetrachloride	117	11.069	11.069	(0.937)	826457	100.000	102.1913
	33 1,2-Dichloroethane-d4	65	11.207	11.207	(0.948)	1017063	50.0000	49.8609
	34 1,2-Dichloroethane	62	11.315	11.315	(0.957)	1290572	100.000	98.6593
	35 Benzene	78	11.355	11.355	(0.961)	3565097	100.000	96.1620
	36 Methyl tert-Amyl Ether (TAME)	73	11.414	11.414	(0.966)	2595503	100.000	99.8988
*	37 1,4-Difluorobenzene	114	11.818	11.818	(1.000)	2579386	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	851032	100.000	97.6573
	39 Trifluorotoluene	146	12.587	12.587	(1.065)	1269449	100.000	102.6042
	40 1,2-Dichloropropane	63	12.597	12.597	(1.066)	1090870	100.000	94.6403
	41 Dibromomethane	93	12.774	12.774	(1.081)	630451	100.000	100.7357
	42 Bromodichloromethane	83	12.942	12.942	(1.095)	1158482	100.000	99.7439
	44 cis-1,3-Dichloropropene	75	13.553	13.553	(1.147)	1582601	100.000	99.5508
	45 Tetramethyl THF	43	13.632	13.632	(1.153)	2630251	100.000	96.6703
	46 4-Methyl-2-Pentanone	43	13.691	13.691	(1.159)	1814480	100.000	105.9465
	47 Toluene-d8	98	13.957	13.957	(1.181)	2747656	50.0000	49.5033
	48 Toluene	92	14.056	14.056	(1.189)	1966809	100.000	93.1794
	49 trans-1,3-Dichloropropene	75	14.253	14.253	(1.206)	1412656	100.000	101.3131
	50 1,1,2-Trichloroethane	85	14.519	14.519	(1.229)	471432	100.000	99.5401
	51 1,3-Dichloropropane	76	14.756	14.756	(0.933)	1507242	100.000	100.7873
	52 2-Hexanone	43	14.776	14.776	(0.934)	995713	100.000	104.2916
	53 Tetrachloroethene	166	14.805	14.805	(0.936)	781562	100.000	101.6607
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	916608	100.000	104.1743
	55 1,2-Dibromoethane	107	15.269	15.269	(1.292)	914347	100.000	102.6623
*	56 Chlorobenzene-d5	117	15.821	15.821	(1.000)	2073881	50.0000	
	57 Chlorobenzene	112	15.860	15.860	(1.002)	2121995	100.000	96.9625
	58 1,1,1,2-Tetrachloroethane	131	15.929	15.929	(1.007)	737484	100.000	101.4443
	59 Ethylbenzene	91	15.949	15.949	(1.008)	3506376	100.000	96.5217
	60 m,p-Xylenes	106	16.087	16.087	(1.017)	2588486	200.000	195.9556
	61 o-Xylene	106	16.570	16.570	(1.047)	1263431	100.000	96.4679
	62 Styrene	104	16.570	16.570	(1.047)	2257571	100.000	100.2484
	63 Bromoform	173	16.836	16.836	(1.064)	681020	100.000	99.6439
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	3148817	100.000	98.7673
	65 Cyclohexanone	55	17.112	17.112	(0.924)	709360	1000.00	1123.4657
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1140071	50.0000	48.3690
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.933)	1227449	100.000	96.9968
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	1105119	100.000	93.4999(M)
	69 Bromobenzene	156	17.388	17.388	(0.939)	896727	100.000	95.8774
	70 Propylbenzene	91	17.428	17.428	(0.941)	3978203	100.000	101.3639
	71 2-Chlorotoluene	91	17.586	17.586	(0.950)	2646632	100.000	94.9562
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	2376912	100.000	103.7698
	73 4-Chlorotoluene	91	17.694	17.694	(0.956)	2450484	100.000	94.6013
	74 tert-Butylbenzene	119	18.010	18.010	(0.973)	2198205	100.000	106.1870
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.975)	2255483	100.000	109.2682
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	3295336	100.000	109.2892
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.994)	2464620	100.000	113.2384
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.997)	1599483	100.000	96.0939

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

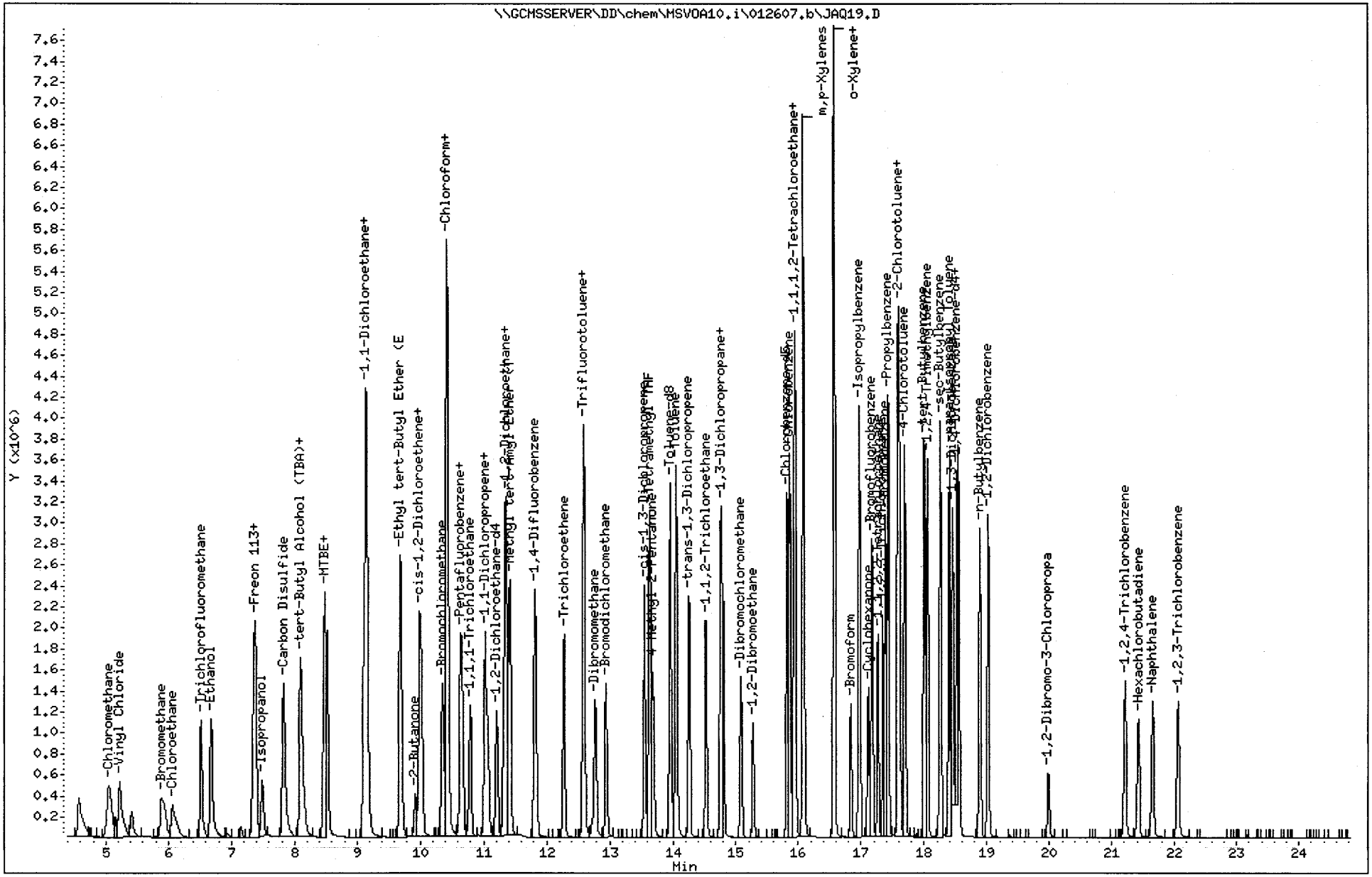
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	995616	50.0000	
80 1,4-Dichlorobenzene	146	18.542	18.542	(1.002)	1620839	100.000	94.7518
81 n-Butylbenzene	91	18.887	18.887	(1.020)	2083695	100.000	119.1905
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1555453	100.000	96.8440
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	213279	100.000	109.0846(M)
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	732219	100.000	114.2212
85 Hexachlorobutadiene	225	21.421	21.421	(1.157)	353650	100.000	110.5339(M)
86 Naphthalene	128	21.648	21.648	(1.169)	1604819	100.000	118.4196
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	687735	100.000	113.5780

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Date : 26-JAN-2007 20:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5219,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: 50PPB IDF : 1.0
Seqnum : 447107015009 File : ecf09 Time : 15-MAR-2007 11:22
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5618 (10000X), S5617 (10000X), S5194 (20000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.8890	50.00	48.11	ug/L	-4	30	0.1000	
Vinyl Chloride	0.6995	0.7621	50.00	54.48	ug/L	9	20	0.0500	
Bromomethane	0.4143	0.4682	50.00	56.51	ug/L	13	30	0.0500	
Chloroethane	0.3917	0.4201	50.00	53.62	ug/L	7	30	0.0500	
Acetone	0.2753	0.2484	50.00	45.11	ug/L	-10	40	0.0500	
1,1-Dichloroethene	0.3434	0.3200	50.00	46.59	ug/L	-7	20	0.0500	
Methylene Chloride	0.5327	0.5288	50.00	49.64	ug/L	-1	30	0.0500	
Carbon Disulfide	1.5714	1.1687	50.00	37.19	ug/L	**-26**	30	0.0500	!c-
MTBE	1.6725	1.5641	50.00	46.76	ug/L	-6	30	0.0500	
trans-1,2-Dichloroethene	0.4507	0.4390	50.00	48.71	ug/L	-3	30	0.0500	
Vinyl Acetate	1.5725	2.0047	50.00	63.74	ug/L	27	40	0.0500	
1,1-Dichloroethane	0.9505	1.0379	50.00	54.60	ug/L	9	30	0.1000	
2-Butanone	0.5135	0.4577	50.00	44.56	ug/L	-11	40	0.0500	
cis-1,2-Dichloroethene	0.6556	0.5943	50.00	45.32	ug/L	-9	30	0.0500	
Chloroform	1.0380	1.0484	50.00	50.50	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.6757	0.6581	50.00	48.70	ug/L	-3	30	0.0500	
Carbon Tetrachloride	0.2658	0.2825	50.00	53.13	ug/L	6	30	0.0500	
1,2-Dichloroethane	0.4996	0.5287	50.00	52.92	ug/L	6	30	0.0500	
Benzene	1.3466	1.3243	50.00	49.17	ug/L	-2	30	0.0500	
Trichloroethene	0.3340	0.3242	50.00	48.52	ug/L	-3	30	0.0500	
1,2-Dichloropropane	0.4228	0.4127	50.00	48.80	ug/L	-2	20	0.0500	
Bromodichloromethane	0.4914	0.5280	50.00	53.73	ug/L	7	30	0.0500	
4-Methyl-2-Pentanone	0.6435	0.5944	50.00	46.18	ug/L	-8	40	0.0500	
cis-1,3-Dichloropropene	0.6379	0.6412	50.00	50.26	ug/L	1	30	0.0500	
Toluene	0.8216	0.7958	50.00	48.43	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.5933	0.5934	50.00	50.01	ug/L	0	30	0.0500	
1,1,2-Trichloroethane	0.2020	0.2086	50.00	51.64	ug/L	3	30	0.0500	
2-Hexanone	0.5472	0.4682	50.00	42.78	ug/L	-14	40	0.0500	
Tetrachloroethene	0.2838	0.3054	50.00	53.80	ug/L	8	30	0.0500	
Dibromochloromethane	0.4287	0.4306	50.00	50.22	ug/L	0	30	0.0500	
Chlorobenzene	1.0173	0.9507	50.00	46.73	ug/L	-7	30	0.3000	
Ethylbenzene	1.7142	1.6476	50.00	48.06	ug/L	-4	20	0.0500	
m,p-Xylenes	0.6280	0.5713	100.0	90.98	ug/L	-9	30	0.0500	
o-Xylene	0.6326	0.5842	50.00	46.17	ug/L	-8	30	0.0500	
Styrene	1.1734	1.0600	50.00	45.17	ug/L	-10	30	0.0500	
Bromoform	0.3263	0.3110	50.00	47.65	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	1.3236	1.1921	50.00	45.04	ug/L	-10	30	0.3000	
Dibromofluoromethane	0.5927	0.5911	50.00	49.87	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.4006	0.4465	50.00	55.73	ug/L	11	30	0.0500	
Toluene-d8	1.1589	1.1892	50.00	51.31	ug/L	3	30	0.0500	
Bromofluorobenzene	1.2864	1.1443	50.00	44.48	ug/L	-11	30	0.0500	

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	565892	-9.15	10.05	10.05	0.00
1,4-Difluorobenzene	1030815	909180	-11.80	11.18	11.17	-0.01
Chlorobenzene-d5	882637	803254	-8.99	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	415919	1.03	17.97	17.96	-0.01

Analyst: BO Date: 03/15/07 Reviewer: LW Date: 03/16/07

!=warning -=low bias c=CCV

447107015009

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC379891 IDF : 1.0
Seqnum : 447112790019.1 File : ecj19 Time : 19-MAR-2007 15:55
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5723 (10000X), S5736 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7558	25.00	20.45	ug/L	-18	30	0.1000	u
Vinyl Chloride	0.6995	0.6142	25.00	21.95	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.4475	25.00	27.01	ug/L	8	30	0.0500	u
Chloroethane	0.3917	0.3877	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2551	25.00	23.17	ug/L	-7	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3784	25.00	27.55	ug/L	10	20	0.0500	u
Methylene Chloride	0.5327	0.5587	25.00	26.22	ug/L	5	30	0.0500	u
Carbon Disulfide	1.5714	0.9229	25.00	14.68	ug/L	**-41**	30	0.0500	c- u ***
MTBE	1.6725	1.5266	25.00	22.82	ug/L	-9	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4611	25.00	25.58	ug/L	2	30	0.0500	u
Vinyl Acetate	1.5725	1.7606	25.00	27.99	ug/L	12	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0285	25.00	27.05	ug/L	8	30	0.1000	u
2-Butanone	0.5135	0.4470	25.00	21.76	ug/L	-13	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6128	25.00	23.37	ug/L	-7	30	0.0500	u
Chloroform	1.0380	0.9914	25.00	23.88	ug/L	-4	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6805	25.00	25.18	ug/L	1	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3050	25.00	28.69	ug/L	15	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4982	25.00	24.93	ug/L	0	30	0.0500	u
Benzene	1.3466	1.3576	25.00	25.21	ug/L	1	30	0.0500	u
Trichloroethene	0.3340	0.3309	25.00	24.77	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5153	25.00	26.21	ug/L	5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5886	25.00	22.87	ug/L	-9	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5907	25.00	23.15	ug/L	-7	30	0.0500	u
Toluene	0.8216	0.8715	25.00	26.52	ug/L	6	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5155	25.00	21.72	ug/L	-13	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1922	25.00	23.79	ug/L	-5	30	0.0500	u
2-Hexanone	0.5472	0.4904	25.00	22.41	ug/L	-10	40	0.0500	u
Tetrachloroethene	0.2838	0.3400	25.00	29.95	ug/L	20	30	0.0500	u
Dibromochloromethane	0.4287	0.4311	25.00	25.14	ug/L	1	30	0.0500	u
Chlorobenzene	1.0173	0.9767	25.00	24.00	ug/L	-4	30	0.3000	u
Ethylbenzene	1.7142	1.8042	25.00	26.31	ug/L	5	20	0.0500	u
m,p-Xylenes	0.6280	0.6410	50.00	51.04	ug/L	2	30	0.0500	u
o-Xylene	0.6326	0.6311	25.00	24.94	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1255	25.00	23.98	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.2228	25.00	23.10	ug/L	-8	30	0.3000	u
Dibromofluoromethane	0.5927	0.5582	50.00	47.09	ug/L	-6	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4345	50.00	54.23	ug/L	8	30	0.0500	u
Toluene-d8	1.1589	1.1681	50.00	50.40	ug/L	1	30	0.0500	u
Bromofluorobenzene	1.2864	1.1717	50.00	45.54	ug/L	-9	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	581103	-6.70	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	905326	-12.17	11.18	11.17	-0.01
Chlorobenzene-d5	882637	762278	-13.64	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	379411	-7.83	17.97	17.96	-0.01

Analyst: BO Date: 03/20/07 Reviewer: ACM Date: 03/20/07

-=low bias c=CCV u=use

447112790019.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 20PPB IDF : 1.0
Seqnum : 477107158004 File : hcf04 Time : 15-MAR-2007 11:13
Cal : 477017193004 Caldate : 12-JAN-2007 Caltype : WATER
Standards: S5617 (25000X), S5618 (25000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.8522	1.0678	20.00	25.06	ug/L	**25**	30	0.1000	!c+ m
Vinyl Chloride	0.6416	0.7671	20.00	23.91	ug/L	20	20	0.0500	m
Bromomethane	0.2251	0.1607	20.00	13.68	ug/L	**-32**	30	0.0500	c- m ***
Chloroethane	0.3251	0.3904	20.00	24.02	ug/L	20	30	0.0500	m
Acetone	0.2629	0.3078	20.00	23.42	ug/L	17	40	0.0500	
1,1-Dichloroethene	0.3003	0.3217	20.00	21.43	ug/L	7	20	0.0500	
Methylene Chloride	0.4577	0.4798	20.00	20.97	ug/L	5	30	0.0500	
Carbon Disulfide	1.5905	1.6686	20.00	20.98	ug/L	5	30	0.0500	
MTBE	1.5642	1.4213	20.00	18.17	ug/L	-9	30	0.0500	
trans-1,2-Dichloroethene	0.3861	0.3896	20.00	20.18	ug/L	1	30	0.0500	
Vinyl Acetate	1.1573	1.5831	20.00	27.36	ug/L	**37**	40	0.0500	!c+
1,1-Dichloroethane	0.9783	1.0431	20.00	21.32	ug/L	7	30	0.1000	
2-Butanone	0.3460	0.4454	20.00	25.74	ug/L	29	40	0.0500	
cis-1,2-Dichloroethene	0.4343	0.4328	20.00	19.93	ug/L	0	30	0.0500	
Chloroform	0.8730	0.8451	20.00	19.36	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.5971	0.5871	20.00	19.66	ug/L	-2	30	0.0500	
Carbon Tetrachloride	0.2121	0.1984	20.00	18.71	ug/L	-6	30	0.0500	
1,2-Dichloroethane	0.3844	0.3806	20.00	19.80	ug/L	-1	30	0.0500	
Benzene	0.7129	0.7218	20.00	20.25	ug/L	1	30	0.0500	
Trichloroethene	0.1900	0.1830	20.00	19.26	ug/L	-4	30	0.0500	
1,2-Dichloropropane	0.2406	0.2467	20.00	20.51	ug/L	3	20	0.0500	
Bromodichloromethane	0.2856	0.2879	20.00	20.16	ug/L	1	30	0.0500	
4-Methyl-2-Pentanone	0.3286	0.4008	20.00	24.40	ug/L	22	40	0.0500	
cis-1,3-Dichloropropene	0.3464	0.3509	20.00	20.26	ug/L	1	30	0.0500	
Toluene	0.4455	0.4314	20.00	19.37	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.3377	0.3353	20.00	19.86	ug/L	-1	30	0.0500	
1,1,2-Trichloroethane	0.0985	0.1011	20.00	20.53	ug/L	3	30	0.0500	
2-Hexanone	0.2791	0.3350	20.00	24.00	ug/L	20	40	0.0500	
Tetrachloroethene	0.1385	0.1346	20.00	19.44	ug/L	-3	30	0.0500	
Dibromochloromethane	0.2343	0.2249	20.00	19.19	ug/L	-4	30	0.0500	
Chlorobenzene	0.5877	0.5375	20.00	18.29	ug/L	-9	30	0.3000	
Ethylbenzene	1.0693	0.9811	20.00	18.35	ug/L	-8	20	0.0500	
m,p-Xylenes	0.3689	0.3536	40.00	38.34	ug/L	-4	30	0.0500	
o-Xylene	0.3726	0.3501	20.00	18.79	ug/L	-6	30	0.0500	
Styrene	0.6454	0.6293	20.00	19.50	ug/L	-2	30	0.0500	
Bromoform	0.1322	0.1304	20.00	19.72	ug/L	-1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.7897	0.7607	20.00	19.27	ug/L	-4	30	0.3000	
Dibromofluoromethane	0.8956	0.8819	50.00	49.24	ug/L	-2	30	0.0500	
1,2-Dichloroethane-d4	0.6066	0.6056	50.00	49.91	ug/L	0	30	0.0500	
Toluene-d8	1.1361	1.1215	50.00	49.36	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.6818	1.4692	50.00	43.68	ug/L	-13	30	0.0500	

ISTD (ICAL hac10)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1002942	1060826	5.77	10.38	10.39	0.01
1,4-Difluorobenzene	2227647	2384153	7.03	11.51	11.52	0.01
Chlorobenzene-d5	1847481	1986747	7.54	15.53	15.52	-0.01
1,4-Dichlorobenzene-d4	738590	844298	14.31	18.24	18.24	0.00

Analyst: TEW Date: 03/16/07 Reviewer: LW Date: 03/16/07

!=warning +=high bias -=low bias c=CCV m=manual integration

477107158004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 20PPB IDF : 1.0
Seqnum : 477107158022 File : hcf22 Time : 15-MAR-2007 22:40
Cal : 477017193004 Caldate : 12-JAN-2007 Caltype : WATER
Standards: S5617 (25000X), S5618 (25000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.8522	0.9564	20.00	22.45	ug/L	12	30	0.1000	m
Vinyl Chloride	0.6416	0.6891	20.00	21.48	ug/L	7	20	0.0500	m
Bromomethane	0.2251	0.1514	20.00	12.96	ug/L	**-35**	30	0.0500	c- m ***
Chloroethane	0.3251	0.3645	20.00	22.43	ug/L	12	30	0.0500	m
Acetone	0.2629	0.2782	20.00	21.16	ug/L	6	40	0.0500	
1,1-Dichloroethene	0.3003	0.3260	20.00	21.71	ug/L	9	20	0.0500	
Methylene Chloride	0.4577	0.4644	20.00	20.29	ug/L	1	30	0.0500	
Carbon Disulfide	1.5905	1.6382	20.00	20.60	ug/L	3	30	0.0500	
MTBE	1.5642	1.3656	20.00	17.46	ug/L	-13	30	0.0500	
trans-1,2-Dichloroethene	0.3861	0.3785	20.00	19.61	ug/L	-2	30	0.0500	
Vinyl Acetate	1.1573	1.3585	20.00	23.48	ug/L	17	40	0.0500	
1,1-Dichloroethane	0.9783	0.9757	20.00	19.95	ug/L	0	30	0.1000	
2-Butanone	0.3460	0.3797	20.00	21.95	ug/L	10	40	0.0500	
cis-1,2-Dichloroethene	0.4343	0.4227	20.00	19.47	ug/L	-3	30	0.0500	
Chloroform	0.8730	0.7970	20.00	18.26	ug/L	-9	20	0.0500	
1,1,1-Trichloroethane	0.5971	0.5474	20.00	18.34	ug/L	-8	30	0.0500	
Carbon Tetrachloride	0.2121	0.2045	20.00	19.28	ug/L	-4	30	0.0500	
1,2-Dichloroethane	0.3844	0.3697	20.00	19.24	ug/L	-4	30	0.0500	
Benzene	0.7129	0.7558	20.00	21.20	ug/L	6	30	0.0500	
Trichloroethene	0.1900	0.1858	20.00	19.56	ug/L	-2	30	0.0500	
1,2-Dichloropropane	0.2406	0.2549	20.00	21.19	ug/L	6	20	0.0500	
Bromodichloromethane	0.2856	0.2876	20.00	20.15	ug/L	1	30	0.0500	
4-Methyl-2-Pentanone	0.3286	0.3843	20.00	23.39	ug/L	17	40	0.0500	
cis-1,3-Dichloropropene	0.3464	0.3380	20.00	19.51	ug/L	-2	30	0.0500	
Toluene	0.4455	0.4333	20.00	19.45	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.3377	0.3183	20.00	18.85	ug/L	-6	30	0.0500	
1,1,2-Trichloroethane	0.0985	0.1047	20.00	21.27	ug/L	6	30	0.0500	
2-Hexanone	0.2791	0.3165	20.00	22.68	ug/L	13	40	0.0500	
Tetrachloroethene	0.1385	0.1371	20.00	19.79	ug/L	-1	30	0.0500	
Dibromochloromethane	0.2343	0.2249	20.00	19.19	ug/L	-4	30	0.0500	
Chlorobenzene	0.5877	0.5658	20.00	19.25	ug/L	-4	30	0.3000	
Ethylbenzene	1.0693	1.0105	20.00	18.90	ug/L	-5	20	0.0500	
m,p-Xylenes	0.3689	0.3656	40.00	39.64	ug/L	-1	30	0.0500	
o-Xylene	0.3726	0.3614	20.00	19.40	ug/L	-3	30	0.0500	
Styrene	0.6454	0.6298	20.00	19.52	ug/L	-2	30	0.0500	
Bromoform	0.1322	0.1311	20.00	19.83	ug/L	-1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.7897	0.7547	20.00	19.11	ug/L	-4	30	0.3000	
Dibromofluoromethane	0.8956	0.8221	50.00	45.90	ug/L	-8	30	0.0500	
1,2-Dichloroethane-d4	0.6066	0.5668	50.00	46.72	ug/L	-7	30	0.0500	
Toluene-d8	1.1361	1.1388	50.00	50.12	ug/L	0	30	0.0500	
Bromofluorobenzene	1.6818	1.4086	50.00	41.88	ug/L	-16	30	0.0500	

ISTD (ICAL hac10)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1002942	1190452	18.70	10.38	10.38	0.00
1,4-Difluorobenzene	2227647	2506860	12.53	11.51	11.52	0.01
Chlorobenzene-d5	1847481	2059135	11.46	15.53	15.53	0.00
1,4-Dichlorobenzene-d4	738590	888477	20.29	18.24	18.24	0.00

Analyst: TEW Date: 03/16/07 Reviewer: LW Date: 03/16/07

-=low bias c=CCV m=manual integration

477107158022

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: QC379620 IDF : 1.0
Seqnum : 477108668003.2 File : hcg03 Time : 16-MAR-2007 12:21
Cal : 477017193004 Caldate : 12-JAN-2007 Caltype : WATER
Standards: S5614 (10000X), S5537 (10000X), S5422 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.8522	0.8717	25.00	25.57	ug/L	2	30	0.1000	m u
Vinyl Chloride	0.6416	0.6704	25.00	26.12	ug/L	4	20	0.0500	m u
Bromomethane	0.2251	0.2159	25.00	21.97	ug/L	-12	30	0.0500	m u
Chloroethane	0.3251	0.3907	25.00	30.04	ug/L	20	30	0.0500	m u
Acetone	0.2629	0.2770	25.00	26.35	ug/L	5	40	0.0500	u
1,1-Dichloroethene	0.3003	0.3600	25.00	29.97	ug/L	20	20	0.0500	u
Methylene Chloride	0.4577	0.4913	25.00	26.84	ug/L	7	30	0.0500	u
Carbon Disulfide	1.5905	1.3156	25.00	20.68	ug/L	-17	30	0.0500	u
MTBE	1.5642	1.4579	25.00	23.30	ug/L	-7	30	0.0500	u
trans-1,2-Dichloroethene	0.3861	0.4191	25.00	27.13	ug/L	9	30	0.0500	u
Vinyl Acetate	1.1573	1.3787	25.00	29.78	ug/L	19	40	0.0500	u
1,1-Dichloroethane	0.9783	1.0720	25.00	27.40	ug/L	10	30	0.1000	u
2-Butanone	0.3460	0.4325	25.00	31.25	ug/L	25	40	0.0500	u
cis-1,2-Dichloroethene	0.4343	0.4641	25.00	26.72	ug/L	7	30	0.0500	u
Chloroform	0.8730	0.8453	25.00	24.21	ug/L	-3	20	0.0500	u
1,1,1-Trichloroethane	0.5971	0.6289	25.00	26.33	ug/L	5	30	0.0500	u
Carbon Tetrachloride	0.2121	0.2415	25.00	28.46	ug/L	14	30	0.0500	u
1,2-Dichloroethane	0.3844	0.4027	25.00	26.19	ug/L	5	30	0.0500	u
Benzene	0.7129	0.7752	25.00	27.18	ug/L	9	30	0.0500	u
Trichloroethene	0.1900	0.1987	25.00	26.15	ug/L	5	30	0.0500	u
1,2-Dichloropropane	0.2406	0.2568	25.00	26.68	ug/L	7	20	0.0500	u
Bromodichloromethane	0.2856	0.3111	25.00	27.24	ug/L	9	30	0.0500	u
4-Methyl-2-Pentanone	0.3286	0.3996	25.00	30.40	ug/L	22	40	0.0500	u
cis-1,3-Dichloropropene	0.3464	0.3557	25.00	25.67	ug/L	3	30	0.0500	u
Toluene	0.4455	0.4593	25.00	25.77	ug/L	3	20	0.0500	u
trans-1,3-Dichloropropene	0.3377	0.3240	25.00	23.99	ug/L	-4	30	0.0500	u
1,1,2-Trichloroethane	0.0985	0.1068	25.00	27.12	ug/L	8	30	0.0500	u
2-Hexanone	0.2791	0.3252	25.00	29.12	ug/L	16	40	0.0500	u
Tetrachloroethene	0.1385	0.1442	25.00	26.02	ug/L	4	30	0.0500	u
Dibromochloromethane	0.2343	0.2215	25.00	23.63	ug/L	-5	30	0.0500	u
Chlorobenzene	0.5877	0.5531	25.00	23.53	ug/L	-6	30	0.3000	u
Ethylbenzene	1.0693	1.0498	25.00	24.55	ug/L	-2	20	0.0500	u
m,p-Xylenes	0.3689	0.3626	50.00	49.15	ug/L	-2	30	0.0500	u
o-Xylene	0.3726	0.3557	25.00	23.86	ug/L	-5	30	0.0500	u
Styrene	0.6454	0.6341	25.00	24.56	ug/L	-2	30	0.0500	u
Bromoform	0.1322	0.1315	25.00	24.87	ug/L	-1	30	0.1000	u
1,1,2,2-Tetrachloroethane	0.7897	0.7641	25.00	24.19	ug/L	-3	30	0.3000	u
Dibromofluoromethane	0.8956	0.8996	50.00	50.23	ug/L	0	30	0.0500	u
1,2-Dichloroethane-d4	0.6066	0.6372	50.00	52.52	ug/L	5	30	0.0500	u
Toluene-d8	1.1361	1.1480	50.00	50.52	ug/L	1	30	0.0500	u
Bromofluorobenzene	1.6818	1.4978	50.00	44.53	ug/L	-11	30	0.0500	u

ISTD (ICAL hacl0)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1002942	1059305	5.62	10.38	10.39	0.01
1,4-Difluorobenzene	2227647	2289461	2.77	11.51	11.52	0.01
Chlorobenzene-d5	1847481	2008833	8.73	15.53	15.53	0.00
1,4-Dichlorobenzene-d4	738590	830503	12.44	18.24	18.24	0.00

Analyst: BO Date: 03/20/07 Reviewer: ACM Date: 03/20/07

m=manual integration u=use

477108668003.2

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: QC379793 IDF : 1.0
Seqnum : 497112758004.1 File : jcj04 Time : 19-MAR-2007 08:38
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5723 (10000X), S5614 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.4628	25.00	20.67	ug/L	-17	30	0.1000	u
Vinyl Chloride	0.4284	0.3732	25.00	21.78	ug/L	-13	20	0.0500	u
Bromomethane	0.2490	0.2629	25.00	26.39	ug/L	6	30	0.0500	u
Chloroethane	0.2566	0.2768	25.00	26.96	ug/L	8	30	0.0500	u
Acetone	0.1377	0.1246	25.00	22.61	ug/L	-10	40	0.0500	u
1,1-Dichloroethene	0.2467	0.2861	25.00	28.99	ug/L	16	20	0.0500	u
Methylene Chloride	0.3245	0.3762	25.00	28.98	ug/L	16	30	0.0500	u
Carbon Disulfide	1.1042	0.8906	25.00	20.17	ug/L	-19	30	0.0500	!v- u
MTBE	0.8650	0.8532	25.00	24.66	ug/L	-1	30	0.0500	u
trans-1,2-Dichloroethene	0.2868	0.3335	25.00	29.07	ug/L	16	30	0.0500	u
Vinyl Acetate	1.1462	0.8847	25.00	19.30	ug/L	-23	40	0.0500	m u
1,1-Dichloroethane	0.5825	0.6488	25.00	27.84	ug/L	11	30	0.1000	u
2-Butanone	0.2252	0.2010	25.00	22.31	ug/L	-11	40	0.0500	u
cis-1,2-Dichloroethene	0.3062	0.3652	25.00	29.82	ug/L	19	30	0.0500	u
Chloroform	0.4815	0.5286	25.00	27.45	ug/L	10	20	0.0500	u
1,1,1-Trichloroethane	0.3163	0.3651	25.00	28.86	ug/L	15	30	0.0500	u
Carbon Tetrachloride	0.1568	0.1836	25.00	29.28	ug/L	17	30	0.0500	u
1,2-Dichloroethane	0.2536	0.2634	25.00	25.97	ug/L	4	30	0.0500	u
Benzene	0.7187	0.8035	25.00	27.95	ug/L	12	30	0.0500	u
Trichloroethene	0.1689	0.1832	25.00	27.12	ug/L	8	30	0.0500	u
1,2-Dichloropropane	0.2234	0.2291	25.00	25.64	ug/L	3	20	0.0500	u
Bromodichloromethane	0.2251	0.2539	25.00	28.19	ug/L	13	30	0.0500	u
4-Methyl-2-Pentanone	0.3320	0.2971	25.00	22.38	ug/L	-10	40	0.0500	u
cis-1,3-Dichloropropene	0.3082	0.3329	25.00	27.01	ug/L	8	30	0.0500	u
Toluene	0.4092	0.4582	25.00	28.00	ug/L	12	20	0.0500	u
trans-1,3-Dichloropropene	0.2703	0.2607	25.00	24.12	ug/L	-4	30	0.0500	u
1,1,2-Trichloroethane	0.0918	0.0994	25.00	27.07	ug/L	8	30	0.0500	u
2-Hexanone	0.2302	0.1842	25.00	20.01	ug/L	-20	40	0.0500	u
Tetrachloroethene	0.1854	0.2011	25.00	27.13	ug/L	9	30	0.0500	u
Dibromochloromethane	0.2121	0.2134	25.00	25.15	ug/L	1	30	0.0500	u
Chlorobenzene	0.5276	0.5343	25.00	25.32	ug/L	1	30	0.3000	u
Ethylbenzene	0.8758	0.8802	25.00	25.13	ug/L	1	20	0.0500	u
m,p-Xylenes	0.3185	0.3291	50.00	51.66	ug/L	3	30	0.0500	u
o-Xylene	0.3158	0.3229	25.00	25.56	ug/L	2	30	0.0500	u
Styrene	0.5429	0.5646	25.00	26.00	ug/L	4	30	0.0500	u
Bromoform	0.1648	0.1621	25.00	24.60	ug/L	-2	30	0.1000	u
1,1,2,2-Tetrachloroethane	0.6355	0.5313	25.00	20.90	ug/L	-16	30	0.3000	u
Dibromofluoromethane	0.5469	0.5678	50.00	51.91	ug/L	4	30	0.0500	u
1,2-Dichloroethane-d4	0.3954	0.3870	50.00	48.94	ug/L	-2	30	0.0500	u
Toluene-d8	1.0759	1.1251	50.00	52.29	ug/L	5	30	0.0500	u
Bromofluorobenzene	1.1837	1.0984	50.00	46.40	ug/L	-7	30	0.0500	u

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1422618	-8.54	10.64	10.62	-0.02
1,4-Difluorobenzene	2525036	2345382	-7.11	11.82	11.81	-0.01
Chlorobenzene-d5	2054473	2167502	5.50	15.83	15.83	0.00
1,4-Dichlorobenzene-d4	973680	1086217	11.56	18.52	18.52	0.00

Analyst: BO Date: 03/20/07 Reviewer: ACM Date: 03/20/07

!=warning -=low bias m=manual integration u=use v=ICV

497112758004.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497112758016 File : jcj16 Time : 19-MAR-2007 15:42
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5426 (5000X), S5537 (10000X), S5723 (10000X), S5614 (10000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.4729	25.00	21.12	ug/L	-16	30	0.1000	
Vinyl Chloride	0.4284	0.3922	25.00	22.88	ug/L	-8	20	0.0500	
Bromomethane	0.2490	0.2698	25.00	27.09	ug/L	8	30	0.0500	
Chloroethane	0.2566	0.2898	25.00	28.23	ug/L	13	30	0.0500	
Acetone	0.1377	0.1329	25.00	24.12	ug/L	-4	40	0.0500	
1,1-Dichloroethene	0.2467	0.2854	25.00	28.92	ug/L	16	20	0.0500	
Methylene Chloride	0.3245	0.3731	25.00	28.74	ug/L	15	30	0.0500	
Carbon Disulfide	1.1042	0.8793	25.00	19.91	ug/L	-20	30	0.0500	
MTBE	0.8650	0.9101	25.00	26.30	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.3323	25.00	28.97	ug/L	16	30	0.0500	
Vinyl Acetate	1.1462	1.0020	25.00	21.86	ug/L	-13	40	0.0500	m
1,1-Dichloroethane	0.5825	0.6411	25.00	27.51	ug/L	10	30	0.1000	
2-Butanone	0.2252	0.2089	25.00	23.19	ug/L	-7	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3658	25.00	29.86	ug/L	19	30	0.0500	
Chloroform	0.4815	0.5295	25.00	27.49	ug/L	10	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3873	25.00	30.62	ug/L	**22**	30	0.0500	!c+
Carbon Tetrachloride	0.1568	0.1909	25.00	30.45	ug/L	**22**	30	0.0500	!c+
1,2-Dichloroethane	0.2536	0.2618	25.00	25.82	ug/L	3	30	0.0500	
Benzene	0.7187	0.8064	25.00	28.05	ug/L	12	30	0.0500	
Trichloroethene	0.1689	0.1903	25.00	28.17	ug/L	13	30	0.0500	
1,2-Dichloropropane	0.2234	0.2283	25.00	25.54	ug/L	2	20	0.0500	
Bromodichloromethane	0.2251	0.2504	25.00	27.81	ug/L	11	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3273	25.00	24.65	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3337	25.00	27.07	ug/L	8	30	0.0500	
Toluene	0.4092	0.4683	25.00	28.62	ug/L	14	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2759	25.00	25.52	ug/L	2	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.0991	25.00	27.00	ug/L	8	30	0.0500	
2-Hexanone	0.2302	0.2166	25.00	23.53	ug/L	-6	40	0.0500	
Tetrachloroethene	0.1854	0.2408	25.00	32.47	ug/L	**30**	30	0.0500	!c+
Dibromochloromethane	0.2121	0.2311	25.00	27.23	ug/L	9	30	0.0500	
Chlorobenzene	0.5276	0.5816	25.00	27.56	ug/L	10	30	0.3000	
Ethylbenzene	0.8758	1.0280	25.00	29.34	ug/L	17	20	0.0500	
m,p-Xylenes	0.3185	0.3843	50.00	60.34	ug/L	**21**	30	0.0500	!c+
o-Xylene	0.3158	0.3711	25.00	29.38	ug/L	18	30	0.0500	
Styrene	0.5429	0.6500	25.00	29.93	ug/L	20	30	0.0500	
Bromoform	0.1648	0.1782	25.00	27.03	ug/L	8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5518	25.00	21.71	ug/L	-13	30	0.3000	
Dibromofluoromethane	0.5469	0.5544	50.00	50.68	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3786	50.00	47.88	ug/L	-4	30	0.0500	
Toluene-d8	1.0759	1.1120	50.00	51.68	ug/L	3	30	0.0500	
Bromofluorobenzene	1.1837	1.0732	50.00	45.33	ug/L	-9	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1483530	-4.63	10.64	10.63	-0.01
1,4-Difluorobenzene	2525036	2442574	-3.27	11.82	11.81	-0.01
Chlorobenzene-d5	2054473	2067578	0.64	15.83	15.83	0.00
1,4-Dichlorobenzene-d4	973680	1128822	15.93	18.52	18.52	0.00

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

!=warning +=high bias c=CCV m=manual integration

497112758016

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447107015

Date : 03/15/07
Sequence : MSVOA05 ecf

Reference: ea916
Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
009	CCV	50PPB	565892	10.05	909180	11.17	803254	15.24	415919	17.96
010	BS	QC379347	572700	10.04	936509	11.17	830265	15.24	427603	17.96
011	BSD	QC379348	580935	10.04	942351	11.17	833505	15.24	417388	17.96
013	BLANK	QC379349	554209	10.04	912234	11.16	814845	15.24	400612	17.96
014	SAMPLE	193217-013	553794	10.04	904644	11.17	806683	15.24	394754	17.96
015	SAMPLE	193217-001	544882	10.04	915472	11.17	803927	15.24	387190	17.96
016	SAMPLE	193217-002	531323	10.04	904601	11.17	780008	15.24	380611	17.96
017	SAMPLE	193217-003	529060	10.05	902728	11.17	782410	15.24	373431	17.96
018	SAMPLE	193217-004	530028	10.05	900482	11.17	784506	15.24	377341	17.96
019	SAMPLE	193217-006	522518	10.04	900279	11.17	780536	15.24	369860	17.96
020	SAMPLE	193217-007	506236	10.04	888796	11.17	776416	15.24	366611	17.96
021	SAMPLE	193217-008	507536	10.04	889216	11.17	776594	15.24	367326	17.96
022	SAMPLE	193217-009	504871	10.05	882466	11.17	768674	15.24	361890	17.96
023	SAMPLE	193217-012	505613	10.04	862506	11.17	768385	15.24	356892	17.96
024	SAMPLE	193217-014	502874	10.04	886012	11.17	766149	15.24	361056	17.96
025	SAMPLE	193217-015	489243	10.04	879781	11.17	753242	15.24	361976	17.96
026	SAMPLE	193217-016	489023	10.05	871434	11.17	758128	15.24	358230	17.96
027	SAMPLE	193217-017	496166	10.04	880159	11.17	758009	15.24	354662	17.96
028	SAMPLE	193217-018	485371	10.04	867837	11.17	759218	15.24	349343	17.96
029	SAMPLE	193217-019	483467	10.05	864679	11.17	756130	15.24	352095	17.96
030	SAMPLE	193217-020	487153	10.05	865460	11.17	753010	15.24	349748	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447112790

Date : 03/19/07 Reference: ea916
Sequence : MSVOA05 ecj Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
019	CCV/LCS	QC379891	581103	10.04	905326	11.17	762278	15.24	379411	17.96
021	BLANK	QC379862	544412	10.05	857014	11.17	735253	15.24	355138	17.96
022	SAMPLE	193262-009	537599	10.04	850909	11.17	719531	15.24	347926	17.96
023	SAMPLE	193262-010	542562	10.04	848701	11.17	713723	15.24	348169	17.96
024	SAMPLE	193262-017	523819	10.04	825598	11.17	704972	15.24	342552	17.96
025	SAMPLE	193262-018	527938	10.04	835509	11.17	705759	15.24	336364	17.96
026	SAMPLE	193262-019	523688	10.04	835881	11.17	709109	15.24	341293	17.96
027	SAMPLE	193262-020	511777	10.04	827625	11.17	701243	15.24	339467	17.96
028	SAMPLE	193262-022	510576	10.04	829302	11.17	712846	15.24	335503	17.96
029	SAMPLE	193262-023	517838	10.04	837915	11.16	700337	15.24	339045	17.96
030	SAMPLE	193277-001	519825	10.05	836320	11.17	699965	15.24	336089	17.96
031	SAMPLE	193329-002	515757	10.04	841284	11.17	713659	15.24	337867	17.96
032	SAMPLE	193329-003	513288	10.04	847623	11.17	697953	15.24	336779	17.96
033	SAMPLE	193329-004	509390	10.04	842305	11.17	703637	15.24	330726	17.96
034	SAMPLE	193329-005	507322	10.05	830279	11.17	700651	15.24	330181	17.96
035	SAMPLE	193329-006	513335	10.04	856711	11.17	707768	15.25	334835	17.97
036	SAMPLE	193329-007	510245	10.05	831112	11.17	699399	15.24	333543	17.96
037	MSS	193217-011	494632	10.05	827029	11.17	692363	15.24	329886	17.96
038	SAMPLE	193329-001	503626	10.04	841853	11.17	707040	15.24	333439	17.96
039	MS	QC379910	500518	10.04	838970	11.17	711503	15.24	360069	17.96
040	MSD	QC379911	518512	10.04	850979	11.17	708901	15.24	357191	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477107158

Date : 03/15/07 Reference: hac10
Sequence : MSVOA08 hcf Analyzed : 01/12/07 04:06

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1002942	10.38	2227647	11.51	1847481	15.53	738590	18.24
		LOWER LIMIT	501471	9.88	1113824	11.01	923741	15.03	369295	17.74
		UPPER LIMIT	2005884	10.88	4455294	12.01	3694962	16.03	1477180	18.74
004	CCV	20PPB	1060826	10.39	2384153	11.52	1986747	15.52	844298	18.24
005	BS	QC379355	1122723	10.38	2436186	11.51	2082679	15.53	870905	18.24
006	BSD	QC379356	1172016	10.39	2552748	11.51	2063343	15.52	863306	18.24
008	BLANK	QC379354	1158920	10.39	2497180	11.51	2038530	15.52	829446	18.24
009	SAMPLE	193312-001	1159511	10.39	2472556	11.51	2015654	15.52	808228	18.24
010	SAMPLE	193312-025	1132239	10.39	2483142	11.52	2023031	15.52	802406	18.24
011	SAMPLE	193312-002	1070242	10.39	2452270	11.51	2020195	15.52	785483	18.24
012	SAMPLE	193312-012	1086187	10.39	2382663	11.51	1974736	15.53	789095	18.24
013	SAMPLE	193312-013	1098868	10.39	2499832	11.52	2070967	15.52	904112	18.24
014	SAMPLE	193312-007	1417142	10.39	2886286	11.51	2434107	15.53	992306	18.24
015	SAMPLE	193312-022	1344902	10.38	2800937	11.51	2299261	15.53	939548	18.24
016	SAMPLE	193312-005	1247554	10.39	2641142	11.52	2160436	15.53	885093	18.24
017	SAMPLE	193312-021	1224113	10.39	2582426	11.52	2196255	15.52	897424	18.24
018	SAMPLE	193312-024	1185630	10.39	2547358	11.51	2174965	15.53	842918	18.24
019	SAMPLE	193312-023	1125873	10.38	2450804	11.52	2042555	15.53	785975	18.24
022	CCV	20PPB	1190452	10.38	2506860	11.52	2059135	15.53	888477	18.24
024	BLANK	QC379530	1119938	10.38	2521300	11.51	2077758	15.53	826048	18.24
025	SAMPLE	193339-002	1151464	10.38	2529406	11.52	2055651	15.53	833091	18.24
026	SAMPLE	193339-006	1199663	10.39	2550343	11.51	2132747	15.52	845123	18.24
027	SAMPLE	193217-024	1193398	10.38	2473051	11.51	2075870	15.52	839480	18.24
028	SAMPLE	193217-023	1159165	10.38	2562262	11.51	2106444	15.53	809374	18.24
029	SAMPLE	193217-022	1092955	10.39	2468410	11.51	2001534	15.52	781540	18.24
030	MSS	193217-021	1104690	10.39	2441759	11.52	2036047	15.52	781497	18.24
031	MS	QC379531	1092209	10.38	2476732	11.51	2011279	15.52	860263	18.24
032	MSD	QC379532	1218052	10.38	2637534	11.52	2201113	15.53	923042	18.24
034	SAMPLE	193312-006	1132200	10.38	2448753	11.51	2048095	15.52	812985	18.24
035	SAMPLE	193312-026	1120103	10.38	2462993	11.51	2021460	15.53	796075	18.24
036	SAMPLE	193312-027	1111984	10.38	2515539	11.51	2060314	15.53	779290	18.24

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477108668

Date : 03/16/07
Sequence : MSVOA08 hcg

Reference: hac10
Analyzed : 01/12/07 04:06

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1002942	10.38	2227647	11.51	1847481	15.53	738590	18.24
		LOWER LIMIT	501471	9.88	1113824	11.01	923741	15.03	369295	17.74
		UPPER LIMIT	2005884	10.88	4455294	12.01	3694962	16.03	1477180	18.74
003	CCV/BS	QC379620	1059305	10.39	2289461	11.52	2008833	15.53	830503	18.24
004	BSD	QC379621	1073603	10.39	2397895	11.52	1972254	15.52	824838	18.24
006	BLANK	QC379619	1116350	10.39	2355391	11.52	2003466	15.52	769508	18.24
007	MSS	193312-003	1085624	10.39	2424912	11.52	2021791	15.52	798537	18.24
008	SAMPLE	193217-007	1062016	10.39	2404773	11.51	1996498	15.53	760489	18.24
009	SAMPLE	193217-020	1062802	10.39	2369692	11.52	1962993	15.52	765019	18.24
010	SAMPLE	193312-007	1034512	10.39	2409297	11.52	1980486	15.52	760770	18.24
011	SAMPLE	193312-013	1052095	10.38	2361392	11.51	1999194	15.53	805411	18.24
012	SAMPLE	193312-004	1179769	10.39	2552487	11.51	2121531	15.52	840330	18.24
013	SAMPLE	193312-020	1126274	10.38	2388224	11.52	2089070	15.53	802323	18.24
014	SAMPLE	193312-026	1128533	10.38	2491602	11.51	2022368	15.53	769512	18.24
015	SAMPLE	193312-022	994423	10.39	2241760	11.51	1878364	15.52	713572	18.24
016	SAMPLE	193312-021	1078288	10.39	2404121	11.51	2004508	15.53	772152	18.24
017	SAMPLE	193312-016	1063670	10.39	2408566	11.51	1917781	15.53	745050	18.24
018	MS	QC379669	1056703	10.39	2422970	11.52	2015105	15.53	838279	18.24
019	MSD	QC379670	1210183	10.39	2590511	11.51	2090409	15.52	894425	18.24

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497112758

Date : 03/19/07 Reference: jaq17
Sequence : MSVOA10 jcj Analyzed : 01/26/07 19:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1555522	10.64	2525036	11.82	2054473	15.83	973680	18.52
		LOWER LIMIT	777761	10.14	1262518	11.32	1027237	15.33	486840	18.02
		UPPER LIMIT	3111044	11.14	5050072	12.32	4108946	16.33	1947360	19.02
004	CCV/BS	QC379793	1422618	10.62	2345382	11.81	2167502	15.83	1086217	18.52
005	BSD	QC379794	1458507	10.63	2445117	11.81	2168457	15.83	1078987	18.52
007	BLANK	QC379792	1456686	10.63	2426130	11.81	2202497	15.83	1095915	18.52
008	SAMPLE	193332-003	1482913	10.62	2466906	11.80	2203458	15.83	1137224	18.52
009	SAMPLE	193492-004	1497626	10.62	2475982	11.80	2212243	15.83	1124304	18.52
010	MSS	193217-005	1479948	10.62	2482650	11.81	2243567	15.83	1137712	18.52
011	MS	QC379820	1470182	10.62	2472247	11.80	2223429	15.83	1132669	18.52
012	MSD	QC379821	1525672	10.62	2492622	11.81	2244214	15.83	1139515	18.52
016	CCV	25PPB	1483530	10.63	2442574	11.81	2067578	15.83	1128822	18.52
018	BLANK	QC379829	1489857	10.62	2459103	11.80	2197551	15.83	1088911	18.53
019	SAMPLE	193515-001	1504718	10.63	2494833	11.81	2245032	15.82	1116534	18.53
020	SAMPLE	193515-008	1492556	10.63	2451744	11.81	2196750	15.83	1123920	18.52
021	SAMPLE	193217-003	1463822	10.63	2451471	11.81	2179312	15.83	1068622	18.53
022	SAMPLE	193217-004	1469319	10.63	2442791	11.81	2203805	15.82	1082472	18.53
023	SAMPLE	193217-006	1463988	10.63	2484764	11.81	2233174	15.83	1100307	18.53
024	SAMPLE	193333-001	1482835	10.63	2490690	11.81	2228813	15.83	1109172	18.53
025	SAMPLE	193274-010	1462962	10.63	2457172	11.81	2143813	15.83	1092179	18.53
026	SAMPLE	193262-002	1482705	10.63	2466539	11.81	2208251	15.83	1116314	18.52
027	SAMPLE	193262-003	1478740	10.62	2436198	11.80	2199031	15.83	1116583	18.53
028	SAMPLE	193262-007	1457472	10.63	2434545	11.81	2169766	15.83	1064710	18.53
029	SAMPLE	193515-002	1448912	10.63	2441061	11.81	2200662	15.83	1078108	18.52
030	SAMPLE	193515-003	1450261	10.62	2421187	11.81	2161951	15.83	1084000	18.52
031	SAMPLE	193515-004	1435293	10.63	2379748	11.81	2097702	15.83	1016777	18.52
032	SAMPLE	193515-005	1440692	10.63	2422248	11.81	2163142	15.83	1068731	18.52
033	SAMPLE	193515-006	1492150	10.63	2475076	11.81	2180455	15.83	1056507	18.52
034	SAMPLE	193515-007	1465765	10.63	2445255	11.81	2192365	15.83	1046699	18.53
035	SAMPLE	193515-009	1446978	10.63	2423783	11.81	2170584	15.83	1055605	18.53

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ea901	X	IB			01/09/07 08:24	1.0	1
002	ea902	X	BFB			01/09/07 09:00	1.0	2
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1
007	ea907	X	IB			01/09/07 12:18	1.0	1
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1
022	ea922	X	IB			01/09/07 20:36	1.0	1
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1
031	ea931	X	IB			01/10/07 01:23	1.0	1

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447107015

Instrument : MSVOA05 Begun : 03/15/07 07:35
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ecf01	X	IB			03/15/07 07:35	1.0	1	
002	ecf02	X	BFB			03/15/07 08:05	1.0	2	
003	ecf03	X	30PPB			03/15/07 08:21	1.0	3 4 5 1	
004	ecf04	X	BFB			03/15/07 09:04	1.0	2	
005	ecf05	X	30PPB			03/15/07 09:20	1.0	3 4 5 1	
006	ecf06	X	BFB			03/15/07 09:53	1.0	2	
007	ecf07	X	QC379347	Water	123142	03/15/07 10:09	1.0	6 7 8 1	
008	ecf08	TUN	BFB			03/15/07 11:07	1.0	2	
009	ecf09	CCV	50PPB			03/15/07 11:22	1.0	3 4 5 1	
010	ecf10	BS	QC379347	Water	123142	03/15/07 12:08	1.0	6 7 9 1	
011	ecf11	BSD	QC379348	Water	123142	03/15/07 12:40	1.0	6 7 9 1	
012	ecf12	X	IB			03/15/07 13:12	1.0	1	
013	ecf13	BLANK	QC379349	Water	123142	03/15/07 13:44	1.0	1	
014	ecf14	SAMPLE	193217-013	Water	123142	03/15/07 14:29	1.0	1	
015	ecf15	SAMPLE	193217-001	Water	123142	03/15/07 15:01	1.0	1	
016	ecf16	SAMPLE	193217-002	Water	123142	03/15/07 15:34	1.0	1	
017	ecf17	SAMPLE	193217-003	Water	123142	03/15/07 16:06	1.0	1	
018	ecf18	SAMPLE	193217-004	Water	123142	03/15/07 16:38	1.0	1	
019	ecf19	SAMPLE	193217-006	Water	123142	03/15/07 17:09	1.0	1	
020	ecf20	SAMPLE	193217-007	Water	123142	03/15/07 17:41	1.0	1	
021	ecf21	SAMPLE	193217-008	Water	123142	03/15/07 18:13	1.0	1	
022	ecf22	SAMPLE	193217-009	Water	123142	03/15/07 18:45	1.0	1	
023	ecf23	SAMPLE	193217-012	Water	123142	03/15/07 19:17	1.0	1	
024	ecf24	SAMPLE	193217-014	Water	123142	03/15/07 19:49	1.0	1	
025	ecf25	SAMPLE	193217-015	Water	123142	03/15/07 20:21	1.0	1	
026	ecf26	SAMPLE	193217-016	Water	123142	03/15/07 20:53	1.0	1	
027	ecf27	SAMPLE	193217-017	Water	123142	03/15/07 21:25	1.0	1	
028	ecf28	SAMPLE	193217-018	Water	123142	03/15/07 21:57	1.0	1	
029	ecf29	SAMPLE	193217-019	Water	123142	03/15/07 22:29	1.0	1	
030	ecf30	SAMPLE	193217-020	Water	123142	03/15/07 23:01	1.0	1	
031	ecf31	X	IB			03/15/07 23:33	1.0	1	
032	ecf32	X	IB			03/16/07 00:04	1.0	1	
033	ecf33	X	IB			03/16/07 00:36	1.0	1	
034	ecf34	X	TVH2000			03/16/07 01:08	1.0	1	

BO 03/16/07 : ecf06, adj tune, ecf08 autotune

Analyst: BO Date: 03/16/07 Reviewer: LW Date: 03/16/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5194 6=S5537 7=S5614 8=S5422 9=S5723

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447112790

Instrument : MSVOA05 Begun : 03/19/07 07:50
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ecj01	X	IB			03/19/07 07:50	1.0	1
002	ecj02	X	BFB			03/19/07 08:18	1.0	2
003	ecj03	X	30PPB			03/19/07 08:34	1.0	3 4 5 1
004	ecj04	X	BFB			03/19/07 09:10	1.0	2
005	ecj05	X	30PPB			03/19/07 09:26	1.0	3 4 5 1
006	ecj06	X	BFB			03/19/07 09:57	1.0	2
007	ecj07	X	30PPB			03/19/07 10:13	1.0	3 4 5 1
008	ecj08	X	BFB			03/19/07 10:56	1.0	2
009	ecj09	X	50PPB			03/19/07 11:12	1.0	3 4 5 1
010	ecj10	X	BFB			03/19/07 12:03	1.0	2
011	ecj11	X	50PPB			03/19/07 12:19	1.0	3 4 5 1
012	ecj12	X	BFB			03/19/07 13:10	1.0	2
013	ecj13	X	QC379860	Water	123261	03/19/07 13:27	1.0	6 7 8 1
014	ecj14	X	BFB			03/19/07 13:58	1.0	2
015	ecj15	X	QC379860	Water	123261	03/19/07 14:14	1.0	6 7 8 1
016	ecj16	X	BFB			03/19/07 14:45	1.0	2
017	ecj17	X	QC379860	Water	123261	03/19/07 15:01	1.0	6 7 8 1
018	ecj18	TUN	BFB			03/19/07 15:39	1.0	2
019	ecj19	CCV/LCS	QC379891	Water	123261	03/19/07 15:55	1.0	6 7 8 9
020	ecj20	X	IB			03/19/07 16:38	1.0	9
021	ecj21	BLANK	QC379862	Water	123261	03/19/07 17:10	1.0	9
022	ecj22	SAMPLE	193262-009	Water	123261	03/19/07 17:42	1.0	9
023	ecj23	SAMPLE	193262-010	Water	123261	03/19/07 18:13	1.0	9
024	ecj24	SAMPLE	193262-017	Water	123261	03/19/07 18:45	1.0	9
025	ecj25	SAMPLE	193262-018	Water	123261	03/19/07 19:17	1.0	9
026	ecj26	SAMPLE	193262-019	Water	123261	03/19/07 19:49	1.0	9
027	ecj27	SAMPLE	193262-020	Water	123261	03/19/07 20:21	1.0	9
028	ecj28	SAMPLE	193262-022	Water	123261	03/19/07 20:53	1.0	9
029	ecj29	SAMPLE	193262-023	Water	123261	03/19/07 21:25	1.0	9
030	ecj30	SAMPLE	193277-001	Water	123261	03/19/07 21:57	1.0	9
031	ecj31	SAMPLE	193329-002	Water	123261	03/19/07 22:29	1.0	9
032	ecj32	SAMPLE	193329-003	Water	123261	03/19/07 23:01	1.0	9
033	ecj33	SAMPLE	193329-004	Water	123261	03/19/07 23:33	1.0	9
034	ecj34	SAMPLE	193329-005	Water	123261	03/20/07 00:05	1.0	9
035	ecj35	SAMPLE	193329-006	Water	123261	03/20/07 00:37	1.0	9
036	ecj36	SAMPLE	193329-007	Water	123261	03/20/07 01:08	1.0	9
037	ecj37	MSS	193217-011	Water	123261	03/20/07 01:40	1.0	9
038	ecj38	SAMPLE	193329-001	Water	123261	03/20/07 02:12	62.50	9
039	ecj39	MS	QC379910	Water	123261	03/20/07 02:44	1.0	9 6 7 8
040	ecj40	MSD	QC379911	Water	123261	03/20/07 03:16	1.0	9 6 7 8
041	ecj41	X	IB			03/20/07 03:48	1.0	9
042	ecj42	X	IB			03/20/07 04:20	1.0	9
043	ecj43	X	IB			03/20/07 04:52	1.0	9
044	ecj44	X	TVH2000			03/20/07 05:24	1.0	9

BO 03/19/07 : ecj04, ecj06, ecj08, ecj10 adj tune. ecj12 autotune. ecj15, ecj17 used different aliquots of standards.

Analyst: BO Date: 03/20/07 Reviewer: LW Date: 03/20/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5194 6=S5537 7=S5614 8=S5723 9=S5736

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477017193

Instrument : MSVOA08
Method : EPA 8260B

Begun : 01/11/07 22:33
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hac01	TUN	BFB			01/11/07 22:33	1.0	1
002	hac02	X	IB			01/11/07 23:09	1.0	2
003	hac03	IB	CALIB IB			01/11/07 23:46	1.0	2
004	hac04	ICAL	0.25/0.5PPB			01/12/07 00:23	1.0	3 4 5 2
005	hac05	ICAL	0.5/1PPB			01/12/07 01:01	1.0	3 4 5 2
006	hac06	ICAL	2PPB			01/12/07 01:38	1.0	3 4 5 2
007	hac07	ICAL	5PPB			01/12/07 02:15	1.0	3 4 5 2
008	hac08	ICAL	10PPB			01/12/07 02:52	1.0	3 4 5 2
009	hac09	ICAL	20PPB			01/12/07 03:29	1.0	3 4 5 2
010	hac10	ICAL	50PPB			01/12/07 04:06	1.0	3 4 5 2
011	hac11	ICAL	75PPB			01/12/07 04:43	1.0	3 4 5 2
012	hac12	ICAL	100PPB			01/12/07 05:20	1.0	3 4 5 2
013	hac13	ICV	25PPB			01/12/07 05:56	1.0	6 2
014	hac14	ICV	25PPB			01/12/07 06:33	1.0	7 8 2
015	hac15	X	IB			01/12/07 07:10	1.0	2
016	hac16	X	IB			01/12/07 13:26	1.0	2
017	hac17	TUN	BFB			01/12/07 14:10	1.0	1
018	hac18	CCV	25PPB			01/12/07 14:47	1.0	3 4 2
019	hac19	BS	QC371636	Water	121203	01/12/07 16:23	1.0	7 8 6 2
020	hac20	BSD	QC371637	Water	121203	01/12/07 17:00	1.0	7 8 6 2
021	hac21	X	IB			01/12/07 17:52	1.0	2
022	hac22	BLANK	QC371635	Water	121203	01/12/07 18:29	1.0	2
023	hac23	MDL	191922-001	Water	121203	01/12/07 19:45	1.0	3 4 2
024	hac24	MDL	191922-002	Water	121203	01/12/07 20:23	1.0	3 4 2
025	hac25	MDL	191922-003	Water	121203	01/12/07 21:00	1.0	3 4 2
026	hac26	MDL	191922-004	Water	121203	01/12/07 21:37	1.0	3 4 2
027	hac27	MDL	191922-005	Water	121203	01/12/07 22:15	1.0	3 4 2
028	hac28	MDL	191922-006	Water	121203	01/12/07 22:52	1.0	3 4 2
029	hac29	MDL	191922-007	Water	121203	01/12/07 23:29	1.0	3 4 2
030	hac30	SAMPLE	192085-010	Water	121203	01/13/07 00:06	1.667	2
031	hac31	SAMPLE	192085-009	Water	121203	01/13/07 00:43	2.0	2
032	hac32	SAMPLE	192085-001	Water	121203	01/13/07 01:20	8.333	2
033	hac33	SAMPLE	192085-005	Water	121203	01/13/07 01:57	12.50	2
034	hac34	SAMPLE	192085-002	Water	121203	01/13/07 02:34	20.0	2
035	hac35	SAMPLE	192085-006	Water	121203	01/13/07 03:11	25.0	2
036	hac36	X	IB			01/13/07 03:48	1.0	2
037	hac37	X	IB			01/13/07 04:25	1.0	2
038	hac38	X	IB			01/13/07 05:02	1.0	2

TEW 01/12/07 : Reviewed through file hac15.

LW 01/12/07 : Reviewed through file hac15.

TEW 01/15/07 : Reviewed entire sequence.

Analyst: TEW Date: 01/15/07 Reviewer: LW Date: 01/15/07

Standards used: 1=S5117 2=S5079 3=S5152 4=S5170 5=S4713 6=S5241 7=S5052 8=S5168

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477107158

Instrument : MSVOA08 Begun : 03/15/07 09:58
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hcf01	X	IB			03/15/07 09:58	1.0	1	
002	hcf02	X	BFB			03/15/07 10:28	1.0	2	
003	hcf03	TUN	BFB			03/15/07 10:45	1.0	2	
004	hcf04	CCV	20PPB			03/15/07 11:13	1.0	3 4 1	
005	hcf05	BS	QC379355	Water	123144	03/15/07 12:02	1.0	5 6 7 1	
006	hcf06	BSD	QC379356	Water	123144	03/15/07 12:41	1.0	5 6 7 1	
007	hcf07	X	IB			03/15/07 13:25	1.0	1	
008	hcf08	BLANK	QC379354	Water	123144	03/15/07 14:03	1.0	1	
009	hcf09	SAMPLE	193312-001	Water	123144	03/15/07 14:41	1.0	1	
010	hcf10	SAMPLE	193312-025	Water	123144	03/15/07 15:20	1.0	1	
011	hcf11	SAMPLE	193312-002	Water	123144	03/15/07 15:58	1.0	1	
012	hcf12	SAMPLE	193312-012	Water	123144	03/15/07 16:36	6.25	1	
013	hcf13	SAMPLE	193312-013	Water	123144	03/15/07 17:14	7.143	1	
014	hcf14	SAMPLE	193312-007	Water	123144	03/15/07 17:52	14.29	1	
015	hcf15	SAMPLE	193312-022	Water	123144	03/15/07 18:29	142.9	1	
016	hcf16	SAMPLE	193312-005	Water	123144	03/15/07 19:08	200.0	1	
017	hcf17	SAMPLE	193312-021	Water	123144	03/15/07 19:46	500.0	1	
018	hcf18	SAMPLE	193312-024	Water	123144	03/15/07 20:24	500.0	1	
019	hcf19	SAMPLE	193312-023	Water	123144	03/15/07 21:01	625.0	1	
020	hcf20	X	BFB			03/15/07 21:57	1.0	2	
021	hcf21	TUN	BFB			03/15/07 22:10	1.0	2	
022	hcf22	CCV	20PPB			03/15/07 22:40	1.0	3 4 1	
023	hcf23	X	IB			03/15/07 23:36	1.0	1	
024	hcf24	BLANK	QC379530	Water	123144	03/16/07 00:14	1.0	1	
025	hcf25	SAMPLE	193339-002	Water	123144	03/16/07 00:51	1.0	1	pH > 2
026	hcf26	SAMPLE	193339-006	Water	123144	03/16/07 01:29	1.0	1	
027	hcf27	SAMPLE	193217-024	Water	123144	03/16/07 02:07	1.0	1	
028	hcf28	SAMPLE	193217-023	Water	123144	03/16/07 02:44	1.0	1	
029	hcf29	SAMPLE	193217-022	Water	123144	03/16/07 03:22	1.0	1	
030	hcf30	MSS	193217-021	Water	123144	03/16/07 04:00	1.0	1	
031	hcf31	MS	QC379531	Water	123144	03/16/07 04:37	1.0	1 5 6 7	
032	hcf32	MSD	QC379532	Water	123144	03/16/07 05:15	1.0	1 5 6 7	
033	hcf33	X	IB			03/16/07 05:52	1.0	1	
034	hcf34	SAMPLE	193312-006	Water	123144	03/16/07 06:29	2000	1	
035	hcf35	SAMPLE	193312-026	Water	123144	03/16/07 07:07	2000	1	
036	hcf36	SAMPLE	193312-027	Water	123144	03/16/07 07:44	4000	1	
037	hcf37	X	IB			03/16/07 08:22	1.0	1	
038	hcf38	X	IB			03/16/07 09:00	1.0	1	
039	hcf39	X	IB			03/16/07 09:37	1.0	1	

Analyst: TEW Date: 03/16/07 Reviewer: LW Date: 03/16/07

Standards used: 1=S5426 2=S5117 3=S5617 4=S5618 5=S5614 6=S5537 7=S5422

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477108668

Instrument : MSVOA08 Begun : 03/16/07 11:08
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hcg01	X	IB			03/16/07 11:08	1.0	1	
002	hcg02	TUN	BFB			03/16/07 11:49	1.0	2	
003	hcg03	CCV/BS	QC379620	Water	123201	03/16/07 12:21	1.0	3 4 5 1	
004	hcg04	BSD	QC379621	Water	123201	03/16/07 12:59	1.0	3 4 5 1	
005	hcg05	X	IB			03/16/07 13:44	1.0	1	
006	hcg06	BLANK	QC379619	Water	123201	03/16/07 14:23	1.0	1	
007	hcg07	MSS	193312-003	Water	123201	03/16/07 15:01	1.0	1	
008	hcg08	SAMPLE	193217-007	Water	123201	03/16/07 15:39	1.0	1	
009	hcg09	SAMPLE	193217-020	Water	123201	03/16/07 16:18	1.0	1	
010	hcg10	SAMPLE	193312-007	Water	123201	03/16/07 17:02	14.29	1	
011	hcg11	SAMPLE	193312-013	Water	123201	03/16/07 17:40	16.67	1	
012	hcg12	SAMPLE	193312-004	Water	123201	03/16/07 18:18	62.50	1	
013	hcg13	SAMPLE	193312-020	Water	123201	03/16/07 18:57	166.7	1	headspace <= 1 mL
014	hcg14	SAMPLE	193312-026	Water	123201	03/16/07 19:34	250.0	1	
015	hcg15	SAMPLE	193312-022	Water	123201	03/16/07 20:12	250.0	1	
016	hcg16	SAMPLE	193312-021	Water	123201	03/16/07 20:50	333.3	1	
017	hcg17	SAMPLE	193312-016	Water	123201	03/16/07 21:29	625.0	1	
018	hcg18	MS	QC379669	Water	123201	03/16/07 22:07	1.0	3 4 5 1	
019	hcg19	MSD	QC379670	Water	123201	03/16/07 22:44	1.0	3 4 5 1	
020	hcg20	X	IB			03/16/07 23:22	1.0	1	
021	hcg21	X	IB			03/17/07 00:00	1.0	1	
022	hcg22	X	IB			03/17/07 00:38	1.0	1	

Analyst: SJD Date: 03/17/07 Reviewer: LW Date: 03/19/07

Standards used: 1=S5426 2=S5117 3=S5614 4=S5537 5=S5422

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497038053

Instrument : MSVOA10 Begun : 01/26/07 10:13
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jaq01	X	IB			01/26/07 10:13	1.0	1	
002	jaq02	TUN	BFB			01/26/07 10:45	1.0	2	
003	jaq03	CCV	25PPB			01/26/07 11:03	1.0	3 4 5 1	
004	jaq04	TUN	BFB			01/26/07 11:48	1.0	2	
005	jaq05	CCV	25PPB			01/26/07 12:05	1.0	3 4 5 1	
006	jaq06	ICV/BS	QC373244	Water	121602	01/26/07 12:51	1.0	6 7 8 1	
007	jaq07	X	LP			01/26/07 14:26	1.0	1	
008	jaq08	TUN	BFB			01/26/07 15:00	1.0	2	
009	jaq09	X	IB			01/26/07 15:18	1.0	1	
010	jaq10	IB	CALIB			01/26/07 15:51	1.0	1	
011	jaq11	ICAL	0.25/0.5PPB			01/26/07 16:23	1.0	3 9 10 1	
012	jaq12	ICAL	0.5/1PPB			01/26/07 16:56	1.0	3 9 10 1	
013	jaq13	ICAL	2PPB			01/26/07 17:28	1.0	3 9 10 1	
014	jaq14	ICAL	5PPB			01/26/07 18:01	1.0	3 9 10 1	
015	jaq15	ICAL	10PPB			01/26/07 18:34	1.0	3 9 10 1	
016	jaq16	ICAL	20PPB			01/26/07 19:06	1.0	3 9 10 1	
017	jaq17	ICAL	50PPB			01/26/07 19:39	1.0	3 9 10 1	
018	jaq18	ICAL	75PPB			01/26/07 20:12	1.0	3 9 10 1	
019	jaq19	ICAL	100PPB			01/26/07 20:44	1.0	3 9 10 1	
020	jaq20	ICV	ICVGAS25PPB			01/26/07 21:17	1.0	8 1	
021	jaq21	ICV	ICV25PPB			01/26/07 21:50	1.0	7 6 1	
022	jaq22	X	IB			01/26/07 22:23	1.0	1	
023	jaq23	X	IB			01/26/07 22:56	1.0	1	
024	jaq24	X	IB			01/26/07 23:28	1.0	1	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5322 7=S5052 8=S5241 9=S5219 10=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497112758

Instrument : MSVOA10 Begun : 03/19/07 07:18
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jcj01	X	IB			03/19/07 07:18	1.0	1	
002	jcj02	TUN	BFB			03/19/07 07:47	1.0	2	
003	jcj03	X	20PPB			03/19/07 08:05	1.0	3 4 1	
004	jcj04	CCV/BS	QC379793	Water	123243	03/19/07 08:38	1.0	5 6 7 1	
005	jcj05	BSD	QC379794	Water	123243	03/19/07 09:11	1.0	5 6 7 1	
006	jcj06	X	IB			03/19/07 09:44	1.0	1	
007	jcj07	BLANK	QC379792	Water	123243	03/19/07 10:16	1.0	1	
008	jcj08	SAMPLE	193332-003	Water	123243	03/19/07 10:51	1.0	1	
009	jcj09	SAMPLE	193492-004	Water	123243	03/19/07 11:24	1.0	1	
010	jcj10	MSS	193217-005	Water	123243	03/19/07 12:05	1.0	1	
011	jcj11	MS	QC379820	Water	123243	03/19/07 12:37	1.0	5 6 7 1	
012	jcj12	MSD	QC379821	Water	123243	03/19/07 13:30	1.0	5 6 7 1	
013	jcj13	X	BFB			03/19/07 14:28	1.0	2	
014	jcj14	X	20PPB			03/19/07 14:46	1.0	3 4 1	
015	jcj15	TUN	BFB			03/19/07 15:19	1.0	2	
016	jcj16	CCV	25PPB	Water		03/19/07 15:42	1.0	1 5 6 7	
017	jcj17	X	IB			03/19/07 16:15	1.0	1	
018	jcj18	BLANK	QC379829	Water	123243	03/19/07 16:48	1.0	1	
019	jcj19	SAMPLE	193515-001	Water	123243	03/19/07 17:20	1.0	1	
020	jcj20	SAMPLE	193515-008	Water	123243	03/19/07 17:53	1.0	1	
021	jcj21	SAMPLE	193217-003	Water	123243	03/19/07 18:26	1.0	1	
022	jcj22	SAMPLE	193217-004	Water	123243	03/19/07 18:59	1.0	1	
023	jcj23	SAMPLE	193217-006	Water	123243	03/19/07 19:32	2.500	1	
024	jcj24	SAMPLE	193333-001	Water	123243	03/19/07 20:05	1.0	1	
025	jcj25	SAMPLE	193274-010	Water	123243	03/19/07 20:37	1.0	1	pH > 2
026	jcj26	SAMPLE	193262-002	Water	123243	03/19/07 21:10	1.0	1	
027	jcj27	SAMPLE	193262-003	Water	123243	03/19/07 21:43	1.0	1	
028	jcj28	SAMPLE	193262-007	Water	123243	03/19/07 22:15	1.0	1	
029	jcj29	SAMPLE	193515-002	Water	123243	03/19/07 22:48	1.0	1	
030	jcj30	SAMPLE	193515-003	Water	123243	03/19/07 23:21	1.0	1	
031	jcj31	SAMPLE	193515-004	Water	123243	03/19/07 23:53	1.0	1	
032	jcj32	SAMPLE	193515-005	Water	123243	03/20/07 00:26	1.0	1	
033	jcj33	SAMPLE	193515-006	Water	123243	03/20/07 00:58	1.0	1	
034	jcj34	SAMPLE	193515-007	Water	123243	03/20/07 01:31	1.0	1	
035	jcj35	SAMPLE	193515-009	Water	123243	03/20/07 02:03	1.0	1	
036	jcj36	X	IB			03/20/07 02:36	1.0	1	
037	jcj37	X	IB			03/20/07 03:09	1.0	1	
038	jcj38	X	IB			03/20/07 03:41	1.0	1	
039	jcj39	X	IB-1			03/20/07 04:14	1.0	1	
040	jcj40	X	IB-10			03/20/07 04:46	1.0	1	

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5537 6=S5723 7=S5614

REPORTING SUMMARY FOR 193217 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACECCCTCZCCDICZCCXCBLBYYOTBCBCZR	M MEEELSBE AKELACA EPCBPMPAOECBZLLTYMAFAM4	E EA 1N E1 1 1MLL1 AMK1E11 2 MZ MOX E MF	2 3 2 2 2 3 2
193217-001	MSVOA08	03/12/07 02:42	1.0	| | |

REPORTING SUMMARY FOR 193217 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACECCCTCZCCDICZCCXCBLBYYOTBCBCZR	M ME EELSBE A KELACA EPCBPMPAOECBZLLTYMAFAM4	E EA 1N E1 1 1MLL1 AMK1E11 2 MZ MOX E M1EF	2 3 2 3 2	
193217-022	MSVOA08	03/16/07 03:22	1.0	+++++++

REPORTING SUMMARY FOR 193217 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACECCCTCZCCDICZCCXCBLBYYOTBCBCZR	MMEEELSBE AKELACA EPCBPMPAOECBZLLTYMAFAM4	EEA 1N E1 1 1MM1L1 AMK1E11 2 MZ MOX E M1EF	2 3 2 2 3 2
QC379792	MSVOA10	03/19/07 10:16	1.0	|+|+|+\

GC/MS VOA SAMPLE PREP LOG SHEET	CURTIS & TOMPKINS, LTD.

DATE: 3/15/07
PREPPED BY: Zee

123142 WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193360 - 1		B					1X	
2	- 2								
3	- 3								
4	193217 - 1		C	<2			5	mix 1X	
5	- 2		D						
6	- 3		C						
7	- 4								
8	- 6							1X	
9	- 7								
10	- 8								
11	- 9		B						
12	- 12		C						
13	- 13		A					TB	
14	- 14		C						
15	- 15								
16	- 16								
17	- 17								
18	- 18								
19	- 19								
20	- 20								
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/15/07
PREPPED BY. Zia & TEW

123144

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER	Due	Hold
1	193312-006							RRe 2000x (out of clock)		3/15	3/20
2	~~193191-008~~							RRe 1x Freon 113 curve +	on MS/D	3/16	3/20
3	193312-~~013~~							7.14x tight surr limits		3/15	3/21
4	~~-012~~							625x			3/20
5	-002		B	<2			8	1x			3/21
6	-007			<2				14.2x			3/20
7	-005							200x			
8	-001			<2				1x (TB)			
9	193312-6			<2				~~2000x~~, clock			
10	-13							~~7.14x~~			
11	-12							~~6.25x~~			
12	-021			<2				500x			
13	-022							142.9x			
14	-023							625x			
15	-024							500x			
16	-025			<2				1x FB			
17	-026							2000x			
18	-027							4000x			
19	193339-002		B	7				RRe 1x			
20	-006		D	<2				1x MS/MSD D,E,F pH=<2			
21	193217-021		CDEF								
22	-022										
23	-023										
24	-024										
25											
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PREPFORM.XLS

7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/16/07
PREPPED BY: [illegible]

~~193201~~ JAW 3-19-07 **WATER**
123201

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193312-007		C	<2			8	RRC ~~333x OD~~ 14.29x	Surr ↓
2	-013							RRC 16.7x Naphthalene	
3	-022							RRC 250x Benzene	
4	-021							RRC 333x OD	
5	-026		A					RRC 250x OD	
6	-016		B					RRC 625x Naphthalene	
7	-020		A		1mL			RRC 167x	
8	-004		C					62.5x	
9	~~-025~~		A	<2				7143x > Put Off	
10	~~-029~~							2000x	
11	-003		ABCD	<2				MS/MSD 1x	
12	193217-007		D	<2				RRC 1x	
13	-020								
14									
15									
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/19
PREPPED BY: [illegible]

WATER

123243 14+ ms/msd

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193332-003		F	<2			ID	RR 1x ccu - n-Butyl, tert, sec NAPH, CS2	Prepped in Brick
2	193333-001		C					RR 1x sec-, n-Butyl Vt	
3	193274-010		D	7				RR 1x O.D	
4	~~193317-005~~		E					RR 6.25x ~~MSS/MSD~~	Put off
5	1		B					RR 5x OD	
6	4							~~RR 1.42x OD~~	
7	6							~~RR 7.14x OD~~	
8	7							~~RR 8.3x OD~~	
9	193217-3		D	<2				RR 1x surr 7	HoN 3/20
10	4							RR 1x	
11	5		CDEF	<2				1x MSS/MSD	
12	6		E					RR 2.5x surr 7	
13	193262-2		V	<2				1x	
14	2-3		A					1x	
15	-7		K					1x ~~Put off~~ SSS 3/19	
16	193492-~~3~~4		C		LV			RR 1x PCE co/	
17	193575-001		A					TB	
18	-002		B					1x	
19	-003								
20	-004								
21	-005								
22	-006								
23	-007							EVB	
24	-008							1x	
25	-009								
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7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/19/07
PREPPED BY: [illegible]

123261 WATER

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			COFF	<2			5	MB 1X, MSS/MSI/MSD 60	
1	193217-11		O	⊥				1X	
2	193277-1		~~A~~K					1X in Fridge	
3	~~193262-7~~		~~A~~	<2				TB	
4	193267-9		~~B~~C					1X	
5	-10		B						
6	-17		A						
7	-18		B						
8	-19		C						
9	-20		B						
0	-22		⊥	⊥					
1	-23		B	<2				62.5X prepped	in Fridge
2	193329-1							1X	
3	-2								
4	-3								
5	-4		⊥						
16	-5		C					1X	
17	-6								
18	-7								
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PREPFORM.XLS

7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/23/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF08GW01	Batch#:	123004
Lab ID:	193217-014	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	88	65-135

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF08GW02B	Batch#:	123004
Lab ID:	193217-015	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	93	65-135

ND= Not Detected
RL= Reporting Limit

44.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF08GW03	Batch#:	123004
Lab ID:	193217-016	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	79	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF08GW06	Batch#:	123004
Lab ID:	193217-017	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	91	65-135

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378784	Batch#:	123004
Matrix:	Water	Prepared:	03/12/07
Units:	ug/L	Analyzed:	03/14/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	110	65-135

ND= Not Detected
RL= Reporting Limit

47.0

00319

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	123004
Units:	ug/L	Prepared:	03/12/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: BS Lab ID: QC378785

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1877	94	65-135
Heptachlor	0.2000	0.1723	86	65-135
Aldrin	0.2000	0.1753	88	65-135
Dieldrin	0.4000	0.3568	89	65-135
Endrin	0.4000	0.3468	87	65-135
4,4'-DDT	0.4000	0.3603	90	65-135

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	81	65-135

Type: BSD Lab ID: QC378786

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1721	86	65-135	9	35
Heptachlor	0.2000	0.1637	82	65-135	5	35
Aldrin	0.2000	0.1675	84	65-135	5	35
Dieldrin	0.4000	0.3281	82	65-135	8	35
Endrin	0.4000	0.3178	79	65-135	9	35
4,4'-DDT	0.4000	0.3278	82	65-135	9	35

Surrogate	%REC	Limits
TCMX	72	65-135
Decachlorobiphenyl	76	65-135

RPD= Relative Percent Difference

48.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807102991001
Units : pg

Name : gc23pest_071
Date : 12-MAR-2007 20:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_018	807102991018	PEST_1	12-MAR-2007 20:02	S5553
L2	071_019	807102991019	PEST_2	12-MAR-2007 20:24	S5554
L3	071_020	807102991020	PEST_3	12-MAR-2007 20:45	S5555
L4	071_021	807102991021	PEST_4	12-MAR-2007 21:07	S5556
L5	071_022	807102991022	PEST_5	12-MAR-2007 21:28	S5049
L6	071_023	807102991023	PEST_6	12-MAR-2007 21:49	S5050
L7	071_024	807102991024	PEST_7	12-MAR-2007 22:11	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	8287.0	8058.0	7084.2	6450.4	7781.5	7196.6	6140.7	AVRG		1.37E-4		7285.5	11	0.995	20	
gamma-BHC	A	7685.0	7315.2	6305.2	5715.7	7032.6	6447.7	5570.9	AVRG		1.52E-4		6581.8	12	0.995	20	
beta-BHC	A	3095.0	2928.4	2536.5	2289.9	2848.4	2548.5	2289.8	AVRG		3.78E-4		2648.1	12	0.995	20	
delta-BHC	A	7865.5	7353.0	6225.3	5569.8	7232.0	6426.1	5629.1	AVRG		1.51E-4		6614.4	13	0.995	20	
Heptachlor	A	7061.0	6909.2	5846.8	5223.0	6670.1	6035.2	5240.0	AVRG		1.63E-4		6140.7	12	0.995	20	
Aldrin	A	7383.0	7000.8	6064.0	5394.5	6508.6	5980.0	5185.6	AVRG		1.61E-4		6216.6	13	0.995	20	
Heptachlor epoxide	A	6466.5	6208.2	5333.4	4709.8	5820.6	5240.0	4556.7	AVRG		1.83E-4		5476.4	13	0.995	20	
gamma-Chlordane	A	6326.0	6042.0	5931.0	4609.5	5730.7	5240.1	4648.2	AVRG		1.82E-4		5503.9	12	0.995	20	
alpha-Chlordane	A	5679.5	5906.6	4846.8	4488.6	5429.4	5019.6	4388.7	AVRG		1.96E-4		5108.5	11	0.995	20	
4,4'-DDE	A	5914.8	5544.2	4606.7	4006.1	5253.9	4670.3	3880.0	AVRG		2.07E-4		4839.4	16	0.995	20	
Endosulfan I	A	5736.5	5618.8	5025.3	4220.5	5485.7	4875.1	4360.5	AVRG		1.98E-4		5046.0	12	0.995	20	
Dieldrin	A	6185.5	5895.7	4968.6	4380.2	5518.9	4863.6	3946.9	AVRG		1.96E-4		5108.5	16	0.995	20	
Endrin	A	5318.0	4994.3	4129.3	3550.0	4688.8	4133.9	3466.7	AVRG		2.31E-4		4325.8	16	0.995	20	
4,4'-DDD	A	4665.8	4268.2	3556.8	3062.0	4163.8	3766.0	3232.3	AVRG		2.62E-4		3816.4	15	0.995	20	
Endosulfan II	A	5287.8	4906.4	4038.9	3541.4	4571.7	4019.6	3467.7	AVRG		2.35E-4		4261.9	16	0.995	20	
4,4'-DDT	A	4666.5	4529.0	3675.4	3162.4	4431.1	4004.5	3505.8	AVRG		2.50E-4		3996.4	14	0.995	20	
Methoxychlor	A	2148.9	1896.2	1492.0	1261.8	1727.5	1392.3		AVRG		6.05E-4		1653.1	20	0.995	20	
Endosulfan sulfate	A	4723.5	4400.2	3608.3	3073.6	4101.6	3672.3	3236.4	AVRG		2.61E-4		3830.8	16	0.995	20	
Endrin ketone	A	5529.5	5005.7	4116.5	3508.4	4729.0	4163.8	3492.8	AVRG		2.29E-4		4363.7	17	0.995	20	
TCMX	A	4485.0	4401.6	3829.2	3464.1	4099.7	3760.0	3207.8	AVRG		2.57E-4		3892.5	12	0.995	20	
Decachlorobiphenyl	A	4005.8	3708.2	2905.0	2467.0	3514.3	3034.9	2832.3	AVRG		3.12E-4		3209.6	17	0.995	20	
alpha-BHC	B	10379	9720.8	9185.8	9304.8	9341.7	9054.6	8238.2	AVRG		1.07E-4		9317.8	7	0.995	20	
gamma-BHC	B	10327	8906.2	8272.4	8372.2	8386.3	8023.0	7364.1	AVRG		1.17E-4		8521.5	11	0.995	20	
beta-BHC	B	3760.0	3533.6	3293.4	3339.2	3284.8	3079.7	2902.6	AVRG		3.02E-4		3313.3	8	0.995	20	
delta-BHC	B	9285.5	8811.2	8223.6	8557.3	8376.8	8132.5	7408.1	AVRG		1.19E-4		8399.3	7	0.995	20	
Heptachlor	B	8454.0	8021.6	7542.5	7710.8	7598.5	7156.8	6760.2	AVRG		1.31E-4		7606.3	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8790.5	8196.0	7792.6	7813.6	7763.5	7400.8	6843.9	AVRG		1.28E-4		7800.1	8	0.995	20	
Heptachlor epoxide	B	8002.5	7514.6	7027.2	6980.7	6926.6	6421.1	5915.4	AVRG		1.43E-4		6969.7	10	0.995	20	
gamma-Chlordane	B	7858.0	7429.4	6875.3	6965.6	6900.6	6487.2	6158.9	AVRG		1.44E-4		6953.6	8	0.995	20	
alpha-Chlordane	B	6847.5	7052.0	6504.1	6635.1	6608.6	6219.1	5837.2	AVRG		1.53E-4		6529.1	6	0.995	20	
4,4'-DDE	B	7323.0	6830.1	6308.5	6547.2	6376.3	5890.2	5096.6	AVRG		1.58E-4		6338.8	11	0.995	20	
Endosulfan I	B	7270.5	6953.4	6436.2	6445.6	6330.3	5873.0	5457.6	AVRG		1.56E-4		6395.2	10	0.995	20	
Dieldrin	B	7757.5	7306.0	6750.4	6812.5	6711.2	6128.7	5096.2	AVRG		1.50E-4		6651.8	13	0.995	20	
Endrin	B	6295.8	5776.3	5359.1	5473.8	5185.3	4745.9	4274.8	AVRG		1.89E-4		5301.6	12	0.995	20	
4,4'-DDD	B	6231.8	5746.1	5301.8	5462.1	5278.5	4796.5	4369.4	AVRG		1.88E-4		5312.3	11	0.995	20	
Endosulfan II	B	6138.5	6000.2	5397.2	5599.1	5438.2	5007.5	4334.7	AVRG		1.85E-4		5416.5	11	0.995	20	
4,4'-DDT	B	5267.3	5012.3	4765.4	5153.5	4940.4	4702.8	4415.9	AVRG		2.04E-4		4893.9	6	0.995	20	
Methoxychlor	B	2436.2	2150.3	1993.5	2072.8	1911.8	1591.5	1278.0	AVRG		5.21E-4		1919.2	20	0.995	20	
Endosulfan sulfate	B	5854.8	5385.8	4883.5	4961.6	4759.8	4321.7	3959.4	AVRG		2.05E-4		4875.2	13	0.995	20	
Endrin ketone	B	6845.5	6332.5	5723.3	5904.4	5679.2	5112.4	4372.3	AVRG		1.75E-4		5709.9	14	0.995	20	
TCMX	B	5686.3	5259.1	4933.2	4944.9	4923.6	4703.2	4308.6	AVRG		2.01E-4		4965.6	9	0.995	20	
Decachlorobiphenyl	B	4716.5	4361.6	3899.0	4138.3	3786.9	3424.9	3453.2	AVRG		2.52E-4		3968.6	12	0.995	20	
Average EPA 8081A	A												(n=22)	15		20	
Average EPA 8081A	B												(n=22)	10		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00		pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_071
Calnum : 807102991001 Cal Date: 12-MAR-2007

ICV 807102991027 (071_027 12-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	7285.5	6485.8	25.00	22.26	pg	-11	15	
gamma-BHC	A	6581.8	5846.4	25.00	22.21	pg	-11	15	
beta-BHC	A	2648.1	2307.7	25.00	21.79	pg	-13	15	
delta-BHC	A	6614.4	6045.2	25.00	22.85	pg	-9	15	
Heptachlor	A	6140.7	5329.8	25.00	21.70	pg	-13	15	
Aldrin	A	6216.6	5495.8	25.00	22.10	pg	-12	15	
Heptachlor epoxide	A	5476.4	4814.2	25.00	21.98	pg	-12	15	
gamma-Chlordane	A	5503.9	4927.7	25.00	22.38	pg	-10	15	
alpha-Chlordane	A	5108.5	4514.2	25.00	22.09	pg	-12	15	
4,4'-DDE	A	4839.4	4577.0	25.00	23.64	pg	-5	15	
Endosulfan I	A	5046.0	4608.2	25.00	22.83	pg	-9	15	
Dieldrin	A	5108.5	4802.8	25.00	23.50	pg	-6	15	
Endrin	A	4325.8	4152.0	25.00	24.00	pg	-4	15	
4,4'-DDD	A	3816.4	3520.7	25.00	23.06	pg	-8	15	
Endosulfan II	A	4261.9	4027.6	25.00	23.63	pg	-5	15	
4,4'-DDT	A	3996.4	3725.3	25.00	23.30	pg	-7	15	
Methoxychlor	A	1653.1	1887.4	25.00	28.54	pg	14	15	
Endosulfan sulfate	A	3830.8	3629.4	25.00	23.69	pg	-5	15	
Endrin ketone	A	4363.7	4210.0	25.00	24.12	pg	-4	15	
alpha-BHC	B	9317.8	8960.6	25.00	24.04	pg	-4	15	
gamma-BHC	B	8521.5	8058.8	25.00	23.64	pg	-5	15	
beta-BHC	B	3313.3	3135.7	25.00	23.66	pg	-5	15	
delta-BHC	B	8399.3	8530.4	25.00	25.39	pg	2	15	
Heptachlor	B	7606.3	7356.9	25.00	24.18	pg	-3	15	
Aldrin	B	7800.1	7506.9	25.00	24.06	pg	-4	15	
Heptachlor epoxide	B	6969.7	6580.6	25.00	23.60	pg	-6	15	
gamma-Chlordane	B	6953.6	6784.9	25.00	24.39	pg	-2	15	
alpha-Chlordane	B	6529.1	6357.4	25.00	24.34	pg	-3	15	
4,4'-DDE	B	6338.8	6326.6	25.00	24.95	pg	0	15	
Endosulfan I	B	6395.2	5959.5	25.00	23.30	pg	-7	15	
Dieldrin	B	6651.8	6557.3	25.00	24.64	pg	-1	15	
Endrin	B	5301.6	5571.4	25.00	26.27	pg	5	15	
4,4'-DDD	B	5312.3	5253.4	25.00	24.72	pg	-1	15	
Endosulfan II	B	5416.5	5525.2	25.00	25.50	pg	2	15	
4,4'-DDT	B	4893.9	4894.6	25.00	25.00	pg	0	15	
Methoxychlor	B	1919.2	2349.8	25.00	30.61	pg	**22**	15	v+ ***
Endosulfan sulfate	B	4875.2	4850.7	25.00	24.87	pg	-1	15	
Endrin ketone	B	5709.9	5846.1	25.00	25.60	pg	2	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

807102991001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991067 File : 071_067 Time : 14-MAR-2007 01:15

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	279505	5	15	
4,4'-DDE	A	2763			
4,4'-DDD	A	11143			
Endrin	A	170760	6	15	
Endrin aldehyde	A	2396			
Endrin ketone	A	8141			
4,4'-DDT	B	488740	8	15	
4,4'-DDE	B	2431			
4,4'-DDD	B	38259			
Endrin	B	272225	12	15	
Endrin aldehyde	B	8691			
Endrin ketone	B	29865			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807102991083 File : 071_083 Time : 14-MAR-2007 06:59

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	377008	2	15	
4,4'-DDE	A	3153			
4,4'-DDD	A	6132			
Endrin	A	214503	3	15	
Endrin aldehyde	A	1451			
Endrin ketone	A	5220			
4,4'-DDT	B	490253	7	15	
4,4'-DDE	B	2146			
4,4'-DDD	B	36826			
Endrin	B	265738	12	15	
Endrin aldehyde	B	7863			
Endrin ketone	B	29968			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807107260011 File : 074_011 Time : 15-MAR-2007 17:11

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	376856	7	15	
4,4'-DDE	A	3212			
4,4'-DDD	A	23369			
Endrin	A	233237	3	15	
Endrin aldehyde	A	1244			
Endrin ketone	A	5310			
4,4'-DDT	B	394296	12	15	
4,4'-DDE	B	2957			
4,4'-DDD	B	48967			
Endrin	B	267826	6	15	
Endrin aldehyde	B	2671			
Endrin ketone	B	12989			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807107260020 File : 074_020 Time : 15-MAR-2007 20:33

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	321149	8	15	
4,4'-DDE	A	3114			
4,4'-DDD	A	24322			
Endrin	A	207508	4	15	
Endrin aldehyde	A	686			
Endrin ketone	A	7331			
4,4'-DDT	B	433518	9	15	
4,4'-DDE	B	2724			
4,4'-DDD	B	42002			
Endrin	B	280181	5	15	
Endrin aldehyde	B	1347			
Endrin ketone	B	12850			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807102991070 File : 071_070 Time : 14-MAR-2007 02:19
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7995.4	10.00	10.97	pg	10	15	
gamma-BHC	A	6581.8	7162.2	10.00	10.88	pg	9	15	
beta-BHC	A	2648.1	2896.5	10.00	10.94	pg	9	15	
delta-BHC	A	6614.4	7116.3	10.00	10.76	pg	8	15	
Heptachlor	A	6140.7	6766.7	10.00	11.02	pg	10	15	
Aldrin	A	6216.6	6778.8	10.00	10.90	pg	9	15	
Heptachlor epoxide	A	5476.4	5946.1	10.00	10.86	pg	9	15	
gamma-Chlordane	A	5503.9	5825.1	10.00	10.58	pg	6	15	
alpha-Chlordane	A	5108.5	5452.8	10.00	10.67	pg	7	15	
4,4'-DDE	A	4839.4	5144.5	20.00	21.26	pg	6	15	
Endosulfan I	A	5046.0	5583.1	10.00	11.06	pg	11	15	
Dieldrin	A	5108.5	5481.8	20.00	21.46	pg	7	15	
Endrin	A	4325.8	4632.5	20.00	21.42	pg	7	15	
4,4'-DDD	A	3816.4	3965.0	20.00	20.78	pg	4	15	
Endosulfan II	A	4261.9	4401.5	20.00	20.65	pg	3	15	
4,4'-DDT	A	3996.4	4107.6	20.00	20.56	pg	3	15	
Methoxychlor	A	1653.1	1615.5	100.0	97.72	pg	-2	15	
Endosulfan sulfate	A	3830.8	3939.4	20.00	20.57	pg	3	15	
Endrin ketone	A	4363.7	4423.4	20.00	20.27	pg	1	15	
TCMX	A	3892.5	4426.7	20.00	22.74	pg	14	15	
Decachlorobiphenyl	A	3209.6	3066.5	20.00	19.11	pg	-4	15	
alpha-BHC	B	9317.8	8932.8	10.00	9.587	pg	-4	15	
gamma-BHC	B	8521.5	8270.7	10.00	9.706	pg	-3	15	
beta-BHC	B	3313.3	3281.0	10.00	9.902	pg	-1	15	
delta-BHC	B	8399.3	8225.7	10.00	9.793	pg	-2	15	
Heptachlor	B	7606.3	7331.8	10.00	9.639	pg	-4	15	
Aldrin	B	7800.1	7622.8	10.00	9.773	pg	-2	15	
Heptachlor epoxide	B	6969.7	6838.9	10.00	9.812	pg	-2	15	
gamma-Chlordane	B	6953.6	6727.1	10.00	9.674	pg	-3	15	
alpha-Chlordane	B	6529.1	6432.2	10.00	9.852	pg	-1	15	
4,4'-DDE	B	6338.8	6187.0	20.00	19.52	pg	-2	15	
Endosulfan I	B	6395.2	6340.1	10.00	9.914	pg	-1	15	
Dieldrin	B	6651.8	6565.5	20.00	19.74	pg	-1	15	
Endrin	B	5301.6	5039.3	20.00	19.01	pg	-5	15	
4,4'-DDD	B	5312.3	5395.4	20.00	20.31	pg	2	15	
Endosulfan II	B	5416.5	5313.9	20.00	19.62	pg	-2	15	
4,4'-DDT	B	4893.9	4444.1	20.00	18.16	pg	-9	15	
Methoxychlor	B	1919.2	1879.2	100.0	97.92	pg	-2	15	
Endosulfan sulfate	B	4875.2	4789.9	20.00	19.65	pg	-2	15	
Endrin ketone	B	5709.9	5724.8	20.00	20.05	pg	0	15	
TCMX	B	4965.6	4920.1	20.00	19.82	pg	-1	15	
Decachlorobiphenyl	B	3968.6	3889.4	20.00	19.60	pg	-2	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 807102991084
Cal : 807102991001
Standards: S5556

Run Name: PEST_4
File : 071_084
Caldate : 12-MAR-2007

IDF : 1.0
Time : 14-MAR-2007 07:21

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7319.2	20.00	20.09	pg	0	15	
gamma-BHC	A	6581.8	6690.7	20.00	20.33	pg	2	15	
beta-BHC	A	2648.1	2689.8	20.00	20.31	pg	2	15	
delta-BHC	A	6614.4	6652.0	20.00	20.11	pg	1	15	
Heptachlor	A	6140.7	6330.0	20.00	20.62	pg	3	15	
Aldrin	A	6216.6	6296.9	20.00	20.26	pg	1	15	
Heptachlor epoxide	A	5476.4	5500.4	20.00	20.09	pg	0	15	
gamma-Chlordane	A	5503.9	5454.9	20.00	19.82	pg	-1	15	
alpha-Chlordane	A	5108.5	5178.2	20.00	20.27	pg	1	15	
4,4'-DDE	A	4839.4	4920.1	40.00	40.67	pg	2	15	
Endosulfan I	A	5046.0	5098.6	20.00	20.21	pg	1	15	
Dieldrin	A	5108.5	5246.5	40.00	41.08	pg	3	15	
Endrin	A	4325.8	4562.2	40.00	42.19	pg	5	15	
4,4'-DDD	A	3816.4	3961.9	40.00	41.52	pg	4	15	
Endosulfan II	A	4261.9	4204.1	40.00	39.46	pg	-1	15	
4,4'-DDT	A	3996.4	4295.8	40.00	43.00	pg	7	15	
Methoxychlor	A	1653.1	1700.8	200.0	205.8	pg	3	15	
Endosulfan sulfate	A	3830.8	3874.2	40.00	40.45	pg	1	15	
Endrin ketone	A	4363.7	4405.0	40.00	40.38	pg	1	15	
TCMX	A	3892.5	3993.9	40.00	41.04	pg	3	15	
Decachlorobiphenyl	A	3209.6	3163.1	40.00	39.42	pg	-1	15	
alpha-BHC	B	9317.8	9498.3	20.00	20.39	pg	2	15	
gamma-BHC	B	8521.5	8628.1	20.00	20.25	pg	1	15	
beta-BHC	B	3313.3	3370.5	20.00	20.35	pg	2	15	
delta-BHC	B	8399.3	8582.3	20.00	20.44	pg	2	15	
Heptachlor	B	7606.3	7679.4	20.00	20.19	pg	1	15	
Aldrin	B	7800.1	7912.0	20.00	20.29	pg	1	15	
Heptachlor epoxide	B	6969.7	7003.5	20.00	20.10	pg	0	15	
gamma-Chlordane	B	6953.6	6958.2	20.00	20.01	pg	0	15	
alpha-Chlordane	B	6529.1	6630.5	20.00	20.31	pg	2	15	
4,4'-DDE	B	6338.8	6499.2	40.00	41.01	pg	3	15	
Endosulfan I	B	6395.2	6456.1	20.00	20.19	pg	1	15	
Dieldrin	B	6651.8	6844.1	40.00	41.16	pg	3	15	
Endrin	B	5301.6	5253.1	40.00	39.63	pg	-1	15	
4,4'-DDD	B	5312.3	5643.9	40.00	42.50	pg	6	15	
Endosulfan II	B	5416.5	5513.5	40.00	40.72	pg	2	15	
4,4'-DDT	B	4893.9	4724.0	40.00	38.61	pg	-3	15	
Methoxychlor	B	1919.2	1967.3	200.0	205.0	pg	3	15	
Endosulfan sulfate	B	4875.2	4957.3	40.00	40.67	pg	2	15	
Endrin ketone	B	5709.9	5971.2	40.00	41.83	pg	5	15	
TCMX	B	4965.6	5103.2	40.00	41.11	pg	3	15	
Decachlorobiphenyl	B	3968.6	4068.8	40.00	41.01	pg	3	15	
Average EPA 8081A	A	(n=22)					2	15	
Average EPA 8081A	B	(n=22)					2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807107260012 File : 074_012 Time : 15-MAR-2007 17:32
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7575.1	20.00	20.79	pg	4	15	
gamma-BHC	A	6581.8	6734.5	20.00	20.46	pg	2	15	
beta-BHC	A	2648.1	2746.4	20.00	20.74	pg	4	15	
delta-BHC	A	6614.4	6771.8	20.00	20.48	pg	2	15	
Heptachlor	A	6140.7	6082.4	20.00	19.81	pg	-1	15	
Aldrin	A	6216.6	6427.1	20.00	20.68	pg	3	15	
Heptachlor epoxide	A	5476.4	5608.2	20.00	20.48	pg	2	15	
gamma-Chlordane	A	5503.9	5547.7	20.00	20.16	pg	1	15	
alpha-Chlordane	A	5108.5	5191.0	20.00	20.32	pg	2	15	
4,4'-DDE	A	4839.4	4973.4	40.00	41.11	pg	3	15	
Endosulfan I	A	5046.0	5215.3	20.00	20.67	pg	3	15	
Dieldrin	A	5108.5	5301.1	40.00	41.51	pg	4	15	
Endrin	A	4325.8	4539.6	40.00	41.98	pg	5	15	
4,4'-DDD	A	3816.4	4157.0	40.00	43.57	pg	9	15	
Endosulfan II	A	4261.9	4193.0	40.00	39.35	pg	-2	15	
4,4'-DDT	A	3996.4	3471.2	40.00	34.74	pg	-13	15	
Methoxychlor	A	1653.1	1516.7	200.0	183.5	pg	-8	15	
Endosulfan sulfate	A	3830.8	3931.3	40.00	41.05	pg	3	15	
Endrin ketone	A	4363.7	4364.3	40.00	40.01	pg	0	15	
TCMX	A	3892.5	4088.2	40.00	42.01	pg	5	15	
Decachlorobiphenyl	A	3209.6	3253.9	40.00	40.55	pg	1	15	
alpha-BHC	B	9317.8	9206.7	20.00	19.76	pg	-1	15	
gamma-BHC	B	8521.5	8265.1	20.00	19.40	pg	-3	15	
beta-BHC	B	3313.3	3236.6	20.00	19.54	pg	-2	15	
delta-BHC	B	8399.3	8174.0	20.00	19.46	pg	-3	15	
Heptachlor	B	7606.3	6898.4	20.00	18.14	pg	-9	15	
Aldrin	B	7800.1	7597.5	20.00	19.48	pg	-3	15	
Heptachlor epoxide	B	6969.7	6760.5	20.00	19.40	pg	-3	15	
gamma-Chlordane	B	6953.6	6711.4	20.00	19.30	pg	-3	15	
alpha-Chlordane	B	6529.1	6312.4	20.00	19.34	pg	-3	15	
4,4'-DDE	B	6338.8	6106.8	40.00	38.54	pg	-4	15	
Endosulfan I	B	6395.2	6230.8	20.00	19.49	pg	-3	15	
Dieldrin	B	6651.8	6573.3	40.00	39.53	pg	-1	15	
Endrin	B	5301.6	5201.9	40.00	39.25	pg	-2	15	
4,4'-DDD	B	5312.3	5329.7	40.00	40.13	pg	0	15	
Endosulfan II	B	5416.5	5183.8	40.00	38.28	pg	-4	15	
4,4'-DDT	B	4893.9	3715.5	40.00	30.37	pg	**-24**	15	c- ***
Methoxychlor	B	1919.2	1661.9	200.0	173.2	pg	-13	15	
Endosulfan sulfate	B	4875.2	4609.9	40.00	37.82	pg	-5	15	
Endrin ketone	B	5709.9	5195.8	40.00	36.40	pg	-9	15	
TCMX	B	4965.6	4943.5	40.00	39.82	pg	0	15	
Decachlorobiphenyl	B	3968.6	3422.8	40.00	34.50	pg	-14	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

-=low bias c=CCV

807107260012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_5 IDF : 1.0
Seqnum : 807107260021 File : 074_021 Time : 15-MAR-2007 20:54
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5049

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7906.8	25.00	27.13	pg	9	15	
gamma-BHC	A	6581.8	7020.4	25.00	26.67	pg	7	15	
beta-BHC	A	2648.1	2871.8	25.00	27.11	pg	8	15	
delta-BHC	A	6614.4	7179.7	25.00	27.14	pg	9	15	
Heptachlor	A	6140.7	6479.8	25.00	26.38	pg	6	15	
Aldrin	A	6216.6	6629.9	25.00	26.66	pg	7	15	
Heptachlor epoxide	A	5476.4	5878.5	25.00	26.84	pg	7	15	
gamma-Chlordane	A	5503.9	5894.7	25.00	26.77	pg	7	15	
alpha-Chlordane	A	5108.5	5628.8	25.00	27.55	pg	10	15	
4,4'-DDE	A	4839.4	5406.4	50.00	55.86	pg	12	15	
Endosulfan I	A	5046.0	5496.4	25.00	27.23	pg	9	15	
Dieldrin	A	5108.5	5672.5	50.00	55.52	pg	11	15	
Endrin	A	4325.8	4920.2	50.00	56.87	pg	14	15	
4,4'-DDD	A	3816.4	4583.6	50.00	60.05	pg	**20**	15	c+ ***
Endosulfan II	A	4261.9	4688.7	50.00	55.01	pg	10	15	
4,4'-DDT	A	3996.4	4169.9	50.00	52.17	pg	4	15	
Methoxychlor	A	1653.1	1758.9	250.0	266.0	pg	6	15	
Endosulfan sulfate	A	3830.8	4313.3	50.00	56.30	pg	13	15	
Endrin ketone	A	4363.7	4977.0	50.00	57.03	pg	14	15	
TCMX	A	3892.5	4172.4	50.00	53.60	pg	7	15	
Decachlorobiphenyl	A	3209.6	3804.6	50.00	59.27	pg	**19**	15	c+
alpha-BHC	B	9317.8	9737.8	25.00	26.13	pg	5	15	
gamma-BHC	B	8521.5	8729.7	25.00	25.61	pg	2	15	
beta-BHC	B	3313.3	3408.7	25.00	25.72	pg	3	15	
delta-BHC	B	8399.3	8705.6	25.00	25.91	pg	4	15	
Heptachlor	B	7606.3	7707.3	25.00	25.33	pg	1	15	
Aldrin	B	7800.1	8059.0	25.00	25.83	pg	3	15	
Heptachlor epoxide	B	6969.7	7240.7	25.00	25.97	pg	4	15	
gamma-Chlordane	B	6953.6	7216.1	25.00	25.94	pg	4	15	
alpha-Chlordane	B	6529.1	6815.4	25.00	26.10	pg	4	15	
4,4'-DDE	B	6338.8	6705.0	50.00	52.89	pg	6	15	
Endosulfan I	B	6395.2	6600.2	25.00	25.80	pg	3	15	
Dieldrin	B	6651.8	7139.8	50.00	53.67	pg	7	15	
Endrin	B	5301.6	5771.4	50.00	54.43	pg	9	15	
4,4'-DDD	B	5312.3	5742.5	50.00	54.05	pg	8	15	
Endosulfan II	B	5416.5	5777.2	50.00	53.33	pg	7	15	
4,4'-DDT	B	4893.9	4699.8	50.00	48.02	pg	-4	15	
Methoxychlor	B	1919.2	1993.2	250.0	259.6	pg	4	15	
Endosulfan sulfate	B	4875.2	5012.9	50.00	51.41	pg	3	15	
Endrin ketone	B	5709.9	5836.0	50.00	51.10	pg	2	15	
TCMX	B	4965.6	5127.2	50.00	51.63	pg	3	15	
Decachlorobiphenyl	B	3968.6	4036.7	50.00	50.86	pg	2	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					4	15	

+=high bias c=CCV

SEQUENCE SUMMARY FOR 193217 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	071_001	X	PRIMER			12-MAR-2007 12:31	1.0					
002	071_002	X	PRIMER			12-MAR-2007 12:53	1.0					
003	071_003	X	PRIMER			12-MAR-2007 13:14	1.0					
004	071_004	X	PRIMER			12-MAR-2007 13:35	1.0					
005	071_005	X	HEX			12-MAR-2007 13:57	1.0					
006	071_006	X	PEST_3			12-MAR-2007 14:18	1.0	1.0	25	1	1 ac	
007	071_007	X	PEST_3			12-MAR-2007 14:40	1.0	1.0	36	1	1 ac	
008	071_008	X	PEM			12-MAR-2007 15:01	1.0	1.0		1	2	
009	071_009	X	PEST_4			12-MAR-2007 15:35	1.0	1.0	20	1	3 ac	
010	071_010	X	PEST_4			12-MAR-2007 16:00	1.0	1.0	27	1	3 ac	
011	071_011	X	PRIMER			12-MAR-2007 17:33	1.0					
012	071_012	X	PRIMER			12-MAR-2007 17:54	1.0					
013	071_013	X	PRIMER			12-MAR-2007 18:16	1.0					
014	071_014	X	PRIMER			12-MAR-2007 18:37	1.0					
015	071_015	X	HEX			12-MAR-2007 18:58	1.0					
016	071_016	PEM	PEM			12-MAR-2007 19:20	1.0	1.0		1	2	
017	071_017	X	HEX			12-MAR-2007 19:41	1.0					
018	071_018	ICAL	PEST_1			12-MAR-2007 20:02	1.0	1.0			4	
019	071_019	ICAL	PEST_2			12-MAR-2007 20:24	1.0	1.0			5	
020	071_020	ICAL	PEST_3			12-MAR-2007 20:45	1.0	1.0			1	
021	071_021	ICAL	PEST_4			12-MAR-2007 21:07	1.0	1.0			3	
022	071_022	ICAL	PEST_5			12-MAR-2007 21:28	1.0	1.0			6	
023	071_023	ICAL	PEST_6			12-MAR-2007 21:49	1.0	1.0			7	
024	071_024	ICAL	PEST_7			12-MAR-2007 22:11	1.0	1.0			8	
025	071_025	X	HEX			12-MAR-2007 22:32	1.0					
026	071_026	X	HEX			12-MAR-2007 22:53	1.0					
027	071_027	ICV	ICV			12-MAR-2007 23:15	1.0	1.0	3	1	9	2:XYL246=211.331
028	071_028	X	ICV			12-MAR-2007 23:36	1.0	1.0	4	1	9	2:CL10BZ=229.806
029	071_029	X	HEX			12-MAR-2007 23:57	1.0					
030	071_030	PEM	PEM			13-MAR-2007 11:00	1.0	1.0		1	2	

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193217 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	071_031	SAMPLE	193154-019	122843	Soil	13-MAR-2007 11:28	1.0	0.662			1		
032	071_032	X	HEX			13-MAR-2007 12:05	1.0						
033	071_033	PEM	PEM			13-MAR-2007 12:26	1.0	1.0			1	2	
034	071_034	CCV	PEST_3			13-MAR-2007 12:48	1.0	1.0			1	1	
035	071_035	X	HEX			13-MAR-2007 13:31	1.0						
036	071_036	ICAL	TOXAPHENE			13-MAR-2007 13:52	1.0	1.0				10	
037	071_037	X	TOXAPHENE			13-MAR-2007 14:13	1.0					10	
038	071_038	X	HEX			13-MAR-2007 14:34	1.0						
039	071_039	BLANK	QC378642	122973	Soil	13-MAR-2007 14:56	1.0	0.6669			1		
040	071_040	LCS	QC378643	122973	Soil	13-MAR-2007 15:17	1.0	0.6625			1		
041	071_041	MSS	193210-016	122973	Soil	13-MAR-2007 15:39	1.0	0.6669			1		
042	071_042	SAMPLE	193210-017	122973	Soil	13-MAR-2007 16:00	1.0	0.6633			1		
043	071_043	SAMPLE	193210-018	122973	Soil	13-MAR-2007 16:21	1.0	0.6603			1		
044	071_044	SAMPLE	193210-019	122973	Soil	13-MAR-2007 16:42	1.0	0.6579			1		
045	071_045	SAMPLE	193210-020	122973	Soil	13-MAR-2007 17:04	1.0	0.6577			1		
046	071_046	SAMPLE	193210-037	122973	Soil	13-MAR-2007 17:25	1.0	0.6594			1		
047	071_047	SAMPLE	193210-038	122973	Soil	13-MAR-2007 17:47	1.0	0.6607			1		
048	071_048	SAMPLE	193210-039	122973	Soil	13-MAR-2007 18:08	1.0	0.6638			1		
049	071_049	X	HEX			13-MAR-2007 18:30	1.0						
050	071_050	PEM	PEM			13-MAR-2007 19:10	1.0	1.0			1	2	
051	071_051	X	TOXAPHENE			13-MAR-2007 19:31	1.0	1.0	1		1	10	
052	071_052	CCV	TOXAPHENE			13-MAR-2007 19:53	1.0	1.0			1	10	
053	071_053	CCV	PEST_4			13-MAR-2007 20:14	1.0	1.0			1	3	
054	071_054	X	PEST_4			13-MAR-2007 20:36	1.0					3	
055	071_055	X	PEM			13-MAR-2007 20:57	1.0					2	
056	071_056	X	HEX			13-MAR-2007 21:19	1.0						
057	071_057	BLANK	QC377837	122778	Water	13-MAR-2007 21:40	1.0	0.01			1		
058	071_058	LCS	QC377838	122778	Water	13-MAR-2007 22:02	1.0	0.01			1		
059	071_059	SAMPLE	193108-008	122778	Water	13-MAR-2007 22:23	1.0	0.01	2	1	1		2:BHCGAM=102.821
060	071_060	SAMPLE	193108-011	122778	Water	13-MAR-2007 22:45	1.0	0.009901	1	1	1		1:BHCGAM=110.640

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193217 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
061	071_061	MSS	193210-027	122843	Soil	13-MAR-2007 23:06	1.0	0.6653	1		
062	071_062	SAMPLE	193210-028	122843	Soil	13-MAR-2007 23:28	1.0	0.6581	1		
063	071_063	SAMPLE	193210-029	122843	Soil	13-MAR-2007 23:49	1.0	0.666	1		
064	071_064	SAMPLE	193210-030	122843	Soil	14-MAR-2007 00:11	1.0	0.6607	1		
065	071_065	SAMPLE	193210-035	122843	Soil	14-MAR-2007 00:32	1.0	0.6651	1		
066	071_066	X	HEX			14-MAR-2007 00:54	1.0				
067	071_067	PEM	PEM			14-MAR-2007 01:15	1.0	1.0	1	2	
068	071_068	CCV	TOXAPHENE			14-MAR-2007 01:37	1.0	1.0	1	10	
069	071_069	X	TOXAPHENE			14-MAR-2007 01:58	1.0			10	
070	071_070	CCV	PEST_3			14-MAR-2007 02:19	1.0	1.0	1	1	
071	071_071	X	PEST_3			14-MAR-2007 02:41	1.0			1	
072	071_072	X	PEM			14-MAR-2007 03:02	1.0			2	
073	071_073	X	HEX			14-MAR-2007 03:24	1.0				
074	071_074	BLANK	QC378784	123004	Water	14-MAR-2007 03:45	1.0	0.01	1		
075	071_075	BS	QC378785	123004	Water	14-MAR-2007 04:07	1.0	0.01	1		
076	071_076	BSD	QC378786	123004	Water	14-MAR-2007 04:29	1.0	0.01	1		
077	071_077	SAMPLE	193261-001	123004	Water	14-MAR-2007 04:50	1.0	0.009804	1		
078	071_078	SAMPLE	193261-002	123004	Water	14-MAR-2007 05:12	1.0	0.009709	1		
079	071_079	SAMPLE	193261-003	123004	Water	14-MAR-2007 05:33	1.0	0.009804	1		
080	071_080	SAMPLE	193261-004	123004	Water	14-MAR-2007 05:55	1.0	0.009709	1		
081	071_081	SAMPLE	193335-001	123004	Water	14-MAR-2007 06:16	1.0	0.009804	1		
082	071_082	X	HEX			14-MAR-2007 06:38	1.0				
083	071_083	PEM	PEM			14-MAR-2007 06:59	1.0	1.0	1	2	
084	071_084	CCV	PEST_4			14-MAR-2007 07:21	1.0	1.0	1	3	
085	071_085	X	PEST_4			14-MAR-2007 07:42	1.0			3	
086	071_086	X	PEM			14-MAR-2007 08:04	1.0			2	
087	071_087	X	HEX			14-MAR-2007 08:26	1.0				

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193217 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807107260 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 15-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	074_001	X	PRIMER			15-MAR-2007 11:40	1.0						
002	074_002	X	PRIMER			15-MAR-2007 12:01	1.0						
003	074_003	X	PRIMER			15-MAR-2007 12:23	1.0						
004	074_004	X	HEX			15-MAR-2007 12:44	1.0						
005	074_005	PEM	PEM			15-MAR-2007 13:06	1.0	1.0			1	1	
006	074_006	CCV	PEST_3			15-MAR-2007 13:27	1.0	1.0	2		1	2	
007	074_007	X	HEX			15-MAR-2007 14:12	1.0						
008	074_008	SAMPLE	193325-006	123078	Soil	15-MAR-2007 14:33	1.0	0.6616	2		1		
009	074_009	SAMPLE	193176-001	123004	Water	15-MAR-2007 14:55	1.0	0.009615	5		1		3:GCHLOR=406.265
010	074_010	X	HEX			15-MAR-2007 16:49	1.0						
011	074_011	PEM	PEM			15-MAR-2007 17:11	1.0	1.0			1	1	
012	074_012	CCV	PEST_4			15-MAR-2007 17:32	1.0	1.0	1		1	3	
013	074_013	X	HEX			15-MAR-2007 18:03	1.0						
014	074_014	SAMPLE	193217-014	123004	Water	15-MAR-2007 18:25	1.0	0.009524	1		1		
015	074_015	SAMPLE	193217-015	123004	Water	15-MAR-2007 18:46	1.0	0.009434	1		1		
016	074_016	SAMPLE	193217-016	123004	Water	15-MAR-2007 19:08	1.0	0.009434	1		1		
017	074_017	SAMPLE	193217-017	123004	Water	15-MAR-2007 19:29	1.0	0.009901	1		1		
018	074_018	SAMPLE	193219-001	123004	Water	15-MAR-2007 19:50	1.0	0.009434	1	1	1		
019	074_019	X	HEX			15-MAR-2007 20:12	1.0						
020	074_020	PEM	PEM			15-MAR-2007 20:33	1.0	1.0			1	1	
021	074_021	CCV	PEST_5			15-MAR-2007 20:54	1.0	1.0	1		1	4	
022	074_022	X	PEST_5			15-MAR-2007 21:16	1.0	1.0	3		1	4	
023	074_023	X	PEM			15-MAR-2007 21:37	1.0	1.0			1	1	
024	074_024	X	HEX			15-MAR-2007 21:59	1.0						
025	074_025	X	ASECHECK			15-MAR-2007 22:20	1.0						

Stds used: 1=S5053 2=S5555 3=S5556 4=S5049

REPORTING SUMMARY FOR 193217 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-014	alpha-BHC	GC23	A	03/15/07 18:25
193217-014	beta-BHC	GC23	A	03/15/07 18:25
193217-014	gamma-BHC	GC23	A	03/15/07 18:25
193217-014	delta-BHC	GC23	A	03/15/07 18:25
193217-014	Heptachlor	GC23	A	03/15/07 18:25
193217-014	Aldrin	GC23	A	03/15/07 18:25
193217-014	Heptachlor epoxide	GC23	A	03/15/07 18:25
193217-014	Endosulfan I	GC23	A	03/15/07 18:25
193217-014	Dieldrin	GC23	A	03/15/07 18:25
193217-014	4,4'-DDE	GC23	A	03/15/07 18:25
193217-014	Endrin	GC23	A	03/15/07 18:25
193217-014	Endosulfan II	GC23	A	03/15/07 18:25
193217-014	Endosulfan sulfate	GC23	A	03/15/07 18:25
193217-014	4,4'-DDD	GC23	A	03/15/07 18:25
193217-014	4,4'-DDT	GC23	A	03/15/07 18:25
193217-014	alpha-Chlordane	GC23	A	03/15/07 18:25
193217-014	gamma-Chlordane	GC23	A	03/15/07 18:25
193217-014	Methoxychlor	GC23	A	03/15/07 18:25
193217-014	Endrin ketone	GC23	A	03/15/07 18:25
193217-014	Toxaphene	GC23	A	03/15/07 18:25
193217-014	TCMX	GC23	A	03/15/07 18:25
193217-014	Decachlorobiphenyl	GC23	B	03/15/07 18:25
193217-015	alpha-BHC	GC23	A	03/15/07 18:46
193217-015	beta-BHC	GC23	A	03/15/07 18:46
193217-015	gamma-BHC	GC23	A	03/15/07 18:46
193217-015	delta-BHC	GC23	A	03/15/07 18:46
193217-015	Heptachlor	GC23	A	03/15/07 18:46
193217-015	Aldrin	GC23	A	03/15/07 18:46
193217-015	Heptachlor epoxide	GC23	A	03/15/07 18:46
193217-015	Endosulfan I	GC23	A	03/15/07 18:46
193217-015	Dieldrin	GC23	A	03/15/07 18:46
193217-015	4,4'-DDE	GC23	A	03/15/07 18:46
193217-015	Endrin	GC23	A	03/15/07 18:46
193217-015	Endosulfan II	GC23	A	03/15/07 18:46
193217-015	Endosulfan sulfate	GC23	A	03/15/07 18:46
193217-015	4,4'-DDD	GC23	A	03/15/07 18:46
193217-015	4,4'-DDT	GC23	A	03/15/07 18:46
193217-015	alpha-Chlordane	GC23	A	03/15/07 18:46
193217-015	gamma-Chlordane	GC23	A	03/15/07 18:46
193217-015	Methoxychlor	GC23	A	03/15/07 18:46
193217-015	Endrin ketone	GC23	A	03/15/07 18:46
193217-015	Toxaphene	GC23	A	03/15/07 18:46
193217-015	TCMX	GC23	A	03/15/07 18:46
193217-015	Decachlorobiphenyl	GC23	B	03/15/07 18:46
193217-016	alpha-BHC	GC23	A	03/15/07 19:08
193217-016	beta-BHC	GC23	A	03/15/07 19:08
193217-016	gamma-BHC	GC23	A	03/15/07 19:08
193217-016	delta-BHC	GC23	A	03/15/07 19:08
193217-016	Heptachlor	GC23	A	03/15/07 19:08
193217-016	Aldrin	GC23	A	03/15/07 19:08
193217-016	Heptachlor epoxide	GC23	A	03/15/07 19:08
193217-016	Endosulfan I	GC23	A	03/15/07 19:08

REPORTING SUMMARY FOR 193217 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-016	Dieldrin	GC23	A	03/15/07 19:08
193217-016	4,4'-DDE	GC23	A	03/15/07 19:08
193217-016	Endrin	GC23	A	03/15/07 19:08
193217-016	Endosulfan II	GC23	A	03/15/07 19:08
193217-016	Endosulfan sulfate	GC23	A	03/15/07 19:08
193217-016	4,4'-DDD	GC23	A	03/15/07 19:08
193217-016	4,4'-DDT	GC23	A	03/15/07 19:08
193217-016	alpha-Chlordane	GC23	A	03/15/07 19:08
193217-016	gamma-Chlordane	GC23	A	03/15/07 19:08
193217-016	Methoxychlor	GC23	A	03/15/07 19:08
193217-016	Endrin ketone	GC23	A	03/15/07 19:08
193217-016	Toxaphene	GC23	A	03/15/07 19:08
193217-016	TCMX	GC23	A	03/15/07 19:08
193217-016	Decachlorobiphenyl	GC23	B	03/15/07 19:08
193217-017	alpha-BHC	GC23	A	03/15/07 19:29
193217-017	beta-BHC	GC23	A	03/15/07 19:29
193217-017	gamma-BHC	GC23	A	03/15/07 19:29
193217-017	delta-BHC	GC23	A	03/15/07 19:29
193217-017	Heptachlor	GC23	A	03/15/07 19:29
193217-017	Aldrin	GC23	A	03/15/07 19:29
193217-017	Heptachlor epoxide	GC23	A	03/15/07 19:29
193217-017	Endosulfan I	GC23	A	03/15/07 19:29
193217-017	Dieldrin	GC23	A	03/15/07 19:29
193217-017	4,4'-DDE	GC23	A	03/15/07 19:29
193217-017	Endrin	GC23	A	03/15/07 19:29
193217-017	Endosulfan II	GC23	A	03/15/07 19:29
193217-017	Endosulfan sulfate	GC23	A	03/15/07 19:29
193217-017	4,4'-DDD	GC23	A	03/15/07 19:29
193217-017	4,4'-DDT	GC23	A	03/15/07 19:29
193217-017	alpha-Chlordane	GC23	A	03/15/07 19:29
193217-017	gamma-Chlordane	GC23	A	03/15/07 19:29
193217-017	Methoxychlor	GC23	A	03/15/07 19:29
193217-017	Endrin ketone	GC23	A	03/15/07 19:29
193217-017	Toxaphene	GC23	A	03/15/07 19:29
193217-017	TCMX	GC23	A	03/15/07 19:29
193217-017	Decachlorobiphenyl	GC23	B	03/15/07 19:29
QC378784	alpha-BHC	GC23	A	03/14/07 03:45
QC378784	beta-BHC	GC23	A	03/14/07 03:45
QC378784	gamma-BHC	GC23	A	03/14/07 03:45
QC378784	delta-BHC	GC23	A	03/14/07 03:45
QC378784	Heptachlor	GC23	A	03/14/07 03:45
QC378784	Aldrin	GC23	A	03/14/07 03:45
QC378784	Heptachlor epoxide	GC23	A	03/14/07 03:45
QC378784	Endosulfan I	GC23	A	03/14/07 03:45
QC378784	Dieldrin	GC23	A	03/14/07 03:45
QC378784	4,4'-DDE	GC23	A	03/14/07 03:45
QC378784	Endrin	GC23	A	03/14/07 03:45
QC378784	Endosulfan II	GC23	A	03/14/07 03:45
QC378784	Endosulfan sulfate	GC23	A	03/14/07 03:45
QC378784	4,4'-DDD	GC23	A	03/14/07 03:45
QC378784	4,4'-DDT	GC23	A	03/14/07 03:45
QC378784	alpha-Chlordane	GC23	A	03/14/07 03:45

REPORTING SUMMARY FOR 193217 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC378784	gamma-Chlordane	GC23	A	03/14/07 03:45
QC378784	Methoxychlor	GC23	A	03/14/07 03:45
QC378784	Endrin ketone	GC23	A	03/14/07 03:45
QC378784	Toxaphene	GC23	A	03/14/07 03:45
QC378784	TCMX	GC23	A	03/14/07 03:45
QC378784	Decachlorobiphenyl	GC23	A	03/14/07 03:45
QC378785	gamma-BHC	GC23	A	03/14/07 04:07
QC378785	Heptachlor	GC23	A	03/14/07 04:07
QC378785	Aldrin	GC23	A	03/14/07 04:07
QC378785	Dieldrin	GC23	A	03/14/07 04:07
QC378785	Endrin	GC23	A	03/14/07 04:07
QC378785	4,4'-DDT	GC23	A	03/14/07 04:07
QC378785	TCMX	GC23	A	03/14/07 04:07
QC378785	Decachlorobiphenyl	GC23	A	03/14/07 04:07
QC378786	gamma-BHC	GC23	A	03/14/07 04:29
QC378786	Heptachlor	GC23	A	03/14/07 04:29
QC378786	Aldrin	GC23	A	03/14/07 04:29
QC378786	Dieldrin	GC23	A	03/14/07 04:29
QC378786	Endrin	GC23	A	03/14/07 04:29
QC378786	4,4'-DDT	GC23	A	03/14/07 04:29
QC378786	TCMX	GC23	A	03/14/07 04:29
QC378786	Decachlorobiphenyl	GC23	A	03/14/07 04:29

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 14:52

Batch Number : 123004
Date Extracted: 12-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5676A
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193176-001		Polymatrix	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
193217-014		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193217-015		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193217-016		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193217-017		Treadwell & Rollo	Water	1010	mL	10	0.009901	1	7	.025	0		8081		
193219-001		Acme Fill Corp.	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193261-001		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	1	7	.025	0		8081		
193261-002		Blasland, Bouck & Lee	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193261-003		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	1	7	.025	0		8081		
193261-004		Blasland, Bouck & Lee	Water	1030	mL	10	0.009709	1	7	.025	0		8081		
193335-001		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	1	7	.025	0		8081		
QC378784	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC378785	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC378786	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie O'Brien Mee Reviewed By: Pamela Mafit Date: 3/13/07

Relinquished By: Received By: Date: 3/13/07

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 123004
LIMS Analysis: 8081
Extracted by: JDM
Date Extracted: 03/12/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☑ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193176-001 F	1040	7	10.0		
193217-014 L	1050	↓	↓		
-015 I	1060				
-016 J	↓				
-017 L	1010				
193219-001 M	1060				
193261-001 N	1020				
-002 P	1030				
-003 M	1020				
-004 M	1030				
193335-001 K	1020				
MB QC378784	1000	NA			
BS 85	↓	↓			
BSD 86	↓	↓	↓		
					JXM 3/13/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	SS6167A	JDM 3/12/07
0.025 mL of matrix spiking solution was added to all spikes	SS6767A	↓
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 + HPLC H_2O	EM46352/EM46354	
Extraction Start Time:	1430	
Extraction End Time:	0837	JDM 3/13/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JXM 3/13/07
Extracts filtered through baked, CH_2Cl_2 rinsed ~~powdered~~ granular Na_2SO_4	EM46111628	
Exchanged 2x with Hexane	JTB C43540	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	↓

Jane Lee 3/12/07
Extraction Chemist Date

Contined from Page ____

Pamela Marshall 3/13/07
Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/23/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/13/07
Batch#:	123068		

Field ID:	LF08GW01	Analyzed:	03/20/07
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	193217-014		

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	86	65-135
Decachlorobiphenyl	74	65-135

Field ID:	LF08GW02B	Analyzed:	03/20/07
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	193217-015		

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	100	65-135
Decachlorobiphenyl	107	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/13/07
Batch#:	123068		

Field ID: LF08GW03 — Analyzed: 03/20/07
Type: SAMPLE — Cleanup Method: EPA 3665A
Lab ID: 193217-016

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	105	65-135

Field ID: LF08GW06 — Analyzed: 03/20/07
Type: SAMPLE — Cleanup Method: EPA 3665A
Lab ID: 193217-017

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	100	65-135
Decachlorobiphenyl	80	65-135

Type: BLANK — Analyzed: 03/14/07
Lab ID: QC379056 — Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	62 *	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

118.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	123068
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type: BS Cleanup Method: EPA 3665A
Lab ID: QC379057

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.680	114	65-135

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	60 *	65-135

Type: BSD Cleanup Method: EPA 3665A
Lab ID: QC379058

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	5.006	100	65-135	13	35

Surrogate	%REC	Limits
TCMX	88	65-135
Decachlorobiphenyl	55 *	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

119.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257103122001
Units : pg

Name : 1660_071
Date : 12-MAR-2007 17:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_006	257103122006	PCB10_2	12-MAR-2007 17:36	S5483
L2	071_007	257103122007	PCB25_5	12-MAR-2007 18:02	S5484
L3	071_008	257103122008	PCB100_20	12-MAR-2007 18:29	S4996
L4	071_009	257103122009	PCB250_50	12-MAR-2007 18:55	S4997
L5	071_010	257103122010	PCB500_100	12-MAR-2007 19:22	S4998
L6	071_011	257103122011	PCB750_150	12-MAR-2007 19:48	S5227
L7	071_012	257103122012	PCB1000_200	12-MAR-2007 20:14	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	1148.7	1095.6	1111.1	966.15	817.74	903.27	930.70	AVRG		0.00100		996.18	12	.99	20	
Aroclor-1016 Peak # 2	A	1342.4	1385.2	1449.3	1325.1	1175.9	1380.5	1475.9	AVRG		7.34E-4		1362.1	7	.99	20	
Aroclor-1016 Peak # 3	A	597.80	559.44	656.04	598.44	511.78	568.47	603.45	AVRG		0.00171		585.06	8	.99	20	
Aroclor-1016 Peak # 4	A	378.10	405.52	446.45	401.34	338.75	361.82	391.90	AVRG		0.00257		389.13	9	.99	20	
Aroclor-1016 Peak # 5	A	667.30	649.64	669.16	606.22	520.26	575.48	610.12	AVRG		0.00163		614.02	9	.99	20	
Aroclor-1260 Peak # 1	A	2260.7	2217.4	2258.9	2143.2	2028.7	2210.1	2285.6	AVRG		4.54E-4		2200.6	4	.99	20	
Aroclor-1260 Peak # 2	A	1879.6	1844.9	1918.8	1787.4	1686.4	1887.8	2042.4	AVRG		5.37E-4		1863.9	6	.99	20	
Aroclor-1260 Peak # 3	A	1561.1	1166.5	1266.2	1174.9	1095.9	1178.6	1255.5	AVRG		8.05E-4		1242.7	12	.99	20	
Aroclor-1260 Peak # 4	A	3102.1	2924.0	3038.0	3027.6	2898.8	3041.4	3025.2	AVRG		3.32E-4		3008.2	2	.99	20	
Aroclor-1260 Peak # 5	A	1509.3	1397.4	1495.1	1418.8	1327.9	1470.6	1564.0	AVRG		6.87E-4		1454.7	5	.99	20	
TCMX	A	34845	31892	34012	33399	29284	29869	26488	AVRG		3.18E-5		31398	10	.99	20	
Decachlorobiphenyl	A	21658	20994	21971	22411	20771	20458	17498	AVRG		4.80E-5		20823	8	.99	20	
Aroclor-1016 Peak # 1	B	545.70	499.00	417.50	403.95	380.80	334.89	401.77	AVRG		0.00235		426.23	17	.99	20	
Aroclor-1016 Peak # 2	B	1194.7	1111.2	936.58	892.60	855.35	766.44	950.70	AVRG		0.00104		958.23	15	.99	20	
Aroclor-1016 Peak # 3	B	699.20	661.20	532.62	511.42	486.74	436.54	540.28	AVRG		0.00181		552.57	17	.99	20	
Aroclor-1016 Peak # 4	B	346.10	338.36	268.57	263.22	247.78	223.73	269.05	AVRG		0.00358		279.54	16	.99	20	
Aroclor-1016 Peak # 5	B	467.70	438.80	331.97	331.13	311.25	280.88	343.77	AVRG		0.00279		357.93	19	.99	20	
Aroclor-1260 Peak # 1	B	1515.8	1582.4	1126.0	1112.2	1150.6	1043.9	1343.9	AVRG		7.89E-4		1267.8	17	.99	20	
Aroclor-1260 Peak # 2	B	1057.0	1027.9	762.21	751.70	746.88	684.53	910.09	AVRG		0.00118		848.61	18	.99	20	
Aroclor-1260 Peak # 3	B	895.10	889.12	639.43	638.10	634.73	579.63	776.73	AVRG		0.00139		721.83	18	.99	20	
Aroclor-1260 Peak # 4	B	2237.1	2294.6	1651.7	1705.0	1809.9	1658.8	2111.3	AVRG		5.20E-4		1924.0	15	.99	20	
Aroclor-1260 Peak # 5	B	1125.4	1160.2	845.69	851.66	869.37	788.31	1056.7	AVRG		0.00105		956.76	16	.99	20	
TCMX	B	21813	20655	17169	16709	17334	15631	17398	AVRG		5.52E-5		18101	12	.99	20	
Decachlorobiphenyl	B	16028	16543	11873	12344	13416	12115	14415	AVRG		7.24E-5		13819	14	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_071
Calnum : 257103122001 Cal Date: 12-MAR-2007

ICV 257103122014 (071_014 12-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	996.18		250.0	220.5	pg	-12	15	
Aroclor-1260	A	2200.6		250.0	231.4	pg	-7	15	
Aroclor-1016	B	426.23		250.0	222.2	pg	-11	15	
Aroclor-1260	B	1267.8		250.0	234.8	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257104282001
Units : pg

Name : ar1242
Date : 13-MAR-2007 12:17
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_004	257104282004	AR1242	13-MAR-2007 12:17	S5688

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	729.21	AVRG		0.00137		729.21	0	.99	20	
Aroclor-1242 Peak # 2	A	903.51	AVRG		0.00111		903.51	0	.99	20	
Aroclor-1242 Peak # 3	A	409.56	AVRG		0.00244		409.56	0	.99	20	
Aroclor-1242 Peak # 4	A	433.30	AVRG		0.00231		433.30	0	.99	20	
Aroclor-1242 Peak # 5	A	418.97	AVRG		0.00239		418.97	0	.99	20	
Aroclor-1242 Peak # 1	B	284.85	AVRG		0.00351		284.85	0	.99	20	
Aroclor-1242 Peak # 2	B	668.87	AVRG		0.00150		668.87	0	.99	20	
Aroclor-1242 Peak # 3	B	360.03	AVRG		0.00278		360.03	0	.99	20	
Aroclor-1242 Peak # 4	B	176.23	AVRG		0.00567		176.23	0	.99	20	
Aroclor-1242 Peak # 5	B	232.92	AVRG		0.00429		232.92	0	.99	20	

Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CONTINUING CALIBRATION SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	743.29	pg	-1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	673.67	pg	-10	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	509.31	pg	2	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	474.93	pg	-5	15	
GC22	A	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007			500.00	443.16	pg	-11	15	
GC22	B	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007			500.00	503.24	pg	1	15	
GC22	A	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007			250.00	256.48	pg	3	15	
GC22	B	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007			250.00	276.77	pg	11	15	

CONTINUING CALIBRATION SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1242

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	277.17	pg	11	15	
GC22	B	257106081003	14-MAR-2007 16:54	257104282001	13-MAR-2007			250.00	275.72	pg	10	15	
GC22	A	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	282.26	pg	13	15	
GC22	B	257106081022	15-MAR-2007 01:20	257104282001	13-MAR-2007			250.00	281.75	pg	13	15	
GC22	A	257113111026	20-MAR-2007 00:12	257113111001	19-MAR-2007			250.00	251.37	pg	1	15	
GC22	B	257113111026	20-MAR-2007 00:12	257113111001	19-MAR-2007			250.00	247.70	pg	-1	15	

CONTINUING CALIBRATION SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	802.65	pg	7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007			750.00	820.69	pg	9	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	516.61	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007			500.00	534.32	pg	7	15	
GC22	A	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007			500.00	498.78	pg	0	15	
GC22	B	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007			500.00	509.85	pg	2	15	
GC22	A	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007			250.00	256.82	pg	3	15	
GC22	B	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007			250.00	227.13	pg	-9	15	

CONTINUING CALIBRATION SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	31398	29246	150.00	139.72	pg	-7	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	18101	17058	150.00	141.35	pg	-6	15	
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	31398	34984	100.00	111.42	pg	11	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	18101	19523	100.00	107.85	pg	8	15	
GC22	A	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007	31398	30116	100.00	95.917	pg	-4	15	
GC22	B	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007	18101	19138	100.00	105.72	pg	6	15	
GC22	A	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007	31398	34350	50.000	54.700	pg	9	15	
GC22	B	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007	18101	18732	50.000	51.742	pg	3	15	

CONTINUING CALIBRATION SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
GC22	A	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	20823	20971	150.00	151.07	pg	1	15	
GC22	B	257106081001	14-MAR-2007 16:01	257103122001	12-MAR-2007	13819	16166	150.00	175.47	pg	**17**	15	c+
GC22	A	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	20823	21438	100.00	102.96	pg	3	15	
GC22	B	257106081020	15-MAR-2007 00:27	257103122001	12-MAR-2007	13819	15104	100.00	109.30	pg	9	15	
GC22	A	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007	20823	23087	100.00	110.87	pg	11	15	
GC22	B	257113111022	19-MAR-2007 22:27	257103122001	12-MAR-2007	13819	13645	100.00	98.737	pg	-1	15	
GC22	A	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007	20823	24186	50.000	58.076	pg	**16**	15	c+
GC22	B	257113111040	20-MAR-2007 06:22	257103122001	12-MAR-2007	13819	12294	50.000	44.481	pg	-11	15	

+=high bias c=CCV

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257103122 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	071_001	X	PCB500_100			12-MAR-2007 14:42	1.0					1	
002	071_002	X	PCB500_100			12-MAR-2007 15:09	1.0					1	
003	071_003	X	PCB500_100			12-MAR-2007 15:46	1.0	1	1			1	
004	071_004	X	HEX			12-MAR-2007 16:43	1.0						
005	071_005	X	HEX			12-MAR-2007 17:09	1.0						
006	071_006	ICAL	PCB10_2			12-MAR-2007 17:36	1.0					2	
007	071_007	ICAL	PCB25_5			12-MAR-2007 18:02	1.0					3	
008	071_008	ICAL	PCB100_20			12-MAR-2007 18:29	1.0					4	
009	071_009	ICAL	PCB250_50			12-MAR-2007 18:55	1.0					5	
010	071_010	ICAL	PCB500_100			12-MAR-2007 19:22	1.0					1	
011	071_011	ICAL	PCB750_150			12-MAR-2007 19:48	1.0					6	
012	071_012	ICAL	PCB1000_200			12-MAR-2007 20:14	1.0					7	
013	071_013	X	HEX			12-MAR-2007 20:41	1.0						
014	071_014	ICV	ULTRA_1660			12-MAR-2007 21:07	1.0		1			8	
015	071_015	X	ULTRA_1660			12-MAR-2007 21:34	1.0	2	1			8	
016	071_016	X	HEX			12-MAR-2007 22:00	1.0						

Stds used: 1=S4998 2=S5483 3=S5484 4=S4996 5=S4997 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	072_001	CCV	PCB500_100			13-MAR-2007 10:02	1.0	1.0			1	1	
002	072_002	X	PCB500_100			13-MAR-2007 10:28	1.0	1.0	4		1	1	
003	072_003	X	AR1242			13-MAR-2007 11:51	1.0	1.0	1		1	2	
004	072_004	ICAL	AR1242			13-MAR-2007 12:17	1.0	1.0			1	2	
005	072_005	CCV	AR2154			13-MAR-2007 12:44	1.0	1.0			1	3	
006	072_006	X	AR2154			13-MAR-2007 13:10	1.0	1.0			1	3	
007	072_007	CCV	AR1248			13-MAR-2007 14:19	1.0					4	
008	072_008	ICAL	AR1248			13-MAR-2007 14:45	1.0	1.0				4	
009	072_009	CCV	AR1232			13-MAR-2007 15:12	1.0					5	
010	072_010	X	HEX			13-MAR-2007 15:38	1.0						
011	072_011	BLANK	QC378900	123037	Miscel	13-MAR-2007 16:05	1.0	50.0			1		
012	072_012	BLANK	QC378910	123039	Soil	13-MAR-2007 16:31	1.0	0.8221			1		
013	072_013	SAMPLE	193121-001	123037	Miscel	13-MAR-2007 16:57	1.0	49.98	1		1		2:PCB122=1203.02
014	072_014	SAMPLE	193229-002	122911	Soil	13-MAR-2007 17:24	2.0	0.827			1		
015	072_015	SAMPLE	193229-003	122911	Soil	13-MAR-2007 17:52	1.0	0.8224			1		
016	072_016	SAMPLE	193229-004	122911	Soil	13-MAR-2007 18:19	1.0	0.8256			1		
017	072_017	BS	QC378901	123037	Miscel	13-MAR-2007 18:51	1.0	50.0			1		
018	072_018	BSD	QC378902	123037	Miscel	13-MAR-2007 19:18	1.0	50.0			1		
019	072_019	LCS	QC378911	123039	Soil	13-MAR-2007 19:44	1.0	0.8317		1	1		
020	072_020	X	HEX			13-MAR-2007 20:11	1.0						
021	072_021	CCV	PCB250_50			13-MAR-2007 20:37	1.0	1.0			1	6	
022	072_022	X	PCB250_50			13-MAR-2007 21:04	1.0	1.0	1		1	6	
023	072_023	CCV	AR1242			13-MAR-2007 21:30	1.0	1.0			1	2	
024	072_024	X	AR1242			13-MAR-2007 21:57	1.0	1.0	1		1	2	
025	072_025	CCV	AR2154			13-MAR-2007 22:23	1.0	1.0			1	3	
026	072_026	X	AR2154			13-MAR-2007 22:50	1.0	1.0	1		1	3	
027	072_027	CCV	AR1248			13-MAR-2007 23:16	1.0	1.0			1	4	
028	072_028	CCV	AR1232			13-MAR-2007 23:43	1.0					5	
029	072_029	X	HEX			14-MAR-2007 00:09	1.0						
030	072_030	SAMPLE	193280-001	123039	Soil	14-MAR-2007 00:36	1.0	0.8457			1		
031	072_031	SAMPLE	193280-002	123039	Soil	14-MAR-2007 01:02	1.0	0.8466			1		

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	072_032	SAMPLE	193280-003	123039	Soil	14-MAR-2007 01:29	1.0					
033	072_033	SAMPLE	193280-004	123039	Soil	14-MAR-2007 01:55	1.0	0.8232		1		
034	072_034	SAMPLE	193280-005	123039	Soil	14-MAR-2007 02:22	1.0	0.8221		1		
035	072_035	SAMPLE	193280-006	123039	Soil	14-MAR-2007 02:48	1.0	0.8342		1		
036	072_036	SAMPLE	193280-007	123039	Soil	14-MAR-2007 03:15	1.0	0.8237		1		
037	072_037	X	193280-008	123039	Soil	14-MAR-2007 03:41	10.0	0.8353		1		
038	072_038	SAMPLE	193280-009	123039	Soil	14-MAR-2007 04:08	1.0	0.8375		1		
039	072_039	SAMPLE	193280-010	123039	Soil	14-MAR-2007 04:34	1.0	0.835		1		
040	072_040	X	HEX			14-MAR-2007 05:01	1.0					
041	072_041	X	PCB500_100			14-MAR-2007 05:27	1.0	1.0		1	1	
042	072_042	CCV	PCB500_100			14-MAR-2007 05:54	1.0	1.0		1	1	
043	072_043	CCV	AR2154			14-MAR-2007 06:20	1.0	1.0		1	3	
044	072_044	X	AR2154			14-MAR-2007 06:47	1.0	1.0	1	1	3	
045	072_045	CCV	AR1248			14-MAR-2007 07:13	1.0	1.0		1	4	
046	072_046	X	HEX			14-MAR-2007 07:40	1.0					
047	072_047	SAMPLE	193280-011	123039	Soil	14-MAR-2007 08:06	1.0	0.8386		1		
048	072_048	SAMPLE	193280-012	123039	Soil	14-MAR-2007 08:33	1.0	0.8409		1		
049	072_049	X	193280-013	123039	Soil	14-MAR-2007 08:59	2.0	0.8245		1		
050	072_050	SAMPLE	193314-001	123039	Soil	14-MAR-2007 09:26	1.0	0.8289		1		
051	072_051	SAMPLE	193314-002	123039	Soil	14-MAR-2007 09:52	1.0	0.827	2	1		3:PCB122=5298.41
052	072_052	SAMPLE	193314-003	123039	Soil	14-MAR-2007 10:19	1.0	0.8205		1		
053	072_053	SAMPLE	193314-004	123039	Soil	14-MAR-2007 10:45	5.0	0.8213		1		
054	072_054	X	193314-005	123039	Soil	14-MAR-2007 11:12	5.0	0.8322		1		
055	072_055	SAMPLE	193314-006	123039	Soil	14-MAR-2007 11:38	2.0	0.8218		1		
056	072_056	SAMPLE	193314-007	123039	Soil	14-MAR-2007 12:05	2.0	0.821		1		
057	072_057	X	HEX			14-MAR-2007 12:31	1.0					
058	072_058	CCV	PCB250_50			14-MAR-2007 12:57	1.0	1.0		1	6	
059	072_059	X	PCB250_50			14-MAR-2007 13:24	1.0				6	
060	072_060	CCV	AR2154			14-MAR-2007 13:50	1.0	1.0		1	3	
061	072_061	X	AR2154			14-MAR-2007 14:17	1.0				3	
062	072_062	CCV	AR1248			14-MAR-2007 14:43	1.0	1.0			4	

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	072_063	X	HEX			14-MAR-2007 15:09	1.0					

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 14-MAR-2007

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	073_001	CCV	PCB750_150			14-MAR-2007 16:01	1.0	1.0			1	1	
002	073_002	X	PCB750_150			14-MAR-2007 16:27	1.0					1	
003	073_003	CCV	AR1242			14-MAR-2007 16:54	1.0	1.0			1	2	
004	073_004	X	AR1242			14-MAR-2007 17:20	1.0	1.0			1	2	
005	073_005	CCV	AR2154			14-MAR-2007 17:50	1.0	1.0			1	3	
006	073_006	X	AR2154			14-MAR-2007 18:17	1.0	1.0			1	3	
007	073_007	ICAL	AR1248			14-MAR-2007 18:43	1.0	1.0			1	4	
008	073_008	X	HEX			14-MAR-2007 19:10	1.0						
009	073_009	BLANK	QC379056	123068	Water	14-MAR-2007 19:36	1.0	0.025		1	1		
010	073_010	SAMPLE	193280-003	123039	Soil	14-MAR-2007 20:02	1.0	0.8401	1		1		2:PCB122=1058.09
011	073_011	SAMPLE	193280-004	123039	Soil	14-MAR-2007 20:29	1.0	0.8232			1		
012	073_012	SAMPLE	193280-008	123039	Soil	14-MAR-2007 20:55	2.0	0.8353			1		
013	073_013	SAMPLE	193280-013	123039	Soil	14-MAR-2007 21:22	1.0	0.8245			1		
014	073_014	BS	QC379057	123068	Water	14-MAR-2007 21:48	1.0	0.025		2	1		
015	073_015	BSD	QC379058	123068	Water	14-MAR-2007 22:15	1.0	0.025		2	1		
016	073_016	MSS	193314-005	123039	Soil	14-MAR-2007 22:41	1.0	0.8322			1		
017	073_017	MS	QC378912	123039	Soil	14-MAR-2007 23:08	1.0	0.8292		1	1		
018	073_018	MSD	QC378913	123039	Soil	14-MAR-2007 23:34	1.0	0.8306		1	1		
019	073_019	X	HEX			15-MAR-2007 00:00	1.0						
020	073_020	CCV	PCB500_100			15-MAR-2007 00:27	1.0	1.0			1	5	
021	073_021	X	PCB500_100			15-MAR-2007 00:53	1.0	1.0			1	5	
022	073_022	CCV	AR1242			15-MAR-2007 01:20	1.0	1.0			1	2	
023	073_023	X	AR1242			15-MAR-2007 01:46	1.0	1.0	1		1	2	
024	073_024	CCV	AR2154			15-MAR-2007 02:13	1.0	1.0			1	3	
025	073_025	X	AR2154			15-MAR-2007 02:39	1.0	1.0			1	3	
026	073_026	CCV	AR1248			15-MAR-2007 03:06	1.0	1.0			1	4	
027	073_027	X	HEX			15-MAR-2007 03:32	1.0						
028	073_028	SAMPLE	193108-028	123068	Water	15-MAR-2007 03:58	1.0	0.02427	18	4	1	sh	
029	073_029	SAMPLE	193108-029	123068	Water	15-MAR-2007 04:25	1.0	0.02451	18	4	1	sh	
030	073_030	SAMPLE	193108-030	123068	Water	15-MAR-2007 04:51	1.0	0.02404	18	3	1	sh	

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257106081 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	073_031	SAMPLE	193108-031	123068	Water	15-MAR-2007 05:18	1.0	0.02451	18	4	1	sh	
032	073_032	SAMPLE	193108-032	123068	Water	15-MAR-2007 05:44	1.0	0.025	18	3	1	sh	
033	073_033	SAMPLE	193261-001	123068	Water	15-MAR-2007 06:11	1.0	0.03125			1		
034	073_034	SAMPLE	193261-002	123068	Water	15-MAR-2007 06:37	1.0	0.02427			1		
035	073_035	SAMPLE	193261-003	123068	Water	15-MAR-2007 07:03	1.0	0.02381			1		
036	073_036	SAMPLE	193261-004	123068	Water	15-MAR-2007 07:30	1.0	0.02358			1		
037	073_037	SAMPLE	193347-001	123068	Water	15-MAR-2007 07:56	1.0	0.02358	1	2	1		2:PCB126=1419.49
038	073_038	X	HEX			15-MAR-2007 08:23	1.0						
039	073_039	CCV	PCB250_50			15-MAR-2007 08:49	1.0	1.0			1	6	
040	073_040	X	PCB250_50			15-MAR-2007 09:16	1.0	1.0	1		1	6	
041	073_041	CCV	AR2154			15-MAR-2007 09:42	1.0					3	
042	073_042	CCV	AR2154			15-MAR-2007 10:08	1.0					3	
043	073_043	X	HEX			15-MAR-2007 10:35	1.0						

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257113111 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 19-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	078_001	X	HEX			19-MAR-2007 13:11	1.0						
002	078_002	CCV	PCB750_150			19-MAR-2007 13:36	1.0	1.0			1	1	
003	078_003	X	PCB750_150			19-MAR-2007 14:02	1.0	1.0			1	1	
004	078_004	X	AR1242			19-MAR-2007 14:31	1.0	1.0	1		1	2	
005	078_005	ICAL	AR1242			19-MAR-2007 14:57	1.0	1.0			1	2	
006	078_006	CCV	AR2154			19-MAR-2007 15:24	1.0					3	
007	078_007	CCV	AR2154			19-MAR-2007 15:50	1.0					3	
008	078_008	CCV	AR1248			19-MAR-2007 16:17	1.0					4	
009	078_009	X	HEX			19-MAR-2007 16:43	1.0						
010	078_010	SAMPLE	193449-006	123189	Soil	19-MAR-2007 17:09	4.0	0.8278		2	1		
011	078_011	SAMPLE	193449-007	123189	Soil	19-MAR-2007 17:36	5.0	0.8308		2	1		
012	078_012	SAMPLE	193449-009	123189	Soil	19-MAR-2007 18:02	10.0	0.8322	2		1		4:PCB101=1161.50
013	078_013	SAMPLE	193449-010	123189	Soil	19-MAR-2007 18:29	1.0	0.8205			1		
014	078_014	SAMPLE	193290-001	123118	Water	19-MAR-2007 18:55	1.0	0.02381			1		
015	078_015	SAMPLE	193299-001	123118	Water	19-MAR-2007 19:22	1.0	0.02381			1		
016	078_016	SAMPLE	193301-003	123118	Water	19-MAR-2007 19:48	1.0	0.02427			1		
017	078_017	BLANK	QC379867	123263	Soil	19-MAR-2007 20:15	1.0	0.8306			1		
018	078_018	LCS	QC379868	123263	Soil	19-MAR-2007 20:41	1.0	0.8259			1		
019	078_019	X	193495-001	123263	Soil	19-MAR-2007 21:07	1.0						
020	078_020	X	HEX			19-MAR-2007 21:34	1.0						
021	078_021	X	PCB500_100			19-MAR-2007 22:00	1.0	1.0			1	5	
022	078_022	CCV	PCB500_100			19-MAR-2007 22:27	1.0	1.0			1	5	
023	078_023	CCV	AR2154			19-MAR-2007 22:53	1.0					3	
024	078_024	CCV	AR2154			19-MAR-2007 23:19	1.0					3	
025	078_025	X	AR1242			19-MAR-2007 23:46	1.0	1.0			1	2	
026	078_026	CCV	AR1242			20-MAR-2007 00:12	1.0	1.0			1	2	
027	078_027	CCV	AR1248			20-MAR-2007 00:39	1.0					4	
028	078_028	X	HEX			20-MAR-2007 01:05	1.0						
029	078_029	SAMPLE	193217-014	123068	Water	20-MAR-2007 01:31	1.0	0.02427			1		
030	078_030	SAMPLE	193217-015	123068	Water	20-MAR-2007 01:58	1.0	0.02381			1		
031	078_031	SAMPLE	193217-016	123068	Water	20-MAR-2007 02:24	1.0	0.02381			1		

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997

SEQUENCE SUMMARY FOR 193217 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257113111 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 19-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	078_032	SAMPLE	193217-017	123068	Water	20-MAR-2007 02:51	1.0	0.02427		1	1		
033	078_033	SAMPLE	193329-005	123118	Water	20-MAR-2007 03:17	1.0	0.02404			1		
034	078_034	SAMPLE	193460-001	123189	Soil	20-MAR-2007 03:44	1.0						
035	078_035	SAMPLE	193460-002	123189	Soil	20-MAR-2007 04:10	1.0						
036	078_036	SAMPLE	193460-003	123189	Soil	20-MAR-2007 04:37	1.0						
037	078_037	SAMPLE	193480-001	123263	Miscel	20-MAR-2007 05:03	1.0						
038	078_038	SAMPLE	193480-002	123263	Miscel	20-MAR-2007 05:29	1.0						
039	078_039	X	HEX			20-MAR-2007 05:56	1.0						
040	078_040	CCV	PCB250_50			20-MAR-2007 06:22	1.0	1.0			1	6	
041	078_041	X	PCB250_50			20-MAR-2007 06:49	1.0	1.0			1	6	
042	078_042	CCV	AR2154			20-MAR-2007 07:15	1.0					3	
043	078_043	CCV	AR2154			20-MAR-2007 07:42	1.0					3	
044	078_044	CCV	AR1248			20-MAR-2007 08:08	1.0					4	
045	078_045	X	HEX			20-MAR-2007 08:35	1.0						
046	078_046	CCV	AR1242			20-MAR-2007 10:05	1.0					2	
047	078_047	X	HEX			20-MAR-2007 10:32	1.0						
048	078_048	SAMPLE	193495-001	123263	Soil	20-MAR-2007 10:58	100.0						

Stds used: 1=S5227 2=S5688 3=S5687 4=S5103 5=S4998 6=S4997

REPORTING SUMMARY FOR 193217 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-014	Aroclor-1016	GC22	A	03/20/07 01:31
193217-014	Aroclor-1221	GC22	A	03/20/07 01:31
193217-014	Aroclor-1232	GC22	A	03/20/07 01:31
193217-014	Aroclor-1242	GC22	A	03/20/07 01:31
193217-014	Aroclor-1248	GC22	A	03/20/07 01:31
193217-014	Aroclor-1254	GC22	A	03/20/07 01:31
193217-014	Aroclor-1260	GC22	A	03/20/07 01:31
193217-014	TCMX	GC22	A	03/20/07 01:31
193217-014	Decachlorobiphenyl	GC22	A	03/20/07 01:31
193217-015	Aroclor-1016	GC22	A	03/20/07 01:58
193217-015	Aroclor-1221	GC22	A	03/20/07 01:58
193217-015	Aroclor-1232	GC22	A	03/20/07 01:58
193217-015	Aroclor-1242	GC22	A	03/20/07 01:58
193217-015	Aroclor-1248	GC22	A	03/20/07 01:58
193217-015	Aroclor-1254	GC22	A	03/20/07 01:58
193217-015	Aroclor-1260	GC22	A	03/20/07 01:58
193217-015	TCMX	GC22	A	03/20/07 01:58
193217-015	Decachlorobiphenyl	GC22	A	03/20/07 01:58
193217-016	Aroclor-1016	GC22	A	03/20/07 02:24
193217-016	Aroclor-1221	GC22	A	03/20/07 02:24
193217-016	Aroclor-1232	GC22	A	03/20/07 02:24
193217-016	Aroclor-1242	GC22	A	03/20/07 02:24
193217-016	Aroclor-1248	GC22	A	03/20/07 02:24
193217-016	Aroclor-1254	GC22	A	03/20/07 02:24
193217-016	Aroclor-1260	GC22	A	03/20/07 02:24
193217-016	TCMX	GC22	A	03/20/07 02:24
193217-016	Decachlorobiphenyl	GC22	A	03/20/07 02:24
193217-017	Aroclor-1016	GC22	A	03/20/07 02:51
193217-017	Aroclor-1221	GC22	A	03/20/07 02:51
193217-017	Aroclor-1232	GC22	A	03/20/07 02:51
193217-017	Aroclor-1242	GC22	A	03/20/07 02:51
193217-017	Aroclor-1248	GC22	A	03/20/07 02:51
193217-017	Aroclor-1254	GC22	A	03/20/07 02:51
193217-017	Aroclor-1260	GC22	A	03/20/07 02:51
193217-017	TCMX	GC22	A	03/20/07 02:51
193217-017	Decachlorobiphenyl	GC22	A	03/20/07 02:51
QC379056	Aroclor-1016	GC22	A	03/14/07 19:36
QC379056	Aroclor-1221	GC22	A	03/14/07 19:36
QC379056	Aroclor-1232	GC22	A	03/14/07 19:36
QC379056	Aroclor-1242	GC22	A	03/14/07 19:36
QC379056	Aroclor-1248	GC22	A	03/14/07 19:36
QC379056	Aroclor-1254	GC22	A	03/14/07 19:36
QC379056	Aroclor-1260	GC22	A	03/14/07 19:36
QC379056	TCMX	GC22	A	03/14/07 19:36
QC379056	Decachlorobiphenyl	GC22	A	03/14/07 19:36
QC379057	Aroclor-1242	GC22	A	03/14/07 21:48
QC379057	TCMX	GC22	A	03/14/07 21:48
QC379057	Decachlorobiphenyl	GC22	A	03/14/07 21:48

REPORTING SUMMARY FOR 193217 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379058	Aroclor-1242	GC22	A	03/14/07 22:15
QC379058	TCMX	GC22	A	03/14/07 22:15
QC379058	Decachlorobiphenyl	GC22	A	03/14/07 22:15

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 16:46

Batch Number : 123068
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616A
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193108-028		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193108-029		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-030		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
193108-031		Treadwell & Rollo	Water	1020	mL	25	0.024510	1	7	.05	0		PCB	3665A	
193108-032		Treadwell & Rollo	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
193217-014		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193217-015		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-016		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193217-017		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-001		Blasland, Bouck & Lee	Water	800	mL	25	0.031250	1	7	.05	0		PCB	3665A	
193261-002		Blasland, Bouck & Lee	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193261-003		Blasland, Bouck & Lee	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193261-004		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
193347-001		Blasland, Bouck & Lee	Water	1060	mL	25	0.023585	1	9	.05	0		PCB	3665A	
QC379056	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC379057	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC379058	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: SA for JOM Reviewed By: [signature] Date: 3/15/07

Relinquished By: [signature] Received By: [signature] Date: 3/15/07

00357

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 123068
LIMS Analysis: PCB
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
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Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193108-028	1030	7	25.0	alias of 193108-008 O
29	1020			11 H
30	1040			13 M
31	1020			25 J
32	1000			26 K
193217-004 14 J	1030			
15 K	1050			
16 L	1050			
17 J	1030			
193261-001 M	800			limited sample; contained twigs
02 L	1030			
03 K	1050			
04 N	1060			
193347-001 B	1060	9		H_2O contains free product (oily)
MB QC379056	1000	NA		
BS 57				
BSD 58				
				JXM 3/14/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616A	JOM 3/13/07
0.05 mL of spike solution AR1242 was added to all spikes	S5458A	
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1750	
Extraction End Time:	1200	JXM 3/14/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH2Cl2-rinsed ~~granular~~ powder Na2SO4	EM46320628	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	STBC38E39	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	FS065076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jennifer Lee 3/13/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

[illegible] 3/15/07
Reviewed by **Date**

00358

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/23/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF08GW01	Batch#:	123065
Lab ID:	193217-014	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.97	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.97	
Fluorene	ND	0.97	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	84	65-135
1-Methylnaphthalene (F)	80	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

68.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF08GW02B	Batch#:	123065
Lab ID:	193217-015	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	86	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

69.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF08GW03	Batch#:	123065
Lab ID:	193217-016	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	90	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

70.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF08GW06	Batch#:	123065
Lab ID:	193217-017	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.98	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.98	
Fluorene	ND	0.98	
Phenanthrene	ND	0.49	
Anthracene	ND	0.49	0.02
Fluoranthene	ND	0.39	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	84	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

71.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379036	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	87	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

72.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379037	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.318	93	50-135
Fluorene	2.000	1.857	93	65-135
Pyrene	1.000	0.9021	90	65-135
Benzo(a)pyrene	1.000	0.9642	96	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	86	65-135

73.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	ZZZZZZZZZZ	Batch#:	123065
MSS Lab ID:	193332-003	Sampled:	03/09/07
Matrix:	Water	Received:	03/09/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: MS Lab ID: QC379038

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09271	9.901	9.604	97	50-135
Fluorene	15.08	1.980	13.76	-67 NM	65-135
Pyrene	0.9263	0.9901	1.432	51 *	65-135
Benzo(a)pyrene	<0.01532	0.9901	0.7741	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	249 *	65-135
1-Methylnaphthalene (F)	173 *	65-135

Type: MSD Lab ID: QC379039

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.901	11.37	115	50-135	17	35
Fluorene	1.980	13.74	-68 NM	65-135	0	35
Pyrene	0.9901	1.431	51 *	65-135	0	35
Benzo(a)pyrene	0.9901	0.7896	80	65-135	2	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	246 *	65-135
1-Methylnaphthalene (F)	171 *	65-135

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

74.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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HPLC04 METHOD 8310 NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

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RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

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RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

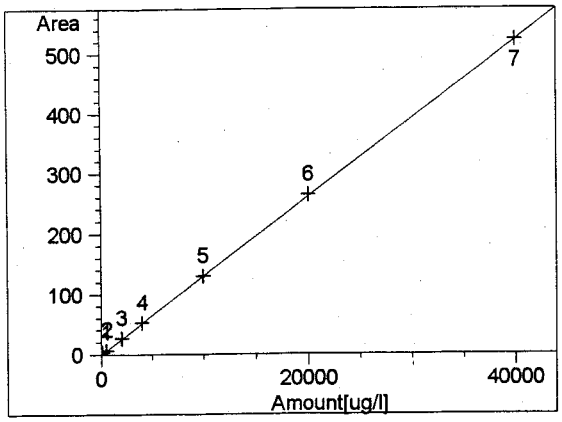
Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

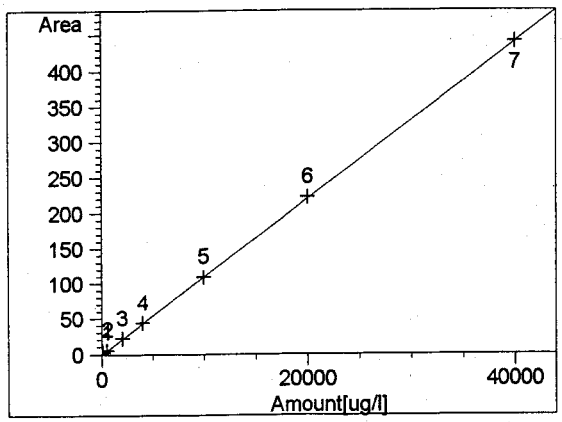
Peak Sum Table

No Entries in table

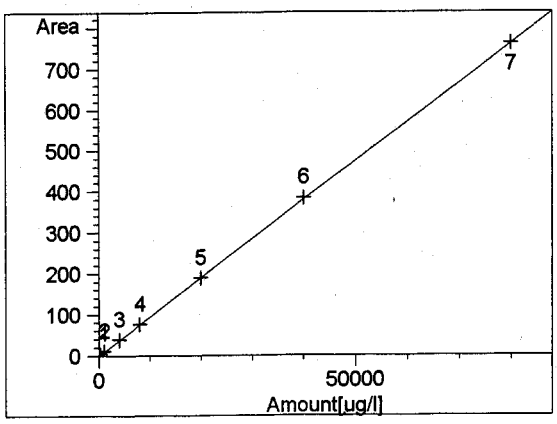
Calibration Curves



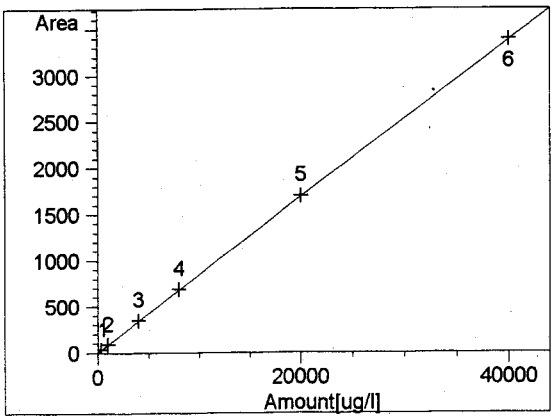
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



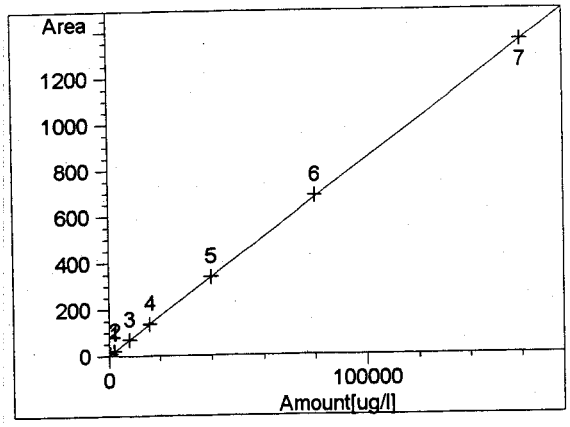
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



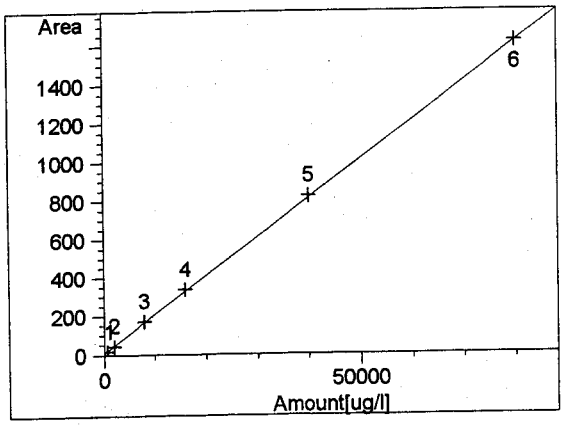
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



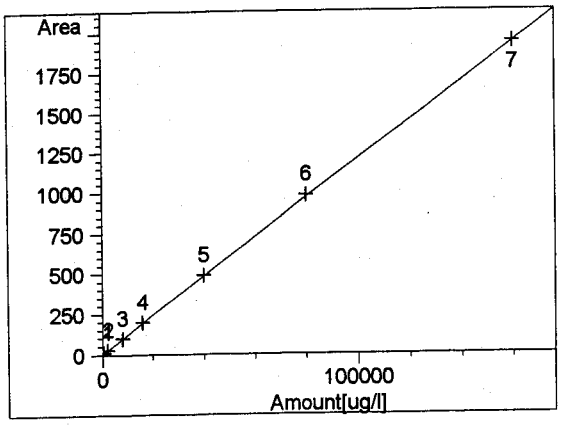
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



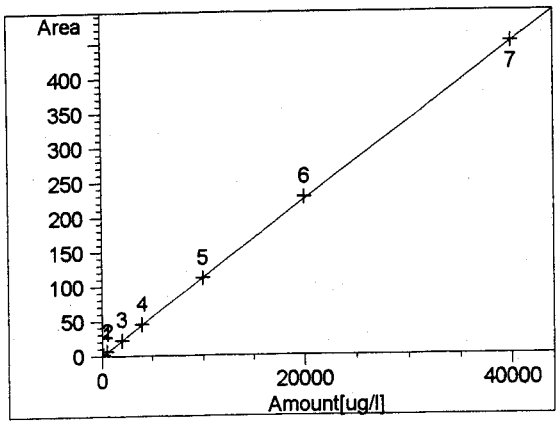
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



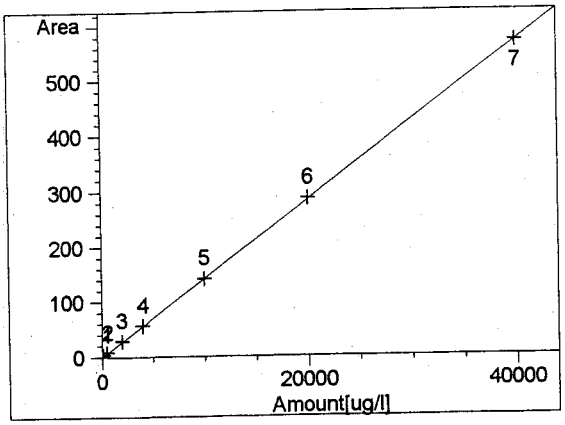
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



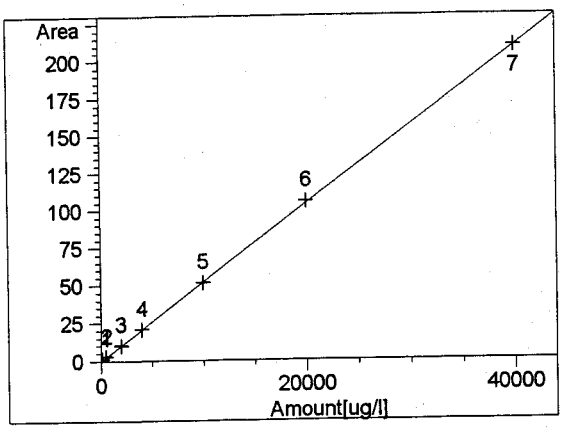
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



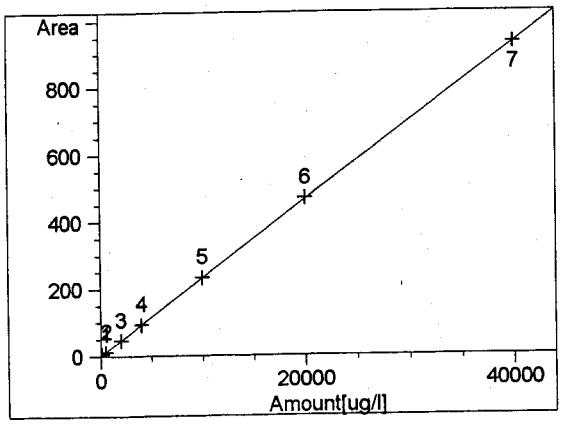
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



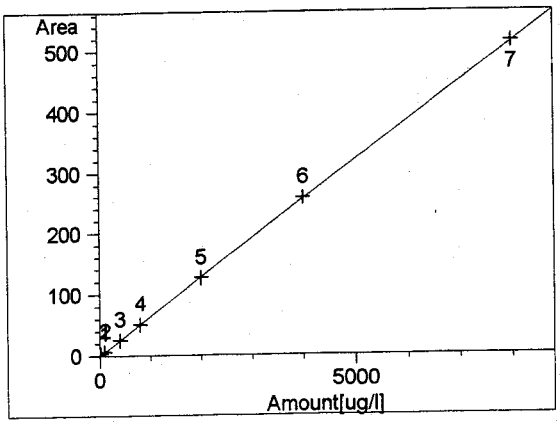
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



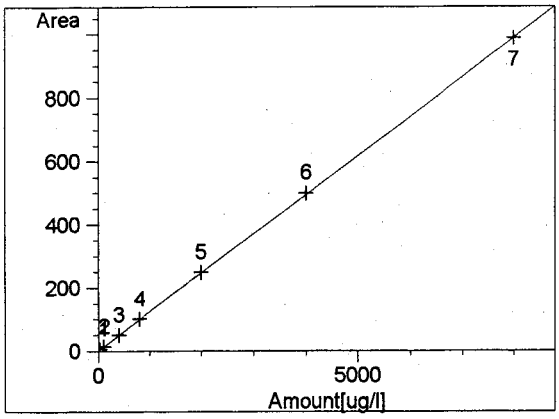
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



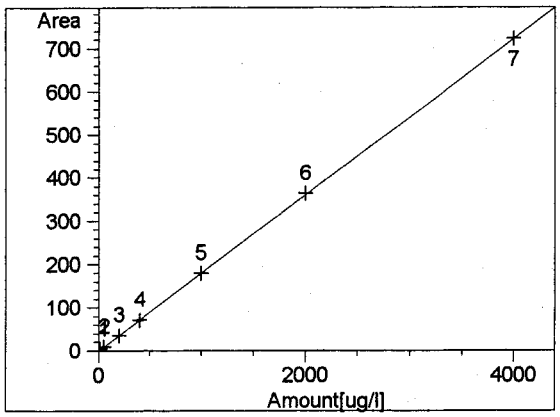
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



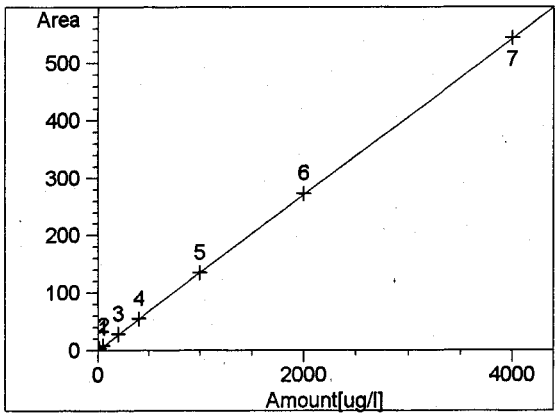
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



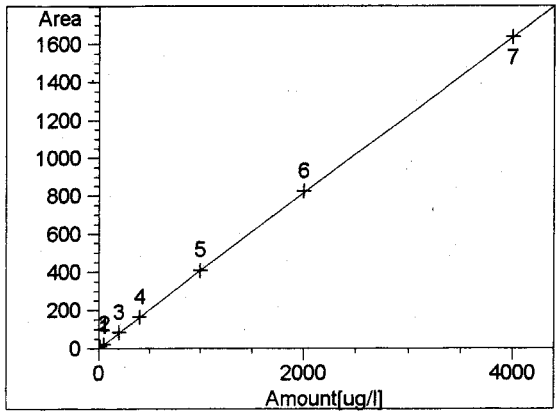
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



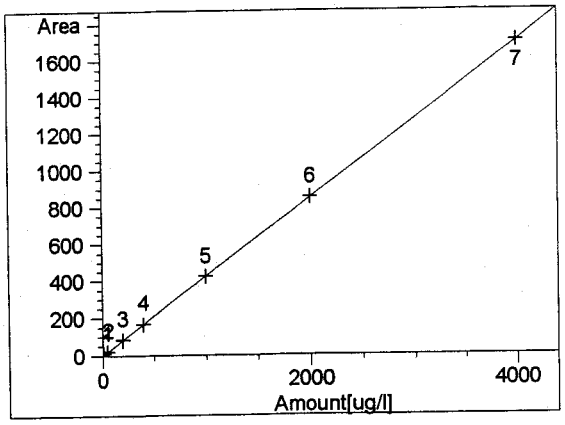
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



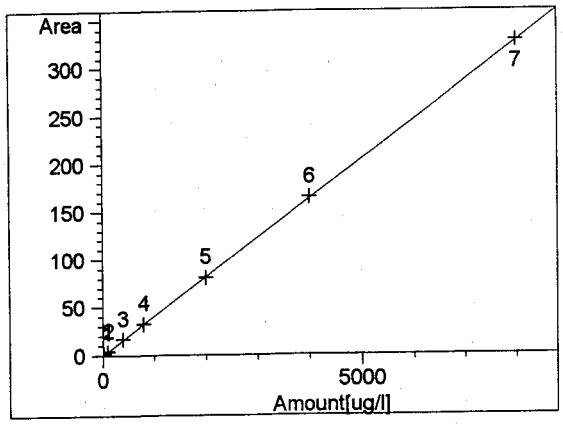
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



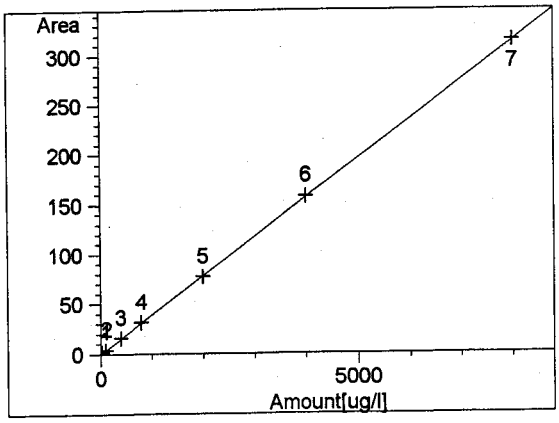
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



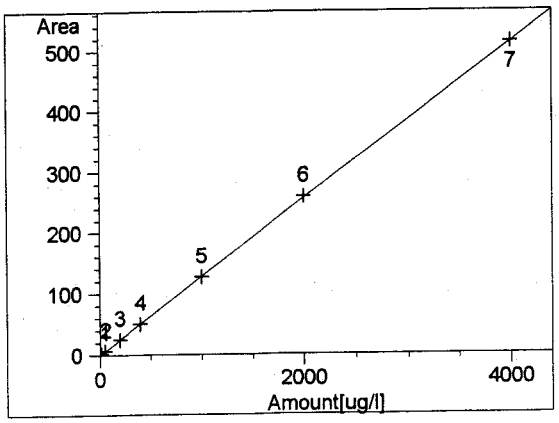
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



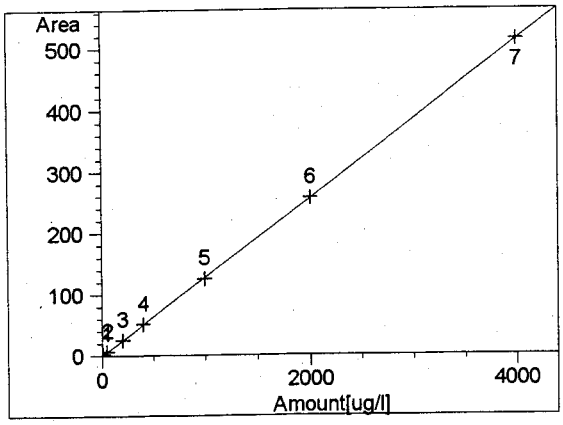
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



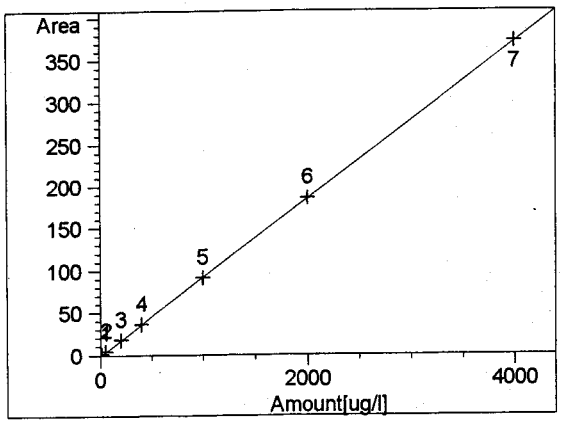
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



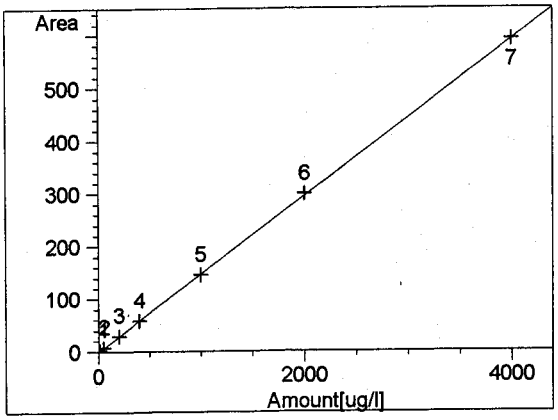
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



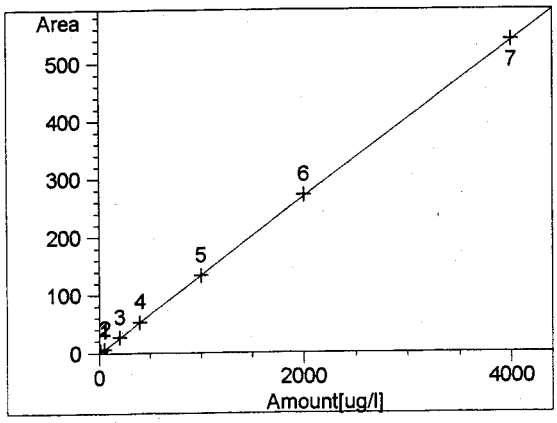
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



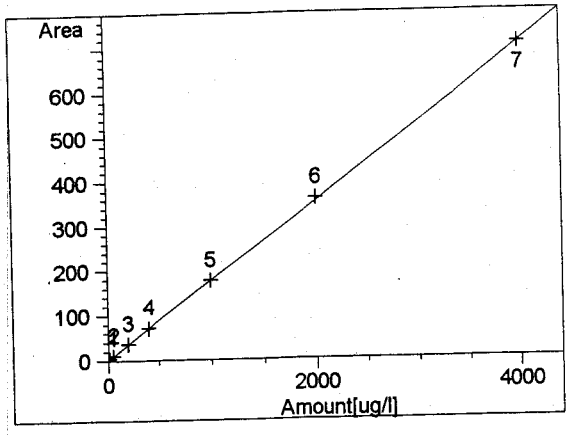
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



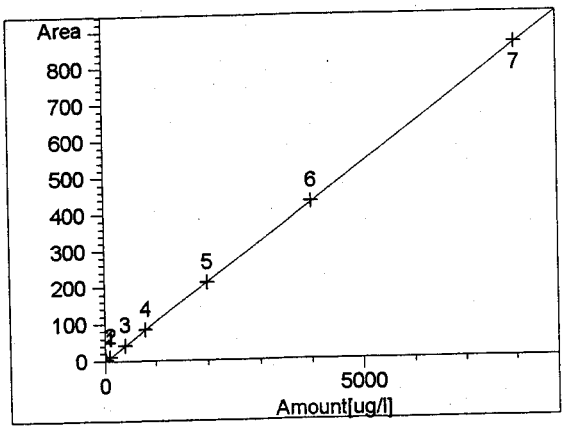
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



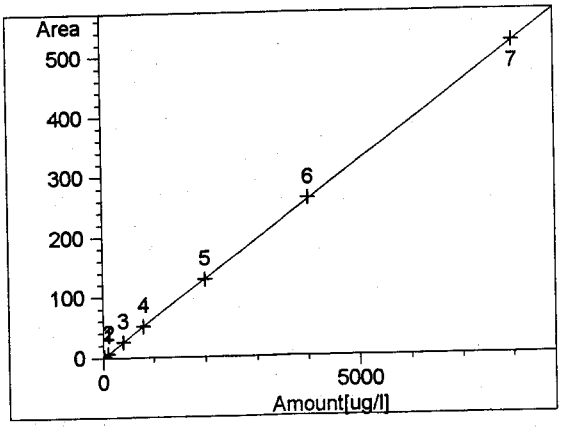
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



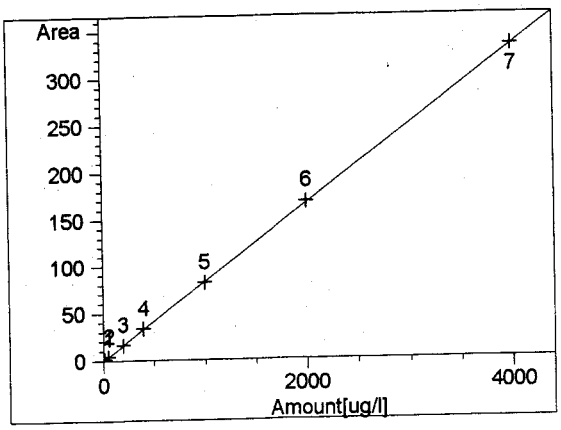
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



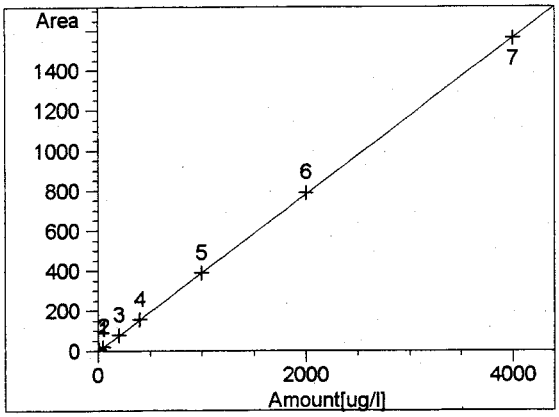
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



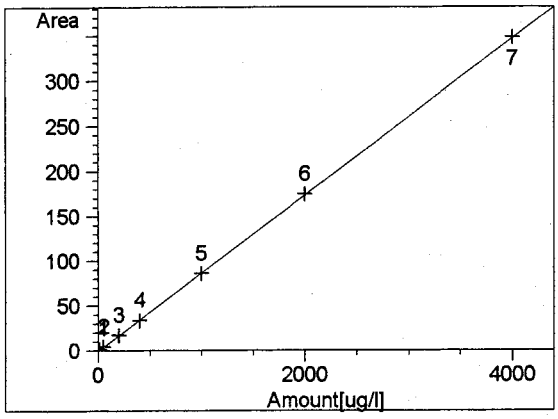
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



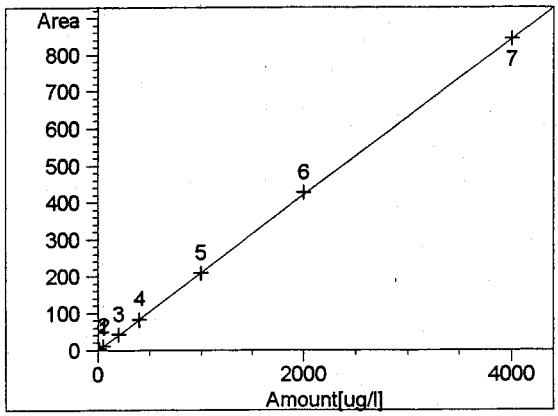
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



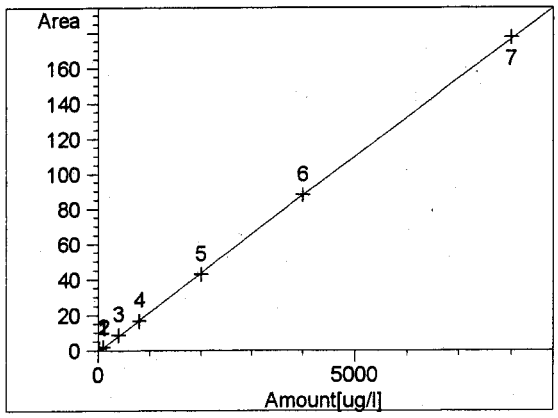
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



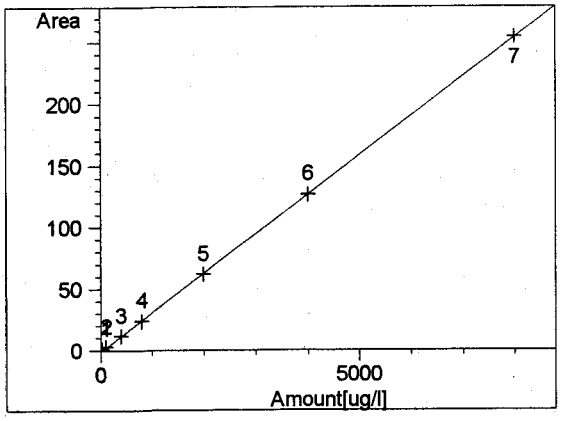
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



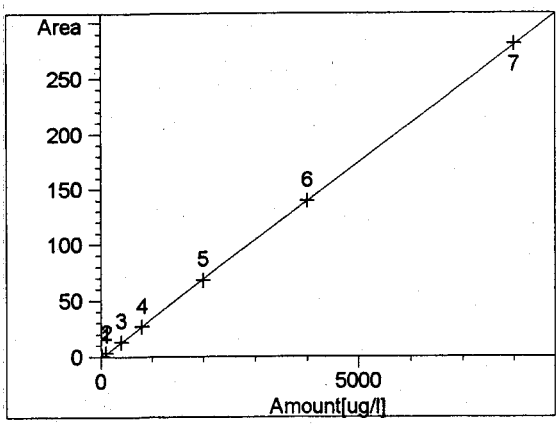
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



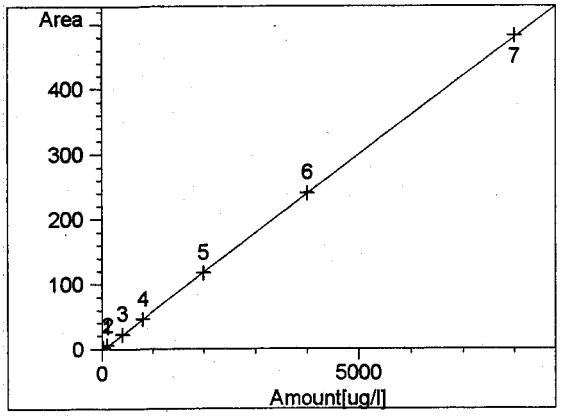
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



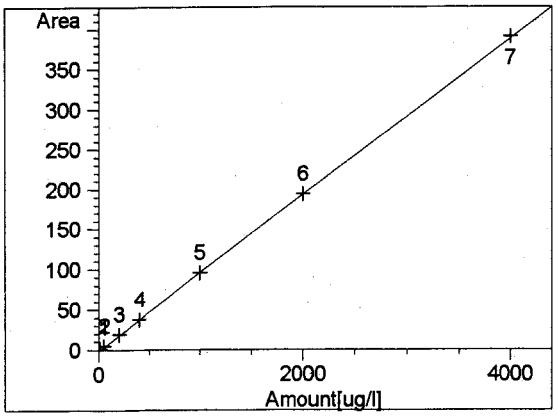
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

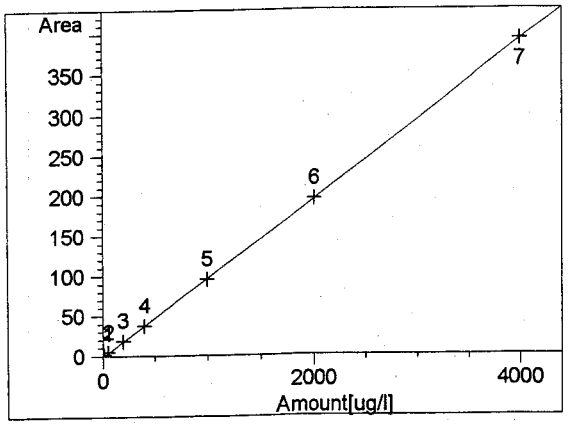


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297107179002 File : 07400002 Time : 15-MAR-2007 10:51
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2051	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0097	4000	4084	ug/L	2	15	
Acenaphthene	1	0.0053	0.0052	2000	2005	ug/L	0	15	
Fluorene	1	0.0637	0.0639	400.0	407.8	ug/L	2	15	
Phenanthrene	1	0.1810	0.1774	200.0	198.8	ug/L	-1	15	
Anthracene	1	0.4065	0.4384	200.0	215.8	ug/L	8	15	
Fluoranthene	1	0.0404	0.0422	400.0	418.9	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0936	200.0	209.3	ug/L	5	15	
Chrysene	1	0.1350	0.1348	200.0	202.1	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1023	400.0	394.8	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0780	200.0	192.7	ug/L	-4	15	
Benzo(a)pyrene	1	0.0828	0.0906	200.0	218.2	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0202	400.0	394.3	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0340	400.0	418.8	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0850	200.0	187.9	ug/L	-6	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8043	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	4000	4129	ug/L	3	15	
Pyrene	2	0.1252	0.1309	200.0	207.6	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8160	ug/L	2	15	
Naphthalene	3	0.0110	0.0110	2000	2001	ug/L	0	15	
Acenaphthene	3	0.0234	0.0238	2000	2026	ug/L	1	15	
Fluorene	3	0.1247	0.1230	400.0	389.1	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1359	200.0	202.2	ug/L	1	15	
Anthracene	3	0.4222	0.4548	200.0	217.7	ug/L	9	15	
Fluoranthene	3	0.0390	0.0402	400.0	414.9	ug/L	4	15	
Pyrene	3	0.1264	0.1332	200.0	212.9	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1515	200.0	208.7	ug/L	4	15	
Chrysene	3	0.1780	0.1769	200.0	196.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0623	400.0	390.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	200.0	194.3	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2262	200.0	216.6	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0274	400.0	373.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0559	400.0	397.0	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0891	200.0	194.7	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	8000	7930	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193217 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297107179018 File : 07400018 Time : 15-MAR-2007 19:29
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4104	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	8000	8327	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4127	ug/L	3	15	
Fluorene	1	0.0637	0.0645	800.0	812.6	ug/L	2	15	
Phenanthrene	1	0.1810	0.1794	400.0	399.5	ug/L	0	15	
Anthracene	1	0.4065	0.4400	400.0	431.2	ug/L	8	15	
Fluoranthene	1	0.0404	0.0420	800.0	825.6	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0953	400.0	417.7	ug/L	4	15	
Chrysene	1	0.1350	0.1359	400.0	404.7	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1057	800.0	801.1	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0813	400.0	395.6	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0928	400.0	436.4	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0204	800.0	765.2	ug/L	-4	15	
Benzo(g,h,i)perylene	1	0.0309	0.0353	800.0	834.5	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0943	400.0	400.3	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16280	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0889	8000	8345	ug/L	4	15	
Pyrene	2	0.1252	0.1311	400.0	411.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16620	ug/L	4	15	
Naphthalene	3	0.0110	0.0108	4000	3922	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0235	4000	4008	ug/L	0	15	
Fluorene	3	0.1247	0.1212	800.0	775.9	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1326	400.0	392.6	ug/L	-2	15	
Anthracene	3	0.4222	0.4551	400.0	431.2	ug/L	8	15	
Fluoranthene	3	0.0390	0.0398	800.0	816.5	ug/L	2	15	
Pyrene	3	0.1264	0.1276	400.0	402.4	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1509	400.0	411.4	ug/L	3	15	
Chrysene	3	0.1780	0.1745	400.0	390.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0637	800.0	790.8	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3820	400.0	391.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2289	400.0	435.9	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0287	800.0	750.2	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0577	800.0	790.9	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0917	400.0	386.9	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	16000	15650	ug/L	-2	15	

SEQUENCE SUMMARY FOR 193217 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0					
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0					
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0					
004	25400004	X	IB			11-SEP-2006 14:31	1.0					
005	25400005	X	IB			11-SEP-2006 15:02	1.0					
006	25400006	ICAL				11-SEP-2006 15:34	1.0				1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0				2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0				3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0				4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0				5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0				6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0				7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0					
014	25400014	X	IB			11-SEP-2006 19:47	1.0					
015	25400015	ICV				11-SEP-2006 20:19	1.0	10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0				8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0					

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193217 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	07400001	X	IB - 074			15-MAR-2007 10:19	1.0						
002	07400002	CCV	L			15-MAR-2007 10:51	1.0	1.0			10	1	
003	07400003	X	CCV			15-MAR-2007 11:23	1.0					1	
004	07400004	X	IB			15-MAR-2007 11:54	1.0						
005	07400005	LCS	QC379236	123110	Miscel	15-MAR-2007 12:31	1.0	0.06647		6	10	spk	
006	07400006	X	IB			15-MAR-2007 13:02	1.0						
007	07400007	BLANK	QC379036	123065	Water	15-MAR-2007 13:34	1.0	0.002			10		
008	07400008	MSS	193332-003	123065	Water	15-MAR-2007 14:06	1.0	0.00198	5	2	10		5:MTNPH1=134292
009	07400009	LCS	QC379037	123065	Water	15-MAR-2007 14:37	1.0	0.002			10		
010	07400010	MS	QC379038	123065	Water	15-MAR-2007 15:09	1.0	0.00198	3	10	10		5:MTNPH1=117657
011	07400011	MSD	QC379039	123065	Water	15-MAR-2007 15:40	1.0	0.00198	3	10	10		5:MTNPH1=115619
012	07400012	X	IB			15-MAR-2007 16:19	1.0						
013	07400013	SAMPLE	193217-014	123065	Water	15-MAR-2007 16:51	1.0	0.001942			10		
014	07400014	SAMPLE	193217-015	123065	Water	15-MAR-2007 17:22	1.0	0.001887			10		
015	07400015	SAMPLE	193217-016	123065	Water	15-MAR-2007 17:54	1.0	0.001905			10		
016	07400016	SAMPLE	193217-017	123065	Water	15-MAR-2007 18:25	1.0	0.001961			10		
017	07400017	X	IB			15-MAR-2007 18:57	1.0						
018	07400018	CCV	M			15-MAR-2007 19:29	1.0	1.0			10	2	
019	07400019	X	CCV			15-MAR-2007 20:00	1.0					2	
020	07400020	X	IB			15-MAR-2007 20:32	1.0						
021	07400021	SAMPLE	193333-001	123065	Water	15-MAR-2007 21:03	1.0	0.00198	1		10		1:PYR=4497.82
022	07400022	SAMPLE	193262-002	123065	Water	15-MAR-2007 21:35	1.0	0.001905			10		
023	07400023	SAMPLE	193262-003	123065	Water	15-MAR-2007 22:07	1.0	0.001905			10		
024	07400024	SAMPLE	193262-007	123065	Water	15-MAR-2007 22:38	1.0	0.001923			10		
025	07400025	SAMPLE	193262-019	123065	Water	15-MAR-2007 23:10	1.0	0.001923			10		
026	07400026	SAMPLE	193262-020	123065	Water	15-MAR-2007 23:42	1.0	0.001905			10		
027	07400027	SAMPLE	193277-001	123065	Water	16-MAR-2007 00:13	1.0	0.002105			10		
028	07400028	SAMPLE	193329-003	123065	Water	16-MAR-2007 00:45	1.0	0.001905			10		
029	07400029	SAMPLE	193329-004	123065	Water	16-MAR-2007 01:16	1.0	0.001905			10		
030	07400030	SAMPLE	193329-005	123065	Water	16-MAR-2007 01:48	1.0	0.001905			10		

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

SEQUENCE SUMMARY FOR 193217 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	07400031	X	IB			16-MAR-2007 02:19	1.0						
032	07400032	CCV	H			16-MAR-2007 02:51	1.0	1.0			10	3	
033	07400033	X	CCV			16-MAR-2007 03:23	1.0					3	
034	07400034	X	IB			16-MAR-2007 03:54	1.0						
035	07400035	SAMPLE	193329-006	123065	Water	16-MAR-2007 04:26	1.0	0.001961			10		
036	07400036	SAMPLE	193332-001	123065	Water	16-MAR-2007 04:58	1.0	0.001942			10		
037	07400037	SAMPLE	193332-004	123065	Water	16-MAR-2007 05:29	1.0	0.002667			10		
038	07400038	SAMPLE	193332-005	123065	Water	16-MAR-2007 06:01	1.0	0.001923	1		10		1:PYR=5315.28
039	07400039	SAMPLE	193332-002	123065	Water	16-MAR-2007 06:32	1.0	0.001961	1		10		1:PYR=5218.97
040	07400040	X	IB			16-MAR-2007 07:04	1.0						
041	07400041	X	IB			16-MAR-2007 07:35	1.0						
042	07400042	CCV	M			16-MAR-2007 08:07	1.0	1.0			10	2	
043	07400043	X	CCV			16-MAR-2007 08:39	1.0					2	
044	07400044	X	IB			16-MAR-2007 09:10	1.0						

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

REPORTING SUMMARY FOR 193217 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-014	Naphthalene	HPLC04	1	03/15/07 16:51
193217-014	Acenaphthylene	HPLC04	1	03/15/07 16:51
193217-014	Acenaphthene	HPLC04	1	03/15/07 16:51
193217-014	Fluorene	HPLC04	1	03/15/07 16:51
193217-014	Phenanthrene	HPLC04	3	03/15/07 16:51
193217-014	Anthracene	HPLC04	3	03/15/07 16:51
193217-014	Fluoranthene	HPLC04	3	03/15/07 16:51
193217-014	Pyrene	HPLC04	3	03/15/07 16:51
193217-014	Benzo(a)anthracene	HPLC04	3	03/15/07 16:51
193217-014	Chrysene	HPLC04	3	03/15/07 16:51
193217-014	Benzo(b)fluoranthene	HPLC04	3	03/15/07 16:51
193217-014	Benzo(k)fluoranthene	HPLC04	3	03/15/07 16:51
193217-014	Benzo(a)pyrene	HPLC04	3	03/15/07 16:51
193217-014	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 16:51
193217-014	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 16:51
193217-014	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 16:51
193217-014	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 16:51
193217-014	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 16:51
193217-015	Naphthalene	HPLC04	1	03/15/07 17:22
193217-015	Acenaphthylene	HPLC04	1	03/15/07 17:22
193217-015	Acenaphthene	HPLC04	1	03/15/07 17:22
193217-015	Fluorene	HPLC04	1	03/15/07 17:22
193217-015	Phenanthrene	HPLC04	3	03/15/07 17:22
193217-015	Anthracene	HPLC04	3	03/15/07 17:22
193217-015	Fluoranthene	HPLC04	3	03/15/07 17:22
193217-015	Pyrene	HPLC04	3	03/15/07 17:22
193217-015	Benzo(a)anthracene	HPLC04	3	03/15/07 17:22
193217-015	Chrysene	HPLC04	3	03/15/07 17:22
193217-015	Benzo(b)fluoranthene	HPLC04	3	03/15/07 17:22
193217-015	Benzo(k)fluoranthene	HPLC04	3	03/15/07 17:22
193217-015	Benzo(a)pyrene	HPLC04	3	03/15/07 17:22
193217-015	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 17:22
193217-015	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 17:22
193217-015	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 17:22
193217-015	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 17:22
193217-015	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 17:22
193217-016	Naphthalene	HPLC04	1	03/15/07 17:54
193217-016	Acenaphthylene	HPLC04	1	03/15/07 17:54
193217-016	Acenaphthene	HPLC04	1	03/15/07 17:54
193217-016	Fluorene	HPLC04	1	03/15/07 17:54
193217-016	Phenanthrene	HPLC04	3	03/15/07 17:54
193217-016	Anthracene	HPLC04	3	03/15/07 17:54
193217-016	Fluoranthene	HPLC04	3	03/15/07 17:54
193217-016	Pyrene	HPLC04	3	03/15/07 17:54
193217-016	Benzo(a)anthracene	HPLC04	3	03/15/07 17:54
193217-016	Chrysene	HPLC04	3	03/15/07 17:54
193217-016	Benzo(b)fluoranthene	HPLC04	3	03/15/07 17:54
193217-016	Benzo(k)fluoranthene	HPLC04	3	03/15/07 17:54
193217-016	Benzo(a)pyrene	HPLC04	3	03/15/07 17:54
193217-016	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 17:54
193217-016	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 17:54
193217-016	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 17:54

REPORTING SUMMARY FOR 193217 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193217-016	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 17:54
193217-016	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 17:54
193217-017	Naphthalene	HPLC04	1	03/15/07 18:25
193217-017	Acenaphthylene	HPLC04	1	03/15/07 18:25
193217-017	Acenaphthene	HPLC04	1	03/15/07 18:25
193217-017	Fluorene	HPLC04	1	03/15/07 18:25
193217-017	Phenanthrene	HPLC04	3	03/15/07 18:25
193217-017	Anthracene	HPLC04	3	03/15/07 18:25
193217-017	Fluoranthene	HPLC04	3	03/15/07 18:25
193217-017	Pyrene	HPLC04	3	03/15/07 18:25
193217-017	Benzo(a)anthracene	HPLC04	3	03/15/07 18:25
193217-017	Chrysene	HPLC04	3	03/15/07 18:25
193217-017	Benzo(b)fluoranthene	HPLC04	3	03/15/07 18:25
193217-017	Benzo(k)fluoranthene	HPLC04	3	03/15/07 18:25
193217-017	Benzo(a)pyrene	HPLC04	3	03/15/07 18:25
193217-017	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 18:25
193217-017	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 18:25
193217-017	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 18:25
193217-017	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 18:25
193217-017	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 18:25
QC379036	Naphthalene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthylene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthene	HPLC04	1	03/15/07 13:34
QC379036	Fluorene	HPLC04	1	03/15/07 13:34
QC379036	Phenanthrene	HPLC04	3	03/15/07 13:34
QC379036	Anthracene	HPLC04	3	03/15/07 13:34
QC379036	Fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Pyrene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Chrysene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(b)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(k)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)pyrene	HPLC04	3	03/15/07 13:34
QC379036	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 13:34
QC379036	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 13:34
QC379036	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 13:34
QC379036	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 13:34
QC379037	Naphthalene	HPLC04	1	03/15/07 14:37
QC379037	Fluorene	HPLC04	1	03/15/07 14:37
QC379037	Pyrene	HPLC04	3	03/15/07 14:37
QC379037	Benzo(a)pyrene	HPLC04	3	03/15/07 14:37
QC379037	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 14:37
QC379037	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 14:37
QC379038	Naphthalene	HPLC04	1	03/15/07 15:09
QC379038	Fluorene	HPLC04	1	03/15/07 15:09
QC379038	Pyrene	HPLC04	3	03/15/07 15:09
QC379038	Benzo(a)pyrene	HPLC04	3	03/15/07 15:09
QC379038	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:09
QC379038	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:09

REPORTING SUMMARY FOR 193217 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379039	Naphthalene	HPLC04	1	03/15/07 15:40
QC379039	Fluorene	HPLC04	1	03/15/07 15:40
QC379039	Pyrene	HPLC04	3	03/15/07 15:40
QC379039	Benzo(a)pyrene	HPLC04	3	03/15/07 15:40
QC379039	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:40
QC379039	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:40

S

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 21:05

Batch Number : 123065
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5673B
Spike #2 ID : S5518C
Spike #3 ID :
SOP Version : 8310w 3520 rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193217-014		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193217-015		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193217-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193217-017		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193262-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-003		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-019		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-020		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193277-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193329-003		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-004		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-005		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-006		Innovative Technical Solutions	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-001		Mactec, Inc.	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193332-002		Mactec, Inc.	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-003		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		MSS
193332-004		Mactec, Inc.	Water	375	mL	1	0.002667	1	7	.05	0		8310		
193332-005		Mactec, Inc.	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193333-001		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		
QC379036	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC379037	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC379038	MS	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		
QC379039	MSD	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		

Prep Chemist: Jessie Mee Reviewed By: Pamela Moghit Date: 3/15/07

Relinquished By: [signature] Received By: [signature] Date: 15MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 123065
LIMS Analysis: 8310
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193217-014 I	1030	7	2.0		
15 J	1060				
16 K	1050				
17 I	1020				
193262-002 G	1050				
03 I	1050				
07	1040				
19 N	1040				
20 W	1050				
193277-001 J	950				*
193329-003 G	1050				
04 H					
05 H					
06 J	1020				
193332-001 H	1030				
02 J	1020				
03 V	1010				MSS
04 B	375		1.0		limited sample **
05 I	1040		2.0		
193333-001 J	1010				
MB QC379036	1000	NA			
LCS 37	1000				
MS 38	1010	7			193332-003 T
MSD 39	1010	7			U

JOM 3/13/07

0.1 | 0.05 ** mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1630
Extraction End Time: 12:00
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ Gray Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☐ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5673B / S5673C*	JOM 3/13/07
S 5518C	
EM47031 / EM47011	
1630	3/14/07
12:00	JXM 3/14/07 from 3/13/07
N/A	
EM46111628	
EM46473	
✓	
N/A	
Whatman L227	✓

Extraction Chemist 3/13/07 Date

Contined from Page ____
Continued on Page ____

Pamela Mangiaf 3/15/07
Reviewed by: Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/23/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2B	Batch#:	122924
Lab ID:	193217-010	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	25,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	37,000	500
Manganese	10	10
Nickel	ND	20
Potassium	1,000	500
Sodium	45,000	500
Vanadium	20	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Batch#:	122924
Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	34	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	11,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	20,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	36,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0306071C	Batch#:	122924
Lab ID:	193217-012	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	35	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	11,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	2.4	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	20,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	20	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF08GW01	Batch#:	122924
Lab ID:	193217-014	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	290	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	36,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	34,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	1,300	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	140,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF08GW02B	Batch#:	122924
Lab ID:	193217-015	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	43	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	23,000	500
Chromium	34	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	32,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	610	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	33,000	500
Thallium	ND	1.0
Vanadium	10	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF08GW03	Batch#:	122924
Lab ID:	193217-016	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	140	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	21,000	500
Chromium	24	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	54,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	580	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	58,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF08GW06	Batch#:	122924
Lab ID:	193217-017	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	39	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	23,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	23,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	2,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	130,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Batch#:	122924
Lab ID:	193217-018	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/10/07
Antimony	ND	1.0	10.00	03/10/07
Arsenic	5.1	5.0	10.00	03/10/07
Barium	ND	10	10.00	03/10/07
Beryllium	ND	2.0	10.00	03/10/07
Cadmium	ND	1.0	10.00	03/10/07
Calcium	36,000	500	10.00	03/10/07
Chromium	15	10	10.00	03/10/07
Cobalt	ND	10	10.00	03/10/07
Copper	ND	1.0	10.00	03/10/07
Iron	ND	100	10.00	03/10/07
Lead	ND	3.0	10.00	03/10/07
Magnesium	160,000	500	10.00	03/10/07
Manganese	19	10	10.00	03/10/07
Nickel	ND	20	10.00	03/10/07
Potassium	1,900	500	10.00	03/10/07
Selenium	ND	5.0	10.00	03/10/07
Silver	ND	1.0	10.00	03/10/07
Sodium	310,000	500	20.00	03/11/07
Thallium	ND	1.0	10.00	03/10/07
Vanadium	11	10	10.00	03/10/07
Zinc	ND	20	10.00	03/10/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW101	Batch#:	122924
Lab ID:	193217-019	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/10/07
Antimony	ND	1.0	10.00	03/10/07
Arsenic	ND	5.0	10.00	03/10/07
Barium	ND	10	10.00	03/10/07
Beryllium	ND	2.0	10.00	03/10/07
Cadmium	ND	1.0	10.00	03/10/07
Calcium	13,000	500	10.00	03/10/07
Chromium	21	10	10.00	03/10/07
Cobalt	ND	10	10.00	03/10/07
Copper	ND	1.0	10.00	03/10/07
Iron	ND	100	10.00	03/10/07
Lead	ND	3.0	10.00	03/10/07
Magnesium	28,000	500	10.00	03/10/07
Manganese	ND	10	10.00	03/10/07
Nickel	ND	20	10.00	03/10/07
Potassium	830	500	10.00	03/10/07
Selenium	ND	5.0	10.00	03/10/07
Silver	ND	1.0	10.00	03/10/07
Sodium	210,000	500	20.00	03/11/07
Thallium	ND	1.0	10.00	03/10/07
Vanadium	11	10	10.00	03/10/07
Zinc	ND	20	10.00	03/10/07

ND= Not Detected
RL= Reporting Limit

15.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	122924
Lab ID:	193217-020	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/10/07
Antimony	ND	1.0	10.00	03/10/07
Arsenic	ND	5.0	10.00	03/10/07
Barium	50	10	10.00	03/10/07
Beryllium	ND	2.0	10.00	03/10/07
Cadmium	ND	1.0	10.00	03/10/07
Calcium	18,000	500	10.00	03/10/07
Chromium	110	10	10.00	03/10/07
Cobalt	ND	10	10.00	03/10/07
Copper	ND	1.0	10.00	03/10/07
Iron	ND	100	10.00	03/10/07
Lead	ND	3.0	10.00	03/10/07
Magnesium	90,000	500	10.00	03/10/07
Manganese	ND	10	10.00	03/10/07
Nickel	ND	20	10.00	03/10/07
Potassium	ND	500	10.00	03/10/07
Selenium	ND	5.0	10.00	03/10/07
Silver	ND	1.0	10.00	03/10/07
Sodium	230,000	500	20.00	03/11/07
Thallium	ND	1.0	10.00	03/10/07
Vanadium	ND	10	10.00	03/10/07
Zinc	ND	20	10.00	03/10/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	2.2	1.0
Arsenic	ND	5.0
Barium	40	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	17,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	2.5	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	46,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	120,000	500
Thallium	ND	1.0
Vanadium	11	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05	Batch#:	122924
Lab ID:	193217-022	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/10/07
Antimony	ND	1.0	10.00	03/10/07
Arsenic	ND	5.0	10.00	03/10/07
Barium	92	10	10.00	03/10/07
Beryllium	ND	2.0	10.00	03/10/07
Cadmium	ND	1.0	10.00	03/10/07
Calcium	77,000	500	10.00	03/10/07
Chromium	ND	10	10.00	03/10/07
Cobalt	ND	10	10.00	03/10/07
Copper	ND	1.0	10.00	03/10/07
Iron	ND	100	10.00	03/10/07
Lead	ND	3.0	10.00	03/10/07
Magnesium	89,000	500	10.00	03/10/07
Manganese	520	10	10.00	03/10/07
Nickel	30	20	10.00	03/10/07
Potassium	3,600	500	10.00	03/10/07
Selenium	ND	5.0	10.00	03/10/07
Silver	ND	1.0	10.00	03/10/07
Sodium	210,000	500	20.00	03/11/07
Thallium	ND	1.0	10.00	03/10/07
Vanadium	ND	10	10.00	03/10/07
Zinc	ND	20	10.00	03/10/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05RBBHWGW01	Batch#:	122924
Lab ID:	193217-023	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0306073A	Batch#:	122924
Lab ID:	193217-024	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	41	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	17,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	16	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	47,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	130,000	500
Thallium	ND	1.0
Vanadium	10	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378443	Batch#:	122924
Matrix:	Filtrate	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	03/06/07
Units:	ug/L	Received:	03/07/07
Diln Fac:	1.000	Prepared:	03/14/07
Batch#:	123115	Analyzed:	03/14/07

Field ID	Type	Lab ID	Matrix	Result	RL
NKGW02	SAMPLE	193217-011	Filtrate	ND	0.20
DUP0306071C	SAMPLE	193217-012	Filtrate	ND	0.20
LF08GW01	SAMPLE	193217-014	Filtrate	ND	0.20
LF08GW02B	SAMPLE	193217-015	Filtrate	ND	0.20
LF08GW03	SAMPLE	193217-016	Filtrate	ND	0.20
LF08GW06	SAMPLE	193217-017	Filtrate	ND	0.20
	BLANK	QC379253	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	122924
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	1.000	Analyzed:	03/10/07

Type: BS Lab ID: QC378444

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,851	99	80-120
Antimony	100.0	95.50	96	80-120
Arsenic	100.0	92.45	92	80-120
Barium	100.0	99.37	99	80-120
Beryllium	100.0	97.84	98	80-120
Cadmium	100.0	99.12	99	80-120
Calcium	10,000	10,150	102	80-120
Chromium	100.0	104.8	105	80-120
Cobalt	100.0	106.2	106	80-120
Copper	100.0	98.61	99	80-120
Iron	10,000	10,190	102	80-120
Lead	100.0	101.7	102	80-120
Magnesium	10,000	9,748	97	80-120
Manganese	100.0	102.7	103	80-120
Nickel	100.0	105.1	105	80-120
Potassium	10,000	10,160	102	80-120
Selenium	100.0	91.02	91	80-120
Silver	100.0	107.5	108	80-120
Sodium	10,000	9,874	99	80-120
Thallium	50.00	49.91	100	80-120
Vanadium	100.0	102.5	103	80-120
Zinc	100.0	94.10	94	80-120

Type: BSD Lab ID: QC378445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,583	96	80-120	3	20
Antimony	100.0	92.60	93	80-120	3	20
Arsenic	100.0	92.01	92	80-120	0	20
Barium	100.0	98.16	98	80-120	1	20
Beryllium	100.0	96.92	97	80-120	1	20
Cadmium	100.0	96.15	96	80-120	3	20
Calcium	10,000	9,862	99	80-120	3	20
Chromium	100.0	100.9	101	80-120	4	20
Cobalt	100.0	102.6	103	80-120	3	20
Copper	100.0	97.43	97	80-120	1	20
Iron	10,000	9,842	98	80-120	3	20
Lead	100.0	98.73	99	80-120	3	20
Magnesium	10,000	9,549	95	80-120	2	20
Manganese	100.0	98.38	98	80-120	4	20
Nickel	100.0	102.1	102	80-120	3	20
Potassium	10,000	9,908	99	80-120	3	20
Selenium	100.0	93.47	93	80-120	3	20
Silver	100.0	104.2	104	80-120	3	20
Sodium	10,000	9,549	95	80-120	3	20
Thallium	50.00	48.32	97	80-120	3	20
Vanadium	100.0	99.25	99	80-120	3	20
Zinc	100.0	96.27	96	80-120	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	123115
Field ID:	NKGW02	Sampled:	03/06/07
MSS Lab ID:	193217-011	Received:	03/07/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC379255	Water		5.000	5.310	106	80-120		
BSD	QC379256	Water		5.000	5.210	104	80-120	2	20
MS	QC379258	Filtrate	<0.05753	5.000	5.320	106	75-125		
MSD	QC379259	Filtrate		5.000	5.470	109	75-125	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Batch#:	122924
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378446

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<4.041	10,000	10,060	101	75-125
Antimony	0.2700	100.0	94.81	95	75-125
Arsenic	<0.3366	100.0	97.88	98	75-125
Barium	34.01	100.0	133.8	100	75-125
Beryllium	<0.1733	100.0	93.81	94	75-125
Cadmium	<0.05768	100.0	99.25	99	75-125
Calcium	11,030	10,000	20,980	100	75-125
Chromium	3.892	100.0	102.3	98	75-125
Cobalt	<0.07247	100.0	100.7	101	75-125
Copper	<0.2776	100.0	100.5	101	75-125
Iron	<19.37	10,000	9,851	99	75-125
Lead	<0.1276	100.0	99.22	99	75-125
Magnesium	19,770	10,000	29,050	93	75-125
Manganese	<0.1082	100.0	98.98	99	75-125
Nickel	5.010	100.0	106.1	101	75-125
Potassium	126.3	10,000	10,150	100	75-125
Selenium	1.548	100.0	98.93	97	75-125
Silver	<0.07903	100.0	102.9	103	75-125
Sodium	35,990	10,000	43,710	77	75-125
Thallium	<0.2993	50.00	46.14	92	75-125
Vanadium	2.296	100.0	99.10	97	75-125
Zinc	9.868	100.0	121.5	112	75-125

Type: MSD Lab ID: QC378447

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,080	101	75-125	0	20
Antimony	100.0	95.28	95	75-125	0	20
Arsenic	100.0	95.95	96	75-125	2	20
Barium	100.0	134.8	101	75-125	1	20
Beryllium	100.0	93.01	93	75-125	1	20
Cadmium	100.0	98.82	99	75-125	0	20
Calcium	10,000	21,440	104	75-125	2	20
Chromium	100.0	101.4	98	75-125	1	20
Cobalt	100.0	98.58	99	75-125	2	20
Copper	100.0	98.48	98	75-125	2	20
Iron	10,000	9,845	98	75-125	0	20
Lead	100.0	99.26	99	75-125	0	20
Magnesium	10,000	29,430	97	75-125	1	20
Manganese	100.0	97.68	98	75-125	1	20
Nickel	100.0	104.7	100	75-125	1	20
Potassium	10,000	10,220	101	75-125	1	20
Selenium	100.0	98.73	97	75-125	0	20
Silver	100.0	101.2	101	75-125	2	20
Sodium	10,000	44,970	90	75-125	3	20
Thallium	50.00	45.35	91	75-125	2	20
Vanadium	100.0	98.47	96	75-125	1	20
Zinc	100.0	109.7	100	75-125	10	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MS Lab ID: QC378508

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	38.94	10,000	10,170	101	75-125
Antimony	2.153	100.0	94.85	93	75-125
Arsenic	3.031	100.0	98.79	96	75-125
Barium	40.48	100.0	140.4	100	75-125
Beryllium	0.3423	100.0	93.82	93	75-125
Cadmium	0.4589	100.0	99.66	99	75-125
Calcium	16,710	10,000	25,600	89	75-125
Chromium	6.235	100.0	103.3	97	75-125
Cobalt	2.470	100.0	101.3	99	75-125
Copper	2.527	100.0	99.63	97	75-125
Iron	<19.37	10,000	10,360	104	75-125
Lead	0.5239	100.0	98.51	98	75-125
Magnesium	45,530	10,000	53,690	82 NM	75-125
Manganese	3.705	100.0	99.84	96	75-125
Nickel	7.760	100.0	105.2	97	75-125
Potassium	218.7	10,000	10,280	101	75-125
Selenium	<0.2730	100.0	101.2	101	75-125
Silver	0.2372	100.0	101.9	102	75-125
Sodium	122,700	10,000	129,700	70 NM	75-125
Thallium	<0.2993	50.00	46.29	93	75-125
Vanadium	10.52	100.0	108.4	98	75-125
Zinc	15.16	100.0	106.9	92	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	122924
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	10.00	Analyzed:	03/10/07

Type: MSD Lab ID: QC378509

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,010	100	75-125	2	20
Antimony	100.0	94.80	93	75-125	0	20
Arsenic	100.0	103.4	100	75-125	5	20
Barium	100.0	141.3	101	75-125	1	20
Beryllium	100.0	96.66	96	75-125	3	20
Cadmium	100.0	98.78	98	75-125	1	20
Calcium	10,000	25,820	91	75-125	1	20
Chromium	100.0	106.3	100	75-125	3	20
Cobalt	100.0	103.7	101	75-125	2	20
Copper	100.0	103.3	101	75-125	4	20
Iron	10,000	9,963	100	75-125	4	20
Lead	100.0	97.45	97	75-125	1	20
Magnesium	10,000	53,890	84 NM	75-125	0	20
Manganese	100.0	103.2	99	75-125	3	20
Nickel	100.0	108.7	101	75-125	3	20
Potassium	10,000	10,150	99	75-125	1	20
Selenium	100.0	100.3	100	75-125	1	20
Silver	100.0	101.9	102	75-125	0	20
Sodium	10,000	136,900	142 NM	75-125	5	20
Thallium	50.00	46.27	93	75-125	0	20
Vanadium	100.0	112.0	101	75-125	3	20
Zinc	100.0	111.3	96	75-125	4	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW02	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193217-011	Batch#:	122924
Lab ID:	QC378448	Sampled:	03/06/07
Matrix:	Filtrate	Received:	03/07/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	ND	500.0	NC	10	03/10/07
Antimony	ND	1.000	ND	5.000	NC	10	03/10/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/10/07
Barium	34.01	10.00	35.46	10.00	4	10	03/10/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/10/07
Cadmium	ND	1.000	ND	5.000	NC	10	03/10/07
Calcium	11,030	500.0	9,906	500.0	10	10	03/11/07
Chromium	ND	10.00	4.388 J	10.00	NC	10	03/10/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/10/07
Copper	ND	1.000	10.93	5.000	NC	10	03/10/07
Iron	ND	100.0	ND	500.0	NC	10	03/10/07
Lead	ND	3.000	ND	5.000	NC	10	03/10/07
Magnesium	19,770	500.0	20,110	500.0	2	10	03/10/07
Manganese	ND	10.00	ND	10.00	NC	10	03/10/07
Nickel	ND	20.00	4.802 J	20.00	NC	10	03/10/07
Potassium	ND	500.0	ND	500.0	NC	10	03/10/07
Selenium	ND	5.000	ND	5.000	NC	10	03/10/07
Silver	ND	1.000	ND	5.000	NC	10	03/10/07
Sodium	35,990	500.0	37,770	500.0	5	10	03/10/07
Thallium	ND	1.000	ND	2.500	NC	10	03/10/07
Vanadium	ND	10.00	3.316 J	10.00	NC	10	03/11/07
Zinc	ND	20.00	33.39	20.00	NC	10	03/10/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	NKGW02	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123115
MSS Lab ID:	193217-011	Sampled:	03/06/07
Lab ID:	QC379257	Received:	03/07/07
Matrix:	Filtrate	Analyzed:	03/14/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

50.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67098941155
File : c09q0155
IDF : 10.0
Lab ID: 193217-011
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:07
Cal : 67098941001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67098941159
File : c09q0159
IDF : 10.0
Lab ID: QC378449
Matrix: Filtrate
Batch : 122924
Time : 10-MAR-2007 07:28
Cal : 67098941001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	9833	A	98	75-125	u
Antimony	0.02700	A	100.0	89.86	A	90	75-125	u
Arsenic	ND	E	100.0	95.98	E	96	75-125	u
Barium	3.401	A	100.0	100.4	A	97	75-125	u
Beryllium	ND	A	100.0	93.63	A	94	75-125	u
Cadmium	ND	A	100.0	95.18	A	95	75-125	u
Calcium	1103	A	10000	10840	A	97	75-125	u
Chromium	0.3892	E	100.0	98.77	E	98	75-125	u
Cobalt	ND	E	100.0	99.00	E	99	75-125	u
Copper	ND	E	100.0	96.40	E	96	75-125	u
Iron	ND	H	10000	9650	H	97	75-125	u
Lead	ND	A	100.0	94.78	A	95	75-125	u
Magnesium	1977	A	10000	11730	A	98	75-125	u
Manganese	ND	E	100.0	97.18	E	97	75-125	u
Molybdenum	0.02324	A	100.0	93.72	A	94	75-125	u
Nickel	0.5010	E	100.0	98.85	E	98	75-125	u
Potassium	12.63	A	10000	9837	A	98	75-125	u
Selenium	0.1548	H	100.0	96.14	H	96	75-125	u
Silver	ND	A	100.0	93.46	A	93	75-125	u
Sodium	3599	E	10000	13130	E	95	75-125	u
Thallium	ND	A	50.00	48.43	A	97	75-125	u
Vanadium	0.2296	E	100.0	97.72	E	97	75-125	<ib **b***
Zinc	0.9868	E	100.0	96.92	E	96	75-125	u

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	916634	848479	-7.44
Scandium	A	1517730	1389680	-8.44
Scandium	E	45344	41278	-8.97
Scandium	H	422488	400627	-5.17
Germanium	H	101123	92227	-8.80
Germanium	E	22511	20273	-9.94
Indium	A	1832636	1608487	-12.23
Bismuth	A	1296680	1054667	-18.66
Yttrium	A	1904354	1714680	-9.96
Terbium	A	2253622	2038945	-9.53

<=opening b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET06
alnum : 67098941001
nits : ug/L

Date : 09-MAR-2007 17:19
X Axis : R

Reviewer: ---

evel	File	Seqnum	Sample ID	Analyzed	Stds
L1	c09q0005	67098941005		09-MAR-2007 17:24	S5645
L2	c09q0006	67098941006		09-MAR-2007 17:30	S5648
L3	c09q0007	67098941007		09-MAR-2007 17:35	S5649
L4	c09q0008	67098941008		09-MAR-2007 17:40	S5650
L5	c09q0009	67098941009		09-MAR-2007 17:45	S5644
L6	c09q0010	67098941010		09-MAR-2007 17:51	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
uminum	A	1.0127	0.7158	0.9799	0.6571	0.6506	0.6379	BLNK	-2.7680	1.56167		0.7757	1.000	0.995	
timony	A	0.4072	0.3297	0.3209	0.3088	0.3210	0.3280	BLNK	-0.0253	3.06281		0.3359	1.000	0.995	
rium	A	0.2869	0.1534	0.1078	0.0939	0.0939	0.0920	BLNK	-0.0593	10.8298		0.1380	1.000	0.995	
ryllium	A	0.4058	0.3557	0.3589	0.3440	0.3622	0.3632	BLNK	-0.0182	2.75552		0.3650	1.000	0.995	
dmium	A	0.1047	0.0922	0.0946	0.0890	0.0893	0.0891	BLNK	-0.0150	11.2216		0.0932	1.000	0.995	
lcium	A	0.4388	0.1041	0.0686	0.0289	0.0225	0.0217	BLNK	-196.48	46.3423		0.1141	1.000	0.995	
ad	A	1.2340	0.7613	0.7042	0.6332	0.6489	0.6511	BLNK	-0.0342	1.53737		0.7721	1.000	0.995	
gnesium	A	0.7525	0.6043	0.5811	0.5519	0.5437	0.5391	BLNK	-2.0795	1.85184		0.5954	1.000	0.995	
lybdenum	A	0.3454	0.2488	0.2413	0.2297	0.2313	0.2385	BLNK	-0.0518	4.22014		0.2558	1.000	0.995	
tassium	A	6.1144	1.8034	1.2709	0.7751	0.7208	0.7085	BLNK	-75.952	1.41296		1.8988	1.000	0.995	
lver	A	0.4626	0.4039	0.4088	0.3924	0.3962	0.3967	BLNK	-0.0218	2.52204		0.4101	1.000	0.995	
allium	A	2.0362	1.0312	0.9444	0.8483	0.8877	0.9593	BLNK	-0.0717	1.05940		1.1178	0.999	0.995	
senic	E	0.8142	0.7223	0.6739	0.6537	0.6486	0.6551	BLNK	-0.0505	1.53000		0.6946	1.000	0.995	
romium	E	7.6612	4.2433	3.7835	3.3656	3.2742	3.3048	BLNK	-0.1249	0.30337		4.2721	1.000	0.995	
balt	E	6.9414	5.6712	5.7061	5.4273	5.2102	5.1704	BLNK	-0.0378	0.19314		5.6878	1.000	0.995	
pper	E	26.371	12.548	12.909	8.5491	8.0398	7.9605	BLNK	-0.1957	0.12550		12.730	1.000	0.995	
nganese	E	2.8387	1.9797	1.8652	1.6900	1.6583	1.6796	BLNK	-0.0526	0.59708		1.9519	1.000	0.995	
ckel	E	3.1866	1.8564	1.7358	1.5047	1.4304	1.4170	BLNK	-0.1223	0.70485		1.8551	1.000	0.995	
dium	E	4.2421	1.4197	1.0752	0.7329	0.6813	0.6907	BLNK	-49.142	1.45605		1.4736	1.000	0.995	
nadium	E		3.1157	2.8036	2.5744	2.5588	2.5967	BLNK	-0.2606	0.38686		2.7298	1.000	0.995	
nc	E	22.520	5.2400	3.6163	1.4390	1.2153	1.1544	BLNK	-1.2930	0.86364		5.8642	0.999	0.995	
on	H	1.4541	1.0813	1.0554	0.9382	0.9387	0.9241	BLNK	-5.9496	1.07910		1.0653	1.000	0.995	
lenium	H	0.1985	0.1550	0.1620	0.1459	0.1491	0.1481	BLNK	-0.0515	6.74561		0.1598	1.000	0.995	

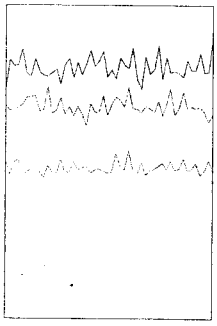
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
luminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ntimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
arium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
eryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
admium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
alcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
agnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
olybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
otassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
allium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
senic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
romium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
balt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
pper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
nganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ckel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
dium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
nadium	E		0.5000	1.0000	10.000	100.00	200.00	ug/L
nc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
on	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
lenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

ent amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67098941001

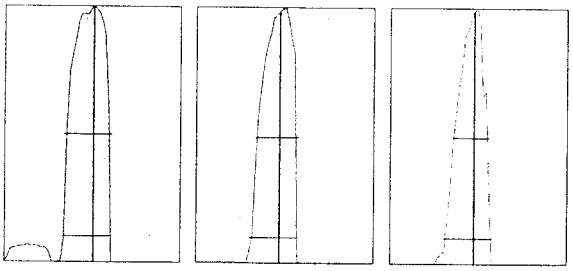
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	17941.0	16037.2	4.41	0.80
89	50,000	32655.0	33846.0	3.86	0.80
205	50,000	23764.0	24112.8	3.77	3.00

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.881%
Doubly Charged: 70/140 1.423%



m/z:	7	89	205
Height:	16,264	33,712	23,918
Axis:	7.05	88.95	204.95
W-50%:	0.80	0.70	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.03 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-160 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	123
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-3 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1810 V
Pulse HV	:	1430 V

===Reaction Cell===

Reaction Mode	:	OFF
H2 Gas	:	0 mL/min
He Gas	:	0 mL/min
Optional Gas	:	--- %

Tune File : he.u

He Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	51	14.4	29.57	
QP Focus:	-10 V	59	3669.5	4.92	
Cell Exit:	-38 V	89	2311.9	6.04	
OctP Bias:	-18 V				
QP Bias:	-13 V				

Tune File : h2.u

H2 Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	59	2559.4	4.64	
QP Focus:	-8 V	78	0.1	342.56	
Cell Exit:	-38 V	89	20073.3	3.99	
OctP Bias:	-18 V				
QP Bias:	-15 V				

Generated : Mar 09, 2007 15:47:05
Printed : Mar 09, 2007 15:48:45

P/A Factor Tuning Report

Acquired:Mar 9 2007 04:34 pm

Mass [amu]	Element	P/A Factor
6	Li	0.059504
7	(Li)	Sensitivity too low
9	Be	0.068785
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086430
45	Sc	0.086036
51	V	0.087935
52	Cr	0.091605
55	Mn	0.093940
56	Fe	Sensitivity too high
59	Co	0.097332
60	Ni	0.101235
63	Cu	0.105051
65	Cu	0.104224
66	Zn	Sensitivity too low
72	Ge	0.102011
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.099997
98	Mo	0.100647
99	(Ru)	Sensitivity too low
107	Ag	0.110998
111	Cd	Sensitivity too low
115	In	0.109935
118	(In)	0.109589
121	Sb	0.108305
137	Ba	Sensitivity too low
159	Tb	0.112040
205	Tl	0.119958
206	(Pb)	0.119539
207	(Pb)	0.119266
208	Pb	0.119009
209	Bi	0.120139

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1430 V

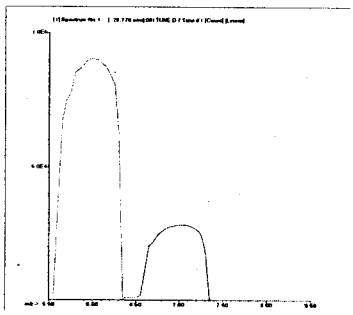
00436

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C09q00.B\001TUNE.D
Date Acquired:	Mar 9 2007 05:01 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	1.01	5.00	
115 In	0.95	5.00	
205 Tl	0.34	5.00	



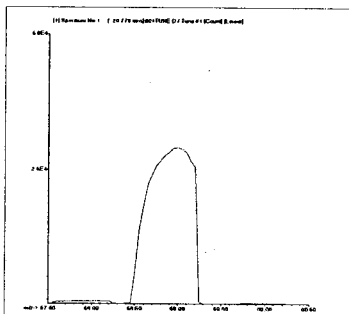
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.70
Required: 0.90
Flag:



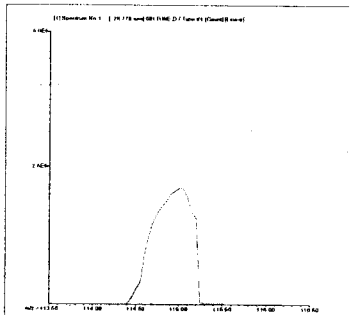
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

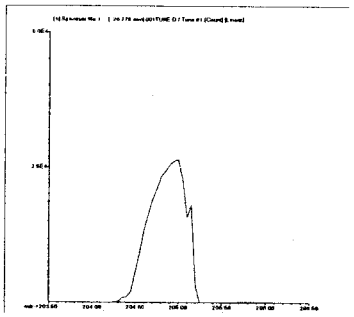
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.90

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004C
Date Acquired: Mar 9 2007 05:17 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	916633.81	A	13710.00	1.50
7	(Li)		P		
9	Be	121.12	P	20.37	16.82
23	Na	30607.30	P	507.90	1.66
24	Mg	34040.43	P	3613.00	10.61
27	Al	53745.65	P	3790.00	7.05
39	K	1631212.00	A	9044.00	0.55
44	Ca	128692.70	P	2817.00	2.19
45	Sc	422487.81	P	6740.00	1.60
45	Sc	45344.33	P	679.40	1.50
45	Sc	1517729.00	A	29070.00	1.92
51	V	610.76	P	6.70	1.10
52	Cr	373.71	P	43.91	11.75
55	Mn	80.00	P	15.28	19.10
56	Fe	46731.86	P	14490.00	31.01
59	Co	178.15	P	74.74	41.95
60	Ni	157.41	P	15.41	9.79
63	Cu	702.62	P	59.89	8.52
65	Cu	322.60	P	17.01	5.27
66	Zn	673.73	P	52.62	7.81
72	Ge	101122.60	P	1933.00	1.91
72	Ge	22510.59	P	340.00	1.51
75	As	14.89	P	2.14	14.39
78	Se	15.56	P	8.88	57.07
89	Y	1904354.00	A	44640.00	2.34
98	Mo	466.70	P	68.08	14.59
107	Ag	316.69	P	32.83	10.37
111	Cd	48.89	P	13.47	27.55
115	In	1832636.00	A	36180.00	1.97
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	302.25	P	53.89	17.83
137	Ba	246.68	P	14.53	5.89
159	Tb	2253621.00	A	40930.00	1.82
205	Tl	1753.54	P	125.50	7.16
208	Pb	1002.30	P	51.69	5.16
209	Bi	1296680.00	A	24510.00	1.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 9 2007 05:22 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:21 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	932362.81	A	20880.00	2.24
7	(Li)		P		
9	Be	756.72	P	98.38	13.00
23	Na	37989.20	P	453.20	1.19
24	Mg	224754.59	P	7900.00	3.51
27	Al	302506.91	P	11730.00	3.88
39	K	1825330.00	A	17170.00	0.94
44	Ca	130970.30	P	1091.00	0.83
45	Sc	408674.50	P	2821.00	0.69
45	Sc	44781.21	P	467.30	1.04
45	Sc	1493194.00	A	42010.00	2.81
51	V	532.98	P	30.60	5.74
52	Cr	686.32	P	40.92	5.96
55	Mn	254.08	P	23.13	9.10
56	Fe	118836.00	P	1660.00	1.40
59	Co	621.87	P	42.32	6.81
60	Ni	285.56	P	41.83	14.65
63	Cu	1174.14	P	53.03	4.52
65	Cu	556.31	P	28.21	5.07
66	Zn	1003.01	P	10.08	1.01
72	Ge	98470.08	P	1233.00	1.25
72	Ge	22271.34	P	380.30	1.71
75	As	36.22	P	6.47	17.88
78	Se	39.11	P	3.79	9.69
89	Y	1825115.00	A	33830.00	1.85
98	Mo	1261.22	P	55.01	4.36
99	(Ru)	5.56	P	5.09	91.65
107	Ag	1651.28	P	171.70	10.40
111	Cd	373.35	P	10.00	2.68
115	In	1783367.00	A	42550.00	2.39
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1452.36	P	44.27	3.05
137	Ba	1256.78	P	122.50	9.75
159	Tb	2191961.00	A	33700.00	1.54
205	Tl	2639.27	P	130.30	4.94
208	Pb	5411.80	P	287.80	5.32
209	Bi	1295684.00	A	22450.00	1.73

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	932362.81	2.24	916633.81	101.7	80 - 120	
45	Sc	408674.50	0.69	422487.78	96.7	80 - 120	
45	Sc	44781.21	1.04	45344.33	98.8	80 - 120	
45	Sc	1493194.10	2.81	1517729.50	98.4	80 - 120	
72	Ge	98470.09	1.25	101122.62	97.4	80 - 120	
72	Ge	22271.34	1.71	22510.59	98.9	80 - 120	
89	Y	1825115.60	1.85	1904353.90	95.8	80 - 120	
115	In	1783367.30	2.39	1832635.80	97.3	80 - 120	
159	Tb	2191960.80	1.54	2253621.50	97.3	80 - 120	
209	Bi	1295683.50	1.73	1296679.60	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 9 2007 05:28 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	938807.00	A	31990.00	3.41
7 (Li)		P		
9 Be	3338.29	P	91.68	2.75
23 Na	61838.99	P	267.50	0.43
24 Mg	887612.00	A	6993.00	0.79
27 Al	1051503.00	A	6508.00	0.62
39 K	2649391.00	A	9411.00	0.36
44 Ca	152952.09	P	1604.00	1.05
45 Sc	396918.41	P	3853.00	0.97
45 Sc	43558.08	P	93.97	0.22
45 Sc	1472874.00	A	90400.00	6.14
51 V	1357.12	P	17.37	1.28
52 Cr	1848.29	P	11.88	0.64
55 Mn	862.26	P	68.06	7.89
56 Fe	429154.81	P	3539.00	0.82
59 Co	2470.25	P	6.67	0.27
60 Ni	808.55	P	42.01	5.20
63 Cu	2671.40	P	100.80	3.77
65 Cu	1305.63	P	73.14	5.60
66 Zn	1115.62	P	65.52	5.87
72 Ge	94500.77	P	1088.00	1.15
72 Ge	21288.65	P	62.48	0.29
75 As	153.78	P	9.98	6.49
78 Se	146.45	P	2.69	1.84
89 Y	1798577.00	A	97930.00	5.44
98 Mo	4463.12	P	173.00	3.88
99 (Ru)	3.33	P	3.33	99.99
107 Ag	7066.54	P	119.80	1.70
111 Cd	1614.61	P	6.95	0.43
115 In	1752938.00	A	86430.00	4.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5764.79	P	214.70	3.72
137 Ba	3256.08	P	37.18	1.14
159 Tb	2126610.00	A	122200.00	5.75
205 Tl	6444.11	P	149.40	2.32
208 Pb	16149.21	P	194.10	1.20
209 Bi	1250766.00	A	52740.00	4.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	938806.94	3.41	916633.81	102.4	80 - 120	
45 Sc	396918.34	0.97	422487.78	93.9	80 - 120	
45 Sc	43558.09	0.22	45344.33	96.1	80 - 120	
45 Sc	1472874.40	6.14	1517729.50	97.0	80 - 120	
72 Ge	94500.77	1.15	101122.62	93.5	80 - 120	
72 Ge	21288.65	0.29	22510.59	94.6	80 - 120	
89 Y	1798577.30	5.44	1904353.90	94.4	80 - 120	
115 In	1752937.90	4.93	1832635.80	95.7	80 - 120	
159 Tb	2126610.30	5.75	2253621.50	94.4	80 - 120	
209 Bi	1250765.50	4.22	1296679.60	96.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 9 2007 05:33 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	949084.19	A	9162.00	0.97
7 (Li)		P		
9 Be	6811.84	P	232.60	3.41
23 Na	95789.79	P	1074.00	1.12
24 Mg	1730903.00	A	10410.00	0.60
27 Al	2918482.00	A	12270.00	0.42
39 K	3785269.00	A	32530.00	0.86
44 Ca	204370.91	P	1217.00	0.60
45 Sc	397183.91	P	1449.00	0.36
45 Sc	44549.42	P	784.20	1.76
45 Sc	1489234.00	A	3171.00	0.21
51 V	2498.03	P	61.50	2.46
52 Cr	3370.45	P	18.99	0.56
55 Mn	1661.60	P	60.28	3.63
56 Fe	838345.88	P	9281.00	1.11
59 Co	5084.31	P	137.60	2.71
60 Ni	1546.40	P	37.92	2.45
63 Cu	5637.86	P	106.10	1.88
65 Cu	2732.15	P	39.14	1.43
66 Zn	1579.00	P	28.37	1.80
72 Ge	93877.58	P	842.10	0.90
72 Ge	21839.15	P	398.60	1.83
75 As	294.45	P	15.91	5.40
78 Se	304.23	P	13.42	4.41
89 Y	1819868.00	A	9355.00	0.51
98 Mo	8782.03	P	107.40	1.22
99 (Ru)	8.89	P	7.70	86.60
107 Ag	14229.08	P	356.00	2.50
111 Cd	3293.87	P	68.88	2.09
115 In	1740483.00	A	15200.00	0.87
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	11168.36	P	104.50	0.94
137 Ba	4606.53	P	100.00	2.17
159 Tb	2136014.00	A	12900.00	0.60
205 Tl	11629.12	P	152.00	1.31
208 Pb	30079.75	P	392.70	1.31
209 Bi	1231391.00	A	5079.00	0.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	949084.25	0.97	916633.81	103.5	80 - 120	
45 Sc	397183.91	0.36	422487.78	94.0	80 - 120	
45 Sc	44549.42	1.76	45344.33	98.2	80 - 120	
45 Sc	1489233.60	0.21	1517729.50	98.1	80 - 120	
72 Ge	93877.59	0.90	101122.62	92.8	80 - 120	
72 Ge	21839.15	1.83	22510.59	97.0	80 - 120	
89 Y	1819868.10	0.51	1904353.90	95.6	80 - 120	
115 In	1740483.30	0.87	1832635.80	95.0	80 - 120	
159 Tb	2136014.30	0.60	2253621.50	94.8	80 - 120	
209 Bi	1231391.50	0.41	1296679.60	95.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 9 2007 05:38 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	953547.69	A	5058.00	0.53
7 (Li)		P		
9 Be	65607.67	P	560.40	0.85
23 Na	659608.88	M	10880.00	1.65
24 Mg	16405000.00	A	198800.00	1.21
27 Al	19529830.00	A	256400.00	1.31
39 K	23039840.00	A	412900.00	1.79
44 Ca	859148.50	A	11770.00	1.37
45 Sc	420468.81	P	3267.00	0.78
45 Sc	45001.15	P	673.60	1.50
45 Sc	1486259.00	A	16170.00	1.09
51 V	23167.72	P	273.30	1.18
52 Cr	30292.32	P	567.70	1.87
55 Mn	15208.72	P	62.77	0.41
56 Fe	7888894.00	A	73960.00	0.94
59 Co	48839.70	P	54.53	0.11
60 Ni	13540.73	P	115.50	0.85
63 Cu	37717.90	P	216.00	0.57
65 Cu	18160.82	P	87.32	0.48
66 Zn	6348.18	P	74.39	1.17
72 Ge	99980.46	P	690.90	0.69
72 Ge	22059.47	P	121.70	0.55
75 As	2883.88	P	67.19	2.33
78 Se	2917.66	P	30.15	1.03
89 Y	1813408.00	A	12890.00	0.71
98 Mo	83302.12	P	664.60	0.80
99 (Ru)	8.89	P	3.85	43.30
107 Ag	136468.59	P	646.80	0.47
111 Cd	30939.46	P	781.80	2.53
115 In	1739030.00	A	5424.00	0.31
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	107386.70	P	911.50	0.85
137 Ba	40617.30	P	69.58	0.17
159 Tb	2162836.00	A	33710.00	1.56
205 Tl	104980.10	P	557.90	0.53
208 Pb	273865.41	P	1220.00	0.45
209 Bi	1237622.00	A	11940.00	0.96

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	953547.69	0.53	916633.81	104.0	80 - 120	
45 Sc	420468.78	0.78	422487.78	99.5	80 - 120	
45 Sc	45001.15	1.50	45344.33	99.2	80 - 120	
45 Sc	1486258.60	1.09	1517729.50	97.9	80 - 120	
72 Ge	99980.46	0.69	101122.62	98.9	80 - 120	
72 Ge	22059.47	0.55	22510.59	98.0	80 - 120	
89 Y	1813408.10	0.71	1904353.90	95.2	80 - 120	
115 In	1739030.00	0.31	1832635.80	94.9	80 - 120	
159 Tb	2162836.30	1.56	2253621.50	96.0	80 - 120	
209 Bi	1237622.30	0.96	1296679.60	95.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 9 2007 05:43 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937081.13	A	13910.00	1.48
7 (Li)		P		
9 Be	678743.38	A	9766.00	1.44
23 Na	6060036.00	A	29480.00	0.49
24 Mg	############	A	2117000.00	1.31
27 Al	############	A	896500.00	0.46
39 K	############	A	283100.00	0.13
44 Ca	6669938.00	A	43570.00	0.65
45 Sc	417386.59	P	4148.00	0.99
45 Sc	44474.40	P	190.70	0.43
45 Sc	1484756.00	A	7937.00	0.53
51 V	227598.30	P	964.40	0.42
52 Cr	291237.91	P	3252.00	1.12
55 Mn	147500.59	P	1378.00	0.93
56 Fe	78356888.00	A	123000.00	0.16
59 Co	463440.59	P	1395.00	0.30
60 Ni	127227.70	P	98.41	0.08
63 Cu	345450.91	P	2709.00	0.78
65 Cu	168927.00	P	856.30	0.51
66 Zn	52219.91	P	563.60	1.08
72 Ge	96489.86	P	674.50	0.70
72 Ge	21483.78	P	34.36	0.16
75 As	27869.04	P	191.00	0.69
78 Se	28766.99	P	215.50	0.75
89 Y	1797811.00	A	17520.00	0.97
98 Mo	831617.00	P	7351.00	0.88
99 (Ru)	15.56	P	1.93	12.38
107 Ag	1334873.00	A	3153.00	0.24
111 Cd	301002.50	P	2325.00	0.77
115 In	1684578.00	A	6999.00	0.42
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1081536.00	A	3378.00	0.31
137 Ba	398705.59	P	1559.00	0.39
159 Tb	2122223.00	A	3772.00	0.18
205 Tl	1060299.00	A	10890.00	1.03
208 Pb	2754297.00	A	28250.00	1.03
209 Bi	1194464.00	A	2339.00	0.20

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937081.13	1.48	916633.81	102.2	80 - 120	
45 Sc	417386.63	0.99	422487.78	98.8	80 - 120	
45 Sc	44474.40	0.43	45344.33	98.1	80 - 120	
45 Sc	1484755.80	0.53	1517729.50	97.8	80 - 120	
72 Ge	96489.86	0.70	101122.62	95.4	80 - 120	
72 Ge	21483.78	0.16	22510.59	95.4	80 - 120	
89 Y	1797810.80	0.97	1904353.90	94.4	80 - 120	
115 In	1684578.30	0.42	1832635.80	91.9	80 - 120	
159 Tb	2122223.30	0.18	2253621.50	94.2	80 - 120	
209 Bi	1194464.50	0.20	1296679.60	92.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C09q00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 9 2007 05:49 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 09 2007 05:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	919698.63	A	29050.00	3.16
7	(Li)		P		
9	Be	1335686.00	A	25390.00	1.90
23	Na	12161390.00	A	61600.00	0.51
24	Mg	###########	A	3708000.00	1.15
27	Al	###########	A	4124000.00	1.08
39	K	###########	A	2118000.00	0.50
44	Ca	12977620.00	A	83180.00	0.64
45	Sc	418632.19	P	4688.00	1.12
45	Sc	44021.58	P	239.60	0.54
45	Sc	1497570.00	A	26740.00	1.79
51	V	457253.09	P	5817.00	1.27
52	Cr	581941.31	P	6741.00	1.16
55	Mn	295765.09	P	3685.00	1.25
56	Fe	###########	A	119200.00	0.08
59	Co	910429.63	M	5028.00	0.55
60	Ni	249501.00	P	584.90	0.23
63	Cu	673206.63	P	2546.00	0.38
65	Cu	327244.31	P	3420.00	1.05
66	Zn	97625.27	P	281.50	0.29
72	Ge	95738.95	P	862.10	0.90
72	Ge	21149.96	P	529.80	2.51
75	As	55405.40	P	441.80	0.80
78	Se	56713.07	P	265.30	0.47
89	Y	1812733.00	A	51040.00	2.82
98	Mo	1728550.00	A	9631.00	0.56
99	(Ru)	36.67	P	12.02	32.78
107	Ag	2630364.00	A	25940.00	0.99
111	Cd	590731.88	P	5359.00	0.91
115	In	1658619.00	A	38650.00	2.33
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2175337.00	A	14340.00	0.66
137	Ba	783535.38	P	10300.00	1.31
159	Tb	2130470.00	A	64450.00	3.03
205	Tl	2179188.00	A	39910.00	1.83
208	Pb	5545149.00	A	12410.00	0.22
209	Bi	1136089.00	A	29000.00	2.55

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	919698.63	3.16	916633.81	100.3	80 - 120	
45	Sc	418632.25	1.12	422487.78	99.1	80 - 120	
45	Sc	44021.58	0.54	45344.33	97.1	80 - 120	
45	Sc	1497570.50	1.79	1517729.50	98.7	80 - 120	
72	Ge	95738.95	0.90	101122.62	94.7	80 - 120	
72	Ge	21149.96	2.51	22510.59	94.0	80 - 120	
89	Y	1812733.30	2.82	1904353.90	95.2	80 - 120	
115	In	1658618.80	2.33	1832635.80	90.5	80 - 120	
159	Tb	2130470.50	3.03	2253621.50	94.5	80 - 120	
209	Bi	1136089.50	2.55	1296679.60	87.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C09q00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941015 File : c09q0015 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 09-MAR-2007 18:28
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7757	0.6568	10000	10250	ug/L	3	10	
Antimony	A	0.3359	0.3195	100.0	97.82	ug/L	-2	10	
Barium	A	0.1380	0.0924	100.0	99.95	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.23	ug/L	-1	10	
Cadmium	A	0.0932	0.0888	100.0	99.59	ug/L	0	10	
Calcium	A	0.1141	0.0223	10000	10140	ug/L	1	10	
Lead	A	0.7721	0.6345	100.0	97.51	ug/L	-2	10	
Magnesium	A	0.5954	0.5528	10000	10230	ug/L	2	10	
Molybdenum	A	0.2558	0.2307	100.0	97.32	ug/L	-3	10	
Potassium	A	1.8988	0.7353	10000	10310	ug/L	3	10	
Silver	A	0.4101	0.4208	100.0	106.1	ug/L	6	10	
Thallium	A	1.1178	0.8895	50.00	47.05	ug/L	-6	10	
Arsenic	E	0.6946	0.6606	100.0	101.0	ug/L	1	10	
Chromium	E	4.2721	3.2821	100.0	99.45	ug/L	-1	10	
Cobalt	E	5.6878	5.1156	100.0	98.76	ug/L	-1	10	
Copper	E	12.730	7.8162	100.0	97.90	ug/L	-2	10	
Manganese	E	1.9519	1.6406	100.0	97.90	ug/L	-2	10	
Nickel	E	1.8551	1.4033	100.0	98.79	ug/L	-1	10	
Sodium	E	1.4736	0.6636	10000	9613	ug/L	-4	10	
Vanadium	E	3.2665	2.5368	100.0	97.88	ug/L	-2	10	
Zinc	E	5.8642	1.1702	100.0	99.77	ug/L	0	10	
Iron	H	1.0653	0.9073	10000	9785	ug/L	-2	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	938532	2.39
Scandium	A	1517730	1448345	-4.57
Scandium	E	45344	45386	0.09
Scandium	H	422488	427092	1.09
Germanium	H	101123	98414	-2.68
Germanium	E	22511	21784	-3.23
Indium	A	1832636	1634980	-10.79
Bismuth	A	1296680	1096500	-15.44
Yttrium	A	1904354	1748838	-8.17
Terbium	A	2253622	2025126	-10.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941046 File : c09q0046 Time : 09-MAR-2007 21:24
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3185	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0915	100.0	98.99	ug/L	-1	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.24	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	9991	ug/L	0	10	
Lead	A	0.7721	0.6252	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5954	0.5461	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2285	100.0	96.37	ug/L	-4	10	
Potassium	A	1.8988	0.7217	10000	10120	ug/L	1	10	
Silver	A	0.4101	0.4173	100.0	105.2	ug/L	5	10	
Thallium	A	1.1178	0.8698	50.00	46.00	ug/L	-8	10	
Arsenic	E	0.6946	0.6551	100.0	100.2	ug/L	0	10	
Chromium	E	4.2721	3.2245	100.0	97.70	ug/L	-2	10	
Cobalt	E	5.6878	5.0576	100.0	97.64	ug/L	-2	10	
Copper	E	12.730	7.8226	100.0	97.98	ug/L	-2	10	
Manganese	E	1.9519	1.6229	100.0	96.84	ug/L	-3	10	
Nickel	E	1.8551	1.3804	100.0	97.17	ug/L	-3	10	
Sodium	E	1.4736	0.6569	10000	9516	ug/L	-5	10	
Vanadium	E	3.2665	2.5129	100.0	96.95	ug/L	-3	10	
Zinc	E	5.8642	1.1526	100.0	98.25	ug/L	-2	10	
Iron	H	1.0653	0.9145	10000	9863	ug/L	-1	10	
Selenium	H	0.1598	0.1454	100.0	98.03	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	905174	-1.25
Scandium	A	1517730	1441531	-5.02
Scandium	E	45344	45193	-0.33
Scandium	H	422488	420497	-0.47
Germanium	H	101123	96743	-4.33
Germanium	E	22511	21533	-4.34
Indium	A	1832636	1642773	-10.36
Bismuth	A	1296680	1088318	-16.07
Yttrium	A	1904354	1748927	-8.16
Terbium	A	2253622	2043585	-9.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941068 File : c09q0068
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 09-MAR-2007 23:20

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6489	10000	10130	ug/L	1	10	
Antimony	A	0.3359	0.3132	100.0	95.90	ug/L	-4	10	
Barium	A	0.1380	0.0925	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3608	100.0	99.40	ug/L	-1	10	
Cadmium	A	0.0932	0.0875	100.0	98.20	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9947	ug/L	-1	10	
Lead	A	0.7721	0.6311	100.0	96.98	ug/L	-3	10	
Magnesium	A	0.5954	0.5452	10000	10090	ug/L	1	10	
Molybdenum	A	0.2558	0.2257	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4190	100.0	105.6	ug/L	6	10	
Thallium	A	1.1178	0.8838	50.00	46.74	ug/L	-7	10	
Arsenic	E	0.6946	0.6568	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.2029	100.0	97.04	ug/L	-3	10	
Cobalt	E	5.6878	4.9833	100.0	96.21	ug/L	-4	10	
Copper	E	12.730	7.7997	100.0	97.69	ug/L	-2	10	
Manganese	E	1.9519	1.6174	100.0	96.52	ug/L	-3	10	
Nickel	E	1.8551	1.3802	100.0	97.16	ug/L	-3	10	
Sodium	E	1.4736	0.6559	10000	9501	ug/L	-5	10	
Vanadium	E	3.2665	2.4945	100.0	96.24	ug/L	-4	10	
Zinc	E	5.8642	1.1539	100.0	98.36	ug/L	-2	10	
Iron	H	1.0653	0.8929	10000	9630	ug/L	-4	10	
Selenium	H	0.1598	0.1429	100.0	96.34	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	913999	-0.29
Scandium	A	1517730	1455726	-4.09
Scandium	E	45344	46412	2.35
Scandium	H	422488	435589	3.10
Germanium	H	101123	100000	-1.11
Germanium	E	22511	21916	-2.64
Indium	A	1832636	1638663	-10.58
Bismuth	A	1296680	1053580	-18.75
Yttrium	A	1904354	1768625	-7.13
Terbium	A	2253622	2008550	-10.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941084 File : c09q0084 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 00:46
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6509	10000	10160	ug/L	2	10	
Antimony	A	0.3359	0.3181	100.0	97.39	ug/L	-3	10	
Barium	A	0.1380	0.0921	100.0	99.73	ug/L	0	10	
Beryllium	A	0.3650	0.3602	100.0	99.22	ug/L	-1	10	
Cadmium	A	0.0932	0.0876	100.0	98.31	ug/L	-2	10	
Calcium	A	0.1141	0.0221	10000	10060	ug/L	1	10	
Lead	A	0.7721	0.6278	100.0	96.48	ug/L	-4	10	
Magnesium	A	0.5954	0.5504	10000	10190	ug/L	2	10	
Molybdenum	A	0.2558	0.2258	100.0	95.22	ug/L	-5	10	
Potassium	A	1.8988	0.7317	10000	10260	ug/L	3	10	
Silver	A	0.4101	0.4203	100.0	106.0	ug/L	6	10	
Thallium	A	1.1178	0.9101	50.00	48.14	ug/L	-4	10	
Arsenic	E	0.6946	0.6458	100.0	98.75	ug/L	-1	10	
Chromium	E	4.2721	3.1412	100.0	95.17	ug/L	-5	10	
Cobalt	E	5.6878	4.9028	100.0	94.65	ug/L	-5	10	
Copper	E	12.730	7.6681	100.0	96.04	ug/L	-4	10	
Manganese	E	1.9519	1.5949	100.0	95.17	ug/L	-5	10	
Nickel	E	1.8551	1.3436	100.0	94.58	ug/L	-5	10	
Sodium	E	1.4736	0.6503	10000	9420	ug/L	-6	10	
Vanadium	E	3.2665	2.4434	100.0	94.26	ug/L	-6	10	
Zinc	E	5.8642	1.1383	100.0	97.02	ug/L	-3	10	
Iron	H	1.0653	0.8882	10000	9578	ug/L	-4	10	
Selenium	H	0.1598	0.1422	100.0	95.85	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	906941	-1.06
Scandium	A	1517730	1427826	-5.92
Scandium	E	45344	46819	3.25
Scandium	H	422488	433588	2.63
Germanium	H	101123	98832	-2.27
Germanium	E	22511	21976	-2.37
Indium	A	1832636	1596458	-12.89
Bismuth	A	1296680	999596	-22.91
Yttrium	A	1904354	1745906	-8.32
Terbium	A	2253622	1966364	-12.75

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941108 File : c09q0108 Time : 10-MAR-2007 02:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6418	10000	10020	ug/L	0	10	
Antimony	A	0.3359	0.3146	100.0	96.33	ug/L	-4	10	
Barium	A	0.1380	0.0900	100.0	97.39	ug/L	-3	10	
Beryllium	A	0.3650	0.3389	100.0	93.37	ug/L	-7	10	
Cadmium	A	0.0932	0.0876	100.0	98.30	ug/L	-2	10	
Calcium	A	0.1141	0.0216	10000	9797	ug/L	-2	10	
Lead	A	0.7721	0.6453	100.0	99.17	ug/L	-1	10	
Magnesium	A	0.5954	0.5421	10000	10040	ug/L	0	10	
Molybdenum	A	0.2558	0.2243	100.0	94.60	ug/L	-5	10	
Potassium	A	1.8988	0.7140	10000	10010	ug/L	0	10	
Silver	A	0.4101	0.4102	100.0	103.4	ug/L	3	10	
Thallium	A	1.1178	0.8558	50.00	45.26	ug/L	-9	10	
Arsenic	E	0.6946	0.6477	100.0	99.04	ug/L	-1	10	
Chromium	E	4.2721	3.2139	100.0	97.38	ug/L	-3	10	
Cobalt	E	5.6878	5.0239	100.0	96.99	ug/L	-3	10	
Copper	E	12.730	7.6729	100.0	96.10	ug/L	-4	10	
Manganese	E	1.9519	1.6212	100.0	96.74	ug/L	-3	10	
Nickel	E	1.8551	1.3680	100.0	96.30	ug/L	-4	10	
Sodium	E	1.4736	0.6621	10000	9591	ug/L	-4	10	
Vanadium	E	3.2665	2.4901	100.0	96.07	ug/L	-4	10	
Zinc	E	5.8642	1.1431	100.0	97.43	ug/L	-3	10	
Iron	H	1.0653	0.8920	10000	9620	ug/L	-4	10	
Selenium	H	0.1598	0.1432	100.0	96.52	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902889	-1.50
Scandium	A	1517730	1401113	-7.68
Scandium	E	45344	42563	-6.13
Scandium	H	422488	416586	-1.40
Germanium	H	101123	94956	-6.10
Germanium	E	22511	20421	-9.28
Indium	A	1832636	1614720	-11.89
Bismuth	A	1296680	1141281	-11.98
Yttrium	A	1904354	1722254	-9.56
Terbium	A	2253622	2048074	-9.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941129 File : c09q0129 Time : 10-MAR-2007 04:47
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6496	10000	10140	ug/L	1	10	
Antimony	A	0.3359	0.3148	100.0	96.40	ug/L	-4	10	
Barium	A	0.1380	0.0916	100.0	99.16	ug/L	-1	10	
Beryllium	A	0.3650	0.3472	100.0	95.65	ug/L	-4	10	
Cadmium	A	0.0932	0.0881	100.0	98.86	ug/L	-1	10	
Calcium	A	0.1141	0.0216	10000	9816	ug/L	-2	10	
Lead	A	0.7721	0.6451	100.0	99.14	ug/L	-1	10	
Magnesium	A	0.5954	0.5462	10000	10110	ug/L	1	10	
Molybdenum	A	0.2558	0.2295	100.0	96.80	ug/L	-3	10	
Potassium	A	1.8988	0.7220	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4116	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.8799	50.00	46.54	ug/L	-7	10	
Arsenic	E	0.6946	0.6545	100.0	100.1	ug/L	0	10	
Chromium	E	4.2721	3.2320	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0486	100.0	97.47	ug/L	-3	10	
Copper	E	12.730	7.7084	100.0	96.55	ug/L	-3	10	
Manganese	E	1.9519	1.6244	100.0	96.93	ug/L	-3	10	
Nickel	E	1.8551	1.3782	100.0	97.02	ug/L	-3	10	
Sodium	E	1.4736	0.6695	10000	9699	ug/L	-3	10	
Vanadium	E	3.2665	2.5089	100.0	96.80	ug/L	-3	10	
Zinc	E	5.8642	1.1481	100.0	97.86	ug/L	-2	10	
Iron	H	1.0653	0.8988	10000	9693	ug/L	-3	10	
Selenium	H	0.1598	0.1458	100.0	98.28	ug/L	-2	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	892003	-2.69
Scandium	A	1517730	1400371	-7.73
Scandium	E	45344	43765	-3.48
Scandium	H	422488	424248	0.42
Germanium	H	101123	96829	-4.25
Germanium	E	22511	20956	-6.91
Indium	A	1832636	1610854	-12.10
Bismuth	A	1296680	1101593	-15.05
Yttrium	A	1904354	1703888	-10.53
Terbium	A	2253622	2032098	-9.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941141 File : c09q0141 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 05:51
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6544	10000	10220	ug/L	2	10	
Antimony	A	0.3359	0.3165	100.0	96.91	ug/L	-3	10	
Barium	A	0.1380	0.0926	100.0	100.2	ug/L	0	10	
Beryllium	A	0.3650	0.3447	100.0	94.95	ug/L	-5	10	
Cadmium	A	0.0932	0.0893	100.0	100.2	ug/L	0	10	
Calcium	A	0.1141	0.0219	10000	9973	ug/L	0	10	
Lead	A	0.7721	0.6463	100.0	99.32	ug/L	-1	10	
Magnesium	A	0.5954	0.5481	10000	10150	ug/L	2	10	
Molybdenum	A	0.2558	0.2280	100.0	96.16	ug/L	-4	10	
Potassium	A	1.8988	0.7275	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4162	100.0	104.9	ug/L	5	10	
Thallium	A	1.1178	0.9000	50.00	47.60	ug/L	-5	10	
Arsenic	E	0.6946	0.6445	100.0	98.56	ug/L	-1	10	
Chromium	E	4.2721	3.1910	100.0	96.68	ug/L	-3	10	
Cobalt	E	5.6878	4.9869	100.0	96.28	ug/L	-4	10	
Copper	E	12.730	7.5974	100.0	95.15	ug/L	-5	10	
Manganese	E	1.9519	1.6027	100.0	95.64	ug/L	-4	10	
Nickel	E	1.8551	1.3612	100.0	95.82	ug/L	-4	10	
Sodium	E	1.4736	0.6527	10000	9455	ug/L	-5	10	
Vanadium	E	3.2665	2.4771	100.0	95.57	ug/L	-4	10	
Zinc	E	5.8642	1.1282	100.0	96.14	ug/L	-4	10	
Iron	H	1.0653	0.8772	10000	9460	ug/L	-5	10	
Selenium	H	0.1598	0.1423	100.0	95.94	ug/L	-4	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	902061	-1.59
Scandium	A	1517730	1405467	-7.40
Scandium	E	45344	44656	-1.52
Scandium	H	422488	428923	1.52
Germanium	H	101123	98288	-2.80
Germanium	E	22511	21386	-5.00
Indium	A	1832636	1598338	-12.78
Bismuth	A	1296680	1083588	-16.43
Yttrium	A	1904354	1727094	-9.31
Terbium	A	2253622	2021728	-10.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941165 File : c09q0165 Time : 10-MAR-2007 08:00
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6447	10000	10070	ug/L	1	10	
Antimony	A	0.3359	0.3126	100.0	95.73	ug/L	-4	10	
Barium	A	0.1380	0.0921	100.0	99.64	ug/L	0	10	
Beryllium	A	0.3650	0.3385	100.0	93.25	ug/L	-7	10	
Cadmium	A	0.0932	0.0881	100.0	98.87	ug/L	-1	10	
Calcium	A	0.1141	0.0217	10000	9857	ug/L	-1	10	
Lead	A	0.7721	0.6393	100.0	98.25	ug/L	-2	10	
Magnesium	A	0.5954	0.5385	10000	9971	ug/L	0	10	
Molybdenum	A	0.2558	0.2286	100.0	96.41	ug/L	-4	10	
Potassium	A	1.8988	0.7223	10000	10130	ug/L	1	10	
Silver	A	0.4101	0.4120	100.0	103.9	ug/L	4	10	
Thallium	A	1.1178	0.9042	50.00	47.82	ug/L	-4	10	
Arsenic	E	0.6946	0.6460	100.0	98.79	ug/L	-1	10	
Chromium	E	4.2721	3.2867	100.0	99.59	ug/L	0	10	
Cobalt	E	5.6878	5.1088	100.0	98.63	ug/L	-1	10	
Copper	E	12.730	7.6466	100.0	95.77	ug/L	-4	10	
Manganese	E	1.9519	1.6359	100.0	97.62	ug/L	-2	10	
Nickel	E	1.8551	1.4041	100.0	98.84	ug/L	-1	10	
Sodium	E	1.4736	0.6613	10000	9580	ug/L	-4	10	
Vanadium	E	3.2665	2.5532	100.0	98.51	ug/L	-1	10	
Zinc	E	5.8642	1.1318	100.0	96.46	ug/L	-4	10	
Iron	H	1.0653	0.8954	10000	9657	ug/L	-3	10	
Selenium	H	0.1598	0.1445	100.0	97.41	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	877950	-4.22
Scandium	A	1517730	1386999	-8.61
Scandium	E	45344	41993	-7.39
Scandium	H	422488	407840	-3.47
Germanium	H	101123	93340	-7.70
Germanium	E	22511	20616	-8.42
Indium	A	1832636	1594481	-13.00
Bismuth	A	1296680	1064061	-17.94
Yttrium	A	1904354	1696157	-10.93
Terbium	A	2253622	2011171	-10.76

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941184 File : c09q0184 Time : 10-MAR-2007 09:41
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6482	10000	10120	ug/L	1	10	
Antimony	A	0.3359	0.3123	100.0	95.62	ug/L	-4	10	
Barium	A	0.1380	0.0927	100.0	100.3	ug/L	0	10	
Beryllium	A	0.3650	0.3425	100.0	94.36	ug/L	-6	10	
Cadmium	A	0.0932	0.0877	100.0	98.40	ug/L	-2	10	
Calcium	A	0.1141	0.0220	10000	10010	ug/L	0	10	
Lead	A	0.7721	0.6466	100.0	99.38	ug/L	-1	10	
Magnesium	A	0.5954	0.5479	10000	10140	ug/L	1	10	
Molybdenum	A	0.2558	0.2280	100.0	96.17	ug/L	-4	10	
Potassium	A	1.8988	0.7311	10000	10250	ug/L	3	10	
Silver	A	0.4101	0.4091	100.0	103.2	ug/L	3	10	
Thallium	A	1.1178	0.9135	50.00	48.32	ug/L	-3	10	
Arsenic	E	0.6946	0.6497	100.0	99.35	ug/L	-1	10	
Chromium	E	4.2721	3.2258	100.0	97.74	ug/L	-2	10	
Cobalt	E	5.6878	5.0421	100.0	97.34	ug/L	-3	10	
Copper	E	12.730	7.6852	100.0	96.26	ug/L	-4	10	
Manganese	E	1.9519	1.6235	100.0	96.88	ug/L	-3	10	
Nickel	E	1.8551	1.3739	100.0	96.72	ug/L	-3	10	
Sodium	E	1.4736	0.6556	10000	9497	ug/L	-5	10	
Vanadium	E	3.2665	2.5359	100.0	97.84	ug/L	-2	10	
Zinc	E	5.8642	1.1397	100.0	97.14	ug/L	-3	10	
Iron	H	1.0653	0.8807	10000	9498	ug/L	-5	10	
Selenium	H	0.1598	0.1440	100.0	97.11	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	860804	-6.09
Scandium	A	1517730	1351596	-10.95
Scandium	E	45344	42354	-6.59
Scandium	H	422488	401343	-5.00
Germanium	H	101123	91432	-9.58
Germanium	E	22511	20368	-9.52
Indium	A	1832636	1567188	-14.48
Bismuth	A	1296680	1025975	-20.88
Yttrium	A	1904354	1661744	-12.74
Terbium	A	2253622	1953400	-13.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67098941199 File : c09q0199 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 11:02
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6474	10000	10110	ug/L	1	10	
Antimony	A	0.3359	0.3139	100.0	96.12	ug/L	-4	10	
Barium	A	0.1380	0.0933	100.0	101.0	ug/L	1	10	
Beryllium	A	0.3650	0.3363	100.0	92.66	ug/L	-7	10	
Cadmium	A	0.0932	0.0890	100.0	99.82	ug/L	0	10	
Calcium	A	0.1141	0.0220	10000	10000	ug/L	0	10	
Lead	A	0.7721	0.6465	100.0	99.35	ug/L	-1	10	
Magnesium	A	0.5954	0.5405	10000	10010	ug/L	0	10	
Molybdenum	A	0.2558	0.2296	100.0	96.84	ug/L	-3	10	
Potassium	A	1.8988	0.7303	10000	10240	ug/L	2	10	
Silver	A	0.4101	0.4118	100.0	103.8	ug/L	4	10	
Thallium	A	1.1178	0.9148	50.00	48.38	ug/L	-3	10	
Arsenic	E	0.6946	0.6505	100.0	99.48	ug/L	-1	10	
Chromium	E	4.2721	3.2322	100.0	97.93	ug/L	-2	10	
Cobalt	E	5.6878	5.0229	100.0	96.97	ug/L	-3	10	
Copper	E	12.730	7.6274	100.0	95.53	ug/L	-4	10	
Manganese	E	1.9519	1.6365	100.0	97.66	ug/L	-2	10	
Nickel	E	1.8551	1.3697	100.0	96.42	ug/L	-4	10	
Sodium	E	1.4736	0.6520	10000	9444	ug/L	-6	10	
Vanadium	E	3.2665	2.5242	100.0	97.39	ug/L	-3	10	
Zinc	E	5.8642	1.1393	100.0	97.10	ug/L	-3	10	
Iron	H	1.0653	0.9014	10000	9721	ug/L	-3	10	
Selenium	H	0.1598	0.1438	100.0	96.97	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	864908	-5.64
Scandium	A	1517730	1350162	-11.04
Scandium	E	45344	42695	-5.84
Scandium	H	422488	393397	-6.89
Germanium	H	101123	91024	-9.99
Germanium	E	22511	20572	-8.61
Indium	A	1832636	1550003	-15.42
Bismuth	A	1296680	1023495	-21.07
Yttrium	A	1904354	1653281	-13.18
Terbium	A	2253622	1946954	-13.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941224 File : c09q0224 Time : 10-MAR-2007 13:17
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6411	10000	10010	ug/L	0	10	
Antimony	A	0.3359	0.3184	100.0	97.51	ug/L	-2	10	
Barium	A	0.1380	0.0936	100.0	101.3	ug/L	1	10	
Beryllium	A	0.3650	0.3456	100.0	95.20	ug/L	-5	10	
Cadmium	A	0.0932	0.0885	100.0	99.34	ug/L	-1	10	
Calcium	A	0.1141	0.0218	10000	9909	ug/L	-1	10	
Lead	A	0.7721	0.6388	100.0	98.18	ug/L	-2	10	
Magnesium	A	0.5954	0.5365	10000	9933	ug/L	-1	10	
Molybdenum	A	0.2558	0.2299	100.0	96.98	ug/L	-3	10	
Potassium	A	1.8988	0.7272	10000	10200	ug/L	2	10	
Silver	A	0.4101	0.4129	100.0	104.1	ug/L	4	10	
Thallium	A	1.1178	0.8941	50.00	47.29	ug/L	-5	10	
Arsenic	E	0.6946	0.6460	100.0	98.78	ug/L	-1	10	
Chromium	E	4.2721	3.1376	100.0	95.06	ug/L	-5	10	
Cobalt	E	5.6878	4.8490	100.0	93.61	ug/L	-6	10	
Copper	E	12.730	7.4539	100.0	93.35	ug/L	-7	10	
Manganese	E	1.9519	1.5907	100.0	94.92	ug/L	-5	10	
Nickel	E	1.8551	1.3302	100.0	93.64	ug/L	-6	10	
Sodium	E	1.4736	0.6290	10000	9110	ug/L	-9	10	
Vanadium	E	3.2665	2.4374	100.0	94.03	ug/L	-6	10	
Zinc	E	5.8642	1.1170	100.0	95.18	ug/L	-5	10	
Iron	H	1.0653	0.8878	10000	9575	ug/L	-4	10	
Selenium	H	0.1598	0.1436	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	837171	-8.67
Scandium	A	1517730	1374157	-9.46
Scandium	E	45344	44698	-1.43
Scandium	H	422488	402269	-4.79
Germanium	H	101123	93003	-8.03
Germanium	E	22511	21285	-5.44
Indium	A	1832636	1584817	-13.52
Bismuth	A	1296680	1070250	-17.46
Yttrium	A	1904354	1683860	-11.58
Terbium	A	2253622	2002425	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941236 File : c09q0236 Time : 10-MAR-2007 14:21
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7757	0.6402	10000	9995	ug/L	0	10	
Antimony	A	0.3359	0.3123	100.0	95.63	ug/L	-4	10	
Barium	A	0.1380	0.0938	100.0	101.6	ug/L	2	10	
Beryllium	A	0.3650	0.3433	100.0	94.58	ug/L	-5	10	
Cadmium	A	0.0932	0.0876	100.0	98.34	ug/L	-2	10	
Calcium	A	0.1141	0.0219	10000	9944	ug/L	-1	10	
Lead	A	0.7721	0.6340	100.0	97.44	ug/L	-3	10	
Magnesium	A	0.5954	0.5392	10000	9983	ug/L	0	10	
Molybdenum	A	0.2558	0.2285	100.0	96.39	ug/L	-4	10	
Potassium	A	1.8988	0.7249	10000	10170	ug/L	2	10	
Silver	A	0.4101	0.4089	100.0	103.1	ug/L	3	10	
Thallium	A	1.1178	0.8683	50.00	45.92	ug/L	-8	10	
Arsenic	E	0.6946	0.6566	100.0	100.4	ug/L	0	10	
Chromium	E	4.2721	3.1900	100.0	96.65	ug/L	-3	10	
Cobalt	E	5.6878	4.9703	100.0	95.96	ug/L	-4	10	
Copper	E	12.730	7.4873	100.0	93.77	ug/L	-6	10	
Manganese	E	1.9519	1.6423	100.0	98.00	ug/L	-2	10	
Nickel	E	1.8551	1.3516	100.0	95.15	ug/L	-5	10	
Sodium	E	1.4736	0.6475	10000	9378	ug/L	-6	10	
Vanadium	E	3.2665	2.5091	100.0	96.81	ug/L	-3	10	
Zinc	E	5.8642	1.1323	100.0	96.49	ug/L	-4	10	
Iron	H	1.0653	0.9100	10000	9814	ug/L	-2	10	
Selenium	H	0.1598	0.1443	100.0	97.30	ug/L	-3	10	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	843785	-7.95
Scandium	A	1517730	1361270	-10.31
Scandium	E	45344	44250	-2.41
Scandium	H	422488	395586	-6.37
Germanium	H	101123	91504	-9.51
Germanium	E	22511	21253	-5.59
Indium	A	1832636	1578633	-13.86
Bismuth	A	1296680	1061930	-18.10
Yttrium	A	1904354	1668555	-12.38
Terbium	A	2253622	1965560	-12.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941018 File : c09q0018 Time : 09-MAR-2007 18:44
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01955]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01321]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005369]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	981613	7.09
Scandium	A	1517730	1476487	-2.72
Scandium	E	45344	48015	5.89
Scandium	H	422488	440455	4.25
Germanium	H	101123	102714	1.57
Germanium	E	22511	22945	1.93
Indium	A	1832636	1719452	-6.18
Bismuth	A	1296680	1139959	-12.09
Yttrium	A	1904354	1797451	-5.61
Terbium	A	2253622	2047526	-9.15

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941049 File : c09q0049 Time : 09-MAR-2007 21:40
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02630]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03014]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	960350	4.77
Scandium	A	1517730	1481310	-2.40
Scandium	E	45344	46876	3.38
Scandium	H	422488	431598	2.16
Germanium	H	101123	100676	-0.44
Germanium	E	22511	22327	-0.82
Indium	A	1832636	1735890	-5.28
Bismuth	A	1296680	1191218	-8.13
Yttrium	A	1904354	1834279	-3.68
Terbium	A	2253622	2106807	-6.51

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941070 File : c09q0070 Time : 09-MAR-2007 23:32
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03474]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02445]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02347]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01432]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.09417]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	972695	6.12
Scandium	A	1517730	1482231	-2.34
Scandium	E	45344	48846	7.72
Scandium	H	422488	439316	3.98
Germanium	H	101123	101199	0.08
Germanium	E	22511	23094	2.59
Indium	A	1832636	1729036	-5.65
Bismuth	A	1296680	1149784	-11.33
Yttrium	A	1904354	1823495	-4.25
Terbium	A	2253622	2056781	-8.73

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941086 File : c09q0086 Time : 10-MAR-2007 00:57
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01420]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01617]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06679]	0.1000	0.01127	ug/L	!ib
Iron	H	[6.752]	10.00	4.329	ug/L	!ib
Selenium	H	[0.05645]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	956334	4.33
Scandium	A	1517730	1439257	-5.17
Scandium	E	45344	47503	4.76
Scandium	H	422488	447019	5.81
Germanium	H	101123	103188	2.04
Germanium	E	22511	22596	0.38
Indium	A	1832636	1677042	-8.49
Bismuth	A	1296680	1137040	-12.31
Yttrium	A	1904354	1765145	-7.31
Terbium	A	2253622	2002557	-11.14

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941112 File : c09q0112 Time : 10-MAR-2007 03:15
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.304]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01359]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002636]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	[8.887]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03640]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	924797	0.89
Scandium	A	1517730	1376821	-9.28
Scandium	E	45344	43697	-3.63
Scandium	H	422488	415130	-1.74
Germanium	H	101123	96819	-4.26
Germanium	E	22511	21189	-5.87
Indium	A	1832636	1642742	-10.36
Bismuth	A	1296680	1174900	-9.39
Yttrium	A	1904354	1721832	-9.58
Terbium	A	2253622	2056685	-8.74

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941131 File : c09q0131 Time : 10-MAR-2007 04:58
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.272]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1030	0.1000	0	ug/L	ib ***
Zinc	E	[0.01550]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	931971	1.67
Scandium	A	1517730	1401473	-7.66
Scandium	E	45344	44948	-0.87
Scandium	H	422488	427514	1.19
Germanium	H	101123	99355	-1.75
Germanium	E	22511	21712	-3.55
Indium	A	1832636	1658452	-9.50
Bismuth	A	1296680	1156128	-10.84
Yttrium	A	1904354	1730428	-9.13
Terbium	A	2253622	2037464	-9.59

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941143 File : c09q0143 Time : 10-MAR-2007 06:02
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005149]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1026	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01709]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	934611	1.96
Scandium	A	1517730	1381267	-8.99
Scandium	E	45344	45098	-0.54
Scandium	H	422488	405569	-4.00
Germanium	H	101123	95993	-5.07
Germanium	E	22511	21660	-3.78
Indium	A	1832636	1649358	-10.00
Bismuth	A	1296680	1134689	-12.49
Yttrium	A	1904354	1705681	-10.43
Terbium	A	2253622	2028289	-10.00

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941168 File : c09q0168 Time : 10-MAR-2007 08:16
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006930]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01414]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.754]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	907910	-0.95
Scandium	A	1517730	1373491	-9.50
Scandium	E	45344	43250	-4.62
Scandium	H	422488	410259	-2.89
Germanium	H	101123	95168	-5.89
Germanium	E	22511	20961	-6.88
Indium	A	1832636	1620162	-11.59
Bismuth	A	1296680	1145144	-11.69
Yttrium	A	1904354	1687177	-11.40
Terbium	A	2253622	2010187	-10.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941186 File : c09q0186 Time : 10-MAR-2007 09:52
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03002]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03559]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.192]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.831]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008371]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	911932	-0.51
Scandium	A	1517730	1387391	-8.59
Scandium	E	45344	44235	-2.45
Scandium	H	422488	414992	-1.77
Germanium	H	101123	96866	-4.21
Germanium	E	22511	21633	-3.90
Indium	A	1832636	1653626	-9.77
Bismuth	A	1296680	1169511	-9.81
Yttrium	A	1904354	1707120	-10.36
Terbium	A	2253622	2039560	-9.50

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941201 File : c09q0201 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 11:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009775]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	887722	-3.15
Scandium	A	1517730	1370772	-9.68
Scandium	E	45344	45085	-0.57
Scandium	H	422488	410915	-2.74
Germanium	H	101123	96368	-4.70
Germanium	E	22511	21710	-3.56
Indium	A	1832636	1630628	-11.02
Bismuth	A	1296680	1121425	-13.52
Yttrium	A	1904354	1710361	-10.19
Terbium	A	2253622	1982461	-12.03

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941227 File : c09q0227 Time : 10-MAR-2007 13:33
Cal : 67098941001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.264]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	868425	-5.26
Scandium	A	1517730	1350039	-11.05
Scandium	E	45344	44352	-2.19
Scandium	H	422488	385028	-8.87
Germanium	H	101123	90590	-10.42
Germanium	E	22511	21655	-3.80
Indium	A	1832636	1609789	-12.16
Bismuth	A	1296680	1100157	-15.16
Yttrium	A	1904354	1653506	-13.17
Terbium	A	2253622	1965147	-12.80

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67098941239 File : c09q0239 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 14:38

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.682]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	871768	-4.89
Scandium	A	1517730	1336030	-11.97
Scandium	E	45344	45051	-0.65
Scandium	H	422488	390025	-7.68
Germanium	H	101123	92251	-8.77
Germanium	E	22511	21613	-3.99
Indium	A	1832636	1593414	-13.05
Bismuth	A	1296680	1085987	-16.25
Yttrium	A	1904354	1648046	-13.46
Terbium	A	2253622	1958145	-13.11

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941020 File : c09q0020 Time : 09-MAR-2007 18:55
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04119]	0.1000	ug/L	
Barium	A	0.8910	0.1000	ug/L	
Beryllium	A	[0.01908]	0.1000	ug/L	
Cadmium	A	1.182	0.1000	ug/L	
Lead	A	0.4316	0.1000	ug/L	
Silver	A	0.1913	0.1000	ug/L	
Thallium	A	[0.01043]	0.05000	ug/L	
Arsenic	E	0.2169	0.1000	ug/L	
Chromium	E	1.352	0.1000	ug/L	
Cobalt	E	0.1939	0.1000	ug/L	
Copper	E	1.203	0.1000	ug/L	
Manganese	E	0.7121	0.1000	ug/L	
Nickel	E	1.102	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.186	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92200	ug/L	92
Calcium	A	300000	283800	ug/L	95
Magnesium	A	100000	87740	ug/L	88
Molybdenum	A	2000	1904	ug/L	95
Potassium	A	100000	93880	ug/L	94
Sodium	E	250000	233700	ug/L	93
Iron	H	250000	227000	ug/L	91

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	648481	-29.25
Scandium	A	1517730	1232034	-18.82
Scandium	E	45344	37927	-16.36
Scandium	H	422488	382036	-9.57
Germanium	H	101123	82401	-18.51
Germanium	E	22511	18306	-18.68
Indium	A	1832636	1405228	-23.32
Bismuth	A	1296680	853887	-34.15
Yttrium	A	1904354	1563770	-17.88
Terbium	A	2253622	1834242	-18.61

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67098941021 File : c09q0021
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 09-MAR-2007 19:00

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100600	ug/L	1		
Cadmium	A	100.0	104.3	ug/L	4	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	96430	ug/L	-4		
Molybdenum	A	2000	2117	ug/L	6		
Potassium	A	100000	104600	ug/L	5		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	112.5	ug/L	13	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	204.3	ug/L	2	20	
Copper	E	200.0	189.2	ug/L	-5	20	
Manganese	E	200.0	204.4	ug/L	2	20	
Nickel	E	200.0	198.2	ug/L	-1	20	
Sodium	E	250000	264600	ug/L	6		
Vanadium	E	200.0	219.0	ug/L	10	20	
Zinc	E	100.0	95.94	ug/L	-4	20	
Iron	H	250000	255700	ug/L	2		
Selenium	H	100.0	104.2	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	360675	-14.63
Scandium	A	1517730	1155038	-23.90
Scandium	E	45344	34371	-24.20
Germanium	H	101123	78650	-22.22
Germanium	E	22511	16695	-25.83
Indium	A	1832636	1377995	-24.81
Yttrium	A	1904354	1538086	-19.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941089 File : c09q0089 Time : 10-MAR-2007 01:13
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03290]	0.1000	ug/L	
Barium	A	0.9061	0.1000	ug/L	
Beryllium	A	[0.004327]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4286	0.1000	ug/L	
Silver	A	0.1833	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1964	0.1000	ug/L	
Chromium	E	1.316	0.1000	ug/L	
Cobalt	E	0.1764	0.1000	ug/L	
Copper	E	1.164	0.1000	ug/L	
Manganese	E	0.7559	0.1000	ug/L	
Nickel	E	1.117	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.161	0.1000	ug/L	
Selenium	H	[0]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93020	ug/L	93
Calcium	A	300000	284500	ug/L	95
Magnesium	A	100000	88550	ug/L	89
Molybdenum	A	2000	1864	ug/L	93
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	233900	ug/L	94
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	623862	-31.94
Scandium	A	1517730	1236772	-18.51
Scandium	E	45344	39129	-13.71
Scandium	H	422488	393799	-6.79
Germanium	H	101123	84184	-16.75
Germanium	E	22511	18594	-17.40
Indium	A	1832636	1368055	-25.35
Bismuth	A	1296680	819714	-36.78
Yttrium	A	1904354	1557710	-18.20
Terbium	A	2253622	1742704	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941090 File : c09q0090 Time : 10-MAR-2007 01:19
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99800	ug/L	0		
Cadmium	A	100.0	100.9	ug/L	1	20	
Calcium	A	300000	317200	ug/L	6		
Magnesium	A	100000	94790	ug/L	-5		
Molybdenum	A	2000	2061	ug/L	3		
Potassium	A	100000	103000	ug/L	3		
Silver	A	50.00	45.27	ug/L	-9	20	
Arsenic	E	100.0	110.8	ug/L	11	20	
Chromium	E	200.0	213.7	ug/L	7	20	
Cobalt	E	200.0	201.6	ug/L	1	20	
Copper	E	200.0	189.5	ug/L	-5	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	196.9	ug/L	-2	20	
Sodium	E	250000	266900	ug/L	7		
Vanadium	E	200.0	218.5	ug/L	9	20	
Zinc	E	100.0	95.65	ug/L	-4	20	
Iron	H	250000	250100	ug/L	0		
Selenium	H	100.0	103.7	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	377102	-10.74
Scandium	A	1517730	1167169	-23.10
Scandium	E	45344	35564	-21.57
Germanium	H	101123	80404	-20.49
Germanium	E	22511	17120	-23.95
Indium	A	1832636	1376611	-24.88
Yttrium	A	1904354	1543286	-18.96

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941146 File : c09q0146 Time : 10-MAR-2007 06:18
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03552]	0.1000	ug/L	
Barium	A	0.8836	0.1000	ug/L	
Beryllium	A	[0.004092]	0.1000	ug/L	
Cadmium	A	1.389	0.1000	ug/L	
Lead	A	0.4272	0.1000	ug/L	
Silver	A	0.1743	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.1982	0.1000	ug/L	
Chromium	E	1.308	0.1000	ug/L	
Cobalt	E	0.1737	0.1000	ug/L	
Copper	E	1.218	0.1000	ug/L	
Manganese	E	0.7907	0.1000	ug/L	
Nickel	E	1.129	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.209	0.1000	ug/L	
Selenium	H	[0.04071]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91160	ug/L	91
Calcium	A	300000	280800	ug/L	94
Magnesium	A	100000	86910	ug/L	87
Molybdenum	A	2000	1830	ug/L	92
Potassium	A	100000	93540	ug/L	94
Sodium	E	250000	229700	ug/L	92
Iron	H	250000	221000	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	609904	-33.46
Scandium	A	1517730	1241471	-18.20
Scandium	E	45344	39241	-13.46
Scandium	H	422488	393129	-6.95
Germanium	H	101123	83730	-17.20
Germanium	E	22511	18443	-18.07
Indium	A	1832636	1380517	-24.67
Bismuth	A	1296680	834170	-35.67
Yttrium	A	1904354	1579303	-17.07
Terbium	A	2253622	1770798	-21.42

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941147 File : c09q0147 Time : 10-MAR-2007 06:23
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97750	ug/L	-2		
Cadmium	A	100.0	99.56	ug/L	0	20	
Calcium	A	300000	314400	ug/L	5		
Magnesium	A	100000	92990	ug/L	-7		
Molybdenum	A	2000	2025	ug/L	1		
Potassium	A	100000	102300	ug/L	2		
Silver	A	50.00	44.82	ug/L	-10	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	212.3	ug/L	6	20	
Cobalt	E	200.0	201.7	ug/L	1	20	
Copper	E	200.0	189.0	ug/L	-6	20	
Manganese	E	200.0	202.3	ug/L	1	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	258400	ug/L	3		
Vanadium	E	200.0	217.7	ug/L	9	20	
Zinc	E	100.0	94.73	ug/L	-5	20	
Iron	H	250000	246800	ug/L	-1		
Selenium	H	100.0	105.0	ug/L	5	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	373132	-11.68
Scandium	A	1517730	1174322	-22.63
Scandium	E	45344	35245	-22.27
Germanium	H	101123	78759	-22.12
Germanium	E	22511	16937	-24.76
Indium	A	1832636	1378645	-24.77
Yttrium	A	1904354	1545629	-18.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941204 File : c09q0204 Time : 10-MAR-2007 11:29
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.03299]	0.1000	ug/L	
Barium	A	0.9235	0.1000	ug/L	
Beryllium	A	[0.01135]	0.1000	ug/L	
Cadmium	A	1.459	0.1000	ug/L	
Lead	A	0.4326	0.1000	ug/L	
Silver	A	0.1740	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2265	0.1000	ug/L	
Chromium	E	1.284	0.1000	ug/L	
Cobalt	E	0.1813	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.7650	0.1000	ug/L	
Nickel	E	1.079	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.106	0.1000	ug/L	
Selenium	H	[0.005864]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93090	ug/L	93
Calcium	A	300000	285200	ug/L	95
Magnesium	A	100000	88160	ug/L	88
Molybdenum	A	2000	1839	ug/L	92
Potassium	A	100000	94450	ug/L	94
Sodium	E	250000	222900	ug/L	89
Iron	H	250000	221200	ug/L	88

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	599910	-34.55
Scandium	A	1517730	1191263	-21.51
Scandium	E	45344	39252	-13.44
Scandium	H	422488	370202	-12.38
Germanium	H	101123	79661	-21.22
Germanium	E	22511	18466	-17.97
Indium	A	1832636	1345356	-26.59
Bismuth	A	1296680	827534	-36.18
Yttrium	A	1904354	1528690	-19.73
Terbium	A	2253622	1742765	-22.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941205 File : c09q0205 Time : 10-MAR-2007 11:34
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99200	ug/L	-1		
Cadmium	A	100.0	100.8	ug/L	1	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93600	ug/L	-6		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	103900	ug/L	4		
Silver	A	50.00	45.81	ug/L	-8	20	
Arsenic	E	100.0	108.9	ug/L	9	20	
Chromium	E	200.0	211.0	ug/L	6	20	
Cobalt	E	200.0	199.3	ug/L	0	20	
Copper	E	200.0	183.2	ug/L	-8	20	
Manganese	E	200.0	201.8	ug/L	1	20	
Nickel	E	200.0	192.6	ug/L	-4	20	
Sodium	E	250000	257100	ug/L	3		
Vanadium	E	200.0	216.5	ug/L	8	20	
Zinc	E	100.0	92.80	ug/L	-7	20	
Iron	H	250000	244900	ug/L	-2		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	357716	-15.33
Scandium	A	1517730	1134866	-25.23
Scandium	E	45344	35275	-22.21
Germanium	H	101123	76421	-24.43
Germanium	E	22511	17153	-23.80
Indium	A	1832636	1337539	-27.02
Yttrium	A	1904354	1493682	-21.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67098941241 File : c09q0241 IDF : 1.0
Cal : 67098941001 Caldate: 09-MAR-2007 Time : 10-MAR-2007 14:48
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04069]	0.1000	ug/L	
Barium	A	0.9376	0.1000	ug/L	
Beryllium	A	[0.01409]	0.1000	ug/L	
Cadmium	A	1.455	0.1000	ug/L	
Lead	A	0.4407	0.1000	ug/L	
Silver	A	0.1966	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.2228	0.1000	ug/L	
Chromium	E	1.292	0.1000	ug/L	
Cobalt	E	0.1760	0.1000	ug/L	
Copper	E	1.153	0.1000	ug/L	
Manganese	E	0.7582	0.1000	ug/L	
Nickel	E	1.069	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.073	0.1000	ug/L	
Selenium	H	[0.01115]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90460	ug/L	90
Calcium	A	300000	281600	ug/L	94
Magnesium	A	100000	86780	ug/L	87
Molybdenum	A	2000	1848	ug/L	92
Potassium	A	100000	93320	ug/L	93
Sodium	E	250000	225600	ug/L	90
Iron	H	250000	221300	ug/L	89

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	916634	581542	-36.56
Scandium	A	1517730	1188280	-21.71
Scandium	E	45344	38831	-14.36
Scandium	H	422488	360357	-14.71
Germanium	H	101123	77698	-23.16
Germanium	E	22511	18316	-18.63
Indium	A	1832636	1350980	-26.28
Bismuth	A	1296680	805630	-37.87
Yttrium	A	1904354	1518776	-20.25
Terbium	A	2253622	1735412	-22.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67098941242 File : c09q0242 Time : 10-MAR-2007 14:54
Cal : 67098941001 Caldate: 09-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98070	ug/L	-2		
Cadmium	A	100.0	102.0	ug/L	2	20	
Calcium	A	300000	315900	ug/L	5		
Magnesium	A	100000	93340	ug/L	-7		
Molybdenum	A	2000	2063	ug/L	3		
Potassium	A	100000	102700	ug/L	3		
Silver	A	50.00	45.92	ug/L	-8	20	
Arsenic	E	100.0	110.5	ug/L	11	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	198.5	ug/L	-1	20	
Copper	E	200.0	183.1	ug/L	-8	20	
Manganese	E	200.0	203.3	ug/L	2	20	
Nickel	E	200.0	191.8	ug/L	-4	20	
Sodium	E	250000	255700	ug/L	2		
Vanadium	E	200.0	216.4	ug/L	8	20	
Zinc	E	100.0	94.32	ug/L	-6	20	
Iron	H	250000	248400	ug/L	-1		
Selenium	H	100.0	103.9	ug/L	4	20	

ISTD (ICALBLK c09q0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	422488	341093	-19.27
Scandium	A	1517730	1130423	-25.52
Scandium	E	45344	35247	-22.27
Germanium	H	101123	73516	-27.30
Germanium	E	22511	17085	-24.10
Indium	A	1832636	1317155	-28.13
Yttrium	A	1904354	1464552	-23.09

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	916634	1517730	45344	422488	101123	22511	1832636	1296680	1904354	2253622
		LOWER LIMIT	274990	455319	13603	126746	30337	6753	549791	389004	571306	676087
		UPPER LIMIT	1099961	1821276	54413	506985	121347	27013	2199163	1556016	2285225	2704346
018	ICB		981613	1476487	48015	440455	102714	22945	1719452	1139959	1797451	2047526
020	ICSA		648481	1232034	37927	382036	82401	18306	1405228	853887	1563770	1834242
021	ICSAB		582795	1155038	34371	360675	78650	16695	1377995	852495	1538086	1858666
026	BLANK	QC378336	863017	1374446	40965	392999	94008	21107	1741851	1286874	1773795	2195119
027	BS	QC378337	903666	1450057	41163	388071	92268	20779	1801605	1302872	1850641	2246110
028	BSD	QC378338	891566	1424703	42379	393068	92980	21472	1743629	1260863	1790909	2194284
031	BLANK	QC378414	773387	1276190	36872	361754	96338	21188	1651727	1282988	1687273	2200427
032	BLANK	QC378443	789285	1298089	37453	363119	94068	20836	1700706	1299604	1726652	2223508
033	MSS	193165-002	963383	1545789	46469	430915	98342	22091	1775714	1244051	1946540	2199596
034	SER	QC378341	942026	1458038	45757	418392	97918	22288	1725568	1217037	1826667	2130441
035	MS	QC378339	936660	1499541	47583	427121	96530	22532	1715638	1173677	1889410	2105941
046	CCV		905174	1441531	45193	420497	96743	21533	1642773	1088318	1748927	2043585
049	CCB		960350	1481310	46876	431598	100676	22327	1735890	1191213	1834279	2106807
055	PDS	QC378342	932148	1530176	46941	434367	96736	21744	1669597	1089202	1883003	2066072
056	SAMPLE	193165-001	952322	1503979	48239	437535	99049	22729	1705989	1152210	1870686	2074860
057	SAMPLE	193165-003	955852	1538633	48962	454552	102101	22982	1713938	1125330	1917433	2039358
058	SAMPLE	193165-004	967423	1611432	49819	451634	101145	23117	1771979	1175909	1986668	2109743
059	SAMPLE	193165-005	958524	1547831	50371	454257	101846	23535	1725335	1146647	1912778	2053880
060	SAMPLE	193165-006	998493	1589246	50471	451513	100990	23296	1742402	1149353	1949706	2087054
061	SAMPLE	193165-007	985003	1554322	50500	445054	100327	23450	1728953	1154781	1938419	2071529
062	SAMPLE	193165-008	966327	1544798	49344	436334	99819	23055	1711720	1122555	1888204	2043452
063	SAMPLE	193165-009	974905	1554277	50365	450694	100022	22841	1699669	1118344	1920211	2016418
068	CCV		913999	1455726	46412	435589	100000	21916	1638663	1053580	1768625	2008550
070	CCB		972695	1482231	48846	439316	101199	23094	1729036	1149784	1823495	2056781
073	SAMPLE	193165-010	972938	1575158	50135	449325	100503	23182	1720829	1157854	1929263	2050582
074	SAMPLE	193165-011	975873	1542417	50568	452792	102354	23468	1694315	1119077	1918120	2037129
075	SAMPLE	193202-001	931098	1425498	46924	441100	95914	21109	1540175	988222	1664166	1919982
076	SAMPLE	193202-002	892840	1408129	46358	442730	95059	20576	1514132	966987	1645724	1892526
077	SAMPLE	193202-003	884224	1409245	46402	436810	94649	21024	1528446	971327	1647355	1882595
078	SAMPLE	193202-004	979622	1536923	50318	455917	98767	22488	1643810	1056711	1884832	1984488
079	SAMPLE	193284-002	985109	1563781	50390	461985	99286	22565	1666916	1120661	1902848	2022684
084	CCV		906941	1427826	46819	433588	98832	21976	1596458	999596	1745906	1966364
086	CCB		956334	1439257	47503	447019	103188	22596	1677042	1137040	1765145	2002557
089	ICSA		623862	1236772	39129	393799	84184	18594	1368055	819714	1557710	1742704
090	ICSAB		561457	1167169	35564	377102	80404	17120	1376611	843178	1543286	1807188
095	BS	QC378415	951663	1540367	46965	435249	99965	22851	1765502	1196154	1891418	2190349
096	BSD	QC378416	972110	1564246	48675	450177	102955	23095	1775978	1174581	1907655	2180968
098	MSS	193253-001	900374	1470155	44821	426156	98578	22048	1696248	1112262	1798822	2090852
099	SER	QC378419	914606	1460055	45132	432481	101180	22233	1727773	1174234	1788889	2087437
100	MS	QC378417	895098	1430428	44507	428004	99395	21837	1649439	1121106	1760805	2075003
101	MSD	QC378418	885257	1434266	45009	427402	99071	21845	1667025	1121793	1753445	2057510
102	PDS	QC378420	847821	1411196	43324	423901	96610	20891	1630536	1085080	1742969	2056899
103	SAMPLE	193187-001	918129	1435477	44353	420441	99735	21884	1725870	1224680	1776904	2136736
108	CCV		902889	1401113	42563	416586	94956	20421	1614720	1141281	1722254	2048074
112	CCB		924797	1376821	43697	415130	96819	21189	1642742	1174900	1721832	2056685
113	SAMPLE	193187-002	915561	1411896	44401	418141	97508	21510	1638461	1154585	1730795	2048808
114	SAMPLE	193187-003	933709	1422558	44410	429762	100039	21633	1664179	1200909	1728641	2057104
117	SAMPLE	193199-001	929726	1419568	44602	429071	99163	21549	1664107	1146977	1737917	2052217

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
118	SAMPLE	193199-002	932691	1390850	43974	431171	99853	21510	1655169	1172327	1691733	2046235
119	SAMPLE	193199-003	936944	1414304	44140	417129	96955	21489	1648685	1155529	1705058	2032738
120	SAMPLE	193199-001	946352	1422379	45055	421941	97812	21548	1648097	1153561	1722060	2049120
121	SAMPLE	193199-002	942567	1433867	44565	421458	98054	21584	1663931	1163545	1699936	2039926
122	SAMPLE	193199-003	952437	1446828	45382	430507	100087	21696	1676750	1175834	1739698	2073121
123	SAMPLE	193205-001	949568	1431059	45483	436405	101828	22282	1667530	1148422	1726428	2053644
124	SAMPLE	193205-001	948968	1437818	44929	433466	100551	22049	1681861	1165414	1721645	2079978
129	CCV		892003	1400371	43765	424248	96829	20956	1610854	1101593	1703888	2032098
131	CCB		931971	1401473	44948	427514	99355	21712	1658452	1156128	1730428	2037464
134	SAMPLE	193243-001	947965	1433971	46256	435667	100466	22327	1684774	1162270	1760832	2067419
135	SAMPLE	193243-002	957304	1423797	45498	429285	99618	21958	1663899	1147299	1721760	2048812
136	SAMPLE	193253-002	917746	1414906	45173	432833	99044	21785	1603894	1074395	1699662	1987469
141	CCV		902061	1405467	44656	428923	98288	21386	1598338	1083588	1727094	2021728
143	CCB		934611	1381267	45098	405569	95993	21660	1649358	1134689	1705681	2028289
146	ICSA		609904	1241471	39241	393129	83730	18443	1380517	834170	1579303	1770798
147	ICSAB		537186	1174322	35245	373132	78759	16937	1378645	849147	1545629	1807773
152	BS	QC378444	774667	1349726	37917	375806	90392	19624	1623415	1150738	1732090	2155849
153	BSD	QC378445	780202	1356481	38136	372594	87668	19413	1624802	1134141	1732764	2106738
155	MSS	193217-011	876175	1397755	42642	406502	96903	21306	1693493	1149050	1734483	2067021
156	SER	QC378448	910334	1423010	43940	418688	98954	21933	1713381	1169658	1770301	2086307
157	MS	QC378446	878725	1398327	42721	405316	94597	20828	1637704	1135399	1734896	2057123
158	MSD	QC378447	879618	1401030	42650	400368	94637	21009	1649654	1146196	1709242	2046195
159	PDS	QC378449	848479	1389680	41278	400627	92227	20273	1608487	1054667	1714680	2038945
160	MSS	193217-021	874711	1412957	43902	412116	96445	21443	1658392	1135002	1733128	2038837
165	CCV		877950	1386999	41993	407840	93340	20616	1594481	1064061	1696157	2011171
168	CCB		907910	1373491	43250	410259	95168	20961	1620162	1145144	1687177	2010187
170	MS	QC378508	912084	1422763	43430	389480	92155	21390	1645528	1128938	1729205	2048852
171	MSD	QC378509	902677	1458695	43230	412918	95654	21056	1677263	1145594	1768214	2092280
172	SAMPLE	193055-023	914402	1434056	44367	419669	97864	21640	1641566	1125705	1733193	2039891
173	SAMPLE	193137-005	916075	1399875	43942	414996	97876	21409	1631266	1130292	1704359	2029941
174	SAMPLE	193217-010	903153	1397147	46164	402020	94234	22237	1623538	1138800	1686493	2016948
175	SAMPLE	193217-012	929033	1369759	42723	398156	93314	21027	1614797	1130902	1667710	1999508
176	SAMPLE	193217-014	928068	1419487	43460	401097	93310	21296	1651660	1154989	1723765	2060619
177	SAMPLE	193217-015	906972	1367926	42440	399515	93425	20638	1591180	1115691	1653183	1990920
178	SAMPLE	193217-016	911090	1396387	43884	412339	95839	21268	1612838	1125303	1691322	2020074
179	SAMPLE	193217-017	873427	1316326	43497	405946	94980	21139	1553156	1075831	1593753	1916399
184	CCV		860804	1351596	42354	401343	91432	20368	1567188	1025975	1661744	1953400
186	CCB		911932	1387391	44235	414992	96866	21633	1653626	1169511	1707120	2039560
189	SAMPLE	193217-018	859967	1381365	43631	403383	94147	21348	1588849	1046023	1668635	1947997
190	SAMPLE	193217-019	868431	1370522	43518	410454	95686	21190	1596118	1090920	1658624	1968888
191	SAMPLE	193217-020	895527	1384994	44484	407285	95147	21679	1588874	1066025	1674548	1966732
192	SAMPLE	193217-022	857166	1298783	44247	414967	96445	21405	1506101	1008142	1579921	1867394
193	SAMPLE	193217-023	917649	1354117	44102	407100	95980	21289	1623050	1121830	1664556	1984836
194	SAMPLE	193217-024	911929	1363987	43635	398225	93370	21181	1599712	1093031	1661086	1992253
199	CCV		864908	1350162	42695	393397	91024	20572	1550003	1023495	1653281	1946954
201	CCB		887722	1370772	45085	410915	96368	21710	1630628	1121425	1710361	1982461
204	ICSA		599910	1191263	39252	370202	79661	18466	1345356	827534	1528690	1742765
205	ICSAB		509434	1134866	35275	357716	76421	17153	1337539	829867	1493682	1765605
210	MSS	193193-001	836904	1335937	41413	377991	90337	21005	1666574	1206508	1701705	2084946
213	SER	QC378193	846561	1383067	43359	386934	93511	21520	1693543	1205709	1736518	2113365
214	MS	QC378191	851733	1377327	42849	390804	92855	21443	1667822	1187527	1730195	2099191
215	MSD	QC378192	834606	1352257	42763	385310	91048	21142	1635785	1153761	1682318	2053411

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67098941

Date : 03/09/07 Reference: c09q0004
Sequence : MET06 c09q0 Analyzed : 03/09/07 17:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	PI A	Y A	TB A
216	PDS	QC378194	807162	1373965	42602	384827	89411	20904	1609006	1101960	1712302	2054536
217	SAMPLE	193193-006	837697	1351619	42847	383925	91549	21489	1648575	1171136	1680832	2045000
218	SAMPLE	193193-013	850323	1381844	43488	386328	92324	21786	1672280	1172422	1713891	2068810
219	SAMPLE	193027-012	851969	1374048	44520	389682	92872	21830	1641570	1118909	1697619	2008910
224	CCV		837171	1374157	44698	402269	93003	21285	1584817	1070250	1683860	2002425
227	CCB		868425	1350039	44352	385028	90590	21655	1609789	1100157	1653506	1965147
229	SAMPLE	193027-011	866645	1356505	44718	390336	92548	21997	1600466	1043536	1658608	1947958
230	SAMPLE	193027-012	910423	1413487	45570	392055	93011	22167	1666863	1130964	1721437	2042000
231	SAMPLE	193027-013	868936	1377052	45188	386345	91538	22177	1623029	1121886	1698277	1970489
236	CCV		843785	1361270	44250	395586	91504	21253	1578633	1061930	1668555	1965560
239	CCB		871768	1336030	45051	390025	92251	21613	1593414	1085987	1648046	1958145
241	ICSA		581542	1188280	38831	360357	77698	18316	1350980	805630	1518776	1735412
242	ICSAB		496559	1130423	35247	341093	73516	17085	1317155	801642	1464552	1737562

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c09q0001	TUN				09-MAR-2007 17:01	1.0	1.0				1	
002	c09q0002	X	RINSE			09-MAR-2007 17:09	1.0					2	
003	c09q0003	X	RINSE			09-MAR-2007 17:14	1.0					2	
004	c09q0004	ICALBLK	CALBLANK			09-MAR-2007 17:19	1.0	1.0				2	
005	c09q0005	ICAL				09-MAR-2007 17:24	1.0	1.0				3	
006	c09q0006	ICAL				09-MAR-2007 17:30	1.0	1.0				4	
007	c09q0007	ICAL				09-MAR-2007 17:35	1.0	1.0				5	
008	c09q0008	ICAL				09-MAR-2007 17:40	1.0	1.0				6	
009	c09q0009	ICAL				09-MAR-2007 17:45	1.0	1.0				7	
010	c09q0010	ICAL				09-MAR-2007 17:51	1.0	1.0				8	
011	c09q0011	X	RINSE			09-MAR-2007 17:58	1.0					2	
012	c09q0012	X				09-MAR-2007 18:04	1.0					9 2	
013	c09q0013	X	RINSE			09-MAR-2007 18:09	1.0					2	
014	c09q0014	X				09-MAR-2007 18:14	1.0					2	
015	c09q0015	ICV				09-MAR-2007 18:28	1.0	1.0			1	9	
016	c09q0016	X	RINSE			09-MAR-2007 18:33	1.0					2	
017	c09q0017	X				09-MAR-2007 18:39	1.0					2	
018	c09q0018	ICB				09-MAR-2007 18:44	1.0	1.0			1	2	
019	c09q0019	X				09-MAR-2007 18:49	1.0					2	
020	c09q0020	ICSA				09-MAR-2007 18:55	1.0	1.0			1	10 2	7:CA=283800
021	c09q0021	ICSAB				09-MAR-2007 19:00	1.0	1.0			1	11 2	11:CA=322800
022	c09q0022	X	RINSE			09-MAR-2007 19:05	1.0					2	
023	c09q0023	X	RINSE			09-MAR-2007 19:11	1.0					2	
024	c09q0024	X	RINSE			09-MAR-2007 19:16	1.0					2	
025	c09q0025	X	RINSE			09-MAR-2007 19:21	1.0					2	
026	c09q0026	BLANK	QC378336	122902	Soil	09-MAR-2007 19:27	5.0	50.0	1		1	2	
027	c09q0027	BS	QC378337	122902	Soil	09-MAR-2007 19:32	50.0	50.0	1	1	1	2	
028	c09q0028	BSD	QC378338	122902	Soil	09-MAR-2007 19:37	50.0	50.0		1	1	2	
029	c09q0029	X	RINSE			09-MAR-2007 19:42	1.0					2	
030	c09q0030	X	RINSE			09-MAR-2007 19:48	1.0					2	
031	c09q0031	BLANK	QC378414	122921	Filtra	09-MAR-2007 20:02	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c09q0032	BLANK	QC378443	122924	Filtra	09-MAR-2007 20:07	1.0	1.0			1	2	
033	c09q0033	MSS	193165-002	122902	Soil	09-MAR-2007 20:13	50.0	50.0	1		1	2	1:MN=324.000
034	c09q0034	SER	QC378341	122902	Soil	09-MAR-2007 20:18	250.0	50.0		2	1	2	
035	c09q0035	MS	QC378339	122902	Soil	09-MAR-2007 20:23	50.0	50.0			1	2	1:MN=373.800
036	c09q0036	X	RINSE			09-MAR-2007 20:28	1.0					2	
037	c09q0037	X	RINSE			09-MAR-2007 20:34	1.0					2	
038	c09q0038	X	RINSE			09-MAR-2007 20:39	1.0					2	
039	c09q0039	X	RINSE			09-MAR-2007 20:44	1.0					2	
040	c09q0040	X				09-MAR-2007 20:50	1.0					12 2	
041	c09q0041	X	RINSE			09-MAR-2007 20:57	1.0					2	
042	c09q0042	X	RINSE			09-MAR-2007 21:03	1.0					2	
043	c09q0043	X	RINSE			09-MAR-2007 21:08	1.0					2	
044	c09q0044	X	RINSE			09-MAR-2007 21:14	1.0					2	
045	c09q0045	X	RINSE			09-MAR-2007 21:19	1.0					2	
046	c09q0046	CCV				09-MAR-2007 21:24	1.0	1.0			1	12 2	
047	c09q0047	X	RINSE			09-MAR-2007 21:29	1.0					2	
048	c09q0048	X				09-MAR-2007 21:35	1.0					2	
049	c09q0049	CCB				09-MAR-2007 21:40	1.0	1.0			1	2	
050	c09q0050	X				09-MAR-2007 21:45	1.0					2	
051	c09q0051	X				09-MAR-2007 21:51	1.0					2	
052	c09q0052	X				09-MAR-2007 21:56	1.0					2	
053	c09q0053	X				09-MAR-2007 22:01	1.0					2	
054	c09q0054	X	RINSE			09-MAR-2007 22:07	1.0					2	
055	c09q0055	PDS	QC378342	122902	Soil	09-MAR-2007 22:12	50.0	50.0			1	13 14 2	1:MN=431.000
056	c09q0056	SAMPLE	193165-001	122902	Soil	09-MAR-2007 22:17	50.0	46.73			1	2	
057	c09q0057	SAMPLE	193165-003	122902	Soil	09-MAR-2007 22:22	50.0	48.08			1	2	
058	c09q0058	SAMPLE	193165-004	122902	Soil	09-MAR-2007 22:27	50.0	47.62			1	2	
059	c09q0059	SAMPLE	193165-005	122902	Soil	09-MAR-2007 22:33	50.0	48.54			1	2	
060	c09q0060	SAMPLE	193165-006	122902	Soil	09-MAR-2007 22:38	50.0	43.48			1	2	
061	c09q0061	SAMPLE	193165-007	122902	Soil	09-MAR-2007 22:43	50.0	45.45			1	2	
062	c09q0062	SAMPLE	193165-008	122902	Soil	09-MAR-2007 22:49	50.0	49.02			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RetH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c09q0063	SAMPLE	193165-009	122902	Soil	09-MAR-2007 22:54	50.0	46.73			1	2	
064	c09q0064	X	RINSE			09-MAR-2007 22:59	1.0					2	
065	c09q0065	X	RINSE			09-MAR-2007 23:04	1.0					2	
066	c09q0066	X	RINSE			09-MAR-2007 23:10	1.0					2	
067	c09q0067	X	RINSE			09-MAR-2007 23:15	1.0					2	
068	c09q0068	CCV				09-MAR-2007 23:20	1.0	1.0			1	12 2	
069	c09q0069	X	RINSE			09-MAR-2007 23:27	1.0					2	
070	c09q0070	CCB				09-MAR-2007 23:32	1.0	1.0			1	2	
071	c09q0071	X				09-MAR-2007 23:37	1.0	1.0			1	2	
072	c09q0072	X				09-MAR-2007 23:43	1.0	1.0			1	2	
073	c09q0073	SAMPLE	193165-010	122902	Soil	09-MAR-2007 23:48	50.0	45.05			1	2	
074	c09q0074	SAMPLE	193165-011	122902	Soil	09-MAR-2007 23:53	50.0	46.73			1	2	
075	c09q0075	SAMPLE	193202-001	122902	Soil	09-MAR-2007 23:58	50.0	44.25	2		1	2	4:MG=71880.0
076	c09q0076	SAMPLE	193202-002	122902	Soil	10-MAR-2007 00:04	50.0	44.64	2		1	2	4:MG=77300.0
077	c09q0077	SAMPLE	193202-003	122902	Soil	10-MAR-2007 00:09	50.0	48.08	2		1	2	4:MG=71980.0
078	c09q0078	SAMPLE	193202-004	122902	Soil	10-MAR-2007 00:14	50.0	46.30			1	2	
079	c09q0079	SAMPLE	193284-002	122902	Soil	10-MAR-2007 00:20	50.0	46.30			1	2	
080	c09q0080	X	RINSE			10-MAR-2007 00:25	1.0					2	
081	c09q0081	X	RINSE			10-MAR-2007 00:30	1.0					2	
082	c09q0082	X	RINSE			10-MAR-2007 00:36	1.0					2	
083	c09q0083	X	RINSE			10-MAR-2007 00:41	1.0					2	
084	c09q0084	CCV				10-MAR-2007 00:46	1.0	1.0			1	12 2	
085	c09q0085	X	RINSE			10-MAR-2007 00:52	1.0					2	
086	c09q0086	CCB				10-MAR-2007 00:57	1.0	1.0			1	2	
087	c09q0087	X				10-MAR-2007 01:03	1.0	1.0	1		1	2	
088	c09q0088	X				10-MAR-2007 01:08	1.0	1.0			1	2	
089	c09q0089	ICSA				10-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=284500
090	c09q0090	ICSAB				10-MAR-2007 01:19	1.0	1.0			1	11 2	11:CA=317200
091	c09q0091	X	RINSE			10-MAR-2007 01:24	1.0					2	
092	c09q0092	X	RINSE			10-MAR-2007 01:29	1.0					2	
093	c09q0093	X	RINSE			10-MAR-2007 01:35	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RKA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c09q0094	X	RINSE			10-MAR-2007 01:40	1.0					2	
095	c09q0095	BS	QC378415	122921	Filtra	10-MAR-2007 01:45	1.0	1.0			1	2	
096	c09q0096	BSD	QC378416	122921	Filtra	10-MAR-2007 01:50	1.0	1.0			1	2	
097	c09q0097	X	RINSE			10-MAR-2007 01:56	1.0					2	
098	c09q0098	MSS	193253-001	122921	Filtra	10-MAR-2007 02:01	10.0	1.0	8		1	2	1:NA=33180.0
099	c09q0099	SER	QC378419	122921	Filtra	10-MAR-2007 02:06	50.0	1.0		1	1	2	
100	c09q0100	MS	QC378417	122921	Filtra	10-MAR-2007 02:11	10.0	1.0			1	2	1:NA=32780.0
101	c09q0101	MSD	QC378418	122921	Filtra	10-MAR-2007 02:17	10.0	1.0			1	2	1:NA=33200.0
102	c09q0102	PDS	QC378420	122921	Filtra	10-MAR-2007 02:22	10.0	1.0	1		1	13 14 2	2:NA=42700.0
103	c09q0103	SAMPLE	193187-001	122921	Water	10-MAR-2007 02:27	10.0	1.0	9		1	2	
104	c09q0104	X	RINSE			10-MAR-2007 02:32	1.0					2	
105	c09q0105	X	RINSE			10-MAR-2007 02:38	1.0					2	
106	c09q0106	X	RINSE			10-MAR-2007 02:43	1.0					2	
107	c09q0107	X	RINSE			10-MAR-2007 02:48	1.0					2	
108	c09q0108	CCV				10-MAR-2007 02:54	1.0	1.0			1	12 2	
109	c09q0109	X	RINSE			10-MAR-2007 02:59	1.0					2	
110	c09q0110	X				10-MAR-2007 03:04	1.0	1.0	2		1	2	
111	c09q0111	X				10-MAR-2007 03:10	1.0	1.0	2		1	2	
112	c09q0112	CCB				10-MAR-2007 03:15	1.0	1.0			1	2	
113	c09q0113	SAMPLE	193187-002	122921	Water	10-MAR-2007 03:20	10.0	1.0	1		1	2	
114	c09q0114	SAMPLE	193187-003	122921	Water	10-MAR-2007 03:26	10.0	1.0	1		1	2	
115	c09q0115	TUN				10-MAR-2007 03:30	1.0	1.0				1	
116	c09q0116	X	RINSE			10-MAR-2007 03:38	1.0					2	
117	c09q0117	SAMPLE	193199-001	122921	Water	10-MAR-2007 03:43	10.0	1.0	1		1	2	
118	c09q0118	SAMPLE	193199-002	122921	Water	10-MAR-2007 03:48	10.0	1.0	1		1	2	
119	c09q0119	SAMPLE	193199-003	122921	Water	10-MAR-2007 03:54	10.0	1.0	1		1	2	
120	c09q0120	SAMPLE	193199-001	122921	Filtra	10-MAR-2007 03:59	10.0	1.0	1		1	2	
121	c09q0121	SAMPLE	193199-002	122921	Filtra	10-MAR-2007 04:04	10.0	1.0	1		1	2	
122	c09q0122	SAMPLE	193199-003	122921	Filtra	10-MAR-2007 04:10	10.0	1.0	1		1	2	
123	c09q0123	SAMPLE	193205-001	122921	Water	10-MAR-2007 04:15	10.0	1.0	1		1	2	
124	c09q0124	SAMPLE	193205-001	122921	Filtra	10-MAR-2007 04:20	10.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c09q0125	X	RINSE			10-MAR-2007 04:26	1.0					2	
126	c09q0126	X	RINSE			10-MAR-2007 04:31	1.0					2	
127	c09q0127	X	RINSE			10-MAR-2007 04:36	1.0					2	
128	c09q0128	X	RINSE			10-MAR-2007 04:42	1.0					2	
129	c09q0129	CCV				10-MAR-2007 04:47	1.0	1.0			1	12 2	
130	c09q0130	X	RINSE			10-MAR-2007 04:52	1.0					2	
131	c09q0131	CCB				10-MAR-2007 04:58	1.0	1.0	1		1	2	
132	c09q0132	X				10-MAR-2007 05:03	1.0	1.0	2		1	2	
133	c09q0133	X				10-MAR-2007 05:08	1.0	1.0	1		1	2	
134	c09q0134	SAMPLE	193243-001	122921	Water	10-MAR-2007 05:14	10.0	1.0			1	2	
135	c09q0135	SAMPLE	193243-002	122921	Water	10-MAR-2007 05:19	10.0	1.0			1	2	
136	c09q0136	SAMPLE	193253-002	122921	Filtra	10-MAR-2007 05:24	10.0	1.0			1	2	1:NA=23670.0
137	c09q0137	X	RINSE			10-MAR-2007 05:30	1.0					2	
138	c09q0138	X	RINSE			10-MAR-2007 05:35	1.0					2	
139	c09q0139	X	RINSE			10-MAR-2007 05:40	1.0					2	
140	c09q0140	X	RINSE			10-MAR-2007 05:46	1.0					2	
141	c09q0141	CCV				10-MAR-2007 05:51	1.0	1.0			1	12 2	
142	c09q0142	X	RINSE			10-MAR-2007 05:56	1.0					2	
143	c09q0143	CCB				10-MAR-2007 06:02	1.0	1.0	1		1	2	
144	c09q0144	X				10-MAR-2007 06:07	1.0	1.0	1		1	2	
145	c09q0145	X				10-MAR-2007 06:12	1.0	1.0	1		1	2	
146	c09q0146	ICSA				10-MAR-2007 06:18	1.0	1.0			1	10 2	7:CA=280800
147	c09q0147	ICSAB				10-MAR-2007 06:23	1.0	1.0			1	11 2	11:CA=314400
148	c09q0148	X	RINSE			10-MAR-2007 06:28	1.0					2	
149	c09q0149	X	RINSE			10-MAR-2007 06:34	1.0					2	
150	c09q0150	X	RINSE			10-MAR-2007 06:39	1.0					2	
151	c09q0151	X	RINSE			10-MAR-2007 06:44	1.0					2	
152	c09q0152	BS	QC378444	122924	Filtra	10-MAR-2007 06:50	1.0	1.0			1	2	
153	c09q0153	BSD	QC378445	122924	Filtra	10-MAR-2007 06:55	1.0	1.0			1	2	
154	c09q0154	X	RINSE			10-MAR-2007 07:01	1.0					2	
155	c09q0155	MSS	193217-011	122924	Filtra	10-MAR-2007 07:07	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: DAA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c09q0156	SER	QC378448	122924	Filtra	10-MAR-2007 07:12	50.0	1.0	1	1	1	2	
157	c09q0157	MS	QC378446	122924	Filtra	10-MAR-2007 07:17	10.0	1.0	1		1	2	
158	c09q0158	MSD	QC378447	122924	Filtra	10-MAR-2007 07:23	10.0	1.0	1		1	2	
159	c09q0159	PDS	QC378449	122924	Filtra	10-MAR-2007 07:28	10.0	1.0	1		1	13 14 2	
160	c09q0160	MSS	193217-021	122924	Filtra	10-MAR-2007 07:33	10.0	1.0			1	2	
161	c09q0161	X	RINSE			10-MAR-2007 07:39	1.0					2	
162	c09q0162	X	RINSE			10-MAR-2007 07:44	1.0					2	
163	c09q0163	X	RINSE			10-MAR-2007 07:49	1.0					2	
164	c09q0164	X	RINSE			10-MAR-2007 07:55	1.0					2	
165	c09q0165	CCV				10-MAR-2007 08:00	1.0	1.0			1	12 2	
166	c09q0166	X	RINSE			10-MAR-2007 08:05	1.0					2	
167	c09q0167	X				10-MAR-2007 08:11	1.0	1.0	2		1	2	
168	c09q0168	CCB				10-MAR-2007 08:16	1.0	1.0			1	2	
169	c09q0169	X				10-MAR-2007 08:21	1.0	1.0			1	2	
170	c09q0170	MS	QC378508	122924	Filtra	10-MAR-2007 08:27	10.0	1.0			1	2	
171	c09q0171	MSD	QC378509	122924	Filtra	10-MAR-2007 08:32	10.0	1.0			1	2	
172	c09q0172	SAMPLE	193055-023	122924	Water	10-MAR-2007 08:37	10.0	1.0			1	2	
173	c09q0173	SAMPLE	193137-005	122924	Filtra	10-MAR-2007 08:43	10.0	1.0			1	2	
174	c09q0174	SAMPLE	193217-010	122924	Filtra	10-MAR-2007 08:48	10.0	1.0			1	2	
175	c09q0175	SAMPLE	193217-012	122924	Filtra	10-MAR-2007 08:53	10.0	1.0			1	2	
176	c09q0176	SAMPLE	193217-014	122924	Filtra	10-MAR-2007 08:59	10.0	1.0			1	2	
177	c09q0177	SAMPLE	193217-015	122924	Filtra	10-MAR-2007 09:04	10.0	1.0			1	2	
178	c09q0178	SAMPLE	193217-016	122924	Filtra	10-MAR-2007 09:09	10.0	1.0			1	2	
179	c09q0179	SAMPLE	193217-017	122924	Filtra	10-MAR-2007 09:15	10.0	1.0			1	2	
180	c09q0180	X	RINSE			10-MAR-2007 09:20	1.0					2	
181	c09q0181	X	RINSE			10-MAR-2007 09:25	1.0					2	
182	c09q0182	X	RINSE			10-MAR-2007 09:31	1.0					2	
183	c09q0183	X	RINSE			10-MAR-2007 09:36	1.0					2	
184	c09q0184	CCV				10-MAR-2007 09:41	1.0	1.0			1	12 2	
185	c09q0185	X	RINSE			10-MAR-2007 09:47	1.0					2	
186	c09q0186	CCB				10-MAR-2007 09:52	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RAA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
187	c09q0187	X				10-MAR-2007 09:57	1.0	1.0			1	2	
188	c09q0188	X				10-MAR-2007 10:03	1.0	1.0	3		1	2	
189	c09q0189	SAMPLE	193217-018	122924	Filtra	10-MAR-2007 10:08	10.0	1.0	1		1	2	1:NA=29570.0
190	c09q0190	SAMPLE	193217-019	122924	Filtra	10-MAR-2007 10:13	10.0	1.0	1		1	2	1:NA=20670.0
191	c09q0191	SAMPLE	193217-020	122924	Filtra	10-MAR-2007 10:19	10.0	1.0	1		1	2	1:NA=22410.0
192	c09q0192	SAMPLE	193217-022	122924	Filtra	10-MAR-2007 10:24	10.0	1.0	1		1	2	1:NA=20810.0
193	c09q0193	SAMPLE	193217-023	122924	Filtra	10-MAR-2007 10:30	10.0	1.0			1	2	
194	c09q0194	SAMPLE	193217-024	122924	Filtra	10-MAR-2007 10:35	10.0	1.0			1	2	
195	c09q0195	X	RINSE			10-MAR-2007 10:40	1.0					2	
196	c09q0196	X	RINSE			10-MAR-2007 10:46	1.0					2	
197	c09q0197	X	RINSE			10-MAR-2007 10:51	1.0					2	
198	c09q0198	X	RINSE			10-MAR-2007 10:57	1.0					2	
199	c09q0199	CCV				10-MAR-2007 11:02	1.0	1.0			1	12 2	
200	c09q0200	X	RINSE			10-MAR-2007 11:07	1.0					2	
201	c09q0201	CCB				10-MAR-2007 11:13	1.0	1.0			1	2	
202	c09q0202	X				10-MAR-2007 11:18	1.0	1.0			1	2	
203	c09q0203	X				10-MAR-2007 11:23	1.0	1.0			1	2	
204	c09q0204	ICSA				10-MAR-2007 11:29	1.0	1.0			1	10 2	7:CA=285200
205	c09q0205	ICSAB				10-MAR-2007 11:34	1.0	1.0			1	11 2	10:CA=315900
206	c09q0206	X	RINSE			10-MAR-2007 11:39	1.0					2	
207	c09q0207	X	RINSE			10-MAR-2007 11:45	1.0					2	
208	c09q0208	X	RINSE			10-MAR-2007 11:50	1.0					2	
209	c09q0209	X	RINSE			10-MAR-2007 11:56	1.0					2	
210	c09q0210	MSS	193193-001	122866	Filtra	10-MAR-2007 12:01	10.0	1.0			1	2	
211	c09q0211	TUN				10-MAR-2007 12:05	1.0	1.0				1	
212	c09q0212	X	RINSE			10-MAR-2007 12:13	1.0					2	
213	c09q0213	SER	QC378193	122866	Filtra	10-MAR-2007 12:18	50.0	1.0		2	1	2	
214	c09q0214	MS	QC378191	122866	Filtra	10-MAR-2007 12:24	10.0	1.0		1	1	2	
215	c09q0215	MSD	QC378192	122866	Filtra	10-MAR-2007 12:29	10.0	1.0		1	1	2	
216	c09q0216	PDS	QC378194	122866	Filtra	10-MAR-2007 12:34	10.0	1.0			1	13 14 2	
217	c09q0217	SAMPLE	193193-006	122866	Filtra	10-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLA Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67098941 Instrument: MET06 Agilent ICP-MS MET06 Begun: 09-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
218	c09q0218	SAMPLE	193193-013	122866	Filtra	10-MAR-2007 12:45	10.0	1.0	1		1	2	
219	c09q0219	SAMPLE	193027-012	122867	Filtra	10-MAR-2007 12:50	50.0	1.0			1	2	
220	c09q0220	X	RINSE			10-MAR-2007 12:56	1.0					2	
221	c09q0221	X	RINSE			10-MAR-2007 13:01	1.0					2	
222	c09q0222	X	RINSE			10-MAR-2007 13:06	1.0					2	
223	c09q0223	X	RINSE			10-MAR-2007 13:12	1.0					2	
224	c09q0224	CCV				10-MAR-2007 13:17	1.0	1.0			1	12 2	
225	c09q0225	X	RINSE			10-MAR-2007 13:23	1.0					2	
226	c09q0226	X				10-MAR-2007 13:28	1.0	1.0	4		1	2	
227	c09q0227	CCB				10-MAR-2007 13:33	1.0	1.0			1	2	
228	c09q0228	X				10-MAR-2007 13:39	1.0	1.0			1	2	
229	c09q0229	SAMPLE	193027-011	122867	Water	10-MAR-2007 13:44	20.0	1.0			1	2	
230	c09q0230	SAMPLE	193027-012	122867	Water	10-MAR-2007 13:49	50.0	1.0			1	2	
231	c09q0231	SAMPLE	193027-013	122867	Water	10-MAR-2007 13:55	20.0	1.0			1	2	
232	c09q0232	X	RINSE			10-MAR-2007 14:00	1.0					2	
233	c09q0233	X	RINSE			10-MAR-2007 14:05	1.0					2	
234	c09q0234	X	RINSE			10-MAR-2007 14:11	1.0					2	
235	c09q0235	X	RINSE			10-MAR-2007 14:16	1.0					2	
236	c09q0236	CCV				10-MAR-2007 14:21	1.0	1.0			1	12 2	
237	c09q0237	X	RINSE			10-MAR-2007 14:27	1.0					2	
238	c09q0238	X				10-MAR-2007 14:32	1.0	1.0	5		1	2	
239	c09q0239	CCB				10-MAR-2007 14:38	1.0	1.0			1	2	
240	c09q0240	X				10-MAR-2007 14:43	1.0	1.0			1	2	
241	c09q0241	ICSA				10-MAR-2007 14:48	1.0	1.0			1	10 2	7:CA=281600
242	c09q0242	ICSAB				10-MAR-2007 14:54	1.0	1.0			1	11 2	10:CA=315900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67101597001
Units : ug/L

Date : 11-MAR-2007 13:35
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c11n0005	67101597005		11-MAR-2007 13:40	S5645
L2	c11n0006	67101597006		11-MAR-2007 13:46	S5648
L3	c11n0007	67101597007		11-MAR-2007 13:51	S5649
L4	c11n0008	67101597008		11-MAR-2007 13:56	S5650
L5	c11n0009	67101597009		11-MAR-2007 14:01	S5644
L6	c11n0010	67101597010		11-MAR-2007 14:06	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.7797	0.6602	0.6737	0.6368	0.6275	0.5950	BLNK	-0.7320	1.66246		0.6622	0.999	0.995	
Antimony	A	0.3235	0.2940	0.2939	0.2903	0.2967	0.2868	BLNK	-0.0114	3.46274		0.2975	1.000	0.995	
Barium	A	0.2790	0.1027	0.1154	0.0958	0.0920	0.0875	BLNK	-0.0155	11.3143		0.1287	0.999	0.995	
Beryllium	A	0.3327	0.3285	0.3369	0.3336	0.3416	0.3349	BLNK	-0.0020	2.97424		0.3347	1.000	0.995	
Cadmium	A	0.0869	0.0796	0.0892	0.0856	0.0835	0.0805	BLNK	-0.0027	12.3239		0.0842	1.000	0.995	
Calcium	A	0.2503	0.0646	0.0460	0.0245	0.0217	0.0205	BLNK	-118.21	48.5240		0.0713	0.999	0.995	
Lead	A	0.8656	0.7170	0.7208	0.6788	0.6635	0.6425	BLNK	-0.0210	1.54628		0.7147	1.000	0.995	
Magnesium	A	0.6343	0.5469	0.5573	0.5217	0.5101	0.4820	BLNK	-0.6918	2.05039		0.5421	0.999	0.995	
Molybdenum	A	0.2472	0.2300	0.2389	0.2271	0.2237	0.2255	BLNK	-0.0067	4.44166		0.2321	1.000	0.995	
Potassium	A	6.5780	1.8867	1.3292	0.7862	0.7289	0.6907	BLNK	-82.405	1.43897		1.9999	0.999	0.995	
Silver	A	0.3675	0.3641	0.3689	0.3579	0.3633	0.3508	BLNK	-0.0064	2.83022		0.3621	1.000	0.995	
Thallium	A	1.4676	0.9616	0.9212	0.8746	0.9153	0.8932	BLNK	-0.0414	1.11473		1.0056	1.000	0.995	
Arsenic	E	0.9187	0.6487	0.6670	0.6390	0.6251	0.6001	BLNK	-0.0420	1.65282		0.6831	1.000	0.995	
Chromium	E	6.4330	3.9322	3.5828	3.1755	3.1526	2.9789	BLNK	-0.1056	0.33200		3.8759	0.999	0.995	
Cobalt	E	5.2760	4.9399	5.2270	5.0645	4.9438	4.6485	BLNK	-0.0015	0.21239		5.0166	0.999	0.995	
Copper	E	19.117	10.270	9.2750	8.0920	7.6121	7.1405	BLNK	-0.1409	0.13831		10.251	0.999	0.995	
Manganese	E	2.0495	1.7367	1.7195	1.6453	1.6331	1.5350	BLNK	-0.0173	0.64325		1.7199	0.999	0.995	
Nickel	E	2.7116	1.6311	1.6764	1.3942	1.3366	1.2437	BLNK	-0.1049	0.79255		1.6656	0.999	0.995	
Sodium	E	3.3500	1.2333	1.0132	0.7270	0.6721	0.6461	BLNK	-41.172	1.53903		1.2736	1.000	0.995	
Vanadium	E	6.4071	3.2784	2.9968	2.5025	2.4916	2.3588	BLNK	-0.1671	0.41962		3.3392	0.999	0.995	
Zinc	E	20.742	4.8340	6.3245	1.3469	1.1345	1.0530	BLNK	-1.4141	0.94280		5.9058	0.998	0.995	
Iron	H	1.0920	0.9782	1.0156	0.9293	0.9007	0.8645	BLNK	-0.5784	1.14701		0.9634	1.000	0.995	
Selenium	H	0.1631	0.1456	0.1597	0.1555	0.1496	0.1370	BLNK	-0.0062	7.16537		0.1518	0.998	0.995	

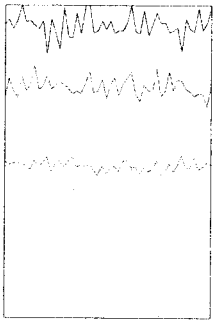
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

ng rument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67101597001

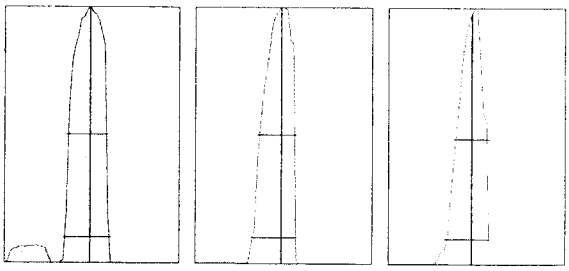
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19928.0	18753.4	4.35	1.00
89	50,000	37452.0	36828.8	3.90	0.80
205	50,000	24422.0	24217.8	3.22	2.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.985%
Doubly Charged: 70/140 2.163%



m/z:	7	89	205
Height:	18,927	36,897	23,621
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.800	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	0.9 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.04 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-32 V
Omega Lens-ce	:	0 V
Cell Entrance	:	-30 V
QP Focus	:	2 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0015
Axis Offset	:	-0.03
QP Bias	:	-5 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1780 V
Pulse HV	:	1410 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	4 mL/min	51	26.8	26.85
Optional Gas:	--- %	59	3764.5	3.57
QP Focus:	-10 V	89	2364.6	3.67
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-13 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	4 mL/min	59	2690.7	5.11
Optional Gas:	--- %	78	0.2	231.46
QP Focus:	-8 V	89	18472.2	4.21
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-15 V			

Integration Time: 0.1000sec

Generated : Mar 11, 2007 12:49:40
Printed : Mar 11, 2007 12:51:19

P/A Factor Tuning Report

Acquired:Mar 11 2007 01:00 pm

Mass[amu]	Element	P/A Factor
6	Li	0.064990
7	(Li)	Sensitivity too low
9	Be	0.074241
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091195
45	Sc	0.090963
51	V	0.092550
52	Cr	0.096217
55	Mn	0.098412
56	Fe	Sensitivity too high
59	Co	0.100893
60	Ni	Sensitivity too low
63	Cu	0.108212
65	Cu	0.107611
66	Zn	Sensitivity too low
72	Ge	0.105571
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.103605
98	Mo	0.104388
99	(Ru)	Sensitivity too low
107	Ag	0.113364
111	Cd	Sensitivity too low
115	In	0.112154
118	(In)	0.111256
121	Sb	0.110585
137	Ba	Sensitivity too low
159	Tb	0.114120
205	Tl	0.120270
206	(Pb)	0.120189
207	(Pb)	0.120232
208	Pb	0.119703
209	Bi	0.120469

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1780 V
Pulse HV: 1410 V

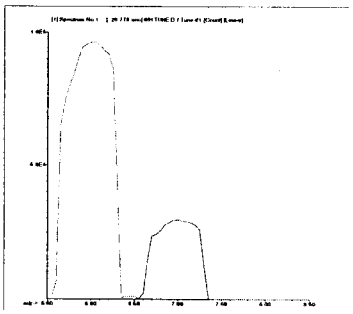
00494

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C11n00.B\001TUNE.D
Date Acquired:	Mar 11 2007 01:17 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.31	5.00	
59 Co	0.46	5.00	
115 In	1.05	5.00	
205 Tl	0.72	5.00	



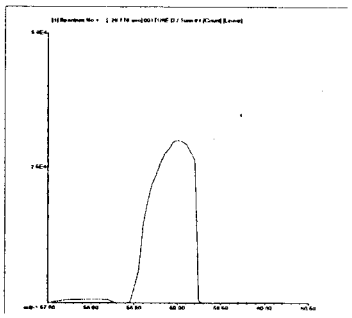
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



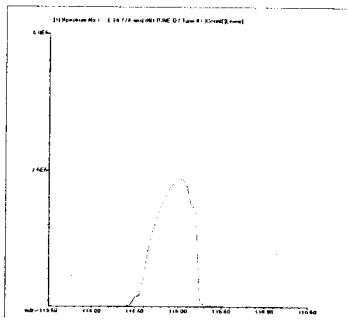
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



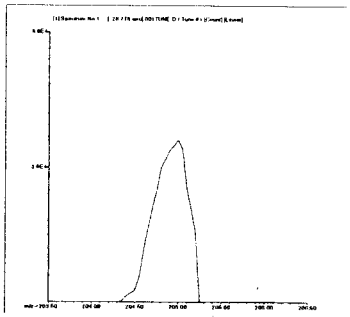
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004C
Date Acquired: Mar 11 2007 01:33 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	914016.31	A	10480.00	1.15
7	(Li)		P		
9	Be	12.22	P	5.09	41.66
23	Na	21398.87	P	249.90	1.17
24	Mg	10005.18	P	421.70	4.21
27	Al	13058.89	P	278.90	2.14
39	K	1698730.00	A	3644.00	0.21
44	Ca	72282.13	P	2201.00	3.05
45	Sc	339061.09	P	1139.00	0.34
45	Sc	39996.86	P	179.00	0.45
45	Sc	1483318.00	A	17720.00	1.19
51	V	318.53	P	34.07	10.70
52	Cr	254.45	P	13.10	5.15
55	Mn	21.48	P	1.70	7.90
56	Fe	3419.72	P	30.52	0.89
59	Co	5.56	P	1.93	34.65
60	Ni	105.93	P	5.25	4.96
63	Cu	383.34	P	35.76	9.33
65	Cu	178.89	P	20.37	11.39
66	Zn	564.09	P	27.32	4.84
72	Ge	77432.61	P	80.66	0.10
72	Ge	18807.66	P	97.30	0.52
75	As	9.56	P	1.02	10.65
78	Se	1.33	P	0.67	50.00
89	Y	1804800.00	A	16040.00	0.89
98	Mo	54.45	P	10.18	18.70
107	Ag	80.00	P	6.67	8.33
111	Cd	7.78	P	5.09	65.47
115	In	1776838.00	A	21300.00	1.20
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	116.67	P	10.00	8.57
137	Ba	61.11	P	10.18	16.66
159	Tb	2230978.00	A	34340.00	1.54
205	Tl	1010.08	P	40.00	3.96
208	Pb	606.70	P	10.00	1.65
209	Bi	1361245.00	A	12200.00	0.90

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\005CALS.D\005CALS.D#
Date Acquired: Mar 11 2007 01:38 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:36 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	925835.00	A	19290.00	2.08
7 (Li)		P		
9 Be	615.59	P	19.53	3.17
23 Na	27732.04	P	586.70	2.12
24 Mg	190104.80	P	1073.00	0.56
27 Al	233693.50	P	1226.00	0.52
39 K	1971530.00	A	11640.00	0.59
44 Ca	75032.58	P	1193.00	1.59
45 Sc	344107.81	P	843.70	0.25
45 Sc	41388.66	P	256.70	0.62
45 Sc	1498586.00	A	10080.00	0.67
51 V	530.39	P	29.45	5.55
52 Cr	532.61	P	28.92	5.43
55 Mn	169.63	P	18.60	10.97
56 Fe	75157.48	P	1144.00	1.52
59 Co	436.68	P	26.46	6.06
60 Ni	224.45	P	17.46	7.78
63 Cu	748.92	P	14.19	1.89
65 Cu	362.97	P	39.48	10.88
66 Zn	812.63	P	6.51	0.80
72 Ge	78328.36	P	132.30	0.17
72 Ge	19589.46	P	105.20	0.54
75 As	36.00	P	2.67	7.41
78 Se	25.56	P	3.79	14.83
89 Y	1858633.00	A	17890.00	0.96
98 Mo	918.96	P	40.33	4.39
99 (Ru)	11.11	P	8.39	75.50
107 Ag	1344.56	P	65.19	4.85
111 Cd	317.79	P	25.24	7.94
115 In	1828997.00	A	19380.00	1.06
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1183.43	P	46.32	3.91
137 Ba	1264.55	P	5.10	0.40
159 Tb	2266466.00	A	10910.00	0.48
205 Tl	2003.57	P	132.50	6.61
208 Pb	3923.72	P	60.27	1.54
209 Bi	1365602.00	A	24000.00	1.76

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	925835.00	2.08	914016.31	101.3	80 - 120	
45 Sc	344107.81	0.25	339061.13	101.5	80 - 120	
45 Sc	41388.66	0.62	39996.86	103.5	80 - 120	
45 Sc	1498586.00	0.67	1483317.60	101.0	80 - 120	
72 Ge	78328.36	0.17	77432.61	101.2	80 - 120	
72 Ge	19589.46	0.54	18807.66	104.2	80 - 120	
89 Y	1858632.60	0.96	1804800.40	103.0	80 - 120	
115 In	1828996.90	1.06	1776837.60	102.9	80 - 120	
159 Tb	2266466.50	0.48	2230977.80	101.6	80 - 120	
209 Bi	1365602.10	1.76	1361245.10	100.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 11 2007 01:43 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	937823.81	A	6224.00	0.66
7 (Li)		P		
9 Be	3080.44	P	40.42	1.31
23 Na	50986.19	P	592.00	1.16
24 Mg	837286.38	A	3021.00	0.36
27 Al	1010774.00	A	5005.00	0.50
39 K	2888643.00	A	14210.00	0.49
44 Ca	98971.37	P	560.40	0.57
45 Sc	345030.69	P	1666.00	0.48
45 Sc	41342.93	P	328.20	0.79
45 Sc	1531079.00	A	12120.00	0.79
51 V	1355.64	P	62.58	4.62
52 Cr	1625.67	P	11.71	0.72
55 Mn	718.17	P	44.67	6.22
56 Fe	337522.31	P	2890.00	0.86
59 Co	2042.03	P	41.60	2.04
60 Ni	674.47	P	35.95	5.33
63 Cu	2006.47	P	92.11	4.59
65 Cu	990.42	P	34.36	3.47
66 Zn	944.12	P	35.84	3.80
72 Ge	78924.04	P	539.40	0.68
72 Ge	19536.44	P	203.10	1.04
75 As	126.67	P	10.35	8.17
78 Se	114.89	P	13.42	11.68
89 Y	1868140.00	A	19480.00	1.04
98 Mo	4296.40	P	88.37	2.06
99 (Ru)	12.22	P	1.92	15.74
107 Ag	6739.69	P	96.66	1.43
111 Cd	1473.47	P	69.86	4.74
115 In	1850896.00	A	13410.00	0.72
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5441.30	P	73.60	1.35
137 Ba	2350.29	P	131.00	5.57
159 Tb	2288938.00	A	6597.00	0.29
205 Tl	6684.22	P	326.70	4.89
208 Pb	16410.34	P	323.90	1.97
209 Bi	1390616.00	A	8860.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	937823.81	0.66	914016.31	102.6	80 - 120	
45 Sc	345030.69	0.48	339061.13	101.8	80 - 120	
45 Sc	41342.93	0.79	39996.86	103.4	80 - 120	
45 Sc	1531079.30	0.79	1483317.60	103.2	80 - 120	
72 Ge	78924.04	0.68	77432.61	101.9	80 - 120	
72 Ge	19536.44	1.04	18807.66	103.9	80 - 120	
89 Y	1868140.00	1.04	1804800.40	103.5	80 - 120	
115 In	1850896.00	0.72	1776837.60	104.2	80 - 120	
159 Tb	2288938.00	0.29	2230977.80	102.6	80 - 120	
209 Bi	1390615.90	0.64	1361245.10	102.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 11 2007 01:49 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	915792.00	A	8758.00	0.96
7 (Li)		P		
9 Be	6171.53	P	159.10	2.58
23 Na	83963.03	P	607.20	0.72
24 Mg	1686488.00	A	18770.00	1.11
27 Al	2038663.00	A	8525.00	0.42
39 K	4021900.00	A	7872.00	0.20
44 Ca	139294.80	P	1229.00	0.88
45 Sc	346555.09	P	2125.00	0.61
45 Sc	41436.95	P	385.80	0.93
45 Sc	1513238.00	A	24650.00	1.63
51 V	2483.58	P	77.97	3.14
52 Cr	2968.87	P	79.60	2.68
55 Mn	1424.90	P	47.54	3.34
56 Fe	703939.00	P	5234.00	0.74
59 Co	4331.83	P	62.27	1.44
60 Ni	1389.35	P	55.93	4.03
63 Cu	3670.15	P	30.12	0.82
65 Cu	1808.29	P	25.76	1.42
66 Zn	2502.85	P	41.36	1.65
72 Ge	79028.66	P	352.70	0.45
72 Ge	19787.51	P	195.40	0.99
75 As	264.00	P	13.13	4.97
78 Se	252.45	P	12.81	5.07
89 Y	1854459.00	A	23840.00	1.29
98 Mo	8863.18	P	287.30	3.24
99 (Ru)	12.22	P	6.94	56.77
107 Ag	13474.92	P	183.00	1.36
111 Cd	3258.29	P	45.39	1.39
115 In	1826288.00	A	17690.00	0.97
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10734.66	P	253.80	2.36
137 Ba	5243.47	P	140.20	2.67
159 Tb	2272728.00	A	18870.00	0.83
205 Tl	12623.35	P	244.70	1.94
208 Pb	32763.25	P	488.80	1.49
209 Bi	1370337.00	A	23330.00	1.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	915791.94	0.96	914016.31	100.2	80 - 120	
45 Sc	346555.06	0.61	339061.13	102.2	80 - 120	
45 Sc	41436.96	0.93	39996.86	103.6	80 - 120	
45 Sc	1513238.30	1.63	1483317.60	102.0	80 - 120	
72 Ge	79028.66	0.45	77432.61	102.1	80 - 120	
72 Ge	19787.51	0.99	18807.66	105.2	80 - 120	
89 Y	1854459.40	1.29	1804800.40	102.8	80 - 120	
115 In	1826288.30	0.97	1776837.60	102.8	80 - 120	
159 Tb	2272728.00	0.83	2230977.80	101.9	80 - 120	
209 Bi	1370336.60	1.70	1361245.10	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 11 2007 01:54 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	928096.50	A	7530.00	0.81
7 (Li)		P		
9 Be	61912.26	P	769.40	1.24
23 Na	608612.13	P	1966.00	0.32
24 Mg	15938670.00	A	73420.00	0.46
27 Al	19451340.00	A	161300.00	0.83
39 K	24016490.00	A	81250.00	0.34
44 Ca	747481.63	P	2162.00	0.29
45 Sc	349240.09	P	468.70	0.13
45 Sc	41863.36	P	556.10	1.33
45 Sc	1527563.00	A	18820.00	1.23
51 V	20951.97	P	269.30	1.29
52 Cr	26584.40	P	35.38	0.13
55 Mn	13773.90	P	20.05	0.15
56 Fe	6490921.00	A	37350.00	0.58
59 Co	42397.70	P	87.32	0.21
60 Ni	11672.75	P	77.76	0.67
63 Cu	31714.51	P	195.40	0.62
65 Cu	15322.58	P	103.60	0.68
66 Zn	5278.84	P	91.01	1.72
72 Ge	80134.09	P	519.90	0.65
72 Ge	19597.26	P	137.50	0.70
75 As	2504.24	P	90.03	3.60
78 Se	2492.24	P	9.17	0.37
89 Y	1869155.00	A	15550.00	0.83
98 Mo	84910.69	P	844.10	0.99
99 (Ru)	16.67	P	6.67	40.00
107 Ag	130279.20	P	1152.00	0.88
111 Cd	31163.36	P	432.00	1.39
115 In	1819963.00	A	12020.00	0.66
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	105681.10	P	1618.00	1.53
137 Ba	43349.24	P	293.00	0.68
159 Tb	2262846.00	A	26660.00	1.18
205 Tl	119126.90	P	816.40	0.69
208 Pb	307197.81	P	456.80	0.15
209 Bi	1362154.00	A	12560.00	0.92

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	928096.56	0.81	914016.31	101.5	80 - 120	
45 Sc	349240.09	0.13	339061.13	103.0	80 - 120	
45 Sc	41863.36	1.33	39996.86	104.7	80 - 120	
45 Sc	1527562.90	1.23	1483317.60	103.0	80 - 120	
72 Ge	80134.09	0.65	77432.61	103.5	80 - 120	
72 Ge	19597.26	0.70	18807.66	104.2	80 - 120	
89 Y	1869155.10	0.83	1804800.40	103.6	80 - 120	
115 In	1819963.10	0.66	1776837.60	102.4	80 - 120	
159 Tb	2262846.30	1.18	2230977.80	101.4	80 - 120	
209 Bi	1362153.90	0.92	1361245.10	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 11 2007 01:59 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 01:57 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	885035.50	A	9139.00	1.03
7	(Li)		P		
9	Be	604657.19	P	4870.00	0.81
23	Na	5609490.00	A	68990.00	1.23
24	Mg	############	A	899700.00	0.57
27	Al	############	A	2278000.00	1.17
39	K	############	A	2348000.00	1.04
44	Ca	6727684.00	A	46250.00	0.69
45	Sc	360595.50	P	813.30	0.23
45	Sc	41733.74	P	122.10	0.29
45	Sc	1549179.00	A	8568.00	0.55
51	V	207966.80	P	631.80	0.30
52	Cr	263142.41	P	1229.00	0.47
55	Mn	136311.30	P	618.20	0.45
56	Fe	64959420.00	A	270300.00	0.42
59	Co	412646.59	P	3518.00	0.85
60	Ni	111561.50	P	700.70	0.63
63	Cu	300003.81	P	2643.00	0.88
65	Cu	145962.80	P	402.80	0.28
66	Zn	44711.09	P	190.60	0.43
72	Ge	80709.42	P	374.20	0.46
72	Ge	19705.54	P	34.58	0.18
75	As	24636.74	P	172.30	0.70
78	Se	24139.73	P	137.00	0.57
89	Y	1872389.00	A	20740.00	1.11
98	Mo	837844.19	P	11970.00	1.43
99	(Ru)	34.45	P	13.47	39.11
107	Ag	1304533.00	A	24510.00	1.88
111	Cd	299794.91	P	5650.00	1.88
115	In	1795535.00	A	18630.00	1.04
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	1065274.00	A	6231.00	0.58
137	Ba	418490.59	P	5897.00	1.41
159	Tb	2275105.00	A	15730.00	0.69
205	Tl	1200463.00	A	14640.00	1.22
208	Pb	3018941.00	A	31250.00	1.04
209	Bi	1311667.00	A	14710.00	1.12

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	885035.50	1.03	914016.31	96.8	80 - 120	
45	Sc	360595.50	0.23	339061.13	106.4	80 - 120	
45	Sc	41733.74	0.29	39996.86	104.3	80 - 120	
45	Sc	1549178.60	0.55	1483317.60	104.4	80 - 120	
72	Ge	80709.42	0.46	77432.61	104.2	80 - 120	
72	Ge	19705.54	0.18	18807.66	104.8	80 - 120	
89	Y	1872389.10	1.11	1804800.40	103.7	80 - 120	
115	In	1795535.00	1.04	1776837.60	101.1	80 - 120	
159	Tb	2275105.30	0.69	2230977.80	102.0	80 - 120	
209	Bi	1311666.50	1.12	1361245.10	96.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C11n00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 11 2007 02:04 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 11 2007 02:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	845869.38	A	8570.00	1.01
7	(Li)		P		
9	Be	1133152.00	A	26100.00	2.30
23	Na	10932670.00	A	31920.00	0.29
24	Mg	############	A	5672000.00	1.94
27	Al	############	A	8055000.00	2.23
39	K	############	A	8347000.00	1.99
44	Ca	12443510.00	A	287200.00	2.31
45	Sc	368407.91	P	6951.00	1.89
45	Sc	42308.40	P	510.70	1.21
45	Sc	1516671.00	A	34620.00	2.28
51	V	399151.00	P	2067.00	0.52
52	Cr	504107.31	P	4263.00	0.85
55	Mn	259746.91	P	981.60	0.38
56	Fe	############	A	1516000.00	1.19
59	Co	786640.13	P	5154.00	0.66
60	Ni	210473.20	P	1754.00	0.83
63	Cu	560092.81	P	2050.00	0.37
65	Cu	274376.59	P	1414.00	0.52
66	Zn	82598.06	P	204.50	0.25
72	Ge	82567.25	P	598.80	0.73
72	Ge	19609.88	P	99.58	0.51
75	As	47072.36	P	341.90	0.73
78	Se	45255.18	P	571.00	1.26
89	Y	1822665.00	A	28870.00	1.58
98	Mo	1644168.00	A	39220.00	2.39
99	(Ru)	64.45	P	12.62	19.58
107	Ag	2419848.00	A	54600.00	2.26
111	Cd	555505.31	P	6635.00	1.19
115	In	1724202.00	A	23490.00	1.36
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1978358.00	A	43160.00	2.18
137	Ba	785086.19	P	14250.00	1.82
159	Tb	2243654.00	A	37170.00	1.66
205	Tl	2261116.00	A	36300.00	1.61
208	Pb	5766329.00	A	72050.00	1.25
209	Bi	1265896.00	A	23490.00	1.86

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	845869.38	1.01	914016.31	92.5	80 - 120	
45	Sc	368407.94	1.89	339061.13	108.7	80 - 120	
45	Sc	42308.40	1.21	39996.86	105.8	80 - 120	
45	Sc	1516670.60	2.28	1483317.60	102.2	80 - 120	
72	Ge	82567.25	0.73	77432.61	106.6	80 - 120	
72	Ge	19609.88	0.51	18807.66	104.3	80 - 120	
89	Y	1822665.40	1.58	1804800.40	101.0	80 - 120	
115	In	1724201.90	1.36	1776837.60	97.0	80 - 120	
159	Tb	2243654.00	1.66	2230977.80	100.6	80 - 120	
209	Bi	1265895.60	1.86	1361245.10	93.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C11n00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597016 File : c11n0016
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5653

IDF : 1.0
Time : 11-MAR-2007 14:40

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6622	0.6235	10000	10360	ug/L	4	10	
Antimony	A	0.2975	0.3089	100.0	107.0	ug/L	7	10	
Barium	A	0.1287	0.0915	100.0	103.5	ug/L	4	10	
Beryllium	A	0.3347	0.3314	100.0	98.56	ug/L	-1	10	
Cadmium	A	0.0842	0.0831	100.0	102.5	ug/L	3	10	
Calcium	A	0.0713	0.0216	10000	10380	ug/L	4	10	
Lead	A	0.7147	0.6431	100.0	99.43	ug/L	-1	10	
Magnesium	A	0.5421	0.5105	10000	10470	ug/L	5	10	
Molybdenum	A	0.2321	0.2239	100.0	99.46	ug/L	-1	10	
Potassium	A	1.9999	0.7228	10000	10320	ug/L	3	10	
Silver	A	0.3621	0.3899	100.0	110.3	ug/L	10	10	
Thallium	A	1.0056	0.8794	50.00	48.98	ug/L	-2	10	
Arsenic	E	0.6831	0.6298	100.0	104.1	ug/L	4	10	
Chromium	E	3.8759	3.0649	100.0	101.7	ug/L	2	10	
Cobalt	E	5.0166	4.7371	100.0	100.6	ug/L	1	10	
Copper	E	10.251	7.3230	100.0	101.1	ug/L	1	10	
Manganese	E	1.7199	1.5822	100.0	101.8	ug/L	2	10	
Nickel	E	1.6656	1.2817	100.0	101.5	ug/L	2	10	
Sodium	E	1.2736	0.6568	10000	10070	ug/L	1	10	
Vanadium	E	3.3392	2.4160	100.0	101.2	ug/L	1	10	
Zinc	E	5.9058	1.1217	100.0	104.3	ug/L	4	10	
Iron	H	0.9634	0.9059	10000	10390	ug/L	4	10	
Selenium	H	0.1518	0.1448	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	920893	0.75
Scandium	A	1483318	1532446	3.31
Scandium	E	39997	42978	7.45
Scandium	H	339061	350356	3.33
Germanium	H	77433	79881	3.16
Germanium	E	18808	19922	5.92
Indium	A	1776838	1787538	0.60
Bismuth	A	1361245	1284782	-5.62
Yttrium	A	1804800	1879207	4.12
Terbium	A	2230978	2243464	0.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67101597038 File : c11n0038 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 16:40
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5900	10000	9808	ug/L	-2	10	
Antimony	A	0.2975	0.3014	100.0	104.4	ug/L	4	10	
Barium	A	0.1287	0.0864	100.0	97.70	ug/L	-2	10	
Beryllium	A	0.3347	0.3027	100.0	90.02	ug/L	-10	10	
Cadmium	A	0.0842	0.0786	100.0	96.91	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9943	ug/L	-1	10	
Lead	A	0.7147	0.5990	100.0	92.61	ug/L	-7	10	
Magnesium	A	0.5421	0.4839	10000	9922	ug/L	-1	10	
Molybdenum	A	0.2321	0.2117	100.0	94.03	ug/L	-6	10	
Potassium	A	1.9999	0.6954	10000	9924	ug/L	-1	10	
Silver	A	0.3621	0.3776	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8567	50.00	47.71	ug/L	-5	10	
Arsenic	E	0.6831	0.6033	100.0	99.68	ug/L	0	10	
Chromium	E	3.8759	2.9271	100.0	97.07	ug/L	-3	10	
Cobalt	E	5.0166	4.5113	100.0	95.82	ug/L	-4	10	
Copper	E	10.251	6.8447	100.0	94.53	ug/L	-5	10	
Manganese	E	1.7199	1.5380	100.0	98.91	ug/L	-1	10	
Nickel	E	1.6656	1.2219	100.0	96.73	ug/L	-3	10	
Sodium	E	1.2736	0.6305	10000	9662	ug/L	-3	10	
Vanadium	E	3.3392	2.2989	100.0	96.30	ug/L	-4	10	
Zinc	E	5.9058	1.0575	100.0	98.28	ug/L	-2	10	
Iron	H	0.9634	0.9065	10000	10400	ug/L	4	10	
Selenium	H	0.1518	0.1385	100.0	99.22	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917861	0.42
Scandium	A	1483318	1570616	5.89
Scandium	E	39997	43857	9.65
Scandium	H	339061	336429	-0.78
Germanium	H	77433	78961	1.97
Germanium	E	18808	20769	10.43
Indium	A	1776838	1840619	3.59
Bismuth	A	1361245	1283949	-5.68
Yttrium	A	1804800	1921443	6.46
Terbium	A	2230978	2296357	2.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597058 File : c11n0058 Time : 11-MAR-2007 18:59
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5894	10000	9797	ug/L	-2	10	
Antimony	A	0.2975	0.2971	100.0	102.9	ug/L	3	10	
Barium	A	0.1287	0.0872	100.0	98.67	ug/L	-1	10	
Beryllium	A	0.3347	0.3050	100.0	90.71	ug/L	-9	10	
Cadmium	A	0.0842	0.0785	100.0	96.70	ug/L	-3	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5883	100.0	90.94	ug/L	-9	10	
Magnesium	A	0.5421	0.4833	10000	9908	ug/L	-1	10	
Molybdenum	A	0.2321	0.2099	100.0	93.24	ug/L	-7	10	
Potassium	A	1.9999	0.6950	10000	9919	ug/L	-1	10	
Silver	A	0.3621	0.3779	100.0	106.9	ug/L	7	10	
Thallium	A	1.0056	0.8136	50.00	45.31	ug/L	-9	10	
Arsenic	E	0.6831	0.6065	100.0	100.2	ug/L	0	10	
Chromium	E	3.8759	2.9215	100.0	96.89	ug/L	-3	10	
Cobalt	E	5.0166	4.5019	100.0	95.62	ug/L	-4	10	
Copper	E	10.251	6.7154	100.0	92.74	ug/L	-7	10	
Manganese	E	1.7199	1.5513	100.0	99.77	ug/L	0	10	
Nickel	E	1.6656	1.2156	100.0	96.24	ug/L	-4	10	
Sodium	E	1.2736	0.6259	10000	9592	ug/L	-4	10	
Vanadium	E	3.3392	2.3119	100.0	96.84	ug/L	-3	10	
Zinc	E	5.9058	1.0542	100.0	97.97	ug/L	-2	10	
Iron	H	0.9634	0.8894	10000	10200	ug/L	2	10	
Selenium	H	0.1518	0.1389	100.0	99.50	ug/L	-1	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	912804	-0.13
Scandium	A	1483318	1555714	4.88
Scandium	E	39997	45395	13.50
Scandium	H	339061	316695	-6.60
Germanium	H	77433	74471	-3.82
Germanium	E	18808	21713	15.45
Indium	A	1776838	1814333	2.11
Bismuth	A	1361245	1229389	-9.69
Yttrium	A	1804800	1908693	5.76
Terbium	A	2230978	2232736	0.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597072 File : c11n0072 Time : 11-MAR-2007 20:14
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6622	0.5901	10000	9810	ug/L	-2	10	
Antimony	A	0.2975	0.2952	100.0	102.2	ug/L	2	10	
Barium	A	0.1287	0.0872	100.0	98.60	ug/L	-1	10	
Beryllium	A	0.3347	0.2986	100.0	88.80	ug/L	**-11**	10	c- ***
Cadmium	A	0.0842	0.0775	100.0	95.48	ug/L	-5	10	
Calcium	A	0.0713	0.0207	10000	9914	ug/L	-1	10	
Lead	A	0.7147	0.5948	100.0	91.95	ug/L	-8	10	
Magnesium	A	0.5421	0.4812	10000	9865	ug/L	-1	10	
Molybdenum	A	0.2321	0.2089	100.0	92.77	ug/L	-7	10	
Potassium	A	1.9999	0.6966	10000	9941	ug/L	-1	10	
Silver	A	0.3621	0.3747	100.0	106.0	ug/L	6	10	
Thallium	A	1.0056	0.7968	50.00	44.37	ug/L	**-11**	10	c- ***
Arsenic	E	0.6831	0.5985	100.0	98.88	ug/L	-1	10	
Chromium	E	3.8759	2.8758	100.0	95.37	ug/L	-5	10	
Cobalt	E	5.0166	4.4104	100.0	93.67	ug/L	-6	10	
Copper	E	10.251	6.7307	100.0	92.95	ug/L	-7	10	
Manganese	E	1.7199	1.5283	100.0	98.29	ug/L	-2	10	
Nickel	E	1.6656	1.1932	100.0	94.46	ug/L	-6	10	
Sodium	E	1.2736	0.6285	10000	9632	ug/L	-4	10	
Vanadium	E	3.3392	2.2624	100.0	94.77	ug/L	-5	10	
Zinc	E	5.9058	1.0555	100.0	98.09	ug/L	-2	10	
Iron	H	0.9634	0.9005	10000	10330	ug/L	3	10	
Selenium	H	0.1518	0.1394	100.0	99.85	ug/L	0	10	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	917720	0.41
Scandium	A	1483318	1533714	3.40
Scandium	E	39997	44243	10.62
Scandium	H	339061	314905	-7.12
Germanium	H	77433	73650	-4.89
Germanium	E	18808	20782	10.50
Indium	A	1776838	1792631	0.89
Bismuth	A	1361245	1212255	-10.95
Yttrium	A	1804800	1870131	3.62
Terbium	A	2230978	2178779	-2.34

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597018 File : c11n0018
Cal : 67101597001 Caldate: 11-MAR-2007
IDF : 1.0
Time : 11-MAR-2007 14:50

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.003508]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01038]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.07495]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02791]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	963727	5.44
Scandium	A	1483318	1572576	6.02
Scandium	E	39997	45367	13.43
Scandium	H	339061	367200	8.30
Germanium	H	77433	84025	8.51
Germanium	E	18808	21238	12.92
Indium	A	1776838	1872261	5.37
Bismuth	A	1361245	1357645	-0.26
Yttrium	A	1804800	1912994	5.99
Terbium	A	2230978	2279148	2.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597040 File : c11n0040 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 16:50

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01001]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01068]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01309]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001891]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01247]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005017]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01104]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	972249	6.37
Scandium	A	1483318	1654236	11.52
Scandium	E	39997	45255	13.15
Scandium	H	339061	332262	-2.01
Germanium	H	77433	78694	1.63
Germanium	E	18808	21341	13.47
Indium	A	1776838	1999046	12.51
Bismuth	A	1361245	1404744	3.20
Yttrium	A	1804800	2040525	13.06
Terbium	A	2230978	2416702	8.32

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597060 File : c11n0060 Time : 11-MAR-2007 19:09
Cal : 67101597001 Caldate: 11-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007192]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007118]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01108]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008521]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	calc
Manganese	E	[0.01312]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01515]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006840]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	973914	6.55
Scandium	A	1483318	1592762	7.38
Scandium	E	39997	47412	18.54
Scandium	H	339061	350704	3.43
Germanium	H	77433	81005	4.61
Germanium	E	18808	22154	17.79
Indium	A	1776838	1931902	8.73
Bismuth	A	1361245	1311613	-3.65
Yttrium	A	1804800	1959638	8.58
Terbium	A	2230978	2295376	2.89

!=warning calc=check quantitation ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67101597074 File : c11n0074
Cal : 67101597001 Caldate: 11-MAR-2007
IDF : 1.0
Time : 11-MAR-2007 20:25

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006054]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04629]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05015]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06346]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05053]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.02667]	0.1000	0.01127	ug/L	!ib
Iron	H	[7.510]	10.00	4.329	ug/L	!ib
Selenium	H	[0.07756]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	962389	5.29
Scandium	A	1483318	1576613	6.29
Scandium	E	39997	45713	14.29
Scandium	H	339061	315018	-7.09
Germanium	H	77433	75067	-3.06
Germanium	E	18808	21426	13.92
Indium	A	1776838	1895828	6.70
Bismuth	A	1361245	1309292	-3.82
Yttrium	A	1804800	1943884	7.71
Terbium	A	2230978	2278473	2.13

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67101597020 File : c11n0020 Time : 11-MAR-2007 15:01
Cal : 67101597001 Caldate: 11-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06348]	0.1000	ug/L	
Barium	A	0.9957	0.1000	ug/L	
Beryllium	A	[0.02693]	0.1000	ug/L	
Cadmium	A	1.769	0.1000	ug/L	
Lead	A	0.4565	0.1000	ug/L	
Silver	A	0.2096	0.1000	ug/L	
Thallium	A	[0.01561]	0.05000	ug/L	
Arsenic	E	0.2250	0.1000	ug/L	
Chromium	E	1.376	0.1000	ug/L	
Cobalt	E	0.2179	0.1000	ug/L	
Copper	E	1.289	0.1000	ug/L	
Manganese	E	0.6159	0.1000	ug/L	
Nickel	E	1.190	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	1.295	0.1000	ug/L	
Selenium	H	[0.08705]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95040	ug/L	95
Calcium	A	300000	295300	ug/L	98
Magnesium	A	100000	92340	ug/L	92
Molybdenum	A	2000	1940	ug/L	97
Potassium	A	100000	96420	ug/L	96
Sodium	E	250000	250000	ug/L	100
Iron	H	250000	236600	ug/L	95

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	622890	-31.85
Scandium	A	1483318	1366945	-7.85
Scandium	E	39997	38907	-2.72
Scandium	H	339061	342995	1.16
Germanium	H	77433	70980	-8.33
Germanium	E	18808	17767	-5.53
Indium	A	1776838	1533682	-13.68
Bismuth	A	1361245	982053	-27.86
Yttrium	A	1804800	1703322	-5.62
Terbium	A	2230978	2012659	-9.79

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67101597021 File : c11n0021 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 15:06
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95930	ug/L	-4		
Cadmium	A	100.0	99.12	ug/L	-1	20	
Calcium	A	300000	300800	ug/L	0		
Magnesium	A	100000	92760	ug/L	-7		
Molybdenum	A	2000	1985	ug/L	-1		
Potassium	A	100000	97110	ug/L	-3		
Silver	A	50.00	41.98	ug/L	-16	20	
Arsenic	E	100.0	107.4	ug/L	7	20	
Chromium	E	200.0	203.6	ug/L	2	20	
Cobalt	E	200.0	190.3	ug/L	-5	20	
Copper	E	200.0	184.2	ug/L	-8	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	186.5	ug/L	-7	20	
Sodium	E	250000	255400	ug/L	2		
Vanadium	E	200.0	208.5	ug/L	4	20	
Zinc	E	100.0	91.73	ug/L	-8	20	
Iron	H	250000	246900	ug/L	-1		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	327471	-3.42
Scandium	A	1483318	1355444	-8.62
Scandium	E	39997	36971	-7.57
Germanium	H	77433	68911	-11.01
Germanium	E	18808	16797	-10.69
Indium	A	1776838	1540719	-13.29
Yttrium	A	1804800	1696682	-5.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67101597076 File : c11n0076 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 20:35
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05860]	0.1000	ug/L	
Barium	A	0.9563	0.1000	ug/L	
Beryllium	A	[0.02353]	0.1000	ug/L	
Cadmium	A	1.766	0.1000	ug/L	
Lead	A	0.4196	0.1000	ug/L	
Silver	A	0.2067	0.1000	ug/L	
Thallium	A	[0.008457]	0.05000	ug/L	
Arsenic	E	0.2697	0.1000	ug/L	
Chromium	E	1.414	0.1000	ug/L	
Cobalt	E	0.2241	0.1000	ug/L	
Copper	E	1.245	0.1000	ug/L	
Manganese	E	0.6715	0.1000	ug/L	
Nickel	E	1.218	0.1000	ug/L	
Vanadium	E	[0.008865]	0.1000	ug/L	
Zinc	E	1.293	0.1000	ug/L	
Selenium	H	[0.06983]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93670	ug/L	94
Calcium	A	300000	293900	ug/L	98
Magnesium	A	100000	91190	ug/L	91
Molybdenum	A	2000	1933	ug/L	97
Potassium	A	100000	96180	ug/L	96
Sodium	E	250000	252500	ug/L	101
Iron	H	250000	248400	ug/L	99

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	914016	634364	-30.60
Scandium	A	1483318	1398346	-5.73
Scandium	E	39997	39660	-0.84
Scandium	H	339061	290010	-14.47
Germanium	H	77433	61783	-20.21
Germanium	E	18808	18488	-1.70
Indium	A	1776838	1561861	-12.10
Bismuth	A	1361245	925157	-32.04
Yttrium	A	1804800	1733946	-3.93
Terbium	A	2230978	1999275	-10.39

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67101597077 File : c11n0077 IDF : 1.0
Cal : 67101597001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 20:41
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94960	ug/L	-5		
Cadmium	A	100.0	98.29	ug/L	-2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	91140	ug/L	-9		
Molybdenum	A	2000	1963	ug/L	-2		
Potassium	A	100000	98330	ug/L	-2		
Silver	A	50.00	42.24	ug/L	-16	20	
Arsenic	E	100.0	104.8	ug/L	5	20	
Chromium	E	200.0	195.6	ug/L	-2	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	174.2	ug/L	-13	20	
Manganese	E	200.0	195.0	ug/L	-3	20	
Nickel	E	200.0	179.0	ug/L	-11	20	
Sodium	E	250000	247100	ug/L	-1		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	88.37	ug/L	-12	20	
Iron	H	250000	251500	ug/L	1		
Selenium	H	100.0	104.9	ug/L	5	20	

ISTD (ICALBLK c11n0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	339061	296240	-12.63
Scandium	A	1483318	1371514	-7.54
Scandium	E	39997	39151	-2.11
Germanium	H	77433	62930	-18.73
Germanium	E	18808	17980	-4.40
Indium	A	1776838	1548140	-12.87
Yttrium	A	1804800	1741446	-3.51

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67101597

Date : 03/11/07
Sequence : MET06 c11n0

Reference: c11n0004
Analyzed : 03/11/07 13:35

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	914016	1483318	39997	339061	77433	18808	1776838	1361245	1804800	2230978
		LOWER LIMIT	274205	444995	11999	101718	23230	5642	533051	408374	541440	669293
		UPPER LIMIT	1096820	1779982	47996	406873	92919	22569	2132206	1633494	2165760	2677174
018	ICB		963727	1572576	45367	367200	84025	21238	1872261	1357645	1912994	2279148
020	ICSA		622890	1366945	38907	342995	70980	17767	1533682	982053	1703322	2012659
021	ICSAB		569366	1355444	36971	327471	68911	16797	1540719	993926	1696682	2031170
026	BLANK	QC378535	836682	1424803	35209	292671	86773	21570	1778537	1349027	1836250	2282868
029	BS	QC378536	857144	1509285	39009	312458	72064	18496	1783183	1278068	1892531	2282399
030	BSD	QC378537	861203	1551355	39808	312548	72278	18604	1818445	1300675	1921066	2331298
034	MSS	193066-001	905777	1534515	43316	336255	78628	20673	1840908	1296053	1897043	2285615
038	CCV		917861	1570616	43857	336429	78961	20769	1840619	1283949	1921443	2296357
040	CCB		972249	1654236	45255	332262	78694	21341	1999046	1404744	2040525	2416702
042	BS	QC378337	916735	1554349	46552	334374	77400	21627	1838868	1287103	1907305	2269070
043	BSD	QC378338	956175	1670608	44594	322061	75429	20778	1975288	1353371	2046837	2424406
047	SER	QC378540	948814	1539747	44575	333366	79284	21447	1885021	1333434	1908735	2266445
048	MS	QC378538	888940	1533453	44081	333016	77306	20867	1827973	1254901	1888221	2236691
049	MSD	QC378539	892914	1550233	45009	336293	78781	21092	1851017	1270897	1915967	2255171
050	PDS	QC378541	883046	1581029	44322	331567	76282	20539	1844645	1244265	1939659	2289320
051	SAMPLE	193027-011	902112	1515017	44761	316048	75068	21252	1789200	1232903	1846622	2192746
052	SAMPLE	193027-012	882580	1581851	43375	338263	76935	20257	1795750	1245605	1928783	2250666
053	SAMPLE	193027-013	904920	1548607	44564	311777	73257	21323	1856592	1308079	1928518	2276958
058	CCV		912804	1555714	45395	316695	74471	21713	1814333	1229389	1908693	2232736
060	CCB		973914	1592762	47412	350704	81005	22154	1931902	1311613	1959638	2295376
062	BLANK	QC378542	865408	1466928	43484	292592	71811	21234	1788078	1266761	1850296	2194448
063	BLANK	QC378535	871445	1495662	41130	277041	70359	20773	1809097	1285728	1865840	2204232
065	SER	QC378448	963257	1559864	45540	322173	78179	21671	1903583	1293108	1912874	2252355
066	MSS	193217-011	934690	1563946	47186	323026	77667	22504	1876638	1291462	1921464	2270499
067	SAMPLE	193217-018	952386	1588525	46465	328076	77146	22226	1866653	1243191	1915643	2234811
068	SAMPLE	193217-019	900674	1475273	45702	316215	75969	22007	1789383	1258662	1810646	2142271
069	SAMPLE	193217-020	920841	1477998	45777	290497	70800	21769	1820574	1246372	1853182	2190742
070	SAMPLE	193217-022	903970	1491228	43775	301535	72670	21196	1795919	1213745	1841718	2170505
072	CCV		917720	1533714	44243	314905	73650	20782	1792631	1212255	1870131	2178779
074	CCB		962389	1576613	45713	315018	75067	21426	1895828	1309292	1943884	2278473
076	ICSA		634364	1398346	39660	290010	61783	18488	1561861	925157	1733946	1999275
077	ICSAB		549824	1371514	39151	296240	62930	17980	1548140	933015	1741446	2001537

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c11n0001	TUN				11-MAR-2007 13:17	1.0	1.0				1	
002	c11n0002	X	RINSE			11-MAR-2007 13:24	1.0					2	
003	c11n0003	X	RINSE			11-MAR-2007 13:30	1.0					2	
004	c11n0004	ICALBLK	CALBLANK			11-MAR-2007 13:35	1.0	1.0				2	
005	c11n0005	ICAL				11-MAR-2007 13:40	1.0	1.0				3	
006	c11n0006	ICAL				11-MAR-2007 13:46	1.0	1.0				4	
007	c11n0007	ICAL				11-MAR-2007 13:51	1.0	1.0				5	
008	c11n0008	ICAL				11-MAR-2007 13:56	1.0	1.0				6	
009	c11n0009	ICAL				11-MAR-2007 14:01	1.0	1.0				7	
010	c11n0010	ICAL				11-MAR-2007 14:06	1.0	1.0				8	
011	c11n0011	X	RINSE			11-MAR-2007 14:12	1.0					2	
012	c11n0012	X				11-MAR-2007 14:19	1.0					9 2	
013	c11n0013	X	RINSE			11-MAR-2007 14:24	1.0					2	
014	c11n0014	X				11-MAR-2007 14:29	1.0					9 2	
015	c11n0015	X	RINSE			11-MAR-2007 14:35	1.0					2	
016	c11n0016	ICV				11-MAR-2007 14:40	1.0	1.0			1	9	
017	c11n0017	X	RINSE			11-MAR-2007 14:45	1.0					2	
018	c11n0018	ICB				11-MAR-2007 14:50	1.0	1.0			1	2	
019	c11n0019	X				11-MAR-2007 14:56	1.0					2	
020	c11n0020	ICSA				11-MAR-2007 15:01	1.0	1.0			1	10 2	7:CA=295300
021	c11n0021	ICSAB				11-MAR-2007 15:06	1.0	1.0			1	11 2	9:CA=300800
022	c11n0022	X	RINSE			11-MAR-2007 15:12	1.0					2	
023	c11n0023	X	RINSE			11-MAR-2007 15:17	1.0					2	
024	c11n0024	X	RINSE			11-MAR-2007 15:23	1.0					2	
025	c11n0025	X	RINSE			11-MAR-2007 15:30	1.0					2	
026	c11n0026	BLANK	QC378535	122949	Water	11-MAR-2007 15:36	1.0	1.0			1	2	
027	c11n0027	XBS	QC378337	122902	Soil	11-MAR-2007 15:41	100.0	50.0			1	2	
028	c11n0028	XBSD	QC378338	122902	Soil	11-MAR-2007 15:46	100.0	50.0			1	2	
029	c11n0029	BS	QC378536	122949	Water	11-MAR-2007 15:52	1.0	1.0			1	2	
030	c11n0030	BSD	QC378537	122949	Water	11-MAR-2007 15:57	1.0	1.0			1	2	
031	c11n0031	XBS	QC378337	122902	Soil	11-MAR-2007 16:02	50.0	50.0		1	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RLH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c11n0032	XBSD	QC378338	122902	Soil	11-MAR-2007 16:08	50.0	50.0		1	1	2	
033	c11n0033	X	RINSE			11-MAR-2007 16:13	1.0					2	
034	c11n0034	MSS	193066-001	122949	Water	11-MAR-2007 16:18	10.0	1.0	1		1	2	1:NA=43290.0
035	c11n0035	X	RINSE			11-MAR-2007 16:24	1.0					2	
036	c11n0036	X	RINSE			11-MAR-2007 16:29	1.0					2	
037	c11n0037	X	RINSE			11-MAR-2007 16:35	1.0					2	
038	c11n0038	CCV				11-MAR-2007 16:40	1.0	1.0			1	12 2	
039	c11n0039	X	RINSE			11-MAR-2007 16:45	1.0					2	
040	c11n0040	CCB				11-MAR-2007 16:50	1.0	1.0			1	2	
041	c11n0041	X				11-MAR-2007 16:56	1.0					2	
042	c11n0042	BS	QC378337	122902	Soil	11-MAR-2007 17:01	5.0	50.0			1	2	
043	c11n0043	BSD	QC378338	122902	Soil	11-MAR-2007 17:07	5.0	50.0			1	2	
044	c11n0044	X	RINSE			11-MAR-2007 17:14	1.0					2	
045	c11n0045	X	RINSE			11-MAR-2007 17:19	1.0					2	
046	c11n0046	X	RINSE			11-MAR-2007 17:24	1.0					2	
047	c11n0047	SER	QC378540	122949	Water	11-MAR-2007 17:30	50.0	1.0	1	1	1	2	
048	c11n0048	MS	QC378538	122949	Water	11-MAR-2007 17:35	10.0	1.0			1	2	1:NA=42850.0
049	c11n0049	MSD	QC378539	122949	Water	11-MAR-2007 17:40	10.0	1.0			1	2	1:NA=40870.0
050	c11n0050	PDS	QC378541	122949	Water	11-MAR-2007 17:45	10.0	1.0			1	13 14 2	1:NA=52430.0
051	c11n0051	SAMPLE	193027-011	122949	Water	11-MAR-2007 17:51	10.0	1.0	1		1	2	1:NA=20640.0
052	c11n0052	SAMPLE	193027-012	122949	Water	11-MAR-2007 17:56	10.0	1.0	1		1	2	1:MN=546.100
053	c11n0053	SAMPLE	193027-013	122949	Water	11-MAR-2007 18:01	10.0	1.0	1		1	2	1:MN=355.100
054	c11n0054	XMSS	193165-002	122902	Soil	11-MAR-2007 18:07	100.0	50.0			1	2	
055	c11n0055	X	RINSE			11-MAR-2007 18:14	1.0					2	
056	c11n0056	X	RINSE			11-MAR-2007 18:19	1.0					2	
057	c11n0057	X	RINSE			11-MAR-2007 18:25	1.0					2	
058	c11n0058	CCV				11-MAR-2007 18:59	1.0	1.0			1	12 2	
059	c11n0059	X	RINSE			11-MAR-2007 19:04	1.0					2	
060	c11n0060	CCB				11-MAR-2007 19:09	1.0	1.0			1	2	
061	c11n0061	X				11-MAR-2007 19:15	1.0					2	
062	c11n0062	BLANK	QC378542	122950	Filtra	11-MAR-2007 19:20	1.0	1.0	2		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67101597 Instrument: MET06 Agilent ICP-MS MET06 Begun: 11-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c11n0063	BLANK	QC378535	122949	Water	11-MAR-2007 19:26	1.0	1.0	2		1	2	
064	c11n0064	XSER	NO SAMPLE	122902	Soil	11-MAR-2007 19:31	500.0					2	
065	c11n0065	SER	QC378448	122924	Filtra	11-MAR-2007 19:37	50.0	1.0	4		1	2	
066	c11n0066	MSS	193217-011	122924	Filtra	11-MAR-2007 19:42	10.0	1.0	2		1	2	
067	c11n0067	SAMPLE	193217-018	122924	Filtra	11-MAR-2007 19:47	20.0	1.0	2		1	2	
068	c11n0068	SAMPLE	193217-019	122924	Filtra	11-MAR-2007 19:53	20.0	1.0	2		1	2	
069	c11n0069	SAMPLE	193217-020	122924	Filtra	11-MAR-2007 19:58	20.0	1.0	2		1	2	
070	c11n0070	SAMPLE	193217-022	122924	Filtra	11-MAR-2007 20:03	20.0	1.0	2		1	2	
071	c11n0071	X	RINSE			11-MAR-2007 20:09	1.0					2	
072	c11n0072	CCV				11-MAR-2007 20:14	1.0	1.0	2		1	12 2	
073	c11n0073	X	RINSE			11-MAR-2007 20:19	1.0					2	
074	c11n0074	CCB				11-MAR-2007 20:25	1.0	1.0			1	2	
075	c11n0075	X				11-MAR-2007 20:30	1.0					2	
076	c11n0076	ICSA				11-MAR-2007 20:35	1.0	1.0			1	10 2	7:CA=293900
077	c11n0077	ICSAB				11-MAR-2007 20:41	1.0	1.0			1	11 2	8:CA=302800

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCB Date: 3/11/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193217 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193217-010	MET06	03/10/07 08:48	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193217-011	MET06	03/10/07 07:07	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-011	MET06	03/11/07 19:42	10.0																							
193217-011	MET04	03/14/07 17:35	1.0															+								
193217-012	MET06	03/10/07 08:53	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-012	MET04	03/14/07 17:59	1.0															+								
193217-014	MET06	03/10/07 08:59	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-014	MET04	03/14/07 18:01	1.0															+								
193217-015	MET06	03/10/07 09:04	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-015	MET04	03/14/07 18:03	1.0															+								
193217-016	MET06	03/10/07 09:09	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-016	MET04	03/14/07 18:05	1.0															+								
193217-017	MET06	03/10/07 09:15	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-017	MET04	03/14/07 18:07	1.0															+								
193217-018	MET06	03/10/07 10:08	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
193217-018	MET06	03/11/07 19:47	20.0																				+			
193217-019	MET06	03/10/07 10:13	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
193217-019	MET06	03/11/07 19:53	20.0																				+			
193217-020	MET06	03/10/07 10:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
193217-020	MET06	03/11/07 19:58	20.0																				+			
193217-021	MET06	03/10/07 07:33	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-022	MET06	03/10/07 10:24	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
193217-022	MET06	03/11/07 20:03	20.0																				+			
193217-023	MET06	03/10/07 10:30	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193217-024	MET06	03/10/07 10:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378443	MET06	03/09/07 20:07	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378444	MET06	03/10/07 06:50	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378445	MET06	03/10/07 06:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378446	MET06	03/10/07 07:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378447	MET06	03/10/07 07:23	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193217 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ASA	BAE	BED	CDA	CCA	CRO	COU	FEB	PBG	MGN	MNG	HGI	NIK	SEG	AGA	NAL	TL	VN	ZN
QC378448	MET06	03/10/07 07:12	50.0	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+	+	+		+
QC378448	MET06	03/11/07 19:37	50.0							+														+	
QC378449	MET06	03/10/07 07:28	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378508	MET06	03/10/07 08:27	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC378509	MET06	03/10/07 08:32	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379253	MET04	03/14/07 17:26	1.0														+								
QC379254	MET04	03/14/07 17:28	1.0														+								
QC379255	MET04	03/14/07 17:31	1.0														+								
QC379256	MET04	03/14/07 17:33	1.0														+								
QC379257	MET04	03/14/07 17:37	5.0														+								
QC379258	MET04	03/14/07 17:39	1.0														+								
QC379259	MET04	03/14/07 17:41	1.0														+								
QC379260	MET04	03/14/07 17:46	5.0														+								
QC379261	MET04	03/14/07 17:52	1.0														+								
QC379262	MET04	03/14/07 17:54	1.0														+								

Curtis & Tompkins Laboratories Sample Preparation Summary 12-MAR-2007 16:07

Batch Number : 122924
Date Extracted: 09-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193055-023			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
193137-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
193217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-021			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-022			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-023			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193217-024			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378443	BLANK			Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC378444	BS			Filtrate	50	mL	50	1.000000	1					ICAP		
QC378445	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378446	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378447	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378448	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378449	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378508	MS	of 193217-021		Filtrate	50	mL	50	1.000000	1					ICAP		
QC378509	MSD	of 193217-021		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: for K. Gaines

Reviewed By: RAT Date: 3/12/07

Relinquished By: RAT

Received By: RAT Date: 3/12/07

5552

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 122924
Date Digested: 3/9/07
Digested by: [illegible]

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 75
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50		
BS				
BSD				
MS-11				
MSD11				
193217-11				
MS 21				
MSD 21				
193217-21				
-10				
-12				
-14				
-15				
-16				
-17				
-18				
-19				
-20				
-22				
-23				
-24				
137-105 H				
055-23-D				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KEA 3/9
.5 mL of spike solution was added to all spikes	S50054	
	S50055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	CHG025	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date: 3/9/07

Reviewer Signature / Date: 3-9-07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

t : MET04
num : 47106147001
ts : ug/L

Date : 14-MAR-2007 17:07
X Axis : R

Reviewer: ---
Type : WATER

el	File	Seqnum	Sample ID	Analyzed	Stds
	123115	47106147002	STD02REP1	14-MAR-2007 17:10	S5707 (500X)
	123115	47106147003	STD03REP1	14-MAR-2007 17:12	S5707 (200X)
	123115	47106147004	STD04REP1	14-MAR-2007 17:14	S5707 (50X)
	123115	47106147005	STD05REP1	14-MAR-2007 17:16	S5707 (20X)
	123115	47106147006	STD06REP1	14-MAR-2007 17:19	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
cury	4000.0	2894.0	2522.5	2487.2	2323.2	LINR	-0.1628	4.32E-4		2845.4	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
cury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

rument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47106147001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb BUSY Dataset/Proto 031407a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.32460e-4

C -1.62778e-1

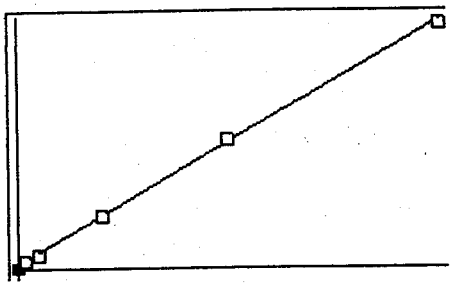
Rho .999572

Type

µ Abs. 23232

Accepted

New



Include S1 Rep 1

14-Mar-07 17:19 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.065	-.065	228	1	227		
02	.20000	.183	-.017	800	0%	800		
03	.50000	.463	-.037	1448	0%	1447		
04	2.0000	2.02	.019	5046	0%	5045		
05	5.0000	5.22	.215	12436	0%	12436		
06	10.000	9.88	-.116	23233	0%	23232		

Ready NUM SCRL

Folder: 031407a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	17:07:51 14 Mar 07	HG		
Hg	.000	ppb	227					
		Bkgd 1	15636530					
*** Standard: 2 Rep: 1				Seq: 2	17:10:00 14 Mar 07	HG		
Hg	.200	ppb	800					
		Bkgd 1	15632746					
*** Standard: 3 Rep: 1				Seq: 3	17:12:08 14 Mar 07	HG		
Hg	.500	ppb	1447					
		Bkgd 1	15626365					
*** Standard: 4 Rep: 1				Seq: 4	17:14:13 14 Mar 07	HG		
Hg	2.00	ppb	5045					
		Bkgd 1	15625144					
*** Standard: 5 Rep: 1				Seq: 5	17:16:54 14 Mar 07	HG		
Hg	5.00	ppb	12436					
		Bkgd 1	15629616					
*** Standard: 6 Rep: 1				Seq: 6	17:19:13 14 Mar 07	HG		
Hg	10.0	ppb	23232					
		Bkgd 1	15638879					
*** Check Standard: 2			Ck2S5709	Seq: 7	17:21:21 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			12441					
		Bkgd 1	15649864					
*** Check Standard: 1			Ck1ICB	Seq: 8	17:23:35 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			222					
		Bkgd 1	15651598					
*** Sample ID: qc379253			123115,1	Seq: 9	17:26:06 14 Mar 07	HG		
Hg	-.041	ppb	281					
		Bkgd 1	15647189					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

uence: 47106147 Instrument: MET04 HydraAA HG Analyzer Begun: 14-MAR-2007
lytical Method: EPA 7470A SOP Version: HG_water_rv7
lyte: Mercury

Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
123115	ICALBLK	STD01REP1				14-MAR-2007 17:07	1.0	1.0									
123115	ICAL	STD02REP1				14-MAR-2007 17:10	1.0	1.0									
123115	ICAL	STD03REP1				14-MAR-2007 17:12	1.0	1.0									
123115	ICAL	STD04REP1				14-MAR-2007 17:14	1.0	1.0									
123115	ICAL	STD05REP1				14-MAR-2007 17:16	1.0	1.0									
123115	ICAL	STD06REP1				14-MAR-2007 17:19	1.0	1.0									
123115	ICV					14-MAR-2007 17:21	1.0	1.0	2	5.000	47106147001	5.220		ug/L	104		
123115	ICB					14-MAR-2007 17:23	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	BLANK	QC379253		123115	Water	14-MAR-2007 17:26	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	BLANK	QC379254		123115	TCLP L	14-MAR-2007 17:28	1.0	5.0			47106147001	ND	1.0	ug/L			u
123115	BS	QC379255		123115	Water	14-MAR-2007 17:31	1.0	1.0		5.000	47106147001	5.310	0.20	ug/L	106		u
123115	BSD	QC379256		123115	Water	14-MAR-2007 17:33	1.0	1.0		5.000	47106147001	5.210	0.20	ug/L	104	2	u
123115	MSS	193217-011		123115	Filtra	14-MAR-2007 17:35	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SER	QC379257	193217-011	123115	Filtra	14-MAR-2007 17:37	5.0	1.0			47106147001	ND	1.0	ug/L		--	u
123115	MS	QC379258	193217-011	123115	Filtra	14-MAR-2007 17:39	1.0	1.0		5.000	47106147001	5.320	0.20	ug/L	106		u
123115	MSD	QC379259	193217-011	123115	Filtra	14-MAR-2007 17:41	1.0	1.0		5.000	47106147001	5.470	0.20	ug/L	109	3	u
123115	MSS	193323-001		123115	TCLP L	14-MAR-2007 17:44	1.0	5.0			47106147001	ND	2.0	ug/L			u
123115	SER	QC379260	193323-001	123115	TCLP L	14-MAR-2007 17:46	5.0	5.0			47106147001	ND	5.0	ug/L		--	u
123115	CCV					14-MAR-2007 17:48	1.0	1.0	3	2.500	47106147001	2.660		ug/L	106		
123115	CCB					14-MAR-2007 17:50	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	MS	QC379261	193323-001	123115	TCLP L	14-MAR-2007 17:52	1.0	5.0		25.00	47106147001	26.45	1.0	ug/L	106		u
123115	MSD	QC379262	193323-001	123115	TCLP L	14-MAR-2007 17:54	1.0	5.0		25.00	47106147001	26.40	1.0	ug/L	106	0	u
123115	SAMPLE	193176-001		123115	Water	14-MAR-2007 17:56	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-012		123115	Filtra	14-MAR-2007 17:59	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-014		123115	Filtra	14-MAR-2007 18:01	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-015		123115	Filtra	14-MAR-2007 18:03	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-016		123115	Filtra	14-MAR-2007 18:05	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-017		123115	Filtra	14-MAR-2007 18:07	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193219-001		123115	Water	14-MAR-2007 18:10	1.0	1.0			47106147001	0.49	0.20	ug/L			u
123115	SAMPLE	193233-002		123115	Filtra	14-MAR-2007 18:12	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	CCV					14-MAR-2007 18:14	1.0	1.0	4	5.000	47106147001	5.570		ug/L	111		
123115	CCB					14-MAR-2007 18:16	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	SAMPLE	193233-003		123115	Filtra	14-MAR-2007 18:19	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193262-021		123115	Water	14-MAR-2007 18:21	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-002		123115	Filtra	14-MAR-2007 18:23	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-003		123115	Filtra	14-MAR-2007 18:25	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-004		123115	Filtra	14-MAR-2007 18:27	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193277-001		123115	Filtra	14-MAR-2007 18:30	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193319-001		123115	Water	14-MAR-2007 18:32	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193338-001		123115	Filtra	14-MAR-2007 18:34	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	CCV					14-MAR-2007 18:36	1.0	1.0	5	7.500	47106147001	8.090		ug/L	108		
123115	CCB					14-MAR-2007 18:38	1.0	1.0			47106147001	ND	0.20	ug/L			

ds used: 1=S5707 2=S5709 3=S5710 4=S5711 5=S5712
ags used: u=use

alyst: [signature] Date: 3/14/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **14-MAR-2007 17:12**

Batch Number : 123115
Date Extracted: 14-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
3176-001			Polymatrix	Water	50	mL	50	1.000000	1					HG		
3217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3219-001			Acme Fill Corp.	Water	50	mL	50	1.000000	1					HG		
3233-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
3233-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
3262-021			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
3274-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3274-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3274-004			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3277-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3319-001			Ward Construction	Water	50	mL	50	1.000000	1					T26/HG		
3323-001			CH2M Hill Constructors Inc.	TCLP Leach	10	mL	50	5.000000	1					T26/HG		
3338-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
379253	BLANK			Water	50	mL	50	1.000000	1					HG		
379254	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
379255	BS			Water	50	mL	50	1.000000	1		2.5			HG		
379256	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
379257	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
379258	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
379259	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
379260	SER	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		
379261	MS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
379262	MSD	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
379263	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
379264	PDS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		

Prep Chemist: [signature] 3/14/07 Reviewed By: [signature] Date: 3/14/07

Relinquished By: [signature] 3/14/07 Received By: [signature] Date: 3/14/07

00528

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 123115
Date Digested: 3/14/07
Digested by: ZA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

BK 2452
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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193176-001	A	50	50		water
193217-011 MSS	Y				Filtrate (F.F.)
-012	I				
-014	B				
-015	G				
-016	F				
-017	F				
193219-001	J				water
193233-002	L				Filtrate
-003	K				
193262-021	B				water
193277-001	S				Filtrate
193319-001	D				water
193323-001 MSS		10			TCLP leachate
193274-002	D	50			Filtrate (F.F.)
-003					
-004					
193338-001	G				
Blank					water
Blank		10			TCLP leachate
BS/BSD		50			water
ms 193217-011	Y				Filtrate (F.F.)
msD					
ms 193323-001		10			TCLP leachate
msD					

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	55707	3/14/07
ICAL Source WS#	55707	
ICV / CCV WS#	55707/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	12:00 / 95°C	
Time OFF/ Temperature OFF	2:00 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030807	
5% $K_2S_2O_8$	K2030307	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	SnCl2 031307	
☐ filtered thru' 0.45 um syringe filter	MILLIPORE PGAN43B32	

3/14/07

Continued from page X

3/14/07

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/23/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/23/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

00532

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/19/07
Batch#:	123252		

Field ID: 1065PZ2B Lab ID: 193217-010
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	200	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	200	6.7

Field ID: LF08GW01 Lab ID: 193217-014
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	160	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	160	6.7

Field ID: LF08GW02B Lab ID: 193217-015
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	170	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	170	6.7

Field ID: LF08GW03 Lab ID: 193217-016
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	250	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	250	6.7

Field ID: LF08GW06 Lab ID: 193217-017
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	180	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	180	6.7

ND= Not Detected
RL= Reporting Limit

75.1

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/19/07
Batch#:	123252		

Field ID: HWGW100 Lab ID: 193217-018
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	910	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	910	6.7

Field ID: HWGW101 Lab ID: 193217-019
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	440	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	440	10

Field ID: BHWGW01 Lab ID: 193217-020
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	550	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	550	10

Field ID: BHWGW04 Lab ID: 193217-021
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	330	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	330	10

Field ID: BHWGW05 Lab ID: 193217-022
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	720	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	720	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/19/07
Batch#:	123252		

Field ID: BHWGW05RBBHWGW01 Lab ID: 193217-023
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Field ID: DUP0306073A Lab ID: 193217-024
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	320	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	320	10

Type: BLANK Lab ID: QC379825

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379826	Batch#:	123252
Matrix:	Water	Analyzed:	03/19/07

Spiked	Result	%REC	Limits
200.0	187.6	94	90-110

76.0

00536

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	BHWGW04	Batch#:	123252
MSS Lab ID:	193217-021	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	mg/L	Analyzed:	03/19/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379827	327.0	500.0	806.0	96	69-112		
MSD	QC379828		500.0	803.0	95	69-112	0	25

RPD= Relative Percent Difference

77.0

00537

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/19/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123252** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.4	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.5	4.7	187.60			4.0	94	
193217-021	7.60	10	0.0	3.3	327.00		n/a	10.0		
MS	9.5	10	2.1	8.1	806.00			10.0	96	
MSD	9.5	10	2.1	8.0	803.00			10.0	95	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193217-010	7.40	15	0.0	3.1	204.00		n/a	6.7
193217-014	7.70	15	0.0	2.3	156.00		n/a	6.7
193217-015	7.20	15	0.0	2.6	174.00		n/a	6.7
193217-016	7.40	15	0.0	3.7	248.00		n/a	6.7
193217-017	7.30	15	0.0	2.7	181.33		n/a	6.7
193217-018	7.70	15	0.0	13.6	907.33		n/a	6.7
193217-019	7.70	10	0.0	4.4	442.00		n/a	10.0
193217-020	7.90	10	0.0	5.5	548.00		n/a	10.0
193217-021	7.60	10	0.0	3.3	327.00		n/a	10.0
193217-022	7.80	10	0.0	7.2	715.00		n/a	10.0
193217-023	4.50	100	0.0	0.0	rpt low alk		no low alk	1.0
193217-024	7.60	10	0.0	3.2	320.00		n/a	10.0
193233-002	7.80	15	0.0	2.1	138.67		n/a	6.7
193233-003	7.60	15	0.0	2.1	141.33		n/a	6.7
193274-005					ND		n/a	#DIV/0!
193274-006					ND		n/a	#DIV/0!
193274-007					ND		n/a	#DIV/0!
193274-008					ND		n/a	#DIV/0!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMB 3/19/07

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

Curtis Tompkins, Ltd.

095535

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/19/07
Batch No: 123252

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193217-010	0.0	204.0	204	204.000	0.000	0.000
193217-014	0.0	156.00	156.000	156.000	0.000	0.000
193217-015	0.0	174.00	174.000	174.000	0.000	0.000
193217-016	0.0	248.00	248.000	248.000	0.000	0.000
193217-017	0.0	181.33	181.333	181.333	0.000	0.000
193217-018	0.0	907.33	907.333	907.333	0.000	0.000
193217-019	0.0	442.00	442.000	442.000	0.000	0.000
193217-020	0.0	548.00	548.000	548.000	0.000	0.000
193217-021	0.0	327.00	327.000	327.000	0.000	0.000
193217-022	0.0	715.00	715.000	715.000	0.000	0.000
193217-023	0.0	#VALUE!	no low alk	not applicable	not applicable	not applicable
193217-024	0.0	320.00	320.000	320.000	0.000	0.000
193233-002	0.0	138.67	138.667	138.667	0.000	0.000
193233-003	0.0	141.33	141.333	141.333	0.000	0.000
193274-005	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-006	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-007	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-008	#DIV/0!	#VALUE!	ND	#DIV/0!	#DIV/0!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

00563

Analysis: **Alkalinity** Analysis Date: 03/19/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123252 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
193217-010	204.000	248.726	0.000	0.000
193217-014	156.000	190.203	0.000	0.000
193217-015	174.000	212.149	0.000	0.000
193217-016	248.000	302.373	0.000	0.000
193217-017	181.333	221.090	0.000	0.000
193217-018	907.333	1106.264	0.000	0.000
193217-019	442.000	538.907	0.000	0.000
193217-020	548.000	668.147	0.000	0.000
193217-021	327.000	398.694	0.000	0.000
193217-022	715.000	871.762	0.000	0.000
193217-023	no low alk	not applicable	not applicable	not applicable
193217-024	320.000	390.159	0.000	0.000
193233-002	138.667	169.069	0.000	0.000
193233-003	141.333	172.320	0.000	0.000
193274-005	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-006	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-007	ND	#DIV/0!	#DIV/0!	#VALUE!
193274-008	ND	#DIV/0!	#DIV/0!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123252 Date: 3/19/07 Benchbook#: **BK2384**
Matrix: water Time: 10:30 Page: **76**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 99.6
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp. 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	5.4	100	—	<0.05		
	~~3/19 BS~~ LCS	10.1	25	2.45	4.69		
	193217-10 D	7.4	15	—	3.06		
	-14 A	7.7	15	—	2.34		
5	-15	7.2	15	—	2.61		
	-16	7.4	15	—	3.72		
	-17	7.3	15	—	2.72		
	-18	7.7	15	—	13.61		
	-19	7.7	10	—	4.42		
10	-20	7.9	10	—	5.48		
	-21	7.6	10	—	3.27		
	MS-21	9.5	10	2.07	8.06		
	MSD-21	9.5	10	2.10	8.03		
	-22	7.8	10	—	7.15		
15	-23	5.1	25	—	<2mL		
	-23	4.5	100	—	—		
	-24	7.6	10	—	3.20		
	193233-2 J	7.8	15	—	2.08		
	-3 ↓	7.6	15	—	2.12		
20	193274-5 J	7.4	10	—	2.79		
	-6	7.5	10	—	2.04		
	-8	7.3	10	—			

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/19/07
Analyst / Date

3/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123252
Date Started: 19-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193217-010			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-014			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-015			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-016			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-017			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-018			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-019			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-020			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-021			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-022			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-023			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193217-024			Treadwell & Rollo	Water	ALKALINITY	19-MAR-2007
193233-002			Innovative Technic	Water	ALKALINITY	19-MAR-2007
193233-003			Innovative Technic	Water	ALKALINITY	19-MAR-2007
193274-005			Innovative Technic	Water	ALKALINITY	20-MAR-2007
193274-006			Innovative Technic	Water	ALKALINITY	20-MAR-2007
193274-008			Innovative Technic	Water	ALKALINITY	20-MAR-2007
193274-009			Innovative Technic	Water	ALKALINITY	20-MAR-2007
QC379825	BLANK			Water	ALKALINITY	
QC379826	LCS			Water	ALKALINITY	
QC379827	MS	of 193217-021		Water	ALKALINITY	
QC379828	MSD	of 193217-021		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1065PZ2B	SAMPLE	193217-010	38	2.0	10.00	03/06/07 14:20	03/07/07 19:12
LF08GW01	SAMPLE	193217-014	280	5.0	25.00	03/06/07 15:40	03/07/07 19:29
LF08GW02B	SAMPLE	193217-015	54	2.0	10.00	03/06/07 13:30	03/07/07 19:47
LF08GW03	SAMPLE	193217-016	77	2.0	10.00	03/06/07 14:10	03/07/07 21:32
LF08GW06	SAMPLE	193217-017	140	2.0	10.00	03/06/07 14:55	03/07/07 21:50
HWGW100	SAMPLE	193217-018	170	10	50.00	03/06/07 12:15	03/07/07 16:55
HWGW101	SAMPLE	193217-019	69	5.0	25.00	03/06/07 11:35	03/07/07 22:07
BHWGW01	SAMPLE	193217-020	230	5.0	25.00	03/06/07 10:35	03/07/07 17:30
BHWGW04	SAMPLE	193217-021	89	2.0	10.00	03/06/07 08:45	03/07/07 17:13
BHWGW05	SAMPLE	193217-022	110	5.0	25.00	03/06/07 09:55	03/07/07 17:48
BHWGW05RBBHWGW01	SAMPLE	193217-023	ND	0.20	1.000	03/06/07 10:10	03/07/07 21:15
DUP0306073A	SAMPLE	193217-024	90	2.0	10.00	03/06/07	03/07/07 22:25
	BLANK	QC378257	ND	0.20	1.000		03/07/07 13:50

ND= Not Detected
RL= Reporting Limit

29.0

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	122881
Units:	mg/L	Received:	03/07/07

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
1065PZ2B	SAMPLE	193217-010	ND	0.10	03/06/07 14:20	03/07/07 23:00
LF08GW01	SAMPLE	193217-014	0.13	0.10	03/06/07 15:40	03/08/07 01:55
LF08GW02B	SAMPLE	193217-015	ND	0.10	03/06/07 13:30	03/07/07 22:42
LF08GW03	SAMPLE	193217-016	ND	0.10	03/06/07 14:10	03/07/07 23:17
LF08GW06	SAMPLE	193217-017	0.29	0.10	03/06/07 14:55	03/07/07 23:35
HWGW100	SAMPLE	193217-018	ND	0.10	03/06/07 12:15	03/08/07 02:47
HWGW101	SAMPLE	193217-019	ND	0.10	03/06/07 11:35	03/08/07 01:37
BHWGW01	SAMPLE	193217-020	0.10	0.10	03/06/07 10:35	03/08/07 02:30
BHWGW04	SAMPLE	193217-021	ND	0.10	03/06/07 08:45	03/07/07 23:52
BHWGW05	SAMPLE	193217-022	0.10	0.10	03/06/07 09:55	03/08/07 02:12
BHWGW05RBBHWGW01	SAMPLE	193217-023	ND	0.10	03/06/07 10:10	03/07/07 21:15
DUP0306073A	SAMPLE	193217-024	ND	0.10	03/06/07	03/08/07 01:20
	BLANK	QC378257	ND	0.10		03/07/07 13:50

ND= Not Detected
RL= Reporting Limit

31.0

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1065PZ2B	SAMPLE	193217-010	2.8	0.05	1.000	03/06/07 14:20	03/07/07 23:00
LF08GW01	SAMPLE	193217-014	1.4	0.05	1.000	03/06/07 15:40	03/08/07 01:55
LF08GW02B	SAMPLE	193217-015	3.0	0.05	1.000	03/06/07 13:30	03/07/07 22:42
LF08GW03	SAMPLE	193217-016	3.7	0.05	1.000	03/06/07 14:10	03/07/07 23:17
LF08GW06	SAMPLE	193217-017	1.2	0.05	1.000	03/06/07 14:55	03/07/07 23:35
HWGW100	SAMPLE	193217-018	0.10	0.05	1.000	03/06/07 12:15	03/08/07 02:47
HWGW101	SAMPLE	193217-019	1.6	0.05	1.000	03/06/07 11:35	03/08/07 01:37
BHWGW01	SAMPLE	193217-020	5.7	1.3	25.00	03/06/07 10:35	03/07/07 17:30
BHWGW04	SAMPLE	193217-021	4.5	0.05	1.000	03/06/07 08:45	03/07/07 23:52
BHWGW05	SAMPLE	193217-022	ND	0.05	1.000	03/06/07 09:55	03/08/07 02:12
BHWGW05RBBHWGW01	SAMPLE	193217-023	0.21	0.05	1.000	03/06/07 10:10	03/07/07 21:15
DUP0306073A	SAMPLE	193217-024	4.5	0.05	1.000	03/06/07	03/08/07 01:20
	BLANK	QC378257	ND	0.05	1.000		03/07/07 13:50

ND= Not Detected
RL= Reporting Limit

33.0

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	122881
Units:	mg/L	Received:	03/07/07

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
1065PZ2B	SAMPLE	193217-010	0.08	0.05	03/06/07 14:20	03/07/07 23:00
LF08GW01	SAMPLE	193217-014	ND	0.05	03/06/07 15:40	03/08/07 01:55
LF08GW02B	SAMPLE	193217-015	ND	0.05	03/06/07 13:30	03/07/07 22:42
LF08GW03	SAMPLE	193217-016	ND	0.05	03/06/07 14:10	03/07/07 23:17
LF08GW06	SAMPLE	193217-017	ND	0.05	03/06/07 14:55	03/07/07 23:35
HWGW100	SAMPLE	193217-018	ND	0.05	03/06/07 12:15	03/08/07 02:47
HWGW101	SAMPLE	193217-019	ND	0.05	03/06/07 11:35	03/08/07 01:37
BHWGW01	SAMPLE	193217-020	ND	0.05	03/06/07 10:35	03/08/07 02:30
BHWGW04	SAMPLE	193217-021	ND	0.05	03/06/07 08:45	03/07/07 23:52
BHWGW05	SAMPLE	193217-022	ND	0.05	03/06/07 09:55	03/08/07 02:12
BHWGW05RBBHWGW01	SAMPLE	193217-023	ND	0.05	03/06/07 10:10	03/07/07 21:15
DUP0306073A	SAMPLE	193217-024	ND	0.05	03/06/07	03/08/07 01:20
	BLANK	QC378257	ND	0.05		03/07/07 13:50

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1065PZ2B	SAMPLE	193217-010	58	5.0	10.00	03/06/07 14:20	03/07/07 19:12
LF08GW01	SAMPLE	193217-014	41	0.50	1.000	03/06/07 15:40	03/08/07 01:55
LF08GW02B	SAMPLE	193217-015	29	0.50	1.000	03/06/07 13:30	03/07/07 22:42
LF08GW03	SAMPLE	193217-016	51	5.0	10.00	03/06/07 14:10	03/07/07 21:32
LF08GW06	SAMPLE	193217-017	87	5.0	10.00	03/06/07 14:55	03/07/07 21:50
HWGW100	SAMPLE	193217-018	220	25	50.00	03/06/07 12:15	03/07/07 16:55
HWGW101	SAMPLE	193217-019	75	13	25.00	03/06/07 11:35	03/07/07 22:07
BHWGW01	SAMPLE	193217-020	68	13	25.00	03/06/07 10:35	03/07/07 17:30
BHWGW04	SAMPLE	193217-021	60	5.0	10.00	03/06/07 08:45	03/07/07 17:13
BHWGW05	SAMPLE	193217-022	120	13	25.00	03/06/07 09:55	03/07/07 17:48
BHWGW05RBBHWGW01	SAMPLE	193217-023	ND	0.50	1.000	03/06/07 10:10	03/07/07 21:15
DUP0306073A	SAMPLE	193217-024	60	5.0	10.00	03/06/07	03/07/07 22:25
	BLANK	QC378257	ND	0.50	1.000		03/07/07 13:50

ND= Not Detected
RL= Reporting Limit

37.0

Batch QC Report

Chloride

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	LCS		QC378258		4.000	4.293	107	80-120			1.000		03/07/07 14:08
ZZZZZZZZZZ	MS	193208-003	QC378259	715.4	200.0	914.3	99	80-120			100.0	03/06/07 12:20	03/07/07 15:28
ZZZZZZZZZZ	MSD	193208-003	QC378260		200.0	915.5	100	80-120	0	25	100.0	03/06/07 12:20	03/07/07 15:45
BHWGW04	MS	193217-021	QC378261	88.81	40.00	128.5	99	80-120			20.00	03/06/07 08:45	03/07/07 18:54
BHWGW04	MSD	193217-021	QC378262		40.00	128.2	98	80-120	0	25	20.00	03/06/07 08:45	03/07/07 18:37

RPD= Relative Percent Difference

30.0

Curtis & Tompkins, Ltd.

Binder 5

Batch QC Report

Fluoride

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	LCS		QC378258		2.000	2.097	105	80-120			1.000		03/07/07 14:08
ZZZZZZZZZZ	MS	193208-003	QC378259	<0.4590	100.0	92.08	92	78-120			100.0	03/06/07 12:20	03/07/07 15:28
ZZZZZZZZZZ	MSD	193208-003	QC378260		100.0	92.08	92	78-120	0	20	100.0	03/06/07 12:20	03/07/07 15:45
BHWGW04	MS	193217-021	QC378261	0.07414	20.00	18.46	92	78-120			20.00	03/06/07 08:45	03/07/07 18:54
BHWGW04	MSD	193217-021	QC378262		20.00	18.15	90	78-120	2	20	20.00	03/06/07 08:45	03/07/07 18:37

RPD= Relative Percent Difference

32.0

Curtis & Tompkins, Ltd.

00519

Batch QC Report

Nitrate Nitrogen

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	LCS		QC378258		1.000	1.036	104	80-120			1.000		03/07/07 14:08
ZZZZZZZZZZ	MS	193208-003	QC378259	3.118	50.00	54.25	102	80-120			100.0	03/06/07 12:20	03/07/07 15:28
ZZZZZZZZZZ	MSD	193208-003	QC378260		50.00	52.80	99	80-120	3	25	100.0	03/06/07 12:20	03/07/07 15:45
BHWGW04	MS	193217-021	QC378261	4.504	10.00	14.98	105	80-120			20.00	03/06/07 08:45	03/07/07 18:54
BHWGW04	MSD	193217-021	QC378262		10.00	14.98	105	80-120	0	25	20.00	03/06/07 08:45	03/07/07 18:37

RPD= Relative Percent Difference

34.0

Curtis & Tompkins, Ltd.

00556

Batch QC Report

Nitrite Nitrogen

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	LCS		QC378258		1.000	1.040	104	80-120			1.000		03/07/07 14:08
ZZZZZZZZZZ	MS	193208-003	QC378259	<0.4040	50.00	51.26	103	80-120			100.0	03/06/07 12:20	03/07/07 15:28
ZZZZZZZZZZ	MSD	193208-003	QC378260		50.00	48.55	97	80-120	5	25	100.0	03/06/07 12:20	03/07/07 15:45
BHWGW04	MS	193217-021	QC378261	<0.008079	10.00	10.02	100	80-120			20.00	03/06/07 08:45	03/07/07 18:54
BHWGW04	MSD	193217-021	QC378262		10.00	9.860	99	80-120	2	25	20.00	03/06/07 08:45	03/07/07 18:37

RPD= Relative Percent Difference

36.0

Curtis & Tompkins, Ltd.

00551

Batch QC Report

Sulfate

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	122881
Matrix:	Water	Received:	03/07/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	LCS		QC378258		10.00	10.54	105	80-120			1.000		03/07/07 14:08
ZZZZZZZZZZ	MS	193208-003	QC378259	679.3	500.0	1,187	102	80-120			100.0	03/06/07 12:20	03/07/07 15:28
ZZZZZZZZZZ	MSD	193208-003	QC378260		500.0	1,178	100	80-120	1	25	100.0	03/06/07 12:20	03/07/07 15:45
BHWGW04	MS	193217-021	QC378261	60.42	100.0	161.2	101	80-120			20.00	03/06/07 08:45	03/07/07 18:54
BHWGW04	MSD	193217-021	QC378262		100.0	160.5	100	80-120	0	25	20.00	03/06/07 08:45	03/07/07 18:37

RPD= Relative Percent Difference

38.0

Curtis & Tompkins, Ltd.

00552

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193217 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193217 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MCS 2/28/07

/CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

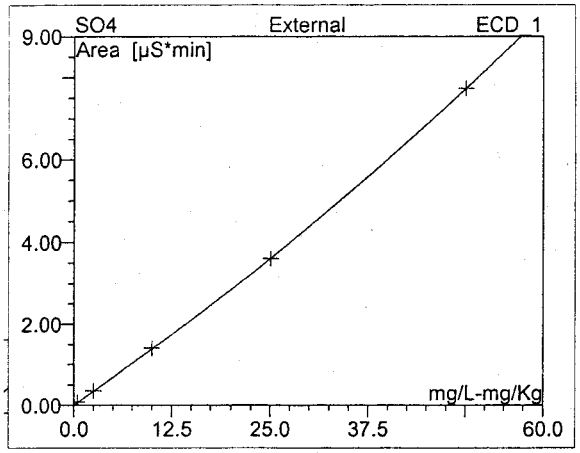
No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

No.	Name	Area µS*min F ECD 1	Area µS*min CL ECD 1	Area µS*min NO2N ECD 1	Area µS*min BR ECD 1	Area µS*min NO3N ECD 1	Area µS*min PO4 ECD 1	Area µS*min SO4 ECD 1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD 1	Height µS CL ECD 1	Height µS NO2N ECD 1	Height µS BR ECD 1	Height µS NO3N ECD 1	Height µS PO4 ECD 1	Height µS SO4 ECD 1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

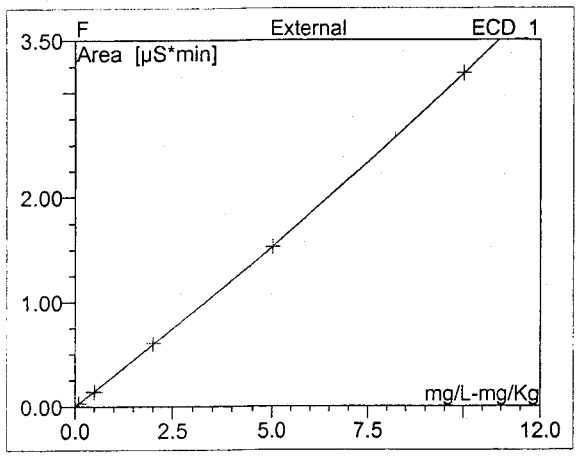
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

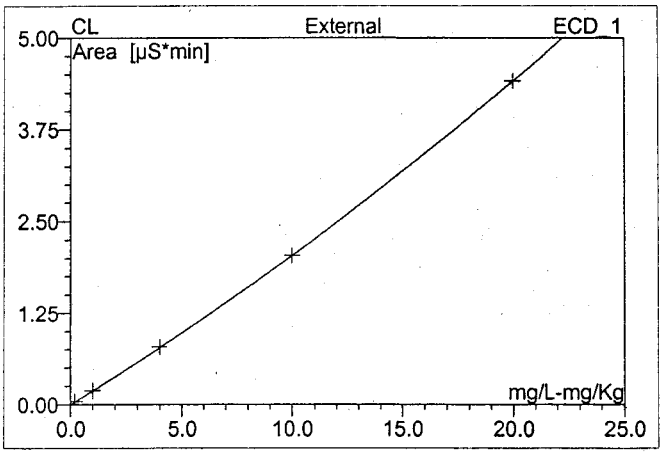


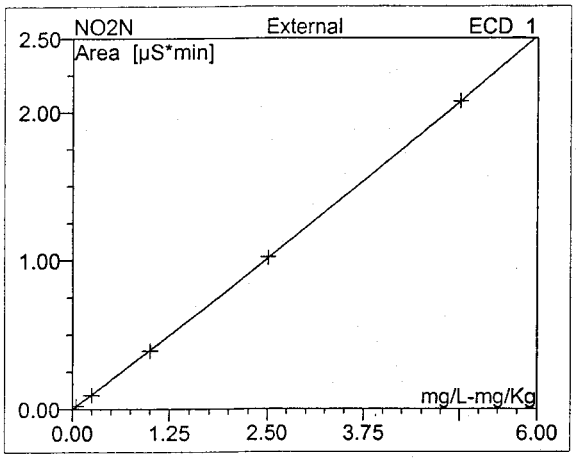
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

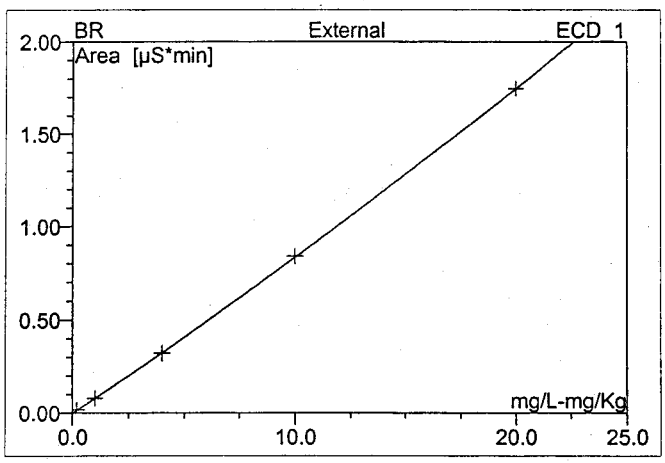
IC01 Calibration Batch Report

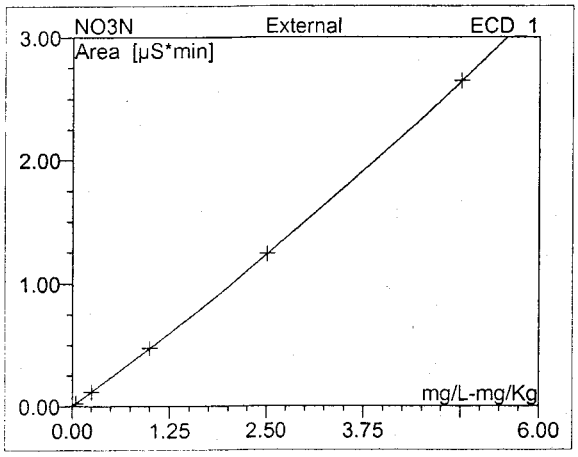
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

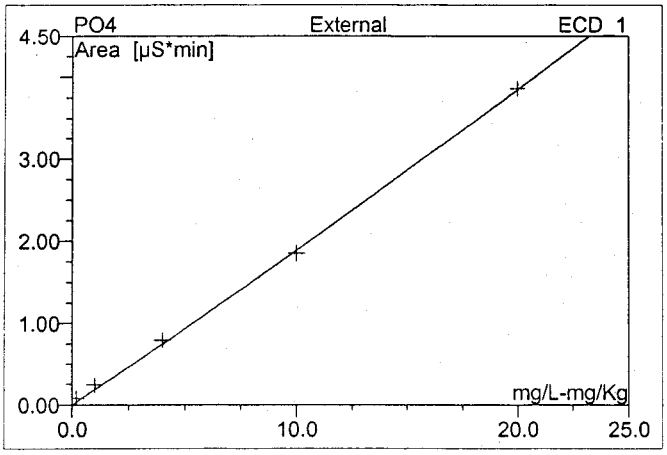












Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

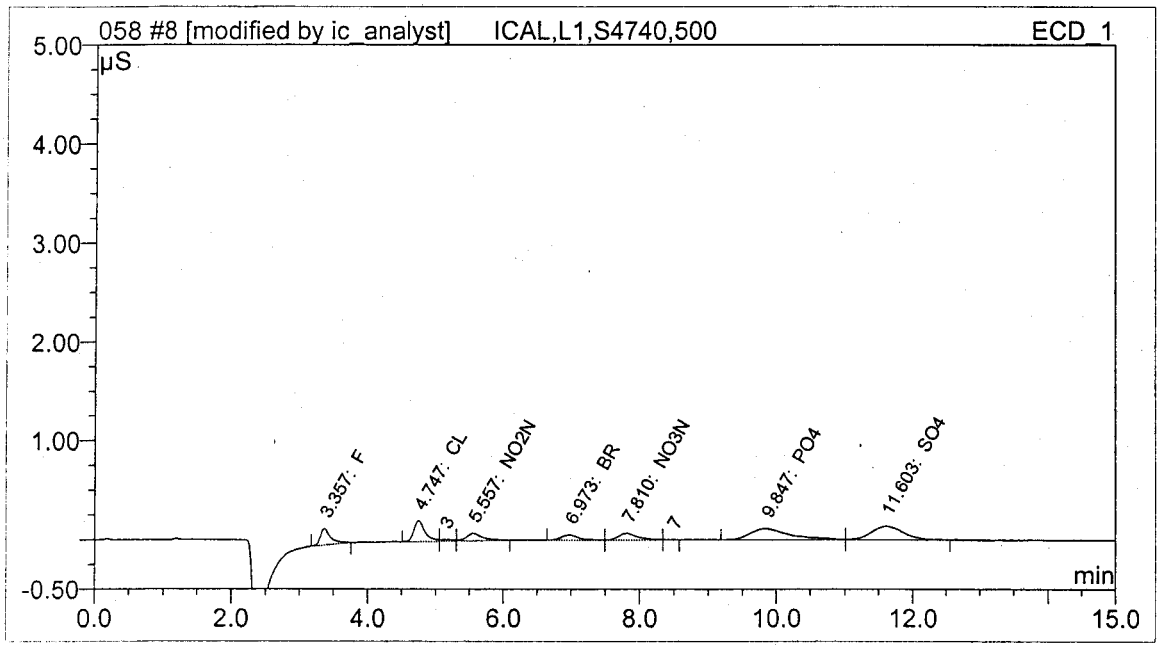
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



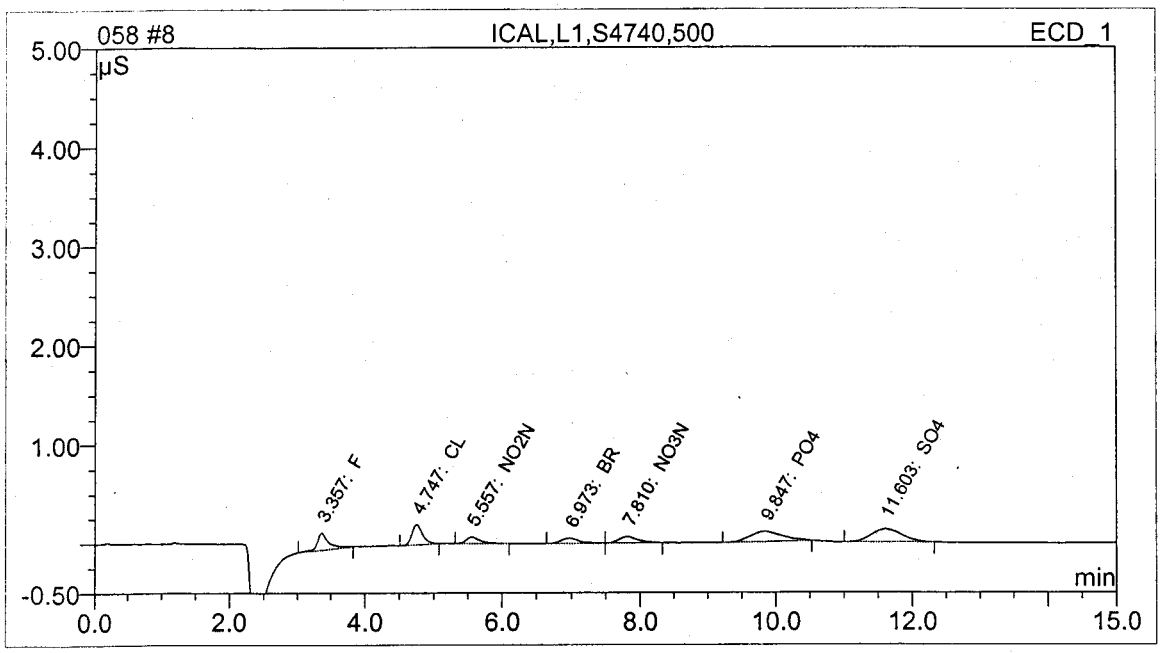
ANALYZED BY: REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

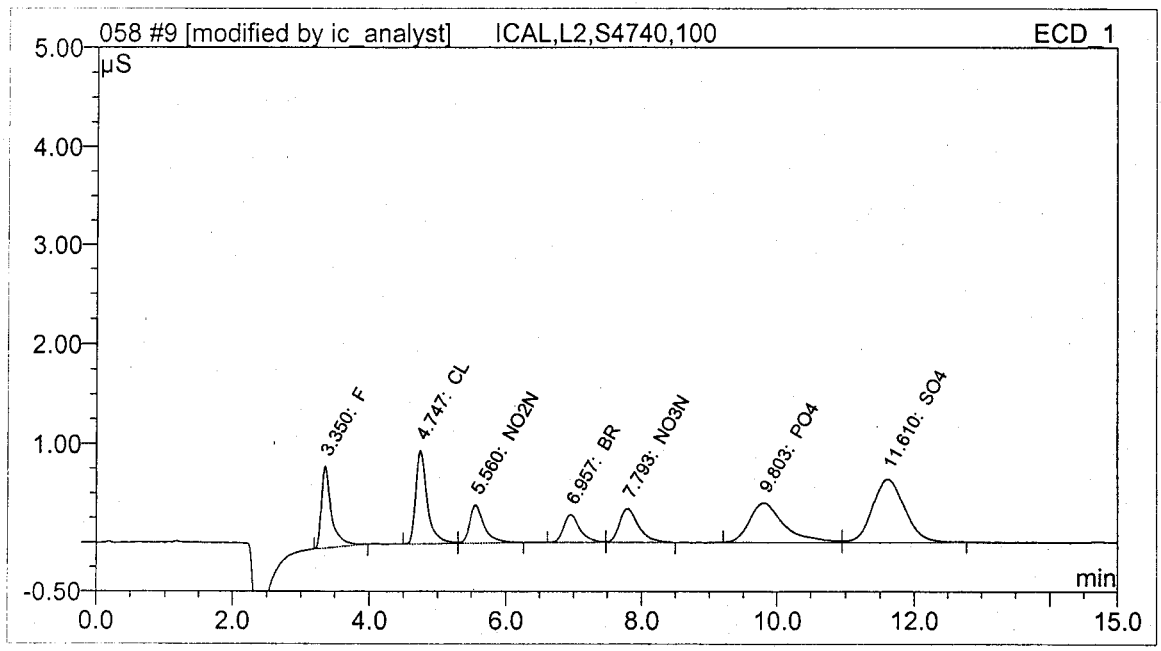
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

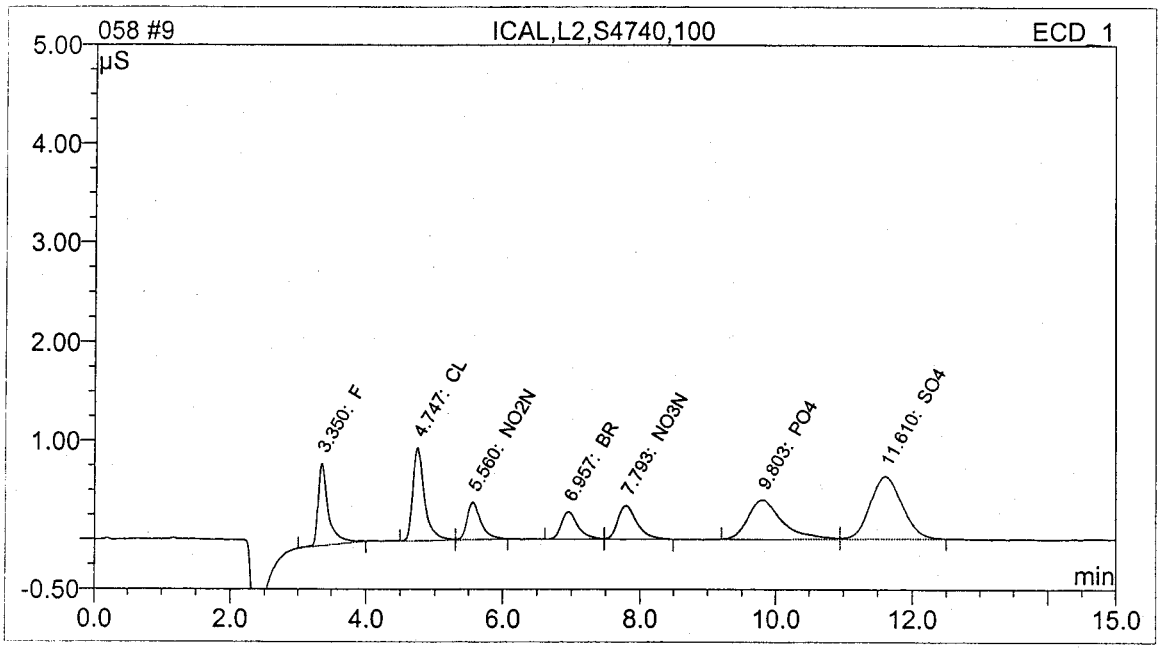
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

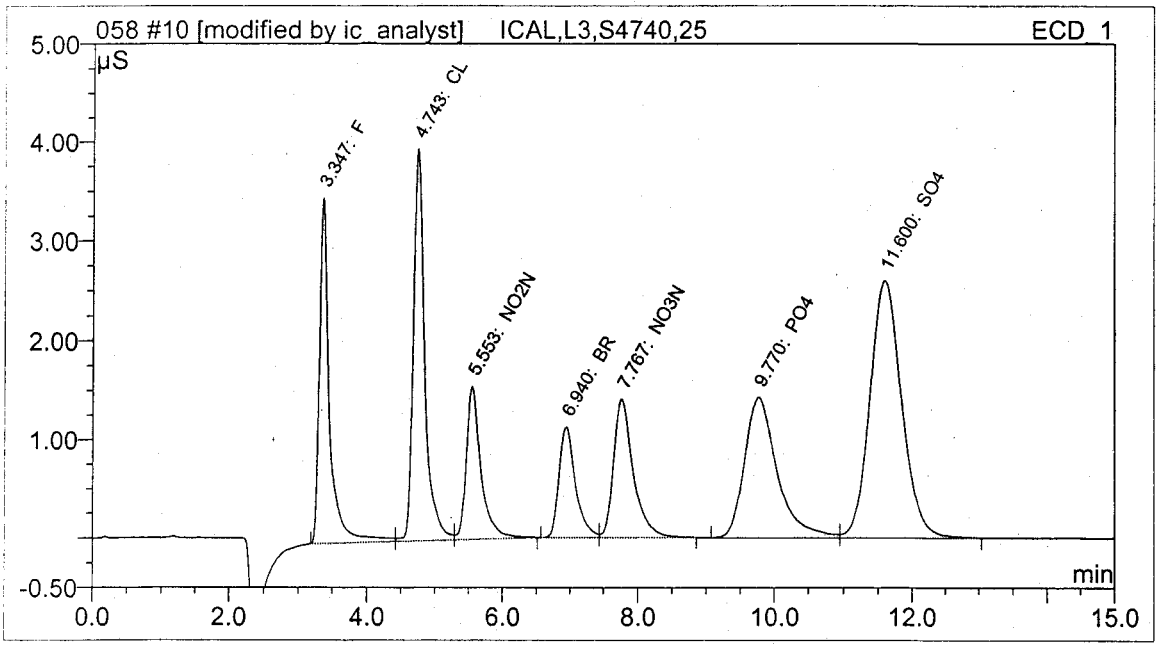
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

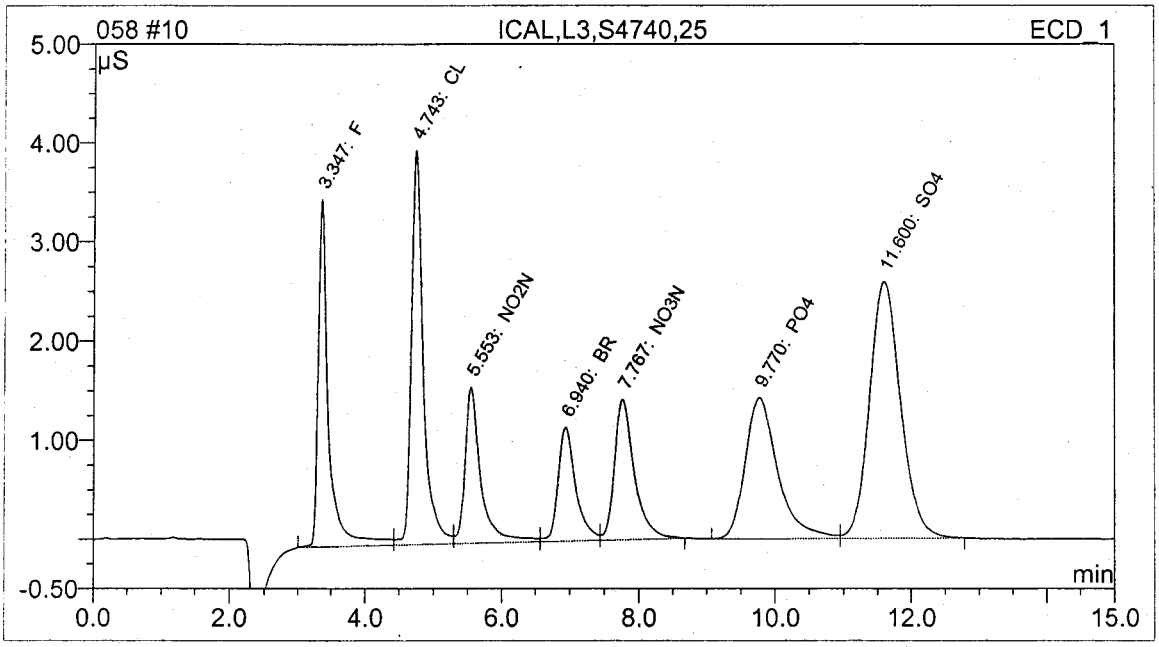
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

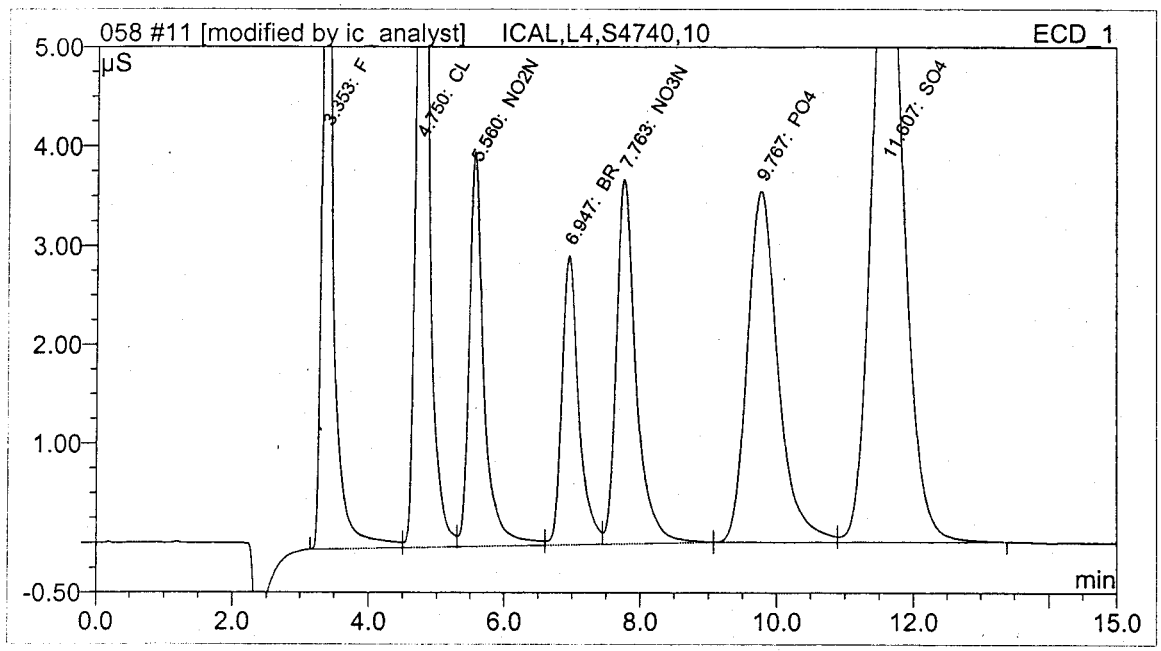
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

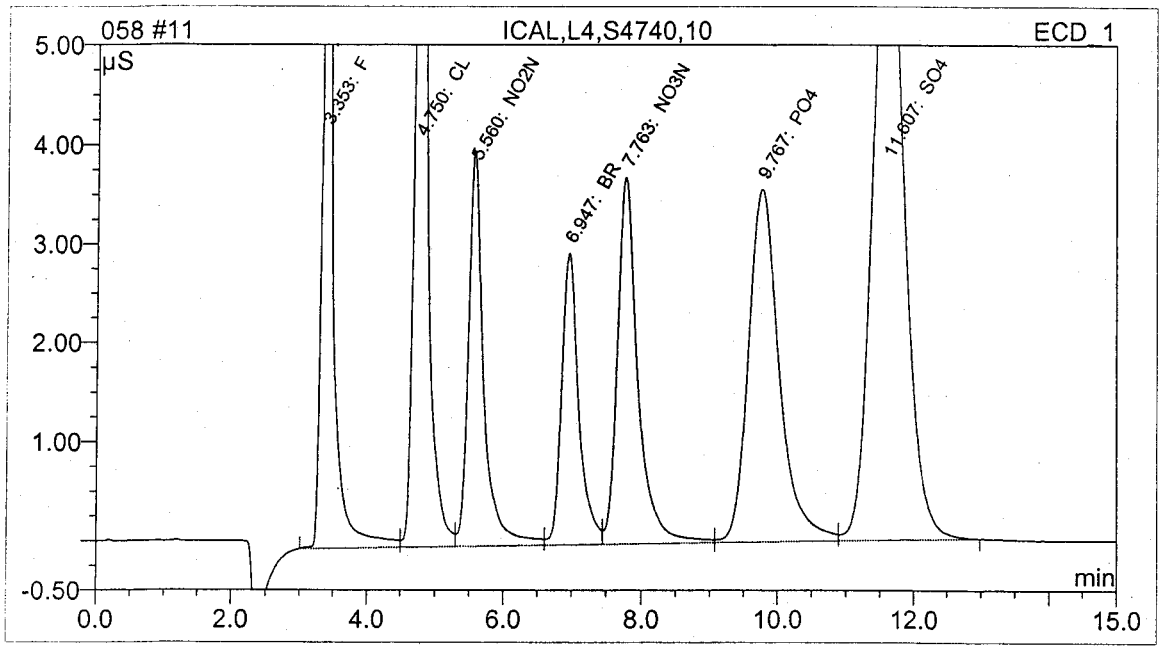
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

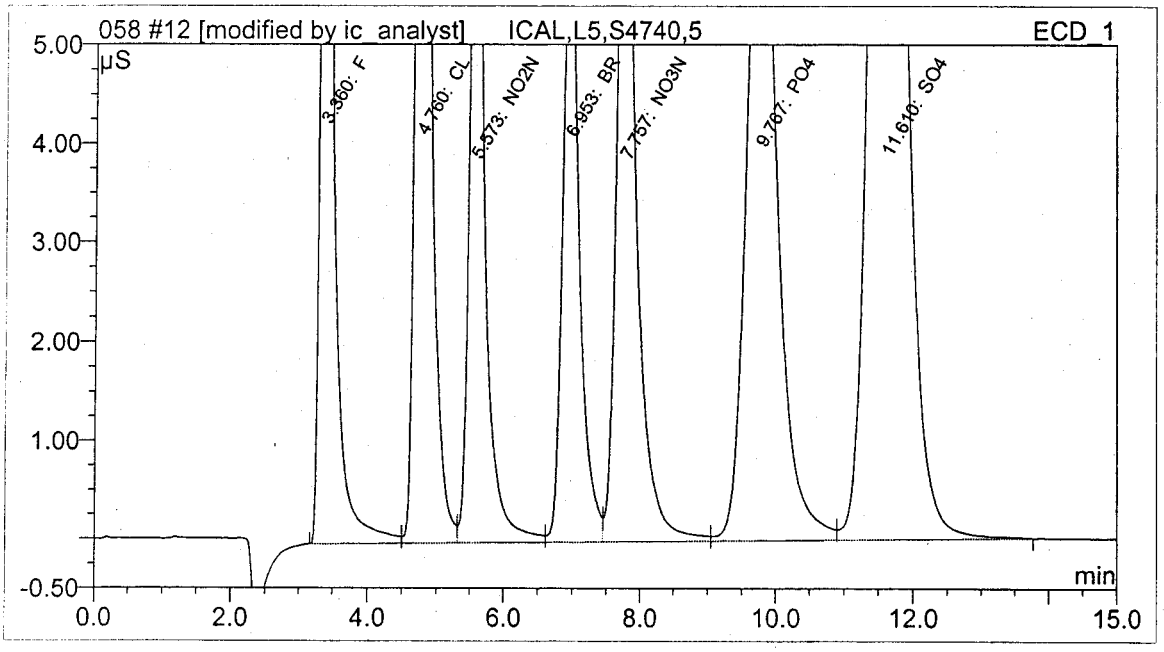
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

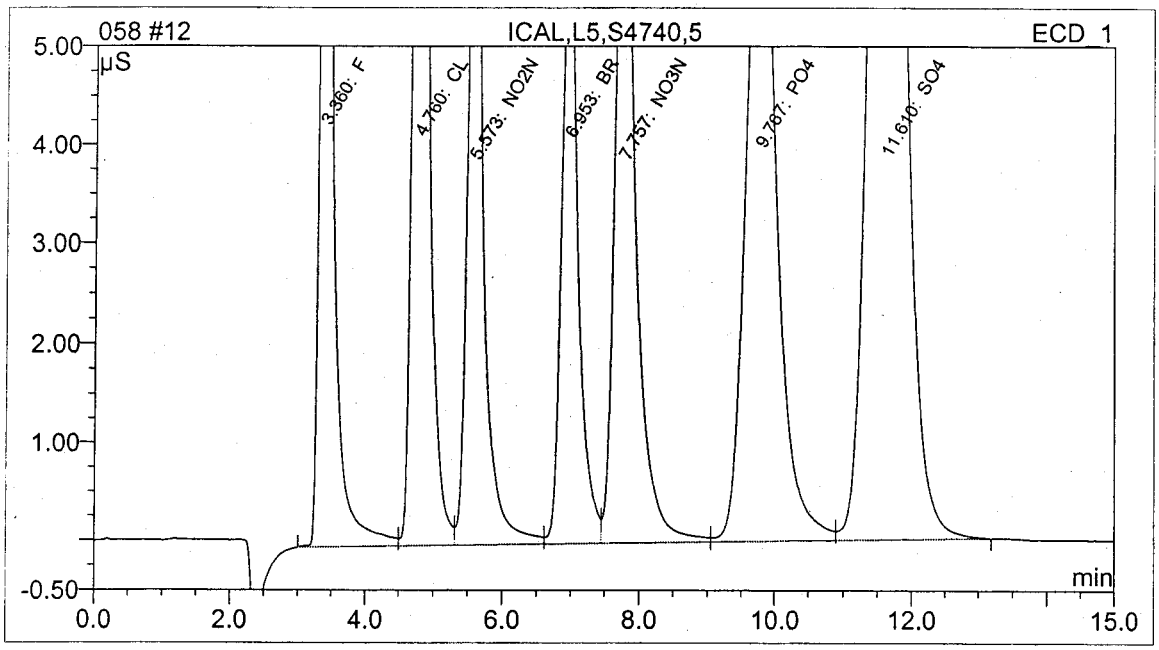
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260013 File : 058_13 Time : 27-FEB-2007 15:51
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

CW 3/1/07

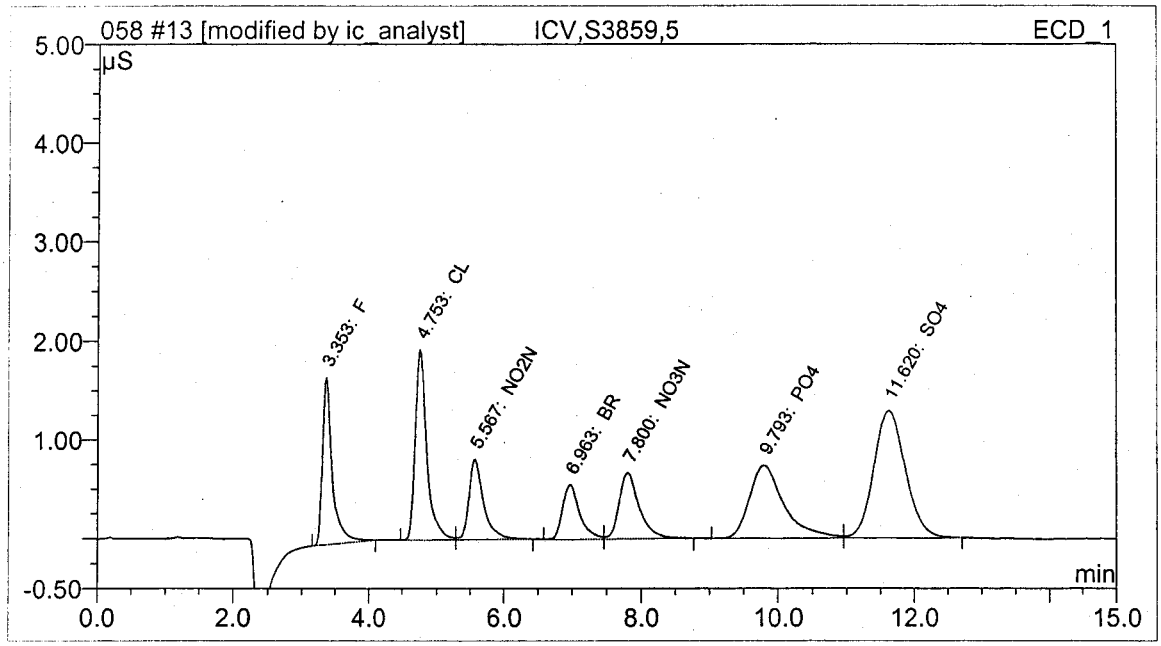
+=high bias v=ICV

607084260013

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

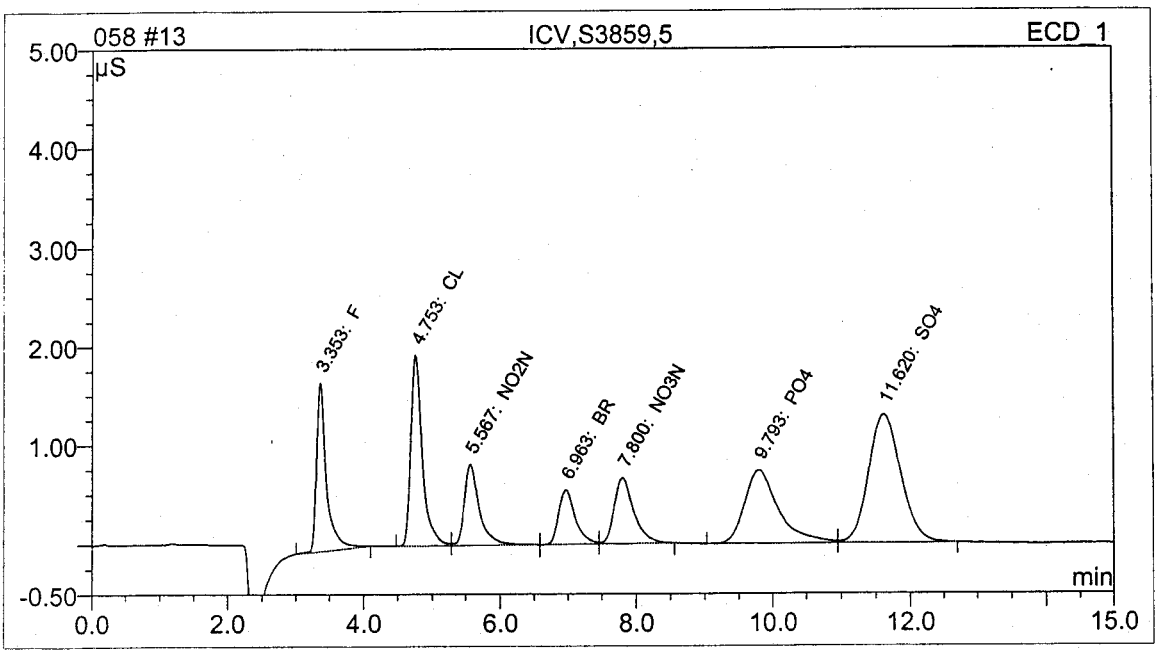
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260014 File : 058_14 Time : 27-FEB-2007 16:08
Cal : 607084260001 Caldate: 27-FEB-2007

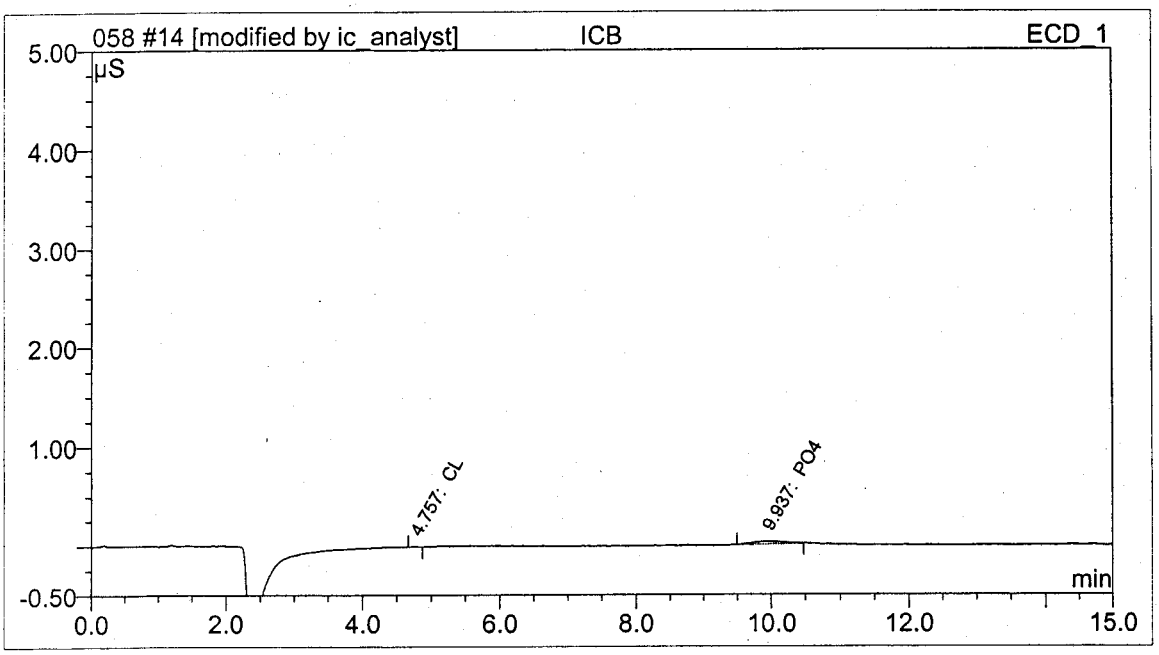
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

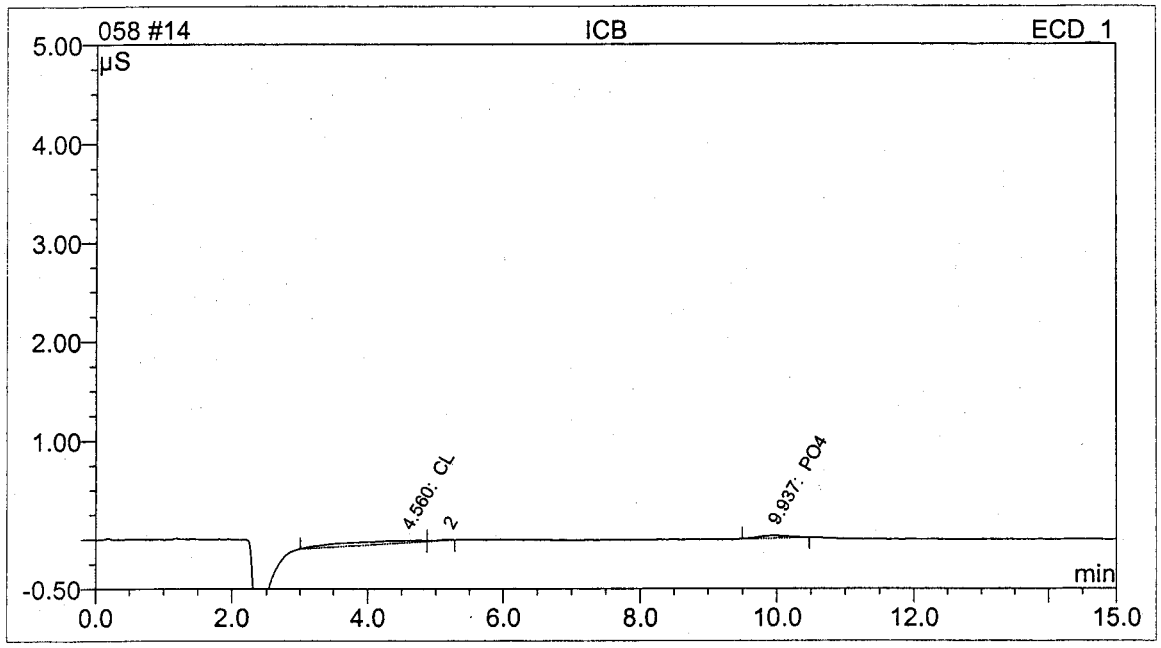
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260007 File : 058_7
Cal : 606441349001 Caldate: 02-NOV-2006

IDF : 1.0
Time : 27-FEB-2007 14:06

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

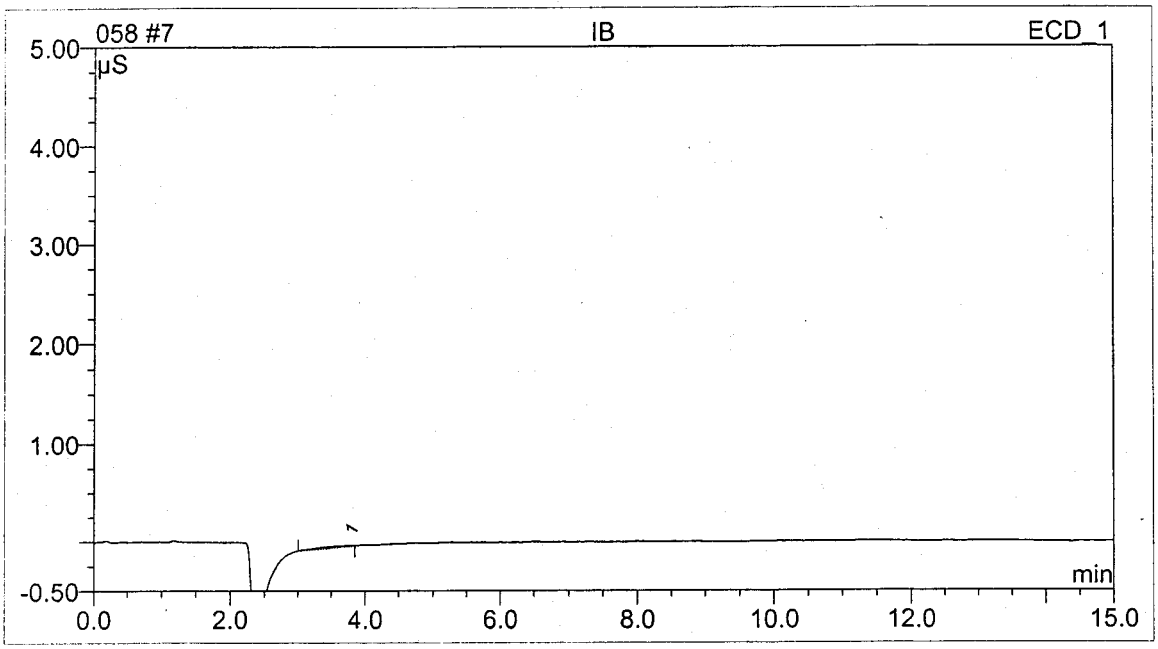
MKS 2/28/07

607084260007

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607095905007	07-MAR-2007 13:33	607084260001	27-FEB-2007	0.2987	0.2671	0.5000	0.4527	mg/L	-9	10	
IC01	P	607095905015	07-MAR-2007 16:03	607084260001	27-FEB-2007	0.2987	0.2975	2.0000	1.9916	mg/L	0	10	
IC01	P	607095905027	07-MAR-2007 20:05	607084260001	27-FEB-2007	0.2987	0.3045	5.0000	4.9747	mg/L	-1	10	
IC01	P	607095905041	08-MAR-2007 00:10	607084260001	27-FEB-2007	0.2987	0.2746	0.5000	0.4653	mg/L	-7	10	
IC01	P	607095905051	08-MAR-2007 03:05	607084260001	27-FEB-2007	0.2987	0.2991	2.0000	2.0025	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607095905007	07-MAR-2007 13:33	607084260001	27-FEB-2007	0.2028	0.1957	1.0000	1.0330	mg/L	3	10	
IC01	P	607095905015	07-MAR-2007 16:03	607084260001	27-FEB-2007	0.2028	0.2020	4.0000	4.1527	mg/L	4	10	
IC01	P	607095905027	07-MAR-2007 20:05	607084260001	27-FEB-2007	0.2028	0.2102	10.000	10.273	mg/L	3	10	
IC01	P	607095905041	08-MAR-2007 00:10	607084260001	27-FEB-2007	0.2028	0.1898	1.0000	1.0019	mg/L	0	10	

CONTINUING CALIBRATION SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607095905007	07-MAR-2007 13:33	607084260001	27-FEB-2007	0.4045	0.3894	0.2500	0.2462	mg/L	-2	10	
IC01	P	607095905015	07-MAR-2007 16:03	607084260001	27-FEB-2007	0.4045	0.3963	1.0000	0.9946	mg/L	-1	10	
IC01	P	607095905027	07-MAR-2007 20:05	607084260001	27-FEB-2007	0.4045	0.4123	2.5000	2.5455	mg/L	2	10	
IC01	P	607095905041	08-MAR-2007 00:10	607084260001	27-FEB-2007	0.4045	0.3679	0.2500	0.2326	mg/L	-7	10	
IC01	P	607095905051	08-MAR-2007 03:05	607084260001	27-FEB-2007	0.4045	0.4022	1.0000	1.0091	mg/L	1	10	

CONTINUING CALIBRATION SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607095905007	07-MAR-2007 13:33	607084260001	27-FEB-2007	0.4834	0.4746	0.2500	0.2550	mg/L	2	10	
IC01	P	607095905015	07-MAR-2007 16:03	607084260001	27-FEB-2007	0.4834	0.4905	1.0000	1.0312	mg/L	3	10	
IC01	P	607095905027	07-MAR-2007 20:05	607084260001	27-FEB-2007	0.4834	0.5103	2.5000	2.5705	mg/L	3	10	
IC01	P	607095905041	08-MAR-2007 00:10	607084260001	27-FEB-2007	0.4834	0.4428	0.2500	0.2380	mg/L	-5	10	
IC01	P	607095905051	08-MAR-2007 03:05	607084260001	27-FEB-2007	0.4834	0.4908	1.0000	1.0317	mg/L	3	10	

CONTINUING CALIBRATION SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607095905007	07-MAR-2007 13:33	607084260001	27-FEB-2007	0.1465	0.1385	2.5000	2.5540	mg/L	2	10	
IC01	P	607095905015	07-MAR-2007 16:03	607084260001	27-FEB-2007	0.1465	0.1433	10.000	10.334	mg/L	3	10	
IC01	P	607095905027	07-MAR-2007 20:05	607084260001	27-FEB-2007	0.1465	0.1471	25.000	25.405	mg/L	2	10	
IC01	P	607095905041	08-MAR-2007 00:10	607084260001	27-FEB-2007	0.1465	0.1346	2.5000	2.4823	mg/L	-1	10	
IC01	P	607095905051	08-MAR-2007 03:05	607084260001	27-FEB-2007	0.1465	0.1441	10.000	10.388	mg/L	4	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193217 IC Water
EPA 300.0

Inst : IC01 Lab ID : QC378257
Seqnum : 607095905008.2 Matrix : Water
File : 066_8 Batch : 122881 Time : 07-MAR-2007 13:50
Cal : 607084260001 Caldate: 27-FEB-2007
IDF : 1.0 Units : mg/L
PDF : 1.0

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193217 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607095905016 File : 066_16 Time : 07-MAR-2007 16:20
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193217 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607095905028 File : 066_28 Time : 07-MAR-2007 20:22
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01187]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193217 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607095905042 File : 066_42 Time : 08-MAR-2007 00:27
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01415]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193217 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607095905052 File : 066_52 Time : 08-MAR-2007 03:22
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01317]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

SEQUENCE SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Sequence: 607095905 Instrument: IC01 Ion Chromatograph Begun: 07-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	066_7	CCV	L	122881		07-MAR-2007 13:33	1.0	1	25			1	
008	066_8	CCB/MB	QC378257	122881	Water	07-MAR-2007 13:50	1.0		25				
009	066_9	LCS	QC378258	122881	Water	07-MAR-2007 14:08	1.0		25			1	
010	066_10	SAMPLE	193208-001	122881	Water	07-MAR-2007 14:25	50.0		25				
011	066_11	MSS	193208-003	122881	Water	07-MAR-2007 14:43	50.0	5	25				
012	066_12	SAMPLE	193208-005	122881	Water	07-MAR-2007 15:00	50.0		25				
013	066_13	MS	QC378259	122881	Water	07-MAR-2007 15:28	100.0		25			1	
014	066_14	MSD	QC378260	122881	Water	07-MAR-2007 15:45	100.0		25			1	
015	066_15	CCV	M	122881		07-MAR-2007 16:03	1.0		25			1	
016	066_16	CCB		122881		07-MAR-2007 16:20	1.0		25				
017	066_17	SAMPLE	193217-018	122881	Water	07-MAR-2007 16:55	50.0		25				
018	066_18	MSS	193217-021	122881	Water	07-MAR-2007 17:13	10.0		25				
019	066_19	SAMPLE	193217-020	122881	Water	07-MAR-2007 17:30	25.0		25				
020	066_20	SAMPLE	193217-022	122881	Water	07-MAR-2007 17:48	25.0		25				
021	066_21	X	QC378261	122881		07-MAR-2007 18:19	20.0					1	
022	066_22	MSD	QC378262	122881	Water	07-MAR-2007 18:37	20.0		25			1	
023	066_23	MS	QC378261	122881	Water	07-MAR-2007 18:54	20.0		25			1	
024	066_24	SAMPLE	193217-010	122881	Water	07-MAR-2007 19:12	10.0		25				
025	066_25	SAMPLE	193217-014	122881	Water	07-MAR-2007 19:29	25.0		25				
026	066_26	SAMPLE	193217-015	122881	Water	07-MAR-2007 19:47	10.0		25				
027	066_27	CCV	H	122881		07-MAR-2007 20:05	1.0		25			1	
028	066_28	CCB		122881		07-MAR-2007 20:22	1.0		25				
029	066_29	X	CCV	122881		07-MAR-2007 20:40	1.0					1	
030	066_30	X	CCB	122881		07-MAR-2007 20:57	1.0						
031	066_31	SAMPLE	193217-023	122881	Water	07-MAR-2007 21:15	1.0		25				
032	066_32	SAMPLE	193217-016	122881	Water	07-MAR-2007 21:32	10.0		25				
033	066_33	SAMPLE	193217-017	122881	Water	07-MAR-2007 21:50	10.0		25				
034	066_34	SAMPLE	193217-019	122881	Water	07-MAR-2007 22:07	25.0		25				
035	066_35	SAMPLE	193217-024	122881	Water	07-MAR-2007 22:25	10.0		25				
036	066_36	SAMPLE	193217-015	122881	Water	07-MAR-2007 22:42	1.0	1	25				1:CL=50.5009
037	066_37	SAMPLE	193217-010	122881	Water	07-MAR-2007 23:00	1.0	2	25				2:SO4=57.6650

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Sequence: 607095905 Instrument: IC01 Ion Chromatograph Begun: 07-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	066_38	SAMPLE	193217-016	122881	Water	07-MAR-2007 23:17	1.0	2	25				2:CL=68.4711
039	066_39	SAMPLE	193217-017	122881	Water	07-MAR-2007 23:35	1.0	2	25				2:CL=109.743
040	066_40	MSS	193217-021	122881	Water	07-MAR-2007 23:52	1.0	2	25				2:CL=77.3449
041	066_41	CCV	L	122881		08-MAR-2007 00:10	1.0		25			1	
042	066_42	CCB		122881		08-MAR-2007 00:27	1.0		25				
043	066_43	X	CCV	122881		08-MAR-2007 00:45	1.0					1	
044	066_44	X	CCB	122881		08-MAR-2007 01:02	1.0						
045	066_45	SAMPLE	193217-024	122881	Water	08-MAR-2007 01:20	1.0	2	25				2:CL=77.3606
046	066_46	SAMPLE	193217-019	122881	Water	08-MAR-2007 01:37	1.0	2	25				2:SO4=73.8742
047	066_47	SAMPLE	193217-014	122881	Water	08-MAR-2007 01:55	1.0	1	25				1:CL=178.478
048	066_48	SAMPLE	193217-022	122881	Water	08-MAR-2007 02:12	1.0	2	25				2:SO4=109.547
049	066_49	SAMPLE	193217-020	122881	Water	08-MAR-2007 02:30	1.0	3	25				3:CL=155.046
050	066_50	SAMPLE	193217-018	122881	Water	08-MAR-2007 02:47	1.0	2	25				2:SO4=195.803
051	066_51	CCV	M	122881		08-MAR-2007 03:05	1.0		25			1	
052	066_52	CCB		122881		08-MAR-2007 03:22	1.0		25				
053	066_53	X	CCV	122881		08-MAR-2007 03:40	1.0					1	
054	066_54	X	CCB	122881		08-MAR-2007 03:57	1.0						
055	066_55	X	SHUTDOWN	122881		08-MAR-2007 04:15	1.0						

Stds used: 1=S4740

REPORTING SUMMARY FOR 193217 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193217-010	IC01	03/07/07 19:12	10.0		+			+
193217-010	IC01	03/07/07 23:00	1.0	+		+	+	
193217-014	IC01	03/07/07 19:29	25.0		+			
193217-014	IC01	03/08/07 01:55	1.0	+		+	+	+
193217-015	IC01	03/07/07 19:47	10.0		+			
193217-015	IC01	03/07/07 22:42	1.0	+		+	+	+
193217-016	IC01	03/07/07 21:32	10.0		+			+
193217-016	IC01	03/07/07 23:17	1.0	+		+	+	
193217-017	IC01	03/07/07 21:50	10.0		+			+
193217-017	IC01	03/07/07 23:35	1.0	+		+	+	
193217-018	IC01	03/07/07 16:55	50.0		+			+
193217-018	IC01	03/08/07 02:47	1.0	+		+	+	
193217-019	IC01	03/07/07 22:07	25.0		+			+
193217-019	IC01	03/08/07 01:37	1.0	+		+	+	
193217-020	IC01	03/07/07 17:30	25.0		+		+	+
193217-020	IC01	03/08/07 02:30	1.0	+		+		
193217-021	IC01	03/07/07 17:13	10.0		+			+
193217-021	IC01	03/07/07 23:52	1.0	+		+	+	
193217-022	IC01	03/07/07 17:48	25.0		+			+
193217-022	IC01	03/08/07 02:12	1.0	+		+	+	
193217-023	IC01	03/07/07 21:15	1.0	+	+	+	+	+
193217-024	IC01	03/07/07 22:25	10.0		+			+
193217-024	IC01	03/08/07 01:20	1.0	+		+	+	
QC378257	IC01	03/07/07 13:50	1.0	+	+	+	+	+
QC378258	IC01	03/07/07 14:08	1.0	+	+	+	+	+
QC378259	IC01	03/07/07 15:28	100.0	+	+	+	+	+
QC378260	IC01	03/07/07 15:45	100.0	+	+	+	+	+
QC378261	IC01	03/07/07 18:54	20.0	+	+	+	+	+
QC378262	IC01	03/07/07 18:37	20.0	+	+	+	+	+

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122881
Date Started: 3/7/07
Prep Chemist: MRS

BK 2431
Page 76

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193208-001 J	3.58	50x	S	
2	-003	3.63			MSS
3	-005	3.48			
4	193217-010 D	0.60	1x 10x	S	
5	-014 A	1.25	MRS 3/7/07 ~~10x~~ 25x		
6	-015	0.53	10x		
7	-016	0.78	10x		
8	-017	0.94	10x		
9	-018	2.23	50x		
10	-019	1.13	25x		
11	-020	1.70	25x		
12	-021	0.97	10x		MSS
13	-022	1.63	25x		
14	-023	0.02			
15	-024	0.97	10x		
16	Blank QC378257	N/A	1x	N/A	
17	LCS QC378258		1x	N/A	
18	MS QC378259		100x	S	MS of 193208-003J
19	MSD QC378260		100x		MSD of 193208-003J
20	MS QC378261		20x		MS of 193217-021A
	MSD QC378262		20x		MSD of 193217-021A
		MRS 3/7/07			

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x MRS 12/5/06	MRS 3/7/07
BS/BSD Spiked with	0.2 mL of :	54740	
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot #A1065052L	

MRS 3/7/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CW 3/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122881
Date Started: 07-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193208-001			URS Corporation	Water	NITRATE, SULFATE	19-MAR-2007
193208-003			URS Corporation	Water	NITRATE, SULFATE	19-MAR-2007
193208-005			URS Corporation	Water	NITRATE, SULFATE	19-MAR-2007
193217-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-020			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-021			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-023			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
193217-024			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-MAR-2007
QC378257	BLANK			Water		
QC378258	LCS			Water		
QC378259	MS	of 193208-003		Water		
QC378260	MSD	of 193208-003		Water		
QC378261	MS	of 193217-021		Water		
QC378262	MSD	of 193217-021		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/23/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123187
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/16/07

Field ID	Type	Lab ID	Result	RL
NKGW02	SAMPLE	193217-011	ND	0.01
DUP0306071C	SAMPLE	193217-012	ND	0.01
LF08GW01	SAMPLE	193217-014	ND	0.01
LF08GW02B	SAMPLE	193217-015	ND	0.01
LF08GW03	SAMPLE	193217-016	ND	0.01
LF08GW06	SAMPLE	193217-017	ND	0.01
	BLANK	QC379549	ND	0.01

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	NKGW02	Batch#:	123187
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	mg/L	Analyzed:	03/16/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379550	<0.01000	0.1630	0.1217	75	65-135		
MSD	QC379551		0.1630	0.1226	75	65-135	1	20
LCS	QC379552		0.1630	0.1551	95	75-125		

RPD= Relative Percent Difference

42.0

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/16/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/16/2007**
Wavelength:	578 nm	Batch:	123187
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1240	0.0889	0.0816	109%	90 - 110%
ICB	-0.0007	-0.0005	0.0000		
CCV	0.1213	0.0869	0.0816	107%	90 - 110%
CCB	-0.0036	-0.0026	0.0000		
CCV	0.1194	0.0856	0.0816	105%	90 - 110%
CCB	-0.0006	-0.0004	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/16/2007**
Analysis Date: **3/16/2007**
Batch: 123187
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	inal Distill Vol (mL)	Distillate olored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	0.0016	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1082	**0.1551**	0.020	0.5	16.3	0.163	**95**	
193217-11	50.0	50.0	20.0	1.00	0.0023	**ND**	0.010					
193217-11m	50.0	50.0	10.0	1.00	0.0849	**0.1217**	0.020	0.5	16.3	0.163	**75**	
193217-11m	50.0	50.0	10.0	1.00	0.0855	**0.1226**	0.020	0.5	16.3	0.163	**75**	**1**
193217-12	50.0	50.0	20.0	1.00	0.0022	**ND**	0.010					
193217-14	50.0	50.0	20.0	1.00	0.0011	**ND**	0.010					
193217-15	50.0	50.0	20.0	1.00	0.0011	**ND**	0.010					
193217-16	50.0	50.0	20.0	1.00	0.0015	**ND**	0.010					
193217-17	50.0	50.0	20.0	1.00	0.0018	**ND**	0.010					
193219-2	50.0	50.0	20.0	1.00	0.0405	**0.0290**	0.010					
193183-3	50.0	50.0	20.0	1.00	0.0009	**ND**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

Reviewed by/ Date: 3/19/07

---) **Quantitation Results Report** (---

Date : 03-16-2007
Time : 12:45:29
Operator :

ile Name : Data not stored yet

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L
il. Factor : 1.00

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

AMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	-0.0007	0.00000
2	ICV	Analytical	+0.1240	0.09096
3	193217-11	Analytical	+0.0023	0.00168
4	193217-11MS	Analytical	+0.0849	0.06228
5	193217-11MSD	Analytical	+0.0855	0.06272
6	193217-12	Analytical	+0.0022	0.00162
7	193214-14	Analytical	+0.0011	8.056E-04
8	193214-15	Analytical	+0.0011	8.280E-04
9	193214-16	Analytical	+0.0015	0.00109
10	193214-17	Analytical	+0.0018	0.00131
11	193219-2	Analytical	+0.0405	0.02971
12	193183-3	Analytical	+0.0009	6.266E-04
13	CCV	Analytical	+0.1213	0.08896
14	CCB	Analytical	-0.0036	0.00000
15	LCS	Analytical	+0.1082	0.07936
16	MB	Analytical	+0.0016	0.00115
17	LCV	Analytical	+0.1194	0.08754
18	CCB	Analytical	-0.0006	0.00000

Date : 03-16-2007
Time : 12:45:46
Operator :

---) Standard Calibration Report (---

ile Name : C:\UV\DATA\CN706.STD

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = +7.3338-01 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0007	*****
2	0.00873	0.0125	-4.622 %
3	0.01746	0.0259	-7.942 %
4	0.05238	0.0710	-0.295 %
5	0.08730	0.1186	+0.385 %
6	0.13968	0.1916	-0.589 %
7	0.17460	0.2371	+0.424 %

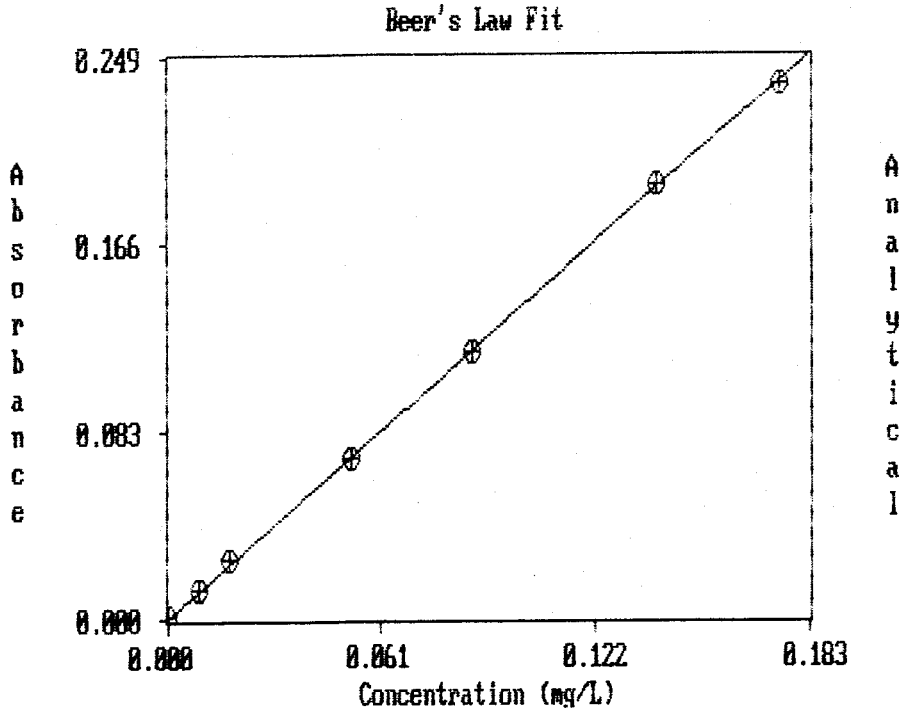
Date : 03-16-2007
Time : 12:45:47
Operator :

---> Standard Calibration Report <---

ile Name : C:\UV\DATA\CN706.STD

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



2 Acme 193219
conversion 193183
PROJECT Treadwell 193217

Notebook No. BK 2480

Continued From Page

CN EPA 335.2M

B 123187

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	ABS
193183-3	50	50	20	.0009
193217-11				.0023
-11MS	+.5ml (16.32ug/ml dilⁿ of S5101)	1ml → 50ml	10	.0849
-11MSD	same as MS		10	.0855
-12			20	.0022
-14				.0011
-15				.0011
-16				.0015
-17				.0018
193219-2				.0405
LCS	same as MS		10	.1082
MB			20	.0616
ICB				-.0007
ICV	0.5ml (16.32ug/ml dilⁿ of S5101) - 50		10 ml	.1240 TU = .0816 mg/L
CCV				.1213
CCB				-.0036
CCV				.1194
CCB				-.0006

tests for Cl^- & S^{2-} negative
pH all ≥12
Sulfamic acid added to all samples.

Continued on Page

Read and Understood By

Dm 3-16-07 Date

Signed

3/16/07 Date

00609

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123187
Date Started: 16-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193183-003			Conversion Coating	Water	CYANIDE	16-MAR-2007
193217-011			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193217-012			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193217-014			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193217-015			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193217-016			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193217-017			Treadwell & Rollo	Water	CYANIDE	19-MAR-2007
193219-002			Acme Fill Corp.	Water	CYANIDE	19-MAR-2007
QC379549	BLANK			Water	CYANIDE	
QC379550	MS	of 193217-011		Water	CYANIDE	
QC379551	MSD	of 193217-011		Water	CYANIDE	
QC379552	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	123026
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	Lab ID	Result	RL
1065PZ2B	SAMPLE	193217-010	ND	0.04
LF08GW01	SAMPLE	193217-014	ND	0.04
LF08GW02B	SAMPLE	193217-015	ND	0.04
LF08GW03	SAMPLE	193217-016	ND	0.04
LF08GW06	SAMPLE	193217-017	ND	0.04
	BLANK	QC378857	ND	0.04

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	LF08GW06	Batch#:	123026
MSS Lab ID:	193217-017	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	mg/L	Analyzed:	03/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378858	<0.04000	0.3046	0.2578	85	75-125		
MSD	QC378859		0.3046	0.2652	87	75-125	3	20
LCS	QC378860		0.3046	0.2946	97	75-125		

RPD= Relative Percent Difference

28.0

Analysis: **SULFIDE**
Method: EPA 376.2
Instrument: **HP UV-VIS Spectrometer**
Wavelength: 626 nm
SOP#: sulfide_376_rv 4.doc

Analyst: DM
Prep Date: 3/13/2007
Analysis Date: 3/13/2007
Batch: ######## 123026 DM 3-13-07
Matrix: Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r): 0.9990
Avg Rf: 0.6210
%RSD: 3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1829	0.2945	0.3046	97%	90 - 110%
ICB	0.0002	0.0003	0.0000		
CCV	0.1801	0.2900	0.3046	95%	90 - 110%
CCB	-0.0006	-0.0010	0.0000		
CCV	0.1823	0.2936	0.3046	96%	90 - 110%
CCB	0.0003	0.0005	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH **123026**
Prep Date: **3/13/2007**
Analysis Date: **3/13/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report** mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0002		**ND**	0.040					
LCS	7.5000	1.0000	0.1829		**0.29455**	0.040	0.0500	45.6960	0.3046	**97**	
193217-17	7.5000	1.0000	0.0018		**ND**	0.040					
193217-17m	7.5000	1.0000	0.1601		**0.25783**	0.040	0.0500	45.6960	0.3046	**85**	
193217-17m	7.5000	1.0000	0.1647		**0.26524**	0.040	0.0500	45.6960	0.3046	**87**	**3**
193226-7	7.5000	1.0000	0.0020		**ND**	0.040					
193227-2	7.5000	1.0000	0.0065		**ND**	0.040					
193217-10	7.5000	1.0000	0.0034		**ND**	0.040					
193217-14	7.5000	1.0000	0.0035		**ND**	0.040					
193217-15	7.5000	1.0000	0.0139		**ND**	0.040					
193217-16	7.5000	1.0000	0.0025		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

Reviewed by/ Date: 3/13/07

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

3-13-07 [illegible]

Date : [illegible]
Time : [illegible]
Operator :

---) Quantitation Results Report (---

File Name : Data not stored yet

Sample Name : sulfide
Client Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 625 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Resp.	Concentration
1	ICB/MB	Analytical	+0.0000	2.921E-04
2	ICV/LCS	Analytical	+0.1829	0.30523
3	193226-7	Analytical	+0.0200	0.02334
4	193227-8	Analytical	+0.0005	0.01093
5	193217-10	Analytical	+0.0034	0.00565
6	193217-14	Analytical	+0.0035	0.00583
7	193217-15	Analytical	+0.0139	0.02312
8	193217-16	Analytical	+0.0025	0.00410
9	193217-17	Analytical	+0.0018	0.00306
10	193217-17MS	Analytical	+0.1601	0.26727
11	CCV	Analytical	+0.1801	0.30057
12	CB	Analytical	-0.0002	0.00000
13	193217-17MSD	Analytical	+0.1647	0.27485
14	CCV	Analytical	+0.1823	0.30417
15	CCB	Analytical	+0.0003	5.843E-04

3-13-07 [illegible]

Date : ~~[illegible]~~
Time : 11:18:12
Operator :

---> Standard Calibration Report <---

ile Name : C:\UV\DATA\SS1106.STD

ample Name : sulfide
ilution Name : CAL 11-10-06
one Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0022	*****
2	0.02700	0.0178	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21000	0.1374	-4.916 %
5	0.43700	0.2713	-3.670 %
6	0.87300	0.5511	-0.089 %
7	1.52900	0.6947	+6.393 %

3-13-07

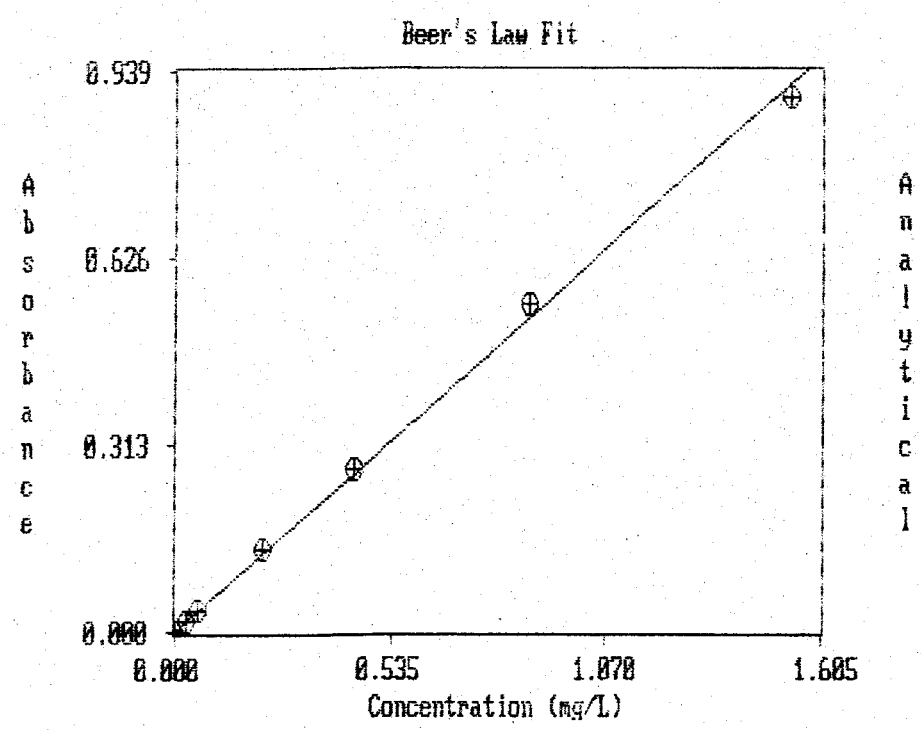
Date : ~~03-13-2007~~
Time : 11:10:13
Operator :

---) Standard Calibration Report (---

ile Name : C:\UV\DATA\SS1106.STD

ample Name : sulfide
olvent Name : DAL 11-16-06
onc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



90 HRS 193226
PROJECT Treadwell 193217

Notebook No. Bk 2451
Continued From Page

Sulfide EPA 376.2

ID 123026

Sample	Vol (ml)	Final Vol (ml)	ABS
193226-7H	7.5	7.5	.0020
193227-2L			.0065
193217-10E			.0034
-14G			.0035
-15H			.0139
-16H			.0025
-17G			.0018
-17MS	+.05ml (45.696 mg/L from 0455292)		.1601
-17MSD	None or MS		.1617
LCB/MB			.0002
ICV/LCS	Same as MS		.1829
CCV			.1801
CCB			-.0006
CCV			.1823
CCB			.0003

→ Vi .3046 mg/L

S=

1.0 ml
5.0 ml I .0255N
2.2 ml S_2O_3 .0255N

.1275
-.0561
.0714 × 16000 / 1.0 = 1142.4 mg/L
1:25 = 45.696 mg/L
.05 → 7.5 = .3046 mg/L

Continued on Page

Read and Understood By

Signed: DM Date: 3-13-07 Signed: DMP 3/13/07

00619

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123026
Date Started: 13-MAR-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193217-010			Treadwell & Rollo	Water	SULFIDE	19-MAR-2007
193217-014			Treadwell & Rollo	Water	SULFIDE	19-MAR-2007
193217-015			Treadwell & Rollo	Water	SULFIDE	19-MAR-2007
193217-016			Treadwell & Rollo	Water	SULFIDE	19-MAR-2007
193217-017			Treadwell & Rollo	Water	SULFIDE	19-MAR-2007
193226-007			URS Corporation	Water	SULFIDE	13-MAR-2007
193227-002			Innovative Technic	Water	SULFIDE	13-MAR-2007
QC378857	BLANK			Water	SULFIDE	
QC378858	MS	of 193217-017		Water	SULFIDE	
QC378859	MSD	of 193217-017		Water	SULFIDE	
QC378860	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	123044
Matrix:	Water	Sampled:	03/06/07
Units:	mg/L	Received:	03/07/07
Diln Fac:	1.000	Analyzed:	03/13/07

Field ID	Type	Lab ID	Result	RL
1065PZ2B	SAMPLE	193217-010	390	10
NKGW02	SAMPLE	193217-011	240	10
DUP0306071C	SAMPLE	193217-012	200	10
LF08GW01	SAMPLE	193217-014	640	10
LF08GW02B	SAMPLE	193217-015	330	10
LF08GW03	SAMPLE	193217-016	430	10
LF08GW06	SAMPLE	193217-017	630	10
	BLANK	QC378940	ND	10

ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193217	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	NKGW02	Batch#:	123044
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	mg/L	Analyzed:	03/13/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC378941		100.0	86.00		86	75-126		
BSD	QC378942		100.0	96.00		96	75-126	11	21
SDUP	QC378943	242.0		244.0	10.00			1	24

RL= Reporting Limit
RPD= Relative Percent Difference

40.0

00623

Analysis:	**Total Dissolved Solids**	Analyst:	**SJ**
Method:	EPA160.1 / SMWWW 2540C	Analysis Date:	**13-Mar-07**
Matrix:	Water	Batch #:	**123044**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	56.6107	56.6106	-0.0001	ND	10					
BS	50	1	55.6974	55.7017	0.0043	86.0	10	1,000	5	100	**86**	
BSD	50	1	50.8541	50.8589	0.0048	96.0	10	1,000	5	100	**96**	**10.99**
193217-011	50	1	45.4829	45.4950	0.0121	242.0	10					
SDUP	50	1	51.7198	51.7320	0.0122	244.0	10					**0.82**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193217-010	50	1	48.3809	48.4004	0.0195	390.0	10
193217-011	50	1	45.4829	45.4950	0.0121	242.0	10
193217-012	50	1	54.9869	54.9971	0.0102	204.0	10
193217-014	50	1	48.8178	48.8498	0.0320	640.0	10
193217-015	50	1	56.4292	56.4456	0.0164	328.0	10
193217-016	50	1	56.5414	56.5631	0.0217	434.0	10
193217-017	50	1	57.1107	57.1421	0.0314	628.0	10
193261-001	50	1	55.3408	55.3453	0.0045	90.0	10
193261-002	50	1	57.3101	57.3138	0.0037	74.0	10
193261-003	50	1	51.6872	51.6901	0.0029	58.0	10
193261-004	50	1	57.2797	57.2820	0.0023	46.0	10
193268-001	50	1	55.1923	55.3007	0.1084	2,168.0	10
193268-005	1	50	29.1867	29.2199	0.0332	33,200.0	500
193268-006	5	10	28.2964	28.4150	0.1186	23,720.0	100
193272-001	3	16.67	24.9970	25.0136	0.0166	5,533.3	167
193272-006	50	1	48.5044	48.5052	0.0008	16.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: Dme 3/14/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Re-organization of Batch due to unexpected work load.

Curtis & Tompkins, Ltd.

LIMS Batch #: 123044

Prep Date: 3/13/07 3/14

Prep Time: 9:30

Benchbook#: **BK 2420**

Page: **84**

Filter Mfg/ Lot#: Env. Exp. 85614

Spike WS#: 55560

Spike WS Conc (mg/L): 1000

Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/13/07	3/14/07	3/14/07	3/14/07		
Time:	11:45	12:00	2:00	3:00		
Temp (C):	90	180	180	180		

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	56.6107	JHN	56.6110	56.6106	X
	BS			DOE	55.6974	55.7021	55.7017	X
	BSD			6	50.8541	50.8593	50.8589	X
	193217-10 G	520	50	BUM	48.3809	48.4008	48.4004	X
5	-11	356		CIA	45.4829	45.4954	45.4950	X
	SDUP-11			2	51.7198	51.7325	51.7320	X
	-12	374		MAN	54.9869	54.9971	54.9971	X
	-14 F	1082		9	48.8178	48.8498	48.8498	X
	-15 E	492		GOOD	56.4292	56.4457	56.4456	X
10	-16	715		GIA	56.5414	56.5634	56.5631	X
	-17	875		GARG	57.1107	57.1425	57.1421	X
	193247-1 I	~~25,500~~ 116.5	50	~~DOE~~ GRASP	~~28.2964~~ 55.3408	55.3456	55.3453	X
	~~193235~~-2 J	~~307~~ 93.8	50	GOD	57.3101	57.3143	57.3138	X
	-3	~~278~~ 120.6		GIVE	51.6872	51.6901	51.6901	X
	~~193245~~ 4 I	~~7860~~ 109.9	~~25~~ 50	~~SLO~~ GUN	~~29.1867~~ 57.2973	57.2822	57.2820	X
	193268-10	~~1268~~ 2780	50	GEE	55.1923	55.3010	55.3007	X
	-5 G	~~40245~~,500	1	~~GUN~~ SLO	~~57.2797~~ 29.1867	29.2195	29.2199	X
	~~193277-1~~ 6 H	~~138~~ 31,800	5	~~GRASP~~ DOE	~~55.3408~~ 28.2964	28.4155	28.4150	X
	~~193272-1~~ ~~193219-1~~ B	13,250	3 ~~15~~	~~GEO~~ (5)	24.9970	25.0140	25.0136	X
20	-6 E	38.5	50	(5) GEO	~~24.9970~~ 48.5057	48.5057	48.5052	X

* Constant weight must be within 0.0005 from previous reading.

* Sample 193272-1 too thick to filter 15 mL.

3/13/07

Analyst / Date

3/14/07

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123044
Date Started: 13-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193217-010		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-011		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-012		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-014		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-015		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-016		Treadwell & Rollo	Water	TDS	19-MAR-2007
193217-017		Treadwell & Rollo	Water	TDS	19-MAR-2007
193261-001		Blasland, Bouck &	Water	TDS	14-MAR-2007
193261-002		Blasland, Bouck &	Water	TDS	14-MAR-2007
193261-003		Blasland, Bouck &	Water	TDS	14-MAR-2007
193261-004		Blasland, Bouck &	Water	TDS	14-MAR-2007
193268-001		Kennedy/Jenks Cons	Water	TDS	14-MAR-2007
193268-005		Kennedy/Jenks Cons	Water	TDS	14-MAR-2007
193268-006		Kennedy/Jenks Cons	Water	TDS	14-MAR-2007
193272-001		LFR Levine Fricke	Water	TDS	14-MAR-2007
193272-006		LFR Levine Fricke	Water	TDS	14-MAR-2007
QC378940	BLANK		Water	TDS	
QC378941	BS		Water	TDS	
QC378942	BSD		Water	TDS	
QC378943	SDUP of 193217-011		Water	TDS	

NDMA

PACIFIC ANALYTICAL, INC.

6056 Corte Del Cedro • Carlsbad, CA 92011
(760) 496-2200 • FAX (760) 496-2211

NARRATIVE REPORT
Method 1625M Semivolatiles

03/16/07

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

Attn: Steve Stanley

PA Reference: 2948, 2953, 2956

Samples: FB0302071A, NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B, DW030807A

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 1000 mL aliquot was spiked with 0.01 ug of N-Nitrosodimethylamine-d6 and extracted with continuous liquid-liquid extractors for 24 hours. The sample extract was concentrated to a final volume of 0.10 mL and spiked with 0.01 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL. A recent method detection limit study suggests the instrument is capable of detecting N-Nitrosodimethylamine (NNDMA) at a concentration of 0.0005 ug/L in a 1 liter sample.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.002 ug of NNDMA and 0.01 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. The laboratory blanks associated with the samples have no NNDMA detected.

Matrix Spike/Matrix Spike Duplicate

Two aliquots of sample NKGW02 were spiked with 0.01 ug of NNDMA and its label, extracted and analyzed like the sample.

Samples

Samples NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B and DW030807A have NNDMA detected at concentrations which exceed the method detection limit..

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001
Lab File ID: 7C1521
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1925

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0007	J	0.0020	34 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MS

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MS
Lab File ID: 7C1522
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2007

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	37 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MSD

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MSD
Lab File ID: 7C1524
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2132

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	39 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP0306071C

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-002
Lab File ID: 7C1525
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2214

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0008	J	0.0020	36 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11873

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11873
Lab File ID: 7C1517
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1634

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11874

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11874
Lab File ID: 7C1518
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1717

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	40 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q59

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q59
Lab File ID: 7C1513
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1345

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0022	0.0020	53 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs:
Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.133	0.133	0.127	0.128	0.130	0.130	1.9

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs:
Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
N-Nitrosodimethylami	999999	0.184	0.427	0.819	4.095	8.188

CONCENTRATIONS OF CALIBRATION STANDARDS

	Compound	Ical Type	Resp Ref	Calibration Standards Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1	2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2	N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3	N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

I = internal standard; L = labeled compound; U = unlabeled native
O = compound referenced to internal standard

Sample No.: 0.02 PPM STD NSTD0.02 Analyzed: 03/15/07 0807
File ID: 7C1505 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0519

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03/16/07

Raw Datafile : 7C1505 Quan DB : 7C1505
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	-1	51158785	bb	1086	1087	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6788672	bb	152	152	80	N-Nitrosodimethylamine-d6
3	86	49	89	0	1249100	!!	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.05 PPM STD NSTD0.05 Analyzed: 03/15/07 0850
File ID: 7C1506 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0519

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03/16/07

Raw Datafile : 7C1506 Quan DB : 7C1506
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	-1	48900994	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6496083	vv	152	152	80	N-Nitrosodimethylamine-d6
3	94	59	92	0	2776235	vv	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.10 PPM STD NSTD0.10 Analyzed: 03/15/07 0933
File ID: 7C1507 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~07~~ 0520

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V33 16b7

Raw Datafile : 7C1507 Quan DB : 7C1507
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	48440195	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	94	67	84	0	6166152	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	68	93	0	5047360	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.50 PPM STD NSTD0.50 Analyzed: 03/15/07 1015
File ID: 7C1508 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~07~~ 05 0521

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05311667

Raw Datafile : 7C1508 Quan DB : 7C1508
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	94	100	0	55381118	bb	1087	1087	190	2,2'-Difluorobiphenyl
2	96	69	84	0	7103816	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	87	95	0	29088944	bv	157	157	74	N-Nitrosodimethylamine

Sample No.: 1.00 PPM STD NSTD1.00 Analyzed: 03/15/07 1057
File ID: 7C1509 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0522

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Raw Datafile : 7C1509 Quan DB : 7C1509
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	50250806	bv	1087	1088	190	2,2'-Difluorobiphenyl
2	97	70	85	0	6553843	bv	152	152	80	N-Nitrosodimethylamine-d6
3	100	91	94	0	53664544	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 5.00 PPM STD NSTD5.00 Analyzed: 03/15/07 1139
File ID: 7C1510 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0522

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03/16/07

Raw Datafile : 7C1510 Quan DB : 7C1510
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	0	41180765	vb	1088	1088	190	2,2'-Difluorobiphenyl
2	91	65	86	1	5366427	bv	153	152	80	N-Nitrosodimethylamine-d6
3	100	94	95	0	221817374	bv	157	157	74	N-Nitrosodimethylamine

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2ND SRC DAI

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 7C1523
Date Sampled:
Date Extracted:
Date Analyzed: 03/15/07
Time Analyzed: 2049

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.0891	0.1000	89 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

Daily Calibration Check

Sample: 0.10 PPM 2ND SRC DAI Lab ID: NSTD0.10 File: 7C1523
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 2049
Initial Size: 1000.0000 Final Size: 1.0000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.08913	89	80 - 120	100	25 - 175

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1241

Cal File: 7C15 Date: 3/15/07

Notes: NDMA Curtis + Tompkins

Taped	Sample ID	File Name	OK	Description	OP
		7C1501		Warm-up	CB
		02			
		03			
		04			
	WSTD0.02	05		0.02 ug/ml NDMA Std	
	WSTD0.05	06		0.05	
	WSTD0.10	07		0.10	
	WSTD0.50	08		0.50	
	WSTD1.00	09		1.00	
	WSTD5.00	10		5.00	
	RRQ58	11			
	RRQ58Dup	12			
	RRQ59	13			
	RRQ59Dup	14			
	11871	15			
	11872	16			
	11873	17			
	11874	18			
	2948-001	19			
	2948-002	20			
	2953-001	21			
	2953-001MS	22			
	WSTD0.10	23		0.10 ug/ml NDMA 2nd Std Daily	
	2953-001MS	24			
	2953-002	25			

03/08/00 Reviewed by: _____ on: _____

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1242

Cal File: 7C15 Date: 3/15/07

Notes: 10 blnk

Taped	Sample ID	File Name	OK	Description	OP
	2956-001	7C1526			CB
	2956-002	27			
	2956-003	28			
	2956-004	29			

Reviewed by: _____ on: _____

03/06/00

00550

EXTRACTION LOG: Method Mod 1625 - NDMA

CLIENT Curtis + Tompp.

JOB # 2953, 56

Extraction Date 3-13-07

Extraction Method L-L

Extraction Solvent DCM

Lot # 46354

Initials dl

Matrix Aq

Other Reagents

Lot #

Ascorbic acid 3/8/07

	LABEL	DATE MADE	CONC.	VOL. ADDED	DATE SPIKED	INITIALS	COMMENTS
1. Surrogate Spike	NDMA + 1,4 Dioxane labels	12/19/06	0.02 µg/ml	500 µl	3-13-07	dl	
2. Matrix Spike	NDMA + 1,4 Dioxane Nature	12/16/06	0.02 µg/ml	100 µl	"	dl	500 µl → MS/MSD
3.							
4. Internal Standard	NDMA IS	6/20/06	1 µg/ml	100 µl	3/15/07	CB	

Sample #	Sample Size Extracted	% Moisture Solids	Extract. pH	Standards 1	2	3	4	Initial Extract Vol. A	Aliquot Removed for Prep B	Volume After Prep C	Calculated Final Vol: A/B x C	Comments: (Cleanup method used, info about unusual sample/extract behavior)
(B) 11873	1000 ml	<1%	5-7	✓			X	100 µl	100 µl	100 µl	100 µl	
(B) 11874							X					
PORQ59							X					
1 up							X					
2953-01							X					
01 MS							X					Spiked MS w/500 µl Nature - CSF
01 MSD							X					"
02							X					
2956-01							X					
02							X					
03							X					
04							X					

Pacific Analytical, Inc. on 13 20

QA Review

30

00551

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 193217
Site: Presidio

COPY

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
NKGW02	03/06 13:52	Water	NDMA	193217-011	MS/MSD
DUP0306071C	03/06 14:02	Water	NDMA	193217-012	

Notes:	Relinquished By:	Received By:
	Date/Time: 3/8/07 1730	Date/Time:

Signature on this form constitutes a firm Purchase Order for the services requested above.

Pacific Analytical, inc.

SAMPLE LOG-IN SHEET -- *Initial*

JOB #	LOG-IN DATE
2953	3-9-07

Received By (print name): D Ernett

Received By (signature): [illegible]

CLIENT: Curtis + Thompkins

Received From: Cal Ove.

# of Coolers: 1

TEMP: 1° C

Custody seals	Present Absent* / Intact Broken
Custody Seal #'s	
Airbill	Airbill Sticker Present Absent*
Airbill #	C101290000406 36
Date Rec'd	3/9/07
Time Rec'd	0745
Chain of Custody or Traffic Reports	Present Absent*
Sample Label	Present Absent*
Sample ID #'s on COC	Listed Not Listed
Sample Condition	Intact Broken Leaking
Does information on Custody records, reports and sample tags agree?	Yes No

LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
2953-01	193217-011	NDMA	3	AL	WW	MS/MSD
1 02	1 012	+	1	1	1	

* COMMENTS

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other

Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container

00553

2953 Curtis & Tompkins, 2 NNDMA (TAT: 30)

Lab ID	NDMA	MS	MSD
2953-001	P___	✓	✓
2953-002	P___		

Lab ID	Cust ID	Sampled	Rec'vd	Login ID
2953-001	193217-011	03/08/07	03/09/07	01959
2953-002	193217-012	03/08/07	03/09/07	01959

Lab ID	Description	Comment
2953-001	3 x AL x WW	ms/msd
2953-002	1 x AL x WW	

Login	Loggin by	Shipper	Shipper Code	CofC
01959	Dana E. Errett	Federal Express	791248610891	OK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193262

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
1221GW104	193262-001
LF08GW04	193262-002
DAEGW04	193262-003
1065MW10A	193262-004
1065MW10B	193262-005
DUP0307073B	193262-006
DUP0307073A	193262-007
1065MW10ARB1065MW10B	193262-008
TB0307071A	193262-009
1065PZ1B	193262-010
1065PZ6B	193262-011
1065PZ6BRB1065MW9A	193262-012
1065MW9A	193262-013
1065MW9B	193262-014
1065MW11A	193262-015
1065MW11B	193262-016
NKGW01	193262-017
NKGW05	193262-018
DAEGW102	193262-019
DW030807B	193262-020
WT030807	193262-021
937GW07	193262-022
937GW15	193262-023

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/26/07
Operations Manager

Signature: _____ Date: 3/26/07
Project Manager

NELAP # 01107CA

00001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193262
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/08/07
Samples Received:	03/08/07

This hardcopy data package contains sample and QC results for twenty three water samples, requested for the above referenced project on 03/08/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the CCV analyzed 03/19/07 15:55; this analyte met minimum response criteria. High surrogate recoveries were observed for 1,2-dichloroethane-d4 in many samples; no associated target analytes were detected in the sample. No other analytical problems were encountered.

Pesticides (EPA 8081A):
High response was observed for methoxychlor in the ICV analyzed 03/15/07 00:57; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. Low response was observed for endrin ketone in the CCV analyzed 03/15/07 21:34; average CCV drift met method requirements. High responses were observed for 4,4'-DDD, 4,4'-DDE, and endrin; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for pyrene in the MS/MSD for batch 123065; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (F) and 1-methylnaphthalene (UV) in the MS/MSD for batch 123065; the parent sample was not a project sample. No other analytical problems were encountered.

Metals (EPA 6010B, EPA 6020, EPA 7470A, and SM 2340B) Water:
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193262
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/08/07
Samples Received:	03/08/07

Metals (EPA 6020 and EPA 7470A) Filtrate:
No analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Total Oil & Grease (HEM) (EPA 1664A):
Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

Phenolic Compounds (EPA 420.1):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
Low recoveries were observed for sulfide in the MS/MSD for batch 123080; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Dissolved Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
High RPD was observed for total dissolved solids in the SDUP for batch 123140; the parent sample was not a project sample. No other analytical problems were encountered.

pH (EPA 9040B):
No analytical problems were encountered.

Surfactants (MBAS) (EPA 425.1):
No analytical problems were encountered.

NDMA (EPA 1625):
Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193262
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	03/08/07
Samples Received:	03/08/07

NDMA (EPA 1625):

the Pacific Analytical, Inc. case narrative.

144.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

193262

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2201

Page: 1 of 3

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

Sampled By (Firm and Samplers): Blaine Tech Brian Prowd

Recorder (signature required): [signature]

Sent to Laboratory (Name): Curtis & Tompkins

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - ~~Total~~ Dissolved (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	PCB's	Total Solids	Cyanide	Metals - Dissolved (5)	BTEX, MTBE	COMMENTS / NOTES
1	1221GW04	3-7	1500			X				3		3					X			X								
2	LF03GW04		905			X		3		1	1	7				X	X	X	X		X	X	X	X	X			MS/MSD
3	DAEGW04		1100			X		3		1		5		X	X	X	X			X	X	X						
4	1065MW10A		1250			X		3		1		4	X	X	X		X				X			X		X	X	
5	1065MW10B		1400			X		3		1		4	X	X	X		X				X			X		X	X	
6	DUP030707 3B		—			X				1		1					X			X								
7	DUP030707 3A		—			X		3		1	1	7	•			X	X	X	X		X	X	X	X	X			
8	1065MW10ARB1065MW10B		1300			X		3		1		4	X	X	X		X				X			X		X	X	
9	TB030707 1A		—			X		2								X												

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: [signature]	DATE: 3/8/7	RECEIVED BY: [signature]	DATE: 3/8/7
PRINT NAME: Brian Prowd FIRM: Blaine Tech	TIME: 1400	PRINT NAME: AARON GREENER FIRM: CTT	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
rec'd, intact + cold [signature]

Method of Shipment:

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

193262

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2199

Page: 2 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): [signature]
Sent to Laboratory (Name): C+T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) / MTBE	General Chemistry [2]	OCPs (8081) / PCBs	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals ~~Total~~ [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Dissolved Metals (15)	Total Sulfide	BTEX/MTBE	NDMA	Cyanide	Total MBAS, Hardness	COMMENTS / NOTES
10	1065 PZ1B	3/7/07	0935			X		6		1		4	X	X	X	X	X				X		X	X					
11	1065 PZ6B		1025			X		3		1		4	X	X	X		X				X		X	X	X				
12	1065PZ6B RB 1065MW9A		1100			X		3		1		4	X	X	X		X				X		X	X	X				
13	1065 MW9A		1200			X		3		1		4	X	X	X		X				X		X	X	X				
14	1065 MW9B		1305			X		3		1		4	X	X	X		X				X		X	X	X				
15	1065 MW11A		1340			X		3		1		4	X	X	X		X				X		X	X	X				
16	1065 MW11B		1410			X		3		1		4	X	X	X		X				X		X	X	X				
17	NKGW01		1256			X		6		1	1	4	X	X	X	X			X		X					X	X		
	NKGW05		1114			X		6		1	1	4	X	X	X	X			X		X					X	X		
	DAEGW102		912			X		6		2		9	X	X	X	X	X	X	X		X	X						A	analyze also for Molybdenum
	~~DU03 DB07B~~	~~3/8/07~~	~~815~~			~~X~~		~~9~~		~~2~~	~~1~~	~~11~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~	~~X~~	~~X~~					No sample

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - 15 Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni, Zn)

RELINQUISHED BY: [signature]	DATE: 3/8/7	RECEIVED BY: [signature]	DATE: 3/8/7
PRINT NAME: Devin Raynal FIRM: BTS	TIME: 1400	PRINT NAME: AARON GRENIER FIRM: C+T	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES: rec'd intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

1932602

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2202
Page: 3 of 3

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): Blaine Tech B Pond, P. Cornish
Recorder (signature required): [illegible]
Sent to Laboratory (Name): Curtis + Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	~~Metals - Total [3] (22, 22, 13, 9, 8, 7, 3, Other)~~ other seeks below	TDS (160.1)	PAHs (8310)	~~Nitrate~~ NDMA	MBAS, total hardness	Molybdenum, PCBs	Sulfide	Cyanide	TPH - Stoddard Solvent	COMMENTS / NOTES
DW030807B	3-8-07	815			X		9		2	1	11	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
WT030807	↓	1015			X		1	1	1	1	1															X		analyze also for Phenolic Compounds
937GW07		845			X		6				1	X	X	X	X													
937GW15		925			X		6				1	X	X	X	X													

Added usual quarterly analyses to the WT sample

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - Arsenic, Cadmium, Chromium, Copper, Lead, Hg, Ni, silver, Zn, Dissolved Sulfide, Total oil & Grease, pH

RELINQUISHED BY: [signature]	DATE: 3/8/7	RECEIVED BY: [signature]	DATE: 3/8/7
PRINT NAME: Brian Pond FIRM: Blaine Tech	TIME: 1400	PRINT NAME: Aaron Grenier FIRM: C+T	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:
Acid intact + cold Ag

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 · Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193262 Date Received: 3-08-2007 Number of Coolers: 6
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 3-08-2007 By (print) Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over 1 of cooler Seal date: 3-8-07 Seal name: [illegible]
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 2.3°C, 1.8°C, 1.6°C, 1.8, 3.8°C, 2.3°C

B. Login Phase
Date Logged In: 3-08-07 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... YES (NO)
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
4.) Sample - 021 received with 7 containers, COC states 5 also Analyses not marked on COC per SES instructions

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW10A	Batch#:	123200
Lab ID:	193262-004	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.6	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	65-135	EPA 8015B
Bromofluorobenzene (FID)	101	65-135	EPA 8015B
Trifluorotoluene (PID)	96	65-135	EPA 8021B
Bromofluorobenzene (PID)	99	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

100.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW10B	Batch#:	123200
Lab ID:	193262-005	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	65-135	EPA 8015B
Bromofluorobenzene (FID)	107	65-135	EPA 8015B
Trifluorotoluene (PID)	97	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW10ARB1065MW10B	Batch#:	123200
Lab ID:	193262-008	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	5.1	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	65-135	EPA 8015B
Bromofluorobenzene (FID)	110	65-135	EPA 8015B
Trifluorotoluene (PID)	102	65-135	EPA 8021B
Bromofluorobenzene (PID)	108	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

102.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1B	Batch#:	123200
Lab ID:	193262-010	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	103	65-135

ND= Not Detected
RL= Reporting Limit

103.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ6B	Batch#:	123256
Lab ID:	193262-011	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.3	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	112	65-135	EPA 8015B
Bromofluorobenzene (FID)	116	65-135	EPA 8015B
Trifluorotoluene (PID)	105	65-135	EPA 8021B
Bromofluorobenzene (PID)	109	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

104.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ6BRB1065MW9A	Batch#:	123256
Lab ID:	193262-012	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	4.7	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	65-135	EPA 8015B
Bromofluorobenzene (FID)	106	65-135	EPA 8015B
Trifluorotoluene (PID)	95	65-135	EPA 8021B
Bromofluorobenzene (PID)	99	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

105.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9A	Batch#:	123256
Lab ID:	193262-013	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	5.4	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	65-135	EPA 8015B
Bromofluorobenzene (FID)	115	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

106.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9B	Batch#:	123256
Lab ID:	193262-014	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	65-135	EPA 8015B
Bromofluorobenzene (FID)	110	65-135	EPA 8015B
Trifluorotoluene (PID)	99	65-135	EPA 8021B
Bromofluorobenzene (PID)	103	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

107.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW11A	Batch#:	123256
Lab ID:	193262-015	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	65-135	EPA 8015B
Bromofluorobenzene (FID)	110	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	103	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

108.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW11B	Batch#:	123256
Lab ID:	193262-016	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.1	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	65-135	EPA 8015B
Bromofluorobenzene (FID)	115	65-135	EPA 8015B
Trifluorotoluene (PID)	96	65-135	EPA 8021B
Bromofluorobenzene (PID)	102	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

109.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	NKGW01	Batch#:	123200
Lab ID:	193262-017	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/17/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	65-135
Bromofluorobenzene (FID)	94	65-135

ND= Not Detected
RL= Reporting Limit

110.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	NKGW05	Batch#:	123200
Lab ID:	193262-018	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/17/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	65-135
Bromofluorobenzene (FID)	94	65-135

ND= Not Detected
RL= Reporting Limit

111.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DAEGW102	Batch#:	123200
Lab ID:	193262-019	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/17/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	108	65-135

ND= Not Detected
RL= Reporting Limit

112.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW030807B	Batch#:	123199
Lab ID:	193262-020	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

113.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW07	Batch#:	123200
Lab ID:	193262-022	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/17/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

114.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	937GW15	Batch#:	123200
Lab ID:	193262-023	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/17/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	109	65-135

ND= Not Detected
RL= Reporting Limit

115.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379610	Batch#:	123199
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

116.1

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379614	Batch#:	123200
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	89	65-135	EPA 8015B
Bromofluorobenzene (FID)	92	65-135	EPA 8015B
Trifluorotoluene (PID)	87	65-135	EPA 8021B
Bromofluorobenzene (PID)	89	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

119.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379841	Batch#:	123256
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	65-135	EPA 8015B
Bromofluorobenzene (FID)	99	65-135	EPA 8015B
Trifluorotoluene (PID)	89	65-135	EPA 8021B
Bromofluorobenzene (PID)	91	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379611	Batch#:	123199
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,708	85	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	105	65-135

117.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379615	Batch#:	123200
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	21.32	107	65-135
Benzene	20.00	20.59	103	65-135
Toluene	20.00	20.62	103	65-135
Ethylbenzene	20.00	20.98	105	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	65-135
Bromofluorobenzene (PID)	101	65-135

120.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379616	Batch#:	123200
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,776	89	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	107	65-135

121.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379842	Batch#:	123256
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.20	86	65-135
Benzene	20.00	20.43	102	65-135
Toluene	20.00	20.45	102	65-135
Ethylbenzene	20.00	20.30	102	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	98	65-135
Bromofluorobenzene (PID)	102	65-135

124.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379843	Batch#:	123256
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,719	86	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	114	65-135

125.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	123199
MSS Lab ID:	193466-007	Sampled:	03/15/07
Matrix:	Water	Received:	03/15/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379612

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	28.61	2,000	1,916	94	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	113	65-135

Type: MSD Lab ID: QC379613

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,961	97	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	65-135
Bromofluorobenzene (FID)	114	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW10A	Batch#:	123200
MSS Lab ID:	193262-004	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379645

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	9.704	2,000	1,654	82	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	65-135
Bromofluorobenzene (FID)	124	65-135

Type: MSD Lab ID: QC379646

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,629	81	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	117	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	123256
MSS Lab ID:	193470-002	Sampled:	03/15/07
Matrix:	Water	Received:	03/15/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379844

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	11.77	2,000	1,800	89	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	114	65-135

Type: MSD Lab ID: QC379845

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,811	90	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	115	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 317102780001
Units : ng

Name : GC05 TFT/BFB 071
Date : 12-MAR-2007 09:35
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_002	317102780002	TFT/BFB_1	12-MAR-2007 09:35	S5343 (5000X)
L2	071_003	317102780003	TFT/BFB_2	12-MAR-2007 10:11	S5344 (5000X)
L3	071_004	317102780004	TFT/BFB_3	12-MAR-2007 10:47	S5665 (5000X)
L4	071_005	317102780005	TFT/BFB_4	12-MAR-2007 11:36	S5346 (5000X)
L5	071_006	317102780006	TFT/BFB_5	12-MAR-2007 12:12	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2426.8	2303.3	2120.9	2104.4	2056.7	AVRG		4.54E-4		2202.4	7	0.995	20	
Bromofluorobenzene (FID)	A	1423.7	1362.3	1316.8	1314.3	1267.3	AVRG		7.48E-4		1336.9	4	0.995	20	
Trifluorotoluene (PID)	B	8429.5	8290.8	7848.7	7705.0	7557.4	AVRG		1.26E-4		7966.3	5	0.995	20	
Bromofluorobenzene (PID)	B	15668	15743	15279	15134	14843	AVRG		6.52E-5		15333	2	0.995	20	
Trifluorotoluene (PID)	C	739.01	743.17	750.40	770.27	794.33	AVRG		0.00132		759.44	3	0.995	20	
Bromofluorobenzene (PID)	C	1512.0	1597.5	1643.6	1662.7	1681.5	AVRG		6.17E-4		1619.5	4	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/12/07 Reviewer: CW Date: 03/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317102780001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8021B

Inst : GC05
Calnum : 317104369001
Units : ng

Name : GC05 MBTXE 072
Date : 13-MAR-2007 20:41
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_008	317104369008	BTXE 1	13-MAR-2007 20:41	S5559 (1000X), S5665 (5000X)
L2	072_009	317104369009	BTXE 2	13-MAR-2007 21:17	S5558 (1250X), S5665 (5000X)
L3	072_010	317104369010	BTXE 3	13-MAR-2007 21:52	S5558 (500X), S5665 (5000X)
L4	072_011	317104369011	BTXE 4	13-MAR-2007 22:28	S5558 (125X), S5665 (5000X)
L5	072_012	317104369012	BTXE 5	13-MAR-2007 23:04	S5557 (1000X), S5665 (5000X)
L6	072_013	317104369013	BTXE 6	13-MAR-2007 23:39	S5557 (250X), S5665 (5000X)
L7	072_014	317104369014	MTBE 7	14-MAR-2007 00:15	S4993 (500X), S5665 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		13813	12831	11944	13238	12557	11776	AVRG		7.88E-5		12693	6	0.995	20	
Benzene	B	30509	28743	28078	31067	31698	29756		AVRG		3.34E-5		29975	5	0.995	20	
Toluene	B	36934	31106	29304	30079	29322	27248		AVRG		3.26E-5		30666	11	0.995	20	
Ethylbenzene	B	23169	23880	23981	25809	25356	23617		AVRG		4.11E-5		24302	4	0.995	20	
m,p-Xylenes	B	36460	35318	34887	36378	35702	32386		AVRG		2.84E-5		35188	4	0.995	20	
o-Xylene	B	24966	25403	25431	26633	25958	23887		AVRG		3.94E-5		25380	4	0.995	20	
MTBE	C		1231.7	1264.8	1189.2	1426.8	1465.2	1468.6	AVRG		7.46E-4		1341.1	9	0.995	20	
Benzene	C	2656.4	2797.1	2775.8	3182.9	3606.7	3638.8		AVRG		3.22E-4		3109.6	14	0.995	20	
Toluene	C	2278.4	2475.6	2521.2	2912.1	3325.7	3387.4		AVRG		3.55E-4		2816.7	17	0.995	20	
Ethylbenzene	C	2176.4	2157.7	2258.6	2655.3	3075.2	3150.5		AVRG		3.88E-4		2578.9	18	0.995	20	
m,p-Xylenes	C	3316.4	3036.8	2969.3	3476.7	3981.4	4091.1		AVRG		2.87E-4		3478.6	14	0.995	20	
o-Xylene	C	2586.4	2248.6	2251.6	2603.3	3002.6	3104.0		AVRG		3.80E-4		2632.7	14	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
MTBE	B		10.000	25.000	100.00	500.00	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	2000.0		ng

Analyst: JCP Date: 03/14/07 Reviewer: CW Date: 03/15/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317104369001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCVOA Water
EPA 8021B

Inst : GC05
Calnum : 317104369001

Name : GC05 MBTXE 072
Cal Date: 13-MAR-2007

ICV 317104369017 (072_017 14-MAR-2007) stds: S5206 (1000X), S5665 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	12693	10788	100.0	84.99	ng	-15	15	
Benzene	B	29975	32925	100.0	109.8	ng	10	15	
Toluene	B	30666	32063	100.0	104.6	ng	5	15	
Ethylbenzene	B	24302	26910	100.0	110.7	ng	11	15	
m,p-Xylenes	B	35188	34099	200.0	193.8	ng	-3	15	
o-Xylene	B	25380	27619	100.0	108.8	ng	9	15	
MTBE	C	1341.1	1166.0	100.0	86.95	ng	-13	15	
Benzene	C	3109.6	3591.0	100.0	115.5	ng	15	15	
Toluene	C	2816.7	3248.3	100.0	115.3	ng	15	15	
Ethylbenzene	C	2578.9	2919.4	100.0	113.2	ng	13	15	
m,p-Xylenes	C	3478.6	3606.1	200.0	207.3	ng	4	15	
o-Xylene	C	2632.7	2766.8	100.0	105.1	ng	5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 317104369002
Units : ng

Name : GC05 TVH 072
Date : 14-MAR-2007 03:48
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_020	317104369020	TVH 1	14-MAR-2007 03:48	S5078 (1000X), S5665 (5000X)
L2	072_021	317104369021	TVH 2	14-MAR-2007 04:24	S5077 (1000X), S5665 (5000X)
L3	072_022	317104369022	TVH 3	14-MAR-2007 04:59	S5076 (1000X), S5665 (5000X)
L4	072_023	317104369023	TVH 4	14-MAR-2007 05:35	S5075 (2000X), S5665 (5000X)
L5	072_024	317104369024	TVH 5	14-MAR-2007 06:11	S5075 (1000X), S5665 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2973.6	2542.7	2566.7	2873.7	2563.3	AVRG		3.70E-4		2704.0	8	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 03/14/07 Reviewer: CW Date: 03/15/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317104369002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 317104369002

Name : GC05 TVH 072
Cal Date: 14-MAR-2007

ICV 317104369026 (072_026 14-MAR-2007) stds: S5365 (1000X), S5665 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2704.0	2489.6	10000	9207	ng	-8	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	
Trifluorotoluene (PID)	B	1665.0	1682.0	1655.7	1654.7	1576.4	AVRG		6.07E-4		1646.8	2	0.995	20	
Bromofluorobenzene (PID)	B	4178.5	4347.3	4132.7	4316.5	4159.9	AVRG		2.37E-4		4227.0	2	0.995	20	
Trifluorotoluene (PID)	C	280.55	299.47	313.70	318.56	304.47	AVRG		0.00330		303.35	5	0.995	20	
Bromofluorobenzene (PID)	C	770.41	843.26	849.70	916.75	878.28	AVRG		0.00117		851.68	6	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327026521002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 327063206001
Units : ng

Name : GC07 TVH 043
Date : 12-FEB-2007 16:37
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043_007	327063206007	TVH_1	12-FEB-2007 16:37	S5078 (1000X), S5029 (5000X)
L2	043_008	327063206008	TVH_2	12-FEB-2007 17:14	S5077 (1000X), S5029 (5000X)
L3	043_009	327063206009	TVH_3	12-FEB-2007 17:50	S5076 (1000X), S5029 (5000X)
L4	043_010	327063206010	TVH_4	12-FEB-2007 18:26	S5075 (2000X), S5029 (5000X)
L5	043_017	327063206017	TVH_5	13-FEB-2007 12:20	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1954.2	1665.2	1659.1	1714.5	1763.8	AVRG		5.71E-4		1751.4	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

327063206001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCVOA Water
EPA 8015B

Inst : GC07
Calnum : 327063206001

Name : GC07 TVH 043
Cal Date: 12-FEB-2007

ICV 327063206019 (043_019 13-FEB-2007) stds: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1751.4	1746.5	10000	9972	ng	0	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B

Inst : GC07
Calnum : 327074193001
Units : ng

Name : GC07 STODDARD 051
Date : 20-FEB-2007 14:22
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_004	327074193004	STODD	20-FEB-2007 14:22	S4942 (1000X), S5029 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Stoddard Solvent C7-C12	A	2540.3	AVRG		3.94E-4		2540.3	0	0.995	20	

Analyte Spiked Amounts	Ch	L1	Units
Stoddard Solvent C7-C12	A	10000	ng

JCP 02/21/07 : 25402572 / 10000 = 2540.2572 = 2540.3

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347042266001
Units : ng

Name : GC 19 TVH 029
Date : 29-JAN-2007 16:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	029_006	347042266006	TVH_1	29-JAN-2007 16:08	S5078 (1000X), S5029 (5000X)
L2	029_007	347042266007	TVH_2	29-JAN-2007 16:46	S5077 (1000X), S5029 (5000X)
L3	029_008	347042266008	TVH_3	29-JAN-2007 17:23	S5076 (1000X), S5029 (5000X)
L4	029_009	347042266009	TVH_4	29-JAN-2007 18:01	S5075 (2000X), S5029 (5000X)
L5	029_010	347042266010	TVH_5	29-JAN-2007 18:39	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1459.9	1490.6	1511.8	1702.2	1681.0	AVRG		6.37E-4		1569.1	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347042266001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 347042266001

Name : GC 19 TVH 029
Cal Date: 29-JAN-2007

ICV 347042266012 (029_012 29-JAN-2007) stds: S5203 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1569.1	1513.0	10000	9643	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8021B

Inst : GC19
Calnum: 347094532001
Units : ng

Name : GC19 MBTXE 065
Date : 07-MAR-2007 00:19
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_015	347094532015	BTXE_1	07-MAR-2007 00:19	S5559 (1000X), S5345 (5000X)
L2	065_016	347094532016	BTXE_2	07-MAR-2007 00:57	S5558 (1250X), S5345 (5000X)
L3	065_017	347094532017	BTXE_3	07-MAR-2007 01:34	S5558 (500X), S5345 (5000X)
L4	065_018	347094532018	BTXE_4	07-MAR-2007 02:12	S5558 (125X), S5345 (5000X)
L5	065_019	347094532019	BTXE_5	07-MAR-2007 02:50	S5557 (1000X), S5345 (5000X)
L6	065_020	347094532020	BTXE_6	07-MAR-2007 03:27	S5557 (500X), S5345 (5000X)
L7	065_021	347094532021	BTXE_7	07-MAR-2007 04:05	S5557 (250X), S5345 (5000X)
L8	065_022	347094532022	MTBE_7	07-MAR-2007 04:43	S4993 (500X), S5345 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		3844.7	2928.8	2729.5	2707.7	2723.5	2789.1	2700.5	AVRG		3.43E-4		2917.7	14	0.995	20	
Benzene	B	15283	14070	13944	13606	13542	13399	13426		AVRG		7.20E-5		13895	5	0.995	20	
Toluene	B	17218	13683	13277	12748	12668	12299	12327		AVRG		7.43E-5		13460	13	0.995	20	
Ethylbenzene	B	12304	10889	11222	10989	11072	10619	10982		AVRG		8.97E-5		11154	5	0.995	20	
m,p-Xylenes	B	17544	14979	14768	14800	14896	14597	14193		AVRG		6.62E-5		15111	7	0.995	20	
o-Xylene	B	11831	10709	10758	10813	10894	10576	10704		AVRG		9.18E-5		10898	4	0.995	20	
MTBE	C		1161.4	849.60	882.72	1003.0	1059.5	1121.2	1126.9	AVRG		9.72E-4		1029.2	12	0.995	20	
Benzene	C	3050.8	2644.0	2630.1	2881.1	3091.0	3125.4	3166.7		AVRG		3.40E-4		2941.3	8	0.995	20	
Toluene	C	2697.2	2425.0	2498.8	2660.0	2896.6	2894.8	2940.4		AVRG		3.68E-4		2716.1	8	0.995	20	
Ethylbenzene	C	2160.4	2122.9	2208.3	2377.6	2637.4	2615.1	2656.7		AVRG		4.17E-4		2396.9	10	0.995	20	
m,p-Xylenes	C	2953.2	2781.4	2898.4	3066.5	3354.7	3334.8	3386.1		AVRG		3.21E-4		3110.7	8	0.995	20	
o-Xylene	C	2044.4	2043.3	2070.3	2247.6	2482.0	2485.6	2568.8		AVRG		4.39E-4		2277.4	10	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Units
MTBE	B		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	B	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
MTBE	C		10.000	25.000	100.00	500.00	1000.0	2000.0	5000.0	ng
Benzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Toluene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
Ethylbenzene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
m,p-Xylenes	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng
o-Xylene	C	2.5000	10.000	25.000	100.00	500.00	1000.0	2000.0		ng

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347094532001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCVOA Water
EPA 8021B

Inst : GC19
Calnum : 347094532001

Name : GC19 MBTXE 065
Cal Date: 07-MAR-2007

ICV 347094532024 (065_024 07-MAR-2007) stds: S5206 (1000X), S5345 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	2917.7	2567.6	100.0	88.00	ng	-12	15	
Benzene	B	13895	14504	100.0	104.4	ng	4	15	
Toluene	B	13460	13478	100.0	100.1	ng	0	15	
Ethylbenzene	B	11154	11607	100.0	104.1	ng	4	15	
m,p-Xylenes	B	15111	13169	200.0	174.3	ng	-13	15	
o-Xylene	B	10898	10825	100.0	99.33	ng	-1	15	
MTBE	C	1029.2	949.05	100.0	92.21	ng	-8	15	
Benzene	C	2941.3	3165.2	100.0	107.6	ng	8	15	
Toluene	C	2716.1	2916.1	100.0	107.4	ng	7	15	
Ethylbenzene	C	2396.9	2583.1	100.0	107.8	ng	8	15	
m,p-Xylenes	C	3110.7	2985.0	200.0	191.9	ng	-4	15	
o-Xylene	C	2277.4	2318.9	100.0	101.8	ng	2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347094532002
Units : ng

Name : GC19 TFT/BFB 065
Date : 07-MAR-2007 09:08
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	065_027	347094532027	TFT/BFB_1	07-MAR-2007 09:08	S5343 (5000X)
L2	065_028	347094532028	TFT/BFB_2	07-MAR-2007 09:48	S5344 (5000X)
L3	065_029	347094532029	TFT/BFB_3	07-MAR-2007 10:26	S5665 (5000X)
L4	065_030	347094532030	TFT/BFB_4	07-MAR-2007 11:04	S5346 (5000X)
L5	065_031	347094532031	TFT/BFB_5	07-MAR-2007 11:51	S5347 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1826.5	1624.8	1951.7	1889.3	1699.3	AVRG		5.56E-4		1798.3	7	0.995	20	
Bromofluorobenzene (FID)	A	788.41	783.36	1016.4	990.66	931.50	AVRG		0.00111		902.06	12	0.995	20	
Trifluorotoluene (PID)	B	4840.6	4318.4	5159.2	4899.1	4464.0	AVRG		2.11E-4		4736.3	7	0.995	20	
Bromofluorobenzene (PID)	B	6754.1	6717.9	8691.5	8480.4	7857.3	AVRG		1.30E-4		7700.2	12	0.995	20	
Trifluorotoluene (PID)	C	976.64	880.75	1115.3	1078.4	999.08	AVRG		9.90E-4		1010.0	9	0.995	20	
Bromofluorobenzene (PID)	C	1447.6	1451.4	1943.2	1912.3	1774.9	AVRG		5.86E-4		1705.9	14	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	B	150.00	225.00	450.00	675.00	950.00	ng
Trifluorotoluene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (PID)	C	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 03/07/07 Reviewer: _____ Date: _____

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC379843 IDF : 1.0
Seqnum : 317112989003.1 File : 078_003 Time : 19-MAR-2007 11:09
Standards: S5716 (1000X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317104369002	14-MAR-2007	2704.0	2323.6	10000	8593	ng	-14	15	u
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2559.0	450.0	522.9	ng	**16**	15	c+ u
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1519.7	450.0	511.5	ng	14	15	u
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	881.30	450.0	522.2	ng	**16**	15	c+
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	9524.9	450.0	538.0	ng	**20**	15	c+
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1798.1	450.0	499.6	ng	11	15	
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	17442	450.0	511.9	ng	14	15	

JCP 03/20/07 [Trifluorotoluene (FID) A]: Passes limits of 74-135% [general version]

JCP 03/20/07 : Trifluorotoluene (PID) B and C pass limits of 65-135% [general version]

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV u=use

317112989003.1

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC379842 IDF : 1.0
Seqnum : 317112989005.1 File : 078_005 Time : 19-MAR-2007 13:10
Standards: S5313 (1000X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	C	317104369001	13-MAR-2007	1341.1	1153.2	100.0	85.99	ng	-14	15	u
MTBE	B	317104369001	13-MAR-2007	12693	13539	100.0	106.7	ng	7	15	
Benzene	C	317104369001	13-MAR-2007	3109.6	3176.8	100.0	102.2	ng	2	15	u
Benzene	B	317104369001	13-MAR-2007	29975	33711	100.0	112.5	ng	12	15	
Toluene	C	317104369001	13-MAR-2007	2816.7	2879.6	100.0	102.2	ng	2	15	u
Toluene	B	317104369001	13-MAR-2007	30666	31802	100.0	103.7	ng	4	15	
Ethylbenzene	C	317104369001	13-MAR-2007	2578.9	2617.7	100.0	101.5	ng	2	15	u
Ethylbenzene	B	317104369001	13-MAR-2007	24302	27190	100.0	111.9	ng	12	15	
m,p-Xylenes	C	317104369001	13-MAR-2007	3478.6	3409.1	100.0	98.00	ng	-2	15	u
m,p-Xylenes	B	317104369001	13-MAR-2007	35188	38764	100.0	110.2	ng	10	15	
o-Xylene	C	317104369001	13-MAR-2007	2632.7	2518.1	100.0	95.64	ng	-4	15	u
o-Xylene	B	317104369001	13-MAR-2007	25380	28032	100.0	110.4	ng	10	15	
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2280.9	450.0	466.0	ng	4	15	
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1396.1	450.0	469.9	ng	4	15	
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	743.49	450.0	440.5	ng	-2	15	u
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	8671.1	450.0	489.8	ng	9	15	
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1645.7	450.0	457.3	ng	2	15	u
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	16963	450.0	497.8	ng	11	15	

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

u=use

317112989005.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: MBTXE IDF : 1.0
Seqnum : 317112989014 File : 078_014 Time : 19-MAR-2007 20:35
Standards: S5313 (666.7X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2358.6	450.0	481.9	ng	7	15	
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1459.0	450.0	491.1	ng	9	15	
MTBE	B	317104369001	13-MAR-2007	12693	13081	150.0	154.6	ng	3	15	
Benzene	B	317104369001	13-MAR-2007	29975	33630	150.0	168.3	ng	12	15	
Toluene	B	317104369001	13-MAR-2007	30666	31904	150.0	156.1	ng	4	15	
Ethylbenzene	B	317104369001	13-MAR-2007	24302	26948	150.0	166.3	ng	11	15	
m,p-Xylenes	B	317104369001	13-MAR-2007	35188	38789	150.0	165.3	ng	10	15	
o-Xylene	B	317104369001	13-MAR-2007	25380	28876	150.0	170.7	ng	14	15	
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	8498.5	450.0	480.1	ng	7	15	
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	17293	450.0	507.5	ng	13	15	
MTBE	C	317104369001	13-MAR-2007	1341.1	1303.7	150.0	145.8	ng	-3	15	
Benzene	C	317104369001	13-MAR-2007	3109.6	3565.0	150.0	172.0	ng	15	15	
Toluene	C	317104369001	13-MAR-2007	2816.7	3220.2	150.0	171.5	ng	14	15	
Ethylbenzene	C	317104369001	13-MAR-2007	2578.9	2950.8	150.0	171.6	ng	14	15	
m,p-Xylenes	C	317104369001	13-MAR-2007	3478.6	3840.2	150.0	165.6	ng	10	15	
o-Xylene	C	317104369001	13-MAR-2007	2632.7	2867.7	150.0	163.4	ng	9	15	
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	793.39	450.0	470.1	ng	4	15	
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1773.6	450.0	492.8	ng	10	15	

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 317112989016 File : 078_016 Time : 19-MAR-2007 21:46
Standards: S5716 (666.7X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317104369002	14-MAR-2007	2704.0	2382.7	15000	13220	ng	-12	15	
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2620.9	450.0	535.5	ng	**19**	15	c+
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1557.0	450.0	524.1	ng	**16**	15	c+
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	12272	450.0	693.2	ng	**54**	15	c+
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	17902	450.0	525.4	ng	**17**	15	c+
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	1266.0	450.0	750.2	ng	**67**	15	c+
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1880.4	450.0	522.5	ng	**16**	15	c+

JCP 03/20/07 [Trifluorotoluene (FID) A]: Passes limits of 74-135%

JCP 03/20/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/20/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

317112989016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 317112989017 File : 078_017 Time : 19-MAR-2007 22:22
Standards: S5716 (666.7X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317104369002	14-MAR-2007	2704.0	2357.1	15000	13080	ng	-13	15	
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2601.4	450.0	531.5	ng	**18**	15	c+
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1584.2	450.0	533.2	ng	**18**	15	c+
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	12395	450.0	700.2	ng	**56**	15	c+
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	17972	450.0	527.4	ng	**17**	15	c+
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	1304.7	450.0	773.1	ng	**72**	15	c+
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1925.7	450.0	535.1	ng	**19**	15	c+

JCP 03/20/07 [Trifluorotoluene (FID) A]: Passes limits of 74-135%

JCP 03/20/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/20/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

317112989017

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: MBTXE IDF : 1.0
Seqnum : 317112989029 File : 078_029 Time : 20-MAR-2007 05:27
Standards: S5313 (500X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2328.6	450.0	475.8	ng	6	15	
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1434.9	450.0	483.0	ng	7	15	
MTBE	B	317104369001	13-MAR-2007	12693	14054	200.0	221.4	ng	11	15	
Benzene	B	317104369001	13-MAR-2007	29975	34639	200.0	231.1	ng	**16**	15	c+ ***
Toluene	B	317104369001	13-MAR-2007	30666	32180	200.0	209.9	ng	5	15	
Ethylbenzene	B	317104369001	13-MAR-2007	24302	27773	200.0	228.6	ng	14	15	
m,p-Xylenes	B	317104369001	13-MAR-2007	35188	37540	200.0	213.4	ng	7	15	
o-Xylene	B	317104369001	13-MAR-2007	25380	28524	200.0	224.8	ng	12	15	
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	8751.4	450.0	494.4	ng	10	15	
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	17422	450.0	511.3	ng	14	15	
MTBE	C	317104369001	13-MAR-2007	1341.1	1304.6	200.0	194.6	ng	-3	15	
Benzene	C	317104369001	13-MAR-2007	3109.6	3517.7	200.0	226.2	ng	13	15	
Toluene	C	317104369001	13-MAR-2007	2816.7	3173.5	200.0	225.3	ng	13	15	
Ethylbenzene	C	317104369001	13-MAR-2007	2578.9	2861.2	200.0	221.9	ng	11	15	
m,p-Xylenes	C	317104369001	13-MAR-2007	3478.6	3689.7	200.0	212.1	ng	6	15	
o-Xylene	C	317104369001	13-MAR-2007	2632.7	2800.4	200.0	212.7	ng	6	15	
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	769.16	450.0	455.8	ng	1	15	
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1743.2	450.0	484.4	ng	8	15	

JCP 03/20/07 : Benzene fails high on ChB. Report Benzene from ChC. ChB is for confirm only.

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

317112989029

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 317112989031 File : 078_031 Time : 20-MAR-2007 06:38
Standards: S5716 (500X), S5665 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317104369002	14-MAR-2007	2704.0	2375.2	20000	17570	ng	-12	15	
Trifluorotoluene (FID)	A	317102780001	12-MAR-2007	2202.4	2795.4	450.0	571.2	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	317102780001	12-MAR-2007	1336.9	1608.2	450.0	541.3	ng	**20**	15	c+
Trifluorotoluene (PID)	B	317102780001	12-MAR-2007	7966.3	13309	450.0	751.8	ng	**67**	15	c+
Bromofluorobenzene (PID)	B	317102780001	12-MAR-2007	15333	18060	450.0	530.0	ng	**18**	15	c+
Trifluorotoluene (PID)	C	317102780001	12-MAR-2007	759.44	1454.3	450.0	861.7	ng	**91**	15	c+
Bromofluorobenzene (PID)	C	317102780001	12-MAR-2007	1619.5	1957.8	450.0	544.0	ng	**21**	15	c+

JCP 03/20/07 [Trifluorotoluene (FID) A]: Passes limits of 74-135%

JCP 03/20/07 [Bromofluorobenzene (FID) A]: Passes limits of 78-131%

JCP 03/20/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

317112989031

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: QC379611 IDF : 1.0
Seqnum : 327108649002.1 File : 075_002 Time : 16-MAR-2007 10:49
Standards: S5716 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1495.9	10000	8542	ng	-15	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2229.3	450.0	446.7	ng	-1	15	u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1831.6	450.0	472.2	ng	5	15	u
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1676.8	450.0	2487 >LR	ng	**453**	15	>LR c+ ***
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	651.97	450.0	178.2	ng	**-60**	15	c-
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4203.5	450.0	2221 >LR	ng	**394**	15	>LR c+ ***
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1723.1	450.0	183.4	ng	**-59**	15	c-

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

+=high bias -=low bias >LR=overrange c=CCV u=use

327108649002.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327108649004 File : 075_004 Time : 16-MAR-2007 12:53
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2703.1	10000	10640	ng	6	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2175.6	450.0	436.0	ng	-3	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2467.9	450.0	636.3	ng	**41**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	646.65	450.0	176.7	ng	**-61**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1971.1	450.0	209.8	ng	**-53**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1585.1	450.0	2351	ng	**423**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5631.3	450.0	2975	ng	**561**	15	>LR c+ ***

JCP 03/19/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias -=low bias >LR=overrange c=CCV

327108649004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327108649015 File : 075_015 Time : 16-MAR-2007 20:57
Standards: S5716 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1567.1	15000	13420	ng	-11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2636.6	450.0	528.3	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1923.3	450.0	495.8	ng	10	15	
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	751.38	450.0	205.3	ng	**-54**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1775.6	450.0	189.0	ng	**-58**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	2045.2	450.0	3034	ng	**574**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	4368.5	450.0	2308	ng	**413**	15	>LR c+ ***

JCP 03/19/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias -=low bias >LR=overrange c=CCV

327108649015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327108649016 File : 075_016 Time : 16-MAR-2007 21:33
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2586.7	10000	10180	ng	2	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2273.6	450.0	455.6	ng	1	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2461.7	450.0	634.7	ng	**41**	15	c+
Trifluorotoluene (PID)	B	327026521002	19-JAN-2007	1646.8	636.46	450.0	173.9	ng	**-61**	15	c-
Bromofluorobenzene (PID)	B	327026521002	19-JAN-2007	4227.0	1888.3	450.0	201.0	ng	**-55**	15	c-
Trifluorotoluene (PID)	C	327026521002	19-JAN-2007	303.35	1523.9	450.0	2261	ng	**402**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	327026521002	19-JAN-2007	851.68	5291.4	450.0	2796	ng	**521**	15	>LR c+ ***

JCP 03/19/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias -=low bias >LR=overrange c=CCV

327108649016

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC379616 IDF : 1.0
Seqnum : 347109021002.1 File : 075_002 Time : 16-MAR-2007 14:49
Standards: S5716 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1393.2	10000	8879	ng	-11	15	u
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1754.0	450.0	438.9	ng	-2	15	u
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	966.47	450.0	482.1	ng	7	15	u
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5179.9	450.0	492.2	ng	9	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1055.5	450.0	470.2	ng	4	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8219.4	450.0	480.3	ng	7	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1688.1	450.0	445.3	ng	-1	15	

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

u=use

347109021002.1

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC379615 IDF : 1.0
Seqnum : 347109021003.1 File : 075_003 Time : 16-MAR-2007 15:27
Standards: S5313 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	347094532001	07-MAR-2007	2917.7	3109.9	100.0	106.6	ng	7	15	u
MTBE	C	347094532001	07-MAR-2007	1029.2	898.26	100.0	87.28	ng	-13	15	
Benzene	B	347094532001	07-MAR-2007	13895	14308	100.0	103.0	ng	3	15	u
Benzene	C	347094532001	07-MAR-2007	2941.3	2790.5	100.0	94.87	ng	-5	15	
Toluene	B	347094532001	07-MAR-2007	13460	13880	100.0	103.1	ng	3	15	u
Toluene	C	347094532001	07-MAR-2007	2716.1	2658.0	100.0	97.86	ng	-2	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11701	100.0	104.9	ng	5	15	u
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2381.7	100.0	99.36	ng	-1	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	16015	100.0	106.0	ng	6	15	u
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	3113.1	100.0	100.1	ng	0	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11510	100.0	105.6	ng	6	15	u
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2237.5	100.0	98.25	ng	-2	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1765.5	450.0	441.8	ng	-2	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	934.92	450.0	466.4	ng	4	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4578.5	450.0	435.0	ng	-3	15	u
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	898.68	450.0	400.4	ng	-11	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7754.1	450.0	453.1	ng	1	15	u
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1593.5	450.0	420.4	ng	-7	15	

Analyst: JCP Date: 03/20/07 Reviewer: CW Date: 03/20/07

u=use

347109021003.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347109021012 File : 075_012 Time : 16-MAR-2007 21:50
Standards: S5313 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1688.6	450.0	422.5	ng	-6	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	874.20	450.0	436.1	ng	-3	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2977.9	150.0	153.1	ng	2	15	
Benzene	B	347094532001	07-MAR-2007	13895	14048	150.0	151.6	ng	1	15	
Toluene	B	347094532001	07-MAR-2007	13460	13368	150.0	149.0	ng	-1	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11248	150.0	151.3	ng	1	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15412	150.0	153.0	ng	2	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11063	150.0	152.3	ng	2	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4401.7	450.0	418.2	ng	-7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7404.3	450.0	432.7	ng	-4	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	730.43	150.0	106.5	ng	**-29**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	2702.3	150.0	137.8	ng	-8	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2555.1	150.0	141.1	ng	-6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2370.9	150.0	148.4	ng	-1	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	2965.2	150.0	143.0	ng	-5	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2182.8	150.0	143.8	ng	-4	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	836.90	450.0	372.9	ng	**-17**	15	c-
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1461.8	450.0	385.6	ng	-14	15	

MJM 03/19/07 [Trifluorotoluene (PID) B]: Passes 65-135% control limits range. (confirm channel C)

MJM 03/19/07 [MTBE B]: MTBE fail low on confirm channel C, Samples w/ hits for analyte confirm ok w/in bracket or else flagged for rerun.

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

-=low bias c=CCV

347109021012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347109021014 File : 075_014 Time : 16-MAR-2007 23:05
Standards: S5716 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1470.3	15000	14060	ng	-6	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1847.7	450.0	462.3	ng	3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1058.4	450.0	528.0	ng	**17**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5056.2	450.0	480.4	ng	7	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8526.6	450.0	498.3	ng	11	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1161.2	450.0	517.4	ng	15	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1749.3	450.0	461.4	ng	3	15	

MJM 03/19/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits range.

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

347109021014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 347109021026 File : 075_026 Time : 17-MAR-2007 06:37
Standards: S5313 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1752.5	450.0	438.5	ng	-3	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	945.59	450.0	471.7	ng	5	15	
MTBE	B	347094532001	07-MAR-2007	2917.7	2622.1	200.0	179.7	ng	-10	15	
Benzene	B	347094532001	07-MAR-2007	13895	13773	200.0	198.2	ng	-1	15	
Toluene	B	347094532001	07-MAR-2007	13460	13328	200.0	198.0	ng	-1	15	
Ethylbenzene	B	347094532001	07-MAR-2007	11154	11562	200.0	207.3	ng	4	15	
m,p-Xylenes	B	347094532001	07-MAR-2007	15111	15298	200.0	202.5	ng	1	15	
o-Xylene	B	347094532001	07-MAR-2007	10898	11196	200.0	205.5	ng	3	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4691.6	450.0	445.8	ng	-1	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	8150.1	450.0	476.3	ng	6	15	
MTBE	C	347094532001	07-MAR-2007	1029.2	492.98	200.0	95.80	ng	**-52**	15	c- ***
Benzene	C	347094532001	07-MAR-2007	2941.3	2708.7	200.0	184.2	ng	-8	15	
Toluene	C	347094532001	07-MAR-2007	2716.1	2564.7	200.0	188.9	ng	-6	15	
Ethylbenzene	C	347094532001	07-MAR-2007	2396.9	2331.0	200.0	194.5	ng	-3	15	
m,p-Xylenes	C	347094532001	07-MAR-2007	3110.7	2967.3	200.0	190.8	ng	-5	15	
o-Xylene	C	347094532001	07-MAR-2007	2277.4	2168.5	200.0	190.4	ng	-5	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	880.98	450.0	392.5	ng	-13	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1602.1	450.0	422.6	ng	-6	15	

MJM 03/19/07 [MTBE B]: MTBE fail low on confirm channel C, Samples w/ hits for analyte confirm ok w/in bracket or else flagged for rerun.

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

-=low bias c=CCV

347109021026

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347109021028 File : 075_028 Time : 17-MAR-2007 07:52
Standards: S5716 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1434.5	20000	18280	ng	-9	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1818.4	450.0	455.0	ng	1	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1060.6	450.0	529.1	ng	**18**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5042.1	450.0	479.1	ng	6	15	
Bromofluorobenzene (PID)	B'	347094532002	07-MAR-2007	7700.2	8336.9	450.0	487.2	ng	8	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1175.0	450.0	523.5	ng	**16**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1691.4	450.0	446.2	ng	-1	15	

MJM 03/19/07 : PID surrogates are not applicable.

MJM 03/19/07 [Bromofluorobenzene (FID) A]: Passes 65-135% control limits range.

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

347109021028

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347109021029 File : 075_029 Time : 17-MAR-2007 08:30
Standards: S5716 (500X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1415.5	20000	18040	ng	-10	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1676.1	450.0	419.4	ng	-7	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	973.40	450.0	485.6	ng	8	15	
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	4654.3	450.0	442.2	ng	-2	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	7596.3	450.0	443.9	ng	-1	15	
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1114.2	450.0	496.4	ng	10	15	
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1563.8	450.0	412.5	ng	-8	15	

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

347109021029

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 347109021037 File : 075_037 Time : 17-MAR-2007 13:30
Standards: S5716 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347042266001	29-JAN-2007	1569.1	1453.3	15000	13890	ng	-7	15	
Trifluorotoluene (FID)	A	347094532002	07-MAR-2007	1798.3	1965.6	450.0	491.9	ng	9	15	
Bromofluorobenzene (FID)	A	347094532002	07-MAR-2007	902.06	1139.5	450.0	568.4	ng	**26**	15	c+
Trifluorotoluene (PID)	B	347094532002	07-MAR-2007	4736.3	5417.8	450.0	514.8	ng	14	15	
Bromofluorobenzene (PID)	B	347094532002	07-MAR-2007	7700.2	9229.1	450.0	539.3	ng	**20**	15	c+
Trifluorotoluene (PID)	C	347094532002	07-MAR-2007	1010.0	1211.6	450.0	539.8	ng	**20**	15	c+
Bromofluorobenzene (PID)	C	347094532002	07-MAR-2007	1705.9	1885.3	450.0	497.3	ng	11	15	

MJM 03/19/07 [Bromofluorobenzene (FID) A]: Passes 65-135% control limits range.

MJM 03/19/07 : PID surrogates are not applicable.

Analyst: MJM Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

347109021037

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	018_001	X	IB			01/18/07 10:01	1.0	1	
002	018_002	X	IB			01/18/07 10:49	1.0	1	
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1	
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1	
005	018_005	X	IB			01/18/07 18:01	1.0	1	
006	018_006	X	IB			01/18/07 18:37	1.0	1	
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1	
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1	
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1	
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1	
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1	
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1	
013	018_013	X	IB			01/18/07 22:54	1.0	1	
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1	
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1	
016	018_016	X	IB			01/19/07 00:43	1.0	1	
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1	
018	018_018	X	IB			01/19/07 01:56	1.0	1	
019	018_019	X	IB			01/19/07 02:32	1.0	1	
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1	
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1	
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1	
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1	
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1	
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1	
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1	
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1	
028	018_028	X	IB			01/19/07 08:41	1.0	1	
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1	
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1	
031	018_031	X	IB			01/19/07 12:18	1.0	1	
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15	
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16	
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17	
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18	
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19	

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347042266

Instrument : GC19 Begun : 01/29/07 08:26
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	029_001	X	IB			01/29/07 08:26	1.0	1	
002	029_002	X	CCV			01/29/07 09:20	1.0	2 1	
003	029_003	X	CCV			01/29/07 09:57	1.0	3 1	
004	029_004	X	IB			01/29/07 14:53	1.0	1	
005	029_005	X	TVH_1			01/29/07 15:30	1.0	4 1	
006	029_006	ICAL	TVH_1			01/29/07 16:08	1.0	4 1	
007	029_007	ICAL	TVH_2			01/29/07 16:46	1.0	5 1	
008	029_008	ICAL	TVH_3			01/29/07 17:23	1.0	6 1	
009	029_009	ICAL	TVH_4			01/29/07 18:01	1.0	7 1	
010	029_010	ICAL	TVH_5			01/29/07 18:39	1.0	7 1	
011	029_011	X	IB			01/29/07 19:16	1.0	1	
012	029_012	ICV	TVH			01/29/07 19:54	1.0	3 1	
013	029_013	X	ICV			01/29/07 20:32	1.0	3 1	
014	029_014	X	IB			01/29/07 21:09	1.0	1	
015	029_015	X	CARBMARK			01/29/07 21:47	1.0	8 9 1	
016	029_016	X	IB			01/29/07 22:25	1.0	1	
017	029_017	X	IB			01/29/07 23:02	1.0	1	
018	029_018	X	BTXE_1			01/29/07 23:40	1.0	10 1	
019	029_019	ICAL	BTXE_1			01/30/07 00:17	1.0	10 1	
020	029_020	ICAL	MTBE_1			01/30/07 00:55	1.0	11 1	
021	029_021	ICAL	MBTXE_2			01/30/07 01:33	1.0	11 1	
022	029_022	ICAL	MBTXE_3			01/30/07 02:10	1.0	11 1	
023	029_023	ICAL	MBTXE_4			01/30/07 02:48	1.0	12 1	
024	029_024	ICAL	MBTXE_5			01/30/07 03:26	1.0	12 1	
025	029_025	ICAL	MBTXE_6			01/30/07 04:03	1.0	12 1	
026	029_026	ICAL	MTBE_7			01/30/07 04:41	1.0	13 1	
027	029_027	X	IB			01/30/07 05:18	1.0	1	
028	029_028	ICV	MBTXE			01/30/07 05:56	1.0	14 1	
029	029_029	X	ICV			01/30/07 06:34	1.0	14 1	
030	029_030	X	IB			01/30/07 08:29	1.0	1	
031	029_031	ICAL	TFT/BFB_1			01/30/07 09:06	1.0	15	
032	029_032	ICAL	TFT/BFB_2			01/30/07 09:46	1.0	16	
033	029_033	ICAL	TFT/BFB_3			01/30/07 10:24	1.0	17	
034	029_034	ICAL	TFT/BFB_4			01/30/07 11:02	1.0	18	
035	029_035	ICAL	TFT/BFB_5			01/30/07 12:15	1.0	19	

Analyst: JCP Date: 01/30/07 Reviewer: CW Date: 01/31/07

Standards used: 1=S5029 2=S5313 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S5343 16=S5344 17=S5345 18=S5346 19=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327063206

Instrument : GC07 Begun : 02/12/07 08:31
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	043_001	X	IB			02/12/07 08:31	1.0	1
002	043_002	X	CCV			02/12/07 09:08	1.0	2 1
003	043_003	X	CCV			02/12/07 09:44	1.0	3 1
004	043_004	X	IB			02/12/07 11:42	1.0	1
005	043_005	X	IB			02/12/07 15:25	1.0	1
006	043_006	X	ICAL			02/12/07 16:01	1.0	4 1
007	043_007	ICAL	TVH_1			02/12/07 16:37	1.0	4 1
008	043_008	ICAL	TVH_2			02/12/07 17:14	1.0	5 1
009	043_009	ICAL	TVH_3			02/12/07 17:50	1.0	6 1
010	043_010	ICAL	TVH_4			02/12/07 18:26	1.0	7 1
011	043_011	X	TVH_5			02/12/07 19:02	1.0	7 1
012	043_012	X	IB			02/12/07 19:38	1.0	1
013	043_013	X	ICV			02/12/07 20:14	1.0	3 1
014	043_014	X	ICV			02/12/07 20:50	1.0	3 1
015	043_015	X	IB			02/12/07 21:26	1.0	1
016	043_016	CMARKER	CARBMARK			02/12/07 22:03	1.0	8 9 1
017	043_017	ICAL	TVH_5			02/13/07 12:20	1.0	7 1
018	043_018	X	IB			02/13/07 12:56	1.0	1
019	043_019	ICV	TVH			02/13/07 13:32	1.0	3 1

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327074193

Instrument : GC07 Begun : 02/20/07 12:33
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	051_001	X	IB			02/20/07 12:33	1.0	1
002	051_002	X	CCV			02/20/07 13:10	1.0	2 1
003	051_003	CCV/LCS	QC375803	Soil	122278	02/20/07 13:46	1.0	3 1
004	051_004	ICAL	STODD			02/20/07 14:22	1.0	4 1
005	051_005	BLANK	QC375802	Soil	122278	02/20/07 15:14	1.0	1
006	051_006	MS	QC375804	Soil	122278	02/20/07 15:50	1.0	3 1
007	051_007	MSD	QC375805	Soil	122278	02/20/07 16:27	1.0	3 1
008	051_008	MSS	192789-001	Soil	122278	02/20/07 17:30	1.0	1
009	051_009	SAMPLE	192789-002	Soil	122278	02/20/07 18:06	1.0	1
010	051_010	SAMPLE	192789-003	Soil	122278	02/20/07 18:42	1.0	1
011	051_011	SAMPLE	192789-004	Soil	122278	02/20/07 19:18	1.0	1
012	051_012	CCV	TVH			02/20/07 19:54	1.0	3 1
013	051_013	CCV	TVH			02/20/07 20:31	1.0	3 1
014	051_014	CCV	STODD			02/20/07 21:07	1.0	4 1
015	051_015	CCV	STODD			02/20/07 21:43	1.0	4 1
016	051_016	CCV	JP4			02/20/07 22:19	1.0	5 1
017	051_017	CCV	JP4			02/20/07 22:55	1.0	5 1
018	051_018	MB	QC375836	Water	122286	02/20/07 23:32	1.0	1
019	051_019	LCS	QC375837	Water	122286	02/21/07 00:08	666.7	1 3
020	051_020	X	192322-001		122286	02/21/07 00:44	1.0	6 1
021	051_021	MDL	192322-001	Water	122286	02/21/07 01:20	1.0	6 1
022	051_022	MDL	192322-002	Water	122286	02/21/07 01:56	1.0	6 1
023	051_023	MDL	192322-003	Water	122286	02/21/07 02:32	1.0	6 1
024	051_024	MDL	192322-004	Water	122286	02/21/07 03:08	1.0	6 1
025	051_025	MDL	192322-005	Water	122286	02/21/07 03:45	1.0	6 1
026	051_026	MDL	192322-006	Water	122286	02/21/07 04:21	1.0	6 1
027	051_027	MDL	192322-007	Water	122286	02/21/07 04:57	1.0	6 1
028	051_028	CCV	TVH			02/21/07 05:33	1.0	3 1
029	051_029	CCV	TVH			02/21/07 06:09	1.0	3 1
030	051_030	CCV	JP4			02/21/07 06:45	1.0	5 1
031	051_031	CCV	JP4			02/21/07 07:21	1.0	5 1

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S4942 5=S4690 6=S4692

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347094532

Instrument : GC19 Begun : 03/06/07 15:32
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	065_001	X	IB			03/06/07 15:32	1.0	1	
002	065_002	X	ICAL			03/06/07 16:09	1.0	2 1	
003	065_003	X	ICAL			03/06/07 16:47	1.0	2 1	
004	065_004	X	ICAL			03/06/07 17:25	1.0	3 1	
005	065_005	X	ICAL			03/06/07 18:02	1.0	3 1	
006	065_006	X	ICAL			03/06/07 18:40	1.0	3 1	
007	065_007	X	ICAL			03/06/07 19:18	1.0	4 1	
008	065_008	X	ICAL			03/06/07 19:55	1.0	4 1	
009	065_009	X	ICAL			03/06/07 20:33	1.0	4 1	
010	065_010	X	ICAL			03/06/07 21:11	1.0	5 1	
011	065_011	X	IB			03/06/07 21:48	1.0	1	
012	065_012	X	ICV			03/06/07 22:26	1.0	6 1	
013	065_013	X	ICV			03/06/07 23:04	1.0	6 1	
014	065_014	X	IB			03/06/07 23:41	1.0	1	
015	065_015	ICAL	BTXE_1			03/07/07 00:19	1.0	2 1	
016	065_016	ICAL	BTXE_2			03/07/07 00:57	1.0	3 1	
017	065_017	ICAL	BTXE_3			03/07/07 01:34	1.0	3 1	
018	065_018	ICAL	BTXE_4			03/07/07 02:12	1.0	3 1	
019	065_019	ICAL	BTXE_5			03/07/07 02:50	1.0	4 1	
020	065_020	ICAL	BTXE_6			03/07/07 03:27	1.0	4 1	
021	065_021	ICAL	BTXE_7			03/07/07 04:05	1.0	4 1	
022	065_022	ICAL	MTBE_7			03/07/07 04:43	1.0	5 1	
023	065_023	X	IB			03/07/07 05:20	1.0	1	
024	065_024	ICV	MBTXE			03/07/07 05:58	1.0	6 1	
025	065_025	X	ICV			03/07/07 06:35	1.0	6 1	
026	065_026	X	IB			03/07/07 08:30	1.0	1	
027	065_027	ICAL	TFT/BFB_1			03/07/07 09:08	1.0	7	
028	065_028	ICAL	TFT/BFB_2			03/07/07 09:48	1.0	8	
029	065_029	ICAL	TFT/BFB_3			03/07/07 10:26	1.0	9	
030	065_030	ICAL	TFT/BFB_4			03/07/07 11:04	1.0	10	
031	065_031	ICAL	TFT/BFB_5			03/07/07 11:51	1.0	11	

Analyst: JCP Date: 03/07/07 Reviewer: MCH Date: 03/07/07

Standards used: 1=S5345 2=S5559 3=S5558 4=S5557 5=S4993 6=S5206 7=S5343 8=S5344 9=S5665 10=S5346 11=S5347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317102780

Instrument : GC05 Begun : 03/12/07 09:00
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	071_001	X	IB			03/12/07 09:00	1.0	1
002	071_002	ICAL	TFT/BFB_1			03/12/07 09:35	1.0	2
003	071_003	ICAL	TFT/BFB_2			03/12/07 10:11	1.0	3
004	071_004	ICAL	TFT/BFB_3			03/12/07 10:47	1.0	1
005	071_005	ICAL	TFT/BFB_4			03/12/07 11:36	1.0	4
006	071_006	ICAL	TFT/BFB_5			03/12/07 12:12	1.0	5
007	071_007	X	IB			03/12/07 13:16	1.0	1
008	071_008	CCV/BS	QC378658	Water	122979	03/12/07 13:52	1.0	6 1
009	071_009	CCV/LCS	QC378660	Water	122979	03/12/07 14:27	1.0	7 1
010	071_010	BLANK	QC378657	Water	122979	03/12/07 15:47	1.0	1
011	071_011	BSD	QC378659	Water	122979	03/12/07 16:23	1.0	6 1
012	071_012	SAMPLE	193250-003	Water	122979	03/12/07 16:58	1.0	1
013	071_013	MS	QC378661	Water	122979	03/12/07 17:34	1.0	7 1
014	071_014	MSD	QC378662	Water	122979	03/12/07 18:09	1.0	7 1
015	071_015	SAMPLE	193250-001	Water	122979	03/12/07 18:45	1.0	1
016	071_016	SAMPLE	193250-002	Water	122979	03/12/07 19:21	1.0	1
017	071_017	SAMPLE	193319-001	Water	122979	03/12/07 19:56	1.0	1
018	071_018	CCV	MBTXE			03/12/07 20:32	1.0	6 1
019	071_019	CCV	MBTXE			03/12/07 21:07	1.0	6 1
020	071_020	CCV	TVH			03/12/07 21:43	1.0	7 1
021	071_021	CCV	TVH			03/12/07 22:19	1.0	7 1
022	071_022	MSS	193326-001	Water	122979	03/12/07 22:54	1.0	1
023	071_023	SAMPLE	193326-002	Water	122979	03/12/07 23:30	1.0	1
024	071_024	SAMPLE	193326-003	Water	122979	03/13/07 00:05	1.0	1
025	071_025	SAMPLE	193326-004	Water	122979	03/13/07 00:41	1.0	1
026	071_026	SAMPLE	193326-005	Water	122979	03/13/07 01:16	1.0	1
027	071_027	SAMPLE	193326-006	Water	122979	03/13/07 01:52	1.0	1
028	071_028	SAMPLE	193326-007	Water	122979	03/13/07 02:27	1.0	1
029	071_029	SAMPLE	193326-008	Water	122979	03/13/07 03:03	1.0	1
030	071_030	SAMPLE	193326-009	Water	122979	03/13/07 03:39	1.0	1
031	071_031	SAMPLE	193338-001	Water	122979	03/13/07 04:14	1.0	1
032	071_032	CCV	MBTXE			03/13/07 04:50	1.0	6 1
033	071_033	CCV	MBTXE			03/13/07 05:25	1.0	6 1
034	071_034	CCV	TVH			03/13/07 06:01	1.0	7 1
035	071_035	CCV	TVH			03/13/07 06:36	1.0	7 1
036	071_036	SAMPLE	193339-003	Water	122979	03/13/07 07:12	1.0	1
037	071_037	SAMPLE	193339-005	Water	122979	03/13/07 07:47	1.0	1
038	071_038	SAMPLE	193339-006	Water	122979	03/13/07 08:23	1.0	1
039	071_039	SAMPLE	193339-007	Water	122979	03/13/07 08:58	1.0	1
040	071_040	CCV	TVH			03/13/07 10:37	1.0	7 1

JCP 03/14/07 : No MS/MSD reported for this batch. The MSS needs to re-run in a different batch.

Analyst: CW Date: 03/13/07 Reviewer: JCP Date: 03/14/07

Standards used: 1=S5665 2=S5343 3=S5344 4=S5346 5=S5347 6=S5313 7=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317104369

Instrument : GC05 Begun : 03/13/07 11:29
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	072_001	X	MBTXE			03/13/07 11:29	1.0	1 2
002	072_002	X	TVH			03/13/07 12:04	1.0	3 2
003	072_003	X	MBTXE			03/13/07 12:46	1.0	1 2
004	072_004	X	IB			03/13/07 17:03	1.0	2
005	072_005	X	IB			03/13/07 18:54	1.0	2
006	072_006	X	IB			03/13/07 19:30	1.0	2
007	072_007	X	ICAL			03/13/07 20:06	1.0	4 2
008	072_008	ICAL	BTXE 1			03/13/07 20:41	1.0	4 2
009	072_009	ICAL	BTXE 2			03/13/07 21:17	1.0	5 2
010	072_010	ICAL	BTXE 3			03/13/07 21:52	1.0	5 2
011	072_011	ICAL	BTXE 4			03/13/07 22:28	1.0	5 2
012	072_012	ICAL	BTXE 5			03/13/07 23:04	1.0	6 2
013	072_013	ICAL	BTXE 6			03/13/07 23:39	1.0	6 2
014	072_014	ICAL	MTBE 7			03/14/07 00:15	1.0	7 2
015	072_015	X	IB			03/14/07 00:50	1.0	2
016	072_016	X	MBTXE			03/14/07 01:26	1.0	8 2
017	072_017	ICV	MBTXE			03/14/07 02:02	1.0	8 2
018	072_018	X	IB			03/14/07 02:37	1.0	2
019	072_019	X	IB			03/14/07 03:13	1.0	2
020	072_020	ICAL	TVH 1			03/14/07 03:48	1.0	9 2
021	072_021	ICAL	TVH 2			03/14/07 04:24	1.0	10 2
022	072_022	ICAL	TVH 3			03/14/07 04:59	1.0	11 2
023	072_023	ICAL	TVH 4			03/14/07 05:35	1.0	12 2
024	072_024	ICAL	TVH 5			03/14/07 06:11	1.0	12 2
025	072_025	X	IB			03/14/07 06:46	1.0	2
026	072_026	ICV	TVH			03/14/07 07:22	1.0	3 2
027	072_027	X	TVH			03/14/07 07:57	1.0	3 2
028	072_028	X	IB			03/14/07 08:33	1.0	2
029	072_029	CMARKER	CARBMARK			03/14/07 09:08	1.0	13 14 2

Analyst: JCP Date: 03/14/07 Reviewer: CW Date: 03/15/07

Standards used: 1=S5313 2=S5665 3=S5365 4=S5559 5=S5558 6=S5557 7=S4993 8=S5206 9=S5078 10=S5077 11=S5076 12=S5075 13=S1645 14=S1646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327108649

Instrument : GC07 Begun : 03/16/07 10:13
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	075_001	X	IB			03/16/07 10:13	1.0	1	
002	075_002	CCV/LCS	QC379611	Water	123199	03/16/07 10:49	1.0	2 1	
003	075_003	X	IB			03/16/07 12:17	1.0	1	
004	075_004	CCV	STODD			03/16/07 12:53	1.0	3 1	
005	075_005	BLANK	QC379610	Water	123199	03/16/07 13:29	1.0	1	
006	075_006	MS	QC379612	Water	123199	03/16/07 14:06	1.0	4 1	
007	075_007	MSD	QC379613	Water	123199	03/16/07 14:42	1.0	4 1	
008	075_008	MSS	193466-007	Water	123199	03/16/07 15:18	1.0	1	
009	075_009	SAMPLE	193262-020	Water	123199	03/16/07 15:54	1.0	1	
010	075_010	SAMPLE	193277-001	Water	123199	03/16/07 16:30	1.0	1	
011	075_011	SAMPLE	193461-001	Water	123199	03/16/07 17:06	1.0	1	
012	075_012	SAMPLE	193461-003	Water	123199	03/16/07 19:08	1.0	1	
013	075_013	SAMPLE	193461-004	Water	123199	03/16/07 19:45	1.0	1	
014	075_014	X	TVH			03/16/07 20:21	1.0	2 1	
015	075_015	CCV	TVH			03/16/07 20:57	1.0	2 1	
016	075_016	CCV	STODD			03/16/07 21:33	1.0	3 1	
017	075_017	CCV	STODD			03/16/07 22:10	1.0	3 1	
018	075_018	SAMPLE	193466-001	Water	123199	03/16/07 22:46	1.0	1	
019	075_019	SAMPLE	193466-002	Water	123199	03/16/07 23:22	1.0	1	
020	075_020	SAMPLE	193466-004	Water	123199	03/16/07 23:58	1.0	1	pH > 2
021	075_021	SAMPLE	193466-005	Water	123199	03/17/07 00:35	1.0	1	
022	075_022	SAMPLE	193466-006	Water	123199	03/17/07 01:11	1.0	1	
023	075_023	SAMPLE	193466-008	Water	123199	03/17/07 01:47	1.0	1	
024	075_024	X	TVH			03/17/07 02:24	1.0	2 1	
025	075_025	CCV	TVH			03/17/07 03:00	1.0	2 1	

Analyst: JCP Date: 03/19/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5716 3=S4942 4=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347109021

Instrument : GC19 Begun : 03/16/07 14:12
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	075_001	X	CCV			03/16/07 14:12	1.0	1 2
002	075_002	CCV/LCS	QC379616	Water	123200	03/16/07 14:49	1.0	3 2
003	075_003	CCV/LCS	QC379615	Water	123200	03/16/07 15:27	1.0	1 2
004	075_004	BLANK	QC379614	Water	123200	03/16/07 16:23	1.0	2
005	075_005	MS	QC379645	Water	123200	03/16/07 17:01	1.0	4 2
006	075_006	MSD	QC379646	Water	123200	03/16/07 17:39	1.0	4 2
007	075_007	MSS	193262-004	Water	123200	03/16/07 18:17	1.0	2
008	075_008	SAMPLE	193262-005	Water	123200	03/16/07 19:19	1.0	2
009	075_009	SAMPLE	193262-008	Water	123200	03/16/07 19:57	1.0	2
010	075_010	SAMPLE	193262-010	Water	123200	03/16/07 20:34	1.0	2
011	075_011	SAMPLE	193262-011	Water	123200	03/16/07 21:12	1.0	2
012	075_012	CCV	MBTXE			03/16/07 21:50	1.0	1 2
013	075_013	CCV	MBTXE			03/16/07 22:27	1.0	1 2
014	075_014	CCV	TVH			03/16/07 23:05	1.0	3 2
015	075_015	X	TVH			03/16/07 23:42	1.0	3 2
016	075_016	SAMPLE	193262-012	Water	123200	03/17/07 00:20	1.0	2
017	075_017	SAMPLE	193262-013	Water	123200	03/17/07 00:58	1.0	2
018	075_018	SAMPLE	193262-014	Water	123200	03/17/07 01:36	1.0	2
019	075_019	SAMPLE	193262-015	Water	123200	03/17/07 02:13	1.0	2
020	075_020	SAMPLE	193262-016	Water	123200	03/17/07 02:51	1.0	2
021	075_021	SAMPLE	193262-017	Water	123200	03/17/07 03:28	1.0	2
022	075_022	SAMPLE	193262-018	Water	123200	03/17/07 04:06	1.0	2
023	075_023	SAMPLE	193432-001	Water	123200	03/17/07 04:44	1.0	2
024	075_024	SAMPLE	193444-001	Water	123200	03/17/07 05:21	1.0	2
025	075_025	SAMPLE	193444-002	Water	123200	03/17/07 05:59	1.0	2
026	075_026	CCV	MBTXE			03/17/07 06:37	1.0	1 2
027	075_027	X	CCV			03/17/07 07:14	1.0	1 2
028	075_028	CCV	TVH			03/17/07 07:52	1.0	3 2
029	075_029	CCV	TVH			03/17/07 08:30	1.0	3 2
030	075_030	MS	QC379366	Water	123146	03/17/07 09:07	1.0	4 2
031	075_031	MSD	QC379367	Water	123146	03/17/07 09:45	1.0	4 2
032	075_032	MS	QC379368	Water	123146	03/17/07 10:22	1.0	4 2
033	075_033	MSD	QC379369	Water	123146	03/17/07 11:00	1.0	4 2
034	075_034	SAMPLE	193262-019	Water	123200	03/17/07 11:37	1.0	2
035	075_035	SAMPLE	193262-022	Water	123200	03/17/07 12:15	1.0	2
036	075_036	SAMPLE	193262-023	Water	123200	03/17/07 12:53	1.0	2
037	075_037	CCV	TVH			03/17/07 13:30	1.0	3 2
038	075_038	CCV	TVH			03/17/07 14:08	1.0	3 2

Analyst: MJM Date: 03/19/07 Reviewer: _____ Date: _____

Standards used: 1=S5313 2=S5345 3=S5716 4=S5365

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317112989

Instrument : GC05 Begun : 03/19/07 09:57
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	078_001	X	IB			03/19/07 09:57	1.0	1	
002	078_002	X	CCV			03/19/07 10:33	1.0	2 1	
003	078_003	CCV/LCS	QC379843	Water	123256	03/19/07 11:09	1.0	3 1	
004	078_004	X	CCV			03/19/07 12:21	1.0	2 1	
005	078_005	CCV/LCS	QC379842	Water	123256	03/19/07 13:10	1.0	2 1	
006	078_006	BLANK	QC379841	Water	123256	03/19/07 15:19	1.0	1	
007	078_007	SAMPLE	193262-011	Water	123256	03/19/07 15:54	1.0	1	
008	078_008	SAMPLE	193262-012	Water	123256	03/19/07 16:30	1.0	1	
009	078_009	SAMPLE	193262-013	Water	123256	03/19/07 17:05	1.0	1	
010	078_010	SAMPLE	193262-014	Water	123256	03/19/07 17:41	1.0	1	
011	078_011	SAMPLE	193262-015	Water	123256	03/19/07 18:16	1.0	1	
012	078_012	SAMPLE	193262-016	Water	123256	03/19/07 19:24	1.0	1	
013	078_013	SAMPLE	193432-001	Water	123256	03/19/07 20:00	1.0	1	
014	078_014	CCV	MBTXE			03/19/07 20:35	1.0	2 1	
015	078_015	CCV	MBTXE			03/19/07 21:11	1.0	2 1	
016	078_016	CCV	TVH			03/19/07 21:46	1.0	3 1	
017	078_017	CCV	TVH			03/19/07 22:22	1.0	3 1	
018	078_018	MS	QC379844	Water	123256	03/19/07 22:57	1.0	3 1	
019	078_019	MSD	QC379845	Water	123256	03/19/07 23:32	1.0	3 1	
020	078_020	SAMPLE	193501-001	Water	123256	03/20/07 00:08	1.0	1	
021	078_021	SAMPLE	193501-002	Water	123256	03/20/07 00:44	1.0	1	
022	078_022	SAMPLE	193444-001	Water	123256	03/20/07 01:19	1.0	1	
023	078_023	SAMPLE	193444-002	Water	123256	03/20/07 01:55	1.0	1	
024	078_024	SAMPLE	193457-001	Water	123256	03/20/07 02:30	1.0	1	
025	078_025	SAMPLE	193447-001	Water	123256	03/20/07 03:06	1.0	1	
026	078_026	X	IB			03/20/07 03:41	1.0	1	
027	078_027	SAMPLE	193447-002	Water	123256	03/20/07 04:16	1.0	1	
028	078_028	SAMPLE	193518-001	Water	123256	03/20/07 04:52	1.0	1	
029	078_029	CCV	MBTXE			03/20/07 05:27	1.0	2 1	
030	078_030	CCV	MBTXE			03/20/07 06:03	1.0	2 1	
031	078_031	CCV	TVH			03/20/07 06:38	1.0	3 1	
032	078_032	CCV	TVH			03/20/07 07:14	1.0	3 1	
033	078_033	SAMPLE	193518-002	Water	123256	03/20/07 07:49	1.0	1	
034	078_034	SAMPLE	193470-001	Water	123256	03/20/07 08:25	1.0	1	
035	078_035	MSS	193470-002	Water	123256	03/20/07 09:00	1.0	1	pH > 2
036	078_036	SAMPLE	193470-009	Water	123256	03/20/07 09:36	1.0	1	pH > 2
037	078_037	SAMPLE	193479-001	Water	123256	03/20/07 10:11	1.0	1	
038	078_038	SAMPLE	193501-002	Water	123256	03/20/07 10:46	1.0	1	
039	078_039	CCV	TVH			03/20/07 11:33	1.0	3 1	

Analyst: JCP Date: 03/20/07 Reviewer: _____ Date: _____

Standards used: 1=S5665 2=S5313 3=S5716

REPORTING SUMMARY FOR 193262 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-004	Gasoline C7-C12	GC19	A	03/16/07 18:17
193262-004	MTBE	GC19	B	03/16/07 18:17
193262-004	Benzene	GC19	B	03/16/07 18:17
193262-004	Toluene	GC19	B	03/16/07 18:17
193262-004	Ethylbenzene	GC19	B	03/16/07 18:17
193262-004	Trifluorotoluene (FID)	GC19	A	03/16/07 18:17
193262-004	Bromofluorobenzene (FID)	GC19	A	03/16/07 18:17
193262-004	Trifluorotoluene (PID)	GC19	B	03/16/07 18:17
193262-004	Bromofluorobenzene (PID)	GC19	B	03/16/07 18:17
193262-004	Xylene (total)	GC19	B	03/16/07 18:17
193262-005	Gasoline C7-C12	GC19	A	03/16/07 19:19
193262-005	MTBE	GC19	B	03/16/07 19:19
193262-005	Benzene	GC19	B	03/16/07 19:19
193262-005	Toluene	GC19	B	03/16/07 19:19
193262-005	Ethylbenzene	GC19	B	03/16/07 19:19
193262-005	Trifluorotoluene (FID)	GC19	A	03/16/07 19:19
193262-005	Bromofluorobenzene (FID)	GC19	A	03/16/07 19:19
193262-005	Trifluorotoluene (PID)	GC19	B	03/16/07 19:19
193262-005	Bromofluorobenzene (PID)	GC19	B	03/16/07 19:19
193262-005	Xylene (total)	GC19	B	03/16/07 19:19
193262-008	Gasoline C7-C12	GC19	A	03/16/07 19:57
193262-008	MTBE	GC19	B	03/16/07 19:57
193262-008	Benzene	GC19	B	03/16/07 19:57
193262-008	Toluene	GC19	B	03/16/07 19:57
193262-008	Ethylbenzene	GC19	B	03/16/07 19:57
193262-008	Trifluorotoluene (FID)	GC19	A	03/16/07 19:57
193262-008	Bromofluorobenzene (FID)	GC19	A	03/16/07 19:57
193262-008	Trifluorotoluene (PID)	GC19	B	03/16/07 19:57
193262-008	Bromofluorobenzene (PID)	GC19	B	03/16/07 19:57
193262-008	Xylene (total)	GC19	B	03/16/07 19:57
193262-010	Gasoline C7-C12	GC19	A	03/16/07 20:34
193262-010	Trifluorotoluene (FID)	GC19	A	03/16/07 20:34
193262-010	Bromofluorobenzene (FID)	GC19	A	03/16/07 20:34
193262-011	Gasoline C7-C12	GC05	A	03/19/07 15:54
193262-011	MTBE	GC05	C	03/19/07 15:54
193262-011	Benzene	GC05	C	03/19/07 15:54
193262-011	Toluene	GC05	C	03/19/07 15:54
193262-011	Ethylbenzene	GC05	C	03/19/07 15:54
193262-011	Trifluorotoluene (FID)	GC05	A	03/19/07 15:54
193262-011	Bromofluorobenzene (FID)	GC05	A	03/19/07 15:54
193262-011	Trifluorotoluene (PID)	GC05	C	03/19/07 15:54
193262-011	Bromofluorobenzene (PID)	GC05	C	03/19/07 15:54
193262-011	Xylene (total)	GC05	C	03/19/07 15:54
193262-012	Gasoline C7-C12	GC05	A	03/19/07 16:30
193262-012	MTBE	GC05	C	03/19/07 16:30
193262-012	Benzene	GC05	C	03/19/07 16:30
193262-012	Toluene	GC05	C	03/19/07 16:30
193262-012	Ethylbenzene	GC05	C	03/19/07 16:30
193262-012	Trifluorotoluene (FID)	GC05	A	03/19/07 16:30

REPORTING SUMMARY FOR 193262 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-012	Bromofluorobenzene (FID)	GC05	A	03/19/07 16:30
193262-012	Trifluorotoluene (PID)	GC05	C	03/19/07 16:30
193262-012	Bromofluorobenzene (PID)	GC05	C	03/19/07 16:30
193262-012	Xylene (total)	GC05	C	03/19/07 16:30
193262-013	Gasoline C7-C12	GC05	A	03/19/07 17:05
193262-013	MTBE	GC05	C	03/19/07 17:05
193262-013	Benzene	GC05	C	03/19/07 17:05
193262-013	Toluene	GC05	C	03/19/07 17:05
193262-013	Ethylbenzene	GC05	C	03/19/07 17:05
193262-013	Trifluorotoluene (FID)	GC05	A	03/19/07 17:05
193262-013	Bromofluorobenzene (FID)	GC05	A	03/19/07 17:05
193262-013	Trifluorotoluene (PID)	GC05	C	03/19/07 17:05
193262-013	Bromofluorobenzene (PID)	GC05	C	03/19/07 17:05
193262-013	Xylene (total)	GC05	C	03/19/07 17:05
193262-014	Gasoline C7-C12	GC05	A	03/19/07 17:41
193262-014	MTBE	GC05	C	03/19/07 17:41
193262-014	Benzene	GC05	C	03/19/07 17:41
193262-014	Toluene	GC05	C	03/19/07 17:41
193262-014	Ethylbenzene	GC05	C	03/19/07 17:41
193262-014	Trifluorotoluene (FID)	GC05	A	03/19/07 17:41
193262-014	Bromofluorobenzene (FID)	GC05	A	03/19/07 17:41
193262-014	Trifluorotoluene (PID)	GC05	C	03/19/07 17:41
193262-014	Bromofluorobenzene (PID)	GC05	C	03/19/07 17:41
193262-014	Xylene (total)	GC05	C	03/19/07 17:41
193262-015	Gasoline C7-C12	GC05	A	03/19/07 18:16
193262-015	MTBE	GC05	C	03/19/07 18:16
193262-015	Benzene	GC05	C	03/19/07 18:16
193262-015	Toluene	GC05	C	03/19/07 18:16
193262-015	Ethylbenzene	GC05	C	03/19/07 18:16
193262-015	Trifluorotoluene (FID)	GC05	A	03/19/07 18:16
193262-015	Bromofluorobenzene (FID)	GC05	A	03/19/07 18:16
193262-015	Trifluorotoluene (PID)	GC05	C	03/19/07 18:16
193262-015	Bromofluorobenzene (PID)	GC05	C	03/19/07 18:16
193262-015	Xylene (total)	GC05	C	03/19/07 18:16
193262-016	Gasoline C7-C12	GC05	A	03/19/07 19:24
193262-016	MTBE	GC05	C	03/19/07 19:24
193262-016	Benzene	GC05	C	03/19/07 19:24
193262-016	Toluene	GC05	C	03/19/07 19:24
193262-016	Ethylbenzene	GC05	C	03/19/07 19:24
193262-016	Trifluorotoluene (FID)	GC05	A	03/19/07 19:24
193262-016	Bromofluorobenzene (FID)	GC05	A	03/19/07 19:24
193262-016	Trifluorotoluene (PID)	GC05	C	03/19/07 19:24
193262-016	Bromofluorobenzene (PID)	GC05	C	03/19/07 19:24
193262-016	Xylene (total)	GC05	C	03/19/07 19:24
193262-017	Gasoline C7-C12	GC19	A	03/17/07 03:28
193262-017	Trifluorotoluene (FID)	GC19	A	03/17/07 03:28
193262-017	Bromofluorobenzene (FID)	GC19	A	03/17/07 03:28
193262-018	Gasoline C7-C12	GC19	A	03/17/07 04:06

REPORTING SUMMARY FOR 193262 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-018	Trifluorotoluene (FID)	GC19	A	03/17/07 04:06
193262-018	Bromofluorobenzene (FID)	GC19	A	03/17/07 04:06
193262-019	Gasoline C7-C12	GC19	A	03/17/07 11:37
193262-019	Trifluorotoluene (FID)	GC19	A	03/17/07 11:37
193262-019	Bromofluorobenzene (FID)	GC19	A	03/17/07 11:37
193262-020	Gasoline C7-C12	GC07	A	03/16/07 15:54
193262-020	Stoddard Solvent C7-C12	GC07	A	03/16/07 15:54
193262-020	Trifluorotoluene (FID)	GC07	A	03/16/07 15:54
193262-020	Bromofluorobenzene (FID)	GC07	A	03/16/07 15:54
193262-022	Gasoline C7-C12	GC19	A	03/17/07 12:15
193262-022	Trifluorotoluene (FID)	GC19	A	03/17/07 12:15
193262-022	Bromofluorobenzene (FID)	GC19	A	03/17/07 12:15
193262-023	Gasoline C7-C12	GC19	A	03/17/07 12:53
193262-023	Trifluorotoluene (FID)	GC19	A	03/17/07 12:53
193262-023	Bromofluorobenzene (FID)	GC19	A	03/17/07 12:53
QC379610	Gasoline C7-C12	GC07	A	03/16/07 13:29
QC379610	Stoddard Solvent C7-C12	GC07	A	03/16/07 13:29
QC379610	Trifluorotoluene (FID)	GC07	A	03/16/07 13:29
QC379610	Bromofluorobenzene (FID)	GC07	A	03/16/07 13:29
QC379611	Gasoline C7-C12	GC07	A	03/16/07 10:49
QC379611	Trifluorotoluene (FID)	GC07	A	03/16/07 10:49
QC379611	Bromofluorobenzene (FID)	GC07	A	03/16/07 10:49
QC379612	Gasoline C7-C12	GC07	A	03/16/07 14:06
QC379612	Trifluorotoluene (FID)	GC07	A	03/16/07 14:06
QC379612	Bromofluorobenzene (FID)	GC07	A	03/16/07 14:06
QC379613	Gasoline C7-C12	GC07	A	03/16/07 14:42
QC379613	Trifluorotoluene (FID)	GC07	A	03/16/07 14:42
QC379613	Bromofluorobenzene (FID)	GC07	A	03/16/07 14:42
QC379614	Gasoline C7-C12	GC19	A	03/16/07 16:23
QC379614	MTBE	GC19	B	03/16/07 16:23
QC379614	Benzene	GC19	B	03/16/07 16:23
QC379614	Toluene	GC19	B	03/16/07 16:23
QC379614	Ethylbenzene	GC19	B	03/16/07 16:23
QC379614	Trifluorotoluene (FID)	GC19	A	03/16/07 16:23
QC379614	Bromofluorobenzene (FID)	GC19	A	03/16/07 16:23
QC379614	Trifluorotoluene (PID)	GC19	B	03/16/07 16:23
QC379614	Bromofluorobenzene (PID)	GC19	B	03/16/07 16:23
QC379614	Xylene (total)	GC19	B	03/16/07 16:23
QC379615	MTBE	GC19	B	03/16/07 15:27
QC379615	Benzene	GC19	B	03/16/07 15:27
QC379615	Toluene	GC19	B	03/16/07 15:27
QC379615	Ethylbenzene	GC19	B	03/16/07 15:27
QC379615	Trifluorotoluene (PID)	GC19	B	03/16/07 15:27
QC379615	Bromofluorobenzene (PID)	GC19	B	03/16/07 15:27

REPORTING SUMMARY FOR 193262 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379616	Gasoline C7-C12	GC19	A	03/16/07 14:49
QC379616	Trifluorotoluene (FID)	GC19	A	03/16/07 14:49
QC379616	Bromofluorobenzene (FID)	GC19	A	03/16/07 14:49
QC379645	Gasoline C7-C12	GC19	A	03/16/07 17:01
QC379645	Trifluorotoluene (FID)	GC19	A	03/16/07 17:01
QC379645	Bromofluorobenzene (FID)	GC19	A	03/16/07 17:01
QC379646	Gasoline C7-C12	GC19	A	03/16/07 17:39
QC379646	Trifluorotoluene (FID)	GC19	A	03/16/07 17:39
QC379646	Bromofluorobenzene (FID)	GC19	A	03/16/07 17:39
QC379841	Gasoline C7-C12	GC05	A	03/19/07 15:19
QC379841	MTBE	GC05	C	03/19/07 15:19
QC379841	Benzene	GC05	C	03/19/07 15:19
QC379841	Toluene	GC05	C	03/19/07 15:19
QC379841	Ethylbenzene	GC05	C	03/19/07 15:19
QC379841	Trifluorotoluene (FID)	GC05	A	03/19/07 15:19
QC379841	Bromofluorobenzene (FID)	GC05	A	03/19/07 15:19
QC379841	Trifluorotoluene (PID)	GC05	C	03/19/07 15:19
QC379841	Bromofluorobenzene (PID)	GC05	C	03/19/07 15:19
QC379841	Xylene (total)	GC05	C	03/19/07 15:19
QC379842	MTBE	GC05	C	03/19/07 13:10
QC379842	Benzene	GC05	C	03/19/07 13:10
QC379842	Toluene	GC05	C	03/19/07 13:10
QC379842	Ethylbenzene	GC05	C	03/19/07 13:10
QC379842	Trifluorotoluene (PID)	GC05	C	03/19/07 13:10
QC379842	Bromofluorobenzene (PID)	GC05	C	03/19/07 13:10
QC379843	Gasoline C7-C12	GC05	A	03/19/07 11:09
QC379843	Trifluorotoluene (FID)	GC05	A	03/19/07 11:09
QC379843	Bromofluorobenzene (FID)	GC05	A	03/19/07 11:09
QC379844	Gasoline C7-C12	GC05	A	03/19/07 22:57
QC379844	Trifluorotoluene (FID)	GC05	A	03/19/07 22:57
QC379844	Bromofluorobenzene (FID)	GC05	A	03/19/07 22:57
QC379845	Gasoline C7-C12	GC05	A	03/19/07 23:32
QC379845	Trifluorotoluene (FID)	GC05	A	03/19/07 23:32
QC379845	Bromofluorobenzene (FID)	GC05	A	03/19/07 23:32

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/24/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 03/24/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.30	0.62	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.034	0.057	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.048	0.15	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.036	0.17	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.030	0.17	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.083	0.19	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Prepared:	03/21/07

Field ID:	DAEGW04	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/22/07
Lab ID:	193262-003	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID:	1065MW10A	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/22/07
Lab ID:	193262-004	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Field ID:	1065MW10B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-005	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID:	1065MW10ARB1065MW10B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-008	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	65-135

ND= Not Detected
RL= Reporting Limit

141.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Prepared:	03/21/07

Field ID:	1065PZ1B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-010	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	1065PZ6B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-011	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-135

Field ID:	1065PZ6BRB1065MW9A	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-012	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	75	65-135

Field ID:	1065MW9A	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-013	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

ND= Not Detected
RL= Reporting Limit

141.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Prepared:	03/21/07

Field ID:	1065MW9B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-014	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

Field ID:	1065MW11A	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-015	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID:	1065MW11B	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-016	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID:	NKGW01	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-017	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Prepared:	03/21/07

Field ID:	NKGW05	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-018	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Field ID:	DAEGW102	Sampled:	03/07/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-019	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	105	65-135

Field ID:	DW030807B	Sampled:	03/08/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-020	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

Field ID:	937GW07	Sampled:	03/08/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-022	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Prepared:	03/21/07

Field ID:	937GW15	Sampled:	03/08/07
Type:	SAMPLE	Analyzed:	03/23/07
Lab ID:	193262-023	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Type:	BLANK	Analyzed:	03/22/07
Lab ID:	QC380254	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

ND= Not Detected
RL= Reporting Limit

141.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Prepared:	03/21/07
Diln Fac:	1.000	Analyzed:	03/22/07

Type: BS
Lab ID: QC380255
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,392	96	65-135

Surrogate	%REC	Limits
Hexacosane	101	65-135

Type: BSD
Lab ID: QC380256
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,560	102	65-135	7	35

Surrogate	%REC	Limits
Hexacosane	100	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	B	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date: 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	B	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC14B
Calnum: 227114390003
Units : mg/L

Name : Hexacosane 14b
Date : 21-MAR-2007 02:06
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_032	227114390032	HEX_5	21-MAR-2007 02:06	S4639
L2	079_033	227114390033	HEX_10	21-MAR-2007 02:34	S4640
L3	079_034	227114390034	HEX_25	21-MAR-2007 03:02	S4641
L4	079_035	227114390035	HEX_50	21-MAR-2007 03:30	S5402
L5	079_036	227114390036	HEX_100	21-MAR-2007 03:58	S4644
L6	079_037	227114390037	HEX_200	21-MAR-2007 04:26	S4645

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	74590	78850	78940	83159	81690	79917	AVRG		1.26E-5		79524	4	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Hexacosane	B	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG		1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177062425003

001105

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_250 IDF : 1.0
Seqnum : 227117078022 File : 081_022 Time : 22-MAR-2007 21:00
Standards: S5730

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65798	250.0	253.5	mg/L	1	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	70581	50.00	44.38	mg/L	-11	15	

227117078022

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227117078023 File : 081_023 Time : 22-MAR-2007 21:28
Standards: S5734

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	48975	500.0	532.8	mg/L	7	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	80190	50.00	50.42	mg/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_500 IDF : 1.0
Seqnum : 227117078037 File : 081_037 Time : 23-MAR-2007 03:06
Standards: S5731

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	67346	500.0	518.9	mg/L	4	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	73134	50.00	45.98	mg/L	-8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227117078038 File : 081_038 Time : 23-MAR-2007 03:34
Standards: S5734

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	47325	500.0	514.9	mg/L	3	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	78803	50.00	49.55	mg/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: DSL_1000 IDF : 1.0
Seqnum : 227117078049 File : 081_049 Time : 23-MAR-2007 10:26
Standards: S5732

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66657	1000	1027	mg/L	3	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	73101	50.00	45.96	mg/L	-8	15	

227117078049

:0010A

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC14B Run Name: MO_500 IDF : 1.0
Seqnum : 227117078050 File : 081_050 Time : 23-MAR-2007 10:54
Standards: S5734

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	47025	500.0	511.6	mg/L	2	15	
Hexacosane	B	227114390003	21-MAR-2007	79524	77676	50.00	48.84	mg/L	-2	15	

227117078050

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177117069015
Standards: S5734

Run Name: MO_500
File : 081a015

IDF : 1.0
Time : 22-MAR-2007 17:27

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	49663	500.0	551.0	mg/L	10	15	
Hexacosane	177062425003	13-FEB-2007	77085	79231	50.00	51.39	mg/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177117069017 File : 081a017 Time : 22-MAR-2007 18:22
Standards: S5732

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	62808	1000	1028	mg/L	3	15	
Hexacosane	177062425003	13-FEB-2007	77085	72556	50.00	47.06	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_250 IDF : 1.0
Seqnum : 177117069030 File : 081a030 Time : 23-MAR-2007 01:01
Standards: S5730

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	66314	250.0	271.3	mg/L	9	15	
Hexacosane	177062425003	13-FEB-2007	77085	72814	50.00	47.23	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177117069031 File : 081a031 Time : 23-MAR-2007 01:28
Standards: S5734

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	50303	500.0	558.1	mg/L	12	15	
Hexacosane	177062425003	13-FEB-2007	77085	82382	50.00	53.44	mg/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177117069045
Standards: S5731

Run Name: DSL_500
File : 081a045

IDF : 1.0
Time : 23-MAR-2007 07:50

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	70291	500.0	575.2	mg/L	15	15	
Hexacosane	177062425003	13-FEB-2007	77085	76956	50.00	49.92	mg/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177117069046
Standards: S5734

Run Name: MO_500
File : 081a046

IDF : 1.0
Time : 23-MAR-2007 08:18

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	51119	500.0	567.1	mg/L	13	15	
Hexacosane	177062425003	13-FEB-2007	77085	84103	50.00	54.55	mg/L	9	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	043a001	X	PRIMER				02/12/07 08:25	1.0	
002	043a002	X	IB				02/12/07 08:52	1.0	
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0	
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0	
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0	
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0	
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0	
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0	
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1
014	043a014	CCV	MO				02/12/07 16:03	1.0	2
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3
016	043a016	CCV	MO				02/12/07 16:57	1.0	2
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2
019	043a019	IB	CALIB				02/12/07 18:47	1.0	
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4
021	043a021	IB	CALIB				02/12/07 19:42	1.0	
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10
028	043a028	IB	CALIB				02/12/07 22:53	1.0	
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11
030	043a030	X	ICV				02/12/07 23:48	1.0	11
031	043a031	IB	CALIB				02/13/07 00:15	1.0	
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17
038	043a038	IB	CALIB				02/13/07 03:26	1.0	
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23
045	043a045	IB	CALIB				02/13/07 06:37	1.0	

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version: TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	079_001	X	IB			03/20/07 10:30	1.0	
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1
003	079_003	X	MO_500			03/20/07 11:26	1.0	2
005	079_005	X	IB			03/20/07 12:53	1.0	
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2
008	079_008	X	PRIMER			03/20/07 14:26	1.0	
009	079_009	X	PRIMER			03/20/07 14:54	1.0	
010	079_010	X	IB			03/20/07 15:22	1.0	
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3
012	079_012	IB	CALIB			03/20/07 16:29	1.0	
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4
014	079_014	IB	CALIB			03/20/07 17:43	1.0	
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10
021	079_021	IB	CALIB			03/20/07 20:59	1.0	
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11
024	079_024	IB	CALIB			03/20/07 22:23	1.0	
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17
031	079_031	IB	CALIB			03/21/07 01:38	1.0	
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23
038	079_038	IB	CALIB			03/21/07 04:54	1.0	

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227117078

Instrument : GC14B
Method : EPA 8015B

Begun : 03/22/07 07:18
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	081_001	X	PRIMER				03/22/07 07:18	1.0	
002	081_002	X	IB				03/22/07 07:45	1.0	
003	081_003	CCV	DSL_1000				03/22/07 08:13	1.0	1
004	081_004	CCV	MO_500				03/22/07 08:41	1.0	2
005	081_005	X	JP5_250				03/22/07 09:47	1.0	3
006	081_006	SAMPLE	193460-001	S	Soil	123319	03/22/07 10:44	1.0	
007	081_007	X	IB				03/22/07 12:57	1.0	
008	081_008	CCV	DSL_500				03/22/07 13:25	1.0	4
009	081_009	CCV	MO_500				03/22/07 13:53	1.0	2
010	081_010	SAMPLE	193533-001	S	Soil	123361	03/22/07 15:07	1.0	
011	081_011	SAMPLE	193532-004	S	Soil	123361	03/22/07 15:35	1.0	
012	081_012	SAMPLE	193481-003	S	Soil	123361	03/22/07 16:03	1.0	
013	081_013	SAMPLE	193481-002	S	Soil	123361	03/22/07 16:30	1.0	
014	081_014	X	IB				03/22/07 17:16	1.0	
015	081_015	SAMPLE	193272-003	S	Water	123374	03/22/07 17:44	1.0	
016	081_016	SAMPLE	193272-004	S	Water	123374	03/22/07 18:12	1.0	
017	081_017	SAMPLE	193272-005	S	Water	123374	03/22/07 18:40	1.0	
018	081_018	SAMPLE	193272-006	S	Water	123374	03/22/07 19:08	1.0	
019	081_019	SAMPLE	193346-001	S	Water	123374	03/22/07 19:36	1.0	
020	081_020	SAMPLE	193346-002	S	Water	123374	03/22/07 20:04	1.0	
021	081_021	X	IB				03/22/07 20:32	1.0	
022	081_022	CCV	DSL_250				03/22/07 21:00	1.0	5
023	081_023	CCV	MO_500				03/22/07 21:28	1.0	2
026	081_026	BLANK	QC380349	S	Water	123374	03/22/07 21:57	1.0	
027	081_027	SAMPLE	193346-003	S	Water	123374	03/22/07 22:26	1.0	
028	081_028	SAMPLE	193346-004	S	Water	123374	03/22/07 22:53	1.0	
029	081_029	SAMPLE	193346-005	S	Water	123374	03/22/07 23:21	1.0	
030	081_030	SAMPLE	193346-006	S	Water	123374	03/22/07 23:49	1.0	
031	081_031	SAMPLE	193346-007	S	Water	123374	03/23/07 00:18	1.0	
032	081_032	SAMPLE	193346-008	S	Water	123374	03/23/07 00:45	1.0	
033	081_033	X	IB				03/23/07 01:14	1.0	
034	081_034	SAMPLE	193262-023	S	Water	123351	03/23/07 01:42	1.0	
035	081_035	SAMPLE	193262-022	S	Water	123351	03/23/07 02:10	1.0	
036	081_036	SAMPLE	193262-020	S	Water	123351	03/23/07 02:38	1.0	
037	081_037	CCV	DSL_500				03/23/07 03:06	1.0	4
038	081_038	CCV	MO_500				03/23/07 03:34	1.0	2
039	081_039	X	CCV				03/23/07 04:02	1.0	4
040	081_040	X	CCV				03/23/07 04:30	1.0	2
041	081_041	SAMPLE	193321-005		Water	123374	03/23/07 04:58	1.0	
042	081_042	SAMPLE	193321-005	S	Water	123374	03/23/07 05:26	1.0	
043	081_043	SAMPLE	193248-003		Water	123267	03/23/07 05:54	1.0	
044	081_044	SAMPLE	193248-003	S	Water	123267	03/23/07 06:22	1.0	
045	081_045	SAMPLE	193481-002	S	Soil	123361	03/23/07 06:50	1.0	
046	081_046	SAMPLE	193262-019	S	Water	123351	03/23/07 07:18	1.0	
047	081_047	X	IB				03/23/07 09:30	1.0	
048	081_048	SAMPLE	193262-020	S	Water	123351	03/23/07 09:58	1.0	
049	081_049	CCV	DSL_1000				03/23/07 10:26	1.0	1
050	081_050	CCV	MO_500				03/23/07 10:54	1.0	2
051	081_051	CCV	KERO_250				03/23/07 12:23	1.0	6
052	081_052	CCV	JET_250				03/23/07 12:51	1.0	7
053	081_053	SAMPLE	193615-004	S	Soil	123414	03/23/07 13:41	1.0	
054	081_054	SAMPLE	193615-005	S	Soil	123414	03/23/07 14:09	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227117078

Instrument : GC14B
Method : EPA 8015B

Begun : 03/22/07 07:18
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
055	081_055	SAMPLE	193615-006	S	Soil	123414	03/23/07 14:36	1.0		

Standards used: 1=S5732 2=S5734 3=S5739 4=S5731 5=S5730 6=S5779 7=S5735

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177117069

Instrument : GC17A
Method : EPA 8015B

Begun : 03/22/07 07:09
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	081a001	X	PRIMER				03/22/07 07:09	1.0	
002	081a002	X	IB				03/22/07 07:36	1.0	
003	081a003	CCV	DSL_1000				03/22/07 08:04	1.0	1
004	081a004	CCV	MO_500				03/22/07 08:31	1.0	2
005	081a005	CCV	JP5				03/22/07 09:31	1.0	3
006	081a006	X	IB				03/22/07 13:00	1.0	
007	081a007	BLANK	QC380115	S	Water	123318	03/22/07 13:27	1.0	
008	081a008	SAMPLE	193290-001	S	Water	123318	03/22/07 13:55	1.0	
009	081a009	SAMPLE	193299-001	S	Water	123318	03/22/07 14:22	1.0	
010	081a010	X	DSL_500				03/22/07 14:49	1.0	4
011	081a011	CCV	MO_500				03/22/07 15:17	1.0	2
012	081a012	XCCV	JP5_250				03/22/07 15:44	1.0	3
013	081a013	CCV	DSL_500				03/22/07 16:12	1.0	4
014	081a014	XCCV	JP5_250				03/22/07 16:40	1.0	3
015	081a015	CCV	MO_500				03/22/07 17:27	1.0	2
016	081a016	X	JP5_250				03/22/07 17:55	1.0	3
017	081a017	CCV	DSL_1000				03/22/07 18:22	1.0	1
018	081a018	CCV	JP5_250				03/22/07 18:50	1.0	5
019	081a019	BLANK	QC380288	S	Water	123358	03/22/07 19:17	1.0	
020	081a020	BS	QC380289	S	Water	123358	03/22/07 19:44	1.0	
021	081a021	BSD	QC380290	S	Water	123358	03/22/07 20:12	1.0	
022	081a022	BLANK	QC380254	S	Water	123351	03/22/07 21:24	1.0	
023	081a023	BS	QC380255	S	Water	123351	03/22/07 21:51	1.0	
024	081a024	BSD	QC380256	S	Water	123351	03/22/07 22:18	1.0	
025	081a025	SAMPLE	193277-001	S	Water	123351	03/22/07 22:45	1.0	
026	081a026	SAMPLE	193262-003	S	Water	123351	03/22/07 23:12	1.0	
027	081a027	SAMPLE	193262-004	S	Water	123351	03/22/07 23:39	1.0	
028	081a028	SAMPLE	193262-005	S	Water	123351	03/23/07 00:06	1.0	
029	081a029	X	IB				03/23/07 00:34	1.0	
030	081a030	CCV	DSL_250				03/23/07 01:01	1.0	6
031	081a031	CCV	MO_500				03/23/07 01:28	1.0	2
032	081a032	X	CCV				03/23/07 01:55	1.0	6
033	081a033	X	CCV				03/23/07 02:23	1.0	2
034	081a034	SAMPLE	193262-008	S	Water	123351	03/23/07 02:50	1.0	
035	081a035	SAMPLE	193262-010	S	Water	123351	03/23/07 03:17	1.0	
036	081a036	SAMPLE	193262-011	S	Water	123351	03/23/07 03:44	1.0	
037	081a037	SAMPLE	193262-012	S	Water	123351	03/23/07 04:11	1.0	
038	081a038	SAMPLE	193262-013	S	Water	123351	03/23/07 04:38	1.0	
039	081a039	SAMPLE	193262-014	S	Water	123351	03/23/07 05:06	1.0	
040	081a040	SAMPLE	193262-015	S	Water	123351	03/23/07 05:33	1.0	
041	081a041	SAMPLE	193262-016	S	Water	123351	03/23/07 06:00	1.0	
042	081a042	SAMPLE	193262-017	S	Water	123351	03/23/07 06:28	1.0	
043	081a043	SAMPLE	193262-018	S	Water	123351	03/23/07 06:55	1.0	
044	081a044	X	IB				03/23/07 07:22	1.0	
045	081a045	CCV	DSL_500				03/23/07 07:50	1.0	4
046	081a046	CCV	MO_500				03/23/07 08:18	1.0	2

Standards used: 1=S5732 2=S5734 3=S5739 4=S5731 5=S5801 6=S5730

REPORTING SUMMARY FOR 193262 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193262-003	GC17A	03/22/07 23:12	1.0	+	+	+	
193262-004	GC17A	03/22/07 23:39	1.0	+	+	+	
193262-005	GC17A	03/23/07 00:06	1.0	+	+	+	
193262-008	GC17A	03/23/07 02:50	1.0	+	+	+	
193262-010	GC17A	03/23/07 03:17	1.0	+	+	+	
193262-011	GC17A	03/23/07 03:44	1.0	+	+	+	
193262-012	GC17A	03/23/07 04:11	1.0	+	+	+	
193262-013	GC17A	03/23/07 04:38	1.0	+	+	+	
193262-014	GC17A	03/23/07 05:06	1.0	+	+	+	
193262-015	GC17A	03/23/07 05:33	1.0	+	+	+	
193262-016	GC17A	03/23/07 06:00	1.0	+	+	+	
193262-017	GC17A	03/23/07 06:28	1.0	+	+	+	
193262-018	GC17A	03/23/07 06:55	1.0	+	+	+	
193262-019	GC14B	03/23/07 07:18	1.0	+	+	+	
193262-020	GC14B	03/23/07 02:38	1.0				
193262-020	GC14B	03/23/07 09:58	1.0	+	+	+	
193262-022	GC14B	03/23/07 02:10	1.0	+	+	+	
193262-023	GC14B	03/23/07 01:42	1.0	+	+	+	
QC380254	GC17A	03/22/07 21:24	1.0	+	+	+	
QC380255	GC17A	03/22/07 21:51	1.0	+		+	
QC380256	GC17A	03/22/07 22:18	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123351
Started By : PDM
Method : 3520C
Spike #1 ID: S5713

Prep Date : 21-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: KR
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193262-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-012		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
193262-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-020		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
193262-022		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-023		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193277-001		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
QC380254	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC380255	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC380256	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: DLM Date: 03/23/07 Reviewer: MCH Date: 03/23/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

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LIMS Batch No: 123351
LIMS Analysis: TEHM
Extracted by: PdM
Date Extracted: 3/21/07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193262-003 I	500	7	2.5	X	
-004 H					
-005 H					
-008 H					
-010 K					
-011 H					baby funnel lost ~ 2.5mL
-012 H		4			
-013 H		7			
-014 H					
-015 H					
-016 H					
-017 J					runs to light peach color
-018 K					
-019 Q					
-020 S		4			
-022 G		7			
-023 G					
193277 -001 P		4			
MB QC380254		N/A			
BS 5					
BSD 6					
					KR 22 MAR 07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	SS713B	PdM 3/21
0.5 mL of TEH_SP was added to all spikes	SS627C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 and HPLC H_2O	EM47031/EM46318	
Extraction Start Time:	1510	
Extraction End Time:	0910	RE 3/22/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	3/22/07 K
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes as noted above	✓	

Pamela Maglet 3/21/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

KRef 22 MAR 07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KR
Cleanup Date: 22 MAR 07

Benchbook # **BK 2475**
Page 26

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193321-005	123374	1.0	1.0	
193262-003	123351	1.0	1.0	
4				
5				
8				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
22				
23				
193277-001				
BLANK QC380254				
BS 5				
BSD 6				
JDM	3/23/07			

☐ Extracts were cleaned up using C&T assembled ~ g columns
☑ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 4.0 mL CH_2Cl_2
Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	KR 22 MAR 07
SP8243	
EM47031	
✓	

KR 22 MAR 07
Extraction Chemist / Date

Continued from page ~
Continued on page ~

Jenine Lee 3/23/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/24/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	LF08GW04	Batch#:	123243
Lab ID:	193262-002	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

64.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW04	Batch#:	123243
Lab ID:	193262-003	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

65.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0307073A	Batch#:	123243
Lab ID:	193262-007	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	0.3
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

66.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0307071A	Batch#:	123261
Lab ID:	193262-009	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

67.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1B	Batch#:	123261
Lab ID:	193262-010	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	92	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

68.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW01	Batch#:	123261
Lab ID:	193262-017	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	118 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	93	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

69.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW05	Batch#:	123261
Lab ID:	193262-018	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	115 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

70.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DAEGW102	Batch#:	123261
Lab ID:	193262-019	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	116 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	93	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW030807B	Batch#:	123261
Lab ID:	193262-020	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.07 J	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	118 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	95	86-115

*= Value outside of QC limits; see narrative
J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

72.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW07	Batch#:	123261
Lab ID:	193262-022	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	118 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	937GW15	Batch#:	123261
Lab ID:	193262-023	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	0.06
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	118 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

74.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379792	Batch#:	123243
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

75.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379829	Batch#:	123243
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379862	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379891	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.55	110	65-135
Benzene	25.00	25.21	101	65-135
Trichloroethene	25.00	24.77	99	65-135
Toluene	25.00	26.52	106	65-135
Chlorobenzene	25.00	24.00	96	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	91	86-115

80.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123243
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Type: BS Lab ID: QC379793

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.99	116	65-135
Benzene	25.00	27.95	112	65-135
Trichloroethene	25.00	27.12	108	65-135
Toluene	25.00	28.00	112	65-135
Chlorobenzene	25.00	25.32	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	93	86-115

Type: BSD Lab ID: QC379794

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.32	105	65-135	10	35
Benzene	25.00	26.80	107	65-135	4	35
Trichloroethene	25.00	27.04	108	65-135	0	35
Toluene	25.00	26.73	107	65-135	5	35
Chlorobenzene	25.00	25.33	101	65-135	0	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	93	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	979GW116	Batch#:	123243
MSS Lab ID:	193217-005	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379820

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	0.1323	25.00	26.54	106	65-135
Benzene	<0.2500	25.00	27.28	109	65-135
Trichloroethene	<0.1151	25.00	26.27	105	65-135
Toluene	<0.1338	25.00	27.34	109	65-135
Chlorobenzene	<0.1569	25.00	25.37	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	92	86-115

Type: MSD Lab ID: QC379821

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.74	102	65-135	3	35
Benzene	25.00	26.05	104	65-135	5	35
Trichloroethene	25.00	25.32	101	65-135	4	35
Toluene	25.00	25.83	103	65-135	6	35
Chlorobenzene	25.00	24.01	96	65-135	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	92	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW02	Batch#:	123261
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379910

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1169	25.00	30.30	121	65-135
Benzene	<0.06286	25.00	27.20	109	65-135
Trichloroethene	<0.08502	25.00	25.18	101	65-135
Toluene	<0.1220	25.00	25.50	102	65-135
Chlorobenzene	<0.1069	25.00	24.97	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	120 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	91	86-115

Type: MSD Lab ID: QC379911

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.71	115	65-135	5	35
Benzene	25.00	26.51	106	65-135	3	35
Trichloroethene	25.00	24.30	97	65-135	4	35
Toluene	25.00	24.68	99	65-135	3	35
Chlorobenzene	25.00	24.45	98	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	121 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	93	86-115

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447112790018 File : ecj18 Time : 19-MAR-2007 15:39

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8084	18.62	
75	30.00% - 60.00% of mass 95	18678	43.02	
95		43418		
96	5.00% - 9.00% of mass 95	2837	6.53	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	31514	72.58	
175	5.00% - 9.00% of mass 174	2218	7.04	
176	> 95.00% and < 101.00% of mass 174	29944	95.02	
177	5.00% - 9.00% of mass 176	2060	6.88	

Analyst: BO Date: 03/19/07 Reviewer: LW Date: 03/20/07

447112790018

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497038053008 File : jaq08 Time : 26-JAN-2007 15:00

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	77378	23.85	
75	30.00% - 60.00% of mass 95	148629	45.81	
95		324437		
96	5.00% - 9.00% of mass 95	22037	6.79	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	249066	76.77	
175	5.00% - 9.00% of mass 174	18514	7.43	
176	> 95.00% and < 101.00% of mass 174	244885	98.32	
177	5.00% - 9.00% of mass 176	15711	6.42	

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

497038053008

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497112758002 File : jcj02 Time : 19-MAR-2007 07:47

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	113381	22.02	
75	30.00% - 60.00% of mass 95	226240	43.94	
95		514922		
96	5.00% - 9.00% of mass 95	34594	6.72	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	405802	78.81	
175	5.00% - 9.00% of mass 174	30405	7.49	
176	> 95.00% and < 101.00% of mass 174	404373	99.65	
177	5.00% - 9.00% of mass 176	25813	6.38	

Analyst: ACM Date: 03/19/07 Reviewer: LW Date: 03/19/07

CURTIS & TOMPKINS BFB TUNE FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 497112758015 File : jcj15 Time : 19-MAR-2007 15:19

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	216042	22.22	
75	30.00% - 60.00% of mass 95	437376	44.98	
95		972288		
96	5.00% - 9.00% of mass 95	64781	6.66	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	772181	79.42	
175	5.00% - 9.00% of mass 174	58781	7.61	
176	> 95.00% and < 101.00% of mass 174	762538	98.75	
177	5.00% - 9.00% of mass 176	50960	6.68	

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

497112758015

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 MSVOA Water: EPA 8260B

Inst : MSVOA05
Calnum: 447013464001
Units : ug/L

Name : 826GOX5
Date : 09-JAN-2007 14:12
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

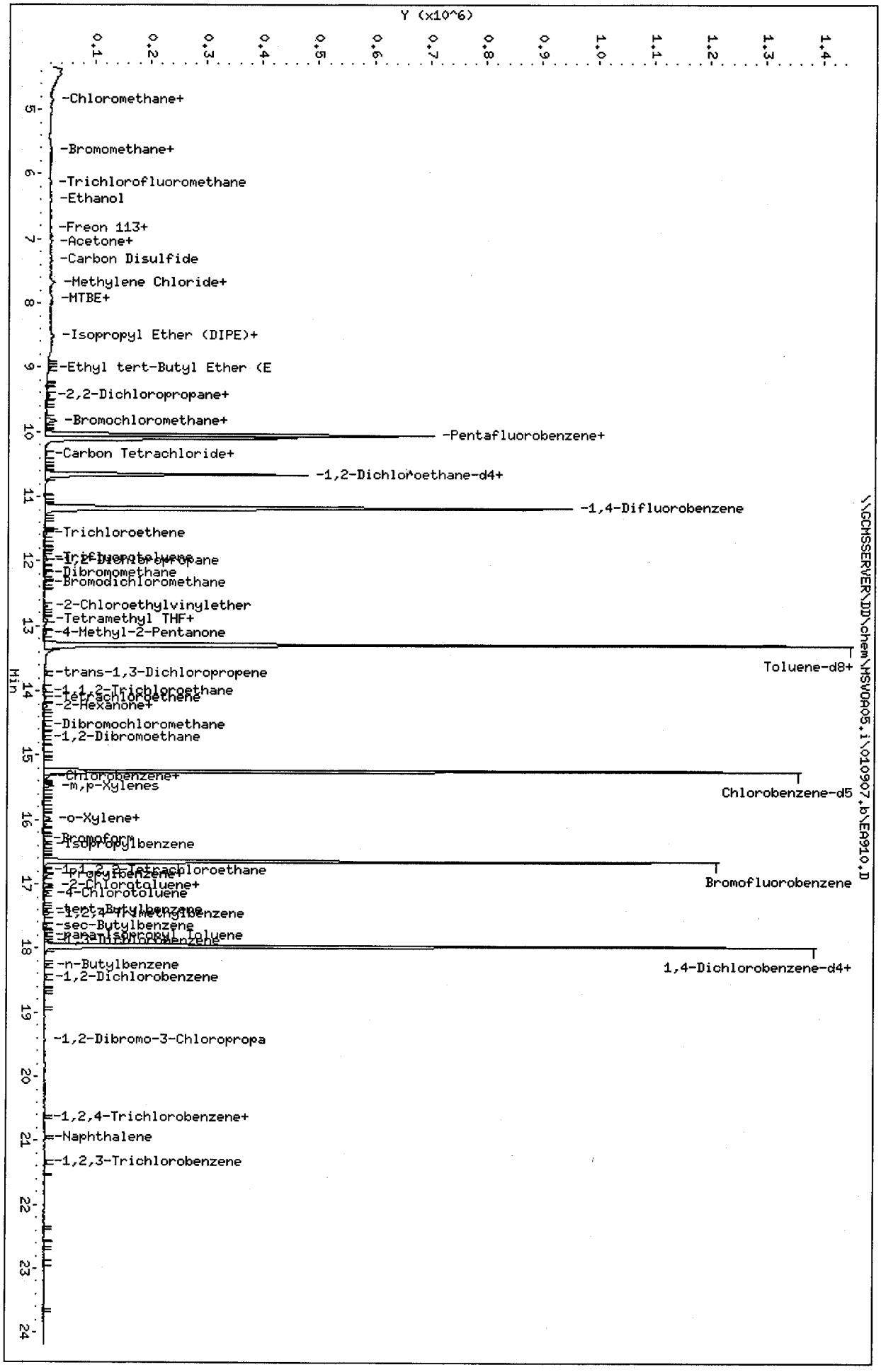
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
	18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
	19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
	21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
	22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
	24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
	25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
	26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
	30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
	33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
	37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
	38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
	40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
	46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
	47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
	50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
	51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
	57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
	60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
	61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
	62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

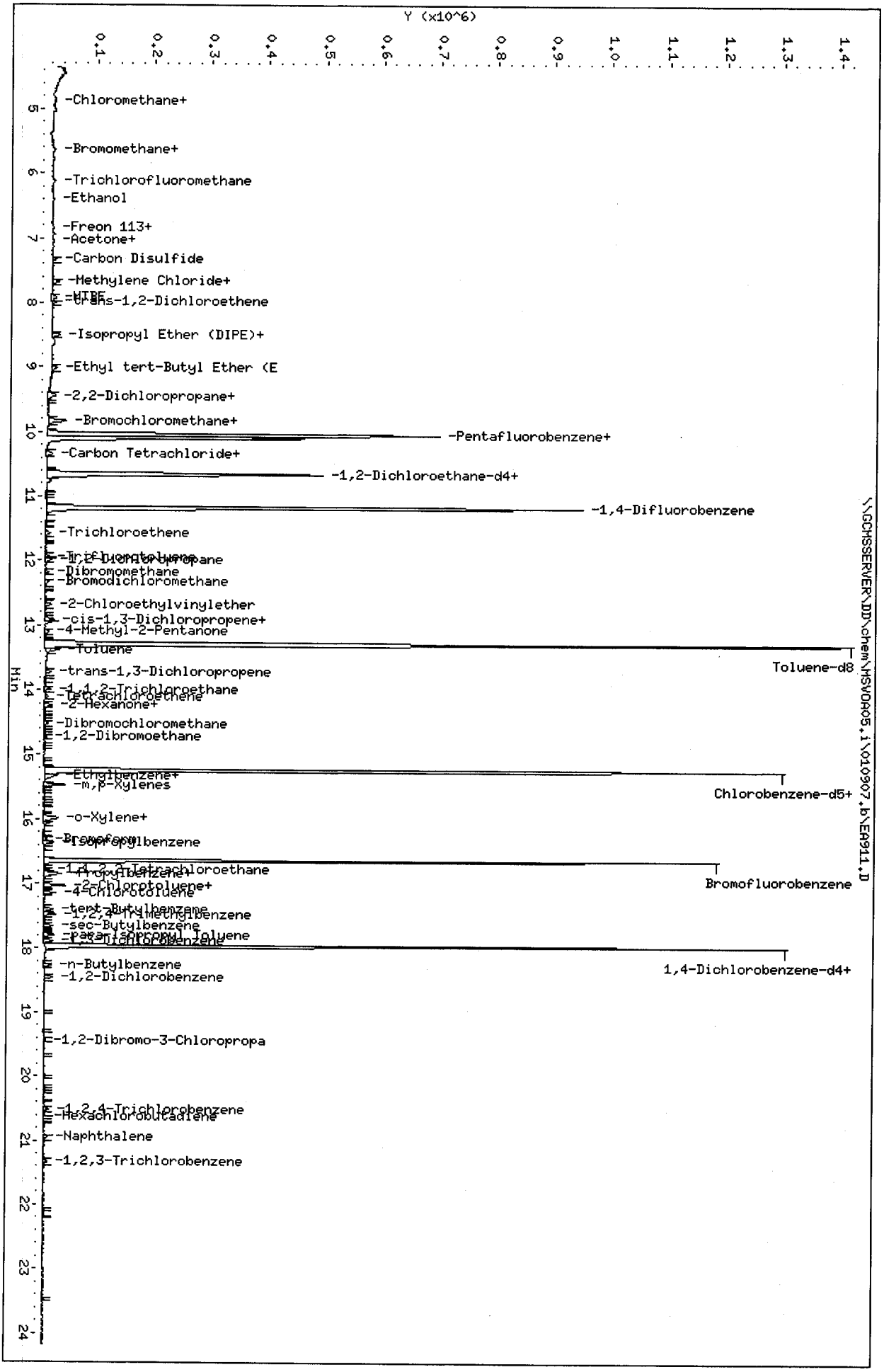
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

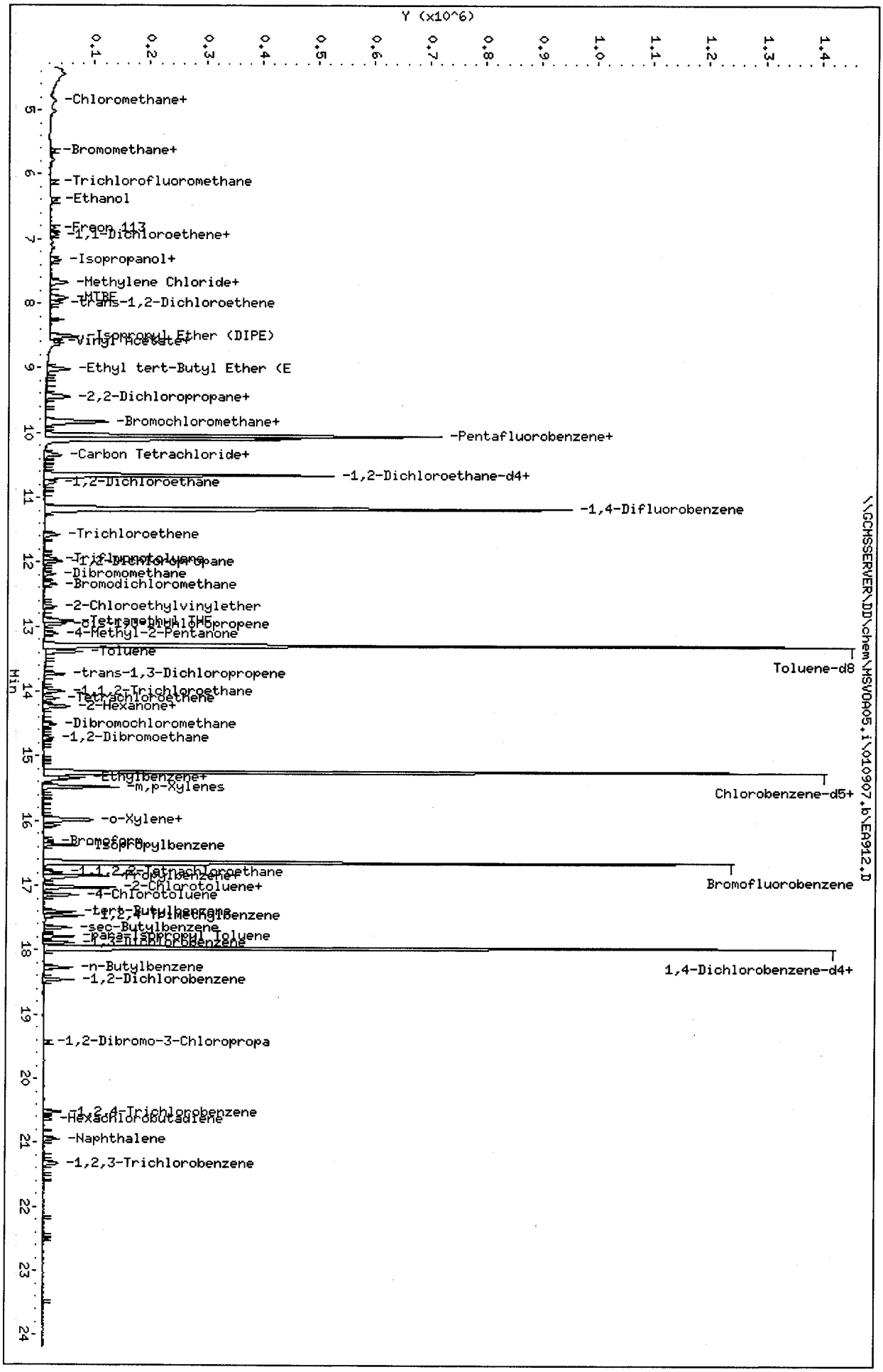
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Date : 09-JAN-2007 15:16
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5152,0.002/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

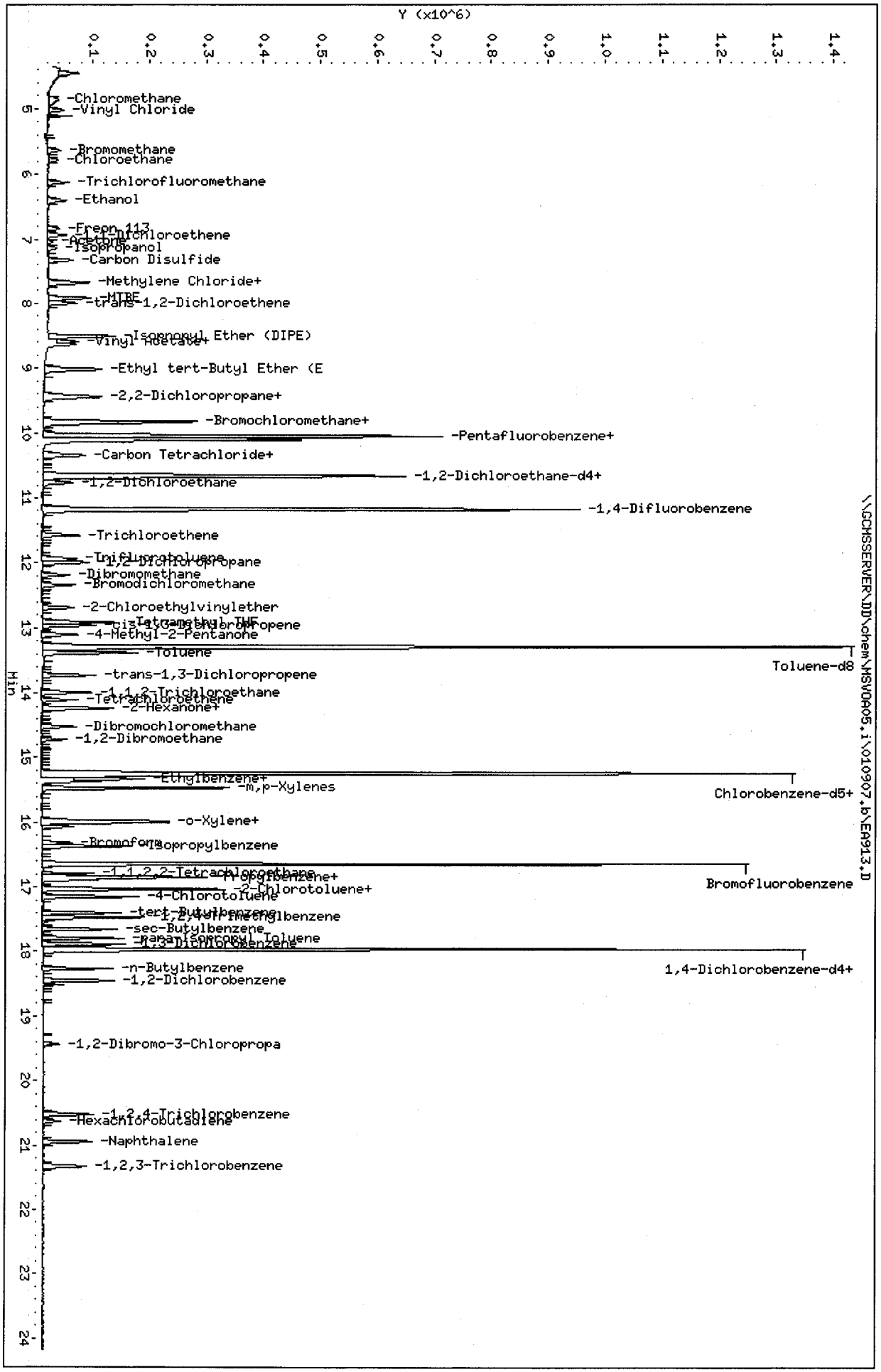
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Date : 09-JAN-2007 15:48
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5152,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

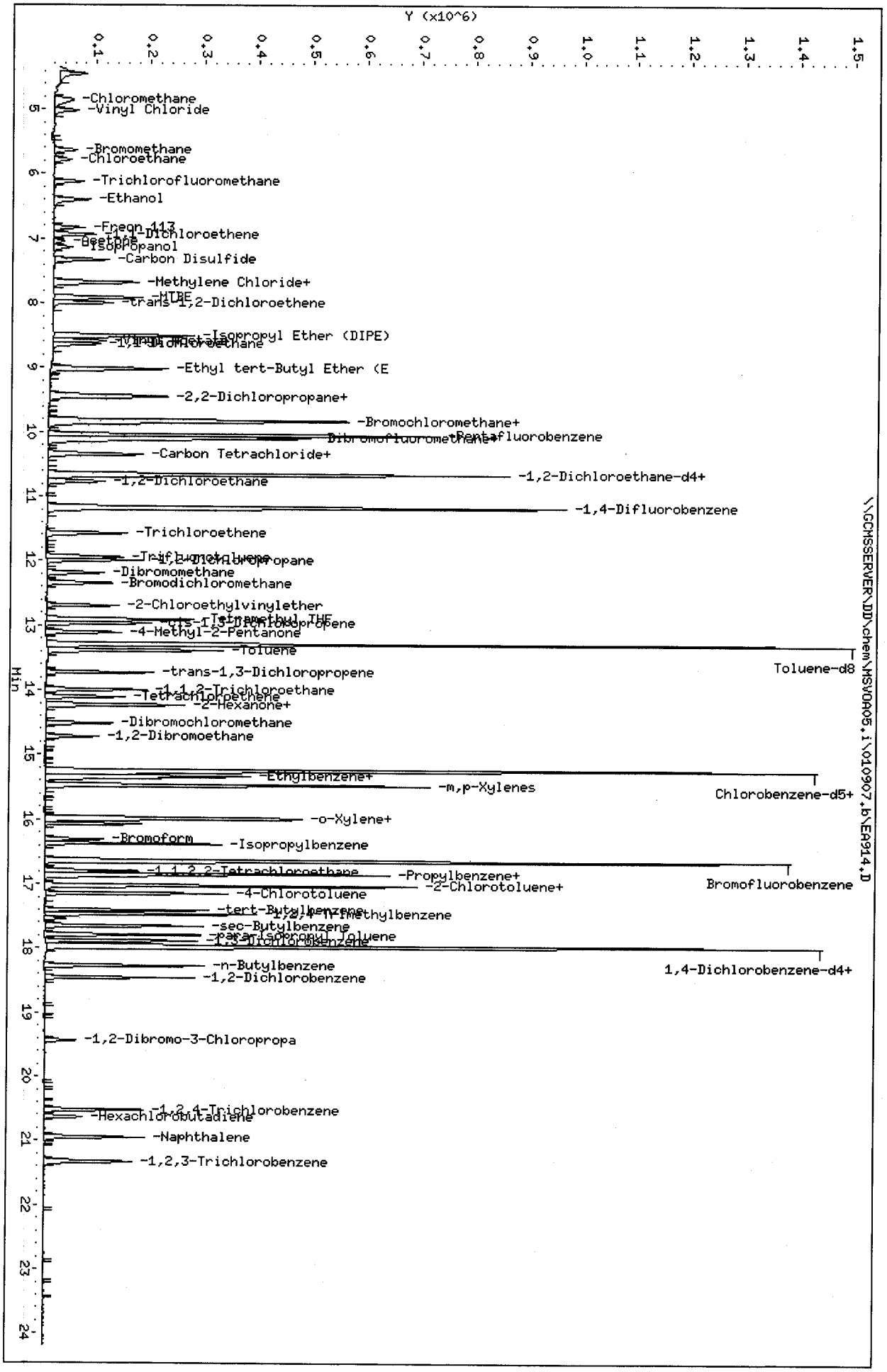
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Date : 09-JAN-2007 16:20
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5152,0.002/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:52 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
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Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
* 36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
* 55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Date : 09-JAN-2007 16:52
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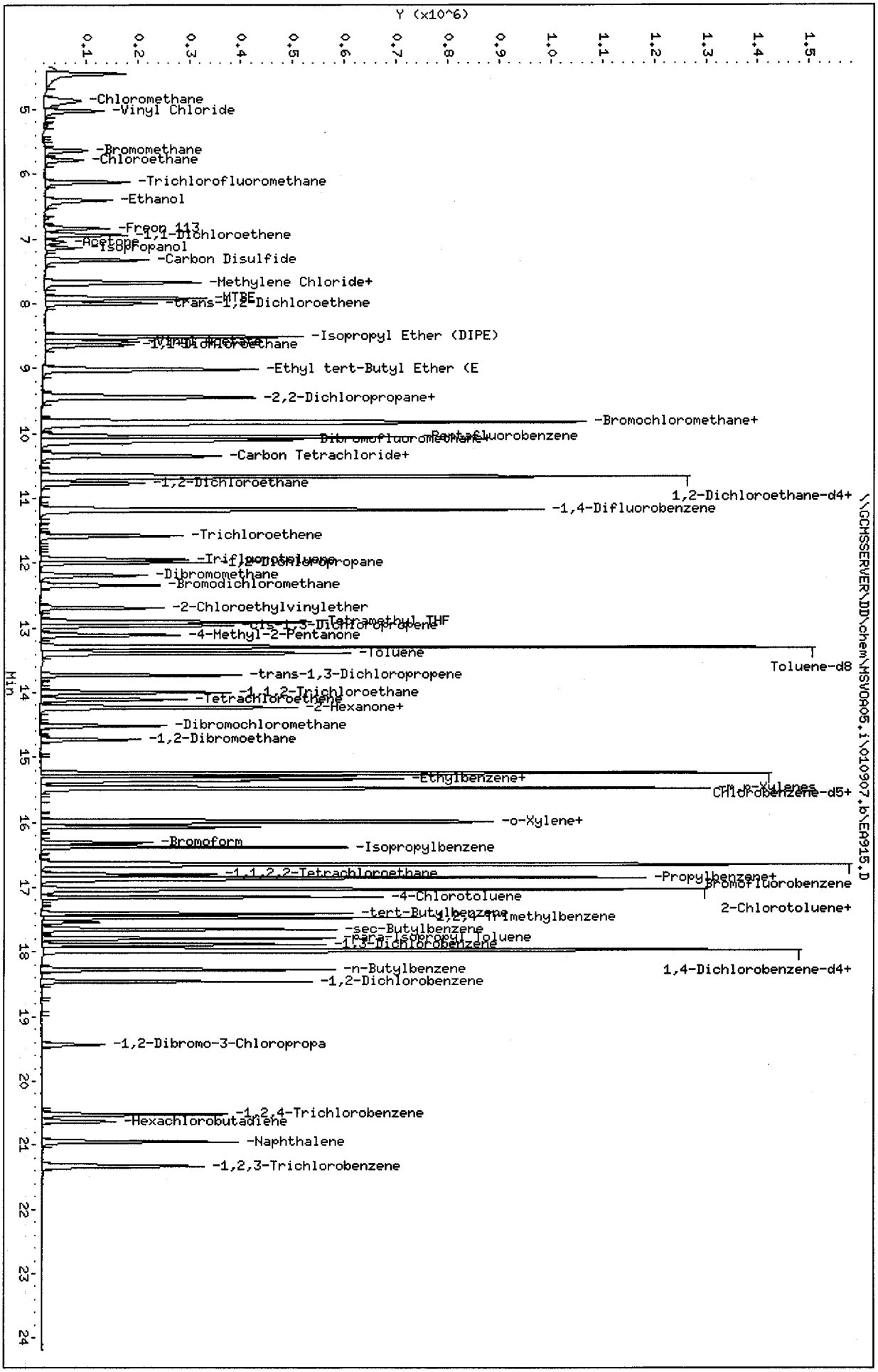
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
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Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.005/100,50PPB
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Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
* 55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

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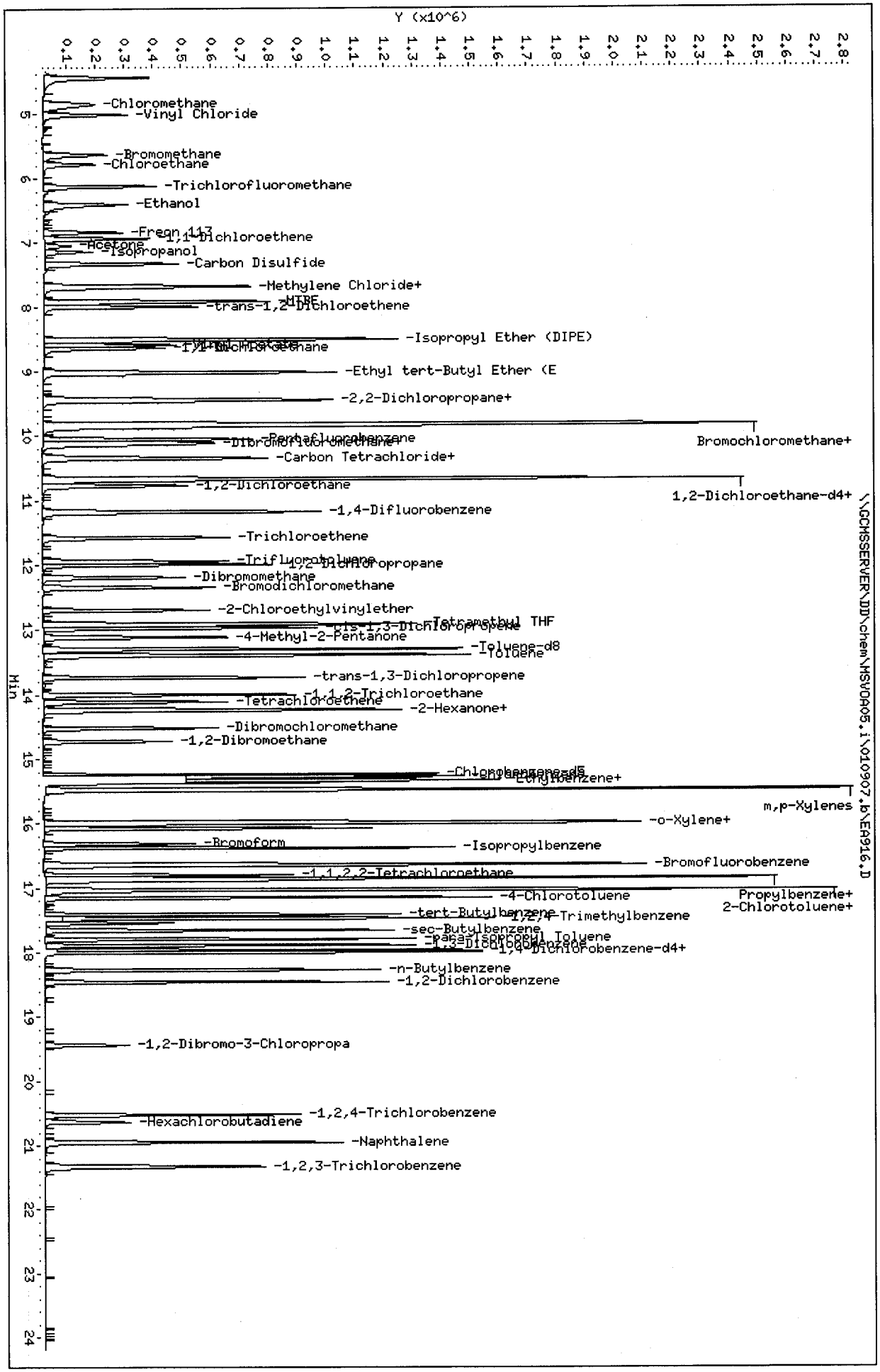
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:49

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
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Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
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Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

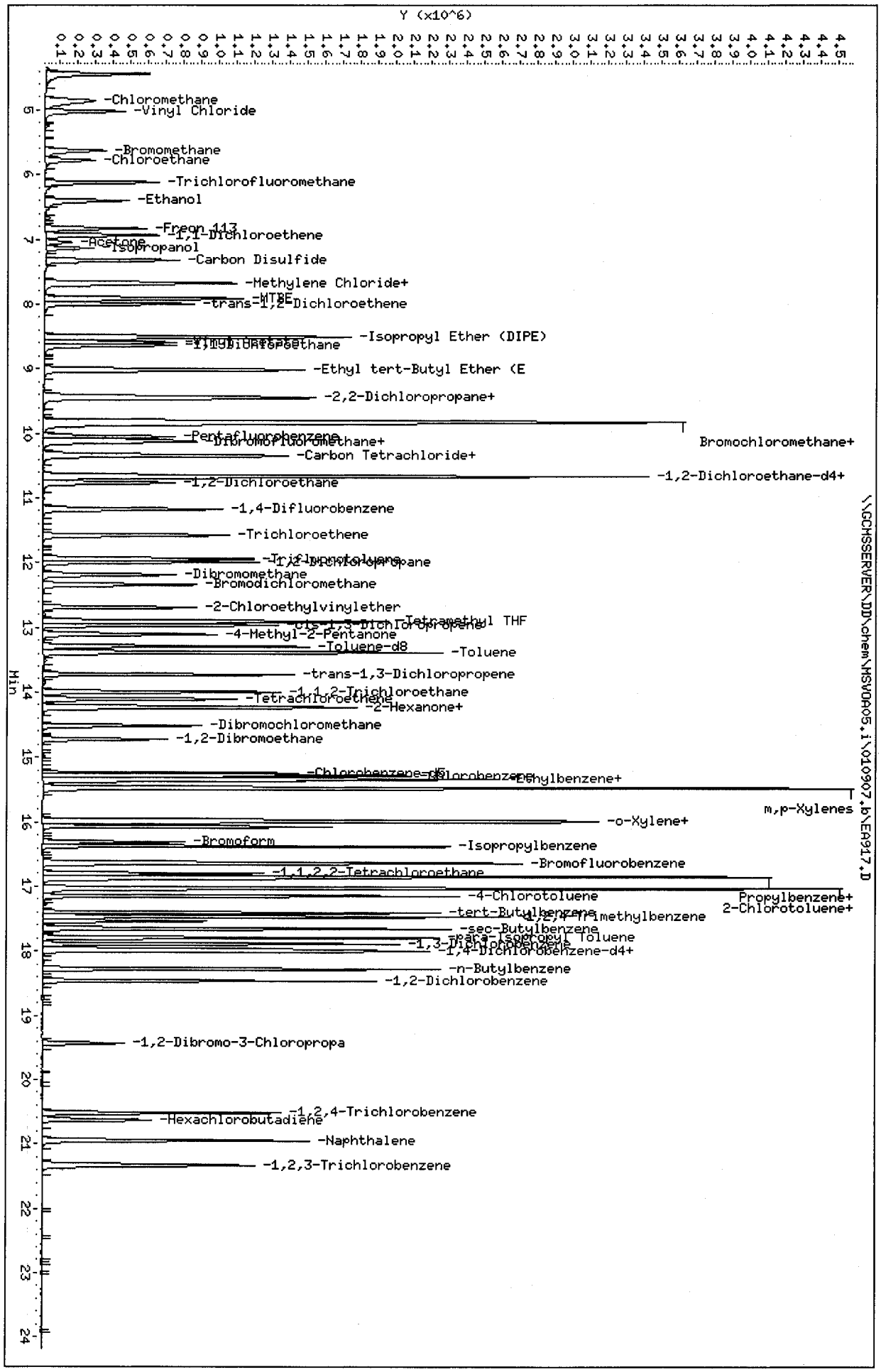
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Date : 09-JAN-2007 17:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5152,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
	18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
	19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
	21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
	22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
	24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
	25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
	26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
*	27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
	28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
	30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
	32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
	33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
	35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
*	36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
	37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
	38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
	40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
	41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
	42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
	43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
	44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
	45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
	46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
	47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
	48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
	49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
	50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
	51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
	52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
	53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
	54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
	56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
	57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
	58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
	59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
	60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
	61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
	62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
	63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

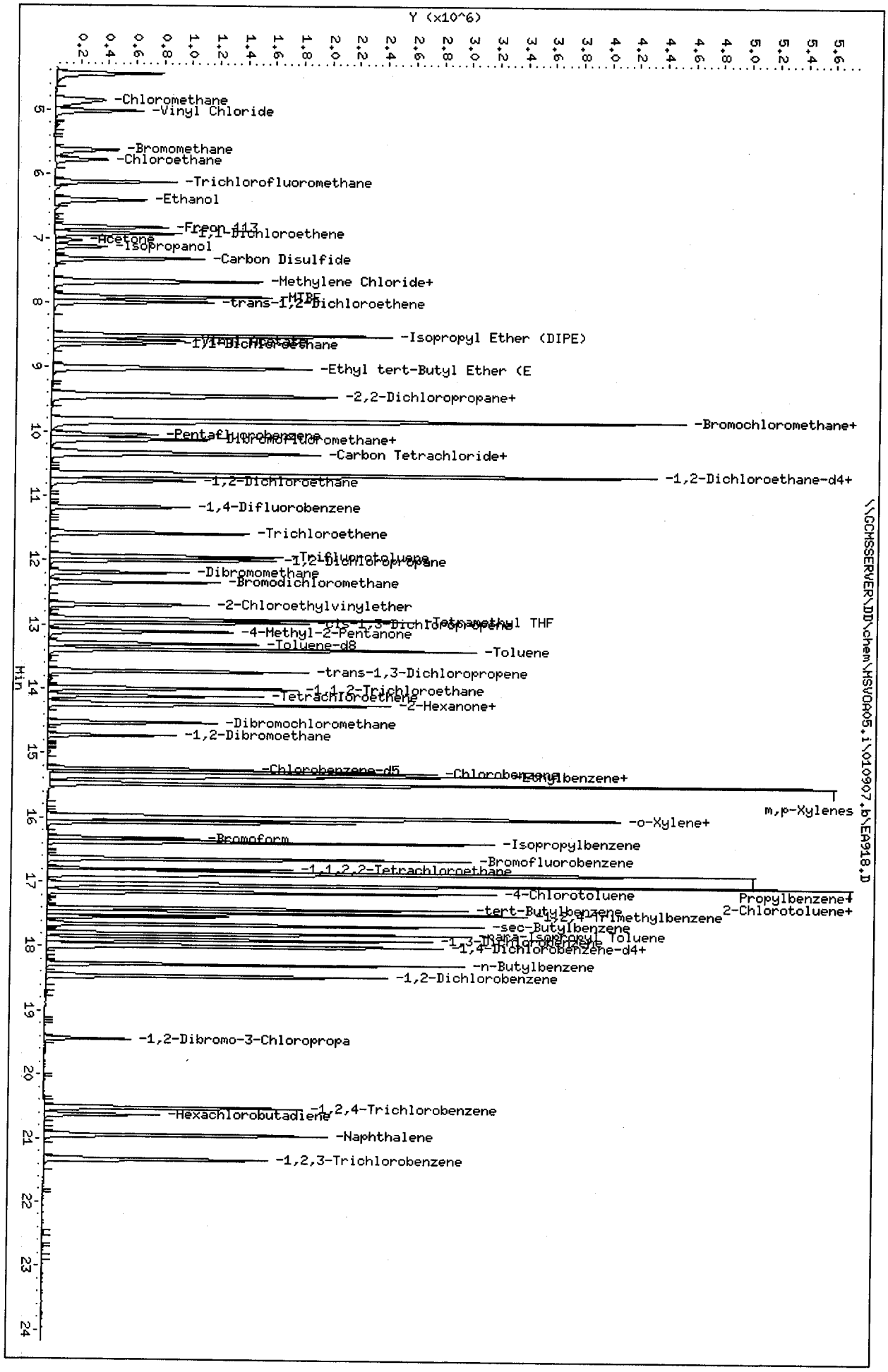
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Date : 09-JAN-2007 18:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5152,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum: 497038053001
Units : ug/L

Name : 826GOX10
Date : 26-JAN-2007 16:23
X Axis: R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaq11	497038053011	0.25/0.5PPB	26-JAN-2007 16:23	S5170 (2000000X), S5219 (1000000X), S4172 (2000000X), S5079 (5000X)
L2	jaq12	497038053012	0.5/1PPB	26-JAN-2007 16:56	S5170 (1000000X), S5219 (500000X), S4172 (1000000X), S5079 (5000X)
L3	jaq13	497038053013	2PPB	26-JAN-2007 17:28	S5170 (250000X), S5219 (250000X), S4172 (500000X), S5079 (5000X)
L4	jaq14	497038053014	5PPB	26-JAN-2007 18:01	S5170 (100000X), S5219 (100000X), S4172 (200000X), S5079 (5000X)
L5	jaq15	497038053015	10PPB	26-JAN-2007 18:34	S5170 (50000X), S5219 (50000X), S4172 (100000X), S5079 (5000X)
L6	jaq16	497038053016	20PPB	26-JAN-2007 19:06	S5170 (25000X), S5219 (25000X), S4172 (50000X), S5079 (5000X)
L7	jaq17	497038053017	50PPB	26-JAN-2007 19:39	S5170 (10000X), S5219 (10000X), S4172 (20000X), S5079 (5000X)
L8	jaq18	497038053018	75PPB	26-JAN-2007 20:12	S5170 (6667X), S5219 (6667X), S4172 (13330X), S5079 (5000X)
L9	jaq19	497038053019	100PPB	26-JAN-2007 20:44	S5170 (5000X), S5219 (5000X), S4172 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5702	0.5978m	0.5791m	0.5117m	0.5518m	0.5698m	0.5574m	0.5407m	AVRG		1.78629		0.5598	5	15	0.10	0.99	
Vinyl Chloride	0.4091m	0.4111m	0.4334m	0.4330m	0.4004m	0.4420m	0.4434	0.4439	0.4397m	AVRG		2.33402		0.4284	4	15	0.050	0.99	
Bromomethane		0.2306m	0.2441	0.2478	0.2302m	0.2430m	0.2624	0.2661	0.2682m	AVRG		4.01550		0.2490	6	15	0.050	0.99	
Chloroethane		0.2422m	0.2662	0.2571m	0.2473m	0.2571m	0.2624	0.2622	0.2588m	AVRG		3.89639		0.2566	3	15	0.050	0.99	
Acetone				0.1464	0.1417	0.1522	0.1261	0.1258	0.1342	AVRG		7.25989		0.1377	8	15	0.050	0.99	
1,1-Dichloroethene		0.2450m	0.2605m	0.2594	0.2333m	0.2576m	0.2366	0.2357	0.2456	AVRG		4.05340		0.2467	5	15	0.050	0.99	
Methylene Chloride			0.3473	0.3340	0.3160m	0.3234	0.3158	0.3166	0.3186m	AVRG		3.08128		0.3245	4	15	0.050	0.99	
Carbon Disulfide		1.1955	1.1420m	1.1328	1.0306m	1.1220m	1.0599	1.0524	1.0982	AVRG		0.90565		1.1042	5	15	0.050	0.99	
MTBE		0.8101	0.8879	0.8726m	0.8548	0.8912	0.8740m	0.8587	0.8710	AVRG		1.15603		0.8650	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.3024	0.2929	0.2948	0.2742m	0.2901m	0.2836m	0.2735	0.2830	AVRG		3.48670		0.2868	4	15	0.050	0.99	
Vinyl Acetate				1.1386m	1.1379m	1.2067m	1.1239m	1.1534m	1.1166m	AVRG		0.87245		1.1462	3	15	0.050	0.99	
1,1-Dichloroethane		0.5934	0.6331m	0.6072m	0.5682m	0.5919	0.5641	0.5476	0.5548	AVRG		1.71665		0.5825	5	15	0.10	0.99	
2-Butanone			0.2271m	0.2252m	0.2183	0.2457m	0.2203	0.2116	0.2282	AVRG		4.44043		0.2252	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.3169	0.3283	0.3022	0.2998m	0.3109m	0.2991m	0.2946	0.2978	AVRG		3.26582		0.3062	4	15	0.050	0.99	
Chloroform		0.5297	0.5102	0.4927	0.4683m	0.4842	0.4605	0.4530	0.4537	AVRG		2.07676		0.4815	6	15	0.050	0.99	
1,1,1-Trichloroethane		0.3216	0.3305	0.3303	0.2948	0.3207	0.3044	0.3046	0.3232	AVRG		3.16186		0.3163	4	15	0.050	0.99	
Carbon Tetrachloride		0.1713	0.1622	0.1617	0.1456	0.1554m	0.1464	0.1514	0.1602	AVRG		6.37882		0.1568	6	15	0.050	0.99	
1,2-Dichloroethane		0.2347	0.2616	0.2581m	0.2562m	0.2634	0.2532	0.2512	0.2502	AVRG		3.94369		0.2536	4	15	0.050	0.99	
Benzene		0.7459	0.7821	0.7244m	0.6958	0.7270	0.6899	0.6930	0.6911	AVRG		1.39149		0.7187	5	15	0.050	0.99	
Trichloroethene		0.1960	0.1804	0.1698	0.1496m	0.1695	0.1593	0.1619	0.1650	AVRG		5.91977		0.1689	8	15	0.050	0.99	
1,2-Dichloropropane		0.2375	0.2319	0.2346m	0.2117m	0.2262m	0.2187	0.2155	0.2115	AVRG		4.47558		0.2234	5	15	0.050	0.99	
Bromodichloromethane		0.2243	0.2297	0.2187	0.2201	0.2317m	0.2240	0.2280	0.2246	AVRG		4.44164		0.2251	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2909m	0.3345m	0.3418m	0.3228	0.3546	0.3198	0.3398	0.3517	AVRG		3.01218		0.3320	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.3082	0.3182m	0.3060	0.2928m	0.3158	0.3078	0.3098	0.3068	AVRG		3.24504		0.3082	2	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4374	0.4340	0.3929	0.4617	0.3990m	0.3770	0.3902	0.3813	AVRG		2.44402		0.4092	8	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2532m	0.2717	0.2714	0.2626	0.2789	0.2730	0.2778	0.2738	AVRG		3.69978		0.2703	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0772	0.1030	0.0918	0.0907	0.0959	0.0912	0.0932	0.0914	AVRG		10.8925		0.0918	8	15	0.050	0.99	
2-Hexanone			0.2261m	0.2142m	0.2213m	0.2535	0.2304	0.2257	0.2401	AVRG		4.34439		0.2302	6	15	0.050	0.99	
Tetrachloroethene		0.2047	0.1907	0.1883	0.1650	0.1905	0.1737m	0.1814	0.1884	AVRG		5.39515		0.1854	6	15	0.050	0.99	
Dibromochloromethane		0.1759	0.2308	0.2140	0.2051	0.2182	0.2133	0.2187	0.2210	AVRG		4.71402		0.2121	8	15	0.050	0.99	
Chlorobenzene		0.5657	0.5812	0.5274	0.4912m	0.5235m	0.4979	0.5225	0.5116	AVRG		1.89528		0.5276	6	15	0.30	0.99	
Ethylbenzene		0.9051	0.9876	0.8915	0.8355	0.8667	0.8194	0.8555	0.8454	AVRG		1.14177		0.8758	6	15	0.050	0.99	
m,p-Xylenes	0.3037	0.3336	0.3457	0.3123m	0.3191	0.3197	0.3067	0.3134	0.3120	AVRG		3.13997		0.3185	4	15	0.050	0.99	
o-Xylene		0.3356	0.3384	0.3134	0.3082	0.3148	0.3002	0.3108	0.3046	AVRG		3.16698		0.3158	4	15	0.050	0.99	
Styrene		0.5022	0.5860m	0.5371m	0.5122	0.5644	0.5372	0.5601	0.5443	AVRG		1.84183		0.5429	5	15	0.050	0.99	
Bromoform		0.1880	0.1722	0.1554	0.1554	0.1654	0.1558	0.1619	0.1642	AVRG		6.06883		0.1648	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6524	0.6948	0.6318	0.6018	0.6660	0.6091	0.6117	0.6164	AVRG		1.57353		0.6355	5	15	0.30	0.99	
Dibromofluoromethane	0.5407	0.5452	0.5423	0.5551	0.5518	0.5468	0.5492	0.5438	0.5476	AVRG		1.82833		0.5469	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3968	0.4007	0.3961	0.3972	0.3973	0.3918	0.3908	0.3935	0.3943	AVRG		2.52906		0.3954	1	15	0.050	0.99	
Toluene-d8	1.0761	1.0777	1.0805	1.0723	1.0823	1.0795	1.0767	1.0731	1.0652	AVRG		0.92943		1.0759	0	15	0.050	0.99	
Bromofluorobenzene	1.2129	1.2033	1.2171	1.2136	1.1902	1.1781	1.1523	1.1407	1.1451	AVRG		0.84481		1.1837	3	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate				5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497038053001 Cal Date: 26-JAN-2007 Type : WATER

ICV 497038053020 (jaq20 26-JAN-2007) stds: S5241 (10000X), S5079 (5000X)
ICV 497038053021 (jaq21 26-JAN-2007) stds: S5052 (10000X), S5322 (10000X), S5079 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497038053020	0.5598	0.4893	25.00	21.85	ug/L	-13	30	m
Vinyl Chloride	497038053020	0.4284	0.3821	25.00	22.29	ug/L	-11	20	m
Bromomethane	497038053020	0.2490	0.2265	25.00	22.74	ug/L	-9	30	m
Chloroethane	497038053020	0.2566	0.2530	25.00	24.64	ug/L	-1	30	m
Acetone	497038053021	0.1377	0.1420	25.00	25.77	ug/L	3	40	
1,1-Dichloroethene	497038053021	0.2467	0.2456	25.00	24.88	ug/L	0	20	
Methylene Chloride	497038053021	0.3245	0.3243	25.00	24.98	ug/L	0	30	
Carbon Disulfide	497038053021	1.1042	0.8505	25.00	19.26	ug/L	**-23**	30	!v- m
MTBE	497038053021	0.8650	0.8004	25.00	23.13	ug/L	-7	30	
trans-1,2-Dichloroethene	497038053021	0.2868	0.2826	25.00	24.64	ug/L	-1	30	
Vinyl Acetate	497038053021	1.1462	1.0327	25.00	22.53	ug/L	-10	40	m
1,1-Dichloroethane	497038053021	0.5825	0.5767	25.00	24.75	ug/L	-1	30	
2-Butanone	497038053021	0.2252	0.2315	25.00	25.70	ug/L	3	40	
cis-1,2-Dichloroethene	497038053021	0.3062	0.3223	25.00	26.31	ug/L	5	30	m
Chloroform	497038053021	0.4815	0.4837	25.00	25.11	ug/L	0	20	
1,1,1-Trichloroethane	497038053021	0.3163	0.3300	25.00	26.08	ug/L	4	30	m
Carbon Tetrachloride	497038053021	0.1568	0.1660	25.00	26.47	ug/L	6	30	
1,2-Dichloroethane	497038053021	0.2536	0.2527	25.00	24.92	ug/L	0	30	m
Benzene	497038053021	0.7187	0.7110	25.00	24.73	ug/L	-1	30	
Trichloroethene	497038053021	0.1689	0.1650	25.00	24.42	ug/L	-2	30	
1,2-Dichloropropane	497038053021	0.2234	0.2134	25.00	23.87	ug/L	-5	20	
Bromodichloromethane	497038053021	0.2251	0.2384	25.00	26.47	ug/L	6	30	m
4-Methyl-2-Pentanone	497038053021	0.3320	0.3212	25.00	24.19	ug/L	-3	40	
cis-1,3-Dichloropropene	497038053021	0.3082	0.3089	25.00	25.06	ug/L	0	30	
Toluene	497038053021	0.4092	0.4022	25.00	24.58	ug/L	-2	20	
trans-1,3-Dichloropropene	497038053021	0.2703	0.2535	25.00	23.45	ug/L	-6	30	
1,1,2-Trichloroethane	497038053021	0.0918	0.0944	25.00	25.71	ug/L	3	30	
2-Hexanone	497038053021	0.2302	0.2472	25.00	26.85	ug/L	7	40	
Tetrachloroethene	497038053021	0.1854	0.1951	25.00	26.31	ug/L	5	30	
Dibromochloromethane	497038053021	0.2121	0.2199	25.00	25.92	ug/L	4	30	
Chlorobenzene	497038053021	0.5276	0.5181	25.00	24.55	ug/L	-2	30	
Ethylbenzene	497038053021	0.8758	0.8976	25.00	25.62	ug/L	2	20	
m,p-Xylenes	497038053021	0.3185	0.3220	50.00	50.56	ug/L	1	30	
o-Xylene	497038053021	0.3158	0.3158	25.00	25.01	ug/L	0	30	
Styrene	497038053021	0.5429	0.5724	25.00	26.36	ug/L	5	30	
Bromoform	497038053021	0.1648	0.1631	25.00	24.75	ug/L	-1	30	
1,1,2,2-Tetrachloroethane	497038053021	0.6355	0.6193	25.00	24.36	ug/L	-3	30	

!=warning -=low bias m=manual integration v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:23 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.0005/1000,S5219,0.001/1000
Misc Info : S4172,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:03 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:23 Cal File: JAQ11.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.560	4.560	(0.428)	2535	0.50000	0.2662
2 Chloromethane	50	5.034	5.034	(0.473)	5069	0.50000	0.2829
3 Vinyl Chloride	62	5.221	5.221	(0.491)	6546	0.50000	0.4774(M)
4 Bromomethane	94	5.891	5.891	(0.554)	3347	0.50000	0.4199
5 Chloroethane	64	6.069	6.069	(0.570)	1935	0.50000	0.2356
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	4880	0.50000	0.4441
7 Ethanol	45	6.710	6.710	(0.630)	3237	25.0000	16.8374
8 Freon 113	101	7.350	7.350	(0.691)	793	0.25000	0.1069
9 Acetone	43	7.400	7.400	(0.695)	4185	0.25000	0.9494
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	887	0.25000	0.1123
11 Isopropanol	45	7.518	7.518	(0.706)	1872	2.50000	2.1586
12 Carbon Disulfide	76	7.824	7.824	(0.735)	8618	0.25000	0.2439
13 Methylene Chloride	84	8.100	8.100	(0.761)	3802	0.25000	0.3660
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.763)	1649	2.50000	1.6803
15 MTBE	73	8.494	8.494	(0.798)	6130	0.25000	0.2214
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	2257	0.25000	0.2459
18 Vinyl Acetate	43	9.145	9.145	(0.859)	12426	0.25000	0.3387
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	4220	0.25000	0.2263
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	12019	0.25000	0.2453
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	7432	0.25000	0.2129
22 2-Butanone	43	9.953	9.953	(0.935)	2308	0.25000	0.3202
23 cis-1,2-Dichloroethene	96	10.003	10.003	(0.940)	2488	0.25000	0.2539

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.943)	2193	0.25000	0.1981
25 Bromochloromethane	128	10.367	10.367	(0.974)	757	0.25000	0.1553
26 Chloroform	83	10.427	10.427	(0.980)	5576	0.25000	0.3618
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	48760	2.50000	10.1033
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1600020	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	865191	50.0000	49.4323
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	2194	0.25000	0.2167
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	2234	0.25000	0.1926
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	1328	0.25000	0.1676
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1002330	50.0000	50.1819
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	2887	0.25000	0.2253
35 Benzene	78	11.353	11.353	(0.961)	8860	0.25000	0.2440
36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.967)	5416	0.25000	0.2128
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525762	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	2421	0.25000	0.2837
39 Trifluorotoluene	146	12.586	12.586	(1.065)	1414	0.25000	0.1167
40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	2497	0.25000	0.2212
41 Dibromomethane	93	12.783	12.783	(1.082)	1486	0.25000	0.2424
42 Bromodichloromethane	83	12.941	12.941	(1.095)	2246	0.25000	0.1974
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	3382	0.25000	0.2172
45 Tetramethyl THF	43	13.641	13.641	(1.154)	6620	0.25000	0.2484
46 4-Methyl-2-Pentanone	43	13.641	13.641	(1.154)	6620	0.25000	0.3947
47 Toluene-d8	98	13.966	13.966	(1.182)	2717903	50.0000	50.0069
48 Toluene	92	14.055	14.055	(1.189)	5930	0.25000	0.2869
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.208)	2914	0.25000	0.2134
50 1,1,2-Trichloroethane	85	14.538	14.538	(1.230)	874	0.25000	0.1884
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	3000	0.25000	0.2006
52 2-Hexanone	43	14.834	14.834	(0.937)	1217	0.25000	0.1274
53 Tetrachloroethene	166	14.804	14.804	(0.935)	1816	0.25000	0.2362
54 Dibromochloromethane	129	15.080	15.080	(0.953)	1689	0.25000	0.1919
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	1824	0.25000	0.2091
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2073470	50.0000	
57 Chlorobenzene	112	15.859	15.859	(1.002)	5136	0.25000	0.2347
58 1,1,1,2-Tetrachloroethane	131	15.918	15.918	(1.006)	1451	0.25000	0.1996
59 Ethylbenzene	91	15.958	15.958	(1.008)	9022	0.25000	0.2484
60 m,p-Xylenes	106	16.086	16.086	(1.016)	6298	0.50000	0.4768
61 o-Xylene	106	16.569	16.569	(1.047)	3225	0.25000	0.2462
62 Styrene	104	16.589	16.589	(1.048)	5266	0.25000	0.2338
63 Bromoform	173	16.835	16.835	(1.064)	2043	0.25000	0.2989
64 Isopropylbenzene	105	16.973	16.973	(0.916)	6782	0.25000	0.2283
65 Cyclohexanone	55	17.131	17.131	(0.925)	1418	2.50000	2.4111
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1124757	50.0000	51.2336
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	2100	0.25000	0.1781
68 1,2,3-Trichloropropane	75	17.358	17.358	(0.937)	3018	0.25000	0.2741
69 Bromobenzene	156	17.387	17.387	(0.939)	2273	0.25000	0.2609
70 Propylbenzene	91	17.436	17.436	(0.941)	8820	0.25000	0.2412
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	6823	0.25000	0.2628
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	4748	0.25000	0.2225
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	6022	0.25000	0.2496
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	4532	0.25000	0.2350
75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	4301	0.25000	0.2237
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	5720	0.25000	0.2036
77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	4284	0.25000	0.2113
78 1,3-Dichlorobenzene	146	18.462	18.462	(0.997)	4523	0.25000	0.2917

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Report Date: 29-Jan-2007 09:03

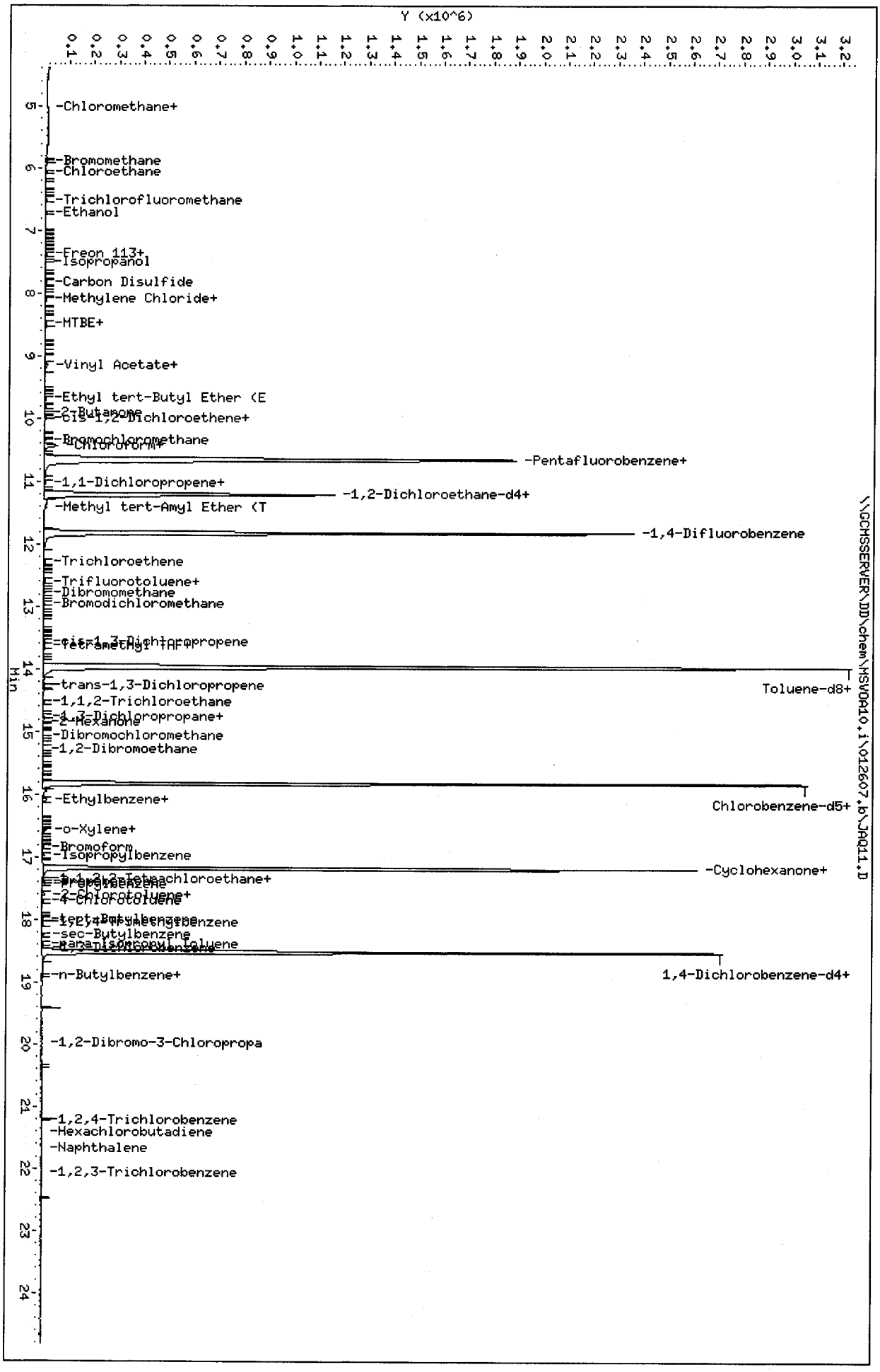
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	927324	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.001)	4544	0.25000	0.2851
81 n-Butylbenzene	91	18.886	18.886	(1.020)	3931	0.25000	0.2414
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	3574	0.25000	0.2389
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	150	0.25000	0.0823
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	2096	0.25000	0.3510
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	861	0.25000	0.2889
86 Naphthalene	128	21.676	21.676	(1.170)	1928	0.25000	0.1527
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1726	0.25000	0.3060

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ11.D
Date : 26-JAN-2007 16:23
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5219,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 16:56 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.001/1000,S5219,0.002/1000
Misc Info : S4172,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:04 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 16:56 Cal File: JAQ12.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.576	4.576	(0.430)	7235	1.00000	0.7427(M)
2 Chloromethane	50	5.059	5.059	(0.476)	18667	1.00000	1.0185
3 Vinyl Chloride	62	5.216	5.216	(0.490)	13459	1.00000	0.9595(M)
4 Bromomethane	94	5.897	5.897	(0.554)	7548	1.00000	0.9258(M)
5 Chloroethane	64	6.074	6.074	(0.571)	7929	1.00000	0.9437(M)
6 Trichlorofluoromethane	101	6.528	6.528	(0.614)	9832	1.00000	0.8747
7 Ethanol	45	6.695	6.695	(0.629)	8655	50.0000	44.0061
8 Freon 113	101	7.356	7.356	(0.691)	3526	0.50000	0.4648
9 Acetone	43	7.395	7.395	(0.695)	4892	0.50000	1.0848(M)
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	4010	0.50000	0.4965(M)
11 Isopropanol	45	7.514	7.514	(0.706)	3895	5.00000	4.3903(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	19568	0.50000	0.5413
13 Methylene Chloride	84	8.095	8.095	(0.761)	6365	0.50000	0.5990(M)
14 tert-Butyl Alcohol (TBA)	59	8.115	8.115	(0.763)	4310	5.00000	4.2930
15 MTBE	73	8.490	8.490	(0.798)	13260	0.50000	0.4682
16 trans-1,2-Dichloroethene	96	8.539	8.539	(0.803)	4950	0.50000	0.5272
18 Vinyl Acetate	43	9.131	9.131	(0.858)	15549	0.50000	0.4143
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	9713	0.50000	0.5093
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	25375	0.50000	0.5062
21 Ethyl tert-Butyl Ether (ETBE)	59	9.702	9.702	(0.912)	16442	0.50000	0.4605
22 2-Butanone	43	9.949	9.949	(0.935)	3867	0.50000	0.5245
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	5187	0.50000	0.5174

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	6306	0.50000	0.5569
25 Bromochloromethane	128	10.363	10.363	(0.974)	2329	0.50000	0.4671
26 Chloroform	83	10.422	10.422	(0.980)	8670	0.50000	0.5499
27 Tetrahydrofuran	42	10.442	10.442	(0.981)	61535	5.00000	12.4633(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1636864	50.0000	
29 Dibromofluoromethane	113	10.669	10.669	(1.003)	892397	50.0000	49.8390
30 1,1,1-Trichloroethane	97	10.797	10.797	(1.015)	5264	0.50000	0.5084
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	6549	0.50000	0.5542
32 Carbon Tetrachloride	117	11.063	11.063	(0.936)	4408	0.50000	0.5462
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1031383	50.0000	50.6712
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	6041	0.50000	0.4628
35 Benzene	78	11.359	11.359	(0.961)	19199	0.50000	0.5189
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	12894	0.50000	0.4973
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2573874	50.0000	
38 Trichloroethene	95	12.276	12.276	(1.038)	5045	0.50000	0.5801
39 Trifluorotoluene	146	12.601	12.601	(1.066)	6166	0.50000	0.4994
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	6114	0.50000	0.5315
41 Dibromomethane	93	12.778	12.778	(1.081)	2626	0.50000	0.4204
42 Bromodichloromethane	83	12.956	12.956	(1.096)	5774	0.50000	0.4981
44 cis-1,3-Dichloropropene	75	13.567	13.567	(1.148)	7933	0.50000	0.5000
45 Tetramethyl THF	43	13.646	13.646	(1.154)	12460	0.50000	0.4589
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	7488	0.50000	0.4381(H)
47 Toluene-d8	98	13.962	13.962	(1.181)	2773774	50.0000	50.0809
48 Toluene	92	14.060	14.060	(1.189)	11257	0.50000	0.5344
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	6516	0.50000	0.4683(M)
50 1,1,2-Trichloroethane	85	14.524	14.524	(1.228)	1988	0.50000	0.4206
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	7415	0.50000	0.4943
52 2-Hexanone	43	14.809	14.809	(0.936)	3613	0.50000	0.3772
53 Tetrachloroethene	166	14.809	14.809	(0.936)	4259	0.50000	0.5522
54 Dibromochloromethane	129	15.086	15.086	(0.953)	3660	0.50000	0.4146
55 1,2-Dibromoethane	107	15.283	15.283	(1.293)	3828	0.50000	0.4307
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2080264	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	11768	0.50000	0.5360
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	3496	0.50000	0.4794
59 Ethylbenzene	91	15.953	15.953	(1.008)	18828	0.50000	0.5166
60 m,p-Xylenes	106	16.091	16.091	(1.017)	13879	1.00000	1.0474
61 o-Xylene	106	16.574	16.574	(1.047)	6981	0.50000	0.5313
62 Styrene	104	16.584	16.584	(1.048)	10447	0.50000	0.4624
63 Bromoform	173	16.840	16.840	(1.064)	3910	0.50000	0.5703
64 Isopropylbenzene	105	16.978	16.978	(0.917)	15942	0.50000	0.5306
65 Cyclohexanone	55	17.117	17.117	(0.924)	2707	5.00000	4.5494
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1128978	50.0000	50.8277
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	6121	0.50000	0.5132
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	7536	0.50000	0.6765
69 Bromobenzene	156	17.393	17.393	(0.939)	4426	0.50000	0.5021
70 Propylbenzene	91	17.442	17.442	(0.942)	19152	0.50000	0.5178
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	14066	0.50000	0.5355
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	10793	0.50000	0.5000
73 4-Chlorotoluene	91	17.708	17.708	(0.956)	13469	0.50000	0.5517
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	10033	0.50000	0.5142
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	8927	0.50000	0.4589
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	14915	0.50000	0.5249
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	10601	0.50000	0.5168
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	8321	0.50000	0.5304

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Report Date: 29-Jan-2007 09:04

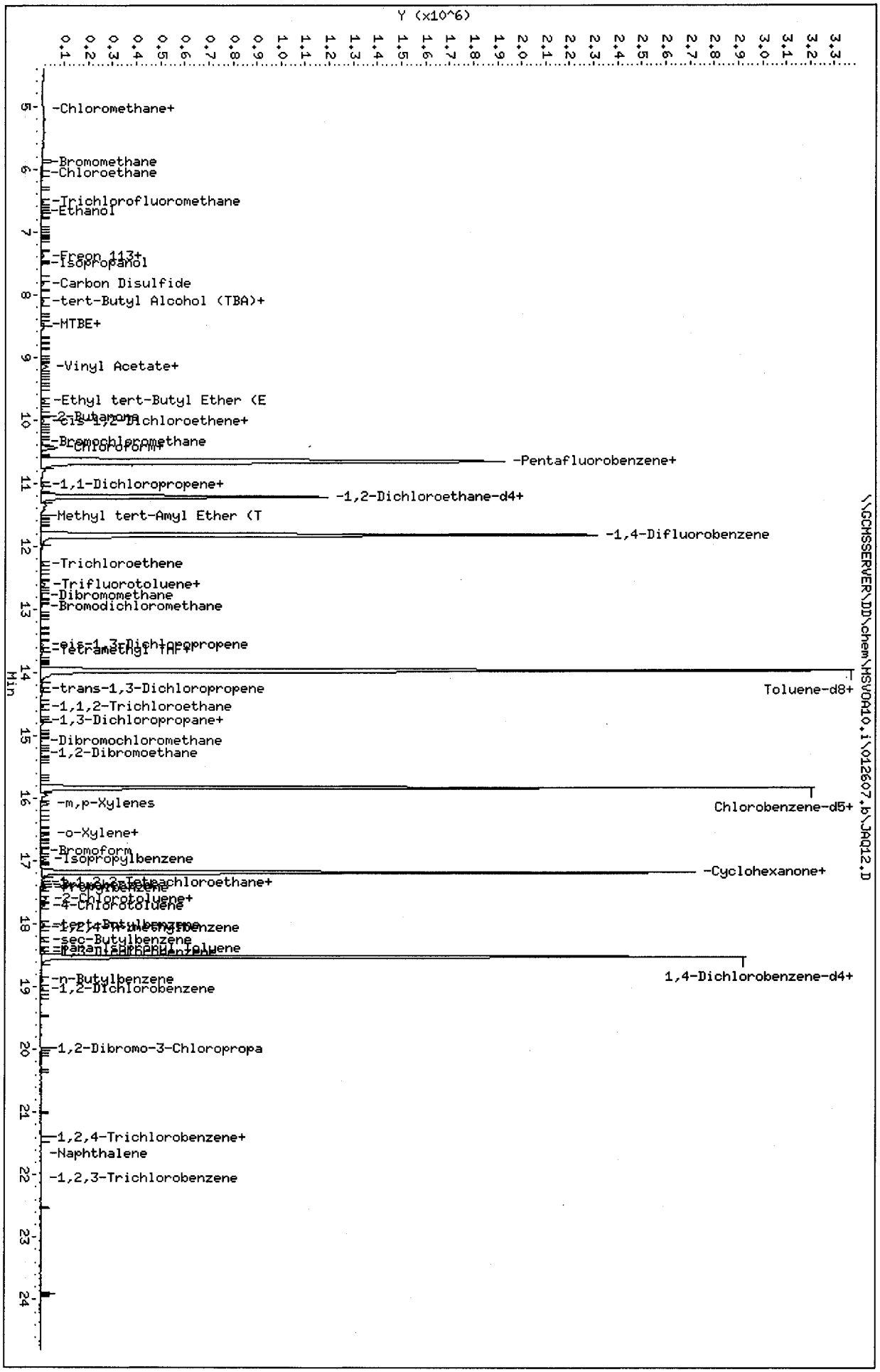
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	938237	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	9153	0.50000	0.5677
81 n-Butylbenzene	91	18.891	18.891	(1.020)	8333	0.50000	0.5058
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	7706	0.50000	0.5091
83 1,2-Dibromo-3-Chloropropane	75	19.995	19.995	(1.080)	383	0.50000	0.2078
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	3180	0.50000	0.5263
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	2029	0.50000	0.6729
86 Naphthalene	128	21.671	21.671	(1.170)	5279	0.50000	0.4133
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	2798	0.50000	0.4903

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ12.D
Date : 26-JAN-2007 16:56
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5219,0.002/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 17:28 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.002/500,S5219,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:05 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 17:28 Cal File: JAQ13.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.575	4.575	(0.430)	18377	2.00000	1.9299(M)
2 Chloromethane	50	5.048	5.048	(0.475)	38262	2.00000	2.1358(M)
3 Vinyl Chloride	62	5.216	5.216	(0.490)	27735	2.00000	2.0228(M)
4 Bromomethane	94	5.896	5.896	(0.554)	15624	2.00000	1.9605
5 Chloroethane	64	6.064	6.064	(0.570)	17036	2.00000	2.0742
6 Trichlorofluoromethane	101	6.527	6.527	(0.614)	21663	2.00000	1.9716
7 Ethanol	45	6.705	6.705	(0.630)	39066	200.000	203.2028(M)
8 Freon 113	101	7.356	7.356	(0.691)	14598	2.00000	1.9690
9 Acetone	43	7.385	7.385	(0.694)	13299	2.00000	3.0171
10 1,1-Dichloroethene	96	7.385	7.385	(0.694)	16671	2.00000	2.1116(M)
11 Isopropanol	45	7.503	7.503	(0.705)	17751	20.0000	20.4691(M)
12 Carbon Disulfide	76	7.829	7.829	(0.736)	73090	2.00000	2.0685(M)
13 Methylene Chloride	84	8.105	8.105	(0.762)	22230	2.00000	2.1404
14 tert-Butyl Alcohol (TBA)	59	8.125	8.125	(0.764)	19591	20.0000	19.9630
15 MTBE	73	8.480	8.480	(0.797)	56826	2.00000	2.0528
16 trans-1,2-Dichloroethene	96	8.529	8.529	(0.802)	18745	2.00000	2.0424
18 Vinyl Acetate	43	9.130	9.130	(0.858)	82474	2.00000	2.2485(M)
19 1,1-Dichloroethane	63	9.140	9.140	(0.859)	40519	2.00000	2.1736(M)
20 Isopropyl Ether (DIPE)	45	9.160	9.160	(0.861)	102783	2.00000	2.0979
21 Ethyl tert-Butyl Ether (ETBE)	59	9.692	9.692	(0.911)	72766	2.00000	2.0849
22 2-Butanone	43	9.949	9.949	(0.935)	14535	2.00000	2.0168(M)
23 cis-1,2-Dichloroethene	96	9.998	9.998	(0.940)	21011	2.00000	2.1442

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.942)	22956	2.00000	2.0740
25 Bromochloromethane	128	10.363	10.363	(0.974)	9569	2.00000	1.9633
26 Chloroform	83	10.422	10.422	(0.980)	32652	2.00000	2.1190
27 Tetrahydrofuran	42	10.441	10.441	(0.981)	133684	20.0000	27.6998(M)
* 28 Pentafluorobenzene	168	10.639	10.639	(1.000)	1600031	50.0000	
29 Dibromofluoromethane	113	10.668	10.668	(1.003)	867760	50.0000	49.5787
30 1,1,1-Trichloroethane	97	10.796	10.796	(1.015)	21153	2.00000	2.0900
31 1,1-Dichloropropene	75	11.023	11.023	(0.932)	23288	2.00000	1.9879
32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	16561	2.00000	2.0698
33 1,2-Dichloroethane-d4	65	11.211	11.211	(0.948)	1010779	50.0000	50.0873
34 1,2-Dichloroethane	62	11.319	11.319	(0.957)	26702	2.00000	2.0632
35 Benzene	78	11.358	11.358	(0.961)	79833	2.00000	2.1765
36 Methyl tert-Amyl Ether (TAME)	73	11.418	11.418	(0.966)	52839	2.00000	2.0556
* 37 1,4-Difluorobenzene	114	11.822	11.822	(1.000)	2551866	50.0000	
38 Trichloroethene	95	12.285	12.285	(1.039)	18415	2.00000	2.1359
39 Trifluorotoluene	146	12.591	12.591	(1.065)	25974	2.00000	2.1220
40 1,2-Dichloropropane	63	12.601	12.601	(1.066)	23667	2.00000	2.0754
41 Dibromomethane	93	12.778	12.778	(1.081)	13071	2.00000	2.1110
42 Bromodichloromethane	83	12.946	12.946	(1.095)	23450	2.00000	2.0407
44 cis-1,3-Dichloropropene	75	13.557	13.557	(1.147)	32480	2.00000	2.0651(M)
45 Tetramethyl THF	43	13.646	13.646	(1.154)	58138	2.00000	2.1598
46 4-Methyl-2-Pentanone	43	13.695	13.695	(1.158)	34144	2.00000	2.0151(M)
47 Toluene-d8	98	13.961	13.961	(1.181)	2757182	50.0000	50.2107
48 Toluene	92	14.060	14.060	(1.189)	44304	2.00000	2.1215
49 trans-1,3-Dichloropropene	75	14.267	14.267	(1.207)	27734	2.00000	2.0104
50 1,1,2-Trichloroethane	85	14.533	14.533	(1.229)	10510	2.00000	2.2430
51 1,3-Dichloropropane	76	14.760	14.760	(0.933)	30655	2.00000	2.0636
52 2-Hexanone	43	14.789	14.789	(0.935)	18632	2.00000	1.9646(M)
53 Tetrachloroethene	166	14.809	14.809	(0.936)	15714	2.00000	2.0577
54 Dibromochloromethane	129	15.085	15.085	(0.953)	19021	2.00000	2.1763
55 1,2-Dibromoethane	107	15.273	15.273	(1.292)	19499	2.00000	2.2129
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	2060016	50.0000	
57 Chlorobenzene	112	15.864	15.864	(1.002)	47893	2.00000	2.2031
58 1,1,1,2-Tetrachloroethane	131	15.933	15.933	(1.007)	15605	2.00000	2.1609
59 Ethylbenzene	91	15.953	15.953	(1.008)	81378	2.00000	2.2552
60 m,p-Xylenes	106	16.091	16.091	(1.017)	56977	4.00000	4.3423
61 o-Xylene	106	16.574	16.574	(1.047)	27885	2.00000	2.1434
62 Styrene	104	16.584	16.584	(1.048)	48290	2.00000	2.1587(M)
63 Bromoform	173	16.840	16.840	(1.064)	14187	2.00000	2.0897
64 Isopropylbenzene	105	16.978	16.978	(0.917)	63190	2.00000	2.1252
65 Cyclohexanone	55	17.116	17.116	(0.924)	12622	20.0000	21.4347
66 Bromofluorobenzene	95	17.175	17.175	(0.928)	1130086	50.0000	51.4096
67 1,1,2,2-Tetrachloroethane	83	17.274	17.274	(0.933)	25806	2.00000	2.1866
68 1,2,3-Trichloropropane	75	17.353	17.353	(0.937)	20828	2.00000	1.8894
69 Bromobenzene	156	17.392	17.392	(0.939)	19452	2.00000	2.2300
70 Propylbenzene	91	17.442	17.442	(0.942)	77111	2.00000	2.1067
71 2-Chlorotoluene	91	17.589	17.589	(0.950)	60049	2.00000	2.3101
72 1,3,5-Trimethylbenzene	105	17.609	17.609	(0.951)	43770	2.00000	2.0489
73 4-Chlorotoluene	91	17.698	17.698	(0.956)	55051	2.00000	2.2788
74 tert-Butylbenzene	119	18.004	18.004	(0.972)	39220	2.00000	2.0314
75 1,2,4-Trimethylbenzene	105	18.053	18.053	(0.975)	39122	2.00000	2.0322
76 sec-Butylbenzene	105	18.260	18.260	(0.986)	52834	2.00000	1.8788
77 para-Isopropyl Toluene	119	18.398	18.398	(0.994)	37289	2.00000	1.8370
78 1,3-Dichlorobenzene	146	18.457	18.457	(0.997)	34911	2.00000	2.2489

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Report Date: 29-Jan-2007 09:06

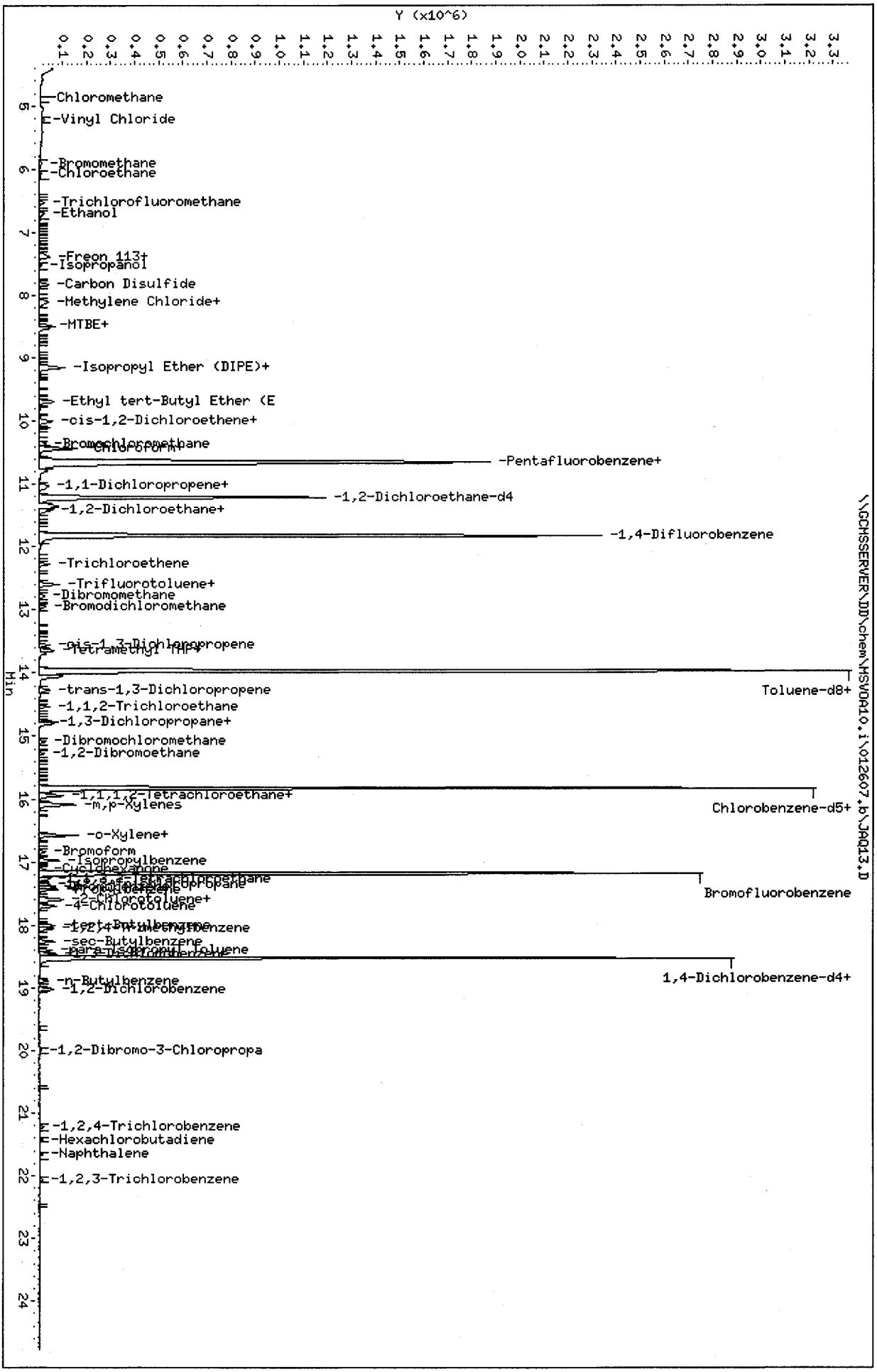
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.516	18.516	(1.000)	928528	50.0000	
80 1,4-Dichlorobenzene	146	18.546	18.546	(1.002)	36503	2.00000	2.2880
81 n-Butylbenzene	91	18.891	18.891	(1.020)	28101	2.00000	1.7235(M)
82 1,2-Dichlorobenzene	146	19.029	19.029	(1.028)	33310	2.00000	2.2237
83 1,2-Dibromo-3-Chloropropane	75	20.005	20.005	(1.080)	4355	2.00000	2.3883
84 1,2,4-Trichlorobenzene	180	21.218	21.218	(1.146)	10870	2.00000	1.8181
85 Hexachlorobutadiene	225	21.415	21.415	(1.157)	5429	2.00000	1.8194
86 Naphthalene	128	21.661	21.661	(1.170)	23362	2.00000	1.8484(M)
87 1,2,3-Trichlorobenzene	180	22.066	22.066	(1.192)	10856	2.00000	1.9223

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ13.D
Date : 26-JAN-2007 17:28
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/500,S5219,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Lab Smp Id:
Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 18:01
MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA
Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.005/500,S5219,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:07 msvoa10
Quant Type: ISTD
Cal Date : 26-JAN-2007 18:01
Cal File: JAQ14.D
Als bottle: 14
Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.571	4.571	(0.429)	45057	5.00000	4.7352(M)
2 Chloromethane	50	5.044	5.044	(0.474)	92586	5.00000	5.1717(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	69233	5.00000	5.0531(M)
4 Bromomethane	94	5.892	5.892	(0.554)	39614	5.00000	4.9742
5 Chloroethane	64	6.079	6.079	(0.571)	41104	5.00000	5.0082(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	54275	5.00000	4.9431
7 Ethanol	45	6.690	6.690	(0.629)	96354	500.000	501.5352(M)
8 Freon 113	101	7.351	7.351	(0.691)	39830	5.00000	5.3761
9 Acetone	43	7.380	7.380	(0.693)	23401	5.00000	5.3125
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	41481	5.00000	5.2578
11 Isopropanol	45	7.499	7.499	(0.705)	42583	50.0000	49.1375(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	181127	5.00000	5.1296
13 Methylene Chloride	84	8.090	8.090	(0.760)	53405	5.00000	5.1458
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	48200	50.0000	49.1492(M)
15 MTBE	73	8.485	8.485	(0.797)	139526	5.00000	5.0438(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	47140	5.00000	5.1398
18 Vinyl Acetate	43	9.126	9.126	(0.857)	182058	5.00000	4.9670(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	97079	5.00000	5.2113(M)
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	254455	5.00000	5.1974(M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	179275	5.00000	5.1402(M)
22 2-Butanone	43	9.944	9.944	(0.934)	36000	5.00000	4.9988(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	48321	5.00000	4.9348

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	57419	5.00000	5.1914
	25 Bromochloromethane	128	10.358	10.358	(0.973)	24836	5.00000	5.0994
	26 Chloroform	83	10.427	10.427	(0.980)	78786	5.00000	5.1165
	27 Tetrahydrofuran	42	10.437	10.437	(0.981)	258085	50.0000	53.5132
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1598923	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.002)	887606	50.0000	50.7477
	30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	52814	5.00000	5.2219
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	60501	5.00000	5.1515
	32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	41379	5.00000	5.1586
	33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	1016175	50.0000	50.2275
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	66042	5.00000	5.0902(M)
	35 Benzene	78	11.354	11.354	(0.961)	185323	5.00000	5.0399(M)
	36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.967)	129813	5.00000	5.0375(M)
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2558326	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	43433	5.00000	5.0250
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	64491	5.00000	5.2554
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	60007	5.00000	5.2488(M)
	41 Dibromomethane	93	12.783	12.783	(1.082)	32000	5.00000	5.1551
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	55962	5.00000	4.8579
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.148)	78281	5.00000	4.9646
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	132056	5.00000	4.8934
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	87431	5.00000	5.1470(M)
	47 Toluene-d8	98	13.966	13.966	(1.182)	2743323	50.0000	49.8321
	48 Toluene	92	14.055	14.055	(1.189)	100505	5.00000	4.8007
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	69434	5.00000	5.0206
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	23486	5.00000	4.9997
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	74917	5.00000	4.9986(M)
	52 2-Hexanone	43	14.785	14.785	(0.934)	44526	5.00000	4.6535(M)
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	39144	5.00000	5.0804
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	44470	5.00000	5.0430
	55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	42530	5.00000	4.8145
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2078416	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	109608	5.00000	4.9975
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	35396	5.00000	4.8582
	59 Ethylbenzene	91	15.958	15.958	(1.008)	185289	5.00000	5.0894
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	129806	10.0000	9.8052(M)
	61 o-Xylene	106	16.569	16.569	(1.047)	65146	5.00000	4.9633
	62 Styrene	104	16.579	16.579	(1.047)	111630	5.00000	4.9461(M)
	63 Bromoform	173	16.845	16.845	(1.064)	32300	5.00000	4.7156
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	159446	5.00000	5.3219
	65 Cyclohexanone	55	17.121	17.121	(0.924)	25839	50.0000	43.5472
	66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1135470	50.0000	51.2628
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	59115	5.00000	4.9709
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	51961	5.00000	4.6781
	69 Bromobenzene	156	17.397	17.397	(0.939)	44439	5.00000	5.0560
	70 Propylbenzene	91	17.437	17.437	(0.941)	189911	5.00000	5.1491
	71 2-Chlorotoluene	91	17.585	17.585	(0.949)	133716	5.00000	5.1051
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	107754	5.00000	5.0059(M)
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	122996	5.00000	5.0527
	74 tert-Butylbenzene	119	18.009	18.009	(0.972)	99337	5.00000	5.1062
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	91370	5.00000	4.7103
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	144987	5.00000	5.1167
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	99367	5.00000	4.8582
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	79859	5.00000	5.1054

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Report Date: 29-Jan-2007 09:07

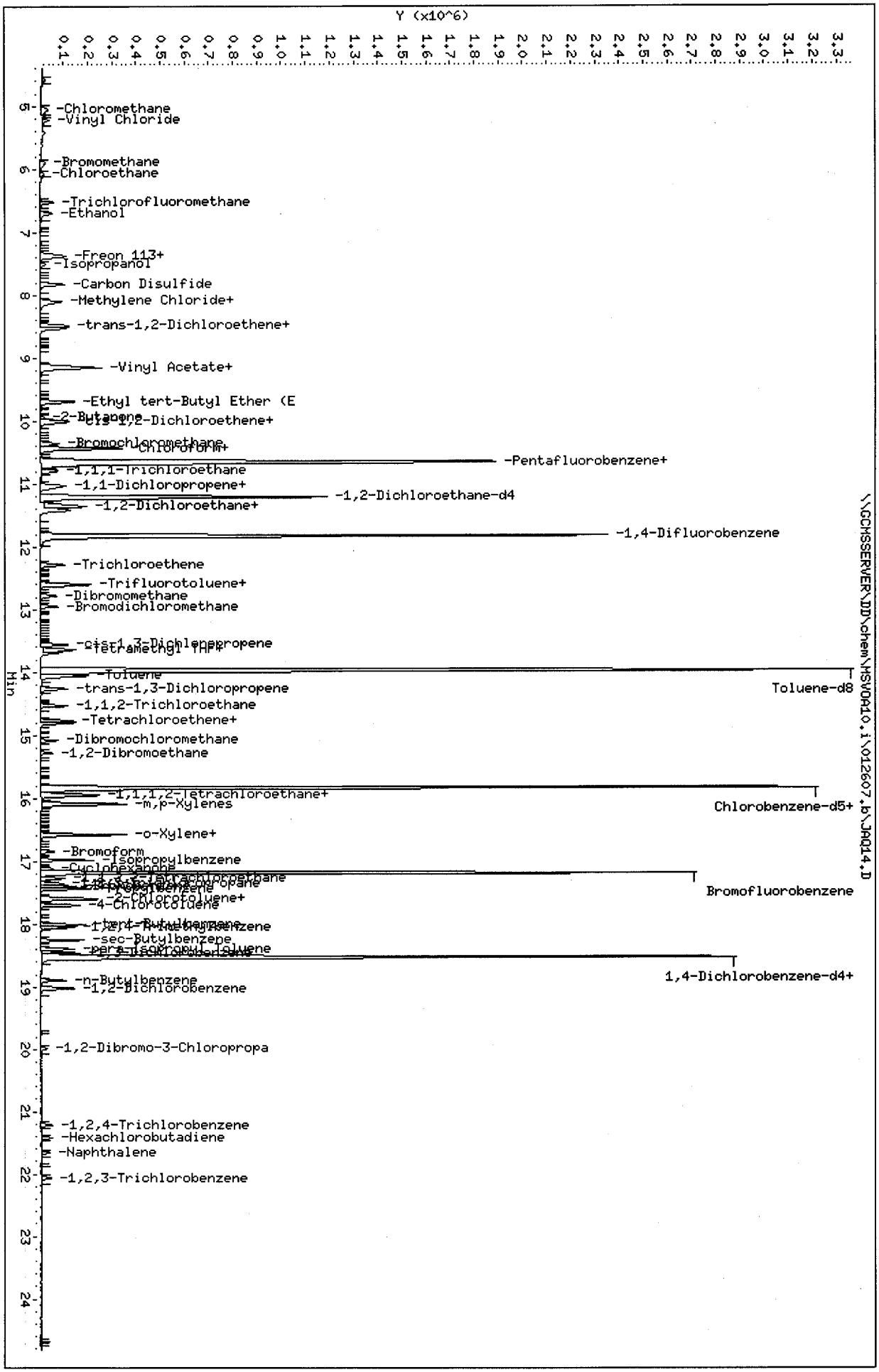
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	935622	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	78373	5.00000	4.8753
81 n-Butylbenzene	91	18.886	18.886	(1.020)	76759	5.00000	4.6722
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	75672	5.00000	5.0135
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	9331	5.00000	5.0784
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	26200	5.00000	4.3490(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	15257	5.00000	5.0743
86 Naphthalene	128	21.657	21.657	(1.169)	52322	5.00000	4.1084(M)
87 1,2,3-Trichlorobenzene	180	22.061	22.061	(1.191)	25002	5.00000	4.3937

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ14.D
Date : 26-JAN-2007 18:01
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.005/500,S5219,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Lab Smp Id:
Inj Date : 26-JAN-2007 18:34
Operator : VOA
Smp Info : ICAL,S5170,0.002/100,S5219,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:08 msvoa10
Cal Date : 26-JAN-2007 18:34
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.10
Processing Host: PC_MSVOA10

Client Smp ID: DYNA P&T
MS Autotune Date: 10-JUL-2006 14:50
Inst ID: MSVOA10.i
Quant Type: ISTD
Cal File: JAQ15.D
Calibration Sample, Level: 5
Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	84494	10.0000	8.7838 (M)
2 Chloromethane	50	5.053	5.053	(0.475)	165424	10.0000	9.1405 (M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	129444	10.0000	9.3456 (M)
4 Bromomethane	94	5.891	5.891	(0.554)	74412	10.0000	9.2428 (M)
5 Chloroethane	64	6.069	6.069	(0.570)	79961	10.0000	9.6374 (M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	106528	10.0000	9.5972 (M)
7 Ethanol	45	6.690	6.690	(0.629)	195201	1000.00	1005.0648 (M)
8 Freon 113	101	7.350	7.350	(0.691)	72575	10.0000	9.6900
9 Acetone	43	7.380	7.380	(0.693)	45813	10.0000	10.2882
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	75423	10.0000	9.4568 (M)
11 Isopropanol	45	7.498	7.498	(0.705)	86791	100.000	99.0678 (M)
12 Carbon Disulfide	76	7.823	7.823	(0.735)	333187	10.0000	9.3340 (M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	102157	10.0000	9.7369 (M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.762)	96548	100.000	97.3853 (M)
15 MTBE	73	8.484	8.484	(0.797)	276342	10.0000	9.8818
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	88646	10.0000	9.5608 (M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	367875	10.0000	9.9280 (M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	183697	10.0000	9.7545 (M)
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	488537	10.0000	9.8709
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	348567	10.0000	9.8862
22 2-Butanone	43	9.933	9.933	(0.933)	70586	10.0000	9.6954
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	96931	10.0000	9.7921 (M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	106663	10.0000	9.5395
25 Bromochloromethane	128	10.357	10.357	(0.973)	48823	10.0000	9.9161
26 Chloroform	83	10.426	10.426	(0.980)	151380	10.0000	9.7247(M)
27 Tetrahydrofuran	42	10.436	10.436	(0.981)	469154	100.000	96.2264(M)
* 28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1616394	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.002)	891888	50.0000	50.4414
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	95313	10.0000	9.3221
31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	110656	10.0000	9.3857(M)
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	74772	10.0000	9.2855
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	1020366	50.0000	50.2394
34 1,2-Dichloroethane	62	11.323	11.323	(0.958)	131605	10.0000	10.1042(M)
35 Benzene	78	11.353	11.353	(0.961)	357416	10.0000	9.6823
36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	251130	10.0000	9.7076
* 37 1,4-Difluorobenzene	114	11.816	11.816	(1.000)	2568270	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	76818	10.0000	8.8531(M)
39 Trifluorotoluene	146	12.595	12.595	(1.066)	113391	10.0000	9.2045(M)
40 1,2-Dichloropropane	63	12.595	12.595	(1.066)	108727	10.0000	9.4736(M)
41 Dibromomethane	93	12.773	12.773	(1.081)	62157	10.0000	9.9746
42 Bromodichloromethane	83	12.950	12.950	(1.096)	113047	10.0000	9.7753
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	150387	10.0000	9.5007(M)
45 Tetramethyl THF	43	13.640	13.640	(1.154)	264010	10.0000	9.7452
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	165790	10.0000	9.7222
47 Toluene-d8	98	13.966	13.966	(1.182)	2779653	50.0000	50.2966
48 Toluene	92	14.055	14.055	(1.189)	237133	10.0000	11.2830
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	134860	10.0000	9.7137
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	46608	10.0000	9.8836
51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	147957	10.0000	9.8331
52 2-Hexanone	43	14.784	14.784	(0.934)	92344	10.0000	9.6130(M)
53 Tetrachloroethene	166	14.804	14.804	(0.935)	68864	10.0000	8.9026
54 Dibromochloromethane	129	15.080	15.080	(0.953)	85577	10.0000	9.6665
55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	84326	10.0000	9.5090
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2086644	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	205003	10.0000	9.3101(M)
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69112	10.0000	9.4485
59 Ethylbenzene	91	15.957	15.957	(1.008)	348677	10.0000	9.5394
60 m,p-Xylenes	106	16.086	16.086	(1.016)	266315	20.0000	20.0374
61 o-Xylene	106	16.569	16.569	(1.047)	128608	10.0000	9.7596
62 Styrene	104	16.578	16.578	(1.047)	213741	10.0000	9.4332
63 Bromoform	173	16.835	16.835	(1.064)	64859	10.0000	9.4318
64 Isopropylbenzene	105	16.973	16.973	(0.916)	279244	10.0000	9.1311(M)
65 Cyclohexanone	55	17.121	17.121	(0.924)	61691	100.000	101.8569
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1136659	50.0000	50.2738
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	114956	10.0000	9.4702
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	108093	10.0000	9.5340
69 Bromobenzene	156	17.397	17.397	(0.939)	84734	10.0000	9.4447
70 Propylbenzene	91	17.436	17.436	(0.941)	341476	10.0000	9.0705
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	248159	10.0000	9.2818
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	202459	10.0000	9.2144
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	224507	10.0000	9.0354
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	174361	10.0000	8.7806
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	182222	10.0000	9.2030
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	251902	10.0000	8.7093(M)
77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	178033	10.0000	8.5274
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	146340	10.0000	9.1654

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Report Date: 29-Jan-2007 09:08

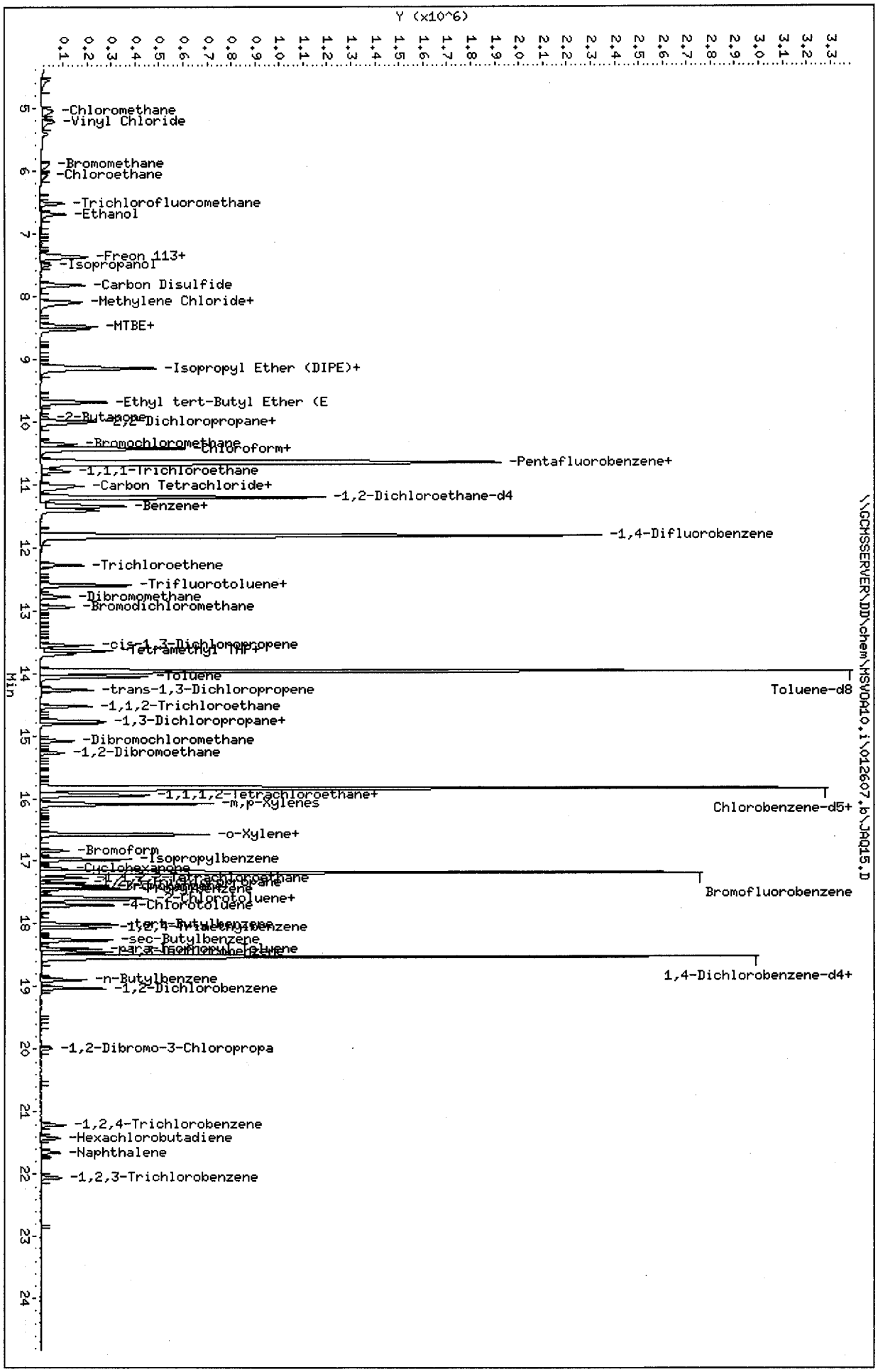
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	955028	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	145507	10.0000	8.8676
81 n-Butylbenzene	91	18.886	18.886	(1.020)	138129	10.0000	8.2369
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	142749	10.0000	9.2654
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	19208	10.0000	10.2417
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.145)	52214	10.0000	8.4911(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	25119	10.0000	8.1846
86 Naphthalene	128	21.656	21.656	(1.169)	107389	10.0000	8.2610(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	50728	10.0000	8.7336(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ15.D
Date : 26-JAN-2007 18:34
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.002/100,S5219,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 19:06 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.004/100,S5219,0.004/100
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:09 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 19:06 Cal File: JAQ16.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.570	4.570	(0.429)	192804	20.0000	20.7696(M)
2 Chloromethane	50	5.053	5.053	(0.475)	344326	20.0000	19.7151(M)
3 Vinyl Chloride	62	5.221	5.221	(0.491)	275789	20.0000	20.6328(M)
4 Bromomethane	94	5.891	5.891	(0.554)	151590	20.0000	19.5113(M)
5 Chloroethane	64	6.069	6.069	(0.570)	160389	20.0000	20.0315(M)
6 Trichlorofluoromethane	101	6.522	6.522	(0.613)	220048	20.0000	20.5426
7 Ethanol	45	6.690	6.690	(0.629)	402306	2000.00	2146.4647
8 Freon 113	101	7.350	7.350	(0.691)	148890	20.0000	20.5997
9 Acetone	43	7.380	7.380	(0.693)	94992	20.0000	22.1052
10 1,1-Dichloroethene	96	7.390	7.390	(0.694)	160709	20.0000	20.8803(M)
11 Isopropanol	45	7.498	7.498	(0.705)	184113	200.000	217.7697(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	700052	20.0000	20.3221(M)
13 Methylene Chloride	84	8.100	8.100	(0.761)	201812	20.0000	19.9322
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	212561	200.000	222.1720(M)
15 MTBE	73	8.484	8.484	(0.797)	556038	20.0000	20.6039
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	180999	20.0000	20.2287(M)
18 Vinyl Acetate	43	9.115	9.115	(0.856)	752930	20.0000	21.0559(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	369308	20.0000	20.3211
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	975758	20.0000	20.4296
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	692908	20.0000	20.3646
22 2-Butanone	43	9.934	9.934	(0.933)	153310	20.0000	21.8209(M)
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	193973	20.0000	20.3054(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.942)	217712	20.0000	20.1767
	25 Bromochloromethane	128	10.357	10.357	(0.973)	98151	20.0000	20.6571(M)
	26 Chloroform	83	10.426	10.426	(0.980)	302098	20.0000	20.1099
	27 Tetrahydrofuran	42	10.436	10.436	(0.981)	935923	200.000	198.9180
*	28 Pentafluorobenzene	168	10.643	10.643	(1.000)	1559883	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.002)	852946	50.0000	49.9866
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.014)	200085	20.0000	20.2784
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	233733	20.0000	20.2621
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	156195	20.0000	19.8247(M)
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	984510	50.0000	49.5427
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	264710	20.0000	20.7717
	35 Benzene	78	11.353	11.353	(0.961)	730718	20.0000	20.2315
	36 Methyl tert-Amyl Ether (TAME)	73	11.412	11.412	(0.966)	517690	20.0000	20.4529(M)
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2512865	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	170355	20.0000	20.0660
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	243316	20.0000	20.1868
	40 1,2-Dichloropropane	63	12.605	12.605	(1.067)	227356	20.0000	20.2468(M)
	41 Dibromomethane	93	12.783	12.783	(1.082)	129311	20.0000	21.2087
	42 Bromodichloromethane	83	12.950	12.950	(1.096)	232895	20.0000	20.5827(M)
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	317451	20.0000	20.4973
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	569270	20.0000	21.4764
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	356407	20.0000	21.3613
	47 Toluene-d8	98	13.966	13.966	(1.182)	2712669	50.0000	50.1668
	48 Toluene	92	14.055	14.055	(1.189)	401018	20.0000	19.5015(M)
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	280298	20.0000	20.6346
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	96443	20.0000	20.9024
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	303268	20.0000	20.8741
	52 2-Hexanone	43	14.774	14.774	(0.933)	204269	20.0000	22.0230
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	153538	20.0000	20.5572
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175886	20.0000	20.5763
	55 1,2-Dibromoethane	107	15.277	15.277	(1.293)	182455	20.0000	21.0282
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	2014764	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	421896	20.0000	19.8437(M)
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	145850	20.0000	20.6510
	59 Ethylbenzene	91	15.958	15.958	(1.008)	698484	20.0000	19.7916
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	515329	40.0000	40.1565
	61 o-Xylene	106	16.569	16.569	(1.047)	253697	20.0000	19.9391
	62 Styrene	104	16.579	16.579	(1.047)	454840	20.0000	20.7900
	63 Bromoform	173	16.835	16.835	(1.064)	133275	20.0000	20.0724
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	610402	20.0000	20.4406(M)
	65 Cyclohexanone	55	17.111	17.111	(0.924)	144510	200.000	244.3451(M)
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1098649	50.0000	49.7631
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	248441	20.0000	20.9599
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	227603	20.0000	20.5585
	69 Bromobenzene	156	17.397	17.397	(0.939)	179752	20.0000	20.5183
	70 Propylbenzene	91	17.436	17.436	(0.941)	736056	20.0000	20.0225
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	514653	20.0000	19.7131
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	428199	20.0000	19.9579
	73 4-Chlorotoluene	91	17.693	17.693	(0.955)	477184	20.0000	19.6672
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	391239	20.0000	20.1770
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	389708	20.0000	20.1560
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	574787	20.0000	20.3515
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	406884	20.0000	19.9584
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	306441	20.0000	19.6551

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Report Date: 29-Jan-2007 09:09

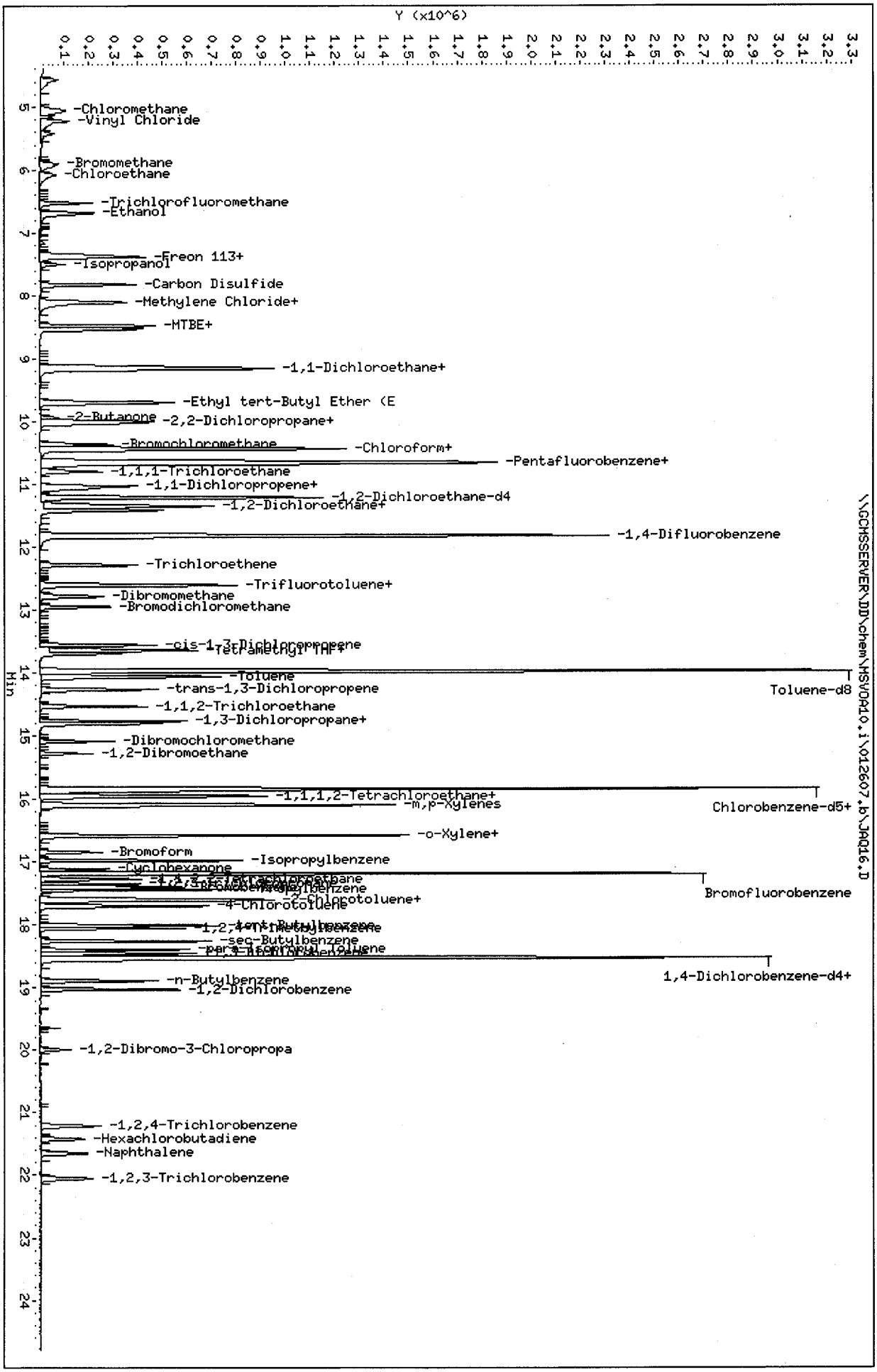
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	932565	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	318141	20.0000	19.8554
81 n-Butylbenzene	91	18.886	18.886	(1.020)	332009	20.0000	20.2754
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	303728	20.0000	20.1889
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	42724	20.0000	23.3292(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	120800	20.0000	20.1180(M)
85 Hexachlorobutadiene	225	21.429	21.429	(1.157)	57572	20.0000	19.2108
86 Naphthalene	128	21.656	21.656	(1.169)	259513	20.0000	20.4441(M)
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	116520	20.0000	20.5440(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ16.D
Date : 26-JAN-2007 19:06
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.004/100,S5219,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Lab Smp Id:
Inj Date : 26-JAN-2007 19:39
Operator : VOA
Smp Info : ICAL,S5170,0.01/100,S5219,0.01/100
Misc Info : S4172,0.005/100,50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:10 msvoa10
Cal Date : 26-JAN-2007 19:39
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.10
Processing Host: PC_MSVOA10

Client Smp ID: DYNA P&T
MS Autotune Date: 10-JUL-2006 14:50
Inst ID: MSVOA10.i
Quant Type: ISTD
Cal File: JAQ17.D
Calibration Sample, Level: 7
Compound Sublist: all.sub

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	520970	50.0000	56.2784
2 Chloromethane	50	5.044	5.044	(0.474)	886324	50.0000	50.8907(M)
3 Vinyl Chloride	62	5.211	5.211	(0.490)	689712	50.0000	51.7446
4 Bromomethane	94	5.892	5.892	(0.554)	408210	50.0000	52.6886
5 Chloroethane	64	6.069	6.069	(0.570)	408130	50.0000	51.1157
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	561782	50.0000	52.5924
7 Ethanol	45	6.680	6.680	(0.628)	942062	5000.00	5040.3720
8 Freon 113	101	7.351	7.351	(0.691)	344262	50.0000	47.7639
9 Acetone	43	7.371	7.371	(0.692)	196148	50.0000	45.7728
10 1,1-Dichloroethene	96	7.380	7.380	(0.693)	368018	50.0000	47.9492
11 Isopropanol	45	7.489	7.489	(0.704)	433436	500.000	514.1075(M)
12 Carbon Disulfide	76	7.824	7.824	(0.735)	1648704	50.0000	47.9952
13 Methylene Chloride	84	8.090	8.090	(0.760)	491188	50.0000	48.6488
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	496436	500.000	520.3372(M)
15 MTBE	73	8.475	8.475	(0.796)	1359574	50.0000	50.5201(M)
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	441126	50.0000	49.4391(M)
18 Vinyl Acetate	43	9.116	9.116	(0.856)	1748211	50.0000	49.0264(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	877528	50.0000	48.4212
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	2337773	50.0000	49.0836
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.910)	1709702	50.0000	50.3892
22 2-Butanone	43	9.924	9.924	(0.932)	342720	50.0000	48.9167
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	465253	50.0000	48.8400(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	507034	50.0000	47.1217(M)
	25 Bromochloromethane	128	10.358	10.358	(0.973)	243803	50.0000	51.4552(M)
	26 Chloroform	83	10.427	10.427	(0.980)	716284	50.0000	47.8151
	27 Tetrahydrofuran	42	10.427	10.427	(0.980)	2095476	500.000	446.6143
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1555522	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.002)	854225	50.0000	50.2019
	30 1,1,1-Trichloroethane	97	10.792	10.792	(1.014)	473552	50.0000	48.1287
	31 1,1-Dichloropropene	75	11.028	11.028	(0.933)	540790	50.0000	46.6546
	32 Carbon Tetrachloride	117	11.068	11.068	(0.937)	369593	50.0000	46.6838
	33 1,2-Dichloroethane-d4	65	11.206	11.206	(0.948)	986905	50.0000	49.4239
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	639313	50.0000	49.9250
	35 Benzene	78	11.354	11.354	(0.961)	1742148	50.0000	48.0027
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	1253595	50.0000	49.2884
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2525036	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	402225	50.0000	47.1494
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	574384	50.0000	47.4243
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	552323	50.0000	48.9491
	41 Dibromomethane	93	12.783	12.783	(1.082)	304026	50.0000	49.6240
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	565585	50.0000	49.7443
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	777124	50.0000	49.9358
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	1381596	50.0000	51.8711
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	807610	50.0000	48.1709
	47 Toluene-d8	98	13.966	13.966	(1.182)	2718680	50.0000	50.0356
	48 Toluene	92	14.055	14.055	(1.189)	951856	50.0000	46.0657
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	689259	50.0000	50.4963
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	230237	50.0000	49.6596
	51 1,3-Dichloropropane	76	14.755	14.755	(0.932)	702613	50.0000	47.4266
	52 2-Hexanone	43	14.775	14.775	(0.933)	473392	50.0000	50.0517
	53 Tetrachloroethene	166	14.804	14.804	(0.935)	356789	50.0000	46.8472(M)
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	438254	50.0000	50.2789
	55 1,2-Dibromoethane	107	15.278	15.278	(1.293)	438278	50.0000	50.2687
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	2054473	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	1022884	50.0000	47.1812
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	355870	50.0000	49.4139
	59 Ethylbenzene	91	15.958	15.958	(1.008)	1683400	50.0000	46.7775
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	1260291	100.000	96.3088
	61 o-Xylene	106	16.569	16.569	(1.047)	616795	50.0000	47.5396
	62 Styrene	104	16.579	16.579	(1.047)	1103752	50.0000	49.4756
	63 Bromoform	173	16.835	16.835	(1.064)	319994	50.0000	47.2624
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	1447868	50.0000	46.4376
	65 Cyclohexanone	55	17.112	17.112	(0.924)	255178	500.000	413.2491(M)
	66 Bromofluorobenzene	95	17.181	17.181	(0.928)	1122015	50.0000	48.6754
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	593081	50.0000	47.9229
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	533783	50.0000	46.1787
	69 Bromobenzene	156	17.397	17.397	(0.939)	434644	50.0000	47.5188
	70 Propylbenzene	91	17.437	17.437	(0.941)	1839895	50.0000	47.9364
	71 2-Chlorotoluene	91	17.585	17.585	(0.949)	1266357	50.0000	46.4581
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.950)	1099261	50.0000	49.0720
	73 4-Chlorotoluene	91	17.693	17.693	(0.955)	1177170	50.0000	46.4686
	74 tert-Butylbenzene	119	18.009	18.009	(0.972)	970054	50.0000	47.9153
	75 1,2,4-Trimethylbenzene	105	18.058	18.058	(0.975)	1025019	50.0000	50.7763
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	1456185	50.0000	49.3821
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.993)	1076521	50.0000	50.5757
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	761638	50.0000	46.7886

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
Report Date: 29-Jan-2007 09:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	973680	50.0000	
80 1,4-Dichlorobenzene	146	18.551	18.551	(1.002)	779906	50.0000	46.6192
81 n-Butylbenzene	91	18.886	18.886	(1.020)	900061	50.0000	52.6447
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	752352	50.0000	47.8975
83 1,2-Dibromo-3-Chloropropane	75	19.990	19.990	(1.079)	97414	50.0000	50.9462(M)
84 1,2,4-Trichlorobenzene	180	21.213	21.213	(1.145)	320727	50.0000	51.1584(M)
85 Hexachlorobutadiene	225	21.420	21.420	(1.156)	145319	50.0000	46.4429
86 Naphthalene	128	21.647	21.647	(1.169)	707854	50.0000	53.4092(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	312267	50.0000	52.7321

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ17.D
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Client ID: DYNA P&T
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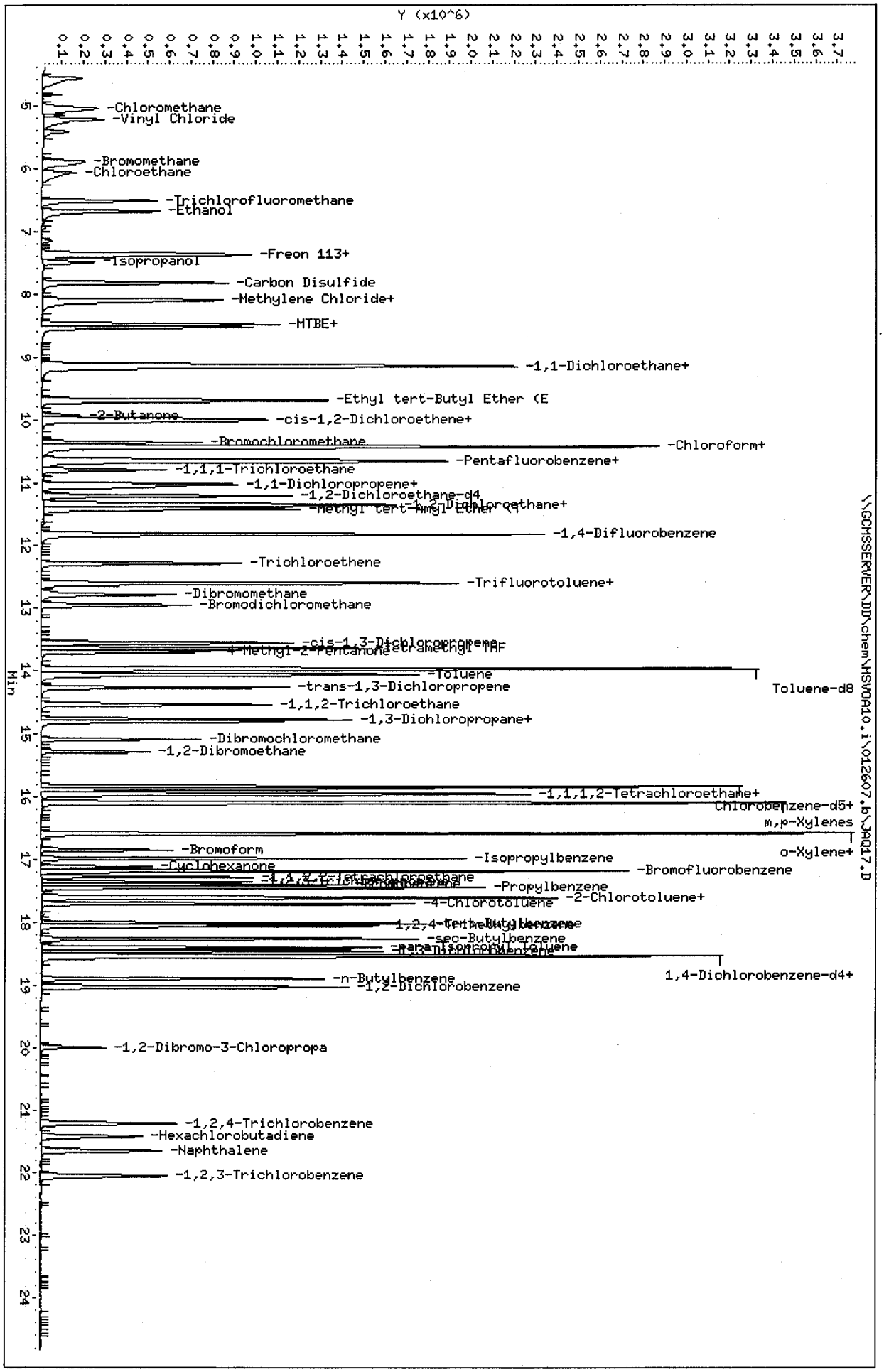
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 26-JAN-2007 20:12 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.015/100,S5219,0.015/100
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:12 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:12 Cal File: JAQ18.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.564	4.564	(0.429)	809223	75.0000	85.8521
2 Chloromethane	50	5.048	5.048	(0.475)	1324306	75.0000	74.6772(M)
3 Vinyl Chloride	62	5.215	5.215	(0.490)	1054692	75.0000	77.7099
4 Bromomethane	94	5.895	5.895	(0.554)	632139	75.0000	80.1307
5 Chloroethane	64	6.073	6.073	(0.571)	622935	75.0000	76.6217
6 Trichlorofluoromethane	101	6.526	6.526	(0.614)	862577	75.0000	79.3061
7 Ethanol	45	6.684	6.684	(0.628)	1402318	7500.00	7368.5655
8 Freon 113	101	7.345	7.345	(0.690)	531114	75.0000	72.3689
9 Acetone	43	7.374	7.374	(0.693)	298898	75.0000	68.5015
10 1,1-Dichloroethene	96	7.384	7.384	(0.694)	559949	75.0000	71.6497
11 Isopropanol	45	7.493	7.493	(0.704)	620448	750.000	722.7494(M)
12 Carbon Disulfide	76	7.828	7.828	(0.736)	2500288	75.0000	71.4823
13 Methylene Chloride	84	8.094	8.094	(0.761)	752185	75.0000	73.1649
14 tert-Butyl Alcohol (TBA)	59	8.104	8.104	(0.762)	705157	750.000	725.8732
15 MTBE	73	8.479	8.479	(0.797)	2040096	75.0000	74.4501
16 trans-1,2-Dichloroethene	96	8.528	8.528	(0.802)	649716	75.0000	71.5130
18 Vinyl Acetate	43	9.110	9.110	(0.856)	2740359	75.0000	75.4739(M)
19 1,1-Dichloroethane	63	9.139	9.139	(0.859)	1300910	75.0000	70.4977
20 Isopropyl Ether (DIPE)	45	9.159	9.159	(0.861)	3477743	75.0000	71.7109
21 Ethyl tert-Butyl Ether (ETBE)	59	9.691	9.691	(0.911)	2557297	75.0000	74.0204
22 2-Butanone	43	9.928	9.928	(0.933)	502631	75.0000	70.4565
23 cis-1,2-Dichloroethene	96	9.997	9.997	(0.940)	699906	75.0000	72.1571

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.026	10.026	(0.943)	771300	75.0000	70.3981
	25 Bromochloromethane	128	10.362	10.362	(0.974)	358502	75.0000	74.3079
	26 Chloroform	83	10.421	10.421	(0.980)	1076170	75.0000	70.5527
	27 Tetrahydrofuran	42	10.431	10.431	(0.981)	2980679	750.000	623.9051
*	28 Pentafluorobenzene	168	10.638	10.638	(1.000)	1583882	50.0000	
	29 Dibromofluoromethane	113	10.667	10.667	(1.003)	861386	50.0000	49.7163
	30 1,1,1-Trichloroethane	97	10.795	10.795	(1.015)	723687	75.0000	72.2338
	31 1,1-Dichloropropene	75	11.022	11.022	(0.932)	843069	75.0000	72.7865
	32 Carbon Tetrachloride	117	11.072	11.072	(0.937)	572881	75.0000	72.4149
	33 1,2-Dichloroethane-d4	65	11.210	11.210	(0.948)	992977	50.0000	49.7648
	34 1,2-Dichloroethane	62	11.318	11.318	(0.957)	950686	75.0000	74.2956
	35 Benzene	78	11.357	11.357	(0.961)	2622858	75.0000	72.3231
	36 Methyl tert-Amyl Ether (TAME)	73	11.417	11.417	(0.966)	1890516	75.0000	74.3857
*	37 1,4-Difluorobenzene	114	11.821	11.821	(1.000)	2523167	50.0000	
	38 Trichloroethene	95	12.274	12.274	(1.038)	612822	75.0000	71.8891
	39 Trifluorotoluene	146	12.590	12.590	(1.065)	893804	75.0000	73.8521
	40 1,2-Dichloropropane	63	12.600	12.600	(1.066)	815449	75.0000	72.3220
	41 Dibromomethane	93	12.777	12.777	(1.081)	465912	75.0000	76.1038
	42 Bromodichloromethane	83	12.945	12.945	(1.095)	862862	75.0000	75.9466
	44 cis-1,3-Dichloropropene	75	13.556	13.556	(1.147)	1172349	75.0000	75.3877
	45 Tetramethyl THF	43	13.635	13.635	(1.153)	1938432	75.0000	72.8311
	46 4-Methyl-2-Pentanone	43	13.694	13.694	(1.158)	1286035	75.0000	76.7639
	47 Toluene-d8	98	13.960	13.960	(1.181)	2707504	50.0000	49.8668
	48 Toluene	92	14.059	14.059	(1.189)	1476833	75.0000	71.5253
	49 trans-1,3-Dichloropropene	75	14.256	14.256	(1.206)	1051431	75.0000	77.0868
	50 1,1,2-Trichloroethane	85	14.522	14.522	(1.229)	352724	75.0000	76.1350
	51 1,3-Dichloropropane	76	14.759	14.759	(0.933)	1109668	75.0000	74.7288
	52 2-Hexanone	43	14.779	14.779	(0.934)	697186	75.0000	73.5421
	53 Tetrachloroethene	166	14.808	14.808	(0.936)	560386	75.0000	73.4089
	54 Dibromochloromethane	129	15.084	15.084	(0.953)	675604	75.0000	77.3288
	55 1,2-Dibromoethane	107	15.272	15.272	(1.292)	676189	75.0000	77.6137
*	56 Chlorobenzene-d5	117	15.824	15.824	(1.000)	2059262	50.0000	
	57 Chlorobenzene	112	15.863	15.863	(1.002)	1613995	75.0000	74.2735
	58 1,1,1,2-Tetrachloroethane	131	15.932	15.932	(1.007)	546211	75.0000	75.6672
	59 Ethylbenzene	91	15.952	15.952	(1.008)	2642627	75.0000	73.2613
	60 m,p-Xylenes	106	16.080	16.080	(1.016)	1936065	150.000	147.6060
	61 o-Xylene	106	16.573	16.573	(1.047)	960156	75.0000	73.8321
	62 Styrene	104	16.573	16.573	(1.047)	1730073	75.0000	77.3700
	63 Bromoform	173	16.839	16.839	(1.064)	500229	75.0000	73.7109
	64 Isopropylbenzene	105	16.977	16.977	(0.917)	2283744	75.0000	72.0115
	65 Cyclohexanone	55	17.115	17.115	(0.924)	408440	750.000	650.2945
	66 Bromofluorobenzene	95	17.174	17.174	(0.928)	1129755	50.0000	48.1846
	67 1,1,2,2-Tetrachloroethane	83	17.263	17.263	(0.932)	908682	75.0000	72.1862
	68 1,2,3-Trichloropropane	75	17.352	17.352	(0.937)	817034	75.0000	69.4913(M)
	69 Bromobenzene	156	17.391	17.391	(0.939)	690715	75.0000	74.2410
	70 Propylbenzene	91	17.431	17.431	(0.941)	2929723	75.0000	75.0433
	71 2-Chlorotoluene	91	17.589	17.589	(0.950)	1996875	75.0000	72.0227
	72 1,3,5-Trimethylbenzene	105	17.608	17.608	(0.951)	1770129	75.0000	77.6875
	73 4-Chlorotoluene	91	17.697	17.697	(0.956)	1902006	75.0000	73.8152
	74 tert-Butylbenzene	119	18.003	18.003	(0.972)	1586626	75.0000	77.0489
	75 1,2,4-Trimethylbenzene	105	18.052	18.052	(0.975)	1674992	75.0000	81.5747
	76 sec-Butylbenzene	105	18.259	18.259	(0.986)	2290862	75.0000	76.3775
	77 para-Isopropyl Toluene	119	18.397	18.397	(0.994)	1756199	75.0000	81.1159
	78 1,3-Dichlorobenzene	146	18.456	18.456	(0.997)	1238664	75.0000	74.8098

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Report Date: 29-Jan-2007 09:12

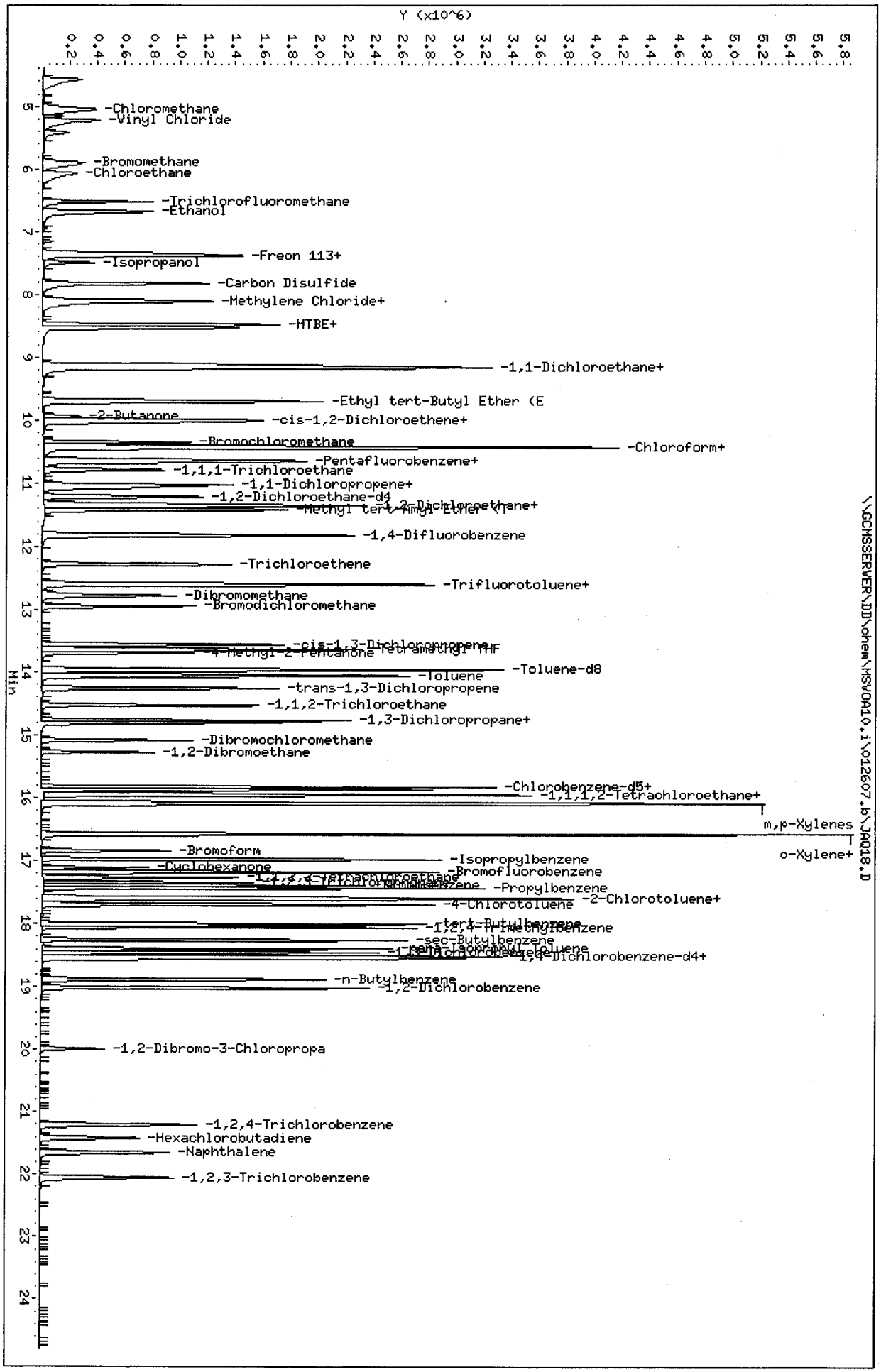
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.515	18.515	(1.000)	990383	50.0000	
80 1,4-Dichlorobenzene	146	18.545	18.545	(1.002)	1258167	75.0000	73.9392
81 n-Butylbenzene	91	18.880	18.880	(1.020)	1447562	75.0000	83.2402
82 1,2-Dichlorobenzene	146	19.018	19.018	(1.027)	1204009	75.0000	75.3589
83 1,2-Dibromo-3-Chloropropane	75	19.984	19.984	(1.079)	156657	75.0000	80.5478(M)
84 1,2,4-Trichlorobenzene	180	21.207	21.207	(1.145)	549002	75.0000	86.0931(M)
85 Hexachlorobutadiene	225	21.424	21.424	(1.157)	218719	75.0000	68.7222(M)
86 Naphthalene	128	21.651	21.651	(1.169)	1166161	75.0000	86.5057
87 1,2,3-Trichlorobenzene	180	22.055	22.055	(1.191)	526972	75.0000	87.4882

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ18.D
Date : 26-JAN-2007 20:12
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.015/100,S5219,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Lab Smp Id: Client Smp ID: DYNA P&T
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Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5170,0.02/100,S5219,0.02/100
Misc Info : S4172,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\826GOX10.m
Meth Date : 29-Jan-2007 09:13 msvoa10 Quant Type: ISTD
Cal Date : 26-JAN-2007 20:44 Cal File: JAQ19.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.561	4.561	(0.429)	1101474	100.000	115.8100
2 Chloromethane	50	5.054	5.054	(0.475)	1728322	100.000	96.5858(M)
3 Vinyl Chloride	62	5.212	5.212	(0.490)	1405434	100.000	102.6243(M)
4 Bromomethane	94	5.902	5.902	(0.555)	857330	100.000	107.7019(M)
5 Chloroethane	64	6.070	6.070	(0.571)	827102	100.000	100.8224(M)
6 Trichlorofluoromethane	101	6.523	6.523	(0.613)	1157557	100.000	105.4728
7 Ethanol	45	6.681	6.681	(0.628)	1981668	10000.0	10319.4444
8 Freon 113	101	7.352	7.352	(0.691)	808125	100.000	109.1269
9 Acetone	43	7.371	7.371	(0.693)	429094	100.000	97.4582
10 1,1-Dichloroethene	96	7.381	7.381	(0.694)	785094	100.000	99.5581
11 Isopropanol	45	7.490	7.490	(0.704)	904604	1000.00	1044.3109
12 Carbon Disulfide	76	7.825	7.825	(0.736)	3510437	100.000	99.4623
13 Methylene Chloride	84	8.091	8.091	(0.761)	1018464	100.000	98.1777(M)
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.762)	1045965	1000.00	1067.0409
15 MTBE	73	8.476	8.476	(0.797)	2783984	100.000	100.6864
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.802)	904479	100.000	98.6618
18 Vinyl Acetate	43	9.107	9.107	(0.856)	3568990	100.000	97.4145(M)
19 1,1-Dichloroethane	63	9.136	9.136	(0.859)	1773356	100.000	95.2385
20 Isopropyl Ether (DIPE)	45	9.156	9.156	(0.861)	4661169	100.000	95.2514
21 Ethyl tert-Butyl Ether (ETBE)	59	9.688	9.688	(0.911)	3510091	100.000	100.6880
22 2-Butanone	43	9.925	9.925	(0.933)	729524	100.000	101.3445
23 cis-1,2-Dichloroethene	96	9.994	9.994	(0.940)	951950	100.000	97.2619

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.024	10.024	(0.943)	1068977	100.000	96.6930
	25 Bromochloromethane	128	10.359	10.359	(0.974)	496480	100.000	101.9845
	26 Chloroform	83	10.418	10.418	(0.980)	1450169	100.000	94.2195
	27 Tetrahydrofuran	42	10.428	10.428	(0.981)	4159209	1000.00	862.7859
*	28 Pentafluorobenzene	168	10.635	10.635	(1.000)	1598210	50.0000	
	29 Dibromofluoromethane	113	10.664	10.664	(1.003)	875112	50.0000	50.0557
	30 1,1,1-Trichloroethane	97	10.793	10.793	(1.015)	1033090	100.000	102.1920
	31 1,1-Dichloropropene	75	11.019	11.019	(0.932)	1198179	100.000	101.1903
	32 Carbon Tetrachloride	117	11.069	11.069	(0.937)	826457	100.000	102.1913
	33 1,2-Dichloroethane-d4	65	11.207	11.207	(0.948)	1017063	50.0000	49.8609
	34 1,2-Dichloroethane	62	11.315	11.315	(0.957)	1290572	100.000	98.6593
	35 Benzene	78	11.355	11.355	(0.961)	3565097	100.000	96.1620
	36 Methyl tert-Amyl Ether (TAME)	73	11.414	11.414	(0.966)	2595503	100.000	99.8988
*	37 1,4-Difluorobenzene	114	11.818	11.818	(1.000)	2579386	50.0000	
	38 Trichloroethene	95	12.281	12.281	(1.039)	851032	100.000	97.6573
	39 Trifluorotoluene	146	12.587	12.587	(1.065)	1269449	100.000	102.6042
	40 1,2-Dichloropropane	63	12.597	12.597	(1.066)	1090870	100.000	94.6403
	41 Dibromomethane	93	12.774	12.774	(1.081)	630451	100.000	100.7357
	42 Bromodichloromethane	83	12.942	12.942	(1.095)	1158482	100.000	99.7439
	44 cis-1,3-Dichloropropene	75	13.553	13.553	(1.147)	1582601	100.000	99.5508
	45 Tetramethyl THF	43	13.632	13.632	(1.153)	2630251	100.000	96.6703
	46 4-Methyl-2-Pentanone	43	13.691	13.691	(1.159)	1814480	100.000	105.9465
	47 Toluene-d8	98	13.957	13.957	(1.181)	2747656	50.0000	49.5033
	48 Toluene	92	14.056	14.056	(1.189)	1966809	100.000	93.1794
	49 trans-1,3-Dichloropropene	75	14.253	14.253	(1.206)	1412656	100.000	101.3131
	50 1,1,2-Trichloroethane	85	14.519	14.519	(1.229)	471432	100.000	99.5401
	51 1,3-Dichloropropane	76	14.756	14.756	(0.933)	1507242	100.000	100.7873
	52 2-Hexanone	43	14.776	14.776	(0.934)	995713	100.000	104.2916
	53 Tetrachloroethene	166	14.805	14.805	(0.936)	781562	100.000	101.6607
	54 Dibromochloromethane	129	15.081	15.081	(0.953)	916608	100.000	104.1743
	55 1,2-Dibromoethane	107	15.269	15.269	(1.292)	914347	100.000	102.6623
*	56 Chlorobenzene-d5	117	15.821	15.821	(1.000)	2073881	50.0000	
	57 Chlorobenzene	112	15.860	15.860	(1.002)	2121995	100.000	96.9625
	58 1,1,1,2-Tetrachloroethane	131	15.929	15.929	(1.007)	737484	100.000	101.4443
	59 Ethylbenzene	91	15.949	15.949	(1.008)	3506376	100.000	96.5217
	60 m,p-Xylenes	106	16.087	16.087	(1.017)	2588486	200.000	195.9556
	61 o-Xylene	106	16.570	16.570	(1.047)	1263431	100.000	96.4679
	62 Styrene	104	16.570	16.570	(1.047)	2257571	100.000	100.2484
	63 Bromoform	173	16.836	16.836	(1.064)	681020	100.000	99.6439
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	3148817	100.000	98.7673
	65 Cyclohexanone	55	17.112	17.112	(0.924)	709360	1000.00	1123.4657
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1140071	50.0000	48.3690
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.933)	1227449	100.000	96.9968
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	1105119	100.000	93.4999(M)
	69 Bromobenzene	156	17.388	17.388	(0.939)	896727	100.000	95.8774
	70 Propylbenzene	91	17.428	17.428	(0.941)	3978203	100.000	101.3639
	71 2-Chlorotoluene	91	17.586	17.586	(0.950)	2646632	100.000	94.9562
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	2376912	100.000	103.7698
	73 4-Chlorotoluene	91	17.694	17.694	(0.956)	2450484	100.000	94.6013
	74 tert-Butylbenzene	119	18.010	18.010	(0.973)	2198205	100.000	106.1870
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.975)	2255483	100.000	109.2682
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	3295336	100.000	109.2892
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.994)	2464620	100.000	113.2384
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.997)	1599483	100.000	96.0939

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Report Date: 29-Jan-2007 09:13

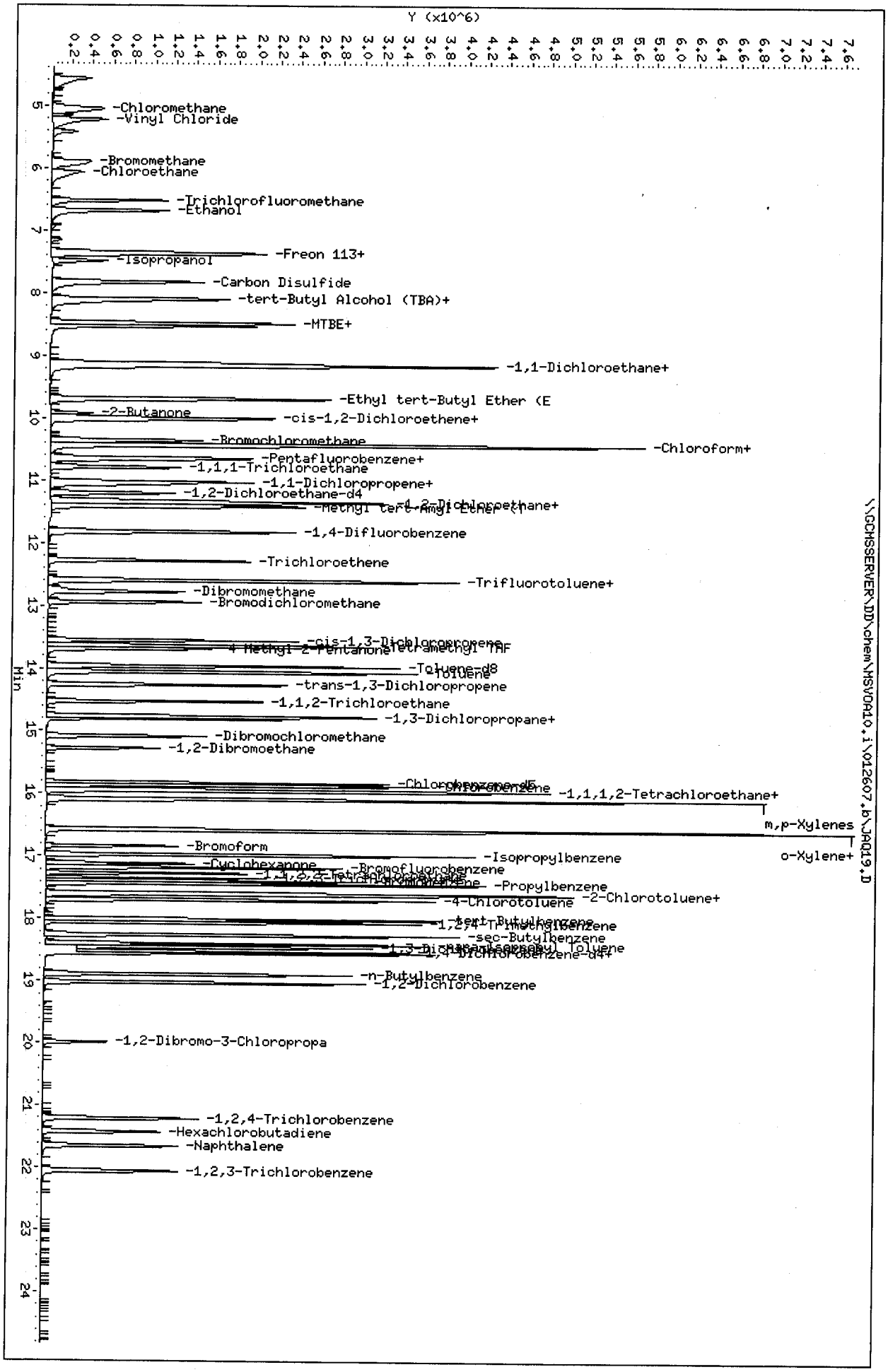
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	995616	50.0000	
80 1,4-Dichlorobenzene	146	18.542	18.542	(1.002)	1620839	100.000	94.7518
81 n-Butylbenzene	91	18.887	18.887	(1.020)	2083695	100.000	119.1905
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1555453	100.000	96.8440
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	213279	100.000	109.0846(M)
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	732219	100.000	114.2212
85 Hexachlorobutadiene	225	21.421	21.421	(1.157)	353650	100.000	110.5339(M)
86 Naphthalene	128	21.648	21.648	(1.169)	1604819	100.000	118.4196
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	687735	100.000	113.5780

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\012607.b\JAQ19.D
Date : 26-JAN-2007 20:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.02/100,S5219,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC379891 IDF : 1.0
Seqnum : 447112790019.2 File : ecj19 Time : 19-MAR-2007 15:55
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5723 (10000X), S5736 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7558	25.00	20.45	ug/L	-18	30	0.1000	u
Vinyl Chloride	0.6995	0.6142	25.00	21.95	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.4475	25.00	27.01	ug/L	8	30	0.0500	u
Chloroethane	0.3917	0.3877	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2551	25.00	23.17	ug/L	-7	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3784	25.00	27.55	ug/L	10	20	0.0500	u
Methylene Chloride	0.5327	0.5587	25.00	26.22	ug/L	5	30	0.0500	u
Carbon Disulfide	1.5714	0.9229	25.00	14.68	ug/L	**-41**	30	0.0500	c- u ***
MTBE	1.6725	1.5266	25.00	22.82	ug/L	-9	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4611	25.00	25.58	ug/L	2	30	0.0500	u
Vinyl Acetate	1.5725	1.7606	25.00	27.99	ug/L	12	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0285	25.00	27.05	ug/L	8	30	0.1000	u
2-Butanone	0.5135	0.4470	25.00	21.76	ug/L	-13	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6128	25.00	23.37	ug/L	-7	30	0.0500	u
Chloroform	1.0380	0.9914	25.00	23.88	ug/L	-4	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6805	25.00	25.18	ug/L	1	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3050	25.00	28.69	ug/L	15	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4982	25.00	24.93	ug/L	0	30	0.0500	u
Benzene	1.3466	1.3576	25.00	25.21	ug/L	1	30	0.0500	u
Trichloroethene	0.3340	0.3309	25.00	24.77	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5153	25.00	26.21	ug/L	5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5886	25.00	22.87	ug/L	-9	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5907	25.00	23.15	ug/L	-7	30	0.0500	u
Toluene	0.8216	0.8715	25.00	26.52	ug/L	6	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5155	25.00	21.72	ug/L	-13	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1922	25.00	23.79	ug/L	-5	30	0.0500	u
2-Hexanone	0.5472	0.4904	25.00	22.41	ug/L	-10	40	0.0500	u
Tetrachloroethene	0.2838	0.3400	25.00	29.95	ug/L	20	30	0.0500	u
Dibromochloromethane	0.4287	0.4311	25.00	25.14	ug/L	1	30	0.0500	u
Chlorobenzene	1.0173	0.9767	25.00	24.00	ug/L	-4	30	0.3000	u
Ethylbenzene	1.7142	1.8042	25.00	26.31	ug/L	5	20	0.0500	u
m,p-Xylenes	0.6280	0.6410	50.00	51.04	ug/L	2	30	0.0500	u
o-Xylene	0.6326	0.6311	25.00	24.94	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1255	25.00	23.98	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.2228	25.00	23.10	ug/L	-8	30	0.3000	u
Dibromofluoromethane	0.5927	0.5582	50.00	47.09	ug/L	-6	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4345	50.00	54.23	ug/L	8	30	0.0500	u
Toluene-d8	1.1589	1.1681	50.00	50.40	ug/L	1	30	0.0500	u
Bromofluorobenzene	1.2864	1.1717	50.00	45.54	ug/L	-9	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	581103	-6.70	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	905326	-12.17	11.18	11.17	-0.01
Chlorobenzene-d5	882637	762278	-13.64	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	379411	-7.83	17.97	17.96	-0.01

Analyst: BO Date: 03/20/07 Reviewer: LW Date: 03/20/07

-=low bias c=CCV u=use

447112790019.2

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: QC379793 IDF : 1.0
Seqnum : 497112758004.2 File : jcj04 Time : 19-MAR-2007 08:38
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5723 (10000X), S5614 (10000X), S5426 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.4628	25.00	20.67	ug/L	-17	30	0.1000	u
Vinyl Chloride	0.4284	0.3732	25.00	21.78	ug/L	-13	20	0.0500	u
Bromomethane	0.2490	0.2629	25.00	26.39	ug/L	6	30	0.0500	u
Chloroethane	0.2566	0.2768	25.00	26.96	ug/L	8	30	0.0500	u
Acetone	0.1377	0.1246	25.00	22.61	ug/L	-10	40	0.0500	u
1,1-Dichloroethene	0.2467	0.2861	25.00	28.99	ug/L	16	20	0.0500	u
Methylene Chloride	0.3245	0.3762	25.00	28.98	ug/L	16	30	0.0500	u
Carbon Disulfide	1.1042	0.8906	25.00	20.17	ug/L	-19	30	0.0500	!v- u
MTBE	0.8650	0.8532	25.00	24.66	ug/L	-1	30	0.0500	u
trans-1,2-Dichloroethene	0.2868	0.3335	25.00	29.07	ug/L	16	30	0.0500	u
Vinyl Acetate	1.1462	0.8847	25.00	19.30	ug/L	-23	40	0.0500	m u
1,1-Dichloroethane	0.5825	0.6488	25.00	27.84	ug/L	11	30	0.1000	u
2-Butanone	0.2252	0.2010	25.00	22.31	ug/L	-11	40	0.0500	u
cis-1,2-Dichloroethene	0.3062	0.3652	25.00	29.82	ug/L	19	30	0.0500	u
Chloroform	0.4815	0.5286	25.00	27.45	ug/L	10	20	0.0500	u
1,1,1-Trichloroethane	0.3163	0.3651	25.00	28.86	ug/L	15	30	0.0500	u
Carbon Tetrachloride	0.1568	0.1836	25.00	29.28	ug/L	17	30	0.0500	u
1,2-Dichloroethane	0.2536	0.2634	25.00	25.97	ug/L	4	30	0.0500	u
Benzene	0.7187	0.8035	25.00	27.95	ug/L	12	30	0.0500	u
Trichloroethene	0.1689	0.1832	25.00	27.12	ug/L	8	30	0.0500	u
1,2-Dichloropropane	0.2234	0.2291	25.00	25.64	ug/L	3	20	0.0500	u
Bromodichloromethane	0.2251	0.2539	25.00	28.19	ug/L	13	30	0.0500	u
4-Methyl-2-Pentanone	0.3320	0.2971	25.00	22.38	ug/L	-10	40	0.0500	u
cis-1,3-Dichloropropene	0.3082	0.3329	25.00	27.01	ug/L	8	30	0.0500	u
Toluene	0.4092	0.4582	25.00	28.00	ug/L	12	20	0.0500	u
trans-1,3-Dichloropropene	0.2703	0.2607	25.00	24.12	ug/L	-4	30	0.0500	u
1,1,2-Trichloroethane	0.0918	0.0994	25.00	27.07	ug/L	8	30	0.0500	u
2-Hexanone	0.2302	0.1842	25.00	20.01	ug/L	-20	40	0.0500	u
Tetrachloroethene	0.1854	0.2011	25.00	27.13	ug/L	9	30	0.0500	u
Dibromochloromethane	0.2121	0.2134	25.00	25.15	ug/L	1	30	0.0500	u
Chlorobenzene	0.5276	0.5343	25.00	25.32	ug/L	1	30	0.3000	u
Ethylbenzene	0.8758	0.8802	25.00	25.13	ug/L	1	20	0.0500	u
m,p-Xylenes	0.3185	0.3291	50.00	51.66	ug/L	3	30	0.0500	u
o-Xylene	0.3158	0.3229	25.00	25.56	ug/L	2	30	0.0500	u
Styrene	0.5429	0.5646	25.00	26.00	ug/L	4	30	0.0500	u
Bromoform	0.1648	0.1621	25.00	24.60	ug/L	-2	30	0.1000	u
1,1,2,2-Tetrachloroethane	0.6355	0.5313	25.00	20.90	ug/L	-16	30	0.3000	u
Dibromofluoromethane	0.5469	0.5678	50.00	51.91	ug/L	4	30	0.0500	u
1,2-Dichloroethane-d4	0.3954	0.3870	50.00	48.94	ug/L	-2	30	0.0500	u
Toluene-d8	1.0759	1.1251	50.00	52.29	ug/L	5	30	0.0500	u
Bromofluorobenzene	1.1837	1.0984	50.00	46.40	ug/L	-7	30	0.0500	u

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1422618	-8.54	10.64	10.62	-0.02
1,4-Difluorobenzene	2525036	2345382	-7.11	11.82	11.81	-0.01
Chlorobenzene-d5	2054473	2167502	5.50	15.83	15.83	0.00
1,4-Dichlorobenzene-d4	973680	1086217	11.56	18.52	18.52	0.00

Analyst: BO Date: 03/20/07 Reviewer: LW Date: 03/20/07

!=warning -=low bias m=manual integration u=use v=ICV

497112758004.2

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 25PPB IDF : 1.0
Seqnum : 497112758016 File : jcj16 Time : 19-MAR-2007 15:42
Cal : 497038053001 Caldate : 26-JAN-2007 Caltype : WATER
Standards: S5426 (5000X), S5537 (10000X), S5723 (10000X), S5614 (10000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5598	0.4729	25.00	21.12	ug/L	-16	30	0.1000	
Vinyl Chloride	0.4284	0.3922	25.00	22.88	ug/L	-8	20	0.0500	
Bromomethane	0.2490	0.2698	25.00	27.09	ug/L	8	30	0.0500	
Chloroethane	0.2566	0.2898	25.00	28.23	ug/L	13	30	0.0500	
Acetone	0.1377	0.1329	25.00	24.12	ug/L	-4	40	0.0500	
1,1-Dichloroethene	0.2467	0.2854	25.00	28.92	ug/L	16	20	0.0500	
Methylene Chloride	0.3245	0.3731	25.00	28.74	ug/L	15	30	0.0500	
Carbon Disulfide	1.1042	0.8793	25.00	19.91	ug/L	-20	30	0.0500	
MTBE	0.8650	0.9101	25.00	26.30	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.2868	0.3323	25.00	28.97	ug/L	16	30	0.0500	
Vinyl Acetate	1.1462	1.0020	25.00	21.86	ug/L	-13	40	0.0500	m
1,1-Dichloroethane	0.5825	0.6411	25.00	27.51	ug/L	10	30	0.1000	
2-Butanone	0.2252	0.2089	25.00	23.19	ug/L	-7	40	0.0500	
cis-1,2-Dichloroethene	0.3062	0.3658	25.00	29.86	ug/L	19	30	0.0500	
Chloroform	0.4815	0.5295	25.00	27.49	ug/L	10	20	0.0500	
1,1,1-Trichloroethane	0.3163	0.3873	25.00	30.62	ug/L	**22**	30	0.0500	!c+
Carbon Tetrachloride	0.1568	0.1909	25.00	30.45	ug/L	**22**	30	0.0500	!c+
1,2-Dichloroethane	0.2536	0.2618	25.00	25.82	ug/L	3	30	0.0500	
Benzene	0.7187	0.8064	25.00	28.05	ug/L	12	30	0.0500	
Trichloroethene	0.1689	0.1903	25.00	28.17	ug/L	13	30	0.0500	
1,2-Dichloropropane	0.2234	0.2283	25.00	25.54	ug/L	2	20	0.0500	
Bromodichloromethane	0.2251	0.2504	25.00	27.81	ug/L	11	30	0.0500	
4-Methyl-2-Pentanone	0.3320	0.3273	25.00	24.65	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.3082	0.3337	25.00	27.07	ug/L	8	30	0.0500	
Toluene	0.4092	0.4683	25.00	28.62	ug/L	14	20	0.0500	
trans-1,3-Dichloropropene	0.2703	0.2759	25.00	25.52	ug/L	2	30	0.0500	
1,1,2-Trichloroethane	0.0918	0.0991	25.00	27.00	ug/L	8	30	0.0500	
2-Hexanone	0.2302	0.2166	25.00	23.53	ug/L	-6	40	0.0500	
Tetrachloroethene	0.1854	0.2408	25.00	32.47	ug/L	**30**	30	0.0500	!c+
Dibromochloromethane	0.2121	0.2311	25.00	27.23	ug/L	9	30	0.0500	
Chlorobenzene	0.5276	0.5816	25.00	27.56	ug/L	10	30	0.3000	
Ethylbenzene	0.8758	1.0280	25.00	29.34	ug/L	17	20	0.0500	
m,p-Xylenes	0.3185	0.3843	50.00	60.34	ug/L	**21**	30	0.0500	!c+
o-Xylene	0.3158	0.3711	25.00	29.38	ug/L	18	30	0.0500	
Styrene	0.5429	0.6500	25.00	29.93	ug/L	20	30	0.0500	
Bromoform	0.1648	0.1782	25.00	27.03	ug/L	8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6355	0.5518	25.00	21.71	ug/L	-13	30	0.3000	
Dibromofluoromethane	0.5469	0.5544	50.00	50.68	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3954	0.3786	50.00	47.88	ug/L	-4	30	0.0500	
Toluene-d8	1.0759	1.1120	50.00	51.68	ug/L	3	30	0.0500	
Bromofluorobenzene	1.1837	1.0732	50.00	45.33	ug/L	-9	30	0.0500	

ISTD (ICAL jaq17)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1555522	1483530	-4.63	10.64	10.63	-0.01
1,4-Difluorobenzene	2525036	2442574	-3.27	11.82	11.81	-0.01
Chlorobenzene-d5	2054473	2067578	0.64	15.83	15.83	0.00
1,4-Dichlorobenzene-d4	973680	1128822	15.93	18.52	18.52	0.00

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

!=warning +=high bias c=CCV m=manual integration

497112758016

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447112790

Date : 03/19/07
Sequence : MSVOA05 ecj

Reference: ea916
Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
019	CCV/LCS	QC379891	581103	10.04	905326	11.17	762278	15.24	379411	17.96
021	BLANK	QC379862	544412	10.05	857014	11.17	735253	15.24	355138	17.96
022	SAMPLE	193262-009	537599	10.04	850909	11.17	719531	15.24	347926	17.96
023	SAMPLE	193262-010	542562	10.04	848701	11.17	713723	15.24	348169	17.96
024	SAMPLE	193262-017	523819	10.04	825598	11.17	704972	15.24	342552	17.96
025	SAMPLE	193262-018	527938	10.04	835509	11.17	705759	15.24	336364	17.96
026	SAMPLE	193262-019	523688	10.04	835881	11.17	709109	15.24	341293	17.96
027	SAMPLE	193262-020	511777	10.04	827625	11.17	701243	15.24	339467	17.96
028	SAMPLE	193262-022	510576	10.04	829302	11.17	712846	15.24	335503	17.96
029	SAMPLE	193262-023	517838	10.04	837915	11.16	700337	15.24	339045	17.96
030	SAMPLE	193277-001	519825	10.05	836320	11.17	699965	15.24	336089	17.96
031	SAMPLE	193329-002	515757	10.04	841284	11.17	713659	15.24	337867	17.96
032	SAMPLE	193329-003	513288	10.04	847623	11.17	697953	15.24	336779	17.96
033	SAMPLE	193329-004	509390	10.04	842305	11.17	703637	15.24	330726	17.96
034	SAMPLE	193329-005	507322	10.05	830279	11.17	700651	15.24	330181	17.96
035	SAMPLE	193329-006	513335	10.04	856711	11.17	707768	15.25	334835	17.97
036	SAMPLE	193329-007	510245	10.05	831112	11.17	699399	15.24	333543	17.96
037	MSS	193217-011	494632	10.05	827029	11.17	692363	15.24	329886	17.96
038	SAMPLE	193329-001	503626	10.04	841853	11.17	707040	15.24	333439	17.96
039	MS	QC379910	500518	10.04	838970	11.17	711503	15.24	360069	17.96
040	MSD	QC379911	518512	10.04	850979	11.17	708901	15.24	357191	17.96

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497112758

Date : 03/19/07 Reference: jaq17
Sequence : MSVOA10 jcj Analyzed : 01/26/07 19:39

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1555522	10.64	2525036	11.82	2054473	15.83	973680	18.52
		LOWER LIMIT	777761	10.14	1262518	11.32	1027237	15.33	486840	18.02
		UPPER LIMIT	3111044	11.14	5050072	12.32	4108946	16.33	1947360	19.02
004	CCV/BS	QC379793	1422618	10.62	2345382	11.81	2167502	15.83	1086217	18.52
005	BSD	QC379794	1458507	10.63	2445117	11.81	2168457	15.83	1078987	18.52
007	BLANK	QC379792	1456686	10.63	2426130	11.81	2202497	15.83	1095915	18.52
008	SAMPLE	193332-003	1482913	10.62	2466906	11.80	2203458	15.83	1137224	18.52
009	SAMPLE	193492-004	1497626	10.62	2475982	11.80	2212243	15.83	1124304	18.52
010	MSS	193217-005	1479948	10.62	2482650	11.81	2243567	15.83	1137712	18.52
011	MS	QC379820	1470182	10.62	2472247	11.80	2223429	15.83	1132669	18.52
012	MSD	QC379821	1525672	10.62	2492622	11.81	2244214	15.83	1139515	18.52
016	CCV	25PPB	1483530	10.63	2442574	11.81	2067578	15.83	1128822	18.52
018	BLANK	QC379829	1489857	10.62	2459103	11.80	2197551	15.83	1088911	18.53
019	SAMPLE	193515-001	1504718	10.63	2494833	11.81	2245032	15.82	1116534	18.53
020	SAMPLE	193515-008	1492556	10.63	2451744	11.81	2196750	15.83	1123920	18.52
021	SAMPLE	193217-003	1463822	10.63	2451471	11.81	2179312	15.83	1068622	18.53
022	SAMPLE	193217-004	1469319	10.63	2442791	11.81	2203805	15.82	1082472	18.53
023	SAMPLE	193217-006	1463988	10.63	2484764	11.81	2233174	15.83	1100307	18.53
024	SAMPLE	193333-001	1482835	10.63	2490690	11.81	2228813	15.83	1109172	18.53
025	SAMPLE	193274-010	1462962	10.63	2457172	11.81	2143813	15.83	1092179	18.53
026	SAMPLE	193262-002	1482705	10.63	2466539	11.81	2208251	15.83	1116314	18.52
027	SAMPLE	193262-003	1478740	10.62	2436198	11.80	2199031	15.83	1116583	18.53
028	SAMPLE	193262-007	1457472	10.63	2434545	11.81	2169766	15.83	1064710	18.53
029	SAMPLE	193515-002	1448912	10.63	2441061	11.81	2200662	15.83	1078108	18.52
030	SAMPLE	193515-003	1450261	10.62	2421187	11.81	2161951	15.83	1084000	18.52
031	SAMPLE	193515-004	1435293	10.63	2379748	11.81	2097702	15.83	1016777	18.52
032	SAMPLE	193515-005	1440692	10.63	2422248	11.81	2163142	15.83	1068731	18.52
033	SAMPLE	193515-006	1492150	10.63	2475076	11.81	2180455	15.83	1056507	18.52
034	SAMPLE	193515-007	1465765	10.63	2445255	11.81	2192365	15.83	1046699	18.53
035	SAMPLE	193515-009	1446978	10.63	2423783	11.81	2170584	15.83	1055605	18.53

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447112790

Instrument : MSVOA05 Begun : 03/19/07 07:50
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ecj01	X	IB			03/19/07 07:50	1.0	1
002	ecj02	X	BFB			03/19/07 08:18	1.0	2
003	ecj03	X	30PPB			03/19/07 08:34	1.0	3 4 5 1
004	ecj04	X	BFB			03/19/07 09:10	1.0	2
005	ecj05	X	30PPB			03/19/07 09:26	1.0	3 4 5 1
006	ecj06	X	BFB			03/19/07 09:57	1.0	2
007	ecj07	X	30PPB			03/19/07 10:13	1.0	3 4 5 1
008	ecj08	X	BFB			03/19/07 10:56	1.0	2
009	ecj09	X	50PPB			03/19/07 11:12	1.0	3 4 5 1
010	ecj10	X	BFB			03/19/07 12:03	1.0	2
011	ecj11	X	50PPB			03/19/07 12:19	1.0	3 4 5 1
012	ecj12	X	BFB			03/19/07 13:10	1.0	2
013	ecj13	X	QC379860	Water	123261	03/19/07 13:27	1.0	6 7 8 1
014	ecj14	X	BFB			03/19/07 13:58	1.0	2
015	ecj15	X	QC379860	Water	123261	03/19/07 14:14	1.0	6 7 8 1
016	ecj16	X	BFB			03/19/07 14:45	1.0	2
017	ecj17	X	QC379860	Water	123261	03/19/07 15:01	1.0	6 7 8 1
018	ecj18	TUN	BFB			03/19/07 15:39	1.0	2
019	ecj19	CCV/LCS	QC379891	Water	123261	03/19/07 15:55	1.0	6 7 8 9
020	ecj20	X	IB			03/19/07 16:38	1.0	9
021	ecj21	BLANK	QC379862	Water	123261	03/19/07 17:10	1.0	9
022	ecj22	SAMPLE	193262-009	Water	123261	03/19/07 17:42	1.0	9
023	ecj23	SAMPLE	193262-010	Water	123261	03/19/07 18:13	1.0	9
024	ecj24	SAMPLE	193262-017	Water	123261	03/19/07 18:45	1.0	9
025	ecj25	SAMPLE	193262-018	Water	123261	03/19/07 19:17	1.0	9
026	ecj26	SAMPLE	193262-019	Water	123261	03/19/07 19:49	1.0	9
027	ecj27	SAMPLE	193262-020	Water	123261	03/19/07 20:21	1.0	9
028	ecj28	SAMPLE	193262-022	Water	123261	03/19/07 20:53	1.0	9
029	ecj29	SAMPLE	193262-023	Water	123261	03/19/07 21:25	1.0	9
030	ecj30	SAMPLE	193277-001	Water	123261	03/19/07 21:57	1.0	9
031	ecj31	SAMPLE	193329-002	Water	123261	03/19/07 22:29	1.0	9
032	ecj32	SAMPLE	193329-003	Water	123261	03/19/07 23:01	1.0	9
033	ecj33	SAMPLE	193329-004	Water	123261	03/19/07 23:33	1.0	9
034	ecj34	SAMPLE	193329-005	Water	123261	03/20/07 00:05	1.0	9
035	ecj35	SAMPLE	193329-006	Water	123261	03/20/07 00:37	1.0	9
036	ecj36	SAMPLE	193329-007	Water	123261	03/20/07 01:08	1.0	9
037	ecj37	MSS	193217-011	Water	123261	03/20/07 01:40	1.0	9
038	ecj38	SAMPLE	193329-001	Water	123261	03/20/07 02:12	62.50	9
039	ecj39	MS	QC379910	Water	123261	03/20/07 02:44	1.0	9 6 7 8
040	ecj40	MSD	QC379911	Water	123261	03/20/07 03:16	1.0	9 6 7 8
041	ecj41	X	IB			03/20/07 03:48	1.0	9
042	ecj42	X	IB			03/20/07 04:20	1.0	9
043	ecj43	X	IB			03/20/07 04:52	1.0	9
044	ecj44	X	TVH2000			03/20/07 05:24	1.0	9

BO 03/19/07 : ecj04, ecj06, ecj08, ecj10 adj tune. ecj12 autotune. ecj15, ecj17 used different aliquots of standards.

Analyst: BO Date: 03/20/07 Reviewer: LW Date: 03/20/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5194 6=S5537 7=S5614 8=S5723 9=S5736

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497038053

Instrument : MSVOA10
Method : EPA 8260B

Begun : 01/26/07 10:13
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jaq01	X	IB			01/26/07 10:13	1.0	1
002	jaq02	TUN	BFB			01/26/07 10:45	1.0	2
003	jaq03	CCV	25PPB			01/26/07 11:03	1.0	3 4 5 1
004	jaq04	TUN	BFB			01/26/07 11:48	1.0	2
005	jaq05	CCV	25PPB			01/26/07 12:05	1.0	3 4 5 1
006	jaq06	ICV/BS	QC373244	Water	121602	01/26/07 12:51	1.0	6 7 8 1
007	jaq07	X	LP			01/26/07 14:26	1.0	1
008	jaq08	TUN	BFB			01/26/07 15:00	1.0	2
009	jaq09	X	IB			01/26/07 15:18	1.0	1
010	jaq10	IB	CALIB			01/26/07 15:51	1.0	1
011	jaq11	ICAL	0.25/0.5PPB			01/26/07 16:23	1.0	3 9 10 1
012	jaq12	ICAL	0.5/1PPB			01/26/07 16:56	1.0	3 9 10 1
013	jaq13	ICAL	2PPB			01/26/07 17:28	1.0	3 9 10 1
014	jaq14	ICAL	5PPB			01/26/07 18:01	1.0	3 9 10 1
015	jaq15	ICAL	10PPB			01/26/07 18:34	1.0	3 9 10 1
016	jaq16	ICAL	20PPB			01/26/07 19:06	1.0	3 9 10 1
017	jaq17	ICAL	50PPB			01/26/07 19:39	1.0	3 9 10 1
018	jaq18	ICAL	75PPB			01/26/07 20:12	1.0	3 9 10 1
019	jaq19	ICAL	100PPB			01/26/07 20:44	1.0	3 9 10 1
020	jaq20	ICV	ICVGAS25PPB			01/26/07 21:17	1.0	8 1
021	jaq21	ICV	ICV25PPB			01/26/07 21:50	1.0	7 6 1
022	jaq22	X	IB			01/26/07 22:23	1.0	1
023	jaq23	X	IB			01/26/07 22:56	1.0	1
024	jaq24	X	IB			01/26/07 23:28	1.0	1

Analyst: ACM Date: 01/29/07 Reviewer: LW Date: 01/29/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5322 7=S5052 8=S5241 9=S5219 10=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497112758

Instrument : MSVOA10
Method : EPA 8260B

Begun : 03/19/07 07:18
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jcj01	X	IB			03/19/07 07:18	1.0	1	
002	jcj02	TUN	BFB			03/19/07 07:47	1.0	2	
003	jcj03	X	20PPB			03/19/07 08:05	1.0	3 4 1	
004	jcj04	CCV/BS	QC379793	Water	123243	03/19/07 08:38	1.0	5 6 7 1	
005	jcj05	BSD	QC379794	Water	123243	03/19/07 09:11	1.0	5 6 7 1	
006	jcj06	X	IB			03/19/07 09:44	1.0	1	
007	jcj07	BLANK	QC379792	Water	123243	03/19/07 10:16	1.0	1	
008	jcj08	SAMPLE	193332-003	Water	123243	03/19/07 10:51	1.0	1	
009	jcj09	SAMPLE	193492-004	Water	123243	03/19/07 11:24	1.0	1	
010	jcj10	MSS	193217-005	Water	123243	03/19/07 12:05	1.0	1	
011	jcj11	MS	QC379820	Water	123243	03/19/07 12:37	1.0	5 6 7 1	
012	jcj12	MSD	QC379821	Water	123243	03/19/07 13:30	1.0	5 6 7 1	
013	jcj13	X	BFB			03/19/07 14:28	1.0	2	
014	jcj14	X	20PPB			03/19/07 14:46	1.0	3 4 1	
015	jcj15	TUN	BFB			03/19/07 15:19	1.0	2	
016	jcj16	CCV	25PPB	Water		03/19/07 15:42	1.0	1 5 6 7	
017	jcj17	X	IB			03/19/07 16:15	1.0	1	
018	jcj18	BLANK	QC379829	Water	123243	03/19/07 16:48	1.0	1	
019	jcj19	SAMPLE	193515-001	Water	123243	03/19/07 17:20	1.0	1	
020	jcj20	SAMPLE	193515-008	Water	123243	03/19/07 17:53	1.0	1	
021	jcj21	SAMPLE	193217-003	Water	123243	03/19/07 18:26	1.0	1	
022	jcj22	SAMPLE	193217-004	Water	123243	03/19/07 18:59	1.0	1	
023	jcj23	SAMPLE	193217-006	Water	123243	03/19/07 19:32	2.500	1	
024	jcj24	SAMPLE	193333-001	Water	123243	03/19/07 20:05	1.0	1	
025	jcj25	SAMPLE	193274-010	Water	123243	03/19/07 20:37	1.0	1	pH > 2
026	jcj26	SAMPLE	193262-002	Water	123243	03/19/07 21:10	1.0	1	
027	jcj27	SAMPLE	193262-003	Water	123243	03/19/07 21:43	1.0	1	
028	jcj28	SAMPLE	193262-007	Water	123243	03/19/07 22:15	1.0	1	
029	jcj29	SAMPLE	193515-002	Water	123243	03/19/07 22:48	1.0	1	
030	jcj30	SAMPLE	193515-003	Water	123243	03/19/07 23:21	1.0	1	
031	jcj31	SAMPLE	193515-004	Water	123243	03/19/07 23:53	1.0	1	
032	jcj32	SAMPLE	193515-005	Water	123243	03/20/07 00:26	1.0	1	
033	jcj33	SAMPLE	193515-006	Water	123243	03/20/07 00:58	1.0	1	
034	jcj34	SAMPLE	193515-007	Water	123243	03/20/07 01:31	1.0	1	
035	jcj35	SAMPLE	193515-009	Water	123243	03/20/07 02:03	1.0	1	
036	jcj36	X	IB			03/20/07 02:36	1.0	1	
037	jcj37	X	IB			03/20/07 03:09	1.0	1	
038	jcj38	X	IB			03/20/07 03:41	1.0	1	
039	jcj39	X	IB-1			03/20/07 04:14	1.0	1	
040	jcj40	X	IB-10			03/20/07 04:46	1.0	1	

Analyst: ACM Date: 03/20/07 Reviewer: LW Date: 03/20/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5537 6=S5723 7=S5614

REPORTING SUMMARY FOR 193262 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CVBCADMCMDVDMDTTCDBTDBMDBDTHPDCEXXTSTPDDBB	LCRLCCTDTCACEC CCTCZCCDICZCCXCBLBYYOTBCBCZR	M MEEELSBE ACKELACCA EPCBPMPAOECBZLLTYMAFAM4	E EAA 1N E1 1 1MLLL1 APMK1E112 MZ MOX E M1E F	
193262-002	MSVOA10	03/19/07 21:10	1.0	|+|+|+\

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/19
PREPPED BY: Zee

WATER

123 243 | 14 + MS/MSD

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			F	<2			ID	RR 1x CCU - n-Butyl, tert, sec NAPH, CS_2	Prepped in Fridge
1	193332-003		C					RR 1x sec-, n-Butyl Vt	
2	193333-001		D	7				RR 1x 0.1Ω	
3	193274-010		E					~~RR 6.25x MSS/MS/MSD~~	Put off
4	~~193217-005~~		B					~~RR 5x OD~~	
5	4							~~RR 1.42x OD~~	
6	6							~~RR 7.14x OD~~	
7	7							~~RR 8.3x OD~~	
8			D	<2				RR 1x surr ↑	Holl 3/20
9	193217 -3							RR 1x	
0	4		CDEF	<2				1x MSS/MS/MSD	
1	5		E					RR 2.5x surr ↑	
2	6		V	<2				1x	
3	193 262 -2		A					1x	
4	2-3		K					1x ~~Put off~~ 3/20 3/19	
5	-7		C		LV			RR 1x PCE col	
16	193492 -~~3~~4		A					TB	
17	193575 -001		B					1x	
18	-002								
19	-003								
20	-004								
21	-005								
22	-006								
23	-007							EB	
24	-008							1x	
25	-009								
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PREPFORM.XLS

7/21/95

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/19/07
PREPPED BY: [illegible]

123261 WATER

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	193217-11		COFF	<2			5	MB 1X, MSS/MSS/MSD 60	
2	193277-1		D	⊥				1X	
3	~~193262-7~~		~~KK~~					~~1X~~ in fridge	
4	193262-9		A	<2				TB	
5	-10		BC					1X	
6	-17		B						
7	-18		A						
8	-19		B						
9	-20		C						
10	-22		B						
11	-23		⊥	⊥					
12	193329-1		B	<2				62.5X prepped	in fridge
13	-2							1X	
14	-3								
15	-4								
16	-5		⊥						
17	-6		C					1X	
18	-7			⊥					
19									
20									
21									
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PREPFORM.XLS

7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/24/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/24/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF08GW04	Batch#:	123116
Lab ID:	193262-002	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	128	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0307073A	Batch#:	123116
Lab ID:	193262-007	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	65-135
Decachlorobiphenyl	115	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DAEGW102	Batch#:	123116
Lab ID:	193262-019	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	103	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW030807B	Batch#:	123116
Lab ID:	193262-020	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	112	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379265	Batch#:	123116
Matrix:	Water	Prepared:	03/14/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	74	65-135
Decachlorobiphenyl	128	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	123116
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/16/07

Type: BS Lab ID: QC379266

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1876	94	65-135
Heptachlor	0.2000	0.1753	88	65-135
Aldrin	0.2000	0.1801	90	65-135
Dieldrin	0.4000	0.3629	91	65-135
Endrin	0.4000	0.3620	90	65-135
4,4'-DDT	0.4000	0.3513	88	65-135

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	93	65-135

Type: BSD Lab ID: QC379267

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1901	95	65-135	1	35
Heptachlor	0.2000	0.1794	90	65-135	2	35
Aldrin	0.2000	0.1818	91	65-135	1	35
Dieldrin	0.4000	0.3600	90	65-135	1	35
Endrin	0.4000	0.3637	91	65-135	0	35
4,4'-DDT	0.4000	0.3495	87	65-135	1	35

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	95	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 PEST Water: EPA 8081A

Inst : GC16
Calnum : 237105809001
Units : pg/ul

Name : gc16pest_073
Date : 14-MAR-2007 22:04
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	073_017	237105809017	PEST_1	14-MAR-2007 22:04	S5553
L2	073_018	237105809018	PEST_2	14-MAR-2007 22:23	S5554
L3	073_019	237105809019	PEST_3	14-MAR-2007 22:42	S5555
L4	073_021	237105809021	PEST_5	14-MAR-2007 23:21	S5049
L5	073_022	237105809022	PEST_6	14-MAR-2007 23:40	S5050
L6	073_023	237105809023	PEST_7	14-MAR-2007 23:59	S5051
L7	073_030	237105809030	PEST_4	15-MAR-2007 11:21	S5556

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	3772.5	4155.0	4430.6	6020.6	7400.7	7492.6	5273.8	AVRG		1.82E-4		5506.5	**28**	0.995	20	rsd ***
gamma-BHC	A	3518.5	3785.4	4038.3	5250.2	6234.0	6180.6	4692.6	AVRG		2.08E-4		4814.2	**23**	0.995	20	rsd ***
beta-BHC	A	3282.0	3331.2	3224.4	3504.3	3627.8	3289.6	3232.7	AVRG		2.98E-4		3356.0	5	0.995	20	
delta-BHC	A	3378.0	3574.0	3685.3	4838.8	5762.1	5732.4	4176.6	AVRG		2.25E-4		4449.6	**23**	0.995	20	rsd ***
Heptachlor	A	4243.5	4354.0	4303.0	4762.0	4902.5	4601.5	4244.5	AVRG		2.23E-4		4487.3	6	0.995	20	
Aldrin	A	4924.0	5125.8	5059.4	5729.6	6407.9	6163.5	5221.0	AVRG		1.81E-4		5518.7	11	0.995	20	
Heptachlor epoxide	A	5214.0	5376.6	5078.6	5338.7	5520.3	5086.8	4945.5	AVRG		1.91E-4		5222.9	4	0.995	20	
gamma-Chlordane	A	5100.5	5179.2	4976.1	5296.0	5543.4	5117.7	4887.4	AVRG		1.94E-4		5157.2	4	0.995	20	
alpha-Chlordane	A	4621.0	4860.6	4702.7	4994.3	5327.4	4863.4	4568.4	AVRG		2.06E-4		4848.3	5	0.995	20	
4,4'-DDE	A	3323.0	3484.2	3431.1	4086.2	4415.8	4091.5	3621.7	AVRG		2.65E-4		3779.1	11	0.995	20	
Endosulfan I	A	5417.0	5310.0	5066.5	5428.1	5564.0	5167.6	5027.2	AVRG		1.89E-4		5282.9	4	0.995	20	
Dieldrin	A	4121.8	4263.3	4169.3	4708.0	5009.9	4591.6	4286.1	AVRG		2.25E-4		4450.0	7	0.995	20	
Endrin	A	3373.0	3425.3	3103.1	3501.6	3606.9	3339.7	3108.6	AVRG		2.98E-4		3351.2	6	0.995	20	
4,4'-DDD	A	2063.0	2350.1	2226.0	2808.1	3122.4	2922.4	2450.2	AVRG		3.90E-4		2563.2	15	0.995	20	
Endosulfan II	A	5679.8	4286.3	4293.9	4125.4	4230.7	3823.3	3852.9	AVRG		2.31E-4		4327.5	14	0.995	20	
4,4'-DDT	A	1494.0	1771.1	1631.6	2112.8	2218.3	2047.7	1800.7	AVRG		5.35E-4		1868.0	14	0.995	20	
Methoxychlor	A	1092.5	1253.7	1120.5	1289.2	1215.7	1003.3	1112.3	AVRG		8.66E-4		1155.3	9	0.995	20	
Endosulfan sulfate	A	3574.3	3746.4	3475.0	3721.6	3694.8	3232.3	3411.7	AVRG		2.82E-4		3550.9	5	0.995	20	
Endrin ketone	A	3024.5	3317.3	3256.6	3893.1	4031.5	3563.8	3499.9	AVRG		2.85E-4		3512.4	10	0.995	20	
TCMX	A	5785.5	6111.9	6155.9	6646.4	6782.4	6066.7	6208.0	AVRG		1.60E-4		6251.0	6	0.995	20	
Decachlorobiphenyl	A	3395.8	3690.9	3206.6	3325.3	3035.8		3135.0	AVRG		3.03E-4		3298.2	7	0.995	20	
alpha-BHC	B	7297.0	7420.4	7520.7	9034.9	10627	10855	7813.5	AVRG		1.16E-4		8652.6	18	0.995	20	
gamma-BHC	B	8689.5	7165.4	7345.7	8101.6	8993.9	8942.5	6827.5	AVRG		1.25E-4		8009.4	11	0.995	20	
beta-BHC	B	5155.5	5180.4	4877.1	5006.4	5027.3	4545.8	4470.3	AVRG		2.04E-4		4894.7	6	0.995	20	
delta-BHC	B	5701.0	5886.6	5757.5	6963.8	7960.9	7877.6	5798.2	AVRG		1.52E-4		6563.6	16	0.995	20	
Heptachlor	B	6663.0	6750.4	6162.1	6467.8	6511.6	6153.3	5510.7	AVRG		1.58E-4		6317.0	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8377.0	8210.8	8078.3	8591.9	9540.6	9216.2	7918.1	AVRG		1.17E-4		8561.8	7	0.995	20	
Heptachlor epoxide	B	8520.0	8507.6	7856.8	7990.7	8078.7	7440.9	7179.9	AVRG		1.26E-4		7939.2	6	0.995	20	
gamma-Chlordane	B	8762.0	8724.6	8082.1	8172.8	8310.1	7642.6	7440.1	AVRG		1.23E-4		8162.0	6	0.995	20	
alpha-Chlordane	B	8604.0	8568.4	7952.0	7972.6	8053.6	7289.0	7329.0	AVRG		1.26E-4		7966.9	7	0.995	20	
4,4'-DDE	B	5401.0	5623.7	5340.4	6025.4	6472.4	6051.9	5373.3	AVRG		1.74E-4		5755.4	8	0.995	20	
Endosulfan I	B	8033.5	8107.4	7528.9	7637.5	7835.7	7204.8	7003.7	AVRG		1.31E-4		7621.6	5	0.995	20	
Dieldrin	B	6780.3	6803.8	6432.3	6982.2	7322.1	6785.4	6194.9	AVRG		1.48E-4		6757.3	5	0.995	20	
Endrin	B	4573.0	4805.3	4341.2	4799.8	4939.6	4594.5	4125.7	AVRG		2.18E-4		4597.0	6	0.995	20	
4,4'-DDD	B	3621.8	3900.0	3556.3	3998.7	4241.3	3945.7	3265.7	AVRG		2.64E-4		3789.9	9	0.995	20	
Endosulfan II	B	6897.8	6978.8	6200.2	6446.3	6380.6	5715.0	5585.9	AVRG		1.58E-4		6314.9	8	0.995	20	
4,4'-DDT	B	2444.5	2587.3	2296.4	2602.9	2668.5	2412.9	2167.2	AVRG		4.07E-4		2454.2	7	0.995	20	
Methoxychlor	B	1317.2	1408.5	1223.0	1370.7	1302.7	1112.3	1048.4	AVRG		7.97E-4		1254.7	11	0.995	20	
Endosulfan sulfate	B	5660.3	5651.1	5100.1	5276.7	5192.8	4578.4	4552.7	AVRG		1.94E-4		5144.6	9	0.995	20	
Endrin ketone	B	4583.3	4952.3	4641.9	5367.7	5520.0	4973.5	4373.0	AVRG		2.03E-4		4915.9	9	0.995	20	
TCMX	B	9996.5	9788.2	9450.0	9683.1	9928.3	9130.9	9166.8	AVRG		1.04E-4		9592.0	4	0.995	20	
Decachlorobiphenyl	B	5971.5	6247.4	5235.0	5222.9	4770.4		4906.9	AVRG		1.85E-4		5392.3	11	0.995	20	
Average EPA 8081A	A												(n=22)	10		20	
Average EPA 8081A	B												(n=22)	8		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
beta-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
delta-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Aldrin	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor epoxide	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-Chlordane	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
alpha-Chlordane	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
4,4'-DDE	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan I	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Dieldrin	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDD	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan II	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDT	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Methoxychlor	A	20.000	50.000	100.00	250.00	500.00	1000.0	200.00	pg/ul
Endosulfan sulfate	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin ketone	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
TCMX	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Decachlorobiphenyl	A	4.0000	10.000	20.000	50.000	100.00		40.000	pg/ul
alpha-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
beta-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
delta-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Aldrin	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor epoxide	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-Chlordane	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
alpha-Chlordane	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
4,4'-DDE	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan I	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Dieldrin	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDD	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan II	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDT	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Methoxychlor	B	20.000	50.000	100.00	250.00	500.00	1000.0	200.00	pg/ul
Endosulfan sulfate	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin ketone	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
TCMX	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Decachlorobiphenyl	B	4.0000	10.000	20.000	50.000	100.00		40.000	pg/ul

=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 PEST Water
EPA 8081A

Inst : GC16 Name : gc16pest_073
Calnum : 237105809001 Cal Date: 14-MAR-2007

ICV 237105809026 (073_026 15-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	5506.5	5696.1	25.00	25.86	pg/ul	3	15	
gamma-BHC	A	4814.2	5016.3	25.00	26.05	pg/ul	4	15	
beta-BHC	A	3356.0	3304.4	25.00	24.62	pg/ul	-2	15	
delta-BHC	A	4449.6	4785.4	25.00	26.89	pg/ul	8	15	
Heptachlor	A	4487.3	4419.8	25.00	24.62	pg/ul	-2	15	
Aldrin	A	5518.7	5551.7	25.00	25.15	pg/ul	1	15	
Heptachlor epoxide	A	5222.9	5145.5	25.00	24.63	pg/ul	-1	15	
gamma-Chlordane	A	5157.2	5305.2	25.00	25.72	pg/ul	3	15	
alpha-Chlordane	A	4848.3	5082.6	25.00	26.21	pg/ul	5	15	
4,4'-DDE	A	3779.1	3671.3	25.00	24.29	pg/ul	-3	15	
Endosulfan I	A	5282.9	5170.3	25.00	24.47	pg/ul	-2	15	
Dieldrin	A	4450.0	4162.8	25.00	23.39	pg/ul	-6	15	
Endrin	A	3351.2	3357.9	25.00	25.05	pg/ul	0	15	
4,4'-DDD	A	2563.2	2340.6	25.00	22.83	pg/ul	-9	15	
Endosulfan II	A	4327.5	4762.2	25.00	27.51	pg/ul	10	15	
4,4'-DDT	A	1868.0	1862.9	25.00	24.93	pg/ul	0	15	
Methoxychlor	A	1155.3	1432.3	25.00	30.99	pg/ul	**24**	15	v+ ***
Endosulfan sulfate	A	3550.9	3615.6	25.00	25.46	pg/ul	2	15	
Endrin ketone	A	3512.4	3696.3	25.00	26.31	pg/ul	5	15	
alpha-BHC	B	8652.6	8612.2	25.00	24.88	pg/ul	0	15	
gamma-BHC	B	8009.4	8029.2	25.00	25.06	pg/ul	0	15	
beta-BHC	B	4894.7	4759.0	25.00	24.31	pg/ul	-3	15	
delta-BHC	B	6563.6	6847.0	25.00	26.08	pg/ul	4	15	
Heptachlor	B	6317.0	6082.4	25.00	24.07	pg/ul	-4	15	
Aldrin	B	8561.8	8442.6	25.00	24.65	pg/ul	-1	15	
Heptachlor epoxide	B	7939.2	7662.0	25.00	24.13	pg/ul	-3	15	
gamma-Chlordane	B	8162.0	8089.5	25.00	24.78	pg/ul	-1	15	
alpha-Chlordane	B	7966.9	7860.9	25.00	24.67	pg/ul	-1	15	
4,4'-DDE	B	5755.4	5683.6	25.00	24.69	pg/ul	-1	15	
Endosulfan I	B	7621.6	7539.0	25.00	24.73	pg/ul	-1	15	
Dieldrin	B	6757.3	6527.0	25.00	24.15	pg/ul	-3	15	
Endrin	B	4597.0	4644.2	25.00	25.26	pg/ul	1	15	
4,4'-DDD	B	3789.9	3732.7	25.00	24.62	pg/ul	-2	15	
Endosulfan II	B	6314.9	6313.0	25.00	24.99	pg/ul	0	15	
4,4'-DDT	B	2454.2	2560.3	25.00	26.08	pg/ul	4	15	
Methoxychlor	B	1254.7	1694.6	25.00	33.77	pg/ul	**35**	15	v+ ***
Endosulfan sulfate	B	5144.6	5314.1	25.00	25.82	pg/ul	3	15	
Endrin ketone	B	4915.9	5216.3	25.00	26.53	pg/ul	6	15	
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807102991001
Units : pg

Name : gc23pest_071
Date : 12-MAR-2007 20:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_018	807102991018	PEST_1	12-MAR-2007 20:02	S5553
L2	071_019	807102991019	PEST_2	12-MAR-2007 20:24	S5554
L3	071_020	807102991020	PEST_3	12-MAR-2007 20:45	S5555
L4	071_021	807102991021	PEST_4	12-MAR-2007 21:07	S5556
L5	071_022	807102991022	PEST_5	12-MAR-2007 21:28	S5049
L6	071_023	807102991023	PEST_6	12-MAR-2007 21:49	S5050
L7	071_024	807102991024	PEST_7	12-MAR-2007 22:11	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	8287.0	8058.0	7084.2	6450.4	7781.5	7196.6	6140.7	AVRG		1.37E-4		7285.5	11	0.995	20	
gamma-BHC	A	7685.0	7315.2	6305.2	5715.7	7032.6	6447.7	5570.9	AVRG		1.52E-4		6581.8	12	0.995	20	
beta-BHC	A	3095.0	2928.4	2536.5	2289.9	2848.4	2548.5	2289.8	AVRG		3.78E-4		2648.1	12	0.995	20	
delta-BHC	A	7865.5	7353.0	6225.3	5569.8	7232.0	6426.1	5629.1	AVRG		1.51E-4		6614.4	13	0.995	20	
Heptachlor	A	7061.0	6909.2	5846.8	5223.0	6670.1	6035.2	5240.0	AVRG		1.63E-4		6140.7	12	0.995	20	
Aldrin	A	7383.0	7000.8	6064.0	5394.5	6508.6	5980.0	5185.6	AVRG		1.61E-4		6216.6	13	0.995	20	
Heptachlor epoxide	A	6466.5	6208.2	5333.4	4709.8	5820.6	5240.0	4556.7	AVRG		1.83E-4		5476.4	13	0.995	20	
gamma-Chlordane	A	6326.0	6042.0	5931.0	4609.5	5730.7	5240.1	4648.2	AVRG		1.82E-4		5503.9	12	0.995	20	
alpha-Chlordane	A	5679.5	5906.6	4846.8	4488.6	5429.4	5019.6	4388.7	AVRG		1.96E-4		5108.5	11	0.995	20	
4,4'-DDE	A	5914.8	5544.2	4606.7	4006.1	5253.9	4670.3	3880.0	AVRG		2.07E-4		4839.4	16	0.995	20	
Endosulfan I	A	5736.5	5618.8	5025.3	4220.5	5485.7	4875.1	4360.5	AVRG		1.98E-4		5046.0	12	0.995	20	
Dieldrin	A	6185.5	5895.7	4968.6	4380.2	5518.9	4863.6	3946.9	AVRG		1.96E-4		5108.5	16	0.995	20	
Endrin	A	5318.0	4994.3	4129.3	3550.0	4688.8	4133.9	3466.7	AVRG		2.31E-4		4325.8	16	0.995	20	
4,4'-DDD	A	4665.8	4268.2	3556.8	3062.0	4163.8	3766.0	3232.3	AVRG		2.62E-4		3816.4	15	0.995	20	
Endosulfan II	A	5287.8	4906.4	4038.9	3541.4	4571.7	4019.6	3467.7	AVRG		2.35E-4		4261.9	16	0.995	20	
4,4'-DDT	A	4666.5	4529.0	3675.4	3162.4	4431.1	4004.5	3505.8	AVRG		2.50E-4		3996.4	14	0.995	20	
Methoxychlor	A	2148.9	1896.2	1492.0	1261.8	1727.5	1392.3		AVRG		6.05E-4		1653.1	20	0.995	20	
Endosulfan sulfate	A	4723.5	4400.2	3608.3	3073.6	4101.6	3672.3	3236.4	AVRG		2.61E-4		3830.8	16	0.995	20	
Endrin ketone	A	5529.5	5005.7	4116.5	3508.4	4729.0	4163.8	3492.8	AVRG		2.29E-4		4363.7	17	0.995	20	
TCMX	A	4485.0	4401.6	3829.2	3464.1	4099.7	3760.0	3207.8	AVRG		2.57E-4		3892.5	12	0.995	20	
Decachlorobiphenyl	A	4005.8	3708.2	2905.0	2467.0	3514.3	3034.9	2832.3	AVRG		3.12E-4		3209.6	17	0.995	20	
alpha-BHC	B	10379	9720.8	9185.8	9304.8	9341.7	9054.6	8238.2	AVRG		1.07E-4		9317.8	7	0.995	20	
gamma-BHC	B	10327	8906.2	8272.4	8372.2	8386.3	8023.0	7364.1	AVRG		1.17E-4		8521.5	11	0.995	20	
beta-BHC	B	3760.0	3533.6	3293.4	3339.2	3284.8	3079.7	2902.6	AVRG		3.02E-4		3313.3	8	0.995	20	
delta-BHC	B	9285.5	8811.2	8223.6	8557.3	8376.8	8132.5	7408.1	AVRG		1.19E-4		8399.3	7	0.995	20	
Heptachlor	B	8454.0	8021.6	7542.5	7710.8	7598.5	7156.8	6760.2	AVRG		1.31E-4		7606.3	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8790.5	8196.0	7792.6	7813.6	7763.5	7400.8	6843.9	AVRG		1.28E-4		7800.1	8	0.995	20	
Heptachlor epoxide	B	8002.5	7514.6	7027.2	6980.7	6926.6	6421.1	5915.4	AVRG		1.43E-4		6969.7	10	0.995	20	
gamma-Chlordane	B	7858.0	7429.4	6875.3	6965.6	6900.6	6487.2	6158.9	AVRG		1.44E-4		6953.6	8	0.995	20	
alpha-Chlordane	B	6847.5	7052.0	6504.1	6635.1	6608.6	6219.1	5837.2	AVRG		1.53E-4		6529.1	6	0.995	20	
4,4'-DDE	B	7323.0	6830.1	6308.5	6547.2	6376.3	5890.2	5096.6	AVRG		1.58E-4		6338.8	11	0.995	20	
Endosulfan I	B	7270.5	6953.4	6436.2	6445.6	6330.3	5873.0	5457.6	AVRG		1.56E-4		6395.2	10	0.995	20	
Dieldrin	B	7757.5	7306.0	6750.4	6812.5	6711.2	6128.7	5096.2	AVRG		1.50E-4		6651.8	13	0.995	20	
Endrin	B	6295.8	5776.3	5359.1	5473.8	5185.3	4745.9	4274.8	AVRG		1.89E-4		5301.6	12	0.995	20	
4,4'-DDD	B	6231.8	5746.1	5301.8	5462.1	5278.5	4796.5	4369.4	AVRG		1.88E-4		5312.3	11	0.995	20	
Endosulfan II	B	6138.5	6000.2	5397.2	5599.1	5438.2	5007.5	4334.7	AVRG		1.85E-4		5416.5	11	0.995	20	
4,4'-DDT	B	5267.3	5012.3	4765.4	5153.5	4940.4	4702.8	4415.9	AVRG		2.04E-4		4893.9	6	0.995	20	
Methoxychlor	B	2436.2	2150.3	1993.5	2072.8	1911.8	1591.5	1278.0	AVRG		5.21E-4		1919.2	20	0.995	20	
Endosulfan sulfate	B	5854.8	5385.8	4883.5	4961.6	4759.8	4321.7	3959.4	AVRG		2.05E-4		4875.2	13	0.995	20	
Endrin ketone	B	6845.5	6332.5	5723.3	5904.4	5679.2	5112.4	4372.3	AVRG		1.75E-4		5709.9	14	0.995	20	
TCMX	B	5686.3	5259.1	4933.2	4944.9	4923.6	4703.2	4308.6	AVRG		2.01E-4		4965.6	9	0.995	20	
Decachlorobiphenyl	B	4716.5	4361.6	3899.0	4138.3	3786.9	3424.9	3453.2	AVRG		2.52E-4		3968.6	12	0.995	20	
Average EPA 8081A	A												(n=22)	15		20	
Average EPA 8081A	B												(n=22)	10		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00		pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00256

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_071
Calnum : 807102991001 Cal Date: 12-MAR-2007

ICV 807102991027 (071_027 12-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	7285.5	6485.8	25.00	22.26	pg	-11	15	
gamma-BHC	A	6581.8	5846.4	25.00	22.21	pg	-11	15	
beta-BHC	A	2648.1	2307.7	25.00	21.79	pg	-13	15	
delta-BHC	A	6614.4	6045.2	25.00	22.85	pg	-9	15	
Heptachlor	A	6140.7	5329.8	25.00	21.70	pg	-13	15	
Aldrin	A	6216.6	5495.8	25.00	22.10	pg	-12	15	
Heptachlor epoxide	A	5476.4	4814.2	25.00	21.98	pg	-12	15	
gamma-Chlordane	A	5503.9	4927.7	25.00	22.38	pg	-10	15	
alpha-Chlordane	A	5108.5	4514.2	25.00	22.09	pg	-12	15	
4,4'-DDE	A	4839.4	4577.0	25.00	23.64	pg	-5	15	
Endosulfan I	A	5046.0	4608.2	25.00	22.83	pg	-9	15	
Dieldrin	A	5108.5	4802.8	25.00	23.50	pg	-6	15	
Endrin	A	4325.8	4152.0	25.00	24.00	pg	-4	15	
4,4'-DDD	A	3816.4	3520.7	25.00	23.06	pg	-8	15	
Endosulfan II	A	4261.9	4027.6	25.00	23.63	pg	-5	15	
4,4'-DDT	A	3996.4	3725.3	25.00	23.30	pg	-7	15	
Methoxychlor	A	1653.1	1887.4	25.00	28.54	pg	14	15	
Endosulfan sulfate	A	3830.8	3629.4	25.00	23.69	pg	-5	15	
Endrin ketone	A	4363.7	4210.0	25.00	24.12	pg	-4	15	
alpha-BHC	B	9317.8	8960.6	25.00	24.04	pg	-4	15	
gamma-BHC	B	8521.5	8058.8	25.00	23.64	pg	-5	15	
beta-BHC	B	3313.3	3135.7	25.00	23.66	pg	-5	15	
delta-BHC	B	8399.3	8530.4	25.00	25.39	pg	2	15	
Heptachlor	B	7606.3	7356.9	25.00	24.18	pg	-3	15	
Aldrin	B	7800.1	7506.9	25.00	24.06	pg	-4	15	
Heptachlor epoxide	B	6969.7	6580.6	25.00	23.60	pg	-6	15	
gamma-Chlordane	B	6953.6	6784.9	25.00	24.39	pg	-2	15	
alpha-Chlordane	B	6529.1	6357.4	25.00	24.34	pg	-3	15	
4,4'-DDE	B	6338.8	6326.6	25.00	24.95	pg	0	15	
Endosulfan I	B	6395.2	5959.5	25.00	23.30	pg	-7	15	
Dieldrin	B	6651.8	6557.3	25.00	24.64	pg	-1	15	
Endrin	B	5301.6	5571.4	25.00	26.27	pg	5	15	
4,4'-DDD	B	5312.3	5253.4	25.00	24.72	pg	-1	15	
Endosulfan II	B	5416.5	5525.2	25.00	25.50	pg	2	15	
4,4'-DDT	B	4893.9	4894.6	25.00	25.00	pg	0	15	
Methoxychlor	B	1919.2	2349.8	25.00	30.61	pg	**22**	15	v+ ***
Endosulfan sulfate	B	4875.2	4850.7	25.00	24.87	pg	-1	15	
Endrin ketone	B	5709.9	5846.1	25.00	25.60	pg	2	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

807102991001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193262 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237107445002 File : 074_002 Time : 15-MAR-2007 15:04

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	237896	7	15	
4,4'-DDE	A	1538			
4,4'-DDD	A	16427			
Endrin	A	170343	10	15	
Endrin aldehyde	A	1371			
Endrin ketone	A	16529			
4,4'-DDT	B	266295	11	15	
4,4'-DDE	B	2751			
4,4'-DDD	B	29082			
Endrin	B	246462	10	15	
Endrin aldehyde	B	3847			
Endrin ketone	B	24293			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193262 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237107445017 File : 074_017 Time : 15-MAR-2007 21:14

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	145294	8	15	
4,4'-DDE	A	1157			
4,4'-DDD	A	11986			
Endrin	A	177066	3	15	
Endrin aldehyde	A	486			
Endrin ketone	A	5161			
4,4'-DDT	B	193939	11	15	
4,4'-DDE	B	2884			
4,4'-DDD	B	20512			
Endrin	B	266814	3	15	
Endrin aldehyde	B	2657			
Endrin ketone	B	5521			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193262 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807108510002 File : 075_002 Time : 16-MAR-2007 08:52

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	331140	5	15	
4,4'-DDE	A	2584			
4,4'-DDD	A	15999			
Endrin	A	200856	4	15	
Endrin aldehyde	A	1240			
Endrin ketone	A	6500			
4,4'-DDT	B	462461	7	15	
4,4'-DDE	B	3160			
4,4'-DDD	B	31150			
Endrin	B	275927	5	15	
Endrin aldehyde	B	2761			
Endrin ketone	B	12426			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193262 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807108510009 File : 075_009 Time : 16-MAR-2007 12:18

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	382077	5	15	
4,4'-DDE	A	2400			
4,4'-DDD	A	17900			
Endrin	A	224262	4	15	
Endrin aldehyde	A	1371			
Endrin ketone	A	6899			
4,4'-DDT	B	479443	7	15	
4,4'-DDE	B	3544			
4,4'-DDD	B	34682			
Endrin	B	279517	6	15	
Endrin aldehyde	B	2237			
Endrin ketone	B	14484			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PEST Water
EPA 8081A

Inst : GC16
Seqnum : 237107445003
Cal : 237105809001
Standards: S5555

Run Name: PEST_3
File : 074_003
Caldate : 14-MAR-2007

IDF : 1.0
Time : 15-MAR-2007 15:24

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	5506.5	4630.7	10.00	8.409	pg/ul	**-16**	15	c- rsd ***
gamma-BHC	A	4814.2	4283.0	10.00	8.897	pg/ul	-11	15	rsd ***
beta-BHC	A	3356.0	3349.6	10.00	9.981	pg/ul	0	15	
delta-BHC	A	4449.6	3824.7	10.00	8.596	pg/ul	-14	15	rsd ***
Heptachlor	A	4487.3	4430.1	10.00	9.873	pg/ul	-1	15	
Aldrin	A	5518.7	5092.9	10.00	9.228	pg/ul	-8	15	
Heptachlor epoxide	A	5222.9	5182.7	10.00	9.923	pg/ul	-1	15	
gamma-Chlordane	A	5157.2	5005.6	10.00	9.706	pg/ul	-3	15	
alpha-Chlordane	A	4848.3	4737.2	10.00	9.771	pg/ul	-2	15	
4,4'-DDE	A	3779.1	3472.4	20.00	18.38	pg/ul	-8	15	
Endosulfan I	A	5282.9	5084.8	10.00	9.625	pg/ul	-4	15	
Dieldrin	A	4450.0	4210.3	20.00	18.92	pg/ul	-5	15	
Endrin	A	3351.2	3236.6	20.00	19.32	pg/ul	-3	15	
4,4'-DDD	A	2563.2	2298.4	20.00	17.93	pg/ul	-10	15	
Endosulfan II	A	4327.5	4594.8	20.00	21.24	pg/ul	6	15	
4,4'-DDT	A	1868.0	1861.7	20.00	19.93	pg/ul	0	15	
Methoxychlor	A	1155.3	1251.4	100.0	108.3	pg/ul	8	15	
Endosulfan sulfate	A	3550.9	3626.1	20.00	20.42	pg/ul	2	15	
Endrin ketone	A	3512.4	3463.3	20.00	19.72	pg/ul	-1	15	
TCMX	A	6251.0	6341.8	20.00	20.29	pg/ul	1	15	
Decachlorobiphenyl	A	3298.2	3619.3	20.00	21.95	pg/ul	10	15	
alpha-BHC	B	8652.6	7704.9	10.00	8.905	pg/ul	-11	15	
gamma-BHC	B	8009.4	8445.2	10.00	10.54	pg/ul	5	15	
beta-BHC	B	4894.7	5056.9	10.00	10.33	pg/ul	3	15	
delta-BHC	B	6563.6	5895.6	10.00	8.982	pg/ul	-10	15	
Heptachlor	B	6317.0	6214.1	10.00	9.837	pg/ul	-2	15	
Aldrin	B	8561.8	7971.5	10.00	9.311	pg/ul	-7	15	
Heptachlor epoxide	B	7939.2	7910.7	10.00	9.964	pg/ul	0	15	
gamma-Chlordane	B	8162.0	8072.6	10.00	9.890	pg/ul	-1	15	
alpha-Chlordane	B	7966.9	7917.5	10.00	9.938	pg/ul	-1	15	
4,4'-DDE	B	5755.4	5394.6	20.00	18.75	pg/ul	-6	15	
Endosulfan I	B	7621.6	7501.5	10.00	9.842	pg/ul	-2	15	
Dieldrin	B	6757.3	6471.7	20.00	19.15	pg/ul	-4	15	
Endrin	B	4597.0	4493.0	20.00	19.55	pg/ul	-2	15	
4,4'-DDD	B	3789.9	3572.3	20.00	18.85	pg/ul	-6	15	
Endosulfan II	B	6314.9	6183.4	20.00	19.58	pg/ul	-2	15	
4,4'-DDT	B	2454.2	2496.3	20.00	20.34	pg/ul	2	15	
Methoxychlor	B	1254.7	1292.5	100.0	103.0	pg/ul	3	15	
Endosulfan sulfate	B	5144.6	5137.8	20.00	19.97	pg/ul	0	15	
Endrin ketone	B	4915.9	4785.5	20.00	19.47	pg/ul	-3	15	
TCMX	B	9592.0	9745.5	20.00	20.32	pg/ul	2	15	
Decachlorobiphenyl	B	5392.3	5794.5	20.00	21.49	pg/ul	7	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					4	15	

-=low bias c=CCV rsd=ICAL %RSD failure

237107445003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_4 IDF : 1.0
Seqnum : 237107445018 File : 074_018 Time : 15-MAR-2007 21:34
Cal : 237105809001 Caldate : 14-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	5506.5	6000.8	20.00	21.79	pg/ul	9	15	rsd ***
gamma-BHC	A	4814.2	4659.3	20.00	19.36	pg/ul	-3	15	rsd ***
beta-BHC	A	3356.0	3752.1	20.00	22.36	pg/ul	12	15	
delta-BHC	A	4449.6	4863.2	20.00	21.86	pg/ul	9	15	rsd ***
Heptachlor	A	4487.3	4197.0	20.00	18.71	pg/ul	-6	15	
Aldrin	A	5518.7	6043.1	20.00	21.90	pg/ul	10	15	
Heptachlor epoxide	A	5222.9	5876.7	20.00	22.50	pg/ul	13	15	
gamma-Chlordane	A	5157.2	5665.2	20.00	21.97	pg/ul	10	15	
alpha-Chlordane	A	4848.3	5465.0	20.00	22.54	pg/ul	13	15	
4,4'-DDE	A	3779.1	4805.5	40.00	50.86	pg/ul	**27**	15	c+ ***
Endosulfan I	A	5282.9	5817.4	20.00	22.02	pg/ul	10	15	
Dieldrin	A	4450.0	5038.7	40.00	45.29	pg/ul	13	15	
Endrin	A	3351.2	4126.8	40.00	49.26	pg/ul	**23**	15	c+ ***
4,4'-DDD	A	2563.2	2947.7	40.00	46.00	pg/ul	15	15	
Endosulfan II	A	4327.5	4847.2	40.00	44.80	pg/ul	12	15	
4,4'-DDT	A	1868.0	1410.1	40.00	30.19	pg/ul	**-25**	15	c- ***
Methoxychlor	A	1155.3	1018.7	200.0	176.4	pg/ul	-12	15	
Endosulfan sulfate	A	3550.9	3544.1	40.00	39.92	pg/ul	0	15	
Endrin ketone	A	3512.4	2798.8	40.00	31.87	pg/ul	**-20**	15	c- ***
TCMX	A	6251.0	6868.5	40.00	43.95	pg/ul	10	15	
Decachlorobiphenyl	A	3298.2	4661.0	40.00	56.53	pg/ul	**41**	15	c+
alpha-BHC	B	8652.6	9121.0	20.00	21.08	pg/ul	5	15	
gamma-BHC	B	8009.4	7825.8	20.00	19.54	pg/ul	-2	15	
beta-BHC	B	4894.7	5387.3	20.00	22.01	pg/ul	10	15	
delta-BHC	B	6563.6	7231.3	20.00	22.03	pg/ul	10	15	
Heptachlor	B	6317.0	6049.7	20.00	19.15	pg/ul	-4	15	
Aldrin	B	8561.8	9120.3	20.00	21.30	pg/ul	7	15	
Heptachlor epoxide	B	7939.2	8672.7	20.00	21.85	pg/ul	9	15	
gamma-Chlordane	B	8162.0	8560.3	20.00	20.98	pg/ul	5	15	
alpha-Chlordane	B	7966.9	8661.5	20.00	21.74	pg/ul	9	15	
4,4'-DDE	B	5755.4	7219.2	40.00	50.17	pg/ul	**25**	15	c+ ***
Endosulfan I	B	7621.6	8301.9	20.00	21.78	pg/ul	9	15	
Dieldrin	B	6757.3	7512.7	40.00	44.47	pg/ul	11	15	
Endrin	B	4597.0	6100.3	40.00	53.08	pg/ul	**33**	15	c+ ***
4,4'-DDD	B	3789.9	4696.4	40.00	49.57	pg/ul	**24**	15	c+ ***
Endosulfan II	B	6314.9	6475.8	40.00	41.02	pg/ul	3	15	
4,4'-DDT	B	2454.2	2100.8	40.00	34.24	pg/ul	-14	15	
Methoxychlor	B	1254.7	1174.9	200.0	187.3	pg/ul	-6	15	
Endosulfan sulfate	B	5144.6	5257.2	40.00	40.88	pg/ul	2	15	
Endrin ketone	B	4915.9	3983.2	40.00	32.41	pg/ul	**-19**	15	c- ***
TCMX	B	9592.0	10405	40.00	43.39	pg/ul	8	15	
Decachlorobiphenyl	B	5392.3	7369.0	40.00	54.66	pg/ul	**37**	15	c+
Average EPA 8081A	A	(n=22)					14	15	
Average EPA 8081A	B	(n=22)					12	15	

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure

237107445018

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807108510004 File : 075_004 Time : 16-MAR-2007 09:49
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7602.3	10.00	10.43	pg	4	15	
gamma-BHC	A	6581.8	6845.9	10.00	10.40	pg	4	15	
beta-BHC	A	2648.1	2800.9	10.00	10.58	pg	6	15	
delta-BHC	A	6614.4	6856.7	10.00	10.37	pg	4	15	
Heptachlor	A	6140.7	6358.0	10.00	10.35	pg	4	15	
Aldrin	A	6216.6	6486.9	10.00	10.43	pg	4	15	
Heptachlor epoxide	A	5476.4	5798.2	10.00	10.59	pg	6	15	
gamma-Chlordane	A	5503.9	5735.4	10.00	10.42	pg	4	15	
alpha-Chlordane	A	5108.5	5393.1	10.00	10.56	pg	6	15	
4,4'-DDE	A	4839.4	5200.9	20.00	21.49	pg	7	15	
Endosulfan I	A	5046.0	5486.1	10.00	10.87	pg	9	15	
Dieldrin	A	5108.5	5539.3	20.00	21.69	pg	8	15	
Endrin	A	4325.8	4756.4	20.00	21.99	pg	10	15	
4,4'-DDD	A	3816.4	4439.9	20.00	23.27	pg	**16**	15	c+ ***
Endosulfan II	A	4261.9	4758.2	20.00	22.33	pg	12	15	
4,4'-DDT	A	3996.4	4060.6	20.00	20.32	pg	2	15	
Methoxychlor	A	1653.1	1783.4	100.0	107.9	pg	8	15	
Endosulfan sulfate	A	3830.8	4322.0	20.00	22.56	pg	13	15	
Endrin ketone	A	4363.7	4968.7	20.00	22.77	pg	14	15	
TCMX	A	3892.5	4115.6	20.00	21.15	pg	6	15	
Decachlorobiphenyl	A	3209.6	3917.0	20.00	24.41	pg	**22**	15	c+
alpha-BHC	B	9317.8	9622.9	10.00	10.33	pg	3	15	
gamma-BHC	B	8521.5	8746.8	10.00	10.26	pg	3	15	
beta-BHC	B	3313.3	3531.7	10.00	10.66	pg	7	15	
delta-BHC	B	8399.3	8797.9	10.00	10.47	pg	5	15	
Heptachlor	B	7606.3	7940.5	10.00	10.44	pg	4	15	
Aldrin	B	7800.1	8204.4	10.00	10.52	pg	5	15	
Heptachlor epoxide	B	6969.7	7411.5	10.00	10.63	pg	6	15	
gamma-Chlordane	B	6953.6	7317.6	10.00	10.52	pg	5	15	
alpha-Chlordane	B	6529.1	6864.8	10.00	10.51	pg	5	15	
4,4'-DDE	B	6338.8	6748.5	20.00	21.29	pg	6	15	
Endosulfan I	B	6395.2	6852.4	10.00	10.71	pg	7	15	
Dieldrin	B	6651.8	7118.2	20.00	21.40	pg	7	15	
Endrin	B	5301.6	5828.5	20.00	21.99	pg	10	15	
4,4'-DDD	B	5312.3	5786.3	20.00	21.78	pg	9	15	
Endosulfan II	B	5416.5	5713.9	20.00	21.10	pg	5	15	
4,4'-DDT	B	4893.9	4767.1	20.00	19.48	pg	-3	15	
Methoxychlor	B	1919.2	2072.4	100.0	108.0	pg	8	15	
Endosulfan sulfate	B	4875.2	5192.2	20.00	21.30	pg	7	15	
Endrin ketone	B	5709.9	6015.3	20.00	21.07	pg	5	15	
TCMX	B	4965.6	5199.3	20.00	20.94	pg	5	15	
Decachlorobiphenyl	B	3968.6	4243.1	20.00	21.38	pg	7	15	
Average EPA 8081A	A	(n=22)					8	15	
Average EPA 8081A	B	(n=22)					6	15	

+=high bias c=CCV

807108510004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807108510010 File : 075_010 Time : 16-MAR-2007 12:39
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	6968.0	20.00	19.13	pg	-4	15	
gamma-BHC	A	6581.8	6195.9	20.00	18.83	pg	-6	15	
beta-BHC	A	2648.1	2504.4	20.00	18.91	pg	-5	15	
delta-BHC	A	6614.4	6150.0	20.00	18.60	pg	-7	15	
Heptachlor	A	6140.7	5725.7	20.00	18.65	pg	-7	15	
Aldrin	A	6216.6	5839.5	20.00	18.79	pg	-6	15	
Heptachlor epoxide	A	5476.4	5175.6	20.00	18.90	pg	-5	15	
gamma-Chlordane	A	5503.9	5155.2	20.00	18.73	pg	-6	15	
alpha-Chlordane	A	5108.5	5001.2	20.00	19.58	pg	-2	15	
4,4'-DDE	A	4839.4	4582.2	40.00	37.87	pg	-5	15	
Endosulfan I	A	5046.0	4720.5	20.00	18.71	pg	-6	15	
Dieldrin	A	5108.5	4913.4	40.00	38.47	pg	-4	15	
Endrin	A	4325.8	4131.9	40.00	38.21	pg	-4	15	
4,4'-DDD	A	3816.4	3703.8	40.00	38.82	pg	-3	15	
Endosulfan II	A	4261.9	4059.3	40.00	38.10	pg	-5	15	
4,4'-DDT	A	3996.4	3530.3	40.00	35.33	pg	-12	15	
Methoxychlor	A	1653.1	1478.8	200.0	178.9	pg	-11	15	
Endosulfan sulfate	A	3830.8	3666.6	40.00	38.29	pg	-4	15	
Endrin ketone	A	4363.7	4189.1	40.00	38.40	pg	-4	15	
TCMX	A	3892.5	3763.2	40.00	38.67	pg	-3	15	
Decachlorobiphenyl	A	3209.6	3133.4	40.00	39.05	pg	-2	15	
alpha-BHC	B	9317.8	9158.1	20.00	19.66	pg	-2	15	
gamma-BHC	B	8521.5	8189.2	20.00	19.22	pg	-4	15	
beta-BHC	B	3313.3	3250.8	20.00	19.62	pg	-2	15	
delta-BHC	B	8399.3	8116.6	20.00	19.33	pg	-3	15	
Heptachlor	B	7606.3	7290.6	20.00	19.17	pg	-4	15	
Aldrin	B	7800.1	7651.4	20.00	19.62	pg	-2	15	
Heptachlor epoxide	B	6969.7	6781.6	20.00	19.46	pg	-3	15	
gamma-Chlordane	B	6953.6	6737.4	20.00	19.38	pg	-3	15	
alpha-Chlordane	B	6529.1	6383.7	20.00	19.55	pg	-2	15	
4,4'-DDE	B	6338.8	6239.1	40.00	39.37	pg	-2	15	
Endosulfan I	B	6395.2	6256.7	20.00	19.57	pg	-2	15	
Dieldrin	B	6651.8	6573.8	40.00	39.53	pg	-1	15	
Endrin	B	5301.6	5179.3	40.00	39.08	pg	-2	15	
4,4'-DDD	B	5312.3	5281.8	40.00	39.77	pg	-1	15	
Endosulfan II	B	5416.5	5187.3	40.00	38.31	pg	-4	15	
4,4'-DDT	B	4893.9	4316.8	40.00	35.28	pg	-12	15	
Methoxychlor	B	1919.2	1826.0	200.0	190.3	pg	-5	15	
Endosulfan sulfate	B	4875.2	4611.5	40.00	37.84	pg	-5	15	
Endrin ketone	B	5709.9	5495.6	40.00	38.50	pg	-4	15	
TCMX	B	4965.6	4894.6	40.00	39.43	pg	-1	15	
Decachlorobiphenyl	B	3968.6	3836.5	40.00	38.67	pg	-3	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					3	15	

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 12-MAR-2007

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	071_001	X	PRIMER			12-MAR-2007 12:31	1.0					
002	071_002	X	PRIMER			12-MAR-2007 12:53	1.0					
003	071_003	X	PRIMER			12-MAR-2007 13:14	1.0					
004	071_004	X	PRIMER			12-MAR-2007 13:35	1.0					
005	071_005	X	HEX			12-MAR-2007 13:57	1.0					
006	071_006	X	PEST_3			12-MAR-2007 14:18	1.0	1.0	25	1	1 ac	
007	071_007	X	PEST_3			12-MAR-2007 14:40	1.0	1.0	36	1	1 ac	
008	071_008	X	PEM			12-MAR-2007 15:01	1.0	1.0		1	2	
009	071_009	X	PEST_4			12-MAR-2007 15:35	1.0	1.0	20	1	3 ac	
010	071_010	X	PEST_4			12-MAR-2007 16:00	1.0	1.0	27	1	3 ac	
011	071_011	X	PRIMER			12-MAR-2007 17:33	1.0					
012	071_012	X	PRIMER			12-MAR-2007 17:54	1.0					
013	071_013	X	PRIMER			12-MAR-2007 18:16	1.0					
014	071_014	X	PRIMER			12-MAR-2007 18:37	1.0					
015	071_015	X	HEX			12-MAR-2007 18:58	1.0					
016	071_016	PEM	PEM			12-MAR-2007 19:20	1.0	1.0		1	2	
017	071_017	X	HEX			12-MAR-2007 19:41	1.0					
018	071_018	ICAL	PEST_1			12-MAR-2007 20:02	1.0	1.0			4	
019	071_019	ICAL	PEST_2			12-MAR-2007 20:24	1.0	1.0			5	
020	071_020	ICAL	PEST_3			12-MAR-2007 20:45	1.0	1.0			1	
021	071_021	ICAL	PEST_4			12-MAR-2007 21:07	1.0	1.0			3	
022	071_022	ICAL	PEST_5			12-MAR-2007 21:28	1.0	1.0			6	
023	071_023	ICAL	PEST_6			12-MAR-2007 21:49	1.0	1.0			7	
024	071_024	ICAL	PEST_7			12-MAR-2007 22:11	1.0	1.0			8	
025	071_025	X	HEX			12-MAR-2007 22:32	1.0					
026	071_026	X	HEX			12-MAR-2007 22:53	1.0					
027	071_027	ICV	ICV			12-MAR-2007 23:15	1.0	1.0	3	1	9	2:XYL246=211.331
028	071_028	X	ICV			12-MAR-2007 23:36	1.0	1.0	4	1	9	2:CL10BZ=229.806
029	071_029	X	HEX			12-MAR-2007 23:57	1.0					
030	071_030	PEM	PEM			13-MAR-2007 11:00	1.0	1.0		1	2	

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	071_031	SAMPLE	193154-019	122843	Soil	13-MAR-2007 11:28	1.0	0.662			1		
032	071_032	X	HEX			13-MAR-2007 12:05	1.0						
033	071_033	PEM	PEM			13-MAR-2007 12:26	1.0	1.0			1	2	
034	071_034	CCV	PEST_3			13-MAR-2007 12:48	1.0	1.0			1	1	
035	071_035	X	HEX			13-MAR-2007 13:31	1.0						
036	071_036	ICAL	TOXAPHENE			13-MAR-2007 13:52	1.0	1.0				10	
037	071_037	X	TOXAPHENE			13-MAR-2007 14:13	1.0					10	
038	071_038	X	HEX			13-MAR-2007 14:34	1.0						
039	071_039	BLANK	QC378642	122973	Soil	13-MAR-2007 14:56	1.0	0.6669			1		
040	071_040	LCS	QC378643	122973	Soil	13-MAR-2007 15:17	1.0	0.6625			1		
041	071_041	MSS	193210-016	122973	Soil	13-MAR-2007 15:39	1.0	0.6669			1		
042	071_042	SAMPLE	193210-017	122973	Soil	13-MAR-2007 16:00	1.0	0.6633			1		
043	071_043	SAMPLE	193210-018	122973	Soil	13-MAR-2007 16:21	1.0	0.6603			1		
044	071_044	SAMPLE	193210-019	122973	Soil	13-MAR-2007 16:42	1.0	0.6579			1		
045	071_045	SAMPLE	193210-020	122973	Soil	13-MAR-2007 17:04	1.0	0.6577			1		
046	071_046	SAMPLE	193210-037	122973	Soil	13-MAR-2007 17:25	1.0	0.6594			1		
047	071_047	SAMPLE	193210-038	122973	Soil	13-MAR-2007 17:47	1.0	0.6607			1		
048	071_048	SAMPLE	193210-039	122973	Soil	13-MAR-2007 18:08	1.0	0.6638			1		
049	071_049	X	HEX			13-MAR-2007 18:30	1.0						
050	071_050	PEM	PEM			13-MAR-2007 19:10	1.0	1.0			1	2	
051	071_051	X	TOXAPHENE			13-MAR-2007 19:31	1.0	1.0	1		1	10	
052	071_052	CCV	TOXAPHENE			13-MAR-2007 19:53	1.0	1.0			1	10	
053	071_053	CCV	PEST_4			13-MAR-2007 20:14	1.0	1.0			1	3	
054	071_054	X	PEST_4			13-MAR-2007 20:36	1.0					3	
055	071_055	X	PEM			13-MAR-2007 20:57	1.0					2	
056	071_056	X	HEX			13-MAR-2007 21:19	1.0						
057	071_057	BLANK	QC377837	122778	Water	13-MAR-2007 21:40	1.0	0.01			1		
058	071_058	LCS	QC377838	122778	Water	13-MAR-2007 22:02	1.0	0.01			1		
059	071_059	SAMPLE	193108-008	122778	Water	13-MAR-2007 22:23	1.0	0.01	2	1	1		2:BHCGAM=102.821
060	071_060	SAMPLE	193108-011	122778	Water	13-MAR-2007 22:45	1.0	0.009901	1	1	1		1:BHCGAM=110.640

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
061	071_061	MSS	193210-027	122843	Soil	13-MAR-2007 23:06	1.0	0.6653	1		
062	071_062	SAMPLE	193210-028	122843	Soil	13-MAR-2007 23:28	1.0	0.6581	1		
063	071_063	SAMPLE	193210-029	122843	Soil	13-MAR-2007 23:49	1.0	0.666	1		
064	071_064	SAMPLE	193210-030	122843	Soil	14-MAR-2007 00:11	1.0	0.6607	1		
065	071_065	SAMPLE	193210-035	122843	Soil	14-MAR-2007 00:32	1.0	0.6651	1		
066	071_066	X	HEX			14-MAR-2007 00:54	1.0				
067	071_067	PEM	PEM			14-MAR-2007 01:15	1.0	1.0	1	2	
068	071_068	CCV	TOXAPHENE			14-MAR-2007 01:37	1.0	1.0	1	10	
069	071_069	X	TOXAPHENE			14-MAR-2007 01:58	1.0			10	
070	071_070	CCV	PEST_3			14-MAR-2007 02:19	1.0	1.0	1	1	
071	071_071	X	PEST_3			14-MAR-2007 02:41	1.0			1	
072	071_072	X	PEM			14-MAR-2007 03:02	1.0			2	
073	071_073	X	HEX			14-MAR-2007 03:24	1.0				
074	071_074	BLANK	QC378784	123004	Water	14-MAR-2007 03:45	1.0	0.01	1		
075	071_075	BS	QC378785	123004	Water	14-MAR-2007 04:07	1.0	0.01	1		
076	071_076	BSD	QC378786	123004	Water	14-MAR-2007 04:29	1.0	0.01	1		
077	071_077	SAMPLE	193261-001	123004	Water	14-MAR-2007 04:50	1.0	0.009804	1		
078	071_078	SAMPLE	193261-002	123004	Water	14-MAR-2007 05:12	1.0	0.009709	1		
079	071_079	SAMPLE	193261-003	123004	Water	14-MAR-2007 05:33	1.0	0.009804	1		
080	071_080	SAMPLE	193261-004	123004	Water	14-MAR-2007 05:55	1.0	0.009709	1		
081	071_081	SAMPLE	193335-001	123004	Water	14-MAR-2007 06:16	1.0	0.009804	1		
082	071_082	X	HEX			14-MAR-2007 06:38	1.0				
083	071_083	PEM	PEM			14-MAR-2007 06:59	1.0	1.0	1	2	
084	071_084	CCV	PEST_4			14-MAR-2007 07:21	1.0	1.0	1	3	
085	071_085	X	PEST_4			14-MAR-2007 07:42	1.0			3	
086	071_086	X	PEM			14-MAR-2007 08:04	1.0			2	
087	071_087	X	HEX			14-MAR-2007 08:26	1.0				

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237105809 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	073_001	X	DIAGNOSTIC			14-MAR-2007 11:29	1.0							
002	073_002	X	DIAGNOSTIC			14-MAR-2007 11:49	1.0							
003	073_003	X	DIAGNOSTIC			14-MAR-2007 12:08	1.0							
004	073_004	CCV	PEST_4			14-MAR-2007 16:20	1.0	13		1			1 ac	
005	073_005	CCV	PEST_4			14-MAR-2007 16:43	1.0	3		1			1	
006	073_006	PEM	PEM			14-MAR-2007 17:10	1.0			1			2	1:DDT44=172.435
007	073_007	CCV	PEST_3			14-MAR-2007 18:09	1.0						3	
008	073_008	X	PRIMER			14-MAR-2007 19:11	1.0							
009	073_009	X	PRIMER			14-MAR-2007 19:31	1.0							
010	073_010	X	PRIMER			14-MAR-2007 19:50	1.0							
011	073_011	X	PRIMER			14-MAR-2007 20:09	1.0							
012	073_012	X	PRIMER			14-MAR-2007 20:29	1.0							
013	073_013	X	HEX			14-MAR-2007 20:48	1.0							
014	073_014	X	HEX			14-MAR-2007 21:07	1.0							
015	073_015	PEM	PEM			14-MAR-2007 21:26	1.0			1			2	
016	073_016	X	HEX			14-MAR-2007 21:45	1.0							
017	073_017	ICAL	PEST_1			14-MAR-2007 22:04	1.0						4	
018	073_018	ICAL	PEST_2			14-MAR-2007 22:23	1.0						5	
019	073_019	ICAL	PEST_3			14-MAR-2007 22:42	1.0						3	
020	073_020	X	PEST_4			14-MAR-2007 23:02	1.0						1	
021	073_021	ICAL	PEST_5			14-MAR-2007 23:21	1.0						6	
022	073_022	ICAL	PEST_6			14-MAR-2007 23:40	1.0						7	
023	073_023	ICAL	PEST_7			14-MAR-2007 23:59	1.0						8	
024	073_024	X	HEX			15-MAR-2007 00:18	1.0							
025	073_025	X	HEX			15-MAR-2007 00:37	1.0							
026	073_026	ICV	ICV			15-MAR-2007 00:57	1.0	6		1			9	4:XYL246=248.169
027	073_027	X	ICV			15-MAR-2007 01:17	1.0						9	
028	073_028	X	HEX			15-MAR-2007 01:37	1.0							
029	073_029	X	HEX			15-MAR-2007 11:01	1.0							
030	073_030	ICAL	PEST_4			15-MAR-2007 11:21	1.0						1	

Stds used: 1=S5556 2=S5053 3=S5555 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237107445 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 15-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	074_001	X	HEX			15-MAR-2007 14:45	1.0						
002	074_002	PEM	PEM			15-MAR-2007 15:04	1.0	1.0			1	1	
003	074_003	CCV	PEST_3			15-MAR-2007 15:24	1.0	1.0	3		1	2	
004	074_004	X	HEX			15-MAR-2007 15:45	1.0						
005	074_005	SAMPLE	193176-001	123004	Water	15-MAR-2007 16:05	1.0	0.009615	4	1	1	2:GCHLOR=881.441	
006	074_006	X	HEX			15-MAR-2007 17:39	1.0						
007	074_007	BLANK	QC379265	123116	Water	15-MAR-2007 17:58	1.0	0.01	4		1		
008	074_008	BS	QC379266	123116	Water	15-MAR-2007 18:18	1.0	0.01	5	3	1		
009	074_009	BSD	QC379267	123116	Water	15-MAR-2007 18:38	1.0	0.01	2	3	1		
010	074_010	SAMPLE	193262-002	123116	Water	15-MAR-2007 18:58	1.0	0.009524	4		1		
011	074_011	SAMPLE	193262-007	123116	Water	15-MAR-2007 19:17	1.0	0.009524	4		1		
012	074_012	SAMPLE	193262-019	123116	Water	15-MAR-2007 19:37	1.0	0.01	4		1		
013	074_013	SAMPLE	193262-020	123116	Water	15-MAR-2007 19:56	1.0	0.009434	4		1		
014	074_014	SAMPLE	193277-001	123116	Water	15-MAR-2007 20:15	1.0	0.01053	4		1		
015	074_015	SAMPLE	193329-005	123116	Water	15-MAR-2007 20:34	1.0	0.009524	4		1		
016	074_016	X	HEX			15-MAR-2007 20:54	1.0						
017	074_017	PEM	PEM			15-MAR-2007 21:14	1.0	1.0			1	1	
018	074_018	CCV	PEST_4			15-MAR-2007 21:34	1.0	1.0	11		1	3	
019	074_019	CCV	PEST_4			15-MAR-2007 21:53	1.0	1.0	16		1	3 ac	
020	074_020	PEM	PEM			15-MAR-2007 22:12	1.0	1.0	2		1	1	
021	074_021	X	HEX			15-MAR-2007 22:32	1.0						

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807108510 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 16-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	075_001	X	HEX			16-MAR-2007 08:30	1.0					
002	075_002	PEM	PEM			16-MAR-2007 08:52	1.0	1.0		1	1	
003	075_003	X	PEST_3			16-MAR-2007 09:13	1.0	1.0	17	1	2 ac	
004	075_004	CCV	PEST_3			16-MAR-2007 09:49	1.0	1.0	1	1	2	
005	075_005	X	HEX			16-MAR-2007 10:21	1.0					
006	075_006	BS	QC379266	123116	Water	16-MAR-2007 10:42	1.0	0.01	1	1		
007	075_007	BSD	QC379267	123116	Water	16-MAR-2007 11:04	1.0	0.01	1	1		
008	075_008	X	HEX			16-MAR-2007 11:56	1.0					
009	075_009	PEM	PEM			16-MAR-2007 12:18	1.0	1.0		1	1	
010	075_010	CCV	PEST_4			16-MAR-2007 12:39	1.0	1.0		1	3	
011	075_011	X	CHLORDANE			16-MAR-2007 16:34	1.0				4	
012	075_012	X	HEX			16-MAR-2007 17:31	1.0					
013	075_013	BLANK	QC379509	123175	Soil	16-MAR-2007 17:52	1.0	0.6577		1		
014	075_014	LCS	QC379510	123175	Soil	16-MAR-2007 18:14	1.0	0.659		1		
015	075_015	MSS	193376-001	123175	Soil	16-MAR-2007 18:35	1.0					
016	075_016	SAMPLE	193376-002	123175	Soil	16-MAR-2007 18:57	1.0					
017	075_017	X	HEX			16-MAR-2007 19:29	1.0					
018	075_018	PEM	PEM			16-MAR-2007 19:50	1.0	1.0		1	1	
019	075_019	CCV	PEST_3			16-MAR-2007 20:12	1.0	1.0		1	2	
020	075_020	X	PEST_3			16-MAR-2007 20:33	1.0				2	
021	075_021	X	HEX			16-MAR-2007 20:54	1.0					
022	075_022	X	TOXAPHENE			16-MAR-2007 21:16	1.0	1.0	2	1	5	
023	075_023	CCV	TOXAPHENE			16-MAR-2007 21:37	1.0	1.0		1	5	
024	075_024	X	PEM			16-MAR-2007 21:59	1.0				1	
025	075_025	X	HEX			16-MAR-2007 22:20	1.0					
026	075_026	MSS	193376-001	123175	Soil	16-MAR-2007 22:41	1.0	0.6662		1		
027	075_027	SAMPLE	193376-002	123175	Soil	16-MAR-2007 23:03	1.0	0.6642		1		
028	075_028	SAMPLE	193376-003	123175	Soil	16-MAR-2007 23:24	1.0	0.6614		1		
029	075_029	SAMPLE	193376-004	123175	Soil	16-MAR-2007 23:45	1.0	0.6662		1		
030	075_030	SAMPLE	193376-005	123175	Soil	17-MAR-2007 00:07	1.0	0.6647		1		

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5351 6=S5049
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193262 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807108510 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 16-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	075_031	SAMPLE	193376-006	123175	Soil	17-MAR-2007 00:28	1.0	0.662			1		
032	075_032	SAMPLE	193376-007	123175	Soil	17-MAR-2007 00:50	1.0	0.6625			1		
033	075_033	SAMPLE	193376-008	123175	Soil	17-MAR-2007 01:11	1.0	0.6603			1		
034	075_034	SAMPLE	193376-009	123175	Soil	17-MAR-2007 01:32	1.0	0.6607			1		
035	075_035	SAMPLE	193376-010	123175	Soil	17-MAR-2007 01:54	1.0	0.6598			1		
036	075_036	X	HEX			17-MAR-2007 02:15	1.0						
037	075_037	PEM	PEM			17-MAR-2007 02:37	1.0	1.0			1	1	
038	075_038	CCV	PEST_5			17-MAR-2007 02:58	1.0	1.0			1	6	
039	075_039	X	PEST_5			17-MAR-2007 03:19	1.0					6	
040	075_040	CCV	TOXAPHENE			17-MAR-2007 03:41	1.0	1.0			1	5	
041	075_041	X	TOXAPHENE			17-MAR-2007 04:02	1.0					5	
042	075_042	X	PEM			17-MAR-2007 04:24	1.0					1	
043	075_043	X	HEX			17-MAR-2007 04:45	1.0						
044	075_044	SAMPLE	193441-001	123175	Soil	17-MAR-2007 05:06	1.0	0.6636			1		
045	075_045	SAMPLE	193441-002	123175	Soil	17-MAR-2007 05:28	1.0	0.6653			1		
046	075_046	SAMPLE	193441-003	123175	Soil	17-MAR-2007 05:49	1.0	0.6647			1		
047	075_047	SAMPLE	193441-004	123175	Soil	17-MAR-2007 06:11	10.0	0.6609			1		
048	075_048	SAMPLE	193441-005	123175	Soil	17-MAR-2007 06:32	1.0	0.6642			1		
049	075_049	SAMPLE	193441-006	123175	Soil	17-MAR-2007 06:54	1.0	0.6603			1		
050	075_050	SAMPLE	193441-007	123175	Soil	17-MAR-2007 07:15	1.0	0.6614			1		
051	075_051	X	HEX			17-MAR-2007 07:37	1.0						
052	075_052	PEM	PEM			17-MAR-2007 07:58	1.0	1.0			1	1	
053	075_053	CCV	PEST_3			17-MAR-2007 08:20	1.0	1.0			1	2	
054	075_054	X	PEST_3			17-MAR-2007 08:41	1.0					2	
055	075_055	X	PEM			17-MAR-2007 09:03	1.0					1	
056	075_056	X	HEX			17-MAR-2007 09:24	1.0						

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5351 6=S5049
Flags used: ac=average CCV drift out

REPORTING SUMMARY FOR 193262 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-002	alpha-BHC	GC16	B	03/15/07 18:58
193262-002	beta-BHC	GC16	B	03/15/07 18:58
193262-002	gamma-BHC	GC16	B	03/15/07 18:58
193262-002	delta-BHC	GC16	B	03/15/07 18:58
193262-002	Heptachlor	GC16	B	03/15/07 18:58
193262-002	Aldrin	GC16	B	03/15/07 18:58
193262-002	Heptachlor epoxide	GC16	B	03/15/07 18:58
193262-002	Endosulfan I	GC16	B	03/15/07 18:58
193262-002	Dieldrin	GC16	B	03/15/07 18:58
193262-002	4,4'-DDE	GC16	B	03/15/07 18:58
193262-002	Endrin	GC16	B	03/15/07 18:58
193262-002	Endosulfan II	GC16	B	03/15/07 18:58
193262-002	Endosulfan sulfate	GC16	B	03/15/07 18:58
193262-002	4,4'-DDD	GC16	B	03/15/07 18:58
193262-002	4,4'-DDT	GC16	B	03/15/07 18:58
193262-002	alpha-Chlordane	GC16	B	03/15/07 18:58
193262-002	gamma-Chlordane	GC16	B	03/15/07 18:58
193262-002	Methoxychlor	GC16	B	03/15/07 18:58
193262-002	Endrin ketone	GC16	B	03/15/07 18:58
193262-002	Toxaphene	GC16	B	03/15/07 18:58
193262-002	TCMX	GC16	B	03/15/07 18:58
193262-002	Decachlorobiphenyl	GC16	B	03/15/07 18:58
193262-007	alpha-BHC	GC16	B	03/15/07 19:17
193262-007	beta-BHC	GC16	B	03/15/07 19:17
193262-007	gamma-BHC	GC16	B	03/15/07 19:17
193262-007	delta-BHC	GC16	B	03/15/07 19:17
193262-007	Heptachlor	GC16	B	03/15/07 19:17
193262-007	Aldrin	GC16	B	03/15/07 19:17
193262-007	Heptachlor epoxide	GC16	B	03/15/07 19:17
193262-007	Endosulfan I	GC16	B	03/15/07 19:17
193262-007	Dieldrin	GC16	B	03/15/07 19:17
193262-007	4,4'-DDE	GC16	B	03/15/07 19:17
193262-007	Endrin	GC16	B	03/15/07 19:17
193262-007	Endosulfan II	GC16	B	03/15/07 19:17
193262-007	Endosulfan sulfate	GC16	B	03/15/07 19:17
193262-007	4,4'-DDD	GC16	B	03/15/07 19:17
193262-007	4,4'-DDT	GC16	B	03/15/07 19:17
193262-007	alpha-Chlordane	GC16	B	03/15/07 19:17
193262-007	gamma-Chlordane	GC16	B	03/15/07 19:17
193262-007	Methoxychlor	GC16	B	03/15/07 19:17
193262-007	Endrin ketone	GC16	B	03/15/07 19:17
193262-007	Toxaphene	GC16	B	03/15/07 19:17
193262-007	TCMX	GC16	B	03/15/07 19:17
193262-007	Decachlorobiphenyl	GC16	B	03/15/07 19:17
193262-019	alpha-BHC	GC16	B	03/15/07 19:37
193262-019	beta-BHC	GC16	B	03/15/07 19:37
193262-019	gamma-BHC	GC16	B	03/15/07 19:37
193262-019	delta-BHC	GC16	B	03/15/07 19:37
193262-019	Heptachlor	GC16	B	03/15/07 19:37
193262-019	Aldrin	GC16	B	03/15/07 19:37
193262-019	Heptachlor epoxide	GC16	B	03/15/07 19:37
193262-019	Endosulfan I	GC16	B	03/15/07 19:37

REPORTING SUMMARY FOR 193262 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-019	Dieldrin	GC16	B	03/15/07 19:37
193262-019	4,4'-DDE	GC16	B	03/15/07 19:37
193262-019	Endrin	GC16	B	03/15/07 19:37
193262-019	Endosulfan II	GC16	B	03/15/07 19:37
193262-019	Endosulfan sulfate	GC16	B	03/15/07 19:37
193262-019	4,4'-DDD	GC16	B	03/15/07 19:37
193262-019	4,4'-DDT	GC16	B	03/15/07 19:37
193262-019	alpha-Chlordane	GC16	B	03/15/07 19:37
193262-019	gamma-Chlordane	GC16	B	03/15/07 19:37
193262-019	Methoxychlor	GC16	B	03/15/07 19:37
193262-019	Endrin ketone	GC16	B	03/15/07 19:37
193262-019	Toxaphene	GC16	B	03/15/07 19:37
193262-019	TCMX	GC16	B	03/15/07 19:37
193262-019	Decachlorobiphenyl	GC16	B	03/15/07 19:37
193262-020	alpha-BHC	GC16	B	03/15/07 19:56
193262-020	beta-BHC	GC16	B	03/15/07 19:56
193262-020	gamma-BHC	GC16	B	03/15/07 19:56
193262-020	delta-BHC	GC16	B	03/15/07 19:56
193262-020	Heptachlor	GC16	B	03/15/07 19:56
193262-020	Aldrin	GC16	B	03/15/07 19:56
193262-020	Heptachlor epoxide	GC16	B	03/15/07 19:56
193262-020	Endosulfan I	GC16	B	03/15/07 19:56
193262-020	Dieldrin	GC16	B	03/15/07 19:56
193262-020	4,4'-DDE	GC16	B	03/15/07 19:56
193262-020	Endrin	GC16	B	03/15/07 19:56
193262-020	Endosulfan II	GC16	B	03/15/07 19:56
193262-020	Endosulfan sulfate	GC16	B	03/15/07 19:56
193262-020	4,4'-DDD	GC16	B	03/15/07 19:56
193262-020	4,4'-DDT	GC16	B	03/15/07 19:56
193262-020	alpha-Chlordane	GC16	B	03/15/07 19:56
193262-020	gamma-Chlordane	GC16	B	03/15/07 19:56
193262-020	Methoxychlor	GC16	B	03/15/07 19:56
193262-020	Endrin ketone	GC16	B	03/15/07 19:56
193262-020	Toxaphene	GC16	B	03/15/07 19:56
193262-020	TCMX	GC16	B	03/15/07 19:56
193262-020	Decachlorobiphenyl	GC16	B	03/15/07 19:56
QC379265	alpha-BHC	GC16	B	03/15/07 17:58
QC379265	beta-BHC	GC16	B	03/15/07 17:58
QC379265	gamma-BHC	GC16	B	03/15/07 17:58
QC379265	delta-BHC	GC16	B	03/15/07 17:58
QC379265	Heptachlor	GC16	B	03/15/07 17:58
QC379265	Aldrin	GC16	B	03/15/07 17:58
QC379265	Heptachlor epoxide	GC16	B	03/15/07 17:58
QC379265	Endosulfan I	GC16	B	03/15/07 17:58
QC379265	Dieldrin	GC16	B	03/15/07 17:58
QC379265	4,4'-DDE	GC16	B	03/15/07 17:58
QC379265	Endrin	GC16	B	03/15/07 17:58
QC379265	Endosulfan II	GC16	B	03/15/07 17:58
QC379265	Endosulfan sulfate	GC16	B	03/15/07 17:58
QC379265	4,4'-DDD	GC16	B	03/15/07 17:58
QC379265	4,4'-DDT	GC16	B	03/15/07 17:58
QC379265	alpha-Chlordane	GC16	B	03/15/07 17:58

REPORTING SUMMARY FOR 193262 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379265	gamma-Chlordane	GC16	B	03/15/07 17:58
QC379265	Methoxychlor	GC16	B	03/15/07 17:58
QC379265	Endrin ketone	GC16	B	03/15/07 17:58
QC379265	Toxaphene	GC16	B	03/15/07 17:58
QC379265	TCMX	GC16	B	03/15/07 17:58
QC379265	Decachlorobiphenyl	GC16	B	03/15/07 17:58
QC379266	gamma-BHC	GC23	A	03/16/07 10:42
QC379266	Heptachlor	GC23	A	03/16/07 10:42
QC379266	Aldrin	GC23	A	03/16/07 10:42
QC379266	Dieldrin	GC23	A	03/16/07 10:42
QC379266	Endrin	GC23	A	03/16/07 10:42
QC379266	4,4'-DDT	GC23	A	03/16/07 10:42
QC379266	TCMX	GC23	A	03/16/07 10:42
QC379266	Decachlorobiphenyl	GC23	A	03/16/07 10:42
QC379267	gamma-BHC	GC23	A	03/16/07 11:04
QC379267	Heptachlor	GC23	A	03/16/07 11:04
QC379267	Aldrin	GC23	A	03/16/07 11:04
QC379267	Dieldrin	GC23	A	03/16/07 11:04
QC379267	Endrin	GC23	A	03/16/07 11:04
QC379267	4,4'-DDT	GC23	A	03/16/07 11:04
QC379267	TCMX	GC23	A	03/16/07 11:04
QC379267	Decachlorobiphenyl	GC23	A	03/16/07 11:04

7

Curtis & Tompkins Laboratories Sample Preparation Summary 15-MAR-2007 15:26

atch Number : 123116
ate Extracted: 14-MAR-2007
xtracted by : Jessie O'Brien Mee
rep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5676A
Spike #3 ID :
SOP Version : 8081_3520_rv15

uple	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
3262-002		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
3262-007		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
3262-019		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
3262-020		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
3277-001		Treadwell & Rollo	Water	950	mL	10	0.010526	1	7	.025	0		8081		
3329-005		Innovative Technical Solutions	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
379265	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
379266	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
379267	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie Mee Reviewed By: [signature] Date: 3/15/07

Relinquished By: [signature] Received By: [signature] Date: 3/~~16~~15/07

00285

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 123116
LIMS Analysis: 8081
Extracted by: JOM
Date Extracted: 14 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193262-002 D	1050	7	10.0		
07 I	1050				
19 ~~H~~ O	1000				
20 ~~O~~ U	1060				
193277-001 M	950				
193329-005 N	1050				
MB QC379265	1000	NA			
BS 66					
BSD 67					

JCM 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initial
0.025 mL of surrogate solution was added to all samples	SS6116B	JOM 3/14
0.025 mL of matrix spike solution was added to all spikes	SS6116B	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 + HPLC H_2O	EM470311 / EM470111	
Extraction Start Time:	1630	
Extraction End Time:	1120	JOM 3/15
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JCM 3/15
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ granular Na_2SO_4	EM4611623	
Exchanged 2x with Hexane	JTB C38E39	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	✓

3/14/07
Extraction Chemist Date

Contined from Page ___

3/15/07
Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/24/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/18/07
Batch#:	123118		

Field ID: LF08GW04
Type: SAMPLE
Lab ID: 193262-002

Sampled: 03/07/07
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	86	65-135
Decachlorobiphenyl	91	65-135

Field ID: DUP0307073A
Type: SAMPLE
Lab ID: 193262-007

Sampled: 03/07/07
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	102	65-135

Field ID: DAEGW102
Type: SAMPLE
Lab ID: 193262-019

Sampled: 03/07/07
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	81	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/18/07
Batch#:	123118		

Field ID:	DW030807B	Sampled:	03/08/07
Type:	SAMPLE	Cleanup Method:	EPA 3665A
Lab ID:	193262-020		

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	71	65-135
Decachlorobiphenyl	105	65-135

Type:	BLANK	Cleanup Method:	EPA 3665A
Lab ID:	QC379275		

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	86	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	123118
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/18/07

Type: BS
Lab ID: QC379276
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.279	106	65-135

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	89	65-135

Type: BSD
Lab ID: QC379277
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	4.960	99	65-135	6	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	85	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257103122001
Units : pg

Name : 1660_071
Date : 12-MAR-2007 17:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_006	257103122006	PCB10_2	12-MAR-2007 17:36	S5483
L2	071_007	257103122007	PCB25_5	12-MAR-2007 18:02	S5484
L3	071_008	257103122008	PCB100_20	12-MAR-2007 18:29	S4996
L4	071_009	257103122009	PCB250_50	12-MAR-2007 18:55	S4997
L5	071_010	257103122010	PCB500_100	12-MAR-2007 19:22	S4998
L6	071_011	257103122011	PCB750_150	12-MAR-2007 19:48	S5227
L7	071_012	257103122012	PCB1000_200	12-MAR-2007 20:14	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	1148.7	1095.6	1111.1	966.15	817.74	903.27	930.70	AVRG		0.00100		996.18	12	.99	20	
Aroclor-1016 Peak # 2	A	1342.4	1385.2	1449.3	1325.1	1175.9	1380.5	1475.9	AVRG		7.34E-4		1362.1	7	.99	20	
Aroclor-1016 Peak # 3	A	597.80	559.44	656.04	598.44	511.78	568.47	603.45	AVRG		0.00171		585.06	8	.99	20	
Aroclor-1016 Peak # 4	A	378.10	405.52	446.45	401.34	338.75	361.82	391.90	AVRG		0.00257		389.13	9	.99	20	
Aroclor-1016 Peak # 5	A	667.30	649.64	669.16	606.22	520.26	575.48	610.12	AVRG		0.00163		614.02	9	.99	20	
Aroclor-1260 Peak # 1	A	2260.7	2217.4	2258.9	2143.2	2028.7	2210.1	2285.6	AVRG		4.54E-4		2200.6	4	.99	20	
Aroclor-1260 Peak # 2	A	1879.6	1844.9	1918.8	1787.4	1686.4	1887.8	2042.4	AVRG		5.37E-4		1863.9	6	.99	20	
Aroclor-1260 Peak # 3	A	1561.1	1166.5	1266.2	1174.9	1095.9	1178.6	1255.5	AVRG		8.05E-4		1242.7	12	.99	20	
Aroclor-1260 Peak # 4	A	3102.1	2924.0	3038.0	3027.6	2898.8	3041.4	3025.2	AVRG		3.32E-4		3008.2	2	.99	20	
Aroclor-1260 Peak # 5	A	1509.3	1397.4	1495.1	1418.8	1327.9	1470.6	1564.0	AVRG		6.87E-4		1454.7	5	.99	20	
TCMX	A	34845	31892	34012	33399	29284	29869	26488	AVRG		3.18E-5		31398	10	.99	20	
Decachlorobiphenyl	A	21658	20994	21971	22411	20771	20458	17498	AVRG		4.80E-5		20823	8	.99	20	
Aroclor-1016 Peak # 1	B	545.70	499.00	417.50	403.95	380.80	334.89	401.77	AVRG		0.00235		426.23	17	.99	20	
Aroclor-1016 Peak # 2	B	1194.7	1111.2	936.58	892.60	855.35	766.44	950.70	AVRG		0.00104		958.23	15	.99	20	
Aroclor-1016 Peak # 3	B	699.20	661.20	532.62	511.42	486.74	436.54	540.28	AVRG		0.00181		552.57	17	.99	20	
Aroclor-1016 Peak # 4	B	346.10	338.36	268.57	263.22	247.78	223.73	269.05	AVRG		0.00358		279.54	16	.99	20	
Aroclor-1016 Peak # 5	B	467.70	438.80	331.97	331.13	311.25	280.88	343.77	AVRG		0.00279		357.93	19	.99	20	
Aroclor-1260 Peak # 1	B	1515.8	1582.4	1126.0	1112.2	1150.6	1043.9	1343.9	AVRG		7.89E-4		1267.8	17	.99	20	
Aroclor-1260 Peak # 2	B	1057.0	1027.9	762.21	751.70	746.88	684.53	910.09	AVRG		0.00118		848.61	18	.99	20	
Aroclor-1260 Peak # 3	B	895.10	889.12	639.43	638.10	634.73	579.63	776.73	AVRG		0.00139		721.83	18	.99	20	
Aroclor-1260 Peak # 4	B	2237.1	2294.6	1651.7	1705.0	1809.9	1658.8	2111.3	AVRG		5.20E-4		1924.0	15	.99	20	
Aroclor-1260 Peak # 5	B	1125.4	1160.2	845.69	851.66	869.37	788.31	1056.7	AVRG		0.00105		956.76	16	.99	20	
TCMX	B	21813	20655	17169	16709	17334	15631	17398	AVRG		5.52E-5		18101	12	.99	20	
Decachlorobiphenyl	B	16028	16543	11873	12344	13416	12115	14415	AVRG		7.24E-5		13819	14	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_071
Calnum : 257103122001 Cal Date: 12-MAR-2007

ICV 257103122014 (071_014 12-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	996.18		250.0	220.5	pg	-12	15	
Aroclor-1260	A	2200.6		250.0	231.4	pg	-7	15	
Aroclor-1016	B	426.23		250.0	222.2	pg	-11	15	
Aroclor-1260	B	1267.8		250.0	234.8	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257104282001
Units : pg

Name : ar1242
Date : 13-MAR-2007 12:17
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_004	257104282004	AR1242	13-MAR-2007 12:17	S5688

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	729.21	AVRG		0.00137		729.21	0	.99	20	
Aroclor-1242 Peak # 2	A	903.51	AVRG		0.00111		903.51	0	.99	20	
Aroclor-1242 Peak # 3	A	409.56	AVRG		0.00244		409.56	0	.99	20	
Aroclor-1242 Peak # 4	A	433.30	AVRG		0.00231		433.30	0	.99	20	
Aroclor-1242 Peak # 5	A	418.97	AVRG		0.00239		418.97	0	.99	20	
Aroclor-1242 Peak # 1	B	284.85	AVRG		0.00351		284.85	0	.99	20	
Aroclor-1242 Peak # 2	B	668.87	AVRG		0.00150		668.87	0	.99	20	
Aroclor-1242 Peak # 3	B	360.03	AVRG		0.00278		360.03	0	.99	20	
Aroclor-1242 Peak # 4	B	176.23	AVRG		0.00567		176.23	0	.99	20	
Aroclor-1242 Peak # 5	B	232.92	AVRG		0.00429		232.92	0	.99	20	

Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB250_50 IDF : 1.0
Seqnum : 257111653003 File : 077_003 Time : 18-MAR-2007 13:46
Cal : 257103122001 Caldate : 12-MAR-2007
Standards: S4997

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			250.0	218.1	pg	-13	15	
Aroclor-1260	A			250.0	243.7	pg	-3	15	
TCMX	A	31398	27056	50.00	43.08	pg	-14	15	
Decachlorobiphenyl	A	20823	23373	50.00	56.12	pg	12	15	
Aroclor-1016	B			250.0	250.8	pg	0	15	
Aroclor-1260	B			250.0	284.3	pg	14	15	
TCMX	B	18101	17881	50.00	49.39	pg	-1	15	
Decachlorobiphenyl	B	13819	16734	50.00	60.55	pg	**21**	15	c+

+=high bias c=CCV

257111653003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR1242 IDF : 1.0
Seqnum : 257111653005 File : 077_005 Time : 18-MAR-2007 18:11
Cal : 257104282001 Caldate : 13-MAR-2007
Standards: S5688

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1242	A	250.0	259.6	pg	4	15	
Aroclor-1242	B	250.0	277.9	pg	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB500_100 IDF : 1.0
Seqnum : 257111653021 File : 077_021 Time : 19-MAR-2007 01:14
Cal : 257103122001 Caldate : 12-MAR-2007
Standards: S4998

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	484.4	pg	-3	15	
Aroclor-1260	A			500.0	516.9	pg	3	15	
TCMX	A	31398	30692	100.0	97.75	pg	-2	15	
Decachlorobiphenyl	A	20823	23379	100.0	112.3	pg	12	15	
Aroclor-1016	B			500.0	435.9	pg	-13	15	
Aroclor-1260	B			500.0	484.7	pg	-3	15	
TCMX	B	18101	16366	100.0	90.41	pg	-10	15	
Decachlorobiphenyl	B	13819	14654	100.0	106.0	pg	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR1242 IDF : 1.0
Seqnum : 257111653024 File : 077_024 Time : 19-MAR-2007 02:33
Cal : 257104282001 Caldate : 13-MAR-2007
Standards: S5688

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1242	A	250.0	276.1	pg	10	15	
Aroclor-1242	B	250.0	286.7	pg	15	15	

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257103122 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	071_001	X	PCB500_100			12-MAR-2007 14:42	1.0						1	
002	071_002	X	PCB500_100			12-MAR-2007 15:09	1.0						1	
003	071_003	X	PCB500_100			12-MAR-2007 15:46	1.0	1		1			1	
004	071_004	X	HEX			12-MAR-2007 16:43	1.0							
005	071_005	X	HEX			12-MAR-2007 17:09	1.0							
006	071_006	ICAL	PCB10_2			12-MAR-2007 17:36	1.0						2	
007	071_007	ICAL	PCB25_5			12-MAR-2007 18:02	1.0						3	
008	071_008	ICAL	PCB100_20			12-MAR-2007 18:29	1.0						4	
009	071_009	ICAL	PCB250_50			12-MAR-2007 18:55	1.0						5	
010	071_010	ICAL	PCB500_100			12-MAR-2007 19:22	1.0						1	
011	071_011	ICAL	PCB750_150			12-MAR-2007 19:48	1.0						6	
012	071_012	ICAL	PCB1000_200			12-MAR-2007 20:14	1.0						7	
013	071_013	X	HEX			12-MAR-2007 20:41	1.0							
014	071_014	ICV	ULTRA_1660			12-MAR-2007 21:07	1.0			1			8	
015	071_015	X	ULTRA_1660			12-MAR-2007 21:34	1.0	2		1			8	
016	071_016	X	HEX			12-MAR-2007 22:00	1.0							

Stds used: 1=S4998 2=S5483 3=S5484 4=S4996 5=S4997 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	072_001	CCV	PCB500_100			13-MAR-2007 10:02	1.0	1.0			1	1	
002	072_002	X	PCB500_100			13-MAR-2007 10:28	1.0	1.0	4		1	1	
003	072_003	X	AR1242			13-MAR-2007 11:51	1.0	1.0	1		1	2	
004	072_004	ICAL	AR1242			13-MAR-2007 12:17	1.0	1.0			1	2	
005	072_005	CCV	AR2154			13-MAR-2007 12:44	1.0	1.0			1	3	
006	072_006	X	AR2154			13-MAR-2007 13:10	1.0	1.0			1	3	
007	072_007	CCV	AR1248			13-MAR-2007 14:19	1.0					4	
008	072_008	ICAL	AR1248			13-MAR-2007 14:45	1.0	1.0				4	
009	072_009	CCV	AR1232			13-MAR-2007 15:12	1.0					5	
010	072_010	X	HEX			13-MAR-2007 15:38	1.0						
011	072_011	BLANK	QC378900	123037	Miscel	13-MAR-2007 16:05	1.0	50.0			1		
012	072_012	BLANK	QC378910	123039	Soil	13-MAR-2007 16:31	1.0	0.8221			1		
013	072_013	SAMPLE	193121-001	123037	Miscel	13-MAR-2007 16:57	1.0	49.98	1		1		2:PCB122=1203.02
014	072_014	SAMPLE	193229-002	122911	Soil	13-MAR-2007 17:24	2.0	0.827			1		
015	072_015	SAMPLE	193229-003	122911	Soil	13-MAR-2007 17:52	1.0	0.8224			1		
016	072_016	SAMPLE	193229-004	122911	Soil	13-MAR-2007 18:19	1.0	0.8256			1		
017	072_017	BS	QC378901	123037	Miscel	13-MAR-2007 18:51	1.0	50.0			1		
018	072_018	BSD	QC378902	123037	Miscel	13-MAR-2007 19:18	1.0	50.0			1		
019	072_019	LCS	QC378911	123039	Soil	13-MAR-2007 19:44	1.0	0.8317		1	1		
020	072_020	X	HEX			13-MAR-2007 20:11	1.0						
021	072_021	CCV	PCB250_50			13-MAR-2007 20:37	1.0	1.0			1	6	
022	072_022	X	PCB250_50			13-MAR-2007 21:04	1.0	1.0	1		1	6	
023	072_023	CCV	AR1242			13-MAR-2007 21:30	1.0	1.0			1	2	
024	072_024	X	AR1242			13-MAR-2007 21:57	1.0	1.0	1		1	2	
025	072_025	CCV	AR2154			13-MAR-2007 22:23	1.0	1.0			1	3	
026	072_026	X	AR2154			13-MAR-2007 22:50	1.0	1.0	1		1	3	
027	072_027	CCV	AR1248			13-MAR-2007 23:16	1.0	1.0			1	4	
028	072_028	CCV	AR1232			13-MAR-2007 23:43	1.0					5	
029	072_029	X	HEX			14-MAR-2007 00:09	1.0						
030	072_030	SAMPLE	193280-001	123039	Soil	14-MAR-2007 00:36	1.0	0.8457			1		
031	072_031	SAMPLE	193280-002	123039	Soil	14-MAR-2007 01:02	1.0	0.8466			1		

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	072_032	SAMPLE	193280-003	123039	Soil	14-MAR-2007 01:29	1.0					
033	072_033	SAMPLE	193280-004	123039	Soil	14-MAR-2007 01:55	1.0	0.8232		1		
034	072_034	SAMPLE	193280-005	123039	Soil	14-MAR-2007 02:22	1.0	0.8221		1		
035	072_035	SAMPLE	193280-006	123039	Soil	14-MAR-2007 02:48	1.0	0.8342		1		
036	072_036	SAMPLE	193280-007	123039	Soil	14-MAR-2007 03:15	1.0	0.8237		1		
037	072_037	X	193280-008	123039	Soil	14-MAR-2007 03:41	10.0	0.8353		1		
038	072_038	SAMPLE	193280-009	123039	Soil	14-MAR-2007 04:08	1.0	0.8375		1		
039	072_039	SAMPLE	193280-010	123039	Soil	14-MAR-2007 04:34	1.0	0.835		1		
040	072_040	X	HEX			14-MAR-2007 05:01	1.0					
041	072_041	X	PCB500_100			14-MAR-2007 05:27	1.0	1.0		1	1	
042	072_042	CCV	PCB500_100			14-MAR-2007 05:54	1.0	1.0		1	1	
043	072_043	CCV	AR2154			14-MAR-2007 06:20	1.0	1.0		1	3	
044	072_044	X	AR2154			14-MAR-2007 06:47	1.0	1.0	1	1	3	
045	072_045	CCV	AR1248			14-MAR-2007 07:13	1.0	1.0		1	4	
046	072_046	X	HEX			14-MAR-2007 07:40	1.0					
047	072_047	SAMPLE	193280-011	123039	Soil	14-MAR-2007 08:06	1.0	0.8386		1		
048	072_048	SAMPLE	193280-012	123039	Soil	14-MAR-2007 08:33	1.0	0.8409		1		
049	072_049	X	193280-013	123039	Soil	14-MAR-2007 08:59	2.0	0.8245		1		
050	072_050	SAMPLE	193314-001	123039	Soil	14-MAR-2007 09:26	1.0	0.8289		1		
051	072_051	SAMPLE	193314-002	123039	Soil	14-MAR-2007 09:52	1.0	0.827	2	1		3:PCB122=5298.41
052	072_052	SAMPLE	193314-003	123039	Soil	14-MAR-2007 10:19	1.0	0.8205		1		
053	072_053	SAMPLE	193314-004	123039	Soil	14-MAR-2007 10:45	5.0	0.8213		1		
054	072_054	X	193314-005	123039	Soil	14-MAR-2007 11:12	5.0	0.8322		1		
055	072_055	SAMPLE	193314-006	123039	Soil	14-MAR-2007 11:38	2.0	0.8218		1		
056	072_056	SAMPLE	193314-007	123039	Soil	14-MAR-2007 12:05	2.0	0.821		1		
057	072_057	X	HEX			14-MAR-2007 12:31	1.0					
058	072_058	CCV	PCB250_50			14-MAR-2007 12:57	1.0	1.0		1	6	
059	072_059	X	PCB250_50			14-MAR-2007 13:24	1.0				6	
060	072_060	CCV	AR2154			14-MAR-2007 13:50	1.0	1.0		1	3	
061	072_061	X	AR2154			14-MAR-2007 14:17	1.0				3	
062	072_062	CCV	AR1248			14-MAR-2007 14:43	1.0	1.0			4	

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	072_063	X	HEX			14-MAR-2007 15:09	1.0					

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257111653 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 18-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	077_001	X	HEX			18-MAR-2007 12:53	1.0						
002	077_002	X	PCB250_50			18-MAR-2007 13:19	1.0	1.0			1	1	
003	077_003	CCV	PCB250_50			18-MAR-2007 13:46	1.0	1.0			1	1	
004	077_004	CCV	AR2154			18-MAR-2007 17:45	1.0					2	
005	077_005	CCV	AR1242			18-MAR-2007 18:11	1.0	1.0			1	3	
006	077_006	X	AR1242			18-MAR-2007 18:38	1.0	1.0			1	3	
007	077_007	CCV	AR1248			18-MAR-2007 19:04	1.0					4	
008	077_008	X	HEX			18-MAR-2007 19:30	1.0						
009	077_009	BLANK	QC379275	123118	Water	18-MAR-2007 19:57	1.0	0.025			1		
010	077_010	SAMPLE	193262-002	123118	Water	18-MAR-2007 20:23	1.0	0.02427			1		
011	077_011	SAMPLE	193262-007	123118	Water	18-MAR-2007 20:50	1.0	0.02404			1		
012	077_012	SAMPLE	193262-019	123118	Water	18-MAR-2007 21:16	1.0	0.02381			1		
013	077_013	SAMPLE	193262-020	123118	Water	18-MAR-2007 21:43	1.0	0.02381			1		
014	077_014	SAMPLE	193277-001	123118	Water	18-MAR-2007 22:09	1.0	0.025			1		
015	077_015	BS	QC379276	123118	Water	18-MAR-2007 22:35	1.0	0.025			1		
016	077_016	BSD	QC379277	123118	Water	18-MAR-2007 23:02	1.0	0.025			1		
017	077_017	MS	QC379352	123143	Soil	18-MAR-2007 23:28	1.0	0.8319	1		1		1:PCB124=1009.51
018	077_018	MSD	QC379353	123143	Soil	18-MAR-2007 23:55	1.0	0.8284		1	1		
019	077_019	X	HEX			19-MAR-2007 00:21	1.0						
020	077_020	X	PCB500_100			19-MAR-2007 00:47	1.0	1.0			1	5	
021	077_021	CCV	PCB500_100			19-MAR-2007 01:14	1.0	1.0			1	5	
022	077_022	X	AR2154			19-MAR-2007 01:40	1.0	1.0	1		1	2	
023	077_023	CCV	AR2154			19-MAR-2007 02:07	1.0	1.0			1	2	
024	077_024	CCV	AR1242			19-MAR-2007 02:33	1.0	1.0			1	3	
025	077_025	X	AR1242			19-MAR-2007 02:59	1.0	1.0	1		1	3	
026	077_026	CCV	AR1248			19-MAR-2007 03:26	1.0					4	
027	077_027	X	HEX			19-MAR-2007 03:52	1.0						
028	077_028	SAMPLE	193384-001	123143	Soil	19-MAR-2007 04:19	5.0	0.8319	4		1		5:PCB122=3384.63
029	077_029	SAMPLE	193384-006	123143	Soil	19-MAR-2007 04:45	1.0	0.8308	1	2	1		
030	077_030	SAMPLE	193449-002	123189	Soil	19-MAR-2007 05:12	1.0	0.8256			1		
031	077_031	SAMPLE	193449-003	123189	Soil	19-MAR-2007 05:38	1.0	0.8278	1		1		

Stds used: 1=S4997 2=S5687 3=S5688 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193262 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257111653 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 18-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	077_032	SAMPLE	193449-004	123189	Soil	19-MAR-2007 06:04	1.0	0.824	1		1		
033	077_033	SAMPLE	193449-005	123189	Soil	19-MAR-2007 06:31	1.0	0.8226			1		
034	077_034	SAMPLE	193449-006	123189	Soil	19-MAR-2007 06:57	1.0	0.8278	24	1	1	28:PCB126=2778.12	
035	077_035	SAMPLE	193449-007	123189	Soil	19-MAR-2007 07:24	1.0	0.8308	16	1	1	20:PCB126=3496.29	
036	077_036	SAMPLE	193449-008	123189	Soil	19-MAR-2007 07:50	1.0	0.8319	1		1		
037	077_037	SAMPLE	193449-009	123189	Soil	19-MAR-2007 08:17	1.0	0.8322	23	2	1	27:PCB101=9491.21	
038	077_038	X	HEX			19-MAR-2007 08:43	1.0						
039	077_039	CCV	PCB750_150			19-MAR-2007 09:10	1.0	1.0	1		1	6	
040	077_040	X	PCB750_150			19-MAR-2007 09:36	1.0	1.0	2		1	6	
041	077_041	CCV	AR2154			19-MAR-2007 10:02	1.0	1.0			1	2	
042	077_042	X	AR2154			19-MAR-2007 10:29	1.0	1.0	2		1	2	
043	077_043	X	AR1242			19-MAR-2007 10:55	1.0	1.0	1		1	3	
044	077_044	CCV	AR1242			19-MAR-2007 11:22	1.0	1.0			1	3	
045	077_045	CCV	AR1248			19-MAR-2007 11:48	1.0					4	
046	077_046	X	HEX			19-MAR-2007 12:14	1.0						
047	077_047	X	193449-010	123189	Soil	19-MAR-2007 12:49	1.0						

Stds used: 1=S4997 2=S5687 3=S5688 4=S5103 5=S4998 6=S5227

REPORTING SUMMARY FOR 193262 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-002	Aroclor-1016	GC22	A	03/18/07 20:23
193262-002	Aroclor-1221	GC22	A	03/18/07 20:23
193262-002	Aroclor-1232	GC22	A	03/18/07 20:23
193262-002	Aroclor-1242	GC22	A	03/18/07 20:23
193262-002	Aroclor-1248	GC22	A	03/18/07 20:23
193262-002	Aroclor-1254	GC22	A	03/18/07 20:23
193262-002	Aroclor-1260	GC22	A	03/18/07 20:23
193262-002	TCMX	GC22	A	03/18/07 20:23
193262-002	Decachlorobiphenyl	GC22	A	03/18/07 20:23
193262-007	Aroclor-1016	GC22	A	03/18/07 20:50
193262-007	Aroclor-1221	GC22	A	03/18/07 20:50
193262-007	Aroclor-1232	GC22	A	03/18/07 20:50
193262-007	Aroclor-1242	GC22	A	03/18/07 20:50
193262-007	Aroclor-1248	GC22	A	03/18/07 20:50
193262-007	Aroclor-1254	GC22	A	03/18/07 20:50
193262-007	Aroclor-1260	GC22	A	03/18/07 20:50
193262-007	TCMX	GC22	A	03/18/07 20:50
193262-007	Decachlorobiphenyl	GC22	A	03/18/07 20:50
193262-019	Aroclor-1016	GC22	A	03/18/07 21:16
193262-019	Aroclor-1221	GC22	A	03/18/07 21:16
193262-019	Aroclor-1232	GC22	A	03/18/07 21:16
193262-019	Aroclor-1242	GC22	A	03/18/07 21:16
193262-019	Aroclor-1248	GC22	A	03/18/07 21:16
193262-019	Aroclor-1254	GC22	A	03/18/07 21:16
193262-019	Aroclor-1260	GC22	A	03/18/07 21:16
193262-019	TCMX	GC22	A	03/18/07 21:16
193262-019	Decachlorobiphenyl	GC22	A	03/18/07 21:16
193262-020	Aroclor-1016	GC22	A	03/18/07 21:43
193262-020	Aroclor-1221	GC22	A	03/18/07 21:43
193262-020	Aroclor-1232	GC22	A	03/18/07 21:43
193262-020	Aroclor-1242	GC22	A	03/18/07 21:43
193262-020	Aroclor-1248	GC22	A	03/18/07 21:43
193262-020	Aroclor-1254	GC22	A	03/18/07 21:43
193262-020	Aroclor-1260	GC22	A	03/18/07 21:43
193262-020	TCMX	GC22	A	03/18/07 21:43
193262-020	Decachlorobiphenyl	GC22	A	03/18/07 21:43
QC379275	Aroclor-1016	GC22	A	03/18/07 19:57
QC379275	Aroclor-1221	GC22	A	03/18/07 19:57
QC379275	Aroclor-1232	GC22	A	03/18/07 19:57
QC379275	Aroclor-1242	GC22	A	03/18/07 19:57
QC379275	Aroclor-1248	GC22	A	03/18/07 19:57
QC379275	Aroclor-1254	GC22	A	03/18/07 19:57
QC379275	Aroclor-1260	GC22	A	03/18/07 19:57
QC379275	TCMX	GC22	A	03/18/07 19:57
QC379275	Decachlorobiphenyl	GC22	A	03/18/07 19:57
QC379276	Aroclor-1242	GC22	A	03/18/07 22:35
QC379276	TCMX	GC22	A	03/18/07 22:35
QC379276	Decachlorobiphenyl	GC22	A	03/18/07 22:35

REPORTING SUMMARY FOR 193262 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379277	Aroclor-1242	GC22	A	03/18/07 23:02
QC379277	TCMX	GC22	A	03/18/07 23:02
QC379277	Decachlorobiphenyl	GC22	A	03/18/07 23:02

Curtis & Tompkins Laboratories Sample Preparation Summary 15-MAR-2007 15:30

Batch Number : 123118
Date Extracted: 14-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193262-002		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	6	.05	0		PCB	3665A	
193262-007		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	6	.05	0		PCB	3665A	
193262-019		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	6	.05	0		PCB	3665A	
193262-020		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	5	.05	0		PCB	3665A	
193277-001		Treadwell & Rollo	Water	1000	mL	25	0.025000	1	5	.05	0		PCB	3665A	
193290-001		Shaw Environmental & Infrastru	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193299-001		Shaw Environmental & Infrastru	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193301-003		Shaw Environmental & Infrastru	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193329-005		Innovative Technical Solutions	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
QC379275	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC379276	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC379277	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: Jessie Mee
Reviewed By: [signature] Date: 3/15/07
Relinquished By: [signature]
Received By: [signature] Date: 3/15/07

00399

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 123118
LIMS Analysis: PCB
Extracted by: JDM
Date Extracted: 14 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
Page 80

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193262-002 F	1030	6	25.0	
07 F	1040	6		
19 M	1050	6		
20 Q	1050	5		
193277-001 L	1000	5		
193290-001 B	1050	7		
193299-001 B	1050			
193301-003 C	1080			
193329-005 M	1040			
MB QC379275	1090	NA		
BS 76				
BSD 77				
				JLM 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616B	JDM 3/14/07
0.05 mL of spike solution AR1242 was added to all spikes	S5458A	
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1650	
Extraction End Time:	1120	JDM 3/15/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JLM 3/15/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTBC38E39	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	FS06S076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jessie Chee 3/14/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

3/15/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/24/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF08GW04	Batch#:	123065
Lab ID:	193262-002	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	92	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

48.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW04	Batch#:	123065
Lab ID:	193262-003	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	93	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

49.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0307073A	Batch#:	123065
Lab ID:	193262-007	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

50.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DAEGW102	Batch#:	123065
Lab ID:	193262-019	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

51.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW030807B	Batch#:	123065
Lab ID:	193262-020	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	86	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

52.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379036	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	87	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

53.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379037	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.318	93	50-135
Fluorene	2.000	1.857	93	65-135
Pyrene	1.000	0.9021	90	65-135
Benzo(a)pyrene	1.000	0.9642	96	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	86	65-135

54.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	ZZZZZZZZZZ	Batch#:	123065
MSS Lab ID:	193332-003	Sampled:	03/09/07
Matrix:	Water	Received:	03/09/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: MS Lab ID: QC379038

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09271	9.901	9.604	97	50-135
Fluorene	15.08	1.980	13.76	-67 NM	65-135
Pyrene	0.9263	0.9901	1.432	51 *	65-135
Benzo(a)pyrene	<0.01532	0.9901	0.7741	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	249 *	65-135
1-Methylnaphthalene (F)	173 *	65-135

Type: MSD Lab ID: QC379039

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.901	11.37	115	50-135	17	35
Fluorene	1.980	13.74	-68 NM	65-135	0	35
Pyrene	0.9901	1.431	51 *	65-135	0	35
Benzo(a)pyrene	0.9901	0.7896	80	65-135	2	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	246 *	65-135
1-Methylnaphthalene (F)	171 *	65-135

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 296366536003
Units : ug/L

Date : 11-SEP-2006 15:34
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

Method G:\HPLC4\METHODS\8310-254.M

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Calibration Table

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HPLC04 METHOD 8310 NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

Method G:\HPLC4\METHODS\8310-254.M

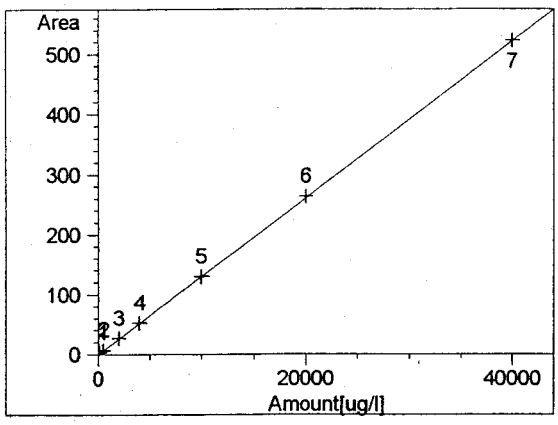
RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

Peak Sum Table

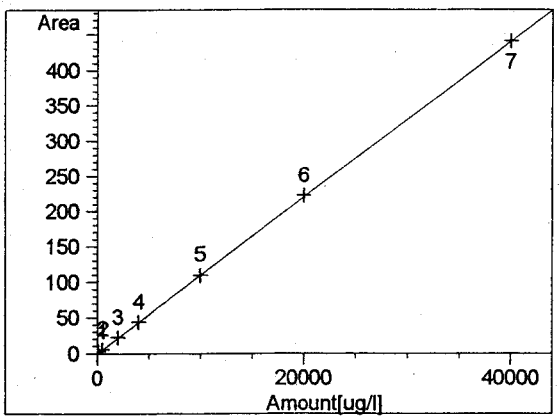
No Entries in table

Method G:\HPLC4\METHODS\8310-254.M

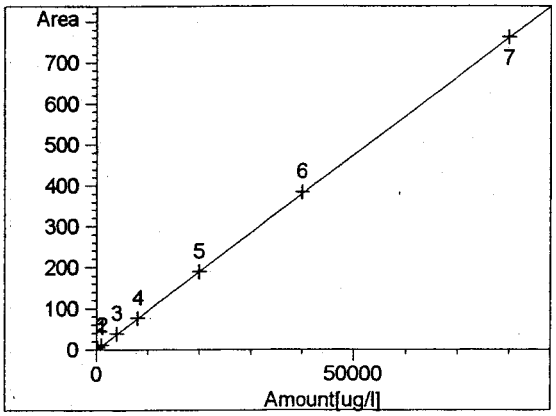
Calibration Curves



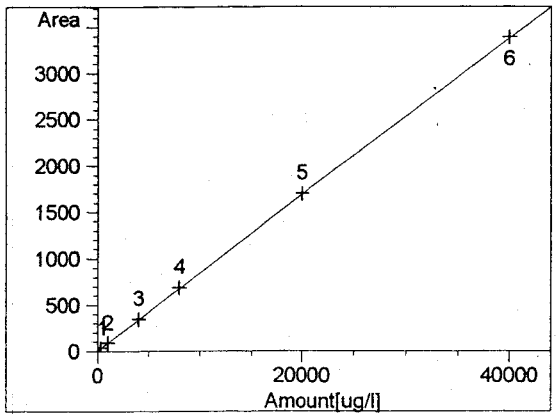
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area

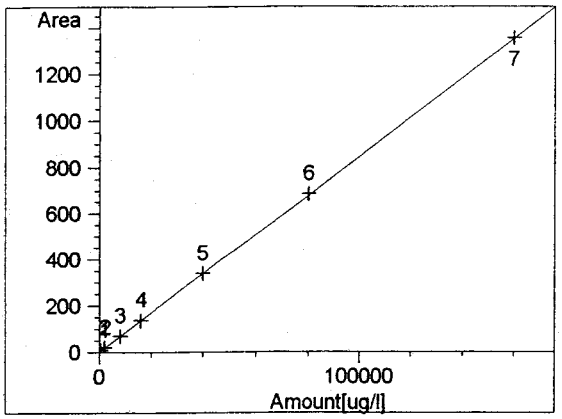


Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area

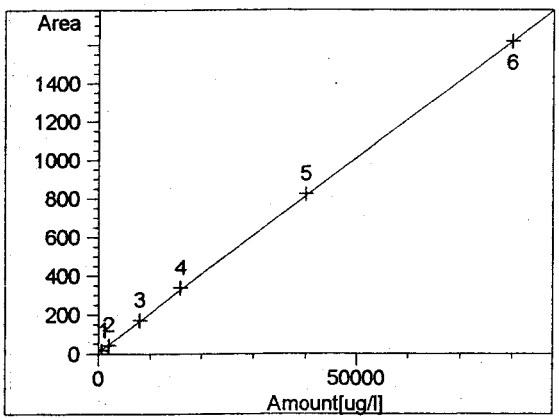


Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area

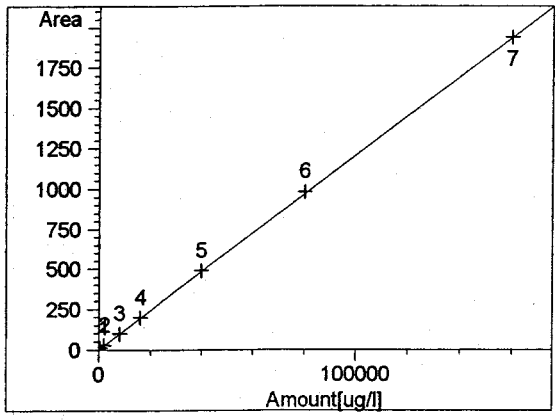
Method G:\HPLC4\METHODS\8310-254.M



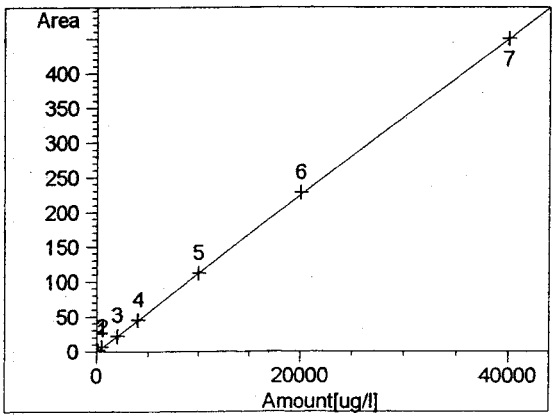
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area

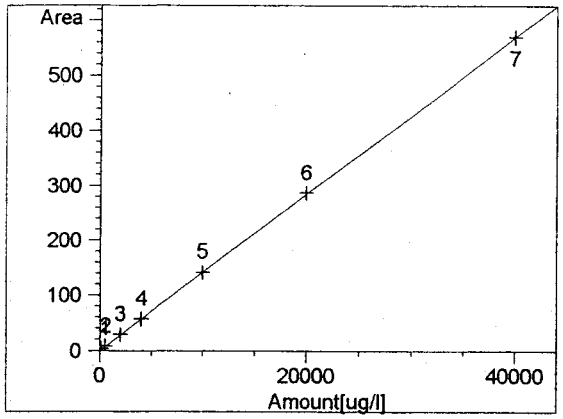


1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area

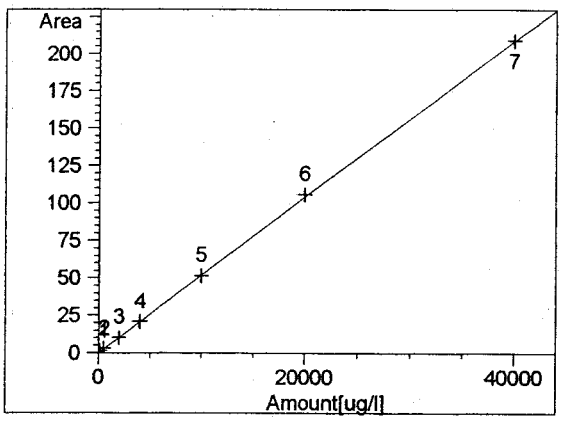


2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area

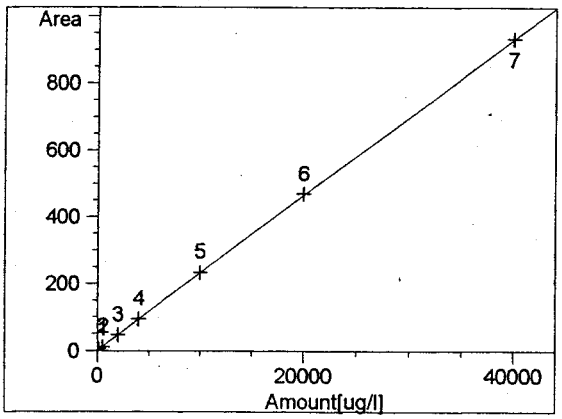
Method G:\HPLC4\METHODS\8310-254.M



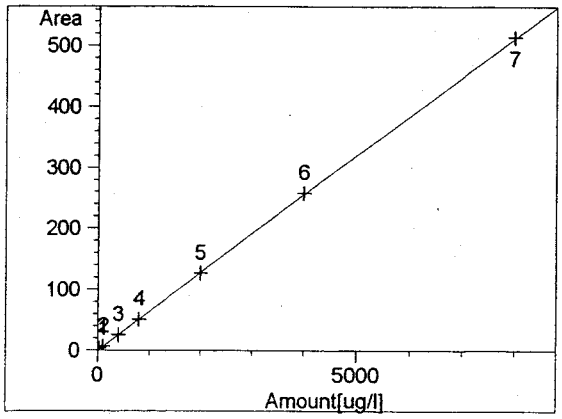
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area

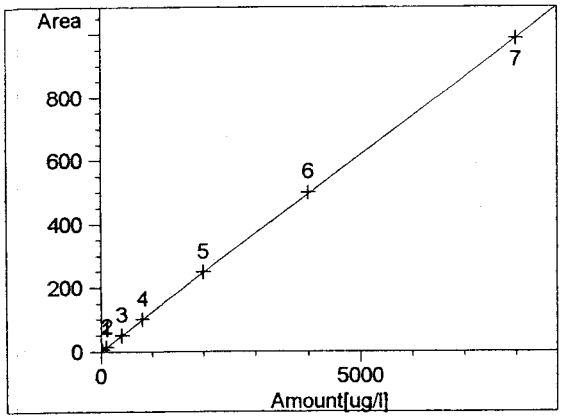


Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area

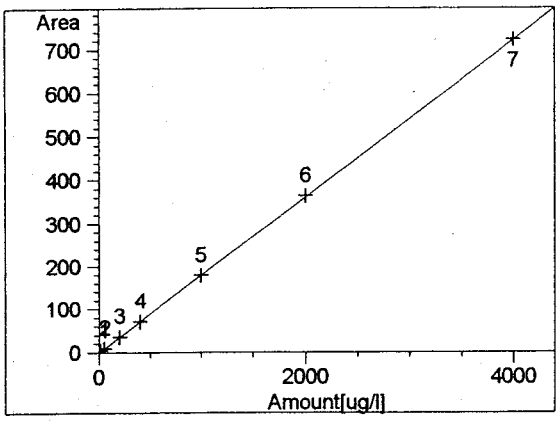


Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area

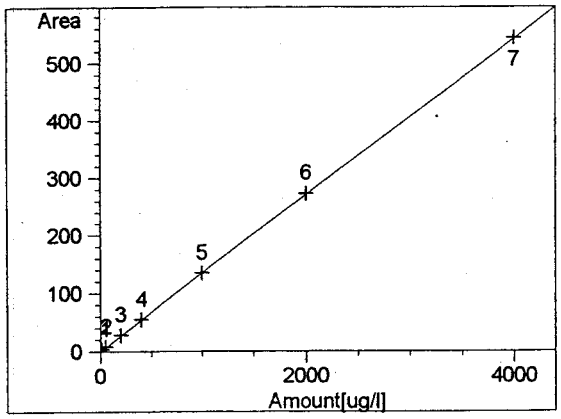
Method G:\HPLC4\METHODS\8310-254.M



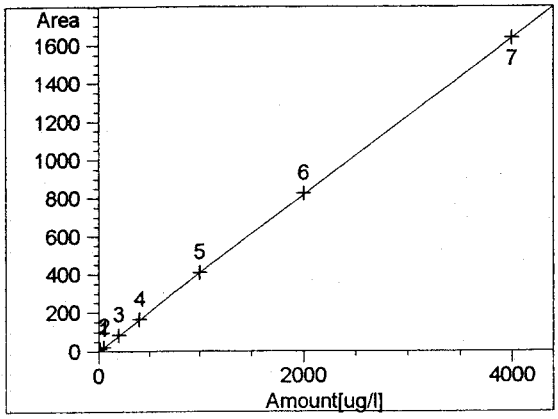
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area

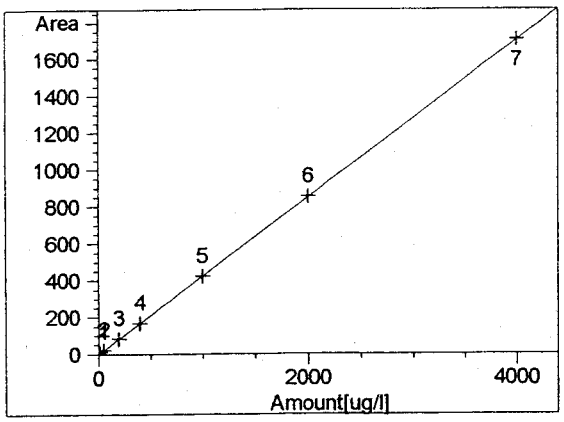


Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area

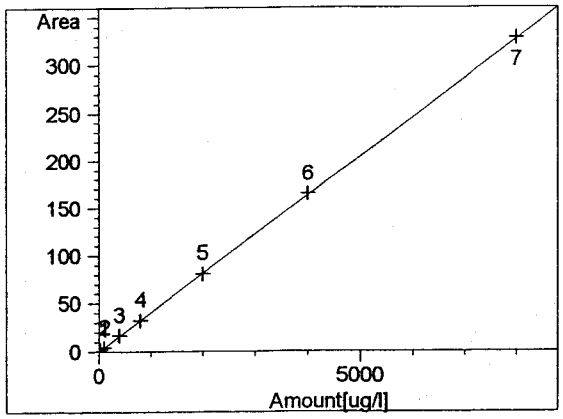


Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area

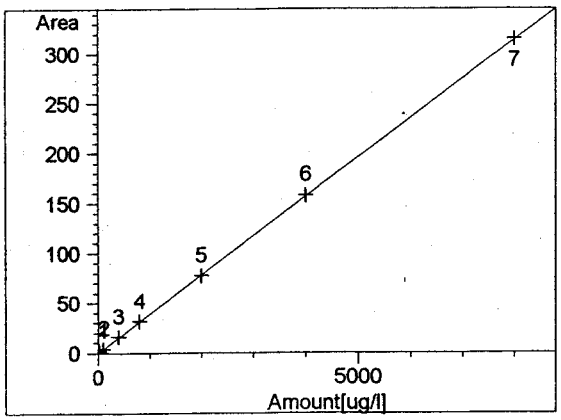
Method G:\HPLC4\METHODS\8310-254.M



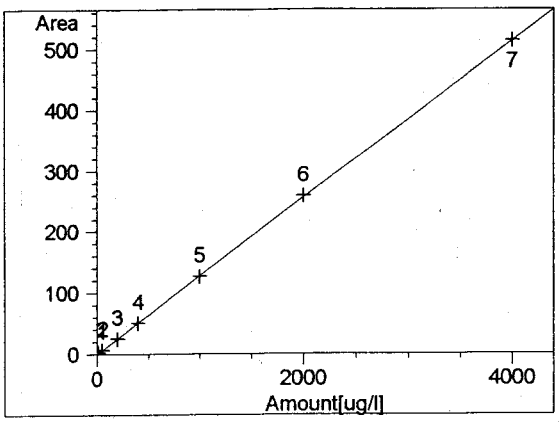
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



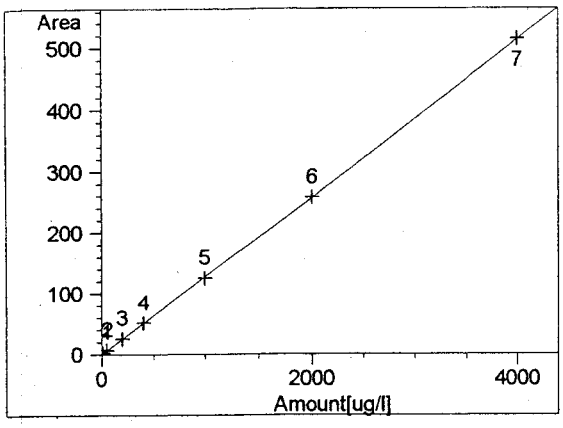
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



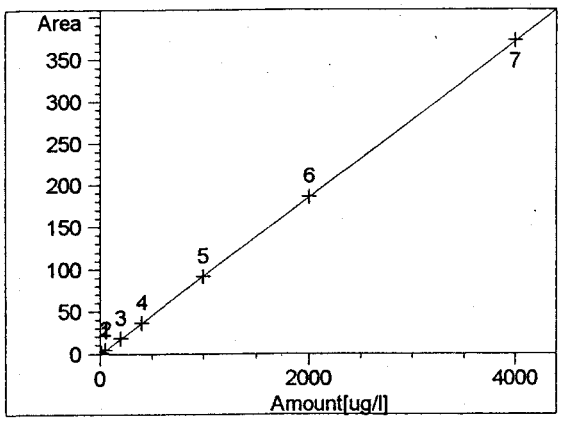
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



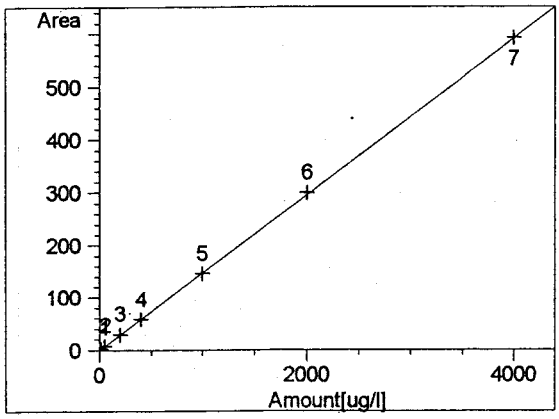
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



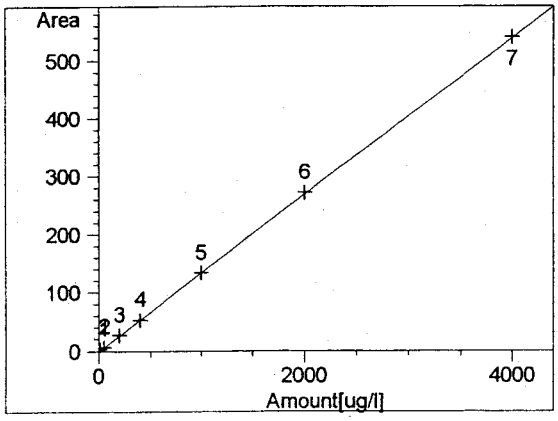
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area

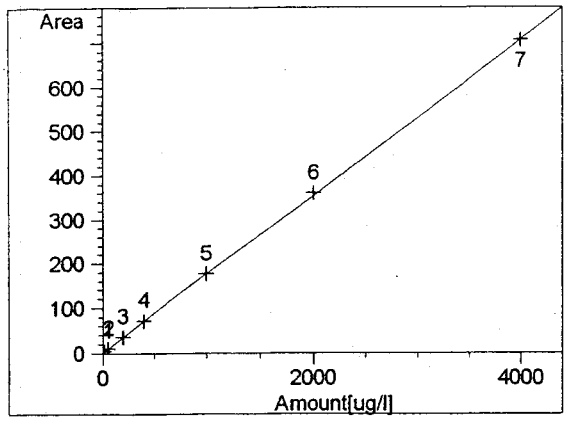


Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area

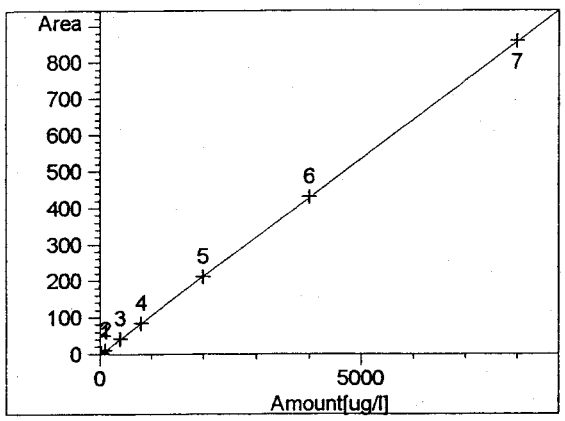


Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area

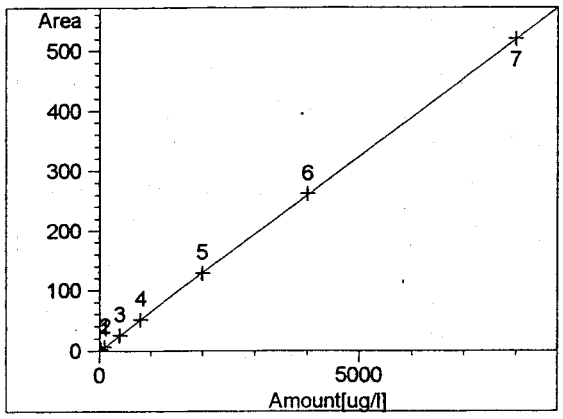
Method G:\HPLC4\METHODS\8310-254.M



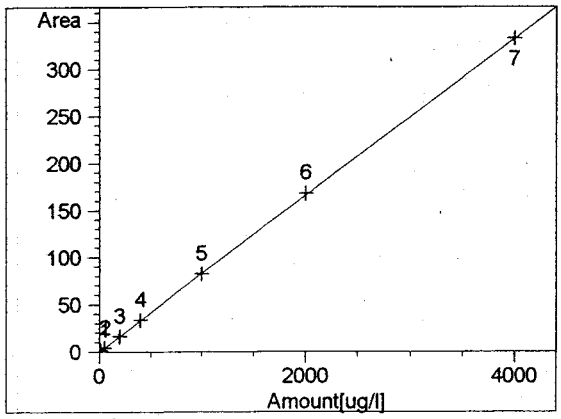
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area

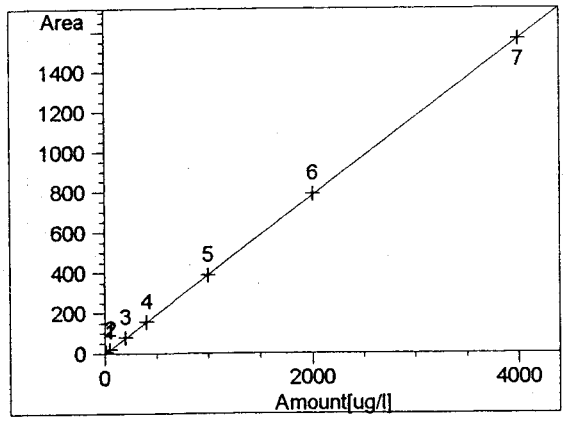


Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area

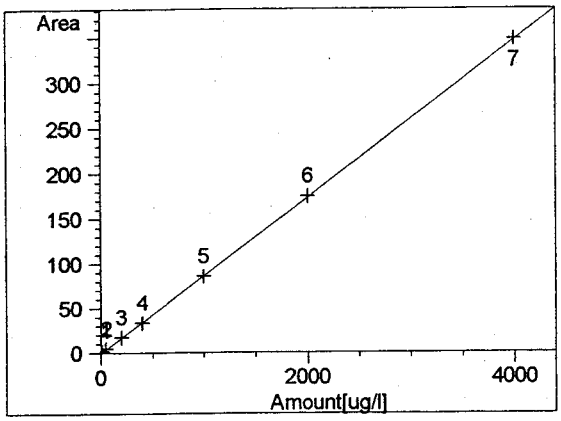


Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area

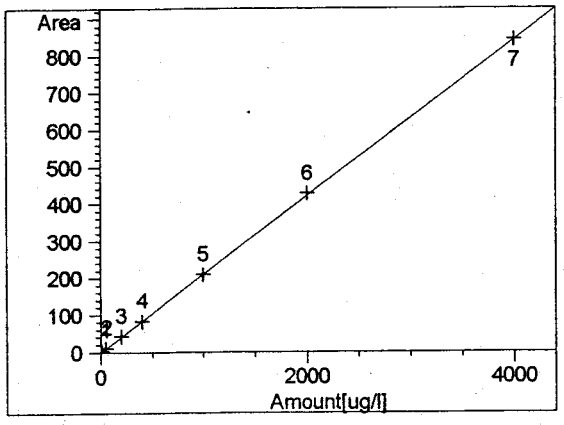
Method G:\HPLC4\METHODS\8310-254.M



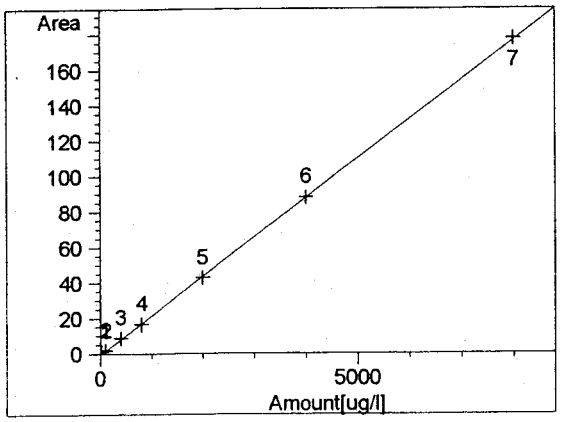
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



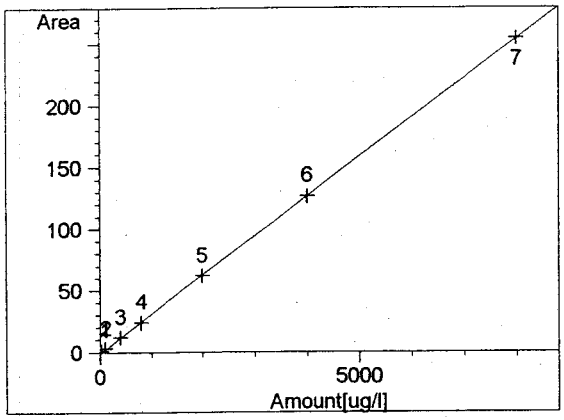
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



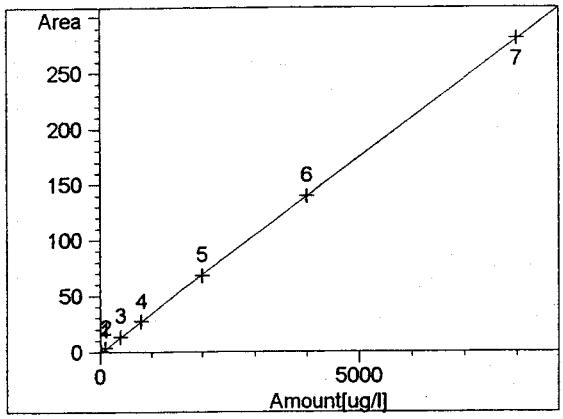
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



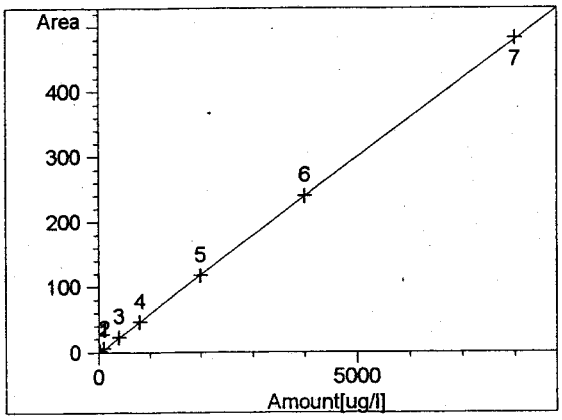
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



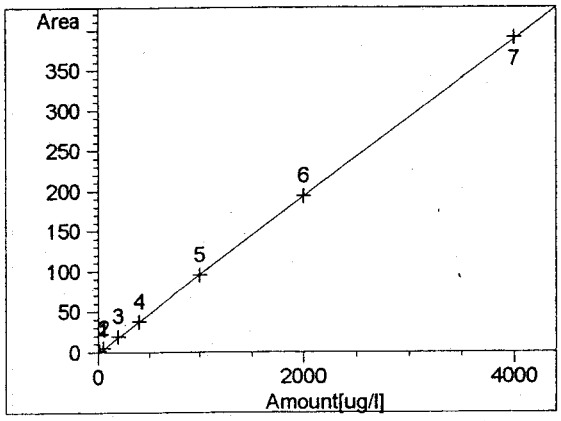
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

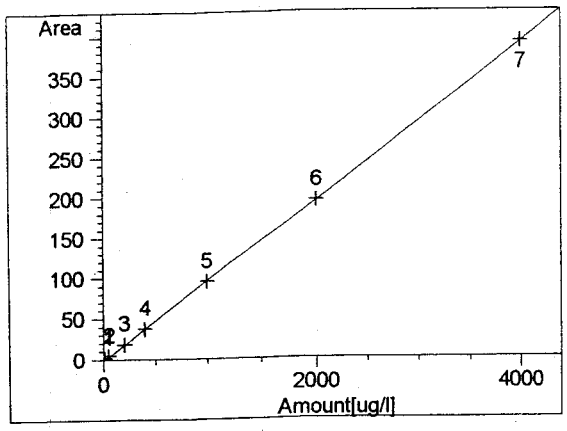


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 297107179002 File : 07400002 Time : 15-MAR-2007 10:51
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2051	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0097	4000	4084	ug/L	2	15	
Acenaphthene	1	0.0053	0.0052	2000	2005	ug/L	0	15	
Fluorene	1	0.0637	0.0639	400.0	407.8	ug/L	2	15	
Phenanthrene	1	0.1810	0.1774	200.0	198.8	ug/L	-1	15	
Anthracene	1	0.4065	0.4384	200.0	215.8	ug/L	8	15	
Fluoranthene	1	0.0404	0.0422	400.0	418.9	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0936	200.0	209.3	ug/L	5	15	
Chrysene	1	0.1350	0.1348	200.0	202.1	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1023	400.0	394.8	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0780	200.0	192.7	ug/L	-4	15	
Benzo(a)pyrene	1	0.0828	0.0906	200.0	218.2	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0202	400.0	394.3	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0340	400.0	418.8	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0850	200.0	187.9	ug/L	-6	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8043	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	4000	4129	ug/L	3	15	
Pyrene	2	0.1252	0.1309	200.0	207.6	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8160	ug/L	2	15	
Naphthalene	3	0.0110	0.0110	2000	2001	ug/L	0	15	
Acenaphthene	3	0.0234	0.0238	2000	2026	ug/L	1	15	
Fluorene	3	0.1247	0.1230	400.0	389.1	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1359	200.0	202.2	ug/L	1	15	
Anthracene	3	0.4222	0.4548	200.0	217.7	ug/L	9	15	
Fluoranthene	3	0.0390	0.0402	400.0	414.9	ug/L	4	15	
Pyrene	3	0.1264	0.1332	200.0	212.9	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1515	200.0	208.7	ug/L	4	15	
Chrysene	3	0.1780	0.1769	200.0	196.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0623	400.0	390.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	200.0	194.3	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2262	200.0	216.6	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0274	400.0	373.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0559	400.0	397.0	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0891	200.0	194.7	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	8000	7930	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297107179018 File : 07400018 Time : 15-MAR-2007 19:29
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4104	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	8000	8327	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4127	ug/L	3	15	
Fluorene	1	0.0637	0.0645	800.0	812.6	ug/L	2	15	
Phenanthrene	1	0.1810	0.1794	400.0	399.5	ug/L	0	15	
Anthracene	1	0.4065	0.4400	400.0	431.2	ug/L	8	15	
Fluoranthene	1	0.0404	0.0420	800.0	825.6	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0953	400.0	417.7	ug/L	4	15	
Chrysene	1	0.1350	0.1359	400.0	404.7	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1057	800.0	801.1	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0813	400.0	395.6	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0928	400.0	436.4	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0204	800.0	765.2	ug/L	-4	15	
Benzo(g,h,i)perylene	1	0.0309	0.0353	800.0	834.5	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0943	400.0	400.3	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16280	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0889	8000	8345	ug/L	4	15	
Pyrene	2	0.1252	0.1311	400.0	411.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16620	ug/L	4	15	
Naphthalene	3	0.0110	0.0108	4000	3922	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0235	4000	4008	ug/L	0	15	
Fluorene	3	0.1247	0.1212	800.0	775.9	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1326	400.0	392.6	ug/L	-2	15	
Anthracene	3	0.4222	0.4551	400.0	431.2	ug/L	8	15	
Fluoranthene	3	0.0390	0.0398	800.0	816.5	ug/L	2	15	
Pyrene	3	0.1264	0.1276	400.0	402.4	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1509	400.0	411.4	ug/L	3	15	
Chrysene	3	0.1780	0.1745	400.0	390.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0637	800.0	790.8	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3820	400.0	391.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2289	400.0	435.9	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0287	800.0	750.2	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0577	800.0	790.9	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0917	400.0	386.9	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	16000	15650	ug/L	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193262 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 297107179032 File : 07400032 Time : 16-MAR-2007 02:51
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10230	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20840	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10230	ug/L	2	15	
Fluorene	1	0.0637	0.0647	2000	2024	ug/L	1	15	
Phenanthrene	1	0.1810	0.1800	1000	998.0	ug/L	0	15	
Anthracene	1	0.4065	0.4409	1000	1077	ug/L	8	15	
Fluoranthene	1	0.0404	0.0426	2000	2086	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0965	1000	1045	ug/L	4	15	
Chrysene	1	0.1350	0.1369	1000	1015	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1023	0.1080	2000	2023	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0844	1000	1018	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0962	1000	1114	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0218	2000	1996	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0366	2000	2110	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0975	1000	1012	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40620	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0882	20000	20800	ug/L	4	15	
Pyrene	2	0.1252	0.1338	1000	1043	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41100	ug/L	3	15	
Naphthalene	3	0.0110	0.0108	10000	9757	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0234	10000	10000	ug/L	0	15	
Fluorene	3	0.1247	0.1211	2000	1953	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1327	1000	979.1	ug/L	-2	15	
Anthracene	3	0.4222	0.4513	1000	1063	ug/L	6	15	
Fluoranthene	3	0.0390	0.0399	2000	2034	ug/L	2	15	
Pyrene	3	0.1264	0.1290	1000	1009	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1523	1000	1031	ug/L	3	15	
Chrysene	3	0.1780	0.1757	1000	989.0	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0641	2000	1977	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3846	1000	984.2	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2316	1000	1099	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0297	2000	1895	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0567	0.0599	2000	2012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0947	1000	978.3	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	40000	39400	ug/L	-2	15	

SEQUENCE SUMMARY FOR 193262 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193262 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	07400001	X	IB - 074			15-MAR-2007 10:19	1.0						
002	07400002	CCV	L			15-MAR-2007 10:51	1.0	1.0			10	1	
003	07400003	X	CCV			15-MAR-2007 11:23	1.0					1	
004	07400004	X	IB			15-MAR-2007 11:54	1.0						
005	07400005	LCS	QC379236	123110	Miscel	15-MAR-2007 12:31	1.0	0.06647		6	10	spk	
006	07400006	X	IB			15-MAR-2007 13:02	1.0						
007	07400007	BLANK	QC379036	123065	Water	15-MAR-2007 13:34	1.0	0.002			10		
008	07400008	MSS	193332-003	123065	Water	15-MAR-2007 14:06	1.0	0.00198	5	2	10		5:MTNPH1=134292
009	07400009	LCS	QC379037	123065	Water	15-MAR-2007 14:37	1.0	0.002			10		
010	07400010	MS	QC379038	123065	Water	15-MAR-2007 15:09	1.0	0.00198	3	10	10		5:MTNPH1=117657
011	07400011	MSD	QC379039	123065	Water	15-MAR-2007 15:40	1.0	0.00198	3	10	10		5:MTNPH1=115619
012	07400012	X	IB			15-MAR-2007 16:19	1.0						
013	07400013	SAMPLE	193217-014	123065	Water	15-MAR-2007 16:51	1.0	0.001942			10		
014	07400014	SAMPLE	193217-015	123065	Water	15-MAR-2007 17:22	1.0	0.001887			10		
015	07400015	SAMPLE	193217-016	123065	Water	15-MAR-2007 17:54	1.0	0.001905			10		
016	07400016	SAMPLE	193217-017	123065	Water	15-MAR-2007 18:25	1.0	0.001961			10		
017	07400017	X	IB			15-MAR-2007 18:57	1.0						
018	07400018	CCV	M			15-MAR-2007 19:29	1.0	1.0			10	2	
019	07400019	X	CCV			15-MAR-2007 20:00	1.0					2	
020	07400020	X	IB			15-MAR-2007 20:32	1.0						
021	07400021	SAMPLE	193333-001	123065	Water	15-MAR-2007 21:03	1.0	0.00198	1		10		1:PYR=4497.82
022	07400022	SAMPLE	193262-002	123065	Water	15-MAR-2007 21:35	1.0	0.001905			10		
023	07400023	SAMPLE	193262-003	123065	Water	15-MAR-2007 22:07	1.0	0.001905			10		
024	07400024	SAMPLE	193262-007	123065	Water	15-MAR-2007 22:38	1.0	0.001923			10		
025	07400025	SAMPLE	193262-019	123065	Water	15-MAR-2007 23:10	1.0	0.001923			10		
026	07400026	SAMPLE	193262-020	123065	Water	15-MAR-2007 23:42	1.0	0.001905			10		
027	07400027	SAMPLE	193277-001	123065	Water	16-MAR-2007 00:13	1.0	0.002105			10		
028	07400028	SAMPLE	193329-003	123065	Water	16-MAR-2007 00:45	1.0	0.001905			10		
029	07400029	SAMPLE	193329-004	123065	Water	16-MAR-2007 01:16	1.0	0.001905			10		
030	07400030	SAMPLE	193329-005	123065	Water	16-MAR-2007 01:48	1.0	0.001905			10		

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

SEQUENCE SUMMARY FOR 193262 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	07400031	X	IB			16-MAR-2007 02:19	1.0						
032	07400032	CCV	H			16-MAR-2007 02:51	1.0	1.0			10	3	
033	07400033	X	CCV			16-MAR-2007 03:23	1.0					3	
034	07400034	X	IB			16-MAR-2007 03:54	1.0						
035	07400035	SAMPLE	193329-006	123065	Water	16-MAR-2007 04:26	1.0	0.001961			10		
036	07400036	SAMPLE	193332-001	123065	Water	16-MAR-2007 04:58	1.0	0.001942			10		
037	07400037	SAMPLE	193332-004	123065	Water	16-MAR-2007 05:29	1.0	0.002667			10		
038	07400038	SAMPLE	193332-005	123065	Water	16-MAR-2007 06:01	1.0	0.001923	1		10		1:PYR=5315.28
039	07400039	SAMPLE	193332-002	123065	Water	16-MAR-2007 06:32	1.0	0.001961	1		10		1:PYR=5218.97
040	07400040	X	IB			16-MAR-2007 07:04	1.0						
041	07400041	X	IB			16-MAR-2007 07:35	1.0						
042	07400042	CCV	M			16-MAR-2007 08:07	1.0	1.0			10	2	
043	07400043	X	CCV			16-MAR-2007 08:39	1.0					2	
044	07400044	X	IB			16-MAR-2007 09:10	1.0						

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

REPORTING SUMMARY FOR 193262 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-002	Naphthalene	HPLC04	1	03/15/07 21:35
193262-002	Acenaphthylene	HPLC04	1	03/15/07 21:35
193262-002	Acenaphthene	HPLC04	1	03/15/07 21:35
193262-002	Fluorene	HPLC04	1	03/15/07 21:35
193262-002	Phenanthrene	HPLC04	3	03/15/07 21:35
193262-002	Anthracene	HPLC04	3	03/15/07 21:35
193262-002	Fluoranthene	HPLC04	3	03/15/07 21:35
193262-002	Pyrene	HPLC04	3	03/15/07 21:35
193262-002	Benzo(a)anthracene	HPLC04	3	03/15/07 21:35
193262-002	Chrysene	HPLC04	3	03/15/07 21:35
193262-002	Benzo(b)fluoranthene	HPLC04	3	03/15/07 21:35
193262-002	Benzo(k)fluoranthene	HPLC04	3	03/15/07 21:35
193262-002	Benzo(a)pyrene	HPLC04	3	03/15/07 21:35
193262-002	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 21:35
193262-002	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 21:35
193262-002	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 21:35
193262-002	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 21:35
193262-002	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 21:35
193262-003	Naphthalene	HPLC04	1	03/15/07 22:07
193262-003	Acenaphthylene	HPLC04	1	03/15/07 22:07
193262-003	Acenaphthene	HPLC04	1	03/15/07 22:07
193262-003	Fluorene	HPLC04	1	03/15/07 22:07
193262-003	Phenanthrene	HPLC04	3	03/15/07 22:07
193262-003	Anthracene	HPLC04	3	03/15/07 22:07
193262-003	Fluoranthene	HPLC04	3	03/15/07 22:07
193262-003	Pyrene	HPLC04	3	03/15/07 22:07
193262-003	Benzo(a)anthracene	HPLC04	3	03/15/07 22:07
193262-003	Chrysene	HPLC04	3	03/15/07 22:07
193262-003	Benzo(b)fluoranthene	HPLC04	3	03/15/07 22:07
193262-003	Benzo(k)fluoranthene	HPLC04	3	03/15/07 22:07
193262-003	Benzo(a)pyrene	HPLC04	3	03/15/07 22:07
193262-003	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 22:07
193262-003	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 22:07
193262-003	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 22:07
193262-003	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 22:07
193262-003	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 22:07
193262-007	Naphthalene	HPLC04	1	03/15/07 22:38
193262-007	Acenaphthylene	HPLC04	1	03/15/07 22:38
193262-007	Acenaphthene	HPLC04	1	03/15/07 22:38
193262-007	Fluorene	HPLC04	1	03/15/07 22:38
193262-007	Phenanthrene	HPLC04	3	03/15/07 22:38
193262-007	Anthracene	HPLC04	3	03/15/07 22:38
193262-007	Fluoranthene	HPLC04	3	03/15/07 22:38
193262-007	Pyrene	HPLC04	3	03/15/07 22:38
193262-007	Benzo(a)anthracene	HPLC04	3	03/15/07 22:38
193262-007	Chrysene	HPLC04	3	03/15/07 22:38
193262-007	Benzo(b)fluoranthene	HPLC04	3	03/15/07 22:38
193262-007	Benzo(k)fluoranthene	HPLC04	3	03/15/07 22:38
193262-007	Benzo(a)pyrene	HPLC04	3	03/15/07 22:38
193262-007	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 22:38
193262-007	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 22:38
193262-007	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 22:38

REPORTING SUMMARY FOR 193262 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193262-007	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 22:38
193262-007	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 22:38
193262-019	Naphthalene	HPLC04	1	03/15/07 23:10
193262-019	Acenaphthylene	HPLC04	1	03/15/07 23:10
193262-019	Acenaphthene	HPLC04	1	03/15/07 23:10
193262-019	Fluorene	HPLC04	1	03/15/07 23:10
193262-019	Phenanthrene	HPLC04	3	03/15/07 23:10
193262-019	Anthracene	HPLC04	3	03/15/07 23:10
193262-019	Fluoranthene	HPLC04	3	03/15/07 23:10
193262-019	Pyrene	HPLC04	3	03/15/07 23:10
193262-019	Benzo(a)anthracene	HPLC04	3	03/15/07 23:10
193262-019	Chrysene	HPLC04	3	03/15/07 23:10
193262-019	Benzo(b)fluoranthene	HPLC04	3	03/15/07 23:10
193262-019	Benzo(k)fluoranthene	HPLC04	3	03/15/07 23:10
193262-019	Benzo(a)pyrene	HPLC04	3	03/15/07 23:10
193262-019	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 23:10
193262-019	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 23:10
193262-019	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 23:10
193262-019	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 23:10
193262-019	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 23:10
193262-020	Naphthalene	HPLC04	1	03/15/07 23:42
193262-020	Acenaphthylene	HPLC04	1	03/15/07 23:42
193262-020	Acenaphthene	HPLC04	1	03/15/07 23:42
193262-020	Fluorene	HPLC04	1	03/15/07 23:42
193262-020	Phenanthrene	HPLC04	3	03/15/07 23:42
193262-020	Anthracene	HPLC04	3	03/15/07 23:42
193262-020	Fluoranthene	HPLC04	3	03/15/07 23:42
193262-020	Pyrene	HPLC04	3	03/15/07 23:42
193262-020	Benzo(a)anthracene	HPLC04	3	03/15/07 23:42
193262-020	Chrysene	HPLC04	3	03/15/07 23:42
193262-020	Benzo(b)fluoranthene	HPLC04	3	03/15/07 23:42
193262-020	Benzo(k)fluoranthene	HPLC04	3	03/15/07 23:42
193262-020	Benzo(a)pyrene	HPLC04	3	03/15/07 23:42
193262-020	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 23:42
193262-020	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 23:42
193262-020	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 23:42
193262-020	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 23:42
193262-020	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 23:42
QC379036	Naphthalene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthylene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthene	HPLC04	1	03/15/07 13:34
QC379036	Fluorene	HPLC04	1	03/15/07 13:34
QC379036	Phenanthrene	HPLC04	3	03/15/07 13:34
QC379036	Anthracene	HPLC04	3	03/15/07 13:34
QC379036	Fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Pyrene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Chrysene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(b)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(k)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)pyrene	HPLC04	3	03/15/07 13:34

REPORTING SUMMARY FOR 193262 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379036	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 13:34
QC379036	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 13:34
QC379036	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 13:34
QC379036	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 13:34
QC379037	Naphthalene	HPLC04	1	03/15/07 14:37
QC379037	Fluorene	HPLC04	1	03/15/07 14:37
QC379037	Pyrene	HPLC04	3	03/15/07 14:37
QC379037	Benzo(a)pyrene	HPLC04	3	03/15/07 14:37
QC379037	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 14:37
QC379037	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 14:37
QC379038	Naphthalene	HPLC04	1	03/15/07 15:09
QC379038	Fluorene	HPLC04	1	03/15/07 15:09
QC379038	Pyrene	HPLC04	3	03/15/07 15:09
QC379038	Benzo(a)pyrene	HPLC04	3	03/15/07 15:09
QC379038	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:09
QC379038	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:09
QC379039	Naphthalene	HPLC04	1	03/15/07 15:40
QC379039	Fluorene	HPLC04	1	03/15/07 15:40
QC379039	Pyrene	HPLC04	3	03/15/07 15:40
QC379039	Benzo(a)pyrene	HPLC04	3	03/15/07 15:40
QC379039	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:40
QC379039	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:40

S

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 21:05

Batch Number : 123065
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5673B
Spike #2 ID : S5518C
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193217-014		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193217-015		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193217-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193217-017		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193262-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-003		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-019		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-020		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193277-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193329-003		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-004		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-005		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-006		Innovative Technical Solutions	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-001		Mactec, Inc.	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193332-002		Mactec, Inc.	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-003		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		MSS
193332-004		Mactec, Inc.	Water	375	mL	1	0.002667	1	7	.05	0		8310		
193332-005		Mactec, Inc.	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193333-001		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		
QC379036	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC379037	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC379038	MS	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		
QC379039	MSD	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		

Prep Chemist: Jessie Mee Reviewed By: Pamela Moghit Date: 3/15/07

Relinquished By: [signature] Received By: [signature] Date: 15MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 123065
LIMS Analysis: 8310
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

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Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193217-014 I	1030	7	2.0		
15 J	1060				
16 K	1050				
17 I	1020				
193262-002 G	1050				
03 I	1050				
07	1040				
19 N	1040				
20 W	1050				
193277-001 J	950				*
193329-003 G	1050				
04 H					
05 H					
06 J	1020				
193332-001 H	1030				
02 J	1020				
03 V	1010				MSS
04 B	375		1.0		limited sample **
05 I	1040		2.0		
193333-001 J	1010				
MB QC379036	1000	NA			
LCS 37	1000				
MS 38	1010	7			193332-003 T
MSD 39	1010	7			U

JOM 3/13/07

0.1 | 0.05 ** mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1130
Extraction End Time: 12:00
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ Grav Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☐ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5673B / S5673C*	JOM 3/13/07
S5518C	
EM47031 / EM47011	
	7-114/07
	JXM 3/13/07 JOM 3/14/07
N/A	
EM46111628	
EM46173	
✓	
N/A	
Whatman L227	✓

Jerine Lee 3/13/07
Extraction Chemist | Date

Contined from Page ____
Continued on Page ____

Pamela Mangat 3/15/07
Reviewed by: 00350 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/24/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Batch#:	123098
Lab ID:	193262-001	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	30	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	89,000	500
Manganese	70	10
Nickel	ND	20
Potassium	1,500	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	60,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF08GW04	Batch#:	123098
Lab ID:	193262-002	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	2.0	1.0
Arsenic	ND	5.0
Barium	36	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	36,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	110	100
Lead	ND	3.0
Magnesium	17,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	2,900	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	29,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW04	Batch#:	123098
Lab ID:	193262-003	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Barium	14	10	10.00	03/17/07
Beryllium	ND	2.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	21,000	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Cobalt	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	61,000	500	10.00	03/17/07
Manganese	29	10	10.00	03/17/07
Nickel	3,200	20	20.00	03/19/07
Potassium	13,000	500	10.00	03/17/07
Selenium	ND	5.0	10.00	03/17/07
Silver	ND	1.0	10.00	03/17/07
Sodium	55,000	500	10.00	03/17/07
Thallium	ND	1.0	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	10.00	03/17/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW10A	Batch#:	123098
Lab ID:	193262-004	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	28,000	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	12,000	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	34,000	500	10.00	03/17/07
Manganese	360	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	1,700	500	10.00	03/17/07
Sodium	53,000	500	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW10B	Batch#:	123098
Lab ID:	193262-005	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	37,000	500
Chromium	40	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	50,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	560	500
Sodium	55,000	500
Vanadium	20	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0307073B	Batch#:	123098
Lab ID:	193262-006	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Barium	33	10	10.00	03/17/07
Beryllium	ND	2.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	45,000	500	10.00	03/17/07
Chromium	10	10	10.00	03/17/07
Cobalt	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	90,000	500	10.00	03/17/07
Manganese	71	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	1,400	500	10.00	03/17/07
Selenium	ND	5.0	10.00	03/17/07
Silver	ND	1.0	10.00	03/17/07
Sodium	60,000	500	10.00	03/17/07
Thallium	ND	1.0	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0307073A	Batch#:	123098
Lab ID:	193262-007	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Barium	36	10	10.00	03/17/07
Beryllium	ND	2.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	36,000	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Cobalt	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	17,000	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	3,000	500	10.00	03/17/07
Selenium	ND	5.0	10.00	03/17/07
Silver	ND	1.0	10.00	03/17/07
Sodium	30,000	500	10.00	03/17/07
Thallium	ND	1.0	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW10ARB1065MW10B	Batch#:	123098
Lab ID:	193262-008	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	ND	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	ND	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	ND	500	10.00	03/17/07
Sodium	ND	500	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1B	Batch#:	123098
Lab ID:	193262-010	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	51,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	220	100
Lead	ND	3.0
Magnesium	79,000	500
Manganese	89	10
Nickel	ND	20
Potassium	38,000	500
Sodium	95,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ6B	Batch#:	123098
Lab ID:	193262-011	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	03/19/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	39,000	500	10.00	03/17/07
Chromium	43	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	47,000	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	990	500	10.00	03/17/07
Sodium	57,000	500	10.00	03/17/07
Vanadium	17	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ6BRB1065MW9A	Batch#:	123098
Lab ID:	193262-012	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	ND	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	ND	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	ND	500	10.00	03/17/07
Sodium	ND	500	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9A	Batch#:	123098
Lab ID:	193262-013	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	60,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	4,500	100
Lead	ND	3.0
Magnesium	88,000	500
Manganese	480	10
Nickel	ND	20
Potassium	16,000	500
Sodium	66,000	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9B	Batch#:	123098
Lab ID:	193262-014	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	38,000	500	10.00	03/17/07
Chromium	40	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	52,000	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	740	500	10.00	03/17/07
Sodium	52,000	500	10.00	03/17/07
Vanadium	16	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW11A	Batch#:	123098
Lab ID:	193262-015	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	28,000	500
Chromium	31	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	35,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	570	500
Sodium	50,000	500
Vanadium	12	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW11B	Batch#:	123098
Lab ID:	193262-016	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	48,000	500	10.00	03/17/07
Chromium	41	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	48,000	500	10.00	03/17/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	700	500	10.00	03/17/07
Sodium	54,000	500	10.00	03/17/07
Vanadium	22	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW01	Batch#:	123098
Lab ID:	193262-017	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	120	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	35,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	73,000	500
Manganese	29	10
Nickel	57	20
Potassium	660	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	87,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

39.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	NKGW05	Batch#:	123098
Lab ID:	193262-018	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Barium	89	10	10.00	03/17/07
Beryllium	ND	2.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	26,000	500	10.00	03/17/07
Chromium	ND	10	10.00	03/17/07
Cobalt	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	51,000	500	10.00	03/17/07
Manganese	90	10	10.00	03/17/07
Nickel	31	20	10.00	03/17/07
Potassium	800	500	10.00	03/17/07
Selenium	ND	5.0	10.00	03/17/07
Silver	ND	1.0	10.00	03/17/07
Sodium	46,000	500	10.00	03/17/07
Thallium	ND	1.0	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Field ID:	DAEGW102	Sampled:	03/07/07
Lab ID:	193262-019	Received:	03/08/07
Matrix:	Water	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

85.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DAEGW102	Batch#:	123098
Lab ID:	193262-019	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	200	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	100,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	130,000	500
Manganese	250	10
Nickel	ND	20
Potassium	1,900	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	88,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Field ID:	DW030807B	Sampled:	03/08/07
Lab ID:	193262-020	Received:	03/08/07
Matrix:	Water	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

86.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW030807B	Batch#:	123098
Lab ID:	193262-020	Sampled:	03/08/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	03/17/07
Antimony	ND	1.0	10.00	03/17/07
Arsenic	ND	5.0	10.00	03/17/07
Barium	ND	10	10.00	03/17/07
Beryllium	ND	2.0	10.00	03/17/07
Cadmium	ND	1.0	10.00	03/17/07
Calcium	ND	500	1.000	03/19/07
Chromium	ND	10	10.00	03/17/07
Cobalt	ND	10	10.00	03/17/07
Copper	ND	1.0	10.00	03/17/07
Iron	ND	100	10.00	03/17/07
Lead	ND	3.0	10.00	03/17/07
Magnesium	ND	500	1.000	03/19/07
Manganese	ND	10	10.00	03/17/07
Nickel	ND	20	10.00	03/17/07
Potassium	ND	500	10.00	03/17/07
Selenium	ND	5.0	10.00	03/17/07
Silver	ND	1.0	10.00	03/17/07
Sodium	ND	500	10.00	03/17/07
Thallium	ND	1.0	10.00	03/17/07
Vanadium	ND	10	10.00	03/17/07
Zinc	ND	20	1.000	03/19/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	193262	Project#:	2893.04.51
Client:	Treadwell & Rollo	Location:	Presidio
Field ID:	WT030807	Units:	ug/L
Lab ID:	193262-021	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	ND	5.0	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Cadmium	ND	1.0	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Chromium	ND	10	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Copper	6.0	5.0	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Lead	ND	3.0	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Mercury	ND	0.20	1.000	123115	03/14/07	03/14/07	METHOD	EPA 7470A
Nickel	20	20	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Silver	ND	1.0	10.00	123055	03/13/07	03/20/07	200.8	EPA 6020
Zinc	64	20	1.000	123055	03/13/07	03/20/07	200.8	EPA 6020

ND= Not Detected
RL= Reporting Limit

87.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379174	Batch#:	123098
Matrix:	Filtrate	Prepared:	03/14/07
Units:	ug/L	Analyzed:	03/17/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	123115
Lab ID:	QC379253	Prepared:	03/14/07
Matrix:	Water	Analyzed:	03/14/07
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

90.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Diln Fac:	1.000
Type:	BLANK	Batch#:	122912
Lab ID:	QC378380	Prepared:	03/09/07
Matrix:	Water	Analyzed:	03/09/07
Units:	ug/L		

Result	RL
ND	5.0

ND= Not Detected
RL= Reporting Limit

88.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378982	Batch#:	123055
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/16/07

Analyte	Result	RL
Arsenic	ND	5.0
Cadmium	ND	1.0
Chromium	ND	10
Copper	ND	1.0
Lead	ND	3.0
Nickel	ND	20
Silver	ND	1.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

89.0

Curtis & Tompkins, Ltd.

Hardness (Total)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	122912
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Prepared:	03/09/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
DAEGW102	SAMPLE	193262-019	850	3.3	5.000	03/07/07	03/11/07
DW030807B	SAMPLE	193262-020	ND	3.3	1.000	03/08/07	03/09/07
	BLANK	QC378380	ND	3.3	1.000		03/09/07

ND= Not Detected
RL= Reporting Limit

84.2

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Received:	03/08/07
Units:	ug/L	Prepared:	03/20/07
Diln Fac:	1.000	Analyzed:	03/20/07
Batch#:	123301		

Field ID	Type	Lab ID	Matrix	Result	RL	Sampled
LF08GW04	SAMPLE	193262-002	Filtrate	ND	0.20	03/07/07
DUP0307073A	SAMPLE	193262-007	Filtrate	ND	0.20	03/07/07
NKGW01	SAMPLE	193262-017	Filtrate	ND	0.20	03/07/07
NKGW05	SAMPLE	193262-018	Filtrate	ND	0.20	03/07/07
DAEGW102	SAMPLE	193262-019	Filtrate	ND	0.20	03/07/07
DW030807B	SAMPLE	193262-020	Filtrate	ND	0.20	03/08/07
	BLANK	QC380038	Water	ND	0.20	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Matrix:	Water	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378381	400.0	470.5	118	80-120		
BSD	QC378382	400.0	455.6	114	80-120	3	20

RPD= Relative Percent Difference

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Water	Batch#:	123055
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/16/07

Type: BS Lab ID: QC378983

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	95.53	96	80-120
Cadmium	100.0	96.45	96	80-120
Chromium	100.0	101.5	102	80-120
Copper	100.0	103.6	104	80-120
Lead	100.0	99.24	99	80-120
Nickel	100.0	101.4	101	80-120
Silver	100.0	106.9	107	80-120
Zinc	100.0	95.60	96	80-120

Type: BSD Lab ID: QC378984

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	96.35	96	80-120	1	20
Cadmium	100.0	98.45	98	80-120	2	20
Chromium	100.0	101.6	102	80-120	0	20
Copper	100.0	103.9	104	80-120	0	20
Lead	100.0	98.77	99	80-120	0	20
Nickel	100.0	102.2	102	80-120	1	20
Silver	100.0	108.3	108	80-120	1	20
Zinc	100.0	98.23	98	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	123098
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/17/07

Type: BS Lab ID: QC379175

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,010	100	80-120
Antimony	100.0	94.67	95	80-120
Arsenic	100.0	96.29	96	80-120
Barium	100.0	101.0	101	80-120
Beryllium	100.0	103.1	103	80-120
Cadmium	100.0	97.73	98	80-120
Calcium	10,000	10,050	101	80-120
Chromium	100.0	101.6	102	80-120
Cobalt	100.0	103.5	104	80-120
Copper	100.0	101.4	101	80-120
Iron	10,000	9,867	99	80-120
Lead	100.0	97.91	98	80-120
Magnesium	10,000	10,030	100	80-120
Manganese	100.0	100.7	101	80-120
Nickel	100.0	103.8	104	80-120
Potassium	10,000	10,140	101	80-120
Selenium	100.0	91.77	92	80-120
Silver	100.0	108.4	108	80-120
Sodium	10,000	9,692	97	80-120
Thallium	50.00	48.99	98	80-120
Vanadium	100.0	101.8	102	80-120
Zinc	100.0	95.23	95	80-120

Type: BSD Lab ID: QC379176

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,100	101	80-120	1	20
Antimony	100.0	95.17	95	80-120	1	20
Arsenic	100.0	98.30	98	80-120	2	20
Barium	100.0	102.0	102	80-120	1	20
Beryllium	100.0	104.0	104	80-120	1	20
Cadmium	100.0	98.06	98	80-120	0	20
Calcium	10,000	10,180	102	80-120	1	20
Chromium	100.0	102.3	102	80-120	1	20
Cobalt	100.0	104.6	105	80-120	1	20
Copper	100.0	103.5	104	80-120	2	20
Iron	10,000	9,951	100	80-120	1	20
Lead	100.0	99.21	99	80-120	1	20
Magnesium	10,000	10,160	102	80-120	1	20
Manganese	100.0	101.7	102	80-120	1	20
Nickel	100.0	104.6	105	80-120	1	20
Potassium	10,000	10,280	103	80-120	1	20
Selenium	100.0	93.50	94	80-120	2	20
Silver	100.0	108.9	109	80-120	0	20
Sodium	10,000	9,840	98	80-120	2	20
Thallium	50.00	49.53	99	80-120	1	20
Vanadium	100.0	102.4	102	80-120	1	20
Zinc	100.0	100.9	101	80-120	6	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	123115
Matrix:	Water	Prepared:	03/14/07
Units:	ug/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC379255	5.000	5.310	106	80-120		
BSD	QC379256	5.000	5.210	104	80-120	2	20

RPD= Relative Percent Difference

97.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	123301
Field ID:	LF08GW04	Sampled:	03/07/07
MSS Lab ID:	193262-002	Received:	03/08/07
Units:	ug/L	Prepared:	03/20/07
Diln Fac:	1.000	Analyzed:	03/20/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC380040	Water		5.000	5.250	105	80-120		
BSD	QC380041	Water		5.000	5.230	105	80-120	0	20
MS	QC380043	Filtrate	<0.02083	5.000	5.410	108	75-125		
MSD	QC380044	Filtrate		5.000	5.250	105	75-125	3	20

RPD= Relative Percent Difference

137.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Field ID:	ZZZZZZZZZZ	Sampled:	03/08/07
MSS Lab ID:	193273-001	Received:	03/08/07
Matrix:	Water	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378383	<1.384	400.0	477.7	119	75-125		
MSD	QC378384		400.0	468.8	117	75-125	2	20

RPD= Relative Percent Difference

92.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	123055
MSS Lab ID:	193244-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	10.00	Analyzed:	03/16/07

Type: MS Lab ID: QC378985

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<0.3366	100.0	99.77	100	75-125
Cadmium	0.3474	100.0	106.6	106	75-125
Chromium	0.7453	100.0	101.5	101	75-125
Copper	2.212	100.0	103.6	101	75-125
Lead	3.197	100.0	108.3	105	75-125
Nickel	2.836	100.0	103.5	101	75-125
Silver	0.1716	100.0	117.4	117	75-125
Zinc	3.495	100.0	112.5	109	75-125

Type: MSD Lab ID: QC378986

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	96.49	96	75-125	3	20
Cadmium	100.0	98.73	98	75-125	8	20
Chromium	100.0	99.03	98	75-125	2	20
Copper	100.0	101.4	99	75-125	2	20
Lead	100.0	97.93	95	75-125	10	20
Nickel	100.0	100.6	98	75-125	3	20
Silver	100.0	107.0	107	75-125	9	20
Zinc	100.0	103.9	100	75-125	8	20

RPD= Relative Percent Difference

95.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Batch#:	123098
MSS Lab ID:	193262-001	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Type: MS Lab ID: QC379177

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	23.89	10,000	10,160	101	75-125
Antimony	0.2913	100.0	99.63	99	75-125
Arsenic	1.837	100.0	99.31	97	75-125
Barium	29.58	100.0	131.8	102	75-125
Beryllium	<0.1733	100.0	101.3	101	75-125
Cadmium	0.1010	100.0	101.1	101	75-125
Calcium	44,650	10,000	55,160	105 NM	75-125
Chromium	9.351	100.0	111.8	102	75-125
Cobalt	0.2723	100.0	103.0	103	75-125
Copper	<0.2776	100.0	94.10	94	75-125
Iron	<19.37	10,000	9,966	100	75-125
Lead	0.1406	100.0	100.7	101	75-125
Magnesium	88,800	10,000	99,880	111 NM	75-125
Manganese	69.74	100.0	171.2	101	75-125
Nickel	11.90	100.0	115.5	104	75-125
Potassium	1,467	10,000	11,610	101	75-125
Selenium	<0.2730	100.0	99.86	100	75-125
Silver	0.1283	100.0	109.4	109	75-125
Sodium	60,130	10,000	69,860	97 NM	75-125
Thallium	0.4365	50.00	48.54	96	75-125
Vanadium	6.019	100.0	107.0	101	75-125
Zinc	8.641	100.0	111.0	102	75-125

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Batch#:	123098
MSS Lab ID:	193262-001	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	10.00	Analyzed:	03/17/07

Type: MSD Lab ID: QC379178

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,160	101	75-125	0	20
Antimony	100.0	99.23	99	75-125	0	20
Arsenic	100.0	101.7	100	75-125	2	20
Barium	100.0	129.9	100	75-125	1	20
Beryllium	100.0	101.5	102	75-125	0	20
Cadmium	100.0	101.1	101	75-125	0	20
Calcium	10,000	54,240	96 NM	75-125	2	20
Chromium	100.0	110.0	101	75-125	2	20
Cobalt	100.0	103.2	103	75-125	0	20
Copper	100.0	94.60	95	75-125	1	20
Iron	10,000	10,040	100	75-125	1	20
Lead	100.0	100.6	100	75-125	0	20
Magnesium	10,000	97,650	89 NM	75-125	2	20
Manganese	100.0	169.7	100	75-125	1	20
Nickel	100.0	115.1	103	75-125	0	20
Potassium	10,000	11,620	102	75-125	0	20
Selenium	100.0	97.77	98	75-125	2	20
Silver	100.0	109.7	110	75-125	0	20
Sodium	10,000	68,250	81 NM	75-125	2	20
Thallium	50.00	49.54	98	75-125	2	20
Vanadium	100.0	107.4	101	75-125	0	20
Zinc	100.0	105.3	97	75-125	5	20

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	123115
Field ID:	NKGW02	Sampled:	03/06/07
MSS Lab ID:	193217-011	Received:	03/07/07
Matrix:	Filtrate	Prepared:	03/14/07
Units:	ug/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379258	<0.05753	5.000	5.320	106	75-125		
MSD	QC379259		5.000	5.470	109	75-125	3	20

RPD= Relative Percent Difference

99.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122912
MSS Lab ID:	193273-001	Sampled:	03/08/07
Lab ID:	QC378385	Received:	03/08/07
Matrix:	Water	Analyzed:	03/09/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	5.000	ND	25.00	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

93.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	123055
MSS Lab ID:	193244-001	Sampled:	03/07/07
Lab ID:	QC378987	Received:	03/08/07
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Arsenic	ND	5.000	ND	5.000	NC	10
Cadmium	0.3474	1.000	1.333 J	5.000	NC	10
Chromium	0.7453	10.00	ND	10.00	NC	10
Copper	2.212	1.000	ND	5.000	NC	10
Lead	3.197	3.000	0.9558 J	5.000	NC	10
Nickel	ND	20.00	ND	20.00	NC	10
Silver	0.1716	1.000	1.244 J	5.000	NC	10
Zinc	3.495	20.00	21.31	20.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

96.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	50.00
MSS Lab ID:	193262-001	Batch#:	123098
Lab ID:	QC379179	Sampled:	03/07/07
Matrix:	Filtrate	Received:	03/08/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	76.76 J	500.0	NC	10	03/17/07
Antimony	ND	1.000	ND	5.000	NC	10	03/17/07
Arsenic	ND	5.000	ND	5.000	NC	10	03/17/07
Barium	29.58	10.00	27.33	10.00	8	10	03/17/07
Beryllium	ND	2.000	ND	5.000	NC	10	03/17/07
Cadmium	ND	1.000	ND	5.000	NC	10	03/17/07
Calcium	44,650	500.0	45,170	500.0	1	10	03/17/07
Chromium	ND	10.00	9.574 J	10.00	NC	10	03/17/07
Cobalt	ND	10.00	ND	10.00	NC	10	03/17/07
Copper	ND	1.000	ND	5.000	NC	10	03/17/07
Iron	ND	100.0	ND	500.0	NC	10	03/17/07
Lead	ND	3.000	ND	5.000	NC	10	03/17/07
Magnesium	88,800	500.0	88,820	500.0	0	10	03/17/07
Manganese	69.74	10.00	67.92	10.00	3	10	03/17/07
Nickel	ND	20.00	16.27 J	20.00	NC	10	03/17/07
Potassium	1,467	500.0	1,829	500.0	NC	10	03/17/07
Selenium	ND	5.000	ND	5.000	NC	10	03/17/07
Silver	ND	1.000	ND	5.000	NC	10	03/17/07
Sodium	60,130	500.0	56,590	1,250	6	10	03/20/07
Thallium	ND	1.000	ND	2.500	NC	10	03/17/07
Vanadium	ND	10.00	8.653 J	10.00	NC	10	03/17/07
Zinc	ND	20.00	46.39	20.00	NC	10	03/17/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	NKGW02	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123115
MSS Lab ID:	193217-011	Sampled:	03/06/07
Lab ID:	QC379257	Received:	03/07/07
Matrix:	Filtrate	Analyzed:	03/14/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

98.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	LF08GW04	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123301
MSS Lab ID:	193262-002	Sampled:	03/07/07
Lab ID:	QC380042	Received:	03/08/07
Matrix:	Filtrate	Analyzed:	03/20/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

138.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6010B

Type : MSS
Inst : MET08
Seqnum: 87098860014
File : 030907ar
IDF : 1.0
Lab ID: 193273-001
Matrix: Water
Batch : 122912
Time : 09-MAR-2007 17:00
Cal : 87098860001
Units : ug/L

Type : PDS
Inst : MET08
Seqnum: 87098860018
File : 030907ar
IDF : 1.0
Lab ID: QC378386
Matrix: Water
Batch : 122912
Time : 09-MAR-2007 17:12
Cal : 87098860001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4884 (100X), S4885 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	R	2000	1819	R	91	75-125	u
Antimony	1.950	A	500.0	471.2	A	94	75-125	u
Arsenic	ND	A	100.0	96.30	A	96	75-125	u
Barium	ND	A	2000	1980	A	99	75-125	u
Beryllium	ND	A	50.00	53.84	A	108	75-125	u
Cadmium	ND	A	50.00	50.55	A	101	75-125	u
Calcium	168.9	R	20000	19380	R	96	75-125	u
Chromium	ND	A	200.0	200.6	A	100	75-125	u
Cobalt	ND	A	500.0	473.4	A	95	75-125	u
Copper	ND	A	250.0	246.6	A	99	75-125	u
Iron	ND	R	1000	942.6	R	94	75-125	u
Lead	ND	A	100.0	102.5	A	103	75-125	u
Magnesium	ND	R	20000	18460	R	92	75-125	u
Manganese	ND	A	50.00	50.92	A	102	75-125	u
Molybdenum	ND	A	400.0	444.4	A	111	75-125	u
Nickel	ND	A	500.0	488.7	A	98	75-125	u
Potassium	ND	R	10000	9594	R	96	75-125	u
Selenium	ND	A	100.0	99.29	A	99	75-125	u
Silver	ND	A	50.00	49.31	A	99	75-125	u
Sodium	6811	R	20000	26210	R	97	75-125	u
Thallium	ND	A	100.0	98.87	A	99	75-125	u
Vanadium	ND	A	500.0	515.6	A	103	75-125	u
Zinc	ND	A	500.0	499.8	A	100	75-125	u
Boron	171.1	A	1000	1224	A	105	75-125	u
Tin	ND	A	1000	994.5	A	99	75-125	u
Titanium	ND	A	1000	1049	A	105	75-125	u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	1356870	1241968	-8.47

u=use

87098860018

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET06
Seqnum: 67108851031
File : c16o0031
IDF : 10.0
Lab ID: QC378988
Matrix: Water
Batch : 123055
Time : 16-MAR-2007 16:59
Cal : 67108851001
MSS : 193244-001
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67108851027	6.889	A	10000	9531	A	95	75-125	u
Antimony	67108851027	0.05258	A	100.0	91.46	A	91	75-125	u
Arsenic	67108851027	ND	E	100.0	100.4	E	100	75-125	u
Barium	67108851027	0.4298	A	100.0	95.81	A	95	75-125	u
Beryllium	67108851027	0.02000	A	100.0	103.8	A	104	75-125	u
Cadmium	67108851027	0.03474	A	100.0	95.54	A	96	75-125	u
Calcium	67108851027	19.85	A	10000	9558	A	95	75-125	u
Chromium	67108851027	0.07453	E	100.0	100.6	E	101	75-125	u
Cobalt	67108851027	0.01530	E	100.0	101.1	E	101	75-125	u
Copper	67108851027	0.2212	E	100.0	101.9	E	102	75-125	u
Iron	67108851027	15.80	H	10000	10150	H	101	75-125	u
Lead	67108851027	0.3197	A	100.0	95.91	A	96	75-125	u
Magnesium	67108851027	6.645	A	10000	9595	A	96	75-125	u
Manganese	67108851027	0.2907	E	100.0	101.1	E	101	75-125	u
Molybdenum	67108851027	0.03499	A	100.0	92.02	A	92	75-125	u
Nickel	67108851027	0.2836	E	100.0	101.3	E	101	75-125	u
Potassium	67108851027	ND	A	10000	9566	A	96	75-125	u
Selenium	67108851027	ND	H	100.0	102.0	H	102	75-125	u
Silver	67108851027	0.01716	A	100.0	90.69	A	91	75-125	u
Sodium	67108851027	18.39	E	10000	10130	E	101	75-125	u
Thallium	67108851027	0.04130	A	50.00	48.15	A	96	75-125	u
Vanadium	67108851027	0.1760	E	100.0	99.94	E	100	75-125	u
Zinc	67108851040	0.3495	E	100.0	101.2	E	101	75-125	u

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	647013	633837	-2.04
Scandium	A	852845	889614	4.31
Scandium	E	27959	27424	-1.91
Scandium	H	427309	417558	-2.28
Germanium	H	105109	101692	-3.25
Germanium	E	15593	14989	-3.88
Indium	A	1435538	1417021	-1.29
Bismuth	A	1399318	1353507	-3.27
Yttrium	A	1356281	1395682	2.91
Terbium	A	2224182	2232337	0.37

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum: 67108851203
File : c16o0203
IDF : 10.0
Lab ID: 193262-001
Matrix: Filtrate
Batch : 123098
Time : 17-MAR-2007 09:15
Cal : 67108851001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum: 67108851215
File : c16o0215
IDF : 10.0
Lab ID: QC379180
Matrix: Filtrate
Batch : 123098
Time : 17-MAR-2007 10:21
Cal : 67108851001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	2.389	A	10000	9603	A	96	75-125	u
Antimony	0.02913	A	100.0	90.06	A	90	75-125	u
Arsenic	0.1837	E	100.0	96.57	E	96	75-125	u
Barium	2.958	A	100.0	101.3	A	98	75-125	u
Beryllium	ND	A	100.0	97.22	A	97	75-125	u
Cadmium	0.01010	A	100.0	95.19	A	95	75-125	u
Calcium	4465	A	10000	13620	A	92	75-125	u
Chromium	0.9351	E	100.0	98.67	E	98	75-125	u
Cobalt	0.02723	E	100.0	98.47	E	98	75-125	u
Copper	ND	E	100.0	95.62	E	96	75-125	u
Iron	ND	H	10000	9488	H	95	75-125	u
Lead	0.01406	A	100.0	94.43	A	94	75-125	u
Magnesium	8880	A	10000	18100	A	92	75-125	u
Manganese	6.974	E	100.0	103.6	E	97	75-125	u
Molybdenum	0.06058	A	100.0	93.48	A	93	75-125	u
Nickel	1.190	E	100.0	99.90	E	99	75-125	u
Potassium	146.7	A	10000	9861	A	97	75-125	u
Selenium	ND	H	100.0	95.63	H	96	75-125	u
Silver	0.01283	A	100.0	94.70	A	95	75-125	u
Sodium	6013	E	10000	14840	E	88	75-125	<ib **b***
Thallium	0.04365	A	50.00	48.09	A	96	75-125	u
Vanadium	0.6019	E	100.0	98.37	E	98	75-125	u
Zinc	0.8641	E	100.0	94.57	E	94	75-125	u

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	647013	625729	-3.29
Scandium	A	852845	872406	2.29
Scandium	E	27959	25406	-9.13
Scandium	H	427309	391753	-8.32
Germanium	H	105109	96848	-7.86
Germanium	E	15593	14345	-8.01
Indium	A	1435538	1318132	-8.18
Bismuth	A	1399318	1190107	-14.95
Yttrium	A	1356281	1312331	-3.24
Terbium	A	2224182	2025156	-8.95

<=opening b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET05
Seqnum: 57113086048
File : c19m0048
IDF : 1.0
Lab ID: 193244-001
Matrix: Water
Batch : 123055
Time : 19-MAR-2007 16:02
Cal : 57113086001
Units : ug/L

Type : PDS
Inst : MET05
Seqnum: 57113086061
File : c19m0061
IDF : 1.0
Lab ID: QC378988
Matrix: Water
Batch : 123055
Time : 19-MAR-2007 16:57
Cal : 57113086001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9823	98	75-125	
Antimony	0.3291	100.0	100.9	101	75-125	
Arsenic	0.6496	100.0	92.84	92	75-125	
Barium	0.1789	100.0	91.87	92	75-125	
Beryllium	ND	100.0	84.46	84	75-125	
Cadmium	ND	100.0	96.01	96	75-125	
Calcium	ND	10000	9726	97	75-125	
Chromium	0.7590	100.0	96.59	96	75-125	
Cobalt	ND	100.0	94.84	95	75-125	
Copper	ND	100.0	90.97	91	75-125	
Iron	ND	10000	9443	94	75-125	
Lead	ND	100.0	96.90	97	75-125	
Magnesium	ND	10000	9854	99	75-125	
Manganese	0.08311	100.0	95.07	95	75-125	
Molybdenum	ND	100.0	94.77	95	75-125	
Nickel	ND	100.0	92.54	93	75-125	
Potassium	32.42	10000	9902	99	75-125	
Selenium	ND	100.0	87.23	87	75-125	
Sodium	ND	10000	9292	93	75-125	
Thallium	ND	50.00	45.42	91	75-125	
Vanadium	0.5171	100.0	95.87	95	75-125	
Zinc	2.227	100.0	89.88	88	75-125	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	809267	649953	-19.69
Scandium	964043	724460	-24.85
Germanium	164788	127260	-22.77
Indium	1539479	1156935	-24.85
Bismuth	1214998	947252	-22.04

MISSING READINGS: **AG**

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6010B

Inst : MET08
Calnum : 87098860001
Units : ug/L

Date : 09-MAR-2007 15:40
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	030907ar	87098860002	CRIM08	09-MAR-2007 15:48	S5393
L2	030907ar	87098860003	CS100	09-MAR-2007 15:52	S5428
L3	030907ar	87098860004	CS1K	09-MAR-2007 15:55	S5427
L4	030907ar	87098860005	CS10K	09-MAR-2007 15:57	S5323
L5	030907ar	87098860006	CS100K	09-MAR-2007 16:01	S5561

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	47.248	53.702	54.990	53.295		LOR0	0.00000	0.01876		52.309	1.000	0.995	
Arsenic	A	32.866	31.318	31.749	30.929		LOR0	0.00000	0.03232		31.716	1.000	0.995	
Barium	A	616.16	579.74	574.35	566.74		LOR0	0.00000	0.00176		584.25	1.000	0.995	
Beryllium	A	4087.8	4304.8	4275.1			LOR0	0.00000	2.34E-4		4222.6	1.000	0.995	
Boron	A	207.71		211.26	217.24		LOR0	0.00000	0.00460		212.07	1.000	0.995	
Cadmium	A	401.04	401.17	398.76	396.15		LOR0	0.00000	0.00252		399.28	1.000	0.995	
Chromium	A	149.70	137.72	137.51	135.50		LOR0	0.00000	0.00738		140.11	1.000	0.995	
Cobalt	A	146.39	148.67	151.58	151.01		LOR0	0.00000	0.00662		149.41	1.000	0.995	
Copper	A	367.90	341.84	349.75	351.42		LOR0	0.00000	0.00285		352.73	1.000	0.995	
Lead	A	70.813	73.777	75.425	70.536		LOR0	0.00000	0.01417		72.638	1.000	0.995	
Manganese	A	887.76	872.17	874.94	835.21		LOR0	0.00000	0.00120		867.52	1.000	0.995	
Molybdenum	A	59.638	58.849	57.224	53.301		LOR0	0.00000	0.01875		57.253	1.000	0.995	
Nickel	A	83.053	79.790	81.675	80.065		LOR0	0.00000	0.01249		81.146	1.000	0.995	
Selenium	A	22.162	29.413	29.811	29.376		LOR0	0.00000	0.03404		27.690	1.000	0.995	
Silver	A	737.26	699.84	695.74	675.59		LOR0	0.00000	0.00147		702.11	1.000	0.995	
Thallium	A	31.877	28.071	28.541	26.330		LOR0	0.00000	0.03795		28.705	1.000	0.995	
Tin	A	36.617	35.871	35.455	35.470		LOR0	0.00000	0.02819		35.853	1.000	0.995	
Titanium	A	1425.8	1434.1	1410.9	1360.6		LOR0	0.00000	7.35E-4		1407.9	1.000	0.995	
Vanadium	A	127.26	123.72	124.90	126.18		LOR0	0.00000	0.00793		125.52	1.000	0.995	
Zinc	A	130.75	127.02	128.23	126.78		LOR0	0.00000	0.00789		128.20	1.000	0.995	
Aluminum	R	0.9560		1.0248	0.9378	1.0493	LOR0	0.00000	0.95399		0.9920	1.000	0.995	
Calcium	R	17.674		18.530	16.935	17.333	LOR0	0.00000	0.05771		17.618	1.000	0.995	
Iron	R	4.3900		4.7320	4.2921	4.3302	LOR0	0.00000	0.23095		4.4361	1.000	0.995	
Magnesium	R	1.9029		2.2490	2.0771	2.1062	LOR0	0.00000	0.47486		2.0838	1.000	0.995	
Potassium	R	5.9091		6.5295	6.0964	6.3840	LOR0	0.00000	0.15671		6.2298	1.000	0.995	
Sodium	R	14.946		15.599	14.966	15.011	LOR0	0.00000	0.06662		15.130	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Antimony	A	5.0000	100.00	1000.0	10000.0		ug/L
Arsenic	A	5.0000	100.00	1000.0	10000.0		ug/L
Barium	A	5.0000	100.00	1000.0	10000.0		ug/L
Beryllium	A	2.0000	100.00	1000.0			ug/L
Boron	A	100.00		1000.0	10000.0		ug/L
Cadmium	A	5.0000	100.00	1000.0	10000.0		ug/L
Chromium	A	5.0000	100.00	1000.0	10000.0		ug/L
Cobalt	A	5.0000	100.00	1000.0	10000.0		ug/L
Copper	A	5.0000	100.00	1000.0	10000.0		ug/L
Lead	A	3.0000	100.00	1000.0	10000.0		ug/L
Manganese	A	5.0000	100.00	1000.0	10000.0		ug/L
Molybdenum	A	5.0000	100.00	1000.0	10000.0		ug/L
Nickel	A	5.0000	100.00	1000.0	10000.0		ug/L
Selenium	A	5.0000	100.00	1000.0	10000.0		ug/L
Silver	A	5.0000	100.00	1000.0	2000.0		ug/L
Thallium	A	5.0000	100.00	1000.0	10000.0		ug/L
Tin	A	40.000	100.00	1000.0	10000.0		ug/L
Titanium	A	10.000	100.00	1000.0	10000.0		ug/L
Vanadium	A	5.0000	100.00	1000.0	10000.0		ug/L
Zinc	A	20.000	100.00	1000.0	10000.0		ug/L
Aluminum	R	100.00		1000.0	10000.0	100000	ug/L
Calcium	R	200.00		1000.0	10000.0	100000	ug/L
Iron	R	100.00		1000.0	10000.0	100000	ug/L
Magnesium	R	200.00		1000.0	10000.0	100000	ug/L
Potassium	R	500.00		1000.0	10000.0	100000	ug/L
Sodium	R	500.00		1000.0	10000.0	100000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

Sequence No.: 1
Sample ID: ICALBLK,
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/9/2007 3:40:39 PM
Data Type: Reprocessed on 3/9/2007 4:45:53 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-23.2	363.04	>999.9%	[0.00]	ug/L
Al 308.215 R	144.8	7.78	5.37%	[0.00]	ug/L
As 188.979	-31.3	13.53	43.25%	[0.00]	ug/L
B 249.677	476.7	3.42	0.72%	[0.00]	ug/L
Ba 233.527	-289.4	1.66	0.57%	[0.00]	ug/L
Be 313.107	-896.3	533.85	59.56%	[0.00]	ug/L
Ca 315.887 R	188.2	13.38	7.11%	[0.00]	ug/L
Cd 214.440	-26.4	13.64	51.66%	[0.00]	ug/L
Co 228.616	-403.8	21.47	5.32%	[0.00]	ug/L
Cr 267.716	166.5	15.41	9.26%	[0.00]	ug/L
Cu 324.752	3029.8	70.41	2.32%	[0.00]	ug/L
Fe 238.204 R	50.9	4.04	7.95%	[0.00]	ug/L
K 766.490 R	-1291.7	296.68	22.97%	[0.00]	ug/L
Mg 279.077 R	64.3	8.87	13.79%	[0.00]	ug/L
Mn 257.610	69.0	6.13	8.88%	[0.00]	ug/L
Mo 202.031	10.0	2.97	29.71%	[0.00]	ug/L
Na 589.592 R	1726.5	57.75	3.34%	[0.00]	ug/L
Ni 231.604	195.4	12.79	6.55%	[0.00]	ug/L
Pb 220.353	24.4	50.55	207.00%	[0.00]	ug/L
Sb 206.836	-129.8	33.43	25.75%	[0.00]	ug/L
Se 196.026	-86.2	51.66	59.96%	[0.00]	ug/L
Ti 334.940 R	392.8	83.98	21.38%	[0.00]	ug/L
Tl 190.801	-32.1	18.58	57.83%	[0.00]	ug/L
V 292.402	-984.2	5.33	0.54%	[0.00]	ug/L
Zn 206.200	137.6	4.86	3.53%	[0.00]	ug/L
Sn 189.927	22.2	3.95	17.83%	[0.00]	ug/L

Sequence No.: 2
Sample ID: ICAL,CRIM08
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/9/2007 3:48:10 PM
Data Type: Reprocessed on 3/9/2007 4:45:56 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CRIM08

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CRIM08

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1356870.5	6454.73	0.48%	100.0	%
Y	294238.4	3843.84	1.31%	100.0	%
Ag 328.068†	3686.3	562.77	15.27%	[5.0]	ug/L
Al 308.215 R†	95.6	8.36	8.74%	[100]	ug/L
As 188.979†	164.3	13.79	8.39%	[5.0]	ug/L
B 249.677†	20771.0	123.69	0.60%	[100]	ug/L
Ba 233.527†	3080.8	32.59	1.06%	[5.0]	ug/L
Be 313.107†	8175.7	156.92	1.92%	[2.0]	ug/L
Ca 315.887 R†	3534.8	55.89	1.58%	[200]	ug/L
Cd 214.440†	2005.2	14.46	0.72%	[5.0]	ug/L
Co 228.616†	731.9	3.72	0.51%	[5.0]	ug/L
Cr 267.716†	748.5	15.17	2.03%	[5.0]	ug/L
Cu 324.752†	1839.5	136.31	7.41%	[5.0]	ug/L
Fe 238.204 R†	439.0	6.55	1.49%	[100]	ug/L
K 766.490 R†	2954.5	216.12	7.31%	[500]	ug/L
Mg 279.077 R†	380.6	9.40	2.47%	[200]	ug/L
Mn 257.610†	4438.8	36.26	0.82%	[5.0]	ug/L
Mo 202.031†	298.2	6.90	2.31%	[5.0]	ug/L
Na 589.592 R†	7472.8	151.86	2.03%	[500]	ug/L
Ni 231.604†	415.3	12.27	2.96%	[5.0]	ug/L
Pb 220.353†	212.4	59.05	27.80%	[3.0]	ug/L
Sb 206.836†	236.2	43.71	18.50%	[5.0]	ug/L
Se 196.026†	110.8	14.70	13.26%	[5.0]	ug/L
Ti 334.940 R†	14258.1	201.32	1.41%	[10]	ug/L
Tl 190.801†	159.4	21.70	13.62%	[5.0]	ug/L
V 292.402†	636.3	5.41	0.85%	[5.0]	ug/L
Zn 206.200†	2615.0	13.05	0.50%	[20]	ug/L
Sn 189.927†	1464.7	11.88	0.81%	[40]	ug/L

Sequence No.: 3
Sample ID: ICAL,CS100
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/9/2007 3:52:10 PM
Data Type: Reprocessed on 3/9/2007 4:45:59 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1346030.6	23810.91	1.77%	99.20	%
Y	298308.7	6361.62	2.13%	101.4	%
Ag 328.068†	69983.6	833.61	1.19%	[100]	ug/L
As 188.979†	3131.8	64.40	2.06%	[100]	ug/L
Ba 233.527†	57974.4	809.75	1.40%	[100]	ug/L
Be 313.107†	430477.1	4450.62	1.03%	[100]	ug/L
Cd 214.440†	40116.7	513.05	1.28%	[100]	ug/L
Co 228.616†	14866.9	292.87	1.97%	[100]	ug/L
Cr 267.716†	13771.8	271.01	1.97%	[100]	ug/L
Cu 324.752†	34184.2	450.82	1.32%	[100]	ug/L
Mn 257.610†	87216.7	1198.19	1.37%	[100]	ug/L
Mo 202.031†	5884.9	158.68	2.70%	[100]	ug/L
Ni 231.604†	7979.0	150.10	1.88%	[100]	ug/L
Pb 220.353†	7377.7	177.98	2.41%	[100]	ug/L
Sb 206.836†	5370.2	80.71	1.50%	[100]	ug/L
Se 196.026†	2941.3	75.34	2.56%	[100]	ug/L
Ti 334.940 R†	143414.0	1979.18	1.38%	[100]	ug/L
Tl 190.801†	2807.1	60.67	2.16%	[100]	ug/L
V 292.402†	12372.1	220.15	1.78%	[100]	ug/L
Zn 206.200†	12702.1	259.91	2.05%	[100]	ug/L
Sn 189.927†	3587.1	93.21	2.60%	[100]	ug/L

Sequence No.: 4
Sample ID: ICAL,CS1K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/9/2007 3:55:10 PM
Data Type: Reprocessed on 3/9/2007 4:46:01 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1367036.2	19084.24	1.40%	100.7	%
Y	283160.6	8128.68	2.87%	96.24	%
Ag 328.068†	695744.7	7206.14	1.04%	[1000]	ug/L
Al 308.215 R†	1024.8	51.01	4.98%	[1000]	ug/L
As 188.979†	31749.2	597.65	1.88%	[1000]	ug/L
B 249.677†	211257.7	2935.80	1.39%	[1000]	ug/L
Ba 233.527†	574349.0	7302.92	1.27%	[1000]	ug/L
Be 313.107†	4275130.7	47792.13	1.12%	[1000]	ug/L
Ca 315.887 R†	18529.7	502.05	2.71%	[1000]	ug/L
Cd 214.440†	398756.1	5324.57	1.34%	[1000]	ug/L
Co 228.616†	151582.3	1919.03	1.27%	[1000]	ug/L
Cr 267.716†	137507.2	2154.24	1.57%	[1000]	ug/L
Cu 324.752†	349745.6	4340.60	1.24%	[1000]	ug/L
Fe 238.204 R†	4732.0	77.43	1.64%	[1000]	ug/L
K 766.490 R†	6529.5	71.15	1.09%	[1000]	ug/L
Mg 279.077 R†	2249.0	75.52	3.36%	[1000]	ug/L
Mn 257.610†	874939.3	11062.29	1.26%	[1000]	ug/L
Mo 202.031†	57224.4	761.33	1.33%	[1000]	ug/L
Na 589.592 R†	15598.9	659.13	4.23%	[1000]	ug/L
Ni 231.604†	81675.4	1348.22	1.65%	[1000]	ug/L
Pb 220.353†	75424.6	1573.51	2.09%	[1000]	ug/L
Sb 206.836†	54990.1	1260.18	2.29%	[1000]	ug/L
Se 196.026†	29810.7	360.72	1.21%	[1000]	ug/L
Ti 334.940 R†	1410942.4	17433.30	1.24%	[1000]	ug/L
Tl 190.801†	28540.9	550.81	1.93%	[1000]	ug/L
V 292.402†	124900.0	1888.01	1.51%	[1000]	ug/L
Zn 206.200†	128233.9	2066.80	1.61%	[1000]	ug/L
Sn 189.927†	35454.7	748.78	2.11%	[1000]	ug/L

Sequence No.: 5
Sample ID: ICAL,CS10K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/9/2007 3:57:21 PM
Data Type: Reprocessed on 3/9/2007 4:46:03 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1309657.2	9336.92	0.71%	96.52	%
Y	283383.1	3267.89	1.15%	96.31	%
Ag 328.068†	1351175.3	5491.10	0.41%	[2000]	ug/L
Al 308.215 R†	9377.5	46.64	0.50%	[10000]	ug/L
As 188.979†	309285.8	3165.16	1.02%	[10000]	ug/L
B 249.677†	2172431.7	23389.37	1.08%	[10000]	ug/L
Ba 233.527†	5667438.0	64861.03	1.14%	[10000]	ug/L
Ca 315.887 R†	169353.8	229.12	0.14%	[10000]	ug/L
Cd 214.440†	3961549.6	56082.06	1.42%	[10000]	ug/L
Co 228.616†	1510089.9	14438.65	0.96%	[10000]	ug/L
Cr 267.716†	1354996.4	13290.55	0.98%	[10000]	ug/L
Cu 324.752†	3514238.9	28760.97	0.82%	[10000]	ug/L
Fe 238.204 R†	42920.7	252.54	0.59%	[10000]	ug/L
K 766.490 R†	60964.2	137.59	0.23%	[10000]	ug/L
Mg 279.077 R†	20770.8	98.41	0.47%	[10000]	ug/L
Mn 257.610†	8352078.5	67099.93	0.80%	[10000]	ug/L
Mo 202.031†	533011.9	12305.97	2.31%	[10000]	ug/L
Na 589.592 R†	149656.5	977.13	0.65%	[10000]	ug/L
Ni 231.604†	800646.1	6705.68	0.84%	[10000]	ug/L
Pb 220.353†	705363.5	7511.31	1.06%	[10000]	ug/L
Sb 206.836†	532951.0	4535.38	0.85%	[10000]	ug/L
Se 196.026†	293756.8	3239.33	1.10%	[10000]	ug/L
Ti 334.940 R†	13606115.2	139103.28	1.02%	[10000]	ug/L
Tl 190.801†	263304.8	3352.68	1.27%	[10000]	ug/L
V 292.402†	1261809.6	12326.81	0.98%	[10000]	ug/L
Zn 206.200†	1267807.4	13384.02	1.06%	[10000]	ug/L
Sn 189.927†	354700.6	3729.86	1.05%	[10000]	ug/L

Sequence No.: 6
Sample ID: ICAL,CS100K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/9/2007 4:01:07 PM
Data Type: Reprocessed on 3/9/2007 4:46:05 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1224097.6	13786.67	1.13%	90.21	%
Y	265798.5	5739.88	2.16%	90.33	%
Al 308.215 R†	104933.7	2832.79	2.70%	[100000]	ug/L
Ca 315.887 R†	1733301.4	48777.51	2.81%	[100000]	ug/L
Fe 238.204 R†	433020.9	10500.81	2.43%	[100000]	ug/L
K 766.490 R†	638395.8	18785.62	2.94%	[100000]	ug/L
Mg 279.077 R†	210615.1	5219.03	2.48%	[100000]	ug/L
Na 589.592 R†	1501084.5	43708.02	2.91%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	679.7	0.00000	0.999929	
Al 308.215 R	4	Lin Thru 0	0.0	1.048	0.00000	0.999944	
As 188.979	4	Lin Thru 0	0.0	30.94	0.00000	0.999997	
B 249.677	3	Lin Thru 0	0.0	217.2	0.00000	0.999996	
Ba 233.527	4	Lin Thru 0	0.0	566.8	0.00000	0.999999	
Be 313.107	3	Lin Thru 0	0.0	4275	0.00000	1.000000	
Ca 315.887 R	4	Lin Thru 0	0.0	17.33	0.00000	0.999997	
Cd 214.440	4	Lin Thru 0	0.0	396.2	0.00000	1.000000	
Co 228.616	4	Lin Thru 0	0.0	151.0	0.00000	1.000000	
Cr 267.716	4	Lin Thru 0	0.0	135.5	0.00000	0.999999	
Cu 324.752	4	Lin Thru 0	0.0	351.4	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	4.330	0.00000	0.999999	
K 766.490 R	4	Lin Thru 0	0.0	6.381	0.00000	0.999990	
Mg 279.077 R	4	Lin Thru 0	0.0	2.106	0.00000	0.999999	
Mn 257.610	4	Lin Thru 0	0.0	835.6	0.00000	0.999989	
Mo 202.031	4	Lin Thru 0	0.0	53.34	0.00000	0.999973	
Na 589.592 R	4	Lin Thru 0	0.0	15.01	0.00000	1.000000	
Ni 231.604	4	Lin Thru 0	0.0	80.08	0.00000	0.999998	
Pb 220.353	4	Lin Thru 0	0.0	70.59	0.00000	0.999976	
Sb 206.836	4	Lin Thru 0	0.0	53.31	0.00000	0.999995	
Se 196.026	4	Lin Thru 0	0.0	29.38	0.00000	0.999999	
Ti 334.940 R	4	Lin Thru 0	0.0	1361	0.00000	0.999993	
Tl 190.801	4	Lin Thru 0	0.0	26.35	0.00000	0.999965	
V 292.402	4	Lin Thru 0	0.0	126.2	0.00000	0.999999	
Zn 206.200	4	Lin Thru 0	0.0	126.8	0.00000	0.999999	
Sn 189.927	4	Lin Thru 0	0.0	35.47	0.00000	1.000000	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860007 File : 030907ar Time : 09-MAR-2007 16:09
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5324

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	52.309	53.600	5000	5027	ug/L	1	10	
Arsenic	A	31.716	31.884	5000	5153	ug/L	3	10	
Barium	A	584.25	557.66	5000	4919	ug/L	-2	10	
Beryllium	A	4222.6	4259.3	500.0	498.1	ug/L	0	10	
Boron	A	212.07	215.20	5000	4954	ug/L	-1	10	
Cadmium	A	399.28	390.05	5000	4923	ug/L	-2	10	
Chromium	A	140.11	132.56	5000	4891	ug/L	-2	10	
Cobalt	A	149.41	146.05	5000	4826	ug/L	-3	10	
Copper	A	352.73	332.23	5000	4727	ug/L	-5	10	
Lead	A	72.638	70.071	5000	4964	ug/L	-1	10	
Manganese	A	867.52	820.09	5000	4907	ug/L	-2	10	
Molybdenum	A	57.253	54.368	5000	5096	ug/L	2	10	
Nickel	A	81.146	77.625	5000	4847	ug/L	-3	10	
Selenium	A	27.690	29.821	5000	5075	ug/L	2	10	
Silver	A	702.11	657.32	1000	967.1	ug/L	-3	10	
Thallium	A	28.705	26.521	5000	5032	ug/L	1	10	
Tin	A	35.853	35.390	5000	4989	ug/L	0	10	
Titanium	A	1407.9	1305.8	5000	4797	ug/L	-4	10	
Vanadium	A	125.52	124.00	5000	4914	ug/L	-2	10	
Zinc	A	128.20	124.29	5000	4901	ug/L	-2	10	
Aluminum	R	0.9920	0.9456	20000	18040	ug/L	-10	10	
Calcium	R	17.618	16.254	20000	18760	ug/L	-6	10	
Iron	R	4.4361	4.0905	20000	18890	ug/L	-6	10	
Magnesium	R	2.0838	1.9815	20000	18820	ug/L	-6	10	
Potassium	R	6.2298	5.8533	20000	18350	ug/L	-8	10	
Sodium	R	15.130	14.125	20000	18820	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1295914	-4.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860020 File : 030907ar Time : 09-MAR-2007 17:18
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	54.858	5000	5145	ug/L	3	10	
Arsenic	A	31.716	32.188	5000	5202	ug/L	4	10	
Barium	A	584.25	575.82	5000	5079	ug/L	2	10	
Beryllium	A	4222.6	4408.5	500.0	515.6	ug/L	3	10	
Boron	A	212.07	222.66	5000	5126	ug/L	3	10	
Cadmium	A	399.28	403.56	5000	5093	ug/L	2	10	
Chromium	A	140.11	137.40	5000	5069	ug/L	1	10	
Cobalt	A	149.41	150.44	5000	4971	ug/L	-1	10	
Copper	A	352.73	344.32	5000	4899	ug/L	-2	10	
Lead	A	72.638	71.072	5000	5034	ug/L	1	10	
Manganese	A	867.52	835.61	5000	5000	ug/L	0	10	
Molybdenum	A	57.253	55.450	5000	5198	ug/L	4	10	
Nickel	A	81.146	79.724	5000	4978	ug/L	0	10	
Selenium	A	27.690	29.706	5000	5056	ug/L	1	10	
Silver	A	702.11	675.92	1000	994.5	ug/L	-1	10	
Thallium	A	28.705	26.632	5000	5053	ug/L	1	10	
Tin	A	35.853	35.734	5000	5037	ug/L	1	10	
Titanium	A	1407.9	1359.1	5000	4993	ug/L	0	10	
Vanadium	A	125.52	129.25	5000	5122	ug/L	2	10	
Zinc	A	128.20	127.01	5000	5009	ug/L	0	10	
Aluminum	R	0.9920	0.9954	20000	18990	ug/L	-5	10	
Calcium	R	17.618	17.443	20000	20130	ug/L	1	10	
Iron	R	4.4361	4.2709	20000	19730	ug/L	-1	10	
Magnesium	R	2.0838	2.0825	20000	19780	ug/L	-1	10	
Potassium	R	6.2298	6.2684	20000	19650	ug/L	-2	10	
Sodium	R	15.130	15.369	20000	20480	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1235855	-8.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860034 File : 030907ar Time : 09-MAR-2007 18:10
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	56.396	5000	5289	ug/L	6	10	
Arsenic	A	31.716	33.188	5000	5364	ug/L	7	10	
Barium	A	584.25	571.03	5000	5037	ug/L	1	10	
Beryllium	A	4222.6	4380.0	500.0	512.2	ug/L	2	10	
Boron	A	212.07	220.61	5000	5079	ug/L	2	10	
Cadmium	A	399.28	400.48	5000	5054	ug/L	1	10	
Chromium	A	140.11	136.73	5000	5045	ug/L	1	10	
Cobalt	A	149.41	149.27	5000	4932	ug/L	-1	10	
Copper	A	352.73	342.92	5000	4879	ug/L	-2	10	
Lead	A	72.638	73.343	5000	5195	ug/L	4	10	
Manganese	A	867.52	827.75	5000	4953	ug/L	-1	10	
Molybdenum	A	57.253	57.142	5000	5356	ug/L	7	10	
Nickel	A	81.146	79.211	5000	4946	ug/L	-1	10	
Selenium	A	27.690	30.665	5000	5219	ug/L	4	10	
Silver	A	702.11	694.90	1000	1022	ug/L	2	10	
Thallium	A	28.705	27.327	5000	5185	ug/L	4	10	
Tin	A	35.853	36.750	5000	5180	ug/L	4	10	
Titanium	A	1407.9	1352.4	5000	4968	ug/L	-1	10	
Vanadium	A	125.52	128.61	5000	5097	ug/L	2	10	
Zinc	A	128.20	126.22	5000	4977	ug/L	0	10	
Aluminum	R	0.9920	0.9783	20000	18670	ug/L	-7	10	
Calcium	R	17.618	16.970	20000	19590	ug/L	-2	10	
Iron	R	4.4361	4.1602	20000	19220	ug/L	-4	10	
Magnesium	R	2.0838	2.0396	20000	19370	ug/L	-3	10	
Potassium	R	6.2298	6.2269	20000	19520	ug/L	-2	10	
Sodium	R	15.130	15.143	20000	20180	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1234221	-9.04

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860047 File : 030907ar Time : 09-MAR-2007 18:53
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	54.499	5000	5111	ug/L	2	10	
Arsenic	A	31.716	31.966	5000	5166	ug/L	3	10	
Barium	A	584.25	567.64	5000	5007	ug/L	0	10	
Beryllium	A	4222.6	4352.1	500.0	509.0	ug/L	2	10	
Boron	A	212.07	219.25	5000	5048	ug/L	1	10	
Cadmium	A	399.28	397.28	5000	5014	ug/L	0	10	
Chromium	A	140.11	135.53	5000	5000	ug/L	0	10	
Cobalt	A	149.41	148.40	5000	4904	ug/L	-2	10	
Copper	A	352.73	340.22	5000	4841	ug/L	-3	10	
Lead	A	72.638	70.572	5000	4999	ug/L	0	10	
Manganese	A	867.52	825.96	5000	4942	ug/L	-1	10	
Molybdenum	A	57.253	54.897	5000	5146	ug/L	3	10	
Nickel	A	81.146	78.697	5000	4914	ug/L	-2	10	
Selenium	A	27.690	29.623	5000	5041	ug/L	1	10	
Silver	A	702.11	668.68	1000	983.8	ug/L	-2	10	
Thallium	A	28.705	26.519	5000	5032	ug/L	1	10	
Tin	A	35.853	35.424	5000	4994	ug/L	0	10	
Titanium	A	1407.9	1340.2	5000	4923	ug/L	-2	10	
Vanadium	A	125.52	127.28	5000	5044	ug/L	1	10	
Zinc	A	128.20	125.56	5000	4951	ug/L	-1	10	
Aluminum	R	0.9920	0.9597	20000	18310	ug/L	-8	10	
Calcium	R	17.618	16.651	20000	19220	ug/L	-4	10	
Iron	R	4.4361	4.0888	20000	18890	ug/L	-6	10	
Magnesium	R	2.0838	1.9977	20000	18970	ug/L	-5	10	
Potassium	R	6.2298	6.0373	20000	18920	ug/L	-5	10	
Sodium	R	15.130	14.535	20000	19370	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1262140	-6.98

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860008 File : 030907ar Time : 09-MAR-2007 16:27
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	ND	5.000	1.384	ug/L	
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	ND	500.0	46.44	ug/L	
Sodium	R	ND	500.0	69.01	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1357290	0.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860022 File : 030907ar Time : 09-MAR-2007 17:26
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.056]	5.000	1.384	ug/L	!ib
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	ND	500.0	46.44	ug/L	
Sodium	R	ND	500.0	69.01	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1290897	-4.86

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860036 File : 030907ar Time : 09-MAR-2007 18:17
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	[2.313]	5.000	1.577	ug/L	!ib
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.330]	5.000	1.384	ug/L	!ib
Nickel	A	[0.7491]	5.000	0.6463	ug/L	!ib
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	[239.3]	500.0	46.44	ug/L	!ib
Sodium	R	[223.3]	500.0	69.01	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1175371	-13.38

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87098860036

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860049 File : 030907ar Time : 09-MAR-2007 19:00
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.277]	5.000	1.384	ug/L	!ib
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	[1.519]	5.000	1.131	ug/L	!ib
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	[54.35]	500.0	46.44	ug/L	!ib
Sodium	R	[137.3]	500.0	69.01	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1322840	-2.51

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87098860049

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860009 File : 030907ar Time : 09-MAR-2007 16:31
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5626

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.5786]	5.000	ug/L	
Arsenic	A	[0.4342]	5.000	ug/L	
Barium	A	[2.514]	5.000	ug/L	
Beryllium	A	[-1.511]	2.000	ug/L	
Boron	A	[26.42]	100.0	ug/L	
Cadmium	A	[-2.943]	5.000	ug/L	
Cobalt	A	[3.154]	5.000	ug/L	
Lead	A	[2.697]	3.000	ug/L	
Molybdenum	A	[0.4517]	5.000	ug/L	
Selenium	A	[4.313]	5.000	ug/L	
Silver	A	[3.314]	5.000	ug/L	
Thallium	A	[-2.801]	5.000	ug/L	
Tin	A	[-0.8241]	40.00	ug/L	
Zinc	A	[8.040]	20.00	ug/L	
Potassium	R	[91.38]	500.0	ug/L	
Sodium	R	[2.930]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19400	ug/L	97
Copper	A	20000	20050	ug/L	100
Manganese	A	20000	18340	ug/L	92
Nickel	A	20000	17670	ug/L	88
Titanium	A	20000	19730	ug/L	99
Vanadium	A	20000	20310	ug/L	102
Aluminum	R	500000	479100	ug/L	96
Calcium	R	500000	482600	ug/L	97
Iron	R	200000	188300	ug/L	94
Magnesium	R	500000	472000	ug/L	94

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1106323	-18.47

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860010 File : 030907ar Time : 09-MAR-2007 16:33
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	548.6	ug/L	10	20	
Arsenic	A	500.0	554.4	ug/L	11	20	
Barium	A	500.0	532.5	ug/L	6	20	
Beryllium	A	500.0	537.3	ug/L	7	20	
Cadmium	A	1000	1000	ug/L	0	20	
Chromium	A	500.0	515.6	ug/L	3	20	
Cobalt	A	500.0	464.3	ug/L	-7	20	
Copper	A	500.0	525.6	ug/L	5	20	
Lead	A	1000	989.1	ug/L	-1	20	
Manganese	A	500.0	513.6	ug/L	3	20	
Molybdenum	A	500.0	570.7	ug/L	14	20	
Nickel	A	1000	940.1	ug/L	-6	20	
Selenium	A	500.0	526.9	ug/L	5	20	
Silver	A	1000	1053	ug/L	5	20	
Thallium	A	500.0	482.5	ug/L	-3	20	
Titanium	A	20000	20390	ug/L	2		
Vanadium	A	500.0	555.8	ug/L	11	20	
Zinc	A	1000	989.8	ug/L	-1	20	
Aluminum	R	500000	470500	ug/L	-6		
Calcium	R	500000	475400	ug/L	-5		
Iron	R	200000	183200	ug/L	-8		
Magnesium	R	500000	463700	ug/L	-7		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1081448	-20.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860045 File : 030907ar Time : 09-MAR-2007 18:45
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	551.7	ug/L	10	20	
Arsenic	A	500.0	551.9	ug/L	10	20	
Barium	A	500.0	527.4	ug/L	5	20	
Beryllium	A	500.0	530.0	ug/L	6	20	
Cadmium	A	1000	981.7	ug/L	-2	20	
Chromium	A	500.0	511.1	ug/L	2	20	
Cobalt	A	500.0	457.6	ug/L	-8	20	
Copper	A	500.0	521.2	ug/L	4	20	
Lead	A	1000	973.6	ug/L	-3	20	
Manganese	A	500.0	504.2	ug/L	1	20	
Molybdenum	A	500.0	562.8	ug/L	13	20	
Nickel	A	1000	929.9	ug/L	-7	20	
Selenium	A	500.0	516.7	ug/L	3	20	
Silver	A	1000	1051	ug/L	5	20	
Thallium	A	500.0	481.3	ug/L	-4	20	
Titanium	A	20000	20280	ug/L	1		
Vanadium	A	500.0	551.1	ug/L	10	20	
Zinc	A	1000	976.2	ug/L	-2	20	
Aluminum	R	500000	460800	ug/L	-8		
Calcium	R	500000	473000	ug/L	-5		
Iron	R	200000	178100	ug/L	-11		
Magnesium	R	500000	456700	ug/L	-9		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1095181	-19.29

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 87098860 Instrument: MET08 PE ICP Begun: 09-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	030907ar	ICALBLK				09-MAR-2007 15:40	1.0	1.0				
002	030907ar	ICAL	CRIM08			09-MAR-2007 15:48	1.0	1.0			1	
003	030907ar	ICAL	CS100			09-MAR-2007 15:52	1.0	1.0			2	
004	030907ar	ICAL	CS1K			09-MAR-2007 15:55	1.0	1.0			3	
005	030907ar	ICAL	CS10K			09-MAR-2007 15:57	1.0	1.0			4	
006	030907ar	ICAL	CS100K			09-MAR-2007 16:01	1.0	1.0			5	
007	030907ar	ICV				09-MAR-2007 16:09	1.0	1.0		5000	6	
008	030907ar	ICB				09-MAR-2007 16:27	1.0	1.0		5000		
009	030907ar	ICSA				09-MAR-2007 16:31	1.0	1.0		5000	7	10:CA=482599
010	030907ar	ICSAB				09-MAR-2007 16:33	1.0	1.0		5000	8	5:CA=475378
011	030907ar	BLANK	QC378380	122912	Water	09-MAR-2007 16:52	1.0	1.0		5000		
012	030907ar	BS	QC378381	122912	Water	09-MAR-2007 16:56	1.0	1.0		5000		
013	030907ar	BSD	QC378382	122912	Water	09-MAR-2007 16:58	1.0	1.0		5000		
014	030907ar	MSS	193273-001	122912	Water	09-MAR-2007 17:00	1.0	1.0		5000		
015	030907ar	MS	QC378383	122912	Water	09-MAR-2007 17:04	1.0	1.0		5000		
016	030907ar	MSD	QC378384	122912	Water	09-MAR-2007 17:06	1.0	1.0		5000		
017	030907ar	SER	QC378385	122912	Water	09-MAR-2007 17:08	5.0	1.0		5000		
018	030907ar	PDS	QC378386	122912	Water	09-MAR-2007 17:12	1.0	1.0		5000	9 10	
019	030907ar	X	RINSE			09-MAR-2007 17:15	1.0					
020	030907ar	CCV				09-MAR-2007 17:18	1.0	1.0		5000	11	
021	030907ar	X	FLUSH			09-MAR-2007 17:22	1.0					
022	030907ar	CCB				09-MAR-2007 17:26	1.0	1.0		5000		
023	030907ar	SAMPLE	193273-024	122912	Water	09-MAR-2007 17:30	1.0	1.0		5000		
024	030907ar	SAMPLE	193277-001	122912	Water	09-MAR-2007 17:34	1.0	1.0		5000		
025	030907ar	SAMPLE	193272-002	122912	Water	09-MAR-2007 17:38	1.0	1.0		5000		7:FE=795652
026	030907ar	SAMPLE	193272-003	122912	Water	09-MAR-2007 17:42	1.0	1.0		5000		3:MG=334698
027	030907ar	SAMPLE	193272-004	122912	Water	09-MAR-2007 17:45	1.0	1.0		5000		3:MG=342158
028	030907ar	SAMPLE	193262-019	122912	Water	09-MAR-2007 17:49	1.0	1.0	2	5000		3:MG=144800
029	030907ar	SAMPLE	193262-020	122912	Water	09-MAR-2007 17:51	1.0	1.0		5000		
030	030907ar	SAMPLE	193263-001	122912	Water	09-MAR-2007 17:55	1.0	1.0		5000		1:NA=118812
031	030907ar	SAMPLE	193264-001	122912	Water	09-MAR-2007 17:58	1.0	1.0	1	5000		3:K=848647

Stds used: 1=S5393 2=~~S5428~~ 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/2007

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 87098860 Instrument: MET08 PE ICP Begun: 09-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	030907ar	SAMPLE	193241-001	122912	Filtra	09-MAR-2007 18:03	1.0	1.0			5000		2:MG=123928
033	030907ar	X	RINSE			09-MAR-2007 18:06	1.0						
034	030907ar	CCV				09-MAR-2007 18:10	1.0	1.0			5000	11	
035	030907ar	X	FLUSH			09-MAR-2007 18:13	1.0						
036	030907ar	CCB				09-MAR-2007 18:17	1.0	1.0			5000		
037	030907ar	SAMPLE	193267-001	122912	Filtra	09-MAR-2007 18:21	1.0	1.0	1		5000		2:CA=175835
038	030907ar	SAMPLE	193267-002	122912	Filtra	09-MAR-2007 18:24	1.0	1.0	1		5000		2:NA=170939
039	030907ar	SAMPLE	193267-003	122912	Filtra	09-MAR-2007 18:27	1.0	1.0	1		5000		2:NA=169449
040	030907ar	SAMPLE	193267-004	122912	Filtra	09-MAR-2007 18:30	1.0	1.0	1		5000		2:CA=179072
041	030907ar	SAMPLE	193267-005	122912	Filtra	09-MAR-2007 18:34	1.0	1.0			5000		3:CA=216178
042	030907ar	SAMPLE	193267-006	122912	Filtra	09-MAR-2007 18:36	1.0	1.0			5000		3:CA=278572
043	030907ar	SAMPLE	193267-007	122912	Filtra	09-MAR-2007 18:39	1.0	1.0	1		5000		3:NA=413013
044	030907ar	SAMPLE	193267-008	122912	Filtra	09-MAR-2007 18:42	1.0	1.0			5000		2:CA=227281
045	030907ar	ICSAB				09-MAR-2007 18:45	1.0	1.0			5000	8	5:CA=473015
046	030907ar	X	RINSE			09-MAR-2007 18:49	1.0						
047	030907ar	CCV				09-MAR-2007 18:53	1.0	1.0			5000	11	
048	030907ar	X	FLUSH			09-MAR-2007 18:56	1.0						
049	030907ar	CCB				09-MAR-2007 19:00	1.0	1.0			5000		

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/2007

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6010B

nst : MET09
alnum : 97101539001
nits : ug/L

Date : 11-MAR-2007 12:19
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	031107r	97101539002	CRIM08	11-MAR-2007 12:23	S5696
L2	031107r	97101539003	CS100	11-MAR-2007 12:27	S5428
L3	031107r	97101539004	CS1K	11-MAR-2007 12:30	S5427
L4	031107r	97101539005	CS10K	11-MAR-2007 12:32	S5323
L5	031107r	97101539006	CS100K	11-MAR-2007 12:36	S5561

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
ntimony	A	20.293	23.460	22.922	23.146		LOR0	0.00000	0.04321		22.455	1.000	0.995	
rsenic	A	11.745	10.985	10.840	10.953		LOR0	0.00000	0.09131		11.131	1.000	0.995	
arium	A	108.69	109.09	109.12	106.40		LOR0	0.00000	0.00940		108.32	1.000	0.995	
eryllium	A	4219.9	4215.2	4364.3			LOR0	0.00000	2.29E-4		4266.4	1.000	0.995	
oron	A	194.27		200.03	204.08		LOR0	0.00000	0.00490		199.46	1.000	0.995	
admium	A	196.04	195.48	204.01	196.03		LOR0	0.00000	0.00510		197.89	1.000	0.995	
hromium	A	184.09	183.41	186.10	182.60		LOR0	0.00000	0.00548		184.05	1.000	0.995	
obalt	A	60.656	61.977	62.004	62.204		LOR0	0.00000	0.01608		61.710	1.000	0.995	
opper	A	212.61	197.29	206.46	205.65		LOR0	0.00000	0.00486		205.50	1.000	0.995	
ead	A	54.081	59.400	58.800	57.717		LOR0	0.00000	0.01732		57.500	1.000	0.995	
anganese	A	547.17	557.86	567.68	533.49		LOR0	0.00000	0.00187		551.55	1.000	0.995	
olybdenum	A	49.571	49.980	47.619	47.096		LOR0	0.00000	0.02123		48.567	1.000	0.995	
ickel	A	94.505	96.984	100.67	98.368		LOR0	0.00000	0.01016		97.633	1.000	0.995	
elenium	A	11.435	14.937	14.695	15.168		LOR0	0.00000	0.06595		14.059	1.000	0.995	
ilver	A	483.93	520.67	536.87	526.68		LOR0	0.00000	0.00189		517.04	1.000	0.995	
hallium	A	11.355	12.137	12.124	11.957		LOR0	0.00000	0.08362		11.893	1.000	0.995	
in	A	21.251	21.155	20.474	22.000		LOR0	0.00000	0.04549		21.220	1.000	0.995	
itanium	A	762.60	778.12	791.15	741.79		LOR0	0.00000	0.00135		768.42	1.000	0.995	
anadium	A	214.68	203.87	207.01	207.10		LOR0	0.00000	0.00483		208.16	1.000	0.995	
inc	A	86.711	93.056	90.072	89.565		LOR0	0.00000	0.01116		89.851	1.000	0.995	
luminum	R	0.9816		1.0570	1.0095	1.0677	LOR0	0.00000	0.93713		1.0289	1.000	0.995	
alcium	R	10.765		11.131	10.499	10.734	LOR0	0.00000	0.09318		10.782	1.000	0.995	
ron	R	5.6918		5.8081	5.6050	5.7388	LOR0	0.00000	0.17429		5.7109	1.000	0.995	
agnesium	R	1.3823		1.4966	1.5005	1.5258	LOR0	0.00000	0.65551		1.4763	1.000	0.995	
otassium	R	3.0895		3.2515	3.2077	3.3410	LOR0	0.00000	0.29943		3.2224	1.000	0.995	
odium	R	302.11		326.59	310.56	312.25	LOR0	0.00000	0.00320		312.88	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Antimony	A	5.0000	100.00	1000.0	10000.0		ug/L
Arsenic	A	5.0000	100.00	1000.0	10000.0		ug/L
Barium	A	5.0000	100.00	1000.0	10000.0		ug/L
Beryllium	A	2.0000	100.00	1000.0			ug/L
Boron	A	100.00		1000.0	10000.0		ug/L
Cadmium	A	5.0000	100.00	1000.0	10000.0		ug/L
Chromium	A	5.0000	100.00	1000.0	10000.0		ug/L
Cobalt	A	5.0000	100.00	1000.0	10000.0		ug/L
Copper	A	5.0000	100.00	1000.0	10000.0		ug/L
Lead	A	3.0000	100.00	1000.0	10000.0		ug/L
Manganese	A	5.0000	100.00	1000.0	10000.0		ug/L
Molybdenum	A	5.0000	100.00	1000.0	10000.0		ug/L
Nickel	A	5.0000	100.00	1000.0	10000.0		ug/L
Selenium	A	5.0000	100.00	1000.0	10000.0		ug/L
Silver	A	5.0000	100.00	1000.0	2000.0		ug/L
Thallium	A	5.0000	100.00	1000.0	10000.0		ug/L
Tin	A	40.000	100.00	1000.0	10000.0		ug/L
Titanium	A	10.000	100.00	1000.0	10000.0		ug/L
Vanadium	A	5.0000	100.00	1000.0	10000.0		ug/L
Zinc	A	20.000	100.00	1000.0	10000.0		ug/L
Aluminum	R	100.00		1000.0	10000.0	100000	ug/L
Calcium	R	200.00		1000.0	10000.0	100000	ug/L
Iron	R	100.00		1000.0	10000.0	100000	ug/L
Magnesium	R	200.00		1000.0	10000.0	100000	ug/L
Potassium	R	500.00		1000.0	10000.0	100000	ug/L
Sodium	R	500.00		1000.0	10000.0	100000	ug/L

0015123

nstrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

Sequence No.: 1
Sample ID: ICALBLK,
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/11/2007 12:19:56 PM
Data Type: Reprocessed on 3/11/2007 1:12:12 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	185.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-1296.2	138.23	10.66%	[0.00]	ug/L
Al 308.215 R	58.6	1.47	2.52%	[0.00]	ug/L
As 188.979	-16.9	26.46	156.62%	[0.00]	ug/L
B 249.677	-1550.8	8.84	0.57%	[0.00]	ug/L
Ba 233.527	-21.5	3.90	18.19%	[0.00]	ug/L
Be 313.107	-1762.9	83.49	4.74%	[0.00]	ug/L
Ca 315.887 R	469.9	10.71	2.28%	[0.00]	ug/L
Cd 214.440	-71.3	5.13	7.19%	[0.00]	ug/L
Co 228.616	-48.7	4.40	9.04%	[0.00]	ug/L
Cr 267.716	-145.8	13.20	9.05%	[0.00]	ug/L
Cu 324.752	3388.1	74.64	2.20%	[0.00]	ug/L
Fe 238.204 R	-270.5	3.13	1.16%	[0.00]	ug/L
K 766.490 R	576.5	95.28	16.53%	[0.00]	ug/L
Mg 279.077 R	-352.3	4.52	1.28%	[0.00]	ug/L
Mn 257.610	-409.2	5.02	1.23%	[0.00]	ug/L
Mo 202.031	-25.7	2.67	10.36%	[0.00]	ug/L
Na 589.592 R	2206.0	1184.61	53.70%	[0.00]	ug/L
Ni 231.604	709.5	23.37	3.29%	[0.00]	ug/L
Pb 220.353	-208.3	10.67	5.12%	[0.00]	ug/L
Sb 206.836	-105.4	52.01	49.33%	[0.00]	ug/L
Se 196.026	-39.2	44.50	113.55%	[0.00]	ug/L
Ti 334.940 R	214.3	14.54	6.78%	[0.00]	ug/L
Tl 190.801	25.1	3.85	15.36%	[0.00]	ug/L
V 292.402	-1966.0	141.09	7.18%	[0.00]	ug/L
Zn 206.200	276.3	1.60	0.58%	[0.00]	ug/L
Sn 189.927	13.7	5.81	42.27%	[0.00]	ug/L

Sequence No.: 2
Sample ID: ICAL,CRIM08
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/11/2007 12:23:48 PM
Data Type: Reprocessed on 3/11/2007 1:12:13 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CRIM08

Analyte	Back Pressure	Flow
All	185.0 kPa	0.55 L/min

Mean Data: ICAL,CRIM08

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3416720.4	5062.77	0.15%	100.0	%
Y	330374.0	11355.64	3.44%	100.0	%
Ag 328.068†	2419.6	66.96	2.77%	[5.0]	ug/L
Al 308.215 R†	98.2	8.38	8.53%	[100]	ug/L
As 188.979†	58.7	15.00	25.55%	[5.0]	ug/L
B 249.677†	19426.7	320.10	1.65%	[100]	ug/L
Ba 233.527†	543.5	2.22	0.41%	[5.0]	ug/L
Be 313.107†	8439.7	75.99	0.90%	[2.0]	ug/L
Ca 315.887 R†	2153.0	114.92	5.34%	[200]	ug/L
Cd 214.440†	980.2	6.90	0.70%	[5.0]	ug/L
Co 228.616†	303.3	4.00	1.32%	[5.0]	ug/L
Cr 267.716†	920.5	15.53	1.69%	[5.0]	ug/L
Cu 324.752†	1063.0	59.11	5.56%	[5.0]	ug/L
Fe 238.204 R†	569.2	15.71	2.76%	[100]	ug/L
K 766.490 R†	1544.8	163.39	10.58%	[500]	ug/L
Mg 279.077 R†	276.5	4.97	1.80%	[200]	ug/L
Mn 257.610†	2735.9	20.31	0.74%	[5.0]	ug/L
Mo 202.031†	247.9	4.30	1.74%	[5.0]	ug/L
Na 589.592 R†	151053.5	3516.27	2.33%	[500]	ug/L
Ni 231.604†	472.5	18.06	3.82%	[5.0]	ug/L
Pb 220.353†	162.2	40.64	25.05%	[3.0]	ug/L
Sb 206.836†	101.5	26.50	26.11%	[5.0]	ug/L
Se 196.026†	57.2	43.39	75.90%	[5.0]	ug/L
Ti 334.940 R†	7626.0	53.53	0.70%	[10]	ug/L
Tl 190.801†	56.8	3.73	6.57%	[5.0]	ug/L
V 292.402†	1073.4	106.28	9.90%	[5.0]	ug/L
Zn 206.200†	1734.2	3.90	0.23%	[20]	ug/L
Sn 189.927†	850.0	10.21	1.20%	[40]	ug/L

Sequence No.: 3
Sample ID: ICAL,CS100
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/11/2007 12:27:45 PM
Data Type: Reprocessed on 3/11/2007 1:12:15 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	185.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3214973.5	169751.60	5.28%	94.10	%
Y	329040.4	1511.77	0.46%	99.60	%
Ag 328.068†	52067.4	489.39	0.94%	[100]	ug/L
As 188.979†	1098.5	85.75	7.81%	[100]	ug/L
Ba 233.527†	10908.7	692.24	6.35%	[100]	ug/L
Be 313.107†	421517.0	9109.06	2.16%	[100]	ug/L
Cd 214.440†	19547.7	425.03	2.17%	[100]	ug/L
Co 228.616†	6197.7	387.66	6.25%	[100]	ug/L
Cr 267.716†	18341.2	224.69	1.23%	[100]	ug/L
Cu 324.752†	19728.5	141.65	0.72%	[100]	ug/L
Mn 257.610†	55786.2	747.46	1.34%	[100]	ug/L
Mo 202.031†	4998.0	281.37	5.63%	[100]	ug/L
Ni 231.604†	9698.4	165.33	1.70%	[100]	ug/L
Pb 220.353†	5940.0	353.58	5.95%	[100]	ug/L
Sb 206.836†	2346.0	101.02	4.31%	[100]	ug/L
Se 196.026†	1493.7	117.45	7.86%	[100]	ug/L
Ti 334.940 R†	77811.8	338.32	0.43%	[100]	ug/L
Tl 190.801†	1213.7	76.16	6.27%	[100]	ug/L
V 292.402†	20387.5	286.85	1.41%	[100]	ug/L
Zn 206.200†	9305.6	621.99	6.68%	[100]	ug/L
Sn 189.927†	2115.5	124.63	5.89%	[100]	ug/L

Sequence No.: 4
Sample ID: ICAL,CS1K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/11/2007 12:30:44 PM
Data Type: Reprocessed on 3/11/2007 1:12:18 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	185.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3338303.9	19231.57	0.58%	97.70	%
Y	321528.4	12442.49	3.87%	97.32	%
Ag 328.068†	536872.8	2334.17	0.43%	[1000]	ug/L
Al 308.215 R†	1057.0	38.15	3.61%	[1000]	ug/L
As 188.979†	10839.6	475.05	4.38%	[1000]	ug/L
B 249.677†	200034.1	440.89	0.22%	[1000]	ug/L
Ba 233.527†	109119.7	495.52	0.45%	[1000]	ug/L
Be 313.107†	4364276.4	8527.28	0.20%	[1000]	ug/L
Ca 315.887 R†	11130.7	509.13	4.57%	[1000]	ug/L
Cd 214.440†	204005.0	646.08	0.32%	[1000]	ug/L
Co 228.616†	62003.9	1616.36	2.61%	[1000]	ug/L
Cr 267.716†	186104.2	646.55	0.35%	[1000]	ug/L
Cu 324.752†	206464.9	900.66	0.44%	[1000]	ug/L
Fe 238.204 R†	5808.1	228.93	3.94%	[1000]	ug/L
K 766.490 R†	3251.5	237.73	7.31%	[1000]	ug/L
Mg 279.077 R†	1496.6	34.22	2.29%	[1000]	ug/L
Mn 257.610†	567675.3	916.83	0.16%	[1000]	ug/L
Mo 202.031†	47619.2	1196.20	2.51%	[1000]	ug/L
Na 589.592 R†	326590.1	4740.46	1.45%	[1000]	ug/L
Ni 231.604†	100672.4	352.86	0.35%	[1000]	ug/L
Pb 220.353†	58800.4	1712.48	2.91%	[1000]	ug/L
Sb 206.836†	22921.5	447.19	1.95%	[1000]	ug/L
Se 196.026†	14695.0	434.49	2.96%	[1000]	ug/L
Ti 334.940 R†	791153.4	1650.13	0.21%	[1000]	ug/L
Tl 190.801†	12124.0	288.42	2.38%	[1000]	ug/L
V 292.402†	207009.0	321.63	0.16%	[1000]	ug/L
Zn 206.200†	90072.3	611.93	0.68%	[1000]	ug/L
Sn 189.927†	20474.5	489.37	2.39%	[1000]	ug/L

Sequence No.: 5
Sample ID: ICAL,CS10K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/11/2007 12:32:55 PM
Data Type: Reprocessed on 3/11/2007 1:12:21 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	186.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	3194753.5	21278.80	0.67%	93.50	%
Y	312835.3	3578.43	1.14%	94.69	%
Ag 328.068†	1053358.2	2390.58	0.23%	[2000]	ug/L
Al 308.215 R†	10094.6	34.12	0.34%	[10000]	ug/L
As 188.979†	109531.9	3028.79	2.77%	[10000]	ug/L
B 249.677†	2040816.9	8254.71	0.40%	[10000]	ug/L
Ba 233.527†	1063975.9	4838.33	0.45%	[10000]	ug/L
Ca 315.887 R†	104987.2	472.49	0.45%	[10000]	ug/L
Cd 214.440†	1960289.2	18257.85	0.93%	[10000]	ug/L
Co 228.616†	622043.1	3484.95	0.56%	[10000]	ug/L
Cr 267.716†	1826040.6	6143.25	0.34%	[10000]	ug/L
Cu 324.752†	2056481.6	16437.18	0.80%	[10000]	ug/L
Fe 238.204 R†	56050.1	258.22	0.46%	[10000]	ug/L
K 766.490 R†	32077.2	257.19	0.80%	[10000]	ug/L
Mg 279.077 R†	15005.1	105.08	0.70%	[10000]	ug/L
Mn 257.610†	5334899.0	28528.17	0.53%	[10000]	ug/L
Mo 202.031†	470962.9	11188.47	2.38%	[10000]	ug/L
Na 589.592 R†	3105575.7	10168.29	0.33%	[10000]	ug/L
Ni 231.604†	983682.5	4490.04	0.46%	[10000]	ug/L
Pb 220.353†	577170.6	15375.27	2.66%	[10000]	ug/L
Sb 206.836†	231463.7	5798.32	2.51%	[10000]	ug/L
Se 196.026†	151684.6	4588.89	3.03%	[10000]	ug/L
Ti 334.940 R†	7417921.9	19777.00	0.27%	[10000]	ug/L
Tl 190.801†	119571.2	2690.28	2.25%	[10000]	ug/L
V 292.402†	2070951.3	5792.31	0.28%	[10000]	ug/L
Zn 206.200†	895652.4	6719.98	0.75%	[10000]	ug/L
Sn 189.927†	220000.5	5625.97	2.56%	[10000]	ug/L

Sequence No.: 6
Sample ID: ICAL,CS100K
Analyst:
Logged In Analyst (Original) : met09
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/11/2007 12:36:24 PM
Data Type: Reprocessed on 3/11/2007 1:12:23 PM

Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	186.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2999049.0	36238.01	1.21%	87.78	%
Y	297334.5	9370.36	3.15%	90.00	%
Al 308.215 Rt	106766.1	2152.01	2.02%	[100000]	ug/L
Ca 315.887 Rt	1073438.7	17892.02	1.67%	[100000]	ug/L
Fe 238.204 Rt	573881.4	7665.45	1.34%	[100000]	ug/L
K 766.490 Rt	334102.3	5139.49	1.54%	[100000]	ug/L
Mg 279.077 Rt	152579.0	3216.13	2.11%	[100000]	ug/L
Na 589.592 Rt	31224788.2	611879.67	1.96%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	528.7	0.00000	0.999970	
Al 308.215 R	4	Lin Thru 0	0.0	1.067	0.00000	0.999985	
As 188.979	4	Lin Thru 0	0.0	10.95	0.00000	0.999999	
B 249.677	3	Lin Thru 0	0.0	204.0	0.00000	0.999998	
Ba 233.527	4	Lin Thru 0	0.0	106.4	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	4363	0.00000	0.999994	
Ca 315.887 R	4	Lin Thru 0	0.0	10.73	0.00000	0.999998	
Cd 214.440	4	Lin Thru 0	0.0	196.1	0.00000	0.999992	
Co 228.616	4	Lin Thru 0	0.0	62.20	0.00000	1.000000	
Cr 267.716	4	Lin Thru 0	0.0	182.6	0.00000	0.999998	
Cu 324.752	4	Lin Thru 0	0.0	205.7	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	5.737	0.00000	0.999997	
K 766.490 R	4	Lin Thru 0	0.0	3.340	0.00000	0.999992	
Mg 279.077 R	4	Lin Thru 0	0.0	1.526	0.00000	0.999999	
Mn 257.610	4	Lin Thru 0	0.0	533.8	0.00000	0.999980	
Mo 202.031	4	Lin Thru 0	0.0	47.10	0.00000	0.999999	
Na 589.592 R	4	Lin Thru 0	0.0	312.2	0.00000	1.000000	
Ni 231.604	4	Lin Thru 0	0.0	98.39	0.00000	0.999997	
Pb 220.353	4	Lin Thru 0	0.0	57.73	0.00000	0.999998	
Sb 206.836	4	Lin Thru 0	0.0	23.14	0.00000	1.000000	
Se 196.026	4	Lin Thru 0	0.0	15.16	0.00000	0.999995	
Ti 334.940 R	4	Lin Thru 0	0.0	742.3	0.00000	0.999978	
Tl 190.801	4	Lin Thru 0	0.0	11.96	0.00000	0.999999	
V 292.402	4	Lin Thru 0	0.0	207.1	0.00000	1.000000	
Zn 206.200	4	Lin Thru 0	0.0	89.57	0.00000	1.000000	
Sn 189.927	4	Lin Thru 0	0.0	21.98	0.00000	0.999976	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6010B

Inst : MET09
Seqnum : 97101539007
Cal : 97101539001
Standards: S5324

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 12:39

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	22.455	23.867	5000	5156	ug/L	3	10	
Arsenic	A	11.131	11.475	5000	5239	ug/L	5	10	
Barium	A	108.32	109.20	5000	5131	ug/L	3	10	
Beryllium	A	4266.4	4426.4	500.0	507.3	ug/L	1	10	
Boron	A	199.46	209.82	5000	5142	ug/L	3	10	
Cadmium	A	197.89	204.06	5000	5203	ug/L	4	10	
Chromium	A	184.05	186.02	5000	5093	ug/L	2	10	
Cobalt	A	61.710	62.764	5000	5034	ug/L	1	10	
Copper	A	205.50	201.58	5000	4901	ug/L	-2	10	
Lead	A	57.500	58.741	5000	5088	ug/L	2	10	
Manganese	A	551.55	544.73	5000	5102	ug/L	2	10	
Molybdenum	A	48.567	49.850	5000	5292	ug/L	6	10	
Nickel	A	97.633	99.194	5000	5041	ug/L	1	10	
Selenium	A	14.059	15.442	5000	5092	ug/L	2	10	
Silver	A	517.04	516.98	1000	977.8	ug/L	-2	10	
Thallium	A	11.893	12.155	5000	5082	ug/L	2	10	
Tin	A	21.220	21.584	5000	4909	ug/L	-2	10	
Titanium	A	768.42	743.98	5000	5011	ug/L	0	10	
Vanadium	A	208.16	209.58	5000	5060	ug/L	1	10	
Zinc	A	89.851	91.218	5000	5092	ug/L	2	10	
Aluminum	R	1.0289	1.0599	20000	19870	ug/L	-1	10	
Calcium	R	10.782	10.991	20000	20480	ug/L	2	10	
Iron	R	5.7109	5.8916	20000	20540	ug/L	3	10	
Magnesium	R	1.4763	1.5678	20000	20550	ug/L	3	10	
Potassium	R	3.2224	3.3508	20000	20070	ug/L	0	10	
Sodium	R	312.88	314.64	20000	20150	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3152937	-7.72

97101539007

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09
Seqnum : 97101539020
Cal : 97101539001
Standards: S5325

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 13:42

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.455	22.846	5000	4936	ug/L	-1	10	
Arsenic	A	11.131	10.943	5000	4996	ug/L	0	10	
Barium	A	108.32	107.60	5000	5055	ug/L	1	10	
Beryllium	A	4266.4	4378.3	500.0	501.8	ug/L	0	10	
Boron	A	199.46	207.95	5000	5096	ug/L	2	10	
Cadmium	A	197.89	202.46	5000	5162	ug/L	3	10	
Chromium	A	184.05	182.83	5000	5005	ug/L	0	10	
Cobalt	A	61.710	59.832	5000	4798	ug/L	-4	10	
Copper	A	205.50	198.68	5000	4830	ug/L	-3	10	
Lead	A	57.500	55.823	5000	4835	ug/L	-3	10	
Manganese	A	551.55	542.87	5000	5085	ug/L	2	10	
Molybdenum	A	48.567	47.762	5000	5070	ug/L	1	10	
Nickel	A	97.633	97.503	5000	4955	ug/L	-1	10	
Selenium	A	14.059	14.699	5000	4847	ug/L	-3	10	
Silver	A	517.04	498.42	1000	942.7	ug/L	-6	10	
Thallium	A	11.893	11.641	5000	4867	ug/L	-3	10	
Tin	A	21.220	20.569	5000	4678	ug/L	-6	10	
Titanium	A	768.42	742.67	5000	5003	ug/L	0	10	
Vanadium	A	208.16	206.23	5000	4979	ug/L	0	10	
Zinc	A	89.851	89.285	5000	4984	ug/L	0	10	
Aluminum	R	1.0289	1.0255	20000	19220	ug/L	-4	10	
Calcium	R	10.782	10.704	20000	19950	ug/L	0	10	
Iron	R	5.7109	5.7408	20000	20010	ug/L	0	10	
Magnesium	R	1.4763	1.5192	20000	19920	ug/L	0	10	
Potassium	R	3.2224	3.2447	20000	19430	ug/L	-3	10	
Sodium	R	312.88	304.31	20000	19490	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3194273	-6.51

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09
Seqnum : 97101539034
Cal : 97101539001
Standards: S5325

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 14:33

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.455	22.872	5000	4941	ug/L	-1	10	
Arsenic	A	11.131	10.858	5000	4957	ug/L	-1	10	
Barium	A	108.32	106.12	5000	4986	ug/L	0	10	
Beryllium	A	4266.4	4330.6	500.0	496.3	ug/L	-1	10	
Boron	A	199.46	206.28	5000	5055	ug/L	1	10	
Cadmium	A	197.89	198.87	5000	5070	ug/L	1	10	
Chromium	A	184.05	180.23	5000	4934	ug/L	-1	10	
Cobalt	A	61.710	60.047	5000	4816	ug/L	-4	10	
Copper	A	205.50	197.28	5000	4796	ug/L	-4	10	
Lead	A	57.500	55.670	5000	4822	ug/L	-4	10	
Manganese	A	551.55	538.22	5000	5041	ug/L	1	10	
Molybdenum	A	48.567	47.558	5000	5048	ug/L	1	10	
Nickel	A	97.633	96.088	5000	4883	ug/L	-2	10	
Selenium	A	14.059	14.591	5000	4811	ug/L	-4	10	
Silver	A	517.04	500.98	1000	947.6	ug/L	-5	10	
Thallium	A	11.893	11.597	5000	4849	ug/L	-3	10	
Tin	A	21.220	20.604	5000	4686	ug/L	-6	10	
Titanium	A	768.42	737.40	5000	4967	ug/L	-1	10	
Vanadium	A	208.16	203.90	5000	4923	ug/L	-2	10	
Zinc	A	89.851	87.111	5000	4863	ug/L	-3	10	
Aluminum	R	1.0289	1.0148	20000	19020	ug/L	-5	10	
Calcium	R	10.782	10.519	20000	19600	ug/L	-2	10	
Iron	R	5.7109	5.6464	20000	19680	ug/L	-2	10	
Magnesium	R	1.4763	1.4824	20000	19430	ug/L	-3	10	
Potassium	R	3.2224	3.2544	20000	19490	ug/L	-3	10	
Sodium	R	312.88	306.68	20000	19640	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3094527	-9.43

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET09
Seqnum : 97101539049
Cal : 97101539001
Standards: S5325

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 15:42

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	22.455	23.233	5000	5019	ug/L	0	10	
Arsenic	A	11.131	11.111	5000	5073	ug/L	1	10	
Barium	A	108.32	107.10	5000	5032	ug/L	1	10	
Beryllium	A	4266.4	4356.4	500.0	499.3	ug/L	0	10	
Boron	A	199.46	208.87	5000	5118	ug/L	2	10	
Cadmium	A	197.89	201.90	5000	5148	ug/L	3	10	
Chromium	A	184.05	182.20	5000	4988	ug/L	0	10	
Cobalt	A	61.710	61.007	5000	4893	ug/L	-2	10	
Copper	A	205.50	197.30	5000	4797	ug/L	-4	10	
Lead	A	57.500	56.882	5000	4927	ug/L	-1	10	
Manganese	A	551.55	540.22	5000	5060	ug/L	1	10	
Molybdenum	A	48.567	48.494	5000	5148	ug/L	3	10	
Nickel	A	97.633	97.181	5000	4939	ug/L	-1	10	
Selenium	A	14.059	14.924	5000	4921	ug/L	-2	10	
Silver	A	517.04	508.53	1000	961.8	ug/L	-4	10	
Thallium	A	11.893	11.894	5000	4973	ug/L	-1	10	
Tin	A	21.220	21.005	5000	4777	ug/L	-4	10	
Titanium	A	768.42	734.85	5000	4950	ug/L	-1	10	
Vanadium	A	208.16	206.05	5000	4975	ug/L	-1	10	
Zinc	A	89.851	88.325	5000	4930	ug/L	-1	10	
Aluminum	R	1.0289	0.9948	20000	18650	ug/L	-7	10	
Calcium	R	10.782	10.338	20000	19270	ug/L	-4	10	
Iron	R	5.7109	5.4997	20000	19170	ug/L	-4	10	
Magnesium	R	1.4763	1.4490	20000	19000	ug/L	-5	10	
Potassium	R	3.2224	3.2253	20000	19310	ug/L	-3	10	
Sodium	R	312.88	302.88	20000	19400	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3124077	-8.57

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09
Seqnum : 97101539008 File : 031107r IDF : 1.0
Cal : 97101539001 Caldate: 11-MAR-2007 Time : 11-MAR-2007 12:53

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	[1.253]	5.000	1.074	ug/L	!ib
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.1708]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[12.54]	100.0	3.849	ug/L	!ib
Cadmium	A	ND	5.000	0.1091	ug/L	
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	[0.3041]	5.000	0.3034	ug/L	!ib
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	[1.144]	3.000	0.6892	ug/L	!ib
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[1.317]	5.000	0.4140	ug/L	!ib
Nickel	A	ND	5.000	0.3660	ug/L	
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	ND	500.0	39.71	ug/L	
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3343808	-2.13

!=warning ib=instrument blank

97101539008

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09
Seqnum : 97101539022
Cal : 97101539001

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 13:49

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.1409]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[26.53]	100.0	3.849	ug/L	!ib
Cadmium	A	ND	5.000	0.1091	ug/L	
Chromium	A	ND	5.000	0.2448	ug/L	
Cobalt	A	ND	5.000	0.3034	ug/L	
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	[0.7570]	3.000	0.6892	ug/L	!ib
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[2.803]	5.000	0.4140	ug/L	!ib
Nickel	A	[0.4529]	5.000	0.3660	ug/L	!ib
Selenium	A	[2.950]	5.000	1.469	ug/L	!ib
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	ND	500.0	39.71	ug/L	
Sodium	R	ND	500.0	17.18	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3326551	-2.64

!=warning ib=instrument blank

97101539022

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09
Seqnum : 97101539036 File : 031107r
Cal : 97101539001 Caldate: 11-MAR-2007
IDF : 1.0
Time : 11-MAR-2007 14:40

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2124]	5.000	0.1113	ug/L	!ib
Beryllium	A	ND	2.000	0.04231	ug/L	
Boron	A	[21.47]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.2591]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.3359]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.4166]	5.000	0.3034	ug/L	!ib
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	ND	5.000	0.4388	ug/L	
Molybdenum	A	[2.693]	5.000	0.4140	ug/L	!ib
Nickel	A	[0.4961]	5.000	0.3660	ug/L	!ib
Selenium	A	[3.007]	5.000	1.469	ug/L	!ib
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	[41.31]	500.0	39.71	ug/L	!ib
Sodium	R	[163.7]	500.0	17.18	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3380721	-1.05

!=warning ib=instrument blank

97101539036

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET09
Seqnum : 97101539051
Cal : 97101539001

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 15:50

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	1.074	ug/L	
Arsenic	A	ND	5.000	2.042	ug/L	
Barium	A	[0.2766]	5.000	0.1113	ug/L	!ib
Beryllium	A	[0.09084]	2.000	0.04231	ug/L	!ib
Boron	A	[18.29]	100.0	3.849	ug/L	!ib
Cadmium	A	[0.3031]	5.000	0.1091	ug/L	!ib
Chromium	A	[0.2769]	5.000	0.2448	ug/L	!ib
Cobalt	A	[0.4994]	5.000	0.3034	ug/L	!ib
Copper	A	ND	5.000	0.8535	ug/L	
Lead	A	ND	3.000	0.6892	ug/L	
Manganese	A	[0.4803]	5.000	0.4388	ug/L	!ib
Molybdenum	A	[2.572]	5.000	0.4140	ug/L	!ib
Nickel	A	[0.5845]	5.000	0.3660	ug/L	!ib
Selenium	A	ND	5.000	1.469	ug/L	
Silver	A	ND	5.000	0.7459	ug/L	
Thallium	A	ND	5.000	1.616	ug/L	
Tin	A	ND	40.00	5.000	ug/L	
Titanium	A	ND	10.00	1.018	ug/L	
Vanadium	A	ND	5.000	1.034	ug/L	
Zinc	A	ND	20.00	0.8377	ug/L	
Aluminum	R	ND	100.0	10.62	ug/L	
Calcium	R	ND	200.0	44.07	ug/L	
Iron	R	ND	100.0	6.086	ug/L	
Magnesium	R	ND	200.0	10.47	ug/L	
Potassium	R	ND	500.0	39.71	ug/L	
Sodium	R	[141.9]	500.0	17.18	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	3245851	-5.00

!=warning ib=instrument blank

97101539051

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6010B

Inst : MET09
Seqnum : 97101539009 File : 031107r
Cal : 97101539001 Caldate: 11-MAR-2007
Standards: S5626

IDF : 1.0
Time : 11-MAR-2007 12:58

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[3.093]	5.000	ug/L	
Arsenic	A	[1.129]	5.000	ug/L	
Barium	A	[-0.9555]	5.000	ug/L	
Beryllium	A	[-0.8466]	2.000	ug/L	
Boron	A	[48.04]	100.0	ug/L	
Cadmium	A	[-0.01866]	5.000	ug/L	
Cobalt	A	[0.08767]	5.000	ug/L	
Lead	A	[1.253]	3.000	ug/L	
Molybdenum	A	[-0.8017]	5.000	ug/L	
Selenium	A	[0.9762]	5.000	ug/L	
Silver	A	[-3.714]	5.000	ug/L	
Thallium	A	[-1.614]	5.000	ug/L	
Tin	A	[-8.339]	40.00	ug/L	
Zinc	A	[11.25]	20.00	ug/L	
Potassium	R	[34.05]	500.0	ug/L	
Sodium	R	[-24.17]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	18840	ug/L	94
Copper	A	20000	19580	ug/L	98
Manganese	A	20000	18540	ug/L	93
Nickel	A	20000	17040	ug/L	85
Titanium	A	20000	19740	ug/L	99
Vanadium	A	20000	19690	ug/L	98
Aluminum	R	500000	480000	ug/L	96
Calcium	R	500000	467000	ug/L	93
Iron	R	200000	182500	ug/L	91
Magnesium	R	500000	471900	ug/L	94

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	2764977	-19.08

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09
Seqnum : 97101539010
Cal : 97101539001
Standards: S5562

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 12:59

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	490.2	ug/L	-2	20	
Arsenic	A	500.0	492.2	ug/L	-2	20	
Barium	A	500.0	502.4	ug/L	0	20	
Beryllium	A	500.0	515.8	ug/L	3	20	
Cadmium	A	1000	1002	ug/L	0	20	
Chromium	A	500.0	509.8	ug/L	2	20	
Cobalt	A	500.0	424.2	ug/L	-15	20	
Copper	A	500.0	527.3	ug/L	5	20	
Lead	A	1000	874.9	ug/L	-13	20	
Manganese	A	500.0	523.9	ug/L	5	20	
Molybdenum	A	500.0	509.6	ug/L	2	20	
Nickel	A	1000	900.9	ug/L	-10	20	
Selenium	A	500.0	510.3	ug/L	2	20	
Silver	A	1000	992.1	ug/L	-1	20	
Thallium	A	500.0	449.7	ug/L	-10	20	
Titanium	A	20000	20010	ug/L	0		
Vanadium	A	500.0	528.8	ug/L	6	20	
Zinc	A	1000	942.7	ug/L	-6	20	
Aluminum	R	500000	459100	ug/L	-8		
Calcium	R	500000	445900	ug/L	-11		
Iron	R	200000	175000	ug/L	-12		
Magnesium	R	500000	450900	ug/L	-10		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	2779121	-18.66

97101539010

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET09
Seqnum : 97101539047
Cal : 97101539001
Standards: S5562

File : 031107r
Caldate: 11-MAR-2007

IDF : 1.0
Time : 11-MAR-2007 15:35

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	510.4	ug/L	2	20	
Arsenic	A	500.0	529.4	ug/L	6	20	
Barium	A	500.0	528.9	ug/L	6	20	
Beryllium	A	500.0	527.4	ug/L	5	20	
Cadmium	A	1000	1020	ug/L	2	20	
Chromium	A	500.0	516.5	ug/L	3	20	
Cobalt	A	500.0	451.9	ug/L	-10	20	
Copper	A	500.0	525.2	ug/L	5	20	
Lead	A	1000	917.2	ug/L	-8	20	
Manganese	A	500.0	534.0	ug/L	7	20	
Molybdenum	A	500.0	535.6	ug/L	7	20	
Nickel	A	1000	917.4	ug/L	-8	20	
Selenium	A	500.0	535.9	ug/L	7	20	
Silver	A	1000	1010	ug/L	1	20	
Thallium	A	500.0	457.9	ug/L	-8	20	
Titanium	A	20000	20510	ug/L	3		
Vanadium	A	500.0	536.5	ug/L	7	20	
Zinc	A	1000	956.4	ug/L	-4	20	
Aluminum	R	500000	459000	ug/L	-8		
Calcium	R	500000	462900	ug/L	-7		
Iron	R	200000	178800	ug/L	-11		
Magnesium	R	500000	464900	ug/L	-7		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	3416720	2709161	-20.71

97101539047

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97101539 Instrument: MET09 PE ICP MET09 Begun: 11-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	031107r	ICALBLK				11-MAR-2007 12:19	1.0	1.0					
002	031107r	ICAL	CRIM08			11-MAR-2007 12:23	1.0	1.0				1	
003	031107r	ICAL	CS100			11-MAR-2007 12:27	1.0	1.0				2	
004	031107r	ICAL	CS1K			11-MAR-2007 12:30	1.0	1.0				3	
005	031107r	ICAL	CS10K			11-MAR-2007 12:32	1.0	1.0				4	
006	031107r	ICAL	CS100K			11-MAR-2007 12:36	1.0	1.0				5	
007	031107r	ICV				11-MAR-2007 12:39	1.0	1.0			5000	6	
008	031107r	ICB				11-MAR-2007 12:53	1.0	1.0			5000		
009	031107r	ICSA				11-MAR-2007 12:58	1.0	1.0			5000	7	10:AL=480033
010	031107r	ICSAB				11-MAR-2007 12:59	1.0	1.0			5000	8	5:AL=459057
011	031107r	BLANK	QC378528	122948	Filtra	11-MAR-2007 13:13	1.0	1.0			5000		
012	031107r	BS	QC378529	122948	Filtra	11-MAR-2007 13:17	1.0	1.0			5000		
013	031107r	BSD	QC378530	122948	Filtra	11-MAR-2007 13:20	1.0	1.0			5000		
014	031107r	MSS	193332-003	122948	Filtra	11-MAR-2007 13:23	1.0	1.0	1		5000		1:NA=172482
015	031107r	MS	QC378531	122948	Filtra	11-MAR-2007 13:26	1.0	1.0			5000		1:NA=192045
016	031107r	MSD	QC378532	122948	Filtra	11-MAR-2007 13:29	1.0	1.0			5000		1:NA=199997
017	031107r	SER	QC378533	122948	Filtra	11-MAR-2007 13:32	5.0	1.0		1	5000		
018	031107r	PDS	QC378534	122948	Filtra	11-MAR-2007 13:35	1.0	1.0			5000	9 10	1:NA=186142
019	031107r	X	RINSE			11-MAR-2007 13:38	1.0						
020	031107r	CCV				11-MAR-2007 13:42	1.0	1.0			5000	11	
021	031107r	X	FLUSH			11-MAR-2007 13:45	1.0						
022	031107r	CCB				11-MAR-2007 13:49	1.0	1.0			5000		
023	031107r	SAMPLE	193332-001	122948	Filtra	11-MAR-2007 13:53	1.0	1.0			5000		1:NA=164658
024	031107r	SAMPLE	193332-002	122948	Filtra	11-MAR-2007 13:57	1.0	1.0			5000		1:NA=145328
025	031107r	SAMPLE	193332-005	122948	Filtra	11-MAR-2007 14:00	1.0	1.0			5000		1:NA=140944
026	031107r	SAMPLE	193333-001	122948	Filtra	11-MAR-2007 14:03	1.0	1.0			5000		1:NA=175275
027	031107r	SAMPLE	193289-001	122948	Filtra	11-MAR-2007 14:07	1.0	1.0			5000		1:CA=103661
028	031107r	SAMPLE	193316-001	122948	Filtra	11-MAR-2007 14:10	1.0	1.0			5000		
029	031107r	SAMPLE	193322-052	122948	Filtra	11-MAR-2007 14:14	1.0	1.0			5000		1:CA=180362
030	031107r	SAMPLE	193319-001	122948	Water	11-MAR-2007 14:18	1.0	1.0			5000		
031	031107r	SAMPLE	193337-001	122948	Water	11-MAR-2007 14:22	1.0	1.0			5000		1:NA=496244

Stds used: 1=S5696 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 97101539 Instrument: MET09 PE ICP MET09 Begun: 11-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
032	031107r	SAMPLE	193339-002	122948	Water	11-MAR-2007 14:25	1.0	1.0	5000		4:MG=347739
033	031107r	X	RINSE			11-MAR-2007 14:29	1.0				
034	031107r	CCV				11-MAR-2007 14:33	1.0	1.0	5000	11	
035	031107r	X	FLUSH			11-MAR-2007 14:37	1.0				
036	031107r	CCB				11-MAR-2007 14:40	1.0	1.0	5000		
037	031107r	SAMPLE	193339-003	122948	Water	11-MAR-2007 14:44	1.0	1.0	5000		2:NA=282746
038	031107r	SAMPLE	193339-005	122948	Water	11-MAR-2007 14:47	1.0	1.0	5000		2:NA=270511
039	031107r	SAMPLE	193339-006	122948	Water	11-MAR-2007 14:51	1.0	1.0	5000		
040	031107r	SAMPLE	193322-052	122948	Filtra	11-MAR-2007 14:55	1.0	1.0	5000		1:CA=179497
041	031107r	SAMPLE	193339-007	122948	Water	11-MAR-2007 14:59	1.0	1.0	5000		
042	031107r	SAMPLE	193290-001	122948	Water	11-MAR-2007 15:03	1.0	1.0	5000		3:MG=478088
043	031107r	SAMPLE	193299-001	122948	Water	11-MAR-2007 15:07	1.0	1.0	5000		3:MG=402677
044	031107r	SAMPLE	193301-003	122948	Water	11-MAR-2007 15:12	1.0	1.0	5000		3:MG=388990
045	031107r	SAMPLE	193264-001	122912	Water	11-MAR-2007 15:16	10.0	1.0	5000		1:NA=298953
046	031107r	SAMPLE	193262-019	122912	Water	11-MAR-2007 15:32	5.0	1.0	5000		
047	031107r	ICSAB				11-MAR-2007 15:35	1.0	1.0	5000	8	5:MG=464868
048	031107r	X	RINSE			11-MAR-2007 15:38	1.0				
049	031107r	CCV				11-MAR-2007 15:42	1.0	1.0	5000	11	
050	031107r	X	FLUSH			11-MAR-2007 15:46	1.0				
051	031107r	CCB				11-MAR-2007 15:50	1.0	1.0	5000		

Stds used: 1=S5696 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67108851001
Units : ug/L

Date : 16-MAR-2007 14:30
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c16o0005	67108851005		16-MAR-2007 14:35	S5645
L2	c16o0006	67108851006		16-MAR-2007 14:40	S5648
L3	c16o0007	67108851007		16-MAR-2007 14:46	S5649
L4	c16o0008	67108851008		16-MAR-2007 14:51	S5650
L5	c16o0009	67108851009		16-MAR-2007 14:56	S5644
L6	c16o0010	67108851010		16-MAR-2007 15:02	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	1.0130	0.7793	0.6690	0.5970	0.6022	0.5802	BLNK	-1.4519	1.71055		0.7068	1.000	0.995	
Antimony	A	1.7044	0.3691	0.3444	0.3218	0.3329	0.3383	BLNK	-0.0096	2.96616		0.5685	1.000	0.995	
Barium	A	0.7802	0.2646	0.1630	0.0840	0.0779	0.0763	BLNK	-0.2930	13.0748		0.2410	1.000	0.995	
Beryllium	A	0.3036	0.3019	0.2973	0.2779	0.2836	0.2601	BLNK	-0.0075	3.77624		0.2874	0.998	0.995	
Cadmium	A	0.0924	0.0937	0.0888	0.0870	0.0882	0.0871	BLNK	-0.0027	11.4504		0.0895	1.000	0.995	
Calcium	A	0.0921	0.0372	0.0306	0.0232	0.0228	0.0217	BLNK	-12.518	45.7140		0.0379	0.999	0.995	
Lead	A	1.3844	0.9763	0.8046	0.7197	0.7266	0.7066	BLNK	-0.0509	1.40763		0.8864	1.000	0.995	
Magnesium	A	0.7489	0.6423	0.5606	0.5132	0.5095	0.4873	BLNK	-1.8260	2.03382		0.5770	1.000	0.995	
Molybdenum	A	0.2604	0.2423	0.2340	0.2245	0.2274	0.2302	BLNK	-0.0136	4.35458		0.2365	1.000	0.995	
Potassium	A	7.4369	2.0792	1.3713	0.7263	0.6765	0.6469	BLNK	-96.156	1.54059		2.1562	1.000	0.995	
Silver	A	0.3833	0.3579	0.3474	0.3309	0.3332	0.3408	BLNK	-0.0057	2.94793		0.3489	1.000	0.995	
Thallium	A	1.1615	0.9596	0.8915	0.8414	0.9117	0.8974	BLNK	-0.0200	1.11122		0.9438	1.000	0.995	
Arsenic	E	0.8331	0.6775	0.5883	0.5707	0.5859	0.5751	BLNK	-0.0271	1.73275		0.6384	1.000	0.995	
Chromium	E	8.9815	4.4451	3.7415	3.2474	3.1799	3.1395	BLNK	-0.1668	0.31801		4.4558	1.000	0.995	
Cobalt	E	5.6808	5.4198	5.3026	5.1057	4.9899	4.8973	BLNK	-0.0039	0.20341		5.2327	1.000	0.995	
Copper	E	133.28	34.002	18.506	7.9548	6.7069	6.4488	BLNK	-1.4891	0.15518		34.484	1.000	0.995	
Manganese	E	3.4604	2.1212	1.8742	1.7538	1.7071	1.6821	BLNK	-0.0255	0.59278		2.0998	1.000	0.995	
Nickel	E	4.6125	1.9867	1.6481	1.3975	1.3245	1.2922	BLNK	-0.0832	0.77032		2.0436	1.000	0.995	
Sodium	E	5.8808	1.7205	1.2362	0.7505	0.6266	0.6137	BLNK	-74.082	1.62931		1.8047	1.000	0.995	
Vanadium	E	8.9152	3.9984	3.1543	2.5047	2.4598	2.4643	BLNK	-0.2402	0.40653		3.9161	1.000	0.995	
Zinc	E	76.215	17.285	7.2509	1.7978	1.1407	1.0815	BLNK	-4.4183	0.93839		17.462	0.999	0.995	
Iron	H	1.2467	1.1420	0.9731	0.8842	0.8831	0.8605	BLNK	-1.2978	1.15603		0.9983	1.000	0.995	
Selenium	H	0.1329	0.1219	0.1359	0.1271	0.1272	0.1228	BLNK	-0.0060	8.08831		0.1280	1.000	0.995	

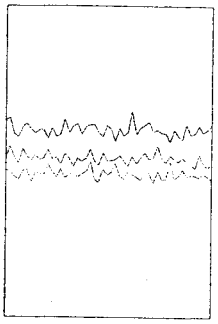
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

nstrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67108851001

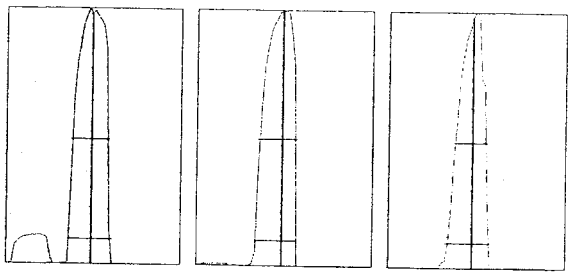
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	12320.0	12032.8	3.33	0.30
89	50,000	24698.0	25468.5	3.28	0.30
205	50,000	22150.0	23000.9	3.52	1.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.989%
Doubly Charged: 70/140 1.528%



m/z:	7	89	205
Height:	12,092	25,697	22,636
Axis:	7.00	89.00	204.95
W-50%:	0.65	0.65	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	1.1 mm
Torch-V	:	0.6 mm
Carrier Gas	:	1.02 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-120 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	1 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-4 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0017
Axis Offset	:	-0.03
QP Bias	:	-1 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1770 V
Pulse HV	:	1420 V

===Reaction Cell===

Reaction Mode	:	OFF
H2 Gas	:	0 mL/min

He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-13 V

m/z	Count(Mean)	RSD%
51	30.9	19.99
59	2672.7	3.55
89	2067.7	3.71

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	2842.2	4.88
78	0.4	159.72
89	20075.5	3.28

Integration Time: 0.1000sec

Generated : Mar 16, 2007 13:37:20
Printed : Mar 16, 2007 13:39:00 00444

P/A Factor Tuning Report

Acquired:Mar 16 2007 01:47 pm

Mass[amu]	Element	P/A Factor
6	Li	0.064266
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.090410
45	Sc	0.089518
51	V	0.090500
52	Cr	0.095455
55	Mn	0.096473
56	Fe	Sensitivity too high
59	Co	0.100782
60	Ni	Sensitivity too low
63	Cu	0.104619
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.102133
98	Mo	0.102399
99	(Ru)	Sensitivity too low
107	Ag	0.110632
111	Cd	Sensitivity too low
115	In	0.109969
118	(In)	0.109245
121	Sb	0.108024
137	Ba	Sensitivity too low
159	Tb	0.111842
205	Tl	0.116594
206	(Pb)	0.116527
207	(Pb)	0.116248
208	Pb	0.116338
209	Bi	0.117327

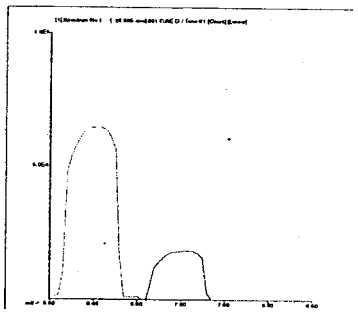
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1420 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C16o01.B\001TUNE.D
Date Acquired:	Mar 16 2007 02:11 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.05	5.00	
59 Co	0.86	5.00	
115 In	1.86	5.00	
205 Tl	1.44	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

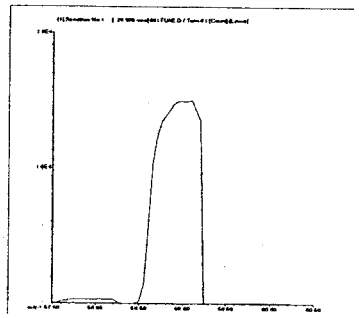
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

Flag:

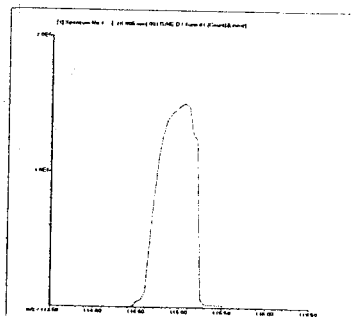
Peak Width

Actual: 0.60

Required: 0.90

Flag:

00146



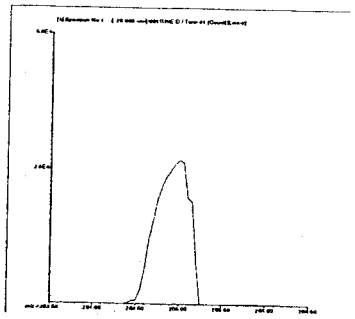
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004C
Date Acquired:	Mar 16 2007 02:27 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Mar 16 2007 02:31 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	647013.00	A	5840.00	0.90
7	(Li)		P		
9	Be	25.56	P	7.70	30.13
23	Na	25425.33	P	258.50	1.02
24	Mg	15314.22	P	67.16	0.44
27	Al	14476.68	P	310.20	2.14
39	K	1064558.00	A	8310.00	0.78
44	Ca	4670.94	P	210.00	4.50
45	Sc	427308.91	P	471.70	0.11
45	Sc	27959.15	P	155.20	0.56
45	Sc	852845.00	A	4845.00	0.57
51	V	330.38	P	15.13	4.58
52	Cr	293.34	P	2.94	1.00
55	Mn	24.07	P	2.31	9.61
56	Fe	9594.48	P	34.68	0.36
59	Co	10.74	P	4.49	41.80
60	Ni	60.37	P	3.90	6.46
63	Cu	2992.20	P	44.46	1.49
65	Cu	1450.83	P	15.77	1.09
66	Zn	1468.61	P	48.21	3.28
72	Ge	105109.40	P	986.80	0.94
72	Ge	15593.30	P	296.60	1.90
75	As	4.89	P	0.77	15.75
78	Se	1.56	P	0.77	49.49
89	Y	1356281.00	A	6536.00	0.48
98	Mo	84.45	P	7.70	9.12
107	Ag	55.56	P	8.39	15.10
111	Cd	6.67	P	3.33	49.99
115	In	1435537.00	A	7170.00	0.50
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	93.34	P	23.33	25.00
137	Ba	996.75	P	30.55	3.07
159	Tb	2224182.00	A	16560.00	0.74
205	Tl	504.47	P	22.19	4.40
208	Pb	1607.88	P	85.73	5.33
209	Bi	1399318.00	A	10690.00	0.76

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\005CALS.D\005CALS.D#
Date Acquired: Mar 16 2007 02:33 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	636584.38	A	1824.00	0.29
7	(Li)		P		
9	Be	386.69	P	60.65	15.69
23	Na	32860.75	P	125.00	0.38
24	Mg	125189.70	P	1763.00	1.41
27	Al	169335.20	P	657.10	0.39
39	K	1243151.00	A	4069.00	0.33
44	Ca	15391.09	P	168.70	1.10
45	Sc	433383.50	P	3355.00	0.77
45	Sc	27939.54	P	157.00	0.56
45	Sc	835842.00	A	9136.00	1.09
51	V	498.16	P	17.01	3.41
52	Cr	501.87	P	14.11	2.81
55	Mn	193.34	P	13.33	6.89
56	Fe	108062.80	P	1722.00	1.59
59	Co	317.42	P	8.34	2.63
60	Ni	257.78	P	11.71	4.54
63	Cu	4125.47	P	35.33	0.86
65	Cu	2017.58	P	40.56	2.01
66	Zn	2358.75	P	96.92	4.11
72	Ge	107028.00	P	865.30	0.81
72	Ge	15477.25	P	104.50	0.68
75	As	25.78	P	2.14	8.31
78	Se	28.44	P	5.82	20.48
89	Y	1357061.00	A	9624.00	0.71
98	Mo	706.71	P	55.68	7.88
99	(Ru)	2.22	P	1.93	86.62
107	Ag	1096.75	P	43.33	3.95
111	Cd	264.46	P	8.39	3.17
115	In	1430920.00	A	6834.00	0.48
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	4868.45	P	6530.00	134.13
137	Ba	3421.68	P	64.08	1.87
159	Tb	2193058.00	A	8209.00	0.37
205	Tl	1623.50	P	96.17	5.92
208	Pb	6071.91	P	27.16	0.45
209	Bi	1398054.00	A	6811.00	0.49

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	636584.44	0.29	647013.00	98.4	80 -	120	
45	Sc	433383.53	0.77	427308.91	101.4	80 -	120	
45	Sc	27939.54	0.56	27959.15	99.9	80 -	120	
45	Sc	835842.00	1.09	852845.00	98.0	80 -	120	
72	Ge	107027.95	0.81	105109.40	101.8	80 -	120	
72	Ge	15477.25	0.68	15593.30	99.3	80 -	120	
89	Y	1357061.50	0.71	1356281.40	100.1	80 -	120	
115	In	1430919.60	0.48	1435537.60	99.7	80 -	120	
159	Tb	2193058.00	0.37	2224182.30	98.6	80 -	120	
209	Bi	1398053.60	0.49	1399317.80	99.9	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\006CALS.D\006CALS.D#
Date Acquired: Mar 16 2007 02:38 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:37 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	638992.81	A	29140.00	4.56
7 (Li)		P		
9 Be	1926.86	P	64.30	3.34
23 Na	47758.48	P	337.80	0.71
24 Mg	529025.81	P	2598.00	0.49
27 Al	641703.38	P	6569.00	1.02
39 K	1712368.00	A	7721.00	0.45
44 Ca	30645.14	P	525.70	1.72
45 Sc	429120.31	P	1658.00	0.39
45 Sc	27781.86	P	907.40	3.27
45 Sc	824351.50	M	28880.00	3.50
51 V	1110.06	P	7.29	0.66
52 Cr	1234.14	P	6.70	0.54
55 Mn	588.91	P	15.28	2.59
56 Fe	490022.19	P	3484.00	0.71
59 Co	1504.17	P	44.04	2.93
60 Ni	551.87	P	35.92	6.51
63 Cu	5358.12	P	121.40	2.27
65 Cu	2573.97	P	10.96	0.43
66 Zn	2724.37	P	37.63	1.38
72 Ge	105518.10	P	68.76	0.07
72 Ge	15766.44	P	312.40	1.98
75 As	106.67	P	12.02	11.27
78 Se	128.67	P	6.11	4.75
89 Y	1330990.00	A	59970.00	4.51
98 Mo	3224.95	P	164.20	5.09
99 (Ru)	1.11	P	1.93	173.24
107 Ag	5002.23	P	174.50	3.49
111 Cd	1312.33	P	80.44	6.13
115 In	1400268.00	A	56460.00	4.03
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5164.51	P	187.90	3.64
137 Ba	5690.30	P	102.50	1.80
159 Tb	2152616.00	A	84900.00	3.94
205 Tl	6599.73	P	140.10	2.12
208 Pb	20987.62	P	280.40	1.34
209 Bi	1377106.00	A	53340.00	3.87

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	638992.88	4.56	647013.00	98.8	80 - 120	
45 Sc	429120.25	0.39	427308.91	100.4	80 - 120	
45 Sc	27781.87	3.27	27959.15	99.4	80 - 120	
45 Sc	824351.50	3.50	852845.00	96.7	80 - 120	
72 Ge	105518.07	0.07	105109.40	100.4	80 - 120	
72 Ge	15766.44	1.98	15593.30	101.1	80 - 120	
89 Y	1330990.40	4.51	1356281.40	98.1	80 - 120	
115 In	1400267.60	4.03	1435537.60	97.5	80 - 120	
159 Tb	2152615.50	3.94	2224182.30	96.8	80 - 120	
209 Bi	1377106.40	3.87	1399317.80	98.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\007CALS.D\007CALS.D#
Date Acquired: Mar 16 2007 02:44 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	653034.13	A	12030.00	1.84
7	(Li)		P		
9	Be	3881.78	P	203.40	5.24
23	Na	70281.98	P	443.80	0.63
24	Mg	939643.00	A	8550.00	0.91
27	Al	1121269.00	A	12770.00	1.14
39	K	2298440.00	A	9662.00	0.42
44	Ca	51309.49	P	377.20	0.74
45	Sc	429661.59	P	1705.00	0.40
45	Sc	28427.88	P	107.50	0.38
45	Sc	838159.13	A	11430.00	1.36
51	V	1793.47	P	29.63	1.65
52	Cr	2127.22	P	25.76	1.21
55	Mn	1065.61	P	45.32	4.25
56	Fe	836235.19	P	2201.00	0.26
59	Co	3014.80	P	97.00	3.22
60	Ni	937.08	P	37.23	3.97
63	Cu	5816.46	P	122.50	2.11
65	Cu	2795.13	P	59.12	2.12
66	Zn	2278.36	P	23.11	1.01
72	Ge	104462.90	P	540.90	0.52
72	Ge	15714.54	P	219.80	1.40
75	As	184.89	P	4.54	2.45
78	Se	284.01	P	9.33	3.29
89	Y	1358907.00	A	10630.00	0.78
98	Mo	6359.50	P	121.80	1.92
99	(Ru)	3.33	P	3.33	99.99
107	Ag	9996.25	P	179.50	1.80
111	Cd	2554.79	P	40.06	1.57
115	In	1438684.00	A	1517.00	0.11
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	9910.65	P	198.50	2.00
137	Ba	7192.20	P	272.50	3.79
159	Tb	2206002.00	A	12240.00	0.55
205	Tl	12594.46	P	294.10	2.34
208	Pb	35496.12	P	286.10	0.81
209	Bi	1412786.00	A	8766.00	0.62

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	653034.19	1.84	647013.00	100.9	80 - 120	
45	Sc	429661.63	0.40	427308.91	100.6	80 - 120	
45	Sc	28427.88	0.38	27959.15	101.7	80 - 120	
45	Sc	838159.13	1.36	852845.00	98.3	80 - 120	
72	Ge	104462.95	0.52	105109.40	99.4	80 - 120	
72	Ge	15714.54	1.40	15593.30	100.8	80 - 120	
89	Y	1358906.80	0.78	1356281.40	100.2	80 - 120	
115	In	1438683.60	0.11	1435537.60	100.2	80 - 120	
159	Tb	2206001.80	0.55	2224182.30	99.2	80 - 120	
209	Bi	1412786.40	0.62	1399317.80	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\008CALS.D\008CALS.D#
Date Acquired: Mar 16 2007 02:49 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	666132.31	A	32450.00	4.87
7 (Li)		P		
9 Be	36960.32	P	368.40	1.00
23 Na	429772.41	P	3396.00	0.79
24 Mg	8867983.00	A	44430.00	0.50
27 Al	10319450.00	A	22860.00	0.22
39 K	12553450.00	A	62030.00	0.49
44 Ca	400590.00	P	1717.00	0.43
45 Sc	434157.00	P	3610.00	0.83
45 Sc	28634.23	P	293.60	1.03
45 Sc	867233.19	A	63860.00	7.36
51 V	14342.97	P	99.35	0.69
52 Cr	18595.70	P	86.23	0.46
55 Mn	10042.57	P	93.76	0.93
56 Fe	7677360.00	A	27930.00	0.36
59 Co	29237.23	P	108.80	0.37
60 Ni	8001.99	P	89.71	1.12
63 Cu	25431.38	P	68.02	0.27
65 Cu	12694.02	P	200.70	1.58
66 Zn	5747.17	P	42.68	0.74
72 Ge	106028.20	P	708.00	0.67
72 Ge	15988.56	P	313.40	1.96
75 As	1824.13	P	31.75	1.74
78 Se	2694.50	P	5.67	0.21
89 Y	1386507.00	A	84830.00	6.12
98 Mo	62108.64	P	126.30	0.20
99 (Ru)	2.22	P	1.93	86.62
107 Ag	97112.93	P	987.30	1.02
111 Cd	25513.63	P	554.50	2.17
115 In	1470127.00	A	83250.00	5.66
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	94437.97	P	100.60	0.11
137 Ba	37865.89	P	468.60	1.24
159 Tb	2261353.00	A	148300.00	6.56
205 Tl	120940.80	P	809.30	0.67
208 Pb	324580.00	P	1702.00	0.52
209 Bi	1439774.00	A	78200.00	5.43

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	666132.31	4.87	647013.00	103.0	80 - 120	
45 Sc	434156.97	0.83	427308.91	101.6	80 - 120	
45 Sc	28634.23	1.03	27959.15	102.4	80 - 120	
45 Sc	867233.19	7.36	852845.00	101.7	80 - 120	
72 Ge	106028.20	0.67	105109.40	100.9	80 - 120	
72 Ge	15988.56	1.96	15593.30	102.5	80 - 120	
89 Y	1386507.10	6.12	1356281.40	102.2	80 - 120	
115 In	1470127.40	5.66	1435537.60	102.4	80 - 120	
159 Tb	2261353.30	6.56	2224182.30	101.7	80 - 120	
209 Bi	1439773.90	5.43	1399317.80	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\009CALS.D\009CALS.D#
Date Acquired: Mar 16 2007 02:54 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	642018.19	A	15220.00	2.37
7	(Li)		P		
9	Be	364054.91	P	1723.00	0.47
23	Na	3543247.00	A	11230.00	0.32
24	Mg	86282944.00	A	608200.00	0.70
27	Al	############	A	452800.00	0.44
39	K	############	A	1115000.00	0.97
44	Ca	3853670.00	A	29370.00	0.76
45	Sc	420108.91	P	1346.00	0.32
45	Sc	28275.73	P	300.90	1.06
45	Sc	847882.38	A	37940.00	4.47
51	V	139087.91	P	763.70	0.55
52	Cr	179812.70	P	270.60	0.15
55	Mn	96527.24	P	337.20	0.35
56	Fe	74203488.00	A	696800.00	0.94
59	Co	282169.31	P	928.00	0.33
60	Ni	74896.50	P	350.30	0.47
63	Cu	208012.80	P	374.20	0.18
65	Cu	102542.80	P	559.10	0.55
66	Zn	35376.65	P	388.20	1.10
72	Ge	102274.60	P	688.00	0.67
72	Ge	15508.38	P	150.30	0.97
75	As	18169.90	P	93.11	0.51
78	Se	26008.63	P	66.96	0.26
89	Y	1349919.00	A	40890.00	3.03
98	Mo	613606.13	P	6042.00	0.98
99	(Ru)	10.00	P	5.77	57.74
107	Ag	918387.00	P	5230.00	0.57
111	Cd	243030.91	P	2507.00	1.03
115	In	1379081.00	A	41160.00	2.98
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	917595.38	P	2311.00	0.25
137	Ba	337253.59	P	4262.00	1.26
159	Tb	2166537.00	A	77160.00	3.56
205	Tl	1209236.00	A	8005.00	0.66
208	Pb	3145649.00	A	11590.00	0.37
209	Bi	1326814.00	A	33670.00	2.54

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	642018.25	2.37	647013.00	99.2	80 - 120	
45	Sc	420108.94	0.32	427308.91	98.3	80 - 120	
45	Sc	28275.73	1.06	27959.15	101.1	80 - 120	
45	Sc	847882.44	4.47	852845.00	99.4	80 - 120	
72	Ge	102274.62	0.67	105109.40	97.3	80 - 120	
72	Ge	15508.38	0.97	15593.30	99.5	80 - 120	
89	Y	1349918.60	3.03	1356281.40	99.5	80 - 120	
115	In	1379080.80	2.98	1435537.60	96.1	80 - 120	
159	Tb	2166537.50	3.56	2224182.30	97.4	80 - 120	
209	Bi	1326813.50	2.54	1399317.80	94.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\010CALS.D\010CALS.D#
Date Acquired: Mar 16 2007 03:00 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:58 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	644025.50	A	10140.00	1.57
7	(Li)		P		
9	Be	669910.63	A	1079.00	0.16
23	Na	6959931.00	A	63610.00	0.91
24	Mg	############	A	878100.00	0.51
27	Al	############	A	1935000.00	0.94
39	K	############	A	850800.00	0.37
44	Ca	7693357.00	A	23410.00	0.30
45	Sc	434352.31	P	2654.00	0.61
45	Sc	28352.18	P	344.90	1.22
45	Sc	887488.63	A	8292.00	0.93
51	V	279445.81	P	139.70	0.05
52	Cr	356000.59	P	2604.00	0.73
55	Mn	190750.59	P	792.30	0.42
56	Fe	############	A	1231000.00	0.82
59	Co	555352.00	P	1361.00	0.25
60	Ni	146533.20	P	781.60	0.53
63	Cu	401536.09	P	2002.00	0.50
65	Cu	197956.09	P	1632.00	0.82
66	Zn	67336.89	P	78.75	0.12
72	Ge	104536.60	P	245.40	0.23
72	Ge	15570.32	P	309.40	1.99
75	As	35807.49	P	106.70	0.30
78	Se	51328.30	P	432.10	0.84
89	Y	1387491.00	A	10190.00	0.73
98	Mo	1277730.00	A	5372.00	0.42
99	(Ru)	17.78	P	1.93	10.83
107	Ag	1888882.00	A	12880.00	0.68
111	Cd	482929.41	P	3494.00	0.72
115	In	1385933.00	A	22690.00	1.64
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1874932.00	A	10200.00	0.54
137	Ba	674559.81	P	2586.00	0.38
159	Tb	2211124.00	A	22160.00	1.00
205	Tl	2369712.00	A	1652.00	0.07
208	Pb	6249123.00	A	38650.00	0.62
209	Bi	1320432.00	A	14200.00	1.08

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	644025.44	1.57	647013.00	99.5	80 - 120	
45	Sc	434352.31	0.61	427308.91	101.6	80 - 120	
45	Sc	28352.18	1.22	27959.15	101.4	80 - 120	
45	Sc	887488.63	0.93	852845.00	104.1	80 - 120	
72	Ge	104536.63	0.23	105109.40	99.5	80 - 120	
72	Ge	15570.32	1.99	15593.30	99.9	80 - 120	
89	Y	1387491.40	0.73	1356281.40	102.3	80 - 120	
115	In	1385932.80	1.64	1435537.60	96.5	80 - 120	
159	Tb	2211124.00	1.00	2224182.30	99.4	80 - 120	
209	Bi	1320431.50	1.08	1399317.80	94.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851012
Cal : 67108851001
Standards: S5653

File : c16o0012
Caldate: 16-MAR-2007

IDF : 1.0
Time : 16-MAR-2007 15:14

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7068	0.6093	10000	10420	ug/L	4	10	
Antimony	A	0.5685	0.3364	100.0	99.77	ug/L	0	10	
Barium	A	0.2410	0.0767	100.0	100.0	ug/L	0	10	
Beryllium	A	0.2874	0.2872	100.0	108.5	ug/L	9	10	
Cadmium	A	0.0895	0.0886	100.0	101.4	ug/L	1	10	
Calcium	A	0.0379	0.0226	10000	10300	ug/L	3	10	
Lead	A	0.8864	0.7238	100.0	101.8	ug/L	2	10	
Magnesium	A	0.5770	0.5154	10000	10480	ug/L	5	10	
Molybdenum	A	0.2365	0.2307	100.0	100.4	ug/L	0	10	
Potassium	A	2.1562	0.6763	10000	10320	ug/L	3	10	
Silver	A	0.3489	0.3739	100.0	110.2	ug/L	10	10	
Thallium	A	0.9438	0.8949	50.00	49.70	ug/L	-1	10	
Arsenic	E	0.6384	0.6051	100.0	104.8	ug/L	5	10	
Chromium	E	4.4558	3.2582	100.0	103.4	ug/L	3	10	
Cobalt	E	5.2327	5.0637	100.0	103.0	ug/L	3	10	
Copper	E	34.484	6.6740	100.0	102.1	ug/L	2	10	
Manganese	E	2.0998	1.7149	100.0	101.6	ug/L	2	10	
Nickel	E	2.0436	1.3370	100.0	102.9	ug/L	3	10	
Sodium	E	1.8047	0.6263	10000	10130	ug/L	1	10	
Vanadium	E	3.9161	2.5149	100.0	102.0	ug/L	2	10	
Zinc	E	17.462	1.1440	100.0	102.9	ug/L	3	10	
Iron	H	0.9983	0.8919	10000	10310	ug/L	3	10	
Selenium	H	0.1280	0.1272	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	646334	-0.10
Scandium	A	852845	863493	1.25
Scandium	E	27959	28389	1.54
Scandium	H	427309	437689	2.43
Germanium	H	105109	106329	1.16
Germanium	E	15593	15562	-0.20
Indium	A	1435538	1393333	-2.94
Bismuth	A	1399318	1328263	-5.08
Yttrium	A	1356281	1365845	0.71
Terbium	A	2224182	2198717	-1.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851035 File : c16o0035 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 17:21
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5878	10000	10050	ug/L	1	10	
Antimony	A	0.5685	0.3322	100.0	98.52	ug/L	-1	10	
Barium	A	0.2410	0.0753	100.0	98.10	ug/L	-2	10	
Beryllium	A	0.2874	0.2809	100.0	106.1	ug/L	6	10	
Cadmium	A	0.0895	0.0874	100.0	100.0	ug/L	0	10	
Calcium	A	0.0379	0.0217	10000	9899	ug/L	-1	10	
Lead	A	0.8864	0.7122	100.0	100.2	ug/L	0	10	
Magnesium	A	0.5770	0.4916	10000	9996	ug/L	0	10	
Molybdenum	A	0.2365	0.2244	100.0	97.70	ug/L	-2	10	
Potassium	A	2.1562	0.6562	10000	10010	ug/L	0	10	
Silver	A	0.3489	0.3652	100.0	107.6	ug/L	8	10	
Thallium	A	0.9438	0.8812	50.00	48.94	ug/L	-2	10	
Arsenic	E	0.6384	0.5883	100.0	101.9	ug/L	2	10	
Chromium	E	4.4558	3.2149	100.0	102.1	ug/L	2	10	
Cobalt	E	5.2327	4.9836	100.0	101.4	ug/L	1	10	
Copper	E	34.484	6.5114	100.0	99.56	ug/L	0	10	
Manganese	E	2.0998	1.7138	100.0	101.6	ug/L	2	10	
Nickel	E	2.0436	1.3142	100.0	101.2	ug/L	1	10	
Sodium	E	1.8047	0.6198	10000	10020	ug/L	0	10	
Vanadium	E	3.9161	2.4907	100.0	101.0	ug/L	1	10	
Zinc	E	17.462	1.1057	100.0	99.34	ug/L	-1	10	
Iron	H	0.9983	0.9236	10000	10670	ug/L	7	10	
Selenium	H	0.1280	0.1289	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	645402	-0.25
Scandium	A	852845	883227	3.56
Scandium	E	27959	28324	1.30
Scandium	H	427309	408990	-4.29
Germanium	H	105109	101494	-3.44
Germanium	E	15593	15722	0.83
Indium	A	1435538	1398368	-2.59
Bismuth	A	1399318	1338138	-4.37
Yttrium	A	1356281	1388477	2.37
Terbium	A	2224182	2231766	0.34

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851053 File : c16o0053 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 19:23
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5966	10000	10200	ug/L	2	10	
Antimony	A	0.5685	0.3295	100.0	97.74	ug/L	-2	10	
Barium	A	0.2410	0.0753	100.0	98.13	ug/L	-2	10	
Beryllium	A	0.2874	0.2771	100.0	104.6	ug/L	5	10	
Cadmium	A	0.0895	0.0871	100.0	99.70	ug/L	0	10	
Calcium	A	0.0379	0.0221	10000	10090	ug/L	1	10	
Lead	A	0.8864	0.7127	100.0	100.3	ug/L	0	10	
Magnesium	A	0.5770	0.5002	10000	10170	ug/L	2	10	
Molybdenum	A	0.2365	0.2243	100.0	97.64	ug/L	-2	10	
Potassium	A	2.1562	0.6660	10000	10160	ug/L	2	10	
Silver	A	0.3489	0.3546	100.0	104.5	ug/L	5	10	
Thallium	A	0.9438	0.8641	50.00	47.99	ug/L	-4	10	
Arsenic	E	0.6384	0.5884	100.0	101.9	ug/L	2	10	
Chromium	E	4.4558	3.2283	100.0	102.5	ug/L	3	10	
Cobalt	E	5.2327	5.0086	100.0	101.9	ug/L	2	10	
Copper	E	34.484	6.4830	100.0	99.11	ug/L	-1	10	
Manganese	E	2.0998	1.7391	100.0	103.1	ug/L	3	10	
Nickel	E	2.0436	1.3195	100.0	101.6	ug/L	2	10	
Sodium	E	1.8047	0.6193	10000	10020	ug/L	0	10	
Vanadium	E	3.9161	2.5036	100.0	101.5	ug/L	2	10	
Zinc	E	17.462	1.1004	100.0	98.84	ug/L	-1	10	
Iron	H	0.9983	0.8820	10000	10190	ug/L	2	10	
Selenium	H	0.1280	0.1242	100.0	100.4	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	645908	-0.17
Scandium	A	852845	864237	1.34
Scandium	E	27959	28194	0.84
Scandium	H	427309	424021	-0.77
Germanium	H	105109	103554	-1.48
Germanium	E	15593	15793	1.28
Indium	A	1435538	1407299	-1.97
Bismuth	A	1399318	1362569	-2.63
Yttrium	A	1356281	1386470	2.23
Terbium	A	2224182	2237559	0.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851067 File : c16o0067 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 20:40
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5904	10000	10100	ug/L	1	10	
Antimony	A	0.5685	0.3322	100.0	98.52	ug/L	-1	10	
Barium	A	0.2410	0.0760	100.0	99.09	ug/L	-1	10	
Beryllium	A	0.2874	0.2829	100.0	106.8	ug/L	7	10	
Cadmium	A	0.0895	0.0872	100.0	99.85	ug/L	0	10	
Calcium	A	0.0379	0.0219	10000	9996	ug/L	0	10	
Lead	A	0.8864	0.7215	100.0	101.5	ug/L	2	10	
Magnesium	A	0.5770	0.4953	10000	10070	ug/L	1	10	
Molybdenum	A	0.2365	0.2267	100.0	98.69	ug/L	-1	10	
Potassium	A	2.1562	0.6556	10000	10000	ug/L	0	10	
Silver	A	0.3489	0.3688	100.0	108.7	ug/L	9	10	
Thallium	A	0.9438	0.8681	50.00	48.21	ug/L	-4	10	
Arsenic	E	0.6384	0.5832	100.0	101.0	ug/L	1	10	
Chromium	E	4.4558	3.1866	100.0	101.2	ug/L	1	10	
Cobalt	E	5.2327	4.9316	100.0	100.3	ug/L	0	10	
Copper	E	34.484	6.4456	100.0	98.54	ug/L	-1	10	
Manganese	E	2.0998	1.7027	100.0	100.9	ug/L	1	10	
Nickel	E	2.0436	1.3041	100.0	100.4	ug/L	0	10	
Sodium	E	1.8047	0.6160	10000	9962	ug/L	0	10	
Vanadium	E	3.9161	2.4490	100.0	99.32	ug/L	-1	10	
Zinc	E	17.462	1.1044	100.0	99.22	ug/L	-1	10	
Iron	H	0.9983	0.8698	10000	10050	ug/L	1	10	
Selenium	H	0.1280	0.1238	100.0	100.1	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	628091	-2.92
Scandium	A	852845	865265	1.46
Scandium	E	27959	28165	0.74
Scandium	H	427309	422541	-1.12
Germanium	H	105109	103383	-1.64
Germanium	E	15593	15693	0.64
Indium	A	1435538	1392454	-3.00
Bismuth	A	1399318	1347174	-3.73
Yttrium	A	1356281	1365367	0.67
Terbium	A	2224182	2201143	-1.04

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851090 File : c16o0090 Time : 16-MAR-2007 22:48
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5968	10000	10210	ug/L	2	10	
Antimony	A	0.5685	0.3359	100.0	99.64	ug/L	0	10	
Barium	A	0.2410	0.0782	100.0	101.9	ug/L	2	10	
Beryllium	A	0.2874	0.2834	100.0	107.0	ug/L	7	10	
Cadmium	A	0.0895	0.0891	100.0	102.1	ug/L	2	10	
Calcium	A	0.0379	0.0222	10000	10160	ug/L	2	10	
Lead	A	0.8864	0.7207	100.0	101.4	ug/L	1	10	
Magnesium	A	0.5770	0.4981	10000	10130	ug/L	1	10	
Molybdenum	A	0.2365	0.2282	100.0	99.34	ug/L	-1	10	
Potassium	A	2.1562	0.6701	10000	10230	ug/L	2	10	
Silver	A	0.3489	0.3749	100.0	110.5	ug/L	**11**	10	c+ ***
Thallium	A	0.9438	0.8874	50.00	49.29	ug/L	-1	10	
Arsenic	E	0.6384	0.6066	100.0	105.1	ug/L	5	10	
Chromium	E	4.4558	3.2909	100.0	104.5	ug/L	5	10	
Cobalt	E	5.2327	5.1255	100.0	104.3	ug/L	4	10	
Copper	E	34.484	6.6874	100.0	102.3	ug/L	2	10	
Manganese	E	2.0998	1.7507	100.0	103.7	ug/L	4	10	
Nickel	E	2.0436	1.3606	100.0	104.7	ug/L	5	10	
Sodium	E	1.8047	0.6226	10000	10070	ug/L	1	10	
Vanadium	E	3.9161	2.5546	100.0	103.6	ug/L	4	10	
Zinc	E	17.462	1.1330	100.0	101.9	ug/L	2	10	
Iron	H	0.9983	0.8779	10000	10150	ug/L	2	10	
Selenium	H	0.1280	0.1259	100.0	101.8	ug/L	2	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	632309	-2.27
Scandium	A	852845	881813	3.40
Scandium	E	27959	27523	-1.56
Scandium	H	427309	428015	0.17
Germanium	H	105109	103765	-1.28
Germanium	E	15593	15293	-1.93
Indium	A	1435538	1394709	-2.84
Bismuth	A	1399318	1306023	-6.67
Yttrium	A	1356281	1382140	1.91
Terbium	A	2224182	2178636	-2.05

+=high bias c=CCV

67108851090

: 00458A

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851104 File : c16o0104 Time : 17-MAR-2007 00:06
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5933	10000	10150	ug/L	2	10	
Antimony	A	0.5685	0.3404	100.0	101.0	ug/L	1	10	
Barium	A	0.2410	0.0789	100.0	102.8	ug/L	3	10	
Beryllium	A	0.2874	0.2918	100.0	110.2	ug/L	10	10	
Cadmium	A	0.0895	0.0895	100.0	102.5	ug/L	3	10	
Calcium	A	0.0379	0.0223	10000	10190	ug/L	2	10	
Lead	A	0.8864	0.7290	100.0	102.6	ug/L	3	10	
Magnesium	A	0.5770	0.4945	10000	10060	ug/L	1	10	
Molybdenum	A	0.2365	0.2305	100.0	100.4	ug/L	0	10	
Potassium	A	2.1562	0.6725	10000	10260	ug/L	3	10	
Silver	A	0.3489	0.3779	100.0	111.4	ug/L	**11**	10	c+ ***
Thallium	A	0.9438	0.8960	50.00	49.76	ug/L	0	10	
Arsenic	E	0.6384	0.6212	100.0	107.6	ug/L	8	10	
Chromium	E	4.4558	3.4091	100.0	108.2	ug/L	8	10	
Cobalt	E	5.2327	5.2884	100.0	107.6	ug/L	8	10	
Copper	E	34.484	6.9014	100.0	105.6	ug/L	6	10	
Manganese	E	2.0998	1.7854	100.0	105.8	ug/L	6	10	
Nickel	E	2.0436	1.3923	100.0	107.2	ug/L	7	10	
Sodium	E	1.8047	0.6393	10000	10340	ug/L	3	10	
Vanadium	E	3.9161	2.6242	100.0	106.4	ug/L	6	10	
Zinc	E	17.462	1.1678	100.0	105.2	ug/L	5	10	
Iron	H	0.9983	0.9116	10000	10540	ug/L	5	10	
Selenium	H	0.1280	0.1281	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	617827	-4.51
Scandium	A	852845	884985	3.77
Scandium	E	27959	27574	-1.38
Scandium	H	427309	426865	-0.10
Germanium	H	105109	106063	0.91
Germanium	E	15593	15385	-1.34
Indium	A	1435538	1389510	-3.21
Bismuth	A	1399318	1303319	-6.86
Yttrium	A	1356281	1380024	1.75
Terbium	A	2224182	2170097	-2.43

+=high bias c=CCV

67108851104

: 0045AB

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851127 File : c16o0127 Time : 17-MAR-2007 02:13
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6326	10000	10820	ug/L	8	10	
Antimony	A	0.5685	0.3492	100.0	103.6	ug/L	4	10	
Barium	A	0.2410	0.0817	100.0	106.5	ug/L	7	10	
Beryllium	A	0.2874	0.2916	100.0	110.1	ug/L	10	10	
Cadmium	A	0.0895	0.0926	100.0	106.0	ug/L	6	10	
Calcium	A	0.0379	0.0236	10000	10760	ug/L	8	10	
Lead	A	0.8864	0.7547	100.0	106.2	ug/L	6	10	
Magnesium	A	0.5770	0.5292	10000	10760	ug/L	8	10	
Molybdenum	A	0.2365	0.2398	100.0	104.4	ug/L	4	10	
Potassium	A	2.1562	0.7079	10000	10810	ug/L	8	10	
Silver	A	0.3489	0.3803	100.0	112.1	ug/L	**12**	10	c+ ***
Thallium	A	0.9438	0.9068	50.00	50.36	ug/L	1	10	
Arsenic	E	0.6384	0.6017	100.0	104.2	ug/L	4	10	
Chromium	E	4.4558	3.2873	100.0	104.4	ug/L	4	10	
Cobalt	E	5.2327	5.1203	100.0	104.1	ug/L	4	10	
Copper	E	34.484	6.5906	100.0	100.8	ug/L	1	10	
Manganese	E	2.0998	1.7366	100.0	102.9	ug/L	3	10	
Nickel	E	2.0436	1.3551	100.0	104.3	ug/L	4	10	
Sodium	E	1.8047	0.6147	10000	9941	ug/L	-1	10	
Vanadium	E	3.9161	2.5547	100.0	103.6	ug/L	4	10	
Zinc	E	17.462	1.1254	100.0	101.2	ug/L	1	10	
Iron	H	0.9983	0.8892	10000	10280	ug/L	3	10	
Selenium	H	0.1280	0.1264	100.0	102.2	ug/L	2	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	592892	-8.36
Scandium	A	852845	817089	-4.19
Scandium	E	27959	26874	-3.88
Scandium	H	427309	415143	-2.85
Germanium	H	105109	102123	-2.84
Germanium	E	15593	15042	-3.54
Indium	A	1435538	1305547	-9.06
Bismuth	A	1399318	1240079	-11.38
Yttrium	A	1356281	1289757	-4.90
Terbium	A	2224182	2034978	-8.51

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851145 File : c16o0145 Time : 17-MAR-2007 03:52
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6025	10000	10300	ug/L	3	10	
Antimony	A	0.5685	0.3328	100.0	98.71	ug/L	-1	10	
Barium	A	0.2410	0.0791	100.0	103.2	ug/L	3	10	
Beryllium	A	0.2874	0.2700	100.0	101.9	ug/L	2	10	
Cadmium	A	0.0895	0.0882	100.0	101.0	ug/L	1	10	
Calcium	A	0.0379	0.0219	10000	9981	ug/L	0	10	
Lead	A	0.8864	0.7116	100.0	100.1	ug/L	0	10	
Magnesium	A	0.5770	0.5081	10000	10330	ug/L	3	10	
Molybdenum	A	0.2365	0.2281	100.0	99.30	ug/L	-1	10	
Potassium	A	2.1562	0.6697	10000	10220	ug/L	2	10	
Silver	A	0.3489	0.3707	100.0	109.3	ug/L	9	10	
Thallium	A	0.9438	0.8670	50.00	48.15	ug/L	-4	10	
Arsenic	E	0.6384	0.6092	100.0	105.5	ug/L	6	10	
Chromium	E	4.4558	3.2227	100.0	102.3	ug/L	2	10	
Cobalt	E	5.2327	5.0058	100.0	101.8	ug/L	2	10	
Copper	E	34.484	6.5970	100.0	100.9	ug/L	1	10	
Manganese	E	2.0998	1.7200	100.0	101.9	ug/L	2	10	
Nickel	E	2.0436	1.3295	100.0	102.3	ug/L	2	10	
Sodium	E	1.8047	0.6042	10000	9771	ug/L	-2	10	
Vanadium	E	3.9161	2.5197	100.0	102.2	ug/L	2	10	
Zinc	E	17.462	1.1307	100.0	101.7	ug/L	2	10	
Iron	H	0.9983	0.8717	10000	10080	ug/L	1	10	
Selenium	H	0.1280	0.1248	100.0	101.0	ug/L	1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	691645	6.90
Scandium	A	852845	930489	9.10
Scandium	E	27959	28404	1.59
Scandium	H	427309	426899	-0.10
Germanium	H	105109	104279	-0.79
Germanium	E	15593	15502	-0.59
Indium	A	1435538	1405215	-2.11
Bismuth	A	1399318	1284939	-8.17
Yttrium	A	1356281	1405050	3.60
Terbium	A	2224182	2156463	-3.04

:00458D

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851159 File : c16o0159 Time : 17-MAR-2007 05:09
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6150	10000	10520	ug/L	5	10	
Antimony	A	0.5685	0.3338	100.0	98.99	ug/L	-1	10	
Barium	A	0.2410	0.0802	100.0	104.5	ug/L	5	10	
Beryllium	A	0.2874	0.2732	100.0	103.2	ug/L	3	10	
Cadmium	A	0.0895	0.0884	100.0	101.2	ug/L	1	10	
Calcium	A	0.0379	0.0222	10000	10130	ug/L	1	10	
Lead	A	0.8864	0.7191	100.0	101.2	ug/L	1	10	
Magnesium	A	0.5770	0.5155	10000	10480	ug/L	5	10	
Molybdenum	A	0.2365	0.2291	100.0	99.77	ug/L	0	10	
Potassium	A	2.1562	0.6807	10000	10390	ug/L	4	10	
Silver	A	0.3489	0.3705	100.0	109.2	ug/L	9	10	
Thallium	A	0.9438	0.8762	50.00	48.66	ug/L	-3	10	
Arsenic	E	0.6384	0.5944	100.0	103.0	ug/L	3	10	
Chromium	E	4.4558	3.2173	100.0	102.1	ug/L	2	10	
Cobalt	E	5.2327	4.9787	100.0	101.3	ug/L	1	10	
Copper	E	34.484	6.4849	100.0	99.14	ug/L	-1	10	
Manganese	E	2.0998	1.7076	100.0	101.2	ug/L	1	10	
Nickel	E	2.0436	1.3153	100.0	101.2	ug/L	1	10	
Sodium	E	1.8047	0.6030	10000	9751	ug/L	-2	10	
Vanadium	E	3.9161	2.4857	100.0	100.8	ug/L	1	10	
Zinc	E	17.462	1.0954	100.0	98.37	ug/L	-2	10	
Iron	H	0.9983	0.8699	10000	10060	ug/L	1	10	
Selenium	H	0.1280	0.1237	100.0	100.0	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	680193	5.13
Scandium	A	852845	903589	5.95
Scandium	E	27959	27930	-0.10
Scandium	H	427309	416153	-2.61
Germanium	H	105109	101907	-3.05
Germanium	E	15593	15401	-1.23
Indium	A	1435538	1370942	-4.50
Bismuth	A	1399318	1237840	-11.54
Yttrium	A	1356281	1361700	0.40
Terbium	A	2224182	2080500	-6.46

:0045BE

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851183 File : c16o0183 Time : 17-MAR-2007 07:22
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6074	10000	10390	ug/L	4	10	
Antimony	A	0.5685	0.3382	100.0	100.3	ug/L	0	10	
Barium	A	0.2410	0.0799	100.0	104.1	ug/L	4	10	
Beryllium	A	0.2874	0.2703	100.0	102.1	ug/L	2	10	
Cadmium	A	0.0895	0.0896	100.0	102.6	ug/L	3	10	
Calcium	A	0.0379	0.0222	10000	10140	ug/L	1	10	
Lead	A	0.8864	0.7227	100.0	101.7	ug/L	2	10	
Magnesium	A	0.5770	0.5097	10000	10360	ug/L	4	10	
Molybdenum	A	0.2365	0.2289	100.0	99.66	ug/L	0	10	
Potassium	A	2.1562	0.6813	10000	10400	ug/L	4	10	
Silver	A	0.3489	0.3710	100.0	109.3	ug/L	9	10	
Thallium	A	0.9438	0.8753	50.00	48.61	ug/L	-3	10	
Arsenic	E	0.6384	0.5895	100.0	102.1	ug/L	2	10	
Chromium	E	4.4558	3.2020	100.0	101.7	ug/L	2	10	
Cobalt	E	5.2327	5.0315	100.0	102.3	ug/L	2	10	
Copper	E	34.484	6.4811	100.0	99.09	ug/L	-1	10	
Manganese	E	2.0998	1.6981	100.0	100.6	ug/L	1	10	
Nickel	E	2.0436	1.3274	100.0	102.2	ug/L	2	10	
Sodium	E	1.8047	0.6011	10000	9719	ug/L	-3	10	
Vanadium	E	3.9161	2.5073	100.0	101.7	ug/L	2	10	
Zinc	E	17.462	1.0946	100.0	98.30	ug/L	-2	10	
Iron	H	0.9983	0.8664	10000	10010	ug/L	0	10	
Selenium	H	0.1280	0.1224	100.0	99.02	ug/L	-1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	643964	-0.47
Scandium	A	852845	875723	2.68
Scandium	E	27959	26801	-4.14
Scandium	H	427309	411656	-3.66
Germanium	H	105109	101982	-2.98
Germanium	E	15593	14954	-4.10
Indium	A	1435538	1325196	-7.69
Bismuth	A	1399318	1220354	-12.79
Yttrium	A	1356281	1335966	-1.50
Terbium	A	2224182	2042769	-8.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851207 File : c16o0207 Time : 17-MAR-2007 09:37
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6049	10000	10350	ug/L	4	10	
Antimony	A	0.5685	0.3351	100.0	99.37	ug/L	-1	10	
Barium	A	0.2410	0.0795	100.0	103.7	ug/L	4	10	
Beryllium	A	0.2874	0.2703	100.0	102.1	ug/L	2	10	
Cadmium	A	0.0895	0.0892	100.0	102.2	ug/L	2	10	
Calcium	A	0.0379	0.0222	10000	10140	ug/L	1	10	
Lead	A	0.8864	0.7181	100.0	101.0	ug/L	1	10	
Magnesium	A	0.5770	0.5054	10000	10280	ug/L	3	10	
Molybdenum	A	0.2365	0.2290	100.0	99.69	ug/L	0	10	
Potassium	A	2.1562	0.6779	10000	10350	ug/L	4	10	
Silver	A	0.3489	0.3661	100.0	107.9	ug/L	8	10	
Thallium	A	0.9438	0.8713	50.00	48.39	ug/L	-3	10	
Arsenic	E	0.6384	0.6023	100.0	104.3	ug/L	4	10	
Chromium	E	4.4558	3.2606	100.0	103.5	ug/L	4	10	
Cobalt	E	5.2327	5.1143	100.0	104.0	ug/L	4	10	
Copper	E	34.484	6.6219	100.0	101.3	ug/L	1	10	
Manganese	E	2.0998	1.7241	100.0	102.2	ug/L	2	10	
Nickel	E	2.0436	1.3453	100.0	103.5	ug/L	4	10	
Sodium	E	1.8047	0.5988	10000	9682	ug/L	-3	10	
Vanadium	E	3.9161	2.5330	100.0	102.7	ug/L	3	10	
Zinc	E	17.462	1.1148	100.0	100.2	ug/L	0	10	
Iron	H	0.9983	0.8716	10000	10070	ug/L	1	10	
Selenium	H	0.1280	0.1239	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	633972	-2.02
Scandium	A	852845	864572	1.38
Scandium	E	27959	25465	-8.92
Scandium	H	427309	394448	-7.69
Germanium	H	105109	98179	-6.59
Germanium	E	15593	14207	-8.89
Indium	A	1435538	1320483	-8.01
Bismuth	A	1399318	1209411	-13.57
Yttrium	A	1356281	1310664	-3.36
Terbium	A	2224182	2026921	-8.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851225 File : c16o0225 Time : 17-MAR-2007 11:16
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6179	10000	10570	ug/L	6	10	
Antimony	A	0.5685	0.3374	100.0	100.0	ug/L	0	10	
Barium	A	0.2410	0.0805	100.0	104.9	ug/L	5	10	
Beryllium	A	0.2874	0.2716	100.0	102.5	ug/L	3	10	
Cadmium	A	0.0895	0.0900	100.0	103.0	ug/L	3	10	
Calcium	A	0.0379	0.0225	10000	10260	ug/L	3	10	
Lead	A	0.8864	0.7338	100.0	103.2	ug/L	3	10	
Magnesium	A	0.5770	0.5195	10000	10560	ug/L	6	10	
Molybdenum	A	0.2365	0.2290	100.0	99.71	ug/L	0	10	
Potassium	A	2.1562	0.6874	10000	10490	ug/L	5	10	
Silver	A	0.3489	0.3696	100.0	108.9	ug/L	9	10	
Thallium	A	0.9438	0.8646	50.00	48.02	ug/L	-4	10	
Arsenic	E	0.6384	0.5892	100.0	102.1	ug/L	2	10	
Chromium	E	4.4558	3.2091	100.0	101.9	ug/L	2	10	
Cobalt	E	5.2327	5.0298	100.0	102.3	ug/L	2	10	
Copper	E	34.484	6.4611	100.0	98.77	ug/L	-1	10	
Manganese	E	2.0998	1.7008	100.0	100.8	ug/L	1	10	
Nickel	E	2.0436	1.3342	100.0	102.7	ug/L	3	10	
Sodium	E	1.8047	0.5939	10000	9602	ug/L	-4	10	
Vanadium	E	3.9161	2.4909	100.0	101.0	ug/L	1	10	
Zinc	E	17.462	1.0928	100.0	98.13	ug/L	-2	10	
Iron	H	0.9983	0.8801	10000	10170	ug/L	2	10	
Selenium	H	0.1280	0.1240	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	623296	-3.67
Scandium	A	852845	833494	-2.27
Scandium	E	27959	25591	-8.47
Scandium	H	427309	385933	-9.68
Germanium	H	105109	96360	-8.32
Germanium	E	15593	14421	-7.52
Indium	A	1435538	1289298	-10.19
Bismuth	A	1399318	1205983	-13.82
Yttrium	A	1356281	1291407	-4.78
Terbium	A	2224182	1980636	-10.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851247 File : c16o0247 Time : 17-MAR-2007 13:18
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6106	10000	10440	ug/L	4	10	
Antimony	A	0.5685	0.3390	100.0	100.5	ug/L	1	10	
Barium	A	0.2410	0.0800	100.0	104.3	ug/L	4	10	
Beryllium	A	0.2874	0.2761	100.0	104.2	ug/L	4	10	
Cadmium	A	0.0895	0.0894	100.0	102.4	ug/L	2	10	
Calcium	A	0.0379	0.0225	10000	10260	ug/L	3	10	
Lead	A	0.8864	0.7308	100.0	102.8	ug/L	3	10	
Magnesium	A	0.5770	0.5118	10000	10410	ug/L	4	10	
Molybdenum	A	0.2365	0.2297	100.0	100.0	ug/L	0	10	
Potassium	A	2.1562	0.6851	10000	10460	ug/L	5	10	
Silver	A	0.3489	0.3700	100.0	109.1	ug/L	9	10	
Thallium	A	0.9438	0.8736	50.00	48.52	ug/L	-3	10	
Arsenic	E	0.6384	0.5976	100.0	103.5	ug/L	4	10	
Chromium	E	4.4558	3.2688	100.0	103.8	ug/L	4	10	
Cobalt	E	5.2327	5.1454	100.0	104.7	ug/L	5	10	
Copper	E	34.484	6.5539	100.0	100.2	ug/L	0	10	
Manganese	E	2.0998	1.7293	100.0	102.5	ug/L	3	10	
Nickel	E	2.0436	1.3546	100.0	104.3	ug/L	4	10	
Sodium	E	1.8047	0.5934	10000	9594	ug/L	-4	10	
Vanadium	E	3.9161	2.5448	100.0	103.2	ug/L	3	10	
Zinc	E	17.462	1.1090	100.0	99.65	ug/L	0	10	
Iron	H	0.9983	0.8619	10000	9962	ug/L	0	10	
Selenium	H	0.1280	0.1218	100.0	98.51	ug/L	-1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	581565	-10.12
Scandium	A	852845	808189	-5.24
Scandium	E	27959	24212	-13.40
Scandium	H	427309	375128	-12.21
Germanium	H	105109	93756	-10.80
Germanium	E	15593	13691	-12.20
Indium	A	1435538	1254427	-12.62
Bismuth	A	1399318	1169004	-16.46
Yttrium	A	1356281	1258898	-7.18
Terbium	A	2224182	1936236	-12.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851259 File : c16o0259 Time : 17-MAR-2007 14:24
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6131	10000	10490	ug/L	5	10	
Antimony	A	0.5685	0.3403	100.0	100.9	ug/L	1	10	
Barium	A	0.2410	0.0795	100.0	103.6	ug/L	4	10	
Beryllium	A	0.2874	0.2755	100.0	104.0	ug/L	4	10	
Cadmium	A	0.0895	0.0896	100.0	102.6	ug/L	3	10	
Calcium	A	0.0379	0.0226	10000	10300	ug/L	3	10	
Lead	A	0.8864	0.7281	100.0	102.4	ug/L	2	10	
Magnesium	A	0.5770	0.5153	10000	10480	ug/L	5	10	
Molybdenum	A	0.2365	0.2324	100.0	101.2	ug/L	1	10	
Potassium	A	2.1562	0.6873	10000	10490	ug/L	5	10	
Silver	A	0.3489	0.3691	100.0	108.8	ug/L	9	10	
Thallium	A	0.9438	0.8785	50.00	48.79	ug/L	-2	10	
Arsenic	E	0.6384	0.5971	100.0	103.4	ug/L	3	10	
Chromium	E	4.4558	3.2485	100.0	103.1	ug/L	3	10	
Cobalt	E	5.2327	5.0823	100.0	103.4	ug/L	3	10	
Copper	E	34.484	6.4908	100.0	99.24	ug/L	-1	10	
Manganese	E	2.0998	1.7314	100.0	102.6	ug/L	3	10	
Nickel	E	2.0436	1.3483	100.0	103.8	ug/L	4	10	
Sodium	E	1.8047	0.5939	10000	9602	ug/L	-4	10	
Vanadium	E	3.9161	2.5215	100.0	102.3	ug/L	2	10	
Zinc	E	17.462	1.1076	100.0	99.52	ug/L	0	10	
Iron	H	0.9983	0.8718	10000	10080	ug/L	1	10	
Selenium	H	0.1280	0.1241	100.0	100.4	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	582244	-10.01
Scandium	A	852845	803992	-5.73
Scandium	E	27959	24747	-11.49
Scandium	H	427309	375327	-12.16
Germanium	H	105109	94023	-10.55
Germanium	E	15593	14038	-9.97
Indium	A	1435538	1258836	-12.31
Bismuth	A	1399318	1175876	-15.97
Yttrium	A	1356281	1251219	-7.75
Terbium	A	2224182	1961622	-11.80

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851282 File : c16o0282 Time : 17-MAR-2007 16:32
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6027	10000	10310	ug/L	3	10	
Antimony	A	0.5685	0.3337	100.0	98.96	ug/L	-1	10	
Barium	A	0.2410	0.0807	100.0	105.2	ug/L	5	10	
Beryllium	A	0.2874	0.2646	100.0	99.90	ug/L	0	10	
Cadmium	A	0.0895	0.0886	100.0	101.4	ug/L	1	10	
Calcium	A	0.0379	0.0223	10000	10160	ug/L	2	10	
Lead	A	0.8864	0.7168	100.0	100.8	ug/L	1	10	
Magnesium	A	0.5770	0.5043	10000	10250	ug/L	3	10	
Molybdenum	A	0.2365	0.2275	100.0	99.07	ug/L	-1	10	
Potassium	A	2.1562	0.6796	10000	10370	ug/L	4	10	
Silver	A	0.3489	0.3681	100.0	108.5	ug/L	9	10	
Thallium	A	0.9438	0.8620	50.00	47.87	ug/L	-4	10	
Arsenic	E	0.6384	0.5881	100.0	101.9	ug/L	2	10	
Chromium	E	4.4558	3.1493	100.0	99.98	ug/L	0	10	
Cobalt	E	5.2327	4.9570	100.0	100.8	ug/L	1	10	
Copper	E	34.484	6.2880	100.0	96.09	ug/L	-4	10	
Manganese	E	2.0998	1.6859	100.0	99.91	ug/L	0	10	
Nickel	E	2.0436	1.3026	100.0	100.2	ug/L	0	10	
Sodium	E	1.8047	0.5612	10000	9069	ug/L	-9	10	
Vanadium	E	3.9161	2.4651	100.0	99.97	ug/L	0	10	
Zinc	E	17.462	1.0796	100.0	96.89	ug/L	-3	10	
Iron	H	0.9983	0.9055	10000	10470	ug/L	5	10	
Selenium	H	0.1280	0.1242	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	594902	-8.05
Scandium	A	852845	809968	-5.03
Scandium	E	27959	24543	-12.22
Scandium	H	427309	343229	-19.68
Germanium	H	105109	88334	-15.96
Germanium	E	15593	13869	-11.06
Indium	A	1435538	1249768	-12.94
Bismuth	A	1399318	1138723	-18.62
Yttrium	A	1356281	1255808	-7.41
Terbium	A	2224182	1902485	-14.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851302 File : c16o0302
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 17-MAR-2007 18:24

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6012	10000	10280	ug/L	3	10	
Antimony	A	0.5685	0.3380	100.0	100.2	ug/L	0	10	
Barium	A	0.2410	0.0811	100.0	105.7	ug/L	6	10	
Beryllium	A	0.2874	0.2660	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0895	0.0886	100.0	101.5	ug/L	2	10	
Calcium	A	0.0379	0.0223	10000	10200	ug/L	2	10	
Lead	A	0.8864	0.7189	100.0	101.1	ug/L	1	10	
Magnesium	A	0.5770	0.5005	10000	10180	ug/L	2	10	
Molybdenum	A	0.2365	0.2307	100.0	100.5	ug/L	1	10	
Potassium	A	2.1562	0.6816	10000	10400	ug/L	4	10	
Silver	A	0.3489	0.3715	100.0	109.5	ug/L	10	10	
Thallium	A	0.9438	0.8913	50.00	49.50	ug/L	-1	10	
Arsenic	E	0.6384	0.5915	100.0	102.5	ug/L	3	10	
Chromium	E	4.4558	3.1628	100.0	100.4	ug/L	0	10	
Cobalt	E	5.2327	4.9912	100.0	101.5	ug/L	2	10	
Copper	E	34.484	6.2723	100.0	95.85	ug/L	-4	10	
Manganese	E	2.0998	1.7087	100.0	101.3	ug/L	1	10	
Nickel	E	2.0436	1.3203	100.0	101.6	ug/L	2	10	
Sodium	E	1.8047	0.5663	10000	9153	ug/L	-8	10	
Vanadium	E	3.9161	2.4864	100.0	100.8	ug/L	1	10	
Zinc	E	17.462	1.0692	100.0	95.91	ug/L	-4	10	
Iron	H	0.9983	0.8711	10000	10070	ug/L	1	10	
Selenium	H	0.1280	0.1201	100.0	97.16	ug/L	-3	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	558610	-13.66
Scandium	A	852845	767711	-9.98
Scandium	E	27959	23192	-17.05
Scandium	H	427309	336732	-21.20
Germanium	H	105109	85803	-18.37
Germanium	E	15593	13237	-15.11
Indium	A	1435538	1180681	-17.75
Bismuth	A	1399318	1059537	-24.28
Yttrium	A	1356281	1181260	-12.90
Terbium	A	2224182	1820958	-18.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851324 File : c16o0324
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 17-MAR-2007 20:25

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5888	10000	10070	ug/L	1	10	
Antimony	A	0.5685	0.3317	100.0	98.39	ug/L	-2	10	
Barium	A	0.2410	0.0794	100.0	103.6	ug/L	4	10	
Beryllium	A	0.2874	0.2671	100.0	100.9	ug/L	1	10	
Cadmium	A	0.0895	0.0873	100.0	99.98	ug/L	0	10	
Calcium	A	0.0379	0.0219	10000	10010	ug/L	0	10	
Lead	A	0.8864	0.7201	100.0	101.3	ug/L	1	10	
Magnesium	A	0.5770	0.4897	10000	9958	ug/L	0	10	
Molybdenum	A	0.2365	0.2256	100.0	98.25	ug/L	-2	10	
Potassium	A	2.1562	0.6673	10000	10180	ug/L	2	10	
Silver	A	0.3489	0.3628	100.0	106.9	ug/L	7	10	
Thallium	A	0.9438	0.8763	50.00	48.67	ug/L	-3	10	
Arsenic	E	0.6384	0.5930	100.0	102.7	ug/L	3	10	
Chromium	E	4.4558	3.2025	100.0	101.7	ug/L	2	10	
Cobalt	E	5.2327	5.0522	100.0	102.8	ug/L	3	10	
Copper	E	34.484	6.3585	100.0	97.18	ug/L	-3	10	
Manganese	E	2.0998	1.7258	100.0	102.3	ug/L	2	10	
Nickel	E	2.0436	1.3421	100.0	103.3	ug/L	3	10	
Sodium	E	1.8047	0.5734	10000	9269	ug/L	-7	10	
Vanadium	E	3.9161	2.5077	100.0	101.7	ug/L	2	10	
Zinc	E	17.462	1.0841	100.0	97.31	ug/L	-3	10	
Iron	H	0.9983	0.8996	10000	10400	ug/L	4	10	
Selenium	H	0.1280	0.1244	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	519560	-19.70
Scandium	A	852845	750729	-11.97
Scandium	E	27959	21927	-21.57
Scandium	H	427309	316824	-25.86
Germanium	H	105109	81553	-22.41
Germanium	E	15593	12592	-19.25
Indium	A	1435538	1174431	-18.19
Bismuth	A	1399318	1080065	-22.81
Yttrium	A	1356281	1173516	-13.48
Terbium	A	2224182	1811307	-18.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851343 File : c16o0343 Time : 17-MAR-2007 22:11
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.6010	10000	10280	ug/L	3	10	
Antimony	A	0.5685	0.3379	100.0	100.2	ug/L	0	10	
Barium	A	0.2410	0.0810	100.0	105.6	ug/L	6	10	
Beryllium	A	0.2874	0.2667	100.0	100.7	ug/L	1	10	
Cadmium	A	0.0895	0.0890	100.0	101.9	ug/L	2	10	
Calcium	A	0.0379	0.0224	10000	10230	ug/L	2	10	
Lead	A	0.8864	0.7312	100.0	102.9	ug/L	3	10	
Magnesium	A	0.5770	0.5013	10000	10190	ug/L	2	10	
Molybdenum	A	0.2365	0.2303	100.0	100.3	ug/L	0	10	
Potassium	A	2.1562	0.6829	10000	10420	ug/L	4	10	
Silver	A	0.3489	0.3707	100.0	109.3	ug/L	9	10	
Thallium	A	0.9438	0.8912	50.00	49.49	ug/L	-1	10	
Arsenic	E	0.6384	0.6004	100.0	104.0	ug/L	4	10	
Chromium	E	4.4558	3.2364	100.0	102.8	ug/L	3	10	
Cobalt	E	5.2327	5.0855	100.0	103.4	ug/L	3	10	
Copper	E	34.484	6.3651	100.0	97.29	ug/L	-3	10	
Manganese	E	2.0998	1.7385	100.0	103.0	ug/L	3	10	
Nickel	E	2.0436	1.3446	100.0	103.5	ug/L	4	10	
Sodium	E	1.8047	0.5744	10000	9284	ug/L	-7	10	
Vanadium	E	3.9161	2.5243	100.0	102.4	ug/L	2	10	
Zinc	E	17.462	1.0944	100.0	98.28	ug/L	-2	10	
Iron	H	0.9983	0.8733	10000	10090	ug/L	1	10	
Selenium	H	0.1280	0.1229	100.0	99.40	ug/L	-1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	516474	-20.18
Scandium	A	852845	716986	-15.93
Scandium	E	27959	21229	-24.07
Scandium	H	427309	309758	-27.51
Germanium	H	105109	79479	-24.38
Germanium	E	15593	12234	-21.54
Indium	A	1435538	1122833	-21.78
Bismuth	A	1399318	1025597	-26.71
Yttrium	A	1356281	1118550	-17.53
Terbium	A	2224182	1730775	-22.18

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67108851361 File : c16o0361
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 17-MAR-2007 23:50

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5930	10000	10140	ug/L	1	10	
Antimony	A	0.5685	0.3317	100.0	98.38	ug/L	-2	10	
Barium	A	0.2410	0.0791	100.0	103.1	ug/L	3	10	
Beryllium	A	0.2874	0.2659	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0895	0.0876	100.0	100.3	ug/L	0	10	
Calcium	A	0.0379	0.0221	10000	10080	ug/L	1	10	
Lead	A	0.8864	0.7265	100.0	102.2	ug/L	2	10	
Magnesium	A	0.5770	0.4967	10000	10100	ug/L	1	10	
Molybdenum	A	0.2365	0.2277	100.0	99.12	ug/L	-1	10	
Potassium	A	2.1562	0.6710	10000	10240	ug/L	2	10	
Silver	A	0.3489	0.3625	100.0	106.9	ug/L	7	10	
Thallium	A	0.9438	0.8813	50.00	48.95	ug/L	-2	10	
Arsenic	E	0.6384	0.5956	100.0	103.2	ug/L	3	10	
Chromium	E	4.4558	3.2582	100.0	103.4	ug/L	3	10	
Cobalt	E	5.2327	5.1421	100.0	104.6	ug/L	5	10	
Copper	E	34.484	6.3638	100.0	97.26	ug/L	-3	10	
Manganese	E	2.0998	1.7412	100.0	103.2	ug/L	3	10	
Nickel	E	2.0436	1.3607	100.0	104.7	ug/L	5	10	
Sodium	E	1.8047	0.5814	10000	9398	ug/L	-6	10	
Vanadium	E	3.9161	2.5479	100.0	103.3	ug/L	3	10	
Zinc	E	17.462	1.0929	100.0	98.14	ug/L	-2	10	
Iron	H	0.9983	0.8771	10000	10140	ug/L	1	10	
Selenium	H	0.1280	0.1229	100.0	99.43	ug/L	-1	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	518927	-19.80
Scandium	A	852845	726977	-14.76
Scandium	E	27959	21001	-24.89
Scandium	H	427309	313248	-26.69
Germanium	H	105109	79722	-24.15
Germanium	E	15593	12217	-21.65
Indium	A	1435538	1147014	-20.10
Bismuth	A	1399318	1058520	-24.35
Yttrium	A	1356281	1131155	-16.60
Terbium	A	2224182	1771180	-20.37

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851371 File : c16o0371 Time : 18-MAR-2007 00:46
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5933	10000	10150	ug/L	2	10	
Antimony	A	0.5685	0.3351	100.0	99.39	ug/L	-1	10	
Barium	A	0.2410	0.0787	100.0	102.6	ug/L	3	10	
Beryllium	A	0.2874	0.2660	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0895	0.0878	100.0	100.5	ug/L	1	10	
Calcium	A	0.0379	0.0221	10000	10070	ug/L	1	10	
Lead	A	0.8864	0.7273	100.0	102.3	ug/L	2	10	
Magnesium	A	0.5770	0.4955	10000	10080	ug/L	1	10	
Molybdenum	A	0.2365	0.2271	100.0	98.89	ug/L	-1	10	
Potassium	A	2.1562	0.6683	10000	10200	ug/L	2	10	
Silver	A	0.3489	0.3650	100.0	107.6	ug/L	8	10	
Thallium	A	0.9438	0.8918	50.00	49.53	ug/L	-1	10	
Arsenic	E	0.6384	0.5869	100.0	101.7	ug/L	2	10	
Chromium	E	4.4558	3.1789	100.0	100.9	ug/L	1	10	
Cobalt	E	5.2327	5.0125	100.0	102.0	ug/L	2	10	
Copper	E	34.484	6.3586	100.0	97.19	ug/L	-3	10	
Manganese	E	2.0998	1.6939	100.0	100.4	ug/L	0	10	
Nickel	E	2.0436	1.3276	100.0	102.2	ug/L	2	10	
Sodium	E	1.8047	0.5678	10000	9177	ug/L	-8	10	
Vanadium	E	3.9161	2.4743	100.0	100.3	ug/L	0	10	
Zinc	E	17.462	1.0861	100.0	97.50	ug/L	-3	10	
Iron	H	0.9983	0.8581	10000	9918	ug/L	-1	10	
Selenium	H	0.1280	0.1205	100.0	97.45	ug/L	-3	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	519246	-19.75
Scandium	A	852845	732115	-14.16
Scandium	E	27959	21514	-23.05
Scandium	H	427309	319650	-25.19
Germanium	H	105109	81236	-22.71
Germanium	E	15593	12264	-21.35
Indium	A	1435538	1144690	-20.26
Bismuth	A	1399318	1066490	-23.79
Yttrium	A	1356281	1144202	-15.64
Terbium	A	2224182	1797584	-19.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67108851015
Cal : 67108851001

File : c16o0015
Caldate: 16-MAR-2007

IDF : 1.0
Time : 16-MAR-2007 15:31

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03820]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04385]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.943]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01913]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.03276]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01957]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.009163]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	679218	4.98
Scandium	A	852845	887668	4.08
Scandium	E	27959	29041	3.87
Scandium	H	427309	436242	2.09
Germanium	H	105109	106866	1.67
Germanium	E	15593	16234	4.11
Indium	A	1435538	1480106	3.10
Bismuth	A	1399318	1420830	1.54
Yttrium	A	1356281	1398256	3.09
Terbium	A	2224182	2243035	0.85

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67108851038
Cal : 67108851001

File : c16o0038
Caldate: 16-MAR-2007

IDF : 1.0
Time : 16-MAR-2007 17:37

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03644]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04679]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[5.011]	10.00	3:328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.004192]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.009627]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.04539]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01332]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	666976	3.09
Scandium	A	852845	868798	1.87
Scandium	E	27959	29028	3.82
Scandium	H	427309	434989	1.80
Germanium	H	105109	107204	1.99
Germanium	E	15593	16218	4.01
Indium	A	1435538	1463425	1.94
Bismuth	A	1399318	1399798	0.03
Yttrium	A	1356281	1380422	1.78
Terbium	A	2224182	2209634	-0.65

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67108851056 File : c16o0056 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 19:40

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03216]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03919]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.135]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.06050]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02986]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06183]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.06187]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03198]	0.1000	0.01127	ug/L	!ib
Iron	H	[4.431]	10.00	4.329	ug/L	!ib
Selenium	H	[0.03950]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	667497	3.17
Scandium	A	852845	875443	2.65
Scandium	E	27959	29519	5.58
Scandium	H	427309	431600	1.00
Germanium	H	105109	106750	1.56
Germanium	E	15593	16474	5.65
Indium	A	1435538	1461848	1.83
Bismuth	A	1399318	1412181	0.92
Yttrium	A	1356281	1391747	2.61
Terbium	A	2224182	2244985	0.94

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67108851069 File : c16o0069 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 20:52

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.006211]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02993]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01315]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01057]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02018]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1969	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02074]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	651170	0.64
Scandium	A	852845	840146	-1.49
Scandium	E	27959	28561	2.15
Scandium	H	427309	424385	-0.68
Germanium	H	105109	104307	-0.76
Germanium	E	15593	15822	1.47
Indium	A	1435538	1422265	-0.92
Bismuth	A	1399318	1378762	-1.47
Yttrium	A	1356281	1346307	-0.74
Terbium	A	2224182	2173938	-2.26

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67108851093 File : c16o0093
Cal : 67108851001 Caldate: 16-MAR-2007
IDF : 1.0
Time : 16-MAR-2007 23:05

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001684]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01512]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01866]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01781]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02489]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1027	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006041]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	651831	0.74
Scandium	A	852845	891475	4.53
Scandium	E	27959	28504	1.95
Scandium	H	427309	425539	-0.41
Germanium	H	105109	104592	-0.49
Germanium	E	15593	15938	2.21
Indium	A	1435538	1471324	2.49
Bismuth	A	1399318	1397547	-0.13
Yttrium	A	1356281	1412943	4.18
Terbium	A	2224182	2225093	0.04

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851107 File : c16o0107 Time : 17-MAR-2007 00:22
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005515]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01040]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.004591]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01950]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.08138]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	654962	1.23
Scandium	A	852845	888168	4.14
Scandium	E	27959	28769	2.90
Scandium	H	427309	428617	0.31
Germanium	H	105109	105390	0.27
Germanium	E	15593	15993	2.56
Indium	A	1435538	1455739	1.41
Bismuth	A	1399318	1384020	-1.09
Yttrium	A	1356281	1399905	3.22
Terbium	A	2224182	2209475	-0.66

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851130 File : c16o0130 Time : 17-MAR-2007 02:30
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.002928]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01386]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.002862]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02127]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06734]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.007933]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	647884	0.13
Scandium	A	852845	872172	2.27
Scandium	E	27959	27450	-1.82
Scandium	H	427309	418246	-2.12
Germanium	H	105109	103582	-1.45
Germanium	E	15593	15502	-0.59
Indium	A	1435538	1415583	-1.39
Bismuth	A	1399318	1352060	-3.38
Yttrium	A	1356281	1366926	0.78
Terbium	A	2224182	2152162	-3.24

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851149 File : c16o0149 Time : 17-MAR-2007 04:15
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.259]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.003319]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008614]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.009734]	0.1000	0.001252	ug/L	!ib
Sodium	E	25.75	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1818	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.008364]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	715229	10.54
Scandium	A	852845	917185	7.54
Scandium	E	27959	28865	3.24
Scandium	H	427309	431010	0.87
Germanium	H	105109	106640	1.46
Germanium	E	15593	16073	3.08
Indium	A	1435538	1434605	-0.06
Bismuth	A	1399318	1326472	-5.21
Yttrium	A	1356281	1389918	2.48
Terbium	A	2224182	2149294	-3.37

!=warning ib=instrument blank

67108851149

00462 D

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851161 File : c16o0161 Time : 17-MAR-2007 05:20
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007310]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008016]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.666]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01426]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008600]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01191]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02539]	0.1000	0.001252	ug/L	!ib
Sodium	E	31.33	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1024	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01146]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	730889	12.96
Scandium	A	852845	938741	10.07
Scandium	E	27959	29303	4.81
Scandium	H	427309	435888	2.01
Germanium	H	105109	108251	2.99
Germanium	E	15593	16285	4.44
Indium	A	1435538	1469057	2.33
Bismuth	A	1399318	1335314	-4.57
Yttrium	A	1356281	1419906	4.69
Terbium	A	2224182	2165537	-2.64

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851185 File : c16o0185 Time : 17-MAR-2007 07:33
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001851]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007400]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.851]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02059]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001516]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01289]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01982]	0.1000	0.001252	ug/L	!ib
Sodium	E	29.30	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1248	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	677264	4.68
Scandium	A	852845	897885	5.28
Scandium	E	27959	27427	-1.90
Scandium	H	427309	411960	-3.59
Germanium	H	105109	103005	-2.00
Germanium	E	15593	15339	-1.63
Indium	A	1435538	1410374	-1.75
Bismuth	A	1399318	1290693	-7.76
Yttrium	A	1356281	1372148	1.17
Terbium	A	2224182	2084089	-6.30

!=warning ib=instrument blank

00462 F

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851209 File : c16o0209 Time : 17-MAR-2007 09:48
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.002768]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007141]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.004872]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.008477]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01599]	0.1000	0.001252	ug/L	!ib
Sodium	E	17.06	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.004749]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	675280	4.37
Scandium	A	852845	890037	4.36
Scandium	E	27959	26439	-5.44
Scandium	H	427309	402906	-5.71
Germanium	H	105109	100547	-4.34
Germanium	E	15593	15066	-3.38
Indium	A	1435538	1407164	-1.98
Bismuth	A	1399318	1282110	-8.38
Yttrium	A	1356281	1361019	0.35
Terbium	A	2224182	2083332	-6.33

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851227 File : c16o0227 Time : 17-MAR-2007 11:27
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001026]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.005657]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01079]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.003766]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01982]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02382]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.05944]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.03828]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	664804	2.75
Scandium	A	852845	863324	1.23
Scandium	E	27959	26132	-6.54
Scandium	H	427309	396782	-7.14
Germanium	H	105109	99730	-5.12
Germanium	E	15593	14752	-5.40
Indium	A	1435538	1379977	-3.87
Bismuth	A	1399318	1269322	-9.29
Yttrium	A	1356281	1326761	-2.18
Terbium	A	2224182	2051133	-7.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851250 File : c16o0250 Time : 17-MAR-2007 13:34
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.003020]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.920]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01523]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.005176]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02077]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02870]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	621285	-3.98
Scandium	A	852845	823889	-3.40
Scandium	E	27959	24472	-12.47
Scandium	H	427309	381115	-10.81
Germanium	H	105109	95949	-8.72
Germanium	E	15593	14196	-8.96
Indium	A	1435538	1320973	-7.98
Bismuth	A	1399318	1229439	-12.14
Yttrium	A	1356281	1280300	-5.60
Terbium	A	2224182	1955268	-12.09

!=warning ib=instrument blank

67108851250

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851262 File : c16o0262 Time : 17-MAR-2007 14:41
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.001653]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.003333]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005957]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.01649]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06782]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006265]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	631309	-2.43
Scandium	A	852845	841205	-1.36
Scandium	E	27959	25487	-8.84
Scandium	H	427309	378857	-11.34
Germanium	H	105109	95387	-9.25
Germanium	E	15593	14535	-6.79
Indium	A	1435538	1332139	-7.20
Bismuth	A	1399318	1246284	-10.94
Yttrium	A	1356281	1285077	-5.25
Terbium	A	2224182	1987503	-10.64

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851285 File : c16o0285 Time : 17-MAR-2007 16:49
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.009744]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	11.10	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02939]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.009267]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01692]	0.1000	0.001252	ug/L	!ib
Sodium	E	33.57	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.006686]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	621608	-3.93
Scandium	A	852845	823075	-3.49
Scandium	E	27959	24943	-10.79
Scandium	H	427309	362207	-15.24
Germanium	H	105109	92400	-12.09
Germanium	E	15593	14305	-8.26
Indium	A	1435538	1272913	-11.33
Bismuth	A	1399318	1189622	-14.99
Yttrium	A	1356281	1240919	-8.51
Terbium	A	2224182	1916577	-13.83

!=warning ib=instrument blank

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851306 File : c16o0306 Time : 17-MAR-2007 18:46
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01126]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007467]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[5.680]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	14.68	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02134]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.001152]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02860]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01398]	0.1000	0.001252	ug/L	!ib
Sodium	E	74.11	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01197]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	616515	-4.71
Scandium	A	852845	823347	-3.46
Scandium	E	27959	24960	-10.73
Scandium	H	427309	352521	-17.50
Germanium	H	105109	90100	-14.28
Germanium	E	15593	14298	-8.31
Indium	A	1435538	1279805	-10.85
Bismuth	A	1399318	1169344	-16.43
Yttrium	A	1356281	1242377	-8.40
Terbium	A	2224182	1891300	-14.97

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851326 File : c16o0326 Time : 17-MAR-2007 20:37
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.004556]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007732]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	10.97	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01839]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01541]	0.1000	0.001252	ug/L	!ib
Sodium	E	55.43	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.03369]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	546698	-15.50
Scandium	A	852845	768864	-9.85
Scandium	E	27959	22736	-18.68
Scandium	H	427309	334695	-21.67
Germanium	H	105109	86138	-18.05
Germanium	E	15593	13206	-15.31
Indium	A	1435538	1237156	-13.82
Bismuth	A	1399318	1135108	-18.88
Yttrium	A	1356281	1183012	-12.78
Terbium	A	2224182	1822183	-18.07

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67108851326

: 00462 M

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851347 File : c16o0347 Time : 17-MAR-2007 22:33
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01182]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02267]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.748]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	13.94	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02525]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02229]	0.1000	0.001252	ug/L	!ib
Sodium	E	64.83	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.04282]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01926]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	548664	-15.20
Scandium	A	852845	754333	-11.55
Scandium	E	27959	22035	-21.19
Scandium	H	427309	317614	-25.67
Germanium	H	105109	81947	-22.04
Germanium	E	15593	12864	-17.50
Indium	A	1435538	1187254	-17.30
Bismuth	A	1399318	1116196	-20.23
Yttrium	A	1356281	1151611	-15.09
Terbium	A	2224182	1770124	-20.41

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67108851347

: 00462 N

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851365 File : c16o0365 Time : 18-MAR-2007 00:12
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02092]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02427]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.114]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	11.56	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.003051]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.006739]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01303]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01250]	0.1000	0.001252	ug/L	!ib
Sodium	E	62.76	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01606]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	549531	-15.07
Scandium	A	852845	751388	-11.90
Scandium	E	27959	21646	-22.58
Scandium	H	427309	318145	-25.55
Germanium	H	105109	81559	-22.41
Germanium	E	15593	12780	-18.04
Indium	A	1435538	1187795	-17.26
Bismuth	A	1399318	1133962	-18.96
Yttrium	A	1356281	1150099	-15.20
Terbium	A	2224182	1782722	-19.85

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851373 File : c16o0373 Time : 18-MAR-2007 00:57
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007873]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.209]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.008090]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01353]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01708]	0.1000	0.001252	ug/L	!ib
Sodium	E	44.26	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1674	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.03101]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	535060	-17.30
Scandium	A	852845	742632	-12.92
Scandium	E	27959	21919	-21.60
Scandium	H	427309	322196	-24.60
Germanium	H	105109	82636	-21.38
Germanium	E	15593	12511	-19.77
Indium	A	1435538	1181289	-17.71
Bismuth	A	1399318	1116735	-20.19
Yttrium	A	1356281	1136189	-16.23
Terbium	A	2224182	1774108	-20.24

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67108851373

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67108851017 File : c16o0017 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 15:42
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06979]	0.1000	ug/L	
Barium	A	3.368	0.1000	ug/L	
Beryllium	A	[0.03743]	0.1000	ug/L	
Cadmium	A	1.572	0.1000	ug/L	
Lead	A	0.4797	0.1000	ug/L	
Silver	A	0.2258	0.1000	ug/L	
Thallium	A	[0.04240]	0.05000	ug/L	
Arsenic	E	0.2809	0.1000	ug/L	
Chromium	E	1.398	0.1000	ug/L	
Cobalt	E	0.2199	0.1000	ug/L	
Copper	E	1.199	0.1000	ug/L	
Manganese	E	0.6524	0.1000	ug/L	
Nickel	E	1.409	0.1000	ug/L	
Vanadium	E	[0.06292]	0.1000	ug/L	
Zinc	E	1.672	0.1000	ug/L	
Selenium	H	0.1330	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98480	ug/L	98
Calcium	A	300000	298100	ug/L	99
Magnesium	A	100000	96760	ug/L	97
Molybdenum	A	2000	1966	ug/L	98
Potassium	A	100000	98580	ug/L	99
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	240700	ug/L	96

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	518899	-19.80
Scandium	A	852845	780103	-8.53
Scandium	E	27959	25576	-8.52
Scandium	H	427309	396467	-7.22
Germanium	H	105109	91814	-12.65
Germanium	E	15593	13819	-11.38
Indium	A	1435538	1209151	-15.77
Bismuth	A	1399318	1031621	-26.28
Yttrium	A	1356281	1247473	-8.02
Terbium	A	2224182	1972673	-11.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67108851018 File : c16o0018 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 15:47
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102900	ug/L	3		
Cadmium	A	100.0	103.0	ug/L	3	20	
Calcium	A	300000	313600	ug/L	5		
Magnesium	A	100000	100400	ug/L	0		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	104100	ug/L	4		
Silver	A	50.00	45.22	ug/L	-10	20	
Arsenic	E	100.0	110.7	ug/L	11	20	
Chromium	E	200.0	211.6	ug/L	6	20	
Cobalt	E	200.0	197.7	ug/L	-1	20	
Copper	E	200.0	192.2	ug/L	-4	20	
Manganese	E	200.0	207.6	ug/L	4	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	262100	ug/L	5		
Vanadium	E	200.0	215.8	ug/L	8	20	
Zinc	E	100.0	99.21	ug/L	-1	20	
Iron	H	250000	249800	ug/L	0		
Selenium	H	100.0	104.0	ug/L	4	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	402678	-5.76
Scandium	A	852845	780915	-8.43
Scandium	E	27959	25436	-9.02
Germanium	H	105109	92472	-12.02
Germanium	E	15593	13616	-12.68
Indium	A	1435538	1200130	-16.40
Yttrium	A	1356281	1239293	-8.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67108851072 File : c16o0072 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 21:08
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06701]	0.1000	ug/L	
Barium	A	3.464	0.1000	ug/L	
Beryllium	A	[0.03829]	0.1000	ug/L	
Cadmium	A	1.683	0.1000	ug/L	
Lead	A	0.4825	0.1000	ug/L	
Silver	A	0.2184	0.1000	ug/L	
Thallium	A	[0.03878]	0.05000	ug/L	
Arsenic	E	0.2735	0.1000	ug/L	
Chromium	E	1.413	0.1000	ug/L	
Cobalt	E	0.2257	0.1000	ug/L	
Copper	E	1.188	0.1000	ug/L	
Manganese	E	0.6878	0.1000	ug/L	
Nickel	E	1.437	0.1000	ug/L	
Vanadium	E	[0.08393]	0.1000	ug/L	
Zinc	E	1.470	0.1000	ug/L	
Selenium	H	0.1405	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98700	ug/L	99
Calcium	A	300000	301200	ug/L	100
Magnesium	A	100000	97480	ug/L	97
Molybdenum	A	2000	1989	ug/L	99
Potassium	A	100000	100300	ug/L	100
Sodium	E	250000	245800	ug/L	98
Iron	H	250000	239600	ug/L	96

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	504568	-22.02
Scandium	A	852845	760867	-10.78
Scandium	E	27959	25363	-9.29
Scandium	H	427309	387126	-9.40
Germanium	H	105109	90213	-14.17
Germanium	E	15593	13775	-11.66
Indium	A	1435538	1186883	-17.32
Bismuth	A	1399318	1023661	-26.85
Yttrium	A	1356281	1224120	-9.74
Terbium	A	2224182	1942237	-12.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67108851073 File : c16o0073 IDF : 1.0
Cal : 67108851001 Caldate: 16-MAR-2007 Time : 16-MAR-2007 21:13
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105300	ug/L	5		
Cadmium	A	100.0	105.8	ug/L	6	20	
Calcium	A	300000	321300	ug/L	7		
Magnesium	A	100000	103500	ug/L	4		
Molybdenum	A	2000	2080	ug/L	4		
Potassium	A	100000	107200	ug/L	7		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	207.2	ug/L	4	20	
Cobalt	E	200.0	194.1	ug/L	-3	20	
Copper	E	200.0	190.6	ug/L	-5	20	
Manganese	E	200.0	204.2	ug/L	2	20	
Nickel	E	200.0	190.9	ug/L	-5	20	
Sodium	E	250000	257200	ug/L	3		
Vanadium	E	200.0	211.3	ug/L	6	20	
Zinc	E	100.0	98.52	ug/L	-1	20	
Iron	H	250000	245900	ug/L	-2		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	400281	-6.33
Scandium	A	852845	754348	-11.55
Scandium	E	27959	25399	-9.16
Germanium	H	105109	92845	-11.67
Germanium	E	15593	13490	-13.49
Indium	A	1435538	1149386	-19.93
Yttrium	A	1356281	1205899	-11.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851109 File : c16o0109 Time : 17-MAR-2007 00:33
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06099]	0.1000	ug/L	
Barium	A	3.629	0.1000	ug/L	
Beryllium	A	[0.03195]	0.1000	ug/L	
Cadmium	A	1.625	0.1000	ug/L	
Lead	A	0.4884	0.1000	ug/L	
Silver	A	0.2189	0.1000	ug/L	
Thallium	A	[0.03628]	0.05000	ug/L	
Arsenic	E	0.2672	0.1000	ug/L	
Chromium	E	1.405	0.1000	ug/L	
Cobalt	E	0.2448	0.1000	ug/L	
Copper	E	0.8789	0.1000	ug/L	
Manganese	E	0.7031	0.1000	ug/L	
Nickel	E	1.413	0.1000	ug/L	
Vanadium	E	[0.07475]	0.1000	ug/L	
Zinc	E	1.609	0.1000	ug/L	
Selenium	H	0.1048	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100400	ug/L	100
Calcium	A	300000	304200	ug/L	101
Magnesium	A	100000	97890	ug/L	98
Molybdenum	A	2000	2001	ug/L	100
Potassium	A	100000	102100	ug/L	102
Sodium	E	250000	244900	ug/L	98
Iron	H	250000	238500	ug/L	95

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	495319	-23.45
Scandium	A	852845	764190	-10.40
Scandium	E	27959	25219	-9.80
Scandium	H	427309	392598	-8.12
Germanium	H	105109	91636	-12.82
Germanium	E	15593	13839	-11.25
Indium	A	1435538	1169276	-18.55
Bismuth	A	1399318	1007694	-27.99
Yttrium	A	1356281	1222187	-9.89
Terbium	A	2224182	1911084	-14.08

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851110 File : c16o0110 Time : 17-MAR-2007 00:39
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104000	ug/L	4		
Cadmium	A	100.0	104.5	ug/L	5	20	
Calcium	A	300000	317400	ug/L	6		
Magnesium	A	100000	101600	ug/L	2		
Molybdenum	A	2000	2057	ug/L	3		
Potassium	A	100000	106000	ug/L	6		
Silver	A	50.00	46.22	ug/L	-8	20	
Arsenic	E	100.0	108.3	ug/L	8	20	
Chromium	E	200.0	207.5	ug/L	4	20	
Cobalt	E	200.0	195.1	ug/L	-2	20	
Copper	E	200.0	188.2	ug/L	-6	20	
Manganese	E	200.0	204.1	ug/L	2	20	
Nickel	E	200.0	192.1	ug/L	-4	20	
Sodium	E	250000	254600	ug/L	2		
Vanadium	E	200.0	211.9	ug/L	6	20	
Zinc	E	100.0	96.40	ug/L	-4	20	
Iron	H	250000	246600	ug/L	-1		
Selenium	H	100.0	103.7	ug/L	4	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	398802	-6.67
Scandium	A	852845	774546	-9.18
Scandium	E	27959	25190	-9.90
Germanium	H	105109	92074	-12.40
Germanium	E	15593	13602	-12.77
Indium	A	1435538	1165568	-18.81
Yttrium	A	1356281	1222290	-9.88

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851164 File : c16o0164 Time : 17-MAR-2007 05:37
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05698]	0.1000	ug/L	
Barium	A	3.725	0.1000	ug/L	
Beryllium	A	[0.01358]	0.1000	ug/L	
Cadmium	A	1.757	0.1000	ug/L	
Lead	A	0.4854	0.1000	ug/L	
Silver	A	0.2212	0.1000	ug/L	
Thallium	A	[0.03167]	0.05000	ug/L	
Arsenic	E	0.3023	0.1000	ug/L	
Chromium	E	1.389	0.1000	ug/L	
Cobalt	E	0.2152	0.1000	ug/L	
Copper	E	0.3746	0.1000	ug/L	
Manganese	E	0.7066	0.1000	ug/L	
Nickel	E	1.413	0.1000	ug/L	
Vanadium	E	[0.08283]	0.1000	ug/L	
Zinc	E	1.514	0.1000	ug/L	
Selenium	H	0.1394	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102000	ug/L	102
Calcium	A	300000	304500	ug/L	102
Magnesium	A	100000	99490	ug/L	99
Molybdenum	A	2000	1990	ug/L	100
Potassium	A	100000	101800	ug/L	102
Sodium	E	250000	236500	ug/L	95
Iron	H	250000	234300	ug/L	94

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	519105	-19.77
Scandium	A	852845	784754	-7.98
Scandium	E	27959	25053	-10.39
Scandium	H	427309	384476	-10.02
Germanium	H	105109	90184	-14.20
Germanium	E	15593	13619	-12.66
Indium	A	1435538	1157727	-19.35
Bismuth	A	1399318	984171	-29.67
Yttrium	A	1356281	1204645	-11.18
Terbium	A	2224182	1851850	-16.74

00466 C

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851165 File : c16o0165 Time : 17-MAR-2007 05:42
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105400	ug/L	5		
Cadmium	A	100.0	103.8	ug/L	4	20	
Calcium	A	300000	315300	ug/L	5		
Magnesium	A	100000	102900	ug/L	3		
Molybdenum	A	2000	2053	ug/L	3		
Potassium	A	100000	106800	ug/L	7		
Silver	A	50.00	46.16	ug/L	-8	20	
Arsenic	E	100.0	108.8	ug/L	9	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	197.4	ug/L	-1	20	
Copper	E	200.0	187.0	ug/L	-7	20	
Manganese	E	200.0	203.9	ug/L	2	20	
Nickel	E	200.0	195.0	ug/L	-3	20	
Sodium	E	250000	251000	ug/L	0		
Vanadium	E	200.0	214.8	ug/L	7	20	
Zinc	E	100.0	96.01	ug/L	-4	20	
Iron	H	250000	243200	ug/L	-3		
Selenium	H	100.0	102.2	ug/L	2	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	382987	-10.37
Scandium	A	852845	775866	-9.03
Scandium	E	27959	24236	-13.32
Germanium	H	105109	89203	-15.13
Germanium	E	15593	13313	-14.62
Indium	A	1435538	1150426	-19.86
Yttrium	A	1356281	1207103	-11.00

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851232 File : c16o0232 Time : 17-MAR-2007 11:55
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06433]	0.1000	ug/L	
Barium	A	3.656	0.1000	ug/L	
Beryllium	A	[0.02896]	0.1000	ug/L	
Cadmium	A	1.764	0.1000	ug/L	
Lead	A	0.4881	0.1000	ug/L	
Silver	A	0.2201	0.1000	ug/L	
Thallium	A	[0.03037]	0.05000	ug/L	
Arsenic	E	0.2592	0.1000	ug/L	
Chromium	E	1.451	0.1000	ug/L	
Cobalt	E	0.2281	0.1000	ug/L	
Copper	E	0.5996	0.1000	ug/L	
Manganese	E	0.7390	0.1000	ug/L	
Nickel	E	1.505	0.1000	ug/L	
Vanadium	E	[0.09660]	0.1000	ug/L	
Zinc	E	1.577	0.1000	ug/L	
Selenium	H	0.1363	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100200	ug/L	100
Calcium	A	300000	299700	ug/L	100
Magnesium	A	100000	97370	ug/L	97
Molybdenum	A	2000	1965	ug/L	98
Potassium	A	100000	101400	ug/L	101
Sodium	E	250000	234100	ug/L	94
Iron	H	250000	236200	ug/L	94

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	501452	-22.50
Scandium	A	852845	772458	-9.43
Scandium	E	27959	23438	-16.17
Scandium	H	427309	364256	-14.76
Germanium	H	105109	85309	-18.84
Germanium	E	15593	12911	-17.20
Indium	A	1435538	1128121	-21.41
Bismuth	A	1399318	969019	-30.75
Yttrium	A	1356281	1193707	-11.99
Terbium	A	2224182	1803316	-18.92

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851233 File : c16o0233 Time : 17-MAR-2007 12:00
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105100	ug/L	5		
Cadmium	A	100.0	105.4	ug/L	5	20	
Calcium	A	300000	314800	ug/L	5		
Magnesium	A	100000	101500	ug/L	2		
Molybdenum	A	2000	2045	ug/L	2		
Potassium	A	100000	107000	ug/L	7		
Silver	A	50.00	46.65	ug/L	-7	20	
Arsenic	E	100.0	109.6	ug/L	10	20	
Chromium	E	200.0	212.9	ug/L	6	20	
Cobalt	E	200.0	202.4	ug/L	1	20	
Copper	E	200.0	191.2	ug/L	-4	20	
Manganese	E	200.0	206.4	ug/L	3	20	
Nickel	E	200.0	199.9	ug/L	0	20	
Sodium	E	250000	249800	ug/L	0		
Vanadium	E	200.0	217.7	ug/L	9	20	
Zinc	E	100.0	97.07	ug/L	-3	20	
Iron	H	250000	245000	ug/L	-2		
Selenium	H	100.0	104.1	ug/L	4	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	367826	-13.92
Scandium	A	852845	765561	-10.23
Scandium	E	27959	23015	-17.68
Germanium	H	105109	86183	-18.01
Germanium	E	15593	12701	-18.55
Indium	A	1435538	1117246	-22.17
Yttrium	A	1356281	1187197	-12.47

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851264 File : c16o0264 Time : 17-MAR-2007 14:51
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06042]	0.1000	ug/L	
Barium	A	3.731	0.1000	ug/L	
Beryllium	A	[0.02463]	0.1000	ug/L	
Cadmium	A	1.761	0.1000	ug/L	
Lead	A	0.4769	0.1000	ug/L	
Silver	A	0.2229	0.1000	ug/L	
Thallium	A	[0.03305]	0.05000	ug/L	
Arsenic	E	0.2736	0.1000	ug/L	
Chromium	E	1.411	0.1000	ug/L	
Cobalt	E	0.2277	0.1000	ug/L	
Copper	E	0.5394	0.1000	ug/L	
Manganese	E	0.6838	0.1000	ug/L	
Nickel	E	1.396	0.1000	ug/L	
Vanadium	E	[0.09678]	0.1000	ug/L	
Zinc	E	1.310	0.1000	ug/L	
Selenium	H	0.1090	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99980	ug/L	100
Calcium	A	300000	300000	ug/L	100
Magnesium	A	100000	97540	ug/L	98
Molybdenum	A	2000	1972	ug/L	99
Potassium	A	100000	101500	ug/L	102
Sodium	E	250000	229400	ug/L	92
Iron	H	250000	234100	ug/L	94

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	483997	-25.20
Scandium	A	852845	761817	-10.67
Scandium	E	27959	23570	-15.70
Scandium	H	427309	361585	-15.38
Germanium	H	105109	85937	-18.24
Germanium	E	15593	13062	-16.23
Indium	A	1435538	1103089	-23.16
Bismuth	A	1399318	953858	-31.83
Yttrium	A	1356281	1171736	-13.61
Terbium	A	2224182	1786198	-19.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851265 File : c16o0265 Time : 17-MAR-2007 14:57
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104100	ug/L	4		
Cadmium	A	100.0	105.6	ug/L	6	20	
Calcium	A	300000	315100	ug/L	5		
Magnesium	A	100000	101200	ug/L	1		
Molybdenum	A	2000	2065	ug/L	3		
Potassium	A	100000	106100	ug/L	6		
Silver	A	50.00	47.30	ug/L	-5	20	
Arsenic	E	100.0	109.7	ug/L	10	20	
Chromium	E	200.0	209.6	ug/L	5	20	
Cobalt	E	200.0	198.9	ug/L	-1	20	
Copper	E	200.0	188.9	ug/L	-6	20	
Manganese	E	200.0	206.0	ug/L	3	20	
Nickel	E	200.0	195.9	ug/L	-2	20	
Sodium	E	250000	242800	ug/L	-3		
Vanadium	E	200.0	214.5	ug/L	7	20	
Zinc	E	100.0	95.57	ug/L	-4	20	
Iron	H	250000	245700	ug/L	-2		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	357194	-16.41
Scandium	A	852845	747620	-12.34
Scandium	E	27959	22634	-19.05
Germanium	H	105109	84934	-19.19
Germanium	E	15593	12415	-20.38
Indium	A	1435538	1083955	-24.49
Yttrium	A	1356281	1146158	-15.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851313 File : c16o0313 Time : 17-MAR-2007 19:24
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06667]	0.1000	ug/L	
Barium	A	3.749	0.1000	ug/L	
Beryllium	A	[0.01742]	0.1000	ug/L	
Cadmium	A	1.939	0.1000	ug/L	
Lead	A	0.4794	0.1000	ug/L	
Silver	A	0.2146	0.1000	ug/L	
Thallium	A	[0.02632]	0.05000	ug/L	
Arsenic	E	0.2679	0.1000	ug/L	
Chromium	E	1.395	0.1000	ug/L	
Cobalt	E	0.2271	0.1000	ug/L	
Copper	E	0.3174	0.1000	ug/L	
Manganese	E	0.7901	0.1000	ug/L	
Nickel	E	1.456	0.1000	ug/L	
Vanadium	E	[0.07179]	0.1000	ug/L	
Zinc	E	1.316	0.1000	ug/L	
Selenium	H	0.1206	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99140	ug/L	99
Calcium	A	300000	297500	ug/L	99
Magnesium	A	100000	96480	ug/L	96
Molybdenum	A	2000	1961	ug/L	98
Potassium	A	100000	101100	ug/L	101
Sodium	E	250000	222900	ug/L	89
Iron	H	250000	233600	ug/L	93

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	464248	-28.25
Scandium	A	852845	718553	-15.75
Scandium	E	27959	21873	-21.77
Scandium	H	427309	325691	-23.78
Germanium	H	105109	78805	-25.03
Germanium	E	15593	12266	-21.34
Indium	A	1435538	1040796	-27.50
Bismuth	A	1399318	899203	-35.74
Yttrium	A	1356281	1100319	-18.87
Terbium	A	2224182	1669789	-24.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851314 File : c16o0314 Time : 17-MAR-2007 19:30
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105000	ug/L	5		
Cadmium	A	100.0	106.2	ug/L	6	20	
Calcium	A	300000	318300	ug/L	6		
Magnesium	A	100000	101500	ug/L	2		
Molybdenum	A	2000	2083	ug/L	4		
Potassium	A	100000	107900	ug/L	8		
Silver	A	50.00	47.69	ug/L	-5	20	
Arsenic	E	100.0	105.7	ug/L	6	20	
Chromium	E	200.0	202.8	ug/L	1	20	
Cobalt	E	200.0	193.5	ug/L	-3	20	
Copper	E	200.0	179.5	ug/L	-10	20	
Manganese	E	200.0	201.1	ug/L	1	20	
Nickel	E	200.0	189.9	ug/L	-5	20	
Sodium	E	250000	231900	ug/L	-7		
Vanadium	E	200.0	209.9	ug/L	5	20	
Zinc	E	100.0	92.47	ug/L	-8	20	
Iron	H	250000	246200	ug/L	-2		
Selenium	H	100.0	101.0	ug/L	1	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	326322	-23.63
Scandium	A	852845	701064	-17.80
Scandium	E	27959	21834	-21.91
Germanium	H	105109	78917	-24.92
Germanium	E	15593	12204	-21.74
Indium	A	1435538	1019060	-29.01
Yttrium	A	1356281	1077488	-20.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851376 File : c16o0376 Time : 18-MAR-2007 01:13
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05523]	0.1000	ug/L	
Barium	A	3.683	0.1000	ug/L	
Beryllium	A	[0.01966]	0.1000	ug/L	
Cadmium	A	1.884	0.1000	ug/L	
Lead	A	0.4932	0.1000	ug/L	
Silver	A	0.2301	0.1000	ug/L	
Thallium	A	[0.03734]	0.05000	ug/L	
Arsenic	E	0.2590	0.1000	ug/L	
Chromium	E	1.408	0.1000	ug/L	
Cobalt	E	0.2349	0.1000	ug/L	
Copper	E	0.6301	0.1000	ug/L	
Manganese	E	0.7333	0.1000	ug/L	
Nickel	E	1.433	0.1000	ug/L	
Vanadium	E	[0.06869]	0.1000	ug/L	
Zinc	E	1.423	0.1000	ug/L	
Selenium	H	0.1418	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99050	ug/L	99
Calcium	A	300000	298600	ug/L	100
Magnesium	A	100000	96510	ug/L	97
Molybdenum	A	2000	1969	ug/L	98
Potassium	A	100000	100900	ug/L	101
Sodium	E	250000	225200	ug/L	90
Iron	H	250000	236300	ug/L	95

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	425897	-34.17
Scandium	A	852845	672599	-21.13
Scandium	E	27959	20045	-28.31
Scandium	H	427309	305381	-28.53
Germanium	H	105109	74189	-29.42
Germanium	E	15593	11571	-25.80
Indium	A	1435538	993918	-30.76
Bismuth	A	1399318	882650	-36.92
Yttrium	A	1356281	1035160	-23.68
Terbium	A	2224182	1614441	-27.41

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851377 File : c16o0377 Time : 18-MAR-2007 01:19
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101600	ug/L	2		
Cadmium	A	100.0	103.2	ug/L	3	20	
Calcium	A	300000	308900	ug/L	3		
Magnesium	A	100000	98520	ug/L	-1		
Molybdenum	A	2000	2017	ug/L	1		
Potassium	A	100000	104400	ug/L	4		
Silver	A	50.00	46.37	ug/L	-7	20	
Arsenic	E	100.0	106.0	ug/L	6	20	
Chromium	E	200.0	207.8	ug/L	4	20	
Cobalt	E	200.0	198.4	ug/L	-1	20	
Copper	E	200.0	180.5	ug/L	-10	20	
Manganese	E	200.0	205.0	ug/L	3	20	
Nickel	E	200.0	196.9	ug/L	-2	20	
Sodium	E	250000	233700	ug/L	-7		
Vanadium	E	200.0	213.9	ug/L	7	20	
Zinc	E	100.0	91.66	ug/L	-8	20	
Iron	H	250000	242100	ug/L	-3		
Selenium	H	100.0	99.17	ug/L	-1	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	305980	-28.39
Scandium	A	852845	671462	-21.27
Scandium	E	27959	19678	-29.62
Germanium	H	105109	74295	-29.32
Germanium	E	15593	11262	-27.78
Indium	A	1435538	989092	-31.10
Yttrium	A	1356281	1046506	-22.84

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CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67108851

Date : 03/16/07
Sequence : MET06 c16o0

Reference: c16o0004
Analyzed : 03/16/07 14:30

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	647013	852845	27959	427309	105109	15593	1435538	1399318	1356281	2224182
		LOWER LIMIT	194104	255854	8388	128193	31533	4678	430661	419795	406884	667255
		UPPER LIMIT	776416	1023414	33551	512771	126131	18712	1722646	1679182	1627537	2669018
015	ICB		679218	887668	29041	436242	106866	16234	1480106	1420830	1398256	2243035
017	ICSA		518899	780103	25576	396467	91814	13819	1209151	1031621	1247473	1972673
018	ICSAB		512341	780915	25436	402678	92472	13616	1200130	1003623	1239293	1943393
023	BLANK	QC378982	776016	985262	31487	456261	114187	17670	1559266	1443274	1494982	2305849
024	BS	QC378983	580371	791031	26603	399505	97503	14421	1316426	1258069	1286920	2087787
025	BSD	QC378984	560977	782843	26054	403086	98548	14242	1302546	1251133	1289618	2094068
027	MSS	193244-001	633488	855419	28055	431602	105695	15512	1446362	1387429	1374486	2187178
028	SER	QC378987	643169	859009	28340	428668	104957	15669	1451881	1385708	1371529	2217644
029	MS	QC378985	598082	786190	28151	425091	103798	15562	1325061	1299698	1256111	2052440
030	MSD	QC378986	636121	830727	28217	421021	102994	15553	1400412	1375021	1341482	2197932
031	PDS	QC378988	633837	889614	27424	417558	101692	14989	1417021	1353507	1395682	2232337
035	CCV		645402	883227	28324	408990	101494	15722	1398368	1338138	1388477	2231766
038	CCB		666976	868798	29028	434989	107204	16218	1463425	1399798	1380422	2209634
040	MSS	193244-001	646292	858624	28794	424803	104025	15930	1454582	1398646	1363176	2209037
042	SAMPLE	193335-001	642134	865827	28376	422523	104320	15844	1454029	1417808	1380603	2229087
043	SAMPLE	193338-001	634679	840715	28185	420197	104268	15780	1425350	1391691	1343712	2211778
044	SAMPLE	193330-001	634015	857601	29049	426606	105570	16064	1447397	1423321	1375994	2238486
045	SAMPLE	193330-002	627319	849649	28545	428501	106394	16164	1442840	1398529	1359499	2218748
046	SAMPLE	193330-003	629383	829393	29233	415524	104145	16224	1412516	1382027	1340032	2183540
047	SAMPLE	193330-004	638264	829846	27144	424003	105569	15644	1426420	1388351	1349816	2192381
048	SAMPLE	193330-005	623519	832351	28260	419499	104024	15817	1415016	1368563	1331890	2192505
049	SAMPLE	193330-006	625684	823516	27918	415933	103027	15653	1399242	1373497	1328767	2179947
053	CCV		645908	864237	28194	424021	103554	15793	1407299	1362569	1386470	2237559
056	CCB		667497	875443	29519	431600	106750	16474	1461848	1412181	1391747	2244985
059	SAMPLE	193330-007	629169	833161	28744	428356	106200	16144	1429660	1384897	1347596	2186938
060	SAMPLE	193330-008	632061	824288	27875	418000	104502	15927	1419588	1386137	1337207	2169616
061	SAMPLE	193338-001	635567	858708	28201	429414	106540	16037	1443573	1393675	1374657	2219707
062	SAMPLE	193330-004	653773	851912	28280	421012	104805	16111	1437631	1400781	1365574	2199437
063	SAMPLE	193330-006	642256	831183	29998	425829	105517	16491	1403398	1388724	1339227	2175105
067	CCV		628091	865265	28165	422541	103383	15693	1392454	1347174	1365367	2201143
069	CCB		651170	840146	28561	424385	104307	15822	1422265	1378762	1346307	2173938
072	ICSA		504568	760867	25363	387126	90213	13775	1186883	1023661	1224120	1942237
073	ICSAB		491683	754348	25399	400281	92845	13490	1149386	975875	1205899	1889066
078	BLANK	QC379370	666252	877284	28523	430509	107033	16078	1429736	1381024	1375171	2152637
079	BS	QC379371	619530	838987	27379	415790	101464	15296	1389093	1347982	1334181	2131453
080	BSD	QC379372	629949	849158	27227	413583	101078	15122	1405185	1354676	1346388	2143254
082	MSS	193291-002	635340	857253	27985	420140	99746	15078	1367726	1340486	1384319	2112664
083	SER	QC379375	641651	855869	27660	413667	101233	15298	1402208	1370056	1357639	2159343
084	MS	QC379373	656069	903886	29128	437584	103495	15718	1409058	1356771	1432439	2180107
085	MSD	QC379374	648052	916901	29165	439605	103982	15739	1405318	1336576	1442475	2162038
086	PDS	QC379376	631680	910960	29158	440805	104127	15492	1377050	1291088	1431769	2152340
090	CCV		632309	881813	27523	428015	103765	15293	1394709	1306023	1382140	2178636
093	CCB		651831	891475	28504	425539	104592	15938	1471324	1397547	1412943	2225093
095	SAMPLE	193291-003	667087	936750	30154	453598	106645	16144	1456877	1376179	1477831	2200116
096	SAMPLE	193291-004	679896	960818	30875	453977	107067	16613	1483565	1409213	1529387	2256163
097	SAMPLE	193291-005	673600	947331	30210	419355	103508	16592	1467084	1391914	1485622	2237523
098	SAMPLE	193291-006	691054	981549	30983	462910	109041	16899	1502850	1421863	1527443	2281224
L04	CCV		617827	884985	27574	426865	106063	15385	1389510	1303319	1380024	2170097

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#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
107	CCB		654962	888168	28769	428617	105390	15993	1455739	1384020	1399905	2209475
109	ICSA		495319	764190	25219	392598	91636	13839	1169276	1007694	1222187	1911084
110	ICSAB		497671	774546	25190	398802	92074	13602	1165568	989274	1222290	1905311
115	BLANK	QC379418	554588	787745	25242	385476	108671	15643	1317131	1263946	1268614	2061610
116	BS	QC379419	556362	787003	25234	389994	95944	13871	1281934	1212923	1278986	2038575
117	BSD	QC379420	541397	778632	25156	390668	97335	13938	1278153	1214682	1264000	2031375
119	MSS	193329-001	623666	884798	27417	416484	102616	15214	1409485	1296685	1385467	2182442
120	SER	QC379423	628648	882064	27856	428508	105873	15711	1420421	1340790	1378709	2146160
121	MS	QC379421	602775	839704	26890	407312	99548	14817	1356572	1245903	1332360	2090651
122	MSD	QC379422	603572	853530	27257	413468	101257	14842	1351842	1237338	1325119	2073271
123	PDS	QC379424	594392	861716	26657	405278	98291	14532	1333994	1229647	1331823	2092313
127	CCV		592892	817089	26874	415143	102123	15042	1305547	1240079	1289757	2034978
130	CCB		647884	872172	27450	418246	103582	15502	1415583	1352060	1366926	2152162
132	SAMPLE	193233-002	630829	869405	27698	419579	105316	15756	1466811	1388303	1388316	2211097
133	SAMPLE	193233-003	604805	839995	27001	410091	102943	15289	1412960	1344799	1334499	2140391
134	SAMPLE	193329-002	623494	862101	27314	419237	104397	15530	1401623	1332311	1345909	2132011
135	SAMPLE	193329-003	602912	873129	27642	414087	94103	14190	1267744	1021397	1281674	1922332
136	SAMPLE	193329-004	612588	905736	28446	430856	97815	14444	1279047	1020497	1312325	1950925
137	SAMPLE	193329-005	732293	941909	29546	445965	111519	16173	1466846	1367084	1414132	2187906
138	SAMPLE	193329-006	638466	922420	28340	421832	97229	14393	1311723	1044944	1336982	2001516
139	SAMPLE	193329-007	710449	945067	30310	456407	113412	16797	1442562	1292669	1411886	2142846
140	SAMPLE	193329-008	531191	850781	27313	413437	90699	13371	1177387	877086	1228313	1774404
141	SAMPLE	193329-009	514424	825295	27394	426622	90621	13219	1140457	832999	1193915	1693220
145	CCV		691645	930489	28404	426899	104279	15502	1405215	1284939	1405050	2156463
149	CCB		715229	917185	28865	431010	106640	16073	1434605	1326472	1389918	2149294
150	SAMPLE	193329-013	693685	905458	28540	420374	103747	15806	1416964	1307518	1362212	2145052
151	SAMPLE	193416-001	654005	899195	28080	418966	99115	14935	1316933	1161470	1325466	2031414
152	SAMPLE	193416-004	659723	913974	28293	426720	100528	15167	1319292	1146908	1338047	2033710
153	SAMPLE	193418-001	580347	849111	26703	396977	87711	13360	1164168	897003	1215998	1744305
154	SAMPLE	193418-004	645377	924621	29068	433367	98297	14583	1282632	991820	1326269	1891644
155	SAMPLE	193418-005	739596	957599	29790	448233	111209	16498	1447475	1306821	1417001	2137435
159	CCV		680193	903589	27930	416153	101907	15401	1370942	1237840	1361700	2080500
161	CCB		730889	938741	29303	435888	108251	16285	1469057	1335314	1419906	2165537
164	ICSA		519105	784754	25053	384476	90184	13619	1157727	984171	1204645	1851850
165	ICSAB		505068	775866	24236	382987	89203	13313	1150426	959124	1207103	1823441
170	BLANK	QC379702	653587	865815	27767	406668	101831	15535	1380353	1291665	1325547	2045809
171	BS	QC379703	627277	848393	25948	393306	97251	14612	1302915	1215049	1296273	2024284
172	BSD	QC379704	638314	871575	26259	398105	97898	14598	1335790	1217723	1330785	2048120
174	MSS	193459-003	647862	947809	27359	421856	95859	14149	1288076	983589	1337863	1893263
175	MS	QC379705	632469	940047	28863	425762	95872	14454	1266813	965035	1330166	1867618
176	MSD	QC379706	636006	966737	29433	431853	97629	14831	1294025	977159	1356850	1907508
178	SAMPLE	193459-001	818066 *	1049125 *	32194	468118	118223	18347	1572454	1322036	1539080	2218606
179	SAMPLE	193459-002	688337	987707	30188	445666	105224	15969	1369993	1084843	1410918	2024921
183	CCV		643964	875723	26801	411656	101982	14954	1325196	1220354	1335966	2042769
185	CCB		677264	897885	27427	411960	103005	15339	1410374	1290693	1372148	2084089
188	SAMPLE	193459-004	658690	929696	28621	414742	97158	14868	1291266	1040382	1329612	1929808
189	SAMPLE	193459-005	648978	926578	27577	427129	100124	14514	1303810	1054140	1351569	1948738
190	SAMPLE	193459-006	677869	971303	29021	426171	99063	14924	1328168	1058174	1379575	1985645
191	SAMPLE	193459-007	666978	987134	29551	431752	99520	14998	1332878	1030931	1380117	1973771
194	SAMPLE	193459-008	702127	988408	30260	448994	106280	15812	1375258	1089382	1420499	2018999
195	SAMPLE	193459-009	670019	989355	29877	445294	102709	15461	1344480	1041096	1409042	1988125
199	BLANK	QC379174	680035	921303	28326	432266	116235	16124	1414556	1274193	1392164	2117878

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#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
200	BS	QC379175	608615	855725	25677	400439	99801	14310	1313102	1206554	1319228	2048665
201	BSD	QC379176	595284	834663	25174	394945	98102	13953	1297471	1183727	1298748	2011861
203	MSS	193262-001	656951	878180	26134	397281	100163	14896	1344250	1247488	1327679	2035912
207	CCV		633972	864572	25465	394448	98179	14207	1320483	1209411	1310664	2026921
209	CCB		675280	890037	26439	402906	100547	15066	1407164	1282110	1361019	2083332
212	SER	QC379179	659037	871988	26015	398873	100926	14915	1355959	1258403	1333485	2022100
213	MS	QC379177	641777	856024	25345	387658	96953	14482	1316961	1223762	1294576	1999350
214	MSD	QC379178	646998	864662	25637	390218	97812	14571	1325899	1216159	1313552	2025583
215	PDS	QC379180	625729	872406	25406	391753	96848	14345	1318132	1190107	1312331	2025156
216	SAMPLE	193262-002	651018	872311	26400	401449	101178	15169	1376360	1274567	1337175	2052139
217	SAMPLE	193262-003	652029	871620	25698	393966	98955	14821	1347395	1232392	1312738	2014557
218	SAMPLE	193262-004	635996	854842	25477	388552	97783	14452	1337243	1238246	1297407	1987884
219	SAMPLE	193262-005	647827	851441	24917	389435	98044	14520	1323330	1230996	1289723	2002680
220	SAMPLE	193262-006	647529	858409	25730	392945	99416	14637	1318762	1217209	1300119	1987945
221	SAMPLE	193262-007	650487	851157	25505	397412	99630	14702	1340677	1247048	1296332	2012484
225	CCV		623296	833494	25591	385933	96360	14421	1289298	1205983	1291407	1980636
227	CCB		664804	863324	26132	396782	99730	14752	1379977	1269322	1326761	2051133
230	SAMPLE	193262-008	645871	852275	25614	390172	98323	14699	1357351	1270887	1309992	2018695
231	SAMPLE	193262-010	626838	835403	24951	384297	96675	14246	1300230	1211547	1275695	1965039
232	ICSA		501452	772458	23438	364256	85309	12911	1128121	969019	1193707	1803316
233	ICSAB		484690	765561	23015	367826	86183	12701	1117246	935560	1187197	1783832
238	SAMPLE	193262-011	595619	818308	24501	370935	94137	14239	1282239	1210078	1252708	1929573
239	SAMPLE	193262-012	625687	837940	25334	386523	97710	14507	1342842	1232920	1295569	1993688
240	SAMPLE	193262-013	606741	830871	24289	373357	93810	14092	1280409	1185524	1255675	1950131
241	SAMPLE	193262-014	612085	828330	24931	374192	94923	14302	1280188	1195383	1258068	1939102
242	SAMPLE	193262-015	622427	829309	24697	371835	94403	14204	1306363	1212028	1266277	1964901
243	SAMPLE	193262-016	612710	825374	24167	368588	93471	13949	1282756	1198622	1254500	1931201
247	CCV		581565	808189	24212	375128	93756	13691	1254427	1169004	1258898	1936236
250	CCB		621285	823889	24472	381115	95949	14196	1320973	1229439	1280300	1955268
252	SAMPLE	193262-017	613075	828502	24722	377621	94902	14194	1288770	1194147	1261900	1954729
253	SAMPLE	193262-018	618310	836443	25124	377828	95895	14324	1294218	1212682	1266500	1955401
254	SAMPLE	193262-019	624231	839415	25278	378767	95681	14566	1284590	1176776	1274494	1953306
255	SAMPLE	193262-020	647973	834116	25713	383106	95959	14426	1331916	1247977	1283476	1982720
259	CCV		582244	803992	24747	375327	94023	14038	1258836	1175876	1251219	1961622
262	CCB		631309	841205	25487	378857	95387	14535	1332139	1246284	1285077	1987503
264	ICSA		483997	761817	23570	361585	85937	13062	1103089	953858	1171736	1786198
265	ICSAB		468214	747620	22634	357194	84934	12415	1083955	918692	1146158	1733550
270	BLANK	QC379167	534390	782988	23056	348060	94527	13805	1230143	1172433	1208380	1894483
271	BS	QC379168	518560	752745	22663	345662	88318	12936	1185653	1093534	1177057	1852176
272	BSD	QC379169	531807	769309	23073	354110	89036	13091	1212988	1098193	1209638	1877573
274	MSS	193274-001	530539	821132	24583	357604	82937	12744	1148230	908504	1185510	1738964
275	SER	QC379172	642129	896961	27186	401118	97913	14690	1290835	1057988	1309889	1904921
276	MS	QC379170	540521	837655	25548	375350	86382	13087	1157850	902126	1212045	1730896
277	MSD	QC379171	554590	872869	25978	377496	86682	13400	1193573	911848	1240423	1760787
278	PDS	QC379173	522125	817268	24369	361321	83252	12504	1130309	888647	1192724	1723476
282	CCV		594902	809968	24543	343229	88334	13869	1249768	1138723	1255808	1902485
285	CCB		621608	823075	24943	362207	92400	14305	1272913	1189622	1240919	1916577
289	SAMPLE	193274-002	513272	797410	24287	347849	79044	12212	1097992	851837	1144312	1647377
290	SAMPLE	193274-003	515471	756739	23362	347570	82825	12642	1094834	944767	1137883	1697796
291	SAMPLE	193274-004	586691	855527	25461	368767	89723	13888	1247101	1015946	1260839	1851141
292	SAMPLE	193274-005	519424	806977	24515	359118	82668	12455	1117486	876898	1157380	1675696
293	SAMPLE	193274-006	538461	829672	25070	362316	83234	12794	1143582	892308	1189896	1724357

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#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
294	SAMPLE	193274-007	509566	828892	24912	356257	80378	12423	1120842	838262	1180696	1652903
295	SAMPLE	193274-008	528277	844331	26070	369737	85214	13237	1165830	882428	1215300	1712744
296	SAMPLE	193274-009	529173	847892	25812	371824	85680	13148	1166999	879572	1209747	1710799
297	SAMPLE	193274-010	595761	848231	26051	378172	93514	14317	1250303	1076976	1251291	1873846
298	SAMPLE	193274-011	591568	822475	24820	339322	88565	14329	1265401	1138572	1240271	1890284
302	CCV		558610	767711	23192	336732	85803	13237	1180681	1059537	1181260	1820958
306	CCB		616515	823347	24960	352521	90100	14298	1279805	1169344	1242377	1891300
307	SAMPLE	193274-012	516846	820160	24717	346749	79832	12577	1135532	874468	1186342	1682852
308	SAMPLE	193274-013	620240	847452	25033	370209	94782	14311	1292008	1179503	1270604	1913638
309	SAMPLE	193274-014	615036	823395	24839	356009	91587	14132	1265763	1176588	1231950	1879435
310	SAMPLE	193274-015	591640	802605	24018	352456	90801	13845	1244126	1124002	1196112	1851866
311	SAMPLE	193274-016	597208	790344	24174	349717	90179	13973	1236964	1143391	1191875	1840590
312	SAMPLE	193383-003	571915	781241	23486	339608	86615	13503	1184770	1078168	1171178	1813229
313	ICSA		464248	718553	21873	325691	78805	12266	1040796	899203	1100319	1669789
314	ICSAB		441268	701064	21834	326322	78917	12204	1019060	868555	1077488	1629353
319	BLANK	QC379439	498571	729799	21667	322538	87639	13147	1160740	1089786	1136637	1778269
320	BS	QC379440	472169	691374	20544	309303	82250	12128	1091056	997359	1090910	1720074
324	CCV		519560	750729	21927	316824	81553	12592	1174431	1080065	1173516	1811307
326	CCB		546698	768864	22736	334695	86138	13206	1237156	1135108	1183012	1822183
329	BSD	QC379441	469085	693264	20577	308838	82049	12317	1093894	1000937	1090307	1711905
331	MSS	193373-001	514176	766050	22119	324338	80336	12523	1138699	996442	1150228	1765199
332	SER	QC379444	554436	796867	23525	348626	87836	13487	1221258	1091453	1212778	1840266
333	MS	QC379442	509155	764815	22287	329217	81323	12567	1150939	998591	1160411	1765734
334	MSD	QC379443	504244	752790	22035	326795	80076	12307	1125823	977913	1138910	1734063
335	PDS	QC379445	490710	736631	21789	319006	78525	11946	1103757	958232	1124724	1727616
336	SAMPLE	193373-002	516620	801795	23178	333622	78792	12399	1134585	929524	1176626	1724675
337	SAMPLE	193373-003	521767	810529	23192	337640	79185	12277	1131685	917591	1169994	1706889
338	SAMPLE	193373-004	531832	807628	23509	341216	80888	12338	1137797	932388	1178627	1720972
339	SAMPLE	193373-005	529849	803831	23324	336722	79952	12423	1118143	921701	1166313	1693113
343	CCV		516474	716986	21229	309758	79479	12234	1122833	1025597	1118550	1730775
347	CCB		548664	754333	22035	317614	81947	12864	1187254	1116196	1151611	1770124
348	SAMPLE	193373-006	510973	733218	21706	315526	81586	12634	1148798	1085428	1111838	1761064
349	SAMPLE	193373-007	484278	672454	22085	309325	79023	12654	1040080	979380	1018438	1602993
350	SAMPLE	193373-008	507928	730422	21541	313205	78671	12152	1105038	997031	1100621	1699200
351	SAMPLE	193373-009	518869	737991	21341	314190	78858	12215	1153452	1000185	1107491	1720953
352	SAMPLE	193373-010	501541	720986	21182	312713	78343	12105	1094821	1007217	1090419	1701055
353	SAMPLE	193373-011	520311	721051	21476	315465	81658	12703	1153721	1080118	1102584	1735550
354	SAMPLE	193373-012	525742	764976	22055	316451	78442	12392	1133795	977949	1145821	1719935
355	SAMPLE	193415-014	561037	755940	22571	331401	85025	12946	1191518	1112050	1143803	1773198
356	SAMPLE	193426-001	529725	763085	22493	322582	78820	12409	1109040	986701	1134525	1723663
357	SAMPLE	193426-002	529282	747858	21988	320848	80229	12359	1111934	1011718	1117692	1719209
361	CCV		518927	726977	21001	313248	79722	12217	1147014	1058520	1131155	1771180
365	CCB		549531	751388	21646	318145	81559	12780	1187795	1133962	1150099	1782722
371	CCV		519246	732115	21514	319650	81236	12264	1144690	1066490	1144202	1797584
373	CCB		535060	742632	21919	322196	82636	12511	1181289	1116735	1136189	1774108
376	ICSA		425897	672599	20045	305381	74189	11571	993918	882650	1035160	1614441
377	ICSAB		413111	671462	19678	305980	74295	11262	989092	863801	1046506	1601025

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	c16o0001	TUN				16-MAR-2007 14:11	1.0	1.0			1	
002	c16o0002	X	RINSE			16-MAR-2007 14:19	1.0				2	
003	c16o0003	X	RINSE			16-MAR-2007 14:24	1.0				2	
004	c16o0004	ICALBLK	CALBLANK			16-MAR-2007 14:30	1.0	1.0			2	
005	c16o0005	ICAL				16-MAR-2007 14:35	1.0	1.0			3	
006	c16o0006	ICAL				16-MAR-2007 14:40	1.0	1.0			4	
007	c16o0007	ICAL				16-MAR-2007 14:46	1.0	1.0			5	
008	c16o0008	ICAL				16-MAR-2007 14:51	1.0	1.0			6	
009	c16o0009	ICAL				16-MAR-2007 14:56	1.0	1.0			7	
010	c16o0010	ICAL				16-MAR-2007 15:02	1.0	1.0			8	
011	c16o0011	X	RINSE			16-MAR-2007 15:09	1.0				2	
012	c16o0012	ICV				16-MAR-2007 15:14	1.0	1.0		1	9	
013	c16o0013	X	RINSE			16-MAR-2007 15:20	1.0				2	
014	c16o0014	X				16-MAR-2007 15:25	1.0				2	
015	c16o0015	ICB				16-MAR-2007 15:31	1.0	1.0		1	2	
016	c16o0016	X				16-MAR-2007 15:36	1.0				2	
017	c16o0017	ICSA				16-MAR-2007 15:42	1.0	1.0		1	10 2	7:CA=298100
018	c16o0018	ICSAB				16-MAR-2007 15:47	1.0	1.0		1	11 2	10:CA=313600
019	c16o0019	X	RINSE			16-MAR-2007 15:53	1.0				2	
020	c16o0020	X	RINSE			16-MAR-2007 15:58	1.0				2	
021	c16o0021	X	RINSE			16-MAR-2007 16:04	1.0				2	
022	c16o0022	X	RINSE			16-MAR-2007 16:09	1.0				2	
023	c16o0023	BLANK	QC378982	123055	Water	16-MAR-2007 16:14	1.0	1.0		1	2	
024	c16o0024	BS	QC378983	123055	Water	16-MAR-2007 16:20	1.0	1.0		1	2	
025	c16o0025	BSD	QC378984	123055	Water	16-MAR-2007 16:26	1.0	1.0		1	2	
026	c16o0026	X	RINSE			16-MAR-2007 16:32	1.0				2	
027	c16o0027	MSS	193244-001	123055	Water	16-MAR-2007 16:37	10.0	1.0		1	2	
028	c16o0028	SER	QC378987	123055	Water	16-MAR-2007 16:43	50.0	1.0		1	2	
029	c16o0029	MS	QC378985	123055	Water	16-MAR-2007 16:48	10.0	1.0		1	2	
030	c16o0030	MSD	QC378986	123055	Water	16-MAR-2007 16:54	10.0	1.0		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RGA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

27156

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	c16o0031	PDS	QC378988	123055	Water	16-MAR-2007 16:59	10.0	1.0			1	12 13 2	
032	c16o0032	X	RINSE			16-MAR-2007 17:05	1.0					2	
033	c16o0033	X	RINSE			16-MAR-2007 17:10	1.0					2	
034	c16o0034	X	RINSE			16-MAR-2007 17:16	1.0					2	
035	c16o0035	CCV				16-MAR-2007 17:21	1.0	1.0			1	14 2	
036	c16o0036	X	RINSE			16-MAR-2007 17:27	1.0					2	
037	c16o0037	X				16-MAR-2007 17:32	1.0					2	
038	c16o0038	CCB				16-MAR-2007 17:37	1.0	1.0			1	2	
039	c16o0039	X				16-MAR-2007 17:43	1.0					2	
040	c16o0040	MSS	193244-001	123055	Water	16-MAR-2007 17:48	10.0	1.0			1	2	
041	c16o0041	XSER	QC378987	123055	Water	16-MAR-2007 17:54	50.0	1.0	1	1	1	2	
042	c16o0042	SAMPLE	193335-001	123055	Filtra	16-MAR-2007 17:59	10.0	1.0			1	2	
043	c16o0043	SAMPLE	193338-001	123055	Filtra	16-MAR-2007 18:05	10.0	1.0			1	2	
044	c16o0044	SAMPLE	193330-001	123055	Filtra	16-MAR-2007 18:10	10.0	1.0			1	2	
045	c16o0045	SAMPLE	193330-002	123055	Filtra	16-MAR-2007 18:16	10.0	1.0			1	2	
046	c16o0046	SAMPLE	193330-003	123055	Filtra	16-MAR-2007 18:21	10.0	1.0			1	2	
047	c16o0047	SAMPLE	193330-004	123055	Filtra	16-MAR-2007 18:27	10.0	1.0			1	2	
048	c16o0048	SAMPLE	193330-005	123055	Filtra	16-MAR-2007 18:32	10.0	1.0			1	2	1:MN=284.900
049	c16o0049	SAMPLE	193330-006	123055	Filtra	16-MAR-2007 18:41	10.0	1.0	1		1	2	1:MN=664.500
050	c16o0050	X	RINSE			16-MAR-2007 19:07	1.0					2	
051	c16o0051	X	RINSE			16-MAR-2007 19:12	1.0					2	
052	c16o0052	X	RINSE			16-MAR-2007 19:18	1.0					2	
053	c16o0053	CCV				16-MAR-2007 19:23	1.0	1.0			1	14 2	
054	c16o0054	X	RINSE			16-MAR-2007 19:29	1.0					2	
055	c16o0055	X				16-MAR-2007 19:34	1.0					2	
056	c16o0056	CCB				16-MAR-2007 19:40	1.0	1.0			1	2	
057	c16o0057	X				16-MAR-2007 19:45	1.0					2	
058	c16o0058	XSAMPLE	193330-005	123055	Filtra	16-MAR-2007 19:51	20.0	1.0			1	2	
059	c16o0059	SAMPLE	193330-007	123055	Filtra	16-MAR-2007 19:56	10.0	1.0			1	2	
060	c16o0060	SAMPLE	193330-008	123055	Filtra	16-MAR-2007 20:02	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RGH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

67108

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
061	c16o0061	SAMPLE	193338-001	123055	Filtra	16-MAR-2007 20:07	10.0	1.0			1	2	
062	c16o0062	SAMPLE	193330-004	123055	Filtra	16-MAR-2007 20:13	10.0	1.0			1	2	
063	c16o0063	SAMPLE	193330-006	123055	Filtra	16-MAR-2007 20:18	10.0	1.0			1	2	1:MN=607.300
064	c16o0064	X	RINSE			16-MAR-2007 20:24	1.0					2	
065	c16o0065	X	RINSE			16-MAR-2007 20:29	1.0					2	
066	c16o0066	X	RINSE			16-MAR-2007 20:35	1.0					2	
067	c16o0067	CCV				16-MAR-2007 20:40	1.0	1.0			1	14 2	
068	c16o0068	X	RINSE			16-MAR-2007 20:46	1.0					2	
069	c16o0069	CCB				16-MAR-2007 20:52	1.0	1.0	1		1	2	
070	c16o0070	X				16-MAR-2007 20:57	1.0	1.0	1		1	2	
071	c16o0071	X				16-MAR-2007 21:02	1.0	1.0	1		1	2	
072	c16o0072	ICSA				16-MAR-2007 21:08	1.0	1.0			1	10 2	7:CA=301200
073	c16o0073	ICSAB				16-MAR-2007 21:13	1.0	1.0			1	11 2	10:CA=321300
074	c16o0074	X	RINSE			16-MAR-2007 21:19	1.0					2	
075	c16o0075	X	RINSE			16-MAR-2007 21:25	1.0					2	
076	c16o0076	X	RINSE			16-MAR-2007 21:30	1.0					2	
077	c16o0077	X	RINSE			16-MAR-2007 21:35	1.0					2	
078	c16o0078	BLANK	QC379370	123147	Soil	16-MAR-2007 21:41	5.0	50.0			1	2	
079	c16o0079	BS	QC379371	123147	Soil	16-MAR-2007 21:46	50.0	50.0	1		1	2	
080	c16o0080	BSD	QC379372	123147	Soil	16-MAR-2007 21:52	50.0	50.0	1	1	1	2	
081	c16o0081	X	RINSE			16-MAR-2007 21:58	1.0					2	
082	c16o0082	MSS	193291-002	123147	Soil	16-MAR-2007 22:03	50.0	47.62			1	2	
083	c16o0083	SER	QC379375	123147	Soil	16-MAR-2007 22:08	250.0	47.62		2	1	2	
084	c16o0084	MS	QC379373	123147	Soil	16-MAR-2007 22:14	50.0	46.30	1		1	2	
085	c16o0085	MSD	QC379374	123147	Soil	16-MAR-2007 22:19	50.0	52.08	1		1	2	
086	c16o0086	PDS	QC379376	123147	Soil	16-MAR-2007 22:25	50.0	47.62	2		1	12 13 2	1:MN=241.40(
087	c16o0087	X	RINSE			16-MAR-2007 22:31	1.0					2	
088	c16o0088	X	RINSE			16-MAR-2007 22:37	1.0					2	
089	c16o0089	X	RINSE			16-MAR-2007 22:42	1.0					2	
090	c16o0090	CCV				16-MAR-2007 22:48	1.0	1.0	1		1	14 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
091	c16o0091	X	RINSE			16-MAR-2007 22:54	1.0					2	
092	c16o0092	X				16-MAR-2007 22:59	1.0	1.0	3		1	2	
093	c16o0093	CCB				16-MAR-2007 23:05	1.0	1.0	1		1	2	
094	c16o0094	X				16-MAR-2007 23:10	1.0	1.0	1		1	2	
095	c16o0095	SAMPLE	193291-003	123147	Soil	16-MAR-2007 23:16	50.0	49.02			1	2	
096	c16o0096	SAMPLE	193291-004	123147	Soil	16-MAR-2007 23:21	50.0	47.17			1	2	
097	c16o0097	SAMPLE	193291-005	123147	Soil	16-MAR-2007 23:26	50.0	48.08			1	2	
098	c16o0098	SAMPLE	193291-006	123147	Soil	16-MAR-2007 23:32	50.0	48.54			1	2	
099	c16o0099	TUN				16-MAR-2007 23:36	1.0	1.0				1	
100	c16o0100	X	RINSE			16-MAR-2007 23:44	1.0					2	
101	c16o0101	X	RINSE			16-MAR-2007 23:49	1.0					2	
102	c16o0102	X	RINSE			16-MAR-2007 23:55	1.0					2	
103	c16o0103	X	RINSE			17-MAR-2007 00:00	1.0					2	
104	c16o0104	CCV				17-MAR-2007 00:06	1.0	1.0	1		1	14 2	
105	c16o0105	X	RINSE			17-MAR-2007 00:11	1.0					2	
106	c16o0106	X				17-MAR-2007 00:17	1.0	1.0	4		1	2	
107	c16o0107	CCB				17-MAR-2007 00:22	1.0	1.0			1	2	
108	c16o0108	X				17-MAR-2007 00:28	1.0	1.0	1		1	2	
109	c16o0109	ICSA				17-MAR-2007 00:33	1.0	1.0			1	10 2	7:CA=304200
110	c16o0110	ICSAB				17-MAR-2007 00:39	1.0	1.0			1	11 2	10:CA=317400
111	c16o0111	X	RINSE			17-MAR-2007 00:44	1.0					2	
112	c16o0112	X	RINSE			17-MAR-2007 00:50	1.0					2	
113	c16o0113	X	RINSE			17-MAR-2007 00:55	1.0					2	
114	c16o0114	X	RINSE			17-MAR-2007 01:01	1.0					2	
115	c16o0115	BLANK	QC379418	123155	Filtra	17-MAR-2007 01:06	1.0	1.0			1	2	
116	c16o0116	BS	QC379419	123155	Filtra	17-MAR-2007 01:12	1.0	1.0	1		1	2	
117	c16o0117	BSD	QC379420	123155	Filtra	17-MAR-2007 01:17	1.0	1.0	1		1	2	
118	c16o0118	X	RINSE			17-MAR-2007 01:24	1.0					2	
119	c16o0119	MSS	193329-001	123155	Filtra	17-MAR-2007 01:29	10.0	1.0	1		1	2	1:NA=98680.0
120	c16o0120	SER	QC379423	123155	Filtra	17-MAR-2007 01:35	50.0	1.0		3	1	2	1:NA=20300.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: Pett Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
121	c16o0121	MS	QC379421	123155	Filtra	17-MAR-2007 01:40	10.0	1.0	1		1	2	1:NA=101000
122	c16o0122	MSD	QC379422	123155	Filtra	17-MAR-2007 01:46	10.0	1.0	1		1	2	1:NA=97570.0
123	c16o0123	PDS	QC379424	123155	Filtra	17-MAR-2007 01:51	10.0	1.0	1		1	12 13 2	1:NA=11032(
124	c16o0124	X	RINSE			17-MAR-2007 01:57	1.0					2	
125	c16o0125	X	RINSE			17-MAR-2007 02:02	1.0					2	
126	c16o0126	X	RINSE			17-MAR-2007 02:08	1.0					2	
127	c16o0127	CCV				17-MAR-2007 02:13	1.0	1.0	1		1	14 2	
128	c16o0128	X	RINSE			17-MAR-2007 02:19	1.0					2	
129	c16o0129	X				17-MAR-2007 02:25	1.0	1.0	15		1	2	
130	c16o0130	CCB				17-MAR-2007 02:30	1.0	1.0			1	2	
131	c16o0131	X				17-MAR-2007 02:36	1.0	1.0	1		1	2	
132	c16o0132	SAMPLE	193233-002	123155	Filtra	17-MAR-2007 02:41	10.0	1.0			1	2	
133	c16o0133	SAMPLE	193233-003	123155	Filtra	17-MAR-2007 02:47	10.0	1.0			1	2	
134	c16o0134	SAMPLE	193329-002	123155	Filtra	17-MAR-2007 02:52	10.0	1.0			1	2	
135	c16o0135	SAMPLE	193329-003	123155	Filtra	17-MAR-2007 02:57	10.0	1.0			1	2	1:NA=30250.0
136	c16o0136	SAMPLE	193329-004	123155	Filtra	17-MAR-2007 03:03	10.0	1.0			1	2	4:NA=686500
137	c16o0137	SAMPLE	193329-005	123155	Filtra	17-MAR-2007 03:09	10.0	1.0			1	2	4:NA=653400
138	c16o0138	SAMPLE	193329-006	123155	Filtra	17-MAR-2007 03:14	10.0	1.0			1	2	
139	c16o0139	SAMPLE	193329-007	123155	Filtra	17-MAR-2007 03:20	10.0	1.0			1	2	4:NA=633300
140	c16o0140	SAMPLE	193329-008	123155	Filtra	17-MAR-2007 03:25	10.0	1.0			1	2	1:NA=31460.0
141	c16o0141	SAMPLE	193329-009	123155	Filtra	17-MAR-2007 03:31	10.0	1.0			1	2	5:NA=1413000
142	c16o0142	X	RINSE			17-MAR-2007 03:36	1.0					2	5:NA=1645000
143	c16o0143	X	RINSE			17-MAR-2007 03:42	1.0					2	
144	c16o0144	X	RINSE			17-MAR-2007 03:47	1.0					2	
145	c16o0145	CCV				17-MAR-2007 03:52	1.0	1.0			1	14 2	
146	c16o0146	X	RINSE			17-MAR-2007 03:58	1.0					2	
147	c16o0147	X				17-MAR-2007 04:04	1.0	1.0	5		1	2	
148	c16o0148	X				17-MAR-2007 04:09	1.0	1.0	3		1	2	
149	c16o0149	CCB				17-MAR-2007 04:15	1.0	1.0	2		1	2	
150	c16o0150	SAMPLE	193329-013	123155	Filtra	17-MAR-2007 04:20	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
151	c16o0151	SAMPLE	193416-001	123155	Water	17-MAR-2007 04:25	10.0	1.0	2		1	2	3:NA=223500
152	c16o0152	SAMPLE	193416-004	123155	Water	17-MAR-2007 04:31	10.0	1.0			1	2	3:NA=227000
153	c16o0153	SAMPLE	193418-001	123155	Filtra	17-MAR-2007 04:36	10.0	1.0			1	2	5:NA=1198000
154	c16o0154	SAMPLE	193418-004	123155	Filtra	17-MAR-2007 04:42	10.0	1.0			1	2	5:NA=722600
155	c16o0155	SAMPLE	193418-005	123155	Filtra	17-MAR-2007 04:47	10.0	1.0			1	2	
156	c16o0156	X	RINSE			17-MAR-2007 04:53	1.0					2	
157	c16o0157	X	RINSE			17-MAR-2007 04:58	1.0					2	
158	c16o0158	X	RINSE			17-MAR-2007 05:04	1.0					2	
159	c16o0159	CCV				17-MAR-2007 05:09	1.0	1.0			1	14 2	
160	c16o0160	X	RINSE			17-MAR-2007 05:15	1.0					2	
161	c16o0161	CCB				17-MAR-2007 05:20	1.0	1.0	2		1	2	
162	c16o0162	X				17-MAR-2007 05:26	1.0	1.0	1		1	2	
163	c16o0163	X				17-MAR-2007 05:31	1.0	1.0	2		1	2	
164	c16o0164	ICSA				17-MAR-2007 05:37	1.0	1.0			1	10 2	7:CA=304500
165	c16o0165	ICSAB				17-MAR-2007 05:42	1.0	1.0			1	11 2	10:CA=315300
166	c16o0166	X	RINSE			17-MAR-2007 05:48	1.0					2	
167	c16o0167	X	RINSE			17-MAR-2007 05:53	1.0					2	
168	c16o0168	X	RINSE			17-MAR-2007 05:59	1.0					2	
169	c16o0169	X	RINSE			17-MAR-2007 06:04	1.0					2	
170	c16o0170	BLANK	QC379702	123218	Filtra	17-MAR-2007 06:10	1.0	1.0			1	2	
171	c16o0171	BS	QC379703	123218	Filtra	17-MAR-2007 06:15	1.0	1.0			1	2	
172	c16o0172	BSD	QC379704	123218	Filtra	17-MAR-2007 06:21	1.0	1.0			1	2	
173	c16o0173	X	RINSE			17-MAR-2007 06:27	1.0					2	
174	c16o0174	MSS	193459-003	123218	Filtra	17-MAR-2007 06:33	20.0	1.0	4		1	2	4:NA=734000
175	c16o0175	MS	QC379705	123218	Filtra	17-MAR-2007 06:38	20.0	1.0	1		1	2	4:NA=714000
176	c16o0176	MSD	QC379706	123218	Filtra	17-MAR-2007 06:44	20.0	1.0	1		1	2	4:NA=737000
177	c16o0177	X	RINSE			17-MAR-2007 06:49	1.0					2	
178	c16o0178	SAMPLE	193459-001	123218	Filtra	17-MAR-2007 06:55	1.0	1.0			1	2	
179	c16o0179	SAMPLE	193459-002	123218	Filtra	17-MAR-2007 07:00	20.0	1.0			1	2	2:NA=327400
180	c16o0180	X	RINSE			17-MAR-2007 07:06	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RetA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
181	c16o0181	X	RINSE			17-MAR-2007 07:11	1.0					2	
182	c16o0182	X	RINSE			17-MAR-2007 07:17	1.0					2	
183	c16o0183	CCV				17-MAR-2007 07:22	1.0	1.0			1	14 2	
184	c16o0184	X	RINSE			17-MAR-2007 07:28	1.0					2	
185	c16o0185	CCB				17-MAR-2007 07:33	1.0	1.0	2		1	2	
186	c16o0186	X				17-MAR-2007 07:39	1.0	1.0	4		1	2	
187	c16o0187	X				17-MAR-2007 07:44	1.0	1.0	2		1	2	
188	c16o0188	SAMPLE	193459-004	123218	Filtra	17-MAR-2007 07:50	20.0	1.0			1	2	2:NA=412850
189	c16o0189	SAMPLE	193459-005	123218	Filtra	17-MAR-2007 07:55	20.0	1.0			1	2	4:NA=337500
190	c16o0190	SAMPLE	193459-006	123218	Filtra	17-MAR-2007 08:01	20.0	1.0			1	2	3:NA=399200
191	c16o0191	SAMPLE	193459-007	123218	Filtra	17-MAR-2007 08:06	20.0	1.0			1	2	3:NA=531000
192	c16o0192	TUN				17-MAR-2007 08:11	1.0	1.0				1	
193	c16o0193	X	RINSE			17-MAR-2007 08:19	1.0					2	
194	c16o0194	SAMPLE	193459-008	123218	Filtra	17-MAR-2007 08:24	20.0	1.0			1	2	2:NA=308450
195	c16o0195	SAMPLE	193459-009	123218	Filtra	17-MAR-2007 08:30	20.0	1.0			1	2	3:NA=488800
196	c16o0196	X	RINSE			17-MAR-2007 08:35	1.0					2	
197	c16o0197	X	RINSE			17-MAR-2007 08:41	1.0					2	
198	c16o0198	X	RINSE			17-MAR-2007 08:46	1.0					2	
199	c16o0199	BLANK	QC379174	123098	Filtra	17-MAR-2007 08:52	1.0	1.0			1	2	
200	c16o0200	BS	QC379175	123098	Filtra	17-MAR-2007 08:57	1.0	1.0			1	2	
201	c16o0201	BSD	QC379176	123098	Filtra	17-MAR-2007 09:03	1.0	1.0			1	2	
202	c16o0202	X	RINSE			17-MAR-2007 09:10	1.0					2	
203	c16o0203	MSS	193262-001	123098	Filtra	17-MAR-2007 09:15	10.0	1.0			1	2	
204	c16o0204	X	RINSE			17-MAR-2007 09:20	1.0					2	
205	c16o0205	X	RINSE			17-MAR-2007 09:26	1.0					2	
206	c16o0206	X	RINSE			17-MAR-2007 09:32	1.0					2	
207	c16o0207	CCV				17-MAR-2007 09:37	1.0	1.0			1	14 2	
208	c16o0208	X	RINSE			17-MAR-2007 09:43	1.0					2	
209	c16o0209	CCB				17-MAR-2007 09:48	1.0	1.0	1		1	2	
210	c16o0210	X				17-MAR-2007 09:54	1.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
211	c16o0211	X				17-MAR-2007 09:59	1.0	1.0	2		1	2	
212	c16o0212	SER	QC379179	123098	Filtra	17-MAR-2007 10:05	50.0	1.0	1	1	1	2	
213	c16o0213	MS	QC379177	123098	Filtra	17-MAR-2007 10:10	10.0	1.0	1		1	2	
214	c16o0214	MSD	QC379178	123098	Filtra	17-MAR-2007 10:15	10.0	1.0	1		1	2	
215	c16o0215	PDS	QC379180	123098	Filtra	17-MAR-2007 10:21	10.0	1.0	1		1	12 13 2	
216	c16o0216	SAMPLE	193262-002	123098	Filtra	17-MAR-2007 10:26	10.0	1.0			1	2	
217	c16o0217	SAMPLE	193262-003	123098	Filtra	17-MAR-2007 10:32	10.0	1.0	1		1	2	1:NI=334.600
218	c16o0218	SAMPLE	193262-004	123098	Filtra	17-MAR-2007 10:37	10.0	1.0			1	2	
219	c16o0219	SAMPLE	193262-005	123098	Filtra	17-MAR-2007 10:43	10.0	1.0			1	2	
220	c16o0220	SAMPLE	193262-006	123098	Filtra	17-MAR-2007 10:48	10.0	1.0			1	2	
221	c16o0221	SAMPLE	193262-007	123098	Filtra	17-MAR-2007 10:54	10.0	1.0			1	2	
222	c16o0222	X	RINSE			17-MAR-2007 11:00	1.0					2	
223	c16o0223	X	RINSE			17-MAR-2007 11:05	1.0					2	
224	c16o0224	X	RINSE			17-MAR-2007 11:11	1.0					2	
225	c16o0225	CCV				17-MAR-2007 11:16	1.0	1.0			1	14 2	
226	c16o0226	X	RINSE			17-MAR-2007 11:22	1.0					2	
227	c16o0227	CCB				17-MAR-2007 11:27	1.0	1.0			1	2	
228	c16o0228	X				17-MAR-2007 11:33	1.0	1.0			1	2	
229	c16o0229	X				17-MAR-2007 11:38	1.0	1.0	1		1	2	
230	c16o0230	SAMPLE	193262-008	123098	Filtra	17-MAR-2007 11:44	10.0	1.0			1	2	
231	c16o0231	SAMPLE	193262-010	123098	Filtra	17-MAR-2007 11:49	10.0	1.0			1	2	
232	c16o0232	ICSA				17-MAR-2007 11:55	1.0	1.0			1	10 2	7:CA=299700
233	c16o0233	ICSAB				17-MAR-2007 12:00	1.0	1.0			1	11 2	11:CA=314800
234	c16o0234	X	RINSE			17-MAR-2007 12:06	1.0					2	
235	c16o0235	X	RINSE			17-MAR-2007 12:12	1.0					2	
236	c16o0236	X	RINSE			17-MAR-2007 12:17	1.0					2	
237	c16o0237	X	RINSE			17-MAR-2007 12:23	1.0					2	
238	c16o0238	SAMPLE	193262-011	123098	Filtra	17-MAR-2007 12:28	10.0	1.0	1		1	2	
239	c16o0239	SAMPLE	193262-012	123098	Filtra	17-MAR-2007 12:34	10.0	1.0			1	2	
240	c16o0240	SAMPLE	193262-013	123098	Filtra	17-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
241	c16o0241	SAMPLE	193262-014	123098	Filtra	17-MAR-2007 12:45	10.0	1.0			1	2	
242	c16o0242	SAMPLE	193262-015	123098	Filtra	17-MAR-2007 12:50	10.0	1.0			1	2	
243	c16o0243	SAMPLE	193262-016	123098	Filtra	17-MAR-2007 12:56	10.0	1.0			1	2	
244	c16o0244	X	RINSE			17-MAR-2007 13:01	1.0					2	
245	c16o0245	X	RINSE			17-MAR-2007 13:07	1.0					2	
246	c16o0246	X	RINSE			17-MAR-2007 13:12	1.0					2	
247	c16o0247	CCV				17-MAR-2007 13:18	1.0	1.0			1	14 2	
248	c16o0248	X	RINSE			17-MAR-2007 13:23	1.0					2	
249	c16o0249	X				17-MAR-2007 13:29	1.0	1.0	2		1	2	
250	c16o0250	CCB				17-MAR-2007 13:34	1.0	1.0			1	2	
251	c16o0251	X				17-MAR-2007 13:40	1.0	1.0			1	2	
252	c16o0252	SAMPLE	193262-017	123098	Filtra	17-MAR-2007 13:45	10.0	1.0			1	2	
253	c16o0253	SAMPLE	193262-018	123098	Filtra	17-MAR-2007 13:51	10.0	1.0			1	2	
254	c16o0254	SAMPLE	193262-019	123098	Filtra	17-MAR-2007 13:56	10.0	1.0			1	2	
255	c16o0255	SAMPLE	193262-020	123098	Filtra	17-MAR-2007 14:02	10.0	1.0	1		1	2	
256	c16o0256	X	RINSE			17-MAR-2007 14:07	1.0					2	
257	c16o0257	X	RINSE			17-MAR-2007 14:13	1.0					2	
258	c16o0258	X	RINSE			17-MAR-2007 14:18	1.0					2	
259	c16o0259	CCV				17-MAR-2007 14:24	1.0	1.0			1	14 2	
260	c16o0260	X	RINSE			17-MAR-2007 14:30	1.0					2	
261	c16o0261	X				17-MAR-2007 14:35	1.0	1.0	2		1	2	
262	c16o0262	CCB				17-MAR-2007 14:41	1.0	1.0			1	2	
263	c16o0263	X				17-MAR-2007 14:46	1.0	1.0			1	2	
264	c16o0264	ICSA				17-MAR-2007 14:51	1.0	1.0			1	10 2	7:CA=300000
265	c16o0265	ICSAB				17-MAR-2007 14:57	1.0	1.0			1	11 2	10:CA=315100
266	c16o0266	X	RINSE			17-MAR-2007 15:03	1.0					2	
267	c16o0267	X	RINSE			17-MAR-2007 15:08	1.0					2	
268	c16o0268	X	RINSE			17-MAR-2007 15:14	1.0					2	
269	c16o0269	X	RINSE			17-MAR-2007 15:19	1.0					2	
270	c16o0270	BLANK	QC379167	123097	Filtra	17-MAR-2007 15:25	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: Rett Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
271	c16o0271	BS	QC379168	123097	Filtra	17-MAR-2007 15:30	1.0	1.0			1	2	
272	c16o0272	BSD	QC379169	123097	Filtra	17-MAR-2007 15:36	1.0	1.0			1	2	
273	c16o0273	X	RINSE			17-MAR-2007 15:43	1.0					2	
274	c16o0274	MSS	193274-001	123097	Filtra	17-MAR-2007 15:48	10.0	1.0	5		1	2	5:NA=842000
275	c16o0275	SER	QC379172	123097	Filtra	17-MAR-2007 15:54	50.0	1.0			1	2	3:NA=163680
276	c16o0276	MS	QC379170	123097	Filtra	17-MAR-2007 15:59	10.0	1.0			1	2	5:NA=829900
277	c16o0277	MSD	QC379171	123097	Filtra	17-MAR-2007 16:05	10.0	1.0		1	1	2	5:NA=830800
278	c16o0278	PDS	QC379173	123097	Filtra	17-MAR-2007 16:10	10.0	1.0			1	12 13 2	5:NA=836800
279	c16o0279	X	RINSE			17-MAR-2007 16:16	1.0					2	
280	c16o0280	X	RINSE			17-MAR-2007 16:21	1.0					2	
281	c16o0281	X	RINSE			17-MAR-2007 16:27	1.0					2	
282	c16o0282	CCV				17-MAR-2007 16:32	1.0	1.0			1	14 2	
283	c16o0283	X	RINSE			17-MAR-2007 16:38	1.0					2	
284	c16o0284	X				17-MAR-2007 16:43	1.0	1.0	3		1	2	
285	c16o0285	CCB				17-MAR-2007 16:49	1.0	1.0	2		1	2	
286	c16o0286	X				17-MAR-2007 16:54	1.0	1.0	4		1	2	
287	c16o0287	TUN				17-MAR-2007 16:59	1.0	1.0				1	
288	c16o0288	X	RINSE			17-MAR-2007 17:07	1.0					2	
289	c16o0289	SAMPLE	193274-002	123097	Filtra	17-MAR-2007 17:12	10.0	1.0			1	2	5:NA=1198000
290	c16o0290	SAMPLE	193274-003	123097	Filtra	17-MAR-2007 17:18	10.0	1.0	2		1	2	6:NA=498600
291	c16o0291	SAMPLE	193274-004	123097	Filtra	17-MAR-2007 17:23	10.0	1.0			1	2	4:NA=240300
292	c16o0292	SAMPLE	193274-005	123097	Filtra	17-MAR-2007 17:29	10.0	1.0			1	2	4:NA=796900
293	c16o0293	SAMPLE	193274-006	123097	Filtra	17-MAR-2007 17:34	10.0	1.0			1	2	4:NA=758400
294	c16o0294	SAMPLE	193274-007	123097	Filtra	17-MAR-2007 17:40	10.0	1.0			1	2	4:NA=1264000
295	c16o0295	SAMPLE	193274-008	123097	Filtra	17-MAR-2007 17:45	10.0	1.0			1	2	4:NA=912800
296	c16o0296	SAMPLE	193274-009	123097	Filtra	17-MAR-2007 17:50	10.0	1.0			1	2	4:NA=901400
297	c16o0297	SAMPLE	193274-010	123097	Filtra	17-MAR-2007 17:56	10.0	1.0			1	2	1:NA=117700
298	c16o0298	SAMPLE	193274-011	123097	Filtra	17-MAR-2007 18:01	10.0	1.0			1	2	
299	c16o0299	X	RINSE			17-MAR-2007 18:07	1.0					2	
300	c16o0300	X	RINSE			17-MAR-2007 18:13	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCB Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
301	c16o0301	X	RINSE			17-MAR-2007 18:18	1.0					2	
302	c16o0302	CCV				17-MAR-2007 18:24	1.0	1.0			1	14 2	
303	c16o0303	X	RINSE			17-MAR-2007 18:29	1.0					2	
304	c16o0304	X				17-MAR-2007 18:35	1.0	1.0	4		1	2	
305	c16o0305	X				17-MAR-2007 18:40	1.0	1.0	3		1	2	
306	c16o0306	CCB				17-MAR-2007 18:46	1.0	1.0	2		1	2	
307	c16o0307	SAMPLE	193274-012	123097	Filtra	17-MAR-2007 18:51	10.0	1.0			1	2	5:NA=1090000
308	c16o0308	SAMPLE	193274-013	123097	Filtra	17-MAR-2007 18:57	10.0	1.0			1	2	
309	c16o0309	SAMPLE	193274-014	123097	Filtra	17-MAR-2007 19:02	10.0	1.0			1	2	
310	c16o0310	SAMPLE	193274-015	123097	Filtra	17-MAR-2007 19:08	10.0	1.0			1	2	
311	c16o0311	SAMPLE	193274-016	123097	Filtra	17-MAR-2007 19:13	10.0	1.0			1	2	
312	c16o0312	SAMPLE	193383-003	123097	Water	17-MAR-2007 19:19	10.0	1.0			1	2	1:NA=77010.0
313	c16o0313	ICSA				17-MAR-2007 19:24	1.0	1.0			1	10 2	7:CA=297500
314	c16o0314	ICSAB				17-MAR-2007 19:30	1.0	1.0			1	11 2	10:CA=318300
315	c16o0315	X	RINSE			17-MAR-2007 19:35	1.0					2	
316	c16o0316	X	RINSE			17-MAR-2007 19:41	1.0					2	
317	c16o0317	X	RINSE			17-MAR-2007 19:47	1.0					2	
318	c16o0318	X	RINSE			17-MAR-2007 19:52	1.0					2	
319	c16o0319	BLANK	QC379439	123162	Filtra	17-MAR-2007 19:58	1.0	1.0	1		1	2	
320	c16o0320	BS	QC379440	123162	Filtra	17-MAR-2007 20:03	1.0	1.0	1		1	2	
321	c16o0321	X	RINSE			17-MAR-2007 20:09	1.0					2	
322	c16o0322	X	RINSE			17-MAR-2007 20:15	1.0					2	
323	c16o0323	X	RINSE			17-MAR-2007 20:20	1.0					2	
324	c16o0324	CCV				17-MAR-2007 20:25	1.0	1.0			1	14 2	
325	c16o0325	X	RINSE			17-MAR-2007 20:32	1.0					2	
326	c16o0326	CCB				17-MAR-2007 20:37	1.0	1.0	2		1	2	
327	c16o0327	X				17-MAR-2007 20:43	1.0	1.0	2		1	2	
328	c16o0328	X				17-MAR-2007 20:48	1.0	1.0	3		1	2	
329	c16o0329	BSD	QC379441	123162	Filtra	17-MAR-2007 20:54	1.0	1.0	1		1	2	
330	c16o0330	X	RINSE			17-MAR-2007 21:00	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
331	c16o0331	MSS	193373-001	123162	Filtra	17-MAR-2007 21:06	10.0	1.0	5	1	2	4:NA=220700
332	c16o0332	SER	QC379444	123162	Filtra	17-MAR-2007 21:11	50.0	1.0		1	2	1:NA=43540.0
333	c16o0333	MS	QC379442	123162	Filtra	17-MAR-2007 21:16	10.0	1.0		1	2	4:NA=210100
334	c16o0334	MSD	QC379443	123162	Filtra	17-MAR-2007 21:22	10.0	1.0		1	2	4:NA=218200
335	c16o0335	PDS	QC379445	123162	Filtra	17-MAR-2007 21:27	10.0	1.0		1	12 13 2	4:NA=22370(
336	c16o0336	SAMPLE	193373-002	123162	Filtra	17-MAR-2007 21:33	10.0	1.0	2	1	2	2:NA=618400
337	c16o0337	SAMPLE	193373-003	123162	Filtra	17-MAR-2007 21:38	10.0	1.0		1	2	4:NA=650900
338	c16o0338	SAMPLE	193373-004	123162	Filtra	17-MAR-2007 21:44	10.0	1.0		1	2	2:NA=541500
339	c16o0339	SAMPLE	193373-005	123162	Filtra	17-MAR-2007 21:49	10.0	1.0		1	2	2:NA=580300
340	c16o0340	X	RINSE			17-MAR-2007 21:55	1.0				2	
341	c16o0341	X	RINSE			17-MAR-2007 22:00	1.0				2	
342	c16o0342	X	RINSE			17-MAR-2007 22:06	1.0				2	
343	c16o0343	CCV				17-MAR-2007 22:11	1.0	1.0		1	14 2	
344	c16o0344	X	RINSE			17-MAR-2007 22:17	1.0				2	
345	c16o0345	X				17-MAR-2007 22:23	1.0	1.0	4	1	2	
346	c16o0346	X				17-MAR-2007 22:28	1.0	1.0	4	1	2	
347	c16o0347	CCB				17-MAR-2007 22:33	1.0	1.0	2	1	2	
348	c16o0348	SAMPLE	193373-006	123162	Filtra	17-MAR-2007 22:39	10.0	1.0		1	2	1:NA=28030.0
349	c16o0349	SAMPLE	193373-007	123162	Filtra	17-MAR-2007 22:44	10.0	1.0		1	2	1:NA=76790.0
350	c16o0350	SAMPLE	193373-008	123162	Filtra	17-MAR-2007 22:50	10.0	1.0		1	2	1:NA=124000
351	c16o0351	SAMPLE	193373-009	123162	Filtra	17-MAR-2007 22:55	10.0	1.0		1	2	1:NA=133300
352	c16o0352	SAMPLE	193373-010	123162	Filtra	17-MAR-2007 23:01	10.0	1.0		1	2	4:NA=80250.0
353	c16o0353	SAMPLE	193373-011	123162	Filtra	17-MAR-2007 23:06	10.0	1.0		1	2	
354	c16o0354	SAMPLE	193373-012	123162	Filtra	17-MAR-2007 23:12	10.0	1.0		1	2	2:NA=244700
355	c16o0355	SAMPLE	193415-014	123162	Water	17-MAR-2007 23:17	10.0	1.0		1	2	
356	c16o0356	SAMPLE	193426-001	123162	Water	17-MAR-2007 23:23	10.0	1.0		1	2	2:NA=233300
357	c16o0357	SAMPLE	193426-002	123162	Water	17-MAR-2007 23:28	10.0	1.0	1	1	2	2:NA=109300
358	c16o0358	X	RINSE			17-MAR-2007 23:34	1.0				2	
359	c16o0359	X	RINSE			17-MAR-2007 23:39	1.0				2	
360	c16o0360	X	RINSE			17-MAR-2007 23:45	1.0				2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
361	c16o0361	CCV				17-MAR-2007 23:50	1.0	1.0			1	14 2	
362	c16o0362	X	RINSE			17-MAR-2007 23:55	1.0					2	
363	c16o0363	X				18-MAR-2007 00:01	1.0	1.0	2		1	2	
364	c16o0364	X				18-MAR-2007 00:06	1.0	1.0	3		1	2	
365	c16o0365	CCB				18-MAR-2007 00:12	1.0	1.0	2		1	2	
366	c16o0366	X				18-MAR-2007 00:16	1.0	1.0	4			1 t	
367	c16o0367	X	RINSE			18-MAR-2007 00:24	1.0					2	
368	c16o0368	X	RINSE			18-MAR-2007 00:30	1.0					2	
369	c16o0369	X	RINSE			18-MAR-2007 00:35	1.0					2	
370	c16o0370	X	RINSE			18-MAR-2007 00:41	1.0					2	
371	c16o0371	CCV				18-MAR-2007 00:46	1.0	1.0			1	14 2	
372	c16o0372	X	RINSE			18-MAR-2007 00:52	1.0					2	
373	c16o0373	CCB				18-MAR-2007 00:57	1.0	1.0	2		1	2	
374	c16o0374	X				18-MAR-2007 01:03	1.0	1.0	1		1	2	
375	c16o0375	X				18-MAR-2007 01:08	1.0	1.0	1		1	2	
376	c16o0376	ICSA				18-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=298600
377	c16o0377	ICSAB				18-MAR-2007 01:19	1.0	1.0			1	11 2	10:CA=308900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57113086001
Units : ug/L

Date : 19-MAR-2007 13:00
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c19m0005	57113086005		19-MAR-2007 13:05	S5647
L2	c19m0006	57113086006		19-MAR-2007 13:09	S5648
L3	c19m0007	57113086007		19-MAR-2007 13:13	S5649
L4	c19m0008	57113086008		19-MAR-2007 13:17	S5650
L5	c19m0009	57113086009		19-MAR-2007 13:21	S5644
L6	c19m0010	57113086010		19-MAR-2007 13:25	S5646

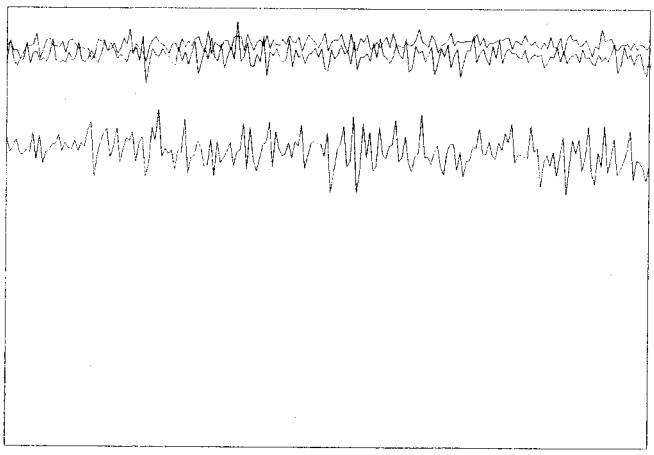
Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	0.6019	0.4283	0.3425	0.2525	0.2509	0.2437	BLNK	-33.745	4.08774		0.3533	1.000	0.995	
Antimony	0.3604	0.3125	0.3184	0.2849	0.2927	0.2918	BLNK	-0.0577	3.42657		0.3101	1.000	0.995	
Arsenic	0.7673	0.6495	0.5609	0.5124	0.5085	0.4956	BLNK	-0.0064	2.00721		0.5824	1.000	0.995	
Barium	0.3334	0.2409	0.2740	0.1269	0.1250	0.1240	BLNK	-0.3722	8.06982		0.2040	1.000	0.995	
Beryllium	0.2603	0.2478	0.2532	0.2310	0.2404	0.2469	BLNK	-0.0159	4.07286		0.2466	1.000	0.995	
Cadmium	1.1143	0.9376	0.8672	0.7328	0.7093	0.6855	BLNK	-0.1278	1.44964		0.8411	1.000	0.995	
Calcium	0.0987	0.0566	0.0394	0.0217	0.0207	0.0198	BLNK	-98.438	50.3535		0.0428	1.000	0.995	
Chromium	13.988	9.2903	7.2397	4.8190	4.2891	4.1541	BLNK	-0.5463	0.23991		7.2967	1.000	0.995	
Cobalt	5.6962	5.5858	5.6449	5.3147	5.3637	5.1341	BLNK	-0.0199	0.19306		5.4566	1.000	0.995	
Copper	4.0503	2.3125	2.0279	1.3161	1.2337	1.2049	BLNK	-0.3952	0.82784		2.0242	1.000	0.995	
Iron	0.3023	0.1948	0.1648	0.1263	0.1260	0.1225	BLNK	-38.344	8.13671		0.1728	1.000	0.995	
Lead	3.1916	2.1398	1.6265	1.0549	1.0802	1.0661	BLNK	-0.5157	0.93855		1.6932	1.000	0.995	
Magnesium	0.0455	0.0379	0.0371	0.0329	0.0324	0.0313	BLNK	-8.1984	31.7446		0.0362	1.000	0.995	
Manganese	9.4402	8.0992	7.2953	6.1752	6.0199	5.8038	BLNK	-0.1473	0.17116		7.1389	1.000	0.995	
Molybdenum	1.3045	1.0407	0.9731	0.8877	0.8835	0.8869	BLNK	-0.1529	1.12948		0.9961	1.000	0.995	
Nickel	2.9906	2.0764	1.6995	1.2028	1.1480	1.1179	BLNK	-0.4201	0.89196		1.7059	1.000	0.995	
Potassium	2.9509	1.7482	1.1864	0.6233	0.5862	0.5587	BLNK	-104.08	1.78348		1.2756	1.000	0.995	
Selenium	0.0645	0.0677	0.0394	0.0375	0.0364	0.0345	BLNK	0.18214	28.6556		0.0467	0.999	0.995	
Silver	3.1047	3.0747	3.0235	2.8431	2.7621	2.4996	BLNK	-0.0280	0.39181		2.8846	0.997	0.995	
Sodium	1.3274	0.8197	0.6262	0.4280	0.4223	0.4151	BLNK	-51.262	2.40825		0.6731	1.000	0.995	
Thallium	0.9035	0.8428	0.8446	0.8027	0.8431	0.8558	BLNK	-0.0171	1.17232		0.8488	1.000	0.995	
Vanadium	7.9840	7.0172	6.1870	5.0742	4.5628	4.4315	BLNK	-0.1748	0.22451		5.8761	1.000	0.995	
Zinc	12.701	6.9852	4.2390	1.0943	0.7973	0.7604	BLNK	-3.9880	1.33347		4.4295	1.000	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Silver	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.1250	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

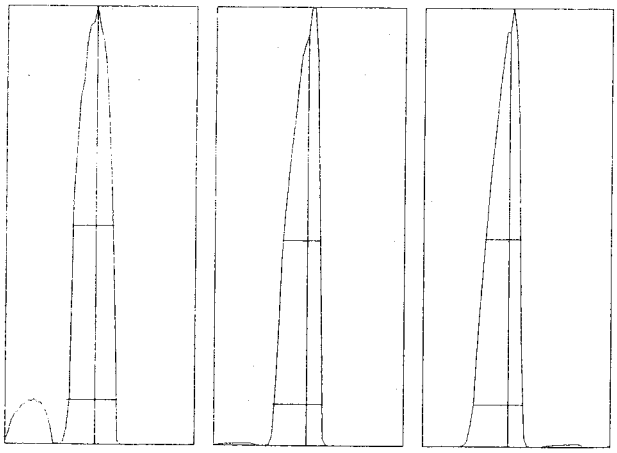
Tune Report

Tune File : nogas.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.326%
Doubly Charged:	70/140	1.191%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13010.0	13530.0	5.31	30.10
89	20,000	18223.0	17857.9	2.24	12.60
205	20,000	18394.0	18401.2	1.52	16.90
156/140	1	0.354%	0.313%	10.00	
70/140	2	1.192%	1.191%	7.99	



m/z:	7	89	205
Height:	14,035	17,638	18,840
Axis:	6.95	89.00	204.90
W-50%:	0.70	0.60	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 19, 2007 10:28:52
Printed : Mar 19, 2007 10:28:54

Tune Report

Tune File : nogas.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	-110 V	AMU Gain	:	129
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	125
Smpl Depth	:	5.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9985
Torch-H	:	-1.1 mm	Einzel 2	:	7 V	Axis Offset	:	0.04
Torch-V	:	0.9 mm	Omega Bias	:	-60 V	QP Bias	:	-1 V
Carrier Gas	:	1.05 L/min	Omega (+)	:	5 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-5 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.2 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-3 V	Analog HV	:	1830 V
Sample Pump	:	--- rps				Pulse HV	:	1380 V
S/C Temp	:	2 degC						

Generated : Mar 19, 2007 10:28:52
Printed : Mar 19, 2007 10:28:56 : 00487

P/A Factor Tuning Report

Acquired:Mar 19 2007 10:40 am

Mass[amu]	Element	P/A Factor
6	Li	0.070663
9	Be	0.082685
23	Na	Sensitivity too high
25	Mg	0.090039
26	Mg	0.090002
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.096976
44	Ca	0.101923
45	Sc	0.098937
51	V	0.092087
52	Cr	Sensitivity too low
53	Cr	0.098183
54	Fe	0.098826
55	Mn	Sensitivity too low
57	Fe	0.110283
59	Co	Sensitivity too low
60	Ni	0.108175
63	Cu	0.112034
65	Cu	0.109978
66	Zn	0.107461
72	Ge	0.104780
75	As	0.105065
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.108529
95	Mo	0.106004
98	Mo	0.107530
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.113750
111	Cd	Sensitivity too low
114	Cd	0.112809
115	In	0.114515
118	(In)	Sensitivity too low
121	Sb	0.114967
135	Ba	Sensitivity too low
137	Ba	0.112179
159	Tb	0.119766
166	Er	Sensitivity too low
205	Tl	0.121495
206	(Pb)	0.119833
207	(Pb)	0.119160
208	Pb	0.122207
209	Bi	0.121025

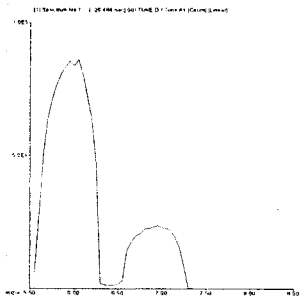
===Detector Parameters===
Discriminator: 9.2 mV
Analog HV: 1830 V
Pulse HV: 1380 V

6020 QC Tune Report

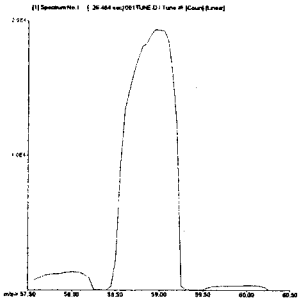
Data File: C:\ICPCHEM\1\DATA\07C19m00.B\001TUNE.D
Date Acquired: Mar 19 2007 12:46 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

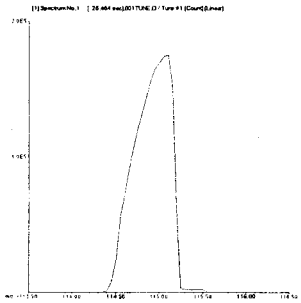
Element	Actual	Required	Flag
7 Li	2.20	5.00	
59 Co	1.02	5.00	
115 In	1.75	5.00	
205 Tl	0.21	5.00	



7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

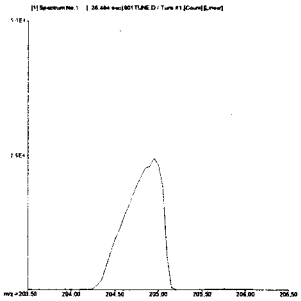
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.90

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.50

Required: 0.90

Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004C
Date Acquired:	Mar 19 2007 01:00 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\60200111.M
Calibration File:	C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update:	Mar 19 2007 01:03 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	809266.88	A	18440.00	2.28
9	Be	63.33	P	8.82	13.93
23	Na	409883.09	M	68300.00	16.66
26	Mg	4970.00	P	1229.00	24.73
27	Al	159076.70	P	10260.00	6.45
39	K	1124988.00	A	19380.00	1.72
44	Ca	37676.62	P	1697.00	4.50
45	Sc	964042.50	A	11050.00	1.15
51	V	2561.88	P	1753.00	68.43
52	Cr	7505.56	P	186.30	2.48
55	Mn	2836.67	P	113.70	4.01
57	Fe	15536.67	P	1593.00	10.25
59	Co	340.00	P	68.88	20.26
60	Ni	1552.22	P	100.10	6.45
65	Cu	1573.31	P	78.60	5.00
66	Zn	9857.55	P	348.40	3.53
72	Ge	164788.00	P	867.60	0.53
75	As	10.03	P	152.60	1521.00
82	Se	-21.11	P	58.73	278.19
95	Mo	446.67	P	147.30	32.98
109	Ag	235.56	P	32.89	13.96
111	Cd	290.38	P	30.59	10.53
115	In	1539479.00	A	11710.00	0.76
121	Sb	517.78	P	47.30	9.14
137	Ba	1420.00	P	50.44	3.55
205	Tl	353.33	P	12.02	3.40
208	Pb	13348.89	P	434.30	3.25
209	Bi	1214998.00	A	11230.00	0.92

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 19 2007 01:05 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:03 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	805602.13	A	11920.00	1.48
9 Be	1047.78	P	39.49	3.77
23 Na	635738.19	A	32720.00	5.15
26 Mg	21802.22	P	479.80	2.20
27 Al	288357.81	P	2935.00	1.02
39 K	1413834.00	A	10370.00	0.73
44 Ca	47265.31	P	1267.00	2.68
45 Sc	958687.69	A	22970.00	2.40
51 V	6521.48	P	376.30	5.77
52 Cr	11423.33	P	265.40	2.32
55 Mn	7710.00	P	217.80	2.82
57 Fe	24693.33	P	680.80	2.76
59 Co	4652.22	P	143.10	3.08
60 Ni	2442.22	P	45.26	1.85
65 Cu	3307.68	P	3.85	0.12
66 Zn	10372.00	P	35.14	0.34
72 Ge	163333.80	P	856.70	0.52
75 As	626.69	P	36.11	5.76
82 Se	52.67	P	25.79	48.97
95 Mo	1065.56	P	79.04	7.42
109 Ag	2535.56	P	22.69	0.89
111 Cd	909.98	P	5.38	0.59
115 In	1539418.00	A	20080.00	1.30
121 Sb	2774.44	P	64.06	2.31
137 Ba	2567.78	P	209.80	8.17
205 Tl	2730.00	P	147.30	5.40
208 Pb	19295.55	P	214.60	1.11
209 Bi	1209239.00	A	13920.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	805602.06	1.4796	809266.88	99.55	80 - 120	
45 Sc	958687.69	2.396	964042.5	99.44	80 - 120	
72 Ge	163333.78	0.5245	164788	99.12	80 - 120	
115 In	1539418.4	1.3044	1539478.6	100.00	80 - 120	
209 Bi	1209239.1	1.1511	1214998.3	99.53	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 19 2007 01:09 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:07 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	800716.31	A	15910.00	1.99
9	Be	1984.44	P	101.50	5.11
23	Na	782529.63	A	27160.00	3.47
26	Mg	36232.22	P	450.50	1.24
27	Al	408943.31	P	4867.00	1.19
39	K	1669214.00	A	2368.00	0.14
44	Ca	54048.95	P	340.50	0.63
45	Sc	954905.88	A	9804.00	1.03
51	V	11433.18	P	939.60	8.22
52	Cr	15131.11	P	186.80	1.23
55	Mn	13190.00	P	166.00	1.26
57	Fe	31727.78	P	164.60	0.52
59	Co	9097.78	P	127.30	1.40
60	Ni	3382.22	P	108.80	3.22
65	Cu	3765.39	P	164.50	4.37
66	Zn	11376.67	P	85.46	0.75
72	Ge	162871.30	P	1190.00	0.73
75	As	1057.56	P	231.20	21.86
82	Se	110.44	P	50.65	45.86
95	Mo	1694.44	P	112.90	6.66
109	Ag	5006.67	P	272.40	5.44
111	Cd	1526.83	P	52.06	3.41
115	In	1555350.00	A	22580.00	1.45
121	Sb	4860.00	P	89.88	1.85
137	Ba	3746.67	P	39.30	1.05
205	Tl	5078.89	P	243.30	4.79
208	Pb	25795.55	P	126.90	0.49
209	Bi	1205717.00	A	16950.00	1.41

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	800716.31	1.987	809266.88	98.94	80 - 120	
45	Sc	954905.94	1.0267	964042.5	99.05	80 - 120	
72	Ge	162871.33	0.7306	164788	98.84	80 - 120	
115	In	1555350.4	1.4518	1539478.6	101.03	80 - 120	
209	Bi	1205717.4	1.4058	1214998.3	99.24	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 19 2007 01:13 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:11 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	791287.13	A	14180.00	1.79
9	Be	4006.67	P	41.77	1.04
23	Na	1215479.00	A	24970.00	2.05
26	Mg	72022.22	P	1489.00	2.07
27	Al	664794.13	A	5319.00	0.80
39	K	2303346.00	A	20400.00	0.89
44	Ca	76399.13	P	510.80	0.67
45	Sc	970785.63	A	13090.00	1.35
51	V	20342.28	P	465.50	2.29
52	Cr	23803.33	P	112.90	0.47
55	Mn	23988.89	P	399.30	1.66
57	Fe	54181.11	P	284.10	0.52
59	Co	18561.11	P	168.20	0.91
60	Ni	5587.78	P	60.03	1.07
65	Cu	6668.56	P	160.00	2.40
66	Zn	13938.67	P	172.90	1.24
72	Ge	164407.80	P	1564.00	0.95
75	As	1844.67	P	192.20	10.42
82	Se	129.78	P	33.27	25.64
95	Mo	3200.00	P	72.11	2.25
109	Ag	9942.22	P	172.90	1.74
111	Cd	2851.90	P	71.16	2.50
115	In	1552491.00	A	12810.00	0.83
121	Sb	9887.78	P	225.50	2.28
137	Ba	8506.67	P	136.20	1.60
205	Tl	10140.00	P	251.10	2.48
208	Pb	39061.11	P	624.50	1.60
209	Bi	1200892.00	A	14720.00	1.23

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	791287.13	1.792	809266.88	97.78	80 - 120	
45	Sc	970785.63	1.3484	964042.5	100.70	80 - 120	
72	Ge	164407.78	0.9513	164788	99.77	80 - 120	
115	In	1552490.8	0.8251	1539478.6	100.85	80 - 120	
209	Bi	1200892.5	1.2258	1214998.3	98.84	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 19 2007 01:17 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:15 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	817307.38	A	4120.00	0.50
9	Be	37751.11	P	96.23	0.25
23	Na	8489816.00	A	252300.00	2.97
26	Mg	653231.00	A	2304.00	0.35
27	Al	5010032.00	A	61670.00	1.23
39	K	12365170.00	A	2470.00	0.02
44	Ca	430021.00	P	1685.00	0.39
45	Sc	991993.63	A	9937.00	1.00
51	V	172954.20	P	1022.00	0.59
52	Cr	164261.09	P	632.10	0.38
55	Mn	210491.09	P	809.10	0.38
57	Fe	430515.50	P	1656.00	0.38
59	Co	181153.30	P	859.10	0.47
60	Ni	41000.00	P	361.30	0.88
65	Cu	44863.61	P	307.40	0.69
66	Zn	37299.55	P	69.44	0.19
72	Ge	170450.20	P	2394.00	1.40
75	As	17466.96	P	365.60	2.09
82	Se	1277.11	P	26.01	2.04
95	Mo	30260.00	P	568.20	1.88
109	Ag	96908.88	P	244.50	0.25
111	Cd	24975.29	P	354.20	1.42
115	In	1563410.00	A	9028.00	0.58
121	Sb	89075.55	P	1015.00	1.14
137	Ba	39676.67	P	310.00	0.78
205	Tl	97534.45	P	1168.00	1.20
208	Pb	256364.41	P	112.40	0.04
209	Bi	1215138.00	A	7292.00	0.60

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	817307.38	0.5041	809266.88	100.99	80 - 120	
45	Sc	991993.63	1.0017	964042.5	102.90	80 - 120	
72	Ge	170450.22	1.4045	164788	103.44	80 - 120	
115	In	1563409.6	0.5775	1539478.6	101.55	80 - 120	
209	Bi	1215137.9	0.6001	1214998.3	100.01	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 19 2007 01:21 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:19 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	804806.19	A	18150.00	2.26
9	Be	386914.41	P	6957.00	1.80
23	Na	83202360.00	A	690600.00	0.83
26	Mg	6379928.00	A	29690.00	0.47
27	Al	49434208.00	A	405500.00	0.82
39	K	115501800.00	A	359800.00	0.31
44	Ca	4080010.00	A	47560.00	1.17
45	Sc	985126.00	A	7380.00	0.75
51	V	1569785.00	A	4038.00	0.26
52	Cr	1475604.00	A	3763.00	0.26
55	Mn	2071077.00	A	25020.00	1.21
57	Fe	4336312.00	A	13760.00	0.32
59	Co	1845315.00	A	4901.00	0.27
60	Ni	394944.41	P	2589.00	0.66
65	Cu	424442.59	P	10240.00	2.41
66	Zn	274317.09	P	3041.00	1.11
72	Ge	172020.00	P	562.80	0.33
75	As	174944.50	P	698.10	0.40
82	Se	12525.33	P	132.50	1.06
95	Mo	303974.41	P	2280.00	0.75
109	Ag	950239.63	M	13200.00	1.39
111	Cd	244035.80	P	1151.00	0.47
115	In	1493329.00	A	11080.00	0.74
121	Sb	874084.50	P	2649.00	0.30
137	Ba	373180.00	P	1560.00	0.42
205	Tl	983958.81	P	3739.00	0.38
208	Pb	2521238.00	A	8385.00	0.33
209	Bi	1167100.00	A	10730.00	0.92

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	804806.25	2.2552	809266.88	99.45	80 - 120	
45	Sc	985126	0.7491	964042.5	102.19	80 - 120	
72	Ge	172020	0.3272	164788	104.39	80 - 120	
115	In	1493328.6	0.742	1539478.6	97.00	80 - 120	
209	Bi	1167099.8	0.9194	1214998.3	96.06	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

00496

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 19 2007 01:25 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:23 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	814050.19	A	7324.00	0.90
9 Be	803879.50	A	10560.00	1.31
23 Na	164447600.00	A	2569000.00	1.56
26 Mg	12399040.00	A	177100.00	1.43
27 Al	96536864.00	A	1012000.00	1.05
39 K	221321410.00	A	2374000.00	1.07
44 Ca	7841485.00	A	55120.00	0.70
45 Sc	990388.63	A	8870.00	0.90
51 V	3019873.00	A	13230.00	0.44
52 Cr	2830819.00	A	16330.00	0.58
55 Mn	3955002.00	A	15350.00	0.39
57 Fe	8345797.00	A	16620.00	0.20
59 Co	3498507.00	A	15390.00	0.44
60 Ni	761761.13	P	5799.00	0.76
65 Cu	821110.13	M	5538.00	0.67
66 Zn	518163.31	P	3581.00	0.69
72 Ge	170366.00	P	1140.00	0.67
75 As	337737.00	P	949.70	0.28
82 Se	23484.22	P	191.60	0.82
95 Mo	604324.38	P	6427.00	1.06
109 Ag	1703530.00	A	50760.00	2.98
111 Cd	467141.19	P	1283.00	0.27
115 In	1454894.00	A	6581.00	0.45
121 Sb	1697984.00	A	5790.00	0.34
137 Ba	721640.00	P	7143.00	0.99
205 Tl	1971583.00	A	7342.00	0.37
208 Pb	4911876.00	A	13140.00	0.27
209 Bi	1151909.00	A	8460.00	0.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	814050.19	0.8997	809266.88	100.59	80 - 120	
45 Sc	990388.63	0.8956	964042.5	102.73	80 - 120	
72 Ge	170366	0.6692	164788	103.38	80 - 120	
115 In	1454893.9	0.4523	1539478.6	94.51	80 - 120	
209 Bi	1151909.1	0.7344	1214998.3	94.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086014 File : c19m0014 Time : 19-MAR-2007 13:41
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.3533	0.2466	10000	10040	ug/L	0	10	
Antimony	0.3101	0.2822	100.0	96.64	ug/L	-3	10	
Arsenic	0.5824	0.5054	100.0	101.4	ug/L	1	10	
Barium	0.2040	0.1201	100.0	96.53	ug/L	-3	10	
Beryllium	0.2466	0.2319	100.0	94.44	ug/L	-6	10	
Cadmium	0.8411	0.7467	100.0	108.1	ug/L	8	10	
Calcium	0.0428	0.0204	10000	10180	ug/L	2	10	
Chromium	7.2967	4.3982	100.0	105.0	ug/L	5	10	
Cobalt	5.4566	5.3427	100.0	103.1	ug/L	3	10	
Copper	2.0242	1.2352	100.0	101.9	ug/L	2	10	
Iron	0.1728	0.1280	10000	10380	ug/L	4	10	
Lead	1.6932	1.0656	100.0	99.49	ug/L	-1	10	
Magnesium	0.0362	0.0311	10000	9876	ug/L	-1	10	
Manganese	7.1389	6.1102	100.0	104.4	ug/L	4	10	
Molybdenum	0.9961	0.9278	100.0	104.6	ug/L	5	10	
Nickel	1.7059	1.1472	100.0	101.9	ug/L	2	10	
Potassium	1.2756	0.5779	10000	10200	ug/L	2	10	
Selenium	0.0467	0.0369	100.0	105.9	ug/L	6	10	
Silver	2.8846	2.8817	100.0	112.9	ug/L	**13**	10	v+ ***
Sodium	0.6731	0.4005	10000	9594	ug/L	-4	10	
Thallium	0.8488	0.8384	50.00	49.12	ug/L	-2	10	
Vanadium	5.8761	4.6319	100.0	103.8	ug/L	4	10	
Zinc	4.4295	0.7953	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	835096	3.19
Scandium	964043	1020146	5.82
Germanium	164788	171495	4.07
Indium	1539479	1589610	3.26
Bismuth	1214998	1267642	4.33

+=high bias v=ICV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086036 File : c19m0036 Time : 19-MAR-2007 15:12
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2517	10000	10250	ug/L	3	10	
Antimony	0.3101	0.2847	100.0	97.48	ug/L	-3	10	
Arsenic	0.5824	0.4994	100.0	100.2	ug/L	0	10	
Barium	0.2040	0.1232	100.0	99.02	ug/L	-1	10	
Beryllium	0.2466	0.2337	100.0	95.18	ug/L	-5	10	
Cadmium	0.8411	0.7199	100.0	104.2	ug/L	4	10	
Calcium	0.0428	0.0204	10000	10160	ug/L	2	10	
Chromium	7.2967	4.2857	100.0	102.3	ug/L	2	10	
Cobalt	5.4566	5.2670	100.0	101.7	ug/L	2	10	
Copper	2.0242	1.2130	100.0	100.0	ug/L	0	10	
Iron	0.1728	0.1255	10000	10170	ug/L	2	10	
Lead	1.6932	1.0580	100.0	98.78	ug/L	-1	10	
Magnesium	0.0362	0.0321	10000	10190	ug/L	2	10	
Manganese	7.1389	5.9757	100.0	102.1	ug/L	2	10	
Molybdenum	0.9961	0.8782	100.0	99.03	ug/L	-1	10	
Nickel	1.7059	1.1240	100.0	99.83	ug/L	0	10	
Potassium	1.2756	0.5771	10000	10190	ug/L	2	10	
Selenium	0.0467	0.0359	100.0	102.9	ug/L	3	10	
Silver	2.8846	2.7850	100.0	109.1	ug/L	9	10	
Sodium	0.6731	0.4205	10000	10080	ug/L	1	10	
Thallium	0.8488	0.8167	50.00	47.85	ug/L	-4	10	
Vanadium	5.8761	4.5606	100.0	102.2	ug/L	2	10	
Zinc	4.4295	0.7835	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	767863	-5.12
Scandium	964043	909083	-5.70
Germanium	164788	156038	-5.31
Indium	1539479	1424629	-7.46
Bismuth	1214998	1208795	-0.51

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086056 File : c19m0056 Time : 19-MAR-2007 16:36
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2458	10000	10010	ug/L	0	10	
Antimony	0.3101	0.2844	100.0	97.38	ug/L	-3	10	
Arsenic	0.5824	0.5009	100.0	100.5	ug/L	1	10	
Barium	0.2040	0.1224	100.0	98.43	ug/L	-2	10	
Beryllium	0.2466	0.2275	100.0	92.63	ug/L	-7	10	
Cadmium	0.8411	0.7400	100.0	107.1	ug/L	7	10	
Calcium	0.0428	0.0204	10000	10190	ug/L	2	10	
Chromium	7.2967	4.3297	100.0	103.3	ug/L	3	10	
Cobalt	5.4566	5.2646	100.0	101.6	ug/L	2	10	
Copper	2.0242	1.2269	100.0	101.2	ug/L	1	10	
Iron	0.1728	0.1253	10000	10160	ug/L	2	10	
Lead	1.6932	1.0724	100.0	100.1	ug/L	0	10	
Magnesium	0.0362	0.0310	10000	9844	ug/L	-2	10	
Manganese	7.1389	6.0146	100.0	102.8	ug/L	3	10	
Molybdenum	0.9961	0.9046	100.0	102.0	ug/L	2	10	
Nickel	1.7059	1.1258	100.0	100.0	ug/L	0	10	
Potassium	1.2756	0.5780	10000	10200	ug/L	2	10	
Selenium	0.0467	0.0363	100.0	104.3	ug/L	4	10	
Silver	2.8846	2.8744	100.0	112.6	ug/L	**13**	10	c+ ***
Sodium	0.6731	0.3951	10000	9463	ug/L	-5	10	
Thallium	0.8488	0.8267	50.00	48.44	ug/L	-3	10	
Vanadium	5.8761	4.6117	100.0	103.4	ug/L	3	10	
Zinc	4.4295	0.7860	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	771551	-4.66
Scandium	964043	920722	-4.49
Germanium	164788	156028	-5.32
Indium	1539479	1449422	-5.85
Bismuth	1214998	1211837	-0.26

+=high bias c=CCV

57113086056

: 00500

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086066 File : c19m0066 Time : 19-MAR-2007 17:20
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2431	10000	9902	ug/L	-1	10	
Antimony	0.3101	0.2812	100.0	96.30	ug/L	-4	10	
Arsenic	0.5824	0.5040	100.0	101.2	ug/L	1	10	
Barium	0.2040	0.1215	100.0	97.71	ug/L	-2	10	
Beryllium	0.2466	0.2349	100.0	95.64	ug/L	-4	10	
Cadmium	0.8411	0.7299	100.0	105.7	ug/L	6	10	
Calcium	0.0428	0.0204	10000	10180	ug/L	2	10	
Chromium	7.2967	4.3037	100.0	102.7	ug/L	3	10	
Cobalt	5.4566	5.3485	100.0	103.2	ug/L	3	10	
Copper	2.0242	1.2106	100.0	99.82	ug/L	0	10	
Iron	0.1728	0.1259	10000	10210	ug/L	2	10	
Lead	1.6932	1.0628	100.0	99.24	ug/L	-1	10	
Magnesium	0.0362	0.0311	10000	9850	ug/L	-2	10	
Manganese	7.1389	6.0299	100.0	103.1	ug/L	3	10	
Molybdenum	0.9961	0.8950	100.0	100.9	ug/L	1	10	
Nickel	1.7059	1.1341	100.0	100.7	ug/L	1	10	
Potassium	1.2756	0.5769	10000	10180	ug/L	2	10	
Selenium	0.0467	0.0360	100.0	103.4	ug/L	3	10	
Silver	2.8846	2.8491	100.0	111.6	ug/L	**12**	10	c+ ***
Sodium	0.6731	0.4066	10000	9740	ug/L	-3	10	
Thallium	0.8488	0.8210	50.00	48.10	ug/L	-4	10	
Vanadium	5.8761	4.5591	100.0	102.2	ug/L	2	10	
Zinc	4.4295	0.7885	100.0	101.2	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	760445	-6.03
Scandium	964043	918559	-4.72
Germanium	164788	157150	-4.64
Indium	1539479	1455284	-5.47
Bismuth	1214998	1216366	0.11

+=high bias c=CCV

57113086066

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086088 File : c19m0088 Time : 19-MAR-2007 18:51
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2554	10000	10410	ug/L	4	10	
Antimony	0.3101	0.2827	100.0	96.82	ug/L	-3	10	
Arsenic	0.5824	0.4790	100.0	96.15	ug/L	-4	10	
Barium	0.2040	0.1276	100.0	102.6	ug/L	3	10	
Beryllium	0.2466	0.2520	100.0	102.6	ug/L	3	10	
Cadmium	0.8411	0.5958	100.0	86.25	ug/L	**-14**	10	c- ***
Calcium	0.0428	0.0200	10000	9958	ug/L	0	10	
Chromium	7.2967	3.8649	100.0	92.18	ug/L	-8	10	
Cobalt	5.4566	4.8916	100.0	94.42	ug/L	-6	10	
Copper	2.0242	1.1533	100.0	95.08	ug/L	-5	10	
Iron	0.1728	0.1147	10000	9298	ug/L	-7	10	
Lead	1.6932	1.0441	100.0	97.48	ug/L	-3	10	
Magnesium	0.0362	0.0343	10000	10890	ug/L	9	10	
Manganese	7.1389	5.4789	100.0	93.63	ug/L	-6	10	
Molybdenum	0.9961	0.7410	100.0	83.54	ug/L	**-16**	10	c- ***
Nickel	1.7059	1.0502	100.0	93.25	ug/L	-7	10	
Potassium	1.2756	0.5459	10000	9632	ug/L	-4	10	
Selenium	0.0467	0.0333	100.0	95.70	ug/L	-4	10	
Silver	2.8846	2.3163	100.0	90.73	ug/L	-9	10	
Sodium	0.6731	0.4879	10000	11700	ug/L	**17**	10	c+ ***
Thallium	0.8488	0.8056	50.00	47.20	ug/L	-6	10	
Vanadium	5.8761	4.1206	100.0	92.34	ug/L	-8	10	
Zinc	4.4295	0.7478	100.0	95.73	ug/L	-4	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	704312	-12.97
Scandium	964043	876099	-9.12
Germanium	164788	165882	0.66
Indium	1539479	1286872	-16.41
Bismuth	1214998	1101942	-9.31

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086103 File : c19m0103 Time : 19-MAR-2007 19:54
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2539	10000	10350	ug/L	4	10	
Antimony	0.3101	0.2820	100.0	96.58	ug/L	-3	10	
Arsenic	0.5824	0.4853	100.0	97.41	ug/L	-3	10	
Barium	0.2040	0.1259	100.0	101.2	ug/L	1	10	
Beryllium	0.2466	0.2454	100.0	99.95	ug/L	0	10	
Cadmium	0.8411	0.6248	100.0	90.45	ug/L	-10	10	
Calcium	0.0428	0.0202	10000	10050	ug/L	1	10	
Chromium	7.2967	3.9180	100.0	93.45	ug/L	-7	10	
Cobalt	5.4566	4.8716	100.0	94.03	ug/L	-6	10	
Copper	2.0242	1.1486	100.0	94.69	ug/L	-5	10	
Iron	0.1728	0.1163	10000	9426	ug/L	-6	10	
Lead	1.6932	1.0349	100.0	96.62	ug/L	-3	10	
Magnesium	0.0362	0.0339	10000	10760	ug/L	8	10	
Manganese	7.1389	5.5348	100.0	94.59	ug/L	-5	10	
Molybdenum	0.9961	0.7664	100.0	86.40	ug/L	**-14**	10	c- ***
Nickel	1.7059	1.0430	100.0	92.61	ug/L	-7	10	
Potassium	1.2756	0.5505	10000	9714	ug/L	-3	10	
Selenium	0.0467	0.0341	100.0	97.98	ug/L	-2	10	
Silver	2.8846	2.4249	100.0	94.98	ug/L	-5	10	
Sodium	0.6731	0.4678	10000	11210	ug/L	**12**	10	c+ ***
Thallium	0.8488	0.8017	50.00	46.98	ug/L	-6	10	
Vanadium	5.8761	4.2128	100.0	94.41	ug/L	-6	10	
Zinc	4.4295	0.7598	100.0	97.33	ug/L	-3	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	725333	-10.37
Scandium	964043	876742	-9.06
Germanium	164788	163295	-0.91
Indium	1539479	1331099	-13.54
Bismuth	1214998	1145290	-5.74

+=high bias -=low bias c=CCV

57113086103

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086122 File : c19m0122 Time : 19-MAR-2007 21:23
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2540	10000	10350	ug/L	4	10	
Antimony	0.3101	0.2873	100.0	98.39	ug/L	-2	10	
Arsenic	0.5824	0.4942	100.0	99.19	ug/L	-1	10	
Barium	0.2040	0.1245	100.0	100.1	ug/L	0	10	
Beryllium	0.2466	0.2344	100.0	95.47	ug/L	-5	10	
Cadmium	0.8411	0.6879	100.0	99.59	ug/L	0	10	
Calcium	0.0428	0.0206	10000	10260	ug/L	3	10	
Chromium	7.2967	4.1611	100.0	99.28	ug/L	-1	10	
Cobalt	5.4566	5.1831	100.0	100.0	ug/L	0	10	
Copper	2.0242	1.1791	100.0	97.21	ug/L	-3	10	
Iron	0.1728	0.1241	10000	10060	ug/L	1	10	
Lead	1.6932	1.0607	100.0	99.03	ug/L	-1	10	
Magnesium	0.0362	0.0326	10000	10340	ug/L	3	10	
Manganese	7.1389	5.9175	100.0	101.1	ug/L	1	10	
Molybdenum	0.9961	0.8300	100.0	93.60	ug/L	-6	10	
Nickel	1.7059	1.0861	100.0	96.46	ug/L	-4	10	
Potassium	1.2756	0.5795	10000	10230	ug/L	2	10	
Selenium	0.0467	0.0354	100.0	101.5	ug/L	2	10	
Silver	2.8846	2.6460	100.0	103.6	ug/L	4	10	
Sodium	0.6731	0.4380	10000	10500	ug/L	5	10	
Thallium	0.8488	0.8284	50.00	48.54	ug/L	-3	10	
Vanadium	5.8761	4.4167	100.0	98.98	ug/L	-1	10	
Zinc	4.4295	0.7796	100.0	99.98	ug/L	0	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	752295	-7.04
Scandium	964043	857665	-11.03
Germanium	164788	152441	-7.49
Indium	1539479	1339483	-12.99
Bismuth	1214998	1108373	-8.78

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086147 File : c19m0147 Time : 19-MAR-2007 23:10
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2435	10000	9921	ug/L	-1	10	
Antimony	0.3101	0.2879	100.0	98.59	ug/L	-1	10	
Arsenic	0.5824	0.4858	100.0	97.49	ug/L	-3	10	
Barium	0.2040	0.1237	100.0	99.43	ug/L	-1	10	
Beryllium	0.2466	0.2286	100.0	93.09	ug/L	-7	10	
Cadmium	0.8411	0.6690	100.0	96.85	ug/L	-3	10	
Calcium	0.0428	0.0204	10000	10170	ug/L	2	10	
Chromium	7.2967	4.1285	100.0	98.50	ug/L	-2	10	
Cobalt	5.4566	5.0770	100.0	98.00	ug/L	-2	10	
Copper	2.0242	1.1760	100.0	96.96	ug/L	-3	10	
Iron	0.1728	0.1209	10000	9797	ug/L	-2	10	
Lead	1.6932	1.0475	100.0	97.80	ug/L	-2	10	
Magnesium	0.0362	0.0314	10000	9974	ug/L	0	10	
Manganese	7.1389	5.7531	100.0	98.32	ug/L	-2	10	
Molybdenum	0.9961	0.8149	100.0	91.89	ug/L	-8	10	
Nickel	1.7059	1.0819	100.0	96.08	ug/L	-4	10	
Potassium	1.2756	0.5638	10000	9951	ug/L	0	10	
Selenium	0.0467	0.0339	100.0	97.36	ug/L	-3	10	
Silver	2.8846	2.5994	100.0	101.8	ug/L	2	10	
Sodium	0.6731	0.4284	10000	10270	ug/L	3	10	
Thallium	0.8488	0.8158	50.00	47.80	ug/L	-4	10	
Vanadium	5.8761	4.3863	100.0	98.30	ug/L	-2	10	
Zinc	4.4295	0.7666	100.0	98.24	ug/L	-2	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	773704	-4.39
Scandium	964043	899289	-6.72
Germanium	164788	158647	-3.73
Indium	1539479	1374019	-10.75
Bismuth	1214998	1127780	-7.18

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086157 File : c19m0157 Time : 19-MAR-2007 23:52
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2576	10000	10500	ug/L	5	10	
Antimony	0.3101	0.2883	100.0	98.72	ug/L	-1	10	
Arsenic	0.5824	0.4791	100.0	96.16	ug/L	-4	10	
Barium	0.2040	0.1259	100.0	101.2	ug/L	1	10	
Beryllium	0.2466	0.2396	100.0	97.58	ug/L	-2	10	
Cadmium	0.8411	0.6053	100.0	87.62	ug/L	**-12**	10	c- ***
Calcium	0.0428	0.0204	10000	10190	ug/L	2	10	
Chromium	7.2967	3.9991	100.0	95.40	ug/L	-5	10	
Cobalt	5.4566	5.0244	100.0	96.98	ug/L	-3	10	
Copper	2.0242	1.1645	100.0	96.00	ug/L	-4	10	
Iron	0.1728	0.1185	10000	9607	ug/L	-4	10	
Lead	1.6932	1.0424	100.0	97.32	ug/L	-3	10	
Magnesium	0.0362	0.0339	10000	10770	ug/L	8	10	
Manganese	7.1389	5.6316	100.0	96.24	ug/L	-4	10	
Molybdenum	0.9961	0.7456	100.0	84.06	ug/L	**-16**	10	c- ***
Nickel	1.7059	1.0614	100.0	94.25	ug/L	-6	10	
Potassium	1.2756	0.5558	10000	9809	ug/L	-2	10	
Selenium	0.0467	0.0331	100.0	95.06	ug/L	-5	10	
Silver	2.8846	2.3717	100.0	92.90	ug/L	-7	10	
Sodium	0.6731	0.4806	10000	11520	ug/L	**15**	10	c+ ***
Thallium	0.8488	0.8116	50.00	47.56	ug/L	-5	10	
Vanadium	5.8761	4.2851	100.0	96.03	ug/L	-4	10	
Zinc	4.4295	0.7589	100.0	97.21	ug/L	-3	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	788059	-2.62
Scandium	964043	910201	-5.58
Germanium	164788	167291	1.52
Indium	1539479	1326134	-13.86
Bismuth	1214998	1069337	-11.99

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086018 File : c19m0018 IDF : 1.0
Cal : 57113086001 Caldate: 19-MAR-2007 Time : 19-MAR-2007 13:58

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.02247]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1267]	0.2500	0.007794	ug/L	!ib
Barium	ND	0.2500	0.004941	ug/L	
Beryllium	[0.005902]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.007956]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.01474]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.2160]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	808638	-0.08
Scandium	964043	1005898	4.34
Germanium	164788	164993	0.12
Indium	1539479	1618007	5.10
Bismuth	1214998	1279068	5.27

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086039 File : c19m0039 Time : 19-MAR-2007 15:24
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.07314]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1863]	0.2500	0.007794	ug/L	!ib
Barium	[0.03243]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.008534]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02421]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.04152]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	787551	-2.68
Scandium	964043	896864	-6.97
Germanium	164788	153199	-7.03
Indium	1539479	1422713	-7.58
Bismuth	1214998	1208325	-0.55

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086059 File : c19m0059 IDF : 1.0
Cal : 57113086001 Caldate: 19-MAR-2007 Time : 19-MAR-2007 16:48

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04143]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1226]	0.2500	0.007794	ug/L	!ib
Barium	[0.01795]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.003853]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02523]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.2646	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.07083]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	757155	-6.44
Scandium	964043	905422	-6.08
Germanium	164788	150560	-8.63
Indium	1539479	1469768	-4.53
Bismuth	1214998	1231513	1.36

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086069 File : c19m0069 Time : 19-MAR-2007 17:32
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03828]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.2237]	0.2500	0.007794	ug/L	!ib
Barium	[0.01006]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.008526]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02107]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.3795	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.03826]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	759310	-6.17
Scandium	964043	909202	-5.69
Germanium	164788	153357	-6.94
Indium	1539479	1470842	-4.46
Bismuth	1214998	1222932	0.65

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086091 File : c19m0091
Cal : 57113086001 Caldate: 19-MAR-2007
IDF : 1.0
Time : 19-MAR-2007 19:04

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04308]	0.2500	0.01065	ug/L	!ib
Arsenic	0.3196	0.2500	0.007794	ug/L	ib ***
Barium	[0.03230]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.007112]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02095]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.2693	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1429]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	717002	-11.40
Scandium	964043	863444	-10.44
Germanium	164788	155582	-5.59
Indium	1539479	1339983	-12.96
Bismuth	1214998	1117487	-8.03

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086106 File : c19m0106 Time : 19-MAR-2007 20:09
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.05937]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.2259]	0.2500	0.007794	ug/L	!ib
Barium	[0.03629]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.006442]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	ND	0.2500	0.002798	ug/L	
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1503]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	739703	-8.60
Scandium	964043	878111	-8.91
Germanium	164788	157490	-4.43
Indium	1539479	1359786	-11.67
Bismuth	1214998	1151243	-5.25

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086125 File : c19m0125
Cal : 57113086001 Caldate: 19-MAR-2007
IDF : 1.0
Time : 19-MAR-2007 21:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03480]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.06936]	0.2500	0.007794	ug/L	!ib
Barium	[0.03616]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.007176]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.005709]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	745057	-7.93
Scandium	964043	873716	-9.37
Germanium	164788	147818	-10.30
Indium	1539479	1397912	-9.20
Bismuth	1214998	1137669	-6.36

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086150 File : c19m0150 Time : 19-MAR-2007 23:23
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03748]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1621]	0.2500	0.007794	ug/L	!ib
Barium	[0.02002]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01067]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.006423]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.3537	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	774083	-4.35
Scandium	964043	890823	-7.60
Germanium	164788	153106	-7.09
Indium	1539479	1408458	-8.51
Bismuth	1214998	1139036	-6.25

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086160 File : c19m0160 IDF : 1.0
Cal : 57113086001 Caldate: 19-MAR-2007 Time : 20-MAR-2007 00:05

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.02203]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1368]	0.2500	0.007794	ug/L	!ib
Barium	[0.01651]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.004536]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.002922]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.3886	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	807236	-0.25
Scandium	964043	915034	-5.08
Germanium	164788	161494	-2.00
Indium	1539479	1375172	-10.67
Bismuth	1214998	1115686	-8.17

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086019 File : c19m0019 Time : 19-MAR-2007 14:02
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1577]	0.2500	ug/L	
Arsenic	[0.09260]	0.2500	ug/L	
Barium	1.028	0.2500	ug/L	
Beryllium	[0.01957]	0.2500	ug/L	
Cadmium	[0.1063]	0.2500	ug/L	
Chromium	1.691	0.2500	ug/L	
Cobalt	0.4440	0.2500	ug/L	
Copper	1.780	0.2500	ug/L	
Lead	[0.1409]	0.2500	ug/L	
Manganese	0.6626	0.2500	ug/L	
Nickel	2.065	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2344]	0.2500	ug/L	
Thallium	[0.03854]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	0.9645	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	94970	ug/L	95
Calcium	300000	306900	ug/L	102
Iron	250000	236400	ug/L	95
Magnesium	100000	92580	ug/L	93
Molybdenum	2000	1963	ug/L	98
Potassium	100000	99630	ug/L	100
Sodium	250000	220600	ug/L	88

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	694920	-14.13
Scandium	964043	903584	-6.27
Germanium	164788	165562	0.47
Indium	1539479	1304472	-15.27
Bismuth	1214998	900191	-25.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086020 File : c19m0020 Time : 19-MAR-2007 14:06
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	90070	ug/L	-10		
Arsenic	100.0	99.13	ug/L	-1	20	
Cadmium	100.0	87.71	ug/L	-12	20	
Calcium	300000	288500	ug/L	-4		
Chromium	200.0	202.3	ug/L	1	20	
Cobalt	200.0	190.7	ug/L	-5	20	
Copper	200.0	180.2	ug/L	-10	20	
Iron	250000	222300	ug/L	-11		
Magnesium	100000	90000	ug/L	-10		
Manganese	200.0	199.1	ug/L	0	20	
Molybdenum	2000	1807	ug/L	-10		
Nickel	200.0	187.4	ug/L	-6	20	
Potassium	100000	93160	ug/L	-7		
Selenium	100.0	83.27	ug/L	-17	20	
Silver	50.00	43.72	ug/L	-13	20	
Sodium	250000	218800	ug/L	-12		
Vanadium	200.0	205.2	ug/L	3	20	
Zinc	100.0	84.86	ug/L	-15	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	958096	-0.62
Germanium	164788	176758	7.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086041 File : c19m0041 Time : 19-MAR-2007 15:33
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	0.2631	0.2500	ug/L	
Arsenic	[0.1986]	0.2500	ug/L	
Barium	1.043	0.2500	ug/L	
Beryllium	[0.02122]	0.2500	ug/L	
Cadmium	[0.1137]	0.2500	ug/L	
Chromium	1.687	0.2500	ug/L	
Cobalt	0.4269	0.2500	ug/L	
Copper	1.761	0.2500	ug/L	
Lead	[0.1435]	0.2500	ug/L	
Manganese	0.7032	0.2500	ug/L	
Nickel	1.981	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1958]	0.2500	ug/L	
Thallium	[0.03814]	0.1250	ug/L	
Vanadium	[0.09939]	0.2500	ug/L	
Zinc	1.006	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	95910	ug/L	96
Calcium	300000	305500	ug/L	102
Iron	250000	227300	ug/L	91
Magnesium	100000	96160	ug/L	96
Molybdenum	2000	1846	ug/L	92
Potassium	100000	98540	ug/L	99
Sodium	250000	237000	ug/L	95

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	664014	-17.95
Scandium	964043	838777	-12.99
Germanium	164788	158900	-3.57
Indium	1539479	1209068	-21.46
Bismuth	1214998	861124	-29.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086042 File : c19m0042 Time : 19-MAR-2007 15:37
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	92000	ug/L	-8		
Arsenic	100.0	99.06	ug/L	-1	20	
Cadmium	100.0	86.35	ug/L	-14	20	
Calcium	300000	292400	ug/L	-3		
Chromium	200.0	200.7	ug/L	0	20	
Cobalt	200.0	189.5	ug/L	-5	20	
Copper	200.0	178.8	ug/L	-11	20	
Iron	250000	219300	ug/L	-12		
Magnesium	100000	92210	ug/L	-8		
Manganese	200.0	195.7	ug/L	-2	20	
Molybdenum	2000	1758	ug/L	-12		
Nickel	200.0	185.2	ug/L	-7	20	
Potassium	100000	93440	ug/L	-7		
Selenium	100.0	82.88	ug/L	-17	20	
Silver	50.00	42.91	ug/L	-14	20	
Sodium	250000	232400	ug/L	-7		
Vanadium	200.0	203.5	ug/L	2	20	
Zinc	100.0	84.80	ug/L	-15	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	874339	-9.30
Germanium	164788	165641	0.52

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086071 File : c19m0071 Time : 19-MAR-2007 17:40
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1516]	0.2500	ug/L	
Arsenic	[0.1849]	0.2500	ug/L	
Barium	1.043	0.2500	ug/L	
Beryllium	[0.02939]	0.2500	ug/L	
Cadmium	[0.06530]	0.2500	ug/L	
Chromium	1.644	0.2500	ug/L	
Cobalt	0.4190	0.2500	ug/L	
Copper	1.752	0.2500	ug/L	
Lead	[0.1523]	0.2500	ug/L	
Manganese	0.6898	0.2500	ug/L	
Nickel	1.987	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2010]	0.2500	ug/L	
Thallium	[0.03534]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	0.9838	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	93320	ug/L	93
Calcium	300000	303600	ug/L	101
Iron	250000	228300	ug/L	91
Magnesium	100000	92160	ug/L	92
Molybdenum	2000	1860	ug/L	93
Potassium	100000	97480	ug/L	97
Sodium	250000	228100	ug/L	91

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	664888	-17.84
Scandium	964043	855533	-11.26
Germanium	164788	159156	-3.42
Indium	1539479	1227126	-20.29
Bismuth	1214998	870351	-28.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086072 File : c19m0072 Time : 19-MAR-2007 17:45
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	91210	ug/L	-9		
Arsenic	100.0	97.67	ug/L	-2	20	
Cadmium	100.0	86.23	ug/L	-14	20	
Calcium	300000	293000	ug/L	-2		
Chromium	200.0	200.6	ug/L	0	20	
Cobalt	200.0	189.2	ug/L	-5	20	
Copper	200.0	180.0	ug/L	-10	20	
Iron	250000	218200	ug/L	-13		
Magnesium	100000	90440	ug/L	-10		
Manganese	200.0	195.8	ug/L	-2	20	
Molybdenum	2000	1768	ug/L	-12		
Nickel	200.0	184.4	ug/L	-8	20	
Potassium	100000	93980	ug/L	-6		
Selenium	100.0	81.75	ug/L	-18	20	
Silver	50.00	42.94	ug/L	-14	20	
Sodium	250000	221300	ug/L	-11		
Vanadium	200.0	203.6	ug/L	2	20	
Zinc	100.0	83.86	ug/L	-16	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	888223	-7.86
Germanium	164788	166747	1.19

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086127 File : c19m0127 Time : 19-MAR-2007 21:44
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1316]	0.2500	ug/L	
Arsenic	[0.1771]	0.2500	ug/L	
Barium	1.118	0.2500	ug/L	
Beryllium	[0.02185]	0.2500	ug/L	
Cadmium	[0.1302]	0.2500	ug/L	
Chromium	1.558	0.2500	ug/L	
Cobalt	0.4216	0.2500	ug/L	
Copper	1.683	0.2500	ug/L	
Lead	[0.1415]	0.2500	ug/L	
Manganese	0.6752	0.2500	ug/L	
Nickel	1.831	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1811]	0.2500	ug/L	
Thallium	[0.03968]	0.1250	ug/L	
Vanadium	[0.09333]	0.2500	ug/L	
Zinc	0.9132	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	96090	ug/L	96
Calcium	300000	302200	ug/L	101
Iron	250000	219400	ug/L	88
Magnesium	100000	96670	ug/L	97
Molybdenum	2000	1742	ug/L	87
Potassium	100000	96070	ug/L	96
Sodium	250000	244600	ug/L	98

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	658994	-18.57
Scandium	964043	819990	-14.94
Germanium	164788	159154	-3.42
Indium	1539479	1157639	-24.80
Bismuth	1214998	777191	-36.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086128 File : c19m0128 Time : 19-MAR-2007 21:48
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	93350	ug/L	-7		
Arsenic	100.0	97.40	ug/L	-3	20	
Cadmium	100.0	80.76	ug/L	-19	20	
Calcium	300000	292600	ug/L	-2		
Chromium	200.0	193.4	ug/L	-3	20	
Cobalt	200.0	182.8	ug/L	-9	20	
Copper	200.0	174.0	ug/L	-13	20	
Iron	250000	211900	ug/L	-15		
Magnesium	100000	95440	ug/L	-5		
Manganese	200.0	190.0	ug/L	-5	20	
Molybdenum	2000	1650	ug/L	-18		
Nickel	200.0	178.6	ug/L	-11	20	
Potassium	100000	92070	ug/L	-8		
Selenium	100.0	80.32	ug/L	-20	20	
Silver	50.00	40.10	ug/L	-20	20	
Sodium	250000	249800	ug/L	0		
Vanadium	200.0	197.7	ug/L	-1	20	
Zinc	100.0	82.49	ug/L	-18	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	855319	-11.28
Germanium	164788	167602	1.71

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086162 File : c19m0162 Time : 20-MAR-2007 00:13
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1218]	0.2500	ug/L	
Arsenic	0.2507	0.2500	ug/L	
Barium	1.118	0.2500	ug/L	
Beryllium	[0.02478]	0.2500	ug/L	
Cadmium	[0.1691]	0.2500	ug/L	
Chromium	1.487	0.2500	ug/L	
Cobalt	0.4056	0.2500	ug/L	
Copper	1.675	0.2500	ug/L	
Lead	[0.1520]	0.2500	ug/L	
Manganese	0.6764	0.2500	ug/L	
Nickel	1.866	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1675]	0.2500	ug/L	
Thallium	[0.03511]	0.1250	ug/L	
Vanadium	[0.09408]	0.2500	ug/L	
Zinc	0.8422	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	95940	ug/L	96
Calcium	300000	301100	ug/L	100
Iron	250000	212800	ug/L	85
Magnesium	100000	98190	ug/L	98
Molybdenum	2000	1643	ug/L	82
Potassium	100000	95060	ug/L	95
Sodium	250000	253800	ug/L	102

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	668057	-17.45
Scandium	964043	813938	-15.57
Germanium	164788	162826	-1.19
Indium	1539479	1136446	-26.18
Bismuth	1214998	756867	-37.71

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086163 File : c19m0163 Time : 20-MAR-2007 00:17
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99510	ug/L	0		
Arsenic	100.0	95.79	ug/L	-4	20	
Cadmium	100.0	73.33	ug/L	**-27**	20	ab- ***
Calcium	300000	292400	ug/L	-3		
Chromium	200.0	183.6	ug/L	-8	20	
Cobalt	200.0	176.0	ug/L	-12	20	
Copper	200.0	170.2	ug/L	-15	20	
Iron	250000	203000	ug/L	-19		
Magnesium	100000	103900	ug/L	4		
Manganese	200.0	180.8	ug/L	-10	20	
Molybdenum	2000	1521	ug/L	-24		
Nickel	200.0	172.4	ug/L	-14	20	
Potassium	100000	90080	ug/L	-10		
Selenium	100.0	77.35	ug/L	**-23**	20	ab- ***
Silver	50.00	36.47	ug/L	**-27**	20	ab- ***
Sodium	250000	272200	ug/L	9		
Vanadium	200.0	187.8	ug/L	-6	20	
Zinc	100.0	79.82	ug/L	-20	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	873739	-9.37
Germanium	164788	179687	9.04

-=low bias ab=ICSAB

57113086163

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57113086

Date : 03/19/07 Reference: c19m0004
Sequence : MET05 c19m0 Analyzed : 03/19/07 13:00

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	809267	964043	164788	1539479	1214998
		LOWER LIMIT	242780	289213	49436	461844	364499
		UPPER LIMIT	971120	1156851	197746	1847375	1457998
018	ICB		808638	1005898	164993	1618007	1279068
019	ICSA		694920	903584	165562	1304472	900191
020	ICSAB		704682	958096	176758	1351823	936264
025	BLANK	QC379798	648714	666659	193727	1070235	833270
026	BS	QC379799	669814	705667	137105	1127634	894548
027	BSD	QC379800	683126	730201	140626	1144615	911701
030	MSS	193469-001	1029796 *	1203202 *	188720	1763588	1342154
031	MS	QC379801	926033	1117728	186690	1592550	1266663
032	MSD	QC379802	916049	1118574	188231	1573948	1238947
036	CCV		767863	909083	156038	1424629	1208795
039	CCB		787551	896864	153199	1422713	1208325
040	BLANK	QC378982	851625	1015548	172662	1631620	1300192
041	ICSA		664014	838777	158900	1209068	861124
042	ICSAB		658927	874339	165641	1234608	879269
046	BLANK	QC378982	854378	1020182	170674	1689071	1354110
048	MSS	193244-001	644944	696612	128134	1168007	949832
051	MS	QC378985	657213	710583	125538	1139927	952643
052	MSD	QC378986	669423	713810	125638	1155823	937931
056	CCV		771551	920722	156028	1449422	1211837
059	CCB		757155	905422	150560	1469768	1231513
061	PDS	QC378988	649953	724460	127260	1156935	947252
062	SAMPLE	193335-001	1197117 *	1384782 *	219986 *	2920499 *	2698326 *
066	CCV		760445	918559	157150	1455284	1216366
069	CCB		759310	909202	153357	1470842	1222932
071	ICSA		664888	855533	159156	1227126	870351
072	ICSAB		678012	888223	166747	1258432	885547
077	MSS	193262-001	633817	736706	130384	1120649	907618
078	SER	QC379179	702308	812375	143199	1270675	1097004
079	SAMPLE	193262-003	728489	841403	149855	1316167	1114028
080	SAMPLE	193262-011	664811	761055	132545	1113084	907954
081	SAMPLE	193262-020	688498	719019	139046	1158839	950226
082	SAMPLE	193262-004	645310	738797	134204	1088243	881260
083	SAMPLE	193262-008	674611	738982	137459	1193912	1042420
084	SAMPLE	193262-012	671471	718493	138190	1167425	1006463
088	CCV		704312	876099	165882	1286872	1101942
091	CCB		717002	863444	155582	1339983	1117487
093	SAMPLE	193262-014	651824	741144	132527	1106182	876494
094	SAMPLE	193262-016	650970	736876	130535	1123434	899194
095	SAMPLE	193262-006	659612	740412	131384	1121520	892303
096	MSS	193244-001	725261	770520	141099	1229475	1046086
097	SER	QC378987	748928	854440	147902	1374444	1153379
098	SAMPLE	193262-007	670483	724093	133779	1129291	899752
099	SAMPLE	193262-018	678210	741467	132489	1124480	896931
103	CCV		725333	876742	163295	1331099	1145290
106	CCB		739703	878111	157490	1359786	1151243
114	BLANK	QC379439	673526	681597	139829	1015846	788209
115	BS	QC379440	662203	708000	136965	1078418	843608
116	BSD	QC379441	668209	694220	134398	1050332	819612

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57113086

Date : 03/19/07 Reference: c19m0004
Sequence : MET05 c19m0 Analyzed : 03/19/07 13:00

#	Type	Sample ID	LI	SC	GE	IN	BI
118	MSS	193373-001	746950	906990	160599	1370225	1079795
122	CCV		752295	857665	152441	1339483	1108373
125	CCB		745057	873716	147818	1397912	1137669
127	ICSA		658994	819990	159154	1157639	777191
128	ICSAB		662281	855319	167602	1195242	798411
135	BLANK	QC379439	655713	674483	129229	1076608	826554
136	BS	QC379440	664796	682313	126722	1104868	874926
137	BSD	QC379441	658025	674376	126595	1072493	840818
139	MSS	193373-001	757326	884996	150497	1402004	1082898
140	SER	QC379444	784140	878795	151428	1396160	1131652
141	MS	QC379442	772599	880964	150322	1352028	1084371
142	MSD	QC379443	762623	874139	150658	1351232	1057192
143	PDS	QC379445	713483	836649	145195	1242900	1016645
147	CCV		773704	899289	158647	1374019	1127780
150	CCB		774083	890823	153106	1408458	1139036
152	SAMPLE	193373-002	737124	961369	159307	1253150	772911
153	SAMPLE	193426-001	785535	969836	167321	1350885	890946
157	CCV		788059	910201	167291	1326134	1069337
160	CCB		807236	915034	161494	1375172	1115686
162	ICSA		668057	813938	162826	1136446	756867
163	ICSAB		688956	873739	179687	1171853	774540

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c19m0001	TUN				19-MAR-2007 12:46	1.0	1.0				1	
002	c19m0002	X	RINSE			19-MAR-2007 12:52	1.0					2	
003	c19m0003	X	RINSE			19-MAR-2007 12:56	1.0					2	
004	c19m0004	ICALBLK	CALBLANK			19-MAR-2007 13:00	1.0	1.0				2	
005	c19m0005	ICAL				19-MAR-2007 13:05	1.0	1.0				3	
006	c19m0006	ICAL				19-MAR-2007 13:09	1.0	1.0				4	
007	c19m0007	ICAL				19-MAR-2007 13:13	1.0	1.0				5	
008	c19m0008	ICAL				19-MAR-2007 13:17	1.0	1.0				6	
009	c19m0009	ICAL				19-MAR-2007 13:21	1.0	1.0				7	
010	c19m0010	ICAL				19-MAR-2007 13:25	1.0	1.0				8	
011	c19m0011	X	RINSE			19-MAR-2007 13:29	1.0					2	
012	c19m0012	X				19-MAR-2007 13:33	1.0					9 2	
013	c19m0013	X	RINSE			19-MAR-2007 13:37	1.0					2	
014	c19m0014	ICV				19-MAR-2007 13:41	1.0	1.0	1		1	9	
015	c19m0015	X	RINSE			19-MAR-2007 13:45	1.0					2	
016	c19m0016	X				19-MAR-2007 13:49	1.0					2	
017	c19m0017	X				19-MAR-2007 13:53	1.0					2	
018	c19m0018	ICB				19-MAR-2007 13:58	1.0	1.0			1	2	
019	c19m0019	ICSA				19-MAR-2007 14:02	1.0	1.0			1	10 2	7:CA=306900
020	c19m0020	ICSAB				19-MAR-2007 14:06	1.0	1.0			1	11 2	9:CA=288500
021	c19m0021	X	RINSE			19-MAR-2007 14:10	1.0					2	
022	c19m0022	X	RINSE			19-MAR-2007 14:14	1.0					2	
023	c19m0023	X	RINSE			19-MAR-2007 14:18	1.0					2	
024	c19m0024	X	RINSE			19-MAR-2007 14:22	1.0					2	
025	c19m0025	BLANK	QC379798	123245	Filtra	19-MAR-2007 14:27	1.0	1.0	2		1	2	
026	c19m0026	BS	QC379799	123245	Filtra	19-MAR-2007 14:31	1.0	1.0	1	2	1	2	
027	c19m0027	BSD	QC379800	123245	Filtra	19-MAR-2007 14:35	1.0	1.0	1	2	1	2	
028	c19m0028	X	RINSE			19-MAR-2007 14:39	1.0					2	
029	c19m0029	X	RINSE			19-MAR-2007 14:43	1.0					2	
030	c19m0030	MSS	193469-001	123245	Filtra	19-MAR-2007 14:47	1.0	1.0	3		1	2	2:CA=122440
031	c19m0031	MS	QC379801	123245	Filtra	19-MAR-2007 14:51	1.0	1.0	1		1	2	3:CA=131160

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c19m0032	MSD	QC379802	123245	Filtra	19-MAR-2007 14:55	1.0	1.0	1		1	2	3:CA=131160
033	c19m0033	X	RINSE			19-MAR-2007 14:59	1.0					2	
034	c19m0034	X	RINSE			19-MAR-2007 15:04	1.0					2	
035	c19m0035	X	RINSE			19-MAR-2007 15:08	1.0					2	
036	c19m0036	CCV				19-MAR-2007 15:12	1.0	1.0			1	12 2	
037	c19m0037	X	RINSE			19-MAR-2007 15:16	1.0					2	
038	c19m0038	X				19-MAR-2007 15:20	1.0	1.0	2		1	2	
039	c19m0039	CCB				19-MAR-2007 15:24	1.0	1.0			1	2	
040	c19m0040	BLANK	QC378982	123055	Water	19-MAR-2007 15:29	1.0	1.0	1		1	2	
041	c19m0041	ICSA				19-MAR-2007 15:33	1.0	1.0			1	10 2	7:CA=305500
042	c19m0042	ICSAB				19-MAR-2007 15:37	1.0	1.0			1	11 2	9:CA=292400
043	c19m0043	X	RINSE			19-MAR-2007 15:41	1.0					2	
044	c19m0044	X	RINSE			19-MAR-2007 15:45	1.0					2	
045	c19m0045	X	RINSE			19-MAR-2007 15:49	1.0					2	
046	c19m0046	BLANK	QC378982	123055	Water	19-MAR-2007 15:53	1.0	1.0	1		1	2	
047	c19m0047	X	WRONG SAMPLE	123055	Water	19-MAR-2007 15:58	1.0					2	
048	c19m0048	MSS	193244-001	123055	Water	19-MAR-2007 16:02	1.0	1.0	1		1	2	
049	c19m0049	XSER	WRONG SAMPLE	123055	Water	19-MAR-2007 16:06	5.0	1.0			1	2	
050	c19m0050	XSER	WRONG SAMPLE	123055	Water	19-MAR-2007 16:10	5.0	1.0	2		1	2	
051	c19m0051	MS	QC378985	123055	Water	19-MAR-2007 16:14	1.0	1.0	1	1	1	2	
052	c19m0052	MSD	QC378986	123055	Water	19-MAR-2007 16:19	1.0	1.0	1	1	1	2	
053	c19m0053	X	RINSE			19-MAR-2007 16:23	1.0					2	
054	c19m0054	X	RINSE			19-MAR-2007 16:27	1.0					2	
055	c19m0055	X	RINSE			19-MAR-2007 16:32	1.0					2	
056	c19m0056	CCV				19-MAR-2007 16:36	1.0	1.0	1		1	12 2	
057	c19m0057	X	RINSE			19-MAR-2007 16:40	1.0					2	
058	c19m0058	X				19-MAR-2007 16:44	1.0	1.0	4		1	2	
059	c19m0059	CCB				19-MAR-2007 16:48	1.0	1.0	1		1	2	
060	c19m0060	X				19-MAR-2007 16:52	1.0	1.0	3		1	2	
061	c19m0061	PDS	QC378988	123055	Water	19-MAR-2007 16:57	1.0	1.0			1	13 14 2	
062	c19m0062	SAMPLE	193335-001	123055	Filtra	19-MAR-2007 17:03	1.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c19m0063	X	RINSE			19-MAR-2007 17:07	1.0					2	
064	c19m0064	X	RINSE			19-MAR-2007 17:11	1.0					2	
065	c19m0065	X	RINSE			19-MAR-2007 17:15	1.0					2	
066	c19m0066	CCV				19-MAR-2007 17:20	1.0	1.0	1		1	12 2	
067	c19m0067	X	RINSE			19-MAR-2007 17:24	1.0					2	
068	c19m0068	X				19-MAR-2007 17:28	1.0					2	
069	c19m0069	CCB				19-MAR-2007 17:32	1.0	1.0	1		1	2	
070	c19m0070	X				19-MAR-2007 17:36	1.0					2	
071	c19m0071	ICSA				19-MAR-2007 17:40	1.0	1.0			1	10 2	7:CA=303600
072	c19m0072	ICSAB				19-MAR-2007 17:45	1.0	1.0			1	11 2	9:CA=293000
073	c19m0073	X	RINSE			19-MAR-2007 17:49	1.0					2	
074	c19m0074	X	RINSE			19-MAR-2007 17:53	1.0					2	
075	c19m0075	X	RINSE			19-MAR-2007 17:57	1.0					2	
076	c19m0076	X	RINSE			19-MAR-2007 18:01	1.0					2	
077	c19m0077	MSS	193262-001	123098	Filtra	19-MAR-2007 18:05	1.0	1.0	6		1	2	3:MG=82320.0
078	c19m0078	SER	QC379179	123098	Filtra	19-MAR-2007 18:09	5.0	1.0		1	1	2	
079	c19m0079	SAMPLE	193262-003	123098	Filtra	19-MAR-2007 18:14	20.0	1.0	3		1	2	
080	c19m0080	SAMPLE	193262-011	123098	Filtra	19-MAR-2007 18:18	1.0	1.0	4		1	2	3:NA=57040.0
081	c19m0081	SAMPLE	193262-020	123098	Filtra	19-MAR-2007 18:22	1.0	1.0	2		1	2	
082	c19m0082	SAMPLE	193262-004	123098	Filtra	19-MAR-2007 18:26	1.0	1.0	5		1	2	4:NA=54600.0
083	c19m0083	SAMPLE	193262-008	123098	Filtra	19-MAR-2007 18:30	1.0	1.0	1		1	2	
084	c19m0084	SAMPLE	193262-012	123098	Filtra	19-MAR-2007 18:35	1.0	1.0	1		1	2	
085	c19m0085	X	RINSE			19-MAR-2007 18:39	1.0					2	
086	c19m0086	X	RINSE			19-MAR-2007 18:43	1.0					2	
087	c19m0087	X	RINSE			19-MAR-2007 18:47	1.0					2	
088	c19m0088	CCV				19-MAR-2007 18:51	1.0	1.0	3		1	12 2	
089	c19m0089	X	RINSE			19-MAR-2007 18:55	1.0					2	
090	c19m0090	X				19-MAR-2007 18:59	1.0					2	
091	c19m0091	CCB				19-MAR-2007 19:04	1.0	1.0	2		1	2	
092	c19m0092	X				19-MAR-2007 19:08	1.0					2	
093	c19m0093	SAMPLE	193262-014	123098	Filtra	19-MAR-2007 19:12	1.0	1.0	4		1	2	3:NA=57410.0

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c19m0094	SAMPLE	193262-016	123098	Filtra	19-MAR-2007 19:16	1.0	1.0	4		1	2	3:NA=52710.0
095	c19m0095	SAMPLE	193262-006	123098	Filtra	19-MAR-2007 19:20	1.0	1.0	5		1	2	3:MG=85400.0
096	c19m0096	MSS	193244-001	123055	Water	19-MAR-2007 19:25	1.0	1.0	3		1	2	
097	c19m0097	SER	QC378987	123055	Water	19-MAR-2007 19:29	5.0	1.0	3		1	2	
098	c19m0098	SAMPLE	193262-007	123098	Filtra	19-MAR-2007 19:33	1.0	1.0	4		1	2	2:CA=34920.0
099	c19m0099	SAMPLE	193262-018	123098	Filtra	19-MAR-2007 19:37	1.0	1.0	5		1	2	3:MG=50370.0
100	c19m0100	X	RINSE			19-MAR-2007 19:42	1.0					2	
101	c19m0101	X	RINSE			19-MAR-2007 19:46	1.0					2	
102	c19m0102	X	RINSE			19-MAR-2007 19:50	1.0					2	
103	c19m0103	CCV				19-MAR-2007 19:54	1.0	1.0	2		1	12 2	
104	c19m0104	X	RINSE			19-MAR-2007 20:00	1.0					2	
105	c19m0105	X				19-MAR-2007 20:05	1.0					2	
106	c19m0106	CCB				19-MAR-2007 20:09	1.0	1.0			1	2	
107	c19m0107	X				19-MAR-2007 20:14	1.0					2	
108	c19m0108	X				19-MAR-2007 20:18	1.0	1.0			1	10 2	7:CA=303700
109	c19m0109	X				19-MAR-2007 20:22	1.0	1.0	3		1	11 2	7:CA=292600
110	c19m0110	X	RINSE			19-MAR-2007 20:26	1.0					2	
111	c19m0111	X	RINSE			19-MAR-2007 20:31	1.0					2	
112	c19m0112	X	RINSE			19-MAR-2007 20:35	1.0					2	
113	c19m0113	X	RINSE			19-MAR-2007 20:39	1.0					2	
114	c19m0114	BLANK	QC379439	123162	Filtra	19-MAR-2007 20:43	1.0	1.0	3		1	2	
115	c19m0115	BS	QC379440	123162	Filtra	19-MAR-2007 20:47	1.0	1.0	3		1	2	
116	c19m0116	BSD	QC379441	123162	Filtra	19-MAR-2007 20:52	1.0	1.0	3		1	2	
117	c19m0117	X	RINSE			19-MAR-2007 20:57	1.0					2	
118	c19m0118	MSS	193373-001	123162	Filtra	19-MAR-2007 21:01	50.0	1.0	3		1	2	1:NA=51820.0
119	c19m0119	X	RINSE			19-MAR-2007 21:11	1.0					2	
120	c19m0120	X	RINSE			19-MAR-2007 21:15	1.0					2	
121	c19m0121	X	RINSE			19-MAR-2007 21:19	1.0					2	
122	c19m0122	CCV				19-MAR-2007 21:23	1.0	1.0			1	12 2	
123	c19m0123	X	RINSE			19-MAR-2007 21:27	1.0					2	
124	c19m0124	X				19-MAR-2007 21:32	1.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	c19m0125	CCB				19-MAR-2007 21:36	1.0	1.0			1	2	
126	c19m0126	X				19-MAR-2007 21:40	1.0	1.0	1		1	2	
127	c19m0127	ICSA				19-MAR-2007 21:44	1.0	1.0			1	10 2	7:CA=302200
128	c19m0128	ICSAB				19-MAR-2007 21:48	1.0	1.0			1	11 2	7:CA=292600
129	c19m0129	TUN				19-MAR-2007 21:53	1.0	1.0				1	
130	c19m0130	X	RINSE			19-MAR-2007 21:59	1.0					2	
131	c19m0131	X	RINSE			19-MAR-2007 22:03	1.0					2	
132	c19m0132	X	RINSE			19-MAR-2007 22:07	1.0					2	
133	c19m0133	X	RINSE			19-MAR-2007 22:11	1.0					2	
134	c19m0134	X	RINSE			19-MAR-2007 22:15	1.0					2	
135	c19m0135	BLANK	QC379439	123162	Filtra	19-MAR-2007 22:20	1.0	1.0	1		1	2	
136	c19m0136	BS	QC379440	123162	Filtra	19-MAR-2007 22:24	1.0	1.0	1		1	2	
137	c19m0137	BSD	QC379441	123162	Filtra	19-MAR-2007 22:28	1.0	1.0	1		1	2	
138	c19m0138	X	RINSE			19-MAR-2007 22:33	1.0					2	
139	c19m0139	MSS	193373-001	123162	Filtra	19-MAR-2007 22:37	50.0	1.0	3		1	2	1:NA=45960.0
140	c19m0140	SER	QC379444	123162	Filtra	19-MAR-2007 22:41	250.0	1.0	1		1	2	
141	c19m0141	MS	QC379442	123162	Filtra	19-MAR-2007 22:45	50.0	1.0	1	5	1	2	1:NA=47680.0
142	c19m0142	MSD	QC379443	123162	Filtra	19-MAR-2007 22:50	50.0	1.0	2	6	1	2	1:NA=47340.0
143	c19m0143	PDS	QC379445	123162	Filtra	19-MAR-2007 22:54	50.0	1.0	1		1	13 14 2	2:NA=57500.0
144	c19m0144	X	RINSE			19-MAR-2007 22:58	1.0					2	
145	c19m0145	X	RINSE			19-MAR-2007 23:02	1.0					2	
146	c19m0146	X	RINSE			19-MAR-2007 23:06	1.0					2	
147	c19m0147	CCV				19-MAR-2007 23:10	1.0	1.0			1	12 2	
148	c19m0148	X	RINSE			19-MAR-2007 23:15	1.0					2	
149	c19m0149	X				19-MAR-2007 23:19	1.0	1.0	1		1	2	
150	c19m0150	CCB				19-MAR-2007 23:23	1.0	1.0	1		1	2	
151	c19m0151	X				19-MAR-2007 23:27	1.0	1.0	3		1	2	
152	c19m0152	SAMPLE	193373-002	123162	Filtra	19-MAR-2007 23:31	10.0	1.0	3		1	2	2:MG=81400.0
153	c19m0153	SAMPLE	193426-001	123162	Water	19-MAR-2007 23:36	20.0	1.0	4		1	2	1:NA=139150
154	c19m0154	X	RINSE			19-MAR-2007 23:40	1.0					2	
155	c19m0155	X	RINSE			19-MAR-2007 23:44	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
156	c19m0156	X	RINSE			19-MAR-2007 23:48	1.0					2	
157	c19m0157	CCV				19-MAR-2007 23:52	1.0	1.0	3		1	12 2	
158	c19m0158	X	RINSE			19-MAR-2007 23:56	1.0					2	
159	c19m0159	X				20-MAR-2007 00:01	1.0	1.0	3		1	2	
160	c19m0160	CCB				20-MAR-2007 00:05	1.0	1.0	1		1	2	
161	c19m0161	X				20-MAR-2007 00:09	1.0	1.0	2		1	2	
162	c19m0162	ICSA				20-MAR-2007 00:13	1.0	1.0			1	10 2	7:CA=301100
163	c19m0163	ICSAB				20-MAR-2007 00:17	1.0	1.0	3		1	11 2	7:CA=292400

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [signature] Date: 3/20/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67113634001
Units : ug/L

Date : 19-MAR-2007 22:13
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c19v0005	67113634005		19-MAR-2007 22:19	S5645
L2	c19v0006	67113634006		19-MAR-2007 22:24	S5648
L3	c19v0007	67113634007		19-MAR-2007 22:33	S5649
L4	c19v0008	67113634008		19-MAR-2007 22:38	S5650
L5	c19v0009	67113634009		19-MAR-2007 22:44	S5644
L6	c19v0010	67113634010		19-MAR-2007 22:49	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8822	0.7336	0.6669	0.6225	0.6100	0.5906	BLNK	-4.2292	1.68235		0.6843	1.000	0.995	
Antimony	A	0.3815	0.3130	0.3165	0.3110	0.3074	0.3098	BLNK	-0.0228	3.23373		0.3232	1.000	0.995	
Barium	A	0.9865	0.2141	0.1563	0.0794	0.0712	0.0687	BLNK	-0.9000	14.5266		0.2627	1.000	0.995	
Beryllium	A	0.2785	0.2713	0.2741	0.2777	0.2793	0.2701	BLNK	-0.0210	3.67704		0.2752	1.000	0.995	
Cadmium	A	0.0828	0.0868	0.0869	0.0847	0.0827	0.0796	BLNK	-0.0067	12.4619		0.0839	1.000	0.995	
Calcium	A	0.0704	0.0407	0.0264	0.0221	0.0222	0.0212	BLNK	-37.691	46.7623		0.0338	1.000	0.995	
Lead	A	1.0755	0.7979	0.7876	0.7394	0.7352	0.7020	BLNK	-0.0708	1.41172		0.8062	0.999	0.995	
Magnesium	A	1.0476	0.7006	0.6053	0.5368	0.5204	0.4992	BLNK	-13.525	1.98786		0.6516	1.000	0.995	
Molybdenum	A	0.2690	0.2344	0.2291	0.2142	0.2091	0.2035	BLNK	-0.0363	4.88691		0.2266	1.000	0.995	
Potassium	A	8.3490	2.2008	1.4543	0.7577	0.6795	0.6551	BLNK	-118.43	1.52578		2.3494	1.000	0.995	
Silver	A	0.3560	0.3107	0.3287	0.3176	0.3080	0.3063	BLNK	-0.0117	3.26093		0.3212	1.000	0.995	
Thallium	A	1.1890	0.8893	0.8840	0.8670	0.8738	0.8921	BLNK	-0.0340	1.12607		0.9325	1.000	0.995	
Arsenic	E	0.6264	0.6664	0.6464	0.5804	0.5720	0.5523	BLNK	-0.0481	1.79816		0.6073	1.000	0.995	
Chromium	E	8.0334	3.9847	3.7557	3.2295	3.0653	2.9936	BLNK	-0.1868	0.33279		4.1770	1.000	0.995	
Cobalt	E	5.0845	5.0532	5.3847	5.2266	4.9530	4.8194	BLNK	-0.0149	0.20634		5.0869	1.000	0.995	
Copper	E	65.661	17.934	11.593	7.1303	6.2992	6.0533	BLNK	-0.9762	0.16480		19.112	1.000	0.995	
Manganese	E	2.6437	1.8564	1.7685	1.7135	1.6335	1.6005	BLNK	-0.0510	0.62235		1.8693	1.000	0.995	
Nickel	E	2.8909	1.7361	1.5658	1.4257	1.3171	1.2766	BLNK	-0.1236	0.77884		1.7020	1.000	0.995	
Sodium	E	5.4434	1.5824	1.1037	0.6842	0.5707	0.5525	BLNK	-109.08	1.80940		1.6562	1.000	0.995	
Vanadium	E	10.883	4.1452	3.2912	2.5410	2.4053	2.3732	BLNK	-0.3558	0.42110		4.2732	1.000	0.995	
Zinc	E	48.700	49.516	5.4244	1.8678	1.0576	0.9835	BLNK	-16.234	1.10055		17.925	**0.989**	0.995	r2 ***
Iron	H	1.1812	0.9685	0.9694	0.8979	0.8497	0.8162	BLNK	-2.4280	1.21514		0.9472	1.000	0.995	
Selenium	H	0.1517	0.1206	0.1302	0.1246	0.1196	0.1138	BLNK	-0.0175	8.69551		0.1268	0.999	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

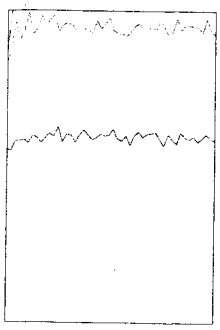
r2 CAL r^2 failure

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67113634001

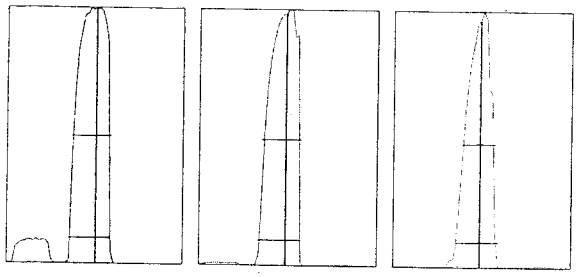
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	11712.0	11864.0	2.57	0.10
89	20,000	21788.0	21684.5	3.83	0.70
205	20,000	18433.0	18855.0	2.84	1.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.103%
Doubly Charged: 70/140 1.261%



m/z:	7	89	205
Height:	11,851	21,779	18,732
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.65	0.55
W-10%:	0.700	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	9 mm
Torch-H	:	1.3 mm
Torch-V	:	0.2 mm
Carrier Gas	:	1.02 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-125 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	1 V
Cell Entrance	:	-36 V
QP Focus	:	7 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	160 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	142
AMU Offset	:	125
Axis Gain	:	1.0017
Axis Offset	:	-0.03
QP Bias	:	-0.4 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1800 V
Pulse HV	:	1440 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune File : he.u

He Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	51	29.7	20.31	
QP Focus:	-10 V	59	2614.8	3.28	
Cell Exit:	-38 V	89	1871.9	3.44	
OctP Bias:	-18 V				
QP Bias:	-13 V				

Tune File : h2.u

H2 Gas:	4 mL/min	m/z	Count(Mean)	RSD%	Integration Time: 0.1000sec
Optional Gas:	--- %	59	2374.5	3.24	
QP Focus:	-8 V	78	0.7	143.84	
Cell Exit:	-38 V	89	17905.5	2.20	
OctP Bias:	-18 V				
QP Bias:	-16 V				

Generated : Mar 19, 2007 12:49:27
Printed : Mar 19, 2007 12:51:08

00536

P/A Factor Tuning Report

Acquired:Mar 19 2007 01:11 pm

Mass [amu]	Element	P/A Factor
6	Li	0.061007
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.089309
45	Sc	0.087864
51	V	0.088932
52	Cr	0.094418
55	Mn	0.095488
56	Fe	Sensitivity too high
59	Co	0.100828
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.102508
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.113115
111	Cd	Sensitivity too low
115	In	0.112885
118	(In)	0.112291
121	Sb	0.110617
137	Ba	Sensitivity too low
159	Tb	0.115257
205	Tl	0.122591
206	(Pb)	0.122278
207	(Pb)	Sensitivity too low
208	Pb	0.123736
209	Bi	0.123401

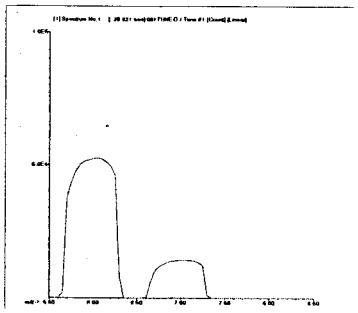
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1800 V
Pulse HV: 1440 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C19v00.B\001TUNE.D
Date Acquired:	Mar 19 2007 09:54 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.07	5.00	
59 Co	1.03	5.00	
115 In	1.24	5.00	
205 Tl	1.34	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

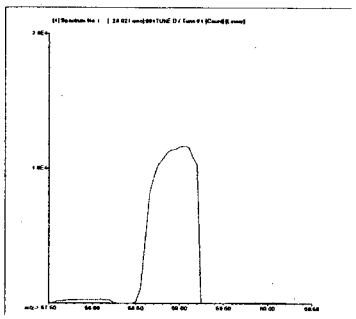
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

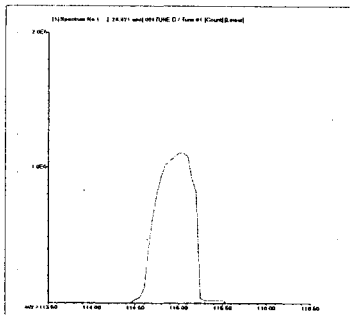
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



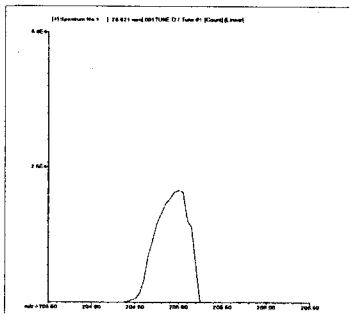
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004C
Date Acquired:	Mar 19 2007 10:11 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Mar 19 2007 10:15 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	572706.38	A	1153.00	0.20
7	(Li)		P		
9	Be	65.56	P	21.43	32.69
23	Na	30789.47	P	185.80	0.60
24	Mg	96167.41	P	1146.00	1.19
27	Al	35532.37	P	212.90	0.60
39	K	1097077.00	A	5196.00	0.47
44	Ca	11393.90	P	285.50	2.51
45	Sc	359251.41	P	994.10	0.28
45	Sc	25539.44	P	358.30	1.40
45	Sc	706761.50	P	5123.00	0.72
51	V	431.49	P	3.57	0.83
52	Cr	286.67	P	10.60	3.70
55	Mn	41.85	P	15.57	37.20
56	Fe	14356.71	P	88.25	0.61
59	Co	37.04	P	6.51	17.58
60	Ni	81.11	P	6.76	8.33
63	Cu	1770.88	P	80.96	4.57
65	Cu	841.89	P	63.89	7.59
66	Zn	4409.27	P	84.43	1.91
72	Ge	93669.15	P	287.20	0.31
72	Ge	14945.93	P	69.92	0.47
75	As	8.00	P	1.16	14.44
78	Se	3.78	P	1.93	50.96
89	Y	1085669.00	A	6120.00	0.56
98	Mo	161.12	P	6.94	4.31
107	Ag	82.23	P	8.39	10.20
111	Cd	12.22	P	10.18	83.29
115	In	1144466.00	A	10350.00	0.90
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	161.12	P	24.57	15.25
137	Ba	2219.16	P	40.06	1.81
159	Tb	1790797.00	A	14430.00	0.81
205	Tl	723.39	P	29.63	4.10
208	Pb	1795.68	P	58.35	3.25
209	Bi	1198899.00	A	3585.00	0.30

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 19 2007 10:22 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:20 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	566771.00	A	5776.00	1.02
7	(Li)		P		
9	Be	1537.91	P	16.78	1.09
23	Na	40503.70	P	692.60	1.71
24	Mg	491467.09	P	3947.00	0.80
27	Al	514636.09	P	1902.00	0.37
39	K	1543956.00	A	11410.00	0.74
44	Ca	28557.48	P	379.70	1.33
45	Sc	355519.31	P	1202.00	0.34
45	Sc	25596.94	P	107.70	0.42
45	Sc	701555.19	P	7465.00	1.06
51	V	1061.17	P	58.72	5.53
52	Cr	1020.05	P	37.63	3.69
55	Mn	475.20	P	13.89	2.92
56	Fe	344316.00	P	1127.00	0.33
59	Co	1293.41	P	27.76	2.15
60	Ni	444.46	P	38.75	8.72
63	Cu	2678.81	P	50.61	1.89
65	Cu	1381.20	P	22.22	1.61
66	Zn	7397.97	P	71.73	0.97
72	Ge	91898.89	P	716.60	0.78
72	Ge	14941.85	P	248.90	1.67
75	As	99.56	P	2.69	2.71
78	Se	110.89	P	10.46	9.43
89	Y	1088855.00	A	14060.00	1.29
98	Mo	2551.45	P	15.75	0.62
99	(Ru)	1.11	P	1.93	173.24
107	Ag	3557.27	P	138.70	3.90
111	Cd	993.41	P	30.00	3.02
115	In	1144808.00	A	8605.00	0.75
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	3582.85	P	165.60	4.62
137	Ba	3814.03	P	72.67	1.91
159	Tb	1781881.00	A	21010.00	1.18
205	Tl	5334.65	P	175.80	3.30
208	Pb	14220.33	P	626.60	4.41
209	Bi	1199893.00	A	15950.00	1.33

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	566771.06	1.02	572706.38	99.0	80 - 120	
45	Sc	355519.28	0.34	359251.41	99.0	80 - 120	
45	Sc	25596.94	0.42	25539.44	100.2	80 - 120	
45	Sc	701555.25	1.06	706761.50	99.3	80 - 120	
72	Ge	91898.88	0.78	93669.16	98.1	80 - 120	
72	Ge	14941.85	1.67	14945.93	100.0	80 - 120	
89	Y	1088854.90	1.29	1085669.40	100.3	80 - 120	
115	In	1144807.80	0.75	1144466.40	100.0	80 - 120	
159	Tb	1781881.00	1.18	1790797.00	99.5	80 - 120	
209	Bi	1199893.00	1.33	1198899.40	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 19 2007 10:31 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	578637.81	A	6749.00	1.17
7 (Li)		P		
9 Be	3171.56	P	50.50	1.59
23 Na	57650.39	P	691.90	1.20
24 Mg	853244.81	A	8507.00	1.00
27 Al	940022.69	A	12910.00	1.37
39 K	2049895.00	A	2881.00	0.14
44 Ca	37152.94	P	771.40	2.08
45 Sc	364422.00	P	3566.00	0.98
45 Sc	26115.65	P	47.05	0.18
45 Sc	704771.50	P	4313.00	0.61
51 V	1719.02	P	18.96	1.10
52 Cr	1961.64	P	42.01	2.14
55 Mn	923.75	P	21.21	2.30
56 Fe	706534.19	P	3248.00	0.46
59 Co	2812.54	P	48.24	1.72
60 Ni	817.81	P	28.95	3.54
63 Cu	3487.51	P	46.92	1.35
65 Cu	1707.90	P	55.66	3.26
66 Zn	1631.60	P	77.26	4.74
72 Ge	94222.18	P	536.10	0.57
72 Ge	15041.59	P	65.08	0.43
75 As	194.45	P	10.25	5.27
78 Se	245.34	P	32.54	13.26
89 Y	1078041.00	A	7286.00	0.68
98 Mo	4939.96	P	103.10	2.09
99 (Ru)	0.00	P	0.00	0.00
107 Ag	7473.46	P	26.95	0.36
111 Cd	1975.78	P	92.65	4.69
115 In	1136753.00	A	5307.00	0.47
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	7194.40	P	135.10	1.88
137 Ba	5534.69	P	162.60	2.94
159 Tb	1770904.00	A	6376.00	0.36
205 Tl	10444.65	P	151.90	1.45
208 Pb	27896.45	P	487.10	1.75
209 Bi	1181713.00	A	14080.00	1.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	578637.88	1.17	572706.38	101.0	80 - 120	
45 Sc	364422.00	0.98	359251.41	101.4	80 - 120	
45 Sc	26115.65	0.18	25539.44	102.3	80 - 120	
45 Sc	704771.56	0.61	706761.50	99.7	80 - 120	
72 Ge	94222.17	0.57	93669.16	100.6	80 - 120	
72 Ge	15041.59	0.43	14945.93	100.6	80 - 120	
89 Y	1078040.80	0.68	1085669.40	99.3	80 - 120	
115 In	1136752.80	0.47	1144466.40	99.3	80 - 120	
159 Tb	1770903.50	0.36	1790797.00	98.9	80 - 120	
209 Bi	1181712.80	1.19	1198899.40	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 19 2007 10:36 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:35 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	537963.69	M	14980.00	2.78
7	(Li)		P		
9	Be	29867.16	P	251.10	0.84
23	Na	341855.69	P	755.30	0.22
24	Mg	7319172.00	A	30570.00	0.42
27	Al	8487350.00	A	27760.00	0.33
39	K	10330930.00	A	22000.00	0.21
44	Ca	301999.19	P	1121.00	0.37
45	Sc	351578.69	P	1269.00	0.36
45	Sc	24983.63	P	232.30	0.93
45	Sc	681732.38	P	3313.00	0.49
51	V	12695.81	P	134.20	1.06
52	Cr	16136.02	P	113.60	0.70
55	Mn	8560.84	P	64.18	0.75
56	Fe	6313756.00	A	21190.00	0.34
59	Co	26114.35	P	32.89	0.13
60	Ni	7124.11	P	118.50	1.66
63	Cu	20729.55	P	315.40	1.52
65	Cu	10220.13	P	104.40	1.02
66	Zn	5430.38	P	56.20	1.03
72	Ge	91515.33	P	89.42	0.10
72	Ge	14540.31	P	236.90	1.63
75	As	1687.23	P	18.65	1.11
78	Se	2279.98	P	64.73	2.84
89	Y	1052661.00	A	8117.00	0.77
98	Mo	45098.64	P	396.00	0.88
99	(Ru)	1.11	P	1.93	173.24
107	Ag	70116.35	P	349.40	0.50
111	Cd	18702.39	P	337.70	1.81
115	In	1103872.00	A	8675.00	0.79
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	68666.32	P	418.70	0.61
137	Ba	27533.73	P	94.33	0.34
159	Tb	1734074.00	A	12440.00	0.72
205	Tl	97689.54	P	304.70	0.31
208	Pb	256417.09	P	1772.00	0.69
209	Bi	1126789.00	P	5001.00	0.44

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	537963.75	2.78	572706.38	93.9	80 - 120	
45	Sc	351578.66	0.36	359251.41	97.9	80 - 120	
45	Sc	24983.64	0.93	25539.44	97.8	80 - 120	
45	Sc	681732.38	0.49	706761.50	96.5	80 - 120	
72	Ge	91515.33	0.10	93669.16	97.7	80 - 120	
72	Ge	14540.31	1.63	14945.93	97.3	80 - 120	
89	Y	1052661.50	0.77	1085669.40	97.0	80 - 120	
115	In	1103871.90	0.79	1144466.40	96.5	80 - 120	
159	Tb	1734073.60	0.72	1790797.00	96.8	80 - 120	
209	Bi	1126789.00	0.44	1198899.40	94.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 19 2007 10:42 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	502749.81	P	1294.00	0.26
7	(Li)		P		
9	Be	280881.50	P	1134.00	0.40
23	Na	2820548.00	A	15220.00	0.54
24	Mg	68771216.00	A	317000.00	0.46
27	Al	80615840.00	A	274000.00	0.34
39	K	89795488.00	A	98290.00	0.11
44	Ca	2934631.00	A	850.90	0.03
45	Sc	350250.50	P	2192.00	0.63
45	Sc	24709.43	P	13.68	0.06
45	Sc	660766.88	P	1256.00	0.19
51	V	118869.30	P	569.40	0.48
52	Cr	151482.70	P	291.90	0.19
55	Mn	80726.36	P	339.90	0.42
56	Fe	59522440.00	A	485600.00	0.82
59	Co	244770.30	P	1493.00	0.61
60	Ni	65087.52	P	480.90	0.74
63	Cu	179680.70	P	1158.00	0.64
65	Cu	88748.84	P	307.30	0.35
66	Zn	30167.79	P	226.90	0.75
72	Ge	90316.64	P	415.60	0.46
72	Ge	14262.61	P	65.99	0.46
75	As	16316.28	P	101.20	0.62
78	Se	21607.76	P	197.00	0.91
89	Y	1031213.00	A	5902.00	0.57
98	Mo	431247.00	P	3300.00	0.77
99	(Ru)	11.11	P	3.85	34.64
107	Ag	649762.31	P	877.90	0.14
111	Cd	174474.80	P	959.10	0.55
115	In	1054855.00	A	5602.00	0.53
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	648459.88	P	2375.00	0.37
137	Ba	242241.20	P	799.10	0.33
159	Tb	1702020.00	A	10810.00	0.64
205	Tl	924083.50	P	2688.00	0.29
208	Pb	2502628.00	A	4177.00	0.17
209	Bi	1057523.00	P	4938.00	0.47

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	502749.78	0.26	572706.38	87.8	80 - 120	
45	Sc	350250.50	0.63	359251.41	97.5	80 - 120	
45	Sc	24709.43	0.06	25539.44	96.8	80 - 120	
45	Sc	660766.94	0.19	706761.50	93.5	80 - 120	
72	Ge	90316.65	0.46	93669.16	96.4	80 - 120	
72	Ge	14262.61	0.46	14945.93	95.4	80 - 120	
89	Y	1031212.90	0.57	1085669.40	95.0	80 - 120	
115	In	1054855.40	0.53	1144466.40	92.2	80 - 120	
159	Tb	1702020.60	0.64	1790797.00	95.0	80 - 120	
209	Bi	1057523.40	0.47	1198899.40	88.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 19 2007 10:47 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:45 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	501834.59	P	2178.00	0.43
7 (Li)		P		
9 Be	542261.19	P	2428.00	0.45
23 Na	5453382.00	A	16300.00	0.30
24 Mg	############	A	485300.00	0.36
27 Al	############	A	79440.00	0.05
39 K	############	A	619600.00	0.35
44 Ca	5692803.00	A	22690.00	0.40
45 Sc	357198.69	P	697.10	0.20
45 Sc	24677.53	P	207.10	0.84
45 Sc	670056.19	P	915.90	0.14
51 V	234252.70	P	1478.00	0.63
52 Cr	295485.50	P	1066.00	0.36
55 Mn	157983.09	P	917.40	0.58
56 Fe	############	A	754400.00	0.65
59 Co	475714.91	P	2838.00	0.60
60 Ni	126006.60	P	664.40	0.53
63 Cu	344685.50	P	3031.00	0.88
65 Cu	170083.50	P	490.50	0.29
66 Zn	56002.77	P	469.50	0.84
72 Ge	91298.77	P	295.40	0.32
72 Ge	14237.77	P	165.90	1.17
75 As	31451.23	P	86.70	0.28
78 Se	41572.73	P	43.56	0.10
89 Y	1050581.00	A	5348.00	0.51
98 Mo	855340.00	P	2269.00	0.27
99 (Ru)	11.11	P	13.47	121.22
107 Ag	1298781.00	A	2657.00	0.20
111 Cd	337575.09	P	1775.00	0.53
115 In	1060020.00	A	10660.00	1.01
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1313316.00	A	6186.00	0.47
137 Ba	471189.41	P	1440.00	0.31
159 Tb	1714398.00	A	3834.00	0.22
205 Tl	1841820.00	A	10640.00	0.58
208 Pb	4813659.00	A	27290.00	0.57
209 Bi	1032285.00	P	5576.00	0.54

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	501834.63	0.43	572706.38	87.6	80 - 120	
45 Sc	357198.66	0.20	359251.41	99.4	80 - 120	
45 Sc	24677.53	0.84	25539.44	96.6	80 - 120	
45 Sc	670056.19	0.14	706761.50	94.8	80 - 120	
72 Ge	91298.77	0.32	93669.16	97.5	80 - 120	
72 Ge	14237.77	1.17	14945.93	95.3	80 - 120	
89 Y	1050580.60	0.51	1085669.40	96.8	80 - 120	
115 In	1060019.90	1.01	1144466.40	92.6	80 - 120	
159 Tb	1714397.80	0.22	1790797.00	95.7	80 - 120	
209 Bi	1032285.30	0.54	1198899.40	86.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67113634012 File : c19v0012 IDF : 1.0
Cal : 67113634001 Caldate: 19-MAR-2007 Time : 19-MAR-2007 23:00
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6843	0.5992	10000	10080	ug/L	1	10	
Antimony	A	0.3232	0.2994	100.0	96.78	ug/L	-3	10	
Barium	A	0.2627	0.0704	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2752	0.2722	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0839	0.0805	100.0	100.4	ug/L	0	10	
Calcium	A	0.0338	0.0218	10000	10180	ug/L	2	10	
Lead	A	0.8062	0.7158	100.0	101.0	ug/L	1	10	
Magnesium	A	0.6516	0.5102	10000	10130	ug/L	1	10	
Molybdenum	A	0.2266	0.2059	100.0	100.6	ug/L	1	10	
Potassium	A	2.3494	0.6722	10000	10140	ug/L	1	10	
Silver	A	0.3212	0.3036	100.0	98.97	ug/L	-1	10	
Thallium	A	0.9325	0.8545	50.00	48.08	ug/L	-4	10	
Arsenic	E	0.6073	0.5564	100.0	100.0	ug/L	0	10	
Chromium	E	4.1770	3.0254	100.0	100.5	ug/L	1	10	
Cobalt	E	5.0869	4.9033	100.0	101.2	ug/L	1	10	
Copper	E	9.8018	6.2258	100.0	101.6	ug/L	2	10	
Manganese	E	1.8693	1.6162	100.0	100.5	ug/L	1	10	
Nickel	E	1.7020	1.3105	100.0	101.9	ug/L	2	10	
Sodium	E	1.6562	0.5641	10000	10100	ug/L	1	10	
Vanadium	E	4.2732	2.3857	100.0	100.1	ug/L	0	10	
Zinc	E	17.925	1.0071	100.0	94.60	ug/L	-5	10	
Iron	H	0.9472	0.8449	10000	10260	ug/L	3	10	
Selenium	H	0.1268	0.1167	100.0	101.5	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	515438	-10.00
Scandium	A	706762	677111	-4.20
Scandium	E	25539	25103	-1.71
Scandium	H	359251	358175	-0.30
Germanium	H	93669	92433	-1.32
Germanium	E	14946	14606	-2.27
Indium	A	1144466	1091719	-4.61
Bismuth	A	1198899	1075450	-10.30
Yttrium	A	1085669	1062848	-2.10
Terbium	A	1790797	1742438	-2.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634035 File : c19v0035 Time : 20-MAR-2007 01:06
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5899	10000	9920	ug/L	-1	10	
Antimony	A	0.3232	0.2993	100.0	96.77	ug/L	-3	10	
Barium	A	0.2627	0.0692	100.0	99.62	ug/L	0	10	
Beryllium	A	0.2752	0.2697	100.0	99.16	ug/L	-1	10	
Cadmium	A	0.0839	0.0800	100.0	99.74	ug/L	0	10	
Calcium	A	0.0338	0.0216	10000	10070	ug/L	1	10	
Lead	A	0.8062	0.7150	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6516	0.5047	10000	10020	ug/L	0	10	
Molybdenum	A	0.2266	0.2043	100.0	99.78	ug/L	0	10	
Potassium	A	2.3494	0.6619	10000	9981	ug/L	0	10	
Silver	A	0.3212	0.3016	100.0	98.35	ug/L	-2	10	
Thallium	A	0.9325	0.8437	50.00	47.47	ug/L	-5	10	
Arsenic	E	0.6073	0.5529	100.0	99.37	ug/L	-1	10	
Chromium	E	4.1770	3.0149	100.0	100.1	ug/L	0	10	
Cobalt	E	5.0869	4.8902	100.0	100.9	ug/L	1	10	
Copper	E	9.8018	6.1851	100.0	101.0	ug/L	1	10	
Manganese	E	1.8693	1.6035	100.0	99.74	ug/L	0	10	
Nickel	E	1.7020	1.2970	100.0	100.9	ug/L	1	10	
Sodium	E	1.6562	0.5602	10000	10030	ug/L	0	10	
Vanadium	E	4.2732	2.3711	100.0	99.49	ug/L	-1	10	
Zinc	E	17.925	1.0049	100.0	94.37	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8395	10000	10200	ug/L	2	10	
Selenium	H	0.1268	0.1178	100.0	102.4	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	485845	-15.17
Scandium	A	706762	633927	-10.31
Scandium	E	25539	23124	-9.46
Scandium	H	359251	331405	-7.75
Germanium	H	93669	85822	-8.38
Germanium	E	14946	13559	-9.28
Indium	A	1144466	1024995	-10.44
Bismuth	A	1198899	1030196	-14.07
Yttrium	A	1085669	995435	-8.31
Terbium	A	1790797	1652787	-7.71

r2=ICAL r^2 failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634053 File : c19v0053 Time : 20-MAR-2007 02:45
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5934	10000	9978	ug/L	0	10	
Antimony	A	0.3232	0.3042	100.0	98.35	ug/L	-2	10	
Barium	A	0.2627	0.0701	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2752	0.2683	100.0	98.64	ug/L	-1	10	
Cadmium	A	0.0839	0.0810	100.0	101.0	ug/L	1	10	
Calcium	A	0.0338	0.0218	10000	10150	ug/L	2	10	
Lead	A	0.8062	0.7233	100.0	102.0	ug/L	2	10	
Magnesium	A	0.6516	0.5039	10000	10000	ug/L	0	10	
Molybdenum	A	0.2266	0.2054	100.0	100.3	ug/L	0	10	
Potassium	A	2.3494	0.6639	10000	10010	ug/L	0	10	
Silver	A	0.3212	0.3064	100.0	99.89	ug/L	0	10	
Thallium	A	0.9325	0.8441	50.00	47.49	ug/L	-5	10	
Arsenic	E	0.6073	0.5528	100.0	99.36	ug/L	-1	10	
Chromium	E	4.1770	3.0236	100.0	100.4	ug/L	0	10	
Cobalt	E	5.0869	4.8975	100.0	101.0	ug/L	1	10	
Copper	E	9.8018	6.1914	100.0	101.1	ug/L	1	10	
Manganese	E	1.8693	1.6259	100.0	101.1	ug/L	1	10	
Nickel	E	1.7020	1.3011	100.0	101.2	ug/L	1	10	
Sodium	E	1.6562	0.5641	10000	10100	ug/L	1	10	
Vanadium	E	4.2732	2.3835	100.0	100.0	ug/L	0	10	
Zinc	E	17.925	0.9995	100.0	93.76	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8425	10000	10230	ug/L	2	10	
Selenium	H	0.1268	0.1174	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	480947	-16.02
Scandium	A	706762	631429	-10.66
Scandium	E	25539	22996	-9.96
Scandium	H	359251	327018	-8.97
Germanium	H	93669	84729	-9.54
Germanium	E	14946	13535	-9.44
Indium	A	1144466	1015462	-11.27
Bismuth	A	1198899	1033025	-13.84
Yttrium	A	1085669	994035	-8.44
Terbium	A	1790797	1647189	-8.02

r2=ICAL r^2 failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67113634072
Cal : 67113634001
Standards: S5654

File : c19v0072
Caldate: 19-MAR-2007

IDF : 1.0
Time : 20-MAR-2007 04:29

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.6028	10000	10140	ug/L	1	10	
Antimony	A	0.3232	0.3051	100.0	98.62	ug/L	-1	10	
Barium	A	0.2627	0.0697	100.0	100.3	ug/L	0	10	
Beryllium	A	0.2752	0.2645	100.0	97.24	ug/L	-3	10	
Cadmium	A	0.0839	0.0809	100.0	100.8	ug/L	1	10	
Calcium	A	0.0338	0.0217	10000	10120	ug/L	1	10	
Lead	A	0.8062	0.7174	100.0	101.2	ug/L	1	10	
Magnesium	A	0.6516	0.5132	10000	10190	ug/L	2	10	
Molybdenum	A	0.2266	0.2042	100.0	99.74	ug/L	0	10	
Potassium	A	2.3494	0.6621	10000	9984	ug/L	0	10	
Silver	A	0.3212	0.3057	100.0	99.67	ug/L	0	10	
Thallium	A	0.9325	0.8424	50.00	47.40	ug/L	-5	10	
Arsenic	E	0.6073	0.5508	100.0	99.00	ug/L	-1	10	
Chromium	E	4.1770	2.9615	100.0	98.37	ug/L	-2	10	
Cobalt	E	5.0869	4.7911	100.0	98.84	ug/L	-1	10	
Copper	E	9.8018	6.0606	100.0	98.90	ug/L	-1	10	
Manganese	E	1.8693	1.5935	100.0	99.12	ug/L	-1	10	
Nickel	E	1.7020	1.2705	100.0	98.83	ug/L	-1	10	
Sodium	E	1.6562	0.5671	10000	10150	ug/L	2	10	
Vanadium	E	4.2732	2.3393	100.0	98.15	ug/L	-2	10	
Zinc	E	17.925	0.9935	100.0	93.10	ug/L	-7	10	r2 ***
Iron	H	0.9472	0.8357	10000	10150	ug/L	2	10	
Selenium	H	0.1268	0.1167	100.0	101.5	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	500754	-12.56
Scandium	A	706762	632712	-10.48
Scandium	E	25539	23391	-8.41
Scandium	H	359251	330436	-8.02
Germanium	H	93669	85040	-9.21
Germanium	E	14946	13516	-9.57
Indium	A	1144466	1001696	-12.47
Bismuth	A	1198899	1011846	-15.60
Yttrium	A	1085669	981128	-9.63
Terbium	A	1790797	1622736	-9.38

r2=ICAL r^2 failure

67113634072

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67113634089 File : c19v0089 IDF : 1.0
Cal : 67113634001 Caldate: 19-MAR-2007 Time : 20-MAR-2007 06:03
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5975	10000	10050	ug/L	1	10	
Antimony	A	0.3232	0.3173	100.0	102.6	ug/L	3	10	
Barium	A	0.2627	0.0700	100.0	100.8	ug/L	1	10	
Beryllium	A	0.2752	0.2652	100.0	97.50	ug/L	-3	10	
Cadmium	A	0.0839	0.0841	100.0	104.9	ug/L	5	10	
Calcium	A	0.0338	0.0217	10000	10120	ug/L	1	10	
Lead	A	0.8062	0.7279	100.0	102.7	ug/L	3	10	
Magnesium	A	0.6516	0.5074	10000	10070	ug/L	1	10	
Molybdenum	A	0.2266	0.2116	100.0	103.4	ug/L	3	10	
Potassium	A	2.3494	0.6663	10000	10050	ug/L	1	10	
Silver	A	0.3212	0.3196	100.0	104.2	ug/L	4	10	
Thallium	A	0.9325	0.8427	50.00	47.41	ug/L	-5	10	
Arsenic	E	0.6073	0.5496	100.0	98.78	ug/L	-1	10	
Chromium	E	4.1770	2.9564	100.0	98.20	ug/L	-2	10	
Cobalt	E	5.0869	4.7922	100.0	98.87	ug/L	-1	10	
Copper	E	9.8018	6.0951	100.0	99.47	ug/L	-1	10	
Manganese	E	1.8693	1.5927	100.0	99.07	ug/L	-1	10	
Nickel	E	1.7020	1.2663	100.0	98.50	ug/L	-2	10	
Sodium	E	1.6562	0.5544	10000	9921	ug/L	-1	10	
Vanadium	E	4.2732	2.3379	100.0	98.09	ug/L	-2	10	
Zinc	E	17.925	1.0005	100.0	93.87	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8278	10000	10060	ug/L	1	10	
Selenium	H	0.1268	0.1148	100.0	99.77	ug/L	0	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	465081	-18.79
Scandium	A	706762	592267	-16.20
Scandium	E	25539	21870	-14.37
Scandium	H	359251	312467	-13.02
Germanium	H	93669	81194	-13.32
Germanium	E	14946	12624	-15.54
Indium	A	1144466	918164	-19.77
Bismuth	A	1198899	976024	-18.59
Yttrium	A	1085669	903045	-16.82
Terbium	A	1790797	1540150	-14.00

r2=ICAL r^2 failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634016 File : c19v0016 Time : 19-MAR-2007 23:22
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02907]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03183]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	543017	-5.18
Scandium	A	706762	684555	-3.14
Scandium	E	25539	24850	-2.70
Scandium	H	359251	350957	-2.31
Germanium	H	93669	90951	-2.90
Germanium	E	14946	14626	-2.14
Indium	A	1144466	1122823	-1.89
Bismuth	A	1198899	1152187	-3.90
Yttrium	A	1085669	1067736	-1.65
Terbium	A	1790797	1735947	-3.06

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634038 File : c19v0038 Time : 20-MAR-2007 01:23
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	[0.2536]	0.5000	0.1296	ug/L	!ib
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	504678	-11.88
Scandium	A	706762	641225	-9.27
Scandium	E	25539	23588	-7.64
Scandium	H	359251	331707	-7.67
Germanium	H	93669	86298	-7.87
Germanium	E	14946	13774	-7.84
Indium	A	1144466	1022643	-10.64
Bismuth	A	1198899	1074324	-10.39
Yttrium	A	1085669	996076	-8.25
Terbium	A	1790797	1641165	-8.36

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634056 File : c19v0056 Time : 20-MAR-2007 03:01
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	[0.4491]	0.5000	0.1296	ug/L	!ib
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01408]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	501151	-12.49
Scandium	A	706762	636706	-9.91
Scandium	E	25539	23862	-6.57
Scandium	H	359251	330302	-8.06
Germanium	H	93669	85642	-8.57
Germanium	E	14946	14001	-6.32
Indium	A	1144466	1032341	-9.80
Bismuth	A	1198899	1076234	-10.23
Yttrium	A	1085669	996065	-8.25
Terbium	A	1790797	1645474	-8.11

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634075 File : c19v0075 Time : 20-MAR-2007 04:46
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	530007	-7.46
Scandium	A	706762	643037	-9.02
Scandium	E	25539	23882	-6.49
Scandium	H	359251	333756	-7.10
Germanium	H	93669	85907	-8.29
Germanium	E	14946	13857	-7.29
Indium	A	1144466	1008187	-11.91
Bismuth	A	1198899	1065874	-11.10
Yttrium	A	1085669	991878	-8.64
Terbium	A	1790797	1623419	-9.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634091 File : c19v0091 Time : 20-MAR-2007 06:14
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.09003]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06882]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	[0.05976]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05606]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.007114]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	485015	-15.31
Scandium	A	706762	612082	-13.40
Scandium	E	25539	22892	-10.37
Scandium	H	359251	315375	-12.21
Germanium	H	93669	82353	-12.08
Germanium	E	14946	13460	-9.94
Indium	A	1144466	978011	-14.54
Bismuth	A	1198899	1037361	-13.47
Yttrium	A	1085669	940486	-13.37
Terbium	A	1790797	1569339	-12.37

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67113634091

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634017 File : c19v0017 Time : 19-MAR-2007 23:27
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09995]	0.1000	ug/L	
Barium	A	3.737	0.1000	ug/L	
Beryllium	A	[0.05848]	0.1000	ug/L	
Cadmium	A	1.619	0.1000	ug/L	
Lead	A	0.4870	0.1000	ug/L	
Silver	A	0.2308	0.1000	ug/L	
Thallium	A	[0.02412]	0.05000	ug/L	
Arsenic	E	0.2383	0.1000	ug/L	
Chromium	E	1.447	0.1000	ug/L	
Cobalt	E	0.2310	0.1000	ug/L	
Copper	E	1.583	0.5000	ug/L	
Manganese	E	0.7401	0.1000	ug/L	
Nickel	E	1.426	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	[0.07861]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99530	ug/L	100
Calcium	A	300000	302600	ug/L	101
Magnesium	A	100000	96600	ug/L	97
Molybdenum	A	2000	2243	ug/L	112
Potassium	A	100000	101400	ug/L	101
Sodium	E	250000	260300	ug/L	104
Iron	H	250000	256400	ug/L	103

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	430213	-24.88
Scandium	A	706762	639353	-9.54
Scandium	E	25539	23341	-8.61
Scandium	H	359251	333619	-7.13
Germanium	H	93669	82416	-12.01
Germanium	E	14946	13379	-10.48
Indium	A	1144466	953554	-16.68
Bismuth	A	1198899	920324	-23.24
Yttrium	A	1085669	997311	-8.14
Terbium	A	1790797	1651389	-7.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67113634018 File : c19v0018
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 19-MAR-2007 23:33

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97550	ug/L	-2		
Cadmium	A	100.0	104.7	ug/L	5	20	
Calcium	A	300000	295700	ug/L	-1		
Magnesium	A	100000	95060	ug/L	-5		
Molybdenum	A	2000	2169	ug/L	8		
Potassium	A	100000	98710	ug/L	-1		
Silver	A	50.00	45.33	ug/L	-9	20	
Arsenic	E	100.0	105.3	ug/L	5	20	
Chromium	E	200.0	201.4	ug/L	1	20	
Cobalt	E	200.0	189.2	ug/L	-5	20	
Copper	E	200.0	183.9	ug/L	-8	20	
Manganese	E	200.0	196.5	ug/L	-2	20	
Nickel	E	200.0	185.9	ug/L	-7	20	
Sodium	E	250000	243300	ug/L	-3		
Vanadium	E	200.0	204.4	ug/L	2	20	
Zinc	E	100.0	83.56	ug/L	-16	20	
Iron	H	250000	238400	ug/L	-5		
Selenium	H	100.0	102.0	ug/L	2	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	334642	-6.85
Scandium	A	706762	599115	-15.23
Scandium	E	25539	22657	-11.29
Germanium	H	93669	82381	-12.05
Germanium	E	14946	12886	-13.78
Indium	A	1144466	899415	-21.41
Yttrium	A	1085669	944648	-12.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67113634079 File : c19v0079
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 20-MAR-2007 05:08

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09761]	0.1000	ug/L	
Barium	A	3.723	0.1000	ug/L	
Beryllium	A	[0.04425]	0.1000	ug/L	
Cadmium	A	1.695	0.1000	ug/L	
Lead	A	0.5008	0.1000	ug/L	
Silver	A	0.2636	0.1000	ug/L	
Thallium	A	0.07153	0.05000	ug/L	
Arsenic	E	0.2622	0.1000	ug/L	
Chromium	E	1.487	0.1000	ug/L	
Cobalt	E	0.2548	0.1000	ug/L	
Copper	E	1.500	0.5000	ug/L	
Manganese	E	0.7823	0.1000	ug/L	
Nickel	E	1.415	0.1000	ug/L	
Vanadium	E	[0.01536]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	0.1066	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	101200	ug/L	101
Calcium	A	300000	303000	ug/L	101
Magnesium	A	100000	98600	ug/L	99
Molybdenum	A	2000	2252	ug/L	113
Potassium	A	100000	101800	ug/L	102
Sodium	E	250000	259100	ug/L	104
Iron	H	250000	254700	ug/L	102

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	422733	-26.19
Scandium	A	706762	612970	-13.27
Scandium	E	25539	22338	-12.54
Scandium	H	359251	316007	-12.04
Germanium	H	93669	77855	-16.88
Germanium	E	14946	12750	-14.69
Indium	A	1144466	911226	-20.38
Bismuth	A	1198899	887503	-25.97
Yttrium	A	1085669	937517	-13.65
Terbium	A	1790797	1574508	-12.08

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634080 File : c19v0080 Time : 20-MAR-2007 05:13
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97440	ug/L	-3		
Cadmium	A	100.0	102.8	ug/L	3	20	
Calcium	A	300000	292800	ug/L	-2		
Magnesium	A	100000	95410	ug/L	-5		
Molybdenum	A	2000	2182	ug/L	9		
Potassium	A	100000	98400	ug/L	-2		
Silver	A	50.00	44.44	ug/L	-11	20	
Arsenic	E	100.0	102.5	ug/L	3	20	
Chromium	E	200.0	198.1	ug/L	-1	20	
Cobalt	E	200.0	185.9	ug/L	-7	20	
Copper	E	200.0	180.0	ug/L	-10	20	
Manganese	E	200.0	193.9	ug/L	-3	20	
Nickel	E	200.0	184.2	ug/L	-8	20	
Sodium	E	250000	243600	ug/L	-3		
Vanadium	E	200.0	202.1	ug/L	1	20	
Zinc	E	100.0	81.92	ug/L	-18	20	
Iron	H	250000	236300	ug/L	-5		
Selenium	H	100.0	100.9	ug/L	1	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	321383	-10.54
Scandium	A	706762	578697	-18.12
Scandium	E	25539	21758	-14.81
Germanium	H	93669	78658	-16.03
Germanium	E	14946	12384	-17.14
Indium	A	1144466	868906	-24.08
Yttrium	A	1085669	886861	-18.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634093 File : c19v0093 Time : 20-MAR-2007 06:25
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07867]	0.1000	ug/L	
Barium	A	3.853	0.1000	ug/L	
Beryllium	A	[0.02736]	0.1000	ug/L	
Cadmium	A	1.699	0.1000	ug/L	
Lead	A	0.4903	0.1000	ug/L	
Silver	A	0.2400	0.1000	ug/L	
Thallium	A	[0.02294]	0.05000	ug/L	
Arsenic	E	0.2416	0.1000	ug/L	
Chromium	E	1.456	0.1000	ug/L	
Cobalt	E	0.2310	0.1000	ug/L	
Copper	E	1.113	0.5000	ug/L	
Manganese	E	0.7128	0.1000	ug/L	
Nickel	E	1.483	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	[0.09079]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102900	ug/L	103
Calcium	A	300000	308700	ug/L	103
Magnesium	A	100000	100400	ug/L	100
Molybdenum	A	2000	2296	ug/L	115
Potassium	A	100000	103700	ug/L	104
Sodium	E	250000	256500	ug/L	103
Iron	H	250000	254800	ug/L	102

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	397258	-30.63
Scandium	A	706762	569794	-19.38
Scandium	E	25539	21032	-17.65
Scandium	H	359251	298944	-16.79
Germanium	H	93669	73979	-21.02
Germanium	E	14946	12135	-18.81
Indium	A	1144466	858070	-25.02
Bismuth	A	1198899	838948	-30.02
Yttrium	A	1085669	881846	-18.77
Terbium	A	1790797	1497146	-16.40

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634094 File : c19v0094 Time : 20-MAR-2007 06:30
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97490	ug/L	-3		
Cadmium	A	100.0	103.3	ug/L	3	20	
Calcium	A	300000	293000	ug/L	-2		
Magnesium	A	100000	94750	ug/L	-5		
Molybdenum	A	2000	2188	ug/L	9		
Potassium	A	100000	98500	ug/L	-2		
Silver	A	50.00	45.12	ug/L	-10	20	
Arsenic	E	100.0	105.6	ug/L	6	20	
Chromium	E	200.0	201.3	ug/L	1	20	
Cobalt	E	200.0	189.2	ug/L	-5	20	
Copper	E	200.0	182.9	ug/L	-9	20	
Manganese	E	200.0	197.0	ug/L	-2	20	
Nickel	E	200.0	186.7	ug/L	-7	20	
Sodium	E	250000	241900	ug/L	-3		
Vanadium	E	200.0	204.2	ug/L	2	20	
Zinc	E	100.0	83.28	ug/L	-17	20	
Iron	H	250000	237800	ug/L	-5		
Selenium	H	100.0	101.2	ug/L	1	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	301504	-16.07
Scandium	A	706762	553668	-21.66
Scandium	E	25539	20459	-19.89
Germanium	H	93669	74717	-20.23
Germanium	E	14946	11644	-22.09
Indium	A	1144466	836519	-26.91
Yttrium	A	1085669	855080	-21.24

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67113634

Date : 03/19/07
Sequence : MET06 c19v0

Reference: c19v0004
Analyzed : 03/19/07 22:13

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	572706	706762	25539	359251	93669	14946	1144466	1198899	1085669	1790797
		LOWER LIMIT	171812	212028	7662	107775	28101	4484	343340	359670	325701	537239
		UPPER LIMIT	687248	848114	30647	431102	112403	17935	1373359	1438679	1302803	2148956
016	ICB		543017	684555	24850	350957	90951	14626	1122823	1152187	1067736	1735947
017	ICSA		430213	639353	23341	333619	82416	13379	953554	920324	997311	1651389
018	ICSAB		412831	599115	22657	334642	82381	12886	899415	867646	944648	1575188
023	BLANK	QC379810	444259	585225	21963	321240	93867	14122	946607	1026061	910762	1567697
024	BS	QC379811	434618	583428	21502	312000	85006	12958	920071	971183	905686	1578126
025	BSD	QC379812	454421	613304	22835	335011	86003	13160	975924	1003619	985011	1631509
027	MSS	193474-001	479530	619523	23439	332199	86743	13894	984887	1045244	951424	1593615
028	SER	QC379815	497932	645636	23467	334828	88348	13840	1056485	1098566	998863	1647982
029	MS	QC379813	488247	631470	22849	326221	84900	13395	1011910	1047929	977040	1638408
030	MSD	QC379814	499071	638210	23108	330602	86311	13602	1017049	1051948	984533	1630485
031	PDS	QC379816	481912	637057	23365	330839	85563	13661	1015184	1007596	987074	1632640
035	CCV		485845	633927	23124	331405	85822	13559	1024995	1030196	995435	1652787
038	CCB		504678	641225	23588	331707	86298	13774	1022643	1074324	996076	1641165
040	SAMPLE	193463-001	482740	622481	22931	323557	85572	13627	991658	1051767	970539	1610974
041	SAMPLE	193463-002	487658	628133	23438	334109	87662	14039	1014577	1062249	982901	1632328
042	SAMPLE	193463-003	499161	634438	23524	331733	87439	14067	1035639	1089453	984740	1640617
043	SAMPLE	193463-004	494123	635154	23402	325884	85517	13699	1006214	1057421	989849	1619436
044	SAMPLE	193463-009	504385	644450	23717	331671	87126	14012	1028461	1083546	1005960	1644821
045	SAMPLE	193463-011	498005	637364	23387	324848	85718	13665	1049957	1069082	991217	1646539
046	SAMPLE	193463-012	492270	632022	23379	332467	87203	13929	1001438	1055515	972203	1623723
047	SAMPLE	193463-013	499788	640761	23668	330836	87369	14073	1059472	1093500	997052	1654831
048	SAMPLE	193463-014	499178	634510	23476	333226	87974	13933	1014112	1072431	990482	1638734
049	SAMPLE	193463-015	505659	641432	23844	329171	86929	14036	1046564	1082262	999533	1651789
053	CCV		480947	631429	22996	327018	84729	13535	1015462	1033025	994035	1647189
056	CCB		501151	636706	23862	330302	85642	14001	1032341	1076234	996065	1645474
058	SAMPLE	193474-002	507879	643613	23800	332132	86570	13814	1043415	1098092	996810	1641275
059	SAMPLE	193474-003	492512	637317	22852	323409	84624	13759	1003723	1079499	980226	1637880
060	SAMPLE	193474-004	490838	629367	23121	348636	89244	13643	1006432	1063400	970073	1613871
061	SAMPLE	193474-005	500429	637301	23326	326487	85283	13736	1002003	1085164	976903	1617157
062	SAMPLE	193479-001	486810	661162	24498	340645	82222	13334	954300	906171	992860	1586213
063	SAMPLE	193277-001	587776	701973	25553	353586	91269	14851	1109505	1109441	1063303	1721059
064	SAMPLE	193262-021	522102	657126	24780	349838	90784	14361	1004443	1014457	990692	1631927
066	SAMPLE	193416-001	504509	645126	24181	343877	86853	13750	969158	993543	978566	1607751
067	SAMPLE	193416-001	484363	631518	23709	333470	82850	13241	935354	941063	933365	1555302
068	SAMPLE	193459-005	475834	652924	24530	340838	80700	12910	941926	865463	1000004	1554911
072	CCV		500754	632712	23391	330436	85040	13516	1001696	1011846	981128	1622736
075	CCB		530007	643037	23882	333756	85907	13857	1008187	1065874	991878	1623419
077	SAMPLE	193335-001	514814	635152	23686	327395	84908	13680	1021921	1073395	976800	1619584
078	BS	QC379371	516379	641240	23375	332994	85420	13577	1012910	1068376	979506	1624197
079	ICSA		422733	612970	22338	316007	77855	12750	911226	887503	937517	1574508
080	ICSAB		406361	578697	21758	321383	78658	12384	868906	847672	886861	1518620
085	BSD	QC379372	483043	611419	22473	313733	81210	12978	980921	1044281	946636	1586295
089	CCV		465081	592267	21870	312467	81194	12624	918164	976024	903045	1540150
091	CCB		485015	612082	22892	315375	82353	13460	978011	1037361	940486	1569339
093	ICSA		397258	569794	21032	298944	73979	12135	858070	838948	881846	1497146
094	ICSAB		384973	553668	20459	301504	74717	11644	836519	821305	855080	1449807

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c19v0001	TUN				19-MAR-2007 21:54	1.0	1.0				1	
002	c19v0002	X	RINSE			19-MAR-2007 22:02	1.0					2	
003	c19v0003	X	RINSE			19-MAR-2007 22:08	1.0					2	
004	c19v0004	ICALBLK	CALBLANK			19-MAR-2007 22:13	1.0	1.0				2	
005	c19v0005	ICAL				19-MAR-2007 22:19	1.0	1.0				3	
006	c19v0006	ICAL				19-MAR-2007 22:24	1.0	1.0				4	
007	c19v0007	ICAL				19-MAR-2007 22:33	1.0	1.0				5	
008	c19v0008	ICAL				19-MAR-2007 22:38	1.0	1.0				6	
009	c19v0009	ICAL				19-MAR-2007 22:44	1.0	1.0				7	
010	c19v0010	ICAL				19-MAR-2007 22:49	1.0	1.0				8	
011	c19v0011	X	RINSE			19-MAR-2007 22:55	1.0					2	
012	c19v0012	ICV				19-MAR-2007 23:00	1.0	1.0			1	9	
013	c19v0013	X	RINSE			19-MAR-2007 23:05	1.0					2	
014	c19v0014	X				19-MAR-2007 23:11	1.0					2	
015	c19v0015	X				19-MAR-2007 23:16	1.0					2	
016	c19v0016	ICB				19-MAR-2007 23:22	1.0	1.0			1	2	
017	c19v0017	ICSA				19-MAR-2007 23:27	1.0	1.0			1	10 2	7:CA=302600
018	c19v0018	ICSAB				19-MAR-2007 23:33	1.0	1.0			1	11 2	9:CA=295700
019	c19v0019	X	RINSE			19-MAR-2007 23:38	1.0					2	
020	c19v0020	X	RINSE			19-MAR-2007 23:44	1.0					2	
021	c19v0021	X	RINSE			19-MAR-2007 23:49	1.0					2	
022	c19v0022	X	RINSE			19-MAR-2007 23:54	1.0					2	
023	c19v0023	BLANK	QC379810	123249	Filtra	20-MAR-2007 00:00	1.0	1.0	1		1	2	
024	c19v0024	BS	QC379811	123249	Filtra	20-MAR-2007 00:05	1.0	1.0	1		1	2	
025	c19v0025	BSD	QC379812	123249	Filtra	20-MAR-2007 00:11	1.0	1.0	1		1	2	
026	c19v0026	X	RINSE			20-MAR-2007 00:17	1.0					2	
027	c19v0027	MSS	193474-001	123249	Filtra	20-MAR-2007 00:22	10.0	1.0	2		1	2	
028	c19v0028	SER	QC379815	123249	Filtra	20-MAR-2007 00:28	50.0	1.0	1	2	1	2	
029	c19v0029	MS	QC379813	123249	Filtra	20-MAR-2007 00:33	10.0	1.0			1	2	
030	c19v0030	MSD	QC379814	123249	Filtra	20-MAR-2007 00:39	10.0	1.0			1	2	
031	c19v0031	PDS	QC379816	123249	Filtra	20-MAR-2007 00:44	10.0	1.0			1	12	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c19v0032	X	RINSE			20-MAR-2007 00:50	1.0					2	
033	c19v0033	X	RINSE			20-MAR-2007 00:55	1.0					2	
034	c19v0034	X	RINSE			20-MAR-2007 01:01	1.0					2	
035	c19v0035	CCV				20-MAR-2007 01:06	1.0	1.0	1		1	13	
036	c19v0036	X	RINSE			20-MAR-2007 01:12	1.0					2	
037	c19v0037	X				20-MAR-2007 01:17	1.0					2	
038	c19v0038	CCB				20-MAR-2007 01:23	1.0	1.0			1	2	
039	c19v0039	X				20-MAR-2007 01:28	1.0					2	
040	c19v0040	SAMPLE	193463-001	123249	Water	20-MAR-2007 01:34	10.0	1.0	2		1	2	
041	c19v0041	SAMPLE	193463-002	123249	Water	20-MAR-2007 01:39	10.0	1.0	1		1	2	
042	c19v0042	SAMPLE	193463-003	123249	Water	20-MAR-2007 01:45	10.0	1.0	1		1	2	
043	c19v0043	SAMPLE	193463-004	123249	Water	20-MAR-2007 01:50	10.0	1.0	1		1	2	
044	c19v0044	SAMPLE	193463-009	123249	Water	20-MAR-2007 01:56	10.0	1.0	1		1	2	
045	c19v0045	SAMPLE	193463-011	123249	Water	20-MAR-2007 02:01	10.0	1.0	1		1	2	
046	c19v0046	SAMPLE	193463-012	123249	Water	20-MAR-2007 02:07	10.0	1.0	1		1	2	
047	c19v0047	SAMPLE	193463-013	123249	Water	20-MAR-2007 02:12	10.0	1.0	1		1	2	
048	c19v0048	SAMPLE	193463-014	123249	Water	20-MAR-2007 02:18	10.0	1.0	2		1	2	
049	c19v0049	SAMPLE	193463-015	123249	Water	20-MAR-2007 02:23	10.0	1.0	1		1	2	
050	c19v0050	X	RINSE			20-MAR-2007 02:29	1.0					2	
051	c19v0051	X	RINSE			20-MAR-2007 02:34	1.0					2	
052	c19v0052	X	RINSE			20-MAR-2007 02:40	1.0					2	
053	c19v0053	CCV				20-MAR-2007 02:45	1.0	1.0	1		1	13	
054	c19v0054	X	RINSE			20-MAR-2007 02:50	1.0					2	
055	c19v0055	X				20-MAR-2007 02:56	1.0					2	
056	c19v0056	CCB				20-MAR-2007 03:01	1.0	1.0			1	2	
057	c19v0057	X				20-MAR-2007 03:07	1.0					2	
058	c19v0058	SAMPLE	193474-002	123249	Filtra	20-MAR-2007 03:12	10.0	1.0	1		1	2	
059	c19v0059	SAMPLE	193474-003	123249	Filtra	20-MAR-2007 03:18	10.0	1.0	1		1	2	
060	c19v0060	SAMPLE	193474-004	123249	Filtra	20-MAR-2007 03:23	10.0	1.0	1		1	2	
061	c19v0061	SAMPLE	193474-005	123249	Filtra	20-MAR-2007 03:29	10.0	1.0	1		1	2	
062	c19v0062	SAMPLE	193479-001	123249	Filtra	20-MAR-2007 03:34	10.0	1.0	1		1	2	2:NA=590200

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c19v0063	SAMPLE	193277-001	123055	Filtra	20-MAR-2007 03:40	10.0	1.0	2		1	2	
064	c19v0064	SAMPLE	193262-021	123055	Water	20-MAR-2007 03:45	10.0	1.0	1		1	2	1:NA=29200.0
065	c19v0065	X	RINSE			20-MAR-2007 03:51	1.0					2	
066	c19v0066	SAMPLE	193416-001	123155	Water	20-MAR-2007 03:56	20.0	1.0	1		1	2	1:NA=123000
067	c19v0067	SAMPLE	193416-001	123155	Water	20-MAR-2007 04:02	10.0	1.0	2		1	2	3:NA=239200
068	c19v0068	SAMPLE	193459-005	123218	Filtra	20-MAR-2007 04:07	10.0	1.0	1		1	2	5:NA=716700
069	c19v0069	X	RINSE			20-MAR-2007 04:13	1.0					2	
070	c19v0070	X	RINSE			20-MAR-2007 04:18	1.0					2	
071	c19v0071	X	RINSE			20-MAR-2007 04:24	1.0					2	
072	c19v0072	CCV				20-MAR-2007 04:29	1.0	1.0	1		1	13	
073	c19v0073	X	RINSE			20-MAR-2007 04:35	1.0					2	
074	c19v0074	X				20-MAR-2007 04:40	1.0					2	
075	c19v0075	CCB				20-MAR-2007 04:46	1.0	1.0			1	2	
076	c19v0076	X				20-MAR-2007 04:51	1.0					2	
077	c19v0077	SAMPLE	193335-001	123055	Filtra	20-MAR-2007 04:57	5.0	1.0	1		1	2	
078	c19v0078	BS	QC379371	123147	Soil	20-MAR-2007 05:02	50.0	50.0	1	1	1	2	
079	c19v0079	ICSA				20-MAR-2007 05:08	1.0	1.0			1	10 2	7:CA=303000
080	c19v0080	ICSAB				20-MAR-2007 05:13	1.0	1.0			1	11 2	8:CA=292800
081	c19v0081	X	RINSE			20-MAR-2007 05:19	1.0					2	
082	c19v0082	X	RINSE			20-MAR-2007 05:24	1.0					2	
083	c19v0083	X	RINSE			20-MAR-2007 05:30	1.0					2	
084	c19v0084	X	RINSE			20-MAR-2007 05:35	1.0					2	
085	c19v0085	BSD	QC379372	123147	Soil	20-MAR-2007 05:41	50.0	50.0	1	1	1	2	
086	c19v0086	X	RINSE			20-MAR-2007 05:46	1.0					2	
087	c19v0087	X	RINSE			20-MAR-2007 05:52	1.0					2	
088	c19v0088	X	RINSE			20-MAR-2007 05:58	1.0					2	
089	c19v0089	CCV				20-MAR-2007 06:03	1.0	1.0	1		1	13	
090	c19v0090	X	RINSE			20-MAR-2007 06:08	1.0					2	
091	c19v0091	CCB				20-MAR-2007 06:14	1.0	1.0			1	2	
092	c19v0092	X				20-MAR-2007 06:20	1.0					2	
093	c19v0093	ICSA				20-MAR-2007 06:25	1.0	1.0			1	10 2	7:CA=308700

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
094	c19v0094	ICSAB				20-MAR-2007 06:30	1.0	1.0		1	11 2	9:CA=293000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: [signature] Date: 3/20/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57114423001
Units : ug/L

Date : 20-MAR-2007 11:17
X Axis : R

Reviewer: ---

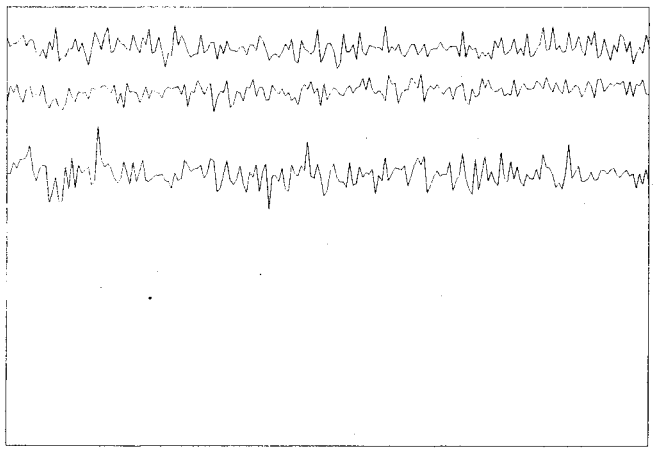
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c2010005	57114423005		20-MAR-2007 11:21	S5647
L2	c2010006	57114423006		20-MAR-2007 11:26	S5648
L3	c2010007	57114423007		20-MAR-2007 11:30	S5649
L4	c2010008	57114423008		20-MAR-2007 11:34	S5650
L5	c2010009	57114423009		20-MAR-2007 11:38	S5644
L6	c2010010	57114423010		20-MAR-2007 11:42	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	0.5176	0.5067	0.4897	0.4444	0.4500	0.4428	BLNK	-0.6028	2.25116		0.4752	1.000	0.995	
Antimony	0.3585	0.3249	0.3196	0.2922	0.2985	0.2970	BLNK	-0.0515	3.36513		0.3151	1.000	0.995	
Arsenic	1.2661	0.8848	0.8660	0.6510	0.6246	0.6047	BLNK	-0.1248	1.64395		0.8162	1.000	0.995	
Barium	0.2141	0.1401	0.1589	0.1140	0.1181	0.1187	BLNK	-0.1080	8.44145		0.1440	1.000	0.995	
Beryllium	0.2789	0.2705	0.2670	0.2653	0.2707	0.2783	BLNK	-0.0088	3.61325		0.2718	1.000	0.995	
Cadmium	1.0975	1.0693	0.9696	0.8462	0.8215	0.7898	BLNK	-0.1089	1.25670		0.9323	1.000	0.995	
Calcium	0.0383	0.0301	0.0270	0.0231	0.0214	0.0209	BLNK	-17.837	47.6721		0.0268	1.000	0.995	
Chromium	21.330	13.510	9.5803	5.7108	5.4027	5.1736	BLNK	-0.7392	0.19243		10.118	1.000	0.995	
Cobalt	5.7861	5.8172	5.7358	5.5170	5.5877	5.3696	BLNK	-0.0054	0.18473		5.6356	1.000	0.995	
Copper	1.8566	1.5733	1.5287	1.3299	1.2873	1.2448	BLNK	-0.0918	0.79826		1.4701	1.000	0.995	
Iron	0.2924	0.2100	0.1758	0.1330	0.1173	0.1135	BLNK	-34.206	8.77056		0.1737	1.000	0.995	
Lead	1.3544	1.2579	1.2452	1.1883	1.2156	1.1952	BLNK	-0.0290	0.83400		1.2428	1.000	0.995	
Magnesium	0.0682	0.0658	0.0648	0.0596	0.0582	0.0576	BLNK	-1.6750	17.3282		0.0624	1.000	0.995	
Manganese	9.2375	8.0218	7.6153	6.7464	6.8130	6.5732	BLNK	-0.0860	0.15111		7.5012	1.000	0.995	
Molybdenum	1.3513	1.3117	1.2014	1.2036	1.2110	1.1880	BLNK	-0.0177	0.83856		1.2445	1.000	0.995	
Nickel	1.7528	1.4680	1.4442	1.2323	1.1980	1.1471	BLNK	-0.1014	0.86452		1.3737	1.000	0.995	
Potassium	3.6671	2.1587	1.4452	0.7607	0.7038	0.6878	BLNK	-106.15	1.45644		1.5705	1.000	0.995	
Selenium	0.0128	0.0830	0.0727	0.0512	0.0499	0.0473	BLNK	0.13750	20.8781		0.0528	0.999	0.995	
Silver	3.5210	3.3845	3.4509	3.5084	3.2815	3.3238	BLNK	-0.0137	0.30161		3.4117	1.000	0.995	
Sodium	2.6919	1.6700	1.1970	0.7266	0.6936	0.6805	BLNK	-72.226	1.47030		1.2766	1.000	0.995	
Thallium	1.0447	0.9711	0.9537	0.8913	0.9228	0.9239	BLNK	-0.0286	1.08306		0.9512	1.000	0.995	
Vanadium	21.200	12.781	9.8566	6.1628	5.4770	5.1935	BLNK	-0.5949	0.19110		10.112	0.999	0.995	
Zinc	3.8351	2.2496	1.6092	0.8795	0.7955	0.7528	BLNK	-0.8574	1.32003		1.6869	0.999	0.995	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Silver	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.1250	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L

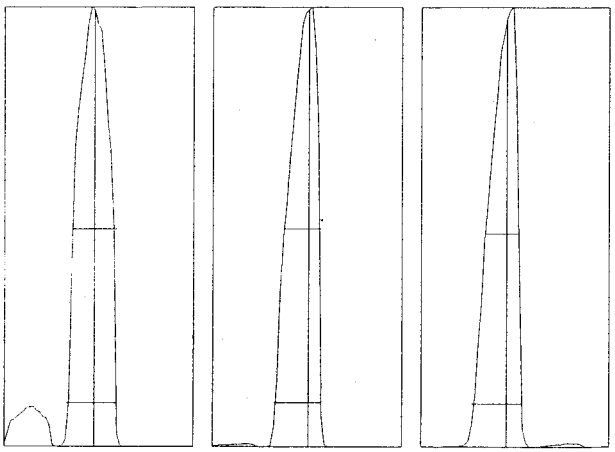
Tune Report

Tune File : nogas.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.372%
Doubly Charged:	70/140	1.570%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	12033.0	12418.8	4.16	28.60
89	20,000	18134.0	18149.4	2.20	13.20
205	20,000	16005.0	16167.2	2.11	11.70
156/140	1	0.384%	0.376%	11.11	
70/140	5	1.429%	1.583%	6.93	



m/z:	7	89	205
Height:	12,869	18,429	15,795
Axis:	6.95	89.05	204.90
W-50%:	0.70	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 20, 2007 10:10:05
Printed : Mar 20, 2007 10:10:07 : 00569

Tune Report

Tune File : nogas.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	-100 V	AMU Gain	:	129
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	125
Smpl Depth	:	5.3 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9987
Torch-H	:	-1.1 mm	Einzel 2	:	7 V	Axis Offset	:	0.07
Torch-V	:	0.9 mm	Omega Bias	:	-70 V	QP Bias	:	-1 V
Carrier Gas	:	1.05 L/min	Omega (+)	:	3 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-3 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	6 V	Discriminator	:	9.2 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-3 V	Analog HV	:	1830 V
Sample Pump	:	--- rps				Pulse HV	:	1380 V
S/C Temp	:	2 degC						

Generated : Mar 20, 2007 10:10:05
Printed : Mar 20, 2007 10:10:10 : 00570

P/A Factor Tuning Report

Acquired:Mar 20 2007 10:22 am

Mass[amu]	Element	P/A Factor
6	Li	0.069651
9	Be	0.080663
23	Na	Sensitivity too high
25	Mg	0.089799
26	Mg	0.088541
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.096618
44	Ca	0.092621
45	Sc	0.098285
51	V	0.091340
52	Cr	0.104038
53	Cr	0.097355
54	Fe	0.098660
55	Mn	0.106660
57	Fe	0.097316
59	Co	0.109297
60	Ni	0.107805
63	Cu	0.111901
65	Cu	0.109749
66	Zn	0.106936
72	Ge	0.103040
75	As	0.104184
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.107339
95	Mo	0.105350
98	Mo	0.107009
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.114078
111	Cd	0.108908
114	Cd	0.113111
115	In	0.114778
118	(In)	Sensitivity too low
121	Sb	0.115078
135	Ba	Sensitivity too low
137	Ba	0.111679
159	Tb	0.118662
166	Er	Sensitivity too low
205	Tl	0.121789
206	(Pb)	0.120017
207	(Pb)	0.119225
208	Pb	0.122756
209	Bi	0.121520

===Detector Parameters===
Discriminator: 9.2 mV
Analog HV: 1830 V
Pulse HV: 1380 V

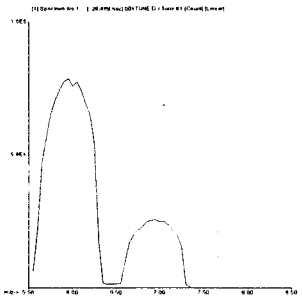
: 00571

6020 QC Tune Report

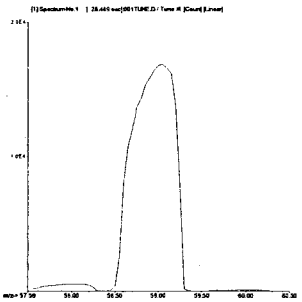
Data File: C:\ICPCHEM\1\DATA\07C20100.B\001TUNE.D
Date Acquired: Mar 20 2007 11:03 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	0.59	5.00	
115 In	0.61	5.00	
205 Tl	1.54	5.00	

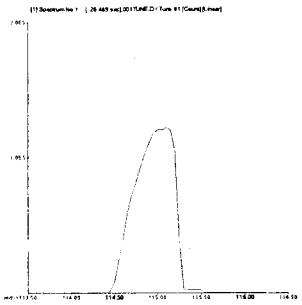


7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

00572



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

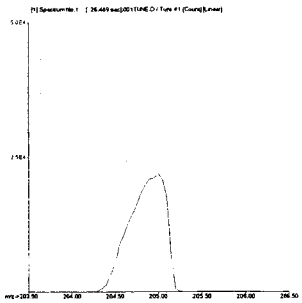
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004C
Date Acquired: Mar 20 2007 11:17 am
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:19 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	781175.88	A	10000.00	1.28
9	Be	37.78	P	16.44	43.52
23	Na	764504.81	A	12260.00	1.60
26	Mg	1504.44	P	18.95	1.26
27	Al	4166.67	P	86.86	2.08
39	K	1134670.00	A	5986.00	0.53
44	Ca	5823.09	P	115.50	1.98
45	Sc	778960.13	M	25370.00	3.26
51	V	7553.17	P	1271.00	16.83
52	Cr	9316.67	P	97.01	1.04
55	Mn	1380.00	P	80.00	5.80
57	Fe	9458.89	P	78.13	0.83
59	Co	71.11	P	18.36	25.82
60	Ni	284.44	P	6.94	2.44
65	Cu	278.88	P	38.92	13.96
66	Zn	1575.33	P	39.85	2.53
72	Ge	121266.20	P	433.60	0.36
75	As	184.56	P	223.60	121.15
82	Se	-16.00	P	22.54	140.88
95	Mo	51.11	P	13.88	27.16
109	Ag	110.00	P	18.56	16.87
111	Cd	210.19	P	35.52	16.90
115	In	1110817.00	A	11350.00	1.02
121	Sb	340.00	P	11.55	3.40
137	Ba	284.44	P	28.35	9.97
205	Tl	553.33	P	81.85	14.79
208	Pb	727.78	P	69.31	9.52
209	Bi	1047465.00	M	5010.00	0.48

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\005CALI.D\005CALI.D#
Date Acquired: Mar 20 2007 11:21 am
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:20 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	784055.88	A	10910.00	1.39
9	Be	1093.33	P	52.39	4.79
23	Na	1028784.00	A	18330.00	1.78
26	Mg	26088.89	P	62.57	0.24
27	Al	197848.91	P	1044.00	0.53
39	K	1401849.00	A	4645.00	0.33
44	Ca	14635.96	P	289.60	1.98
45	Sc	764807.19	M	17930.00	2.34
51	V	12756.50	P	1687.00	13.23
52	Cr	12832.22	P	156.90	1.22
55	Mn	5557.78	P	160.70	2.89
57	Fe	17595.55	P	220.10	1.25
59	Co	3481.11	P	127.00	3.65
60	Ni	1054.44	P	68.50	6.50
65	Cu	1117.66	P	78.19	7.00
66	Zn	2307.78	P	48.91	2.12
72	Ge	120344.90	P	1460.00	1.21
75	As	759.56	P	378.90	49.88
82	Se	7.56	P	23.65	313.01
95	Mo	813.33	P	63.86	7.85
109	Ag	2118.89	P	60.49	2.85
111	Cd	660.05	P	56.93	8.63
115	In	1118557.00	A	7935.00	0.71
121	Sb	2004.44	P	166.80	8.32
137	Ba	1196.67	P	93.87	7.84
205	Tl	2757.78	P	95.82	3.47
208	Pb	7151.11	P	166.50	2.33
209	Bi	1055992.00	M	6749.00	0.64

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	784055.88	1.3915	781175.88	100.37	80 -	120	
45	Sc	764807.25	2.3444	778960.06	98.18	80 -	120	
72	Ge	120344.88	1.2132	121266.22	99.24	80 -	120	
115	In	1118556.8	0.7094	1110817	100.70	80 -	120	
209	Bi	1055992.6	0.6391	1047465.4	100.81	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\006CALI.D\006CALI.D#
Date Acquired: Mar 20 2007 11:26 am
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:24 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	780015.00	A	12360.00	1.58
9 Be	2110.00	P	91.71	4.35
23 Na	1309477.00	A	36300.00	2.77
26 Mg	51582.22	P	593.10	1.15
27 Al	397295.50	P	5360.00	1.35
39 K	1692790.00	A	9673.00	0.57
44 Ca	23622.54	P	463.00	1.96
45 Sc	784153.63	A	4132.00	0.53
51 V	15464.04	P	1667.00	10.78
52 Cr	16354.44	P	384.30	2.35
55 Mn	9710.00	P	18.56	0.19
57 Fe	25422.22	P	298.20	1.17
59 Co	7041.11	P	68.34	0.97
60 Ni	1776.67	P	51.32	2.89
65 Cu	1904.21	P	42.47	2.23
66 Zn	2723.11	P	28.88	1.06
72 Ge	121047.80	P	758.90	0.63
75 As	1070.32	P	165.20	15.44
82 Se	100.22	P	91.69	91.49
95 Mo	1587.78	P	50.48	3.18
109 Ag	4096.67	P	170.60	4.16
111 Cd	1294.26	P	27.74	2.14
115 In	1140839.00	A	6016.00	0.53
121 Sb	3706.67	P	97.01	2.62
137 Ba	1597.78	P	15.75	0.99
205 Tl	5160.00	P	20.82	0.40
208 Pb	13368.89	P	118.80	0.89
209 Bi	1062754.00	M	6506.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	780015.06	1.5846	781175.88	99.85	80 - 120	
45 Sc	784153.63	0.5269	778960.06	100.67	80 - 120	
72 Ge	121047.78	0.6269	121266.22	99.82	80 - 120	
115 In	1140838.9	0.5273	1110817	102.70	80 - 120	
209 Bi	1062753.6	0.6122	1047465.4	101.46	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\007CALI.D\007CALI.D#
Date Acquired: Mar 20 2007 11:30 am
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:28 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	791101.50	A	13110.00	1.66
9 Be	4226.67	P	203.70	4.82
23 Na	1890426.00	A	42500.00	2.25
26 Mg	102391.10	P	3255.00	3.18
27 Al	773194.63	A	19070.00	2.47
39 K	2282124.00	A	10910.00	0.48
44 Ca	42574.04	P	886.20	2.08
45 Sc	789610.81	A	6034.00	0.76
51 V	23912.02	P	547.00	2.29
52 Cr	23240.00	P	171.50	0.74
55 Mn	18473.33	P	213.20	1.15
57 Fe	42648.89	P	477.50	1.12
59 Co	13915.55	P	394.40	2.83
60 Ni	3503.33	P	16.67	0.48
65 Cu	3708.44	P	108.60	2.93
66 Zn	3904.00	P	63.09	1.62
72 Ge	121296.70	P	812.80	0.67
75 As	2101.60	P	217.40	10.35
82 Se	176.22	P	13.68	7.76
95 Mo	2914.44	P	119.50	4.10
109 Ag	8371.11	P	47.18	0.56
111 Cd	2351.44	P	127.00	5.40
115 In	1130002.00	A	14880.00	1.32
121 Sb	7222.22	P	157.80	2.18
137 Ba	3590.00	P	77.67	2.16
205 Tl	10334.44	P	243.20	2.35
208 Pb	26988.89	P	579.00	2.15
209 Bi	1083655.00	A	4545.00	0.42

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	791101.5	1.6572	781175.88	101.27	80 - 120	
45 Sc	789610.75	0.7642	778960.06	101.37	80 - 120	
72 Ge	121296.66	0.6701	121266.22	100.03	80 - 120	
115 In	1130001.5	1.3168	1110817	101.73	80 - 120	
209 Bi	1083654.6	0.4194	1047465.4	103.45	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\008CALI.D\008CALI.D#
Date Acquired: Mar 20 2007 11:34 am
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:32 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	785820.69	A	3548.00	0.45
9 Be	41691.11	P	840.10	2.02
23 Na	11583120.00	A	41980.00	0.36
26 Mg	950620.69	A	12030.00	1.27
27 Al	7084153.00	A	69650.00	0.98
39 K	12127750.00	A	81170.00	0.67
44 Ca	368224.31	P	2582.00	0.70
45 Sc	797117.69	A	7939.00	1.00
51 V	152600.91	P	2542.00	1.67
52 Cr	141423.30	P	1867.00	1.32
55 Mn	167064.41	P	1415.00	0.85
57 Fe	329454.41	P	3820.00	1.16
59 Co	136621.09	P	1493.00	1.09
60 Ni	30516.67	P	349.90	1.15
65 Cu	32930.05	P	50.07	0.15
66 Zn	21779.11	P	179.10	0.82
72 Ge	123822.70	P	1601.00	1.29
75 As	16121.72	P	195.20	1.21
82 Se	1268.44	P	69.10	5.45
95 Mo	29807.78	P	559.80	1.88
109 Ag	86880.00	P	828.60	0.95
111 Cd	20954.65	P	177.80	0.85
115 In	1131929.00	A	19330.00	1.71
121 Sb	66128.89	P	1054.00	1.59
137 Ba	25801.11	P	415.20	1.61
205 Tl	95844.45	P	1460.00	1.52
208 Pb	255551.09	P	1672.00	0.65
209 Bi	1075315.00	M	7627.00	0.71

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	785820.69	0.4515	781175.88	100.59	80 - 120	
45 Sc	797117.69	0.996	778960.06	102.33	80 - 120	
72 Ge	123822.66	1.293	121266.22	102.11	80 - 120	
115 In	1131929.5	1.7077	1110817	101.90	80 - 120	
209 Bi	1075315.1	0.7093	1047465.4	102.66	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\009CALI.D\009CALI.D#
Date Acquired: Mar 20 2007 11:38 am
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:36 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	768136.38	A	8178.00	1.06
9 Be	415833.31	P	4325.00	1.04
23 Na	108220400.00	A	1567000.00	1.45
26 Mg	9075439.00	A	40950.00	0.45
27 Al	70213728.00	A	189200.00	0.27
39 K	109814300.00	A	1517000.00	1.38
44 Ca	3340718.00	A	36460.00	1.09
45 Sc	780180.50	M	5193.00	0.67
51 V	1360217.00	A	22270.00	1.64
52 Cr	1341762.00	A	16030.00	1.19
55 Mn	1692016.00	A	18780.00	1.11
57 Fe	2912170.00	A	24820.00	0.85
59 Co	1387702.00	A	11290.00	0.81
60 Ni	297517.81	P	5603.00	1.88
65 Cu	319709.41	P	1305.00	0.41
66 Zn	197553.09	P	1601.00	0.81
72 Ge	124175.10	P	141.30	0.11
75 As	155123.00	P	387.50	0.25
82 Se	12400.89	P	126.20	1.02
95 Mo	300744.41	P	1360.00	0.45
109 Ag	814962.19	P	1882.00	0.23
111 Cd	204021.70	P	1300.00	0.64
115 In	1092796.00	A	6620.00	0.61
121 Sb	652438.88	P	3733.00	0.57
137 Ba	258115.50	P	1799.00	0.70
205 Tl	957321.13	P	4673.00	0.49
208 Pb	2521965.00	A	19160.00	0.76
209 Bi	1037372.00	P	2663.00	0.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	768136.38	1.0647	781175.88	98.33	80 - 120	
45 Sc	780180.5	0.6656	778960.06	100.16	80 - 120	
72 Ge	124175.12	0.1138	121266.22	102.40	80 - 120	
115 In	1092796.5	0.6058	1110817	98.38	80 - 120	
209 Bi	1037372.2	0.2567	1047465.4	99.04	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\010CALI.D\010CALI.D#
Date Acquired: Mar 20 2007 11:42 am
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:40 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	749446.00	A	3569.00	0.48
9 Be	834331.50	A	15640.00	1.87
23 Na	209139300.00	A	3742000.00	1.79
26 Mg	17701340.00	A	141100.00	0.80
27 Al	136077410.00	A	1875000.00	1.38
39 K	211355600.00	A	1899000.00	0.90
44 Ca	6420798.00	A	25260.00	0.39
45 Sc	768530.13	M	16050.00	2.09
51 V	2567150.00	A	12660.00	0.49
52 Cr	2557214.00	A	35220.00	1.38
55 Mn	3249112.00	A	26890.00	0.83
57 Fe	5608303.00	A	63650.00	1.13
59 Co	2654289.00	A	33550.00	1.26
60 Ni	567030.00	P	2871.00	0.51
65 Cu	615276.69	P	8223.00	1.34
66 Zn	372116.19	P	1957.00	0.53
72 Ge	123580.20	P	773.00	0.63
75 As	298896.19	P	1448.00	0.48
82 Se	23394.00	P	141.50	0.60
95 Mo	587250.00	P	2822.00	0.48
109 Ag	1643016.00	A	5509.00	0.34
111 Cd	390410.69	P	2727.00	0.70
115 In	1053885.00	A	16070.00	1.52
121 Sb	1251624.00	A	922.50	0.07
137 Ba	500148.91	P	1191.00	0.24
205 Tl	1851561.00	A	9277.00	0.50
208 Pb	4790443.00	A	25560.00	0.53
209 Bi	1002023.00	P	5092.00	0.51

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	749446	0.4762	781175.88	95.94	80 - 120	
45 Sc	768530.13	2.0884	778960.06	98.66	80 - 120	
72 Ge	123580.22	0.6255	121266.22	101.91	80 - 120	
115 In	1053884.8	1.5248	1110817	94.87	80 - 120	
209 Bi	1002023.3	0.5082	1047465.4	95.66	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423012 File : c2010012 Time : 20-MAR-2007 11:50
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.4752	0.4502	10000	10130	ug/L	1	10	
Antimony	0.3151	0.3015	100.0	101.4	ug/L	1	10	
Arsenic	0.8162	0.6289	100.0	103.3	ug/L	3	10	
Barium	0.1440	0.1187	100.0	100.1	ug/L	0	10	
Beryllium	0.2718	0.2777	100.0	100.3	ug/L	0	10	
Cadmium	0.9323	0.8247	100.0	103.5	ug/L	4	10	
Calcium	0.0268	0.0214	10000	10170	ug/L	2	10	
Chromium	10.118	5.4357	100.0	103.9	ug/L	4	10	
Cobalt	5.6356	5.6210	100.0	103.8	ug/L	4	10	
Copper	1.4701	1.2931	100.0	103.1	ug/L	3	10	
Iron	0.1737	0.1194	10000	10430	ug/L	4	10	
Lead	1.2428	1.2203	100.0	101.7	ug/L	2	10	
Magnesium	0.0624	0.0584	10000	10130	ug/L	1	10	
Manganese	7.5012	6.9251	100.0	104.6	ug/L	5	10	
Molybdenum	1.2445	1.2122	100.0	101.6	ug/L	2	10	
Nickel	1.3737	1.1936	100.0	103.1	ug/L	3	10	
Potassium	1.5705	0.6936	10000	9995	ug/L	0	10	
Selenium	0.0528	0.0510	100.0	106.5	ug/L	7	10	
Silver	3.4117	3.2349	100.0	97.56	ug/L	-2	10	
Sodium	1.2766	0.6951	10000	10150	ug/L	2	10	
Thallium	0.9512	0.9186	50.00	49.72	ug/L	-1	10	
Vanadium	10.112	5.4672	100.0	103.9	ug/L	4	10	
Zinc	1.6869	0.8000	100.0	104.7	ug/L	5	10	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	803790	2.89
Scandium	778960	856114	9.90
Germanium	121266	133336	9.95
Indium	1110817	1159904	4.42
Bismuth	1047465	1107876	5.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423033 File : c2010033 Time : 20-MAR-2007 13:18
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.4752	0.4464	10000	10050	ug/L	1	10	
Antimony	0.3151	0.3038	100.0	102.2	ug/L	2	10	
Arsenic	0.8162	0.6210	100.0	102.0	ug/L	2	10	
Barium	0.1440	0.1212	100.0	102.2	ug/L	2	10	
Beryllium	0.2718	0.2701	100.0	97.60	ug/L	-2	10	
Cadmium	0.9323	0.8614	100.0	108.1	ug/L	8	10	
Calcium	0.0268	0.0215	10000	10220	ug/L	2	10	
Chromium	10.118	5.5635	100.0	106.3	ug/L	6	10	
Cobalt	5.6356	5.7429	100.0	106.1	ug/L	6	10	
Copper	1.4701	1.3038	100.0	104.0	ug/L	4	10	
Iron	0.1737	0.1214	10000	10620	ug/L	6	10	
Lead	1.2428	1.2179	100.0	101.5	ug/L	2	10	
Magnesium	0.0624	0.0576	10000	9983	ug/L	0	10	
Manganese	7.5012	7.0267	100.0	106.1	ug/L	6	10	
Molybdenum	1.2445	1.2242	100.0	102.6	ug/L	3	10	
Nickel	1.3737	1.2147	100.0	104.9	ug/L	5	10	
Potassium	1.5705	0.7004	10000	10090	ug/L	1	10	
Selenium	0.0528	0.0505	100.0	105.5	ug/L	6	10	
Silver	3.4117	3.3559	100.0	101.2	ug/L	1	10	
Sodium	1.2766	0.6934	10000	10120	ug/L	1	10	
Thallium	0.9512	0.9223	50.00	49.92	ug/L	0	10	
Vanadium	10.112	5.6422	100.0	107.2	ug/L	7	10	
Zinc	1.6869	0.8106	100.0	106.1	ug/L	6	10	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	831632	6.46
Scandium	778960	824301	5.82
Germanium	121266	126705	4.49
Indium	1110817	1139491	2.58
Bismuth	1047465	1136871	8.54

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423015 File : c2010015 Time : 20-MAR-2007 12:03
Cal : 57114423001 Caldate: 20-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04089]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.08918]	0.2500	0.007794	ug/L	!ib
Barium	[0.006236]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01325]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.01178]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.04021]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1898]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	802736	2.76
Scandium	778960	813538	4.44
Germanium	121266	123360	1.73
Indium	1110817	1149422	3.48
Bismuth	1047465	1097185	4.75

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423035 File : c2010035 Time : 20-MAR-2007 13:27
Cal : 57114423001 Caldate: 20-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03131]	0.2500	0.01065	ug/L	!ib
Arsenic	ND	0.2500	0.007794	ug/L	
Barium	[0.04197]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01923]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.009328]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.01352]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	823605	5.43
Scandium	778960	788778	1.26
Germanium	121266	117557	-3.06
Indium	1110817	1147290	3.28
Bismuth	1047465	1111990	6.16

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423017 File : c2010017 Time : 20-MAR-2007 12:11
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1203]	0.2500	ug/L	
Arsenic	[0]	0.2500	ug/L	
Barium	1.083	0.2500	ug/L	
Beryllium	[0.02861]	0.2500	ug/L	
Cadmium	[0.07026]	0.2500	ug/L	
Chromium	1.244	0.2500	ug/L	
Cobalt	0.4839	0.2500	ug/L	
Copper	1.926	0.2500	ug/L	
Lead	0.5436	0.2500	ug/L	
Manganese	0.5973	0.2500	ug/L	
Nickel	2.542	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2464]	0.2500	ug/L	
Thallium	[0.03387]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	2.176	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	100700	ug/L	101
Calcium	300000	310600	ug/L	104
Iron	250000	223800	ug/L	90
Magnesium	100000	101400	ug/L	101
Molybdenum	2000	1775	ug/L	89
Potassium	100000	98200	ug/L	98
Sodium	250000	238000	ug/L	95

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	677132	-13.32
Scandium	778960	741869	-4.76
Germanium	121266	137047	13.01
Indium	1110817	1009025	-9.16
Bismuth	1047465	836613	-20.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423020 File : c2010020 Time : 20-MAR-2007 12:23
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	96810	ug/L	-3		
Arsenic	100.0	93.34	ug/L	-7	20	
Cadmium	100.0	87.94	ug/L	-12	20	
Calcium	300000	302300	ug/L	1		
Chromium	200.0	196.6	ug/L	-2	20	
Cobalt	200.0	189.0	ug/L	-6	20	
Copper	200.0	178.1	ug/L	-11	20	
Iron	250000	218100	ug/L	-13		
Magnesium	100000	96320	ug/L	-4		
Manganese	200.0	193.8	ug/L	-3	20	
Molybdenum	2000	1757	ug/L	-12		
Nickel	200.0	185.9	ug/L	-7	20	
Potassium	100000	96030	ug/L	-4		
Selenium	100.0	75.86	ug/L	**-24**	20	ab- ***
Silver	50.00	38.81	ug/L	**-22**	20	ab- ***
Sodium	250000	226700	ug/L	-9		
Vanadium	200.0	200.5	ug/L	0	20	
Zinc	100.0	84.86	ug/L	-15	20	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Scandium	778960	729093	-6.40
Germanium	121266	134199	10.66

-=low bias ab=ICSAB

57114423020

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423037 File : c2010037 Time : 20-MAR-2007 13:36
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.08833]	0.2500	ug/L	
Arsenic	[0]	0.2500	ug/L	
Barium	1.121	0.2500	ug/L	
Beryllium	[0.03481]	0.2500	ug/L	
Cadmium	[0.1211]	0.2500	ug/L	
Chromium	1.264	0.2500	ug/L	
Cobalt	0.4781	0.2500	ug/L	
Copper	1.981	0.2500	ug/L	
Lead	0.5517	0.2500	ug/L	
Manganese	0.5990	0.2500	ug/L	
Nickel	2.590	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1918]	0.2500	ug/L	
Thallium	[0.04035]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	2.158	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101200	ug/L	101
Calcium	300000	309500	ug/L	103
Iron	250000	224100	ug/L	90
Magnesium	100000	101400	ug/L	101
Molybdenum	2000	1760	ug/L	88
Potassium	100000	98070	ug/L	98
Sodium	250000	239000	ug/L	96

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	681646	-12.74
Scandium	778960	739386	-5.08
Germanium	121266	136261	12.37
Indium	1110817	1012006	-8.90
Bismuth	1047465	850890	-18.77

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423038 File : c2010038 Time : 20-MAR-2007 13:40
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98110	ug/L	-2		
Arsenic	100.0	92.99	ug/L	-7	20	
Cadmium	100.0	88.03	ug/L	-12	20	
Calcium	300000	300600	ug/L	0		
Chromium	200.0	200.0	ug/L	0	20	
Cobalt	200.0	190.1	ug/L	-5	20	
Copper	200.0	177.9	ug/L	-11	20	
Iron	250000	220500	ug/L	-12		
Magnesium	100000	97020	ug/L	-3		
Manganese	200.0	195.7	ug/L	-2	20	
Molybdenum	2000	1736	ug/L	-13		
Nickel	200.0	186.1	ug/L	-7	20	
Potassium	100000	96130	ug/L	-4		
Selenium	100.0	74.90	ug/L	**-25**	20	ab- ***
Silver	50.00	38.63	ug/L	**-23**	20	ab- ***
Sodium	250000	230700	ug/L	-8		
Vanadium	200.0	202.0	ug/L	1	20	
Zinc	100.0	85.19	ug/L	-15	20	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Scandium	778960	713159	-8.45
Germanium	121266	130777	7.84

-=low bias ab=ICSAB

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57114423

Date : 03/20/07 Reference: c2010004
Sequence : MET05 c2010 Analyzed : 03/20/07 11:17

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	781176	778960	121266	1110817	1047465
		LOWER LIMIT	234353	233688	36380	333245	314240
		UPPER LIMIT	937411	934752	145519	1332980	1256958
015	ICB		802736	813538	123360	1149422	1097185
017	ICSA		677132	741869	137047	1009025	836613
020	ICSAB		670589	729093	134199	1014107	868931
025	SER	QC379179	807060	798766	123582	1158275	1128270
026	SAMPLE	193262-021	711043	685404	117431	895297	800450
027	SAMPLE	193277-001	791551	754998	122954	1043919	957098
028	BS	QC379371	775261	737517	114579	1067609	1025945
029	BSD	QC379372	765139	744894	113408	1050021	1009047
033	CCV		831632	824301	126705	1139491	1136871
035	CCB		823605	788778	117557	1147290	1111990
037	ICSA		681646	739386	136261	1012006	850890
038	ICSAB		667216	713159	130777	986510	849654

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57114423 Instrument: MET05 Agilent ICP-MS Begun: 20-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c2010001	TUN				20-MAR-2007 11:03	1.0	1.0				1	
002	c2010002	X	RINSE			20-MAR-2007 11:09	1.0					2	
003	c2010003	X	RINSE			20-MAR-2007 11:13	1.0					2	
004	c2010004	ICALBLK	CALBLANK			20-MAR-2007 11:17	1.0	1.0				2	
005	c2010005	ICAL				20-MAR-2007 11:21	1.0	1.0				3	
006	c2010006	ICAL				20-MAR-2007 11:26	1.0	1.0				4	
007	c2010007	ICAL				20-MAR-2007 11:30	1.0	1.0				5	
008	c2010008	ICAL				20-MAR-2007 11:34	1.0	1.0				6	
009	c2010009	ICAL				20-MAR-2007 11:38	1.0	1.0				7	
010	c2010010	ICAL				20-MAR-2007 11:42	1.0	1.0				8	
011	c2010011	X	RINSE			20-MAR-2007 11:46	1.0					2	
012	c2010012	ICV				20-MAR-2007 11:50	1.0	1.0			1	9	
013	c2010013	X	RINSE			20-MAR-2007 11:54	1.0					2	
014	c2010014	X				20-MAR-2007 11:58	1.0					2	
015	c2010015	ICB				20-MAR-2007 12:03	1.0	1.0			1	2	
016	c2010016	X				20-MAR-2007 12:07	1.0					2	
017	c2010017	ICSA				20-MAR-2007 12:11	1.0	1.0			1	10 2	7:CA=310600
018	c2010018	X				20-MAR-2007 12:15	1.0					11 2	
019	c2010019	X	RINSE			20-MAR-2007 12:19	1.0					2	
020	c2010020	ICSAB				20-MAR-2007 12:23	1.0	1.0	2		1	11 2	8:CA=302300
021	c2010021	X	RINSE			20-MAR-2007 12:27	1.0					2	
022	c2010022	X	RINSE			20-MAR-2007 12:32	1.0					2	
023	c2010023	X	RINSE			20-MAR-2007 12:36	1.0					2	
024	c2010024	X	RINSE			20-MAR-2007 12:40	1.0					2	
025	c2010025	SER	QC379179	123098	Filtra	20-MAR-2007 12:44	50.0	1.0	2	1	1	2	
026	c2010026	SAMPLE	193262-021	123055	Water	20-MAR-2007 12:48	1.0	1.0	1		1	2	4:NA=259300
027	c2010027	SAMPLE	193277-001	123055	Filtra	20-MAR-2007 12:52	1.0	1.0	2		1	2	
028	c2010028	BS	QC379371	123147	Soil	20-MAR-2007 12:57	5.0	50.0	2		1	2	
029	c2010029	BSD	QC379372	123147	Soil	20-MAR-2007 13:01	5.0	50.0	2		1	2	
030	c2010030	X	RINSE			20-MAR-2007 13:05	1.0					2	
031	c2010031	X	RINSE			20-MAR-2007 13:10	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57114423 Instrument: MET05 Agilent ICP-MS Begun: 20-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c2010032	X	RINSE			20-MAR-2007 13:14	1.0					2	
033	c2010033	CCV				20-MAR-2007 13:18	1.0	1.0			1	12 2	
034	c2010034	X	RINSE			20-MAR-2007 13:22	1.0					2	
035	c2010035	CCB				20-MAR-2007 13:27	1.0	1.0			1	2	
036	c2010036	X				20-MAR-2007 13:31	1.0					2	
037	c2010037	ICSA				20-MAR-2007 13:36	1.0	1.0			1	10 2	7:CA=309500
038	c2010038	ICSAB				20-MAR-2007 13:40	1.0	1.0	2		1	11 2	8:CA=300600

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/20/07

16566

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193262 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	HARD	AS	CD	CA	CR	CU	PB	MG	HG	MO	NI	AG	ZN
193262-019	MET08	03/09/07 17:49	1.0										+			
193262-019	MET09	03/11/07 15:32	5.0				+				+					
193262-020	MET08	03/09/07 17:51	1.0				+				+		+			
193262-021	MET04	03/14/07 18:21	1.0									+				
193262-021	MET06	03/20/07 03:45	10.0		+	+		+	+	+				+	+	
193262-021	MET05	03/20/07 12:48	1.0													+
QC378380	MET08	03/09/07 16:52	1.0		+		+	+		+	+		+	+		+
QC378381	MET08	03/09/07 16:56	1.0		+		+	+		+	+		+	+		+
QC378382	MET08	03/09/07 16:58	1.0		+		+	+		+	+		+	+		+
QC378383	MET08	03/09/07 17:04	1.0		+		+	+		+	+		+	+		+
QC378384	MET08	03/09/07 17:06	1.0		+		+	+		+	+		+	+		+
QC378385	MET08	03/09/07 17:08	5.0		+		+	+		+	+		+	+		+
QC378386	MET08	03/09/07 17:12	1.0		+	+	+	+	+	+	+		+	+	+	+
QC378982	MET06	03/16/07 16:14	1.0		+	+		+	+	+	+		+	+	+	+
QC378982	MET05	03/19/07 15:29	1.0				+									
QC378982	MET05	03/19/07 15:53	1.0													
QC378983	MET06	03/16/07 16:20	1.0		+	+	+	+	+	+	+		+	+	+	+
QC378984	MET06	03/16/07 16:26	1.0		+	+	+	+	+	+	+		+	+	+	+
QC378985	MET06	03/16/07 16:48	10.0		+	+	+	+	+	+	+		+	+	+	+
QC378985	MET05	03/19/07 16:14	1.0													
QC378986	MET06	03/16/07 16:54	10.0		+	+	+	+	+	+	+		+	+	+	+
QC378986	MET05	03/19/07 16:19	1.0													
QC378987	MET06	03/16/07 16:43	50.0		+	+		+	+	+	+		+	+	+	+
QC378987	MET05	03/19/07 19:29	5.0				+									
QC378988	MET06	03/16/07 16:59	10.0		+	+	+	+	+	+	+		+	+	+	+
QC378988	MET05	03/19/07 16:57	1.0													
QC379253	MET04	03/14/07 17:26	1.0									+				
QC379254	MET04	03/14/07 17:28	1.0									+				

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193262 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	HARD	AS	CD	CA	CR	CU	PB	MG	HG	MO	NI	AG	ZN	
QC379255	MET04	03/14/07 17:31	1.0									+					
QC379256	MET04	03/14/07 17:33	1.0									+					
QC379257	MET04	03/14/07 17:37	5.0									+					
QC379258	MET04	03/14/07 17:39	1.0									+					
QC379259	MET04	03/14/07 17:41	1.0									+					
QC379260	MET04	03/14/07 17:46	5.0									+					
QC379261	MET04	03/14/07 17:52	1.0									+					
QC379262	MET04	03/14/07 17:54	1.0									+					

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193262 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
193262-001	MET06	03/17/07 09:15	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193262-001	MET05	03/19/07 18:05	1.0																							
193262-002	MET06	03/17/07 10:26	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193262-002	MET14	03/20/07 14:27	1.0															+								
193262-003	MET06	03/17/07 10:32	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+
193262-003	MET05	03/19/07 18:14	20.0																+							
193262-004	MET06	03/17/07 10:37	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-004	MET05	03/19/07 18:26	1.0																							+
193262-005	MET06	03/17/07 10:43	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193262-006	MET06	03/17/07 10:48	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	
193262-006	MET05	03/19/07 19:20	1.0																							+
193262-007	MET06	03/17/07 10:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	
193262-007	MET05	03/19/07 19:33	1.0																							+
193262-007	MET14	03/20/07 14:46	1.0															+								
193262-008	MET06	03/17/07 11:44	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-008	MET05	03/19/07 18:30	1.0																							+
193262-010	MET06	03/17/07 11:49	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193262-011	MET06	03/17/07 12:28	10.0		+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-011	MET05	03/19/07 18:18	1.0	+																						+
193262-012	MET06	03/17/07 12:34	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-012	MET05	03/19/07 18:35	1.0																							+
193262-013	MET06	03/17/07 12:39	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193262-014	MET06	03/17/07 12:45	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-014	MET05	03/19/07 19:12	1.0																							+
193262-015	MET06	03/17/07 12:50	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	+
193262-016	MET06	03/17/07 12:56	10.0	+	+	+			+	+	+		+	+	+	+	+		+	+			+		+	
193262-016	MET05	03/19/07 19:16	1.0																							+
193262-017	MET06	03/17/07 13:45	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
193262-017	MET14	03/20/07 14:49	1.0															+								
193262-018	MET06	03/17/07 13:51	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	
193262-018	MET05	03/19/07 19:37	1.0																							+
193262-018	MET14	03/20/07 14:51	1.0															+								

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193262 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALS	BAS	BAE	CDA	CAR	COU	FEB	PBG	MNG	HGI	KE	SAG	NAL	TV	ZN
193262-019	MET06	03/17/07 13:56	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
193262-019	MET14	03/20/07 14:53	1.0											+										
193262-020	MET06	03/17/07 14:02	10.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+	+	+	+	
193262-020	MET05	03/19/07 18:22	1.0							+						+										+
193262-020	MET14	03/20/07 14:55	1.0															+								
QC379174	MET06	03/17/07 08:52	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379175	MET06	03/17/07 08:57	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379176	MET06	03/17/07 09:03	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379177	MET06	03/17/07 10:10	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379178	MET06	03/17/07 10:15	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC379179	MET06	03/17/07 10:05	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC379179	MET05	03/19/07 18:09	5.0																							
QC379179	MET05	03/20/07 12:44	50.0																				+			
QC379180	MET06	03/17/07 10:21	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC380038	MET14	03/20/07 14:18	1.0											+										
QC380039	MET14	03/20/07 14:20	1.0											+										
QC380040	MET14	03/20/07 14:23	1.0											+										
QC380041	MET14	03/20/07 14:25	1.0											+										
QC380042	MET14	03/20/07 14:29	5.0											+										
QC380043	MET14	03/20/07 14:31	1.0											+										
QC380044	MET14	03/20/07 14:34	1.0											+										
QC380045	MET14	03/20/07 14:38	1.0											+										
QC380046	MET14	03/20/07 14:44	1.0											+										

Curtis & Tompkins Laboratories Sample Preparation Summary 11-MAR-2007 11:19

Batch Number : 122912
Date Extracted: 09-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 3010A

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4884
Spike #2 ID : S4885
Spike #3 ID :
SOP Version : 3010A_ICP_rv8

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193241-001			Stellar Environmental Solution	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193262-019			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193262-020			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
193263-001			Brenntag	Water	50	mL	50	1.000000	1					CR, CU, NI, PB, ZN		
193264-001			Brenntag	Water	50	mL	50	1.000000	1					CR, CU, NI, PB, ZN		
193267-001			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-002			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-003			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-004			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-005			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-006			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-007			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193267-008			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193272-002			LFR Levine Fricke	Water	50	mL	50	1.000000	1					CR, PB		
193272-003			LFR Levine Fricke	Water	50	mL	50	1.000000	1					CD, CR, NI, PB, ZN		
193272-004			LFR Levine Fricke	Water	50	mL	50	1.000000	1					CD, CR, NI, PB, ZN		
193273-001			Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193273-024			Presidio Trust	Water	50	mL	50	1.000000	1					PB		
193277-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HARDNESS, MO		
QC378380	BLANK			Water	50	mL	50	1.000000	1					ICAP		
QC378381	BS			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378382	BSD			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378383	MS	of 193273-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378384	MSD	of 193273-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378385	SER	of 193273-001		Water	50	mL	50	1.000000	1					ICAP		
QC378386	PDS	of 193273-001		Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist: For KDG Reviewed By: Date: 3/11/07

Relinquished By: Received By: Date: 3/11/07

00596

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 122912
Date Digested: 3/9/07
Digested by: KLA

Digestion Method
- ☐ EPA 3010a for ICP
- ☐ EPA 200.7
- ☐ _____

BK 2471
Page 9
Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
BS				
BSD				
MS -01A				
MSD-01				
— K3273-01				
24				
— 277-01B				
— 272-02D				
03E				
04				
— 262-19G				
20				
— 263-01A				
— 264-01				
241-01				FILTERED IN LAB
267-01G				
02				
03				
04				
05				
06				
07				
08				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/9
.5 mL of spike solution was added to all spikes	54884	
	54885	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	CH49025 PARKER	
1:1 HCl added to all samples	CH6039 027H07	
☐ filtered thru' Whatman # 541		

Prep Chemist Signature / Date: 3/9/07

Reviewer Signature / Date: 3/11/07

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:02

Batch Number : 123055
Date Extracted: 13-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193244-001			CH2M Hill	Water	50	mL	50	1.000000	1					TAL/ICP		
193262-021			Treadwell & Rollo	Water	50	mL	50	1.000000	1					AG, AS, CD, (more)		
193277-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193330-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193335-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
193338-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC378982	BLANK			Water	50	mL	50	1.000000	1					ICAP		
QC378983	BS			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378984	BSD			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378985	MS	of 193244-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378986	MSD	of 193244-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378987	SER	of 193244-001		Water	50	mL	50	1.000000	1					ICAP		
QC378988	PDS	of 193244-001		Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [illegible] 3/13/07 Reviewed By: [illegible] Date: 3/14/07

Relinquished By: [illegible] 3/13/07 Received By: [illegible] Date: 3/14/07

00598

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 123055
Date Digested: 3/13/07
Digested by: KLA

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
Page 84
Continued From: /
Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS-01A				
MSD-01				
193244-01				
277-01B				FIELD FILTERED
262-21B				
330-01B				FIELD FILTERED
-02				
-03				
-04				
-05				
-06				
-07				
-08				
335-01-1				
338-01G				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 3/13
.5 mL of spike solution was added to all spikes	55054	
	55055	
concentrated HCl	233036 BAKER	
concentrated HNO3	CH9029	
☐ filtered thru' Whatman # 541		

KLA 3/13/07
Prep Chemist Signature / Date

3/13/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 12:24

Batch Number : 123098
Date Extracted: 14-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193262-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
193262-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
193262-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
QC379174	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC379175	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC379176	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC379177	MS	of 193262-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC379178	MSD	of 193262-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC379179	SER	of 193262-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC379180	PDS	of 193262-001		Filtrate	50	mL	50	1.000000	1				ICAP		

Prep Chemist: [illegible] 3/14/07 Reviewed By: [illegible] Date: 3/16/07

Relinquished By: [illegible] 3/14/07 Received By: [illegible] Date: 3/14/07

00500

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 123098
Date Digested: 3/14/07
Digested by: [illegible]

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Continued From: /
Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
BS				
BSD				
MS-01A				FIELD FILTERED.
MSD-01				
193262-01				
02 F				
03 F				
04				
05				
06A				
07				
08 E				
10 I				
11 F				
12				
13				
14G				
15				
16 F				
17 H				
18 I				
19				
20 L				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	[illegible] 3/14
.5 mL of spike solution was added to all spikes	S5054	
	S5055	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

[illegible] 3/14/07
Prep Chemist Signature / Date

[illegible] 3/14/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

t : MET04
num : 47106147001
ts : ug/L

Date : 14-MAR-2007 17:07
X Axis : R

Reviewer: ---
Type : WATER

l	File	Seqnum	Sample ID	Analyzed	Stds
	123115	47106147002	STD02REP1	14-MAR-2007 17:10	S5707 (500X)
	123115	47106147003	STD03REP1	14-MAR-2007 17:12	S5707 (200X)
	123115	47106147004	STD04REP1	14-MAR-2007 17:14	S5707 (50X)
	123115	47106147005	STD05REP1	14-MAR-2007 17:16	S5707 (20X)
	123115	47106147006	STD06REP1	14-MAR-2007 17:19	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
cury	4000.0	2894.0	2522.5	2487.2	2323.2	LINR	-0.1628	4.32E-4		2845.4	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
cury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

00502

trument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47106147001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 031407a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.32460e-4

C -1.62778e-1

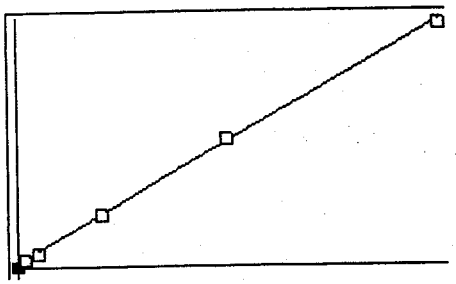
Rho .999572

Type

µ Abs.
23232

Accepted

New



Include S1 Rep 1

14-Mar-07 17:19 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.065	-.065	228	1	227		
02	.20000	.183	-.017	800	0%	800		
03	.50000	.463	-.037	1448	0%	1447		
04	2.0000	2.02	.019	5046	0%	5045		
05	5.0000	5.22	.215	12436	0%	12436		
06	10.000	9.88	-.116	23233	0%	23232		

Ready NUM SCRL

Folder: 031407a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	17:07:51 14 Mar 07	HG		
Hg	.000	ppb	227					
		Bkgd 1	15636530					
*** Standard: 2 Rep: 1				Seq: 2	17:10:00 14 Mar 07	HG		
Hg	.200	ppb	800					
		Bkgd 1	15632746					
*** Standard: 3 Rep: 1				Seq: 3	17:12:08 14 Mar 07	HG		
Hg	.500	ppb	1447					
		Bkgd 1	15626365					
*** Standard: 4 Rep: 1				Seq: 4	17:14:13 14 Mar 07	HG		
Hg	2.00	ppb	5045					
		Bkgd 1	15625144					
*** Standard: 5 Rep: 1				Seq: 5	17:16:54 14 Mar 07	HG		
Hg	5.00	ppb	12436					
		Bkgd 1	15629616					
*** Standard: 6 Rep: 1				Seq: 6	17:19:13 14 Mar 07	HG		
Hg	10.0	ppb	23232					
		Bkgd 1	15638879					
*** Check Standard: 2			Ck2S5709	Seq: 7	17:21:21 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			12441					
		Bkgd 1	15649864					
*** Check Standard: 1			Ck1ICB	Seq: 8	17:23:35 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			222					
		Bkgd 1	15651598					
*** Sample ID: qc379253			123115,1	Seq: 9	17:26:06 14 Mar 07	HG		
Hg	-.041	ppb	281					
		Bkgd 1	15647189					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

uence: 47106147 Instrument: MET04 HydraAA HG Analyzer Begun: 14-MAR-2007
ytical Method: EPA 7470A SOP Version: HG_water_rv7
lyte: Mercury

lename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
23115	ICALBLK	STD01REP1				14-MAR-2007 17:07	1.0	1.0									
23115	ICAL	STD02REP1				14-MAR-2007 17:10	1.0	1.0									
23115	ICAL	STD03REP1				14-MAR-2007 17:12	1.0	1.0									
23115	ICAL	STD04REP1				14-MAR-2007 17:14	1.0	1.0									
23115	ICAL	STD05REP1				14-MAR-2007 17:16	1.0	1.0									
23115	ICAL	STD06REP1				14-MAR-2007 17:19	1.0	1.0									
23115	ICV					14-MAR-2007 17:21	1.0	1.0	2	5.000	47106147001	5.220		ug/L	104		
23115	ICB					14-MAR-2007 17:23	1.0	1.0			47106147001	ND	0.20	ug/L			
23115	BLANK	QC379253		123115	Water	14-MAR-2007 17:26	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	BLANK	QC379254		123115	TCLP L	14-MAR-2007 17:28	1.0	5.0			47106147001	ND	1.0	ug/L			u
23115	BS	QC379255		123115	Water	14-MAR-2007 17:31	1.0	1.0		5.000	47106147001	5.310	0.20	ug/L	106		u
23115	BSD	QC379256		123115	Water	14-MAR-2007 17:33	1.0	1.0		5.000	47106147001	5.210	0.20	ug/L	104	2	u
23115	MSS	193217-011		123115	Filtra	14-MAR-2007 17:35	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SER	QC379257	193217-011	123115	Filtra	14-MAR-2007 17:37	5.0	1.0			47106147001	ND	1.0	ug/L		--	u
23115	MS	QC379258	193217-011	123115	Filtra	14-MAR-2007 17:39	1.0	1.0		5.000	47106147001	5.320	0.20	ug/L	106		u
23115	MSD	QC379259	193217-011	123115	Filtra	14-MAR-2007 17:41	1.0	1.0		5.000	47106147001	5.470	0.20	ug/L	109	3	u
23115	MSS	193323-001		123115	TCLP L	14-MAR-2007 17:44	1.0	5.0			47106147001	ND	2.0	ug/L			u
23115	SER	QC379260	193323-001	123115	TCLP L	14-MAR-2007 17:46	5.0	5.0			47106147001	ND	5.0	ug/L		--	u
23115	CCV					14-MAR-2007 17:48	1.0	1.0	3	2.500	47106147001	2.660		ug/L	106		
23115	CCB					14-MAR-2007 17:50	1.0	1.0			47106147001	ND	0.20	ug/L			
23115	MS	QC379261	193323-001	123115	TCLP L	14-MAR-2007 17:52	1.0	5.0		25.00	47106147001	26.45	1.0	ug/L	106		u
23115	MSD	QC379262	193323-001	123115	TCLP L	14-MAR-2007 17:54	1.0	5.0		25.00	47106147001	26.40	1.0	ug/L	106	0	u
23115	SAMPLE	193176-001		123115	Water	14-MAR-2007 17:56	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193217-012		123115	Filtra	14-MAR-2007 17:59	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193217-014		123115	Filtra	14-MAR-2007 18:01	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193217-015		123115	Filtra	14-MAR-2007 18:03	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193217-016		123115	Filtra	14-MAR-2007 18:05	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193217-017		123115	Filtra	14-MAR-2007 18:07	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193219-001		123115	Water	14-MAR-2007 18:10	1.0	1.0			47106147001	0.49	0.20	ug/L			u
23115	SAMPLE	193233-002		123115	Filtra	14-MAR-2007 18:12	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	CCV					14-MAR-2007 18:14	1.0	1.0	4	5.000	47106147001	5.570		ug/L	111		
23115	CCB					14-MAR-2007 18:16	1.0	1.0			47106147001	ND	0.20	ug/L			
23115	SAMPLE	193233-003		123115	Filtra	14-MAR-2007 18:19	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193262-021		123115	Water	14-MAR-2007 18:21	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193274-002		123115	Filtra	14-MAR-2007 18:23	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193274-003		123115	Filtra	14-MAR-2007 18:25	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193274-004		123115	Filtra	14-MAR-2007 18:27	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193277-001		123115	Filtra	14-MAR-2007 18:30	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193319-001		123115	Water	14-MAR-2007 18:32	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	SAMPLE	193338-001		123115	Filtra	14-MAR-2007 18:34	1.0	1.0			47106147001	ND	0.20	ug/L			u
23115	CCV					14-MAR-2007 18:36	1.0	1.0	5	7.500	47106147001	8.090		ug/L	108		
23115	CCB					14-MAR-2007 18:38	1.0	1.0			47106147001	ND	0.20	ug/L			

used: 1=S5707 2=S5709 3=S5710 4=S5711 5=S5712
used: u=use

alyst: Date: 3/14/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **14-MAR-2007 17:12**

atch Number : 123115
ate Extracted: 14-MAR-2007
xtracted by : Zachary Abbott
rep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

ple	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
176-001			Polymatrix	Water	50	mL	50	1.000000	1					HG		
217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
219-001			Acme Fill Corp.	Water	50	mL	50	1.000000	1					HG		
233-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
233-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
262-021			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
274-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
274-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
274-004			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
277-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
319-001			Ward Construction	Water	50	mL	50	1.000000	1					T26/HG		
323-001			CH2M Hill Constructors Inc.	TCLP Leach	10	mL	50	5.000000	1					T26/HG		
338-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
79253	BLANK			Water	50	mL	50	1.000000	1					HG		
79254	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
79255	BS			Water	50	mL	50	1.000000	1		2.5			HG		
79256	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
79257	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
79258	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
79259	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
79260	SER	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		
79261	MS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
79262	MSD	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
79263	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
79264	PDS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		

Prep Chemist: 3/14/07 Reviewed By: Date: 3/14/07

Relinquished By: 3/14/07 Received By: Date: 3/14/07

Curtis & Tompkins, Ltd.

Water Digestion for Mercury

LIMS Batch #: 123115
Date Digested: 3/14/07
Digested by: ZA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

BK 2452
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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193176-001	A	50	50		water
193217-011 MSS	Y				Filtrate (F.F.)
-012	I				
-014	B				
-015	G				
-016	F				
-017	F				
193219-001	J				water
193233-002	L				Filtrate
-003	K				
193262-021	B				water
193277-001	S				Filtrate
193319-001	D				water
193323-001 MSS		10			TCLP leachate
193274-002	D	50			Filtrate (F.F.)
-003					
-004					
193338-001	G				
Blank					water
Blank		10			TCLP leachate
BS/BSD		50			water
ms 193217-011	Y				Filtrate (F.F.)
msD					
ms 193323-001		10			TCLP leachate
msD					

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	SS707	Za 3/14/07
ICAL Source WS#	SS707	
ICV / CCV WS#	SS707/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	12:00 / 95°C	
Time OFF/ Temperature OFF	2:00 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030807	
5% $K_2S_2O_8$	K2030307	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	SnCl2 031307	
☐ filtered thru' 0.45 um syringe filter	millipore R6AN43B32	

3/14/07

Continued from page X

3/14/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

: MET14
num : 847114598001
s : ug/L

Date : 20-MAR-2007 13:58
X Axis : R

Reviewer: ---
Type : WATER

File	Seqnum	Sample ID	Analyzed	Stds
123301	847114598002	STD02REP1	20-MAR-2007 14:00	S5741 (500X)
123301	847114598003	STD03REP1	20-MAR-2007 14:02	S5741 (200X)
123301	847114598004	STD04REP1	20-MAR-2007 14:06	S5741 (50X)
123301	847114598005	STD05REP1	20-MAR-2007 14:08	S5741 (20X)
123301	847114598006	STD06REP1	20-MAR-2007 14:10	S5741 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
ury	2910.0	2448.0	2359.5	2295.6	2197.8	LINR	-0.1000	4.56E-4		2442.2	1.000	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
ury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

00508

ument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847114598001

WinHg Database 1.5

File Utility Help

RN⇩ RN⇧

Protocol hgppb | BUSY | Dataset/Proto 032007 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.56011e-4

C -9.99502e-2

Rho .999801

Type Linear

☑ Calibrated

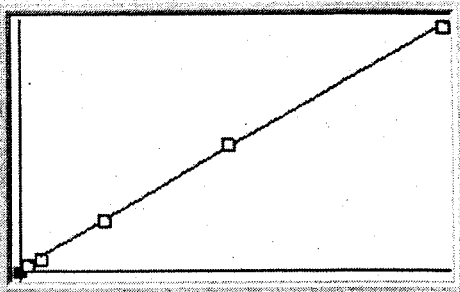
☑ Accepted

Accept

µ Abs.
21978

Accepted

New



Include S1 Rep 1☑ 2☐ 3☐ 4☐ 5☐

20-Mar-07 14:10 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.032	-.032	150	0	149		
02	.20000	.165	-.035	582	0%	582		
03	.50000	.458	-.042	1224	0%	1224		
04	2.0000	2.05	.052	4720	0%	4719		
05	5.0000	5.13	.134	11478	0%	11478		
06	10.000	9.92	-.078	21979	0%	21978		

Ready NUM

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 13:58:26 20 Mar 07 HG

Hg .000 ppb 149
Bkgd 1 14422769

*** Standard: 2 Rep: 1 Seq: 2 14:00:36 20 Mar 07 HG

Hg .200 ppb 582
Bkgd 1 14418677

*** Standard: 3 Rep: 1 Seq: 3 14:02:53 20 Mar 07 HG

Hg .500 ppb 1224
Bkgd 1 14413444

*** Standard: 4 Rep: 1 Seq: 4 14:06:02 20 Mar 07 HG

Hg 2.00 ppb 4719
Bkgd 1 14413257

*** Standard: 5 Rep: 1 Seq: 5 14:08:09 20 Mar 07 HG

Hg 5.00 ppb 11478
Bkgd 1 14412729

*** Standard: 6 Rep: 1 Seq: 6 14:10:26 20 Mar 07 HG

Hg 10.0 ppb 21978
Bkgd 1 14412272

*** Check Standard: 2 Ck2S5743 Seq: 7 14:13:41 20 Mar 07 HG
Line Flag Intensities
Hg 11822
Bkgd 1 14408839

*** Check Standard: 1 Ck1ICB Seq: 8 14:16:38 20 Mar 07 HG
Line Flag Intensities
Hg 58
Bkgd 1 14407710

*** Sample ID: qc380038 Seq: 9 14:18:53 20 Mar 07 HG
123301,1
Hg -.104 ppb -9
Bkgd 1 14407373

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

uence: 847114598 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 20-MAR-2007
lytical Method: EPA 7470A SOP Version: HG_water_rv7
lyte: Mercury

ilename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
23301	ICALBLK	STD01REP1				20-MAR-2007 13:58	1.0	1.0									
23301	ICAL	STD02REP1				20-MAR-2007 14:00	1.0	1.0									
23301	ICAL	STD03REP1				20-MAR-2007 14:02	1.0	1.0									
23301	ICAL	STD04REP1				20-MAR-2007 14:06	1.0	1.0									
23301	ICAL	STD05REP1				20-MAR-2007 14:08	1.0	1.0									
23301	ICAL	STD06REP1				20-MAR-2007 14:10	1.0	1.0									
23301	ICV					20-MAR-2007 14:13	1.0	1.0	2	5.000	847114598001	5.290		uq/L	106		
23301	ICB					20-MAR-2007 14:16	1.0	1.0			847114598001	ND	0.20	uq/L			
23301	BLANK	QC380038		123301	Water	20-MAR-2007 14:18	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	BLANK	QC380039		123301	TCLP L	20-MAR-2007 14:20	1.0	5.0			847114598001	ND	1.0	uq/L			u
23301	BS	QC380040		123301	Water	20-MAR-2007 14:23	1.0	1.0		5.000	847114598001	5.250	0.20	uq/L	105		u
23301	BSD	QC380041		123301	Water	20-MAR-2007 14:25	1.0	1.0		5.000	847114598001	5.230	0.20	uq/L	105	0	u
23301	MSS	193262-002		123301	Filtra	20-MAR-2007 14:27	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SER	QC380042	193262-002	123301	Filtra	20-MAR-2007 14:29	5.0	1.0			847114598001	ND	1.0	uq/L		--	u
23301	MS	QC380043	193262-002	123301	Filtra	20-MAR-2007 14:31	1.0	1.0		5.000	847114598001	5.410	0.20	uq/L	108		u
23301	MSD	QC380044	193262-002	123301	Filtra	20-MAR-2007 14:34	1.0	1.0		5.000	847114598001	5.250	0.20	uq/L	105	3	u
23301	MSS	193388-001		123301	TCLP L	20-MAR-2007 14:36	1.0	5.0			847114598001	ND	2.0	uq/L			u
23301	MS	QC380045	193388-001	123301	TCLP L	20-MAR-2007 14:38	1.0	5.0		25.00	847114598001	26.90	1.0	uq/L	108		u
23301	CCV					20-MAR-2007 14:40	1.0	1.0	3	2.500	847114598001	2.690		uq/L	108		
23301	CCB					20-MAR-2007 14:42	1.0	1.0			847114598001	ND	0.20	uq/L			
23301	MSD	QC380046	193388-001	123301	TCLP L	20-MAR-2007 14:44	1.0	5.0		25.00	847114598001	26.20	1.0	uq/L	105	3	u
23301	SAMPLE	193262-007		123301	Filtra	20-MAR-2007 14:46	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193262-017		123301	Filtra	20-MAR-2007 14:49	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193262-018		123301	Filtra	20-MAR-2007 14:51	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193262-019		123301	Filtra	20-MAR-2007 14:53	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193262-020		123301	Filtra	20-MAR-2007 14:55	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193329-003		123301	Filtra	20-MAR-2007 14:57	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193329-004		123301	Filtra	20-MAR-2007 14:59	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193329-005		123301	Filtra	20-MAR-2007 15:02	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193329-006		123301	Filtra	20-MAR-2007 15:04	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	CCV					20-MAR-2007 15:07	1.0	1.0	4	5.000	847114598001	5.440		uq/L	109		
23301	CCB					20-MAR-2007 15:09	1.0	1.0			847114598001	ND	0.20	uq/L			
23301	SAMPLE	193329-008		123301	Filtra	20-MAR-2007 15:11	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193329-009		123301	Filtra	20-MAR-2007 15:13	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193395-002		123301	Water	20-MAR-2007 15:16	1.0	1.0			847114598001	1.5	0.20	uq/L			u
23301	SAMPLE	193426-001		123301	Water	20-MAR-2007 15:18	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193426-002		123301	Water	20-MAR-2007 15:20	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193485-001		123301	Water	20-MAR-2007 15:23	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	SAMPLE	193485-003		123301	Water	20-MAR-2007 15:25	1.0	1.0			847114598001	ND	0.20	uq/L			u
23301	CCV					20-MAR-2007 15:28	1.0	1.0	5	7.500	847114598001	8.250		uq/L	110		
23301	CCB					20-MAR-2007 15:30	1.0	1.0			847114598001	ND	0.20	uq/L			

s used: 1=S5741 2=S5743 3=S5744 4=S5745 5=S5746
gs used: u=use

alyst: [signature] Date: 3/20/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **20-MAR-2007 13:29**

Batch Number : 123301
Date Extracted: 20-MAR-2007
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5741
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193262-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193262-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193262-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193262-018			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193262-019			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193262-020			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
193329-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193329-004			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193329-005			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193329-006			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193329-008			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193329-009			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
193388-001			ConocoPhillips Company	TCLP Leach	10	mL	50	5.000000	1					HG		
193395-002			Union Sanitary District	Water	50	mL	50	1.000000	1					HG		
193426-001			CH2M Hill Constructors Inc.	Water	50	mL	50	1.000000	1					T26/HG		
193426-002			CH2M Hill Constructors Inc.	Water	50	mL	50	1.000000	1					T26/HG		
193485-001			Pam Seidenman	Water	50	mL	50	1.000000	1					HG		
193485-003			Pam Seidenman	Water	50	mL	50	1.000000	1					HG		
2380038	BLANK			Water	50	mL	50	1.000000	1					HG		
2380039	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
2380040	BS			Water	50	mL	50	1.000000	1		2.5			HG		
2380041	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
2380042	SER	of 193262-002		Filtrate	50	mL	50	1.000000	1					HG		
2380043	MS	of 193262-002		Filtrate	50	mL	50	1.000000	1		2.5			HG		
2380044	MSD	of 193262-002		Filtrate	50	mL	50	1.000000	1		2.5			HG		
2380045	MS	of 193388-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
2380046	MSD	of 193388-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
2380047	PDS	of 193262-002		Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist: ZAbbott 3/20/07 Reviewed By: [illegible] Date: 3/20/07

Relinquished By: ZAbbott 3/20/07 Received By: ZAbbott Date: 3/20/07

00512

, Ltd.

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

MS Batch #: 123301

Date Digested: 3/20/07

Digested by: ZD

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2452

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193262-002 MSS	I	50	50	N	Filtrate (F.F.)
-007	A				
-017	H				
-018	I				
-019	I				
-020	L				
193329-003	F				
-004	G				
-005					
-006					
-008	D				
-009					
193388-001 MSS		10			TCLP leachate
193395-002	A	50			water
193426-001	I				
-002					
193485-007	A				
-003	B				
Blank					
Blank		10			TCLP leachate
BS/BSD		50			water
MS 193262-002	I				Filtrate (F.F.)
MSD					
MS 193388-001		10			TCLP leachate
MSD					

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	S5741	3/20/07
ICAL Source WS#	S5741	
ICV / CCV WS#	S5743/44/45/46	
Digestion of Samples & Standards: Time ON / Temperature ON	11:15 / 95°C	
Time OFF/ Temperature OFF	1:15 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C38055	
5% $KMnO_4$	K031507	
5% $K_2S_2O_8$	K030807	
NaCl.hydroxylamine hydrochloride	Hy031907	
Stannous Chloride	SnCl2 032007	
☐ filtered thru' 0.45 um syringe filter	millipore CY6AN43832	

/ Date 5/07

3/20/07

Continued from page

3/20/07

Curtis & Tompkins Laboratories
MDL Summary for EPA 6010B Water
As of 03/24/07

Analyte	Units	MET07	MET09 A	MET09 R	MET08 A	MET08 R
Aluminum	ug/L	19		11		25
Antimony	ug/L	3.9	1.1		0.96	
Arsenic	ug/L	2.8	2.0		1.4	
Barium	ug/L	0.13	0.11		0.32	
Beryllium	ug/L	0.48	0.042		0.12	
Cadmium	ug/L	0.29	0.11		0.36	
Calcium	ug/L	9.7		44		64
Chromium	ug/L	0.50	0.24		0.33	
Cobalt	ug/L	0.68	0.30		0.31	
Copper	ug/L	0.62	0.85		1.6	
Iron	ug/L	24		6.1		8.1
Lead	ug/L	1.9	0.69		1.1	
Magnesium	ug/L	16		10		12
Manganese	ug/L	0.57	0.44		0.58	
Molybdenum	ug/L	2.4	0.41		1.4	
Nickel	ug/L	0.74	0.37		0.65	
Potassium	ug/L			40		46
Selenium	ug/L	4.2	1.5		2.0	
Silver	ug/L	0.77	0.75		0.75	
Sodium	ug/L			17		69
Thallium	ug/L	3.5	1.6		1.1	
Vanadium	ug/L	0.57	1.0		0.61	
Zinc	ug/L	1.1	0.84		3.1	
Boron	ug/L		3.8		15	
Tin	ug/L		5.0		2.8	
Titanium	ug/L		1.0		1.0	

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/24/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/24/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Total Oil & Grease (HEM)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	123295
Field ID:	WT030807	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	193262-021	ND	4.75	0.9500
BLANK	QC380017	ND	5.00	1.000

ND= Not Detected
RL= Reporting Limit

130.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Oil & Grease (HEM)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	123295
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC380018	40.00	33.30	83	78-114		
BSD	QC380019	40.00	36.40	91	78-114	9	18

RPD= Relative Percent Difference

Analysis:	**Hexane Extractable Material (Total)**	Analyst:	CCH
Method:	**EPA 1664A**	Prep Date:	**20-Mar-07**
Matrix:	Water	Analysis Date:	**20-Mar-07**
Silica Gel:	No	Batch #:	**123295**
SOP#:	1664_rv3.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Beaker Mass (g)	Total Mass (g)	Residue Mass (g)	**Report** (mg/L)	Reporting Limit (mg/L)	Spike Used (g)	**Recovery,%**	**RPD,%**
MB	1000	1.00	2.5185	2.5192	0.0007	ND	5.00			
BS	1000	1.00	2.5264	2.5597	0.0333	33.300	5.00	0.0400	83	
BSD	1000	1.00	2.5075	2.5439	0.0364	36.400	5.00	0.0400	91	9

SAMPLE DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report** (mg/L)	Reporting Limit (mg/L)	IDF (1000/Vs)
193254-001	1050	0.95	2.5042	2.5211	0.0169	16.095	4.76	0.952
193262-021	1050	0.95	2.4940	2.4944	0.0004	ND	4.76	0.952
193393-001	880	1.14	2.5100	2.5530	0.0430	48.864	5.68	1.136
193393-002	920	1.09	2.5021	2.5100	0.0079	8.587	5.43	1.087
193393-003	920	1.09	2.4914	2.5137	0.0223	24.239	5.43	1.087
193393-004	560	1.79	2.5058	2.5153	0.0095	16.964	8.93	1.786
193461-001	1060	0.94	2.4935	2.4944	0.0009	ND	4.72	0.943
193461-003	1060	0.94	2.5015	2.5030	0.0015	ND	4.72	0.943
193461-004	1060	0.94	2.4911	2.4925	0.0014	ND	4.72	0.943

Note: RPD calculation includes correction for different spiking levels.

Reviewed by/ Date: 3/20/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	18	78 - 114
MS/ MSD	28	68 - 124

025529

Oil Grease (H.E.M.) Benchbook EPA 1664A Curtis & Tompkins, Ltd.

LIMS Batch #: 123255 Date: 3/20/07 Benchbook#: **BK2436**

Matrix: water Time: 12:40pm Page: **44**

Spike SS#: 55585 D Hexane Manufacturer & Lot# Baker 143E40

Spike SS Conc (mg/L): 800 Extraction Disc Lot#: Empore 450350

Into Final Vol (mL): 100 Silica Gel Cleanup Used (Y / N): N

Spike Conc (mg/L): F=40 Silica Gel Manufacturer & Lot# N/A

	Sample # / Letter	pH	Sample Vol (mL)	Mass (g)	Mass (g)*	Mass (g)*	Comments
1	Blank	<2	1000mL	2.5185	2.5191	2.5192	
	BS			2.5264	2.5600	2.5597	
	BSD			2.5075	2.5437	2.5439	
	A3254-1 F	<2	1050mL	2.5042	2.5211	2.5211	
5	A3262-21 E	<2	1050mL	2.4940	2.4945	2.4944	
	19339-1 E	<2	880mL	2.5100	2.5532	2.5530	
	-2		920mL	2.5021	2.5099	2.5100	
	-3		920mL	2.4914	2.5138	2.5137	
	-4		560mL	2.5058	2.5153	2.5153	
10	19346-1 I	<2	1060mL	2.4935	2.4943	2.4944	
	-3 I		1060mL	2.5015	2.5029	2.5030	
	-4 I		1060mL	2.4911	2.4925	2.4925	
15							
20							

CMK 3/20/07

* Constant weight must be within ± 0.0005g from previous reading.

Weight Set Number: HRM2/490

	Openning Wt.	Ending Wt.	Limits
2 mg	0.0020	0.0019	(0.0018 to 0.0022 g)
1 g	0.9999	1.0000	(0.9950 to 1.0050 g)
5 g	4.9998	5.0000	(4.9750 to 5.0250 g)

3/20/07

Analyst / Date

3/20/07

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123295
Date Started: 20-MAR-2007
Batched by : Charles Howse

Analysis : 1664T
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193254-001		Unitek Environment	Water	1664T	20-MAR-2007
193262-021		Treadwell & Rollo	Water	1664T	20-MAR-2007
193393-001		Union Sanitary Dis	Water	1664T	20-MAR-2007
193393-002		Union Sanitary Dis	Water	1664T	20-MAR-2007
193393-003		Union Sanitary Dis	Water	1664T	20-MAR-2007
193393-004		Union Sanitary Dis	Water	1664T	20-MAR-2007
193461-001		Geomatrix Consulta	Water	1664T	21-MAR-2007
193461-003		Geomatrix Consulta	Water	1664T	21-MAR-2007
193461-004		Geomatrix Consulta	Water	1664T	21-MAR-2007
QC380017	BLANK		Water	1664T	
QC380018	BS		Water	1664T	
QC380019	BSD		Water	1664T	

Hexane Extractable Material
EPA 1664
Method Detection Limit Study

Method Detection Limit Study

Analysis:	Oil & Grease	Prep Date:	9-Jun-06
Method:	**EPA 1664** w/o silica gel	Analysis Date:	6/9/2006
Matrix:	Water	Analyst:	REB

Conc. (mg/L)	2.0
1	1.6
2	1.9
3	1.7
4	1.9
5	2.2
6	2.2
7	2.3

STDEVP	0.24908
Student-T value	3.14

(Student-T value for 7 replicates = 3.143)

MDL (mg/L)	**0.8**
RL (mg/L)	5.0
Status	**PASS**

Vrcw 6/1/06

Curtis & Tompkins, Ltd.

pH

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Diln Fac:	1.000
Field ID:	WT030807	Batch#:	122914
Lab ID:	193262-021	Sampled:	03/08/07 10:15
Matrix:	Water	Received:	03/08/07
Units:	SU	Analyzed:	03/09/07 10:00

Result	RL
7.7	1.0

RL= Reporting Limit

135.0

Curtis & Tompkins, Ltd.

Batch QC Report

pH

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Units:	SU
Field ID:	WT030807	Diln Fac:	1.000
Type:	SDUP	Batch#:	122914
MSS Lab ID:	193262-021	Sampled:	03/08/07 10:15
Lab ID:	QC378389	Received:	03/08/07
Matrix:	Water	Analyzed:	03/09/07 10:00

MSS Result	Result	RL	RPD	Lim
7.740	7.740	1.000	0	20

RL= Reporting Limit
RPD= Relative Percent Difference

136.0

pH Analysis Benchbook **Curtis & Tompkins, Ltd.**

LIMS Batch #: 122914 Date: 3/9/07 Benchbook#: **BK 2442**
Matrix: Water Time: 10:00 Page: **75**

Method (check one): ☒ Water (EPA 9040b/ 150.1) ☐ Soil (EPA 9045c)

Cal Std-1 ph: 4 SS#: 5799 Slope: 101.6
Cal Std-2 ph: 7 SS#: 51291 (slope limits: 92 - 102)
Cal Std-3 ph: 10 SS#: 55638

Run	Sample # / Letter	pH (S.U.)	2nd Reading* (water only)	Soil Prep Wt(g)/Vol(mL)	Comments
1	ICV	7.04			ICV/CCV ⇒ 53273
	193262-21 A	7.74	7.76		
	SDUP-21 ↓	7.74	7.75		RPD ⇒ 0%
	193265-1 D	10.25	over		
5	CCV	7.05			
	ICV	6.98			ICV/CCV ⇒ 53273
	193265-1 D	10.26	10.27		Recal ▲ 3/9
	CCV	7.03			7 10 12.45
					51291 55638 55582
10					Slope ⇒ 98.0
15					
20					
25					

* 2nd aliquot must be within 0.1 SU

AJ 3/9
3/9/07 3/9/07
Analyst / Date

3/9/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122914
Date Started: 09-MAR-2007
Batched by : Patrick Perin

Analysis : PH
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193262-021		Treadwell & Rollo	Water	PH	20-MAR-2007
193265-001		Morton Salt	Water	PH	20-MAR-2007
QC378389	SDUP of 193262-021		Water	PH	

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Batch#:	123291
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/20/07

Field ID: 1221GW104 Lab ID: 193262-001
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	490	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	490	10

Field ID: LF08GW04 Lab ID: 193262-002
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	130	5.0
Alkalinity, Carbonate	ND	5.0
Alkalinity, Hydroxide	ND	5.0
Alkalinity, Total as CaCO3	130	5.0

Field ID: DAEGW04 Lab ID: 193262-003
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	330	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	330	10

Field ID: 1065MW10A Lab ID: 193262-004
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	260	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	260	10

Field ID: 1065MW10B Lab ID: 193262-005
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	270	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Batch#:	123291
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/20/07

Field ID: DUP0307073B Lab ID: 193262-006
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	470	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	470	10

Field ID: DUP0307073A Lab ID: 193262-007
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	120	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	120	4.0

Field ID: 1065MW10ARB1065MW10B Lab ID: 193262-008
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Field ID: 1065PZ1B Lab ID: 193262-010
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	420	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	420	10

Field ID: 1065PZ6B Lab ID: 193262-011
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	240	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	240	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Batch#:	123291
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/20/07

Field ID: 1065PZ6BRB1065MW9A Lab ID: 193262-012
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Field ID: 1065MW9A Lab ID: 193262-013
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	490	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	490	10

Field ID: 1065MW9B Lab ID: 193262-014
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	280	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	280	10

Field ID: 1065MW11A Lab ID: 193262-015
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	190	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	190	6.7

Field ID: 1065MW11B Lab ID: 193262-016
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	270	10

ND= Not Detected
RL= Reporting Limit

132.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Batch#:	123291
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/20/07

Field ID: DAEGW102 Lab ID: 193262-019
Type: SAMPLE Sampled: 03/07/07

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID: DW030807B Lab ID: 193262-020
Type: SAMPLE Sampled: 03/08/07

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type: BLANK Lab ID: QC380000

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

132.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC380001	Batch#:	123291
Matrix:	Water	Analyzed:	03/20/07

Spiked	Result	%REC	Limits
200.0	182.8	91	90-110

133.0

: 00632

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1221GW104	Batch#:	123291
MSS Lab ID:	193262-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC380002	494.0	500.0	948.0	91	69-112		
MSD	QC380003		500.0	962.0	94	69-112	1	25

RPD= Relative Percent Difference

134.0

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/20/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123291** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.2	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.5	4.6	182.80			4.0	91	
193262-001	6.8	10	0.0	4.9	494.00		n/a	10.0		
MS	9.1	10	1.3	9.5	948.00			10.0	91	
MSD	9.2	10	1.4	9.6	962.00			10.0	94	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193262-001	6.8	10	0.0	4.9	494.00		n/a	10.0
193262-002	6.70	20	0.0	2.6	129.50		n/a	5.0
193262-003	7.80	10	0.0	3.3	333.00		n/a	10.0
193262-004	7.00	10	0.0	2.6	255.00		n/a	10.0
193262-005	6.90	10	0.0	2.7	265.00		n/a	10.0
193262-006	7.30	10	0.0	4.7	474.00		n/a	10.0
193262-007	6.60	25	0.0	3.1	124.00		n/a	4.0
193262-008	5.30	100	0.0	0.1	rpt low alk	0.18	ND	1.0
193262-010	7.80	10	0.0	4.2	420.00		n/a	10.0
193262-011	7.20	10	0.0	2.4	244.00		n/a	10.0
193262-012	5.20	100	0.0	0.1	rpt low alk	0.12	ND	1.0
193262-013	7.10	10	0.0	4.9	490.00		n/a	10.0
193262-014	7.60	10	0.0	2.8	283.00		n/a	10.0
193262-015	7.00	15	0.0	2.9	190.00		n/a	6.7
193262-016	7.20	10	0.0	2.7	268.00		n/a	10.0
193262-019	7.50	10	0.0	5.4	535.00		n/a	10.0
193262-020	4.70	100	0.0	0.1	rpt low alk	0.11	ND	1.0
193277-001	4.70	100	0.0	0.1	rpt low alk	0.12	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMB 3/20/07

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

Curtis Tompkins, Ltd.

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/20/07
Batch No: 123291

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193262-001	0.0	494.0	494	494.000	0.000	0.000
193262-002	0.0	129.50	129.500	129.500	0.000	0.000
193262-003	0.0	333.00	333.000	333.000	0.000	0.000
193262-004	0.0	255.00	255.000	255.000	0.000	0.000
193262-005	0.0	265.00	265.000	265.000	0.000	0.000
193262-006	0.0	474.00	474.000	474.000	0.000	0.000
193262-007	0.0	124.00	124.000	124.000	0.000	0.000
193262-008	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193262-010	0.0	420.00	420.000	420.000	0.000	0.000
193262-011	0.0	244.00	244.000	244.000	0.000	0.000
193262-012	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193262-013	0.0	490.00	490.000	490.000	0.000	0.000
193262-014	0.0	283.00	283.000	283.000	0.000	0.000
193262-015	0.0	190.00	190.000	190.000	0.000	0.000
193262-016	0.0	268.00	268.000	268.000	0.000	0.000
193262-019	0.0	535.00	535.000	535.000	0.000	0.000
193262-020	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193277-001	0.0	#VALUE!	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

000535

Analysis: **Alkalinity** Analysis Date: 03/20/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123291 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
193262-001	494.000	602.308	0.000	0.000
193262-002	129.500	157.892	0.000	0.000
193262-003	333.000	406.009	0.000	0.000
193262-004	255.000	310.908	0.000	0.000
193262-005	265.000	323.100	0.000	0.000
193262-006	474.000	577.923	0.000	0.000
193262-007	124.000	151.187	0.000	0.000
193262-008	ND	not applicable	not applicable	not applicable
193262-010	420.000	512.084	0.000	0.000
193262-011	244.000	297.496	0.000	0.000
193262-012	ND	not applicable	not applicable	not applicable
193262-013	490.000	597.431	0.000	0.000
193262-014	283.000	345.047	0.000	0.000
193262-015	190.000	231.657	0.000	0.000
193262-016	268.000	326.758	0.000	0.000
193262-019	535.000	652.297	0.000	0.000
193262-020	ND	not applicable	not applicable	not applicable
193277-001	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123291 Date: 3/20/07 Benchbook#: **BK2384**
Matrix: water Time: 10:45 Page: **77**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 98.5
(slope limits: 92 - 102)

$NaCO_3$ Vol (mgL) Spiked: 5
$NaCO_3$ Conc (mg/L): 1000
$NaCO_3$ WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	5.2	100	—	<0.08		
	LCS	10.1	25	2.51	4.57		
	193262-1 E	6.8	10	—	4.94		
	MS-1	9.1		1.34	9.48		
5	MSD-1	9.2		1.41	9.62		
	-2 B	6.7	20	—	2.59		
	-3 E	7.8	10	—	3.33		
	-4 D	7.0	10	—	2.55		
	-5	6.9	10	—	2.65		
10	-6 B	7.3	10	—	4.74		
	-7 D	6.6	25	—	3.10		
	-8 G	5.5	25	—	<2mL		
	-8	5.3	100	—	0.06	0.18	
	AJ 3/20 -~~9~~10 H	7.8	10	—	4.20		
15	-11 E	7.2	10	—	2.44		
	-12	5.8	25	—	<2mL		
	-12	5.2	100	—	0.06	0.12	
	-13	7.1	10	—	AJ 3/20 ~~3.9~~ 4.90		
	-14	7.6	10	—	2.83		
20	-15	7.0	15	—	2.85		
	-16	7.2	10	—	2.68		
	-19 L	7.5	10	—	5.35		
	-20 K	5.5	25	—	<2mL		
	-20	4.7	100	—	0.05	0.11	
	193277-1 V	4.9	25	—	<2mL		
	-1	4.7	100	—	0.06	0.12	

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/20/07
Analyst / Date

3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123291
Date Started: 20-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-001			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-002			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-003			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-004			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-005			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-006			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-007			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-008			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-010			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-011			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-012			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-013			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-014			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-015			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-016			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-019			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-020			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193277-001			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
QC380000	BLANK			Water	ALKALINITY	
QC380001	LCS			Water	ALKALINITY	
QC380002	MS	of 193262-001		Water	ALKALINITY	
QC380003	MSD	of 193262-001		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	122884
Matrix:	Water	Received:	03/08/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1221GW104	SAMPLE	193262-001	64	5.0	25.00	03/07/07 15:00	03/09/07 06:09
LF08GW04	SAMPLE	193262-002	46	1.0	5.000	03/07/07 09:05	03/08/07 22:16
DAEGW04	SAMPLE	193262-003	86	2.0	10.00	03/07/07 11:00	03/09/07 01:46
1065MW10A	SAMPLE	193262-004	51	2.0	10.00	03/07/07 12:50	03/09/07 02:04
1065MW10B	SAMPLE	193262-005	59	2.0	10.00	03/07/07 14:00	03/09/07 07:37
DUP0307073B	SAMPLE	193262-006	63	2.0	10.00	03/07/07	03/09/07 09:57
DUP0307073A	SAMPLE	193262-007	45	1.0	5.000	03/07/07	03/09/07 10:14
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND	0.20	1.000	03/07/07 13:00	03/08/07 21:24
1065PZ1B	SAMPLE	193262-010	170	5.0	25.00	03/07/07 09:35	03/09/07 02:21
1065PZ6B	SAMPLE	193262-011	64	2.0	10.00	03/07/07 10:25	03/09/07 02:39
1065PZ6BRB1065MW9A	SAMPLE	193262-012	0.40	0.20	1.000	03/07/07 11:00	03/08/07 21:41
1065MW9A	SAMPLE	193262-013	170	5.0	25.00	03/07/07 12:00	03/09/07 02:56
1065MW9B	SAMPLE	193262-014	56	2.0	10.00	03/07/07 13:05	03/09/07 07:19
1065MW11A	SAMPLE	193262-015	40	2.0	10.00	03/07/07 13:40	03/09/07 07:02
1065MW11B	SAMPLE	193262-016	55	2.0	10.00	03/07/07 14:10	03/09/07 10:32
DAEGW102	SAMPLE	193262-019	320	5.0	25.00	03/07/07 09:12	03/08/07 22:34
DW030807B	SAMPLE	193262-020	ND	0.20	1.000	03/08/07 08:15	03/08/07 21:59
	BLANK	QC378271	ND	0.20	1.000		03/08/07 21:06

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	03/08/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
1221GW104	SAMPLE	193262-001	ND	0.10	122884	03/07/07 15:00	03/09/07 08:29
LF08GW04	SAMPLE	193262-002	ND	0.10	122884	03/07/07 09:05	03/08/07 22:51
DAEGW04	SAMPLE	193262-003	ND	0.10	122884	03/07/07 11:00	03/09/07 04:06
1065MW10A	SAMPLE	193262-004	ND	0.10	122884	03/07/07 12:50	03/09/07 03:14
1065MW10B	SAMPLE	193262-005	ND	0.10	122884	03/07/07 14:00	03/09/07 08:12
DUP0307073B	SAMPLE	193262-006	ND	0.10	123095	03/07/07	03/13/07 20:28
DUP0307073A	SAMPLE	193262-007	ND	0.10	123095	03/07/07	03/13/07 19:53
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND	0.10	122884	03/07/07 13:00	03/08/07 21:24
1065PZ1B	SAMPLE	193262-010	ND	0.10	122884	03/07/07 09:35	03/09/07 00:19
1065PZ6B	SAMPLE	193262-011	ND	0.10	122884	03/07/07 10:25	03/09/07 03:31
1065PZ6BRB1065MW9A	SAMPLE	193262-012	ND	0.10	122884	03/07/07 11:00	03/08/07 21:41
1065MW9A	SAMPLE	193262-013	0.13	0.10	122884	03/07/07 12:00	03/09/07 04:24
1065MW9B	SAMPLE	193262-014	ND	0.10	122884	03/07/07 13:05	03/09/07 03:49
1065MW11A	SAMPLE	193262-015	ND	0.10	122884	03/07/07 13:40	03/09/07 07:54
1065MW11B	SAMPLE	193262-016	ND	0.10	123095	03/07/07 14:10	03/13/07 20:11
DAEGW102	SAMPLE	193262-019	0.61	0.10	122884	03/07/07 09:12	03/08/07 23:44
DW030807B	SAMPLE	193262-020	ND	0.10	122884	03/08/07 08:15	03/08/07 21:59
	BLANK	QC378271	ND	0 10	122884		03/08/07 21:06
	BLANK	QC379158	ND	0.10	123095		03/13/07 11:49

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	122884
Matrix:	Water	Received:	03/08/07
Units:	mg/L		

Field ID	Type	Lab ID		Result	RL	Diln Fac	Sampled	Analyzed
1221GW104	SAMPLE	193262-001		0.44	0.05	1.000	03/07/07 15:00	03/09/07 08:29
LF08GW04	SAMPLE	193262-002		6.5	0.25	5.000	03/07/07 09:05	03/08/07 22:16
DAEGW04	SAMPLE	193262-003		0.19	0.05	1.000	03/07/07 11:00	03/09/07 04:06
1065MW10A	SAMPLE	193262-004	ND		0.05	1.000	03/07/07 12:50	03/09/07 03:14
1065MW10B	SAMPLE	193262-005		5.3	0.50	10.00	03/07/07 14:00	03/09/07 07:37
DUP0307073B	SAMPLE	193262-006		0.42	0.05	1.000	03/07/07	03/09/07 11:24
DUP0307073A	SAMPLE	193262-007		6.4	0.25	5.000	03/07/07	03/09/07 10:14
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND		0.05	1.000	03/07/07 13:00	03/08/07 21:24
1065PZ1B	SAMPLE	193262-010	ND		0.05	1.000	03/07/07 09:35	03/09/07 00:19
1065PZ6B	SAMPLE	193262-011		3.5	0.05	1.000	03/07/07 10:25	03/09/07 03:31
1065PZ6BRB1065MW9A	SAMPLE	193262-012	ND		0.05	1.000	03/07/07 11:00	03/08/07 21:41
1065MW9A	SAMPLE	193262-013	ND		0.05	1.000	03/07/07 12:00	03/09/07 04:24
1065MW9B	SAMPLE	193262-014		5.5	0.50	10.00	03/07/07 13:05	03/09/07 07:19
1065MW11A	SAMPLE	193262-015		4.7	0.05	1.000	03/07/07 13:40	03/09/07 07:54
1065MW11B	SAMPLE	193262-016		4.3	0.05	1.000	03/07/07 14:10	03/09/07 11:07
DAEGW102	SAMPLE	193262-019	ND		0.05	1.000	03/07/07 09:12	03/08/07 23:44
DW030807B	SAMPLE	193262-020	ND		0.05	1.000	03/08/07 08:15	03/08/07 21:59
	BLANK	QC378271	ND		0.05	1.000		03/08/07 21:06

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	122884
Units:	mg/L	Received:	03/08/07

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
1221GW104	SAMPLE	193262-001	ND	0.05	03/07/07 15:00	03/09/07 08:29
LF08GW04	SAMPLE	193262-002	ND	0.05	03/07/07 09:05	03/08/07 22:51
DAEGW04	SAMPLE	193262-003	ND	0.05	03/07/07 11:00	03/09/07 04:06
1065MW10A	SAMPLE	193262-004	ND	0.05	03/07/07 12:50	03/09/07 03:14
1065MW10B	SAMPLE	193262-005	ND	0.05	03/07/07 14:00	03/09/07 08:12
DUP0307073B	SAMPLE	193262-006	ND	0.05	03/07/07	03/09/07 11:24
DUP0307073A	SAMPLE	193262-007	ND	0.05	03/07/07	03/09/07 10:49
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND	0.05	03/07/07 13:00	03/08/07 21:24
1065PZ1B	SAMPLE	193262-010	ND	0.05	03/07/07 09:35	03/09/07 00:19
1065PZ6B	SAMPLE	193262-011	ND	0.05	03/07/07 10:25	03/09/07 03:31
1065PZ6BRB1065MW9A	SAMPLE	193262-012	ND	0.05	03/07/07 11:00	03/08/07 21:41
1065MW9A	SAMPLE	193262-013	ND	0.05	03/07/07 12:00	03/09/07 04:24
1065MW9B	SAMPLE	193262-014	ND	0.05	03/07/07 13:05	03/09/07 03:49
1065MW11A	SAMPLE	193262-015	ND	0.05	03/07/07 13:40	03/09/07 07:54
1065MW11B	SAMPLE	193262-016	ND	0.05	03/07/07 14:10	03/09/07 11:07
DAEGW102	SAMPLE	193262-019	ND	0.05	03/07/07 09:12	03/08/07 23:44
DW030807B	SAMPLE	193262-020	ND	0.05	03/08/07 08:15	03/08/07 21:59
	BLANK	QC378271	ND	0.05		03/08/07 21:06

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	122884
Matrix:	Water	Received:	03/08/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1221GW104	SAMPLE	193262-001	69	13	25.00	03/07/07 15:00	03/09/07 06:09
LF08GW04	SAMPLE	193262-002	25	0.50	1.000	03/07/07 09:05	03/08/07 22:51
DAEGW04	SAMPLE	193262-003	25	0.50	1.000	03/07/07 11:00	03/09/07 04:06
1065MW10A	SAMPLE	193262-004	48	0.50	1.000	03/07/07 12:50	03/09/07 03:14
1065MW10B	SAMPLE	193262-005	78	5.0	10.00	03/07/07 14:00	03/09/07 07:37
DUP0307073B	SAMPLE	193262-006	70	5.0	10.00	03/07/07	03/09/07 09:57
DUP0307073A	SAMPLE	193262-007	25	0.50	1.000	03/07/07	03/09/07 10:49
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND	0.50	1.000	03/07/07 13:00	03/08/07 21:24
1065PZ1B	SAMPLE	193262-010	62	13	25.00	03/07/07 09:35	03/09/07 02:21
1065PZ6B	SAMPLE	193262-011	75	5.0	10.00	03/07/07 10:25	03/09/07 02:39
1065PZ6BRB1065MW9A	SAMPLE	193262-012	ND	0.50	1.000	03/07/07 11:00	03/08/07 21:41
1065MW9A	SAMPLE	193262-013	15	0.50	1.000	03/07/07 12:00	03/09/07 04:24
1065MW9B	SAMPLE	193262-014	82	5.0	10.00	03/07/07 13:05	03/09/07 07:19
1065MW11A	SAMPLE	193262-015	71	5.0	10.00	03/07/07 13:40	03/09/07 07:02
1065MW11B	SAMPLE	193262-016	83	5.0	10.00	03/07/07 14:10	03/09/07 10:32
DAEGW102	SAMPLE	193262-019	97	1.0	2.000	03/07/07 09:12	03/08/07 23:09
DW030807B	SAMPLE	193262-020	ND	0.50	1.000	03/08/07 08:15	03/08/07 21:59
	BLANK	QC378271	ND	0.50	1.000		03/08/07 21:06

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Batch QC Report

Chloride

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	1221GW104	Batch#:	122884
MSS Lab ID:	193262-001	Sampled:	03/07/07 15:00
Matrix:	Water	Received:	03/08/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
LCS	QC378272		4.000	4.201	105	80-120			1.000	03/09/07 05:52
MS	QC378273	63.65	50.00	111.8	96	80-120			25.00	03/09/07 06:27
MSD	QC378274		50.00	113.7	100	80-120	2	25	25.00	03/09/07 06:44

RPD= Relative Percent Difference

9.0

Batch QC Report

Fluoride

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	LCS		QC378272		2.000	2.019	101	80-120			1.000	122884			03/09/07 05:52
1221GW104	MS	193262-001	QC378273	0.04779	25.00	22.89	91	78-120			25.00	122884	03/07/07 15:00	03/08/07	03/09/07 06:27
1221GW104	MSD	193262-001	QC378274		25.00	23.26	93	78-120	2	20	25.00	122884	03/07/07 15:00	03/08/07	03/09/07 06:44
	LCS		QC379159		2.000	2.256	113	80-120			1.000	123095			03/13/07 12:06
ZZZZZZZZZZ	MS	193373-006	QC379160	0.9315	10.00	10.41	95	78-120			10.00	123095	03/12/07 10:55	03/12/07	03/13/07 18:26
ZZZZZZZZZZ	MSD	193373-006	QC379161		10.00	10.54	96	78-120	1	20	10.00	123095	03/12/07 10:55	03/12/07	03/13/07 18:44

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

11.0

00545

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	1221GW104	Batch#:	122884
MSS Lab ID:	193262-001	Sampled:	03/07/07 15:00
Matrix:	Water	Received:	03/08/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
LCS	QC378272		1.000	1.059	106	80-120			1.000	03/09/07 05:52
MS	QC378273	0.4397	12.50	13.26	103	80-120			25.00	03/09/07 06:27
MSD	QC378274		12.50	13.23	102	80-120	0	25	25.00	03/09/07 06:44

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrite Nitrogen

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	1221GW104	Batch#:	122884
MSS Lab ID:	193262-001	Sampled:	03/07/07 15:00
Matrix:	Water	Received:	03/08/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
LCS	QC378272		1.000	1.012	101	80-120			1.000	03/09/07 05:52
MS	QC378273	<0.008079	12.50	12.70	102	80-120			25.00	03/09/07 06:27
MSD	QC378274		12.50	12.52	100	80-120	1	25	25.00	03/09/07 06:44

RPD= Relative Percent Difference

15.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	1221GW104	Batch#:	122884
MSS Lab ID:	193262-001	Sampled:	03/07/07 15:00
Matrix:	Water	Received:	03/08/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
LCS	QC378272		10.00	10.48	105	80-120			1.000	03/09/07 05:52
MS	QC378273	68.85	125.0	196.8	102	80-120			25.00	03/09/07 06:27
MSD	QC378274		125.0	197.9	103	80-120	1	25	25.00	03/09/07 06:44

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

nst : IC01
alnum : 607084260001
nits : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MCS 2/28/07

CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

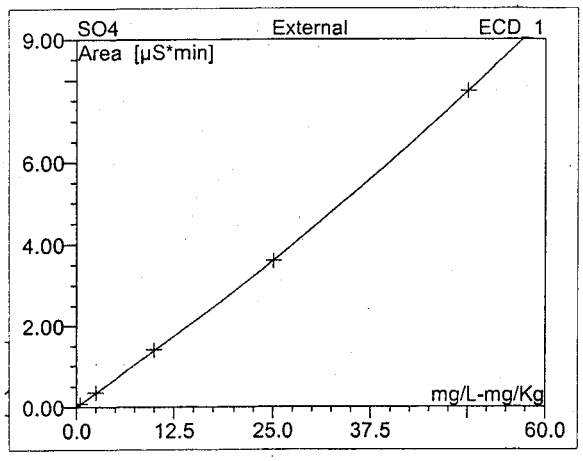
Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

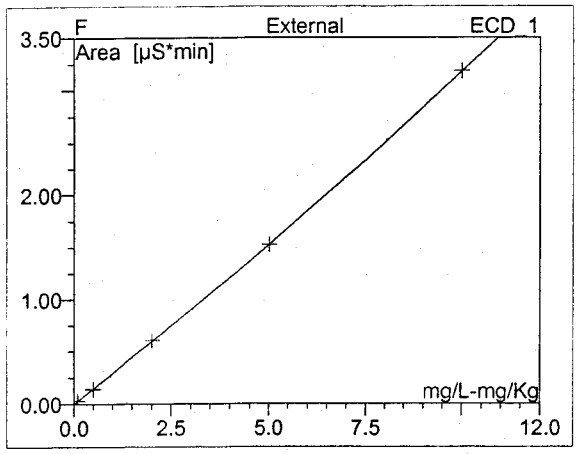
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

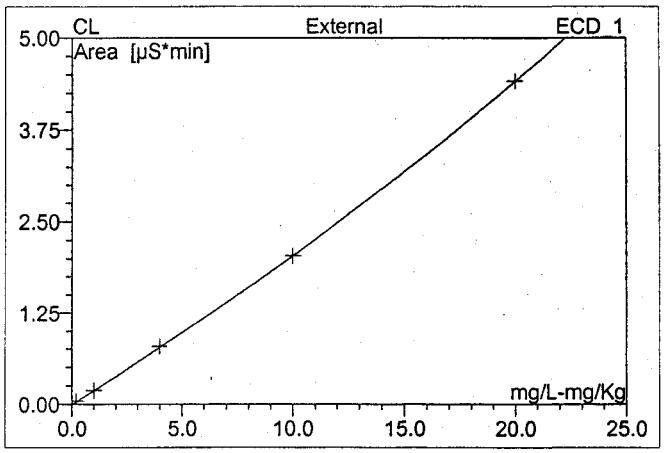


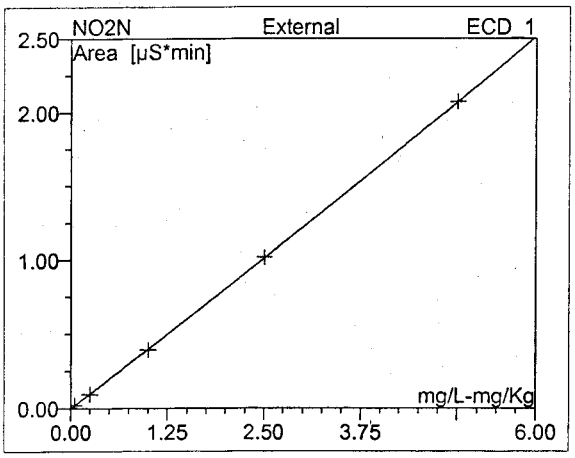
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

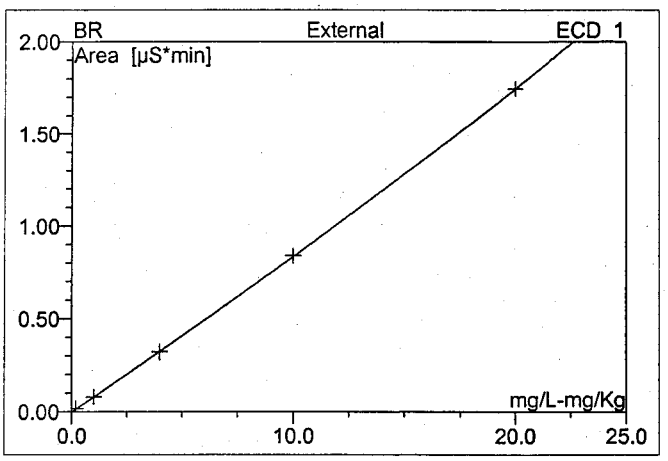
IC01 Calibration Batch Report

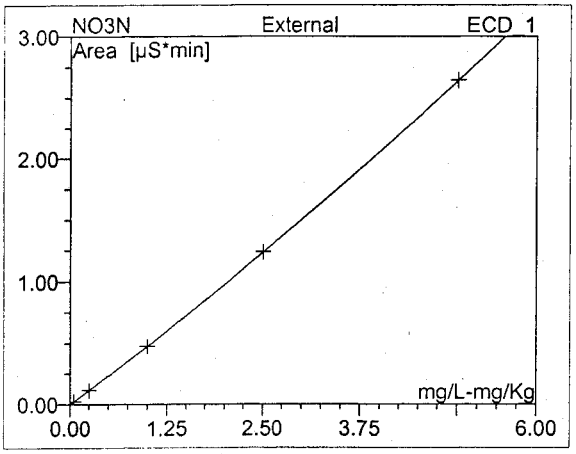
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

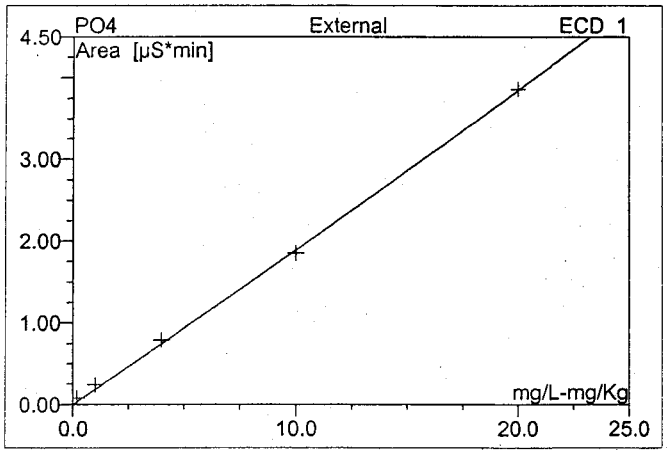












No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

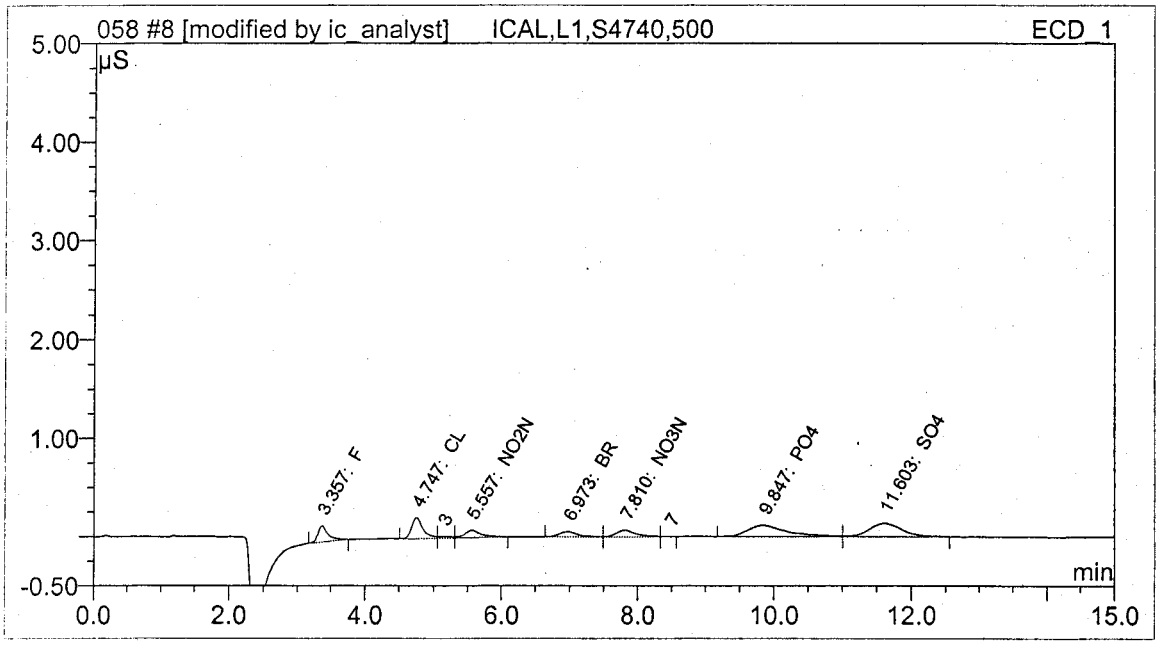
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



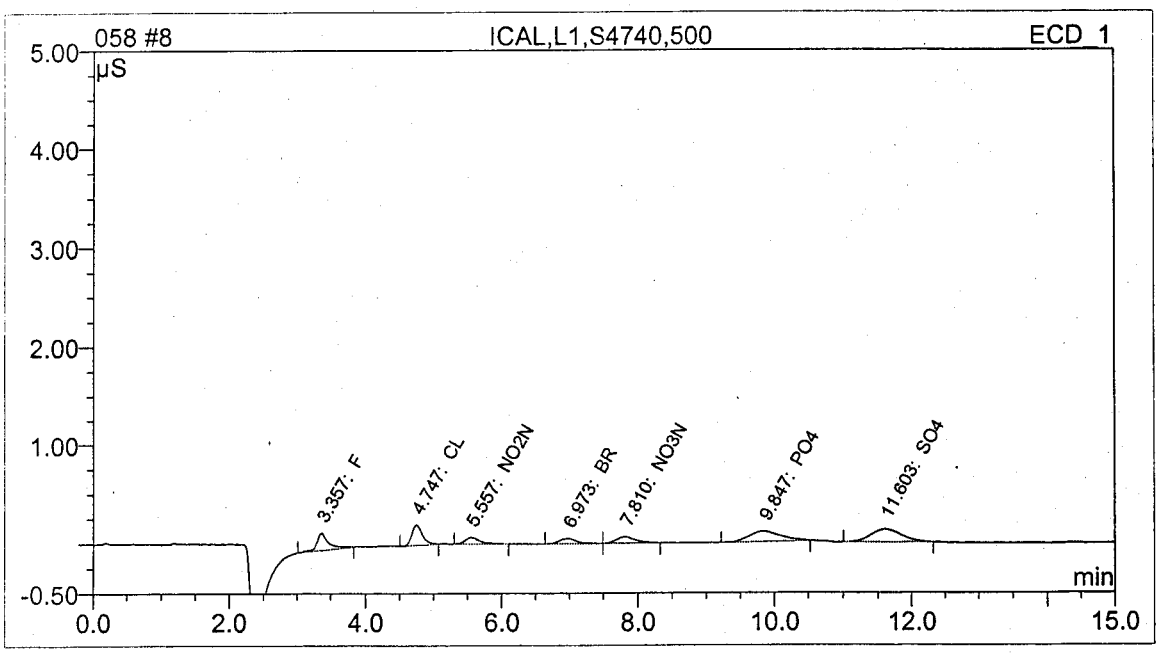
ANALYZED BY: REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

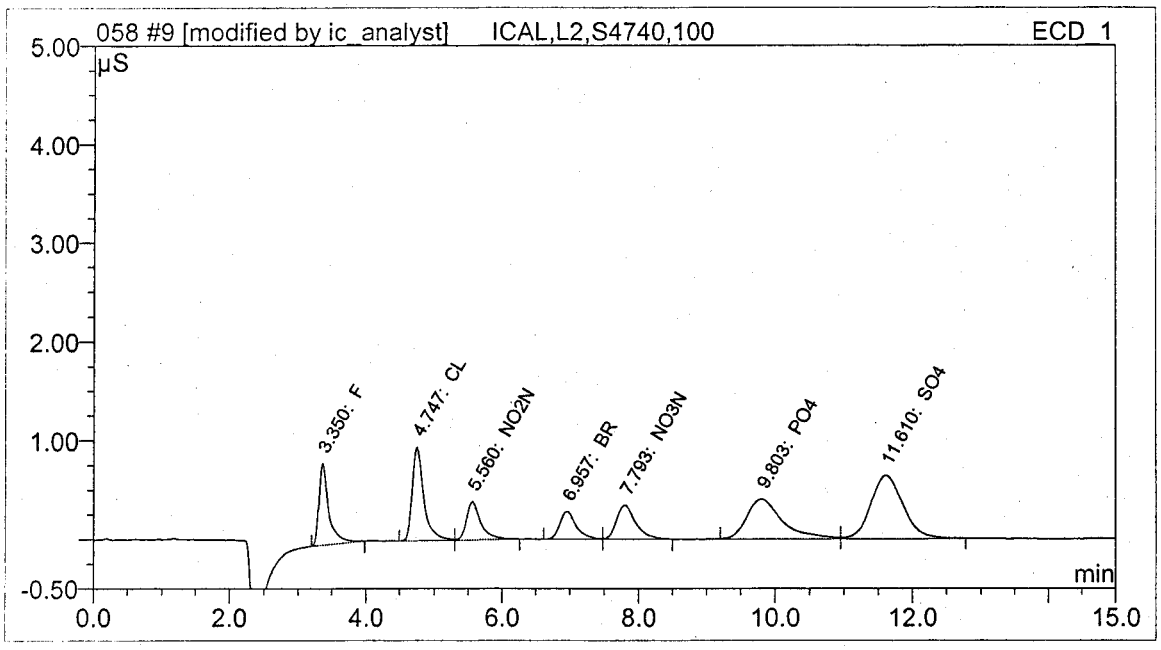
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

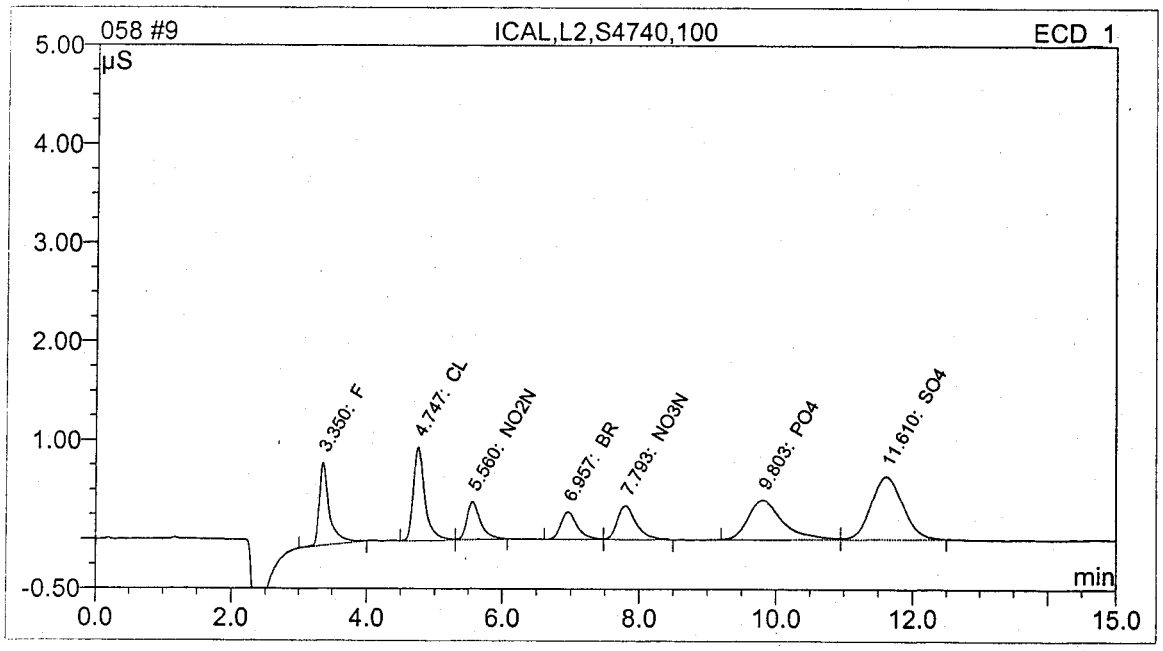
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

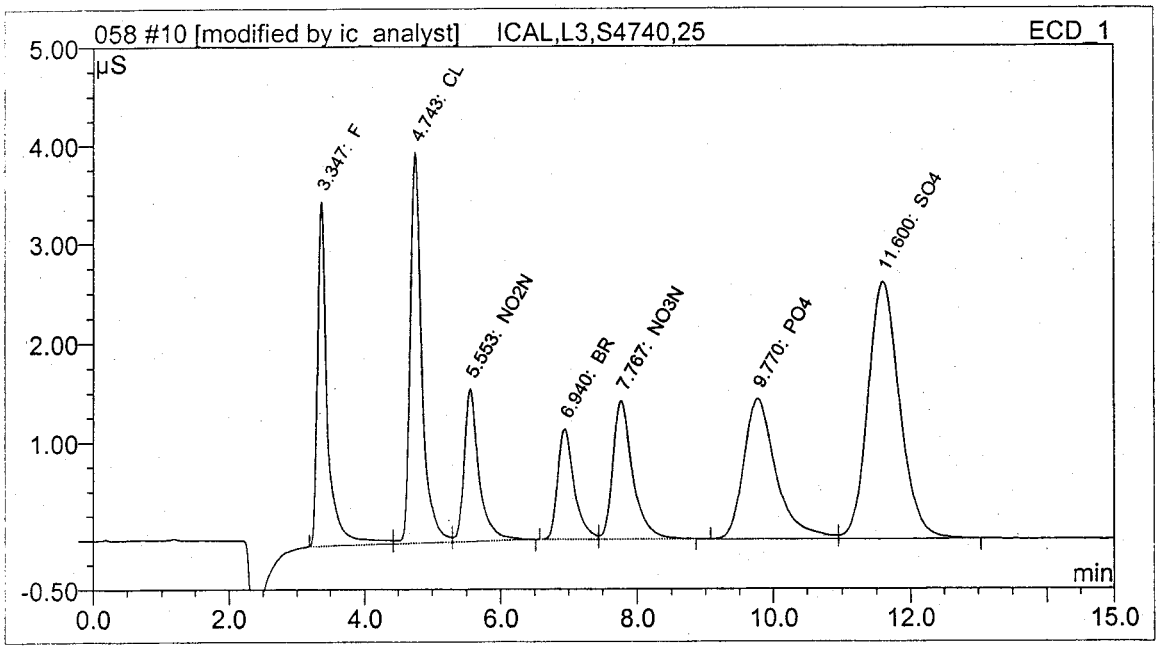
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

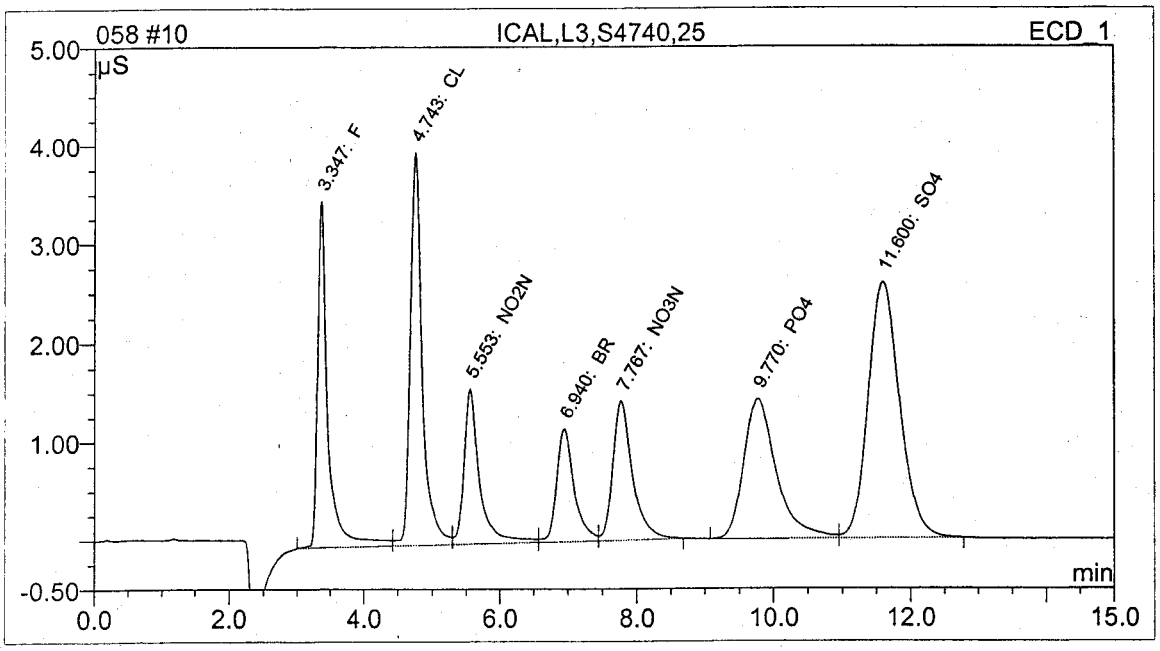
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

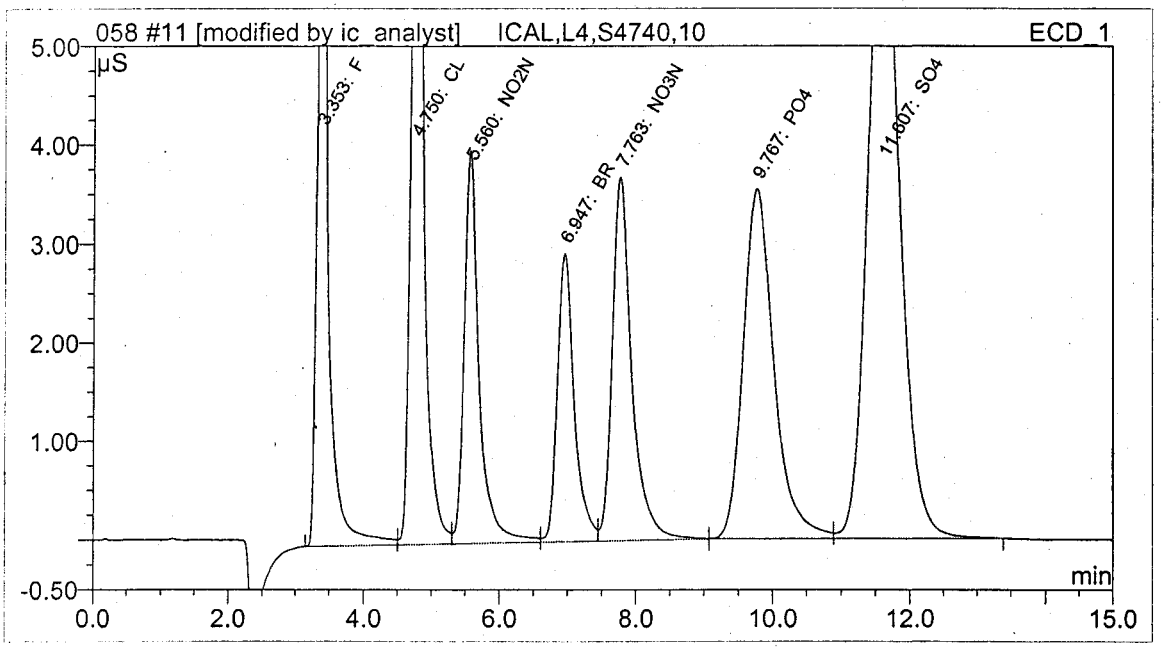
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

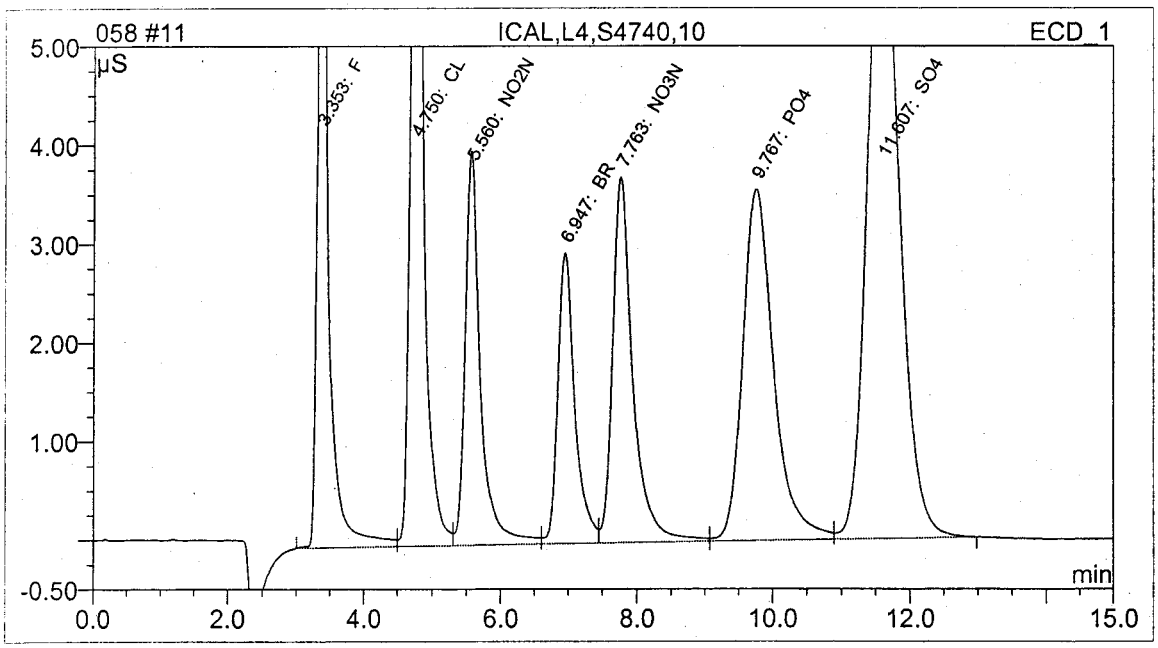
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

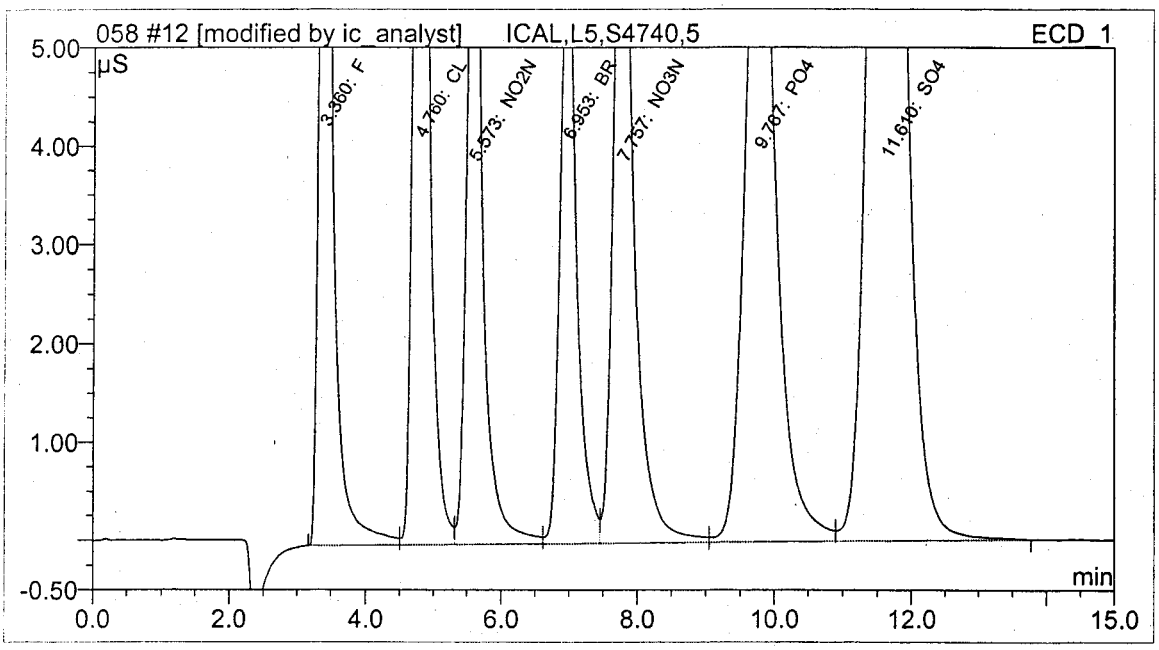
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

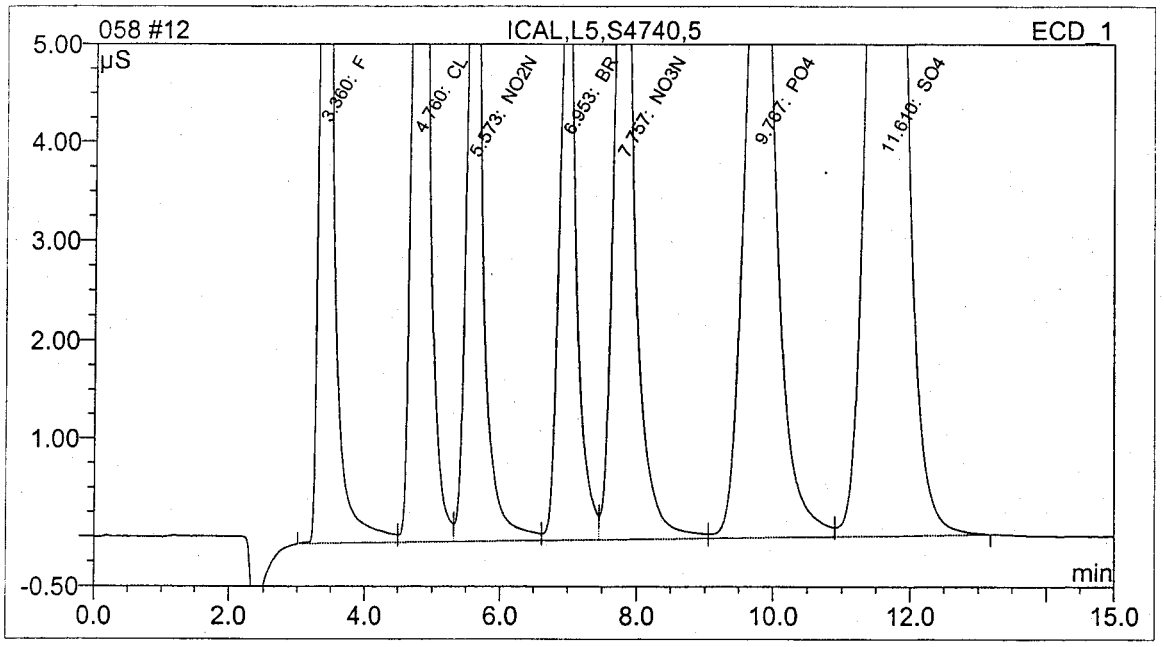
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260013 File : 058_13 Time : 27-FEB-2007 15:51
Cal : 607084260001 Caldate: 27-FEB-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

CW 3/1/07

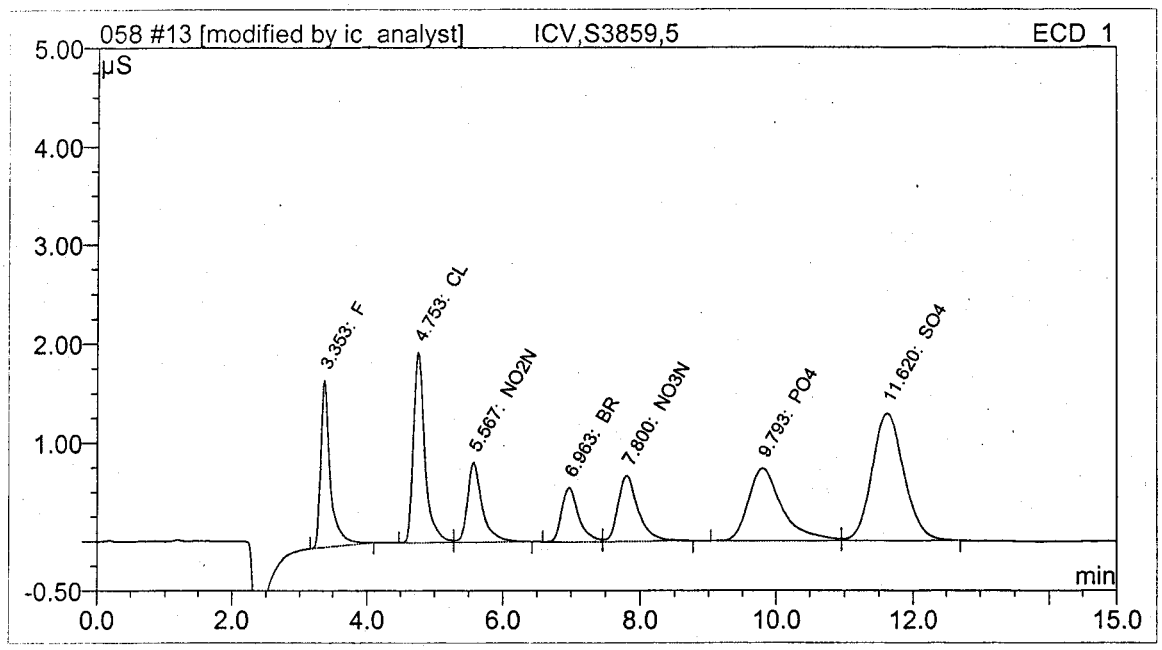
+=high bias v=ICV

607084260013

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

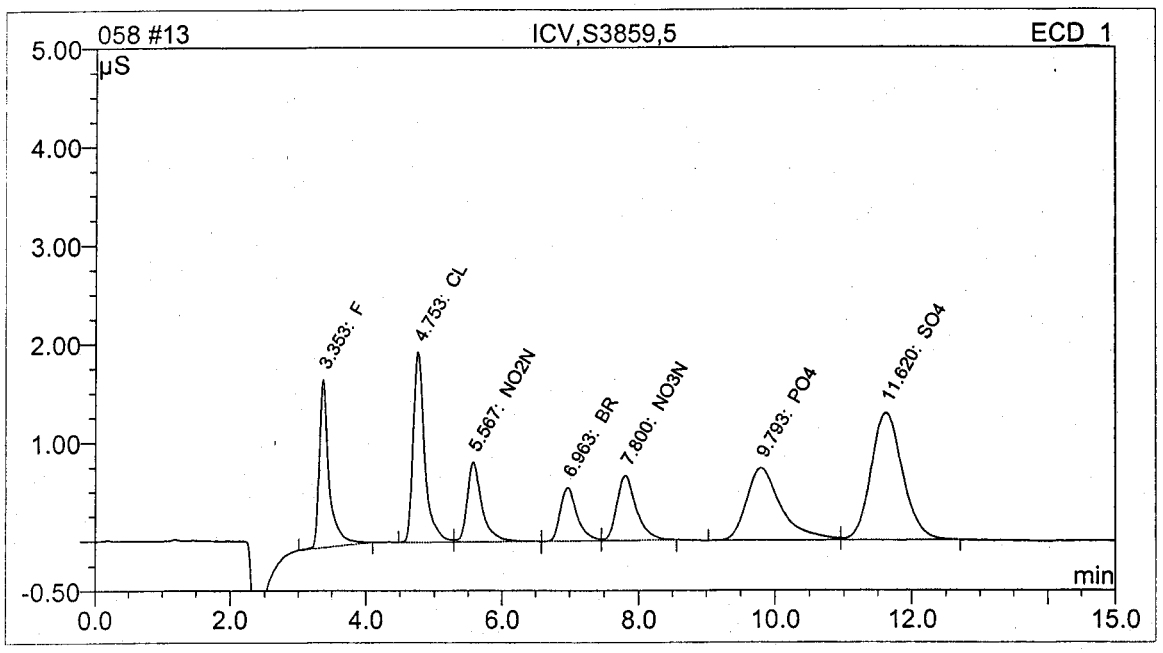
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607084260014 File : 058_14 Time : 27-FEB-2007 16:08
Cal : 607084260001 Caldate: 27-FEB-2007

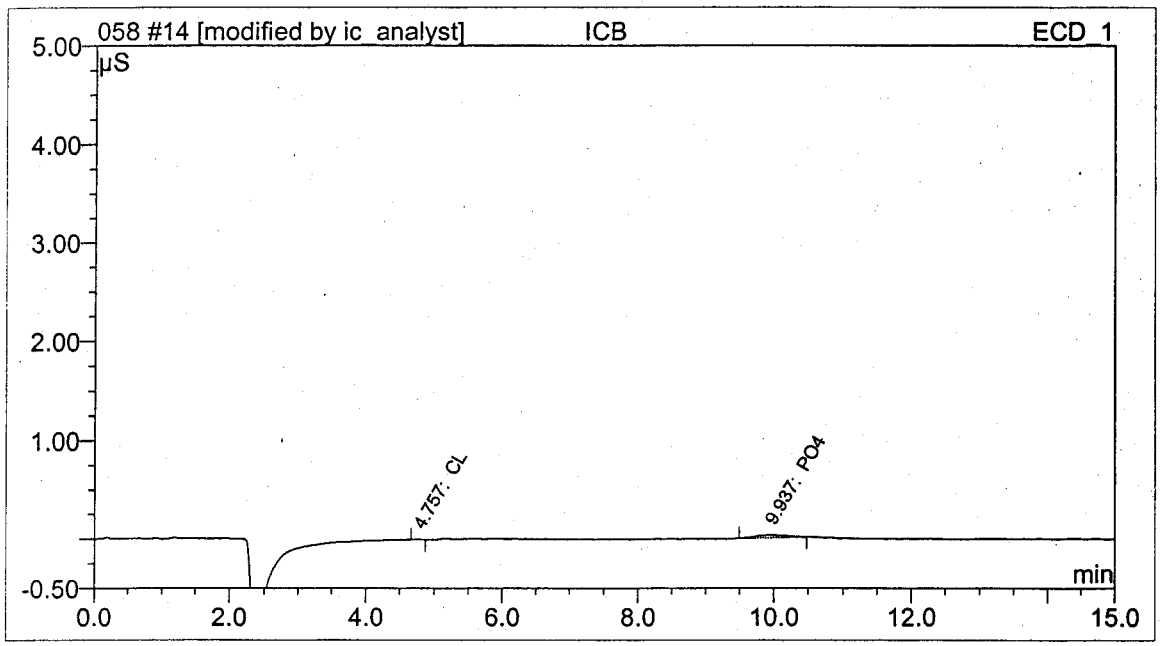
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

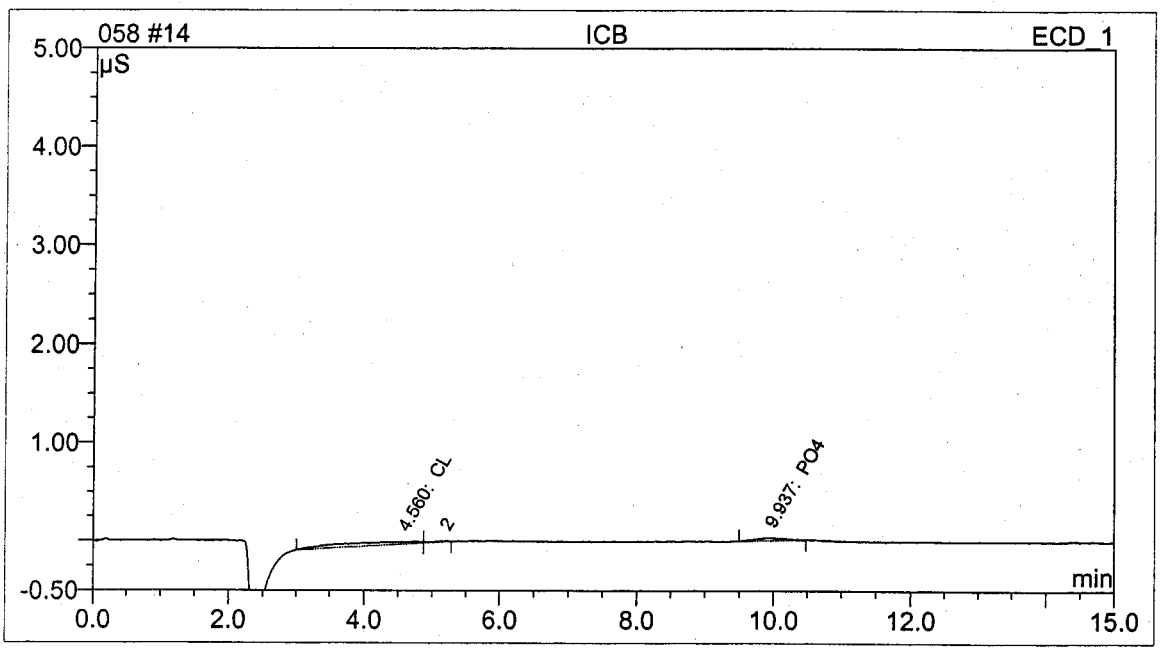
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260007 File : 058_7
Cal : 606441349001 Caldate: 02-NOV-2006

IDF : 1.0
Time : 27-FEB-2007 14:06

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

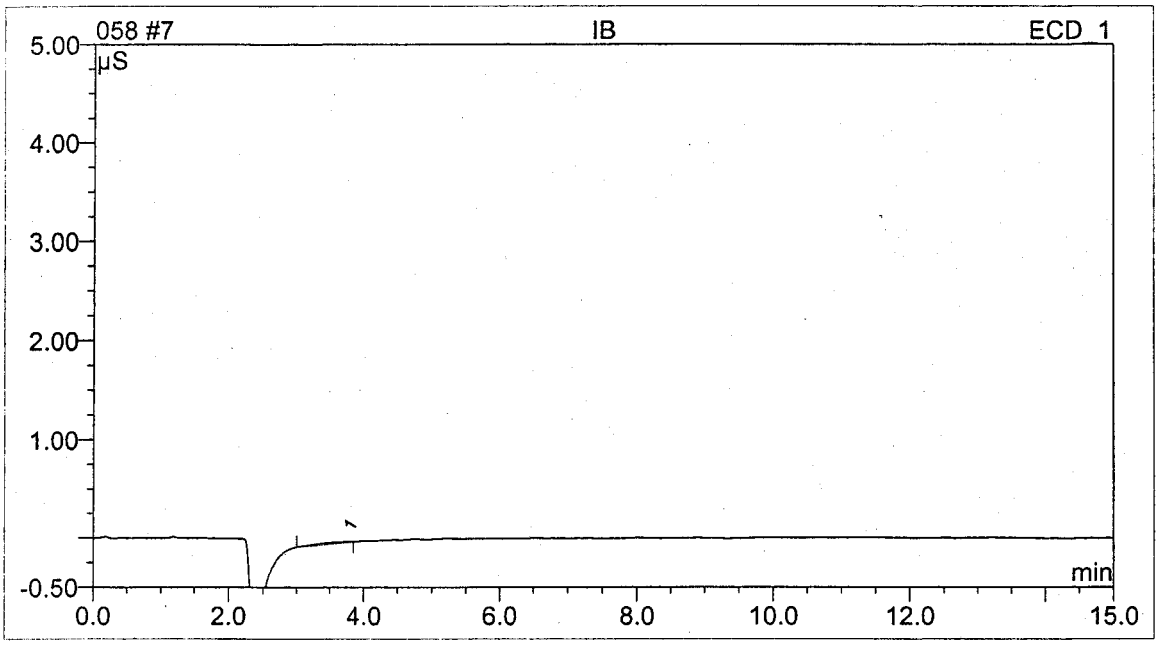
MKS 2/28/07

607084260007

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193262 IC Water: EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Reviewer: MCH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627092916001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193262 IC Water
EPA 300.0

Inst : IC03
Calnum : 627092916001 Cal Date: 05-MAR-2007

ICV 627092916007 (064_7 05-MAR-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 627092916001
Units : mg/L

Date : 05-MAR-2007 12:54
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	064_2	627092916002	L1	05-MAR-2007 12:54	S4740 (500X)
L2	064_3	627092916003	L2	05-MAR-2007 13:11	S4740 (100X)
L3	064_4	627092916004	L3	05-MAR-2007 13:29	S4740 (25X)
L4	064_5	627092916005	L4	05-MAR-2007 13:46	S4740 (10X)
L5	064_6	627092916006	L5	05-MAR-2007 14:03	S4740 (5X)

MRS 3/8/07

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1398	0.1653	0.1801	0.1913	0.2039	QORG		0.17693	0.002701	0.1761	1.000	0.990	
Chloride	0.1503	0.1519	0.1564	0.1637	0.1794	QORG		0.14880	0.001530	0.1603	1.000	0.990	
Nitrogen, Nitrite	0.3075	0.2999	0.3066	0.3096	0.3241	QORG		0.29735	0.005328	0.3096	1.000	0.990	
Bromide	0.0796	0.0697	0.0681	0.0664	0.0690	QORG		0.06508	1.946E-4	0.0706	1.000	0.990	
Nitrogen, Nitrate	0.3416	0.3778	0.3863	0.3816	0.4059	QORG		0.36487	0.008135	0.3786	1.000	0.990	
Orthophosphate (as P)	0.2701	0.1554	0.1248	0.1245	0.1319	QORG		0.12009	5.805E-4	0.1614	0.999	0.990	NC
Sulfate	0.1184	0.1042	0.1078	0.1133	0.1230	QORG		0.10368	3.858E-4	0.1133	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MRS 3/5/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

627092916001

Sequence: 064
Operator: ic_analyst
Printed: 3/6/2007 6:36:07 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-064	IB		1.0000	IC03-7AN	Finished	3/5/2007 12:36:49 PM	IC03-7AN_CAL
2	CAL-064	ICAL,L1,S4740,500		1.0000	IC03-7AN	Finished	3/5/2007 12:54:14 PM	IC03-7AN_CAL
3	CAL-064	ICAL,L2,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 1:11:38 PM	IC03-7AN_CAL
4	CAL-064	ICAL,L3,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 1:29:03 PM	IC03-7AN_CAL
5	CAL-064	ICAL,L4,S4740,10		1.0000	IC03-7AN	Finished	3/5/2007 1:46:27 PM	IC03-7AN_CAL
6	CAL-064	ICAL,L5,S4740,5		1.0000	IC03-7AN	Finished	3/5/2007 2:03:52 PM	IC03-7AN_CAL
7	CAL-064	ICV,S3859,5		1.0000	IC03-7AN	Finished	3/5/2007 2:21:16 PM	IC03-7AN_CAL
8	CAL-064	ICB		1.0000	IC03-7AN	Finished	3/5/2007 2:38:41 PM	IC03-7AN_CAL
9	122763	CCV,L,S4740,100		1.0000	IC03-7AN	Finished	3/5/2007 3:07:18 PM	IC03-7AN_CAL
10	122763	CCB/MB,QC377766		1.0000	IC03-7AN	Finished	3/5/2007 3:24:43 PM	IC03-7AN_CAL
11	122763	193108-027	J	10.0000	IC03-7AN	Finished	3/5/2007 3:43:54 PM	IC03-7AN_CAL
12	122763	MSS,193128-002	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:01:18 PM	IC03-7AN_CAL
13	122763	193128-001	F	2000.0000	IC03-7AN	Finished	3/5/2007 4:18:43 PM	IC03-7AN_CAL
14	122763	MSS,193128-002	F	20.0000	IC03-7AN	Finished	3/5/2007 4:38:53 PM	IC03-7AN_CAL
15	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 4:56:18 PM	IC03-7AN_CAL
16	122763	193128-001	F	25.0000	IC03-7AN	Finished	3/5/2007 5:13:42 PM	IC03-7AN_CAL
17	122763	BLK		1.0000	IC03-7AN	Finished	3/5/2007 5:31:07 PM	IC03-7AN_CAL
18	122763	MS,QC377768,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 5:56:29 PM	IC03-7AN_CAL
19	122763	MSD,QC377769,S4740,50	F	2500.0000	IC03-7AN	Finished	3/5/2007 6:13:53 PM	IC03-7AN_CAL
20	122763	LCS,QC377767,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:01:14 PM	IC03-7AN_CAL
21	122763	CCV,M,S4740,25		1.0000	IC03-7AN	Finished	3/5/2007 7:18:38 PM	IC03-7AN_CAL
22	122763	CCB		1.0000	IC03-7AN	Finished	3/5/2007 7:36:03 PM	IC03-7AN_CAL
23	122763	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	3/5/2007 7:53:28 PM	IC03-7AN_CAL

Sequence: 064
Operator: ic_analyst

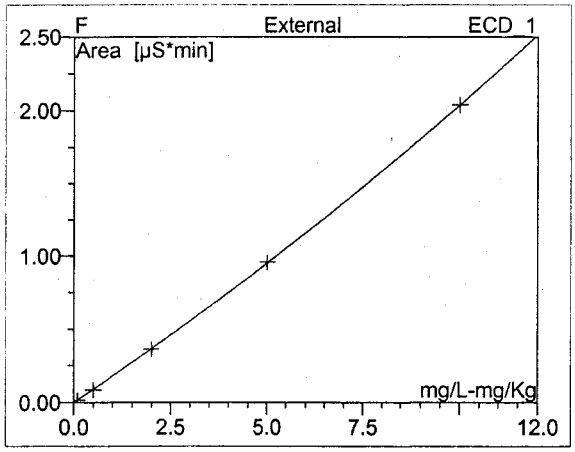
Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007
Timebase: IC3_DX120
#Samples: 23

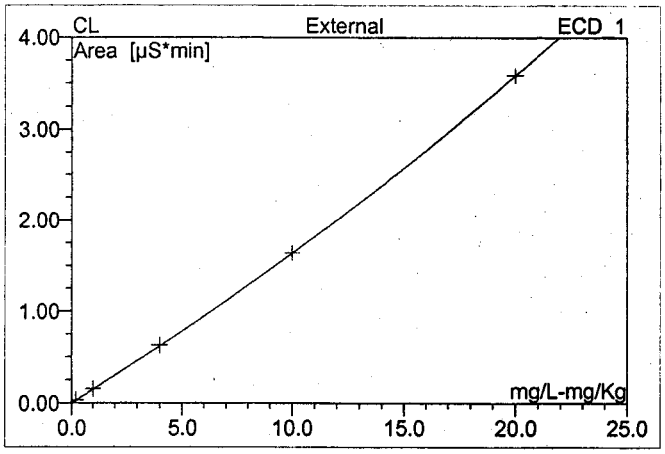
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 3/6/2007 2:05:34 PM by ic_analyst

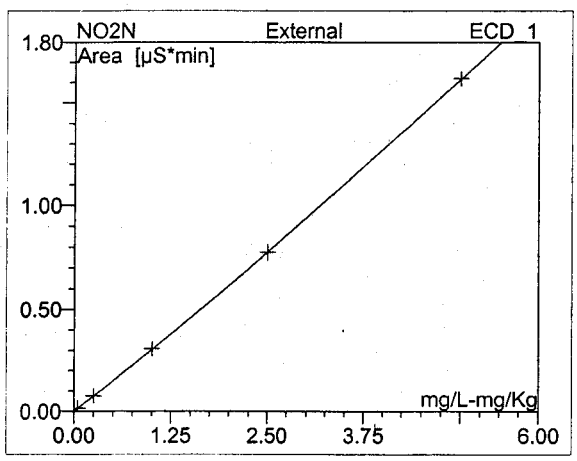
No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-064	IB		Unknown	25.0	MRS	1
2	CAL-064	ICAL,L1,S4740,500		Standard	25.0	MRS	1
3	CAL-064	ICAL,L2,S4740,100		Standard	25.0	MRS	1
4	CAL-064	ICAL,L3,S4740,25		Standard	25.0	MRS	1
5	CAL-064	ICAL,L4,S4740,10		Standard	25.0	MRS	1
6	CAL-064	ICAL,L5,S4740,5		Standard	25.0	MRS	1
7	CAL-064	ICV,S3859,5		Unknown	25.0	MRS	1
8	CAL-064	ICB		Unknown	25.0	MRS	1
9	122763	CCV,L,S4740,100		Unknown	25.0	MRS	1
10	122763	CCB/MB,QC377766		Unknown	25.0	MRS	1
11	122763	193108-027	J	Unknown	25.0	MRS	1
12	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
13	122763	193128-001	F	Unknown	25.0	MRS	1
14	122763	MSS,193128-002	F	Unknown	25.0	MRS	1
15	122763	BLK		Unknown	25.0	MRS	1
16	122763	193128-001	F	Unknown	25.0	MRS	1
17	122763	BLK		Unknown	25.0	MRS	1
18	122763	MS,QC377768,S4740,50	F	Unknown	25.0	MRS	1
19	122763	MSD,QC377769,S4740,50	F	Unknown	25.0	MRS	1
20	122763	LCS,QC377767,S4740,25		Unknown	25.0	MRS	1
21	122763	CCV,M,S4740,25		Unknown	25.0	MRS	1
22	122763	CCB		Unknown	25.0	MRS	1
23	122763	SHUTDOWN		Unknown	25.0	MRS	1

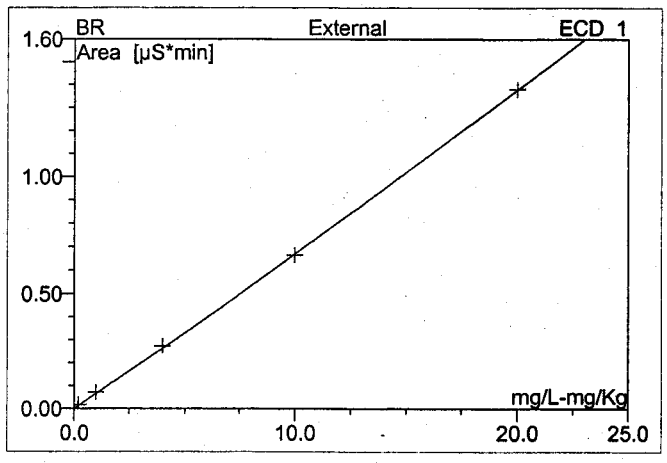
IC03 Calibration Batch Report

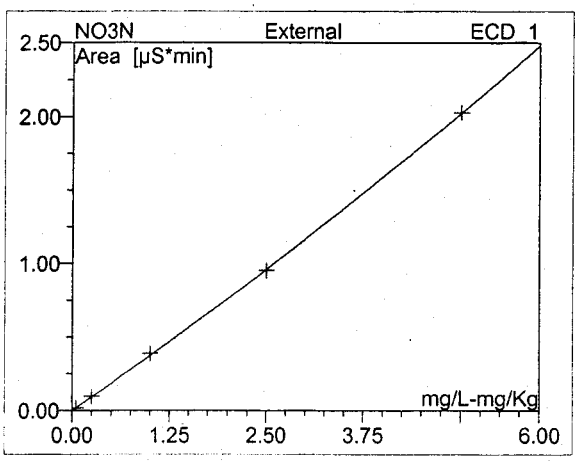
Sequence:	064	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	03/05/07 13:29	Run Time:	15.00

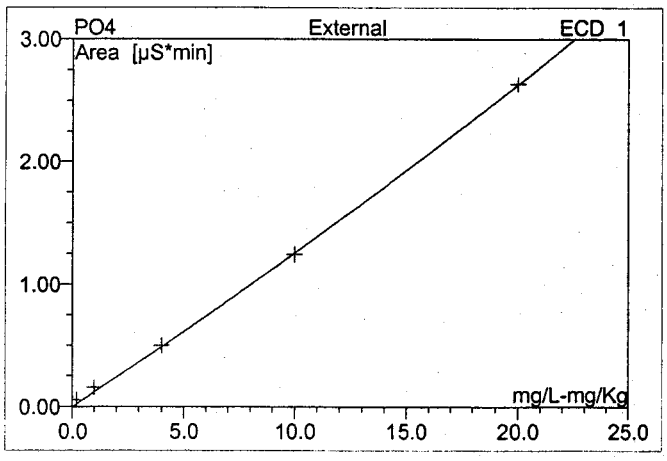




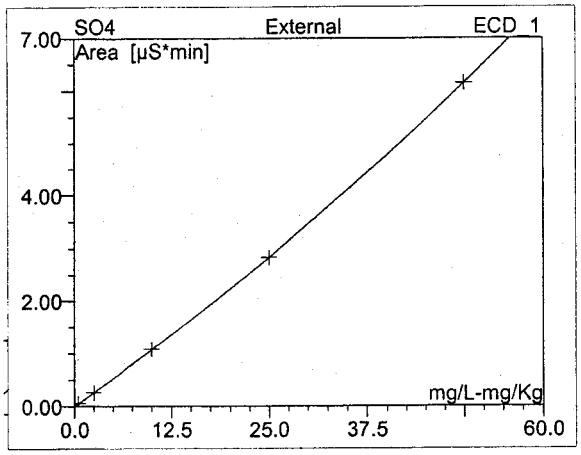








Sequence:	**064**	*Inj. Vol.:*	**25.0**
Program:	**IC03-7AN**	*Operator:*	**n.a.**
Inj. Date/Time:	**03/05/07 13:29**	*Run Time:*	**15.00**



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.933	F	Quad	5	0.000000	0.176934	0.002701	99.949239
3	4.303	CL	Quad	5	0.000000	0.148797	0.001530	99.896081
4	5.080	NO2N	Quad	5	0.000000	0.297350	0.005328	99.974037
6	6.447	BR	Quad	5	0.000000	0.065083	0.000195	99.978297
7	7.227	NO3N	Quad	5	0.000000	0.364867	0.008136	99.955223
8	9.410	PO4	Quad	5	0.000000	0.120090	0.000581	99.931914
10	11.307	SO4	Quad	5	0.000000	0.103685	0.000386	99.912131
AVERAGE:					0.000000	0.182401	0.002694	99.942417

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
2	ICAL,L1,S474	0.013984	0.030060	0.015376	0.015928	0.017080	0.054026	0.059200
3	ICAL,L2,S474	0.082655	0.151891	0.074983	0.069681	0.094449	0.155444	0.260487
4	ICAL,L3,S474	0.360134	0.625490	0.306630	0.272305	0.386270	0.499382	1.077717
5	ICAL,L4,S474	0.956489	1.636939	0.774070	0.663674	0.954052	1.244935	2.831688
6	ICAL,L5,S474	2.038608	3.588720	1.620454	1.380808	2.029424	2.637050	6.148953

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
2	ICAL,L1,S474	0.106784	0.259206	0.094736	0.085782	0.086944	0.139904	0.192940
3	ICAL,L2,S474	0.559810	1.251968	0.476384	0.380274	0.439102	0.442038	0.871826
4	ICAL,L3,S474	2.519532	5.183898	1.963338	1.493146	1.805864	1.577264	3.668088
5	ICAL,L4,S474	7.021296	14.016320	5.023600	3.765102	4.656376	4.136188	9.753474
6	ICAL,L5,S474	16.054300	31.358586	10.620766	7.988634	10.098332	9.284974	21.808498

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
2	ICAL,L1,S474	0.078939	0.201601	0.051663	0.244555	0.046763	0.448900	0.569750
3	ICAL,L2,S474	0.463870	1.010297	0.251040	1.067238	0.257382	1.286394	2.489237
4	ICAL,L3,S474	1.975816	4.036139	1.012826	4.132878	1.034784	4.077992	10.020568
5	ICAL,L4,S474	5.021006	9.977518	2.491950	9.903984	2.477892	9.893477	24.987492
6	ICAL,L5,S474	9.996219	20.003673	5.001406	20.017697	5.003816	20.021116	50.002073

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100
1	*F*	*2.933 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*		*0.100000*	*0.500000*
2	CL	4.303 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.080 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.447 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.227 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.410 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.307 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5	Comment
1	*F*	*2.933 min*	*2.000000*	*5.000000*	*10.000000*	
2	CL	4.303 min	4.000000	10.000000	20.000000	
3	NO2N	5.080 min	1.000000	2.500000	5.000000	
4	BR	6.447 min	4.000000	10.000000	20.000000	
5	NO3N	7.227 min	1.000000	2.500000	5.000000	
6	PO4	9.410 min	4.000000	10.000000	20.000000	
7	SO4	11.307 min	10.000000	25.000000	50.000000	

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	*F*	*2.933 min*	*1.000000*	*0.100000*	*0.500000*	*2.000000*	*5.000000*	*10.000000*
2	CL	4.303 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
3	NO2N	5.080 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
4	BR	6.447 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.227 min	1.000000	0.050000	0.250000	1.000000	2.500000	5.000000
6	PO4	9.410 min	1.000000	0.200000	1.000000	4.000000	10.000000	20.000000
7	SO4	11.307 min	1.000000	0.500000	2.500000	10.000000	25.000000	50.000000

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Comment
1	*F*	*2.933 min*	
2	CL	4.303 min	
3	NO2N	5.080 min	
4	BR	6.447 min	
5	NO3N	7.227 min	
6	PO4	9.410 min	
7	SO4	11.307 min	

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2007\064.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 3/5/2007 3:02:32 PM by ic_analyst

Calibration:

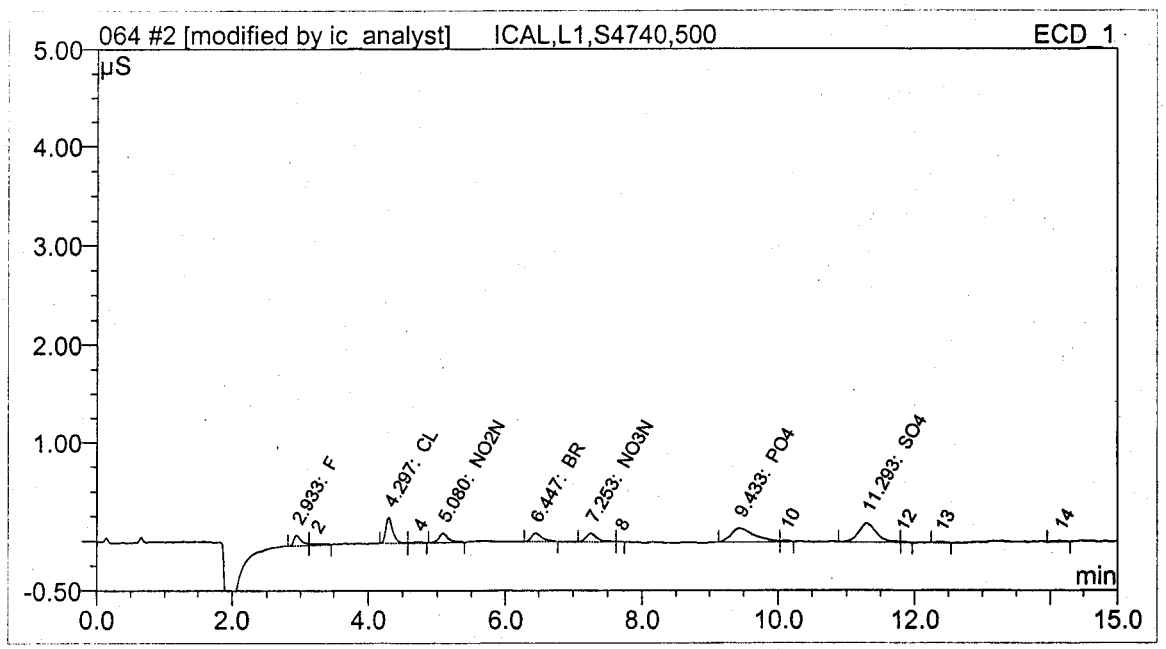
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	3/5/2007 12:54:14 PM	Ok
2	☒	ICAL,L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	3/5/2007 1:11:38 PM	Ok
3	☒	ICAL,L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	3/5/2007 1:29:03 PM	Ok
4	☒	ICAL,L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	3/5/2007 1:46:27 PM	Ok
5	☒	ICAL,L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	3/5/2007 2:03:52 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.013984	0.0789	0.0789	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.017080	0.0468	0.0468	
9	PO4	9.433	0.054026	0.4489	0.4489	
11	SO4	11.293	0.059200	0.5697	0.5697	



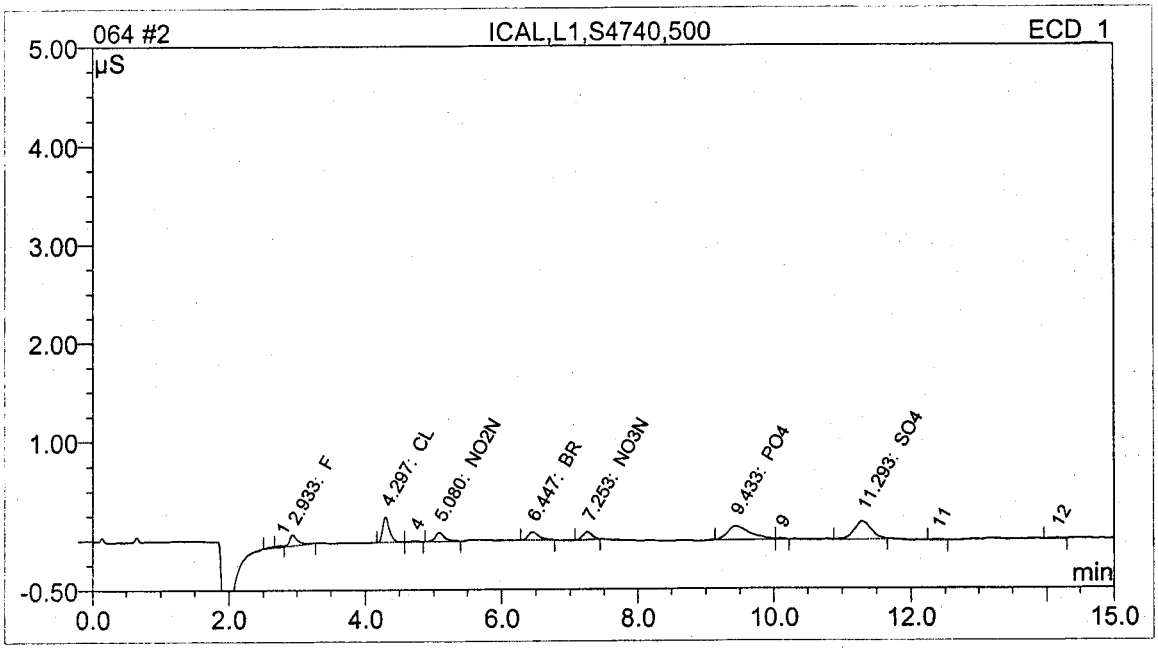
ANALYZED BY: REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	2
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:54 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.933	0.018469	0.1042	0.1042	
3	CL	4.297	0.030060	0.2016	0.2016	
5	NO2N	5.080	0.015376	0.0517	0.0517	
6	BR	6.447	0.015928	0.2446	0.2446	
7	NO3N	7.253	0.012973	0.0355	0.0355	
8	PO4	9.433	0.054026	0.4489	0.4489	
10	SO4	11.293	0.053244	0.5126	0.5126	



ANALYZED BY: _____

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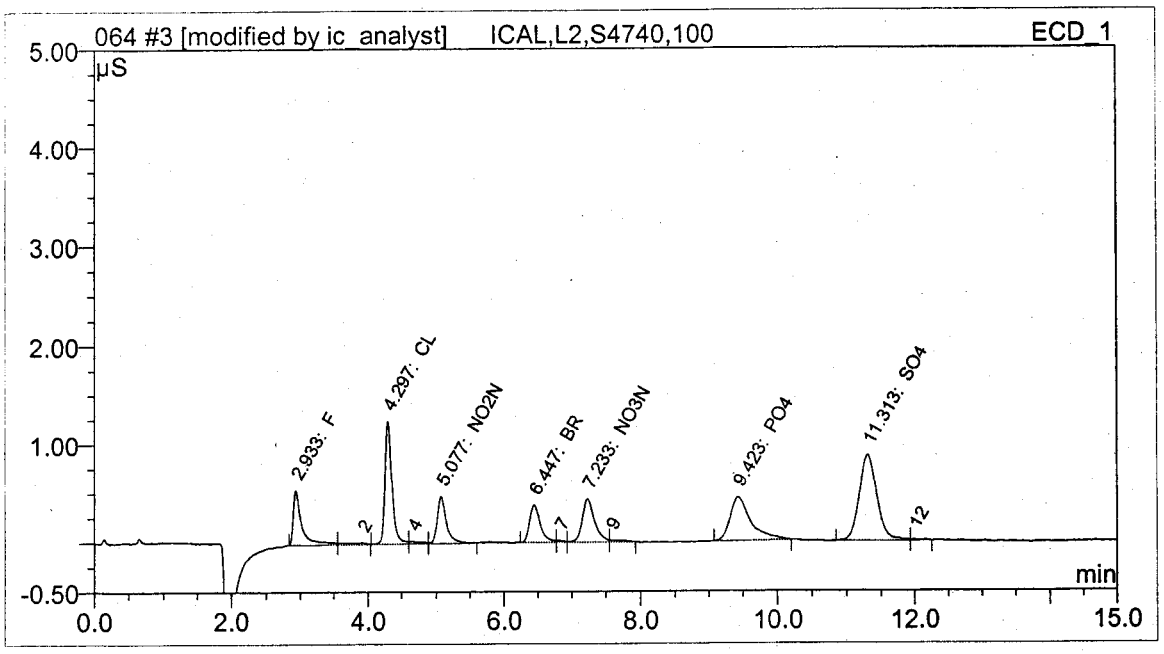
Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.082655	0.4639	0.4639	
3	CL	4.297	0.151891	1.0103	1.0103	
5	NO2N	5.077	0.074983	0.2510	0.2510	
6	BR	6.447	0.069681	1.0672	1.0672	
8	NO3N	7.233	0.094449	0.2574	0.2574	
10	PO4	9.423	0.155444	1.2864	1.2864	
11	SO4	11.313	0.260487	2.4892	2.4892	



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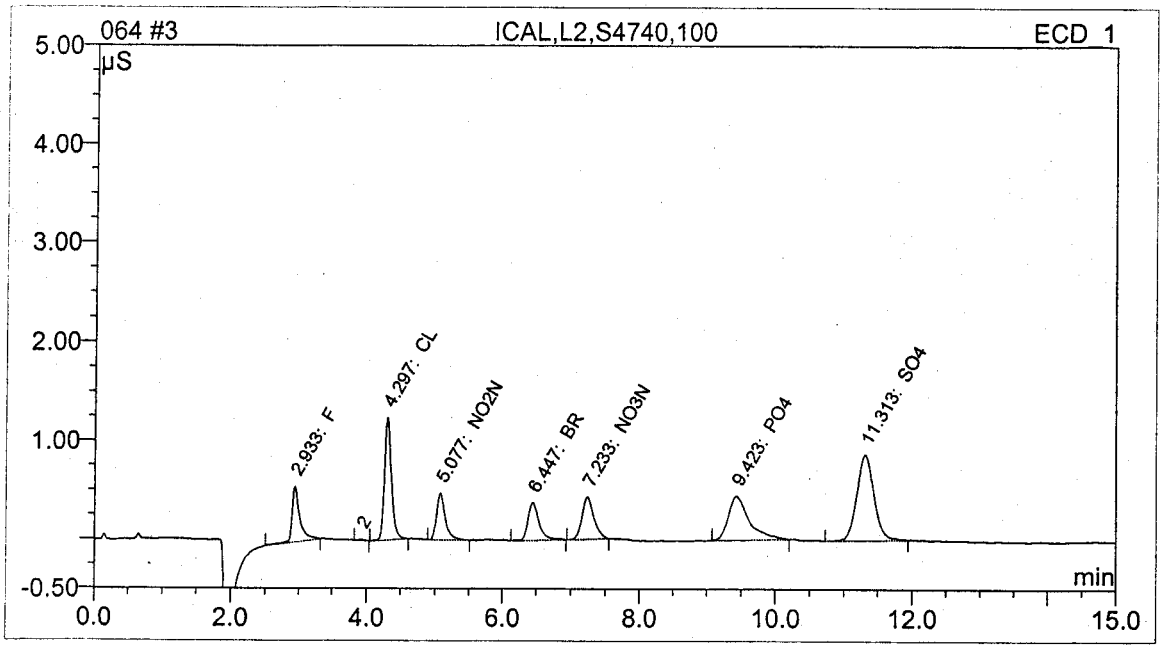
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	3
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:11 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.075978	0.4275	0.4275	
3	CL	4.297	0.146267	0.9742	0.9742	
4	NO2N	5.077	0.071148	0.2386	0.2386	
5	BR	6.447	0.071306	1.0913	1.0913	
6	NO3N	7.233	0.086565	0.2365	0.2365	
7	PO4	9.423	0.155444	1.2864	1.2864	
8	SO4	11.313	0.257897	2.4653	2.4653	



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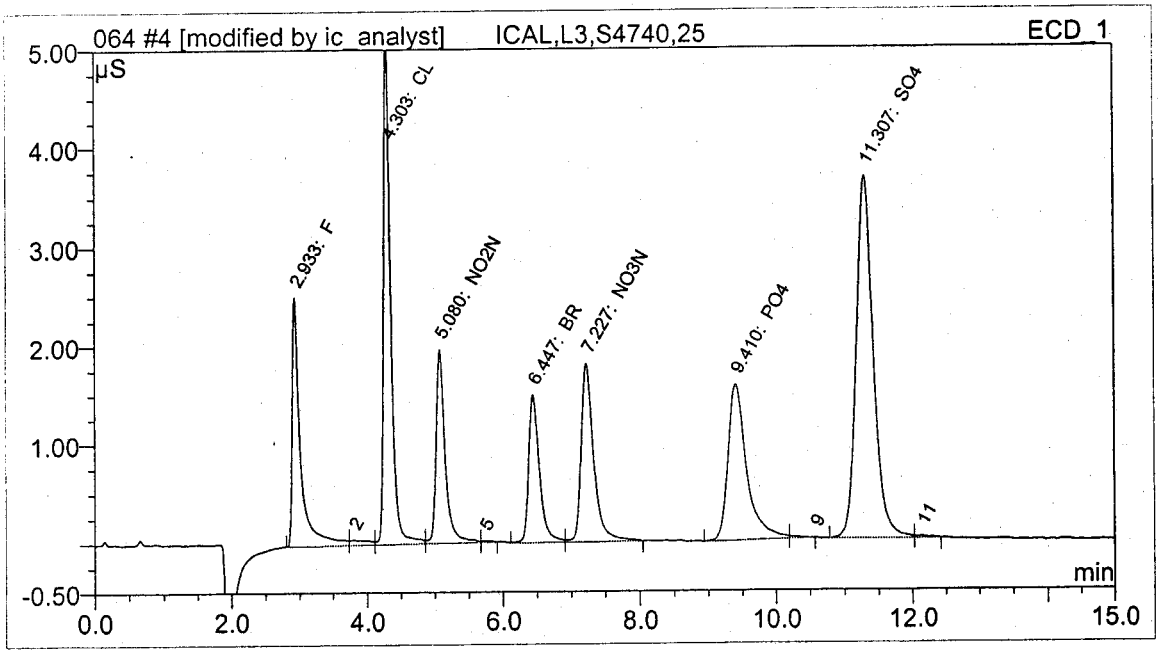
ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.360134	1.9758	1.9758	
3	CL	4.303	0.625490	4.0361	4.0361	
4	NO2N	5.080	0.306630	1.0128	1.0128	
6	BR	6.447	0.272305	4.1329	4.1329	
7	NO3N	7.227	0.386270	1.0348	1.0348	
8	PO4	9.410	0.499382	4.0780	4.0780	
10	SO4	11.307	1.077717	10.0206	10.0206	



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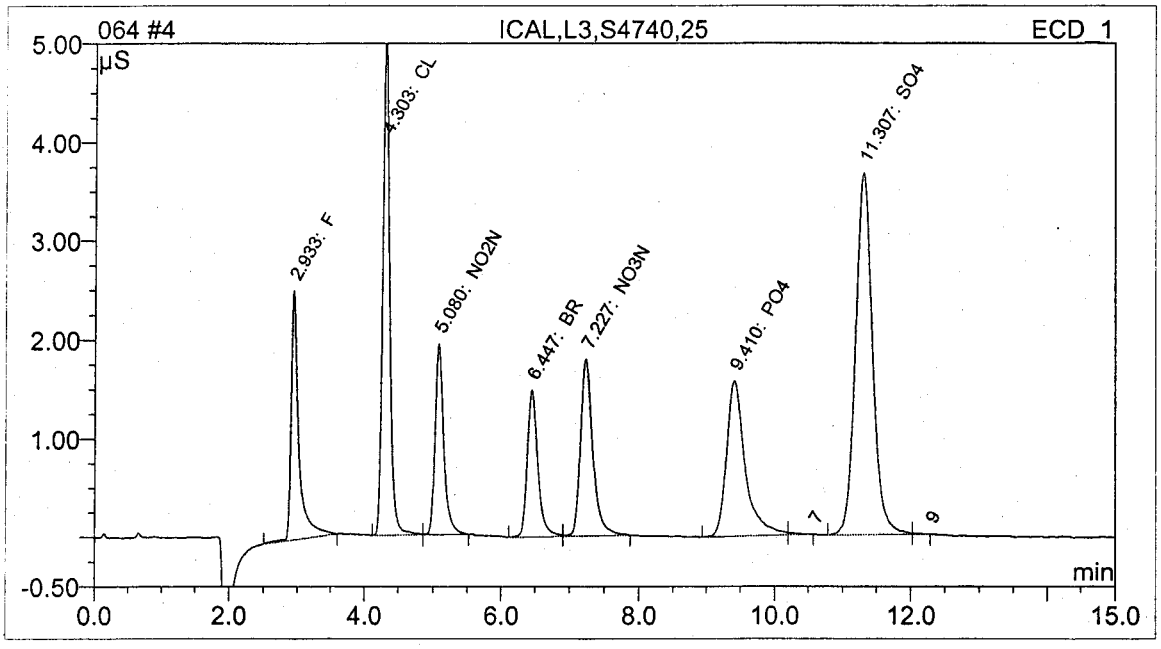
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	4
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:29 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.933	0.341403	1.9038	1.9038	
2	CL	4.303	0.603405	3.9382	3.9382	
3	NO2N	5.080	0.285535	0.9636	0.9636	
4	BR	6.447	0.269846	4.1069	4.1069	
5	NO3N	7.227	0.375155	1.0142	1.0142	
6	PO4	9.410	0.499382	4.0780	4.0780	
8	SO4	11.307	1.071996	9.9841	9.9841	



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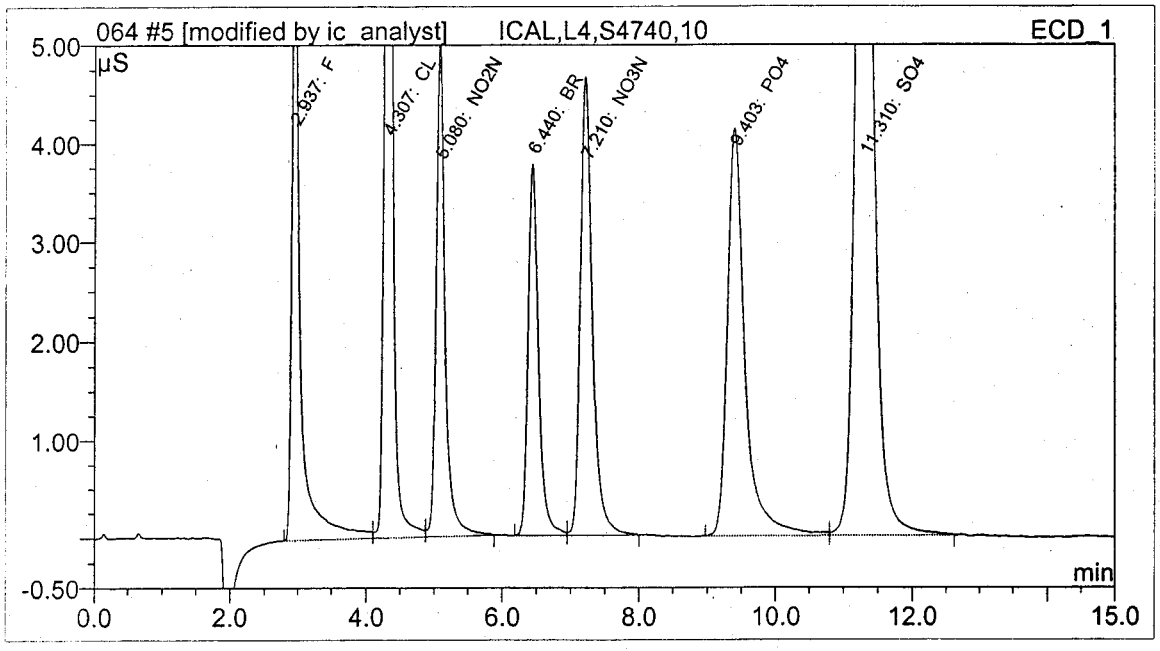
ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.956489	5.0210	5.0210	
2	CL	4.307	1.636939	9.9775	9.9775	
3	NO2N	5.080	0.774070	2.4920	2.4920	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.244935	9.8935	9.8935	
7	SO4	11.310	2.831688	24.9875	24.9875	



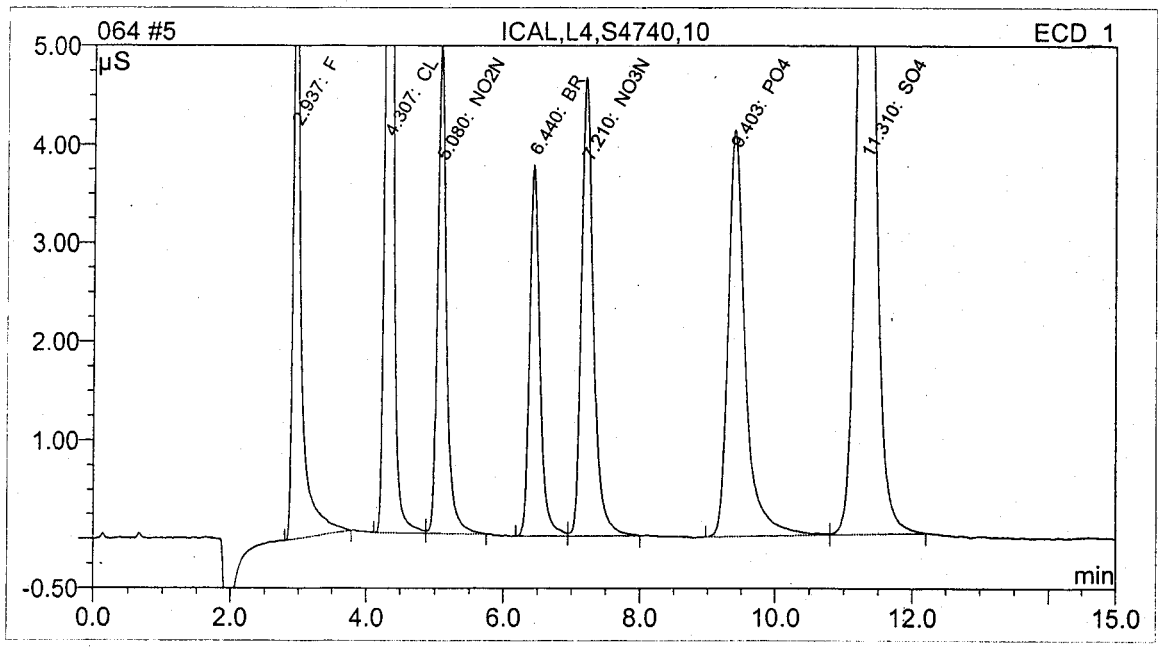
ANALYZED BY: REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	5
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 1:46 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.937	0.888070	4.9182	4.9182	
2	CL	4.307	1.598349	9.9117	9.9117	
3	NO2N	5.080	0.747696	2.4670	2.4670	
4	BR	6.440	0.663674	9.9040	9.9040	
5	NO3N	7.210	0.954052	2.4779	2.4779	
6	PO4	9.403	1.228820	9.8560	9.8560	
7	SO4	11.310	2.789769	24.8832	24.8832	



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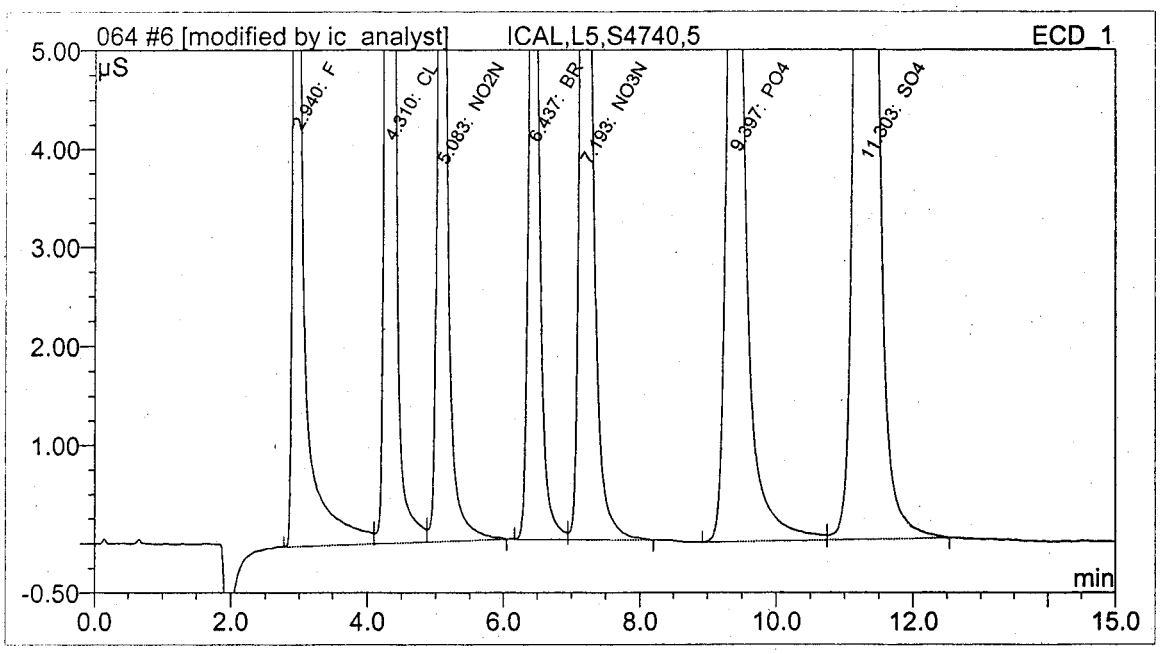
Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.038608	9.9962	9.9962	
2	CL	4.310	3.588720	20.0037	20.0037	
3	NO2N	5.083	1.620454	5.0014	5.0014	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

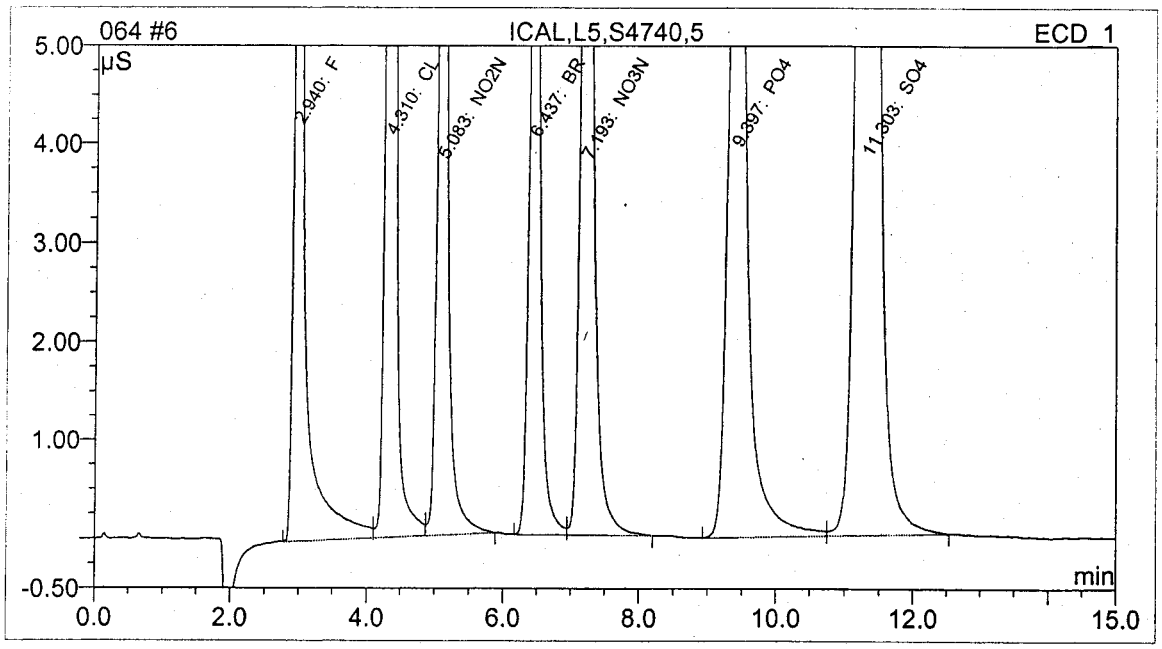
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	6
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:03 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	2.032875	9.9959	9.9959	
2	CL	4.310	3.580258	20.0032	20.0032	
3	NO2N	5.083	1.601110	5.0008	5.0008	
4	BR	6.437	1.380808	20.0177	20.0177	
5	NO3N	7.193	2.029424	5.0038	5.0038	
6	PO4	9.397	2.637050	20.0211	20.0211	
7	SO4	11.303	6.148953	50.0021	50.0021	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916007 File : 064_7 Time : 05-MAR-2007 14:21
Cal : 627092916001 Caldate: 05-MAR-2007
Standards: S3859 (5X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1761	0.1803	1.000	1.004	mg/L	0	10	
Chloride	0.1603	0.1475	2.000	1.943	mg/L	-3	10	
Nitrogen, Nitrite	0.3096	0.3108	0.5000	0.5178	mg/L	4	10	
Bromide	0.0706	0.0714	2.000	2.181	mg/L	9	10	
Nitrogen, Nitrate	0.3786	0.3540	0.5000	0.4800	mg/L	-4	10	
Orthophosphate (as P)	0.1614	0.1250	2.000	2.060	mg/L	3	10	
Sulfate	0.1133	0.1078	5.000	5.101	mg/L	2	10	

MRS 3/5/07

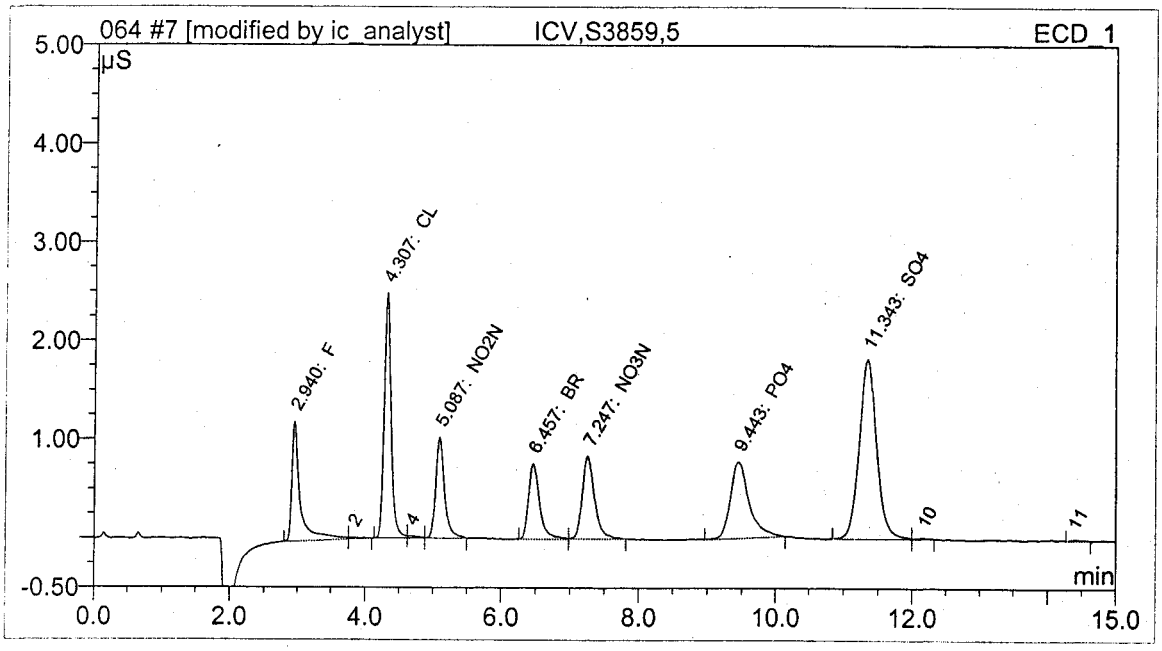
3/15/07

627092916007

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180313	1.0037	1.0037	
3	CL	4.307	0.294964	1.9435	1.9435	
5	NO2N	5.087	0.155389	0.5178	0.5178	
6	BR	6.457	0.142892	2.1813	2.1813	
7	NO3N	7.247	0.177004	0.4800	0.4800	
8	PO4	9.443	0.249901	2.0604	2.0604	
9	SO4	11.343	0.538907	5.1007	5.1007	



ANALYZED BY: _____

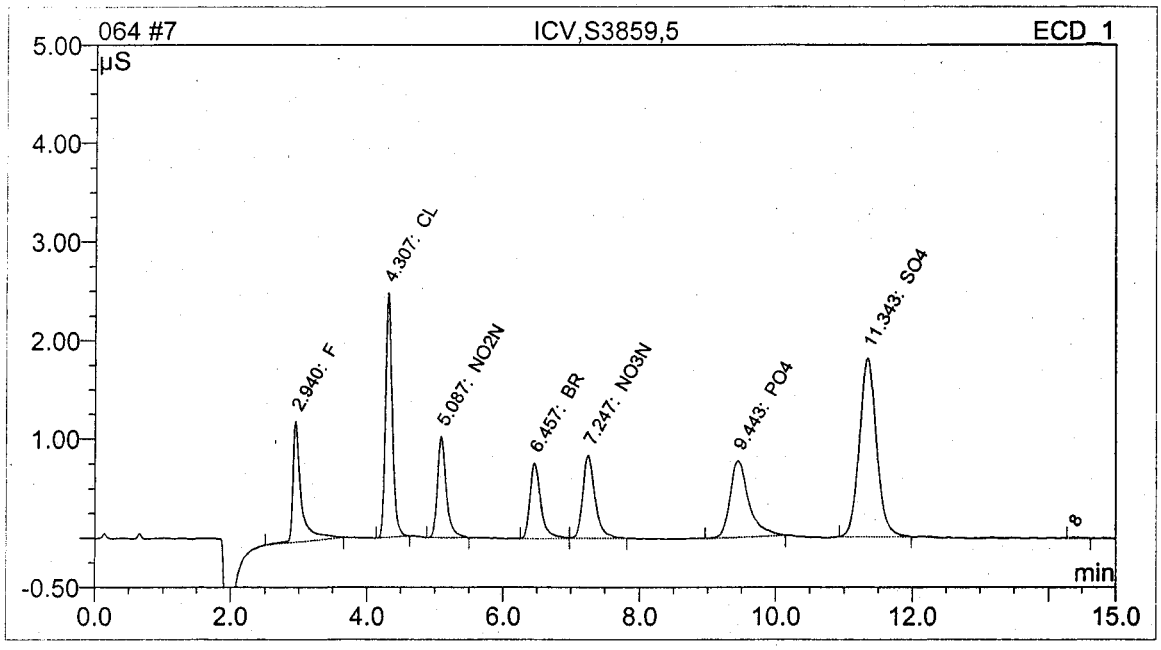
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	**Sample No.:**	7
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:21 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.177111	0.9862	0.9862	
2	CL	4.307	0.289553	1.9085	1.9085	
3	NO2N	5.087	0.154283	0.5141	0.5141	
4	BR	6.457	0.142892	2.1813	2.1813	
5	NO3N	7.247	0.177004	0.4800	0.4800	
6	PO4	9.443	0.249901	2.0604	2.0604	
7	SO4	11.343	0.531317	5.0302	5.0302	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916008 File : 064_8 Time : 05-MAR-2007 14:38
Cal : 627092916001 Caldate: 05-MAR-2007

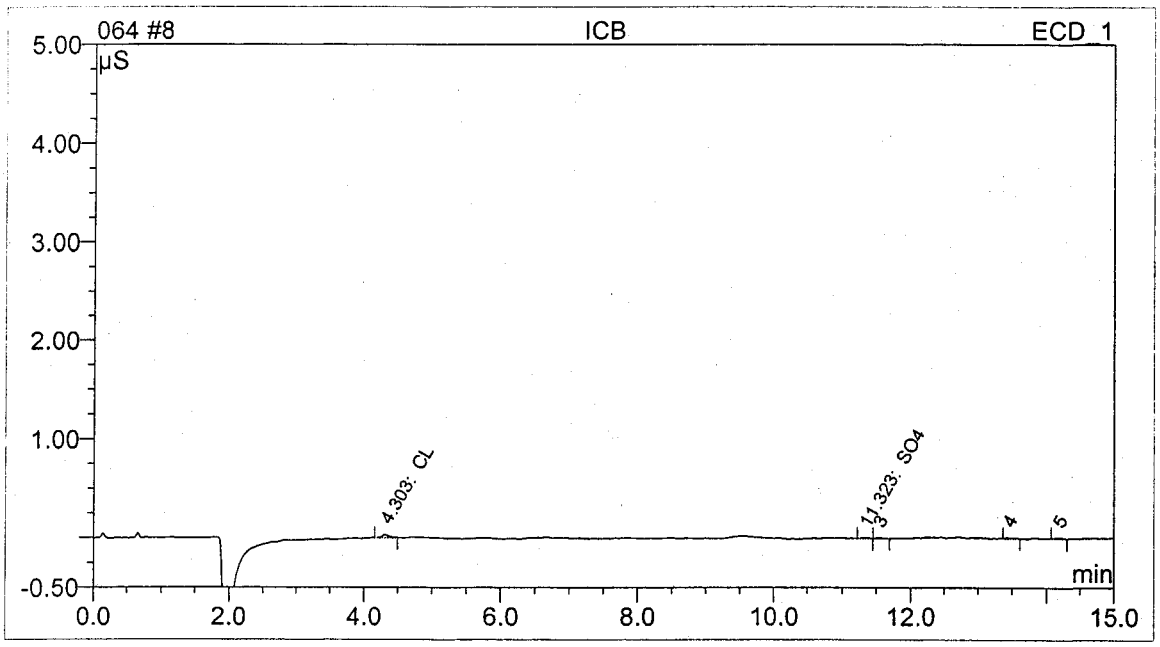
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	**Sample No.:**	8
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 2:38 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.303	0.004707	0.0316	0.0316	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
2	SO4	11.323	0.001376	0.0133	0.0133	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627092916001 File : 064_1 Time : 05-MAR-2007 12:36
Cal : 627084271001 Caldate: 27-FEB-2007

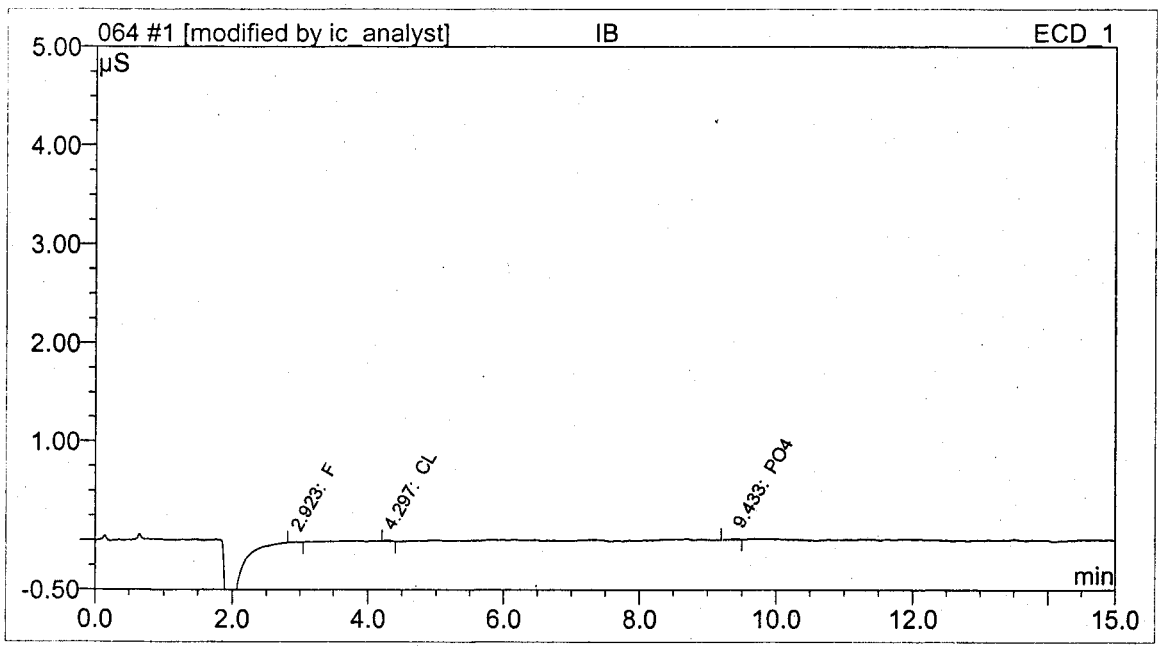
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Bromide	ND	0.2000	0.05352	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

MRS 3/5/07

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.000712	0.0040	0.0040	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

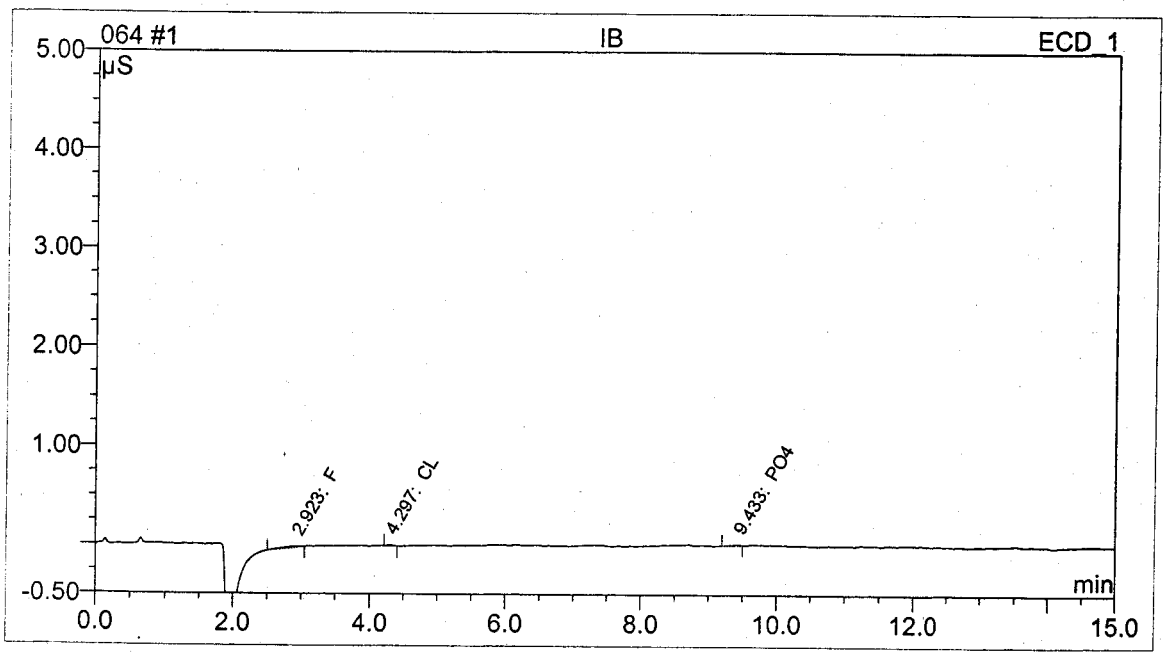
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	**Sample No.:**	1
Sequence Name:	064	**Batch #:**	CAL-064
Program Method:	IC03-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC03-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC03-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	3/5/2007 12:36 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.923	0.004858	0.0274	0.0274	
2	CL	4.297	0.001107	0.0074	0.0074	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.433	0.001546	0.0129	0.0129	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607097127040	08-MAR-2007 20:49	607084260001	27-FEB-2007	0.2987	0.2946	2.0000	1.9729	mg/L	-1	10	
IC01	P	607097127053	09-MAR-2007 00:36	607084260001	27-FEB-2007	0.2987	0.3058	5.0000	4.9953	mg/L	0	10	
IC01	P	607097127067	09-MAR-2007 04:41	607084260001	27-FEB-2007	0.2987	0.2931	2.0000	1.9628	mg/L	-2	10	
IC01	P	607097127081	09-MAR-2007 08:47	607084260001	27-FEB-2007	0.2987	0.3003	5.0000	4.9098	mg/L	-2	10	
IC03	P	627104424007	13-MAR-2007 11:32	627092916001	05-MAR-2007	0.1761	0.1860	0.5000	0.5215	mg/L	4	10	
IC03	P	627104424019	13-MAR-2007 15:15	627092916001	05-MAR-2007	0.1761	0.2013	2.0000	2.2020	mg/L	10	10	
IC03	P	627104424033	13-MAR-2007 19:19	627092916001	05-MAR-2007	0.1761	0.1625	0.5000	0.4561	mg/L	-9	10	
IC03	P	627104424052	14-MAR-2007 00:49	627092916001	05-MAR-2007	0.1761	0.2036	5.0000	5.3219	mg/L	6	10	

CONTINUING CALIBRATION SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607097127040	08-MAR-2007 20:49	607084260001	27-FEB-2007	0.2028	0.2005	4.0000	4.1223	mg/L	3	10	
IC01	P	607097127053	09-MAR-2007 00:36	607084260001	27-FEB-2007	0.2028	0.2129	10.000	10.395	mg/L	4	10	
IC01	P	607097127067	09-MAR-2007 04:41	607084260001	27-FEB-2007	0.2028	0.2024	4.0000	4.1610	mg/L	4	10	
IC01	P	607097127081	09-MAR-2007 08:47	607084260001	27-FEB-2007	0.2028	0.2125	10.000	10.378	mg/L	4	10	
IC01	P	607097127091	09-MAR-2007 11:42	607084260001	27-FEB-2007	0.2028	0.1886	1.0000	0.9960	mg/L	0	10	
IC03	P	627104424007	13-MAR-2007 11:32	627092916001	05-MAR-2007	0.1603	0.1464	1.0000	0.9743	mg/L	-3	10	
IC03	P	627104424019	13-MAR-2007 15:15	627092916001	05-MAR-2007	0.1603	0.1583	4.0000	4.0850	mg/L	2	10	
IC03	P	627104424033	13-MAR-2007 19:19	627092916001	05-MAR-2007	0.1603	0.1440	1.0000	0.9581	mg/L	-4	10	

CONTINUING CALIBRATION SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607097127040	08-MAR-2007 20:49	607084260001	27-FEB-2007	0.4045	0.3961	1.0000	0.9941	mg/L	-1	10	
IC01	P	607097127053	09-MAR-2007 00:36	607084260001	27-FEB-2007	0.4045	0.4112	2.5000	2.5390	mg/L	2	10	
IC01	P	607097127067	09-MAR-2007 04:41	607084260001	27-FEB-2007	0.4045	0.3987	1.0000	1.0004	mg/L	0	10	
IC01	P	607097127081	09-MAR-2007 08:47	607084260001	27-FEB-2007	0.4045	0.4166	2.5000	2.5713	mg/L	3	10	
IC01	P	607097127091	09-MAR-2007 11:42	607084260001	27-FEB-2007	0.4045	0.3835	0.2500	0.2425	mg/L	-3	10	
IC03	P	627104424007	13-MAR-2007 11:32	627092916001	05-MAR-2007	0.3096	0.2814	0.2500	0.2356	mg/L	-6	10	
IC03	P	627104424019	13-MAR-2007 15:15	627092916001	05-MAR-2007	0.3096	0.3002	1.0000	0.9920	mg/L	-1	10	
IC03	P	627104424033	13-MAR-2007 19:19	627092916001	05-MAR-2007	0.3096	0.2775	0.2500	0.2324	mg/L	-7	10	

CONTINUING CALIBRATION SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607097127040	08-MAR-2007 20:49	607084260001	27-FEB-2007	0.4834	0.4865	1.0000	1.0230	mg/L	2	10	
IC01	P	607097127053	09-MAR-2007 00:36	607084260001	27-FEB-2007	0.4834	0.5143	2.5000	2.5895	mg/L	4	10	
IC01	P	607097127067	09-MAR-2007 04:41	607084260001	27-FEB-2007	0.4834	0.4984	1.0000	1.0473	mg/L	5	10	
IC01	P	607097127081	09-MAR-2007 08:47	607084260001	27-FEB-2007	0.4834	0.5175	2.5000	2.6044	mg/L	4	10	
IC01	P	607097127091	09-MAR-2007 11:42	607084260001	27-FEB-2007	0.4834	0.4668	0.2500	0.2508	mg/L	0	10	
IC03	P	627104424007	13-MAR-2007 11:32	627092916001	05-MAR-2007	0.3786	0.3460	0.2500	0.2359	mg/L	-6	10	
IC03	P	627104424019	13-MAR-2007 15:15	627092916001	05-MAR-2007	0.3786	0.3737	1.0000	1.0019	mg/L	0	10	
IC03	P	627104424033	13-MAR-2007 19:19	627092916001	05-MAR-2007	0.3786	0.3518	0.2500	0.2397	mg/L	-4	10	

CONTINUING CALIBRATION SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607097127040	08-MAR-2007 20:49	607084260001	27-FEB-2007	0.1465	0.1433	10.000	10.335	mg/L	3	10	
IC01	P	607097127053	09-MAR-2007 00:36	607084260001	27-FEB-2007	0.1465	0.1483	25.000	25.603	mg/L	2	10	
IC01	P	607097127067	09-MAR-2007 04:41	607084260001	27-FEB-2007	0.1465	0.1441	10.000	10.391	mg/L	4	10	
IC01	P	607097127081	09-MAR-2007 08:47	607084260001	27-FEB-2007	0.1465	0.1481	25.000	25.571	mg/L	2	10	
IC01	P	607097127091	09-MAR-2007 11:42	607084260001	27-FEB-2007	0.1465	0.1413	2.5000	2.6049	mg/L	4	10	
IC03	P	627104424007	13-MAR-2007 11:32	627092916001	05-MAR-2007	0.1133	0.1022	2.5000	2.4425	mg/L	-2	10	
IC03	P	627104424019	13-MAR-2007 15:15	627092916001	05-MAR-2007	0.1133	0.1082	10.000	10.062	mg/L	1	10	
IC03	P	627104424033	13-MAR-2007 19:19	627092916001	05-MAR-2007	0.1133	0.1034	2.5000	2.4714	mg/L	-1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607097127054 File : 067_54 Time : 09-MAR-2007 00:54
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.07005]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607097127068 File : 067_68 Time : 09-MAR-2007 04:59
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.06626]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607097127082 File : 067_82 Time : 09-MAR-2007 09:04
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.05341]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

607097127082

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607097127092 File : 067_92 Time : 09-MAR-2007 11:59
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.03771]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627104424020 File : 072_20 Time : 13-MAR-2007 15:32
Cal : 627092916001 Caldate: 05-MAR-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627104424034 File : 072_34 Time : 13-MAR-2007 19:36
Cal : 627092916001 Caldate: 05-MAR-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193262 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627104424053 File : 072_53 Time : 14-MAR-2007 01:07
Cal : 627092916001 Caldate: 05-MAR-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03512]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 627092916 Instrument: IC03 Ion Chromatograph Begun: 05-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	064_1	IB				05-MAR-2007 12:36	1.0		25				
002	064_2	ICAL	L1			05-MAR-2007 12:54	1.0					1	
003	064_3	ICAL	L2			05-MAR-2007 13:11	1.0					1	
004	064_4	ICAL	L3			05-MAR-2007 13:29	1.0					1	
005	064_5	ICAL	L4			05-MAR-2007 13:46	1.0					1	
006	064_6	ICAL	L5			05-MAR-2007 14:03	1.0					1	
007	064_7	ICV				05-MAR-2007 14:21	1.0		25			2	
008	064_8	ICB				05-MAR-2007 14:38	1.0		25				
009	064_9	CCV	L	122763		05-MAR-2007 15:07	1.0	2	25			1	
010	064_10	CCB/MB	QC377766	122763	Water	05-MAR-2007 15:24	1.0		25				
011	064_11	SAMPLE	193108-027	122763	Water	05-MAR-2007 15:43	10.0	2	25				
012	064_12	MSS	193128-002	122763	Water	05-MAR-2007 16:01	2000		25				
013	064_13	SAMPLE	193128-001	122763	Water	05-MAR-2007 16:18	2000		25				
014	064_14	MSS	193128-002	122763	Water	05-MAR-2007 16:38	20.0	1	25				
015	064_15	X	BLK	122763		05-MAR-2007 16:56	1.0						
016	064_16	SAMPLE	193128-001	122763	Water	05-MAR-2007 17:13	25.0	2	25				1:SO4=52.0044
017	064_17	X	BLK	122763		05-MAR-2007 17:31	1.0						
018	064_18	MS	QC377768	122763	Water	05-MAR-2007 17:56	2500	2	25			1	
019	064_19	MSD	QC377769	122763	Water	05-MAR-2007 18:13	2500	2	25			1	
020	064_20	LCS	QC377767	122763	Water	05-MAR-2007 19:01	1.0	2	25			1	
021	064_21	CCV	M	122763		05-MAR-2007 19:18	1.0		25			1	
022	064_22	CCB		122763		05-MAR-2007 19:36	1.0		25				
023	064_23	X	SHUTDOWN	122763		05-MAR-2007 19:53	1.0						

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 607097127 Instrument: IC01 Ion Chromatograph Begun: 08-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	067_7	CCV	M	122882		08-MAR-2007 09:48	1.0		25			1	
008	067_8	CCB/MB	QC378263	122882	Water	08-MAR-2007 10:05	1.0	1	25				
009	067_9	SAMPLE	193222-003	122882	Water	08-MAR-2007 10:28	1.0	1	25				1:SO4=393.864
010	067_10	SAMPLE	193222-004	122882	Water	08-MAR-2007 10:47	2.0	3	25				3:SO4=485.922
011	067_11	X	BLK	122882		08-MAR-2007 11:05	1.0						
012	067_12	SAMPLE	193222-004	122882	Water	08-MAR-2007 11:38	10.0	1	25				1:SO4=140.968
013	067_13	SAMPLE	193222-004	122882	Water	08-MAR-2007 11:58	50.0		25				
014	067_14	SAMPLE	193222-003	122882	Water	08-MAR-2007 12:16	25.0		25				
015	067_15	SAMPLE	193225-001	122882	Water	08-MAR-2007 13:25	500.0		25				
016	067_16	SAMPLE	193245-001	122882	Water	08-MAR-2007 13:43	200.0		25				
017	067_17	MSS	193245-002	122882	Water	08-MAR-2007 14:00	25.0	3	25				
018	067_18	SAMPLE	193245-003	122882	Water	08-MAR-2007 14:18	5.0		25				
019	067_19	CCV	L	122882		08-MAR-2007 14:35	1.0	1	25			1	
020	067_20	CCB		122882		08-MAR-2007 14:53	1.0		25				
021	067_21	SAMPLE	193245-003	122882	Water	08-MAR-2007 15:10	1.0	1	25				1:CL=38.4864
022	067_22	MSS	193245-002	122882	Water	08-MAR-2007 15:28	1.0	4	25				3:CL=131.485
023	067_23	SAMPLE	193245-001	122882	Water	08-MAR-2007 15:45	3.0	1	25				1:CL=375.988
024	067_24	X	BLK	122882		08-MAR-2007 16:03	1.0						
025	067_25	SAMPLE	193225-001	122882	Water	08-MAR-2007 16:20	5.0	2	25				2:CL=347.710
026	067_26	X	BLK	122882		08-MAR-2007 16:38	1.0						
027	067_27	MS	QC378265	122882	Water	08-MAR-2007 17:01	25.0	1	25			1	
028	067_28	MSD	QC378266	122882	Water	08-MAR-2007 17:18	25.0	1	25			1	
029	067_29	LCS	QC378264	122882	Water	08-MAR-2007 17:36	1.0	1	25			1	
030	067_30	X	BLK	122882		08-MAR-2007 17:53	1.0						
031	067_31	X	BLK	122882		08-MAR-2007 18:11	1.0						
032	067_32	CCV	H	122882		08-MAR-2007 18:29	1.0		25			1	
033	067_33	CCB		122882		08-MAR-2007 18:46	1.0	1	25				
034	067_34	SAMPLE	193230-001	122882	Water	08-MAR-2007 19:04	1.0		25				
035	067_35	SAMPLE	193230-002	122882	Water	08-MAR-2007 19:21	1.0		25				
036	067_36	SAMPLE	193230-003	122882	Water	08-MAR-2007 19:39	1.0		25				
037	067_37	SAMPLE	193230-004	122882	Water	08-MAR-2007 19:56	1.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 607097127 Instrument: IC01 Ion Chromatograph Begun: 08-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
038	067_38	CCV	M	122882		08-MAR-2007 20:14	1.0		25			1	
039	067_39	CCB		122882		08-MAR-2007 20:31	1.0		25				
040	067_40	CCV	M	122884		08-MAR-2007 20:49	1.0		25			1	
041	067_41	CCB/MB	QC378271	122884	Water	08-MAR-2007 21:06	1.0		25				
042	067_42	SAMPLE	193262-008	122884	Water	08-MAR-2007 21:24	1.0		25				
043	067_43	SAMPLE	193262-012	122884	Water	08-MAR-2007 21:41	1.0		25				
044	067_44	SAMPLE	193262-020	122884	Water	08-MAR-2007 21:59	1.0		25				
045	067_45	SAMPLE	193262-002	122884	Water	08-MAR-2007 22:16	5.0		25				
046	067_46	SAMPLE	193262-019	122884	Water	08-MAR-2007 22:34	25.0		25				
047	067_47	SAMPLE	193262-002	122884	Water	08-MAR-2007 22:51	1.0	2	25				2:CL=43.2293
048	067_48	SAMPLE	193262-019	122884	Water	08-MAR-2007 23:09	2.0	1	25				1:CL=121.738
049	067_49	X	BLK	122884		08-MAR-2007 23:26	1.0						
050	067_50	SAMPLE	193262-019	122884	Water	08-MAR-2007 23:44	1.0	1	25				1:SO4=93.6897
051	067_51	X	BLK	122884		09-MAR-2007 00:01	1.0						
052	067_52	SAMPLE	193262-010	122884	Water	09-MAR-2007 00:19	1.0	2	25				2:CL=128.070
053	067_53	CCV	H	122884		09-MAR-2007 00:36	1.0		25			1	
054	067_54	CCB		122884		09-MAR-2007 00:54	1.0	1	25				
055	067_55	X	CCV	122884		09-MAR-2007 01:11	1.0					1	
056	067_56	X	CCB	122884		09-MAR-2007 01:29	1.0						
057	067_57	SAMPLE	193262-003	122884	Water	09-MAR-2007 01:46	10.0		25				
058	067_58	SAMPLE	193262-004	122884	Water	09-MAR-2007 02:04	10.0		25				
059	067_59	SAMPLE	193262-010	122884	Water	09-MAR-2007 02:21	25.0		25				
060	067_60	SAMPLE	193262-011	122884	Water	09-MAR-2007 02:39	10.0		25				
061	067_61	SAMPLE	193262-013	122884	Water	09-MAR-2007 02:56	25.0		25				
062	067_62	SAMPLE	193262-004	122884	Water	09-MAR-2007 03:14	1.0	1	25				1:CL=47.3965
063	067_63	SAMPLE	193262-011	122884	Water	09-MAR-2007 03:31	1.0	2	25				2:SO4=73.2677
064	067_64	SAMPLE	193262-014	122884	Water	09-MAR-2007 03:49	1.0	3	25				3:SO4=75.8437
065	067_65	SAMPLE	193262-003	122884	Water	09-MAR-2007 04:06	1.0	1	25				1:CL=75.0261
066	067_66	SAMPLE	193262-013	122884	Water	09-MAR-2007 04:24	1.0	1	25				1:CL=125.122
067	067_67	CCV	M	122884		09-MAR-2007 04:41	1.0		25			1	
068	067_68	CCB		122884		09-MAR-2007 04:59	1.0		25				

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 607097127 Instrument: IC01 Ion Chromatograph Begun: 08-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
069	067_69	X	CCV	122884		09-MAR-2007 05:17	1.0					1	
070	067_70	X	CCB	122884		09-MAR-2007 05:34	1.0						
071	067_71	LCS	QC378272	122884	Water	09-MAR-2007 05:52	1.0		25			1	
072	067_72	MSS	193262-001	122884	Water	09-MAR-2007 06:09	25.0		25				
073	067_73	MS	QC378273	122884	Water	09-MAR-2007 06:27	25.0		25			1	
074	067_74	MSD	QC378274	122884	Water	09-MAR-2007 06:44	25.0		25			1	
075	067_75	SAMPLE	193262-015	122884	Water	09-MAR-2007 07:02	10.0		25				
076	067_76	SAMPLE	193262-014	122884	Water	09-MAR-2007 07:19	10.0		25				
077	067_77	SAMPLE	193262-005	122884	Water	09-MAR-2007 07:37	10.0		25				
078	067_78	SAMPLE	193262-015	122884	Water	09-MAR-2007 07:54	1.0	2	25				2:SO4=60.6027
079	067_79	SAMPLE	193262-005	122884	Water	09-MAR-2007 08:12	1.0	3	25				3:SO4=74.1812
080	067_80	MSS	193262-001	122884	Water	09-MAR-2007 08:29	1.0	2	25				2:SO4=67.7248
081	067_81	CCV	H	122884		09-MAR-2007 08:47	1.0		25			1	
082	067_82	CCB		122884		09-MAR-2007 09:04	1.0		25				
083	067_83	X	CCV	122884		09-MAR-2007 09:22	1.0					1	
084	067_84	X	CCB	122884		09-MAR-2007 09:39	1.0						
085	067_85	SAMPLE	193262-006	122884	Water	09-MAR-2007 09:57	10.0	1	25				
086	067_86	SAMPLE	193262-007	122884	Water	09-MAR-2007 10:14	5.0	1	25				
087	067_87	SAMPLE	193262-016	122884	Water	09-MAR-2007 10:32	10.0	1	25				
088	067_88	SAMPLE	193262-007	122884	Water	09-MAR-2007 10:49	1.0	3	25				2:CL=43.0584
089	067_89	SAMPLE	193262-016	122884	Water	09-MAR-2007 11:07	1.0	3	25				2:SO4=80.5973
090	067_90	SAMPLE	193262-006	122884	Water	09-MAR-2007 11:24	1.0	3	25				2:SO4=67.7900
091	067_91	CCV	L	122884		09-MAR-2007 11:42	1.0	1	25			1	
092	067_92	CCB		122884		09-MAR-2007 11:59	1.0		25				
093	067_93	X	CCV	122884		09-MAR-2007 12:17	1.0					1	
094	067_94	X	CCB	122884		09-MAR-2007 12:34	1.0						

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 627104424 Instrument: IC03 Ion Chromatograph Begun: 13-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	072_7	CCV	L	123095		13-MAR-2007 11:32	1.0	1	25			1	
008	072_8	CCB/MB	QC379158	123095	Water	13-MAR-2007 11:49	1.0		25				
009	072_9	LCS	QC379159	123095	Water	13-MAR-2007 12:06	1.0		25			1	
010	072_10	SAMPLE	193373-008	123095	Water	13-MAR-2007 12:24	200.0		25				
011	072_11	SAMPLE	193373-009	123095	Water	13-MAR-2007 12:41	200.0		25				
012	072_12	SAMPLE	193373-010	123095	Water	13-MAR-2007 12:59	200.0		25				
013	072_13	SAMPLE	193373-012	123095	Water	13-MAR-2007 13:16	500.0		25				
014	072_14	SAMPLE	193373-007	123095	Water	13-MAR-2007 13:33	100.0		25				
015	072_15	SAMPLE	193373-011	123095	Water	13-MAR-2007 13:51	1.0	1	25				1:CL=83.5473
016	072_16	MSS	193373-006	123095	Water	13-MAR-2007 14:08	1.0	5	25				2:CL=68.2345
017	072_17	X	BLK	123095		13-MAR-2007 14:26	1.0						
018	072_18	SAMPLE	193373-011	123095	Water	13-MAR-2007 14:57	5.0	1	25				1:CL=20.8345
019	072_19	CCV	M	123095		13-MAR-2007 15:15	1.0		25			1	
020	072_20	CCB		123095		13-MAR-2007 15:32	1.0		25				
021	072_21	SAMPLE	193375-005	123095	Water	13-MAR-2007 15:50	1.0		25				
022	072_22	SAMPLE	193375-010	123095	Water	13-MAR-2007 16:07	1.0		25				
023	072_23	SAMPLE	193375-007	123095	Water	13-MAR-2007 16:24	1.0		25				
024	072_24	MSS	193373-006	123095	Water	13-MAR-2007 16:42	5.0		25				
025	072_25	SAMPLE	193373-011	123095	Water	13-MAR-2007 16:59	10.0		25				
026	072_26	SAMPLE	193373-012	123095	Water	13-MAR-2007 17:17	5.0	1	25				1:SO4=106.362
027	072_27	X	BLK	123095		13-MAR-2007 17:34	1.0						
028	072_28	SAMPLE	193373-012	123095	Water	13-MAR-2007 17:52	10.0	2	25				2:CL=239.550
029	072_29	X	BLK	123095		13-MAR-2007 18:09	1.0						
030	072_30	MS	QC379160	123095	Water	13-MAR-2007 18:26	10.0		25			1	
031	072_31	MSD	QC379161	123095	Water	13-MAR-2007 18:44	10.0		25			1	
032	072_32	SAMPLE	193373-009	123095	Water	13-MAR-2007 19:01	10.0	1	25				1:CL=158.262
033	072_33	CCV	L	123095		13-MAR-2007 19:19	1.0		25			1	
034	072_34	CCB		123095		13-MAR-2007 19:36	1.0		25				
035	072_35	SAMPLE	193262-007	123095	Water	13-MAR-2007 19:53	1.0	3	25				2:CL=41.2583
036	072_36	SAMPLE	193262-016	123095	Water	13-MAR-2007 20:11	1.0	4	25				2:SO4=79.3919
037	072_37	SAMPLE	193262-006	123095	Water	13-MAR-2007 20:28	1.0	4	25				2:SO4=67.7443

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Sequence: 627104424 Instrument: IC03 Ion Chromatograph Begun: 13-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
038	072_38	SAMPLE	193373-007	123095	Water	13-MAR-2007 20:46	1.0			25				
039	072_39	X	BLK	123095		13-MAR-2007 21:03	1.0							
040	072_40	SAMPLE	193373-007	123095	Water	13-MAR-2007 21:20	2.0	1		25				1:CL=163.283
041	072_41	X	BLK	123095		13-MAR-2007 21:38	1.0							
042	072_42	SAMPLE	193373-008	123095	Water	13-MAR-2007 21:55	3.0	2		25				2:CL=327.966
043	072_43	X	BLK	123095		13-MAR-2007 22:13	1.0							
044	072_44	SAMPLE	193373-008	123095	Water	13-MAR-2007 22:30	10.0	1		25				1:CL=161.344
045	072_45	X	BLK	123095		13-MAR-2007 22:47	1.0							
046	072_46	SAMPLE	193373-009	123095	Water	13-MAR-2007 23:05	3.0	1		25				1:SO4=91.4749
047	072_47	X	BLK	123095		13-MAR-2007 23:22	1.0							
048	072_48	SAMPLE	193373-010	123095	Water	13-MAR-2007 23:40	3.0			25				
049	072_49	X	BLK	123095		13-MAR-2007 23:57	1.0							
050	072_50	SAMPLE	193373-010	123095	Water	14-MAR-2007 00:15	5.0	1		25				1:CL=237.565
051	072_51	X	BLK	123095		14-MAR-2007 00:32	1.0							
052	072_52	CCV	H	123095		14-MAR-2007 00:49	1.0			25			1	
053	072_53	CCB		123095		14-MAR-2007 01:07	1.0	1		25				
054	072_54	X	CCV	123095		14-MAR-2007 01:24	1.0						1	
055	072_55	X	CCB	123095		14-MAR-2007 01:42	1.0							
056	072_56	X	SHUTDOWN	123095		14-MAR-2007 01:59	1.0							

Stds used: 1=S4740

REPORTING SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
193262-001	IC01	03/09/07 06:09	25.0		+			+
193262-001	IC01	03/09/07 08:29	1.0	+		+	+	
193262-002	IC01	03/08/07 22:16	5.0		+		+	
193262-002	IC01	03/08/07 22:51	1.0	+		+		+
193262-003	IC01	03/09/07 01:46	10.0		+			
193262-003	IC01	03/09/07 04:06	1.0	+		+	+	+
193262-004	IC01	03/09/07 02:04	10.0		+			
193262-004	IC01	03/09/07 03:14	1.0	+		+	+	+
193262-005	IC01	03/09/07 07:37	10.0		+		+	+
193262-005	IC01	03/09/07 08:12	1.0	+		+		
193262-006	IC01	03/09/07 09:57	10.0		+			+
193262-006	IC01	03/09/07 11:24	1.0			+	+	
193262-006	IC03	03/13/07 20:28	1.0	+				
193262-007	IC01	03/09/07 10:14	5.0		+		+	
193262-007	IC01	03/09/07 10:49	1.0			+		+
193262-007	IC03	03/13/07 19:53	1.0	+				
193262-008	IC01	03/08/07 21:24	1.0	+	+	+	+	+
193262-010	IC01	03/09/07 00:19	1.0	+		+	+	
193262-010	IC01	03/09/07 02:21	25.0		+			+
193262-011	IC01	03/09/07 02:39	10.0		+			+
193262-011	IC01	03/09/07 03:31	1.0	+		+	+	
193262-012	IC01	03/08/07 21:41	1.0	+	+	+	+	+
193262-013	IC01	03/09/07 02:56	25.0		+			
193262-013	IC01	03/09/07 04:24	1.0	+		+	+	+
193262-014	IC01	03/09/07 03:49	1.0	+		+		
193262-014	IC01	03/09/07 07:19	10.0		+		+	+
193262-015	IC01	03/09/07 07:02	10.0		+			+
193262-015	IC01	03/09/07 07:54	1.0	+		+	+	
193262-016	IC01	03/09/07 10:32	10.0		+			+
193262-016	IC01	03/09/07 11:07	1.0			+	+	
193262-016	IC03	03/13/07 20:11	1.0	+				
193262-019	IC01	03/08/07 22:34	25.0		+			
193262-019	IC01	03/08/07 23:09	2.0					+
193262-019	IC01	03/08/07 23:44	1.0	+		+	+	
193262-020	IC01	03/08/07 21:59	1.0	+	+	+	+	+

REPORTING SUMMARY FOR 193262 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC378271	IC01	03/08/07 21:06	1.0	+	+	+	+	+	
QC378272	IC01	03/09/07 05:52	1.0	+	+	+	+	+	
QC378273	IC01	03/09/07 06:27	25.0	+	+	+	+	+	
QC378274	IC01	03/09/07 06:44	25.0	+	+	+	+	+	
QC379158	IC03	03/13/07 11:49	1.0	+	+	+	+	+	
QC379159	IC03	03/13/07 12:06	1.0	+	+	+	+	+	
QC379160	IC03	03/13/07 18:26	10.0	+	+	+	+	+	
QC379161	IC03	03/13/07 18:44	10.0	+	+	+	+	+	

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122884
Date Started: 3/8/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193262-001 D	1.03	1x 25x	S	MSS
2	-002 B	0.46	5x		
3	-003 E	0.79	10x		
4	-004 D	0.67	10x		
5	-005 E	0.77	10x		
6	-006 B	0.99	10x		RR @ 1x for fluoride
7	-007 E	0.47	5x		RR @ 1x for fluoride
8	-008 D	0.01			
9	-010 H	1.16	25x		
10	-011 E	0.74	10x		
11	-012	0.01			
12	-013	1.27	25x		
13	-014	0.78	10x		
14	-015	0.59	10x		
15	-016	0.77	10x		RR @ 1x for fluoride
16	-019 K	1.91	25x 2x		
17	-020 K	0.01			
18	Blank QC378271	N/A	1x	N/A	
19	LCS QC378272		1x	N/A	
20	MS QC378273 D		25x	S	
	MSD QC378274 D		25x	S	
		MRS 3/8/07			

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100X MRS 12/5/06	MRS 3/8/07
BS/BSD Spiked with	0.2 mL of :	54740	
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: ~~0.20um~~/0.45um	Acrodisc lot #A1065052 2	

MRS 3/8/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 3/14/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122884
Date Started: 08-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193262-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-002			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-004			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-006			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-007			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-012			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-013			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-014			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-016			Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
193262-020			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
QC378271	BLANK			Water		
QC378272	LCS			Water		
QC378273	MS	of 193262-001		Water		
QC378274	MSD	of 193262-001		Water		

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 123095
Date Started: 3/13/07
Prep Chemist: MRS

BK 2431
Page 87

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193262-006 B	0.99	1X	S	
2	-007 E	0.77			
3	-016 D	0.77			
4	193373-006 I	1.40	1X 5X	S	MSS
5	-007	4.21	100X 1X 2X		
6	-008	8.49	200X 3X 10X		
7	-009	8.34	200X 3X 10X		
8	-010	7.50	200X 3X 5X		
9	-011 F	0.76	1X 5X 10X		
10	-012 F	15.10	500X 5X 10X		
11	193375-005 B	0.15	1X	S	
12	-007 E	0.18			
13	-010 E	0.16			
14	Blank QC379158	N/A	1X	N/A	
15	LCS QC379159		1X	N/A	
16	MS QC379160 I		10X	S	
17	MSD QC379161 I		10X	S	
18					
19					
20					

MRS 3/13/07

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100X MRS 12/5/06	MRS 3/13/07
BS/BSD Spiked with	0.2 mL of :	S4740	
MS/MSD Spiked with	0.1 mL of :	S4740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot #A1065052	

MRS 3/13/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CL 3/16/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123095
Date Started: 13-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193262-006			Treadwell & Rollo	Water	FLUORIDE	20-MAR-2007
193262-007			Treadwell & Rollo	Water	FLUORIDE	20-MAR-2007
193262-016			Treadwell & Rollo	Water	FLUORIDE	20-MAR-2007
193373-006			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-007			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-008			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-009			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-010			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-011			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193373-012			Innovative Technic	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	22-MAR-2007
193375-005			Arcadis G&M	Water	NITRATE, SULFATE	23-MAR-2007
193375-007			Arcadis G&M	Water	NITRATE, SULFATE	23-MAR-2007
193375-010			Arcadis G&M	Water	NITRATE, SULFATE	23-MAR-2007
QC379158	BLANK			Water		
QC379159	LCS			Water		
QC379160	MS	of 193373-006		Water		
QC379161	MSD	of 193373-006		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/24/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123286
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
LF08GW04	SAMPLE	193262-002	ND	0.01	03/07/07
DUP0307073A	SAMPLE	193262-007	ND	0.01	03/07/07
NKGW01	SAMPLE	193262-017	ND	0.01	03/07/07
NKGW05	SAMPLE	193262-018	ND	0.01	03/07/07
DW030807B	SAMPLE	193262-020	ND	0.01	03/08/07
WT030807	SAMPLE	193262-021	ND	0.01	03/08/07
	BLANK	QC379976	ND	0.01	

ND= Not Detected
RL= Reporting Limit

127.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	WT030807	Batch#:	123286
MSS Lab ID:	193262-021	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379977	<0.01000	0.1630	0.2030	85	65-135		
MSD	QC379978		0.1630	0.1928	79	65-135	5	20
LCS	QC379979		0.1630	0.1520	93	75-125		

RPD= Relative Percent Difference

128.0

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/20/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/20/2007**
Wavelength:	578 nm	Batch:	123286
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1127	0.0808	0.0816	99%	90 - 110%
ICB	-0.0001	-0.0001	0.0000		
CCV	0.1138	0.0816	0.0816	100%	90 - 110%
CCB	0.0031	0.0022	0.0000		
CCV	0.1120	0.0803	0.0816	98%	90 - 110%
CCB	0.0022	0.0016	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/20/2007**
Analysis Date: **3/20/2007**
Batch: 123286
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	inal Distill Vol (mL)	Distillate olored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	-0.0004	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1060	**0.1520**	0.020	0.5	16.3	0.163	**93**	
193262-21	50.0	50.0	20.0	1.00	0.0893	**0.0640**	0.010					
193262-21m	50.0	50.0	10.0	1.00	0.1416	**0.2030**	0.020	0.5	16.3	0.163	**85**	
193262-21m	50.0	50.0	10.0	1.00	0.1345	**0.1928**	0.020	0.5	16.3	0.163	**79**	**5**
193262-2	50.0	50.0	20.0	1.00	0.0023	**ND**	0.010					
193262-7	50.0	50.0	20.0	1.00	0.0040	**ND**	0.010					
193262-17	50.0	50.0	20.0	1.00	0.0005	**ND**	0.010					
193262-18	50.0	50.0	20.0	1.00	0.0047	**ND**	0.010					
193262-20	50.0	50.0	20.0	1.00	0.0018	**ND**	0.010					
193277-1	50.0	50.0	20.0	1.00	0.0018	**ND**	0.010					
193393-1	50.0	50.0	20.0	1.00	0.0017	**ND**	0.010					
193393-2	50.0	50.0	20.0	1.00	0.0195	**0.0140**	0.010					
193393-3	50.0	50.0	20.0	1.00	0.0054	**ND**	0.010					
193393-4	50.0	50.0	20.0	1.00	0.0035	**ND**	0.010					
193416-1	50.0	50.0	20.0	1.00	0.0068	**ND**	0.010					
193416-4	50.0	50.0	20.0	1.00	0.0364	**0.0261**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

DMD 3/20/07

00742

---> **Quantitation Results Report** <---

Date : 03-~~18~~ 20-2007
Time : 13:19:51
Operator : AM

ile Name : Data not stored yet

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L
il. Factor : 1.00

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	-0.0001	0.00000
2	ICV	Analytical	+0.1127	0.08268
3	193262-2	Analytical	+0.0023	0.00169
4	193262-7	Analytical	+0.0040	0.00294
5	193262-17	Analytical	+0.0005	4.028E-04
6	193262-18	Analytical	+0.0047	0.00345
7	193262-20	Analytical	+0.0018	0.00133
8	193262-21	Analytical	+0.0893	0.06549
9	193262-21MS	Analytical	+0.1416	0.10381
10	193262-21MSD	Analytical	+0.1345	0.09861
11	193277-1	Analytical	+0.0018	0.00131
12	193393-1	Analytical	+0.0017	0.00126
13	CCV	Analytical	+0.1138	0.08342
14	CCB	Analytical	+0.0031	0.00229
15	193393-2	Analytical	+0.0195	0.01429
16	193393-3	Analytical	+0.0054	0.00399
17	193393-4	Analytical	+0.0035	0.00255
18	193416-1	Analytical	+0.0068	0.00497
19	193416-4	Analytical	+0.0364	0.02668
20	~~LCS~~	~~Analytical~~	~~+0.0922~~	~~0.06761~~
21	LCS	Analytical	+0.1060	0.07772

AM 3-20-07

22	MB	Analytical	-0.0004	0.00000
23	CCV	Analytical	+0.1120	0.08211
24	CCB	Analytical	+0.0022	0.00164

---> Standard Calibration Report <---

Date : 03-~~18~~ 20-2007
Time : 13:20:13
Operator : DM

File Name : C:\UV\DATA\CN706.STD

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +7.333E-01 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0007	*****
2	0.00873	0.0125	-4.622 %
3	0.01746	0.0259	-7.942 %
4	0.05238	0.0716	-0.295 %
5	0.08730	0.1186	+0.385 %
6	0.13968	0.1916	-0.589 %
7	0.17460	0.2371	+0.424 %

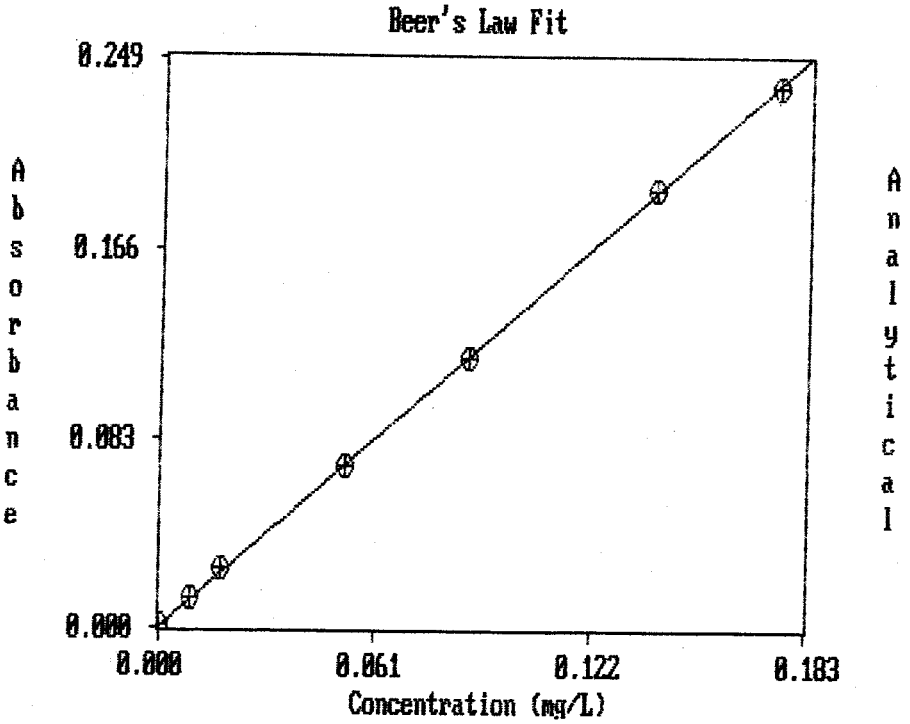
---) Standard Calibration Report (---

Date : 03-~~18~~ 20-2007
Time : 13:20:15
Operator : DM

File Name : C:\UV\DATA\CN706.STD

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



OTG 193416
USD 193393

PROJECT Treadwell 193262 193277

Notebook No. Bk 2480

Continued From Page

CN- EPA 335.2 M. 13123286

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	Abs
193262-2 H	50	50	20	.0023
-7 B				.0040
-17 I				.0005
-18 H				.0047
-20 O				.0018
-21 C				.0893
-21 MS	1.5 ml (16.32 ug/ml Cl dilution of 25401)	1 ml – 50 ml	10	.1416
-21 MSD	same as MS		10	.1345
193277-1 R			20	.0018
193393-1 D				.0017
-2				.0195
-3				.0054
-4				.0035
193416-1 S				.0068
-4 L				.0364
LCS			10	.1060
MB			20	-.0004
ICV	0.5 ml (16.32 ug/ml dilution of 25101)		10	.1127
ICB				-.0001
CCV				.1138
CCB				.0031
CCV				.1120
CCB				.0022

TV = .0816 mg/L

Tests for Cl⁻ & S⁻ negative
pH all >12
Sulfuric acid added to all sample.

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[illegible]	3-20-07	[illegible]	3/20/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123286
Date Started: 20-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-002			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-007			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-017			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-018			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-020			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-021			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193277-001			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193393-001			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-002			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-003			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-004			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193416-001			OTG Enviroengineer	Water	CYANIDE	20-MAR-2007
193416-004			OTG Enviroengineer	Water	CYANIDE	20-MAR-2007
QC379976	BLANK			Water	CYANIDE	
QC379977	MS	of 193262-021		Water	CYANIDE	
QC379978	MSD	of 193262-021		Water	CYANIDE	
QC379979	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis:	**Cyanide**	Matrix:	**Water**
Method:	EPA 335.2 mod*	Analysis Date:	8/31/2006
Instrument:	HP UV/VIS Spectrometer	Analyst:	DMc
	* using the midi-distillation apparatus		

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Surfactants (MBAS)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Batch#:	122898
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/09/07 10:08
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
DAEGW102	SAMPLE	193262-019	ND	0.10	03/07/07 09:12
DW030807B	SAMPLE	193262-020	ND	0.10	03/08/07 08:15
	BLANK	QC378319	ND	0.10	

ND= Not Detected
RL= Reporting Limit

62.0

: 00750

Curtis & Tompkins, Ltd.

Batch QC Report

Surfactants (MBAS)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Diln Fac:	1.000
Field ID:	DW030807A	Batch#:	122898
MSS Lab ID:	193277-001	Sampled:	03/08/07 12:30
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/09/07 10:08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378320	<0.1000	0.4800	0.4203	88	70-130		
MSD	QC378321		0.4800	0.5166	108	70-130	21	30
LCS	QC378322		0.4800	0.5099	106	80-120		

RPD= Relative Percent Difference

63.0

Analysis:	**Surfactants (MBAS)**	Analyst:	**DM**
Method:	**EPA 425.1** / SMWW 5540c	Analysis Date:	**3/9/2007**
Instrument:	Perkin-Elmer Lambda 25	Batch#:	122898
SOP#:	MBAS_rv4.doc	Matrix:	Water

Reviewed by/ Date: _____

Initial Calibration Data

Calibrated: 1/31/07

ug/100mL	ABS	RF
0	0.0000	
10	0.0174	0.00174
30	0.0495	0.00165
50	0.0784	0.00157
100	0.2066	0.00207
150	0.2864	0.00191

Correlation Coefficient =	0.9955
Avg Response Factor =	0.00179
%RSD =	11.3

Note: Average response used to calculate sample results

Calibration Verification Data

	vol (mL)	IDF	ABS	Conc.(mg/L)	TV (mg/L)	Recovery	Limits
ICV	100	1	0.0911	0.5099	0.48	106.2%	90-110%
ICB	100	1	0.0000	ND			
CCV	100	1	0.0900	0.5037	0.48	104.9%	90-110%
CCB	100	1	0.0012	ND			

00752

Analysis: **Surfactants (MBAS)**
Method: **EPA 425.1** / SMWW 5540c

Analysis Date: 3/9/2007
Batch#: 122898

Sample & Batch QC Data

C&T ID	vol (mL)	IDF	ABS	**Report** (mg/L)	RL (mg/L)	Spike Added (mL)	Spike Std Conc. (mg/L)	QC TV (mg/L)	**% Recovery**	**%RPD**
MB	100	1	0.0034	**ND**	0.1					
193277-1	100	1	0.0108	**ND**	0.1					
193277-1ms	100	1	0.0751	**0.4203**	0.1	5	9.6	0.48	**88**	
193277-1msd	100	1	0.0923	**0.5166**	0.1	5	9.6	0.48	**108**	**21**
193262-19	100	1	0.0053	**ND**	0.1					
193262-20	100	1	0.0039	**ND**	0.1					

RShiffa 3/20/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

00753

Concentration Results

Date: 3/9/2007 Time: 9:59:30 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 122898.RCO
Autozero performed: 3/9/2007 9:59:23 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
652.0	0.0	icb	0.0000	1.0000	0.0156	ug/100ml	
652.0	0.0	icvlcs	0.0911	1.0000	47.405	ug/100ml	
652.0	0.0	3277-1	0.0108	1.0000	5.5973	ug/100ml	193277-1
652.0	0.0	3277-1ms	0.0751	1.0000	39.087	ug/100ml	193277-1ms
652.0	0.0	3277-1ms	0.0923	1.0000	47.998	ug/100ml	193277-1msd
652.0	0.0	3262-19	0.0053	1.0000	2.7726	ug/100ml	193262-19
652.0	0.0	3262-20	0.0039	1.0000	2.0444	ug/100ml	193262-20
652.0	0.0	mb	0.0034	1.0000	1.7531	ug/100ml	
652.0	0.0	ccv	0.0900	1.0000	46.827	ug/100ml	
652.0	0.0	ccb	0.0012	1.0000	0.6190	ug/100ml	

CALIBRATION

Date: 3/9/2007 Time: 9:59:23 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: DMB

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
652.0	0.0	mbas107.A01	0.0000	ug/100ml	0.0000	
652.0	0.0	mbas107.A02	10.000	ug/100ml	0.0174	
652.0	0.0	mbas107.A03	30.000	ug/100ml	0.0495	
652.0	0.0	mbas107.A04	50.000	ug/100ml	0.0784	
652.0	0.0	mbas107.A05	100.00	ug/100ml	0.2066	
652.0	0.0	mbas107.A06	150.00	ug/100ml	0.2864	

Equation: y = 1.922358e-03 * x

Residual error: 0.010891
Correlation coefficient: 0.995477

MBAS EPA 425.1 B 122898

Sample	Vol (ml)	Final Vol (ml)	ABS
193262-19	100	100	.0053
-20N			.0039
193277-1K			.0108
-1MS	+5ml (9.6 mg/ml dilu of S3500 8ml — 50ml)		.0751
-1MSD	same as MS		.0923
MB			.0034
ICV/LCS	same as MS		.0911
LCB			.0000
CCV			.0900
CCB			.0012

TV = .48 mg/L

Continued on Page

Read and Understood By

Signed	Date	Signed	
[illegible]	3-9-07	[illegible]	3/20/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122898
Date Started: 09-MAR-2007
Batched by : Dennis McCanna

Analysis : MBAS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-019			Treadwell & Rollo	Water	MBAS	20-MAR-2007
193262-020			Treadwell & Rollo	Water	MBAS	20-MAR-2007
193277-001			Treadwell & Rollo	Water	MBAS	20-MAR-2007
QC378319	BLANK			Water	MBAS	
QC378320	MS	of 193277-001		Water	MBAS	
QC378321	MSD	of 193277-001		Water	MBAS	
QC378322	LCS			Water	MBAS	

Analysis:	MBAS	Login #:	121867
Method:	EPA 425.1	Analysis Date:	2/6/2007
Instrument:	PERKIN ELMER LAMBDA 25	Analyst:	SY
Wavelength:	652		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.3
Units:	mg/L
1	0.313
2	0.333
3	0.330
4	0.338
5	0.343
6	0.340
7	0.333
Average:	0.333 mg/L
Std Deviation:	0.009853
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0310** mg/L
Reporting Limit:	0.1 mg/L
Status:	PASS

✓ 2/27/07

Curtis & Tompkins, Ltd.

Phenolic Compounds

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Batch#:	122908
Field ID:	WT030807	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193262-021	ND	0.050
BLANK	QC378362	ND	0.050

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Phenolic Compounds

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Diln Fac:	1.000
Matrix:	Water	Batch#:	122908
Units:	mg/L	Analyzed:	03/09/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378363	0.1000	0.1119	112	80-120		
BSD	QC378364	0.1000	0.1119	112	80-120	0	20

RPD= Relative Percent Difference

Analysis:	**Phenolic Compounds**	Analyst:	DMB
Method:	**EPA 420.1**	Prep Date:	3/9/07
Instrument:	Perkin Elmer Lambda 25	Analysis Date:	3/9/07
Wavelength:	510 nm	Batch:	122908
SOP#:	phenols_rv 7.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 1/17/07

Conc (mg/L)	ABS	RF
0.0000	0.0000	
0.0500	0.0070	0.1400
0.1000	0.0125	0.1250
0.2000	0.0264	0.1320
0.5000	0.0654	0.1308
0.8000	0.1006	0.1258
1.0000	0.1290	0.1290
1.5000	0.1963	0.1309

Correlation Coefficient (r):	0.9998
Avg Rf:	0.1305
%RSD:	3.8

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1267	0.9710	1.0000	97%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1253	0.9602	1.0000	96%	90 - 110%
CCB	0.0000	0.0000	0.0000		

Analysis: **Phenolic Compounds**
Method: **EPA 420.1**
Instrument: Perkin Elmer Lambda 25
Wavelength: 510 nm

Analyst: DMB
Prep Date: 3/9/07
Analysis Date: 3/9/07
Batch: 122908
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Initial Volume (mL)	Distilled to (mL)	Distillate Colored (mL)	IDF	Sample ABS	Color Blk Abs	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Spike Std. Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	200	200	50.0	1.0	0.0000		**ND**	0.050					
BS	200	200	50.0	1.0	0.0146		**0.11189**	0.050	2.0	10.0	0.1000	**112**	
BSD	200	200	50.0	1.0	0.0146		**0.11189**	0.050	2.0	10.0	0.1000	**112**	**0**
193002-002	200	200	50.0	1.0	0.0026		**ND**	0.050					
193002-003	200	200	50.0	1.0	0.0058		**ND**	0.050					
193166-018	200	200	50.0	1.0	0.0125		**0.09579**	0.050					
193175-005	200	200	50.0	1.0	0.0620		**0.47514**	0.050					
193262-021	200	200	50.0	1.0	0.0024		**ND**	0.050					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

Reviewed by/ Date: RShiffa 3/9/07

009762

Phenols

BATCH 122908

Sample	Vol(I)	Vol(F)	ABS
MB	200	200	0.000
☆ BS	↓	↓	0.0146
☆ BSD			0.0146
193002-002 p			0.0026
193202-003 p			0.0058
193166-018 Comp			0.0125
193175-005 Comp			0.0620
193262-021 RMB XF 3/9/07			0.0024
ICB	—	—	0.000
* ICV	—	—	0.1267
* CCV			0.1253
CCB			0.000

☆ Plus 2.0 ml of 10 mg/L (100x of S5501) ↑ 200 ml
* Plus 5.0 ml of 10 mg/L (100x of S5501) ↑ 50 ml

Continued on Page

Read and Understood By

Signed: DMB — Date: 3/9/07 — Signed: RS hiffa — 3/9/07

CALIBRATION

Date: 3/9/2007 Time: 2:42:35 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: phen107
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
510.0	0.0	phen107.A01	0.0000	mg/L	0.0000	
510.0	0.0	phen107.A02	0.0500	mg/L	0.0070	
510.0	0.0	phen107.A03	0.1000	mg/L	0.0125	
510.0	0.0	phen107.A04	0.2000	mg/L	0.0264	
510.0	0.0	phen107.A05	0.5000	mg/L	0.0654	
510.0	0.0	phen107.A06	8.0000	unused	0.1006	
510.0	0.0	phen107.A07	1.0000	mg/L	0.1290	
510.0	0.0	phen107.A08	1.5000	mg/L	0.1963	

Equation: y = 1.303302e-01 * x

Residual error: 0.000715
Correlation coefficient: 0.999954

Date : 3/9/2007 Time : 14:59:51

Concentration Results

Date: 3/9/2007 Time: 2:42:43 PM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: phen107
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 122908.RCO
Autozero performed: 3/9/2007 2:42:35 PM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
510.0	0.0	ICB	-0.000	1.0000	-0.000*	mg/L	
510.0	0.0	ICV	0.1267	1.0000	0.9718	mg/L	
510.0	0.0	MB	-0.000	1.0000	-0.002*	mg/L	
510.0	0.0	BS	0.0146	1.0000	0.1118	mg/L	
510.0	0.0	BSD	0.0146	1.0000	0.1119	mg/L	
510.0	0.0	002-2	0.0026	1.0000	0.0196	mg/L	193002-002
510.0	0.0	002-3	0.0058	1.0000	0.0442	mg/L	193002-003
510.0	0.0	166-18	0.0125	1.0000	0.0957	mg/L	193166-018
~~510.0~~	~~0.0~~	~~166-18~~	~~0.049~~	~~1.0000~~	~~0.379*~~	~~mg/L~~	~~193166-018~~ DMB 3/9/07 } CB Not used
~~510.0~~	~~0.0~~	~~166-18~~	~~-0.054~~	~~1.0000~~	~~0.421*~~	~~mg/L~~	~~193166-018~~ DMB 3/9/07 }
510.0	0.0	175-5	0.0620	1.0000	0.4756	mg/L	193175-005
510.0	0.0	262-21	0.0024	1.0000	0.0187	mg/L	193262-021
510.0	0.0	CCV	0.1253	1.0000	0.9616	mg/L	
510.0	0.0	CCB	-0.000	1.0000	-0.002*	mg/L	~~x25~~ DMB 3/9/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122908
Date Started: 09-MAR-2007
Batched by : David Bowden

Analysis : PHENOL/WET
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193002-002		Weston Solutions	Water	PHENOL/WET	09-MAR-2007
193002-003		Weston Solutions	Water	PHENOL/WET	09-MAR-2007
193166-018		Weston Solutions	Water	PHENOL/WET	16-MAR-2007
193175-005		Polymatrix	Water	PHENOL/WET	16-MAR-2007
193262-021		Treadwell & Rollo	Water	PHENOL/WET	20-MAR-2007
QC378362	BLANK		Water	PHENOL/WET	
QC378363	BS		Water	PHENOL/WET	
QC378364	BSD		Water	PHENOL/WET	

Analysis:	PHENOLIC COMPOUNDS	Analysis Date:	3/24/2005
Method:	EPA 420.1	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	510 nm		

Instrument Calibrated to report sample results in cc tration ug/L

Concentration:	0.200	
Units:	mg/L	
1	0.202	
2	0.200	
3	0.205	
4	0.203	
5	0.201	
6	0.189	
7	0.184	
8		
Average:	0.198	ug/L
Std Deviation:	0.0079522	
Student T:	2.998	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0238**	mg/L
Reporting Limit:	0.05	mg/L
Status:	PASS	

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	123080
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/14/07
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
LF08GW04	SAMPLE	193262-002	ND	0.04	03/07/07
1065MW10A	SAMPLE	193262-004	ND	0.04	03/07/07
1065MW10B	SAMPLE	193262-005	ND	0.04	03/07/07
DUP0307073A	SAMPLE	193262-007	ND	0.04	03/07/07
1065MW10ARB1065MW10B	SAMPLE	193262-008	ND	0.04	03/07/07
1065PZ1B	SAMPLE	193262-010	0.04	0.04	03/07/07
1065PZ6B	SAMPLE	193262-011	ND	0.04	03/07/07
1065PZ6BRB1065MW9A	SAMPLE	193262-012	ND	0.04	03/07/07
1065MW9A	SAMPLE	193262-013	ND	0.04	03/07/07
1065MW9B	SAMPLE	193262-014	ND	0.04	03/07/07
1065MW11A	SAMPLE	193262-015	ND	0.04	03/07/07
1065MW11B	SAMPLE	193262-016	ND	0.04	03/07/07
DW030807B	SAMPLE	193262-020	ND	0.04	03/08/07
	BLANK	QC379107	ND	0.04	

ND= Not Detected
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123080
MSS Lab ID:	193274-009	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379108	<0.04000	0.2829	0.08294	29 *	75-125		
MSD	QC379109		0.2829	0.08197	29 *	75-125	1	20
LCS	QC379110		0.2829	0.2657	94	75-125		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Analysis: **SULFIDE**
Method: EPA 376.2
Instrument: **HP UV-VIS Spectrometer**
Wavelength: 626 nm
SOP#: sulfide_376_rv 4.doc

Analyst: DM
Prep Date: 3/14/2007
Analysis Date: 3/14/2007
Batch: 123080
Matrix: Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r): 0.9990
Avg Rf: 0.6210
%RSD: 3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1650	0.2657	0.2829	94%	90 - 110%
ICB	-0.0018	-0.0029	0.0000		
CCV	0.1631	0.2627	0.2829	93%	90 - 110%
CCB	-0.0033	-0.0053	0.0000		
CCV	0.1657	0.2668	0.2829	94%	90 - 110%
CCB	0.0007	0.0011	0.0000		
CCV	0.1642	0.2644	0.2829	93%	90 - 110%
CCB	-0.0002	-0.0003	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **123080**
Prep Date: **3/14/2007**
Analysis Date: **3/14/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0018		**ND**	0.040					
LCS	7.5000	1.0000	0.1650		**0.26572**	0.040	0.0500	42.4320	0.2829	**94**	
193274-9	7.5000	1.0000	0.0034		**ND**	0.040					
193274-9ms	7.5000	1.0000	0.0515		**0.08294**	0.040	0.0500	42.4320	0.2829	**29 ***	
193274-9ms	7.5000	1.0000	0.0509		**0.08197**	0.040	0.0500	42.4320	0.2829	**29 ***	**1**
193219-2	7.5000	1.0000	0.0085		**ND**	0.040					
193233-2	7.5000	1.0000	0.0033		**ND**	0.040					
193233-3	7.5000	1.0000	0.0023		**ND**	0.040					
193262-2	7.5000	1.0000	0.0046		**ND**	0.040					
193262-4	7.5000	1.0000	0.0120		**ND**	0.040					
193262-5	7.5000	1.0000	0.0009		**ND**	0.040					
193262-7	7.5000	1.0000	0.0005		**ND**	0.040					
193262-8	7.5000	1.0000	-0.0015		**ND**	0.040					
193262-10	7.5000	1.0000	0.0249		**0.04010**	0.040					
193262-11	7.5000	1.0000	-0.0016		**ND**	0.040					
193262-12	7.5000	1.0000	-0.0003		**ND**	0.040					
193262-13	7.5000	1.0000	-0.0008		**ND**	0.040					
193262-14	7.5000	1.0000	0.0046		**ND**	0.040					
193262-15	7.5000	1.0000	0.0053		**ND**	0.040					
193262-16	7.5000	1.0000	0.0007		**ND**	0.040					
193262-20	7.5000	1.0000	0.0001		**ND**	0.040					
193274-5	7.5000	1.0000	0.0000		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

00774

193274-6	7.5000	1.0000	0.0401	**0.06458**	0.040
193274-8	7.5000	1.0000	0.0018	**ND**	0.040

Reviewed by/ Date: DMB 3/19/07

00772

---> **Quantitation Results Report** <---

Date : 03-14-2007
Time : 10:39:32
Operator :

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0018	0.00000
2	ICV/LCS	Analytical	+0.1650	0.27531
3	193219-2	Analytical	+0.0085	0.01424
4	193233-2	Analytical	+0.0033	0.00550
5	193233-3	Analytical	+0.0023	0.00377
6	193262-2	Analytical	+0.0046	0.00769
7	193262-4	Analytical	+0.0120	0.02002
8	193262-5	Analytical	+0.0009	0.00153
9	193262-7	Analytical	+0.0005	8.913E-04
10	193262-8	Analytical	-0.0015	0.00000
11	CCV	Analytical	+0.1631	0.27218
12	CCB	Analytical	-0.0033	0.00000
13	193262-10	Analytical	+0.0249	0.04161
14	193262-11	Analytical	-0.0016	0.00000
15	193262-12	Analytical	-0.0003	0.00000
16	193262-13	Analytical	-0.0008	0.00000
17	193262-14	Analytical	+0.0046	0.00767
18	193262-15	Analytical	+0.0053	0.00884
19	193262-16	Analytical	+0.0007	0.00122
20	193262-20	Analytical	+0.0001	2.292E-04
21	193274-5	Analytical	+0.0000	7.640E-05

22	193274-6	Analytical	+0.0401	0.06692
23	CCV	Analytical	+0.1657	0.27659
24	CCB	Analytical	+0.0007	0.00115
25	193274-8	Analytical	+0.0018	0.00295
26	193274-9	Analytical	+0.0034	0.00560
27	193274-9MS	Analytical	+0.0515	0.08602
28	193274-9MSD	Analytical	+0.0509	0.08498
29	CCV	Analytical	+0.1642	0.27409
30	CCB	Analytical	-0.0002	0.00000

---) **Standard Calibration Report** (---

Date : 03-14-2007
Time : 10:39:57
Operator :

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

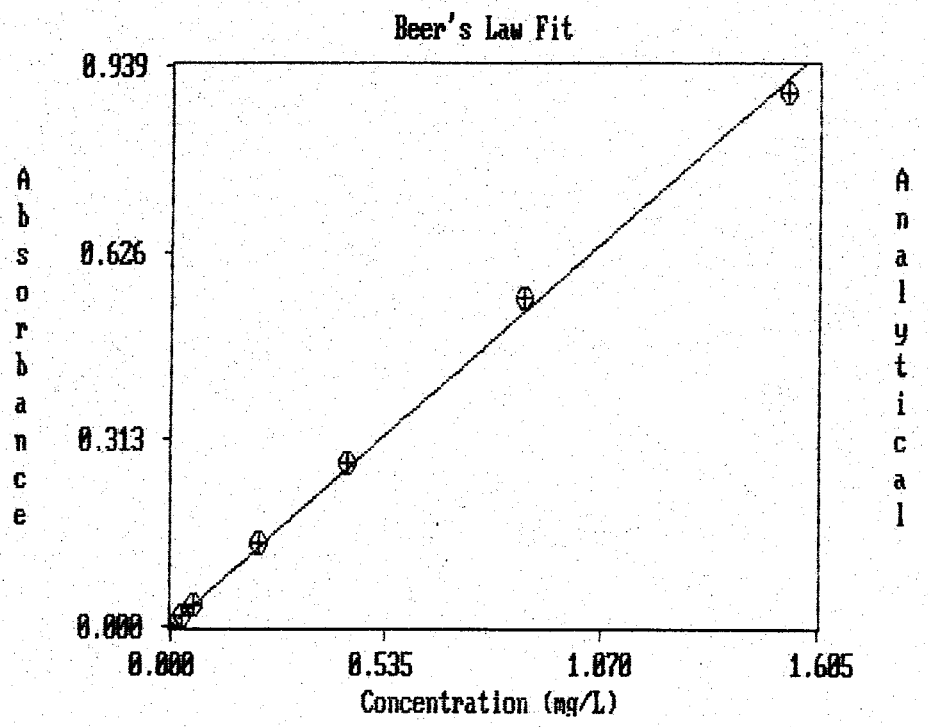
---> **Standard Calibration Report** <---

Date : 03-14-2007
Time : 10:39:58
Operator :

'ile Name : C:\UV\DATA\SS1106.STD

-iample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123080
Date Started: 14-MAR-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193219-002			Acme Fill Corp.	Water	SULFIDE	19-MAR-2007
193233-002			Innovative Technic	Water	SULFIDE	19-MAR-2007
193233-003			Innovative Technic	Water	SULFIDE	19-MAR-2007
193262-002			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-004			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-005			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-007			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-008			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-010			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-011			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-012			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-013			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-014			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-015			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-016			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193262-020			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193274-005			Innovative Technic	Water	SULFIDE	20-MAR-2007
193274-006			Innovative Technic	Water	SULFIDE	20-MAR-2007
193274-008			Innovative Technic	Water	SULFIDE	20-MAR-2007
193274-009			Innovative Technic	Water	SULFIDE	20-MAR-2007
QC379107	BLANK			Water	SULFIDE	
QC379108	MS	of 193274-009		Water	SULFIDE	
QC379109	MSD	of 193274-009		Water	SULFIDE	
QC379110	LCS			Water	SULFIDE	

Curtis & Tompkins, Ltd.

Dissolved Sulfide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Batch#:	123139
Field ID:	WT030807	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193262-021	ND	0.04
BLANK	QC379335	ND	0.04

ND= Not Detected
RL= Reporting Limit

6.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sulfide

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123139
MSS Lab ID:	193373-006	Sampled:	03/12/07
Matrix:	Water	Received:	03/12/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379336	<0.04000	0.3155	0.6730	88	34-127		
MSD	QC379337		0.3155	0.6765	90	34-127	1	20
LCS	QC379338		0.3155	0.2934	93	90-110		

RPD= Relative Percent Difference

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Analysis: **SULFIDE**
Method: EPA 376.2
Instrument: **HP UV-VIS Spectrometer**
Wavelength: 626 nm
SOP#: sulfide_376_rv 4.doc

Analyst: DM
Prep Date: 3/15/2007
Analysis Date: 3/15/2007
Batch: 2/20/2237
Matrix: Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r): 0.9990
Avg Rf: 0.6210
%RSD: 3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1822	0.2934	0.3155	93%	90 - 110%
ICB	-0.0001	-0.0002	0.0000		
CCV	0.1868	0.3008	0.3155	95%	90 - 110%
CCB	0.0005	0.0008	0.0000		
CCV	0.1852	0.2983	0.3155	95%	90 - 110%
CCB	0.0015	0.0024	0.0000		
CCV	0.1861	0.2997	0.3155	95%	90 - 110%
CCB	0.0007	0.0011	0.0000		

00781

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **123139**
Prep Date: **3/15/2007**
Analysis Date: **3/15/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report** mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0001		**ND**	0.040					
LCS	7.5000	1.0000	0.1822		**0.29342**	0.040	0.0500	47.3280	0.3155	**93**	
193373-6	7.5000	1.0000	0.2446		**0.39391**	0.040					
193373-6ms	7.5000	1.0000	0.4179		**0.67300**	0.040	0.0500	47.3280	0.3155	**88**	
193373-6ms	7.5000	1.0000	0.4201		**0.67654**	0.040	0.0500	47.3280	0.3155	**90**	**1**
193262-21	7.5000	1.0000	0.0014		**ND**	0.040					
193277-1	7.5000	1.0000	0.0000		**ND**	0.040					
193366-1	7.5000	1.0000	0.0027		**ND**	0.040					
193366-2	7.5000	1.0000	0.0017		**ND**	0.040					
193366-3	7.5000	1.0000	0.0028		**ND**	0.040					
193366-4	7.5000	20.0000	0.7431		**23.93426**	0.800					
193366-5	7.5000	1.0000	0.0049		**ND**	0.040					
193367-1	7.5000	1.0000	0.0025		**ND**	0.040					
193367-2	7.5000	1.0000	0.0008		**ND**	0.040					
193368-1	7.5000	1.0000	0.0016		**ND**	0.040					
193368-2	7.5000	1.0000	0.0006		**ND**	0.040					
193368-3	7.5000	1.0000	0.0045		**ND**	0.040					
193368-4	7.5000	1.0000	0.0002		**ND**	0.040					
193373-7	7.5000	1.0000	0.3439		**0.55383**	0.040					
193373-8	7.5000	1.0000	0.0030		**ND**	0.040					
193373-9	7.5000	1.0000	0.0014		**ND**	0.040					
193373-10	7.5000	1.0000	0.0329		**0.05298**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

00782

193366-4dis:	7.5000	20.0000	0.7184	**23.13871**	0.800

Reviewed by/ Date: DMB 3/20/07

00783

---> **Quantitation Results Report** <---

Date : 03-15-2007
Time : 11:32:29
Operator :

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0001	0.00000
2	ICV/LCS	Analytical	+0.1822	0.30414
3	193262-21	Analytical	+0.0014	0.00234
4	193277-1	Analytical	+0.0000	0.00000
5	193366-1	Analytical	+0.0027	0.00443
6	193366-2	Analytical	+0.0017	0.00283
7	193366-3	Analytical	+0.0028	0.00474
8	193366-4X20	Analytical	+0.7431	1.24014
9	193366-5	Analytical	+0.0049	0.00825
10	193367-1	Analytical	+0.0025	0.00425
11	CCV	Analytical	+0.1868	0.31170
12	CCB	Analytical	+0.0005	8.658E-04
13	193367-2	Analytical	+0.0008	0.00127
14	193368-1	Analytical	+0.0016	0.00262
15	193368-2	Analytical	+0.0006	0.00104
16	193368-3	Analytical	+0.0045	0.00749
17	193368-4	Analytical	+0.0002	3.820E-04
18	193373-6	Analytical	+0.2446	0.40814
19	193373-6MS	Analytical	+0.4179	0.69738
20	193373-6MSD	Analytical	+0.4201	0.70118
21	193373-7	Analytical	+0.3439	0.57388

22	193373-8	Analytical	+0.0030	0.00502
23	CCV	Analytical	+0.1852	0.30913
24	CCB	Analytical	+0.0015	0.00250
25	193373-9	Analytical	+0.0014	0.00237
26	193373-10	Analytical	+0.0329	0.05490
27	193366-4X20F	Analytical	+0.7184	1.19904
28	CCV	Analytical	+0.1861	0.31063
29	CCB	Analytical	+0.0007	0.00120

---) **Standard Calibration Report** (---

Date : 03-15-2007
Time : 11:32:52
Operator :

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

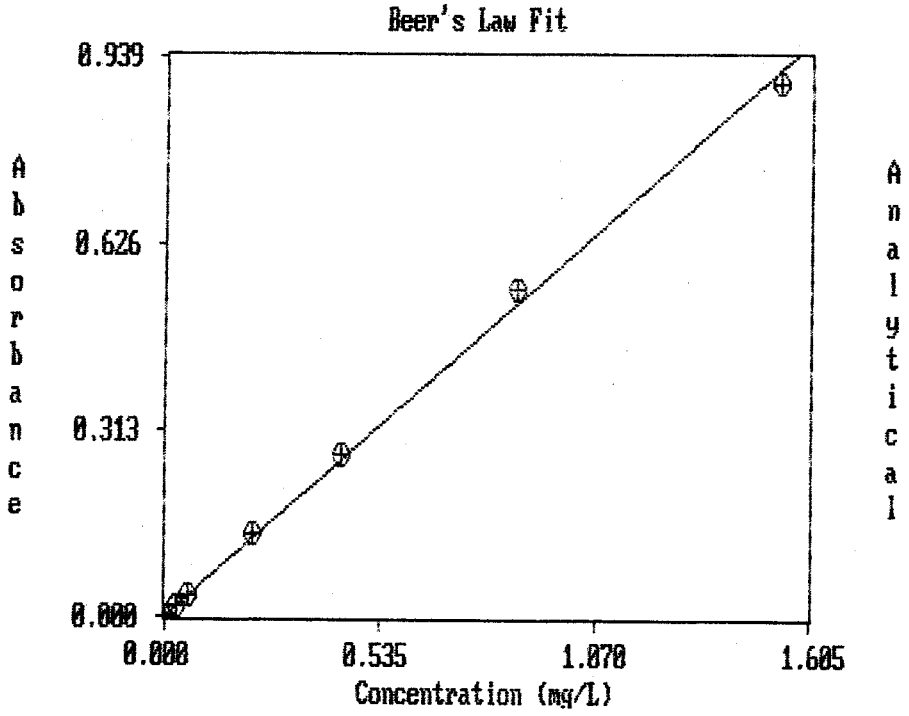
---> Standard Calibration Report <---

Date : 03-15-2007
Time : 11:32:53
Operator :

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



LTS1 193373
EK1 193366 193367 193369
PROJECT Treadwell 193262 193277

Notebook No. BK2451

Continued From Page

Sulfide/Gas Sulfide EPA 365.2 3/23/39

Sample	Vol (ml)	Final Vol ml	ABS	
*193262-21	7.5	7.5	.0014	
193277-1			.0000	
193366-1			.0027	
-2			.0017	S= s/a)
-3			.0028	2.4 g 0455292 → 50 DI H_2O
-4			.7430 X20	
-5			.0049	1.0 ml S=
193367-1			.0025	5.0 ml I .0255
-2			.0008	2.1 ml S_2O_3 .0255 B
193368-1			.0016	
-2			.0006	.1275
-3			.0045	-.05355
-4			.0002	.07395 X 6000 / 1.0 = 1183.20 mg/L
193373-6			.2446	
				1:25 = 47.328 mg/L
-6MS	+.05 ml (47.328 mg/L from 0455292)		.4179	.05 → 7.5 = .3155 mg/L
-6MSD	Same as MS		.4201	* = Filter thru WHATMAN .45μ
-7			.3439 3-15-07 am	Filter Cat 4226
-8			~~.0080~~ .0030	
-9			.0014	
-10			.0329	
*193366-4			.7184 x20	
ICB/MB			-.0001	
ICV/LCS	Same as MS		.1822	TV = .3155 mg/L
CCV			.1868	
CCB			.0005	
CCV			.1852	
CCB			.0015	
CCV			.1861	
CCB			.0007	

Continued on Page

Read and Understood By

Signed 3-15-05 Date

Signed 3/15/07 Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123139
Date Started: 15-MAR-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-021			Treadwell & Rollo	Water	DISS SULFIDE	20-MAR-2007
193277-001			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193366-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-003			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-004			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-005			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193367-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193367-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-003			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-004			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193373-006			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-007			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-008			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-009			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-010			Innovative Technic	Water	SULFIDE	22-MAR-2007
QC379335	BLANK			Water	SULFIDE	
QC379336	MS	of 193373-006		Water	SULFIDE	
QC379337	MSD	of 193373-006		Water	SULFIDE	
QC379338	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/10/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/14/07

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled
LF08GW04	SAMPLE	193262-002	290	10	123140	03/07/07
DAEGW04	SAMPLE	193262-003	450	10	123140	03/07/07
1065MW10A	SAMPLE	193262-004	400	10	123140	03/07/07
1065MW10B	SAMPLE	193262-005	530	10	123140	03/07/07
DUP0307073A	SAMPLE	193262-007	270	10	123140	03/07/07
1065MW10ARB1065MW10B	SAMPLE	193262-008	16	10	123140	03/07/07
1065PZ1B	SAMPLE	193262-010	780	10	123140	03/07/07
1065PZ6B	SAMPLE	193262-011	460	10	123140	03/07/07
1065PZ6BRB1065MW9A	SAMPLE	193262-012	100	10	123140	03/07/07
1065MW9A	SAMPLE	193262-013	680	10	123140	03/07/07
1065MW9B	SAMPLE	193262-014	490	10	123140	03/07/07
1065MW11A	SAMPLE	193262-015	360	10	123140	03/07/07
1065MW11B	SAMPLE	193262-016	510	10	123140	03/07/07
NKGW01	SAMPLE	193262-017	600	10	123140	03/07/07
NKGW05	SAMPLE	193262-018	430	10	123141	03/07/07
DAEGW102	SAMPLE	193262-019	1,070	10	123141	03/07/07
DW030807B	SAMPLE	193262-020	22	10	123141	03/08/07
	BLANK	QC379339	ND	10	123140	
	BLANK	QC379343	ND	10	123141	

ND= Not Detected
RL= Reporting Limit

82.1

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193262	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	03/07/07
Matrix:	Water	Analyzed:	03/14/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Received
	BS		QC379340		100.0	120.0		120	75-126			1.000	123140	
	BSD		QC379341		100.0	118.0		118	75-126	2	21	1.000	123140	
ZZZZZZZZZZ	SDUP	193219-001	QC379342	16,760		11,200	100.0			40 *	24	10.00	123140	03/07/07
	BS		QC379344		100.0	100.0		100	75-126			1.000	123141	
	BSD		QC379345		100.0	114.0		114	75-126	13	21	1.000	123141	
NKGW05	SDUP	193262-018	QC379346	434.0		428.0	10.00			1	24	1.000	123141	03/08/07

*= Value outside of QC limits; see narrative
RL= Reporting Limit
RPD= Relative Percent Difference

83.1

Curtis & Tompkins, Ltd.

: 997922

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**14-Mar-07**
Matrix:	Water	Batch #:	**123140**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	51.0524	51.0527	0.0003	ND	10					
BS	50	1	51.4758	51.4818	0.0060	120.0	10	1,000	5	100	**120**	
BSD	50	1	54.4290	54.4349	0.0059	118.0	10	1,000	5	100	**118**	**1.68**
193219-001	5	10	27.4544	27.5382	0.0838	16,760.0	100					
SDUP	5	10	27.5994	27.6554	0.0560	11,200.0	100					**39.77 ***

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193219-001	5	10	27.4544	27.5382	0.0838	16,760.0	100
193233-002	50	1	49.4433	49.4532	0.0099	198.0	10
193233-003	50	1	47.4340	47.4436	0.0096	192.0	10
193245-001	50	1	48.4058	48.6247	0.2189	4,378.0	10
193245-002	50	1	51.4764	51.5134	0.0370	740.0	10
193245-003	50	1	45.3179	45.3311	0.0132	264.0	10
193262-002	50	1	45.9236	45.9382	0.0146	292.0	10
193262-003	50	1	48.6179	48.6403	0.0224	448.0	10
193262-004	50	1	46.7358	46.7558	0.0200	400.0	10
193262-005	50	1	49.1293	49.1557	0.0264	528.0	10
193262-007	50	1	49.3456	49.3589	0.0133	266.0	10
193262-008	50	1	43.5527	43.5535	0.0008	16.0	10
193262-010	50	1	51.2237	51.2627	0.0390	780.0	10
193262-011	50	1	46.8237	46.8467	0.0230	460.0	10
193262-012	50	1	45.2388	45.2439	0.0051	102.0	10
193262-013	50	1	44.5569	44.5908	0.0339	678.0	10
193262-014	50	1	41.8711	41.8957	0.0246	492.0	10
193262-015	50	1	43.6432	43.6613	0.0181	362.0	10
193262-016	50	1	50.6475	50.6729	0.0254	508.0	10
193262-017	50	1	49.1220	49.1521	0.0301	602.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/20/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 128140

Prep Date: 3/14/07
Prep Time: 14:00

Benchbook#: **BK 2420**
Page: **88**

Filter Mfg/ Lot#: Env. Exp. 655614
Spike WS#: 55580

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/14/07	3/16/07	3/16/07	3/19/07	3/19/07	3/19/07
Time:	15:30	10:00	12:00	8:00	10:25	11:25
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	
1	MB		50	NEV	51.0524	51.0527	51.0527	X	
	BS		↓	69	51.4758	51.4827	51.4818	X	
	BSD		↓	REPZ	54.4290	54.4346	54.4349	X	
	193219-1	25,500	5	OAMO	27.4544	27.5377	27.5382	X	
5	SDUP-1	↓	↓	1	27.5994	27.6583	27.6595	27.6588	
	193233-2	93.8	50	619	49.4433	49.4529	49.4582	X	
	-3	120.6	↓	510	47.4340	47.4439	47.4436	X	
	193245-1	~~412~~ 7860	50	916	48.4058	48.6364	48.6272	48.6247	
	-2	~~744~~ 2780	↓	415	51.4764	51.5156	51.5132	51.5153	
10	-3	~~612~~ 402	↓	02	45.3179	45.3320	45.3306	45.3311	X
	193262-2	42	↓	4	45.9226	45.9380	45.9382	X	
	-3	744	↓	P3	48.6179	48.6416	48.6397	48.6409	
	-4	612	↓	ZOMBIE	46.7358	46.7359	46.7558	X	
	-5	752	↓	$	49.1293	49.1553	49.1557	X	
15	-7	450	↓	2	49.3456	49.3589	49.3589	X	
	-8	2.17	↓	8	43.5527	43.5531	43.5535	X	
	-10	1247	↓	MARS	51.2237	51.2627	51.2627	X	
	-11	725	↓	ALIEN	46.8227	46.8468	46.8467	X	
	-12	2.26	↓	5	45.2388	45.2395	45.2434	45.2439	X
20	-13	1235	↓	40	44.5569	44.5904	44.5908	X	
	-14	771	↓	4A	41.8711	41.8957	41.8957	X	
	-15	575	↓	WOOD	43.6432	43.6606	43.6613	43.6613	X
	-16	758	↓	ELF	50.6475	50.6718	50.6728	50.6729	X
	-17	976	↓	NEMO	49.1220	49.1512	49.1521	49.1528	X

* Constant weight must be within 0.0005 from previous reading.

PAP per DMB 3/16/07
Analyst / Date

3/16/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 123140 con 4

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2420**
Page: **89**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-2	Out-2	In-3	Out-3
Date:	3/19/07	3/19/07				
Time:	12:30	13:30				
Temp (C):	180	180				

	Sample ~~#/~~ Letter 4	EC Value (µS/cm) 5	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1								
5	27.6555	27.6554	Y					
	48.6247							
	51.5139	51.5134	X					
10								
	48.6400	48.6403	Y					
15								
20								

* Constant weight must be within 0.0005 from previous reading.

Analyst / Date

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123140
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193219-001			Acme Fill Corp.	Water	TDS	19-MAR-2007
193233-002			Innovative Technic	Water	TDS	19-MAR-2007
193233-003			Innovative Technic	Water	TDS	19-MAR-2007
193245-001			Don Hillebrandt As	Water	TDS	20-MAR-2007
193245-002			Don Hillebrandt As	Water	TDS	20-MAR-2007
193245-003			Don Hillebrandt As	Water	TDS	20-MAR-2007
193262-002			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-003			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-004			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-005			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-007			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-008			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-010			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-011			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-012			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-013			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-014			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-015			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-016			Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-017			Treadwell & Rollo	Water	TDS	20-MAR-2007
QC379339	BLANK			Water	TDS	
QC379340	BS			Water	TDS	
QC379341	BSD			Water	TDS	
QC379342	SDUP	of 193219-001		Water	TDS	

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**14-Mar-07**
Matrix:	Water	Batch #:	**123141**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	44.0374	44.0378	0.0004	ND	10					
BS	50	1	48.6408	48.6458	0.0050	100.0	10	1,000	5	100	**100**	
BSD	50	1	48.5290	48.5347	0.0057	114.0	10	1,000	5	100	**114**	**13.08**
193262-018	50	1	48.3820	48.4037	0.0217	434.0	10					
SDUP	50	1	41.6280	41.6494	0.0214	428.0	10					**1.39**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193262-018	50	1	48.3820	48.4037	0.0217	434.0	10
193262-019	50	1	47.2855	47.3389	0.0534	1,068.0	10
193262-020	50	1	44.1154	44.1165	0.0011	22.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMS 3/20/07

00797

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 123141

Prep Date: 3/14/07
Prep Time: 15:30

Benchbook#: **BK 2420**
Page: **90**

Filter Mfg/ Lot#: Env. Exp. 655614
Spike WS#: 85560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/14/07	3/16/07	3/16/07	3/19/07	3/19/07	
Time:	16:15	10:00	12:00	8:00	10:25	
Temp (C):	90	180	180	180	180	

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
90 3/14/07	~~MB~~		~~50~~	~~CREAM~~	~~48.8519~~			
	~~BS~~		↓	~~NOED~~	~~48.4007~~			
	~~BSD~~		↓	~~GED~~	~~48.5054~~			
	~~193262-18~~	~~694~~	~~50~~	~~EHN~~	~~56.6129~~			
5	SDUP-18	~~1827~~ ↓	50	CIA	41.6280	41.6494	41.6496	X
	-19	1827	↓	LMNOP	47.2855	47.3410	47.3389	47.33 X
	-20	2.02	↓	BMW	44.1154	44.1165	44.1161	X
	MB		50	NOID	44.0374	44.0378	44.0379	X
	BS		↓	MANGO	48.6408	48.6458	48.6460	X
10	BSD		↓	ALF	48.5290	48.5347	48.5350	X
	193262-18	694	↓	KGB	48.3820	48.4037	48.4039	X
15								
20								

* Constant weight must be within 0.0005 from previous reading.

PAP per DMB 3/16/07
Analyst / Date

3/16/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123141
Date Started: 15-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193262-018		Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-019		Treadwell & Rollo	Water	TDS	20-MAR-2007
193262-020		Treadwell & Rollo	Water	TDS	20-MAR-2007
QC379343	BLANK		Water	TDS	
QC379344	BS		Water	TDS	
QC379345	BSD		Water	TDS	
QC379346	SDUP of 193262-018		Water	TDS	

NDMA

PACIFIC ANALYTICAL, INC.

6056 Corte Del Cedro • Carlsbad, CA 92011
(760) 496-2200 • FAX (760) 496-2211

NARRATIVE REPORT
Method 1625M Semivolatiles

03/16/07

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

Attn: Steve Stanley

PA Reference: 2948, 2953, 2956

Samples: FB0302071A, NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B, DW030807A

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 1000 mL aliquot was spiked with 0.01 ug of N-Nitrosodimethylamine-d6 and extracted with continuous liquid-liquid extractors for 24 hours. The sample extract was concentrated to a final volume of 0.10 mL and spiked with 0.01 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL. A recent method detection limit study suggests the instrument is capable of detecting N-Nitrosodimethylamine (NNDMA) at a concentration of 0.0005 ug/L in a 1 liter sample.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.002 ug of NNDMA and 0.01 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. The laboratory blanks associated with the samples have no NNDMA detected.

Matrix Spike/Matrix Spike Duplicate

Two aliquots of sample NKGW02 were spiked with 0.01 ug of NNDMA and its label, extracted and analyzed like the sample.

Samples

Samples NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B and DW030807A have NNDMA detected at concentrations which exceed the method detection limit..

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW01

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2956-001
Lab File ID: 7C1526
Date Sampled: 03/07/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2256

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0023	0.0020	39 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW05

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2956-002
Lab File ID: 7C1527
Date Sampled: 03/07/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2338

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0011	J	0.0020	39 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DW030807B

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2956-003
Lab File ID: 7C1528
Date Sampled: 03/08/07
Date Extracted: 03/13/07
Date Analyzed: 03/16/07
Time Analyzed: 0020

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0021	0.0020	52 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001
Lab File ID: 7C1521
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1925

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0007	J	0.0020	34 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MS

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MS
Lab File ID: 7C1522
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2007

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	37 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MSD

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MSD
Lab File ID: 7C1524
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2132

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	39 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11873

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11873
Lab File ID: 7C1517
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1634

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11874

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11874
Lab File ID: 7C1518
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1717

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	40 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q59

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q59
Lab File ID: 7C1513
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1345

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0022	0.0020	53 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

On-going Accuracy (P&R) Check

Sample: P&R Q59 Lab ID: P&R Q59 File: 7C1513
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 1345
Initial Size: 1000.0000 Final Size: 0.1000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.02199	110	70 - 130	53	25 - 175

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs: Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.133	0.133	0.127	0.128	0.130	0.130	1.9

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs: Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
N-Nitrosodimethylami	999999	0.184	0.427	0.819	4.095	8.188

CONCENTRATIONS OF CALIBRATION STANDARDS

	Compound	Ical Type	Resp Ref	Calibration Standards Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1	2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2	N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3	N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

I = internal standard; L = labeled compound; U = unlabeled native
O = compound referenced to internal standard

Sample No.: 0.02 PPM STD NSTD0.02 Analyzed: 03/15/07 0807
File ID: 7C1505 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0519

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03/16/07

Quan DB : 7C1505
Scan DB :

Raw Datafile : 7C1505
Find DB : NNDMA

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	-1	51158785	bb	1086	1087	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6788672	bb	152	152	80	N-Nitrosodimethylamine-d6
3	86	49	89	0	1249100	!!	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.05 PPM STD NSTD0.05 Analyzed: 03/15/07 0850
File ID: 7C1506 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~07~~ 0519

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03/16/07

Raw Datafile : 7C1506 Quan DB : 7C1506
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	-1	48900994	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6496083	vv	152	152	80	N-Nitrosodimethylamine-d6
3	94	59	92	0	2776235	vv	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.10 PPM STD NSTD0.10 Analyzed: 03/15/07 0933
File ID: 7C1507 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~87~~ 0520

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V33(16b7

Raw Datafile : 7C1507 Quan DB : 7C1507
Find DB : NNDMA Scan DB :

No.	MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	48440195	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	94	67	84	0	6166152	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	68	93	0	5047360	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.50 PPM STD NSTD0.50 Analyzed: 03/15/07 1015
File ID: 7C1508 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/85 0521

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0531167

Raw Datafile : 7C1508 Quan DB : 7C1508
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	94	100	0	55381118	bb	1087	1087	190	2,2'-Difluorobiphenyl
2	96	69	84	0	7103816	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	87	95	0	29088944	bv	157	157	74	N-Nitrosodimethylamine

Sample No.: 1.00 PPM STD NSTD1.00 Analyzed: 03/15/07 1057
File ID: 7C1509 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/07 0522

Raw Datafile : 7C1509 Quan DB : 7C1509
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	50250806	bv	1087	1088	190	2,2'-Difluorobiphenyl
2	97	70	85	0	6553843	bv	152	152	80	N-Nitrosodimethylamine-d6
3	100	91	94	0	53664544	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 5.00 PPM STD NSTD5.00 Analyzed: 03/15/07 1139
File ID: 7C1510 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0522

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03/16/07

Raw Datafile : 7C1510 Quan DB : 7C1510
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	0	41180765	vb	1088	1088	190	2,2'-Difluorobiphenyl
2	91	65	86	1	5366427	bv	153	152	80	N-Nitrosodimethylamine-d6
3	100	94	95	0	221817374	bv	157	157	74	N-Nitrosodimethylamine

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2ND SRC DAI

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 7C1523
Date Sampled:
Date Extracted:
Date Analyzed: 03/15/07
Time Analyzed: 2049

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.0891	0.1000	89 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

Daily Calibration Check

Sample: 0.10 PPM 2ND SRC DAI Lab ID: NSTD0.10 File: 7C1523
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 2049
Initial Size: 1000.0000 Final Size: 1.0000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.08913	89	80 - 120	100	25 - 175

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1241

Cal File: 7C15 Date: 3/15/07

Notes: NDMA Curtis + Tompkins

Taped	Sample ID	File Name	OK	Description	OP
		7C1501		warm-up	CB
		02			
		03			
		04			
	WSTD0.02	05		0.02 ug/ml NDMA Std	
	WSTD0.05	06		0.05	
	WSTD0.10	07		0.10	
	WSTD0.50	08		0.50	
	WSTD1.00	09		1.00	
	WSTD5.00	10		5.00	
	RRQ58	11			
	RRQ58Rep	12			
	RRQ59	13			
	RRQ59Rep	14			
	11871	15			
	11872	16			
	11873	17			
	11874	18			
	2948-001	19			
	2948-002	20			
	2953-001	21			
	2953-001MS	22			
	WSTD0.10	23		0.10 ug/ml NDMA 2nd Std Chk	
	2953-001MS	24			
	2953-002	25			

03/06/00 Reviewed by: _____ on: _____

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1242

Cal File: 7C15 Date: 3/15/07

Notes: 10 blnk

Taped	Sample ID	File Name	OK	Description	OP
	2956-001	7C1526			CB
	2956-002	27			
	2956-003	28			
	2956-004	29			

03/06/00 Reviewed by: _____ on: _____

EXTRACTION LOG: Method Mod 1625 -NDMA

CLIENT Curtis + Tompkins

JOB # 2953, 56

Extraction Date 3-13-07

Extraction Method L-L

Matrix Aq

Extraction Solvent DCM

Other Reagents

Lot # 46354

Lot #

Initials dl

Ascorbic acid 3/8/07

	LABEL	DATE MADE	CONC.	VOL. ADDED	DATE SPIKED	INITIALS	COMMENTS
1. Surrogate Spike	NDMA + 1,4 Dioxane labels	12/19/06	0.02 µg/ml	500 µl	3-13-07	dl	
2. Matrix Spike	NDMA - 1,4 Dioxane Natives	12/16/06	0.02 µg/ml	100 µl	"	dl	500 µl → MS/MSD
3.							
4. Internal Standard	NDMA IS	6/20/06	1 µg/ml	1 ml	3/15/07	GB	

Sample #	Sample Size Extracted	% Moisture Solids	Extract. pH	Standards 1	2	3	4	Initial Extract Vol. A	Aliquot Removed for Prep B	Volume After Prep C	Calculated Final Vol: A/B x C	Comments: (Cleanup method used, info about unusual sample/extract behavior)
(B) 11873	1000 ml	<1%	5-7				X	100 ml	100 ml	100 ml	100 ml	
(B) 11874							X					
P+RQ59							X					
1 dup							X					
2953-01							X					Spiked MS w/500 µl Native mix - CSP
01 MS							X					"
01 MSD							X					
02							X					
2956-01							X					
02							X					
03							X					
04							X					

Pacific Analytical, Inc. on 13 20

QA Review

30

000825

LEVEL III

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 193262
Site: Presidio

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
NKGW01	03/07 12:56	Water	NDMA	193262-017	
NKGW05	03/07 11:14	Water	NDMA	193262-018	
W030807B	03/08 08:15	Water	NDMA	193262-020	

Notes:	Relinquished By:	Received By:
Need C&T Format EDD	[signature]	C Parson
	Date/Time: 3/9/07	Date/Time: 10MAR07 12:15

Signature on this form constitutes a firm Purchase Order for the services requested above.

Pacific Analytical, inc.

SAMPLE LOG-IN SHEET – *Initial*

JOB #	LOG-IN DATE
2956	10 MARCH 07

Received By (*print name*): C S PARSONS

Received By (*signature*): C S Parsons

CLIENT Curtis Tomplins

# of Coolers: 1

TEMP: 2 °C

Received From Fed Ex

Custody seals (Present) Absent * / Intact Broken

Custody Seal #'s

Airbill (Airbill) Sticker Present Absent *

Airbill # 8575 3390967

Date Rec'd 10 MAR 07

Time Rec'd 12:15

Chain of Custody or Traffic Reports (Present) Absent *

Sample Label (Present) Absent *

Sample ID #'s on COC (Listed) Not Listed

Sample Condition (Intact) Broken Leaking

Does information on Custody records, reports and sample tags agree? (Yes) No

LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
2956-01	NKG-W01	NDMA	2	AL	WW	OK
02	NKG-W05		2	AL	WW	OK
03	DW030807B		2	AL	WW	OK
04	DW030807A		2	AL	WW	OK

* COMMENTS

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other

Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container

37

00828

2956 Curtis & Tompkins, 4 - NNDMA (TAT: 30)

Lab ID	NDMA
2956-001	P___
2956-002	P___
2956-003	P___
2956-004	P___

Lab ID	Cust ID	Sampled	Rec'vd	Login ID
2956-001	NKGW01	03/07/07	03/10/07	01959
2956-002	NKGW05	03/07/07	03/10/07	01959
2956-003	DW030807B	03/08/07	03/10/07	01959
2956-004	DW030807A	03/08/07	03/10/07	01959

Lab ID	Description	Comment
2956-001	2 x AL x WW	
2956-002	2 x AL x WW	
2956-003	2 x AL x WW	
2956-004	2 x AL x WW	

Login	Loggin by	Shipper	Shipper Code	CofC
01959	Dana E. Errett	Federal Express	857533909671	OK

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 193277

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID	Lab ID
DW030807A	193277-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 3/26/07
Operations Manager

Signature: _____ Date: 3/26/07
Project Manager

NELAP # 01107CA

00001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193277
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/08/07
Samples Received:	03/08/07

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 03/08/07. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the CCV analyzed 03/19/07 15:55; this analyte met minimum response criteria. High surrogate recoveries were observed for 1,2-dichloroethane-d4 in DW030807A (lab # 193277-001) and the MS/MSD of NKGW02 (lab # 193217-011); no associated target analytes were detected in the sample. No other analytical problems were encountered.

Pesticides (EPA 8081A):
High response was observed for methoxychlor in the ICV analyzed 03/15/07 00:57; average ICV drift met method requirements, and this analyte was not detected at or above the RL in the associated samples. Low response was observed for endrin ketone in the CCV analyzed 03/15/07 21:34; average CCV drift met method requirements. High responses were observed for 4,4'-DDD, 4,4'-DDE, and endrin; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for pyrene in the MS/MSD for batch 123065; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (F) and 1-methylnaphthalene (UV) in the MS/MSD for batch 123065; the parent sample was not a project sample. No other analytical problems were encountered.

Metals (EPA 6010B and SM 2340B) Water:
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	193277
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	03/08/07
Samples Received:	03/08/07

Metals (EPA 6020 and EPA 7470A) Filtrate:
No analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

Surfactants (MBAS) (EPA 425.1):
No analytical problems were encountered.

NDMA (EPA 1625):
Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo

193277

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

3/12/07

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS WILLIAM JONES
Recorder (signature required):
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

REQUESTED ANALYSES

SAMPLE INDENTIFICATION	DATE	TIME	LAB ID	Matrix: SoiL	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260)	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23) 22, 13, 9, 8, 7, 3, Other)	~~Metals - Total (22, 13, 9, 8, 7, 3, Other)~~ TPH-SVOCs/PCBs/Pesticides	TDS (160.1)	PAHs (8310)	NDMA (1625)	MBAs E425.1	TOTAL NANONES	PCBs 8080	SULFIDE 376.2	CYANIDE 9012A	MOLYBDENUM
DW030807A	3/8/07	1230			X		X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Z
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -

RELINQUISHED BY:	DATE: 3/8/07	RECEIVED BY: (Amale Cuisnow)	
PRINT NAME: William Jones FIRM: BTS	TIME: 1330	PRINT NAME: Weathers	FIRM: BTS
RELINQUISHED BY:	DATE: 3/8/07	RECEIVED BY:	
PRINT NAME: Pete Cornish FIRM: BTS	TIME: 1400	PRINT NAME: Rick Grams	FIRM: C&T

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:
White Copy - Orignial Yel

intact cold & G

50005

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 · Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 193277 Date Received: 3/8/07 Number of Coolers: 1
Client: Treadwell & Rollo Project: Presidio Q2'07

A. Preliminary Examination Phase
Date Opened: 3/8/07 By (print): S. Stanley (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO NA
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: No Temp Blk, Cold

B. Login Phase
Date Logged In: 3/8/07 By (print): S. Stanley (sign) [signature]

1. Describe type of packing in cooler: Bagged in loose ice
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW030807A	Batch#:	123199
Matrix:	Water	Sampled:	03/08/07
Units:	ug/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/16/07

Type: SAMPLE Lab ID: 193277-001

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	103	65-135

Type: BLANK Lab ID: QC379610

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379611	Batch#:	123199
Matrix:	Water	Analyzed:	03/16/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,708	85	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	105	65-135

10.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	123199
MSS Lab ID:	193466-007	Sampled:	03/15/07
Matrix:	Water	Received:	03/15/07
Units:	ug/L	Analyzed:	03/16/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379612

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	28.61	2,000	1,916	94	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	113	65-135

Type: MSD Lab ID: QC379613

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,961	97	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	65-135
Bromofluorobenzene (FID)	114	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Trifluorotoluene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng
Bromofluorobenzene (FID)	A	150.00	225.00	450.00	675.00	950.00	ng

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 327063206001
Units : ng

Name : GC07 TVH 043
Date : 12-FEB-2007 16:37
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043_007	327063206007	TVH_1	12-FEB-2007 16:37	S5078 (1000X), S5029 (5000X)
L2	043_008	327063206008	TVH_2	12-FEB-2007 17:14	S5077 (1000X), S5029 (5000X)
L3	043_009	327063206009	TVH_3	12-FEB-2007 17:50	S5076 (1000X), S5029 (5000X)
L4	043_010	327063206010	TVH_4	12-FEB-2007 18:26	S5075 (2000X), S5029 (5000X)
L5	043_017	327063206017	TVH_5	13-FEB-2007 12:20	S5075 (1000X), S5029 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1954.2	1665.2	1659.1	1714.5	1763.8	AVRG		5.71E-4		1751.4	7	0.995	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Gasoline C7-C12	A	250.00	2500.0	10000	25000	50000	ng

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 GCVOA Water
EPA 8015B

Inst : GC07 Name : GC07 TVH 043
Calnum : 327063206001 Cal Date: 12-FEB-2007

ICV 327063206019 (043_019 13-FEB-2007) stds: S5365 (1000X), S5029 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1751.4	1746.5	10000	9972	ng	0	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCVOA Water: EPA 8015B

Inst : GC07
Calnum : 327074193001
Units : ng

Name : GC07 STODDARD 051
Date : 20-FEB-2007 14:22
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	051_004	327074193004	STODD	20-FEB-2007 14:22	S4942 (1000X), S5029 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Stoddard Solvent C7-C12	A	2540.3	AVRG		3.94E-4		2540.3	0	0.995	20	

Analyte Spiked Amounts	Ch	L1	Units
Stoddard Solvent C7-C12	A	10000	ng

JCP 02/21/07 : 25402572 / 10000 = 2540.2572 = 2540.3

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 193277 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: QC379611 IDF : 1.0
Seqnum : 327108649002.2 File : 075_002 Time : 16-MAR-2007 10:49
Standards: S5716 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1495.9	10000	8542	ng	-15	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2229.3	450.0	446.7	ng	-1	15	u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1831.6	450.0	472.2	ng	5	15	u

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

u=use

327108649002.2

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327108649004 File : 075_004 Time : 16-MAR-2007 12:53
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2703.1	10000	10640	ng	6	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2175.6	450.0	436.0	ng	-3	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2467.9	450.0	636.3	ng	**41**	15	c+

JCP 03/19/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

327108649004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 327108649015 File : 075_015 Time : 16-MAR-2007 20:57
Standards: S5716 (666.7X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327063206001	12-FEB-2007	1751.4	1567.1	15000	13420	ng	-11	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2636.6	450.0	528.3	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1923.3	450.0	495.8	ng	10	15	

JCP 03/19/07 [Trifluorotoluene (FID) A]: Passes limits of 72-135%

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

327108649015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: STODD IDF : 1.0
Seqnum : 327108649016 File : 075_016 Time : 16-MAR-2007 21:33
Standards: S4942 (1000X), S5345 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	327074193001	20-FEB-2007	2540.3	2586.7	10000	10180	ng	2	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2273.6	450.0	455.6	ng	1	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	2461.7	450.0	634.7	ng	**41**	15	c+

JCP 03/19/07 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 03/19/07 : PID surrogates are not applicable.

Analyst: JCP Date: 03/19/07 Reviewer: CW Date: 03/20/07

+=high bias c=CCV

327108649016

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	018_001	X	IB			01/18/07 10:01	1.0	1	
002	018_002	X	IB			01/18/07 10:49	1.0	1	
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1	
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1	
005	018_005	X	IB			01/18/07 18:01	1.0	1	
006	018_006	X	IB			01/18/07 18:37	1.0	1	
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1	
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1	
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1	
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1	
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1	
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1	
013	018_013	X	IB			01/18/07 22:54	1.0	1	
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1	
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1	
016	018_016	X	IB			01/19/07 00:43	1.0	1	
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1	
018	018_018	X	IB			01/19/07 01:56	1.0	1	
019	018_019	X	IB			01/19/07 02:32	1.0	1	
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1	
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1	
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1	
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1	
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1	
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1	
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1	
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1	
028	018_028	X	IB			01/19/07 08:41	1.0	1	
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1	
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1	
031	018_031	X	IB			01/19/07 12:18	1.0	1	
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15	
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16	
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17	
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18	
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19	

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327063206

Instrument : GC07 Begun : 02/12/07 08:31
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043_001	X	IB			02/12/07 08:31	1.0	1	
002	043_002	X	CCV			02/12/07 09:08	1.0	2 1	
003	043_003	X	CCV			02/12/07 09:44	1.0	3 1	
004	043_004	X	IB			02/12/07 11:42	1.0	1	
005	043_005	X	IB			02/12/07 15:25	1.0	1	
006	043_006	X	ICAL			02/12/07 16:01	1.0	4 1	
007	043_007	ICAL	TVH_1			02/12/07 16:37	1.0	4 1	
008	043_008	ICAL	TVH_2			02/12/07 17:14	1.0	5 1	
009	043_009	ICAL	TVH_3			02/12/07 17:50	1.0	6 1	
010	043_010	ICAL	TVH_4			02/12/07 18:26	1.0	7 1	
011	043_011	X	TVH_5			02/12/07 19:02	1.0	7 1	
012	043_012	X	IB			02/12/07 19:38	1.0	1	
013	043_013	X	ICV			02/12/07 20:14	1.0	3 1	
014	043_014	X	ICV			02/12/07 20:50	1.0	3 1	
015	043_015	X	IB			02/12/07 21:26	1.0	1	
016	043_016	CMARKER	CARBMARK			02/12/07 22:03	1.0	8 9 1	
017	043_017	ICAL	TVH_5			02/13/07 12:20	1.0	7 1	
018	043_018	X	IB			02/13/07 12:56	1.0	1	
019	043_019	ICV	TVH			02/13/07 13:32	1.0	3 1	

Analyst: JCP Date: 02/17/07 Reviewer: MCH Date: 02/17/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327074193

Instrument : GC07 Begun : 02/20/07 12:33
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	051_001	X	IB			02/20/07 12:33	1.0	1
002	051_002	X	CCV			02/20/07 13:10	1.0	2 1
003	051_003	CCV/LCS	QC375803	Soil	122278	02/20/07 13:46	1.0	3 1
004	051_004	ICAL	STODD			02/20/07 14:22	1.0	4 1
005	051_005	BLANK	QC375802	Soil	122278	02/20/07 15:14	1.0	1
006	051_006	MS	QC375804	Soil	122278	02/20/07 15:50	1.0	3 1
007	051_007	MSD	QC375805	Soil	122278	02/20/07 16:27	1.0	3 1
008	051_008	MSS	192789-001	Soil	122278	02/20/07 17:30	1.0	1
009	051_009	SAMPLE	192789-002	Soil	122278	02/20/07 18:06	1.0	1
010	051_010	SAMPLE	192789-003	Soil	122278	02/20/07 18:42	1.0	1
011	051_011	SAMPLE	192789-004	Soil	122278	02/20/07 19:18	1.0	1
012	051_012	CCV	TVH			02/20/07 19:54	1.0	3 1
013	051_013	CCV	TVH			02/20/07 20:31	1.0	3 1
014	051_014	CCV	STODD			02/20/07 21:07	1.0	4 1
015	051_015	CCV	STODD			02/20/07 21:43	1.0	4 1
016	051_016	CCV	JP4			02/20/07 22:19	1.0	5 1
017	051_017	CCV	JP4			02/20/07 22:55	1.0	5 1
018	051_018	MB	QC375836	Water	122286	02/20/07 23:32	1.0	1
019	051_019	LCS	QC375837	Water	122286	02/21/07 00:08	666.7	1 3
020	051_020	X	192322-001		122286	02/21/07 00:44	1.0	6 1
021	051_021	MDL	192322-001	Water	122286	02/21/07 01:20	1.0	6 1
022	051_022	MDL	192322-002	Water	122286	02/21/07 01:56	1.0	6 1
023	051_023	MDL	192322-003	Water	122286	02/21/07 02:32	1.0	6 1
024	051_024	MDL	192322-004	Water	122286	02/21/07 03:08	1.0	6 1
025	051_025	MDL	192322-005	Water	122286	02/21/07 03:45	1.0	6 1
026	051_026	MDL	192322-006	Water	122286	02/21/07 04:21	1.0	6 1
027	051_027	MDL	192322-007	Water	122286	02/21/07 04:57	1.0	6 1
028	051_028	CCV	TVH			02/21/07 05:33	1.0	3 1
029	051_029	CCV	TVH			02/21/07 06:09	1.0	3 1
030	051_030	CCV	JP4			02/21/07 06:45	1.0	5 1
031	051_031	CCV	JP4			02/21/07 07:21	1.0	5 1

Analyst: JCP Date: 02/21/07 Reviewer: CW Date: 02/21/07

Standards used: 1=S5029 2=S5313 3=S5365 4=S4942 5=S4690 6=S4692

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327108649

Instrument : GC07 Begun : 03/16/07 10:13
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	075_001	X	IB			03/16/07 10:13	1.0	1	
002	075_002	CCV/LCS	QC379611	Water	123199	03/16/07 10:49	1.0	2 1	
003	075_003	X	IB			03/16/07 12:17	1.0	1	
004	075_004	CCV	STODD			03/16/07 12:53	1.0	3 1	
005	075_005	BLANK	QC379610	Water	123199	03/16/07 13:29	1.0	1	
006	075_006	MS	QC379612	Water	123199	03/16/07 14:06	1.0	4 1	
007	075_007	MSD	QC379613	Water	123199	03/16/07 14:42	1.0	4 1	
008	075_008	MSS	193466-007	Water	123199	03/16/07 15:18	1.0	1	
009	075_009	SAMPLE	193262-020	Water	123199	03/16/07 15:54	1.0	1	
010	075_010	SAMPLE	193277-001	Water	123199	03/16/07 16:30	1.0	1	
011	075_011	SAMPLE	193461-001	Water	123199	03/16/07 17:06	1.0	1	
012	075_012	SAMPLE	193461-003	Water	123199	03/16/07 19:08	1.0	1	
013	075_013	SAMPLE	193461-004	Water	123199	03/16/07 19:45	1.0	1	
014	075_014	X	TVH			03/16/07 20:21	1.0	2 1	
015	075_015	CCV	TVH			03/16/07 20:57	1.0	2 1	
016	075_016	CCV	STODD			03/16/07 21:33	1.0	3 1	
017	075_017	CCV	STODD			03/16/07 22:10	1.0	3 1	
018	075_018	SAMPLE	193466-001	Water	123199	03/16/07 22:46	1.0	1	
019	075_019	SAMPLE	193466-002	Water	123199	03/16/07 23:22	1.0	1	
020	075_020	SAMPLE	193466-004	Water	123199	03/16/07 23:58	1.0	1	pH > 2
021	075_021	SAMPLE	193466-005	Water	123199	03/17/07 00:35	1.0	1	
022	075_022	SAMPLE	193466-006	Water	123199	03/17/07 01:11	1.0	1	
023	075_023	SAMPLE	193466-008	Water	123199	03/17/07 01:47	1.0	1	
024	075_024	X	TVH			03/17/07 02:24	1.0	2 1	
025	075_025	CCV	TVH			03/17/07 03:00	1.0	2 1	

Analyst: JCP Date: 03/19/07 Reviewer: _____ Date: _____

Standards used: 1=S5345 2=S5716 3=S4942 4=S5365

REPORTING SUMMARY FOR 193277 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
193277-001	GC04	03/15/07 02:20	1.0					
193277-001	GC07	03/16/07 16:30	1.0	+	+	+	+	
QC379131	GC04	03/14/07 13:46	1.0	+		+	+	
QC379132	GC04	03/14/07 12:49	1.0	+		+	+	
QC379133	GC04	03/14/07 14:24	1.0	+		+	+	
QC379134	GC04	03/14/07 15:02	1.0	+		+	+	
QC379610	GC07	03/16/07 13:29	1.0	+	+	+	+	
QC379611	GC07	03/16/07 10:49	1.0	+		+	+	
QC379612	GC07	03/16/07 14:06	1.0	+		+	+	
QC379613	GC07	03/16/07 14:42	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/26/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L			14	8.1		
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			5.3			9.8
Bromofluorobenzene (FID)	ug/L			4.5			7.5

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/21/07
Diln Fac:	1.000	Analyzed:	03/22/07
Batch#:	123351		

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 193277-001

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC380254

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123351
Units:	ug/L	Prepared:	03/21/07
Diln Fac:	1.000	Analyzed:	03/22/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC380255

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,392	96	65-135

Surrogate	%REC	Limits
Hexacosane	101	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC380256

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,560	102	65-135	7	35

Surrogate	%REC	Limits
Hexacosane	100	65-135

RPD= Relative Percent Difference

47.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425001
Units : mg/L

Name : DSL
Date : 12-FEB-2007 20:09
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a022	177062425022	DSL_10	12-FEB-2007 20:09	S5413
L2	043a023	177062425023	DSL_100	12-FEB-2007 20:36	S5414
L3	043a024	177062425024	DSL_500	12-FEB-2007 21:03	S5416
L4	043a025	177062425025	DSL_1000	12-FEB-2007 21:31	S5417
L5	043a026	177062425026	DSL_5000	12-FEB-2007 21:59	S5411
L6	043a027	177062425027	DSL_7500	12-FEB-2007 22:26	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	50425	64566	63374	62034	62393	63812	AVRG		1.64E-5		61101	9	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Diesel C12-C24	10.000	100.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177062425001

Name : DSL
Cal Date: 12-FEB-2007

ICV 177062425029 (043a029 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61101	61645	500.0	504.4	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425002
Units : mg/L

Name : MOTOR OIL
Date : 13-FEB-2007 00:42
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a032	177062425032	MO_50	13-FEB-2007 00:42	S5523
L2	043a033	177062425033	MO_250	13-FEB-2007 01:09	S5524
L3	043a034	177062425034	MO_500	13-FEB-2007 01:37	S5525
L4	043a035	177062425035	MO_1000	13-FEB-2007 02:04	S5526
L5	043a036	177062425036	MO_5000	13-FEB-2007 02:31	S5522
L6	043a037	177062425037	MO_7500	13-FEB-2007 02:59	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	39794	48702	44865	48702	43992	44363	AVRG		2.22E-5		45069	7	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Motor Oil C24-C36	50.000	250.00	500.00	1000.0	5000.0	7500.0	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177062425003
Units : mg/L

Name : HEX
Date : 13-FEB-2007 03:53
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	043a039	177062425039	HEX_5	13-FEB-2007 03:53	S4639
L2	043a040	177062425040	HEX_10	13-FEB-2007 04:20	S4640
L3	043a041	177062425041	HEX_25	13-FEB-2007 04:48	S4641
L4	043a042	177062425042	HEX_50	13-FEB-2007 05:15	S5402
L5	043a043	177062425043	HEX_100	13-FEB-2007 05:42	S4644
L6	043a044	177062425044	HEX_200	13-FEB-2007 06:09	S4645

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	72897	75823	77657	75595	80686	79852	AVRG		1.30E-5		77085	4	0.995	20	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Hexacosane	5.0000	10.000	25.000	50.000	100.00	200.00	mg/L

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00051

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177117069015 File : 081a015 Time : 22-MAR-2007 17:27
Standards: S5734

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	49663	500.0	551.0	mg/L	10	15	
Hexacosane	177062425003	13-FEB-2007	77085	79231	50.00	51.39	mg/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_1000 IDF : 1.0
Seqnum : 177117069017 File : 081a017 Time : 22-MAR-2007 18:22
Standards: S5732

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	62808	1000	1028	mg/L	3	15	
Hexacosane	177062425003	13-FEB-2007	77085	72556	50.00	47.06	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCSV Water
EPA 8015B

Inst : GC17A Run Name: DSL_250 IDF : 1.0
Seqnum : 177117069030 File : 081a030 Time : 23-MAR-2007 01:01
Standards: S5730

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177062425001	12-FEB-2007	61101	66314	250.0	271.3	mg/L	9	15	
Hexacosane	177062425003	13-FEB-2007	77085	72814	50.00	47.23	mg/L	-6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 GCSV Water
EPA 8015B

Inst : GC17A Run Name: MO_500 IDF : 1.0
Seqnum : 177117069031 File : 081a031 Time : 23-MAR-2007 01:28
Standards: S5734

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177062425002	13-FEB-2007	45069	50303	500.0	558.1	mg/L	12	15	
Hexacosane	177062425003	13-FEB-2007	77085	82382	50.00	53.44	mg/L	7	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177062425

Instrument : GC17A
Method : EPA 8015B

Begun : 02/12/07 08:25
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043a001	X	PRIMER				02/12/07 08:25	1.0		
002	043a002	X	IB				02/12/07 08:52	1.0		
003	043a003	X	DSL_500				02/12/07 09:49	1.0	1	
004	043a004	CCV	MO_500				02/12/07 10:16	1.0	2	
005	043a005	X	DSL_500				02/12/07 11:49	1.0	1	
006	043a006	CCV	DSL_500				02/12/07 12:20	1.0	1	
007	043a007	SAMPLE	192484-005		WET DI Leachate	121995	02/12/07 12:54	1.0		
008	043a008	SAMPLE	192484-010	S	WET DI Leachate	121995	02/12/07 13:21	1.0		
009	043a009	SAMPLE	192484-006	S	WET DI Leachate	121995	02/12/07 13:48	1.0		
010	043a010	SAMPLE	192484-009	S	WET DI Leachate	121995	02/12/07 14:15	1.0		
011	043a011	SAMPLE	192484-011	S	WET DI Leachate	121995	02/12/07 14:42	1.0		
012	043a012	SAMPLE	192484-011		WET DI Leachate	121995	02/12/07 15:09	1.0		
013	043a013	CCV	DSL				02/12/07 15:36	1.0	1	
014	043a014	CCV	MO				02/12/07 16:03	1.0	2	
015	043a015	CCV	DSL				02/12/07 16:30	1.0	3	
016	043a016	CCV	MO				02/12/07 16:57	1.0	2	
017	043a017	CCV	DSL_1000				02/12/07 17:35	1.0	3	
018	043a018	CCV	MO_500				02/12/07 18:02	1.0	2	
019	043a019	IB	CALIB				02/12/07 18:47	1.0		
020	043a020	CMARKER	CM C10-50				02/12/07 19:14	1.0	4	
021	043a021	IB	CALIB				02/12/07 19:42	1.0		
022	043a022	ICAL	DSL_10				02/12/07 20:09	1.0	5	
023	043a023	ICAL	DSL_100				02/12/07 20:36	1.0	6	
024	043a024	ICAL	DSL_500				02/12/07 21:03	1.0	7	
025	043a025	ICAL	DSL_1000				02/12/07 21:31	1.0	8	
026	043a026	ICAL	DSL_5000				02/12/07 21:59	1.0	9	
027	043a027	ICAL	DSL_7500				02/12/07 22:26	1.0	10	
028	043a028	IB	CALIB				02/12/07 22:53	1.0		
029	043a029	ICV	DSL_500				02/12/07 23:21	1.0	11	
030	043a030	X	ICV				02/12/07 23:48	1.0	11	
031	043a031	IB	CALIB				02/13/07 00:15	1.0		
032	043a032	ICAL	MO_50				02/13/07 00:42	1.0	12	
033	043a033	ICAL	MO_250				02/13/07 01:09	1.0	13	
034	043a034	ICAL	MO_500				02/13/07 01:37	1.0	14	
035	043a035	ICAL	MO_1000				02/13/07 02:04	1.0	15	
036	043a036	ICAL	MO_5000				02/13/07 02:31	1.0	16	
037	043a037	ICAL	MO_7500				02/13/07 02:59	1.0	17	
038	043a038	IB	CALIB				02/13/07 03:26	1.0		
039	043a039	ICAL	HEX_5				02/13/07 03:53	1.0	18	
040	043a040	ICAL	HEX_10				02/13/07 04:20	1.0	19	
041	043a041	ICAL	HEX_25				02/13/07 04:48	1.0	20	
042	043a042	ICAL	HEX_50				02/13/07 05:15	1.0	21	
043	043a043	ICAL	HEX_100				02/13/07 05:42	1.0	22	
044	043a044	ICAL	HEX_200				02/13/07 06:09	1.0	23	
045	043a045	IB	CALIB				02/13/07 06:37	1.0		

Standards used: 1=S5517 2=S5274 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177117069

Instrument : GC17A
Method : EPA 8015B

Begun : 03/22/07 07:09
SOP Version: TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	081a001	X	PRIMER				03/22/07 07:09	1.0	
002	081a002	X	IB				03/22/07 07:36	1.0	
003	081a003	CCV	DSL_1000				03/22/07 08:04	1.0	1
004	081a004	CCV	MO_500				03/22/07 08:31	1.0	2
005	081a005	CCV	JP5				03/22/07 09:31	1.0	3
006	081a006	X	IB				03/22/07 13:00	1.0	
007	081a007	BLANK	QC380115	S	Water	123318	03/22/07 13:27	1.0	
008	081a008	SAMPLE	193290-001	S	Water	123318	03/22/07 13:55	1.0	
009	081a009	SAMPLE	193299-001	S	Water	123318	03/22/07 14:22	1.0	
010	081a010	X	DSL_500				03/22/07 14:49	1.0	4
011	081a011	CCV	MO_500				03/22/07 15:17	1.0	2
012	081a012	XCCV	JP5_250				03/22/07 15:44	1.0	3
013	081a013	CCV	DSL_500				03/22/07 16:12	1.0	4
014	081a014	XCCV	JP5_250				03/22/07 16:40	1.0	3
015	081a015	CCV	MO_500				03/22/07 17:27	1.0	2
016	081a016	X	JP5_250				03/22/07 17:55	1.0	3
017	081a017	CCV	DSL_1000				03/22/07 18:22	1.0	1
018	081a018	CCV	JP5_250				03/22/07 18:50	1.0	5
019	081a019	BLANK	QC380288	S	Water	123358	03/22/07 19:17	1.0	
020	081a020	BS	QC380289	S	Water	123358	03/22/07 19:44	1.0	
021	081a021	BSD	QC380290	S	Water	123358	03/22/07 20:12	1.0	
022	081a022	BLANK	QC380254	S	Water	123351	03/22/07 21:24	1.0	
023	081a023	BS	QC380255	S	Water	123351	03/22/07 21:51	1.0	
024	081a024	BSD	QC380256	S	Water	123351	03/22/07 22:18	1.0	
025	081a025	SAMPLE	193277-001	S	Water	123351	03/22/07 22:45	1.0	
026	081a026	SAMPLE	193262-003	S	Water	123351	03/22/07 23:12	1.0	
027	081a027	SAMPLE	193262-004	S	Water	123351	03/22/07 23:39	1.0	
028	081a028	SAMPLE	193262-005	S	Water	123351	03/23/07 00:06	1.0	
029	081a029	X	IB				03/23/07 00:34	1.0	
030	081a030	CCV	DSL_250				03/23/07 01:01	1.0	6
031	081a031	CCV	MO_500				03/23/07 01:28	1.0	2
032	081a032	X	CCV				03/23/07 01:55	1.0	6
033	081a033	X	CCV				03/23/07 02:23	1.0	2
034	081a034	SAMPLE	193262-008	S	Water	123351	03/23/07 02:50	1.0	
035	081a035	SAMPLE	193262-010	S	Water	123351	03/23/07 03:17	1.0	
036	081a036	SAMPLE	193262-011	S	Water	123351	03/23/07 03:44	1.0	
037	081a037	SAMPLE	193262-012	S	Water	123351	03/23/07 04:11	1.0	
038	081a038	SAMPLE	193262-013	S	Water	123351	03/23/07 04:38	1.0	
039	081a039	SAMPLE	193262-014	S	Water	123351	03/23/07 05:06	1.0	
040	081a040	SAMPLE	193262-015	S	Water	123351	03/23/07 05:33	1.0	
041	081a041	SAMPLE	193262-016	S	Water	123351	03/23/07 06:00	1.0	
042	081a042	SAMPLE	193262-017	S	Water	123351	03/23/07 06:28	1.0	
043	081a043	SAMPLE	193262-018	S	Water	123351	03/23/07 06:55	1.0	
044	081a044	X	IB				03/23/07 07:22	1.0	
045	081a045	CCV	DSL_500				03/23/07 07:50	1.0	4
046	081a046	CCV	MO_500				03/23/07 08:18	1.0	2

Standards used: 1=S5732 2=S5734 3=S5739 4=S5731 5=S5801 6=S5730

REPORTING SUMMARY FOR 193277 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
193277-001	GC17A	03/22/07 22:45	1.0	+	+	+	
QC380254	GC17A	03/22/07 21:24	1.0	+	+	+	
QC380255	GC17A	03/22/07 21:51	1.0	+		+	
QC380256	GC17A	03/22/07 22:18	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 123351
Started By : PDM
Method : 3520C
Spike #1 ID: S5713

Prep Date : 21-MAR-2007
SOP Version: TEH_3520_rv11
Spike #2 ID: S5627

Analysis : TEH
Finished By: KR
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
193262-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-012		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
193262-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-020		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
193262-022		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193262-023		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
193277-001		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	
QC380254	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC380255	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC380256	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	

Analyst: DLM Date: 03/23/07 Reviewer: MCH Date: 03/23/07

Curtis & Tompkins, Ltd

TEH WATER PREP LOG

BK2447

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LIMS Batch No: 123351
LIMS Analysis: TEHM
Extracted by: PAM
Date Extracted: 3/21/07

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193202 -003 I	500	7	2.5	X	
-004 H					
-005 H					
-008 H					
-010 K					
-011 H					leaky funnel lost ~ 2.5mL
-012 H		4			
-013 H		7			
-014 H					
-015 H					
-016 H					
-017 J					rinse to light peach color
-018 K					
-019 Q					
-020 S		4			
-022 G		7			
-023 G					
193277 -001 P		4			
MB QC380254		N/A			
BS S					
BSD 6					
					KR 22 MAR 07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	SS713B	PAM 3/21
0.5 mL of TEH_SP was added to all spikes	SS627C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ Samples were continually extracted about 450 mL of CH_2Cl_2 and HPLC H_2O	EM47031/EM46318	
Extraction Start Time:	1510	
Extraction End Time:	0910	RF 3/22/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	3/22/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes as noted above	✓	

Pamela Maglio 3/21/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

KRef 22 MAR 07
Reviewed by Date

00040

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: KR
Cleanup Date: 22 MAR 07

Benchbook # **BK 2475**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
193321-005	123374	1.0	1.0	
193202-003	123351	1.0	1.0	
4				
5				
8				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
22				
23				
193277-001				
BLANK QC380254				
BS 5				
BSD 6				
JLM	3/23/07			

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ~ g columns	NA	KR 22 MAR 07
☑ Extracts were cleaned up using 1.0 g cartridges	SP8243	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47031	
Concentrated to volumes as noted above	✓	

KR 22 MAR 07
Extraction Chemist / Date

Continued from page ~
Continued on page ~

Jeanne Lee 3/23/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 03/26/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Jet Fuel A C10-C16	ug/L	14	30	24	33			
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C28	ug/L		31					
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW030807A	Batch#:	123261
Lab ID:	193277-001	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Analyzed:	03/19/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	119 *	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379862	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.06
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

31.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379891	Batch#:	123261
Matrix:	Water	Analyzed:	03/19/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.55	110	65-135
Benzene	25.00	25.21	101	65-135
Trichloroethene	25.00	24.77	99	65-135
Toluene	25.00	26.52	106	65-135
Chlorobenzene	25.00	24.00	96	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	91	86-115

32.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	NKGW02	Batch#:	123261
MSS Lab ID:	193217-011	Sampled:	03/06/07
Matrix:	Water	Received:	03/07/07
Units:	ug/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Type: MS Lab ID: QC379910

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1169	25.00	30.30	121	65-135
Benzene	<0.06286	25.00	27.20	109	65-135
Trichloroethene	<0.08502	25.00	25.18	101	65-135
Toluene	<0.1220	25.00	25.50	102	65-135
Chlorobenzene	<0.1069	25.00	24.97	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	120 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	91	86-115

Type: MSD Lab ID: QC379911

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.71	115	65-135	5	35
Benzene	25.00	26.51	106	65-135	3	35
Trichloroethene	25.00	24.30	97	65-135	4	35
Toluene	25.00	24.68	99	65-135	3	35
Chlorobenzene	25.00	24.45	98	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	121 *	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	93	86-115

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

33.0

CURTIS & TOMPKINS BFB TUNE FOR 193277 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447013464008 File : ea908 Time : 09-JAN-2007 13:24

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10500	19.84	
75	30.00% - 60.00% of mass 95	22896	43.27	
95		52912		
96	5.00% - 9.00% of mass 95	3416	6.46	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36709	69.38	
175	5.00% - 9.00% of mass 174	2697	7.35	
176	> 95.00% and < 101.00% of mass 174	35896	97.79	
177	5.00% - 9.00% of mass 176	2405	6.70	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447013464008

CURTIS & TOMPKINS BFB TUNE FOR 193277 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447014875002 File : eaa02 Time : 10-JAN-2007 08:23

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	3069	18.58	
75	30.00% - 60.00% of mass 95	7035	42.60	
95		16514		
96	5.00% - 9.00% of mass 95	1229	7.44	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	11898	72.05	
175	5.00% - 9.00% of mass 174	867	7.29	
176	> 95.00% and < 101.00% of mass 174	11616	97.63	
177	5.00% - 9.00% of mass 176	798	6.87	

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

447014875002

CURTIS & TOMPKINS BFB TUNE FOR 193277 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 447112790018 File : ecj18 Time : 19-MAR-2007 15:39

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	8084	18.62	
75	30.00% - 60.00% of mass 95	18678	43.02	
95		43418		
96	5.00% - 9.00% of mass 95	2837	6.53	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	31514	72.58	
175	5.00% - 9.00% of mass 174	2218	7.04	
176	> 95.00% and < 101.00% of mass 174	29944	95.02	
177	5.00% - 9.00% of mass 176	2060	6.88	

Analyst: BO Date: 03/19/07 Reviewer: LW Date: 03/20/07

447112790018

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 MSVOA Water: EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum: 447013464001 Date : 09-JAN-2007 14:12 Type : WATER
Units : ug/L X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	ea910	447013464010	0.25/0.5PPB	09-JAN-2007 14:12	S5170 (2000000X), S5152 (1000000X), S4713 (2000000X), S5079 (5000X)
L2	ea911	447013464011	0.5/1PPB	09-JAN-2007 14:44	S5170 (1000000X), S5152 (500000X), S4713 (1000000X), S5079 (5000X)
L3	ea912	447013464012	2PPB	09-JAN-2007 15:16	S5170 (250000X), S5152 (250000X), S4713 (500000X), S5079 (5000X)
L4	ea913	447013464013	5PPB	09-JAN-2007 15:48	S5170 (100000X), S5152 (100000X), S4713 (200000X), S5079 (5000X)
L5	ea914	447013464014	10PPB	09-JAN-2007 16:20	S5170 (50000X), S5152 (50000X), S4713 (100000X), S5079 (5000X)
L6	ea915	447013464015	20PPB	09-JAN-2007 16:52	S5170 (25000X), S5152 (25000X), S4713 (50000X), S5079 (5000X)
L7	ea916	447013464016	50PPB	09-JAN-2007 17:24	S5170 (10000X), S5152 (10000X), S4713 (20000X), S5079 (5000X)
L8	ea917	447013464017	75PPB	09-JAN-2007 17:56	S5170 (6667X), S5152 (6667X), S4713 (13330X), S5079 (5000X)
L9	ea918	447013464018	100PPB	09-JAN-2007 18:28	S5170 (5000X), S5152 (5000X), S4713 (10000X), S5079 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.8235	0.9146	0.9555	0.9449	0.9447	0.9159	0.9512	0.9409	AVRG		1.08236		0.9239	5	15	0.10	0.99	
Vinyl Chloride	0.7023	0.6386	0.5928m	0.7625m	0.6034	0.7481	0.7203	0.7653	0.7624	AVRG		1.42957		0.6995	10	15	0.050	0.99	
Bromomethane		0.4299	0.3903	0.3728	0.3935	0.4047	0.4230	0.4435	0.4565	AVRG		2.41392		0.4143	7	15	0.050	0.99	
Chloroethane		0.4031m	0.3822m	0.4119m	0.3637	0.3944	0.3873	0.3905	0.4006	AVRG		2.55293		0.3917	4	15	0.050	0.99	
Acetone			0.2955	0.2519	0.2690	0.2865	0.2733	0.2763	0.2743	AVRG		3.63298		0.2753	5	15	0.050	0.99	
1,1-Dichloroethene		0.3884	0.2934	0.3089	0.3465	0.3522	0.3187	0.3652	0.3740	AVRG		2.91198		0.3434	10	15	0.050	0.99	
Methylene Chloride			0.6413	0.5519	0.5472	0.5225	0.5005	0.4795	0.4858	AVRG		1.87733		0.5327	10	15	0.050	0.99	
Carbon Disulfide		1.7539m	1.4834	1.4192	1.6062	1.5950	1.4605	1.6025	1.6508	AVRG		0.63636		1.5714	7	15	0.050	0.99	
MTBE		1.6939	1.6904	1.6588	1.7591	1.7035	1.6686	1.5882	1.6173	AVRG		0.59792		1.6725	3	15	0.050	0.99	
trans-1,2-Dichloroethene		0.4186m	0.4546	0.4503	0.4754	0.4597	0.4373	0.4484	0.4613	AVRG		2.21875		0.4507	4	15	0.050	0.99	
Vinyl Acetate		1.5749	1.5082	1.7720	1.6413	1.5139	1.4897	1.5909	1.4891	AVRG		0.63593		1.5725	6	15	0.050	0.99	
1,1-Dichloroethane		1.0486	0.9417	1.0602	0.9082	0.8811	0.8576	1.0333	0.8728	AVRG		1.05213		0.9505	9	15	0.10	0.99	
2-Butanone			0.5294	0.4970	0.5377	0.5372	0.5143	0.4963	0.4828	AVRG		1.94730		0.5135	4	15	0.050	0.99	
cis-1,2-Dichloroethene		0.7304	0.6682	0.6685	0.6893	0.6379	0.6208	0.6160	0.6137	AVRG		1.52531		0.6556	6	15	0.050	0.99	
Chloroform		1.2695	1.0752	1.0275	1.0762	1.0082	0.9673	0.9426	0.9378	AVRG		0.96335		1.0380	10	15	0.050	0.99	
1,1,1-Trichloroethane		0.7616	0.6357	0.6340	0.6855	0.6739	0.6058	0.7046	0.7043	AVRG		1.48002		0.6757	7	15	0.050	0.99	
Carbon Tetrachloride		0.2378	0.2286	0.2314	0.2736	0.2811	0.2465	0.3140	0.3138	AVRG		3.76159		0.2658	13	15	0.050	0.99	
1,2-Dichloroethane		0.5196	0.5048	0.5001	0.5260	0.4984	0.4882	0.4780	0.4815	AVRG		2.00176		0.4996	3	15	0.050	0.99	
Benzene		1.5082	1.3767	1.3941	1.4286	1.3529	1.2489	1.2479	1.2149	AVRG		0.74264		1.3466	8	15	0.050	0.99	
Trichloroethene		0.3742	0.3360	0.3244	0.3443	0.3307	0.3032	0.3284	0.3312	AVRG		2.99360		0.3340	6	15	0.050	0.99	
1,2-Dichloropropane		0.4660m	0.4278	0.4163	0.4477	0.4224	0.3962	0.4046	0.4015	AVRG		2.36517		0.4228	6	15	0.050	0.99	
Bromodichloromethane		0.5291	0.4851	0.4977	0.5102	0.4943	0.4786	0.4669	0.4692	AVRG		2.03507		0.4914	4	15	0.050	0.99	
4-Methyl-2-Pentanone			0.6269	0.6396	0.6784	0.6683	0.6373	0.6241	0.6299	AVRG		1.55403		0.6435	3	15	0.050	0.99	
cis-1,3-Dichloropropene		0.6938	0.6409	0.6397	0.6732	0.6437	0.6136	0.5970	0.6015	AVRG		1.56754		0.6379	5	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.9231	0.8315	0.8225	0.8640	0.8171	0.7535	0.7824	0.7786	AVRG		1.21716		0.8216	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.6322	0.6061	0.5918	0.6179	0.6036	0.5700	0.5654	0.5595	AVRG		1.68546		0.5933	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2007	0.2015	0.2056	0.2004	0.1942	0.1894	0.1891	AVRG		4.95135		0.2020	7	15	0.050	0.99	
2-Hexanone			0.5457	0.5262	0.5675	0.5670	0.5489	0.5447	0.5302	AVRG		1.82759		0.5472	3	15	0.050	0.99	
Tetrachloroethene		0.2930	0.2581	0.2605	0.2935	0.2856	0.2559	0.3118	0.3121	AVRG		3.52342		0.2838	8	15	0.050	0.99	
Dibromochloromethane		0.4408	0.4205	0.4328	0.4498	0.4264	0.4194	0.4204	0.4195	AVRG		2.33273		0.4287	3	15	0.050	0.99	
Chlorobenzene		1.1216	1.0072	1.0368	1.0658	1.0024	0.9619	0.9799	0.9628	AVRG		0.98300		1.0173	5	15	0.30	0.99	
Ethylbenzene		2.0058	1.7214	1.7325	1.7919	1.6655	1.5336	1.6545	1.6083	AVRG		0.58337		1.7142	8	15	0.050	0.99	
m,p-Xylenes	0.6640	0.7101	0.6249	0.6456	0.6675	0.6130	0.5612	0.5953	0.5703	AVRG		1.59237		0.6280	8	15	0.050	0.99	
o-Xylene		0.6731	0.6393	0.6616	0.6788	0.6258	0.5811	0.6076	0.5937	AVRG		1.58073		0.6326	6	15	0.050	0.99	
Styrene		1.2544	1.1871	1.2140	1.2686	1.1712	1.0910	1.1153	1.0856	AVRG		0.85222		1.1734	6	15	0.050	0.99	
Bromoform		0.3668	0.3129	0.3239	0.3310	0.3236	0.3129	0.3200	0.3192	AVRG		3.06481		0.3263	5	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.4378	1.3178	1.3203	1.3864	1.3142	1.2866	1.2554	1.2699	AVRG		0.75554		1.3236	5	15	0.30	0.99	
Dibromofluoromethane	0.5955	0.5944	0.5933	0.5941	0.5952	0.5952	0.5936	0.5887	0.5845	AVRG		1.68716		0.5927	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.4137	0.4121	0.4149	0.4026	0.4060	0.4071	0.3916	0.3827	0.3748	AVRG		2.49630		0.4006	4	15	0.050	0.99	
Toluene-d8	1.1591	1.1564	1.1641	1.1569	1.1653	1.1667	1.1614	1.1457	1.1541	AVRG		0.86292		1.1589	1	15	0.050	0.99	
Bromofluorobenzene	1.3002	1.2960	1.3033	1.2981	1.2918	1.2844	1.2706	1.2698	1.2632	AVRG		0.77738		1.2864	1	15	0.050	0.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	L7	L8	L9	Units
Chloromethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Chloride	0.5000	1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromomethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroethane		1.0000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Acetone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Methylene Chloride			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Disulfide		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
MTBE		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Vinyl Acetate		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Butanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,2-Dichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chloroform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,1-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Carbon Tetrachloride		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Benzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Trichloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,2-Dichloropropane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromodichloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
4-Methyl-2-Pentanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
cis-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Toluene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
trans-1,3-Dichloropropene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2-Trichloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
2-Hexanone			2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Tetrachloroethene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromochloromethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Chlorobenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Ethylbenzene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
m,p-Xylenes	0.5000	1.0000	4.0000	10.000	20.000	40.000	100.00	150.00	200.00	ug/L
o-Xylene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Styrene		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Bromoform		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
1,1,2,2-Tetrachloroethane		0.5000	2.0000	5.0000	10.000	20.000	50.000	75.000	100.00	ug/L
Dibromofluoromethane	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
1,2-Dichloroethane-d4	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Toluene-d8	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L
Bromofluorobenzene	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	50.000	ug/L

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

A-manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

447013464001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 MSVOA Water
EPA 8260B

Inst : MSVOA05 Name : 826GOX5
Calnum : 447013464001 Cal Date: 09-JAN-2007 Type : WATER

ICV 447014875004 (eaa04 10-JAN-2007) stds: S5168 (10000X), S5241 (10000X), S5052 (10000X), S5079 (5000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.9239	0.8271	25.00	22.38	ug/L	-10	30	
Vinyl Chloride	0.6995	0.6499	25.00	23.23	ug/L	-7	20	
Bromomethane	0.4143	0.3845	25.00	23.20	ug/L	-7	30	
Chloroethane	0.3917	0.3835	25.00	24.48	ug/L	-2	30	
Acetone	0.2753	0.2258	25.00	20.51	ug/L	-18	40	
1,1-Dichloroethene	0.3434	0.3710	25.00	27.01	ug/L	8	20	
Methylene Chloride	0.5327	0.5548	25.00	26.04	ug/L	4	30	
Carbon Disulfide	1.5714	1.2834	25.00	20.42	ug/L	-18	30	
MTBE	1.6725	1.5001	25.00	22.42	ug/L	-10	30	
trans-1,2-Dichloroethene	0.4507	0.4798	25.00	26.62	ug/L	6	30	
Vinyl Acetate	1.5725	1.4379	25.00	22.86	ug/L	-9	40	
1,1-Dichloroethane	0.9505	0.8997	25.00	23.66	ug/L	-5	30	
2-Butanone	0.5135	0.4697	25.00	22.87	ug/L	-9	40	
cis-1,2-Dichloroethene	0.6556	0.6730	25.00	25.66	ug/L	3	30	
Chloroform	1.0380	1.0299	25.00	24.80	ug/L	-1	20	
1,1,1-Trichloroethane	0.6757	0.6792	25.00	25.13	ug/L	1	30	
Carbon Tetrachloride	0.2658	0.2860	25.00	26.89	ug/L	8	30	
1,2-Dichloroethane	0.4996	0.4798	25.00	24.01	ug/L	-4	30	
Benzene	1.3466	1.3590	25.00	25.23	ug/L	1	30	
Trichloroethene	0.3340	0.3374	25.00	25.25	ug/L	1	30	
1,2-Dichloropropane	0.4228	0.3936	25.00	23.27	ug/L	-7	20	
Bromodichloromethane	0.4914	0.5104	25.00	25.97	ug/L	4	30	
4-Methyl-2-Pentanone	0.6435	0.5916	25.00	22.98	ug/L	-8	40	
cis-1,3-Dichloropropene	0.6379	0.6461	25.00	25.32	ug/L	1	30	
Toluene	0.8216	0.8467	25.00	25.76	ug/L	3	20	
trans-1,3-Dichloropropene	0.5933	0.5440	25.00	22.92	ug/L	-8	30	
1,1,2-Trichloroethane	0.2020	0.1961	25.00	24.27	ug/L	-3	30	
2-Hexanone	0.5472	0.4917	25.00	22.47	ug/L	-10	40	
Tetrachloroethene	0.2838	0.3212	25.00	28.29	ug/L	13	30	
Dibromochloromethane	0.4287	0.4190	25.00	24.43	ug/L	-2	30	
Chlorobenzene	1.0173	1.0503	25.00	25.81	ug/L	3	30	
Ethylbenzene	1.7142	1.8178	25.00	26.51	ug/L	6	20	
m,p-Xylenes	0.6280	0.6648	50.00	52.93	ug/L	6	30	
o-Xylene	0.6326	0.6739	25.00	26.63	ug/L	7	30	
Styrene	1.1734	1.2360	25.00	26.33	ug/L	5	30	
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	
1,1,2,2-Tetrachloroethane	1.3236	1.2671	25.00	23.93	ug/L	-4	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:12 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Misc Info : S4713,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:41 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.442	4.442	(0.442)	6477	0.50000	1.3370(M)
2 Chloromethane	50	4.856	4.856	(0.483)	5925	0.50000	0.5434
3 Vinyl Chloride	62	5.024	5.024	(0.500)	4144	0.50000	0.5020
4 Bromomethane	94	5.635	5.635	(0.561)	2039	0.50000	0.4170(a)
5 Chloroethane	64	5.792	5.792	(0.576)	2357	0.50000	0.5098
6 Trichlorofluoromethane	101	6.137	6.137	(0.611)	3315	0.50000	1.2779
7 Ethanol	45	6.403	6.403	(0.637)	3289	25.0000	25.9868
8 Freon 113	101	6.827	6.827	(0.679)	463	0.25000	0.5989
9 1,1-Dichloroethene	96	6.945	6.945	(0.691)	960	0.25000	0.2368(a)
10 Acetone	43	7.044	7.044	(0.701)	2139	0.25000	0.6585
11 Isopropanol	45	7.133	7.133	(0.710)	2284	2.50000	3.4648
12 Carbon Disulfide	76	7.330	7.330	(0.729)	4947	0.25000	0.2667(a)
13 Methylene Chloride	84	7.675	7.675	(0.764)	5019	0.25000	0.7984
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	2120	2.50000	2.3674
15 MTBE	73	7.931	7.931	(0.789)	5223	0.25000	0.2646(a)
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	2025	0.25000	0.3807(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	7992	0.25000	0.2505(a)
18 Vinyl Acetate	43	8.591	8.591	(0.855)	4578	0.25000	0.2466(a)
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	2958	0.25000	0.2637(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	6650	0.25000	0.2706(a)
21 2,2-Dichloropropane	77	9.419	9.419	(0.937)	1989	0.25000	0.2490(a)
22 2-Butanone	43	9.439	9.439	(0.939)	1341	0.25000	0.2212(a)
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	1828	0.25000	0.2362(a)
24 Bromochloromethane	128	9.813	9.813	(0.976)	808	0.25000	0.2316(a)
25 Tetrahydrofuran	42	9.833	9.833	(0.978)	15138	2.50000	4.1934
26 Chloroform	83	9.853	9.853	(0.980)	4018	0.25000	0.3280(a)
* 27 Pentafluorobenzene	168	10.050	10.050	(1.000)	590048	50.0000	
28 Dibromofluoromethane	113	10.099	10.099	(1.005)	351377	50.0000	50.2355
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	2381	0.25000	0.2986(a)
30 Carbon Tetrachloride	117	10.335	10.335	(0.925)	832	0.25000	0.1610(a)
31 1,1-Dichloropropene	75	10.345	10.345	(0.926)	2050	0.25000	0.2634(a)
32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	401972	50.0000	51.6310
33 Benzene	78	10.661	10.661	(0.954)	7160	0.25000	0.2735(a)
34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	5949	0.25000	0.2497(a)
35 1,2-Dichloroethane	62	10.769	10.769	(0.964)	2437	0.25000	0.2510(a)
* 36 1,4-Difluorobenzene	114	11.173	11.173	(1.000)	971746	50.0000	
37 Trichloroethene	95	11.577	11.577	(1.036)	2019	0.25000	0.3109(a)
38 Trifluorotoluene	146	11.932	11.932	(1.068)	1458	0.25000	0.2039(a)
39 1,2-Dichloropropane	63	11.991	11.991	(1.073)	2450	0.25000	0.2981(a)
40 Dibromomethane	93	12.188	12.188	(1.091)	1423	0.25000	0.2646(a)
41 Bromodichloromethane	83	12.346	12.346	(1.105)	2690	0.25000	0.2816(a)
42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	3248	0.50000	0.5564
43 Tetramethyl THF	43	12.917	12.917	(1.156)	5678	0.25000	0.2676(a)
44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	3105	0.25000	0.2504(a)
45 4-Methyl-2-Pentanone	43	13.115	13.115	(1.174)	3799	0.25000	0.3037(a)
46 Toluene-d8	98	13.292	13.292	(1.190)	1126396	50.0000	50.0123
47 Toluene	92	13.381	13.381	(1.198)	4029	0.25000	0.2523(a)
48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	3132	0.25000	0.2716(a)
49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	1094	0.25000	0.2787(a)
50 Tetrachloroethene	166	14.110	14.110	(0.926)	1039	0.25000	0.2198(a)
51 2-Hexanone	43	14.228	14.228	(0.933)	2231	0.25000	0.2448(a)
52 1,3-Dichloropropane	76	14.238	14.238	(0.934)	3052	0.25000	0.2510(a)
53 Dibromochloromethane	129	14.514	14.514	(0.952)	1705	0.25000	0.2388(a)
54 1,2-Dibromoethane	107	14.721	14.721	(1.318)	1692	0.25000	0.2229(a)
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	832477	50.0000	
56 Chlorobenzene	112	15.283	15.283	(1.003)	4272	0.25000	0.2522(a)
57 Ethylbenzene	91	15.332	15.332	(1.006)	7586	0.25000	0.2657(a)
58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	1411	0.25000	0.2484(a)
59 m,p-Xylenes	106	15.470	15.470	(1.015)	5528	0.50000	0.5287
60 o-Xylene	106	15.973	15.973	(1.048)	2678	0.25000	0.2542(a)
61 Styrene	104	16.002	16.002	(1.050)	4934	0.25000	0.2525(a)
62 Bromoform	173	16.318	16.318	(1.070)	1650	0.25000	0.3037(a)
63 Isopropylbenzene	105	16.367	16.367	(0.911)	5755	0.25000	0.2481(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Report Date: 10-Jan-2007 08:41

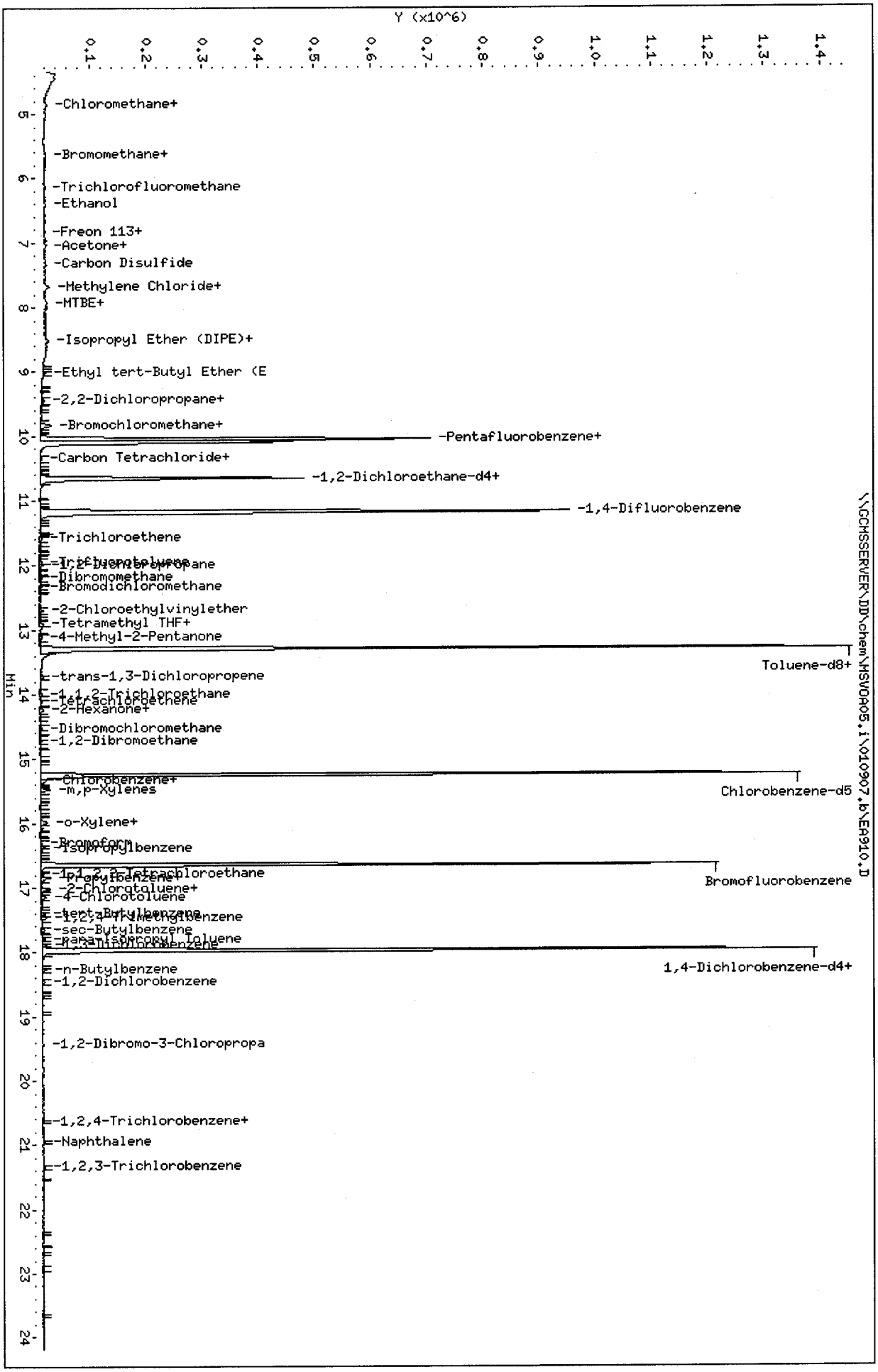
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	510682	50.0000	50.5390
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	2722	0.25000	0.2618(a)
67 Propylbenzene	91	16.850	16.850	(0.938)	8167	0.25000	0.2764(a)
68 Bromobenzene	156	16.850	16.850	(0.938)	1650	0.25000	0.2453(a)
69 1,2,3-Trichloropropane	75	16.879	16.879	(0.940)	2689	0.25000	0.2865(a)
70 2-Chlorotoluene	91	17.027	17.027	(0.948)	6130	0.25000	0.2764(a)
71 1,3,5-Trimethylbenzene	105	17.027	17.027	(0.948)	5527	0.25000	0.2718(a)
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	5881	0.25000	0.2724(a)
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	3647	0.25000	0.2540(a)
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	5790	0.25000	0.2618(a)
75 sec-Butylbenzene	105	17.648	17.648	(0.982)	5519	0.25000	0.2467(a)
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	4454	0.25000	0.2456(a)
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	3065	0.25000	0.2566(a)
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	392761	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	3103	0.25000	0.2498(a)
80 n-Butylbenzene	91	18.269	18.269	(1.017)	4926	0.25000	0.2717(a)
81 1,2-Dichlorobenzene	146	18.456	18.456	(1.027)	2992	0.25000	0.2562(a)
82 1,2-Dibromo-3-Chloropropane	75	19.422	19.422	(1.081)	911	0.25000	0.4585(a)
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	1396	0.25000	0.1917(a)
84 Hexachlorobutadiene	225	20.624	20.624	(1.148)	266	0.25000	0.1527(a)
85 Naphthalene	128	20.949	20.949	(1.166)	3442	0.25000	0.1745(a)
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	1293	0.25000	0.1899(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA910.D
Date : 09-JAN-2007 14:12
Client ID: D'NA P&T
Sample Info: ICAL,S5170,0.0005/1000,S5152,0.001/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 14:44 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.001/1000,S5152,0.002/1000,
Misc Info : S4713,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:42 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	9328	1.00000	1.5896(M)
2 Chloromethane	50	4.871	4.871	(0.485)	9829	1.00000	0.8913
3 Vinyl Chloride	62	5.019	5.019	(0.500)	7622	1.00000	0.9129
4 Bromomethane	94	5.630	5.630	(0.560)	5131	1.00000	1.0377
5 Chloroethane	64	5.787	5.787	(0.576)	4811	1.00000	1.0290(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	5630	1.00000	1.5342
7 Ethanol	45	6.398	6.398	(0.637)	6554	50.0000	51.1996
8 Freon 113	101	6.832	6.832	(0.680)	1368	0.50000	0.8575
9 1,1-Dichloroethene	96	6.940	6.940	(0.691)	2318	0.50000	0.5655
10 Acetone	43	7.039	7.039	(0.701)	3166	0.50000	0.9636
11 Isopropanol	45	7.128	7.128	(0.710)	3676	5.00000	5.5135
12 Carbon Disulfide	76	7.325	7.325	(0.729)	10467	0.50000	0.5580(M)
13 Methylene Chloride	84	7.670	7.670	(0.764)	6690	0.50000	1.0522
14 tert-Butyl Alcohol (TBA)	59	7.699	7.699	(0.767)	5000	5.00000	5.5205
15 MTBE	73	7.926	7.926	(0.789)	10109	0.50000	0.5064
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	2498	0.50000	0.4643(aM)

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	17736	0.50000	0.5496
	18 Vinyl Acetate	43	8.596	8.596	(0.856)	9399	0.50000	0.5007
	19 1,1-Dichloroethane	63	8.645	8.645	(0.861)	6258	0.50000	0.5516
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	10979	0.50000	0.4417(a)
	21 2,2-Dichloropropane	77	9.434	9.434	(0.939)	4437	0.50000	0.5492
	22 2-Butanone	43	9.434	9.434	(0.939)	3936	0.50000	0.6421
	23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	4359	0.50000	0.5570
	24 Bromochloromethane	128	9.818	9.818	(0.977)	1941	0.50000	0.5501
	25 Tetrahydrofuran	42	9.838	9.838	(0.979)	23008	5.00000	6.3015
	26 Chloroform	83	9.858	9.858	(0.981)	7576	0.50000	0.6114
*	27 Pentafluorobenzene	168	10.045	10.045	(1.000)	596784	50.0000	
	28 Dibromofluoromethane	113	10.094	10.094	(1.005)	354709	50.0000	50.1395
	29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	4545	0.50000	0.5635
	30 Carbon Tetrachloride	117	10.340	10.340	(0.925)	2341	0.50000	0.4472(a)
	31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	4355	0.50000	0.5523
	32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	405711	50.0000	51.4341
	33 Benzene	78	10.666	10.666	(0.954)	14849	0.50000	0.5600
	34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	12633	0.50000	0.5235
	35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	5116	0.50000	0.5200
*	36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	984538	50.0000	
	37 Trichloroethene	95	11.582	11.582	(1.036)	3684	0.50000	0.5600
	38 Trifluorotoluene	146	11.947	11.947	(1.069)	3282	0.50000	0.4531(a)
	39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	4588	0.50000	0.5510(M)
	40 Dibromomethane	93	12.183	12.183	(1.090)	2935	0.50000	0.5387
	41 Bromodichloromethane	83	12.341	12.341	(1.104)	5209	0.50000	0.5383
	42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	6159	1.00000	1.0414
	43 Tetramethyl THF	43	12.913	12.913	(1.155)	11210	0.50000	0.5216(M)
	44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	6831	0.50000	0.5438
	45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	6498	0.50000	0.5128
	46 Toluene-d8	98	13.287	13.287	(1.189)	1138552	50.0000	49.8952
	47 Toluene	92	13.386	13.386	(1.197)	9088	0.50000	0.5617
	48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	6224	0.50000	0.5327
	49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	2311	0.50000	0.5811
	50 Tetrachloroethene	166	14.115	14.115	(0.926)	2452	0.50000	0.5162
	51 2-Hexanone	43	14.223	14.223	(0.933)	4291	0.50000	0.4686(a)
	52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	6428	0.50000	0.5260
	53 Dibromochloromethane	129	14.519	14.519	(0.952)	3688	0.50000	0.5140
	54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	4007	0.50000	0.5211
*	55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	836718	50.0000	
	56 Chlorobenzene	112	15.278	15.278	(1.002)	9385	0.50000	0.5512
	57 Ethylbenzene	91	15.327	15.327	(1.005)	16783	0.50000	0.5850
	58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	3092	0.50000	0.5416
	59 m,p-Xylenes	106	15.475	15.475	(1.015)	11883	1.00000	1.1307
	60 o-Xylene	106	15.978	15.978	(1.048)	5632	0.50000	0.5320
	61 Styrene	104	15.997	15.997	(1.049)	10496	0.50000	0.5345
	62 Bromoform	173	16.313	16.313	(1.070)	3069	0.50000	0.5620
	63 Isopropylbenzene	105	16.372	16.372	(0.911)	12889	0.50000	0.5482

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Report Date: 10-Jan-2007 08:42

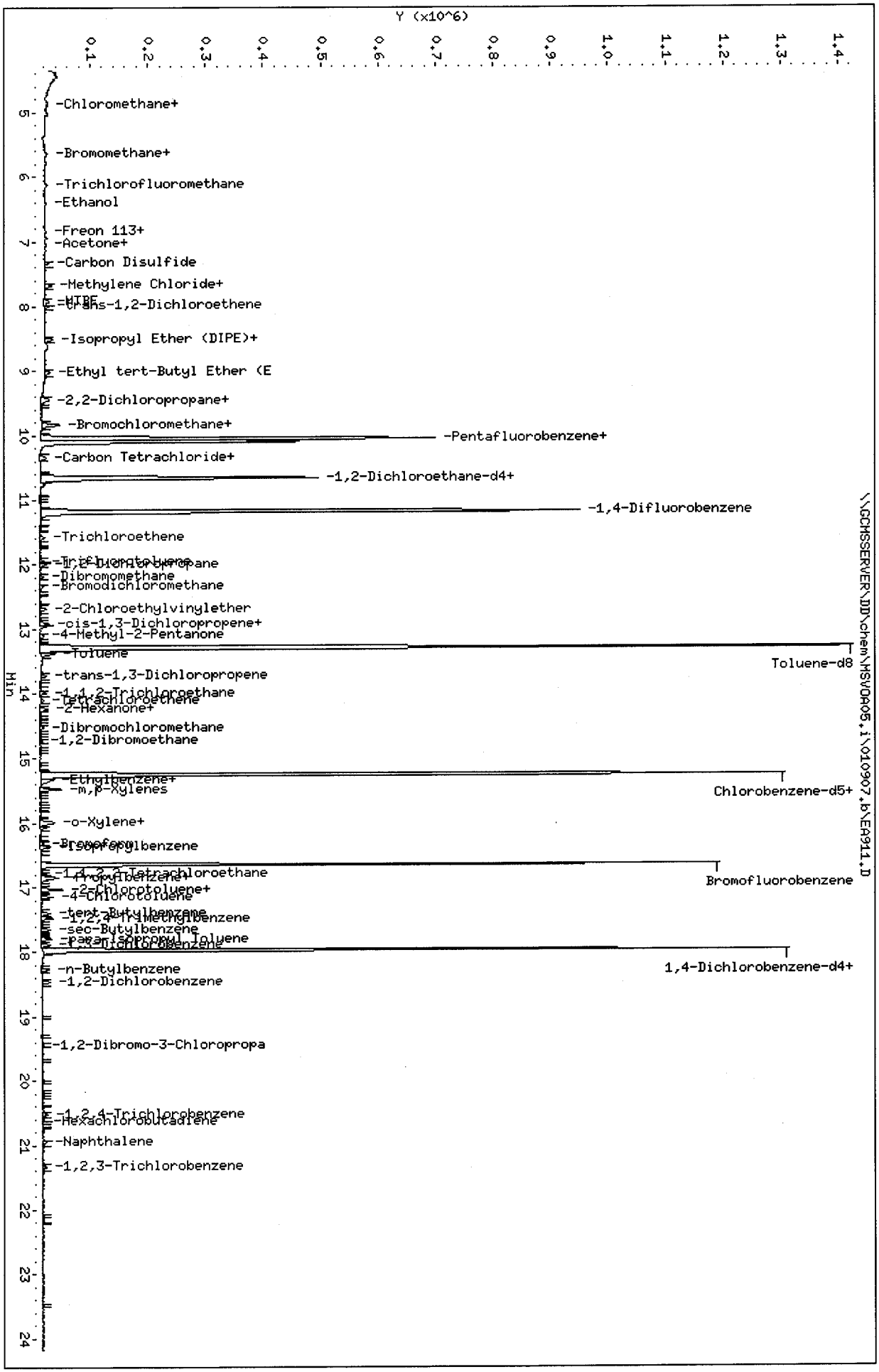
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	515927	50.0000	50.3738
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	5724	0.50000	0.5431
67 Propylbenzene	91	16.845	16.845	(0.937)	17449	0.50000	0.5827
68 Bromobenzene	156	16.855	16.855	(0.938)	3855	0.50000	0.5656
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	5726	0.50000	0.6020
70 2-Chlorotoluene	91	17.032	17.032	(0.948)	13779	0.50000	0.6130
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	12046	0.50000	0.5845
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	13038	0.50000	0.5958
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	8170	0.50000	0.5615
74 1,2,4-Trimethylbenzene	105	17.476	17.476	(0.973)	12840	0.50000	0.5728
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	12684	0.50000	0.5595
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	10115	0.50000	0.5502
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	6756	0.50000	0.5580
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	398096	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	7036	0.50000	0.5589
80 n-Butylbenzene	91	18.264	18.264	(1.016)	10178	0.50000	0.5540
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	6527	0.50000	0.5514
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	1093	0.50000	0.5427
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	3413	0.50000	0.4625(a)
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	709	0.50000	0.4016(a)
85 Naphthalene	128	20.954	20.954	(1.166)	7881	0.50000	0.3943(a)
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	3031	0.50000	0.4394(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA911.D
Date : 09-JAN-2007 14:44
Client ID: DYNA P&T
Sample Info: ICAL,S5170,0.001/1000,S5152,0.002/1000,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:16 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/500,S5152,0.002/500,
Misc Info : S4713,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:43 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	14932	2.00000	2.0943(M)
2 Chloromethane	50	4.855	4.855	(0.483)	21912	2.00000	1.9798
3 Vinyl Chloride	62	5.023	5.023	(0.500)	14201	2.00000	1.6947(M)
4 Bromomethane	94	5.624	5.624	(0.560)	9350	2.00000	1.8841
5 Chloroethane	64	5.782	5.782	(0.575)	9156	2.00000	1.9513(M)
6 Trichlorofluoromethane	101	6.127	6.127	(0.610)	11869	2.00000	2.2312
7 Ethanol	45	6.403	6.403	(0.637)	25107	200.000	195.4282
8 Freon 113	101	6.836	6.836	(0.680)	5679	2.00000	2.0864
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	7029	2.00000	1.7087
10 Acetone	43	7.053	7.053	(0.702)	7080	2.00000	2.1472
11 Isopropanol	45	7.132	7.132	(0.710)	13202	20.0000	19.7299
12 Carbon Disulfide	76	7.329	7.329	(0.729)	35538	2.00000	1.8879
13 Methylene Chloride	84	7.664	7.664	(0.763)	15364	2.00000	2.4078
14 tert-Butyl Alcohol (TBA)	59	7.694	7.694	(0.766)	17319	20.0000	19.0530
15 MTBE	73	7.920	7.920	(0.788)	40498	2.00000	2.0214
16 trans-1,2-Dichloroethene	96	7.989	7.989	(0.795)	10892	2.00000	2.0174

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.512	8.512	(0.847)	68113	2.00000	2.1034
	18 Vinyl Acetate	43	8.581	8.581	(0.854)	36134	2.00000	1.9182
	19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	22560	2.00000	1.9815
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	52352	2.00000	2.0988
	21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	16163	2.00000	1.9935
	22 2-Butanone	43	9.438	9.438	(0.939)	12683	2.00000	2.0617
	23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	16008	2.00000	2.0383
	24 Bromochloromethane	128	9.812	9.812	(0.976)	6879	2.00000	1.9428
	25 Tetrahydrofuran	42	9.832	9.832	(0.978)	80371	20.0000	21.9331
	26 Chloroform	83	9.852	9.852	(0.980)	25760	2.00000	2.0716
*	27 Pentafluorobenzene	168	10.049	10.049	(1.000)	598942	50.0000	
	28 Dibromofluoromethane	113	10.098	10.098	(1.005)	355323	50.0000	50.0453
	29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	15229	2.00000	1.8815
	30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	8951	2.00000	1.7197
	31 1,1-Dichloropropene	75	10.354	10.354	(0.927)	14609	2.00000	1.8635
	32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	406137	50.0000	51.7848
	33 Benzene	78	10.660	10.660	(0.954)	53907	2.00000	2.0448
	34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	50934	2.00000	2.1230
	35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	19764	2.00000	2.0207
*	36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	978899	50.0000	
	37 Trichloroethene	95	11.577	11.577	(1.036)	13157	2.00000	2.0117
	38 Trifluorotoluene	146	11.941	11.941	(1.069)	12717	2.00000	1.7657
	39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	16749	2.00000	2.0234
	40 Dibromomethane	93	12.188	12.188	(1.091)	10872	2.00000	2.0071
	41 Bromodichloromethane	83	12.345	12.345	(1.105)	18994	2.00000	1.9743
	42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	11762	2.00000	2.0002
	43 Tetramethyl THF	43	12.907	12.907	(1.155)	44288	2.00000	2.0727
	44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	25097	2.00000	2.0094
	45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	24545	2.00000	1.9482
	46 Toluene-d8	98	13.291	13.291	(1.190)	1139580	50.0000	50.2279
	47 Toluene	92	13.390	13.390	(1.198)	32558	2.00000	2.0241
	48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	23734	2.00000	2.0432
	49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	7858	2.00000	1.9873
	50 Tetrachloroethene	166	14.109	14.109	(0.926)	8786	2.00000	1.8186
	51 2-Hexanone	43	14.228	14.228	(0.933)	18577	2.00000	1.9946
	52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	25024	2.00000	2.0132
	53 Dibromochloromethane	129	14.513	14.513	(0.952)	14316	2.00000	1.9619
	54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	14948	2.00000	1.9552
*	55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	851071	50.0000	
	56 Chlorobenzene	112	15.282	15.282	(1.003)	34287	2.00000	1.9800
	57 Ethylbenzene	91	15.331	15.331	(1.006)	58600	2.00000	2.0083
	58 1,1,1,2-Tetrachloroethane	131	15.371	15.371	(1.008)	11625	2.00000	2.0019
	59 m,p-Xylenes	106	15.469	15.469	(1.015)	42547	4.00000	3.9803
	60 o-Xylene	106	15.972	15.972	(1.048)	21763	2.00000	2.0210
	61 Styrene	104	16.001	16.001	(1.050)	40411	2.00000	2.0232
	62 Bromoform	173	16.307	16.307	(1.070)	10652	2.00000	1.9179
	63 Isopropylbenzene	105	16.376	16.376	(0.912)	46922	2.00000	1.9778

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
Report Date: 10-Jan-2007 08:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	523545	50.0000	50.6568
66 1,1,2,2-Tetrachloroethane	83	16.790	16.790	(0.935)	21175	2.00000	1.9912
67 Propylbenzene	91	16.849	16.849	(0.938)	60067	2.00000	1.9881
68 Bromobenzene	156	16.849	16.849	(0.938)	13744	2.00000	1.9983
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	19518	2.00000	2.0336
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	46465	2.00000	2.0485
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	40877	2.00000	1.9658
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	43067	2.00000	1.9504
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	28185	2.00000	1.9198
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	44816	2.00000	1.9814
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	42230	2.00000	1.8462
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	35384	2.00000	1.9076
77 1,3-Dichlorobenzene	146	17.894	17.894	(0.996)	23900	2.00000	1.9564
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	401717	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	25047	2.00000	1.9718
80 n-Butylbenzene	91	18.268	18.268	(1.017)	34444	2.00000	1.8579
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	23908	2.00000	2.0018
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	3997	2.00000	1.9668
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	13456	2.00000	1.8072
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	3306	2.00000	1.8562
85 Naphthalene	128	20.949	20.949	(1.166)	31988	2.00000	1.5863
86 1,2,3-Trichlorobenzene	180	21.333	21.333	(1.188)	12201	2.00000	1.7528

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA912.D
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Client ID: DYNA P&T
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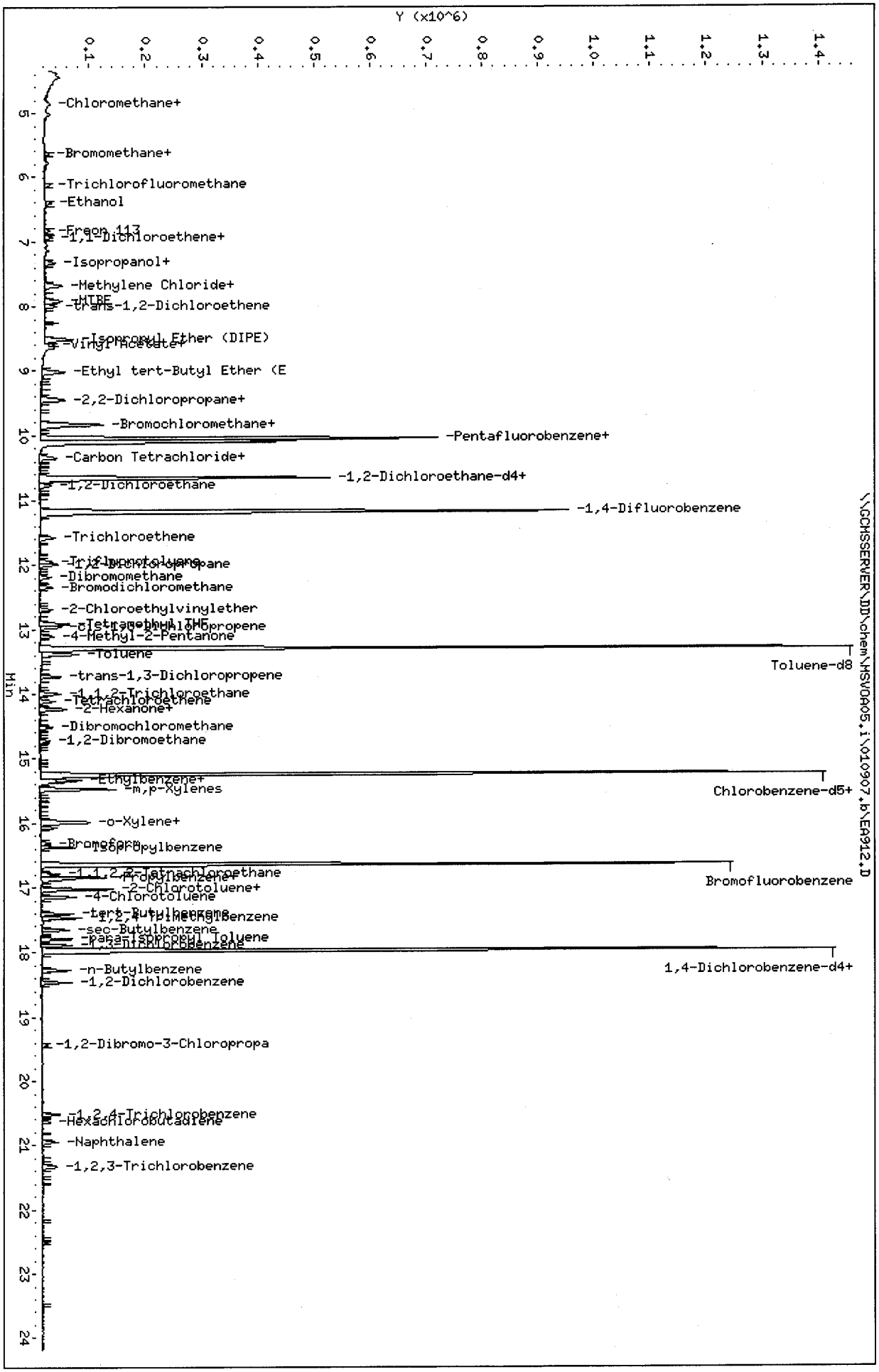
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 15:48 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.005/500,S5152,0.005/500,
Misc Info : S4713,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:44 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	58566	5.00000	6.0069
2 Chloromethane	50	4.861	4.861	(0.484)	57586	5.00000	5.1710
3 Vinyl Chloride	62	5.018	5.018	(0.500)	45952	5.00000	5.4500(M)
4 Bromomethane	94	5.629	5.629	(0.560)	22467	5.00000	4.4994
5 Chloroethane	64	5.777	5.777	(0.575)	24827	5.00000	5.2583(M)
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	44332	5.00000	5.8290
7 Ethanol	45	6.398	6.398	(0.637)	62869	500.000	486.3320
8 Freon 113	101	6.832	6.832	(0.680)	13769	5.00000	4.3528
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	18619	5.00000	4.4981
10 Acetone	43	7.039	7.039	(0.701)	15182	5.00000	4.5759
11 Isopropanol	45	7.137	7.137	(0.711)	32199	50.0000	47.8225
12 Carbon Disulfide	76	7.325	7.325	(0.729)	85529	5.00000	4.5155
13 Methylene Chloride	84	7.669	7.669	(0.764)	33261	5.00000	5.1804
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	44466	50.0000	48.6154
15 MTBE	73	7.916	7.916	(0.788)	99972	5.00000	4.9591
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	27138	5.00000	4.9954

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	158787	5.00000	4.8732
18 Vinyl Acetate	43	8.586	8.586	(0.855)	106793	5.00000	5.6342
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	63896	5.00000	5.5774
20 Ethyl tert-Butyl Ether (ETBE)	59	9.020	9.020	(0.898)	133330	5.00000	5.3121
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	38052	5.00000	4.6643
22 2-Butanone	43	9.434	9.434	(0.939)	29951	5.00000	4.8387
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	40288	5.00000	5.0982
24 Bromochloromethane	128	9.818	9.818	(0.977)	18401	5.00000	5.1648
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	196115	50.0000	53.1882
26 Chloroform	83	9.857	9.857	(0.981)	61927	5.00000	4.9493
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	602672	50.0000	
28 Dibromofluoromethane	113	10.104	10.104	(1.006)	358055	50.0000	50.1180
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	38207	5.00000	4.6913
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	22987	5.00000	4.3527
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	36575	5.00000	4.5981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	399919	50.0000	50.2554
33 Benzene	78	10.665	10.665	(0.954)	138472	5.00000	5.1767
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	124122	5.00000	5.0989
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	49672	5.00000	5.0053
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	993245	50.0000	
37 Trichloroethene	95	11.582	11.582	(1.036)	32223	5.00000	4.8559
38 Trifluorotoluene	146	11.937	11.937	(1.068)	33798	5.00000	4.6251
39 1,2-Dichloropropane	63	11.996	11.996	(1.073)	41346	5.00000	4.9227
40 Dibromomethane	93	12.193	12.193	(1.091)	27390	5.00000	4.9837
41 Bromodichloromethane	83	12.341	12.341	(1.104)	49432	5.00000	5.0640
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	29368	5.00000	4.9223
43 Tetramethyl THF	43	12.912	12.912	(1.155)	109116	5.00000	5.0330
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	63536	5.00000	5.0136
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	63531	5.00000	4.9700
46 Toluene-d8	98	13.287	13.287	(1.189)	1149128	50.0000	49.9172
47 Toluene	92	13.386	13.386	(1.197)	81692	5.00000	5.0054
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	58785	5.00000	4.9876
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	20014	5.00000	4.9885
50 Tetrachloroethene	166	14.105	14.105	(0.925)	22225	5.00000	4.5895
51 2-Hexanone	43	14.223	14.223	(0.933)	44893	5.00000	4.8086
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	63053	5.00000	5.0606
53 Dibromochloromethane	129	14.519	14.519	(0.952)	36919	5.00000	5.0475
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	39324	5.00000	5.0694
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	853114	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	88452	5.00000	5.0959
57 Ethylbenzene	91	15.327	15.327	(1.005)	147799	5.00000	5.0533
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	29448	5.00000	5.0590
59 m,p-Xylenes	106	15.465	15.465	(1.014)	110152	10.0000	10.2801
60 o-Xylene	106	15.977	15.977	(1.048)	56444	5.00000	5.2292
61 Styrene	104	15.997	15.997	(1.049)	103565	5.00000	5.1728
62 Bromoform	173	16.312	16.312	(1.070)	27630	5.00000	4.9630
63 Isopropylbenzene	105	16.372	16.372	(0.911)	119040	5.00000	4.9978

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
Report Date: 10-Jan-2007 08:44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523553	50.0000	50.4556
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	53252	5.00000	4.9877
67 Propylbenzene	91	16.845	16.845	(0.937)	152679	5.00000	5.0333
68 Bromobenzene	156	16.855	16.855	(0.938)	35360	5.00000	5.1207
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	48349	5.00000	5.0174
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	119476	5.00000	5.2465
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	108126	5.00000	5.1793
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	114048	5.00000	5.1445
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	70539	5.00000	4.7855
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	116700	5.00000	5.1391
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	106822	5.00000	4.6515
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	89865	5.00000	4.8256
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	63476	5.00000	5.1753
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	403325	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	65433	5.00000	5.1306
80 n-Butylbenzene	91	18.264	18.264	(1.016)	88226	5.00000	4.7401
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	61102	5.00000	5.0957
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	10585	5.00000	5.1880
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	37697	5.00000	5.0427
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	7827	5.00000	4.3770
85 Naphthalene	128	20.944	20.944	(1.166)	97510	5.00000	4.8164
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	34914	5.00000	4.9958

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA913.D
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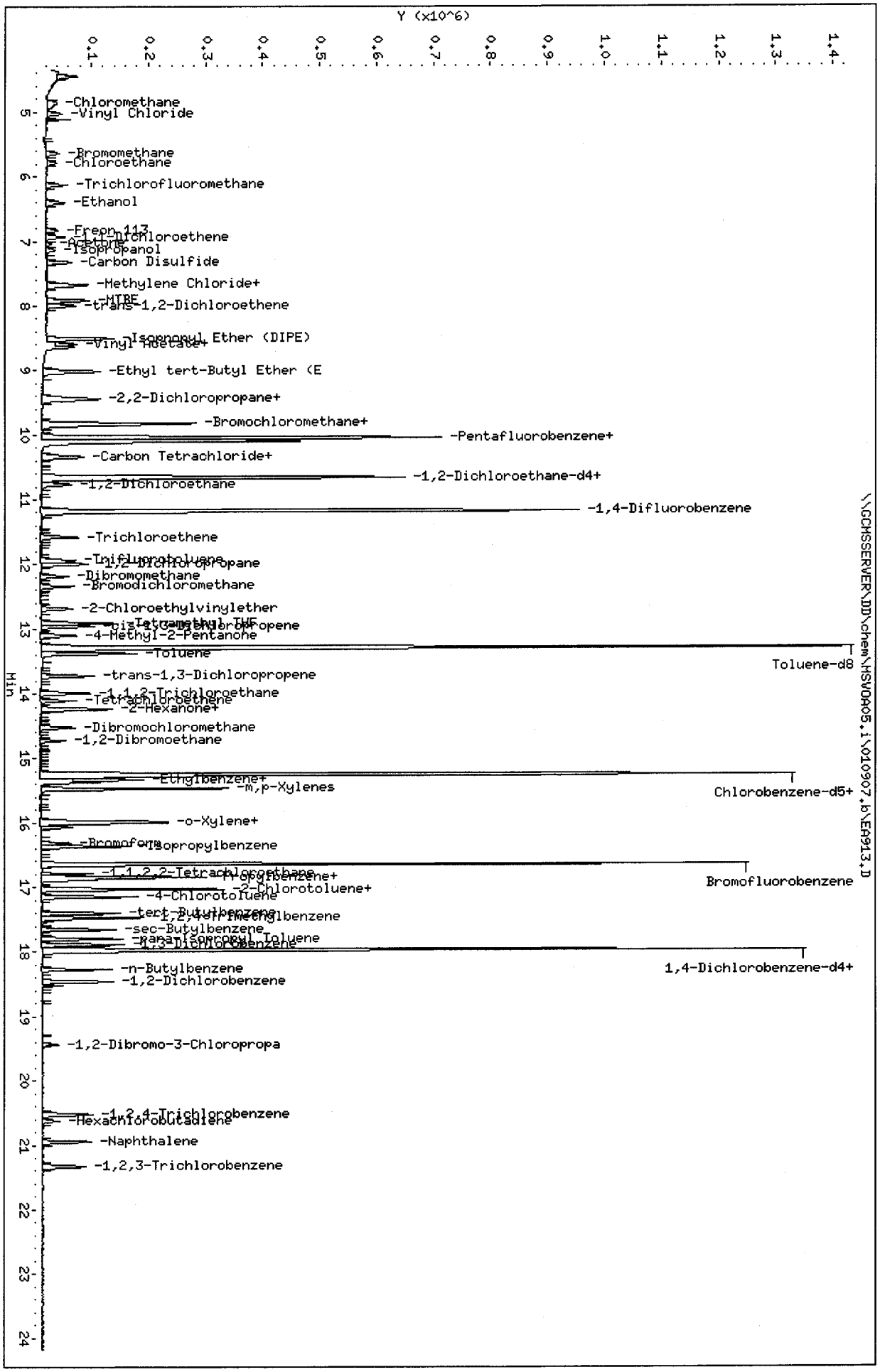
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:46

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 16:20 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.002/100,S5152,0.002/100,
Misc Info : S4713,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:45 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.441	4.441	(0.442)	70598	10.0000	6.9835(M)
2 Chloromethane	50	4.865	4.865	(0.484)	115754	10.0000	10.2268
3 Vinyl Chloride	62	5.023	5.023	(0.500)	73927	10.0000	8.6265
4 Bromomethane	94	5.634	5.634	(0.561)	48204	10.0000	9.4981
5 Chloroethane	64	5.782	5.782	(0.575)	44561	10.0000	9.2859
6 Trichlorofluoromethane	101	6.126	6.126	(0.610)	61802	10.0000	7.6523
7 Ethanol	45	6.402	6.402	(0.637)	132818	1000.00	1010.8723
8 Freon 113	101	6.836	6.836	(0.680)	37093	10.0000	10.6201
9 1,1-Dichloroethene	96	6.935	6.935	(0.690)	42445	10.0000	10.0889
10 Acetone	43	7.043	7.043	(0.701)	32951	10.0000	9.7715
11 Isopropanol	45	7.132	7.132	(0.710)	72394	100.000	105.7879
12 Carbon Disulfide	76	7.329	7.329	(0.729)	196777	10.0000	10.2214
13 Methylene Chloride	84	7.674	7.674	(0.764)	67040	10.0000	10.2732
14 tert-Butyl Alcohol (TBA)	59	7.684	7.684	(0.765)	97103	100.000	104.4531
15 MTBE	73	7.920	7.920	(0.788)	215503	10.0000	10.5178
16 trans-1,2-Dichloroethene	96	7.999	7.999	(0.796)	58241	10.0000	10.5479

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.511	8.511	(0.847)	344025	10.0000	10.3880
18 Vinyl Acetate	43	8.580	8.580	(0.854)	201077	10.0000	10.4376
19 1,1-Dichloroethane	63	8.640	8.640	(0.860)	111267	10.0000	9.5558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.014	9.014	(0.897)	278345	10.0000	10.9111
21 2,2-Dichloropropane	77	9.428	9.428	(0.938)	88116	10.0000	10.6269
22 2-Butanone	43	9.438	9.438	(0.939)	65873	10.0000	10.4706
23 cis-1,2-Dichloroethene	96	9.458	9.458	(0.941)	84447	10.0000	10.5141
24 Bromochloromethane	128	9.822	9.822	(0.977)	37821	10.0000	10.4445
25 Tetrahydrofuran	42	9.832	9.832	(0.978)	405847	100.000	108.2953
26 Chloroform	83	9.852	9.852	(0.980)	131849	10.0000	10.3679
* 27 Pentafluorobenzene	168	10.049	10.049	(1.000)	612545	50.0000	
28 Dibromofluoromethane	113	10.098	10.098	(1.005)	364581	50.0000	50.2089
29 1,1,1-Trichloroethane	97	10.128	10.128	(1.008)	83984	10.0000	10.1460
30 Carbon Tetrachloride	117	10.325	10.325	(0.924)	54666	10.0000	10.2899
31 1,1-Dichloropropene	75	10.344	10.344	(0.926)	81980	10.0000	10.2451
32 1,2-Dichloroethane-d4	65	10.650	10.650	(0.953)	405684	50.0000	50.6769
33 Benzene	78	10.660	10.660	(0.954)	285490	10.0000	10.6094
34 Methyl tert-Amyl Ether (TAME)	73	10.670	10.670	(0.955)	259771	10.0000	10.6080
35 1,2-Dichloroethane	62	10.768	10.768	(0.964)	105109	10.0000	10.5287
* 36 1,4-Difluorobenzene	114	11.172	11.172	(1.000)	999184	50.0000	
37 Trichloroethene	95	11.576	11.576	(1.036)	68798	10.0000	10.3060
38 Trifluorotoluene	146	11.941	11.941	(1.069)	78180	10.0000	10.6351
39 1,2-Dichloropropane	63	11.990	11.990	(1.073)	89459	10.0000	10.5879
40 Dibromomethane	93	12.187	12.187	(1.091)	56860	10.0000	10.2844
41 Bromodichloromethane	83	12.345	12.345	(1.105)	101965	10.0000	10.3837
42 2-Chloroethylvinylether	63	12.690	12.690	(1.136)	66114	10.0000	11.0153
43 Tetramethyl THF	43	12.907	12.907	(1.155)	230134	10.0000	10.5520
44 cis-1,3-Dichloropropene	75	12.966	12.966	(1.161)	134537	10.0000	10.5532
45 4-Methyl-2-Pentanone	43	13.104	13.104	(1.173)	135560	10.0000	10.5417
46 Toluene-d8	98	13.291	13.291	(1.190)	1164358	50.0000	50.2781
47 Toluene	92	13.390	13.390	(1.198)	172666	10.0000	10.5166
48 trans-1,3-Dichloropropene	75	13.725	13.725	(1.228)	123470	10.0000	10.4136
49 1,1,2-Trichloroethane	85	13.991	13.991	(1.252)	41086	10.0000	10.1798
50 Tetrachloroethene	166	14.109	14.109	(0.926)	50378	10.0000	10.3419
51 2-Hexanone	43	14.218	14.218	(0.933)	97400	10.0000	10.3713
52 1,3-Dichloropropane	76	14.237	14.237	(0.934)	130532	10.0000	10.4148
53 Dibromochloromethane	129	14.513	14.513	(0.952)	77194	10.0000	10.4916
54 1,2-Dibromoethane	107	14.720	14.720	(1.318)	80595	10.0000	10.3281
* 55 Chlorobenzene-d5	117	15.243	15.243	(1.000)	858172	50.0000	
56 Chlorobenzene	112	15.282	15.282	(1.003)	182922	10.0000	10.4764
57 Ethylbenzene	91	15.331	15.331	(1.006)	307550	10.0000	10.4532
58 1,1,1,2-Tetrachloroethane	131	15.361	15.361	(1.008)	61451	10.0000	10.4948
59 m,p-Xylenes	106	15.469	15.469	(1.015)	229125	20.0000	21.2575
60 o-Xylene	106	15.972	15.972	(1.048)	116508	10.0000	10.7302
61 Styrene	104	16.001	16.001	(1.050)	217742	10.0000	10.8116
62 Bromoform	173	16.307	16.307	(1.070)	56812	10.0000	10.1446
63 Isopropylbenzene	105	16.376	16.376	(0.912)	250847	10.0000	10.4566

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA914.D
Report Date: 10-Jan-2007 08:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.642	16.642	(0.926)	524740	50.0000	50.2093
66 1,1,2,2-Tetrachloroethane	83	16.800	16.800	(0.935)	112636	10.0000	10.4746
67 Propylbenzene	91	16.849	16.849	(0.938)	327657	10.0000	10.7247
68 Bromobenzene	156	16.849	16.849	(0.938)	73709	10.0000	10.5982
69 1,2,3-Trichloropropane	75	16.888	16.888	(0.940)	98916	10.0000	10.1918
70 2-Chlorotoluene	91	17.026	17.026	(0.948)	243910	10.0000	10.6343
71 1,3,5-Trimethylbenzene	105	17.026	17.026	(0.948)	227451	10.0000	10.8173
72 4-Chlorotoluene	91	17.145	17.145	(0.954)	236214	10.0000	10.5792
73 tert-Butylbenzene	119	17.401	17.401	(0.969)	155446	10.0000	10.4707
74 1,2,4-Trimethylbenzene	105	17.470	17.470	(0.973)	243753	10.0000	10.6575
75 sec-Butylbenzene	105	17.647	17.647	(0.982)	239923	10.0000	10.3729
76 para-Isopropyl Toluene	119	17.795	17.795	(0.991)	200763	10.0000	10.7037
77 1,3-Dichlorobenzene	146	17.884	17.884	(0.996)	130285	10.0000	10.5467
* 78 1,4-Dichlorobenzene-d4	152	17.963	17.963	(1.000)	406223	50.0000	
79 1,4-Dichlorobenzene	146	17.992	17.992	(1.002)	137051	10.0000	10.6696
80 n-Butylbenzene	91	18.268	18.268	(1.017)	195708	10.0000	10.4398
81 1,2-Dichlorobenzene	146	18.455	18.455	(1.027)	127234	10.0000	10.5352
82 1,2-Dibromo-3-Chloropropane	75	19.431	19.431	(1.082)	20643	10.0000	10.0455
83 1,2,4-Trichlorobenzene	180	20.525	20.525	(1.143)	80997	10.0000	10.7576
84 Hexachlorobutadiene	225	20.633	20.633	(1.149)	19704	10.0000	10.9403
85 Naphthalene	128	20.949	20.949	(1.166)	213913	10.0000	10.4906
86 1,2,3-Trichlorobenzene	180	21.323	21.323	(1.187)	76453	10.0000	10.8616

QC Flag Legend

M - Compound response manually integrated.

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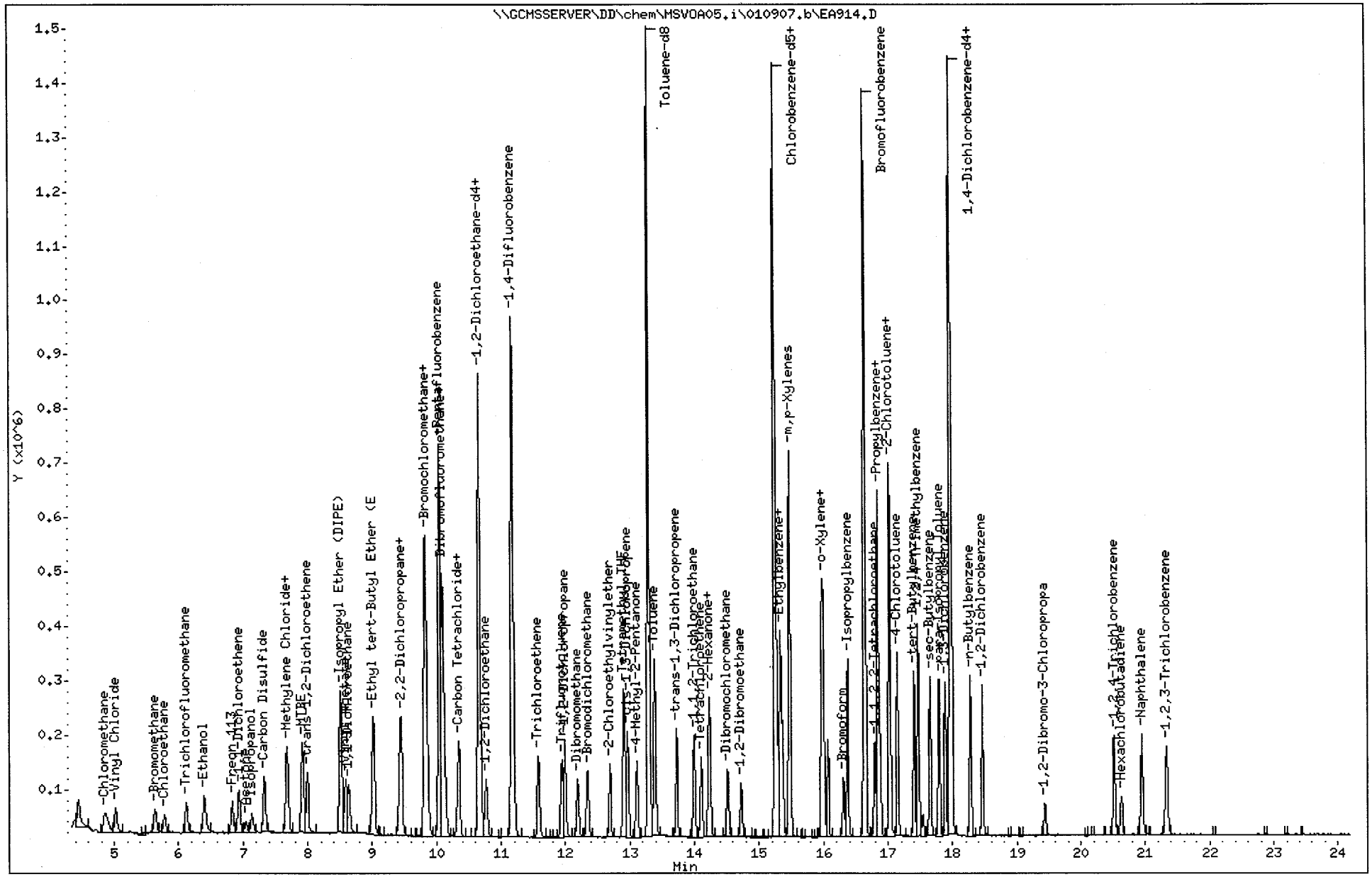
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:47

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
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Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.004/100,S5152,0.004/100,
Misc Info : S4713,0.002/100,20PPB
Comment :
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Meth Date : 10-Jan-2007 08:47 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.443	4.443	(0.442)	228497	20.0000	20.8363
2 Chloromethane	50	4.866	4.866	(0.484)	231156	20.0000	20.4491
3 Vinyl Chloride	62	5.024	5.024	(0.500)	183056	20.0000	21.3886
4 Bromomethane	94	5.635	5.635	(0.561)	99028	20.0000	19.5378
5 Chloroethane	64	5.783	5.783	(0.575)	96502	20.0000	20.1359
6 Trichlorofluoromethane	101	6.128	6.128	(0.610)	188723	20.0000	21.3556
7 Ethanol	45	6.404	6.404	(0.637)	278692	2000.00	2123.8698
8 Freon 113	101	6.837	6.837	(0.680)	83183	20.0000	22.5916
9 1,1-Dichloroethene	96	6.936	6.936	(0.690)	86177	20.0000	20.5104
10 Acetone	43	7.044	7.044	(0.701)	70109	20.0000	20.8177
11 Isopropanol	45	7.133	7.133	(0.710)	140242	200.000	205.1991
12 Carbon Disulfide	76	7.330	7.330	(0.729)	390297	20.0000	20.2999
13 Methylene Chloride	84	7.675	7.675	(0.764)	127861	20.0000	19.6189
14 tert-Butyl Alcohol (TBA)	59	7.685	7.685	(0.765)	187325	200.000	201.7663
15 MTBE	73	7.921	7.921	(0.788)	416853	20.0000	20.3713
16 trans-1,2-Dichloroethene	96	7.990	7.990	(0.795)	112490	20.0000	20.3994

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	17 Isopropyl Ether (DIPE)	45	8.513	8.513	(0.847)	664082	20.0000	20.0784
	18 Vinyl Acetate	43	8.582	8.582	(0.854)	370445	20.0000	19.2542
	19 1,1-Dichloroethane	63	8.641	8.641	(0.860)	215606	20.0000	18.5407
	20 Ethyl tert-Butyl Ether (ETBE)	59	9.015	9.015	(0.897)	523026	20.0000	20.5293
	21 2,2-Dichloropropane	77	9.429	9.429	(0.938)	169562	20.0000	20.4760
	22 2-Butanone	43	9.439	9.439	(0.939)	131448	20.0000	20.9210
	23 cis-1,2-Dichloroethene	96	9.459	9.459	(0.941)	156103	20.0000	19.4609
	24 Bromochloromethane	128	9.814	9.814	(0.976)	72955	20.0000	20.1733
	25 Tetrahydrofuran	42	9.824	9.824	(0.977)	772334	200.000	206.3558
	26 Chloroform	83	9.853	9.853	(0.980)	246711	20.0000	19.4252
*	27 Pentafluorobenzene	168	10.050	10.050	(1.000)	611750	50.0000	
	28 Dibromofluoromethane	113	10.099	10.099	(1.005)	364142	50.0000	50.2137
	29 1,1,1-Trichloroethane	97	10.129	10.129	(1.008)	164911	20.0000	19.9485
	30 Carbon Tetrachloride	117	10.326	10.326	(0.924)	112255	20.0000	21.1460
	31 1,1-Dichloropropene	75	10.346	10.346	(0.926)	161685	20.0000	20.2212
	32 1,2-Dichloroethane-d4	65	10.651	10.651	(0.953)	406423	50.0000	50.8075
	33 Benzene	78	10.661	10.661	(0.954)	540318	20.0000	20.0945
	34 Methyl tert-Amyl Ether (TAME)	73	10.671	10.671	(0.955)	496244	20.0000	20.2799
	35 1,2-Dichloroethane	62	10.770	10.770	(0.964)	199030	20.0000	19.9518
*	36 1,4-Difluorobenzene	114	11.174	11.174	(1.000)	998431	50.0000	
	37 Trichloroethene	95	11.578	11.578	(1.036)	132063	20.0000	19.7982
	38 Trifluorotoluene	146	11.942	11.942	(1.069)	159706	20.0000	21.7417
	39 1,2-Dichloropropane	63	11.992	11.992	(1.073)	168705	20.0000	19.9821
	40 Dibromomethane	93	12.189	12.189	(1.091)	112351	20.0000	20.3365
	41 Bromodichloromethane	83	12.337	12.337	(1.104)	197407	20.0000	20.1184
	42 2-Chloroethylvinylether	63	12.691	12.691	(1.136)	121292	20.0000	20.2238
	43 Tetramethyl THF	43	12.908	12.908	(1.155)	442064	20.0000	20.2846
	44 cis-1,3-Dichloropropene	75	12.967	12.967	(1.161)	257077	20.0000	20.1806
	45 4-Methyl-2-Pentanone	43	13.105	13.105	(1.173)	266883	20.0000	20.7697
	46 Toluene-d8	98	13.293	13.293	(1.190)	1164829	50.0000	50.3364
	47 Toluene	92	13.381	13.381	(1.198)	326320	20.0000	19.8903
	48 trans-1,3-Dichloropropene	75	13.726	13.726	(1.228)	241061	20.0000	20.3468
	49 1,1,2-Trichloroethane	85	13.992	13.992	(1.252)	80053	20.0000	19.8496
	50 Tetrachloroethene	166	14.111	14.111	(0.926)	99566	20.0000	20.1263
	51 2-Hexanone	43	14.219	14.219	(0.933)	197647	20.0000	20.7232
	52 1,3-Dichloropropane	76	14.239	14.239	(0.934)	255450	20.0000	20.0695
	53 Dibromochloromethane	129	14.515	14.515	(0.952)	148636	20.0000	19.8919
	54 1,2-Dibromoethane	107	14.722	14.722	(1.318)	160045	20.0000	20.5250
*	55 Chlorobenzene-d5	117	15.244	15.244	(1.000)	871527	50.0000	
	56 Chlorobenzene	112	15.283	15.283	(1.003)	349437	20.0000	19.7065
	57 Ethylbenzene	91	15.333	15.333	(1.006)	580613	20.0000	19.4319
	58 1,1,1,2-Tetrachloroethane	131	15.362	15.362	(1.008)	116126	20.0000	19.5285
	59 m,p-Xylenes	106	15.471	15.471	(1.015)	427380	40.0000	39.0434
	60 o-Xylene	106	15.973	15.973	(1.048)	218158	20.0000	19.7842
	61 Styrene	104	16.003	16.003	(1.050)	408295	20.0000	19.9625
	62 Bromoform	173	16.308	16.308	(1.070)	112811	20.0000	19.8355
	63 Isopropylbenzene	105	16.377	16.377	(0.912)	478691	20.0000	19.6700

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA915.D
Report Date: 10-Jan-2007 08:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.643	16.643	(0.926)	529303	50.0000	49.9243
66 1,1,2,2-Tetrachloroethane	83	16.791	16.791	(0.935)	216625	20.0000	19.8582
67 Propylbenzene	91	16.850	16.850	(0.938)	613536	20.0000	19.7960
68 Bromobenzene	156	16.850	16.850	(0.938)	139924	20.0000	19.8323
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.940)	192358	20.0000	19.5373
70 2-Chlorotoluene	91	17.028	17.028	(0.948)	448129	20.0000	19.2598
71 1,3,5-Trimethylbenzene	105	17.028	17.028	(0.948)	420779	20.0000	19.7267
72 4-Chlorotoluene	91	17.146	17.146	(0.954)	443295	20.0000	19.5709
73 tert-Butylbenzene	119	17.402	17.402	(0.969)	300643	20.0000	19.9625
74 1,2,4-Trimethylbenzene	105	17.471	17.471	(0.973)	453233	20.0000	19.5343
75 sec-Butylbenzene	105	17.649	17.649	(0.982)	467244	20.0000	19.9132
76 para-Isopropyl Toluene	119	17.786	17.786	(0.990)	379264	20.0000	19.9325
77 1,3-Dichlorobenzene	146	17.885	17.885	(0.996)	246172	20.0000	19.6439
* 78 1,4-Dichlorobenzene-d4	152	17.964	17.964	(1.000)	412094	50.0000	
79 1,4-Dichlorobenzene	146	17.993	17.993	(1.002)	258431	20.0000	19.8325
80 n-Butylbenzene	91	18.269	18.269	(1.017)	376476	20.0000	19.7966
81 1,2-Dichlorobenzene	146	18.457	18.457	(1.027)	242511	20.0000	19.7944
82 1,2-Dibromo-3-Chloropropane	75	19.432	19.432	(1.082)	41302	20.0000	19.8126
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.143)	157946	20.0000	20.6787
84 Hexachlorobutadiene	225	20.625	20.625	(1.148)	38791	20.0000	21.2313
85 Naphthalene	128	20.950	20.950	(1.166)	446410	20.0000	21.5808
86 1,2,3-Trichlorobenzene	180	21.324	21.324	(1.187)	147866	20.0000	20.7080

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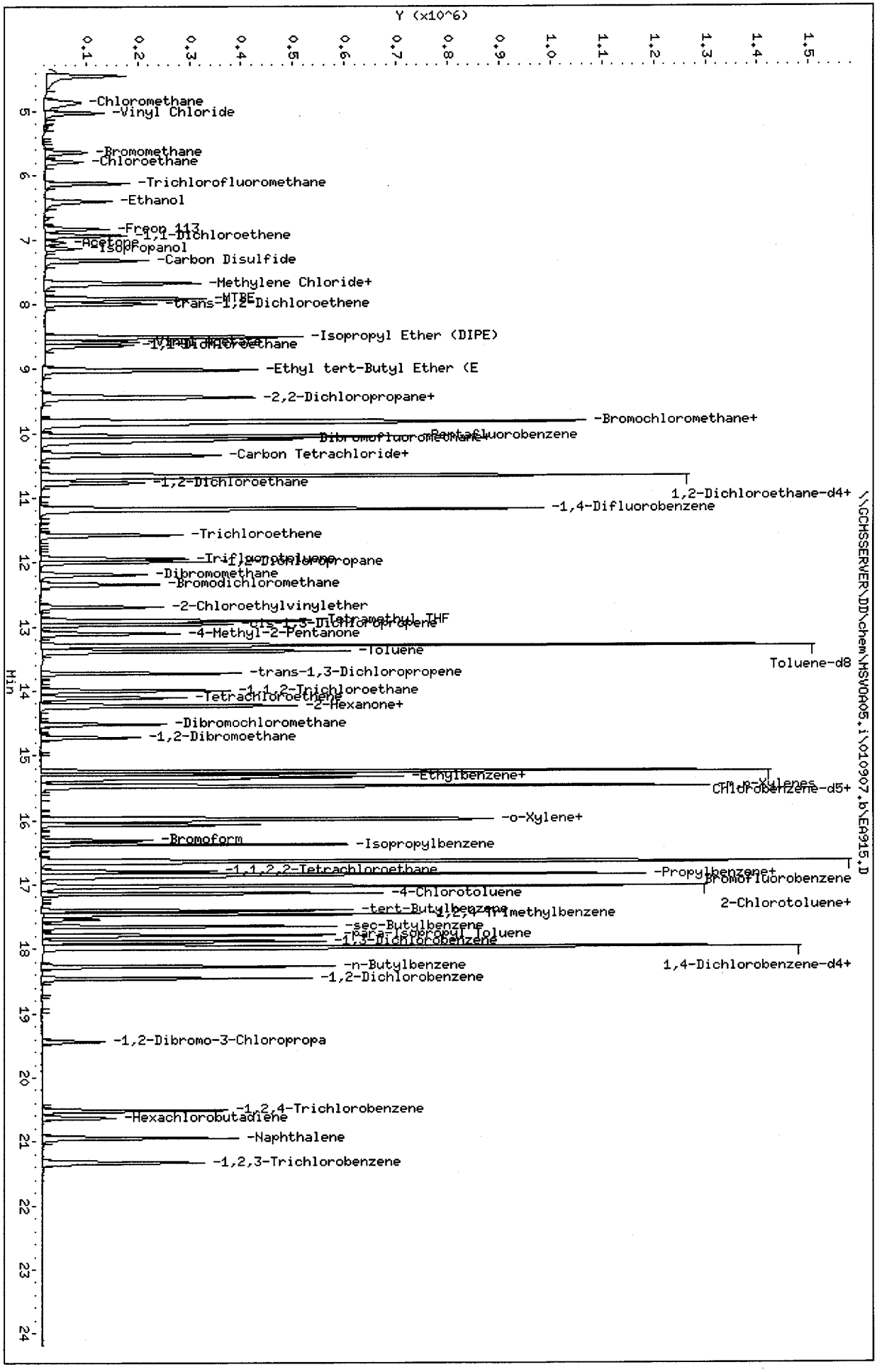
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



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Report Date: 10-Jan-2007 08:48

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 17:24 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
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Misc Info : S4713,0.005/100,50PPB
Comment :
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Meth Date : 10-Jan-2007 08:48 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.447	4.447	(0.443)	561977	50.0000	48.6110
2 Chloromethane	50	4.861	4.861	(0.484)	570499	50.0000	49.5690
3 Vinyl Chloride	62	5.019	5.019	(0.500)	448618	50.0000	51.4829
4 Bromomethane	94	5.630	5.630	(0.560)	263485	50.0000	51.0577
5 Chloroethane	64	5.778	5.778	(0.575)	241233	50.0000	49.4377
6 Trichlorofluoromethane	101	6.123	6.123	(0.610)	456568	50.0000	48.5816
7 Ethanol	45	6.399	6.399	(0.637)	654369	5000.00	4897.9284
8 Freon 113	101	6.832	6.832	(0.680)	174367	50.0000	43.3589
9 1,1-Dichloroethene	96	6.931	6.931	(0.690)	198483	50.0000	46.3974
10 Acetone	43	7.039	7.039	(0.701)	170238	50.0000	49.6480
11 Isopropanol	45	7.138	7.138	(0.711)	341789	500.000	491.1814
12 Carbon Disulfide	76	7.325	7.325	(0.729)	909700	50.0000	46.4712
13 Methylene Chloride	84	7.670	7.670	(0.764)	311716	50.0000	46.9767
14 tert-Butyl Alcohol (TBA)	59	7.690	7.690	(0.766)	457890	500.000	484.3960
15 MTBE	73	7.916	7.916	(0.788)	1039278	50.0000	49.8831
16 trans-1,2-Dichloroethene	96	7.995	7.995	(0.796)	272401	50.0000	48.5175

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.508	8.508	(0.847)	1633701	50.0000	48.5139
18 Vinyl Acetate	43	8.586	8.586	(0.855)	927851	50.0000	47.3661
19 1,1-Dichloroethane	63	8.636	8.636	(0.860)	534192	50.0000	45.1180
20 Ethyl tert-Butyl Ether (ETBE)	59	9.010	9.010	(0.897)	1307874	50.0000	50.4201
21 2,2-Dichloropropane	77	9.424	9.424	(0.938)	385493	50.0000	45.7215
22 2-Butanone	43	9.434	9.434	(0.939)	320344	50.0000	50.0763
23 cis-1,2-Dichloroethene	96	9.454	9.454	(0.941)	386644	50.0000	47.3424
24 Bromochloromethane	128	9.818	9.818	(0.977)	179294	50.0000	48.6939
25 Tetrahydrofuran	42	9.828	9.828	(0.978)	1827450	500.000	479.5604
26 Chloroform	83	9.858	9.858	(0.981)	602474	50.0000	46.5911
* 27 Pentafluorobenzene	168	10.045	10.045	(1.000)	622856	50.0000	
28 Dibromofluoromethane	113	10.094	10.094	(1.005)	369738	50.0000	50.0762
29 1,1,1-Trichloroethane	97	10.134	10.134	(1.009)	377323	50.0000	44.8293
30 Carbon Tetrachloride	117	10.331	10.331	(0.924)	254117	50.0000	46.3654
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	365687	50.0000	44.2981
32 1,2-Dichloroethane-d4	65	10.656	10.656	(0.953)	403627	50.0000	48.8727
33 Benzene	78	10.666	10.666	(0.954)	1287391	50.0000	46.3742
34 Methyl tert-Amyl Ether (TAME)	73	10.676	10.676	(0.955)	1213661	50.0000	48.0404
35 1,2-Dichloroethane	62	10.764	10.764	(0.963)	503242	50.0000	48.8628
* 36 1,4-Difluorobenzene	114	11.178	11.178	(1.000)	1030815	50.0000	
37 Trichloroethene	95	11.573	11.573	(1.035)	312515	50.0000	45.3788
38 Trifluorotoluene	146	11.937	11.937	(1.068)	354142	50.0000	46.6969
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	408365	50.0000	46.8490
40 Dibromomethane	93	12.184	12.184	(1.090)	275263	50.0000	48.2597
41 Bromodichloromethane	83	12.341	12.341	(1.104)	493365	50.0000	48.7009
42 2-Chloroethylvinylether	63	12.686	12.686	(1.135)	296795	50.0000	47.9321
43 Tetramethyl THF	43	12.913	12.913	(1.155)	1082884	50.0000	48.1283
44 cis-1,3-Dichloropropene	75	12.962	12.962	(1.160)	632557	50.0000	48.0959
45 4-Methyl-2-Pentanone	43	13.110	13.110	(1.173)	656944	50.0000	49.5194
46 Toluene-d8	98	13.287	13.287	(1.189)	1197141	50.0000	50.1075
47 Toluene	92	13.386	13.386	(1.197)	776741	50.0000	45.8578
48 trans-1,3-Dichloropropene	75	13.731	13.731	(1.228)	587555	50.0000	48.0347
49 1,1,2-Trichloroethane	85	13.997	13.997	(1.252)	200167	50.0000	48.0735
50 Tetrachloroethene	166	14.105	14.105	(0.925)	225836	50.0000	45.0760
51 2-Hexanone	43	14.224	14.224	(0.933)	484487	50.0000	50.1589
52 1,3-Dichloropropane	76	14.243	14.243	(0.934)	623879	50.0000	48.3982
53 Dibromochloromethane	129	14.519	14.519	(0.952)	370140	50.0000	48.9123
54 1,2-Dibromoethane	107	14.726	14.726	(1.317)	394662	50.0000	49.0234
* 55 Chlorobenzene-d5	117	15.249	15.249	(1.000)	882637	50.0000	
56 Chlorobenzene	112	15.278	15.278	(1.002)	848985	50.0000	47.2758
57 Ethylbenzene	91	15.327	15.327	(1.005)	1353652	50.0000	44.7338
58 1,1,1,2-Tetrachloroethane	131	15.367	15.367	(1.008)	287898	50.0000	47.8055
59 m,p-Xylenes	106	15.475	15.475	(1.015)	990728	100.000	89.3690
60 o-Xylene	106	15.978	15.978	(1.048)	512870	50.0000	45.9255
61 Styrene	104	15.998	15.998	(1.049)	962974	50.0000	46.4896
62 Bromoform	173	16.313	16.313	(1.070)	276176	50.0000	47.9487
63 Isopropylbenzene	105	16.372	16.372	(0.911)	1071839	50.0000	44.0892

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA916.D
Report Date: 10-Jan-2007 08:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.648	16.648	(0.926)	523048	50.0000	49.3859
66 1,1,2,2-Tetrachloroethane	83	16.796	16.796	(0.935)	529666	50.0000	48.6057
67 Propylbenzene	91	16.845	16.845	(0.937)	1341377	50.0000	43.3253
68 Bromobenzene	156	16.855	16.855	(0.938)	334099	50.0000	47.4034
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	458576	50.0000	46.6251
70 2-Chlorotoluene	91	17.022	17.022	(0.947)	1034636	50.0000	44.5134
71 1,3,5-Trimethylbenzene	105	17.032	17.032	(0.948)	934890	50.0000	43.8747
72 4-Chlorotoluene	91	17.151	17.151	(0.954)	1035656	50.0000	45.7707
73 tert-Butylbenzene	119	17.407	17.407	(0.969)	659994	50.0000	43.8690
74 1,2,4-Trimethylbenzene	105	17.466	17.466	(0.972)	1047874	50.0000	45.2104
75 sec-Butylbenzene	105	17.653	17.653	(0.982)	1013947	50.0000	43.2579
76 para-Isopropyl Toluene	119	17.791	17.791	(0.990)	822695	50.0000	43.2825
77 1,3-Dichlorobenzene	146	17.890	17.890	(0.996)	583984	50.0000	46.6492
* 78 1,4-Dichlorobenzene-d4	152	17.969	17.969	(1.000)	411664	50.0000	
79 1,4-Dichlorobenzene	146	17.998	17.998	(1.002)	608859	50.0000	46.7740
80 n-Butylbenzene	91	18.264	18.264	(1.016)	814590	50.0000	42.8792
81 1,2-Dichlorobenzene	146	18.461	18.461	(1.027)	580313	50.0000	47.4162
82 1,2-Dibromo-3-Chloropropane	75	19.437	19.437	(1.082)	100883	50.0000	48.4442
83 1,2,4-Trichlorobenzene	180	20.521	20.521	(1.142)	379938	50.0000	49.7945
84 Hexachlorobutadiene	225	20.629	20.629	(1.148)	78034	50.0000	42.7546
85 Naphthalene	128	20.945	20.945	(1.166)	1153101	50.0000	55.8026
86 1,2,3-Trichlorobenzene	180	21.329	21.329	(1.187)	363731	50.0000	50.9923

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Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
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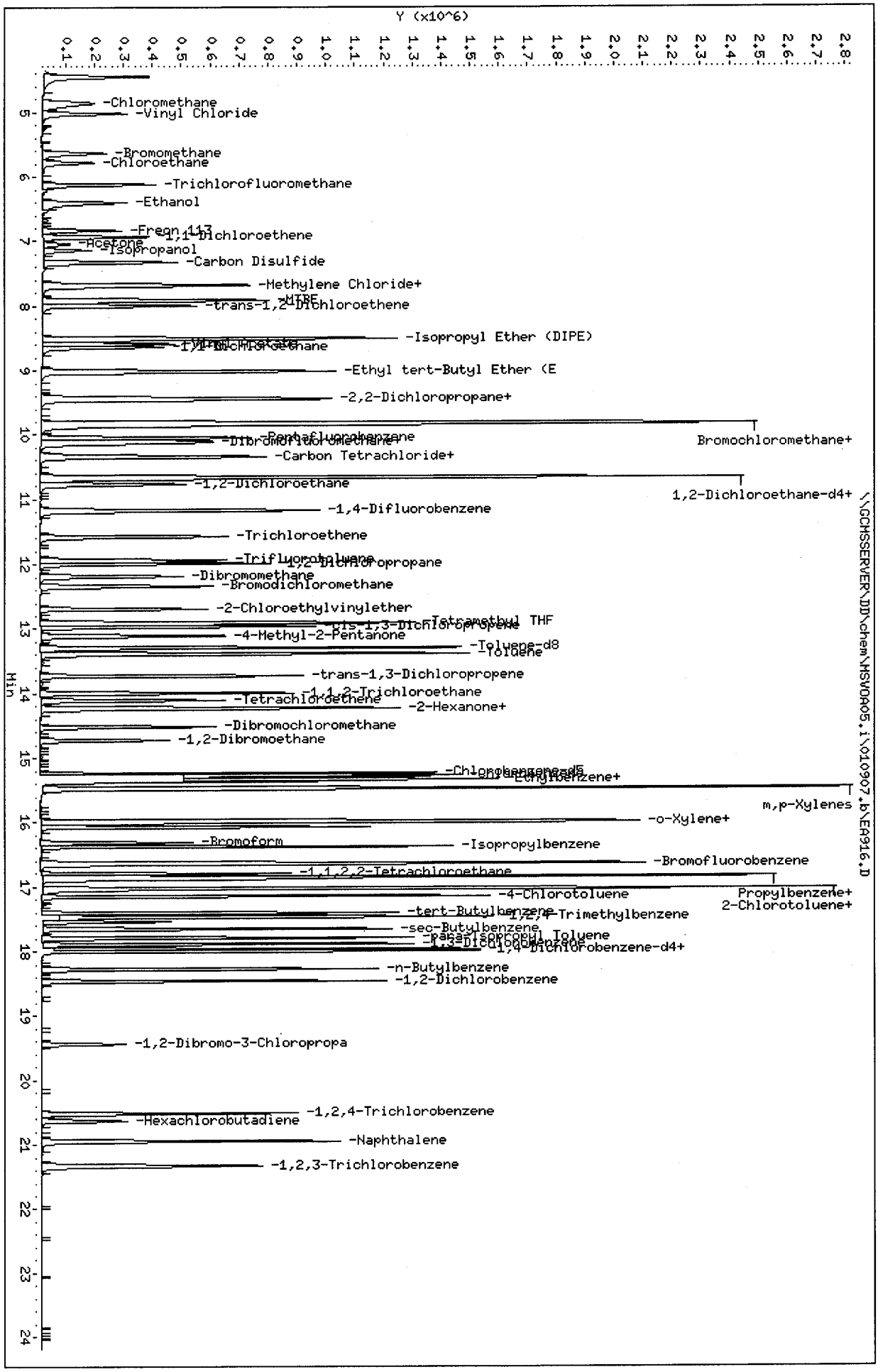

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Report Date: 10-Jan-2007 08:49

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
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Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.015/100,S5152,0.015/100,
Misc Info : S4713,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:49 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.444	4.444	(0.442)	919905	75.0000	76.8033
2 Chloromethane	50	4.858	4.858	(0.483)	902125	75.0000	77.2197
3 Vinyl Chloride	62	5.016	5.016	(0.499)	725825	75.0000	82.0586
4 Bromomethane	94	5.627	5.627	(0.560)	420553	75.0000	80.2845
5 Chloroethane	64	5.774	5.774	(0.575)	370292	75.0000	74.7604
6 Trichlorofluoromethane	101	6.119	6.119	(0.609)	747855	75.0000	76.2647
7 Ethanol	45	6.395	6.395	(0.636)	1000149	7500.00	7374.9675
8 Freon 113	101	6.829	6.829	(0.679)	385516	75.0000	80.6146
9 1,1-Dichloroethene	96	6.937	6.937	(0.690)	346372	75.0000	79.7663
10 Acetone	43	7.046	7.046	(0.701)	262033	75.0000	75.2847
11 Isopropanol	45	7.134	7.134	(0.710)	517345	750.000	732.4361
12 Carbon Disulfide	76	7.322	7.322	(0.728)	1519752	75.0000	76.4829
13 Methylene Chloride	84	7.667	7.667	(0.763)	454724	75.0000	67.5114
14 tert-Butyl Alcohol (TBA)	59	7.686	7.686	(0.765)	693348	750.000	722.5973
15 MTBE	73	7.913	7.913	(0.787)	1506223	75.0000	71.2225
16 trans-1,2-Dichloroethene	96	7.992	7.992	(0.795)	425227	75.0000	74.6133

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.504	8.504	(0.846)	2366654	75.0000	69.2364
18 Vinyl Acetate	43	8.583	8.583	(0.854)	1508766	75.0000	75.8782
19 1,1-Dichloroethane	63	8.632	8.632	(0.859)	979971	75.0000	81.5402
20 Ethyl tert-Butyl Ether (ETBE)	59	9.017	9.017	(0.897)	1946099	75.0000	73.9109
21 2,2-Dichloropropane	77	9.421	9.421	(0.937)	638444	75.0000	74.5990
22 2-Butanone	43	9.431	9.431	(0.938)	470710	75.0000	72.4894
23 cis-1,2-Dichloroethene	96	9.450	9.450	(0.940)	584212	75.0000	70.4719
24 Bromochloromethane	128	9.815	9.815	(0.976)	263717	75.0000	70.5590
25 Tetrahydrofuran	42	9.825	9.825	(0.977)	2625993	750.000	678.8864
26 Chloroform	83	9.854	9.854	(0.980)	893961	75.0000	68.1066
* 27 Pentafluorobenzene	168	10.052	10.052	(1.000)	632240	50.0000	
28 Dibromofluoromethane	113	10.101	10.101	(1.005)	372177	50.0000	49.6584
29 1,1,1-Trichloroethane	97	10.130	10.130	(1.008)	668183	75.0000	78.2077
30 Carbon Tetrachloride	117	10.328	10.328	(0.924)	491942	75.0000	88.5799
31 1,1-Dichloropropene	75	10.347	10.347	(0.926)	665753	75.0000	79.5885
32 1,2-Dichloroethane-d4	65	10.653	10.653	(0.953)	399700	50.0000	47.7619
33 Benzene	78	10.663	10.663	(0.954)	1955245	75.0000	69.5070
34 Methyl tert-Amyl Ether (TAME)	73	10.672	10.672	(0.955)	1783152	75.0000	69.6560
35 1,2-Dichloroethane	62	10.761	10.761	(0.963)	748927	75.0000	71.7633
* 36 1,4-Difluorobenzene	114	11.175	11.175	(1.000)	1044527	50.0000	
37 Trichloroethene	95	11.579	11.579	(1.036)	514554	75.0000	73.7351
38 Trifluorotoluene	146	11.944	11.944	(1.069)	683667	75.0000	88.9645
39 1,2-Dichloropropane	63	11.993	11.993	(1.073)	633983	75.0000	71.7779
40 Dibromomethane	93	12.190	12.190	(1.091)	413151	75.0000	71.4837
41 Bromodichloromethane	83	12.338	12.338	(1.104)	731525	75.0000	71.2621
42 2-Chloroethylvinylether	63	12.693	12.693	(1.136)	450893	75.0000	71.8628
43 Tetramethyl THF	43	12.910	12.910	(1.155)	1618617	75.0000	70.9943
44 cis-1,3-Dichloropropene	75	12.969	12.969	(1.160)	935313	75.0000	70.1822
45 4-Methyl-2-Pentanone	43	13.107	13.107	(1.173)	977907	75.0000	72.7455
46 Toluene-d8	98	13.294	13.294	(1.190)	1196720	50.0000	49.4323
47 Toluene	92	13.383	13.383	(1.198)	1225835	75.0000	71.4217
48 trans-1,3-Dichloropropene	75	13.728	13.728	(1.228)	885904	75.0000	71.4751
49 1,1,2-Trichloroethane	85	13.994	13.994	(1.252)	296805	75.0000	70.3469
50 Tetrachloroethene	166	14.112	14.112	(0.926)	409909	75.0000	82.3978
51 2-Hexanone	43	14.220	14.220	(0.933)	716065	75.0000	74.6611
52 1,3-Dichloropropane	76	14.240	14.240	(0.934)	925289	75.0000	72.2907
53 Dibromochloromethane	129	14.516	14.516	(0.952)	552707	75.0000	73.5569
54 1,2-Dibromoethane	107	14.723	14.723	(1.317)	590500	75.0000	72.3868
* 55 Chlorobenzene-d5	117	15.245	15.245	(1.000)	876408	50.0000	
56 Chlorobenzene	112	15.285	15.285	(1.003)	1288214	75.0000	72.2442
57 Ethylbenzene	91	15.334	15.334	(1.006)	2175071	75.0000	72.3900
58 1,1,1,2-Tetrachloroethane	131	15.364	15.364	(1.008)	433126	75.0000	72.4318
59 m,p-Xylenes	106	15.472	15.472	(1.015)	1565235	150.000	142.1962
60 o-Xylene	106	15.975	15.975	(1.048)	798754	75.0000	72.0336
61 Styrene	104	16.004	16.004	(1.050)	1466136	75.0000	71.2839
62 Bromoform	173	16.310	16.310	(1.070)	420701	75.0000	73.5597
63 Isopropylbenzene	105	16.379	16.379	(0.912)	1874624	75.0000	75.6724

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA917.D
Report Date: 10-Jan-2007 08:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.645	16.645	(0.926)	532653	50.0000	49.3544
66 1,1,2,2-Tetrachloroethane	83	16.793	16.793	(0.935)	789940	75.0000	71.1376
67 Propylbenzene	91	16.852	16.852	(0.938)	2290164	75.0000	72.5901
68 Bromobenzene	156	16.852	16.852	(0.938)	502856	75.0000	70.0161
69 1,2,3-Trichloropropane	75	16.881	16.881	(0.940)	698782	75.0000	69.7221
70 2-Chlorotoluene	91	17.029	17.029	(0.948)	1608674	75.0000	67.9190
71 1,3,5-Trimethylbenzene	105	17.029	17.029	(0.948)	1534900	75.0000	70.6894
72 4-Chlorotoluene	91	17.147	17.147	(0.954)	1603306	75.0000	69.5358
73 tert-Butylbenzene	119	17.404	17.404	(0.969)	1169440	75.0000	76.2809
74 1,2,4-Trimethylbenzene	105	17.473	17.473	(0.973)	1674881	75.0000	70.9143
75 sec-Butylbenzene	105	17.650	17.650	(0.982)	1900629	75.0000	79.5734
76 para-Isopropyl Toluene	119	17.788	17.788	(0.990)	1479714	75.0000	76.3962
77 1,3-Dichlorobenzene	146	17.886	17.886	(0.996)	906446	75.0000	71.0569
* 78 1,4-Dichlorobenzene-d4	152	17.965	17.965	(1.000)	419491	50.0000	
79 1,4-Dichlorobenzene	146	17.995	17.995	(1.002)	935575	75.0000	70.5320
80 n-Butylbenzene	91	18.271	18.271	(1.017)	1530837	75.0000	79.0782
81 1,2-Dichlorobenzene	146	18.458	18.458	(1.027)	883286	75.0000	70.8249
82 1,2-Dibromo-3-Chloropropane	75	19.434	19.434	(1.082)	154818	75.0000	72.9568
83 1,2,4-Trichlorobenzene	180	20.518	20.518	(1.142)	600114	75.0000	77.1833
84 Hexachlorobutadiene	225	20.636	20.636	(1.149)	166536	75.0000	89.5421
85 Naphthalene	128	20.942	20.942	(1.166)	1753725	75.0000	83.2854
86 1,2,3-Trichlorobenzene	180	21.326	21.326	(1.187)	574837	75.0000	79.0841

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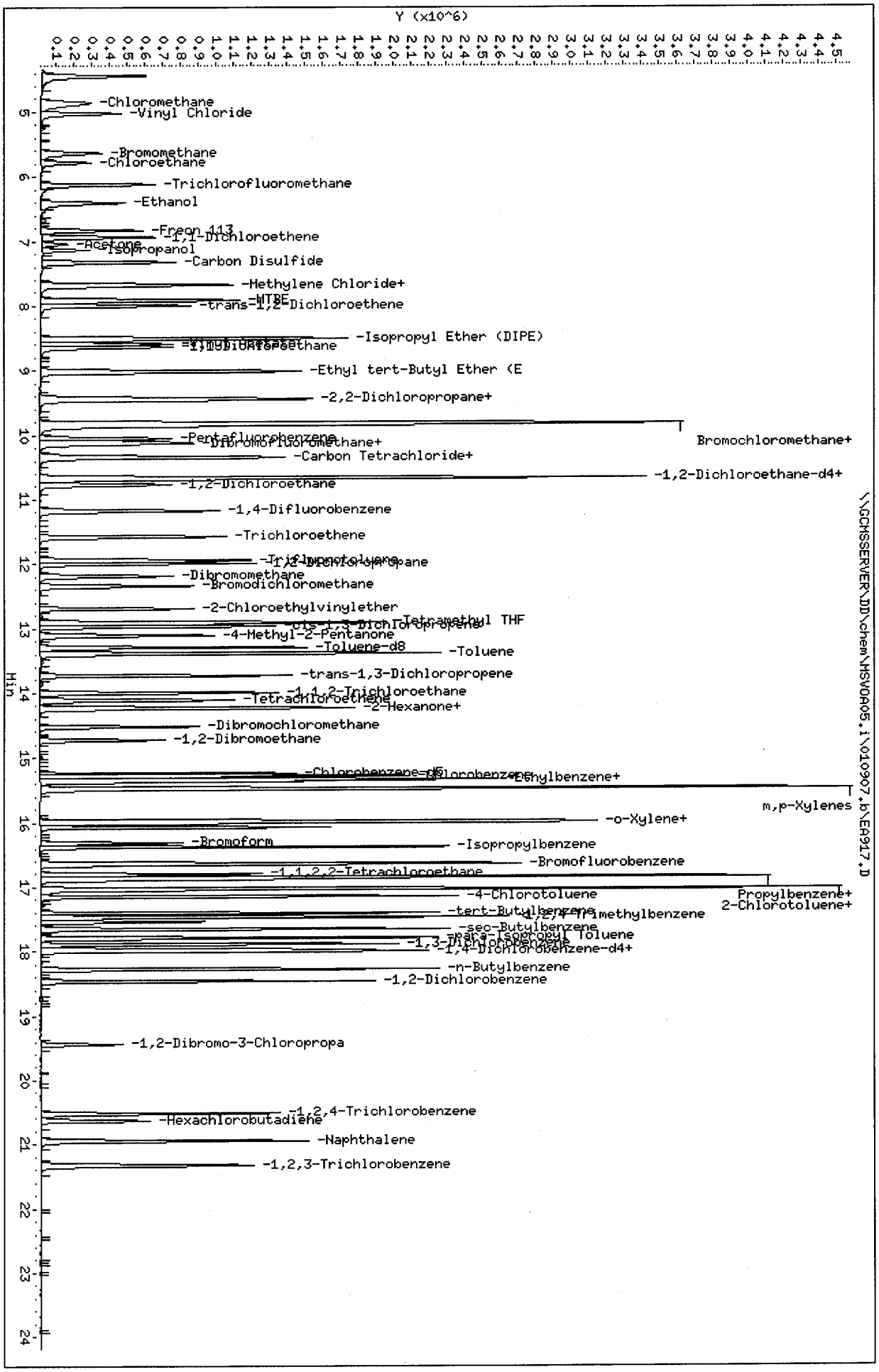
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-JAN-2007 18:28 MS Autotune Date: 08-JAN-2007 15:49
Operator : VOC Inst ID: MSVOA05.i
Smp Info : ICAL,S5170,0.02/100,S5152,0.02/100,
Misc Info : S4713,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\826GOX5.m
Meth Date : 10-Jan-2007 08:50 target Quant Type: ISTD
Cal Date : 09-JAN-2007 18:28 Cal File: EA918.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.436	4.436	(0.442)	1223149	100.000	99.2376
2 Chloromethane	50	4.850	4.850	(0.483)	1206730	100.000	101.8398
3 Vinyl Chloride	62	5.018	5.018	(0.500)	977738	100.000	108.9834(A)
4 Bromomethane	94	5.619	5.619	(0.559)	585492	100.000	110.1991
5 Chloroethane	64	5.777	5.777	(0.575)	513766	100.000	102.2677
6 Trichlorofluoromethane	101	6.122	6.122	(0.610)	1011469	100.000	99.5509
7 Ethanol	45	6.398	6.398	(0.637)	1362400	10000.0	9904.8026
8 Freon 113	101	6.831	6.831	(0.680)	534068	100.000	97.6687
9 1,1-Dichloroethene	96	6.930	6.930	(0.690)	479645	100.000	108.9036
10 Acetone	43	7.038	7.038	(0.701)	351748	100.000	99.6388
11 Isopropanol	45	7.137	7.137	(0.711)	726610	1000.00	1014.2305
12 Carbon Disulfide	76	7.324	7.324	(0.729)	2117158	100.000	105.0488
13 Methylene Chloride	84	7.669	7.669	(0.764)	623065	100.000	91.2028
14 tert-Butyl Alcohol (TBA)	59	7.689	7.689	(0.766)	958924	1000.00	985.3149
15 MTBE	73	7.915	7.915	(0.788)	2074191	100.000	96.6991
16 trans-1,2-Dichloroethene	96	7.994	7.994	(0.796)	591631	100.000	102.3510

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.507	8.507	(0.847)	3252392	100.000	93.8098
18 Vinyl Acetate	43	8.585	8.585	(0.855)	1909785	100.000	94.6947
19 1,1-Dichloroethane	63	8.635	8.635	(0.860)	1119375	100.000	91.8290
20 Ethyl tert-Butyl Ether (ETBE)	59	9.009	9.009	(0.897)	2385403	100.000	89.3204
21 2,2-Dichloropropane	77	9.423	9.423	(0.938)	847457	100.000	97.6279
22 2-Butanone	43	9.433	9.433	(0.939)	619227	100.000	94.0193
23 cis-1,2-Dichloroethene	96	9.453	9.453	(0.941)	787121	100.000	93.6122
24 Bromochloromethane	128	9.817	9.817	(0.977)	351588	100.000	92.7458
25 Tetrahydrofuran	42	9.827	9.827	(0.978)	3376169	1000.00	860.5449
26 Chloroform	83	9.857	9.857	(0.981)	1202711	100.000	90.3395
* 27 Pentafluorobenzene	168	10.044	10.044	(1.000)	641263	50.0000	
28 Dibromofluoromethane	113	10.093	10.093	(1.005)	374794	50.0000	49.3039
29 1,1,1-Trichloroethane	97	10.133	10.133	(1.009)	903304	100.000	104.2399
30 Carbon Tetrachloride	117	10.330	10.330	(0.924)	661685	100.000	118.0458
31 1,1-Dichloropropene	75	10.350	10.350	(0.926)	895925	100.000	106.1174
32 1,2-Dichloroethane-d4	65	10.655	10.655	(0.953)	395086	50.0000	46.7753
33 Benzene	78	10.665	10.665	(0.954)	2561708	100.000	90.2267
34 Methyl tert-Amyl Ether (TAME)	73	10.675	10.675	(0.955)	2344005	100.000	90.7207
35 1,2-Dichloroethane	62	10.763	10.763	(0.963)	1015157	100.000	96.3771
* 36 1,4-Difluorobenzene	114	11.177	11.177	(1.000)	1054246	50.0000	
37 Trichloroethene	95	11.572	11.572	(1.035)	698365	100.000	99.1525
38 Trifluorotoluene	146	11.936	11.936	(1.068)	930267	100.000	119.9382
39 1,2-Dichloropropane	63	11.986	11.986	(1.072)	846571	100.000	94.9630
40 Dibromomethane	93	12.183	12.183	(1.090)	559172	100.000	95.8564
41 Bromodichloromethane	83	12.340	12.340	(1.104)	989250	100.000	95.4802
42 2-Chloroethylvinylether	63	12.685	12.685	(1.135)	598076	100.000	94.4419
43 Tetramethyl THF	43	12.912	12.912	(1.155)	2151878	100.000	93.5137
44 cis-1,3-Dichloropropene	75	12.961	12.961	(1.160)	1268303	100.000	94.2911
45 4-Methyl-2-Pentanone	43	13.109	13.109	(1.173)	1328106	100.000	97.8856
46 Toluene-d8	98	13.296	13.296	(1.190)	1216661	50.0000	49.7927
47 Toluene	92	13.385	13.385	(1.197)	1641686	100.000	94.7689
48 trans-1,3-Dichloropropene	75	13.730	13.730	(1.228)	1179598	100.000	94.2931
49 1,1,2-Trichloroethane	85	13.996	13.996	(1.252)	398803	100.000	93.6505
50 Tetrachloroethene	166	14.114	14.114	(0.926)	556285	100.000	109.9539
51 2-Hexanone	43	14.223	14.223	(0.933)	945155	100.000	96.9015
52 1,3-Dichloropropane	76	14.242	14.242	(0.934)	1239690	100.000	95.2365
53 Dibromochloromethane	129	14.518	14.518	(0.952)	747769	100.000	97.8546
54 1,2-Dibromoethane	107	14.725	14.725	(1.317)	791668	100.000	96.1525
* 55 Chlorobenzene-d5	117	15.248	15.248	(1.000)	891294	50.0000	
56 Chlorobenzene	112	15.287	15.287	(1.003)	1716333	100.000	94.6459
57 Ethylbenzene	91	15.336	15.336	(1.006)	2866922	100.000	93.8223
58 1,1,1,2-Tetrachloroethane	131	15.366	15.366	(1.008)	581515	100.000	95.6228
59 m,p-Xylenes	106	15.474	15.474	(1.015)	2033223	200.000	181.6264
60 o-Xylene	106	15.977	15.977	(1.048)	1058244	100.000	93.8412
61 Styrene	104	16.006	16.006	(1.050)	1935224	100.000	92.5196
62 Bromoform	173	16.312	16.312	(1.070)	568984	100.000	97.8255
63 Isopropylbenzene	105	16.371	16.371	(0.911)	2492158	100.000	99.5069

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
Report Date: 10-Jan-2007 08:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
65 Bromofluorobenzene	95	16.647	16.647	(0.926)	535734	50.0000	49.1004
66 1,1,2,2-Tetrachloroethane	83	16.795	16.795	(0.935)	1077122	100.000	95.9455
67 Propylbenzene	91	16.854	16.854	(0.938)	2988651	100.000	93.7002
68 Bromobenzene	156	16.854	16.854	(0.938)	662492	100.000	91.2409
69 1,2,3-Trichloropropane	75	16.884	16.884	(0.940)	929620	100.000	91.7464
70 2-Chlorotoluene	91	17.031	17.031	(0.948)	2102584	100.000	87.8074
71 1,3,5-Trimethylbenzene	105	17.031	17.031	(0.948)	2028189	100.000	92.3926
72 4-Chlorotoluene	91	17.150	17.150	(0.954)	2156502	100.000	92.5116
73 tert-Butylbenzene	119	17.406	17.406	(0.969)	1581227	100.000	102.0203
74 1,2,4-Trimethylbenzene	105	17.475	17.475	(0.973)	2252919	100.000	94.3517
75 sec-Butylbenzene	105	17.652	17.652	(0.982)	2579695	100.000	106.8301
76 para-Isopropyl Toluene	119	17.790	17.790	(0.990)	2015332	100.000	102.9188
77 1,3-Dichlorobenzene	146	17.889	17.889	(0.996)	1229436	100.000	95.3289
* 78 1,4-Dichlorobenzene-d4	152	17.968	17.968	(1.000)	424100	50.0000	
79 1,4-Dichlorobenzene	146	17.997	17.997	(1.002)	1254630	100.000	93.5574
80 n-Butylbenzene	91	18.273	18.273	(1.017)	2092460	100.000	106.9152
81 1,2-Dichlorobenzene	146	18.460	18.460	(1.027)	1186512	100.000	94.1047
82 1,2-Dibromo-3-Chloropropane	75	19.436	19.436	(1.082)	205228	100.000	95.6611
83 1,2,4-Trichlorobenzene	180	20.520	20.520	(1.142)	808106	100.000	102.8045
84 Hexachlorobutadiene	225	20.628	20.628	(1.148)	223473	100.000	118.8499
85 Naphthalene	128	20.944	20.944	(1.166)	2341985	100.000	110.0135
86 1,2,3-Trichlorobenzene	180	21.328	21.328	(1.187)	771390	100.000	104.9719

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\010907.b\EA918.D
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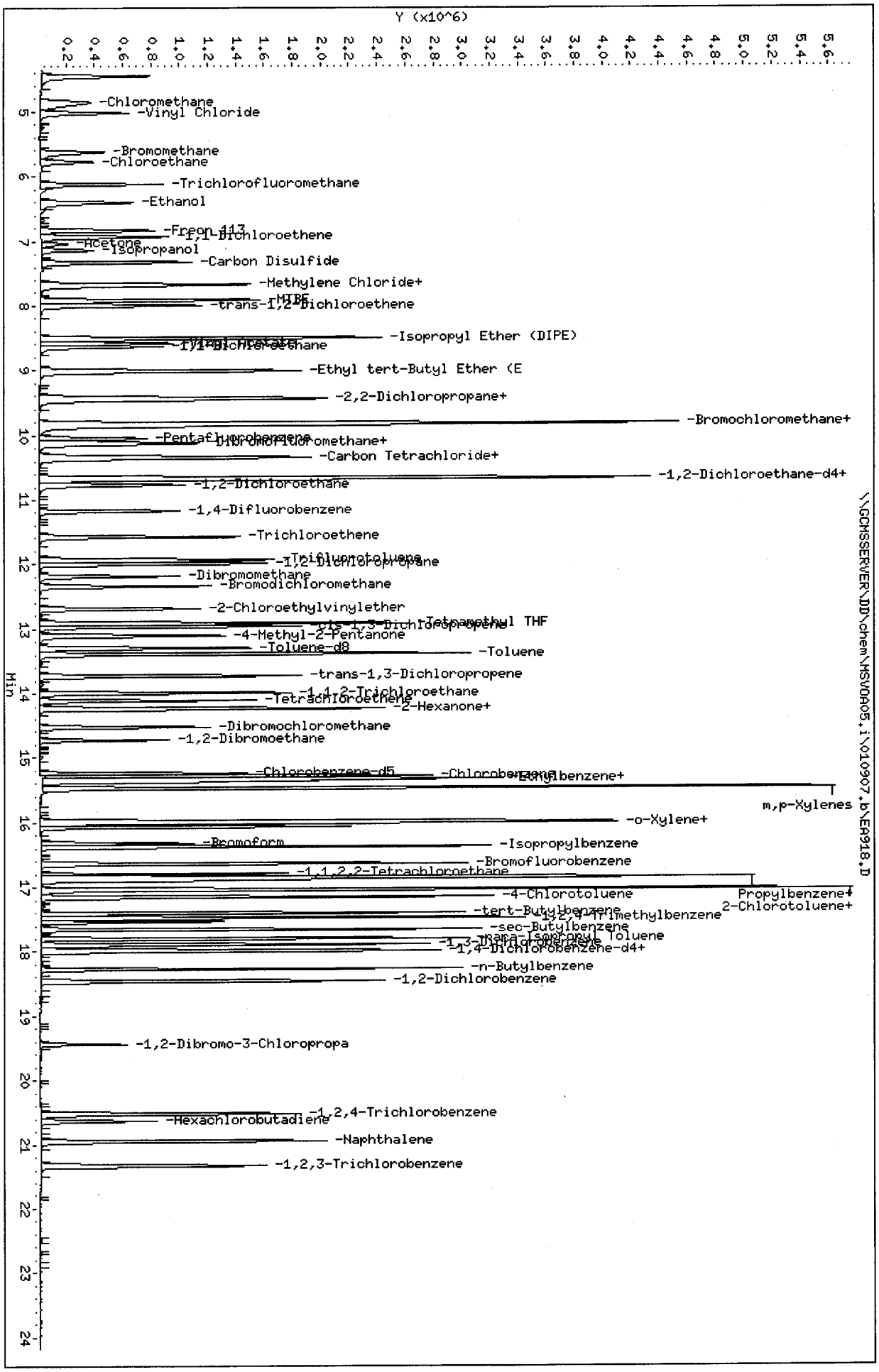
Instrument: MSVOA05.i
Operator: VOC
Column diameter: 0.25



CURTIS & TOMPKINS SPIKE USER REPORT FOR 193277 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: QC379891 IDF : 1.0
Seqnum : 447112790019.3 File : ecj19 Time : 19-MAR-2007 15:55
Cal : 447013464001 Caldate : 09-JAN-2007 Caltype : WATER
Standards: S5537 (10000X), S5614 (10000X), S5723 (10000X), S5736 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9239	0.7558	25.00	20.45	ug/L	-18	30	0.1000	u
Vinyl Chloride	0.6995	0.6142	25.00	21.95	ug/L	-12	20	0.0500	u
Bromomethane	0.4143	0.4475	25.00	27.01	ug/L	8	30	0.0500	u
Chloroethane	0.3917	0.3877	25.00	24.75	ug/L	-1	30	0.0500	u
Acetone	0.2753	0.2551	25.00	23.17	ug/L	-7	40	0.0500	u
1,1-Dichloroethene	0.3434	0.3784	25.00	27.55	ug/L	10	20	0.0500	u
Methylene Chloride	0.5327	0.5587	25.00	26.22	ug/L	5	30	0.0500	u
Carbon Disulfide	1.5714	0.9229	25.00	14.68	ug/L	**-41**	30	0.0500	c- u ***
MTBE	1.6725	1.5266	25.00	22.82	ug/L	-9	30	0.0500	u
trans-1,2-Dichloroethene	0.4507	0.4611	25.00	25.58	ug/L	2	30	0.0500	u
Vinyl Acetate	1.5725	1.7606	25.00	27.99	ug/L	12	40	0.0500	u
1,1-Dichloroethane	0.9505	1.0285	25.00	27.05	ug/L	8	30	0.1000	u
2-Butanone	0.5135	0.4470	25.00	21.76	ug/L	-13	40	0.0500	u
cis-1,2-Dichloroethene	0.6556	0.6128	25.00	23.37	ug/L	-7	30	0.0500	u
Chloroform	1.0380	0.9914	25.00	23.88	ug/L	-4	20	0.0500	u
1,1,1-Trichloroethane	0.6757	0.6805	25.00	25.18	ug/L	1	30	0.0500	u
Carbon Tetrachloride	0.2658	0.3050	25.00	28.69	ug/L	15	30	0.0500	u
1,2-Dichloroethane	0.4996	0.4982	25.00	24.93	ug/L	0	30	0.0500	u
Benzene	1.3466	1.3576	25.00	25.21	ug/L	1	30	0.0500	u
Trichloroethene	0.3340	0.3309	25.00	24.77	ug/L	-1	30	0.0500	u
1,2-Dichloropropane	0.4228	0.3779	25.00	22.35	ug/L	-11	20	0.0500	u
Bromodichloromethane	0.4914	0.5153	25.00	26.21	ug/L	5	30	0.0500	u
4-Methyl-2-Pentanone	0.6435	0.5886	25.00	22.87	ug/L	-9	40	0.0500	u
cis-1,3-Dichloropropene	0.6379	0.5907	25.00	23.15	ug/L	-7	30	0.0500	u
Toluene	0.8216	0.8715	25.00	26.52	ug/L	6	20	0.0500	u
trans-1,3-Dichloropropene	0.5933	0.5155	25.00	21.72	ug/L	-13	30	0.0500	u
1,1,2-Trichloroethane	0.2020	0.1922	25.00	23.79	ug/L	-5	30	0.0500	u
2-Hexanone	0.5472	0.4904	25.00	22.41	ug/L	-10	40	0.0500	u
Tetrachloroethene	0.2838	0.3400	25.00	29.95	ug/L	20	30	0.0500	u
Dibromochloromethane	0.4287	0.4311	25.00	25.14	ug/L	1	30	0.0500	u
Chlorobenzene	1.0173	0.9767	25.00	24.00	ug/L	-4	30	0.3000	u
Ethylbenzene	1.7142	1.8042	25.00	26.31	ug/L	5	20	0.0500	u
m,p-Xylenes	0.6280	0.6410	50.00	51.04	ug/L	2	30	0.0500	u
o-Xylene	0.6326	0.6311	25.00	24.94	ug/L	0	30	0.0500	u
Styrene	1.1734	1.1255	25.00	23.98	ug/L	-4	30	0.0500	u
Bromoform	0.3263	0.3102	25.00	23.77	ug/L	-5	30	0.1000	u
1,1,2,2-Tetrachloroethane	1.3236	1.2228	25.00	23.10	ug/L	-8	30	0.3000	u
Dibromofluoromethane	0.5927	0.5582	50.00	47.09	ug/L	-6	30	0.0500	u
1,2-Dichloroethane-d4	0.4006	0.4345	50.00	54.23	ug/L	8	30	0.0500	u
Toluene-d8	1.1589	1.1681	50.00	50.40	ug/L	1	30	0.0500	u
Bromofluorobenzene	1.2864	1.1717	50.00	45.54	ug/L	-9	30	0.0500	u

ISTD (ICAL ea916)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	622856	581103	-6.70	10.05	10.04	-0.01
1,4-Difluorobenzene	1030815	905326	-12.17	11.18	11.17	-0.01
Chlorobenzene-d5	882637	762278	-13.64	15.25	15.24	-0.01
1,4-Dichlorobenzene-d4	411664	379411	-7.83	17.97	17.96	-0.01

Analyst: BO Date: 03/20/07 Reviewer: ACM Date: 03/20/07

-=low bias c=CCV u=use

447112790019.3

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 447112790

Date : 03/19/07
Sequence : MSVOA05 ecj

Reference: ea916
Analyzed : 01/09/07 17:24

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	622856	10.05	1030815	11.18	882637	15.25	411664	17.97
		LOWER LIMIT	311428	9.55	515408	10.68	441319	14.75	205832	17.47
		UPPER LIMIT	1245712	10.55	2061630	11.68	1765274	15.75	823328	18.47
019	CCV/LCS	QC379891	581103	10.04	905326	11.17	762278	15.24	379411	17.96
021	BLANK	QC379862	544412	10.05	857014	11.17	735253	15.24	355138	17.96
022	SAMPLE	193262-009	537599	10.04	850909	11.17	719531	15.24	347926	17.96
023	SAMPLE	193262-010	542562	10.04	848701	11.17	713723	15.24	348169	17.96
024	SAMPLE	193262-017	523819	10.04	825598	11.17	704972	15.24	342552	17.96
025	SAMPLE	193262-018	527938	10.04	835509	11.17	705759	15.24	336364	17.96
026	SAMPLE	193262-019	523688	10.04	835881	11.17	709109	15.24	341293	17.96
027	SAMPLE	193262-020	511777	10.04	827625	11.17	701243	15.24	339467	17.96
028	SAMPLE	193262-022	510576	10.04	829302	11.17	712846	15.24	335503	17.96
029	SAMPLE	193262-023	517838	10.04	837915	11.16	700337	15.24	339045	17.96
030	SAMPLE	193277-001	519825	10.05	836320	11.17	699965	15.24	336089	17.96
031	SAMPLE	193329-002	515757	10.04	841284	11.17	713659	15.24	337867	17.96
032	SAMPLE	193329-003	513288	10.04	847623	11.17	697953	15.24	336779	17.96
033	SAMPLE	193329-004	509390	10.04	842305	11.17	703637	15.24	330726	17.96
034	SAMPLE	193329-005	507322	10.05	830279	11.17	700651	15.24	330181	17.96
035	SAMPLE	193329-006	513335	10.04	856711	11.17	707768	15.25	334835	17.97
036	SAMPLE	193329-007	510245	10.05	831112	11.17	699399	15.24	333543	17.96
037	MSS	193217-011	494632	10.05	827029	11.17	692363	15.24	329886	17.96
038	SAMPLE	193329-001	503626	10.04	841853	11.17	707040	15.24	333439	17.96
039	MS	QC379910	500518	10.04	838970	11.17	711503	15.24	360069	17.96
040	MSD	QC379911	518512	10.04	850979	11.17	708901	15.24	357191	17.96

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447013464

Instrument : MSVOA05 Begun : 01/09/07 08:24
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ea901	X	IB			01/09/07 08:24	1.0	1	
002	ea902	X	BFB			01/09/07 09:00	1.0	2	
003	ea903	X	50PPB			01/09/07 09:17	1.0	3 4 5 1	
004	ea904	TUN	BFB			01/09/07 10:23	1.0	2	
005	ea905	X	LOW PT			01/09/07 10:51	1.0	1	
006	ea906	X	LOW PT			01/09/07 11:46	1.0	1	
007	ea907	X	IB			01/09/07 12:18	1.0	1	
008	ea908	TUN	BFB			01/09/07 13:24	1.0	2	
009	ea909	IB	CALIB IB			01/09/07 13:40	1.0	1	
010	ea910	ICAL	0.25/0.5PPB			01/09/07 14:12	1.0	3 4 5 1	
011	ea911	ICAL	0.5/1PPB			01/09/07 14:44	1.0	3 4 5 1	
012	ea912	ICAL	2PPB			01/09/07 15:16	1.0	3 4 5 1	
013	ea913	ICAL	5PPB			01/09/07 15:48	1.0	3 4 5 1	
014	ea914	ICAL	10PPB			01/09/07 16:20	1.0	3 4 5 1	
015	ea915	ICAL	20PPB			01/09/07 16:52	1.0	3 4 5 1	
016	ea916	ICAL	50PPB			01/09/07 17:24	1.0	3 4 5 1	
017	ea917	ICAL	75PPB			01/09/07 17:56	1.0	3 4 5 1	
018	ea918	ICAL	100PPB			01/09/07 18:28	1.0	3 4 5 1	
019	ea919	X	25PPB			01/09/07 19:00	1.0	6 1	
020	ea920	X	25PPB			01/09/07 19:32	1.0	7 8 1	
021	ea921	X	C-MARKER			01/09/07 20:04	1.0	1	
022	ea922	X	IB			01/09/07 20:36	1.0	1	
023	ea923	IB	CALIB IB			01/09/07 21:08	1.0	1	
024	ea924	ICAL	TVH50PPB			01/09/07 21:39	1.0	9 1	
025	ea925	ICAL	TVH100PPB			01/09/07 22:11	1.0	9 1	
026	ea926	ICAL	TVH200PPB			01/09/07 22:43	1.0	9 1	
027	ea927	ICAL	TVH500PPB			01/09/07 23:15	1.0	9 1	
028	ea928	ICAL	TVH1000PPB			01/09/07 23:47	1.0	9 1	
029	ea929	ICAL	TVH3000PPB			01/10/07 00:19	1.0	9 1	
030	ea930	ICAL	TVH5000PPB			01/10/07 00:51	1.0	9 1	
031	ea931	X	IB			01/10/07 01:23	1.0	1	

BO 01/10/07 : TVH ical not used. See eaa04 for ICV

Analyst: BO Date: 01/10/07 Reviewer: LW Date: 01/10/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5241 7=S5168 8=S5052 9=S4989

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447014875

Instrument : MSVOA05 Begun : 01/10/07 07:55
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	eaa01	X	IB			01/10/07 07:55	1.0	1	
002	eaa02	TUN	BFB			01/10/07 08:23	1.0	2	
003	eaa03	CCV	30PPB			01/10/07 08:40	1.0	3 4 5 1	
004	eaa04	ICV/BS	QC371201	Water	121090	01/10/07 09:26	1.0	6 7 8 1	
005	eaa05	BSD	QC371202	Water	121090	01/10/07 09:58	1.0	6 7 8 1	
006	eaa06	X	IB			01/10/07 10:30	1.0	1	
007	eaa07	BLANK	QC371205	Water	121090	01/10/07 11:02	1.0	1	
008	eaa08	SAMPLE	191972-005	Water	121090	01/10/07 11:34	1.0	1	
009	eaa09	SAMPLE	191988-012	Water	121090	01/10/07 12:06	1.0	1	
010	eaa10	SAMPLE	191983-004	Water	121090	01/10/07 12:38	1.0	1	
011	eaa11	SAMPLE	191963-007	Water	121090	01/10/07 13:10	1.0	1	
012	eaa12	SAMPLE	191963-008	Water	121090	01/10/07 13:41	1.0	1	
013	eaa13	SAMPLE	191963-009	Water	121090	01/10/07 14:13	1.0	1	
014	eaa14	SAMPLE	191972-001	Water	121090	01/10/07 14:45	1.0	1	
015	eaa15	SAMPLE	191972-002	Water	121090	01/10/07 15:17	1.0	1	pH > 2
016	eaa16	SAMPLE	191972-003	Water	121090	01/10/07 15:49	1.0	1	
017	eaa17	SAMPLE	191972-004	Water	121090	01/10/07 16:21	1.0	1	
018	eaa18	SAMPLE	191972-006	Water	121090	01/10/07 16:53	1.0	1	pH > 2
019	eaa19	SAMPLE	191986-001	Water	121090	01/10/07 17:25	1.0	1	
020	eaa20	SAMPLE	191983-001	Water	121090	01/10/07 17:57	1.0	1	
021	eaa21	SAMPLE	191983-002	Water	121090	01/10/07 18:28	1.0	1	
022	eaa22	SAMPLE	191983-003	Water	121090	01/10/07 19:01	1.0	1	
023	eaa23	SAMPLE	191990-001	Water	121090	01/10/07 19:33	1.0	1	
024	eaa24	SAMPLE	191989-001	Water	121090	01/10/07 20:05	1.0	1	
025	eaa25	X	IB			01/10/07 20:36	1.0	1	
026	eaa26	X	IB			01/10/07 21:09	1.0	1	
027	eaa27	X	IB			01/10/07 21:40	1.0	1	

Analyst: BO Date: 01/11/07 Reviewer: LW Date: 01/11/07

Standards used: 1=S5079 2=S5117 3=S5170 4=S5152 5=S4713 6=S5168 7=S5241 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 447112790

Instrument : MSVOA05 Begun : 03/19/07 07:50
Method : EPA 8260B SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ecj01	X	IB			03/19/07 07:50	1.0	1
002	ecj02	X	BFB			03/19/07 08:18	1.0	2
003	ecj03	X	30PPB			03/19/07 08:34	1.0	3 4 5 1
004	ecj04	X	BFB			03/19/07 09:10	1.0	2
005	ecj05	X	30PPB			03/19/07 09:26	1.0	3 4 5 1
006	ecj06	X	BFB			03/19/07 09:57	1.0	2
007	ecj07	X	30PPB			03/19/07 10:13	1.0	3 4 5 1
008	ecj08	X	BFB			03/19/07 10:56	1.0	2
009	ecj09	X	50PPB			03/19/07 11:12	1.0	3 4 5 1
010	ecj10	X	BFB			03/19/07 12:03	1.0	2
011	ecj11	X	50PPB			03/19/07 12:19	1.0	3 4 5 1
012	ecj12	X	BFB			03/19/07 13:10	1.0	2
013	ecj13	X	QC379860	Water	123261	03/19/07 13:27	1.0	6 7 8 1
014	ecj14	X	BFB			03/19/07 13:58	1.0	2
015	ecj15	X	QC379860	Water	123261	03/19/07 14:14	1.0	6 7 8 1
016	ecj16	X	BFB			03/19/07 14:45	1.0	2
017	ecj17	X	QC379860	Water	123261	03/19/07 15:01	1.0	6 7 8 1
018	ecj18	TUN	BFB			03/19/07 15:39	1.0	2
019	ecj19	CCV/LCS	QC379891	Water	123261	03/19/07 15:55	1.0	6 7 8 9
020	ecj20	X	IB			03/19/07 16:38	1.0	9
021	ecj21	BLANK	QC379862	Water	123261	03/19/07 17:10	1.0	9
022	ecj22	SAMPLE	193262-009	Water	123261	03/19/07 17:42	1.0	9
023	ecj23	SAMPLE	193262-010	Water	123261	03/19/07 18:13	1.0	9
024	ecj24	SAMPLE	193262-017	Water	123261	03/19/07 18:45	1.0	9
025	ecj25	SAMPLE	193262-018	Water	123261	03/19/07 19:17	1.0	9
026	ecj26	SAMPLE	193262-019	Water	123261	03/19/07 19:49	1.0	9
027	ecj27	SAMPLE	193262-020	Water	123261	03/19/07 20:21	1.0	9
028	ecj28	SAMPLE	193262-022	Water	123261	03/19/07 20:53	1.0	9
029	ecj29	SAMPLE	193262-023	Water	123261	03/19/07 21:25	1.0	9
030	ecj30	SAMPLE	193277-001	Water	123261	03/19/07 21:57	1.0	9
031	ecj31	SAMPLE	193329-002	Water	123261	03/19/07 22:29	1.0	9
032	ecj32	SAMPLE	193329-003	Water	123261	03/19/07 23:01	1.0	9
033	ecj33	SAMPLE	193329-004	Water	123261	03/19/07 23:33	1.0	9
034	ecj34	SAMPLE	193329-005	Water	123261	03/20/07 00:05	1.0	9
035	ecj35	SAMPLE	193329-006	Water	123261	03/20/07 00:37	1.0	9
036	ecj36	SAMPLE	193329-007	Water	123261	03/20/07 01:08	1.0	9
037	ecj37	MSS	193217-011	Water	123261	03/20/07 01:40	1.0	9
038	ecj38	SAMPLE	193329-001	Water	123261	03/20/07 02:12	62.50	9
039	ecj39	MS	QC379910	Water	123261	03/20/07 02:44	1.0	9 6 7 8
040	ecj40	MSD	QC379911	Water	123261	03/20/07 03:16	1.0	9 6 7 8
041	ecj41	X	IB			03/20/07 03:48	1.0	9
042	ecj42	X	IB			03/20/07 04:20	1.0	9
043	ecj43	X	IB			03/20/07 04:52	1.0	9
044	ecj44	X	TVH2000			03/20/07 05:24	1.0	9

BO 03/19/07 : ecj04, ecj06, ecj08, ecj10 adj tune. ecj12 autotune. ecj15, ecj17 used different aliquots of standards.

Analyst: BO Date: 03/20/07 Reviewer: LW Date: 03/20/07

Standards used: 1=S5426 2=S5117 3=S5618 4=S5617 5=S5194 6=S5537 7=S5614 8=S5723 9=S5736

REPORTING SUMMARY FOR 193277 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLMEC	VCRME	BLEA	CCEE	AC1N	DCEL	MTS	DTB	DCE1	VAC2	DCA	MCC1	EAC	DCM	DCL	TCM	TCA	CCL	TCA	DCA	BCL	TCA	DEE	DPA	BCM	MCK	DB1	BDE	DB1	TC1	HCL	PCA	DMO	CBE	EBX	XZE	XCX	TBE	SYE	TYE	PMM	DAE	DFM	BC2	BZ2	BCF
193277-001	MSVOA05	03/19/07 21:57	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379862	MSVOA05	03/19/07 17:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379891	MSVOA05	03/19/07 15:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379910	MSVOA05	03/20/07 02:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC379911	MSVOA05	03/20/07 03:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 3/19/07
PREPPED BY: [illegible]

123261 WATER

	SAMPLE NUM	AMT o/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			CDEF	<2			5	MB 1X, MSS/MSI/MSD 010	
1	193217-11		O	⊥				1X	
2	193277-1		~~K~~					1X in Prepped	
3	~~193262-7~~		~~A~~	<2				TB	
4	193262-9		~~B~~C					1X	
5	-10		B						
6	-17		A						
7	-18		B						
8	-19		C						
9	-20		B						
0	-22		⊥	⊥					
1	-23		B	<2				62.5X prepped	in fridge
2	193329-1							1X	
3	-2								
4	-3								
5	-4								
16	-5		⊥						
17	-6		C					1X	
18	-7								
19									
20									
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PREPFORM.XLS

7/21/95

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/26/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	23	50	11	22	10	10
1,1-Dichloroethene	ug/L	0.094	0.12	0.062	0.17	0.10	0.17	0.094	0.11
Benzene	ug/L	0.082	0.063	0.060	0.061	0.12	0.10	0.25	0.084
Trichloroethene	ug/L	0.084	0.085	0.18	0.17	0.11	0.13	0.12	0.086
Toluene	ug/L	0.10	0.12	0.12	0.092	0.062	0.085	0.13	0.14
Chlorobenzene	ug/L	0.063	0.11	0.11	0.16	0.16	0.098	0.16	0.075
Freon 12	ug/L	0.067	0.13	0.22	0.062	0.15	0.47	0.24	0.20
Chloromethane	ug/L	0.20	0.24	0.12	0.18	0.13	0.34	0.24	0.20
Vinyl Chloride	ug/L	0.13	0.087	0.10	0.066	0.10	0.097	0.11	0.039
Bromomethane	ug/L	0.39	0.22	0.31	0.13	0.31	0.34	0.15	0.23
Chloroethane	ug/L	0.21	0.13	0.15	0.16	0.13	0.45	0.20	0.18
Trichlorofluoromethane	ug/L	0.098	0.12	0.17	0.10	0.080	0.46	0.18	0.19
Acetone	ug/L	0.43	0.48	0.21	0.85	0.16	0.20	1.0	0.15
Freon 113	ug/L	0.16	0.13	0.13	0.25	0.071	0.19	0.14	0.16
Methylene Chloride	ug/L	0.19	0.20	0.11	0.12	0.16	0.29	0.18	0.086
MTBE	ug/L	0.045	0.072	0.065	0.045	0.040	0.15	0.047	0.068
Carbon Disulfide	ug/L	0.093	0.14	0.086	0.076	0.11	0.14	0.054	0.066
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.18	0.051	0.064	0.15	0.12	0.094
Vinyl Acetate	ug/L	0.17	0.11	0.084	0.99	0.40	0.13	0.80	0.13
1,1-Dichloroethane	ug/L	0.023	0.077	0.048	0.090	0.11	0.14	0.055	0.10
2-Butanone	ug/L	0.29	0.10	0.20	0.50	0.099	0.23	0.41	0.081
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.083	0.12	0.042	0.12	0.14	0.16
2,2-Dichloropropane	ug/L	0.20	0.13	0.077	0.12	0.066	0.15	0.062	0.14
Chloroform	ug/L	0.12	0.080	0.086	0.060	0.11	0.16	0.16	0.084
Bromochloromethane	ug/L	0.14	0.087	0.10	0.18	0.11	0.18	0.093	0.11
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.14	0.11	0.061	0.12	0.11	0.096
1,1-Dichloropropene	ug/L	0.071	0.054	0.081	0.16	0.16	0.11	0.14	0.084
Carbon Tetrachloride	ug/L	0.15	0.13	0.098	0.17	0.15	0.14	0.11	0.14
1,2-Dichloroethane	ug/L	0.068	0.053	0.099	0.096	0.12	0.18	0.086	0.094
1,2-Dichloropropane	ug/L	0.14	0.067	0.079	0.071	0.14	0.16	0.14	0.086
Bromodichloromethane	ug/L	0.090	0.078	0.067	0.074	0.10	0.14	0.065	0.094
Dibromomethane	ug/L	0.076	0.10	0.092	0.16	0.11	0.18	0.070	0.089
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.057	0.20	0.13	0.14	0.17	0.067
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.056	0.20	0.16	0.094	0.048	0.080
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.044	0.073	0.14	0.13	0.069	0.059
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.14	0.19	0.15	0.21	0.15	0.12
2-Hexanone	ug/L	0.076	0.062	0.047	0.34	0.11	0.13	0.46	0.097
1,3-Dichloropropane	ug/L	0.056	0.065	0.061	0.063	0.10	0.14	0.15	0.049
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.22	0.14	0.092	0.20	0.089
Dibromochloromethane	ug/L	0.067	0.069	0.10	0.085	0.056	0.15	0.10	0.094
1,2-Dibromoethane	ug/L	0.14	0.050	0.10	0.073	0.11	0.13	0.099	0.088
2-Chloroethylvinylether	ug/L	0.46	0.12	0.24	0.17	0.14	0.19		0.14
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.10	0.11	0.14	0.10	0.16	0.16
Ethylbenzene	ug/L	0.067	0.11	0.075	0.17	0.041	0.11	0.14	0.069
m,p-Xylenes	ug/L	0.24	0.077	0.14	0.27	0.17	0.19	0.30	0.14
o-Xylene	ug/L	0.096	0.041	0.092	0.11	0.16	0.087	0.16	0.078
Styrene	ug/L	0.083	0.032	0.098	0.085	0.16	0.11	0.090	0.055
Bromoform	ug/L	0.16	0.058	0.11	0.18	0.094	0.12	0.10	0.10
Isopropylbenzene	ug/L	0.072	0.030	0.090	0.18	0.059	0.11	0.19	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.086	0.047	0.13	0.20	0.13	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 03/26/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.074	0.11	0.17	0.19	0.26	0.072
Propylbenzene	ug/L	0.087	0.031	0.063	0.21	0.023	0.12	0.15	0.088
Bromobenzene	ug/L	0.080	0.040	0.10	0.19	0.12	0.17	0.10	0.088
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.047	0.14	0.057	0.13	0.19	0.069
2-Chlorotoluene	ug/L	0.097	0.049	0.068	0.15	0.025	0.10	0.18	0.080
4-Chlorotoluene	ug/L	0.10	0.074	0.043	0.14	0.037	0.14	0.14	0.078
tert-Butylbenzene	ug/L	0.097	0.095	0.075	0.19	0.038	0.13	0.17	0.082
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.066	0.12	0.069	0.082	0.15	0.099
sec-Butylbenzene	ug/L	0.10	0.10	0.062	0.17	0.088	0.088	0.14	0.097
para-Isopropyl Toluene	ug/L	0.068	0.11	0.12	0.14	0.056	0.071	0.19	0.075
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.097	0.18	0.060	0.13	0.17	0.094
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.095	0.18	0.038	0.10	0.15	0.072
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.18	0.21	0.11	0.11	0.073
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.080	0.14	0.16	0.16	0.20	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.21	0.22	0.13	0.17	0.45	0.18
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.12	0.17	0.29	0.21	0.11	0.065	0.22	0.17
Naphthalene	ug/L	0.086	0.10	0.060	0.10	0.091	0.11	0.19	0.052
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.10	0.20	0.095	0.10	0.22	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	0.83	2.5	1.3	1.1	1.6	1.3
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.063	0.027	0.030	0.14	0.040	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.024	0.20	0.033	0.13	0.074	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.055	0.054	0.048	0.10	0.049	0.17
Isopropanol	ug/L	3.7	1.2	1.6	6.6	1.5	1.4	0.89	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L		2.4	0.21	1.6	1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	1.1	0.79	1.4	2.1	1.2	0.70
Tetramethyl THF	ug/L	0.061	0.055	0.062	0.20	0.10	0.13	0.13	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5	10	11
Gasoline C7-C12	ug/L		18		2.4	13	7.7	3.5	11
Dibromofluoromethane	ug/L			1.8	2.4		1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L				2.4		1.7	2.3	1.0
Toluene-d8	ug/L				1.1		1.5	1.5	0.96
Bromofluorobenzene	ug/L				1.2		2.5	1.6	0.62
Trifluorotoluene	ug/L			0.065	0.21				

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW030807A	Batch#:	123116
Lab ID:	193277-001	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.1

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	86	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379265	Batch#:	123116
Matrix:	Water	Prepared:	03/14/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND #	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	74	65-135
Decachlorobiphenyl	128	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	123116
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/16/07

Type: BS Lab ID: QC379266

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1876	94	65-135
Heptachlor	0.2000	0.1753	88	65-135
Aldrin	0.2000	0.1801	90	65-135
Dieldrin	0.4000	0.3629	91	65-135
Endrin	0.4000	0.3620	90	65-135
4,4'-DDT	0.4000	0.3513	88	65-135

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	93	65-135

Type: BSD Lab ID: QC379267

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1901	95	65-135	1	35
Heptachlor	0.2000	0.1794	90	65-135	2	35
Aldrin	0.2000	0.1818	91	65-135	1	35
Dieldrin	0.4000	0.3600	90	65-135	1	35
Endrin	0.4000	0.3637	91	65-135	0	35
4,4'-DDT	0.4000	0.3495	87	65-135	1	35

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	95	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 PEST Water: EPA 8081A

Inst : GC16
Calnum : 237105809001
Units : pg/ul

Name : gc16pest_073
Date : 14-MAR-2007 22:04
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	073_017	237105809017	PEST_1	14-MAR-2007 22:04	S5553
L2	073_018	237105809018	PEST_2	14-MAR-2007 22:23	S5554
L3	073_019	237105809019	PEST_3	14-MAR-2007 22:42	S5555
L4	073_021	237105809021	PEST_5	14-MAR-2007 23:21	S5049
L5	073_022	237105809022	PEST_6	14-MAR-2007 23:40	S5050
L6	073_023	237105809023	PEST_7	14-MAR-2007 23:59	S5051
L7	073_030	237105809030	PEST_4	15-MAR-2007 11:21	S5556

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	3772.5	4155.0	4430.6	6020.6	7400.7	7492.6	5273.8	AVRG		1.82E-4		5506.5	**28**	0.995	20	rsd ***
gamma-BHC	A	3518.5	3785.4	4038.3	5250.2	6234.0	6180.6	4692.6	AVRG		2.08E-4		4814.2	**23**	0.995	20	rsd ***
beta-BHC	A	3282.0	3331.2	3224.4	3504.3	3627.8	3289.6	3232.7	AVRG		2.98E-4		3356.0	5	0.995	20	
delta-BHC	A	3378.0	3574.0	3685.3	4838.8	5762.1	5732.4	4176.6	AVRG		2.25E-4		4449.6	**23**	0.995	20	rsd ***
Heptachlor	A	4243.5	4354.0	4303.0	4762.0	4902.5	4601.5	4244.5	AVRG		2.23E-4		4487.3	6	0.995	20	
Aldrin	A	4924.0	5125.8	5059.4	5729.6	6407.9	6163.5	5221.0	AVRG		1.81E-4		5518.7	11	0.995	20	
Heptachlor epoxide	A	5214.0	5376.6	5078.6	5338.7	5520.3	5086.8	4945.5	AVRG		1.91E-4		5222.9	4	0.995	20	
gamma-Chlordane	A	5100.5	5179.2	4976.1	5296.0	5543.4	5117.7	4887.4	AVRG		1.94E-4		5157.2	4	0.995	20	
alpha-Chlordane	A	4621.0	4860.6	4702.7	4994.3	5327.4	4863.4	4568.4	AVRG		2.06E-4		4848.3	5	0.995	20	
4,4'-DDE	A	3323.0	3484.2	3431.1	4086.2	4415.8	4091.5	3621.7	AVRG		2.65E-4		3779.1	11	0.995	20	
Endosulfan I	A	5417.0	5310.0	5066.5	5428.1	5564.0	5167.6	5027.2	AVRG		1.89E-4		5282.9	4	0.995	20	
Dieldrin	A	4121.8	4263.3	4169.3	4708.0	5009.9	4591.6	4286.1	AVRG		2.25E-4		4450.0	7	0.995	20	
Endrin	A	3373.0	3425.3	3103.1	3501.6	3606.9	3339.7	3108.6	AVRG		2.98E-4		3351.2	6	0.995	20	
4,4'-DDD	A	2063.0	2350.1	2226.0	2808.1	3122.4	2922.4	2450.2	AVRG		3.90E-4		2563.2	15*	0.995	20	
Endosulfan II	A	5679.8	4286.3	4293.9	4125.4	4230.7	3823.3	3852.9	AVRG		2.31E-4		4327.5	14	0.995	20	
4,4'-DDT	A	1494.0	1771.1	1631.6	2112.8	2218.3	2047.7	1800.7	AVRG		5.35E-4		1868.0	14	0.995	20	
Methoxychlor	A	1092.5	1253.7	1120.5	1289.2	1215.7	1003.3	1112.3	AVRG		8.66E-4		1155.3	9	0.995	20	
Endosulfan sulfate	A	3574.3	3746.4	3475.0	3721.6	3694.8	3232.3	3411.7	AVRG		2.82E-4		3550.9	5	0.995	20	
Endrin ketone	A	3024.5	3317.3	3256.6	3893.1	4031.5	3563.8	3499.9	AVRG		2.85E-4		3512.4	10	0.995	20	
TCMX	A	5785.5	6111.9	6155.9	6646.4	6782.4	6066.7	6208.0	AVRG		1.60E-4		6251.0	6	0.995	20	
Decachlorobiphenyl	A	3395.8	3690.9	3206.6	3325.3	3035.8		3135.0	AVRG		3.03E-4		3298.2	7	0.995	20	
alpha-BHC	B	7297.0	7420.4	7520.7	9034.9	10627	10855	7813.5	AVRG		1.16E-4		8652.6	18	0.995	20	
gamma-BHC	B	8689.5	7165.4	7345.7	8101.6	8993.9	8942.5	6827.5	AVRG		1.25E-4		8009.4	11	0.995	20	
beta-BHC	B	5155.5	5180.4	4877.1	5006.4	5027.3	4545.8	4470.3	AVRG		2.04E-4		4894.7	6	0.995	20	
delta-BHC	B	5701.0	5886.6	5757.5	6963.8	7960.9	7877.6	5798.2	AVRG		1.52E-4		6563.6	16	0.995	20	
Heptachlor	B	6663.0	6750.4	6162.1	6467.8	6511.6	6153.3	5510.7	AVRG		1.58E-4		6317.0	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8377.0	8210.8	8078.3	8591.9	9540.6	9216.2	7918.1	AVRG		1.17E-4		8561.8	7	0.995	20	
Heptachlor epoxide	B	8520.0	8507.6	7856.8	7990.7	8078.7	7440.9	7179.9	AVRG		1.26E-4		7939.2	6	0.995	20	
gamma-Chlordane	B	8762.0	8724.6	8082.1	8172.8	8310.1	7642.6	7440.1	AVRG		1.23E-4		8162.0	6	0.995	20	
alpha-Chlordane	B	8604.0	8568.4	7952.0	7972.6	8053.6	7289.0	7329.0	AVRG		1.26E-4		7966.9	7	0.995	20	
4,4'-DDE	B	5401.0	5623.7	5340.4	6025.4	6472.4	6051.9	5373.3	AVRG		1.74E-4		5755.4	8	0.995	20	
Endosulfan I	B	8033.5	8107.4	7528.9	7637.5	7835.7	7204.8	7003.7	AVRG		1.31E-4		7621.6	5	0.995	20	
Dieldrin	B	6780.3	6803.8	6432.3	6982.2	7322.1	6785.4	6194.9	AVRG		1.48E-4		6757.3	5	0.995	20	
Endrin	B	4573.0	4805.3	4341.2	4799.8	4939.6	4594.5	4125.7	AVRG		2.18E-4		4597.0	6	0.995	20	
4,4'-DDD	B	3621.8	3900.0	3556.3	3998.7	4241.3	3945.7	3265.7	AVRG		2.64E-4		3789.9	9	0.995	20	
Endosulfan II	B	6897.8	6978.8	6200.2	6446.3	6380.6	5715.0	5585.9	AVRG		1.58E-4		6314.9	8	0.995	20	
4,4'-DDT	B	2444.5	2587.3	2296.4	2602.9	2668.5	2412.9	2167.2	AVRG		4.07E-4		2454.2	7	0.995	20	
Methoxychlor	B	1317.2	1408.5	1223.0	1370.7	1302.7	1112.3	1048.4	AVRG		7.97E-4		1254.7	11	0.995	20	
Endosulfan sulfate	B	5660.3	5651.1	5100.1	5276.7	5192.8	4578.4	4552.7	AVRG		1.94E-4		5144.6	9	0.995	20	
Endrin ketone	B	4583.3	4952.3	4641.9	5367.7	5520.0	4973.5	4373.0	AVRG		2.03E-4		4915.9	9	0.995	20	
TCMX	B	9996.5	9788.2	9450.0	9683.1	9928.3	9130.9	9166.8	AVRG		1.04E-4		9592.0	4	0.995	20	
Decachlorobiphenyl	B	5971.5	6247.4	5235.0	5222.9	4770.4		4906.9	AVRG		1.85E-4		5392.3	11	0.995	20	
Average EPA 8081A	A												(n=22)	10		20	
Average EPA 8081A	B												(n=22)	8		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
beta-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
delta-BHC	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Aldrin	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor epoxide	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-Chlordane	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
alpha-Chlordane	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
4,4'-DDE	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan I	A	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Dieldrin	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDD	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan II	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDT	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Methoxychlor	A	20.000	50.000	100.00	250.00	500.00	1000.0	200.00	pg/ul
Endosulfan sulfate	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin ketone	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
TCMX	A	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Decachlorobiphenyl	A	4.0000	10.000	20.000	50.000	100.00		40.000	pg/ul
alpha-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
beta-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
delta-BHC	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Aldrin	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Heptachlor epoxide	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
gamma-Chlordane	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
alpha-Chlordane	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
4,4'-DDE	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan I	B	2.0000	5.0000	10.000	25.000	50.000	100.00	20.000	pg/ul
Dieldrin	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDD	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endosulfan II	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
4,4'-DDT	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Methoxychlor	B	20.000	50.000	100.00	250.00	500.00	1000.0	200.00	pg/ul
Endosulfan sulfate	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Endrin ketone	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
TCMX	B	4.0000	10.000	20.000	50.000	100.00	200.00	40.000	pg/ul
Decachlorobiphenyl	B	4.0000	10.000	20.000	50.000	100.00		40.000	pg/ul

RSD=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 PEST Water
EPA 8081A

Inst : GC16 Name : gc16pest_073
Calnum : 237105809001 Cal Date: 14-MAR-2007

ICV 237105809026 (073_026 15-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	5506.5	5696.1	25.00	25.86	pg/ul	3	15	
gamma-BHC	A	4814.2	5016.3	25.00	26.05	pg/ul	4	15	
beta-BHC	A	3356.0	3304.4	25.00	24.62	pg/ul	-2	15	
delta-BHC	A	4449.6	4785.4	25.00	26.89	pg/ul	8	15	
Heptachlor	A	4487.3	4419.8	25.00	24.62	pg/ul	-2	15	
Aldrin	A	5518.7	5551.7	25.00	25.15	pg/ul	1	15	
Heptachlor epoxide	A	5222.9	5145.5	25.00	24.63	pg/ul	-1	15	
gamma-Chlordane	A	5157.2	5305.2	25.00	25.72	pg/ul	3	15	
alpha-Chlordane	A	4848.3	5082.6	25.00	26.21	pg/ul	5	15	
4,4'-DDE	A	3779.1	3671.3	25.00	24.29	pg/ul	-3	15	
Endosulfan I	A	5282.9	5170.3	25.00	24.47	pg/ul	-2	15	
Dieldrin	A	4450.0	4162.8	25.00	23.39	pg/ul	-6	15	
Endrin	A	3351.2	3357.9	25.00	25.05	pg/ul	0	15	
4,4'-DDD	A	2563.2	2340.6	25.00	22.83	pg/ul	-9	15	
Endosulfan II	A	4327.5	4762.2	25.00	27.51	pg/ul	10	15	
4,4'-DDT	A	1868.0	1862.9	25.00	24.93	pg/ul	0	15	
Methoxychlor	A	1155.3	1432.3	25.00	30.99	pg/ul	**24**	15	v+ ***
Endosulfan sulfate	A	3550.9	3615.6	25.00	25.46	pg/ul	2	15	
Endrin ketone	A	3512.4	3696.3	25.00	26.31	pg/ul	5	15	
alpha-BHC	B	8652.6	8612.2	25.00	24.88	pg/ul	0	15	
gamma-BHC	B	8009.4	8029.2	25.00	25.06	pg/ul	0	15	
beta-BHC	B	4894.7	4759.0	25.00	24.31	pg/ul	-3	15	
delta-BHC	B	6563.6	6847.0	25.00	26.08	pg/ul	4	15	
Heptachlor	B	6317.0	6082.4	25.00	24.07	pg/ul	-4	15	
Aldrin	B	8561.8	8442.6	25.00	24.65	pg/ul	-1	15	
Heptachlor epoxide	B	7939.2	7662.0	25.00	24.13	pg/ul	-3	15	
gamma-Chlordane	B	8162.0	8089.5	25.00	24.78	pg/ul	-1	15	
alpha-Chlordane	B	7966.9	7860.9	25.00	24.67	pg/ul	-1	15	
4,4'-DDE	B	5755.4	5683.6	25.00	24.69	pg/ul	-1	15	
Endosulfan I	B	7621.6	7539.0	25.00	24.73	pg/ul	-1	15	
Dieldrin	B	6757.3	6527.0	25.00	24.15	pg/ul	-3	15	
Endrin	B	4597.0	4644.2	25.00	25.26	pg/ul	1	15	
4,4'-DDD	B	3789.9	3732.7	25.00	24.62	pg/ul	-2	15	
Endosulfan II	B	6314.9	6313.0	25.00	24.99	pg/ul	0	15	
4,4'-DDT	B	2454.2	2560.3	25.00	26.08	pg/ul	4	15	
Methoxychlor	B	1254.7	1694.6	25.00	33.77	pg/ul	**35**	15	v+ ***
Endosulfan sulfate	B	5144.6	5314.1	25.00	25.82	pg/ul	3	15	
Endrin ketone	B	4915.9	5216.3	25.00	26.53	pg/ul	6	15	
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807102991001
Units : pg

Name : gc23pest_071
Date : 12-MAR-2007 20:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_018	807102991018	PEST_1	12-MAR-2007 20:02	S5553
L2	071_019	807102991019	PEST_2	12-MAR-2007 20:24	S5554
L3	071_020	807102991020	PEST_3	12-MAR-2007 20:45	S5555
L4	071_021	807102991021	PEST_4	12-MAR-2007 21:07	S5556
L5	071_022	807102991022	PEST_5	12-MAR-2007 21:28	S5049
L6	071_023	807102991023	PEST_6	12-MAR-2007 21:49	S5050
L7	071_024	807102991024	PEST_7	12-MAR-2007 22:11	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	8287.0	8058.0	7084.2	6450.4	7781.5	7196.6	6140.7	AVRG		1.37E-4		7285.5	11	0.995	20	
gamma-BHC	A	7685.0	7315.2	6305.2	5715.7	7032.6	6447.7	5570.9	AVRG		1.52E-4		6581.8	12	0.995	20	
beta-BHC	A	3095.0	2928.4	2536.5	2289.9	2848.4	2548.5	2289.8	AVRG		3.78E-4		2648.1	12	0.995	20	
delta-BHC	A	7865.5	7353.0	6225.3	5569.8	7232.0	6426.1	5629.1	AVRG		1.51E-4		6614.4	13	0.995	20	
Heptachlor	A	7061.0	6909.2	5846.8	5223.0	6670.1	6035.2	5240.0	AVRG		1.63E-4		6140.7	12	0.995	20	
Aldrin	A	7383.0	7000.8	6064.0	5394.5	6508.6	5980.0	5185.6	AVRG		1.61E-4		6216.6	13	0.995	20	
Heptachlor epoxide	A	6466.5	6208.2	5333.4	4709.8	5820.6	5240.0	4556.7	AVRG		1.83E-4		5476.4	13	0.995	20	
gamma-Chlordane	A	6326.0	6042.0	5931.0	4609.5	5730.7	5240.1	4648.2	AVRG		1.82E-4		5503.9	12	0.995	20	
alpha-Chlordane	A	5679.5	5906.6	4846.8	4488.6	5429.4	5019.6	4388.7	AVRG		1.96E-4		5108.5	11	0.995	20	
4,4'-DDE	A	5914.8	5544.2	4606.7	4006.1	5253.9	4670.3	3880.0	AVRG		2.07E-4		4839.4	16	0.995	20	
Endosulfan I	A	5736.5	5618.8	5025.3	4220.5	5485.7	4875.1	4360.5	AVRG		1.98E-4		5046.0	12	0.995	20	
Dieldrin	A	6185.5	5895.7	4968.6	4380.2	5518.9	4863.6	3946.9	AVRG		1.96E-4		5108.5	16	0.995	20	
Endrin	A	5318.0	4994.3	4129.3	3550.0	4688.8	4133.9	3466.7	AVRG		2.31E-4		4325.8	16	0.995	20	
4,4'-DDD	A	4665.8	4268.2	3556.8	3062.0	4163.8	3766.0	3232.3	AVRG		2.62E-4		3816.4	15	0.995	20	
Endosulfan II	A	5287.8	4906.4	4038.9	3541.4	4571.7	4019.6	3467.7	AVRG		2.35E-4		4261.9	16	0.995	20	
4,4'-DDT	A	4666.5	4529.0	3675.4	3162.4	4431.1	4004.5	3505.8	AVRG		2.50E-4		3996.4	14	0.995	20	
Methoxychlor	A	2148.9	1896.2	1492.0	1261.8	1727.5	1392.3		AVRG		6.05E-4		1653.1	20	0.995	20	
Endosulfan sulfate	A	4723.5	4400.2	3608.3	3073.6	4101.6	3672.3	3236.4	AVRG		2.61E-4		3830.8	16	0.995	20	
Endrin ketone	A	5529.5	5005.7	4116.5	3508.4	4729.0	4163.8	3492.8	AVRG		2.29E-4		4363.7	17	0.995	20	
TCMX	A	4485.0	4401.6	3829.2	3464.1	4099.7	3760.0	3207.8	AVRG		2.57E-4		3892.5	12	0.995	20	
Decachlorobiphenyl	A	4005.8	3708.2	2905.0	2467.0	3514.3	3034.9	2832.3	AVRG		3.12E-4		3209.6	17	0.995	20	
alpha-BHC	B	10379	9720.8	9185.8	9304.8	9341.7	9054.6	8238.2	AVRG		1.07E-4		9317.8	7	0.995	20	
gamma-BHC	B	10327	8906.2	8272.4	8372.2	8386.3	8023.0	7364.1	AVRG		1.17E-4		8521.5	11	0.995	20	
beta-BHC	B	3760.0	3533.6	3293.4	3339.2	3284.8	3079.7	2902.6	AVRG		3.02E-4		3313.3	8	0.995	20	
delta-BHC	B	9285.5	8811.2	8223.6	8557.3	8376.8	8132.5	7408.1	AVRG		1.19E-4		8399.3	7	0.995	20	
Heptachlor	B	8454.0	8021.6	7542.5	7710.8	7598.5	7156.8	6760.2	AVRG		1.31E-4		7606.3	7	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8790.5	8196.0	7792.6	7813.6	7763.5	7400.8	6843.9	AVRG		1.28E-4		7800.1	8	0.995	20	
Heptachlor epoxide	B	8002.5	7514.6	7027.2	6980.7	6926.6	6421.1	5915.4	AVRG		1.43E-4		6969.7	10	0.995	20	
gamma-Chlordane	B	7858.0	7429.4	6875.3	6965.6	6900.6	6487.2	6158.9	AVRG		1.44E-4		6953.6	8	0.995	20	
alpha-Chlordane	B	6847.5	7052.0	6504.1	6635.1	6608.6	6219.1	5837.2	AVRG		1.53E-4		6529.1	6	0.995	20	
4,4'-DDE	B	7323.0	6830.1	6308.5	6547.2	6376.3	5890.2	5096.6	AVRG		1.58E-4		6338.8	11	0.995	20	
Endosulfan I	B	7270.5	6953.4	6436.2	6445.6	6330.3	5873.0	5457.6	AVRG		1.56E-4		6395.2	10	0.995	20	
Dieldrin	B	7757.5	7306.0	6750.4	6812.5	6711.2	6128.7	5096.2	AVRG		1.50E-4		6651.8	13	0.995	20	
Endrin	B	6295.8	5776.3	5359.1	5473.8	5185.3	4745.9	4274.8	AVRG		1.89E-4		5301.6	12	0.995	20	
4,4'-DDD	B	6231.8	5746.1	5301.8	5462.1	5278.5	4796.5	4369.4	AVRG		1.88E-4		5312.3	11	0.995	20	
Endosulfan II	B	6138.5	6000.2	5397.2	5599.1	5438.2	5007.5	4334.7	AVRG		1.85E-4		5416.5	11	0.995	20	
4,4'-DDT	B	5267.3	5012.3	4765.4	5153.5	4940.4	4702.8	4415.9	AVRG		2.04E-4		4893.9	6	0.995	20	
Methoxychlor	B	2436.2	2150.3	1993.5	2072.8	1911.8	1591.5	1278.0	AVRG		5.21E-4		1919.2	20	0.995	20	
Endosulfan sulfate	B	5854.8	5385.8	4883.5	4961.6	4759.8	4321.7	3959.4	AVRG		2.05E-4		4875.2	13	0.995	20	
Endrin ketone	B	6845.5	6332.5	5723.3	5904.4	5679.2	5112.4	4372.3	AVRG		1.75E-4		5709.9	14	0.995	20	
TCMX	B	5686.3	5259.1	4933.2	4944.9	4923.6	4703.2	4308.6	AVRG		2.01E-4		4965.6	9	0.995	20	
Decachlorobiphenyl	B	4716.5	4361.6	3899.0	4138.3	3786.9	3424.9	3453.2	AVRG		2.52E-4		3968.6	12	0.995	20	
Average EPA 8081A	A												(n=22)	15		20	
Average EPA 8081A	B												(n=22)	10		20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
alpha-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	A	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	A	20.000	50.000	100.00	200.00	250.00	500.00		pg
Endosulfan sulfate	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	A	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
alpha-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
beta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
delta-BHC	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Aldrin	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Heptachlor epoxide	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
gamma-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
alpha-Chlordane	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
4,4'-DDE	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan I	B	2.0000	5.0000	10.000	20.000	25.000	50.000	100.00	pg
Dieldrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDD	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endosulfan II	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
4,4'-DDT	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Methoxychlor	B	20.000	50.000	100.00	200.00	250.00	500.00	1000.0	pg
Endosulfan sulfate	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Endrin ketone	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
TCMX	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg
Decachlorobiphenyl	B	4.0000	10.000	20.000	40.000	50.000	100.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_071
Calnum : 807102991001 Cal Date: 12-MAR-2007

ICV 807102991027 (071_027 12-MAR-2007) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	7285.5	6485.8	25.00	22.26	pg	-11	15	
gamma-BHC	A	6581.8	5846.4	25.00	22.21	pg	-11	15	
beta-BHC	A	2648.1	2307.7	25.00	21.79	pg	-13	15	
delta-BHC	A	6614.4	6045.2	25.00	22.85	pg	-9	15	
Heptachlor	A	6140.7	5329.8	25.00	21.70	pg	-13	15	
Aldrin	A	6216.6	5495.8	25.00	22.10	pg	-12	15	
Heptachlor epoxide	A	5476.4	4814.2	25.00	21.98	pg	-12	15	
gamma-Chlordane	A	5503.9	4927.7	25.00	22.38	pg	-10	15	
alpha-Chlordane	A	5108.5	4514.2	25.00	22.09	pg	-12	15	
4,4'-DDE	A	4839.4	4577.0	25.00	23.64	pg	-5	15	
Endosulfan I	A	5046.0	4608.2	25.00	22.83	pg	-9	15	
Dieldrin	A	5108.5	4802.8	25.00	23.50	pg	-6	15	
Endrin	A	4325.8	4152.0	25.00	24.00	pg	-4	15	
4,4'-DDD	A	3816.4	3520.7	25.00	23.06	pg	-8	15	
Endosulfan II	A	4261.9	4027.6	25.00	23.63	pg	-5	15	
4,4'-DDT	A	3996.4	3725.3	25.00	23.30	pg	-7	15	
Methoxychlor	A	1653.1	1887.4	25.00	28.54	pg	14	15	
Endosulfan sulfate	A	3830.8	3629.4	25.00	23.69	pg	-5	15	
Endrin ketone	A	4363.7	4210.0	25.00	24.12	pg	-4	15	
alpha-BHC	B	9317.8	8960.6	25.00	24.04	pg	-4	15	
gamma-BHC	B	8521.5	8058.8	25.00	23.64	pg	-5	15	
beta-BHC	B	3313.3	3135.7	25.00	23.66	pg	-5	15	
delta-BHC	B	8399.3	8530.4	25.00	25.39	pg	2	15	
Heptachlor	B	7606.3	7356.9	25.00	24.18	pg	-3	15	
Aldrin	B	7800.1	7506.9	25.00	24.06	pg	-4	15	
Heptachlor epoxide	B	6969.7	6580.6	25.00	23.60	pg	-6	15	
gamma-Chlordane	B	6953.6	6784.9	25.00	24.39	pg	-2	15	
alpha-Chlordane	B	6529.1	6357.4	25.00	24.34	pg	-3	15	
4,4'-DDE	B	6338.8	6326.6	25.00	24.95	pg	0	15	
Endosulfan I	B	6395.2	5959.5	25.00	23.30	pg	-7	15	
Dieldrin	B	6651.8	6557.3	25.00	24.64	pg	-1	15	
Endrin	B	5301.6	5571.4	25.00	26.27	pg	5	15	
4,4'-DDD	B	5312.3	5253.4	25.00	24.72	pg	-1	15	
Endosulfan II	B	5416.5	5525.2	25.00	25.50	pg	2	15	
4,4'-DDT	B	4893.9	4894.6	25.00	25.00	pg	0	15	
Methoxychlor	B	1919.2	2349.8	25.00	30.61	pg	**22**	15	v+ ***
Endosulfan sulfate	B	4875.2	4850.7	25.00	24.87	pg	-1	15	
Endrin ketone	B	5709.9	5846.1	25.00	25.60	pg	2	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

807102991001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193277 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237107445002 File : 074_002 Time : 15-MAR-2007 15:04

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	237896	7	15	
4,4'-DDE	A	1538			
4,4'-DDD	A	16427			
Endrin	A	170343	10	15	
Endrin aldehyde	A	1371			
Endrin ketone	A	16529			
4,4'-DDT	B	266295	11	15	
4,4'-DDE	B	2751			
4,4'-DDD	B	29082			
Endrin	B	246462	10	15	
Endrin aldehyde	B	3847			
Endrin ketone	B	24293			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193277 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 237107445017 File : 074_017 Time : 15-MAR-2007 21:14

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	145294	8	15	
4,4'-DDE	A	1157			
4,4'-DDD	A	11986			
Endrin	A	177066	3	15	
Endrin aldehyde	A	486			
Endrin ketone	A	5161			
4,4'-DDT	B	193939	11	15	
4,4'-DDE	B	2884			
4,4'-DDD	B	20512			
Endrin	B	266814	3	15	
Endrin aldehyde	B	2657			
Endrin ketone	B	5521			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193277 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807108510002 File : 075_002 Time : 16-MAR-2007 08:52

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	331140	5	15	
4,4'-DDE	A	2584			
4,4'-DDD	A	15999			
Endrin	A	200856	4	15	
Endrin aldehyde	A	1240			
Endrin ketone	A	6500			
4,4'-DDT	B	462461	7	15	
4,4'-DDE	B	3160			
4,4'-DDD	B	31150			
Endrin	B	275927	5	15	
Endrin aldehyde	B	2761			
Endrin ketone	B	12426			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 193277 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 807108510009 File : 075_009 Time : 16-MAR-2007 12:18

Standards: S5053

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	382077	5	15	
4,4'-DDE	A	2400			
4,4'-DDD	A	17900			
Endrin	A	224262	4	15	
Endrin aldehyde	A	1371			
Endrin ketone	A	6899			
4,4'-DDT	B	479443	7	15	
4,4'-DDE	B	3544			
4,4'-DDD	B	34682			
Endrin	B	279517	6	15	
Endrin aldehyde	B	2237			
Endrin ketone	B	14484			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_3 IDF : 1.0
Seqnum : 237107445003 File : 074_003 Time : 15-MAR-2007 15:24
Cal : 237105809001 Caldate : 14-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	5506.5	4630.7	10.00	8.409	pg/ul	-16	15	c- rsd ***
gamma-BHC	A	4814.2	4283.0	10.00	8.897	pg/ul	-11	15	rsd ***
beta-BHC	A	3356.0	3349.6	10.00	9.981	pg/ul	0	15	
delta-BHC	A	4449.6	3824.7	10.00	8.596	pg/ul	-14	15	rsd ***
Heptachlor	A	4487.3	4430.1	10.00	9.873	pg/ul	-1	15	
Aldrin	A	5518.7	5092.9	10.00	9.228	pg/ul	-8	15	
Heptachlor epoxide	A	5222.9	5182.7	10.00	9.923	pg/ul	-1	15	
gamma-Chlordane	A	5157.2	5005.6	10.00	9.706	pg/ul	-3	15	
alpha-Chlordane	A	4848.3	4737.2	10.00	9.771	pg/ul	-2	15	
4,4'-DDE	A	3779.1	3472.4	20.00	18.38	pg/ul	-8	15	
Endosulfan I	A	5282.9	5084.8	10.00	9.625	pg/ul	-4	15	
Dieldrin	A	4450.0	4210.3	20.00	18.92	pg/ul	-5	15	
Endrin	A	3351.2	3236.6	20.00	19.32	pg/ul	-3	15	
4,4'-DDD	A	2563.2	2298.4	20.00	17.93	pg/ul	-10	15	
Endosulfan II	A	4327.5	4594.8	20.00	21.24	pg/ul	6	15	
4,4'-DDT	A	1868.0	1861.7	20.00	19.93	pg/ul	0	15	
Methoxychlor	A	1155.3	1251.4	100.0	108.3	pg/ul	8	15	
Endosulfan sulfate	A	3550.9	3626.1	20.00	20.42	pg/ul	2	15	
Endrin ketone	A	3512.4	3463.3	20.00	19.72	pg/ul	-1	15	
TCMX	A	6251.0	6341.8	20.00	20.29	pg/ul	1	15	
Decachlorobiphenyl	A	3298.2	3619.3	20.00	21.95	pg/ul	10	15	
alpha-BHC	B	8652.6	7704.9	10.00	8.905	pg/ul	-11	15	
gamma-BHC	B	8009.4	8445.2	10.00	10.54	pg/ul	5	15	
beta-BHC	B	4894.7	5056.9	10.00	10.33	pg/ul	3	15	
delta-BHC	B	6563.6	5895.6	10.00	8.982	pg/ul	-10	15	
Heptachlor	B	6317.0	6214.1	10.00	9.837	pg/ul	-2	15	
Aldrin	B	8561.8	7971.5	10.00	9.311	pg/ul	-7	15	
Heptachlor epoxide	B	7939.2	7910.7	10.00	9.964	pg/ul	0	15	
gamma-Chlordane	B	8162.0	8072.6	10.00	9.890	pg/ul	-1	15	
alpha-Chlordane	B	7966.9	7917.5	10.00	9.938	pg/ul	-1	15	
4,4'-DDE	B	5755.4	5394.6	20.00	18.75	pg/ul	-6	15	
Endosulfan I	B	7621.6	7501.5	10.00	9.842	pg/ul	-2	15	
Dieldrin	B	6757.3	6471.7	20.00	19.15	pg/ul	-4	15	
Endrin	B	4597.0	4493.0	20.00	19.55	pg/ul	-2	15	
4,4'-DDD	B	3789.9	3572.3	20.00	18.85	pg/ul	-6	15	
Endosulfan II	B	6314.9	6183.4	20.00	19.58	pg/ul	-2	15	
4,4'-DDT	B	2454.2	2496.3	20.00	20.34	pg/ul	2	15	
Methoxychlor	B	1254.7	1292.5	100.0	103.0	pg/ul	3	15	
Endosulfan sulfate	B	5144.6	5137.8	20.00	19.97	pg/ul	0	15	
Endrin ketone	B	4915.9	4785.5	20.00	19.47	pg/ul	-3	15	
TCMX	B	9592.0	9745.5	20.00	20.32	pg/ul	2	15	
Decachlorobiphenyl	B	5392.3	5794.5	20.00	21.49	pg/ul	7	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					4	15	

-=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_4 IDF : 1.0
Seqnum : 237107445018 File : 074_018 Time : 15-MAR-2007 21:34
Cal : 237105809001 Caldate : 14-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	5506.5	6000.8	20.00	21.79	pg/ul	9	15	rsd ***
gamma-BHC	A	4814.2	4659.3	20.00	19.36	pg/ul	-3	15	rsd ***
beta-BHC	A	3356.0	3752.1	20.00	22.36	pg/ul	12	15	
delta-BHC	A	4449.6	4863.2	20.00	21.86	pg/ul	9	15	rsd ***
Heptachlor	A	4487.3	4197.0	20.00	18.71	pg/ul	-6	15	
Aldrin	A	5518.7	6043.1	20.00	21.90	pg/ul	10	15	
Heptachlor epoxide	A	5222.9	5876.7	20.00	22.50	pg/ul	13	15	
gamma-Chlordane	A	5157.2	5665.2	20.00	21.97	pg/ul	10	15	
alpha-Chlordane	A	4848.3	5465.0	20.00	22.54	pg/ul	13	15	
4,4'-DDE	A	3779.1	4805.5	40.00	50.86	pg/ul	**27**	15	c+ ***
Endosulfan I	A	5282.9	5817.4	20.00	22.02	pg/ul	10	15	
Dieldrin	A	4450.0	5038.7	40.00	45.29	pg/ul	13	15	
Endrin	A	3351.2	4126.8	40.00	49.26	pg/ul	**23**	15	c+ ***
4,4'-DDD	A	2563.2	2947.7	40.00	46.00	pg/ul	15	15	
Endosulfan II	A	4327.5	4847.2	40.00	44.80	pg/ul	12	15	
4,4'-DDT	A	1868.0	1410.1	40.00	30.19	pg/ul	**-25**	15	c- ***
Methoxychlor	A	1155.3	1018.7	200.0	176.4	pg/ul	-12	15	
Endosulfan sulfate	A	3550.9	3544.1	40.00	39.92	pg/ul	0	15	
Endrin ketone	A	3512.4	2798.8	40.00	31.87	pg/ul	**-20**	15	c- ***
TCMX	A	6251.0	6868.5	40.00	43.95	pg/ul	10	15	
Decachlorobiphenyl	A	3298.2	4661.0	40.00	56.53	pg/ul	**41**	15	c+
alpha-BHC	B	8652.6	9121.0	20.00	21.08	pg/ul	5	15	
gamma-BHC	B	8009.4	7825.8	20.00	19.54	pg/ul	-2	15	
beta-BHC	B	4894.7	5387.3	20.00	22.01	pg/ul	10	15	
delta-BHC	B	6563.6	7231.3	20.00	22.03	pg/ul	10	15	
Heptachlor	B	6317.0	6049.7	20.00	19.15	pg/ul	-4	15	
Aldrin	B	8561.8	9120.3	20.00	21.30	pg/ul	7	15	
Heptachlor epoxide	B	7939.2	8672.7	20.00	21.85	pg/ul	9	15	
gamma-Chlordane	B	8162.0	8560.3	20.00	20.98	pg/ul	5	15	
alpha-Chlordane	B	7966.9	8661.5	20.00	21.74	pg/ul	9	15	
4,4'-DDE	B	5755.4	7219.2	40.00	50.17	pg/ul	**25**	15	c+ ***
Endosulfan I	B	7621.6	8301.9	20.00	21.78	pg/ul	9	15	
Dieldrin	B	6757.3	7512.7	40.00	44.47	pg/ul	11	15	
Endrin	B	4597.0	6100.3	40.00	53.08	pg/ul	**33**	15	c+ ***
4,4'-DDD	B	3789.9	4696.4	40.00	49.57	pg/ul	**24**	15	c+ ***
Endosulfan II	B	6314.9	6475.8	40.00	41.02	pg/ul	3	15	
4,4'-DDT	B	2454.2	2100.8	40.00	34.24	pg/ul	-14	15	
Methoxychlor	B	1254.7	1174.9	200.0	187.3	pg/ul	-6	15	
Endosulfan sulfate	B	5144.6	5257.2	40.00	40.88	pg/ul	2	15	
Endrin ketone	B	4915.9	3983.2	40.00	32.41	pg/ul	**-19**	15	c- ***
TCMX	B	9592.0	10405	40.00	43.39	pg/ul	8	15	
Decachlorobiphenyl	B	5392.3	7369.0	40.00	54.66	pg/ul	**37**	15	c+
Average EPA 8081A	A	(n=22)					14	15	
Average EPA 8081A	B	(n=22)					12	15	

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 807108510004 File : 075_004 Time : 16-MAR-2007 09:49
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5555

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	7602.3	10.00	10.43	pg	4	15	
gamma-BHC	A	6581.8	6845.9	10.00	10.40	pg	4	15	
beta-BHC	A	2648.1	2800.9	10.00	10.58	pg	6	15	
delta-BHC	A	6614.4	6856.7	10.00	10.37	pg	4	15	
Heptachlor	A	6140.7	6358.0	10.00	10.35	pg	4	15	
Aldrin	A	6216.6	6486.9	10.00	10.43	pg	4	15	
Heptachlor epoxide	A	5476.4	5798.2	10.00	10.59	pg	6	15	
gamma-Chlordane	A	5503.9	5735.4	10.00	10.42	pg	4	15	
alpha-Chlordane	A	5108.5	5393.1	10.00	10.56	pg	6	15	
4,4'-DDE	A	4839.4	5200.9	20.00	21.49	pg	7	15	
Endosulfan I	A	5046.0	5486.1	10.00	10.87	pg	9	15	
Dieldrin	A	5108.5	5539.3	20.00	21.69	pg	8	15	
Endrin	A	4325.8	4756.4	20.00	21.99	pg	10	15	
4,4'-DDD	A	3816.4	4439.9	20.00	23.27	pg	**16**	15	c+ ***
Endosulfan II	A	4261.9	4758.2	20.00	22.33	pg	12	15	
4,4'-DDT	A	3996.4	4060.6	20.00	20.32	pg	2	15	
Methoxychlor	A	1653.1	1783.4	100.0	107.9	pg	8	15	
Endosulfan sulfate	A	3830.8	4322.0	20.00	22.56	pg	13	15	
Endrin ketone	A	4363.7	4968.7	20.00	22.77	pg	14	15	
TCMX	A	3892.5	4115.6	20.00	21.15	pg	6	15	
Decachlorobiphenyl	A	3209.6	3917.0	20.00	24.41	pg	**22**	15	c+
alpha-BHC	B	9317.8	9622.9	10.00	10.33	pg	3	15	
gamma-BHC	B	8521.5	8746.8	10.00	10.26	pg	3	15	
beta-BHC	B	3313.3	3531.7	10.00	10.66	pg	7	15	
delta-BHC	B	8399.3	8797.9	10.00	10.47	pg	5	15	
Heptachlor	B	7606.3	7940.5	10.00	10.44	pg	4	15	
Aldrin	B	7800.1	8204.4	10.00	10.52	pg	5	15	
Heptachlor epoxide	B	6969.7	7411.5	10.00	10.63	pg	6	15	
gamma-Chlordane	B	6953.6	7317.6	10.00	10.52	pg	5	15	
alpha-Chlordane	B	6529.1	6864.8	10.00	10.51	pg	5	15	
4,4'-DDE	B	6338.8	6748.5	20.00	21.29	pg	6	15	
Endosulfan I	B	6395.2	6852.4	10.00	10.71	pg	7	15	
Dieldrin	B	6651.8	7118.2	20.00	21.40	pg	7	15	
Endrin	B	5301.6	5828.5	20.00	21.99	pg	10	15	
4,4'-DDD	B	5312.3	5786.3	20.00	21.78	pg	9	15	
Endosulfan II	B	5416.5	5713.9	20.00	21.10	pg	5	15	
4,4'-DDT	B	4893.9	4767.1	20.00	19.48	pg	-3	15	
Methoxychlor	B	1919.2	2072.4	100.0	108.0	pg	8	15	
Endosulfan sulfate	B	4875.2	5192.2	20.00	21.30	pg	7	15	
Endrin ketone	B	5709.9	6015.3	20.00	21.07	pg	5	15	
TCMX	B	4965.6	5199.3	20.00	20.94	pg	5	15	
Decachlorobiphenyl	B	3968.6	4243.1	20.00	21.38	pg	7	15	
Average EPA 8081A	A	(n=22)					8	15	
Average EPA 8081A	B	(n=22)					6	15	

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
Seqnum : 807108510010 File : 075_010 Time : 16-MAR-2007 12:39
Cal : 807102991001 Caldate : 12-MAR-2007
Standards: S5556

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	7285.5	6968.0	20.00	19.13	pg	-4	15	
gamma-BHC	A	6581.8	6195.9	20.00	18.83	pg	-6	15	
beta-BHC	A	2648.1	2504.4	20.00	18.91	pg	-5	15	
delta-BHC	A	6614.4	6150.0	20.00	18.60	pg	-7	15	
Heptachlor	A	6140.7	5725.7	20.00	18.65	pg	-7	15	
Aldrin	A	6216.6	5839.5	20.00	18.79	pg	-6	15	
Heptachlor epoxide	A	5476.4	5175.6	20.00	18.90	pg	-5	15	
gamma-Chlordane	A	5503.9	5155.2	20.00	18.73	pg	-6	15	
alpha-Chlordane	A	5108.5	5001.2	20.00	19.58	pg	-2	15	
4,4'-DDE	A	4839.4	4582.2	40.00	37.87	pg	-5	15	
Endosulfan I	A	5046.0	4720.5	20.00	18.71	pg	-6	15	
Dieldrin	A	5108.5	4913.4	40.00	38.47	pg	-4	15	
Endrin	A	4325.8	4131.9	40.00	38.21	pg	-4	15	
4,4'-DDD	A	3816.4	3703.8	40.00	38.82	pg	-3	15	
Endosulfan II	A	4261.9	4059.3	40.00	38.10	pg	-5	15	
4,4'-DDT	A	3996.4	3530.3	40.00	35.33	pg	-12	15	
Methoxychlor	A	1653.1	1478.8	200.0	178.9	pg	-11	15	
Endosulfan sulfate	A	3830.8	3666.6	40.00	38.29	pg	-4	15	
Endrin ketone	A	4363.7	4189.1	40.00	38.40	pg	-4	15	
TCMX	A	3892.5	3763.2	40.00	38.67	pg	-3	15	
Decachlorobiphenyl	A	3209.6	3133.4	40.00	39.05	pg	-2	15	
alpha-BHC	B	9317.8	9158.1	20.00	19.66	pg	-2	15	
gamma-BHC	B	8521.5	8189.2	20.00	19.22	pg	-4	15	
beta-BHC	B	3313.3	3250.8	20.00	19.62	pg	-2	15	
delta-BHC	B	8399.3	8116.6	20.00	19.33	pg	-3	15	
Heptachlor	B	7606.3	7290.6	20.00	19.17	pg	-4	15	
Aldrin	B	7800.1	7651.4	20.00	19.62	pg	-2	15	
Heptachlor epoxide	B	6969.7	6781.6	20.00	19.46	pg	-3	15	
gamma-Chlordane	B	6953.6	6737.4	20.00	19.38	pg	-3	15	
alpha-Chlordane	B	6529.1	6383.7	20.00	19.55	pg	-2	15	
4,4'-DDE	B	6338.8	6239.1	40.00	39.37	pg	-2	15	
Endosulfan I	B	6395.2	6256.7	20.00	19.57	pg	-2	15	
Dieldrin	B	6651.8	6573.8	40.00	39.53	pg	-1	15	
Endrin	B	5301.6	5179.3	40.00	39.08	pg	-2	15	
4,4'-DDD	B	5312.3	5281.8	40.00	39.77	pg	-1	15	
Endosulfan II	B	5416.5	5187.3	40.00	38.31	pg	-4	15	
4,4'-DDT	B	4893.9	4316.8	40.00	35.28	pg	-12	15	
Methoxychlor	B	1919.2	1826.0	200.0	190.3	pg	-5	15	
Endosulfan sulfate	B	4875.2	4611.5	40.00	37.84	pg	-5	15	
Endrin ketone	B	5709.9	5495.6	40.00	38.50	pg	-4	15	
TCMX	B	4965.6	4894.6	40.00	39.43	pg	-1	15	
Decachlorobiphenyl	B	3968.6	3836.5	40.00	38.67	pg	-3	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					3	15	

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	071_001	X	PRIMER			12-MAR-2007 12:31	1.0						
002	071_002	X	PRIMER			12-MAR-2007 12:53	1.0						
003	071_003	X	PRIMER			12-MAR-2007 13:14	1.0						
004	071_004	X	PRIMER			12-MAR-2007 13:35	1.0						
005	071_005	X	HEX			12-MAR-2007 13:57	1.0						
006	071_006	X	PEST_3			12-MAR-2007 14:18	1.0	1.0	25		1	1 ac	
007	071_007	X	PEST_3			12-MAR-2007 14:40	1.0	1.0	36		1	1 ac	
008	071_008	X	PEM			12-MAR-2007 15:01	1.0	1.0			1	2	
009	071_009	X	PEST_4			12-MAR-2007 15:35	1.0	1.0	20		1	3 ac	
010	071_010	X	PEST_4			12-MAR-2007 16:00	1.0	1.0	27		1	3 ac	
011	071_011	X	PRIMER			12-MAR-2007 17:33	1.0						
012	071_012	X	PRIMER			12-MAR-2007 17:54	1.0						
013	071_013	X	PRIMER			12-MAR-2007 18:16	1.0						
014	071_014	X	PRIMER			12-MAR-2007 18:37	1.0						
015	071_015	X	HEX			12-MAR-2007 18:58	1.0						
016	071_016	PEM	PEM			12-MAR-2007 19:20	1.0	1.0			1	2	
017	071_017	X	HEX			12-MAR-2007 19:41	1.0						
018	071_018	ICAL	PEST_1			12-MAR-2007 20:02	1.0	1.0				4	
019	071_019	ICAL	PEST_2			12-MAR-2007 20:24	1.0	1.0				5	
020	071_020	ICAL	PEST_3			12-MAR-2007 20:45	1.0	1.0				1	
021	071_021	ICAL	PEST_4			12-MAR-2007 21:07	1.0	1.0				3	
022	071_022	ICAL	PEST_5			12-MAR-2007 21:28	1.0	1.0				6	
023	071_023	ICAL	PEST_6			12-MAR-2007 21:49	1.0	1.0				7	
024	071_024	ICAL	PEST_7			12-MAR-2007 22:11	1.0	1.0				8	
025	071_025	X	HEX			12-MAR-2007 22:32	1.0						
026	071_026	X	HEX			12-MAR-2007 22:53	1.0						
027	071_027	ICV	ICV			12-MAR-2007 23:15	1.0	1.0	3		1	9	2:XYL246=211.331
028	071_028	X	ICV			12-MAR-2007 23:36	1.0	1.0	4		1	9	2:CL10BZ=229.806
029	071_029	X	HEX			12-MAR-2007 23:57	1.0						
030	071_030	PEM	PEM			13-MAR-2007 11:00	1.0	1.0			1	2	

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	071_031	SAMPLE	193154-019	122843	Soil	13-MAR-2007 11:28	1.0	0.662			1		
032	071_032	X	HEX			13-MAR-2007 12:05	1.0						
033	071_033	PEM	PEM			13-MAR-2007 12:26	1.0	1.0			1	2	
034	071_034	CCV	PEST_3			13-MAR-2007 12:48	1.0	1.0			1	1	
035	071_035	X	HEX			13-MAR-2007 13:31	1.0						
036	071_036	ICAL	TOXAPHENE			13-MAR-2007 13:52	1.0	1.0				10	
037	071_037	X	TOXAPHENE			13-MAR-2007 14:13	1.0					10	
038	071_038	X	HEX			13-MAR-2007 14:34	1.0						
039	071_039	BLANK	QC378642	122973	Soil	13-MAR-2007 14:56	1.0	0.6669			1		
040	071_040	LCS	QC378643	122973	Soil	13-MAR-2007 15:17	1.0	0.6625			1		
041	071_041	MSS	193210-016	122973	Soil	13-MAR-2007 15:39	1.0	0.6669			1		
042	071_042	SAMPLE	193210-017	122973	Soil	13-MAR-2007 16:00	1.0	0.6633			1		
043	071_043	SAMPLE	193210-018	122973	Soil	13-MAR-2007 16:21	1.0	0.6603			1		
044	071_044	SAMPLE	193210-019	122973	Soil	13-MAR-2007 16:42	1.0	0.6579			1		
045	071_045	SAMPLE	193210-020	122973	Soil	13-MAR-2007 17:04	1.0	0.6577			1		
046	071_046	SAMPLE	193210-037	122973	Soil	13-MAR-2007 17:25	1.0	0.6594			1		
047	071_047	SAMPLE	193210-038	122973	Soil	13-MAR-2007 17:47	1.0	0.6607			1		
048	071_048	SAMPLE	193210-039	122973	Soil	13-MAR-2007 18:08	1.0	0.6638			1		
049	071_049	X	HEX			13-MAR-2007 18:30	1.0						
050	071_050	PEM	PEM			13-MAR-2007 19:10	1.0	1.0			1	2	
051	071_051	X	TOXAPHENE			13-MAR-2007 19:31	1.0	1.0	1		1	10	
052	071_052	CCV	TOXAPHENE			13-MAR-2007 19:53	1.0	1.0			1	10	
053	071_053	CCV	PEST_4			13-MAR-2007 20:14	1.0	1.0			1	3	
054	071_054	X	PEST_4			13-MAR-2007 20:36	1.0					3	
055	071_055	X	PEM			13-MAR-2007 20:57	1.0					2	
056	071_056	X	HEX			13-MAR-2007 21:19	1.0						
057	071_057	BLANK	QC377837	122778	Water	13-MAR-2007 21:40	1.0	0.01			1		
058	071_058	LCS	QC377838	122778	Water	13-MAR-2007 22:02	1.0	0.01			1		
059	071_059	SAMPLE	193108-008	122778	Water	13-MAR-2007 22:23	1.0	0.01	2	1	1		2:BHCGAM=102.821
060	071_060	SAMPLE	193108-011	122778	Water	13-MAR-2007 22:45	1.0	0.009901	1	1	1		1:BHCGAM=110.640

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807102991 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
061	071_061	MSS	193210-027	122843	Soil	13-MAR-2007 23:06	1.0	0.6653		1		
062	071_062	SAMPLE	193210-028	122843	Soil	13-MAR-2007 23:28	1.0	0.6581		1		
063	071_063	SAMPLE	193210-029	122843	Soil	13-MAR-2007 23:49	1.0	0.666		1		
064	071_064	SAMPLE	193210-030	122843	Soil	14-MAR-2007 00:11	1.0	0.6607		1		
065	071_065	SAMPLE	193210-035	122843	Soil	14-MAR-2007 00:32	1.0	0.6651		1		
066	071_066	X	HEX			14-MAR-2007 00:54	1.0					
067	071_067	PEM	PEM			14-MAR-2007 01:15	1.0	1.0		1	2	
068	071_068	CCV	TOXAPHENE			14-MAR-2007 01:37	1.0	1.0		1	10	
069	071_069	X	TOXAPHENE			14-MAR-2007 01:58	1.0				10	
070	071_070	CCV	PEST_3			14-MAR-2007 02:19	1.0	1.0		1	1	
071	071_071	X	PEST_3			14-MAR-2007 02:41	1.0				1	
072	071_072	X	PEM			14-MAR-2007 03:02	1.0				2	
073	071_073	X	HEX			14-MAR-2007 03:24	1.0					
074	071_074	BLANK	QC378784	123004	Water	14-MAR-2007 03:45	1.0	0.01		1		
075	071_075	BS	QC378785	123004	Water	14-MAR-2007 04:07	1.0	0.01		1		
076	071_076	BSD	QC378786	123004	Water	14-MAR-2007 04:29	1.0	0.01		1		
077	071_077	SAMPLE	193261-001	123004	Water	14-MAR-2007 04:50	1.0	0.009804		1		
078	071_078	SAMPLE	193261-002	123004	Water	14-MAR-2007 05:12	1.0	0.009709		1		
079	071_079	SAMPLE	193261-003	123004	Water	14-MAR-2007 05:33	1.0	0.009804		1		
080	071_080	SAMPLE	193261-004	123004	Water	14-MAR-2007 05:55	1.0	0.009709		1		
081	071_081	SAMPLE	193335-001	123004	Water	14-MAR-2007 06:16	1.0	0.009804		1		
082	071_082	X	HEX			14-MAR-2007 06:38	1.0					
083	071_083	PEM	PEM			14-MAR-2007 06:59	1.0	1.0		1	2	
084	071_084	CCV	PEST_4			14-MAR-2007 07:21	1.0	1.0		1	3	
085	071_085	X	PEST_4			14-MAR-2007 07:42	1.0				3	
086	071_086	X	PEM			14-MAR-2007 08:04	1.0				2	
087	071_087	X	HEX			14-MAR-2007 08:26	1.0					

Stds used: 1=S5555 2=S5053 3=S5556 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092 10=S5351
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237105809 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 14-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	073_001	X	DIAGNOSTIC			14-MAR-2007 11:29	1.0							
002	073_002	X	DIAGNOSTIC			14-MAR-2007 11:49	1.0							
003	073_003	X	DIAGNOSTIC			14-MAR-2007 12:08	1.0							
004	073_004	CCV	PEST_4			14-MAR-2007 16:20	1.0	13		1			1 ac	
005	073_005	CCV	PEST_4			14-MAR-2007 16:43	1.0	3		1			1	
006	073_006	PEM	PEM			14-MAR-2007 17:10	1.0			1			2	1:DDT44=172.435
007	073_007	CCV	PEST_3			14-MAR-2007 18:09	1.0						3	
008	073_008	X	PRIMER			14-MAR-2007 19:11	1.0							
009	073_009	X	PRIMER			14-MAR-2007 19:31	1.0							
010	073_010	X	PRIMER			14-MAR-2007 19:50	1.0							
011	073_011	X	PRIMER			14-MAR-2007 20:09	1.0							
012	073_012	X	PRIMER			14-MAR-2007 20:29	1.0							
013	073_013	X	HEX			14-MAR-2007 20:48	1.0							
014	073_014	X	HEX			14-MAR-2007 21:07	1.0							
015	073_015	PEM	PEM			14-MAR-2007 21:26	1.0			1			2	
016	073_016	X	HEX			14-MAR-2007 21:45	1.0							
017	073_017	ICAL	PEST_1			14-MAR-2007 22:04	1.0						4	
018	073_018	ICAL	PEST_2			14-MAR-2007 22:23	1.0						5	
019	073_019	ICAL	PEST_3			14-MAR-2007 22:42	1.0						3	
020	073_020	X	PEST_4			14-MAR-2007 23:02	1.0						1	
021	073_021	ICAL	PEST_5			14-MAR-2007 23:21	1.0						6	
022	073_022	ICAL	PEST_6			14-MAR-2007 23:40	1.0						7	
023	073_023	ICAL	PEST_7			14-MAR-2007 23:59	1.0						8	
024	073_024	X	HEX			15-MAR-2007 00:18	1.0							
025	073_025	X	HEX			15-MAR-2007 00:37	1.0							
026	073_026	ICV	ICV			15-MAR-2007 00:57	1.0	6		1			9	4:XYL246=248.169
027	073_027	X	ICV			15-MAR-2007 01:17	1.0						9	
028	073_028	X	HEX			15-MAR-2007 01:37	1.0							
029	073_029	X	HEX			15-MAR-2007 11:01	1.0							
030	073_030	ICAL	PEST_4			15-MAR-2007 11:21	1.0						1	

Stds used: 1=S5556 2=S5053 3=S5555 4=S5553 5=S5554 6=S5049 7=S5050 8=S5051 9=S5092
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 237107445 Instrument: GC16 Gas Chromatograph #16 ECD Begun: 15-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	074_001	X	HEX			15-MAR-2007 14:45	1.0						
002	074_002	PEM	PEM			15-MAR-2007 15:04	1.0	1.0			1	1	
003	074_003	CCV	PEST_3			15-MAR-2007 15:24	1.0	1.0	3		1	2	
004	074_004	X	HEX			15-MAR-2007 15:45	1.0						
005	074_005	SAMPLE	193176-001	123004	Water	15-MAR-2007 16:05	1.0	0.009615	4	1	1		2:GCHLOR=881.441
006	074_006	X	HEX			15-MAR-2007 17:39	1.0						
007	074_007	BLANK	QC379265	123116	Water	15-MAR-2007 17:58	1.0	0.01	4		1		
008	074_008	BS	QC379266	123116	Water	15-MAR-2007 18:18	1.0	0.01	5	3	1		
009	074_009	BSD	QC379267	123116	Water	15-MAR-2007 18:38	1.0	0.01	2	3	1		
010	074_010	SAMPLE	193262-002	123116	Water	15-MAR-2007 18:58	1.0	0.009524	4		1		
011	074_011	SAMPLE	193262-007	123116	Water	15-MAR-2007 19:17	1.0	0.009524	4		1		
012	074_012	SAMPLE	193262-019	123116	Water	15-MAR-2007 19:37	1.0	0.01	4		1		
013	074_013	SAMPLE	193262-020	123116	Water	15-MAR-2007 19:56	1.0	0.009434	4		1		
014	074_014	SAMPLE	193277-001	123116	Water	15-MAR-2007 20:15	1.0	0.01053	4		1		
015	074_015	SAMPLE	193329-005	123116	Water	15-MAR-2007 20:34	1.0	0.009524	4		1		
016	074_016	X	HEX			15-MAR-2007 20:54	1.0						
017	074_017	PEM	PEM			15-MAR-2007 21:14	1.0	1.0			1	1	
018	074_018	CCV	PEST_4			15-MAR-2007 21:34	1.0	1.0	11		1	3	
019	074_019	CCV	PEST_4			15-MAR-2007 21:53	1.0	1.0	16		1	3 ac	
020	074_020	PEM	PEM			15-MAR-2007 22:12	1.0	1.0	2		1	1	
021	074_021	X	HEX			15-MAR-2007 22:32	1.0						

Stds used: 1=S5053 2=S5555 3=S5556
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807108510 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 16-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	075_001	X	HEX			16-MAR-2007 08:30	1.0						
002	075_002	PEM	PEM			16-MAR-2007 08:52	1.0	1.0			1	1	
003	075_003	X	PEST_3			16-MAR-2007 09:13	1.0	1.0	17		1	2 ac	
004	075_004	CCV	PEST_3			16-MAR-2007 09:49	1.0	1.0	1		1	2	
005	075_005	X	HEX			16-MAR-2007 10:21	1.0						
006	075_006	BS	QC379266	123116	Water	16-MAR-2007 10:42	1.0	0.01	1		1		
007	075_007	BSD	QC379267	123116	Water	16-MAR-2007 11:04	1.0	0.01	1		1		
008	075_008	X	HEX			16-MAR-2007 11:56	1.0						
009	075_009	PEM	PEM			16-MAR-2007 12:18	1.0	1.0			1	1	
010	075_010	CCV	PEST_4			16-MAR-2007 12:39	1.0	1.0			1	3	
011	075_011	X	CHLORDANE			16-MAR-2007 16:34	1.0					4	
012	075_012	X	HEX			16-MAR-2007 17:31	1.0						
013	075_013	BLANK	QC379509	123175	Soil	16-MAR-2007 17:52	1.0	0.6577			1		
014	075_014	LCS	QC379510	123175	Soil	16-MAR-2007 18:14	1.0	0.659			1		
015	075_015	MSS	193376-001	123175	Soil	16-MAR-2007 18:35	1.0						
016	075_016	SAMPLE	193376-002	123175	Soil	16-MAR-2007 18:57	1.0						
017	075_017	X	HEX			16-MAR-2007 19:29	1.0						
018	075_018	PEM	PEM			16-MAR-2007 19:50	1.0	1.0			1	1	
019	075_019	CCV	PEST_3			16-MAR-2007 20:12	1.0	1.0			1	2	
020	075_020	X	PEST_3			16-MAR-2007 20:33	1.0					2	
021	075_021	X	HEX			16-MAR-2007 20:54	1.0						
022	075_022	X	TOXAPHENE			16-MAR-2007 21:16	1.0	1.0	2		1	5	
023	075_023	CCV	TOXAPHENE			16-MAR-2007 21:37	1.0	1.0			1	5	
024	075_024	X	PEM			16-MAR-2007 21:59	1.0					1	
025	075_025	X	HEX			16-MAR-2007 22:20	1.0						
026	075_026	MSS	193376-001	123175	Soil	16-MAR-2007 22:41	1.0	0.6662			1		
027	075_027	SAMPLE	193376-002	123175	Soil	16-MAR-2007 23:03	1.0	0.6642			1		
028	075_028	SAMPLE	193376-003	123175	Soil	16-MAR-2007 23:24	1.0	0.6614			1		
029	075_029	SAMPLE	193376-004	123175	Soil	16-MAR-2007 23:45	1.0	0.6662			1		
030	075_030	SAMPLE	193376-005	123175	Soil	17-MAR-2007 00:07	1.0	0.6647			1		

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5351 6=S5049
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 193277 PEST Water
Curtis & Tompkins Laboratories

Sequence: 807108510 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 16-MAR-2007
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	075_031	SAMPLE	193376-006	123175	Soil	17-MAR-2007 00:28	1.0	0.662			1		
032	075_032	SAMPLE	193376-007	123175	Soil	17-MAR-2007 00:50	1.0	0.6625			1		
033	075_033	SAMPLE	193376-008	123175	Soil	17-MAR-2007 01:11	1.0	0.6603			1		
034	075_034	SAMPLE	193376-009	123175	Soil	17-MAR-2007 01:32	1.0	0.6607			1		
035	075_035	SAMPLE	193376-010	123175	Soil	17-MAR-2007 01:54	1.0	0.6598			1		
036	075_036	X	HEX			17-MAR-2007 02:15	1.0						
037	075_037	PEM	PEM			17-MAR-2007 02:37	1.0	1.0			1	1	
038	075_038	CCV	PEST_5			17-MAR-2007 02:58	1.0	1.0			1	6	
039	075_039	X	PEST_5			17-MAR-2007 03:19	1.0					6	
040	075_040	CCV	TOXAPHENE			17-MAR-2007 03:41	1.0	1.0			1	5	
041	075_041	X	TOXAPHENE			17-MAR-2007 04:02	1.0					5	
042	075_042	X	PEM			17-MAR-2007 04:24	1.0					1	
043	075_043	X	HEX			17-MAR-2007 04:45	1.0						
044	075_044	SAMPLE	193441-001	123175	Soil	17-MAR-2007 05:06	1.0	0.6636			1		
045	075_045	SAMPLE	193441-002	123175	Soil	17-MAR-2007 05:28	1.0	0.6653			1		
046	075_046	SAMPLE	193441-003	123175	Soil	17-MAR-2007 05:49	1.0	0.6647			1		
047	075_047	SAMPLE	193441-004	123175	Soil	17-MAR-2007 06:11	10.0	0.6609			1		
048	075_048	SAMPLE	193441-005	123175	Soil	17-MAR-2007 06:32	1.0	0.6642			1		
049	075_049	SAMPLE	193441-006	123175	Soil	17-MAR-2007 06:54	1.0	0.6603			1		
050	075_050	SAMPLE	193441-007	123175	Soil	17-MAR-2007 07:15	1.0	0.6614			1		
051	075_051	X	HEX			17-MAR-2007 07:37	1.0						
052	075_052	PEM	PEM			17-MAR-2007 07:58	1.0	1.0			1	1	
053	075_053	CCV	PEST_3			17-MAR-2007 08:20	1.0	1.0			1	2	
054	075_054	X	PEST_3			17-MAR-2007 08:41	1.0					2	
055	075_055	X	PEM			17-MAR-2007 09:03	1.0					1	
056	075_056	X	HEX			17-MAR-2007 09:24	1.0						

Stds used: 1=S5053 2=S5555 3=S5556 4=S5222 5=S5351 6=S5049
Flags used: ac=average CCV drift out

REPORTING SUMMARY FOR 193277 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193277-001	alpha-BHC	GC16	B	03/15/07 20:15
193277-001	beta-BHC	GC16	B	03/15/07 20:15
193277-001	gamma-BHC	GC16	B	03/15/07 20:15
193277-001	delta-BHC	GC16	B	03/15/07 20:15
193277-001	Heptachlor	GC16	B	03/15/07 20:15
193277-001	Aldrin	GC16	B	03/15/07 20:15
193277-001	Heptachlor epoxide	GC16	B	03/15/07 20:15
193277-001	Endosulfan I	GC16	B	03/15/07 20:15
193277-001	Dieldrin	GC16	B	03/15/07 20:15
193277-001	4,4'-DDE	GC16	B	03/15/07 20:15
193277-001	Endrin	GC16	B	03/15/07 20:15
193277-001	Endosulfan II	GC16	B	03/15/07 20:15
193277-001	Endosulfan sulfate	GC16	B	03/15/07 20:15
193277-001	4,4'-DDD	GC16	B	03/15/07 20:15
193277-001	4,4'-DDT	GC16	B	03/15/07 20:15
193277-001	alpha-Chlordane	GC16	B	03/15/07 20:15
193277-001	gamma-Chlordane	GC16	B	03/15/07 20:15
193277-001	Methoxychlor	GC16	B	03/15/07 20:15
193277-001	Endrin ketone	GC16	B	03/15/07 20:15
193277-001	Toxaphene	GC16	B	03/15/07 20:15
193277-001	TCMX	GC16	B	03/15/07 20:15
193277-001	Decachlorobiphenyl	GC16	B	03/15/07 20:15
QC379265	alpha-BHC	GC16	B	03/15/07 17:58
QC379265	beta-BHC	GC16	B	03/15/07 17:58
QC379265	gamma-BHC	GC16	B	03/15/07 17:58
QC379265	delta-BHC	GC16	B	03/15/07 17:58
QC379265	Heptachlor	GC16	B	03/15/07 17:58
QC379265	Aldrin	GC16	B	03/15/07 17:58
QC379265	Heptachlor epoxide	GC16	B	03/15/07 17:58
QC379265	Endosulfan I	GC16	B	03/15/07 17:58
QC379265	Dieldrin	GC16	B	03/15/07 17:58
QC379265	4,4'-DDE	GC16	B	03/15/07 17:58
QC379265	Endrin	GC16	B	03/15/07 17:58
QC379265	Endosulfan II	GC16	B	03/15/07 17:58
QC379265	Endosulfan sulfate	GC16	B	03/15/07 17:58
QC379265	4,4'-DDD	GC16	B	03/15/07 17:58
QC379265	4,4'-DDT	GC16	B	03/15/07 17:58
QC379265	alpha-Chlordane	GC16	B	03/15/07 17:58
QC379265	gamma-Chlordane	GC16	B	03/15/07 17:58
QC379265	Methoxychlor	GC16	B	03/15/07 17:58
QC379265	Endrin ketone	GC16	B	03/15/07 17:58
QC379265	Toxaphene	GC16	B	03/15/07 17:58
QC379265	TCMX	GC16	B	03/15/07 17:58
QC379265	Decachlorobiphenyl	GC16	B	03/15/07 17:58
QC379266	gamma-BHC	GC23	A	03/16/07 10:42
QC379266	Heptachlor	GC23	A	03/16/07 10:42
QC379266	Aldrin	GC23	A	03/16/07 10:42
QC379266	Dieldrin	GC23	A	03/16/07 10:42
QC379266	Endrin	GC23	A	03/16/07 10:42
QC379266	4,4'-DDT	GC23	A	03/16/07 10:42
QC379266	TCMX	GC23	A	03/16/07 10:42
QC379266	Decachlorobiphenyl	GC23	A	03/16/07 10:42

REPORTING SUMMARY FOR 193277 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379267	gamma-BHC	GC23	A	03/16/07 11:04
QC379267	Heptachlor	GC23	A	03/16/07 11:04
QC379267	Aldrin	GC23	A	03/16/07 11:04
QC379267	Dieldrin	GC23	A	03/16/07 11:04
QC379267	Endrin	GC23	A	03/16/07 11:04
QC379267	4,4'-DDT	GC23	A	03/16/07 11:04
QC379267	TCMX	GC23	A	03/16/07 11:04
QC379267	Decachlorobiphenyl	GC23	A	03/16/07 11:04

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Curtis & Tompkins Laboratories Sample Preparation Summary 15-MAR-2007 15:26

Batch Number : 123116
Date Extracted: 14-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5676A
Spike #3 ID :
SOP Version : 8081_3520_rv15

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193262-002		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193262-007		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
193262-019		Treadwell & Rollo	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
193262-020		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
193277-001		Treadwell & Rollo	Water	950	mL	10	0.010526	1	7	.025	0		8081		
193329-005		Innovative Technical Solutions	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
QC379265	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC379266	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC379267	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie Mee
Reviewed By: [signature] Date: 3/15/07
Relinquished By: [signature]
Received By: [signature] Date: 3/15/07

Curtis & Tompkins, Ltd

8081 WATER PREP LOG

BK2416

LIMS Batch No: 123116
LIMS Analysis: 8081
Extracted by: JCM
Date Extracted: 14 March 07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193262-002 D	1050	7	10.0		
07 I	1050				
19 ~~H~~ O	1000				
20 ~~O~~ U	1060				
193277-001 M	950				
193329-005 N	1050				
MB QC379265	1000	NA			
BS 66					
BSD 67					

JCM 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	SG61106	JCM 3/14/07
0.025 mL of matrix spike solution was added to all spikes	SG7106A	
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 + HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1630	
Extraction End Time:	1120	JCM 3/15/
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JCM 3/15/07
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ granular Na_2SO_4	EM46011625	
Exchanged 2x with Hexane	JTB C38 E39	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	✓

Extraction Chemist — Date: 3/14/07

Contined from Page ___
Continued on Page ___

Reviewed by — Date: 3/15/07

00134

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 03/26/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/18/07
Batch#:	123118		

Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 193277-001

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	68	65-135

Type: BLANK Cleanup Method: EPA 3665A
Lab ID: QC379275

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	86	65-135

ND= Not Detected
RL= Reporting Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	123118
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/18/07

Type: BS
Lab ID: QC379276
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1242	5.000	5.279	106	65-135

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	89	65-135

Type: BSD
Lab ID: QC379277
Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1242	5.000	4.960	99	65-135	6	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	85	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257103122001
Units : pg

Name : 1660_071
Date : 12-MAR-2007 17:36
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071_006	257103122006	PCB10_2	12-MAR-2007 17:36	S5483
L2	071_007	257103122007	PCB25_5	12-MAR-2007 18:02	S5484
L3	071_008	257103122008	PCB100_20	12-MAR-2007 18:29	S4996
L4	071_009	257103122009	PCB250_50	12-MAR-2007 18:55	S4997
L5	071_010	257103122010	PCB500_100	12-MAR-2007 19:22	S4998
L6	071_011	257103122011	PCB750_150	12-MAR-2007 19:48	S5227
L7	071_012	257103122012	PCB1000_200	12-MAR-2007 20:14	S5000

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1016 Peak # 1	A	1148.7	1095.6	1111.1	966.15	817.74	903.27	930.70	AVRG		0.00100		996.18	12	.99	20	
Aroclor-1016 Peak # 2	A	1342.4	1385.2	1449.3	1325.1	1175.9	1380.5	1475.9	AVRG		7.34E-4		1362.1	7	.99	20	
Aroclor-1016 Peak # 3	A	597.80	559.44	656.04	598.44	511.78	568.47	603.45	AVRG		0.00171		585.06	8	.99	20	
Aroclor-1016 Peak # 4	A	378.10	405.52	446.45	401.34	338.75	361.82	391.90	AVRG		0.00257		389.13	9	.99	20	
Aroclor-1016 Peak # 5	A	667.30	649.64	669.16	606.22	520.26	575.48	610.12	AVRG		0.00163		614.02	9	.99	20	
Aroclor-1260 Peak # 1	A	2260.7	2217.4	2258.9	2143.2	2028.7	2210.1	2285.6	AVRG		4.54E-4		2200.6	4	.99	20	
Aroclor-1260 Peak # 2	A	1879.6	1844.9	1918.8	1787.4	1686.4	1887.8	2042.4	AVRG		5.37E-4		1863.9	6	.99	20	
Aroclor-1260 Peak # 3	A	1561.1	1166.5	1266.2	1174.9	1095.9	1178.6	1255.5	AVRG		8.05E-4		1242.7	12	.99	20	
Aroclor-1260 Peak # 4	A	3102.1	2924.0	3038.0	3027.6	2898.8	3041.4	3025.2	AVRG		3.32E-4		3008.2	2	.99	20	
Aroclor-1260 Peak # 5	A	1509.3	1397.4	1495.1	1418.8	1327.9	1470.6	1564.0	AVRG		6.87E-4		1454.7	5	.99	20	
TCMX	A	34845	31892	34012	33399	29284	29869	26488	AVRG		3.18E-5		31398	10	.99	20	
Decachlorobiphenyl	A	21658	20994	21971	22411	20771	20458	17498	AVRG		4.80E-5		20823	8	.99	20	
Aroclor-1016 Peak # 1	B	545.70	499.00	417.50	403.95	380.80	334.89	401.77	AVRG		0.00235		426.23	17	.99	20	
Aroclor-1016 Peak # 2	B	1194.7	1111.2	936.58	892.60	855.35	766.44	950.70	AVRG		0.00104		958.23	15	.99	20	
Aroclor-1016 Peak # 3	B	699.20	661.20	532.62	511.42	486.74	436.54	540.28	AVRG		0.00181		552.57	17	.99	20	
Aroclor-1016 Peak # 4	B	346.10	338.36	268.57	263.22	247.78	223.73	269.05	AVRG		0.00358		279.54	16	.99	20	
Aroclor-1016 Peak # 5	B	467.70	438.80	331.97	331.13	311.25	280.88	343.77	AVRG		0.00279		357.93	19	.99	20	
Aroclor-1260 Peak # 1	B	1515.8	1582.4	1126.0	1112.2	1150.6	1043.9	1343.9	AVRG		7.89E-4		1267.8	17	.99	20	
Aroclor-1260 Peak # 2	B	1057.0	1027.9	762.21	751.70	746.88	684.53	910.09	AVRG		0.00118		848.61	18	.99	20	
Aroclor-1260 Peak # 3	B	895.10	889.12	639.43	638.10	634.73	579.63	776.73	AVRG		0.00139		721.83	18	.99	20	
Aroclor-1260 Peak # 4	B	2237.1	2294.6	1651.7	1705.0	1809.9	1658.8	2111.3	AVRG		5.20E-4		1924.0	15	.99	20	
Aroclor-1260 Peak # 5	B	1125.4	1160.2	845.69	851.66	869.37	788.31	1056.7	AVRG		0.00105		956.76	16	.99	20	
TCMX	B	21813	20655	17169	16709	17334	15631	17398	AVRG		5.52E-5		18101	12	.99	20	
Decachlorobiphenyl	B	16028	16543	11873	12344	13416	12115	14415	AVRG		7.24E-5		13819	14	.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Aroclor-1016 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	A	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	A	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Aroclor-1016 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1016 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 1	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 2	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 3	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 4	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
Aroclor-1260 Peak # 5	B	10.000	25.000	100.00	250.00	500.00	750.00	1000.0	pg
TCMX	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg
Decachlorobiphenyl	B	2.0000	5.0000	20.000	50.000	100.00	150.00	200.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 PCBS Water
EPA 8082

Inst : GC22 Name : 1660_071
Calnum : 257103122001 Cal Date: 12-MAR-2007

ICV 257103122014 (071_014 12-MAR-2007) stds: S5637

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	996.18		250.0	220.5	pg	-12	15	
Aroclor-1260	A	2200.6		250.0	231.4	pg	-7	15	
Aroclor-1016	B	426.23		250.0	222.2	pg	-11	15	
Aroclor-1260	B	1267.8		250.0	234.8	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 PCBS Water: EPA 8082

Inst : GC22
Calnum : 257104282001
Units : pg

Name : ar1242
Date : 13-MAR-2007 12:17
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	072_004	257104282004	AR1242	13-MAR-2007 12:17	S5688

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aroclor-1242 Peak # 1	A	729.21	AVRG		0.00137		729.21	0	.99	20	
Aroclor-1242 Peak # 2	A	903.51	AVRG		0.00111		903.51	0	.99	20	
Aroclor-1242 Peak # 3	A	409.56	AVRG		0.00244		409.56	0	.99	20	
Aroclor-1242 Peak # 4	A	433.30	AVRG		0.00231		433.30	0	.99	20	
Aroclor-1242 Peak # 5	A	418.97	AVRG		0.00239		418.97	0	.99	20	
Aroclor-1242 Peak # 1	B	284.85	AVRG		0.00351		284.85	0	.99	20	
Aroclor-1242 Peak # 2	B	668.87	AVRG		0.00150		668.87	0	.99	20	
Aroclor-1242 Peak # 3	B	360.03	AVRG		0.00278		360.03	0	.99	20	
Aroclor-1242 Peak # 4	B	176.23	AVRG		0.00567		176.23	0	.99	20	
Aroclor-1242 Peak # 5	B	232.92	AVRG		0.00429		232.92	0	.99	20	

Analyte Spiked Amounts	Ch	L1	Units
Aroclor-1242 Peak # 1	A	250.00	pg
Aroclor-1242 Peak # 2	A	250.00	pg
Aroclor-1242 Peak # 3	A	250.00	pg
Aroclor-1242 Peak # 4	A	250.00	pg
Aroclor-1242 Peak # 5	A	250.00	pg
Aroclor-1242 Peak # 1	B	250.00	pg
Aroclor-1242 Peak # 2	B	250.00	pg
Aroclor-1242 Peak # 3	B	250.00	pg
Aroclor-1242 Peak # 4	B	250.00	pg
Aroclor-1242 Peak # 5	B	250.00	pg

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB250_50 IDF : 1.0
Seqnum : 257111653003 File : 077_003 Time : 18-MAR-2007 13:46
Cal : 257103122001 Caldate : 12-MAR-2007
Standards: S4997

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			250.0	218.1	pg	-13	15	
Aroclor-1260	A			250.0	243.7	pg	-3	15	
TCMX	A	31398	27056	50.00	43.08	pg	-14	15	
Decachlorobiphenyl	A	20823	23373	50.00	56.12	pg	12	15	
Aroclor-1016	B			250.0	250.8	pg	0	15	
Aroclor-1260	B			250.0	284.3	pg	14	15	
TCMX	B	18101	17881	50.00	49.39	pg	-1	15	
Decachlorobiphenyl	B	13819	16734	50.00	60.55	pg	**21**	15	c+

+=high bias c=CCV

257111653003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR1242 IDF : 1.0
Seqnum : 257111653005 File : 077_005 Time : 18-MAR-2007 18:11
Cal : 257104282001 Caldate : 13-MAR-2007
Standards: S5688

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1242	A	250.0	259.6	pg	4	15	
Aroclor-1242	B	250.0	277.9	pg	11	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB500_100 IDF : 1.0
Seqnum : 257111653021 File : 077_021 Time : 19-MAR-2007 01:14
Cal : 257103122001 Caldate : 12-MAR-2007
Standards: S4998

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	484.4	pg	-3	15	
Aroclor-1260	A			500.0	516.9	pg	3	15	
TCMX	A	31398	30692	100.0	97.75	pg	-2	15	
Decachlorobiphenyl	A	20823	23379	100.0	112.3	pg	12	15	
Aroclor-1016	B			500.0	435.9	pg	-13	15	
Aroclor-1260	B			500.0	484.7	pg	-3	15	
TCMX	B	18101	16366	100.0	90.41	pg	-10	15	
Decachlorobiphenyl	B	13819	14654	100.0	106.0	pg	6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR1242 IDF : 1.0
Seqnum : 257111653024 File : 077_024 Time : 19-MAR-2007 02:33
Cal : 257104282001 Caldate : 13-MAR-2007
Standards: S5688

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1242	A	250.0	276.1	pg	10	15	
Aroclor-1242	B	250.0	286.7	pg	15	15	

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257103122 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 12-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
001	071_001	X	PCB500_100			12-MAR-2007 14:42	1.0						1	
002	071_002	X	PCB500_100			12-MAR-2007 15:09	1.0						1	
003	071_003	X	PCB500_100			12-MAR-2007 15:46	1.0	1		1			1	
004	071_004	X	HEX			12-MAR-2007 16:43	1.0							
005	071_005	X	HEX			12-MAR-2007 17:09	1.0							
006	071_006	ICAL	PCB10_2			12-MAR-2007 17:36	1.0						2	
007	071_007	ICAL	PCB25_5			12-MAR-2007 18:02	1.0						3	
008	071_008	ICAL	PCB100_20			12-MAR-2007 18:29	1.0						4	
009	071_009	ICAL	PCB250_50			12-MAR-2007 18:55	1.0						5	
010	071_010	ICAL	PCB500_100			12-MAR-2007 19:22	1.0						1	
011	071_011	ICAL	PCB750_150			12-MAR-2007 19:48	1.0						6	
012	071_012	ICAL	PCB1000_200			12-MAR-2007 20:14	1.0						7	
013	071_013	X	HEX			12-MAR-2007 20:41	1.0							
014	071_014	ICV	ULTRA_1660			12-MAR-2007 21:07	1.0			1			8	
015	071_015	X	ULTRA_1660			12-MAR-2007 21:34	1.0	2		1			8	
016	071_016	X	HEX			12-MAR-2007 22:00	1.0							

Stds used: 1=S4998 2=S5483 3=S5484 4=S4996 5=S4997 6=S5227 7=S5000 8=S5637

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	072_001	CCV	PCB500_100			13-MAR-2007 10:02	1.0	1.0			1	1	
002	072_002	X	PCB500_100			13-MAR-2007 10:28	1.0	1.0	4		1	1	
003	072_003	X	AR1242			13-MAR-2007 11:51	1.0	1.0	1		1	2	
004	072_004	ICAL	AR1242			13-MAR-2007 12:17	1.0	1.0			1	2	
005	072_005	CCV	AR2154			13-MAR-2007 12:44	1.0	1.0			1	3	
006	072_006	X	AR2154			13-MAR-2007 13:10	1.0	1.0			1	3	
007	072_007	CCV	AR1248			13-MAR-2007 14:19	1.0					4	
008	072_008	ICAL	AR1248			13-MAR-2007 14:45	1.0	1.0				4	
009	072_009	CCV	AR1232			13-MAR-2007 15:12	1.0					5	
010	072_010	X	HEX			13-MAR-2007 15:38	1.0						
011	072_011	BLANK	QC378900	123037	Miscel	13-MAR-2007 16:05	1.0	50.0			1		
012	072_012	BLANK	QC378910	123039	Soil	13-MAR-2007 16:31	1.0	0.8221			1		
013	072_013	SAMPLE	193121-001	123037	Miscel	13-MAR-2007 16:57	1.0	49.98	1		1		2:PCB122=1203.02
014	072_014	SAMPLE	193229-002	122911	Soil	13-MAR-2007 17:24	2.0	0.827			1		
015	072_015	SAMPLE	193229-003	122911	Soil	13-MAR-2007 17:52	1.0	0.8224			1		
016	072_016	SAMPLE	193229-004	122911	Soil	13-MAR-2007 18:19	1.0	0.8256			1		
017	072_017	BS	QC378901	123037	Miscel	13-MAR-2007 18:51	1.0	50.0			1		
018	072_018	BSD	QC378902	123037	Miscel	13-MAR-2007 19:18	1.0	50.0			1		
019	072_019	LCS	QC378911	123039	Soil	13-MAR-2007 19:44	1.0	0.8317		1	1		
020	072_020	X	HEX			13-MAR-2007 20:11	1.0						
021	072_021	CCV	PCB250_50			13-MAR-2007 20:37	1.0	1.0			1	6	
022	072_022	X	PCB250_50			13-MAR-2007 21:04	1.0	1.0	1		1	6	
023	072_023	CCV	AR1242			13-MAR-2007 21:30	1.0	1.0			1	2	
024	072_024	X	AR1242			13-MAR-2007 21:57	1.0	1.0	1		1	2	
025	072_025	CCV	AR2154			13-MAR-2007 22:23	1.0	1.0			1	3	
026	072_026	X	AR2154			13-MAR-2007 22:50	1.0	1.0	1		1	3	
027	072_027	CCV	AR1248			13-MAR-2007 23:16	1.0	1.0			1	4	
028	072_028	CCV	AR1232			13-MAR-2007 23:43	1.0					5	
029	072_029	X	HEX			14-MAR-2007 00:09	1.0						
030	072_030	SAMPLE	193280-001	123039	Soil	14-MAR-2007 00:36	1.0	0.8457			1		
031	072_031	SAMPLE	193280-002	123039	Soil	14-MAR-2007 01:02	1.0	0.8466			1		

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	072_032	SAMPLE	193280-003	123039	Soil	14-MAR-2007 01:29	1.0					
033	072_033	SAMPLE	193280-004	123039	Soil	14-MAR-2007 01:55	1.0	0.8232		1		
034	072_034	SAMPLE	193280-005	123039	Soil	14-MAR-2007 02:22	1.0	0.8221		1		
035	072_035	SAMPLE	193280-006	123039	Soil	14-MAR-2007 02:48	1.0	0.8342		1		
036	072_036	SAMPLE	193280-007	123039	Soil	14-MAR-2007 03:15	1.0	0.8237		1		
037	072_037	X	193280-008	123039	Soil	14-MAR-2007 03:41	10.0	0.8353		1		
038	072_038	SAMPLE	193280-009	123039	Soil	14-MAR-2007 04:08	1.0	0.8375		1		
039	072_039	SAMPLE	193280-010	123039	Soil	14-MAR-2007 04:34	1.0	0.835		1		
040	072_040	X	HEX			14-MAR-2007 05:01	1.0					
041	072_041	X	PCB500_100			14-MAR-2007 05:27	1.0	1.0		1	1	
042	072_042	CCV	PCB500_100			14-MAR-2007 05:54	1.0	1.0		1	1	
043	072_043	CCV	AR2154			14-MAR-2007 06:20	1.0	1.0		1	3	
044	072_044	X	AR2154			14-MAR-2007 06:47	1.0	1.0	1	1	3	
045	072_045	CCV	AR1248			14-MAR-2007 07:13	1.0	1.0		1	4	
046	072_046	X	HEX			14-MAR-2007 07:40	1.0					
047	072_047	SAMPLE	193280-011	123039	Soil	14-MAR-2007 08:06	1.0	0.8386		1		
048	072_048	SAMPLE	193280-012	123039	Soil	14-MAR-2007 08:33	1.0	0.8409		1		
049	072_049	X	193280-013	123039	Soil	14-MAR-2007 08:59	2.0	0.8245		1		
050	072_050	SAMPLE	193314-001	123039	Soil	14-MAR-2007 09:26	1.0	0.8289		1		
051	072_051	SAMPLE	193314-002	123039	Soil	14-MAR-2007 09:52	1.0	0.827	2	1		3:PCB122=5298.41
052	072_052	SAMPLE	193314-003	123039	Soil	14-MAR-2007 10:19	1.0	0.8205		1		
053	072_053	SAMPLE	193314-004	123039	Soil	14-MAR-2007 10:45	5.0	0.8213		1		
054	072_054	X	193314-005	123039	Soil	14-MAR-2007 11:12	5.0	0.8322		1		
055	072_055	SAMPLE	193314-006	123039	Soil	14-MAR-2007 11:38	2.0	0.8218		1		
056	072_056	SAMPLE	193314-007	123039	Soil	14-MAR-2007 12:05	2.0	0.821		1		
057	072_057	X	HEX			14-MAR-2007 12:31	1.0					
058	072_058	CCV	PCB250_50			14-MAR-2007 12:57	1.0	1.0		1	6	
059	072_059	X	PCB250_50			14-MAR-2007 13:24	1.0				6	
060	072_060	CCV	AR2154			14-MAR-2007 13:50	1.0	1.0		1	3	
061	072_061	X	AR2154			14-MAR-2007 14:17	1.0				3	
062	072_062	CCV	AR1248			14-MAR-2007 14:43	1.0	1.0			4	

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257104282 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 13-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	072_063	X	HEX			14-MAR-2007 15:09	1.0					

Stds used: 1=S4998 2=S5688 3=S5687 4=S5103 5=S5508 6=S4997

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257111653 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 18-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	077_001	X	HEX			18-MAR-2007 12:53	1.0						
002	077_002	X	PCB250_50			18-MAR-2007 13:19	1.0	1.0			1	1	
003	077_003	CCV	PCB250_50			18-MAR-2007 13:46	1.0	1.0			1	1	
004	077_004	CCV	AR2154			18-MAR-2007 17:45	1.0					2	
005	077_005	CCV	AR1242			18-MAR-2007 18:11	1.0	1.0			1	3	
006	077_006	X	AR1242			18-MAR-2007 18:38	1.0	1.0			1	3	
007	077_007	CCV	AR1248			18-MAR-2007 19:04	1.0					4	
008	077_008	X	HEX			18-MAR-2007 19:30	1.0						
009	077_009	BLANK	QC379275	123118	Water	18-MAR-2007 19:57	1.0	0.025			1		
010	077_010	SAMPLE	193262-002	123118	Water	18-MAR-2007 20:23	1.0	0.02427			1		
011	077_011	SAMPLE	193262-007	123118	Water	18-MAR-2007 20:50	1.0	0.02404			1		
012	077_012	SAMPLE	193262-019	123118	Water	18-MAR-2007 21:16	1.0	0.02381			1		
013	077_013	SAMPLE	193262-020	123118	Water	18-MAR-2007 21:43	1.0	0.02381			1		
014	077_014	SAMPLE	193277-001	123118	Water	18-MAR-2007 22:09	1.0	0.025			1		
015	077_015	BS	QC379276	123118	Water	18-MAR-2007 22:35	1.0	0.025			1		
016	077_016	BSD	QC379277	123118	Water	18-MAR-2007 23:02	1.0	0.025			1		
017	077_017	MS	QC379352	123143	Soil	18-MAR-2007 23:28	1.0	0.8319	1		1		1:PCB124=1009.51
018	077_018	MSD	QC379353	123143	Soil	18-MAR-2007 23:55	1.0	0.8284		1	1		
019	077_019	X	HEX			19-MAR-2007 00:21	1.0						
020	077_020	X	PCB500_100			19-MAR-2007 00:47	1.0	1.0			1	5	
021	077_021	CCV	PCB500_100			19-MAR-2007 01:14	1.0	1.0			1	5	
022	077_022	X	AR2154			19-MAR-2007 01:40	1.0	1.0	1		1	2	
023	077_023	CCV	AR2154			19-MAR-2007 02:07	1.0	1.0			1	2	
024	077_024	CCV	AR1242			19-MAR-2007 02:33	1.0	1.0			1	3	
025	077_025	X	AR1242			19-MAR-2007 02:59	1.0	1.0	1		1	3	
026	077_026	CCV	AR1248			19-MAR-2007 03:26	1.0					4	
027	077_027	X	HEX			19-MAR-2007 03:52	1.0						
028	077_028	SAMPLE	193384-001	123143	Soil	19-MAR-2007 04:19	5.0	0.8319	4		1		5:PCB122=3384.63
029	077_029	SAMPLE	193384-006	123143	Soil	19-MAR-2007 04:45	1.0	0.8308	1	2	1		
030	077_030	SAMPLE	193449-002	123189	Soil	19-MAR-2007 05:12	1.0	0.8256			1		
031	077_031	SAMPLE	193449-003	123189	Soil	19-MAR-2007 05:38	1.0	0.8278	1		1		

Stds used: 1=S4997 2=S5687 3=S5688 4=S5103 5=S4998 6=S5227

SEQUENCE SUMMARY FOR 193277 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 257111653 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 18-MAR-2007
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	077_032	SAMPLE	193449-004	123189	Soil	19-MAR-2007 06:04	1.0	0.824	1		1		
033	077_033	SAMPLE	193449-005	123189	Soil	19-MAR-2007 06:31	1.0	0.8226			1		
034	077_034	SAMPLE	193449-006	123189	Soil	19-MAR-2007 06:57	1.0	0.8278	24	1	1	28:PCB126=2778.12	
035	077_035	SAMPLE	193449-007	123189	Soil	19-MAR-2007 07:24	1.0	0.8308	16	1	1	20:PCB126=3496.29	
036	077_036	SAMPLE	193449-008	123189	Soil	19-MAR-2007 07:50	1.0	0.8319	1		1		
037	077_037	SAMPLE	193449-009	123189	Soil	19-MAR-2007 08:17	1.0	0.8322	23	2	1	27:PCB101=9491.21	
038	077_038	X	HEX			19-MAR-2007 08:43	1.0						
039	077_039	CCV	PCB750_150			19-MAR-2007 09:10	1.0	1.0	1		1	6	
040	077_040	X	PCB750_150			19-MAR-2007 09:36	1.0	1.0	2		1	6	
041	077_041	CCV	AR2154			19-MAR-2007 10:02	1.0	1.0			1	2	
042	077_042	X	AR2154			19-MAR-2007 10:29	1.0	1.0	2		1	2	
043	077_043	X	AR1242			19-MAR-2007 10:55	1.0	1.0	1		1	3	
044	077_044	CCV	AR1242			19-MAR-2007 11:22	1.0	1.0			1	3	
045	077_045	CCV	AR1248			19-MAR-2007 11:48	1.0					4	
046	077_046	X	HEX			19-MAR-2007 12:14	1.0						
047	077_047	X	193449-010	123189	Soil	19-MAR-2007 12:49	1.0						

Stds used: 1=S4997 2=S5687 3=S5688 4=S5103 5=S4998 6=S5227

REPORTING SUMMARY FOR 193277 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193277-001	Aroclor-1016	GC22	A	03/18/07 22:09
193277-001	Aroclor-1221	GC22	A	03/18/07 22:09
193277-001	Aroclor-1232	GC22	A	03/18/07 22:09
193277-001	Aroclor-1242	GC22	A	03/18/07 22:09
193277-001	Aroclor-1248	GC22	A	03/18/07 22:09
193277-001	Aroclor-1254	GC22	A	03/18/07 22:09
193277-001	Aroclor-1260	GC22	A	03/18/07 22:09
193277-001	TCMX	GC22	A	03/18/07 22:09
193277-001	Decachlorobiphenyl	GC22	A	03/18/07 22:09
QC379275	Aroclor-1016	GC22	A	03/18/07 19:57
QC379275	Aroclor-1221	GC22	A	03/18/07 19:57
QC379275	Aroclor-1232	GC22	A	03/18/07 19:57
QC379275	Aroclor-1242	GC22	A	03/18/07 19:57
QC379275	Aroclor-1248	GC22	A	03/18/07 19:57
QC379275	Aroclor-1254	GC22	A	03/18/07 19:57
QC379275	Aroclor-1260	GC22	A	03/18/07 19:57
QC379275	TCMX	GC22	A	03/18/07 19:57
QC379275	Decachlorobiphenyl	GC22	A	03/18/07 19:57
QC379276	Aroclor-1242	GC22	A	03/18/07 22:35
QC379276	TCMX	GC22	A	03/18/07 22:35
QC379276	Decachlorobiphenyl	GC22	A	03/18/07 22:35
QC379277	Aroclor-1242	GC22	A	03/18/07 23:02
QC379277	TCMX	GC22	A	03/18/07 23:02
QC379277	Decachlorobiphenyl	GC22	A	03/18/07 23:02

Curtis & Tompkins Laboratories Sample Preparation Summary 15-MAR-2007 15:30

Batch Number : 123118
Date Extracted: 14-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : PCB
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5616B
Spike #2 ID : S5458A
Spike #3 ID :
SOP Version : PCB_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193262-002		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	6	.05	0		PCB	3665A	
193262-007		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	6	.05	0		PCB	3665A	
193262-019		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	6	.05	0		PCB	3665A	
193262-020		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	5	.05	0		PCB	3665A	
193277-001		Treadwell & Rollo	Water	1000	mL	25	0.025000	1	5	.05	0		PCB	3665A	
193290-001		Shaw Environmental & Infrastru	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193299-001		Shaw Environmental & Infrastru	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
193301-003		Shaw Environmental & Infrastru	Water	1030	mL	25	0.024272	1	7	.05	0		PCB	3665A	
193329-005		Innovative Technical Solutions	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
QC379275	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC379276	BS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC379277	BSD		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	

Prep Chemist: Jessie Mee
Reviewed By: [signature] Date: 3/15/07
Relinquished By: [signature]
Received By: [signature] Date: 3/15/07

001515

Curtis & Tompkins, Ltd

PCB WATER PREP LOG

BK2374

LIMS Batch No: 123118
LIMS Analysis: PCB
Extracted by: JDM
Date Extracted: 14 March 07

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
Page 80

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
193262-002 F	1030	6	25.0	
07 F	1040	6		
19 M	1050	6		
20 Q	1050	5		
193277-001 L	1000	5		
193290-001 B	1050	5		
193299-001 B	1050			
193301-003 C	1080			
193329-005 M	1040			
MB QC379275	1000	NA		
BS 76				
BSD 77				
				JLM 3/15/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.05 mL of surrogate solution was added to all samples	S5616B	JDM 3/14/07
0.05 mL of spike solution AR1242 was added to all spikes	S5458A	
☒ Samples were continuously extracted with about 450 mL CH_2Cl_2 & HPLC H_2O	EM47031 / EM47011	
Extraction Start Time:	1650	
Extraction End Time:	1120	JDM 3/15/07
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	JLM 3/15/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46111628	
Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	JTBC38E39	
EPA 3665A Clean-up: Vortexed w/ 10mL H_2SO_4 lot #	FS06S076	
Centrifuged for 1min; 10mL transferred to labelled vial	✓	

Jessie Thee 3/14/07
Extraction Chemist **Date**

Contined from Page —
Continued on Page —

3/15/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 03/26/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.054	0.088			0.19	0.15	0.22	0.21
Aroclor-1242	ug/L	0.043	0.089			0.13	0.12	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW030807A	Batch#:	123065
Lab ID:	193277-001	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/16/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.1	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.1	
Fluorene	ND	1.1	
Phenanthrene	ND	0.53	
Anthracene	ND	0.53	0.02
Fluoranthene	ND	0.42	0.006
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.11	
Chrysene	ND	0.11	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.11	
Benzo(a)pyrene	ND	0.11	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	ND	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.15	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	82	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

12.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC379036	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	87	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC379037	Batch#:	123065
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/15/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.318	93	50-135
Fluorene	2.000	1.857	93	65-135
Pyrene	1.000	0.9021	90	65-135
Benzo(a)pyrene	1.000	0.9642	96	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	86	65-135

14.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	ZZZZZZZZZZ	Batch#:	123065
MSS Lab ID:	193332-003	Sampled:	03/09/07
Matrix:	Water	Received:	03/09/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/15/07

Type: MS Lab ID: QC379038

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09271	9.901	9.604	97	50-135
Fluorene	15.08	1.980	13.76	-67 NM	65-135
Pyrene	0.9263	0.9901	1.432	51 *	65-135
Benzo(a)pyrene	<0.01532	0.9901	0.7741	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	249 *	65-135
1-Methylnaphthalene (F)	173 *	65-135

Type: MSD Lab ID: QC379039

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.901	11.37	115	50-135	17	35
Fluorene	1.980	13.74	-68 NM	65-135	0	35
Pyrene	0.9901	1.431	51 *	65-135	0	35
Benzo(a)pyrene	0.9901	0.7896	80	65-135	2	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	246 *	65-135
1-Methylnaphthalene (F)	171 *	65-135

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

15.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 HPLC Water: EPA 8310

Inst : HPLC04 Reviewer: MCH
Calnum : 296366536003 Date : 11-SEP-2006 15:34
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	25400006	296366536006		11-SEP-2006 15:34	S4234
L2	25400007	296366536007		11-SEP-2006 16:05	S4233
L3	25400008	296366536008		11-SEP-2006 16:37	S4232
L4	25400009	296366536009		11-SEP-2006 17:09	S4231
L5	25400010	296366536010		11-SEP-2006 17:40	S4230
L6	25400011	296366536011		11-SEP-2006 18:12	S4229
L7	25400012	296366536012		11-SEP-2006 18:44	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0134	0.0126	0.0130	0.0130	0.0130	0.0132	0.0131	LINR	15.5697	76.3942		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0095	0.0094	0.0094	0.0095	0.0094	0.0096	0.0095	LINR	32.9278	104.956		0.0095	1.000	0.99	20	
Acenaphthene	1	0.0057	0.0052	0.0051	0.0052	0.0052	0.0053	0.0052	LINR	11.0139	190.949		0.0053	1.000	0.99	20	
Fluorene	1	0.0655	0.0628	0.0627	0.0631	0.0630	0.0644	0.0642	LINR	10.2991	15.5484		0.0637	1.000	0.99	20	
Phenanthrene	1	0.1949	0.1746	0.1782	0.1781	0.1787	0.1816	0.1806	LINR	2.64090	5.52864		0.1810	1.000	0.99	20	
Anthracene	1	0.4068	0.4009	0.4048	0.4052	0.4067	0.4118	0.4096	LINR	2.01871	2.43839		0.4065	1.000	0.99	20	
Fluoranthene	1	0.0415	0.0377	0.0409	0.0403	0.0404	0.0412	0.0410	LINR	7.21460	24.3791		0.0404	1.000	0.99	20	
Benzo(a)anthracene	1	0.0845	0.0878	0.0901	0.0899	0.0911	0.0929	0.0930	LINR	8.35879	10.7348		0.0899	1.000	0.99	20	
Chrysene	1	0.1424	0.1313	0.1344	0.1331	0.1335	0.1355	0.1350	LINR	2.48279	7.40050		0.1350	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0862	0.1008	0.1039	0.1046	0.1054	0.1075	0.1073	LINR	14.2279	9.30459		0.1023	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0645	0.0745	0.0800	0.0827	0.0819	0.0838	0.0832	LINR	5.58431	11.9893		0.0787	1.000	0.99	20	
Benzo(a)pyrene	1	0.0803	0.0741	0.0829	0.0833	0.0852	0.0870	0.0869	LINR	10.2827	11.4765		0.0828	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0246	0.0166	0.0217	0.0209	0.0213	0.0220	0.0221	LINR	29.6094	45.0755		0.0213	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0165	0.0294	0.0330	0.0335	0.0340	0.0349	0.0351	LINR	32.0834	28.4118		0.0309	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0790	0.0805	0.0938	0.0931	0.0945	0.0966	0.0975	LINR	13.9271	10.2397		0.0907	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0085	0.0085	0.0085	0.0084	0.0086	0.0085	LINR	-76.026	117.995		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0885	0.0857	0.0868	0.0861	0.0849	0.0846		LINR	-70.826	11.8330		0.0861	1.000	0.99	20	
Pyrene	2	0.1182	0.1220	0.1252	0.1267	0.1267	0.1294	0.1285	LINR	4.27774	7.76663		0.1252	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0221	0.0213	0.0215	0.0211	0.0205	0.0202		LINR	-393.82	49.5869		0.0211	1.000	0.99	20	
Naphthalene	3	0.0111	0.0109	0.0109	0.0110	0.0110	0.0111	0.0110	LINR	13.1984	90.6364		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0237	0.0230	0.0233	0.0234	0.0234	0.0235	0.0233	LINR	-11.517	42.8233		0.0234	1.000	0.99	20	
Fluorene	3	0.1274	0.1235	0.1242	0.1250	0.1245	0.1248	0.1233	LINR	-9.5449	8.10194		0.1247	1.000	0.99	20	
Phenanthrene	3	0.1380	0.1358	0.1345	0.1350	0.1344	0.1360	0.1358	LINR	2.05560	7.36159		0.1356	1.000	0.99	20	
Anthracene	3	0.4296	0.4138	0.4201	0.4193	0.4206	0.4258	0.4263	LINR	4.43590	2.34448		0.4222	1.000	0.99	20	
Fluoranthene	3	0.0394	0.0382	0.0392	0.0391	0.0386	0.0395	0.0393	LINR	6.54339	25.4100		0.0390	1.000	0.99	20	
Pyrene	3	0.1248	0.1243	0.1261	0.1270	0.1257	0.1284	0.1286	LINR	5.80224	7.77299		0.1264	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1429	0.1415	0.1452	0.1450	0.1453	0.1494	0.1479	LINR	4.39149	6.74322		0.1453	1.000	0.99	20	
Chrysene	3	0.1810	0.1759	0.1784	0.1776	0.1766	0.1802	0.1765	LINR	-3.8697	5.65057		0.1780	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0623	0.0620	0.0639	0.0639	0.0642	0.0654	0.0650	LINR	7.62422	15.3591		0.0638	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3742	0.3750	0.3871	0.3884	0.3878	0.3940	0.3906	LINR	1.42985	2.55556		0.3853	1.000	0.99	20	
Benzo(a)pyrene	3	0.1994	0.1972	0.2087	0.2074	0.2091	0.2130	0.2108	LINR	2.49086	4.73300		0.2065	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0306	0.0284	0.0291	0.0300	0.0310	0.0316	0.0318	LINR	29.7282	31.3563		0.0303	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0501	0.0543	0.0566	0.0575	0.0586	0.0598	0.0602	LINR	26.3643	16.5715		0.0567	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0836	0.0887	0.0924	0.0933	0.0950	0.0974	0.0980	LINR	13.2379	10.1878		0.0926	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0125	0.0123	0.0122	0.0123	0.0122	0.0123	0.0121	LINR	-170.35	82.4814		0.0122	1.000	0.99	20	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	L7	Units
Naphthalene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthylene	1	333.33	1000.0	4000.0	8000.0	20000	40000	80000	ug/L
Acenaphthene	1	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(a)anthracene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	1	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	1	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	1	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L
Acenaphthylene	2	333.33	1000.0	4000.0	8000.0	20000	40000		ug/L
Pyrene	2	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (UV)	2	666.70	2000.0	8000.0	16000	40000	80000		ug/L
Naphthalene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Acenaphthene	3	166.67	500.00	2000.0	4000.0	10000	20000	40000	ug/L
Fluorene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Phenanthrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)anthracene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Chrysene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(b)fluoranthene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(k)fluoranthene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Benzo(a)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
Dibenz(a,h)anthracene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Benzo(g,h,i)perylene	3	33.333	100.00	400.00	800.00	2000.0	4000.0	8000.0	ug/L
Indeno(1,2,3-cd)pyrene	3	16.667	50.000	200.00	400.00	1000.0	2000.0	4000.0	ug/L
1-Methylnaphthalene (F)	3	666.70	2000.0	8000.0	16000	40000	80000	160000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

296366536003

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296366536003 Cal Date: 11-SEP-2006

ICV 296366536015 (25400015 11-SEP-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0135	5000	5185	ug/L	4	15	
Acenaphthylene	1	0.0095	0.0101	10000	10620	ug/L	6	15	
Acenaphthene	1	0.0053	0.0056	5000	5364	ug/L	7	15	
Fluorene	1	0.0637	0.0655	1000	1029	ug/L	3	15	
Phenanthrene	1	0.1810	0.1823	500.0	506.7	ug/L	1	15	
Anthracene	1	0.4065	0.4217	500.0	516.2	ug/L	3	15	
Fluoranthene	1	0.0404	0.0426	1000	1045	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0948	500.0	517.4	ug/L	3	15	
Chrysene	1	0.1350	0.1387	500.0	515.6	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1023	0.1098	1000	1036	ug/L	4	15	
Benzo(k)fluoranthene	1	0.0787	0.0839	500.0	508.6	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0872	500.0	510.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0213	0.0216	1000	1003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0346	1000	1016	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0972	500.0	511.7	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0906	10000	10650	ug/L	6	15	
Pyrene	2	0.1252	0.1338	500.0	523.8	ug/L	5	15	
Naphthalene	3	0.0110	0.0114	5000	5167	ug/L	3	15	
Acenaphthene	3	0.0234	0.0249	5000	5321	ug/L	6	15	
Fluorene	3	0.1247	0.1285	1000	1032	ug/L	3	15	
Phenanthrene	3	0.1356	0.1368	500.0	505.5	ug/L	1	15	
Anthracene	3	0.4222	0.4379	500.0	517.8	ug/L	4	15	
Fluoranthene	3	0.0390	0.0412	1000	1053	ug/L	5	15	
Pyrene	3	0.1264	0.1327	500.0	521.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1453	0.1519	500.0	516.6	ug/L	3	15	
Chrysene	3	0.1780	0.1817	500.0	509.4	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0638	0.0665	1000	1028	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3853	0.4040	500.0	517.7	ug/L	4	15	
Benzo(a)pyrene	3	0.2065	0.2168	500.0	515.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0303	0.0313	1000	1010	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0567	0.0589	1000	1002	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0990	500.0	517.5	ug/L	3	15	

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Calibration Table

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HPLC04 METHOD 8310 NEW ICAL STANDARD CONCENTRATIONS. DAD SIGNAL B 305nm REPLACED WITH 235nm. 12SEP2006

Calib. Data Modified : 9/12/2006 10:57:26 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.802	1	1	166.67000	2.23078	74.71377			Naphthalene
		2	500.00000	6.31569	79.16794			
		3	2000.00000	25.90398	77.20822			
		4	4000.00000	51.93715	77.01617			
		5	1.00000e4	129.65009	77.13069			
		6	2.00000e4	263.24326	75.97536			
		7	4.00000e4	522.85864	76.50251			
4.842	3	1	166.67000	1.85394	89.90059			Naphthalene
		2	500.00000	5.43618	91.97637			
		3	2000.00000	21.78984	91.78590			
		4	4000.00000	43.84108	91.23863			
		5	1.00000e4	109.57388	91.26263			
		6	2.00000e4	221.49504	90.29548			
		7	4.00000e4	440.86111	90.73152			
6.060	1	1	333.33000	3.15395	105.68635			Acenaphthylene
		2	1000.00000	9.43525	105.98551			
		3	4000.00000	37.61687	106.33528			
		4	8000.00000	75.64349	105.75926			
		5	2.00000e4	188.38324	106.16656			
		6	4.00000e4	383.38632	104.33340			
		7	8.00000e4	761.10919	105.10975			
6.061	2	1	333.33000	29.49190	11.30242			Acenaphthylene
		2	1000.00000	85.73747	11.66351			
		3	4000.00000	347.08606	11.52452			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	688.70593	11.61599			
		5	2.00000e4	1698.55408	11.77472			
		6	4.00000e4	3383.69482	11.82140			
6.830	1	1	666.67000	5.81349	114.67642			1-Methylnaphthalene (UV)
		2	2000.00000	17.05874	117.24194			
		3	8000.00000	68.16199	117.36747			
		4	1.60000e4	136.14874	117.51853			
		5	4.00000e4	337.57864	118.49091			
		6	8.00000e4	684.45111	116.88198			
		7	1.60000e5	1354.27161	118.14469			
6.831	2	1	666.67000	14.75137	45.19378			1-Methylnaphthalene (UV)
		2	2000.00000	42.66757	46.87401			
		3	8000.00000	171.91420	46.53484			
		4	1.60000e4	338.36716	47.28591			
		5	4.00000e4	821.53601	48.68928			
		6	8.00000e4	1616.18457	49.49930			
6.869	3	1	666.67000	8.30560	80.26751			1-Methylnaphthalene (F)
		2	2000.00000	24.51801	81.57270			
		3	8000.00000	97.60980	81.95898			
		4	1.60000e4	196.10147	81.59041			
		5	4.00000e4	487.35361	82.07593			
		6	8.00000e4	981.35596	81.51986			
		7	1.60000e5	1937.22498	82.59237			
7.283	1	1	166.67000	1.82115	91.51926			2-Methylnaphthalene
		2	500.00000	5.62870	88.83045			
		3	2000.00000	22.06749	90.63106			
		4	4000.00000	44.66531	89.55495			
		5	1.00000e4	111.34611	89.81005			
		6	2.00000e4	227.18216	88.03508			
		7	4.00000e4	449.94791	88.89918			
7.322	3	1	166.67000	2.41951	68.88591			2-Methylnaphthalene
		2	500.00000	7.07634	70.65800			
		3	2000.00000	28.29847	70.67520			
		4	4000.00000	56.86556	70.34135			
		5	1.00000e4	141.75874	70.54239			
		6	2.00000e4	286.67664	69.76502			
		7	4.00000e4	569.43372	70.24523			
7.666	1	1	166.67000	9.58257e-1	173.93033			Acenaphthene
		2	500.00000	2.58876	193.14283			
		3	2000.00000	10.25945	194.94226			
		4	4000.00000	20.75902	192.68732			
		5	1.00000e4	51.63885	193.65263			
		6	2.00000e4	105.88689	188.88079			
		7	4.00000e4	209.00858	191.37971			
7.706	3	1	166.67000	3.94748	42.22189			Acenaphthene
		2	500.00000	11.50409	43.46281			
		3	2000.00000	46.64507	42.87699			
		4	4000.00000	93.48280	42.78862			
		5	1.00000e4	233.75096	42.78057			
		6	2.00000e4	469.62485	42.58718			
		7	4.00000e4	933.23206	42.86179			
8.192	1	1	33.33300	2.18436	15.25985			Fluorene
		2	100.00000	6.28320	15.91545			
		3	400.00000	25.07074	15.95485			
		4	800.00000	50.47938	15.84805			
		5	2000.00000	125.96744	15.87712			
		6	4000.00000	257.72849	15.52021			
		7	8000.00000	513.81476	15.56981			
8.231	3	1	33.33300	4.24690	7.84878			Fluorene
		2	100.00000	12.35106	8.09647			
		3	400.00000	49.66773	8.05352			
		4	800.00000	100.02036	7.99837			
		5	2000.00000	249.05284	8.03042			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	499.24185	8.01215			
		7	8000.00000	986.21576	8.11182			
9.320	1	1	16.66700	3.24771	5.13193			Phenanthrene
		2	50.00000	8.73134	5.72650			
		3	200.00000	35.63305	5.61277			
		4	400.00000	71.22990	5.61562			
		5	1000.00000	178.74966	5.59442			
		6	2000.00000	363.28619	5.50530			
		7	4000.00000	722.49628	5.53636			
9.358	3	1	16.66700	2.29972	7.24742			Phenanthrene
		2	50.00000	6.79069	7.36302			
		3	200.00000	26.89424	7.43654			
		4	400.00000	54.00311	7.40698			
		5	1000.00000	134.37662	7.44177			
		6	2000.00000	272.08804	7.35056			
		7	4000.00000	543.03455	7.36601			
10.334	1	1	16.66700	6.77936	2.45849			Anthracene
		2	50.00000	20.04438	2.49447			
		3	200.00000	80.96329	2.47026			
		4	400.00000	162.06219	2.46819			
		5	1000.00000	406.67545	2.45896			
		6	2000.00000	823.53979	2.42854			
		7	4000.00000	1638.29102	2.44157			
10.373	3	1	16.66700	7.16011	2.32776			Anthracene
		2	50.00000	20.68958	2.41668			
		3	200.00000	84.01796	2.38044			
		4	400.00000	167.72159	2.38490			
		5	1000.00000	420.57559	2.37769			
		6	2000.00000	851.57800	2.34858			
		7	4000.00000	1705.10254	2.34590			
11.486	1	1	33.33300	1.38397	24.08505			Fluoranthene
		2	100.00000	3.77340	26.50128			
		3	400.00000	16.37512	24.42730			
		4	800.00000	32.25341	24.80358			
		5	2000.00000	80.77144	24.76123			
		6	4000.00000	164.65369	24.29341			
		7	8000.00000	327.67221	24.41464			
11.525	3	1	33.33300	1.31290	25.38879			Fluoranthene
		2	100.00000	3.82154	26.16749			
		3	400.00000	15.66038	25.54217			
		4	800.00000	31.27155	25.58236			
		5	2000.00000	77.19557	25.90822			
		6	4000.00000	157.83025	25.34368			
		7	8000.00000	314.54245	25.43377			
12.251	2	1	16.66700	1.96944	8.46281			Pyrene
		2	50.00000	6.10192	8.19415			
		3	200.00000	25.03993	7.98724			
		4	400.00000	50.67305	7.89374			
		5	1000.00000	126.68972	7.89330			
		6	2000.00000	258.87106	7.72585			
		7	4000.00000	513.92889	7.78318			
12.289	3	1	16.66700	2.08021	8.01219			Pyrene
		2	50.00000	6.21589	8.04390			
		3	200.00000	25.21846	7.93070			
		4	400.00000	50.78207	7.87680			
		5	1000.00000	125.73042	7.95352			
		6	2000.00000	256.84088	7.78692			
		7	4000.00000	514.22852	7.77864			
15.078	1	1	16.66700	1.40757	11.84096			Benzo(a)anthracene
		2	50.00000	4.39093	11.38710			
		3	200.00000	18.02956	11.09289			
		4	400.00000	35.96157	11.12298			
		5	1000.00000	91.08721	10.97849			

Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	185.79373	10.76463			
		7	4000.00000	372.06567	10.75079			
15.117	3	1	16.66700	2.38196	6.99717			Benzo(a)anthracene
		2	50.00000	7.07718	7.06496			
		3	200.00000	29.04660	6.88549			
		4	400.00000	57.99482	6.89717			
		5	1000.00000	145.28833	6.88287			
		6	2000.00000	298.87973	6.69165			
		7	4000.00000	591.71747	6.75998			
15.569	1	1	16.66700	2.37354	7.02199			Chrysene
		2	50.00000	6.56659	7.61430			
		3	200.00000	26.87596	7.44159			
		4	400.00000	53.24480	7.51247			
		5	1000.00000	133.54916	7.48788			
		6	2000.00000	271.07315	7.37808			
		7	4000.00000	539.93469	7.40830			
15.609	3	1	16.66700	3.01668	5.52495			Chrysene
		2	50.00000	8.79621	5.68427			
		3	200.00000	35.68427	5.60471			
		4	400.00000	71.02697	5.63166			
		5	1000.00000	176.61105	5.66216			
		6	2000.00000	360.44446	5.54871			
		7	4000.00000	706.00958	5.66565			
17.798	1	1	33.33300	2.87367	11.59947			Benzo(b)fluoranthene
		2	100.00000	10.08330	9.91739			
		3	400.00000	41.56968	9.62240			
		4	800.00000	83.70390	9.55750			
		5	2000.00000	210.88165	9.48399			
		6	4000.00000	429.96417	9.30310			
		7	8000.00000	858.15143	9.32236			
17.838	3	1	33.33300	2.07741	16.04549			Benzo(b)fluoranthene
		2	100.00000	6.19757	16.13537			
		3	400.00000	25.56431	15.64681			
		4	800.00000	51.14081	15.64308			
		5	2000.00000	128.38522	15.57812			
		6	4000.00000	261.54764	15.29358			
		7	8000.00000	519.93604	15.38651			
18.751	1	1	16.66700	1.07543	15.49792			Benzo(k)fluoranthene
		2	50.00000	3.72570	13.42030			
		3	200.00000	15.99709	12.50228			
		4	400.00000	33.08460	12.09022			
		5	1000.00000	81.89797	12.21031			
		6	2000.00000	167.65059	11.92957			
		7	4000.00000	332.76590	12.02046			
18.791	3	1	16.66700	6.23597	2.67272			Benzo(k)fluoranthene
		2	50.00000	18.75131	2.66648			
		3	200.00000	77.42423	2.58317			
		4	400.00000	155.37965	2.57434			
		5	1000.00000	387.77014	2.57885			
		6	2000.00000	788.03778	2.53795			
		7	4000.00000	1562.47449	2.56004			
19.692	1	1	16.66700	1.33777	12.45884			Benzo(a)pyrene
		2	50.00000	3.70577	13.49249			
		3	200.00000	16.57245	12.06822			
		4	400.00000	33.31983	12.00486			
		5	1000.00000	85.22900	11.73310			
		6	2000.00000	173.91586	11.49981			
		7	4000.00000	347.67770	11.50491			
19.731	3	1	16.66700	3.32274	5.01603			Benzo(a)pyrene
		2	50.00000	9.86083	5.07057			
		3	200.00000	41.73109	4.79259			
		4	400.00000	82.94123	4.82269			
		5	1000.00000	209.14313	4.78141			

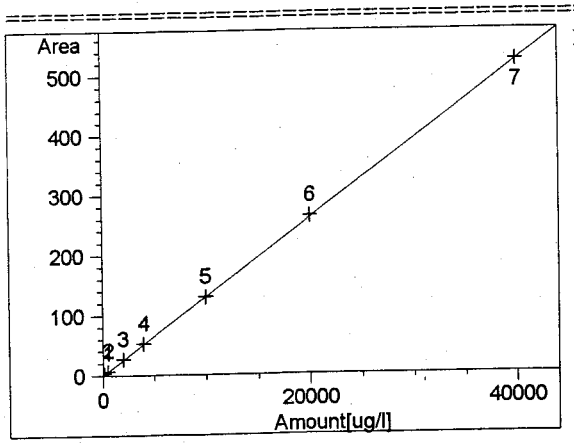
Method G:\HPLC4\METHODS\8310-254.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	426.03613	4.69444			
		7	4000.00000	843.11401	4.74432			
21.303	1	1	33.33300	8.21385e-1	40.58148			Dibenz(a,h)anthracene
		2	100.00000	1.66336	60.11935			
		3	400.00000	8.68074	46.07902			
		4	800.00000	16.69440	47.92027			
		5	2000.00000	42.58520	46.96468			
		6	4000.00000	87.93577	45.48775			
		7	8000.00000	177.19081	45.14907			
21.342	3	1	33.33300	1.02147	32.63240			Dibenz(a,h)anthracene
		2	100.00000	2.83526	35.27010			
		3	400.00000	11.62696	34.40279			
		4	800.00000	23.97204	33.37221			
		5	2000.00000	61.97951	32.26873			
		6	4000.00000	126.33451	31.66197			
		7	8000.00000	254.59657	31.42226			
22.077	1	1	33.33300	5.48442e-1	60.77766			Benzo(g,h,i)perylene
		2	100.00000	2.94243	33.98549			
		3	400.00000	13.20163	30.29929			
		4	800.00000	26.80556	29.84456			
		5	2000.00000	67.94373	29.43612			
		6	4000.00000	139.46440	28.68115			
		7	8000.00000	280.87122	28.48280			
22.116	3	1	33.33300	1.67112	19.94655			Benzo(g,h,i)perylene
		2	100.00000	5.43380	18.40334			
		3	400.00000	22.62144	17.68234			
		4	800.00000	46.01322	17.38631			
		5	2000.00000	117.28700	17.05219			
		6	4000.00000	239.12497	16.72766			
		7	8000.00000	481.99588	16.59765			
22.585	1	1	16.66700	1.31663	12.65886			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.02647	12.41782			
		3	200.00000	18.76573	10.65773			
		4	400.00000	37.23690	10.74203			
		5	1000.00000	94.50513	10.58144			
		6	2000.00000	193.27768	10.34781			
		7	4000.00000	390.07297	10.25449			
22.624	3	1	16.66700	1.39295	11.96523			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.43460	11.27496			
		3	200.00000	18.48479	10.81971			
		4	400.00000	37.32488	10.71671			
		5	1000.00000	95.02103	10.52399			
		6	2000.00000	194.89191	10.26210			
		7	4000.00000	391.88934	10.20696			

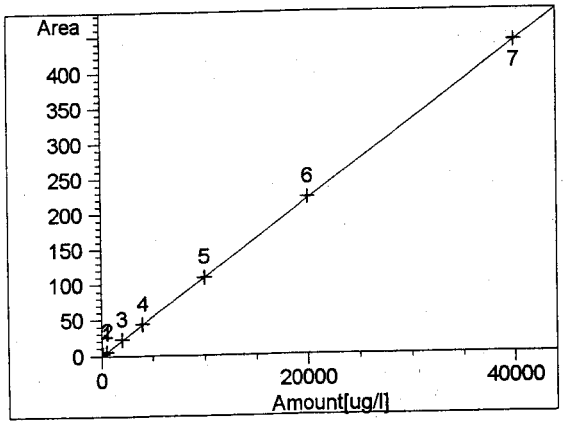
Peak Sum Table

No Entries in table

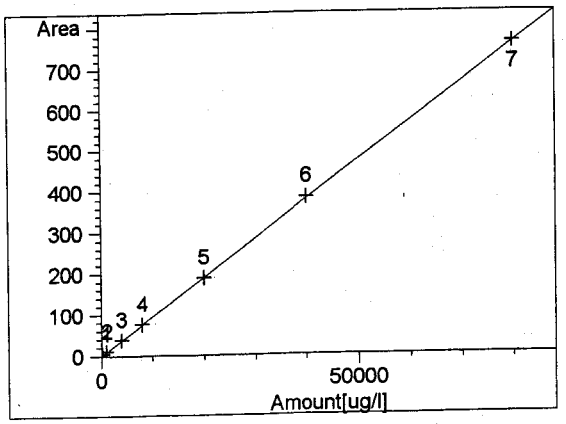
Calibration Curves



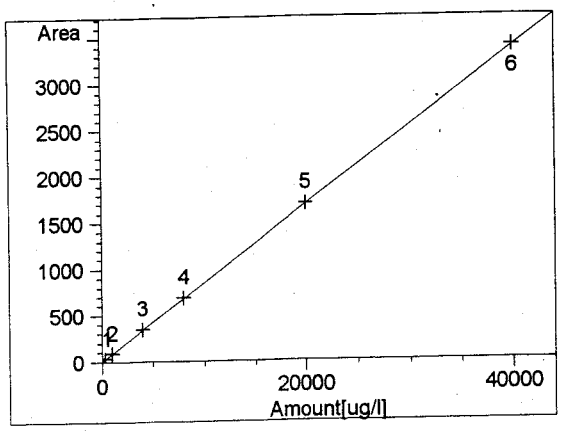
Naphthalene at exp. RT: 4.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.91803
Formula: y = mx + b
m: 1.30900e-2
b: -2.03811e-1
x: Amount[ug/l]
y: Area



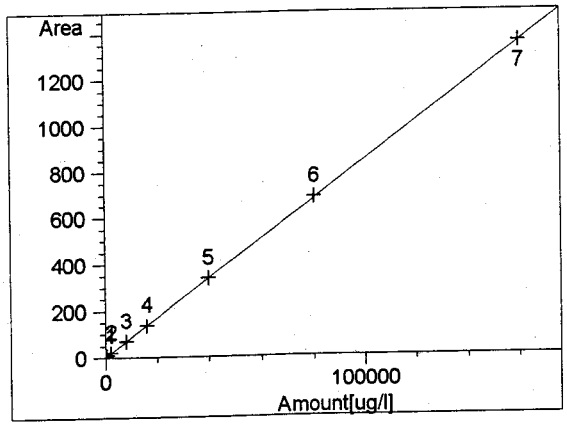
Naphthalene at exp. RT: 4.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.54786
Formula: y = mx + b
m: 1.10331e-2
b: -1.45621e-1
x: Amount[ug/l]
y: Area



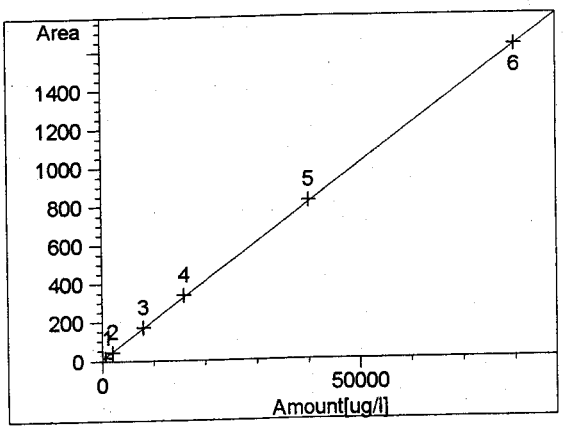
Acenaphthylene at exp. RT: 6.060
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48544
Formula: y = mx + b
m: 9.52777e-3
b: -3.13727e-1
x: Amount[ug/l]
y: Area



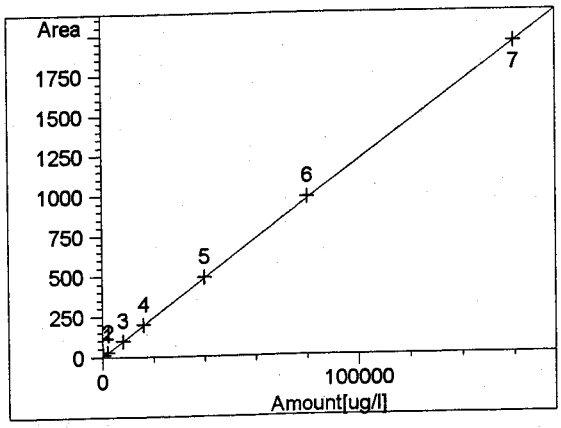
Acenaphthylene at exp. RT: 6.061
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 5.26063
Formula: y = mx + b
m: 8.45094e-2
b: 5.98548
x: Amount[ug/l]
y: Area



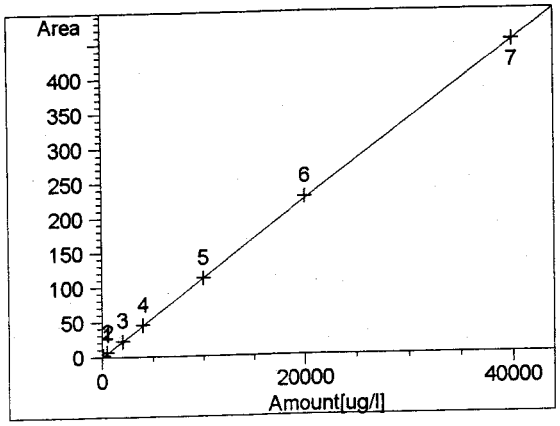
1-Methylnaphthalene (UV) at exp. RT: 6.830
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 2.97396
Formula: y = mx + b
m: 8.47491e-3
b: 6.44378e-1
x: Amount[ug/l]
y: Area



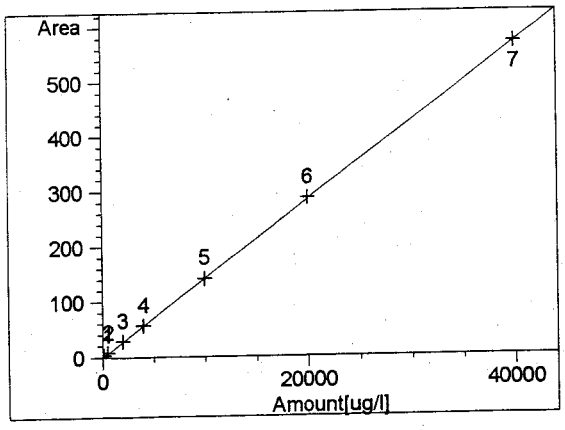
1-Methylnaphthalene (UV) at exp. RT: 6.831
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99994
Residual Std. Dev.: 7.35754
Formula: y = mx + b
m: 2.01666e-2
b: 7.94226
x: Amount[ug/l]
y: Area



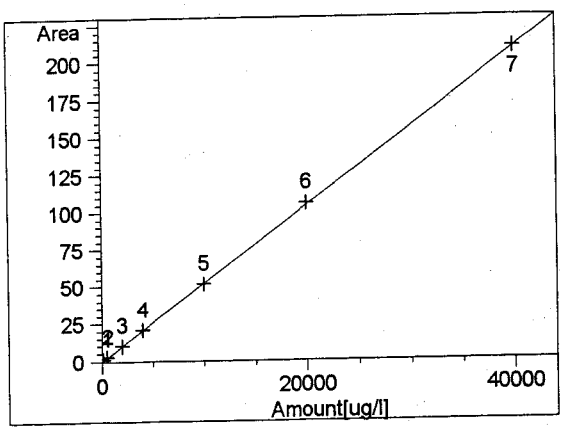
1-Methylnaphthalene (F) at exp. RT: 6.869
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 4.86904
Formula: y = mx + b
m: 1.21240e-2
b: 2.06538
x: Amount[ug/l]
y: Area



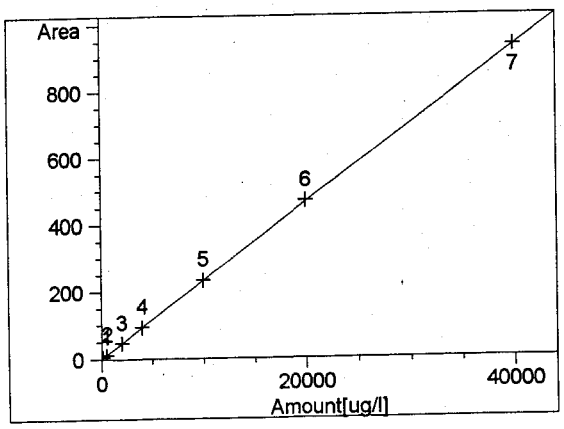
2-Methylnaphthalene at exp. RT: 7.283
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.08293
Formula: y = mx + b
m: 1.12704e-2
b: -2.00286e-1
x: Amount[ug/l]
y: Area



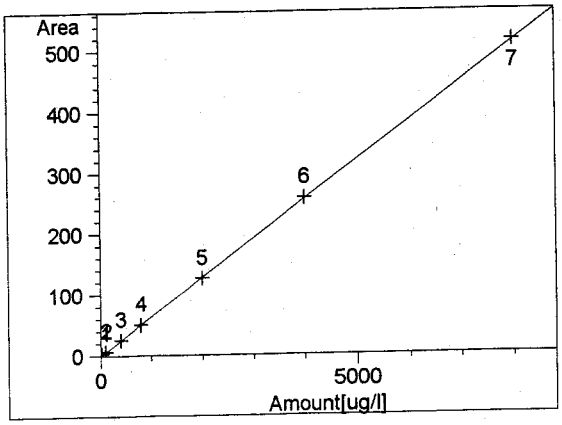
2-Methylnaphthalene at exp. RT: 7.322
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.86492
Formula: y = mx + b
m: 1.42517e-2
b: -1.46352e-2
x: Amount[ug/l]
y: Area



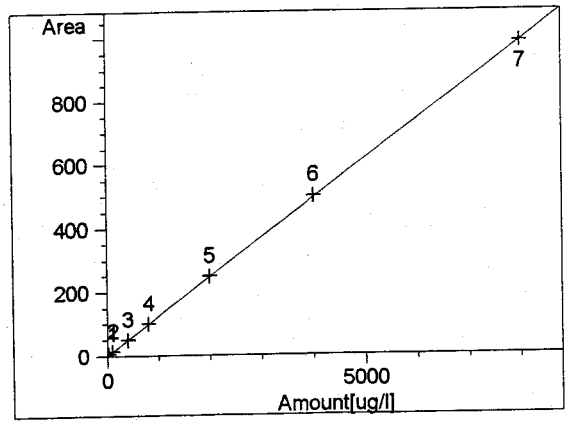
Acenaphthene at exp. RT: 7.666
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 0.65404
Formula: y = mx + b
m: 5.23700e-3
b: -5.76794e-2
x: Amount[ug/l]
y: Area



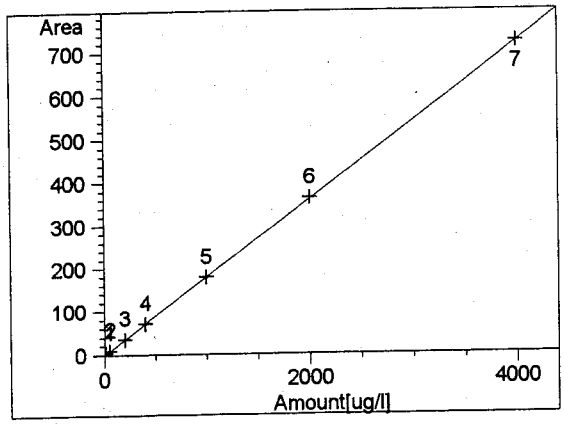
Acenaphthene at exp. RT: 7.706
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.18299
Formula: y = mx + b
m: 2.33518e-2
b: 2.68943e-1
x: Amount[ug/l]
y: Area



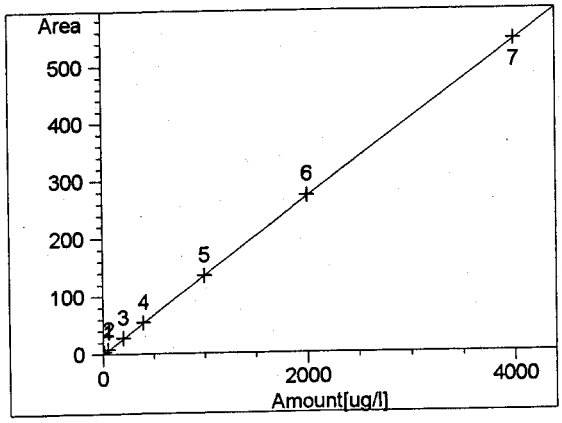
Fluorene at exp. RT: 8.192
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.10780
Formula: y = mx + b
m: 6.43151e-2
b: -6.62389e-1
x: Amount[ug/l]
y: Area



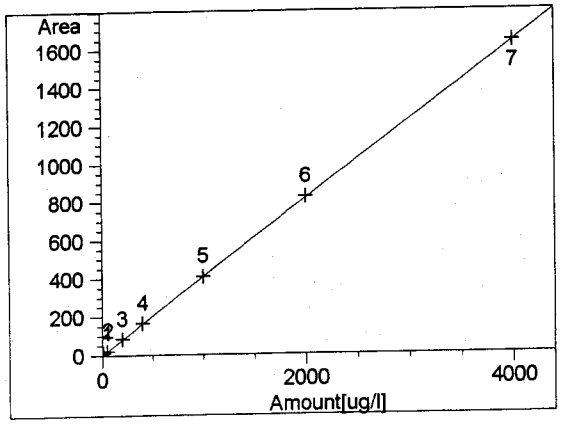
Fluorene at exp. RT: 8.231
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.40494
Formula: y = mx + b
m: 1.23427e-1
b: 1.17809
x: Amount[ug/l]
y: Area



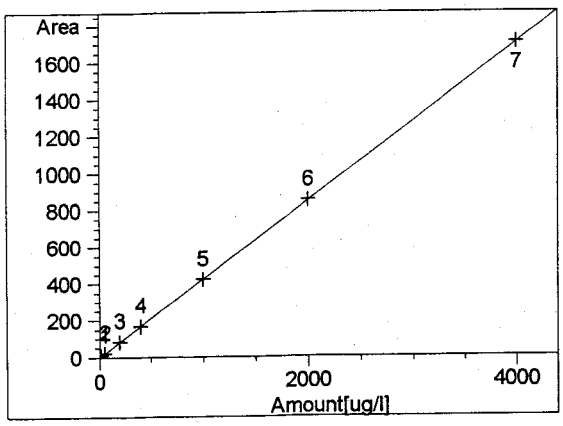
Phenanthrene at exp. RT: 9.320
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.26463
Formula: y = mx + b
m: 1.80876e-1
b: -4.77674e-1
x: Amount[ug/l]
y: Area



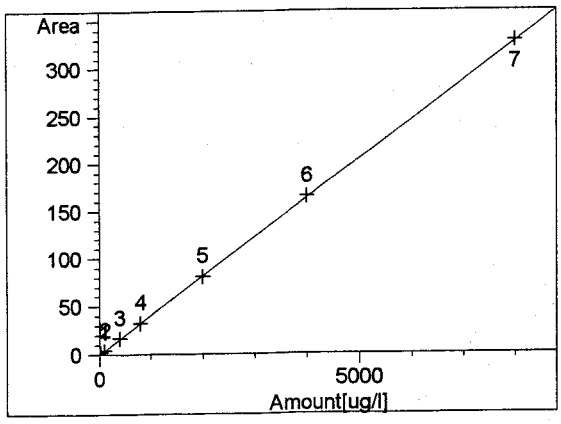
Phenanthrene at exp. RT: 9.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.64125
Formula: y = mx + b
m: 1.35840e-1
b: -2.79235e-1
x: Amount[ug/l]
y: Area



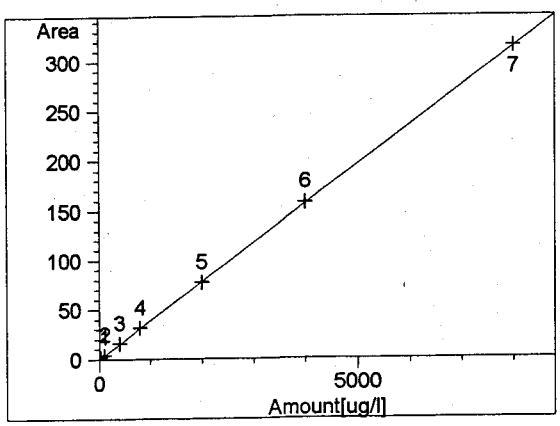
Anthracene at exp. RT: 10.334
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.36043
Formula: y = mx + b
m: 4.10107e-1
b: -8.27888e-1
x: Amount[ug/l]
y: Area



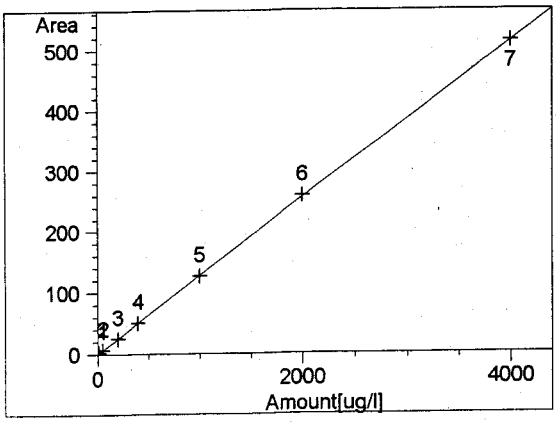
Anthracene at exp. RT: 10.373
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 2.19765
Formula: y = mx + b
m: 4.26533e-1
b: -1.89206
x: Amount[ug/l]
y: Area



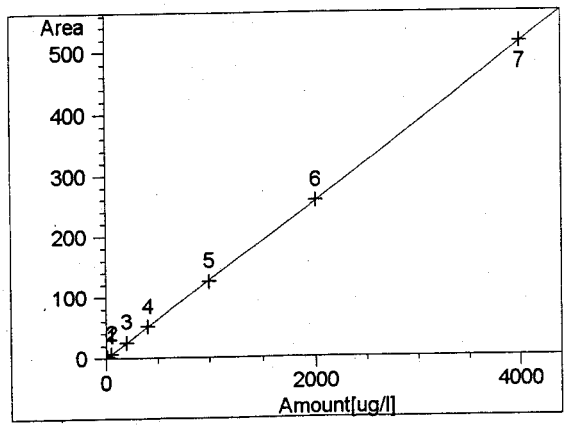
Fluoranthene at exp. RT: 11.486
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.62897
Formula: y = mx + b
m: 4.10188e-2
b: -2.95934e-1
x: Amount[ug/l]
y: Area



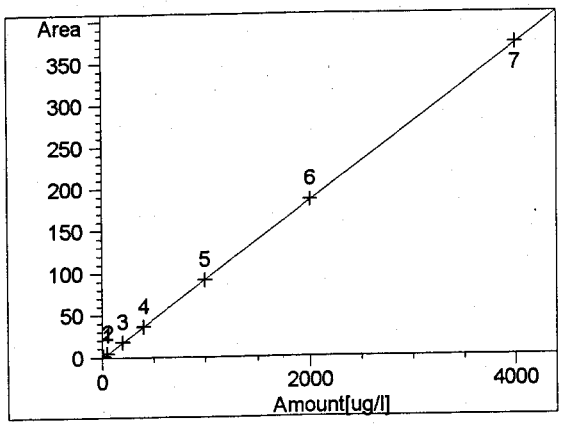
Fluoranthene at exp. RT: 11.525
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.65540
Formula: y = mx + b
m: 3.93546e-2
b: -2.57514e-1
x: Amount[ug/l]
y: Area



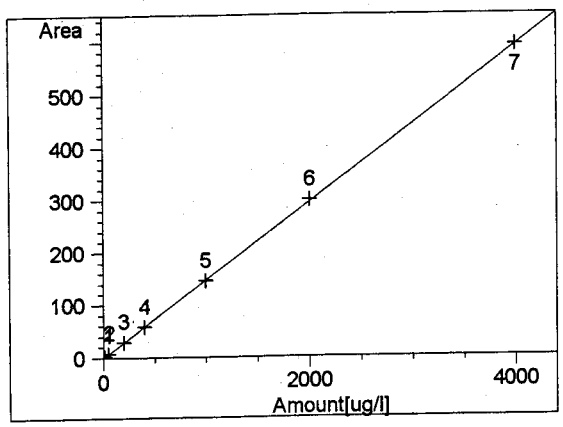
Pyrene at exp. RT: 12.251
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 1.14282
Formula: y = mx + b
m: 1.28756e-1
b: -5.50786e-1
x: Amount[ug/l]
y: Area



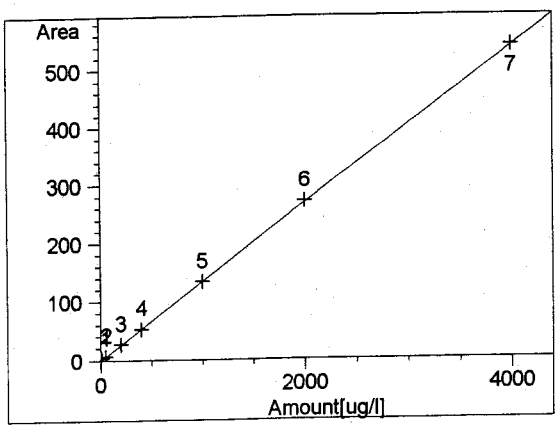
Pyrene at exp. RT: 12.289
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.07257
Formula: y = mx + b
m: 1.28651e-1
b: -7.46462e-1
x: Amount[ug/l]
y: Area



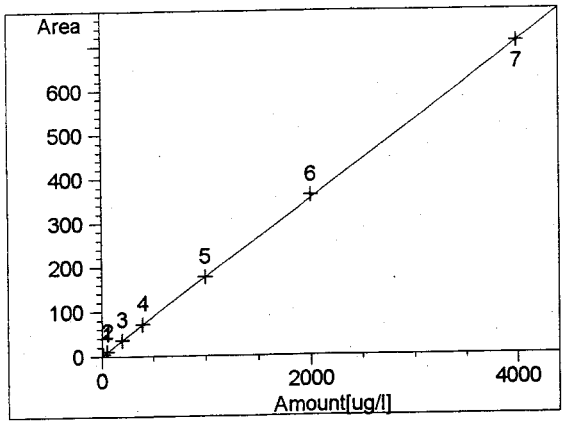
Benzo(a)anthracene at exp. RT: 15.078
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74137
Formula: y = mx + b
m: 9.31548e-2
b: -7.78659e-1
x: Amount[ug/l]
y: Area



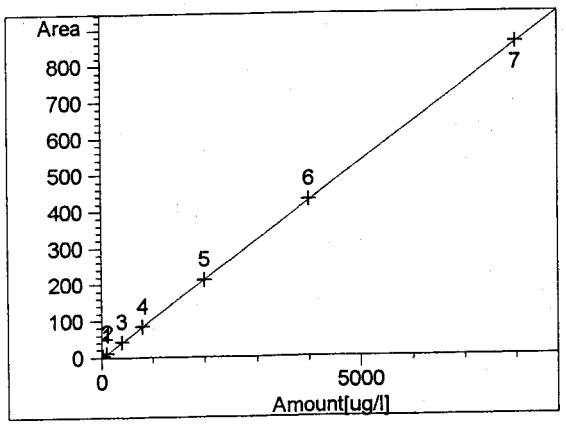
Benzo(a)anthracene at exp. RT: 15.117
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 1.77326
Formula: y = mx + b
m: 1.48297e-1
b: -6.51242e-1
x: Amount[ug/l]
y: Area



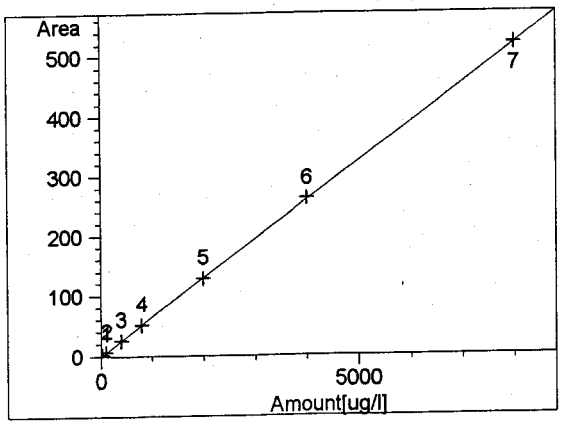
Chrysene at exp. RT: 15.569
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.82694
Formula: y = mx + b
m: 1.35126e-1
b: -3.35486e-1
x: Amount[ug/l]
y: Area



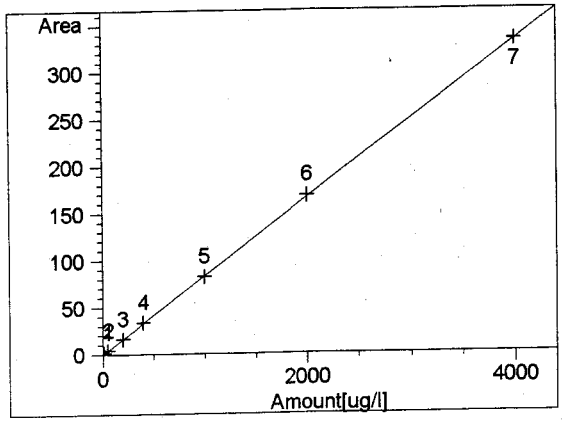
Chrysene at exp. RT: 15.609
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99995
Residual Std. Dev.: 2.92458
Formula: y = mx + b
m: 1.76973e-1
b: 6.84833e-1
x: Amount[ug/l]
y: Area



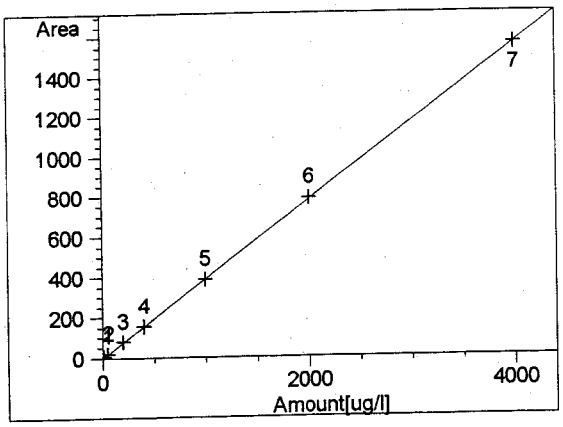
Benzo(b)fluoranthene at exp. RT: 17.798
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 1.48265
Formula: y = mx + b
m: 1.07474e-1
b: -1.52913
x: Amount[ug/l]
y: Area



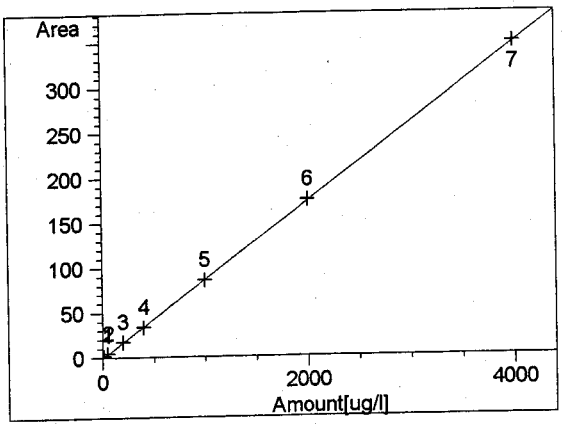
Benzo(b)fluoranthene at exp. RT: 17.838
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.99639
Formula: y = mx + b
m: 6.51081e-2
b: -4.96398e-1
x: Amount[ug/l]
y: Area



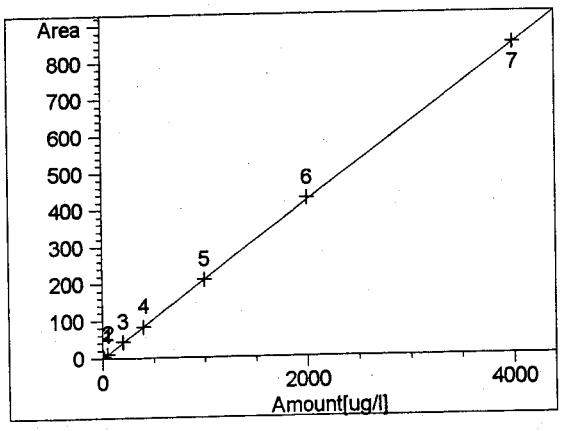
Benzo(k)fluoranthene at exp. RT: 18.751
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.78074
Formula: y = mx + b
m: 8.34075e-2
b: -4.65773e-1
x: Amount[ug/l]
y: Area



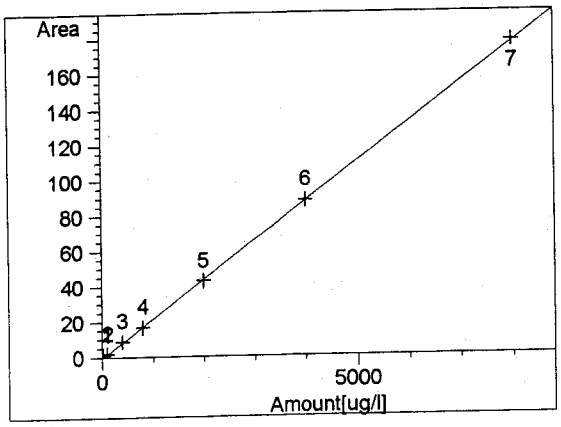
Benzo(k)fluoranthene at exp. RT: 18.791
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 3.16339
Formula: y = mx + b
m: 3.91303e-1
b: -5.59503e-1
x: Amount[ug/l]
y: Area



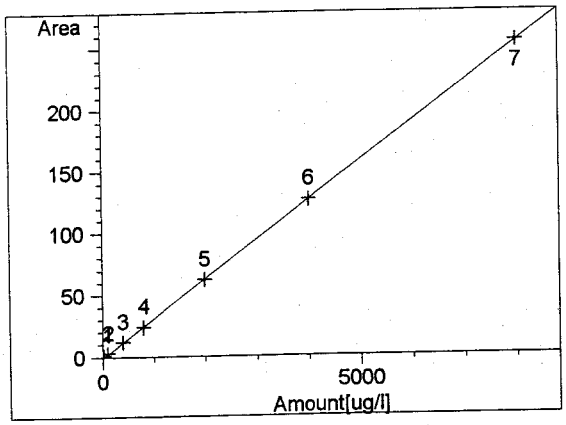
Benzo(a)pyrene at exp. RT: 19.692
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.69204
Formula: y = mx + b
m: 8.71344e-2
b: -8.95975e-1
x: Amount[ug/l]
y: Area



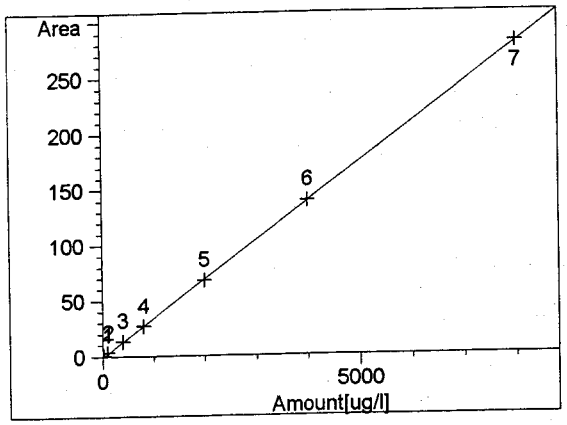
Benzo(a)pyrene at exp. RT: 19.731
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 2.09916
Formula: y = mx + b
m: 2.11283e-1
b: -5.26274e-1
x: Amount[ug/l]
y: Area



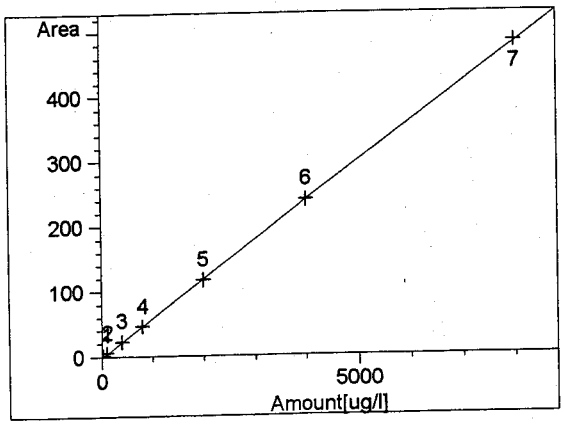
Dibenz(a,h)anthracene at exp. RT: 21.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 0.68667
Formula: y = mx + b
m: 2.21850e-2
b: -6.56885e-1
x: Amount[ug/l]
y: Area



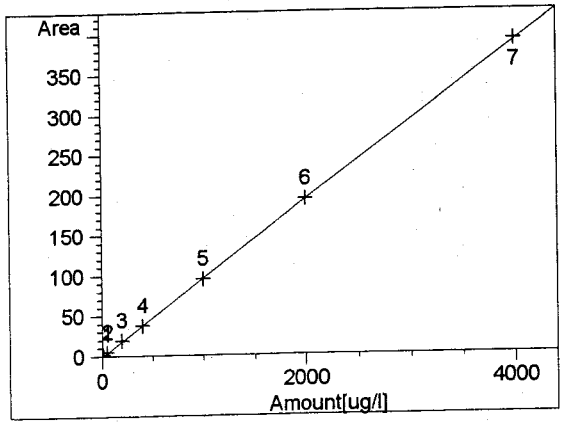
Dibenz(a,h)anthracene at exp. RT: 21.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 0.71300
Formula: y = mx + b
m: 3.18915e-2
b: -9.48075e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 22.077
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.72600
Formula: y = mx + b
m: 3.51967e-2
b: -1.12923
x: Amount[ug/l]
y: Area

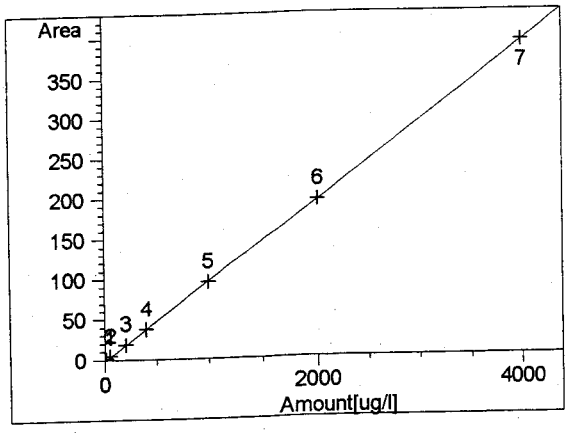


Benzo(g,h,i)perylene at exp. RT: 22.116
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.21734
Formula: y = mx + b
m: 6.03446e-2
b: -1.59095
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.585
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 1.11717
Formula: y = mx + b
m: 9.76594e-2
b: -1.36011
x: Amount[ug/l]
y: Area

Method G:\HPLC4\METHODS\8310-254.M



Indeno(1,2,3-cd)pyrene at exp. RT: 22.624
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.08922
Formula: y = mx + b
m: 9.81568e-2
b: -1.29939
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 297107179002
Cal : 296366536003
Standards: S5286

Run Name: L
File : 07400002
Caldate : 11-SEP-2006

IDF : 1.0
Time : 15-MAR-2007 10:51

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	2000	2051	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0097	4000	4084	ug/L	2	15	
Acenaphthene	1	0.0053	0.0052	2000	2005	ug/L	0	15	
Fluorene	1	0.0637	0.0639	400.0	407.8	ug/L	2	15	
Phenanthrene	1	0.1810	0.1774	200.0	198.8	ug/L	-1	15	
Anthracene	1	0.4065	0.4384	200.0	215.8	ug/L	8	15	
Fluoranthene	1	0.0404	0.0422	400.0	418.9	ug/L	5	15	
Benzo(a)anthracene	1	0.0899	0.0936	200.0	209.3	ug/L	5	15	
Chrysene	1	0.1350	0.1348	200.0	202.1	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1023	400.0	394.8	ug/L	-1	15	
Benzo(k)fluoranthene	1	0.0787	0.0780	200.0	192.7	ug/L	-4	15	
Benzo(a)pyrene	1	0.0828	0.0906	200.0	218.2	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0202	400.0	394.3	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0309	0.0340	400.0	418.8	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0850	200.0	187.9	ug/L	-6	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	8000	8043	ug/L	1	15	
Acenaphthylene	2	0.0861	0.0887	4000	4129	ug/L	3	15	
Pyrene	2	0.1252	0.1309	200.0	207.6	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0216	8000	8160	ug/L	2	15	
Naphthalene	3	0.0110	0.0110	2000	2001	ug/L	0	15	
Acenaphthene	3	0.0234	0.0238	2000	2026	ug/L	1	15	
Fluorene	3	0.1247	0.1230	400.0	389.1	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1359	200.0	202.2	ug/L	1	15	
Anthracene	3	0.4222	0.4548	200.0	217.7	ug/L	9	15	
Fluoranthene	3	0.0390	0.0402	400.0	414.9	ug/L	4	15	
Pyrene	3	0.1264	0.1332	200.0	212.9	ug/L	6	15	
Benzo(a)anthracene	3	0.1453	0.1515	200.0	208.7	ug/L	4	15	
Chrysene	3	0.1780	0.1769	200.0	196.1	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0623	400.0	390.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3853	0.3774	200.0	194.3	ug/L	-3	15	
Benzo(a)pyrene	3	0.2065	0.2262	200.0	216.6	ug/L	8	15	
Dibenz(a,h)anthracene	3	0.0303	0.0274	400.0	373.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0567	0.0559	400.0	397.0	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0891	200.0	194.7	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	8000	7930	ug/L	-1	15	

297107179002

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
Seqnum : 297107179018 File : 07400018 Time : 15-MAR-2007 19:29
Cal : 296366536003 Caldate : 11-SEP-2006
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	4000	4104	ug/L	3	15	
Acenaphthylene	1	0.0095	0.0099	8000	8327	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	4000	4127	ug/L	3	15	
Fluorene	1	0.0637	0.0645	800.0	812.6	ug/L	2	15	
Phenanthrene	1	0.1810	0.1794	400.0	399.5	ug/L	0	15	
Anthracene	1	0.4065	0.4400	400.0	431.2	ug/L	8	15	
Fluoranthene	1	0.0404	0.0420	800.0	825.6	ug/L	3	15	
Benzo(a)anthracene	1	0.0899	0.0953	400.0	417.7	ug/L	4	15	
Chrysene	1	0.1350	0.1359	400.0	404.7	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1023	0.1057	800.0	801.1	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0787	0.0813	400.0	395.6	ug/L	-1	15	
Benzo(a)pyrene	1	0.0828	0.0928	400.0	436.4	ug/L	9	15	
Dibenz(a,h)anthracene	1	0.0213	0.0204	800.0	765.2	ug/L	-4	15	
Benzo(g,h,i)perylene	1	0.0309	0.0353	800.0	834.5	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0943	400.0	400.3	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0087	16000	16280	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0889	8000	8345	ug/L	4	15	
Pyrene	2	0.1252	0.1311	400.0	411.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0214	16000	16620	ug/L	4	15	
Naphthalene	3	0.0110	0.0108	4000	3922	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0235	4000	4008	ug/L	0	15	
Fluorene	3	0.1247	0.1212	800.0	775.9	ug/L	-3	15	
Phenanthrene	3	0.1356	0.1326	400.0	392.6	ug/L	-2	15	
Anthracene	3	0.4222	0.4551	400.0	431.2	ug/L	8	15	
Fluoranthene	3	0.0390	0.0398	800.0	816.5	ug/L	2	15	
Pyrene	3	0.1264	0.1276	400.0	402.4	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1509	400.0	411.4	ug/L	3	15	
Chrysene	3	0.1780	0.1745	400.0	390.5	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0638	0.0637	800.0	790.8	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3820	400.0	391.9	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2289	400.0	435.9	ug/L	9	15	
Dibenz(a,h)anthracene	3	0.0303	0.0287	800.0	750.2	ug/L	-6	15	
Benzo(g,h,i)perylene	3	0.0567	0.0577	800.0	790.9	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0917	400.0	386.9	ug/L	-3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	16000	15650	ug/L	-2	15	

297107179018

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 297107179032
Cal : 296366536003
Standards: S5284

Run Name: H
File : 07400032
Caldate : 11-SEP-2006

IDF : 1.0
Time : 16-MAR-2007 02:51

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	10000	10230	ug/L	2	15	
Acenaphthylene	1	0.0095	0.0099	20000	20840	ug/L	4	15	
Acenaphthene	1	0.0053	0.0054	10000	10230	ug/L	2	15	
Fluorene	1	0.0637	0.0647	2000	2024	ug/L	1	15	
Phenanthrene	1	0.1810	0.1800	1000	998.0	ug/L	0	15	
Anthracene	1	0.4065	0.4409	1000	1077	ug/L	8	15	
Fluoranthene	1	0.0404	0.0426	2000	2086	ug/L	4	15	
Benzo(a)anthracene	1	0.0899	0.0965	1000	1045	ug/L	4	15	
Chrysene	1	0.1350	0.1369	1000	1015	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1023	0.1080	2000	2023	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0787	0.0844	1000	1018	ug/L	2	15	
Benzo(a)pyrene	1	0.0828	0.0962	1000	1114	ug/L	11	15	
Dibenz(a,h)anthracene	1	0.0213	0.0218	2000	1996	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0309	0.0366	2000	2110	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	1	0.0907	0.0975	1000	1012	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	40000	40620	ug/L	2	15	
Acenaphthylene	2	0.0861	0.0882	20000	20800	ug/L	4	15	
Pyrene	2	0.1252	0.1338	1000	1043	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0211	0.0209	40000	41100	ug/L	3	15	
Naphthalene	3	0.0110	0.0108	10000	9757	ug/L	-2	15	
Acenaphthene	3	0.0234	0.0234	10000	10000	ug/L	0	15	
Fluorene	3	0.1247	0.1211	2000	1953	ug/L	-2	15	
Phenanthrene	3	0.1356	0.1327	1000	979.1	ug/L	-2	15	
Anthracene	3	0.4222	0.4513	1000	1063	ug/L	6	15	
Fluoranthene	3	0.0390	0.0399	2000	2034	ug/L	2	15	
Pyrene	3	0.1264	0.1290	1000	1009	ug/L	1	15	
Benzo(a)anthracene	3	0.1453	0.1523	1000	1031	ug/L	3	15	
Chrysene	3	0.1780	0.1757	1000	989.0	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0638	0.0641	2000	1977	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3853	0.3846	1000	984.2	ug/L	-2	15	
Benzo(a)pyrene	3	0.2065	0.2316	1000	1099	ug/L	10	15	
Dibenz(a,h)anthracene	3	0.0303	0.0297	2000	1895	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0567	0.0599	2000	2012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0926	0.0947	1000	978.3	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0120	40000	39400	ug/L	-2	15	

297107179032

SEQUENCE SUMMARY FOR 193277 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296366536 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 11-SEP-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	25400001	X	PRIMER - 254			11-SEP-2006 12:56	1.0						
002	25400002	X	PRIMER			11-SEP-2006 13:27	1.0						
003	25400003	X	IB - 254			11-SEP-2006 13:59	1.0						
004	25400004	X	IB			11-SEP-2006 14:31	1.0						
005	25400005	X	IB			11-SEP-2006 15:02	1.0						
006	25400006	ICAL				11-SEP-2006 15:34	1.0					1	
007	25400007	ICAL				11-SEP-2006 16:05	1.0					2	
008	25400008	ICAL				11-SEP-2006 16:37	1.0					3	
009	25400009	ICAL				11-SEP-2006 17:09	1.0					4	
010	25400010	ICAL				11-SEP-2006 17:40	1.0					5	
011	25400011	ICAL				11-SEP-2006 18:12	1.0					6	
012	25400012	ICAL				11-SEP-2006 18:44	1.0					7	
013	25400013	X	IB			11-SEP-2006 19:15	1.0						
014	25400014	X	IB			11-SEP-2006 19:47	1.0						
015	25400015	ICV				11-SEP-2006 20:19	1.0		10			8	
016	25400016	X	ICV			11-SEP-2006 20:50	1.0					8	
017	25400017	X	IB			11-SEP-2006 21:22	1.0						

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S3051

SEQUENCE SUMMARY FOR 193277 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	07400001	X	IB - 074			15-MAR-2007 10:19	1.0						
002	07400002	CCV	L			15-MAR-2007 10:51	1.0	1.0			10	1	
003	07400003	X	CCV			15-MAR-2007 11:23	1.0					1	
004	07400004	X	IB			15-MAR-2007 11:54	1.0						
005	07400005	LCS	QC379236	123110	Miscel	15-MAR-2007 12:31	1.0	0.06647		6	10	spk	
006	07400006	X	IB			15-MAR-2007 13:02	1.0						
007	07400007	BLANK	QC379036	123065	Water	15-MAR-2007 13:34	1.0	0.002			10		
008	07400008	MSS	193332-003	123065	Water	15-MAR-2007 14:06	1.0	0.00198	5	2	10		5:MTNPH1=134292
009	07400009	LCS	QC379037	123065	Water	15-MAR-2007 14:37	1.0	0.002			10		
010	07400010	MS	QC379038	123065	Water	15-MAR-2007 15:09	1.0	0.00198	3	10	10		5:MTNPH1=117657
011	07400011	MSD	QC379039	123065	Water	15-MAR-2007 15:40	1.0	0.00198	3	10	10		5:MTNPH1=115619
012	07400012	X	IB			15-MAR-2007 16:19	1.0						
013	07400013	SAMPLE	193217-014	123065	Water	15-MAR-2007 16:51	1.0	0.001942			10		
014	07400014	SAMPLE	193217-015	123065	Water	15-MAR-2007 17:22	1.0	0.001887			10		
015	07400015	SAMPLE	193217-016	123065	Water	15-MAR-2007 17:54	1.0	0.001905			10		
016	07400016	SAMPLE	193217-017	123065	Water	15-MAR-2007 18:25	1.0	0.001961			10		
017	07400017	X	IB			15-MAR-2007 18:57	1.0						
018	07400018	CCV	M			15-MAR-2007 19:29	1.0	1.0			10	2	
019	07400019	X	CCV			15-MAR-2007 20:00	1.0					2	
020	07400020	X	IB			15-MAR-2007 20:32	1.0						
021	07400021	SAMPLE	193333-001	123065	Water	15-MAR-2007 21:03	1.0	0.00198	1		10		1:PYR=4497.82
022	07400022	SAMPLE	193262-002	123065	Water	15-MAR-2007 21:35	1.0	0.001905			10		
023	07400023	SAMPLE	193262-003	123065	Water	15-MAR-2007 22:07	1.0	0.001905			10		
024	07400024	SAMPLE	193262-007	123065	Water	15-MAR-2007 22:38	1.0	0.001923			10		
025	07400025	SAMPLE	193262-019	123065	Water	15-MAR-2007 23:10	1.0	0.001923			10		
026	07400026	SAMPLE	193262-020	123065	Water	15-MAR-2007 23:42	1.0	0.001905			10		
027	07400027	SAMPLE	193277-001	123065	Water	16-MAR-2007 00:13	1.0	0.002105			10		
028	07400028	SAMPLE	193329-003	123065	Water	16-MAR-2007 00:45	1.0	0.001905			10		
029	07400029	SAMPLE	193329-004	123065	Water	16-MAR-2007 01:16	1.0	0.001905			10		
030	07400030	SAMPLE	193329-005	123065	Water	16-MAR-2007 01:48	1.0	0.001905			10		

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

SEQUENCE SUMMARY FOR 193277 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297107179 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 15-MAR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	07400031	X	IB			16-MAR-2007 02:19	1.0						
032	07400032	CCV	H			16-MAR-2007 02:51	1.0	1.0			10	3	
033	07400033	X	CCV			16-MAR-2007 03:23	1.0					3	
034	07400034	X	IB			16-MAR-2007 03:54	1.0						
035	07400035	SAMPLE	193329-006	123065	Water	16-MAR-2007 04:26	1.0	0.001961			10		
036	07400036	SAMPLE	193332-001	123065	Water	16-MAR-2007 04:58	1.0	0.001942			10		
037	07400037	SAMPLE	193332-004	123065	Water	16-MAR-2007 05:29	1.0	0.002667			10		
038	07400038	SAMPLE	193332-005	123065	Water	16-MAR-2007 06:01	1.0	0.001923	1		10		1:PYR=5315.28
039	07400039	SAMPLE	193332-002	123065	Water	16-MAR-2007 06:32	1.0	0.001961	1		10		1:PYR=5218.97
040	07400040	X	IB			16-MAR-2007 07:04	1.0						
041	07400041	X	IB			16-MAR-2007 07:35	1.0						
042	07400042	CCV	M			16-MAR-2007 08:07	1.0	1.0			10	2	
043	07400043	X	CCV			16-MAR-2007 08:39	1.0					2	
044	07400044	X	IB			16-MAR-2007 09:10	1.0						

Stds used: 1=S5286 2=S5285 3=S5284
Flags used: spk=5% spike rule

REPORTING SUMMARY FOR 193277 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
193277-001	Naphthalene	HPLC04	1	03/16/07 00:13
193277-001	Acenaphthylene	HPLC04	1	03/16/07 00:13
193277-001	Acenaphthene	HPLC04	1	03/16/07 00:13
193277-001	Fluorene	HPLC04	1	03/16/07 00:13
193277-001	Phenanthrene	HPLC04	3	03/16/07 00:13
193277-001	Anthracene	HPLC04	3	03/16/07 00:13
193277-001	Fluoranthene	HPLC04	3	03/16/07 00:13
193277-001	Pyrene	HPLC04	3	03/16/07 00:13
193277-001	Benzo(a)anthracene	HPLC04	3	03/16/07 00:13
193277-001	Chrysene	HPLC04	3	03/16/07 00:13
193277-001	Benzo(b)fluoranthene	HPLC04	3	03/16/07 00:13
193277-001	Benzo(k)fluoranthene	HPLC04	3	03/16/07 00:13
193277-001	Benzo(a)pyrene	HPLC04	3	03/16/07 00:13
193277-001	Dibenz(a,h)anthracene	HPLC04	3	03/16/07 00:13
193277-001	Benzo(g,h,i)perylene	HPLC04	3	03/16/07 00:13
193277-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/16/07 00:13
193277-001	1-Methylnaphthalene (UV)	HPLC04	1	03/16/07 00:13
193277-001	1-Methylnaphthalene (F)	HPLC04	3	03/16/07 00:13
QC379036	Naphthalene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthylene	HPLC04	1	03/15/07 13:34
QC379036	Acenaphthene	HPLC04	1	03/15/07 13:34
QC379036	Fluorene	HPLC04	1	03/15/07 13:34
QC379036	Phenanthrene	HPLC04	3	03/15/07 13:34
QC379036	Anthracene	HPLC04	3	03/15/07 13:34
QC379036	Fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Pyrene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Chrysene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(b)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(k)fluoranthene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(a)pyrene	HPLC04	3	03/15/07 13:34
QC379036	Dibenz(a,h)anthracene	HPLC04	3	03/15/07 13:34
QC379036	Benzo(g,h,i)perylene	HPLC04	3	03/15/07 13:34
QC379036	Indeno(1,2,3-cd)pyrene	HPLC04	3	03/15/07 13:34
QC379036	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 13:34
QC379036	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 13:34
QC379037	Naphthalene	HPLC04	1	03/15/07 14:37
QC379037	Fluorene	HPLC04	1	03/15/07 14:37
QC379037	Pyrene	HPLC04	3	03/15/07 14:37
QC379037	Benzo(a)pyrene	HPLC04	3	03/15/07 14:37
QC379037	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 14:37
QC379037	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 14:37
QC379038	Naphthalene	HPLC04	1	03/15/07 15:09
QC379038	Fluorene	HPLC04	1	03/15/07 15:09
QC379038	Pyrene	HPLC04	3	03/15/07 15:09
QC379038	Benzo(a)pyrene	HPLC04	3	03/15/07 15:09
QC379038	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:09
QC379038	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:09
QC379039	Naphthalene	HPLC04	1	03/15/07 15:40
QC379039	Fluorene	HPLC04	1	03/15/07 15:40

REPORTING SUMMARY FOR 193277 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC379039	Pyrene	HPLC04	3	03/15/07 15:40
QC379039	Benzo(a)pyrene	HPLC04	3	03/15/07 15:40
QC379039	1-Methylnaphthalene (UV)	HPLC04	1	03/15/07 15:40
QC379039	1-Methylnaphthalene (F)	HPLC04	3	03/15/07 15:40

S

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 21:05

Batch Number : 123065
Date Extracted: 13-MAR-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S5673B
Spike #2 ID : S5518C
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193217-014		Treadwell & Rollo	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193217-015		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
193217-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193217-017		Treadwell & Rollo	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193262-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-003		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193262-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-019		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193262-020		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193277-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
193329-003		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-004		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-005		Innovative Technical Solutions	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
193329-006		Innovative Technical Solutions	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-001		Mactec, Inc.	Water	1030	mL	2	0.001942	1	7	.1	0		8310		
193332-002		Mactec, Inc.	Water	1020	mL	2	0.001961	1	7	.1	0		8310		
193332-003		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		MSS
193332-004		Mactec, Inc.	Water	375	mL	1	0.002667	1	7	.05	0		8310		
193332-005		Mactec, Inc.	Water	1040	mL	2	0.001923	1	7	.1	0		8310		
193333-001		Mactec, Inc.	Water	1010	mL	2	0.001980	1	7	.1	0		8310		
QC379036	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC379037	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC379038	MS	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		
QC379039	MSD	of 193332-003	Water	1010	mL	2	0.001980	1	7	.1	1		8310		

Prep Chemist: Jessie Mee Reviewed By: Pamela Moghat Date: 3/15/07

Relinquished By: _____ Received By: _____ Date: 15MAR2007

Curtis & Tompkins, Ltd

8310 WATER PREP LOG

BK2426

LIMS Batch No: 123065
LIMS Analysis: 8310
Extracted by: JOM
Date Extracted: 13 March 07

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
193217-014 I	1030	7	2.0		
15 J	1060				
16 K	1050				
17 I	1020				
193262-002 G	1050				
03 I	1050				
07	1040				
19 N	1040				
20 W	1050				
193277-001 J	950				*
193329-003 G	1050				
04 H					
05 H					
06 J	1020				
193332-001 H	1030				
02 J	1020				
03 V	1010				MSS
04 B	375		1.0		limited sample **
05 I	1040		2.0		
193333-001 J	1010				
MB QC379036	1000	NA			
LCS 37	1000				
MS 38	1010	7			193332-003 T
MSD 39	1010	7			U

JOM 3/13/07

0.1 | 0.05 ** mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1630
Extraction End Time: 12:00
☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed ~~powdered~~ Grar Na2SO4
Exchanged 2x with Acetonitrile
Concentrated: ☐ to volumes as noted above ☐ to clean-up volume
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel
Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time	Date/ Initials
S5673B / S5673C*	JOM 3/13/07
S5518C	
EM47031 / EM47011	
	3-14/07
	JXM 3/14/07 JOM 3/14/07
N/A	
EM46111628	
EM46173	
N/A	
Whatman L227	

Extraction Chemist | 3/13/07 Date

Contined from Page ____
Continued on Page ____

Pamela Mangat 3/15/07
Reviewed by 00190 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 03/26/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW030807A	Sampled:	03/08/07
Lab ID:	193277-001	Received:	03/08/07
Matrix:	Filtrate	Prepared:	03/13/07
Units:	ug/L	Analyzed:	03/20/07
Batch#:	123055		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	ND	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	660	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	5.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	2,600	500	10.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	ND	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	ND	500	1.000
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	1.000

ND= Not Detected
RL= Reporting Limit

25.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC378982	Batch#:	123055
Matrix:	Water	Prepared:	03/13/07
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	03/16/07
Antimony	ND	1.0	03/16/07
Arsenic	ND	5.0	03/16/07
Barium	ND	10	03/16/07
Beryllium	ND	2.0	03/16/07
Cadmium	ND	1.0	03/16/07
Calcium	ND	500	03/19/07
Chromium	ND	10	03/16/07
Cobalt	ND	10	03/16/07
Copper	ND	1.0	03/16/07
Iron	ND	100	03/16/07
Lead	ND	3.0	03/16/07
Magnesium	ND	500	03/16/07
Manganese	ND	10	03/16/07
Nickel	ND	20	03/16/07
Potassium	ND	500	03/16/07
Selenium	ND	5.0	03/16/07
Silver	ND	1.0	03/16/07
Sodium	ND	500	03/16/07
Thallium	ND	1.0	03/16/07
Vanadium	ND	10	03/16/07
Zinc	ND	20	03/16/07

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Molybdenum

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/09/07
Diln Fac:	1.000	Analyzed:	03/09/07

Type	Lab ID	Result	RL
SAMPLE	193277-001	ND	5.0
BLANK	QC378380	ND	5.0

ND= Not Detected
RL= Reporting Limit

22.0

Curtis & Tompkins, Ltd.

Hardness (Total)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	SM 2340B
Analyte:	Hardness as CaCO3	Batch#:	122912
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Prepared:	03/09/07
Diln Fac:	1.000	Analyzed:	03/09/07

Type	Lab ID	Result	RL
SAMPLE	193277-001	ND	3.3
BLANK	QC378380	ND	3.3

ND= Not Detected
RL= Reporting Limit

21.2

00196

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	03/08/07
Field ID:	DW030807A	Received:	03/08/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/14/07
Batch#:	123115		

Type	Lab ID	Matrix	Result	RL
SAMPLE	193277-001	Filtrate	ND	0.20
BLANK	QC379253	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

26.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Water	Batch#:	123055
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	1.000	Analyzed:	03/16/07

Type: BS Lab ID: QC378983

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,150	102	80-120
Antimony	100.0	93.70	94	80-120
Arsenic	100.0	95.53	96	80-120
Barium	100.0	97.01	97	80-120
Beryllium	100.0	107.1	107	80-120
Cadmium	100.0	96.45	96	80-120
Calcium	10,000	10,410	104	80-120
Chromium	100.0	101.5	102	80-120
Cobalt	100.0	101.9	102	80-120
Copper	100.0	103.6	104	80-120
Iron	10,000	10,070	101	80-120
Lead	100.0	99.24	99	80-120
Magnesium	10,000	10,320	103	80-120
Manganese	100.0	101.4	101	80-120
Nickel	100.0	101.4	101	80-120
Potassium	10,000	10,270	103	80-120
Selenium	100.0	93.55	94	80-120
Silver	100.0	106.9	107	80-120
Sodium	10,000	10,070	101	80-120
Thallium	50.00	49.87	100	80-120
Vanadium	100.0	100.5	101	80-120
Zinc	100.0	95.60	96	80-120

Type: BSD Lab ID: QC378984

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,210	102	80-120	1	20
Antimony	100.0	95.30	95	80-120	2	20
Arsenic	100.0	96.35	96	80-120	1	20
Barium	100.0	97.18	97	80-120	0	20
Beryllium	100.0	111.3	111	80-120	4	20
Cadmium	100.0	98.45	98	80-120	2	20
Calcium	10,000	10,440	104	80-120	0	20
Chromium	100.0	101.6	102	80-120	0	20
Cobalt	100.0	102.1	102	80-120	0	20
Copper	100.0	103.9	104	80-120	0	20
Iron	10,000	10,080	101	80-120	0	20
Lead	100.0	98.77	99	80-120	0	20
Magnesium	10,000	10,350	104	80-120	0	20
Manganese	100.0	102.2	102	80-120	1	20
Nickel	100.0	102.2	102	80-120	1	20
Potassium	10,000	10,360	104	80-120	1	20
Selenium	100.0	94.69	95	80-120	1	20
Silver	100.0	108.3	108	80-120	1	20
Sodium	10,000	10,220	102	80-120	1	20
Thallium	50.00	50.30	101	80-120	1	20
Vanadium	100.0	100.6	101	80-120	0	20
Zinc	100.0	98.23	98	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Batch#:	122912
Field ID:	ZZZZZZZZZZ	Sampled:	03/08/07
MSS Lab ID:	193273-001	Received:	03/08/07
Matrix:	Water	Prepared:	03/09/07
Units:	ug/L	Analyzed:	03/09/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC378381		400.0	470.5	118	80-120		
BSD	QC378382		400.0	455.6	114	80-120	3	20
MS	QC378383	<1.384	400.0	477.7	119	75-125		
MSD	QC378384		400.0	468.8	117	75-125	2	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	123115
Field ID:	NKGW02	Sampled:	03/06/07
MSS Lab ID:	193217-011	Received:	03/07/07
Units:	ug/L	Prepared:	03/14/07
Diln Fac:	1.000	Analyzed:	03/14/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC379255	Water		5.000	5.310	106	80-120		
BSD	QC379256	Water		5.000	5.210	104	80-120	2	20
MS	QC379258	Filtrate	<0.05753	5.000	5.320	106	75-125		
MSD	QC379259	Filtrate		5.000	5.470	109	75-125	3	20

RPD= Relative Percent Difference

27.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	123055
MSS Lab ID:	193244-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	ug/L	Prepared:	03/13/07
Diln Fac:	10.00	Analyzed:	03/16/07

Type: MS Lab ID: QC378985

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	68.89	10,000	11,110	110	75-125
Antimony	0.5258	100.0	105.6	105	75-125
Arsenic	<0.3366	100.0	99.77	100	75-125
Barium	0.1789	100.0	109.8	110	75-125
Beryllium	0.2000	100.0	114.0	114	75-125
Cadmium	0.3474	100.0	106.6	106	75-125
Calcium	<15.48	10,000	11,320	113	75-125
Chromium	0.7453	100.0	101.5	101	75-125
Cobalt	0.1530	100.0	102.0	102	75-125
Copper	2.212	100.0	103.6	101	75-125
Iron	<15.92	10,000	10,280	103	75-125
Lead	3.197	100.0	108.3	105	75-125
Magnesium	66.45	10,000	11,290	112	75-125
Manganese	2.907	100.0	101.5	99	75-125
Nickel	2.836	100.0	103.5	101	75-125
Potassium	<53.33	10,000	11,240	112	75-125
Selenium	<0.2730	100.0	102.2	102	75-125
Silver	0.1716	100.0	117.4	117	75-125
Sodium	<27.31	10,000	11,070	111	75-125
Thallium	0.4130	50.00	50.46	100	75-125
Vanadium	1.760	100.0	101.4	100	75-125
Zinc	3.495	100.0	112.5	109	75-125

Type: MSD Lab ID: QC378986

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,120	101	75-125	9	20
Antimony	100.0	95.52	95	75-125	10	20
Arsenic	100.0	96.49	96	75-125	3	20
Barium	100.0	97.51	97	75-125	12	20
Beryllium	100.0	103.1	103	75-125	10	20
Cadmium	100.0	98.73	98	75-125	8	20
Calcium	10,000	10,370	104	75-125	9	20
Chromium	100.0	99.03	98	75-125	2	20
Cobalt	100.0	100.6	100	75-125	1	20
Copper	100.0	101.4	99	75-125	2	20
Iron	10,000	10,090	101	75-125	2	20
Lead	100.0	97.93	95	75-125	10	20
Magnesium	10,000	10,300	102	75-125	9	20
Manganese	100.0	98.78	96	75-125	3	20
Nickel	100.0	100.6	98	75-125	3	20
Potassium	10,000	10,210	102	75-125	10	20
Selenium	100.0	98.45	98	75-125	4	20
Silver	100.0	107.0	107	75-125	9	20
Sodium	10,000	10,830	108	75-125	2	20
Thallium	50.00	46.41	92	75-125	8	20
Vanadium	100.0	97.88	96	75-125	4	20
Zinc	100.0	103.9	100	75-125	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Units:	ug/L
Type:	Serial Dilution	Batch#:	123055
MSS Lab ID:	193244-001	Sampled:	03/07/07
Lab ID:	QC378987	Received:	03/08/07
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	68.89	100.0	178.4 J	500.0	NC	10	50.00	03/16/07
Antimony	0.5258	1.000	1.636 J	5.000	NC	10	50.00	03/16/07
Arsenic	ND	5.000	ND	5.000	NC	10	50.00	03/16/07
Barium	ND	10.00	4.417 J	10.00	NC	10	50.00	03/16/07
Beryllium	0.2000	2.000	1.599 J	5.000	NC	10	50.00	03/16/07
Cadmium	0.3474	1.000	1.333 J	5.000	NC	10	50.00	03/16/07
Calcium	ND	500.0	105.3 J	500.0	NC	10	5.000	03/19/07
Chromium	0.7453	10.00	ND	10.00	NC	10	50.00	03/16/07
Cobalt	0.1530	10.00	ND	10.00	NC	10	50.00	03/16/07
Copper	2.212	1.000	ND	5.000	NC	10	50.00	03/16/07
Iron	158.0	100.0	ND	500.0	NC	10	50.00	03/16/07
Lead	3.197	3.000	0.9558 J	5.000	NC	10	50.00	03/16/07
Magnesium	66.45	500.0	216.2 J	500.0	NC	10	50.00	03/16/07
Manganese	ND	10.00	1.085 J	10.00	NC	10	50.00	03/16/07
Nickel	ND	20.00	ND	20.00	NC	10	50.00	03/16/07
Potassium	ND	500.0	ND	500.0	NC	10	50.00	03/16/07
Selenium	ND	5.000	ND	5.000	NC	10	50.00	03/16/07
Silver	0.1716	1.000	1.244 J	5.000	NC	10	50.00	03/16/07
Sodium	ND	500.0	ND	500.0	NC	10	50.00	03/16/07
Thallium	0.4130	1.000	ND	2.500	NC	10	50.00	03/16/07
Vanadium	ND	10.00	3.910 J	10.00	NC	10	50.00	03/16/07
Zinc	3.495	20.00	21.31	20.00	NC	10	50.00	03/16/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Molybdenum

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	2893.04.51	Analysis:	EPA 6010B
Analyte:	Molybdenum	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	122912
MSS Lab ID:	193273-001	Sampled:	03/08/07
Lab ID:	QC378385	Received:	03/08/07
Matrix:	Water	Analyzed:	03/09/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	5.000	ND	25.00	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

24.0

00203

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	NKGW02	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	123115
MSS Lab ID:	193217-011	Sampled:	03/06/07
Lab ID:	QC379257	Received:	03/07/07
Matrix:	Filtrate	Analyzed:	03/14/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

28.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6010B

Type : MSS
Inst : MET08
Seqnum: 87098860014
File : 030907ar
IDF : 1.0
Lab ID: 193273-001
Matrix: Water
Batch : 122912
Time : 09-MAR-2007 17:00
Cal : 87098860001
Units : ug/L

Type : PDS
Inst : MET08
Seqnum: 87098860018
File : 030907ar
IDF : 1.0
Lab ID: QC378386
Matrix: Water
Batch : 122912
Time : 09-MAR-2007 17:12
Cal : 87098860001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4884 (100X), S4885 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	R	2000	1819	R	91	75-125	u
Antimony	1.950	A	500.0	471.2	A	94	75-125	u
Arsenic	ND	A	100.0	96.30	A	96	75-125	u
Barium	ND	A	2000	1980	A	99	75-125	u
Beryllium	ND	A	50.00	53.84	A	108	75-125	u
Cadmium	ND	A	50.00	50.55	A	101	75-125	u
Calcium	168.9	R	20000	19380	R	96	75-125	u
Chromium	ND	A	200.0	200.6	A	100	75-125	u
Cobalt	ND	A	500.0	473.4	A	95	75-125	u
Copper	ND	A	250.0	246.6	A	99	75-125	u
Iron	ND	R	1000	942.6	R	94	75-125	u
Lead	ND	A	100.0	102.5	A	103	75-125	u
Magnesium	ND	R	20000	18460	R	92	75-125	u
Manganese	ND	A	50.00	50.92	A	102	75-125	u
Molybdenum	ND	A	400.0	444.4	A	111	75-125	u
Nickel	ND	A	500.0	488.7	A	98	75-125	u
Potassium	ND	R	10000	9594	R	96	75-125	u
Selenium	ND	A	100.0	99.29	A	99	75-125	u
Silver	ND	A	50.00	49.31	A	99	75-125	u
Sodium	6811	R	20000	26210	R	97	75-125	u
Thallium	ND	A	100.0	98.87	A	99	75-125	u
Vanadium	ND	A	500.0	515.6	A	103	75-125	u
Zinc	ND	A	500.0	499.8	A	100	75-125	u
Boron	171.1	A	1000	1224	A	105	75-125	u
Tin	ND	A	1000	994.5	A	99	75-125	u
Titanium	ND	A	1000	1049	A	105	75-125	u

ISTD (ICAL 002)	Ch	ICAL Abund	PDS Abund	%Drift
Yttrium	A	1356870	1241968	-8.47

u=use

87098860018

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET06
Seqnum: 67108851031
File : c16o0031
IDF : 10.0
Lab ID: QC378988
Matrix: Water
Batch : 123055
Time : 16-MAR-2007 16:59
Cal : 67108851001
MSS : 193244-001
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67108851027	6.889	A	10000	9531	A	95	75-125	u
Antimony	67108851027	0.05258	A	100.0	91.46	A	91	75-125	u
Arsenic	67108851027	ND	E	100.0	100.4	E	100	75-125	u
Barium	67108851027	0.4298	A	100.0	95.81	A	95	75-125	u
Beryllium	67108851027	0.02000	A	100.0	103.8	A	104	75-125	u
Cadmium	67108851027	0.03474	A	100.0	95.54	A	96	75-125	u
Calcium	67108851027	19.85	A	10000	9558	A	95	75-125	u
Chromium	67108851027	0.07453	E	100.0	100.6	E	101	75-125	u
Cobalt	67108851027	0.01530	E	100.0	101.1	E	101	75-125	u
Copper	67108851027	0.2212	E	100.0	101.9	E	102	75-125	u
Iron	67108851027	15.80	H	10000	10150	H	101	75-125	u
Lead	67108851027	0.3197	A	100.0	95.91	A	96	75-125	u
Magnesium	67108851027	6.645	A	10000	9595	A	96	75-125	u
Manganese	67108851027	0.2907	E	100.0	101.1	E	101	75-125	u
Molybdenum	67108851027	0.03499	A	100.0	92.02	A	92	75-125	u
Nickel	67108851027	0.2836	E	100.0	101.3	E	101	75-125	u
Potassium	67108851027	ND	A	10000	9566	A	96	75-125	u
Selenium	67108851027	ND	H	100.0	102.0	H	102	75-125	u
Silver	67108851027	0.01716	A	100.0	90.69	A	91	75-125	u
Sodium	67108851027	18.39	E	10000	10130	E	101	75-125	u
Thallium	67108851027	0.04130	A	50.00	48.15	A	96	75-125	u
Vanadium	67108851027	0.1760	E	100.0	99.94	E	100	75-125	u
Zinc	67108851040	0.3495	E	100.0	101.2	E	101	75-125	u

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	647013	633837	-2.04
Scandium	A	852845	889614	4.31
Scandium	E	27959	27424	-1.91
Scandium	H	427309	417558	-2.28
Germanium	H	105109	101692	-3.25
Germanium	E	15593	14989	-3.88
Indium	A	1435538	1417021	-1.29
Bismuth	A	1399318	1353507	-3.27
Yttrium	A	1356281	1395682	2.91
Terbium	A	2224182	2232337	0.37

u=use

67108851031

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET05
Seqnum: 57113086048
File : c19m0048
IDF : 1.0
Lab ID: 193244-001
Matrix: Water
Batch : 123055
Time : 19-MAR-2007 16:02
Cal : 57113086001
Units : ug/L

Type : PDS
Inst : MET05
Seqnum: 57113086061
File : c19m0061
IDF : 1.0
Lab ID: QC378988
Matrix: Water
Batch : 123055
Time : 19-MAR-2007 16:57
Cal : 57113086001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S5290

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9823	98	75-125	
Antimony	0.3291	100.0	100.9	101	75-125	
Arsenic	0.6496	100.0	92.84	92	75-125	
Barium	0.1789	100.0	91.87	92	75-125	
Beryllium	ND	100.0	84.46	84	75-125	
Cadmium	ND	100.0	96.01	96	75-125	
Calcium	ND	10000	9726	97	75-125	
Chromium	0.7590	100.0	96.59	96	75-125	
Cobalt	ND	100.0	94.84	95	75-125	
Copper	ND	100.0	90.97	91	75-125	
Iron	ND	10000	9443	94	75-125	
Lead	ND	100.0	96.90	97	75-125	
Magnesium	ND	10000	9854	99	75-125	
Manganese	0.08311	100.0	95.07	95	75-125	
Molybdenum	ND	100.0	94.77	95	75-125	
Nickel	ND	100.0	92.54	93	75-125	
Potassium	32.42	10000	9902	99	75-125	
Selenium	ND	100.0	87.23	87	75-125	
Sodium	ND	10000	9292	93	75-125	
Thallium	ND	50.00	45.42	91	75-125	
Vanadium	0.5171	100.0	95.87	95	75-125	
Zinc	2.227	100.0	89.88	88	75-125	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	809267	649953	-19.69
Scandium	964043	724460	-24.85
Germanium	164788	127260	-22.77
Indium	1539479	1156935	-24.85
Bismuth	1214998	947252	-22.04

MISSING READINGS: **AG**

57113086061

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6010B

Inst : MET08
Calnum : 87098860001
Units : ug/L

Date : 09-MAR-2007 15:40
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	030907ar	87098860002	CRIM08	09-MAR-2007 15:48	S5393
L2	030907ar	87098860003	CS100	09-MAR-2007 15:52	S5428
L3	030907ar	87098860004	CS1K	09-MAR-2007 15:55	S5427
L4	030907ar	87098860005	CS10K	09-MAR-2007 15:57	S5323
L5	030907ar	87098860006	CS100K	09-MAR-2007 16:01	S5561

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Antimony	A	47.248	53.702	54.990	53.295		LOR0	0.00000	0.01876		52.309	1.000	0.995	
Arsenic	A	32.866	31.318	31.749	30.929		LOR0	0.00000	0.03232		31.716	1.000	0.995	
Barium	A	616.16	579.74	574.35	566.74		LOR0	0.00000	0.00176		584.25	1.000	0.995	
Beryllium	A	4087.8	4304.8	4275.1			LOR0	0.00000	2.34E-4		4222.6	1.000	0.995	
Boron	A	207.71		211.26	217.24		LOR0	0.00000	0.00460		212.07	1.000	0.995	
Cadmium	A	401.04	401.17	398.76	396.15		LOR0	0.00000	0.00252		399.28	1.000	0.995	
Chromium	A	149.70	137.72	137.51	135.50		LOR0	0.00000	0.00738		140.11	1.000	0.995	
Cobalt	A	146.39	148.67	151.58	151.01		LOR0	0.00000	0.00662		149.41	1.000	0.995	
Copper	A	367.90	341.84	349.75	351.42		LOR0	0.00000	0.00285		352.73	1.000	0.995	
Lead	A	70.813	73.777	75.425	70.536		LOR0	0.00000	0.01417		72.638	1.000	0.995	
Manganese	A	887.76	872.17	874.94	835.21		LOR0	0.00000	0.00120		867.52	1.000	0.995	
Molybdenum	A	59.638	58.849	57.224	53.301		LOR0	0.00000	0.01875		57.253	1.000	0.995	
Nickel	A	83.053	79.790	81.675	80.065		LOR0	0.00000	0.01249		81.146	1.000	0.995	
Selenium	A	22.162	29.413	29.811	29.376		LOR0	0.00000	0.03404		27.690	1.000	0.995	
Silver	A	737.26	699.84	695.74	675.59		LOR0	0.00000	0.00147		702.11	1.000	0.995	
Thallium	A	31.877	28.071	28.541	26.330		LOR0	0.00000	0.03795		28.705	1.000	0.995	
Tin	A	36.617	35.871	35.455	35.470		LOR0	0.00000	0.02819		35.853	1.000	0.995	
Titanium	A	1425.8	1434.1	1410.9	1360.6		LOR0	0.00000	7.35E-4		1407.9	1.000	0.995	
Vanadium	A	127.26	123.72	124.90	126.18		LOR0	0.00000	0.00793		125.52	1.000	0.995	
Zinc	A	130.75	127.02	128.23	126.78		LOR0	0.00000	0.00789		128.20	1.000	0.995	
Aluminum	R	0.9560		1.0248	0.9378	1.0493	LOR0	0.00000	0.95399		0.9920	1.000	0.995	
Calcium	R	17.674		18.530	16.935	17.333	LOR0	0.00000	0.05771		17.618	1.000	0.995	
Iron	R	4.3900		4.7320	4.2921	4.3302	LOR0	0.00000	0.23095		4.4361	1.000	0.995	
Magnesium	R	1.9029		2.2490	2.0771	2.1062	LOR0	0.00000	0.47486		2.0838	1.000	0.995	
Potassium	R	5.9091		6.5295	6.0964	6.3840	LOR0	0.00000	0.15671		6.2298	1.000	0.995	
Sodium	R	14.946		15.599	14.966	15.011	LOR0	0.00000	0.06662		15.130	1.000	0.995	

Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	Units
Antimony	A	5.0000	100.00	1000.0	10000.0		ug/L
Arsenic	A	5.0000	100.00	1000.0	10000.0		ug/L
Barium	A	5.0000	100.00	1000.0	10000.0		ug/L
Beryllium	A	2.0000	100.00	1000.0			ug/L
Boron	A	100.00		1000.0	10000.0		ug/L
Cadmium	A	5.0000	100.00	1000.0	10000.0		ug/L
Chromium	A	5.0000	100.00	1000.0	10000.0		ug/L
Cobalt	A	5.0000	100.00	1000.0	10000.0		ug/L
Copper	A	5.0000	100.00	1000.0	10000.0		ug/L
Lead	A	3.0000	100.00	1000.0	10000.0		ug/L
Manganese	A	5.0000	100.00	1000.0	10000.0		ug/L
Molybdenum	A	5.0000	100.00	1000.0	10000.0		ug/L
Nickel	A	5.0000	100.00	1000.0	10000.0		ug/L
Selenium	A	5.0000	100.00	1000.0	10000.0		ug/L
Silver	A	5.0000	100.00	1000.0	2000.0		ug/L
Thallium	A	5.0000	100.00	1000.0	10000.0		ug/L
Tin	A	40.000	100.00	1000.0	10000.0		ug/L
Titanium	A	10.000	100.00	1000.0	10000.0		ug/L
Vanadium	A	5.0000	100.00	1000.0	10000.0		ug/L
Zinc	A	20.000	100.00	1000.0	10000.0		ug/L
Aluminum	R	100.00		1000.0	10000.0	100000	ug/L
Calcium	R	200.00		1000.0	10000.0	100000	ug/L
Iron	R	100.00		1000.0	10000.0	100000	ug/L
Magnesium	R	200.00		1000.0	10000.0	100000	ug/L
Potassium	R	500.00		1000.0	10000.0	100000	ug/L
Sodium	R	500.00		1000.0	10000.0	100000	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

Sequence No.: 1
Sample ID: ICALBLK,
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/9/2007 3:40:39 PM
Data Type: Reprocessed on 3/9/2007 4:45:53 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICALBLK,

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICALBLK,

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ag 328.068	-23.2	363.04	>999.9%	[0.00]	ug/L
Al 308.215 R	144.8	7.78	5.37%	[0.00]	ug/L
As 188.979	-31.3	13.53	43.25%	[0.00]	ug/L
B 249.677	476.7	3.42	0.72%	[0.00]	ug/L
Ba 233.527	-289.4	1.66	0.57%	[0.00]	ug/L
Be 313.107	-896.3	533.85	59.56%	[0.00]	ug/L
Ca 315.887 R	188.2	13.38	7.11%	[0.00]	ug/L
Cd 214.440	-26.4	13.64	51.66%	[0.00]	ug/L
Co 228.616	-403.8	21.47	5.32%	[0.00]	ug/L
Cr 267.716	166.5	15.41	9.26%	[0.00]	ug/L
Cu 324.752	3029.8	70.41	2.32%	[0.00]	ug/L
Fe 238.204 R	50.9	4.04	7.95%	[0.00]	ug/L
K 766.490 R	-1291.7	296.68	22.97%	[0.00]	ug/L
Mg 279.077 R	64.3	8.87	13.79%	[0.00]	ug/L
Mn 257.610	69.0	6.13	8.88%	[0.00]	ug/L
Mo 202.031	10.0	2.97	29.71%	[0.00]	ug/L
Na 589.592 R	1726.5	57.75	3.34%	[0.00]	ug/L
Ni 231.604	195.4	12.79	6.55%	[0.00]	ug/L
Pb 220.353	24.4	50.55	207.00%	[0.00]	ug/L
Sb 206.836	-129.8	33.43	25.75%	[0.00]	ug/L
Se 196.026	-86.2	51.66	59.96%	[0.00]	ug/L
Ti 334.940 R	392.8	83.98	21.38%	[0.00]	ug/L
Tl 190.801	-32.1	18.58	57.83%	[0.00]	ug/L
V 292.402	-984.2	5.33	0.54%	[0.00]	ug/L
Zn 206.200	137.6	4.86	3.53%	[0.00]	ug/L
Sn 189.927	22.2	3.95	17.83%	[0.00]	ug/L

Sequence No.: 2
Sample ID: ICAL,CRIM08
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/9/2007 3:48:10 PM
Data Type: Reprocessed on 3/9/2007 4:45:56 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CRIM08

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CRIM08

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1356870.5	6454.73	0.48%	100.0	%
Y	294238.4	3843.84	1.31%	100.0	%
Ag 328.068†	3686.3	562.77	15.27%	[5.0]	ug/L
Al 308.215 R†	95.6	8.36	8.74%	[100]	ug/L
As 188.979†	164.3	13.79	8.39%	[5.0]	ug/L
B 249.677†	20771.0	123.69	0.60%	[100]	ug/L
Ba 233.527†	3080.8	32.59	1.06%	[5.0]	ug/L
Be 313.107†	8175.7	156.92	1.92%	[2.0]	ug/L
Ca 315.887 R†	3534.8	55.89	1.58%	[200]	ug/L
Cd 214.440†	2005.2	14.46	0.72%	[5.0]	ug/L
Co 228.616†	731.9	3.72	0.51%	[5.0]	ug/L
Cr 267.716†	748.5	15.17	2.03%	[5.0]	ug/L
Cu 324.752†	1839.5	136.31	7.41%	[5.0]	ug/L
Fe 238.204 R†	439.0	6.55	1.49%	[100]	ug/L
K 766.490 R†	2954.5	216.12	7.31%	[500]	ug/L
Mg 279.077 R†	380.6	9.40	2.47%	[200]	ug/L
Mn 257.610†	4438.8	36.26	0.82%	[5.0]	ug/L
Mo 202.031†	298.2	6.90	2.31%	[5.0]	ug/L
Na 589.592 R†	7472.8	151.86	2.03%	[500]	ug/L
Ni 231.604†	415.3	12.27	2.96%	[5.0]	ug/L
Pb 220.353†	212.4	59.05	27.80%	[3.0]	ug/L
Sb 206.836†	236.2	43.71	18.50%	[5.0]	ug/L
Se 196.026†	110.8	14.70	13.26%	[5.0]	ug/L
Ti 334.940 R†	14258.1	201.32	1.41%	[10]	ug/L
Tl 190.801†	159.4	21.70	13.62%	[5.0]	ug/L
V 292.402†	636.3	5.41	0.85%	[5.0]	ug/L
Zn 206.200†	2615.0	13.05	0.50%	[20]	ug/L
Sn 189.927†	1464.7	11.88	0.81%	[40]	ug/L

Sequence No.: 3
Sample ID: ICAL,CS100
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/9/2007 3:52:10 PM
Data Type: Reprocessed on 3/9/2007 4:45:59 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS100

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1346030.6	23810.91	1.77%	99.20	%
Y	298308.7	6361.62	2.13%	101.4	%
Ag 328.068†	69983.6	833.61	1.19%	[100]	ug/L
As 188.979†	3131.8	64.40	2.06%	[100]	ug/L
Ba 233.527†	57974.4	809.75	1.40%	[100]	ug/L
Be 313.107†	430477.1	4450.62	1.03%	[100]	ug/L
Cd 214.440†	40116.7	513.05	1.28%	[100]	ug/L
Co 228.616†	14866.9	292.87	1.97%	[100]	ug/L
Cr 267.716†	13771.8	271.01	1.97%	[100]	ug/L
Cu 324.752†	34184.2	450.82	1.32%	[100]	ug/L
Mn 257.610†	87216.7	1198.19	1.37%	[100]	ug/L
Mo 202.031†	5884.9	158.68	2.70%	[100]	ug/L
Ni 231.604†	7979.0	150.10	1.88%	[100]	ug/L
Pb 220.353†	7377.7	177.98	2.41%	[100]	ug/L
Sb 206.836†	5370.2	80.71	1.50%	[100]	ug/L
Se 196.026†	2941.3	75.34	2.56%	[100]	ug/L
Ti 334.940 R†	143414.0	1979.18	1.38%	[100]	ug/L
Tl 190.801†	2807.1	60.67	2.16%	[100]	ug/L
V 292.402†	12372.1	220.15	1.78%	[100]	ug/L
Zn 206.200†	12702.1	259.91	2.05%	[100]	ug/L
Sn 189.927†	3587.1	93.21	2.60%	[100]	ug/L

Sequence No.: 4
Sample ID: ICAL,CS1K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/9/2007 3:55:10 PM
Data Type: Reprocessed on 3/9/2007 4:46:01 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS1K

Analyte	Back Pressure	Flow
All	155.0 kPa	0.55 L/min

Mean Data: ICAL,CS1K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1367036.2	19084.24	1.40%	100.7	%
Y	283160.6	8128.68	2.87%	96.24	%
Ag 328.068†	695744.7	7206.14	1.04%	[1000]	ug/L
Al 308.215 R†	1024.8	51.01	4.98%	[1000]	ug/L
As 188.979†	31749.2	597.65	1.88%	[1000]	ug/L
B 249.677†	211257.7	2935.80	1.39%	[1000]	ug/L
Ba 233.527†	574349.0	7302.92	1.27%	[1000]	ug/L
Be 313.107†	4275130.7	47792.13	1.12%	[1000]	ug/L
Ca 315.887 R†	18529.7	502.05	2.71%	[1000]	ug/L
Cd 214.440†	398756.1	5324.57	1.34%	[1000]	ug/L
Co 228.616†	151582.3	1919.03	1.27%	[1000]	ug/L
Cr 267.716†	137507.2	2154.24	1.57%	[1000]	ug/L
Cu 324.752†	349745.6	4340.60	1.24%	[1000]	ug/L
Fe 238.204 R†	4732.0	77.43	1.64%	[1000]	ug/L
K 766.490 R†	6529.5	71.15	1.09%	[1000]	ug/L
Mg 279.077 R†	2249.0	75.52	3.36%	[1000]	ug/L
Mn 257.610†	874939.3	11062.29	1.26%	[1000]	ug/L
Mo 202.031†	57224.4	761.33	1.33%	[1000]	ug/L
Na 589.592 R†	15598.9	659.13	4.23%	[1000]	ug/L
Ni 231.604†	81675.4	1348.22	1.65%	[1000]	ug/L
Pb 220.353†	75424.6	1573.51	2.09%	[1000]	ug/L
Sb 206.836†	54990.1	1260.18	2.29%	[1000]	ug/L
Se 196.026†	29810.7	360.72	1.21%	[1000]	ug/L
Ti 334.940 R†	1410942.4	17433.30	1.24%	[1000]	ug/L
Tl 190.801†	28540.9	550.81	1.93%	[1000]	ug/L
V 292.402†	124900.0	1888.01	1.51%	[1000]	ug/L
Zn 206.200†	128233.9	2066.80	1.61%	[1000]	ug/L
Sn 189.927†	35454.7	748.78	2.11%	[1000]	ug/L

Sequence No.: 5
Sample ID: ICAL,CS10K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/9/2007 3:57:21 PM
Data Type: Reprocessed on 3/9/2007 4:46:03 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS10K

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICAL,CS10K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1309657.2	9336.92	0.71%	96.52	%
Y	283383.1	3267.89	1.15%	96.31	%
Ag 328.068†	1351175.3	5491.10	0.41%	[2000]	ug/L
Al 308.215 R†	9377.5	46.64	0.50%	[10000]	ug/L
As 188.979†	309285.8	3165.16	1.02%	[10000]	ug/L
B 249.677†	2172431.7	23389.37	1.08%	[10000]	ug/L
Ba 233.527†	5667438.0	64861.03	1.14%	[10000]	ug/L
Ca 315.887 R†	169353.8	229.12	0.14%	[10000]	ug/L
Cd 214.440†	3961549.6	56082.06	1.42%	[10000]	ug/L
Co 228.616†	1510089.9	14438.65	0.96%	[10000]	ug/L
Cr 267.716†	1354996.4	13290.55	0.98%	[10000]	ug/L
Cu 324.752†	3514238.9	28760.97	0.82%	[10000]	ug/L
Fe 238.204 R†	42920.7	252.54	0.59%	[10000]	ug/L
K 766.490 R†	60964.2	137.59	0.23%	[10000]	ug/L
Mg 279.077 R†	20770.8	98.41	0.47%	[10000]	ug/L
Mn 257.610†	8352078.5	67099.93	0.80%	[10000]	ug/L
Mo 202.031†	533011.9	12305.97	2.31%	[10000]	ug/L
Na 589.592 R†	149656.5	977.13	0.65%	[10000]	ug/L
Ni 231.604†	800646.1	6705.68	0.84%	[10000]	ug/L
Pb 220.353†	705363.5	7511.31	1.06%	[10000]	ug/L
Sb 206.836†	532951.0	4535.38	0.85%	[10000]	ug/L
Se 196.026†	293756.8	3239.33	1.10%	[10000]	ug/L
Ti 334.940 R†	13606115.2	139103.28	1.02%	[10000]	ug/L
Tl 190.801†	263304.8	3352.68	1.27%	[10000]	ug/L
V 292.402†	1261809.6	12326.81	0.98%	[10000]	ug/L
Zn 206.200†	1267807.4	13384.02	1.06%	[10000]	ug/L
Sn 189.927†	354700.6	3729.86	1.05%	[10000]	ug/L

Sequence No.: 6
Sample ID: ICAL,CS100K
Analyst:
Logged In Analyst (Original) : Curtis and Tompkins
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/9/2007 4:01:07 PM
Data Type: Reprocessed on 3/9/2007 4:46:05 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICAL,CS100K

Analyte	Back Pressure	Flow
All	154.0 kPa	0.55 L/min

Mean Data: ICAL,CS100K

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	1224097.6	13786.67	1.13%	90.21	%
Y	265798.5	5739.88	2.16%	90.33	%
Al 308.215 R†	104933.7	2832.79	2.70%	[100000]	ug/L
Ca 315.887 R†	1733301.4	48777.51	2.81%	[100000]	ug/L
Fe 238.204 R†	433020.9	10500.81	2.43%	[100000]	ug/L
K 766.490 R†	638395.8	18785.62	2.94%	[100000]	ug/L
Mg 279.077 R†	210615.1	5219.03	2.48%	[100000]	ug/L
Na 589.592 R†	1501084.5	43708.02	2.91%	[100000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin Thru 0	0.0	679.7	0.00000	0.999929	
Al 308.215 R	4	Lin Thru 0	0.0	1.048	0.00000	0.999944	
As 188.979	4	Lin Thru 0	0.0	30.94	0.00000	0.999997	
B 249.677	3	Lin Thru 0	0.0	217.2	0.00000	0.999996	
Ba 233.527	4	Lin Thru 0	0.0	566.8	0.00000	0.999999	
Be 313.107	3	Lin Thru 0	0.0	4275	0.00000	1.000000	
Ca 315.887 R	4	Lin Thru 0	0.0	17.33	0.00000	0.999997	
Cd 214.440	4	Lin Thru 0	0.0	396.2	0.00000	1.000000	
Co 228.616	4	Lin Thru 0	0.0	151.0	0.00000	1.000000	
Cr 267.716	4	Lin Thru 0	0.0	135.5	0.00000	0.999999	
Cu 324.752	4	Lin Thru 0	0.0	351.4	0.00000	1.000000	
Fe 238.204 R	4	Lin Thru 0	0.0	4.330	0.00000	0.999999	
K 766.490 R	4	Lin Thru 0	0.0	6.381	0.00000	0.999990	
Mg 279.077 R	4	Lin Thru 0	0.0	2.106	0.00000	0.999999	
Mn 257.610	4	Lin Thru 0	0.0	835.6	0.00000	0.999989	
Mo 202.031	4	Lin Thru 0	0.0	53.34	0.00000	0.999973	
Na 589.592 R	4	Lin Thru 0	0.0	15.01	0.00000	1.000000	
Ni 231.604	4	Lin Thru 0	0.0	80.08	0.00000	0.999998	
Pb 220.353	4	Lin Thru 0	0.0	70.59	0.00000	0.999976	
Sb 206.836	4	Lin Thru 0	0.0	53.31	0.00000	0.999995	
Se 196.026	4	Lin Thru 0	0.0	29.38	0.00000	0.999999	
Ti 334.940 R	4	Lin Thru 0	0.0	1361	0.00000	0.999993	
Tl 190.801	4	Lin Thru 0	0.0	26.35	0.00000	0.999965	
V 292.402	4	Lin Thru 0	0.0	126.2	0.00000	0.999999	
Zn 206.200	4	Lin Thru 0	0.0	126.8	0.00000	0.999999	
Sn 189.927	4	Lin Thru 0	0.0	35.47	0.00000	1.000000	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860007 File : 030907ar Time : 09-MAR-2007 16:09
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5324

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Antimony	A	52.309	53.600	5000	5027	ug/L	1	10	
Arsenic	A	31.716	31.884	5000	5153	ug/L	3	10	
Barium	A	584.25	557.66	5000	4919	ug/L	-2	10	
Beryllium	A	4222.6	4259.3	500.0	498.1	ug/L	0	10	
Boron	A	212.07	215.20	5000	4954	ug/L	-1	10	
Cadmium	A	399.28	390.05	5000	4923	ug/L	-2	10	
Chromium	A	140.11	132.56	5000	4891	ug/L	-2	10	
Cobalt	A	149.41	146.05	5000	4826	ug/L	-3	10	
Copper	A	352.73	332.23	5000	4727	ug/L	-5	10	
Lead	A	72.638	70.071	5000	4964	ug/L	-1	10	
Manganese	A	867.52	820.09	5000	4907	ug/L	-2	10	
Molybdenum	A	57.253	54.368	5000	5096	ug/L	2	10	
Nickel	A	81.146	77.625	5000	4847	ug/L	-3	10	
Selenium	A	27.690	29.821	5000	5075	ug/L	2	10	
Silver	A	702.11	657.32	1000	967.1	ug/L	-3	10	
Thallium	A	28.705	26.521	5000	5032	ug/L	1	10	
Tin	A	35.853	35.390	5000	4989	ug/L	0	10	
Titanium	A	1407.9	1305.8	5000	4797	ug/L	-4	10	
Vanadium	A	125.52	124.00	5000	4914	ug/L	-2	10	
Zinc	A	128.20	124.29	5000	4901	ug/L	-2	10	
Aluminum	R	0.9920	0.9456	20000	18040	ug/L	-10	10	
Calcium	R	17.618	16.254	20000	18760	ug/L	-6	10	
Iron	R	4.4361	4.0905	20000	18890	ug/L	-6	10	
Magnesium	R	2.0838	1.9815	20000	18820	ug/L	-6	10	
Potassium	R	6.2298	5.8533	20000	18350	ug/L	-8	10	
Sodium	R	15.130	14.125	20000	18820	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1295914	-4.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860020 File : 030907ar Time : 09-MAR-2007 17:18
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	54.858	5000	5145	ug/L	3	10	
Arsenic	A	31.716	32.188	5000	5202	ug/L	4	10	
Barium	A	584.25	575.82	5000	5079	ug/L	2	10	
Beryllium	A	4222.6	4408.5	500.0	515.6	ug/L	3	10	
Boron	A	212.07	222.66	5000	5126	ug/L	3	10	
Cadmium	A	399.28	403.56	5000	5093	ug/L	2	10	
Chromium	A	140.11	137.40	5000	5069	ug/L	1	10	
Cobalt	A	149.41	150.44	5000	4971	ug/L	-1	10	
Copper	A	352.73	344.32	5000	4899	ug/L	-2	10	
Lead	A	72.638	71.072	5000	5034	ug/L	1	10	
Manganese	A	867.52	835.61	5000	5000	ug/L	0	10	
Molybdenum	A	57.253	55.450	5000	5198	ug/L	4	10	
Nickel	A	81.146	79.724	5000	4978	ug/L	0	10	
Selenium	A	27.690	29.706	5000	5056	ug/L	1	10	
Silver	A	702.11	675.92	1000	994.5	ug/L	-1	10	
Thallium	A	28.705	26.632	5000	5053	ug/L	1	10	
Tin	A	35.853	35.734	5000	5037	ug/L	1	10	
Titanium	A	1407.9	1359.1	5000	4993	ug/L	0	10	
Vanadium	A	125.52	129.25	5000	5122	ug/L	2	10	
Zinc	A	128.20	127.01	5000	5009	ug/L	0	10	
Aluminum	R	0.9920	0.9954	20000	18990	ug/L	-5	10	
Calcium	R	17.618	17.443	20000	20130	ug/L	1	10	
Iron	R	4.4361	4.2709	20000	19730	ug/L	-1	10	
Magnesium	R	2.0838	2.0825	20000	19780	ug/L	-1	10	
Potassium	R	6.2298	6.2684	20000	19650	ug/L	-2	10	
Sodium	R	15.130	15.369	20000	20480	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1235855	-8.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860034 File : 030907ar Time : 09-MAR-2007 18:10
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5325

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	56.396	5000	5289	ug/L	6	10	
Arsenic	A	31.716	33.188	5000	5364	ug/L	7	10	
Barium	A	584.25	571.03	5000	5037	ug/L	1	10	
Beryllium	A	4222.6	4380.0	500.0	512.2	ug/L	2	10	
Boron	A	212.07	220.61	5000	5079	ug/L	2	10	
Cadmium	A	399.28	400.48	5000	5054	ug/L	1	10	
Chromium	A	140.11	136.73	5000	5045	ug/L	1	10	
Cobalt	A	149.41	149.27	5000	4932	ug/L	-1	10	
Copper	A	352.73	342.92	5000	4879	ug/L	-2	10	
Lead	A	72.638	73.343	5000	5195	ug/L	4	10	
Manganese	A	867.52	827.75	5000	4953	ug/L	-1	10	
Molybdenum	A	57.253	57.142	5000	5356	ug/L	7	10	
Nickel	A	81.146	79.211	5000	4946	ug/L	-1	10	
Selenium	A	27.690	30.665	5000	5219	ug/L	4	10	
Silver	A	702.11	694.90	1000	1022	ug/L	2	10	
Thallium	A	28.705	27.327	5000	5185	ug/L	4	10	
Tin	A	35.853	36.750	5000	5180	ug/L	4	10	
Titanium	A	1407.9	1352.4	5000	4968	ug/L	-1	10	
Vanadium	A	125.52	128.61	5000	5097	ug/L	2	10	
Zinc	A	128.20	126.22	5000	4977	ug/L	0	10	
Aluminum	R	0.9920	0.9783	20000	18670	ug/L	-7	10	
Calcium	R	17.618	16.970	20000	19590	ug/L	-2	10	
Iron	R	4.4361	4.1602	20000	19220	ug/L	-4	10	
Magnesium	R	2.0838	2.0396	20000	19370	ug/L	-3	10	
Potassium	R	6.2298	6.2269	20000	19520	ug/L	-2	10	
Sodium	R	15.130	15.143	20000	20180	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1234221	-9.04

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6010B

Inst : MET08
Seqnum : 87098860047
Cal : 87098860001
Standards: S5325

File : 030907ar
Caldate: 09-MAR-2007

IDF : 1.0
Time : 09-MAR-2007 18:53

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	52.309	54.499	5000	5111	ug/L	2	10	
Arsenic	A	31.716	31.966	5000	5166	ug/L	3	10	
Barium	A	584.25	567.64	5000	5007	ug/L	0	10	
Beryllium	A	4222.6	4352.1	500.0	509.0	ug/L	2	10	
Boron	A	212.07	219.25	5000	5048	ug/L	1	10	
Cadmium	A	399.28	397.28	5000	5014	ug/L	0	10	
Chromium	A	140.11	135.53	5000	5000	ug/L	0	10	
Cobalt	A	149.41	148.40	5000	4904	ug/L	-2	10	
Copper	A	352.73	340.22	5000	4841	ug/L	-3	10	
Lead	A	72.638	70.572	5000	4999	ug/L	0	10	
Manganese	A	867.52	825.96	5000	4942	ug/L	-1	10	
Molybdenum	A	57.253	54.897	5000	5146	ug/L	3	10	
Nickel	A	81.146	78.697	5000	4914	ug/L	-2	10	
Selenium	A	27.690	29.623	5000	5041	ug/L	1	10	
Silver	A	702.11	668.68	1000	983.8	ug/L	-2	10	
Thallium	A	28.705	26.519	5000	5032	ug/L	1	10	
Tin	A	35.853	35.424	5000	4994	ug/L	0	10	
Titanium	A	1407.9	1340.2	5000	4923	ug/L	-2	10	
Vanadium	A	125.52	127.28	5000	5044	ug/L	1	10	
Zinc	A	128.20	125.56	5000	4951	ug/L	-1	10	
Aluminum	R	0.9920	0.9597	20000	18310	ug/L	-8	10	
Calcium	R	17.618	16.651	20000	19220	ug/L	-4	10	
Iron	R	4.4361	4.0888	20000	18890	ug/L	-6	10	
Magnesium	R	2.0838	1.9977	20000	18970	ug/L	-5	10	
Potassium	R	6.2298	6.0373	20000	18920	ug/L	-5	10	
Sodium	R	15.130	14.535	20000	19370	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1262140	-6.98

87098860047

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860008 File : 030907ar Time : 09-MAR-2007 16:27
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	ND	5.000	1.384	ug/L	
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	ND	500.0	46.44	ug/L	
Sodium	R	ND	500.0	69.01	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1357290	0.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08
Seqnum : 87098860022 File : 030907ar
Cal : 87098860001 Caldate: 09-MAR-2007

IDF : 1.0
Time : 09-MAR-2007 17:26

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.056]	5.000	1.384	ug/L	!ib
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	ND	500.0	46.44	ug/L	
Sodium	R	ND	500.0	69.01	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1290897	-4.86

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87098860022

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860036 File : 030907ar Time : 09-MAR-2007 18:17
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	[2.313]	5.000	1.577	ug/L	!ib
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.330]	5.000	1.384	ug/L	!ib
Nickel	A	[0.7491]	5.000	0.6463	ug/L	!ib
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	ND	5.000	1.131	ug/L	
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	[239.3]	500.0	46.44	ug/L	!ib
Sodium	R	[223.3]	500.0	69.01	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1175371	-13.38

!=warning ib=instrument blank

87098860036

00222

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860049 File : 030907ar Time : 09-MAR-2007 19:00
Cal : 87098860001 Caldate: 09-MAR-2007

Analyte	Ch	Quant	RL	MDL	Units	Flags
Antimony	A	ND	5.000	0.9637	ug/L	
Arsenic	A	ND	5.000	1.387	ug/L	
Barium	A	ND	5.000	0.3212	ug/L	
Beryllium	A	ND	2.000	0.1170	ug/L	
Boron	A	ND	100.0	15.00	ug/L	
Cadmium	A	ND	5.000	0.3555	ug/L	
Chromium	A	ND	5.000	0.3298	ug/L	
Cobalt	A	ND	5.000	0.3112	ug/L	
Copper	A	ND	5.000	1.577	ug/L	
Lead	A	ND	3.000	1.150	ug/L	
Manganese	A	ND	5.000	0.5779	ug/L	
Molybdenum	A	[2.277]	5.000	1.384	ug/L	!ib
Nickel	A	ND	5.000	0.6463	ug/L	
Selenium	A	ND	5.000	1.986	ug/L	
Silver	A	ND	5.000	0.7500	ug/L	
Thallium	A	[1.519]	5.000	1.131	ug/L	!ib
Tin	A	ND	40.00	2.773	ug/L	
Titanium	A	ND	10.00	1.013	ug/L	
Vanadium	A	ND	5.000	0.6065	ug/L	
Zinc	A	ND	20.00	3.056	ug/L	
Aluminum	R	ND	100.0	24.86	ug/L	
Calcium	R	ND	200.0	63.70	ug/L	
Iron	R	ND	100.0	8.057	ug/L	
Magnesium	R	ND	200.0	12.20	ug/L	
Potassium	R	[54.35]	500.0	46.44	ug/L	!ib
Sodium	R	[137.3]	500.0	69.01	ug/L	!ib

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1322840	-2.51

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860009 File : 030907ar Time : 09-MAR-2007 16:31
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5626

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.5786]	5.000	ug/L	
Arsenic	A	[0.4342]	5.000	ug/L	
Barium	A	[2.514]	5.000	ug/L	
Beryllium	A	[-1.511]	2.000	ug/L	
Boron	A	[26.42]	100.0	ug/L	
Cadmium	A	[-2.943]	5.000	ug/L	
Cobalt	A	[3.154]	5.000	ug/L	
Lead	A	[2.697]	3.000	ug/L	
Molybdenum	A	[0.4517]	5.000	ug/L	
Selenium	A	[4.313]	5.000	ug/L	
Silver	A	[3.314]	5.000	ug/L	
Thallium	A	[-2.801]	5.000	ug/L	
Tin	A	[-0.8241]	40.00	ug/L	
Zinc	A	[8.040]	20.00	ug/L	
Potassium	R	[91.38]	500.0	ug/L	
Sodium	R	[2.930]	500.0	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Chromium	A	20000	19400	ug/L	97
Copper	A	20000	20050	ug/L	100
Manganese	A	20000	18340	ug/L	92
Nickel	A	20000	17670	ug/L	88
Titanium	A	20000	19730	ug/L	99
Vanadium	A	20000	20310	ug/L	102
Aluminum	R	500000	479100	ug/L	96
Calcium	R	500000	482600	ug/L	97
Iron	R	200000	188300	ug/L	94
Magnesium	R	500000	472000	ug/L	94

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1106323	-18.47

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET08
Seqnum : 87098860010
Cal : 87098860001
Standards: S5562

File : 030907ar
Caldate: 09-MAR-2007

IDF : 1.0
Time : 09-MAR-2007 16:33

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	548.6	ug/L	10	20	
Arsenic	A	500.0	554.4	ug/L	11	20	
Barium	A	500.0	532.5	ug/L	6	20	
Beryllium	A	500.0	537.3	ug/L	7	20	
Cadmium	A	1000	1000	ug/L	0	20	
Chromium	A	500.0	515.6	ug/L	3	20	
Cobalt	A	500.0	464.3	ug/L	-7	20	
Copper	A	500.0	525.6	ug/L	5	20	
Lead	A	1000	989.1	ug/L	-1	20	
Manganese	A	500.0	513.6	ug/L	3	20	
Molybdenum	A	500.0	570.7	ug/L	14	20	
Nickel	A	1000	940.1	ug/L	-6	20	
Selenium	A	500.0	526.9	ug/L	5	20	
Silver	A	1000	1053	ug/L	5	20	
Thallium	A	500.0	482.5	ug/L	-3	20	
Titanium	A	20000	20390	ug/L	2		
Vanadium	A	500.0	555.8	ug/L	11	20	
Zinc	A	1000	989.8	ug/L	-1	20	
Aluminum	R	500000	470500	ug/L	-6		
Calcium	R	500000	475400	ug/L	-5		
Iron	R	200000	183200	ug/L	-8		
Magnesium	R	500000	463700	ug/L	-7		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1081448	-20.30

87098860010

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6010B

Inst : MET08 IDF : 1.0
Seqnum : 87098860045 File : 030907ar Time : 09-MAR-2007 18:45
Cal : 87098860001 Caldate: 09-MAR-2007
Standards: S5562

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Antimony	A	500.0	551.7	ug/L	10	20	
Arsenic	A	500.0	551.9	ug/L	10	20	
Barium	A	500.0	527.4	ug/L	5	20	
Beryllium	A	500.0	530.0	ug/L	6	20	
Cadmium	A	1000	981.7	ug/L	-2	20	
Chromium	A	500.0	511.1	ug/L	2	20	
Cobalt	A	500.0	457.6	ug/L	-8	20	
Copper	A	500.0	521.2	ug/L	4	20	
Lead	A	1000	973.6	ug/L	-3	20	
Manganese	A	500.0	504.2	ug/L	1	20	
Molybdenum	A	500.0	562.8	ug/L	13	20	
Nickel	A	1000	929.9	ug/L	-7	20	
Selenium	A	500.0	516.7	ug/L	3	20	
Silver	A	1000	1051	ug/L	5	20	
Thallium	A	500.0	481.3	ug/L	-4	20	
Titanium	A	20000	20280	ug/L	1		
Vanadium	A	500.0	551.1	ug/L	10	20	
Zinc	A	1000	976.2	ug/L	-2	20	
Aluminum	R	500000	460800	ug/L	-8		
Calcium	R	500000	473000	ug/L	-5		
Iron	R	200000	178100	ug/L	-11		
Magnesium	R	500000	456700	ug/L	-9		

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	1356870	1095181	-19.29

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 87098860 Instrument: MET08 PE ICP Begun: 09-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

12266

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	030907ar	ICALBLK				09-MAR-2007 15:40	1.0	1.0				
002	030907ar	ICAL	CRIM08			09-MAR-2007 15:48	1.0	1.0			1	
003	030907ar	ICAL	CS100			09-MAR-2007 15:52	1.0	1.0			2	
004	030907ar	ICAL	CS1K			09-MAR-2007 15:55	1.0	1.0			3	
005	030907ar	ICAL	CS10K			09-MAR-2007 15:57	1.0	1.0			4	
006	030907ar	ICAL	CS100K			09-MAR-2007 16:01	1.0	1.0			5	
007	030907ar	ICV				09-MAR-2007 16:09	1.0	1.0		5000	6	
008	030907ar	ICB				09-MAR-2007 16:27	1.0	1.0		5000		
009	030907ar	ICSA				09-MAR-2007 16:31	1.0	1.0		5000	7	10:CA=482599
010	030907ar	ICSAB				09-MAR-2007 16:33	1.0	1.0		5000	8	5:CA=475378
011	030907ar	BLANK	QC378380	122912	Water	09-MAR-2007 16:52	1.0	1.0		5000		
012	030907ar	BS	QC378381	122912	Water	09-MAR-2007 16:56	1.0	1.0		5000		
013	030907ar	BSD	QC378382	122912	Water	09-MAR-2007 16:58	1.0	1.0		5000		
014	030907ar	MSS	193273-001	122912	Water	09-MAR-2007 17:00	1.0	1.0		5000		
015	030907ar	MS	QC378383	122912	Water	09-MAR-2007 17:04	1.0	1.0		5000		
016	030907ar	MSD	QC378384	122912	Water	09-MAR-2007 17:06	1.0	1.0		5000		
017	030907ar	SER	QC378385	122912	Water	09-MAR-2007 17:08	5.0	1.0		5000		
018	030907ar	PDS	QC378386	122912	Water	09-MAR-2007 17:12	1.0	1.0		5000	9 10	
019	030907ar	X	RINSE			09-MAR-2007 17:15	1.0					
020	030907ar	CCV				09-MAR-2007 17:18	1.0	1.0		5000	11	
021	030907ar	X	FLUSH			09-MAR-2007 17:22	1.0					
022	030907ar	CCB				09-MAR-2007 17:26	1.0	1.0		5000		
023	030907ar	SAMPLE	193273-024	122912	Water	09-MAR-2007 17:30	1.0	1.0		5000		
024	030907ar	SAMPLE	193277-001	122912	Water	09-MAR-2007 17:34	1.0	1.0		5000		
025	030907ar	SAMPLE	193272-002	122912	Water	09-MAR-2007 17:38	1.0	1.0		5000		7:FE=795652
026	030907ar	SAMPLE	193272-003	122912	Water	09-MAR-2007 17:42	1.0	1.0		5000		3:MG=334698
027	030907ar	SAMPLE	193272-004	122912	Water	09-MAR-2007 17:45	1.0	1.0		5000		3:MG=342158
028	030907ar	SAMPLE	193262-019	122912	Water	09-MAR-2007 17:49	1.0	1.0	2	5000		3:MG=144800
029	030907ar	SAMPLE	193262-020	122912	Water	09-MAR-2007 17:51	1.0	1.0		5000		
030	030907ar	SAMPLE	193263-001	122912	Water	09-MAR-2007 17:55	1.0	1.0		5000		1:NA=118812
031	030907ar	SAMPLE	193264-001	122912	Water	09-MAR-2007 17:58	1.0	1.0	1	5000		3:K=848647

Stds used: 1=S5393 2=~~S5428~~ 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/2007

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 87098860 Instrument: MET08 PE ICP Begun: 09-MAR-2007
Analytical Method: EPA 6010B SOP Version: 6010B_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	030907ar	SAMPLE	193241-001	122912	Filtra	09-MAR-2007 18:03	1.0	1.0			5000		2:MG=123928
033	030907ar	X	RINSE			09-MAR-2007 18:06	1.0						
034	030907ar	CCV				09-MAR-2007 18:10	1.0	1.0			5000	11	
035	030907ar	X	FLUSH			09-MAR-2007 18:13	1.0						
036	030907ar	CCB				09-MAR-2007 18:17	1.0	1.0			5000		
037	030907ar	SAMPLE	193267-001	122912	Filtra	09-MAR-2007 18:21	1.0	1.0	1		5000		2:CA=175835
038	030907ar	SAMPLE	193267-002	122912	Filtra	09-MAR-2007 18:24	1.0	1.0	1		5000		2:NA=170939
039	030907ar	SAMPLE	193267-003	122912	Filtra	09-MAR-2007 18:27	1.0	1.0	1		5000		2:NA=169449
040	030907ar	SAMPLE	193267-004	122912	Filtra	09-MAR-2007 18:30	1.0	1.0	1		5000		2:CA=179072
041	030907ar	SAMPLE	193267-005	122912	Filtra	09-MAR-2007 18:34	1.0	1.0			5000		3:CA=216178
042	030907ar	SAMPLE	193267-006	122912	Filtra	09-MAR-2007 18:36	1.0	1.0			5000		3:CA=278572
043	030907ar	SAMPLE	193267-007	122912	Filtra	09-MAR-2007 18:39	1.0	1.0	1		5000		3:NA=413013
044	030907ar	SAMPLE	193267-008	122912	Filtra	09-MAR-2007 18:42	1.0	1.0			5000		2:CA=227281
045	030907ar	ICSAB				09-MAR-2007 18:45	1.0	1.0			5000	8	5:CA=473015
046	030907ar	X	RINSE			09-MAR-2007 18:49	1.0						
047	030907ar	CCV				09-MAR-2007 18:53	1.0	1.0			5000	11	
048	030907ar	X	FLUSH			09-MAR-2007 18:56	1.0						
049	030907ar	CCB				09-MAR-2007 19:00	1.0	1.0			5000		

Stds used: 1=S5393 2=S5428 3=S5427 4=S5323 5=S5561 6=S5324 7=S5626 8=S5562 9=S4884 10=S4885 11=S5325

Analyst: _____ Date: 3/11/2007

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET06
'alnum : 67108851001
nits : ug/L

Date : 16-MAR-2007 14:30
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c16o0005	67108851005		16-MAR-2007 14:35	S5645
L2	c16o0006	67108851006		16-MAR-2007 14:40	S5648
L3	c16o0007	67108851007		16-MAR-2007 14:46	S5649
L4	c16o0008	67108851008		16-MAR-2007 14:51	S5650
L5	c16o0009	67108851009		16-MAR-2007 14:56	S5644
L6	c16o0010	67108851010		16-MAR-2007 15:02	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
luminum	A	1.0130	0.7793	0.6690	0.5970	0.6022	0.5802	BLNK	-1.4519	1.71055		0.7068	1.000	0.995	
ntimony	A	1.7044	0.3691	0.3444	0.3218	0.3329	0.3383	BLNK	-0.0096	2.96616		0.5685	1.000	0.995	
arium	A	0.7802	0.2646	0.1630	0.0840	0.0779	0.0763	BLNK	-0.2930	13.0748		0.2410	1.000	0.995	
eryllium	A	0.3036	0.3019	0.2973	0.2779	0.2836	0.2601	BLNK	-0.0075	3.77624		0.2874	0.998	0.995	
admium	A	0.0924	0.0937	0.0888	0.0870	0.0882	0.0871	BLNK	-0.0027	11.4504		0.0895	1.000	0.995	
alcium	A	0.0921	0.0372	0.0306	0.0232	0.0228	0.0217	BLNK	-12.518	45.7140		0.0379	0.999	0.995	
ead	A	1.3844	0.9763	0.8046	0.7197	0.7266	0.7066	BLNK	-0.0509	1.40763		0.8864	1.000	0.995	
agnesium	A	0.7489	0.6423	0.5606	0.5132	0.5095	0.4873	BLNK	-1.8260	2.03382		0.5770	1.000	0.995	
olybdenum	A	0.2604	0.2423	0.2340	0.2245	0.2274	0.2302	BLNK	-0.0136	4.35458		0.2365	1.000	0.995	
otassium	A	7.4369	2.0792	1.3713	0.7263	0.6765	0.6469	BLNK	-96.156	1.54059		2.1562	1.000	0.995	
ilver	A	0.3833	0.3579	0.3474	0.3309	0.3332	0.3408	BLNK	-0.0057	2.94793		0.3489	1.000	0.995	
hallium	A	1.1615	0.9596	0.8915	0.8414	0.9117	0.8974	BLNK	-0.0200	1.11122		0.9438	1.000	0.995	
rsenic	E	0.8331	0.6775	0.5883	0.5707	0.5859	0.5751	BLNK	-0.0271	1.73275		0.6384	1.000	0.995	
hromium	E	8.9815	4.4451	3.7415	3.2474	3.1799	3.1395	BLNK	-0.1668	0.31801		4.4558	1.000	0.995	
obalt	E	5.6808	5.4198	5.3026	5.1057	4.9899	4.8973	BLNK	-0.0039	0.20341		5.2327	1.000	0.995	
opper	E	133.28	34.002	18.506	7.9548	6.7069	6.4488	BLNK	-1.4891	0.15518		34.484	1.000	0.995	
anganese	E	3.4604	2.1212	1.8742	1.7538	1.7071	1.6821	BLNK	-0.0255	0.59278		2.0998	1.000	0.995	
ickel	E	4.6125	1.9867	1.6481	1.3975	1.3245	1.2922	BLNK	-0.0832	0.77032		2.0436	1.000	0.995	
odium	E	5.8808	1.7205	1.2362	0.7505	0.6266	0.6137	BLNK	-74.082	1.62931		1.8047	1.000	0.995	
anadium	E	8.9152	3.9984	3.1543	2.5047	2.4598	2.4643	BLNK	-0.2402	0.40653		3.9161	1.000	0.995	
inc	E	76.215	17.285	7.2509	1.7978	1.1407	1.0815	BLNK	-4.4183	0.93839		17.462	0.999	0.995	
ron	H	1.2467	1.1420	0.9731	0.8842	0.8831	0.8605	BLNK	-1.2978	1.15603		0.9983	1.000	0.995	
elenium	H	0.1329	0.1219	0.1359	0.1271	0.1272	0.1228	BLNK	-0.0060	8.08831		0.1280	1.000	0.995	

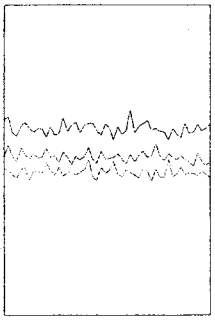
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
luminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ntimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
arium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
eryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
admium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
alcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
agnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
olybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
otassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
ilver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
hallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
rsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
hromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
obalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
opper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
anganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
odium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
anadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
inc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
ron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
elenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

strument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67108851001

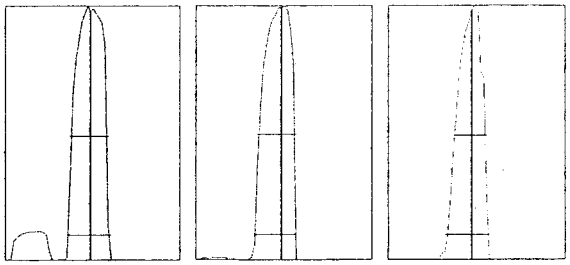
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	12320.0	12032.8	3.33	0.30
89	50,000	24698.0	25468.5	3.28	0.30
205	50,000	22150.0	23000.9	3.52	1.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.989%
Doubly Charged: 70/140 1.528%



m/z:	7	89	205
Height:	12,092	25,697	22,636
Axis:	7.00	89.00	204.95
W-50%:	0.65	0.65	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===		===Ion Lenses===		===Q-Pole Parameters===	
RF Power :	1550 W	Extract 1 :	0 V	AMU Gain :	142
RF Matching :	1.7 V	Extract 2 :	-120 V	AMU Offset :	125
Smpl Depth :	9 mm	Omega Bias-ce :	-30 V	Axis Gain :	1.0017
Torch-H :	1.1 mm	Omega Lens-ce :	1 V	Axis Offset :	-0.03
Torch-V :	0.6 mm	Cell Entrance :	-30 V	QP Bias :	-1 V
Carrier Gas :	1.02 L/min	QP Focus :	5 V		
Makeup Gas :	0 L/min	Cell Exit :	-30 V	===Detector Parameters===	
Optional Gas :	--- %			Discriminator :	8 mV
Nebulizer Pump :	0.1 rps	===Octopole Parameters===		Analog HV :	1770 V
Sample Pump :	--- rps	OctP RF :	160 V	Pulse HV :	1420 V
S/C Temp :	2 degC	OctP Bias :	-4 V		

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min Integration Time: 0.1000sec

Optional Gas:	--- %	m/z	Count(Mean)	RSD%
		51	30.9	19.99
QP Focus:	-10 V	59	2672.7	3.55
Cell Exit:	-38 V	89	2067.7	3.71
OctP Bias:	-18 V			
QP Bias:	-13 V			

Tune File : h2.u
H2 Gas: 4 mL/min Integration Time: 0.1000sec

Optional Gas:	--- %	m/z	Count(Mean)	RSD%
		59	2842.2	4.88
QP Focus:	-8 V	78	0.4	159.72
Cell Exit:	-38 V	89	20075.5	3.28
OctP Bias:	-18 V			
QP Bias:	-16 V			

Generated : Mar 16, 2007 13:37:20
Printed : Mar 16, 2007 13:39:00 00231

P/A Factor Tuning Report

Acquired:Mar 16 2007 01:47 pm

Mass[amu]	Element	P/A Factor
6	Li	0.064266
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.090410
45	Sc	0.089518
51	V	0.090500
52	Cr	0.095455
55	Mn	0.096473
56	Fe	Sensitivity too high
59	Co	0.100782
60	Ni	Sensitivity too low
63	Cu	0.104619
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.102133
98	Mo	0.102399
99	(Ru)	Sensitivity too low
107	Ag	0.110632
111	Cd	Sensitivity too low
115	In	0.109969
118	(In)	0.109245
121	Sb	0.108024
137	Ba	Sensitivity too low
159	Tb	0.111842
205	Tl	0.116594
206	(Pb)	0.116527
207	(Pb)	0.116248
208	Pb	0.116338
209	Bi	0.117327

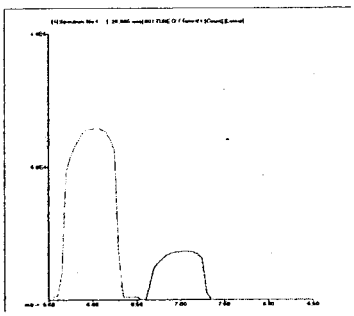
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1420 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C16o01.B\001TUNE.D
Date Acquired:	Mar 16 2007 02:11 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.05	5.00	
59 Co	0.86	5.00	
115 In	1.86	5.00	
205 Tl	1.44	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

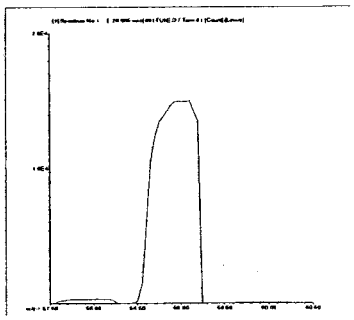
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

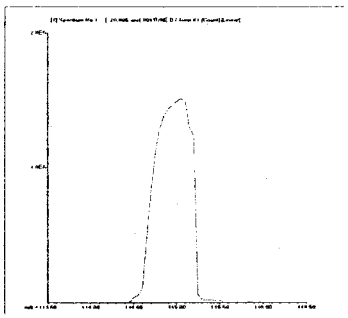
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



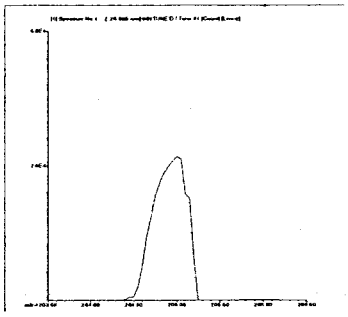
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004C
Date Acquired: Mar 16 2007 02:27 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:31 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	647013.00	A	5840.00	0.90
7	(Li)		P		
9	Be	25.56	P	7.70	30.13
23	Na	25425.33	P	258.50	1.02
24	Mg	15314.22	P	67.16	0.44
27	Al	14476.68	P	310.20	2.14
39	K	1064558.00	A	8310.00	0.78
44	Ca	4670.94	P	210.00	4.50
45	Sc	427308.91	P	471.70	0.11
45	Sc	27959.15	P	155.20	0.56
45	Sc	852845.00	A	4845.00	0.57
51	V	330.38	P	15.13	4.58
52	Cr	293.34	P	2.94	1.00
55	Mn	24.07	P	2.31	9.61
56	Fe	9594.48	P	34.68	0.36
59	Co	10.74	P	4.49	41.80
60	Ni	60.37	P	3.90	6.46
63	Cu	2992.20	P	44.46	1.49
65	Cu	1450.83	P	15.77	1.09
66	Zn	1468.61	P	48.21	3.28
72	Ge	105109.40	P	986.80	0.94
72	Ge	15593.30	P	296.60	1.90
75	As	4.89	P	0.77	15.75
78	Se	1.56	P	0.77	49.49
89	Y	1356281.00	A	6536.00	0.48
98	Mo	84.45	P	7.70	9.12
107	Ag	55.56	P	8.39	15.10
111	Cd	6.67	P	3.33	49.99
115	In	1435537.00	A	7170.00	0.50
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	93.34	P	23.33	25.00
137	Ba	996.75	P	30.55	3.07
159	Tb	2224182.00	A	16560.00	0.74
205	Tl	504.47	P	22.19	4.40
208	Pb	1607.88	P	85.73	5.33
209	Bi	1399318.00	A	10690.00	0.76

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\005CALS.D\005CALS.D#
Date Acquired: Mar 16 2007 02:33 pm
Operator:
Sample Name: s5645
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	636584.38	A	1824.00	0.29
7 (Li)		P		
9 Be	386.69	P	60.65	15.69
23 Na	32860.75	P	125.00	0.38
24 Mg	125189.70	P	1763.00	1.41
27 Al	169335.20	P	657.10	0.39
39 K	1243151.00	A	4069.00	0.33
44 Ca	15391.09	P	168.70	1.10
45 Sc	433383.50	P	3355.00	0.77
45 Sc	27939.54	P	157.00	0.56
45 Sc	835842.00	A	9136.00	1.09
51 V	498.16	P	17.01	3.41
52 Cr	501.87	P	14.11	2.81
55 Mn	193.34	P	13.33	6.89
56 Fe	108062.80	P	1722.00	1.59
59 Co	317.42	P	8.34	2.63
60 Ni	257.78	P	11.71	4.54
63 Cu	4125.47	P	35.33	0.86
65 Cu	2017.58	P	40.56	2.01
66 Zn	2358.75	P	96.92	4.11
72 Ge	107028.00	P	865.30	0.81
72 Ge	15477.25	P	104.50	0.68
75 As	25.78	P	2.14	8.31
78 Se	28.44	P	5.82	20.48
89 Y	1357061.00	A	9624.00	0.71
98 Mo	706.71	P	55.68	7.88
99 (Ru)	2.22	P	1.93	86.62
107 Ag	1096.75	P	43.33	3.95
111 Cd	264.46	P	8.39	3.17
115 In	1430920.00	A	6834.00	0.48
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4868.45	P	6530.00	134.13
137 Ba	3421.68	P	64.08	1.87
159 Tb	2193058.00	A	8209.00	0.37
205 Tl	1623.50	P	96.17	5.92
208 Pb	6071.91	P	27.16	0.45
209 Bi	1398054.00	A	6811.00	0.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	636584.44	0.29	647013.00	98.4	80 - 120	
45 Sc	433383.53	0.77	427308.91	101.4	80 - 120	
45 Sc	27939.54	0.56	27959.15	99.9	80 - 120	
45 Sc	835842.00	1.09	852845.00	98.0	80 - 120	
72 Ge	107027.95	0.81	105109.40	101.8	80 - 120	
72 Ge	15477.25	0.68	15593.30	99.3	80 - 120	
89 Y	1357061.50	0.71	1356281.40	100.1	80 - 120	
115 In	1430919.60	0.48	1435537.60	99.7	80 - 120	
159 Tb	2193058.00	0.37	2224182.30	98.6	80 - 120	
209 Bi	1398053.60	0.49	1399317.80	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\006CALS.D\006CALS.D#
Date Acquired: Mar 16 2007 02:38 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:37 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	638992.81	A	29140.00	4.56
7 (Li)		P		
9 Be	1926.86	P	64.30	3.34
23 Na	47758.48	P	337.80	0.71
24 Mg	529025.81	P	2598.00	0.49
27 Al	641703.38	P	6569.00	1.02
39 K	1712368.00	A	7721.00	0.45
44 Ca	30645.14	P	525.70	1.72
45 Sc	429120.31	P	1658.00	0.39
45 Sc	27781.86	P	907.40	3.27
45 Sc	824351.50	M	28880.00	3.50
51 V	1110.06	P	7.29	0.66
52 Cr	1234.14	P	6.70	0.54
55 Mn	588.91	P	15.28	2.59
56 Fe	490022.19	P	3484.00	0.71
59 Co	1504.17	P	44.04	2.93
60 Ni	551.87	P	35.92	6.51
63 Cu	5358.12	P	121.40	2.27
65 Cu	2573.97	P	10.96	0.43
66 Zn	2724.37	P	37.63	1.38
72 Ge	105518.10	P	68.76	0.07
72 Ge	15766.44	P	312.40	1.98
75 As	106.67	P	12.02	11.27
78 Se	128.67	P	6.11	4.75
89 Y	1330990.00	A	59970.00	4.51
98 Mo	3224.95	P	164.20	5.09
99 (Ru)	1.11	P	1.93	173.24
107 Ag	5002.23	P	174.50	3.49
111 Cd	1312.33	P	80.44	6.13
115 In	1400268.00	A	56460.00	4.03
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5164.51	P	187.90	3.64
137 Ba	5690.30	P	102.50	1.80
159 Tb	2152616.00	A	84900.00	3.94
205 Tl	6599.73	P	140.10	2.12
208 Pb	20987.62	P	280.40	1.34
209 Bi	1377106.00	A	53340.00	3.87

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	638992.88	4.56	647013.00	98.8	80 - 120	
45 Sc	429120.25	0.39	427308.91	100.4	80 - 120	
45 Sc	27781.87	3.27	27959.15	99.4	80 - 120	
45 Sc	824351.50	3.50	852845.00	96.7	80 - 120	
72 Ge	105518.07	0.07	105109.40	100.4	80 - 120	
72 Ge	15766.44	1.98	15593.30	101.1	80 - 120	
89 Y	1330990.40	4.51	1356281.40	98.1	80 - 120	
115 In	1400267.60	4.03	1435537.60	97.5	80 - 120	
159 Tb	2152615.50	3.94	2224182.30	96.8	80 - 120	
209 Bi	1377106.40	3.87	1399317.80	98.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\007CALS.D\007CALS.D#
Date Acquired: Mar 16 2007 02:44 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:42 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	653034.13	A	12030.00	1.84
7 (Li)		P		
9 Be	3881.78	P	203.40	5.24
23 Na	70281.98	P	443.80	0.63
24 Mg	939643.00	A	8550.00	0.91
27 Al	1121269.00	A	12770.00	1.14
39 K	2298440.00	A	9662.00	0.42
44 Ca	51309.49	P	377.20	0.74
45 Sc	429661.59	P	1705.00	0.40
45 Sc	28427.88	P	107.50	0.38
45 Sc	838159.13	A	11430.00	1.36
51 V	1793.47	P	29.63	1.65
52 Cr	2127.22	P	25.76	1.21
55 Mn	1065.61	P	45.32	4.25
56 Fe	836235.19	P	2201.00	0.26
59 Co	3014.80	P	97.00	3.22
60 Ni	937.08	P	37.23	3.97
63 Cu	5816.46	P	122.50	2.11
65 Cu	2795.13	P	59.12	2.12
66 Zn	2278.36	P	23.11	1.01
72 Ge	104462.90	P	540.90	0.52
72 Ge	15714.54	P	219.80	1.40
75 As	184.89	P	4.54	2.45
78 Se	284.01	P	9.33	3.29
89 Y	1358907.00	A	10630.00	0.78
98 Mo	6359.50	P	121.80	1.92
99 (Ru)	3.33	P	3.33	99.99
107 Ag	9996.25	P	179.50	1.80
111 Cd	2554.79	P	40.06	1.57
115 In	1438684.00	A	1517.00	0.11
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	9910.65	P	198.50	2.00
137 Ba	7192.20	P	272.50	3.79
159 Tb	2206002.00	A	12240.00	0.55
205 Tl	12594.46	P	294.10	2.34
208 Pb	35496.12	P	286.10	0.81
209 Bi	1412786.00	A	8766.00	0.62

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	653034.19	1.84	647013.00	100.9	80 - 120	
45 Sc	429661.63	0.40	427308.91	100.6	80 - 120	
45 Sc	28427.88	0.38	27959.15	101.7	80 - 120	
45 Sc	838159.13	1.36	852845.00	98.3	80 - 120	
72 Ge	104462.95	0.52	105109.40	99.4	80 - 120	
72 Ge	15714.54	1.40	15593.30	100.8	80 - 120	
89 Y	1358906.80	0.78	1356281.40	100.2	80 - 120	
115 In	1438683.60	0.11	1435537.60	100.2	80 - 120	
159 Tb	2206001.80	0.55	2224182.30	99.2	80 - 120	
209 Bi	1412786.40	0.62	1399317.80	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\008CALS.D\008CALS.D#
Date Acquired: Mar 16 2007 02:49 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:47 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	666132.31	A	32450.00	4.87
7 (Li)		P		
9 Be	36960.32	P	368.40	1.00
23 Na	429772.41	P	3396.00	0.79
24 Mg	8867983.00	A	44430.00	0.50
27 Al	10319450.00	A	22860.00	0.22
39 K	12553450.00	A	62030.00	0.49
44 Ca	400590.00	P	1717.00	0.43
45 Sc	434157.00	P	3610.00	0.83
45 Sc	28634.23	P	293.60	1.03
45 Sc	867233.19	A	63860.00	7.36
51 V	14342.97	P	99.35	0.69
52 Cr	18595.70	P	86.23	0.46
55 Mn	10042.57	P	93.76	0.93
56 Fe	7677360.00	A	27930.00	0.36
59 Co	29237.23	P	108.80	0.37
60 Ni	8001.99	P	89.71	1.12
63 Cu	25431.38	P	68.02	0.27
65 Cu	12694.02	P	200.70	1.58
66 Zn	5747.17	P	42.68	0.74
72 Ge	106028.20	P	708.00	0.67
72 Ge	15988.56	P	313.40	1.96
75 As	1824.13	P	31.75	1.74
78 Se	2694.50	P	5.67	0.21
89 Y	1386507.00	A	84830.00	6.12
98 Mo	62108.64	P	126.30	0.20
99 (Ru)	2.22	P	1.93	86.62
107 Ag	97112.93	P	987.30	1.02
111 Cd	25513.63	P	554.50	2.17
115 In	1470127.00	A	83250.00	5.66
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	94437.97	P	100.60	0.11
137 Ba	37865.89	P	468.60	1.24
159 Tb	2261353.00	A	148300.00	6.56
205 Tl	120940.80	P	809.30	0.67
208 Pb	324580.00	P	1702.00	0.52
209 Bi	1439774.00	A	78200.00	5.43

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	666132.31	4.87	647013.00	103.0	80 - 120	
45 Sc	434156.97	0.83	427308.91	101.6	80 - 120	
45 Sc	28634.23	1.03	27959.15	102.4	80 - 120	
45 Sc	867233.19	7.36	852845.00	101.7	80 - 120	
72 Ge	106028.20	0.67	105109.40	100.9	80 - 120	
72 Ge	15988.56	1.96	15593.30	102.5	80 - 120	
89 Y	1386507.10	6.12	1356281.40	102.2	80 - 120	
115 In	1470127.40	5.66	1435537.60	102.4	80 - 120	
159 Tb	2261353.30	6.56	2224182.30	101.7	80 - 120	
209 Bi	1439773.90	5.43	1399317.80	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\009CALS.D\009CALS.D#
Date Acquired: Mar 16 2007 02:54 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	642018.19	A	15220.00	2.37
7 (Li)		P		
9 Be	364054.91	P	1723.00	0.47
23 Na	3543247.00	A	11230.00	0.32
24 Mg	86282944.00	A	608200.00	0.70
27 Al	############	A	452800.00	0.44
39 K	############	A	1115000.00	0.97
44 Ca	3853670.00	A	29370.00	0.76
45 Sc	420108.91	P	1346.00	0.32
45 Sc	28275.73	P	300.90	1.06
45 Sc	847882.38	A	37940.00	4.47
51 V	139087.91	P	763.70	0.55
52 Cr	179812.70	P	270.60	0.15
55 Mn	96527.24	P	337.20	0.35
56 Fe	74203488.00	A	696800.00	0.94
59 Co	282169.31	P	928.00	0.33
60 Ni	74896.50	P	350.30	0.47
63 Cu	208012.80	P	374.20	0.18
65 Cu	102542.80	P	559.10	0.55
66 Zn	35376.65	P	388.20	1.10
72 Ge	102274.60	P	688.00	0.67
72 Ge	15508.38	P	150.30	0.97
75 As	18169.90	P	93.11	0.51
78 Se	26008.63	P	66.96	0.26
89 Y	1349919.00	A	40890.00	3.03
98 Mo	613606.13	P	6042.00	0.98
99 (Ru)	10.00	P	5.77	57.74
107 Ag	918387.00	P	5230.00	0.57
111 Cd	243030.91	P	2507.00	1.03
115 In	1379081.00	A	41160.00	2.98
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	917595.38	P	2311.00	0.25
137 Ba	337253.59	P	4262.00	1.26
159 Tb	2166537.00	A	77160.00	3.56
205 Tl	1209236.00	A	8005.00	0.66
208 Pb	3145649.00	A	11590.00	0.37
209 Bi	1326814.00	A	33670.00	2.54

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	642018.25	2.37	647013.00	99.2	80 - 120	
45 Sc	420108.94	0.32	427308.91	98.3	80 - 120	
45 Sc	28275.73	1.06	27959.15	101.1	80 - 120	
45 Sc	847882.44	4.47	852845.00	99.4	80 - 120	
72 Ge	102274.62	0.67	105109.40	97.3	80 - 120	
72 Ge	15508.38	0.97	15593.30	99.5	80 - 120	
89 Y	1349918.60	3.03	1356281.40	99.5	80 - 120	
115 In	1379080.80	2.98	1435537.60	96.1	80 - 120	
159 Tb	2166537.50	3.56	2224182.30	97.4	80 - 120	
209 Bi	1326813.50	2.54	1399317.80	94.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C16o01.B\010CALS.D\010CALS.D#
Date Acquired: Mar 16 2007 03:00 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 16 2007 02:58 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	644025.50	A	10140.00	1.57
7 (Li)		P		
9 Be	669910.63	A	1079.00	0.16
23 Na	6959931.00	A	63610.00	0.91
24 Mg	###########	A	878100.00	0.51
27 Al	###########	A	1935000.00	0.94
39 K	###########	A	850800.00	0.37
44 Ca	7693357.00	A	23410.00	0.30
45 Sc	434352.31	P	2654.00	0.61
45 Sc	28352.18	P	344.90	1.22
45 Sc	887488.63	A	8292.00	0.93
51 V	279445.81	P	139.70	0.05
52 Cr	356000.59	P	2604.00	0.73
55 Mn	190750.59	P	792.30	0.42
56 Fe	###########	A	1231000.00	0.82
59 Co	555352.00	P	1361.00	0.25
60 Ni	146533.20	P	781.60	0.53
63 Cu	401536.09	P	2002.00	0.50
65 Cu	197956.09	P	1632.00	0.82
66 Zn	67336.89	P	78.75	0.12
72 Ge	104536.60	P	245.40	0.23
72 Ge	15570.32	P	309.40	1.99
75 As	35807.49	P	106.70	0.30
78 Se	51328.30	P	432.10	0.84
89 Y	1387491.00	A	10190.00	0.73
98 Mo	1277730.00	A	5372.00	0.42
99 (Ru)	17.78	P	1.93	10.83
107 Ag	1888882.00	A	12880.00	0.68
111 Cd	482929.41	P	3494.00	0.72
115 In	1385933.00	A	22690.00	1.64
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1874932.00	A	10200.00	0.54
137 Ba	674559.81	P	2586.00	0.38
159 Tb	2211124.00	A	22160.00	1.00
205 Tl	2369712.00	A	1652.00	0.07
208 Pb	6249123.00	A	38650.00	0.62
209 Bi	1320432.00	A	14200.00	1.08

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	644025.44	1.57	647013.00	99.5	80 - 120	
45 Sc	434352.31	0.61	427308.91	101.6	80 - 120	
45 Sc	28352.18	1.22	27959.15	101.4	80 - 120	
45 Sc	887488.63	0.93	852845.00	104.1	80 - 120	
72 Ge	104536.63	0.23	105109.40	99.5	80 - 120	
72 Ge	15570.32	1.99	15593.30	99.9	80 - 120	
89 Y	1387491.40	0.73	1356281.40	102.3	80 - 120	
115 In	1385932.80	1.64	1435537.60	96.5	80 - 120	
159 Tb	2211124.00	1.00	2224182.30	99.4	80 - 120	
209 Bi	1320431.50	1.08	1399317.80	94.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C16o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851012 File : c16o0012 Time : 16-MAR-2007 15:14
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.7068	0.6093	10000	10420	ug/L	4	10	
Antimony	A	0.5685	0.3364	100.0	99.77	ug/L	0	10	
Barium	A	0.2410	0.0767	100.0	100.0	ug/L	0	10	
Beryllium	A	0.2874	0.2872	100.0	108.5	ug/L	9	10	
Cadmium	A	0.0895	0.0886	100.0	101.4	ug/L	1	10	
Calcium	A	0.0379	0.0226	10000	10300	ug/L	3	10	
Lead	A	0.8864	0.7238	100.0	101.8	ug/L	2	10	
Magnesium	A	0.5770	0.5154	10000	10480	ug/L	5	10	
Molybdenum	A	0.2365	0.2307	100.0	100.4	ug/L	0	10	
Potassium	A	2.1562	0.6763	10000	10320	ug/L	3	10	
Silver	A	0.3489	0.3739	100.0	110.2	ug/L	10	10	
Thallium	A	0.9438	0.8949	50.00	49.70	ug/L	-1	10	
Arsenic	E	0.6384	0.6051	100.0	104.8	ug/L	5	10	
Chromium	E	4.4558	3.2582	100.0	103.4	ug/L	3	10	
Cobalt	E	5.2327	5.0637	100.0	103.0	ug/L	3	10	
Copper	E	34.484	6.6740	100.0	102.1	ug/L	2	10	
Manganese	E	2.0998	1.7149	100.0	101.6	ug/L	2	10	
Nickel	E	2.0436	1.3370	100.0	102.9	ug/L	3	10	
Sodium	E	1.8047	0.6263	10000	10130	ug/L	1	10	
Vanadium	E	3.9161	2.5149	100.0	102.0	ug/L	2	10	
Zinc	E	17.462	1.1440	100.0	102.9	ug/L	3	10	
Iron	H	0.9983	0.8919	10000	10310	ug/L	3	10	
Selenium	H	0.1280	0.1272	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	646334	-0.10
Scandium	A	852845	863493	1.25
Scandium	E	27959	28389	1.54
Scandium	H	427309	437689	2.43
Germanium	H	105109	106329	1.16
Germanium	E	15593	15562	-0.20
Indium	A	1435538	1393333	-2.94
Bismuth	A	1399318	1328263	-5.08
Yttrium	A	1356281	1365845	0.71
Terbium	A	2224182	2198717	-1.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851035 File : c16o0035 Time : 16-MAR-2007 17:21
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5878	10000	10050	ug/L	1	10	
Antimony	A	0.5685	0.3322	100.0	98.52	ug/L	-1	10	
Barium	A	0.2410	0.0753	100.0	98.10	ug/L	-2	10	
Beryllium	A	0.2874	0.2809	100.0	106.1	ug/L	6	10	
Cadmium	A	0.0895	0.0874	100.0	100.0	ug/L	0	10	
Calcium	A	0.0379	0.0217	10000	9899	ug/L	-1	10	
Lead	A	0.8864	0.7122	100.0	100.2	ug/L	0	10	
Magnesium	A	0.5770	0.4916	10000	9996	ug/L	0	10	
Molybdenum	A	0.2365	0.2244	100.0	97.70	ug/L	-2	10	
Potassium	A	2.1562	0.6562	10000	10010	ug/L	0	10	
Silver	A	0.3489	0.3652	100.0	107.6	ug/L	8	10	
Thallium	A	0.9438	0.8812	50.00	48.94	ug/L	-2	10	
Arsenic	E	0.6384	0.5883	100.0	101.9	ug/L	2	10	
Chromium	E	4.4558	3.2149	100.0	102.1	ug/L	2	10	
Cobalt	E	5.2327	4.9836	100.0	101.4	ug/L	1	10	
Copper	E	34.484	6.5114	100.0	99.56	ug/L	0	10	
Manganese	E	2.0998	1.7138	100.0	101.6	ug/L	2	10	
Nickel	E	2.0436	1.3142	100.0	101.2	ug/L	1	10	
Sodium	E	1.8047	0.6198	10000	10020	ug/L	0	10	
Vanadium	E	3.9161	2.4907	100.0	101.0	ug/L	1	10	
Zinc	E	17.462	1.1057	100.0	99.34	ug/L	-1	10	
Iron	H	0.9983	0.9236	10000	10670	ug/L	7	10	
Selenium	H	0.1280	0.1289	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	645402	-0.25
Scandium	A	852845	883227	3.56
Scandium	E	27959	28324	1.30
Scandium	H	427309	408990	-4.29
Germanium	H	105109	101494	-3.44
Germanium	E	15593	15722	0.83
Indium	A	1435538	1398368	-2.59
Bismuth	A	1399318	1338138	-4.37
Yttrium	A	1356281	1388477	2.37
Terbium	A	2224182	2231766	0.34

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851053 File : c16o0053 Time : 16-MAR-2007 19:23
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5966	10000	10200	ug/L	2	10	
Antimony	A	0.5685	0.3295	100.0	97.74	ug/L	-2	10	
Barium	A	0.2410	0.0753	100.0	98.13	ug/L	-2	10	
Beryllium	A	0.2874	0.2771	100.0	104.6	ug/L	5	10	
Cadmium	A	0.0895	0.0871	100.0	99.70	ug/L	0	10	
Calcium	A	0.0379	0.0221	10000	10090	ug/L	1	10	
Lead	A	0.8864	0.7127	100.0	100.3	ug/L	0	10	
Magnesium	A	0.5770	0.5002	10000	10170	ug/L	2	10	
Molybdenum	A	0.2365	0.2243	100.0	97.64	ug/L	-2	10	
Potassium	A	2.1562	0.6660	10000	10160	ug/L	2	10	
Silver	A	0.3489	0.3546	100.0	104.5	ug/L	5	10	
Thallium	A	0.9438	0.8641	50.00	47.99	ug/L	-4	10	
Arsenic	E	0.6384	0.5884	100.0	101.9	ug/L	2	10	
Chromium	E	4.4558	3.2283	100.0	102.5	ug/L	3	10	
Cobalt	E	5.2327	5.0086	100.0	101.9	ug/L	2	10	
Copper	E	34.484	6.4830	100.0	99.11	ug/L	-1	10	
Manganese	E	2.0998	1.7391	100.0	103.1	ug/L	3	10	
Nickel	E	2.0436	1.3195	100.0	101.6	ug/L	2	10	
Sodium	E	1.8047	0.6193	10000	10020	ug/L	0	10	
Vanadium	E	3.9161	2.5036	100.0	101.5	ug/L	2	10	
Zinc	E	17.462	1.1004	100.0	98.84	ug/L	-1	10	
Iron	H	0.9983	0.8820	10000	10190	ug/L	2	10	
Selenium	H	0.1280	0.1242	100.0	100.4	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	645908	-0.17
Scandium	A	852845	864237	1.34
Scandium	E	27959	28194	0.84
Scandium	H	427309	424021	-0.77
Germanium	H	105109	103554	-1.48
Germanium	E	15593	15793	1.28
Indium	A	1435538	1407299	-1.97
Bismuth	A	1399318	1362569	-2.63
Yttrium	A	1356281	1386470	2.23
Terbium	A	2224182	2237559	0.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851067 File : c16o0067 Time : 16-MAR-2007 20:40
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5654, S5290

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.7068	0.5904	10000	10100	ug/L	1	10	
Antimony	A	0.5685	0.3322	100.0	98.52	ug/L	-1	10	
Barium	A	0.2410	0.0760	100.0	99.09	ug/L	-1	10	
Beryllium	A	0.2874	0.2829	100.0	106.8	ug/L	7	10	
Cadmium	A	0.0895	0.0872	100.0	99.85	ug/L	0	10	
Calcium	A	0.0379	0.0219	10000	9996	ug/L	0	10	
Lead	A	0.8864	0.7215	100.0	101.5	ug/L	2	10	
Magnesium	A	0.5770	0.4953	10000	10070	ug/L	1	10	
Molybdenum	A	0.2365	0.2267	100.0	98.69	ug/L	-1	10	
Potassium	A	2.1562	0.6556	10000	10000	ug/L	0	10	
Silver	A	0.3489	0.3688	100.0	108.7	ug/L	9	10	
Thallium	A	0.9438	0.8681	50.00	48.21	ug/L	-4	10	
Arsenic	E	0.6384	0.5832	100.0	101.0	ug/L	1	10	
Chromium	E	4.4558	3.1866	100.0	101.2	ug/L	1	10	
Cobalt	E	5.2327	4.9316	100.0	100.3	ug/L	0	10	
Copper	E	34.484	6.4456	100.0	98.54	ug/L	-1	10	
Manganese	E	2.0998	1.7027	100.0	100.9	ug/L	1	10	
Nickel	E	2.0436	1.3041	100.0	100.4	ug/L	0	10	
Sodium	E	1.8047	0.6160	10000	9962	ug/L	0	10	
Vanadium	E	3.9161	2.4490	100.0	99.32	ug/L	-1	10	
Zinc	E	17.462	1.1044	100.0	99.22	ug/L	-1	10	
Iron	H	0.9983	0.8698	10000	10050	ug/L	1	10	
Selenium	H	0.1280	0.1238	100.0	100.1	ug/L	0	10	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	628091	-2.92
Scandium	A	852845	865265	1.46
Scandium	E	27959	28165	0.74
Scandium	H	427309	422541	-1.12
Germanium	H	105109	103383	-1.64
Germanium	E	15593	15693	0.64
Indium	A	1435538	1392454	-3.00
Bismuth	A	1399318	1347174	-3.73
Yttrium	A	1356281	1365367	0.67
Terbium	A	2224182	2201143	-1.04

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851015 File : c16o0015 Time : 16-MAR-2007 15:31
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03820]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04385]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.943]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01913]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.03276]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.01957]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.009163]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	679218	4.98
Scandium	A	852845	887668	4.08
Scandium	E	27959	29041	3.87
Scandium	H	427309	436242	2.09
Germanium	H	105109	106866	1.67
Germanium	E	15593	16234	4.11
Indium	A	1435538	1480106	3.10
Bismuth	A	1399318	1420830	1.54
Yttrium	A	1356281	1398256	3.09
Terbium	A	2224182	2243035	0.85

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851038 File : c16o0038 Time : 16-MAR-2007 17:37
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03644]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04679]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[5.011]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.004192]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.009627]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.04539]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01332]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	666976	3.09
Scandium	A	852845	868798	1.87
Scandium	E	27959	29028	3.82
Scandium	H	427309	434989	1.80
Germanium	H	105109	107204	1.99
Germanium	E	15593	16218	4.01
Indium	A	1435538	1463425	1.94
Bismuth	A	1399318	1399798	0.03
Yttrium	A	1356281	1380422	1.78
Terbium	A	2224182	2209634	-0.65

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851056 File : c16o0056 Time : 16-MAR-2007 19:40
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.03216]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03919]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.135]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.06050]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02986]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.06183]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.06187]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03198]	0.1000	0.01127	ug/L	!ib
Iron	H	[4.431]	10.00	4.329	ug/L	!ib
Selenium	H	[0.03950]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	667497	3.17
Scandium	A	852845	875443	2.65
Scandium	E	27959	29519	5.58
Scandium	H	427309	431600	1.00
Germanium	H	105109	106750	1.56
Germanium	E	15593	16474	5.65
Indium	A	1435538	1461848	1.83
Bismuth	A	1399318	1412181	0.92
Yttrium	A	1356281	1391747	2.61
Terbium	A	2224182	2244985	0.94

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67108851056

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851069 File : c16o0069 Time : 16-MAR-2007 20:52
Cal : 67108851001 Caldate: 16-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.006211]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02993]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01315]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01057]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02018]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.1969	0.1000	0.01127	ug/L	ib ***
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02074]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	651170	0.64
Scandium	A	852845	840146	-1.49
Scandium	E	27959	28561	2.15
Scandium	H	427309	424385	-0.68
Germanium	H	105109	104307	-0.76
Germanium	E	15593	15822	1.47
Indium	A	1435538	1422265	-0.92
Bismuth	A	1399318	1378762	-1.47
Yttrium	A	1356281	1346307	-0.74
Terbium	A	2224182	2173938	-2.26

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67108851069

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851017 File : c16o0017 Time : 16-MAR-2007 15:42
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06979]	0.1000	ug/L	
Barium	A	3.368	0.1000	ug/L	
Beryllium	A	[0.03743]	0.1000	ug/L	
Cadmium	A	1.572	0.1000	ug/L	
Lead	A	0.4797	0.1000	ug/L	
Silver	A	0.2258	0.1000	ug/L	
Thallium	A	[0.04240]	0.05000	ug/L	
Arsenic	E	0.2809	0.1000	ug/L	
Chromium	E	1.398	0.1000	ug/L	
Cobalt	E	0.2199	0.1000	ug/L	
Copper	E	1.199	0.1000	ug/L	
Manganese	E	0.6524	0.1000	ug/L	
Nickel	E	1.409	0.1000	ug/L	
Vanadium	E	[0.06292]	0.1000	ug/L	
Zinc	E	1.672	0.1000	ug/L	
Selenium	H	0.1330	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98480	ug/L	98
Calcium	A	300000	298100	ug/L	99
Magnesium	A	100000	96760	ug/L	97
Molybdenum	A	2000	1966	ug/L	98
Potassium	A	100000	98580	ug/L	99
Sodium	E	250000	248200	ug/L	99
Iron	H	250000	240700	ug/L	96

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	518899	-19.80
Scandium	A	852845	780103	-8.53
Scandium	E	27959	25576	-8.52
Scandium	H	427309	396467	-7.22
Germanium	H	105109	91814	-12.65
Germanium	E	15593	13819	-11.38
Indium	A	1435538	1209151	-15.77
Bismuth	A	1399318	1031621	-26.28
Yttrium	A	1356281	1247473	-8.02
Terbium	A	2224182	1972673	-11.31

67108851017

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851018 File : c16o0018 Time : 16-MAR-2007 15:47
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	102900	ug/L	3		
Cadmium	A	100.0	103.0	ug/L	3	20	
Calcium	A	300000	313600	ug/L	5		
Magnesium	A	100000	100400	ug/L	0		
Molybdenum	A	2000	2051	ug/L	3		
Potassium	A	100000	104100	ug/L	4		
Silver	A	50.00	45.22	ug/L	-10	20	
Arsenic	E	100.0	110.7	ug/L	11	20	
Chromium	E	200.0	211.6	ug/L	6	20	
Cobalt	E	200.0	197.7	ug/L	-1	20	
Copper	E	200.0	192.2	ug/L	-4	20	
Manganese	E	200.0	207.6	ug/L	4	20	
Nickel	E	200.0	195.1	ug/L	-2	20	
Sodium	E	250000	262100	ug/L	5		
Vanadium	E	200.0	215.8	ug/L	8	20	
Zinc	E	100.0	99.21	ug/L	-1	20	
Iron	H	250000	249800	ug/L	0		
Selenium	H	100.0	104.0	ug/L	4	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	402678	-5.76
Scandium	A	852845	780915	-8.43
Scandium	E	27959	25436	-9.02
Germanium	H	105109	92472	-12.02
Germanium	E	15593	13616	-12.68
Indium	A	1435538	1200130	-16.40
Yttrium	A	1356281	1239293	-8.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851072 File : c16o0072 Time : 16-MAR-2007 21:08
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06701]	0.1000	ug/L	
Barium	A	3.464	0.1000	ug/L	
Beryllium	A	[0.03829]	0.1000	ug/L	
Cadmium	A	1.683	0.1000	ug/L	
Lead	A	0.4825	0.1000	ug/L	
Silver	A	0.2184	0.1000	ug/L	
Thallium	A	[0.03878]	0.05000	ug/L	
Arsenic	E	0.2735	0.1000	ug/L	
Chromium	E	1.413	0.1000	ug/L	
Cobalt	E	0.2257	0.1000	ug/L	
Copper	E	1.188	0.1000	ug/L	
Manganese	E	0.6878	0.1000	ug/L	
Nickel	E	1.437	0.1000	ug/L	
Vanadium	E	[0.08393]	0.1000	ug/L	
Zinc	E	1.470	0.1000	ug/L	
Selenium	H	0.1405	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98700	ug/L	99
Calcium	A	300000	301200	ug/L	100
Magnesium	A	100000	97480	ug/L	97
Molybdenum	A	2000	1989	ug/L	99
Potassium	A	100000	100300	ug/L	100
Sodium	E	250000	245800	ug/L	98
Iron	H	250000	239600	ug/L	96

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	647013	504568	-22.02
Scandium	A	852845	760867	-10.78
Scandium	E	27959	25363	-9.29
Scandium	H	427309	387126	-9.40
Germanium	H	105109	90213	-14.17
Germanium	E	15593	13775	-11.66
Indium	A	1435538	1186883	-17.32
Bismuth	A	1399318	1023661	-26.85
Yttrium	A	1356281	1224120	-9.74
Terbium	A	2224182	1942237	-12.68

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67108851073 File : c16o0073 Time : 16-MAR-2007 21:13
Cal : 67108851001 Caldate: 16-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	105300	ug/L	5		
Cadmium	A	100.0	105.8	ug/L	6	20	
Calcium	A	300000	321300	ug/L	7		
Magnesium	A	100000	103500	ug/L	4		
Molybdenum	A	2000	2080	ug/L	4		
Potassium	A	100000	107200	ug/L	7		
Silver	A	50.00	46.97	ug/L	-6	20	
Arsenic	E	100.0	110.1	ug/L	10	20	
Chromium	E	200.0	207.2	ug/L	4	20	
Cobalt	E	200.0	194.1	ug/L	-3	20	
Copper	E	200.0	190.6	ug/L	-5	20	
Manganese	E	200.0	204.2	ug/L	2	20	
Nickel	E	200.0	190.9	ug/L	-5	20	
Sodium	E	250000	257200	ug/L	3		
Vanadium	E	200.0	211.3	ug/L	6	20	
Zinc	E	100.0	98.52	ug/L	-1	20	
Iron	H	250000	245900	ug/L	-2		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK c16o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	427309	400281	-6.33
Scandium	A	852845	754348	-11.55
Scandium	E	27959	25399	-9.16
Germanium	H	105109	92845	-11.67
Germanium	E	15593	13490	-13.49
Indium	A	1435538	1149386	-19.93
Yttrium	A	1356281	1205899	-11.09

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67108851

Date : 03/16/07 Reference: c16o0004
Sequence : MET06 c16o0 Analyzed : 03/16/07 14:30

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	647013	852845	27959	427309	105109	15593	1435538	1399318	1356281	2224182
		LOWER LIMIT	194104	255854	8388	128193	31533	4678	430661	419795	406884	667255
		UPPER LIMIT	776416	1023414	33551	512771	126131	18712	1722646	1679182	1627537	2669018
015	ICB		679218	887668	29041	436242	106866	16234	1480106	1420830	1398256	2243035
017	ICSA		518899	780103	25576	396467	91814	13819	1209151	1031621	1247473	1972673
018	ICSAB		512341	780915	25436	402678	92472	13616	1200130	1003623	1239293	1943393
023	BLANK	QC378982	776016	985262	31487	456261	114187	17670	1559266	1443274	1494982	2305849
024	BS	QC378983	580371	791031	26603	399505	97503	14421	1316426	1258069	1286920	2087787
025	BSD	QC378984	560977	782843	26054	403086	98548	14242	1302546	1251133	1289618	2094068
027	MSS	193244-001	633488	855419	28055	431602	105695	15512	1446362	1387429	1374486	2187178
028	SER	QC378987	643169	859009	28340	428668	104957	15669	1451881	1385708	1371529	2217644
029	MS	QC378985	598082	786190	28151	425091	103798	15562	1325061	1299698	1256111	2052440
030	MSD	QC378986	636121	830727	28217	421021	102994	15553	1400412	1375021	1341482	2197932
031	PDS	QC378988	633837	889614	27424	417558	101692	14989	1417021	1353507	1395682	2232337
035	CCV		645402	883227	28324	408990	101494	15722	1398368	1338138	1388477	2231766
038	CCB		666976	868798	29028	434989	107204	16218	1463425	1399798	1380422	2209634
040	MSS	193244-001	646292	858624	28794	424803	104025	15930	1454582	1398646	1363176	2209037
042	SAMPLE	193335-001	642134	865827	28376	422523	104320	15844	1454029	1417808	1380603	2229087
043	SAMPLE	193338-001	634679	840715	28185	420197	104268	15780	1425350	1391691	1343712	2211778
044	SAMPLE	193330-001	634015	857601	29049	426606	105570	16064	1447397	1423321	1375994	2238486
045	SAMPLE	193330-002	627319	849649	28545	428501	106394	16164	1442840	1398529	1359499	2218748
046	SAMPLE	193330-003	629383	829393	29233	415524	104145	16224	1412516	1382027	1340032	2183540
047	SAMPLE	193330-004	638264	829846	27144	424003	105569	15644	1426420	1388351	1349816	2192381
048	SAMPLE	193330-005	623519	832351	28260	419499	104024	15817	1415016	1368563	1331890	2192505
049	SAMPLE	193330-006	625684	823516	27918	415933	103027	15653	1399242	1373497	1328767	2179947
053	CCV		645908	864237	28194	424021	103554	15793	1407299	1362569	1386470	2237559
056	CCB		667497	875443	29519	431600	106750	16474	1461848	1412181	1391747	2244985
059	SAMPLE	193330-007	629169	833161	28744	428356	106200	16144	1429660	1384897	1347596	2186938
060	SAMPLE	193330-008	632061	824288	27875	418000	104502	15927	1419588	1386137	1337207	2169616
061	SAMPLE	193338-001	635567	858708	28201	429414	106540	16037	1443573	1393675	1374657	2219707
062	SAMPLE	193330-004	653773	851912	28280	421012	104805	16111	1437631	1400781	1365574	2199437
063	SAMPLE	193330-006	642256	831183	29998	425829	105517	16491	1403398	1388724	1339227	2175105
067	CCV		628091	865265	28165	422541	103383	15693	1392454	1347174	1365367	2201143
069	CCB		651170	840146	28561	424385	104307	15822	1422265	1378762	1346307	2173938
072	ICSA		504568	760867	25363	387126	90213	13775	1186883	1023661	1224120	1942237
073	ICSAB		491683	754348	25399	400281	92845	13490	1149386	975875	1205899	1889066
078	BLANK	QC379370	666252	877284	28523	430509	107033	16078	1429736	1381024	1375171	2152637
079	BS	QC379371	619530	838987	27379	415790	101464	15296	1389093	1347982	1334181	2131453
080	BSD	QC379372	629949	849158	27227	413583	101078	15122	1405185	1354676	1346388	2143254
082	MSS	193291-002	635340	857253	27985	420140	99746	15078	1367726	1340486	1384319	2112664
083	SER	QC379375	641651	855869	27660	413667	101233	15298	1402208	1370056	1357639	2159343
084	MS	QC379373	656069	903886	29128	437584	103495	15718	1409058	1356771	1432439	2180107
085	MSD	QC379374	648052	916901	29165	439605	103982	15739	1405318	1336576	1442475	2162038
086	PDS	QC379376	631680	910960	29158	440805	104127	15492	1377050	1291088	1431769	2152340
090	CCV		632309	881813	27523	428015	103765	15293	1394709	1306023	1382140	2178636
093	CCB		651831	891475	28504	425539	104592	15938	1471324	1397547	1412943	2225093
095	SAMPLE	193291-003	667087	936750	30154	453598	106645	16144	1456877	1376179	1477831	2200116
096	SAMPLE	193291-004	679896	960818	30875	453977	107067	16613	1483565	1409213	1529387	2256163
097	SAMPLE	193291-005	673600	947331	30210	419355	103508	16592	1467084	1391914	1485622	2237523
098	SAMPLE	193291-006	691054	981549	30983	462910	109041	16899	1502850	1421863	1527443	2281224
104	CCV		617827	884985	27574	426865	106063	15385	1389510	1303319	1380024	2170097

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67108851

Date : 03/16/07 Reference: c16o0004
Sequence : MET06 c16o0 Analyzed : 03/16/07 14:30

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
107	CCB		654962	888168	28769	428617	105390	15993	1455739	1384020	1399905	2209475
109	ICSA		495319	764190	25219	392598	91636	13839	1169276	1007694	1222187	1911084
110	ICSAB		497671	774546	25190	398802	92074	13602	1165568	989274	1222290	1905311
115	BLANK	QC379418	554588	787745	25242	385476	108671	15643	1317131	1263946	1268614	2061610
116	BS	QC379419	556362	787003	25234	389994	95944	13871	1281934	1212923	1278986	2038575
117	BSD	QC379420	541397	778632	25156	390668	97335	13938	1278153	1214682	1264000	2031375
119	MSS	193329-001	623666	884798	27417	416484	102616	15214	1409485	1296685	1385467	2182442
120	SER	QC379423	628648	882064	27856	428508	105873	15711	1420421	1340790	1378709	2146160
121	MS	QC379421	602775	839704	26890	407312	99548	14817	1356572	1245903	1332360	2090651
122	MSD	QC379422	603572	853530	27257	413468	101257	14842	1351842	1237338	1325119	2073271
123	PDS	QC379424	594392	861716	26657	405278	98291	14532	1333994	1229647	1331823	2092313
127	CCV		592892	817089	26874	415143	102123	15042	1305547	1240079	1289757	2034978
130	CCB		647884	872172	27450	418246	103582	15502	1415583	1352060	1366926	2152162
132	SAMPLE	193233-002	630829	869405	27698	419579	105316	15756	1466811	1388303	1388316	2211097
133	SAMPLE	193233-003	604805	839995	27001	410091	102943	15289	1412960	1344799	1334499	2140391
134	SAMPLE	193329-002	623494	862101	27314	419237	104397	15530	1401623	1332311	1345909	2132011
135	SAMPLE	193329-003	602912	873129	27642	414087	94103	14190	1267744	1021397	1281674	1922332
136	SAMPLE	193329-004	612588	905736	28446	430856	97815	14444	1279047	1020497	1312325	1950925
137	SAMPLE	193329-005	732293	941909	29546	445965	111519	16173	1466846	1367084	1414132	2187906
138	SAMPLE	193329-006	638466	922420	28340	421832	97229	14393	1311723	1044944	1336982	2001516
139	SAMPLE	193329-007	710449	945067	30310	456407	113412	16797	1442562	1292669	1411886	2142846
140	SAMPLE	193329-008	531191	850781	27313	413437	90699	13371	1177387	877086	1228313	1774404
141	SAMPLE	193329-009	514424	825295	27394	426622	90621	13219	1140457	832999	1193915	1693220
145	CCV		691645	930489	28404	426899	104279	15502	1405215	1284939	1405050	2156463
149	CCB		715229	917185	28865	431010	106640	16073	1434605	1326472	1389918	2149294
150	SAMPLE	193329-013	693685	905458	28540	420374	103747	15806	1416964	1307518	1362212	2145052
151	SAMPLE	193416-001	654005	899195	28080	418966	99115	14935	1316933	1161470	1325466	2031414
152	SAMPLE	193416-004	659723	913974	28293	426720	100528	15167	1319292	1146908	1338047	2033710
153	SAMPLE	193418-001	580347	849111	26703	396977	87711	13360	1164168	897003	1215998	1744305
154	SAMPLE	193418-004	645377	924621	29068	433367	98297	14583	1282632	991820	1326269	1891644
155	SAMPLE	193418-005	739596	957599	29790	448233	111209	16498	1447475	1306821	1417001	2137435
159	CCV		680193	903589	27930	416153	101907	15401	1370942	1237840	1361700	2080500
161	CCB		730889	938741	29303	435888	108251	16285	1469057	1335314	1419906	2165537
164	ICSA		519105	784754	25053	384476	90184	13619	1157727	984171	1204645	1851850
165	ICSAB		505068	775866	24236	382987	89203	13313	1150426	959124	1207103	1823441
170	BLANK	QC379702	653587	865815	27767	406668	101831	15535	1380353	1291665	1325547	2045809
171	BS	QC379703	627277	848393	25948	393306	97251	14612	1302915	1215049	1296273	2024284
172	BSD	QC379704	638314	871575	26259	398105	97898	14598	1335790	1217723	1330785	2048120
174	MSS	193459-003	647862	947809	27359	421856	95859	14149	1288076	983589	1337863	1893263
175	MS	QC379705	632469	940047	28863	425762	95872	14454	1266813	965035	1330166	1867618
176	MSD	QC379706	636006	966737	29433	431853	97629	14831	1294025	977159	1356850	1907508
178	SAMPLE	193459-001	818066 *	1049125 *	32194	468118	118223	18347	1572454	1322036	1539080	2218606
179	SAMPLE	193459-002	688337	987707	30188	445666	105224	15969	1369993	1084843	1410918	2024921
183	CCV		643964	875723	26801	411656	101982	14954	1325196	1220354	1335966	2042769
185	CCB		677264	897885	27427	411960	103005	15339	1410374	1290693	1372148	2084089
188	SAMPLE	193459-004	658690	929696	28621	414742	97158	14868	1291266	1040382	1329612	1929808
189	SAMPLE	193459-005	648978	926578	27577	427129	100124	14514	1303810	1054140	1351569	1948738
190	SAMPLE	193459-006	677869	971303	29021	426171	99063	14924	1328168	1058174	1379575	1985645
191	SAMPLE	193459-007	666978	987134	29551	431752	99520	14998	1332878	1030931	1380117	1973771
194	SAMPLE	193459-008	702127	988408	30260	448994	106280	15812	1375258	1089382	1420499	2018999
195	SAMPLE	193459-009	670019	989355	29877	445294	102709	15461	1344480	1041096	1409042	1988125
199	BLANK	QC379174	680035	921303	28326	432266	116235	16124	1414556	1274193	1392164	2117878

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67108851

Date : 03/16/07 Reference: c16o0004
Sequence : MET06 c16o0 Analyzed : 03/16/07 14:30

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
200	BS	QC379175	608615	855725	25677	400439	99801	14310	1313102	1206554	1319228	2048665
201	BSD	QC379176	595284	834663	25174	394945	98102	13953	1297471	1183727	1298748	2011861
203	MSS	193262-001	656951	878180	26134	397281	100163	14896	1344250	1247488	1327679	2035912
207	CCV		633972	864572	25465	394448	98179	14207	1320483	1209411	1310664	2026921
209	CCB		675280	890037	26439	402906	100547	15066	1407164	1282110	1361019	2083332
212	SER	QC379179	659037	871988	26015	398873	100926	14915	1355959	1258403	1333485	2022100
213	MS	QC379177	641777	856024	25345	387658	96953	14482	1316961	1223762	1294576	1999350
214	MSD	QC379178	646998	864662	25637	390218	97812	14571	1325899	1216159	1313552	2025583
215	PDS	QC379180	625729	872406	25406	391753	96848	14345	1318132	1190107	1312331	2025156
216	SAMPLE	193262-002	651018	872311	26400	401449	101178	15169	1376360	1274567	1337175	2052139
217	SAMPLE	193262-003	652029	871620	25698	393966	98955	14821	1347395	1232392	1312738	2014557
218	SAMPLE	193262-004	635996	854842	25477	388552	97783	14452	1337243	1238246	1297407	1987884
219	SAMPLE	193262-005	647827	851441	24917	389435	98044	14520	1323330	1230996	1289723	2002680
220	SAMPLE	193262-006	647529	858409	25730	392945	99416	14637	1318762	1217209	1300119	1987945
221	SAMPLE	193262-007	650487	851157	25505	397412	99630	14702	1340677	1247048	1296332	2012484
225	CCV		623296	833494	25591	385933	96360	14421	1289298	1205983	1291407	1980636
227	CCB		664804	863324	26132	396782	99730	14752	1379977	1269322	1326761	2051133
230	SAMPLE	193262-008	645871	852275	25614	390172	98323	14699	1357351	1270887	1309992	2018695
231	SAMPLE	193262-010	626838	835403	24951	384297	96675	14246	1300230	1211547	1275695	1965039
232	ICSA		501452	772458	23438	364256	85309	12911	1128121	969019	1193707	1803316
233	ICSAB		484690	765561	23015	367826	86183	12701	1117246	935560	1187197	1783832
238	SAMPLE	193262-011	595619	818308	24501	370935	94137	14239	1282239	1210078	1252708	1929573
239	SAMPLE	193262-012	625687	837940	25334	386523	97710	14507	1342842	1232920	1295569	1993688
240	SAMPLE	193262-013	606741	830871	24289	373357	93810	14092	1280409	1185524	1255675	1950131
241	SAMPLE	193262-014	612085	828330	24931	374192	94923	14302	1280188	1195383	1258068	1939102
242	SAMPLE	193262-015	622427	829309	24697	371835	94403	14204	1306363	1212028	1266277	1964901
243	SAMPLE	193262-016	612710	825374	24167	368588	93471	13949	1282756	1198622	1254500	1931201
247	CCV		581565	808189	24212	375128	93756	13691	1254427	1169004	1258898	1936236
250	CCB		621285	823889	24472	381115	95949	14196	1320973	1229439	1280300	1955268
252	SAMPLE	193262-017	613075	828502	24722	377621	94902	14194	1288770	1194147	1261900	1954729
253	SAMPLE	193262-018	618310	836443	25124	377828	95895	14324	1294218	1212682	1266500	1955401
254	SAMPLE	193262-019	624231	839415	25278	378767	95681	14566	1284590	1176776	1274494	1953306
255	SAMPLE	193262-020	647973	834116	25713	383106	95959	14426	1331916	1247977	1283476	1982720
259	CCV		582244	803992	24747	375327	94023	14038	1258836	1175876	1251219	1961622
262	CCB		631309	841205	25487	378857	95387	14535	1332139	1246284	1285077	1987503
264	ICSA		483997	761817	23570	361585	85937	13062	1103089	953858	1171736	1786198
265	ICSAB		468214	747620	22634	357194	84934	12415	1083955	918692	1146158	1733550
270	BLANK	QC379167	534390	782988	23056	348060	94527	13805	1230143	1172433	1208380	1894483
271	BS	QC379168	518560	752745	22663	345662	88318	12936	1185653	1093534	1177057	1852176
272	BSD	QC379169	531807	769309	23073	354110	89036	13091	1212988	1098193	1209638	1877573
274	MSS	193274-001	530539	821132	24583	357604	82937	12744	1148230	908504	1185510	1738964
275	SER	QC379172	642129	896961	27186	401118	97913	14690	1290835	1057988	1309889	1904921
276	MS	QC379170	540521	837655	25548	375350	86382	13087	1157850	902126	1212045	1730896
277	MSD	QC379171	554590	872869	25978	377496	86682	13400	1193573	911848	1240423	1760787
278	PDS	QC379173	522125	817268	24369	361321	83252	12504	1130309	888647	1192724	1723476
282	CCV		594902	809968	24543	343229	88334	13869	1249768	1138723	1255808	1902485
285	CCB		621608	823075	24943	362207	92400	14305	1272913	1189622	1240919	1916577
289	SAMPLE	193274-002	513272	797410	24287	347849	79044	12212	1097992	851837	1144312	1647377
290	SAMPLE	193274-003	515471	756739	23362	347570	82825	12642	1094834	944767	1137883	1697796
291	SAMPLE	193274-004	586691	855527	25461	368767	89723	13888	1247101	1015946	1260839	1851141
292	SAMPLE	193274-005	519424	806977	24515	359118	82668	12455	1117486	876898	1157380	1675696
293	SAMPLE	193274-006	538461	829672	25070	362316	83234	12794	1143582	892308	1189896	1724357

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67108851

Date : 03/16/07 Reference: c16o0004
Sequence : MET06 c16o0 Analyzed : 03/16/07 14:30

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
294	SAMPLE	193274-007	509566	828892	24912	356257	80378	12423	1120842	838262	1180696	1652903
295	SAMPLE	193274-008	528277	844331	26070	369737	85214	13237	1165830	882428	1215300	1712744
296	SAMPLE	193274-009	529173	847892	25812	371824	85680	13148	1166999	879572	1209747	1710799
297	SAMPLE	193274-010	595761	848231	26051	378172	93514	14317	1250303	1076976	1251291	1873846
298	SAMPLE	193274-011	591568	822475	24820	339322	88565	14329	1265401	1138572	1240271	1890284
302	CCV		558610	767711	23192	336732	85803	13237	1180681	1059537	1181260	1820958
306	CCB		616515	823347	24960	352521	90100	14298	1279805	1169344	1242377	1891300
307	SAMPLE	193274-012	516846	820160	24717	346749	79832	12577	1135532	874468	1186342	1682852
308	SAMPLE	193274-013	620240	847452	25033	370209	94782	14311	1292008	1179503	1270604	1913638
309	SAMPLE	193274-014	615036	823395	24839	356009	91587	14132	1265763	1176588	1231950	1879435
310	SAMPLE	193274-015	591640	802605	24018	352456	90801	13845	1244126	1124002	1196112	1851866
311	SAMPLE	193274-016	597208	790344	24174	349717	90179	13973	1236964	1143391	1191875	1840590
312	SAMPLE	193383-003	571915	781241	23486	339608	86615	13503	1184770	1078168	1171178	1813229
313	ICSA		464248	718553	21873	325691	78805	12266	1040796	899203	1100319	1669789
314	ICSAB		441268	701064	21834	326322	78917	12204	1019060	868555	1077488	1629353
319	BLANK	QC379439	498571	729799	21667	322538	87639	13147	1160740	1089786	1136637	1778269
320	BS	QC379440	472169	691374	20544	309303	82250	12128	1091056	997359	1090910	1720074
324	CCV		519560	750729	21927	316824	81553	12592	1174431	1080065	1173516	1811307
326	CCB		546698	768864	22736	334695	86138	13206	1237156	1135108	1183012	1822183
329	BSD	QC379441	469085	693264	20577	308838	82049	12317	1093894	1000937	1090307	1711905
331	MSS	193373-001	514176	766050	22119	324338	80336	12523	1138699	996442	1150228	1765199
332	SER	QC379444	554436	796867	23525	348626	87836	13487	1221258	1091453	1212778	1840266
333	MS	QC379442	509155	764815	22287	329217	81323	12567	1150939	998591	1160411	1765734
334	MSD	QC379443	504244	752790	22035	326795	80076	12307	1125823	977913	1138910	1734063
335	PDS	QC379445	490710	736631	21789	319006	78525	11946	1103757	958232	1124724	1727616
336	SAMPLE	193373-002	516620	801795	23178	333622	78792	12399	1134585	929524	1176626	1724675
337	SAMPLE	193373-003	521767	810529	23192	337640	79185	12277	1131685	917591	1169994	1706889
338	SAMPLE	193373-004	531832	807628	23509	341216	80888	12338	1137797	932388	1178627	1720972
339	SAMPLE	193373-005	529849	803831	23324	336722	79952	12423	1118143	921701	1166313	1693113
343	CCV		516474	716986	21229	309758	79479	12234	1122833	1025597	1118550	1730775
347	CCB		548664	754333	22035	317614	81947	12864	1187254	1116196	1151611	1770124
348	SAMPLE	193373-006	510973	733218	21706	315526	81586	12634	1148798	1085428	1111838	1761064
349	SAMPLE	193373-007	484278	672454	22085	309325	79023	12654	1040080	979380	1018438	1602993
350	SAMPLE	193373-008	507928	730422	21541	313205	78671	12152	1105038	997031	1100621	1699200
351	SAMPLE	193373-009	518869	737991	21341	314190	78858	12215	1153452	1000185	1107491	1720953
352	SAMPLE	193373-010	501541	720986	21182	312713	78343	12105	1094821	1007217	1090419	1701055
353	SAMPLE	193373-011	520311	721051	21476	315465	81658	12703	1153721	1080118	1102584	1735550
354	SAMPLE	193373-012	525742	764976	22055	316451	78442	12392	1133795	977949	1145821	1719935
355	SAMPLE	193415-014	561037	755940	22571	331401	85025	12946	1191518	1112050	1143803	1773198
356	SAMPLE	193426-001	529725	763085	22493	322582	78820	12409	1109040	986701	1134525	1723663
357	SAMPLE	193426-002	529282	747858	21988	320848	80229	12359	1111934	1011718	1117692	1719209
361	CCV		518927	726977	21001	313248	79722	12217	1147014	1058520	1131155	1771180
365	CCB		549531	751388	21646	318145	81559	12780	1187795	1133962	1150099	1782722
371	CCV		519246	732115	21514	319650	81236	12264	1144690	1066490	1144202	1797584
373	CCB		535060	742632	21919	322196	82636	12511	1181289	1116735	1136189	1774108
376	ICSA		425897	672599	20045	305381	74189	11571	993918	882650	1035160	1614441
377	ICSAB		413111	671462	19678	305980	74295	11262	989092	863801	1046506	1601025

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	c16o0001	TUN				16-MAR-2007 14:11	1.0	1.0		1	
002	c16o0002	X	RINSE			16-MAR-2007 14:19	1.0			2	
003	c16o0003	X	RINSE			16-MAR-2007 14:24	1.0			2	
004	c16o0004	ICALBLK	CALBLANK			16-MAR-2007 14:30	1.0	1.0		2	
005	c16o0005	ICAL				16-MAR-2007 14:35	1.0	1.0		3	
006	c16o0006	ICAL				16-MAR-2007 14:40	1.0	1.0		4	
007	c16o0007	ICAL				16-MAR-2007 14:46	1.0	1.0		5	
008	c16o0008	ICAL				16-MAR-2007 14:51	1.0	1.0		6	
009	c16o0009	ICAL				16-MAR-2007 14:56	1.0	1.0		7	
010	c16o0010	ICAL				16-MAR-2007 15:02	1.0	1.0		8	
011	c16o0011	X	RINSE			16-MAR-2007 15:09	1.0			2	
012	c16o0012	ICV				16-MAR-2007 15:14	1.0	1.0	1	9	
013	c16o0013	X	RINSE			16-MAR-2007 15:20	1.0			2	
014	c16o0014	X				16-MAR-2007 15:25	1.0			2	
015	c16o0015	ICB				16-MAR-2007 15:31	1.0	1.0	1	2	
016	c16o0016	X				16-MAR-2007 15:36	1.0			2	
017	c16o0017	ICSA				16-MAR-2007 15:42	1.0	1.0	1	10 2	7:CA=298100
018	c16o0018	ICSAB				16-MAR-2007 15:47	1.0	1.0	1	11 2	10:CA=313600
019	c16o0019	X	RINSE			16-MAR-2007 15:53	1.0			2	
020	c16o0020	X	RINSE			16-MAR-2007 15:58	1.0			2	
021	c16o0021	X	RINSE			16-MAR-2007 16:04	1.0			2	
022	c16o0022	X	RINSE			16-MAR-2007 16:09	1.0			2	
023	c16o0023	BLANK	QC378982	123055	Water	16-MAR-2007 16:14	1.0	1.0	1	2	
024	c16o0024	BS	QC378983	123055	Water	16-MAR-2007 16:20	1.0	1.0	1	2	
025	c16o0025	BSD	QC378984	123055	Water	16-MAR-2007 16:26	1.0	1.0	1	2	
026	c16o0026	X	RINSE			16-MAR-2007 16:32	1.0			2	
027	c16o0027	MSS	193244-001	123055	Water	16-MAR-2007 16:37	10.0	1.0	1	2	
028	c16o0028	SER	QC378987	123055	Water	16-MAR-2007 16:43	50.0	1.0	1	2	
029	c16o0029	MS	QC378985	123055	Water	16-MAR-2007 16:48	10.0	1.0	1	2	
030	c16o0030	MSD	QC378986	123055	Water	16-MAR-2007 16:54	10.0	1.0	1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RBA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
031	c16o0031	PDS	QC378988	123055	Water	16-MAR-2007 16:59	10.0	1.0			1	12 13 2	
032	c16o0032	X	RINSE			16-MAR-2007 17:05	1.0					2	
033	c16o0033	X	RINSE			16-MAR-2007 17:10	1.0					2	
034	c16o0034	X	RINSE			16-MAR-2007 17:16	1.0					2	
035	c16o0035	CCV				16-MAR-2007 17:21	1.0	1.0			1	14 2	
036	c16o0036	X	RINSE			16-MAR-2007 17:27	1.0					2	
037	c16o0037	X				16-MAR-2007 17:32	1.0					2	
038	c16o0038	CCB				16-MAR-2007 17:37	1.0	1.0			1	2	
039	c16o0039	X				16-MAR-2007 17:43	1.0					2	
040	c16o0040	MSS	193244-001	123055	Water	16-MAR-2007 17:48	10.0	1.0			1	2	
041	c16o0041	XSER	QC378987	123055	Water	16-MAR-2007 17:54	50.0	1.0	1	1	1	2	
042	c16o0042	SAMPLE	193335-001	123055	Filtra	16-MAR-2007 17:59	10.0	1.0			1	2	
043	c16o0043	SAMPLE	193338-001	123055	Filtra	16-MAR-2007 18:05	10.0	1.0			1	2	
044	c16o0044	SAMPLE	193330-001	123055	Filtra	16-MAR-2007 18:10	10.0	1.0			1	2	
045	c16o0045	SAMPLE	193330-002	123055	Filtra	16-MAR-2007 18:16	10.0	1.0			1	2	
046	c16o0046	SAMPLE	193330-003	123055	Filtra	16-MAR-2007 18:21	10.0	1.0			1	2	
047	c16o0047	SAMPLE	193330-004	123055	Filtra	16-MAR-2007 18:27	10.0	1.0			1	2	
048	c16o0048	SAMPLE	193330-005	123055	Filtra	16-MAR-2007 18:32	10.0	1.0			1	2	1:MN=284.900
049	c16o0049	SAMPLE	193330-006	123055	Filtra	16-MAR-2007 18:41	10.0	1.0	1		1	2	1:MN=664.500
050	c16o0050	X	RINSE			16-MAR-2007 19:07	1.0					2	
051	c16o0051	X	RINSE			16-MAR-2007 19:12	1.0					2	
052	c16o0052	X	RINSE			16-MAR-2007 19:18	1.0					2	
053	c16o0053	CCV				16-MAR-2007 19:23	1.0	1.0			1	14 2	
054	c16o0054	X	RINSE			16-MAR-2007 19:29	1.0					2	
055	c16o0055	X				16-MAR-2007 19:34	1.0					2	
056	c16o0056	CCB				16-MAR-2007 19:40	1.0	1.0			1	2	
057	c16o0057	X				16-MAR-2007 19:45	1.0					2	
058	c16o0058	XSAMPLE	193330-005	123055	Filtra	16-MAR-2007 19:51	20.0	1.0			1	2	
059	c16o0059	SAMPLE	193330-007	123055	Filtra	16-MAR-2007 19:56	10.0	1.0			1	2	
060	c16o0060	SAMPLE	193330-008	123055	Filtra	16-MAR-2007 20:02	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
061	c16o0061	SAMPLE	193338-001	123055	Filtra	16-MAR-2007 20:07	10.0	1.0			1	2	
062	c16o0062	SAMPLE	193330-004	123055	Filtra	16-MAR-2007 20:13	10.0	1.0			1	2	
063	c16o0063	SAMPLE	193330-006	123055	Filtra	16-MAR-2007 20:18	10.0	1.0			1	2	1:MN=607.300
064	c16o0064	X	RINSE			16-MAR-2007 20:24	1.0					2	
065	c16o0065	X	RINSE			16-MAR-2007 20:29	1.0					2	
066	c16o0066	X	RINSE			16-MAR-2007 20:35	1.0					2	
067	c16o0067	CCV				16-MAR-2007 20:40	1.0	1.0			1	14 2	
068	c16o0068	X	RINSE			16-MAR-2007 20:46	1.0					2	
069	c16o0069	CCB				16-MAR-2007 20:52	1.0	1.0	1		1	2	
070	c16o0070	X				16-MAR-2007 20:57	1.0	1.0	1		1	2	
071	c16o0071	X				16-MAR-2007 21:02	1.0	1.0	1		1	2	
072	c16o0072	ICSA				16-MAR-2007 21:08	1.0	1.0			1	10 2	7:CA=301200
073	c16o0073	ICSAB				16-MAR-2007 21:13	1.0	1.0			1	11 2	10:CA=321300
074	c16o0074	X	RINSE			16-MAR-2007 21:19	1.0					2	
075	c16o0075	X	RINSE			16-MAR-2007 21:25	1.0					2	
076	c16o0076	X	RINSE			16-MAR-2007 21:30	1.0					2	
077	c16o0077	X	RINSE			16-MAR-2007 21:35	1.0					2	
078	c16o0078	BLANK	QC379370	123147	Soil	16-MAR-2007 21:41	5.0	50.0			1	2	
079	c16o0079	BS	QC379371	123147	Soil	16-MAR-2007 21:46	50.0	50.0	1		1	2	
080	c16o0080	BSD	QC379372	123147	Soil	16-MAR-2007 21:52	50.0	50.0	1	1	1	2	
081	c16o0081	X	RINSE			16-MAR-2007 21:58	1.0					2	
082	c16o0082	MSS	193291-002	123147	Soil	16-MAR-2007 22:03	50.0	47.62			1	2	
083	c16o0083	SER	QC379375	123147	Soil	16-MAR-2007 22:08	250.0	47.62		2	1	2	
084	c16o0084	MS	QC379373	123147	Soil	16-MAR-2007 22:14	50.0	46.30	1		1	2	
085	c16o0085	MSD	QC379374	123147	Soil	16-MAR-2007 22:19	50.0	52.08	1		1	2	
086	c16o0086	PDS	QC379376	123147	Soil	16-MAR-2007 22:25	50.0	47.62	2		1	12 13 2	1:MN=241.40(
087	c16o0087	X	RINSE			16-MAR-2007 22:31	1.0					2	
088	c16o0088	X	RINSE			16-MAR-2007 22:37	1.0					2	
089	c16o0089	X	RINSE			16-MAR-2007 22:42	1.0					2	
090	c16o0090	CCV				16-MAR-2007 22:48	1.0	1.0	1		1	14 2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
091	c16o0091	X	RINSE			16-MAR-2007 22:54	1.0					2	
092	c16o0092	X				16-MAR-2007 22:59	1.0	1.0	3		1	2	
093	c16o0093	CCB				16-MAR-2007 23:05	1.0	1.0	1		1	2	
094	c16o0094	X				16-MAR-2007 23:10	1.0	1.0	1		1	2	
095	c16o0095	SAMPLE	193291-003	123147	Soil	16-MAR-2007 23:16	50.0	49.02			1	2	
096	c16o0096	SAMPLE	193291-004	123147	Soil	16-MAR-2007 23:21	50.0	47.17			1	2	
097	c16o0097	SAMPLE	193291-005	123147	Soil	16-MAR-2007 23:26	50.0	48.08			1	2	
098	c16o0098	SAMPLE	193291-006	123147	Soil	16-MAR-2007 23:32	50.0	48.54			1	2	
099	c16o0099	TUN				16-MAR-2007 23:36	1.0	1.0				1	
100	c16o0100	X	RINSE			16-MAR-2007 23:44	1.0					2	
101	c16o0101	X	RINSE			16-MAR-2007 23:49	1.0					2	
102	c16o0102	X	RINSE			16-MAR-2007 23:55	1.0					2	
103	c16o0103	X	RINSE			17-MAR-2007 00:00	1.0					2	
104	c16o0104	CCV				17-MAR-2007 00:06	1.0	1.0	1		1	14 2	
105	c16o0105	X	RINSE			17-MAR-2007 00:11	1.0					2	
106	c16o0106	X				17-MAR-2007 00:17	1.0	1.0	4		1	2	
107	c16o0107	CCB				17-MAR-2007 00:22	1.0	1.0			1	2	
108	c16o0108	X				17-MAR-2007 00:28	1.0	1.0	1		1	2	
109	c16o0109	ICSA				17-MAR-2007 00:33	1.0	1.0			1	10 2	7:CA=304200
110	c16o0110	ICSAB				17-MAR-2007 00:39	1.0	1.0			1	11 2	10:CA=317400
111	c16o0111	X	RINSE			17-MAR-2007 00:44	1.0					2	
112	c16o0112	X	RINSE			17-MAR-2007 00:50	1.0					2	
113	c16o0113	X	RINSE			17-MAR-2007 00:55	1.0					2	
114	c16o0114	X	RINSE			17-MAR-2007 01:01	1.0					2	
115	c16o0115	BLANK	QC379418	123155	Filtra	17-MAR-2007 01:06	1.0	1.0			1	2	
116	c16o0116	BS	QC379419	123155	Filtra	17-MAR-2007 01:12	1.0	1.0	1		1	2	
117	c16o0117	BSD	QC379420	123155	Filtra	17-MAR-2007 01:17	1.0	1.0	1		1	2	
118	c16o0118	X	RINSE			17-MAR-2007 01:24	1.0					2	
119	c16o0119	MSS	193329-001	123155	Filtra	17-MAR-2007 01:29	10.0	1.0	1		1	2	1:NA=98680.0
120	c16o0120	SER	QC379423	123155	Filtra	17-MAR-2007 01:35	50.0	1.0		3	1	2	1:NA=20300.0

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: Rett Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
121	c16o0121	MS	QC379421	123155	Filtra	17-MAR-2007 01:40	10.0	1.0	1		1	2	1:NA=101000
122	c16o0122	MSD	QC379422	123155	Filtra	17-MAR-2007 01:46	10.0	1.0	1		1	2	1:NA=97570.0
123	c16o0123	PDS	QC379424	123155	Filtra	17-MAR-2007 01:51	10.0	1.0	1		1	12 13 2	1:NA=11032(
124	c16o0124	X	RINSE			17-MAR-2007 01:57	1.0					2	
125	c16o0125	X	RINSE			17-MAR-2007 02:02	1.0					2	
126	c16o0126	X	RINSE			17-MAR-2007 02:08	1.0					2	
127	c16o0127	CCV				17-MAR-2007 02:13	1.0	1.0	1		1	14 2	
128	c16o0128	X	RINSE			17-MAR-2007 02:19	1.0					2	
129	c16o0129	X				17-MAR-2007 02:25	1.0	1.0	15		1	2	
130	c16o0130	CCB				17-MAR-2007 02:30	1.0	1.0			1	2	
131	c16o0131	X				17-MAR-2007 02:36	1.0	1.0	1		1	2	
132	c16o0132	SAMPLE	193233-002	123155	Filtra	17-MAR-2007 02:41	10.0	1.0			1	2	
133	c16o0133	SAMPLE	193233-003	123155	Filtra	17-MAR-2007 02:47	10.0	1.0			1	2	
134	c16o0134	SAMPLE	193329-002	123155	Filtra	17-MAR-2007 02:52	10.0	1.0			1	2	1:NA=30250.0
135	c16o0135	SAMPLE	193329-003	123155	Filtra	17-MAR-2007 02:57	10.0	1.0			1	2	4:NA=686500
136	c16o0136	SAMPLE	193329-004	123155	Filtra	17-MAR-2007 03:03	10.0	1.0			1	2	4:NA=653400
137	c16o0137	SAMPLE	193329-005	123155	Filtra	17-MAR-2007 03:09	10.0	1.0			1	2	
138	c16o0138	SAMPLE	193329-006	123155	Filtra	17-MAR-2007 03:14	10.0	1.0			1	2	4:NA=633300
139	c16o0139	SAMPLE	193329-007	123155	Filtra	17-MAR-2007 03:20	10.0	1.0			1	2	1:NA=31460.0
140	c16o0140	SAMPLE	193329-008	123155	Filtra	17-MAR-2007 03:25	10.0	1.0			1	2	5:NA=1413000
141	c16o0141	SAMPLE	193329-009	123155	Filtra	17-MAR-2007 03:31	10.0	1.0			1	2	5:NA=1645000
142	c16o0142	X	RINSE			17-MAR-2007 03:36	1.0					2	
143	c16o0143	X	RINSE			17-MAR-2007 03:42	1.0					2	
144	c16o0144	X	RINSE			17-MAR-2007 03:47	1.0					2	
145	c16o0145	CCV				17-MAR-2007 03:52	1.0	1.0			1	14 2	
146	c16o0146	X	RINSE			17-MAR-2007 03:58	1.0					2	
147	c16o0147	X				17-MAR-2007 04:04	1.0	1.0	5		1	2	
148	c16o0148	X				17-MAR-2007 04:09	1.0	1.0	3		1	2	
149	c16o0149	CCB				17-MAR-2007 04:15	1.0	1.0	2		1	2	
150	c16o0150	SAMPLE	193329-013	123155	Filtra	17-MAR-2007 04:20	10.0	1.0			1	2	

tds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
'lags used: t=tune failure

nalyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
151	c16o0151	SAMPLE	193416-001	123155	Water	17-MAR-2007 04:25	10.0	1.0	2		1	2	3:NA=223500
152	c16o0152	SAMPLE	193416-004	123155	Water	17-MAR-2007 04:31	10.0	1.0			1	2	3:NA=227000
153	c16o0153	SAMPLE	193418-001	123155	Filtra	17-MAR-2007 04:36	10.0	1.0			1	2	5:NA=1198000
154	c16o0154	SAMPLE	193418-004	123155	Filtra	17-MAR-2007 04:42	10.0	1.0			1	2	5:NA=722600
155	c16o0155	SAMPLE	193418-005	123155	Filtra	17-MAR-2007 04:47	10.0	1.0			1	2	
156	c16o0156	X	RINSE			17-MAR-2007 04:53	1.0					2	
157	c16o0157	X	RINSE			17-MAR-2007 04:58	1.0					2	
158	c16o0158	X	RINSE			17-MAR-2007 05:04	1.0					2	
159	c16o0159	CCV				17-MAR-2007 05:09	1.0	1.0			1	14 2	
160	c16o0160	X	RINSE			17-MAR-2007 05:15	1.0					2	
161	c16o0161	CCB				17-MAR-2007 05:20	1.0	1.0	2		1	2	
162	c16o0162	X				17-MAR-2007 05:26	1.0	1.0	1		1	2	
163	c16o0163	X				17-MAR-2007 05:31	1.0	1.0	2		1	2	
164	c16o0164	ICSA				17-MAR-2007 05:37	1.0	1.0			1	10 2	7:CA=304500
165	c16o0165	ICSAB				17-MAR-2007 05:42	1.0	1.0			1	11 2	10:CA=315300
166	c16o0166	X	RINSE			17-MAR-2007 05:48	1.0					2	
167	c16o0167	X	RINSE			17-MAR-2007 05:53	1.0					2	
168	c16o0168	X	RINSE			17-MAR-2007 05:59	1.0					2	
169	c16o0169	X	RINSE			17-MAR-2007 06:04	1.0					2	
170	c16o0170	BLANK	QC379702	123218	Filtra	17-MAR-2007 06:10	1.0	1.0			1	2	
171	c16o0171	BS	QC379703	123218	Filtra	17-MAR-2007 06:15	1.0	1.0			1	2	
172	c16o0172	BSD	QC379704	123218	Filtra	17-MAR-2007 06:21	1.0	1.0			1	2	
173	c16o0173	X	RINSE			17-MAR-2007 06:27	1.0					2	
174	c16o0174	MSS	193459-003	123218	Filtra	17-MAR-2007 06:33	20.0	1.0	4		1	2	4:NA=734000
175	c16o0175	MS	QC379705	123218	Filtra	17-MAR-2007 06:38	20.0	1.0	1		1	2	4:NA=714000
176	c16o0176	MSD	QC379706	123218	Filtra	17-MAR-2007 06:44	20.0	1.0	1		1	2	4:NA=737000
177	c16o0177	X	RINSE			17-MAR-2007 06:49	1.0					2	
178	c16o0178	SAMPLE	193459-001	123218	Filtra	17-MAR-2007 06:55	1.0	1.0			1	2	
179	c16o0179	SAMPLE	193459-002	123218	Filtra	17-MAR-2007 07:00	20.0	1.0			1	2	2:NA=327400
180	c16o0180	X	RINSE			17-MAR-2007 07:06	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
181	c16o0181	X	RINSE			17-MAR-2007 07:11	1.0					2	
182	c16o0182	X	RINSE			17-MAR-2007 07:17	1.0					2	
183	c16o0183	CCV				17-MAR-2007 07:22	1.0	1.0			1	14 2	
184	c16o0184	X	RINSE			17-MAR-2007 07:28	1.0					2	
185	c16o0185	CCB				17-MAR-2007 07:33	1.0	1.0	2		1	2	
186	c16o0186	X				17-MAR-2007 07:39	1.0	1.0	4		1	2	
187	c16o0187	X				17-MAR-2007 07:44	1.0	1.0	2		1	2	
188	c16o0188	SAMPLE	193459-004	123218	Filtra	17-MAR-2007 07:50	20.0	1.0			1	2	2:NA=412850
189	c16o0189	SAMPLE	193459-005	123218	Filtra	17-MAR-2007 07:55	20.0	1.0			1	2	4:NA=337500
190	c16o0190	SAMPLE	193459-006	123218	Filtra	17-MAR-2007 08:01	20.0	1.0			1	2	3:NA=399200
191	c16o0191	SAMPLE	193459-007	123218	Filtra	17-MAR-2007 08:06	20.0	1.0			1	2	3:NA=531000
192	c16o0192	TUN				17-MAR-2007 08:11	1.0	1.0				1	
193	c16o0193	X	RINSE			17-MAR-2007 08:19	1.0					2	
194	c16o0194	SAMPLE	193459-008	123218	Filtra	17-MAR-2007 08:24	20.0	1.0			1	2	2:NA=308450
195	c16o0195	SAMPLE	193459-009	123218	Filtra	17-MAR-2007 08:30	20.0	1.0			1	2	3:NA=488800
196	c16o0196	X	RINSE			17-MAR-2007 08:35	1.0					2	
197	c16o0197	X	RINSE			17-MAR-2007 08:41	1.0					2	
198	c16o0198	X	RINSE			17-MAR-2007 08:46	1.0					2	
199	c16o0199	BLANK	QC379174	123098	Filtra	17-MAR-2007 08:52	1.0	1.0			1	2	
200	c16o0200	BS	QC379175	123098	Filtra	17-MAR-2007 08:57	1.0	1.0			1	2	
201	c16o0201	BSD	QC379176	123098	Filtra	17-MAR-2007 09:03	1.0	1.0			1	2	
202	c16o0202	X	RINSE			17-MAR-2007 09:10	1.0					2	
203	c16o0203	MSS	193262-001	123098	Filtra	17-MAR-2007 09:15	10.0	1.0			1	2	
204	c16o0204	X	RINSE			17-MAR-2007 09:20	1.0					2	
205	c16o0205	X	RINSE			17-MAR-2007 09:26	1.0					2	
206	c16o0206	X	RINSE			17-MAR-2007 09:32	1.0					2	
207	c16o0207	CCV				17-MAR-2007 09:37	1.0	1.0			1	14 2	
208	c16o0208	X	RINSE			17-MAR-2007 09:43	1.0					2	
209	c16o0209	CCB				17-MAR-2007 09:48	1.0	1.0	1		1	2	
210	c16o0210	X				17-MAR-2007 09:54	1.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
211	c16o0211	X				17-MAR-2007 09:59	1.0	1.0	2		1	2	
212	c16o0212	SER	QC379179	123098	Filtra	17-MAR-2007 10:05	50.0	1.0	1	1	1	2	
213	c16o0213	MS	QC379177	123098	Filtra	17-MAR-2007 10:10	10.0	1.0	1		1	2	
214	c16o0214	MSD	QC379178	123098	Filtra	17-MAR-2007 10:15	10.0	1.0	1		1	2	
215	c16o0215	PDS	QC379180	123098	Filtra	17-MAR-2007 10:21	10.0	1.0	1		1	12 13 2	
216	c16o0216	SAMPLE	193262-002	123098	Filtra	17-MAR-2007 10:26	10.0	1.0			1	2	
217	c16o0217	SAMPLE	193262-003	123098	Filtra	17-MAR-2007 10:32	10.0	1.0	1		1	2	1:NI=334.600
218	c16o0218	SAMPLE	193262-004	123098	Filtra	17-MAR-2007 10:37	10.0	1.0			1	2	
219	c16o0219	SAMPLE	193262-005	123098	Filtra	17-MAR-2007 10:43	10.0	1.0			1	2	
220	c16o0220	SAMPLE	193262-006	123098	Filtra	17-MAR-2007 10:48	10.0	1.0			1	2	
221	c16o0221	SAMPLE	193262-007	123098	Filtra	17-MAR-2007 10:54	10.0	1.0			1	2	
222	c16o0222	X	RINSE			17-MAR-2007 11:00	1.0					2	
223	c16o0223	X	RINSE			17-MAR-2007 11:05	1.0					2	
224	c16o0224	X	RINSE			17-MAR-2007 11:11	1.0					2	
225	c16o0225	CCV				17-MAR-2007 11:16	1.0	1.0			1	14 2	
226	c16o0226	X	RINSE			17-MAR-2007 11:22	1.0					2	
227	c16o0227	CCB				17-MAR-2007 11:27	1.0	1.0			1	2	
228	c16o0228	X				17-MAR-2007 11:33	1.0	1.0			1	2	
229	c16o0229	X				17-MAR-2007 11:38	1.0	1.0	1		1	2	
230	c16o0230	SAMPLE	193262-008	123098	Filtra	17-MAR-2007 11:44	10.0	1.0			1	2	
231	c16o0231	SAMPLE	193262-010	123098	Filtra	17-MAR-2007 11:49	10.0	1.0			1	2	
232	c16o0232	ICSA				17-MAR-2007 11:55	1.0	1.0			1	10 2	7:CA=299700
233	c16o0233	ICSAB				17-MAR-2007 12:00	1.0	1.0			1	11 2	11:CA=314800
234	c16o0234	X	RINSE			17-MAR-2007 12:06	1.0					2	
235	c16o0235	X	RINSE			17-MAR-2007 12:12	1.0					2	
236	c16o0236	X	RINSE			17-MAR-2007 12:17	1.0					2	
237	c16o0237	X	RINSE			17-MAR-2007 12:23	1.0					2	
238	c16o0238	SAMPLE	193262-011	123098	Filtra	17-MAR-2007 12:28	10.0	1.0	1		1	2	
239	c16o0239	SAMPLE	193262-012	123098	Filtra	17-MAR-2007 12:34	10.0	1.0			1	2	
240	c16o0240	SAMPLE	193262-013	123098	Filtra	17-MAR-2007 12:39	10.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
241	c16o0241	SAMPLE	193262-014	123098	Filtra	17-MAR-2007 12:45	10.0	1.0			1	2	
242	c16o0242	SAMPLE	193262-015	123098	Filtra	17-MAR-2007 12:50	10.0	1.0			1	2	
243	c16o0243	SAMPLE	193262-016	123098	Filtra	17-MAR-2007 12:56	10.0	1.0			1	2	
244	c16o0244	X	RINSE			17-MAR-2007 13:01	1.0					2	
245	c16o0245	X	RINSE			17-MAR-2007 13:07	1.0					2	
246	c16o0246	X	RINSE			17-MAR-2007 13:12	1.0					2	
247	c16o0247	CCV				17-MAR-2007 13:18	1.0	1.0			1	14 2	
248	c16o0248	X	RINSE			17-MAR-2007 13:23	1.0					2	
249	c16o0249	X				17-MAR-2007 13:29	1.0	1.0	2		1	2	
250	c16o0250	CCB				17-MAR-2007 13:34	1.0	1.0			1	2	
251	c16o0251	X				17-MAR-2007 13:40	1.0	1.0			1	2	
252	c16o0252	SAMPLE	193262-017	123098	Filtra	17-MAR-2007 13:45	10.0	1.0			1	2	
253	c16o0253	SAMPLE	193262-018	123098	Filtra	17-MAR-2007 13:51	10.0	1.0			1	2	
254	c16o0254	SAMPLE	193262-019	123098	Filtra	17-MAR-2007 13:56	10.0	1.0			1	2	
255	c16o0255	SAMPLE	193262-020	123098	Filtra	17-MAR-2007 14:02	10.0	1.0	1		1	2	
256	c16o0256	X	RINSE			17-MAR-2007 14:07	1.0					2	
257	c16o0257	X	RINSE			17-MAR-2007 14:13	1.0					2	
258	c16o0258	X	RINSE			17-MAR-2007 14:18	1.0					2	
259	c16o0259	CCV				17-MAR-2007 14:24	1.0	1.0			1	14 2	
260	c16o0260	X	RINSE			17-MAR-2007 14:30	1.0					2	
261	c16o0261	X				17-MAR-2007 14:35	1.0	1.0	2		1	2	
262	c16o0262	CCB				17-MAR-2007 14:41	1.0	1.0			1	2	
263	c16o0263	X				17-MAR-2007 14:46	1.0	1.0			1	2	
264	c16o0264	ICSA				17-MAR-2007 14:51	1.0	1.0			1	10 2	7:CA=300000
265	c16o0265	ICSAB				17-MAR-2007 14:57	1.0	1.0			1	11 2	10:CA=315100
266	c16o0266	X	RINSE			17-MAR-2007 15:03	1.0					2	
267	c16o0267	X	RINSE			17-MAR-2007 15:08	1.0					2	
268	c16o0268	X	RINSE			17-MAR-2007 15:14	1.0					2	
269	c16o0269	X	RINSE			17-MAR-2007 15:19	1.0					2	
270	c16o0270	BLANK	QC379167	123097	Filtra	17-MAR-2007 15:25	1.0	1.0			1	2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
271	c16o0271	BS	QC379168	123097	Filtra	17-MAR-2007 15:30	1.0	1.0			1	2	
272	c16o0272	BSD	QC379169	123097	Filtra	17-MAR-2007 15:36	1.0	1.0			1	2	
273	c16o0273	X	RINSE			17-MAR-2007 15:43	1.0					2	
274	c16o0274	MSS	193274-001	123097	Filtra	17-MAR-2007 15:48	10.0	1.0	5		1	2	5:NA=842000
275	c16o0275	SER	QC379172	123097	Filtra	17-MAR-2007 15:54	50.0	1.0			1	2	3:NA=163680
276	c16o0276	MS	QC379170	123097	Filtra	17-MAR-2007 15:59	10.0	1.0			1	2	5:NA=829900
277	c16o0277	MSD	QC379171	123097	Filtra	17-MAR-2007 16:05	10.0	1.0		1	1	2	5:NA=830800
278	c16o0278	PDS	QC379173	123097	Filtra	17-MAR-2007 16:10	10.0	1.0			1	12 13 2	5:NA=83680(
279	c16o0279	X	RINSE			17-MAR-2007 16:16	1.0					2	
280	c16o0280	X	RINSE			17-MAR-2007 16:21	1.0					2	
281	c16o0281	X	RINSE			17-MAR-2007 16:27	1.0					2	
282	c16o0282	CCV				17-MAR-2007 16:32	1.0	1.0			1	14 2	
283	c16o0283	X	RINSE			17-MAR-2007 16:38	1.0					2	
284	c16o0284	X				17-MAR-2007 16:43	1.0	1.0	3		1	2	
285	c16o0285	CCB				17-MAR-2007 16:49	1.0	1.0	2		1	2	
286	c16o0286	X				17-MAR-2007 16:54	1.0	1.0	4		1	2	
287	c16o0287	TUN				17-MAR-2007 16:59	1.0	1.0				1	
288	c16o0288	X	RINSE			17-MAR-2007 17:07	1.0					2	
289	c16o0289	SAMPLE	193274-002	123097	Filtra	17-MAR-2007 17:12	10.0	1.0			1	2	5:NA=1198000
290	c16o0290	SAMPLE	193274-003	123097	Filtra	17-MAR-2007 17:18	10.0	1.0	2		1	2	6:NA=498600
91	c16o0291	SAMPLE	193274-004	123097	Filtra	17-MAR-2007 17:23	10.0	1.0			1	2	4:NA=240300
92	c16o0292	SAMPLE	193274-005	123097	Filtra	17-MAR-2007 17:29	10.0	1.0			1	2	4:NA=796900
93	c16o0293	SAMPLE	193274-006	123097	Filtra	17-MAR-2007 17:34	10.0	1.0			1	2	4:NA=758400
94	c16o0294	SAMPLE	193274-007	123097	Filtra	17-MAR-2007 17:40	10.0	1.0			1	2	4:NA=1264000
95	c16o0295	SAMPLE	193274-008	123097	Filtra	17-MAR-2007 17:45	10.0	1.0			1	2	4:NA=912800
96	c16o0296	SAMPLE	193274-009	123097	Filtra	17-MAR-2007 17:50	10.0	1.0			1	2	4:NA=901400
97	c16o0297	SAMPLE	193274-010	123097	Filtra	17-MAR-2007 17:56	10.0	1.0			1	2	1:NA=117700
98	c16o0298	SAMPLE	193274-011	123097	Filtra	17-MAR-2007 18:01	10.0	1.0			1	2	
99	c16o0299	X	RINSE			17-MAR-2007 18:07	1.0					2	
00	c16o0300	X	RINSE			17-MAR-2007 18:13	1.0					2	

tds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
lags used: t=tune failure

nalyst: RCB Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
01	c16o0301	X	RINSE			17-MAR-2007 18:18	1.0					2	
02	c16o0302	CCV				17-MAR-2007 18:24	1.0	1.0			1	14 2	
03	c16o0303	X	RINSE			17-MAR-2007 18:29	1.0					2	
04	c16o0304	X				17-MAR-2007 18:35	1.0	1.0	4		1	2	
05	c16o0305	X				17-MAR-2007 18:40	1.0	1.0	3		1	2	
06	c16o0306	CCB				17-MAR-2007 18:46	1.0	1.0	2		1	2	
07	c16o0307	SAMPLE	193274-012	123097	Filtra	17-MAR-2007 18:51	10.0	1.0			1	2	5:NA=1090000
08	c16o0308	SAMPLE	193274-013	123097	Filtra	17-MAR-2007 18:57	10.0	1.0			1	2	
09	c16o0309	SAMPLE	193274-014	123097	Filtra	17-MAR-2007 19:02	10.0	1.0			1	2	
10	c16o0310	SAMPLE	193274-015	123097	Filtra	17-MAR-2007 19:08	10.0	1.0			1	2	
11	c16o0311	SAMPLE	193274-016	123097	Filtra	17-MAR-2007 19:13	10.0	1.0			1	2	
12	c16o0312	SAMPLE	193383-003	123097	Water	17-MAR-2007 19:19	10.0	1.0			1	2	1:NA=77010.0
13	c16o0313	ICSA				17-MAR-2007 19:24	1.0	1.0			1	10 2	7:CA=297500
14	c16o0314	ICSAB				17-MAR-2007 19:30	1.0	1.0			1	11 2	10:CA=318300
15	c16o0315	X	RINSE			17-MAR-2007 19:35	1.0					2	
16	c16o0316	X	RINSE			17-MAR-2007 19:41	1.0					2	
17	c16o0317	X	RINSE			17-MAR-2007 19:47	1.0					2	
18	c16o0318	X	RINSE			17-MAR-2007 19:52	1.0					2	
19	c16o0319	BLANK	QC379439	123162	Filtra	17-MAR-2007 19:58	1.0	1.0	1		1	2	
20	c16o0320	BS	QC379440	123162	Filtra	17-MAR-2007 20:03	1.0	1.0	1		1	2	
21	c16o0321	X	RINSE			17-MAR-2007 20:09	1.0					2	
22	c16o0322	X	RINSE			17-MAR-2007 20:15	1.0					2	
23	c16o0323	X	RINSE			17-MAR-2007 20:20	1.0					2	
24	c16o0324	CCV				17-MAR-2007 20:25	1.0	1.0			1	14 2	
25	c16o0325	X	RINSE			17-MAR-2007 20:32	1.0					2	
26	c16o0326	CCB				17-MAR-2007 20:37	1.0	1.0	2		1	2	
27	c16o0327	X				17-MAR-2007 20:43	1.0	1.0	2		1	2	
28	c16o0328	X				17-MAR-2007 20:48	1.0	1.0	3		1	2	
29	c16o0329	BSD	QC379441	123162	Filtra	17-MAR-2007 20:54	1.0	1.0	1		1	2	
30	c16o0330	X	RINSE			17-MAR-2007 21:00	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
31	c16o0331	MSS	193373-001	123162	Filtra	17-MAR-2007 21:06	10.0	1.0	5		1	2	4:NA=220700
32	c16o0332	SER	QC379444	123162	Filtra	17-MAR-2007 21:11	50.0	1.0			1	2	1:NA=43540.0
33	c16o0333	MS	QC379442	123162	Filtra	17-MAR-2007 21:16	10.0	1.0			1	2	4:NA=210100
34	c16o0334	MSD	QC379443	123162	Filtra	17-MAR-2007 21:22	10.0	1.0			1	2	4:NA=218200
35	c16o0335	PDS	QC379445	123162	Filtra	17-MAR-2007 21:27	10.0	1.0			1	12 13 2	4:NA=223700
36	c16o0336	SAMPLE	193373-002	123162	Filtra	17-MAR-2007 21:33	10.0	1.0	2		1	2	2:NA=618400
37	c16o0337	SAMPLE	193373-003	123162	Filtra	17-MAR-2007 21:38	10.0	1.0			1	2	4:NA=650900
38	c16o0338	SAMPLE	193373-004	123162	Filtra	17-MAR-2007 21:44	10.0	1.0			1	2	2:NA=541500
39	c16o0339	SAMPLE	193373-005	123162	Filtra	17-MAR-2007 21:49	10.0	1.0			1	2	2:NA=580300
40	c16o0340	X	RINSE			17-MAR-2007 21:55	1.0					2	
41	c16o0341	X	RINSE			17-MAR-2007 22:00	1.0					2	
42	c16o0342	X	RINSE			17-MAR-2007 22:06	1.0					2	
43	c16o0343	CCV				17-MAR-2007 22:11	1.0	1.0			1	14 2	
44	c16o0344	X	RINSE			17-MAR-2007 22:17	1.0					2	
45	c16o0345	X				17-MAR-2007 22:23	1.0	1.0	4		1	2	
46	c16o0346	X				17-MAR-2007 22:28	1.0	1.0	4		1	2	
47	c16o0347	CCB				17-MAR-2007 22:33	1.0	1.0	2		1	2	
48	c16o0348	SAMPLE	193373-006	123162	Filtra	17-MAR-2007 22:39	10.0	1.0			1	2	1:NA=28030.0
49	c16o0349	SAMPLE	193373-007	123162	Filtra	17-MAR-2007 22:44	10.0	1.0			1	2	1:NA=76790.0
50	c16o0350	SAMPLE	193373-008	123162	Filtra	17-MAR-2007 22:50	10.0	1.0			1	2	1:NA=124000
51	c16o0351	SAMPLE	193373-009	123162	Filtra	17-MAR-2007 22:55	10.0	1.0			1	2	1:NA=133300
52	c16o0352	SAMPLE	193373-010	123162	Filtra	17-MAR-2007 23:01	10.0	1.0			1	2	4:NA=80250.0
53	c16o0353	SAMPLE	193373-011	123162	Filtra	17-MAR-2007 23:06	10.0	1.0			1	2	
54	c16o0354	SAMPLE	193373-012	123162	Filtra	17-MAR-2007 23:12	10.0	1.0			1	2	2:NA=244700
55	c16o0355	SAMPLE	193415-014	123162	Water	17-MAR-2007 23:17	10.0	1.0			1	2	
56	c16o0356	SAMPLE	193426-001	123162	Water	17-MAR-2007 23:23	10.0	1.0			1	2	2:NA=233300
57	c16o0357	SAMPLE	193426-002	123162	Water	17-MAR-2007 23:28	10.0	1.0	1		1	2	2:NA=109300
58	c16o0358	X	RINSE			17-MAR-2007 23:34	1.0					2	
59	c16o0359	X	RINSE			17-MAR-2007 23:39	1.0					2	
60	c16o0360	X	RINSE			17-MAR-2007 23:45	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCA Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67108851 Instrument: MET06 Agilent ICP-MS MET06 Begun: 16-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
361	c16o0361	CCV				17-MAR-2007 23:50	1.0	1.0			1	14 2	
362	c16o0362	X	RINSE			17-MAR-2007 23:55	1.0					2	
363	c16o0363	X				18-MAR-2007 00:01	1.0	1.0	2		1	2	
364	c16o0364	X				18-MAR-2007 00:06	1.0	1.0	3		1	2	
365	c16o0365	CCB				18-MAR-2007 00:12	1.0	1.0	2		1	2	
366	c16o0366	X				18-MAR-2007 00:16	1.0	1.0	4			1 t	
367	c16o0367	X	RINSE			18-MAR-2007 00:24	1.0					2	
368	c16o0368	X	RINSE			18-MAR-2007 00:30	1.0					2	
369	c16o0369	X	RINSE			18-MAR-2007 00:35	1.0					2	
370	c16o0370	X	RINSE			18-MAR-2007 00:41	1.0					2	
371	c16o0371	CCV				18-MAR-2007 00:46	1.0	1.0			1	14 2	
372	c16o0372	X	RINSE			18-MAR-2007 00:52	1.0					2	
373	c16o0373	CCB				18-MAR-2007 00:57	1.0	1.0	2		1	2	
374	c16o0374	X				18-MAR-2007 01:03	1.0	1.0	1		1	2	
375	c16o0375	X				18-MAR-2007 01:08	1.0	1.0	1		1	2	
376	c16o0376	ICSA				18-MAR-2007 01:13	1.0	1.0			1	10 2	7:CA=298600
377	c16o0377	ICSAB				18-MAR-2007 01:19	1.0	1.0			1	11 2	10:CA=308900

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5055 14=S5654
Flags used: t=tune failure

Analyst: RCH Date: 3/19/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57113086001
Units : ug/L

Date : 19-MAR-2007 13:00
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c19m0005	57113086005		19-MAR-2007 13:05	S5647
L2	c19m0006	57113086006		19-MAR-2007 13:09	S5648
L3	c19m0007	57113086007		19-MAR-2007 13:13	S5649
L4	c19m0008	57113086008		19-MAR-2007 13:17	S5650
L5	c19m0009	57113086009		19-MAR-2007 13:21	S5644
L6	c19m0010	57113086010		19-MAR-2007 13:25	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	0.6019	0.4283	0.3425	0.2525	0.2509	0.2437	BLNK	-33.745	4.08774		0.3533	1.000	0.995	
Antimony	0.3604	0.3125	0.3184	0.2849	0.2927	0.2918	BLNK	-0.0577	3.42657		0.3101	1.000	0.995	
Arsenic	0.7673	0.6495	0.5609	0.5124	0.5085	0.4956	BLNK	-0.0064	2.00721		0.5824	1.000	0.995	
Barium	0.3334	0.2409	0.2740	0.1269	0.1250	0.1240	BLNK	-0.3722	8.06982		0.2040	1.000	0.995	
Beryllium	0.2603	0.2478	0.2532	0.2310	0.2404	0.2469	BLNK	-0.0159	4.07286		0.2466	1.000	0.995	
Cadmium	1.1143	0.9376	0.8672	0.7328	0.7093	0.6855	BLNK	-0.1278	1.44964		0.8411	1.000	0.995	
Calcium	0.0987	0.0566	0.0394	0.0217	0.0207	0.0198	BLNK	-98.438	50.3535		0.0428	1.000	0.995	
Chromium	13.988	9.2903	7.2397	4.8190	4.2891	4.1541	BLNK	-0.5463	0.23991		7.2967	1.000	0.995	
Cobalt	5.6962	5.5858	5.6449	5.3147	5.3637	5.1341	BLNK	-0.0199	0.19306		5.4566	1.000	0.995	
Copper	4.0503	2.3125	2.0279	1.3161	1.2337	1.2049	BLNK	-0.3952	0.82784		2.0242	1.000	0.995	
Iron	0.3023	0.1948	0.1648	0.1263	0.1260	0.1225	BLNK	-38.344	8.13671		0.1728	1.000	0.995	
Lead	3.1916	2.1398	1.6265	1.0549	1.0802	1.0661	BLNK	-0.5157	0.93855		1.6932	1.000	0.995	
Magnesium	0.0455	0.0379	0.0371	0.0329	0.0324	0.0313	BLNK	-8.1984	31.7446		0.0362	1.000	0.995	
Manganese	9.4402	8.0992	7.2953	6.1752	6.0199	5.8038	BLNK	-0.1473	0.17116		7.1389	1.000	0.995	
Molybdenum	1.3045	1.0407	0.9731	0.8877	0.8835	0.8869	BLNK	-0.1529	1.12948		0.9961	1.000	0.995	
Nickel	2.9906	2.0764	1.6995	1.2028	1.1480	1.1179	BLNK	-0.4201	0.89196		1.7059	1.000	0.995	
Potassium	2.9509	1.7482	1.1864	0.6233	0.5862	0.5587	BLNK	-104.08	1.78348		1.2756	1.000	0.995	
Selenium	0.0645	0.0677	0.0394	0.0375	0.0364	0.0345	BLNK	0.18214	28.6556		0.0467	0.999	0.995	
Silver	3.1047	3.0747	3.0235	2.8431	2.7621	2.4996	BLNK	-0.0280	0.39181		2.8846	0.997	0.995	
Sodium	1.3274	0.8197	0.6262	0.4280	0.4223	0.4151	BLNK	-51.262	2.40825		0.6731	1.000	0.995	
Thallium	0.9035	0.8428	0.8446	0.8027	0.8431	0.8558	BLNK	-0.0171	1.17232		0.8488	1.000	0.995	
Vanadium	7.9840	7.0172	6.1870	5.0742	4.5628	4.4315	BLNK	-0.1748	0.22451		5.8761	1.000	0.995	
Zinc	12.701	6.9852	4.2390	1.0943	0.7973	0.7604	BLNK	-3.9880	1.33347		4.4295	1.000	0.995	

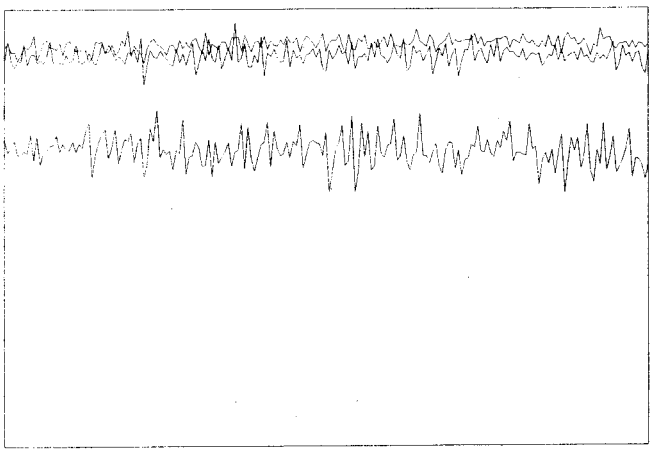
Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Silver	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.1250	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

57113086001

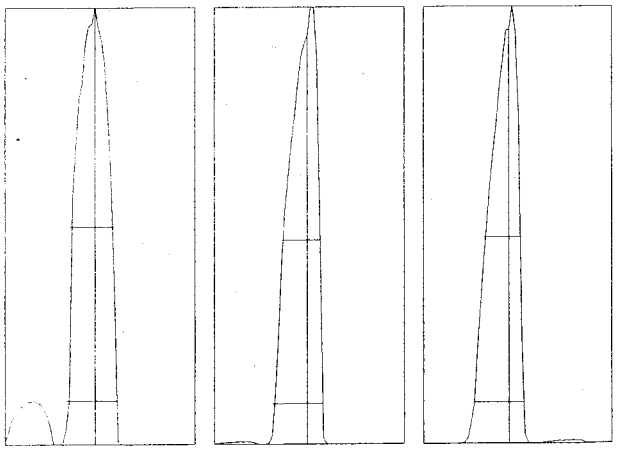
Tune Report

Tune File : nogas.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.326%
Doubly Charged:	70/140	1.191%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13010.0	13530.0	5.31	30.10
89	20,000	18223.0	17857.9	2.24	12.60
205	20,000	18394.0	18401.2	1.52	16.90
156/140	1	0.354%	0.313%	10.00	
70/140	2	1.192%	1.191%	7.99	



m/z:	7	89	205
Height:	14,035	17,638	18,840
Axis:	6.95	89.00	204.90
W-50%:	0.70	0.60	0.60
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 19, 2007 10:28:52
Printed : Mar 19, 2007 10:28:54

Tune Report

Tune File : nogas.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	-110 V	AMU Gain	:	129
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	125
Smpl Depth	:	5.5 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9985
Torch-H	:	-1.1 mm	Einzel 2	:	7 V	Axis Offset	:	0.04
Torch-V	:	0.9 mm	Omega Bias	:	-60 V	QP Bias	:	-1 V
Carrier Gas	:	1.05 L/min	Omega (+)	:	5 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-5 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	5 V	Discriminator	:	9.2 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-3 V	Analog HV	:	1830 V
Sample Pump	:	--- rps				Pulse HV	:	1380 V
S/C Temp	:	2 degC						

Generated : Mar 19, 2007 10:28:52
Printed : Mar 19, 2007 10:28:56

00274

P/A Factor Tuning Report

Acquired:Mar 19 2007 10:40 am

Mass[amu]	Element	P/A Factor
6	Li	0.070663
9	Be	0.082685
23	Na	Sensitivity too high
25	Mg	0.090039
26	Mg	0.090002
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.096976
44	Ca	0.101923
45	Sc	0.098937
51	V	0.092087
52	Cr	Sensitivity too low
53	Cr	0.098183
54	Fe	0.098826
55	Mn	Sensitivity too low
57	Fe	0.110283
59	Co	Sensitivity too low
60	Ni	0.108175
63	Cu	0.112034
65	Cu	0.109978
66	Zn	0.107461
72	Ge	0.104780
75	As	0.105065
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.108529
95	Mo	0.106004
98	Mo	0.107530
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.113750
111	Cd	Sensitivity too low
114	Cd	0.112809
115	In	0.114515
118	(In)	Sensitivity too low
121	Sb	0.114967
135	Ba	Sensitivity too low
137	Ba	0.112179
159	Tb	0.119766
166	Er	Sensitivity too low
205	Tl	0.121495
206	(Pb)	0.119833
207	(Pb)	0.119160
208	Pb	0.122207
209	Bi	0.121025

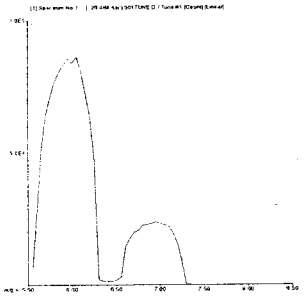
===Detector Parameters===
Discriminator: 9.2 mV
Analog HV: 1830 V
Pulse HV: 1380 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C19m00.B\001TUNE.D
Date Acquired:	Mar 19 2007 12:46 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	2.20	5.00	
59 Co	1.02	5.00	
115 In	1.75	5.00	
205 Tl	0.21	5.00	



7 Li

Mass Calib.

Actual: 6.95

Required: 6.90 - 7.10

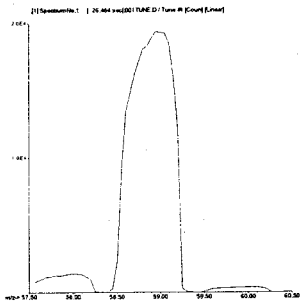
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

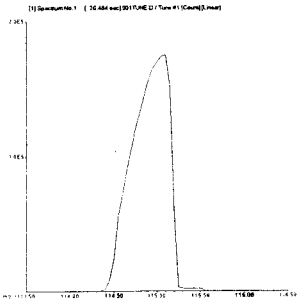
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



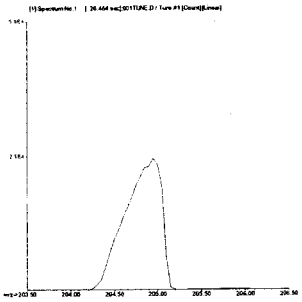
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.50
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004C
Date Acquired: Mar 19 2007 01:00 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:03 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	809266.88	A	18440.00	2.28
9	Be	63.33	P	8.82	13.93
23	Na	409883.09	M	68300.00	16.66
26	Mg	4970.00	P	1229.00	24.73
27	Al	159076.70	P	10260.00	6.45
39	K	1124988.00	A	19380.00	1.72
44	Ca	37676.62	P	1697.00	4.50
45	Sc	964042.50	A	11050.00	1.15
51	V	2561.88	P	1753.00	68.43
52	Cr	7505.56	P	186.30	2.48
55	Mn	2836.67	P	113.70	4.01
57	Fe	15536.67	P	1593.00	10.25
59	Co	340.00	P	68.88	20.26
60	Ni	1552.22	P	100.10	6.45
65	Cu	1573.31	P	78.60	5.00
66	Zn	9857.55	P	348.40	3.53
72	Ge	164788.00	P	867.60	0.53
75	As	10.03	P	152.60	1521.00
82	Se	-21.11	P	58.73	278.19
95	Mo	446.67	P	147.30	32.98
109	Ag	235.56	P	32.89	13.96
111	Cd	290.38	P	30.59	10.53
115	In	1539479.00	A	11710.00	0.76
121	Sb	517.78	P	47.30	9.14
137	Ba	1420.00	P	50.44	3.55
205	Tl	353.33	P	12.02	3.40
208	Pb	13348.89	P	434.30	3.25
209	Bi	1214998.00	A	11230.00	0.92

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\005CALI.D\005CALI.D#
Date Acquired: Mar 19 2007 01:05 pm
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:03 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	805602.13	A	11920.00	1.48
9 Be	1047.78	P	39.49	3.77
23 Na	635738.19	A	32720.00	5.15
26 Mg	21802.22	P	479.80	2.20
27 Al	288357.81	P	2935.00	1.02
39 K	1413834.00	A	10370.00	0.73
44 Ca	47265.31	P	1267.00	2.68
45 Sc	958687.69	A	22970.00	2.40
51 V	6521.48	P	376.30	5.77
52 Cr	11423.33	P	265.40	2.32
55 Mn	7710.00	P	217.80	2.82
57 Fe	24693.33	P	680.80	2.76
59 Co	4652.22	P	143.10	3.08
60 Ni	2442.22	P	45.26	1.85
65 Cu	3307.68	P	3.85	0.12
66 Zn	10372.00	P	35.14	0.34
72 Ge	163333.80	P	856.70	0.52
75 As	626.69	P	36.11	5.76
82 Se	52.67	P	25.79	48.97
95 Mo	1065.56	P	79.04	7.42
109 Ag	2535.56	P	22.69	0.89
111 Cd	909.98	P	5.38	0.59
115 In	1539418.00	A	20080.00	1.30
121 Sb	2774.44	P	64.06	2.31
137 Ba	2567.78	P	209.80	8.17
205 Tl	2730.00	P	147.30	5.40
208 Pb	19295.55	P	214.60	1.11
209 Bi	1209239.00	A	13920.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	805602.06	1.4796	809266.88	99.55	80 - 120	
45 Sc	958687.69	2.396	964042.5	99.44	80 - 120	
72 Ge	163333.78	0.5245	164788	99.12	80 - 120	
115 In	1539418.4	1.3044	1539478.6	100.00	80 - 120	
209 Bi	1209239.1	1.1511	1214998.3	99.53	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\006CALI.D\006CALI.D#
Date Acquired: Mar 19 2007 01:09 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:07 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	800716.31	A	15910.00	1.99
9 Be	1984.44	P	101.50	5.11
23 Na	782529.63	A	27160.00	3.47
26 Mg	36232.22	P	450.50	1.24
27 Al	408943.31	P	4867.00	1.19
39 K	1669214.00	A	2368.00	0.14
44 Ca	54048.95	P	340.50	0.63
45 Sc	954905.88	A	9804.00	1.03
51 V	11433.18	P	939.60	8.22
52 Cr	15131.11	P	186.80	1.23
55 Mn	13190.00	P	166.00	1.26
57 Fe	31727.78	P	164.60	0.52
59 Co	9097.78	P	127.30	1.40
60 Ni	3382.22	P	108.80	3.22
65 Cu	3765.39	P	164.50	4.37
66 Zn	11376.67	P	85.46	0.75
72 Ge	162871.30	P	1190.00	0.73
75 As	1057.56	P	231.20	21.86
82 Se	110.44	P	50.65	45.86
95 Mo	1694.44	P	112.90	6.66
109 Ag	5006.67	P	272.40	5.44
111 Cd	1526.83	P	52.06	3.41
115 In	1555350.00	A	22580.00	1.45
121 Sb	4860.00	P	89.88	1.85
137 Ba	3746.67	P	39.30	1.05
205 Tl	5078.89	P	243.30	4.79
208 Pb	25795.55	P	126.90	0.49
209 Bi	1205717.00	A	16950.00	1.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	800716.31	1.987	809266.88	98.94	80 - 120	
45 Sc	954905.94	1.0267	964042.5	99.05	80 - 120	
72 Ge	162871.33	0.7306	164788	98.84	80 - 120	
115 In	1555350.4	1.4518	1539478.6	101.03	80 - 120	
209 Bi	1205717.4	1.4058	1214998.3	99.24	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\007CALI.D\007CALI.D#
Date Acquired: Mar 19 2007 01:13 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:11 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	791287.13	A	14180.00	1.79
9 Be	4006.67	P	41.77	1.04
23 Na	1215479.00	A	24970.00	2.05
26 Mg	72022.22	P	1489.00	2.07
27 Al	664794.13	A	5319.00	0.80
39 K	2303346.00	A	20400.00	0.89
44 Ca	76399.13	P	510.80	0.67
45 Sc	970785.63	A	13090.00	1.35
51 V	20342.28	P	465.50	2.29
52 Cr	23803.33	P	112.90	0.47
55 Mn	23988.89	P	399.30	1.66
57 Fe	54181.11	P	284.10	0.52
59 Co	18561.11	P	168.20	0.91
60 Ni	5587.78	P	60.03	1.07
65 Cu	6668.56	P	160.00	2.40
66 Zn	13938.67	P	172.90	1.24
72 Ge	164407.80	P	1564.00	0.95
75 As	1844.67	P	192.20	10.42
82 Se	129.78	P	33.27	25.64
95 Mo	3200.00	P	72.11	2.25
109 Ag	9942.22	P	172.90	1.74
111 Cd	2851.90	P	71.16	2.50
115 In	1552491.00	A	12810.00	0.83
121 Sb	9887.78	P	225.50	2.28
137 Ba	8506.67	P	136.20	1.60
205 Tl	10140.00	P	251.10	2.48
208 Pb	39061.11	P	624.50	1.60
209 Bi	1200892.00	A	14720.00	1.23

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	791287.13	1.792	809266.88	97.78	80 - 120	
45 Sc	970785.63	1.3484	964042.5	100.70	80 - 120	
72 Ge	164407.78	0.9513	164788	99.77	80 - 120	
115 In	1552490.8	0.8251	1539478.6	100.85	80 - 120	
209 Bi	1200892.5	1.2258	1214998.3	98.84	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\008CALI.D\008CALI.D#
Date Acquired: Mar 19 2007 01:17 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:15 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	817307.38	A	4120.00	0.50
9 Be	37751.11	P	96.23	0.25
23 Na	8489816.00	A	252300.00	2.97
26 Mg	653231.00	A	2304.00	0.35
27 Al	5010032.00	A	61670.00	1.23
39 K	12365170.00	A	2470.00	0.02
44 Ca	430021.00	P	1685.00	0.39
45 Sc	991993.63	A	9937.00	1.00
51 V	172954.20	P	1022.00	0.59
52 Cr	164261.09	P	632.10	0.38
55 Mn	210491.09	P	809.10	0.38
57 Fe	430515.50	P	1656.00	0.38
59 Co	181153.30	P	859.10	0.47
60 Ni	41000.00	P	361.30	0.88
65 Cu	44863.61	P	307.40	0.69
66 Zn	37299.55	P	69.44	0.19
72 Ge	170450.20	P	2394.00	1.40
75 As	17466.96	P	365.60	2.09
82 Se	1277.11	P	26.01	2.04
95 Mo	30260.00	P	568.20	1.88
109 Ag	96908.88	P	244.50	0.25
111 Cd	24975.29	P	354.20	1.42
115 In	1563410.00	A	9028.00	0.58
121 Sb	89075.55	P	1015.00	1.14
137 Ba	39676.67	P	310.00	0.78
205 Tl	97534.45	P	1168.00	1.20
208 Pb	256364.41	P	112.40	0.04
209 Bi	1215138.00	A	7292.00	0.60

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	817307.38	0.5041	809266.88	100.99	80 - 120	
45 Sc	991993.63	1.0017	964042.5	102.90	80 - 120	
72 Ge	170450.22	1.4045	164788	103.44	80 - 120	
115 In	1563409.6	0.5775	1539478.6	101.55	80 - 120	
209 Bi	1215137.9	0.6001	1214998.3	100.01	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\009CALI.D\009CALI.D#
Date Acquired: Mar 19 2007 01:21 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:19 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	804806.19	A	18150.00	2.26
9 Be	386914.41	P	6957.00	1.80
23 Na	83202360.00	A	690600.00	0.83
26 Mg	6379928.00	A	29690.00	0.47
27 Al	49434208.00	A	405500.00	0.82
39 K	115501800.00	A	359800.00	0.31
44 Ca	4080010.00	A	47560.00	1.17
45 Sc	985126.00	A	7380.00	0.75
51 V	1569785.00	A	4038.00	0.26
52 Cr	1475604.00	A	3763.00	0.26
55 Mn	2071077.00	A	25020.00	1.21
57 Fe	4336312.00	A	13760.00	0.32
59 Co	1845315.00	A	4901.00	0.27
60 Ni	394944.41	P	2589.00	0.66
65 Cu	424442.59	P	10240.00	2.41
66 Zn	274317.09	P	3041.00	1.11
72 Ge	172020.00	P	562.80	0.33
75 As	174944.50	P	698.10	0.40
82 Se	12525.33	P	132.50	1.06
95 Mo	303974.41	P	2280.00	0.75
109 Ag	950239.63	M	13200.00	1.39
111 Cd	244035.80	P	1151.00	0.47
115 In	1493329.00	A	11080.00	0.74
121 Sb	874084.50	P	2649.00	0.30
137 Ba	373180.00	P	1560.00	0.42
205 Tl	983958.81	P	3739.00	0.38
208 Pb	2521238.00	A	8385.00	0.33
209 Bi	1167100.00	A	10730.00	0.92

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	804806.25	2.2552	809266.88	99.45	80 - 120	
45 Sc	985126	0.7491	964042.5	102.19	80 - 120	
72 Ge	172020	0.3272	164788	104.39	80 - 120	
115 In	1493328.6	0.742	1539478.6	97.00	80 - 120	
209 Bi	1167099.8	0.9194	1214998.3	96.06	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19m00.B\010CALI.D\010CALI.D#
Date Acquired: Mar 19 2007 01:25 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 19 2007 01:23 pm
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	814050.19	A	7324.00	0.90
9 Be	803879.50	A	10560.00	1.31
23 Na	164447600.00	A	2569000.00	1.56
26 Mg	12399040.00	A	177100.00	1.43
27 Al	96536864.00	A	1012000.00	1.05
39 K	221321410.00	A	2374000.00	1.07
44 Ca	7841485.00	A	55120.00	0.70
45 Sc	990388.63	A	8870.00	0.90
51 V	3019873.00	A	13230.00	0.44
52 Cr	2830819.00	A	16330.00	0.58
55 Mn	3955002.00	A	15350.00	0.39
57 Fe	8345797.00	A	16620.00	0.20
59 Co	3498507.00	A	15390.00	0.44
60 Ni	761761.13	P	5799.00	0.76
65 Cu	821110.13	M	5538.00	0.67
66 Zn	518163.31	P	3581.00	0.69
72 Ge	170366.00	P	1140.00	0.67
75 As	337737.00	P	949.70	0.28
82 Se	23484.22	P	191.60	0.82
95 Mo	604324.38	P	6427.00	1.06
109 Ag	1703530.00	A	50760.00	2.98
111 Cd	467141.19	P	1283.00	0.27
115 In	1454894.00	A	6581.00	0.45
121 Sb	1697984.00	A	5790.00	0.34
137 Ba	721640.00	P	7143.00	0.99
205 Tl	1971583.00	A	7342.00	0.37
208 Pb	4911876.00	A	13140.00	0.27
209 Bi	1151909.00	A	8460.00	0.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	814050.19	0.8997	809266.88	100.59	80 - 120	
45 Sc	990388.63	0.8956	964042.5	102.73	80 - 120	
72 Ge	170366	0.6692	164788	103.38	80 - 120	
115 In	1454893.9	0.4523	1539478.6	94.51	80 - 120	
209 Bi	1151909.1	0.7344	1214998.3	94.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19m00.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086014 File : c19m0014 Time : 19-MAR-2007 13:41
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.3533	0.2466	10000	10040	ug/L	0	10	
Antimony	0.3101	0.2822	100.0	96.64	ug/L	-3	10	
Arsenic	0.5824	0.5054	100.0	101.4	ug/L	1	10	
Barium	0.2040	0.1201	100.0	96.53	ug/L	-3	10	
Beryllium	0.2466	0.2319	100.0	94.44	ug/L	-6	10	
Cadmium	0.8411	0.7467	100.0	108.1	ug/L	8	10	
Calcium	0.0428	0.0204	10000	10180	ug/L	2	10	
Chromium	7.2967	4.3982	100.0	105.0	ug/L	5	10	
Cobalt	5.4566	5.3427	100.0	103.1	ug/L	3	10	
Copper	2.0242	1.2352	100.0	101.9	ug/L	2	10	
Iron	0.1728	0.1280	10000	10380	ug/L	4	10	
Lead	1.6932	1.0656	100.0	99.49	ug/L	-1	10	
Magnesium	0.0362	0.0311	10000	9876	ug/L	-1	10	
Manganese	7.1389	6.1102	100.0	104.4	ug/L	4	10	
Molybdenum	0.9961	0.9278	100.0	104.6	ug/L	5	10	
Nickel	1.7059	1.1472	100.0	101.9	ug/L	2	10	
Potassium	1.2756	0.5779	10000	10200	ug/L	2	10	
Selenium	0.0467	0.0369	100.0	105.9	ug/L	6	10	
Silver	2.8846	2.8817	100.0	112.9	ug/L	**13**	10	v+ ***
Sodium	0.6731	0.4005	10000	9594	ug/L	-4	10	
Thallium	0.8488	0.8384	50.00	49.12	ug/L	-2	10	
Vanadium	5.8761	4.6319	100.0	103.8	ug/L	4	10	
Zinc	4.4295	0.7953	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	835096	3.19
Scandium	964043	1020146	5.82
Germanium	164788	171495	4.07
Indium	1539479	1589610	3.26
Bismuth	1214998	1267642	4.33

+=high bias v=ICV

57113086014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57113086036 File : c19m0036
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 19-MAR-2007 15:12

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2517	10000	10250	ug/L	3	10	
Antimony	0.3101	0.2847	100.0	97.48	ug/L	-3	10	
Arsenic	0.5824	0.4994	100.0	100.2	ug/L	0	10	
Barium	0.2040	0.1232	100.0	99.02	ug/L	-1	10	
Beryllium	0.2466	0.2337	100.0	95.18	ug/L	-5	10	
Cadmium	0.8411	0.7199	100.0	104.2	ug/L	4	10	
Calcium	0.0428	0.0204	10000	10160	ug/L	2	10	
Chromium	7.2967	4.2857	100.0	102.3	ug/L	2	10	
Cobalt	5.4566	5.2670	100.0	101.7	ug/L	2	10	
Copper	2.0242	1.2130	100.0	100.0	ug/L	0	10	
Iron	0.1728	0.1255	10000	10170	ug/L	2	10	
Lead	1.6932	1.0580	100.0	98.78	ug/L	-1	10	
Magnesium	0.0362	0.0321	10000	10190	ug/L	2	10	
Manganese	7.1389	5.9757	100.0	102.1	ug/L	2	10	
Molybdenum	0.9961	0.8782	100.0	99.03	ug/L	-1	10	
Nickel	1.7059	1.1240	100.0	99.83	ug/L	0	10	
Potassium	1.2756	0.5771	10000	10190	ug/L	2	10	
Selenium	0.0467	0.0359	100.0	102.9	ug/L	3	10	
Silver	2.8846	2.7850	100.0	109.1	ug/L	9	10	
Sodium	0.6731	0.4205	10000	10080	ug/L	1	10	
Thallium	0.8488	0.8167	50.00	47.85	ug/L	-4	10	
Vanadium	5.8761	4.5606	100.0	102.2	ug/L	2	10	
Zinc	4.4295	0.7835	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	767863	-5.12
Scandium	964043	909083	-5.70
Germanium	164788	156038	-5.31
Indium	1539479	1424629	-7.46
Bismuth	1214998	1208795	-0.51

57113086036

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086056 File : c19m0056 Time : 19-MAR-2007 16:36
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2458	10000	10010	ug/L	0	10	
Antimony	0.3101	0.2844	100.0	97.38	ug/L	-3	10	
Arsenic	0.5824	0.5009	100.0	100.5	ug/L	1	10	
Barium	0.2040	0.1224	100.0	98.43	ug/L	-2	10	
Beryllium	0.2466	0.2275	100.0	92.63	ug/L	-7	10	
Cadmium	0.8411	0.7400	100.0	107.1	ug/L	7	10	
Calcium	0.0428	0.0204	10000	10190	ug/L	2	10	
Chromium	7.2967	4.3297	100.0	103.3	ug/L	3	10	
Cobalt	5.4566	5.2646	100.0	101.6	ug/L	2	10	
Copper	2.0242	1.2269	100.0	101.2	ug/L	1	10	
Iron	0.1728	0.1253	10000	10160	ug/L	2	10	
Lead	1.6932	1.0724	100.0	100.1	ug/L	0	10	
Magnesium	0.0362	0.0310	10000	9844	ug/L	-2	10	
Manganese	7.1389	6.0146	100.0	102.8	ug/L	3	10	
Molybdenum	0.9961	0.9046	100.0	102.0	ug/L	2	10	
Nickel	1.7059	1.1258	100.0	100.0	ug/L	0	10	
Potassium	1.2756	0.5780	10000	10200	ug/L	2	10	
Selenium	0.0467	0.0363	100.0	104.3	ug/L	4	10	
Silver	2.8846	2.8744	100.0	112.6	ug/L	**13**	10	c+ ***
Sodium	0.6731	0.3951	10000	9463	ug/L	-5	10	
Thallium	0.8488	0.8267	50.00	48.44	ug/L	-3	10	
Vanadium	5.8761	4.6117	100.0	103.4	ug/L	3	10	
Zinc	4.4295	0.7860	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	771551	-4.66
Scandium	964043	920722	-4.49
Germanium	164788	156028	-5.32
Indium	1539479	1449422	-5.85
Bismuth	1214998	1211837	-0.26

+=high bias c=CCV

57113086056

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086066 File : c19m0066 Time : 19-MAR-2007 17:20
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2431	10000	9902	ug/L	-1	10	
Antimony	0.3101	0.2812	100.0	96.30	ug/L	-4	10	
Arsenic	0.5824	0.5040	100.0	101.2	ug/L	1	10	
Barium	0.2040	0.1215	100.0	97.71	ug/L	-2	10	
Beryllium	0.2466	0.2349	100.0	95.64	ug/L	-4	10	
Cadmium	0.8411	0.7299	100.0	105.7	ug/L	6	10	
Calcium	0.0428	0.0204	10000	10180	ug/L	2	10	
Chromium	7.2967	4.3037	100.0	102.7	ug/L	3	10	
Cobalt	5.4566	5.3485	100.0	103.2	ug/L	3	10	
Copper	2.0242	1.2106	100.0	99.82	ug/L	0	10	
Iron	0.1728	0.1259	10000	10210	ug/L	2	10	
Lead	1.6932	1.0628	100.0	99.24	ug/L	-1	10	
Magnesium	0.0362	0.0311	10000	9850	ug/L	-2	10	
Manganese	7.1389	6.0299	100.0	103.1	ug/L	3	10	
Molybdenum	0.9961	0.8950	100.0	100.9	ug/L	1	10	
Nickel	1.7059	1.1341	100.0	100.7	ug/L	1	10	
Potassium	1.2756	0.5769	10000	10180	ug/L	2	10	
Selenium	0.0467	0.0360	100.0	103.4	ug/L	3	10	
Silver	2.8846	2.8491	100.0	111.6	ug/L	**12**	10	c+ ***
Sodium	0.6731	0.4066	10000	9740	ug/L	-3	10	
Thallium	0.8488	0.8210	50.00	48.10	ug/L	-4	10	
Vanadium	5.8761	4.5591	100.0	102.2	ug/L	2	10	
Zinc	4.4295	0.7885	100.0	101.2	ug/L	1	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	760445	-6.03
Scandium	964043	918559	-4.72
Germanium	164788	157150	-4.64
Indium	1539479	1455284	-5.47
Bismuth	1214998	1216366	0.11

+=high bias c=CCV

57113086066

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57113086088 File : c19m0088
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 19-MAR-2007 18:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2554	10000	10410	ug/L	4	10	
Antimony	0.3101	0.2827	100.0	96.82	ug/L	-3	10	
Arsenic	0.5824	0.4790	100.0	96.15	ug/L	-4	10	
Barium	0.2040	0.1276	100.0	102.6	ug/L	3	10	
Beryllium	0.2466	0.2520	100.0	102.6	ug/L	3	10	
Cadmium	0.8411	0.5958	100.0	86.25	ug/L	**-14**	10	c- ***
Calcium	0.0428	0.0200	10000	9958	ug/L	0	10	
Chromium	7.2967	3.8649	100.0	92.18	ug/L	-8	10	
Cobalt	5.4566	4.8916	100.0	94.42	ug/L	-6	10	
Copper	2.0242	1.1533	100.0	95.08	ug/L	-5	10	
Iron	0.1728	0.1147	10000	9298	ug/L	-7	10	
Lead	1.6932	1.0441	100.0	97.48	ug/L	-3	10	
Magnesium	0.0362	0.0343	10000	10890	ug/L	9	10	
Manganese	7.1389	5.4789	100.0	93.63	ug/L	-6	10	
Molybdenum	0.9961	0.7410	100.0	83.54	ug/L	**-16**	10	c- ***
Nickel	1.7059	1.0502	100.0	93.25	ug/L	-7	10	
Potassium	1.2756	0.5459	10000	9632	ug/L	-4	10	
Selenium	0.0467	0.0333	100.0	95.70	ug/L	-4	10	
Silver	2.8846	2.3163	100.0	90.73	ug/L	-9	10	
Sodium	0.6731	0.4879	10000	11700	ug/L	**17**	10	c+ ***
Thallium	0.8488	0.8056	50.00	47.20	ug/L	-6	10	
Vanadium	5.8761	4.1206	100.0	92.34	ug/L	-8	10	
Zinc	4.4295	0.7478	100.0	95.73	ug/L	-4	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	704312	-12.97
Scandium	964043	876099	-9.12
Germanium	164788	165882	0.66
Indium	1539479	1286872	-16.41
Bismuth	1214998	1101942	-9.31

+=high bias -=low bias c=CCV

57113086088

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 57113086103 File : c19m0103
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5654, S5290

IDF : 1.0
Time : 19-MAR-2007 19:54

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.3533	0.2539	10000	10350	ug/L	4	10	
Antimony	0.3101	0.2820	100.0	96.58	ug/L	-3	10	
Arsenic	0.5824	0.4853	100.0	97.41	ug/L	-3	10	
Barium	0.2040	0.1259	100.0	101.2	ug/L	1	10	
Beryllium	0.2466	0.2454	100.0	99.95	ug/L	0	10	
Cadmium	0.8411	0.6248	100.0	90.45	ug/L	-10	10	
Calcium	0.0428	0.0202	10000	10050	ug/L	1	10	
Chromium	7.2967	3.9180	100.0	93.45	ug/L	-7	10	
Cobalt	5.4566	4.8716	100.0	94.03	ug/L	-6	10	
Copper	2.0242	1.1486	100.0	94.69	ug/L	-5	10	
Iron	0.1728	0.1163	10000	9426	ug/L	-6	10	
Lead	1.6932	1.0349	100.0	96.62	ug/L	-3	10	
Magnesium	0.0362	0.0339	10000	10760	ug/L	8	10	
Manganese	7.1389	5.5348	100.0	94.59	ug/L	-5	10	
Molybdenum	0.9961	0.7664	100.0	86.40	ug/L	**-14**	10	c- ***
Nickel	1.7059	1.0430	100.0	92.61	ug/L	-7	10	
Potassium	1.2756	0.5505	10000	9714	ug/L	-3	10	
Selenium	0.0467	0.0341	100.0	97.98	ug/L	-2	10	
Silver	2.8846	2.4249	100.0	94.98	ug/L	-5	10	
Sodium	0.6731	0.4678	10000	11210	ug/L	**12**	10	c+ ***
Thallium	0.8488	0.8017	50.00	46.98	ug/L	-6	10	
Vanadium	5.8761	4.2128	100.0	94.41	ug/L	-6	10	
Zinc	4.4295	0.7598	100.0	97.33	ug/L	-3	10	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	725333	-10.37
Scandium	964043	876742	-9.06
Germanium	164788	163295	-0.91
Indium	1539479	1331099	-13.54
Bismuth	1214998	1145290	-5.74

+=high bias -=low bias c=CCV

57113086103

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086018 File : c19m0018 Time : 19-MAR-2007 13:58
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.02247]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1267]	0.2500	0.007794	ug/L	!ib
Barium	ND	0.2500	0.004941	ug/L	
Beryllium	[0.005902]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.007956]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.01474]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.2160]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	808638	-0.08
Scandium	964043	1005898	4.34
Germanium	164788	164993	0.12
Indium	1539479	1618007	5.10
Bismuth	1214998	1279068	5.27

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57113086018

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086039
Cal : 57113086001

File : c19m0039
Caldate: 19-MAR-2007

IDF : 1.0
Time : 19-MAR-2007 15:24

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.07314]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1863]	0.2500	0.007794	ug/L	!ib
Barium	[0.03243]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.008534]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02421]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.04152]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	787551	-2.68
Scandium	964043	896864	-6.97
Germanium	164788	153199	-7.03
Indium	1539479	1422713	-7.58
Bismuth	1214998	1208325	-0.55

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57113086039

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086059 File : c19m0059 Time : 19-MAR-2007 16:48
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04143]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.1226]	0.2500	0.007794	ug/L	!ib
Barium	[0.01795]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.003853]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02523]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.2646	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.07083]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	757155	-6.44
Scandium	964043	905422	-6.08
Germanium	164788	150560	-8.63
Indium	1539479	1469768	-4.53
Bismuth	1214998	1231513	1.36

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57113086059

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086069 File : c19m0069 Time : 19-MAR-2007 17:32
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03828]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.2237]	0.2500	0.007794	ug/L	!ib
Barium	[0.01006]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.008526]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02107]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.3795	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.03826]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	759310	-6.17
Scandium	964043	909202	-5.69
Germanium	164788	153357	-6.94
Indium	1539479	1470842	-4.46
Bismuth	1214998	1222932	0.65

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57113086069

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
Seqnum : 57113086091 File : c19m0091
Cal : 57113086001 Caldate: 19-MAR-2007

IDF : 1.0
Time : 19-MAR-2007 19:04

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04308]	0.2500	0.01065	ug/L	!ib
Arsenic	0.3196	0.2500	0.007794	ug/L	ib ***
Barium	[0.03230]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.007112]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.02095]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	0.2693	0.2500	0.3448	ug/L	ib ***
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1429]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	717002	-11.40
Scandium	964043	863444	-10.44
Germanium	164788	155582	-5.59
Indium	1539479	1339983	-12.96
Bismuth	1214998	1117487	-8.03

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57113086091

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086106 File : c19m0106 Time : 19-MAR-2007 20:09
Cal : 57113086001 Caldate: 19-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.05937]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.2259]	0.2500	0.007794	ug/L	!ib
Barium	[0.03629]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.006442]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	ND	0.2500	0.002798	ug/L	
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	ND	0.2500	0.009973	ug/L	
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1503]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	739703	-8.60
Scandium	964043	878111	-8.91
Germanium	164788	157490	-4.43
Indium	1539479	1359786	-11.67
Bismuth	1214998	1151243	-5.25

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57113086106

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
Seqnum : 57113086019 File : c19m0019
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 19-MAR-2007 14:02

Analyte	Quant	RL	Units	Flags
Antimony	[0.1577]	0.2500	ug/L	
Arsenic	[0.09260]	0.2500	ug/L	
Barium	1.028	0.2500	ug/L	
Beryllium	[0.01957]	0.2500	ug/L	
Cadmium	[0.1063]	0.2500	ug/L	
Chromium	1.691	0.2500	ug/L	
Cobalt	0.4440	0.2500	ug/L	
Copper	1.780	0.2500	ug/L	
Lead	[0.1409]	0.2500	ug/L	
Manganese	0.6626	0.2500	ug/L	
Nickel	2.065	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2344]	0.2500	ug/L	
Thallium	[0.03854]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	0.9645	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	94970	ug/L	95
Calcium	300000	306900	ug/L	102
Iron	250000	236400	ug/L	95
Magnesium	100000	92580	ug/L	93
Molybdenum	2000	1963	ug/L	98
Potassium	100000	99630	ug/L	100
Sodium	250000	220600	ug/L	88

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	694920	-14.13
Scandium	964043	903584	-6.27
Germanium	164788	165562	0.47
Indium	1539479	1304472	-15.27
Bismuth	1214998	900191	-25.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086020 File : c19m0020 Time : 19-MAR-2007 14:06
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	90070	ug/L	-10		
Arsenic	100.0	99.13	ug/L	-1	20	
Cadmium	100.0	87.71	ug/L	-12	20	
Calcium	300000	288500	ug/L	-4		
Chromium	200.0	202.3	ug/L	1	20	
Cobalt	200.0	190.7	ug/L	-5	20	
Copper	200.0	180.2	ug/L	-10	20	
Iron	250000	222300	ug/L	-11		
Magnesium	100000	90000	ug/L	-10		
Manganese	200.0	199.1	ug/L	0	20	
Molybdenum	2000	1807	ug/L	-10		
Nickel	200.0	187.4	ug/L	-6	20	
Potassium	100000	93160	ug/L	-7		
Selenium	100.0	83.27	ug/L	-17	20	
Silver	50.00	43.72	ug/L	-13	20	
Sodium	250000	218800	ug/L	-12		
Vanadium	200.0	205.2	ug/L	3	20	
Zinc	100.0	84.86	ug/L	-15	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	958096	-0.62
Germanium	164788	176758	7.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
Seqnum : 57113086041 File : c19m0041
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 19-MAR-2007 15:33

Analyte	Quant	RL	Units	Flags
Antimony	0.2631	0.2500	ug/L	
Arsenic	[0.1986]	0.2500	ug/L	
Barium	1.043	0.2500	ug/L	
Beryllium	[0.02122]	0.2500	ug/L	
Cadmium	[0.1137]	0.2500	ug/L	
Chromium	1.687	0.2500	ug/L	
Cobalt	0.4269	0.2500	ug/L	
Copper	1.761	0.2500	ug/L	
Lead	[0.1435]	0.2500	ug/L	
Manganese	0.7032	0.2500	ug/L	
Nickel	1.981	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1958]	0.2500	ug/L	
Thallium	[0.03814]	0.1250	ug/L	
Vanadium	[0.09939]	0.2500	ug/L	
Zinc	1.006	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	95910	ug/L	96
Calcium	300000	305500	ug/L	102
Iron	250000	227300	ug/L	91
Magnesium	100000	96160	ug/L	96
Molybdenum	2000	1846	ug/L	92
Potassium	100000	98540	ug/L	99
Sodium	250000	237000	ug/L	95

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	664014	-17.95
Scandium	964043	838777	-12.99
Germanium	164788	158900	-3.57
Indium	1539479	1209068	-21.46
Bismuth	1214998	861124	-29.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086042 File : c19m0042 Time : 19-MAR-2007 15:37
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	92000	ug/L	-8		
Arsenic	100.0	99.06	ug/L	-1	20	
Cadmium	100.0	86.35	ug/L	-14	20	
Calcium	300000	292400	ug/L	-3		
Chromium	200.0	200.7	ug/L	0	20	
Cobalt	200.0	189.5	ug/L	-5	20	
Copper	200.0	178.8	ug/L	-11	20	
Iron	250000	219300	ug/L	-12		
Magnesium	100000	92210	ug/L	-8		
Manganese	200.0	195.7	ug/L	-2	20	
Molybdenum	2000	1758	ug/L	-12		
Nickel	200.0	185.2	ug/L	-7	20	
Potassium	100000	93440	ug/L	-7		
Selenium	100.0	82.88	ug/L	-17	20	
Silver	50.00	42.91	ug/L	-14	20	
Sodium	250000	232400	ug/L	-7		
Vanadium	200.0	203.5	ug/L	2	20	
Zinc	100.0	84.80	ug/L	-15	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	874339	-9.30
Germanium	164788	165641	0.52

57113086042

:00300

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086071 File : c19m0071 Time : 19-MAR-2007 17:40
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1516]	0.2500	ug/L	
Arsenic	[0.1849]	0.2500	ug/L	
Barium	1.043	0.2500	ug/L	
Beryllium	[0.02939]	0.2500	ug/L	
Cadmium	[0.06530]	0.2500	ug/L	
Chromium	1.644	0.2500	ug/L	
Cobalt	0.4190	0.2500	ug/L	
Copper	1.752	0.2500	ug/L	
Lead	[0.1523]	0.2500	ug/L	
Manganese	0.6898	0.2500	ug/L	
Nickel	1.987	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2010]	0.2500	ug/L	
Thallium	[0.03534]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	0.9838	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	93320	ug/L	93
Calcium	300000	303600	ug/L	101
Iron	250000	228300	ug/L	91
Magnesium	100000	92160	ug/L	92
Molybdenum	2000	1860	ug/L	93
Potassium	100000	97480	ug/L	97
Sodium	250000	228100	ug/L	91

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	664888	-17.84
Scandium	964043	855533	-11.26
Germanium	164788	159156	-3.42
Indium	1539479	1227126	-20.29
Bismuth	1214998	870351	-28.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57113086072 File : c19m0072 Time : 19-MAR-2007 17:45
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	91210	ug/L	-9		
Arsenic	100.0	97.67	ug/L	-2	20	
Cadmium	100.0	86.23	ug/L	-14	20	
Calcium	300000	293000	ug/L	-2		
Chromium	200.0	200.6	ug/L	0	20	
Cobalt	200.0	189.2	ug/L	-5	20	
Copper	200.0	180.0	ug/L	-10	20	
Iron	250000	218200	ug/L	-13		
Magnesium	100000	90440	ug/L	-10		
Manganese	200.0	195.8	ug/L	-2	20	
Molybdenum	2000	1768	ug/L	-12		
Nickel	200.0	184.4	ug/L	-8	20	
Potassium	100000	93980	ug/L	-6		
Selenium	100.0	81.75	ug/L	-18	20	
Silver	50.00	42.94	ug/L	-14	20	
Sodium	250000	221300	ug/L	-11		
Vanadium	200.0	203.6	ug/L	2	20	
Zinc	100.0	83.86	ug/L	-16	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	888223	-7.86
Germanium	164788	166747	1.19

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
Seqnum : 57113086108 File : c19m0108
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5651, S5290

IDF : 1.0
Time : 19-MAR-2007 20:18

Analyte	Quant	RL	Units	Flags
Antimony	[0.1536]	0.2500	ug/L	
Arsenic	0.5217	0.2500	ug/L	
Barium	1.048	0.2500	ug/L	
Beryllium	[0.01958]	0.2500	ug/L	
Cadmium	[0.1116]	0.2500	ug/L	
Chromium	1.488	0.2500	ug/L	
Cobalt	0.3932	0.2500	ug/L	
Copper	1.612	0.2500	ug/L	
Lead	[0.1283]	0.2500	ug/L	
Manganese	0.6372	0.2500	ug/L	
Nickel	1.621	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1741]	0.2500	ug/L	
Thallium	[0.03104]	0.1250	ug/L	
Vanadium	[0.1412]	0.2500	ug/L	
Zinc	0.7858	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101600	ug/L	102
Calcium	300000	303700	ug/L	101
Iron	250000	209900	ug/L	84
Magnesium	100000	104800	ug/L	105
Molybdenum	2000	1626	ug/L	81
Potassium	100000	95440	ug/L	95
Sodium	250000	274900	ug/L	110

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Lithium	809267	625285	-22.73
Scandium	964043	770974	-20.03
Germanium	164788	157397	-4.49
Indium	1539479	1083924	-29.59
Bismuth	1214998	756998	-37.70

57113086108

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
Seqnum : 57113086109 File : c19m0109
Cal : 57113086001 Caldate: 19-MAR-2007
Standards: S5652, S5290

IDF : 1.0
Time : 19-MAR-2007 20:22

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	101200	ug/L	1		
Arsenic	100.0	95.85	ug/L	-4	20	
Cadmium	100.0	72.45	ug/L	**-28**	20	ab- ***
Calcium	300000	292600	ug/L	-2		
Chromium	200.0	181.9	ug/L	-9	20	
Cobalt	200.0	174.6	ug/L	-13	20	
Copper	200.0	170.1	ug/L	-15	20	
Iron	250000	200400	ug/L	-20		
Magnesium	100000	106400	ug/L	6		
Manganese	200.0	180.0	ug/L	-10	20	
Molybdenum	2000	1508	ug/L	-25		
Nickel	200.0	171.3	ug/L	-14	20	
Potassium	100000	90740	ug/L	-9		
Selenium	100.0	78.39	ug/L	**-22**	20	ab- ***
Silver	50.00	36.19	ug/L	**-28**	20	ab- ***
Sodium	250000	278900	ug/L	12		
Vanadium	200.0	186.5	ug/L	-7	20	
Zinc	100.0	79.64	ug/L	-20	20	

ISTD (ICALBLK c19m0004)	ICALBLK Abund	Abund	%Drift
Scandium	964043	839961	-12.87
Germanium	164788	176030	6.82

-=low bias ab=ICSAB

57113086109

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57113086

Date : 03/19/07
Sequence : MET05 c19m0

Reference: c19m0004
Analyzed : 03/19/07 13:00

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	809267	964043	164788	1539479	1214998
		LOWER LIMIT	242780	289213	49436	461844	364499
		UPPER LIMIT	971120	1156851	197746	1847375	1457998
018	ICB		808638	1005898	164993	1618007	1279068
019	ICSA		694920	903584	165562	1304472	900191
020	ICSAB		704682	958096	176758	1351823	936264
025	BLANK	QC379798	648714	666659	193727	1070235	833270
026	BS	QC379799	669814	705667	137105	1127634	894548
027	BSD	QC379800	683126	730201	140626	1144615	911701
030	MSS	193469-001	1029796 *	1203202 *	188720	1763588	1342154
031	MS	QC379801	926033	1117728	186690	1592550	1266663
032	MSD	QC379802	916049	1118574	188231	1573948	1238947
036	CCV		767863	909083	156038	1424629	1208795
039	CCB		787551	896864	153199	1422713	1208325
040	BLANK	QC378982	851625	1015548	172662	1631620	1300192
041	ICSA		664014	838777	158900	1209068	861124
042	ICSAB		658927	874339	165641	1234608	879269
046	BLANK	QC378982	854378	1020182	170674	1689071	1354110
048	MSS	193244-001	644944	696612	128134	1168007	949832
051	MS	QC378985	657213	710583	125538	1139927	952643
052	MSD	QC378986	669423	713810	125638	1155823	937931
056	CCV		771551	920722	156028	1449422	1211837
059	CCB		757155	905422	150560	1469768	1231513
061	PDS	QC378988	649953	724460	127260	1156935	947252
062	SAMPLE	193335-001	1197117 *	1384782 *	219986 *	2920499 *	2698326 *
066	CCV		760445	918559	157150	1455284	1216366
069	CCB		759310	909202	153357	1470842	1222932
071	ICSA		664888	855533	159156	1227126	870351
072	ICSAB		678012	888223	166747	1258432	885547
077	MSS	193262-001	633817	736706	130384	1120649	907618
078	SER	QC379179	702308	812375	143199	1270675	1097004
079	SAMPLE	193262-003	728489	841403	149855	1316167	1114028
080	SAMPLE	193262-011	664811	761055	132545	1113084	907954
081	SAMPLE	193262-020	688498	719019	139046	1158839	950226
082	SAMPLE	193262-004	645310	738797	134204	1088243	881260
083	SAMPLE	193262-008	674611	738982	137459	1193912	1042420
084	SAMPLE	193262-012	671471	718493	138190	1167425	1006463
088	CCV		704312	876099	165882	1286872	1101942
091	CCB		717002	863444	155582	1339983	1117487
093	SAMPLE	193262-014	651824	741144	132527	1106182	876494
094	SAMPLE	193262-016	650970	736876	130535	1123434	899194
095	SAMPLE	193262-006	659612	740412	131384	1121520	892303
096	MSS	193244-001	725261	770520	141099	1229475	1046086
097	SER	QC378987	748928	854440	147902	1374444	1153379
098	SAMPLE	193262-007	670483	724093	133779	1129291	899752
099	SAMPLE	193262-018	678210	741467	132489	1124480	896931
103	CCV		725333	876742	163295	1331099	1145290
106	CCB		739703	878111	157490	1359786	1151243
108	ICSA		625285	770974	157397	1083924	756998
109	ICSAB		655025	839961	176030	1154221	780566

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c19m0001	TUN				19-MAR-2007 12:46	1.0	1.0				1	
002	c19m0002	X	RINSE			19-MAR-2007 12:52	1.0					2	
003	c19m0003	X	RINSE			19-MAR-2007 12:56	1.0					2	
004	c19m0004	ICALBLK	CALBLANK			19-MAR-2007 13:00	1.0	1.0				2	
005	c19m0005	ICAL				19-MAR-2007 13:05	1.0	1.0				3	
006	c19m0006	ICAL				19-MAR-2007 13:09	1.0	1.0				4	
007	c19m0007	ICAL				19-MAR-2007 13:13	1.0	1.0				5	
008	c19m0008	ICAL				19-MAR-2007 13:17	1.0	1.0				6	
009	c19m0009	ICAL				19-MAR-2007 13:21	1.0	1.0				7	
010	c19m0010	ICAL				19-MAR-2007 13:25	1.0	1.0				8	
011	c19m0011	X	RINSE			19-MAR-2007 13:29	1.0					2	
012	c19m0012	X				19-MAR-2007 13:33	1.0					9 2	
013	c19m0013	X	RINSE			19-MAR-2007 13:37	1.0					2	
014	c19m0014	ICV				19-MAR-2007 13:41	1.0	1.0	1		1	9	
015	c19m0015	X	RINSE			19-MAR-2007 13:45	1.0					2	
016	c19m0016	X				19-MAR-2007 13:49	1.0					2	
017	c19m0017	X				19-MAR-2007 13:53	1.0					2	
018	c19m0018	ICB				19-MAR-2007 13:58	1.0	1.0			1	2	
019	c19m0019	ICSA				19-MAR-2007 14:02	1.0	1.0			1	10 2	7:CA=306900
020	c19m0020	ICSAB				19-MAR-2007 14:06	1.0	1.0			1	11 2	9:CA=288500
021	c19m0021	X	RINSE			19-MAR-2007 14:10	1.0					2	
022	c19m0022	X	RINSE			19-MAR-2007 14:14	1.0					2	
023	c19m0023	X	RINSE			19-MAR-2007 14:18	1.0					2	
024	c19m0024	X	RINSE			19-MAR-2007 14:22	1.0					2	
025	c19m0025	BLANK	QC379798	123245	Filtra	19-MAR-2007 14:27	1.0	1.0	2		1	2	
026	c19m0026	BS	QC379799	123245	Filtra	19-MAR-2007 14:31	1.0	1.0	1	2	1	2	
027	c19m0027	BSD	QC379800	123245	Filtra	19-MAR-2007 14:35	1.0	1.0	1	2	1	2	
028	c19m0028	X	RINSE			19-MAR-2007 14:39	1.0					2	
029	c19m0029	X	RINSE			19-MAR-2007 14:43	1.0					2	
030	c19m0030	MSS	193469-001	123245	Filtra	19-MAR-2007 14:47	1.0	1.0	3		1	2	2:CA=122440
031	c19m0031	MS	QC379801	123245	Filtra	19-MAR-2007 14:51	1.0	1.0	1		1	2	3:CA=131160

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: [illegible] Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c19m0032	MSD	QC379802	123245	Filtra	19-MAR-2007 14:55	1.0	1.0	1		1	2	3:CA=131160
033	c19m0033	X	RINSE			19-MAR-2007 14:59	1.0					2	
034	c19m0034	X	RINSE			19-MAR-2007 15:04	1.0					2	
035	c19m0035	X	RINSE			19-MAR-2007 15:08	1.0					2	
036	c19m0036	CCV				19-MAR-2007 15:12	1.0	1.0			1	12 2	
037	c19m0037	X	RINSE			19-MAR-2007 15:16	1.0					2	
038	c19m0038	X				19-MAR-2007 15:20	1.0	1.0	2		1	2	
039	c19m0039	CCB				19-MAR-2007 15:24	1.0	1.0			1	2	
040	c19m0040	BLANK	QC378982	123055	Water	19-MAR-2007 15:29	1.0	1.0	1		1	2	
041	c19m0041	ICSA				19-MAR-2007 15:33	1.0	1.0			1	10 2	7:CA=305500
042	c19m0042	ICSAB				19-MAR-2007 15:37	1.0	1.0			1	11 2	9:CA=292400
043	c19m0043	X	RINSE			19-MAR-2007 15:41	1.0					2	
044	c19m0044	X	RINSE			19-MAR-2007 15:45	1.0					2	
045	c19m0045	X	RINSE			19-MAR-2007 15:49	1.0					2	
046	c19m0046	BLANK	QC378982	123055	Water	19-MAR-2007 15:53	1.0	1.0	1		1	2	
047	c19m0047	X	WRONG SAMPLE	123055	Water	19-MAR-2007 15:58	1.0					2	
048	c19m0048	MSS	193244-001	123055	Water	19-MAR-2007 16:02	1.0	1.0	1		1	2	
049	c19m0049	XSER	WRONG SAMPLE	123055	Water	19-MAR-2007 16:06	5.0	1.0			1	2	
050	c19m0050	XSER	WRONG SAMPLE	123055	Water	19-MAR-2007 16:10	5.0	1.0	2		1	2	
051	c19m0051	MS	QC378985	123055	Water	19-MAR-2007 16:14	1.0	1.0	1	1	1	2	
052	c19m0052	MSD	QC378986	123055	Water	19-MAR-2007 16:19	1.0	1.0	1	1	1	2	
053	c19m0053	X	RINSE			19-MAR-2007 16:23	1.0					2	
054	c19m0054	X	RINSE			19-MAR-2007 16:27	1.0					2	
055	c19m0055	X	RINSE			19-MAR-2007 16:32	1.0					2	
056	c19m0056	CCV				19-MAR-2007 16:36	1.0	1.0	1		1	12 2	
057	c19m0057	X	RINSE			19-MAR-2007 16:40	1.0					2	
058	c19m0058	X				19-MAR-2007 16:44	1.0	1.0	4		1	2	
059	c19m0059	CCB				19-MAR-2007 16:48	1.0	1.0	1		1	2	
060	c19m0060	X				19-MAR-2007 16:52	1.0	1.0	3		1	2	
061	c19m0061	PDS	QC378988	123055	Water	19-MAR-2007 16:57	1.0	1.0			1	13 14 2	
062	c19m0062	SAMPLE	193335-001	123055	Filtra	19-MAR-2007 17:03	1.0	1.0	1		1	2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c19m0063	X	RINSE			19-MAR-2007 17:07	1.0					2	
064	c19m0064	X	RINSE			19-MAR-2007 17:11	1.0					2	
065	c19m0065	X	RINSE			19-MAR-2007 17:15	1.0					2	
066	c19m0066	CCV				19-MAR-2007 17:20	1.0	1.0	1		1	12 2	
067	c19m0067	X	RINSE			19-MAR-2007 17:24	1.0					2	
068	c19m0068	X				19-MAR-2007 17:28	1.0					2	
069	c19m0069	CCB				19-MAR-2007 17:32	1.0	1.0	1		1	2	
070	c19m0070	X				19-MAR-2007 17:36	1.0					2	
071	c19m0071	ICSA				19-MAR-2007 17:40	1.0	1.0			1	10 2	7:CA=303600
072	c19m0072	ICSAB				19-MAR-2007 17:45	1.0	1.0			1	11 2	9:CA=293000
073	c19m0073	X	RINSE			19-MAR-2007 17:49	1.0					2	
074	c19m0074	X	RINSE			19-MAR-2007 17:53	1.0					2	
075	c19m0075	X	RINSE			19-MAR-2007 17:57	1.0					2	
076	c19m0076	X	RINSE			19-MAR-2007 18:01	1.0					2	
077	c19m0077	MSS	193262-001	123098	Filtra	19-MAR-2007 18:05	1.0	1.0	6		1	2	3:MG=82320.0
078	c19m0078	SER	QC379179	123098	Filtra	19-MAR-2007 18:09	5.0	1.0		1	1	2	
079	c19m0079	SAMPLE	193262-003	123098	Filtra	19-MAR-2007 18:14	20.0	1.0	3		1	2	
080	c19m0080	SAMPLE	193262-011	123098	Filtra	19-MAR-2007 18:18	1.0	1.0	4		1	2	3:NA=57040.0
081	c19m0081	SAMPLE	193262-020	123098	Filtra	19-MAR-2007 18:22	1.0	1.0	2		1	2	
082	c19m0082	SAMPLE	193262-004	123098	Filtra	19-MAR-2007 18:26	1.0	1.0	5		1	2	4:NA=54600.0
083	c19m0083	SAMPLE	193262-008	123098	Filtra	19-MAR-2007 18:30	1.0	1.0	1		1	2	
084	c19m0084	SAMPLE	193262-012	123098	Filtra	19-MAR-2007 18:35	1.0	1.0	1		1	2	
085	c19m0085	X	RINSE			19-MAR-2007 18:39	1.0					2	
086	c19m0086	X	RINSE			19-MAR-2007 18:43	1.0					2	
087	c19m0087	X	RINSE			19-MAR-2007 18:47	1.0					2	
088	c19m0088	CCV				19-MAR-2007 18:51	1.0	1.0	3		1	12 2	
089	c19m0089	X	RINSE			19-MAR-2007 18:55	1.0					2	
090	c19m0090	X				19-MAR-2007 18:59	1.0					2	
091	c19m0091	CCB				19-MAR-2007 19:04	1.0	1.0	2		1	2	
092	c19m0092	X				19-MAR-2007 19:08	1.0					2	
093	c19m0093	SAMPLE	193262-014	123098	Filtra	19-MAR-2007 19:12	1.0	1.0	4		1	2	3:NA=57410.0

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57113086 Instrument: MET05 Agilent ICP-MS Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	c19m0094	SAMPLE	193262-016	123098	Filtra	19-MAR-2007 19:16	1.0	1.0	4		1	2	3:NA=52710.0
095	c19m0095	SAMPLE	193262-006	123098	Filtra	19-MAR-2007 19:20	1.0	1.0	5		1	2	3:MG=85400.0
096	c19m0096	MSS	193244-001	123055	Water	19-MAR-2007 19:25	1.0	1.0	3		1	2	
097	c19m0097	SER	QC378987	123055	Water	19-MAR-2007 19:29	5.0	1.0	3		1	2	
098	c19m0098	SAMPLE	193262-007	123098	Filtra	19-MAR-2007 19:33	1.0	1.0	4		1	2	2:CA=34920.0
099	c19m0099	SAMPLE	193262-018	123098	Filtra	19-MAR-2007 19:37	1.0	1.0	5		1	2	3:MG=50370.0
100	c19m0100	X	RINSE			19-MAR-2007 19:42	1.0					2	
101	c19m0101	X	RINSE			19-MAR-2007 19:46	1.0					2	
102	c19m0102	X	RINSE			19-MAR-2007 19:50	1.0					2	
103	c19m0103	CCV				19-MAR-2007 19:54	1.0	1.0	2		1	12 2	
104	c19m0104	X	RINSE			19-MAR-2007 20:00	1.0					2	
105	c19m0105	X				19-MAR-2007 20:05	1.0					2	
106	c19m0106	CCB				19-MAR-2007 20:09	1.0	1.0			1	2	
107	c19m0107	X				19-MAR-2007 20:14	1.0					2	
108	c19m0108	ICSA				19-MAR-2007 20:18	1.0	1.0			1	10 2	7:CA=303700
109	c19m0109	ICSAB				19-MAR-2007 20:22	1.0	1.0	3		1	11 2	7:CA=292600

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654 13=S5054 14=S5055

Analyst: RCH Date: 3/19/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67113634001
Units : ug/L

Date : 19-MAR-2007 22:13
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c19v0005	67113634005		19-MAR-2007 22:19	S5645
L2	c19v0006	67113634006		19-MAR-2007 22:24	S5648
L3	c19v0007	67113634007		19-MAR-2007 22:33	S5649
L4	c19v0008	67113634008		19-MAR-2007 22:38	S5650
L5	c19v0009	67113634009		19-MAR-2007 22:44	S5644
L6	c19v0010	67113634010		19-MAR-2007 22:49	S5646

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8822	0.7336	0.6669	0.6225	0.6100	0.5906	BLNK	-4.2292	1.68235		0.6843	1.000	0.995	
Antimony	A	0.3815	0.3130	0.3165	0.3110	0.3074	0.3098	BLNK	-0.0228	3.23373		0.3232	1.000	0.995	
Barium	A	0.9865	0.2141	0.1563	0.0794	0.0712	0.0687	BLNK	-0.9000	14.5266		0.2627	1.000	0.995	
Beryllium	A	0.2785	0.2713	0.2741	0.2777	0.2793	0.2701	BLNK	-0.0210	3.67704		0.2752	1.000	0.995	
Cadmium	A	0.0828	0.0868	0.0869	0.0847	0.0827	0.0796	BLNK	-0.0067	12.4619		0.0839	1.000	0.995	
Calcium	A	0.0704	0.0407	0.0264	0.0221	0.0222	0.0212	BLNK	-37.691	46.7623		0.0338	1.000	0.995	
Lead	A	1.0755	0.7979	0.7876	0.7394	0.7352	0.7020	BLNK	-0.0708	1.41172		0.8062	0.999	0.995	
Magnesium	A	1.0476	0.7006	0.6053	0.5368	0.5204	0.4992	BLNK	-13.525	1.98786		0.6516	1.000	0.995	
Molybdenum	A	0.2690	0.2344	0.2291	0.2142	0.2091	0.2035	BLNK	-0.0363	4.88691		0.2266	1.000	0.995	
Potassium	A	8.3490	2.2008	1.4543	0.7577	0.6795	0.6551	BLNK	-118.43	1.52578		2.3494	1.000	0.995	
Silver	A	0.3560	0.3107	0.3287	0.3176	0.3080	0.3063	BLNK	-0.0117	3.26093		0.3212	1.000	0.995	
Thallium	A	1.1890	0.8893	0.8840	0.8670	0.8738	0.8921	BLNK	-0.0340	1.12607		0.9325	1.000	0.995	
Arsenic	E	0.6264	0.6664	0.6464	0.5804	0.5720	0.5523	BLNK	-0.0481	1.79816		0.6073	1.000	0.995	
Chromium	E	8.0334	3.9847	3.7557	3.2295	3.0653	2.9936	BLNK	-0.1868	0.33279		4.1770	1.000	0.995	
Cobalt	E	5.0845	5.0532	5.3847	5.2266	4.9530	4.8194	BLNK	-0.0149	0.20634		5.0869	1.000	0.995	
Copper	E	65.661	17.934	11.593	7.1303	6.2992	6.0533	BLNK	-0.9762	0.16480		19.112	1.000	0.995	
Manganese	E	2.6437	1.8564	1.7685	1.7135	1.6335	1.6005	BLNK	-0.0510	0.62235		1.8693	1.000	0.995	
Nickel	E	2.8909	1.7361	1.5658	1.4257	1.3171	1.2766	BLNK	-0.1236	0.77884		1.7020	1.000	0.995	
Sodium	E	5.4434	1.5824	1.1037	0.6842	0.5707	0.5525	BLNK	-109.08	1.80940		1.6562	1.000	0.995	
Vanadium	E	10.883	4.1452	3.2912	2.5410	2.4053	2.3732	BLNK	-0.3558	0.42110		4.2732	1.000	0.995	
Zinc	E	48.700	49.516	5.4244	1.8678	1.0576	0.9835	BLNK	-16.234	1.10055		17.925	**0.989**	0.995	r2 ***
Iron	H	1.1812	0.9685	0.9694	0.8979	0.8497	0.8162	BLNK	-2.4280	1.21514		0.9472	1.000	0.995	
Selenium	H	0.1517	0.1206	0.1302	0.1246	0.1196	0.1138	BLNK	-0.0175	8.69551		0.1268	0.999	0.995	

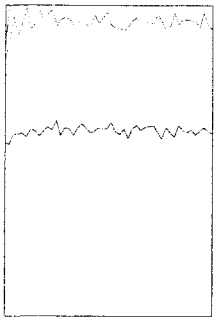
Analyte Spiked Amounts	Ch	L1	L2	L3	L4	L5	L6	Units
Aluminum	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Molybdenum	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	A	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Silver	A	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Thallium	A	0.0500	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Arsenic	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Chromium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Manganese	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	E	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Vanadium	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	E	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	H	10.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	H	0.1000	0.5000	1.0000	10.000	100.00	200.00	ug/L

r2=ICAL r^2 failure

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

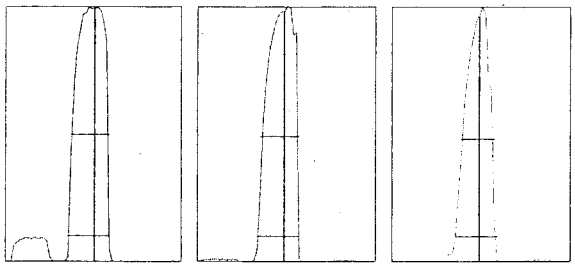
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	11712.0	11864.0	2.57	0.10
89	20,000	21788.0	21684.5	3.83	0.70
205	20,000	18433.0	18855.0	2.84	1.60

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.103%
Doubly Charged: 70/140 1.261%



m/z:	7	89	205
Height:	11,851	21,779	18,732
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.65	0.55
W-10%:	0.700	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	142
RF Matching	:	1.7 V	Extract 2	:	-125 V	AMU Offset	:	125
Smpl Depth	:	9 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0017
Torch-H	:	1.3 mm	Omega Lens-ce	:	1 V	Axis Offset	:	-0.03
Torch-V	:	0.2 mm	Cell Entrance	:	-36 V	QP Bias	:	-0.4 V
Carrier Gas	:	1.02 L/min	QP Focus	:	7 V			
Makeup Gas	:	0 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1800 V
Sample Pump	:	--- rps	OctP RF	:	160 V	Pulse HV	:	1440 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%
51	29.7	20.31
59	2614.8	3.28
89	1871.9	3.44

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -16 V

m/z	Count(Mean)	RSD%
59	2374.5	3.24
78	0.7	143.84
89	17905.5	2.20

Integration Time: 0.1000sec

Generated : Mar 19, 2007 12:49:27
Printed : Mar 19, 2007 12:51:08

P/A Factor Tuning Report

Acquired:Mar 19 2007 01:11 pm

Mass[amu]	Element	P/A Factor
6	Li	0.061007
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.089309
45	Sc	0.087864
51	V	0.088932
52	Cr	0.094418
55	Mn	0.095488
56	Fe	Sensitivity too high
59	Co	0.100828
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.102508
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.113115
111	Cd	Sensitivity too low
115	In	0.112885
118	(In)	0.112291
121	Sb	0.110617
137	Ba	Sensitivity too low
159	Tb	0.115257
205	Tl	0.122591
206	(Pb)	0.122278
207	(Pb)	Sensitivity too low
208	Pb	0.123736
209	Bi	0.123401

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1800 V
Pulse HV: 1440 V

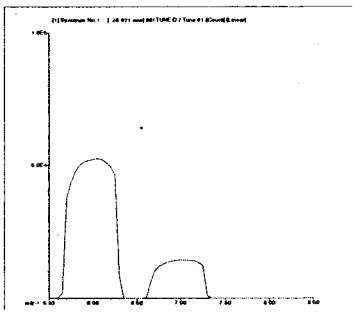
00313

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07C19v00.B\001TUNE.D
Date Acquired:	Mar 19 2007 09:54 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s5641
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.07	5.00	
59 Co	1.03	5.00	
115 In	1.24	5.00	
205 Tl	1.34	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

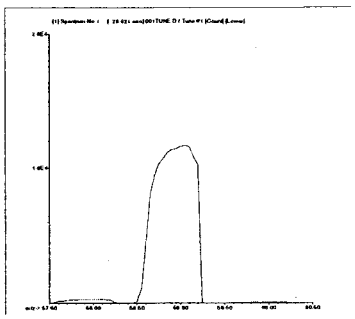
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

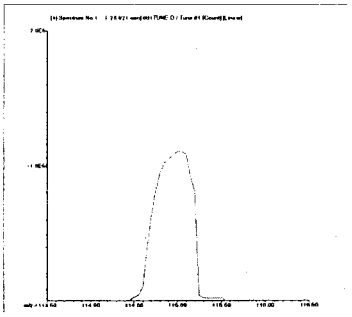
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



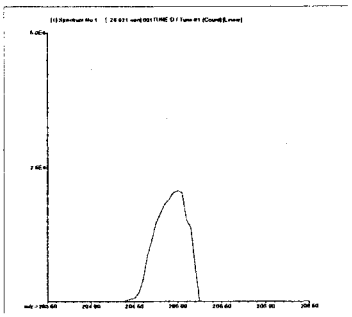
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004C
Date Acquired: Mar 19 2007 10:11 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:15 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	572706.38	A	1153.00	0.20
7	(Li)		P		
9	Be	65.56	P	21.43	32.69
23	Na	30789.47	P	185.80	0.60
24	Mg	96167.41	P	1146.00	1.19
27	Al	35532.37	P	212.90	0.60
39	K	1097077.00	A	5196.00	0.47
44	Ca	11393.90	P	285.50	2.51
45	Sc	359251.41	P	994.10	0.28
45	Sc	25539.44	P	358.30	1.40
45	Sc	706761.50	P	5123.00	0.72
51	V	431.49	P	3.57	0.83
52	Cr	286.67	P	10.60	3.70
55	Mn	41.85	P	15.57	37.20
56	Fe	14356.71	P	88.25	0.61
59	Co	37.04	P	6.51	17.58
60	Ni	81.11	P	6.76	8.33
63	Cu	1770.88	P	80.96	4.57
65	Cu	841.89	P	63.89	7.59
66	Zn	4409.27	P	84.43	1.91
72	Ge	93669.15	P	287.20	0.31
72	Ge	14945.93	P	69.92	0.47
75	As	8.00	P	1.16	14.44
78	Se	3.78	P	1.93	50.96
89	Y	1085669.00	A	6120.00	0.56
98	Mo	161.12	P	6.94	4.31
107	Ag	82.23	P	8.39	10.20
111	Cd	12.22	P	10.18	83.29
115	In	1144466.00	A	10350.00	0.90
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	161.12	P	24.57	15.25
137	Ba	2219.16	P	40.06	1.81
159	Tb	1790797.00	A	14430.00	0.81
205	Tl	723.39	P	29.63	4.10
208	Pb	1795.68	P	58.35	3.25
209	Bi	1198899.00	A	3585.00	0.30

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\006CALS.D\006CALS.D#
Date Acquired: Mar 19 2007 10:22 pm
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:20 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	566771.00	A	5776.00	1.02
7 (Li)		P		
9 Be	1537.91	P	16.78	1.09
23 Na	40503.70	P	692.60	1.71
24 Mg	491467.09	P	3947.00	0.80
27 Al	514636.09	P	1902.00	0.37
39 K	1543956.00	A	11410.00	0.74
44 Ca	28557.48	P	379.70	1.33
45 Sc	355519.31	P	1202.00	0.34
45 Sc	25596.94	P	107.70	0.42
45 Sc	701555.19	P	7465.00	1.06
51 V	1061.17	P	58.72	5.53
52 Cr	1020.05	P	37.63	3.69
55 Mn	475.20	P	13.89	2.92
56 Fe	344316.00	P	1127.00	0.33
59 Co	1293.41	P	27.76	2.15
60 Ni	444.46	P	38.75	8.72
63 Cu	2678.81	P	50.61	1.89
65 Cu	1381.20	P	22.22	1.61
66 Zn	7397.97	P	71.73	0.97
72 Ge	91898.89	P	716.60	0.78
72 Ge	14941.85	P	248.90	1.67
75 As	99.56	P	2.69	2.71
78 Se	110.89	P	10.46	9.43
89 Y	1088855.00	A	14060.00	1.29
98 Mo	2551.45	P	15.75	0.62
99 (Ru)	1.11	P	1.93	173.24
107 Ag	3557.27	P	138.70	3.90
111 Cd	993.41	P	30.00	3.02
115 In	1144808.00	A	8605.00	0.75
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	3582.85	P	165.60	4.62
137 Ba	3814.03	P	72.67	1.91
159 Tb	1781881.00	A	21010.00	1.18
205 Tl	5334.65	P	175.80	3.30
208 Pb	14220.33	P	626.60	4.41
209 Bi	1199893.00	A	15950.00	1.33

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	566771.06	1.02	572706.38	99.0	80 - 120	
45 Sc	355519.28	0.34	359251.41	99.0	80 - 120	
45 Sc	25596.94	0.42	25539.44	100.2	80 - 120	
45 Sc	701555.25	1.06	706761.50	99.3	80 - 120	
72 Ge	91898.88	0.78	93669.16	98.1	80 - 120	
72 Ge	14941.85	1.67	14945.93	100.0	80 - 120	
89 Y	1088854.90	1.29	1085669.40	100.3	80 - 120	
115 In	1144807.80	0.75	1144466.40	100.0	80 - 120	
159 Tb	1781881.00	1.18	1790797.00	99.5	80 - 120	
209 Bi	1199893.00	1.33	1198899.40	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\007CALS.D\007CALS.D#
Date Acquired: Mar 19 2007 10:31 pm
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	578637.81	A	6749.00	1.17
7 (Li)		P		
9 Be	3171.56	P	50.50	1.59
23 Na	57650.39	P	691.90	1.20
24 Mg	853244.81	A	8507.00	1.00
27 Al	940022.69	A	12910.00	1.37
39 K	2049895.00	A	2881.00	0.14
44 Ca	37152.94	P	771.40	2.08
45 Sc	364422.00	P	3566.00	0.98
45 Sc	26115.65	P	47.05	0.18
45 Sc	704771.50	P	4313.00	0.61
51 V	1719.02	P	18.96	1.10
52 Cr	1961.64	P	42.01	2.14
55 Mn	923.75	P	21.21	2.30
56 Fe	706534.19	P	3248.00	0.46
59 Co	2812.54	P	48.24	1.72
60 Ni	817.81	P	28.95	3.54
63 Cu	3487.51	P	46.92	1.35
65 Cu	1707.90	P	55.66	3.26
66 Zn	1631.60	P	77.26	4.74
72 Ge	94222.18	P	536.10	0.57
72 Ge	15041.59	P	65.08	0.43
75 As	194.45	P	10.25	5.27
78 Se	245.34	P	32.54	13.26
89 Y	1078041.00	A	7286.00	0.68
98 Mo	4939.96	P	103.10	2.09
99 (Ru)	0.00	P	0.00	0.00
107 Ag	7473.46	P	26.95	0.36
111 Cd	1975.78	P	92.65	4.69
115 In	1136753.00	A	5307.00	0.47
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	7194.40	P	135.10	1.88
137 Ba	5534.69	P	162.60	2.94
159 Tb	1770904.00	A	6376.00	0.36
205 Tl	10444.65	P	151.90	1.45
208 Pb	27896.45	P	487.10	1.75
209 Bi	1181713.00	A	14080.00	1.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	578637.88	1.17	572706.38	101.0	80 - 120	
45 Sc	364422.00	0.98	359251.41	101.4	80 - 120	
45 Sc	26115.65	0.18	25539.44	102.3	80 - 120	
45 Sc	704771.56	0.61	706761.50	99.7	80 - 120	
72 Ge	94222.17	0.57	93669.16	100.6	80 - 120	
72 Ge	15041.59	0.43	14945.93	100.6	80 - 120	
89 Y	1078040.80	0.68	1085669.40	99.3	80 - 120	
115 In	1136752.80	0.47	1144466.40	99.3	80 - 120	
159 Tb	1770903.50	0.36	1790797.00	98.9	80 - 120	
209 Bi	1181712.80	1.19	1198899.40	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\008CALS.D\008CALS.D#
Date Acquired: Mar 19 2007 10:36 pm
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:35 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	537963.69	M	14980.00	2.78
7 (Li)		P		
9 Be	29867.16	P	251.10	0.84
23 Na	341855.69	P	755.30	0.22
24 Mg	7319172.00	A	30570.00	0.42
27 Al	8487350.00	A	27760.00	0.33
39 K	10330930.00	A	22000.00	0.21
44 Ca	301999.19	P	1121.00	0.37
45 Sc	351578.69	P	1269.00	0.36
45 Sc	24983.63	P	232.30	0.93
45 Sc	681732.38	P	3313.00	0.49
51 V	12695.81	P	134.20	1.06
52 Cr	16136.02	P	113.60	0.70
55 Mn	8560.84	P	64.18	0.75
56 Fe	6313756.00	A	21190.00	0.34
59 Co	26114.35	P	32.89	0.13
60 Ni	7124.11	P	118.50	1.66
63 Cu	20729.55	P	315.40	1.52
65 Cu	10220.13	P	104.40	1.02
66 Zn	5430.38	P	56.20	1.03
72 Ge	91515.33	P	89.42	0.10
72 Ge	14540.31	P	236.90	1.63
75 As	1687.23	P	18.65	1.11
78 Se	2279.98	P	64.73	2.84
89 Y	1052661.00	A	8117.00	0.77
98 Mo	45098.64	P	396.00	0.88
99 (Ru)	1.11	P	1.93	173.24
107 Ag	70116.35	P	349.40	0.50
111 Cd	18702.39	P	337.70	1.81
115 In	1103872.00	A	8675.00	0.79
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	68666.32	P	418.70	0.61
137 Ba	27533.73	P	94.33	0.34
159 Tb	1734074.00	A	12440.00	0.72
205 Tl	97689.54	P	304.70	0.31
208 Pb	256417.09	P	1772.00	0.69
209 Bi	1126789.00	P	5001.00	0.44

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	537963.75	2.78	572706.38	93.9	80 - 120	
45 Sc	351578.66	0.36	359251.41	97.9	80 - 120	
45 Sc	24983.64	0.93	25539.44	97.8	80 - 120	
45 Sc	681732.38	0.49	706761.50	96.5	80 - 120	
72 Ge	91515.33	0.10	93669.16	97.7	80 - 120	
72 Ge	14540.31	1.63	14945.93	97.3	80 - 120	
89 Y	1052661.50	0.77	1085669.40	97.0	80 - 120	
115 In	1103871.90	0.79	1144466.40	96.5	80 - 120	
159 Tb	1734073.60	0.72	1790797.00	96.8	80 - 120	
209 Bi	1126789.00	0.44	1198899.40	94.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\009CALS.D\009CALS.D#
Date Acquired: Mar 19 2007 10:42 pm
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	502749.81	P	1294.00	0.26
7 (Li)		P		
9 Be	280881.50	P	1134.00	0.40
23 Na	2820548.00	A	15220.00	0.54
24 Mg	68771216.00	A	317000.00	0.46
27 Al	80615840.00	A	274000.00	0.34
39 K	89795488.00	A	98290.00	0.11
44 Ca	2934631.00	A	850.90	0.03
45 Sc	350250.50	P	2192.00	0.63
45 Sc	24709.43	P	13.68	0.06
45 Sc	660766.88	P	1256.00	0.19
51 V	118869.30	P	569.40	0.48
52 Cr	151482.70	P	291.90	0.19
55 Mn	80726.36	P	339.90	0.42
56 Fe	59522440.00	A	485600.00	0.82
59 Co	244770.30	P	1493.00	0.61
60 Ni	65087.52	P	480.90	0.74
63 Cu	179680.70	P	1158.00	0.64
65 Cu	88748.84	P	307.30	0.35
66 Zn	30167.79	P	226.90	0.75
72 Ge	90316.64	P	415.60	0.46
72 Ge	14262.61	P	65.99	0.46
75 As	16316.28	P	101.20	0.62
78 Se	21607.76	P	197.00	0.91
89 Y	1031213.00	A	5902.00	0.57
98 Mo	431247.00	P	3300.00	0.77
99 (Ru)	11.11	P	3.85	34.64
107 Ag	649762.31	P	877.90	0.14
111 Cd	174474.80	P	959.10	0.55
115 In	1054855.00	A	5602.00	0.53
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	648459.88	P	2375.00	0.37
137 Ba	242241.20	P	799.10	0.33
159 Tb	1702020.00	A	10810.00	0.64
205 Tl	924083.50	P	2688.00	0.29
208 Pb	2502628.00	A	4177.00	0.17
209 Bi	1057523.00	P	4938.00	0.47

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	502749.78	0.26	572706.38	87.8	80 - 120	
45 Sc	350250.50	0.63	359251.41	97.5	80 - 120	
45 Sc	24709.43	0.06	25539.44	96.8	80 - 120	
45 Sc	660766.94	0.19	706761.50	93.5	80 - 120	
72 Ge	90316.65	0.46	93669.16	96.4	80 - 120	
72 Ge	14262.61	0.46	14945.93	95.4	80 - 120	
89 Y	1031212.90	0.57	1085669.40	95.0	80 - 120	
115 In	1054855.40	0.53	1144466.40	92.2	80 - 120	
159 Tb	1702020.60	0.64	1790797.00	95.0	80 - 120	
209 Bi	1057523.40	0.47	1198899.40	88.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C19v00.B\010CALS.D\010CALS.D#
Date Acquired: Mar 19 2007 10:47 pm
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Mar 19 2007 10:45 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	501834.59	P	2178.00	0.43
7 (Li)		P		
9 Be	542261.19	P	2428.00	0.45
23 Na	5453382.00	A	16300.00	0.30
24 Mg	############	A	485300.00	0.36
27 Al	############	A	79440.00	0.05
39 K	############	A	619600.00	0.35
44 Ca	5692803.00	A	22690.00	0.40
45 Sc	357198.69	P	697.10	0.20
45 Sc	24677.53	P	207.10	0.84
45 Sc	670056.19	P	915.90	0.14
51 V	234252.70	P	1478.00	0.63
52 Cr	295485.50	P	1066.00	0.36
55 Mn	157983.09	P	917.40	0.58
56 Fe	############	A	754400.00	0.65
59 Co	475714.91	P	2838.00	0.60
60 Ni	126006.60	P	664.40	0.53
63 Cu	344685.50	P	3031.00	0.88
65 Cu	170083.50	P	490.50	0.29
66 Zn	56002.77	P	469.50	0.84
72 Ge	91298.77	P	295.40	0.32
72 Ge	14237.77	P	165.90	1.17
75 As	31451.23	P	86.70	0.28
78 Se	41572.73	P	43.56	0.10
89 Y	1050581.00	A	5348.00	0.51
98 Mo	855340.00	P	2269.00	0.27
99 (Ru)	11.11	P	13.47	121.22
107 Ag	1298781.00	A	2657.00	0.20
111 Cd	337575.09	P	1775.00	0.53
115 In	1060020.00	A	10660.00	1.01
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1313316.00	A	6186.00	0.47
137 Ba	471189.41	P	1440.00	0.31
159 Tb	1714398.00	A	3834.00	0.22
205 Tl	1841820.00	A	10640.00	0.58
208 Pb	4813659.00	A	27290.00	0.57
209 Bi	1032285.00	P	5576.00	0.54

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	501834.63	0.43	572706.38	87.6	80 - 120	
45 Sc	357198.66	0.20	359251.41	99.4	80 - 120	
45 Sc	24677.53	0.84	25539.44	96.6	80 - 120	
45 Sc	670056.19	0.14	706761.50	94.8	80 - 120	
72 Ge	91298.77	0.32	93669.16	97.5	80 - 120	
72 Ge	14237.77	1.17	14945.93	95.3	80 - 120	
89 Y	1050580.60	0.51	1085669.40	96.8	80 - 120	
115 In	1060019.90	1.01	1144466.40	92.6	80 - 120	
159 Tb	1714397.80	0.22	1790797.00	95.7	80 - 120	
209 Bi	1032285.30	0.54	1198899.40	86.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C19v00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634012 File : c19v0012 Time : 19-MAR-2007 23:00
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5653

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6843	0.5992	10000	10080	ug/L	1	10	
Antimony	A	0.3232	0.2994	100.0	96.78	ug/L	-3	10	
Barium	A	0.2627	0.0704	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2752	0.2722	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0839	0.0805	100.0	100.4	ug/L	0	10	
Calcium	A	0.0338	0.0218	10000	10180	ug/L	2	10	
Lead	A	0.8062	0.7158	100.0	101.0	ug/L	1	10	
Magnesium	A	0.6516	0.5102	10000	10130	ug/L	1	10	
Molybdenum	A	0.2266	0.2059	100.0	100.6	ug/L	1	10	
Potassium	A	2.3494	0.6722	10000	10140	ug/L	1	10	
Silver	A	0.3212	0.3036	100.0	98.97	ug/L	-1	10	
Thallium	A	0.9325	0.8545	50.00	48.08	ug/L	-4	10	
Arsenic	E	0.6073	0.5564	100.0	100.0	ug/L	0	10	
Chromium	E	4.1770	3.0254	100.0	100.5	ug/L	1	10	
Cobalt	E	5.0869	4.9033	100.0	101.2	ug/L	1	10	
Copper	E	9.8018	6.2258	100.0	101.6	ug/L	2	10	
Manganese	E	1.8693	1.6162	100.0	100.5	ug/L	1	10	
Nickel	E	1.7020	1.3105	100.0	101.9	ug/L	2	10	
Sodium	E	1.6562	0.5641	10000	10100	ug/L	1	10	
Vanadium	E	4.2732	2.3857	100.0	100.1	ug/L	0	10	
Zinc	E	17.925	1.0071	100.0	94.60	ug/L	-5	10	
Iron	H	0.9472	0.8449	10000	10260	ug/L	3	10	
Selenium	H	0.1268	0.1167	100.0	101.5	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	515438	-10.00
Scandium	A	706762	677111	-4.20
Scandium	E	25539	25103	-1.71
Scandium	H	359251	358175	-0.30
Germanium	H	93669	92433	-1.32
Germanium	E	14946	14606	-2.27
Indium	A	1144466	1091719	-4.61
Bismuth	A	1198899	1075450	-10.30
Yttrium	A	1085669	1062848	-2.10
Terbium	A	1790797	1742438	-2.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634035 File : c19v0035 Time : 20-MAR-2007 01:06
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5899	10000	9920	ug/L	-1	10	
Antimony	A	0.3232	0.2993	100.0	96.77	ug/L	-3	10	
Barium	A	0.2627	0.0692	100.0	99.62	ug/L	0	10	
Beryllium	A	0.2752	0.2697	100.0	99.16	ug/L	-1	10	
Cadmium	A	0.0839	0.0800	100.0	99.74	ug/L	0	10	
Calcium	A	0.0338	0.0216	10000	10070	ug/L	1	10	
Lead	A	0.8062	0.7150	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6516	0.5047	10000	10020	ug/L	0	10	
Molybdenum	A	0.2266	0.2043	100.0	99.78	ug/L	0	10	
Potassium	A	2.3494	0.6619	10000	9981	ug/L	0	10	
Silver	A	0.3212	0.3016	100.0	98.35	ug/L	-2	10	
Thallium	A	0.9325	0.8437	50.00	47.47	ug/L	-5	10	
Arsenic	E	0.6073	0.5529	100.0	99.37	ug/L	-1	10	
Chromium	E	4.1770	3.0149	100.0	100.1	ug/L	0	10	
Cobalt	E	5.0869	4.8902	100.0	100.9	ug/L	1	10	
Copper	E	9.8018	6.1851	100.0	101.0	ug/L	1	10	
Manganese	E	1.8693	1.6035	100.0	99.74	ug/L	0	10	
Nickel	E	1.7020	1.2970	100.0	100.9	ug/L	1	10	
Sodium	E	1.6562	0.5602	10000	10030	ug/L	0	10	
Vanadium	E	4.2732	2.3711	100.0	99.49	ug/L	-1	10	
Zinc	E	17.925	1.0049	100.0	94.37	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8395	10000	10200	ug/L	2	10	
Selenium	H	0.1268	0.1178	100.0	102.4	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	485845	-15.17
Scandium	A	706762	633927	-10.31
Scandium	E	25539	23124	-9.46
Scandium	H	359251	331405	-7.75
Germanium	H	93669	85822	-8.38
Germanium	E	14946	13559	-9.28
Indium	A	1144466	1024995	-10.44
Bismuth	A	1198899	1030196	-14.07
Yttrium	A	1085669	995435	-8.31
Terbium	A	1790797	1652787	-7.71

r2=ICAL r^2 failure

67113634035

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634053 File : c19v0053 Time : 20-MAR-2007 02:45
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5934	10000	9978	ug/L	0	10	
Antimony	A	0.3232	0.3042	100.0	98.35	ug/L	-2	10	
Barium	A	0.2627	0.0701	100.0	101.0	ug/L	1	10	
Beryllium	A	0.2752	0.2683	100.0	98.64	ug/L	-1	10	
Cadmium	A	0.0839	0.0810	100.0	101.0	ug/L	1	10	
Calcium	A	0.0338	0.0218	10000	10150	ug/L	2	10	
Lead	A	0.8062	0.7233	100.0	102.0	ug/L	2	10	
Magnesium	A	0.6516	0.5039	10000	10000	ug/L	0	10	
Molybdenum	A	0.2266	0.2054	100.0	100.3	ug/L	0	10	
Potassium	A	2.3494	0.6639	10000	10010	ug/L	0	10	
Silver	A	0.3212	0.3064	100.0	99.89	ug/L	0	10	
Thallium	A	0.9325	0.8441	50.00	47.49	ug/L	-5	10	
Arsenic	E	0.6073	0.5528	100.0	99.36	ug/L	-1	10	
Chromium	E	4.1770	3.0236	100.0	100.4	ug/L	0	10	
Cobalt	E	5.0869	4.8975	100.0	101.0	ug/L	1	10	
Copper	E	9.8018	6.1914	100.0	101.1	ug/L	1	10	
Manganese	E	1.8693	1.6259	100.0	101.1	ug/L	1	10	
Nickel	E	1.7020	1.3011	100.0	101.2	ug/L	1	10	
Sodium	E	1.6562	0.5641	10000	10100	ug/L	1	10	
Vanadium	E	4.2732	2.3835	100.0	100.0	ug/L	0	10	
Zinc	E	17.925	0.9995	100.0	93.76	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8425	10000	10230	ug/L	2	10	
Selenium	H	0.1268	0.1174	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	480947	-16.02
Scandium	A	706762	631429	-10.66
Scandium	E	25539	22996	-9.96
Scandium	H	359251	327018	-8.97
Germanium	H	93669	84729	-9.54
Germanium	E	14946	13535	-9.44
Indium	A	1144466	1015462	-11.27
Bismuth	A	1198899	1033025	-13.84
Yttrium	A	1085669	994035	-8.44
Terbium	A	1790797	1647189	-8.02

r2=ICAL r^2 failure

67113634053

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634072 File : c19v0072 Time : 20-MAR-2007 04:29
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.6028	10000	10140	ug/L	1	10	
Antimony	A	0.3232	0.3051	100.0	98.62	ug/L	-1	10	
Barium	A	0.2627	0.0697	100.0	100.3	ug/L	0	10	
Beryllium	A	0.2752	0.2645	100.0	97.24	ug/L	-3	10	
Cadmium	A	0.0839	0.0809	100.0	100.8	ug/L	1	10	
Calcium	A	0.0338	0.0217	10000	10120	ug/L	1	10	
Lead	A	0.8062	0.7174	100.0	101.2	ug/L	1	10	
Magnesium	A	0.6516	0.5132	10000	10190	ug/L	2	10	
Molybdenum	A	0.2266	0.2042	100.0	99.74	ug/L	0	10	
Potassium	A	2.3494	0.6621	10000	9984	ug/L	0	10	
Silver	A	0.3212	0.3057	100.0	99.67	ug/L	0	10	
Thallium	A	0.9325	0.8424	50.00	47.40	ug/L	-5	10	
Arsenic	E	0.6073	0.5508	100.0	99.00	ug/L	-1	10	
Chromium	E	4.1770	2.9615	100.0	98.37	ug/L	-2	10	
Cobalt	E	5.0869	4.7911	100.0	98.84	ug/L	-1	10	
Copper	E	9.8018	6.0606	100.0	98.90	ug/L	-1	10	
Manganese	E	1.8693	1.5935	100.0	99.12	ug/L	-1	10	
Nickel	E	1.7020	1.2705	100.0	98.83	ug/L	-1	10	
Sodium	E	1.6562	0.5671	10000	10150	ug/L	2	10	
Vanadium	E	4.2732	2.3393	100.0	98.15	ug/L	-2	10	
Zinc	E	17.925	0.9935	100.0	93.10	ug/L	-7	10	r2 ***
Iron	H	0.9472	0.8357	10000	10150	ug/L	2	10	
Selenium	H	0.1268	0.1167	100.0	101.5	ug/L	2	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	500754	-12.56
Scandium	A	706762	632712	-10.48
Scandium	E	25539	23391	-8.41
Scandium	H	359251	330436	-8.02
Germanium	H	93669	85040	-9.21
Germanium	E	14946	13516	-9.57
Indium	A	1144466	1001696	-12.47
Bismuth	A	1198899	1011846	-15.60
Yttrium	A	1085669	981128	-9.63
Terbium	A	1790797	1622736	-9.38

r2=ICAL r^2 failure

67113634072

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634089 File : c19v0089 Time : 20-MAR-2007 06:03
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5654

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6843	0.5975	10000	10050	ug/L	1	10	
Antimony	A	0.3232	0.3173	100.0	102.6	ug/L	3	10	
Barium	A	0.2627	0.0700	100.0	100.8	ug/L	1	10	
Beryllium	A	0.2752	0.2652	100.0	97.50	ug/L	-3	10	
Cadmium	A	0.0839	0.0841	100.0	104.9	ug/L	5	10	
Calcium	A	0.0338	0.0217	10000	10120	ug/L	1	10	
Lead	A	0.8062	0.7279	100.0	102.7	ug/L	3	10	
Magnesium	A	0.6516	0.5074	10000	10070	ug/L	1	10	
Molybdenum	A	0.2266	0.2116	100.0	103.4	ug/L	3	10	
Potassium	A	2.3494	0.6663	10000	10050	ug/L	1	10	
Silver	A	0.3212	0.3196	100.0	104.2	ug/L	4	10	
Thallium	A	0.9325	0.8427	50.00	47.41	ug/L	-5	10	
Arsenic	E	0.6073	0.5496	100.0	98.78	ug/L	-1	10	
Chromium	E	4.1770	2.9564	100.0	98.20	ug/L	-2	10	
Cobalt	E	5.0869	4.7922	100.0	98.87	ug/L	-1	10	
Copper	E	9.8018	6.0951	100.0	99.47	ug/L	-1	10	
Manganese	E	1.8693	1.5927	100.0	99.07	ug/L	-1	10	
Nickel	E	1.7020	1.2663	100.0	98.50	ug/L	-2	10	
Sodium	E	1.6562	0.5544	10000	9921	ug/L	-1	10	
Vanadium	E	4.2732	2.3379	100.0	98.09	ug/L	-2	10	
Zinc	E	17.925	1.0005	100.0	93.87	ug/L	-6	10	r2 ***
Iron	H	0.9472	0.8278	10000	10060	ug/L	1	10	
Selenium	H	0.1268	0.1148	100.0	99.77	ug/L	0	10	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	465081	-18.79
Scandium	A	706762	592267	-16.20
Scandium	E	25539	21870	-14.37
Scandium	H	359251	312467	-13.02
Germanium	H	93669	81194	-13.32
Germanium	E	14946	12624	-15.54
Indium	A	1144466	918164	-19.77
Bismuth	A	1198899	976024	-18.59
Yttrium	A	1085669	903045	-16.82
Terbium	A	1790797	1540150	-14.00

r2=ICAL r^2 failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634016 File : c19v0016 Time : 19-MAR-2007 23:22
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02907]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03183]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	543017	-5.18
Scandium	A	706762	684555	-3.14
Scandium	E	25539	24850	-2.70
Scandium	H	359251	350957	-2.31
Germanium	H	93669	90951	-2.90
Germanium	E	14946	14626	-2.14
Indium	A	1144466	1122823	-1.89
Bismuth	A	1198899	1152187	-3.90
Yttrium	A	1085669	1067736	-1.65
Terbium	A	1790797	1735947	-3.06

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67113634016

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634038 File : c19v0038 Time : 20-MAR-2007 01:23
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	[0.2536]	0.5000	0.1296	ug/L	!ib
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	504678	-11.88
Scandium	A	706762	641225	-9.27
Scandium	E	25539	23588	-7.64
Scandium	H	359251	331707	-7.67
Germanium	H	93669	86298	-7.87
Germanium	E	14946	13774	-7.84
Indium	A	1144466	1022643	-10.64
Bismuth	A	1198899	1074324	-10.39
Yttrium	A	1085669	996076	-8.25
Terbium	A	1790797	1641165	-8.36

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67113634038

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634056 File : c19v0056 Time : 20-MAR-2007 03:01
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	[0.4491]	0.5000	0.1296	ug/L	!ib
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01408]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	501151	-12.49
Scandium	A	706762	636706	-9.91
Scandium	E	25539	23862	-6.57
Scandium	H	359251	330302	-8.06
Germanium	H	93669	85642	-8.57
Germanium	E	14946	14001	-6.32
Indium	A	1144466	1032341	-9.80
Bismuth	A	1198899	1076234	-10.23
Yttrium	A	1085669	996065	-8.25
Terbium	A	1790797	1645474	-8.11

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634075 File : c19v0075 Time : 20-MAR-2007 04:46
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	530007	-7.46
Scandium	A	706762	643037	-9.02
Scandium	E	25539	23882	-6.49
Scandium	H	359251	333756	-7.10
Germanium	H	93669	85907	-8.29
Germanium	E	14946	13857	-7.29
Indium	A	1144466	1008187	-11.91
Bismuth	A	1198899	1065874	-11.10
Yttrium	A	1085669	991878	-8.64
Terbium	A	1790797	1623419	-9.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634091 File : c19v0091 Time : 20-MAR-2007 06:14
Cal : 67113634001 Caldate: 19-MAR-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.09003]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06882]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.5000	0.1296	ug/L	
Manganese	E	[0.05976]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05606]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.007114]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	485015	-15.31
Scandium	A	706762	612082	-13.40
Scandium	E	25539	22892	-10.37
Scandium	H	359251	315375	-12.21
Germanium	H	93669	82353	-12.08
Germanium	E	14946	13460	-9.94
Indium	A	1144466	978011	-14.54
Bismuth	A	1198899	1037361	-13.47
Yttrium	A	1085669	940486	-13.37
Terbium	A	1790797	1569339	-12.37

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634017 File : c19v0017 Time : 19-MAR-2007 23:27
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09995]	0.1000	ug/L	
Barium	A	3.737	0.1000	ug/L	
Beryllium	A	[0.05848]	0.1000	ug/L	
Cadmium	A	1.619	0.1000	ug/L	
Lead	A	0.4870	0.1000	ug/L	
Silver	A	0.2308	0.1000	ug/L	
Thallium	A	[0.02412]	0.05000	ug/L	
Arsenic	E	0.2383	0.1000	ug/L	
Chromium	E	1.447	0.1000	ug/L	
Cobalt	E	0.2310	0.1000	ug/L	
Copper	E	1.583	0.5000	ug/L	
Manganese	E	0.7401	0.1000	ug/L	
Nickel	E	1.426	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	[0.07861]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	99530	ug/L	100
Calcium	A	300000	302600	ug/L	101
Magnesium	A	100000	96600	ug/L	97
Molybdenum	A	2000	2243	ug/L	112
Potassium	A	100000	101400	ug/L	101
Sodium	E	250000	260300	ug/L	104
Iron	H	250000	256400	ug/L	103

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	430213	-24.88
Scandium	A	706762	639353	-9.54
Scandium	E	25539	23341	-8.61
Scandium	H	359251	333619	-7.13
Germanium	H	93669	82416	-12.01
Germanium	E	14946	13379	-10.48
Indium	A	1144466	953554	-16.68
Bismuth	A	1198899	920324	-23.24
Yttrium	A	1085669	997311	-8.14
Terbium	A	1790797	1651389	-7.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634018 File : c19v0018 Time : 19-MAR-2007 23:33
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97550	ug/L	-2		
Cadmium	A	100.0	104.7	ug/L	5	20	
Calcium	A	300000	295700	ug/L	-1		
Magnesium	A	100000	95060	ug/L	-5		
Molybdenum	A	2000	2169	ug/L	8		
Potassium	A	100000	98710	ug/L	-1		
Silver	A	50.00	45.33	ug/L	-9	20	
Arsenic	E	100.0	105.3	ug/L	5	20	
Chromium	E	200.0	201.4	ug/L	1	20	
Cobalt	E	200.0	189.2	ug/L	-5	20	
Copper	E	200.0	183.9	ug/L	-8	20	
Manganese	E	200.0	196.5	ug/L	-2	20	
Nickel	E	200.0	185.9	ug/L	-7	20	
Sodium	E	250000	243300	ug/L	-3		
Vanadium	E	200.0	204.4	ug/L	2	20	
Zinc	E	100.0	83.56	ug/L	-16	20	
Iron	H	250000	238400	ug/L	-5		
Selenium	H	100.0	102.0	ug/L	2	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	334642	-6.85
Scandium	A	706762	599115	-15.23
Scandium	E	25539	22657	-11.29
Germanium	H	93669	82381	-12.05
Germanium	E	14946	12886	-13.78
Indium	A	1144466	899415	-21.41
Yttrium	A	1085669	944648	-12.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634079 File : c19v0079 Time : 20-MAR-2007 05:08
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09761]	0.1000	ug/L	
Barium	A	3.723	0.1000	ug/L	
Beryllium	A	[0.04425]	0.1000	ug/L	
Cadmium	A	1.695	0.1000	ug/L	
Lead	A	0.5008	0.1000	ug/L	
Silver	A	0.2636	0.1000	ug/L	
Thallium	A	0.07153	0.05000	ug/L	
Arsenic	E	0.2622	0.1000	ug/L	
Chromium	E	1.487	0.1000	ug/L	
Cobalt	E	0.2548	0.1000	ug/L	
Copper	E	1.500	0.5000	ug/L	
Manganese	E	0.7823	0.1000	ug/L	
Nickel	E	1.415	0.1000	ug/L	
Vanadium	E	[0.01536]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	0.1066	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	101200	ug/L	101
Calcium	A	300000	303000	ug/L	101
Magnesium	A	100000	98600	ug/L	99
Molybdenum	A	2000	2252	ug/L	113
Potassium	A	100000	101800	ug/L	102
Sodium	E	250000	259100	ug/L	104
Iron	H	250000	254700	ug/L	102

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	422733	-26.19
Scandium	A	706762	612970	-13.27
Scandium	E	25539	22338	-12.54
Scandium	H	359251	316007	-12.04
Germanium	H	93669	77855	-16.88
Germanium	E	14946	12750	-14.69
Indium	A	1144466	911226	-20.38
Bismuth	A	1198899	887503	-25.97
Yttrium	A	1085669	937517	-13.65
Terbium	A	1790797	1574508	-12.08

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634080 File : c19v0080 Time : 20-MAR-2007 05:13
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97440	ug/L	-3		
Cadmium	A	100.0	102.8	ug/L	3	20	
Calcium	A	300000	292800	ug/L	-2		
Magnesium	A	100000	95410	ug/L	-5		
Molybdenum	A	2000	2182	ug/L	9		
Potassium	A	100000	98400	ug/L	-2		
Silver	A	50.00	44.44	ug/L	-11	20	
Arsenic	E	100.0	102.5	ug/L	3	20	
Chromium	E	200.0	198.1	ug/L	-1	20	
Cobalt	E	200.0	185.9	ug/L	-7	20	
Copper	E	200.0	180.0	ug/L	-10	20	
Manganese	E	200.0	193.9	ug/L	-3	20	
Nickel	E	200.0	184.2	ug/L	-8	20	
Sodium	E	250000	243600	ug/L	-3		
Vanadium	E	200.0	202.1	ug/L	1	20	
Zinc	E	100.0	81.92	ug/L	-18	20	
Iron	H	250000	236300	ug/L	-5		
Selenium	H	100.0	100.9	ug/L	1	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	321383	-10.54
Scandium	A	706762	578697	-18.12
Scandium	E	25539	21758	-14.81
Germanium	H	93669	78658	-16.03
Germanium	E	14946	12384	-17.14
Indium	A	1144466	868906	-24.08
Yttrium	A	1085669	886861	-18.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634093 File : c19v0093 Time : 20-MAR-2007 06:25
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5651, S5290

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07867]	0.1000	ug/L	
Barium	A	3.853	0.1000	ug/L	
Beryllium	A	[0.02736]	0.1000	ug/L	
Cadmium	A	1.699	0.1000	ug/L	
Lead	A	0.4903	0.1000	ug/L	
Silver	A	0.2400	0.1000	ug/L	
Thallium	A	[0.02294]	0.05000	ug/L	
Arsenic	E	0.2416	0.1000	ug/L	
Chromium	E	1.456	0.1000	ug/L	
Cobalt	E	0.2310	0.1000	ug/L	
Copper	E	1.113	0.5000	ug/L	
Manganese	E	0.7128	0.1000	ug/L	
Nickel	E	1.483	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	[0]	0.1000	ug/L	
Selenium	H	[0.09079]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	102900	ug/L	103
Calcium	A	300000	308700	ug/L	103
Magnesium	A	100000	100400	ug/L	100
Molybdenum	A	2000	2296	ug/L	115
Potassium	A	100000	103700	ug/L	104
Sodium	E	250000	256500	ug/L	103
Iron	H	250000	254800	ug/L	102

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	572706	397258	-30.63
Scandium	A	706762	569794	-19.38
Scandium	E	25539	21032	-17.65
Scandium	H	359251	298944	-16.79
Germanium	H	93669	73979	-21.02
Germanium	E	14946	12135	-18.81
Indium	A	1144466	858070	-25.02
Bismuth	A	1198899	838948	-30.02
Yttrium	A	1085669	881846	-18.77
Terbium	A	1790797	1497146	-16.40

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67113634094 File : c19v0094 Time : 20-MAR-2007 06:30
Cal : 67113634001 Caldate: 19-MAR-2007
Standards: S5652, S5290

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97490	ug/L	-3		
Cadmium	A	100.0	103.3	ug/L	3	20	
Calcium	A	300000	293000	ug/L	-2		
Magnesium	A	100000	94750	ug/L	-5		
Molybdenum	A	2000	2188	ug/L	9		
Potassium	A	100000	98500	ug/L	-2		
Silver	A	50.00	45.12	ug/L	-10	20	
Arsenic	E	100.0	105.6	ug/L	6	20	
Chromium	E	200.0	201.3	ug/L	1	20	
Cobalt	E	200.0	189.2	ug/L	-5	20	
Copper	E	200.0	182.9	ug/L	-9	20	
Manganese	E	200.0	197.0	ug/L	-2	20	
Nickel	E	200.0	186.7	ug/L	-7	20	
Sodium	E	250000	241900	ug/L	-3		
Vanadium	E	200.0	204.2	ug/L	2	20	
Zinc	E	100.0	83.28	ug/L	-17	20	
Iron	H	250000	237800	ug/L	-5		
Selenium	H	100.0	101.2	ug/L	1	20	

ISTD (ICALBLK c19v0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	359251	301504	-16.07
Scandium	A	706762	553668	-21.66
Scandium	E	25539	20459	-19.89
Germanium	H	93669	74717	-20.23
Germanium	E	14946	11644	-22.09
Indium	A	1144466	836519	-26.91
Yttrium	A	1085669	855080	-21.24

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67113634

Date : 03/19/07 Reference: c19v0004
Sequence : MET06 c19v0 Analyzed : 03/19/07 22:13

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	572706	706762	25539	359251	93669	14946	1144466	1198899	1085669	1790797
		LOWER LIMIT	171812	212028	7662	107775	28101	4484	343340	359670	325701	537239
		UPPER LIMIT	687248	848114	30647	431102	112403	17935	1373359	1438679	1302803	2148956
016	ICB		543017	684555	24850	350957	90951	14626	1122823	1152187	1067736	1735947
017	ICSA		430213	639353	23341	333619	82416	13379	953554	920324	997311	1651389
018	ICSAB		412831	599115	22657	334642	82381	12886	899415	867646	944648	1575188
023	BLANK	QC379810	444259	585225	21963	321240	93867	14122	946607	1026061	910762	1567697
024	BS	QC379811	434618	583428	21502	312000	85006	12958	920071	971183	905686	1578126
025	BSD	QC379812	454421	613304	22835	335011	86003	13160	975924	1003619	985011	1631509
027	MSS	193474-001	479530	619523	23439	332199	86743	13894	984887	1045244	951424	1593615
028	SER	QC379815	497932	645636	23467	334828	88348	13840	1056485	1098566	998863	1647982
029	MS	QC379813	488247	631470	22849	326221	84900	13395	1011910	1047929	977040	1638408
030	MSD	QC379814	499071	638210	23108	330602	86311	13602	1017049	1051948	984533	1630485
031	PDS	QC379816	481912	637057	23365	330839	85563	13661	1015184	1007596	987074	1632640
035	CCV		485845	633927	23124	331405	85822	13559	1024995	1030196	995435	1652787
038	CCB		504678	641225	23588	331707	86298	13774	1022643	1074324	996076	1641165
040	SAMPLE	193463-001	482740	622481	22931	323557	85572	13627	991658	1051767	970539	1610974
041	SAMPLE	193463-002	487658	628133	23438	334109	87662	14039	1014577	1062249	982901	1632328
042	SAMPLE	193463-003	499161	634438	23524	331733	87439	14067	1035639	1089453	984740	1640617
043	SAMPLE	193463-004	494123	635154	23402	325884	85517	13699	1006214	1057421	989849	1619436
044	SAMPLE	193463-009	504385	644450	23717	331671	87126	14012	1028461	1083546	1005960	1644821
045	SAMPLE	193463-011	498005	637364	23387	324848	85718	13665	1049957	1069082	991217	1646539
046	SAMPLE	193463-012	492270	632022	23379	332467	87203	13929	1001438	1055515	972203	1623723
047	SAMPLE	193463-013	499788	640761	23668	330836	87369	14073	1059472	1093500	997052	1654831
048	SAMPLE	193463-014	499178	634510	23476	333226	87974	13933	1014112	1072431	990482	1638734
049	SAMPLE	193463-015	505659	641432	23844	329171	86929	14036	1046564	1082262	999533	1651789
053	CCV		480947	631429	22996	327018	84729	13535	1015462	1033025	994035	1647189
056	CCB		501151	636706	23862	330302	85642	14001	1032341	1076234	996065	1645474
058	SAMPLE	193474-002	507879	643613	23800	332132	86570	13814	1043415	1098092	996810	1641275
059	SAMPLE	193474-003	492512	637317	22852	323409	84624	13759	1003723	1079499	980226	1637880
060	SAMPLE	193474-004	490838	629367	23121	348636	89244	13643	1006432	1063400	970073	1613871
061	SAMPLE	193474-005	500429	637301	23326	326487	85283	13736	1002003	1085164	976903	1617157
062	SAMPLE	193479-001	486810	661162	24498	340645	82222	13334	954300	906171	992860	1586213
063	SAMPLE	193277-001	587776	701973	25553	353586	91269	14851	1109505	1109441	1063303	1721059
064	SAMPLE	193262-021	522102	657126	24780	349838	90784	14361	1004443	1014457	990692	1631927
066	SAMPLE	193416-001	504509	645126	24181	343877	86853	13750	969158	993543	978566	1607751
067	SAMPLE	193416-001	484363	631518	23709	333470	82850	13241	935354	941063	933365	1555302
068	SAMPLE	193459-005	475834	652924	24530	340838	80700	12910	941926	865463	1000004	1554911
072	CCV		500754	632712	23391	330436	85040	13516	1001696	1011846	981128	1622736
075	CCB		530007	643037	23882	333756	85907	13857	1008187	1065874	991878	1623419
077	SAMPLE	193335-001	514814	635152	23686	327395	84908	13680	1021921	1073395	976800	1619584
078	BS	QC379371	516379	641240	23375	332994	85420	13577	1012910	1068376	979506	1624197
079	ICSA		422733	612970	22338	316007	77855	12750	911226	887503	937517	1574508
080	ICSAB		406361	578697	21758	321383	78658	12384	868906	847672	886861	1518620
085	BSD	QC379372	483043	611419	22473	313733	81210	12978	980921	1044281	946636	1586295
089	CCV		465081	592267	21870	312467	81194	12624	918164	976024	903045	1540150
091	CCB		485015	612082	22892	315375	82353	13460	978011	1037361	940486	1569339
093	ICSA		397258	569794	21032	298944	73979	12135	858070	838948	881846	1497146
094	ICSAB		384973	553668	20459	301504	74717	11644	836519	821305	855080	1449807

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c19v0001	TUN				19-MAR-2007 21:54	1.0	1.0				1	
002	c19v0002	X	RINSE			19-MAR-2007 22:02	1.0					2	
003	c19v0003	X	RINSE			19-MAR-2007 22:08	1.0					2	
004	c19v0004	ICALBLK	CALBLANK			19-MAR-2007 22:13	1.0	1.0				2	
005	c19v0005	ICAL				19-MAR-2007 22:19	1.0	1.0				3	
006	c19v0006	ICAL				19-MAR-2007 22:24	1.0	1.0				4	
007	c19v0007	ICAL				19-MAR-2007 22:33	1.0	1.0				5	
008	c19v0008	ICAL				19-MAR-2007 22:38	1.0	1.0				6	
009	c19v0009	ICAL				19-MAR-2007 22:44	1.0	1.0				7	
010	c19v0010	ICAL				19-MAR-2007 22:49	1.0	1.0				8	
011	c19v0011	X	RINSE			19-MAR-2007 22:55	1.0					2	
012	c19v0012	ICV				19-MAR-2007 23:00	1.0	1.0			1	9	
013	c19v0013	X	RINSE			19-MAR-2007 23:05	1.0					2	
014	c19v0014	X				19-MAR-2007 23:11	1.0					2	
015	c19v0015	X				19-MAR-2007 23:16	1.0					2	
016	c19v0016	ICB				19-MAR-2007 23:22	1.0	1.0			1	2	
017	c19v0017	ICSA				19-MAR-2007 23:27	1.0	1.0			1	10 2	7:CA=302600
018	c19v0018	ICSAB				19-MAR-2007 23:33	1.0	1.0			1	11 2	9:CA=295700
019	c19v0019	X	RINSE			19-MAR-2007 23:38	1.0					2	
020	c19v0020	X	RINSE			19-MAR-2007 23:44	1.0					2	
021	c19v0021	X	RINSE			19-MAR-2007 23:49	1.0					2	
022	c19v0022	X	RINSE			19-MAR-2007 23:54	1.0					2	
023	c19v0023	BLANK	QC379810	123249	Filtra	20-MAR-2007 00:00	1.0	1.0	1		1	2	
024	c19v0024	BS	QC379811	123249	Filtra	20-MAR-2007 00:05	1.0	1.0	1		1	2	
025	c19v0025	BSD	QC379812	123249	Filtra	20-MAR-2007 00:11	1.0	1.0	1		1	2	
026	c19v0026	X	RINSE			20-MAR-2007 00:17	1.0					2	
027	c19v0027	MSS	193474-001	123249	Filtra	20-MAR-2007 00:22	10.0	1.0	2		1	2	
028	c19v0028	SER	QC379815	123249	Filtra	20-MAR-2007 00:28	50.0	1.0	1	2	1	2	
029	c19v0029	MS	QC379813	123249	Filtra	20-MAR-2007 00:33	10.0	1.0			1	2	
030	c19v0030	MSD	QC379814	123249	Filtra	20-MAR-2007 00:39	10.0	1.0			1	2	
031	c19v0031	PDS	QC379816	123249	Filtra	20-MAR-2007 00:44	10.0	1.0			1	12	

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c19v0032	X	RINSE			20-MAR-2007 00:50	1.0					2	
033	c19v0033	X	RINSE			20-MAR-2007 00:55	1.0					2	
034	c19v0034	X	RINSE			20-MAR-2007 01:01	1.0					2	
035	c19v0035	CCV				20-MAR-2007 01:06	1.0	1.0	1		1	13	
036	c19v0036	X	RINSE			20-MAR-2007 01:12	1.0					2	
037	c19v0037	X				20-MAR-2007 01:17	1.0					2	
038	c19v0038	CCB				20-MAR-2007 01:23	1.0	1.0			1	2	
039	c19v0039	X				20-MAR-2007 01:28	1.0					2	
040	c19v0040	SAMPLE	193463-001	123249	Water	20-MAR-2007 01:34	10.0	1.0	2		1	2	
041	c19v0041	SAMPLE	193463-002	123249	Water	20-MAR-2007 01:39	10.0	1.0	1		1	2	
042	c19v0042	SAMPLE	193463-003	123249	Water	20-MAR-2007 01:45	10.0	1.0	1		1	2	
043	c19v0043	SAMPLE	193463-004	123249	Water	20-MAR-2007 01:50	10.0	1.0	1		1	2	
044	c19v0044	SAMPLE	193463-009	123249	Water	20-MAR-2007 01:56	10.0	1.0	1		1	2	
045	c19v0045	SAMPLE	193463-011	123249	Water	20-MAR-2007 02:01	10.0	1.0	1		1	2	
046	c19v0046	SAMPLE	193463-012	123249	Water	20-MAR-2007 02:07	10.0	1.0	1		1	2	
047	c19v0047	SAMPLE	193463-013	123249	Water	20-MAR-2007 02:12	10.0	1.0	1		1	2	
048	c19v0048	SAMPLE	193463-014	123249	Water	20-MAR-2007 02:18	10.0	1.0	2		1	2	
049	c19v0049	SAMPLE	193463-015	123249	Water	20-MAR-2007 02:23	10.0	1.0	1		1	2	
050	c19v0050	X	RINSE			20-MAR-2007 02:29	1.0					2	
051	c19v0051	X	RINSE			20-MAR-2007 02:34	1.0					2	
052	c19v0052	X	RINSE			20-MAR-2007 02:40	1.0					2	
053	c19v0053	CCV				20-MAR-2007 02:45	1.0	1.0	1		1	13	
054	c19v0054	X	RINSE			20-MAR-2007 02:50	1.0					2	
055	c19v0055	X				20-MAR-2007 02:56	1.0					2	
056	c19v0056	CCB				20-MAR-2007 03:01	1.0	1.0			1	2	
057	c19v0057	X				20-MAR-2007 03:07	1.0					2	
058	c19v0058	SAMPLE	193474-002	123249	Filtra	20-MAR-2007 03:12	10.0	1.0	1		1	2	
059	c19v0059	SAMPLE	193474-003	123249	Filtra	20-MAR-2007 03:18	10.0	1.0	1		1	2	
060	c19v0060	SAMPLE	193474-004	123249	Filtra	20-MAR-2007 03:23	10.0	1.0	1		1	2	
061	c19v0061	SAMPLE	193474-005	123249	Filtra	20-MAR-2007 03:29	10.0	1.0	1		1	2	
062	c19v0062	SAMPLE	193479-001	123249	Filtra	20-MAR-2007 03:34	10.0	1.0	1		1	2	2:NA=590200

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	c19v0063	SAMPLE	193277-001	123055	Filtra	20-MAR-2007 03:40	10.0	1.0	2		1	2	
064	c19v0064	SAMPLE	193262-021	123055	Water	20-MAR-2007 03:45	10.0	1.0	1		1	2	1:NA=29200.0
065	c19v0065	X	RINSE			20-MAR-2007 03:51	1.0					2	
066	c19v0066	SAMPLE	193416-001	123155	Water	20-MAR-2007 03:56	20.0	1.0	1		1	2	1:NA=123000
067	c19v0067	SAMPLE	193416-001	123155	Water	20-MAR-2007 04:02	10.0	1.0	2		1	2	3:NA=239200
068	c19v0068	SAMPLE	193459-005	123218	Filtra	20-MAR-2007 04:07	10.0	1.0	1		1	2	5:NA=716700
069	c19v0069	X	RINSE			20-MAR-2007 04:13	1.0					2	
070	c19v0070	X	RINSE			20-MAR-2007 04:18	1.0					2	
071	c19v0071	X	RINSE			20-MAR-2007 04:24	1.0					2	
072	c19v0072	CCV				20-MAR-2007 04:29	1.0	1.0	1		1	13	
073	c19v0073	X	RINSE			20-MAR-2007 04:35	1.0					2	
074	c19v0074	X				20-MAR-2007 04:40	1.0					2	
075	c19v0075	CCB				20-MAR-2007 04:46	1.0	1.0			1	2	
076	c19v0076	X				20-MAR-2007 04:51	1.0					2	
077	c19v0077	SAMPLE	193335-001	123055	Filtra	20-MAR-2007 04:57	5.0	1.0	1		1	2	
078	c19v0078	BS	QC379371	123147	Soil	20-MAR-2007 05:02	50.0	50.0	1	1	1	2	
079	c19v0079	ICSA				20-MAR-2007 05:08	1.0	1.0			1	10 2	7:CA=303000
080	c19v0080	ICSAB				20-MAR-2007 05:13	1.0	1.0			1	11 2	8:CA=292800
081	c19v0081	X	RINSE			20-MAR-2007 05:19	1.0					2	
082	c19v0082	X	RINSE			20-MAR-2007 05:24	1.0					2	
083	c19v0083	X	RINSE			20-MAR-2007 05:30	1.0					2	
084	c19v0084	X	RINSE			20-MAR-2007 05:35	1.0					2	
085	c19v0085	BSD	QC379372	123147	Soil	20-MAR-2007 05:41	50.0	50.0	1	1	1	2	
086	c19v0086	X	RINSE			20-MAR-2007 05:46	1.0					2	
087	c19v0087	X	RINSE			20-MAR-2007 05:52	1.0					2	
088	c19v0088	X	RINSE			20-MAR-2007 05:58	1.0					2	
089	c19v0089	CCV				20-MAR-2007 06:03	1.0	1.0	1		1	13	
090	c19v0090	X	RINSE			20-MAR-2007 06:08	1.0					2	
091	c19v0091	CCB				20-MAR-2007 06:14	1.0	1.0			1	2	
092	c19v0092	X				20-MAR-2007 06:20	1.0					2	
093	c19v0093	ICSA				20-MAR-2007 06:25	1.0	1.0			1	10 2	7:CA=308700

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67113634 Instrument: MET06 Agilent ICP-MS MET06 Begun: 19-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
094	c19v0094	ICSAB				20-MAR-2007 06:30	1.0	1.0		1	11 2	9:CA=293000

Stds used: 1=S5641 2=S5290 3=S5645 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5054 13=S5654

Analyst: _____ Date: 3/20/07

21608

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 57114423001
Units : ug/L

Date : 20-MAR-2007 11:17
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	c2010005	57114423005		20-MAR-2007 11:21	S5647
L2	c2010006	57114423006		20-MAR-2007 11:26	S5648
L3	c2010007	57114423007		20-MAR-2007 11:30	S5649
L4	c2010008	57114423008		20-MAR-2007 11:34	S5650
L5	c2010009	57114423009		20-MAR-2007 11:38	S5644
L6	c2010010	57114423010		20-MAR-2007 11:42	S5646

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	0.5176	0.5067	0.4897	0.4444	0.4500	0.4428	BLNK	-0.6028	2.25116		0.4752	1.000	0.995	
Antimony	0.3585	0.3249	0.3196	0.2922	0.2985	0.2970	BLNK	-0.0515	3.36513		0.3151	1.000	0.995	
Arsenic	1.2661	0.8848	0.8660	0.6510	0.6246	0.6047	BLNK	-0.1248	1.64395		0.8162	1.000	0.995	
Barium	0.2141	0.1401	0.1589	0.1140	0.1181	0.1187	BLNK	-0.1080	8.44145		0.1440	1.000	0.995	
Beryllium	0.2789	0.2705	0.2670	0.2653	0.2707	0.2783	BLNK	-0.0088	3.61325		0.2718	1.000	0.995	
Cadmium	1.0975	1.0693	0.9696	0.8462	0.8215	0.7898	BLNK	-0.1089	1.25670		0.9323	1.000	0.995	
Calcium	0.0383	0.0301	0.0270	0.0231	0.0214	0.0209	BLNK	-17.837	47.6721		0.0268	1.000	0.995	
Chromium	21.330	13.510	9.5803	5.7108	5.4027	5.1736	BLNK	-0.7392	0.19243		10.118	1.000	0.995	
Cobalt	5.7861	5.8172	5.7358	5.5170	5.5877	5.3696	BLNK	-0.0054	0.18473		5.6356	1.000	0.995	
Copper	1.8566	1.5733	1.5287	1.3299	1.2873	1.2448	BLNK	-0.0918	0.79826		1.4701	1.000	0.995	
Iron	0.2924	0.2100	0.1758	0.1330	0.1173	0.1135	BLNK	-34.206	8.77056		0.1737	1.000	0.995	
Lead	1.3544	1.2579	1.2452	1.1883	1.2156	1.1952	BLNK	-0.0290	0.83400		1.2428	1.000	0.995	
Magnesium	0.0682	0.0658	0.0648	0.0596	0.0582	0.0576	BLNK	-1.6750	17.3282		0.0624	1.000	0.995	
Manganese	9.2375	8.0218	7.6153	6.7464	6.8130	6.5732	BLNK	-0.0860	0.15111		7.5012	1.000	0.995	
Molybdenum	1.3513	1.3117	1.2014	1.2036	1.2110	1.1880	BLNK	-0.0177	0.83856		1.2445	1.000	0.995	
Nickel	1.7528	1.4680	1.4442	1.2323	1.1980	1.1471	BLNK	-0.1014	0.86452		1.3737	1.000	0.995	
Potassium	3.6671	2.1587	1.4452	0.7607	0.7038	0.6878	BLNK	-106.15	1.45644		1.5705	1.000	0.995	
Selenium	0.0128	0.0830	0.0727	0.0512	0.0499	0.0473	BLNK	0.13750	20.8781		0.0528	0.999	0.995	
Silver	3.5210	3.3845	3.4509	3.5084	3.2815	3.3238	BLNK	-0.0137	0.30161		3.4117	1.000	0.995	
Sodium	2.6919	1.6700	1.1970	0.7266	0.6936	0.6805	BLNK	-72.226	1.47030		1.2766	1.000	0.995	
Thallium	1.0447	0.9711	0.9537	0.8913	0.9228	0.9239	BLNK	-0.0286	1.08306		0.9512	1.000	0.995	
Vanadium	21.200	12.781	9.8566	6.1628	5.4770	5.1935	BLNK	-0.5949	0.19110		10.112	0.999	0.995	
Zinc	3.8351	2.2496	1.6092	0.8795	0.7955	0.7528	BLNK	-0.8574	1.32003		1.6869	0.999	0.995	

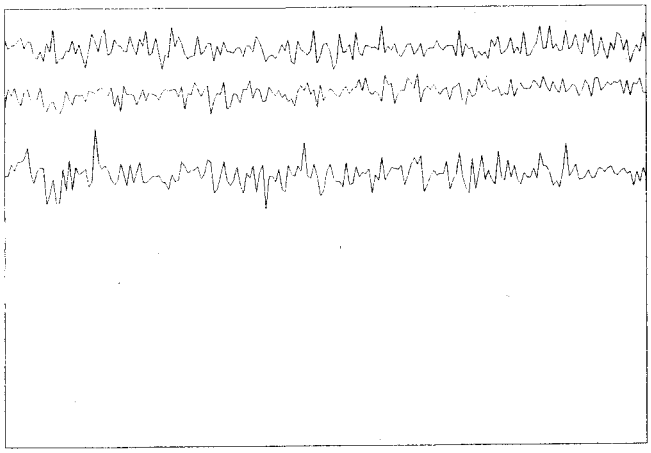
Analyte Spiked Amounts	L1	L2	L3	L4	L5	L6	Units
Aluminum	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Antimony	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Arsenic	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Barium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Beryllium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cadmium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Calcium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Chromium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Cobalt	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Copper	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Iron	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Lead	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Magnesium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Manganese	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Molybdenum	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Nickel	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Potassium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Selenium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Silver	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Sodium	25.000	50.000	100.00	1000.0	10000	20000	ug/L
Thallium	0.1250	0.2500	0.5000	5.0000	50.000	100.00	ug/L
Vanadium	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L
Zinc	0.2500	0.5000	1.0000	10.000	100.00	200.00	ug/L

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

57114423001

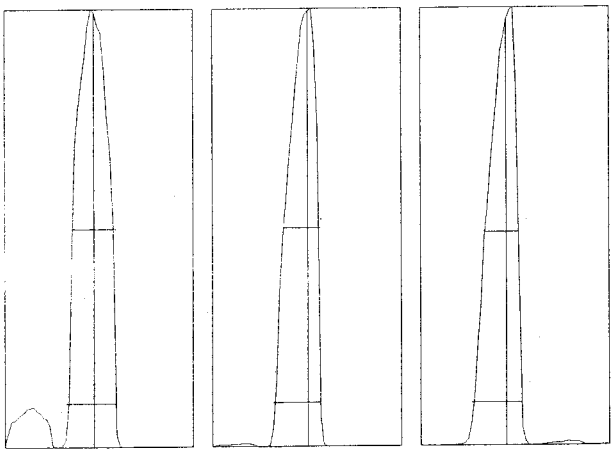
Tune Report

Tune File : nogas.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.372%
Doubly Charged:	70/140	1.570%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	12033.0	12418.8	4.16	28.60
89	20,000	18134.0	18149.4	2.20	13.20
205	20,000	16005.0	16167.2	2.11	11.70
156/140	1	0.384%	0.376%	11.11	
70/140	5	1.429%	1.583%	6.93	



m/z:	7	89	205
Height:	12,869	18,429	15,795
Axis:	6.95	89.05	204.90
W-50%:	0.70	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Mar 20, 2007 10:10:05
Printed : Mar 20, 2007 10:10:07

Tune Report

Tune File : nogas.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1500 W	Extract 1	:	-100 V	AMU Gain	:	129
RF Matching	:	1.72 V	Extract 2	:	-70 V	AMU Offset	:	125
Smpl Depth	:	5.3 mm	Einzel 1,3	:	-100 V	Axis Gain	:	0.9987
Torch-H	:	-1.1 mm	Einzel 2	:	7 V	Axis Offset	:	0.07
Torch-V	:	0.9 mm	Omega Bias	:	-70 V	QP Bias	:	-1 V
Carrier Gas	:	1.05 L/min	Omega (+)	:	3 V			
Makeup Gas	:	0 L/min	Omega (-)	:	-3 V	===Detector Parameters===		
Optional Gas	:	--- %	QP Focus	:	6 V	Discriminator	:	9.2 mV
Nebulizer Pump	:	0.1 rps	Plate Bias	:	-3 V	Analog HV	:	1830 V
Sample Pump	:	--- rps				Pulse HV	:	1380 V
S/C Temp	:	2 degC						

Generated : Mar 20, 2007 10:10:05
Printed : Mar 20, 2007 10:10:10

00346

P/A Factor Tuning Report

Acquired:Mar 20 2007 10:22 am

Mass[amu]	Element	P/A Factor
6	Li	0.069651
9	Be	0.080663
23	Na	Sensitivity too high
25	Mg	0.089799
26	Mg	0.088541
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.096618
44	Ca	0.092621
45	Sc	0.098285
51	V	0.091340
52	Cr	0.104038
53	Cr	0.097355
54	Fe	0.098660
55	Mn	0.106660
57	Fe	0.097316
59	Co	0.109297
60	Ni	0.107805
63	Cu	0.111901
65	Cu	0.109749
66	Zn	0.106936
72	Ge	0.103040
75	As	0.104184
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.107339
95	Mo	0.105350
98	Mo	0.107009
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.114078
111	Cd	0.108908
114	Cd	0.113111
115	In	0.114778
118	(In)	Sensitivity too low
121	Sb	0.115078
135	Ba	Sensitivity too low
137	Ba	0.111679
159	Tb	0.118662
166	Er	Sensitivity too low
205	Tl	0.121789
206	(Pb)	0.120017
207	(Pb)	0.119225
208	Pb	0.122756
209	Bi	0.121520

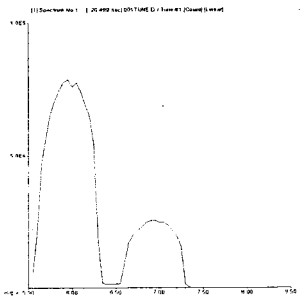
===Detector Parameters===
Discriminator: 9.2 mV
Analog HV: 1830 V
Pulse HV: 1380 V

6020 QC Tune Report

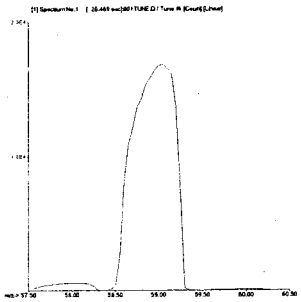
Data File: C:\ICPCHEM\1\DATA\07C20100.B\001TUNE.D
Date Acquired: Mar 20 2007 11:03 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s5641
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

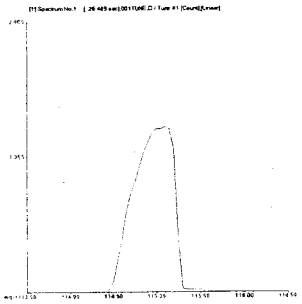
Element	Actual	Required	Flag
7 Li	1.48	5.00	
59 Co	0.59	5.00	
115 In	0.61	5.00	
205 Tl	1.54	5.00	



7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



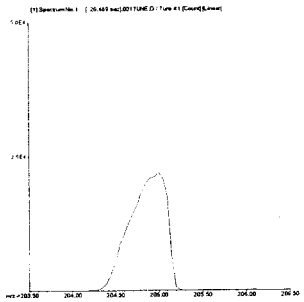
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 204.95
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004C
Date Acquired: Mar 20 2007 11:17 am
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:19 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	781175.88	A	10000.00	1.28
9	Be	37.78	P	16.44	43.52
23	Na	764504.81	A	12260.00	1.60
26	Mg	1504.44	P	18.95	1.26
27	Al	4166.67	P	86.86	2.08
39	K	1134670.00	A	5986.00	0.53
44	Ca	5823.09	P	115.50	1.98
45	Sc	778960.13	M	25370.00	3.26
51	V	7553.17	P	1271.00	16.83
52	Cr	9316.67	P	97.01	1.04
55	Mn	1380.00	P	80.00	5.80
57	Fe	9458.89	P	78.13	0.83
59	Co	71.11	P	18.36	25.82
60	Ni	284.44	P	6.94	2.44
65	Cu	278.88	P	38.92	13.96
66	Zn	1575.33	P	39.85	2.53
72	Ge	121266.20	P	433.60	0.36
75	As	184.56	P	223.60	121.15
82	Se	-16.00	P	22.54	140.88
95	Mo	51.11	P	13.88	27.16
109	Ag	110.00	P	18.56	16.87
111	Cd	210.19	P	35.52	16.90
115	In	1110817.00	A	11350.00	1.02
121	Sb	340.00	P	11.55	3.40
137	Ba	284.44	P	28.35	9.97
205	Tl	553.33	P	81.85	14.79
208	Pb	727.78	P	69.31	9.52
209	Bi	1047465.00	M	5010.00	0.48

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\005CALI.D\005CALI.D#
Date Acquired: Mar 20 2007 11:21 am
Operator:
Sample Name: s5647
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:20 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	784055.88	A	10910.00	1.39
9 Be	1093.33	P	52.39	4.79
23 Na	1028784.00	A	18330.00	1.78
26 Mg	26088.89	P	62.57	0.24
27 Al	197848.91	P	1044.00	0.53
39 K	1401849.00	A	4645.00	0.33
44 Ca	14635.96	P	289.60	1.98
45 Sc	764807.19	M	17930.00	2.34
51 V	12756.50	P	1687.00	13.23
52 Cr	12832.22	P	156.90	1.22
55 Mn	5557.78	P	160.70	2.89
57 Fe	17595.55	P	220.10	1.25
59 Co	3481.11	P	127.00	3.65
60 Ni	1054.44	P	68.50	6.50
65 Cu	1117.66	P	78.19	7.00
66 Zn	2307.78	P	48.91	2.12
72 Ge	120344.90	P	1460.00	1.21
75 As	759.56	P	378.90	49.88
82 Se	7.56	P	23.65	313.01
95 Mo	813.33	P	63.86	7.85
109 Ag	2118.89	P	60.49	2.85
111 Cd	660.05	P	56.93	8.63
115 In	1118557.00	A	7935.00	0.71
121 Sb	2004.44	P	166.80	8.32
137 Ba	1196.67	P	93.87	7.84
205 Tl	2757.78	P	95.82	3.47
208 Pb	7151.11	P	166.50	2.33
209 Bi	1055992.00	M	6749.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	784055.88	1.3915	781175.88	100.37	80 - 120	
45 Sc	764807.25	2.3444	778960.06	98.18	80 - 120	
72 Ge	120344.88	1.2132	121266.22	99.24	80 - 120	
115 In	1118556.8	0.7094	1110817	100.70	80 - 120	
209 Bi	1055992.6	0.6391	1047465.4	100.81	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\006CALI.D\006CALI.D#
Date Acquired: Mar 20 2007 11:26 am
Operator:
Sample Name: s5648
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:24 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	780015.00	A	12360.00	1.58
9 Be	2110.00	P	91.71	4.35
23 Na	1309477.00	A	36300.00	2.77
26 Mg	51582.22	P	593.10	1.15
27 Al	397295.50	P	5360.00	1.35
39 K	1692790.00	A	9673.00	0.57
44 Ca	23622.54	P	463.00	1.96
45 Sc	784153.63	A	4132.00	0.53
51 V	15464.04	P	1667.00	10.78
52 Cr	16354.44	P	384.30	2.35
55 Mn	9710.00	P	18.56	0.19
57 Fe	25422.22	P	298.20	1.17
59 Co	7041.11	P	68.34	0.97
60 Ni	1776.67	P	51.32	2.89
65 Cu	1904.21	P	42.47	2.23
66 Zn	2723.11	P	28.88	1.06
72 Ge	121047.80	P	758.90	0.63
75 As	1070.32	P	165.20	15.44
82 Se	100.22	P	91.69	91.49
95 Mo	1587.78	P	50.48	3.18
109 Ag	4096.67	P	170.60	4.16
111 Cd	1294.26	P	27.74	2.14
115 In	1140839.00	A	6016.00	0.53
121 Sb	3706.67	P	97.01	2.62
137 Ba	1597.78	P	15.75	0.99
205 Tl	5160.00	P	20.82	0.40
208 Pb	13368.89	P	118.80	0.89
209 Bi	1062754.00	M	6506.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	780015.06	1.5846	781175.88	99.85	80 - 120	
45 Sc	784153.63	0.5269	778960.06	100.67	80 - 120	
72 Ge	121047.78	0.6269	121266.22	99.82	80 - 120	
115 In	1140838.9	0.5273	1110817	102.70	80 - 120	
209 Bi	1062753.6	0.6122	1047465.4	101.46	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\007CALI.D\007CALI.D#
Date Acquired: Mar 20 2007 11:30 am
Operator:
Sample Name: s5649
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:28 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	791101.50	A	13110.00	1.66
9 Be	4226.67	P	203.70	4.82
23 Na	1890426.00	A	42500.00	2.25
26 Mg	102391.10	P	3255.00	3.18
27 Al	773194.63	A	19070.00	2.47
39 K	2282124.00	A	10910.00	0.48
44 Ca	42574.04	P	886.20	2.08
45 Sc	789610.81	A	6034.00	0.76
51 V	23912.02	P	547.00	2.29
52 Cr	23240.00	P	171.50	0.74
55 Mn	18473.33	P	213.20	1.15
57 Fe	42648.89	P	477.50	1.12
59 Co	13915.55	P	394.40	2.83
60 Ni	3503.33	P	16.67	0.48
65 Cu	3708.44	P	108.60	2.93
66 Zn	3904.00	P	63.09	1.62
72 Ge	121296.70	P	812.80	0.67
75 As	2101.60	P	217.40	10.35
82 Se	176.22	P	13.68	7.76
95 Mo	2914.44	P	119.50	4.10
109 Ag	8371.11	P	47.18	0.56
111 Cd	2351.44	P	127.00	5.40
115 In	1130002.00	A	14880.00	1.32
121 Sb	7222.22	P	157.80	2.18
137 Ba	3590.00	P	77.67	2.16
205 Tl	10334.44	P	243.20	2.35
208 Pb	26988.89	P	579.00	2.15
209 Bi	1083655.00	A	4545.00	0.42

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	791101.5	1.6572	781175.88	101.27	80 - 120	
45 Sc	789610.75	0.7642	778960.06	101.37	80 - 120	
72 Ge	121296.66	0.6701	121266.22	100.03	80 - 120	
115 In	1130001.5	1.3168	1110817	101.73	80 - 120	
209 Bi	1083654.6	0.4194	1047465.4	103.45	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\008CALI.D\008CALI.D#
Date Acquired: Mar 20 2007 11:34 am
Operator:
Sample Name: s5650
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:32 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	785820.69	A	3548.00	0.45
9 Be	41691.11	P	840.10	2.02
23 Na	11583120.00	A	41980.00	0.36
26 Mg	950620.69	A	12030.00	1.27
27 Al	7084153.00	A	69650.00	0.98
39 K	12127750.00	A	81170.00	0.67
44 Ca	368224.31	P	2582.00	0.70
45 Sc	797117.69	A	7939.00	1.00
51 V	152600.91	P	2542.00	1.67
52 Cr	141423.30	P	1867.00	1.32
55 Mn	167064.41	P	1415.00	0.85
57 Fe	329454.41	P	3820.00	1.16
59 Co	136621.09	P	1493.00	1.09
60 Ni	30516.67	P	349.90	1.15
65 Cu	32930.05	P	50.07	0.15
66 Zn	21779.11	P	179.10	0.82
72 Ge	123822.70	P	1601.00	1.29
75 As	16121.72	P	195.20	1.21
82 Se	1268.44	P	69.10	5.45
95 Mo	29807.78	P	559.80	1.88
109 Ag	86880.00	P	828.60	0.95
111 Cd	20954.65	P	177.80	0.85
115 In	1131929.00	A	19330.00	1.71
121 Sb	66128.89	P	1054.00	1.59
137 Ba	25801.11	P	415.20	1.61
205 Tl	95844.45	P	1460.00	1.52
208 Pb	255551.09	P	1672.00	0.65
209 Bi	1075315.00	M	7627.00	0.71

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	785820.69	0.4515	781175.88	100.59	80 - 120	
45 Sc	797117.69	0.996	778960.06	102.33	80 - 120	
72 Ge	123822.66	1.293	121266.22	102.11	80 - 120	
115 In	1131929.5	1.7077	1110817	101.90	80 - 120	
209 Bi	1075315.1	0.7093	1047465.4	102.66	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\009CALI.D\009CALI.D#
Date Acquired: Mar 20 2007 11:38 am
Operator:
Sample Name: s5644
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:36 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	768136.38	A	8178.00	1.06
9 Be	415833.31	P	4325.00	1.04
23 Na	108220400.00	A	1567000.00	1.45
26 Mg	9075439.00	A	40950.00	0.45
27 Al	70213728.00	A	189200.00	0.27
39 K	109814300.00	A	1517000.00	1.38
44 Ca	3340718.00	A	36460.00	1.09
45 Sc	780180.50	M	5193.00	0.67
51 V	1360217.00	A	22270.00	1.64
52 Cr	1341762.00	A	16030.00	1.19
55 Mn	1692016.00	A	18780.00	1.11
57 Fe	2912170.00	A	24820.00	0.85
59 Co	1387702.00	A	11290.00	0.81
60 Ni	297517.81	P	5603.00	1.88
65 Cu	319709.41	P	1305.00	0.41
66 Zn	197553.09	P	1601.00	0.81
72 Ge	124175.10	P	141.30	0.11
75 As	155123.00	P	387.50	0.25
82 Se	12400.89	P	126.20	1.02
95 Mo	300744.41	P	1360.00	0.45
109 Ag	814962.19	P	1882.00	0.23
111 Cd	204021.70	P	1300.00	0.64
115 In	1092796.00	A	6620.00	0.61
121 Sb	652438.88	P	3733.00	0.57
137 Ba	258115.50	P	1799.00	0.70
205 Tl	957321.13	P	4673.00	0.49
208 Pb	2521965.00	A	19160.00	0.76
209 Bi	1037372.00	P	2663.00	0.26

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	768136.38	1.0647	781175.88	98.33	80 - 120	
45 Sc	780180.5	0.6656	778960.06	100.16	80 - 120	
72 Ge	124175.12	0.1138	121266.22	102.40	80 - 120	
115 In	1092796.5	0.6058	1110817	98.38	80 - 120	
209 Bi	1037372.2	0.2567	1047465.4	99.04	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07C20100.B\010CALI.D\010CALI.D#
Date Acquired: Mar 20 2007 11:42 am
Operator:
Sample Name: s5646
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Mar 20 2007 11:40 am
Sample Type: CalStd
Total Dil Factor: 1

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	749446.00	A	3569.00	0.48
9 Be	834331.50	A	15640.00	1.87
23 Na	209139300.00	A	3742000.00	1.79
26 Mg	17701340.00	A	141100.00	0.80
27 Al	136077410.00	A	1875000.00	1.38
39 K	211355600.00	A	1899000.00	0.90
44 Ca	6420798.00	A	25260.00	0.39
45 Sc	768530.13	M	16050.00	2.09
51 V	2567150.00	A	12660.00	0.49
52 Cr	2557214.00	A	35220.00	1.38
55 Mn	3249112.00	A	26890.00	0.83
57 Fe	5608303.00	A	63650.00	1.13
59 Co	2654289.00	A	33550.00	1.26
60 Ni	567030.00	P	2871.00	0.51
65 Cu	615276.69	P	8223.00	1.34
66 Zn	372116.19	P	1957.00	0.53
72 Ge	123580.20	P	773.00	0.63
75 As	298896.19	P	1448.00	0.48
82 Se	23394.00	P	141.50	0.60
95 Mo	587250.00	P	2822.00	0.48
109 Ag	1643016.00	A	5509.00	0.34
111 Cd	390410.69	P	2727.00	0.70
115 In	1053885.00	A	16070.00	1.52
121 Sb	1251624.00	A	922.50	0.07
137 Ba	500148.91	P	1191.00	0.24
205 Tl	1851561.00	A	9277.00	0.50
208 Pb	4790443.00	A	25560.00	0.53
209 Bi	1002023.00	P	5092.00	0.51

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	749446	0.4762	781175.88	95.94	80 - 120	
45 Sc	768530.13	2.0884	778960.06	98.66	80 - 120	
72 Ge	123580.22	0.6255	121266.22	101.91	80 - 120	
115 In	1053884.8	1.5248	1110817	94.87	80 - 120	
209 Bi	1002023.3	0.5082	1047465.4	95.66	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07C20100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423012 File : c2010012 Time : 20-MAR-2007 11:50
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5653

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.4752	0.4502	10000	10130	ug/L	1	10	
Antimony	0.3151	0.3015	100.0	101.4	ug/L	1	10	
Arsenic	0.8162	0.6289	100.0	103.3	ug/L	3	10	
Barium	0.1440	0.1187	100.0	100.1	ug/L	0	10	
Beryllium	0.2718	0.2777	100.0	100.3	ug/L	0	10	
Cadmium	0.9323	0.8247	100.0	103.5	ug/L	4	10	
Calcium	0.0268	0.0214	10000	10170	ug/L	2	10	
Chromium	10.118	5.4357	100.0	103.9	ug/L	4	10	
Cobalt	5.6356	5.6210	100.0	103.8	ug/L	4	10	
Copper	1.4701	1.2931	100.0	103.1	ug/L	3	10	
Iron	0.1737	0.1194	10000	10430	ug/L	4	10	
Lead	1.2428	1.2203	100.0	101.7	ug/L	2	10	
Magnesium	0.0624	0.0584	10000	10130	ug/L	1	10	
Manganese	7.5012	6.9251	100.0	104.6	ug/L	5	10	
Molybdenum	1.2445	1.2122	100.0	101.6	ug/L	2	10	
Nickel	1.3737	1.1936	100.0	103.1	ug/L	3	10	
Potassium	1.5705	0.6936	10000	9995	ug/L	0	10	
Selenium	0.0528	0.0510	100.0	106.5	ug/L	7	10	
Silver	3.4117	3.2349	100.0	97.56	ug/L	-2	10	
Sodium	1.2766	0.6951	10000	10150	ug/L	2	10	
Thallium	0.9512	0.9186	50.00	49.72	ug/L	-1	10	
Vanadium	10.112	5.4672	100.0	103.9	ug/L	4	10	
Zinc	1.6869	0.8000	100.0	104.7	ug/L	5	10	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	803790	2.89
Scandium	778960	856114	9.90
Germanium	121266	133336	9.95
Indium	1110817	1159904	4.42
Bismuth	1047465	1107876	5.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423033 File : c2010033 Time : 20-MAR-2007 13:18
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5654, S5290

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.4752	0.4464	10000	10050	ug/L	1	10	
Antimony	0.3151	0.3038	100.0	102.2	ug/L	2	10	
Arsenic	0.8162	0.6210	100.0	102.0	ug/L	2	10	
Barium	0.1440	0.1212	100.0	102.2	ug/L	2	10	
Beryllium	0.2718	0.2701	100.0	97.60	ug/L	-2	10	
Cadmium	0.9323	0.8614	100.0	108.1	ug/L	8	10	
Calcium	0.0268	0.0215	10000	10220	ug/L	2	10	
Chromium	10.118	5.5635	100.0	106.3	ug/L	6	10	
Cobalt	5.6356	5.7429	100.0	106.1	ug/L	6	10	
Copper	1.4701	1.3038	100.0	104.0	ug/L	4	10	
Iron	0.1737	0.1214	10000	10620	ug/L	6	10	
Lead	1.2428	1.2179	100.0	101.5	ug/L	2	10	
Magnesium	0.0624	0.0576	10000	9983	ug/L	0	10	
Manganese	7.5012	7.0267	100.0	106.1	ug/L	6	10	
Molybdenum	1.2445	1.2242	100.0	102.6	ug/L	3	10	
Nickel	1.3737	1.2147	100.0	104.9	ug/L	5	10	
Potassium	1.5705	0.7004	10000	10090	ug/L	1	10	
Selenium	0.0528	0.0505	100.0	105.5	ug/L	6	10	
Silver	3.4117	3.3559	100.0	101.2	ug/L	1	10	
Sodium	1.2766	0.6934	10000	10120	ug/L	1	10	
Thallium	0.9512	0.9223	50.00	49.92	ug/L	0	10	
Vanadium	10.112	5.6422	100.0	107.2	ug/L	7	10	
Zinc	1.6869	0.8106	100.0	106.1	ug/L	6	10	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	831632	6.46
Scandium	778960	824301	5.82
Germanium	121266	126705	4.49
Indium	1110817	1139491	2.58
Bismuth	1047465	1136871	8.54

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423015 File : c2010015 Time : 20-MAR-2007 12:03
Cal : 57114423001 Caldate: 20-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.04089]	0.2500	0.01065	ug/L	!ib
Arsenic	[0.08918]	0.2500	0.007794	ug/L	!ib
Barium	[0.006236]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01325]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.01178]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.04021]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1898]	0.2500	0.01579	ug/L	!ib
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	802736	2.76
Scandium	778960	813538	4.44
Germanium	121266	123360	1.73
Indium	1110817	1149422	3.48
Bismuth	1047465	1097185	4.75

!=warning ib=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423035 File : c2010035 Time : 20-MAR-2007 13:27
Cal : 57114423001 Caldate: 20-MAR-2007

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	17.57	ug/L	
Antimony	[0.03131]	0.2500	0.01065	ug/L	!ib
Arsenic	ND	0.2500	0.007794	ug/L	
Barium	[0.04197]	0.2500	0.004941	ug/L	!ib
Beryllium	[0.01923]	0.2500	0.003448	ug/L	!ib
Cadmium	ND	0.2500	0.02184	ug/L	
Calcium	ND	25.00	47.08	ug/L	
Chromium	ND	0.2500	0	ug/L	
Cobalt	ND	0.2500	0.02311	ug/L	
Copper	ND	0.2500	0.1462	ug/L	
Iron	ND	25.00	37.55	ug/L	
Lead	[0.009328]	0.2500	0.002798	ug/L	!ib
Magnesium	ND	25.00	17.25	ug/L	
Manganese	ND	0.2500	0.01770	ug/L	
Molybdenum	ND	0.2500	0.3646	ug/L	
Nickel	ND	0.2500	0.1408	ug/L	
Potassium	ND	25.00	14.03	ug/L	
Selenium	ND	0.2500	0.3448	ug/L	
Silver	[0.01352]	0.2500	0.009973	ug/L	!ib
Sodium	ND	25.00	38.51	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.01579	ug/L	
Zinc	ND	0.2500	0.3575	ug/L	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	823605	5.43
Scandium	778960	788778	1.26
Germanium	121266	117557	-3.06
Indium	1110817	1147290	3.28
Bismuth	1047465	1111990	6.16

!=warning ib=instrument blank

57114423035

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423017 File : c2010017 Time : 20-MAR-2007 12:11
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.1203]	0.2500	ug/L	
Arsenic	[0]	0.2500	ug/L	
Barium	1.083	0.2500	ug/L	
Beryllium	[0.02861]	0.2500	ug/L	
Cadmium	[0.07026]	0.2500	ug/L	
Chromium	1.244	0.2500	ug/L	
Cobalt	0.4839	0.2500	ug/L	
Copper	1.926	0.2500	ug/L	
Lead	0.5436	0.2500	ug/L	
Manganese	0.5973	0.2500	ug/L	
Nickel	2.542	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.2464]	0.2500	ug/L	
Thallium	[0.03387]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	2.176	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	100700	ug/L	101
Calcium	300000	310600	ug/L	104
Iron	250000	223800	ug/L	90
Magnesium	100000	101400	ug/L	101
Molybdenum	2000	1775	ug/L	89
Potassium	100000	98200	ug/L	98
Sodium	250000	238000	ug/L	95

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	677132	-13.32
Scandium	778960	741869	-4.76
Germanium	121266	137047	13.01
Indium	1110817	1009025	-9.16
Bismuth	1047465	836613	-20.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423020 File : c2010020 Time : 20-MAR-2007 12:23
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	96810	ug/L	-3		
Arsenic	100.0	93.34	ug/L	-7	20	
Cadmium	100.0	87.94	ug/L	-12	20	
Calcium	300000	302300	ug/L	1		
Chromium	200.0	196.6	ug/L	-2	20	
Cobalt	200.0	189.0	ug/L	-6	20	
Copper	200.0	178.1	ug/L	-11	20	
Iron	250000	218100	ug/L	-13		
Magnesium	100000	96320	ug/L	-4		
Manganese	200.0	193.8	ug/L	-3	20	
Molybdenum	2000	1757	ug/L	-12		
Nickel	200.0	185.9	ug/L	-7	20	
Potassium	100000	96030	ug/L	-4		
Selenium	100.0	75.86	ug/L	**-24**	20	ab- ***
Silver	50.00	38.81	ug/L	**-22**	20	ab- ***
Sodium	250000	226700	ug/L	-9		
Vanadium	200.0	200.5	ug/L	0	20	
Zinc	100.0	84.86	ug/L	-15	20	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Scandium	778960	729093	-6.40
Germanium	121266	134199	10.66

-=low bias ab=ICSAB

57114423020

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423037 File : c2010037 Time : 20-MAR-2007 13:36
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5651, S5290

Analyte	Quant	RL	Units	Flags
Antimony	[0.08833]	0.2500	ug/L	
Arsenic	[0]	0.2500	ug/L	
Barium	1.121	0.2500	ug/L	
Beryllium	[0.03481]	0.2500	ug/L	
Cadmium	[0.1211]	0.2500	ug/L	
Chromium	1.264	0.2500	ug/L	
Cobalt	0.4781	0.2500	ug/L	
Copper	1.981	0.2500	ug/L	
Lead	0.5517	0.2500	ug/L	
Manganese	0.5990	0.2500	ug/L	
Nickel	2.590	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1918]	0.2500	ug/L	
Thallium	[0.04035]	0.1250	ug/L	
Vanadium	[0]	0.2500	ug/L	
Zinc	2.158	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101200	ug/L	101
Calcium	300000	309500	ug/L	103
Iron	250000	224100	ug/L	90
Magnesium	100000	101400	ug/L	101
Molybdenum	2000	1760	ug/L	88
Potassium	100000	98070	ug/L	98
Sodium	250000	239000	ug/L	96

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Lithium	781176	681646	-12.74
Scandium	778960	739386	-5.08
Germanium	121266	136261	12.37
Indium	1110817	1012006	-8.90
Bismuth	1047465	850890	-18.77

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05 IDF : 1.0
Seqnum : 57114423038 File : c2010038 Time : 20-MAR-2007 13:40
Cal : 57114423001 Caldate: 20-MAR-2007
Standards: S5652, S5290

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98110	ug/L	-2		
Arsenic	100.0	92.99	ug/L	-7	20	
Cadmium	100.0	88.03	ug/L	-12	20	
Calcium	300000	300600	ug/L	0		
Chromium	200.0	200.0	ug/L	0	20	
Cobalt	200.0	190.1	ug/L	-5	20	
Copper	200.0	177.9	ug/L	-11	20	
Iron	250000	220500	ug/L	-12		
Magnesium	100000	97020	ug/L	-3		
Manganese	200.0	195.7	ug/L	-2	20	
Molybdenum	2000	1736	ug/L	-13		
Nickel	200.0	186.1	ug/L	-7	20	
Potassium	100000	96130	ug/L	-4		
Selenium	100.0	74.90	ug/L	**-25**	20	ab- ***
Silver	50.00	38.63	ug/L	**-23**	20	ab- ***
Sodium	250000	230700	ug/L	-8		
Vanadium	200.0	202.0	ug/L	1	20	
Zinc	100.0	85.19	ug/L	-15	20	

ISTD (ICALBLK c2010004)	ICALBLK Abund	Abund	%Drift
Scandium	778960	713159	-8.45
Germanium	121266	130777	7.84

-=low bias ab=ICSAB

57114423038

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 57114423

Date : 03/20/07 Reference: c2010004
Sequence : MET05 c2010 Analyzed : 03/20/07 11:17

#	Type	Sample ID	LI	SC	GE	IN	BI
		IB+ICALBLK STD	781176	778960	121266	1110817	1047465
		LOWER LIMIT	234353	233688	36380	333245	314240
		UPPER LIMIT	937411	934752	145519	1332980	1256958
015	ICB		802736	813538	123360	1149422	1097185
017	ICSA		677132	741869	137047	1009025	836613
020	ICSAB		670589	729093	134199	1014107	868931
025	SER	QC379179	807060	798766	123582	1158275	1128270
026	SAMPLE	193262-021	711043	685404	117431	895297	800450
027	SAMPLE	193277-001	791551	754998	122954	1043919	957098
028	BS	QC379371	775261	737517	114579	1067609	1025945
029	BSD	QC379372	765139	744894	113408	1050021	1009047
033	CCV		831632	824301	126705	1139491	1136871
035	CCB		823605	788778	117557	1147290	1111990
037	ICSA		681646	739386	136261	1012006	850890
038	ICSAB		667216	713159	130777	986510	849654

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57114423 Instrument: MET05 Agilent ICP-MS Begun: 20-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	c2010001	TUN				20-MAR-2007 11:03	1.0	1.0				1	
002	c2010002	X	RINSE			20-MAR-2007 11:09	1.0					2	
003	c2010003	X	RINSE			20-MAR-2007 11:13	1.0					2	
004	c2010004	ICALBLK	CALBLANK			20-MAR-2007 11:17	1.0	1.0				2	
005	c2010005	ICAL				20-MAR-2007 11:21	1.0	1.0				3	
006	c2010006	ICAL				20-MAR-2007 11:26	1.0	1.0				4	
007	c2010007	ICAL				20-MAR-2007 11:30	1.0	1.0				5	
008	c2010008	ICAL				20-MAR-2007 11:34	1.0	1.0				6	
009	c2010009	ICAL				20-MAR-2007 11:38	1.0	1.0				7	
010	c2010010	ICAL				20-MAR-2007 11:42	1.0	1.0				8	
011	c2010011	X	RINSE			20-MAR-2007 11:46	1.0					2	
012	c2010012	ICV				20-MAR-2007 11:50	1.0	1.0			1	9	
013	c2010013	X	RINSE			20-MAR-2007 11:54	1.0					2	
014	c2010014	X				20-MAR-2007 11:58	1.0					2	
015	c2010015	ICB				20-MAR-2007 12:03	1.0	1.0			1	2	
016	c2010016	X				20-MAR-2007 12:07	1.0					2	
017	c2010017	ICSA				20-MAR-2007 12:11	1.0	1.0			1	10 2	7:CA=310600
018	c2010018	X				20-MAR-2007 12:15	1.0					11 2	
019	c2010019	X	RINSE			20-MAR-2007 12:19	1.0					2	
020	c2010020	ICSAB				20-MAR-2007 12:23	1.0	1.0	2		1	11 2	8:CA=302300
021	c2010021	X	RINSE			20-MAR-2007 12:27	1.0					2	
022	c2010022	X	RINSE			20-MAR-2007 12:32	1.0					2	
023	c2010023	X	RINSE			20-MAR-2007 12:36	1.0					2	
024	c2010024	X	RINSE			20-MAR-2007 12:40	1.0					2	
025	c2010025	SER	QC379179	123098	Filtra	20-MAR-2007 12:44	50.0	1.0	2	1	1	2	
026	c2010026	SAMPLE	193262-021	123055	Water	20-MAR-2007 12:48	1.0	1.0	1		1	2	4:NA=259300
027	c2010027	SAMPLE	193277-001	123055	Filtra	20-MAR-2007 12:52	1.0	1.0	2		1	2	
028	c2010028	BS	QC379371	123147	Soil	20-MAR-2007 12:57	5.0	50.0	2		1	2	
029	c2010029	BSD	QC379372	123147	Soil	20-MAR-2007 13:01	5.0	50.0	2		1	2	
030	c2010030	X	RINSE			20-MAR-2007 13:05	1.0					2	
031	c2010031	X	RINSE			20-MAR-2007 13:10	1.0					2	

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/20/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 57114423 Instrument: MET05 Agilent ICP-MS Begun: 20-MAR-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	c2010032	X	RINSE			20-MAR-2007 13:14	1.0					2	
033	c2010033	CCV				20-MAR-2007 13:18	1.0	1.0			1	12 2	
034	c2010034	X	RINSE			20-MAR-2007 13:22	1.0					2	
035	c2010035	CCB				20-MAR-2007 13:27	1.0	1.0			1	2	
036	c2010036	X				20-MAR-2007 13:31	1.0					2	
037	c2010037	ICSA				20-MAR-2007 13:36	1.0	1.0			1	10 2	7:CA=309500
038	c2010038	ICSAB				20-MAR-2007 13:40	1.0	1.0	2		1	11 2	8:CA=300600

Stds used: 1=S5641 2=S5290 3=S5647 4=S5648 5=S5649 6=S5650 7=S5644 8=S5646 9=S5653 10=S5651 11=S5652 12=S5654

Analyst: _____ Date: 3/20/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193277 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	HARD	CA	MG	MO	
193277-001	MET08	03/09/07 17:34	1.0		+	+	+	
QC378380	MET08	03/09/07 16:52	1.0		+	+	+	
QC378381	MET08	03/09/07 16:56	1.0		+	+	+	
QC378382	MET08	03/09/07 16:58	1.0		+	+	+	
QC378383	MET08	03/09/07 17:04	1.0		+	+	+	
QC378384	MET08	03/09/07 17:06	1.0		+	+	+	
QC378385	MET08	03/09/07 17:08	5.0		+	+	+	
QC378386	MET08	03/09/07 17:12	1.0		+	+	+	

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 193277 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ASA	BAE	BED	CDA	CAR	CCO	CUE	FEB	PBG	MGN	HG	NI	KE	SAG	NA	TL	VN	ZN
193277-001	MET04	03/14/07 18:30	1.0													+							
193277-001	MET06	03/20/07 03:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	
193277-001	MET05	03/20/07 12:52	1.0																		+				+
QC378982	MET06	03/16/07 16:14	1.0	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378982	MET05	03/19/07 15:29	1.0							+															
QC378982	MET05	03/19/07 15:53	1.0																						
QC378983	MET06	03/16/07 16:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378984	MET06	03/16/07 16:26	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378985	MET06	03/16/07 16:48	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378985	MET05	03/19/07 16:14	1.0																						
QC378986	MET06	03/16/07 16:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378986	MET05	03/19/07 16:19	1.0																						
QC378987	MET06	03/16/07 16:43	50.0	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378987	MET05	03/19/07 19:29	5.0							+															
QC378988	MET06	03/16/07 16:59	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC378988	MET05	03/19/07 16:57	1.0																						
QC379253	MET04	03/14/07 17:26	1.0													+									
QC379254	MET04	03/14/07 17:28	1.0													+									
QC379255	MET04	03/14/07 17:31	1.0													+									
QC379256	MET04	03/14/07 17:33	1.0													+									
QC379257	MET04	03/14/07 17:37	5.0													+									
QC379258	MET04	03/14/07 17:39	1.0													+									
QC379259	MET04	03/14/07 17:41	1.0													+									
QC379260	MET04	03/14/07 17:46	5.0													+									
QC379261	MET04	03/14/07 17:52	1.0													+									
QC379262	MET04	03/14/07 17:54	1.0													+									

Curtis & Tompkins Laboratories Sample Preparation Summary 11-MAR-2007 11:19

Batch Number : 122912
Date Extracted: 09-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 3010A

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4884
Spike #2 ID : S4885
Spike #3 ID :
SOP Version : 3010A_ICP_rv8

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193241-001			Stellar Environmental Solution	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193262-019			Treadwell & Rollo	Water	50	mL	50	1.000000	1				HARDNESS, MO		
193262-020			Treadwell & Rollo	Water	50	mL	50	1.000000	1				HARDNESS, MO		
193263-001			Brenntag	Water	50	mL	50	1.000000	1				CR, CU, NI, PB, ZN		
193264-001			Brenntag	Water	50	mL	50	1.000000	1				CR, CU, NI, PB, ZN		
193267-001			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-002			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-003			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-004			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-005			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-006			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-007			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193267-008			PES Environmental, Inc.	Filtrate	50	mL	50	1.000000	1				T26/ICP		
193272-002			LFR Levine Fricke	Water	50	mL	50	1.000000	1				CR, PB		
193272-003			LFR Levine Fricke	Water	50	mL	50	1.000000	1				CD, CR, NI, PB, ZN		
193272-004			LFR Levine Fricke	Water	50	mL	50	1.000000	1				CD, CR, NI, PB, ZN		
193273-001			Presidio Trust	Water	50	mL	50	1.000000	1				PB		
193273-024			Presidio Trust	Water	50	mL	50	1.000000	1				PB		
193277-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1				HARDNESS, MO		
QC378380	BLANK			Water	50	mL	50	1.000000	1				ICAP		
QC378381	BS			Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378382	BSD			Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378383	MS	of 193273-001		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378384	MSD	of 193273-001		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC378385	SER	of 193273-001		Water	50	mL	50	1.000000	1				ICAP		
QC378386	PDS	of 193273-001		Water	50	mL	50	1.000000	1				ICAP		

Prep Chemist: [signature] FOR KDG Reviewed By: [signature] Date: 3/11/07

Relinquished By: [signature] Received By: [signature] Date: 3/11/07

Water Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 122912
Date Digested: 3/9/07
Digested by: [illegible]

Digestion Method
- ☐ EPA 3010a for ICP
- ☐ EPA 200.7
- ☐ _____

BK 2471
Page 9
Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
BS				
BSD				
MS -01A				
MSD-01				
— 253273-01				
24				
— 277-01B				
— 272-02D				
03E				
04				
— 262-19G				
20J				
— 263-01A				
— 264-01				
241-01				FILTERED IN LAB
267-01G				
02				
03				
04				
05				
06				
07				
08				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	[illegible] 3/9
.5 mL of spike solution was added to all spikes	34884	
	54885	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	CH9025 BAKER	
1:1 HCl added to all samples	CH6059 027107	
☐ filtered thru' Whatman # 541		

[illegible] 3/9/07
Prep Chemist Signature / Date

[illegible] 3/11/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories Sample Preparation Summary 13-MAR-2007 15:02

Batch Number : 123055
Date Extracted: 13-MAR-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S5054
Spike #2 ID : S5055
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
193244-001			CH2M Hill	Water	50	mL	50	1.000000	1					TAL/ICP		
193262-021			Treadwell & Rollo	Water	50	mL	50	1.000000	1					AG, AS, CD, (more)		
193277-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
193330-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-002			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-003			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-004			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-005			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-006			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-007			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193330-008			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
193335-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
193338-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC378982	BLANK			Water	50	mL	50	1.000000	1					ICAP		
QC378983	BS			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378984	BSD			Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378985	MS	of 193244-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378986	MSD	of 193244-001		Water	50	mL	50	1.000000	1		.5	.5		ICAP		
QC378987	SER	of 193244-001		Water	50	mL	50	1.000000	1					ICAP		
QC378988	PDS	of 193244-001		Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 3/13/07 Reviewed By: [signature] Date: 3/14/07

Relinquished By: [signature] 3/13/07 Received By: [signature] Date: 3/14/07

00372

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 123055
Date Digested: 3/13/07
Digested by: KHA

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
MS				
MSD				
MS-01A				
MSD-01				
193244-01				
277-01B				FIELD FILTERED
242-21B				
330-01B				FIELD FILTERED
-02				
-03				
-04				
-05				
-06				
-07				
-08				
335-01-1				
338-01G				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KHA 3/13
.5 mL of spike solution was added to all spikes	55054	
	55053	
concentrated HCl	C33036 BAKER	
concentrated HNO3	C49025	
☐ filtered thru' Whatman # 541		

KHA 3/13/07
Prep Chemist Signature / Date

3/13/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

t : MET04
num : 47106147001
ts : ug/L

Date : 14-MAR-2007 17:07
X Axis : R

Reviewer: ---
Type : WATER

l	File	Seqnum	Sample ID	Analyzed	Stds
	123115	47106147002	STD02REP1	14-MAR-2007 17:10	S5707 (500X)
	123115	47106147003	STD03REP1	14-MAR-2007 17:12	S5707 (200X)
	123115	47106147004	STD04REP1	14-MAR-2007 17:14	S5707 (50X)
	123115	47106147005	STD05REP1	14-MAR-2007 17:16	S5707 (20X)
	123115	47106147006	STD06REP1	14-MAR-2007 17:19	S5707 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
cury	4000.0	2894.0	2522.5	2487.2	2323.2	LINR	-0.1628	4.32E-4		2845.4	0.999	.99	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
cury	0.2000	0.5000	2.0000	5.0000	10.000	ug/L

trument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

47106147001

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

BUSY Dataset/Proto 031407a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 4.32460e-4

C -1.62778e-1

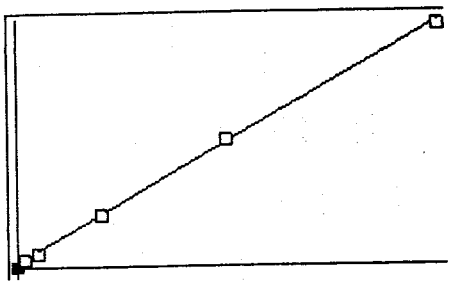
Rho .999572

Type

µ Abs.
23232

Accepted

New



Include S1 Rep 1

14-Mar-07 17:19 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.065	-.065	228	1	227		
02	.20000	.183	-.017	800	0%	800		
03	.50000	.463	-.037	1448	0%	1447		
04	2.0000	2.02	.019	5046	0%	5045		
05	5.0000	5.22	.215	12436	0%	12436		
06	10.000	9.88	-.116	23233	0%	23232		

NUM SCRL

Ready

Folder: 031407a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	17:07:51 14 Mar 07	HG		
Hg	.000	ppb	227					
		Bkgd 1	15636530					
*** Standard: 2 Rep: 1				Seq: 2	17:10:00 14 Mar 07	HG		
Hg	.200	ppb	800					
		Bkgd 1	15632746					
*** Standard: 3 Rep: 1				Seq: 3	17:12:08 14 Mar 07	HG		
Hg	.500	ppb	1447					
		Bkgd 1	15626365					
*** Standard: 4 Rep: 1				Seq: 4	17:14:13 14 Mar 07	HG		
Hg	2.00	ppb	5045					
		Bkgd 1	15625144					
*** Standard: 5 Rep: 1				Seq: 5	17:16:54 14 Mar 07	HG		
Hg	5.00	ppb	12436					
		Bkgd 1	15629616					
*** Standard: 6 Rep: 1				Seq: 6	17:19:13 14 Mar 07	HG		
Hg	10.0	ppb	23232					
		Bkgd 1	15638879					
*** Check Standard: 2			Ck2S5709	Seq: 7	17:21:21 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			12441					
		Bkgd 1	15649864					
*** Check Standard: 1			Ck1ICB	Seq: 8	17:23:35 14 Mar 07	HG		
Line	Flag		Intensities					
Hg			222					
		Bkgd 1	15651598					
*** Sample ID: qc379253			123115,1	Seq: 9	17:26:06 14 Mar 07	HG		
Hg	-.041	ppb	281					
		Bkgd 1	15647189					

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

quence: 47106147 Instrument: MET04 HydraAA HG Analyzer Begun: 14-MAR-2007
lytical Method: EPA 7470A SOP Version: HG_water_rv7
lyte: Mercury

Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
123115	ICALBLK	STD01REP1				14-MAR-2007 17:07	1.0	1.0									
123115	ICAL	STD02REP1				14-MAR-2007 17:10	1.0	1.0									
123115	ICAL	STD03REP1				14-MAR-2007 17:12	1.0	1.0									
123115	ICAL	STD04REP1				14-MAR-2007 17:14	1.0	1.0									
123115	ICAL	STD05REP1				14-MAR-2007 17:16	1.0	1.0									
123115	ICAL	STD06REP1				14-MAR-2007 17:19	1.0	1.0									
123115	ICV					14-MAR-2007 17:21	1.0	1.0	2	5.000	47106147001	5.220		ug/L	104		
123115	ICB					14-MAR-2007 17:23	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	BLANK	QC379253		123115	Water	14-MAR-2007 17:26	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	BLANK	QC379254		123115	TCLP L	14-MAR-2007 17:28	1.0	5.0			47106147001	ND	1.0	ug/L			u
123115	BS	QC379255		123115	Water	14-MAR-2007 17:31	1.0	1.0		5.000	47106147001	5.310	0.20	ug/L	106		u
123115	BSD	QC379256		123115	Water	14-MAR-2007 17:33	1.0	1.0		5.000	47106147001	5.210	0.20	ug/L	104	2	u
123115	MSS	193217-011		123115	Filtra	14-MAR-2007 17:35	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SER	QC379257	193217-011	123115	Filtra	14-MAR-2007 17:37	5.0	1.0			47106147001	ND	1.0	ug/L		--	u
123115	MS	QC379258	193217-011	123115	Filtra	14-MAR-2007 17:39	1.0	1.0		5.000	47106147001	5.320	0.20	ug/L	106		u
123115	MSD	QC379259	193217-011	123115	Filtra	14-MAR-2007 17:41	1.0	1.0		5.000	47106147001	5.470	0.20	ug/L	109	3	u
123115	MSS	193323-001		123115	TCLP L	14-MAR-2007 17:44	1.0	5.0			47106147001	ND	2.0	ug/L			u
123115	SER	QC379260	193323-001	123115	TCLP L	14-MAR-2007 17:46	5.0	5.0			47106147001	ND	5.0	ug/L		--	u
123115	CCV					14-MAR-2007 17:48	1.0	1.0	3	2.500	47106147001	2.660		ug/L	106		
123115	CCB					14-MAR-2007 17:50	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	MS	QC379261	193323-001	123115	TCLP L	14-MAR-2007 17:52	1.0	5.0		25.00	47106147001	26.45	1.0	ug/L	106		u
123115	MSD	QC379262	193323-001	123115	TCLP L	14-MAR-2007 17:54	1.0	5.0		25.00	47106147001	26.40	1.0	ug/L	106	0	u
123115	SAMPLE	193176-001		123115	Water	14-MAR-2007 17:56	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-012		123115	Filtra	14-MAR-2007 17:59	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-014		123115	Filtra	14-MAR-2007 18:01	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-015		123115	Filtra	14-MAR-2007 18:03	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-016		123115	Filtra	14-MAR-2007 18:05	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193217-017		123115	Filtra	14-MAR-2007 18:07	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193219-001		123115	Water	14-MAR-2007 18:10	1.0	1.0			47106147001	0.49	0.20	ug/L			u
123115	SAMPLE	193233-002		123115	Filtra	14-MAR-2007 18:12	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	CCV					14-MAR-2007 18:14	1.0	1.0	4	5.000	47106147001	5.570		ug/L	111		
123115	CCB					14-MAR-2007 18:16	1.0	1.0			47106147001	ND	0.20	ug/L			
123115	SAMPLE	193233-003		123115	Filtra	14-MAR-2007 18:19	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193262-021		123115	Water	14-MAR-2007 18:21	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-002		123115	Filtra	14-MAR-2007 18:23	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-003		123115	Filtra	14-MAR-2007 18:25	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193274-004		123115	Filtra	14-MAR-2007 18:27	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193277-001		123115	Filtra	14-MAR-2007 18:30	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193319-001		123115	Water	14-MAR-2007 18:32	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	SAMPLE	193338-001		123115	Filtra	14-MAR-2007 18:34	1.0	1.0			47106147001	ND	0.20	ug/L			u
123115	CCV					14-MAR-2007 18:36	1.0	1.0	5	7.500	47106147001	8.090		ug/L	108		
123115	CCB					14-MAR-2007 18:38	1.0	1.0			47106147001	ND	0.20	ug/L			

tds used: 1=S5707 2=S5709 3=S5710 4=S5711 5=S5712
lags used: u=use

nalyst: [signature] Date: 3/14/07

Curtis & Tompkins Laboratories Sample Preparation Summary 14-MAR-2007 17:12

atch Number : 123115
ate Extracted: 14-MAR-2007
xtracted by : Zachary Abbott
rep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5707
Spike #2 ID :
Spike #3 ID :
SOP Version :

mple	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
3176-001			Polymatrix	Water	50	mL	50	1.000000	1					HG		
3217-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-014			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3217-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3219-001			Acme Fill Corp.	Water	50	mL	50	1.000000	1					HG		
3233-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
3233-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					PP13/HG		
3262-021			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
3274-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3274-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3274-004			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
3277-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
3319-001			Ward Construction	Water	50	mL	50	1.000000	1					T26/HG		
3323-001			CH2M Hill Constructors Inc.	TCLP Leach	10	mL	50	5.000000	1					T26/HG		
3338-001			Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
C379253	BLANK			Water	50	mL	50	1.000000	1					HG		
C379254	BLANK			TCLP Leach	10	mL	50	5.000000	1					HG		
C379255	BS			Water	50	mL	50	1.000000	1		2.5			HG		
C379256	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
C379257	SER	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
C379258	MS	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
C379259	MSD	of 193217-011		Filtrate	50	mL	50	1.000000	1		2.5			HG		
C379260	SER	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		
C379261	MS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
C379262	MSD	of 193323-001		TCLP Leach	10	mL	50	5.000000	1		2.5			HG		
C379263	PDS	of 193217-011		Filtrate	50	mL	50	1.000000	1					HG		
C379264	PDS	of 193323-001		TCLP Leach	10	mL	50	5.000000	1					HG		

Prep Chemist: [signature] 3/14/07 Reviewed By: [signature] Date: 3/14/07

Relinquished By: [signature] 3/14/07 Received By: [signature] Date: 3/14/07

Curtis & Tompkins, Ltd.

Water Digestion for Mercury

LIMS Batch #: 123115
Date Digested: 3/14/07
Digested by: ZA

Digestion Method
☑ EPA 7470A/ EPA 245.1
☐ _____

BK 2452
Page 43

Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
193176-001	A	50	50		water
193217-011 MSS	Y				Filtrate (F.F.)
-012	I				
-014	B				
-015	G				
-016	F				
-017	F				
193219-001	J				water
193233-002	L				Filtrate
-003	K				
193262-021	B				water
193277-001	S				Filtrate
193319-001	D				water
193323-001 MSS		10			TCLP leachate
193274-002	D	50			Filtrate (F.F.)
-003					
-004					
193338-001	G				
Blank					water
Blank		10			TCLP leachate
BS/BSD		50			water
ms 193217-011	Y				Filtrate (F.F.)
msD					
ms 193323-001		10			TCLP leachate
msD					

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	55707	3/14/07
ICAL Source WS#	55707	
ICV / CCV WS#	55709/10/11/12	
Digestion of Samples & Standards: Time ON / Temperature ON	12:00 / 95°C	
Time OFF/ Temperature OFF	2:00 / 95°C	
concentrated H_2SO_4	B41041	
concentrated HNO_3	C49025	
5% $KMnO_4$	K030807	
5% $K_2S_2O_8$	K2030307	
NaCl.hydroxylamine hydrochloride	Hy 030107	
Stannous Chloride	SnCl2 031307	
☐ filtered thru' 0.45 um syringe filter	Millipore RGAN43B32	

3/14/07

Continued from page X

3/14/07

Curtis & Tompkins Laboratories
MDL Summary for EPA 6010B Water
As of 03/26/07

Analyte	Units	MET07	MET09 A	MET09 R	MET08 A	MET08 R
Aluminum	ug/L	19		11		25
Antimony	ug/L	3.9	1.1		0.96	
Arsenic	ug/L	2.8	2.0		1.4	
Barium	ug/L	0.13	0.11		0.32	
Beryllium	ug/L	0.48	0.042		0.12	
Cadmium	ug/L	0.29	0.11		0.36	
Calcium	ug/L	9.7		44		64
Chromium	ug/L	0.50	0.24		0.33	
Cobalt	ug/L	0.68	0.30		0.31	
Copper	ug/L	0.62	0.85		1.6	
Iron	ug/L	24		6.1		8.1
Lead	ug/L	1.9	0.69		1.1	
Magnesium	ug/L	16		10		12
Manganese	ug/L	0.57	0.44		0.58	
Molybdenum	ug/L	2.4	0.41		1.4	
Nickel	ug/L	0.74	0.37		0.65	
Potassium	ug/L			40		46
Selenium	ug/L	4.2	1.5		2.0	
Silver	ug/L	0.77	0.75		0.75	
Sodium	ug/L			17		69
Thallium	ug/L	3.5	1.6		1.1	
Vanadium	ug/L	0.57	1.0		0.61	
Zinc	ug/L	1.1	0.84		3.1	
Boron	ug/L		3.8		15	
Tin	ug/L		5.0		2.8	
Titanium	ug/L		1.0		1.0	

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 03/26/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			15
Selenium	ug/L			0.027	0.43
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 03/26/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Field ID:	DW030807A	Batch#:	123291
Matrix:	Water	Sampled:	03/08/07
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000	Analyzed:	03/20/07

Type: SAMPLE Lab ID: 193277-001

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type: BLANK Lab ID: QC380000

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

41.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC380001	Batch#:	123291
Matrix:	Water	Analyzed:	03/20/07

Spiked	Result	%REC	Limits
200.0	182.8	91	90-110

42.0

: 00385

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1221GW104	Batch#:	123291
MSS Lab ID:	193262-001	Sampled:	03/07/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC380002	494.0	500.0	948.0	91	69-112		
MSD	QC380003		500.0	962.0	94	69-112	1	25

RPD= Relative Percent Difference

43.0

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **03/20/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123291** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.2	100	0.0	0.0	ND			1.0		
LCS	10.1	25	2.5	4.6	182.80			4.0	91	
193262-001	6.8	10	0.0	4.9	494.00		n/a	10.0		
MS	9.1	10	1.3	9.5	948.00			10.0	91	
MSD	9.2	10	1.4	9.6	962.00			10.0	94	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
193262-001	6.8	10	0.0	4.9	494.00		n/a	10.0
193262-002	6.70	20	0.0	2.6	129.50		n/a	5.0
193262-003	7.80	10	0.0	3.3	333.00		n/a	10.0
193262-004	7.00	10	0.0	2.6	255.00		n/a	10.0
193262-005	6.90	10	0.0	2.7	265.00		n/a	10.0
193262-006	7.30	10	0.0	4.7	474.00		n/a	10.0
193262-007	6.60	25	0.0	3.1	124.00		n/a	4.0
193262-008	5.30	100	0.0	0.1	rpt low alk	0.18	ND	1.0
193262-010	7.80	10	0.0	4.2	420.00		n/a	10.0
193262-011	7.20	10	0.0	2.4	244.00		n/a	10.0
193262-012	5.20	100	0.0	0.1	rpt low alk	0.12	ND	1.0
193262-013	7.10	10	0.0	4.9	490.00		n/a	10.0
193262-014	7.60	10	0.0	2.8	283.00		n/a	10.0
193262-015	7.00	15	0.0	2.9	190.00		n/a	6.7
193262-016	7.20	10	0.0	2.7	268.00		n/a	10.0
193262-019	7.50	10	0.0	5.4	535.00		n/a	10.0
193262-020	4.70	100	0.0	0.1	rpt low alk	0.11	ND	1.0
193277-001	4.70	100	0.0	0.1	rpt low alk	0.12	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMB 3/20/07

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

Curtis Tompkins, Ltd.

00387

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 03/20/07
Batch No: 123291

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
193262-001	0.0	494.0	494	494.000	0.000	0.000
193262-002	0.0	129.50	129.500	129.500	0.000	0.000
193262-003	0.0	333.00	333.000	333.000	0.000	0.000
193262-004	0.0	255.00	255.000	255.000	0.000	0.000
193262-005	0.0	265.00	265.000	265.000	0.000	0.000
193262-006	0.0	474.00	474.000	474.000	0.000	0.000
193262-007	0.0	124.00	124.000	124.000	0.000	0.000
193262-008	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193262-010	0.0	420.00	420.000	420.000	0.000	0.000
193262-011	0.0	244.00	244.000	244.000	0.000	0.000
193262-012	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193262-013	0.0	490.00	490.000	490.000	0.000	0.000
193262-014	0.0	283.00	283.000	283.000	0.000	0.000
193262-015	0.0	190.00	190.000	190.000	0.000	0.000
193262-016	0.0	268.00	268.000	268.000	0.000	0.000
193262-019	0.0	535.00	535.000	535.000	0.000	0.000
193262-020	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
193277-001	0.0	#VALUE!	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

00288

Analysis: **Alkalinity** Analysis Date: 03/20/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123291 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
193262-001	494.000	602.308	0.000	0.000
193262-002	129.500	157.892	0.000	0.000
193262-003	333.000	406.009	0.000	0.000
193262-004	255.000	310.908	0.000	0.000
193262-005	265.000	323.100	0.000	0.000
193262-006	474.000	577.923	0.000	0.000
193262-007	124.000	151.187	0.000	0.000
193262-008	ND	not applicable	not applicable	not applicable
193262-010	420.000	512.084	0.000	0.000
193262-011	244.000	297.496	0.000	0.000
193262-012	ND	not applicable	not applicable	not applicable
193262-013	490.000	597.431	0.000	0.000
193262-014	283.000	345.047	0.000	0.000
193262-015	190.000	231.657	0.000	0.000
193262-016	268.000	326.758	0.000	0.000
193262-019	535.000	652.297	0.000	0.000
193262-020	ND	not applicable	not applicable	not applicable
193277-001	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 123291 Date: 3/20/07 Benchbook#: **BK2384**
Matrix: water Time: 10:45 Page: **77**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55638
Slope: 98.5
(slope limits: 92 - 102)

$NaCO_3$ Vol (mgL) Spiked: 5
$NaCO_3$ Conc (mg/L): 1000
$NaCO_3$ WS#: 54565
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6248 Exp 31-Aug-07

	Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
1	MB	5.2	100	/	<0.08		
	LCS	10.1	25	2.51	4.57		
	193262-1 E	6.8	10	/	4.94		
	MS-1	9.1		1.34	9.48		
5	MSD-1	9.2		1.41	9.62		
	-2 B	6.7	20	/	2.59		
	-3 E	7.8	10	/	3.33		
	-4 D	7.0	10	/	2.55		
	-5	6.9	10	/	2.65		
10	-6 B	7.3	10	/	4.74		
	-7 D	6.6	25	/	3.10		
	-8 G	5.5	25	/	<2mL		
	-8	5.3	100	/	0.06	0.18	
	AT 3/20 -~~9~~10 H	7.8	10	/	4.20		
15	-11 E	7.2	10	/	2.44		
	-12	5.8	25	/	<2mL		
	-12	5.2	100	/	0.06	0.12	
	-13	7.1	10	/	AT 3/20 ~~3.9~~ 4.90		
	-14	7.6	10	/	2.83		
20	-15	7.0	15	/	2.85		
	-16	7.2	10	/	2.68		
	-19 L	7.5	10	/	5.35		
	-20 K	5.5	25	/	<2mL		
	-20	4.7	100	/	0.05	0.11	
	193277-1 V	4.9	25	/	<2mL		
	-1	4.7	100	/	0.06	0.12	

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

3/20/07
Analyst / Date

3/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123291
Date Started: 20-MAR-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-001			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-002			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-003			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-004			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-005			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-006			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-007			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-008			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-010			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-011			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-012			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-013			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-014			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-015			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-016			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-019			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193262-020			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
193277-001			Treadwell & Rollo	Water	ALKALINITY	20-MAR-2007
QC380000	BLANK			Water	ALKALINITY	
QC380001	LCS			Water	ALKALINITY	
QC380002	MS	of 193262-001		Water	ALKALINITY	
QC380003	MSD	of 193262-001		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW030807A	Batch#:	122941
Matrix:	Water	Sampled:	03/08/07 12:30
Units:	mg/L	Received:	03/08/07
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 03/09/07 13:42
Lab ID: 193277-001

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type: BLANK Analyzed: 03/09/07 13:21
Lab ID: QC378497

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC378498	Batch#:	122941
Matrix:	Water	Analyzed:	03/09/07 19:30
Units:	mg/L		

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.022	101	80-120
Chloride	4.000	4.183	105	80-120
Nitrogen, Nitrite	1.000	1.020	102	80-120
Nitrogen, Nitrate	1.000	1.032	103	80-120
Sulfate	10.00	10.36	104	80-120

3.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	ZZZZZZZZZZ	Diln Fac:	2,000
MSS Lab ID:	193268-006	Batch#:	122941
Matrix:	Water	Sampled:	03/08/07 11:59
Units:	mg/L	Received:	03/08/07

Type: MS Analyzed: 03/09/07 17:45
Lab ID: QC378499

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	0.5801	2,000	1,855	93	78-120
Chloride	11,970	4,000	15,800	96	80-120
Nitrogen, Nitrite	<0.1616	1,000	984.8	98	80-120
Nitrogen, Nitrate	<0.1609	1,000	1,008	101	80-120
Sulfate	2,261	10,000	12,280	100	80-120

Type: MSD Analyzed: 03/09/07 18:02
Lab ID: QC378500

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2,000	1,888	94	78-120	2	20
Chloride	4,000	15,860	97	80-120	0	25
Nitrogen, Nitrite	1,000	967.2	97	80-120	2	25
Nitrogen, Nitrate	1,000	1,028	103	80-120	2	25
Sulfate	10,000	12,390	101	80-120	1	25

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 193277 IC Water: EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Reviewer: CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 193277 IC Water
EPA 300.0

Inst : IC01 Name : IC01 ANIONS
Calnum : 607084260001 Cal Date: 27-FEB-2007

ICV 607084260013 (058_13 27-FEB-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
Calnum : 607084260001
Units : mg/L

Name : IC01 ANIONS
Date : 27-FEB-2007 14:23
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	058_8	607084260008	L1	27-FEB-2007 14:23	S4740 (500X)
L2	058_9	607084260009	L2	27-FEB-2007 14:41	S4740 (100X)
L3	058_10	607084260010	L3	27-FEB-2007 14:58	S4740 (25X)
L4	058_11	607084260011	L4	27-FEB-2007 15:16	S4740 (10X)
L5	058_12	607084260012	L5	27-FEB-2007 15:33	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2855	0.2820	0.3025	0.3054	0.3183	QORG		0.29390	0.002435	0.2987	1.000	0.990	
Chloride	0.2063	0.1872	0.1963	0.2037	0.2206	QORG		0.18776	0.001640	0.2028	1.000	0.990	
Nitrogen, Nitrite	0.4272	0.3814	0.3925	0.4065	0.4149	QORG		0.39437	0.004145	0.4045	1.000	0.990	
Bromide	0.0818	0.0794	0.0801	0.0839	0.0874	QORG		0.07972	3.856E-4	0.0825	1.000	0.990	
Nitrogen, Nitrate	0.4623	0.4556	0.4747	0.4956	0.5287	QORG		0.46193	0.013360	0.4834	1.000	0.990	
Orthophosphate (as P)	0.3894	0.2393	0.1989	0.1853	0.1929	QORG		0.18618	3.173E-4	0.2412	0.999	0.990	
Sulfate	0.1531	0.1403	0.1403	0.1440	0.1547	QORG		0.13454	4.014E-4	0.1465	1.000	0.990	

Analyte Spiked Amounts	L1	L2	L3	L4	L5	Units
Fluoride	0.1000	0.5000	2.0000	5.0000	10.000	mg/L
Chloride	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrite	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Bromide	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Nitrogen, Nitrate	0.0500	0.2500	1.0000	2.5000	5.0000	mg/L
Orthophosphate (as P)	0.2000	1.0000	4.0000	10.000	20.000	mg/L
Sulfate	0.5000	2.5000	10.000	25.000	50.000	mg/L

MKS 2/28/07

/CW 3/1/07

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607084260001

Sequence: 058
Operator: ic_analyst

Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:20:57 PM	MRS	IC01-7AN_CAL
2	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:38:28 PM	MRS	IC01-7AN_CAL
3	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 12:56:00 PM	MRS	IC01-7AN_CAL
4	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:13:30 PM	MRS	IC01-7AN_CAL
5	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:31:01 PM	MRS	IC01-7AN_CAL
6	CAL-058	BLK		1.0000	IC01-7AN	2/27/2007 1:48:32 PM	MRS	IC01-7AN_CAL
7	CAL-058	IB		1.0000	IC01-7AN	2/27/2007 2:06:03 PM	MRS	IC01-7AN_CAL
8	CAL-058	ICAL,L1,S4740,500		1.0000	IC01-7AN	2/27/2007 2:23:34 PM	MRS	IC01-7AN_CAL
9	CAL-058	ICAL,L2,S4740,100		1.0000	IC01-7AN	2/27/2007 2:41:04 PM	MRS	IC01-7AN_CAL
10	CAL-058	ICAL,L3,S4740,25		1.0000	IC01-7AN	2/27/2007 2:58:36 PM	MRS	IC01-7AN_CAL
11	CAL-058	ICAL,L4,S4740,10		1.0000	IC01-7AN	2/27/2007 3:16:07 PM	MRS	IC01-7AN_CAL
12	CAL-058	ICAL,L5,S4740,5		1.0000	IC01-7AN	2/27/2007 3:33:37 PM	MRS	IC01-7AN_CAL
13	CAL-058	ICV,S3859,5		1.0000	IC01-7AN	2/27/2007 3:51:08 PM	MRS	IC01-7AN_CAL
14	CAL-058	ICB		1.0000	IC01-7AN	2/27/2007 4:08:39 PM	MRS	IC01-7AN_CAL

Sequence: 058
Operator: ic_analyst
Printed: 2/28/2007 11:53:42 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007
Timebase: IC1_DX120
#Samples: 14

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 2/27/2007 4:13:34 PM by ic_analyst

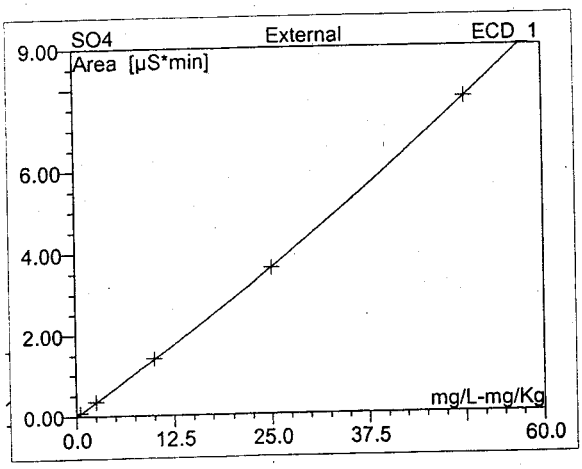
No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-058	BLK		Finished	25.0	Unknown	1
2	CAL-058	BLK		Finished	25.0	Unknown	1
3	CAL-058	BLK		Finished	25.0	Unknown	1
4	CAL-058	BLK		Finished	25.0	Unknown	1
5	CAL-058	BLK		Finished	25.0	Unknown	1
6	CAL-058	BLK		Finished	25.0	Unknown	1
7	CAL-058	IB		Finished	25.0	Unknown	1
8	CAL-058	ICAL,L1,S4740,500		Finished	25.0	Standard	1
9	CAL-058	ICAL,L2,S4740,100		Finished	25.0	Standard	1
10	CAL-058	ICAL,L3,S4740,25		Finished	25.0	Standard	1
11	CAL-058	ICAL,L4,S4740,10		Finished	25.0	Standard	1
12	CAL-058	ICAL,L5,S4740,5		Finished	25.0	Standard	1
13	CAL-058	ICV,S3859,5		Finished	25.0	Unknown	1
14	CAL-058	ICB		Finished	25.0	Unknown	1

No.	Name	Area µS*min F ECD_1	Area µS*min CL ECD_1	Area µS*min NO2N ECD_1	Area µS*min BR ECD_1	Area µS*min NO3N ECD_1	Area µS*min PO4 ECD_1	Area µS*min SO4 ECD_1
8	ICAL,L1,S474	0.028551	0.041265	0.021362	0.016369	0.023115	0.077883	0.076555
9	ICAL,L2,S474	0.140987	0.187242	0.095356	0.079367	0.113908	0.239279	0.350801
10	ICAL,L3,S474	0.605012	0.785283	0.392538	0.320222	0.474740	0.795454	1.403440
11	ICAL,L4,S474	1.526853	2.036729	1.016270	0.838941	1.239123	1.852671	3.600276
12	ICAL,L5,S474	3.183057	4.412064	2.074634	1.747974	2.643463	3.858779	7.733302

No.	Name	Height µS F ECD_1	Height µS CL ECD_1	Height µS NO2N ECD_1	Height µS BR ECD_1	Height µS NO3N ECD_1	Height µS PO4 ECD_1	Height µS SO4 ECD_1
8	ICAL,L1,S474	0.165356	0.212006	0.076202	0.053970	0.068456	0.116584	0.138010
9	ICAL,L2,S474	0.828310	0.946854	0.384468	0.278696	0.343032	0.399618	0.638646
10	ICAL,L3,S474	3.487038	3.958984	1.552030	1.127560	1.408422	1.427738	2.593556
11	ICAL,L4,S474	9.212716	10.598746	3.977412	2.921474	3.678058	3.537258	6.755000
12	ICAL,L5,S474	19.912020	23.607368	8.329958	6.214218	7.925188	7.605224	14.796466

No.	Name	Amount mg/L-mg/Kg F ECD_1	Amount mg/L-mg/Kg CL ECD_1	Amount mg/L-mg/Kg NO2N ECD_1	Amount mg/L-mg/Kg BR ECD_1	Amount mg/L-mg/Kg NO3N ECD_1	Amount mg/L-mg/Kg PO4 ECD_1	Amount mg/L-mg/Kg SO4 ECD_1
8	ICAL,L1,S474	0.097068	0.219356	0.054137	0.205138	0.049968	0.418026	0.568051
9	ICAL,L2,S474	0.477824	0.988707	0.241179	0.990847	0.244860	1.282405	2.587455
10	ICAL,L3,S474	2.024627	4.039845	0.985143	3.941801	0.998883	4.241838	10.125557
11	ICAL,L4,S474	4.988988	9.977967	2.510666	10.036676	2.501527	9.787701	24.908824
12	ICAL,L5,S474	10.001732	20.003550	4.998029	19.993617	4.999708	20.041493	50.015893

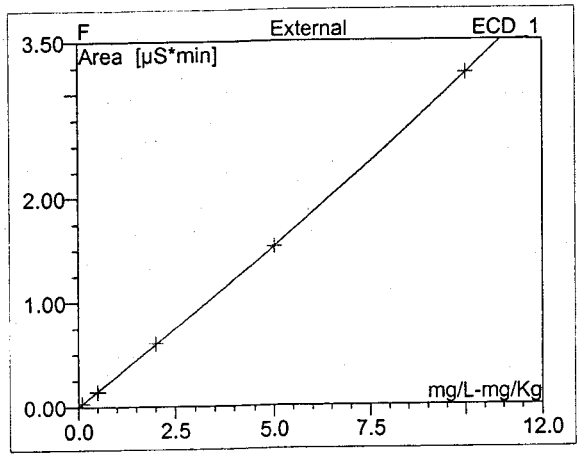
Sequence:	058	*Inj. Vol.:*	25.0
Program:	IC01-7AN	*Operator:*	n.a.
Inj. Date/Time:	02/27/07 14:58	*Run Time:*	15.00

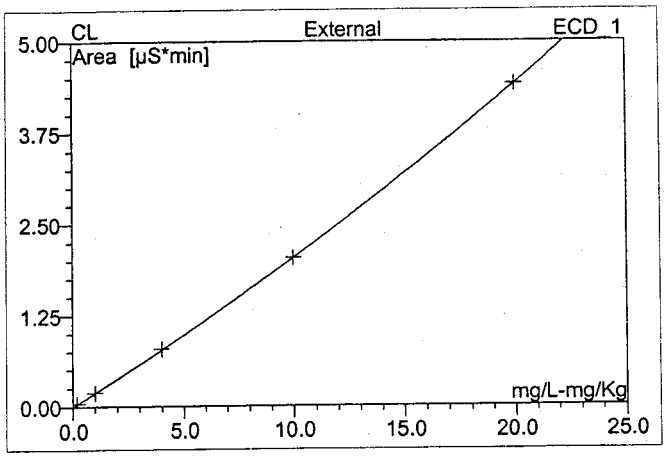


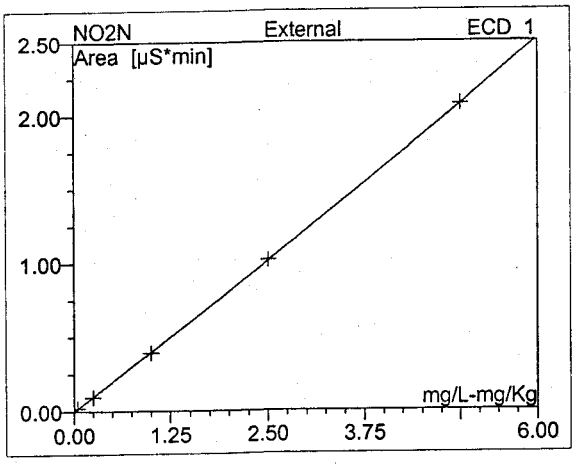
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.35	F	Quad	5	0.000000	0.293897	0.002435	99.979911
2	4.74	CL	Quad	5	0.000000	0.187759	0.001640	99.920384
3	5.55	NO2N	Quad	5	0.000000	0.394375	0.004145	99.991739
4	6.94	BR	Quad	5	0.000000	0.079718	0.000386	99.974135
5	7.77	NO3N	Quad	5	0.000000	0.461925	0.013360	99.946333
6	9.77	PO4	Quad	5	0.000000	0.186180	0.000317	99.962608
7	11.60	SO4	Quad	5	0.000000	0.134539	0.000401	99.934233
AVERAGE:					0.000000	0.248342	0.003241	99.958478

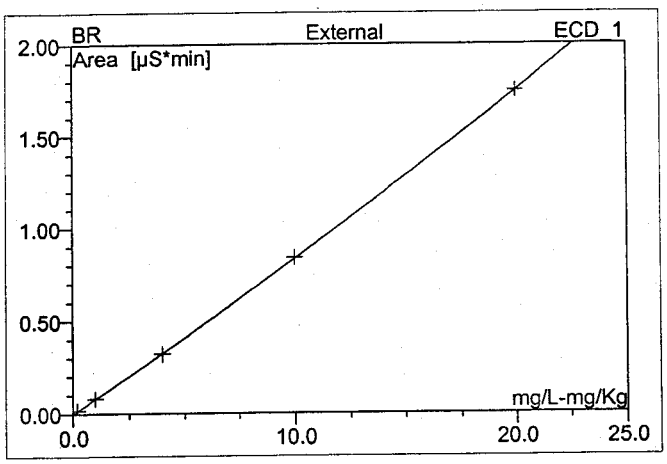
IC01 Calibration Batch Report

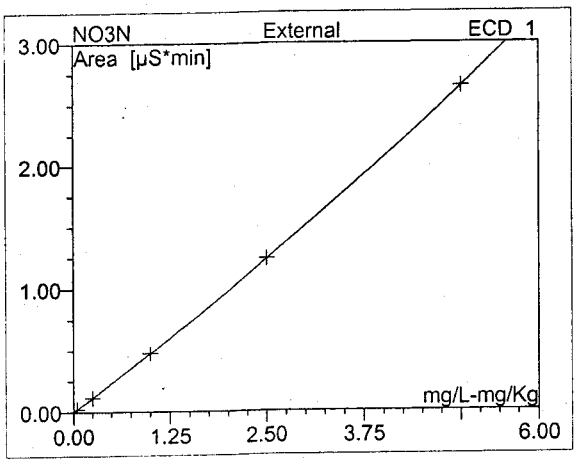
Sequence:	058	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	PC_NEWIC
Inj. Date/Time:	02/27/07 14:58	Run Time:	15.00

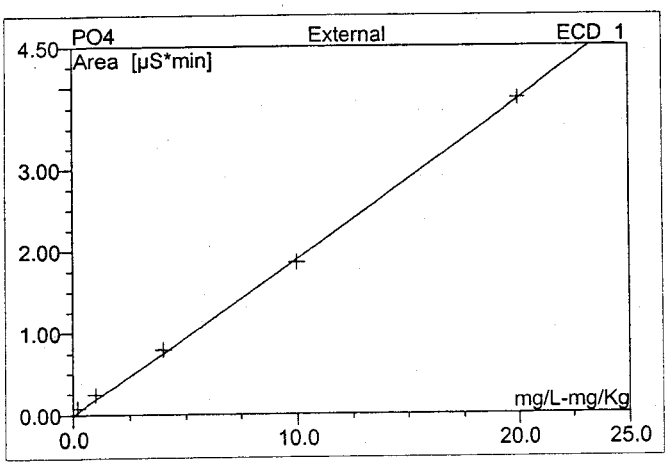












Method File: IC01-7AN_CAL
Operator: ic_analyst

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount ICAL,L1,S4740,500
1	F	3.347 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	*CL*	*4.743 min*	*5.000 RG*	*External*	*Area*	*Quad*	*Auto*			*0.200000*
3	NO2N	5.553 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	6.940 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	7.767 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	9.770 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	11.600 min	10.000 RG	External	Area	Quad	Auto			0.500000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10	Amount ICAL,L5,S4740,5
1	F	3.347 min	0.500000	2.000000	5.000000	10.000000
2	*CL*	*4.743 min*	*1.000000*	*4.000000*	*10.000000*	*20.000000*
3	NO2N	5.553 min	0.250000	1.000000	2.500000	5.000000
4	BR	6.940 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	7.767 min	0.250000	1.000000	2.500000	5.000000
6	PO4	9.770 min	1.000000	4.000000	10.000000	20.000000
7	SO4	11.600 min	2.500000	10.000000	25.000000	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount ICAL,L1,S4740,500	Amount ICAL,L2,S4740,100	Amount ICAL,L3,S4740,25	Amount ICAL,L4,S4740,10
1	F	3.347 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	*CL*	*4.743 min*	*1.000000*		*0.200000*	*1.000000*	*4.000000*	*10.000000*
3	NO2N	5.553 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	6.940 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	7.767 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	9.770 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	11.600 min	1.000000		0.500000	2.500000	10.000000	25.000000

Method File: IC01-7AN_CAL
Operator: ic_analyst

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount ICAL,L5,S4740,5
1	F	3.347 min	10.000000
2	*CL*	*4.743 min*	*20.000000*
3	NO2N	5.553 min	5.000000
4	BR	6.940 min	20.000000
5	NO3N	7.767 min	5.000000
6	PO4	9.770 min	20.000000
7	SO4	11.600 min	50.000000

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2007\058.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKIN
Last Update: 2/28/2007 11:27:20 AM by ic_analyst

Calibration:

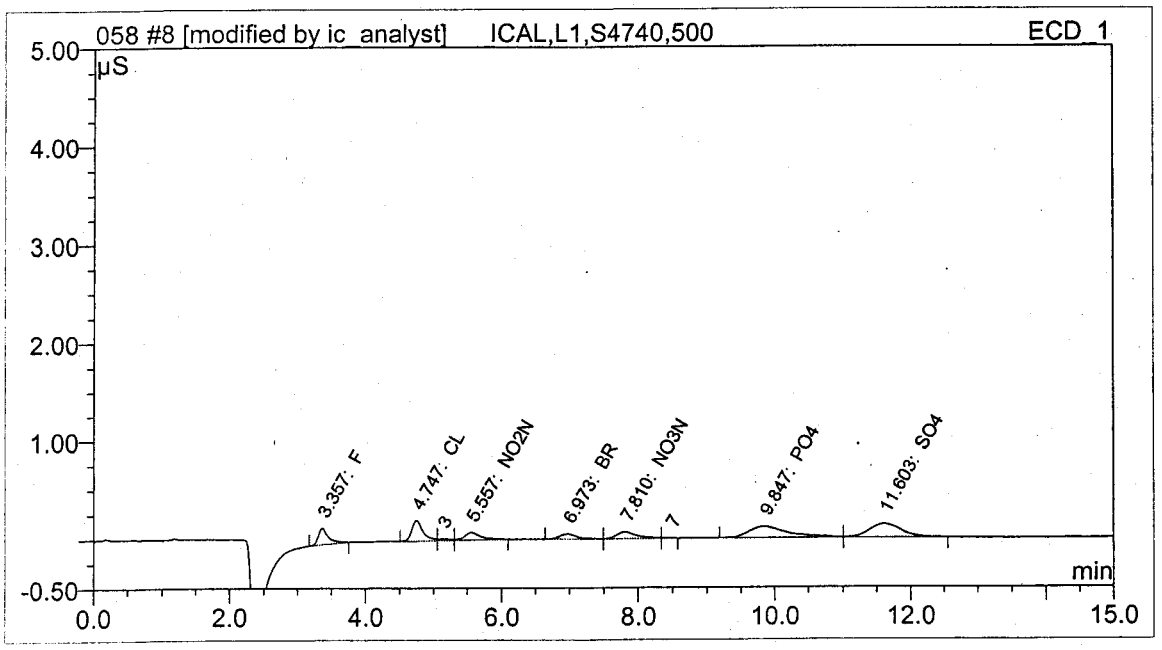
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S4740,500	8	70	25.0	1.0000	1.0000	1.0000	2/27/2007 2:23:34 PM	Ok
2	☒	ICAL,L2,S4740,100	9	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:41:04 PM	Ok
3	☒	ICAL,L3,S4740,25	10	35	25.0	1.0000	1.0000	1.0000	2/27/2007 2:58:36 PM	Ok
4	☒	ICAL,L4,S4740,10	11	36	25.0	1.0000	1.0000	1.0000	2/27/2007 3:16:07 PM	Ok
5	☒	ICAL,L5,S4740,5	12	37	25.0	1.0000	1.0000	1.0000	2/27/2007 3:33:37 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.028551	0.0971	0.0971	
2	CL	4.747	0.041265	0.2194	0.2194	
4	NO2N	5.557	0.021362	0.0541	0.0541	
5	BR	6.973	0.016369	0.2051	0.2051	
6	NO3N	7.810	0.023115	0.0500	0.0500	
8	PO4	9.847	0.077883	0.4180	0.4180	
9	SO4	11.603	0.076555	0.5681	0.5681	



ANALYZED BY: _____

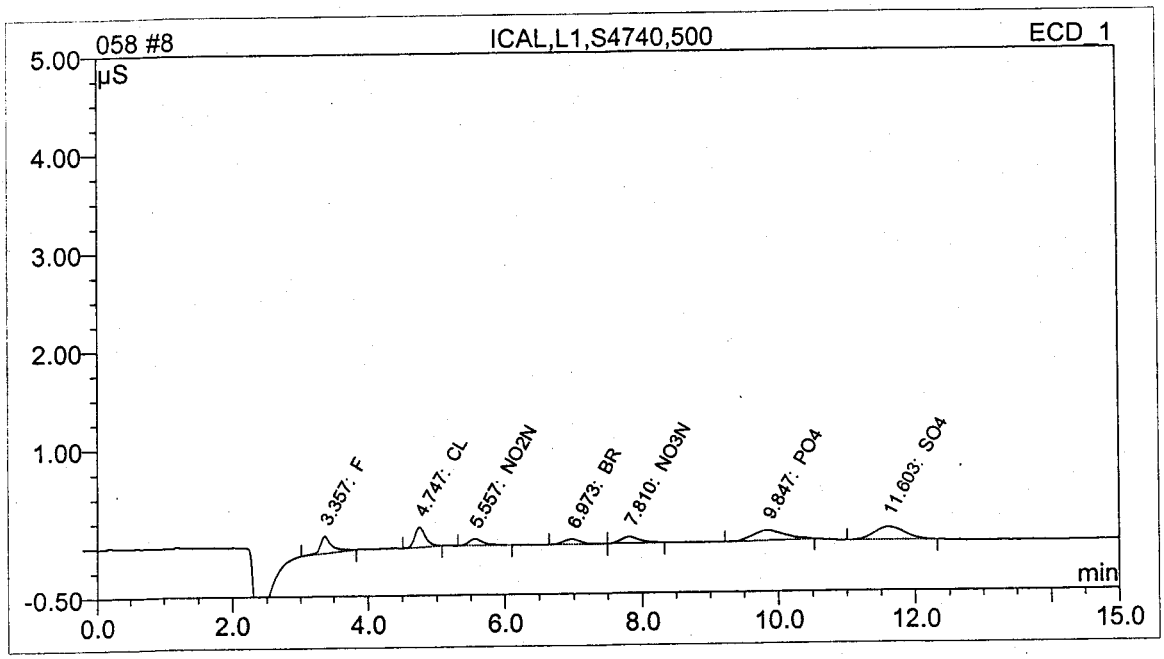
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S4740,500	**Sample No.:**	8
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:23 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.357	0.034814	0.1183	0.1183	
2	CL	4.747	0.037084	0.1972	0.1972	
3	NO2N	5.557	0.017528	0.0444	0.0444	
4	BR	6.973	0.015745	0.1973	0.1973	
5	NO3N	7.810	0.021223	0.0459	0.0459	
6	PO4	9.847	0.056664	0.3044	0.3044	
7	SO4	11.603	0.069293	0.5143	0.5143	



ANALYZED BY: _____

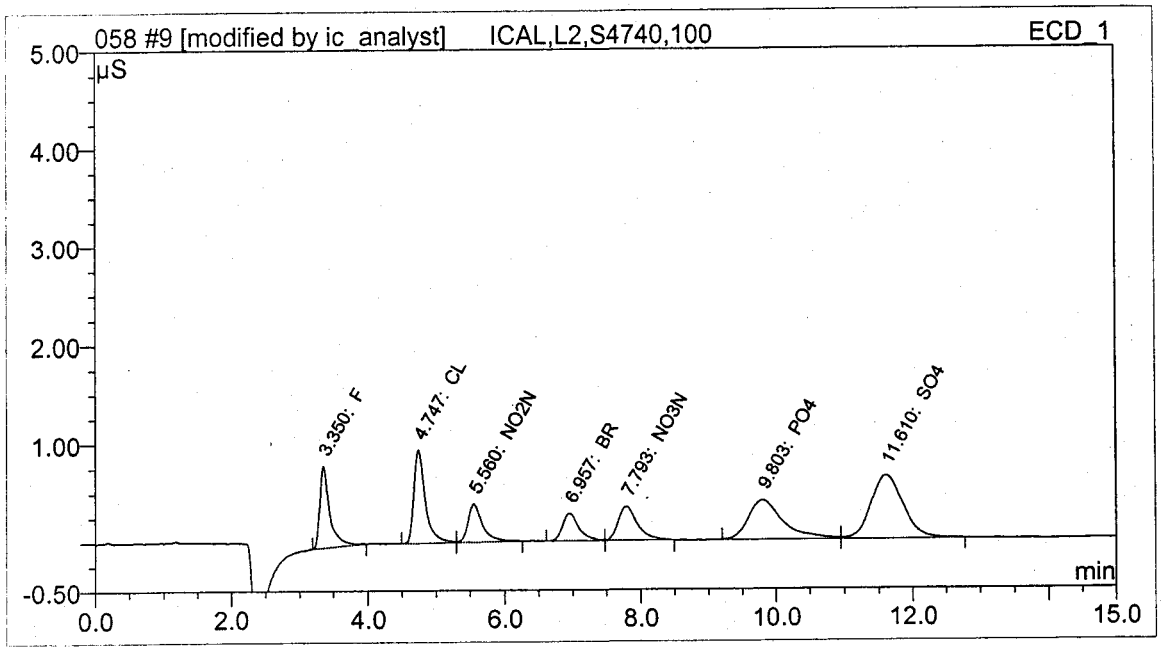
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.140987	0.4778	0.4778	
2	CL	4.747	0.187242	0.9887	0.9887	
3	NO2N	5.560	0.095356	0.2412	0.2412	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.239279	1.2824	1.2824	
7	SO4	11.610	0.350801	2.5875	2.5875	



ANALYZED BY: _____

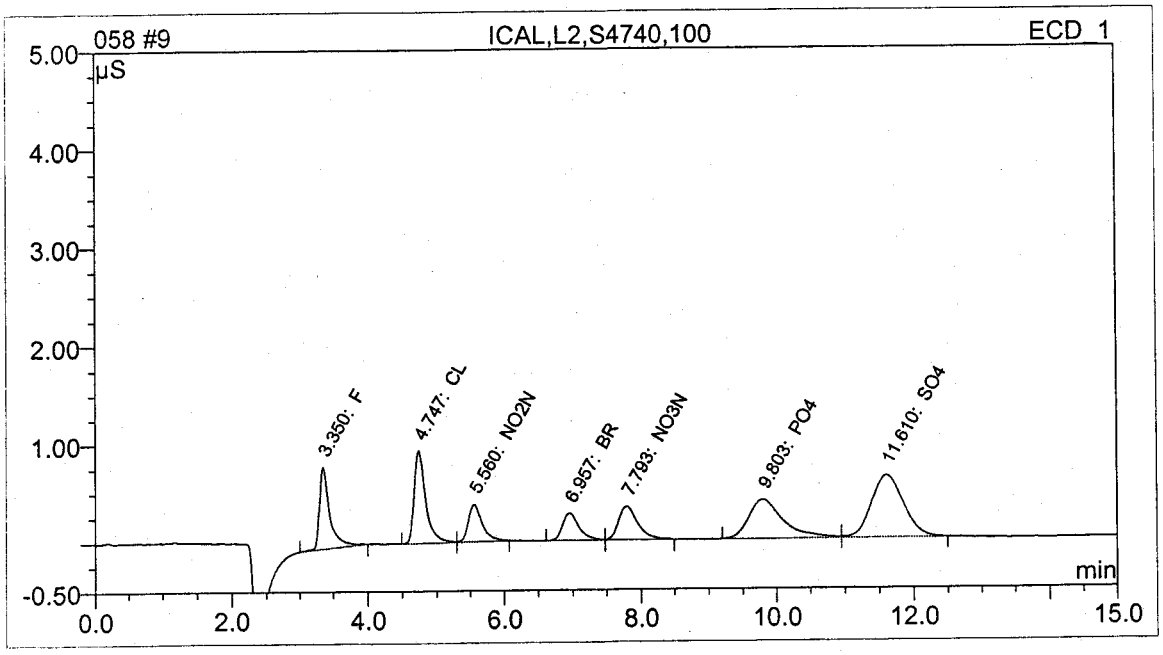
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S4740,100	**Sample No.:**	9
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:41 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.350	0.146311	0.4953	0.4953	
2	CL	4.747	0.185982	0.9823	0.9823	
3	NO2N	5.560	0.091022	0.2305	0.2305	
4	BR	6.957	0.079367	0.9908	0.9908	
5	NO3N	7.793	0.113908	0.2449	0.2449	
6	PO4	9.803	0.236323	1.2671	1.2671	
7	SO4	11.610	0.341796	2.5233	2.5233	



ANALYZED BY: _____

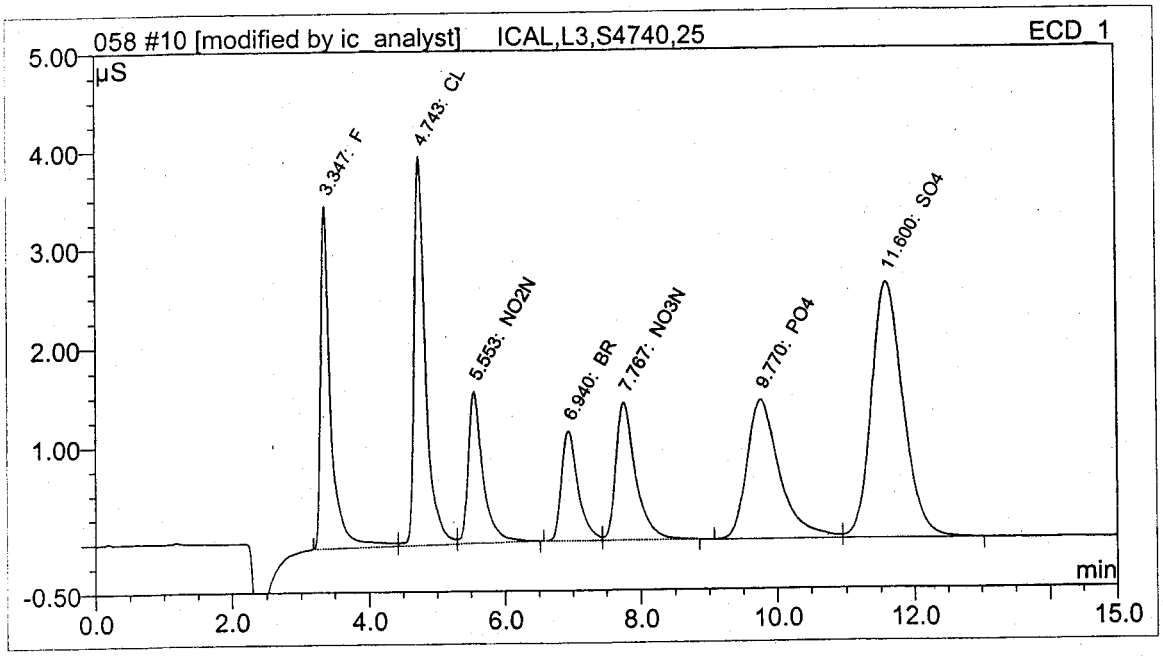
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.605012	2.0246	2.0246	
2	CL	4.743	0.785283	4.0398	4.0398	
3	NO2N	5.553	0.392538	0.9851	0.9851	
4	BR	6.940	0.320222	3.9418	3.9418	
5	NO3N	7.767	0.474740	0.9989	0.9989	
6	PO4	9.770	0.795454	4.2418	4.2418	
7	SO4	11.600	1.403440	10.1256	10.1256	



ANALYZED BY: _____

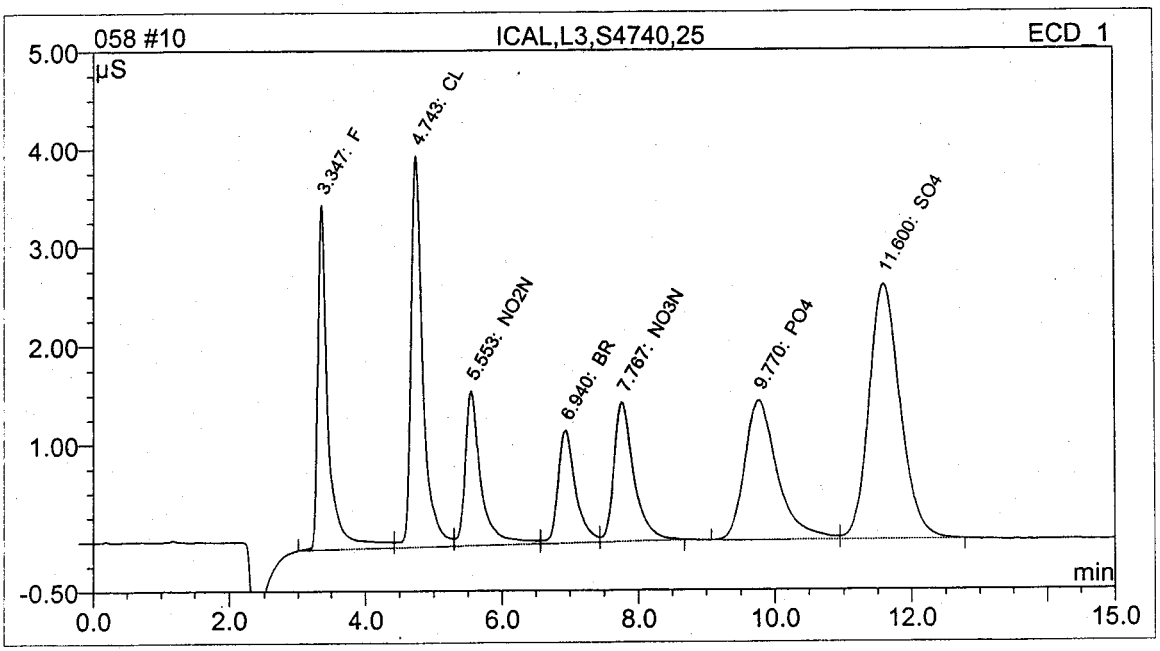
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S4740,25	**Sample No.:**	10
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:58 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.347	0.635966	2.0959	2.0959	
2	CL	4.743	0.808297	4.1204	4.1204	
3	NO2N	5.553	0.429628	1.0496	1.0496	
4	BR	6.940	0.339802	4.1084	4.1084	
5	NO3N	7.767	0.480843	1.0077	1.0077	
6	PO4	9.770	0.791708	4.2280	4.2280	
7	SO4	11.600	1.391258	10.0650	10.0650	



ANALYZED BY: _____

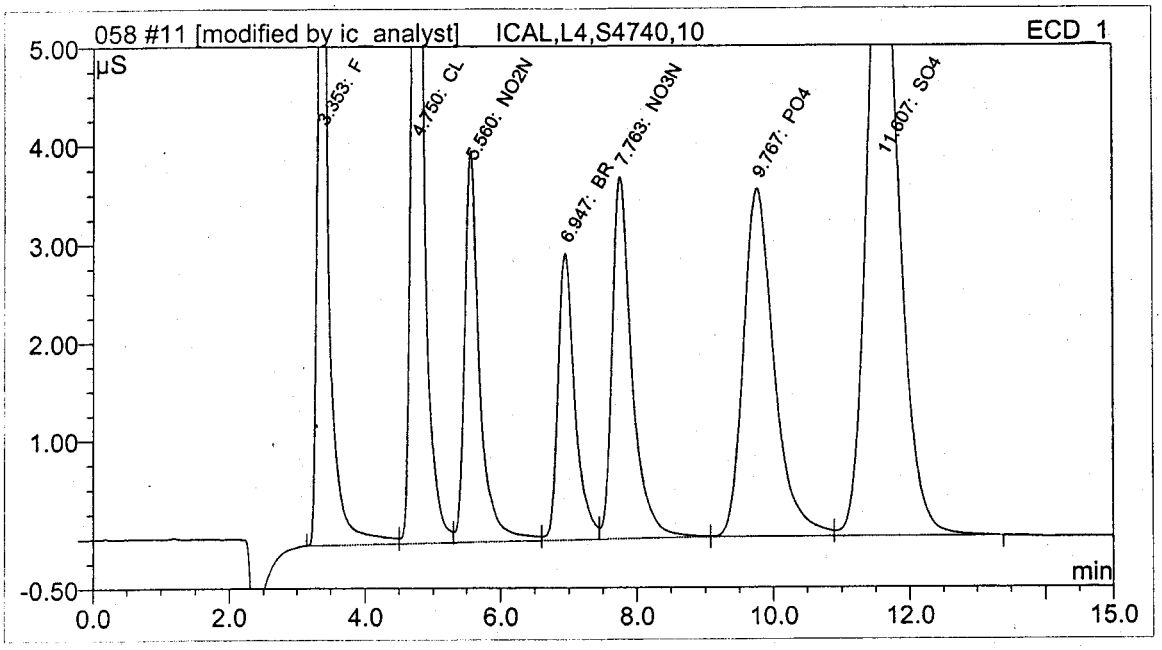
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.526853	4.9890	4.9890	
2	CL	4.750	2.036729	9.9780	9.9780	
3	NO2N	5.560	1.016270	2.5107	2.5107	
4	BR	6.947	0.838941	10.0367	10.0367	
5	NO3N	7.763	1.239123	2.5015	2.5015	
6	PO4	9.767	1.852671	9.7877	9.7877	
7	SO4	11.607	3.600276	24.9088	24.9088	



ANALYZED BY: _____

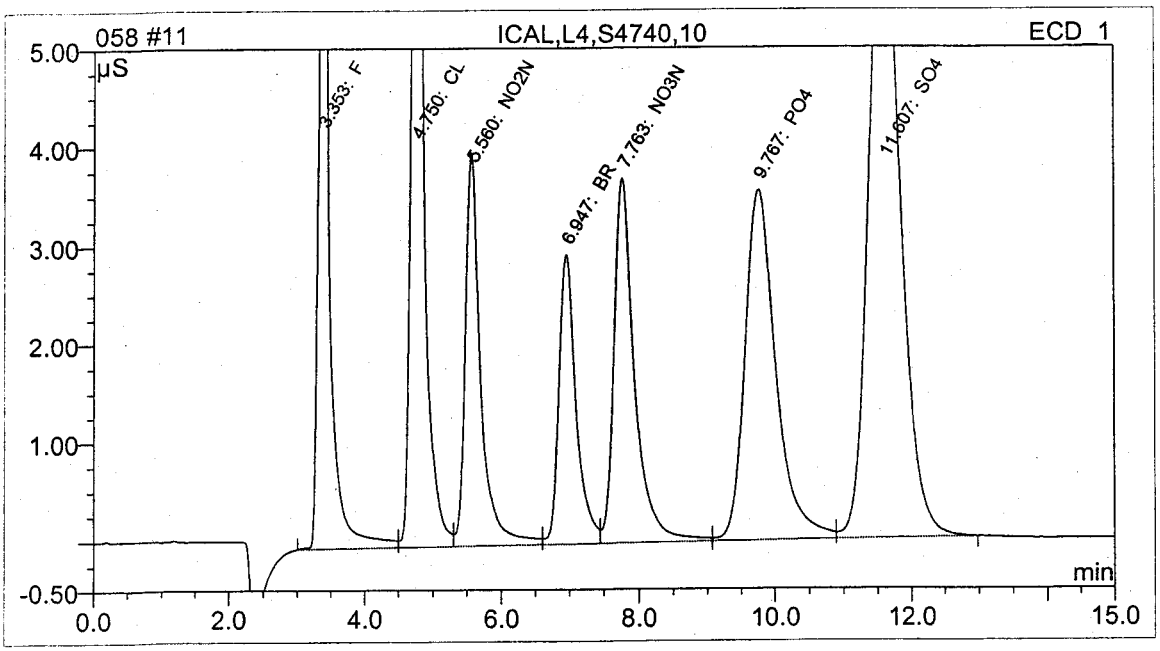
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S4740,10	**Sample No.:**	11
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:16 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	1.549619	5.0108	5.0108	
2	CL	4.750	2.051403	9.9983	9.9983	
3	NO2N	5.560	1.043007	2.5303	2.5303	
4	BR	6.947	0.858434	10.1047	10.1047	
5	NO3N	7.763	1.280994	2.5257	2.5257	
6	PO4	9.767	1.886490	9.8415	9.8415	
7	SO4	11.607	3.595971	24.9003	24.9003	



ANALYZED BY: _____

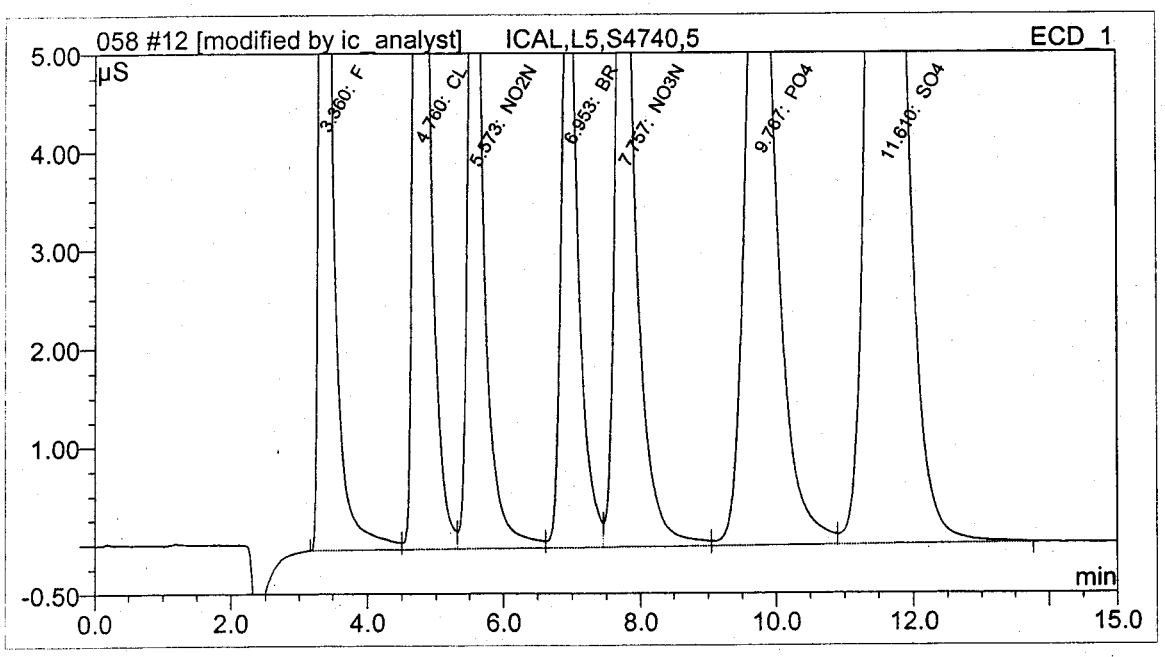
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.183057	10.0017	10.0017	
2	CL	4.760	4.412064	20.0036	20.0036	
3	NO2N	5.573	2.074634	4.9980	4.9980	
4	BR	6.953	1.747974	19.9936	19.9936	
5	NO3N	7.757	2.643463	4.9997	4.9997	
6	PO4	9.767	3.858779	20.0415	20.0415	
7	SO4	11.610	7.733302	50.0159	50.0159	



ANALYZED BY: _____

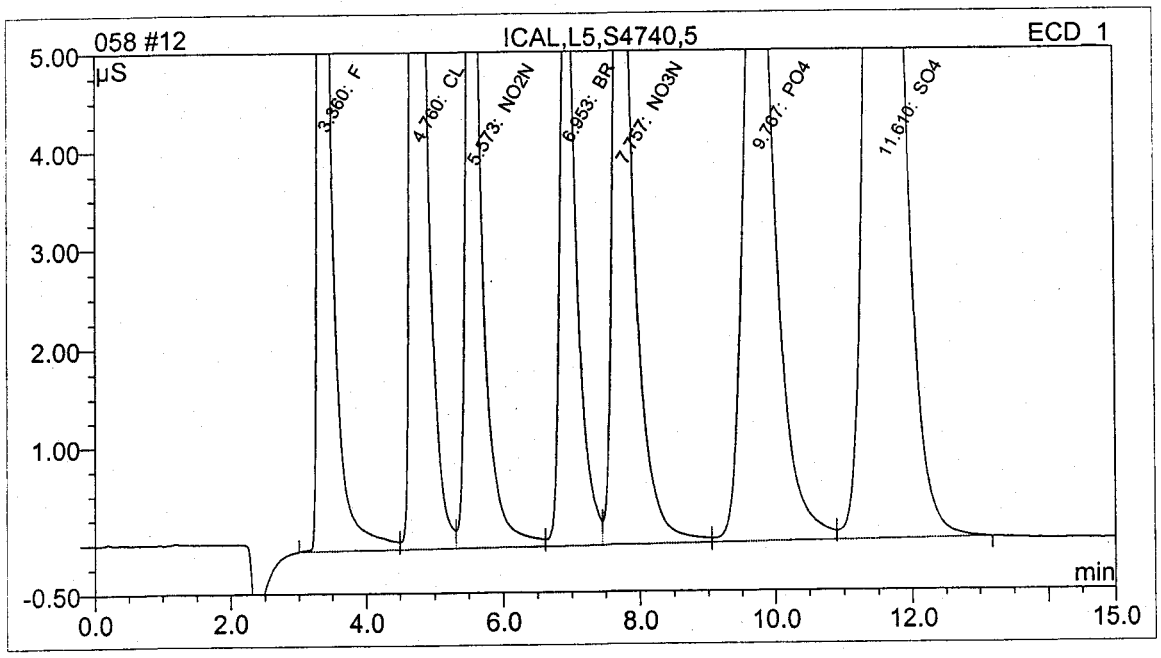
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S4740,5	**Sample No.:**	12
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:33 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.360	3.202870	10.0023	10.0023	
2	CL	4.760	4.420230	20.0039	20.0039	
3	NO2N	5.573	2.082979	4.9983	4.9983	
4	BR	6.953	1.750317	19.9939	19.9939	
5	NO3N	7.757	2.641363	4.9997	4.9997	
6	PO4	9.767	3.845584	20.0411	20.0411	
7	SO4	11.610	7.694329	50.0135	50.0135	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01
Seqnum : 607084260013
Cal : 607084260001
Standards: S3859 (5X)

File : 058_13
Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 15:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2987	0.2862	1.000	0.9660	mg/L	-3	10	
Chloride	0.2028	0.1885	2.000	1.974	mg/L	-1	10	
Nitrogen, Nitrite	0.4045	0.4100	0.5000	0.5171	mg/L	3	10	
Bromide	0.0825	0.0798	2.000	1.983	mg/L	-1	10	
Nitrogen, Nitrate	0.4834	0.4537	0.5000	0.4844	mg/L	-3	10	
Orthophosphate (as P)	0.2412	0.2154	2.000	2.305	mg/L	**15**	10	v+ ***
Sulfate	0.1465	0.1400	5.000	5.125	mg/L	2	10	

MS 2/28/07

CW 3/1/07

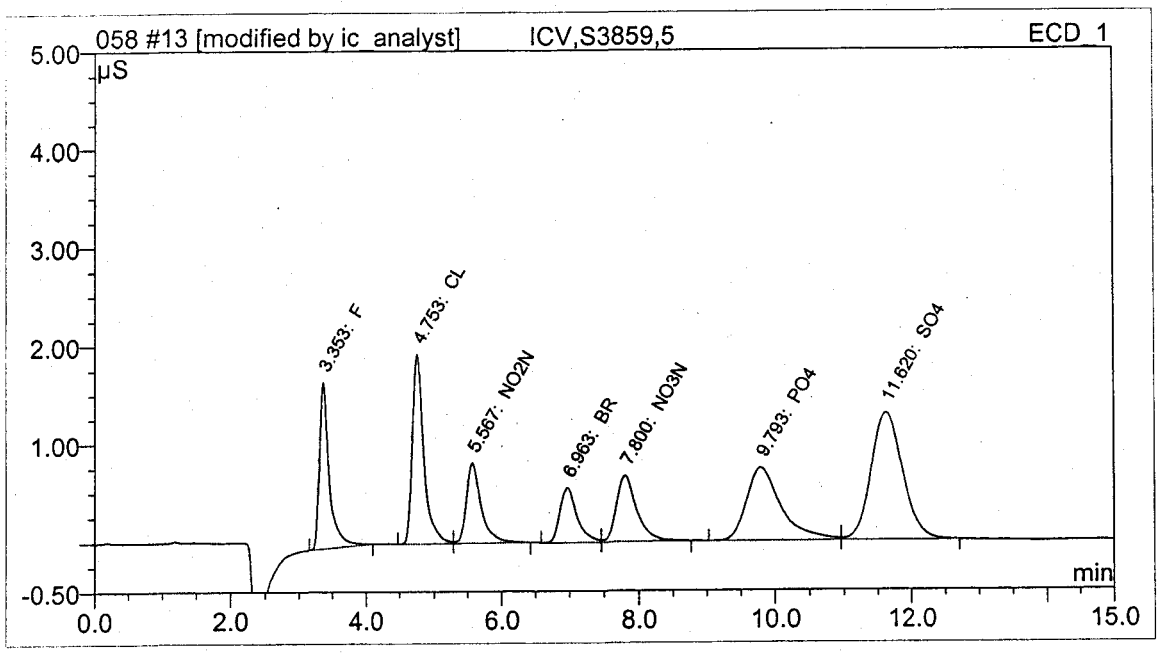
+=high bias v=ICV

607084260013

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.286163	0.9660	0.9660	
2	CL	4.753	0.376932	1.9735	1.9735	
3	NO2N	5.567	0.205021	0.5171	0.5171	
4	BR	6.963	0.159575	1.9827	1.9827	
5	NO3N	7.800	0.226872	0.4844	0.4844	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

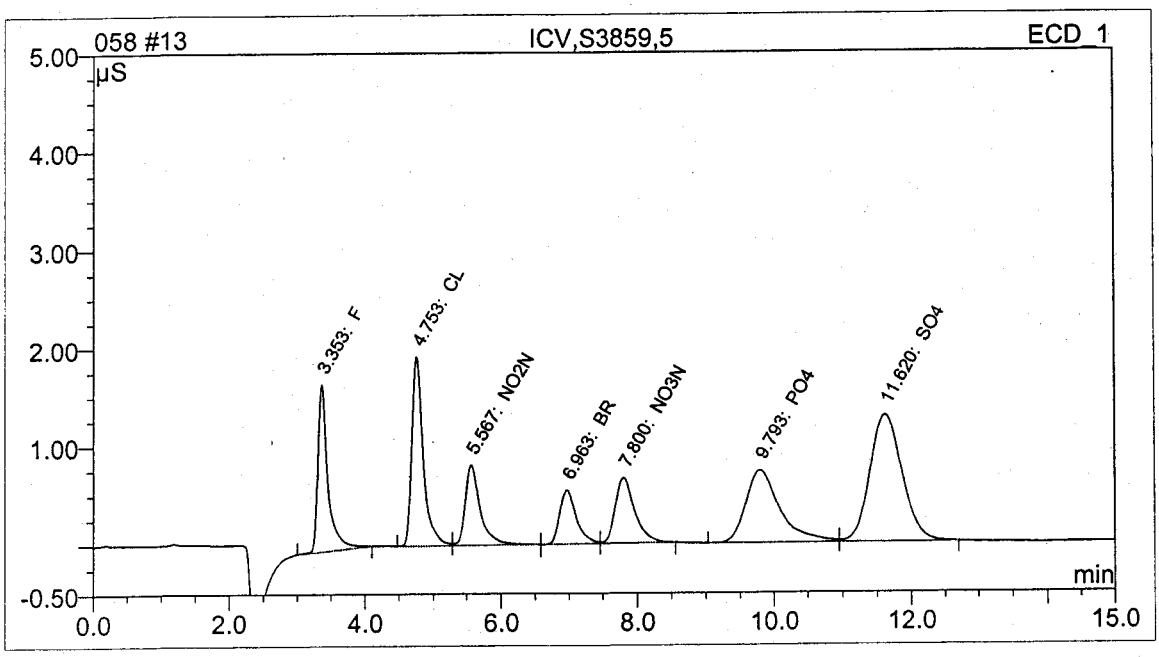
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	**Sample No.:**	13
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 3:51 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.353	0.290333	0.9799	0.9799	
2	CL	4.753	0.376789	1.9728	1.9728	
3	NO2N	5.567	0.204041	0.5146	0.5146	
4	BR	6.963	0.154166	1.9161	1.9161	
5	NO3N	7.800	0.218299	0.4663	0.4663	
6	PO4	9.793	0.430808	2.3049	2.3049	
7	SO4	11.620	0.700028	5.1248	5.1248	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260014 File : 058_14
Cal : 607084260001 Caldate: 27-FEB-2007

IDF : 1.0
Time : 27-FEB-2007 16:08

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	[0.07283]	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

MRS 2/28/07

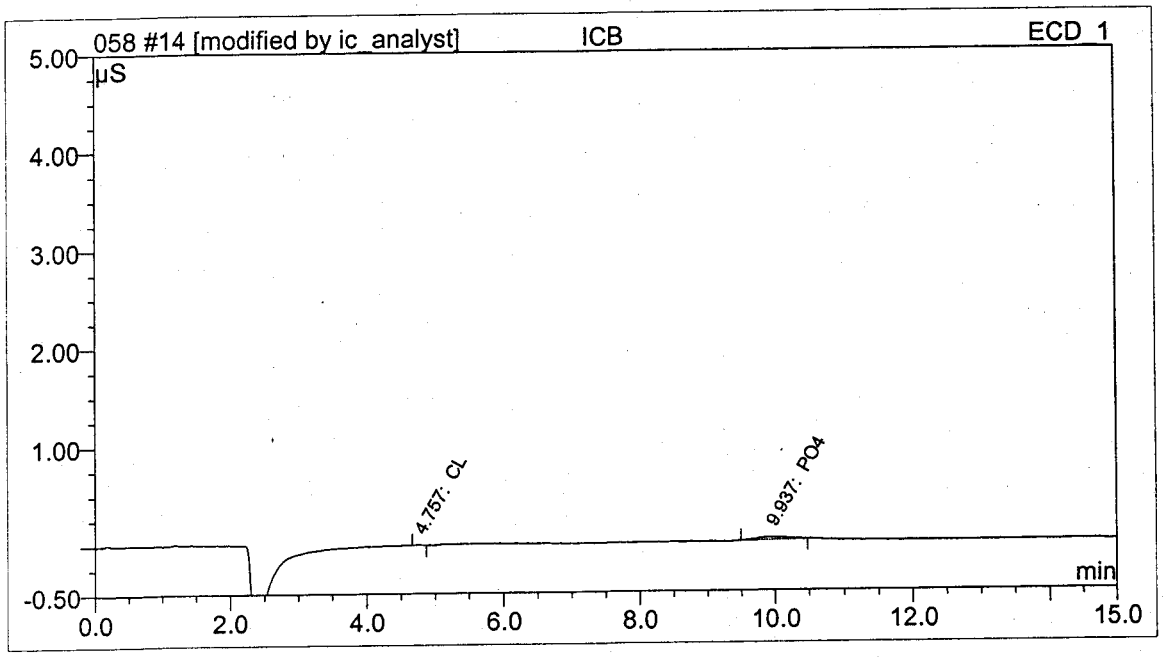
607084260014

00422

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.757	0.000567	0.0030	0.0030	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

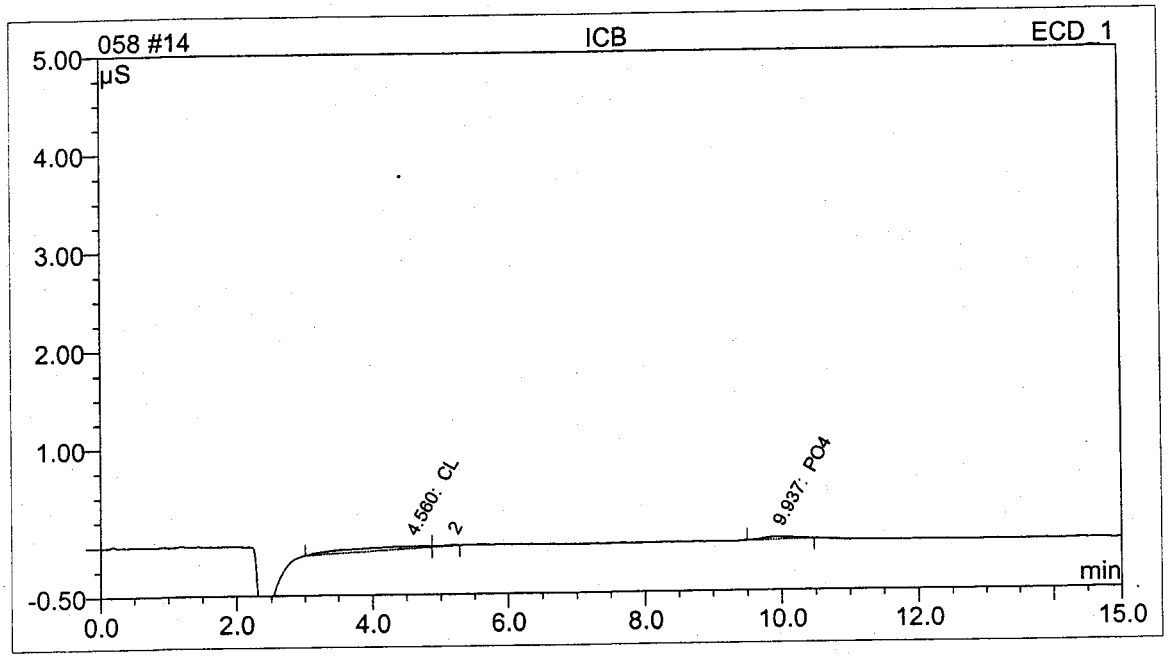
REVIEWED BY: _____

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	**Sample No.:**	14
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 4:08 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.560	0.045029	0.2393	0.2393	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	9.937	0.013561	0.0728	0.0728	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 607084260007 File : 058_7
Cal : 606441349001 Caldate: 02-NOV-2006

IDF : 1.0
Time : 27-FEB-2007 14:06

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Bromide	ND	0.2000	0.03595	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Orthophosphate (as P)	ND	0.2000	0.04544	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

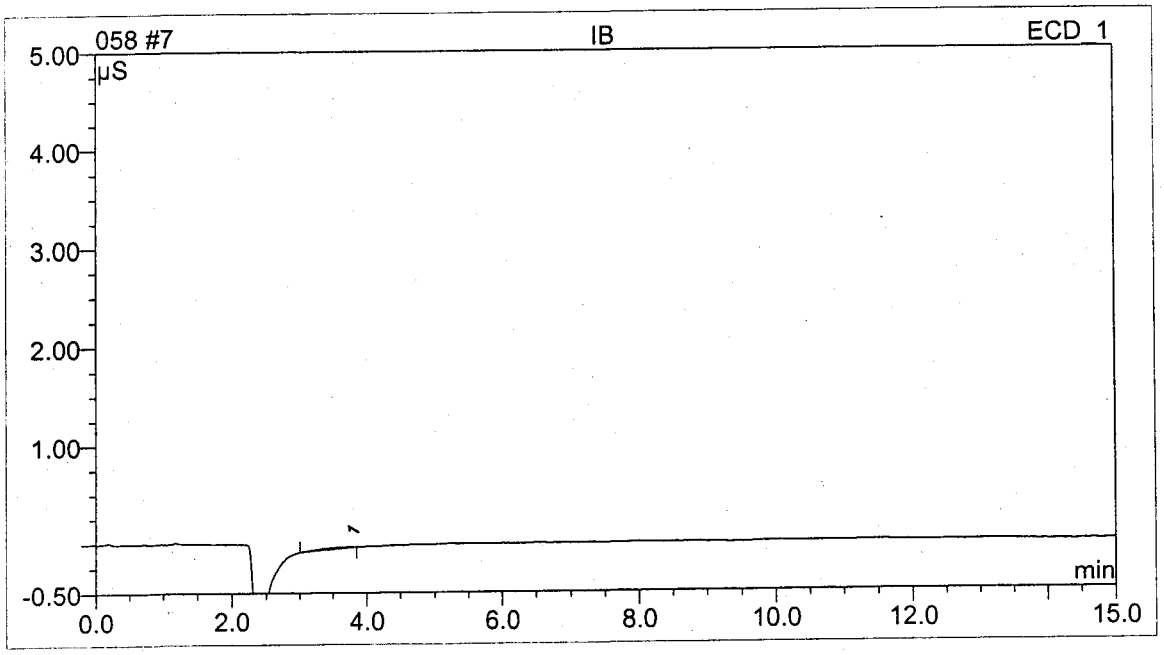
MCS 2/28/07

607084260007

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	**Sample No.:**	7
Sequence Name:	058	**Batch #:**	CAL-058
Program Method:	IC01-7AN	**Injection vol.:**	25.0
Quantitation Method:	IC01-7AN_CAL	**Dilution Factor:**	1.0000
Quant. Method Title:	IC01-7AN_CAL	**Sample Wt.:**	1.0000
Date Time Collected:	2/27/2007 2:06 PM	**PDF:**	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area µS*min	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY: _____

REVIEWED BY: _____

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 IC Water
EPA 300.0

Inst : IC01 Run Name: L IDF : 1.0
Seqnum : 607098759007 File : 068_7 Time : 09-MAR-2007 13:04
Cal : 607084260001 Caldate : 27-FEB-2007
Standards: S4740 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2987	0.2719	0.5000	0.4608	mg/L	-8	10	
Chloride	0.2028	0.1907	1.000	1.007	mg/L	1	10	
Nitrogen, Nitrite	0.4045	0.3980	0.2500	0.2516	mg/L	1	10	
Nitrogen, Nitrate	0.4834	0.4707	0.2500	0.2529	mg/L	1	10	
Sulfate	0.1465	0.1433	2.500	2.641	mg/L	6	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 IC Water
EPA 300.0

Inst : IC01 Run Name: M IDF : 1.0
Seqnum : 607098759020 File : 068_20 Time : 09-MAR-2007 16:54
Cal : 607084260001 Caldate : 27-FEB-2007
Standards: S4740 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2987	0.3050	2.000	2.041	mg/L	2	10	
Chloride	0.2028	0.2045	4.000	4.203	mg/L	5	10	
Nitrogen, Nitrite	0.4045	0.4110	1.000	1.031	mg/L	3	10	
Nitrogen, Nitrate	0.4834	0.4984	1.000	1.047	mg/L	5	10	
Sulfate	0.1465	0.1446	10.00	10.42	mg/L	4	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 193277 IC Water
EPA 300.0

Inst : IC01 Run Name: H IDF : 1.0
Seqnum : 607098759029 File : 068_29 Time : 09-MAR-2007 19:48
Cal : 607084260001 Caldate : 27-FEB-2007
Standards: S4740 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2987	0.3050	5.000	4.983	mg/L	0	10	
Chloride	0.2028	0.2100	10.00	10.26	mg/L	3	10	
Nitrogen, Nitrite	0.4045	0.4143	2.500	2.558	mg/L	2	10	
Nitrogen, Nitrate	0.4834	0.5104	2.500	2.571	mg/L	3	10	
Sulfate	0.1465	0.1480	25.00	25.55	mg/L	2	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 193277 IC Water
EPA 300.0

Inst : IC01
Seqnum : 607098759008.3
File : 068_8
Cal : 607084260001
IDF : 1.0
PDF : 1.0

Lab ID : QC378497
Matrix : Water
Batch : 122941
Caldate: 27-FEB-2007

Time : 09-MAR-2007 13:21
Units : mg/L

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

607098759008.3

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193277 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607098759021 File : 068_21 Time : 09-MAR-2007 17:12
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01479]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 193277 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607098759030 File : 068_30 Time : 09-MAR-2007 20:05
Cal : 607084260001 Caldate: 27-FEB-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01586]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

SEQUENCE SUMMARY FOR 193277 IC Water
Curtis & Tompkins Laboratories

Sequence: 607084260 Instrument: IC01 Ion Chromatograph Begun: 27-FEB-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	058_1	X	BLK			27-FEB-2007 12:20	1.0						
002	058_2	X	BLK			27-FEB-2007 12:38	1.0						
003	058_3	X	BLK			27-FEB-2007 12:56	1.0						
004	058_4	X	BLK			27-FEB-2007 13:13	1.0						
005	058_5	X	BLK			27-FEB-2007 13:31	1.0						
006	058_6	X	BLK			27-FEB-2007 13:48	1.0						
007	058_7	IB				27-FEB-2007 14:06	1.0		25				
008	058_8	ICAL	L1			27-FEB-2007 14:23	1.0					1	
009	058_9	ICAL	L2			27-FEB-2007 14:41	1.0					1	
010	058_10	ICAL	L3			27-FEB-2007 14:58	1.0					1	
011	058_11	ICAL	L4			27-FEB-2007 15:16	1.0					1	
012	058_12	ICAL	L5			27-FEB-2007 15:33	1.0					1	
013	058_13	ICV				27-FEB-2007 15:51	1.0	1	25			2	
014	058_14	ICB				27-FEB-2007 16:08	1.0		25				

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 193277 IC Water
Curtis & Tompkins Laboratories

Sequence: 607098759 Instrument: IC01 Ion Chromatograph Begun: 09-MAR-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	068_7	CCV	L	122941		09-MAR-2007 13:04	1.0	1	25			1	
008	068_8	CCB/MB	QC378497	122941	Water	09-MAR-2007 13:21	1.0		25				
009	068_9	SAMPLE	193277-001	122941	Water	09-MAR-2007 13:42	1.0		25				
010	068_10	SAMPLE	193268-004	122941	Water	09-MAR-2007 13:59	2000		25				
011	068_11	SAMPLE	193268-005	122941	Water	09-MAR-2007 14:17	2000		25				
012	068_12	MSS	193268-006	122941	Water	09-MAR-2007 14:34	2000	4	25				
013	068_13	SAMPLE	193261-003	122941	Water	09-MAR-2007 14:52	1.0		25				
014	068_14	SAMPLE	193261-004	122941	Water	09-MAR-2007 15:09	1.0		25				
015	068_15	SAMPLE	193261-002	122941	Water	09-MAR-2007 15:27	1.0		25				
016	068_16	SAMPLE	193261-001	122941	Water	09-MAR-2007 15:44	1.0		25				
017	068_17	X	BLK	122941		09-MAR-2007 16:02	1.0						
018	068_18	SAMPLE	193268-004	122941	Water	09-MAR-2007 16:19	20.0	2	25				2:CL=287.313
019	068_19	X	BLK	122941		09-MAR-2007 16:37	1.0						
020	068_20	CCV	M	122941		09-MAR-2007 16:54	1.0		25			1	
021	068_21	CCB		122941		09-MAR-2007 17:12	1.0		25				
022	068_22	MS	QC378499	122941	Water	09-MAR-2007 17:45	2000		25			1	
023	068_23	MSD	QC378500	122941	Water	09-MAR-2007 18:02	2000		25			1	
024	068_24	MSS	193268-006	122941	Water	09-MAR-2007 18:20	20.0	3	25				2:CL=287.902
025	068_25	X	BLK	122941		09-MAR-2007 18:37	1.0						
026	068_26	SAMPLE	193268-005	122941	Water	09-MAR-2007 18:55	20.0	2	25				2:CL=373.330
027	068_27	X	BLK	122941		09-MAR-2007 19:13	1.0						
028	068_28	LCS	QC378498	122941	Water	09-MAR-2007 19:30	1.0		25			1	
029	068_29	CCV	H	122941		09-MAR-2007 19:48	1.0		25			1	
030	068_30	CCB		122941		09-MAR-2007 20:05	1.0	1	25				
031	068_31	X	CCV	122941		09-MAR-2007 20:23	1.0					1	
032	068_32	X	CCB	122941		09-MAR-2007 20:40	1.0						
033	068_33	X	SHUTDOWN	122941		09-MAR-2007 20:58	1.0						

Stds used: 1=S4740

REPORTING SUMMARY FOR 193277 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
193277-001	IC01	03/09/07 13:42	1.0	+	+	+	+	+	
QC378497	IC01	03/09/07 13:21	1.0	+	+	+	+	+	
QC378498	IC01	03/09/07 19:30	1.0	+	+	+	+	+	
QC378499	IC01	03/09/07 17:45	2000	+	+	+	+	+	
QC378500	IC01	03/09/07 18:02	2000	+	+	+	+	+	

Curtis & Tompkins, Ltd. **Water Prep Log** **Ion Chromatography**

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 122941
Date Started: 3/9/07
Prep Chemist: MRS

BK 2431
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	193261-001 I	0.14	1X	S	
2	-002 I	0.12			
3	-003 I	0.13			
4	-004 J	0.13			
5	193268-004 D	34.0	2000X 20X		
6	-005 H	49.4			
7	-006 J	34.5			MSS
8	193277-001 W	0.01	1X		
9	Blank QC378497	N/A	1X	N/A	
10	LCS QC378498		1X	N/A	
11	MS QC378499 J		2000X	S	
12	MSD QC378500 J		2000X	S	
13					
14					
15					
16					
17					
18					
19					
20					

3/9/07

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100X MS 12/5/06	MS 3/9/07
BS/BSD Spiked with	0.2 mL of :	54740	
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot #A106505 22	

MRJ 3/9/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

OR 3/14/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122941
Date Started: 09-MAR-2007
Batched by : Micah Smith

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
193261-001			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	14-MAR-2007
193261-002			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	14-MAR-2007
193261-003			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	14-MAR-2007
193261-004			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	14-MAR-2007
193268-004			Kennedy/Jenks Cons	Water	CHLORIDE, NITRATE, SULFATE	14-MAR-2007
193268-005			Kennedy/Jenks Cons	Water	CHLORIDE, NITRATE, SULFATE	14-MAR-2007
193268-006			Kennedy/Jenks Cons	Water	CHLORIDE, NITRATE, SULFATE	14-MAR-2007
193277-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-MAR-2007
QC378497	BLANK			Water		
QC378498	LCS			Water		
QC378499	MS	of 193268-006		Water		
QC378500	MSD	of 193268-006		Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 03/26/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	123286
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193277-001	ND	0.01
BLANK	QC379976	ND	0.01

ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	WT030807	Batch#:	123286
MSS Lab ID:	193262-021	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379977	<0.01000	0.1630	0.2030	85	65-135		
MSD	QC379978		0.1630	0.1928	79	65-135	5	20
LCS	QC379979		0.1630	0.1520	93	75-125		

RPD= Relative Percent Difference

39.0

Analysis:	**Cyanide**	Analyst:	DM
Method:	**EPA 335.2** / SMWW 4500CN-E	Prep Date:	**3/20/2007**
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	**3/20/2007**
Wavelength:	578 nm	Batch:	123286
SOP#:	CN_335_rv8.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 7/06/06

Conc (mg/L)	ABS	RF
0.00000	0.0007	
0.00873	0.0125	1.431844
0.01746	0.0259	1.483391
0.05238	0.0716	1.366934
0.08730	0.1186	1.358534
0.13968	0.1916	1.371707
0.17460	0.2371	1.357961

Correlation Coefficient (r):	0.9999
Avg Rf:	1.395062
%RSD:	3.7

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1127	0.0808	0.0816	99%	90 - 110%
ICB	-0.0001	-0.0001	0.0000		
CCV	0.1138	0.0816	0.0816	100%	90 - 110%
CCB	0.0031	0.0022	0.0000		
CCV	0.1120	0.0803	0.0816	98%	90 - 110%
CCB	0.0022	0.0016	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: HP UV-VIS Spectrometer
Wavelength: 578 nm

Analyst: DM
Prep Date: **3/20/2007**
Analysis Date: **3/20/2007**
Batch: 123286
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	Final Distill Vol (mL)	Distillate Colored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	20.0	1.00	-0.0004	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.1060	**0.1520**	0.020	0.5	16.3	0.163	**93**	
193262-21	50.0	50.0	20.0	1.00	0.0893	**0.0640**	0.010					
193262-21m	50.0	50.0	10.0	1.00	0.1416	**0.2030**	0.020	0.5	16.3	0.163	**85**	
193262-21m	50.0	50.0	10.0	1.00	0.1345	**0.1928**	0.020	0.5	16.3	0.163	**79**	**5**
193262-2	50.0	50.0	20.0	1.00	0.0023	**ND**	0.010					
193262-7	50.0	50.0	20.0	1.00	0.0040	**ND**	0.010					
193262-17	50.0	50.0	20.0	1.00	0.0005	**ND**	0.010					
193262-18	50.0	50.0	20.0	1.00	0.0047	**ND**	0.010					
193262-20	50.0	50.0	20.0	1.00	0.0018	**ND**	0.010					
193277-1	50.0	50.0	20.0	1.00	0.0018	**ND**	0.010					
193393-1	50.0	50.0	20.0	1.00	0.0017	**ND**	0.010					
193393-2	50.0	50.0	20.0	1.00	0.0195	**0.0140**	0.010					
193393-3	50.0	50.0	20.0	1.00	0.0054	**ND**	0.010					
193393-4	50.0	50.0	20.0	1.00	0.0035	**ND**	0.010					
193416-1	50.0	50.0	20.0	1.00	0.0068	**ND**	0.010					
193416-4	50.0	50.0	20.0	1.00	0.0364	**0.0261**	0.010					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

DMD 3/20/07

---> Quantitation Results Report <---

Date : 03-~~18~~ 20-2007
Time : 13:19:51
Operator : AM

ile Name : Data not stored yet

ample Name : cyanide
olvent Name : CAL 7/6/06
onc Units : mg/L
il. Factor : 1.00

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	-0.0001	0.00000
2	ICV	Analytical	+0.1127	0.08268
3	193262-2	Analytical	+0.0023	0.00169
4	193262-7	Analytical	+0.0040	0.00294
5	193262-17	Analytical	+0.0005	4.028E-04
6	193262-18	Analytical	+0.0047	0.00345
7	193262-20	Analytical	+0.0018	0.00133
8	193262-21	Analytical	+0.0893	0.06549
9	193262-21MS	Analytical	+0.1416	0.10381
10	193262-21MSD	Analytical	+0.1345	0.09861
11	193277-1	Analytical	+0.0018	0.00131
12	193393-1	Analytical	+0.0017	0.00126
13	CCV	Analytical	+0.1138	0.08342
14	CCB	Analytical	+0.0031	0.00229
15	193393-2	Analytical	+0.0195	0.01429
16	193393-3	Analytical	+0.0054	0.00399
17	193393-4	Analytical	+0.0035	0.00255
18	193416-1	Analytical	+0.0068	0.00497
19	193416-4	Analytical	+0.0364	0.02668
20	~~LCS~~ AM 3-20-07	~~Analytical~~	~~+0.0922~~	~~0.06761~~
21	LCS	Analytical	+0.1060	0.07772

22	MB	Analytical	-0.0004	0.00000
23	CCV	Analytical	+0.1120	0.08211
24	CCB	Analytical	+0.0022	0.00164

---> Standard Calibration Report <---

Date : 03-~~18~~ 20-2007
Time : 13:20:13
Operator : DM

File Name : C:\UV\DATA\CN706.STD

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +7.333E-01 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0007	*****
2	0.00873	0.0125	-4.622 %
3	0.01746	0.0259	-7.942 %
4	0.05238	0.0716	-0.295 %
5	0.08730	0.1186	+0.385 %
6	0.13968	0.1916	-0.589 %
7	0.17460	0.2371	+0.424 %

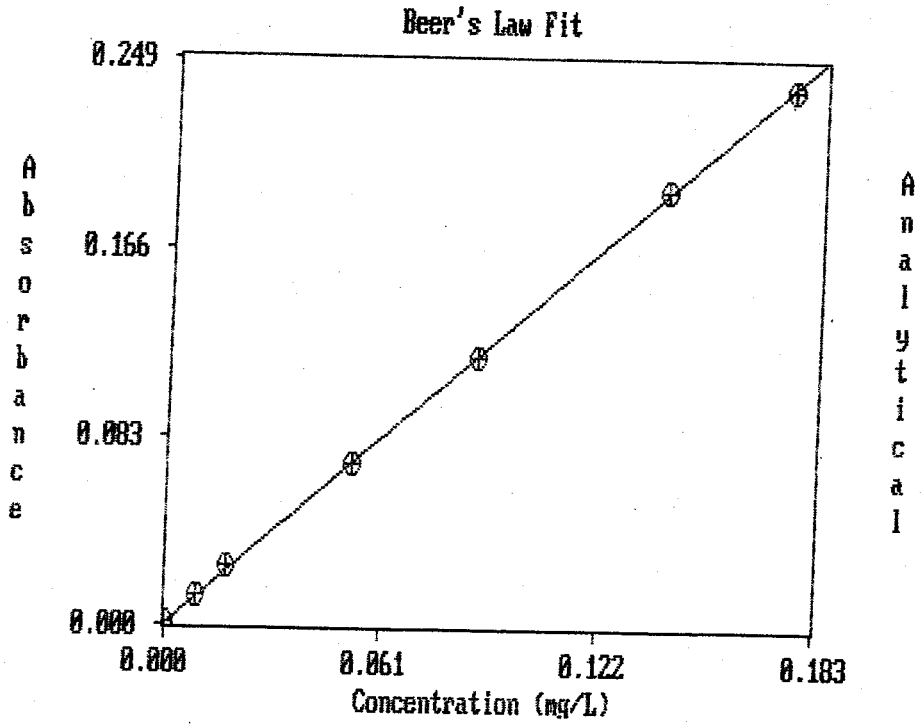
---) Standard Calibration Report (---

Date : 03-~~18~~ 20-2007
Time : 13:20:15
Operator : DM

File Name : C:\UV\DATA\CN706.STD

Sample Name : cyanide
Solvent Name : CAL 7/6/06
Conc Units : mg/L

Analytical Wavelength : 578 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



OTG 193416
USD 193393

PROJECT: Treadwell 193262 193277

Notebook No. Bk 2480

Continued From Page

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CN⁻ EPA 335.2M. 13/23286

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	Abs
193262-2 H	50	50	20	.0023
-7 B				.0040
-17 I				.0005
-18 H				.0047
-20 O				.0018
-21 C				.0893
-21 MS	0.5ml (16.32 ug/ml Cl) (1ml of 25101) 1ml – 50ml		10	.1416
-21 MSD	same as MS		10	.1345
193277-1 R			20	.0018
193393-1 D				.0017
-2				.0195
-3				.0054
-4				.0035
193416-1 J				.0068
-4 L				.0364
LCS			10	.1060
MB			20	-.0004
ICV	0.5ml (16.32 ug/ml dilute 25101) – 100		10	.1127
ICB				-.0001
CCV				.1138
CCB				.0031
CCV				.1120
CCB				.0022

TV = .0816 mg/L

Tests for Cl⁻ & S⁻ negative
pH all >12
Sulfuric acid added to all sample.

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[illegible]	3-20-07	[illegible]	3/20/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123286
Date Started: 20-MAR-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-002			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-007			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-017			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-018			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-020			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193262-021			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193277-001			Treadwell & Rollo	Water	CYANIDE	20-MAR-2007
193393-001			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-002			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-003			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193393-004			Union Sanitary Dis	Water	CYANIDE	20-MAR-2007
193416-001			OTG Enviroengineer	Water	CYANIDE	20-MAR-2007
193416-004			OTG Enviroengineer	Water	CYANIDE	20-MAR-2007
QC379976	BLANK			Water	CYANIDE	
QC379977	MS	of 193262-021		Water	CYANIDE	
QC379978	MSD	of 193262-021		Water	CYANIDE	
QC379979	LCS			Water	CYANIDE	

Method Detection Limit Study

Analysis: **Cyanide**
Method: EPA 335.2 mod*
Instrument: HP UV/VIS Spectrometer
* using the midi-distillation apparatus

Matrix: **Water**
Analysis Date: 8/31/2006
Analyst: DMc

Concentration:	0.0359	mg/L
1	0.0271	
2	0.0285	
3	0.0292	
4	0.0306	
5	0.0271	
6	0.0282	
7	0.0270	
8		
Average	0.0282	
STDEVP	0.001236	
Student's t	3.143	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0039**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	>1/3 RL

f:\inorgan\forms\cn-mdl-h2o.xls
ver.2 effective 7/14/04

Curtis & Tompkins, Ltd.

Surfactants (MBAS)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Batch#:	122898
Field ID:	DW030807A	Sampled:	03/08/07 12:30
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/09/07 10:08
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193277-001	ND	0.10
BLANK	QC378319	ND	0.10

ND= Not Detected
RL= Reporting Limit

19.0

: 00450

Curtis & Tompkins, Ltd.

Batch QC Report

Surfactants (MBAS)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 425.1
Project#:	2893.04.51		
Analyte:	Surfactants (MBAS)	Diln Fac:	1.000
Field ID:	DW030807A	Batch#:	122898
MSS Lab ID:	193277-001	Sampled:	03/08/07 12:30
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/09/07 10:08

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC378320	<0.1000	0.4800	0.4203	88	70-130		
MSD	QC378321		0.4800	0.5166	108	70-130	21	30
LCS	QC378322		0.4800	0.5099	106	80-120		

RPD= Relative Percent Difference

Analysis:	**Surfactants (MBAS)**	Analyst:	**DM**	
Method:	**EPA 425.1** / SMWW 5540c	Analysis Date:	**3/9/2007**	
Instrument:	Perkin-Elmer Lambda 25	Batch#:	122898	**Reviewed by/ Date:** _____
SOP#:	MBAS_rv4.doc	Matrix:	Water	

Initial Calibration Data Calibrated: 1/31/07

ug/100mL	ABS	RF
0	0.0000	
10	0.0174	0.00174
30	0.0495	0.00165
50	0.0784	0.00157
100	0.2066	0.00207
150	0.2864	0.00191

Correlation Coefficient = 0.9955
Avg Response Factor = 0.00179
%RSD = 11.3

Note: Average response used to calculate sample results

Calibration Verification Data

	vol (mL)	IDF	ABS	Conc.(mg/L)	TV (mg/L)	Recovery	Limits
ICV	100	1	0.0911	0.5099	0.48	106.2%	90-110%
ICB	100	1	0.0000	ND			
CCV	100	1	0.0900	0.5037	0.48	104.9%	90-110%
CCB	100	1	0.0012	ND			

00452

Analysis: **Surfactants (MBAS)**
Method: **EPA 425.1** / SMWW 5540c

Analysis Date: 3/9/2007
Batch#: 122898

Sample & Batch QC Data

C&T ID	vol (mL)	IDF	ABS	**Report** (mg/L)	RL (mg/L)	Spike Added (mL)	Spike Std Conc. (mg/L)	QC TV (mg/L)	**% Recovery**	**%RPD**
MB	100	1	0.0034	**ND**	0.1					
193277-1	100	1	0.0108	**ND**	0.1					
193277-1ms	100	1	0.0751	**0.4203**	0.1	5	9.6	0.48	**88**	
193277-1msd	100	1	0.0923	**0.5166**	0.1	5	9.6	0.48	**108**	**21**
193262-19	100	1	0.0053	**ND**	0.1					
193262-20	100	1	0.0039	**ND**	0.1					

RS Liffa 3/20/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

00453

Date : 3/9/2007 Time : 10:08:49

Concentration Results

Date: 3/9/2007 Time: 9:59:30 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 122898.RCO
Autozero performed: 3/9/2007 9:59:23 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
652.0	0.0	icb	0.0000	1.0000	0.0156	ug/100ml	
652.0	0.0	icvlcs	0.0911	1.0000	47.405	ug/100ml	
652.0	0.0	3277-1	0.0108	1.0000	5.5973	ug/100ml	193277-1
652.0	0.0	3277-1ms	0.0751	1.0000	39.087	ug/100ml	193277-1ms
652.0	0.0	3277-1ms	0.0923	1.0000	47.998	ug/100ml	193277-1msd
652.0	0.0	3262-19	0.0053	1.0000	2.7726	ug/100ml	193262-19
652.0	0.0	3262-20	0.0039	1.0000	2.0444	ug/100ml	193262-20
652.0	0.0	mb	0.0034	1.0000	1.7531	ug/100ml	
652.0	0.0	ccv	0.0900	1.0000	46.827	ug/100ml	
652.0	0.0	ccb	0.0012	1.0000	0.6190	ug/100ml	

Date : 3/9/2007 Time : 09:59:26

CALIBRATION

Date: 3/9/2007 Time: 9:59:23 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: MBAS107
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: DMB

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
652.0	0.0	mbas107.A01	0.0000	ug/100ml	0.0000	
652.0	0.0	mbas107.A02	10.000	ug/100ml	0.0174	
652.0	0.0	mbas107.A03	30.000	ug/100ml	0.0495	
652.0	0.0	mbas107.A04	50.000	ug/100ml	0.0784	
652.0	0.0	mbas107.A05	100.00	ug/100ml	0.2066	
652.0	0.0	mbas107.A06	150.00	ug/100ml	0.2864	

Equation: y = 1.922358e-03 * x

Residual error: 0.010891
Correlation coefficient: 0.995477

MBAS EPA 425.1 B122898

Sample	Vol (ml)	Final Vol (ml)	ABS
193262-19	100	100	.0053
-20N			.0039
193277-1K			.0108
-1MS	+5ml (9.6 mg/ml dilution of SS500 5ml — 50 ml)		.0751
-1MSD	same as	MS	.0923
MB			.0034
ICV/LCS	same as	MS	.0911
ICB			.0000
CCV			.0900
CCB			.0012

TV = .48 mg/L

Continued on Page

Read and Understood by

Signed 3-9-07 Date Signed 3/9/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 122898
Date Started: 09-MAR-2007
Batched by : Dennis McCanna

Analysis : MBAS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-019			Treadwell & Rollo	Water	MBAS	20-MAR-2007
193262-020			Treadwell & Rollo	Water	MBAS	20-MAR-2007
193277-001			Treadwell & Rollo	Water	MBAS	20-MAR-2007
QC378319	BLANK			Water	MBAS	
QC378320	MS	of 193277-001		Water	MBAS	
QC378321	MSD	of 193277-001		Water	MBAS	
QC378322	LCS			Water	MBAS	

Analysis:	MBAS	Login #:	121867
Method:	EPA 425.1	Analysis Date:	2/6/2007
Instrument:	PERKIN ELMER LAMBDA 25	Analyst:	SY
Wavelength:	652		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.3
Units:	mg/L
1	0.313
2	0.333
3	0.330
4	0.338
5	0.343
6	0.340
7	0.333
Average:	0.333 mg/L
Std Deviation:	0.009853
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0310** mg/L
Reporting Limit:	0.1 mg/L
Status:	PASS

✓ 2/27/07

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	123139
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193277-001	ND	0.04
BLANK	QC379335	ND	0.04

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	123139
MSS Lab ID:	193373-006	Sampled:	03/12/07
Matrix:	Water	Received:	03/12/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC379336	0.3939	0.3155	0.6730	88	75-125		
MSD	QC379337		0.3155	0.6765	90	75-125	1	20
LCS	QC379338		0.3155	0.2934	93	75-125		

RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	3/15/2007
Instrument:	**HP UV-VIS Spectrometer**	Analysis Date:	3/15/2007
Wavelength:	626 nm	Batch:	2/20/2237
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r):	0.9990
Avg Rf:	0.6210
%RSD:	3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1822	0.2934	0.3155	93%	90 - 110%
ICB	-0.0001	-0.0002	0.0000		
CCV	0.1868	0.3008	0.3155	95%	90 - 110%
CCB	0.0005	0.0008	0.0000		
CCV	0.1852	0.2983	0.3155	95%	90 - 110%
CCB	0.0015	0.0024	0.0000		
CCV	0.1861	0.2997	0.3155	95%	90 - 110%
CCB	0.0007	0.0011	0.0000		

19465

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

BATCH: **123139**
Prep Date: **3/15/2007**
Analysis Date: **3/15/2007**
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	-0.0001		**ND**	0.040					
LCS	7.5000	1.0000	0.1822		**0.29342**	0.040	0.0500	47.3280	0.3155	**93**	
193373-6	7.5000	1.0000	0.2446		**0.39391**	0.040					
193373-6ms	7.5000	1.0000	0.4179		**0.67300**	0.040	0.0500	47.3280	0.3155	**88**	
193373-6msd	7.5000	1.0000	0.4201		**0.67654**	0.040	0.0500	47.3280	0.3155	**90**	**1**
193262-21	7.5000	1.0000	0.0014		**ND**	0.040					
193277-1	7.5000	1.0000	0.0000		**ND**	0.040					
193366-1	7.5000	1.0000	0.0027		**ND**	0.040					
193366-2	7.5000	1.0000	0.0017		**ND**	0.040					
193366-3	7.5000	1.0000	0.0028		**ND**	0.040					
193366-4	7.5000	20.0000	0.7431		**23.93426**	0.800					
193366-5	7.5000	1.0000	0.0049		**ND**	0.040					
193367-1	7.5000	1.0000	0.0025		**ND**	0.040					
193367-2	7.5000	1.0000	0.0008		**ND**	0.040					
193368-1	7.5000	1.0000	0.0016		**ND**	0.040					
193368-2	7.5000	1.0000	0.0006		**ND**	0.040					
193368-3	7.5000	1.0000	0.0045		**ND**	0.040					
193368-4	7.5000	1.0000	0.0002		**ND**	0.040					
193373-7	7.5000	1.0000	0.3439		**0.55383**	0.040					
193373-8	7.5000	1.0000	0.0030		**ND**	0.040					
193373-9	7.5000	1.0000	0.0014		**ND**	0.040					
193373-10	7.5000	1.0000	0.0329		**0.05298**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

C&T, f:\inorgan\wetstuff\sulfide.xls
Rev. 10.1, Effective 2/19/07

00452

193366-4dis	7.5000	20.0000	0.7184	**23.13871**	0.800

Reviewed by/ Date: 3/20/07

00153

---) Quantitation Results Report (---

Date : 03-15-2007
Time : 11:32:29
Operator :

ile Name : Data not stored yet

ample Name : sulfide
olvent Name : CAL 11-16-06
onc Units : mg/L
il. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

AMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0001	0.00000
2	ICV/LCS	Analytical	+0.1822	0.30414
3	193262-21	Analytical	+0.0014	0.00234
4	193277-1	Analytical	+0.0000	0.00000
5	193366-1	Analytical	+0.0027	0.00443
6	193366-2	Analytical	+0.0017	0.00283
7	193366-3	Analytical	+0.0028	0.00474
8	193366-4X20	Analytical	+0.7431	1.24014
9	193366-5	Analytical	+0.0049	0.00825
10	193367-1	Analytical	+0.0025	0.00425
11	CCV	Analytical	+0.1868	0.31170
12	CCB	Analytical	+0.0005	8.658E-04
13	193367-2	Analytical	+0.0008	0.00127
14	193368-1	Analytical	+0.0016	0.00262
15	193368-2	Analytical	+0.0006	0.00104
16	193368-3	Analytical	+0.0045	0.00749
17	193368-4	Analytical	+0.0002	3.820E-04
18	193373-6	Analytical	+0.2446	0.40814
19	193373-6MS	Analytical	+0.4179	0.69738
20	193373-6MSD	Analytical	+0.4201	0.70118
21	193373-7	Analytical	+0.3439	0.57388

22	193373-8	Analytical	+0.0030	0.00502
23	CCV	Analytical	+0.1852	0.30913
24	CCB	Analytical	+0.0015	0.00250
25	193373-9	Analytical	+0.0014	0.00237
26	193373-10	Analytical	+0.0329	0.05490
27	193366-4X20F	Analytical	+0.7184	1.19904
28	CCV	Analytical	+0.1861	0.31063
29	CCB	Analytical	+0.0007	0.00120

---) Standard Calibration Report (---

Date : 03-15-2007
Time : 11:32:52
Operator :

ile Name : C:\UV\DATA\SS1106.STD

ample Name : sulfide
olvent Name : CAL 11-16-06
onc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

nalytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

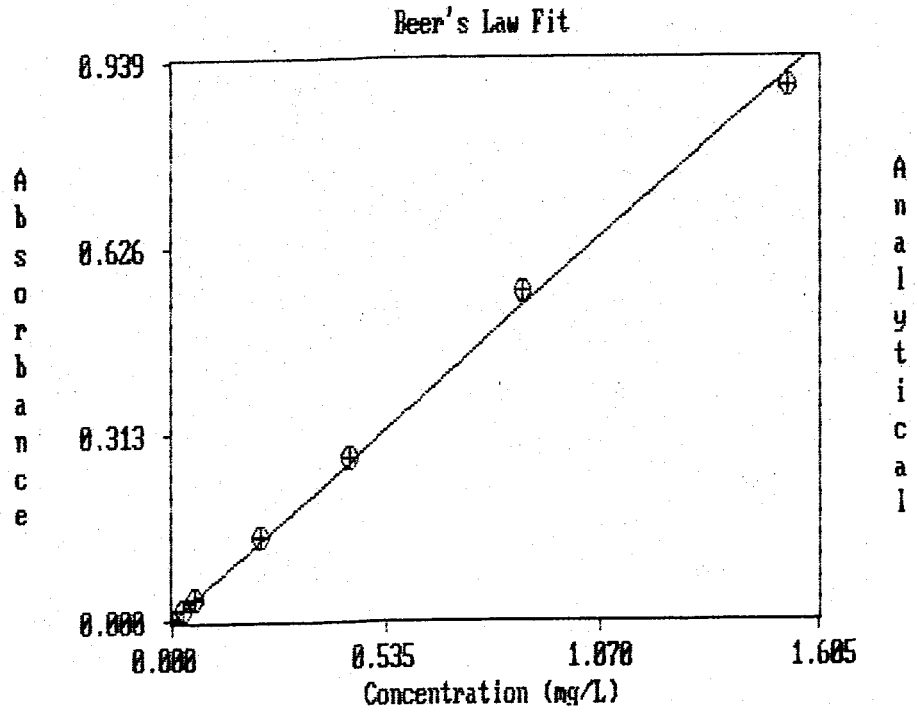
---> Standard Calibration Report <---

Date : 03-15-2007
Time : 11:32:53
Operator :

ile Name : C:\UV\DATA\SS1106.STD

ample Name : sulfide
olvent Name : CAL 11-16-06
onc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds



LTS1 193373
EK1 193366 193367 193369
Threadwell 193262 193277

Notebook No. BK2451
Continued From Page

Sulfide/Gross Sulfide EPA 365.2 3123139

Sample	Vol (ml)	Final Vol ml	ABS	
*193262-21	7.5	7.5	.0014	
193277-1			.0000	
193366-1			.0027	
-2			.0017	S= std
-3			.0028	≈4g 0455292 → 50 DI H2O
-4			.7430 X20	
-5			.0049	1.0 ml S=
193367-1			.0025	5.0 ml I .0255
-2			.0008	2.1 ml S_2O_3 .0255B
193368-1			.0016	
-2			.0006	.1275
-3			.0045	-.05355
-4			.0002	.07395 X 6000 / 10 = 1183.20 mg/L
193373-6			.2446	
				1:25 = 47.328 mg/L
-6MS	+.05 ml (47.328 mg/L from 0455292)		.4179	.05 → 7.5 = .3155 mg/L
-6MSD	same as MS		.4201	* = Filter thru WHATMAN .45μ
-7			.3439 3rd 0.0am	Filter Lot 4226
-8			~~.0080~~ .0030	
-9			.0014	
-10			.0329	
*193366-4			.7184 X20	
ICB/MB			-.0001	
ICV/LCS	same as MS		.1822	TV = .3155 mg/L
CCV			.1868	
CCB			.0005	
CCV			.1852	
CCB			.0015	
CCV			.1861	
CCB			.0007	

Continued On Page

Reviewed Interpreted By

Dm 3-15-05 [illegible] 3/15/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123139
Date Started: 15-MAR-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
193262-021			Treadwell & Rollo	Water	DISS SULFIDE	20-MAR-2007
193277-001			Treadwell & Rollo	Water	SULFIDE	20-MAR-2007
193366-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-003			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-004			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193366-005			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193367-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193367-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-001			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-002			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-003			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193368-004			Erler & Kalinowski	Water	SULFIDE	16-MAR-2007
193373-006			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-007			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-008			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-009			Innovative Technic	Water	SULFIDE	22-MAR-2007
193373-010			Innovative Technic	Water	SULFIDE	22-MAR-2007
QC379335	BLANK			Water	SULFIDE	
QC379336	MS	of 193373-006		Water	SULFIDE	
QC379337	MSD	of 193373-006		Water	SULFIDE	
QC379338	LCS			Water	SULFIDE	

Analysis:	Sulfide	Analysis Date:	10/10/2006
Method:	EPA 376.2	Analyst:	DM
Instrument:	HP UV/Vis		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.098
Units:	mg/L
1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070
Average:	0.070 ug/L
Std Deviation:	0.0057186
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0180** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS >1/3 RL

10/16/06

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	123209
Field ID:	DW030807A	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/15/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	193277-001	22	10
BLANK	QC379649	ND	10

ND= Not Detected
RL= Reporting Limit

44.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	193277	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	DW030807A	Batch#:	123209
MSS Lab ID:	193277-001	Sampled:	03/08/07
Matrix:	Water	Received:	03/08/07
Units:	mg/L	Analyzed:	03/15/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC379650		100.0	118.0		118	75-126		
BSD	QC379651		100.0	104.0		104	75-126	13	21
SDUP	QC379652	22.00		<10.00	10.00			NC	24

NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

45.0

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWWW 2540C	Analysis Date:	**15-Mar-07**
Matrix:	Water	Batch #:	**123209**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	45.0517	45.0521	0.0004	ND	10					
BS	50	1	47.3807	47.3866	0.0059	118.0	10	1,000	5	100	**118**	
BSD	50	1	44.1418	44.1470	0.0052	104.0	10	1,000	5	100	**104**	**12.61**
193277-001	50	1	50.5552	50.5563	0.0011	22.0	10					
SDUP	50	1	52.1142	52.1144	0.0002	ND	10					**NC**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
193274-001	1	50	25.0460	25.0782	0.0322	32,200.0	500
193274-005	1	50	27.1582	27.1806	0.0224	22,400.0	500
193274-006	1	50	26.0940	26.1237	0.0297	29,700.0	500
193274-007	1	50	25.6985	25.7445	0.0460	46,000.0	500
193274-008	1	50	26.5936	26.6288	0.0352	35,200.0	500
193274-009	1	50	27.6345	27.6702	0.0357	35,700.0	500
193274-010	30	1.667	29.0124	29.1270	0.1146	3,820.0	17
193274-015	50	1	47.2343	47.2626	0.0283	566.0	10
193274-016	50	1	48.9292	48.9406	0.0114	228.0	10
193277-001	50	1	50.5552	50.5563	0.0011	22.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 3/20/07

00173

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 123209

Prep Date: 3/15/07
Prep Time: 16:00

Benchbook#: **BK 2420**
Page: **92**

Filter Mfg/ Lot#: Env. Exp 655614
Spike WS#: S5560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	3/15/07	3/16/07	3/16/07	3/19/07	3/19/07	
Time:	16:30	10:00	12:00	8:00	10:20	
Temp (C):	90	180	180	180	180	

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	
1	MB		50	5	45.0517	45.0522	45.0521	X	
	BS		↓	9	47.3807	47.3861	47.3866	X	
	BSD		↓	8	44.1418	44.1468	44.1470	X	
	193274-1 I	43,300	1	FRE	25.0460	26.0804	25.0787	25.0782	X
5	-5 ↓	47,900	1	J	27.1582	27.1823	27.1810	27.1806	X
	-6 ↓	45,500	1	Y	26.0940	26.1244	26.1232	26.1237	X
	-7 F	61,900	1	UN	25.6985	25.7466	25.7450	25.7445	X
	-8 I	47,300	1	7	26.5936	26.6300	26.6292	26.6288	
	-9 ↓	46,700	1	PAK	27.6345	27.6706	27.6702	X	
10	-10 F	6470	30	LA	29.0124	29.1272	29.1270	X	
	-15 ↓	846	50	14	47.2343	47.2626	47.2626	X	
	-16 ↓	389	↓	08	48.9292	48.9401	48.9400 3/19/07	X	
	193277-1W	138	50	P	50.5552	50.5548	50.5560	50.5563	
	SDUP-1 ↓	↓	↓	10	52.1142	52.1135	52.1142	52.1144	
15									
20									

* Constant weight must be within 0.0005 from previous reading.

3/15/07
Analyst / Date

3/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 123209
Date Started: 16-MAR-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
193274-001		Innovative Technic	Water	TDS	20-MAR-2007
193274-005		Innovative Technic	Water	TDS	20-MAR-2007
193274-006		Innovative Technic	Water	TDS	20-MAR-2007
193274-007		Innovative Technic	Water	TDS	20-MAR-2007
193274-008		Innovative Technic	Water	TDS	20-MAR-2007
193274-009		Innovative Technic	Water	TDS	20-MAR-2007
193274-010		Innovative Technic	Water	TDS	20-MAR-2007
193274-015		Innovative Technic	Water	TDS	20-MAR-2007
193274-016		Innovative Technic	Water	TDS	20-MAR-2007
193277-001		Treadwell & Rollo	Water	TDS	20-MAR-2007
QC379649	BLANK		Water	TDS	
QC379650	BS		Water	TDS	
QC379651	BSD		Water	TDS	
QC379652	SDUP of 193277-001		Water	TDS	

NDMA

PACIFIC ANALYTICAL, INC.

6056 Corte Del Cedro • Carlsbad, CA 92011
(760) 496-2200 • FAX (760) 496-2211

NARRATIVE REPORT
Method 1625M Semivolatiles

03/16/07

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

Attn: Steve Stanley

PA Reference: 2948, 2953, 2956

Samples: FB0302071A, NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B, DW030807A

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 1000 mL aliquot was spiked with 0.01 ug of N-Nitrosodimethylamine-d6 and extracted with continuous liquid-liquid extractors for 24 hours. The sample extract was concentrated to a final volume of 0.10 mL and spiked with 0.01 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL. A recent method detection limit study suggests the instrument is capable of detecting N-Nitrosodimethylamine (NNDMA) at a concentration of 0.0005 ug/L in a 1 liter sample.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.002 ug of NNDMA and 0.01 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. The laboratory blanks associated with the samples have no NNDMA detected.

Matrix Spike/Matrix Spike Duplicate

Two aliquots of sample NKGW02 were spiked with 0.01 ug of NNDMA and its label, extracted and analyzed like the sample.

Samples

Samples NKGW04, NKGW02, DUP0306071C, NKGW01, NKGW05, DW030807B and DW030807A have NNDMA detected at concentrations which exceed the method detection limit..

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DW030807A

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2956-004
Lab File ID: 7C1529
Date Sampled: 03/08/07
Date Extracted: 03/13/07
Date Analyzed: 03/16/07
Time Analyzed: 0102

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0113	0.0020	62 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001
Lab File ID: 7C1521
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1925

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0007	J	0.0020	34 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MS

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MS
Lab File ID: 7C1522
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2007

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	37 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02MSD

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 2953-001MSD
Lab File ID: 7C1524
Date Sampled: 03/06/07
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 2132

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0109	0.0020	39 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11873

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11873
Lab File ID: 7C1517
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1634

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11874

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11874
Lab File ID: 7C1518
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1717

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine		U	0.0020	40 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q59

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q59
Lab File ID: 7C1513
Date Sampled:
Date Extracted: 03/13/07
Date Analyzed: 03/15/07
Time Analyzed: 1345

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0022	0.0020	53 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

On-going Accuracy (P&R) Check

Sample: P&R Q59 Lab ID: P&R Q59 File: 7C1513
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 1345
Initial Size: 1000.0000 Final Size: 0.1000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.02199	110	70 - 130	53	25 - 175

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs:
Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.133	0.133	0.127	0.128	0.130	0.130	1.9

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL Instr. ID: VG07 Cal. Date: 03/15/07

LAB FILE IDs:
Conc1 = 7C1505
Conc2 = 7C1506
Conc3 = 7C1507
Conc4 = 7C1508
Conc5 = 7C1509

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
N-Nitrosodimethylami	999999	0.184	0.427	0.819	4.095	8.188

CONCENTRATIONS OF CALIBRATION STANDARDS

	Compound	Ical Type	Resp Ref	Calibration Standards Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1	2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2	N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3	N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

I = internal standard; L = labeled compound; U = unlabeled native
O = compound referenced to internal standard

Sample No.: 0.02 PPM STD NSTD0.02 Analyzed: 03/15/07 0807
File ID: 7C1505 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/07 0519

Raw Datafile : 7C1505 Quan DB : 7C1505
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	-1	51158785	bb	1086	1087	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6788672	bb	152	152	80	N-Nitrosodimethylamine-d6
3	86	49	89	0	1249100	!!	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.05 PPM STD NSTD0.05 Analyzed: 03/15/07 0850
File ID: 7C1506 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~07~~ 0519

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03/16/07

Raw Datafile : 7C1506 Quan DB : 7C1506
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Scan FOR	Scan REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	92	100	-1	48900994	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	93	66	83	0	6496083	vv	152	152	80	N-Nitrosodimethylamine-d6
3	94	59	92	0	2776235	vv	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.10 PPM STD NSTD0.10 Analyzed: 03/15/07 0933
File ID: 7C1507 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/~~07~~ 0520

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V33(1667

Raw Datafile : 7C1507 Quan DB : 7C1507
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	48440195	bb	1087	1088	190	2,2'-Difluorobiphenyl
2	94	67	84	0	6166152	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	68	93	0	5047360	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 0.50 PPM STD NSTD0.50 Analyzed: 03/15/07 1015
File ID: 7C1508 Instrument ID: VG07

==========

Interim Report LAB-BASE FIND 03/16/~~07~~ 0521
03/16/07

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Raw Datafile : 7C1508 Quan DB : 7C1508
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Scan Pred	QM	Compound Name
1	100	94	100	0	55381118	bb	1087	1087	190	2,2'-Difluorobiphenyl
2	96	69	84	0	7103816	vv	152	152	80	N-Nitrosodimethylamine-d6
3	100	87	95	0	29088944	bv	157	157	74	N-Nitrosodimethylamine

Sample No.: 1.00 PPM STD NSTD1.00 Analyzed: 03/15/07 1057
File ID: 7C1509 Instrument ID: VG07

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Interim Report LAB-BASE FIND 03/16/07 0522

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Raw Datafile : 7C1509 Quan DB : 7C1509
Find DB : NNDMA Scan DB :

No.	Spectrum MAT	FOR	REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	93	100	-1	50250806	bv	1087	1088	190	2,2'-Difluorobiphenyl
2	97	70	85	0	6553843	bv	152	152	80	N-Nitrosodimethylamine-d6
3	100	91	94	0	53664544	bb	157	157	74	N-Nitrosodimethylamine

Sample No.: 5.00 PPM STD NSTD5.00 Analyzed: 03/15/07 1139
File ID: 7C1510 Instrument ID: VG07

Interim Report LAB-BASE FIND 03/16/07 0522

Raw Datafile : 7C1510
Find DB : NNDMA

Quan DB : 7C1510
Scan DB :

No.	Spectrum MAT	Spectrum FOR	Spectrum REV	Scan Diff	Peak Area	Flgs	Scan Found	Pred	QM	Compound Name
1	100	92	100	0	41180765	vb	1088	1088	190	2,2'-Difluorobiphenyl
2	91	65	86	1	5366427	bv	153	152	80	N-Nitrosodimethylamine-d6
3	100	94	95	0	221817374	bv	157	157	74	N-Nitrosodimethylamine

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2ND SRC DAI

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 7C1523
Date Sampled:
Date Extracted:
Date Analyzed: 03/15/07
Time Analyzed: 2049

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.0891	0.1000	89 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

Daily Calibration Check

Sample: 0.10 PPM 2ND SRC DAI Lab ID: NSTD0.10 File: 7C1523
Instr: VG07 Acqu Date: 03/15/07 Acqu Time: 2049
Initial Size: 1000.0000 Final Size: 1.0000 ml

Compound	Target Conc ug/ml	% Spike Rec	Limits	% Label Rec	Limits
N-Nitrosodimethylamine	0.08913	89	80 - 120	100	25 - 175

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67 Page: 1241

Cal File: 7C15 Date: 3/15/07

Notes: NDMA Curtis + Tompkins

Taped	Sample ID	File Name	OK	Description	OP
		7C1501		Warm-up	CB
		02			
		03			
		04			
	WSTD0.02	05		0.02 ug/ml NDMA Std	
	WSTD0.05	06		0.05	
	WSTD0.10	07		0.10	
	WSTD0.50	08		0.50	
	WSTD1.00	09		1.00	
	WSTD5.00	10		5.00	
	RRQ58	11			
	RRQ58Rep	12			
	RRQ59	13			
	RRQ59Rep	14			
	11871	15			
	11872	16			
	11873	17			
	11874	18			
	2948-001	19			
	2948-002	20			
	2953-001	21			
	2953-001MS	22			
	WSTD0.10	23		0.10 ug/ml NDMA 2nd Std Daily	
	2953-001MS	24			
	2953-002	25			

Reviewed by: _____ on: _____

03/06/00

Pacific Analytical

GC/MS SEMI-VOLATILES RUN LOG

Instrument: V67

Cal File: 7C15

Page: 1242

Date: 3/15/07

Notes: 10 ulmt

Taped	Sample ID	File Name	OK	Description	OP
	2956-001	7C1526			CB
	2956-002	27			
	2956-003	28			
	2956-004	29			

Reviewed by: 28 on:

EXTRACTION LOG: Method Mod 1625 - NDMA

CLIENT Curtis + Tompp.

JOB # 2953, 56

Extraction Date 3-13-07

Extraction Method L-L

Extraction Solvent DCM

Lot # 46354

Initials dl

Matrix Aq

Other Reagents

Lot #

Ascorbic acid 3/8/07

	LABEL	DATE MADE	CONC.	VOL. ADDED	DATE SPIKED	INITIALS	COMMENTS
1. Surrogate Spike	NDMA + 1,4 Dioxane labels	12/19/06	0.02 µg/ml	500 µl	3-13-07	dl	
2. Matrix Spike	NDMA + 1,4 Dioxane Natives	12/16/06	0.02 µg/ml	100 µl	"	dl	500 µl → MS/MSD
3.							
4. Internal Standard	NDMA IS	6/20/06	1 µg/ml	100 µl	3/15/07	CB	

Sample #	Sample Size Extracted	% Moisture Solids	Extract. pH	Standards 1	2	3	4	Initial Extract Vol. A	Aliquot Removed for Prep B	Volume After Prep C	Calculated Final Vol: A/B x C	Comments: (Cleanup method used, info about unusual sample/extract behavior)
(B) 11873	1000 ml	<1%	5-7				X	100 µl	100 µl	100 µl	100 µl	
(B) 11874							X					
P+RQ59							X					
dup							X					
2953-01							X					
01 MS							X					Spiked MS w/500 µl Native on CSP
01 MSD							X					"
02							X					
2956-01							X					
02							X					
03							X					
04							X					

Pacific Analytical, Inc. on 13 20

QA Review

30

00500

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

Project Number: 193277
Site: Presidio

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

LEVEL III

Results due: Standard Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
DW030807A	03/08 12:30	Water	NDMA	193277-001	

Notes:	Relinquished By:	Received By:
Need C&T format EDD	[illegible]	C D Parsons
	Date/Time: 3/9/07	Date/Time: 10 Mar 07 12:15

Signature on this form constitutes a firm Purchase Order for the services requested above.

Pacific Analytical, inc.

SAMPLE LOG-IN SHEET -- *Initial*

JOB #	LOG-IN DATE
2956	10 MARCH 07

Received By (print name): C S PARSONS

Received By (signature): C S Parsons

CLIENT: Curtis Tomplins

Received From: Fed Ex

# of Coolers: 1

TEMP: 2°C

Custody seals	Present / Absent * (Intact / Broken)
Custody Seal #'s	
Airbill	Airbill / Slicker Present / Absent *
Airbill #	8575 3390967
Date Rec'd	10 MAR 07
Time Rec'd	12:15
Chain of Custody or Traffic Reports	Present / Absent *
Sample Label	Present / Absent *
Sample ID #'s on COC	Listed / Not Listed
Sample Condition	Intact / Broken / Leaking
Does information on Custody records, reports and sample tags agree?	Yes / No

LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
2956-01	NKGW01	NDMA	2	AL	WW	OK
02	NKGW05		2	AL	WW	OK
03	DW030807B		2	AL	WW	OK
04	DW030807A		2	AL	WW	OK

* COMMENTS

Matrix Codes: DW = Drinking Water, WW = Wastewater, S = Soil, SL = Sludge, O = Other

Container Types: AL = Amber Liter, VOA = 40 mL vial, SJ = Solid jar, BT = Brass Tube, OTC = Other Type Container

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00502

2956 Curtis & Tompkins, 4 - NNDMA (TAT: 30)

Lab ID	NDMA
2956-001	P___
2956-002	P___
2956-003	P___
2956-004	P___

Lab ID	Cust ID	Sampled	Rec'vd	Login ID
2956-001	NKGW01	03/07/07	03/10/07	01959
2956-002	NKGW05	03/07/07	03/10/07	01959
2956-003	DW030807B	03/08/07	03/10/07	01959
2956-004	DW030807A	03/08/07	03/10/07	01959

Lab ID	Description	Comment
2956-001	2 x AL x WW	
2956-002	2 x AL x WW	
2956-003	2 x AL x WW	
2956-004	2 x AL x WW	

Login	Loggin by	Shipper	Shipper Code	CofC
01959	Dana E. Errett	Federal Express	857533909671	OK

Second Quarter 2007

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Second Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Battery Howe/Wagner		
BHWGW01	6/6/2007	195270
BHWGW01 (DUP0606073B)	6/6/2007	195270
BHWGW04	6/6/2007	195270
BHWGW05	6/6/2007	195270
HWGW100	6/7/2007	195303
HWGW101	6/6/2007	195270
Building 1349/Fill Site 5		
1349MW100	6/6/2007	195270
1349MW100 (DUP0606073A)	6/6/2007	195270
Building 231/207 Area		
231GW09	6/5/2007	195241
231GW16	6/7/2007	195303
231GW17	6/7/2007	195303
231GW18	6/7/2007	195303
231GW21	6/7/2007	195303
231GW22	6/7/2007	195303
231GW30	6/7/2007	195303
231PZ04	6/7/2007	195303
231PZ03	6/7/2007	195303
231GW29	6/6/2007	195270
231GW29 (DUP0606072A)	6/6/2007	195270
231GW28	6/5/2007	195241
231GW20	6/5/2007	195234
231GW20 (DUP0605072A)	6/5/2007	195234
231GW06	6/5/2007	195234
231GW13	6/5/2007	195234
231GW13 (DUP0605072B)	6/5/2007	195234
Building 1065 Area		
1065MW103A	6/7/2007	195303
Landfill 10		
LF10SP01	5/11/2007	194745
LF10SP01	6/5/2007	195247
LF10SP01 (DUP0511071A)	6/5/2007	195247
LF10GW01	6/5/2007	195247
LF10GW02	6/5/2007	195247
LF10GW03	6/5/2007	195241
LF10GW100	6/5/2007	195241
LF4GW103	6/5/2007	195241

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Second Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
LF4GW103 (DUP0605073A)	6/5/2007	195241
LF4GW104	6/5/2007	195241
Baker Beach Disturbed Areas 1 and 2A		
BB1PZ100	6/5/2007	195247
BB1PZ101	6/5/2007	195247
Baker Beach Disturbed Area 3		
BB3GW100	6/5/2007	195247
BB3SW101	6/6/2007	195270
Commissary_PX		
600WG106	6/7/2007	195303
610GW101	6/7/2007	195270
610GW102	6/7/2007	195270
610GW103	6/7/2007	195303
610SP01	6/7/2007	195303
Mini CAPs Area		
FM14EX07GW101	6/6/2007	195270
FM14EX07GW102	6/6/2007	195270
FM14EX07GW102 (DUP0606071A)	6/6/2007	195270
1213 GW101	6/6/2007	195270
Trip Blanks		
TB0605072A	6/5/2007	195234
TB0605073A	6/5/2007	195241
TB0605071A	6/5/2007	195247
TB0606073A	6/6/2007	195270
TB0606071A	6/6/2007	195270
TB0606072A	6/6/2007	195270
TB0607073A	6/7/2007	195303
TB0607071A	6/7/2007	195303
Source Water Samples		
DW060707A	6/7/2007	195279
Rinsate Blank		
BHWGW04RBHWGW100	6/7/2007	195270

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 194745

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID
LF10SP01	194745-001
DUP0511071A	194745-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 05/21/2007
Project Manager

Signature: _____ Date: 05/22/2007
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**194745**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**05/11/07**
Samples Received:	**05/11/07**

This hardcopy data package contains sample and QC results for two water samples, requested for the above referenced project on 05/11/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

1947745

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2158
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS P.Cornish
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M), BTEX	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	COMMENTS / NOTES
-1	LF105P01	5/11/07	950			X		5				2	X	X	X								
-2	DUP051107IA	"	1000			X		5				2	X	X	X								

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: [signature]	DATE: 5/11/07	RECEIVED BY: [signature]	DATE: 5-11-07
PRINT NAME: Pete Cornish FIRM: BTS	TIME: 1148	PRINT NAME: Faith Nichols FIRM: C&T	TIME: 1148
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES: 24 hr TAT per G. Johnson 5/11/07 SES
Client retained cooler. Samples in ziplock bags. Cold, on ice, & intact 5/11/07 SES
No Temp Blk. Extra S.G. Clean per G. Johnson

Method of Shipment:
White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Curtis & Tompkins, Ltd.

TPH-Purgeables and BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Matrix:	Water	Sampled:	05/11/07
Units:	ug/L	Received:	05/11/07
Diln Fac:	1.000	Analyzed:	05/11/07
Batch#:	125118		

Field ID: LF10SP01 Lab ID: 194745-001
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	65-135	EPA 8015B
Bromofluorobenzene (FID)	116	65-135	EPA 8015B
Trifluorotoluene (PID)	107	65-135	EPA 8021B
Bromofluorobenzene (PID)	113	65-135	EPA 8021B

Field ID: DUP0511071A Lab ID: 194745-002
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	115	65-135	EPA 8015B
Bromofluorobenzene (FID)	118	65-135	EPA 8015B
Trifluorotoluene (PID)	114	65-135	EPA 8021B
Bromofluorobenzene (PID)	119	65-135	EPA 8021B

Type: BLANK Lab ID: QC387486

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	65-135	EPA 8015B
Bromofluorobenzene (FID)	109	65-135	EPA 8015B
Trifluorotoluene (PID)	109	65-135	EPA 8021B
Bromofluorobenzene (PID)	111	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC387488	Batch#:	125118
Matrix:	Water	Analyzed:	05/11/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,028	101	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	65-135
Bromofluorobenzene (FID)	114	65-135

8.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC387489	Batch#:	125118
Matrix:	Water	Analyzed:	05/11/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	20.35	102	65-135
Toluene	20.00	20.35	102	65-135
Ethylbenzene	20.00	20.13	101	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	110	65-135
Bromofluorobenzene (PID)	111	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	125118
MSS Lab ID:	194714-002	Sampled:	05/10/07
Matrix:	Water	Received:	05/10/07
Units:	ug/L	Analyzed:	05/11/07
Diln Fac:	1.000		

Type: MS Lab ID: QC387490

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	22.78	2,000	1,997	99	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	65-135
Bromofluorobenzene (FID)	128	65-135

Type: MSD Lab ID: QC387491

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,008	99	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	108	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCVOA Water: EPA 8015B

Inst : GC04
Calnum : 307189045002
Units : ng

Name : GC04 TVH 130
Date : 11-MAY-2007 01:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	130_021	307189045021	TVH 1	11-MAY-2007 01:03	S5937 (1000X), S6108 (5000X)
L2	130_022	307189045022	TVH 2	11-MAY-2007 01:41	S5936 (1000X), S6108 (5000X)
L3	130_023	307189045023	TVH 3	11-MAY-2007 02:19	S5935 (1000X), S6108 (5000X)
L4	130_024	307189045024	TVH 4	11-MAY-2007 02:57	S5934 (2000X), S6108 (5000X)
L5	130_025	307189045025	TVH 5	11-MAY-2007 03:35	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	3894.9	3217.7	3110.3	3274.6	3083.8	AVRG		3.02E-4		3316.3	10	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	17	2500	-3	10000	-6	25000	-1	50000	-7

Analyst: JCP Date: 05/11/07 Reviewer: MCH Date: 05/11/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 194745 GCVOA Water
EPA 8015B

Inst : GC04 Name : GC04 TVH 130
Calnum : 307189045002 Cal Date : 11-MAY-2007

ICV 307189045028 (130_028 11-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	3316.3	3263.6	10000	9841	ng	-2	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCVOA Water: EPA 8021B

Inst : GC04
Calnum : 307189045001
Units : ng

Name : GC04 MBTXE 130
Date : 10-MAY-2007 16:49
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	130_008	307189045008	BTXE 1	10-MAY-2007 16:49	S5889 (1000X), S6108 (5000X)
L2	130_009	307189045009	BTXE 2	10-MAY-2007 17:27	S5888 (1250X), S6108 (5000X)
L3	130_010	307189045010	BTXE 3	10-MAY-2007 18:05	S5888 (500X), S6108 (5000X)
L4	130_011	307189045011	BTXE 4	10-MAY-2007 18:42	S5888 (125X), S6108 (5000X)
L5	130_012	307189045012	BTXE 5	10-MAY-2007 19:20	S5887 (1000X), S6108 (5000X)
L6	130_013	307189045013	BTXE 6	10-MAY-2007 19:58	S5887 (500X), S6108 (5000X)
L7	130_014	307189045014	BTXE 7	10-MAY-2007 20:36	S5887 (250X), S6108 (5000X)
L8	130_015	307189045015	MTBE 7	10-MAY-2007 21:14	S4993 (500X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzene	B	7316.0	6558.2	6756.2	6651.7	6547.1	6793.8	6964.8		AVRG		1.47E-4		6798.3	4	0.995	20	
Toluene	B	6445.6	6193.9	6363.4	6140.4	6083.4	6390.7	6536.6		AVRG		1.59E-4		6307.7	3	0.995	20	
Ethylbenzene	B	5637.6	5258.1	5374.9	5312.8	5166.0	5436.5	5636.4		AVRG		1.85E-4		5403.2	3	0.995	20	
m,p-Xylenes	B	7072.4	6405.9	6569.4	6541.4	6675.9	6930.7	6780.8		AVRG		1.49E-4		6710.9	3	0.995	20	
o-Xylene	B	6380.0	5439.0	5307.0	5433.2	5354.3	5584.7	5649.8		AVRG		1.79E-4		5592.6	7	0.995	20	
Benzene	C	1719.6	2198.3	2570.4	2868.9	2953.6	2958.1	2872.3		AVRG		3.86E-4		2591.6	18	0.995	20	
Toluene	C	2186.8	2157.5	2439.6	2703.2	2782.3	2823.1	2750.4		AVRG		3.92E-4		2549.0	11	0.995	20	
Ethylbenzene	C	1576.4	1820.6	2132.6	2361.6	2435.4	2496.5	2414.8		AVRG		4.59E-4		2176.8	16	0.995	20	
m,p-Xylenes	C	2178.0	2249.0	2613.3	2890.9	2965.1	3056.5	2957.1		AVRG		3.70E-4		2701.4	13	0.995	20	
o-Xylene	C	1717.6	1802.5	2135.4	2379.9	2470.8	2551.9	2464.7		AVRG		4.51E-4		2217.5	15	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Benzene	B	2.500	8	10.00	-4	25.00	-1	100.0	-2	500.0	-4	1000	0	2000	2		
Toluene	B	2.500	2	10.00	-2	25.00	1	100.0	-3	500.0	-4	1000	1	2000	4		
Ethylbenzene	B	2.500	4	10.00	-3	25.00	-1	100.0	-2	500.0	-4	1000	1	2000	4		
m,p-Xylenes	B	2.500	5	10.00	-5	25.00	-2	100.0	-3	500.0	-1	1000	3	2000	1		
o-Xylene	B	2.500	14	10.00	-3	25.00	-5	100.0	-3	500.0	-4	1000	0	2000	1		
Benzene	C	2.500	-34	10.00	-15	25.00	-1	100.0	11	500.0	14	1000	14	2000	11		
Toluene	C	2.500	-14	10.00	-15	25.00	-4	100.0	6	500.0	9	1000	11	2000	8		
Ethylbenzene	C	2.500	-28	10.00	-16	25.00	-2	100.0	8	500.0	12	1000	15	2000	11		
m,p-Xylenes	C	2.500	-19	10.00	-17	25.00	-3	100.0	7	500.0	10	1000	13	2000	9		
o-Xylene	C	2.500	-23	10.00	-19	25.00	-4	100.0	7	500.0	11	1000	15	2000	11		

JCP 05/11/07 : MTBE fails %D low on ChC. Report MTBE from ChB. ChC is for confirm only.

Analyst: JCP Date: 05/11/07 Reviewer: MCH Date: 05/11/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 194745 GCVOA Water
EPA 8021B

Inst : GC04 Name : GC04 MBTXE 130
Calnum : 307189045001 Cal Date : 10-MAY-2007

ICV 307189045017 (130_017 10-MAY-2007) stds: S6204 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Benzene	B	6798.3	6909.9	100.0	101.6	ng	2	15	
Toluene	B	6307.7	6306.8	100.0	99.99	ng	0	15	
Ethylbenzene	B	5403.2	5397.4	100.0	99.89	ng	0	15	
m,p-Xylenes	B	6710.9	6503.0	200.0	193.8	ng	-3	15	
o-Xylene	B	5592.6	5409.0	100.0	96.72	ng	-3	15	
Benzene	C	2591.6	2721.1	100.0	105.0	ng	5	15	
Toluene	C	2549.0	2588.6	100.0	101.6	ng	2	15	
Ethylbenzene	C	2176.8	2260.7	100.0	103.9	ng	4	15	
m,p-Xylenes	C	2701.4	2815.5	200.0	208.4	ng	4	15	
o-Xylene	C	2217.5	2282.6	100.0	102.9	ng	3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC04
Calnum : 307189045003
Units : ng

Name : GC04 TFT/BFB 130
Date : 11-MAY-2007 08:26
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	130_032	307189045032	TFT/BFB_1	11-MAY-2007 08:26	S5951 (5000X)
L2	130_033	307189045033	TFT/BFB_2	11-MAY-2007 09:26	S5952 (5000X)
L3	130_034	307189045034	TFT/BFB_3	11-MAY-2007 10:09	S5953 (5000X)
L4	130_035	307189045035	TFT/BFB_4	11-MAY-2007 10:49	S5954 (5000X)
L5	130_036	307189045036	TFT/BFB_5	11-MAY-2007 11:40	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2749.4	2739.3	2589.7	2565.7	2735.9	AVRG		3.74E-4		2676.0	3	0.995	20	
Bromofluorobenzene (FID)	A	1632.9	1754.0	1606.7	1579.5	1676.9	AVRG		6.06E-4		1650.0	4	0.995	20	
Trifluorotoluene (PID)	B	1473.6	1433.1	1373.9	1399.7	1487.4	AVRG		6.98E-4		1433.5	3	0.995	20	
Bromofluorobenzene (PID)	B	2924.7	2926.8	2802.2	2908.9	3056.5	AVRG		3.42E-4		2923.8	3	0.995	20	
Trifluorotoluene (PID)	C	590.21	611.95	620.93	652.08	707.03	AVRG		0.00157		636.44	7	0.995	20	
Bromofluorobenzene (PID)	C	1173.4	1248.6	1236.6	1291.7	1373.2	AVRG		7.91E-4		1264.7	6	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	3	225.0	2	450.0	-3	675.0	-4	950.0	2
Bromofluorobenzene (FID)	A	150.0	-1	225.0	6	450.0	-3	675.0	-4	950.0	2
Trifluorotoluene (PID)	B	150.0	3	225.0	0	450.0	-4	675.0	-2	950.0	4
Bromofluorobenzene (PID)	B	150.0	0	225.0	0	450.0	-4	675.0	-1	950.0	5
Trifluorotoluene (PID)	C	150.0	-7	225.0	-4	450.0	-2	675.0	2	950.0	11
Bromofluorobenzene (PID)	C	150.0	-7	225.0	-1	450.0	-2	675.0	2	950.0	9

Analyst: JCP Date: 05/11/07 Reviewer: MCH Date: 05/11/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 194745 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : QC387488 IDF : 1.0
Seqnum : 307189398003.2 File : 131_003 Time : 11-MAY-2007 13:54
Standards: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307189045002	11-MAY-2007	3316.3	3362.2	10000	10140	ng	1	15	u
Trifluorotoluene (FID)	A	307189045003	11-MAY-2007	2676.0	3196.1	450.0	537.5	ng	**19**	15	c+ u
Bromofluorobenzene (FID)	A	307189045003	11-MAY-2007	1650.0	1883.1	450.0	513.6	ng	14	15	u
Trifluorotoluene (PID)	B	307189045003	11-MAY-2007	1433.5	2036.7	450.0	639.3	ng	**42**	15	c+
Trifluorotoluene (PID)	C	307189045003	11-MAY-2007	636.44	1077.2	450.0	761.7	ng	**69**	15	c+
Bromofluorobenzene (PID)	B	307189045003	11-MAY-2007	2923.8	3632.4	450.0	559.1	ng	**24**	15	c+
Bromofluorobenzene (PID)	C	307189045003	11-MAY-2007	1264.7	1718.7	450.0	611.5	ng	**36**	15	c+

JCP 05/14/07 : Trifluorotoluene (FID)A passes limits of 72-135% [general version]

JCP 05/14/07 : PID surrogates are not applicable. [general version]

Analyst: JCP Date: 05/14/07 Reviewer: MCH Date: 05/14/07

+=high bias c=CCV u=use

307189398003.2

CURTIS & TOMPKINS SPIKE USER REPORT FOR 194745 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : QC387489 IDF : 1.0
Seqnum : 307189398004.2 File : 131_004 Time : 11-MAY-2007 15:16
Standards: S5943 (1000X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Benzene	B	307189045001	10-MAY-2007	6798.3	6917.5	100.0	101.8	ng	2	15	u
Benzene	C	307189045001	10-MAY-2007	2591.6	2972.3	100.0	114.7	ng	15	15	
Toluene	B	307189045001	10-MAY-2007	6307.7	6417.9	100.0	101.7	ng	2	15	u
Toluene	C	307189045001	10-MAY-2007	2549.0	2875.2	100.0	112.8	ng	13	15	
Ethylbenzene	B	307189045001	10-MAY-2007	5403.2	5437.8	100.0	100.6	ng	1	15	u
Ethylbenzene	C	307189045001	10-MAY-2007	2176.8	2494.1	100.0	114.6	ng	15	15	
m,p-Xylenes	B	307189045001	10-MAY-2007	6710.9	6897.4	100.0	102.8	ng	3	15	u
m,p-Xylenes	C	307189045001	10-MAY-2007	2701.4	3087.4	100.0	114.3	ng	14	15	
o-Xylene	B	307189045001	10-MAY-2007	5592.6	5673.8	100.0	101.5	ng	1	15	u
o-Xylene	C	307189045001	10-MAY-2007	2217.5	2518.6	100.0	113.6	ng	14	15	
Trifluorotoluene (FID)	A	307189045003	11-MAY-2007	2676.0	2764.8	450.0	464.9	ng	3	15	
Bromofluorobenzene (FID)	A	307189045003	11-MAY-2007	1650.0	1758.6	450.0	479.6	ng	7	15	
Trifluorotoluene (PID)	B	307189045003	11-MAY-2007	1433.5	1580.9	450.0	496.3	ng	10	15	u
Trifluorotoluene (PID)	C	307189045003	11-MAY-2007	636.44	718.34	450.0	507.9	ng	13	15	
Bromofluorobenzene (PID)	B	307189045003	11-MAY-2007	2923.8	3259.1	450.0	501.6	ng	11	15	u
Bromofluorobenzene (PID)	C	307189045003	11-MAY-2007	1264.7	1442.1	450.0	513.1	ng	14	15	

Analyst: JCP Date: 05/14/07 Reviewer: MCH Date: 05/14/07

u=use

307189398004.2

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : MBTXE IDF : 1.0
Seqnum : 307189398014 File : 131_014 Time : 11-MAY-2007 22:24
Standards: S5943 (666.7X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	307189045003	11-MAY-2007	2676.0	3154.9	450.0	530.5	ng	**18**	15	c+
Bromofluorobenzene (FID)	A	307189045003	11-MAY-2007	1650.0	2067.0	450.0	563.7	ng	**25**	15	c+
Benzene	B	307189045001	10-MAY-2007	6798.3	6840.1	150.0	150.9	ng	1	15	
Toluene	B	307189045001	10-MAY-2007	6307.7	6451.4	150.0	153.4	ng	2	15	
Ethylbenzene	B	307189045001	10-MAY-2007	5403.2	5435.0	150.0	150.9	ng	1	15	
m,p-Xylenes	B	307189045001	10-MAY-2007	6710.9	6794.1	150.0	151.9	ng	1	15	
o-Xylene	B	307189045001	10-MAY-2007	5592.6	5542.1	150.0	148.6	ng	-1	15	
Trifluorotoluene (PID)	B	307189045003	11-MAY-2007	1433.5	1759.7	450.0	552.4	ng	**23**	15	c+
Bromofluorobenzene (PID)	B	307189045003	11-MAY-2007	2923.8	3801.0	450.0	585.0	ng	**30**	15	c+
Benzene	C	307189045001	10-MAY-2007	2591.6	2725.5	150.0	157.7	ng	5	15	
Toluene	C	307189045001	10-MAY-2007	2549.0	2710.1	150.0	159.5	ng	6	15	
Ethylbenzene	C	307189045001	10-MAY-2007	2176.8	2389.6	150.0	164.7	ng	10	15	
m,p-Xylenes	C	307189045001	10-MAY-2007	2701.4	2971.2	150.0	165.0	ng	10	15	
o-Xylene	C	307189045001	10-MAY-2007	2217.5	2464.6	150.0	166.7	ng	11	15	
Trifluorotoluene (PID)	C	307189045003	11-MAY-2007	636.44	756.61	450.0	535.0	ng	**19**	15	c+
Bromofluorobenzene (PID)	C	307189045003	11-MAY-2007	1264.7	1669.8	450.0	594.1	ng	**32**	15	c+

JCP 05/14/07 : Trifluorotoluene (FID)A passes limits of 72-135%

JCP 05/14/07 : Bromofluorobenzene (FID)A passes limits of 78-131%

JCP 05/14/07 : Trifluorotoluene (PID)B and C and Bromofluorobenzene (PID)B and C pass limit of 65-135%

JCP 05/14/07 : MTBE fails %D low on both channels. MTBE is not a target analyte for any of the associated runs

Analyst: JCP Date: 05/14/07 Reviewer: MCH Date: 05/14/07

+=high bias c=CCV

307189398014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307189398016 File : 131_016 Time : 11-MAY-2007 23:40
Standards: S6066 (666.7X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307189045002	11-MAY-2007	3316.3	3289.2	15000	14880	ng	-1	15	
Trifluorotoluene (FID)	A	307189045003	11-MAY-2007	2676.0	3427.2	450.0	576.3	ng	**28**	15	c+
Bromofluorobenzene (FID)	A	307189045003	11-MAY-2007	1650.0	2036.7	450.0	555.5	ng	**23**	15	c+
Trifluorotoluene (PID)	B	307189045003	11-MAY-2007	1433.5	2317.2	450.0	727.4	ng	**62**	15	c+
Bromofluorobenzene (PID)	B	307189045003	11-MAY-2007	2923.8	4000.4	450.0	615.7	ng	**37**	15	c+
Trifluorotoluene (PID)	C	307189045003	11-MAY-2007	636.44	1232.3	450.0	871.3	ng	**94**	15	c+
Bromofluorobenzene (PID)	C	307189045003	11-MAY-2007	1264.7	1887.7	450.0	671.7	ng	**49**	15	c+

JCP 05/14/07 : Trifluorotoluene (FID)A passes limits of 72-135%

JCP 05/14/07 : Bromofluorobenzene (FID)A passes limits of 78-131%

JCP 05/14/07 : PID surrogates are not applicable.

Analyst: JCP Date: 05/14/07 Reviewer: MCH Date: 05/14/07

+=high bias c=CCV

307189398016

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307189045

Instrument : GC04 Begun : 05/10/07 10:40
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	130_001	X	IB			05/10/07 10:40	1.0	1
002	130_002	X	CCV			05/10/07 11:18	1.0	2 1
003	130_003	X	CCV			05/10/07 11:56	1.0	3 1
004	130_004	X	CCV			05/10/07 13:22	1.0	2 1
005	130_005	X	CCV			05/10/07 14:00	1.0	3 1
006	130_006	X	IB			05/10/07 15:32	1.0	1
007	130_007	X	IB			05/10/07 16:11	1.0	1
008	130_008	ICAL	BTXE 1			05/10/07 16:49	1.0	4 1
009	130_009	ICAL	BTXE 2			05/10/07 17:27	1.0	5 1
010	130_010	ICAL	BTXE 3			05/10/07 18:05	1.0	5 1
011	130_011	ICAL	BTXE 4			05/10/07 18:42	1.0	5 1
012	130_012	ICAL	BTXE 5			05/10/07 19:20	1.0	6 1
013	130_013	ICAL	BTXE 6			05/10/07 19:58	1.0	6 1
014	130_014	ICAL	BTXE 7			05/10/07 20:36	1.0	6 1
015	130_015	ICAL	MTBE 7			05/10/07 21:14	1.0	7 1
016	130_016	X	IB			05/10/07 21:52	1.0	1
017	130_017	ICV	MBTXE			05/10/07 22:30	1.0	8 1
018	130_018	X	ICV			05/10/07 23:08	1.0	8 1
019	130_019	X	IB			05/10/07 23:47	1.0	1
020	130_020	X	IB			05/11/07 00:25	1.0	1
021	130_021	ICAL	TVH 1			05/11/07 01:03	1.0	9 1
022	130_022	ICAL	TVH 2			05/11/07 01:41	1.0	10 1
023	130_023	ICAL	TVH 3			05/11/07 02:19	1.0	11 1
024	130_024	ICAL	TVH 4			05/11/07 02:57	1.0	12 1
025	130_025	ICAL	TVH 5			05/11/07 03:35	1.0	12 1
026	130_026	X	IB			05/11/07 04:13	1.0	1
027	130_027	X	ICV			05/11/07 04:51	1.0	3 1
028	130_028	ICV	TVH			05/11/07 05:29	1.0	3 1
029	130_029	X	IB			05/11/07 06:07	1.0	1
030	130_030	CMARKER				05/11/07 06:45	1.0	13 14 1
031	130_031	X	IB			05/11/07 07:49	1.0	1
032	130_032	ICAL	TFT/BFB_1			05/11/07 08:26	1.0	15
033	130_033	ICAL	TFT/BFB_2			05/11/07 09:26	1.0	16
034	130_034	ICAL	TFT/BFB_3			05/11/07 10:09	1.0	17
035	130_035	ICAL	TFT/BFB_4			05/11/07 10:49	1.0	18
036	130_036	ICAL	TFT/BFB_5			05/11/07 11:40	1.0	19

Analyst: JCP Date: 05/11/07 Reviewer: MCH Date: 05/11/07

Standards used: 1=S6108 2=S5943 3=S6066 4=S5889 5=S5888 6=S5887 7=S4993 8=S6204 9=S5937 10=S5936 11=S5935 12=S5934 13=S1646 14=S1645 15=S5951 16=S5952 17=S5953 18=S5954 19=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307189398

Instrument : GC04 Begun : 05/11/07 12:38
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	131_001	X	IB			05/11/07 12:38	1.0	1	
002	131_002	X	CCV			05/11/07 13:16	1.0	2 1	
003	131_003	CCV/LCS	QC387488	Water	125118	05/11/07 13:54	1.0	3 1	
004	131_004	CCV/LCS	QC387489	Water	125118	05/11/07 15:16	1.0	2 1	
005	131_005	BLANK	QC387486	Water	125118	05/11/07 16:04	1.0	1	
006	131_006	PREPBLK	QC387487	SPLP Leachate	125118	05/11/07 17:20	1.0	1	
007	131_007	SAMPLE	194745-001	Water	125118	05/11/07 17:58	1.0	1	
008	131_008	SAMPLE	194745-002	Water	125118	05/11/07 18:36	1.0	1	
009	131_009	MSS	194714-002	Water	125118	05/11/07 19:14	1.0	1	pH > 2
010	131_010	MS	QC387490	Water	125118	05/11/07 19:52	1.0	3 1	
011	131_011	MSD	QC387491	Water	125118	05/11/07 20:30	1.0	3 1	
012	131_012	SAMPLE	194689-002	SPLP Leachate	125118	05/11/07 21:08	1.0	1	1:BZME=2300
013	131_013	X	IB			05/11/07 21:46	1.0	1	
014	131_014	CCV	MBTXE			05/11/07 22:24	1.0	2 1	
015	131_015	CCV	MBTXE			05/11/07 23:02	1.0	2 1	
016	131_016	CCV	TVH			05/11/07 23:40	1.0	3 1	
017	131_017	CCV	TVH			05/12/07 00:18	1.0	3 1	
018	131_018	SAMPLE	194723-001	Water	125118	05/12/07 00:55	1.0	1	
019	131_019	SAMPLE	194723-002	Water	125118	05/12/07 01:34	1.0	1	
020	131_020	SAMPLE	194723-003	Water	125118	05/12/07 02:12	1.0	1	
021	131_021	SAMPLE	194723-004	Water	125118	05/12/07 02:50	1.0	1	
022	131_022	SAMPLE	194723-005	Water	125118	05/12/07 03:28	1.0	1	
023	131_023	SAMPLE	194723-006	Water	125118	05/12/07 04:06	1.0	1	
024	131_024	SAMPLE	194723-007	Water	125118	05/12/07 04:45	1.0	1	
025	131_025	SAMPLE	194723-008	Water	125118	05/12/07 05:23	1.0	1	
026	131_026	SAMPLE	194723-009	Water	125118	05/12/07 06:01	1.0	1	
027	131_027	SAMPLE	194723-010	Water	125118	05/12/07 06:39	1.0	1	
028	131_028	CCV	TVH			05/12/07 07:17	1.0	3 1	
029	131_029	CCV	TVH			05/12/07 07:55	1.0	3 1	
030	131_030	SAMPLE	194714-001	Water	125118	05/12/07 08:33	1.0	1	
031	131_031	SAMPLE	194714-009	Water	125118	05/12/07 09:10	1.0	1	pH > 2
032	131_032	SAMPLE	194721-019	Water	125118	05/12/07 09:48	5.0	1	1:BZ=16000
033	131_033	SAMPLE	194721-020	Water	125118	05/12/07 10:26	10.0	1	6:GAS:7-12=310000
034	131_034	SAMPLE	194721-022	Water	125118	05/12/07 11:04	50.0	1	6:GAS:7-12=99000
035	131_035	SAMPLE	194721-021	Water	125118	05/12/07 11:42	50.0	1	pH > 2
036	131_036	X	IB			05/12/07 12:20	1.0	1	
037	131_037	CCV	TVH			05/12/07 12:58	1.0	3 1	
038	131_038	CCV	TVH			05/12/07 13:36	1.0	3 1	

Analyst: JCP Date: 05/14/07 Reviewer: _____ Date: _____

Standards used: 1=S6108 2=S5943 3=S6066

REPORTING SUMMARY FOR 194745 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
194745-001	Gasoline C7-C12	GC04	A	05/11/07 17:58
194745-001	Benzene	GC04	B	05/11/07 17:58
194745-001	Toluene	GC04	B	05/11/07 17:58
194745-001	Ethylbenzene	GC04	B	05/11/07 17:58
194745-001	Trifluorotoluene (FID)	GC04	A	05/11/07 17:58
194745-001	Bromofluorobenzene (FID)	GC04	A	05/11/07 17:58
194745-001	Trifluorotoluene (PID)	GC04	B	05/11/07 17:58
194745-001	Bromofluorobenzene (PID)	GC04	B	05/11/07 17:58
194745-001	Xylene (total)	GC04	B	05/11/07 17:58
194745-002	Gasoline C7-C12	GC04	A	05/11/07 18:36
194745-002	Benzene	GC04	B	05/11/07 18:36
194745-002	Toluene	GC04	B	05/11/07 18:36
194745-002	Ethylbenzene	GC04	B	05/11/07 18:36
194745-002	Trifluorotoluene (FID)	GC04	A	05/11/07 18:36
194745-002	Bromofluorobenzene (FID)	GC04	A	05/11/07 18:36
194745-002	Trifluorotoluene (PID)	GC04	B	05/11/07 18:36
194745-002	Bromofluorobenzene (PID)	GC04	B	05/11/07 18:36
194745-002	Xylene (total)	GC04	B	05/11/07 18:36
QC387486	Gasoline C7-C12	GC04	A	05/11/07 16:04
QC387486	Benzene	GC04	B	05/11/07 16:04
QC387486	Toluene	GC04	B	05/11/07 16:04
QC387486	Ethylbenzene	GC04	B	05/11/07 16:04
QC387486	Trifluorotoluene (FID)	GC04	A	05/11/07 16:04
QC387486	Bromofluorobenzene (FID)	GC04	A	05/11/07 16:04
QC387486	Trifluorotoluene (PID)	GC04	B	05/11/07 16:04
QC387486	Bromofluorobenzene (PID)	GC04	B	05/11/07 16:04
QC387486	Xylene (total)	GC04	B	05/11/07 16:04
QC387488	Gasoline C7-C12	GC04	A	05/11/07 13:54
QC387488	Trifluorotoluene (FID)	GC04	A	05/11/07 13:54
QC387488	Bromofluorobenzene (FID)	GC04	A	05/11/07 13:54
QC387489	Benzene	GC04	B	05/11/07 15:16
QC387489	Toluene	GC04	B	05/11/07 15:16
QC387489	Ethylbenzene	GC04	B	05/11/07 15:16
QC387489	Trifluorotoluene (PID)	GC04	B	05/11/07 15:16
QC387489	Bromofluorobenzene (PID)	GC04	B	05/11/07 15:16
QC387490	Gasoline C7-C12	GC04	A	05/11/07 19:52
QC387490	Trifluorotoluene (FID)	GC04	A	05/11/07 19:52
QC387490	Bromofluorobenzene (FID)	GC04	A	05/11/07 19:52
QC387491	Gasoline C7-C12	GC04	A	05/11/07 20:30
QC387491	Trifluorotoluene (FID)	GC04	A	05/11/07 20:30
QC387491	Bromofluorobenzene (FID)	GC04	A	05/11/07 20:30

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 05/21/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 05/21/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.48	0.26	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.15	0.032	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.11	0.098	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.087	0.061	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.15	0.11	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.19	0.10	0.14	0.13	0.030	0.14

Curtis & Tompkins, Ltd.

TPH/Extractable Data

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/11/07
Units:	ug/L	Received:	05/11/07
Diln Fac:	1.000	Prepared:	05/11/07
Batch#:	125109		

Field ID:	LF10SP01	Analyzed:	05/12/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	194745-001		

Analyte	Result	RL
Diesel C12-C24	88 Y Z	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

Field ID:	DUP0511071A	Analyzed:	05/12/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	194745-002		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

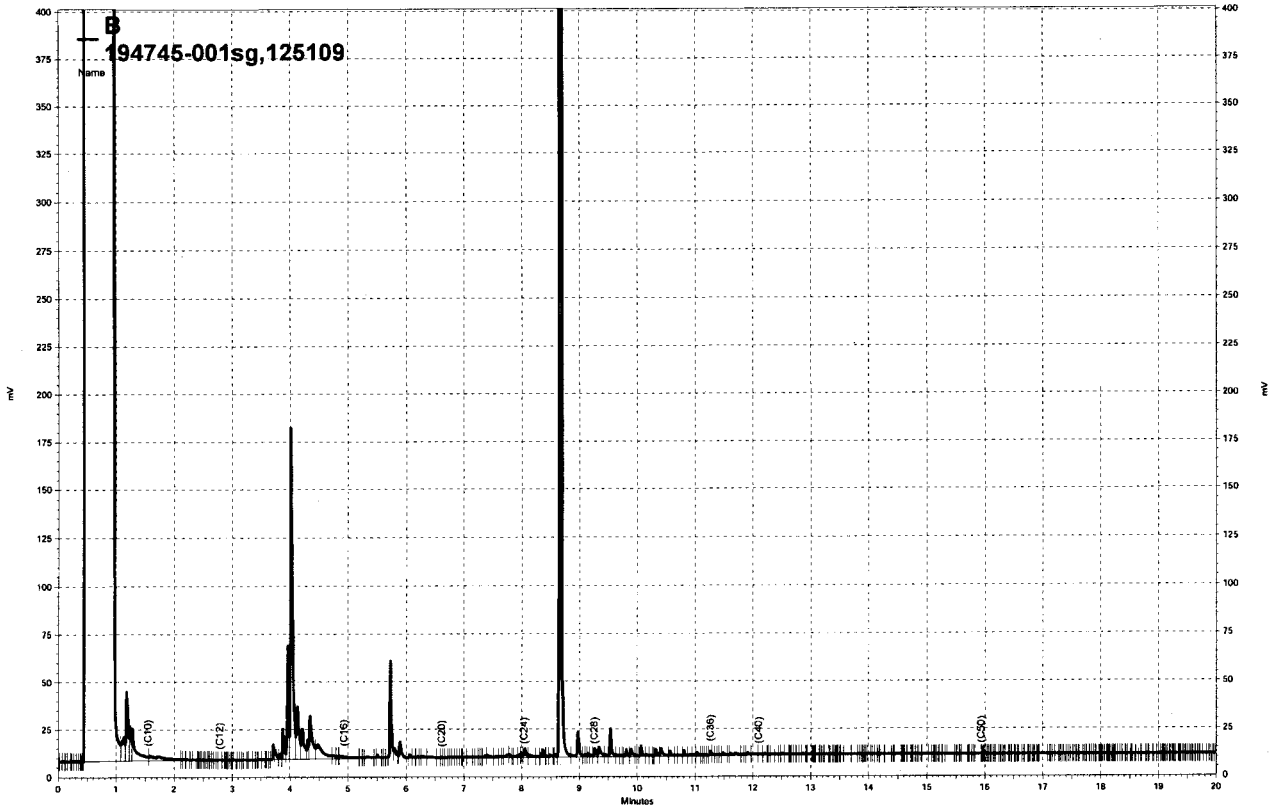
Surrogate	%REC	Limits
Hexacosane	85	65-135

Type:	BLANK	Analyzed:	05/14/07
Lab ID:	QC387446	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit



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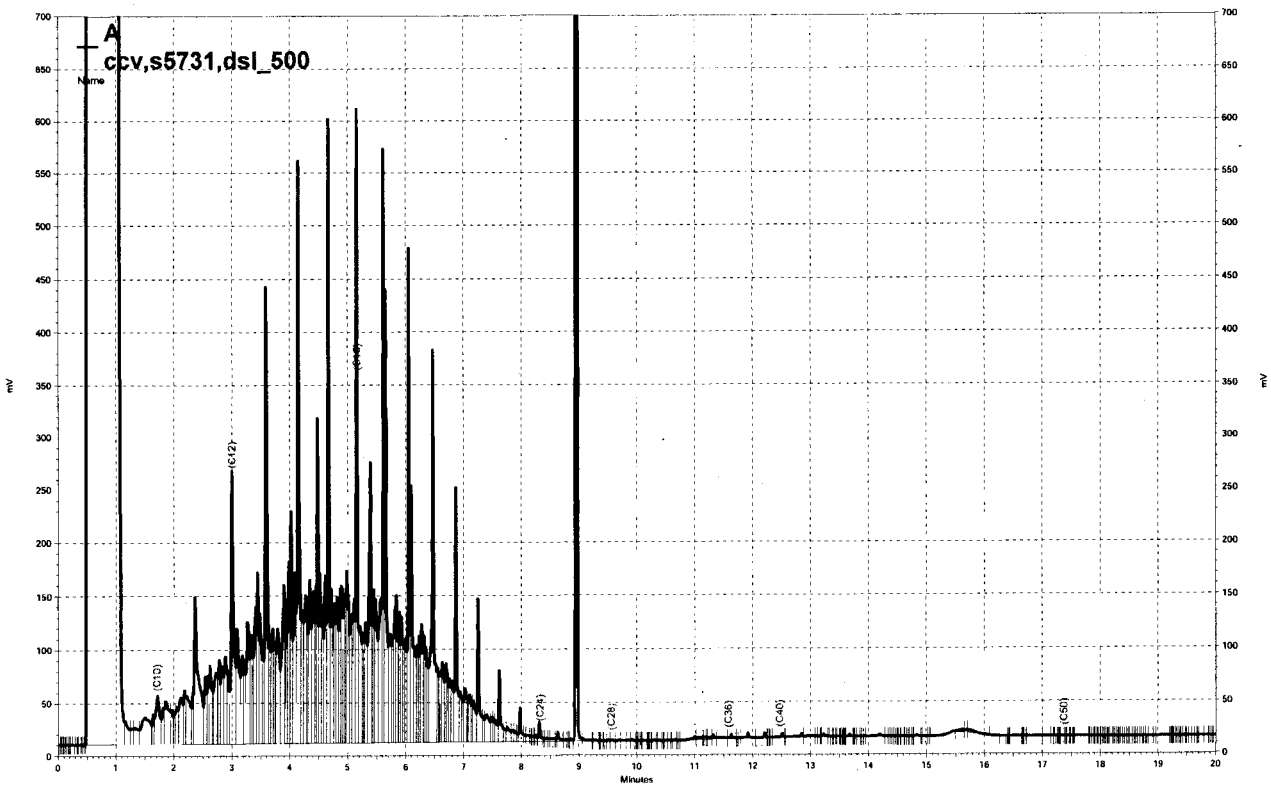
LF10SP01



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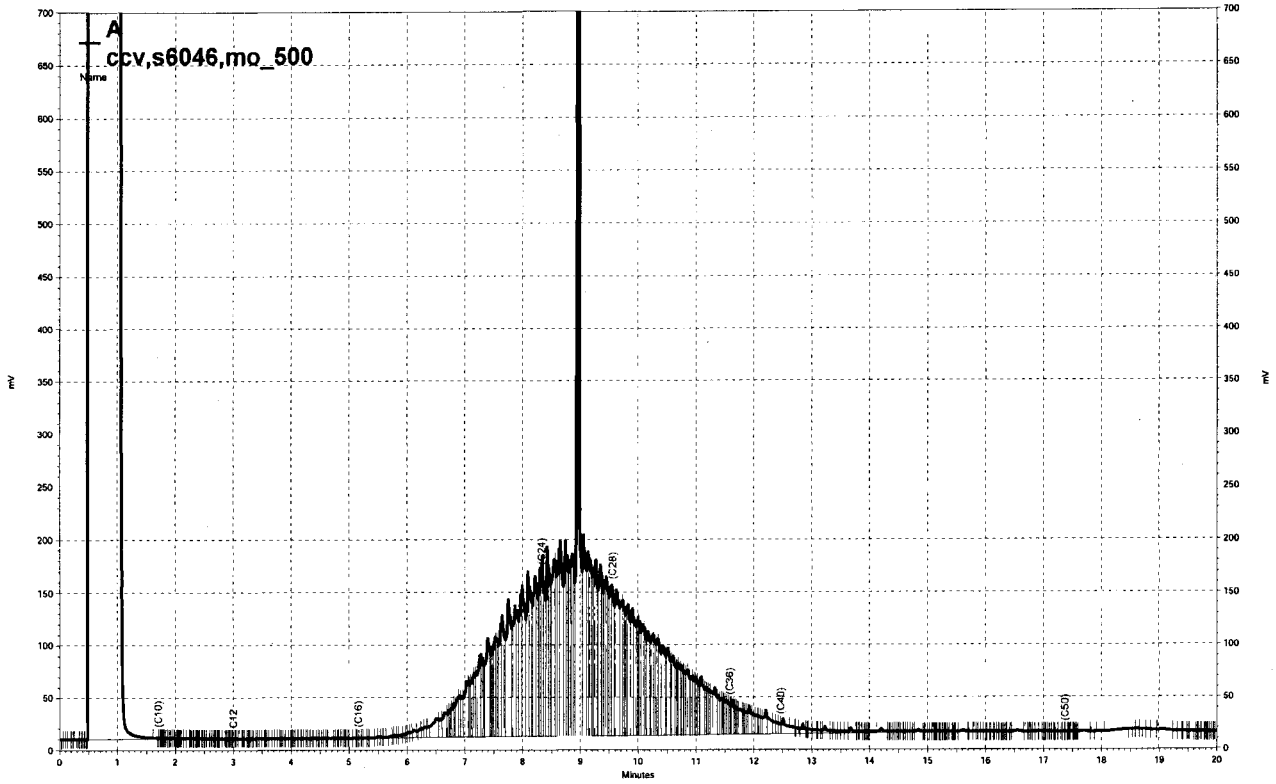
DIESEL



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MOTOR OIL

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC387447	Batch#:	125109
Matrix:	Water	Prepared:	05/11/07
Units:	ug/L	Analyzed:	05/14/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	1,864	75	65-135

Surrogate	%REC	Limits
Hexacosane	92	65-135

3.2

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	125109
MSS Lab ID:	194674-003	Sampled:	05/08/07
Matrix:	Water	Received:	05/09/07
Units:	ug/L	Prepared:	05/11/07
Diln Fac:	1.000	Analyzed:	05/12/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC387448

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,145	86	65-135

Surrogate	%REC	Limits
Hexacosane	103	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC387449

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,121	85	65-135	1	35

Surrogate	%REC	Limits
Hexacosane	105	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194745	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	125109
MSS Lab ID:	194674-004	Sampled:	05/08/07
Matrix:	Water	Received:	05/09/07
Units:	ug/L	Prepared:	05/11/07
Diln Fac:	1.000	Analyzed:	05/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC387450

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,002	80	65-135

Surrogate	%REC	Limits
Hexacosane	101	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC387451

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	1,847	74	65-135	8	35

Surrogate	%REC	Limits
Hexacosane	91	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	-3	250.0	3	500.0	7	1000	6	5000	-13

Analyst: MCH Date: 01/29/07 Reviewer: CW Date: 02/27/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	-4	100.0	-4	500.0	-3	1000	19	5000	-6	7500	-2

Analyst: MCH Date: 02/12/07 Reviewer: CP Date: 02/12/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 194745 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date : 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117102790001
Units : mg/L

Name : Hexacosane
Date : 12-MAR-2007 20:05
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071a023	117102790023	HEX_10	12-MAR-2007 20:05	S4640
L2	071a024	117102790024	HEX_25	12-MAR-2007 20:33	S4641
L3	071a025	117102790025	HEX_50	12-MAR-2007 21:01	S5402
L4	071a026	117102790026	HEX_100	12-MAR-2007 21:29	S4644
L5	071a027	117102790027	HEX_200	12-MAR-2007 21:57	S4645
L6	071a033	117102790033	HEX_5	13-MAR-2007 12:16	S4639

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60718	67049	65965	69806	68232	69707	AVRG		1.49E-5		66913	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	10.00	-9	25.00	0	50.00	-1	100.0	4	200.0	2	5.000	4

Analyst: MDW Date: 03/13/07 Reviewer: CW Date: 03/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 194745 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227171974001
Units : mg/L

Name : Hexacosane
Date : 29-APR-2007 14:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	119_008	227171974008	HEX_25	29-APR-2007 14:04	S5753
L2	119_009	227171974009	HEX_50	29-APR-2007 14:32	S5754
L3	119_010	227171974010	HEX_100	29-APR-2007 15:00	S5755
L4	119_011	227171974011	HEX_200	29-APR-2007 15:28	S5756
L5	119_013	227171974013	HEX_5	29-APR-2007 16:36	S5751
L6	119_014	227171974014	HEX_10	29-APR-2007 17:04	S5752

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	64113	67566	67130	69058	71220	70245	AVRG		1.47E-5		68222	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	25.00	-6	50.00	-1	100.0	-2	200.0	1	5.000	4	10.00	3

DLM 04/30/07 : Hex 5 and 10 points were run at the end due to mis-injects

Analyst: DLM Date: 04/30/07 Reviewer: MCH Date: 04/30/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC11A Run Name : DSL_500 IDF : 1.0
Seqnum : 117193435003 File : 134a003 Time : 14-MAY-2007 08:52
Standards: S5731

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	61051	500.0	524.0	mg/L	5	15	
Hexacosane	117102790001	12-MAR-2007	66913	66504	50.00	49.69	mg/L	-1	15	

Analyst: ATL Date: 05/14/07 Reviewer: DLM Date: 05/14/07

117193435003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117193435004 File : 134a004 Time : 14-MAY-2007 09:21
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	41690	500.0	502.8	mg/L	1	15	
Hexacosane	117102790001	12-MAR-2007	66913	68524	50.00	51.20	mg/L	2	15	

Analyst: ATL Date: 05/14/07 Reviewer: DLM Date: 05/14/07

117193435004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC11A Run Name : DSL_1000 IDF : 1.0
Seqnum : 117193435009 File : 134a009 Time : 14-MAY-2007 12:26
Standards: S5732

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	61191	1000	1050	mg/L	5	15	
Hexacosane	117102790001	12-MAR-2007	66913	69822	50.00	52.17	mg/L	4	15	

Analyst: MDW Date: 05/14/07 Reviewer: DLM Date: 05/14/07

117193435009

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117193435010 File : 134a010 Time : 14-MAY-2007 12:54
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	46467	500.0	560.4	mg/L	12	15	
Hexacosane	117102790001	12-MAR-2007	66913	76569	50.00	57.22	mg/L	14	15	

Analyst: MDW Date: 05/14/07 Reviewer: DLM Date: 05/14/07

117193435010

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227190739003 File : 132_003 Time : 12-MAY-2007 11:55
Standards: S5731

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65588	500.0	505.3	mg/L	1	15	
Hexacosane	B	227171974001	29-APR-2007	68222	70342	50.00	51.55	mg/L	3	15	

Analyst: ATL Date: 05/12/07 Reviewer: DLM Date: 05/14/07

227190739003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227190739004 File : 132_004 Time : 12-MAY-2007 12:23
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	44884	500.0	488.3	mg/L	-2	15	
Hexacosane	B	227171974001	29-APR-2007	68222	74737	50.00	54.77	mg/L	10	15	

Analyst: ATL Date: 05/12/07 Reviewer: DLM Date: 05/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227190739016 File : 132_016 Time : 12-MAY-2007 18:28
Standards: S5730

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	61831	250.0	238.2	mg/L	-5	15	
Hexacosane	B	227171974001	29-APR-2007	68222	68851	50.00	50.46	mg/L	1	15	

Analyst: MDW Date: 05/12/07 Reviewer: DLM Date: 05/14/07

227190739016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227190739017 File : 132_017 Time : 12-MAY-2007 18:57
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	49064	500.0	533.8	mg/L	7	15	
Hexacosane	B	227171974001	29-APR-2007	68222	80995	50.00	59.36	mg/L	**19**	15	c+

CW 05/15/07 : Surrogate from previous diesel standard within limits.

Analyst: MDW Date: 05/12/07 Reviewer: DLM Date: 05/14/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 227190739031 File : 132_031 Time : 13-MAY-2007 01:28
Standards: S5732

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	62201	1000	958.5	mg/L	-4	15	
Hexacosane	B	227171974001	29-APR-2007	68222	69122	50.00	50.66	mg/L	1	15	

Analyst: DLM Date: 05/14/07 Reviewer: ATL Date: 05/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227193434003 File : 134_003 Time : 14-MAY-2007 08:50
Standards: S5731

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	61416	500.0	473.2	mg/L	-5	15	
Hexacosane	B	227171974001	29-APR-2007	68222	66982	50.00	49.09	mg/L	-2	15	

Analyst: DLM Date: 05/14/07 Reviewer: ATL Date: 05/14/07

227193434003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 194745 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227193434010 File : 134_010 Time : 14-MAY-2007 12:15
Standards: S5730

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65031	250.0	250.5	mg/L	0	15	
Hexacosane	B	227171974001	29-APR-2007	68222	71339	50.00	52.28	mg/L	5	15	

Analyst: DLM Date: 05/14/07 Reviewer: CW Date: 05/15/07

227193434010

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	026a001	X	IB			01/26/07 08:36	1.0		
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1	
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2	
006	026a006	X	HEX_5			01/26/07 16:57	1.0		
007	026a007	X	IB			01/26/07 17:25	1.0		
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3	
009	026a009	X	CALIB			01/26/07 18:22	1.0		
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4	
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5	
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6	
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7	
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8	
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9	
016	026a016	X	IB			01/26/07 21:38	1.0		
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10	
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10	
019	026a019	IB	CALIB			01/26/07 23:02	1.0		
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11	
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12	
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13	
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14	
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15	
025	026a025	IB	CALIB			01/27/07 01:50	1.0		
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16	
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17	
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18	
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19	
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20	
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21	
032	026a032	IB	CALIB			01/27/07 05:06	1.0		
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22	
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23	
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24	
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25	
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26	
038	026a038	IB	CALIB			01/27/07 07:55	1.0		
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27	
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28	
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29	
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30	
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31	
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32	
045	026a045	X	IB			01/27/07 11:12	1.0		

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042a001	X	IB			02/11/07 16:08	1.0	
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1
003	042a003	X	MO_500			02/11/07 17:03	1.0	2
004	042a004	X	MO_500			02/11/07 17:47	1.0	2
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1
008	042a008	X	IB			02/11/07 20:45	1.0	
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8
015	042a015	IB	CALIB			02/12/07 00:01	1.0	
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9
018	042a018	X	IB			02/12/07 01:24	1.0	
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117102790

Instrument : GC11A
Method : EPA 8015B

Begun : 03/12/07 09:10
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071a001	X	PRIMER				03/12/07 09:10	1.0	
002	071a002	X	IB				03/12/07 09:38	1.0	
003	071a003	X	DSL_500				03/12/07 10:06	1.0	1
004	071a004	CCV	DSL_500				03/12/07 10:34	1.0	1
005	071a005	CCV	MO_500				03/12/07 11:02	1.0	2
006	071a006	CCV	JET_250				03/12/07 11:51	1.0	3
007	071a007	SAMPLE	193189-007	S	Water	122934	03/12/07 12:19	1.0	
008	071a008	SAMPLE	193189-006	S	Water	122934	03/12/07 12:47	1.0	
009	071a009	SAMPLE	193189-005	S	Water	122934	03/12/07 13:15	1.0	
010	071a010	SAMPLE	193189-004	S	Water	122934	03/12/07 13:43	1.0	
011	071a011	SAMPLE	193189-003	S	Water	122934	03/12/07 14:12	1.0	
012	071a012	X	IB				03/12/07 14:40	1.0	
013	071a013	SAMPLE	193189-002	S	Water	122934	03/12/07 15:08	1.0	
014	071a014	SAMPLE	193189-001	S	Water	122934	03/12/07 15:36	1.0	
015	071a015	SAMPLE	193190-001	S	Water	122934	03/12/07 16:05	1.0	
016	071a016	X	DSL_1000				03/12/07 16:33	1.0	4
017	071a017	CCV	MO_500				03/12/07 17:01	1.0	2
018	071a018	CCV	JET_250				03/12/07 17:29	1.0	3
019	071a019	CCV	DSL_1000				03/12/07 17:57	1.0	4
020	071a020	CCV	DSL_1000				03/12/07 18:37	1.0	4
021	071a021	IB	CALIB				03/12/07 19:09	1.0	
022	071a022	X	HEX_5				03/12/07 19:37	1.0	5
023	071a023	ICAL	HEX_10				03/12/07 20:05	1.0	6
024	071a024	ICAL	HEX_25				03/12/07 20:33	1.0	7
025	071a025	ICAL	HEX_50				03/12/07 21:01	1.0	8
026	071a026	ICAL	HEX_100				03/12/07 21:29	1.0	9
027	071a027	ICAL	HEX_200				03/12/07 21:57	1.0	10
028	071a028	IB	CALIB				03/12/07 22:25	1.0	
029	071a029	CCV	DSL_1000				03/12/07 22:52	1.0	4
030	071a030	CCV	MO_500				03/12/07 23:20	1.0	2
031	071a031	X	CCV				03/12/07 23:48	1.0	4
032	071a032	X	CCV				03/13/07 00:16	1.0	2
033	071a033	ICAL	HEX_5				03/13/07 12:16	1.0	5

Standards used: 1=S5517 2=S5603 3=S4560 4=S5259 5=S4639 6=S4640 7=S4641 8=S5402 9=S4644 10=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117193435

Instrument : GC11A
Method : EPA 8015B

Begun : 05/14/07 07:55
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	134a001	X	PRIMER				05/14/07 07:55	1.0		
002	134a002	X	IB				05/14/07 08:24	1.0		
003	134a003	CCV	DSL_500				05/14/07 08:52	1.0	1	
004	134a004	CCV	MO_500				05/14/07 09:21	1.0	2	
005	134a005	SAMPLE	194694-001	S	Soil	125102	05/14/07 10:34	1.0		4:BUNKC:12-40=11000
006	134a006	BS	QC387566	S	Water	125140	05/14/07 11:02	1.0		
007	134a007	BSD	QC387567	S	Water	125140	05/14/07 11:30	1.0		
008	134a008	BLANK	QC387446	S	Water	125109	05/14/07 11:58	1.0		
009	134a009	CCV	DSL_1000				05/14/07 12:26	1.0	3	
010	134a010	CCV	MO_500				05/14/07 12:54	1.0	2	
011	134a011	XCCV	MO_500				05/14/07 13:22	1.0	2	
012	134a012	BLANK	QC387550		Soil	125133	05/14/07 14:38	1.0		
013	134a013	LCS	QC387551		Soil	125133	05/14/07 15:06	1.0		
014	134a014	SAMPLE	194721-001		Soil	125133	05/14/07 15:34	2.0		2:BUNKC:12-40=11000
015	134a015	SAMPLE	194721-002		Soil	125133	05/14/07 16:02	1.0		2:BUNKC:12-40=6200
016	134a016	SAMPLE	194721-003		Soil	125133	05/14/07 16:30	2.0		1:BUNKC:12-40=5300
017	134a017	SAMPLE	194721-004		Soil	125133	05/14/07 16:58	20.0		18:BUNKC:12-40=61000
018	134a018	X	IB				05/14/07 17:26	1.0		
019	134a019	SAMPLE	194721-005		Soil	125133	05/14/07 17:54	2.0		3:BUNKC:12-40=19000
020	134a020	SAMPLE	194721-006		Soil	125133	05/14/07 18:22	10.0		3:BUNKC:12-40=18000
021	134a021	MSS	194721-007		Soil	125133	05/14/07 18:51	10.0		14:BUNKC:12-40=32000
022	134a022	SAMPLE	194721-008		Soil	125133	05/14/07 19:19	10.0		3:BUNKC:12-40=15000
023	134a023	X	IB				05/14/07 19:48	1.0		
024	134a024	CCV	DSL_250				05/14/07 20:16	1.0	4	
025	134a025	CCV	MO_500				05/14/07 20:45	1.0	2	
026	134a026	X	CCV				05/14/07 21:13	1.0	4	
027	134a027	X	CCV				05/14/07 21:41	1.0	2	
028	134a028	SAMPLE	194721-009		Soil	125133	05/14/07 22:10	1.0		2:BUNKC:12-40=8400
029	134a029	SAMPLE	194721-010		Soil	125133	05/14/07 22:38	1.0		12:BUNKC:12-40=24000
030	134a030	SAMPLE	194721-011		Soil	125133	05/14/07 23:06	10.0		6:BUNKC:12-40=19000
031	134a031	SAMPLE	194721-012		Soil	125133	05/14/07 23:35	10.0		2:BUNKC:12-40=5900
032	134a032	X	IB				05/15/07 00:03	1.0		
033	134a033	SAMPLE	194721-013		Soil	125133	05/15/07 00:31	10.0		3:BUNKC:12-40=16000
034	134a034	SAMPLE	194721-014		Soil	125133	05/15/07 01:00	5.0		14:BUNKC:12-40=40000
035	134a035	SAMPLE	194721-015		Soil	125133	05/15/07 01:28	10.0		16:BUNKC:12-40=36000
036	134a036	X	IB				05/15/07 01:56	1.0		
037	134a037	SAMPLE	194721-016		Soil	125133	05/15/07 02:25	5.0		11:BUNKC:12-40=33000
038	134a038	SAMPLE	194721-017		Soil	125133	05/15/07 02:53	3.0		3:BUNKC:12-40=14000
039	134a039	SAMPLE	194721-018		Soil	125133	05/15/07 03:21	3.0		3:BUNKC:12-40=15000
040	134a040	X	IB				05/15/07 03:49	1.0		
041	134a041	CCV	DSL_1000				05/15/07 04:17	1.0	3	
042	134a042	CCV	MO_500				05/15/07 04:46	1.0	2	
043	134a043	X	CCV				05/15/07 05:14	1.0	3	
044	134a044	X	CCV				05/15/07 05:42	1.0	2	
045	134a045	BLANK	QC387564		Water	125139	05/15/07 06:10	1.0		
046	134a046	MDL	194335-001		Water	125139	05/15/07 06:39	1.0		
047	134a047	MDL	194335-002		Water	125139	05/15/07 07:07	1.0		
048	134a048	MDL	194335-003		Water	125139	05/15/07 07:35	1.0		
049	134a049	MDL	194335-004		Water	125139	05/15/07 08:03	1.0		
050	134a050	MDL	194335-005		Water	125139	05/15/07 08:31	1.0		
051	134a051	MDL	194335-006		Water	125139	05/15/07 09:00	1.0		
052	134a052	MDL	194335-007		Water	125139	05/15/07 09:28	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117193435

Instrument : GC11A
Method : EPA 8015B

Begun : 05/14/07 07:55
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
053	134a053	MDL	194335-008		Water	125139	05/15/07 09:56	1.0		
054	134a054	CCV	DSL_250				05/15/07 10:25	1.0	4	

Standards used: 1=S5731 2=S6046 3=S5732 4=S5730

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	079_001	X	IB			03/20/07 10:30	1.0	
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1
003	079_003	X	MO_500			03/20/07 11:26	1.0	2
005	079_005	X	IB			03/20/07 12:53	1.0	
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2
008	079_008	X	PRIMER			03/20/07 14:26	1.0	
009	079_009	X	PRIMER			03/20/07 14:54	1.0	
010	079_010	X	IB			03/20/07 15:22	1.0	
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3
012	079_012	IB	CALIB			03/20/07 16:29	1.0	
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4
014	079_014	IB	CALIB			03/20/07 17:43	1.0	
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10
021	079_021	IB	CALIB			03/20/07 20:59	1.0	
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11
024	079_024	IB	CALIB			03/20/07 22:23	1.0	
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17
031	079_031	IB	CALIB			03/21/07 01:38	1.0	
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23
038	079_038	IB	CALIB			03/21/07 04:54	1.0	

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227171974

Instrument : GC14B
Method : EPA 8015B

Begun : 04/29/07 10:14
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	119_001	X	PRIMER			04/29/07 10:14	1.0		
002	119_002	X	IB			04/29/07 10:41	1.0		
003	119_003	CCV	MO_500			04/29/07 11:09	1.0	1	
004	119_004	CCV	DSL_500			04/29/07 11:38	1.0	2	
005	119_005	IB	CALIB			04/29/07 12:40	1.0		
006	119_006	X	HEX_5			04/29/07 13:08	1.0	3	
007	119_007	X	HEX_10			04/29/07 13:36	1.0	4	
008	119_008	ICAL	HEX_25			04/29/07 14:04	1.0	5	
009	119_009	ICAL	HEX_50			04/29/07 14:32	1.0	6	
010	119_010	ICAL	HEX_100			04/29/07 15:00	1.0	7	
011	119_011	ICAL	HEX_200			04/29/07 15:28	1.0	8	
012	119_012	IB	CALIB			04/29/07 15:56	1.0		
013	119_013	ICAL	HEX_5			04/29/07 16:36	1.0	3	
014	119_014	ICAL	HEX_10			04/29/07 17:04	1.0	4	

Analyst: DLM Date: 04/30/07 Reviewer: MCH Date: 04/30/07

Standards used: 1=S5734 2=S5731 3=S5751 4=S5752 5=S5753 6=S5754 7=S5755 8=S5756

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227190739

Instrument : GC14B
Method : EPA 8015B

Begun : 05/12/07 10:59
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	132_001	X	PRIMER				05/12/07 10:59	1.0		
002	132_002	X	IB				05/12/07 11:27	1.0		
003	132_003	CCV	DSL_500				05/12/07 11:55	1.0	1	
004	132_004	CCV	MO_500				05/12/07 12:23	1.0	2	
005	132_005	LCS	QC387447	S	Water	125109	05/12/07 13:20	1.0		
006	132_006	XBLANK	QC387446	S	Water	125109	05/12/07 13:48	1.0		
007	132_007	BLANK	QC387446		Water	125109	05/12/07 14:16	1.0		
008	132_008	PREPBLK	QC387492		SPLP Leachate	125109	05/12/07 14:44	1.0		
009	132_009	SAMPLE	194716-001	S	Water	125109	05/12/07 15:12	1.0		
010	132_010	SAMPLE	194745-001	S	Water	125109	05/12/07 15:40	1.0		
011	132_011	SAMPLE	194745-002	S	Water	125109	05/12/07 16:08	1.0		
012	132_012	SAMPLE	194689-002		SPLP Leachate	125109	05/12/07 16:36	1.0		
013	132_013	X	IB				05/12/07 17:04	1.0		
014	132_014	SAMPLE	194674-002	S	Water	125109	05/12/07 17:32	1.0		
015	132_015	SAMPLE	194674-006	S	Water	125109	05/12/07 18:00	1.0		
016	132_016	CCV	DSL_250				05/12/07 18:28	1.0	3	
017	132_017	CCV	MO_500				05/12/07 18:57	1.0	2	
018	132_018	X	CCV				05/12/07 19:25	1.0	3	
019	132_019	X	CCV				05/12/07 19:53	1.0	2	
020	132_020	SAMPLE	194698-001	S	Water	125109	05/12/07 20:21	1.0		
021	132_021	SAMPLE	194674-007	S	Water	125109	05/12/07 20:49	1.0		
022	132_022	SAMPLE	194674-008	S	Water	125109	05/12/07 21:16	1.0		
023	132_023	SAMPLE	194674-005	S	Water	125109	05/12/07 21:44	1.0		
024	132_024	X	IB				05/12/07 22:12	1.0		
025	132_025	MSS	194674-003	S	Water	125109	05/12/07 22:40	1.0		
026	132_026	MS	QC387448	S	Water	125109	05/12/07 23:08	1.0		
027	132_027	MSD	QC387449	S	Water	125109	05/12/07 23:36	1.0		
028	132_028	MSS	194674-004	S	Water	125109	05/13/07 00:04	1.0		
029	132_029	MS	QC387450	S	Water	125109	05/13/07 00:32	1.0		
030	132_030	MSD	QC387451	S	Water	125109	05/13/07 01:00	1.0		
031	132_031	CCV	DSL_1000				05/13/07 01:28	1.0	4	
032	132_032	CCV	MO_500				05/13/07 01:56	1.0	2	
033	132_033	X	CCV				05/13/07 02:24	1.0	4	
034	132_034	X	CCV				05/13/07 02:52	1.0	2	
035	132_035	SAMPLE	194721-019		Water	125109	05/13/07 03:20	1.0		
036	132_036	SAMPLE	194721-020		Water	125109	05/13/07 03:48	1.0		12:BUNKC:12-40=24000
037	132_037	X	IB				05/13/07 04:16	1.0		

Standards used: 1=S5731 2=S6046 3=S5730 4=S5732

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227193434

Instrument : GC14B
Method : EPA 8015B

Begun : 05/14/07 07:54
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	134_001	X	PRIMER				05/14/07 07:54	1.0		
002	134_002	X	IB				05/14/07 08:22	1.0		
003	134_003	CCV	DSL_500				05/14/07 08:50	1.0	1	
004	134_004	CCV	MO_500				05/14/07 09:18	1.0	2	
005	134_005	XBLANK	QC387446	S	Water	125109	05/14/07 09:50	1.0		
006	134_006	LCS	QC387447	S	Water	125109	05/14/07 10:18	1.0		
007	134_007	SAMPLE	194721-019		Water	125109	05/14/07 10:46	1.0		
008	134_008	SAMPLE	194750-001	S	Water	125140	05/14/07 11:14	1.0		
009	134_009	BLANK	QC387565	S	Water	125140	05/14/07 11:42	1.0		
010	134_010	CCV	DSL_250				05/14/07 12:15	1.0	3	
011	134_011	CCV	MO_500				05/14/07 12:43	1.0	2	
012	134_012	SAMPLE	194721-020		Water	125109	05/14/07 13:12	2.0		2:BUNKC:12-40=12000
013	134_013	SAMPLE	194694-001		Soil	125102	05/14/07 13:40	1.0		2:BUNKC:12-40=9900
014	134_014	SAMPLE	194700-001		Soil	125102	05/14/07 14:08	2.0		
015	134_015	SAMPLE	194700-002		Soil	125102	05/14/07 14:36	3.0		
016	134_016	X	IB				05/14/07 15:04	1.0		
017	134_017	SAMPLE	194721-021		Water	125109	05/14/07 15:32	3.0		
018	134_018	SAMPLE	194721-022		Water	125109	05/14/07 16:00	10.0		3:BUNKC:12-40=20000
019	134_019	X	IB				05/14/07 16:28	1.0		
020	134_020	CCV	DSL_250				05/14/07 16:59	1.0	3	
021	134_021	CCV	MO_500				05/14/07 17:27	1.0	2	
022	134_022	X	CCV				05/14/07 17:55	1.0	3	
023	134_023	X	CCV				05/14/07 18:24	1.0	2	
024	134_024	BLANK	QC387564		Water	125139	05/14/07 18:52	1.0		
025	134_025	MDL	194335-001		Water	125139	05/14/07 19:21	1.0		
026	134_026	MDL	194335-002		Water	125139	05/14/07 19:49	1.0		
027	134_027	MDL	194335-003		Water	125139	05/14/07 20:17	1.0		
028	134_028	MDL	194335-004		Water	125139	05/14/07 20:46	1.0		
029	134_029	MDL	194335-005		Water	125139	05/14/07 21:14	1.0		
030	134_030	MDL	194335-006		Water	125139	05/14/07 21:42	1.0		
031	134_031	MDL	194335-007		Water	125139	05/14/07 22:10	1.0		
032	134_032	MDL	194335-008		Water	125139	05/14/07 22:38	1.0		
033	134_033	CCV	DSL_500				05/14/07 23:06	1.0	1	
034	134_034	X	CCV				05/14/07 23:34	1.0	1	

Standards used: 1=S5731 2=S6046 3=S5730

REPORTING SUMMARY FOR 194745 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
194745-001	GC14B	05/12/07 15:40	1.0	+	+	+	
194745-002	GC14B	05/12/07 16:08	1.0	+	+	+	
QC387446	GC14B	05/12/07 14:16	1.0				
QC387446	GC11A	05/14/07 11:58	1.0	+	+	+	
QC387447	GC14B	05/12/07 13:20	1.0				
QC387447	GC14B	05/14/07 10:18	1.0	+		+	
QC387448	GC14B	05/12/07 23:08	1.0	+		+	
QC387449	GC14B	05/12/07 23:36	1.0	+		+	
QC387450	GC14B	05/13/07 00:32	1.0	+		+	
QC387451	GC14B	05/13/07 01:00	1.0	+		+	
QC387492	GC14B	05/12/07 14:44	1.0				

SAMPLE PREPARATION SUMMARY

Batch # : 125109
Started By : SFL
Method : 3520C
Spike #1 ID : S6082

Prep Date : 11-MAY-2007
SOP Version : TEH_3520_rv11
Spike #2 ID : S6234

Analysis : TEH
Finished By : SFL
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
194674-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194674-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
194674-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
194674-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194674-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194674-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194674-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194689-002		SPLP Leachate	500	2.5	1	0.005	5	.5				TEHM	
194698-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194716-001		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
194721-019		Water	500	2.5	1	0.005	7	.5				TEHM	
194721-020		Water	500	2.5	1	0.005	7	.5				TEHM	
194721-021		Water	500	2.5	1	0.005	8	.5				TEHM	
194721-022		Water	500	2.5	1	0.005	8	.5				TEHM	
194745-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
194745-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC387446	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEH	
QC387447	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEH	
QC387448	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC387449	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC387450	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC387451	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEH	
QC387492	PREPBLK	SPLP Leachate	500	2.5	1	0.005	4	.5				TEH	

Analyst: DLM Date: 05/15/07 Reviewer: CP Date: 05/15/07

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 125109
LIMS Analysis: TEHM
Date Extracted: 5/11/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☑ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☑ EPA 3630c Silica G

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
194674-002L	500	7	2.5	X	
03 M					MSS
04 V					MSS
05 O					
06 P					
07 M					
08 P					
194698-001B					
194716-001		5		X	
194721-019F		7			
20					
21		8			
22					SEDIMENT IN SAMPLE; PDCS 0/6
MB QC387446		N/A		X	
LCS 47					
MS 48		7			194674-003AC
MSD 49					
MS 50					194674-004Q
MSD 51					
194689-002		5			
PREP BLK QC387492		4			
194745-001F		7		X	NEEDS 2X SL !
02					SFL 5/12/07

	Mfg & Lot# / LIMS # / Time	Date/ Initia
0.5 mL of TEH_SURR was added to all samples	SU0820	SFL 5/11/07
0.5 mL of TEH_SP was added to all spikes	SU0822 SP 5/11/07 SU6234A	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS0 5076	
☑ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM47074/EM4791	
& HPLC H2O Extraction Start Time:	1315/1521*/1025	
Extraction End Time:	0800/0930*/1030	SFL 5/12/07
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM4620563 7	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	FP1065 ✓	

5/11/07
Extraction Chemist Date

Contined from Page ___
Continued on Page ___

5/12/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 363**

Prep Chemist: SFL
Cleanup Date: 5/12/07

Benchbook # **BK 2493**
Page 40

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
194674-002	125109	1.0	1.0	
03				MSS
04				MSS
05				
06				
07				
08				
194698-001				
194716-001				
194745-001				2x SG
002				
MB QC387446				
LCS 47				
MS 48				194674-002
MSD 49				
MS 50				004
MSD 51				

5/12/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ____ g columns	N/A	5/12/07
☑ Extracts were cleaned up using 1.0 g cartridges	SPBU05	
Extracts were eluted with 4.0 mL CH_2Cl_2	BM47074	
Concentrated to volumes as noted above	✓	

5/12/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

5/12/07
Reviewed by / Date

TCLP EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 125114
Extraction Method: 1311
Rotator #'s: 1
1

Date/ Time ON: 5/10/07 7PM
Temp (F) ON: 24°C
Date/ Time OFF: 5/11/07
Temp (F) OFF: 24°C

Page: 10
Benchbook#: **BK 2494**

Sample # / Letter	Vessel #	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK QC	1	Ø	Ø	Ø	Ø	Ø	2	2200	5	
1941689-002	2	110	no	no	NA	NA	1	1	8	

	Mfg & Lot # / LIMS #	Date/ Initials
3.5 mL of 1 N HCl was added to all samples	N/A	VV 5/10/07
Used Sodium Hydroxide (NaOH)		
Used Acetic acid (HOAc)		
Fluid #1 pH		
Fluid #2 pH	500	
Extract filtered through 0.7um x 142mm TCLP filter paper	Environmental Express 170101	VV 5/10/07

Temperature Limits: 21 - 25 C
Fluid #1 pH Limits: 4.88 - 4.98 su
Fluid #2 pH Limits: 2.83 - 3.03 su

5/11/07
Extraction Chemist **Date**

5/11/07
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: RFW
Cleanup Date: 5/14/07

Benchbook # **BK 2493**
Page 42

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
194723-001	125140	1.0	1.0	
002				
003				
004				
005				
006				
007				
008				
009				
010				
194750-001				
MB QC387585				
BS 6				piece of red brib in sample.
BSD 7				
MB QC387446	125109	0.5	0.5	~~Re-sg~~, 2x SG

RFW 5/14/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	RFW 5/14/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8605	
Extracts were eluted with 4.0 mL CH_2Cl_2	47074	
Concentrated to volumes as noted above	✓	

5/14/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

5/14/07
Reviewed by / Date

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 05/21/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12	11	16	21	15	16	12
Diesel C10-C24	ug/L	9.5	15	17	19	15	16	11
Diesel C12-C22	ug/L	10	17	17	22	17	17	12
Diesel C12-C24	ug/L	11	13	18	22	16	17	12
Diesel C12-C32	ug/L	14	14	19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0	18	16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195234

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID
231GW20	195234-001
231GW06	195234-002
231GW13	195234-003
DUP0605072A	195234-004
DUP0605072B	195234-005
TB0605072A	195234-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/27/2007
Project Manager

Signature: _____ Date: 06/27/2007
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195234**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/06/07**
Samples Received:	**06/06/07**

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 06/06/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 05/03/07 13:35; this analyte was not detected at or above the RL in the associated samples. High responses were observed for vinyl acetate in the CCV analyzed 06/08/07 08:49 and the CCV analyzed 06/11/07 09:51; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Metals (EPA 6020):
Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of 231GW13 (lab # 195234-003). High % differences were observed for calcium and potassium in the serial dilution of 231GW20 (lab # 195234-001). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
The analysis of nitrate and nitrite for sample 231GW20 (lab # 195234-001) was performed five hours past the recommended hold time. No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
High RPD was observed for total dissolved solids in the SDUP of 231GW20 (lab # 195234-001). No other analytical problems were encountered.

#
55.0

Curtis & Tompkins, Ltd.

Chain of Custody

195234

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2159
Page: ____ of ____

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal
Recorder (signature required): D
Sent to Laboratory (Name): CTT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH+ZnAc	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (14)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total SO_4/Hale						COMMENTS / NOTES
-1	2316W20	6/5/07	1030			X		18		3	3	9	X	X	X	X	X		X		X		X						Collected MS/MSD
-2	2316W06		1230			X		6		1	1	3	X	X	X	X	X		X		X		X						
-3	2316W13		1330			X		18		3	3	9	X	X	X	X	X		X		X		X						Collected MS/MSD
-4	DUP060507 2A		1045			X		6		1	1	3	X	X	X	X	X		X		X		X						
-5	DUP060507 2B		1345			X		6		1	1	3	X	X	X	X	X		X		X		X						
-6	TB060507 2A		—			X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: D	DATE: 6/6/07	RECEIVED BY:		DATE: 6/6/7	
PRINT NAME: D. Raynal	FIRM: BTS	TIME: 1400	PRINT NAME: AARON GRENIER	FIRM: CTT	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:		DATE:	
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195234 Date Received: 6/6/07 Number of Coolers: 5
Client: Treadwell & Rollo Project: Presidio of SF

A. Preliminary Examination Phase
Date Opened: 6/6/07 By (print): S. Monteclaro (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 7-lid of coolers Seal date: 6/6/07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 5.3°, 2.3°, 3.9°, 3.7°, 2.6°

B. Login Phase
Date Logged In: 6/6/07 By (print): S. Monteclaro (sign) [signature]

1. Describe type of packing in cooler: ziplock bags
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

00005

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126272
Units:	ug/L	Sampled:	06/05/07
Diln Fac:	1.000	Received:	06/06/07

Field ID:	231GW20	Lab ID:	195234-001
Type:	SAMPLE	Analyzed:	06/13/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	114	65-135

Field ID:	231GW06	Lab ID:	195234-002
Type:	SAMPLE	Analyzed:	06/13/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	115	65-135

Field ID:	231GW13	Lab ID:	195234-003
Type:	SAMPLE	Analyzed:	06/13/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	118	65-135

ND= Not Detected
RL= Reporting Limit

27.0

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126272
Units:	ug/L	Sampled:	06/05/07
Diln Fac:	1.000	Received:	06/06/07

Field ID:	DUP0605072A	Lab ID:	195234-004
Type:	SAMPLE	Analyzed:	06/13/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	124	65-135

Field ID:	DUP0605072B	Lab ID:	195234-005
Type:	SAMPLE	Analyzed:	06/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	117	65-135

Type:	BLANK	Analyzed:	06/13/07
Lab ID:	QC392178		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

27.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392179	Batch#:	126272
Matrix:	Water	Analyzed:	06/13/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,948	97	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	65-135
Bromofluorobenzene (FID)	114	65-135

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW20	Batch#:	126272
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392180

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	29.12	2,000	2,024	100	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	65-135
Bromofluorobenzene (FID)	130	65-135

Type: MSD Lab ID: QC392181

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,952	96	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	130	65-135
Bromofluorobenzene (FID)	130	65-135

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW13	Batch#:	126272
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392182

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	26.14	2,000	1,954	96	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	134	65-135
Bromofluorobenzene (FID)	129	65-135

Type: MSD Lab ID: QC392183

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,988	98	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	65-135
Bromofluorobenzene (FID)	128	65-135

RPD= Relative Percent Difference

30.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCVOA Water: EPA 8015B

Inst : GC19
Calnum : 347229747003
Units : ng

Name : gc19 TVH 159a
Date : 09-JUN-2007 02:23
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	159_021	347229747021	TVH 1	09-JUN-2007 02:23	S5937 (1000X), S6435 (5000X)
L2	159_022	347229747022	TVH 2	09-JUN-2007 03:01	S5936 (1000X), S6435 (5000X)
L3	159_023	347229747023	TVH 3	09-JUN-2007 03:38	S5935 (1000X), S6435 (5000X)
L4	159_024	347229747024	TVH 4	09-JUN-2007 04:16	S5934 (2000X), S6435 (5000X)
L5	159_025	347229747025	TVH 5	09-JUN-2007 04:53	S5934 (1000X), S6435 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1857.9	1330.7	1272.1	1323.7	1363.9	AVRG		6.99E-4		1429.7	17	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	30	2500	-7	10000	-11	25000	-7	50000	-5

Analyst: MJM Date: 06/13/07 Reviewer: CW Date: 06/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

347229747003

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 GCVOA Water
EPA 8015B

Inst : GC19 Name : gc19 TVH 159a
Calnum : 347229747003 Cal Date : 09-JUN-2007

ICV 347229747027 (159_027 09-JUN-2007) stds: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1429.7	1385.0	10000	9687	ng	-3	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19
Calnum : 347234019001
Units : ng

Name : gc19 TFT/BFB 162
Date : 11-JUN-2007 13:00
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	162_002	347234019002	TFT/BFB_1	11-JUN-2007 13:00	S5951 (5000X)
L2	162_003	347234019003	TFT/BFB_2	11-JUN-2007 13:38	S5952 (5000X)
L3	162_004	347234019004	TFT/BFB_3	11-JUN-2007 15:44	S5953 (5000X)
L4	162_005	347234019005	TFT/BFB_4	11-JUN-2007 16:31	S5954 (5000X)
L5	162_006	347234019006	TFT/BFB_5	11-JUN-2007 17:10	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1353.5	1387.6	1269.6	1254.2	1370.7	AVRG		7.54E-4		1327.1	5	0.995	20	
Bromofluorobenzene (FID)	A	770.11	758.41	704.69	714.44	768.09	AVRG		0.00135		743.15	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	2	225.0	5	450.0	-4	675.0	-5	950.0	3
Bromofluorobenzene (FID)	A	150.0	4	225.0	2	450.0	-5	675.0	-4	950.0	3

Analyst: MJM Date: 06/13/07 Reviewer: CW Date: 06/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195234 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : QC392179 IDF : 1.0
Seqnum : 347238118002.1 File : 164_002 Time : 13-JUN-2007 13:13
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347229747003	09-JUN-2007	1429.7	1392.5	10000	9740	ng	-3	15	u
Trifluorotoluene (FID)	A	347234019001	11-JUN-2007	1327.1	1575.3	450.0	534.2	ng	**19**	15	c+ u
Bromofluorobenzene (FID)	A	347234019001	11-JUN-2007	743.15	843.93	450.0	511.0	ng	14	15	u

CP 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV u=use

347238118002.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : TVH IDF : 1.0
Seqnum : 347238118014.1 File : 164_014 Time : 14-JUN-2007 00:30
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347229747003	09-JUN-2007	1429.7	1347.1	15000	14130	ng	-6	15	
Trifluorotoluene (FID)	A	347234019001	11-JUN-2007	1327.1	1670.7	450.0	566.5	ng	**26**	15	c+
Bromofluorobenzene (FID)	A	347234019001	11-JUN-2007	743.15	889.64	450.0	538.7	ng	**20**	15	c+

CP 06/14/07 [Bromofluorobenzene (FID) A]: Passes control limits. [general version]

CP 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

347238118014.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : TVH IDF : 1.0
Seqnum : 347238118015.1 File : 164_015 Time : 14-JUN-2007 01:08
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347229747003	09-JUN-2007	1429.7	1355.7	15000	14220	ng	-5	15	
Trifluorotoluene (FID)	A	347234019001	11-JUN-2007	1327.1	1613.1	450.0	547.0	ng	**22**	15	c+
Bromofluorobenzene (FID)	A	347234019001	11-JUN-2007	743.15	944.43	450.0	571.9	ng	**27**	15	c+

CP 06/14/07 [Bromofluorobenzene (FID) A]: Passes control limits. [general version]

CP 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

347238118015.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCVOA Water
EPA 8015B

Inst : GC19 Run Name : TVH IDF : 1.0
Seqnum : 347238118027.1 File : 164_027 Time : 14-JUN-2007 08:38
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	347229747003	09-JUN-2007	1429.7	1371.0	20000	19180	ng	-4	15	
Trifluorotoluene (FID)	A	347234019001	11-JUN-2007	1327.1	1701.3	450.0	576.9	ng	**28**	15	c+
Bromofluorobenzene (FID)	A	347234019001	11-JUN-2007	743.15	823.92	450.0	498.9	ng	11	15	

CP 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/18/07

+=high bias c=CCV

347238118027.1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347229747

Instrument : GC19 Begun : 06/08/07 13:07
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	159_001	X	IB			06/08/07 13:07	1.0	1	
002	159_002	X	CMARK			06/08/07 14:29	1.0	2 1	
003	159_003	CCV	BTXE			06/08/07 15:07	1.0	3 1	
004	159_004	CCV	TVH			06/08/07 15:45	1.0	4 1	
005	159_005	X	IB			06/08/07 16:22	1.0	1	
006	159_006	IB	CALIB			06/08/07 17:00	1.0	1	
007	159_007	X	ICAL			06/08/07 17:38	1.0	5 1	
008	159_008	ICAL	BTXE_1			06/08/07 18:15	1.0	5 1	
009	159_009	ICAL	BTXE_2			06/08/07 18:53	1.0	6 1	
010	159_010	ICAL	BTXE_3			06/08/07 19:30	1.0	6 1	
011	159_011	ICAL	BTXE_4			06/08/07 20:08	1.0	6 1	
012	159_012	ICAL	BTXE_5			06/08/07 20:45	1.0	7 1	
013	159_013	ICAL	BTXE_6			06/08/07 21:23	1.0	7 1	
014	159_014	ICAL	BTXE_7			06/08/07 22:00	1.0	7 1	
015	159_015	X	ICAL			06/08/07 22:38	1.0	8 1	
016	159_016	X	IB			06/08/07 23:16	1.0	1	
017	159_017	X	MBTXE			06/08/07 23:53	1.0	9 1	
018	159_018	X	MBTXE			06/09/07 00:31	1.0	9 1	
019	159_019	X	IB			06/09/07 01:08	1.0	1	
020	159_020	IB	CALIB			06/09/07 01:46	1.0	1	
021	159_021	ICAL	TVH 1			06/09/07 02:23	1.0	10 1	
022	159_022	ICAL	TVH 2			06/09/07 03:01	1.0	11 1	
023	159_023	ICAL	TVH 3			06/09/07 03:38	1.0	12 1	
024	159_024	ICAL	TVH 4			06/09/07 04:16	1.0	13 1	
025	159_025	ICAL	TVH 5			06/09/07 04:53	1.0	13 1	
026	159_026	X	IB			06/09/07 05:31	1.0	1	
027	159_027	ICV	TVH			06/09/07 06:08	1.0	4 1	
028	159_028	ICV	TVH			06/09/07 06:46	1.0	4 1	
029	159_029	X	IB			06/09/07 07:23	1.0	1	
030	159_030	CMARKER				06/09/07 08:01	1.0	2 1	
031	159_031	X	CMARK			06/11/07 07:54	1.0	2 1	
032	159_032	ICAL	MTBE_7			06/11/07 09:09	1.0	8 1	
033	159_033	X	IB			06/11/07 09:46	1.0	1	
034	159_034	ICV	MBTXE			06/11/07 10:24	1.0	9 1	

Analyst: MJM Date: 06/11/07 Reviewer: CW Date: 06/13/07

Standards used: 1=S6435 2=S6383 3=S5943 4=S6393 5=S6305 6=S6304 7=S6303 8=S6302 9=S6204 10=S5937 11=S5936 12=S5935 13=S5934

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347234019

Instrument : GC19 Begun : 06/11/07 12:19
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	162_001	IB	CALIB			06/11/07 12:19	1.0	1
002	162_002	ICAL	TFT/BFB_1			06/11/07 13:00	1.0	2
003	162_003	ICAL	TFT/BFB_2			06/11/07 13:38	1.0	3
004	162_004	ICAL	TFT/BFB_3			06/11/07 15:44	1.0	4
005	162_005	ICAL	TFT/BFB_4			06/11/07 16:31	1.0	5
006	162_006	ICAL	TFT/BFB_5			06/11/07 17:10	1.0	6

Analyst: MJM Date: 06/13/07 Reviewer: CW Date: 06/13/07

Standards used: 1=S6435 2=S5951 3=S5952 4=S5953 5=S5954 6=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 347238118

Instrument : GC19 Begun : 06/13/07 12:35
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164_001	X	CMARK			06/13/07 12:35	1.0	1 2	
002	164_002	CCV/LCS	QC392179	Water	126272	06/13/07 13:13	1.0	3 2	
003	164_003	X	CCV			06/13/07 13:50	1.0	4 2	
004	164_004	X	CCV			06/13/07 16:09	1.0	4 2	
005	164_005	BLANK	QC392178	Water	126272	06/13/07 17:07	1.0	2	
006	164_006	MS	QC392180	Water	126272	06/13/07 19:30	1.0	3 2	
007	164_007	MSD	QC392181	Water	126272	06/13/07 20:07	1.0	3 2	
008	164_008	MS	QC392182	Water	126272	06/13/07 20:45	1.0	3 2	
009	164_009	MSD	QC392183	Water	126272	06/13/07 21:22	1.0	3 2	
010	164_010	MSS	195234-001	Water	126272	06/13/07 22:00	1.0	2	
011	164_011	SAMPLE	195234-002	Water	126272	06/13/07 22:37	1.0	2	
012	164_012	MSS	195234-003	Water	126272	06/13/07 23:15	1.0	2	
013	164_013	SAMPLE	195234-004	Water	126272	06/13/07 23:53	1.0	2	
014	164_014	CCV	TVH			06/14/07 00:30	1.0	3 2	
015	164_015	CCV	TVH			06/14/07 01:08	1.0	3 2	
016	164_016	X	CMARK			06/14/07 01:45	1.0	1 2	
017	164_017	SAMPLE	195234-005	Water	126272	06/14/07 02:23	1.0	2	
018	164_018	SAMPLE	195317-002	Water	126272	06/14/07 03:00	1.0	2	
019	164_019	SAMPLE	195317-003	Water	126272	06/14/07 03:38	1.0	2	
020	164_020	SAMPLE	195317-004	Water	126272	06/14/07 04:15	1.0	2	
021	164_021	SAMPLE	195317-005	Water	126272	06/14/07 04:53	1.0	2	
022	164_022	SAMPLE	195350-002	Water	126272	06/14/07 05:30	1.0	2	
023	164_023	SAMPLE	195350-003	Water	126272	06/14/07 06:08	1.0	2	
024	164_024	SAMPLE	195350-004	Water	126272	06/14/07 06:46	1.0	2	
025	164_025	SAMPLE	195350-005	Water	126272	06/14/07 07:23	1.0	2	
026	164_026	SAMPLE	195350-006	Water	126272	06/14/07 08:01	1.0	2	
027	164_027	CCV	TVH			06/14/07 08:38	1.0	3 2	
028	164_028	SAMPLE	195350-007	Water	126272	06/14/07 09:34	1.0	2	
029	164_029	CCV	TVH			06/14/07 11:27	1.0	3 2	

Analyst: CP Date: 06/14/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S6393 4=S5943

REPORTING SUMMARY FOR 195234 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
195234-001	GC19	06/13/07 22:00	1.0	+		+	+	
195234-002	GC19	06/13/07 22:37	1.0	+		+	+	
195234-003	GC19	06/13/07 23:15	1.0	+		+	+	
195234-004	GC19	06/13/07 23:53	1.0	+		+	+	
195234-005	GC19	06/14/07 02:23	1.0	+		+	+	
QC392178	GC19	06/13/07 17:07	1.0	+		+	+	
QC392179	GC19	06/13/07 13:13	1.0	+		+	+	
QC392180	GC19	06/13/07 19:30	1.0	+		+	+	
QC392181	GC19	06/13/07 20:07	1.0	+		+	+	
QC392182	GC19	06/13/07 20:45	1.0	+		+	+	
QC392183	GC19	06/13/07 21:22	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/12/07
Batch#:	126206	Analyzed:	06/13/07

Field ID:	231GW20	Lab ID:	195234-001
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	231GW06	Lab ID:	195234-002
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	111	65-135

Field ID:	231GW13	Lab ID:	195234-003
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

ND= Not Detected
RL= Reporting Limit

43.0

00025

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/12/07
Batch#:	126206	Analyzed:	06/13/07

Field ID: DUP0605072A Lab ID: 195234-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	65-135

Field ID: DUP0605072B Lab ID: 195234-005
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC391881

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	105	65-135

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391882	Batch#:	126206
Matrix:	Water	Prepared:	06/12/07
Units:	ug/L	Analyzed:	06/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,105	84	65-135

Surrogate	%REC	Limits
Hexacosane	80	65-135

44.0

00027

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW20	Batch#:	126206
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC391883

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<22.40	2,500	1,852	74	65-135

Surrogate	%REC	Limits
Hexacosane	88	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC391884

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	1,964	79	65-135	6	35

Surrogate	%REC	Limits
Hexacosane	91	65-135

RPD= Relative Percent Difference

45.0

00029

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW13	Batch#:	126206
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC391885

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<22.40	2,500	1,826	73	65-135

Surrogate	%REC	Limits
Hexacosane	89	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC391886

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,107	84	65-135	14	35

Surrogate	%REC	Limits
Hexacosane	98	65-135

RPD= Relative Percent Difference

46.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	-3	250.0	3	500.0	7	1000	6	5000	-13

Analyst: MCH Date: 01/29/07 Reviewer: CW Date: 02/27/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

117037956001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	-4	100.0	-4	500.0	-3	1000	19	5000	-6	7500	-2

Analyst: MCH Date: 02/12/07 Reviewer: CP Date: 02/12/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

117061448001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date : 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117102790001
Units : mg/L

Name : Hexacosane
Date : 12-MAR-2007 20:05
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	071a023	117102790023	HEX_10	12-MAR-2007 20:05	S4640
L2	071a024	117102790024	HEX_25	12-MAR-2007 20:33	S4641
L3	071a025	117102790025	HEX_50	12-MAR-2007 21:01	S5402
L4	071a026	117102790026	HEX_100	12-MAR-2007 21:29	S4644
L5	071a027	117102790027	HEX_200	12-MAR-2007 21:57	S4645
L6	071a033	117102790033	HEX_5	13-MAR-2007 12:16	S4639

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60718	67049	65965	69806	68232	69707	AVRG		1.49E-5		66913	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	10.00	-9	25.00	0	50.00	-1	100.0	4	200.0	2	5.000	4

Analyst: MDW Date: 03/13/07 Reviewer: CW Date: 03/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

117102790001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014001
Units : mg/L

Name : DSL
Date : 18-APR-2007 21:42
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b028	167156014028	DSL_10	18-APR-2007 21:42	S5413
L2	108b029	167156014029	DSL_100	18-APR-2007 22:10	S5414
L3	108b030	167156014030	DSL_500	18-APR-2007 22:38	S5416
L4	108b031	167156014031	DSL_1000	18-APR-2007 23:06	S5417
L5	108b032	167156014032	DSL_5000	18-APR-2007 23:34	S5411
L6	108b033	167156014033	DSL_7500	19-APR-2007 00:02	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	57791	53835	53110	54128	53620	50175	AVRG		1.86E-5		53776	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	7	100.0	0	500.0	-1	1000	1	5000	0	7500	-7

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

167156014001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 167156014001

Name : DSL
Cal Date : 18-APR-2007

ICV 167156014035 (108b035 19-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	53776	60453	500.0	562.1	mg/L	12	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014002
Units : mg/L

Name : Hexacosane
Date : 19-APR-2007 05:34
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b045	167156014045	HEX_5	19-APR-2007 05:34	S5751
L2	108b046	167156014046	HEX_10	19-APR-2007 06:02	S5752
L3	108b047	167156014047	HEX_25	19-APR-2007 08:04	S5753
L4	108b048	167156014048	HEX_50	19-APR-2007 08:31	S5754
L5	108b049	167156014049	HEX_100	19-APR-2007 08:59	S5755
L6	108b050	167156014050	HEX_200	19-APR-2007 09:27	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60849	59594	60334	60123	58538	58399	AVRG		1.68E-5		59639	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	2	10.00	0	25.00	1	50.00	1	100.0	-2	200.0	-2

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118001
Units : mg/L

Name : DSL
Date : 16-APR-2007 22:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a010	177153118010	DSL_10	16-APR-2007 22:16	S5413
L2	106a011	177153118011	DSL_100	16-APR-2007 22:43	S5414
L3	106a012	177153118012	DSL_500	16-APR-2007 23:10	S5416
L4	106a013	177153118013	DSL_1000	16-APR-2007 23:38	S5417
L5	106a014	177153118014	DSL_5000	17-APR-2007 00:04	S5411
L6	106a015	177153118015	DSL_7500	17-APR-2007 00:32	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	71898	64898	73238	68474	66312	67917	AVRG		1.45E-5		68789	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	5	100.0	-6	500.0	6	1000	0	5000	-4	7500	-1

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177153118001

Name : DSL
Cal Date : 16-APR-2007

ICV 177153118017 (106a017 17-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	68789	68119	500.0	495.1	mg/L	-1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118002
Units : mg/L

Name : MO
Date : 17-APR-2007 02:47
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a020	177153118020	MO_50	17-APR-2007 02:47	S5523
L2	106a021	177153118021	MO_250	17-APR-2007 03:14	S5524
L3	106a022	177153118022	MO_500	17-APR-2007 03:41	S5525
L4	106a023	177153118023	MO_1000	17-APR-2007 04:09	S5526
L5	106a024	177153118024	MO_5000	17-APR-2007 04:35	S5522
L6	106a025	177153118025	MO_7500	17-APR-2007 05:02	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	42522	55240	53936	51516	47937	46757	AVRG		2.01E-5		49651	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-14	250.0	11	500.0	9	1000	4	5000	-3	7500	-6

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118003
Units : mg/L

Name : Hexacosane
Date : 17-APR-2007 05:57
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a027	177153118027	HEX_5	17-APR-2007 05:57	S5751
L2	106a028	177153118028	HEX_10	17-APR-2007 06:24	S5752
L3	106a029	177153118029	HEX_25	17-APR-2007 06:52	S5753
L4	106a030	177153118030	HEX_50	17-APR-2007 07:19	S5754
L5	106a031	177153118031	HEX_100	17-APR-2007 07:46	S5755
L6	106a032	177153118032	HEX_200	17-APR-2007 08:14	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	85626	79939	79901	77537	75605	82966	AVRG		1.25E-5		80262	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	7	10.00	0	25.00	0	50.00	-3	100.0	-6	200.0	3

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117236652004.1
Standards: S6346

Run Name : DSL_500
File : 164a004

IDF : 1.0
Time : 13-JUN-2007 09:35

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	59167	500.0	507.9	mg/L	2	15	
Hexacosane	117102790001	12-MAR-2007	66913	72883	50.00	54.46	mg/L	9	15	

Analyst: ATL Date: 06/13/07 Reviewer: CW Date: 06/13/07

117236652004.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117236652005 File : 164a005 Time : 13-JUN-2007 10:03
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	44514	500.0	536.9	mg/L	7	15	
Hexacosane	117102790001	12-MAR-2007	66913	76378	50.00	57.07	mg/L	14	15	

Analyst: ATL Date: 06/13/07 Reviewer: CW Date: 06/13/07

117236652005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC11A Run Name : DSL_250 IDF : 1.0
Seqnum : 117236652019 File : 164a019 Time : 13-JUN-2007 18:10
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	59778	250.0	256.6	mg/L	3	15	
Hexacosane	117102790001	12-MAR-2007	66913	71145	50.00	53.16	mg/L	6	15	

Analyst: ZA Date: 06/13/07 Reviewer: DLM Date: 06/14/07

117236652019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117236652020 File : 164a020 Time : 13-JUN-2007 18:38
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	40210	500.0	485.0	mg/L	-3	15	
Hexacosane	117102790001	12-MAR-2007	66913	69527	50.00	51.95	mg/L	4	15	

Analyst: ZA Date: 06/13/07 Reviewer: DLM Date: 06/14/07

117236652020

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 167236640004 File : 164b004 Time : 13-JUN-2007 09:23
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	50813	500.0	472.4	mg/L	-6	15	
Hexacosane	167156014002	19-APR-2007	59639	51971	50.00	43.57	mg/L	-13	15	

Analyst: DLM Date: 06/13/07 Reviewer: CW Date: 06/13/07

167236640004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC15B
Seqnum : 167236640021
Cal : 167156014002
Standards: S5778

Run Name : HYFL_1250
File : 164b021
Caldate : 19-APR-2007

IDF : 1.0
Time : 13-JUN-2007 17:54

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Hexacosane	59639	52167	50.00	43.74	mg/L	-13	15	

Analyst: ZA Date: 06/13/07 Reviewer: DLM Date: 06/14/07

167236640021

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 167236640022 File : 164b022 Time : 13-JUN-2007 18:22
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	53781	1000	1000	mg/L	0	15	
Hexacosane	167156014002	19-APR-2007	59639	51610	50.00	43.27	mg/L	-13	15	

Analyst: ZA Date: 06/13/07 Reviewer: DLM Date: 06/14/07

167236640022

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 177236639019 File : 164a019 Time : 13-JUN-2007 16:27
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	67115	250.0	243.9	mg/L	-2	15	
Hexacosane	177153118003	17-APR-2007	80262	85983	50.00	53.56	mg/L	7	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

177236639019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177236639020
Standards: S6046

Run Name : MO_500
File : 164a020

IDF : 1.0
Time : 13-JUN-2007 16:54

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	50494	500.0	508.5	mg/L	2	15	
Hexacosane	177153118003	17-APR-2007	80262	82290	50.00	51.26	mg/L	3	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

177236639020

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 177236639034 File : 164a034 Time : 13-JUN-2007 23:19
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	61236	1000	890.2	mg/L	-11	15	
Hexacosane	177153118003	17-APR-2007	80262	78372	50.00	48.82	mg/L	-2	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

177236639034

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177236639035 File : 164a035 Time : 13-JUN-2007 23:46
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	49735	500.0	500.8	mg/L	0	15	
Hexacosane	177153118003	17-APR-2007	80262	82550	50.00	51.43	mg/L	3	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	042a001	X	IB			02/11/07 16:08	1.0		
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1	
003	042a003	X	MO_500			02/11/07 17:03	1.0	2	
004	042a004	X	MO_500			02/11/07 17:47	1.0	2	
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2	
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1	
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1	
008	042a008	X	IB			02/11/07 20:45	1.0		
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3	
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4	
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5	
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6	
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7	
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8	
015	042a015	IB	CALIB			02/12/07 00:01	1.0		
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9	
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9	
018	042a018	X	IB			02/12/07 01:24	1.0		
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10	

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117102790

Instrument : GC11A
Method : EPA 8015B

Begun : 03/12/07 09:10
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	071a001	X	PRIMER				03/12/07 09:10	1.0		
002	071a002	X	IB				03/12/07 09:38	1.0		
003	071a003	X	DSL_500				03/12/07 10:06	1.0	1	
004	071a004	CCV	DSL_500				03/12/07 10:34	1.0	1	
005	071a005	CCV	MO_500				03/12/07 11:02	1.0	2	
006	071a006	CCV	JET_250				03/12/07 11:51	1.0	3	
007	071a007	SAMPLE	193189-007	S	Water	122934	03/12/07 12:19	1.0		
008	071a008	SAMPLE	193189-006	S	Water	122934	03/12/07 12:47	1.0		
009	071a009	SAMPLE	193189-005	S	Water	122934	03/12/07 13:15	1.0		
010	071a010	SAMPLE	193189-004	S	Water	122934	03/12/07 13:43	1.0		
011	071a011	SAMPLE	193189-003	S	Water	122934	03/12/07 14:12	1.0		
012	071a012	X	IB				03/12/07 14:40	1.0		
013	071a013	SAMPLE	193189-002	S	Water	122934	03/12/07 15:08	1.0		
014	071a014	SAMPLE	193189-001	S	Water	122934	03/12/07 15:36	1.0		
015	071a015	SAMPLE	193190-001	S	Water	122934	03/12/07 16:05	1.0		
016	071a016	X	DSL_1000				03/12/07 16:33	1.0	4	
017	071a017	CCV	MO_500				03/12/07 17:01	1.0	2	
018	071a018	CCV	JET_250				03/12/07 17:29	1.0	3	
019	071a019	CCV	DSL_1000				03/12/07 17:57	1.0	4	
020	071a020	CCV	DSL_1000				03/12/07 18:37	1.0	4	
021	071a021	IB	CALIB				03/12/07 19:09	1.0		
022	071a022	X	HEX_5				03/12/07 19:37	1.0	5	
023	071a023	ICAL	HEX_10				03/12/07 20:05	1.0	6	
024	071a024	ICAL	HEX_25				03/12/07 20:33	1.0	7	
025	071a025	ICAL	HEX_50				03/12/07 21:01	1.0	8	
026	071a026	ICAL	HEX_100				03/12/07 21:29	1.0	9	
027	071a027	ICAL	HEX_200				03/12/07 21:57	1.0	10	
028	071a028	IB	CALIB				03/12/07 22:25	1.0		
029	071a029	CCV	DSL_1000				03/12/07 22:52	1.0	4	
030	071a030	CCV	MO_500				03/12/07 23:20	1.0	2	
031	071a031	X	CCV				03/12/07 23:48	1.0	4	
032	071a032	X	CCV				03/13/07 00:16	1.0	2	
033	071a033	ICAL	HEX_5				03/13/07 12:16	1.0	5	

Standards used: 1=S5517 2=S5603 3=S4560 4=S5259 5=S4639 6=S4640 7=S4641 8=S5402 9=S4644 10=S4645

0005

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117236652

Instrument : GC11A
Method : EPA 8015B

Begun : 06/13/07 08:12
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164a001	X	PRIMER				06/13/07 08:12	1.0		
002	164a002	X	IB				06/13/07 08:39	1.0		
003	164a003	CMARKER	C8-C50				06/13/07 09:07	1.0	1	
004	164a004	CCV	DSL_500				06/13/07 09:35	1.0	2	
005	164a005	CCV	MO_500				06/13/07 10:03	1.0	3	
006	164a006	CCV	JET_250				06/13/07 11:34	1.0	4	
007	164a007	BLANK	QC391881	S	Water	126206	06/13/07 12:12	1.0		
008	164a008	SAMPLE	195316-002	S	Water	126206	06/13/07 12:40	1.0		
009	164a009	SAMPLE	195354-001	S	Water	126206	06/13/07 13:08	5.0		14:BUNKC:12-40=230000
010	164a010	SAMPLE	195354-001	S	Water	126206	06/13/07 13:59	100.0		5:BUNKC:12-40=11000
011	164a011	X	IB				06/13/07 14:27	1.0		
012	164a012	SAMPLE	195354-001	S	Water	126206	06/13/07 14:55	200.0		2:BUNKC:12-40=6600
013	164a013	SAMPLE	195234-005	S	Water	126206	06/13/07 15:23	1.0		
014	164a014	SAMPLE	195267-002	S	Water	126206	06/13/07 15:51	1.0		
015	164a015	SAMPLE	195267-003	S	Water	126206	06/13/07 16:19	1.0		
016	164a016	SAMPLE	195267-004	S	Water	126206	06/13/07 16:47	1.0		
017	164a017	SAMPLE	195267-005	S	Water	126206	06/13/07 17:14	1.0		
018	164a018	X	IB				06/13/07 17:42	1.0		
019	164a019	CCV	DSL_250				06/13/07 18:10	1.0	5	
020	164a020	CCV	MO_500				06/13/07 18:38	1.0	3	
021	164a021	X	JET_250				06/13/07 19:06	1.0	4	
022	164a022	X	CCV				06/13/07 19:34	1.0	5	
023	164a023	X	CMARKER				06/13/07 20:02	1.0	1	
024	164a024	CCV	JET_250				06/14/07 09:08	1.0	4	

Standards used: 1=S4049 2=S6346 3=S6046 4=S5735 5=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	108b001	X	PRIMER				04/18/07 08:14	1.0		
002	108b002	X	IB				04/18/07 08:41	1.0		
003	108b003	CCV	DSL_500				04/18/07 09:09	1.0	1	
004	108b004	CCV	MO_500				04/18/07 09:37	1.0	2	
005	108b005	X	194211-014	S	Soil	124276	04/18/07 10:07	1.0		
006	108b006	SAMPLE	194211-013	S	Soil	124276	04/18/07 10:35	20.0		3:BUNKC:12-40=16000
007	108b007	MS	QC384076	S	Soil	124276	04/18/07 11:02	1.0		
008	108b008	MSD	QC384077	S	Soil	124276	04/18/07 11:30	1.0		
009	108b009	SAMPLE	194094-006	S	Water	124180	04/18/07 11:58	1.0		
010	108b010	SAMPLE	194094-007	S	Water	124180	04/18/07 12:26	1.0		
011	108b011	SAMPLE	194094-008	S	Water	124180	04/18/07 12:53	1.0		
012	108b012	X	IB				04/18/07 13:28	1.0		
013	108b013	BLANK	QC384097	S	Soil	124282	04/18/07 13:56	1.0		
014	108b014	SAMPLE	194154-001	S	Soil	124282	04/18/07 14:23	1.0		
015	108b015	SAMPLE	194154-002	S	Soil	124282	04/18/07 14:51	1.0		
016	108b016	X	DSL_1000				04/18/07 15:19	1.0	3	
017	108b017	CCV	MO_500				04/18/07 15:47	1.0	2	
018	108b018	CCV	DSL_1000				04/18/07 16:14	1.0	3	
019	108b019	X	MO_500				04/18/07 17:05	1.0	2	
020	108b020	XCMARKER	C10-C50				04/18/07 18:00	1.0	4	
021	108b021	X	MO_500				04/18/07 18:28	1.0	2	
022	108b022	CMARKER	C10-C50				04/18/07 18:56	1.0	4	
023	108b023	CCV	MO_500				04/18/07 19:24	1.0	2	
024	108b024	CCV	DSL_1000				04/18/07 19:52	1.0	3	2:BUNKC:12-40=5900
025	108b025	CCV	MO_500				04/18/07 20:19	1.0	2	
026	108b026	CCV	DSL_1000				04/18/07 20:47	1.0	3	
027	108b027	IB	CALIB				04/18/07 21:15	1.0		
028	108b028	ICAL	DSL_10				04/18/07 21:42	1.0	5	
029	108b029	ICAL	DSL_100				04/18/07 22:10	1.0	6	
030	108b030	ICAL	DSL_500				04/18/07 22:38	1.0	7	
031	108b031	ICAL	DSL_1000				04/18/07 23:06	1.0	8	
032	108b032	ICAL	DSL_5000				04/18/07 23:34	1.0	9	
033	108b033	ICAL	DSL_7500				04/19/07 00:02	1.0	10	
034	108b034	IB	CALIB				04/19/07 00:29	1.0		
035	108b035	ICV	DSL_500				04/19/07 00:57	1.0	11	
036	108b036	X	ICV				04/19/07 01:25	1.0	11	
037	108b037	IB	CALIB				04/19/07 01:52	1.0		
038	108b038	ICAL	MO_50				04/19/07 02:20	1.0	12	
039	108b039	ICAL	MO_250				04/19/07 02:48	1.0	13	
040	108b040	ICAL	MO_500				04/19/07 03:15	1.0	14	
041	108b041	X	MO_1000				04/19/07 03:43	1.0	15	
042	108b042	ICAL	MO_5000				04/19/07 04:11	1.0	16	
043	108b043	ICAL	MO_7500				04/19/07 04:39	1.0	17	
044	108b044	IB	CALIB				04/19/07 05:06	1.0		
045	108b045	ICAL	HEX_5				04/19/07 05:34	1.0	18	
046	108b046	ICAL	HEX_10				04/19/07 06:02	1.0	19	
047	108b047	ICAL	HEX_25				04/19/07 08:04	1.0	20	
048	108b048	ICAL	HEX_50				04/19/07 08:31	1.0	21	
049	108b049	ICAL	HEX_100				04/19/07 08:59	1.0	22	
050	108b050	ICAL	HEX_200				04/19/07 09:27	1.0	23	
051	108b051	IB	CALIB				04/19/07 09:55	1.0		
052	108b052	ICAL	MO_1000				04/19/07 14:41	1.0	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

DLM 04/19/07 : MO ICAL 1000 point was run at the end due to a mis-inject

Standards used: 1=S5731 2=S5734 3=S5732 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S5751 19=S5752 20=S5753 21=S5754 22=S5755 23=S5756

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167236640

Instrument : GC15B
Method : EPA 8015B

Begun : 06/13/07 08:00
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164b001	X	PRIMER				06/13/07 08:00	1.0		
002	164b002	X	IB				06/13/07 08:27	1.0		
003	164b003	X	CMARKER				06/13/07 08:55	1.0	1	
004	164b004	CCV	DSL_500				06/13/07 09:23	1.0	2	
005	164b005	CCV	MO_500				06/13/07 09:51	1.0	3	
006	164b006	CCV	HYFL_1250				06/13/07 10:20	1.0	4	
007	164b007	BLANK	QC391804		Soil	126190	06/13/07 10:50	1.0		
008	164b008	SAMPLE	195330-007		Soil	126190	06/13/07 11:17	5.0		2:BUNKC:12-40=11000
009	164b009	X	IB				06/13/07 11:45	1.0		
010	164b010	LCS	QC391882	S	Water	126206	06/13/07 12:13	1.0		
011	164b011	SAMPLE	195316-016	S	Water	126206	06/13/07 12:40	1.0		
012	164b012	SAMPLE	195241-001	S	Water	126168	06/13/07 13:44	1.0		
013	164b013	SAMPLE	195241-004	S	Water	126168	06/13/07 14:12	1.0		
014	164b014	SAMPLE	195241-005	S	Water	126168	06/13/07 14:40	1.0		
015	164b015	SAMPLE	195241-006	S	Water	126168	06/13/07 15:07	1.0		
016	164b016	SAMPLE	195247-001	S	Water	126168	06/13/07 15:35	1.0		
017	164b017	SAMPLE	195247-002	S	Water	126168	06/13/07 16:03	1.0		
018	164b018	X	IB				06/13/07 16:31	1.0		
019	164b019	X	CCV				06/13/07 16:59	1.0	5	
020	164b020	X	CCV				06/13/07 17:26	1.0	3	
021	164b021	CCV	HYFL_1250				06/13/07 17:54	1.0	4	
022	164b022	CCV	DSL_1000				06/13/07 18:22	1.0	5	
023	164b023	CCV	MO_500				06/13/07 18:49	1.0	3	
024	164b024	X	CMARKER				06/13/07 19:17	1.0	1	
025	164b025	X	CMARKER				06/13/07 19:55	1.0	1	

Standards used: 1=S4049 2=S6346 3=S6046 4=S5778 5=S6347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177153118

Instrument : GC17A
Method : EPA 8015B

Begun : 04/16/07 07:58
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	106a001	X	PRIMER			04/16/07 07:58	1.0		
002	106a002	X	IB			04/16/07 08:25	1.0		
003	106a003	X	DSL_500			04/16/07 08:53	1.0	1	
004	106a004	X	MO_500			04/16/07 09:20	1.0	2	
005	106a005	X	IB			04/16/07 10:07	1.0		
006	106a006	X				04/16/07 10:34	1.0	3	
007	106a007	IB	CALIB			04/16/07 20:54	1.0		
008	106a008	CMARKER	C8-C50			04/16/07 21:22	1.0	3	
009	106a009	IB	CALIB			04/16/07 21:49	1.0		
010	106a010	ICAL	DSL_10			04/16/07 22:16	1.0	4	
011	106a011	ICAL	DSL_100			04/16/07 22:43	1.0	5	
012	106a012	ICAL	DSL_500			04/16/07 23:10	1.0	6	
013	106a013	ICAL	DSL_1000			04/16/07 23:38	1.0	7	
014	106a014	ICAL	DSL_5000			04/17/07 00:04	1.0	8	
015	106a015	ICAL	DSL_7500			04/17/07 00:32	1.0	9	
016	106a016	IB	CALIB			04/17/07 00:59	1.0		
017	106a017	ICV	DSL_500			04/17/07 01:26	1.0	10	
018	106a018	X	ICV			04/17/07 01:53	1.0	10	
019	106a019	IB	CALIB			04/17/07 02:20	1.0		
020	106a020	ICAL	MO_50			04/17/07 02:47	1.0	11	
021	106a021	ICAL	MO_250			04/17/07 03:14	1.0	12	
022	106a022	ICAL	MO_500			04/17/07 03:41	1.0	13	
023	106a023	ICAL	MO_1000			04/17/07 04:09	1.0	14	
024	106a024	ICAL	MO_5000			04/17/07 04:35	1.0	15	
025	106a025	ICAL	MO_7500			04/17/07 05:02	1.0	16	
026	106a026	IB	CALIB			04/17/07 05:30	1.0		
027	106a027	ICAL	HEX_5			04/17/07 05:57	1.0	17	
028	106a028	ICAL	HEX_10			04/17/07 06:24	1.0	18	
029	106a029	ICAL	HEX_25			04/17/07 06:52	1.0	19	
030	106a030	ICAL	HEX_50			04/17/07 07:19	1.0	20	
031	106a031	ICAL	HEX_100			04/17/07 07:46	1.0	21	
032	106a032	ICAL	HEX_200			04/17/07 08:14	1.0	22	
033	106a033	IB	CALIB			04/17/07 08:41	1.0		
034	106a034	ICAL	JP5_10			04/17/07 09:09	1.0	23	
035	106a035	ICAL	JP5_100			04/17/07 09:36	1.0	24	
036	106a036	ICAL	JP5_500			04/17/07 10:04	1.0	25	
037	106a037	ICAL	JP5_1500			04/17/07 10:31	1.0	26	
038	106a038	ICAL	JP5_5000			04/17/07 10:58	1.0	27	
039	106a039	IB	CALIB			04/17/07 11:25	1.0		

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Standards used: 1=S5731 2=S5734 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S5521 17=S5751 18=S5752 19=S5753 20=S5754 21=S5755 22=S5756 23=S5858 24=S5857 25=S5856 26=S5855 27=S5853

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177236639

Instrument : GC17A
Method : EPA 8015B

Begun : 06/13/07 07:59
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164a001	X	PRIMER				06/13/07 07:59	1.0		
002	164a002	X	IB				06/13/07 08:27	1.0		
003	164a003	X	CMARKER				06/13/07 08:54	1.0	1	
004	164a004	CCV	DSL_500				06/13/07 09:21	1.0	2	
005	164a005	CCV	MO_500				06/13/07 09:49	1.0	3	
006	164a006	SAMPLE	195215-013	S	Soil	126127	06/13/07 10:21	2.0		2:BUNKC:12-50=14000
007	164a007	SAMPLE	195269-007	S	Soil	126190	06/13/07 10:49	5.0		2:BUNKC:12-40=9000
008	164a008	SAMPLE	195269-007		Soil	126190	06/13/07 11:25	5.0		2:BUNKC:12-40=10000
009	164a009	X	IB				06/13/07 11:52	1.0		
010	164a010	MSS	195269-002	S	Soil	126190	06/13/07 12:20	10.0		3:BUNKC:12-40=16000
011	164a011	SAMPLE	195269-011	S	Soil	126190	06/13/07 12:47	20.0		3:BUNKC:12-40=15000
012	164a012	SAMPLE	195269-003	S	Soil	126190	06/13/07 13:15	40.0		2:BUNKC:12-40=13000
013	164a013	X	IB				06/13/07 13:42	1.0		
014	164a014	SAMPLE	195247-004	S	Water	126168	06/13/07 14:10	1.0		
015	164a015	SAMPLE	195247-005	S	Water	126168	06/13/07 14:37	1.0		
016	164a016	SAMPLE	195344-001	S	Water	126206	06/13/07 15:05	1.0		
017	164a017	SAMPLE	195344-002	S	Water	126206	06/13/07 15:32	1.0		
018	164a018	X	IB				06/13/07 16:00	1.0		
019	164a019	CCV	DSL_250				06/13/07 16:27	1.0	4	
020	164a020	CCV	MO_500				06/13/07 16:54	1.0	3	
021	164a021	MSS	195234-001	S	Water	126206	06/13/07 17:23	1.0		
022	164a022	MS	QC391883	S	Water	126206	06/13/07 17:50	1.0		
023	164a023	MSD	QC391884	S	Water	126206	06/13/07 18:18	1.0		
024	164a024	MSS	195234-003	S	Water	126206	06/13/07 18:45	1.0		
025	164a025	MS	QC391885	S	Water	126206	06/13/07 19:12	1.0		
026	164a026	MSD	QC391886	S	Water	126206	06/13/07 19:40	1.0		
027	164a027	X	IB				06/13/07 20:07	1.0		
028	164a028	BLANK	QC391881		Water	126206	06/13/07 20:35	1.0		
029	164a029	SAMPLE	195329-001		Water	126206	06/13/07 21:02	1.0		
030	164a030	SAMPLE	195234-002	S	Water	126206	06/13/07 21:29	1.0		
031	164a031	SAMPLE	195234-004	S	Water	126206	06/13/07 21:57	1.0		
032	164a032	X	IB				06/13/07 22:24	1.0		
033	164a033	X	CMARKER				06/13/07 22:51	1.0	1	
034	164a034	CCV	DSL_1000				06/13/07 23:19	1.0	5	
035	164a035	CCV	MO_500				06/13/07 23:46	1.0	3	
036	164a036	X	CCV				06/14/07 00:13	1.0	5	
037	164a037	X	CCV				06/14/07 00:41	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6345 5=S6347

REPORTING SUMMARY FOR 195234 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195234-001	GC17A	06/13/07 17:23	1.0	+	+	+	
195234-002	GC17A	06/13/07 21:29	1.0	+	+	+	
195234-003	GC17A	06/13/07 18:45	1.0	+	+	+	
195234-004	GC17A	06/13/07 21:57	1.0	+	+	+	
195234-005	GC11A	06/13/07 15:23	1.0	+	+	+	
QC391881	GC11A	06/13/07 12:12	1.0	+	+	+	
QC391881	GC17A	06/13/07 20:35	1.0				
QC391882	GC15B	06/13/07 12:13	1.0	+		+	
QC391882	GC14B	06/13/07 23:39	1.0				
QC391883	GC17A	06/13/07 17:50	1.0	+		+	
QC391884	GC17A	06/13/07 18:18	1.0	+		+	
QC391885	GC17A	06/13/07 19:12	1.0	+		+	
QC391886	GC17A	06/13/07 19:40	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 126206
Started By : JOM
Method : 3520C
Spike #1 ID : S6349

Prep Date : 12-JUN-2007
SOP Version : TEH_3520_rv11
Spike #2 ID : S6469

Analysis : TEH
Finished By : JLM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195234-001		Water	500	2.5	1	0.005	4	.5			3630C	TEHM	MSS
195234-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195234-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	MSS
195234-004		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
195234-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195267-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195267-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195267-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195267-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195267-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195316-002		Water	450	2.5	1	0.005556	8	.5			3630C	TEH	
195316-016		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
195321-009		Water	500	2.5	1	0.005	7	.5				TEHM	
195329-001		Water	500	2.5	1	0.005	7	.5				TEHM	
195344-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195344-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195354-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC391881	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC391882	LCS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC391883	MS	Water	500	2.5	1	0.005	4	.5	.5		3630C		
QC391884	MSD	Water	500	2.5	1	0.005	4	.5	.5		3630C		
QC391885	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC391886	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C		

MMP 06/14/07 : 195316-002 volume 450mL, noted as re-extract with sediment.

Analyst: DLM Date: 06/14/07 Reviewer: MMP Date: 06/14/07

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 126206
LIMS Analysis: TEHM
Date Extracted: 12 June 07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195234-001 AF	500	4	2.5	X	MSS
02 K		7			
03 AF		7			MSS
04 K		5			
05 K		7			
195267-002 H					
03					
04					
05					
06					
195316-002 D	450	8			re-x sediment
16 D	500	7			
195329-001 A					
195344-001 D				X	
02 D					
MB QC391881		NA			
LCS 82					
MS 83		4			195234-001AE
MSD 84		4			
MS 85		7			195234-003 AE
MSD 86		7			
195354-001 E	500	7		X	* contained free product, very dark mix extract
195321-009F	500	7			**
					JLM 6/13/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S6349D	JLM 6/12/07
0.5 mL of TEH_SP was added to all spikes	S6469A	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM47	
Extraction Start Time:	1220/1635*/1850**	
Extraction End Time:	0715/1040*/1305**	JLM 6/13/07
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46283706	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	hood ✓	

Jessie Mee 6/12/07
Extraction Chemist **Date**

Contined from Page ___
Continued on Page ___

6/13/07
Reviewed by **Date**

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 6/13/07

Benchbook # **BK 2520**
Page 5

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195234-001	126206	1.0	1.0	MSS
-002				
-003				MSS
-004				
-005				
195267-002				
-003				
-004				
-005				
-006				
195316-002				re-x
-016				
195344-001				
-002				
195354-001				very dark thick extract
MB QC391881				
LCS 2				
MS 3				
MSD 4				
MS 5				
MSD 6				

RFW 6/13/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	N/A	JLM 6/13/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP860S	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47092	
Concentrated to volumes as noted above	✓	

6/13/07
Extraction Chemist / Date

Continued from page —
Continued on page —

6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW20	Batch#:	126137
Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW06	Batch#:	126079
Lab ID:	195234-002	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

3.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW13	Batch#:	126079
Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

4.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0605072A	Batch#:	126079
Lab ID:	195234-004	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0605072B	Batch#:	126079
Lab ID:	195234-005	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

6.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0605072A	Batch#:	126079
Lab ID:	195234-006	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391402	Batch#:	126079
Matrix:	Water	Analyzed:	06/08/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

8.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391610	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391403	Batch#:	126079
Matrix:	Water	Analyzed:	06/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.68	119	65-135
Benzene	25.00	26.91	108	65-135
Trichloroethene	25.00	25.87	103	65-135
Toluene	25.00	27.65	111	65-135
Chlorobenzene	25.00	25.97	104	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	97	86-115

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391611	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.29	109	65-135
Benzene	25.00	25.33	101	65-135
Trichloroethene	25.00	23.61	94	65-135
Toluene	25.00	26.05	104	65-135
Chlorobenzene	25.00	25.10	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW13	Batch#:	126079
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391497

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	29.02	116	65-135
Benzene	<0.2500	25.00	27.22	109	65-135
Trichloroethene	<0.1151	25.00	25.66	103	65-135
Toluene	<0.1338	25.00	27.98	112	65-135
Chlorobenzene	<0.1569	25.00	26.23	105	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	100	86-115

Type: MSD Lab ID: QC391498

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.37	117	65-135	1	35
Benzene	25.00	27.23	109	65-135	0	35
Trichloroethene	25.00	25.72	103	65-135	0	35
Toluene	25.00	28.08	112	65-135	0	35
Chlorobenzene	25.00	26.72	107	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW20	Batch#:	126137
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391631

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	28.63	115	65-135
Benzene	<0.2500	25.00	27.23	109	65-135
Trichloroethene	<0.1151	25.00	26.05	104	65-135
Toluene	<0.1338	25.00	28.11	112	65-135
Chlorobenzene	<0.1569	25.00	26.79	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC391632

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.24	117	65-135	2	35
Benzene	25.00	26.96	108	65-135	1	35
Trichloroethene	25.00	25.29	101	65-135	3	35
Toluene	25.00	27.95	112	65-135	1	35
Chlorobenzene	25.00	26.40	106	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	98	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497177754005 File : je305 Time : 03-MAY-2007 12:11

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	79938	21.98	
75	30.00% - 60.00% of mass 95	161536	44.42	
95		363648		
96	5.00% - 9.00% of mass 95	24247	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	279530	76.87	
175	5.00% - 9.00% of mass 174	21048	7.53	
176	> 95.00% and < 101.00% of mass 174	272661	97.54	
177	5.00% - 9.00% of mass 176	17603	6.46	

Analyst: ACM Date: 05/04/07 Reviewer: LW Date: 05/04/07

497177754005

CURTIS & TOMPKINS BFB TUNE FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497229413002 File : jf802 Time : 08-JUN-2007 08:31

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	152490	21.24	
75	30.00% - 60.00% of mass 95	311808	43.43	
95		717994		
96	5.00% - 9.00% of mass 95	48594	6.77	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	539584	75.15	
175	5.00% - 9.00% of mass 174	39874	7.39	
176	> 95.00% and < 101.00% of mass 174	528725	97.99	
177	5.00% - 9.00% of mass 176	34032	6.44	

Analyst: SJD Date: 06/08/07 Reviewer: ACM Date: 06/08/07

497229413002

CURTIS & TOMPKINS BFB TUNE FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497233759004 File : jfb04 Time : 11-JUN-2007 09:30

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	177728	21.13	
75	30.00% - 60.00% of mass 95	367530	43.69	
95		841280		
96	5.00% - 9.00% of mass 95	55977	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	657920	78.20	
175	5.00% - 9.00% of mass 174	45770	6.96	
176	> 95.00% and < 101.00% of mass 174	628778	95.57	
177	5.00% - 9.00% of mass 176	40829	6.49	

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

497233759004

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum : 497177754004
Units : ug/L

Name : 826GOX10
Date : 03-MAY-2007 13:35
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	je308	497177754008	0.25/0.5PPB	03-MAY-2007 13:35	S5194 (2000000X), S6072 (2000000X), S5938 (1000000X), S6084 (5000X)
L2	je309	497177754009	0.5/1PPB	03-MAY-2007 14:07	S5194 (1000000X), S6072 (1000000X), S5938 (500000X), S6084 (5000X)
L3	je310	497177754010	2PPB	03-MAY-2007 14:40	S5194 (500000X), S6072 (250000X), S5938 (250000X), S6084 (5000X)
L4	je311	497177754011	5PPB	03-MAY-2007 15:13	S5194 (200000X), S6072 (100000X), S5938 (100000X), S6084 (5000X)
L5	je312	497177754012	10PPB	03-MAY-2007 15:46	S5194 (100000X), S6072 (50000X), S5938 (50000X), S6084 (5000X)
L6	je313	497177754013	20PPB	03-MAY-2007 16:19	S5194 (50000X), S6072 (25000X), S5938 (25000X), S6084 (5000X)
L7	je314	497177754014	50PPB	03-MAY-2007 16:51	S5194 (20000X), S6072 (10000X), S5938 (10000X), S6084 (5000X)
L8	je315	497177754015	75PPB	03-MAY-2007 17:24	S5194 (13330X), S6072 (6667X), S5938 (6667X), S6084 (5000X)
L9	je316	497177754016	100PPB	03-MAY-2007 17:57	S5194 (10000X), S6072 (5000X), S5938 (5000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5947	0.5426	0.5709	0.4865	0.4975	0.4780	0.4537	0.4433	AVRG		1.96694		0.5084	11	15	0.10	0.99	
Vinyl Chloride	0.4132	0.4168m	0.3671m	0.4167	0.3655	0.3629	0.3690	0.3540	0.3529	AVRG		2.63311		0.3798	7	15	0.05	0.99	
Bromomethane		0.2909m	0.2714	0.2949m	0.2511	0.2691	0.2676	0.2750	0.2711	AVRG		3.65109		0.2739	5	15	0.05	0.99	
Chloroethane		0.2584	0.2745m	0.2998	0.2712	0.2697	0.2621	0.2640	0.2563	AVRG		3.71065		0.2695	5	15	0.05	0.99	
Acetone			0.1599m	0.1925	0.1879	0.1586	0.1600			AVRG		5.82201		0.1718	10	15	0.05	0.99	
1,1-Dichloroethene		0.2358m	0.2192	0.2400	0.2414	0.2539	0.2359	0.2494	0.2390	AVRG		4.17827		0.2393	4	15	0.05	0.99	
Methylene Chloride			0.3563m	0.3576	0.3346	0.3304	0.3296	0.3230	0.3254	AVRG		2.97009		0.3367	4	15	0.05	0.99	
Carbon Disulfide		1.0985	0.9961	0.9893	0.9633	1.0131	0.9946	1.0407	0.9939	AVRG		0.98894		1.0112	4	15	0.05	0.99	
MTBE		0.9046m	0.8559	0.8149	0.7674	0.7714	0.7576	0.7442	0.7584	AVRG		1.25500		0.7968	7	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3511m	0.3343	0.3015	0.2976	0.3008	0.2824	0.2812	0.2841	AVRG		3.28796		0.3041	8	15	0.05	0.99	
Vinyl Acetate			0.6363m	0.7199m	0.5324m	0.6892	0.4476	1.0222	0.9214	AVRG		1.40874		0.7099	**29**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.5984	0.5968	0.5961	0.5669	0.5703	0.5508	0.5494	0.5471	AVRG		1.74835		0.5720	4	15	0.10	0.99	
2-Butanone			0.2289	0.2082	0.2129	0.2042	0.2146	0.2015	0.2006	AVRG		4.75928		0.2101	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3134m	0.3691	0.3166	0.3211	0.3199	0.3116	0.3046	0.3123	AVRG		3.11460		0.3211	6	15	0.05	0.99	
Chloroform		0.5213	0.5072	0.4977	0.4926	0.4839	0.4701	0.4623	0.4625	AVRG		2.05257		0.4872	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.3612m	0.2999	0.3138	0.3185	0.3174	0.3049	0.3316	0.3040	AVRG		3.13579		0.3189	6	15	0.05	0.99	
Carbon Tetrachloride		0.1391	0.1316	0.1437	0.1413	0.1537	0.1384	0.1655	0.1415	AVRG		6.92765		0.1443	7	15	0.05	0.99	
1,2-Dichloroethane		0.2645	0.2512	0.2471	0.2515	0.2517	0.2485	0.2447	0.2399	AVRG		4.00187		0.2499	3	15	0.05	0.99	
Benzene		0.7629	0.6956	0.7249	0.6984	0.7058	0.6774	0.6946	0.6560	AVRG		1.42458		0.7020	5	15	0.05	0.99	
Trichloroethene		0.2129	0.1627	0.1791	0.1769	0.1796	0.1703	0.1713	0.1567	AVRG		5.67516		0.1762	10	15	0.05	0.99	
1,2-Dichloropropane		0.2415	0.2196	0.2213	0.2200	0.2208	0.2144	0.2096	0.2025	AVRG		4.57198		0.2187	5	15	0.05	0.99	
Bromodichloromethane		0.2698	0.2371	0.2414	0.2352	0.2365	0.2326	0.2294	0.2301	AVRG		4.18364		0.2390	5	15	0.05	0.99	
4-Methyl-2-Pentanone		0.3021m	0.3421	0.2832	0.2608	0.3025	0.2871	0.2918	0.2661	AVRG		3.42524		0.2919	9	15	0.05	0.99	
cis-1,3-Dichloropropene		0.3284	0.2954	0.3264	0.3072	0.3089	0.3021	0.3088	0.3032	AVRG		3.22531		0.3100	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4330m	0.3869	0.4279	0.3911	0.4056	0.3845	0.4001	0.3547	AVRG		2.51270		0.3980	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2852m	0.2591	0.2780m	0.2711	0.2765	0.2696	0.2741	0.2690	AVRG		3.66524		0.2728	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1044	0.0983	0.0998	0.0980	0.0982	0.0954	0.0972	0.0943	AVRG		10.1845		0.0982	3	15	0.05	0.99	
2-Hexanone			0.1999	0.2144	0.2166	0.1983	0.2045	0.2061	0.1956	AVRG		4.87644		0.2051	4	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1437	0.1819	0.1672	0.1725	0.1573	0.1823	0.1526	AVRG		5.92719		0.1687	10	15	0.05	0.99	
Dibromochloromethane		0.2225	0.2112	0.2281	0.2269	0.2208	0.2263	0.2212	0.2238	AVRG		4.49237		0.2226	2	15	0.05	0.99	
Chlorobenzene		0.5715	0.5242	0.5556	0.5183	0.5228	0.5061	0.5114	0.4731	AVRG		1.91246		0.5229	6	15	0.30	0.99	
Ethylbenzene		0.9731	0.7932	0.9252	0.8386	0.8567	0.7886	0.8468	0.7221	AVRG		1.18619		0.8430	9	15	0.05	0.99	
m,p-Xylenes	0.3103	0.3178	0.3067	0.3430	0.3061	0.3158	0.2914	0.3124	0.2660	AVRG		3.24970		0.3077	7	15	0.05	0.99	
o-Xylene		0.3480	0.3095	0.3483	0.3139	0.3192	0.2940	0.3052	0.2640	AVRG		3.19746		0.3127	9	15	0.05	0.99	
Styrene		0.5857	0.5274	0.6027	0.5445	0.5650	0.5276	0.5378	0.4787	AVRG		1.83087		0.5462	7	15	0.05	0.99	
Bromoform		0.1601	0.1548	0.1656	0.1611	0.1585	0.1626	0.1639	0.1657	AVRG		6.19057		0.1615	2	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6707m	0.6326	0.6403	0.5798	0.6019	0.5675	0.6023	0.5756	AVRG		1.64250		0.6088	6	15	0.30	0.99	
Dibromofluoromethane	0.5647	0.5635	0.5630	0.5511	0.5725	0.5604	0.5593	0.5552	0.5745	AVRG		1.77720		0.5627	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3895	0.3906	0.3874	0.3894	0.3937	0.3894	0.3860	0.3792	0.3779	AVRG		2.58388		0.3870	1	15	0.05	0.99	
Toluene-d8	1.0751	1.0857	1.0863	1.0981	1.0869	1.0914	1.0678	1.0854	1.0649	AVRG		0.92388		1.0824	1	15	0.05	0.99	
Bromofluorobenzene	1.1530	1.1357	1.1445	1.1312	1.1260	1.0989	1.0858	1.0642	1.0625	AVRG		0.89982		1.1113	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	17	2.000	7	5.000	12	10.00	-4	20.00	-2	50.00	-6	75.00	-11	100.0	-13
Vinyl Chloride	0.500	9	1.000	10	2.000	-3	5.000	10	10.00	-4	20.00	-4	50.00	-3	75.00	-7	100.0	-7
Bromomethane			1.000	6	2.000	-1	5.000	8	10.00	-8	20.00	-2	50.00	-2	75.00	0	100.0	-1
Chloroethane			1.000	-4	2.000	2	5.000	11	10.00	1	20.00	0	50.00	-3	75.00	-2	100.0	-5
Acetone					2.000	-7	5.000	12	10.00	9	20.00	-8	50.00	-7				
1,1-Dichloroethene			0.500	-1	2.000	-8	5.000	0	10.00	1	20.00	6	50.00	-1	75.00	4	100.0	0
Methylene Chloride					2.000	6	5.000	6	10.00	-1	20.00	-2	50.00	-2	75.00	-4	100.0	-3
Carbon Disulfide			0.500	9	2.000	-1	5.000	-2	10.00	-5	20.00	0	50.00	-2	75.00	3	100.0	-2
MTBE			0.500	14	2.000	7	5.000	2	10.00	-4	20.00	-3	50.00	-5	75.00	-7	100.0	-5
trans-1,2-Dichloroethene			0.500	15	2.000	10	5.000	-1	10.00	-2	20.00	-1	50.00	-7	75.00	-8	100.0	-7
Vinyl Acetate					2.000	-10	5.000	1	10.00	-25	20.00	-3	50.00	-37	75.00	44	100.0	30
1,1-Dichloroethane			0.500	5	2.000	4	5.000	4	10.00	-1	20.00	0	50.00	-4	75.00	-4	100.0	-4
2-Butanone					2.000	9	5.000	-1	10.00	1	20.00	-3	50.00	2	75.00	-4	100.0	-5
cis-1,2-Dichloroethene			0.500	-2	2.000	15	5.000	-1	10.00	0	20.00	0	50.00	-3	75.00	-5	100.0	-3
Chloroform			0.500	7	2.000	4	5.000	2	10.00	1	20.00	-1	50.00	-4	75.00	-5	100.0	-5
1,1,1-Trichloroethane			0.500	13	2.000	-6	5.000	-2	10.00	0	20.00	0	50.00	-4	75.00	4	100.0	-5
Carbon Tetrachloride			0.500	-4	2.000	-9	5.000	0	10.00	-2	20.00	6	50.00	-4	75.00	15	100.0	-2
1,2-Dichloroethane			0.500	6	2.000	1	5.000	-1	10.00	1	20.00	1	50.00	-1	75.00	-2	100.0	-4
Benzene			0.500	9	2.000	-1	5.000	3	10.00	-1	20.00	1	50.00	-3	75.00	-1	100.0	-7
Trichloroethene			0.500	21	2.000	-8	5.000	2	10.00	0	20.00	2	50.00	-3	75.00	-3	100.0	-11
1,2-Dichloropropane			0.500	10	2.000	0	5.000	1	10.00	1	20.00	1	50.00	-2	75.00	-4	100.0	-7
Bromodichloromethane			0.500	13	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	-3	75.00	-4	100.0	-4
4-Methyl-2-Pentanone			0.500	3	2.000	17	5.000	-3	10.00	-11	20.00	4	50.00	-2	75.00	0	100.0	-9
cis-1,3-Dichloropropene			0.500	6	2.000	-5	5.000	5	10.00	-1	20.00	0	50.00	-3	75.00	0	100.0	-2
Toluene			0.500	9	2.000	-3	5.000	8	10.00	-2	20.00	2	50.00	-3	75.00	1	100.0	-11
trans-1,3-Dichloropropene			0.500	5	2.000	-5	5.000	2	10.00	-1	20.00	1	50.00	-1	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	6	2.000	0	5.000	2	10.00	0	20.00	0	50.00	-3	75.00	-1	100.0	-4
2-Hexanone					2.000	-3	5.000	5	10.00	6	20.00	-3	50.00	0	75.00	1	100.0	-5
Tetrachloroethene			0.500	14	2.000	-15	5.000	8	10.00	-1	20.00	2	50.00	-7	75.00	8	100.0	-10
Dibromochloromethane			0.500	0	2.000	-5	5.000	2	10.00	2	20.00	-1	50.00	2	75.00	-1	100.0	1
Chlorobenzene			0.500	9	2.000	0	5.000	6	10.00	-1	20.00	0	50.00	-3	75.00	-2	100.0	-10
Ethylbenzene			0.500	15	2.000	-6	5.000	10	10.00	-1	20.00	2	50.00	-6	75.00	0	100.0	-14
m,p-Xylenes	0.500	1	1.000	3	4.000	0	10.00	11	20.00	-1	40.00	3	100.0	-5	150.0	2	200.0	-14
o-Xylene			0.500	11	2.000	-1	5.000	11	10.00	0	20.00	2	50.00	-6	75.00	-2	100.0	-16
Styrene			0.500	7	2.000	-3	5.000	10	10.00	0	20.00	3	50.00	-3	75.00	-2	100.0	-12
Bromoform			0.500	-1	2.000	-4	5.000	3	10.00	0	20.00	-2	50.00	1	75.00	1	100.0	3
1,1,2,2-Tetrachloroethane			0.500	10	2.000	4	5.000	5	10.00	-5	20.00	-1	50.00	-7	75.00	-1	100.0	-5
Dibromofluoromethane	50.00	0	50.00	0	50.00	0	50.00	-2	50.00	2	50.00	0	50.00	-1	50.00	-1	50.00	2
1,2-Dichloroethane-d4	50.00	1	50.00	1	50.00	0	50.00	1	50.00	2	50.00	1	50.00	0	50.00	-2	50.00	-2
Toluene-d8	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1	50.00	-1	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-1	50.00	-2	50.00	-4	50.00	-4

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497177754004 Cal Date : 03-MAY-2007 Type : WATER

ICV 497177754017 (je317 03-MAY-2007) stds: S6044 (10000X), S6084 (5000X)
ICV 497177754018 (je318 03-MAY-2007) stds: S5723 (10000X), S5968 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497177754017	0.5084	0.4111	25.00	20.21	ug/L	-19	30	
Vinyl Chloride	497177754017	0.3798	0.3070	25.00	20.21	ug/L	-19	20	
Bromomethane	497177754017	0.2739	0.2259	25.00	20.62	ug/L	-18	30	
Chloroethane	497177754017	0.2695	0.2323	25.00	21.55	ug/L	-14	30	
Acetone	497177754018	0.1718	0.1276	25.00	18.58	ug/L	-26	40	
1,1-Dichloroethene	497177754018	0.2393	0.2311	25.00	24.14	ug/L	-3	20	
Methylene Chloride	497177754018	0.3367	0.3190	25.00	23.68	ug/L	-5	30	
Carbon Disulfide	497177754018	1.0112	0.7101	25.00	17.56	ug/L	**-30**	30	!v-
MTBE	497177754018	0.7968	0.7580	25.00	23.78	ug/L	-5	30	
trans-1,2-Dichloroethene	497177754018	0.3041	0.2775	25.00	22.81	ug/L	-9	30	
Vinyl Acetate	497177754018	0.7099	0.5644	25.00	19.88	ug/L	-20	40	
1,1-Dichloroethane	497177754018	0.5720	0.5352	25.00	23.39	ug/L	-6	30	
2-Butanone	497177754018	0.2101	0.1974	25.00	23.49	ug/L	-6	40	
cis-1,2-Dichloroethene	497177754018	0.3211	0.3185	25.00	24.80	ug/L	-1	30	
Chloroform	497177754018	0.4872	0.4701	25.00	24.13	ug/L	-3	20	
1,1,1-Trichloroethane	497177754018	0.3189	0.3310	25.00	25.95	ug/L	4	30	
Carbon Tetrachloride	497177754018	0.1443	0.1676	25.00	29.02	ug/L	16	30	
1,2-Dichloroethane	497177754018	0.2499	0.2386	25.00	23.87	ug/L	-5	30	
Benzene	497177754018	0.7020	0.6819	25.00	24.29	ug/L	-3	30	
Trichloroethene	497177754018	0.1762	0.1691	25.00	23.99	ug/L	-4	30	
1,2-Dichloropropane	497177754018	0.2187	0.2025	25.00	23.14	ug/L	-7	20	
Bromodichloromethane	497177754018	0.2390	0.2343	25.00	24.51	ug/L	-2	30	
4-Methyl-2-Pentanone	497177754018	0.2919	0.2795	25.00	23.93	ug/L	-4	40	
cis-1,3-Dichloropropene	497177754018	0.3100	0.2924	25.00	23.58	ug/L	-6	30	
Toluene	497177754018	0.3980	0.3901	25.00	24.51	ug/L	-2	20	
trans-1,3-Dichloropropene	497177754018	0.2728	0.2441	25.00	22.36	ug/L	-11	30	
1,1,2-Trichloroethane	497177754018	0.0982	0.0933	25.00	23.75	ug/L	-5	30	
2-Hexanone	497177754018	0.2051	0.1990	25.00	24.26	ug/L	-3	40	
Tetrachloroethene	497177754018	0.1687	0.1930	25.00	28.60	ug/L	14	30	
Dibromochloromethane	497177754018	0.2226	0.2254	25.00	25.32	ug/L	1	30	
Chlorobenzene	497177754018	0.5229	0.5163	25.00	24.69	ug/L	-1	30	
Ethylbenzene	497177754018	0.8430	0.8699	25.00	25.80	ug/L	3	20	
m,p-Xylenes	497177754018	0.3077	0.3165	50.00	51.43	ug/L	3	30	
o-Xylene	497177754018	0.3127	0.3132	25.00	25.04	ug/L	0	30	
Styrene	497177754018	0.5462	0.5576	25.00	25.52	ug/L	2	30	
Bromoform	497177754018	0.1615	0.1666	25.00	25.78	ug/L	3	30	
1,1,2,2-Tetrachloroethane	497177754018	0.6088	0.5836	25.00	23.97	ug/L	-4	30	

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Date : 03-MAY-2007 13:35
Client ID: DYNA P&T
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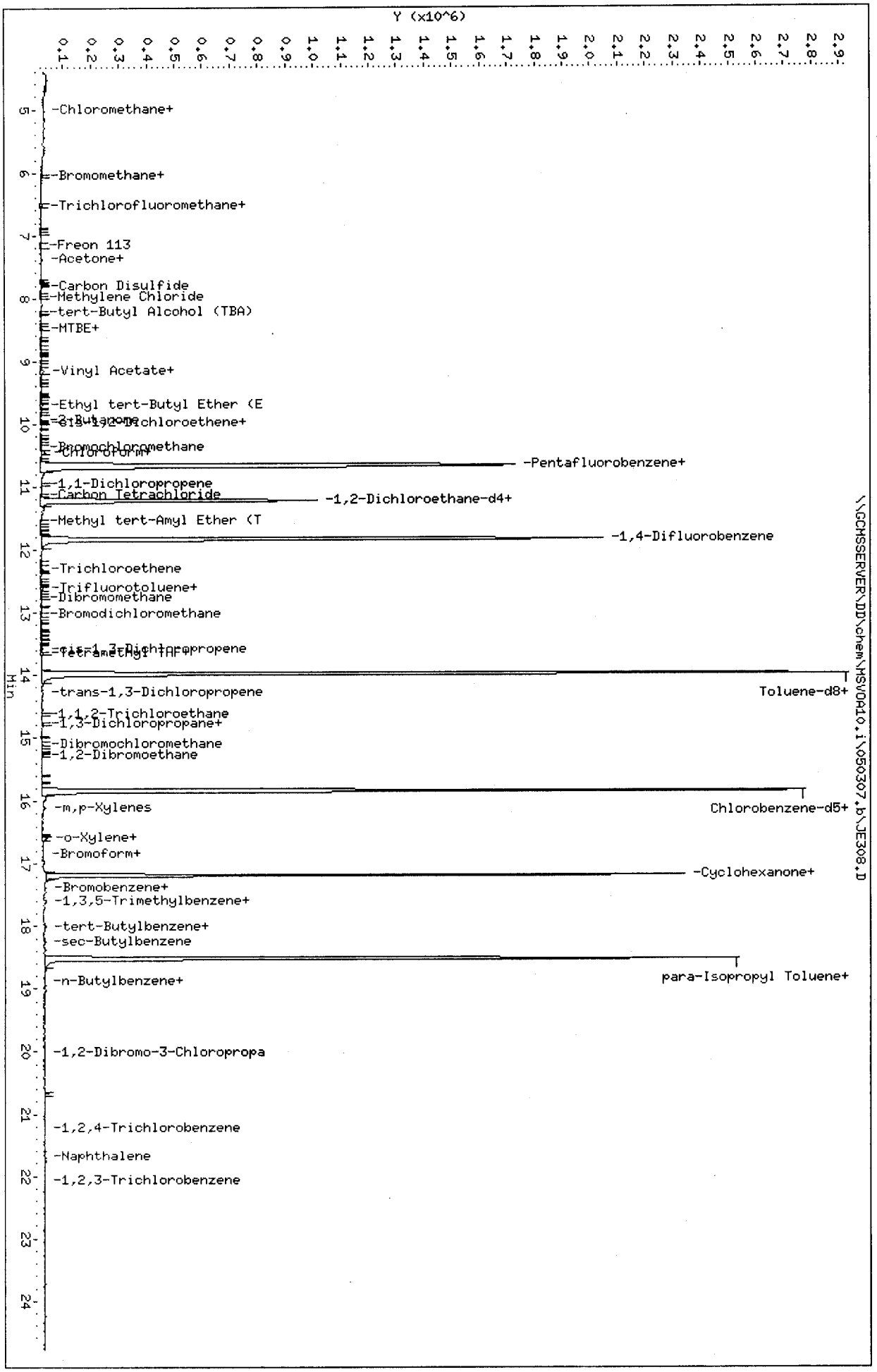
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 13:35 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Misc Info : S5938,0.001/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 09:39 target Quant Type: ISTD
Cal Date : 03-MAY-2007 13:35 Cal File: JE308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	5430	0.50000	0.5581
2 Chloromethane	50	5.000	5.000	(0.470)	9979	0.50000	0.7132
3 Vinyl Chloride	62	5.187	5.187	(0.487)	5685	0.50000	0.5439
4 Bromomethane	94	5.877	5.877	(0.552)	3082	0.50000	0.4088
5 Chloroethane	64	6.055	6.055	(0.569)	2787	0.50000	0.3757
6 Trichlorofluoromethane	101	6.518	6.518	(0.612)	4360	0.50000	0.4666
7 Ethanol	45	6.696	6.696	(0.629)	4018	25.0000	24.7192
8 Freon 113	101	7.346	7.346	(0.690)	704	0.25000	0.1412
9 Acetone	43	7.376	7.376	(0.693)	2734	0.25000	0.5783
10 1,1-Dichloroethene	96	7.376	7.376	(0.693)	3326	0.25000	0.5049
11 Isopropanol	45	7.465	7.465	(0.701)	363	2.50000	0.5458
12 Carbon Disulfide	76	7.820	7.820	(0.734)	8164	0.25000	0.2933
13 Methylene Chloride	84	8.086	8.086	(0.759)	3956	0.25000	0.4269
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.761)	2356	2.50000	3.0033
15 MTBE	73	8.480	8.480	(0.796)	8169	0.25000	0.3725
16 trans-1,2-Dichloroethene	96	8.480	8.480	(0.796)	531	0.25000	0.0634
18 Vinyl Acetate	43	9.161	9.161	(0.860)	8848	0.25000	0.4529
19 1,1-Dichloroethane	63	9.151	9.151	(0.859)	4205	0.25000	0.2671
20 Isopropyl Ether (DIPE)	45	9.170	9.170	(0.861)	10678	0.25000	0.2798
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.911)	5516	0.25000	0.2484
22 2-Butanone	43	9.949	9.949	(0.934)	720	0.25000	0.1245
23 cis-1,2-Dichloroethene	96	9.989	9.989	(0.938)	2514	0.25000	0.2745

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

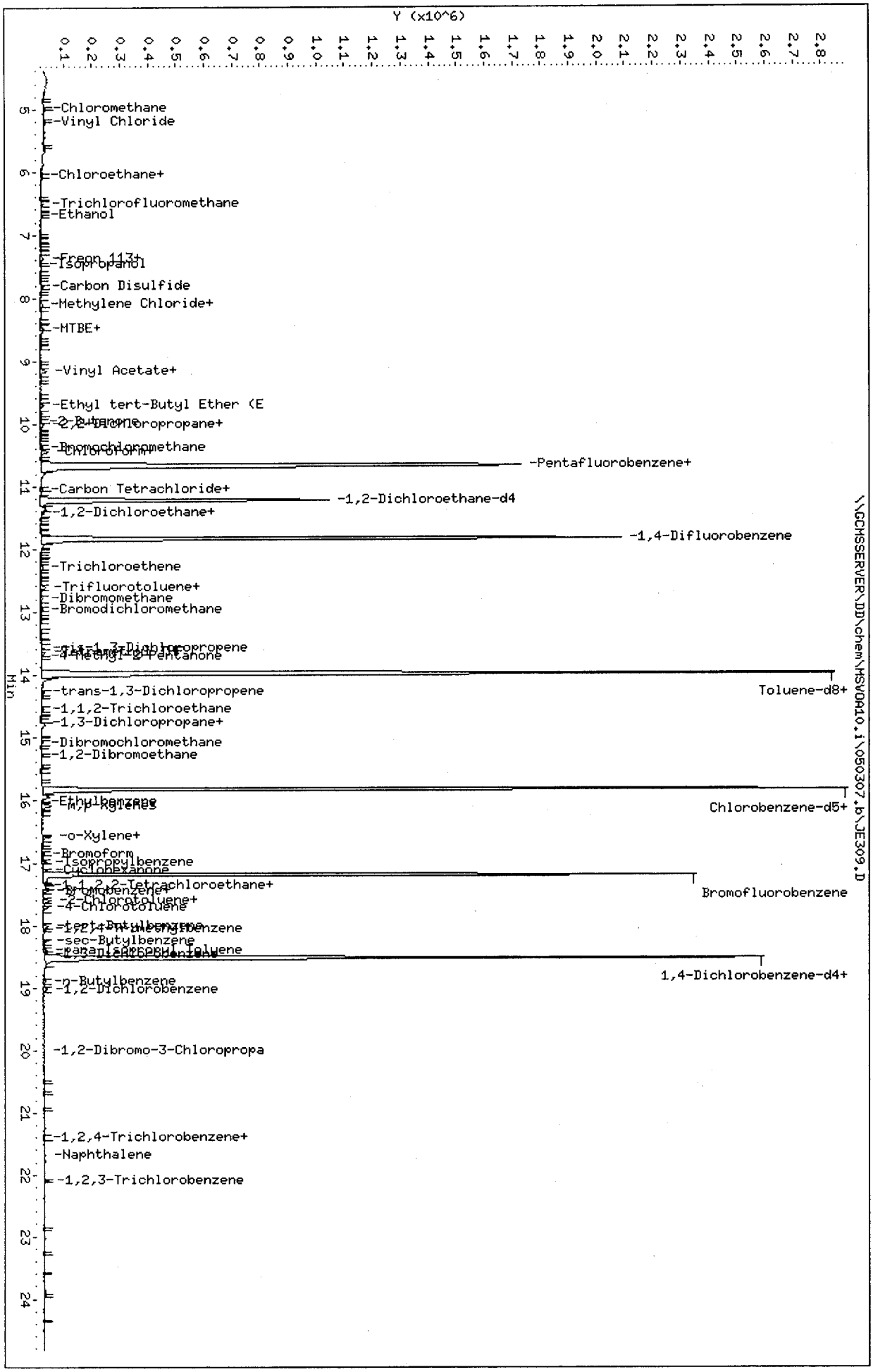
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.018	10.018	(0.941)	2575	0.25000	0.3138
	25 Bromochloromethane	128	10.383	10.383	(0.975)	925	0.25000	0.2116
	26 Chloroform	83	10.432	10.432	(0.980)	4394	0.25000	0.3277
	27 Tetrahydrofuran	42	10.452	10.452	(0.981)	15211	2.50000	4.8892
*	28 Pentafluorobenzene	168	10.649	10.649	(1.000)	1375990	50.0000	
	29 Dibromofluoromethane	113	10.669	10.669	(1.002)	777088	50.0000	50.1834
	30 1,1,1-Trichloroethane	97	10.797	10.797	(1.014)	2518	0.25000	0.2869
	31 1,1-Dichloropropene	75	11.034	11.034	(0.933)	3024	0.25000	0.3077
	32 Carbon Tetrachloride	117	11.093	11.093	(0.938)	861	0.25000	0.1329
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	873566	50.0000	50.3262
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	2796	0.25000	0.2494
	35 Benzene	78	11.359	11.359	(0.960)	8881	0.25000	0.2820
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	5525	0.25000	0.3383
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2242556	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	2094	0.25000	0.2649
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	2164	0.25000	0.2187
	40 1,2-Dichloropropane	63	12.601	12.601	(1.065)	2664	0.25000	0.2715
	41 Dibromomethane	93	12.789	12.789	(1.081)	1256	0.25000	0.2177
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	2921	0.25000	0.2724
	44 cis-1,3-Dichloropropene	75	13.577	13.577	(1.147)	3299	0.25000	0.2372
	45 Tetramethyl THF	43	13.646	13.646	(1.153)	9418	0.25000	0.3932
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	3667	0.25000	0.2800
	47 Toluene-d8	98	13.972	13.972	(1.181)	2411012	50.0000	49.6640
	48 Toluene	92	14.061	14.061	(1.188)	4374	0.25000	0.2450
	49 trans-1,3-Dichloropropene	75	14.268	14.268	(1.206)	3240	0.25000	0.2647
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	894	0.25000	0.2030
	51 1,3-Dichloropropane	76	14.770	14.770	(0.933)	3490	0.25000	0.2617
	52 2-Hexanone	43	14.790	14.790	(0.935)	236	0.25000	0.0306
	53 Tetrachloroethene	166	14.800	14.800	(0.935)	1739	0.25000	0.2740
	54 Dibromochloromethane	129	15.096	15.096	(0.954)	1708	0.25000	0.2040
	55 1,2-Dibromoethane	107	15.293	15.293	(1.292)	1963	0.25000	0.2391
*	56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	1880260	50.0000	
	57 Chlorobenzene	112	15.865	15.865	(1.002)	4849	0.25000	0.2466
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.007)	1822	0.25000	0.2737
	59 Ethylbenzene	91	15.963	15.963	(1.009)	7946	0.25000	0.2506
	60 m,p-Xylenes	106	16.101	16.101	(1.017)	5835	0.50000	0.5042
	61 o-Xylene	106	16.585	16.585	(1.048)	2819	0.25000	0.2396
	62 Styrene	104	16.585	16.585	(1.048)	3876	0.25000	0.1887
	63 Bromoform	173	16.841	16.841	(1.064)	988	0.25000	0.1626
	64 Isopropylbenzene	105	16.969	16.969	(0.916)	7135	0.25000	0.2766
	65 Cyclohexanone	55	17.127	17.127	(0.925)	4680	2.50000	3.4062
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	971769	50.0000	51.8751
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	3370	0.25000	0.3283
	68 1,2,3-Trichloropropane	75	17.363	17.363	(0.938)	3037	0.25000	0.3130
	69 Bromobenzene	156	17.393	17.393	(0.939)	1709	0.25000	0.2147
	70 Propylbenzene	91	17.442	17.442	(0.942)	8660	0.25000	0.2698
	71 2-Chlorotoluene	91	17.580	17.580	(0.949)	6371	0.25000	0.2759
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	4814	0.25000	0.2502
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	6630	0.25000	0.3041
	74 tert-Butylbenzene	119	18.004	18.004	(0.972)	4269	0.25000	0.2460
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	4283	0.25000	0.2472
	76 sec-Butylbenzene	105	18.251	18.251	(0.986)	6214	0.25000	0.2523
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	4295	0.25000	0.2436
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	3719	0.25000	0.2696

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	842814	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	4000	0.25000	0.2833
81 n-Butylbenzene	91	18.892	18.892	(1.020)	3200	0.25000	0.2331
82 1,2-Dichlorobenzene	146	19.030	19.030	(1.028)	3023	0.25000	0.2215
83 1,2-Dibromo-3-Chloropropane	75	20.006	20.006	(1.080)	431	0.25000	0.2578
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	859	0.25000	0.3226
86 Naphthalene	128	21.692	21.692	(1.171)	1424	0.25000	0.1448
87 1,2,3-Trichlorobenzene	180	22.076	22.076	(1.192)	441	0.25000	0.1047

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Date : 03-MAY-2007 14:07
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/1000,S6072,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:07 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/1000,S6072,0.001/1000
Misc Info : S5938,0.002/1000, 0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 12:22 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:07 Cal File: JE309.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	10407	1.00000	1.0722(M)
2 Chloromethane	50	4.994	4.994	(0.469)	16328	1.00000	1.1697
3 Vinyl Chloride	62	5.191	5.191	(0.487)	11443	1.00000	1.0974(M)
4 Bromomethane	94	5.871	5.871	(0.551)	7986	1.00000	1.0619(M)
5 Chloroethane	64	6.049	6.049	(0.568)	7094	1.00000	0.9587
6 Trichlorofluoromethane	101	6.512	6.512	(0.611)	9598	1.00000	1.0297
7 Ethanol	45	6.690	6.690	(0.628)	9931	50.0000	61.2383
8 Freon 113	101	7.340	7.340	(0.689)	2601	0.50000	0.5228
9 Acetone	43	7.380	7.380	(0.693)	3812	0.50000	0.8083
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	3237	0.50000	0.4926(MH)
11 Isopropanol	45	7.498	7.498	(0.704)	3143	5.00000	4.7370
12 Carbon Disulfide	76	7.814	7.814	(0.733)	15080	0.50000	0.5431
13 Methylene Chloride	84	8.090	8.090	(0.759)	7434	0.50000	0.8041(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	4307	5.00000	5.5032(M)
15 MTBE	73	8.474	8.474	(0.795)	12418	0.50000	0.5676(H)
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	4820	0.50000	0.5772(MH)
18 Vinyl Acetate	43	9.154	9.154	(0.859)	19125	0.50000	0.9812
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	8215	0.50000	0.5231
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	21707	0.50000	0.5702
21 Ethyl tert-Butyl Ether (ETBE)	59	9.707	9.707	(0.911)	11934	0.50000	0.5387
22 2-Butanone	43	9.983	9.983	(0.937)	1252	0.50000	0.2170
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	4303	0.50000	0.4881(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	5225	0.50000	0.6382
	25 Bromochloromethane	128	10.377	10.377	(0.974)	1971	0.50000	0.4519
	26 Chloroform	83	10.426	10.426	(0.979)	7156	0.50000	0.5349
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	25372	5.00000	8.1742
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1372806	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	773510	50.0000	50.0681
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.013)	4958	0.50000	0.5662(H)
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	5906	0.50000	0.5994(H)
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	3128	0.50000	0.4819
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	878193	50.0000	50.4645
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	5947	0.50000	0.5292
	35 Benzene	78	11.363	11.363	(0.961)	17153	0.50000	0.5434
	36 Methyl tert-Amyl Ether (TAME)	73	11.432	11.432	(0.967)	7852	0.50000	0.4797(H)
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2248254	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	4787	0.50000	0.6041
	39 Trifluorotoluene	146	12.615	12.615	(1.067)	5706	0.50000	0.5752
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	5429	0.50000	0.5520
	41 Dibromomethane	93	12.783	12.783	(1.081)	2917	0.50000	0.5045
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	6065	0.50000	0.5642
	44 cis-1,3-Dichloropropene	75	13.571	13.571	(1.148)	7383	0.50000	0.5295
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	12608	0.50000	0.5251(H)
	46 4-Methyl-2-Pentanone	43	13.709	13.709	(1.159)	6792	0.50000	0.5173(M)
	47 Toluene-d8	98	13.966	13.966	(1.181)	2440868	50.0000	50.1516
	48 Toluene	92	14.064	14.064	(1.189)	9736	0.50000	0.5440(H)
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	6412	0.50000	0.5226(M)
	50 1,1,2-Trichloroethane	85	14.547	14.547	(1.230)	2347	0.50000	0.5315
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	6587	0.50000	0.4853
	52 2-Hexanone	43	14.824	14.824	(0.936)	3944	0.50000	0.5025
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	3677	0.50000	0.5694
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	4258	0.50000	0.4998
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	3499	0.50000	0.4251
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1913461	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	10935	0.50000	0.5464
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	3381	0.50000	0.4991
	59 Ethylbenzene	91	15.957	15.957	(1.008)	18619	0.50000	0.5771
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	12163	1.00000	1.0328
	61 o-Xylene	106	16.578	16.578	(1.047)	6658	0.50000	0.5562
	62 Styrene	104	16.588	16.588	(1.048)	11207	0.50000	0.5361
	63 Bromoform	173	16.845	16.845	(1.064)	3063	0.50000	0.4954
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	15404	0.50000	0.5714
	65 Cyclohexanone	55	17.121	17.121	(0.925)	7204	5.00000	5.0156
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1000580	50.0000	51.0949
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	5909	0.50000	0.5507(H)
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.938)	6053	0.50000	0.5967(M)
	69 Bromobenzene	156	17.397	17.397	(0.940)	4101	0.50000	0.4928
	70 Propylbenzene	91	17.436	17.436	(0.942)	19074	0.50000	0.5685
	71 2-Chlorotoluene	91	17.584	17.584	(0.950)	13578	0.50000	0.5625
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	10926	0.50000	0.5433
	73 4-Chlorotoluene	91	17.702	17.702	(0.956)	13842	0.50000	0.6075
	74 tert-Butylbenzene	119	18.008	18.008	(0.973)	11010	0.50000	0.6071(H)
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	7948	0.50000	0.4388
	76 sec-Butylbenzene	105	18.245	18.245	(0.986)	14248	0.50000	0.5535
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	9704	0.50000	0.5265(M)
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	7247	0.50000	0.5027

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

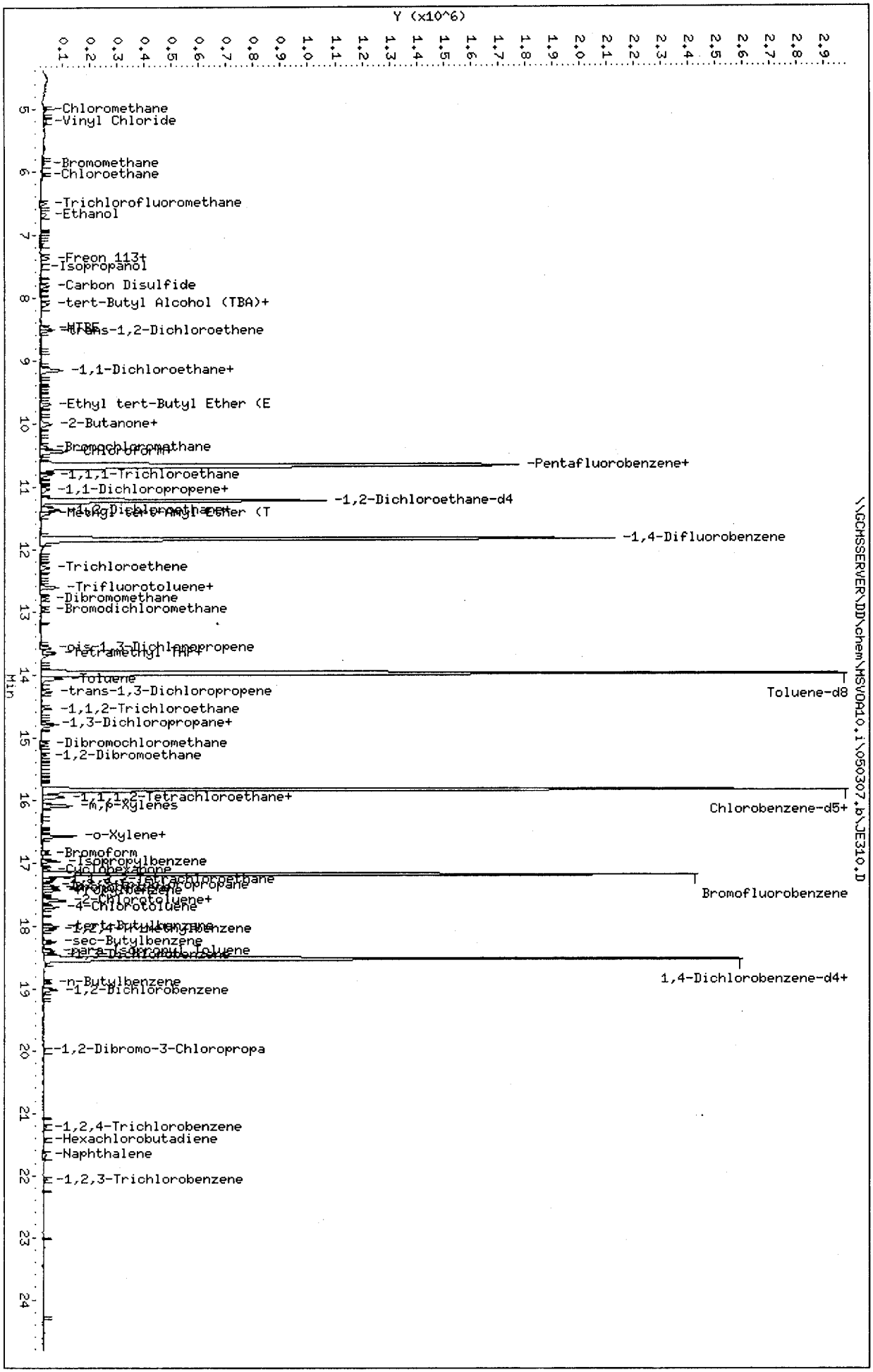
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	881052	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	7762	0.50000	0.5259
81 n-Butylbenzene	91	18.886	18.886	(1.020)	6916	0.50000	0.4819(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.028)	6866	0.50000	0.4812
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	1068	0.50000	0.6113
84 1,2,4-Trichlorobenzene	180	21.242	21.242	(1.148)	1386	0.50000	0.4234(M)
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	1319	0.50000	0.5957(M)
86 Naphthalene	128	21.686	21.686	(1.171)	4817	0.50000	0.4688(M)
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1848	0.50000	0.4200

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Date : 03-MAY-2007 14:40
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/500,S6072,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:40 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/500,S6072,0.002/500
Misc Info : S5938,0.002/500, 2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:06 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:40 Cal File: JE310.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.425)	21455	2.00000	2.1527(M)
2 Chloromethane	50	4.994	4.994	(0.469)	30595	2.00000	2.1345
3 Vinyl Chloride	62	5.191	5.191	(0.487)	20697	2.00000	1.9330(M)
4 Bromomethane	94	5.862	5.862	(0.550)	15302	2.00000	1.9817
5 Chloroethane	64	6.049	6.049	(0.568)	15478	2.00000	2.0372(M)
6 Trichlorofluoromethane	101	6.502	6.502	(0.610)	18360	2.00000	1.9183
7 Ethanol	45	6.680	6.680	(0.627)	33778	200.000	202.8496(M)
8 Freon 113	101	7.331	7.331	(0.688)	7449	2.00000	1.4584
9 Acetone	43	7.380	7.380	(0.693)	9015	2.00000	2.0242(M)
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	12359	2.00000	1.8316
11 Isopropanol	45	7.498	7.498	(0.704)	14554	20.0000	21.3625
12 Carbon Disulfide	76	7.814	7.814	(0.733)	56163	2.00000	1.9701
13 Methylene Chloride	84	8.090	8.090	(0.759)	20092	2.00000	2.1167(M)
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.762)	16309	20.0000	20.2945
15 MTBE	73	8.484	8.484	(0.796)	48260	2.00000	2.1483
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.800)	18850	2.00000	2.1984
18 Vinyl Acetate	43	9.135	9.135	(0.857)	35877	2.00000	1.7623(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	33652	2.00000	2.0869
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	80941	2.00000	2.0708
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.910)	47098	2.00000	2.0706
22 2-Butanone	43	9.953	9.953	(0.934)	12909	2.00000	2.1792
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	20810	2.00000	2.2186

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	16115	2.00000	1.9170
25 Bromochloromethane	128	10.367	10.367	(0.973)	9211	2.00000	2.0571
26 Chloroform	83	10.436	10.436	(0.980)	28600	2.00000	2.0822
27 Tetrahydrofuran	42	10.446	10.446	(0.981)	73173	20.0000	22.9590
* 28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1409612	50.0000	
29 Dibromofluoromethane	113	10.673	10.673	(1.002)	793635	50.0000	50.0295
30 1,1,1-Trichloroethane	97	10.801	10.801	(1.014)	16912	2.00000	1.8811
31 1,1-Dichloropropene	75	11.038	11.038	(0.933)	19064	2.00000	1.8790
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	12184	2.00000	1.8228
33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	896823	50.0000	50.0441
34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	23266	2.00000	2.0107
35 Benzene	78	11.363	11.363	(0.961)	64423	2.00000	1.9819
36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.966)	35656	2.00000	2.1153
* 37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2315236	50.0000	
38 Trichloroethene	95	12.290	12.290	(1.039)	15070	2.00000	1.8469
39 Trifluorotoluene	146	12.605	12.605	(1.066)	16673	2.00000	1.6322
40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	20339	2.00000	2.0082
41 Dibromomethane	93	12.793	12.793	(1.082)	11983	2.00000	2.0127
42 Bromodichloromethane	83	12.960	12.960	(1.096)	21961	2.00000	1.9841
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	27358	2.00000	1.9055
45 Tetramethyl THF	43	13.650	13.650	(1.154)	48611	2.00000	1.9660
46 4-Methyl 2-Pentanone	43	13.700	13.700	(1.158)	31678	2.00000	2.3432
47 Toluene-d8	98	13.976	13.976	(1.182)	2515013	50.0000	50.1800
48 Toluene	92	14.064	14.064	(1.189)	35831	2.00000	1.9443
49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	23991	2.00000	1.8990
50 1,1,2-Trichloroethane	85	14.538	14.538	(1.229)	9099	2.00000	2.0012
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	27964	2.00000	2.0115
52 2-Hexanone	43	14.804	14.804	(0.935)	15672	2.00000	1.9494
53 Tetrachloroethene	166	14.814	14.814	(0.936)	11264	2.00000	1.7030
54 Dibromochloromethane	129	15.090	15.090	(0.953)	16558	2.00000	1.8974
55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	17395	2.00000	2.0523
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1960105	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	41103	2.00000	2.0051
58 1,1,1,2-Tetrachloroethane	131	15.938	15.938	(1.007)	14123	2.00000	2.0355
59 Ethylbenzene	91	15.957	15.957	(1.008)	62188	2.00000	1.8817
60 m,p-Xylenes	106	16.095	16.095	(1.017)	48096	4.00000	3.9869
61 o-Xylene	106	16.579	16.579	(1.047)	24267	2.00000	1.9793
62 Styrene	104	16.588	16.588	(1.048)	41353	2.00000	1.9313
63 Bromoform	173	16.845	16.845	(1.064)	12136	2.00000	1.9164
64 Isopropylbenzene	105	16.973	16.973	(0.916)	49516	2.00000	1.8050
65 Cyclohexanone	55	17.121	17.121	(0.924)	13929	20.0000	10.3005
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1026075	50.0000	51.4913
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	22687	2.00000	2.0781
68 1,2,3-Trichloropropane	75	17.357	17.357	(0.937)	23367	2.00000	2.2639
69 Bromobenzene	156	17.397	17.397	(0.939)	16684	2.00000	1.9705
70 Propylbenzene	91	17.436	17.436	(0.941)	61471	2.00000	1.8006
71 2-Chlorotoluene	91	17.584	17.584	(0.949)	48976	2.00000	1.9939
72 1,3,5-Trimethylbenzene	105	17.614	17.614	(0.951)	36953	2.00000	1.8058
73 4-Chlorotoluene	91	17.703	17.703	(0.956)	45466	2.00000	1.9609
74 tert-Butylbenzene	119	18.008	18.008	(0.972)	31632	2.00000	1.7140
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	32323	2.00000	1.7538
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	43904	2.00000	1.6761
77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	31404	2.00000	1.6747
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	30465	2.00000	2.0768

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

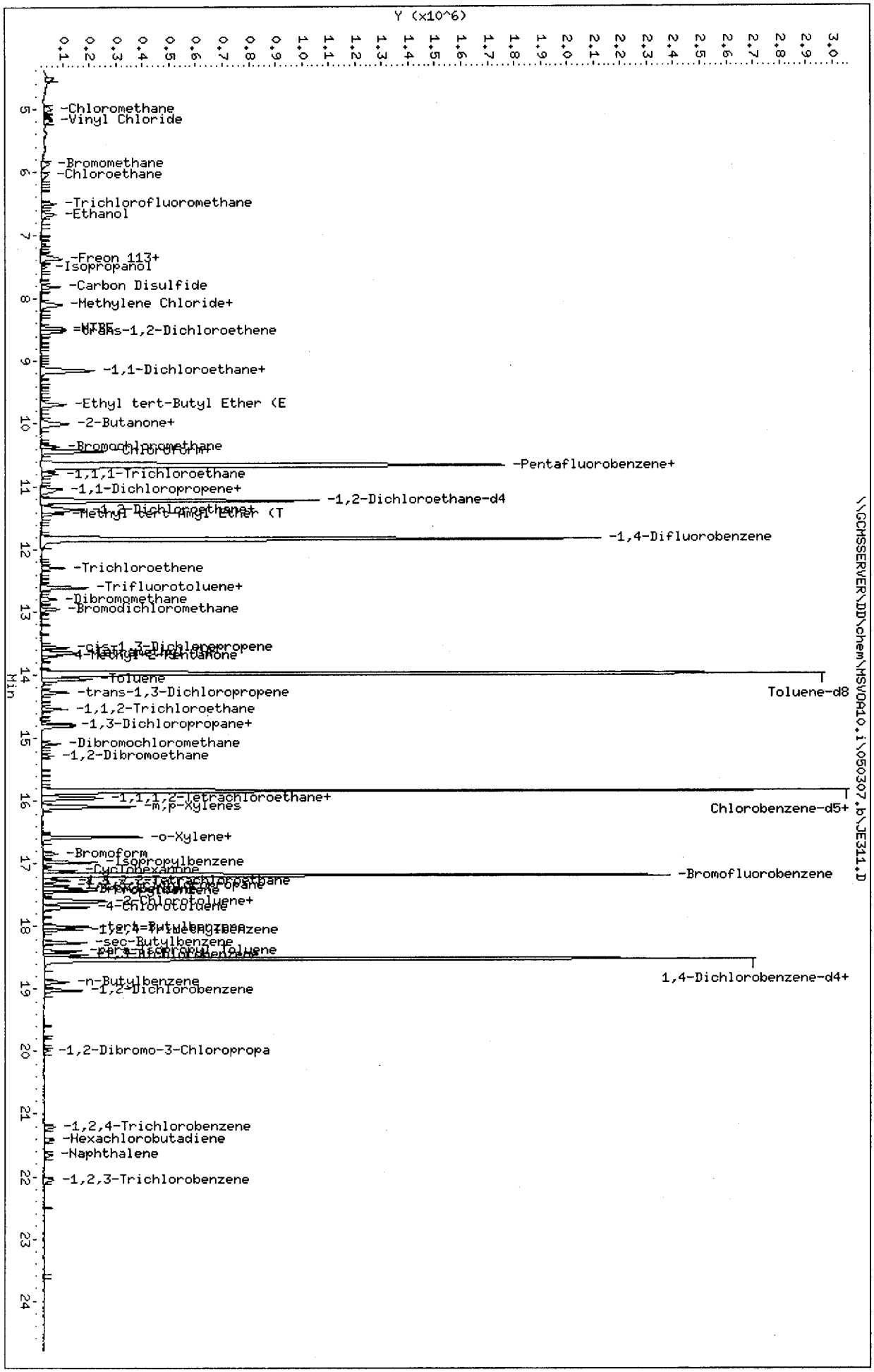
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	896547	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	31850	2.00000	2.1208
81 n-Butylbenzene	91	18.895	18.895	(1.020)	22218	2.00000	1.6087(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	30243	2.00000	2.0833
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	3790	2.00000	2.1318
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	8276	2.00000	1.6536(M)
85 Hexachlorobutadiene	225	21.419	21.419	(1.157)	3542	2.00000	1.6348
86 Naphthalene	128	21.656	21.656	(1.169)	18914	2.00000	1.6799
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	7831	2.00000	1.8252

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Date : 03-MAY-2007 15:13
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0025/500,S6072,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:13 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0025/500,S6072,0.005/500
Misc Info : S5938,0.005/500, 5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:07 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:13 Cal File: JE311.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.426)	60142	5.00000	6.0582(M)
2 Chloromethane	50	5.003	5.003	(0.470)	80156	5.00000	5.6144
3 Vinyl Chloride	62	5.180	5.180	(0.487)	58511	5.00000	5.4864
4 Bromomethane	94	5.861	5.861	(0.551)	41404	5.00000	5.3832(M)
5 Chloroethane	64	6.038	6.038	(0.567)	42093	5.00000	5.5621
6 Trichlorofluoromethane	101	6.501	6.501	(0.611)	52185	5.00000	5.4741
7 Ethanol	45	6.679	6.679	(0.628)	86031	500.000	518.6896(M)
8 Freon 113	101	7.339	7.339	(0.690)	24887	5.00000	4.8918
9 Acetone	43	7.369	7.369	(0.692)	27028	5.00000	6.0928
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	33704	5.00000	5.0148
11 Isopropanol	45	7.497	7.497	(0.704)	35324	50.0000	52.0538
12 Carbon Disulfide	76	7.813	7.813	(0.734)	138901	5.00000	4.8916
13 Methylene Chloride	84	8.089	8.089	(0.760)	50214	5.00000	5.3110
14 tert-Butyl Alcohol (TBA)	59	8.108	8.108	(0.762)	42177	50.0000	52.6913
15 MTBE	73	8.483	8.483	(0.797)	114414	5.00000	5.1133
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	42339	5.00000	4.9573
18 Vinyl Acetate	43	9.124	9.124	(0.857)	101080	5.00000	4.9847(M)
19 1,1-Dichloroethane	63	9.144	9.144	(0.859)	83695	5.00000	5.2108
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	195814	5.00000	5.0297
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.911)	115251	5.00000	5.0869
22 2-Butanone	43	9.942	9.942	(0.934)	29234	5.00000	4.9546
23 cis-1,2-Dichloroethene	96	10.001	10.001	(0.940)	44459	5.00000	4.7586

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.943)	42729	5.00000	5.1031
	25 Bromochloromethane	128	10.366	10.366	(0.974)	22695	5.00000	5.0886
	26 Chloroform	83	10.425	10.425	(0.980)	69881	5.00000	5.1078
	27 Tetrahydrofuran	42	10.445	10.445	(0.981)	173265	50.0000	54.5791
*	28 Pentafluorobenzene	168	10.642	10.642	(1.000)	1404065	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.003)	773811	50.0000	48.9725
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.015)	44056	5.00000	4.9196
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	49607	5.00000	4.9696
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	32728	5.00000	4.9765
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	887080	50.0000	50.3104
	34 1,2-Dichloroethane	62	11.332	11.332	(0.958)	56295	5.00000	4.9448
	35 Benzene	78	11.362	11.362	(0.961)	165120	5.00000	5.1631
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	82681	5.00000	4.9853
*	37 1,4-Difluorobenzene	114	11.825	11.825	(1.000)	2277963	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	40795	5.00000	5.0816
	39 Trifluorotoluene	146	12.604	12.604	(1.066)	50157	5.00000	4.9907
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	50403	5.00000	5.0580
	41 Dibromomethane	93	12.792	12.792	(1.082)	29674	5.00000	5.0657
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	54991	5.00000	5.0497
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	74358	5.00000	5.2640
	45 Tetramethyl THF	43	13.640	13.640	(1.153)	124119	5.00000	5.1019
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	64514	5.00000	4.8503
	47 Toluene-d8	98	13.965	13.965	(1.181)	2501333	50.0000	50.7236
	48 Toluene	92	14.063	14.063	(1.189)	97478	5.00000	5.3761
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	63333	5.00000	5.0951(M)
	50 1,1,2-Trichloroethane	85	14.527	14.527	(1.228)	22727	5.00000	5.0804
	51 1,3-Dichloropropane	76	14.763	14.763	(0.933)	72677	5.00000	5.2249
	52 2-Hexanone	43	14.793	14.793	(0.935)	42055	5.00000	5.2284
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	35679	5.00000	5.3915
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	44728	5.00000	5.1227
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	43475	5.00000	5.2132
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	1961186	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	108962	5.00000	5.3127
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	36766	5.00000	5.2960
	59 Ethylbenzene	91	15.956	15.956	(1.008)	181453	5.00000	5.4874
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	134518	10.0000	11.1448
	61 o-Xylene	106	16.578	16.578	(1.047)	68308	5.00000	5.5683
	62 Styrene	104	16.578	16.578	(1.047)	118195	5.00000	5.5170
	63 Bromoform	173	16.834	16.834	(1.064)	32477	5.00000	5.1257
	64 Isopropylbenzene	105	16.972	16.972	(0.916)	156395	5.00000	5.6433
	65 Cyclohexanone	55	17.110	17.110	(0.924)	69537	50.0000	50.9016
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1024582	50.0000	50.8951
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.932)	57991	5.00000	5.2581
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	54968	5.00000	5.2716
	69 Bromobenzene	156	17.396	17.396	(0.939)	47690	5.00000	5.5754
	70 Propylbenzene	91	17.435	17.435	(0.941)	189282	5.00000	5.4884
	71 2-Chlorotoluene	91	17.583	17.583	(0.949)	140027	5.00000	5.6431
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.950)	112043	5.00000	5.4197
	73 4-Chlorotoluene	91	17.692	17.692	(0.955)	125176	5.00000	5.3441
	74 tert-Butylbenzene	119	18.007	18.007	(0.972)	100747	5.00000	5.4039
	75 1,2,4-Trimethylbenzene	105	18.056	18.056	(0.975)	99183	5.00000	5.3271
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	138952	5.00000	5.2510
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.993)	97726	5.00000	5.1587
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.996)	82601	5.00000	5.5738

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

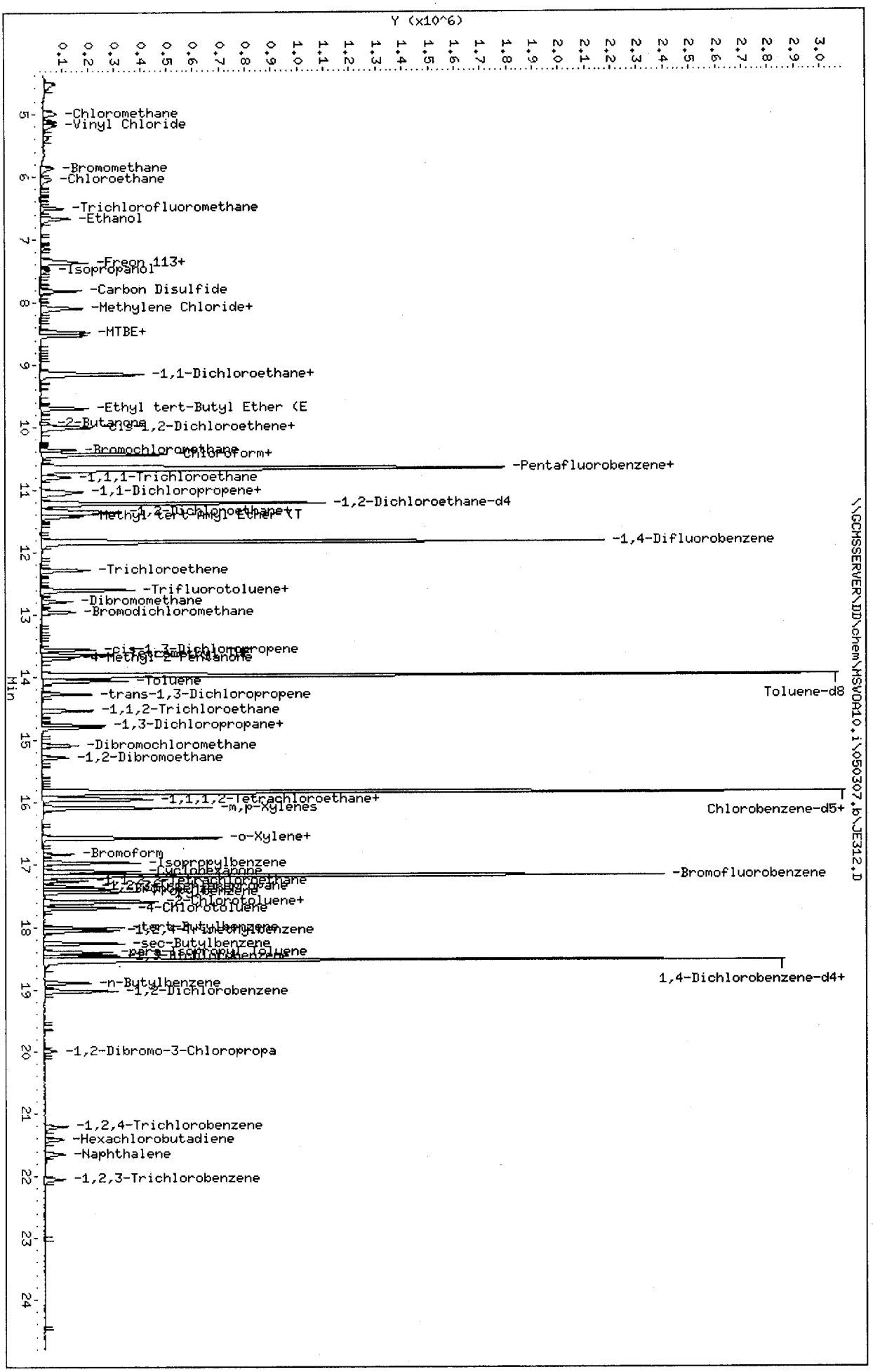
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.520	18.520	(1.000)	905730	50.0000	
80 1,4-Dichlorobenzene	146	18.540	18.540	(1.001)	81814	5.00000	5.3927
81 n-Butylbenzene	91	18.885	18.885	(1.020)	71286	5.00000	5.1093
82 1,2-Dichlorobenzene	146	19.023	19.023	(1.027)	80088	5.00000	5.4610
83 1,2-Dibromo-3-Chloropropane	75	19.999	19.999	(1.080)	8698	5.00000	4.8429
84 1,2,4-Trichlorobenzene	180	21.211	21.211	(1.145)	25865	5.00000	5.1158
85 Hexachlorobutadiene	225	21.418	21.418	(1.157)	11692	5.00000	5.3419
86 Naphthalene	128	21.655	21.655	(1.169)	49271	5.00000	4.3319(M)
87 1,2,3-Trichlorobenzene	180	22.059	22.059	(1.191)	21699	5.00000	5.0063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Date : 03-MAY-2007 15:46
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/100,S6072,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:46 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/100,S6072,0.002/100
Misc Info : S5938,0.002/100, 10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:08 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:46 Cal File: JE312.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	89915	10.0000	8.9778
2 Chloromethane	50	4.985	4.985	(0.468)	137830	10.0000	9.5694
3 Vinyl Chloride	62	5.182	5.182	(0.487)	103548	10.0000	9.6241
4 Bromomethane	94	5.872	5.872	(0.552)	71127	10.0000	9.1665
5 Chloroethane	64	6.049	6.049	(0.568)	76838	10.0000	10.0641
6 Trichlorofluoromethane	101	6.503	6.503	(0.611)	92032	10.0000	9.5691
7 Ethanol	45	6.671	6.671	(0.627)	161047	1000.00	962.4395(M)
8 Freon 113	101	7.341	7.341	(0.690)	55009	10.0000	10.7176
9 Acetone	43	7.371	7.371	(0.692)	53227	10.0000	11.8934
10 1,1-Dichloroethene	96	7.371	7.371	(0.692)	68395	10.0000	10.0872
11 Isopropanol	45	7.489	7.489	(0.704)	66367	100.000	96.9400
12 Carbon Disulfide	76	7.814	7.814	(0.734)	272891	10.0000	9.5260
13 Methylene Chloride	84	8.090	8.090	(0.760)	94781	10.0000	9.9366
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	79384	100.000	98.3025
15 MTBE	73	8.475	8.475	(0.796)	217419	10.0000	9.6314
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	84302	10.0000	9.7839
18 Vinyl Acetate	43	9.145	9.145	(0.859)	150833	10.0000	7.3729(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	160593	10.0000	9.9107
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	389154	10.0000	9.9081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	228996	10.0000	10.0186
22 2-Butanone	43	9.944	9.944	(0.934)	60306	10.0000	10.1310
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	90961	10.0000	9.6504

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	77576	10.0000	9.1836
	25 Bromochloromethane	128	10.368	10.368	(0.974)	45844	10.0000	10.1888
	26 Chloroform	83	10.427	10.427	(0.980)	139559	10.0000	10.1113
	27 Tetrahydrofuran	42	10.437	10.437	(0.981)	332722	100.000	103.8881
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1416508	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.003)	810949	50.0000	50.8721
	30 1,1,1-Trichloroethane	97	10.802	10.802	(1.015)	90225	10.0000	9.9867
	31 1,1-Dichloropropene	75	11.028	11.028	(0.932)	97202	10.0000	9.5272
	32 Carbon Tetrachloride	117	11.078	11.078	(0.937)	65802	10.0000	9.7893
	33 1,2-Dichloroethane-d4	65	11.216	11.216	(0.948)	916714	50.0000	50.8670
	34 1,2-Dichloroethane	62	11.334	11.334	(0.958)	117103	10.0000	10.0637
	35 Benzene	78	11.364	11.364	(0.961)	325224	10.0000	9.9494
	36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.966)	176886	10.0000	10.4349
*	37 1,4-Difluorobenzene	114	11.827	11.827	(1.000)	2328303	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	82390	10.0000	10.0411
	39 Trifluorotoluene	146	12.606	12.606	(1.066)	100609	10.0000	9.7943
	40 1,2-Dichloropropane	63	12.606	12.606	(1.066)	102462	10.0000	10.0600
	41 Dibromomethane	93	12.783	12.783	(1.081)	59720	10.0000	9.9744
	42 Bromodichloromethane	83	12.951	12.951	(1.095)	109536	10.0000	9.8410
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	143043	10.0000	9.9076
	45 Tetramethyl THF	43	13.641	13.641	(1.153)	252528	10.0000	10.1558
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	121435	10.0000	8.9323
	47 Toluene-d8	98	13.966	13.966	(1.181)	2530522	50.0000	50.2061
	48 Toluene	92	14.065	14.065	(1.189)	182138	10.0000	9.8281
	49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.207)	126263	10.0000	9.9382
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.228)	45657	10.0000	9.9857
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	141062	10.0000	10.0983
	52 2-Hexanone	43	14.785	14.785	(0.934)	85327	10.0000	10.5632
	53 Tetrachloroethene	166	14.805	14.805	(0.935)	65859	10.0000	9.9099
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	89381	10.0000	10.1936
	55 1,2-Dibromoethane	107	15.278	15.278	(1.292)	86172	10.0000	10.1098
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	1969525	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	204176	10.0000	9.9130
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69320	10.0000	9.9431
	59 Ethylbenzene	91	15.958	15.958	(1.008)	330342	10.0000	9.9478
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	241168	20.0000	19.8962
	61 o-Xylene	106	16.569	16.569	(1.047)	123646	10.0000	10.0367
	62 Styrene	104	16.579	16.579	(1.047)	214488	10.0000	9.9694
	63 Bromoform	173	16.836	16.836	(1.064)	63442	10.0000	9.9704
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	281407	10.0000	10.0269
	65 Cyclohexanone	55	17.112	17.112	(0.924)	192898	100.000	139.4326
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1032818	50.0000	50.6609
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	106355	10.0000	9.5225
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	104123	10.0000	9.8606
	69 Bromobenzene	156	17.397	17.397	(0.940)	87921	10.0000	10.1500
	70 Propylbenzene	91	17.437	17.437	(0.942)	340232	10.0000	9.7417
	71 2-Chlorotoluene	91	17.585	17.585	(0.950)	247340	10.0000	9.8428
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	205208	10.0000	9.8018
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	233535	10.0000	9.8452
	74 tert-Butylbenzene	119	18.009	18.009	(0.973)	182493	10.0000	9.6660
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	184412	10.0000	9.7805
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	257624	10.0000	9.6135
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	179820	10.0000	9.3732
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	148256	10.0000	9.8787

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

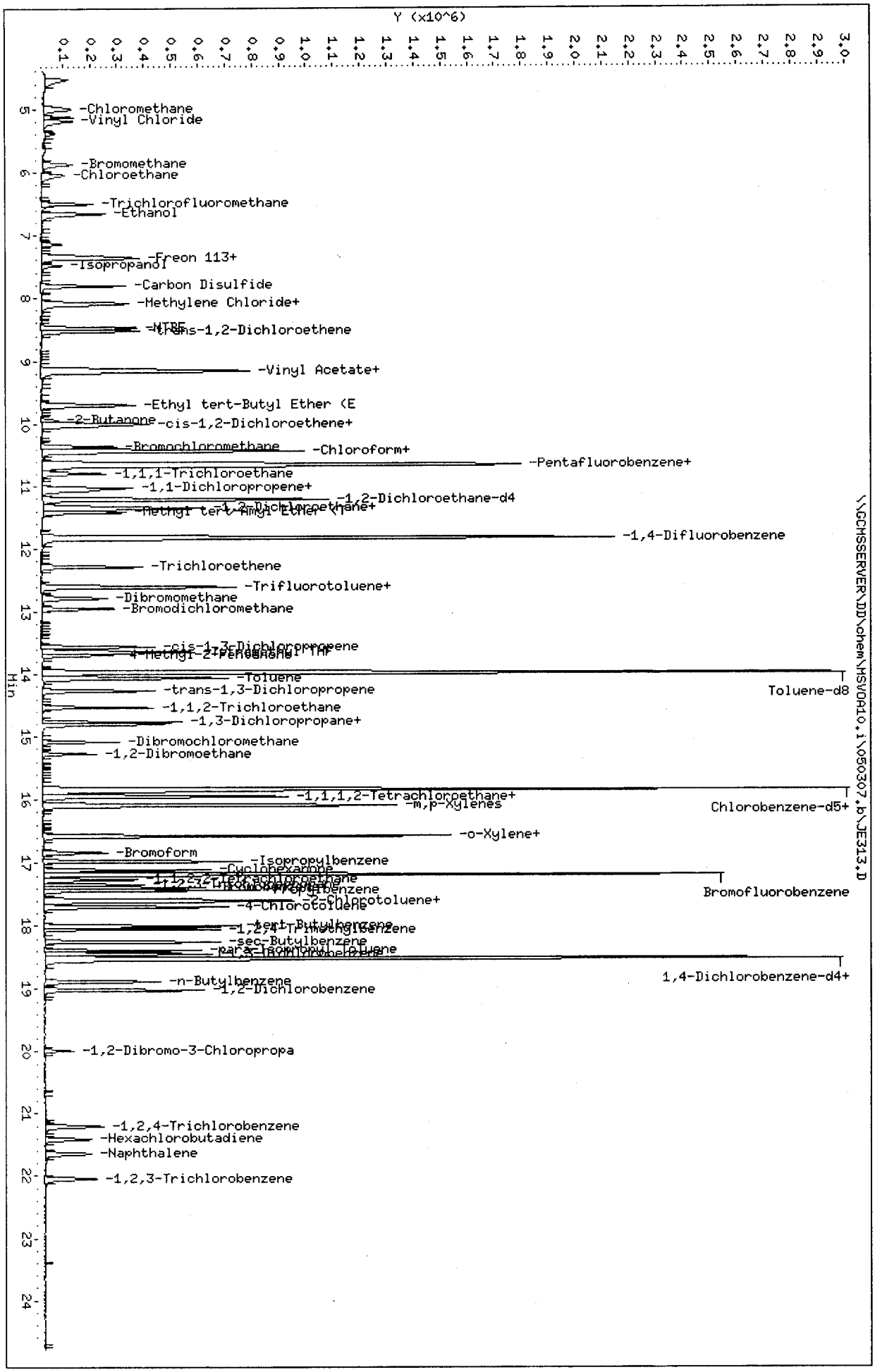
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	917230	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	149173	10.0000	9.7093
81 n-Butylbenzene	91	18.886	18.886	(1.020)	137283	10.0000	9.7163
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	151600	10.0000	10.2077
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	18722	10.0000	10.2934
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	48031	10.0000	9.3808
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	21706	10.0000	9.7928
86 Naphthalene	128	21.647	21.647	(1.169)	104760	10.0000	9.0951(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	45414	10.0000	10.3465

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Date : 03-MAY-2007 16:19
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.002/100,S6072,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:19 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.002/100,S6072,0.004/100
Misc Info : S5938,0.004/100, 20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:09 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:19 Cal File: JE313.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	186996	20.0000	18.5814
2 Chloromethane	50	4.994	4.994	(0.470)	283247	20.0000	19.5710
3 Vinyl Chloride	62	5.181	5.181	(0.487)	206595	20.0000	19.1092
4 Bromomethane	94	5.872	5.872	(0.552)	153230	20.0000	19.6527
5 Chloroethane	64	6.039	6.039	(0.568)	153527	20.0000	20.0120
6 Trichlorofluoromethane	101	6.503	6.503	(0.612)	186970	20.0000	19.3469
7 Ethanol	45	6.660	6.660	(0.626)	320064	2000.00	1903.5449
8 Freon 113	101	7.331	7.331	(0.689)	120374	20.0000	23.3401
9 Acetone	43	7.360	7.360	(0.692)	90282	20.0000	20.0762
10 1,1-Dichloroethene	96	7.370	7.370	(0.693)	144580	20.0000	21.2207
11 Isopropanol	45	7.479	7.479	(0.703)	138719	200.000	201.6472
12 Carbon Disulfide	76	7.814	7.814	(0.735)	576816	20.0000	20.0385
13 Methylene Chloride	84	8.080	8.080	(0.760)	188113	20.0000	19.6265
14 tert-Butyl Alcohol (TBA)	59	8.100	8.100	(0.762)	155391	200.000	191.4976
15 MTBE	73	8.474	8.474	(0.797)	439195	20.0000	19.3623
16 trans-1,2-Dichloroethene	96	8.514	8.514	(0.801)	171269	20.0000	19.7816
18 Vinyl Acetate	43	9.115	9.115	(0.857)	392386	20.0000	19.0882
19 1,1-Dichloroethane	63	9.135	9.135	(0.859)	324682	20.0000	19.9408
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.861)	781752	20.0000	19.8081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.911)	446941	20.0000	19.4597
22 2-Butanone	43	9.934	9.934	(0.934)	116262	20.0000	19.4373
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.940)	182121	20.0000	19.2290

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

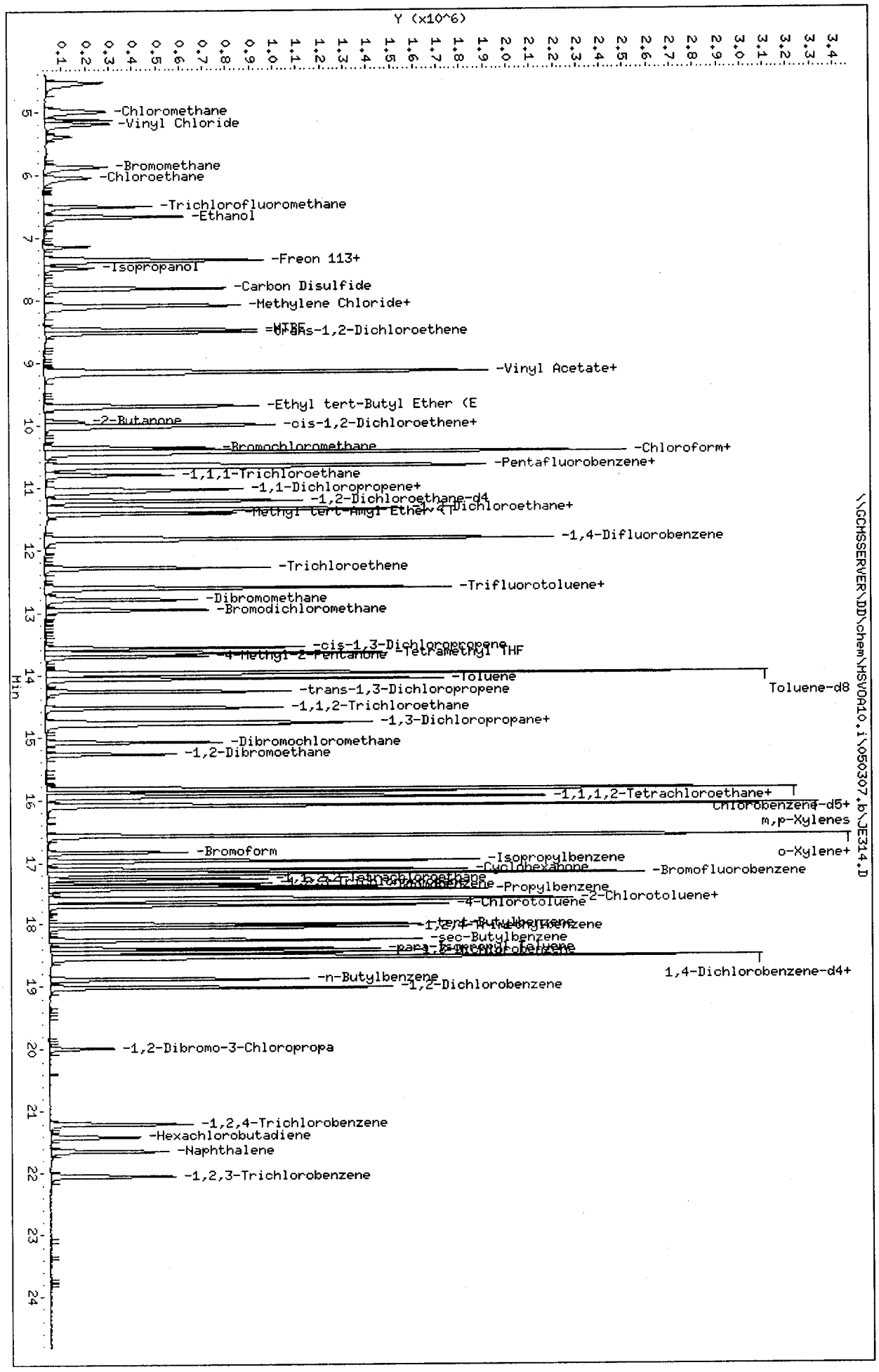
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.943)	158641	20.0000	18.6899
	25 Bromochloromethane	128	10.358	10.358	(0.974)	84899	20.0000	18.7780
	26 Chloroform	83	10.417	10.417	(0.980)	275479	20.0000	19.8629
	27 Tetrahydrofuran	42	10.427	10.427	(0.981)	652109	200.000	202.6329
*	28 Pentafluorobenzene	168	10.634	10.634	(1.000)	1423356	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.003)	797583	50.0000	49.7929
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.015)	180700	20.0000	19.9049
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	205746	20.0000	20.3188
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	142086	20.0000	21.2982
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	899776	50.0000	50.3052
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	232643	20.0000	20.1446
	35 Benzene	78	11.353	11.353	(0.961)	652382	20.0000	20.1092
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	331747	20.0000	19.7187
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2310806	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	166052	20.0000	20.3905
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	213223	20.0000	20.9145
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	204108	20.0000	20.1916
	41 Dibromomethane	93	12.783	12.783	(1.082)	119315	20.0000	20.0789
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	218625	20.0000	19.7906
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	285542	20.0000	19.9272
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	498432	20.0000	20.1970
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	279568	20.0000	20.7197
	47 Toluene-d8	98	13.966	13.966	(1.182)	2522015	50.0000	50.4162
	48 Toluene	92	14.055	14.055	(1.189)	374923	20.0000	20.3839
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	255546	20.0000	20.2664
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	90788	20.0000	20.0067
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	284194	20.0000	20.1328
	52 2-Hexanone	43	14.775	14.775	(0.934)	157898	20.0000	19.3436
	53 Tetrachloroethene	166	14.804	14.804	(0.936)	137319	20.0000	20.4473
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175743	20.0000	19.8340
	55 1,2-Dibromoethane	107	15.268	15.268	(1.292)	173857	20.0000	20.5517
*	56 Chlorobenzene-d5	117	15.820	15.820	(1.000)	1990271	50.0000	
	57 Chlorobenzene	112	15.859	15.859	(1.002)	416244	20.0000	19.9985
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.007)	140426	20.0000	19.9325
	59 Ethylbenzene	91	15.948	15.948	(1.008)	681994	20.0000	20.3232
	60 m,p-Xylenes	106	16.086	16.086	(1.017)	502784	40.0000	41.0470
	61 o-Xylene	106	16.569	16.569	(1.047)	254094	20.0000	20.4106
	62 Styrene	104	16.569	16.569	(1.047)	449841	20.0000	20.6906
	63 Bromoform	173	16.835	16.835	(1.064)	126201	20.0000	19.6268
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	588609	20.0000	20.4755
	65 Cyclohexanone	55	17.111	17.111	(0.924)	326970	200.000	230.7389
	66 Bromofluorobenzene	95	17.170	17.170	(0.928)	1032455	50.0000	49.4421
	67 1,1,2,2-Tetrachloroethane	83	17.259	17.259	(0.932)	226191	20.0000	19.7718
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	200446	20.0000	18.5325
	69 Bromobenzene	156	17.387	17.387	(0.939)	177320	20.0000	19.9852
	70 Propylbenzene	91	17.427	17.427	(0.941)	740774	20.0000	20.7072
	71 2-Chlorotoluene	91	17.575	17.575	(0.949)	524562	20.0000	20.3798
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	444224	20.0000	20.7154
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	481709	20.0000	19.8261
	74 tert-Butylbenzene	119	17.999	17.999	(0.972)	406505	20.0000	21.0205
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	401618	20.0000	20.7952
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	583693	20.0000	21.2647
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	416853	20.0000	21.2134
	78 1,3-Dichlorobenzene	146	18.442	18.442	(0.996)	313184	20.0000	20.3735

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	939511	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	317560	20.0000	20.1791
81 n-Butylbenzene	91	18.876	18.876	(1.020)	328911	20.0000	22.7269
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	310012	20.0000	20.3791
83 1,2-Dibromo-3-Chloropropane	75	19.980	19.980	(1.079)	36842	20.0000	19.7754
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	112830	20.0000	21.5140
85 Hexachlorobutadiene	225	21.410	21.410	(1.157)	50968	20.0000	22.4492
86 Naphthalene	128	21.646	21.646	(1.169)	233435	20.0000	19.7859
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	105637	20.0000	23.4961

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Date : 03-MAY-2007 16:51
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.005/100,S6072,0.01/100
Purpose Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:51 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.005/100,S6072,0.01/100
Misc Info : S5938,0.01/100, 50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:11 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:51 Cal File: JE314.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	504201	50.0000	48.1788
2 Chloromethane	50	4.993	4.993	(0.469)	707558	50.0000	47.0128
3 Vinyl Chloride	62	5.190	5.190	(0.487)	546211	50.0000	48.5838
4 Bromomethane	94	5.871	5.871	(0.551)	396118	50.0000	48.8551
5 Chloroethane	64	6.048	6.048	(0.568)	387910	50.0000	48.6232
6 Trichlorofluoromethane	101	6.511	6.511	(0.611)	500419	50.0000	49.7944
7 Ethanol	45	6.669	6.669	(0.626)	858506	5000.00	4909.9409
8 Freon 113	101	7.340	7.340	(0.689)	270265	50.0000	50.3927
9 Acetone	43	7.369	7.369	(0.692)	236787	50.0000	50.6344
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	349227	50.0000	49.2909
11 Isopropanol	45	7.488	7.488	(0.703)	363163	500.000	507.6502
12 Carbon Disulfide	76	7.813	7.813	(0.733)	1472141	50.0000	49.1794
13 Methylene Chloride	84	8.089	8.089	(0.759)	487837	50.0000	48.9448
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	415778	500.000	492.7261
15 MTBE	73	8.483	8.483	(0.796)	1121415	50.0000	47.5416
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	418054	50.0000	46.4324
18 Vinyl Acetate	43	9.124	9.124	(0.857)	662519	50.0000	30.9925
19 1,1-Dichloroethane	63	9.144	9.144	(0.858)	815210	50.0000	48.1461
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	1986230	50.0000	48.3962
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.910)	1163899	50.0000	48.7313
22 2-Butanone	43	9.933	9.933	(0.932)	317573	50.0000	51.0561
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	461181	50.0000	46.8246

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

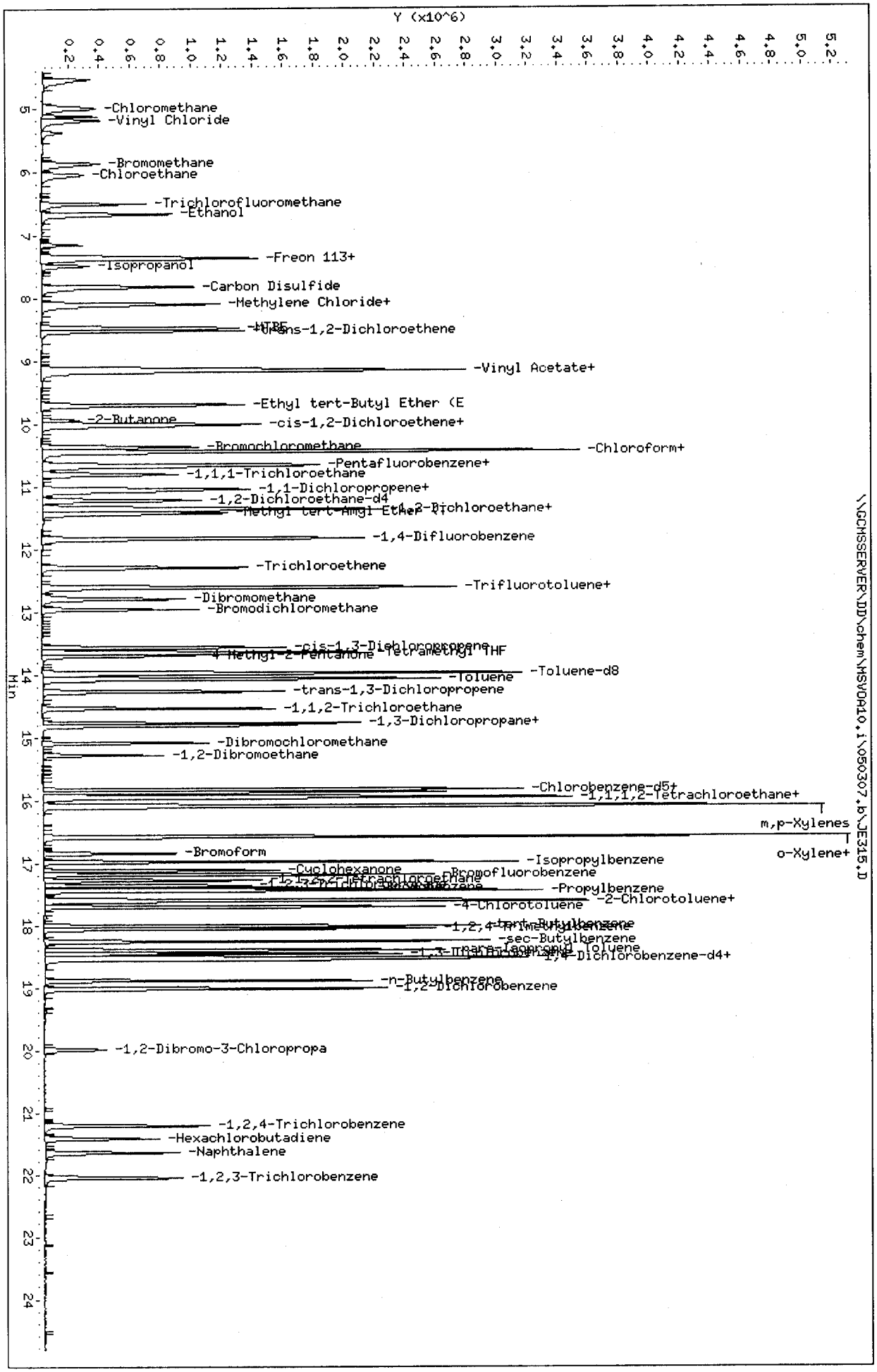
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.942)	383785	50.0000	43.4798
	25 Bromochloromethane	128	10.366	10.366	(0.973)	244827	50.0000	52.0730
	26 Chloroform	83	10.426	10.426	(0.979)	695749	50.0000	48.2407
	27 Tetrahydrofuran	42	10.435	10.435	(0.980)	1649055	500.000	492.7557
*	28 Pentafluorobenzene	168	10.652	10.652	(1.000)	1480154	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.002)	827867	50.0000	49.7002
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.014)	451274	50.0000	47.8024
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	497318	50.0000	46.4788
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	337901	50.0000	47.9331
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	942516	50.0000	49.8679
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	606711	50.0000	49.7170
	35 Benzene	78	11.362	11.362	(0.961)	1654107	50.0000	48.2516
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	871811	50.0000	49.0398
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2441798	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	415910	50.0000	48.3322
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	501243	50.0000	46.5283
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	523637	50.0000	49.0224
	41 Dibromomethane	93	12.792	12.792	(1.082)	312416	50.0000	49.7546
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	567978	50.0000	48.6570
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	737707	50.0000	48.7209
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	1290754	50.0000	49.4971
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	700920	50.0000	49.1609
	47 Toluene-d8	98	13.975	13.975	(1.182)	2607428	50.0000	49.3274
	48 Toluene	92	14.064	14.064	(1.189)	938763	50.0000	48.3010
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	658296	50.0000	49.4064
	50 1,1,2-Trichloroethane	85	14.537	14.537	(1.229)	232911	50.0000	48.5725
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	737516	50.0000	50.7404
	52 2-Hexanone	43	14.783	14.783	(0.934)	419054	50.0000	49.8565
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	322443	50.0000	46.6285
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	463746	50.0000	50.8282
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	456727	50.0000	51.0935
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	2049371	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	1037125	50.0000	48.3919
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	356863	50.0000	49.1936
	59 Ethylbenzene	91	15.957	15.957	(1.008)	1616160	50.0000	46.7723
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	1194176	100.000	94.6805
	61 o-Xylene	106	16.568	16.568	(1.047)	602548	50.0000	47.0052
	62 Styrene	104	16.578	16.578	(1.047)	1081235	50.0000	48.2978
	63 Bromoform	173	16.844	16.844	(1.064)	333182	50.0000	50.3224
	64 Isopropylbenzene	105	16.972	16.972	(0.917)	1372436	50.0000	45.9643
	65 Cyclohexanone	55	17.110	17.110	(0.924)	887316	500.000	602.8524
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1059615	50.0000	48.8533
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.933)	553835	50.0000	46.6093
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	525205	50.0000	46.7504
	69 Bromobenzene	156	17.396	17.396	(0.940)	454747	50.0000	49.3446
	70 Propylbenzene	91	17.436	17.436	(0.942)	1733700	50.0000	46.6585
	71 2-Chlorotoluene	91	17.583	17.583	(0.950)	1239951	50.0000	46.3796
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.951)	1049707	50.0000	47.1280
	73 4-Chlorotoluene	91	17.692	17.692	(0.956)	1175242	50.0000	46.5693
	74 tert-Butylbenzene	119	18.007	18.007	(0.973)	909810	50.0000	45.2949
	75 1,2,4-Trimethylbenzene	105	18.047	18.047	(0.975)	1020238	50.0000	50.8594
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	1337856	50.0000	46.9250
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.994)	981456	50.0000	48.0860
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.997)	766485	50.0000	48.0055

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.510	18.510	(1.000)	975848	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	776019	50.0000	47.4755
81 n-Butylbenzene	91	18.885	18.885	(1.020)	786615	50.0000	52.3291
82 1,2-Dichlorobenzene	146	19.013	19.013	(1.027)	772624	50.0000	48.8985
83 1,2-Dibromo-3-Chloropropane	75	19.979	19.979	(1.079)	96383	50.0000	49.8085
84 1,2,4-Trichlorobenzene	180	21.202	21.202	(1.145)	306325	50.0000	56.2341
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	119376	50.0000	50.6221
86 Naphthalene	128	21.645	21.645	(1.169)	671401	50.0000	54.7888
87 1,2,3-Trichlorobenzene	180	22.050	22.050	(1.191)	294335	50.0000	63.0293

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Date : 03-MAY-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0075/100,S6072,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:24 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0075/100,S6072,0.015/100
Misc Info : S5938,0.015/100, 75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:12 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:24 Cal File: JE315.D
Als bottle: 15 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.532	4.532	(0.425)	665322	75.0000	65.7168
2 Chloromethane	50	4.995	4.995	(0.469)	974450	75.0000	66.9277
3 Vinyl Chloride	62	5.183	5.183	(0.486)	760407	75.0000	69.9148
4 Bromomethane	94	5.873	5.873	(0.551)	590747	75.0000	75.3145
5 Chloroethane	64	6.041	6.041	(0.567)	567112	75.0000	73.4808
6 Trichlorofluoromethane	101	6.504	6.504	(0.610)	715607	75.0000	73.6061
7 Ethanol	45	6.662	6.662	(0.625)	1183509	7500.00	6996.7488
8 Freon 113	101	7.342	7.342	(0.689)	531594	75.0000	102.4589
9 Acetone	43	7.372	7.372	(0.692)	254933	75.0000	56.3515
10 1,1-Dichloroethene	96	7.372	7.372	(0.692)	535637	75.0000	78.1486
11 Isopropanol	45	7.490	7.490	(0.703)	519306	750.000	750.3745
12 Carbon Disulfide	76	7.825	7.825	(0.734)	2235289	75.0000	77.1898
13 Methylene Chloride	84	8.091	8.091	(0.759)	693668	75.0000	71.9408
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.760)	589656	750.000	722.3283
15 MTBE	73	8.476	8.476	(0.795)	1598518	75.0000	70.0514
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.800)	603947	75.0000	69.3393
18 Vinyl Acetate	43	9.117	9.117	(0.856)	2195548	75.0000	106.1678
19 1,1-Dichloroethane	63	9.146	9.146	(0.858)	1180046	75.0000	72.0414
20 Isopropyl Ether (DIPE)	45	9.166	9.166	(0.860)	2786954	75.0000	70.1945
21 Ethyl tert-Butyl Ether (ETBE)	59	9.698	9.698	(0.910)	1673445	75.0000	72.4262
22 2-Butanone	43	9.935	9.935	(0.932)	432725	75.0000	71.9131
23 cis-1,2-Dichloroethene	96	10.004	10.004	(0.939)	654240	75.0000	68.6644

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

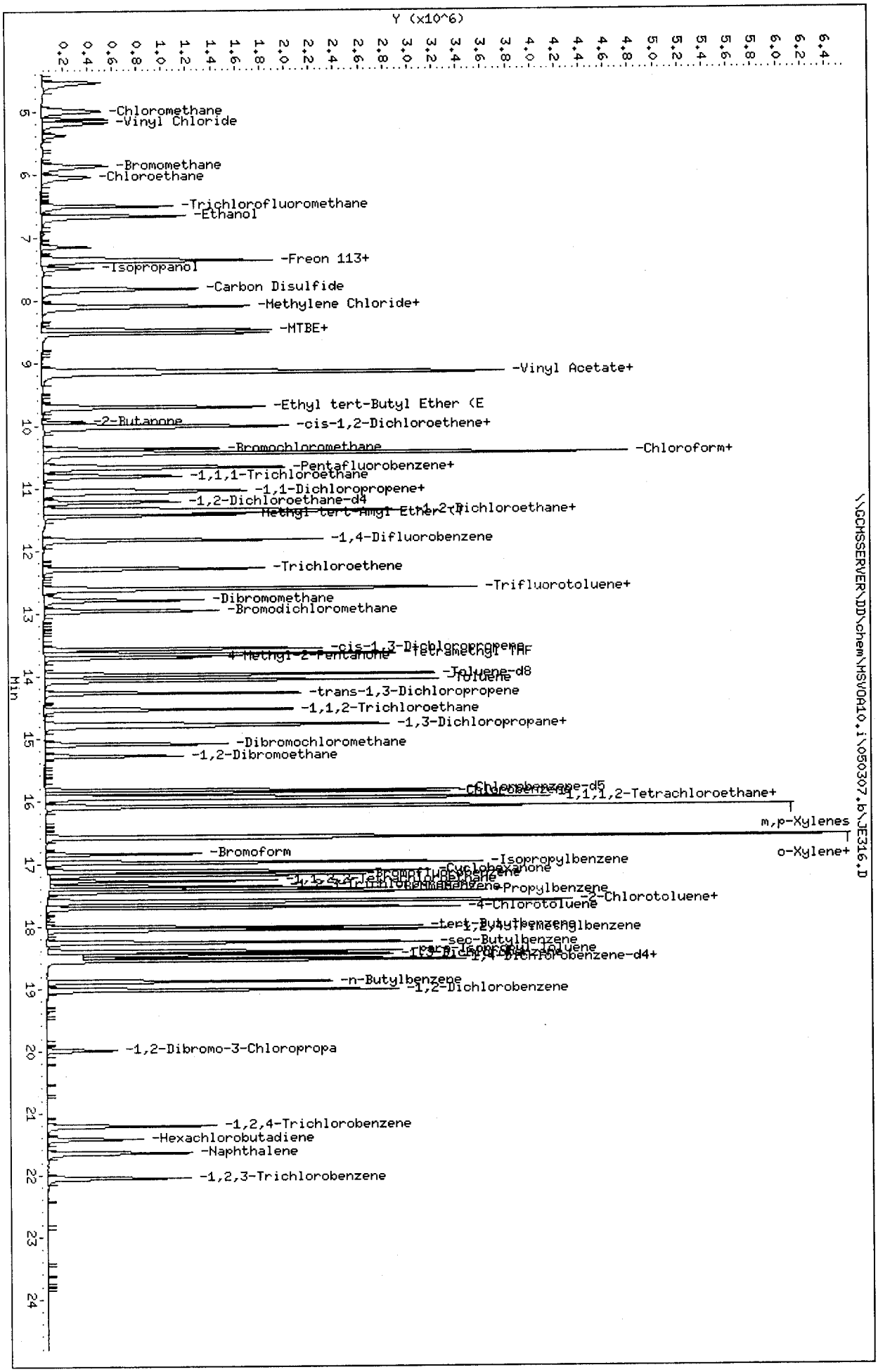
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.034	10.034	(0.942)	674821	75.0000	79.0278
	25 Bromochloromethane	128	10.369	10.369	(0.973)	346491	75.0000	76.1793
	26 Chloroform	83	10.428	10.428	(0.979)	992915	75.0000	71.1648
	27 Tetrahydrofuran	42	10.438	10.438	(0.980)	2326615	750.000	718.6425
*	28 Pentafluorobenzene	168	10.655	10.655	(1.000)	1431908	50.0000	
	29 Dibromofluoromethane	113	10.674	10.674	(1.002)	794941	50.0000	49.3315
	30 1,1,1-Trichloroethane	97	10.803	10.803	(1.014)	712263	75.0000	77.9906
	31 1,1-Dichloropropene	75	11.039	11.039	(0.933)	811214	75.0000	79.0893
	32 Carbon Tetrachloride	117	11.079	11.079	(0.936)	581089	75.0000	85.9905
	33 1,2-Dichloroethane-d4	65	11.217	11.217	(0.948)	887578	50.0000	48.9892
	34 1,2-Dichloroethane	62	11.335	11.335	(0.958)	859136	75.0000	73.4424
	35 Benzene	78	11.365	11.365	(0.960)	2438748	75.0000	74.2124
	36 Methyl tert-Amyl Ether (TAME)	73	11.424	11.424	(0.965)	1287513	75.0000	75.5509
*	37 1,4-Difluorobenzene	114	11.838	11.838	(1.000)	2340712	50.0000	
	38 Trichloroethene	95	12.291	12.291	(1.038)	601330	75.0000	72.8975
	39 Trifluorotoluene	146	12.607	12.607	(1.065)	880330	75.0000	85.2464
	40 1,2-Dichloropropane	63	12.617	12.617	(1.066)	735908	75.0000	71.8704
	41 Dibromomethane	93	12.794	12.794	(1.081)	446568	75.0000	74.1907
	42 Bromodichloromethane	83	12.962	12.962	(1.095)	805593	75.0000	71.9932
	44 cis-1,3-Dichloropropene	75	13.563	13.563	(1.146)	1084077	75.0000	74.6885
	45 Tetramethyl THF	43	13.652	13.652	(1.153)	1835005	75.0000	73.4067
	46 4-Methyl-2-Pentanone	43	13.701	13.701	(1.157)	1024558	75.0000	74.9635
	47 Toluene-d8	98	13.977	13.977	(1.181)	2540553	50.0000	50.1379
	48 Toluene	92	14.066	14.066	(1.188)	1404739	75.0000	75.3976
	49 trans-1,3-Dichloropropene	75	14.273	14.273	(1.206)	962509	75.0000	75.3579
	50 1,1,2-Trichloroethane	85	14.539	14.539	(1.228)	341139	75.0000	74.2154
	51 1,3-Dichloropropane	76	14.776	14.776	(0.933)	1041947	75.0000	73.1952
	52 2-Hexanone	43	14.786	14.786	(0.934)	620581	75.0000	75.3885
	53 Tetrachloroethene	166	14.815	14.815	(0.936)	548973	75.0000	81.0595
	54 Dibromochloromethane	129	15.091	15.091	(0.953)	666030	75.0000	74.5371
	55 1,2-Dibromoethane	107	15.279	15.279	(1.291)	656303	75.0000	76.5906
*	56 Chlorobenzene-d5	117	15.831	15.831	(1.000)	2007086	50.0000	
	57 Chlorobenzene	112	15.870	15.870	(1.002)	1539594	75.0000	73.3504
	58 1,1,1,2-Tetrachloroethane	131	15.939	15.939	(1.007)	529692	75.0000	74.5565
	59 Ethylbenzene	91	15.959	15.959	(1.008)	2549462	75.0000	75.3369
	60 m,p-Xylenes	106	16.087	16.087	(1.016)	1881000	150.000	152.2775
	61 o-Xylene	106	16.570	16.570	(1.047)	918795	75.0000	73.1859
	62 Styrene	104	16.580	16.580	(1.047)	1619179	75.0000	73.8510
	63 Bromoform	173	16.846	16.846	(1.064)	493552	75.0000	76.1144
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	2314351	75.0000	77.8734
	65 Cyclohexanone	55	17.113	17.113	(0.924)	755425	750.000	515.6506
	66 Bromofluorobenzene	95	17.182	17.182	(0.928)	1033698	50.0000	47.8818
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.932)	877482	75.0000	74.1928
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	759185	75.0000	67.8946
	69 Bromobenzene	156	17.398	17.398	(0.939)	677822	75.0000	73.8954
	70 Propylbenzene	91	17.438	17.438	(0.941)	2936524	75.0000	79.4002
	71 2-Chlorotoluene	91	17.586	17.586	(0.949)	1944419	75.0000	73.0709
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.950)	1781595	75.0000	80.3621
	73 4-Chlorotoluene	91	17.694	17.694	(0.955)	1818583	75.0000	72.3998
	74 tert-Butylbenzene	119	18.010	18.010	(0.972)	1596504	75.0000	79.8546
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.974)	1716961	75.0000	85.9928
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	2427192	75.0000	85.5324
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.993)	1777865	75.0000	87.5141
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.996)	1174619	75.0000	73.9121

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.522	18.522	(1.000)	971294	50.0000	
80 1,4-Dichlorobenzene	146	18.552	18.552	(1.002)	1204801	75.0000	74.0532
81 n-Butylbenzene	91	18.887	18.887	(1.020)	1518145	75.0000	101.4673
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1157808	75.0000	73.6199
83 1,2-Dibromo-3-Chloropropane	75	19.982	19.982	(1.079)	146672	75.0000	76.1521
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	521665	75.0000	96.2145
85 Hexachlorobutadiene	225	21.421	21.421	(1.156)	237706	75.0000	101.2734
86 Naphthalene	128	21.648	21.648	(1.169)	1152774	75.0000	94.5117
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	491536	75.0000	105.7518

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Date : 03-MAY-2007 17:57
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.01/100,S6072,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:57 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.01/100,S6072,0.02/100
Misc Info : S5938,0.02/100, 100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:13 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:57 Cal File: JE316.D
Als bottle: 16 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	1042510	100.000	97.3115
2 Chloromethane	50	5.000	5.000	(0.469)	1343417	100.000	87.1959
3 Vinyl Chloride	62	5.187	5.187	(0.487)	1069343	100.000	92.9136
4 Bromomethane	94	5.877	5.877	(0.551)	821645	100.000	98.9921
5 Chloroethane	64	6.045	6.045	(0.567)	776666	100.000	95.0995
6 Trichlorofluoromethane	101	6.508	6.508	(0.611)	1043901	100.000	101.4700
7 Ethanol	45	6.666	6.666	(0.625)	1601102	10000.0	8945.0516
8 Freon 113	101	7.347	7.347	(0.689)	602012	100.000	109.6514
9 Acetone	43	7.366	7.366	(0.691)	394572	100.000	82.4224
10 1,1-Dichloroethene	96	7.376	7.376	(0.692)	724134	100.000	99.8410
11 Isopropanol	45	7.485	7.485	(0.702)	695681	1000.00	949.9572
12 Carbon Disulfide	76	7.820	7.820	(0.734)	3012077	100.000	98.2950
13 Methylene Chloride	84	8.096	8.096	(0.760)	985974	100.000	96.6336
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.760)	813490	1000.00	941.7319
15 MTBE	73	8.480	8.480	(0.796)	2298292	100.000	95.1796
16 trans-1,2-Dichloroethene	96	8.530	8.530	(0.800)	861081	100.000	93.4252
18 Vinyl Acetate	43	9.121	9.121	(0.856)	2792120	100.000	127.5919
19 1,1-Dichloroethane	63	9.151	9.151	(0.858)	1657969	100.000	95.6531
20 Isopropyl Ether (DIPE)	45	9.161	9.161	(0.859)	3919823	100.000	93.2995
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.910)	2334131	100.000	95.4660
22 2-Butanone	43	9.939	9.939	(0.932)	607783	100.000	95.4518
23 cis-1,2-Dichloroethene	96	9.999	9.999	(0.938)	946267	100.000	93.8529

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.038	10.038	(0.942)	874839	100.000	96.8185
25 Bromochloromethane	128	10.373	10.373	(0.973)	498011	100.000	103.4721
26 Chloroform	83	10.432	10.432	(0.979)	1401696	100.000	94.9394
27 Tetrahydrofuran	42	10.442	10.442	(0.980)	3126694	1000.00	912.6681
* 28 Pentafluorobenzene	168	10.659	10.659	(1.000)	1515221	50.0000	
29 Dibromofluoromethane	113	10.679	10.679	(1.002)	870486	50.0000	51.0494
30 1,1,1-Trichloroethane	97	10.807	10.807	(1.014)	921129	100.000	95.3150
31 1,1-Dichloropropene	75	11.044	11.044	(0.933)	1008555	100.000	91.4784
32 Carbon Tetrachloride	117	11.083	11.083	(0.937)	712106	100.000	98.0368
33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	950850	50.0000	48.8250
34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	1206991	100.000	95.9899
35 Benzene	78	11.369	11.369	(0.961)	3301088	100.000	93.4552
36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	1773716	100.000	96.8297
* 37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2516004	50.0000	
38 Trichloroethene	95	12.296	12.296	(1.039)	788744	100.000	88.9554
39 Trifluorotoluene	146	12.611	12.611	(1.066)	1046574	100.000	94.2838
40 1,2-Dichloropropane	63	12.621	12.621	(1.067)	1019121	100.000	92.5953
41 Dibromomethane	93	12.789	12.789	(1.081)	637752	100.000	98.5713
42 Bromodichloromethane	83	12.966	12.966	(1.096)	1157889	100.000	96.2674
44 cis-1,3-Dichloropropene	75	13.568	13.568	(1.147)	1525588	100.000	97.7839
45 Tetramethyl THF	43	13.647	13.647	(1.153)	2558674	100.000	95.2248
46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	1339185	100.000	91.1571
47 Toluene-d8	98	13.972	13.972	(1.181)	2679339	50.0000	49.1928
48 Toluene	92	14.071	14.071	(1.189)	1784637	100.000	89.1146
49 trans-1,3-Dichloropropene	75	14.278	14.278	(1.207)	1353823	100.000	98.6103
50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	474407	100.000	96.0175
51 1,3-Dichloropropane	76	14.771	14.771	(0.933)	1449685	100.000	97.1285
52 2-Hexanone	43	14.790	14.790	(0.934)	823179	100.000	95.3755
53 Tetrachloroethene	166	14.820	14.820	(0.936)	642222	100.000	90.4428
54 Dibromochloromethane	129	15.096	15.096	(0.953)	942103	100.000	100.5572
55 1,2-Dibromoethane	107	15.283	15.283	(1.292)	920390	100.000	99.9263
* 56 Chlorobenzene-d5	117	15.835	15.835	(1.000)	2104409	50.0000	
57 Chlorobenzene	112	15.875	15.875	(1.002)	1991338	100.000	90.4851
58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.006)	711948	100.000	95.5755
59 Ethylbenzene	91	15.963	15.963	(1.008)	3039166	100.000	85.6543
60 m,p-Xylenes	106	16.092	16.092	(1.016)	2239233	200.000	172.8948
61 o-Xylene	106	16.575	16.575	(1.047)	1110918	100.000	84.3970
62 Styrene	104	16.585	16.585	(1.047)	2014865	100.000	87.6483
63 Bromoform	173	16.841	16.841	(1.064)	697528	100.000	102.5963
64 Isopropylbenzene	105	16.979	16.979	(0.917)	2619349	100.000	84.1948
65 Cyclohexanone	55	17.117	17.117	(0.924)	1572948	1000.00	1025.6774
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1080351	50.0000	47.8051
67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	1170494	100.000	94.5421
68 1,2,3-Trichloropropane	75	17.354	17.354	(0.937)	1015049	100.000	86.7175
69 Bromobenzene	156	17.403	17.403	(0.940)	890556	100.000	92.7460
70 Propylbenzene	91	17.442	17.442	(0.942)	3342900	100.000	86.3463
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	2351583	100.000	84.4203
72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	2080533	100.000	89.6498
73 4-Chlorotoluene	91	17.699	17.699	(0.956)	2269523	100.000	86.3120
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	1799173	100.000	85.9677
75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	2086737	100.000	99.8393
76 sec-Butylbenzene	105	18.261	18.261	(0.986)	2676991	100.000	90.1168
77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	2022673	100.000	95.1125
78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	1479296	100.000	88.9214

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	1016760	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	1519696	100.000	89.2314
81 n-Butylbenzene	91	18.892	18.892	(1.020)	1732052	100.000	110.5875
82 1,2-Dichlorobenzene	146	19.020	19.020	(1.027)	1488601	100.000	90.4211
83 1,2-Dibromo-3-Chloropropane	75	19.986	19.986	(1.079)	188687	100.000	93.5856
84 1,2,4-Trichlorobenzene	180	21.209	21.209	(1.145)	661244	100.000	116.5046
85 Hexachlorobutadiene	225	21.426	21.426	(1.157)	233928	100.000	95.2071
86 Naphthalene	128	21.642	21.642	(1.169)	1491468	100.000	116.8120
87 1,2,3-Trichlorobenzene	180	22.047	22.047	(1.191)	640903	100.000	131.7216

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 20PPB IDF : 1.0
Seqnum : 497229413003 File : jf803 Time : 08-JUN-2007 08:49
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (25000X), S6337 (25000X), S5720 (50000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5998	20.00	23.60	ug/L	18	30	0.1000	m
Vinyl Chloride	0.3798	0.4521	20.00	23.81	ug/L	19	20	0.0500	
Bromomethane	0.2739	0.2049	20.00	14.96	ug/L	**-25**	30	0.0500	!c-
Chloroethane	0.2695	0.2932	20.00	21.76	ug/L	9	30	0.0500	
Acetone	0.1718	0.1565	20.00	18.22	ug/L	-9	40	0.0500	
1,1-Dichloroethene	0.2393	0.2566	20.00	21.44	ug/L	7	20	0.0500	
Methylene Chloride	0.3367	0.3522	20.00	20.92	ug/L	5	30	0.0500	
Carbon Disulfide	1.0112	1.1697	20.00	23.14	ug/L	16	30	0.0500	
MTBE	0.7968	0.8403	20.00	21.09	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3111	20.00	20.46	ug/L	2	30	0.0500	
Vinyl Acetate	0.7099	1.0497	20.00	29.57	ug/L	**48**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5980	20.00	20.91	ug/L	5	30	0.1000	
2-Butanone	0.2101	0.2074	20.00	19.74	ug/L	-1	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3343	20.00	20.83	ug/L	4	30	0.0500	
Chloroform	0.4872	0.5061	20.00	20.78	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3454	20.00	21.67	ug/L	8	30	0.0500	
Carbon Tetrachloride	0.1443	0.1605	20.00	22.23	ug/L	11	30	0.0500	
1,2-Dichloroethane	0.2499	0.2538	20.00	20.32	ug/L	2	30	0.0500	
Benzene	0.7020	0.7290	20.00	20.77	ug/L	4	30	0.0500	
Trichloroethene	0.1762	0.1736	20.00	19.71	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.2187	0.2141	20.00	19.57	ug/L	-2	20	0.0500	
Bromodichloromethane	0.2390	0.2382	20.00	19.93	ug/L	0	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2852	20.00	19.54	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3207	20.00	20.68	ug/L	3	30	0.0500	
Toluene	0.3980	0.4170	20.00	20.96	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2765	20.00	20.27	ug/L	1	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0972	20.00	19.80	ug/L	-1	30	0.0500	
2-Hexanone	0.2051	0.1862	20.00	18.16	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1687	0.1873	20.00	22.21	ug/L	11	30	0.0500	
Dibromochloromethane	0.2226	0.2162	20.00	19.43	ug/L	-3	30	0.0500	
Chlorobenzene	0.5229	0.5332	20.00	20.39	ug/L	2	30	0.3000	
Ethylbenzene	0.8430	0.8574	20.00	20.34	ug/L	2	20	0.0500	
m,p-Xylenes	0.3077	0.3308	40.00	43.00	ug/L	8	30	0.0500	
o-Xylene	0.3127	0.3231	20.00	20.66	ug/L	3	30	0.0500	
Styrene	0.5462	0.5601	20.00	20.51	ug/L	3	30	0.0500	
Bromoform	0.1615	0.1493	20.00	18.48	ug/L	-8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5945	20.00	19.53	ug/L	-2	30	0.3000	
Dibromofluoromethane	0.5627	0.5827	50.00	51.77	ug/L	4	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3905	50.00	50.45	ug/L	1	30	0.0500	
Toluene-d8	1.0824	1.0792	50.00	49.85	ug/L	0	30	0.0500	
Bromofluorobenzene	1.1113	1.0872	50.00	48.92	ug/L	-2	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1874711	26.66	10.65	10.60	-0.05
1,4-Difluorobenzene	2441798	3163439	29.55	11.83	11.78	-0.05
Chlorobenzene-d5	2049371	2697441	31.62	15.83	15.79	-0.04
1,4-Dichlorobenzene-d4	975848	1284791	31.66	18.51	18.49	-0.02

Analyst: SJD Date: 06/08/07 Reviewer: ACM Date: 06/08/07

!=warning +=high bias -=low bias c=CCV m=manual integration rsd=ICAL %RSD failure

497229413003

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC391404 IDF : 1.0
Seqnum : 497229413006.3 File : jf806 Time : 08-JUN-2007 10:28
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S5264 (5000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Dibromofluoromethane	0.5627	0.5661	50.00	50.31	ug/L	1	30	0.0500	u
1,2-Dichloroethane-d4	0.3870	0.3817	50.00	49.31	ug/L	-1	30	0.0500	u
Toluene-d8	1.0824	1.0843	50.00	50.09	ug/L	0	30	0.0500	u
Bromofluorobenzene	1.1113	1.0804	50.00	48.61	ug/L	-3	30	0.0500	u

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1841130	24.39	10.65	10.61	-0.04
1,4-Difluorobenzene	2441798	3052181	25.00	11.83	11.78	-0.05
1,4-Dichlorobenzene-d4	975848	1242633	27.34	18.51	18.48	-0.03

ISTD (ICAL je419)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Chlorobenzene-d5 TIC	8290864	8398643	1.30	15.82	15.80	-0.02

Analyst: SJD Date: 06/11/07 Reviewer: BO Date: 06/12/07

u=use

497229413006.3

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195234 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 25PPB IDF : 1.0
Seqnum : 497233759005 File : jfb05 Time : 11-JUN-2007 09:51
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (20000X), S6337 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5722	25.00	28.14	ug/L	13	30	0.1000	
Vinyl Chloride	0.3798	0.4180	25.00	27.52	ug/L	10	20	0.0500	
Bromomethane	0.2739	0.2595	25.00	23.68	ug/L	-5	30	0.0500	
Chloroethane	0.2695	0.2837	25.00	26.32	ug/L	5	30	0.0500	
Acetone	0.1718	0.1369	25.00	19.92	ug/L	-20	40	0.0500	
1,1-Dichloroethene	0.2393	0.2671	25.00	27.90	ug/L	12	20	0.0500	
Methylene Chloride	0.3367	0.3603	25.00	26.75	ug/L	7	30	0.0500	
Carbon Disulfide	1.0112	1.1361	25.00	28.09	ug/L	12	30	0.0500	
MTBE	0.7968	0.8357	25.00	26.22	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3149	25.00	25.89	ug/L	4	30	0.0500	
Vinyl Acetate	0.7099	1.0694	25.00	37.66	ug/L	**51**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5974	25.00	26.11	ug/L	4	30	0.1000	
2-Butanone	0.2101	0.2013	25.00	23.95	ug/L	-4	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3360	25.00	26.16	ug/L	5	30	0.0500	
Chloroform	0.4872	0.5021	25.00	25.76	ug/L	3	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3389	25.00	26.57	ug/L	6	30	0.0500	
Carbon Tetrachloride	0.1443	0.1634	25.00	28.30	ug/L	13	30	0.0500	
1,2-Dichloroethane	0.2499	0.2561	25.00	25.63	ug/L	3	30	0.0500	
Benzene	0.7020	0.7384	25.00	26.30	ug/L	5	30	0.0500	
Trichloroethene	0.1762	0.1737	25.00	24.64	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.2187	0.2216	25.00	25.32	ug/L	1	20	0.0500	
Bromodichloromethane	0.2390	0.2342	25.00	24.50	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2763	25.00	23.66	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3260	25.00	26.29	ug/L	5	30	0.0500	
Toluene	0.3980	0.4291	25.00	26.95	ug/L	8	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2796	25.00	25.62	ug/L	2	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0946	25.00	24.07	ug/L	-4	30	0.0500	
2-Hexanone	0.2051	0.1854	25.00	22.60	ug/L	-10	40	0.0500	
Tetrachloroethene	0.1687	0.1930	25.00	28.60	ug/L	14	30	0.0500	
Dibromochloromethane	0.2226	0.2283	25.00	25.65	ug/L	3	30	0.0500	
Chlorobenzene	0.5229	0.5539	25.00	26.48	ug/L	6	30	0.3000	
Ethylbenzene	0.8430	0.9083	25.00	26.94	ug/L	8	20	0.0500	
m,p-Xylenes	0.3077	0.3417	50.00	55.53	ug/L	11	30	0.0500	
o-Xylene	0.3127	0.3400	25.00	27.18	ug/L	9	30	0.0500	
Styrene	0.5462	0.5819	25.00	26.63	ug/L	7	30	0.0500	
Bromoform	0.1615	0.1530	25.00	23.68	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.6019	25.00	24.72	ug/L	-1	30	0.3000	
Dibromofluoromethane	0.5627	0.5702	50.00	50.67	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3732	50.00	48.22	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.0652	50.00	49.21	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0953	50.00	49.28	ug/L	-1	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2017688	36.32	10.65	10.61	-0.04
1,4-Difluorobenzene	2441798	3381629	38.49	11.83	11.79	-0.04
Chlorobenzene-d5	2049371	2810835	37.16	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1331605	36.46	18.51	18.49	-0.02

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497233759005

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497229413

Date : 06/08/07
Sequence : MSVOA10 jf8

Reference : je314
Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
003	CCV	20PPB	1874711	10.60	3163439	11.78	2697441	15.79	1284791	18.49
005	LCS	QC391403	1891179	10.60	3169164	11.78	2741721	15.80	1294229	18.49
006	CCV/BS	QC391404	1841130	10.61	3052181	11.78	2618134	15.80	1242633	18.48
007	BSD	QC391405	1852972	10.60	3055975	11.78	2607740	15.80	1233696	18.49
009	BLANK	QC391402	1901959	10.59	3129946	11.78	2691505	15.80	1267133	18.49
010	SAMPLE	195234-006	1899011	10.59	3146571	11.78	2655733	15.80	1248730	18.49
011	SAMPLE	195241-008	1925120	10.59	3204724	11.78	2706066	15.80	1270929	18.49
012	SAMPLE	195275-001	1895070	10.59	3134075	11.78	2652015	15.80	1223581	18.49
013	SAMPLE	195275-002	1905036	10.60	3182298	11.78	2654431	15.80	1209174	18.49
014	SAMPLE	195246-010	1872483	10.61	3139171	11.79	2639108	15.81	1188045	18.51
015	SAMPLE	195234-002	1869248	10.60	3157747	11.78	2666191	15.80	1205398	18.49
016	SAMPLE	195234-004	1998007	10.60	3299129	11.79	2836608	15.80	1274756	18.49
017	SAMPLE	195234-005	2000511	10.60	3332843	11.79	2871962	15.80	1299475	18.49
018	SAMPLE	195241-004	1878732	10.60	3161482	11.79	2684276	15.80	1219602	18.49
019	SAMPLE	195241-005	1824894	10.60	3053968	11.78	2675785	15.80	1223527	18.50
020	MSS	195234-003	1876349	10.60	3141074	11.78	2698981	15.80	1213303	18.50
021	SAMPLE	195213-001	2028024	10.60	3376302	11.78	2879684	15.80	1317967	18.49
023	MS	QC391497	1886197	10.60	3102920	11.79	2708964	15.80	1274631	18.49
024	MSD	QC391498	1911191	10.60	3161674	11.78	2743121	15.80	1302743	18.50

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497229413

Date : 06/08/07 Reference : je419
Sequence : MSVOA10 jf8 Analyzed : 05/04/07 20:33

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	8290864	15.82
		LOWER LIMIT	4145432	15.32
		UPPER LIMIT	16581728	16.32
006	CCV/BS	QC391404	8398643	15.80
012	SAMPLE	195275-001	8273010	15.80
013	SAMPLE	195275-002	8385514	15.80

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497233759

Date : 06/11/07
Sequence : MSVOA10 jfb

Reference : je314
Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
005	CCV	25PPB	2017688	10.61	3381629	11.79	2810835	15.80	1331605	18.49
006	LCS	QC391611	2097016	10.60	3445938	11.79	2931210	15.81	1392427	18.49
008	BLANK	QC391610	1912752	10.60	3184818	11.79	2768982	15.81	1282170	18.50
009	SAMPLE	195270-009	2085195	10.61	3448360	11.79	2916802	15.80	1366839	18.50
010	SAMPLE	195270-019	2013497	10.61	3347384	11.79	2845061	15.81	1317775	18.49
011	SAMPLE	195270-002	2005941	10.61	3351706	11.79	2834187	15.80	1383043	18.49
012	SAMPLE	195270-010	1908574	10.61	3160867	11.79	2685615	15.80	1283051	18.50
013	SAMPLE	195270-011	1906901	10.61	3160315	11.79	2695330	15.80	1301913	18.49
014	SAMPLE	195279-001	1923241	10.60	3271069	11.79	2764580	15.80	1304517	18.49
015	MSS	195234-001	1919706	10.61	3164331	11.79	2687214	15.80	1270037	18.50
016	SAMPLE	195300-008	1927107	10.60	3228807	11.79	2779472	15.81	1312173	18.49
017	SAMPLE	195270-001	1955664	10.61	3233345	11.79	2749881	15.80	1342625	18.50
018	SAMPLE	195300-009	1907589	10.60	3188285	11.78	2689257	15.81	1275032	18.50
019	SAMPLE	195255-002	1901103	10.60	3170383	11.79	2723527	15.81	1289215	18.49
020	SAMPLE	195270-016	1935778	10.60	3261082	11.79	2750695	15.80	1272237	18.49
021	SAMPLE	195229-002	1890409	10.60	3154866	11.79	2684798	15.80	1249757	18.49
022	SAMPLE	195250-014	1915392	10.61	3172166	11.79	2729191	15.80	1295819	18.50
023	MS	QC391631	1909503	10.60	3139149	11.79	2668628	15.81	1275577	18.49
024	MSD	QC391632	1895276	10.60	3165701	11.79	2696778	15.80	1272294	18.49

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497177754

Instrument : MSVOA10 Begun : 05/03/07 10:34
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	je301	TUN	BFB			05/03/07 10:34	1.0	1
002	je302	TUN	BFB			05/03/07 10:47	1.0	1
003	je303	X	IB			05/03/07 11:05	1.0	2
004	je304	X	LOWPOINT			05/03/07 11:39	1.0	2
005	je305	TUN	BFB			05/03/07 12:11	1.0	1
006	je306	X	IB			05/03/07 12:29	1.0	2
007	je307	IB	CALIB			05/03/07 13:01	1.0	2
008	je308	ICAL	0.25/0.5PPB			05/03/07 13:35	1.0	3 4 5 2
009	je309	ICAL	0.5/1PPB			05/03/07 14:07	1.0	3 4 5 2
010	je310	ICAL	2PPB			05/03/07 14:40	1.0	3 4 5 2
011	je311	ICAL	5PPB			05/03/07 15:13	1.0	3 4 5 2
012	je312	ICAL	10PPB			05/03/07 15:46	1.0	3 4 5 2
013	je313	ICAL	20PPB			05/03/07 16:19	1.0	3 4 5 2
014	je314	ICAL	50PPB			05/03/07 16:51	1.0	3 4 5 2
015	je315	ICAL	75PPB			05/03/07 17:24	1.0	3 4 5 2
016	je316	ICAL	100PPB			05/03/07 17:57	1.0	3 4 5 2
017	je317	ICV				05/03/07 18:30	1.0	6 2
018	je318	ICV				05/03/07 19:03	1.0	7 8 2
019	je319	X	IB			05/03/07 19:36	1.0	2
020	je320	X	IB			05/03/07 20:08	1.0	2
021	je321	X	IB			05/03/07 20:41	1.0	2

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

Standards used: 1=S5117 2=S6084 3=S5194 4=S6072 5=S5938 6=S6044 7=S5723 8=S5968

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497229413

Instrument : MSVOA10
Method : EPA 8260B

Begun : 06/08/07 07:33
SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jf801	X	IB			06/08/07 07:33	1.0	1	
002	jf802	TUN	BFB			06/08/07 08:31	1.0	2	
003	jf803	CCV	20PPB			06/08/07 08:49	1.0	3 4 5 1	
004	jf804	X	TVH2000PPB			06/08/07 09:22	1.0	6 1	1:BZME=160
005	jf805	LCS	QC391403	Water	126079	06/08/07 09:54	1.0	7 8 9 1	
006	jf806	CCV/BS	QC391404	Water	126079	06/08/07 10:28	1.0	10 1	1:BZME=170
007	jf807	BSD	QC391405	Water	126079	06/08/07 11:01	1.0	10 1	1:BZME=170
008	jf808	X	IB			06/08/07 11:34	1.0	1	
009	jf809	BLANK	QC391402	Water	126079	06/08/07 12:06	1.0	1	
010	jf810	SAMPLE	195234-006	Water	126079	06/08/07 12:39	1.0	1	
011	jf811	SAMPLE	195241-008	Water	126079	06/08/07 13:12	1.0	1	
012	jf812	SAMPLE	195275-001	Water	126079	06/08/07 13:44	1000	1	
013	jf813	SAMPLE	195275-002	Water	126079	06/08/07 14:17	5000	1	
014	jf814	SAMPLE	195246-010	Water	126079	06/08/07 14:49	1.0	1	
015	jf815	SAMPLE	195234-002	Water	126079	06/08/07 15:22	1.0	1	
016	jf816	SAMPLE	195234-004	Water	126079	06/08/07 15:55	1.0	1	
017	jf817	SAMPLE	195234-005	Water	126079	06/08/07 16:28	1.0	1	
018	jf818	SAMPLE	195241-004	Water	126079	06/08/07 17:00	1.0	1	
019	jf819	SAMPLE	195241-005	Water	126079	06/08/07 17:33	1.0	1	
020	jf820	MSS	195234-003	Water	126079	06/08/07 18:06	1.0	1	
021	jf821	SAMPLE	195213-001	Water	126079	06/08/07 18:38	200.0	1	
022	jf822	X	195282-001	Water	126079	06/08/07 19:11	2.0	1	
023	jf823	MS	QC391497	Water	126079	06/08/07 19:44	1.0	7 8 9 1	
024	jf824	MSD	QC391498	Water	126079	06/08/07 20:16	1.0	7 8 9 1	
025	jf825	X	IB			06/08/07 20:49	1.0	1	
026	jf826	X	IB			06/08/07 21:22	1.0	1	
027	jf827	X	IB			06/08/07 21:54	1.0	1	

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/11/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6337 5=S5720 6=S5628 7=S6392 8=S6207 9=S6357 10=S5264

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497233759

Instrument : MSVOA10
Method : EPA 8260B

Begun : 06/11/07 07:59
SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfb01	X	IB			06/11/07 07:59	1.0	1	
002	jfb02	X	BFB			06/11/07 08:37	1.0	2	
003	jfb03	X	25PPB			06/11/07 08:54	1.0	3 4 5 1	
004	jfb04	TUN	BFB			06/11/07 09:30	1.0	2	
005	jfb05	CCV	25PPB			06/11/07 09:51	1.0	3 4 5 1	
006	jfb06	LCS	QC391611	Water	126137	06/11/07 10:32	1.0	6 7 8 1	
007	jfb07	X	IB			06/11/07 11:05	1.0	1	
008	jfb08	BLANK	QC391610	Water	126137	06/11/07 11:38	1.0	1	
009	jfb09	SAMPLE	195270-009	Water	126137	06/11/07 12:11	1.0	1	
010	jfb10	SAMPLE	195270-019	Water	126137	06/11/07 12:44	1.0	1	
011	jfb11	SAMPLE	195270-002	Water	126137	06/11/07 13:18	1.0	1	
012	jfb12	SAMPLE	195270-010	Water	126137	06/11/07 13:51	1.0	1	
013	jfb13	SAMPLE	195270-011	Water	126137	06/11/07 14:23	1.0	1	
014	jfb14	SAMPLE	195279-001	Water	126137	06/11/07 14:56	1.0	1	
015	jfb15	MSS	195234-001	Water	126137	06/11/07 15:29	1.0	1	
016	jfb16	SAMPLE	195300-008	Water	126137	06/11/07 16:02	1.0	1	
017	jfb17	SAMPLE	195270-001	Water	126137	06/11/07 16:35	1.429	1	
018	jfb18	SAMPLE	195300-009	Water	126137	06/11/07 17:07	2.0	1	
019	jfb19	SAMPLE	195255-002	Water	126137	06/11/07 17:40	5.0	1	
020	jfb20	SAMPLE	195270-016	Water	126137	06/11/07 18:13	8.333	1	
021	jfb21	SAMPLE	195229-002	Water	126137	06/11/07 18:46	40.0	1	
022	jfb22	SAMPLE	195250-014	Water	126137	06/11/07 19:19	16.67	1	pH > 2, headspace <= 1 mL
023	jfb23	MS	QC391631	Water	126137	06/11/07 19:51	1.0	6 7 8 1	
024	jfb24	MSD	QC391632	Water	126137	06/11/07 20:24	1.0	6 7 8 1	
025	jfb25	X	IB			06/11/07 20:57	1.0	1	
026	jfb26	X	IB			06/11/07 21:30	1.0	1	
027	jfb27	X	IB			06/11/07 22:02	1.0	1	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/12/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6337 5=S5720 6=S6392 7=S6207 8=S6357

REPORTING SUMMARY FOR 195234 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLME	VCMEA	BRME	CLEA	AEE	DCE	MTL	CSB	MTE	DCA	VTE	DCL	MEE	DCL	TCC	TTC	CTL	DAA	BZ2	TCZ	DCC	BDD	MIC	DKP	BCM	DZ1	BEP	TCM	DZ1	TCA	TXE	HOL	PMB	DYL	CYL	CLT	BOY	EXM	XTE	TOX	STE	TBM	PCA	DBF	DCB	BZM	BRA4
195234-001	MSVOA10	06/11/07 15:29	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-002	MSVOA10	06/08/07 15:22	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-003	MSVOA10	06/08/07 18:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-004	MSVOA10	06/08/07 15:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-005	MSVOA10	06/08/07 16:28	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-006	MSVOA10	06/08/07 12:39	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391402	MSVOA10	06/08/07 12:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391403	MSVOA10	06/08/07 09:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391404	MSVOA10	06/08/07 10:28	1.0																																																+	+	+	+
QC391405	MSVOA10	06/08/07 11:01	1.0																																																+	+	+	+
QC391497	MSVOA10	06/08/07 19:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391498	MSVOA10	06/08/07 20:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391610	MSVOA10	06/11/07 11:38	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391611	MSVOA10	06/11/07 10:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391631	MSVOA10	06/11/07 19:51	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391632	MSVOA10	06/11/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/8/07
PREPPED BY. ZR

WATER

126079

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195275-001		B	<2			10	~~5000x~~ ~~16.7x~~ 5000x	
2	-002		↓	↓				~~833x~~ ~~25x~~ 1000x	
3	195234-002		A	<2				1x	
4	-003		BCDE	<2				MRS/MS/MSD	
5	-004		A					↓	
6	-005		B						
7	-006		A					TR	
8	195241-004		B					1x	
9	-005		C					2x	
10	-008		A				↓	TR	
11	195246-000		B					RR 1x CS, ↓	
12	195213-001		C	<2				RR 200x vial C ANOMOLOUS	
13	~~195282-001~~		~~B~~	~~<2~~	~~brk~~			~~2xF~~	Cancelled
14									
15									
16									
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PREPFORM.XLS

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/11/07
PREPPED BY. ZZ

WATER

126137

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
			F	<2			10	RR 5x VC>LR	
1	195255-002		A	7	1mL			RR 16.67 succ↑	
2	195250-014		E	<2				RR 40x Toluene >LR	
3	195229-002		B					1.42x	
4	195270-001			<2				1x	
5	-002		A					TB Punctured but not sampled	
6	-009							1x	
7	-010							1x	
8	-011			<2				8.32x	
9	-016							TB	
10	-019							1x	
11	195279-001		BC					~~1x MSS/MSD/MSD~~	
12	~~195283-014~~			<2				1X	
13	195300-008			<2				2X	
14	-009		BCDE	<2			10	1x MSS/MSD/MSD	
15	195234-001								
16									
17									
18									
19									
20									
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PREPFORM.XLS

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

METALS

00129

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW20	Batch#:	126207
Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	10.00	Analyzed:	06/13/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	1.6	1.0
Calcium	13,000	500
Chromium	ND	10
Copper	4.3	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	3,800	500
Manganese	ND	10
Nickel	ND	20
Potassium	2,200	500
Sodium	8,400	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW06	Batch#:	126207
Lab ID:	195234-002	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	10.00	Analyzed:	06/14/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	7.6	5.0
Cadmium	ND	1.0
Calcium	25,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	39,000	500
Manganese	13	10
Nickel	ND	20
Potassium	8,100	500
Sodium	46,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW13	Sampled:	06/05/07
Lab ID:	195234-003	Received:	06/06/07
Matrix:	Filtrate	Prepared:	06/12/07
Units:	ug/L	Analyzed:	06/14/07
Batch#:	126207		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Arsenic	31	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	2,600	500	10.00
Chromium	ND	10	10.00
Copper	7.4	1.0	10.00
Iron	250	100	10.00
Lead	ND	3.0	10.00
Magnesium	5,400	500	10.00
Manganese	59	10	10.00
Nickel	ND	20	10.00
Potassium	7,000	500	10.00
Sodium	310,000	500	20.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0605072A	Batch#:	126207
Lab ID:	195234-004	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	10.00	Analyzed:	06/14/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	14,000	500
Chromium	ND	10
Copper	3.7	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	3,900	500
Manganese	ND	10
Nickel	ND	20
Potassium	2,200	500
Sodium	8,600	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

20.0

: 22149

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0605072B	Sampled:	06/05/07
Lab ID:	195234-005	Received:	06/06/07
Matrix:	Filtrate	Prepared:	06/12/07
Units:	ug/L	Analyzed:	06/14/07
Batch#:	126207		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	10.00
Arsenic	29	5.0	10.00
Cadmium	ND	1.0	10.00
Calcium	2,600	500	10.00
Chromium	ND	10	10.00
Copper	35	1.0	10.00
Iron	340	100	10.00
Lead	ND	3.0	10.00
Magnesium	5,300	500	10.00
Manganese	61	10	10.00
Nickel	ND	20	10.00
Potassium	6,900	500	10.00
Sodium	290,000	500	50.00
Zinc	33	20	10.00

ND= Not Detected
RL= Reporting Limit

21.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391899	Batch#:	126207
Matrix:	Filtrate	Prepared:	06/12/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	ND	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

22.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126207
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: BS Lab ID: QC391900

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,108	91	80-120
Arsenic	100.0	89.48	89	80-120
Cadmium	100.0	92.96	93	80-120
Calcium	10,000	9,383	94	80-120
Chromium	100.0	94.08	94	80-120
Copper	100.0	93.51	94	80-120
Iron	10,000	9,866	99	80-120
Lead	100.0	93.94	94	80-120
Magnesium	10,000	9,040	90	80-120
Manganese	100.0	96.06	96	80-120
Nickel	100.0	93.72	94	80-120
Potassium	10,000	9,338	93	80-120
Sodium	10,000	9,640	96	80-120
Zinc	100.0	92.61	93	80-120

Type: BSD Lab ID: QC391901

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	8,655	87	80-120	5	20
Arsenic	100.0	84.40	84	80-120	6	20
Cadmium	100.0	87.51	88	80-120	6	20
Calcium	10,000	8,951	90	80-120	5	20
Chromium	100.0	88.51	89	80-120	6	20
Copper	100.0	88.54	89	80-120	5	20
Iron	10,000	9,387	94	80-120	5	20
Lead	100.0	88.82	89	80-120	6	20
Magnesium	10,000	8,508	85	80-120	6	20
Manganese	100.0	90.40	90	80-120	6	20
Nickel	100.0	88.62	89	80-120	6	20
Potassium	10,000	8,818	88	80-120	6	20
Sodium	10,000	9,254	93	80-120	4	20
Zinc	100.0	85.32	85	80-120	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW20	Batch#:	126207
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	10.00	Analyzed:	06/13/07

Type: MS Lab ID: QC391902

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	82.54	10,000	8,887	88	75-125
Arsenic	1.108	100.0	88.45	87	75-125
Cadmium	1.569	100.0	91.53	90	75-125
Calcium	13,380	10,000	23,740	104	75-125
Chromium	3.896	100.0	95.72	92	75-125
Copper	4.315	100.0	93.44	89	75-125
Iron	77.84	10,000	9,814	97	75-125
Lead	0.8387	100.0	89.91	89	75-125
Magnesium	3,794	10,000	12,540	87	75-125
Manganese	3.009	100.0	93.79	91	75-125
Nickel	2.392	100.0	93.19	91	75-125
Potassium	2,187	10,000	11,110	89	75-125
Sodium	8,407	10,000	17,420	90	75-125
Zinc	8.521	100.0	100.2	92	75-125

Type: MSD Lab ID: QC391903

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	8,850	88	75-125	0	20
Arsenic	100.0	89.06	88	75-125	1	20
Cadmium	100.0	92.20	91	75-125	1	20
Calcium	10,000	23,410	100	75-125	1	20
Chromium	100.0	91.72	88	75-125	4	20
Copper	100.0	94.31	90	75-125	1	20
Iron	10,000	9,845	98	75-125	0	20
Lead	100.0	90.19	89	75-125	0	20
Magnesium	10,000	12,450	87	75-125	1	20
Manganese	100.0	94.12	91	75-125	0	20
Nickel	100.0	91.95	90	75-125	1	20
Potassium	10,000	11,090	89	75-125	0	20
Sodium	10,000	17,310	89	75-125	1	20
Zinc	100.0	99.23	91	75-125	1	20

RPD= Relative Percent Difference

24.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW13	Batch#:	126207
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/12/07
Diln Fac:	10.00	Analyzed:	06/14/07

Type: MS Lab ID: QC391906

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	80.53	10,000	9,014	89	75-125
Arsenic	31.22	100.0	126.3	95	75-125
Cadmium	0.6996	100.0	92.41	92	75-125
Calcium	2,560	10,000	11,140	86	75-125
Chromium	2.971	100.0	97.82	95	75-125
Copper	7.359	100.0	100.8	93	75-125
Iron	254.3	10,000	10,690	104	75-125
Lead	0.7380	100.0	90.29	90	75-125
Magnesium	5,448	10,000	14,070	86	75-125
Manganese	59.44	100.0	149.2	90	75-125
Nickel	13.66	100.0	127.8	114	75-125
Potassium	7,006	10,000	15,880	89	75-125
Sodium	306,600	10,000	297,600 >LR	-90 NM	75-125
Zinc	6.717	100.0	111.6	105	75-125

Type: MSD Lab ID: QC391907

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	8,946	89	75-125	1	20
Arsenic	100.0	118.0	87	75-125	7	20
Cadmium	100.0	91.34	91	75-125	1	20
Calcium	10,000	11,190	86	75-125	0	20
Chromium	100.0	94.16	91	75-125	4	20
Copper	100.0	98.34	91	75-125	2	20
Iron	10,000	10,560	103	75-125	1	20
Lead	100.0	89.66	89	75-125	1	20
Magnesium	10,000	14,130	87	75-125	0	20
Manganese	100.0	153.0	94	75-125	3	20
Nickel	100.0	107.7	94	75-125	17	20
Potassium	10,000	16,060	91	75-125	1	20
Sodium	10,000	306,700 >LR	1 NM	75-125	NC	20
Zinc	100.0	98.44	92	75-125	13	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW20	Diln Fac:	50.00
Type:	Serial Dilution	Batch#:	126207
MSS Lab ID:	195234-001	Sampled:	06/05/07
Lab ID:	QC391904	Received:	06/06/07
Matrix:	Filtrate	Analyzed:	06/13/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Aluminum	ND	100.0	70.79 J	500.0	NC	10
Arsenic	ND	5.000	ND	5.000	NC	10
Cadmium	1.569	1.000	1.565 J	5.000	NC	10
Calcium	13,380	500.0	16,110	500.0	20 *	10
Chromium	ND	10.00	3.986 J	10.00	NC	10
Copper	4.315	1.000	4.400 J	5.000	NC	10
Iron	ND	100.0	ND	500.0	NC	10
Lead	ND	3.000	0.9479 J	5.000	NC	10
Magnesium	3,794	500.0	3,822	500.0	1	10
Manganese	ND	10.00	2.269 J	10.00	NC	10
Nickel	ND	20.00	2.243 J	20.00	NC	10
Potassium	2,187	500.0	1,928	500.0	12 *	10
Sodium	8,407	500.0	8,477	500.0	1	10
Zinc	ND	20.00	ND	20.00	NC	10

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

25.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897236579081
File : f13g0081
IDF : 10.0
Lab ID : 195234-001
Matrix : Filtrate
Batch : 126207
Time : 13-JUN-2007 14:59
Cal : 897236579001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897237240107
File : f13r0107
IDF : 10.0
Lab ID : QC391905
Matrix : Filtrate
Batch : 126207
Time : 14-JUN-2007 04:42
Cal : 897237240001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	8.254	A	10000	8891	A	89	75-125	u
Antimony	0.2243	A	100.0	84.85	A	85	75-125	u
Arsenic	0.1108	E	100.0	89.67	E	90	75-125	u
Barium	5.975	A	100.0	97.37	A	91	75-125	u
Beryllium	0.07760	A	100.0	96.96	A	97	75-125	u
Cadmium	0.1569	A	100.0	92.70	A	93	75-125	u
Calcium	1338	A	10000	10800	A	95	75-125	u
Chromium	0.3896	E	100.0	92.63	E	92	75-125	u
Cobalt	0.09477	E	100.0	94.83	E	95	75-125	u
Copper	0.4315	E	100.0	92.35	E	92	75-125	u
Iron	7.784	H	10000	10010	H	100	75-125	u
Lead	0.08387	A	100.0	85.80	A	86	75-125	u
Magnesium	379.4	A	10000	9290	A	89	75-125	u
Manganese	0.3009	E	100.0	93.58	E	93	75-125	u
Molybdenum	0.2300	A	100.0	87.04	A	87	75-125	u
Nickel	0.2392	E	100.0	95.70	E	95	75-125	u
Potassium	218.7	A	10000	9357	A	91	75-125	u
Selenium	0.06454	H	100.0	103.7	H	104	75-125	<c+ >c+ **b***
Silver	0.06591	A	100.0	82.64	A	83	75-125	u
Sodium	840.7	E	10000	9989	E	91	75-125	u
Thallium	0.1478	A	50.00	42.45	A	85	75-125	u
Zinc	0.8521	E	100.0	92.97	E	92	75-125	u

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1030798	697688	-32.32
Scandium	A	1447283	1108616	-23.40
Scandium	E	25326	18833	-25.64
Scandium	H	251754	118600	-52.89
Germanium	H	70295	34255	-51.27
Germanium	E	19663	15151	-22.95
Indium	A	2345543	1850861	-21.09
Bismuth	A	2401034	1904884	-20.66
Yttrium	A	2298016	1834383	-20.18
Terbium	A	3504928	2854163	-18.57

+=high bias <=opening >=closing b=noncompliant c=CCV u=use

897237240107

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET16
alnum : 897236579001
nits : ug/L

Date : 13-JUN-2007 07:19
X Axis : R

Reviewer : ---

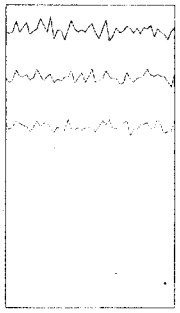
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f13g0005	897236579005		13-JUN-2007 07:25	S6414
L2	f13g0006	897236579006		13-JUN-2007 07:31	S6416
L3	f13g0007	897236579007		13-JUN-2007 07:37	S6417
L4	f13g0008	897236579008		13-JUN-2007 07:42	S6418
L5	f13g0009	897236579009		13-JUN-2007 07:48	S6412
L6	f13g0010	897236579010		13-JUN-2007 07:54	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.3748	0.3159	0.3166	0.2932	0.2926	0.2826	BLNK	-0.4225	3.51342		0.3126	1.000	0.995	
Antimony	A	0.2142	0.1434	0.1439	0.1327	0.1452	0.1393	BLNK	-0.0175	7.12140		0.1531	1.000	0.995	
Barium	A	0.3218	0.0500	0.0468	0.0684	0.0369	0.0358	BLNK	-0.0125	27.7028		0.0933	0.997	0.995	
Beryllium	A	0.1299	0.1243	0.1280	0.1243	0.1222	0.1234	BLNK	-0.0049	8.12175		0.1253	1.000	0.995	
Cadmium	A	0.0444	0.0384	0.0391	0.0365	0.0365	0.0351	BLNK	-0.0087	28.2346		0.0383	1.000	0.995	
Calcium	A	0.0538	0.0180	0.0144	0.0103	0.0105	0.0101	BLNK	-23.827	98.1639		0.0195	1.000	0.995	
Lead	A	0.5267	0.3985	0.3926	0.3645	0.3768	0.3651	BLNK	-0.0159	2.72149		0.4040	1.000	0.995	
Magnesium	A	0.3120	0.2556	0.2599	0.2363	0.2333	0.2274	BLNK	-0.8979	4.37554		0.2540	1.000	0.995	
Molybdenum	A	0.1439	0.1104	0.1057	0.0985	0.0983	0.1036	BLNK	-0.0411	9.75579		0.1101	0.999	0.995	
Potassium	A	4.6021	1.0323	0.7003	0.3830	0.3545	0.3417	BLNK	-99.874	2.92168		1.2357	1.000	0.995	
Silver	A	0.1915	0.1675	0.1768	0.1651	0.1769	0.1678	BLNK	-0.0048	5.89609		0.1743	0.999	0.995	
Thallium	A	0.4794	0.3990	0.4056	0.3760	0.4232	0.4088	BLNK	-0.0098	2.42974		0.4153	1.000	0.995	
Arsenic	E	0.3687	0.2941	0.3051	0.2851	0.2895	0.2837	BLNK	-0.0268	3.51073		0.3044	1.000	0.995	
Chromium	E	4.1847	2.1841	2.3160	1.9763	1.9237	1.8575	BLNK	-0.0883	0.53477		2.4070	1.000	0.995	
Cobalt	E	3.7989	3.4753	3.5288	3.4051	3.3204	3.1900	BLNK	-0.0055	0.31091		3.4531	1.000	0.995	
Copper	E	28.166	4.9395	6.9503	3.5127	3.3549	3.2203	BLNK	-0.1086	0.30810		8.3572	1.000	0.995	
Manganese	E	1.8232	1.0021	0.9431	0.8743	0.8516	0.8244	BLNK	-0.0112	1.20497		1.0531	1.000	0.995	
Nickel	E	4.2408	1.1193	1.0683	0.9644	0.9145	0.8780	BLNK	-0.0348	1.12957		1.5309	1.000	0.995	
Sodium	E	2.1376	0.5468	0.4100	0.2718	0.2553	0.2430	BLNK	-51.418	4.08622		0.6441	0.999	0.995	
Vanadium	E	2.5117	1.5998	1.5875	1.4680	1.4431	1.4070	BLNK	-0.0544	0.70729		1.6695	1.000	0.995	
Zinc	E	10.773	1.4506	0.9317	0.5199	0.4502	0.4298	BLNK	-0.5502	2.31179		2.4259	0.999	0.995	
Iron	H	0.5873	0.4789	0.4806	0.4569	0.4509	0.4357	BLNK	-0.6362	2.27916		0.4817	1.000	0.995	
Selenium	H	0.0652	0.0719	0.0729	0.0659	0.0645	0.0614	BLNK	-0.0127	16.1185		0.0670	0.999	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	27	50.00	10	100.0	11	1000	3	10000	3	20000	-1
Antimony	A	0.100	35	0.500	-1	1.000	1	10.00	-6	100.0	3	200.0	-1
Barium	A	0.100	779	0.500	36	1.000	28	10.00	89	100.0	2	200.0	-1
Beryllium	A	0.100	1	0.500	0	1.000	3	10.00	1	100.0	-1	200.0	0
Cadmium	A	0.100	17	0.500	7	1.000	9	10.00	3	100.0	3	200.0	-1
Calcium	A	10.00	189	50.00	29	100.0	17	1000	-1	10000	3	20000	-1
Lead	A	0.100	27	0.500	5	1.000	5	10.00	-1	100.0	3	200.0	-1
Magnesium	A	10.00	28	50.00	10	100.0	13	1000	3	10000	2	20000	-1
Molybdenum	A	0.100	-1	0.500	-1	1.000	-1	10.00	-4	100.0	-4	200.0	1
Potassium	A	10.00	246	50.00	2	100.0	5	1000	2	10000	3	20000	-1
Silver	A	0.100	8	0.500	-2	1.000	4	10.00	-3	100.0	4	200.0	-1
Thallium	A	0.050	-3	0.250	-7	0.500	-3	5.000	-9	50.00	3	100.0	-1
Arsenic	E	0.100	3	0.500	-2	1.000	4	10.00	0	100.0	2	200.0	0
Chromium	E	0.100	36	0.500	-1	1.000	15	10.00	5	100.0	3	200.0	-1
Cobalt	E	0.100	13	0.500	7	1.000	9	10.00	6	100.0	3	200.0	-1
Copper	E	0.100	659	0.500	30	1.000	103	10.00	7	100.0	3	200.0	-1
Manganese	E	0.100	108	0.500	18	1.000	13	10.00	5	100.0	3	200.0	-1
Nickel	E	0.100	344	0.500	19	1.000	17	10.00	9	100.0	3	200.0	-1
Sodium	E	10.00	259	50.00	21	100.0	16	1000	6	10000	4	20000	-1
Vanadium	E	0.100	23	0.500	2	1.000	7	10.00	3	100.0	2	200.0	-1
Zinc	E	0.100	1840	0.500	125	1.000	60	10.00	15	100.0	4	200.0	-1
Iron	H	10.00	27	50.00	8	100.0	9	1000	4	10000	3	20000	-1
Selenium	H	0.100	-8	0.500	13	1.000	16	10.00	6	100.0	4	200.0	-1

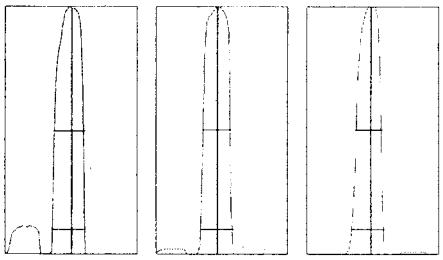
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	18536.0	18335.3	1.99	1.20
89	50,000	38844.0	38046.2	1.87	1.50
205	50,000	31088.0	29937.6	2.22	2.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.975%
Doubly Charged: 70/140 2.126%



m/z:	7	89	205
Height:	18,331	38,430	30,230
Axis:	7.05	88.95	205.00
W-50%:	0.70	0.65	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.68 V	Extract 2	:	-180 V	AMU Offset	:	126
Smpl Depth	:	7 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	0.9997
Torch-H	:	0.6 mm	Omega Lens-ce	:	-0.4 V	Axis Offset	:	0.04
Torch-V	:	0.1 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	1.05 L/min	QP Focus	:	7 V			
Makeup Gas	:	0 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1680 V
Sample Pump	:	--- rps	OctP RF	:	200 V	Pulse HV	:	1050 V
S/C Temp	:	2 degC	OctP Bias	:	-6 V			

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	5.5 mL/min	51	9.0	35.15
Optional Gas:	--- %	59	3182.3	2.99
QP Focus:	-10 V	89	2607.8	2.94
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-16 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	3 mL/min	59	2931.2	7.78
Optional Gas:	--- %	78	0.3	170.42
QP Focus:	-8 V	89	19113.0	3.98
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-16 V			

Integration Time: 0.1000sec

Generated : Jun 13, 2007 06:22:16
Printed : Jun 13, 2007 06:23:56 : 00159

P/A Factor Tuning Report

Acquired:Jun 13 2007 06:28 am

Mass [amu]	Element	P/A Factor
6	Li	0.059876
7	(Li)	0.062599
9	Be	0.067690
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.083457
45	Sc	0.081098
51	V	0.077313
52	Cr	0.085237
55	Mn	0.086840
56	Fe	Sensitivity too high
59	Co	0.088584
60	Ni	Sensitivity too low
63	Cu	0.091136
65	Cu	0.090942
66	Zn	Sensitivity too low
72	Ge	0.091358
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.090321
98	Mo	0.090530
99	(Ru)	Sensitivity too low
107	Ag	0.095875
111	Cd	Sensitivity too low
115	In	0.095435
118	(In)	0.095260
121	Sb	0.095261
137	Ba	Sensitivity too low
159	Tb	Sensitivity too low
205	Tl	0.101882
206	(Pb)	0.102183
207	(Pb)	0.102247
208	Pb	0.102064
209	Bi	0.101982

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1680 V
Pulse HV: 1050 V

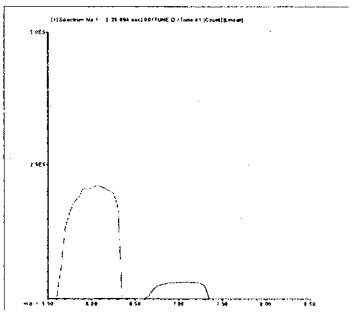
:0015U

6020 QC Tune Report

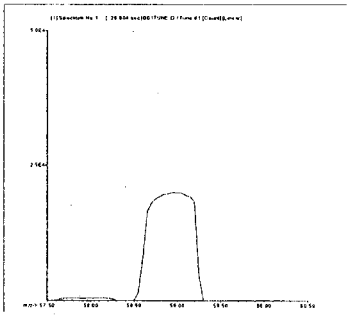
Data File: C:\ICPCHEM\1\DATA\07F13g00.B\001TUNE.D
Date Acquired: Jun 13 2007 06:59 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

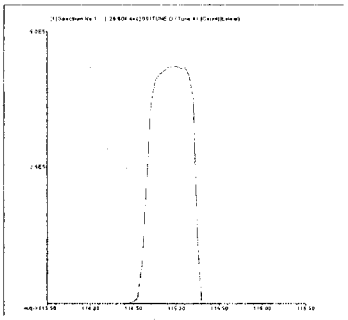
Element	Actual	Required	Flag
7 Li	1.02	5.00	
59 Co	0.57	5.00	
115 In	0.48	5.00	
205 Tl	0.27	5.00	



7 Li
Mass Calib.
Actual: 7.10
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



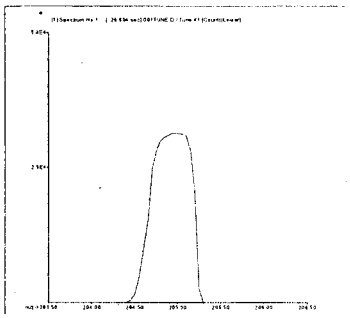
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	205.00	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004C
Date Acquired: Jun 13 2007 07:17 am
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:21 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1861114.00	A	28130.00	1.51
7	(Li)		P		
9	Be	22.22	P	12.62	56.79
23	Na	9996.85	P	239.50	2.40
24	Mg	9856.70	P	225.30	2.29
27	Al	5775.68	P	137.70	2.38
39	K	1642172.00	A	9700.00	0.59
44	Ca	11665.82	P	256.10	2.20
45	Sc	536212.81	P	1582.00	0.30
45	Sc	39721.20	P	170.70	0.43
45	Sc	2403377.00	A	66940.00	2.79
51	V	61.11	P	11.11	18.18
52	Cr	131.11	P	8.01	6.11
55	Mn	7.41	P	2.31	31.23
56	Fe	2993.65	P	6.19	0.21
59	Co	14.07	P	3.90	27.72
60	Ni	24.44	P	2.94	12.03
63	Cu	215.56	P	7.29	3.38
65	Cu	105.93	P	7.06	6.66
66	Zn	145.56	P	10.00	6.87
72	Ge	141447.59	P	625.40	0.44
72	Ge	30578.10	P	102.50	0.34
75	As	4.67	P	1.16	24.75
78	Se	2.22	P	1.02	45.81
89	Y	3687029.00	A	101100.00	2.74
98	Mo	311.12	P	48.11	15.46
107	Ag	61.11	P	6.94	11.35
111	Cd	23.33	P	12.02	51.51
115	In	3743435.00	A	69230.00	1.85
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	183.34	P	6.67	3.64
137	Ba	50.00	P	14.53	29.06
159	Tb	5525760.00	A	91310.00	1.65
205	Tl	300.01	P	35.28	11.76
208	Pb	644.47	P	33.72	5.23
209	Bi	3735147.00	A	60760.00	1.63

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 13 2007 07:23 am
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:21 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1894987.00	A	8803.00	0.46
7	(Li)		P		
9	Be	492.25	P	20.09	4.08
23	Na	17026.24	P	58.44	0.34
24	Mg	154858.30	P	415.20	0.27
27	Al	186053.09	P	2301.00	1.24
39	K	2284539.00	A	18410.00	0.81
44	Ca	26684.40	P	307.20	1.15
45	Sc	523576.09	P	10740.00	2.05
45	Sc	39825.24	P	137.60	0.35
45	Sc	2482034.00	A	11760.00	0.47
51	V	200.00	P	22.55	11.28
52	Cr	333.34	P	16.59	4.98
55	Mn	145.19	P	14.07	9.69
56	Fe	61477.76	P	406.00	0.66
59	Co	302.60	P	26.07	8.62
60	Ni	337.79	P	10.94	3.24
63	Cu	1730.49	P	30.03	1.74
65	Cu	849.66	P	51.17	6.02
66	Zn	661.87	P	22.26	3.36
72	Ge	137927.41	P	1214.00	0.88
72	Ge	30720.99	P	273.90	0.89
75	As	22.67	P	3.06	13.48
78	Se	18.00	P	3.06	16.97
89	Y	3756689.00	A	24950.00	0.66
98	Mo	1081.19	P	43.51	4.02
99	(Ru)	3.33	P	3.33	99.99
107	Ag	1459.01	P	28.35	1.94
111	Cd	337.79	P	46.71	13.83
115	In	3810286.00	A	40060.00	1.05
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1632.37	P	38.64	2.37
137	Ba	3619.46	P	25.25	0.70
159	Tb	5624345.00	A	53450.00	0.95
205	Tl	1824.63	P	231.20	12.67
208	Pb	5924.03	P	43.62	0.74
209	Bi	3806207.00	A	4567.00	0.12

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1894987.30	0.46	1861114.10	101.8	80 - 120	
45	Sc	523576.13	2.05	536212.81	97.6	80 - 120	
45	Sc	39825.24	0.35	39721.20	100.3	80 - 120	
45	Sc	2482034.30	0.47	2403377.30	103.3	80 - 120	
72	Ge	137927.36	0.88	141447.58	97.5	80 - 120	
72	Ge	30720.99	0.89	30578.10	100.5	80 - 120	
89	Y	3756689.00	0.66	3687028.80	101.9	80 - 120	
115	In	3810286.30	1.05	3743435.00	101.8	80 - 120	
159	Tb	5624345.00	0.95	5525759.50	101.8	80 - 120	
209	Bi	3806206.50	0.12	3735147.50	101.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 13 2007 07:28 am
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:27 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1862107.00	A	19360.00	1.04
7	(Li)		P		
9	Be	2314.69	P	144.60	6.25
23	Na	21644.16	P	385.50	1.78
24	Mg	621647.00	P	2883.00	0.46
27	Al	768340.88	A	5755.00	0.75
39	K	2510997.00	A	22570.00	0.90
44	Ca	43771.72	P	208.40	0.48
45	Sc	511783.31	P	2600.00	0.51
45	Sc	39583.87	P	184.80	0.47
45	Sc	2432538.00	A	12010.00	0.49
51	V	633.35	P	38.94	6.15
52	Cr	864.48	P	32.38	3.75
55	Mn	396.68	P	17.64	4.45
56	Fe	245115.91	P	1373.00	0.56
59	Co	1375.63	P	33.34	2.42
60	Ni	442.97	P	28.90	6.52
63	Cu	1516.39	P	38.37	2.53
65	Cu	759.29	P	59.89	7.89
66	Zn	445.20	P	19.42	4.36
72	Ge	135462.41	P	716.90	0.53
72	Ge	30701.72	P	350.70	1.14
75	As	90.22	P	9.08	10.06
78	Se	97.33	P	11.01	11.31
89	Y	3701440.00	A	19700.00	0.53
98	Mo	4085.13	P	193.80	4.74
99	(Ru)	5.56	P	5.09	91.65
107	Ag	6275.95	P	233.60	3.72
111	Cd	1436.79	P	39.30	2.74
115	In	3746229.00	A	15770.00	0.42
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	5371.14	P	163.80	3.05
137	Ba	2765.92	P	99.15	3.58
159	Tb	5532030.00	A	34010.00	0.61
205	Tl	7506.69	P	162.10	2.16
208	Pb	22041.98	P	99.12	0.45
209	Bi	3763142.00	A	7852.00	0.21

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1862107.30	1.04	1861114.10	100.1	80 - 120	
45	Sc	511783.28	0.51	536212.81	95.4	80 - 120	
45	Sc	39583.88	0.47	39721.20	99.7	80 - 120	
45	Sc	2432538.30	0.49	2403377.30	101.2	80 - 120	
72	Ge	135462.38	0.53	141447.58	95.8	80 - 120	
72	Ge	30701.72	1.14	30578.10	100.4	80 - 120	
89	Y	3701440.00	0.53	3687028.80	100.4	80 - 120	
115	In	3746229.00	0.42	3743435.00	100.1	80 - 120	
159	Tb	5532030.50	0.61	5525759.50	100.1	80 - 120	
209	Bi	3763142.00	0.21	3735147.50	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 13 2007 07:34 am
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:33 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1871503.00	A	20300.00	1.08
7	(Li)		P		
9	Be	4789.75	P	65.46	1.37
23	Na	32091.87	P	193.50	0.60
24	Mg	1257906.00	A	3988.00	0.32
27	Al	1532246.00	A	11090.00	0.72
39	K	3389591.00	A	6949.00	0.21
44	Ca	69521.97	P	503.20	0.72
45	Sc	511405.81	P	1656.00	0.32
45	Sc	39140.91	P	230.40	0.59
45	Sc	2420183.00	A	5597.00	0.23
51	V	1242.66	P	9.45	0.76
52	Cr	1813.09	P	36.25	2.00
55	Mn	738.17	P	13.80	1.87
56	Fe	491561.69	P	2901.00	0.59
59	Co	2762.49	P	35.51	1.29
60	Ni	836.33	P	27.09	3.24
63	Cu	4262.48	P	47.55	1.12
65	Cu	2155.36	P	72.87	3.38
66	Zn	571.50	P	16.19	2.83
72	Ge	135400.20	P	418.70	0.31
72	Ge	30664.63	P	312.50	1.02
75	As	187.11	P	3.15	1.68
78	Se	197.34	P	7.05	3.58
89	Y	3689728.00	A	34610.00	0.94
98	Mo	7795.59	P	168.10	2.16
99	(Ru)	7.78	P	5.09	65.47
107	Ag	13163.96	P	38.99	0.30
111	Cd	2908.15	P	105.00	3.61
115	In	3722473.00	A	40180.00	1.08
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	10713.06	P	342.20	3.19
137	Ba	5224.45	P	32.16	0.62
159	Tb	5582109.00	A	18170.00	0.33
205	Tl	15283.23	P	65.24	0.43
208	Pb	43829.31	P	548.70	1.25
209	Bi	3767928.00	A	21690.00	0.58

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1871503.30	1.08	1861114.10	100.6	80 - 120	
45	Sc	511405.84	0.32	536212.81	95.4	80 - 120	
45	Sc	39140.91	0.59	39721.20	98.5	80 - 120	
45	Sc	2420182.80	0.23	2403377.30	100.7	80 - 120	
72	Ge	135400.19	0.31	141447.58	95.7	80 - 120	
72	Ge	30664.63	1.02	30578.10	100.3	80 - 120	
89	Y	3689728.30	0.94	3687028.80	100.1	80 - 120	
115	In	3722472.80	1.08	3743435.00	99.4	80 - 120	
159	Tb	5582109.50	0.33	5525759.50	101.0	80 - 120	
209	Bi	3767927.80	0.58	3735147.50	100.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 13 2007 07:40 am
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:38 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1914979.00	A	9927.00	0.52
7 (Li)		P		
9 Be	47606.65	P	148.50	0.31
23 Na	218381.59	P	913.90	0.42
24 Mg	11767150.00	A	71130.00	0.60
27 Al	14600530.00	A	51140.00	0.35
39 K	19076120.00	A	104200.00	0.55
44 Ca	515429.91	P	833.70	0.16
45 Sc	508368.81	P	2697.00	0.53
45 Sc	40176.79	P	178.50	0.44
45 Sc	2490271.00	A	9643.00	0.39
51 V	11796.02	P	39.93	0.34
52 Cr	15879.63	P	72.74	0.46
55 Mn	7025.35	P	52.34	0.75
56 Fe	4645313.00	A	20910.00	0.45
59 Co	27360.76	P	98.94	0.36
60 Ni	7749.04	P	40.95	0.53
63 Cu	22010.18	P	112.90	0.51
65 Cu	10951.73	P	93.52	0.85
66 Zn	3257.41	P	63.90	1.96
72 Ge	135160.80	P	778.20	0.58
72 Ge	31329.24	P	112.10	0.36
75 As	1786.56	P	17.06	0.95
78 Se	1782.56	P	66.78	3.75
89 Y	3774971.00	A	36980.00	0.98
98 Mo	74395.79	P	309.90	0.42
99 (Ru)	13.33	P	5.77	43.30
107 Ag	125748.20	P	286.40	0.23
111 Cd	27787.60	P	600.90	2.16
115 In	3809307.00	A	42020.00	1.10
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	101068.70	P	433.10	0.43
137 Ba	77541.11	P	264.20	0.34
159 Tb	5667189.00	A	27210.00	0.48
205 Tl	143793.09	P	635.60	0.44
208 Pb	413116.19	P	1945.00	0.47
209 Bi	3824331.00	A	27680.00	0.72

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1914979.10	0.52	1861114.10	102.9	80 - 120	
45 Sc	508368.84	0.53	536212.81	94.8	80 - 120	
45 Sc	40176.79	0.44	39721.20	101.1	80 - 120	
45 Sc	2490271.00	0.39	2403377.30	103.6	80 - 120	
72 Ge	135160.81	0.58	141447.58	95.6	80 - 120	
72 Ge	31329.24	0.36	30578.10	102.5	80 - 120	
89 Y	3774971.30	0.98	3687028.80	102.4	80 - 120	
115 In	3809306.50	1.10	3743435.00	101.8	80 - 120	
159 Tb	5667189.00	0.48	5525759.50	102.6	80 - 120	
209 Bi	3824331.30	0.72	3735147.50	102.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 13 2007 07:46 am
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:44 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1978947.00	A	3886.00	0.20
7 (Li)		P		
9 Be	483627.41	P	88.20	0.02
23 Na	2093613.00	A	29440.00	1.41
24 Mg	###########	A	99280.00	0.08
27 Al	###########	A	771600.00	0.51
39 K	###########	A	558800.00	0.31
44 Ca	5365691.00	A	39340.00	0.73
45 Sc	504696.31	P	3419.00	0.68
45 Sc	40996.75	P	451.30	1.10
45 Sc	2563132.00	A	5448.00	0.21
51 V	118325.40	P	1087.00	0.92
52 Cr	157726.41	P	1345.00	0.85
55 Mn	69825.69	P	732.40	1.05
56 Fe	45513832.00	A	278000.00	0.61
59 Co	272245.59	P	2487.00	0.91
60 Ni	74988.75	P	1098.00	1.46
63 Cu	210258.30	P	1556.00	0.74
65 Cu	104221.80	P	922.00	0.88
66 Zn	28214.66	P	308.30	1.09
72 Ge	132355.20	P	988.10	0.75
72 Ge	31335.97	P	269.30	0.86
75 As	18140.27	P	149.60	0.82
78 Se	17078.41	P	181.90	1.07
89 Y	3834746.00	A	33070.00	0.86
98 Mo	753698.38	P	3716.00	0.49
99 (Ru)	30.00	P	3.33	11.11
107 Ag	1334163.00	A	9965.00	0.75
111 Cd	275654.81	P	2318.00	0.84
115 In	3771615.00	A	15190.00	0.40
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1095604.00	A	2388.00	0.22
137 Ba	418366.41	P	2701.00	0.65
159 Tb	5664874.00	A	43270.00	0.76
205 Tl	1558482.00	A	16840.00	1.08
208 Pb	4269522.00	A	19730.00	0.46
209 Bi	3682399.00	A	27600.00	0.75

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1978947.00	0.20	1861114.10	106.3	80 - 120	
45 Sc	504696.34	0.68	536212.81	94.1	80 - 120	
45 Sc	40996.75	1.10	39721.20	103.2	80 - 120	
45 Sc	2563132.00	0.21	2403377.30	106.6	80 - 120	
72 Ge	132355.17	0.75	141447.58	93.6	80 - 120	
72 Ge	31335.97	0.86	30578.10	102.5	80 - 120	
89 Y	3834746.30	0.86	3687028.80	104.0	80 - 120	
115 In	3771615.00	0.40	3743435.00	100.8	80 - 120	
159 Tb	5664874.50	0.76	5525759.50	102.5	80 - 120	
209 Bi	3682399.50	0.75	3735147.50	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13g00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 13 2007 07:52 am
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:50 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1972458.00	A	12540.00	0.64
7	(Li)		P		
9	Be	973262.63	A	2314.00	0.24
23	Na	3980349.00	A	66230.00	1.66
24	Mg	############	A	1539000.00	0.66
27	Al	############	A	1888000.00	0.65
39	K	############	A	1696000.00	0.48
44	Ca	10374280.00	A	22230.00	0.21
45	Sc	498944.00	P	872.50	0.17
45	Sc	40953.62	P	673.40	1.64
45	Sc	2559008.00	A	16130.00	0.63
51	V	230472.41	P	2818.00	1.22
52	Cr	304265.09	P	2708.00	0.89
55	Mn	135044.59	P	1507.00	1.12
56	Fe	86954960.00	A	286800.00	0.33
59	Co	522525.50	P	5198.00	0.99
60	Ni	143810.00	P	372.50	0.26
63	Cu	398196.09	P	2441.00	0.61
65	Cu	197516.59	P	1623.00	0.82
66	Zn	53141.55	P	422.10	0.79
72	Ge	130556.70	P	411.70	0.32
72	Ge	30913.62	P	326.90	1.06
75	As	35085.60	P	299.00	0.85
78	Se	32073.87	P	91.15	0.28
89	Y	3797891.00	A	31250.00	0.82
98	Mo	1573854.00	A	8520.00	0.54
99	(Ru)	66.67	P	5.77	8.66
107	Ag	2498180.00	A	23570.00	0.94
111	Cd	523095.69	P	3336.00	0.64
115	In	3722127.00	A	41220.00	1.11
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2073224.00	A	15730.00	0.76
137	Ba	803648.63	P	2569.00	0.32
159	Tb	5610349.00	A	52630.00	0.94
205	Tl	2920596.00	A	6328.00	0.22
208	Pb	8194067.00	A	20760.00	0.25
209	Bi	3572217.00	A	23990.00	0.67

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1972457.60	0.64	1861114.10	106.0	80 - 120	
45	Sc	498943.97	0.17	536212.81	93.0	80 - 120	
45	Sc	40953.62	1.64	39721.20	103.1	80 - 120	
45	Sc	2559007.80	0.63	2403377.30	106.5	80 - 120	
72	Ge	130556.70	0.32	141447.58	92.3	80 - 120	
72	Ge	30913.63	1.06	30578.10	101.1	80 - 120	
89	Y	3797890.80	0.82	3687028.80	103.0	80 - 120	
115	In	3722126.50	1.11	3743435.00	99.4	80 - 120	
159	Tb	5610348.50	0.94	5525759.50	101.5	80 - 120	
209	Bi	3572217.50	0.67	3735147.50	95.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579012 File : f13g0012 Time : 13-JUN-2007 08:06
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3126	0.2945	10000	10350	ug/L	4	10	
Antimony	A	0.1531	0.1431	100.0	101.9	ug/L	2	10	
Barium	A	0.0933	0.0370	100.0	102.4	ug/L	2	10	
Beryllium	A	0.1253	0.1261	100.0	102.4	ug/L	2	10	
Cadmium	A	0.0383	0.0369	100.0	104.0	ug/L	4	10	
Calcium	A	0.0195	0.0106	10000	10400	ug/L	4	10	
Lead	A	0.4040	0.3575	100.0	97.27	ug/L	-3	10	
Magnesium	A	0.2540	0.2358	10000	10320	ug/L	3	10	
Molybdenum	A	0.1101	0.0986	100.0	96.11	ug/L	-4	10	
Potassium	A	1.2357	0.3587	10000	10380	ug/L	4	10	
Silver	A	0.1743	0.1696	100.0	100.0	ug/L	0	10	
Thallium	A	0.4153	0.4240	50.00	51.51	ug/L	3	10	
Arsenic	E	0.3044	0.2914	100.0	102.3	ug/L	2	10	
Chromium	E	2.4070	1.9448	100.0	103.9	ug/L	4	10	
Cobalt	E	3.4531	3.4054	100.0	105.9	ug/L	6	10	
Copper	E	8.3572	3.4432	100.0	106.0	ug/L	6	10	
Manganese	E	1.0531	0.8660	100.0	104.3	ug/L	4	10	
Nickel	E	1.5309	0.9350	100.0	105.6	ug/L	6	10	
Sodium	E	0.6441	0.2599	10000	10570	ug/L	6	10	
Vanadium	E	1.6695	1.4667	100.0	103.7	ug/L	4	10	
Zinc	E	2.4259	0.4723	100.0	108.6	ug/L	9	10	
Iron	H	0.4817	0.4538	10000	10340	ug/L	3	10	
Selenium	H	0.0670	0.0655	100.0	105.6	ug/L	6	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1951664	4.87
Scandium	A	2403377	2532026	5.35
Scandium	E	39721	40365	1.62
Scandium	H	536213	482409	-10.03
Germanium	H	141448	127060	-10.17
Germanium	E	30578	30779	0.66
Indium	A	3743435	3741163	-0.06
Bismuth	A	3735148	3658710	-2.05
Yttrium	A	3687029	3775183	2.39
Terbium	A	5525760	5594948	1.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579014 File : f13g0014 Time : 13-JUN-2007 08:18
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.009264]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004635]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.007217]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01152]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003508]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.004021]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.005245]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.3894]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1832116	-1.56
Scandium	A	2403377	2390366	-0.54
Scandium	E	39721	39349	-0.94
Scandium	H	536213	483844	-9.77
Germanium	H	141448	128994	-8.80
Germanium	E	30578	30233	-1.13
Indium	A	3743435	3702512	-1.09
Bismuth	A	3735148	3692627	-1.14
Yttrium	A	3687029	3672970	-0.38
Terbium	A	5525760	5475172	-0.92

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579015 File : f13g0015 Time : 13-JUN-2007 08:25
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07320]	0.1000	ug/L	
Barium	A	0.9323	0.1000	ug/L	
Beryllium	A	[0.02870]	0.1000	ug/L	
Cadmium	A	1.149	0.1000	ug/L	
Lead	A	0.4071	0.1000	ug/L	
Silver	A	0.2038	0.1000	ug/L	
Thallium	A	[0.04142]	0.05000	ug/L	
Arsenic	E	0.2325	0.1000	ug/L	
Chromium	E	1.292	0.1000	ug/L	
Cobalt	E	0.1975	0.1000	ug/L	
Copper	E	1.340	0.1000	ug/L	
Manganese	E	0.5596	0.1000	ug/L	
Nickel	E	1.148	0.1000	ug/L	
Vanadium	E	[0.05257]	0.1000	ug/L	
Zinc	E	2.204	0.1000	ug/L	
Selenium	H	[0.07128]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91850	ug/L	92
Calcium	A	300000	275600	ug/L	92
Magnesium	A	100000	89270	ug/L	89
Molybdenum	A	2000	1827	ug/L	91
Potassium	A	100000	90890	ug/L	91
Sodium	E	250000	225100	ug/L	90
Iron	H	250000	218500	ug/L	87

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1772464	-4.76
Scandium	A	2403377	2412200	0.37
Scandium	E	39721	40307	1.47
Scandium	H	536213	511842	-4.54
Germanium	H	141448	125858	-11.02
Germanium	E	30578	29336	-4.06
Indium	A	3743435	3352449	-10.44
Bismuth	A	3735148	3090229	-17.27
Yttrium	A	3687029	3572693	-3.10
Terbium	A	5525760	5262094	-4.77

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579016 File : f13g0016 Time : 13-JUN-2007 08:31
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100500	ug/L	1		
Cadmium	A	100.0	100.1	ug/L	0	20	
Calcium	A	300000	303400	ug/L	1		
Magnesium	A	100000	97770	ug/L	-2		
Molybdenum	A	2000	1994	ug/L	0		
Potassium	A	100000	99870	ug/L	0		
Silver	A	50.00	45.86	ug/L	-8	20	
Arsenic	E	100.0	107.4	ug/L	7	20	
Chromium	E	200.0	205.0	ug/L	3	20	
Cobalt	E	200.0	193.8	ug/L	-3	20	
Copper	E	200.0	187.5	ug/L	-6	20	
Manganese	E	200.0	203.8	ug/L	2	20	
Nickel	E	200.0	188.8	ug/L	-6	20	
Sodium	E	250000	250200	ug/L	0		
Vanadium	E	200.0	209.7	ug/L	5	20	
Zinc	E	100.0	93.96	ug/L	-6	20	
Iron	H	250000	235200	ug/L	-6		
Selenium	H	100.0	96.81	ug/L	-3	20	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	536213	513020	-4.33
Scandium	A	2403377	2296990	-4.43
Scandium	E	39721	37980	-4.38
Germanium	H	141448	125907	-10.99
Germanium	E	30578	27617	-9.68
Indium	A	3743435	3194397	-14.67
Yttrium	A	3687029	3432903	-6.89

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579031 File : f13g0031 Time : 13-JUN-2007 09:59
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3126	0.2780	10000	9768	ug/L	-2	10	
Antimony	A	0.1531	0.1348	100.0	95.98	ug/L	-4	10	
Barium	A	0.0933	0.0354	100.0	98.10	ug/L	-2	10	
Beryllium	A	0.1253	0.1217	100.0	98.81	ug/L	-1	10	
Cadmium	A	0.0383	0.0352	100.0	99.39	ug/L	-1	10	
Calcium	A	0.0195	0.0102	10000	9965	ug/L	0	10	
Lead	A	0.4040	0.3443	100.0	93.69	ug/L	-6	10	
Magnesium	A	0.2540	0.2227	10000	9743	ug/L	-3	10	
Molybdenum	A	0.1101	0.0936	100.0	91.25	ug/L	-9	10	
Potassium	A	1.2357	0.3432	10000	9926	ug/L	-1	10	
Silver	A	0.1743	0.1609	100.0	94.89	ug/L	-5	10	
Thallium	A	0.4153	0.4090	50.00	49.68	ug/L	-1	10	
Arsenic	E	0.3044	0.2899	100.0	101.7	ug/L	2	10	
Chromium	E	2.4070	1.9434	100.0	103.8	ug/L	4	10	
Cobalt	E	3.4531	3.3664	100.0	104.7	ug/L	5	10	
Copper	E	8.3572	3.3725	100.0	103.8	ug/L	4	10	
Manganese	E	1.0531	0.8724	100.0	105.1	ug/L	5	10	
Nickel	E	1.5309	0.9291	100.0	104.9	ug/L	5	10	
Sodium	E	0.6441	0.2587	10000	10520	ug/L	5	10	
Vanadium	E	1.6695	1.4626	100.0	103.4	ug/L	3	10	
Zinc	E	2.4259	0.4629	100.0	106.5	ug/L	7	10	
Iron	H	0.4817	0.4313	10000	9830	ug/L	-2	10	
Selenium	H	0.0670	0.0639	100.0	102.9	ug/L	3	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1773417	-4.71
Scandium	A	2403377	2397484	-0.25
Scandium	E	39721	37257	-6.20
Scandium	H	536213	449257	-16.22
Germanium	H	141448	116162	-17.88
Germanium	E	30578	28726	-6.06
Indium	A	3743435	3610193	-3.56
Bismuth	A	3735148	3545581	-5.08
Yttrium	A	3687029	3645605	-1.12
Terbium	A	5525760	5443228	-1.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579033 File : f13g0033 Time : 13-JUN-2007 10:11
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.03087]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01348]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01218]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01222]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003607]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.006957]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01401]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01289]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02213]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.02159]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01060]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.074]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01069]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1773088	-4.73
Scandium	A	2403377	2336643	-2.78
Scandium	E	39721	39247	-1.19
Scandium	H	536213	429045	-19.99
Germanium	H	141448	114987	-18.71
Germanium	E	30578	29940	-2.09
Indium	A	3743435	3619288	-3.32
Bismuth	A	3735148	3651720	-2.23
Yttrium	A	3687029	3574951	-3.04
Terbium	A	5525760	5383106	-2.58

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579034 File : f13g0034 Time : 13-JUN-2007 10:18
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09427]	0.1000	ug/L	
Barium	A	0.9194	0.1000	ug/L	
Beryllium	A	[0.03623]	0.1000	ug/L	
Cadmium	A	1.175	0.1000	ug/L	
Lead	A	0.4089	0.1000	ug/L	
Silver	A	0.1897	0.1000	ug/L	
Thallium	A	[0.03687]	0.05000	ug/L	
Arsenic	E	0.2024	0.1000	ug/L	
Chromium	E	1.228	0.1000	ug/L	
Cobalt	E	0.1983	0.1000	ug/L	
Copper	E	1.324	0.1000	ug/L	
Manganese	E	0.4789	0.1000	ug/L	
Nickel	E	1.097	0.1000	ug/L	
Vanadium	E	[0.05886]	0.1000	ug/L	
Zinc	E	2.070	0.1000	ug/L	
Selenium	H	[0.03412]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90650	ug/L	91
Calcium	A	300000	273400	ug/L	91
Magnesium	A	100000	87820	ug/L	88
Molybdenum	A	2000	1792	ug/L	90
Potassium	A	100000	90160	ug/L	90
Sodium	E	250000	221300	ug/L	89
Iron	H	250000	219800	ug/L	88

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1634329	-12.19
Scandium	A	2403377	2257050	-6.09
Scandium	E	39721	38513	-3.04
Scandium	H	536213	435209	-18.84
Germanium	H	141448	107186	-24.22
Germanium	E	30578	27929	-8.66
Indium	A	3743435	3172150	-15.26
Bismuth	A	3735148	2975599	-20.34
Yttrium	A	3687029	3401559	-7.74
Terbium	A	5525760	5048181	-8.64

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579035 File : f13g0035 Time : 13-JUN-2007 10:24
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96920	ug/L	-3		
Cadmium	A	100.0	95.67	ug/L	-4	20	
Calcium	A	300000	292500	ug/L	-3		
Magnesium	A	100000	93700	ug/L	-6		
Molybdenum	A	2000	1917	ug/L	-4		
Potassium	A	100000	96340	ug/L	-4		
Silver	A	50.00	43.77	ug/L	-12	20	
Arsenic	E	100.0	99.52	ug/L	0	20	
Chromium	E	200.0	190.5	ug/L	-5	20	
Cobalt	E	200.0	178.7	ug/L	-11	20	
Copper	E	200.0	175.7	ug/L	-12	20	
Manganese	E	200.0	190.8	ug/L	-5	20	
Nickel	E	200.0	173.7	ug/L	-13	20	
Sodium	E	250000	234100	ug/L	-6		
Vanadium	E	200.0	194.0	ug/L	-3	20	
Zinc	E	100.0	87.88	ug/L	-12	20	
Iron	H	250000	235200	ug/L	-6		
Selenium	H	100.0	98.13	ug/L	-2	20	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	536213	440218	-17.90
Scandium	A	2403377	2193383	-8.74
Scandium	E	39721	38036	-4.24
Germanium	H	141448	108242	-23.48
Germanium	E	30578	27250	-10.88
Indium	A	3743435	3101647	-17.14
Yttrium	A	3687029	3308290	-10.27

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579053 File : f13g0053 Time : 13-JUN-2007 12:10
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3126	0.2831	10000	9948	ug/L	-1	10	
Antimony	A	0.1531	0.1265	100.0	90.09	ug/L	-10	10	
Barium	A	0.0933	0.0361	100.0	100.0	ug/L	0	10	
Beryllium	A	0.1253	0.1234	100.0	100.2	ug/L	0	10	
Cadmium	A	0.0383	0.0355	100.0	100.1	ug/L	0	10	
Calcium	A	0.0195	0.0103	10000	10130	ug/L	1	10	
Lead	A	0.4040	0.3445	100.0	93.74	ug/L	-6	10	
Magnesium	A	0.2540	0.2268	10000	9925	ug/L	-1	10	
Molybdenum	A	0.1101	0.0959	100.0	93.53	ug/L	-6	10	
Potassium	A	1.2357	0.3491	10000	10100	ug/L	1	10	
Silver	A	0.1743	0.1625	100.0	95.78	ug/L	-4	10	
Thallium	A	0.4153	0.4097	50.00	49.76	ug/L	0	10	
Arsenic	E	0.3044	0.2804	100.0	98.41	ug/L	-2	10	
Chromium	E	2.4070	1.8797	100.0	100.4	ug/L	0	10	
Cobalt	E	3.4531	3.2714	100.0	101.7	ug/L	2	10	
Copper	E	8.3572	3.2905	100.0	101.3	ug/L	1	10	
Manganese	E	1.0531	0.8552	100.0	103.0	ug/L	3	10	
Nickel	E	1.5309	0.9032	100.0	102.0	ug/L	2	10	
Sodium	E	0.6441	0.2541	10000	10330	ug/L	3	10	
Vanadium	E	1.6695	1.4118	100.0	99.80	ug/L	0	10	
Zinc	E	2.4259	0.4521	100.0	104.0	ug/L	4	10	
Iron	H	0.4817	0.4350	10000	9912	ug/L	-1	10	
Selenium	H	0.0670	0.0629	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1580189	-15.09
Scandium	A	2403377	2128950	-11.42
Scandium	E	39721	35041	-11.78
Scandium	H	536213	386348	-27.95
Germanium	H	141448	103391	-26.91
Germanium	E	30578	26921	-11.96
Indium	A	3743435	3251597	-13.14
Bismuth	A	3735148	3250526	-12.97
Yttrium	A	3687029	3256368	-11.68
Terbium	A	5525760	4908852	-11.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579055 File : f13g0055 Time : 13-JUN-2007 12:22
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.03286]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01329]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.006912]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01025]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002793]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	[0.009626]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.006278]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01251]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.008007]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.041]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01274]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1569344	-15.68
Scandium	A	2403377	2119891	-11.80
Scandium	E	39721	35705	-10.11
Scandium	H	536213	387811	-27.68
Germanium	H	141448	105585	-25.35
Germanium	E	30578	27531	-9.96
Indium	A	3743435	3318320	-11.36
Bismuth	A	3735148	3377615	-9.57
Yttrium	A	3687029	3257744	-11.64
Terbium	A	5525760	4950194	-10.42

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579068 File : f13g0068 Time : 13-JUN-2007 13:41
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3126	0.2774	10000	9747	ug/L	-3	10	
Antimony	A	0.1531	0.1349	100.0	96.02	ug/L	-4	10	
Barium	A	0.0933	0.0355	100.0	98.41	ug/L	-2	10	
Beryllium	A	0.1253	0.1211	100.0	98.35	ug/L	-2	10	
Cadmium	A	0.0383	0.0352	100.0	99.35	ug/L	-1	10	
Calcium	A	0.0195	0.0102	10000	9989	ug/L	0	10	
Lead	A	0.4040	0.3393	100.0	92.34	ug/L	-8	10	
Magnesium	A	0.2540	0.2241	10000	9803	ug/L	-2	10	
Molybdenum	A	0.1101	0.0939	100.0	91.61	ug/L	-8	10	
Potassium	A	1.2357	0.3428	10000	9914	ug/L	-1	10	
Silver	A	0.1743	0.1693	100.0	99.81	ug/L	0	10	
Thallium	A	0.4153	0.3970	50.00	48.22	ug/L	-4	10	
Arsenic	E	0.3044	0.2778	100.0	97.51	ug/L	-2	10	
Chromium	E	2.4070	1.8193	100.0	97.20	ug/L	-3	10	
Cobalt	E	3.4531	3.1251	100.0	97.16	ug/L	-3	10	
Copper	E	8.3572	3.1470	100.0	96.85	ug/L	-3	10	
Manganese	E	1.0531	0.8203	100.0	98.83	ug/L	-1	10	
Nickel	E	1.5309	0.8624	100.0	97.38	ug/L	-3	10	
Sodium	E	0.6441	0.2442	10000	9927	ug/L	-1	10	
Vanadium	E	1.6695	1.3613	100.0	96.23	ug/L	-4	10	
Zinc	E	2.4259	0.4300	100.0	98.86	ug/L	-1	10	
Iron	H	0.4817	0.4514	10000	10290	ug/L	3	10	
Selenium	H	0.0670	0.0639	100.0	103.0	ug/L	3	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1639096	-11.93
Scandium	A	2403377	2201216	-8.41
Scandium	E	39721	37157	-6.46
Scandium	H	536213	351423	-34.46
Germanium	H	141448	94875	-32.93
Germanium	E	30578	28090	-8.14
Indium	A	3743435	3314002	-11.47
Bismuth	A	3735148	3278622	-12.22
Yttrium	A	3687029	3340762	-9.39
Terbium	A	5525760	4972446	-10.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579070 File : f13g0070 Time : 13-JUN-2007 13:53
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.02752]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01213]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003413]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.008944]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003808]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01535]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01454]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.02312]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02588]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01622]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.02861]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.9963]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01443]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1578511	-15.18
Scandium	A	2403377	2105534	-12.39
Scandium	E	39721	36192	-8.88
Scandium	H	536213	364506	-32.02
Germanium	H	141448	99077	-29.95
Germanium	E	30578	27849	-8.93
Indium	A	3743435	3308098	-11.63
Bismuth	A	3735148	3367877	-9.83
Yttrium	A	3687029	3271315	-11.28
Terbium	A	5525760	4929168	-10.80

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579072 File : f13g0072 Time : 13-JUN-2007 14:05
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	0.1039	0.1000	ug/L	
Barium	A	0.9448	0.1000	ug/L	
Beryllium	A	[0.02549]	0.1000	ug/L	
Cadmium	A	1.227	0.1000	ug/L	
Lead	A	0.4093	0.1000	ug/L	
Silver	A	0.1843	0.1000	ug/L	
Thallium	A	[0.02856]	0.05000	ug/L	
Arsenic	E	0.1640	0.1000	ug/L	
Chromium	E	1.204	0.1000	ug/L	
Cobalt	E	0.1984	0.1000	ug/L	
Copper	E	1.335	0.1000	ug/L	
Manganese	E	0.5292	0.1000	ug/L	
Nickel	E	1.016	0.1000	ug/L	
Vanadium	E	[0.06342]	0.1000	ug/L	
Zinc	E	1.981	0.1000	ug/L	
Selenium	H	[0.04334]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88480	ug/L	88
Calcium	A	300000	267800	ug/L	89
Magnesium	A	100000	85600	ug/L	86
Molybdenum	A	2000	1765	ug/L	88
Potassium	A	100000	88560	ug/L	89
Sodium	E	250000	215700	ug/L	86
Iron	H	250000	240600	ug/L	96

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1500747	-19.36
Scandium	A	2403377	2092537	-12.93
Scandium	E	39721	36921	-7.05
Scandium	H	536213	344063	-35.83
Germanium	H	141448	89258	-36.90
Germanium	E	30578	26587	-13.05
Indium	A	3743435	2962855	-20.85
Bismuth	A	3735148	2786095	-25.41
Yttrium	A	3687029	3154170	-14.45
Terbium	A	5525760	4671899	-15.45

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579073 File : f13g0073 Time : 13-JUN-2007 14:11
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94630	ug/L	-5		
Cadmium	A	100.0	94.53	ug/L	-5	20	
Calcium	A	300000	287300	ug/L	-4		
Magnesium	A	100000	91400	ug/L	-9		
Molybdenum	A	2000	1898	ug/L	-5		
Potassium	A	100000	94970	ug/L	-5		
Silver	A	50.00	43.30	ug/L	-13	20	
Arsenic	E	100.0	99.74	ug/L	0	20	
Chromium	E	200.0	190.7	ug/L	-5	20	
Cobalt	E	200.0	178.8	ug/L	-11	20	
Copper	E	200.0	173.8	ug/L	-13	20	
Manganese	E	200.0	194.4	ug/L	-3	20	
Nickel	E	200.0	172.8	ug/L	-14	20	
Sodium	E	250000	234500	ug/L	-6		
Vanadium	E	200.0	194.7	ug/L	-3	20	
Zinc	E	100.0	87.49	ug/L	-13	20	
Iron	H	250000	234700	ug/L	-6		
Selenium	H	100.0	98.03	ug/L	-2	20	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	536213	385749	-28.06
Scandium	A	2403377	2024466	-15.77
Scandium	E	39721	35920	-9.57
Germanium	H	141448	96389	-31.86
Germanium	E	30578	26006	-14.95
Indium	A	3743435	2874020	-23.23
Yttrium	A	3687029	3057103	-17.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579088 File : f13g0088 Time : 13-JUN-2007 15:41
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3126	0.2733	10000	9603	ug/L	-4	10	
Antimony	A	0.1531	0.1276	100.0	90.87	ug/L	-9	10	
Barium	A	0.0933	0.0358	100.0	99.03	ug/L	-1	10	
Beryllium	A	0.1253	0.1218	100.0	98.89	ug/L	-1	10	
Cadmium	A	0.0383	0.0351	100.0	99.03	ug/L	-1	10	
Calcium	A	0.0195	0.0101	10000	9937	ug/L	-1	10	
Lead	A	0.4040	0.3393	100.0	92.32	ug/L	-8	10	
Magnesium	A	0.2540	0.2190	10000	9582	ug/L	-4	10	
Molybdenum	A	0.1101	0.0940	100.0	91.70	ug/L	-8	10	
Potassium	A	1.2357	0.3417	10000	9884	ug/L	-1	10	
Silver	A	0.1743	0.1665	100.0	98.19	ug/L	-2	10	
Thallium	A	0.4153	0.3937	50.00	47.82	ug/L	-4	10	
Arsenic	E	0.3044	0.2812	100.0	98.68	ug/L	-1	10	
Chromium	E	2.4070	1.8410	100.0	98.36	ug/L	-2	10	
Cobalt	E	3.4531	3.1495	100.0	97.92	ug/L	-2	10	
Copper	E	8.3572	3.1395	100.0	96.62	ug/L	-3	10	
Manganese	E	1.0531	0.8316	100.0	100.2	ug/L	0	10	
Nickel	E	1.5309	0.8682	100.0	98.03	ug/L	-2	10	
Sodium	E	0.6441	0.2438	10000	9912	ug/L	-1	10	
Vanadium	E	1.6695	1.3806	100.0	97.59	ug/L	-2	10	
Zinc	E	2.4259	0.4320	100.0	99.31	ug/L	-1	10	
Iron	H	0.4817	0.4534	10000	10330	ug/L	3	10	
Selenium	H	0.0670	0.0631	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1453737	-21.89
Scandium	A	2403377	2030940	-15.50
Scandium	E	39721	34265	-13.74
Scandium	H	536213	318787	-40.55
Germanium	H	141448	87289	-38.29
Germanium	E	30578	26247	-14.16
Indium	A	3743435	3136769	-16.21
Bismuth	A	3735148	3129661	-16.21
Yttrium	A	3687029	3140095	-14.83
Terbium	A	5525760	4734614	-14.32

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579090 File : f13g0090 Time : 13-JUN-2007 15:53
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.009054]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01477]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005672]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.009831]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.005589]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND.	0.1000	0.008214	ug/L	
Cobalt	E	[0.003333]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01714]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.9754]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1454500	-21.85
Scandium	A	2403377	1995376	-16.98
Scandium	E	39721	34609	-12.87
Scandium	H	536213	328702	-38.70
Germanium	H	141448	90241	-36.20
Germanium	E	30578	26643	-12.87
Indium	A	3743435	3179622	-15.06
Bismuth	A	3735148	3251131	-12.96
Yttrium	A	3687029	3126312	-15.21
Terbium	A	5525760	4742443	-14.18

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579096 File : f13g0096 Time : 13-JUN-2007 16:32
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3126	0.2736	10000	9614	ug/L	-4	10	
Antimony	A	0.1531	0.1289	100.0	91.79	ug/L	-8	10	
Barium	A	0.0933	0.0361	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1253	0.1209	100.0	98.22	ug/L	-2	10	
Cadmium	A	0.0383	0.0355	100.0	100.4	ug/L	0	10	
Calcium	A	0.0195	0.0101	10000	9938	ug/L	-1	10	
Lead	A	0.4040	0.3408	100.0	92.73	ug/L	-7	10	
Magnesium	A	0.2540	0.2196	10000	9607	ug/L	-4	10	
Molybdenum	A	0.1101	0.0944	100.0	92.09	ug/L	-8	10	
Potassium	A	1.2357	0.3415	10000	9878	ug/L	-1	10	
Silver	A	0.1743	0.1686	100.0	99.39	ug/L	-1	10	
Thallium	A	0.4153	0.3956	50.00	48.05	ug/L	-4	10	
Arsenic	E	0.3044	0.2773	100.0	97.31	ug/L	-3	10	
Chromium	E	2.4070	1.8248	100.0	97.49	ug/L	-3	10	
Cobalt	E	3.4531	3.1319	100.0	97.37	ug/L	-3	10	
Copper	E	8.3572	3.0875	100.0	95.02	ug/L	-5	10	
Manganese	E	1.0531	0.8339	100.0	100.5	ug/L	1	10	
Nickel	E	1.5309	0.8633	100.0	97.48	ug/L	-3	10	
Sodium	E	0.6441	0.2429	10000	9873	ug/L	-1	10	
Vanadium	E	1.6695	1.3700	100.0	96.84	ug/L	-3	10	
Zinc	E	2.4259	0.4267	100.0	98.10	ug/L	-2	10	
Iron	H	0.4817	0.4540	10000	10350	ug/L	4	10	
Selenium	H	0.0670	0.0639	100.0	102.9	ug/L	3	10	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1460283	-21.54
Scandium	A	2403377	2020284	-15.94
Scandium	E	39721	33951	-14.53
Scandium	H	536213	302277	-43.63
Germanium	H	141448	83240	-41.15
Germanium	E	30578	26206	-14.30
Indium	A	3743435	3075027	-17.86
Bismuth	A	3735148	3077862	-17.60
Yttrium	A	3687029	3099117	-15.95
Terbium	A	5525760	4644481	-15.95

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579098 File : f13g0098 Time : 13-JUN-2007 16:44
Cal : 897236579001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01033]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01653]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01086]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01099]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003406]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01240]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.006492]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.006202]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.007027]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.051]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1462939	-21.39
Scandium	A	2403377	2010711	-16.34
Scandium	E	39721	34562	-12.99
Scandium	H	536213	318259	-40.65
Germanium	H	141448	87562	-38.10
Germanium	E	30578	26847	-12.20
Indium	A	3743435	3190240	-14.78
Bismuth	A	3735148	3235528	-13.38
Yttrium	A	3687029	3127048	-15.19
Terbium	A	5525760	4716049	-14.65

!=warning ib=instrument blank

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579101 File : f13g0101 Time : 13-JUN-2007 17:03
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07329]	0.1000	ug/L	
Barium	A	0.9654	0.1000	ug/L	
Beryllium	A	[0.02636]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4086	0.1000	ug/L	
Silver	A	0.1919	0.1000	ug/L	
Thallium	A	[0.03191]	0.05000	ug/L	
Arsenic	E	0.2134	0.1000	ug/L	
Chromium	E	1.204	0.1000	ug/L	
Cobalt	E	0.1886	0.1000	ug/L	
Copper	E	1.275	0.1000	ug/L	
Manganese	E	0.5071	0.1000	ug/L	
Nickel	E	1.061	0.1000	ug/L	
Vanadium	E	[0.05338]	0.1000	ug/L	
Zinc	E	1.972	0.1000	ug/L	
Selenium	H	[0.02508]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87870	ug/L	88
Calcium	A	300000	266400	ug/L	89
Magnesium	A	100000	85020	ug/L	85
Molybdenum	A	2000	1760	ug/L	88
Potassium	A	100000	88100	ug/L	88
Sodium	E	250000	211800	ug/L	85
Iron	H	250000	219600	ug/L	88

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1861114	1386882	-25.48
Scandium	A	2403377	1993178	-17.07
Scandium	E	39721	35979	-9.42
Scandium	H	536213	337253	-37.10
Germanium	H	141448	85378	-39.64
Germanium	E	30578	25814	-15.58
Indium	A	3743435	2820975	-24.64
Bismuth	A	3735148	2636378	-29.42
Yttrium	A	3687029	3000153	-18.63
Terbium	A	5525760	4456098	-19.36

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897236579102 File : f13g0102 Time : 13-JUN-2007 17:09
Cal : 897236579001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	93410	ug/L	-7		
Cadmium	A	100.0	94.79	ug/L	-5	20	
Calcium	A	300000	285500	ug/L	-5		
Magnesium	A	100000	90480	ug/L	-10		
Molybdenum	A	2000	1898	ug/L	-5		
Potassium	A	100000	94500	ug/L	-6		
Silver	A	50.00	43.38	ug/L	-13	20	
Arsenic	E	100.0	99.16	ug/L	-1	20	
Chromium	E	200.0	188.7	ug/L	-6	20	
Cobalt	E	200.0	176.9	ug/L	-12	20	
Copper	E	200.0	171.3	ug/L	-14	20	
Manganese	E	200.0	193.9	ug/L	-3	20	
Nickel	E	200.0	171.2	ug/L	-14	20	
Sodium	E	250000	231300	ug/L	-7		
Vanadium	E	200.0	193.2	ug/L	-3	20	
Zinc	E	100.0	86.91	ug/L	-13	20	
Iron	H	250000	235000	ug/L	-6		
Selenium	H	100.0	98.01	ug/L	-2	20	

ISTD (ICALBLK f13g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	536213	333174	-37.87
Scandium	A	2403377	1906109	-20.69
Scandium	E	39721	34078	-14.21
Germanium	H	141448	84165	-40.50
Germanium	E	30578	24803	-18.89
Indium	A	3743435	2709110	-27.63
Yttrium	A	3687029	2877754	-21.95

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897236579

Date : 06/13/07 Reference : f13g0004
Sequence : MET16 f13g0 Analyzed : 06/13/07 07:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1861114	2403377	39721	536213	141448	30578	3743435	3735148	3687029	5525760
		LOWER LIMIT	558334	721013	11916	160864	42434	9173	1123031	1120544	1106109	1657728
		UPPER LIMIT	2233337	2884052	47665	643455	169737	36694	4492122	4482178	4424435	6630912
014	ICB		1832116	2390366	39349	483844	128994	30233	3702512	3692627	3672970	5475172
015	ICSA		1772464	2412200	40307	511842	125858	29336	3352449	3090229	3572693	5262094
016	ICSAB		1676638	2296990	37980	513020	125907	27617	3194397	2968640	3432903	5017086
021	BLANK	QC391874	1670467	2298502	36634	429633	116204	28519	3569990	3673137	3548553	5437794
022	BS	QC391875	1674308	2329729	36554	418317	109478	27761	3497790	3539453	3568697	5369404
023	BSD	QC391876	1678906	2357298	36907	415857	109803	27814	3528793	3518292	3583247	5400076
025	MSS	195242-001	1726167	2309632	37596	434085	117032	29362	3587468	3627560	3553989	5368396
026	SER	QC391879	1718432	2285024	37363	429206	115788	29345	3579247	3606086	3523738	5297737
027	MS	QC391877	1708569	2300706	37180	430806	115363	28766	3568450	3609163	3537180	5318830
028	MSD	QC391878	1709368	2303139	37348	421687	113935	29007	3532685	3570705	3488092	5294717
029	PDS	QC391880	1701614	2276026	37395	421677	111911	28480	3441093	3418622	3460964	5233706
031	CCV		1773417	2397484	37257	449257	116162	28726	3610193	3545581	3645605	5443228
033	CCB		1773088	2336643	39247	429045	114987	29940	3619288	3651720	3574951	5383106
034	ICSA		1634329	2257050	38513	435209	107186	27929	3172150	2975599	3401559	5048181
035	ICSAB		1556868	2193383	38036	440218	108242	27250	3101647	2891134	3308290	4911921
038	MSS	195276-002	1609166	2209179	36714	397208	106734	28306	3464729	3493398	3421111	5152680
039	PDS	QC391680	1564004	2191128	35831	390563	105081	27328	3360955	3337495	3391457	5076322
043	BLANK	QC391987	1568467	2133786	35687	402545	109412	28022	3365434	3450235	3306145	5027365
044	BS	QC391988	1618075	2141364	36381	413601	111653	28169	3317039	3352819	3301620	4987180
045	BSD	QC391989	1596623	2115769	35871	407990	110666	27995	3308453	3340811	3266142	4941201
047	MSS	195252-001	1575022	2143084	36334	416530	110880	27712	3318625	3410455	3299558	4982264
048	MSD	QC391991	1550039	2134239	36111	399025	105977	27555	3288550	3360244	3311701	4933370
049	PDS	QC391993	1576294	2182621	36711	392935	104268	27504	3287329	3268751	3345273	4954261
050	MS	QC391990	1559967	2150024	36173	383593	102779	27614	3292672	3348150	3310419	4919029
051	SER	QC391992	1546260	2105479	35807	380743	102761	27600	3288510	3371624	3262216	4893839
053	CCV		1580189	2128950	35041	386348	103391	26921	3251597	3250526	3256368	4908852
055	CCB		1569344	2119891	35705	387811	105585	27531	3318320	3377615	3257744	4950194
056	SAMPLE	195252-002	1550860	2089258	35778	374492	101094	27626	3245693	3334510	3222593	4834037
057	SAMPLE	195252-003	1567572	2105834	35655	364403	98417	27341	3233728	3322618	3220817	4834816
058	SAMPLE	195252-004	1578921	2104079	35702	363804	98339	27492	3277395	3349107	3242244	4866321
059	SAMPLE	195329-001	2026947	2514591	43795	430847	102975	29657	3269792	2784946	3497530	4897496
068	CCV		1639096	2201216	37157	351423	94875	28090	3314002	3278622	3340762	4972446
070	CCB		1578511	2105534	36192	364506	99077	27849	3308098	3367877	3271315	4929168
072	ICSA		1500747	2092537	36921	344063	89258	26587	2962855	2786095	3154170	4671899
073	ICSAB		1420893	2024466	35920	385749	96389	26006	2874020	2680753	3057103	4536105
078	BLANK	QC391899	1411850	1984072	33561	327015	91251	26389	3177792	3284728	3124993	4786682
079	BS	QC391900	1388199	1993966	32879	310582	83540	24987	3078327	3124127	3108822	4736660
080	BSD	QC391901	1376621	1997332	33234	312557	84497	25239	3097291	3127519	3124734	4746468
081	MSS	195234-001	1411451	1995448	33831	333188	92742	26378	3191402	3267656	3148715	4774948
082	SER	QC391904	1425200	2007773	33899	331313	92066	26590	3212900	3261792	3138097	4758310
083	MS	QC391902	1407794	1982586	34091	324173	89950	26505	3154969	3192015	3091532	4708564
084	MSD	QC391903	1400094	1992031	34273	320649	88943	26517	3162385	3201855	3100008	4711298
085	SAMPLE	195145-008	1405235	1974120	34052	319298	87714	25971	3175788	3240743	3119858	4728558
088	CCV		1453737	2030940	34265	318787	87289	26247	3136769	3129661	3140095	4734614
090	CCB		1454500	1995376	34609	328702	90241	26643	3179622	3251131	3126312	4742443
092	SAMPLE	195145-008	1384883	1947173	32933	308514	87566	26210	3100136	3213820	3084298	4702483
095	SAMPLE	195145-005	1398024	1959767	33481	309545	86245	26389	3066535	3131640	3027251	4618517
096	CCV		1460283	2020284	33951	302277	83240	26206	3075027	3077862	3099117	4644481

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897236579

Date : 06/13/07 Reference : f13g0004
Sequence : MET16 f13g0 Analyzed : 06/13/07 07:19

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
098	CCB		1462939	2010711	34562	318259	87562	26847	3190240	3235528	3127048	4716049
101	ICSA		1386882	1993178	35979	337253	85378	25814	2820975	2636378	3000153	4456098
102	ICSAB		1300310	1906109	34078	333174	84165	24803	2709110	2540508	2877754	4295040

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897236579 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
01	f13g0001	TUN				13-JUN-2007 06:59	1.0	1.0		1	
02	f13g0002	X	RINSE			13-JUN-2007 07:07	1.0			2	
03	f13g0003	X	RINSE			13-JUN-2007 07:13	1.0			2	
04	f13g0004	ICALBLK	CALBLANK			13-JUN-2007 07:19	1.0	1.0		2	
05	f13g0005	ICAL				13-JUN-2007 07:25	1.0	1.0		3	
06	f13g0006	ICAL				13-JUN-2007 07:31	1.0	1.0		4	
07	f13g0007	ICAL				13-JUN-2007 07:37	1.0	1.0		5	
08	f13g0008	ICAL				13-JUN-2007 07:42	1.0	1.0		6	
09	f13g0009	ICAL				13-JUN-2007 07:48	1.0	1.0		7	
10	f13g0010	ICAL				13-JUN-2007 07:54	1.0	1.0		8	
11	f13g0011	X	RINSE			13-JUN-2007 08:00	1.0			2	
12	f13g0012	ICV				13-JUN-2007 08:06	1.0	1.0	1	9	
13	f13g0013	X	RINSE			13-JUN-2007 08:12	1.0			2	
14	f13g0014	ICB				13-JUN-2007 08:18	1.0	1.0	1	2	
15	f13g0015	ICSA				13-JUN-2007 08:25	1.0	1.0	1	10 2	7:CA=275600
16	f13g0016	ICSAB				13-JUN-2007 08:31	1.0	1.0	1	11 2	10:CA=303400
17	f13g0017	X	RINSE			13-JUN-2007 08:37	1.0			2	
18	f13g0018	X	RINSE			13-JUN-2007 08:43	1.0			2	
19	f13g0019	X	RINSE			13-JUN-2007 08:49	1.0			2	
20	f13g0020	X	RINSE			13-JUN-2007 08:55	1.0			2	
21	f13g0021	BLANK	QC391874	126205	Water	13-JUN-2007 09:01	1.0	1.0	1	2	
22	f13g0022	BS	QC391875	126205	Water	13-JUN-2007 09:07	1.0	1.0	1	2	
23	f13g0023	BSD	QC391876	126205	Water	13-JUN-2007 09:12	1.0	1.0	1	2	
24	f13g0024	X	RINSE			13-JUN-2007 09:18	1.0			2	
25	f13g0025	MSS	195242-001	126205	Water	13-JUN-2007 09:24	10.0	1.0	1	2	
26	f13g0026	SER	QC391879	126205	Water	13-JUN-2007 09:30	50.0	1.0	1	2	
27	f13g0027	MS	QC391877	126205	Water	13-JUN-2007 09:36	10.0	1.0	1	2	
28	f13g0028	MSD	QC391878	126205	Water	13-JUN-2007 09:42	10.0	1.0	1	2	
29	f13g0029	PDS	QC391880	126205	Water	13-JUN-2007 09:48	10.0	1.0	1	12 13 2	
30	f13g0030	X	RINSE			13-JUN-2007 09:54	1.0			2	
31	f13g0031	CCV				13-JUN-2007 09:59	1.0	1.0	1	14 2	

tds used: 1=S6411 2=S6088 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

nalyst: _____ Date: 6/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897236579 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f13g0032	X	RINSE			13-JUN-2007 10:05	1.0					2	
033	f13g0033	CCB				13-JUN-2007 10:11	1.0	1.0			1	2	
034	f13g0034	ICSA				13-JUN-2007 10:18	1.0	1.0			1	10 2	7:CA=273400
035	f13g0035	ICSAB				13-JUN-2007 10:24	1.0	1.0			1	11 2	7:CA=292500
036	f13g0036	X	RINSE			13-JUN-2007 10:30	1.0					2	
037	f13g0037	X	RINSE			13-JUN-2007 10:36	1.0					2	
038	f13g0038	MSS	195276-002	126151	Filtra	13-JUN-2007 10:42	1000	1.0			1	2	
039	f13g0039	PDS	QC391680	126151	Filtra	13-JUN-2007 10:48	1000	1.0			1	12 13 2	
40	f13g0040	X	RINSE			13-JUN-2007 10:54	1.0					2	
41	f13g0041	X	NO SAMPLE			13-JUN-2007 11:00	1.0					2	
42	f13g0042	X	NO SAMPLE			13-JUN-2007 11:06	1.0					2	
43	f13g0043	BLANK	QC391987	126227	Soil	13-JUN-2007 11:11	5.0	50.0			1	2	
44	f13g0044	BS	QC391988	126227	Soil	13-JUN-2007 11:17	10.0	50.0			1	2	
45	f13g0045	BSD	QC391989	126227	Soil	13-JUN-2007 11:23	10.0	50.0			1	2	
46	f13g0046	X	RINSE			13-JUN-2007 11:29	1.0					2	
47	f13g0047	MSS	195252-001	126227	Soil	13-JUN-2007 11:35	50.0	46.30			1	2	
48	f13g0048	MSD	QC391991	126227	Soil	13-JUN-2007 11:41	50.0	48.54			1	2	
49	f13g0049	PDS	QC391993	126227	Soil	13-JUN-2007 11:47	50.0	46.30	1		1	12 13 2	1:MN=230.20(
50	f13g0050	MS	QC391990	126227	Soil	13-JUN-2007 11:53	50.0	46.73			1	2	
51	f13g0051	SER	QC391992	126227	Soil	13-JUN-2007 11:58	250.0	46.30			1	2	
52	f13g0052	X	RINSE			13-JUN-2007 12:04	1.0					2	
53	f13g0053	CCV				13-JUN-2007 12:10	1.0	1.0			1	14 2	
54	f13g0054	X	RINSE			13-JUN-2007 12:16	1.0					2	
55	f13g0055	CCB				13-JUN-2007 12:22	1.0	1.0			1	2	
56	f13g0056	SAMPLE	195252-002	126227	Soil	13-JUN-2007 12:29	50.0	48.54			1	2	
57	f13g0057	SAMPLE	195252-003	126227	Soil	13-JUN-2007 12:35	50.0	48.08			1	2	
58	f13g0058	SAMPLE	195252-004	126227	Soil	13-JUN-2007 12:40	50.0	49.50			1	2	
59	f13g0059	SAMPLE	195329-001	126205	Water	13-JUN-2007 12:46	10.0	1.0			1	2	4:NA=1006000
60	f13g0060	X	RINSE			13-JUN-2007 12:52	1.0					2	
61	f13g0061	X	RINSE			13-JUN-2007 12:58	1.0					2	
62	f13g0062	X				13-JUN-2007 13:04	1.0	1.0	1		1	14 2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

nalyst: RHA Date: 6/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897236579 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
63	f13g0063	X	RINSE			13-JUN-2007 13:12	1.0					2	
64	f13g0064	X				13-JUN-2007 13:18	1.0					14 2	
65	f13g0065	X	RINSE			13-JUN-2007 13:24	1.0					2	
66	f13g0066	X	NO SAMPLE			13-JUN-2007 13:29	1.0					14 2	
67	f13g0067	X	RINSE			13-JUN-2007 13:35	1.0					2	
68	f13g0068	CCV				13-JUN-2007 13:41	1.0	1.0			1	14 2	
69	f13g0069	X	RINSE			13-JUN-2007 13:47	1.0					2	
70	f13g0070	CCB				13-JUN-2007 13:53	1.0	1.0			1	2	
71	f13g0071	X				13-JUN-2007 13:59	1.0					2	
72	f13g0072	ICSA				13-JUN-2007 14:05	1.0	1.0			1	10 2	7:CA=267800
73	f13g0073	ICSAB				13-JUN-2007 14:11	1.0	1.0			1	11 2	7:CA=287300
74	f13g0074	X	RINSE			13-JUN-2007 14:17	1.0					2	
75	f13g0075	X	RINSE			13-JUN-2007 14:23	1.0					2	
76	f13g0076	X	RINSE			13-JUN-2007 14:29	1.0					2	
77	f13g0077	X	RINSE			13-JUN-2007 14:35	1.0					2	
78	f13g0078	BLANK	QC391899	126207	Filtra	13-JUN-2007 14:41	1.0	1.0			1	2	
79	f13g0079	BS	QC391900	126207	Filtra	13-JUN-2007 14:47	1.0	1.0			1	2	
80	f13g0080	BSD	QC391901	126207	Filtra	13-JUN-2007 14:53	1.0	1.0			1	2	
81	f13g0081	MSS	195234-001	126207	Filtra	13-JUN-2007 14:59	10.0	1.0	1		1	2	
82	f13g0082	SER	QC391904	126207	Filtra	13-JUN-2007 15:05	50.0	1.0		2	1	2	
83	f13g0083	MS	QC391902	126207	Filtra	13-JUN-2007 15:11	10.0	1.0			1	2	
84	f13g0084	MSD	QC391903	126207	Filtra	13-JUN-2007 15:17	10.0	1.0			1	2	
85	f13g0085	SAMPLE	195145-008	125945	Water	13-JUN-2007 15:23	10.0	1.0			1	2	
86	f13g0086	X	RINSE			13-JUN-2007 15:29	1.0					2	
87	f13g0087	X	RINSE			13-JUN-2007 15:35	1.0					2	
88	f13g0088	CCV				13-JUN-2007 15:41	1.0	1.0			1	14 2	
89	f13g0089	X	RINSE			13-JUN-2007 15:47	1.0					2	
90	f13g0090	CCB				13-JUN-2007 15:53	1.0	1.0			1	2	
91	f13g0091	X				13-JUN-2007 15:59	1.0					2	
92	f13g0092	SAMPLE	195145-008	125945	Water	13-JUN-2007 16:05	1.0	1.0			1	2	
93	f13g0093	X				13-JUN-2007 16:11	1.0					14 2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: [signature] Date: 6/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897236579 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
094	f13g0094	X	RINSE			13-JUN-2007 16:18	1.0			2	
095	f13g0095	SAMPLE	195145-005	125945	Water	13-JUN-2007 16:26	10.0	1.0	1	2	
096	f13g0096	CCV				13-JUN-2007 16:32	1.0	1.0	1	14 2	
097	f13g0097	X	RINSE			13-JUN-2007 16:38	1.0			2	
098	f13g0098	CCB				13-JUN-2007 16:44	1.0	1.0	1	2	
099	f13g0099	TUN				13-JUN-2007 16:49	1.0	1.0		1	
100	f13g0100	X	RINSE			13-JUN-2007 16:57	1.0			2	
101	f13g0101	ICSA				13-JUN-2007 17:03	1.0	1.0	1	10 2	7:CA=266400
102	f13g0102	ICSAB				13-JUN-2007 17:09	1.0	1.0	1	11 2	7:CA=285500

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RLH Date: 6/13/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

nst : MET16
alnum : 897237240001
nits : ug/L

Date : 13-JUN-2007 18:30
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f13r0005	897237240005		13-JUN-2007 18:36	S6414
L2	f13r0006	897237240006		13-JUN-2007 18:42	S6416
L3	f13r0007	897237240007		13-JUN-2007 18:48	S6417
L4	f13r0008	897237240008		13-JUN-2007 18:54	S6418
L5	f13r0009	897237240009		13-JUN-2007 18:59	S6412
L6	f13r0010	897237240010		13-JUN-2007 19:05	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4412	0.3658	0.3704	0.3368	0.3323	0.3228	BLNK	-0.7778	3.07987		0.3615	1.000	0.995	
Antimony	A	0.2764	0.1820	0.1746	0.1562	0.1578	0.1653	BLNK	-0.0188	6.10596		0.1854	1.000	0.995	
Barium	A	0.3953	0.0659	0.0618	0.0825	0.0438	0.0429	BLNK	-0.0261	23.1914		0.1154	0.997	0.995	
Beryllium	A	0.1651	0.1555	0.1483	0.1473	0.1488	0.1424	BLNK	-0.0060	6.95967		0.1512	1.000	0.995	
Cadmium	A	0.0534	0.0462	0.0459	0.0440	0.0431	0.0417	BLNK	-0.0096	23.8227		0.0457	1.000	0.995	
Calcium	A	0.0540	0.0194	0.0165	0.0123	0.0124	0.0119	BLNK	-9.1625	83.2733		0.0211	1.000	0.995	
Lead	A	0.6639	0.4821	0.4758	0.4455	0.4458	0.4437	BLNK	-0.0184	2.25200		0.4928	1.000	0.995	
Magnesium	A	0.3649	0.2951	0.2990	0.2695	0.2659	0.2565	BLNK	-1.0950	3.87025		0.2918	1.000	0.995	
Molybdenum	A	0.1697	0.1243	0.1280	0.1162	0.1159	0.1221	BLNK	-0.0426	8.27666		0.1294	0.999	0.995	
Potassium	A	5.6374	1.2443	0.8422	0.4531	0.4134	0.3996	BLNK	-101.63	2.50022		1.4983	1.000	0.995	
Silver	A	0.2352	0.1977	0.2096	0.1944	0.2040	0.1977	BLNK	-0.0062	5.02566		0.2064	1.000	0.995	
Thallium	A	0.5225	0.4646	0.4864	0.4454	0.4920	0.4845	BLNK	-0.0065	2.05799		0.4826	1.000	0.995	
Arsenic	E	0.3519	0.3590	0.3587	0.3342	0.3425	0.3297	BLNK	-0.0255	3.01042		0.3460	1.000	0.995	
Chromium	E	4.8329	2.5099	2.5688	2.2092	2.2228	2.1730	BLNK	-0.1042	0.45838		2.7528	1.000	0.995	
Cobalt	E	4.1325	4.0286	4.0987	3.8473	3.8275	3.7211	BLNK	-0.0021	0.26720		3.9426	1.000	0.995	
Copper	E	34.713	6.1008	8.4204	3.9826	3.8188	3.6562	BLNK	-0.1855	0.27136		10.115	0.999	0.995	
Manganese	E	2.1050	1.1937	1.2090	1.0280	1.0298	1.0071	BLNK	-0.0116	0.98855		1.2621	1.000	0.995	
Nickel	E	4.5969	1.2786	1.2535	1.0729	1.0476	1.0136	BLNK	-0.0444	0.98016		1.7105	1.000	0.995	
Sodium	E	2.3419	0.6177	0.4719	0.3073	0.2966	0.2838	BLNK	-49.432	3.50268		0.7199	1.000	0.995	
Vanadium	E	2.8510	1.9434	1.8739	1.6517	1.6901	1.6488	BLNK	-0.0640	0.60371		1.9432	1.000	0.995	
Zinc	E	13.900	2.1094	1.2963	0.6314	0.5293	0.5029	BLNK	-0.8697	1.97743		3.1615	0.999	0.995	
Iron	H	0.7599	0.5965	0.6009	0.5595	0.5533	0.5378	BLNK	-1.1940	1.84877		0.6013	1.000	0.995	
Selenium	H	0.0795	0.0854	0.0824	0.0811	0.0780	0.0746	BLNK	-0.0042	13.2813		0.0802	0.999	0.995	

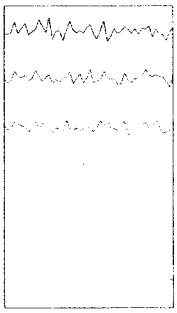
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
luminum	A	10.00	28	50.00	11	100.0	13	1000	4	10000	2	20000	-1
ntimony	A	0.100	50	0.500	7	1.000	5	10.00	-5	100.0	-4	200.0	1
arium	A	0.100	791	0.500	48	1.000	41	10.00	91	100.0	2	200.0	-1
eryllium	A	0.100	9	0.500	7	1.000	3	10.00	2	100.0	4	200.0	-1
admium	A	0.100	18	0.500	8	1.000	8	10.00	5	100.0	3	200.0	-1
alcium	A	10.00	258	50.00	44	100.0	28	1000	2	10000	3	20000	-1
ead	A	0.100	31	0.500	5	1.000	5	10.00	0	100.0	0	200.0	0
agnesium	A	10.00	30	50.00	12	100.0	15	1000	4	10000	3	20000	-1
olybdenum	A	0.100	-2	0.500	-6	1.000	2	10.00	-4	100.0	-4	200.0	1
otassium	A	10.00	293	50.00	8	100.0	9	1000	3	10000	2	20000	-1
ilver	A	0.100	12	0.500	-2	1.000	5	10.00	-2	100.0	3	200.0	-1
hallium	A	0.050	-6	0.250	-7	0.500	-1	5.000	-8	50.00	1	100.0	0
rsenic	E	0.100	-20	0.500	3	1.000	5	10.00	0	100.0	3	200.0	-1
hromium	E	0.100	17	0.500	-6	1.000	7	10.00	0	100.0	2	200.0	0
obalt	E	0.100	8	0.500	7	1.000	9	10.00	3	100.0	2	200.0	-1
opper	E	0.100	656	0.500	28	1.000	110	10.00	6	100.0	3	200.0	-1
anganese	E	0.100	97	0.500	16	1.000	18	10.00	2	100.0	2	200.0	0
ickel	E	0.100	306	0.500	16	1.000	18	10.00	5	100.0	3	200.0	-1
odium	E	10.00	226	50.00	18	100.0	16	1000	3	10000	3	20000	-1
anadium	E	0.100	8	0.500	5	1.000	7	10.00	-1	100.0	2	200.0	0
inc	E	0.100	1779	0.500	143	1.000	69	10.00	16	100.0	4	200.0	-1
ron	H	10.00	29	50.00	8	100.0	10	1000	3	10000	2	20000	-1
elenium	H	0.100	1	0.500	13	1.000	9	10.00	8	100.0	4	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

897237240001

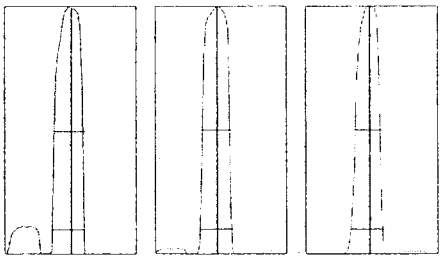
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	18536.0	18335.3	1.99	1.20
89	50,000	38844.0	38046.2	1.87	1.50
205	50,000	31088.0	29937.6	2.22	2.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.975%
Doubly Charged: 70/140 2.126%



m/z:	7	89	205
Height:	18,331	38,430	30,230
Axis:	7.05	88.95	205.00
W-50%:	0.70	0.65	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.68	V
Smpl Depth	7	mm
Torch-H	0.6	mm
Torch-V	0.1	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-180	V
Omega Bias-ce	-30	V
Omega Lens-ce	-0.4	V
Cell Entrance	-30	V
QP Focus	7	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	126	
AMU Offset	126	
Axis Gain	0.9997	
Axis Offset	0.04	
QP Bias	-3	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1680	V
Pulse HV	1050	V

===Reaction Cell===

Reaction Mode	OFF	
H2 Gas	0	mL/min
He Gas	0	mL/min
Optional Gas	---	%

Tune File : he.u

He Gas:	5.5	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	9.0	35.15
59	3182.3	2.99
89	2607.8	2.94

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	3	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	2931.2	7.78
78	0.3	170.42
89	19113.0	3.98

Integration Time: 0.1000sec

Generated : Jun 13, 2007 06:22:16 : 00192
Printed : Jun 13, 2007 06:23:56

P/A Factor Tuning Report

Acquired:Jun 13 2007 06:28 am

Mass[amu]	Element	P/A Factor
6	Li	0.059876
7	(Li)	0.062599
9	Be	0.067690
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.083457
45	Sc	0.081098
51	V	0.077313
52	Cr	0.085237
55	Mn	0.086840
56	Fe	Sensitivity too high
59	Co	0.088584
60	Ni	Sensitivity too low
63	Cu	0.091136
65	Cu	0.090942
66	Zn	Sensitivity too low
72	Ge	0.091358
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.090321
98	Mo	0.090530
99	(Ru)	Sensitivity too low
107	Ag	0.095875
111	Cd	Sensitivity too low
115	In	0.095435
118	(In)	0.095260
121	Sb	0.095261
137	Ba	Sensitivity too low
159	Tb	Sensitivity too low
205	Tl	0.101882
206	(Pb)	0.102183
207	(Pb)	0.102247
208	Pb	0.102064
209	Bi	0.101982

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1680 V
Pulse HV: 1050 V

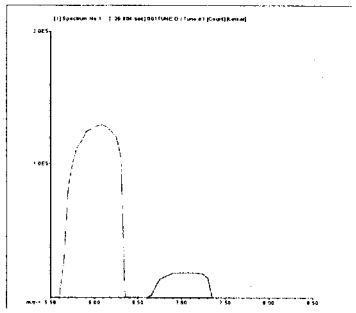
:00193

6020 QC Tune Report

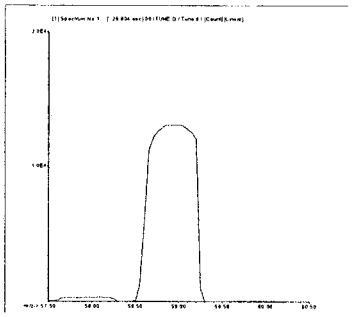
Data File: C:\ICPCHEM\1\DATA\07F13r00.B\001TUNE.D
Date Acquired: Jun 13 2007 06:00 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

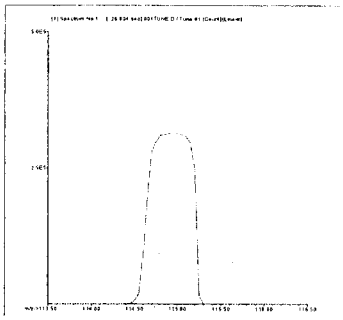
Element	Actual	Required	Flag
7 Li	0.72	5.00	
59 Co	1.00	5.00	
115 In	0.71	5.00	
205 Tl	0.56	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



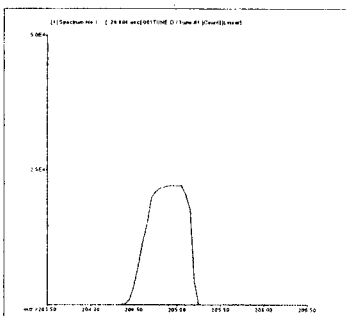
115 In

Mass Calib.

Actual:	114.95	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004C
Date Acquired: Jun 13 2007 06:28 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:32 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1030798.00	A	7254.00	0.70
7	(Li)		P		
9	Be	17.78	P	1.93	10.83
23	Na	7148.48	P	47.05	0.66
24	Mg	8189.02	P	103.60	1.27
27	Al	7309.69	P	236.30	3.23
39	K	1176538.00	A	8873.00	0.75
44	Ca	3184.87	P	82.23	2.58
45	Sc	251753.59	P	308.10	0.12
45	Sc	25326.40	P	45.28	0.18
45	Sc	1447283.00	A	8002.00	0.55
51	V	53.70	P	6.32	11.76
52	Cr	115.19	P	3.21	2.79
55	Mn	5.93	P	0.64	10.83
56	Fe	3251.86	P	109.50	3.37
59	Co	4.07	P	0.64	15.75
60	Ni	22.96	P	1.28	5.59
63	Cu	268.89	P	17.46	6.49
65	Cu	134.82	P	15.41	11.43
66	Zn	172.97	P	13.39	7.74
72	Ge	70294.79	P	700.30	1.00
72	Ge	19663.38	P	11.88	0.06
75	As	3.33	P	2.31	69.27
78	Se	0.44	P	0.77	173.20
89	Y	2298016.00	A	10370.00	0.45
98	Mo	236.68	P	49.33	20.84
107	Ag	57.78	P	12.62	21.84
111	Cd	18.89	P	7.70	40.75
115	In	2345543.00	A	13770.00	0.59
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	144.45	P	28.74	19.90
137	Ba	78.89	P	26.94	34.15
159	Tb	3504928.00	A	20100.00	0.57
205	Tl	152.23	P	5.09	3.35
208	Pb	573.36	P	30.00	5.23
209	Bi	2401034.00	A	8995.00	0.37

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 13 2007 06:34 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:32 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1026323.00	A	9447.00	0.92
7	(Li)		P		
9	Be	338.90	P	10.72	3.16
23	Na	11905.94	P	266.80	2.24
24	Mg	105964.40	P	1067.00	1.01
27	Al	128127.70	P	322.50	0.25
39	K	1637193.00	A	7574.00	0.46
44	Ca	15688.33	P	360.60	2.30
45	Sc	258061.09	P	1262.00	0.49
45	Sc	25419.54	P	324.80	1.28
45	Sc	1452112.00	A	5544.00	0.38
51	V	144.82	P	13.98	9.65
52	Cr	245.56	P	18.19	7.41
55	Mn	107.04	P	13.02	12.16
56	Fe	39218.54	P	243.20	0.62
59	Co	210.00	P	10.18	4.85
60	Ni	233.71	P	5.25	2.25
63	Cu	1380.45	P	39.70	2.88
65	Cu	702.99	P	19.45	2.77
66	Zn	552.98	P	14.92	2.70
72	Ge	71352.18	P	442.00	0.62
72	Ge	19889.60	P	229.90	1.16
75	As	14.00	P	2.67	19.05
78	Se	11.33	P	3.53	31.13
89	Y	2297610.00	A	13470.00	0.59
98	Mo	780.05	P	61.74	7.91
99	(Ru)	5.56	P	6.94	124.90
107	Ag	1115.64	P	57.20	5.13
111	Cd	253.34	P	40.42	15.96
115	In	2371573.00	A	10400.00	0.44
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1311.21	P	97.55	7.44
137	Ba	2761.46	P	66.79	2.42
159	Tb	3493395.00	A	18580.00	0.53
205	Tl	1267.88	P	46.71	3.68
208	Pb	4638.25	P	81.67	1.76
209	Bi	2426489.00	A	11490.00	0.47

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1026323.10	0.92	1030798.00	99.6	80 - 120	
45	Sc	258061.09	0.49	251753.64	102.5	80 - 120	
45	Sc	25419.54	1.28	25326.40	100.4	80 - 120	
45	Sc	1452112.00	0.38	1447283.00	100.3	80 - 120	
72	Ge	71352.18	0.62	70294.80	101.5	80 - 120	
72	Ge	19889.60	1.16	19663.39	101.2	80 - 120	
89	Y	2297609.50	0.59	2298016.30	100.0	80 - 120	
115	In	2371573.00	0.44	2345542.80	101.1	80 - 120	
159	Tb	3493395.00	0.53	3504928.30	99.7	80 - 120	
209	Bi	2426489.30	0.47	2401033.80	101.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 13 2007 06:40 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:38 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1024845.00	A	5209.00	0.51
7 (Li)		P		
9 Be	1593.46	P	109.10	6.85
23 Na	15832.77	P	181.40	1.15
24 Mg	429434.09	P	1148.00	0.27
27 Al	532364.63	P	2189.00	0.41
39 K	1810985.00	A	17650.00	0.97
44 Ca	28291.59	P	248.90	0.88
45 Sc	259426.09	P	1109.00	0.43
45 Sc	25632.11	P	84.03	0.33
45 Sc	1455478.00	A	10610.00	0.73
51 V	498.16	P	15.13	3.04
52 Cr	643.35	P	8.82	1.37
55 Mn	305.93	P	20.65	6.75
56 Fe	154755.91	P	247.60	0.16
59 Co	1032.64	P	17.72	1.72
60 Ni	327.78	P	32.89	10.03
63 Cu	1205.99	P	17.86	1.48
65 Cu	589.28	P	8.91	1.51
66 Zn	417.05	P	18.90	4.53
72 Ge	72301.08	P	383.10	0.53
72 Ge	19767.96	P	171.40	0.87
75 As	70.89	P	11.78	16.62
78 Se	61.78	P	1.93	3.12
89 Y	2313394.00	A	11750.00	0.51
98 Mo	2875.93	P	136.70	4.75
99 (Ru)	4.44	P	3.85	86.60
107 Ag	4637.53	P	50.46	1.09
111 Cd	1084.52	P	105.10	9.69
115 In	2345938.00	A	17160.00	0.73
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	4270.74	P	108.40	2.54
137 Ba	2301.37	P	40.75	1.77
159 Tb	3490378.00	A	15850.00	0.45
205 Tl	5623.53	P	133.90	2.38
208 Pb	16826.77	P	242.70	1.44
209 Bi	2420752.00	A	4902.00	0.20

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1024845.20	0.51	1030798.00	99.4	80 - 120	
45 Sc	259426.13	0.43	251753.64	103.0	80 - 120	
45 Sc	25632.11	0.33	25326.40	101.2	80 - 120	
45 Sc	1455477.60	0.73	1447283.00	100.6	80 - 120	
72 Ge	72301.08	0.53	70294.80	102.9	80 - 120	
72 Ge	19767.96	0.87	19663.39	100.5	80 - 120	
89 Y	2313393.80	0.51	2298016.30	100.7	80 - 120	
115 In	2345937.80	0.73	2345542.80	100.0	80 - 120	
159 Tb	3490377.80	0.45	3504928.30	99.6	80 - 120	
209 Bi	2420752.30	0.20	2401033.80	100.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 13 2007 06:46 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:44 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1031053.00	A	7116.00	0.69
7 (Li)		P		
9 Be	3058.16	P	58.73	1.92
23 Na	23773.96	P	289.50	1.22
24 Mg	860605.50	A	12520.00	1.45
27 Al	1066063.00	A	4286.00	0.40
39 K	2423823.00	A	6915.00	0.29
44 Ca	47457.99	P	356.40	0.75
45 Sc	256178.09	P	1958.00	0.76
45 Sc	25192.48	P	372.10	1.48
45 Sc	1439075.00	A	8046.00	0.56
51 V	944.11	P	43.95	4.66
52 Cr	1293.77	P	33.73	2.61
55 Mn	609.28	P	39.16	6.43
56 Fe	307884.59	P	2660.00	0.86
59 Co	2064.23	P	77.92	3.77
60 Ni	631.50	P	10.08	1.60
63 Cu	3286.68	P	89.84	2.73
65 Cu	1642.70	P	9.71	0.59
66 Zn	505.94	P	22.81	4.51
72 Ge	71145.78	P	779.50	1.10
72 Ge	19516.16	P	135.20	0.69
75 As	140.00	P	4.00	2.86
78 Se	117.33	P	8.08	6.89
89 Y	2270171.00	A	7254.00	0.32
98 Mo	5811.32	P	139.20	2.40
99 (Ru)	2.22	P	1.93	86.62
107 Ag	9732.34	P	288.70	2.97
111 Cd	2133.57	P	101.20	4.74
115 In	2322366.00	A	10000.00	0.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8110.25	P	111.00	1.37
137 Ba	4295.21	P	121.90	2.84
159 Tb	3473851.00	A	21760.00	0.63
205 Tl	11626.30	P	325.00	2.80
208 Pb	33057.46	P	477.60	1.44
209 Bi	2390384.00	A	12720.00	0.53

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1031052.90	0.69	1030798.00	100.0	80 - 120	
45 Sc	256178.13	0.76	251753.64	101.8	80 - 120	
45 Sc	25192.48	1.48	25326.40	99.5	80 - 120	
45 Sc	1439075.10	0.56	1447283.00	99.4	80 - 120	
72 Ge	71145.78	1.10	70294.80	101.2	80 - 120	
72 Ge	19516.16	0.69	19663.39	99.3	80 - 120	
89 Y	2270171.50	0.32	2298016.30	98.8	80 - 120	
115 In	2322366.50	0.43	2345542.80	99.0	80 - 120	
159 Tb	3473850.80	0.63	3504928.30	99.1	80 - 120	
209 Bi	2390383.50	0.53	2401033.80	99.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 13 2007 06:51 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:50 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1032246.00	A	9362.00	0.91
7 (Li)		P		
9 Be	30413.89	P	180.90	0.59
23 Na	158109.00	P	994.50	0.63
24 Mg	7795899.00	A	39610.00	0.51
27 Al	9744046.00	A	60960.00	0.63
39 K	13108320.00	A	57490.00	0.44
44 Ca	355927.81	P	1520.00	0.43
45 Sc	259029.59	P	1623.00	0.63
45 Sc	25728.93	P	522.90	2.03
45 Sc	1446752.00	A	22630.00	1.56
51 V	8494.97	P	155.60	1.83
52 Cr	11363.48	P	110.00	0.97
55 Mn	5287.98	P	101.90	1.93
56 Fe	2898583.00	A	11720.00	0.40
59 Co	19791.57	P	49.13	0.25
60 Ni	5519.55	P	81.71	1.48
63 Cu	15791.47	P	150.80	0.95
65 Cu	7866.50	P	37.64	0.48
66 Zn	2503.56	P	27.76	1.11
72 Ge	71932.41	P	664.80	0.92
72 Ge	19827.29	P	214.70	1.08
75 As	1325.40	P	23.11	1.74
78 Se	1167.16	P	16.34	1.40
89 Y	2298324.00	A	13390.00	0.58
98 Mo	53425.04	P	89.06	0.17
99 (Ru)	6.67	P	6.67	100.00
107 Ag	90826.22	P	937.40	1.03
111 Cd	20537.99	P	195.70	0.95
115 In	2335906.00	A	14290.00	0.61
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	72961.44	P	207.50	0.28
137 Ba	57524.21	P	631.20	1.10
159 Tb	3487143.00	A	30310.00	0.87
205 Tl	107604.40	P	1222.00	1.14
208 Pb	310683.69	P	1546.00	0.50
209 Bi	2415764.00	A	11330.00	0.47

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1032245.70	0.91	1030798.00	100.1	80 - 120	
45 Sc	259029.61	0.63	251753.64	102.9	80 - 120	
45 Sc	25728.93	2.03	25326.40	101.6	80 - 120	
45 Sc	1446752.40	1.56	1447283.00	100.0	80 - 120	
72 Ge	71932.41	0.92	70294.80	102.3	80 - 120	
72 Ge	19827.29	1.08	19663.39	100.8	80 - 120	
89 Y	2298324.30	0.58	2298016.30	100.0	80 - 120	
115 In	2335906.50	0.61	2345542.80	99.6	80 - 120	
159 Tb	3487142.80	0.87	3504928.30	99.5	80 - 120	
209 Bi	2415764.30	0.47	2401033.80	100.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 13 2007 06:57 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 06:55 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	989698.63	A	21090.00	2.13
7 (Li)		P		
9 Be	294418.59	P	2263.00	0.77
23 Na	1470429.00	A	5943.00	0.40
24 Mg	75946400.00	A	187300.00	0.25
27 Al	94897856.00	A	567800.00	0.60
39 K	############	A	590800.00	0.50
44 Ca	3527377.00	A	22980.00	0.65
45 Sc	247971.41	P	805.50	0.32
45 Sc	24790.76	P	138.70	0.56
45 Sc	1428093.00	A	7379.00	0.52
51 V	83794.89	P	355.30	0.42
52 Cr	110203.40	P	746.80	0.68
55 Mn	51058.36	P	150.70	0.30
56 Fe	27441980.00	A	56660.00	0.21
59 Co	189768.91	P	366.00	0.19
60 Ni	51942.38	P	305.90	0.59
63 Cu	146277.20	P	182.30	0.12
65 Cu	72622.81	P	482.20	0.66
66 Zn	20274.49	P	141.20	0.70
72 Ge	68375.19	P	96.54	0.14
72 Ge	19153.49	P	187.60	0.98
75 As	13117.62	P	86.13	0.66
78 Se	10671.75	P	47.94	0.45
89 Y	2253506.00	A	9261.00	0.41
98 Mo	522298.31	P	1693.00	0.32
99 (Ru)	20.00	P	5.77	28.87
107 Ag	917769.63	A	10140.00	1.10
111 Cd	193971.50	P	496.20	0.26
115 In	2249307.00	A	18940.00	0.84
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	709895.38	P	2407.00	0.34
137 Ba	300046.91	P	972.30	0.32
159 Tb	3424603.00	A	13160.00	0.38
205 Tl	1120264.00	A	4318.00	0.39
208 Pb	3053222.00	A	20030.00	0.66
209 Bi	2277089.00	A	8454.00	0.37

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	989698.63	2.13	1030798.00	96.0	80 - 120	
45 Sc	247971.41	0.32	251753.64	98.5	80 - 120	
45 Sc	24790.76	0.56	25326.40	97.9	80 - 120	
45 Sc	1428092.60	0.52	1447283.00	98.7	80 - 120	
72 Ge	68375.19	0.14	70294.80	97.3	80 - 120	
72 Ge	19153.49	0.98	19663.39	97.4	80 - 120	
89 Y	2253506.00	0.41	2298016.30	98.1	80 - 120	
115 In	2249306.80	0.84	2345542.80	95.9	80 - 120	
159 Tb	3424603.00	0.38	3504928.30	97.7	80 - 120	
209 Bi	2277089.30	0.37	2401033.80	94.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F13r00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 13 2007 07:03 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 13 2007 07:01 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1006265.00	A	10620.00	1.06
7	(Li)		P		
9	Be	573181.13	P	2705.00	0.47
23	Na	2811288.00	A	11030.00	0.39
24	Mg	############	A	452200.00	0.30
27	Al	############	A	916900.00	0.49
39	K	############	A	945800.00	0.41
44	Ca	6932381.00	A	44550.00	0.64
45	Sc	242733.50	P	351.10	0.14
45	Sc	24768.49	P	165.30	0.67
45	Sc	1452769.00	A	24070.00	1.66
51	V	163356.91	P	1586.00	0.97
52	Cr	215284.80	P	1701.00	0.79
55	Mn	99775.59	P	873.00	0.87
56	Fe	52216140.00	A	91450.00	0.18
59	Co	368665.91	P	2143.00	0.58
60	Ni	100421.10	P	611.30	0.61
63	Cu	280288.59	P	1776.00	0.63
65	Cu	139140.91	P	793.80	0.57
66	Zn	38551.65	P	213.90	0.55
72	Ge	66877.58	P	175.00	0.26
72	Ge	19165.73	P	174.00	0.91
75	As	25274.05	P	337.30	1.33
78	Se	19954.99	P	118.50	0.59
89	Y	2267498.00	A	8827.00	0.39
98	Mo	1107513.00	A	6350.00	0.57
99	(Ru)	34.45	P	3.85	11.17
107	Ag	1768663.00	A	8716.00	0.49
111	Cd	372892.59	P	218.00	0.06
115	In	2236172.00	A	7112.00	0.32
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1478610.00	A	2191.00	0.15
137	Ba	583892.19	P	1345.00	0.23
159	Tb	3406049.00	A	4824.00	0.14
205	Tl	2165152.00	A	6809.00	0.31
208	Pb	6044665.00	A	11310.00	0.19
209	Bi	2234222.00	A	4793.00	0.21

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1006265.40	1.06	1030798.00	97.6	80 - 120	
45	Sc	242733.52	0.14	251753.64	96.4	80 - 120	
45	Sc	24768.49	0.67	25326.40	97.8	80 - 120	
45	Sc	1452768.90	1.66	1447283.00	100.4	80 - 120	
72	Ge	66877.58	0.26	70294.80	95.1	80 - 120	
72	Ge	19165.73	0.91	19663.39	97.5	80 - 120	
89	Y	2267497.80	0.39	2298016.30	98.7	80 - 120	
115	In	2236172.00	0.32	2345542.80	95.3	80 - 120	
159	Tb	3406049.00	0.14	3504928.30	97.2	80 - 120	
209	Bi	2234221.80	0.21	2401033.80	93.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F13r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240012 File : f13r0012 Time : 13-JUN-2007 19:17
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6419, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3615	0.3321	10000	10230	ug/L	2	10	
Antimony	A	0.1854	0.1591	100.0	97.12	ug/L	-3	10	
Barium	A	0.1154	0.0446	100.0	103.4	ug/L	3	10	
Beryllium	A	0.1512	0.1514	100.0	105.4	ug/L	5	10	
Cadmium	A	0.0457	0.0436	100.0	103.8	ug/L	4	10	
Calcium	A	0.0211	0.0125	10000	10410	ug/L	4	10	
Lead	A	0.4928	0.4226	100.0	95.14	ug/L	-5	10	
Magnesium	A	0.2918	0.2661	10000	10300	ug/L	3	10	
Molybdenum	A	0.1294	0.1163	100.0	96.19	ug/L	-4	10	
Potassium	A	1.4983	0.4181	10000	10350	ug/L	4	10	
Silver	A	0.2064	0.2075	100.0	104.3	ug/L	4	10	
Thallium	A	0.4826	0.4821	50.00	49.60	ug/L	-1	10	
Arsenic	E	0.3460	0.3447	100.0	103.8	ug/L	4	10	
Chromium	E	2.7528	2.2589	100.0	103.4	ug/L	3	10	
Cobalt	E	3.9426	3.8746	100.0	103.5	ug/L	4	10	
Copper	E	10.115	3.8304	100.0	103.8	ug/L	4	10	
Manganese	E	1.2621	1.0388	100.0	102.7	ug/L	3	10	
Nickel	E	1.7105	1.0645	100.0	104.3	ug/L	4	10	
Sodium	E	0.7199	0.2978	10000	10380	ug/L	4	10	
Vanadium	E	1.9432	1.6989	100.0	102.5	ug/L	3	10	
Zinc	E	3.1615	0.5342	100.0	104.8	ug/L	5	10	
Iron	H	0.6013	0.5548	10000	10260	ug/L	3	10	
Selenium	H	0.0802	0.0772	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	1005217	-2.48
Scandium	A	1447283	1444931	-0.16
Scandium	E	25326	25085	-0.95
Scandium	H	251754	239015	-5.06
Germanium	H	70295	66247	-5.76
Germanium	E	19663	19371	-1.49
Indium	A	2345543	2263903	-3.48
Bismuth	A	2401034	2273069	-5.33
Yttrium	A	2298016	2261814	-1.58
Terbium	A	3504928	3423471	-2.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240014 File : f13r0014 Time : 13-JUN-2007 19:29
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01247]	0.1000	0.003333	ug/L	!ib
Barium	A	ND	0.1000	0.002418	ug/L	
Beryllium	A	[0.008061]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[0.7670]	10.00	0.2604	ug/L	!ib
Lead	A	[0.01238]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.005580]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.006456]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01036]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01907]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.02897]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	[0.06966]	0.1000	0.04457	ug/L	!ib
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01296]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	1018842	-1.16
Scandium	A	1447283	1451007	0.26
Scandium	E	25326	25716	1.54
Scandium	H	251754	247840	-1.55
Germanium	H	70295	68960	-1.90
Germanium	E	19663	19884	1.12
Indium	A	2345543	2351727	0.26
Bismuth	A	2401034	2393900	-0.30
Yttrium	A	2298016	2309604	0.50
Terbium	A	3504928	3483786	-0.60

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240016 File : f13r0016 Time : 13-JUN-2007 19:41
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06515]	0.1000	ug/L	
Barium	A	0.9742	0.1000	ug/L	
Beryllium	A	[0.03131]	0.1000	ug/L	
Cadmium	A	1.372	0.1000	ug/L	
Lead	A	0.4208	0.1000	ug/L	
Silver	A	0.1997	0.1000	ug/L	
Thallium	A	[0.04876]	0.05000	ug/L	
Arsenic	E	0.2265	0.1000	ug/L	
Chromium	E	1.259	0.1000	ug/L	
Cobalt	E	0.1990	0.1000	ug/L	
Copper	E	1.361	0.1000	ug/L	
Manganese	E	0.4905	0.1000	ug/L	
Nickel	E	1.166	0.1000	ug/L	
Vanadium	E	[0.05634]	0.1000	ug/L	
Zinc	E	2.036	0.1000	ug/L	
Selenium	H	[0.04611]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	92970	ug/L	93
Calcium	A	300000	277700	ug/L	93
Magnesium	A	100000	90720	ug/L	91
Molybdenum	A	2000	1824	ug/L	91
Potassium	A	100000	92050	ug/L	92
Sodium	E	250000	223500	ug/L	89
Iron	H	250000	219300	ug/L	88

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	932469	-9.54
Scandium	A	1447283	1400223	-3.25
Scandium	E	25326	25549	0.88
Scandium	H	251754	252286	0.21
Germanium	H	70295	64516	-8.22
Germanium	E	19663	18716	-4.82
Indium	A	2345543	2028430	-13.52
Bismuth	A	2401034	1925237	-19.82
Yttrium	A	2298016	2162080	-5.92
Terbium	A	3504928	3213747	-8.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240017 File : f13r0017 Time : 13-JUN-2007 19:47
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99410	ug/L	-1		
Cadmium	A	100.0	98.71	ug/L	-1	20	
Calcium	A	300000	298000	ug/L	-1		
Magnesium	A	100000	96630	ug/L	-3		
Molybdenum	A	2000	1960	ug/L	-2		
Potassium	A	100000	98450	ug/L	-2		
Silver	A	50.00	45.38	ug/L	-9	20	
Arsenic	E	100.0	103.8	ug/L	4	20	
Chromium	E	200.0	199.0	ug/L	-1	20	
Cobalt	E	200.0	187.7	ug/L	-6	20	
Copper	E	200.0	183.1	ug/L	-8	20	
Manganese	E	200.0	197.3	ug/L	-1	20	
Nickel	E	200.0	182.9	ug/L	-9	20	
Sodium	E	250000	242200	ug/L	-3		
Vanadium	E	200.0	202.9	ug/L	1	20	
Zinc	E	100.0	90.14	ug/L	-10	20	
Iron	H	250000	233900	ug/L	-6		
Selenium	H	100.0	97.75	ug/L	-2	20	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	253325	0.62
Scandium	A	1447283	1359929	-6.04
Scandium	E	25326	24911	-1.64
Germanium	H	70295	64923	-7.64
Germanium	E	19663	18415	-6.35
Indium	A	2345543	1984834	-15.38
Yttrium	A	2298016	2106859	-8.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240034 File : f13r0034 Time : 13-JUN-2007 21:28
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3250	10000	10010	ug/L	0	10	
Antimony	A	0.1854	0.1586	100.0	96.84	ug/L	-3	10	
Barium	A	0.1154	0.0442	100.0	102.6	ug/L	3	10	
Beryllium	A	0.1512	0.1504	100.0	104.6	ug/L	5	10	
Cadmium	A	0.0457	0.0439	100.0	104.6	ug/L	5	10	
Calcium	A	0.0211	0.0123	10000	10250	ug/L	3	10	
Lead	A	0.4928	0.4208	100.0	94.74	ug/L	-5	10	
Magnesium	A	0.2918	0.2611	10000	10100	ug/L	1	10	
Molybdenum	A	0.1294	0.1159	100.0	95.86	ug/L	-4	10	
Potassium	A	1.4983	0.4120	10000	10200	ug/L	2	10	
Silver	A	0.2064	0.1934	100.0	97.19	ug/L	-3	10	
Thallium	A	0.4826	0.4822	50.00	49.62	ug/L	-1	10	
Arsenic	E	0.3460	0.3444	100.0	103.6	ug/L	4	10	
Chromium	E	2.7528	2.2410	100.0	102.6	ug/L	3	10	
Cobalt	E	3.9426	3.8664	100.0	103.3	ug/L	3	10	
Copper	E	10.115	3.8151	100.0	103.3	ug/L	3	10	
Manganese	E	1.2621	1.0323	100.0	102.0	ug/L	2	10	
Nickel	E	1.7105	1.0681	100.0	104.6	ug/L	5	10	
Sodium	E	0.7199	0.2947	10000	10270	ug/L	3	10	
Vanadium	E	1.9432	1.6821	100.0	101.5	ug/L	2	10	
Zinc	E	3.1615	0.5380	100.0	105.5	ug/L	6	10	
Iron	H	0.6013	0.5634	10000	10410	ug/L	4	10	
Selenium	H	0.0802	0.0805	100.0	106.9	ug/L	7	10	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	905531	-12.15
Scandium	A	1447283	1336908	-7.63
Scandium	E	25326	22763	-10.12
Scandium	H	251754	197930	-21.38
Germanium	H	70295	55153	-21.54
Germanium	E	19663	17571	-10.64
Indium	A	2345543	2102217	-10.37
Bismuth	A	2401034	2142856	-10.75
Yttrium	A	2298016	2101855	-8.54
Terbium	A	3504928	3226399	-7.95

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240036 File : f13r0036 Time : 13-JUN-2007 21:40
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[0.7643]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.02364]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.008725]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005696]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[1.317]	10.00	0.2604	ug/L	!ib
Lead	A	[0.01237]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.7839]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.004463]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008100]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01343]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01646]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.094]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01450]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	893331	-13.34
Scandium	A	1447283	1309606	-9.51
Scandium	E	25326	22862	-9.73
Scandium	H	251754	195662	-22.28
Germanium	H	70295	55160	-21.53
Germanium	E	19663	17928	-8.83
Indium	A	2345543	2174447	-7.29
Bismuth	A	2401034	2232745	-7.01
Yttrium	A	2298016	2117652	-7.85
Terbium	A	3504928	3250677	-7.25

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240045 File : f13r0045 Time : 13-JUN-2007 22:33
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3279	10000	10100	ug/L	1	10	
Antimony	A	0.1854	0.1570	100.0	95.87	ug/L	-4	10	
Barium	A	0.1154	0.0440	100.0	101.9	ug/L	2	10	
Beryllium	A	0.1512	0.1496	100.0	104.1	ug/L	4	10	
Cadmium	A	0.0457	0.0434	100.0	103.4	ug/L	3	10	
Calcium	A	0.0211	0.0124	10000	10340	ug/L	3	10	
Lead	A	0.4928	0.4198	100.0	94.52	ug/L	-5	10	
Magnesium	A	0.2918	0.2635	10000	10200	ug/L	2	10	
Molybdenum	A	0.1294	0.1155	100.0	95.56	ug/L	-4	10	
Potassium	A	1.4983	0.4119	10000	10200	ug/L	2	10	
Silver	A	0.2064	0.1912	100.0	96.09	ug/L	-4	10	
Thallium	A	0.4826	0.4778	50.00	49.16	ug/L	-2	10	
Arsenic	E	0.3460	0.3386	100.0	101.9	ug/L	2	10	
Chromium	E	2.7528	2.2533	100.0	103.2	ug/L	3	10	
Cobalt	E	3.9426	3.8596	100.0	103.1	ug/L	3	10	
Copper	E	10.115	3.7878	100.0	102.6	ug/L	3	10	
Manganese	E	1.2621	1.0315	100.0	102.0	ug/L	2	10	
Nickel	E	1.7105	1.0646	100.0	104.3	ug/L	4	10	
Sodium	E	0.7199	0.2973	10000	10360	ug/L	4	10	
Vanadium	E	1.9432	1.6834	100.0	101.6	ug/L	2	10	
Zinc	E	3.1615	0.5255	100.0	103.0	ug/L	3	10	
Iron	H	0.6013	0.5645	10000	10430	ug/L	4	10	
Selenium	H	0.0802	0.0804	100.0	106.7	ug/L	7	10	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	935925	-9.20
Scandium	A	1447283	1359770	-6.05
Scandium	E	25326	23168	-8.52
Scandium	H	251754	191526	-23.92
Germanium	H	70295	53225	-24.28
Germanium	E	19663	18106	-7.92
Indium	A	2345543	2158098	-7.99
Bismuth	A	2401034	2174617	-9.43
Yttrium	A	2298016	2136057	-7.05
Terbium	A	3504928	3272250	-6.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240047 File : f13r0047 Time : 13-JUN-2007 22:45
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.008420]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006404]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01120]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[1.177]	10.00	0.2604	ug/L	!ib
Lead	A	[0.01170]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.006247]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01197]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01393]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02694]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01396]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.6204]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01213]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	900294	-12.66
Scandium	A	1447283	1321363	-8.70
Scandium	E	25326	22798	-9.98
Scandium	H	251754	193588	-23.10
Germanium	H	70295	54525	-22.43
Germanium	E	19663	17856	-9.19
Indium	A	2345543	2155174	-8.12
Bismuth	A	2401034	2237732	-6.80
Yttrium	A	2298016	2112225	-8.08
Terbium	A	3504928	3247771	-7.34

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240050 File : f13r0050 Time : 13-JUN-2007 23:03
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07146]	0.1000	ug/L	
Barium	A	0.9578	0.1000	ug/L	
Beryllium	A	[0.02302]	0.1000	ug/L	
Cadmium	A	1.315	0.1000	ug/L	
Lead	A	0.4150	0.1000	ug/L	
Silver	A	0.1908	0.1000	ug/L	
Thallium	A	[0.03398]	0.05000	ug/L	
Arsenic	E	0.2167	0.1000	ug/L	
Chromium	E	1.287	0.1000	ug/L	
Cobalt	E	0.2014	0.1000	ug/L	
Copper	E	1.344	0.1000	ug/L	
Manganese	E	0.5301	0.1000	ug/L	
Nickel	E	1.112	0.1000	ug/L	
Vanadium	E	[0.04065]	0.1000	ug/L	
Zinc	E	2.068	0.1000	ug/L	
Selenium	H	[0.03869]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90890	ug/L	91
Calcium	A	300000	272200	ug/L	91
Magnesium	A	100000	88910	ug/L	89
Molybdenum	A	2000	1796	ug/L	90
Potassium	A	100000	90500	ug/L	91
Sodium	E	250000	224800	ug/L	90
Iron	H	250000	222900	ug/L	89

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	853568	-17.19
Scandium	A	1447283	1296362	-10.43
Scandium	E	25326	22750	-10.17
Scandium	H	251754	199171	-20.89
Germanium	H	70295	51709	-26.44
Germanium	E	19663	16979	-13.65
Indium	A	2345543	1901932	-18.91
Bismuth	A	2401034	1828539	-23.84
Yttrium	A	2298016	2008808	-12.59
Terbium	A	3504928	3039902	-13.27

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240051 File : f13r0051 Time : 13-JUN-2007 23:09
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	99060	ug/L	-1		
Cadmium	A	100.0	98.20	ug/L	-2	20	
Calcium	A	300000	297000	ug/L	-1		
Magnesium	A	100000	96490	ug/L	-4		
Molybdenum	A	2000	1956	ug/L	-2		
Potassium	A	100000	98610	ug/L	-1		
Silver	A	50.00	45.20	ug/L	-10	20	
Arsenic	E	100.0	103.1	ug/L	3	20	
Chromium	E	200.0	200.0	ug/L	0	20	
Cobalt	E	200.0	189.1	ug/L	-5	20	
Copper	E	200.0	182.9	ug/L	-9	20	
Manganese	E	200.0	198.1	ug/L	-1	20	
Nickel	E	200.0	184.6	ug/L	-8	20	
Sodium	E	250000	239400	ug/L	-4		
Vanadium	E	200.0	203.6	ug/L	2	20	
Zinc	E	100.0	90.77	ug/L	-9	20	
Iron	H	250000	240200	ug/L	-4		
Selenium	H	100.0	101.3	ug/L	1	20	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	197004	-21.75
Scandium	A	1447283	1233766	-14.75
Scandium	E	25326	22158	-12.51
Germanium	H	70295	51052	-27.37
Germanium	E	19663	16549	-15.84
Indium	A	2345543	1834323	-21.80
Yttrium	A	2298016	1936443	-15.73

: 00212

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240068 File : f13r0068 Time : 14-JUN-2007 00:50
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3246	10000	9997	ug/L	0	10	
Antimony	A	0.1854	0.1564	100.0	95.47	ug/L	-5	10	
Barium	A	0.1154	0.0440	100.0	102.0	ug/L	2	10	
Beryllium	A	0.1512	0.1496	100.0	104.1	ug/L	4	10	
Cadmium	A	0.0457	0.0429	100.0	102.3	ug/L	2	10	
Calcium	A	0.0211	0.0124	10000	10340	ug/L	3	10	
Lead	A	0.4928	0.4222	100.0	95.07	ug/L	-5	10	
Magnesium	A	0.2918	0.2592	10000	10030	ug/L	0	10	
Molybdenum	A	0.1294	0.1146	100.0	94.81	ug/L	-5	10	
Potassium	A	1.4983	0.4099	10000	10150	ug/L	2	10	
Silver	A	0.2064	0.1897	100.0	95.31	ug/L	-5	10	
Thallium	A	0.4826	0.4559	50.00	46.91	ug/L	-6	10	
Arsenic	E	0.3460	0.3336	100.0	100.4	ug/L	0	10	
Chromium	E	2.7528	2.2498	100.0	103.0	ug/L	3	10	
Cobalt	E	3.9426	3.8822	100.0	103.7	ug/L	4	10	
Copper	E	10.115	3.7365	100.0	101.2	ug/L	1	10	
Manganese	E	1.2621	1.0300	100.0	101.8	ug/L	2	10	
Nickel	E	1.7105	1.0708	100.0	104.9	ug/L	5	10	
Sodium	E	0.7199	0.2924	10000	10190	ug/L	2	10	
Vanadium	E	1.9432	1.6779	100.0	101.2	ug/L	1	10	
Zinc	E	3.1615	0.5194	100.0	101.8	ug/L	2	10	
Iron	H	0.6013	0.5828	10000	10770	ug/L	8	10	
Selenium	H	0.0802	0.0831	100.0	110.4	ug/L	10	10	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	818513	-20.59
Scandium	A	1447283	1219746	-15.72
Scandium	E	25326	20512	-19.01
Scandium	H	251754	148703	-40.93
Germanium	H	70295	42387	-39.70
Germanium	E	19663	16319	-17.01
Indium	A	2345543	1972833	-15.89
Bismuth	A	2401034	2007529	-16.39
Yttrium	A	2298016	1955483	-14.91
Terbium	A	3504928	2997676	-14.47

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00213

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240070 File : f13r0070 Time : 14-JUN-2007 01:02
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01728]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003109]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01374]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[0.4927]	10.00	0.2604	ug/L	!ib
Lead	A	[0.007494]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003624]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.005695]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01609]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02269]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01168]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[2.892]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.06107]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	782914	-24.05
Scandium	A	1447283	1177014	-18.67
Scandium	E	25326	20371	-19.57
Scandium	H	251754	149625	-40.57
Germanium	H	70295	43046	-38.76
Germanium	E	19663	16078	-18.23
Indium	A	2345543	1991115	-15.11
Bismuth	A	2401034	2083830	-13.21
Yttrium	A	2298016	1933829	-15.85
Terbium	A	3504928	2996152	-14.52

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240086 File : f13r0086 Time : 14-JUN-2007 02:37
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3249	10000	10010	ug/L	0	10	
Antimony	A	0.1854	0.1571	100.0	95.90	ug/L	-4	10	
Barium	A	0.1154	0.0439	100.0	101.8	ug/L	2	10	
Beryllium	A	0.1512	0.1482	100.0	103.1	ug/L	3	10	
Cadmium	A	0.0457	0.0434	100.0	103.3	ug/L	3	10	
Calcium	A	0.0211	0.0124	10000	10320	ug/L	3	10	
Lead	A	0.4928	0.4188	100.0	94.28	ug/L	-6	10	
Magnesium	A	0.2918	0.2605	10000	10080	ug/L	1	10	
Molybdenum	A	0.1294	0.1148	100.0	94.94	ug/L	-5	10	
Potassium	A	1.4983	0.4138	10000	10240	ug/L	2	10	
Silver	A	0.2064	0.1911	100.0	96.05	ug/L	-4	10	
Thallium	A	0.4826	0.4449	50.00	45.77	ug/L	-8	10	
Arsenic	E	0.3460	0.3336	100.0	100.4	ug/L	0	10	
Chromium	E	2.7528	2.2444	100.0	102.8	ug/L	3	10	
Cobalt	E	3.9426	3.8658	100.0	103.3	ug/L	3	10	
Copper	E	10.115	3.7343	100.0	101.1	ug/L	1	10	
Manganese	E	1.2621	1.0288	100.0	101.7	ug/L	2	10	
Nickel	E	1.7105	1.0676	100.0	104.6	ug/L	5	10	
Sodium	E	0.7199	0.2966	10000	10340	ug/L	3	10	
Vanadium	E	1.9432	1.6802	100.0	101.4	ug/L	1	10	
Zinc	E	3.1615	0.5207	100.0	102.1	ug/L	2	10	
Iron	H	0.6013	0.5844	10000	10800	ug/L	8	10	
Selenium	H	0.0802	0.0844	100.0	112.1	ug/L	**12**	10	c+ ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	826935	-19.78
Scandium	A	1447283	1220815	-15.65
Scandium	E	25326	20620	-18.58
Scandium	H	251754	135200	-46.30
Germanium	H	70295	38455	-45.29
Germanium	E	19663	16342	-16.89
Indium	A	2345543	1953208	-16.73
Bismuth	A	2401034	1996436	-16.85
Yttrium	A	2298016	1945317	-15.35
Terbium	A	3504928	2983286	-14.88

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240088 File : f13r0088 Time : 14-JUN-2007 02:49
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.005262]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.005326]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.009707]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01193]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.001128]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01037]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02387]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.009596]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01034]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.06829]	0.1000	0.04457	ug/L	!ib
Iron	H	[1.372]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.02906]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	763252	-25.96
Scandium	A	1447283	1146829	-20.76
Scandium	E	25326	20154	-20.42
Scandium	H	251754	137966	-45.20
Germanium	H	70295	39965	-43.15
Germanium	E	19663	16042	-18.42
Indium	A	2345543	1944047	-17.12
Bismuth	A	2401034	2020766	-15.84
Yttrium	A	2298016	1885759	-17.94
Terbium	A	3504928	2947087	-15.92

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240096 File : f13r0096 Time : 14-JUN-2007 03:36
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3244	10000	9992	ug/L	0	10	
Antimony	A	0.1854	0.1584	100.0	96.68	ug/L	-3	10	
Barium	A	0.1154	0.0442	100.0	102.5	ug/L	3	10	
Beryllium	A	0.1512	0.1500	100.0	104.4	ug/L	4	10	
Cadmium	A	0.0457	0.0437	100.0	104.1	ug/L	4	10	
Calcium	A	0.0211	0.0124	10000	10340	ug/L	3	10	
Lead	A	0.4928	0.4200	100.0	94.56	ug/L	-5	10	
Magnesium	A	0.2918	0.2606	10000	10090	ug/L	1	10	
Molybdenum	A	0.1294	0.1145	100.0	94.69	ug/L	-5	10	
Potassium	A	1.4983	0.4123	10000	10210	ug/L	2	10	
Silver	A	0.2064	0.1919	100.0	96.42	ug/L	-4	10	
Thallium	A	0.4826	0.4669	50.00	48.03	ug/L	-4	10	
Arsenic	E	0.3460	0.3385	100.0	101.9	ug/L	2	10	
Chromium	E	2.7528	2.2227	100.0	101.8	ug/L	2	10	
Cobalt	E	3.9426	3.8325	100.0	102.4	ug/L	2	10	
Copper	E	10.115	3.7708	100.0	102.1	ug/L	2	10	
Manganese	E	1.2621	1.0252	100.0	101.3	ug/L	1	10	
Nickel	E	1.7105	1.0526	100.0	103.1	ug/L	3	10	
Sodium	E	0.7199	0.2916	10000	10160	ug/L	2	10	
Vanadium	E	1.9432	1.6600	100.0	100.2	ug/L	0	10	
Zinc	E	3.1615	0.5271	100.0	103.4	ug/L	3	10	
Iron	H	0.6013	0.5881	10000	10870	ug/L	9	10	
Selenium	H	0.0802	0.0847	100.0	112.4	ug/L	**12**	10	c+ ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	836896	-18.81
Scandium	A	1447283	1236091	-14.59
Scandium	E	25326	21031	-16.96
Scandium	H	251754	133381	-47.02
Germanium	H	70295	38093	-45.81
Germanium	E	19663	16366	-16.77
Indium	A	2345543	1960309	-16.42
Bismuth	A	2401034	2008422	-16.35
Yttrium	A	2298016	1963742	-14.55
Terbium	A	3504928	3008146	-14.17

+=high bias c=CCV

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240098 File : f13r0098 Time : 14-JUN-2007 03:48
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.003063]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003530]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.009779]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003084]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007720]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01065]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02670]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.9457]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01837]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	771734	-25.13
Scandium	A	1447283	1151475	-20.44
Scandium	E	25326	20108	-20.60
Scandium	H	251754	137465	-45.40
Germanium	H	70295	39582	-43.69
Germanium	E	19663	16044	-18.41
Indium	A	2345543	1955205	-16.64
Bismuth	A	2401034	2047467	-14.73
Yttrium	A	2298016	1891695	-17.68
Terbium	A	3504928	2959778	-15.55

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240101 File : f13r0101 Time : 14-JUN-2007 04:06
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05665]	0.1000	ug/L	
Barium	A	0.9333	0.1000	ug/L	
Beryllium	A	[0.02986]	0.1000	ug/L	
Cadmium	A	1.343	0.1000	ug/L	
Lead	A	0.4148	0.1000	ug/L	
Silver	A	0.1795	0.1000	ug/L	
Thallium	A	[0.03407]	0.05000	ug/L	
Arsenic	E	0.1617	0.1000	ug/L	
Chromium	E	1.273	0.1000	ug/L	
Cobalt	E	0.1941	0.1000	ug/L	
Copper	E	1.323	0.1000	ug/L	
Manganese	E	0.4943	0.1000	ug/L	
Nickel	E	1.183	0.1000	ug/L	
Vanadium	E	[0.04557]	0.1000	ug/L	
Zinc	E	1.967	0.1000	ug/L	
Selenium	H	[0.05973]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	90340	ug/L	90
Calcium	A	300000	272400	ug/L	91
Magnesium	A	100000	87920	ug/L	88
Molybdenum	A	2000	1790	ug/L	90
Potassium	A	100000	90470	ug/L	90
Sodium	E	250000	220500	ug/L	88
Iron	H	250000	231800	ug/L	93

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	732998	-28.89
Scandium	A	1447283	1148439	-20.65
Scandium	E	25326	20196	-20.26
Scandium	H	251754	140568	-44.16
Germanium	H	70295	36966	-47.41
Germanium	E	19663	15207	-22.66
Indium	A	2345543	1721776	-26.59
Bismuth	A	2401034	1652744	-31.17
Yttrium	A	2298016	1811816	-21.16
Terbium	A	3504928	2758652	-21.29

: 00219

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240102 File : f13r0102 Time : 14-JUN-2007 04:12
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96750	ug/L	-3		
Cadmium	A	100.0	98.35	ug/L	-2	20	
Calcium	A	300000	295800	ug/L	-1		
Magnesium	A	100000	94400	ug/L	-6		
Molybdenum	A	2000	1931	ug/L	-3		
Potassium	A	100000	97780	ug/L	-2		
Silver	A	50.00	45.23	ug/L	-10	20	
Arsenic	E	100.0	102.7	ug/L	3	20	
Chromium	E	200.0	199.0	ug/L	-1	20	
Cobalt	E	200.0	188.9	ug/L	-6	20	
Copper	E	200.0	181.6	ug/L	-9	20	
Manganese	E	200.0	198.4	ug/L	-1	20	
Nickel	E	200.0	184.5	ug/L	-8	20	
Sodium	E	250000	236100	ug/L	-6		
Vanadium	E	200.0	202.5	ug/L	1	20	
Zinc	E	100.0	89.13	ug/L	-11	20	
Iron	H	250000	245600	ug/L	-2		
Selenium	H	100.0	105.6	ug/L	6	20	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	144362	-42.66
Scandium	A	1447283	1085776	-24.98
Scandium	E	25326	19417	-23.33
Germanium	H	70295	38230	-45.61
Germanium	E	19663	14638	-25.56
Indium	A	2345543	1643425	-29.93
Yttrium	A	2298016	1737721	-24.38

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240119 File : f13r0119 Time : 14-JUN-2007 05:54
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3168	10000	9758	ug/L	-2	10	
Antimony	A	0.1854	0.1559	100.0	95.20	ug/L	-5	10	
Barium	A	0.1154	0.0437	100.0	101.4	ug/L	1	10	
Beryllium	A	0.1512	0.1500	100.0	104.4	ug/L	4	10	
Cadmium	A	0.0457	0.0426	100.0	101.6	ug/L	2	10	
Calcium	A	0.0211	0.0124	10000	10340	ug/L	3	10	
Lead	A	0.4928	0.4194	100.0	94.43	ug/L	-6	10	
Magnesium	A	0.2918	0.2532	10000	9800	ug/L	-2	10	
Molybdenum	A	0.1294	0.1138	100.0	94.11	ug/L	-6	10	
Potassium	A	1.4983	0.4073	10000	10080	ug/L	1	10	
Silver	A	0.2064	0.1884	100.0	94.65	ug/L	-5	10	
Thallium	A	0.4826	0.4454	50.00	45.82	ug/L	-8	10	
Arsenic	E	0.3460	0.3345	100.0	100.7	ug/L	1	10	
Chromium	E	2.7528	2.2114	100.0	101.3	ug/L	1	10	
Cobalt	E	3.9426	3.8494	100.0	102.9	ug/L	3	10	
Copper	E	10.115	3.6787	100.0	99.64	ug/L	0	10	
Manganese	E	1.2621	1.0237	100.0	101.2	ug/L	1	10	
Nickel	E	1.7105	1.0612	100.0	104.0	ug/L	4	10	
Sodium	E	0.7199	0.2878	10000	10030	ug/L	0	10	
Vanadium	E	1.9432	1.6601	100.0	100.2	ug/L	0	10	
Zinc	E	3.1615	0.5174	100.0	101.5	ug/L	2	10	
Iron	H	0.6013	0.5959	10000	11010	ug/L	10	10	
Selenium	H	0.0802	0.0874	100.0	116.0	ug/L	**16**	10	c+ ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	713078	-30.82
Scandium	A	1447283	1106833	-23.52
Scandium	E	25326	18886	-25.43
Scandium	H	251754	113817	-54.79
Germanium	H	70295	32759	-53.40
Germanium	E	19663	15084	-23.29
Indium	A	2345543	1832900	-21.86
Bismuth	A	2401034	1885469	-21.47
Yttrium	A	2298016	1816440	-20.96
Terbium	A	3504928	2813466	-19.73

+=high bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240121 File : f13r0121 Time : 14-JUN-2007 06:06
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.003388]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004203]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.0008278]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[0.4445]	10.00	0.2604	ug/L	!ib
Lead	A	[0.01071]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.005289]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01142]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01407]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	[0.09822]	0.1000	0.04457	ug/L	!ib
Iron	H	[1.622]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.02301]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	681667	-33.87
Scandium	A	1447283	1065669	-26.37
Scandium	E	25326	18577	-26.65
Scandium	H	251754	111509	-55.71
Germanium	H	70295	32506	-53.76
Germanium	E	19663	14989	-23.77
Indium	A	2345543	1847104	-21.25
Bismuth	A	2401034	1938806	-19.25
Yttrium	A	2298016	1786931	-22.24
Terbium	A	3504928	2803012	-20.03

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240123 File : f13r0123 Time : 14-JUN-2007 06:18
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06134]	0.1000	ug/L	
Barium	A	0.9347	0.1000	ug/L	
Beryllium	A	[0.03119]	0.1000	ug/L	
Cadmium	A	1.325	0.1000	ug/L	
Lead	A	0.4126	0.1000	ug/L	
Silver	A	0.1890	0.1000	ug/L	
Thallium	A	[0.03587]	0.05000	ug/L	
Arsenic	E	0.2245	0.1000	ug/L	
Chromium	E	1.260	0.1000	ug/L	
Cobalt	E	0.2156	0.1000	ug/L	
Copper	E	1.274	0.1000	ug/L	
Manganese	E	0.5712	0.1000	ug/L	
Nickel	E	1.176	0.1000	ug/L	
Vanadium	E	[0.03649]	0.1000	ug/L	
Zinc	E	2.183	0.1000	ug/L	
Selenium	H	[0.08062]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88680	ug/L	89
Calcium	A	300000	272300	ug/L	91
Magnesium	A	100000	86360	ug/L	86
Molybdenum	A	2000	1795	ug/L	90
Potassium	A	100000	89750	ug/L	90
Sodium	E	250000	215000	ug/L	86
Iron	H	250000	237500	ug/L	95

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	634251	-38.47
Scandium	A	1447283	1027592	-29.00
Scandium	E	25326	18132	-28.41
Scandium	H	251754	110539	-56.09
Germanium	H	70295	29650	-57.82
Germanium	E	19663	13760	-30.02
Indium	A	2345543	1566214	-33.23
Bismuth	A	2401034	1526661	-36.42
Yttrium	A	2298016	1641774	-28.56
Terbium	A	3504928	2532944	-27.73

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240124 File : f13r0124 Time : 14-JUN-2007 06:24
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94720	ug/L	-5		
Cadmium	A	100.0	97.25	ug/L	-3	20	
Calcium	A	300000	292900	ug/L	-2		
Magnesium	A	100000	92090	ug/L	-8		
Molybdenum	A	2000	1921	ug/L	-4		
Potassium	A	100000	96130	ug/L	-4		
Silver	A	50.00	44.71	ug/L	-11	20	
Arsenic	E	100.0	102.4	ug/L	2	20	
Chromium	E	200.0	199.4	ug/L	0	20	
Cobalt	E	200.0	189.1	ug/L	-5	20	
Copper	E	200.0	179.1	ug/L	-10	20	
Manganese	E	200.0	199.1	ug/L	0	20	
Nickel	E	200.0	185.9	ug/L	-7	20	
Sodium	E	250000	232400	ug/L	-7		
Vanadium	E	200.0	203.0	ug/L	2	20	
Zinc	E	100.0	89.06	ug/L	-11	20	
Iron	H	250000	254900	ug/L	2		
Selenium	H	100.0	108.9	ug/L	9	20	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	106555	-57.67
Scandium	A	1447283	972447	-32.81
Scandium	E	25326	17079	-32.56
Germanium	H	70295	28655	-59.24
Germanium	E	19663	13094	-33.41
Indium	A	2345543	1506354	-35.78
Yttrium	A	2298016	1578700	-31.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240129 File : f14g0005 Time : 14-JUN-2007 07:17
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3127	10000	9629	ug/L	-4	10	
Antimony	A	0.1854	0.1576	100.0	96.20	ug/L	-4	10	
Barium	A	0.1154	0.0438	100.0	101.4	ug/L	1	10	
Beryllium	A	0.1512	0.1589	100.0	110.6	ug/L	**11**	10	c+ ***
Cadmium	A	0.0457	0.0431	100.0	102.6	ug/L	3	10	
Calcium	A	0.0211	0.0125	10000	10420	ug/L	4	10	
Lead	A	0.4928	0.4232	100.0	95.29	ug/L	-5	10	
Magnesium	A	0.2918	0.2494	10000	9653	ug/L	-3	10	
Molybdenum	A	0.1294	0.1146	100.0	94.84	ug/L	-5	10	
Potassium	A	1.4983	0.4091	10000	10130	ug/L	1	10	
Silver	A	0.2064	0.1900	100.0	95.46	ug/L	-5	10	
Thallium	A	0.4826	0.4475	50.00	46.04	ug/L	-8	10	
Arsenic	E	0.3460	0.3382	100.0	101.8	ug/L	2	10	
Chromium	E	2.7528	2.2554	100.0	103.3	ug/L	3	10	
Cobalt	E	3.9426	3.9188	100.0	104.7	ug/L	5	10	
Copper	E	10.115	3.6634	100.0	99.22	ug/L	-1	10	
Manganese	E	1.2621	1.0436	100.0	103.1	ug/L	3	10	
Nickel	E	1.7105	1.0818	100.0	106.0	ug/L	6	10	
Sodium	E	0.7199	0.2869	10000	10000	ug/L	0	10	
Vanadium	E	1.9432	1.6769	100.0	101.2	ug/L	1	10	
Zinc	E	3.1615	0.5167	100.0	101.3	ug/L	1	10	
Iron	H	0.6013	0.6073	10000	11230	ug/L	**12**	10	c+ ***
Selenium	H	0.0802	0.0875	100.0	116.2	ug/L	**16**	10	c+ ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	547467	-46.89
Scandium	A	1447283	934673	-35.42
Scandium	E	25326	15879	-37.30
Scandium	H	251754	92840	-63.12
Germanium	H	70295	27331	-61.12
Germanium	E	19663	12967	-34.06
Indium	A	2345543	1616289	-31.09
Bismuth	A	2401034	1691979	-29.53
Yttrium	A	2298016	1589639	-30.83
Terbium	A	3504928	2514717	-28.25

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240131 File : f14g0007 Time : 14-JUN-2007 07:29
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.464]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.02902]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01497]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.02101]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[1.359]	10.00	0.2604	ug/L	!ib
Lead	A	[0.02197]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.607]	10.00	0.7647	ug/L	!ib
Molybdenum	A	[0.04492]	0.1000	0.01888	ug/L	!ib
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01313]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.01268]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02461]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.009058]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.679]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01127]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	574526	-44.26
Scandium	A	1447283	949982	-34.36
Scandium	E	25326	16657	-34.23
Scandium	H	251754	97884	-61.12
Germanium	H	70295	28764	-59.08
Germanium	E	19663	13559	-31.04
Indium	A	2345543	1701469	-27.46
Bismuth	A	2401034	1814696	-24.42
Yttrium	A	2298016	1634926	-28.85
Terbium	A	3504928	2601833	-25.77

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240132 File : f14g0008 Time : 14-JUN-2007 07:35
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08021]	0.1000	ug/L	
Barium	A	0.9240	0.1000	ug/L	
Beryllium	A	[0.02946]	0.1000	ug/L	
Cadmium	A	1.344	0.1000	ug/L	
Lead	A	0.4138	0.1000	ug/L	
Silver	A	0.1874	0.1000	ug/L	
Thallium	A	[0.04491]	0.05000	ug/L	
Arsenic	E	0.2143	0.1000	ug/L	
Chromium	E	1.289	0.1000	ug/L	
Cobalt	E	0.2097	0.1000	ug/L	
Copper	E	1.305	0.1000	ug/L	
Manganese	E	0.5391	0.1000	ug/L	
Nickel	E	1.108	0.1000	ug/L	
Vanadium	E	[0.04172]	0.1000	ug/L	
Zinc	E	2.218	0.1000	ug/L	
Selenium	H	0.1269	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	86720	ug/L	87
Calcium	A	300000	270300	ug/L	90
Magnesium	A	100000	84000	ug/L	84
Molybdenum	A	2000	1779	ug/L	89
Potassium	A	100000	88550	ug/L	89
Sodium	E	250000	212900	ug/L	85
Iron	H	250000	243800	ug/L	98

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	501618	-51.34
Scandium	A	1447283	913547	-36.88
Scandium	E	25326	15958	-36.99
Scandium	H	251754	94025	-62.65
Germanium	H	70295	25870	-63.20
Germanium	E	19663	12275	-37.57
Indium	A	2345543	1432024	-38.95
Bismuth	A	2401034	1396397	-41.84
Yttrium	A	2298016	1499945	-34.73
Terbium	A	3504928	2325265	-33.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240133 File : f14g0009 Time : 14-JUN-2007 07:41
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	93700	ug/L	-6		
Cadmium	A	100.0	97.38	ug/L	-3	20	
Calcium	A	300000	293900	ug/L	-2		
Magnesium	A	100000	90660	ug/L	-9		
Molybdenum	A	2000	1913	ug/L	-4		
Potassium	A	100000	96660	ug/L	-3		
Silver	A	50.00	44.78	ug/L	-10	20	
Arsenic	E	100.0	102.2	ug/L	2	20	
Chromium	E	200.0	197.9	ug/L	-1	20	
Cobalt	E	200.0	189.2	ug/L	-5	20	
Copper	E	200.0	178.5	ug/L	-11	20	
Manganese	E	200.0	197.7	ug/L	-1	20	
Nickel	E	200.0	184.9	ug/L	-8	20	
Sodium	E	250000	226100	ug/L	-10		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	89.18	ug/L	-11	20	
Iron	H	250000	257700	ug/L	3		
Selenium	H	100.0	110.9	ug/L	11	20	

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	88446	-64.87
Scandium	A	1447283	834796	-42.32
Scandium	E	25326	14892	-41.20
Germanium	H	70295	24283	-65.46
Germanium	E	19663	11474	-41.65
Indium	A	2345543	1331229	-43.24
Yttrium	A	2298016	1394160	-39.33

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240135 File : f14h0002 Time : 14-JUN-2007 08:02
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3615	0.3090	10000	9515	ug/L	-5	10	
Antimony	A	0.1854	0.1569	100.0	95.78	ug/L	-4	10	
Barium	A	0.1154	0.0433	100.0	100.3	ug/L	0	10	
Beryllium	A	0.1512	0.1633	100.0	113.6	ug/L	**14**	10	c+ ***
Cadmium	A	0.0457	0.0428	100.0	102.0	ug/L	2	10	
Calcium	A	0.0211	0.0126	10000	10470	ug/L	5	10	
Lead	A	0.4928	0.4279	100.0	96.34	ug/L	-4	10	
Magnesium	A	0.2918	0.2458	10000	9511	ug/L	-5	10	
Molybdenum	A	0.1294	0.1146	100.0	94.78	ug/L	-5	10	
Potassium	A	1.4983	0.4095	10000	10140	ug/L	1	10	
Silver	A	0.2064	0.1875	100.0	94.24	ug/L	-6	10	
Thallium	A	0.4826	0.4471	50.00	46.00	ug/L	-8	10	
Arsenic	E	0.3460	0.3373	100.0	101.5	ug/L	2	10	
Chromium	E	2.7528	2.2669	100.0	103.8	ug/L	4	10	
Cobalt	E	3.9426	3.9544	100.0	105.7	ug/L	6	10	
Copper	E	10.115	3.6752	100.0	99.54	ug/L	0	10	
Manganese	E	1.2621	1.0516	100.0	103.9	ug/L	4	10	
Nickel	E	1.7105	1.0887	100.0	106.7	ug/L	7	10	
Sodium	E	0.7199	0.2856	10000	9956	ug/L	0	10	
Vanadium	E	1.9432	1.6939	100.0	102.2	ug/L	2	10	
Zinc	E	3.1615	0.5177	100.0	101.5	ug/L	2	10	
Iron	H	0.6013	0.6362	10000	11760	ug/L	**18**	10	c+ i- ***
Selenium	H	0.0802	0.0915	100.0	121.5	ug/L	**22**	10	c+ i- ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	432797	-58.01
Scandium	A	1447283	774088	-46.51
Scandium	E	25326	13251	-47.68
Scandium	H	251754	66705	**-73.50 ***
Germanium	H	70295	20071	**-71.45 ***
Germanium	E	19663	10963	-44.25
Indium	A	2345543	1406966	-40.02
Bismuth	A	2401034	1504451	-37.34
Yttrium	A	2298016	1366600	-40.53
Terbium	A	3504928	2210897	-36.92

+=high bias -=low bias c=CCV i=ISTD failure

897237240135

: 00229

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240137 File : f14h0004 Time : 14-JUN-2007 08:13
Cal : 897237240001 Caldate : 13-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.694]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01275]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007757]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01852]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[2.353]	10.00	0.2604	ug/L	!ib
Lead	A	[0.01328]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[2.231]	10.00	0.7647	ug/L	!ib
Molybdenum	A	[0.07505]	0.1000	0.01888	ug/L	!ib
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008267]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02887]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01319]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.02285]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02185]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.02451]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01460]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[4.772]	10.00	0.2518	ug/L	!ib i- ***
Selenium	H	[0.03650]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	457255	-55.64
Scandium	A	1447283	810391	-44.01
Scandium	E	25326	14244	-43.76
Scandium	H	251754	72738	**-71.11 ***
Germanium	H	70295	21740	-69.07
Germanium	E	19663	11675	-40.63
Indium	A	2345543	1505590	-35.81
Bismuth	A	2401034	1641119	-31.65
Yttrium	A	2298016	1438278	-37.41
Terbium	A	3504928	2319384	-33.83

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240138 File : f14h0005 Time : 14-JUN-2007 08:19
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07242]	0.1000	ug/L	
Barium	A	0.8900	0.1000	ug/L	
Beryllium	A	[0.02430]	0.1000	ug/L	
Cadmium	A	1.346	0.1000	ug/L	
Lead	A	0.4225	0.1000	ug/L	
Silver	A	0.1790	0.1000	ug/L	
Thallium	A	[0.04143]	0.05000	ug/L	
Arsenic	E	0.2082	0.1000	ug/L	
Chromium	E	1.288	0.1000	ug/L	
Cobalt	E	0.2084	0.1000	ug/L	
Copper	E	1.345	0.1000	ug/L	
Manganese	E	0.5245	0.1000	ug/L	
Nickel	E	1.188	0.1000	ug/L	
Vanadium	E	[0.04600]	0.1000	ug/L	
Zinc	E	2.025	0.1000	ug/L	
Selenium	H	[0.04142]	0.1000	ug/L	i- ***

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	89970	ug/L	90
Calcium	A	300000	283600	ug/L	95
Magnesium	A	100000	86750	ug/L	87
Molybdenum	A	2000	1786	ug/L	89
Potassium	A	100000	92740	ug/L	93
Sodium	E	250000	206400	ug/L	83
Iron	H	250000	248800	ug/L	100

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1030798	395393	-61.64
Scandium	A	1447283	718064	-50.39
Scandium	E	25326	13391	-47.13
Scandium	H	251754	69482	**-72.40 ***
Germanium	H	70295	19421	**-72.37 ***
Germanium	E	19663	10423	-46.99
Indium	A	2345543	1226970	-47.69
Bismuth	A	2401034	1223644	-49.04
Yttrium	A	2298016	1270370	-44.72
Terbium	A	3504928	2026695	-42.18

-=low bias i=ISTD failure

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897237240139 File : f14h0006 Time : 14-JUN-2007 08:25
Cal : 897237240001 Caldate : 13-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97960	ug/L	-2		
Cadmium	A	100.0	96.88	ug/L	-3	20	
Calcium	A	300000	311600	ug/L	4		
Magnesium	A	100000	94250	ug/L	-6		
Molybdenum	A	2000	1920	ug/L	-4		
Potassium	A	100000	101600	ug/L	2		
Silver	A	50.00	44.27	ug/L	-11	20	
Arsenic	E	100.0	102.9	ug/L	3	20	
Chromium	E	200.0	199.6	ug/L	0	20	
Cobalt	E	200.0	191.8	ug/L	-4	20	
Copper	E	200.0	178.7	ug/L	-11	20	
Manganese	E	200.0	201.2	ug/L	1	20	
Nickel	E	200.0	186.8	ug/L	-7	20	
Sodium	E	250000	221300	ug/L	-11		
Vanadium	E	200.0	203.0	ug/L	2	20	
Zinc	E	100.0	89.27	ug/L	-11	20	
Iron	H	250000	270500	ug/L	8		i- ***
Selenium	H	100.0	115.1	ug/L	15	20	i- ***

ISTD (ICALBLK f13r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	251754	62713	**-75.09 ***
Scandium	A	1447283	648410	-55.20
Scandium	E	25326	12250	-51.63
Germanium	H	70295	17706	**-74.81 ***
Germanium	E	19663	9553	-51.42
Indium	A	2345543	1150743	-50.94
Yttrium	A	2298016	1188980	-48.26

-=low bias i=ISTD failure

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897237240 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
01	f13r0001	TUN				13-JUN-2007 18:00	1.0	1.0		1	
02	f13r0002	X	RINSE			13-JUN-2007 18:08	1.0			2	
03	f13r0003	X	RINSE			13-JUN-2007 18:14	1.0			2	
04	f13r0004	ICALBLK	CALBLANK			13-JUN-2007 18:30	1.0	1.0		2	
05	f13r0005	ICAL				13-JUN-2007 18:36	1.0	1.0		3	
06	f13r0006	ICAL				13-JUN-2007 18:42	1.0	1.0		4	
07	f13r0007	ICAL				13-JUN-2007 18:48	1.0	1.0		5	
08	f13r0008	ICAL				13-JUN-2007 18:54	1.0	1.0		6	
09	f13r0009	ICAL				13-JUN-2007 18:59	1.0	1.0		7	
10	f13r0010	ICAL				13-JUN-2007 19:05	1.0	1.0		8	
11	f13r0011	X	RINSE			13-JUN-2007 19:11	1.0			2	
12	f13r0012	ICV				13-JUN-2007 19:17	1.0	1.0	1	9 2	
13	f13r0013	X	RINSE			13-JUN-2007 19:23	1.0			2	
14	f13r0014	ICB				13-JUN-2007 19:29	1.0	1.0	1	2	
15	f13r0015	X				13-JUN-2007 19:35	1.0			2	
16	f13r0016	ICSA				13-JUN-2007 19:41	1.0	1.0	1	10 2	7:CA=277700
17	f13r0017	ICSAB				13-JUN-2007 19:47	1.0	1.0	1	11 2	8:CA=298000
18	f13r0018	X	RINSE			13-JUN-2007 19:53	1.0			2	
19	f13r0019	X	RINSE			13-JUN-2007 19:59	1.0			2	
20	f13r0020	X	RINSE			13-JUN-2007 20:05	1.0			2	
21	f13r0021	X	RINSE			13-JUN-2007 20:11	1.0			2	
22	f13r0022	BLANK	QC392140	126262	WET DI	13-JUN-2007 20:17	1.0	1.0	1	2	
23	f13r0023	BS	QC392141	126262	WET DI	13-JUN-2007 20:23	1.0	1.0	1	2	
24	f13r0024	BSD	QC392142	126262	WET DI	13-JUN-2007 20:28	1.0	1.0	1	2	
25	f13r0025	X	RINSE			13-JUN-2007 20:34	1.0			2	
26	f13r0026	MSS	195257-025	126262	WET DI	13-JUN-2007 20:40	10.0	1.0	1	2	
27	f13r0027	MS	QC392143	126262	WET DI	13-JUN-2007 20:46	10.0	1.0	1	2	
28	f13r0028	MSD	QC392144	126262	WET DI	13-JUN-2007 20:52	10.0	1.0	1	2	
29	f13r0029	SAMPLE	195257-026	126262	WET DI	13-JUN-2007 20:58	10.0	1.0	1	2	
30	f13r0030	SAMPLE	195257-027	126262	WET DI	13-JUN-2007 21:04	10.0	1.0	1	2	
31	f13r0031	X	RINSE			13-JUN-2007 21:10	1.0			2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897237240 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
32	f13r0032	X	RINSE			13-JUN-2007 21:16	1.0					2	
33	f13r0033	X	RINSE			13-JUN-2007 21:22	1.0					2	
34	f13r0034	CCV				13-JUN-2007 21:28	1.0	1.0			1	12 2	
35	f13r0035	X	RINSE			13-JUN-2007 21:34	1.0					2	
36	f13r0036	CCB				13-JUN-2007 21:40	1.0	1.0			1	2	
37	f13r0037	X				13-JUN-2007 21:46	1.0					2	
38	f13r0038	X				13-JUN-2007 21:52	1.0					2	
39	f13r0039	SAMPLE	195257-028	126262	WET DI	13-JUN-2007 21:58	10.0	1.0			1	2	
40	f13r0040	SAMPLE	195257-029	126262	WET DI	13-JUN-2007 22:04	10.0	1.0			1	2	
41	f13r0041	SAMPLE	195257-030	126262	WET DI	13-JUN-2007 22:10	10.0	1.0			1	2	
42	f13r0042	X	RINSE			13-JUN-2007 22:16	1.0					2	
43	f13r0043	X	RINSE			13-JUN-2007 22:22	1.0					2	
44	f13r0044	X	RINSE			13-JUN-2007 22:28	1.0					2	
45	f13r0045	CCV				13-JUN-2007 22:33	1.0	1.0			1	12 2	
46	f13r0046	X	RINSE			13-JUN-2007 22:39	1.0					2	
47	f13r0047	CCB				13-JUN-2007 22:45	1.0	1.0			1	2	
48	f13r0048	X				13-JUN-2007 22:51	1.0					2	
49	f13r0049	X				13-JUN-2007 22:57	1.0					2	
50	f13r0050	ICSA				13-JUN-2007 23:03	1.0	1.0			1	10 2	7:CA=272200
51	f13r0051	ICSAB				13-JUN-2007 23:09	1.0	1.0			1	11 2	8:CA=297000
52	f13r0052	X	RINSE			13-JUN-2007 23:15	1.0					2	
53	f13r0053	X	RINSE			13-JUN-2007 23:21	1.0					2	
54	f13r0054	X	RINSE			13-JUN-2007 23:27	1.0					2	
55	f13r0055	X	RINSE			13-JUN-2007 23:33	1.0					2	
56	f13r0056	BLANK	QC392102	126255	Soil	13-JUN-2007 23:39	5.0	50.0			1	2	
57	f13r0057	BS	QC392103	126255	Soil	13-JUN-2007 23:45	10.0	50.0			1	2	
58	f13r0058	BSD	QC392104	126255	Soil	13-JUN-2007 23:51	10.0	50.0			1	2	
59	f13r0059	X	RINSE			13-JUN-2007 23:57	1.0					2	
60	f13r0060	MSS	195328-001	126255	Soil	14-JUN-2007 00:03	50.0	52.08	1		1	2	
61	f13r0061	SER	QC392107	126255	Soil	14-JUN-2007 00:09	250.0	52.08		1	1	2	
62	f13r0062	MS	QC392105	126255	Soil	14-JUN-2007 00:15	50.0	48.54			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897237240 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f13r0063	MSD	QC392106	126255	Soil	14-JUN-2007 00:21	50.0	49.02			1	2	
064	f13r0064	PDS	QC392108	126255	Soil	14-JUN-2007 00:26	50.0	52.08			1	13 14 2	
065	f13r0065	X	RINSE			14-JUN-2007 00:32	1.0					2	
066	f13r0066	X	RINSE			14-JUN-2007 00:38	1.0					2	
067	f13r0067	X	RINSE			14-JUN-2007 00:44	1.0					2	
068	f13r0068	CCV				14-JUN-2007 00:50	1.0	1.0			1	12 2	
069	f13r0069	X	RINSE			14-JUN-2007 00:56	1.0					2	
070	f13r0070	CCB				14-JUN-2007 01:02	1.0	1.0			1	2	
071	f13r0071	X				14-JUN-2007 01:08	1.0					2	
072	f13r0072	X				14-JUN-2007 01:14	1.0					2	
073	f13r0073	SAMPLE	195328-002	126255	Soil	14-JUN-2007 01:20	50.0	45.87			1	2	1:MN=204.400
074	f13r0074	SAMPLE	195328-003	126255	Soil	14-JUN-2007 01:26	50.0	54.95	1		1	2	1:MN=212.800
075	f13r0075	SAMPLE	195370-002	126255	Soil	14-JUN-2007 01:32	50.0	43.86			1	2	
076	f13r0076	SAMPLE	195370-003	126255	Soil	14-JUN-2007 01:38	50.0	53.76			1	2	
077	f13r0077	SAMPLE	195370-004	126255	Soil	14-JUN-2007 01:44	50.0	50.0			1	2	
078	f13r0078	SAMPLE	195370-005	126255	Soil	14-JUN-2007 01:50	50.0	42.74			1	2	
079	f13r0079	SAMPLE	195370-006	126255	Soil	14-JUN-2007 01:55	50.0	52.08	1		1	2	
080	f13r0080	SAMPLE	195370-007	126255	Soil	14-JUN-2007 02:01	50.0	49.02	2		1	2	1:PB=267.400
081	f13r0081	SAMPLE	195370-017	126255	Soil	14-JUN-2007 02:07	50.0	50.51	1		1	2	
082	f13r0082	SAMPLE	195370-018	126255	Soil	14-JUN-2007 02:13	50.0	52.08			1	2	
083	f13r0083	X	RINSE			14-JUN-2007 02:19	1.0					2	
084	f13r0084	X	RINSE			14-JUN-2007 02:25	1.0					2	
085	f13r0085	X	RINSE			14-JUN-2007 02:31	1.0					2	
086	f13r0086	CCV				14-JUN-2007 02:37	1.0	1.0	1		1	12 2	
087	f13r0087	X	RINSE			14-JUN-2007 02:43	1.0					2	
088	f13r0088	CCB				14-JUN-2007 02:49	1.0	1.0			1	2	
089	f13r0089	X				14-JUN-2007 02:55	1.0					2	
090	f13r0090	X				14-JUN-2007 03:01	1.0					2	
091	f13r0091	SAMPLE	195370-019	126255	Soil	14-JUN-2007 03:07	50.0	48.54			1	2	
092	f13r0092	SAMPLE	195370-020	126255	Soil	14-JUN-2007 03:13	50.0	52.08			1	2	
093	f13r0093	X	RINSE			14-JUN-2007 03:19	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897237240 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f13r0094	X	RINSE			14-JUN-2007 03:25	1.0					2	
095	f13r0095	X	RINSE			14-JUN-2007 03:31	1.0					2	
096	f13r0096	CCV				14-JUN-2007 03:36	1.0	1.0	1		1	12 2	
097	f13r0097	X	RINSE			14-JUN-2007 03:42	1.0					2	
098	f13r0098	CCB				14-JUN-2007 03:48	1.0	1.0			1	2	
099	f13r0099	X				14-JUN-2007 03:54	1.0					2	
100	f13r0100	X				14-JUN-2007 04:00	1.0					2	
101	f13r0101	ICSA				14-JUN-2007 04:06	1.0	1.0			1	10 2	7:CA=272400
102	f13r0102	ICSAB				14-JUN-2007 04:12	1.0	1.0			1	11 2	8:CA=295800
103	f13r0103	X	RINSE			14-JUN-2007 04:18	1.0					2	
104	f13r0104	X	RINSE			14-JUN-2007 04:24	1.0					2	
105	f13r0105	X	RINSE			14-JUN-2007 04:30	1.0					2	
106	f13r0106	X	RINSE			14-JUN-2007 04:36	1.0					2	
107	f13r0107	PDS	QC391905	126207	Filtra	14-JUN-2007 04:42	10.0	1.0	1		1	13 14 2	
108	f13r0108	MSS	195234-003	126207	Filtra	14-JUN-2007 04:48	10.0	1.0	2		1	2	1:NA=30020.0
109	f13r0109	MS	QC391906	126207	Filtra	14-JUN-2007 04:54	10.0	1.0			1	2	1:NA=29760.0
110	f13r0110	TUN				14-JUN-2007 04:59	1.0	1.0				1	
111	f13r0111	X	RINSE			14-JUN-2007 05:07	1.0					2	
112	f13r0112	MSD	QC391907	126207	Filtra	14-JUN-2007 05:13	10.0	1.0			1	2	1:NA=30670.0
113	f13r0113	SAMPLE	195234-002	126207	Filtra	14-JUN-2007 05:19	10.0	1.0			1	2	
114	f13r0114	SAMPLE	195234-004	126207	Filtra	14-JUN-2007 05:25	10.0	1.0			1	2	
115	f13r0115	SAMPLE	195234-005	126207	Filtra	14-JUN-2007 05:31	10.0	1.0	1		1	2	1:NA=29030.0
116	f13r0116	X	RINSE			14-JUN-2007 05:37	1.0					2	
117	f13r0117	X	RINSE			14-JUN-2007 05:43	1.0					2	
118	f13r0118	X	RINSE			14-JUN-2007 05:49	1.0					2	
119	f13r0119	CCV				14-JUN-2007 05:54	1.0	1.0	1		1	12 2	
120	f13r0120	X	RINSE			14-JUN-2007 06:00	1.0					2	
121	f13r0121	CCB				14-JUN-2007 06:06	1.0	1.0			1	2	
122	f13r0122	X				14-JUN-2007 06:12	1.0					2	
123	f13r0123	ICSA				14-JUN-2007 06:18	1.0	1.0			1	10 2	7:CA=272300
124	f13r0124	ICSAB				14-JUN-2007 06:24	1.0	1.0			1	11 2	8:CA=292900

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897237240 Instrument: MET16 Agilent ICP-MS MET16 Begun: 13-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	f14g0001	X	WRONG SAMPLE	126207		14-JUN-2007 06:53	50.0	1.0	2		1	2	
126	f14g0002	XSER	QC391904	126207	Filtra	14-JUN-2007 06:59	250.0	1.0			1	2	
127	f14g0003	XPDS	QC391905	126207	Filtra	14-JUN-2007 07:05	50.0	1.0			1	13 14 2	
128	f14g0004	SAMPLE	195234-005	126207	Filtra	14-JUN-2007 07:11	50.0	1.0	2		1	2	
129	f14g0005	CCV				14-JUN-2007 07:17	1.0	1.0	3		1	12 2	
130	f14g0006	X	RINSE			14-JUN-2007 07:23	1.0					2	
131	f14g0007	CCB				14-JUN-2007 07:29	1.0	1.0			1	2	
132	f14g0008	ICSA				14-JUN-2007 07:35	1.0	1.0			1	10 2	7:CA=270300
133	f14g0009	ICSAB				14-JUN-2007 07:41	1.0	1.0			1	11 2	8:CA=293900
134	f14h0001	MSS	195234-003	126207	Filtra	14-JUN-2007 07:56	20.0	1.0	2		1	2	
135	f14h0002	CCV				14-JUN-2007 08:02	1.0	1.0	3		1	12 2	
136	f14h0003	X	RINSE			14-JUN-2007 08:07	1.0					2	
137	f14h0004	CCB				14-JUN-2007 08:13	1.0	1.0	1		1	2	
138	f14h0005	ICSA				14-JUN-2007 08:19	1.0	1.0	2		1	10 2	7:CA=283600
139	f14h0006	ICSAB				14-JUN-2007 08:25	1.0	1.0	2		1	11 2	9:CA=311600

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date 6/14/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195234 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	AS	CD	CA	CR	CU	FE	PB	MG	MN	NI	K	NA	ZN
195234-001	MET16	06/13/07 14:59	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-002	MET16	06/14/07 05:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-003	MET16	06/14/07 04:48	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+
195234-003	MET16	06/14/07 07:56	20.0													+	
195234-004	MET16	06/14/07 05:25	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195234-005	MET16	06/14/07 05:31	10.0	+	+	+	+	+	+	+	+	+	+	+	+		+
195234-005	MET16	06/14/07 07:11	50.0													+	
QC391899	MET16	06/13/07 14:41	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391900	MET16	06/13/07 14:47	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391901	MET16	06/13/07 14:53	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391902	MET16	06/13/07 15:11	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391903	MET16	06/13/07 15:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391904	MET16	06/13/07 15:05	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391905	MET16	06/14/07 04:42	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391906	MET16	06/14/07 04:54	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391907	MET16	06/14/07 05:13	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-JUN-2007 12:50**

Batch Number : 126207
Date Extracted: 12-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195234-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195234-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195234-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195234-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195234-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
QC391899	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC391900	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391901	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391902	MS	of 195234-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391903	MSD	of 195234-001		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391904	SER	of 195234-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC391905	PDS	of 195234-001		Filtrate	50	mL	50	1.000000	1				ICAP		
QC391906	MS	of 195234-003		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391907	MSD	of 195234-003		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		

Prep Chemist: 6/12/07 Reviewed By: Date: 6/13/07

Relinquished By: 6/12/07 Received By: Date: 6/13/07

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 126207
Date Digested: 6/12/07
Digested by: [illegible]

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK 2479
Page 56
Continued From: /
Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50	N	
KS				
KSD				
MS-01				Field filtered
MSD-01				
95234-01				
MS-03				
MSD-03				
234-03				
- 02W				
- 04G				
- 05S				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	[illegible] 6/12
.5 mL of spike solution was added to all spikes	36222	
	36223	
concentrated HCl	K07023 BAKER	
concentrated HNO3	C49029	
☐ filtered thru' Whatman # 541		
Relinquished to ICP group		

[illegible] 6/12/07
Prep Chemist Signature / Date

[illegible] 6/12/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/27/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

: 00238

GENERAL CHEMISTRY

: 00239

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126404		

Field ID: 231GW20 Lab ID: 195234-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	90	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	90	4.0

Field ID: 231GW06 Lab ID: 195234-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID: 231GW13 Lab ID: 195234-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	480	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	480	10

ND= Not Detected
RL= Reporting Limit

47.0

:00240

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126404		

Field ID: DUP0605072A Lab ID: 195234-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	52	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	52	1.0

Field ID: DUP0605072B Lab ID: 195234-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	460	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	460	10

Type: BLANK Lab ID: QC392709

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

47.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392710	Batch#:	126404
Matrix:	Water	Analyzed:	06/18/07

Spiked	Result	%REC	Limits
200.0	186.0	93	90-110

48.0

: 00242

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	231GW20	Batch#:	126404
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392711	90.00	200.0	272.0	91	69-112		
MSD	QC392712		200.0	270.0	90	69-112	1	25

RPD= Relative Percent Difference

49.1

00243

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	231GW13	Batch#:	126404
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392713	479.0	500.0	926.0	89	69-112		
MSD	QC392714		500.0	928.0	90	69-112	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	LF4GW104	Batch#:	126404
MSS Lab ID:	195241-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392715	618.0	500.0	1,097	96	69-112		
MSD	QC392716		500.0	1,100	96	69-112	0	25

RPD= Relative Percent Difference

51.1

: 00245

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **06/18/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **126404** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.8	100	0.00	0.00	ND			1.0		
LCS	10.0	25	2.69	4.65	186.00			4.0	93	
195234-001	7.0	25	0.00	2.25	90.00		n/a	4.0		
MS	9.9	25	2.20	6.80	272.00			4.0	91	
MSD	9.9	25	2.30	6.75	270.00			4.0	90	1
195234-003	7.6	10	0.00	4.79	479.00			10.0		
MS	9.6	10	2.12	9.26	926.00			10.0	89	
MSD	9.5	10	2.11	9.28	928.00			10.0	90	0
195241-003	7.2	10	0.00	6.18	618.00			10.0		
MS	9.1	10	1.44	10.97	1097.00			10.0	96	
MSD	9.0	10	1.45	11.00	1100.00			10.0	96	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195234-001	7.0	25	0.00	2.25	90.00		n/a	4.0
195234-002	7.4	10	0.00	2.49	249.00		n/a	10.0
195234-003	7.6	10	0.00	4.79	479.00		n/a	10.0
195234-004	7.0	100	0.00	5.20	52.00		n/a	1.0
195234-005	7.7	10	0.00	4.58	458.00		n/a	10.0
195241-002	7.2	10	0.00	17.03	1703.00		n/a	10.0
195241-003	7.2	10	0.00	6.18	618.00		n/a	10.0
195241-004	6.8	10	0.00	2.46	246.00		n/a	10.0
195241-005	6.9	10	0.00	3.64	364.00		n/a	10.0
195241-007	7.3	10	0.00	16.28	1628.00		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: DMB 6/18/07

Template: F:\inorgan\wetstuff\alkalinity.xls

Ver.8.6, Effective 2/19/07

Curtis Tompkins, Ltd.

00215

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/18/07
Batch No: 126404

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195234-001	0.0	90.0	90	90.000	0.000	0.000
195234-002	0.0	249.00	249.000	249.000	0.000	0.000
195234-003	0.0	479.00	479.000	479.000	0.000	0.000
195234-004	0.0	52.00	52.000	52.000	0.000	0.000
195234-005	0.0	458.00	458.000	458.000	0.000	0.000
195241-002	0.0	1703.00	1703.000	1703.000	0.000	0.000
195241-003	0.0	618.00	618.000	618.000	0.000	0.000
195241-004	0.0	246.00	246.000	246.000	0.000	0.000
195241-005	0.0	364.00	364.000	364.000	0.000	0.000
195241-007	0.0	1628.00	1628.000	1628.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 06/18/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 126404 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
195234-001	90.000	109.732	0.000	0.000
195234-002	249.000	303.593	0.000	0.000
195234-003	479.000	584.019	0.000	0.000
195234-004	52.000	63.401	0.000	0.000
195234-005	458.000	558.415	0.000	0.000
195241-002	1703.000	2076.378	0.000	0.000
195241-003	618.000	753.495	0.000	0.000
195241-004	246.000	299.935	0.000	0.000
195241-005	364.000	443.806	0.000	0.000
195241-007	1628.000	1984.934	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126404 Date: 6/18/07 Benchbook#: **BK2508**
Matrix: water Time: 9:30 Page: **15**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 5129
CAL-ph 10.0: SS#: 5862
Slope: 101.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 5604
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6352 Exp. 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.8	100	AT 6/18 ~~10~~ ~~0~~	<0.05		
LCS	10.0	25	2.69	AT 6/18 ~~4.9~~ 4.65		
195234-1 AD	7.0	25	—	2.25		
MS-1	9.9	25	2.20	6.80		
MSD-1	9.9	25	2.23	6.75		
-2 J	7.4	AT 6/18 ~~25~~ 10	—	2.49		
-3 AD	7.6	10	—	4.79		
MS-3	9.6		2.12	9.26		
MSD-3	9.5		2.11	9.28		
-4 J	7.0	25	—	<2mL		
-4	7.0	100	—	5.20		
-5 H	7.7	10	—	7.58		
195241-2 C	7.2	10	—	17.03		
-3 G	7.2	10	—	6.18		
MS-3	9.1	10	AT 6/18 ~~1.44~~	10.97		
MSD-3	9.0	10	1.45	11.00		
-4 I	6.8	10	—	2.46		
-5 H	6.9	10	—	16.28		
AT 6/18-67C	7.3	10	—	3.64		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/18/07
Analyst / Date

6/18/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126404
Date Started: 18-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-002			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-003			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-004			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-005			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-002			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-003			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-004			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-005			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-007			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
QC392709	BLANK			Water	ALKALINITY	
QC392710	LCS			Water	ALKALINITY	
QC392711	MS	of 195234-001		Water	ALKALINITY	
QC392712	MSD	of 195234-001		Water	ALKALINITY	
QC392713	MS	of 195234-003		Water	ALKALINITY	
QC392714	MSD	of 195234-003		Water	ALKALINITY	
QC392715	MS	of 195241-003		Water	ALKALINITY	
QC392716	MSD	of 195241-003		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	06/06/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
231GW20	SAMPLE	195234-001	9.7	0.20	1.000	126059	06/05/07 10:30	06/07/07 15:52
231GW06	SAMPLE	195234-002	54	1.0	5.000	126184	06/05/07 12:30	06/11/07 20:45
231GW13	SAMPLE	195234-003	200	4.0	20.00	126061	06/05/07 13:30	06/07/07 16:24
DUP0605072A	SAMPLE	195234-004	9.6	0.20	1.000	126004	06/05/07 10:45	06/06/07 23:00
DUP0605072B	SAMPLE	195234-005	220	4.0	20.00	126184	06/05/07 13:45	06/11/07 21:02
	BLANK	QC391102	ND	0.20	1.000	126004		06/06/07 14:04
	BLANK	QC391314	ND	0.20	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.20	1.000	126061		06/07/07 14:55
	BLANK	QC391785	ND	0.20	1.000	126184		06/11/07 17:17

ND= Not Detected
RL= Reporting Limit

31.0

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
231GW20	SAMPLE	195234-001	ND	0.10	126059	06/05/07 10:30	06/07/07 15:52
231GW06	SAMPLE	195234-002	ND	0.10	126004	06/05/07 12:30	06/06/07 22:43
231GW13	SAMPLE	195234-003	0.61	0.10	126004	06/05/07 13:30	06/06/07 19:47
DUP0605072A	SAMPLE	195234-004	ND	0.10	126004	06/05/07 10:45	06/06/07 23:00
DUP0605072B	SAMPLE	195234-005	0.60	0.10	126004	06/05/07 13:45	06/06/07 23:18
	BLANK	QC391102	ND	0.10	126004		06/06/07 14:04
	BLANK	QC391314	ND	0.10	126059		06/07/07 14:26

ND= Not Detected
RL= Reporting Limit

33.0

: 00252

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Diln Fac:	1.000
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
231GW20	SAMPLE	195234-001	0.66	0.05	126059	06/05/07 10:30	06/07/07 15:52
231GW06	SAMPLE	195234-002	ND	0.05	126004	06/05/07 12:30	06/06/07 22:43
231GW13	SAMPLE	195234-003	0.84	0.05	126004	06/05/07 13:30	06/06/07 19:47
DUP0605072A	SAMPLE	195234-004	0.65	0.05	126004	06/05/07 10:45	06/06/07 23:00
DUP0605072B	SAMPLE	195234-005	0.78	0.05	126004	06/05/07 13:45	06/06/07 23:18
	BLANK	QC391102	ND	0.05	126004		06/06/07 14:04
	BLANK	QC391314	ND	0.05	126059		06/07/07 14:26

ND= Not Detected
RL= Reporting Limit

35.1

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
231GW20	SAMPLE	195234-001	ND	0.05	126059	06/05/07 10:30	06/07/07 15:52
231GW06	SAMPLE	195234-002	ND	0.05	126004	06/05/07 12:30	06/06/07 22:43
231GW13	SAMPLE	195234-003	ND	0.05	126004	06/05/07 13:30	06/06/07 19:47
DUP0605072A	SAMPLE	195234-004	ND	0.05	126004	06/05/07 10:45	06/06/07 23:00
DUP0605072B	SAMPLE	195234-005	ND	0.05	126004	06/05/07 13:45	06/06/07 23:18
	BLANK	QC391102	ND	0.05	126004		06/06/07 14:04
	BLANK	QC391314	ND	0.05	126059		06/07/07 14:26

ND= Not Detected
RL= Reporting Limit

37.1

00254

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	06/06/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
231GW20	SAMPLE	195234-001	8.8	0.50	1.000	126059	06/05/07 10:30	06/07/07 15:52
231GW06	SAMPLE	195234-002	53	2.5	5.000	126184	06/05/07 12:30	06/11/07 20:45
231GW13	SAMPLE	195234-003	ND	0.50	1.000	126004	06/05/07 13:30	06/06/07 19:47
DUP0605072A	SAMPLE	195234-004	8.8	0.50	1.000	126004	06/05/07 10:45	06/06/07 23:00
DUP0605072B	SAMPLE	195234-005	ND	0.50	1.000	126004	06/05/07 13:45	06/06/07 23:18
	BLANK	QC391102	ND	0.50	1.000	126004		06/06/07 14:04
	BLANK	QC391314	ND	0.50	1.000	126059		06/07/07 14:26
	BLANK	QC391785	ND	0.50	1.000	126184		06/11/07 17:17

ND= Not Detected
RL= Reporting Limit

39.0

: 00255

Batch QC Report

Fluoride

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391103		2.000	1.988	99	80-120			1.000	126004			06/06/07 14:21
	BSD		QC391104		2.000	2.014	101	80-120	1	20	1.000	126004			06/06/07 14:39
	BS		QC391315		2.000	2.019	101	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		2.000	2.096	105	80-120	4	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	0.01985	1.020	0.9537	92	78-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		1.020	0.9721	93	78-120	2	20	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	0.1201	50.00	43.21	86	78-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		50.00	44.46	89	78-120	3	20	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00

RPD= Relative Percent Difference

34.5

Curtis & Tompkins, Ltd.

00256

Batch QC Report

Chloride

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391103		4.000	4.233	106	80-120			1.000	126004			06/06/07 14:21
	BSD		QC391104		4.000	4.200	105	80-120	1	20	1.000	126004			06/06/07 14:39
	BS		QC391315		4.000	4.312	108	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		4.000	4.262	107	80-120	1	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	9.712	2.040	11.83	104 NM	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		2.040	11.87	106 NM	80-120	0	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	230.9	100.0	343.1	112	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		100.0	338.4	107	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		4.000	4.068	102	80-120			1.000	126061			06/07/07 15:12
	BSD		QC391322		4.000	4.025	101	80-120	1	20	1.000	126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	202.1	40.00	235.3	83 NM	80-120			20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		40.00	235.7	84 NM	80-120	0	25	20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:59
	BS		QC391786		4.000	4.307	108	80-120			1.000	126184			06/11/07 17:34
	BSD		QC391787		4.000	4.298	107	80-120	0	20	1.000	126184			06/11/07 17:52
231GW06	MS	195234-002	QC391870	53.90	10.00	63.75	99 NM	80-120			5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:23
231GW06	MSD	195234-002	QC391871		10.00	63.52	96 NM	80-120	0	25	5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:41

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

32.5

Curtis & Tompkins, Ltd.

00257

Batch QC Report

Nitrite Nitrogen

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391103		1.000	1.053	105	80-120			1.000	126004			06/06/07 14:21
	BSD		QC391104		1.000	1.027	103	80-120	3	20	1.000	126004			06/06/07 14:39
	BS		QC391315		1.000	1.035	104	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		1.000	1.079	108	80-120	4	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	<0.01089	0.5100	0.5944	117	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		0.5100	0.5801	114	80-120	2	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	<0.01089	25.00	26.42	106	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		25.00	26.69	107	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00

RPD= Relative Percent Difference

38.5

Curtis & Tompkins, Ltd.

00258

Batch QC Report

Nitrate Nitrogen

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391103		1.000	1.080	108	80-120			1.000	126004			06/06/07 14:21
	BSD		QC391104		1.000	1.102	110	80-120	2	20	1.000	126004			06/06/07 14:39
	BS		QC391315		1.000	1.104	110	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		1.000	1.108	111	80-120	0	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	0.6578	0.5100	1.226	111	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		0.5100	1.240	114	80-120	1	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	5.678	25.00	33.86	113	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		25.00	33.36	111	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00

RPD= Relative Percent Difference

36.5

Curtis & Tompkins, Ltd.

00250

Batch QC Report

Sulfate

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391103		10.00	10.60	106	80-120			1.000	126004			06/06/07 14:21
	BSD		QC391104		10.00	10.54	105	80-120	1	20	1.000	126004			06/06/07 14:39
	BS		QC391315		10.00	10.91	109	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		10.00	10.96	110	80-120	1	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	8.809	5.100	14.35	109	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		5.100	14.44	110	80-120	1	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	67.12	250.0	336.6	108	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		250.0	330.9	106	80-120	2	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391786		10.00	10.75	107	80-120			1.000	126184			06/11/07 17:34
	BSD		QC391787		10.00	10.83	108	80-120	1	20	1.000	126184			06/11/07 17:52
231GW06	MS	195234-002	QC391870	52.51	25.00	77.97	102	80-120			5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:23
231GW06	MSD	195234-002	QC391871		25.00	78.21	103	80-120	0	25	5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:41

RPD= Relative Percent Difference

40.5

Curtis & Tompkins, Ltd.

00266

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	-10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195234 IC Water: EPA 300.0

Inst : IC03
Calnum : 627218791001
Units : mg/L

Date : 31-MAY-2007 22:31
X Axis : A

Reviewer : RH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_3	627218791003	L1	31-MAY-2007 22:31	S6107 (500X)
L2	152_4	627218791004	L2	31-MAY-2007 22:49	S6107 (100X)
L3	152_5	627218791005	L3	31-MAY-2007 23:06	S6107 (25X)
L4	152_6	627218791006	L4	31-MAY-2007 23:24	S6107 (10X)
L5	152_7	627218791007	L5	31-MAY-2007 23:41	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1297	0.1872	0.1952	0.2113	0.2177	QORG		0.19988	0.001803	0.1882	1.000	0.990	
Chloride	0.1393	0.1328	0.1406	0.1501	0.1616	QORG		0.13746	0.001210	0.1449	1.000	0.990	
Nitrogen, Nitrite	0.3375	0.3005	0.2902	0.3084	0.3151	QORG		0.29647	0.003762	0.3103	1.000	0.990	
Nitrogen, Nitrate	0.3082	0.3189	0.3329	0.3458	0.3609	QORG		0.32886	0.006433	0.3333	1.000	0.990	
Sulfate	0.1108	0.1023	0.1034	0.1095	0.1158	QORG		0.10232	2.707E-4	0.1084	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-35	0.500	-7	2.000	-4	5.000	1	10.00	0
Chloride	0.200	1	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	14	0.250	1	1.000	-3	2.500	1	5.000	0
Nitrogen, Nitrate	0.050	-6	0.250	-3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	8	2.500	-1	10.00	-2	25.00	0	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195234 IC Water
EPA 300.0

Inst : IC03
Calnum : 627218791001 Cal Date : 31-MAY-2007

ICV 627218791009 (152_9 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1882	0.1903	1.000	0.9439	mg/L	-6	10	
Chloride	0.1449	0.1360	2.000	1.945	mg/L	-3	10	
Nitrogen, Nitrite	0.3103	0.2924	0.5000	0.4900	mg/L	-2	10	
Nitrogen, Nitrate	0.3333	0.3204	0.5000	0.4825	mg/L	-3	10	
Sulfate	0.1084	0.1028	5.000	4.961	mg/L	-1	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 195234 IC Water
EPA 300.0

Inst	: IC01	Lab ID	: QC391320		
Seqnum	: 607228348009.3	Matrix	: Water		
File	: 159_9	Batch	: 126061	Time	: 07-JUN-2007 14:55
Cal	: 607218822002	Caldate	: 01-JUN-2007		
IDF	: 1.0			Units	: mg/L
PDF	: 1.0				

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

607228348009.3

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607228348020.1 File : 159_20 Time : 07-JUN-2007 19:08
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01263]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627225264073 File : 156_73 Time : 06-JUN-2007 10:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02950]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627225264089 File : 156_89 Time : 06-JUN-2007 18:14
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627225264101.1 File : 156_101 Time : 07-JUN-2007 00:10
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02575]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 195234 IC Water
EPA 300.0

Inst	: IC03	Lab ID	: QC391314		
Seqnum	: 627228309012.3	Matrix	: Water		
File	: 158_12	Batch	: 126059	Time	: 07-JUN-2007 14:26
Cal	: 627218791001	Caldate	: 31-MAY-2007		
IDF	: 1.0			Units	: mg/L
PDF	: 1.0				

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

u=use

627228309012.3

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309022.1 File : 158_22 Time : 07-JUN-2007 18:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309037.1 File : 158_37 Time : 08-JUN-2007 01:02
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

: 00272

CURTIS & TOMPKINS BLANK USER REPORT FOR 195234 IC Water
EPA 300.0

Inst	: IC03	Lab ID	: QC391785		
Seqnum	: 627234079011.3	Matrix	: Water		
File	: 162_11	Batch	: 126184	Time	: 11-JUN-2007 17:17
Cal	: 627218791001	Caldate	: 31-MAY-2007		
IDF	: 1.0			Units	: mg/L
PDF	: 1.0				

Analyte	Result	RL	Flags
Fluoride	ND	0.10	<c- u **b***
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	>c+ u
Sulfate	ND	0.50	u

+=high bias -=low bias <=opening >=closing b=noncompliant c=CCV u=use

627234079011.3

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079024.1 File : 162_24 Time : 11-JUN-2007 23:21
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

00274

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195234 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079038.1 File : 162_38 Time : 12-JUN-2007 03:25
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03182]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CONTINUING CALIBRATION SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.1750	0.1721	1.0000	1.0016	mg/L	0	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.1750	0.1772	4.0000	4.0320	mg/L	1	10	
IC03	P	627225264072	06-JUN-2007 10:33	627218791001	31-MAY-2007	0.1449	0.1645	10.000	10.917	mg/L	9	10	
IC03	P	627225264088	06-JUN-2007 17:57	627218791001	31-MAY-2007	0.1449	0.1496	4.0000	4.1975	mg/L	5	10	
IC03	P	627225264102	07-JUN-2007 00:27	627218791001	31-MAY-2007	0.1449	0.1648	10.000	10.936	mg/L	9	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1449	0.1472	1.0000	1.0609	mg/L	6	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1449	0.1522	4.0000	4.2678	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1449	0.1648	10.000	10.939	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1449	0.1480	1.0000	1.0667	mg/L	7	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1449	0.1546	4.0000	4.3335	mg/L	8	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1449	0.1641	10.000	10.896	mg/L	9	10	

CONTINUING CALIBRATION SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.2574	0.2742	0.5000	0.5242	mg/L	5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.2574	0.2610	2.0000	1.9733	mg/L	-1	10	
IC03	P	627225264072	06-JUN-2007 10:33	627218791001	31-MAY-2007	0.1882	0.2226	5.0000	5.3128	mg/L	6	10	
IC03	P	627225264088	06-JUN-2007 17:57	627218791001	31-MAY-2007	0.1882	0.2081	2.0000	2.0443	mg/L	2	10	
IC03	P	627225264102	07-JUN-2007 00:27	627218791001	31-MAY-2007	0.1882	0.2230	5.0000	5.3232	mg/L	6	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1882	0.1941	0.5000	0.4834	mg/L	-3	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1882	0.2030	2.0000	1.9951	mg/L	0	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1882	0.2192	5.0000	5.2360	mg/L	5	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1882	0.1773	0.5000	0.4418	mg/L	**-12**	10	c- ***
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1882	0.2093	2.0000	2.0557	mg/L	3	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1882	0.2202	5.0000	5.2598	mg/L	5	10	

-=low bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.4432	0.3982	0.2500	0.2368	mg/L	-5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.4432	0.4541	1.0000	1.0611	mg/L	6	10	
IC03	P	627225264072	06-JUN-2007 10:33	627218791001	31-MAY-2007	0.3333	0.3780	2.5000	2.7277	mg/L	9	10	
IC03	P	627225264088	06-JUN-2007 17:57	627218791001	31-MAY-2007	0.3333	0.3686	1.0000	1.0973	mg/L	10	10	
IC03	P	627225264102	07-JUN-2007 00:27	627218791001	31-MAY-2007	0.3333	0.3788	2.5000	2.7332	mg/L	9	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3333	0.3444	0.2500	0.2605	mg/L	4	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3333	0.3693	1.0000	1.0992	mg/L	10	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3333	0.3807	2.5000	2.7463	mg/L	10	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3333	0.3263	0.2500	0.2468	mg/L	-1	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3333	0.3735	1.0000	1.1116	mg/L	**11**	10	c+ ***
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3333	0.3802	2.5000	2.7434	mg/L	10	10	

+=high bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.3873	0.3549	0.2500	0.2336	mg/L	-7	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.3873	0.3918	1.0000	1.0251	mg/L	3	10	
IC03	P	627225264072	06-JUN-2007 10:33	627218791001	31-MAY-2007	0.3103	0.3374	2.5000	2.7492	mg/L	10	10	
IC03	P	627225264088	06-JUN-2007 17:57	627218791001	31-MAY-2007	0.3103	0.3031	1.0000	1.0094	mg/L	1	10	
IC03	P	627225264102	07-JUN-2007 00:27	627218791001	31-MAY-2007	0.3103	0.3311	2.5000	2.6992	mg/L	8	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3103	0.2965	0.2500	0.2493	mg/L	0	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3103	0.3087	1.0000	1.0280	mg/L	3	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3103	0.3352	2.5000	2.7317	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3103	0.3228	0.2500	0.2712	mg/L	8	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3103	0.3204	1.0000	1.0661	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3103	0.3225	2.5000	2.6315	mg/L	5	10	

CONTINUING CALIBRATION SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.1369	0.1335	2.5000	2.6178	mg/L	5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.1369	0.1344	10.000	10.341	mg/L	3	10	
IC03	P	627225264072	06-JUN-2007 10:33	627218791001	31-MAY-2007	0.1084	0.1176	25.000	26.823	mg/L	7	10	
IC03	P	627225264088	06-JUN-2007 17:57	627218791001	31-MAY-2007	0.1084	0.1127	10.000	10.712	mg/L	7	10	
IC03	P	627225264102	07-JUN-2007 00:27	627218791001	31-MAY-2007	0.1084	0.1188	25.000	27.077	mg/L	8	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1084	0.1082	2.5000	2.6258	mg/L	5	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.705	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1084	0.1191	25.000	27.154	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1084	0.1090	2.5000	2.6447	mg/L	6	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.698	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1084	0.1177	25.000	26.861	mg/L	7	10	

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0		25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0					1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0					1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0					1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0					1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0					1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1	25				
009	152_9	ICV				01-JUN-2007 00:47	1.0		25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0		25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0		25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0		25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1	25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1	25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1	25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2	25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0		25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1	25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1	25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0		25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0		25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0		25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2	25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2	25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2	25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0		25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1	25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1	25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0		25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1	25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1	25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0		25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0		25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0		25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0		25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1	25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1	25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0		25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1	25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0		25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2	25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2	25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2	25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2	25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2	25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1	25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1	25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0		25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0		25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 607228348 Instrument: IC01 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	159_7	X	L			07-JUN-2007 13:48	1.0	3		25			1	
008	159_8	CCV	L			07-JUN-2007 14:25	1.0	1		25			1	
009	159_9	CCB/MB	QC391320	126061	Water	07-JUN-2007 14:55	1.0			25				
010	159_10	BS	QC391321	126061	Water	07-JUN-2007 15:12	1.0			25			1	
011	159_11	BSD	QC391322	126061	Water	07-JUN-2007 15:30	1.0			25			1	
012	159_12	SAMPLE	195251-003	126061	Water	07-JUN-2007 16:01	1.0			25				1:CL=23.1349
013	159_13	MSS	195234-003	126061	Water	07-JUN-2007 16:24	20.0	1		25				
014	159_14	MS	QC391339	126061	Water	07-JUN-2007 16:42	20.0			25			1	
015	159_15	MSD	QC391340	126061	Water	07-JUN-2007 16:59	20.0			25			1	
016	159_16	SAMPLE	195265-005	126061	Water	07-JUN-2007 17:28	100.0			25				
017	159_17	SAMPLE	195270-001	126061	Water	07-JUN-2007 17:55	100.0			25				
018	159_18	SAMPLE	195270-002	126061	Water	07-JUN-2007 18:25	100.0			25				
019	159_19	CCV	M	126061		07-JUN-2007 18:51	1.0			25			1	
020	159_20	CCB		126061		07-JUN-2007 19:08	1.0			25				
021	159_21	SAMPLE	195265-004	126061	Water	07-JUN-2007 21:29	100.0			25				
022	159_22	SAMPLE	195270-006	126061	Water	07-JUN-2007 21:47	50.0			25				
023	159_23	SAMPLE	195270-017	126061	Water	07-JUN-2007 22:04	25.0			25				
024	159_24	SAMPLE	195270-005	126061	Water	07-JUN-2007 22:22	25.0			25				
025	159_25	SAMPLE	195265-005	126061	Water	07-JUN-2007 22:39	10.0	1		25				1:SO4=163.563
026	159_26	SAMPLE	195265-004	126061	Water	07-JUN-2007 22:57	5.0	2		25				2:SO4=250.819
028	159_28	SAMPLE	195286-006	126061	Water	07-JUN-2007 23:32	1.0			25				
029	159_29	SAMPLE	195286-007	126061	Water	07-JUN-2007 23:49	1.0	1		25				1:CL=23.7991
030	159_30	SAMPLE	195270-004	126061	Water	08-JUN-2007 00:07	1.0			25				
032	159_32	CCV	H	126061		08-JUN-2007 00:42	1.0			25			1	
033	159_33	CCB		126061		08-JUN-2007 00:59	1.0	1		25				
036	159_36	SAMPLE	195270-002	126061	Water	08-JUN-2007 01:52	2.0	1		25				1:CL=184.501
038	159_38	SAMPLE	195270-001	126061	Water	08-JUN-2007 02:27	2.0	1		25				1:CL=180.400
040	159_40	SAMPLE	195270-017	126061	Water	08-JUN-2007 03:02	1.0	1		25				1:CL=44.1005
042	159_42	SAMPLE	195270-006	126061	Water	08-JUN-2007 03:37	1.0	2		25				2:SO4=104.807
044	159_44	SAMPLE	195270-005	126061	Water	08-JUN-2007 04:12	1.0	2		25				2:SO4=72.7118
046	159_46	SAMPLE	195265-007	126061	Water	08-JUN-2007 04:47	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 607228348 Instrument: IC01 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
048	159_48	SAMPLE	195265-008	126061	Water	08-JUN-2007 05:22	1.0	25				
050	159_50	CCV	M	126061		08-JUN-2007 05:57	1.0	25			1	
051	159_51	CCB		126061		08-JUN-2007 06:14	1.0	25				
053	159_53	X	CCB	126061		08-JUN-2007 06:49	1.0					

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:14	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 22:31	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 22:49	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:06	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:24	1.0						1	
007	152_7	ICAL	L5			31-MAY-2007 23:41	1.0						1	
008	152_8	CCB				31-MAY-2007 23:58	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:16	1.0			25			2	
011	152_11	CCB/MB	QC390419	125840	Water	01-JUN-2007 00:51	1.0			25				
012	152_12	BS	QC390420	125840	Water	01-JUN-2007 01:08	1.0			25			1	
013	152_13	BSD	QC390421	125840	Water	01-JUN-2007 01:25	1.0			25			1	
014	152_14	SAMPLE	195096-001	125840	Water	01-JUN-2007 01:43	1.0	1		25				1:SO4=556.718
016	152_16	SAMPLE	195096-002	125840	Water	01-JUN-2007 02:18	2.0	1		25				2:SO4=598.434
018	152_18	SAMPLE	195096-003	125840	Water	01-JUN-2007 02:53	1.0	1		25				2:SO4=557.907
019	152_19	SAMPLE	195096-004	125840	Water	01-JUN-2007 03:10	1.0	1		25				2:SO4=559.245
021	152_21	SAMPLE	195089-002	125840	Water	01-JUN-2007 03:45	5.0	1		25				2:SO4=140.384
022	152_22	SAMPLE	195089-002	125840	Water	01-JUN-2007 04:02	1.0	2		25				3:SO4=490.019
024	152_24	SAMPLE	195089-004	125840	Water	01-JUN-2007 04:37	1.0	2		25				3:SO4=427.003
026	152_26	CCV	M	125840		01-JUN-2007 05:12	1.0			25			1	
027	152_27	CCB		125840		01-JUN-2007 05:29	1.0			25				
030	152_30	SAMPLE	195089-005	125840	Water	01-JUN-2007 06:21	1.0	1		25				2:SO4=489.308
031	152_31	SAMPLE	195089-006	125840	Water	01-JUN-2007 06:39	1.0	1		25				2:SO4=517.275
032	152_32	SAMPLE	195089-003	125840	Water	01-JUN-2007 06:56	1.0	1		25				2:SO4=373.460
034	152_34	SAMPLE	195096-005	125840	Water	01-JUN-2007 07:31	1.0	1		25				2:SO4=409.844
035	152_35	SAMPLE	195096-006	125840	Water	01-JUN-2007 07:48	1.0	1		25				2:SO4=144.475
037	152_37	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:23	10.0	1		25				1:SO4=195.820
038	152_38	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:41	5.0	1		25				2:SO4=339.862
039	152_39	SAMPLE	195089-007	125840	Water	01-JUN-2007 08:58	1.0	2		25				3:SO4=481.654
041	152_41	SAMPLE	195092-002	125840	Water	01-JUN-2007 09:33	1.0	2		25				2:SO4=430.097
042	152_42	SAMPLE	195092-003	125840	Water	01-JUN-2007 09:50	1.0	2		25				2:SO4=430.821
044	152_44	CCV	H	125840		01-JUN-2007 10:25	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
045	152_45	CCB		125840		01-JUN-2007 10:43	1.0	1	25				
046	152_46	SAMPLE	195089-004	125840	Water	01-JUN-2007 11:00	5.0	1	25				2:SO4=117.984
047	152_47	SAMPLE	195112-001	125840	Water	01-JUN-2007 11:17	1.0		25				
048	152_48	MSS	195112-004	125840	Water	01-JUN-2007 11:35	1.0	2	25				1:CL=27.8197
050	152_50	SAMPLE	195089-007	125840	Water	01-JUN-2007 12:10	10.0	1	25				1:SO4=70.8983
051	152_51	MS	QC390422	125840	Water	01-JUN-2007 12:27	2.0	1	25			1	
052	152_52	MSD	QC390423	125840	Water	01-JUN-2007 12:44	2.0	1	25			1	
054	152_54	CCV	M	125840		01-JUN-2007 13:19	1.0		25			1	
055	152_55	CCB		125840		01-JUN-2007 13:37	1.0		25				
057	152_57	BLANK	QC390472	125850	Water	01-JUN-2007 15:12	1.0	1	25				
058	152_58	BS	QC390473	125850	Water	01-JUN-2007 15:29	1.0	1	25			1	
059	152_59	BSD	QC390474	125850	Water	01-JUN-2007 15:47	1.0	1	25			1	
060	152_60	SAMPLE	195127-003	125850	Water	01-JUN-2007 16:27	500.0		25				1:CL=25.2331
061	152_61	SAMPLE	195127-001	125850	Water	01-JUN-2007 16:54	20.0		25				2:CL=355.264
062	152_62	SAMPLE	195127-004	125850	Water	01-JUN-2007 17:11	20.0		25				2:CL=357.783
063	152_63	SAMPLE	195127-002	125850	Water	01-JUN-2007 17:28	20.0		25				2:CL=341.082
064	152_64	SAMPLE	195127-003	125850	Water	01-JUN-2007 18:03	20.0		25				2:CL=364.164
066	152_66	CCV	H	125850		01-JUN-2007 18:44	1.0		25			1	
067	152_67	CCB		125850		01-JUN-2007 19:01	20.0	1	25				
068	152_68	MSS	195123-005	125850	Water	01-JUN-2007 21:08	1.0	1	25				
070	152_70	MS	QC390480	125850	Water	01-JUN-2007 21:43	1.02	1	25			1	
071	152_71	MSD	QC390481	125850	Water	01-JUN-2007 22:00	1.02	1	25			1	
073	152_73	CCV	M	125850		01-JUN-2007 22:35	1.0		25			1	
074	152_74	CCB		125850		01-JUN-2007 22:52	1.0	1	25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627225264 Instrument: IC03 Ion Chromatograph Begun: 05-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
010	156_10	CCV	L			05-JUN-2007 10:24	1.0	1	25			1	
011	156_11	CCB/MB	QC390912	125957	Water	05-JUN-2007 10:42	1.0		25				
012	156_12	BS	QC390913	125957	Water	05-JUN-2007 10:59	1.0	1	25			1	
013	156_13	BSD	QC390914	125957	Water	05-JUN-2007 11:16	1.0	1	25			1	
014	156_14	X	195106-002	125957		05-JUN-2007 12:14	25.0						
016	156_16	SAMPLE	195113-007	125957	Water	05-JUN-2007 17:35	50.0		25				
017	156_17	SAMPLE	195113-002	125957	Water	05-JUN-2007 17:52	2.0		25				1:CL=21.8009
018	156_18	SAMPLE	195191-003	125957	Water	05-JUN-2007 18:23	500.0		25				1:CL=32.9682
019	156_19	SAMPLE	195191-006	125957	Water	05-JUN-2007 18:41	500.0		25				1:CL=32.3661
020	156_20	SAMPLE	195191-004	125957	Water	05-JUN-2007 18:58	200.0		25				1:CL=40.2561
021	156_21	SAMPLE	195191-007	125957	Water	05-JUN-2007 19:15	200.0		25				1:CL=33.0796
023	156_23	CCV	M	125957		05-JUN-2007 19:50	1.0		25			1	
024	156_24	CCB		125957		05-JUN-2007 20:08	1.0		25				
028	156_28	SAMPLE	195191-003	125957	Water	05-JUN-2007 21:47	100.0		25				1:CL=125.360
029	156_29	SAMPLE	195191-006	125957	Water	05-JUN-2007 22:05	100.0		25				1:CL=123.023
031	156_31	SAMPLE	195191-003	125957	Water	05-JUN-2007 22:39	50.0		25				1:CL=197.187
032	156_32	SAMPLE	195191-006	125957	Water	05-JUN-2007 22:57	50.0		25				1:CL=195.841
034	156_34	SAMPLE	195191-004	125957	Water	05-JUN-2007 23:32	50.0		25				1:CL=125.903
035	156_35	SAMPLE	195191-007	125957	Water	05-JUN-2007 23:49	50.0		25				1:CL=105.205
037	156_37	SAMPLE	195191-010	125957	Water	06-JUN-2007 00:24	25.0		25				
038	156_38	SAMPLE	195191-007	125957	Water	06-JUN-2007 00:41	20.0		25				1:CL=199.835
040	156_40	X	H	125957		06-JUN-2007 01:16	1.0	1	25			1	
041	156_41	CCB		125957		06-JUN-2007 01:33	1.0	1	25				
042	156_42	CCV	H	125957		06-JUN-2007 01:51	1.0		25			1	
044	156_44	SAMPLE	195191-001	125957	Water	06-JUN-2007 02:26	20.0		25				
045	156_45	SAMPLE	195191-011	125957	Water	06-JUN-2007 02:43	20.0		25				1:CL=155.245
047	156_47	SAMPLE	195191-004	125957	Water	06-JUN-2007 03:18	20.0	1	25				2:CL=229.194
048	156_48	SAMPLE	195191-002	125957	Water	06-JUN-2007 03:35	20.0		25				
050	156_50	SAMPLE	195191-009	125957	Water	06-JUN-2007 04:10	10.0		25				
051	156_51	SAMPLE	195191-008	125957	Water	06-JUN-2007 04:28	10.0		25				1:CL=66.9320
053	156_53	SAMPLE	195191-010	125957	Water	06-JUN-2007 05:02	1.0	1	25				2:SO4=365.079

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627225264 Instrument: IC03 Ion Chromatograph Begun: 05-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
054	156_54	SAMPLE	195191-001	125957	Water	06-JUN-2007 05:20	1.0	1	25				2:CL=171.851
055	156_55	SAMPLE	195191-009	125957	Water	06-JUN-2007 05:37	1.0	1	25				2:SO4=75.3028
056	156_56	SAMPLE	195191-008	125957	Water	06-JUN-2007 05:55	2.0	1	25				2:CL=166.339
058	156_58	CCV	M	125957		06-JUN-2007 06:29	1.0		25			1	
059	156_59	CCB		125957		06-JUN-2007 06:47	1.0		25				
062	156_62	SAMPLE	195191-002	125957	Water	06-JUN-2007 07:39	1.0	1	25				2:SO4=304.877
064	156_64	MSS	195123-003	125957	Water	06-JUN-2007 08:14	25.0	2	25				
066	156_66	MS	QC391043	125957	Water	06-JUN-2007 08:49	25.0	1	25			1	
067	156_67	MSD	QC391044	125957	Water	06-JUN-2007 09:06	25.0	1	25			1	
069	156_69	MS	QC391043	125957	Water	06-JUN-2007 09:41	25.0	1	25			1	
070	156_70	MSD	QC391044	125957	Water	06-JUN-2007 09:58	25.0	1	25			1	
072	156_72	CCV	H	125957		06-JUN-2007 10:33	1.0		25			1	
073	156_73	CCB		125957		06-JUN-2007 10:50	1.0	1	25				
077	156_77	BLANK	QC391102	126004	Water	06-JUN-2007 14:04	1.0		25				
078	156_78	BS	QC391103	126004	Water	06-JUN-2007 14:21	1.0		25			1	
079	156_79	BSD	QC391104	126004	Water	06-JUN-2007 14:39	1.0		25			1	
080	156_80	SAMPLE	195214-007	126004	Water	06-JUN-2007 15:28	100.0		25				
081	156_81	SAMPLE	195214-010	126004	Water	06-JUN-2007 15:45	100.0	1	25				1:CL=27.0839
082	156_82	SAMPLE	195214-006	126004	Water	06-JUN-2007 16:03	100.0		25				
083	156_83	SAMPLE	195214-008	126004	Water	06-JUN-2007 16:20	100.0		25				
084	156_84	SAMPLE	195214-005	126004	Water	06-JUN-2007 16:37	100.0		25				
085	156_85	SAMPLE	195214-003	126004	Water	06-JUN-2007 16:55	100.0		25				
086	156_86	SAMPLE	195214-002	126004	Water	06-JUN-2007 17:22	100.0		25				
088	156_88	CCV	M	126004		06-JUN-2007 17:57	1.0		25			1	
089	156_89	CCB		126004		06-JUN-2007 18:14	1.0		25				
090	156_90	SAMPLE	195214-004	126004	Water	06-JUN-2007 18:37	100.0		25				
091	156_91	SAMPLE	195214-009	126004	Water	06-JUN-2007 18:55	100.0		25				
092	156_92	MSS	195234-001	126004	Water	06-JUN-2007 19:30	1.0		25				
093	156_93	MSS	195234-003	126004	Water	06-JUN-2007 19:47	1.0	1	25				1:CL=144.385
095	156_95	MSS	195234-003	126004	Water	06-JUN-2007 22:26	10.0	1	25				1:CL=21.1749
096	156_96	SAMPLE	195234-002	126004	Water	06-JUN-2007 22:43	1.0	2	25				2:SO4=52.7228

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627225264 Instrument: IC03 Ion Chromatograph Begun: 05-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
097	156_97	SAMPLE	195234-004	126004	Water	06-JUN-2007 23:00	1.0			25				
098	156_98	SAMPLE	195234-005	126004	Water	06-JUN-2007 23:18	1.0	1		25				1:CL=145.123
100	156_100	X	H	126004		06-JUN-2007 23:53	1.0	2		25			1	
101	156_101	CCB		126004		07-JUN-2007 00:10	1.0			25				
102	156_102	CCV	H	126004		07-JUN-2007 00:27	1.0			25			1	
104	156_104	SAMPLE	195214-010	126004	Water	07-JUN-2007 01:02	200.0			25				
105	156_105	SAMPLE	195214-009	126004	Water	07-JUN-2007 01:20	50.0	1		25				1:CL=29.8538
106	156_106	SAMPLE	195214-007	126004	Water	07-JUN-2007 01:37	10.0	2		25				2:SO4=334.391
107	156_107	SAMPLE	195214-008	126004	Water	07-JUN-2007 01:55	10.0	1		25				1:CL=117.385
108	156_108	SAMPLE	195214-002	126004	Water	07-JUN-2007 02:12	10.0	2		25				2:SO4=314.545
109	156_109	SAMPLE	195214-006	126004	Water	07-JUN-2007 02:29	5.0	1		25				1:CL=51.9645
110	156_110	SAMPLE	195214-010	126004	Water	07-JUN-2007 02:47	5.0	1		25				1:CL=224.158
111	156_111	SAMPLE	195214-003	126004	Water	07-JUN-2007 03:04	2.0	1		25				1:SO4=417.267
113	156_113	SAMPLE	195214-005	126004	Water	07-JUN-2007 03:39	2.0	1		25				1:SO4=421.782
115	156_115	SAMPLE	195214-004	126004	Water	07-JUN-2007 04:14	1.0			25				
117	156_117	CCV	M	126004		07-JUN-2007 04:49	1.0			25			1	
118	156_118	CCB		126004		07-JUN-2007 05:06	1.0			25				
121	156_121	MS	QC391173	126004	Water	07-JUN-2007 05:58	1.02		2	25			1	1:CL=23.3380
122	156_122	MSD	QC391174	126004	Water	07-JUN-2007 06:16	1.02		2	25			1	1:CL=23.4444
124	156_124	MS	QC391173	126004	Water	07-JUN-2007 06:51	1.02		2	25			1	1:CL=23.4132
125	156_125	MSD	QC391174	126004	Water	07-JUN-2007 07:08	1.02		2	25			1	1:CL=23.3213
127	156_127	MS	QC391251	126004	Water	07-JUN-2007 07:43	10.0		2	25			1	
128	156_128	MSD	QC391252	126004	Water	07-JUN-2007 08:00	10.0		2	25			1	
130	156_130	MS	QC391251	126004	Water	07-JUN-2007 08:35	10.0		2	25			1	
131	156_131	MSD	QC391252	126004	Water	07-JUN-2007 08:52	10.0		2	25			1	
133	156_133	X	H	126004		07-JUN-2007 09:27	1.0	4		25			1	
134	156_134	CCB		126004		07-JUN-2007 09:45	1.0			25				
135	156_135	CCV	H	126004		07-JUN-2007 10:02	1.0			25			1	

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
009	158_9	X	L			07-JUN-2007 13:09	1.0	4		25			1	
010	158_10	CCV	L			07-JUN-2007 13:45	1.0	2		25			1	
012	158_12	CCB/MB	QC391314	126059	Water	07-JUN-2007 14:26	1.0			25				
013	158_13	BS	QC391315	126059	Water	07-JUN-2007 14:43	1.0			25			1	
014	158_14	BSD	QC391316	126059	Water	07-JUN-2007 15:01	1.0			25			1	
015	158_15	SAMPLE	195241-004	126059	Water	07-JUN-2007 15:29	5.0			25				
016	158_16	MSS	195234-001	126059	Water	07-JUN-2007 15:52	1.0			25				
017	158_17	MS	QC391337	126059	Water	07-JUN-2007 16:09	1.02			25			1	
018	158_18	MSD	QC391338	126059	Water	07-JUN-2007 16:26	1.02			25			1	
019	158_19	SAMPLE	195265-006	126059	Water	07-JUN-2007 17:16	100.0			25				
020	158_20	SAMPLE	195270-016	126059	Water	07-JUN-2007 17:58	100.0			25				
021	158_21	CCV	M	126059		07-JUN-2007 18:33	1.0			25			1	
022	158_22	CCB		126059		07-JUN-2007 18:50	1.0			25				
023	158_23	SAMPLE	195265-001	126059	Water	07-JUN-2007 20:16	100.0			25				
024	158_24	SAMPLE	195265-002	126059	Water	07-JUN-2007 21:16	100.0			25				
025	158_25	SAMPLE	195265-003	126059	Water	07-JUN-2007 21:33	50.0			25				
026	158_26	SAMPLE	195270-008	126059	Water	07-JUN-2007 21:50	50.0			25				
027	158_27	MSS	195270-007	126059	Water	07-JUN-2007 22:08	50.0	1		25				
029	158_29	MS	QC391437	126059	Water	07-JUN-2007 22:43	50.0			25			1	
030	158_30	MSD	QC391438	126059	Water	07-JUN-2007 23:00	50.0			25			1	
032	158_32	SAMPLE	195270-003	126059	Water	07-JUN-2007 23:35	10.0			25				
033	158_33	SAMPLE	195270-011	126059	Water	07-JUN-2007 23:52	10.0			25				
034	158_34	SAMPLE	195270-010	126059	Water	08-JUN-2007 00:10	10.0			25				
036	158_36	CCV	H	126059		08-JUN-2007 00:44	1.0			25			1	
037	158_37	CCB		126059		08-JUN-2007 01:02	1.0	1		25				
040	158_40	SAMPLE	195270-018	126059	Water	08-JUN-2007 01:54	10.0			25				
041	158_41	SAMPLE	195265-006	126059	Water	08-JUN-2007 02:11	5.0	2		25				2:SO4=307.196
042	158_42	SAMPLE	195265-001	126059	Water	08-JUN-2007 02:29	5.0	1		25				1:SO4=319.354
043	158_43	SAMPLE	195265-002	126059	Water	08-JUN-2007 02:46	5.0	1		25				1:SO4=318.946
044	158_44	SAMPLE	195270-016	126059	Water	08-JUN-2007 03:04	3.0	1		25				1:CL=135.740
046	158_46	SAMPLE	195270-018	126059	Water	08-JUN-2007 03:39	1.0	1		25				1:CL=45.2684

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
048	158_48	SAMPLE	195265-003	126059	Water	08-JUN-2007 04:13	1.0	1		25				1:SO4=509.677
050	158_50	SAMPLE	195270-003	126059	Water	08-JUN-2007 04:48	1.0	3		25				3:CL=77.9724
052	158_52	SAMPLE	195270-010	126059	Water	08-JUN-2007 05:23	1.0	2		25				2:SO4=71.9237
054	158_54	SAMPLE	195270-008	126059	Water	08-JUN-2007 05:58	1.0	3		25				3:CL=157.193
056	158_56	X	M	126059		08-JUN-2007 06:33	1.0	1		25			1	
057	158_57	CCB		126059		08-JUN-2007 06:50	1.0			25				
058	158_58	CCV	M	126059		08-JUN-2007 07:07	1.0			25			1	
060	158_60	MSS	195270-007	126059	Water	08-JUN-2007 07:42	1.0	4		25				3:CL=152.910
062	158_62	SAMPLE	195270-011	126059	Water	08-JUN-2007 08:17	1.0	2		25				2:SO4=71.7433
064	158_64	X	H	126059		08-JUN-2007 08:52	1.0	3		25			1	
065	158_65	CCB		126059		08-JUN-2007 09:09	1.0	1		25				
066	158_66	CCV	H	126059		08-JUN-2007 09:27	1.0			25			1	

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Sequence: 627234079 Instrument: IC03 Ion Chromatograph Begun: 11-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	162_9	X	L			11-JUN-2007 13:19	1.0	6	25			1	
010	162_10	CCV	L			11-JUN-2007 13:53	1.0	1	25			1	
011	162_11	CCB/MB	QC391785	126184	Water	11-JUN-2007 17:17	1.0	1	25				
012	162_12	BS	QC391786	126184	Water	11-JUN-2007 17:34	1.0	2	25			1	
013	162_13	BSD	QC391787	126184	Water	11-JUN-2007 17:52	1.0	2	25			1	
015	162_15	MSS	195234-002	126184	Water	11-JUN-2007 20:45	5.0	3	25				
016	162_16	SAMPLE	195234-005	126184	Water	11-JUN-2007 21:02	20.0	3	25				
017	162_17	SAMPLE	195247-001	126184	Water	11-JUN-2007 21:20	20.0	3	25				
018	162_18	SAMPLE	195247-002	126184	Water	11-JUN-2007 21:37	20.0	3	25				
019	162_19	SAMPLE	195241-002	126184	Water	11-JUN-2007 21:54	20.0	4	25				1:CL=38.3195
020	162_20	SAMPLE	195241-007	126184	Water	11-JUN-2007 22:12	20.0	4	25				1:CL=38.1571
021	162_21	SAMPLE	195241-002	126184	Water	11-JUN-2007 22:29	10.0	4	25				1:CL=67.7637
023	162_23	CCV	M	126184		11-JUN-2007 23:04	1.0	1	25			1	
024	162_24	CCB		126184		11-JUN-2007 23:21	1.0		25				
025	162_25	X	M	126184		11-JUN-2007 23:39	1.0	1	25			1	
027	162_27	SAMPLE	195241-007	126184	Water	12-JUN-2007 00:14	10.0	3	25				1:CL=67.4744
028	162_28	SAMPLE	195247-002	126184	Water	12-JUN-2007 00:31	5.0	3	25				1:CL=57.2476
029	162_29	SAMPLE	195247-001	126184	Water	12-JUN-2007 00:48	5.0	3	25				1:CL=50.7985
031	162_31	MS	QC391870	126184	Water	12-JUN-2007 01:23	5.0	1	25			1	
032	162_32	MSD	QC391871	126184	Water	12-JUN-2007 01:41	5.0	1	25			1	
034	162_34	MS	QC391870	126184	Water	12-JUN-2007 02:16	5.0	1	25			1	
035	162_35	MSD	QC391871	126184	Water	12-JUN-2007 02:33	5.0	1	25			1	
037	162_37	CCV	H	126184		12-JUN-2007 03:08	1.0		25			1	
038	162_38	CCB		126184		12-JUN-2007 03:25	1.0	1	25				

Stds used: 1=S6107

REPORTING SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195234-001	IC03	06/06/07 19:30	1.0					
195234-001	IC03	06/07/07 15:52	1.0	+	+	+	+	+
195234-002	IC03	06/06/07 22:43	1.0	+		+	+	
195234-002	IC03	06/11/07 20:45	5.0		+			+
195234-003	IC03	06/06/07 19:47	1.0	+		+	+	+
195234-003	IC03	06/06/07 22:26	10.0					
195234-003	IC01	06/07/07 16:24	20.0		+			
195234-004	IC03	06/06/07 23:00	1.0	+	+	+	+	+
195234-005	IC03	06/06/07 23:18	1.0	+		+	+	+
195234-005	IC03	06/11/07 21:02	20.0		+			
QC391102	IC03	06/06/07 14:04	1.0	+	+	+	+	+
QC391103	IC03	06/06/07 14:21	1.0	+	+	+	+	+
QC391104	IC03	06/06/07 14:39	1.0	+	+	+	+	+
QC391173	IC03	06/07/07 05:58	1.02					
QC391173	IC03	06/07/07 06:51	1.02					
QC391174	IC03	06/07/07 06:16	1.02					
QC391174	IC03	06/07/07 07:08	1.02					
QC391251	IC03	06/07/07 07:43	10.0					
QC391251	IC03	06/07/07 08:35	10.0					
QC391252	IC03	06/07/07 08:00	10.0					
QC391252	IC03	06/07/07 08:52	10.0					
QC391314	IC03	06/07/07 14:26	1.0	+	+	+	+	+
QC391315	IC03	06/07/07 14:43	1.0	+	+	+	+	+
QC391316	IC03	06/07/07 15:01	1.0	+	+	+	+	+
QC391337	IC03	06/07/07 16:09	1.02	+	+	+	+	+
QC391338	IC03	06/07/07 16:26	1.02	+	+	+	+	+
QC391437	IC03	06/07/07 22:43	50.0	+	+	+	+	+
QC391438	IC03	06/07/07 23:00	50.0	+	+	+	+	+
QC391320	IC01	06/07/07 14:55	1.0	+	+	+	+	+
QC391321	IC01	06/07/07 15:12	1.0	+	+	+	+	+

00291

REPORTING SUMMARY FOR 195234 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC391322	IC01	06/07/07 15:30	1.0	+	+	+	+	+	
QC391339	IC01	06/07/07 16:42	20.0	+	+	+	+	+	
QC391340	IC01	06/07/07 16:59	20.0	+	+	+	+	+	
QC391785	IC03	06/11/07 17:17	1.0	+	+	+	+	+	
QC391786	IC03	06/11/07 17:34	1.0	+	+	+	+	+	
QC391787	IC03	06/11/07 17:52	1.0	+	+	+	+	+	
QC391870	IC03	06/12/07 01:23	5.0	+	+	+	+	+	
QC391870	IC03	06/12/07 02:16	5.0						
QC391871	IC03	06/12/07 01:41	5.0	+	+	+	+	+	
QC391871	IC03	06/12/07 02:33	5.0						

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/27/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

00296

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	Lab ID	Result	RL
231GW20	SAMPLE	195234-001	ND	0.04
231GW06	SAMPLE	195234-002	ND	0.04
231GW13	SAMPLE	195234-003	ND	0.04
DUP0605072A	SAMPLE	195234-004	ND	0.04
DUP0605072B	SAMPLE	195234-005	ND	0.04
	BLANK	QC391812	ND	0.04

ND= Not Detected
RL= Reporting Limit

15.0

: 00297

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
231GW20	MS	195234-001	QC391813	<0.04000	0.2667	0.2240	84	75-125		
231GW20	MSD	195234-001	QC391814		0.2667	0.2202	83	75-125	2	20
231GW13	MS	195234-003	QC391815	<0.04000	0.2667	0.2051	77	75-125		
231GW13	MSD	195234-003	QC391816		0.2667	0.2041	77	75-125	0	20
	LCS		QC391817		0.2667	0.2442	92	75-125		

RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	**06/12/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/12/07**
Wavelength:	626 nm	Batch:	**126192**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1486	0.2442	0.2668	92%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1463	0.2405	0.2668	90%	90 - 110%
CCB	0.0026	0.0043	0.0000		
CCV	0.1479	0.2431	0.2668	91%	90 - 110%
CCB	0.0012	0.0020	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: 126192
Prep Date: 06/12/07
Analysis Date: 06/12/07
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1486		**0.24424**	0.040	0.0500	40.0000	0.2667	**92**	
195234-1	7.5000	1.0000	0.0003		**ND**	0.040					
195234-1ms	7.5000	1.0000	0.1363		**0.22402**	0.040	0.0500	40.0000	0.2667	**84**	
195234-1msd	7.5000	1.0000	0.1340		**0.22024**	0.040	0.0500	40.0000	0.2667	**83**	**2**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

195234-3	7.5000	1.0000	0.0093		**ND**	0.040					
195234-3ms	7.5000	1.0000	0.1248		**0.20512**	0.040	0.0500	40.0000	0.2667	**77**	
195234-3msd	7.5000	1.0000	0.1242		**0.20414**	0.040	0.0500	40.0000	0.2667	**77**	**0**
195234-2	7.5000	1.0000	0.0093		**ND**	0.040					
195234-4	7.5000	1.0000	0.0106		**ND**	0.040					
195234-5	7.5000	1.0000	0.0086		**ND**	0.040					
195241-4	7.5000	1.0000	0.0080		**ND**	0.040					
195241-5	7.5000	1.0000	0.0079		**ND**	0.040					
195270-10	7.5000	1.0000	0.0045		**ND**	0.040					
195270-11	7.5000	1.0000	0.0047		**ND**	0.040					

bw 6-12-07

Reviewed by/ Date: SY 6/18/07

Date : 6/12/2007 Time : 11:12:31

Concentration Results

Date: 6/12/2007 Time: 10:52:52 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 126192.RCO
Autozero performed: 6/12/2007 10:52:41 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
626.0	0.0	ICBMB	0.0000	1.0000	0.0000	mg/L	
626.0	0.0	~~CCVLCS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	
626.0	0.0	CCVLCS	0.1486	1.0000	0.2259	mg/L	
626.0	0.0	~~234-1~~	~~0.0460~~	~~1.0000~~	~~0.0700~~	~~mg/L~~	
626.0	0.0	~~234-1~~	~~0.0468~~	~~1.0000~~	~~0.0711~~	~~mg/L~~	
626.0	0.0	234-1	0.0003	1.0000	0.0004	mg/L	
626.0	0.0	234-1MS	0.1363	1.0000	0.2073	mg/L	
626.0	0.0	234-1MSD	0.1340	1.0000	0.2038	mg/L	
626.0	0.0	234-2	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	234-3	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	~~234-3MS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	
626.0	0.0	234-3MS	0.1248	1.0000	0.1898	mg/L	
626.0	0.0	234-3MSD	0.1242	1.0000	0.1889	mg/L	
626.0	0.0	234-4	0.0106	1.0000	0.0161	mg/L	
626.0	0.0	~~CCV~~	~~0.1456~~	~~1.0000~~	~~0.2214~~	~~mg/L~~	
626.0	0.0	CCV	0.1463	1.0000	0.2225	mg/L	
626.0	0.0	~~CCB~~	~~0.0101~~	~~1.0000~~	~~0.0153~~	~~mg/L~~	
626.0	0.0	CCB	0.0026	1.0000	0.0040	mg/L	
626.0	0.0	234-5	0.0086	1.0000	0.0131	mg/L	
626.0	0.0	241-4	0.0080	1.0000	0.0122	mg/L	
626.0	0.0	241-5	0.0079	1.0000	0.0120	mg/L	
626.0	0.0	270-10	0.0045	1.0000	0.0069	mg/L	
626.0	0.0	270-11	0.0047	1.0000	0.0071	mg/L	
626.0	0.0	CCV	0.1479	1.0000	0.2249	mg/L	
626.0	0.0	CCB	0.0012	1.0000	0.0019	mg/L	
626.0	0.0	sam20	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam21	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam22	0.0000	1.0000	0.0000*	mg/L	Sample skipped

gw 6-12-07

CALIBRATION

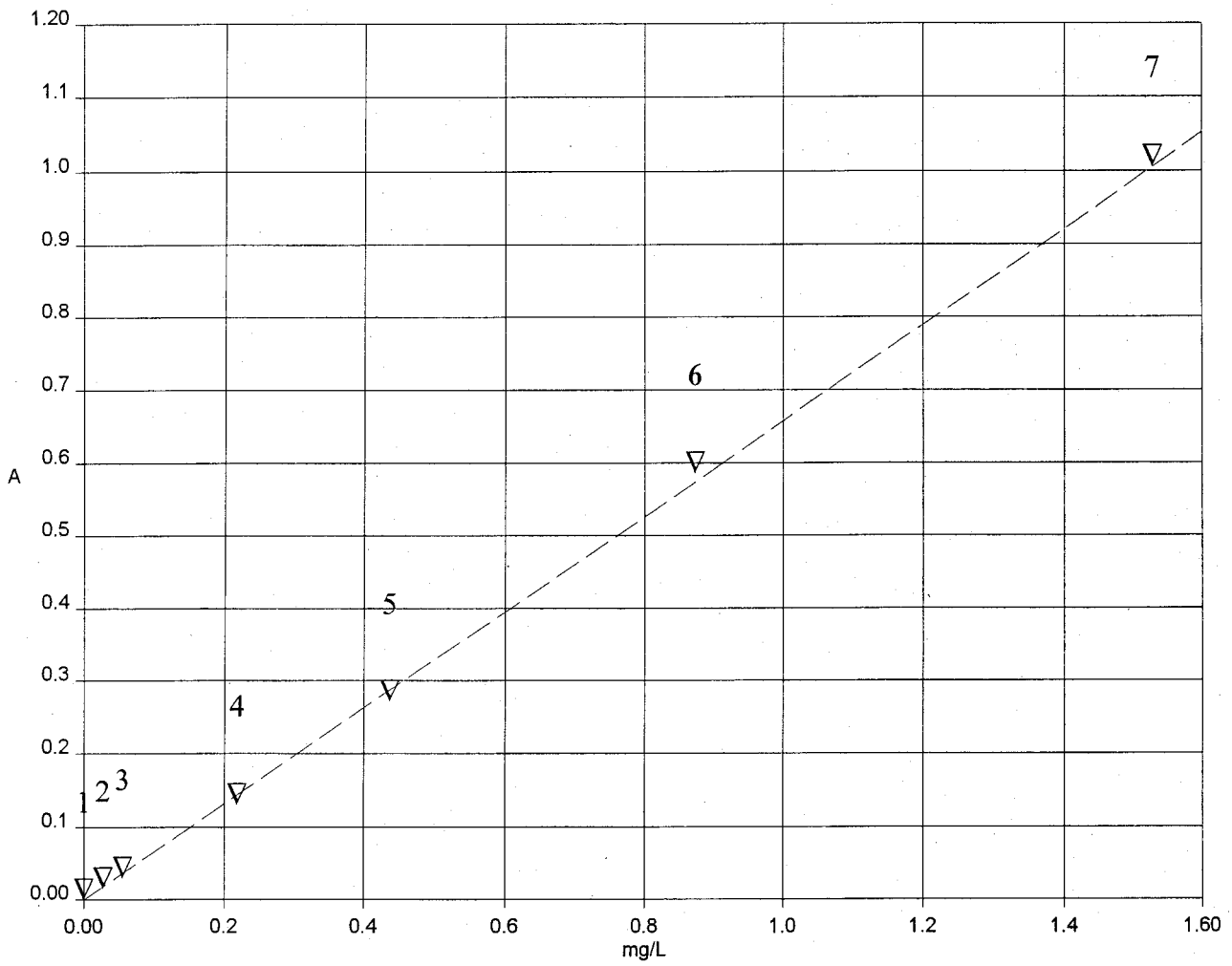
Date: 6/12/2007 Time: 10:52:42 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
626.0	0.0	ss1106.A01	0.0000	mg/L	0.0000	
626.0	0.0	ss1106.A02	0.0270	mg/L	0.0150	
626.0	0.0	ss1106.A03	0.0550	mg/L	0.0301	
626.0	0.0	ss1106.A04	0.2180	mg/L	0.1302	
626.0	0.0	ss1106.A05	0.4370	mg/L	0.2716	
626.0	0.0	ss1106.A06	0.8730	mg/L	0.5861	
626.0	0.0	ss1106.A07	1.5290	mg/L	1.0054	

Equation: y = 6.576329e-01 * x

Residual error: 0.010105
Correlation coefficient: 0.999641

Calibration Curve



Spectrum Name: SULFIDE

Description: y = 6.576329e-01 * x

Comments: RE = 1.010533e-02, CC = 9.996406e-01

Date Created: Thu Nov 16 09:51:35 2006

PROJECT 195234 Treadwell 195241, 195270 Notebook No. Bk 2506

Sulfide EPA 376.2 B 126192

Sample	Vol (ml)	Final Vol (ml)	Abs
195234-1	7.5	7.5	.0003
-1MS			.1363
-1MSD			.1340
-2			.0093
-3			.0093
-3MS	+.05ml (40 mg/L	S=std. from 0455292)	.1248
-3MSD	Same as MS		.1242
-4			.0106
-5			.0086
195241-4			.0080
-5			.0079
195270-10			.0045
-11			.0047
LCB/MB			.0000
LCV/LCS	Same as MS		.1486
CCV			.1453
CCB			.0026
CCV			.1479
CCB			.0012

S=std.
≈.4g 0455292 + 50ml DI H2O
1.0ml S= .1250
5.0ml I .025N -.075
3.0ml S2O3 .025N .050×16000 / 1.0ml = 800.0mg/L

1:20 = 40.0mg/L
.05 — 7.5 = .2668 mg/L

Dm 6.12.07 DMP 6/14/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126192
Date Started: 12-JUN-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-002			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-003			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195270-010			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
195270-011			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
QC391812	BLANK			Water	SULFIDE	
QC391813	MS	of 195234-001		Water	SULFIDE	
QC391814	MSD	of 195234-001		Water	SULFIDE	
QC391815	MS	of 195234-003		Water	SULFIDE	
QC391816	MSD	of 195234-003		Water	SULFIDE	
QC391817	LCS			Water	SULFIDE	

Curtis & Tompkins, Ltd.

Analysis:	Sulfide	Analysis Date:	1/24/2007
Method:	EPA 376.2	Analyst:	SY
Instrument:	**Perkin-Elmer Spectrometer**		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.0821
Units:	mg/L
1	0.06624
2	0.06476
3	0.06180
4	0.06328
5	0.05769
6	0.06295
7	0.05670
Average:	0.062
Std Deviation:	0.0035307
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0111** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS

✓ PKW 2/28/07

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126214
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	Lab ID	Result	RL
231GW20	SAMPLE	195234-001	42	10
231GW06	SAMPLE	195234-002	420	10
231GW13	SAMPLE	195234-003	810	10
DUP0605072A	SAMPLE	195234-004	90	10
DUP0605072B	SAMPLE	195234-005	840	10
	BLANK	QC391928	ND	10

ND= Not Detected
RL= Reporting Limit

53.1

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195234	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126214
Matrix:	Water	Analyzed:	06/12/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received
	BS		QC391929		100.0	84.00		84	75-126			1.000		
	BSD		QC391930		100.0	102.0		102	75-126	19	21	1.000		
ZZZZZZZZZZ	SDUP	195276-002	QC391935	29,180		29,980	100.0			3	24	10.00	06/07/07	06/07/07
231GW20	SDUP	195234-001	QC392734	42.00		68.00	10.00			47 *	24	1.000	06/05/07	06/06/07
231GW13	SDUP	195234-003	QC392735	814.0		858.0	10.00			5	24	1.000	06/05/07	06/06/07
LF4GW104	SDUP	195241-003	QC392736	1,116		1,206	10.00			8	24	1.000	06/05/07	06/06/07
BB3GW100	SDUP	195247-006	QC392737	756.0		812.0	10.00			7	24	1.000	06/05/07	06/06/07

*= Value outside of QC limits; see narrative
RL= Reporting Limit
RPD= Relative Percent Difference

54.1

Curtis & Tompkins, Ltd.

000330

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**12-Jun-07**
Matrix:	Water	Batch #:	**126214**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	58.2136	58.2140	0.0004	ND	10					
BS	50	1	55.1973	55.2015	0.0042	84.0	10	1,000	5	100	**84**	
BSD	50	1	54.5464	54.5515	0.0051	102.0	10	1,000	5	100	**102**	**19.35**
195234-001	50	1	56.4345	56.4366	0.0021	42.0	10					
SDUP	50	1	51.6893	51.6927	0.0034	68.0	10					**47.27 ***
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10					
SDUP	50	1	53.7581	53.8010	0.0429	858.0	10					**5.26**
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10					
SDUP	50	1	56.5424	56.6027	0.0603	1,206.0	10					**7.75**
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10					
SDUP	50	1	58.2072	58.2478	0.0406	812.0	10					**7.14**
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100					
SDUP	5	10	29.0120	29.1619	0.1499	29,980.0	100					**2.70**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195234-001	50	1	56.4345	56.4362	0.0017	34.0	10
195234-002	50	1	56.1267	56.1476	0.0209	418.0	10
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10
195234-004	50	1	51.5206	51.5251	0.0045	90.0	10
195234-005	50	1	53.7383	53.7803	0.0420	840.0	10
195241-002	45	1.111	50.6462	50.7785	0.1323	2,940.0	11
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10
195241-004	50	1	55.0726	55.0959	0.0233	466.0	10
195241-005	50	1	53.4748	53.4954	0.0206	412.0	10
195241-007	50	1	54.0442	54.1836	0.1394	2,788.0	10
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100
195276-003	5	10	26.0931	26.2058	0.1127	22,540.0	100
195276-004	5	10	25.4312	25.5414	0.1102	22,040.0	100
195276-005	50	1	55.1482	55.2264	0.0782	1,564.0	10
195276-006	50	1	54.9902	55.0785	0.0883	1,766.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMR 6/18/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126214

Prep Date: 6/12/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **56**

Filter Mfg/ Lot#: Env. Exp. 655758
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/12/07	6/13/07	6/13/07	6/13/07	6/13/07	6/13/07
Time:	15:15	8:00	9:50	10:30	11:45	12:45
Temp (C):	90	180	180	180	180	180

Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
MB		50	G5	58.2136	58.2140	58.2140	X
BS		↓	GEE	55.1973	55.2019	55.2015	X
BSD		↓	G44	54.5464	54.5527	54.5520	54.5515
195234-1 S	150.5	50	G00D	56.4345	56.4346	56.4362	X
SDUP-1 ↓	↓	↓	GIVE	51.6893	51.6931	51.6917	51.6932
-2 G	612	↓	G0P	56.1267	56.1476	56.1476	X
-3 S	1320	↓	G41	54.1641	54.2058	54.2048	X
SDUP-3 ↓	↓	↓	G43	53.7581	53.8007	53.8010	X
-4 I	1514	↓	GREP	51.5206	51.5259	51.5248	51.5251
-5 G	1364	↓	G55	53.7383	53.7808	53.7803	X
195241-2 B	4030	45	ELF	50.6462	50.7788	50.7785	X
-3 A	1809	50	PET	58.3177	58.3744	58.3731	58.3735
SDUP-3 ↓	↓	↓	G1A	56.5424	56.6029	56.6027	X
-4 G	694	↓	GRAZE	55.0726	55.0962	55.0959	X
-5 ↓	630	↓	G42	53.4748	53.4959	53.4954	X
-7 B	3820	↓	G38	54.0442	54.1860	54.1840	54.1836
195247-6 H	1290	50	GULF	58.3492	58.3897	58.3887	58.3904
SDUP-6 ↓	↓	↓	GAVEL	58.2072	58.2504	58.2489	58.2473
195276-2 B	35,100	5	OAMO	27.4540	27.5977	27.6003	27.5999
SDUP-2 ↓	↓	↓	LA	29.0120	29.1592	29.1623	29.1619
-3 A	27,600	↓	7	26.0931	26.2040	26.2060	26.2058
-4 B	26,200	↓	BOMB	25.4312	25.5403	25.5419	25.5414
-5 A	2670	50	G34	55.1482	55.2379	55.2369	55.2264
-6 L	2690	↓	G40	54.9902	55.0786	55.0785	X

* Constant weight must be within 0.0005 from previous reading.

6/12/07
Analyst / Date

6/13/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 1 2 6 2 1 Y 0 0 4 4

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2421**
Page: **57**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	6/13/07	6/14/07	6/14/07	~~6/18~~ 6/18/07		
Time:	13:50	9:30	10:30	9:00		
Temp (C):	180	180	180	180		

	Sample #/ Letter	EC Value (uS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	X							
	X							
	X							
	X							
5	51.1927	X						
	X							
	X							
	X							
	X							
10	X							
	X							
	X							
	X							
	X							
15	X							
	X							
	58.3871	58.3870	X					
3	58.2478	X						
	X							
20	X							
	X							
	X							
4	X							
	X							

* Constant weight must be within 0.0005 from previous reading.

6/13/07
Analyst / Date

6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126214
Date Started: 12-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-007			Treadwell & Rollo	Water	TDS	18-JUN-2007
195247-006			Treadwell & Rollo	Water	TDS	18-JUN-2007
195276-002			Innovative Technic	Water	TDS	13-JUN-2007
195276-003			Innovative Technic	Water	TDS	13-JUN-2007
195276-004			Innovative Technic	Water	TDS	13-JUN-2007
195276-005			Innovative Technic	Water	TDS	13-JUN-2007
195276-006			Innovative Technic	Water	TDS	13-JUN-2007
QC391928	BLANK			Water	TDS	
QC391929	BS			Water	TDS	
QC391930	BSD			Water	TDS	
QC391935	SDUP	of 195276-002		Water	TDS	
QC392734	SDUP	of 195234-001		Water	TDS	
QC392735	SDUP	of 195234-003		Water	TDS	
QC392736	SDUP	of 195241-003		Water	TDS	
QC392737	SDUP	of 195247-006		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195241

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID
LF10GW03	195241-001
LF4GW103	195241-002
LF4GW104	195241-003
231GW09	195241-004
231GW28	195241-005
LF10GW100	195241-006
DUP0605073A	195241-007
TB0605073A	195241-008

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/27/2007
Project Manager

Signature: _____ Date: 06/28/2007
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195241**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/06/07**
Samples Received:	**06/06/07**

This hardcopy data package contains sample and QC results for eight water samples, requested for the above referenced project on 06/06/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 05/03/07 13:35; this analyte was not detected at or above the RL in the associated samples. High response was observed for vinyl acetate in the CCV analyzed 06/08/07 08:49; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Metals (EPA 6020):
Low recovery was observed for calcium in the MS of BB3GW100 (lab # 195247-006); the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
High recoveries were observed for fluoride in the MS/MSD of BB3GW100 (lab # 195247-006); the BS/BSD were within limits, and the associated RPD was within limits. The diluted nitrate result for sample 231GW09 (lab # 195241-004) was acquired three hours past the recommended hold time. The original undiluted result was analyzed within hold time but was over the linear calibration range. The associated nitrite result was acquired within hold time; no nitrite was detected in the sample. No other analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
High RPD was observed for total dissolved solids in the SDUP of 231GW20 (lab

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195241**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/06/07**
Samples Received:	**06/06/07**

Total Dissolved Solids (TDS) (EPA 160.1):

195234-001). No other analytical problems were encountered.

#
49.2

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

195241

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2160
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): Blaine Tech Brian Proud
Recorder (signature required): [signature]
Sent to Laboratory (Name): Curtis + Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260), MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total Sulfide	Metals - dissolved (4)					COMMENTS / NOTES
-1	LF10GW03	6-5-07	1015			X		3				1	X	X	X														
-2	LF4GW103		1105			X				1		2					X				X			X					
-3	LF4GW104		1140			X				3		6					X				X			X					MS/MSD
-4	231GW09		1250			X		6		1		4	X	X	X	X	X				X		X	X					
-5	231GW28		1320			X		6		1		4	X	X	X	X	X				X		X	X					
-6	LF10GW100		1355			X		3				1	X	X	X														
-7	DVP060507 3A		—			X				1		2	•			•	X				X			X					
-8	TB060507 3A	6-5-07	—			X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 6/6/7	RECEIVED BY: [signature]	DATE: 6/6/7
PRINT NAME: Brian Proud FIRM: BTS	TIME: 1400	PRINT NAME: AARON GREDITOR FIRM: CFT	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195241 Date Received: 6/6/07 Number of Coolers: 5
Client: Treadwell & Rollo Project: Presidio of SF

A. Preliminary Examination Phase
Date Opened: 6/6/07 By (print): S Montecalvo (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? 1-lid of coolers Seal date: 6/6/07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: 5.3°, 2.3°, 3.9°, 3.7°, 2.6°

B. Login Phase
Date Logged In: 6/6/07 By (print): S Montecalvo (sign) [signature]

1. Describe type of packing in cooler: ziplock bags
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

SM 6/6

Additional Comments:
(B4) Sample labeled "231GW2d" COC="231GW28" ⇒ only one bottle. ID'd by process of elimination ⇒ No bottle ~~for~~ sent labeled "231GW28" that was field filtered/preserved with HNO3

: 00005

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126058
Units:	ug/L	Sampled:	06/05/07
Diln Fac:	1.000	Received:	06/06/07

Field ID:	LF10GW03	Lab ID:	195241-001
Type:	SAMPLE	Analyzed:	06/08/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	87	65-135
Bromofluorobenzene (FID)	97	65-135

Field ID:	231GW09	Lab ID:	195241-004
Type:	SAMPLE	Analyzed:	06/08/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	65-135
Bromofluorobenzene (FID)	99	65-135

Field ID:	231GW28	Lab ID:	195241-005
Type:	SAMPLE	Analyzed:	06/08/07

Analyte	Result	RL
Gasoline C7-C12	53 Y	50

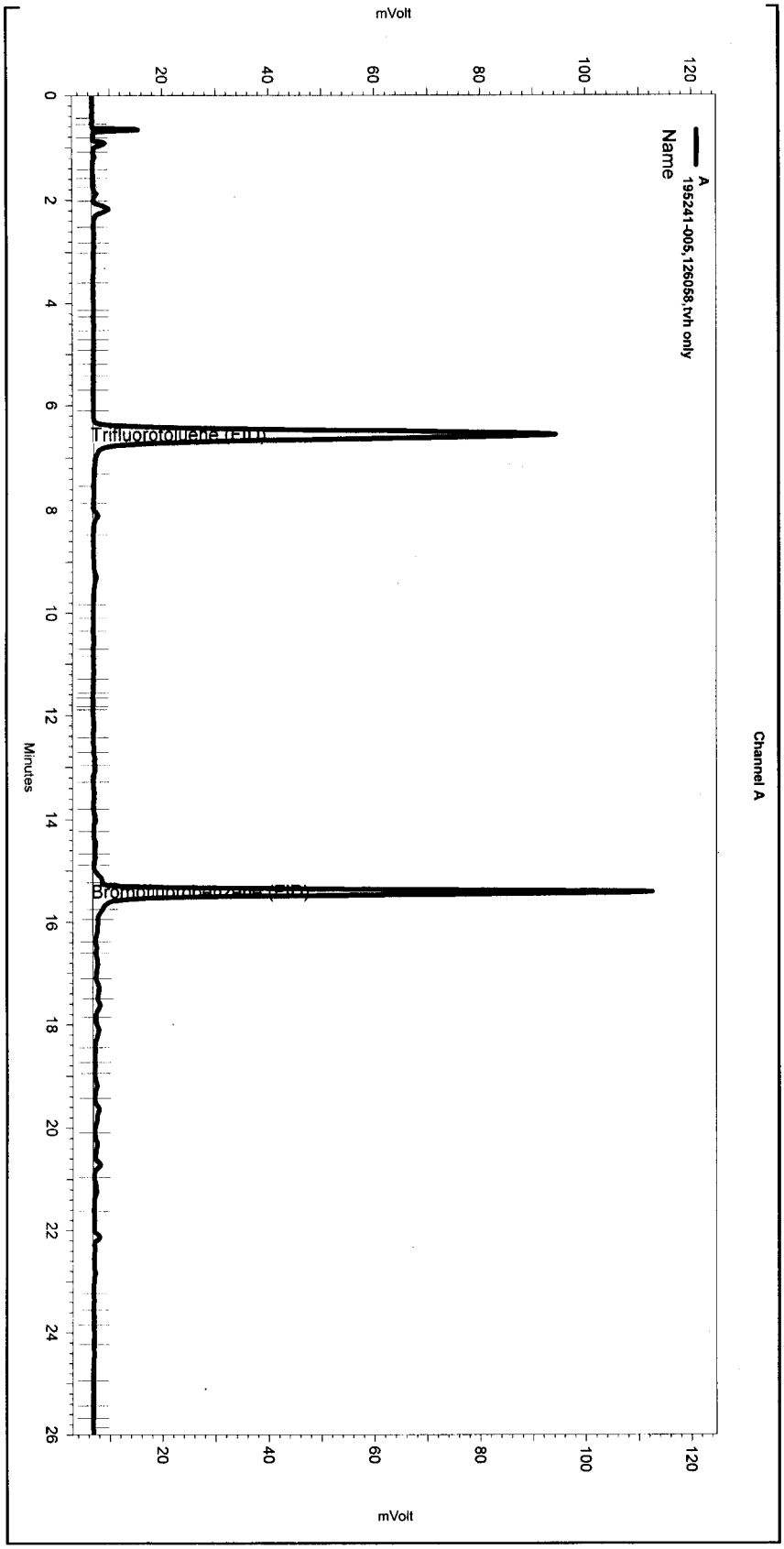
Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	104	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

2.0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\158.seq
Sample Name: **195241-005,126058,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\158_020
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe121.met

Software Version 3.1.7
Run Date: 6/8/2007 9:05:23 AM
Analysis Date: 6/8/2007 9:48:10 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: A1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\158_020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	15.239	0	0
Yes	Split Peak	15.757	0	0

231GW28

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126058
Units:	ug/L	Sampled:	06/05/07
Diln Fac:	1.000	Received:	06/06/07

Field ID:	LF10GW100	Lab ID:	195241-006
Type:	SAMPLE	Analyzed:	06/08/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	65-135
Bromofluorobenzene (FID)	105	65-135

Type:	BLANK	Analyzed:	06/07/07
Lab ID:	QC391309		

Analyte	Result	RL
Gasoline C7-C12	ND	50

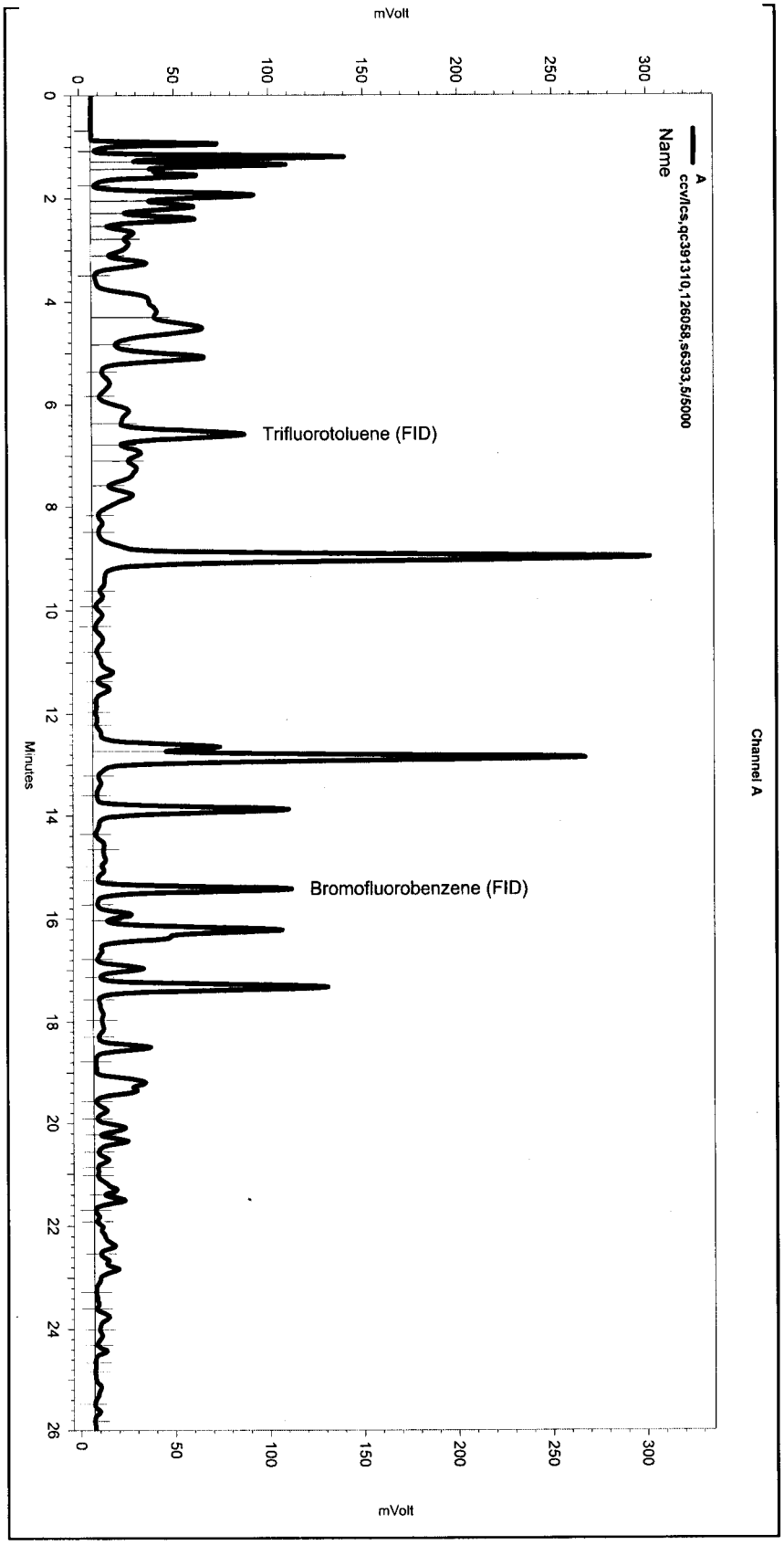
Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	65-135
Bromofluorobenzene (FID)	100	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

2.0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\158.seq**
Sample Name: **ccv/lcs,qc391310,126058,s6393,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\158_002**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe121.met

Software Version 3.1.7
Run Date: 6/7/2007 1:55:38 PM
Analysis Date: 6/8/2007 8:37:02 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\158_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

GASOLINE

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391310	Batch#:	126058
Matrix:	Water	Analyzed:	06/07/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,083	104	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	103	65-135

3.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	126058
MSS Lab ID:	195231-002	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/07/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391311

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	14.68	2,000	1,968	98	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	105	65-135

Type: MSD Lab ID: QC391312

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,786	89	65-135	10	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	99	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum : 327026521002
Units : ng

Name : GC07 TFT/BFB 018
Date : 19-JAN-2007 12:55
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_032	327026521032	TFT/BFB_1	19-JAN-2007 12:55	S4684 (5000X)
L2	018_033	327026521033	TFT/BFB_2	19-JAN-2007 13:33	S4685 (5000X)
L3	018_034	327026521034	TFT/BFB_3	19-JAN-2007 14:10	S4686 (5000X)
L4	018_035	327026521035	TFT/BFB_4	19-JAN-2007 14:52	S4687 (5000X)
L5	018_036	327026521036	TFT/BFB_5	19-JAN-2007 19:21	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2247.7	2298.7	2226.0	2282.7	2173.3	AVRG		4.45E-4		2245.7	2	0.995	20	
Bromofluorobenzene (FID)	A	1710.0	1763.3	1734.3	1779.7	1740.0	AVRG		5.73E-4		1745.5	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	0	225.0	2	450.0	-1	675.0	2	950.0	-3
Bromofluorobenzene (FID)	A	150.0	-2	225.0	1	450.0	-1	675.0	2	950.0	0

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 GCVOA Water: EPA 8015B

Inst : GC07
Calnum : 327175586001
Units : ng

Name : GC07TVH121
Date : 01-MAY-2007 16:59
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	121_004	327175586004	TVH 1	01-MAY-2007 16:59	S5937 (1000X), S5839 (5000X)
L2	121_005	327175586005	TVH 2	01-MAY-2007 17:36	S5936 (1000X), S5839 (5000X)
L3	121_006	327175586006	TVH 3	01-MAY-2007 18:12	S5935 (1000X), S5839 (5000X)
L4	121_007	327175586007	TVH 4	01-MAY-2007 18:48	S5934 (2000X), S5839 (5000X)
L5	121_008	327175586008	TVH 5	01-MAY-2007 19:24	S5934 (1000X), S5839 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	1665.0	1432.7	1482.3	1391.7	1469.3	AVRG		6.72E-4		1488.2	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	12	2500	-4	10000	0	25000	-6	50000	-1

Analyst: JCP Date: 05/02/07 Reviewer: MCH Date: 05/02/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195241 GCVOA Water
EPA 8015B

Inst : GC07 Name : GC07TVH121
Calnum : 327175586001 Cal Date : 01-MAY-2007

ICV 327175586010 (121_010 01-MAY-2007) stds: S6066 (1000X), S5839 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1488.2	1397.9	10000	9394	ng	-6	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195241 GCVOA Water
EPA 8015B

Inst : GC07 Run Name : QC391310 IDF : 1.0
Seqnum : 327228445002.4 File : 158_002 Time : 07-JUN-2007 13:55
Standards: S6393 (1000X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327175586001	01-MAY-2007	1488.2	1549.6	10000	10410	ng	4	15	u
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2313.1	450.0	463.5	ng	3	15	u
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1803.3	450.0	464.9	ng	3	15	u

JCP: 06/08/07 LH: 06/11/07 CW: 06/13/07

u=use

327228445002.4

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCVOA Water
EPA 8015B

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 327228445013.1 File : 158_013 Time : 07-JUN-2007 22:21
Standards: S6393 (666.7X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327175586001	01-MAY-2007	1488.2	1443.5	15000	14550	ng	-3	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2464.5	450.0	493.9	ng	10	15	
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1881.4	450.0	485.1	ng	8	15	

JCP 06/08/07 : PID surrogates are not applicable. [general version]

JCP: 06/08/07 LH: 06/11/07 CW: 06/11/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCVOA Water
EPA 8015B

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 327228445014.1 File : 158_014 Time : 07-JUN-2007 22:58
Standards: S6393 (666.7X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327175586001	01-MAY-2007	1488.2	1446.3	15000	14580	ng	-3	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2654.7	450.0	532.0	ng	**18**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1904.5	450.0	491.0	ng	9	15	

JCP 06/08/07 : Trifluorotoluene (FID)A passes limits of 72-135% [general version]

JCP 06/08/07 : PID surrogates are not applicable. [general version]

JCP: 06/08/07 LH: 06/11/07 CW: 06/12/07

+=high bias c=CCV

327228445014.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCVOA Water
EPA 8015B

Inst : GC07 Run Name : TVH IDF : 1.0
Seqnum : 327228445022.1 File : 158_022 Time : 08-JUN-2007 10:17
Standards: S6393 (500X), S6108 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	327175586001	01-MAY-2007	1488.2	1405.5	20000	18890	ng	-6	15	
Trifluorotoluene (FID)	A	327026521002	19-JAN-2007	2245.7	2626.9	450.0	526.4	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	327026521002	19-JAN-2007	1745.5	1948.6	450.0	502.4	ng	12	15	

JCP 06/08/07 : Trifluorotoluene (FID)A passes limits of 72-135% [general version]

JCP 06/08/07 : PID surrogates are not applicable. [general version]

JCP: 06/08/07 LH: 06/11/07 CW: 06/12/07

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327026521

Instrument : GC07 Begun : 01/18/07 10:01
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	IB			01/18/07 10:01	1.0	1
002	018_002	X	IB			01/18/07 10:49	1.0	1
003	018_003	X	MBTXE			01/18/07 11:25	1.0	2 1
004	018_004	X	TVH			01/18/07 13:42	1.0	3 1
005	018_005	X	IB			01/18/07 18:01	1.0	1
006	018_006	X	IB			01/18/07 18:37	1.0	1
007	018_007	X	ICAL			01/18/07 19:14	1.0	4 1
008	018_008	ICAL	TVH 1			01/18/07 19:50	1.0	4 1
009	018_009	ICAL	TVH 2			01/18/07 20:27	1.0	5 1
010	018_010	ICAL	TVH 3			01/18/07 21:04	1.0	6 1
011	018_011	ICAL	TVH 4			01/18/07 21:41	1.0	7 1
012	018_012	ICAL	TVH 5			01/18/07 22:17	1.0	7 1
013	018_013	X	IB			01/18/07 22:54	1.0	1
014	018_014	ICV	TVH			01/18/07 23:30	1.0	3 1
015	018_015	X	TVH			01/19/07 00:07	1.0	3 1
016	018_016	X	IB			01/19/07 00:43	1.0	1
017	018_017	CMARKER	CARBMARK			01/19/07 01:20	1.0	8 9 1
018	018_018	X	IB			01/19/07 01:56	1.0	1
019	018_019	X	IB			01/19/07 02:32	1.0	1
020	018_020	X	ICAL			01/19/07 03:08	1.0	10 1
021	018_021	X	BTXE 1			01/19/07 03:45	1.0	10 1
022	018_022	X	MTBE 1			01/19/07 04:21	1.0	11 1
023	018_023	X	BTXE 2			01/19/07 04:58	1.0	11 1
024	018_024	X	BTXE 3			01/19/07 05:35	1.0	11 1
025	018_025	X	BTXE 4			01/19/07 06:53	1.0	12 1
026	018_026	X	BTXE 6			01/19/07 07:29	1.0	12 1
027	018_027	X	MTBE 7			01/19/07 08:05	1.0	13 1
028	018_028	X	IB			01/19/07 08:41	1.0	1
029	018_029	X	MBTXE			01/19/07 09:18	1.0	14 1
030	018_030	X	MBTXE			01/19/07 09:54	1.0	14 1
031	018_031	X	IB			01/19/07 12:18	1.0	1
032	018_032	ICAL	TFT/BFB_1			01/19/07 12:55	1.0	15
033	018_033	ICAL	TFT/BFB_2			01/19/07 13:33	1.0	16
034	018_034	ICAL	TFT/BFB_3			01/19/07 14:10	1.0	17
035	018_035	ICAL	TFT/BFB_4			01/19/07 14:52	1.0	18
036	018_036	ICAL	TFT/BFB_5			01/19/07 19:21	1.0	19

Analyst: JCP Date: 01/22/07 Reviewer: CW Date: 01/22/07

Standards used: 1=S5029 2=S4963 3=S5203 4=S5078 5=S5077 6=S5076 7=S5075 8=S1645 9=S1646 10=S4992 11=S4991 12=S4990 13=S4993 14=S5206 15=S4684 16=S4685 17=S4686 18=S4687 19=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327175586

Instrument : GC07 Begun : 05/01/07 14:41
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	121_001	X	CCV			05/01/07 14:41	1.0	1 2	2:F3BZME-PID=1200
002	121_002	X	IB			05/01/07 15:47	1.0	2	
003	121_003	X	IB			05/01/07 16:23	1.0	2	
004	121_004	ICAL	TVH 1			05/01/07 16:59	1.0	3 2	
005	121_005	ICAL	TVH 2			05/01/07 17:36	1.0	4 2	
006	121_006	ICAL	TVH 3			05/01/07 18:12	1.0	5 2	
007	121_007	ICAL	TVH 4			05/01/07 18:48	1.0	6 2	
008	121_008	ICAL	TVH 5			05/01/07 19:24	1.0	6 2	
009	121_009	X	IB			05/01/07 20:00	1.0	2	
010	121_010	ICV	TVH			05/01/07 20:37	1.0	1 2	2:F3BZME-PID=1400
011	121_011	X	ICV			05/01/07 21:13	1.0	1 2	
012	121_012	X	IB			05/01/07 21:49	1.0	2	
013	121_013	CMARKER				05/01/07 22:26	1.0	7 8 2	1:BR4FBZ-PID=1200

Analyst: JCP Date: 05/02/07 Reviewer: MCH Date: 05/02/07

Standards used: 1=S6066 2=S5839 3=S5937 4=S5936 5=S5935 6=S5934 7=S1646 8=S1645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 327228445

Instrument : GC07 Begun : 06/07/07 13:19
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	CMARKER			06/07/07 13:19	1.0	1 2	
002	158_002	CCV/LCS	QC391310	Water	126058	06/07/07 13:55	1.0	3 2	2:F3BZME-PID=1400
003	158_003	X	IB	Water		06/07/07 15:25	1.0	2	2:BR4FBZ-PID=1100
004	158_004	BLANK	QC391309	Water	126058	06/07/07 16:31	1.0	2	2:F3BZME-PID=1100
005	158_005	SAMPLE	195229-002	Water	126058	06/07/07 17:07	10.0	2	2:BR4FBZ-PID=1100
006	158_006	MS	QC391311	Water	126058	06/07/07 18:08	1.0	3 2	2:F3BZME-PID=1300
007	158_007	MSD	QC391312	Water	126058	06/07/07 18:44	1.0	3 2	2:F3BZME-PID=1200
008	158_008	SAMPLE	195191-004	Water	126058	06/07/07 19:20	1.0	2	2:BR4FBZ-PID=1200
009	158_009	SAMPLE	195191-005	Water	126058	06/07/07 19:56	1.0	2	2:BR4FBZ-PID=1100
010	158_010	SAMPLE	195191-006	Water	126058	06/07/07 20:32	1.0	2	1:BR4FBZ-PID=1200
011	158_011	SAMPLE	195191-012	Water	126058	06/07/07 21:09	1.0	2	1:BR4FBZ-PID=1100
012	158_012	SAMPLE	195191-013	Water	126058	06/07/07 21:45	1.0	2	2:F3BZME-PID=1100
013	158_013	CCV	TVH			06/07/07 22:21	1.0	3 2	2:F3BZME-PID=1300
014	158_014	CCV	TVH			06/07/07 22:58	1.0	3 2	1:F3BZME-PID=1500
015	158_015	X	CMARKER			06/07/07 23:34	1.0	1 2	
016	158_016	SAMPLE	195229-001	Water	126058	06/08/07 00:10	1.0	2	2:BR4FBZ-PID=1100
017	158_017	MSS	195231-002	Water	126058	06/08/07 00:46	1.0	2	pH > 2, 1:BR4FBZ-PID=1100
018	158_018	SAMPLE	195241-001	Water	126058	06/08/07 07:52	1.0	2	2:BR4FBZ-PID=1100
019	158_019	SAMPLE	195241-004	Water	126058	06/08/07 08:29	1.0	2	2:F3BZME-PID=1200
020	158_020	SAMPLE	195241-005	Water	126058	06/08/07 09:05	1.0	2	2:F3BZME-PID=1200
021	158_021	SAMPLE	195241-006	Water	126058	06/08/07 09:41	1.0	2	2:BR4FBZ-PID=1100
022	158_022	CCV	TVH			06/08/07 10:17	1.0	3 2	3:BZME=3300

JCP 06/08/07 : Autosampler errored and stopped after run 158_017. The sequence was re-started in the morning.

Analyst: JCP Date: 06/08/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6108 3=S6393

REPORTING SUMMARY FOR 195241 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
195241-001	GC07	06/08/07 07:52	1.0	+		+	+	
195241-004	GC07	06/08/07 08:29	1.0	+		+	+	
195241-005	GC07	06/08/07 09:05	1.0	+		+	+	
195241-006	GC07	06/08/07 09:41	1.0	+		+	+	
QC391309	GC07	06/07/07 16:31	1.0	+		+	+	
QC391310	GC07	06/07/07 13:55	1.0	+		+	+	
QC391311	GC07	06/07/07 18:08	1.0	+		+	+	
QC391312	GC07	06/07/07 18:44	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/11/07
Batch#:	126168		

Field ID:	LF10GW03	Analyzed:	06/14/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195241-001		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

Field ID:	231GW09	Analyzed:	06/14/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195241-004		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	65-135

Field ID:	231GW28	Analyzed:	06/14/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195241-005		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

ND= Not Detected
RL= Reporting Limit

36.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/11/07
Batch#:	126168		

Field ID:	LF10GW100	Analyzed:	06/14/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195241-006		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

Type:	BLANK	Analyzed:	06/13/07
Lab ID:	QC391726	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	127	65-135

ND= Not Detected
RL= Reporting Limit

36.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391727	Batch#:	126168
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,644	106	65-135

Surrogate	%REC	Limits
Hexacosane	113	65-135

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	126168
MSS Lab ID:	195231-002	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC391728

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,413	97	65-135

Surrogate	%REC	Limits
Hexacosane	105	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC391729

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,110	84	65-135	13	35

Surrogate	%REC	Limits
Hexacosane	93	65-135

RPD= Relative Percent Difference

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW01	Batch#:	126168
MSS Lab ID:	195247-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC391730

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,405	96	65-135

Surrogate	%REC	Limits
Hexacosane	105	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC391731

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,161	86	65-135	11	35

Surrogate	%REC	Limits
Hexacosane	92	65-135

RPD= Relative Percent Difference

39.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-20C7 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227227958001
Units : mg/L

Name : hexacosane
Date : 07-JUN-2007 11:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	158_010	227227958010	HEX_5	07-JUN-2007 11:30	S5751
L2	158_011	227227958011	HEX_10	07-JUN-2007 11:58	S5752
L3	158_012	227227958012	HEX_25	07-JUN-2007 12:25	S5753
L4	158_013	227227958013	HEX_50	07-JUN-2007 12:53	S5754
L5	158_014	227227958014	HEX_100	07-JUN-2007 13:21	S5755
L6	158_015	227227958015	HEX_200	07-JUN-2007 13:49	S5756

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	76011	73432	72003	72193	70728	72862	AVRG		1.37E-5		72871	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	5.000	4	10.00	1	25.00	-1	50.00	-1	100.0	-3	200.0	0

Analyst: CP Date: 06/07/07 Reviewer: CW Date: 06/08/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227227958001

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227236647004 File : 164_004 Time : 13-JUN-2007 09:34
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66745	500.0	514.3	mg/L	3	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	81334	50.00	55.81	mg/L	12	15	

DLM: 06/13/07 ATL: 06/13/07 MMP: 06/14/07

227236647004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647005 File : 164_005 Time : 13-JUN-2007 10:21
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	48917	500.0	532.2	mg/L	6	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79393	50.00	54.47	mg/L	9	15	

DLM: 06/13/07 ATL: 06/13/07 MMP: 06/14/07

227236647005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 227236647018 File : 164_018 Time : 13-JUN-2007 16:32
Standards: S6347

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65185	1000	1004	mg/L	0	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	80136	50.00	54.98	mg/L	10	15	

DLM: 06/14/07 LH: 06/14/07 MMP: 06/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647019 File : 164_019 Time : 13-JUN-2007 17:00
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	43894	500.0	477.5	mg/L	-4	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	72127	50.00	49.49	mg/L	-1	15	

DLM: 06/14/07 LH: 06/14/07 MMP: 06/14/07

227236647019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227236647023 File : 164_023 Time : 13-JUN-2007 18:51
Standards: S6345

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66221	250.0	255.1	mg/L	2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	78652	50.00	53.97	mg/L	8	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647023

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647024 File : 164_024 Time : 13-JUN-2007 19:19
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	48182	500.0	524.2	mg/L	5	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79896	50.00	54.82	mg/L	10	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647024

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227236647043 File : 164_043 Time : 14-JUN-2007 04:46
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	59531	500.0	458.7	mg/L	-8	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	71856	50.00	49.30	mg/L	-1	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647043

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647044 File : 164_044 Time : 14-JUN-2007 05:14
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	43314	500.0	471.2	mg/L	-6	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	70818	50.00	48.59	mg/L	-3	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647044

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	079_001	X	IB			03/20/07 10:30	1.0	
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1
003	079_003	X	MO_500			03/20/07 11:26	1.0	2
005	079_005	X	IB			03/20/07 12:53	1.0	
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2
008	079_008	X	PRIMER			03/20/07 14:26	1.0	
009	079_009	X	PRIMER			03/20/07 14:54	1.0	
010	079_010	X	IB			03/20/07 15:22	1.0	
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3
012	079_012	IB	CALIB			03/20/07 16:29	1.0	
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4
014	079_014	IB	CALIB			03/20/07 17:43	1.0	
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10
021	079_021	IB	CALIB			03/20/07 20:59	1.0	
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11
024	079_024	IB	CALIB			03/20/07 22:23	1.0	
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17
031	079_031	IB	CALIB			03/21/07 01:38	1.0	
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23
038	079_038	IB	CALIB			03/21/07 04:54	1.0	

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227227958

Instrument : GC14B
Method : EPA 8015B

Begun : 06/07/07 07:18
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	PRIMER				06/07/07 07:18	1.0		
002	158_002	X	IB				06/07/07 07:46	1.0		
003	158_003	CMARKER	C8-50				06/07/07 08:14	1.0	1	
004	158_004	X	DSL_500				06/07/07 08:42	1.0	2	
005	158_005	X	MO_500				06/07/07 09:10	1.0	3	
006	158_006	X	DSL_1000				06/07/07 09:38	1.0	4	
007	158_007	X	MO_500				06/07/07 10:06	1.0	3	
008	158_008	X	IB				06/07/07 10:34	1.0		
009	158_009	IB	CALIB				06/07/07 11:02	1.0		
010	158_010	ICAL	HEX_5				06/07/07 11:30	1.0	5	
011	158_011	ICAL	HEX_10				06/07/07 11:58	1.0	6	
012	158_012	ICAL	HEX_25				06/07/07 12:25	1.0	7	
013	158_013	ICAL	HEX_50				06/07/07 12:53	1.0	8	
014	158_014	ICAL	HEX_100				06/07/07 13:21	1.0	9	
015	158_015	ICAL	HEX_200				06/07/07 13:49	1.0	10	
016	158_016	X	IB				06/07/07 15:30	1.0		
017	158_017	CCV	DSL_500				06/07/07 15:57	1.0	2	
018	158_018	CCV	MO_500				06/07/07 16:25	1.0	3	
019	158_019	BLANK	QC391198		Soil	126033	06/07/07 18:02	1.0		
020	158_020	MSS	195079-001		Soil	126033	06/07/07 18:30	1.0		
021	158_021	MS	QC391200		Soil	126033	06/07/07 18:58	1.0		
022	158_022	MSD	QC391201		Soil	126033	06/07/07 19:26	1.0		
023	158_023	SAMPLE	195256-001		Soil	126033	06/07/07 19:54	1.0		
024	158_024	SAMPLE	195230-003		Soil	126033	06/07/07 20:21	1.0		11:BUNKC:12-40=36000
025	158_025	X	IB				06/07/07 20:49	1.0		
026	158_026	SAMPLE	195217-002	S	Water	126010	06/07/07 21:17	1.0		
027	158_027	SAMPLE	195217-004	S	Water	126010	06/07/07 21:45	1.0		
028	158_028	SAMPLE	195217-005	S	Water	126010	06/07/07 22:12	1.0		
029	158_029	SAMPLE	195217-006	S	Water	126010	06/07/07 22:40	1.0		
030	158_030	X	IB				06/07/07 23:08	1.0		
031	158_031	X	CMARKER				06/07/07 23:36	1.0	1	
032	158_032	CCV	DSL_250				06/08/07 00:03	1.0	11	
033	158_033	CCV	MO_500				06/08/07 00:31	1.0	3	
034	158_034	X	CCV				06/08/07 00:59	1.0	11	
035	158_035	X	CCV				06/08/07 01:26	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S5751 6=S5752 7=S5753 8=S5754 9=S5755 10=S5756 11=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227236647

Instrument : GC14B
Method : EPA 8015B

Begun : 06/13/07 08:07
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164_001	X	PRIMER				06/13/07 08:07	1.0		
002	164_002	X	IB				06/13/07 08:35	1.0		
003	164_003	X	CMARKER				06/13/07 09:06	1.0	1	
004	164_004	CCV	DSL_500				06/13/07 09:34	1.0	2	
005	164_005	CCV	MO_500				06/13/07 10:21	1.0	3	
006	164_006	LCS	QC391727	S	Water	126168	06/13/07 10:57	1.0		
007	164_007	BLANK	QC391726	S	Water	126168	06/13/07 11:25	1.0		
008	164_008	BLANK	QC391726		Water	126168	06/13/07 11:53	1.0		
009	164_009	SAMPLE	195321-008		Water	126168	06/13/07 12:21	1.0		
010	164_010	X	IB				06/13/07 12:48	1.0		
011	164_011	MSS	195231-002	S	Water	126168	06/13/07 13:16	1.0		
012	164_012	MS	QC391728	S	Water	126168	06/13/07 13:44	1.0		
013	164_013	MSD	QC391729	S	Water	126168	06/13/07 14:12	1.0		
014	164_014	MSS	195247-003	S	Water	126168	06/13/07 14:40	1.0		
015	164_015	MS	QC391730	S	Water	126168	06/13/07 15:08	1.0		
016	164_016	MSD	QC391731	S	Water	126168	06/13/07 15:36	1.0		
017	164_017	X	IB				06/13/07 16:04	1.0		
018	164_018	CCV	DSL_1000				06/13/07 16:32	1.0	4	
019	164_019	CCV	MO_500				06/13/07 17:00	1.0	3	
020	164_020	SAMPLE	195267-006	S	Water	126206	06/13/07 17:28	1.0		
021	164_021	SAMPLE	195321-009		Water	126206	06/13/07 17:56	1.0		
022	164_022	X	CMARKER				06/13/07 18:24	1.0	1	
023	164_023	CCV	DSL_250				06/13/07 18:51	1.0	5	
024	164_024	CCV	MO_500				06/13/07 19:19	1.0	3	
025	164_025	X	CCV				06/13/07 19:47	1.0	5	
026	164_026	X	CCV				06/13/07 20:15	1.0	3	
027	164_027	CCV	HYFL_1250				06/13/07 21:20	1.0	6	
028	164_028	X	CCV				06/13/07 21:47	1.0	6	
029	164_029	X	IB				06/13/07 22:16	1.0		
030	164_030	BLANK	QC391804		Soil	126190	06/13/07 22:43	1.0		
031	164_031	SAMPLE	195330-007		Soil	126190	06/13/07 23:11	5.0		2:BUNKC:12-40=9800
032	164_032	LCS	QC391882	S	Water	126206	06/13/07 23:39	1.0		
033	164_033	SAMPLE	195316-016	S	Water	126206	06/14/07 00:07	1.0		
034	164_034	SAMPLE	195241-001	S	Water	126168	06/14/07 00:35	1.0		
035	164_035	X	IB				06/14/07 01:03	1.0		
036	164_036	SAMPLE	195241-004	S	Water	126168	06/14/07 01:31	1.0		
037	164_037	SAMPLE	195241-005	S	Water	126168	06/14/07 01:59	1.0		
038	164_038	SAMPLE	195241-006	S	Water	126168	06/14/07 02:27	1.0		
039	164_039	SAMPLE	195247-001	S	Water	126168	06/14/07 02:55	1.0		
040	164_040	SAMPLE	195247-002	S	Water	126168	06/14/07 03:23	1.0		
041	164_041	X	IB				06/14/07 03:50	1.0		
042	164_042	X	CMARKER				06/14/07 04:18	1.0	1	
043	164_043	CCV	DSL_500				06/14/07 04:46	1.0	2	
044	164_044	CCV	MO_500				06/14/07 05:14	1.0	3	
045	164_045	CCV	HYFL_1250				06/14/07 05:42	1.0	6	
046	164_046	X	CCV				06/14/07 06:10	1.0	2	
047	164_047	X	CCV				06/14/07 06:39	1.0	3	
048	164_048	X	CCV				06/14/07 07:07	1.0	6	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S6345 6=S5778

REPORTING SUMMARY FOR 195241 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195241-001	GC15B	06/13/07 13:44	1.0				
195241-001	GC14B	06/14/07 00:35	1.0	+	+	+	
195241-004	GC15B	06/13/07 14:12	1.0				
195241-004	GC14B	06/14/07 01:31	1.0	+	+	+	
195241-005	GC15B	06/13/07 14:40	1.0				
195241-005	GC14B	06/14/07 01:59	1.0	+	+	+	
195241-006	GC15B	06/13/07 15:07	1.0				
195241-006	GC14B	06/14/07 02:27	1.0	+	+	+	
QC391726	GC14B	06/13/07 11:25	1.0	+	+	+	
QC391726	GC14B	06/13/07 11:53	1.0				
QC391727	GC14B	06/13/07 10:57	1.0	+		+	
QC391728	GC14B	06/13/07 13:44	1.0	+		+	
QC391729	GC14B	06/13/07 14:12	1.0	+		+	
QC391730	GC14B	06/13/07 15:08	1.0	+		+	
QC391731	GC14B	06/13/07 15:36	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 126168
Started By : DJT
Method : 3520C
Spike #1 ID : S6349

Prep Date : 11-JUN-2007
Spike #2 ID : S6356

Analysis : TEHM
Finished By : RFW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195231-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195241-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195247-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195321-008		Water	500	2.5	1	0.005	7	.5				TEHM	
QC391726	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC391727	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC391728	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391729	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391730	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391731	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/18/07

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 126168
LIMS Analysis: TEHM
Date Extracted: 6/11/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195231-002 O	500	7	2.5	X	MSS
195241-001 D					
004 K					
005 J					
006 D					
195247-001 F					
002 F					
003 J					MSS
004 D					
005 D					
195321-008 I					
MB QC 391726		NA		X	
LCS 27					
MS 28		7			195231-002M
MSD 29					
MS 30					195247-003L
MSD 31					

RFW 6/12/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S6349D	DX 6/11/07
0.5 mL of TEH_SP was added to all spikes	S6356C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS 065 076	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM47110	
Extraction Start Time:	1525	
Extraction End Time:	0940	JCM 6/12/07
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	RFW 6/12/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	0746283706	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	Refrigerator #9	

Extraction Chemist — Date 6/11/07

Contined from Page ___
Continued on Page ___

Reviewed by — Date 6/12/07

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: RFW
Cleanup Date: 6/12/07

Benchbook # **BK 2520**
Page 4

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195231-002	126168	1.0	1.0	MSS
195241-001				
4				
5				
6				
195247-001				
2				
3				MSS
4				
5				
RFW 6/12/07 QMB QC391726				
LCS 27				
MS 28				
MSD 29				
MS 30				
MSD 31				
				RFW 6/12/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled ___ g columns	NA	RFW 6/12/07
☐ Extracts were cleaned up using 1.0 g cartridges	SP8605	
Extracts were eluted with 40 mL CH_2Cl_2	EM7096	
Concentrated to volumes as noted above	✓	

6/12/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

00051

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW09	Batch#:	126079
Lab ID:	195241-004	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW28	Batch#:	126079
Lab ID:	195241-005	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	1.0	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0605073A	Batch#:	126079
Lab ID:	195241-008	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

7.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391402	Batch#:	126079
Matrix:	Water	Analyzed:	06/08/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391403	Batch#:	126079
Matrix:	Water	Analyzed:	06/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.68	119	65-135
Benzene	25.00	26.91	108	65-135
Trichloroethene	25.00	25.87	103	65-135
Toluene	25.00	27.65	111	65-135
Chlorobenzene	25.00	25.97	104	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	97	86-115

9.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW13	Batch#:	126079
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/08/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391497

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	29.02	116	65-135
Benzene	<0.2500	25.00	27.22	109	65-135
Trichloroethene	<0.1151	25.00	25.66	103	65-135
Toluene	<0.1338	25.00	27.98	112	65-135
Chlorobenzene	<0.1569	25.00	26.23	105	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	100	86-115

Type: MSD Lab ID: QC391498

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.37	117	65-135	1	35
Benzene	25.00	27.23	109	65-135	0	35
Trichloroethene	25.00	25.72	103	65-135	0	35
Toluene	25.00	28.08	112	65-135	0	35
Chlorobenzene	25.00	26.72	107	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195241 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497177754005 File : je305 Time : 03-MAY-2007 12:11

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	79938	21.98	
75	30.00% - 60.00% of mass 95	161536	44.42	
95		363648		
96	5.00% - 9.00% of mass 95	24247	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	279530	76.87	
175	5.00% - 9.00% of mass 174	21048	7.53	
176	> 95.00% and < 101.00% of mass 174	272661	97.54	
177	5.00% - 9.00% of mass 176	17603	6.46	

Analyst: ACM Date: 05/04/07 Reviewer: LW Date: 05/04/07

497177754005

CURTIS & TOMPKINS BFB TUNE FOR 195241 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497229413002 File : jf802 Time : 08-JUN-2007 08:31

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	152490	21.24	
75	30.00% - 60.00% of mass 95	311808	43.43	
95		717994		
96	5.00% - 9.00% of mass 95	48594	6.77	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	539584	75.15	
175	5.00% - 9.00% of mass 174	39874	7.39	
176	> 95.00% and < 101.00% of mass 174	528725	97.99	
177	5.00% - 9.00% of mass 176	34032	6.44	

Analyst: SJD Date: 06/08/07 Reviewer: ACM Date: 06/08/07

497229413002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum : 497177754004
Units : ug/L

Name : 826GOX10
Date : 03-MAY-2007 13:35
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	je308	497177754008	0.25/0.5PPB	03-MAY-2007 13:35	S5194 (2000000X), S6072 (2000000X), S5938 (1000000X), S6084 (5000X)
L2	je309	497177754009	0.5/1PPB	03-MAY-2007 14:07	S5194 (1000000X), S6072 (1000000X), S5938 (500000X), S6084 (5000X)
L3	je310	497177754010	2PPB	03-MAY-2007 14:40	S5194 (500000X), S6072 (250000X), S5938 (250000X), S6084 (5000X)
L4	je311	497177754011	5PPB	03-MAY-2007 15:13	S5194 (200000X), S6072 (100000X), S5938 (100000X), S6084 (5000X)
L5	je312	497177754012	10PPB	03-MAY-2007 15:46	S5194 (100000X), S6072 (50000X), S5938 (50000X), S6084 (5000X)
L6	je313	497177754013	20PPB	03-MAY-2007 16:19	S5194 (50000X), S6072 (25000X), S5938 (25000X), S6084 (5000X)
L7	je314	497177754014	50PPB	03-MAY-2007 16:51	S5194 (20000X), S6072 (10000X), S5938 (10000X), S6084 (5000X)
L8	je315	497177754015	75PPB	03-MAY-2007 17:24	S5194 (13330X), S6072 (6667X), S5938 (6667X), S6084 (5000X)
L9	je316	497177754016	100PPB	03-MAY-2007 17:57	S5194 (10000X), S6072 (5000X), S5938 (5000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5947	0.5426	0.5709	0.4865	0.4975	0.4780	0.4537	0.4433	AVRG		1.96694		0.5084	11	15	0.10	0.99	
Vinyl Chloride	0.4132	0.4168m	0.3671m	0.4167	0.3655	0.3629	0.3690	0.3540	0.3529	AVRG		2.63311		0.3798	7	15	0.05	0.99	
Bromomethane		0.2909m	0.2714	0.2949m	0.2511	0.2691	0.2676	0.2750	0.2711	AVRG		3.65109		0.2739	5	15	0.05	0.99	
Chloroethane		0.2584	0.2745m	0.2998	0.2712	0.2697	0.2621	0.2640	0.2563	AVRG		3.71065		0.2695	5	15	0.05	0.99	
Acetone			0.1599m	0.1925	0.1879	0.1586	0.1600			AVRG		5.82201		0.1718	10	15	0.05	0.99	
1,1-Dichloroethene		0.2358m	0.2192	0.2400	0.2414	0.2539	0.2359	0.2494	0.2390	AVRG		4.17827		0.2393	4	15	0.05	0.99	
Methylene Chloride			0.3563m	0.3576	0.3346	0.3304	0.3296	0.3230	0.3254	AVRG		2.97009		0.3367	4	15	0.05	0.99	
Carbon Disulfide		1.0985	0.9961	0.9893	0.9633	1.0131	0.9946	1.0407	0.9939	AVRG		0.98894		1.0112	4	15	0.05	0.99	
MTBE		0.9046m	0.8559	0.8149	0.7674	0.7714	0.7576	0.7442	0.7584	AVRG		1.25500		0.7968	7	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3511m	0.3343	0.3015	0.2976	0.3008	0.2824	0.2812	0.2841	AVRG		3.28796		0.3041	8	15	0.05	0.99	
Vinyl Acetate			0.6363m	0.7199m	0.5324m	0.6892	0.4476	1.0222	0.9214	AVRG		1.40874		0.7099	**29**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.5984	0.5968	0.5961	0.5669	0.5703	0.5508	0.5494	0.5471	AVRG		1.74835		0.5720	4	15	0.10	0.99	
2-Butanone			0.2289	0.2082	0.2129	0.2042	0.2146	0.2015	0.2006	AVRG		4.75928		0.2101	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3134m	0.3691	0.3166	0.3211	0.3199	0.3116	0.3046	0.3123	AVRG		3.11460		0.3211	6	15	0.05	0.99	
Chloroform		0.5213	0.5072	0.4977	0.4926	0.4839	0.4701	0.4623	0.4625	AVRG		2.05257		0.4872	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.3612m	0.2999	0.3138	0.3185	0.3174	0.3049	0.3316	0.3040	AVRG		3.13579		0.3189	6	15	0.05	0.99	
Carbon Tetrachloride		0.1391	0.1316	0.1437	0.1413	0.1537	0.1384	0.1655	0.1415	AVRG		6.92765		0.1443	7	15	0.05	0.99	
1,2-Dichloroethane		0.2645	0.2512	0.2471	0.2515	0.2517	0.2485	0.2447	0.2399	AVRG		4.00187		0.2499	3	15	0.05	0.99	
Benzene		0.7629	0.6956	0.7249	0.6984	0.7058	0.6774	0.6946	0.6560	AVRG		1.42458		0.7020	5	15	0.05	0.99	
Trichloroethene		0.2129	0.1627	0.1791	0.1769	0.1796	0.1703	0.1713	0.1567	AVRG		5.67516		0.1762	10	15	0.05	0.99	
1,2-Dichloropropane		0.2415	0.2196	0.2213	0.2200	0.2208	0.2144	0.2096	0.2025	AVRG		4.57198		0.2187	5	15	0.05	0.99	
Bromodichloromethane		0.2698	0.2371	0.2414	0.2352	0.2365	0.2326	0.2294	0.2301	AVRG		4.18364		0.2390	5	15	0.05	0.99	
4-Methyl-2-Pentanone		0.3021m	0.3421	0.2832	0.2608	0.3025	0.2871	0.2918	0.2661	AVRG		3.42524		0.2919	9	15	0.05	0.99	
cis-1,3-Dichloropropene		0.3284	0.2954	0.3264	0.3072	0.3089	0.3021	0.3088	0.3032	AVRG		3.22531		0.3100	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4330m	0.3869	0.4279	0.3911	0.4056	0.3845	0.4001	0.3547	AVRG		2.51270		0.3980	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2852m	0.2591	0.2780m	0.2711	0.2765	0.2696	0.2741	0.2690	AVRG		3.66524		0.2728	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1044	0.0983	0.0998	0.0980	0.0982	0.0954	0.0972	0.0943	AVRG		10.1845		0.0982	3	15	0.05	0.99	
2-Hexanone			0.1999	0.2144	0.2166	0.1983	0.2045	0.2061	0.1956	AVRG		4.87644		0.2051	4	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1437	0.1819	0.1672	0.1725	0.1573	0.1823	0.1526	AVRG		5.92719		0.1687	10	15	0.05	0.99	
Dibromochloromethane		0.2225	0.2112	0.2281	0.2269	0.2208	0.2263	0.2212	0.2238	AVRG		4.49237		0.2226	2	15	0.05	0.99	
Chlorobenzene		0.5715	0.5242	0.5556	0.5183	0.5228	0.5061	0.5114	0.4731	AVRG		1.91246		0.5229	6	15	0.30	0.99	
Ethylbenzene		0.9731	0.7932	0.9252	0.8386	0.8567	0.7886	0.8468	0.7221	AVRG		1.18619		0.8430	9	15	0.05	0.99	
m,p-Xylenes	0.3103	0.3178	0.3067	0.3430	0.3061	0.3158	0.2914	0.3124	0.2660	AVRG		3.24970		0.3077	7	15	0.05	0.99	
o-Xylene		0.3480	0.3095	0.3483	0.3139	0.3192	0.2940	0.3052	0.2640	AVRG		3.19746		0.3127	9	15	0.05	0.99	
Styrene		0.5857	0.5274	0.6027	0.5445	0.5650	0.5276	0.5378	0.4787	AVRG		1.83087		0.5462	7	15	0.05	0.99	
Bromoform		0.1601	0.1548	0.1656	0.1611	0.1585	0.1626	0.1639	0.1657	AVRG		6.19057		0.1615	2	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6707m	0.6326	0.6403	0.5798	0.6019	0.5675	0.6023	0.5756	AVRG		1.64250		0.6088	6	15	0.30	0.99	
Dibromofluoromethane	0.5647	0.5635	0.5630	0.5511	0.5725	0.5604	0.5593	0.5552	0.5745	AVRG		1.77720		0.5627	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3895	0.3906	0.3874	0.3894	0.3937	0.3894	0.3860	0.3792	0.3779	AVRG		2.58388		0.3870	1	15	0.05	0.99	
Toluene-d8	1.0751	1.0857	1.0863	1.0981	1.0869	1.0914	1.0678	1.0854	1.0649	AVRG		0.92388		1.0824	1	15	0.05	0.99	
Bromofluorobenzene	1.1530	1.1357	1.1445	1.1312	1.1260	1.0989	1.0858	1.0642	1.0625	AVRG		0.89982		1.1113	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	17	2.000	7	5.000	12	10.00	-4	20.00	-2	50.00	-6	75.00	-11	100.0	-13
Vinyl Chloride	0.500	9	1.000	10	2.000	-3	5.000	10	10.00	-4	20.00	-4	50.00	-3	75.00	-7	100.0	-7
Bromomethane			1.000	6	2.000	-1	5.000	8	10.00	-8	20.00	-2	50.00	-2	75.00	0	100.0	-1
Chloroethane			1.000	-4	2.000	2	5.000	11	10.00	1	20.00	0	50.00	-3	75.00	-2	100.0	-5
Acetone					2.000	-7	5.000	12	10.00	9	20.00	-8	50.00	-7				
1,1-Dichloroethene			0.500	-1	2.000	-8	5.000	0	10.00	1	20.00	6	50.00	-1	75.00	4	100.0	0
Methylene Chloride					2.000	6	5.000	6	10.00	-1	20.00	-2	50.00	-2	75.00	-4	100.0	-3
Carbon Disulfide			0.500	9	2.000	-1	5.000	-2	10.00	-5	20.00	0	50.00	-2	75.00	3	100.0	-2
MTBE			0.500	14	2.000	7	5.000	2	10.00	-4	20.00	-3	50.00	-5	75.00	-7	100.0	-5
trans-1,2-Dichloroethene			0.500	15	2.000	10	5.000	-1	10.00	-2	20.00	-1	50.00	-7	75.00	-8	100.0	-7
Vinyl Acetate					2.000	-10	5.000	1	10.00	-25	20.00	-3	50.00	-37	75.00	44	100.0	30
1,1-Dichloroethane			0.500	5	2.000	4	5.000	4	10.00	-1	20.00	0	50.00	-4	75.00	-4	100.0	-4
2-Butanone					2.000	9	5.000	-1	10.00	1	20.00	-3	50.00	2	75.00	-4	100.0	-5
cis-1,2-Dichloroethene			0.500	-2	2.000	15	5.000	-1	10.00	0	20.00	0	50.00	-3	75.00	-5	100.0	-3
Chloroform			0.500	7	2.000	4	5.000	2	10.00	1	20.00	-1	50.00	-4	75.00	-5	100.0	-5
1,1,1-Trichloroethane			0.500	13	2.000	-6	5.000	-2	10.00	0	20.00	0	50.00	-4	75.00	4	100.0	-5
Carbon Tetrachloride			0.500	-4	2.000	-9	5.000	0	10.00	-2	20.00	6	50.00	-4	75.00	15	100.0	-2
1,2-Dichloroethane			0.500	6	2.000	1	5.000	-1	10.00	1	20.00	1	50.00	-1	75.00	-2	100.0	-4
Benzene			0.500	9	2.000	-1	5.000	3	10.00	-1	20.00	1	50.00	-3	75.00	-1	100.0	-7
Trichloroethene			0.500	21	2.000	-8	5.000	2	10.00	0	20.00	2	50.00	-3	75.00	-3	100.0	-11
1,2-Dichloropropane			0.500	10	2.000	0	5.000	1	10.00	1	20.00	1	50.00	-2	75.00	-4	100.0	-7
Bromodichloromethane			0.500	13	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	-3	75.00	-4	100.0	-4
4-Methyl-2-Pentanone			0.500	3	2.000	17	5.000	-3	10.00	-11	20.00	4	50.00	-2	75.00	0	100.0	-9
cis-1,3-Dichloropropene			0.500	6	2.000	-5	5.000	5	10.00	-1	20.00	0	50.00	-3	75.00	0	100.0	-2
Toluene			0.500	9	2.000	-3	5.000	8	10.00	-2	20.00	2	50.00	-3	75.00	1	100.0	-11
trans-1,3-Dichloropropene			0.500	5	2.000	-5	5.000	2	10.00	-1	20.00	1	50.00	-1	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	6	2.000	0	5.000	2	10.00	0	20.00	0	50.00	-3	75.00	-1	100.0	-4
2-Hexanone					2.000	-3	5.000	5	10.00	6	20.00	-3	50.00	0	75.00	1	100.0	-5
Tetrachloroethene			0.500	14	2.000	-15	5.000	8	10.00	-1	20.00	2	50.00	-7	75.00	8	100.0	-10
Dibromochloromethane			0.500	0	2.000	-5	5.000	2	10.00	2	20.00	-1	50.00	2	75.00	-1	100.0	1
Chlorobenzene			0.500	9	2.000	0	5.000	6	10.00	-1	20.00	0	50.00	-3	75.00	-2	100.0	-10
Ethylbenzene			0.500	15	2.000	-6	5.000	10	10.00	-1	20.00	2	50.00	-6	75.00	0	100.0	-14
m,p-Xylenes	0.500	1	1.000	3	4.000	0	10.00	11	20.00	-1	40.00	3	100.0	-5	150.0	2	200.0	-14
o-Xylene			0.500	11	2.000	-1	5.000	11	10.00	0	20.00	2	50.00	-6	75.00	-2	100.0	-16
Styrene			0.500	7	2.000	-3	5.000	10	10.00	0	20.00	3	50.00	-3	75.00	-2	100.0	-12
Bromoform			0.500	-1	2.000	-4	5.000	3	10.00	0	20.00	-2	50.00	1	75.00	1	100.0	3
1,1,2,2-Tetrachloroethane			0.500	10	2.000	4	5.000	5	10.00	-5	20.00	-1	50.00	-7	75.00	-1	100.0	-5
Dibromofluoromethane	50.00	0	50.00	0	50.00	0	50.00	-2	50.00	2	50.00	0	50.00	-1	50.00	-1	50.00	2
1,2-Dichloroethane-d4	50.00	1	50.00	1	50.00	0	50.00	1	50.00	2	50.00	1	50.00	0	50.00	-2	50.00	-2
Toluene-d8	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1	50.00	-1	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-1	50.00	-2	50.00	-4	50.00	-4

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

*=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195241 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497177754004 Cal Date : 03-MAY-2007 Type : WATER

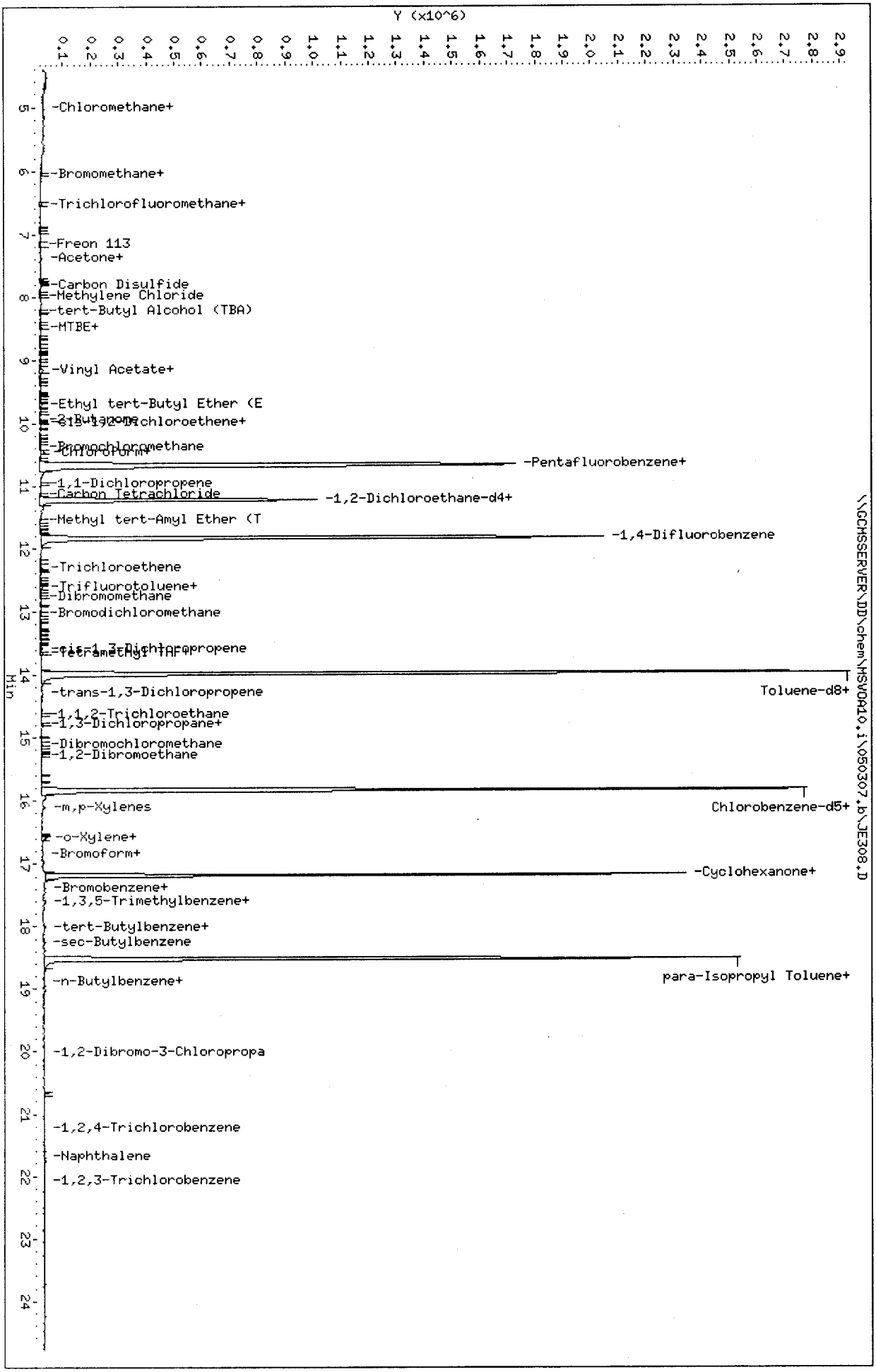
ICV 497177754017 (je317 03-MAY-2007) stds: S6044 (10000X), S6084 (5000X)
ICV 497177754018 (je318 03-MAY-2007) stds: S5723 (10000X), S5968 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497177754017	0.5084	0.4111	25.00	20.21	ug/L	-19	30	
Vinyl Chloride	497177754017	0.3798	0.3070	25.00	20.21	ug/L	-19	20	
Bromomethane	497177754017	0.2739	0.2259	25.00	20.62	ug/L	-18	30	
Chloroethane	497177754017	0.2695	0.2323	25.00	21.55	ug/L	-14	30	
Acetone	497177754018	0.1718	0.1276	25.00	18.58	ug/L	-26	40	
1,1-Dichloroethene	497177754018	0.2393	0.2311	25.00	24.14	ug/L	-3	20	
Methylene Chloride	497177754018	0.3367	0.3190	25.00	23.68	ug/L	-5	30	
Carbon Disulfide	497177754018	1.0112	0.7101	25.00	17.56	ug/L	**-30**	30	!v-
MTBE	497177754018	0.7968	0.7580	25.00	23.78	ug/L	-5	30	
trans-1,2-Dichloroethene	497177754018	0.3041	0.2775	25.00	22.81	ug/L	-9	30	
Vinyl Acetate	497177754018	0.7099	0.5644	25.00	19.88	ug/L	-20	40	
1,1-Dichloroethane	497177754018	0.5720	0.5352	25.00	23.39	ug/L	-6	30	
2-Butanone	497177754018	0.2101	0.1974	25.00	23.49	ug/L	-6	40	
cis-1,2-Dichloroethene	497177754018	0.3211	0.3185	25.00	24.80	ug/L	-1	30	
Chloroform	497177754018	0.4872	0.4701	25.00	24.13	ug/L	-3	20	
1,1,1-Trichloroethane	497177754018	0.3189	0.3310	25.00	25.95	ug/L	4	30	
Carbon Tetrachloride	497177754018	0.1443	0.1676	25.00	29.02	ug/L	16	30	
1,2-Dichloroethane	497177754018	0.2499	0.2386	25.00	23.87	ug/L	-5	30	
Benzene	497177754018	0.7020	0.6819	25.00	24.29	ug/L	-3	30	
Trichloroethene	497177754018	0.1762	0.1691	25.00	23.99	ug/L	-4	30	
1,2-Dichloropropane	497177754018	0.2187	0.2025	25.00	23.14	ug/L	-7	20	
Bromodichloromethane	497177754018	0.2390	0.2343	25.00	24.51	ug/L	-2	30	
4-Methyl-2-Pentanone	497177754018	0.2919	0.2795	25.00	23.93	ug/L	-4	40	
cis-1,3-Dichloropropene	497177754018	0.3100	0.2924	25.00	23.58	ug/L	-6	30	
Toluene	497177754018	0.3980	0.3901	25.00	24.51	ug/L	-2	20	
trans-1,3-Dichloropropene	497177754018	0.2728	0.2441	25.00	22.36	ug/L	-11	30	
1,1,2-Trichloroethane	497177754018	0.0982	0.0933	25.00	23.75	ug/L	-5	30	
2-Hexanone	497177754018	0.2051	0.1990	25.00	24.26	ug/L	-3	40	
Tetrachloroethene	497177754018	0.1687	0.1930	25.00	28.60	ug/L	14	30	
Dibromochloromethane	497177754018	0.2226	0.2254	25.00	25.32	ug/L	1	30	
Chlorobenzene	497177754018	0.5229	0.5163	25.00	24.69	ug/L	-1	30	
Ethylbenzene	497177754018	0.8430	0.8699	25.00	25.80	ug/L	3	20	
m,p-Xylenes	497177754018	0.3077	0.3165	50.00	51.43	ug/L	3	30	
o-Xylene	497177754018	0.3127	0.3132	25.00	25.04	ug/L	0	30	
Styrene	497177754018	0.5462	0.5576	25.00	25.52	ug/L	2	30	
Bromoform	497177754018	0.1615	0.1666	25.00	25.78	ug/L	3	30	
1,1,2,2-Tetrachloroethane	497177754018	0.6088	0.5836	25.00	23.97	ug/L	-4	30	

!=warning -=low bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Date : 03-MAY-2007 13:35
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 13:35 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Misc Info : S5938,0.001/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 09:39 target Quant Type: ISTD
Cal Date : 03-MAY-2007 13:35 Cal File: JE308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	5430	0.50000	0.5581
2 Chloromethane	50	5.000	5.000	(0.470)	9979	0.50000	0.7132
3 Vinyl Chloride	62	5.187	5.187	(0.487)	5685	0.50000	0.5439
4 Bromomethane	94	5.877	5.877	(0.552)	3082	0.50000	0.4088
5 Chloroethane	64	6.055	6.055	(0.569)	2787	0.50000	0.3757
6 Trichlorofluoromethane	101	6.518	6.518	(0.612)	4360	0.50000	0.4666
7 Ethanol	45	6.696	6.696	(0.629)	4018	25.0000	24.7192
8 Freon 113	101	7.346	7.346	(0.690)	704	0.25000	0.1412
9 Acetone	43	7.376	7.376	(0.693)	2734	0.25000	0.5783
10 1,1-Dichloroethene	96	7.376	7.376	(0.693)	3326	0.25000	0.5049
11 Isopropanol	45	7.465	7.465	(0.701)	363	2.50000	0.5458
12 Carbon Disulfide	76	7.820	7.820	(0.734)	8164	0.25000	0.2933
13 Methylene Chloride	84	8.086	8.086	(0.759)	3956	0.25000	0.4269
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.761)	2356	2.50000	3.0033
15 MTBE	73	8.480	8.480	(0.796)	8169	0.25000	0.3725
16 trans-1,2-Dichloroethene	96	8.480	8.480	(0.796)	531	0.25000	0.0634
18 Vinyl Acetate	43	9.161	9.161	(0.860)	8848	0.25000	0.4529
19 1,1-Dichloroethane	63	9.151	9.151	(0.859)	4205	0.25000	0.2671
20 Isopropyl Ether (DIPE)	45	9.170	9.170	(0.861)	10678	0.25000	0.2798
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.911)	5516	0.25000	0.2484
22 2-Butanone	43	9.949	9.949	(0.934)	720	0.25000	0.1245
23 cis-1,2-Dichloroethene	96	9.989	9.989	(0.938)	2514	0.25000	0.2745

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

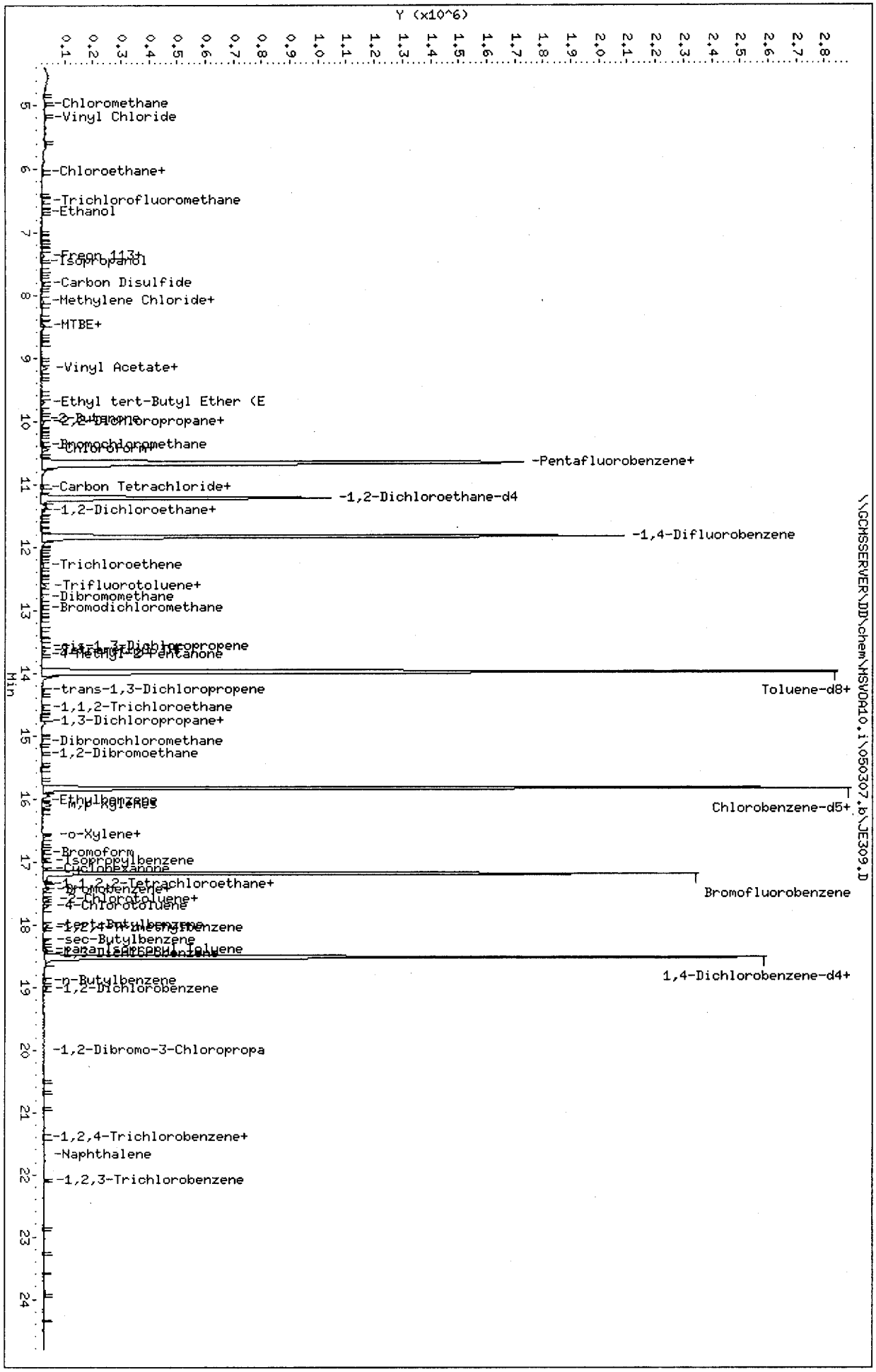
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.018	10.018	(0.941)	2575	0.25000	0.3138
	25 Bromochloromethane	128	10.383	10.383	(0.975)	925	0.25000	0.2116
	26 Chloroform	83	10.432	10.432	(0.980)	4394	0.25000	0.3277
	27 Tetrahydrofuran	42	10.452	10.452	(0.981)	15211	2.50000	4.8892
*	28 Pentafluorobenzene	168	10.649	10.649	(1.000)	1375990	50.0000	
	29 Dibromofluoromethane	113	10.669	10.669	(1.002)	777088	50.0000	50.1834
	30 1,1,1-Trichloroethane	97	10.797	10.797	(1.014)	2518	0.25000	0.2869
	31 1,1-Dichloropropene	75	11.034	11.034	(0.933)	3024	0.25000	0.3077
	32 Carbon Tetrachloride	117	11.093	11.093	(0.938)	861	0.25000	0.1329
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	873566	50.0000	50.3262
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	2796	0.25000	0.2494
	35 Benzene	78	11.359	11.359	(0.960)	8881	0.25000	0.2820
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	5525	0.25000	0.3383
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2242556	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	2094	0.25000	0.2649
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	2164	0.25000	0.2187
	40 1,2-Dichloropropane	63	12.601	12.601	(1.065)	2664	0.25000	0.2715
	41 Dibromomethane	93	12.789	12.789	(1.081)	1256	0.25000	0.2177
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	2921	0.25000	0.2724
	44 cis-1,3-Dichloropropene	75	13.577	13.577	(1.147)	3299	0.25000	0.2372
	45 Tetramethyl THF	43	13.646	13.646	(1.153)	9418	0.25000	0.3932
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	3667	0.25000	0.2800
	47 Toluene-d8	98	13.972	13.972	(1.181)	2411012	50.0000	49.6640
	48 Toluene	92	14.061	14.061	(1.188)	4374	0.25000	0.2450
	49 trans-1,3-Dichloropropene	75	14.268	14.268	(1.206)	3240	0.25000	0.2647
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	894	0.25000	0.2030
	51 1,3-Dichloropropane	76	14.770	14.770	(0.933)	3490	0.25000	0.2617
	52 2-Hexanone	43	14.790	14.790	(0.935)	236	0.25000	0.0306
	53 Tetrachloroethene	166	14.800	14.800	(0.935)	1739	0.25000	0.2740
	54 Dibromochloromethane	129	15.096	15.096	(0.954)	1708	0.25000	0.2040
	55 1,2-Dibromoethane	107	15.293	15.293	(1.292)	1963	0.25000	0.2391
*	56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	1880260	50.0000	
	57 Chlorobenzene	112	15.865	15.865	(1.002)	4849	0.25000	0.2466
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.007)	1822	0.25000	0.2737
	59 Ethylbenzene	91	15.963	15.963	(1.009)	7946	0.25000	0.2506
	60 m,p-Xylenes	106	16.101	16.101	(1.017)	5835	0.50000	0.5042
	61 o-Xylene	106	16.585	16.585	(1.048)	2819	0.25000	0.2396
	62 Styrene	104	16.585	16.585	(1.048)	3876	0.25000	0.1887
	63 Bromoform	173	16.841	16.841	(1.064)	988	0.25000	0.1626
	64 Isopropylbenzene	105	16.969	16.969	(0.916)	7135	0.25000	0.2766
	65 Cyclohexanone	55	17.127	17.127	(0.925)	4680	2.50000	3.4062
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	971769	50.0000	51.8751
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	3370	0.25000	0.3283
	68 1,2,3-Trichloropropane	75	17.363	17.363	(0.938)	3037	0.25000	0.3130
	69 Bromobenzene	156	17.393	17.393	(0.939)	1709	0.25000	0.2147
	70 Propylbenzene	91	17.442	17.442	(0.942)	8660	0.25000	0.2698
	71 2-Chlorotoluene	91	17.580	17.580	(0.949)	6371	0.25000	0.2759
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	4814	0.25000	0.2502
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	6630	0.25000	0.3041
	74 tert-Butylbenzene	119	18.004	18.004	(0.972)	4269	0.25000	0.2460
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	4283	0.25000	0.2472
	76 sec-Butylbenzene	105	18.251	18.251	(0.986)	6214	0.25000	0.2523
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	4295	0.25000	0.2436
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	3719	0.25000	0.2696

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	842814	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	4000	0.25000	0.2833
81 n-Butylbenzene	91	18.892	18.892	(1.020)	3200	0.25000	0.2331
82 1,2-Dichlorobenzene	146	19.030	19.030	(1.028)	3023	0.25000	0.2215
83 1,2-Dibromo-3-Chloropropane	75	20.006	20.006	(1.080)	431	0.25000	0.2578
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	859	0.25000	0.3226
86 Naphthalene	128	21.692	21.692	(1.171)	1424	0.25000	0.1448
87 1,2,3-Trichlorobenzene	180	22.076	22.076	(1.192)	441	0.25000	0.1047

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Date : 03-MAY-2007 14:07
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/1000,S6072,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:07 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/1000,S6072,0.001/1000
Misc Info : S5938,0.002/1000, 0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 12:22 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:07 Cal File: JE309.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	10407	1.00000	1.0722(M)
2 Chloromethane	50	4.994	4.994	(0.469)	16328	1.00000	1.1697
3 Vinyl Chloride	62	5.191	5.191	(0.487)	11443	1.00000	1.0974(M)
4 Bromomethane	94	5.871	5.871	(0.551)	7986	1.00000	1.0619(M)
5 Chloroethane	64	6.049	6.049	(0.568)	7094	1.00000	0.9587
6 Trichlorofluoromethane	101	6.512	6.512	(0.611)	9598	1.00000	1.0297
7 Ethanol	45	6.690	6.690	(0.628)	9931	50.0000	61.2383
8 Freon 113	101	7.340	7.340	(0.689)	2601	0.50000	0.5228
9 Acetone	43	7.380	7.380	(0.693)	3812	0.50000	0.8083
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	3237	0.50000	0.4926(MH)
11 Isopropanol	45	7.498	7.498	(0.704)	3143	5.00000	4.7370
12 Carbon Disulfide	76	7.814	7.814	(0.733)	15080	0.50000	0.5431
13 Methylene Chloride	84	8.090	8.090	(0.759)	7434	0.50000	0.8041(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	4307	5.00000	5.5032(M)
15 MTBE	73	8.474	8.474	(0.795)	12418	0.50000	0.5676(H)
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	4820	0.50000	0.5772(MH)
18 Vinyl Acetate	43	9.154	9.154	(0.859)	19125	0.50000	0.9812
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	8215	0.50000	0.5231
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	21707	0.50000	0.5702
21 Ethyl tert-Butyl Ether (ETBE)	59	9.707	9.707	(0.911)	11934	0.50000	0.5387
22 2-Butanone	43	9.983	9.983	(0.937)	1252	0.50000	0.2170
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	4303	0.50000	0.4881(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	2,2-Dichloropropane	77	10.032	10.032	(0.942)	5225	0.50000	0.6382
25	Bromochloromethane	128	10.377	10.377	(0.974)	1971	0.50000	0.4519
26	Chloroform	83	10.426	10.426	(0.979)	7156	0.50000	0.5349
27	Tetrahydrofuran	42	10.446	10.446	(0.981)	25372	5.00000	8.1742
* 28	Pentafluorobenzene	168	10.653	10.653	(1.000)	1372806	50.0000	
29	Dibromofluoromethane	113	10.673	10.673	(1.002)	773510	50.0000	50.0681
30	1,1,1-Trichloroethane	97	10.791	10.791	(1.013)	4958	0.50000	0.5662(H)
31	1,1-Dichloropropene	75	11.018	11.018	(0.932)	5906	0.50000	0.5994(H)
32	Carbon Tetrachloride	117	11.077	11.077	(0.937)	3128	0.50000	0.4819
33	1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	878193	50.0000	50.4645
34	1,2-Dichloroethane	62	11.333	11.333	(0.958)	5947	0.50000	0.5292
35	Benzene	78	11.363	11.363	(0.961)	17153	0.50000	0.5434
36	Methyl tert-Amyl Ether (TAME)	73	11.432	11.432	(0.967)	7852	0.50000	0.4797(H)
* 37	1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2248254	50.0000	
38	Trichloroethene	95	12.290	12.290	(1.039)	4787	0.50000	0.6041
39	Trifluorotoluene	146	12.615	12.615	(1.067)	5706	0.50000	0.5752
40	1,2-Dichloropropane	63	12.615	12.615	(1.067)	5429	0.50000	0.5520
41	Dibromomethane	93	12.783	12.783	(1.081)	2917	0.50000	0.5045
42	Bromodichloromethane	83	12.960	12.960	(1.096)	6065	0.50000	0.5642
44	cis-1,3-Dichloropropene	75	13.571	13.571	(1.148)	7383	0.50000	0.5295
45	Tetramethyl THF	43	13.650	13.650	(1.154)	12608	0.50000	0.5251(H)
46	4-Methyl-2-Pentanone	43	13.709	13.709	(1.159)	6792	0.50000	0.5173(M)
47	Toluene-d8	98	13.966	13.966	(1.181)	2440868	50.0000	50.1516
48	Toluene	92	14.064	14.064	(1.189)	9736	0.50000	0.5440(H)
49	trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	6412	0.50000	0.5226(M)
50	1,1,2-Trichloroethane	85	14.547	14.547	(1.230)	2347	0.50000	0.5315
51	1,3-Dichloropropane	76	14.774	14.774	(0.933)	6587	0.50000	0.4853
52	2-Hexanone	43	14.824	14.824	(0.936)	3944	0.50000	0.5025
53	Tetrachloroethene	166	14.814	14.814	(0.936)	3677	0.50000	0.5694
54	Dibromochloromethane	129	15.090	15.090	(0.953)	4258	0.50000	0.4998
55	1,2-Dibromoethane	107	15.287	15.287	(1.293)	3499	0.50000	0.4251
* 56	Chlorobenzene-d5	117	15.829	15.829	(1.000)	1913461	50.0000	
57	Chlorobenzene	112	15.869	15.869	(1.002)	10935	0.50000	0.5464
58	1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	3381	0.50000	0.4991
59	Ethylbenzene	91	15.957	15.957	(1.008)	18619	0.50000	0.5771
60	m,p-Xylenes	106	16.095	16.095	(1.017)	12163	1.00000	1.0328
61	o-Xylene	106	16.578	16.578	(1.047)	6658	0.50000	0.5562
62	Styrene	104	16.588	16.588	(1.048)	11207	0.50000	0.5361
63	Bromoform	173	16.845	16.845	(1.064)	3063	0.50000	0.4954
64	Isopropylbenzene	105	16.973	16.973	(0.917)	15404	0.50000	0.5714
65	Cyclohexanone	55	17.121	17.121	(0.925)	7204	5.00000	5.0156
66	Bromofluorobenzene	95	17.180	17.180	(0.928)	1000580	50.0000	51.0949
67	1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	5909	0.50000	0.5507(H)
68	1,2,3-Trichloropropane	75	17.357	17.357	(0.938)	6053	0.50000	0.5967(M)
69	Bromobenzene	156	17.397	17.397	(0.940)	4101	0.50000	0.4928
70	Propylbenzene	91	17.436	17.436	(0.942)	19074	0.50000	0.5685
71	2-Chlorotoluene	91	17.584	17.584	(0.950)	13578	0.50000	0.5625
72	1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	10926	0.50000	0.5433
73	4-Chlorotoluene	91	17.702	17.702	(0.956)	13842	0.50000	0.6075
74	tert-Butylbenzene	119	18.008	18.008	(0.973)	11010	0.50000	0.6071(H)
75	1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	7948	0.50000	0.4388
76	sec-Butylbenzene	105	18.245	18.245	(0.986)	14248	0.50000	0.5535
77	para-Isopropyl Toluene	119	18.393	18.393	(0.994)	9704	0.50000	0.5265(M)
78	1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	7247	0.50000	0.5027

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

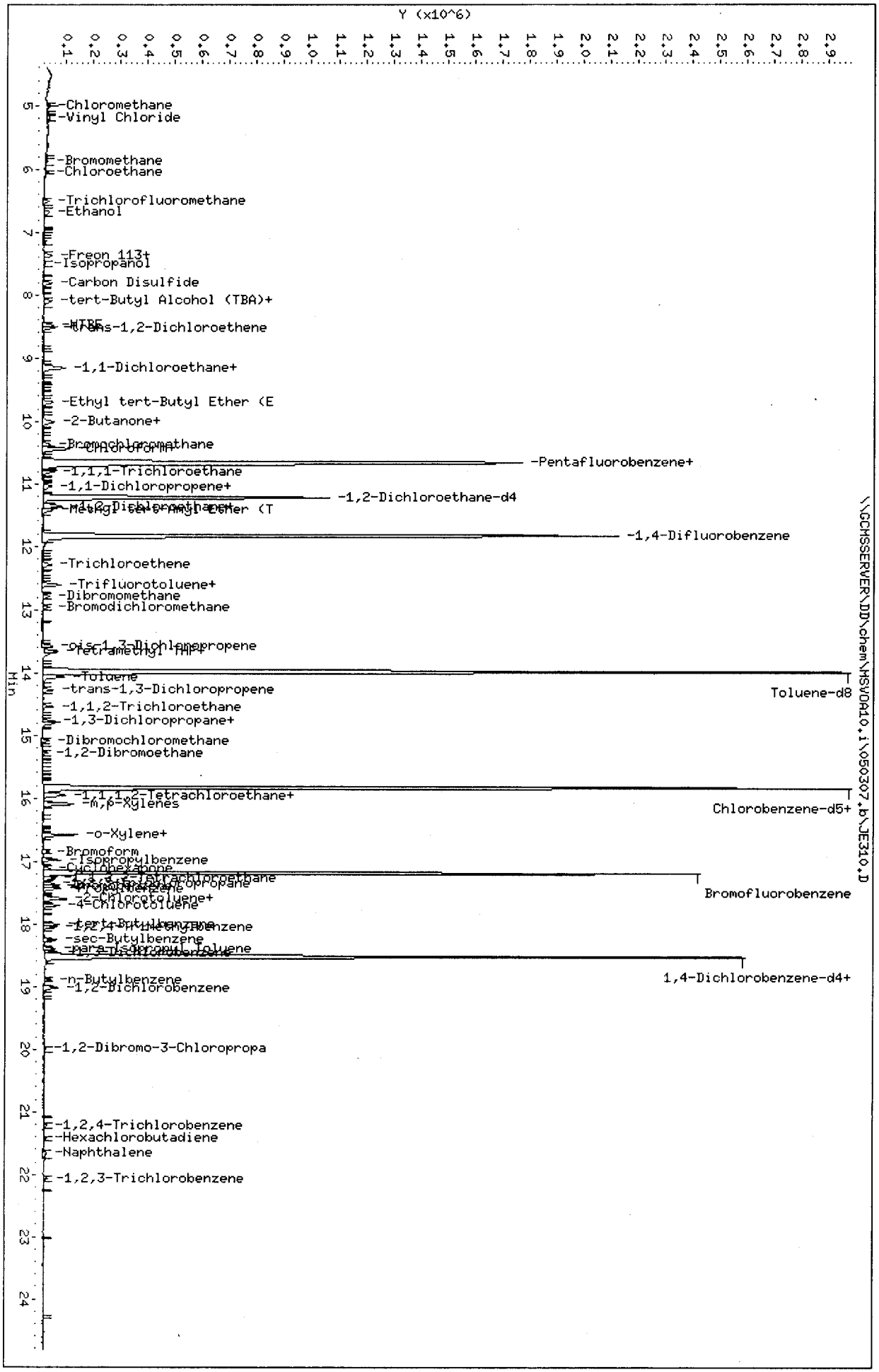
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	881052	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	7762	0.50000	0.5259
81 n-Butylbenzene	91	18.886	18.886	(1.020)	6916	0.50000	0.4819(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.028)	6866	0.50000	0.4812
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	1068	0.50000	0.6113
84 1,2,4-Trichlorobenzene	180	21.242	21.242	(1.148)	1386	0.50000	0.4234(M)
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	1319	0.50000	0.5957(M)
86 Naphthalene	128	21.686	21.686	(1.171)	4817	0.50000	0.4688(M)
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1848	0.50000	0.4200

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Date : 03-MAY-2007 14:40
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/500,S6072,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:40 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/500,S6072,0.002/500
Misc Info : S5938,0.002/500, 2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:06 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:40 Cal File: JE310.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.425)	21455	2.00000	2.1527(M)
2 Chloromethane	50	4.994	4.994	(0.469)	30595	2.00000	2.1345
3 Vinyl Chloride	62	5.191	5.191	(0.487)	20697	2.00000	1.9330(M)
4 Bromomethane	94	5.862	5.862	(0.550)	15302	2.00000	1.9817
5 Chloroethane	64	6.049	6.049	(0.568)	15478	2.00000	2.0372(M)
6 Trichlorofluoromethane	101	6.502	6.502	(0.610)	18360	2.00000	1.9183
7 Ethanol	45	6.680	6.680	(0.627)	33778	200.000	202.8496(M)
8 Freon 113	101	7.331	7.331	(0.688)	7449	2.00000	1.4584
9 Acetone	43	7.380	7.380	(0.693)	9015	2.00000	2.0242(M)
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	12359	2.00000	1.8316
11 Isopropanol	45	7.498	7.498	(0.704)	14554	20.0000	21.3625
12 Carbon Disulfide	76	7.814	7.814	(0.733)	56163	2.00000	1.9701
13 Methylene Chloride	84	8.090	8.090	(0.759)	20092	2.00000	2.1167(M)
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.762)	16309	20.0000	20.2945
15 MTBE	73	8.484	8.484	(0.796)	48260	2.00000	2.1483
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.800)	18850	2.00000	2.1984
18 Vinyl Acetate	43	9.135	9.135	(0.857)	35877	2.00000	1.7623(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	33652	2.00000	2.0869
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	80941	2.00000	2.0708
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.910)	47098	2.00000	2.0706
22 2-Butanone	43	9.953	9.953	(0.934)	12909	2.00000	2.1792
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	20810	2.00000	2.2186

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	16115	2.00000	1.9170
	25 Bromochloromethane	128	10.367	10.367	(0.973)	9211	2.00000	2.0571
	26 Chloroform	83	10.436	10.436	(0.980)	28600	2.00000	2.0822
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	73173	20.0000	22.9590
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1409612	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	793635	50.0000	50.0295
	30 1,1,1-Trichloroethane	97	10.801	10.801	(1.014)	16912	2.00000	1.8811
	31 1,1-Dichloropropene	75	11.038	11.038	(0.933)	19064	2.00000	1.8790
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	12184	2.00000	1.8228
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	896823	50.0000	50.0441
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	23266	2.00000	2.0107
	35 Benzene	78	11.363	11.363	(0.961)	64423	2.00000	1.9819
	36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.966)	35656	2.00000	2.1153
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2315236	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	15070	2.00000	1.8469
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	16673	2.00000	1.6322
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	20339	2.00000	2.0082
	41 Dibromomethane	93	12.793	12.793	(1.082)	11983	2.00000	2.0127
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	21961	2.00000	1.9841
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	27358	2.00000	1.9055
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	48611	2.00000	1.9660
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	31678	2.00000	2.3432
	47 Toluene-d8	98	13.976	13.976	(1.182)	2515013	50.0000	50.1800
	48 Toluene	92	14.064	14.064	(1.189)	35831	2.00000	1.9443
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	23991	2.00000	1.8990
	50 1,1,2-Trichloroethane	85	14.538	14.538	(1.229)	9099	2.00000	2.0012
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	27964	2.00000	2.0115
	52 2-Hexanone	43	14.804	14.804	(0.935)	15672	2.00000	1.9494
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	11264	2.00000	1.7030
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	16558	2.00000	1.8974
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	17395	2.00000	2.0523
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1960105	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	41103	2.00000	2.0051
	58 1,1,1,2-Tetrachloroethane	131	15.938	15.938	(1.007)	14123	2.00000	2.0355
	59 Ethylbenzene	91	15.957	15.957	(1.008)	62188	2.00000	1.8817
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	48096	4.00000	3.9869
	61 o-Xylene	106	16.579	16.579	(1.047)	24267	2.00000	1.9793
	62 Styrene	104	16.588	16.588	(1.048)	41353	2.00000	1.9313
	63 Bromoform	173	16.845	16.845	(1.064)	12136	2.00000	1.9164
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	49516	2.00000	1.8050
	65 Cyclohexanone	55	17.121	17.121	(0.924)	13929	20.0000	10.3005
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1026075	50.0000	51.4913
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	22687	2.00000	2.0781
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.937)	23367	2.00000	2.2639
	69 Bromobenzene	156	17.397	17.397	(0.939)	16684	2.00000	1.9705
	70 Propylbenzene	91	17.436	17.436	(0.941)	61471	2.00000	1.8006
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	48976	2.00000	1.9939
	72 1,3,5-Trimethylbenzene	105	17.614	17.614	(0.951)	36953	2.00000	1.8058
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	45466	2.00000	1.9609
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	31632	2.00000	1.7140
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	32323	2.00000	1.7538
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	43904	2.00000	1.6761
	77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	31404	2.00000	1.6747
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	30465	2.00000	2.0768

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

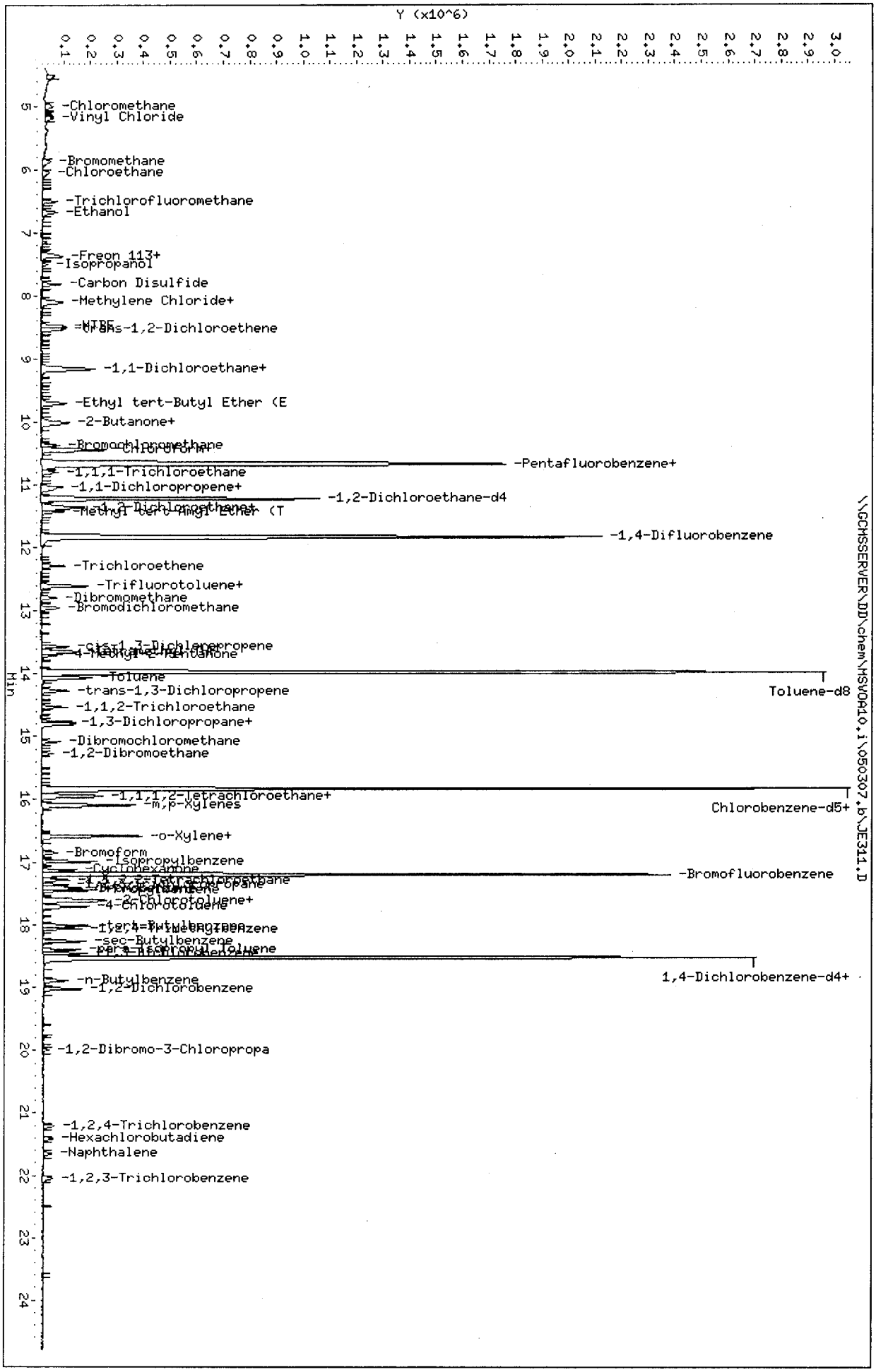
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	896547	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	31850	2.00000	2.1208
81 n-Butylbenzene	91	18.895	18.895	(1.020)	22218	2.00000	1.6087(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	30243	2.00000	2.0833
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	3790	2.00000	2.1318
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	8276	2.00000	1.6536(M)
85 Hexachlorobutadiene	225	21.419	21.419	(1.157)	3542	2.00000	1.6348
86 Naphthalene	128	21.656	21.656	(1.169)	18914	2.00000	1.6799
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	7831	2.00000	1.8252

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Date : 03-MAY-2007 15:13
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0025/500,S6072,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:13 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0025/500,S6072,0.005/500
Misc Info : S5938,0.005/500, 5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:07 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:13 Cal File: JE311.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.426)	60142	5.00000	6.0582(M)
2 Chloromethane	50	5.003	5.003	(0.470)	80156	5.00000	5.6144
3 Vinyl Chloride	62	5.180	5.180	(0.487)	58511	5.00000	5.4864
4 Bromomethane	94	5.861	5.861	(0.551)	41404	5.00000	5.3832(M)
5 Chloroethane	64	6.038	6.038	(0.567)	42093	5.00000	5.5621
6 Trichlorofluoromethane	101	6.501	6.501	(0.611)	52185	5.00000	5.4741
7 Ethanol	45	6.679	6.679	(0.628)	86031	500.000	518.6896(M)
8 Freon 113	101	7.339	7.339	(0.690)	24887	5.00000	4.8918
9 Acetone	43	7.369	7.369	(0.692)	27028	5.00000	6.0928
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	33704	5.00000	5.0148
11 Isopropanol	45	7.497	7.497	(0.704)	35324	50.0000	52.0538
12 Carbon Disulfide	76	7.813	7.813	(0.734)	138901	5.00000	4.8916
13 Methylene Chloride	84	8.089	8.089	(0.760)	50214	5.00000	5.3110
14 tert-Butyl Alcohol (TBA)	59	8.108	8.108	(0.762)	42177	50.0000	52.6913
15 MTBE	73	8.483	8.483	(0.797)	114414	5.00000	5.1133
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	42339	5.00000	4.9573
18 Vinyl Acetate	43	9.124	9.124	(0.857)	101080	5.00000	4.9847(M)
19 1,1-Dichloroethane	63	9.144	9.144	(0.859)	83695	5.00000	5.2108
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	195814	5.00000	5.0297
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.911)	115251	5.00000	5.0869
22 2-Butanone	43	9.942	9.942	(0.934)	29234	5.00000	4.9546
23 cis-1,2-Dichloroethene	96	10.001	10.001	(0.940)	44459	5.00000	4.7586

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.943)	42729	5.00000	5.1031
	25 Bromochloromethane	128	10.366	10.366	(0.974)	22695	5.00000	5.0886
	26 Chloroform	83	10.425	10.425	(0.980)	69881	5.00000	5.1078
	27 Tetrahydrofuran	42	10.445	10.445	(0.981)	173265	50.0000	54.5791
*	28 Pentafluorobenzene	168	10.642	10.642	(1.000)	1404065	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.003)	773811	50.0000	48.9725
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.015)	44056	5.00000	4.9196
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	49607	5.00000	4.9696
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	32728	5.00000	4.9765
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	887080	50.0000	50.3104
	34 1,2-Dichloroethane	62	11.332	11.332	(0.958)	56295	5.00000	4.9448
	35 Benzene	78	11.362	11.362	(0.961)	165120	5.00000	5.1631
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	82681	5.00000	4.9853
*	37 1,4-Difluorobenzene	114	11.825	11.825	(1.000)	2277963	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	40795	5.00000	5.0816
	39 Trifluorotoluene	146	12.604	12.604	(1.066)	50157	5.00000	4.9907
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	50403	5.00000	5.0580
	41 Dibromomethane	93	12.792	12.792	(1.082)	29674	5.00000	5.0657
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	54991	5.00000	5.0497
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	74358	5.00000	5.2640
	45 Tetramethyl THF	43	13.640	13.640	(1.153)	124119	5.00000	5.1019
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	64514	5.00000	4.8503
	47 Toluene-d8	98	13.965	13.965	(1.181)	2501333	50.0000	50.7236
	48 Toluene	92	14.063	14.063	(1.189)	97478	5.00000	5.3761
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	63333	5.00000	5.0951(M)
	50 1,1,2-Trichloroethane	85	14.527	14.527	(1.228)	22727	5.00000	5.0804
	51 1,3-Dichloropropane	76	14.763	14.763	(0.933)	72677	5.00000	5.2249
	52 2-Hexanone	43	14.793	14.793	(0.935)	42055	5.00000	5.2284
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	35679	5.00000	5.3915
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	44728	5.00000	5.1227
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	43475	5.00000	5.2132
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	1961186	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	108962	5.00000	5.3127
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	36766	5.00000	5.2960
	59 Ethylbenzene	91	15.956	15.956	(1.008)	181453	5.00000	5.4874
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	134518	10.0000	11.1448
	61 o-Xylene	106	16.578	16.578	(1.047)	68308	5.00000	5.5683
	62 Styrene	104	16.578	16.578	(1.047)	118195	5.00000	5.5170
	63 Bromoform	173	16.834	16.834	(1.064)	32477	5.00000	5.1257
	64 Isopropylbenzene	105	16.972	16.972	(0.916)	156395	5.00000	5.6433
	65 Cyclohexanone	55	17.110	17.110	(0.924)	69537	50.0000	50.9016
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1024582	50.0000	50.8951
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.932)	57991	5.00000	5.2581
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	54968	5.00000	5.2716
	69 Bromobenzene	156	17.396	17.396	(0.939)	47690	5.00000	5.5754
	70 Propylbenzene	91	17.435	17.435	(0.941)	189282	5.00000	5.4884
	71 2-Chlorotoluene	91	17.583	17.583	(0.949)	140027	5.00000	5.6431
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.950)	112043	5.00000	5.4197
	73 4-Chlorotoluene	91	17.692	17.692	(0.955)	125176	5.00000	5.3441
	74 tert-Butylbenzene	119	18.007	18.007	(0.972)	100747	5.00000	5.4039
	75 1,2,4-Trimethylbenzene	105	18.056	18.056	(0.975)	99183	5.00000	5.3271
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	138952	5.00000	5.2510
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.993)	97726	5.00000	5.1587
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.996)	82601	5.00000	5.5738

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

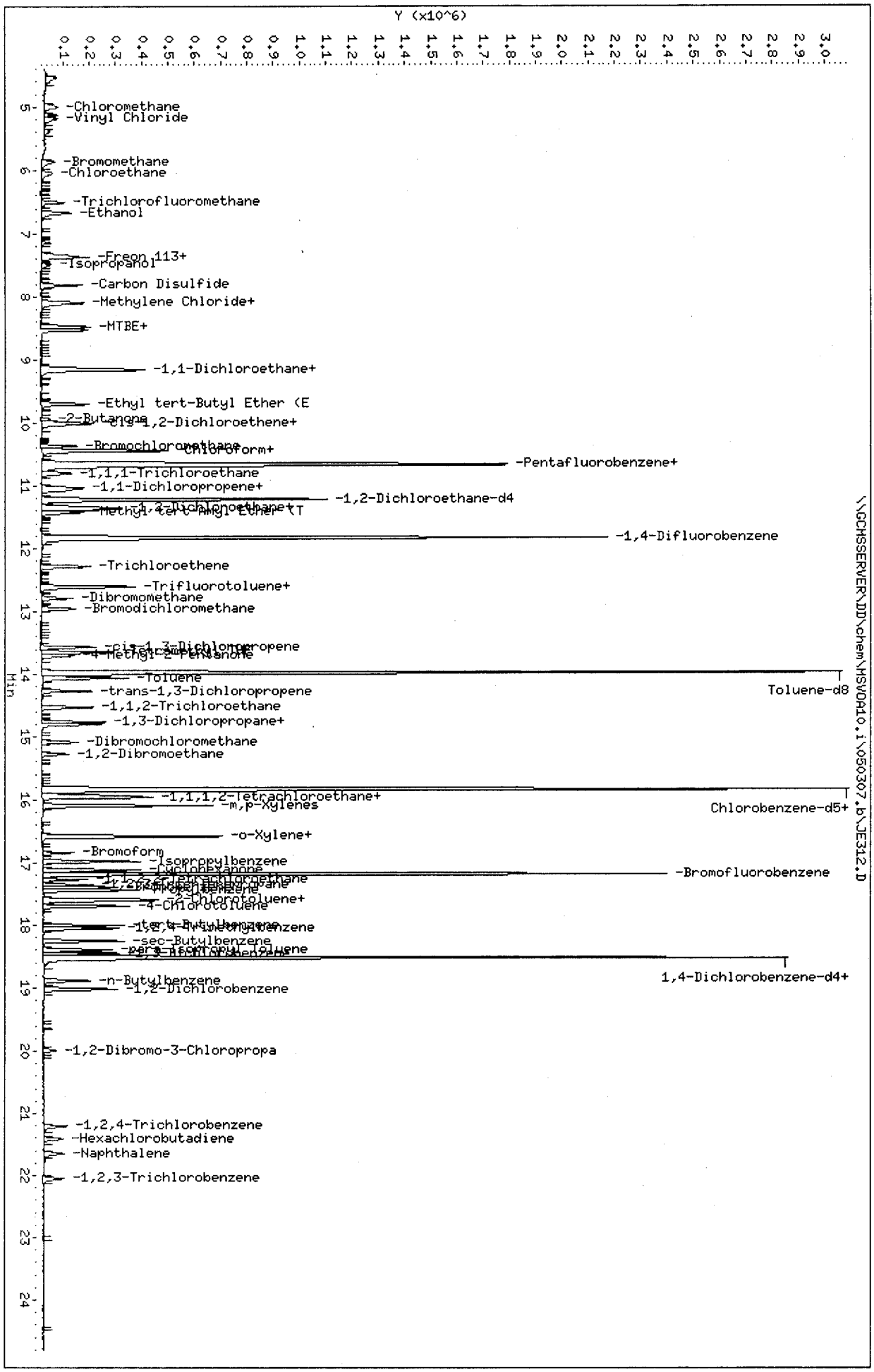
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.520	18.520	(1.000)	905730	50.0000	
80 1,4-Dichlorobenzene	146	18.540	18.540	(1.001)	81814	5.00000	5.3927
81 n-Butylbenzene	91	18.885	18.885	(1.020)	71286	5.00000	5.1093
82 1,2-Dichlorobenzene	146	19.023	19.023	(1.027)	80088	5.00000	5.4610
83 1,2-Dibromo-3-Chloropropane	75	19.999	19.999	(1.080)	8698	5.00000	4.8429
84 1,2,4-Trichlorobenzene	180	21.211	21.211	(1.145)	25865	5.00000	5.1158
85 Hexachlorobutadiene	225	21.418	21.418	(1.157)	11692	5.00000	5.3419
86 Naphthalene	128	21.655	21.655	(1.169)	49271	5.00000	4.3319(M)
87 1,2,3-Trichlorobenzene	180	22.059	22.059	(1.191)	21699	5.00000	5.0063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Date : 03-MAY-2007 15:46
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/100,S6072,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:46 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/100,S6072,0.002/100
Misc Info : S5938,0.002/100, 10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:08 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:46 Cal File: JE312.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	89915	10.0000	8.9778
2 Chloromethane	50	4.985	4.985	(0.468)	137830	10.0000	9.5694
3 Vinyl Chloride	62	5.182	5.182	(0.487)	103548	10.0000	9.6241
4 Bromomethane	94	5.872	5.872	(0.552)	71127	10.0000	9.1665
5 Chloroethane	64	6.049	6.049	(0.568)	76838	10.0000	10.0641
6 Trichlorofluoromethane	101	6.503	6.503	(0.611)	92032	10.0000	9.5691
7 Ethanol	45	6.671	6.671	(0.627)	161047	1000.00	962.4395(M)
8 Freon 113	101	7.341	7.341	(0.690)	55009	10.0000	10.7176
9 Acetone	43	7.371	7.371	(0.692)	53227	10.0000	11.8934
10 1,1-Dichloroethene	96	7.371	7.371	(0.692)	68395	10.0000	10.0872
11 Isopropanol	45	7.489	7.489	(0.704)	66367	100.000	96.9400
12 Carbon Disulfide	76	7.814	7.814	(0.734)	272891	10.0000	9.5260
13 Methylene Chloride	84	8.090	8.090	(0.760)	94781	10.0000	9.9366
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	79384	100.000	98.3025
15 MTBE	73	8.475	8.475	(0.796)	217419	10.0000	9.6314
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	84302	10.0000	9.7839
18 Vinyl Acetate	43	9.145	9.145	(0.859)	150833	10.0000	7.3729(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	160593	10.0000	9.9107
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	389154	10.0000	9.9081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	228996	10.0000	10.0186
22 2-Butanone	43	9.944	9.944	(0.934)	60306	10.0000	10.1310
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	90961	10.0000	9.6504

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	77576	10.0000	9.1836
	25 Bromochloromethane	128	10.368	10.368	(0.974)	45844	10.0000	10.1888
	26 Chloroform	83	10.427	10.427	(0.980)	139559	10.0000	10.1113
	27 Tetrahydrofuran	42	10.437	10.437	(0.981)	332722	100.000	103.8881
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1416508	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.003)	810949	50.0000	50.8721
	30 1,1,1-Trichloroethane	97	10.802	10.802	(1.015)	90225	10.0000	9.9867
	31 1,1-Dichloropropene	75	11.028	11.028	(0.932)	97202	10.0000	9.5272
	32 Carbon Tetrachloride	117	11.078	11.078	(0.937)	65802	10.0000	9.7893
	33 1,2-Dichloroethane-d4	65	11.216	11.216	(0.948)	916714	50.0000	50.8670
	34 1,2-Dichloroethane	62	11.334	11.334	(0.958)	117103	10.0000	10.0637
	35 Benzene	78	11.364	11.364	(0.961)	325224	10.0000	9.9494
	36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.966)	176886	10.0000	10.4349
*	37 1,4-Difluorobenzene	114	11.827	11.827	(1.000)	2328303	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	82390	10.0000	10.0411
	39 Trifluorotoluene	146	12.606	12.606	(1.066)	100609	10.0000	9.7943
	40 1,2-Dichloropropane	63	12.606	12.606	(1.066)	102462	10.0000	10.0600
	41 Dibromomethane	93	12.783	12.783	(1.081)	59720	10.0000	9.9744
	42 Bromodichloromethane	83	12.951	12.951	(1.095)	109536	10.0000	9.8410
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	143043	10.0000	9.9076
	45 Tetramethyl THF	43	13.641	13.641	(1.153)	252528	10.0000	10.1558
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	121435	10.0000	8.9323
	47 Toluene-d8	98	13.966	13.966	(1.181)	2530522	50.0000	50.2061
	48 Toluene	92	14.065	14.065	(1.189)	182138	10.0000	9.8281
	49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.207)	126263	10.0000	9.9382
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.228)	45657	10.0000	9.9857
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	141062	10.0000	10.0983
	52 2-Hexanone	43	14.785	14.785	(0.934)	85327	10.0000	10.5632
	53 Tetrachloroethene	166	14.805	14.805	(0.935)	65859	10.0000	9.9099
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	89381	10.0000	10.1936
	55 1,2-Dibromoethane	107	15.278	15.278	(1.292)	86172	10.0000	10.1098
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	1969525	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	204176	10.0000	9.9130
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69320	10.0000	9.9431
	59 Ethylbenzene	91	15.958	15.958	(1.008)	330342	10.0000	9.9478
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	241168	20.0000	19.8962
	61 o-Xylene	106	16.569	16.569	(1.047)	123646	10.0000	10.0367
	62 Styrene	104	16.579	16.579	(1.047)	214488	10.0000	9.9694
	63 Bromoform	173	16.836	16.836	(1.064)	63442	10.0000	9.9704
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	281407	10.0000	10.0269
	65 Cyclohexanone	55	17.112	17.112	(0.924)	192898	100.000	139.4326
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1032818	50.0000	50.6609
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	106355	10.0000	9.5225
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	104123	10.0000	9.8606
	69 Bromobenzene	156	17.397	17.397	(0.940)	87921	10.0000	10.1500
	70 Propylbenzene	91	17.437	17.437	(0.942)	340232	10.0000	9.7417
	71 2-Chlorotoluene	91	17.585	17.585	(0.950)	247340	10.0000	9.8428
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	205208	10.0000	9.8018
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	233535	10.0000	9.8452
	74 tert-Butylbenzene	119	18.009	18.009	(0.973)	182493	10.0000	9.6660
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	184412	10.0000	9.7805
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	257624	10.0000	9.6135
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	179820	10.0000	9.3732
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	148256	10.0000	9.8787

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

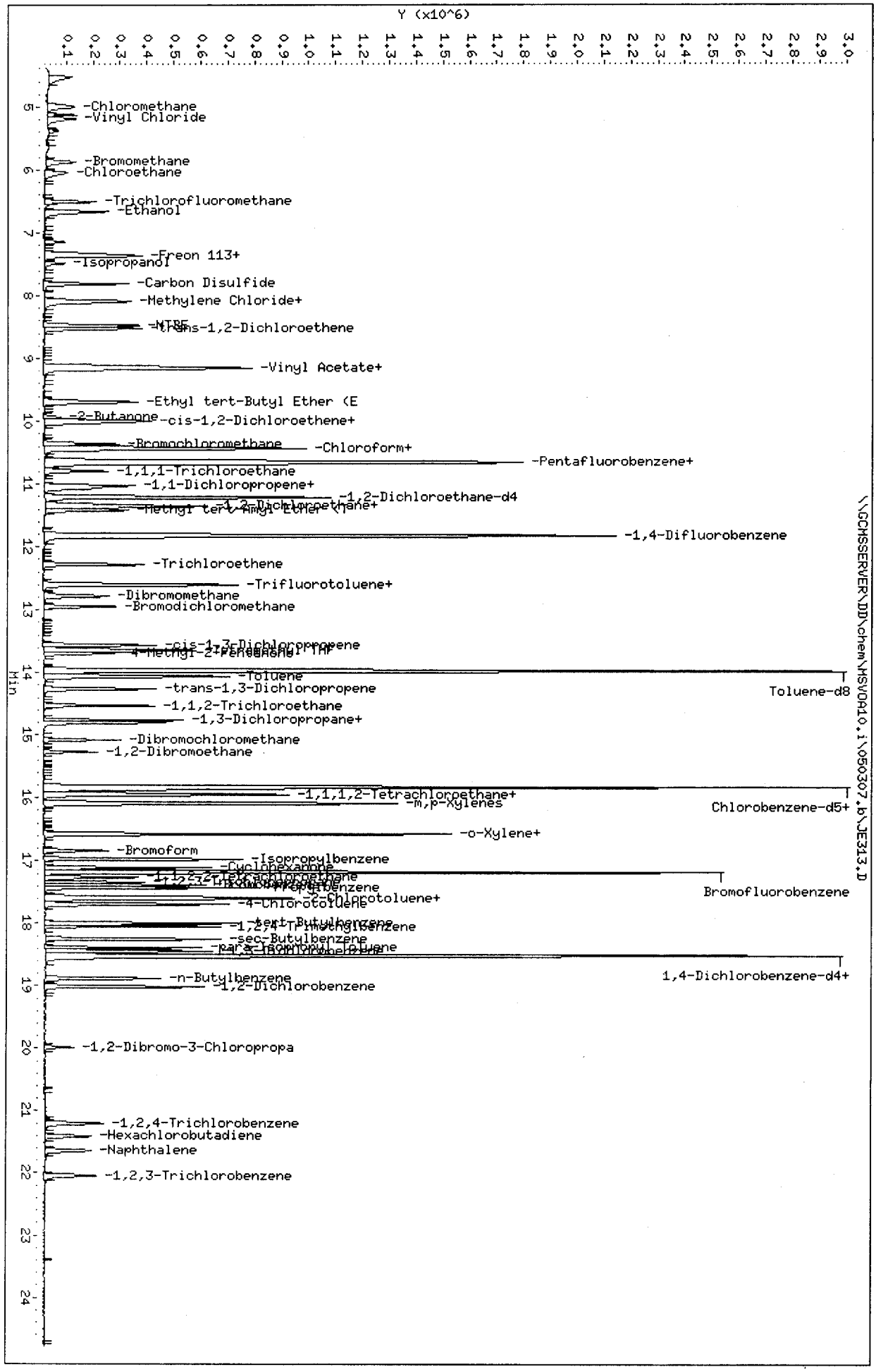
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	917230	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	149173	10.0000	9.7093
81 n-Butylbenzene	91	18.886	18.886	(1.020)	137283	10.0000	9.7163
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	151600	10.0000	10.2077
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	18722	10.0000	10.2934
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	48031	10.0000	9.3808
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	21706	10.0000	9.7928
86 Naphthalene	128	21.647	21.647	(1.169)	104760	10.0000	9.0951(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	45414	10.0000	10.3465

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Date : 03-MAY-2007 16:19
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.002/100,S6072,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:19 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.002/100,S6072,0.004/100
Misc Info : S5938,0.004/100, 20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:09 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:19 Cal File: JE313.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	186996	20.0000	18.5814
2 Chloromethane	50	4.994	4.994	(0.470)	283247	20.0000	19.5710
3 Vinyl Chloride	62	5.181	5.181	(0.487)	206595	20.0000	19.1092
4 Bromomethane	94	5.872	5.872	(0.552)	153230	20.0000	19.6527
5 Chloroethane	64	6.039	6.039	(0.568)	153527	20.0000	20.0120
6 Trichlorofluoromethane	101	6.503	6.503	(0.612)	186970	20.0000	19.3469
7 Ethanol	45	6.660	6.660	(0.626)	320064	2000.00	1903.5449
8 Freon 113	101	7.331	7.331	(0.689)	120374	20.0000	23.3401
9 Acetone	43	7.360	7.360	(0.692)	90282	20.0000	20.0762
10 1,1-Dichloroethene	96	7.370	7.370	(0.693)	144580	20.0000	21.2207
11 Isopropanol	45	7.479	7.479	(0.703)	138719	200.000	201.6472
12 Carbon Disulfide	76	7.814	7.814	(0.735)	576816	20.0000	20.0385
13 Methylene Chloride	84	8.080	8.080	(0.760)	188113	20.0000	19.6265
14 tert-Butyl Alcohol (TBA)	59	8.100	8.100	(0.762)	155391	200.000	191.4976
15 MTBE	73	8.474	8.474	(0.797)	439195	20.0000	19.3623
16 trans-1,2-Dichloroethene	96	8.514	8.514	(0.801)	171269	20.0000	19.7816
18 Vinyl Acetate	43	9.115	9.115	(0.857)	392386	20.0000	19.0882
19 1,1-Dichloroethane	63	9.135	9.135	(0.859)	324682	20.0000	19.9408
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.861)	781752	20.0000	19.8081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.911)	446941	20.0000	19.4597
22 2-Butanone	43	9.934	9.934	(0.934)	116262	20.0000	19.4373
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.940)	182121	20.0000	19.2290

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

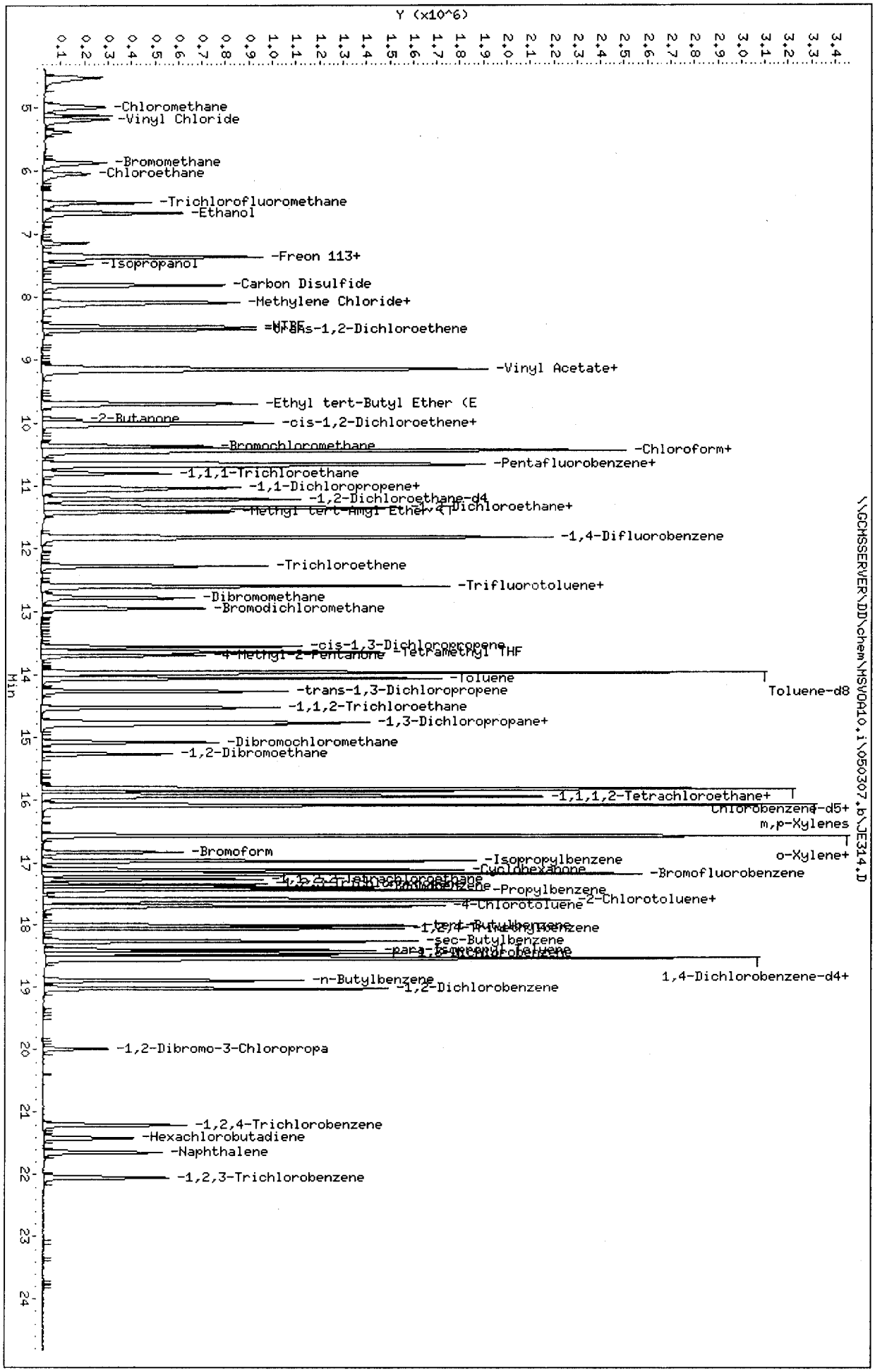
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.943)	158641	20.0000	18.6899
	25 Bromochloromethane	128	10.358	10.358	(0.974)	84899	20.0000	18.7780
	26 Chloroform	83	10.417	10.417	(0.980)	275479	20.0000	19.8629
	27 Tetrahydrofuran	42	10.427	10.427	(0.981)	652109	200.000	202.6329
*	28 Pentafluorobenzene	168	10.634	10.634	(1.000)	1423356	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.003)	797583	50.0000	49.7929
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.015)	180700	20.0000	19.9049
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	205746	20.0000	20.3188
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	142086	20.0000	21.2982
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	899776	50.0000	50.3052
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	232643	20.0000	20.1446
	35 Benzene	78	11.353	11.353	(0.961)	652382	20.0000	20.1092
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	331747	20.0000	19.7187
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2310806	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	166052	20.0000	20.3905
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	213223	20.0000	20.9145
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	204108	20.0000	20.1916
	41 Dibromomethane	93	12.783	12.783	(1.082)	119315	20.0000	20.0789
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	218625	20.0000	19.7906
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	285542	20.0000	19.9272
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	498432	20.0000	20.1970
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	279568	20.0000	20.7197
	47 Toluene-d8	98	13.966	13.966	(1.182)	2522015	50.0000	50.4162
	48 Toluene	92	14.055	14.055	(1.189)	374923	20.0000	20.3839
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	255546	20.0000	20.2664
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	90788	20.0000	20.0067
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	284194	20.0000	20.1328
	52 2-Hexanone	43	14.775	14.775	(0.934)	157898	20.0000	19.3436
	53 Tetrachloroethene	166	14.804	14.804	(0.936)	137319	20.0000	20.4473
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175743	20.0000	19.8340
	55 1,2-Dibromoethane	107	15.268	15.268	(1.292)	173857	20.0000	20.5517
*	56 Chlorobenzene-d5	117	15.820	15.820	(1.000)	1990271	50.0000	
	57 Chlorobenzene	112	15.859	15.859	(1.002)	416244	20.0000	19.9985
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.007)	140426	20.0000	19.9325
	59 Ethylbenzene	91	15.948	15.948	(1.008)	681994	20.0000	20.3232
	60 m,p-Xylenes	106	16.086	16.086	(1.017)	502784	40.0000	41.0470
	61 o-Xylene	106	16.569	16.569	(1.047)	254094	20.0000	20.4106
	62 Styrene	104	16.569	16.569	(1.047)	449841	20.0000	20.6906
	63 Bromoform	173	16.835	16.835	(1.064)	126201	20.0000	19.6268
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	588609	20.0000	20.4755
	65 Cyclohexanone	55	17.111	17.111	(0.924)	326970	200.000	230.7389
	66 Bromofluorobenzene	95	17.170	17.170	(0.928)	1032455	50.0000	49.4421
	67 1,1,2,2-Tetrachloroethane	83	17.259	17.259	(0.932)	226191	20.0000	19.7718
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	200446	20.0000	18.5325
	69 Bromobenzene	156	17.387	17.387	(0.939)	177320	20.0000	19.9852
	70 Propylbenzene	91	17.427	17.427	(0.941)	740774	20.0000	20.7072
	71 2-Chlorotoluene	91	17.575	17.575	(0.949)	524562	20.0000	20.3798
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	444224	20.0000	20.7154
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	481709	20.0000	19.8261
	74 tert-Butylbenzene	119	17.999	17.999	(0.972)	406505	20.0000	21.0205
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	401618	20.0000	20.7952
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	583693	20.0000	21.2647
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	416853	20.0000	21.2134
	78 1,3-Dichlorobenzene	146	18.442	18.442	(0.996)	313184	20.0000	20.3735

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	939511	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	317560	20.0000	20.1791
81 n-Butylbenzene	91	18.876	18.876	(1.020)	328911	20.0000	22.7269
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	310012	20.0000	20.3791
83 1,2-Dibromo-3-Chloropropane	75	19.980	19.980	(1.079)	36842	20.0000	19.7754
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	112830	20.0000	21.5140
85 Hexachlorobutadiene	225	21.410	21.410	(1.157)	50968	20.0000	22.4492
86 Naphthalene	128	21.646	21.646	(1.169)	233435	20.0000	19.7859
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	105637	20.0000	23.4961

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Date : 03-MAY-2007 16:51
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.005/100,S6072,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:51 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.005/100,S6072,0.01/100
Misc Info : S5938,0.01/100, 50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:11 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:51 Cal File: JE314.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	504201	50.0000	48.1788
2 Chloromethane	50	4.993	4.993	(0.469)	707558	50.0000	47.0128
3 Vinyl Chloride	62	5.190	5.190	(0.487)	546211	50.0000	48.5838
4 Bromomethane	94	5.871	5.871	(0.551)	396118	50.0000	48.8551
5 Chloroethane	64	6.048	6.048	(0.568)	387910	50.0000	48.6232
6 Trichlorofluoromethane	101	6.511	6.511	(0.611)	500419	50.0000	49.7944
7 Ethanol	45	6.669	6.669	(0.626)	858506	5000.00	4909.9409
8 Freon 113	101	7.340	7.340	(0.689)	270265	50.0000	50.3927
9 Acetone	43	7.369	7.369	(0.692)	236787	50.0000	50.6344
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	349227	50.0000	49.2909
11 Isopropanol	45	7.488	7.488	(0.703)	363163	500.000	507.6502
12 Carbon Disulfide	76	7.813	7.813	(0.733)	1472141	50.0000	49.1794
13 Methylene Chloride	84	8.089	8.089	(0.759)	487837	50.0000	48.9448
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	415778	500.000	492.7261
15 MTBE	73	8.483	8.483	(0.796)	1121415	50.0000	47.5416
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	418054	50.0000	46.4324
18 Vinyl Acetate	43	9.124	9.124	(0.857)	662519	50.0000	30.9925
19 1,1-Dichloroethane	63	9.144	9.144	(0.858)	815210	50.0000	48.1461
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	1986230	50.0000	48.3962
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.910)	1163899	50.0000	48.7313
22 2-Butanone	43	9.933	9.933	(0.932)	317573	50.0000	51.0561
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	461181	50.0000	46.8246

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

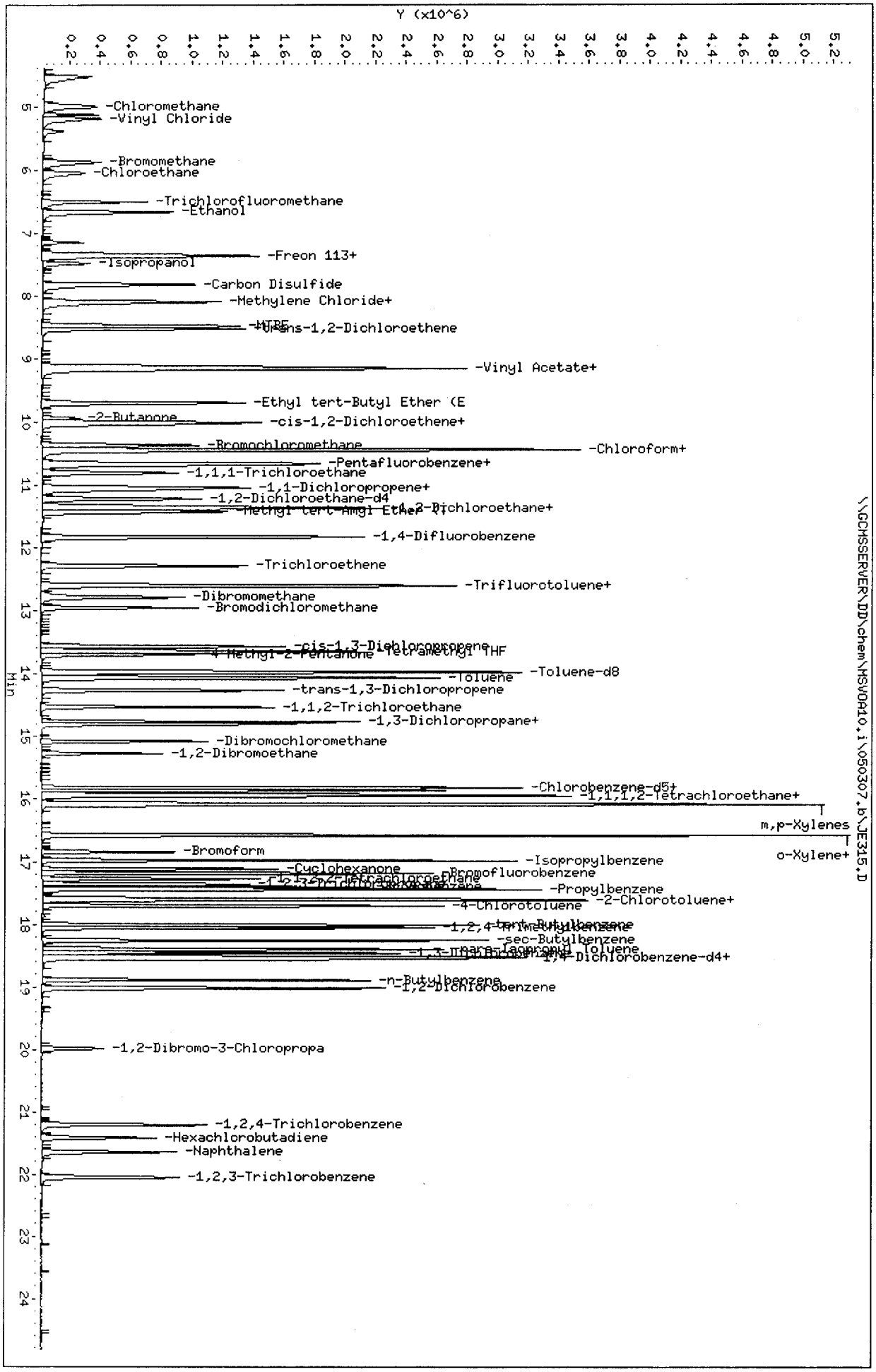
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.942)	383785	50.0000	43.4798
	25 Bromochloromethane	128	10.366	10.366	(0.973)	244827	50.0000	52.0730
	26 Chloroform	83	10.426	10.426	(0.979)	695749	50.0000	48.2407
	27 Tetrahydrofuran	42	10.435	10.435	(0.980)	1649055	500.000	492.7557
*	28 Pentafluorobenzene	168	10.652	10.652	(1.000)	1480154	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.002)	827867	50.0000	49.7002
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.014)	451274	50.0000	47.8024
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	497318	50.0000	46.4788
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	337901	50.0000	47.9331
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	942516	50.0000	49.8679
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	606711	50.0000	49.7170
	35 Benzene	78	11.362	11.362	(0.961)	1654107	50.0000	48.2516
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	871811	50.0000	49.0398
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2441798	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	415910	50.0000	48.3322
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	501243	50.0000	46.5283
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	523637	50.0000	49.0224
	41 Dibromomethane	93	12.792	12.792	(1.082)	312416	50.0000	49.7546
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	567978	50.0000	48.6570
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	737707	50.0000	48.7209
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	1290754	50.0000	49.4971
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	700920	50.0000	49.1609
	47 Toluene-d8	98	13.975	13.975	(1.182)	2607428	50.0000	49.3274
	48 Toluene	92	14.064	14.064	(1.189)	938763	50.0000	48.3010
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	658296	50.0000	49.4064
	50 1,1,2-Trichloroethane	85	14.537	14.537	(1.229)	232911	50.0000	48.5725
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	737516	50.0000	50.7404
	52 2-Hexanone	43	14.783	14.783	(0.934)	419054	50.0000	49.8565
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	322443	50.0000	46.6285
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	463746	50.0000	50.8282
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	456727	50.0000	51.0935
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	2049371	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	1037125	50.0000	48.3919
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	356863	50.0000	49.1936
	59 Ethylbenzene	91	15.957	15.957	(1.008)	1616160	50.0000	46.7723
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	1194176	100.000	94.6805
	61 o-Xylene	106	16.568	16.568	(1.047)	602548	50.0000	47.0052
	62 Styrene	104	16.578	16.578	(1.047)	1081235	50.0000	48.2978
	63 Bromoform	173	16.844	16.844	(1.064)	333182	50.0000	50.3224
	64 Isopropylbenzene	105	16.972	16.972	(0.917)	1372436	50.0000	45.9643
	65 Cyclohexanone	55	17.110	17.110	(0.924)	887316	500.000	602.8524
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1059615	50.0000	48.8533
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.933)	553835	50.0000	46.6093
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	525205	50.0000	46.7504
	69 Bromobenzene	156	17.396	17.396	(0.940)	454747	50.0000	49.3446
	70 Propylbenzene	91	17.436	17.436	(0.942)	1733700	50.0000	46.6585
	71 2-Chlorotoluene	91	17.583	17.583	(0.950)	1239951	50.0000	46.3796
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.951)	1049707	50.0000	47.1280
	73 4-Chlorotoluene	91	17.692	17.692	(0.956)	1175242	50.0000	46.5693
	74 tert-Butylbenzene	119	18.007	18.007	(0.973)	909810	50.0000	45.2949
	75 1,2,4-Trimethylbenzene	105	18.047	18.047	(0.975)	1020238	50.0000	50.8594
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	1337856	50.0000	46.9250
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.994)	981456	50.0000	48.0860
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.997)	766485	50.0000	48.0055

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.510	18.510	(1.000)	975848	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	776019	50.0000	47.4755
81 n-Butylbenzene	91	18.885	18.885	(1.020)	786615	50.0000	52.3291
82 1,2-Dichlorobenzene	146	19.013	19.013	(1.027)	772624	50.0000	48.8985
83 1,2-Dibromo-3-Chloropropane	75	19.979	19.979	(1.079)	96383	50.0000	49.8085
84 1,2,4-Trichlorobenzene	180	21.202	21.202	(1.145)	306325	50.0000	56.2341
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	119376	50.0000	50.6221
86 Naphthalene	128	21.645	21.645	(1.169)	671401	50.0000	54.7888
87 1,2,3-Trichlorobenzene	180	22.050	22.050	(1.191)	294335	50.0000	63.0293

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Date : 03-MAY-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0075/100,S6072,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:24 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0075/100,S6072,0.015/100
Misc Info : S5938,0.015/100, 75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:12 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:24 Cal File: JE315.D
Als bottle: 15 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.532	4.532	(0.425)	665322	75.0000	65.7168
2 Chloromethane	50	4.995	4.995	(0.469)	974450	75.0000	66.9277
3 Vinyl Chloride	62	5.183	5.183	(0.486)	760407	75.0000	69.9148
4 Bromomethane	94	5.873	5.873	(0.551)	590747	75.0000	75.3145
5 Chloroethane	64	6.041	6.041	(0.567)	567112	75.0000	73.4808
6 Trichlorofluoromethane	101	6.504	6.504	(0.610)	715607	75.0000	73.6061
7 Ethanol	45	6.662	6.662	(0.625)	1183509	7500.00	6996.7488
8 Freon 113	101	7.342	7.342	(0.689)	531594	75.0000	102.4589
9 Acetone	43	7.372	7.372	(0.692)	254933	75.0000	56.3515
10 1,1-Dichloroethene	96	7.372	7.372	(0.692)	535637	75.0000	78.1486
11 Isopropanol	45	7.490	7.490	(0.703)	519306	750.000	750.3745
12 Carbon Disulfide	76	7.825	7.825	(0.734)	2235289	75.0000	77.1898
13 Methylene Chloride	84	8.091	8.091	(0.759)	693668	75.0000	71.9408
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.760)	589656	750.000	722.3283
15 MTBE	73	8.476	8.476	(0.795)	1598518	75.0000	70.0514
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.800)	603947	75.0000	69.3393
18 Vinyl Acetate	43	9.117	9.117	(0.856)	2195548	75.0000	106.1678
19 1,1-Dichloroethane	63	9.146	9.146	(0.858)	1180046	75.0000	72.0414
20 Isopropyl Ether (DIPE)	45	9.166	9.166	(0.860)	2786954	75.0000	70.1945
21 Ethyl tert-Butyl Ether (ETBE)	59	9.698	9.698	(0.910)	1673445	75.0000	72.4262
22 2-Butanone	43	9.935	9.935	(0.932)	432725	75.0000	71.9131
23 cis-1,2-Dichloroethene	96	10.004	10.004	(0.939)	654240	75.0000	68.6644

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

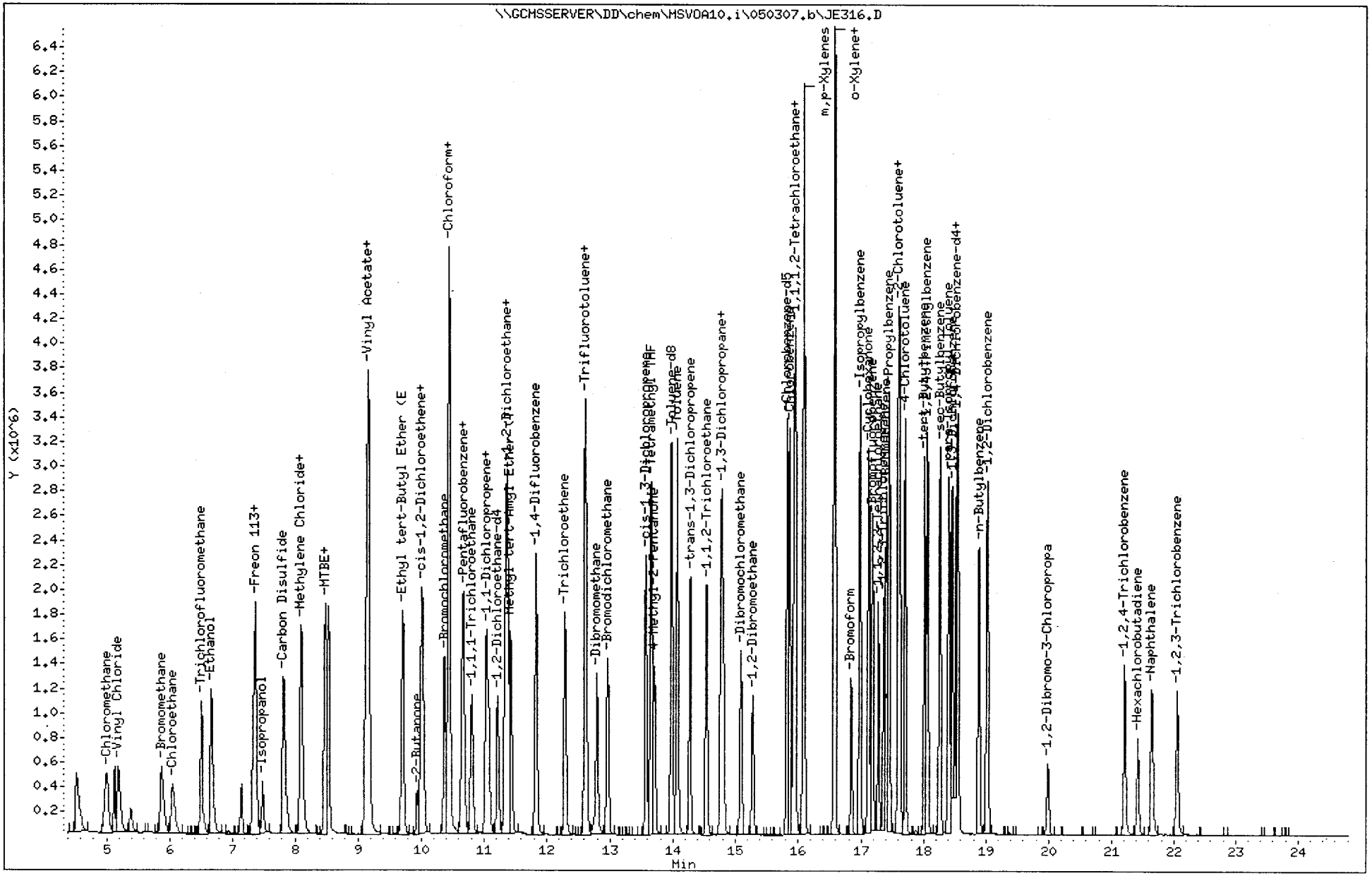
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.034	10.034	(0.942)	674821	75.0000	79.0278
	25 Bromochloromethane	128	10.369	10.369	(0.973)	346491	75.0000	76.1793
	26 Chloroform	83	10.428	10.428	(0.979)	992915	75.0000	71.1648
	27 Tetrahydrofuran	42	10.438	10.438	(0.980)	2326615	750.000	718.6425
*	28 Pentafluorobenzene	168	10.655	10.655	(1.000)	1431908	50.0000	
	29 Dibromofluoromethane	113	10.674	10.674	(1.002)	794941	50.0000	49.3315
	30 1,1,1-Trichloroethane	97	10.803	10.803	(1.014)	712263	75.0000	77.9906
	31 1,1-Dichloropropene	75	11.039	11.039	(0.933)	811214	75.0000	79.0893
	32 Carbon Tetrachloride	117	11.079	11.079	(0.936)	581089	75.0000	85.9905
	33 1,2-Dichloroethane-d4	65	11.217	11.217	(0.948)	887578	50.0000	48.9892
	34 1,2-Dichloroethane	62	11.335	11.335	(0.958)	859136	75.0000	73.4424
	35 Benzene	78	11.365	11.365	(0.960)	2438748	75.0000	74.2124
	36 Methyl tert-Amyl Ether (TAME)	73	11.424	11.424	(0.965)	1287513	75.0000	75.5509
*	37 1,4-Difluorobenzene	114	11.838	11.838	(1.000)	2340712	50.0000	
	38 Trichloroethene	95	12.291	12.291	(1.038)	601330	75.0000	72.8975
	39 Trifluorotoluene	146	12.607	12.607	(1.065)	880330	75.0000	85.2464
	40 1,2-Dichloropropane	63	12.617	12.617	(1.066)	735908	75.0000	71.8704
	41 Dibromomethane	93	12.794	12.794	(1.081)	446568	75.0000	74.1907
	42 Bromodichloromethane	83	12.962	12.962	(1.095)	805593	75.0000	71.9932
	44 cis-1,3-Dichloropropene	75	13.563	13.563	(1.146)	1084077	75.0000	74.6885
	45 Tetramethyl THF	43	13.652	13.652	(1.153)	1835005	75.0000	73.4067
	46 4-Methyl-2-Pentanone	43	13.701	13.701	(1.157)	1024558	75.0000	74.9635
	47 Toluene-d8	98	13.977	13.977	(1.181)	2540553	50.0000	50.1379
	48 Toluene	92	14.066	14.066	(1.188)	1404739	75.0000	75.3976
	49 trans-1,3-Dichloropropene	75	14.273	14.273	(1.206)	962509	75.0000	75.3579
	50 1,1,2-Trichloroethane	85	14.539	14.539	(1.228)	341139	75.0000	74.2154
	51 1,3-Dichloropropane	76	14.776	14.776	(0.933)	1041947	75.0000	73.1952
	52 2-Hexanone	43	14.786	14.786	(0.934)	620581	75.0000	75.3885
	53 Tetrachloroethene	166	14.815	14.815	(0.936)	548973	75.0000	81.0595
	54 Dibromochloromethane	129	15.091	15.091	(0.953)	666030	75.0000	74.5371
	55 1,2-Dibromoethane	107	15.279	15.279	(1.291)	656303	75.0000	76.5906
*	56 Chlorobenzene-d5	117	15.831	15.831	(1.000)	2007086	50.0000	
	57 Chlorobenzene	112	15.870	15.870	(1.002)	1539594	75.0000	73.3504
	58 1,1,1,2-Tetrachloroethane	131	15.939	15.939	(1.007)	529692	75.0000	74.5565
	59 Ethylbenzene	91	15.959	15.959	(1.008)	2549462	75.0000	75.3369
	60 m,p-Xylenes	106	16.087	16.087	(1.016)	1881000	150.000	152.2775
	61 o-Xylene	106	16.570	16.570	(1.047)	918795	75.0000	73.1859
	62 Styrene	104	16.580	16.580	(1.047)	1619179	75.0000	73.8510
	63 Bromoform	173	16.846	16.846	(1.064)	493552	75.0000	76.1144
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	2314351	75.0000	77.8734
	65 Cyclohexanone	55	17.113	17.113	(0.924)	755425	750.000	515.6506
	66 Bromofluorobenzene	95	17.182	17.182	(0.928)	1033698	50.0000	47.8818
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.932)	877482	75.0000	74.1928
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	759185	75.0000	67.8946
	69 Bromobenzene	156	17.398	17.398	(0.939)	677822	75.0000	73.8954
	70 Propylbenzene	91	17.438	17.438	(0.941)	2936524	75.0000	79.4002
	71 2-Chlorotoluene	91	17.586	17.586	(0.949)	1944419	75.0000	73.0709
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.950)	1781595	75.0000	80.3621
	73 4-Chlorotoluene	91	17.694	17.694	(0.955)	1818583	75.0000	72.3998
	74 tert-Butylbenzene	119	18.010	18.010	(0.972)	1596504	75.0000	79.8546
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.974)	1716961	75.0000	85.9928
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	2427192	75.0000	85.5324
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.993)	1777865	75.0000	87.5141
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.996)	1174619	75.0000	73.9121

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.522	18.522	(1.000)	971294	50.0000	
80 1,4-Dichlorobenzene	146	18.552	18.552	(1.002)	1204801	75.0000	74.0532
81 n-Butylbenzene	91	18.887	18.887	(1.020)	1518145	75.0000	101.4673
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1157808	75.0000	73.6199
83 1,2-Dibromo-3-Chloropropane	75	19.982	19.982	(1.079)	146672	75.0000	76.1521
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	521665	75.0000	96.2145
85 Hexachlorobutadiene	225	21.421	21.421	(1.156)	237706	75.0000	101.2734
86 Naphthalene	128	21.648	21.648	(1.169)	1152774	75.0000	94.5117
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	491536	75.0000	105.7518

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Date : 03-MAY-2007 17:57
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.01/100,S6072,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:57 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.01/100,S6072,0.02/100
Misc Info : S5938,0.02/100, 100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:13 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:57 Cal File: JE316.D
Als bottle: 16 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	1042510	100.000	97.3115
2 Chloromethane	50	5.000	5.000	(0.469)	1343417	100.000	87.1959
3 Vinyl Chloride	62	5.187	5.187	(0.487)	1069343	100.000	92.9136
4 Bromomethane	94	5.877	5.877	(0.551)	821645	100.000	98.9921
5 Chloroethane	64	6.045	6.045	(0.567)	776666	100.000	95.0995
6 Trichlorofluoromethane	101	6.508	6.508	(0.611)	1043901	100.000	101.4700
7 Ethanol	45	6.666	6.666	(0.625)	1601102	10000.0	8945.0516
8 Freon 113	101	7.347	7.347	(0.689)	602012	100.000	109.6514
9 Acetone	43	7.366	7.366	(0.691)	394572	100.000	82.4224
10 1,1-Dichloroethene	96	7.376	7.376	(0.692)	724134	100.000	99.8410
11 Isopropanol	45	7.485	7.485	(0.702)	695681	1000.00	949.9572
12 Carbon Disulfide	76	7.820	7.820	(0.734)	3012077	100.000	98.2950
13 Methylene Chloride	84	8.096	8.096	(0.760)	985974	100.000	96.6336
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.760)	813490	1000.00	941.7319
15 MTBE	73	8.480	8.480	(0.796)	2298292	100.000	95.1796
16 trans-1,2-Dichloroethene	96	8.530	8.530	(0.800)	861081	100.000	93.4252
18 Vinyl Acetate	43	9.121	9.121	(0.856)	2792120	100.000	127.5919
19 1,1-Dichloroethane	63	9.151	9.151	(0.858)	1657969	100.000	95.6531
20 Isopropyl Ether (DIPE)	45	9.161	9.161	(0.859)	3919823	100.000	93.2995
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.910)	2334131	100.000	95.4660
22 2-Butanone	43	9.939	9.939	(0.932)	607783	100.000	95.4518
23 cis-1,2-Dichloroethene	96	9.999	9.999	(0.938)	946267	100.000	93.8529

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.038	10.038	(0.942)	874839	100.000	96.8185
	25 Bromochloromethane	128	10.373	10.373	(0.973)	498011	100.000	103.4721
	26 Chloroform	83	10.432	10.432	(0.979)	1401696	100.000	94.9394
	27 Tetrahydrofuran	42	10.442	10.442	(0.980)	3126694	1000.00	912.6681
*	28 Pentafluorobenzene	168	10.659	10.659	(1.000)	1515221	50.0000	
	29 Dibromofluoromethane	113	10.679	10.679	(1.002)	870486	50.0000	51.0494
	30 1,1,1-Trichloroethane	97	10.807	10.807	(1.014)	921129	100.000	95.3150
	31 1,1-Dichloropropene	75	11.044	11.044	(0.933)	1008555	100.000	91.4784
	32 Carbon Tetrachloride	117	11.083	11.083	(0.937)	712106	100.000	98.0368
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	950850	50.0000	48.8250
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	1206991	100.000	95.9899
	35 Benzene	78	11.369	11.369	(0.961)	3301088	100.000	93.4552
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	1773716	100.000	96.8297
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2516004	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	788744	100.000	88.9554
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	1046574	100.000	94.2838
	40 1,2-Dichloropropane	63	12.621	12.621	(1.067)	1019121	100.000	92.5953
	41 Dibromomethane	93	12.789	12.789	(1.081)	637752	100.000	98.5713
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	1157889	100.000	96.2674
	44 cis-1,3-Dichloropropene	75	13.568	13.568	(1.147)	1525588	100.000	97.7839
	45 Tetramethyl THF	43	13.647	13.647	(1.153)	2558674	100.000	95.2248
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	1339185	100.000	91.1571
	47 Toluene-d8	98	13.972	13.972	(1.181)	2679339	50.0000	49.1928
	48 Toluene	92	14.071	14.071	(1.189)	1784637	100.000	89.1146
	49 trans-1,3-Dichloropropene	75	14.278	14.278	(1.207)	1353823	100.000	98.6103
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	474407	100.000	96.0175
	51 1,3-Dichloropropane	76	14.771	14.771	(0.933)	1449685	100.000	97.1285
	52 2-Hexanone	43	14.790	14.790	(0.934)	823179	100.000	95.3755
	53 Tetrachloroethene	166	14.820	14.820	(0.936)	642222	100.000	90.4428
	54 Dibromochloromethane	129	15.096	15.096	(0.953)	942103	100.000	100.5572
	55 1,2-Dibromoethane	107	15.283	15.283	(1.292)	920390	100.000	99.9263
*	56 Chlorobenzene-d5	117	15.835	15.835	(1.000)	2104409	50.0000	
	57 Chlorobenzene	112	15.875	15.875	(1.002)	1991338	100.000	90.4851
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.006)	711948	100.000	95.5755
	59 Ethylbenzene	91	15.963	15.963	(1.008)	3039166	100.000	85.6543
	60 m,p-Xylenes	106	16.092	16.092	(1.016)	2239233	200.000	172.8948
	61 o-Xylene	106	16.575	16.575	(1.047)	1110918	100.000	84.3970
	62 Styrene	104	16.585	16.585	(1.047)	2014865	100.000	87.6483
	63 Bromoform	173	16.841	16.841	(1.064)	697528	100.000	102.5963
	64 Isopropylbenzene	105	16.979	16.979	(0.917)	2619349	100.000	84.1948
	65 Cyclohexanone	55	17.117	17.117	(0.924)	1572948	1000.00	1025.6774
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1080351	50.0000	47.8051
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	1170494	100.000	94.5421
	68 1,2,3-Trichloropropane	75	17.354	17.354	(0.937)	1015049	100.000	86.7175
	69 Bromobenzene	156	17.403	17.403	(0.940)	890556	100.000	92.7460
	70 Propylbenzene	91	17.442	17.442	(0.942)	3342900	100.000	86.3463
	71 2-Chlorotoluene	91	17.590	17.590	(0.950)	2351583	100.000	84.4203
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	2080533	100.000	89.6498
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	2269523	100.000	86.3120
	74 tert-Butylbenzene	119	18.014	18.014	(0.973)	1799173	100.000	85.9677
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	2086737	100.000	99.8393
	76 sec-Butylbenzene	105	18.261	18.261	(0.986)	2676991	100.000	90.1168
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	2022673	100.000	95.1125
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	1479296	100.000	88.9214

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	1016760	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	1519696	100.000	89.2314
81 n-Butylbenzene	91	18.892	18.892	(1.020)	1732052	100.000	110.5875
82 1,2-Dichlorobenzene	146	19.020	19.020	(1.027)	1488601	100.000	90.4211
83 1,2-Dibromo-3-Chloropropane	75	19.986	19.986	(1.079)	188687	100.000	93.5856
84 1,2,4-Trichlorobenzene	180	21.209	21.209	(1.145)	661244	100.000	116.5046
85 Hexachlorobutadiene	225	21.426	21.426	(1.157)	233928	100.000	95.2071
86 Naphthalene	128	21.642	21.642	(1.169)	1491468	100.000	116.8120
87 1,2,3-Trichlorobenzene	180	22.047	22.047	(1.191)	640903	100.000	131.7216

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195241 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 20PPB IDF : 1.0
Seqnum : 497229413003 File : jf803 Time : 08-JUN-2007 08:49
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (25000X), S6337 (25000X), S5720 (50000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5998	20.00	23.60	ug/L	18	30	0.1000	m
Vinyl Chloride	0.3798	0.4521	20.00	23.81	ug/L	19	20	0.0500	
Bromomethane	0.2739	0.2049	20.00	14.96	ug/L	**-25**	30	0.0500	!c-
Chloroethane	0.2695	0.2932	20.00	21.76	ug/L	9	30	0.0500	
Acetone	0.1718	0.1565	20.00	18.22	ug/L	-9	40	0.0500	
1,1-Dichloroethene	0.2393	0.2566	20.00	21.44	ug/L	7	20	0.0500	
Methylene Chloride	0.3367	0.3522	20.00	20.92	ug/L	5	30	0.0500	
Carbon Disulfide	1.0112	1.1697	20.00	23.14	ug/L	16	30	0.0500	
MTBE	0.7968	0.8403	20.00	21.09	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3111	20.00	20.46	ug/L	2	30	0.0500	
Vinyl Acetate	0.7099	1.0497	20.00	29.57	ug/L	**48**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5980	20.00	20.91	ug/L	5	30	0.1000	
2-Butanone	0.2101	0.2074	20.00	19.74	ug/L	-1	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3343	20.00	20.83	ug/L	4	30	0.0500	
Chloroform	0.4872	0.5061	20.00	20.78	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3454	20.00	21.67	ug/L	8	30	0.0500	
Carbon Tetrachloride	0.1443	0.1605	20.00	22.23	ug/L	11	30	0.0500	
1,2-Dichloroethane	0.2499	0.2538	20.00	20.32	ug/L	2	30	0.0500	
Benzene	0.7020	0.7290	20.00	20.77	ug/L	4	30	0.0500	
Trichloroethene	0.1762	0.1736	20.00	19.71	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.2187	0.2141	20.00	19.57	ug/L	-2	20	0.0500	
Bromodichloromethane	0.2390	0.2382	20.00	19.93	ug/L	0	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2852	20.00	19.54	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3207	20.00	20.68	ug/L	3	30	0.0500	
Toluene	0.3980	0.4170	20.00	20.96	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2765	20.00	20.27	ug/L	1	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0972	20.00	19.80	ug/L	-1	30	0.0500	
2-Hexanone	0.2051	0.1862	20.00	18.16	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1687	0.1873	20.00	22.21	ug/L	11	30	0.0500	
Dibromochloromethane	0.2226	0.2162	20.00	19.43	ug/L	-3	30	0.0500	
Chlorobenzene	0.5229	0.5332	20.00	20.39	ug/L	2	30	0.3000	
Ethylbenzene	0.8430	0.8574	20.00	20.34	ug/L	2	20	0.0500	
m,p-Xylenes	0.3077	0.3308	40.00	43.00	ug/L	8	30	0.0500	
o-Xylene	0.3127	0.3231	20.00	20.66	ug/L	3	30	0.0500	
Styrene	0.5462	0.5601	20.00	20.51	ug/L	3	30	0.0500	
Bromoform	0.1615	0.1493	20.00	18.48	ug/L	-8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5945	20.00	19.53	ug/L	-2	30	0.3000	
Dibromofluoromethane	0.5627	0.5827	50.00	51.77	ug/L	4	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3905	50.00	50.45	ug/L	1	30	0.0500	
Toluene-d8	1.0824	1.0792	50.00	49.85	ug/L	0	30	0.0500	
Bromofluorobenzene	1.1113	1.0872	50.00	48.92	ug/L	-2	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1874711	26.66	10.65	10.60	-0.05
1,4-Difluorobenzene	2441798	3163439	29.55	11.83	11.78	-0.05
Chlorobenzene-d5	2049371	2697441	31.62	15.83	15.79	-0.04
1,4-Dichlorobenzene-d4	975848	1284791	31.66	18.51	18.49	-0.02

Analyst: SJD Date: 06/08/07 Reviewer: ACM Date: 06/08/07

!=warning +=high bias -=low bias c=CCV m=manual integration rsd=ICAL %RSD failure

497229413003

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195241 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : QC391404 IDF : 1.0
Seqnum : 497229413006.6 File : jf806 Time : 08-JUN-2007 10:28
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S5264 (5000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Dibromofluoromethane	0.5627	0.5661	50.00	50.31	ug/L	1	30	0.0500	u
1,2-Dichloroethane-d4	0.3870	0.3817	50.00	49.31	ug/L	-1	30	0.0500	u
Toluene-d8	1.0824	1.0843	50.00	50.09	ug/L	0	30	0.0500	u
Bromofluorobenzene	1.1113	1.0804	50.00	48.61	ug/L	-3	30	0.0500	u

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1841130	24.39	10.65	10.61	-0.04
1,4-Difluorobenzene	2441798	3052181	25.00	11.83	11.78	-0.05
1,4-Dichlorobenzene-d4	975848	1242633	27.34	18.51	18.48	-0.03

ISTD (ICAL je419)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Chlorobenzene-d5 TIC	8290864	8398643	1.30	15.82	15.80	-0.02

Analyst: SJD Date: 06/11/07 Reviewer: WNH Date: 06/11/07

u-use

497229413006.6

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497229413

Date : 06/08/07
Sequence : MSVOA10 jf8

Reference : je314
Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
003	CCV	20PPB	1874711	10.60	3163439	11.78	2697441	15.79	1284791	18.49
005	LCS	QC391403	1891179	10.60	3169164	11.78	2741721	15.80	1294229	18.49
006	CCV/BS	QC391404	1841130	10.61	3052181	11.78	2618134	15.80	1242633	18.48
007	BSD	QC391405	1852972	10.60	3055975	11.78	2607740	15.80	1233696	18.49
009	BLANK	QC391402	1901959	10.59	3129946	11.78	2691505	15.80	1267133	18.49
010	SAMPLE	195234-006	1899011	10.59	3146571	11.78	2655733	15.80	1248730	18.49
011	SAMPLE	195241-008	1925120	10.59	3204724	11.78	2706066	15.80	1270929	18.49
012	SAMPLE	195275-001	1895070	10.59	3134075	11.78	2652015	15.80	1223581	18.49
013	SAMPLE	195275-002	1905036	10.60	3182298	11.78	2654431	15.80	1209174	18.49
014	SAMPLE	195246-010	1872483	10.61	3139171	11.79	2639108	15.81	1188045	18.51
015	SAMPLE	195234-002	1869248	10.60	3157747	11.78	2666191	15.80	1205398	18.49
016	SAMPLE	195234-004	1998007	10.60	3299129	11.79	2836608	15.80	1274756	18.49
017	SAMPLE	195234-005	2000511	10.60	3332843	11.79	2871962	15.80	1299475	18.49
018	SAMPLE	195241-004	1878732	10.60	3161482	11.79	2684276	15.80	1219602	18.49
019	SAMPLE	195241-005	1824894	10.60	3053968	11.78	2675785	15.80	1223527	18.50
020	MSS	195234-003	1876349	10.60	3141074	11.78	2698981	15.80	1213303	18.50
021	SAMPLE	195213-001	2028024	10.60	3376302	11.78	2879684	15.80	1317967	18.49
023	MS	QC391497	1886197	10.60	3102920	11.79	2708964	15.80	1274631	18.49
024	MSD	QC391498	1911191	10.60	3161674	11.78	2743121	15.80	1302743	18.50

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497229413

Date : 06/08/07 Reference : je419
Sequence : MSVOA10 jf8 Analyzed : 05/04/07 20:33

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	8290864	15.82
		LOWER LIMIT	4145432	15.32
		UPPER LIMIT	16581728	16.32
006	CCV/BS	QC391404	8398643	15.80
012	SAMPLE	195275-001	8273010	15.80
013	SAMPLE	195275-002	8385514	15.80

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497177754

Instrument : MSVOA10 Begun : 05/03/07 10:34
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	je301	TUN	BFB			05/03/07 10:34	1.0	1	
002	je302	TUN	BFB			05/03/07 10:47	1.0	1	
003	je303	X	IB			05/03/07 11:05	1.0	2	
004	je304	X	LOWPOINT			05/03/07 11:39	1.0	2	
005	je305	TUN	BFB			05/03/07 12:11	1.0	1	
006	je306	X	IB			05/03/07 12:29	1.0	2	
007	je307	IB	CALIB			05/03/07 13:01	1.0	2	
008	je308	ICAL	0.25/0.5PPB			05/03/07 13:35	1.0	3 4 5 2	
009	je309	ICAL	0.5/1PPB			05/03/07 14:07	1.0	3 4 5 2	
010	je310	ICAL	2PPB			05/03/07 14:40	1.0	3 4 5 2	
011	je311	ICAL	5PPB			05/03/07 15:13	1.0	3 4 5 2	
012	je312	ICAL	10PPB			05/03/07 15:46	1.0	3 4 5 2	
013	je313	ICAL	20PPB			05/03/07 16:19	1.0	3 4 5 2	
014	je314	ICAL	50PPB			05/03/07 16:51	1.0	3 4 5 2	
015	je315	ICAL	75PPB			05/03/07 17:24	1.0	3 4 5 2	
016	je316	ICAL	100PPB			05/03/07 17:57	1.0	3 4 5 2	
017	je317	ICV				05/03/07 18:30	1.0	6 2	
018	je318	ICV				05/03/07 19:03	1.0	7 8 2	
019	je319	X	IB			05/03/07 19:36	1.0	2	
020	je320	X	IB			05/03/07 20:08	1.0	2	
021	je321	X	IB			05/03/07 20:41	1.0	2	

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

Standards used: 1=S5117 2=S6084 3=S5194 4=S6072 5=S5938 6=S6044 7=S5723 8=S5968

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497229413

Instrument : MSVOA10 Begun : 06/08/07 07:33
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jf801	X	IB			06/08/07 07:33	1.0	1	
002	jf802	TUN	BFB			06/08/07 08:31	1.0	2	
003	jf803	CCV	20PPB			06/08/07 08:49	1.0	3 4 5 1	
004	jf804	X	TVH2000PPB			06/08/07 09:22	1.0	6 1	1:BZME=160
005	jf805	LCS	QC391403	Water	126079	06/08/07 09:54	1.0	7 8 9 1	
006	jf806	CCV/BS	QC391404	Water	126079	06/08/07 10:28	1.0	10 1	1:BZME=170
007	jf807	BSD	QC391405	Water	126079	06/08/07 11:01	1.0	10 1	1:BZME=170
008	jf808	X	IB			06/08/07 11:34	1.0	1	
009	jf809	BLANK	QC391402	Water	126079	06/08/07 12:06	1.0	1	
010	jf810	SAMPLE	195234-006	Water	126079	06/08/07 12:39	1.0	1	
011	jf811	SAMPLE	195241-008	Water	126079	06/08/07 13:12	1.0	1	
012	jf812	SAMPLE	195275-001	Water	126079	06/08/07 13:44	1000	1	
013	jf813	SAMPLE	195275-002	Water	126079	06/08/07 14:17	5000	1	
014	jf814	SAMPLE	195246-010	Water	126079	06/08/07 14:49	1.0	1	
015	jf815	SAMPLE	195234-002	Water	126079	06/08/07 15:22	1.0	1	
016	jf816	SAMPLE	195234-004	Water	126079	06/08/07 15:55	1.0	1	
017	jf817	SAMPLE	195234-005	Water	126079	06/08/07 16:28	1.0	1	
018	jf818	SAMPLE	195241-004	Water	126079	06/08/07 17:00	1.0	1	
019	jf819	SAMPLE	195241-005	Water	126079	06/08/07 17:33	1.0	1	
020	jf820	MSS	195234-003	Water	126079	06/08/07 18:06	1.0	1	
021	jf821	SAMPLE	195213-001	Water	126079	06/08/07 18:38	200.0	1	
022	jf822	X	195282-001	Water	126079	06/08/07 19:11	2.0	1	
023	jf823	MS	QC391497	Water	126079	06/08/07 19:44	1.0	7 8 9 1	
024	jf824	MSD	QC391498	Water	126079	06/08/07 20:16	1.0	7 8 9 1	
025	jf825	X	IB			06/08/07 20:49	1.0	1	
026	jf826	X	IB			06/08/07 21:22	1.0	1	
027	jf827	X	IB			06/08/07 21:54	1.0	1	

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/11/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6337 5=S5720 6=S5628 7=S6392 8=S6207 9=S6357 10=S5264

00199

REPORTING SUMMARY FOR 195241 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM	VCE	BRA	CLE	AEE	DCE	MEE	CLS	MTN	DDB	TEE	DTC	VCE	DAC	MCA	DEE	DCC	TCC	CTC	DTC	BZA	TCC	DZC	BCC	DDI	MIC	DPB	BZP	DCM	TCP	HPA	PCO	XEE	XCC	XBB	XLZ	YBZ	YLL	OTT	TYY	SOM	TBA	PCF	DBA	DBM	BC4	BZR
														2				3				2										2	2																3	2		
195241-004	MSVOA10	06/08/07 17:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195241-005	MSVOA10	06/08/07 17:33	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195241-008	MSVOA10	06/08/07 13:12	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391402	MSVOA10	06/08/07 12:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391403	MSVOA10	06/08/07 09:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391404	MSVOA10	06/08/07 10:28	1.0																																																+	+	+	+
QC391405	MSVOA10	06/08/07 11:01	1.0																																																+	+	+	+
QC391497	MSVOA10	06/08/07 19:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391498	MSVOA10	06/08/07 20:16	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/8/07
PREPPED BY. ZR

WATER

126079

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195275-001		B	<2			10	~~5000x~~ ~~16.7x~~ 5000x	
2	-002		↓	↓				~~833x~~ ~~25x~~ 1000x	
3	195234-002		A	<2				1x	
4	-003		BCDE	<2				MSS/MS/MSD	
5	-004		A						
6	-005		B						
7	-006		A					TB	
8	195241-004		B					1x	
9	-005		C					1x	
10	-008		A					TB	
11	195246-000		B					RR 1x CS2	
12	195213-001		C	<2				RR 200x vial C ANOMOLOUS	
13	~~195282-001~~		B	<2	6ml			~~ZXF~~	Cancelled
14									
15									
16									
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

METALS

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW103	Batch#:	126087
Lab ID:	195241-002	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	180,000	500	10.00	06/08/07
Chromium	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	ND	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	460,000	500	50.00	06/14/07
Manganese	33	10	5.000	06/14/07
Nickel	40	20	5.000	06/14/07
Potassium	1,400	500	5.000	06/14/07
Sodium	170,000	500	10.00	06/08/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

26.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	126087
Lab ID:	195241-003	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	74,000	500	5.000	06/14/07
Chromium	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	ND	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	190,000	500	10.00	06/08/07
Manganese	37	10	5.000	06/14/07
Nickel	20	20	5.000	06/14/07
Potassium	1,500	500	5.000	06/14/07
Sodium	91,000	500	10.00	06/08/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

27.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW09	Batch#:	126087
Lab ID:	195241-004	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	5.000	Analyzed:	06/14/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	26,000	500
Chromium	23	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	42,000	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	62,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

28.0

00116

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW28	Batch#:	126087
Lab ID:	195241-005	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	48,000	500	5.000	06/14/07
Chromium	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	11,000	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	38,000	500	5.000	06/14/07
Manganese	1,300	10	10.00	06/08/07
Nickel	ND	20	5.000	06/14/07
Potassium	2,400	500	5.000	06/14/07
Sodium	33,000	500	5.000	06/14/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

29.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0605073A	Batch#:	126087
Lab ID:	195241-007	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	200,000	500	10.00	06/08/07
Chromium	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	ND	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	490,000	500	50.00	06/14/07
Manganese	35	10	5.000	06/14/07
Nickel	41	20	5.000	06/14/07
Potassium	1,500	500	5.000	06/14/07
Sodium	170,000	500	10.00	06/08/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391439	Batch#:	126087
Matrix:	Filtrate	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	ND	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

31.0

00119

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126087
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/08/07

Type: BS Lab ID: QC391440

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,330	103	80-120
Arsenic	100.0	95.58	96	80-120
Cadmium	100.0	99.73	100	80-120
Calcium	10,000	10,410	104	80-120
Chromium	100.0	103.6	104	80-120
Copper	100.0	105.6	106	80-120
Iron	10,000	9,806	98	80-120
Lead	100.0	103.8	104	80-120
Magnesium	10,000	10,560	106	80-120
Manganese	100.0	99.95	100	80-120
Nickel	100.0	105.4	105	80-120
Potassium	10,000	10,500	105	80-120
Sodium	10,000	10,410	104	80-120
Zinc	100.0	95.98	96	80-120

Type: BSD Lab ID: QC391441

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,480	105	80-120	1	20
Arsenic	100.0	98.41	98	80-120	3	20
Cadmium	100.0	99.47	99	80-120	0	20
Calcium	10,000	10,350	104	80-120	1	20
Chromium	100.0	104.7	105	80-120	1	20
Copper	100.0	108.7	109	80-120	3	20
Iron	10,000	9,937	99	80-120	1	20
Lead	100.0	103.5	104	80-120	0	20
Magnesium	10,000	10,650	107	80-120	1	20
Manganese	100.0	101.9	102	80-120	2	20
Nickel	100.0	107.0	107	80-120	2	20
Potassium	10,000	10,530	105	80-120	0	20
Sodium	10,000	10,620	106	80-120	2	20
Zinc	100.0	99.23	99	80-120	3	20

RPD= Relative Percent Difference

: 00120

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	126087
MSS Lab ID:	195241-003	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391442

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	5.464	10,000	9,088	91	75-125	5.000	06/14/07
Arsenic	1.644	100.0	93.39	92	75-125	5.000	06/14/07
Cadmium	0.1116	100.0	91.42	91	75-125	5.000	06/14/07
Calcium	73,820	10,000	80,640	68 NM	75-125	5.000	06/14/07
Chromium	3.823	100.0	94.93	91	75-125	5.000	06/14/07
Copper	0.5596	100.0	91.94	91	75-125	5.000	06/14/07
Iron	14.81	10,000	9,263	92	75-125	5.000	06/14/07
Lead	0.08684	100.0	88.60	89	75-125	5.000	06/14/07
Magnesium	189,800	10,000	198,500	87 NM	75-125	10.00	06/08/07
Manganese	36.99	100.0	128.9	92	75-125	5.000	06/14/07
Nickel	20.31	100.0	110.4	90	75-125	5.000	06/14/07
Potassium	1,511	10,000	10,620	91	75-125	5.000	06/14/07
Sodium	90,940	10,000	101,800	109 NM	75-125	10.00	06/08/07
Zinc	6.083	100.0	105.9	100	75-125	5.000	06/14/07

Type: MSD Lab ID: QC391443

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	9,267	93	75-125	2	20	5.000	06/14/07
Arsenic	100.0	94.70	93	75-125	1	20	5.000	06/14/07
Cadmium	100.0	93.91	94	75-125	3	20	5.000	06/14/07
Calcium	10,000	80,820	70 NM	75-125	0	20	5.000	06/14/07
Chromium	100.0	97.40	94	75-125	3	20	5.000	06/14/07
Copper	100.0	92.79	92	75-125	1	20	5.000	06/14/07
Iron	10,000	9,451	94	75-125	2	20	5.000	06/14/07
Lead	100.0	89.87	90	75-125	1	20	5.000	06/14/07
Magnesium	10,000	179,600	-102 NM	75-125	10	20	10.00	06/08/07
Manganese	100.0	131.7	95	75-125	2	20	5.000	06/14/07
Nickel	100.0	112.1	92	75-125	2	20	5.000	06/14/07
Potassium	10,000	10,810	93	75-125	2	20	5.000	06/14/07
Sodium	10,000	94,390	35 NM	75-125	8	20	10.00	06/08/07
Zinc	100.0	99.12	93	75-125	7	20	5.000	06/14/07

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

33.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	126087
MSS Lab ID:	195247-006	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391446

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	40.79	10,000	9,158	91	75-125	5.000	06/14/07
Arsenic	1.241	100.0	92.39	91	75-125	5.000	06/14/07
Cadmium	0.3675	100.0	90.98	91	75-125	5.000	06/14/07
Calcium	32,410	10,000	37,680	53 *	75-125	5.000	06/14/07
Chromium	8.355	100.0	97.97	90	75-125	5.000	06/14/07
Copper	0.8288	100.0	89.78	89	75-125	5.000	06/14/07
Iron	40.46	10,000	9,073	90	75-125	5.000	06/14/07
Lead	0.3861	100.0	88.10	88	75-125	5.000	06/14/07
Magnesium	102,400	10,000	113,400	110 NM	75-125	10.00	06/08/07
Manganese	9.571	100.0	121.8	112	75-125	5.000	06/14/07
Nickel	22.42	100.0	109.9	87	75-125	5.000	06/14/07
Potassium	705.1	10,000	9,799	91	75-125	5.000	06/14/07
Sodium	126,400	10,000	137,400	110 NM	75-125	10.00	06/08/07
Zinc	4.342	100.0	92.92	89	75-125	5.000	06/14/07

Type: MSD Lab ID: QC391447

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	10,270	102	75-125	11	20	5.000	06/14/07
Arsenic	100.0	93.17	92	75-125	1	20	5.000	06/14/07
Cadmium	100.0	102.7	102	75-125	12	20	5.000	06/14/07
Calcium	10,000	41,190	88	75-125	9	20	5.000	06/14/07
Chromium	100.0	98.78	90	75-125	1	20	5.000	06/14/07
Copper	100.0	91.07	90	75-125	1	20	5.000	06/14/07
Iron	10,000	9,341	93	75-125	3	20	5.000	06/14/07
Lead	100.0	99.77	99	75-125	12	20	5.000	06/14/07
Magnesium	10,000	111,200	88 NM	75-125	2	20	10.00	06/08/07
Manganese	100.0	101.3	92	75-125	18	20	5.000	06/14/07
Nickel	100.0	111.5	89	75-125	1	20	5.000	06/14/07
Potassium	10,000	11,060	104	75-125	12	20	5.000	06/14/07
Sodium	10,000	135,300	89 NM	75-125	2	20	10.00	06/08/07
Zinc	100.0	94.38	90	75-125	2	20	5.000	06/14/07

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

35.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Metals

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Units:	ug/L
Type:	Serial Dilution	Batch#:	126087
MSS Lab ID:	195241-003	Sampled:	06/05/07
Lab ID:	QC391444	Received:	06/06/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	27.80 J	250.0	NC	10	25.00	06/14/07
Arsenic	ND	5.000	2.793 J	5.000	NC	10	25.00	06/14/07
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Calcium	73,820	500.0	76,350	500.0	3	10	25.00	06/14/07
Chromium	ND	10.00	4.159 J	10.00	NC	10	25.00	06/14/07
Copper	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Iron	ND	100.0	ND	250.0	NC	10	25.00	06/14/07
Lead	ND	3.000	ND	3.000	NC	10	25.00	06/14/07
Magnesium	189,800	500.0	205,300	500.0	8	10	50.00	06/08/07
Manganese	36.99	10.00	37.32	10.00	1	10	25.00	06/14/07
Nickel	20.31	20.00	20.85	20.00	3	10	25.00	06/14/07
Potassium	1,511	500.0	1,616	500.0	7	10	25.00	06/14/07
Sodium	90,940	500.0	98,930	500.0	9	10	50.00	06/08/07
Zinc	ND	20.00	8.760 J	20.00	NC	10	25.00	06/14/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

34.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67230047027
File : f08s0027
IDF : 10.0
Lab ID : 195241-003
Matrix : Filtrate
Batch : 126087
Time : 08-JUN-2007 20:48
Cal : 67230047001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67230047031
File : f08s0031
IDF : 10.0
Lab ID : QC391445
Matrix : Filtrate
Batch : 126087
Time : 08-JUN-2007 21:11
Cal : 67230047001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	3.763	A	10000	9921	A	99	75-125	u
Antimony	0.04182	A	100.0	100.7	A	101	75-125	u
Arsenic	0.2330	E	100.0	102.4	E	102	75-125	u
Barium	25.98	A	100.0	133.7	A	108	75-125	u
Beryllium	0.01665	A	100.0	103.7	A	104	75-125	u
Cadmium	ND	A	100.0	103.8	A	104	75-125	u
Calcium	7856	A	10000	17810	A	100	75-125	u
Chromium	0.4758	E	100.0	103.2	E	103	75-125	u
Cobalt	0.07650	E	100.0	104.8	E	105	75-125	u
Copper	0.09310	E	100.0	105.8	E	106	75-125	u
Iron	5.167	H	10000	9723	H	97	75-125	u
Lead	ND	A	100.0	92.30	A	92	75-125	u
Magnesium	18980	A	10000	29040 >LR	A	101	75-125	>LR **b***
Manganese	4.097	E	100.0	103.6	E	100	75-125	u
Molybdenum	0.05194	A	100.0	101.5	A	101	75-125	u
Nickel	2.399	E	100.0	107.0	E	105	75-125	u
Potassium	170.1	A	10000	10250	A	101	75-125	u
Selenium	ND	H	100.0	105.5	H	106	75-125	u
Silver	0.02402	A	100.0	98.70	A	99	75-125	u
Sodium	9094	E	10000	19540	E	104	75-125	u
Thallium	0.03834	A	50.00	52.16	A	104	75-125	u
Vanadium	1.223	E	100.0	103.6	E	102	75-125	u
Zinc	0.2680	E	100.0	104.6	E	104	75-125	u

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1773181	1741148	-1.81
Scandium	A	2025754	2128924	5.09
Scandium	E	108386	96667	-10.81
Scandium	H	1119057	1124721	0.51
Germanium	H	223417	204269	-8.57
Germanium	E	57546	49285	-14.36
Indium	A	2719269	2426889	-10.75
Bismuth	A	948434	670034	-29.35
Yttrium	A	2789596	2696311	-3.34
Terbium	A	2901595	2518389	-13.21

>LR=overrange b=noncompliant u=use

67230047031

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897238321046
File : f1410046
IDF : 5.0
Lab ID : 195241-003
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 16:38
Cal : 897238321001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897238321057
File : f1410057
IDF : 5.0
Lab ID : QC391445
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 17:43
Cal : 897238321001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	1.093	A	10000	8896	A	89	75-125	
Antimony	0.05788	A	100.0	82.10	A	82	75-125	
Arsenic	0.3288	E	100.0	88.92	E	89	75-125	
Barium	45.44	A	100.0	133.7	A	88	75-125	
Beryllium	0.01204	A	100.0	88.92	A	89	75-125	
Cadmium	0.02232	A	100.0	89.98	A	90	75-125	
Calcium	14760	A	10000	23500 >LR	A	87	75-125	>LR **b***
Chromium	0.7646	E	100.0	88.64	E	88	75-125	
Cobalt	0.08052	E	100.0	87.72	E	88	75-125	
Copper	0.1119	E	100.0	87.90	E	88	75-125	
Iron	2.962	H	10000	8968	H	90	75-125	
Lead	0.01737	A	100.0	83.04	A	83	75-125	
Manganese	7.398	E	100.0	97.02	E	90	75-125	
Molybdenum	ND	A	100.0	84.08	A	84	75-125	u
Nickel	4.062	E	100.0	91.24	E	87	75-125	
Potassium	302.2	A	10000	9276	A	90	75-125	
Selenium	0.01849	H	100.0	90.22	H	90	75-125	
Silver	0.01469	A	100.0	78.70	A	79	75-125	
Sodium	15890	E	10000	24700 >LR	E	88	75-125	>LR **b***
Thallium	ND	A	50.00	45.96	A	92	75-125	
Vanadium	2.012	E	100.0	89.76	E	88	75-125	
Zinc	1.217	E	100.0	89.00	E	88	75-125	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2123286	2100033	-1.10
Scandium	A	1935693	2069262	6.90
Scandium	E	60849	65040	6.89
Scandium	H	853179	884638	3.69
Germanium	H	210213	217346	3.39
Germanium	E	46689	49565	6.16
Indium	A	2970271	3093621	4.15
Bismuth	A	3398867	3453144	1.60
Yttrium	A	2820269	3022760	7.18
Terbium	A	4719676	5066166	7.34

>LR=overrange b=noncompliant u=use

897238321057

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897238321043
File : f1410043
IDF : 20.0
Lab ID : 195241-003
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 16:20
Cal : 897238321001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897238321044
File : f1410044
IDF : 20.0
Lab ID : QC391445
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 16:26
Cal : 897238321001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8925	A	89	75-125	
Antimony	ND	A	100.0	82.60	A	83	75-125	
Arsenic	0.1159	E	100.0	91.65	E	92	75-125	
Barium	11.63	A	100.0	104.8	A	93	75-125	
Beryllium	ND	A	100.0	92.45	A	92	75-125	
Cadmium	ND	A	100.0	92.80	A	93	75-125	
Calcium	3850	A	10000	13060	A	92	75-125	
Chromium	0.1995	E	100.0	91.15	E	91	75-125	
Cobalt	0.03015	E	100.0	91.40	E	91	75-125	
Copper	ND	E	100.0	91.45	E	91	75-125	
Iron	ND	H	10000	9305	H	93	75-125	
Lead	ND	A	100.0	85.75	A	86	75-125	
Magnesium	8865	A	10000	17450	A	86	75-125	u
Manganese	1.882	E	100.0	94.10	E	92	75-125	
Molybdenum	ND	A	100.0	86.05	A	86	75-125	u
Nickel	1.066	E	100.0	92.30	E	91	75-125	
Potassium	78.95	A	10000	9265	A	92	75-125	
Selenium	ND	H	100.0	92.50	H	93	75-125	
Silver	ND	A	100.0	86.85	A	87	75-125	
Sodium	4168	E	10000	12870	E	87	75-125	
Thallium	ND	A	50.00	47.05	A	94	75-125	
Zinc	ND	E	100.0	92.05	E	92	75-125	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2123286	2034050	-4.20
Scandium	A	1935693	2105863	8.79
Scandium	E	60849	65855	8.23
Scandium	H	853179	887427	4.01
Germanium	H	210213	219725	4.52
Germanium	E	46689	50344	7.83
Indium	A	2970271	3188199	7.34
Bismuth	A	3398867	3533048	3.95
Yttrium	A	2820269	3118480	10.57
Terbium	A	4719676	5166855	9.47

MISSING READINGS: **V**

u=use

897238321044

: 00125

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67230047001
Units : ug/L

Date : 08-JUN-2007 18:26
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f08s0005	67230047005		08-JUN-2007 18:32	S6414
L2	f08s0006	67230047006		08-JUN-2007 18:38	S6416
L3	f08s0007	67230047007		08-JUN-2007 18:44	S6417
L4	f08s0008	67230047008		08-JUN-2007 18:50	S6418
L5	f08s0009	67230047009		08-JUN-2007 18:56	S6412
L6	f08s0010	67230047010		08-JUN-2007 19:06	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.6051	0.4828	0.4576	0.4172	0.4095	0.4149	BLNK	-3.9835	2.41716		0.4645	1.000	0.995	
Antimony	A	0.2796	0.2003	0.2032	0.1880	0.1849	0.1889	BLNK	-0.0497	5.31900		0.2075	1.000	0.995	
Barium	A	0.1292	0.0858	0.0621	0.0572	0.0550	0.0548	BLNK	-0.0860	18.2335		0.0740	1.000	0.995	
Beryllium	A	0.2294	0.2146	0.2192	0.2125	0.2061	0.2104	BLNK	-0.0147	4.77337		0.2154	1.000	0.995	
Cadmium	A	0.1881	0.0873	0.0760	0.0635	0.0614	0.0620	BLNK	-0.2185	16.1758		0.0897	1.000	0.995	
Calcium	A	0.2340	0.0561	0.0362	0.0167	0.0139	0.0138	BLNK	-160.70	72.8711		0.0618	1.000	0.995	
Lead	A	0.4174	0.2988	0.2894	0.2629	0.2507	0.2448	BLNK	-0.1082	4.06727		0.2940	1.000	0.995	
Magnesium	A	0.4510	0.4028	0.3871	0.3549	0.3453	0.3470	BLNK	-2.4998	2.88480		0.3813	1.000	0.995	
Molybdenum	A	0.2739	0.1850	0.1758	0.1611	0.1564	0.1597	BLNK	-0.0851	6.29166		0.1853	1.000	0.995	
Potassium	A	3.0906	0.9541	0.7082	0.4529	0.4179	0.4194	BLNK	-63.850	2.39532		1.0072	1.000	0.995	
Silver	A	0.3580	0.2991	0.3056	0.2857	0.2758	0.2779	BLNK	-0.0414	3.60407		0.3004	1.000	0.995	
Thallium	A	1.0764	0.7210	0.6685	0.6295	0.6471	0.6673	BLNK	-0.0540	1.50885		0.7350	1.000	0.995	
Arsenic	E	0.5238	0.4390	0.3965	0.3935	0.3866	0.3802	BLNK	-0.0461	2.62196		0.4199	1.000	0.995	
Chromium	E	6.1805	2.9502	2.8672	2.1506	2.0586	2.0355	BLNK	-0.2261	0.49079		3.0404	1.000	0.995	
Cobalt	E	3.4317	3.2782	3.1045	3.0756	2.9472	2.8621	BLNK	-0.0235	0.34733		3.1165	1.000	0.995	
Copper	E	48.113	10.964	7.8521	4.5416	3.9574	3.7819	BLNK	-0.6443	0.26293		13.202	0.999	0.995	
Manganese	E	2.2788	1.4471	1.3527	1.2374	1.1986	1.1872	BLNK	-0.0902	0.84110		1.4503	1.000	0.995	
Nickel	E	5.7796	1.8019	1.4041	0.8693	0.7680	0.7355	BLNK	-0.6842	1.35294		1.8931	1.000	0.995	
Sodium	E	1.6940	0.6805	0.5517	0.4317	0.4012	0.3999	BLNK	-28.287	2.50288		0.6932	1.000	0.995	
Vanadium	E	4.5718	2.0943	1.8460	1.5928	1.5460	1.5424	BLNK	-0.1791	0.64871		2.1989	1.000	0.995	
Zinc	E	27.156	6.0829	3.5291	1.1154	0.7552	0.7136	BLNK	-3.5433	1.41397		6.5587	0.999	0.995	
Iron	H	0.6864	0.6102	0.5905	0.5506	0.5427	0.5311	BLNK	-2.3716	1.87495		0.5852	1.000	0.995	
Selenium	H	0.1092	0.1080	0.1023	0.1002	0.0974	0.0917	BLNK	-0.0306	10.7693		0.1015	0.999	0.995	

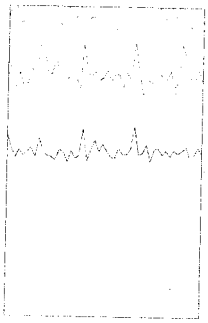
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	6	50.00	9	100.0	7	1000	0	10000	-1	20000	0
Antimony	A	0.100	-1	0.500	-3	1.000	3	10.00	0	100.0	-2	200.0	0
Barium	A	0.100	50	0.500	39	1.000	5	10.00	3	100.0	0	200.0	0
Beryllium	A	0.100	-5	0.500	0	1.000	3	10.00	1	100.0	-2	200.0	0
Cadmium	A	0.100	-14	0.500	-3	1.000	1	10.00	0	100.0	-1	200.0	0
Calcium	A	10.00	-2	50.00	-13	100.0	3	1000	6	10000	0	20000	0
Lead	A	0.100	-38	0.500	0	1.000	7	10.00	6	100.0	2	200.0	0
Magnesium	A	10.00	5	50.00	11	100.0	9	1000	2	10000	0	20000	0
Molybdenum	A	0.100	-13	0.500	-1	1.000	2	10.00	1	100.0	-2	200.0	0
Potassium	A	10.00	2	50.00	1	100.0	6	1000	2	10000	-1	20000	0
Silver	A	0.100	-12	0.500	0	1.000	6	10.00	3	100.0	-1	200.0	0
Thallium	A	0.050	-46	0.250	-13	0.500	-10	5.000	-6	50.00	-2	100.0	1
Arsenic	E	0.100	-9	0.500	6	1.000	-1	10.00	3	100.0	1	200.0	0
Chromium	E	0.100	-23	0.500	0	1.000	18	10.00	3	100.0	1	200.0	0
Cobalt	E	0.100	-4	0.500	9	1.000	5	10.00	7	100.0	2	200.0	-1
Copper	E	0.100	521	0.500	59	1.000	42	10.00	13	100.0	3	200.0	-1
Manganese	E	0.100	1	0.500	4	1.000	5	10.00	3	100.0	1	200.0	0
Nickel	E	0.100	-2	0.500	7	1.000	22	10.00	11	100.0	3	200.0	-1
Sodium	E	10.00	41	50.00	14	100.0	10	1000	5	10000	0	20000	0
Vanadium	E	0.100	17	0.500	0	1.000	2	10.00	2	100.0	0	200.0	0
Zinc	E	0.100	196	0.500	51	1.000	45	10.00	22	100.0	3	200.0	-1
Iron	H	10.00	5	50.00	10	100.0	8	1000	3	10000	2	20000	0
Selenium	H	0.100	-13	0.500	10	1.000	7	10.00	8	100.0	5	200.0	-1

nstrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

67230047001

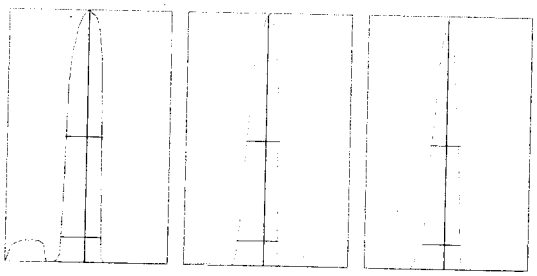
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	26505.0	26829.8	4.55	0.90
89	50,000	37898.0	39179.3	4.91	0.60
205	20,000	19491.0	19629.0	5.71	2.80

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.143%
Doubly Charged: 70/140 2.415%



m/z:	7	89	205
Height:	26,891	39,751	19,969
Axis:	7.00	89.00	205.00
W-50%:	0.70	0.60	0.55
W-10%:	0.7500	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.73 V
Smpl Depth	:	8 mm
Torch-H	:	0.7 mm
Torch-V	:	0.2 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-135 V
Omega Bias-ce	:	-34 V
Omega Lens-ce	:	0.8 V
Cell Entrance	:	-38 V
QP Focus	:	2 V
Cell Exit	:	-38 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-7 V

===Q-Pole Parameters===

AMU Gain	:	133
AMU Offset	:	125
Axis Gain	:	1.0006
Axis Offset	:	-0.06
QP Bias	:	-6 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1810 V
Pulse HV	:	1580 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	4.5 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-14 V

m/z	Count(Mean)	RSD%
51	64.4	14.65
59	7152.1	3.72
89	6169.4	6.16

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4.5 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-40 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	5991.1	3.67
78	0.6	146.77
89	30099.7	3.58

Integration Time: 0.1000sec

Generated : Jun 08, 2007 17:53:05
Printed : Jun 08, 2007 17:54:45

00129

P/A Factor Tuning Report

Acquired:Jun 8 2007 06:03 pm

Mass[amu]	Element	P/A Factor
6	Li	0.084309
7	(Li)	Sensitivity too low
9	Be	0.094431
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.114496
45	Sc	0.114117
51	V	0.116035
52	Cr	0.120438
55	Mn	0.123298
56	Fe	Sensitivity too high
59	Co	0.130159
60	Ni	0.129878
63	Cu	0.134023
65	Cu	0.132853
66	Zn	Sensitivity too low
72	Ge	0.131363
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.130306
98	Mo	0.129257
99	(Ru)	Sensitivity too low
107	Ag	0.140489
111	Cd	Sensitivity too low
115	In	0.140389
118	(In)	0.139483
121	Sb	0.137011
137	Ba	Sensitivity too low
159	Tb	0.143391
205	Tl	0.148282
206	(Pb)	0.147728
207	(Pb)	0.147896
208	Pb	0.149984
209	Bi	0.150586

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1580 V

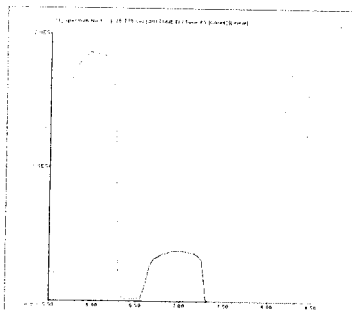
: 00130

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F08s00.B\001TUNE.D
Date Acquired:	Jun 8 2007 06:07 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.57	5.00	
59 Co	0.66	5.00	
115 In	0.98	5.00	
205 Tl	1.26	5.00	



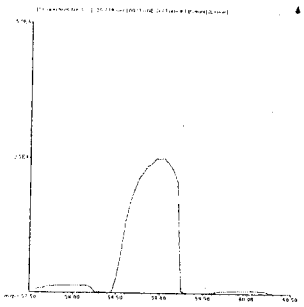
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



59 Co

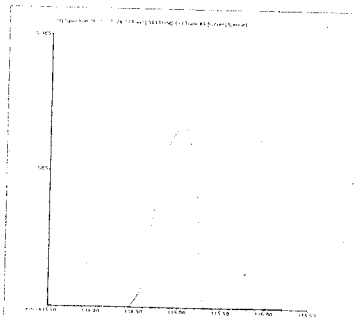
Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:

00131



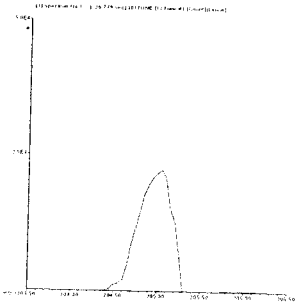
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 205.00
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004C
Date Acquired:	Jun 8 2007 06:24 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Jun 08 2007 06:28 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1773181.00	A	20760.00	1.17
7	(Li)		P		
9	Be	108.89	P	39.06	35.87
23	Na	24499.58	P	508.10	2.07
24	Mg	35079.21	P	10250.00	29.22
27	Al	66737.56	P	11710.00	17.55
39	K	1079841.00	A	18420.00	1.71
44	Ca	89344.61	P	228.70	0.26
45	Sc	1119057.00	A	8851.00	0.79
45	Sc	108386.00	P	1346.00	1.24
45	Sc	2025754.00	A	15670.00	0.77
51	V	598.54	P	33.97	5.68
52	Cr	997.89	P	95.15	9.54
55	Mn	232.60	P	25.68	11.04
56	Fe	28325.43	P	3221.00	11.37
59	Co	147.04	P	10.91	7.42
60	Ni	1096.35	P	25.35	2.31
63	Cu	2820.32	P	64.50	2.29
65	Cu	1347.12	P	21.93	1.63
66	Zn	2884.03	P	76.30	2.65
72	Ge	223416.59	P	2103.00	0.94
72	Ge	57545.94	P	233.50	0.41
75	As	20.22	P	6.47	32.02
78	Se	12.67	P	2.40	18.98
89	Y	2789595.00	A	32750.00	1.17
98	Mo	754.50	P	36.57	4.85
107	Ag	625.59	P	63.63	10.17
111	Cd	734.50	P	21.17	2.88
115	In	2719269.00	A	21240.00	0.78
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	508.92	P	75.75	14.88
137	Ba	273.35	P	52.39	19.17
159	Tb	2901595.00	A	20950.00	0.72
205	Tl	680.05	P	112.90	16.60
208	Pb	1543.43	P	164.20	10.64
209	Bi	948434.00	P	25490.00	2.69

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 8 2007 06:30 pm
Operator:
Sample Name: s6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 06:28 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1714681.00	A	15600.00	0.91
7 (Li)		P		
9 Be	786.72	P	40.42	5.14
23 Na	35322.23	P	423.80	1.20
24 Mg	178135.70	P	1968.00	1.10
27 Al	239008.00	P	707.40	0.30
39 K	1220681.00	A	10860.00	0.89
44 Ca	92413.95	P	89.74	0.10
45 Sc	1080007.00	A	1063.00	0.10
45 Sc	104262.60	P	714.10	0.68
45 Sc	1974920.00	A	15450.00	0.78
51 V	953.38	P	27.24	2.86
52 Cr	1288.59	P	34.07	2.64
55 Mn	475.20	P	18.90	3.98
56 Fe	148258.50	P	1846.00	1.25
59 Co	715.58	P	14.53	2.03
60 Ni	1205.25	P	22.70	1.88
63 Cu	5374.06	P	62.21	1.16
65 Cu	2619.91	P	72.66	2.77
66 Zn	3032.96	P	43.93	1.45
72 Ge	215641.30	P	520.60	0.24
72 Ge	55850.27	P	804.50	1.44
75 As	58.44	P	13.70	23.44
78 Se	47.11	P	7.31	15.52
89 Y	2742885.00	A	5605.00	0.20
98 Mo	1502.36	P	86.00	5.72
99 (Ru)	577.81	P	52.74	9.13
107 Ag	1906.87	P	89.52	4.69
111 Cd	1002.30	P	51.03	5.09
115 In	2663402.00	A	18250.00	0.69
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1489.02	P	50.60	3.40
137 Ba	734.49	P	23.41	3.19
159 Tb	2843189.00	A	18320.00	0.64
205 Tl	971.19	P	63.45	6.53
208 Pb	2373.51	P	145.70	6.14
209 Bi	901587.38	P	30470.00	3.38

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1714680.80	0.91	1773180.60	96.7	80 - 120	
45 Sc	1080006.90	0.10	1119056.80	96.5	80 - 120	
45 Sc	104262.56	0.68	108386.03	96.2	80 - 120	
45 Sc	1974920.40	0.78	2025754.40	97.5	80 - 120	
72 Ge	215641.30	0.24	223416.59	96.5	80 - 120	
72 Ge	55850.27	1.44	57545.94	97.1	80 - 120	
89 Y	2742885.00	0.20	2789595.50	98.3	80 - 120	
115 In	2663402.50	0.69	2719269.30	97.9	80 - 120	
159 Tb	2843188.80	0.64	2901595.30	98.0	80 - 120	
209 Bi	901587.38	3.38	948434.06	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 8 2007 06:36 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 06:34 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1785440.00	A	26640.00	1.49
7 (Li)		P		
9 Be	3831.75	P	134.90	3.52
23 Na	71742.92	P	1298.00	1.81
24 Mg	824672.69	P	4749.00	0.58
27 Al	988360.81	M	35440.00	3.59
39 K	1953206.00	A	23220.00	1.19
44 Ca	114755.90	P	713.80	0.62
45 Sc	1081850.00	A	3973.00	0.37
45 Sc	105432.50	P	1789.00	1.70
45 Sc	2047367.00	A	19260.00	0.94
51 V	2207.98	P	34.45	1.56
52 Cr	3110.75	P	82.94	2.67
55 Mn	1525.66	P	22.20	1.46
56 Fe	660119.19	P	2119.00	0.32
59 Co	3456.02	P	51.03	1.48
60 Ni	1899.04	P	30.45	1.60
63 Cu	6150.68	P	239.60	3.90
65 Cu	3066.30	P	38.57	1.26
66 Zn	3411.94	P	11.24	0.33
72 Ge	214878.41	P	1306.00	0.61
72 Ge	56092.02	P	282.40	0.50
75 As	246.23	P	3.85	1.56
78 Se	232.00	P	17.68	7.62
89 Y	2811277.00	A	19690.00	0.70
98 Mo	5200.08	P	203.10	3.91
99 (Ru)	518.92	P	18.36	3.54
107 Ag	8157.16	P	87.74	1.08
111 Cd	2380.29	P	8.82	0.37
115 In	2727681.00	A	24060.00	0.88
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5463.53	P	134.90	2.47
137 Ba	2474.77	P	22.20	0.90
159 Tb	2882808.00	A	5158.00	0.18
205 Tl	3283.89	P	243.70	7.42
208 Pb	8613.70	P	364.20	4.23
209 Bi	910129.88	P	30290.00	3.33

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1785439.80	1.49	1773180.60	100.7	80 - 120	
45 Sc	1081849.80	0.37	1119056.80	96.7	80 - 120	
45 Sc	105432.45	1.70	108386.03	97.3	80 - 120	
45 Sc	2047366.90	0.94	2025754.40	101.1	80 - 120	
72 Ge	214878.42	0.61	223416.59	96.2	80 - 120	
72 Ge	56092.02	0.50	57545.94	97.5	80 - 120	
89 Y	2811277.00	0.70	2789595.50	100.8	80 - 120	
115 In	2727681.30	0.88	2719269.30	100.3	80 - 120	
159 Tb	2882807.80	0.18	2901595.30	99.4	80 - 120	
209 Bi	910129.88	3.33	948434.06	96.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 8 2007 06:42 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 06:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1752643.00	A	12180.00	0.69
7	(Li)		P		
9	Be	7683.42	P	129.20	1.68
23	Na	119342.50	P	954.60	0.80
24	Mg	1568951.00	A	6710.00	0.43
27	Al	1854511.00	A	21020.00	1.13
39	K	2870608.00	A	14810.00	0.52
44	Ca	146931.91	P	221.80	0.15
45	Sc	1112751.00	A	12890.00	1.16
45	Sc	108163.30	P	1083.00	1.00
45	Sc	2026829.00	A	19920.00	0.98
51	V	3992.84	P	90.05	2.26
52	Cr	6201.44	P	102.70	1.66
55	Mn	2925.90	P	25.46	0.87
56	Fe	1314067.00	A	11160.00	0.85
59	Co	6715.76	P	78.05	1.16
60	Ni	3037.03	P	60.04	1.98
63	Cu	9054.50	P	64.18	0.71
65	Cu	4384.81	P	113.30	2.58
66	Zn	4069.53	P	17.89	0.44
72	Ge	218944.91	P	2007.00	0.92
72	Ge	57657.97	P	473.00	0.82
75	As	457.12	P	7.34	1.61
78	Se	448.01	P	34.08	7.61
89	Y	2761643.00	A	18740.00	0.68
98	Mo	9707.13	P	190.10	1.96
99	(Ru)	650.04	P	40.97	6.30
107	Ag	16377.11	P	171.60	1.05
111	Cd	4074.10	P	129.20	3.17
115	In	2679738.00	A	10630.00	0.40
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	10892.57	P	127.70	1.17
137	Ba	3523.94	P	76.90	2.18
159	Tb	2839162.00	A	15570.00	0.55
205	Tl	5952.73	P	239.60	4.03
208	Pb	16435.83	P	470.20	2.86
209	Bi	890286.69	P	26590.00	2.99

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1752643.30	0.69	1773180.60	98.8	80 - 120	
45	Sc	1112750.90	1.16	1119056.80	99.4	80 - 120	
45	Sc	108163.26	1.00	108386.03	99.8	80 - 120	
45	Sc	2026829.50	0.98	2025754.40	100.1	80 - 120	
72	Ge	218944.95	0.92	223416.59	98.0	80 - 120	
72	Ge	57657.97	0.82	57545.94	100.2	80 - 120	
89	Y	2761643.30	0.68	2789595.50	99.0	80 - 120	
115	In	2679738.00	0.40	2719269.30	98.5	80 - 120	
159	Tb	2839162.50	0.55	2901595.30	97.8	80 - 120	
209	Bi	890286.75	2.99	948434.06	93.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 8 2007 06:48 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 06:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1803367.00	A	151200.00	8.38
7 (Li)		P		
9 Be	76241.36	P	779.10	1.02
23 Na	945899.81	M	28260.00	2.99
24 Mg	14903320.00	A	117600.00	0.79
27 Al	17515400.00	A	105100.00	0.60
39 K	19031910.00	A	118000.00	0.62
44 Ca	702047.31	P	928.10	0.13
45 Sc	1136548.00	A	8893.00	0.78
45 Sc	109539.10	P	1165.00	1.06
45 Sc	2123607.00	A	274500.00	12.93
51 V	34894.35	P	193.30	0.55
52 Cr	47113.04	P	341.10	0.72
55 Mn	27108.88	P	349.10	1.29
56 Fe	12514530.00	A	81600.00	0.65
59 Co	67378.16	P	657.70	0.98
60 Ni	19045.31	P	294.40	1.55
63 Cu	52477.00	P	542.40	1.03
65 Cu	25689.98	P	231.30	0.90
66 Zn	12887.55	P	107.50	0.83
72 Ge	224300.20	P	1474.00	0.66
72 Ge	57776.28	P	541.50	0.94
75 As	4546.55	P	78.80	1.73
78 Se	4495.65	P	105.20	2.34
89 Y	2857366.00	A	359000.00	12.56
98 Mo	91036.70	P	915.30	1.01
99 (Ru)	573.37	P	49.11	8.57
107 Ag	155024.00	P	733.80	0.47
111 Cd	34446.91	P	425.30	1.23
115 In	2739605.00	A	333500.00	12.17
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	102003.70	P	894.70	0.88
137 Ba	32704.28	P	324.10	0.99
159 Tb	2897500.00	A	397800.00	13.73
205 Tl	55010.49	P	2187.00	3.98
208 Pb	150182.30	P	5013.00	3.34
209 Bi	879273.31	P	89550.00	10.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	1803366.60	8.38	1773180.60	101.7	80 -	120	
45 Sc	1136547.80	0.78	1119056.80	101.6	80 -	120	
45 Sc	109539.10	1.06	108386.03	101.1	80 -	120	
45 Sc	2123607.00	12.93	2025754.40	104.8	80 -	120	
72 Ge	224300.22	0.66	223416.59	100.4	80 -	120	
72 Ge	57776.28	0.94	57545.94	100.4	80 -	120	
89 Y	2857366.30	12.56	2789595.50	102.4	80 -	120	
115 In	2739605.30	12.17	2719269.30	100.7	80 -	120	
159 Tb	2897500.30	13.73	2901595.30	99.9	80 -	120	
209 Bi	879273.31	10.19	948434.06	92.7	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 8 2007 06:54 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 06:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1668220.00	A	5365.00	0.32
7	(Li)		P		
9	Be	687632.50	P	3745.00	0.54
23	Na	8317092.00	A	104900.00	1.26
24	Mg	############	A	1254000.00	0.93
27	Al	############	A	1271000.00	0.79
39	K	############	A	1140000.00	0.70
44	Ca	5451043.00	A	33270.00	0.61
45	Sc	1101547.00	A	9917.00	0.90
45	Sc	103647.70	P	1574.00	1.52
45	Sc	1961661.00	A	27550.00	1.40
51	V	320466.09	P	4438.00	1.38
52	Cr	426704.59	P	2789.00	0.65
55	Mn	248454.50	P	2789.00	1.12
56	Fe	############	A	582600.00	0.49
59	Co	610935.31	P	9723.00	1.59
60	Ni	159196.59	P	1648.00	1.04
63	Cu	425138.50	P	2883.00	0.68
65	Cu	206649.91	P	2679.00	1.30
66	Zn	81128.51	P	274.30	0.34
72	Ge	212972.41	P	984.30	0.46
72	Ge	53717.12	P	650.00	1.21
75	As	41529.59	P	382.70	0.92
78	Se	41486.99	P	227.40	0.55
89	Y	2660331.00	A	23420.00	0.88
98	Mo	831930.69	P	1860.00	0.22
99	(Ru)	566.70	P	20.28	3.58
107	Ag	1385625.00	A	4444.00	0.32
111	Cd	308609.41	P	242.40	0.08
115	In	2511608.00	A	13300.00	0.53
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	928730.63	P	9971.00	1.07
137	Ba	298288.91	P	3164.00	1.06
159	Tb	2712282.00	A	26740.00	0.99
205	Tl	509846.09	P	15590.00	3.06
208	Pb	1360406.00	P	49420.00	3.63
209	Bi	787805.31	P	22270.00	2.83

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	1668220.10	0.32	1773180.60	94.1	80 -	120	
45	Sc	1101547.30	0.90	1119056.80	98.4	80 -	120	
45	Sc	103647.75	1.52	108386.03	95.6	80 -	120	
45	Sc	1961661.40	1.40	2025754.40	96.8	80 -	120	
72	Ge	212972.39	0.46	223416.59	95.3	80 -	120	
72	Ge	53717.13	1.21	57545.94	93.3	80 -	120	
89	Y	2660330.50	0.88	2789595.50	95.4	80 -	120	
115	In	2511608.00	0.53	2719269.30	92.4	80 -	120	
159	Tb	2712282.30	0.99	2901595.30	93.5	80 -	120	
209	Bi	787805.31	2.83	948434.06	83.1	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 8 2007 07:04 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 07:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1545487.00	A	30190.00	1.95
7 (Li)		P		
9 Be	1300134.00	A	8900.00	0.68
23 Na	15844330.00	A	269300.00	1.70
24 Mg	############	A	1115000.00	0.44
27 Al	############	A	3743000.00	1.22
39 K	############	A	3266000.00	1.05
44 Ca	10222350.00	A	79260.00	0.78
45 Sc	1087930.00	A	1329.00	0.12
45 Sc	99050.63	P	1720.00	1.74
45 Sc	1846100.00	A	9674.00	0.52
51 V	611101.19	P	9604.00	1.57
52 Cr	806534.13	P	18570.00	2.30
55 Mn	470356.09	P	6312.00	1.34
56 Fe	############	A	1825000.00	0.79
59 Co	1133852.00	P	10770.00	0.95
60 Ni	291387.81	P	3402.00	1.17
63 Cu	770579.50	P	7779.00	1.01
65 Cu	370535.31	P	4492.00	1.21
66 Zn	145405.00	P	909.70	0.63
72 Ge	206672.91	P	1164.00	0.56
72 Ge	50939.71	P	346.90	0.68
75 As	77470.05	P	579.30	0.75
78 Se	75827.51	P	385.80	0.51
89 Y	2493543.00	A	20670.00	0.83
98 Mo	1592647.00	A	3271.00	0.21
99 (Ru)	565.59	P	13.88	2.45
107 Ag	2567816.00	A	19580.00	0.76
111 Cd	572956.13	P	2641.00	0.46
115 In	2309742.00	A	21140.00	0.92
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1744821.00	A	13670.00	0.78
137 Ba	559364.19	P	1679.00	0.30
159 Tb	2550136.00	A	21060.00	0.83
205 Tl	937885.50	P	33260.00	3.55
208 Pb	2497222.00	P	69720.00	2.79
209 Bi	702653.38	P	19720.00	2.81

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1545486.90	1.95	1773180.60	87.2	80 - 120	
45 Sc	1087930.10	0.12	1119056.80	97.2	80 - 120	
45 Sc	99050.63	1.74	108386.03	91.4	80 - 120	
45 Sc	1846100.10	0.52	2025754.40	91.1	80 - 120	
72 Ge	206672.92	0.56	223416.59	92.5	80 - 120	
72 Ge	50939.71	0.68	57545.94	88.5	80 - 120	
89 Y	2493543.00	0.83	2789595.50	89.4	80 - 120	
115 In	2309742.50	0.92	2719269.30	84.9	80 - 120	
159 Tb	2550135.80	0.83	2901595.30	87.9	80 - 120	
209 Bi	702653.38	2.81	948434.06	74.1	80 - 120	ISFail

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Fail**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047012
Cal : 67230047001
Standards: S6419, S6035

File : f08s0012
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 19:18

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.4645	0.4235	10000	10230	ug/L	2	10	
Antimony	A	0.2075	0.1948	100.0	103.6	ug/L	4	10	
Barium	A	0.0740	0.0566	100.0	103.1	ug/L	3	10	
Beryllium	A	0.2154	0.2149	100.0	102.6	ug/L	3	10	
Cadmium	A	0.0897	0.0630	100.0	101.7	ug/L	2	10	
Calcium	A	0.0618	0.0144	10000	10310	ug/L	3	10	
Lead	A	0.2940	0.2518	100.0	102.3	ug/L	2	10	
Magnesium	A	0.3813	0.3579	10000	10320	ug/L	3	10	
Molybdenum	A	0.1853	0.1606	100.0	100.9	ug/L	1	10	
Potassium	A	1.0072	0.4331	10000	10310	ug/L	3	10	
Silver	A	0.3004	0.2829	100.0	101.9	ug/L	2	10	
Thallium	A	0.7350	0.6658	50.00	50.17	ug/L	0	10	
Arsenic	E	0.4199	0.3932	100.0	103.1	ug/L	3	10	
Chromium	E	3.0404	2.0762	100.0	101.7	ug/L	2	10	
Cobalt	E	3.1165	2.9548	100.0	102.6	ug/L	3	10	
Copper	E	13.202	3.9953	100.0	104.4	ug/L	4	10	
Manganese	E	1.4503	1.2064	100.0	101.4	ug/L	1	10	
Nickel	E	1.8931	0.7745	100.0	104.1	ug/L	4	10	
Sodium	E	0.6932	0.4101	10000	10240	ug/L	2	10	
Vanadium	E	2.1989	1.5550	100.0	100.7	ug/L	1	10	
Zinc	E	6.5587	0.7651	100.0	104.6	ug/L	5	10	
Iron	H	0.5852	0.5361	10000	10050	ug/L	1	10	
Selenium	H	0.1015	0.0972	100.0	104.7	ug/L	5	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1617963	-8.75
Scandium	A	2025754	1925325	-4.96
Scandium	E	108386	101952	-5.94
Scandium	H	1119057	1106145	-1.15
Germanium	H	223417	211674	-5.26
Germanium	E	57546	52488	-8.79
Indium	A	2719269	2436398	-10.40
Bismuth	A	948434	744479	-21.50
Yttrium	A	2789596	2606132	-6.58
Terbium	A	2901595	2620214	-9.70

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047015
Cal : 67230047001

File : f08s0015
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 19:36

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03079]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.382]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.807]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02690]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01587]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02009]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01854]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01876]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1768766	-0.25
Scandium	A	2025754	2025479	-0.01
Scandium	E	108386	106497	-1.74
Scandium	H	1119057	1115581	-0.31
Germanium	H	223417	218537	-2.18
Germanium	E	57546	56303	-2.16
Indium	A	2719269	2621889	-3.58
Bismuth	A	948434	815045	-14.06
Yttrium	A	2789596	2740341	-1.77
Terbium	A	2901595	2735849	-5.71

=warning ib=instrument blank

67230047015

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67230047017 File : f08s0017 IDF : 1.0
Cal : 67230047001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:48
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09496]	0.1000	ug/L	
Barium	A	1.318	0.1000	ug/L	
Beryllium	A	[0.02438]	0.1000	ug/L	
Cadmium	A	3.010	0.1000	ug/L	
Lead	A	0.4487	0.1000	ug/L	
Silver	A	0.2409	0.1000	ug/L	
Thallium	A	[0.02463]	0.05000	ug/L	
Arsenic	E	0.3644	0.1000	ug/L	
Chromium	E	1.521	0.1000	ug/L	
Cobalt	E	0.2806	0.1000	ug/L	
Copper	E	1.821	0.1000	ug/L	
Manganese	E	0.9525	0.1000	ug/L	
Nickel	E	1.155	0.1000	ug/L	
Vanadium	E	[0.04072]	0.1000	ug/L	
Zinc	E	2.280	0.1000	ug/L	
Selenium	H	0.1255	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116800	ug/L	117
Calcium	A	300000	346300	ug/L	115
Magnesium	A	100000	113500	ug/L	114
Molybdenum	A	2000	2292	ug/L	115
Potassium	A	100000	116400	ug/L	116
Sodium	E	250000	288200	ug/L	115
Iron	H	250000	251100	ug/L	100

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1333733	-24.78
Scandium	A	2025754	1647899	-18.65
Scandium	E	108386	91231	-15.83
Scandium	H	1119057	1017283	-9.09
Germanium	H	223417	162599	-27.22
Germanium	E	57546	42239	-26.60
Indium	A	2719269	1852303	-31.88
Bismuth	A	948434	465100	-50.96
Yttrium	A	2789596	2121447	-23.95
Terbium	A	2901595	1940677	-33.12

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67230047018 File : f08s0018 IDF : 1.0
Cal : 67230047001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:54
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	114600	ug/L	15		
Cadmium	A	100.0	111.5	ug/L	12	20	
Calcium	A	300000	339100	ug/L	13		
Magnesium	A	100000	111900	ug/L	12		
Molybdenum	A	2000	2240	ug/L	12		
Potassium	A	100000	114700	ug/L	15		
Silver	A	50.00	54.40	ug/L	9	20	
Arsenic	E	100.0	107.7	ug/L	8	20	
Chromium	E	200.0	210.4	ug/L	5	20	
Cobalt	E	200.0	193.5	ug/L	-3	20	
Copper	E	200.0	197.4	ug/L	-1	20	
Manganese	E	200.0	209.6	ug/L	5	20	
Nickel	E	200.0	185.5	ug/L	-7	20	
Sodium	E	250000	288600	ug/L	15		
Vanadium	E	200.0	216.7	ug/L	8	20	
Zinc	E	100.0	97.46	ug/L	-3	20	
Iron	H	250000	248300	ug/L	-1		
Selenium	H	100.0	101.4	ug/L	1	20	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119057	986968	-11.80
Scandium	A	2025754	1587333	-21.64
Scandium	E	108386	84120	-22.39
Germanium	H	223417	158588	-29.02
Germanium	E	57546	38572	-32.97
Indium	A	2719269	1823284	-32.95
Yttrium	A	2789596	2073539	-25.67

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047035
Cal : 67230047001
Standards: S6420, S6035

File : f08s0035
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:35

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4253	10000	10280	ug/L	3	10	
Antimony	A	0.2075	0.1931	100.0	102.7	ug/L	3	10	
Barium	A	0.0740	0.0594	100.0	108.2	ug/L	8	10	
Beryllium	A	0.2154	0.2104	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0897	0.0637	100.0	102.8	ug/L	3	10	
Calcium	A	0.0618	0.0142	10000	10150	ug/L	2	10	
Lead	A	0.2940	0.2329	100.0	94.62	ug/L	-5	10	
Magnesium	A	0.3813	0.3562	10000	10270	ug/L	3	10	
Molybdenum	A	0.1853	0.1586	100.0	99.73	ug/L	0	10	
Potassium	A	1.0072	0.4373	10000	10410	ug/L	4	10	
Silver	A	0.3004	0.2891	100.0	104.2	ug/L	4	10	
Thallium	A	0.7350	0.6655	50.00	50.16	ug/L	0	10	
Arsenic	E	0.4199	0.3975	100.0	104.2	ug/L	4	10	
Chromium	E	3.0404	2.0755	100.0	101.6	ug/L	2	10	
Cobalt	E	3.1165	2.9641	100.0	102.9	ug/L	3	10	
Copper	E	13.202	4.1033	100.0	107.2	ug/L	7	10	
Manganese	E	1.4503	1.1813	100.0	99.27	ug/L	-1	10	
Nickel	E	1.8931	0.7671	100.0	103.1	ug/L	3	10	
Sodium	E	0.6932	0.4109	10000	10260	ug/L	3	10	
Vanadium	E	2.1989	1.5765	100.0	102.1	ug/L	2	10	
Zinc	E	6.5587	0.7638	100.0	104.5	ug/L	5	10	
Iron	H	0.5852	0.5078	10000	9518	ug/L	-5	10	
Selenium	H	0.1015	0.0959	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1928042	8.73
Scandium	A	2025754	2250540	11.10
Scandium	E	108386	110694	2.13
Scandium	H	1119057	1285411	14.87
Germanium	H	223417	235177	5.26
Germanium	E	57546	55323	-3.86
Indium	A	2719269	2612966	-3.91
Bismuth	A	948434	693497	-26.88
Yttrium	A	2789596	2959603	6.09
Terbium	A	2901595	2631681	-9.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047038
Cal : 67230047001

File : f08s0038
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:53

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.970]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2089263	17.83
Scandium	A	2025754	2355569	16.28
Scandium	E	108386	114178	5.34
Scandium	H	1119057	1231801	10.07
Germanium	H	223417	232460	4.05
Germanium	E	57546	58176	1.09
Indium	A	2719269	2771076	1.91
Bismuth	A	948434	750612	-20.86
Yttrium	A	2789596	3064732	9.86
Terbium	A	2901595	2679612	-7.65

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67230047038

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047039
Cal : 67230047001

File : f08s0039
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:59

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	10.67	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002786]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	10.56	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.04507]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2079151	17.26
Scandium	A	2025754	2354754	16.24
Scandium	E	108386	115917	6.95
Scandium	H	1119057	1260783	12.66
Germanium	H	223417	236899	6.03
Germanium	E	57546	59022	2.57
Indium	A	2719269	2822139	3.78
Bismuth	A	948434	756222	-20.27
Yttrium	A	2789596	3111011	11.52
Terbium	A	2901595	2683019	-7.53

=warning ib=instrument blank

67230047039

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047053
Cal : 67230047001
Standards: S6420, S6035

File : f08s0053
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 23:22

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4338	10000	10480	ug/L	5	10	
Antimony	A	0.2075	0.1957	100.0	104.1	ug/L	4	10	
Barium	A	0.0740	0.0611	100.0	111.3	ug/L	**11**	10	c+ ***
Beryllium	A	0.2154	0.2069	100.0	98.75	ug/L	-1	10	
Cadmium	A	0.0897	0.0646	100.0	104.2	ug/L	4	10	
Calcium	A	0.0618	0.0145	10000	10390	ug/L	4	10	
Lead	A	0.2940	0.2392	100.0	97.20	ug/L	-3	10	
Magnesium	A	0.3813	0.3678	10000	10610	ug/L	6	10	
Molybdenum	A	0.1853	0.1596	100.0	100.3	ug/L	0	10	
Potassium	A	1.0072	0.4506	10000	10730	ug/L	7	10	
Silver	A	0.3004	0.2915	100.0	105.0	ug/L	5	10	
Thallium	A	0.7350	0.6763	50.00	50.97	ug/L	2	10	
Arsenic	E	0.4199	0.3993	100.0	104.7	ug/L	5	10	
Chromium	E	3.0404	2.1032	100.0	103.0	ug/L	3	10	
Cobalt	E	3.1165	2.9797	100.0	103.5	ug/L	4	10	
Copper	E	13.202	4.1010	100.0	107.2	ug/L	7	10	
Manganese	E	1.4503	1.1895	100.0	99.96	ug/L	0	10	
Nickel	E	1.8931	0.7758	100.0	104.3	ug/L	4	10	
Sodium	E	0.6932	0.4196	10000	10470	ug/L	5	10	
Vanadium	E	2.1989	1.5866	100.0	102.7	ug/L	3	10	
Zinc	E	6.5587	0.7715	100.0	105.5	ug/L	6	10	
Iron	H	0.5852	0.5272	10000	9883	ug/L	-1	10	
Selenium	H	0.1015	0.0997	100.0	107.3	ug/L	7	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2072489	16.88
Scandium	A	2025754	2328346	14.94
Scandium	E	108386	113963	5.15
Scandium	H	1119057	1300383	16.20
Germanium	H	223417	238673	6.83
Germanium	E	57546	57328	-0.38
Indium	A	2719269	2680410	-1.43
Bismuth	A	948434	692596	-26.97
Yttrium	A	2789596	3046500	9.21
Terbium	A	2901595	2596212	-10.52

=high bias c=CCV

67230047053

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047056
Cal : 67230047001

File : f08s0056
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 23:40

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	i+ ***
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	13.82	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01199]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.006167]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2187819	**23.38 ***
Scandium	A	2025754	2399386	18.44
Scandium	E	108386	117285	8.21
Scandium	H	1119057	1281605	14.53
Germanium	H	223417	237951	6.51
Germanium	E	57546	59184	2.85
Indium	A	2719269	2807560	3.25
Bismuth	A	948434	750974	-20.82
Yttrium	A	2789596	3112187	11.56
Terbium	A	2901595	2654768	-8.51

=warning +=high bias i=ISTD failure ib=instrument blank

67230047056

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047062
Cal : 67230047001
Standards: S6420, S6035

File : f08s0062
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:16

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4317	10000	10430	ug/L	4	10	
Antimony	A	0.2075	0.1947	100.0	103.5	ug/L	4	10	
Barium	A	0.0740	0.0622	100.0	113.3	ug/L	**13**	10	c+ ***
Beryllium	A	0.2154	0.2086	100.0	99.54	ug/L	0	10	i+ ***
Cadmium	A	0.0897	0.0648	100.0	104.5	ug/L	5	10	
Calcium	A	0.0618	0.0145	10000	10370	ug/L	4	10	
Lead	A	0.2940	0.2382	100.0	96.76	ug/L	-3	10	
Magnesium	A	0.3813	0.3623	10000	10450	ug/L	5	10	
Molybdenum	A	0.1853	0.1603	100.0	100.8	ug/L	1	10	
Potassium	A	1.0072	0.4480	10000	10670	ug/L	7	10	
Silver	A	0.3004	0.2934	100.0	105.7	ug/L	6	10	
Thallium	A	0.7350	0.6781	50.00	51.10	ug/L	2	10	
Arsenic	E	0.4199	0.4011	100.0	105.1	ug/L	5	10	
Chromium	E	3.0404	2.0732	100.0	101.5	ug/L	2	10	
Cobalt	E	3.1165	2.9515	100.0	102.5	ug/L	3	10	
Copper	E	13.202	4.1653	100.0	108.9	ug/L	9	10	
Manganese	E	1.4503	1.1751	100.0	98.75	ug/L	-1	10	
Nickel	E	1.8931	0.7674	100.0	103.1	ug/L	3	10	
Sodium	E	0.6932	0.4144	10000	10340	ug/L	3	10	
Vanadium	E	2.1989	1.5770	100.0	102.1	ug/L	2	10	
Zinc	E	6.5587	0.7737	100.0	105.9	ug/L	6	10	
Iron	H	0.5852	0.5325	10000	9982	ug/L	0	10	i+ ***
Selenium	H	0.1015	0.1005	100.0	108.2	ug/L	8	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2139760	**20.67 ***
Scandium	A	2025754	2411964	19.06
Scandium	E	108386	118995	9.79
Scandium	H	1119057	1358144	**21.37 ***
Germanium	H	223417	245946	10.08
Germanium	E	57546	58400	1.48
Indium	A	2719269	2747368	1.03
Bismuth	A	948434	683373	-27.95
Yttrium	A	2789596	3138985	12.52
Terbium	A	2901595	2597850	-10.47

=high bias c=CCV i=ISTD failure

67230047062

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047064
Cal : 67230047001

File : f08s0064
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:28

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	i+ ***
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	i+ ***
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	i+ ***
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	i+ ***
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	15.80	10.00	7.074	ug/L	i+ ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01607]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[4.863]	10.00	4.329	ug/L	!ib
Selenium	H	[0.04821]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2296300	**29.50 ***
Scandium	A	2025754	2496856	**23.26 ***
Scandium	E	108386	122184	12.73
Scandium	H	1119057	1318030	17.78
Germanium	H	223417	248111	11.05
Germanium	E	57546	61419	6.73
Indium	A	2719269	2930539	7.77
Bismuth	A	948434	759245	-19.95
Yttrium	A	2789596	3268240	17.16
Terbium	A	2901595	2695592	-7.10

=warning +=high bias i=ISTD failure ib=instrument blank

67230047064

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67230047067
Cal : 67230047001
Standards: S6421, S6035

File : f08s0067
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:45

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05925]	0.1000	ug/L	
Barium	A	1.519	0.1000	ug/L	
Beryllium	A	[0.01873]	0.1000	ug/L	
Cadmium	A	3.349	0.1000	ug/L	
Lead	A	0.4297	0.1000	ug/L	
Silver	A	0.2354	0.1000	ug/L	
Thallium	A	[0.01638]	0.05000	ug/L	
Arsenic	E	0.3922	0.1000	ug/L	
Chromium	E	1.507	0.1000	ug/L	
Cobalt	E	0.2588	0.1000	ug/L	
Copper	E	1.917	0.1000	ug/L	
Manganese	E	0.8689	0.1000	ug/L	
Nickel	E	1.166	0.1000	ug/L	
Vanadium	E	[0.05732]	0.1000	ug/L	
Zinc	E	2.349	0.1000	ug/L	
Selenium	H	0.1381	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	124100	ug/L	124
Calcium	A	300000	368100	ug/L	123
Magnesium	A	100000	121900	ug/L	122
Molybdenum	A	2000	2321	ug/L	116
Potassium	A	100000	125100	ug/L	125
Sodium	E	250000	299100	ug/L	120
Iron	H	250000	259700	ug/L	104

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1619515	-8.67
Scandium	A	2025754	1959034	-3.29
Scandium	E	108386	100361	-7.40
Scandium	H	1119057	1129303	0.92
Germanium	H	223417	178853	-19.95
Germanium	E	57546	43861	-23.78
Indium	A	2719269	2029273	-25.37
Bismuth	A	948434	434492	-54.19
Yttrium	A	2789596	2423895	-13.11
Terbium	A	2901595	1938321	-33.20

67230047067

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67230047068
Cal : 67230047001
Standards: S6422, S6035

File : f08s0068
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:52

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	121200	ug/L	21		
Cadmium	A	100.0	117.4	ug/L	17	20	
Calcium	A	300000	361400	ug/L	20		
Magnesium	A	100000	119800	ug/L	20		
Molybdenum	A	2000	2252	ug/L	13		
Potassium	A	100000	122700	ug/L	23		
Silver	A	50.00	57.84	ug/L	16	20	
Arsenic	E	100.0	111.0	ug/L	11	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	193.8	ug/L	-3	20	
Copper	E	200.0	209.2	ug/L	5	20	
Manganese	E	200.0	208.8	ug/L	4	20	
Nickel	E	200.0	188.0	ug/L	-6	20	
Sodium	E	250000	299800	ug/L	20		
Vanadium	E	200.0	222.0	ug/L	11	20	
Zinc	E	100.0	99.90	ug/L	0	20	
Iron	H	250000	254100	ug/L	2		
Selenium	H	100.0	107.2	ug/L	7	20	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119057	1123974	0.44
Scandium	A	2025754	1910495	-5.69
Scandium	E	108386	94652	-12.67
Germanium	H	223417	176163	-21.15
Germanium	E	57546	41489	-27.90
Indium	A	2719269	2046123	-24.75
Yttrium	A	2789596	2433083	-12.78

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67230047

Date : 06/08/07
Sequence : MET06 f08s0

Reference : f08s0004
Analyzed : 06/08/07 18:26

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1773181	2025754	108386	1119057	223417	57546	2719269	948434	2789596	2901595
		LOWER LIMIT	531954	607726	32516	335717	67025	17264	815781	284530	836879	870479
		UPPER LIMIT	2127817	2430905	130063	1342868	268100	69055	3263123	1138121	3347515	3481914
015	ICB		1768766	2025479	106497	1115581	218537	56303	2621889	815045	2740341	2735849
017	ICSA		1333733	1647899	91231	1017283	162599	42239	1852303	465100	2121447	1940677
018	ICSAB		1312246	1587333	84120	986968	158588	38572	1823284	476519	2073539	1958390
023	BLANK	QC391439	1715141	1887240	86599	988454	216458	51626	2358372	761738	2537351	2510125
024	BS	QC391440	1695268	1905967	89569	1036586	191395	45920	2326274	703883	2589034	2495037
025	BSD	QC391441	1665224	1872923	87366	1033391	188401	44419	2330029	695760	2536056	2466067
027	MSS	195241-003	1854152	2226116	100067	1095168	208656	51987	2589469	758546	2816103	2675047
028	SER	QC391444	1888820	2189597	103633	1154665	222848	54515	2659289	767771	2878628	2700105
029	MS	QC391442	1833732	2232269	101369	1134751	211224	52465	2556729	717758	2827507	2643410
030	MSD	QC391443	1875212	2295151	101105	1133455	210156	52031	2640340	746736	2921526	2724346
031	PDS	QC391445	1741148	2128924	96667	1124721	204269	49285	2426889	670034	2696311	2518389
035	CCV		1928042	2250540	110694	1285411	235177	55323	2612966	693497	2959603	2631681
038	CCB		2089263	2355569	114178	1231801	232460	58176	2771076	750612	3064732	2679612
039	CCB		2079151	2354754	115917	1260783	236899	59022	2822139	756222	3111011	2683019
040	MSS	195247-006	1976468	2309916	108728	1212328	225828	55135	2618538	704326	2925235	2548790
041	MS	QC391446	1958354	2295575	108204	1200112	221050	54529	2596019	688559	2916531	2562536
042	MSD	QC391447	1931676	2255992	106195	1187713	217832	54053	2571627	690843	2874678	2515156
043	SAMPLE	195241-002	2078705	2397773	111192	1225845	222195	55085	2615988	678543	2996144	2556536
044	SAMPLE	195241-004	1989266	2283142	104224	1183551	221224	53596	2632743	734435	2876722	2575505
045	SAMPLE	195241-005	1987571	2282847	106061	1182254	219385	54127	2659777	759319	2924257	2638537
046	SAMPLE	195241-007	2059742	2375982	110875	1208799	217269	54201	2548924	675341	2957210	2527413
047	SAMPLE	195247-001	2082840	2340161	111921	1253498	230992	56103	2674771	709191	2987823	2603390
048	SAMPLE	195247-002	2047210	2318467	111079	1215440	225637	55307	2653783	700484	2977080	2575198
049	SAMPLE	195247-001	1903009	2399304	110023	1258927	214563	52410	2482435	649877	2902309	2475332
053	CCV		2072489	2328346	113963	1300383	238673	57328	2680410	692596	3046500	2596212
056	CCB		2187819 *	2399386	117285	1281605	237951	59184	2807560	750974	3112187	2654768
058	SAMPLE	195247-002	2071885	2789986 *	121717	1379641 *	231709	56715	2638391	674730	3485796 *	2562300
062	CCV		2139760 *	2411964	118995	1358144 *	245946	58400	2747368	683373	3138985	2597850
064	CCB		2296300 *	2496856 *	122184	1318030	248111	61419	2930539	759245	3268240	2695592
067	ICSA		1619515	1959034	100361	1129303	178853	43861	2029273	434492	2423895	1938321
068	ICSAB		1572925	1910495	94652	1123974	176163	41489	2046123	452665	2433083	1963805

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f08s0001	TUN				08-JUN-2007 18:07	1.0	1.0				1	
002	f08s0002	X	RINSE			08-JUN-2007 18:14	1.0					2	
003	f08s0003	X	RINSE			08-JUN-2007 18:20	1.0					2	
004	f08s0004	ICALBLK	CALBLANK			08-JUN-2007 18:26	1.0	1.0				2	
005	f08s0005	ICAL				08-JUN-2007 18:32	1.0	1.0				3	
006	f08s0006	ICAL				08-JUN-2007 18:38	1.0	1.0				4	
007	f08s0007	ICAL				08-JUN-2007 18:44	1.0	1.0				5	
008	f08s0008	ICAL				08-JUN-2007 18:50	1.0	1.0				6	
009	f08s0009	ICAL				08-JUN-2007 18:56	1.0	1.0				7	
010	f08s0010	ICAL				08-JUN-2007 19:06	1.0	1.0				8	
011	f08s0011	X	RINSE			08-JUN-2007 19:12	1.0					2	
012	f08s0012	ICV				08-JUN-2007 19:18	1.0	1.0			1	9 2	
013	f08s0013	X	RINSE			08-JUN-2007 19:24	1.0					2	
014	f08s0014	X				08-JUN-2007 19:30	1.0					2	
015	f08s0015	ICB				08-JUN-2007 19:36	1.0	1.0			1	2	
016	f08s0016	X				08-JUN-2007 19:42	1.0					2	
017	f08s0017	ICSA				08-JUN-2007 19:48	1.0	1.0			1	10 2	7:CA=346300
018	f08s0018	ICSAB				08-JUN-2007 19:54	1.0	1.0			1	11 2	10:CA=339100
019	f08s0019	X	RINSE			08-JUN-2007 20:00	1.0					2	
020	f08s0020	X	RINSE			08-JUN-2007 20:06	1.0					2	
021	f08s0021	X	RINSE			08-JUN-2007 20:12	1.0					2	
022	f08s0022	X	RINSE			08-JUN-2007 20:18	1.0					2	
023	f08s0023	BLANK	QC391439	126087	Filtra	08-JUN-2007 20:24	1.0	1.0			1	2	
024	f08s0024	BS	QC391440	126087	Filtra	08-JUN-2007 20:30	1.0	1.0			1	2	
025	f08s0025	BSD	QC391441	126087	Filtra	08-JUN-2007 20:36	1.0	1.0			1	2	
026	f08s0026	X	RINSE			08-JUN-2007 20:42	1.0					2	
027	f08s0027	MSS	195241-003	126087	Filtra	08-JUN-2007 20:48	10.0	1.0			1	2	
028	f08s0028	SER	QC391444	126087	Filtra	08-JUN-2007 20:54	50.0	1.0		2	1	2	
029	f08s0029	MS	QC391442	126087	Filtra	08-JUN-2007 21:00	10.0	1.0		1	1	2	
030	f08s0030	MSD	QC391443	126087	Filtra	08-JUN-2007 21:05	10.0	1.0			1	2	
031	f08s0031	PDS	QC391445	126087	Filtra	08-JUN-2007 21:11	10.0	1.0	1		1	12 13 2	1:MG=29040.0

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	f08s0032	X	RINSE			08-JUN-2007 21:17	1.0				2	
033	f08s0033	X	RINSE			08-JUN-2007 21:23	1.0				2	
034	f08s0034	X	RINSE			08-JUN-2007 21:29	1.0				2	
035	f08s0035	CCV				08-JUN-2007 21:35	1.0	1.0		1	14 2	
036	f08s0036	X	RINSE			08-JUN-2007 21:41	1.0				2	
037	f08s0037	X				08-JUN-2007 21:47	1.0				2	
038	f08s0038	CCB				08-JUN-2007 21:53	1.0	1.0		1	2	
039	f08s0039	CCB				08-JUN-2007 21:59	1.0	1.0	2	1	2	
040	f08s0040	MSS	195247-006	126087	Filtra	08-JUN-2007 22:05	10.0	1.0	1	1	2	
041	f08s0041	MS	QC391446	126087	Filtra	08-JUN-2007 22:11	10.0	1.0	2	1	2	
042	f08s0042	MSD	QC391447	126087	Filtra	08-JUN-2007 22:17	10.0	1.0	2	1	2	
043	f08s0043	SAMPLE	195241-002	126087	Filtra	08-JUN-2007 22:23	10.0	1.0	1	1	2	1:MG=49050.0
044	f08s0044	SAMPLE	195241-004	126087	Filtra	08-JUN-2007 22:29	10.0	1.0		1	2	
045	f08s0045	SAMPLE	195241-005	126087	Filtra	08-JUN-2007 22:35	10.0	1.0		1	2	
046	f08s0046	SAMPLE	195241-007	126087	Filtra	08-JUN-2007 22:41	10.0	1.0	1	1	2	1:MG=52350.0
047	f08s0047	SAMPLE	195247-001	126087	Water	08-JUN-2007 22:47	10.0	1.0	2	1	2	1:NA=20780.0
048	f08s0048	SAMPLE	195247-002	126087	Water	08-JUN-2007 22:53	10.0	1.0	2	1	2	1:MN=342.000
049	f08s0049	SAMPLE	195247-001	126087	Filtra	08-JUN-2007 22:58	10.0	1.0	8	1	2	7:MG=69060.0
050	f08s0050	X	RINSE			08-JUN-2007 23:04	1.0				2	
051	f08s0051	X	RINSE			08-JUN-2007 23:10	1.0				2	
052	f08s0052	X	RINSE			08-JUN-2007 23:16	1.0				2	
053	f08s0053	CCV				08-JUN-2007 23:22	1.0	1.0	1	1	14 2	
054	f08s0054	X	RINSE			08-JUN-2007 23:28	1.0				2	
055	f08s0055	X				08-JUN-2007 23:34	1.0				2	
056	f08s0056	CCB				08-JUN-2007 23:40	1.0	1.0	2	1	2	
057	f08s0057	X				08-JUN-2007 23:46	1.0				2	
058	f08s0058	SAMPLE	195247-002	126087	Filtra	08-JUN-2007 23:52	10.0	1.0	7	1	2	3:MG=23740.0
059	f08s0059	X	RINSE			08-JUN-2007 23:58	1.0				2	
060	f08s0060	X	RINSE			09-JUN-2007 00:04	1.0				2	
061	f08s0061	X	RINSE			09-JUN-2007 00:10	1.0				2	
062	f08s0062	CCV				09-JUN-2007 00:16	1.0	1.0	3	1	14 2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f08s0063	X	RINSE			09-JUN-2007 00:22	1.0					2	
064	f08s0064	CCB				09-JUN-2007 00:28	1.0	1.0	5		1	2	
065	f08s0065	X				09-JUN-2007 00:33	1.0					2	
066	f08s0066	X				09-JUN-2007 00:39	1.0					2	
067	f08s0067	ICSA				09-JUN-2007 00:45	1.0	1.0			1	10 2	7:CA=368100
068	f08s0068	ICSAB				09-JUN-2007 00:52	1.0	1.0			1	11 2	11:CA=361400

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: [signature] Date: 6/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897238321001
Units : ug/L

Date : 14-JUN-2007 12:21
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f1410005	897238321005		14-JUN-2007 12:27	S6414
L2	f1410006	897238321006		14-JUN-2007 12:33	S6416
L3	f1410007	897238321007		14-JUN-2007 12:38	S6417
L4	f1410008	897238321008		14-JUN-2007 12:44	S6418
L5	f1410009	897238321009		14-JUN-2007 12:50	S6412
L6	f1410010	897238321010		14-JUN-2007 12:57	S6413

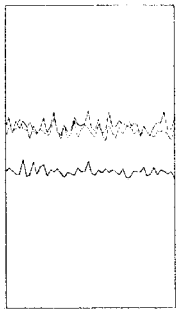
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4736	0.3867	0.3800	0.3468	0.3389	0.3349	BLNK	-0.8678	2.97863		0.3768	1.000	0.995	
Antimony	A	0.2715	0.1714	0.1763	0.1609	0.1716	0.1686	BLNK	-0.0121	5.91156		0.1867	1.000	0.995	
Barium	A	0.3402	0.0972	0.0525	0.0701	0.0374	0.0366	BLNK	-0.0182	27.1779		0.1057	0.997	0.995	
Beryllium	A	0.1433	0.1313	0.1385	0.1367	0.1374	0.1407	BLNK	-0.0011	7.13882		0.1380	1.000	0.995	
Cadmium	A	0.0474	0.0417	0.0421	0.0397	0.0395	0.0386	BLNK	-0.0068	25.7890		0.0415	1.000	0.995	
Calcium	A	0.1150	0.0318	0.0210	0.0115	0.0109	0.0106	BLNK	-67.374	94.2102		0.0335	1.000	0.995	
Lead	A	0.6300	0.5144	0.4646	0.4300	0.4390	0.4274	BLNK	-0.0206	2.32741		0.4842	1.000	0.995	
Magnesium	A	0.3973	0.3256	0.3309	0.2959	0.2873	0.2838	BLNK	-0.3465	3.51496		0.3201	1.000	0.995	
Molybdenum	A	0.1813	0.1248	0.1209	0.1123	0.1115	0.1185	BLNK	-0.0433	8.54399		0.1282	0.999	0.995	
Potassium	A	5.3623	1.1854	0.7821	0.4010	0.3612	0.3539	BLNK	-113.47	2.83305		1.4076	1.000	0.995	
Silver	A	0.2058	0.1827	0.1874	0.1785	0.1914	0.1837	BLNK	-0.0071	5.39993		0.1882	1.000	0.995	
Thallium	A	0.5824	0.4447	0.4542	0.4206	0.4547	0.4411	BLNK	-0.0186	2.25386		0.4663	1.000	0.995	
Arsenic	E	0.3914	0.3434	0.3065	0.3176	0.3143	0.3068	BLNK	-0.0332	3.24391		0.3300	1.000	0.995	
Chromium	E	4.6971	2.5413	2.4663	2.1754	2.1313	2.0632	BLNK	-0.0679	0.48165		2.6791	1.000	0.995	
Cobalt	E	4.0309	3.8504	3.7987	3.7203	3.6454	3.5396	BLNK	-0.0026	0.28082		3.7642	1.000	0.995	
Copper	E	45.345	8.6417	9.3033	3.9976	3.6771	3.5032	BLNK	-0.5548	0.28354		12.411	0.999	0.995	
Manganese	E	2.0019	1.0402	1.0233	0.9223	0.8999	0.8741	BLNK	-0.0312	1.13737		1.1270	1.000	0.995	
Nickel	E	5.4401	1.4199	1.2549	1.0366	1.0069	0.9697	BLNK	-0.1305	1.02410		1.8547	1.000	0.995	
Sodium	E	2.8243	0.7097	0.4920	0.2942	0.2574	0.2510	BLNK	-76.242	3.98119		0.8048	1.000	0.995	
Vanadium	E	3.3537	2.0274	1.8505	1.6439	1.6373	1.6027	BLNK	-0.1071	0.62164		2.0193	1.000	0.995	
Zinc	E	14.402	2.4833	1.2709	0.5690	0.4623	0.4429	BLNK	-1.1617	2.25283		3.2717	0.999	0.995	
Iron	H	0.6218	0.4894	0.4888	0.4490	0.4443	0.4317	BLNK	-0.6357	2.30285		0.4875	1.000	0.995	
Selenium	H	0.0735	0.0634	0.0698	0.0634	0.0642	0.0615	BLNK	-0.0154	16.1189		0.0659	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	32	50.00	13	100.0	12	1000	3	10000	1	20000	0
Antimony	A	0.100	48	0.500	-1	1.000	3	10.00	-5	100.0	1	200.0	0
Barium	A	0.100	806	0.500	160	1.000	41	10.00	90	100.0	2	200.0	-1
Beryllium	A	0.100	1	0.500	-6	1.000	-1	10.00	-2	100.0	-2	200.0	0
Cadmium	A	0.100	16	0.500	6	1.000	8	10.00	2	100.0	2	200.0	0
Calcium	A	10.00	310	50.00	65	100.0	31	1000	2	10000	2	20000	0
Lead	A	0.100	26	0.500	16	1.000	6	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	36	50.00	14	100.0	16	1000	4	10000	1	20000	0
Molybdenum	A	0.100	12	0.500	-2	1.000	-1	10.00	-4	100.0	-5	200.0	1
Potassium	A	10.00	284	50.00	9	100.0	8	1000	2	10000	1	20000	0
Silver	A	0.100	4	0.500	-3	1.000	0	10.00	-4	100.0	3	200.0	-1
Thallium	A	0.050	-6	0.250	-7	0.500	-1	5.000	-6	50.00	2	100.0	-1
Arsenic	E	0.100	-6	0.500	5	1.000	-4	10.00	3	100.0	2	200.0	0
Chromium	E	0.100	58	0.500	9	1.000	12	10.00	4	100.0	3	200.0	-1
Cobalt	E	0.100	11	0.500	8	1.000	6	10.00	4	100.0	2	200.0	-1
Copper	E	0.100	631	0.500	34	1.000	108	10.00	8	100.0	4	200.0	-1
Manganese	E	0.100	97	0.500	12	1.000	13	10.00	5	100.0	2	200.0	-1
Nickel	E	0.100	327	0.500	19	1.000	15	10.00	5	100.0	3	200.0	-1
Sodium	E	10.00	262	50.00	30	100.0	20	1000	10	10000	2	20000	0
Vanadium	E	0.100	1	0.500	5	1.000	4	10.00	1	100.0	2	200.0	0
Zinc	E	0.100	1983	0.500	227	1.000	70	10.00	17	100.0	3	200.0	-1
Iron	H	10.00	37	50.00	11	100.0	12	1000	3	10000	2	20000	-1
Selenium	H	0.100	3	0.500	-1	1.000	11	10.00	2	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

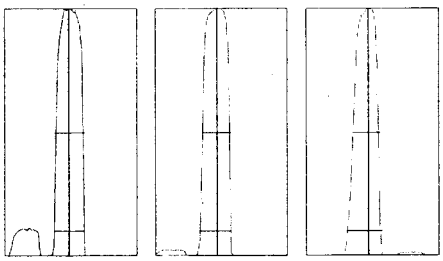
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	21444.0	22591.6	3.12	3.10
89	50,000	31330.0	30188.2	3.60	3.00
205	50,000	29632.0	29322.4	3.09	7.90

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.900%
Doubly Charged: 70/140 2.434%



m/z:	7	89	205
Height:	22,815	30,185	29,516
Axis:	7.00	88.95	204.95
W-50%:	0.65	0.65	0.60
W-10%:	0.700	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.68	V
Smpl Depth	9	mm
Torch-H	0.4	mm
Torch-V	0.3	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-165	V
Omega Bias-ce	-30	V
Omega Lens-ce	-2	V
Cell Entrance	-30	V
QP Focus	7	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	126	
AMU Offset	126	
Axis Gain	0.9997	
Axis Offset	0.04	
QP Bias	-1	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1670	V
Pulse HV	1070	V

===Reaction Cell===

Reaction Mode	OFF	
H2 Gas	0	mL/min
He Gas	0	mL/min
Optional Gas	---	%

Tune File : he.u

He Gas:	5.5	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	27.1	17.45
59	4881.7	3.02
89	3669.8	3.52

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	2779.1	3.79
78	0.3	187.30
89	26278.8	3.24

Integration Time: 0.1000sec

Generated : Jun 14, 2007 11:35:05
Printed : Jun 14, 2007 11:36:45

00159

P/A Factor Tuning Report

Acquired:Jun 14 2007 11:52 am

Mass[amu]	Element	P/A Factor
6	Li	0.062939
7	(Li)	Sensitivity too low
9	Be	0.072176
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.087631
45	Sc	0.086900
51	V	0.088135
52	Cr	0.092446
55	Mn	0.093325
56	Fe	Sensitivity too high
59	Co	0.096422
60	Ni	Sensitivity too low
63	Cu	0.102139
65	Cu	0.102353
66	Zn	Sensitivity too low
72	Ge	0.100167
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098109
98	Mo	0.099236
99	(Ru)	Sensitivity too low
107	Ag	0.106688
111	Cd	Sensitivity too low
115	In	0.105676
118	(In)	0.105310
121	Sb	0.105382
137	Ba	Sensitivity too low
159	Tb	0.108318
205	Tl	0.113774
206	(Pb)	0.114337
207	(Pb)	0.114473
208	Pb	0.113888
209	Bi	0.114090

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

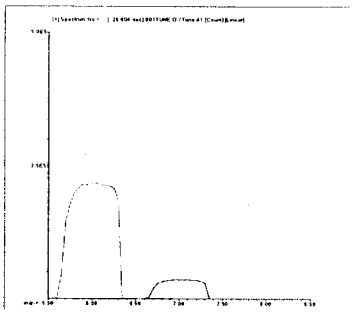
00168

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F14100.B\001TUNE.D
Date Acquired:	Jun 14 2007 12:01 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.49	5.00	
59 Co	0.35	5.00	
115 In	0.92	5.00	
205 Tl	0.43	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

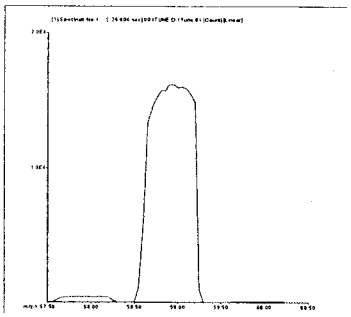
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

Flag:

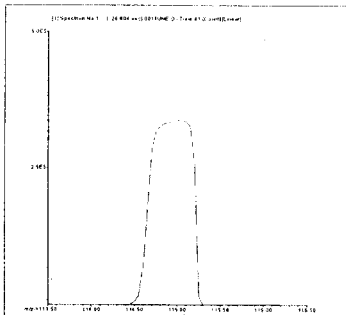
Peak Width

Actual: 0.60

Required: 0.90

Flag:

00161



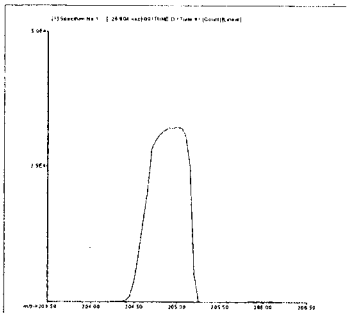
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004C
Date Acquired: Jun 14 2007 12:19 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2123286.00	A	5430.00	0.26
7	(Li)		P		
9	Be	6.67	P	6.67	100.00
23	Na	23306.57	P	452.80	1.94
24	Mg	3815.03	P	109.20	2.86
27	Al	11278.81	P	169.50	1.50
39	K	1550541.00	A	2445.00	0.16
44	Ca	27682.83	P	553.70	2.00
45	Sc	853178.63	A	5859.00	0.69
45	Sc	60849.13	P	255.40	0.42
45	Sc	1935693.00	A	18210.00	0.94
51	V	209.63	P	7.14	3.41
52	Cr	171.48	P	3.90	2.28
55	Mn	33.33	P	8.82	26.46
56	Fe	4710.39	P	106.80	2.27
59	Co	11.48	P	3.39	29.56
60	Ni	155.19	P	24.78	15.97
63	Cu	1827.16	P	66.12	3.62
65	Cu	858.55	P	35.91	4.18
66	Zn	481.49	P	6.79	1.41
72	Ge	210213.09	P	1424.00	0.68
72	Ge	46689.03	P	521.30	1.12
75	As	9.56	P	3.42	35.80
78	Se	4.00	P	1.33	33.33
89	Y	2820269.00	A	9642.00	0.34
98	Mo	285.57	P	19.53	6.84
107	Ag	77.78	P	15.03	19.32
111	Cd	15.56	P	10.18	65.44
115	In	2970271.00	A	6980.00	0.24
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	121.12	P	17.11	14.13
137	Ba	63.34	P	6.67	10.53
159	Tb	4719676.00	A	28440.00	0.60
205	Tl	562.25	P	6.94	1.23
208	Pb	835.60	P	38.92	4.66
209	Bi	3398867.00	A	28920.00	0.85

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\005CALS.D\005CALS.D#
Date Acquired: Jun 14 2007 12:25 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2125205.00	A	4400.00	0.21
7	(Li)		P		
9	Be	608.92	P	40.74	6.69
23	Na	34807.84	P	399.60	1.15
24	Mg	155687.00	P	482.30	0.31
27	Al	185584.91	P	2610.00	1.41
39	K	2101065.00	A	6999.00	0.33
44	Ca	45056.55	P	420.80	0.93
45	Sc	912479.69	A	6363.00	0.70
45	Sc	61625.03	P	737.80	1.20
45	Sc	1959185.00	A	14270.00	0.73
51	V	413.34	P	9.10	2.20
52	Cr	578.91	P	6.94	1.20
55	Mn	246.67	P	22.96	9.31
56	Fe	113465.90	P	425.20	0.37
59	Co	496.68	P	21.46	4.32
60	Ni	670.39	P	7.14	1.07
63	Cu	4272.85	P	26.68	0.62
65	Cu	2086.46	P	20.62	0.99
66	Zn	1357.11	P	15.00	1.11
72	Ge	220831.50	P	151.80	0.07
72	Ge	47117.35	P	455.70	0.97
75	As	36.89	P	2.14	5.81
78	Se	32.44	P	2.04	6.28
89	Y	2822875.00	A	22590.00	0.80
98	Mo	1023.41	P	67.67	6.61
99	(Ru)	6.67	P	6.67	100.00
107	Ag	1228.98	P	33.56	2.73
111	Cd	283.35	P	10.00	3.53
115	In	2987017.00	A	27640.00	0.93
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1621.26	P	70.27	4.33
137	Ba	3252.69	P	146.20	4.49
159	Tb	4779337.00	A	47190.00	0.99
205	Tl	2003.54	P	38.45	1.92
208	Pb	6021.82	P	95.84	1.59
209	Bi	3440637.00	A	22180.00	0.64

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	2125205.30	0.21	2123286.00	100.1	80 - 120	
45	Sc	912479.69	0.70	853178.63	107.0	80 - 120	
45	Sc	61625.03	1.20	60849.13	101.3	80 - 120	
45	Sc	1959184.80	0.73	1935692.90	101.2	80 - 120	
72	Ge	220831.48	0.07	210213.11	105.1	80 - 120	
72	Ge	47117.35	0.97	46689.04	100.9	80 - 120	
89	Y	2822875.30	0.80	2820268.80	100.1	80 - 120	
115	In	2987016.80	0.93	2970271.30	100.6	80 - 120	
159	Tb	4779337.50	0.99	4719676.00	101.3	80 - 120	
209	Bi	3440636.80	0.64	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\006CALS.D\006CALS.D#
Date Acquired: Jun 14 2007 12:30 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2115825.00	A	35250.00	1.67
7 (Li)		P		
9 Be	2778.11	P	94.85	3.41
23 Na	43015.66	P	443.60	1.03
24 Mg	634192.19	P	4000.00	0.63
27 Al	753216.50	P	9579.00	1.27
39 K	2308639.00	A	16880.00	0.73
44 Ca	61903.68	P	470.60	0.76
45 Sc	911309.50	A	9263.00	1.02
45 Sc	60607.47	P	551.40	0.91
45 Sc	1947585.00	A	21870.00	1.12
51 V	1228.58	P	21.27	1.73
52 Cr	1540.09	P	31.35	2.04
55 Mn	630.39	P	51.09	8.10
56 Fe	445953.91	P	843.90	0.19
59 Co	2333.90	P	115.10	4.93
60 Ni	860.78	P	41.24	4.79
63 Cu	4042.42	P	47.62	1.18
65 Cu	1894.95	P	12.39	0.65
66 Zn	1161.54	P	17.01	1.46
72 Ge	219898.70	P	999.60	0.45
72 Ge	46779.32	P	392.20	0.84
75 As	160.67	P	12.22	7.61
78 Se	139.34	P	13.32	9.56
89 Y	2820691.00	A	28550.00	1.01
98 Mo	3520.53	P	143.80	4.08
99 (Ru)	11.11	P	8.39	75.50
107 Ag	5434.48	P	56.89	1.05
111 Cd	1241.21	P	29.88	2.41
115 In	2975496.00	A	25430.00	0.85
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5099.93	P	83.32	1.63
137 Ba	4614.23	P	202.30	4.38
159 Tb	4748127.00	A	46280.00	0.97
205 Tl	7608.97	P	208.60	2.74
208 Pb	24421.42	P	175.50	0.72
209 Bi	3421595.00	A	27440.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2115825.50	1.67	2123286.00	99.6	80 - 120	
45 Sc	911309.50	1.02	853178.63	106.8	80 - 120	
45 Sc	60607.47	0.91	60849.13	99.6	80 - 120	
45 Sc	1947584.50	1.12	1935692.90	100.6	80 - 120	
72 Ge	219898.77	0.45	210213.11	104.6	80 - 120	
72 Ge	46779.32	0.84	46689.04	100.2	80 - 120	
89 Y	2820691.50	1.01	2820268.80	100.0	80 - 120	
115 In	2975496.30	0.85	2970271.30	100.2	80 - 120	
159 Tb	4748127.00	0.97	4719676.00	100.6	80 - 120	
209 Bi	3421595.30	0.80	3398866.80	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\007CALS.D\007CALS.D#
Date Acquired: Jun 14 2007 12:36 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:34 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2118959.00	A	16590.00	0.78
7 (Li)		P		
9 Be	5867.90	P	225.20	3.84
23 Na	58973.49	P	713.10	1.21
24 Mg	1282847.00	A	16670.00	1.30
27 Al	1473214.00	A	23330.00	1.58
39 K	3031913.00	A	6112.00	0.20
44 Ca	81475.94	P	452.90	0.56
45 Sc	899879.81	A	2883.00	0.32
45 Sc	59928.27	P	559.50	0.93
45 Sc	1938505.00	A	14250.00	0.74
51 V	2217.96	P	68.51	3.09
52 Cr	2956.24	P	55.12	1.86
55 Mn	1226.73	P	68.60	5.59
56 Fe	879706.00	A	6074.00	0.69
59 Co	4552.94	P	89.93	1.98
60 Ni	1503.80	P	30.26	2.01
63 Cu	8604.31	P	119.20	1.39
65 Cu	4100.95	P	66.82	1.63
66 Zn	1175.24	P	16.83	1.43
72 Ge	215496.80	P	767.40	0.36
72 Ge	46242.92	P	580.40	1.26
75 As	283.34	P	9.45	3.34
78 Se	300.67	P	24.23	8.06
89 Y	2839735.00	A	7756.00	0.27
98 Mo	6866.22	P	140.00	2.04
99 (Ru)	1.11	P	1.93	173.24
107 Ag	11167.87	P	237.20	2.12
111 Cd	2508.08	P	167.10	6.66
115 In	2979888.00	A	24150.00	0.81
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10506.24	P	263.90	2.51
137 Ba	4996.60	P	125.40	2.51
159 Tb	4754287.00	A	34400.00	0.72
205 Tl	15624.66	P	171.20	1.10
208 Pb	44177.64	P	416.20	0.94
209 Bi	3439964.00	A	12710.00	0.37

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2118958.50	0.78	2123286.00	99.8	80 - 120	
45 Sc	899879.75	0.32	853178.63	105.5	80 - 120	
45 Sc	59928.27	0.93	60849.13	98.5	80 - 120	
45 Sc	1938505.40	0.74	1935692.90	100.1	80 - 120	
72 Ge	215496.77	0.36	210213.11	102.5	80 - 120	
72 Ge	46242.92	1.26	46689.04	99.0	80 - 120	
89 Y	2839734.50	0.27	2820268.80	100.7	80 - 120	
115 In	2979887.80	0.81	2970271.30	100.3	80 - 120	
159 Tb	4754286.50	0.72	4719676.00	100.7	80 - 120	
209 Bi	3439963.80	0.37	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\008CALS.D\008CALS.D#
Date Acquired: Jun 14 2007 12:42 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2157544.00	A	30610.00	1.42
7 (Li)		P		
9 Be	58997.63	P	346.10	0.59
23 Na	363894.00	P	2845.00	0.78
24 Mg	11948130.00	A	67620.00	0.57
27 Al	14002570.00	A	84450.00	0.60
39 K	16193800.00	A	213900.00	1.32
44 Ca	466377.91	P	5160.00	1.11
45 Sc	910392.13	A	3317.00	0.36
45 Sc	61841.13	P	492.90	0.80
45 Sc	2019373.00	A	25040.00	1.24
51 V	20330.73	P	140.90	0.69
52 Cr	26904.37	P	125.70	0.47
55 Mn	11406.49	P	88.72	0.78
56 Fe	8175714.00	A	32430.00	0.40
59 Co	46010.13	P	351.20	0.76
60 Ni	12819.08	P	178.30	1.39
63 Cu	38079.33	P	272.20	0.71
65 Cu	18525.26	P	266.60	1.44
66 Zn	5419.89	P	34.99	0.65
72 Ge	221030.41	P	677.70	0.31
72 Ge	47627.43	P	168.30	0.35
75 As	3025.65	P	18.56	0.61
78 Se	2801.16	P	28.68	1.02
89 Y	2935243.00	A	21140.00	0.72
98 Mo	65940.08	P	476.30	0.72
99 (Ru)	10.00	P	12.02	120.20
107 Ag	109637.00	P	1165.00	1.06
111 Cd	24401.69	P	325.40	1.33
115 In	3071324.00	A	13100.00	0.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	98854.13	P	348.50	0.35
137 Ba	69323.04	P	944.10	1.36
159 Tb	4941350.00	A	33400.00	0.68
205 Tl	147109.91	P	1307.00	0.89
208 Pb	424911.00	P	1750.00	0.41
209 Bi	3497595.00	A	10790.00	0.31

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2157544.30	1.42	2123286.00	101.6	80 - 120	
45 Sc	910392.13	0.36	853178.63	106.7	80 - 120	
45 Sc	61841.13	0.80	60849.13	101.6	80 - 120	
45 Sc	2019372.90	1.24	1935692.90	104.3	80 - 120	
72 Ge	221030.42	0.31	210213.11	105.1	80 - 120	
72 Ge	47627.43	0.35	46689.04	102.0	80 - 120	
89 Y	2935242.80	0.72	2820268.80	104.1	80 - 120	
115 In	3071324.50	0.43	2970271.30	103.4	80 - 120	
159 Tb	4941349.50	0.68	4719676.00	104.7	80 - 120	
209 Bi	3497595.30	0.31	3398866.80	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\009CALS.D\009CALS.D#
Date Acquired: Jun 14 2007 12:48 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2149364.00	A	11980.00	0.56
7	(Li)		P		
9	Be	590824.63	P	2143.00	0.36
23	Na	3264606.00	A	49480.00	1.52
24	Mg	############	A	935700.00	0.78
27	Al	############	A	928200.00	0.65
39	K	############	A	947700.00	0.63
44	Ca	4562030.00	A	30600.00	0.67
45	Sc	906293.69	A	5379.00	0.59
45	Sc	63411.82	P	1148.00	1.81
45	Sc	2095251.00	A	17920.00	0.86
51	V	207633.00	P	2770.00	1.33
52	Cr	270273.31	P	2676.00	0.99
55	Mn	114124.60	P	1490.00	1.31
56	Fe	80539136.00	A	341400.00	0.42
59	Co	462253.31	P	2783.00	0.60
60	Ni	127680.80	P	1275.00	1.00
63	Cu	356467.00	P	3084.00	0.87
65	Cu	175722.09	P	672.50	0.38
66	Zn	44821.78	P	726.50	1.62
72	Ge	219754.30	P	1016.00	0.46
72	Ge	48470.79	P	145.80	0.30
75	As	30465.20	P	285.40	0.94
78	Se	28194.31	P	27.05	0.10
89	Y	3034818.00	A	13300.00	0.44
98	Mo	676509.50	P	5545.00	0.82
99	(Ru)	15.56	P	9.62	61.86
107	Ag	1193600.00	A	12960.00	1.09
111	Cd	246082.20	P	2770.00	1.13
115	In	3118424.00	A	35970.00	1.15
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1070428.00	A	12580.00	1.18
137	Ba	376012.31	P	1134.00	0.30
159	Tb	5025087.00	A	20820.00	0.41
205	Tl	1570654.00	A	21350.00	1.36
208	Pb	4411741.00	A	8087.00	0.18
209	Bi	3454579.00	A	33710.00	0.98

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	2149364.30	0.56	2123286.00	101.2	80 - 120	
45	Sc	906293.69	0.59	853178.63	106.2	80 - 120	
45	Sc	63411.82	1.81	60849.13	104.2	80 - 120	
45	Sc	2095250.80	0.86	1935692.90	108.2	80 - 120	
72	Ge	219754.34	0.46	210213.11	104.5	80 - 120	
72	Ge	48470.79	0.30	46689.04	103.8	80 - 120	
89	Y	3034817.80	0.44	2820268.80	107.6	80 - 120	
115	In	3118424.00	1.15	2970271.30	105.0	80 - 120	
159	Tb	5025087.50	0.41	4719676.00	106.5	80 - 120	
209	Bi	3454579.30	0.98	3398866.80	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\010CALS.D\010CALS.D#
Date Acquired: Jun 14 2007 12:55 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2093192.00	A	28740.00	1.37
7 (Li)		P		
9 Be	1178246.00	A	21430.00	1.82
23 Na	6233624.00	A	98240.00	1.58
24 Mg	###########	A	2036000.00	0.87
27 Al	###########	A	1294000.00	0.47
39 K	###########	A	550700.00	0.19
44 Ca	8692791.00	A	43440.00	0.50
45 Sc	885110.88	A	4521.00	0.51
45 Sc	62087.48	P	797.60	1.28
45 Sc	2050386.00	A	22870.00	1.12
51 V	398028.91	P	4430.00	1.11
52 Cr	512373.31	P	4165.00	0.81
55 Mn	217084.30	P	1639.00	0.76
56 Fe	###########	A	647500.00	0.42
59 Co	879003.88	P	5606.00	0.64
60 Ni	240794.50	P	2147.00	0.89
63 Cu	665169.50	P	4334.00	0.65
65 Cu	328918.81	P	2902.00	0.88
66 Zn	84105.08	P	869.40	1.03
72 Ge	215280.00	P	1443.00	0.67
72 Ge	47469.54	P	400.30	0.84
75 As	58261.38	P	736.10	1.26
78 Se	52971.80	P	339.60	0.64
89 Y	2974006.00	A	21420.00	0.72
98 Mo	1409516.00	A	5639.00	0.40
99 (Ru)	22.22	P	6.94	31.22
107 Ag	2216227.00	A	16890.00	0.76
111 Cd	465855.81	P	5862.00	1.26
115 In	3016750.00	A	34120.00	1.13
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2034085.00	A	5341.00	0.26
137 Ba	715974.50	P	2839.00	0.40
159 Tb	4895945.00	A	35310.00	0.72
205 Tl	2948132.00	A	21010.00	0.71
208 Pb	8369924.00	A	45790.00	0.55
209 Bi	3341917.00	A	48380.00	1.45

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2093191.90	1.37	2123286.00	98.6	80 - 120	
45 Sc	885110.94	0.51	853178.63	103.7	80 - 120	
45 Sc	62087.48	1.28	60849.13	102.0	80 - 120	
45 Sc	2050386.40	1.12	1935692.90	105.9	80 - 120	
72 Ge	215279.95	0.67	210213.11	102.4	80 - 120	
72 Ge	47469.54	0.84	46689.04	101.7	80 - 120	
89 Y	2974005.50	0.72	2820268.80	105.5	80 - 120	
115 In	3016749.80	1.13	2970271.30	101.6	80 - 120	
159 Tb	4895945.00	0.72	4719676.00	103.7	80 - 120	
209 Bi	3341917.30	1.45	3398866.80	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321012 File : f1410012 Time : 14-JUN-2007 13:11
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3768	0.3399	10000	10120	ug/L	1	10	
Antimony	A	0.1867	0.1712	100.0	101.2	ug/L	1	10	
Barium	A	0.1057	0.0378	100.0	102.6	ug/L	3	10	
Beryllium	A	0.1380	0.1409	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0415	0.0400	100.0	103.2	ug/L	3	10	
Calcium	A	0.0335	0.0111	10000	10380	ug/L	4	10	
Lead	A	0.4842	0.4284	100.0	99.68	ug/L	0	10	
Magnesium	A	0.3201	0.2906	10000	10210	ug/L	2	10	
Molybdenum	A	0.1282	0.1122	100.0	95.85	ug/L	-4	10	
Potassium	A	1.4076	0.3667	10000	10270	ug/L	3	10	
Silver	A	0.1882	0.1921	100.0	103.7	ug/L	4	10	
Thallium	A	0.4663	0.4543	50.00	51.17	ug/L	2	10	
Arsenic	E	0.3300	0.3183	100.0	103.2	ug/L	3	10	
Chromium	E	2.6791	2.1658	100.0	104.2	ug/L	4	10	
Cobalt	E	3.7642	3.6964	100.0	103.8	ug/L	4	10	
Copper	E	12.411	3.6773	100.0	103.7	ug/L	4	10	
Manganese	E	1.1270	0.9082	100.0	103.3	ug/L	3	10	
Nickel	E	1.8547	1.0238	100.0	104.7	ug/L	5	10	
Sodium	E	0.8048	0.2600	10000	10270	ug/L	3	10	
Vanadium	E	2.0193	1.6521	100.0	102.6	ug/L	3	10	
Zinc	E	3.2717	0.4661	100.0	103.8	ug/L	4	10	
Iron	H	0.4875	0.4535	10000	10440	ug/L	4	10	
Selenium	H	0.0659	0.0646	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2125998	0.13
Scandium	A	1935693	2082969	7.61
Scandium	E	60849	63401	4.19
Scandium	H	853179	895502	4.96
Germanium	H	210213	219107	4.23
Germanium	E	46689	48897	4.73
Indium	A	2970271	3128469	5.33
Bismuth	A	3398867	3489946	2.68
Yttrium	A	2820269	3031824	7.50
Terbium	A	4719676	5033023	6.64

00179

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321015 File : f1410015 Time : 14-JUN-2007 13:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.201]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01789]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007702]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01254]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.02084]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01638]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.336]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01016]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009380]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.005686]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.004943]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.009330]	0.1000	0.002654	ug/L	!ib
Zinc	E	0.1191	0.1000	0.04457	ug/L	ib ***
Iron	H	[1.410]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01112]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2178902	2.62
Scandium	A	1935693	2043382	5.56
Scandium	E	60849	63074	3.66
Scandium	H	853179	902139	5.74
Germanium	H	210213	223063	6.11
Germanium	E	46689	48402	3.67
Indium	A	2970271	3169218	6.70
Bismuth	A	3398867	3611754	6.26
Yttrium	A	2820269	3006180	6.59
Terbium	A	4719676	5065969	7.34

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321017 File : f1410017 Time : 14-JUN-2007 13:40
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07234]	0.1000	ug/L	
Barium	A	0.9534	0.1000	ug/L	
Beryllium	A	[0.03115]	0.1000	ug/L	
Cadmium	A	0.8629	0.1000	ug/L	
Lead	A	0.4174	0.1000	ug/L	
Silver	A	0.1947	0.1000	ug/L	
Thallium	A	[0.03575]	0.05000	ug/L	
Arsenic	E	0.2491	0.1000	ug/L	
Chromium	E	1.307	0.1000	ug/L	
Cobalt	E	0.1911	0.1000	ug/L	
Copper	E	1.345	0.1000	ug/L	
Manganese	E	0.5379	0.1000	ug/L	
Nickel	E	1.082	0.1000	ug/L	
Vanadium	E	[0.02470]	0.1000	ug/L	
Zinc	E	2.085	0.1000	ug/L	
Selenium	H	[0.04793]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88390	ug/L	88
Calcium	A	300000	272500	ug/L	91
Magnesium	A	100000	86490	ug/L	86
Molybdenum	A	2000	1764	ug/L	88
Potassium	A	100000	89720	ug/L	90
Sodium	E	250000	219000	ug/L	88
Iron	H	250000	220700	ug/L	88

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1845484	-13.08
Scandium	A	1935693	2011932	3.94
Scandium	E	60849	63325	4.07
Scandium	H	853179	864634	1.34
Germanium	H	210213	201150	-4.31
Germanium	E	46689	46587	-0.22
Indium	A	2970271	2902550	-2.28
Bismuth	A	3398867	3043579	-10.45
Yttrium	A	2820269	2998242	6.31
Terbium	A	4719676	4871820	3.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321018 File : f1410018 Time : 14-JUN-2007 13:46
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96080	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	297000	ug/L	-1		
Magnesium	A	100000	93080	ug/L	-7		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97620	ug/L	-2		
Silver	A	50.00	45.19	ug/L	-10	20	
Arsenic	E	100.0	107.3	ug/L	7	20	
Chromium	E	200.0	198.8	ug/L	-1	20	
Cobalt	E	200.0	187.4	ug/L	-6	20	
Copper	E	200.0	185.2	ug/L	-7	20	
Manganese	E	200.0	200.8	ug/L	0	20	
Nickel	E	200.0	183.9	ug/L	-8	20	
Sodium	E	250000	238200	ug/L	-5		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	96.55	ug/L	-3	20	
Iron	H	250000	236000	ug/L	-6		
Selenium	H	100.0	106.3	ug/L	6	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	864005	1.27
Scandium	A	1935693	1966954	1.61
Scandium	E	60849	62771	3.16
Germanium	H	210213	200194	-4.77
Germanium	E	46689	45963	-1.56
Indium	A	2970271	2876364	-3.16
Yttrium	A	2820269	2953598	4.73

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321032 File : f1410032 Time : 14-JUN-2007 15:08
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3293	10000	9806	ug/L	-2	10	
Antimony	A	0.1867	0.1719	100.0	101.6	ug/L	2	10	
Barium	A	0.1057	0.0377	100.0	102.4	ug/L	2	10	
Beryllium	A	0.1380	0.1380	100.0	98.52	ug/L	-1	10	
Cadmium	A	0.0415	0.0393	100.0	101.4	ug/L	1	10	
Calcium	A	0.0335	0.0109	10000	10200	ug/L	2	10	
Lead	A	0.4842	0.4215	100.0	98.07	ug/L	-2	10	
Magnesium	A	0.3201	0.2809	10000	9873	ug/L	-1	10	
Molybdenum	A	0.1282	0.1100	100.0	93.94	ug/L	-6	10	
Potassium	A	1.4076	0.3607	10000	10110	ug/L	1	10	
Silver	A	0.1882	0.1885	100.0	101.8	ug/L	2	10	
Thallium	A	0.4663	0.4426	50.00	49.86	ug/L	0	10	
Arsenic	E	0.3300	0.3162	100.0	102.5	ug/L	3	10	
Chromium	E	2.6791	2.1217	100.0	102.1	ug/L	2	10	
Cobalt	E	3.7642	3.6262	100.0	101.8	ug/L	2	10	
Copper	E	12.411	3.6010	100.0	101.5	ug/L	2	10	
Manganese	E	1.1270	0.8949	100.0	101.8	ug/L	2	10	
Nickel	E	1.8547	1.0001	100.0	102.3	ug/L	2	10	
Sodium	E	0.8048	0.2511	10000	9922	ug/L	-1	10	
Vanadium	E	2.0193	1.6220	100.0	100.7	ug/L	1	10	
Zinc	E	3.2717	0.4573	100.0	101.9	ug/L	2	10	
Iron	H	0.4875	0.4450	10000	10250	ug/L	3	10	
Selenium	H	0.0659	0.0635	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2066227	-2.69
Scandium	A	1935693	2089148	7.93
Scandium	E	60849	65844	8.21
Scandium	H	853179	899458	5.42
Germanium	H	210213	221220	5.24
Germanium	E	46689	50519	8.20
Indium	A	2970271	3199101	7.70
Bismuth	A	3398867	3551272	4.48
Yttrium	A	2820269	3118381	10.57
Terbium	A	4719676	5126287	8.62

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Inst : MET16 IDF : 1.0
Seqnum : 897238321034 File : f1410034 Time : 14-JUN-2007 15:21
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01020]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01304]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.009081]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01658]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.8256]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008324]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01488]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01798]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01037]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01853]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.06537]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.7718]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.003412]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060529	-2.96
Scandium	A	1935693	1998648	3.25
Scandium	E	60849	63130	3.75
Scandium	H	853179	845745	-0.87
Germanium	H	210213	208799	-0.67
Germanium	E	46689	48706	4.32
Indium	A	2970271	3157907	6.32
Bismuth	A	3398867	3575553	5.20
Yttrium	A	2820269	2999921	6.37
Terbium	A	4719676	5020426	6.37

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321036 File : f1410036 Time : 14-JUN-2007 15:33
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06744]	0.1000	ug/L	
Barium	A	0.9319	0.1000	ug/L	
Beryllium	A	[0.02007]	0.1000	ug/L	
Cadmium	A	0.8898	0.1000	ug/L	
Lead	A	0.4060	0.1000	ug/L	
Silver	A	0.1986	0.1000	ug/L	
Thallium	A	[0.02499]	0.05000	ug/L	
Arsenic	E	0.2279	0.1000	ug/L	
Chromium	E	1.281	0.1000	ug/L	
Cobalt	E	0.1978	0.1000	ug/L	
Copper	E	1.319	0.1000	ug/L	
Manganese	E	0.5245	0.1000	ug/L	
Nickel	E	1.106	0.1000	ug/L	
Vanadium	E	[0.02397]	0.1000	ug/L	
Zinc	E	2.143	0.1000	ug/L	
Selenium	H	[0.02872]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88230	ug/L	88
Calcium	A	300000	276500	ug/L	92
Magnesium	A	100000	85780	ug/L	86
Molybdenum	A	2000	1769	ug/L	88
Potassium	A	100000	90480	ug/L	90
Sodium	E	250000	214700	ug/L	86
Iron	H	250000	218100	ug/L	87

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1740184	-18.04
Scandium	A	1935693	1956040	1.05
Scandium	E	60849	63764	4.79
Scandium	H	853179	848673	-0.53
Germanium	H	210213	198888	-5.39
Germanium	E	46689	46943	0.54
Indium	A	2970271	2900425	-2.35
Bismuth	A	3398867	3036197	-10.67
Yttrium	A	2820269	2975475	5.50
Terbium	A	4719676	4831390	2.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321037 File : f1410037 Time : 14-JUN-2007 15:39
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94480	ug/L	-6		
Cadmium	A	100.0	99.31	ug/L	-1	20	
Calcium	A	300000	295000	ug/L	-2		
Magnesium	A	100000	91410	ug/L	-9		
Molybdenum	A	2000	1901	ug/L	-5		
Potassium	A	100000	96800	ug/L	-3		
Silver	A	50.00	44.79	ug/L	-10	20	
Arsenic	E	100.0	106.3	ug/L	6	20	
Chromium	E	200.0	194.6	ug/L	-3	20	
Cobalt	E	200.0	183.7	ug/L	-8	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	179.8	ug/L	-10	20	
Sodium	E	250000	230200	ug/L	-8		
Vanadium	E	200.0	196.6	ug/L	-2	20	
Zinc	E	100.0	94.24	ug/L	-6	20	
Iron	H	250000	235400	ug/L	-6		
Selenium	H	100.0	104.0	ug/L	4	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	851598	-0.19
Scandium	A	1935693	1925910	-0.51
Scandium	E	60849	62621	2.91
Germanium	H	210213	199251	-5.21
Germanium	E	46689	45882	-1.73
Indium	A	2970271	2848256	-4.11
Yttrium	A	2820269	2921982	3.61

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321053 File : f1410053 Time : 14-JUN-2007 17:19
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3318	10000	9882	ug/L	-1	10	
Antimony	A	0.1867	0.1686	100.0	99.65	ug/L	0	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1355	100.0	96.71	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.4	ug/L	0	10	
Calcium	A	0.0335	0.0108	10000	10080	ug/L	1	10	
Lead	A	0.4842	0.4176	100.0	97.17	ug/L	-3	10	
Magnesium	A	0.3201	0.2833	10000	9958	ug/L	0	10	
Molybdenum	A	0.1282	0.1084	100.0	92.60	ug/L	-7	10	
Potassium	A	1.4076	0.3588	10000	10050	ug/L	1	10	
Silver	A	0.1882	0.1852	100.0	99.99	ug/L	0	10	
Thallium	A	0.4663	0.4395	50.00	49.51	ug/L	-1	10	
Arsenic	E	0.3300	0.3065	100.0	99.41	ug/L	-1	10	
Chromium	E	2.6791	2.0605	100.0	99.18	ug/L	-1	10	
Cobalt	E	3.7642	3.5063	100.0	98.46	ug/L	-2	10	
Copper	E	12.411	3.4763	100.0	98.01	ug/L	-2	10	
Manganese	E	1.1270	0.8786	100.0	99.90	ug/L	0	10	
Nickel	E	1.8547	0.9588	100.0	98.06	ug/L	-2	10	
Sodium	E	0.8048	0.2511	10000	9921	ug/L	-1	10	
Vanadium	E	2.0193	1.5843	100.0	98.38	ug/L	-2	10	
Zinc	E	3.2717	0.4425	100.0	98.53	ug/L	-1	10	
Iron	H	0.4875	0.4357	10000	10030	ug/L	0	10	
Selenium	H	0.0659	0.0623	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2158727	1.67
Scandium	A	1935693	2117451	9.39
Scandium	E	60849	65946	8.38
Scandium	H	853179	906373	6.23
Germanium	H	210213	222709	5.94
Germanium	E	46689	50550	8.27
Indium	A	2970271	3232612	8.83
Bismuth	A	3398867	3615349	6.37
Yttrium	A	2820269	3122011	10.70
Terbium	A	4719676	5231345	10.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321055 File : f1410055 Time : 14-JUN-2007 17:31
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01707]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006113]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008729]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01387]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.9751]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.845]	10.00	2.807	ug/L	!ib
Silver	A	[0.007633]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02817]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01738]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01162]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	0.1298	0.1000	0.002654	ug/L	ib ***
Zinc	E	[0.05617]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.5106]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2168826	2.14
Scandium	A	1935693	2030434	4.89
Scandium	E	60849	65550	7.73
Scandium	H	853179	908640	6.50
Germanium	H	210213	223541	6.34
Germanium	E	46689	49899	6.88
Indium	A	2970271	3202869	7.83
Bismuth	A	3398867	3630964	6.83
Yttrium	A	2820269	3023060	7.19
Terbium	A	4719676	5086287	7.77

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321069 File : f1410069 Time : 14-JUN-2007 19:00
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3270	10000	9741	ug/L	-3	10	
Antimony	A	0.1867	0.1656	100.0	97.88	ug/L	-2	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1342	100.0	95.77	ug/L	-4	10	
Cadmium	A	0.0415	0.0385	100.0	99.17	ug/L	-1	10	
Calcium	A	0.0335	0.0107	10000	10030	ug/L	0	10	
Lead	A	0.4842	0.4110	100.0	95.64	ug/L	-4	10	
Magnesium	A	0.3201	0.2801	10000	9845	ug/L	-2	10	
Molybdenum	A	0.1282	0.1073	100.0	91.63	ug/L	-8	10	
Potassium	A	1.4076	0.3549	10000	9940	ug/L	-1	10	
Silver	A	0.1882	0.1817	100.0	98.09	ug/L	-2	10	
Thallium	A	0.4663	0.4313	50.00	48.58	ug/L	-3	10	
Arsenic	E	0.3300	0.3025	100.0	98.09	ug/L	-2	10	
Chromium	E	2.6791	2.0178	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4224	100.0	96.11	ug/L	-4	10	
Copper	E	12.411	3.4303	100.0	96.71	ug/L	-3	10	
Manganese	E	1.1270	0.8723	100.0	99.18	ug/L	-1	10	
Nickel	E	1.8547	0.9431	100.0	96.45	ug/L	-4	10	
Sodium	E	0.8048	0.2473	10000	9769	ug/L	-2	10	
Vanadium	E	2.0193	1.5540	100.0	96.49	ug/L	-4	10	
Zinc	E	3.2717	0.4406	100.0	98.11	ug/L	-2	10	
Iron	H	0.4875	0.4344	10000	10000	ug/L	0	10	
Selenium	H	0.0659	0.0615	100.0	99.11	ug/L	-1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2225185	4.80
Scandium	A	1935693	2198147	13.56
Scandium	E	60849	68052	11.84
Scandium	H	853179	903094	5.85
Germanium	H	210213	221896	5.56
Germanium	E	46689	51886	11.13
Indium	A	2970271	3328207	12.05
Bismuth	A	3398867	3702771	8.94
Yttrium	A	2820269	3216777	14.06
Terbium	A	4719676	5321277	12.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321071 File : f1410071 Time : 14-JUN-2007 19:13
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.009915]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004371]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.004978]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01327]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002679]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01352]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01194]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.004531]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.08023]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.2809]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2208783	4.03
Scandium	A	1935693	2121375	9.59
Scandium	E	60849	68054	11.84
Scandium	H	853179	890576	4.38
Germanium	H	210213	222774	5.98
Germanium	E	46689	51697	10.73
Indium	A	2970271	3290972	10.80
Bismuth	A	3398867	3705815	9.03
Yttrium	A	2820269	3123217	10.74
Terbium	A	4719676	5213095	10.45

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321081 File : f1410081 Time : 14-JUN-2007 20:12
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3289	10000	9797	ug/L	-2	10	
Antimony	A	0.1867	0.1674	100.0	98.94	ug/L	-1	10	
Barium	A	0.1057	0.0364	100.0	98.90	ug/L	-1	10	
Beryllium	A	0.1380	0.1356	100.0	96.82	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.5	ug/L	1	10	
Calcium	A	0.0335	0.0107	10000	9978	ug/L	0	10	
Lead	A	0.4842	0.4125	100.0	95.97	ug/L	-4	10	
Magnesium	A	0.3201	0.2788	10000	9801	ug/L	-2	10	
Molybdenum	A	0.1282	0.1074	100.0	91.73	ug/L	-8	10	
Potassium	A	1.4076	0.3553	10000	9953	ug/L	0	10	
Silver	A	0.1882	0.1835	100.0	99.10	ug/L	-1	10	
Thallium	A	0.4663	0.4320	50.00	48.67	ug/L	-3	10	
Arsenic	E	0.3300	0.2997	100.0	97.19	ug/L	-3	10	
Chromium	E	2.6791	2.0179	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4337	100.0	96.42	ug/L	-4	10	
Copper	E	12.411	3.4111	100.0	96.16	ug/L	-4	10	
Manganese	E	1.1270	0.8685	100.0	98.75	ug/L	-1	10	
Nickel	E	1.8547	0.9442	100.0	96.57	ug/L	-3	10	
Sodium	E	0.8048	0.2465	10000	9737	ug/L	-3	10	
Vanadium	E	2.0193	1.5520	100.0	96.37	ug/L	-4	10	
Zinc	E	3.2717	0.4355	100.0	96.94	ug/L	-3	10	
Iron	H	0.4875	0.4273	10000	9838	ug/L	-2	10	
Selenium	H	0.0659	0.0610	100.0	98.29	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2192821	3.27
Scandium	A	1935693	2173428	12.28
Scandium	E	60849	67479	10.90
Scandium	H	853179	909197	6.57
Germanium	H	210213	222745	5.96
Germanium	E	46689	51818	10.99
Indium	A	2970271	3246361	9.30
Bismuth	A	3398867	3642671	7.17
Yttrium	A	2820269	3171171	12.44
Terbium	A	4719676	5285000	11.98

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321083 File : f1410083 Time : 14-JUN-2007 20:25
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.211]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01778]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01011]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01484]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.01743]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01897]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.649]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01000]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007725]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002860]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06795]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.4897]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.002211]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2204190	3.81
Scandium	A	1935693	2131061	10.09
Scandium	E	60849	67012	10.13
Scandium	H	853179	907018	6.31
Germanium	H	210213	224474	6.78
Germanium	E	46689	51125	9.50
Indium	A	2970271	3304204	11.24
Bismuth	A	3398867	3738892	10.00
Yttrium	A	2820269	3133973	11.12
Terbium	A	4719676	5243867	11.11

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321085 File : f1410085 Time : 14-JUN-2007 20:37
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06889]	0.1000	ug/L	
Barium	A	0.9481	0.1000	ug/L	
Beryllium	A	[0.01890]	0.1000	ug/L	
Cadmium	A	0.8856	0.1000	ug/L	
Lead	A	0.4135	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02450]	0.05000	ug/L	
Arsenic	E	0.2388	0.1000	ug/L	
Chromium	E	1.223	0.1000	ug/L	
Cobalt	E	0.1843	0.1000	ug/L	
Copper	E	1.235	0.1000	ug/L	
Manganese	E	0.4939	0.1000	ug/L	
Nickel	E	1.019	0.1000	ug/L	
Vanadium	E	[0.02806]	0.1000	ug/L	
Zinc	E	2.132	0.1000	ug/L	
Selenium	H	[0.05955]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87380	ug/L	87
Calcium	A	300000	268400	ug/L	89
Magnesium	A	100000	84420	ug/L	84
Molybdenum	A	2000	1716	ug/L	86
Potassium	A	100000	88730	ug/L	89
Sodium	E	250000	209000	ug/L	84
Iron	H	250000	212100	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1843197	-13.19
Scandium	A	1935693	2070349	6.96
Scandium	E	60849	67911	11.61
Scandium	H	853179	879831	3.12
Germanium	H	210213	205671	-2.16
Germanium	E	46689	49716	6.48
Indium	A	2970271	3031373	2.06
Bismuth	A	3398867	3142413	-7.55
Yttrium	A	2820269	3119239	10.60
Terbium	A	4719676	5026124	6.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321086 File : f1410086 Time : 14-JUN-2007 20:43
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	93330	ug/L	-7		
Cadmium	A	100.0	97.70	ug/L	-2	20	
Calcium	A	300000	290900	ug/L	-3		
Magnesium	A	100000	90200	ug/L	-10		
Molybdenum	A	2000	1859	ug/L	-7		
Potassium	A	100000	95900	ug/L	-4		
Silver	A	50.00	43.94	ug/L	-12	20	
Arsenic	E	100.0	101.9	ug/L	2	20	
Chromium	E	200.0	186.3	ug/L	-7	20	
Cobalt	E	200.0	175.6	ug/L	-12	20	
Copper	E	200.0	172.7	ug/L	-14	20	
Manganese	E	200.0	192.6	ug/L	-4	20	
Nickel	E	200.0	171.0	ug/L	-15	20	
Sodium	E	250000	225300	ug/L	-10		
Vanadium	E	200.0	189.5	ug/L	-5	20	
Zinc	E	100.0	90.18	ug/L	-10	20	
Iron	H	250000	231200	ug/L	-8		
Selenium	H	100.0	101.5	ug/L	2	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	871866	2.19
Scandium	A	1935693	2047240	5.76
Scandium	E	60849	67173	10.39
Germanium	H	210213	205746	-2.13
Germanium	E	46689	49048	5.05
Indium	A	2970271	3017424	1.59
Yttrium	A	2820269	3110985	10.31

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321104 File : f1410104
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

IDF : 1.0
Time : 14-JUN-2007 22:33

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3217	10000	9583	ug/L	-4	10	
Antimony	A	0.1867	0.1642	100.0	97.04	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.07	ug/L	-1	10	
Beryllium	A	0.1380	0.1323	100.0	94.46	ug/L	-6	10	
Cadmium	A	0.0415	0.0383	100.0	98.64	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9834	ug/L	-2	10	
Lead	A	0.4842	0.4088	100.0	95.13	ug/L	-5	10	
Magnesium	A	0.3201	0.2735	10000	9612	ug/L	-4	10	
Molybdenum	A	0.1282	0.1060	100.0	90.56	ug/L	-9	10	
Potassium	A	1.4076	0.3527	10000	9879	ug/L	-1	10	
Silver	A	0.1882	0.1800	100.0	97.21	ug/L	-3	10	
Thallium	A	0.4663	0.4313	50.00	48.59	ug/L	-3	10	
Arsenic	E	0.3300	0.3004	100.0	97.42	ug/L	-3	10	
Chromium	E	2.6791	2.0194	100.0	97.20	ug/L	-3	10	
Cobalt	E	3.7642	3.4542	100.0	97.00	ug/L	-3	10	
Copper	E	12.411	3.3899	100.0	95.56	ug/L	-4	10	
Manganese	E	1.1270	0.8697	100.0	98.89	ug/L	-1	10	
Nickel	E	1.8547	0.9473	100.0	96.88	ug/L	-3	10	
Sodium	E	0.8048	0.2444	10000	9652	ug/L	-3	10	
Vanadium	E	2.0193	1.5550	100.0	96.56	ug/L	-3	10	
Zinc	E	3.2717	0.4374	100.0	97.37	ug/L	-3	10	
Iron	H	0.4875	0.4301	10000	9903	ug/L	-1	10	
Selenium	H	0.0659	0.0608	100.0	98.00	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090516	-1.54
Scandium	A	1935693	2114113	9.22
Scandium	E	60849	64071	5.29
Scandium	H	853179	874960	2.55
Germanium	H	210213	216340	2.91
Germanium	E	46689	49541	6.11
Indium	A	2970271	3224571	8.56
Bismuth	A	3398867	3587446	5.55
Yttrium	A	2820269	3130602	11.00
Terbium	A	4719676	5222012	10.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321106 File : f1410106 Time : 14-JUN-2007 22:47
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01657]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004316]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005309]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.007881]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.778]	10.00	2.807	ug/L	!ib
Silver	A	[0.003165]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02425]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01388]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007515]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05789]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5153]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2101720	-1.02
Scandium	A	1935693	2050005	5.91
Scandium	E	60849	64466	5.94
Scandium	H	853179	878462	2.96
Germanium	H	210213	219081	4.22
Germanium	E	46689	49601	6.24
Indium	A	2970271	3223465	8.52
Bismuth	A	3398867	3671727	8.03
Yttrium	A	2820269	3054901	8.32
Terbium	A	4719676	5161081	9.35

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321120 File : f1410120 Time : 15-JUN-2007 00:09
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3224	10000	9602	ug/L	-4	10	
Antimony	A	0.1867	0.1636	100.0	96.71	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.19	ug/L	-1	10	
Beryllium	A	0.1380	0.1328	100.0	94.79	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	98.94	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9861	ug/L	-1	10	
Lead	A	0.4842	0.4099	100.0	95.39	ug/L	-5	10	
Magnesium	A	0.3201	0.2737	10000	9619	ug/L	-4	10	
Molybdenum	A	0.1282	0.1063	100.0	90.75	ug/L	-9	10	
Potassium	A	1.4076	0.3532	10000	9893	ug/L	-1	10	
Silver	A	0.1882	0.1799	100.0	97.14	ug/L	-3	10	
Thallium	A	0.4663	0.4293	50.00	48.36	ug/L	-3	10	
Arsenic	E	0.3300	0.2978	100.0	96.56	ug/L	-3	10	
Chromium	E	2.6791	2.0074	100.0	96.62	ug/L	-3	10	
Cobalt	E	3.7642	3.4193	100.0	96.02	ug/L	-4	10	
Copper	E	12.411	3.3735	100.0	95.09	ug/L	-5	10	
Manganese	E	1.1270	0.8630	100.0	98.13	ug/L	-2	10	
Nickel	E	1.8547	0.9422	100.0	96.36	ug/L	-4	10	
Sodium	E	0.8048	0.2410	10000	9517	ug/L	-5	10	
Vanadium	E	2.0193	1.5395	100.0	95.59	ug/L	-4	10	
Zinc	E	3.2717	0.4323	100.0	96.22	ug/L	-4	10	
Iron	H	0.4875	0.5288	10000	12180	ug/L	**22**	10	c+ ***
Selenium	H	0.0659	0.0745	100.0	120.0	ug/L	**20**	10	c+ ***

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090591	-1.54
Scandium	A	1935693	2116451	9.34
Scandium	E	60849	64613	6.19
Scandium	H	853179	724396	-15.09
Germanium	H	210213	181314	-13.75
Germanium	E	46689	50144	7.40
Indium	A	2970271	3247887	9.35
Bismuth	A	3398867	3641722	7.15
Yttrium	A	2820269	3144205	11.49
Terbium	A	4719676	5235562	10.93

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321122 File : f1410122 Time : 15-JUN-2007 00:22
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.005889]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003319]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003493]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004107]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002443]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01918]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.02055]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.002569]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05233]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5130]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2069415	-2.54
Scandium	A	1935693	2037181	5.24
Scandium	E	60849	64093	5.33
Scandium	H	853179	859828	0.78
Germanium	H	210213	216334	2.91
Germanium	E	46689	49532	6.09
Indium	A	2970271	3185380	7.24
Bismuth	A	3398867	3670609	8.00
Yttrium	A	2820269	3035413	7.63
Terbium	A	4719676	5112231	8.32

!=warning ib=instrument blank

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321131 File : f1410131 Time : 15-JUN-2007 01:15
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3212	10000	9565	ug/L	-4	10	
Antimony	A	0.1867	0.1644	100.0	97.17	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.17	ug/L	-1	10	
Beryllium	A	0.1380	0.1331	100.0	95.02	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	99.06	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9803	ug/L	-2	10	
Lead	A	0.4842	0.4096	100.0	95.32	ug/L	-5	10	
Magnesium	A	0.3201	0.2738	10000	9625	ug/L	-4	10	
Molybdenum	A	0.1282	0.1062	100.0	90.70	ug/L	-9	10	
Potassium	A	1.4076	0.3493	10000	9782	ug/L	-2	10	
Silver	A	0.1882	0.1809	100.0	97.70	ug/L	-2	10	
Thallium	A	0.4663	0.4244	50.00	47.81	ug/L	-4	10	
Arsenic	E	0.3300	0.2940	100.0	95.35	ug/L	-5	10	
Chromium	E	2.6791	1.9864	100.0	95.60	ug/L	-4	10	
Cobalt	E	3.7642	3.3899	100.0	95.19	ug/L	-5	10	
Copper	E	12.411	3.3409	100.0	94.17	ug/L	-6	10	
Manganese	E	1.1270	0.8564	100.0	97.37	ug/L	-3	10	
Nickel	E	1.8547	0.9325	100.0	95.37	ug/L	-5	10	
Sodium	E	0.8048	0.2421	10000	9561	ug/L	-4	10	
Vanadium	E	2.0193	1.5284	100.0	94.90	ug/L	-5	10	
Zinc	E	3.2717	0.4321	100.0	96.18	ug/L	-4	10	
Iron	H	0.4875	0.4235	10000	9752	ug/L	-2	10	
Selenium	H	0.0659	0.0599	100.0	96.46	ug/L	-4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060483	-2.96
Scandium	A	1935693	2099690	8.47
Scandium	E	60849	64031	5.23
Scandium	H	853179	877900	2.90
Germanium	H	210213	219044	4.20
Germanium	E	46689	49382	5.77
Indium	A	2970271	3159989	6.39
Bismuth	A	3398867	3581620	5.38
Yttrium	A	2820269	3084796	9.38
Terbium	A	4719676	5123003	8.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321133 File : f1410133 Time : 15-JUN-2007 01:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.007047]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003846]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004121]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007918]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06047]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2070192	-2.50
Scandium	A	1935693	2019477	4.33
Scandium	E	60849	63277	3.99
Scandium	H	853179	863991	1.27
Germanium	H	210213	217539	3.48
Germanium	E	46689	49107	5.18
Indium	A	2970271	3159069	6.36
Bismuth	A	3398867	3645648	7.26
Yttrium	A	2820269	3011744	6.79
Terbium	A	4719676	5068028	7.38

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897238321135 File : f1410135
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

IDF : 1.0
Time : 15-JUN-2007 01:40

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07062]	0.1000	ug/L	
Barium	A	0.9384	0.1000	ug/L	
Beryllium	A	[0.01950]	0.1000	ug/L	
Cadmium	A	0.9477	0.1000	ug/L	
Lead	A	0.4018	0.1000	ug/L	
Silver	A	0.1757	0.1000	ug/L	
Thallium	A	[0.02511]	0.05000	ug/L	
Arsenic	E	0.2359	0.1000	ug/L	
Chromium	E	1.229	0.1000	ug/L	
Cobalt	E	0.1855	0.1000	ug/L	
Copper	E	1.206	0.1000	ug/L	
Manganese	E	0.5246	0.1000	ug/L	
Nickel	E	1.037	0.1000	ug/L	
Vanadium	E	[0.01641]	0.1000	ug/L	
Zinc	E	2.051	0.1000	ug/L	
Selenium	H	[0.06772]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	85270	ug/L	85
Calcium	A	300000	266000	ug/L	89
Magnesium	A	100000	82520	ug/L	83
Molybdenum	A	2000	1698	ug/L	85
Potassium	A	100000	87750	ug/L	88
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212300	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1787817	-15.80
Scandium	A	1935693	2047588	5.78
Scandium	E	60849	64760	6.43
Scandium	H	853179	847491	-0.67
Germanium	H	210213	202834	-3.51
Germanium	E	46689	48200	3.24
Indium	A	2970271	3023443	1.79
Bismuth	A	3398867	3165919	-6.85
Yttrium	A	2820269	3102733	10.02
Terbium	A	4719676	5056718	7.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321136 File : f1410136 Time : 15-JUN-2007 01:46
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89790	ug/L	-10		
Cadmium	A	100.0	96.49	ug/L	-4	20	
Calcium	A	300000	282800	ug/L	-6		
Magnesium	A	100000	86730	ug/L	-13		
Molybdenum	A	2000	1815	ug/L	-9		
Potassium	A	100000	93170	ug/L	-7		
Silver	A	50.00	43.30	ug/L	-13	20	
Arsenic	E	100.0	101.5	ug/L	2	20	
Chromium	E	200.0	184.4	ug/L	-8	20	
Cobalt	E	200.0	173.8	ug/L	-13	20	
Copper	E	200.0	170.7	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	170.1	ug/L	-15	20	
Sodium	E	250000	220000	ug/L	-12		
Vanadium	E	200.0	187.5	ug/L	-6	20	
Zinc	E	100.0	89.27	ug/L	-11	20	
Iron	H	250000	230300	ug/L	-8		
Selenium	H	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	838972	-1.67
Scandium	A	1935693	2083546	7.64
Scandium	E	60849	65497	7.64
Germanium	H	210213	200315	-4.71
Germanium	E	46689	48070	2.96
Indium	A	2970271	3046687	2.57
Yttrium	A	2820269	3142183	11.41

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321151 File : f1410151 Time : 15-JUN-2007 03:16
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3189	10000	9497	ug/L	-5	10	
Antimony	A	0.1867	0.1611	100.0	95.24	ug/L	-5	10	
Barium	A	0.1057	0.0365	100.0	99.06	ug/L	-1	10	
Beryllium	A	0.1380	0.1316	100.0	93.98	ug/L	-6	10	
Cadmium	A	0.0415	0.0374	100.0	96.56	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9748	ug/L	-3	10	
Lead	A	0.4842	0.4047	100.0	94.17	ug/L	-6	10	
Magnesium	A	0.3201	0.2669	10000	9382	ug/L	-6	10	
Molybdenum	A	0.1282	0.1052	100.0	89.86	ug/L	-10	10	
Potassium	A	1.4076	0.3496	10000	9792	ug/L	-2	10	
Silver	A	0.1882	0.1769	100.0	95.50	ug/L	-5	10	
Thallium	A	0.4663	0.4234	50.00	47.70	ug/L	-5	10	
Arsenic	E	0.3300	0.2939	100.0	95.32	ug/L	-5	10	
Chromium	E	2.6791	1.9637	100.0	94.51	ug/L	-5	10	
Cobalt	E	3.7642	3.3309	100.0	93.54	ug/L	-6	10	
Copper	E	12.411	3.3024	100.0	93.08	ug/L	-7	10	
Manganese	E	1.1270	0.8547	100.0	97.18	ug/L	-3	10	
Nickel	E	1.8547	0.9156	100.0	93.63	ug/L	-6	10	
Sodium	E	0.8048	0.2392	10000	9447	ug/L	-6	10	
Vanadium	E	2.0193	1.5131	100.0	93.95	ug/L	-6	10	
Zinc	E	3.2717	0.4269	100.0	95.01	ug/L	-5	10	
Iron	H	0.4875	0.4280	10000	9857	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2047685	-3.56
Scandium	A	1935693	2160709	11.62
Scandium	E	60849	64964	6.76
Scandium	H	853179	861252	0.95
Germanium	H	210213	217010	3.23
Germanium	E	46689	49959	7.00
Indium	A	2970271	3276769	10.32
Bismuth	A	3398867	3634465	6.93
Yttrium	A	2820269	3181032	12.79
Terbium	A	4719676	5256935	11.38

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321153 File : f14l0153 Time : 15-JUN-2007 03:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004630]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006884]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.006034]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.006944]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.096]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[9.695]	10.00	2.807	ug/L	!ib
Silver	A	[0.004858]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	calc
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002394]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	[5.225]	10.00	4.339	ug/L	!ib
Vanadium	E	[0.08781]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.04724]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4995]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2104532	-0.88
Scandium	A	1935693	2126593	9.86
Scandium	E	60849	64924	6.70
Scandium	H	853179	765293	-10.30
Germanium	H	210213	197282	-6.15
Germanium	E	46689	50156	7.43
Indium	A	2970271	3267513	10.01
Bismuth	A	3398867	3742180	10.10
Yttrium	A	2820269	3122739	10.72
Terbium	A	4719676	5229518	10.80

!=warning calc=check quantitation ib=instrument blank

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321158 File : f1410158 Time : 15-JUN-2007 03:59
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3178	10000	9466	ug/L	-5	10	
Antimony	A	0.1867	0.1621	100.0	95.80	ug/L	-4	10	
Barium	A	0.1057	0.0363	100.0	98.61	ug/L	-1	10	
Beryllium	A	0.1380	0.1305	100.0	93.19	ug/L	-7	10	
Cadmium	A	0.0415	0.0377	100.0	97.34	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9710	ug/L	-3	10	
Lead	A	0.4842	0.4051	100.0	94.26	ug/L	-6	10	
Magnesium	A	0.3201	0.2709	10000	9522	ug/L	-5	10	
Molybdenum	A	0.1282	0.1054	100.0	89.99	ug/L	-10	10	
Potassium	A	1.4076	0.3493	10000	9781	ug/L	-2	10	
Silver	A	0.1882	0.1767	100.0	95.40	ug/L	-5	10	
Thallium	A	0.4663	0.4221	50.00	47.55	ug/L	-5	10	
Arsenic	E	0.3300	0.2917	100.0	94.60	ug/L	-5	10	
Chromium	E	2.6791	1.9743	100.0	95.02	ug/L	-5	10	
Cobalt	E	3.7642	3.3668	100.0	94.54	ug/L	-5	10	
Copper	E	12.411	3.2850	100.0	92.59	ug/L	-7	10	
Manganese	E	1.1270	0.8565	100.0	97.39	ug/L	-3	10	
Nickel	E	1.8547	0.9233	100.0	94.43	ug/L	-6	10	
Sodium	E	0.8048	0.2396	10000	9464	ug/L	-5	10	
Vanadium	E	2.0193	1.5209	100.0	94.44	ug/L	-6	10	
Zinc	E	3.2717	0.4231	100.0	94.15	ug/L	-6	10	
Iron	H	0.4875	0.4285	10000	9866	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.78	ug/L	-3	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2036755	-4.08
Scandium	A	1935693	2100792	8.53
Scandium	E	60849	63006	3.54
Scandium	H	853179	846347	-0.80
Germanium	H	210213	213708	1.66
Germanium	E	46689	49190	5.36
Indium	A	2970271	3196261	7.61
Bismuth	A	3398867	3619250	6.48
Yttrium	A	2820269	3101553	9.97
Terbium	A	4719676	5166691	9.47

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321160 File : f1410160 Time : 15-JUN-2007 04:12
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004600]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007487]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005068]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003520]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[5.665]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01211]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01158]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06753]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.07886]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4337]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2051900	-3.36
Scandium	A	1935693	2049233	5.87
Scandium	E	60849	62533	2.77
Scandium	H	853179	829702	-2.75
Germanium	H	210213	211838	0.77
Germanium	E	46689	48549	3.98
Indium	A	2970271	3214149	8.21
Bismuth	A	3398867	3669004	7.95
Yttrium	A	2820269	3055293	8.33
Terbium	A	4719676	5113478	8.34

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321162 File : f14l0162 Time : 15-JUN-2007 04:24
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05838]	0.1000	ug/L	
Barium	A	0.9070	0.1000	ug/L	
Beryllium	A	[0.02489]	0.1000	ug/L	
Cadmium	A	0.9693	0.1000	ug/L	
Lead	A	0.4065	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02371]	0.05000	ug/L	
Arsenic	E	0.2237	0.1000	ug/L	
Chromium	E	1.209	0.1000	ug/L	
Cobalt	E	0.1835	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.5249	0.1000	ug/L	
Nickel	E	1.041	0.1000	ug/L	
Vanadium	E	[0.02144]	0.1000	ug/L	
Zinc	E	1.959	0.1000	ug/L	
Selenium	H	[0.06371]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	83760	ug/L	84
Calcium	A	300000	263600	ug/L	88
Magnesium	A	100000	81200	ug/L	81
Molybdenum	A	2000	1693	ug/L	85
Potassium	A	100000	86660	ug/L	87
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212800	ug/L	85

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1754350	-17.38
Scandium	A	1935693	2028904	4.82
Scandium	E	60849	63073	3.65
Scandium	H	853179	817123	-4.23
Germanium	H	210213	197016	-6.28
Germanium	E	46689	46633	-0.12
Indium	A	2970271	2962631	-0.26
Bismuth	A	3398867	3125373	-8.05
Yttrium	A	2820269	3058132	8.43
Terbium	A	4719676	5005488	6.06

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321163 File : f1410163 Time : 15-JUN-2007 04:30
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90830	ug/L	-9		
Cadmium	A	100.0	96.08	ug/L	-4	20	
Calcium	A	300000	284400	ug/L	-5		
Magnesium	A	100000	87620	ug/L	-12		
Molybdenum	A	2000	1817	ug/L	-9		
Potassium	A	100000	93990	ug/L	-6		
Silver	A	50.00	43.31	ug/L	-13	20	
Arsenic	E	100.0	99.68	ug/L	0	20	
Chromium	E	200.0	184.2	ug/L	-8	20	
Cobalt	E	200.0	173.9	ug/L	-13	20	
Copper	E	200.0	169.3	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	169.5	ug/L	-15	20	
Sodium	E	250000	220100	ug/L	-12		
Vanadium	E	200.0	187.1	ug/L	-6	20	
Zinc	E	100.0	87.95	ug/L	-12	20	
Iron	H	250000	229500	ug/L	-8		
Selenium	H	100.0	100.2	ug/L	0	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	814243	-4.56
Scandium	A	1935693	2009495	3.81
Scandium	E	60849	63185	3.84
Germanium	H	210213	195217	-7.13
Germanium	E	46689	46665	-0.05
Indium	A	2970271	2977345	0.24
Yttrium	A	2820269	3062091	8.57

: 00199

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07
Sequence : MET16 f1410

Reference : f1410004
Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2123286	1935693	60849	853179	210213	46689	2970271	3398867	2820269	4719676
		LOWER LIMIT	636986	580708	18255	255954	63064	14007	891081	1019660	846081	1415903
		UPPER LIMIT	2547943	2322832	73019	1023814	252256	56027	3564325	4078640	3384323	5663611
015	ICB		2178902	2043382	63074	902139	223063	48402	3169218	3611754	3006180	5065969
017	ICSA		1845484	2011932	63325	864634	201150	46587	2902550	3043579	2998242	4871820
018	ICSAB		1789310	1966954	62771	864005	200194	45963	2876364	2993163	2953598	4790609
023	SAMPLE	195370-007	2093178	2147194	66008	874404	213265	50430	3321263	3730740	3235744	5245479
024	MSS	195328-001	2093143	2113440	66516	868904	216173	51295	3338196	3759901	3212766	5280191
025	SAMPLE	195328-003	2070660	2148688	67415	894791	218264	51081	3279132	3653165	3251539	5229845
026	SAMPLE	195370-006	2096710	2166773	68123	898056	219267	52171	3350689	3733175	3266292	5280417
027	SAMPLE	195370-007	2125889	2204542	68338	904091	219537	52211	3359272	3757411	3333353	5296095
028	SAMPLE	195370-017	2108346	2190487	68898	884210	216840	52161	3343336	3686052	3360983	5239221
029	SAMPLE	195257-027	2023968	2003587	63893	872441	218234	49866	3174653	3595074	2993048	5072635
032	CCV		2066227	2089148	65844	899458	221220	50519	3199101	3551272	3118381	5126287
034	CCB		2060529	1998648	63130	845745	208799	48706	3157907	3575553	2999921	5020426
036	ICSA		1740184	1956040	63764	848673	198888	46943	2900425	3036197	2975475	4831390
037	ICSAB		1702585	1925910	62621	851598	199251	45882	2848256	2977375	2921982	4794059
041	SAMPLE	195241-002	2174055	2138378	65310	857254	214538	50767	3288913	3653723	3175719	5218701
042	SAMPLE	195241-007	2184475	2197288	68753	887147	223900	53322	3343833	3671928	3256316	5284958
043	MSS	195241-003	2134800	2165467	67206	885953	226206	52267	3333433	3679162	3209193	5299030
044	PDS	QC391445	2034050	2105863	65855	887427	219725	50344	3188199	3533048	3118480	5166855
046	MSS	195241-003	2169139	2135785	67162	888322	222214	51456	3253695	3537083	3149919	5200219
047	SER	QC391444	2221686	2180411	69018	912692	229294	53419	3310049	3704255	3203989	5280419
048	MS	QC391442	2155213	2121049	66609	898310	222363	50733	3172575	3509755	3094686	5140928
049	MSD	QC391443	2172345	2097694	66812	906069	224309	51199	3140018	3513178	3073457	5126755
053	CCV		2158727	2117451	65946	906373	222709	50550	3232612	3615349	3122011	5231345
055	CCB		2168826	2030434	65550	908640	223541	49899	3202869	3630964	3023060	5086287
057	PDS	QC391445	2100033	2069262	65040	884638	217346	49565	3093621	3453144	3022760	5066166
058	MSS	195247-006	2257888	2139625	67841	899685	224993	51945	3209622	3539433	3109153	5166013
059	MS	QC391446	2190210	2091254	67261	914401	224691	51213	3156364	3518375	3069789	5138204
060	MSD	QC391447	1984480	1934029	67081	898087	222265	51100	2894106	3212987	2798803	4691210
061	SAMPLE	195241-002	2265439	2186455	69407	905209	221819	51656	3173820	3460018	3142632	5161565
062	SAMPLE	195241-004	2258518	2128143	69093	910698	228485	52475	3245985	3629591	3127034	5209884
063	SAMPLE	195241-005	2200017	2046358	65835	907813	224671	51094	3130664	3578989	3011580	5049995
064	SAMPLE	195241-007	2224536	2146903	67948	891035	216784	50207	3104936	3406667	3058703	5050142
065	SAMPLE	195247-001	2180083	2186713	68230	899948	221651	51224	3226576	3516455	3201630	5232553
066	SAMPLE	195247-002	2159424	2242040	69044	907819	219015	51670	3266640	3584623	3563677 *	5305325
069	CCV		2225185	2198147	68052	903094	221896	51886	3328207	3702771	3216777	5321277
071	CCB		2208783	2121375	68054	890576	222774	51697	3290972	3705815	3123217	5213095
073	SAMPLE	195247-001	2244540	2237885	69508	897409	223202	53014	3337373	3623553	3230278	5301073
074	SAMPLE	195247-002	2266883	2258657	70034	909392	224574	52915	3326664	3586784	3265797	5302374
075	SAMPLE	195247-001	2228774	2180279	67861	906186	227568	52141	3289913	3700538	3168955	5243923
076	SAMPLE	195247-002	2223950	2142002	66982	900053	224721	51577	3226004	3656113	3132604	5195809
077	SAMPLE	195247-001	2229325	2144248	67524	905559	227113	52019	3253639	3701572	3114616	5210586
078	SAMPLE	195247-002	2208628	2129771	67767	918456	229620	51925	3239722	3676779	3088014	5180643
081	CCV		2192821	2173428	67479	909197	222745	51818	3246361	3642671	3171171	5285000
083	CCB		2204190	2131061	67012	907018	224474	51125	3304204	3738892	3133973	5243867
085	ICSA		1843197	2070349	67911	879831	205671	49716	3031373	3142413	3119239	5026124
086	ICSAB		1795245	2047240	67173	871866	205746	49048	3017424	3126576	3110985	5053521
091	BLANK	QC392093	2099747	2044976	64708	867014	218694	50290	3262531	3730296	3062020	5196270
092	BS	QC392094	2074164	2116499	66111	834386	208272	50778	3235501	3637853	3153739	5208650

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07 Reference : f14l0004
Sequence : MET16 f14l0 Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
093	BSD	QC392095	2085663	2163564	66157	864044	216424	50603	3327277	3686688	3220491	5324552
097	MSS	195270-007	2137857	2192536	67870	899173	226001	52222	3323282	3605435	3228887	5232811
098	SER	QC392098	2175096	2153199	66768	888056	225786	52220	3297735	3693543	3168047	5231426
099	MS	QC392096	2076293	2145976	65920	872277	218623	50709	3207990	3509752	3131876	5165938
100	MSD	QC392097	2087344	2157742	65177	864291	217732	50264	3216713	3509365	3147237	5147000
101	PDS	QC392099	2070454	2197927	65071	872693	216284	50005	3240745	3542571	3198886	5249968
104	CCV		2090516	2114113	64071	874960	216340	49541	3224571	3587446	3130602	5222012
106	CCB		2101720	2050005	64466	878462	219081	49601	3223465	3671727	3054901	5161081
108	SAMPLE	195270-003	2113213	2161686	65381	879739	222073	51065	3273731	3627153	3145683	5199461
109	SAMPLE	195270-005	2121387	2175050	65982	875590	221350	51101	3258417	3654070	3160409	5218931
110	SAMPLE	195270-010	2112434	2110916	65306	874343	220526	50856	3233669	3607245	3087492	5130195
111	SAMPLE	195270-012	2141928	2104169	64959	865016	223360	50702	3205775	3661908	3074952	5130296
112	SAMPLE	195358-001	2112379	2078444	63832	876990	222855	49954	3179851	3683079	3025647	5071756
113	SAMPLE	195358-002	2119618	2062971	64030	869388	220135	49549	3182853	3688140	3035863	5099741
114	SAMPLE	195358-003	2102326	2047949	63392	871285	220110	49233	3216622	3659306	3044830	5130266
115	SAMPLE	195358-004	2064821	2035562	64325	877633	220585	50224	3190132	3650076	3009370	5095673
116	SAMPLE	195358-005	2034557	2007388	62298	873689	220521	49013	3125492	3618949	2956938	4989070
117	SAMPLE	195358-006	2069412	2017675	63949	873868	223591	50337	3158707	3652615	2985240	5011271
120	CCV		2090591	2116451	64613	724396	181314	50144	3247887	3641722	3144205	5235562
122	CCB		2069415	2037181	64093	859828	216334	49532	3185380	3670609	3035413	5112231
124	SAMPLE	195358-007	2073310	2014799	63269	860592	217976	49022	3170074	3668825	3005319	5068165
125	SAMPLE	195358-008	2083685	2051529	63424	874610	220977	49555	3177340	3709979	3032106	5087365
126	SAMPLE	195358-009	2099112	2032398	64052	874600	220998	49782	3199588	3700777	3022645	5072335
127	SAMPLE	195369-001	2099711	2237036	68507	877396	217363	51284	3270309	3434398	3229111	5204436
128	SAMPLE	195370-021	2175267	2158826	66833	783893	208011	51547	3292073	3714804	3135184	5173058
131	CCV		2060483	2099690	64031	877900	219044	49382	3159989	3581620	3084796	5123003
133	CCB		2070192	2019477	63277	863991	217539	49107	3159069	3645648	3011744	5068028
135	ICSA		1787817	2047588	64760	847491	202834	48200	3023443	3165919	3102733	5056718
136	ICSAB		1779278	2083546	65497	838972	200315	48070	3046687	3194510	3142183	5115916
141	SAMPLE	195251-001	2001213	2042398	62730	843659	215339	49074	3197238	3668990	3035524	5110156
142	SAMPLE	195251-006	2010125	2044622	63831	856226	220196	50099	3245166	3694459	3074011	5138806
143	SAMPLE	195251-007	2034171	2046521	62391	851529	216709	48932	3190535	3679407	3038210	5082347
144	SAMPLE	195337-001	1899908	2086075	62582	746676	185029	47652	3106807	3317126	3065059	5012234
145	SAMPLE	195337-002	1931472	2219732	67595	813817	199697	48961	3209082	3189239	3209227	5046720
146	SAMPLE	195337-003	1919360	2253575	68422	821959	198876	48854	3160493	3128159	3224104	5041204
147	SAMPLE	195285-012	2165256	2254500	68495	874447	229082	52698	3407477	3728943	3262720	5320019
148	SAMPLE	195285-013	2104590	2187725	66858	875561	225793	52006	3345712	3698355	3184999	5231128
151	CCV		2047685	2160709	64964	861252	217010	49959	3276769	3634465	3181032	5256935
153	CCB		2104532	2126593	64924	765293	197282	50156	3267513	3742180	3122739	5229518
155	SAMPLE	195285-014	2054094	2054966	62627	851357	216493	48931	3160407	3586088	3022706	5050165
158	CCV		2036755	2100792	63006	846347	213708	49190	3196261	3619250	3101553	5166691
160	CCB		2051900	2049233	62533	829702	211838	48549	3214149	3669004	3055293	5113478
162	ICSA		1754350	2028904	63073	817123	197016	46633	2962631	3125373	3058132	5005488
163	ICSAB		1704736	2009495	63185	814243	195217	46665	2977345	3155248	3062091	5026637

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f1410001	TUN				14-JUN-2007 12:01	1.0	1.0				1	
002	f1410002	X	RINSE			14-JUN-2007 12:09	1.0					2	
003	f1410003	X	RINSE			14-JUN-2007 12:15	1.0					2	
004	f1410004	ICALBLK	CALBLANK			14-JUN-2007 12:21	1.0	1.0				2	
005	f1410005	ICAL				14-JUN-2007 12:27	1.0	1.0				3	
006	f1410006	ICAL				14-JUN-2007 12:33	1.0	1.0				4	
007	f1410007	ICAL				14-JUN-2007 12:38	1.0	1.0				5	
008	f1410008	ICAL				14-JUN-2007 12:44	1.0	1.0				6	
009	f1410009	ICAL				14-JUN-2007 12:50	1.0	1.0				7	
010	f1410010	ICAL				14-JUN-2007 12:57	1.0	1.0				8	
011	f1410011	X	RINSE			14-JUN-2007 13:05	1.0					2	
012	f1410012	ICV				14-JUN-2007 13:11	1.0	1.0			1	9	
013	f1410013	X	RINSE			14-JUN-2007 13:17	1.0					2	
014	f1410014	X				14-JUN-2007 13:23	1.0					2	
015	f1410015	ICB				14-JUN-2007 13:29	1.0	1.0	1		1	2	
016	f1410016	X				14-JUN-2007 13:35	1.0					2	
017	f1410017	ICSA				14-JUN-2007 13:40	1.0	1.0			1	10 2	7:CA=272500
018	f1410018	ICSAB				14-JUN-2007 13:46	1.0	1.0			1	11 2	9:CA=297000
019	f1410019	X	RINSE			14-JUN-2007 13:52	1.0					2	
020	f1410020	X	RINSE			14-JUN-2007 13:58	1.0					2	
021	f1410021	X	RINSE			14-JUN-2007 14:04	1.0					2	
022	f1410022	X	RINSE			14-JUN-2007 14:10	1.0					2	
023	f1410023	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:16	100.0	49.02			1	2	
024	f1410024	MSS	195328-001	126255	Soil	14-JUN-2007 14:22	50.0	52.08			1	2	
025	f1410025	SAMPLE	195328-003	126255	Soil	14-JUN-2007 14:28	50.0	54.95			1	2	1:MN=216.800
026	f1410026	SAMPLE	195370-006	126255	Soil	14-JUN-2007 14:33	50.0	52.08			1	2	
027	f1410027	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:39	50.0	49.02	1		1	2	2:PB=265.600
028	f1410028	SAMPLE	195370-017	126255	Soil	14-JUN-2007 14:45	50.0	50.51			1	2	
029	f1410029	SAMPLE	195257-027	126262	WET DI	14-JUN-2007 14:51	10.0	1.0			1	2	
030	f1410030	X	RINSE			14-JUN-2007 14:57	1.0					2	
031	f1410031	X	RINSE			14-JUN-2007 15:03	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f1410032	CCV				14-JUN-2007 15:08	1.0	1.0			1	12 2	
033	f1410033	X	RINSE			14-JUN-2007 15:15	1.0					2	
034	f1410034	CCB				14-JUN-2007 15:21	1.0	1.0			1	2	
035	f1410035	X				14-JUN-2007 15:27	1.0					2	
036	f1410036	ICSA				14-JUN-2007 15:33	1.0	1.0			1	10 2	7:CA=276500
037	f1410037	ICSAB				14-JUN-2007 15:39	1.0	1.0			1	11 2	7:CA=295000
038	f1410038	X	RINSE			14-JUN-2007 15:45	1.0					2	
039	f1410039	X	RINSE			14-JUN-2007 15:51	1.0					2	
040	f1410040	X	RINSE			14-JUN-2007 16:02	1.0					2	
041	f1410041	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 16:08	50.0	1.0			1	2	
042	f1410042	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 16:14	50.0	1.0			1	2	
043	f1410043	MSS	195241-003	126087	Filtra	14-JUN-2007 16:20	20.0	1.0	1		1	2	
044	f1410044	PDS	QC391445	126087	Filtra	14-JUN-2007 16:26	20.0	1.0			1	13 14 2	
045	f1410045	X	RINSE			14-JUN-2007 16:32	1.0					2	
046	f1410046	MSS	195241-003	126087	Filtra	14-JUN-2007 16:38	5.0	1.0	1		1	2	1:MG=34540.0
047	f1410047	SER	QC391444	126087	Filtra	14-JUN-2007 16:43	25.0	1.0	1	1	1	2	
048	f1410048	MS	QC391442	126087	Filtra	14-JUN-2007 16:49	5.0	1.0			1	2	1:MG=35860.0
049	f1410049	MSD	QC391443	126087	Filtra	14-JUN-2007 16:55	5.0	1.0			1	2	1:MG=35740.0
050	f1410050	X	RINSE			14-JUN-2007 17:01	1.0					2	
051	f1410051	X	RINSE			14-JUN-2007 17:07	1.0					2	
052	f1410052	X	RINSE			14-JUN-2007 17:13	1.0					2	
053	f1410053	CCV				14-JUN-2007 17:19	1.0	1.0			1	12 2	
054	f1410054	X	RINSE			14-JUN-2007 17:25	1.0					2	
055	f1410055	CCB				14-JUN-2007 17:31	1.0	1.0	1		1	2	
056	f1410056	X				14-JUN-2007 17:37	1.0					2	
057	f1410057	PDS	QC391445	126087	Filtra	14-JUN-2007 17:43	5.0	1.0	2		1	13 14 2	3:MG=42560.0
058	f1410058	MSS	195247-006	126087	Filtra	14-JUN-2007 17:48	5.0	1.0	1		1	2	1:NA=22760.0
059	f1410059	MS	QC391446	126087	Filtra	14-JUN-2007 17:54	5.0	1.0		1	1	2	2:NA=24440.0
060	f1410060	MSD	QC391447	126087	Filtra	14-JUN-2007 18:00	5.0	1.0			1	2	2:NA=23940.0
061	f1410061	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 18:06	5.0	1.0	3		1	2	3:MG=90120.0
062	f1410062	SAMPLE	195241-004	126087	Filtra	14-JUN-2007 18:12	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f1410063	SAMPLE	195241-005	126087	Filtra	14-JUN-2007 18:18	5.0	1.0	1		1	2	1:MN=236.800
064	f1410064	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 18:24	5.0	1.0	3		1	2	3:MG=96860.0
065	f1410065	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 18:30	5.0	1.0	5		1	2	5:NA=37180.0
066	f1410066	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 18:35	5.0	1.0	4		1	2	4:NA=34400.0
067	f1410067	X	RINSE			14-JUN-2007 18:48	1.0					2	
068	f1410068	X	RINSE			14-JUN-2007 18:54	1.0					2	
069	f1410069	CCV				14-JUN-2007 19:00	1.0	1.0			1	12 2	
070	f1410070	X	RINSE			14-JUN-2007 19:07	1.0					2	
071	f1410071	CCB				14-JUN-2007 19:13	1.0	1.0			1	2	
072	f1410072	X				14-JUN-2007 19:19	1.0					2	
073	f1410073	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:25	5.0	1.0	1		1	2	1:NA=36760.0
074	f1410074	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:31	5.0	1.0	3		1	2	3:NA=35160.0
075	f1410075	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 19:37	50.0	1.0	1		1	2	
076	f1410076	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 19:43	50.0	1.0			1	2	
077	f1410077	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:49	50.0	1.0			1	2	
078	f1410078	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:55	50.0	1.0			1	2	
079	f1410079	X	RINSE			14-JUN-2007 20:01	1.0					2	
080	f1410080	X	RINSE			14-JUN-2007 20:07	1.0					2	
081	f1410081	CCV				14-JUN-2007 20:12	1.0	1.0			1	12 2	
082	f1410082	X	RINSE			14-JUN-2007 20:19	1.0					2	
083	f1410083	CCB				14-JUN-2007 20:25	1.0	1.0			1	2	
084	f1410084	X				14-JUN-2007 20:31	1.0					2	
085	f1410085	ICSA				14-JUN-2007 20:37	1.0	1.0			1	10 2	7:CA=268400
086	f1410086	ICSAB				14-JUN-2007 20:43	1.0	1.0			1	11 2	7:CA=290900
087	f1410087	X	RINSE			14-JUN-2007 20:49	1.0					2	
088	f1410088	X	RINSE			14-JUN-2007 20:55	1.0					2	
089	f1410089	X	RINSE			14-JUN-2007 21:01	1.0					2	
090	f1410090	X	RINSE			14-JUN-2007 21:07	1.0					2	
091	f1410091	BLANK	QC392093	126254	Filtra	14-JUN-2007 21:13	1.0	1.0			1	2	
092	f1410092	BS	QC392094	126254	Filtra	14-JUN-2007 21:18	1.0	1.0			1	2	
093	f1410093	BSD	QC392095	126254	Filtra	14-JUN-2007 21:26	1.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f1410094	TUN				14-JUN-2007 21:33	1.0	1.0				1	
095	f1410095	X	RINSE			14-JUN-2007 21:41	1.0					2	
096	f1410096	X	RINSE			14-JUN-2007 21:47	1.0					2	
097	f1410097	MSS	195270-007	126254	Filtra	14-JUN-2007 21:52	5.0	1.0	1		1	2	1:NA=41300.0
098	f1410098	SER	QC392098	126254	Filtra	14-JUN-2007 21:58	25.0	1.0		1	1	2	
099	f1410099	MS	QC392096	126254	Filtra	14-JUN-2007 22:04	5.0	1.0			1	2	1:NA=45300.0
100	f1410100	MSD	QC392097	126254	Filtra	14-JUN-2007 22:10	5.0	1.0			1	2	1:NA=44500.0
101	f1410101	PDS	QC392099	126254	Filtra	14-JUN-2007 22:16	5.0	1.0	1		1	13 14 2	2:NA=49960.0
102	f1410102	X	RINSE			14-JUN-2007 22:22	1.0					2	
103	f1410103	X	RINSE			14-JUN-2007 22:28	1.0					2	
104	f1410104	CCV				14-JUN-2007 22:33	1.0	1.0			1	12 2	
105	f1410105	X	RINSE			14-JUN-2007 22:41	1.0					2	
106	f1410106	CCB				14-JUN-2007 22:47	1.0	1.0			1	2	
107	f1410107	X				14-JUN-2007 22:52	1.0					2	
108	f1410108	SAMPLE	195270-003	126254	Filtra	14-JUN-2007 22:58	5.0	1.0	1		1	2	1:NA=22900.0
109	f1410109	SAMPLE	195270-005	126254	Filtra	14-JUN-2007 23:04	5.0	1.0	1		1	2	1:NA=38520.0
110	f1410110	SAMPLE	195270-010	126254	Filtra	14-JUN-2007 23:10	5.0	1.0			1	2	
111	f1410111	SAMPLE	195270-012	126254	Water	14-JUN-2007 23:16	5.0	1.0			1	2	
112	f1410112	SAMPLE	195358-001	126254	Filtra	14-JUN-2007 23:22	5.0	1.0			1	2	
113	f1410113	SAMPLE	195358-002	126254	Filtra	14-JUN-2007 23:28	5.0	1.0	1		1	2	
114	f1410114	SAMPLE	195358-003	126254	Filtra	14-JUN-2007 23:34	5.0	1.0	1		1	2	
115	f1410115	SAMPLE	195358-004	126254	Filtra	14-JUN-2007 23:40	5.0	1.0	1		1	2	
116	f1410116	SAMPLE	195358-005	126254	Filtra	14-JUN-2007 23:46	5.0	1.0	1		1	2	
117	f1410117	SAMPLE	195358-006	126254	Filtra	14-JUN-2007 23:52	5.0	1.0			1	2	
118	f1410118	X	RINSE			14-JUN-2007 23:58	1.0					2	
119	f1410119	X	RINSE			15-JUN-2007 00:04	1.0					2	
120	f1410120	CCV				15-JUN-2007 00:09	1.0	1.0	2		1	12 2	
121	f1410121	X	RINSE			15-JUN-2007 00:16	1.0					2	
122	f1410122	CCB				15-JUN-2007 00:22	1.0	1.0			1	2	
123	f1410123	X				15-JUN-2007 00:28	1.0					2	
124	f1410124	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 00:34	5.0	1.0	1		1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: _____

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
25	f1410125	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 00:40	5.0	1.0	1		1	2	
26	f1410126	SAMPLE	195358-009	126254	Filtra	15-JUN-2007 00:46	5.0	1.0			1	2	
27	f1410127	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 00:52	5.0	1.0	3		1	2	2:NA=176700
28	f1410128	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 00:58	5.0	1.0			1	2	
29	f1410129	X	RINSE			15-JUN-2007 01:04	1.0					2	
30	f1410130	X	RINSE			15-JUN-2007 01:10	1.0					2	
31	f1410131	CCV				15-JUN-2007 01:15	1.0	1.0			1	12 2	
32	f1410132	X	RINSE			15-JUN-2007 01:23	1.0					2	
33	f1410133	CCB				15-JUN-2007 01:29	1.0	1.0			1	2	
34	f1410134	X				15-JUN-2007 01:35	1.0					2	
35	f1410135	ICSA				15-JUN-2007 01:40	1.0	1.0			1	10 2	7:CA=266000
36	f1410136	ICSAB				15-JUN-2007 01:46	1.0	1.0			1	11 2	7:CA=282800
37	f1410137	X	RINSE			15-JUN-2007 01:53	1.0					2	
38	f1410138	X	RINSE			15-JUN-2007 01:58	1.0					2	
39	f1410139	X	RINSE			15-JUN-2007 02:04	1.0					2	
40	f1410140	X	RINSE			15-JUN-2007 02:10	1.0					2	
41	f1410141	SAMPLE	195251-001	126205	Water	15-JUN-2007 02:16	10.0	1.0			1	2	
42	f1410142	SAMPLE	195251-006	126205	Water	15-JUN-2007 02:22	10.0	1.0			1	2	
43	f1410143	SAMPLE	195251-007	126205	Water	15-JUN-2007 02:28	10.0	1.0			1.	2	
44	f1410144	SAMPLE	195337-001	126205	Filtra	15-JUN-2007 02:34	5.0	1.0	3		1	2	3:NA=221400
45	f1410145	SAMPLE	195337-002	126205	Filtra	15-JUN-2007 02:40	5.0	1.0	4		1	2	4:NA=490800
46	f1410146	SAMPLE	195337-003	126205	Filtra	15-JUN-2007 02:46	5.0	1.0	5		1	2	5:NA=654000
47	f1410147	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 02:52	5.0	1.0	2		1	2	
48	f1410148	SAMPLE	195285-013	126205	Filtra	15-JUN-2007 02:58	5.0	1.0			1	2	
49	f1410149	X	RINSE			15-JUN-2007 03:04	1.0					2	
50	f1410150	X	RINSE			15-JUN-2007 03:10	1.0					2	
51	f1410151	CCV				15-JUN-2007 03:16	1.0	1.0			1	12 2	
52	f1410152	X	RINSE			15-JUN-2007 03:23	1.0					2	
53	f1410153	CCB				15-JUN-2007 03:29	1.0	1.0			1	2	
54	f1410154	X				15-JUN-2007 03:35	1.0					2	
55	f1410155	SAMPLE	195285-014	126205	Filtra	15-JUN-2007 03:41	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
156	f1410156	X	RINSE			15-JUN-2007 03:47	1.0			2	
157	f1410157	X	RINSE			15-JUN-2007 03:53	1.0			2	
158	f1410158	CCV				15-JUN-2007 03:59	1.0	1.0	1	12 2	
159	f1410159	X	RINSE			15-JUN-2007 04:06	1.0			2	
160	f1410160	CCB				15-JUN-2007 04:12	1.0	1.0	1	2	
161	f1410161	X				15-JUN-2007 04:18	1.0			2	
162	f1410162	ICSA				15-JUN-2007 04:24	1.0	1.0	1	10 2	7:CA=263600
163	f1410163	ICSAB				15-JUN-2007 04:30	1.0	1.0	1	11 2	7:CA=284400

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195241 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	AS	CD	CA	CR	CU	FE	PB	MG	MN	NI	K	NA	ZN
195241-002	MET06	06/08/07 22:23	10.0				+									+	
195241-002	MET16	06/14/07 16:08	50.0									+					
195241-002	MET16	06/14/07 18:06	5.0	+	+	+		+	+	+	+		+	+	+		+
195241-003	MET06	06/08/07 20:48	10.0									+				+	
195241-003	MET16	06/14/07 16:20	20.0														
195241-003	MET16	06/14/07 16:38	5.0	+	+	+	+	+	+	+	+		+	+	+		+
195241-004	MET06	06/08/07 22:29	10.0														
195241-004	MET16	06/14/07 18:12	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195241-005	MET06	06/08/07 22:35	10.0										+				
195241-005	MET16	06/14/07 18:18	5.0	+	+	+	+	+	+	+	+	+		+	+	+	+
195241-007	MET06	06/08/07 22:41	10.0				+									+	
195241-007	MET16	06/14/07 16:14	50.0									+					
195241-007	MET16	06/14/07 18:24	5.0	+	+	+		+	+	+	+		+	+	+		+
QC391439	MET06	06/08/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391440	MET06	06/08/07 20:30	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391441	MET06	06/08/07 20:36	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391442	MET06	06/08/07 21:00	10.0									+				+	
QC391442	MET16	06/14/07 16:49	5.0	+	+	+	+	+	+	+	+		+	+	+		+
QC391443	MET06	06/08/07 21:05	10.0									+				+	
QC391443	MET16	06/14/07 16:55	5.0	+	+	+	+	+	+	+	+		+	+	+		+
QC391444	MET06	06/08/07 20:54	50.0									+				+	
QC391444	MET16	06/14/07 16:43	25.0	+	+	+	+	+	+	+	+		+	+	+		+
QC391445	MET06	06/08/07 21:11	10.0	+	+	+	+	+	+	+	+		+	+	+	+	+
QC391445	MET16	06/14/07 16:26	20.0									+					
QC391445	MET16	06/14/07 17:43	5.0														
QC391446	MET06	06/08/07 22:11	10.0									+				+	
QC391446	MET16	06/14/07 17:54	5.0	+	+	+	+	+	+	+	+		+	+	+		+
QC391447	MET06	06/08/07 22:17	10.0									+				+	
QC391447	MET16	06/14/07 18:00	5.0	+	+	+	+	+	+	+	+		+	+	+		+

Curtis & Tompkins Laboratories Sample Preparation Summary 08-JUN-2007 12:48

Batch Number : 126087
Date Extracted: 08-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195241-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195247-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195247-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195247-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195247-002			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195247-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC391439	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC391440	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391441	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391442	MS	of 195241-003		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391443	MSD	of 195241-003		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391444	SER	of 195241-003		Filtrate	50	mL	50	1.000000	1					ICAP		
QC391445	PDS	of 195241-003		Filtrate	50	mL	50	1.000000	1					ICAP		
QC391446	MS	of 195247-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391447	MSD	of 195247-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: [illegible] 6/8/07 Reviewed By: [illegible] Date: 6/8/07

Relinquished By: [illegible] 6/8/07 Received By: [illegible] Date: 6/8/07

00200

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 36087
Date Digested: 6/3/07
Digested by: [illegible]

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK 2479
Page 51
Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS -03				FIELD FILTERED
MSD -03				
195241-03				
02				
04				
05				
MS-04				
MSD 04				
195347-04				
01				
02				
347-01				
02				

[illegible] 6/8/07

	Reagent ID or LIMS #	Initials / Date
95 digestion temperature (90-95 degrees C)	95	[illegible] 6/8
0 mL of spike solution was added to all spikes	S6222	
	S6223	
concentrated HCl	H020023 BAKER	
concentrated HNO3	CA3025	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group		

[illegible] 6/8/07
Prep Chemist Signature / Date

[illegible] 6/8/07
Reviewer Signature / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/27/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

GENERAL CHEMISTRY

: 98212

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126404		

Field ID: LF4GW103 Lab ID: 195241-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	1,700	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,700	10

Field ID: LF4GW104 Lab ID: 195241-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	620	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	620	10

Field ID: 231GW09 Lab ID: 195241-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126404		

Field ID: 231GW28 Lab ID: 195241-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	360	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	360	10

Field ID: DUP0605073A Lab ID: 195241-007
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	1,600	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,600	10

Type: BLANK Lab ID: QC392709

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

40.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392710	Batch#:	126404
Matrix:	Water	Analyzed:	06/18/07

Spiked	Result	%REC	Limits
200.0	186.0	93	90-110

41.0

00215

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	231GW20	Batch#:	126404
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392711	90.00	200.0	272.0	91	69-112		
MSD	QC392712		200.0	270.0	90	69-112	1	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	231GW13	Batch#:	126404
MSS Lab ID:	195234-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392713	479.0	500.0	926.0	89	69-112		
MSD	QC392714		500.0	928.0	90	69-112	0	25

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	LF4GW104	Batch#:	126404
MSS Lab ID:	195241-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392715	618.0	500.0	1,097	96	69-112		
MSD	QC392716		500.0	1,100	96	69-112	0	25

RPD= Relative Percent Difference

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **06/18/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **126404** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.8	100	0.00	0.00	ND			1.0		
LCS	10.0	25	2.69	4.65	186.00			4.0	93	
195234-001	7.0	25	0.00	2.25	90.00		n/a	4.0		
MS	9.9	25	2.20	6.80	272.00			4.0	91	
MSD	9.9	25	2.30	6.75	270.00			4.0	90	1
195234-003	7.6	10	0.00	4.79	479.00			10.0		
MS	9.6	10	2.12	9.26	926.00			10.0	89	
MSD	9.5	10	2.11	9.28	928.00			10.0	90	0
195241-003	7.2	10	0.00	6.18	618.00			10.0		
MS	9.1	10	1.44	10.97	1097.00			10.0	96	
MSD	9.0	10	1.45	11.00	1100.00			10.0	96	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195234-001	7.0	25	0.00	2.25	90.00		n/a	4.0
195234-002	7.4	10	0.00	2.49	249.00		n/a	10.0
195234-003	7.6	10	0.00	4.79	479.00		n/a	10.0
195234-004	7.0	100	0.00	5.20	52.00		n/a	1.0
195234-005	7.7	10	0.00	4.58	458.00		n/a	10.0
195241-002	7.2	10	0.00	17.03	1703.00		n/a	10.0
195241-003	7.2	10	0.00	6.18	618.00		n/a	10.0
195241-004	6.8	10	0.00	2.46	246.00		n/a	10.0
195241-005	6.9	10	0.00	3.64	364.00		n/a	10.0
195241-007	7.3	10	0.00	16.28	1628.00		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: 6/18/07

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

Curtis Tompkins, Ltd.

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/18/07
Batch No: 126404

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195234-001	0.0	90.0	90	90.000	0.000	0.000
195234-002	0.0	249.00	249.000	249.000	0.000	0.000
195234-003	0.0	479.00	479.000	479.000	0.000	0.000
195234-004	0.0	52.00	52.000	52.000	0.000	0.000
195234-005	0.0	458.00	458.000	458.000	0.000	0.000
195241-002	0.0	1703.00	1703.000	1703.000	0.000	0.000
195241-003	0.0	618.00	618.000	618.000	0.000	0.000
195241-004	0.0	246.00	246.000	246.000	0.000	0.000
195241-005	0.0	364.00	364.000	364.000	0.000	0.000
195241-007	0.0	1628.00	1628.000	1628.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analysis Date: 06/18/07
Batch No: 126404

H_2SO_4 Normality = 0.02
Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
195234-001	90.000	109.732	0.000	0.000
195234-002	249.000	303.593	0.000	0.000
195234-003	479.000	584.019	0.000	0.000
195234-004	52.000	63.401	0.000	0.000
195234-005	458.000	558.415	0.000	0.000
195241-002	1703.000	2076.378	0.000	0.000
195241-003	618.000	753.495	0.000	0.000
195241-004	246.000	299.935	0.000	0.000
195241-005	364.000	443.806	0.000	0.000
195241-007	1628.000	1984.934	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126404 Date: 6/18/07 Benchbook#: **BK2508**
Matrix: water Time: 9:30 Page: **15**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 5291
CAL-ph 10.0: SS#: 5862
Slope: 101.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 5604
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
Lot # 6352 Exp. 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.8	100	AT 6/18 ~~10~~ ~~0~~	<0.05		
LCS	10.0	25	2.69	AT 6/18 ~~4.9~~ 4.65		
195234-1 AD	7.0	25	—	2.25		
MS-1	9.9	25	2.20	6.80		
MSD-1	9.9	25	2.23	6.75		
-2 J	7.4	AT 6/18 ~~25~~ 10	—	2.49		
-3 AD	7.6	10	—	4.79		
MS-3	9.6		2.12	9.26		
MSD-3	9.5		2.11	9.28		
-4 J	7.0	25	—	<2mL		
-4	7.0	100	—	5.20		
-5 H	7.7	10	—	7.58		
195241-2 C	7.2	10	—	17.03		
-3 G	7.2	10	—	6.18		
MS-3	9.1	10	AT 6/18 ~~1.44~~	10.97		
MSD-3	9.0	10	1.45	11.00		
-4 I	6.8	10	—	2.46		
-5 H	6.9	10	—	16.28		
AT 6/18 ~~-6 C~~	7.3	10	—	3.64		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/18/07
Analyst / Date

6/18/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126404
Date Started: 18-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-002			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-003			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-004			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195234-005			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-002			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-003			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-004			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-005			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195241-007			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
QC392709	BLANK			Water	ALKALINITY	
QC392710	LCS			Water	ALKALINITY	
QC392711	MS	of 195234-001		Water	ALKALINITY	
QC392712	MSD	of 195234-001		Water	ALKALINITY	
QC392713	MS	of 195234-003		Water	ALKALINITY	
QC392714	MSD	of 195234-003		Water	ALKALINITY	
QC392715	MS	of 195241-003		Water	ALKALINITY	
QC392716	MSD	of 195241-003		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	06/06/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
LF4GW103	SAMPLE	195241-002	740	10	50.00	126213	06/05/07 11:05	06/12/07 17:31
LF4GW104	SAMPLE	195241-003	290	4.0	20.00	125982	06/05/07 11:40	06/06/07 23:11
231GW09	SAMPLE	195241-004	40	1.0	5.000	126059	06/05/07 12:50	06/07/07 15:29
231GW28	SAMPLE	195241-005	20	0.20	1.000	125982	06/05/07 13:20	06/07/07 01:49
DUP0605073A	SAMPLE	195241-007	740	10	50.00	126213	06/05/07	06/12/07 17:48
	BLANK	QC391012	ND	0.20	1.000	125982		06/06/07 10:15
	BLANK	QC391314	ND	0.20	1.000	126059		06/07/07 14:26
	BLANK	QC391925	ND	0.20	1.000	126213		06/12/07 13:42

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Batch#:	125982
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF4GW103	SAMPLE	195241-002	ND	0.20	2.000	06/05/07 11:05	06/07/07 03:16
LF4GW104	SAMPLE	195241-003	ND	0.10	1.000	06/05/07 11:40	06/06/07 20:14
231GW09	SAMPLE	195241-004	ND	0.10	1.000	06/05/07 12:50	06/07/07 01:31
231GW28	SAMPLE	195241-005	0.22	0.10	1.000	06/05/07 13:20	06/07/07 01:49
DUP0605073A	SAMPLE	195241-007	ND	0.20	2.000	06/05/07	06/07/07 03:34
	BLANK	QC391012	ND	0.10	1.000		06/06/07 10:15

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	06/06/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
LF4GW103	SAMPLE	195241-002	ND	0.10	2.000	125982	06/05/07 11:05	06/07/07 03:16
LF4GW104	SAMPLE	195241-003	0.49	0.05	1.000	125982	06/05/07 11:40	06/06/07 20:14
231GW09	SAMPLE	195241-004	17	0.25	5.000	126059	06/05/07 12:50	06/07/07 15:29
231GW28	SAMPLE	195241-005	0.39	0.05	1.000	125982	06/05/07 13:20	06/07/07 01:49
DUP0605073A	SAMPLE	195241-007	ND	0.10	2.000	125982	06/05/07	06/07/07 03:34
	BLANK	QC391012	ND	0.05	1.000	125982		06/06/07 10:15
	BLANK	QC391314	ND	0.05	1.000	126059		06/07/07 14:26

ND= Not Detected
RL= Reporting Limit

20.0

: 00226

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	125982
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF4GW103	SAMPLE	195241-002	ND	0.10	2.000	06/05/07 11:05	06/07/07 03:16
LF4GW104	SAMPLE	195241-003	ND	0.05	1.000	06/05/07 11:40	06/06/07 20:14
231GW09	SAMPLE	195241-004	ND	0.05	1.000	06/05/07 12:50	06/07/07 01:31
231GW28	SAMPLE	195241-005	ND	0.05	1.000	06/05/07 13:20	06/07/07 01:49
DUP0605073A	SAMPLE	195241-007	ND	0.10	2.000	06/05/07	06/07/07 03:34
	BLANK	QC391012	ND	0.05	1.000		06/06/07 10:15

ND= Not Detected
RL= Reporting Limit

22.0

:08227

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	06/06/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
LF4GW103	SAMPLE	195241-002	460	5.0	10.00	126184	06/05/07 11:05	06/11/07 22:29
LF4GW104	SAMPLE	195241-003	160	10	20.00	125982	06/05/07 11:40	06/06/07 23:11
231GW09	SAMPLE	195241-004	70	2.5	5.000	126059	06/05/07 12:50	06/07/07 15:29
231GW28	SAMPLE	195241-005	16	0.50	1.000	125982	06/05/07 13:20	06/07/07 01:49
DUP0605073A	SAMPLE	195241-007	450	5.0	10.00	126184	06/05/07	06/12/07 00:14
	BLANK	QC391012	ND	0.50	1.000	125982		06/06/07 10:15
	BLANK	QC391314	ND	0.50	1.000	126059		06/07/07 14:26
	BLANK	QC391785	ND	0.50	1.000	126184		06/11/07 17:17

ND= Not Detected
RL= Reporting Limit

24.0

Batch QC Report

Chloride

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391013		4.000	4.203	105	80-120			1.000	125982			06/06/07 10:33
	BSD		QC391014		4.000	4.007	100	80-120	5	20	1.000	125982			06/06/07 10:50
LF4GW104	MS	195241-003	QC391171	288.7	40.00	328.8	100 NM	80-120			20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:09
LF4GW104	MSD	195241-003	QC391172		40.00	329.8	103 NM	80-120	0	25	20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:26
BB3GW100	MS	195247-006	QC391267	262.5	200.0	448.7	93	80-120			200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:04
BB3GW100	MSD	195247-006	QC391268		200.0	453.9	96	80-120	1	25	200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:21
	BS		QC391315		4.000	4.312	108	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		4.000	4.262	107	80-120	1	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	9.712	2.040	11.83	104 NM	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		2.040	11.87	106 NM	80-120	0	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	230.9	100.0	343.1	112	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		100.0	338.4	107	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391926		4.000	4.315	108	80-120			1.000	126213			06/12/07 13:59
	BSD		QC391927		4.000	4.211	105	80-120	2	20	1.000	126213			06/12/07 14:16
ZZZZZZZZZZ	MS	195358-009	QC392109	<0.05005	2.040	2.168	106	80-120			1.020	126213	06/12/07 10:45	06/12/07	06/12/07 21:06
ZZZZZZZZZZ	MSD	195358-009	QC392110		2.040	2.301	113	80-120	6	25	1.020	126213	06/12/07 10:45	06/12/07	06/12/07 21:24

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

17.0

Curtis & Tompkins, Ltd.

000220

Batch QC Report

Fluoride

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Batch#:	125982
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	BS		QC391013		2.000	2.097	105	80-120			1.000		06/06/07 10:33
	BSD		QC391014		2.000	1.877	94	80-120	11	20	1.000		06/06/07 10:50
LF4GW104	MS	195241-003	QC391171	0.06908	20.00	18.60	93	78-120			20.00	06/05/07 11:40	06/07/07 04:09
LF4GW104	MSD	195241-003	QC391172		20.00	19.17	95	78-120	3	20	20.00	06/05/07 11:40	06/07/07 04:26
BB3GW100	MS	195247-006	QC391267	<0.9179	100.0	162.6	163 *	78-120			200.0	06/05/07 14:45	06/07/07 07:04
BB3GW100	MSD	195247-006	QC391268		100.0	167.4	167 *	78-120	3	20	200.0	06/05/07 14:45	06/07/07 07:21

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

19.0

Curtis & Tompkins, Ltd.

00220

Batch QC Report

Nitrate Nitrogen

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391013		1.000	1.099	110	80-120			1.000	125982			06/06/07 10:33
	BSD		QC391014		1.000	1.039	104	80-120	6	20	1.000	125982			06/06/07 10:50
LF4GW104	MS	195241-003	QC391171	0.4944	10.00	11.03	105	80-120			20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:09
LF4GW104	MSD	195241-003	QC391172		10.00	11.15	107	80-120	1	25	20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:26
BB3GW100	MS	195247-006	QC391267	519.7	50.00	572.0	105 NM	80-120			200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:04
BB3GW100	MSD	195247-006	QC391268		50.00	574.3	109 NM	80-120	0	25	200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:21
	BS		QC391315		1.000	1.104	110	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		1.000	1.108	111	80-120	0	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	0.6578	0.5100	1.226	111	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		0.5100	1.240	114	80-120	1	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	5.678	25.00	33.86	113	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		25.00	33.36	111	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

21.0

Curtis & Tompkins, Ltd.

00221

Batch QC Report

Nitrite Nitrogen

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	125982
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Analyzed
	BS		QC391013		1.000	1.046	105	80-120			1.000		06/06/07 10:33
	BSD		QC391014		1.000	0.9664	97	80-120	8	20	1.000		06/06/07 10:50
LF4GW104	MS	195241-003	QC391171	<0.008079	10.00	11.82	118	80-120			20.00	06/05/07 11:40	06/07/07 04:09
LF4GW104	MSD	195241-003	QC391172		10.00	11.43	114	80-120	3	25	20.00	06/05/07 11:40	06/07/07 04:26
BB3GW100	MS	195247-006	QC391267	<0.8079	50.00	51.60	103	80-120			200.0	06/05/07 14:45	06/07/07 07:04
BB3GW100	MSD	195247-006	QC391268		50.00	48.35	97	80-120	7	25	200.0	06/05/07 14:45	06/07/07 07:21

RPD= Relative Percent Difference

23.0

Curtis & Tompkins, Ltd.

000222

Batch QC Report

Sulfate

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391013		10.00	10.71	107	80-120			1.000	125982			06/06/07 10:33
	BSD		QC391014		10.00	9.906	99	80-120	8	20	1.000	125982			06/06/07 10:50
LF4GW104	MS	195241-003	QC391171	161.4	100.0	264.8	103	80-120			20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:09
LF4GW104	MSD	195241-003	QC391172		100.0	266.1	105	80-120	0	25	20.00	125982	06/05/07 11:40	06/06/07	06/07/07 04:26
BB3GW100	MS	195247-006	QC391267	256.6	500.0	670.9	83	80-120			200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:04
BB3GW100	MSD	195247-006	QC391268		500.0	686.6	86	80-120	2	25	200.0	125982	06/05/07 14:45	06/06/07	06/07/07 07:21
	BS		QC391315		10.00	10.91	109	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		10.00	10.96	110	80-120	1	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	8.809	5.100	14.35	109	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		5.100	14.44	110	80-120	1	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	67.12	250.0	336.6	108	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		250.0	330.9	106	80-120	2	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391786		10.00	10.75	107	80-120			1.000	126184			06/11/07 17:34
	BSD		QC391787		10.00	10.83	108	80-120	1	20	1.000	126184			06/11/07 17:52
231GW06	MS	195234-002	QC391870	52.51	25.00	77.97	102	80-120			5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:23
231GW06	MSD	195234-002	QC391871		25.00	78.21	103	80-120	0	25	5.000	126184	06/05/07 12:30	06/06/07	06/12/07 01:41

RPD= Relative Percent Difference

25.0

Curtis & Tompkins, Ltd.

00220

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607218822002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195241 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195241 IC Water: EPA 300.0

Inst : IC03
Calnum : 627218791001
Units : mg/L

Date : 31-MAY-2007 22:31
X Axis : A

Reviewer : RH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_3	627218791003	L1	31-MAY-2007 22:31	S6107 (500X)
L2	152_4	627218791004	L2	31-MAY-2007 22:49	S6107 (100X)
L3	152_5	627218791005	L3	31-MAY-2007 23:06	S6107 (25X)
L4	152_6	627218791006	L4	31-MAY-2007 23:24	S6107 (10X)
L5	152_7	627218791007	L5	31-MAY-2007 23:41	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1297	0.1872	0.1952	0.2113	0.2177	QORG		0.19988	0.001803	0.1882	1.000	0.990	
Chloride	0.1393	0.1328	0.1406	0.1501	0.1616	QORG		0.13746	0.001210	0.1449	1.000	0.990	
Nitrogen, Nitrite	0.3375	0.3005	0.2902	0.3084	0.3151	QORG		0.29647	0.003762	0.3103	1.000	0.990	
Nitrogen, Nitrate	0.3082	0.3189	0.3329	0.3458	0.3609	QORG		0.32886	0.006433	0.3333	1.000	0.990	
Sulfate	0.1108	0.1023	0.1034	0.1095	0.1158	QORG		0.10232	2.707E-4	0.1084	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-35	0.500	-7	2.000	-4	5.000	1	10.00	0
Chloride	0.200	1	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	14	0.250	1	1.000	-3	2.500	1	5.000	0
Nitrogen, Nitrate	0.050	-6	0.250	-3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	8	2.500	-1	10.00	-2	25.00	0	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195241 IC Water
EPA 300.0

Inst : IC03
Calnum : 627218791001 Cal Date : 31-MAY-2007

ICV 627218791009 (152_9 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1882	0.1903	1.000	0.9439	mg/L	-6	10	
Chloride	0.1449	0.1360	2.000	1.945	mg/L	-3	10	
Nitrogen, Nitrite	0.3103	0.2924	0.5000	0.4900	mg/L	-2	10	
Nitrogen, Nitrate	0.3333	0.3204	0.5000	0.4825	mg/L	-3	10	
Sulfate	0.1084	0.1028	5.000	4.961	mg/L	-1	10	

CONTINUING CALIBRATION SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.2574	0.2598	0.5000	0.4968	mg/L	-1	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.2574	0.2581	2.0000	1.9517	mg/L	-2	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.2574	0.2708	5.0000	5.0030	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.2574	0.2597	2.0000	1.9641	mg/L	-2	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.2574	0.2734	5.0000	5.0485	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.2574	0.2649	2.0000	2.0028	mg/L	0	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1882	0.1941	0.5000	0.4834	mg/L	-3	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1882	0.2030	2.0000	1.9951	mg/L	0	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1882	0.2192	5.0000	5.2360	mg/L	5	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1882	0.1773	0.5000	0.4418	mg/L	**-12**	10	c- *** M/A
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1882	0.2093	2.0000	2.0557	mg/L	3	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1882	0.2202	5.0000	5.2598	mg/L	5	10	
IC03	P	627235462010	12-JUN-2007 13:01	627218791001	31-MAY-2007	0.1882	0.1923	0.5000	0.4791	mg/L	-4	10	
IC03	P	627235462022	12-JUN-2007 19:07	627218791001	31-MAY-2007	0.1882	0.2084	2.0000	2.0473	mg/L	2	10	
IC03	P	627235462042	13-JUN-2007 02:20	627218791001	31-MAY-2007	0.1882	0.2215	5.0000	5.2887	mg/L	6	10	

Cw 6/19/07

-=low bias · c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.1750	0.1766	1.0000	1.0275	mg/L	3	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.1750	0.1765	4.0000	4.0157	mg/L	0	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.1750	0.1848	10.000	10.054	mg/L	1	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.1750	0.1769	4.0000	4.0258	mg/L	1	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.1750	0.1871	10.000	10.174	mg/L	2	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.1750	0.1783	4.0000	4.0551	mg/L	1	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1449	0.1472	1.0000	1.0609	mg/L	6	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1449	0.1522	4.0000	4.2678	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1449	0.1648	10.000	10.939	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1449	0.1480	1.0000	1.0667	mg/L	7	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1449	0.1546	4.0000	4.3335	mg/L	8	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1449	0.1641	10.000	10.896	mg/L	9	10	
IC03	P	627235462010	12-JUN-2007 13:01	627218791001	31-MAY-2007	0.1449	0.1498	1.0000	1.0794	mg/L	8	10	
IC03	P	627235462022	12-JUN-2007 19:07	627218791001	31-MAY-2007	0.1449	0.1545	4.0000	4.3299	mg/L	8	10	
IC03	P	627235462042	13-JUN-2007 02:20	627218791001	31-MAY-2007	0.1449	0.1654	10.000	10.975	mg/L	10	10	

CONTINUING CALIBRATION SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.3873	0.3870	0.2500	0.2547	mg/L	2	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.3873	0.3823	1.0000	1.0004	mg/L	0	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.3873	0.3849	2.5000	2.4897	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.3873	0.3772	1.0000	0.9871	mg/L	-1	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.3873	0.3915	2.5000	2.5313	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.3873	0.3847	1.0000	1.0066	mg/L	1	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3103	0.2965	0.2500	0.2493	mg/L	0	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3103	0.3087	1.0000	1.0280	mg/L	3	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3103	0.3352	2.5000	2.7317	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3103	0.3228	0.2500	0.2712	mg/L	8	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3103	0.3204	1.0000	1.0661	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3103	0.3225	2.5000	2.6315	mg/L	5	10	
IC03	P	627235462010	12-JUN-2007 13:01	627218791001	31-MAY-2007	0.3103	0.2897	0.2500	0.2435	mg/L	-3	10	
IC03	P	627235462022	12-JUN-2007 19:07	627218791001	31-MAY-2007	0.3103	0.3177	1.0000	1.0575	mg/L	6	10	
IC03	P	627235462042	13-JUN-2007 02:20	627218791001	31-MAY-2007	0.3103	0.3331	2.5000	2.7153	mg/L	9	10	

CONTINUING CALIBRATION SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.4432	0.4373	0.2500	0.2600	mg/L	4	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.4432	0.4513	1.0000	1.0546	mg/L	5	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.4432	0.4396	2.5000	2.4909	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.4432	0.4442	1.0000	1.0385	mg/L	4	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.4432	0.4489	2.5000	2.5407	mg/L	2	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.4432	0.4555	1.0000	1.0642	mg/L	6	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3333	0.3444	0.2500	0.2605	mg/L	4	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3333	0.3693	1.0000	1.0992	mg/L	10	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3333	0.3807	2.5000	2.7463	mg/L	10	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3333	0.3263	0.2500	0.2468	mg/L	-1	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3333	0.3735	1.0000	1.1116	mg/L	**11**	10	c+ *** MA 6/14/07
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3333	0.3802	2.5000	2.7434	mg/L	10	10	
IC03	P	627235462010	12-JUN-2007 13:01	627218791001	31-MAY-2007	0.3333	0.3552	0.2500	0.2686	mg/L	7	10	
IC03	P	627235462022	12-JUN-2007 19:07	627218791001	31-MAY-2007	0.3333	0.3618	1.0000	1.0775	mg/L	8	10	
IC03	P	627235462042	13-JUN-2007 02:20	627218791001	31-MAY-2007	0.3333	0.3801	2.5000	2.7421	mg/L	10	10	

+=high bias c=CCV

: 00241

CONTINUING CALIBRATION SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.1369	0.1292	2.5000	2.5336	mg/L	1	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.1369	0.1337	10.000	10.288	mg/L	3	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.1369	0.1338	25.000	24.867	mg/L	-1	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.1369	0.1333	10.000	10.260	mg/L	3	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.1369	0.1363	25.000	25.301	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.1369	0.1346	10.000	10.360	mg/L	4	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1084	0.1082	2.5000	2.6258	mg/L	5	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.705	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1084	0.1191	25.000	27.154	mg/L	9	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1084	0.1090	2.5000	2.6447	mg/L	6	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.698	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1084	0.1177	25.000	26.861	mg/L	7	10	
IC03	P	627235462010	12-JUN-2007 13:01	627218791001	31-MAY-2007	0.1084	0.1121	2.5000	2.7187	mg/L	9	10	
IC03	P	627235462022	12-JUN-2007 19:07	627218791001	31-MAY-2007	0.1084	0.1133	10.000	10.765	mg/L	8	10	
IC03	P	627235462042	13-JUN-2007 02:20	627218791001	31-MAY-2007	0.1084	0.1198	25.000	27.308	mg/L	9	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713022 File : 158_22 Time : 06-JUN-2007 14:39
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713029 File : 158_29 Time : 06-JUN-2007 18:04
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.008833]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713044.1 File : 158_44 Time : 07-JUN-2007 00:39
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713063.1 File : 158_63 Time : 07-JUN-2007 06:11
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.03627]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

: 00245

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713073.1 File : 158_73 Time : 07-JUN-2007 09:06
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309022.1 File : 158_22 Time : 07-JUN-2007 18:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309037.1 File : 158_37 Time : 08-JUN-2007 01:02
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079024.1 File : 162_24 Time : 11-JUN-2007 23:21
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079038.1 File : 162_38 Time : 12-JUN-2007 03:25
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03182]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627235462023.1 File : 163_23 Time : 12-JUN-2007 19:24
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03377]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	[0.01564]	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

: 00252

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195241 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627235462043.1 File : 163_43 Time : 13-JUN-2007 02:37
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03947]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0						1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0						1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:47	1.0			25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0			25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0			25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0			25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1		25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1		25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1		25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2		25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0			25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1		25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1		25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0			25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0			25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0			25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2		25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2		25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2		25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0			25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1		25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1		25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0			25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1		25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1		25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0			25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0			25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0			25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1		25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1		25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0			25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1		25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0			25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2		25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2		25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2		25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2		25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2		25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1		25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1		25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0			25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:14	1.0		25				
003	152_3	ICAL	L1			31-MAY-2007 22:31	1.0					1	
004	152_4	ICAL	L2			31-MAY-2007 22:49	1.0					1	
005	152_5	ICAL	L3			31-MAY-2007 23:06	1.0					1	
006	152_6	ICAL	L4			31-MAY-2007 23:24	1.0					1	
007	152_7	ICAL	L5			31-MAY-2007 23:41	1.0					1	
008	152_8	CCB				31-MAY-2007 23:58	1.0	1	25				
009	152_9	ICV				01-JUN-2007 00:16	1.0		25			2	
011	152_11	CCB/MB	QC390419	125840	Water	01-JUN-2007 00:51	1.0		25				
012	152_12	BS	QC390420	125840	Water	01-JUN-2007 01:08	1.0		25			1	
013	152_13	BSD	QC390421	125840	Water	01-JUN-2007 01:25	1.0		25			1	
014	152_14	SAMPLE	195096-001	125840	Water	01-JUN-2007 01:43	1.0	1	25				1:SO4=556.718
016	152_16	SAMPLE	195096-002	125840	Water	01-JUN-2007 02:18	2.0	1	25				2:SO4=598.434
018	152_18	SAMPLE	195096-003	125840	Water	01-JUN-2007 02:53	1.0	1	25				2:SO4=557.907
019	152_19	SAMPLE	195096-004	125840	Water	01-JUN-2007 03:10	1.0	1	25				2:SO4=559.245
021	152_21	SAMPLE	195089-002	125840	Water	01-JUN-2007 03:45	5.0	1	25				2:SO4=140.384
022	152_22	SAMPLE	195089-002	125840	Water	01-JUN-2007 04:02	1.0	2	25				3:SO4=490.019
024	152_24	SAMPLE	195089-004	125840	Water	01-JUN-2007 04:37	1.0	2	25				3:SO4=427.003
026	152_26	CCV	M	125840		01-JUN-2007 05:12	1.0		25			1	
027	152_27	CCB		125840		01-JUN-2007 05:29	1.0		25				
030	152_30	SAMPLE	195089-005	125840	Water	01-JUN-2007 06:21	1.0	1	25				2:SO4=489.308
031	152_31	SAMPLE	195089-006	125840	Water	01-JUN-2007 06:39	1.0	1	25				2:SO4=517.275
032	152_32	SAMPLE	195089-003	125840	Water	01-JUN-2007 06:56	1.0	1	25				2:SO4=373.460
034	152_34	SAMPLE	195096-005	125840	Water	01-JUN-2007 07:31	1.0	1	25				2:SO4=409.844
035	152_35	SAMPLE	195096-006	125840	Water	01-JUN-2007 07:48	1.0	1	25				2:SO4=144.475
037	152_37	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:23	10.0	1	25				1:SO4=195.820
038	152_38	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:41	5.0	1	25				2:SO4=339.862
039	152_39	SAMPLE	195089-007	125840	Water	01-JUN-2007 08:58	1.0	2	25				3:SO4=481.654
041	152_41	SAMPLE	195092-002	125840	Water	01-JUN-2007 09:33	1.0	2	25				2:SO4=430.097
042	152_42	SAMPLE	195092-003	125840	Water	01-JUN-2007 09:50	1.0	2	25				2:SO4=430.821
044	152_44	CCV	H	125840		01-JUN-2007 10:25	1.0		25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
045	152_45	CCB		125840		01-JUN-2007 10:43	1.0	1	25				
046	152_46	SAMPLE	195089-004	125840	Water	01-JUN-2007 11:00	5.0	1	25				2:SO4=117.984
047	152_47	SAMPLE	195112-001	125840	Water	01-JUN-2007 11:17	1.0		25				
048	152_48	MSS	195112-004	125840	Water	01-JUN-2007 11:35	1.0	2	25				1:CL=27.8197
050	152_50	SAMPLE	195089-007	125840	Water	01-JUN-2007 12:10	10.0	1	25				1:SO4=70.8983
051	152_51	MS	QC390422	125840	Water	01-JUN-2007 12:27	2.0	1	25			1	
052	152_52	MSD	QC390423	125840	Water	01-JUN-2007 12:44	2.0	1	25			1	
054	152_54	CCV	M	125840		01-JUN-2007 13:19	1.0		25			1	
055	152_55	CCB		125840		01-JUN-2007 13:37	1.0		25				
057	152_57	BLANK	QC390472	125850	Water	01-JUN-2007 15:12	1.0	1	25				
058	152_58	BS	QC390473	125850	Water	01-JUN-2007 15:29	1.0	1	25			1	
059	152_59	BSD	QC390474	125850	Water	01-JUN-2007 15:47	1.0	1	25			1	
060	152_60	SAMPLE	195127-003	125850	Water	01-JUN-2007 16:27	500.0		25				1:CL=25.2331
061	152_61	SAMPLE	195127-001	125850	Water	01-JUN-2007 16:54	20.0		25				2:CL=355.264
062	152_62	SAMPLE	195127-004	125850	Water	01-JUN-2007 17:11	20.0		25				2:CL=357.783
063	152_63	SAMPLE	195127-002	125850	Water	01-JUN-2007 17:28	20.0		25				2:CL=341.082
064	152_64	SAMPLE	195127-003	125850	Water	01-JUN-2007 18:03	20.0		25				2:CL=364.164
066	152_66	CCV	H	125850		01-JUN-2007 18:44	1.0		25			1	
067	152_67	CCB		125850		01-JUN-2007 19:01	20.0	1	25				
068	152_68	MSS	195123-005	125850	Water	01-JUN-2007 21:08	1.0	1	25				
070	152_70	MS	QC390480	125850	Water	01-JUN-2007 21:43	1.02	1	25			1	
071	152_71	MSD	QC390481	125850	Water	01-JUN-2007 22:00	1.02	1	25			1	
073	152_73	CCV	M	125850		01-JUN-2007 22:35	1.0		25			1	
074	152_74	CCB		125850		01-JUN-2007 22:52	1.0	1	25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 607226713 Instrument: IC01 Ion Chromatograph Begun: 06-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
008	158_8	CCV	L	125982		06-JUN-2007 09:58	1.0	1	25			1	
009	158_9	CCB/MB	QC391012	125982	Water	06-JUN-2007 10:15	1.0		25				
010	158_10	BS	QC391013	125982	Water	06-JUN-2007 10:33	1.0		25			1	
011	158_11	BSD	QC391014	125982	Water	06-JUN-2007 10:50	1.0		25			1	
012	158_12	SAMPLE	195192-001	125982	Water	06-JUN-2007 11:19	1.0	3	25				3:SO4=61.9759
013	158_13	SAMPLE	195192-002	125982	Water	06-JUN-2007 11:37	1.0	3	25				3:SO4=95.7954
014	158_14	SAMPLE	195192-003	125982	Water	06-JUN-2007 11:54	1.0	2	25				2:SO4=100.535
015	158_15	SAMPLE	195192-004	125982	Water	06-JUN-2007 12:12	1.0	2	25				2:SO4=85.9572
016	158_16	SAMPLE	195192-002	125982	Water	06-JUN-2007 12:53	10.0		25				
017	158_17	SAMPLE	195192-001	125982	Water	06-JUN-2007 13:11	5.0		25				
018	158_18	SAMPLE	195192-002	125982	Water	06-JUN-2007 13:28	5.0	1	25				1:CL=22.5500
020	158_20	CCV	M	125982		06-JUN-2007 14:03	1.0		25			1	
022	158_22	CCB		125982		06-JUN-2007 14:39	1.0		25				
023	158_23	SAMPLE	195192-003	125982	Water	06-JUN-2007 15:05	5.0		25				
024	158_24	SAMPLE	195192-004	125982	Water	06-JUN-2007 15:22	5.0		25				
025	158_25	X	195191-004	125982	Water	06-JUN-2007 15:40	25.0	1	25				2:CL=240.044
026	158_26	X	195191-004	125982	Water	06-JUN-2007 16:26	50.0		25				1:CL=121.459
028	158_28	CCV	H	125982		06-JUN-2007 17:47	1.0		25			1	
029	158_29	CCB		125982		06-JUN-2007 18:04	1.0	1	25				
030	158_30	SAMPLE	195226-004	125982	Water	06-JUN-2007 18:39	1.0	1	25				3:SO4=182.808
031	158_31	SAMPLE	195226-003	125982	Water	06-JUN-2007 19:12	1.0	1	25				3:SO4=164.597
032	158_32	SAMPLE	195226-002	125982	Water	06-JUN-2007 19:29	1.0		25				2:SO4=161.435
033	158_33	SAMPLE	195226-001	125982	Water	06-JUN-2007 19:54	1.0		25				
034	158_34	MSS	195241-003	125982	Water	06-JUN-2007 20:14	1.0	3	25				2:CL=189.449
036	158_36	MSS	195247-006	125982	Water	06-JUN-2007 20:49	100.0	2	25				1:NO3N=5.11758
038	158_38	MSS	195247-006	125982	Water	06-JUN-2007 22:54	200.0	1	25				
039	158_39	MSS	195241-003	125982	Water	06-JUN-2007 23:11	20.0	1	25				
040	158_40	SAMPLE	195226-004	125982	Water	06-JUN-2007 23:29	5.0		25				1:CL=35.4851
041	158_41	SAMPLE	195226-003	125982	Water	06-JUN-2007 23:46	5.0		25				1:CL=34.5339
043	158_43	CCV	M	125982		07-JUN-2007 00:21	1.0		25			1	
044	158_44	CCB		125982		07-JUN-2007 00:39	1.0		25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 607226713 Instrument: IC01 Ion Chromatograph Begun: 06-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
047	158_47	SAMPLE	195241-004	125982	Water	07-JUN-2007 01:31	1.0	3		25				3:SO4=66.0012
048	158_48	SAMPLE	195241-005	125982	Water	07-JUN-2007 01:49	1.0			25				
050	158_50	SAMPLE	195247-001	125982	Water	07-JUN-2007 02:24	1.0	2		25				2:CL=171.949
051	158_51	SAMPLE	195247-002	125982	Water	07-JUN-2007 02:41	1.0	2		25				2:CL=191.286
053	158_53	SAMPLE	195241-002	125982	Water	07-JUN-2007 03:16	2.0	2		25				2:CL=217.656
054	158_54	SAMPLE	195241-007	125982	Water	07-JUN-2007 03:34	2.0	2		25				2:CL=217.587
056	158_56	MS	QC391171	125982	Water	07-JUN-2007 04:09	20.0			25			1	
057	158_57	MSD	QC391172	125982	Water	07-JUN-2007 04:26	20.0			25			1	
059	158_59	MS	QC391171	125982	Water	07-JUN-2007 05:01	20.0			25			1	
060	158_60	MSD	QC391172	125982	Water	07-JUN-2007 05:19	20.0			25			1	
062	158_62	CCV	H	125982		07-JUN-2007 05:54	1.0			25			1	
063	158_63	CCB		125982		07-JUN-2007 06:11	1.0			25				
066	158_66	MS	QC391267	125982	Water	07-JUN-2007 07:04	200.0		1	25			1	
067	158_67	MSD	QC391268	125982	Water	07-JUN-2007 07:21	200.0		1	25			1	
069	158_69	MS	QC391267	125982	Water	07-JUN-2007 07:56	200.0		1	25			1	
070	158_70	MSD	QC391268	125982	Water	07-JUN-2007 08:14	200.0		1	25			1	
072	158_72	CCV	M	125982		07-JUN-2007 08:49	1.0			25			1	
073	158_73	CCB		125982		07-JUN-2007 09:06	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	158_9	X	L			07-JUN-2007 13:09	1.0	4	25			1	
010	158_10	CCV	L			07-JUN-2007 13:45	1.0	2	25			1	
012	158_12	CCB/MB	QC391314	126059	Water	07-JUN-2007 14:26	1.0		25				
013	158_13	BS	QC391315	126059	Water	07-JUN-2007 14:43	1.0		25			1	
014	158_14	BSD	QC391316	126059	Water	07-JUN-2007 15:01	1.0		25			1	
015	158_15	SAMPLE	195241-004	126059	Water	07-JUN-2007 15:29	5.0		25				
016	158_16	MSS	195234-001	126059	Water	07-JUN-2007 15:52	1.0		25				
017	158_17	MS	QC391337	126059	Water	07-JUN-2007 16:09	1.02		25			1	
018	158_18	MSD	QC391338	126059	Water	07-JUN-2007 16:26	1.02		25			1	
019	158_19	SAMPLE	195265-006	126059	Water	07-JUN-2007 17:16	100.0		25				
020	158_20	SAMPLE	195270-016	126059	Water	07-JUN-2007 17:58	100.0		25				
021	158_21	CCV	M	126059		07-JUN-2007 18:33	1.0		25			1	
022	158_22	CCB		126059		07-JUN-2007 18:50	1.0		25				
023	158_23	SAMPLE	195265-001	126059	Water	07-JUN-2007 20:16	100.0		25				
024	158_24	SAMPLE	195265-002	126059	Water	07-JUN-2007 21:16	100.0		25				
025	158_25	SAMPLE	195265-003	126059	Water	07-JUN-2007 21:33	50.0		25				
026	158_26	SAMPLE	195270-008	126059	Water	07-JUN-2007 21:50	50.0		25				
027	158_27	MSS	195270-007	126059	Water	07-JUN-2007 22:08	50.0	1	25				
029	158_29	MS	QC391437	126059	Water	07-JUN-2007 22:43	50.0		25			1	
030	158_30	MSD	QC391438	126059	Water	07-JUN-2007 23:00	50.0		25			1	
032	158_32	SAMPLE	195270-003	126059	Water	07-JUN-2007 23:35	10.0		25				
033	158_33	SAMPLE	195270-011	126059	Water	07-JUN-2007 23:52	10.0		25				
034	158_34	SAMPLE	195270-010	126059	Water	08-JUN-2007 00:10	10.0		25				
036	158_36	CCV	H	126059		08-JUN-2007 00:44	1.0		25			1	
037	158_37	CCB		126059		08-JUN-2007 01:02	1.0	1	25				
040	158_40	SAMPLE	195270-018	126059	Water	08-JUN-2007 01:54	10.0		25				
041	158_41	SAMPLE	195265-006	126059	Water	08-JUN-2007 02:11	5.0	2	25				2:SO4=307.196
042	158_42	SAMPLE	195265-001	126059	Water	08-JUN-2007 02:29	5.0	1	25				1:SO4=319.354
043	158_43	SAMPLE	195265-002	126059	Water	08-JUN-2007 02:46	5.0	1	25				1:SO4=318.946
044	158_44	SAMPLE	195270-016	126059	Water	08-JUN-2007 03:04	3.0	1	25				1:CL=135.740
046	158_46	SAMPLE	195270-018	126059	Water	08-JUN-2007 03:39	1.0	1	25				1:CL=45.2684

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
048	158_48	SAMPLE	195265-003	126059	Water	08-JUN-2007 04:13	1.0	1	25				1:SO4=509.677
050	158_50	SAMPLE	195270-003	126059	Water	08-JUN-2007 04:48	1.0	3	25				3:CL=77.9724
052	158_52	SAMPLE	195270-010	126059	Water	08-JUN-2007 05:23	1.0	2	25				2:SO4=71.9237
054	158_54	SAMPLE	195270-008	126059	Water	08-JUN-2007 05:58	1.0	3	25				3:CL=157.193
056	158_56	X	M	126059		08-JUN-2007 06:33	1.0	1	25			1	
057	158_57	CCB		126059		08-JUN-2007 06:50	1.0		25				
058	158_58	CCV	M	126059		08-JUN-2007 07:07	1.0		25			1	
060	158_60	MSS	195270-007	126059	Water	08-JUN-2007 07:42	1.0	4	25				3:CL=152.910
062	158_62	SAMPLE	195270-011	126059	Water	08-JUN-2007 08:17	1.0	2	25				2:SO4=71.7433
064	158_64	X	H	126059		08-JUN-2007 08:52	1.0	3	25			1	
065	158_65	CCB		126059		08-JUN-2007 09:09	1.0	1	25				
066	158_66	CCV	H	126059		08-JUN-2007 09:27	1.0		25			1	

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627234079 Instrument: IC03 Ion Chromatograph Begun: 11-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	162_9	X	L			11-JUN-2007 13:19	1.0	6	25			1	
010	162_10	CCV	L			11-JUN-2007 13:53	1.0	1	25			1	
011	162_11	CCB/MB	QC391785	126184	Water	11-JUN-2007 17:17	1.0	1	25				
012	162_12	BS	QC391786	126184	Water	11-JUN-2007 17:34	1.0	2	25			1	
013	162_13	BSD	QC391787	126184	Water	11-JUN-2007 17:52	1.0	2	25			1	
015	162_15	MSS	195234-002	126184	Water	11-JUN-2007 20:45	5.0	3	25				
016	162_16	SAMPLE	195234-005	126184	Water	11-JUN-2007 21:02	20.0	3	25				
017	162_17	SAMPLE	195247-001	126184	Water	11-JUN-2007 21:20	20.0	3	25				
018	162_18	SAMPLE	195247-002	126184	Water	11-JUN-2007 21:37	20.0	3	25				
019	162_19	SAMPLE	195241-002	126184	Water	11-JUN-2007 21:54	20.0	4	25				1:CL=38.3195
020	162_20	SAMPLE	195241-007	126184	Water	11-JUN-2007 22:12	20.0	4	25				1:CL=38.1571
021	162_21	SAMPLE	195241-002	126184	Water	11-JUN-2007 22:29	10.0	4	25				1:CL=67.7637
023	162_23	CCV	M	126184		11-JUN-2007 23:04	1.0	1	25			1	
024	162_24	CCB		126184		11-JUN-2007 23:21	1.0		25				
025	162_25	X	M	126184		11-JUN-2007 23:39	1.0	1	25			1	
027	162_27	SAMPLE	195241-007	126184	Water	12-JUN-2007 00:14	10.0	3	25				1:CL=67.4744
028	162_28	SAMPLE	195247-002	126184	Water	12-JUN-2007 00:31	5.0	3	25				1:CL=57.2476
029	162_29	SAMPLE	195247-001	126184	Water	12-JUN-2007 00:48	5.0	3	25				1:CL=50.7985
031	162_31	MS	QC391870	126184	Water	12-JUN-2007 01:23	5.0	1	25			1	
032	162_32	MSD	QC391871	126184	Water	12-JUN-2007 01:41	5.0	1	25			1	
034	162_34	MS	QC391870	126184	Water	12-JUN-2007 02:16	5.0	1	25			1	
035	162_35	MSD	QC391871	126184	Water	12-JUN-2007 02:33	5.0	1	25			1	
037	162_37	CCV	H	126184		12-JUN-2007 03:08	1.0		25			1	
038	162_38	CCB		126184		12-JUN-2007 03:25	1.0	1	25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627235462 Instrument: IC03 Ion Chromatograph Begun: 12-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	163_9	X	L			12-JUN-2007 12:22	1.0	3	25			1	
010	163_10	CCV	L			12-JUN-2007 13:01	1.0	2	25			1	
011	163_11	CCB/MB	QC391925	126213	Water	12-JUN-2007 13:42	1.0		25				
012	163_12	BS	QC391926	126213	Water	12-JUN-2007 13:59	1.0		25			1	
013	163_13	BSD	QC391927	126213	Water	12-JUN-2007 14:16	1.0		25			1	
014	163_14	SAMPLE	195179-003	126213	Water	12-JUN-2007 15:52	50.0	1	25				
015	163_15	SAMPLE	195310-001	126213	Water	12-JUN-2007 16:21	5000	1	25				1:CL=29.1607
016	163_16	SAMPLE	195310-001	126213	Water	12-JUN-2007 16:48	10000		25				
018	163_18	SAMPLE	195241-002	126213	Water	12-JUN-2007 17:31	50.0	2	25				
019	163_19	SAMPLE	195241-007	126213	Water	12-JUN-2007 17:48	50.0	2	25				
020	163_20	SAMPLE	195361-002	126213	Water	12-JUN-2007 18:13	100.0		25				
021	163_21	SAMPLE	195358-005	126213	Water	12-JUN-2007 18:37	1.0	1	25				1:CL=30.8276
022	163_22	CCV	M	126213		12-JUN-2007 19:07	1.0		25			1	
023	163_23	CCB		126213		12-JUN-2007 19:24	1.0		25				
024	163_24	MS	QC392109	126213	Water	12-JUN-2007 21:06	1.02		25			1	
025	163_25	MSD	QC392110	126213	Water	12-JUN-2007 21:24	1.02		25			1	
027	163_27	MS	QC392109	126213	Water	12-JUN-2007 21:59	1.02		25			1	
028	163_28	MSD	QC392110	126213	Water	12-JUN-2007 22:16	1.02		25			1	
030	163_30	SAMPLE	195358-005	126213	Water	12-JUN-2007 22:51	2.0		25				
032	163_32	SAMPLE	195358-004	126213	Water	12-JUN-2007 23:26	2.0		25				
034	163_34	SAMPLE	195361-002	126213	Water	13-JUN-2007 00:00	2.0	2	25				2:CL=117.323
036	163_36	SAMPLE	195358-004	126213	Water	13-JUN-2007 00:35	1.0		25				
038	163_38	MSS	195358-009	126213	Water	13-JUN-2007 01:10	1.0	1	25				
040	163_40	SAMPLE	195358-001	126213	Water	13-JUN-2007 01:45	1.0	1	25				1:CL=21.3726
042	163_42	CCV	H	126213		13-JUN-2007 02:20	1.0		25			1	
043	163_43	CCB		126213		13-JUN-2007 02:37	1.0	1	25				
044	163_44	X	H	126213		13-JUN-2007 02:55	1.0	5	25			1	
046	163_46	SAMPLE	195358-002	126213	Water	13-JUN-2007 03:29	1.0		25				
048	163_48	SAMPLE	195358-003	126213	Water	13-JUN-2007 04:04	1.0		25				
050	163_50	SAMPLE	195358-006	126213	Water	13-JUN-2007 04:39	1.0		25				
052	163_52	SAMPLE	195358-007	126213	Water	13-JUN-2007 05:14	1.0		25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Sequence: 627235462 Instrument: IC03 Ion Chromatograph Begun: 12-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
054	163_54	SAMPLE	195358-008	126213	Water	13-JUN-2007 05:49	1.0		25				
056	163_56	CCV	M	126213		13-JUN-2007 06:23	1.0		25			1	
057	163_57	CCB		126213		13-JUN-2007 06:41	1.0		25				

Stds used: 1=S6107

REPORTING SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195241-002	IC01	06/07/07 03:16	2.0	+		+	+	
195241-002	IC03	06/11/07 21:54	20.0					
195241-002	IC03	06/11/07 22:29	10.0					+
195241-002	IC03	06/12/07 17:31	50.0		+			
195241-003	IC01	06/06/07 20:14	1.0	+		+	+	
195241-003	IC01	06/06/07 23:11	20.0		+			+
195241-004	IC01	06/07/07 01:31	1.0	+		+		
195241-004	IC03	06/07/07 15:29	5.0		+		+	+
195241-005	IC01	06/07/07 01:49	1.0	+	+	+	+	+
195241-007	IC01	06/07/07 03:34	2.0	+		+	+	
195241-007	IC03	06/11/07 22:12	20.0					
195241-007	IC03	06/12/07 00:14	10.0					+
195241-007	IC03	06/12/07 17:48	50.0		+			
QC391012	IC01	06/06/07 10:15	1.0	+	+	+	+	+
QC391013	IC01	06/06/07 10:33	1.0	+	+	+	+	+
QC391014	IC01	06/06/07 10:50	1.0	+	+	+	+	+
QC391171	IC01	06/07/07 04:09	20.0	+	+	+	+	+
QC391171	IC01	06/07/07 05:01	20.0					
QC391172	IC01	06/07/07 04:26	20.0	+	+	+	+	+
QC391172	IC01	06/07/07 05:19	20.0					
QC391267	IC01	06/07/07 07:04	200.0	+	+	+	+	+
QC391267	IC01	06/07/07 07:56	200.0					
QC391268	IC01	06/07/07 07:21	200.0	+	+	+	+	+
QC391268	IC01	06/07/07 08:14	200.0					
QC391314	IC03	06/07/07 14:26	1.0	+	+	+	+	+
QC391315	IC03	06/07/07 14:43	1.0	+	+	+	+	+
QC391316	IC03	06/07/07 15:01	1.0	+	+	+	+	+
QC391337	IC03	06/07/07 16:09	1.02	+	+	+	+	+
QC391338	IC03	06/07/07 16:26	1.02	+	+	+	+	+
QC391437	IC03	06/07/07 22:43	50.0	+	+	+	+	+
QC391438	IC03	06/07/07 23:00	50.0	+	+	+	+	+
QC391785	IC03	06/11/07 17:17	1.0	+	+	+	+	+

REPORTING SUMMARY FOR 195241 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC391786	IC03	06/11/07 17:34	1.0	+	+	+	+	+	
QC391787	IC03	06/11/07 17:52	1.0	+	+	+	+	+	
QC391870	IC03	06/12/07 01:23	5.0	+	+	+	+	+	
QC391870	IC03	06/12/07 02:16	5.0						
QC391871	IC03	06/12/07 01:41	5.0	+	+	+	+	+	
QC391871	IC03	06/12/07 02:33	5.0						
QC391925	IC03	06/12/07 13:42	1.0	+	+	+	+	+	
QC391926	IC03	06/12/07 13:59	1.0	+	+	+	+	+	
QC391927	IC03	06/12/07 14:16	1.0	+	+	+	+	+	
QC392109	IC03	06/12/07 21:06	1.02	+	+	+	+	+	
QC392109	IC03	06/12/07 21:59	1.02						
QC392110	IC03	06/12/07 21:24	1.02	+	+	+	+	+	
QC392110	IC03	06/12/07 22:16	1.02						

: 00257

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 125982
Date Started: 06-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195192-001			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-002			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-003			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-004			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195226-001			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-002			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-003			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-004			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195241-002			Treadwell & Rollo	Water	NITRATE, NITRITE	18-JUN-2007
195241-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	FLUORIDE, NITRITE	18-JUN-2007
195241-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
195241-007			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-001			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-002			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
QC391012	BLANK			Water		
QC391013	BS			Water		
QC391014	BSD			Water		
QC391171	MS	of 195241-003		Water		
QC391172	MSD	of 195241-003		Water		
QC391267	MS	of 195247-006		Water		
QC391268	MSD	of 195247-006		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 125982
Date Started: 6/6/07
Prep Chemist: KSB

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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195191-004 O	24.0	20x/50x	S	
2	195192-001 A	.96	1x		
3	-002 A	1.32			
4	-003 E	.84			
5	-004 E	.78			
6	195226-001 B	.21			
7	-002	1.23			
8	-003	1.37	5x/1x		
9	-004	1.44	5x/1x		
10	195241-002 G	4.70	2x		
11	-003 G	2.14	1x/40x		MSS
12	-004 I	.85	1x/5x		
13	-006 H	.75	1x		
14	-007 C	4.68	2x		
15	195247-001 A	1.76	1x		
16	-002	2.12	1x		
17	-006	13.50	100x/1000x		MSS
18	Blank 391012	N/A	N/A	N/A	
19	BS 013				
20	BSD 014				
	MS 171	2.14	20x	S	
	MSD 172	2.14	20x		
	MS 267	13.50	200x		
	MSD 268	13.50	200x		

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x MDW 4/19/07	KSB 6/9/07
BS/BSD Spiked with	.2 mL of :	SG107	
MS/MSD Spiked with	.1 mL of :	SG107	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10650522	

KSB 6/11/07

KSB 6/9/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CR 6/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126059
Date Started: 07-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, SULFATE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	CHLORIDE, NITRATE, SULFATE	18-JUN-2007
195265-001			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-002			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-003			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-006			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195270-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-007			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, SULFATE	19-JUN-2007
195270-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
QC391314	BLANK			Water	NITRATE	
QC391315	BS			Water	NITRATE	
QC391316	BSD			Water	NITRATE	
QC391337	MS	of 195234-001		Water		
QC391338	MSD	of 195234-001		Water		
QC391437	MS	of 195270-007		Water		
QC391438	MSD	of 195270-007		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126069
Date Started: 6/7/05
Prep Chemist: KSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195234-001 AD	.16	1x	S	MSS
2	195241-004 I	.85	5x		
3	195265-001 F	3.15	5x/100x		
4	-002	3.21	5x/100x		
5	-003	1.89	1x/100x		
6	195276-003 B	.99	1x/10x		
7	-007 B	1.74	1x/50x		MSS
8	-008 B	1.74	1x/50x		
9	-010 J	.77	1x/10x		
10	-011 J	.77	1x/10x		
11	-016 H	3.00	3x/1000x		
12	-017 H	1.00	1x/25x		
13	-018 H	.79	1x/10x		
14	Blank 391314	N/A	1x	N/A	
15	BS 316				
16	BSD 316				
17	MS 337	.16	1x	S	
18	MSD 338	.16	1x		
19	MS 437	1.74	50x		
20	MSD 436	1.74	50x		

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x MDW 4/9/05	KSB 6/9/05
BS/BSD Spiked with	.2 mL of :	5/6/05	
MS/MSD Spiked with	.1 mL of :	5/6/05	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10650522	

KSB 6/9/05
KSB 6/9/05
Extraction Chemist / Date

Continued from page ___
Continued on page ___

6/8/05
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126184
Date Started: 11-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195234-002			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195234-005			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195241-002			Treadwell & Rollo	Water	SULFATE	18-JUN-2007
195241-007			Treadwell & Rollo	Water	SULFATE	18-JUN-2007
195247-001			Treadwell & Rollo	Water	CHLORIDE, SULFATE	18-JUN-2007
195247-002			Treadwell & Rollo	Water	CHLORIDE, SULFATE	18-JUN-2007
QC391785	BLANK			Water		
QC391786	BS			Water		
QC391787	BSD			Water		
QC391870	MS	of 195234-002		Water		
QC391871	MSD	of 195234-002		Water		

: 00272

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 26184
Date Started: 6/11/07
Prep Chemist: MSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195234-002 J	.67	5x	5	MSS
2	↓ -005 H	1.31	20x	↓	
3	195241-002 G	4.70	20x	↓	
4	↓ -007 C	4.69	20x	↓	
5	195247-001 A	1.76	20x	↓	
6	↓ -002 A	2.12	20x	↓	
7	Blank 391785	N/A	1x	N/A	
8	BS 786	↓	↓	↓	
9	BSD 787	↓	↓	↓	
10	MS 870	.67	5x	5	
11	MSD ↓ 871	.67	5x	↓	
12					
13					
14					
15					
16					
17					MSB 6/12/07
18					
19					
20					

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	10ex MDW 4/9/07	6/12/07 MSB
BS/BSD Spiked with	.2 mL of :	SG107	↓
MS/MSD Spiked with	.1 mL of :	SG107	↓
Filters Used:	Ag: OnGuard II Ag	NA	↓
	Na: OnGuard II Na		↓
	P: OnGuard II P		↓
	RP: OnGuard II RP		↓
	S: 0.20um/0.45um	Acrodisc #10650522	↓

MSB 6/12/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

RM 6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126213
Date Started: 12-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195179-003			LFR Levine Fricke	Water	CHLORIDE	11-JUN-2007
195241-002			Treadwell & Rollo	Water	FLUORIDE	18-JUN-2007
195241-007			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195310-001			Morton Salt	Water	CHLORIDE, SULFATE	20-JUN-2007
195358-001			Blasland, Bouck &	Water	FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-002			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-003			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-004			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-005			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-006			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-007			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-008			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195358-009			Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	18-JUN-2007
195361-002			PES Environmental,	Water	CHLORIDE, NITRATE, SULFATE	18-JUN-2007
QC391925	BLANK			Water		
QC391926	BS			Water		
QC391927	BSD			Water		
QC392109	MS	of 195358-009		Water		
QC392110	MSD	of 195358-009		Water		

: 002714

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126213
Date Started: 6/12/07
Prep Chemist: MSB

BK 2488
Page 88

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195174-003 A	2.75	50x	S	
2	195241-002 G	4.70	50x	↓	
3	↓ -007 C	4.68	50x	↓	
4	195366-001 C	.12	1x	↓	
5	-002	.07	↓	↓	
6	-003	.18	↓	↓	
7	-004	.24	↓	↓	
8	-005	.39	↓	↓	
9	-006	.09	↓	↓	
10	-007	.12	↓	↓	
11	-008	.12	↓	↓	
12	↓ -009 ↓	.02	↓	↓	MSS
13	195361-002 I	2.57	100x	↓	
14	Blank 391925	NA	1x	NA	
15	BS ↓ 926	↓	↓	↓	
16	BSD ↓ 927	↓	↓	↓	
17	MS 392109	.02	↓	S	
18	MSD ↓ 110	.02	↓	↓	
19					
20					
					MSB 6/13/07

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100x ADW 4/9/07	MSB 6/14/07
BS/BSD Spiked with	.2 mL of :	5G107	↓
MS/MSD Spiked with	.1 mL of :	5G107	↓
Filters Used:	Ag: OnGuard II Ag	NA	↓
	Na: OnGuard II Na	↓	↓
	P: OnGuard II P	↓	↓
	RP: OnGuard II RP	↓	↓
	S: 0.20um/0.45um	Acrodisc #10650522	↓

MSB 6/13/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

RJ 6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/27/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	Lab ID	Result	RL
231GW09	SAMPLE	195241-004	ND	0.04
231GW28	SAMPLE	195241-005	ND	0.04
	BLANK	QC391812	ND	0.04

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
231GW20	MS	195234-001	QC391813	<0.04000	0.2667	0.2240	84	75-125		
231GW20	MSD	195234-001	QC391814		0.2667	0.2202	83	75-125	2	20
231GW13	MS	195234-003	QC391815	<0.04000	0.2667	0.2051	77	75-125		
231GW13	MSD	195234-003	QC391816		0.2667	0.2041	77	75-125	0	20
	LCS		QC391817		0.2667	0.2442	92	75-125		

RPD= Relative Percent Difference

: 00278

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	**06/12/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/12/07**
Wavelength:	626 nm	Batch:	**126192**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1486	0.2442	0.2668	92%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1463	0.2405	0.2668	90%	90 - 110%
CCB	0.0026	0.0043	0.0000		
CCV	0.1479	0.2431	0.2668	91%	90 - 110%
CCB	0.0012	0.0020	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: 126192
Prep Date: 06/12/07
Analysis Date: 06/12/07
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1486		**0.24424**	0.040	0.0500	40.0000	0.2667	**92**	
195234-1	7.5000	1.0000	0.0003		**ND**	0.040					
195234-1ms	7.5000	1.0000	0.1363		**0.22402**	0.040	0.0500	40.0000	0.2667	**84**	
195234-1msd	7.5000	1.0000	0.1340		**0.22024**	0.040	0.0500	40.0000	0.2667	**83**	**2**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

195234-3	7.5000	1.0000	0.0093		**ND**	0.040					
195234-3ms	7.5000	1.0000	0.1248		**0.20512**	0.040	0.0500	40.0000	0.2667	**77**	
195234-3msd	7.5000	1.0000	0.1242		**0.20414**	0.040	0.0500	40.0000	0.2667	**77**	**0**
195234-2	7.5000	1.0000	0.0093		**ND**	0.040					
195234-4	7.5000	1.0000	0.0106		**ND**	0.040					
195234-5	7.5000	1.0000	0.0086		**ND**	0.040					
195241-4	7.5000	1.0000	0.0080		**ND**	0.040					
195241-5	7.5000	1.0000	0.0079		**ND**	0.040					
195270-10	7.5000	1.0000	0.0045		**ND**	0.040					
195270-11	7.5000	1.0000	0.0047		**ND**	0.040					

6-12-07

Date : 6/12/2007 Time : 11:12:31

Concentration Results

Date: 6/12/2007 Time: 10:52:52 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 126192.RCO
Autozero performed: 6/12/2007 10:52:41 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
626.0	0.0	ICBMB	0.0000	1.0000	0.0000	mg/L	
626.0	0.0	~~CCVLCS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	
626.0	0.0	CCVLCS	0.1486	1.0000	0.2259	mg/L	
626.0	0.0	~~234-1~~	~~0.0460~~	~~1.0000~~	~~0.0700~~	~~mg/L~~	
626.0	0.0	~~234-1~~	~~0.0468~~	~~1.0000~~	~~0.0711~~	~~mg/L~~	
626.0	0.0	234-1	0.0003	1.0000	0.0004	mg/L	
626.0	0.0	234-1MS	0.1363	1.0000	0.2073	mg/L	
626.0	0.0	234-1MSD	0.1340	1.0000	0.2038	mg/L	
626.0	0.0	234-2	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	234-3	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	~~234-3MS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	
626.0	0.0	234-3MS	0.1248	1.0000	0.1898	mg/L	
626.0	0.0	234-3MSD	0.1242	1.0000	0.1889	mg/L	
626.0	0.0	234-4	0.0106	1.0000	0.0161	mg/L	
626.0	0.0	~~CCV~~	~~0.1456~~	~~1.0000~~	~~0.2214~~	~~mg/L~~	
626.0	0.0	CCV	0.1463	1.0000	0.2225	mg/L	
626.0	0.0	~~CCB~~	~~0.0101~~	~~1.0000~~	~~0.0153~~	~~mg/L~~	
626.0	0.0	CCB	0.0026	1.0000	0.0040	mg/L	
626.0	0.0	234-5	0.0086	1.0000	0.0131	mg/L	
626.0	0.0	241-4	0.0080	1.0000	0.0122	mg/L	
626.0	0.0	241-5	0.0079	1.0000	0.0120	mg/L	
626.0	0.0	270-10	0.0045	1.0000	0.0069	mg/L	
626.0	0.0	270-11	0.0047	1.0000	0.0071	mg/L	
626.0	0.0	CCV	0.1479	1.0000	0.2249	mg/L	
626.0	0.0	CCB	0.0012	1.0000	0.0019	mg/L	
626.0	0.0	sam20	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam21	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam22	0.0000	1.0000	0.0000*	mg/L	Sample skipped

DW 6-12-07

CALIBRATION

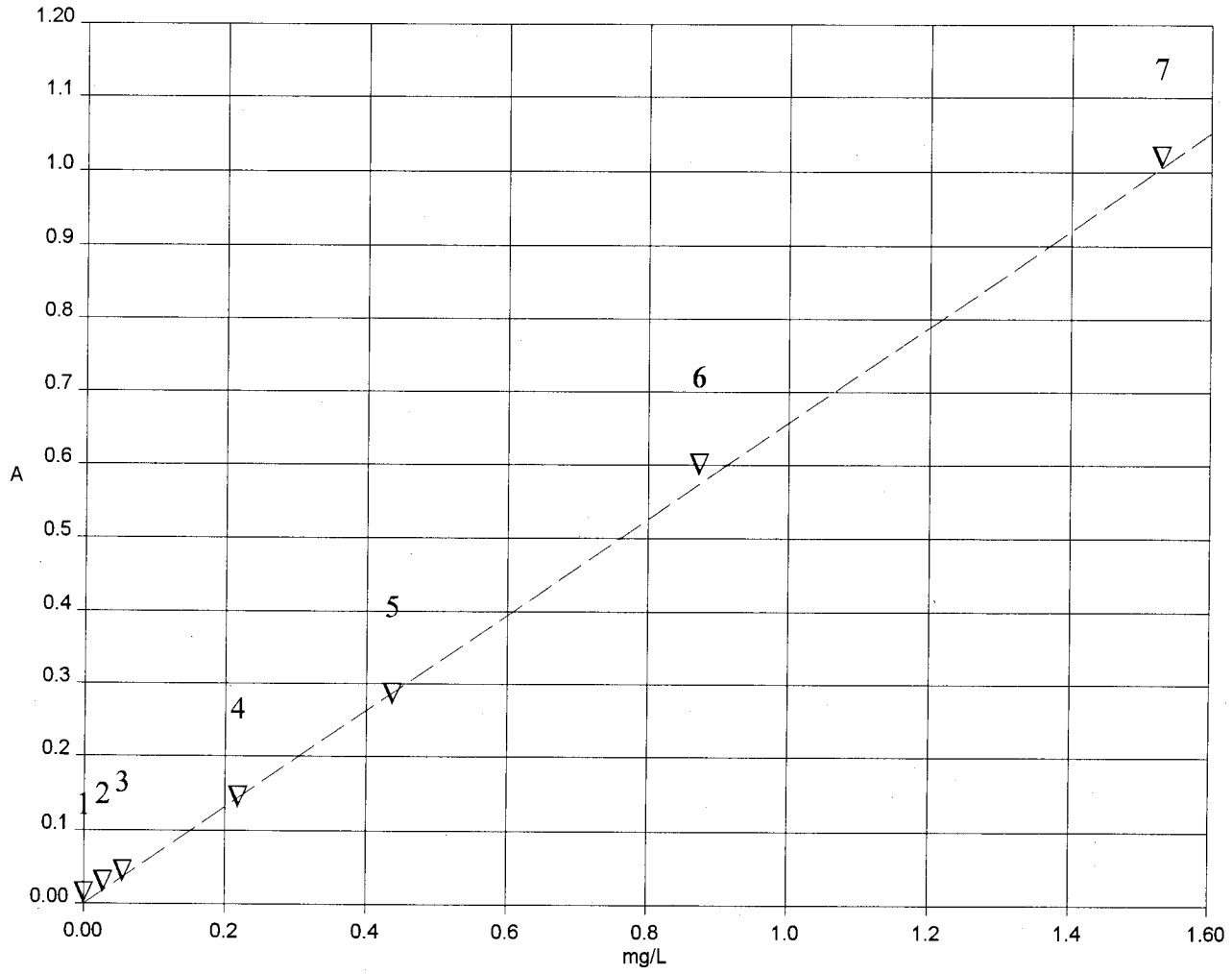
Date: 6/12/2007 Time: 10:52:42 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
626.0	0.0	ss1106.A01	0.0000	mg/L	0.0000	
626.0	0.0	ss1106.A02	0.0270	mg/L	0.0150	
626.0	0.0	ss1106.A03	0.0550	mg/L	0.0301	
626.0	0.0	ss1106.A04	0.2180	mg/L	0.1302	
626.0	0.0	ss1106.A05	0.4370	mg/L	0.2716	
626.0	0.0	ss1106.A06	0.8730	mg/L	0.5861	
626.0	0.0	ss1106.A07	1.5290	mg/L	1.0054	

Equation: y = 6.576329e-01 * x

Residual error: 0.010105
Correlation coefficient: 0.999641

Calibration Curve



Spectrum Name: SULFIDE

Description: y = 6.576329e-01 * x

Comments: RE = 1.010533e-02, CC = 9.996406e-01

Date Created: Thu Nov 16 09:51:35 2006

PROJECT 195234 Treadwell 195241, 195270 Notebook No. Bk 2506
Continued From Page

Sulfide EPA 376.2 B 126192

Sample	Vol (ml)	Final Vol (ml)	ABS
195234-1	7.5	7.5	.0003
-1MS			.1363
-1MSD			.1340
-2			.0093
-3			.0093
-3MS	+.05ml (40 mg/L from 0955292)	S²-std.	.1248
-3MSD	same as MS		.1242
-4			.0106
-5			.0086
195241-4			.0080
-5			.0079
195270-10			.0045
-11			.0047
ICB/MB			.0000
ICV/LCS	same as MS		.1486
CCV			.1463
CCB			.0026
CCV			.1479
CCB			.0012

S² std.
≈.4g 0955292 + 50ml DI H2O
1.0ml S² .1250
5.0ml I, .025N -.075
3.0ml S_2O_3, .025N .050×16000 / 1.0ml = 800.0mg/L

1:20 = 40.0mg/L
.05 — 7.5 = .2668 mg/L

Continued on Page
Read and Understood By

Dm 6.12.07 Dmp 6/14/07
Signed Date Witnessed Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126192
Date Started: 12-JUN-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-002			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-003			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195270-010			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
195270-011			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
QC391812	BLANK			Water	SULFIDE	
QC391813	MS	of 195234-001		Water	SULFIDE	
QC391814	MSD	of 195234-001		Water	SULFIDE	
QC391815	MS	of 195234-003		Water	SULFIDE	
QC391816	MSD	of 195234-003		Water	SULFIDE	
QC391817	LCS			Water	SULFIDE	

Curtis & Tompkins, Ltd.

Analysis:	Sulfide	Analysis Date:	1/24/2007
Method:	EPA 376.2	Analyst:	SY
Instrument:	**Perkin-Elmer Spectrometer**		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.0821
Units:	mg/L
1	0.06624
2	0.06476
3	0.06180
4	0.06328
5	0.05769
6	0.06295
7	0.05670
Average:	0.062
Std Deviation:	0.0035307
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0111** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS

✓ PKW 2/28/07

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/12/07
Batch#:	126214		

Field ID	Type	Lab ID	Result	RL	Diln Fac
LF4GW103	SAMPLE	195241-002	2,940	11	1.111
LF4GW104	SAMPLE	195241-003	1,120	10	1.000
231GW09	SAMPLE	195241-004	470	10	1.000
231GW28	SAMPLE	195241-005	410	10	1.000
DUP0605073A	SAMPLE	195241-007	2,790	10	1.000
	BLANK	QC391928	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

47.0

00299

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195241	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126214
Matrix:	Water	Analyzed:	06/12/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received
	BS		QC391929		100.0	84.00		84	75-126			1.000		
	BSD		QC391930		100.0	102.0		102	75-126	19	21	1.000		
ZZZZZZZZZZ	SDUP	195276-002	QC391935	29,180		29,980	100.0			3	24	10.00	06/07/07	06/07/07
231GW20	SDUP	195234-001	QC392734	42.00		68.00	10.00			47 *	24	1.000	06/05/07	06/06/07
231GW13	SDUP	195234-003	QC392735	814.0		858.0	10.00			5	24	1.000	06/05/07	06/06/07
LF4GW104	SDUP	195241-003	QC392736	1,116		1,206	10.00			8	24	1.000	06/05/07	06/06/07
BB3GW100	SDUP	195247-006	QC392737	756.0		812.0	10.00			7	24	1.000	06/05/07	06/06/07

*= Value outside of QC limits; see narrative
RL= Reporting Limit
RPD= Relative Percent Difference

48.0

Curtis & Tompkins, Ltd.

00288

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWWW 2540C	Analysis Date:	**12-Jun-07**
Matrix:	Water	Batch #:	**126214**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	58.2136	58.2140	0.0004	ND	10					
BS	50	1	55.1973	55.2015	0.0042	84.0	10	1,000	5	100	**84**	
BSD	50	1	54.5464	54.5515	0.0051	102.0	10	1,000	5	100	**102**	**19.35**
195234-001	50	1	56.4345	56.4366	0.0021	42.0	10					
SDUP	50	1	51.6893	51.6927	0.0034	68.0	10					**47.27 ***
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10					
SDUP	50	1	53.7581	53.8010	0.0429	858.0	10					**5.26**
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10					
SDUP	50	1	56.5424	56.6027	0.0603	1,206.0	10					**7.75**
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10					
SDUP	50	1	58.2072	58.2478	0.0406	812.0	10					**7.14**
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100					
SDUP	5	10	29.0120	29.1619	0.1499	29,980.0	100					**2.70**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195234-001	50	1	56.4345	56.4362	0.0017	34.0	10
195234-002	50	1	56.1267	56.1476	0.0209	418.0	10
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10
195234-004	50	1	51.5206	51.5251	0.0045	90.0	10
195234-005	50	1	53.7383	53.7803	0.0420	840.0	10
195241-002	45	1.111	50.6462	50.7785	0.1323	2,940.0	11
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10
195241-004	50	1	55.0726	55.0959	0.0233	466.0	10
195241-005	50	1	53.4748	53.4954	0.0206	412.0	10
195241-007	50	1	54.0442	54.1836	0.1394	2,788.0	10
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100
195276-003	5	10	26.0931	26.2058	0.1127	22,540.0	100
195276-004	5	10	25.4312	25.5414	0.1102	22,040.0	100
195276-005	50	1	55.1482	55.2264	0.0782	1,564.0	10
195276-006	50	1	54.9902	55.0785	0.0883	1,766.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMP 6/18/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126214

Prep Date: 6/12/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **56**

Filter Mfg/ Lot#: Env. Exp. 655758
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/12/07	6/13/07	6/13/07	6/13/07	6/13/07	6/13/07
Time:	15:15	8:00	9:50	10:50	11:45	12:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	G5	58.2136	58.2140	58.2140	X
	BS		↓	GEE	55.1973	55.2019	55.2015	X
	BSD		↓	G44	54.5464	54.5527	54.5520	54.5515
	195234-1 S	150.5	50	G00D	56.4345	56.4366	56.4362	X
5	SDUP -1 ↓	↓	↓	GIVE	51.6893	51.6931	51.6917	51.6932
	-2 G	612	↓	GOP	56.1267	56.1476	56.1476	X
	-3 S	1320	↓	G41	54.1641	54.2058	54.2048	X
	SDUP -3 ↓	↓	↓	G43	53.7581	53.8007	53.8010	X
	-4 I	151.4	↓	GRIP	51.5206	51.5259	51.5248	51.5251
10	-5 G	1364	↓	G55	53.7383	53.7808	53.7803	X
	195241-2 B	4030	45	ELF	50.6462	50.7788	50.7785	X
	-3 A	1809	50	PET	58.3177	58.3744	58.3731	58.3735
	SDUP-3 ↓	↓	↓	G1A	56.5424	56.6029	56.6027	X
	-4 G	694	↓	GRAZE	55.0926	55.0962	55.0959	X
15	-5 ↓	630	↓	G42	53.4748	53.4959	53.4954	X
	-7 B	3820	↓	G38	54.0442	54.1860	54.1840	54.1836
	195247-6 H	1290	50	GULF	58.3492	58.3897	58.3887	58.3904
	SDUP-6 ↓	↓	↓	GAVEL	58.2072	58.2504	58.2489	58.2473
	195276-2 B	35,100	5	OAMO	27.4540	27.5977	27.6003	27.5899
20	SDUP-2 ↓	↓	↓	LA	29.0120	29.1592	29.1623	29.1619
	-3 A	27,600	↓	7	26.0931	26.2040	26.2060	26.2058
	-4 B	26,200	↓	BOMB	25.4312	25.5403	25.5419	25.5414
	-5 A	2670	50	G34	55.1482	55.2379	55.2369	55.2264
	-6 V	2690	↓	G40	54.9902	55.0786	55.0785	X

* Constant weight must be within 0.0005 from previous reading.

6/12/07
Analyst / Date

6/13/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 12621Y cont 4

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2421**
Page: **57**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	6/13/07	6/14/07	6/14/07	6/18/07		
Time:	13:50	9:30	10:30	9:00		
Temp (C):	180	180	180	180		

	Sample #/ Letter	EC Value (uS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	X							
	X							
	X							
	X							
5	51.6927	X						
	X							
	X							
	X							
	X							
10	X							
	X							
	X							
	X							
	X							
15	X							
	X							
	58.3871	58.3870	X					
	58.2478	X						
	X							
20	X							
	X							
	X							
	X							
	X							

* Constant weight must be within 0.0005 from previous reading.

6/13/07
Analyst / Date

6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126214
Date Started: 12-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-007			Treadwell & Rollo	Water	TDS	18-JUN-2007
195247-006			Treadwell & Rollo	Water	TDS	18-JUN-2007
195276-002			Innovative Technic	Water	TDS	13-JUN-2007
195276-003			Innovative Technic	Water	TDS	13-JUN-2007
195276-004			Innovative Technic	Water	TDS	13-JUN-2007
195276-005			Innovative Technic	Water	TDS	13-JUN-2007
195276-006			Innovative Technic	Water	TDS	13-JUN-2007
QC391928	BLANK			Water	TDS	
QC391929	BS			Water	TDS	
QC391930	BSD			Water	TDS	
QC391935	SDUP	of 195276-002		Water	TDS	
QC392734	SDUP	of 195234-001		Water	TDS	
QC392735	SDUP	of 195234-003		Water	TDS	
QC392736	SDUP	of 195241-003		Water	TDS	
QC392737	SDUP	of 195247-006		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195247

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID
BB1PZ100	195247-001
BB1PZ101	195247-002
LF10GW01	195247-003
LF10GW02	195247-004
LF10SP01	195247-005
BB3GW100	195247-006
TB0605071A	195247-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/27/2007
Project Manager

Signature: _____ Date: 06/28/2007
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195247**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/06/07**
Samples Received:	**06/06/07**

This hardcopy data package contains sample and QC results for seven water samples, requested for the above referenced project on 06/06/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
The TEPH extract was analyzed by GC/MS to assist in identifying the anomalous hydrocarbon pattern observed with sample LF10SP01 (lab # 195247-005). Of significance in this qualitative analysis of the extract, were three compounds: hexacosane (this is the surrogate used for the TEPH extraction), alpha-pinene, and aromadendrene; no other identifiable detections were observed. The latter two compounds are of a chemical class called terpenoids. These chemicals are naturally occuring, but are most often associated with a plant's innate pesticide production capability. This analysis of the TEPH extract is qualitative only; calibration of the compounds using known standards would be required to both confirm the identity of the chemicals observed, and to quantify levels in the water. No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
Low response was observed for carbon disulfide in the ICV analyzed 05/31/07 21:26; this analyte was not detected at or above the RL in the associated samples. High response was observed for vinyl acetate in the CCV analyzed 06/07/07 12:02; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Pesticides (EPA 8081A):
Low surrogate recoveries were observed for decachlorobiphenyl in BB1PZ100 (lab # 195247-001) and BB1PZ101 (lab # 195247-002); the corresponding TCMX surrogate recoveries were within limits. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of FM14EX07GW101 (lab # 195270-013); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

#
58.1

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195247**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/06/07**
Samples Received:	**06/06/07**

Metals (EPA 6020 and EPA 7470A) Water:
High % difference was observed for vanadium in the serial dilution of LF4GW104 (lab # 195241-003). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
High % difference was observed for vanadium in the serial dilution of LF4GW104 (lab # 195241-003); this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
Low response was observed for fluoride in the CCV analyzed 06/11/07 13:53; affected data was qualified with "b". High response was observed for nitrogen, nitrate in the CCV analyzed 06/11/07 23:04; affected data was qualified with "b". High recoveries were observed for fluoride in the MS/MSD of BB3GW100 (lab # 195247-006); the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
High RPD was observed for total dissolved solids in the SDUP of 231GW20 (lab # 195234-001). No other analytical problems were encountered.

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58.1

Curtis & Tompkins, Ltd.

Chain of Custody

195247

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2156
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS R. Cornish
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Diss. Metals 22						COMMENTS / NOTES
-1	BB1PZ100	6/5/07	0930			X				2		6		X	X		X	X	X	X		X							
-2	BB1PZ101		1034			X				2		6		X	X		X	X	X	X		X							
-3	LF10GW01		1240			X		9				3	X	X	X														MS/MSD
-4	LF10GW02		1210			X		3				1	X	X	X														
-5	LF10SP01		1135			X		3				1	X	X	X														
-6	BB3GW100		1445			X				3		6					X				X		X						MS/MSD
-7	TB060507 1A		—			X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (**13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (**9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (**8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (**3** - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 6/6/07	RECEIVED BY: [signature]	DATE: 6/6/7
PRINT NAME: D. Cornish FIRM: BTS	TIME: 1400	PRINT NAME: AARON GREULER FIRM: C&T	TIME: 1400
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195247 Date Received: 6/6/07 Number of Coolers: 5
Client: Treadwell & Rollo Project: Presidio of SF

A. Preliminary Examination Phase
Date Opened: 6/6/07 By (print): S. Montecalvo (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 7-lid of coolers Seal date: 6/6/07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 5.3°, 2.3°, 3.9°, 3.7°, 2.6°

B. Login Phase
Date Logged In: 6/6/07 By (print): S. Montecalvo (sign) [signature]

1. Describe type of packing in cooler: ziplock bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126089
Units:	ug/L	Sampled:	06/05/07
Diln Fac:	1.000	Received:	06/06/07

Field ID:	LF10GW01	Lab ID:	195247-003
Type:	SAMPLE	Analyzed:	06/09/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	116	65-135

Field ID:	LF10GW02	Lab ID:	195247-004
Type:	SAMPLE	Analyzed:	06/09/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	111	65-135

Field ID:	LF10SP01	Lab ID:	195247-005
Type:	SAMPLE	Analyzed:	06/09/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	109	65-135

Type:	BLANK	Analyzed:	06/08/07
Lab ID:	QC391451		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	98	65-135

ND= Not Detected
RL= Reporting Limit

20.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391453	Batch#:	126089
Matrix:	Water	Analyzed:	06/08/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,862	93	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	65-135
Bromofluorobenzene (FID)	108	65-135

21.0

00009

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW01	Batch#:	126089
MSS Lab ID:	195247-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/09/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391454

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<15.96	2,000	1,808	90	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	65-135
Bromofluorobenzene (FID)	129	65-135

Type: MSD Lab ID: QC391455

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,693	85	65-135	7	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	126	65-135
Bromofluorobenzene (FID)	127	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCVOA Water: EPA 8015B

Inst : GC04
Calnum : 307209896001
Units : ng

Name : gc04gasoline145
Date : 26-MAY-2007 06:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	145_018	307209896018	TVH 1	26-MAY-2007 06:03	S5937 (1000X), S6108 (5000X)
L2	145_019	307209896019	TVH 2	26-MAY-2007 06:41	S5936 (1000X), S6108 (5000X)
L3	145_020	307209896020	TVH 3	26-MAY-2007 07:19	S5935 (1000X), S6108 (5000X)
L4	145_021	307209896021	TVH 4	26-MAY-2007 07:57	S5934 (2000X), S6108 (5000X)
L5	145_022	307209896022	TVH 5	26-MAY-2007 08:35	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	r^2 MnR^2	MxRSD	Flg
Gasoline C7-C12	A	5812.4	4598.9	4121.4	4408.3	4162.4	AVRG		2.16E-4		4620.7	15	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	26	2500	0	10000	-11	25000	-5	50000	-10

Analyst: MJM Date: 05/30/07 Reviewer: CW Date: 06/01/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Name : gc04gasoline145
Calnum : 307209896001 Cal Date : 26-MAY-2007

ICV 307209896024 (145_024 26-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	4620.7	4321.0	10000	9352	ng	-6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC04
Calnum : 307216985002
Units : ng

Name : GC04 TFT/BFB 150
Date : 31-MAY-2007 11:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	150_018	307216985018	TFT/BFB_1	31-MAY-2007 11:19	S5951 (5000X)
L2	150_019	307216985019	TFT/BFB_2	31-MAY-2007 11:58	S5952 (5000X)
L3	150_020	307216985020	TFT/BFB_3	31-MAY-2007 12:50	S5953 (5000X)
L4	150_021	307216985021	TFT/BFB_4	31-MAY-2007 13:28	S5954 (5000X)
L5	150_022	307216985022	TFT/BFB_5	31-MAY-2007 14:17	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	3434.1	3849.1	3671.5	3538.0	3490.3	AVRG		2.78E-4		3596.6	5	0.995	20	
Bromofluorobenzene (FID)	A	2182.3	2394.4	2260.1	2154.4	2170.6	AVRG		4.48E-4		2232.4	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	-5	225.0	7	450.0	2	675.0	-2	950.0	-3
Bromofluorobenzene (FID)	A	150.0	-2	225.0	7	450.0	1	675.0	-3	950.0	-3

Analyst: JCP Date: 05/31/07 Reviewer: CW Date: 06/01/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : QC391453 IDF : 1.0
Seqnum : 307229799003.7 File : 159_003 Time : 08-JUN-2007 15:15
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4301.9	10000	9310	ng	-7	15	u
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4085.7	450.0	511.2	ng	14	15	u
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2419.8	450.0	487.8	ng	8	15	u

MJM 06/11/07 : PID surrogates are not applicable. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

u=use

307229799003.7

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : BTXE IDF : 1.0
Seqnum : 307229799017.1 File : 159_017 Time : 09-JUN-2007 00:52
Cal : 307216985002 Caldate : 31-MAY-2007
Standards: S5943 (666.7X), S6435 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	3596.6	4103.5	450.0	513.4	ng	14	15	
Bromofluorobenzene (FID)	A	2232.4	2525.0	450.0	509.0	ng	13	15	

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307229799018.1 File : 159_018 Time : 09-JUN-2007 01:30
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4205.8	15000	13650	ng	-9	15	
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4552.8	450.0	569.6	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2702.9	450.0	544.9	ng	**21**	15	c+

MJM 06/11/07 : PID surrogates are not applicable. [general version]

MJM 06/11/07 [Trifluorotoluene (FID) A]: Passes 72-135% control limits. [general version]

MJM 06/11/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

307229799018.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307229799034.1 File : 159_034 Time : 09-JUN-2007 11:36
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4322.5	20000	18710	ng	-6	15	
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4517.6	450.0	565.2	ng	**26**	15	c+
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2886.7	450.0	581.9	ng	**29**	15	c+

MJM 06/11/07 : PID surrogates are not applicable. [general version]

MJM 06/11/07 [Trifluorotoluene (FID) A]: Passes 72-135% control limits. [general version]

MJM 06/11/07 [Bromofluorobenzene (FID) A]: Passes 78-131% control limits. [general version]

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307229799036.1 File : 159_036 Time : 09-JUN-2007 12:52
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4122.9	20000	17850	ng	-11	15	
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4569.0	450.0	571.7	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2851.3	450.0	574.8	ng	**28**	15	c+

LW 06/18/07 : Surrogates pass control limits.

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

307229799036.1

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCVOA Water
EPA 8015B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307229799040.1 File : 159_040 Time : 09-JUN-2007 15:23
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4236.9	15000	13750	ng	-8	15	
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4531.3	450.0	566.9	ng	**26**	15	c+
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2759.9	450.0	556.3	ng	**24**	15	c+

LW 06/18/07 : Surrogates pass control limits.

Analyst: MJM Date: 06/15/07 Reviewer: LH Date: 06/15/07

+=high bias c=CCV

307229799040.1

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307209896

Instrument : GC04 Begun : 05/25/07 18:16
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
002	145_002	X	TEST			05/25/07 18:16	1.0	1 2	
016	145_016	X	IB			05/26/07 04:48	1.0	2	
017	145_017	X	IB			05/26/07 05:26	1.0	2	
018	145_018	ICAL	TVH 1			05/26/07 06:03	1.0	3 2	
019	145_019	ICAL	TVH 2			05/26/07 06:41	1.0	4 2	
020	145_020	ICAL	TVH 3			05/26/07 07:19	1.0	5 2	
021	145_021	ICAL	TVH 4			05/26/07 07:57	1.0	6 2	
022	145_022	ICAL	TVH 5			05/26/07 08:35	1.0	6 2	
023	145_023	X	IB			05/26/07 09:13	1.0	2	
024	145_024	ICV	TVH			05/26/07 09:51	1.0	7 2	
025	145_025	ICV	TVH			05/26/07 10:29	1.0	7 2	
026	145_026	X	IB			05/26/07 11:06	1.0	2	
027	145_027	CMARKER				05/26/07 11:44	1.0	8 9 2	

MJM 05/30/07 : Maintenance performed 5/25/06 and BTXE calibration run from 145_003 to 145_016. BTXE cal. not used due to faulty PID Lamp.

Analyst: MJM Date: 05/30/07 Reviewer: CW Date: 06/01/07

Standards used: 1=S6305 2=S6108 3=S5937 4=S5936 5=S5935 6=S5934 7=S6066 8=S1646 9=S1645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307216985

Instrument : GC04 Begun : 05/30/07 16:25
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	150_001	X	IB			05/30/07 16:25	1.0	1	
002	150_002	X	IB			05/30/07 17:03	1.0	1	
003	150_003	ICAL	BTXE_1			05/30/07 17:41	1.0	2 1	
004	150_004	X	BTXE_2			05/30/07 18:19	1.0	3 1	
005	150_005	ICAL	BTXE_3			05/30/07 18:57	1.0	3 1	
006	150_006	ICAL	BTXE_4			05/30/07 19:35	1.0	3 1	
007	150_007	ICAL	BTXE_5			05/30/07 20:13	1.0	4 1	
008	150_008	ICAL	BTXE_6			05/30/07 20:51	1.0	4 1	
009	150_009	ICAL	BTXE_7			05/30/07 21:28	1.0	4 1	
010	150_010	ICAL	MTBE_7			05/30/07 22:06	1.0	5 1	
011	150_011	X	IB			05/30/07 22:44	1.0	1	
012	150_012	X	ICV			05/30/07 23:22	1.0	6 1	
013	150_013	X	ICV			05/31/07 00:00	1.0	6 1	
014	150_014	X	IB			05/31/07 08:32	1.0	1	
015	150_015	ICAL	BTXE_2			05/31/07 09:10	1.0	3 1	
016	150_016	ICV	MBTXE			05/31/07 09:47	1.0	6 1	
017	150_017	X	IB			05/31/07 10:41	1.0	1	
018	150_018	ICAL	TFT/BFB_1			05/31/07 11:19	1.0	7	
019	150_019	ICAL	TFT/BFB_2			05/31/07 11:58	1.0	8	
020	150_020	ICAL	TFT/BFB_3			05/31/07 12:50	1.0	9	
021	150_021	ICAL	TFT/BFB_4			05/31/07 13:28	1.0	10	
022	150_022	ICAL	TFT/BFB_5			05/31/07 14:17	1.0	11	

Analyst: JCP Date: 05/31/07 Reviewer: CW Date: 06/01/07

Standards used: 1=S6108 2=S6305 3=S6304 4=S6303 5=S6302 6=S6204 7=S5951 8=S5952 9=S5953 10=S5954 11=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307229799

Instrument : GC04 Begun : 06/08/07 13:59
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	159_001	X	CMARK			06/08/07 13:59	1.0	1 2	
002	159_002	X	CCV			06/08/07 14:37	1.0	3 2	
003	159_003	CCV/LCS	QC391453	Water	126089	06/08/07 15:15	1.0	4 2	
004	159_004	CCV/LCS	QC391452	Water	126089	06/08/07 16:11	1.0	3 2	
005	159_005	CCV	AVGAS			06/08/07 17:17	1.0	5 2	
006	159_006	CCV	AVGAS			06/08/07 17:55	1.0	5 2	
007	159_007	X	IB			06/08/07 18:33	1.0	2	
008	159_008	BLANK	QC391451	Water	126089	06/08/07 19:11	1.0	2	
009	159_009	SAMPLE	195092-004	Water	126089	06/08/07 19:49	1.0	2	
010	159_010	SAMPLE	195123-003	Water	126089	06/08/07 20:27	1.0	2	headspace > 1 mL, 1:BR4FBZ-FID=960
011	159_011	SAMPLE	195123-004	Water	126089	06/08/07 21:05	1.0	2	
012	159_012	SAMPLE	195148-002	Water	126089	06/08/07 21:43	1.0	2	
013	159_013	SAMPLE	195148-003	Water	126089	06/08/07 22:21	1.0	2	
014	159_014	SAMPLE	195148-004	Water	126089	06/08/07 22:59	1.0	2	
015	159_015	SAMPLE	195148-005	Water	126089	06/08/07 23:37	1.0	2	
016	159_016	X	TVH			06/09/07 00:14	1.0	4 2	
017	159_017	CCV	BTXE			06/09/07 00:52	1.0	3 2	
018	159_018	CCV	TVH			06/09/07 01:30	1.0	4 2	
019	159_019	X	BTXE			06/09/07 02:08	1.0	3 2	
020	159_020	CCV	AVGAS			06/09/07 02:46	1.0	5 2	
021	159_021	X	AVGAS			06/09/07 03:24	1.0	5 2	
022	159_022	X	CMARK			06/09/07 04:02	1.0	1 2	
023	159_023	MS	QC391454	Water	126089	06/09/07 04:40	1.0	4 2	
024	159_024	MSD	QC391455	Water	126089	06/09/07 05:18	1.0	4 2	
025	159_025	SAMPLE	195267-002	Water	126089	06/09/07 05:56	1.0	2	pH > 2
026	159_026	SAMPLE	195267-003	Water	126089	06/09/07 06:34	1.0	2	pH > 2
027	159_027	SAMPLE	195267-004	Water	126089	06/09/07 07:11	1.0	2	pH > 2
028	159_028	SAMPLE	195267-005	Water	126089	06/09/07 07:49	1.0	2	pH > 2
029	159_029	SAMPLE	195267-006	Water	126089	06/09/07 08:27	1.0	2	
030	159_030	X	IB			06/09/07 09:05	1.0	2	
031	159_031	SAMPLE	195253-001	Water	126089	06/09/07 09:43	1.0	2	
032	159_032	SAMPLE	195253-002	Water	126089	06/09/07 10:21	1.0	2	
033	159_033	MSS	195247-003	Water	126089	06/09/07 10:59	1.0	2	
034	159_034	CCV	TVH			06/09/07 11:36	1.0	4 2	
035	159_035	CCV	BTXE			06/09/07 12:14	1.0	3 2	
036	159_036	CCV	TVH			06/09/07 12:52	1.0	4 2	
037	159_037	CCV	BTXE			06/09/07 13:30	1.0	3 2	
038	159_038	SAMPLE	195247-004	Water	126089	06/09/07 14:08	1.0	2	
039	159_039	SAMPLE	195247-005	Water	126089	06/09/07 14:46	1.0	2	
040	159_040	CCV	TVH			06/09/07 15:23	1.0	4 2	
041	159_041	CCV	TVH			06/09/07 16:01	1.0	4 2	

Analyst: MJM Date: 06/11/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S5943 4=S6393 5=S5629

REPORTING SUMMARY FOR 195247 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
195247-003	GC04	06/09/07 10:59	1.0	+		+	+	
195247-004	GC04	06/09/07 14:08	1.0	+		+	+	
195247-005	GC04	06/09/07 14:46	1.0	+		+	+	
QC391451	GC04	06/08/07 19:11	1.0	+		+	+	
QC391452	GC04	06/08/07 16:11	1.0					
QC391453	GC04	06/08/07 15:15	1.0	+		+	+	
QC391454	GC04	06/09/07 04:40	1.0	+		+	+	
QC391455	GC04	06/09/07 05:18	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/11/07
Batch#:	126168		

Field ID: BB1PZ100 Analyzed: 06/14/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 195247-001

Analyte	Result	RL
Diesel C12-C24	140 H Y	50
Motor Oil C24-C36	760	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID: BB1PZ101 Analyzed: 06/14/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 195247-002

Analyte	Result	RL
Diesel C12-C24	57 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Field ID: LF10GW01 Analyzed: 06/13/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 195247-003

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

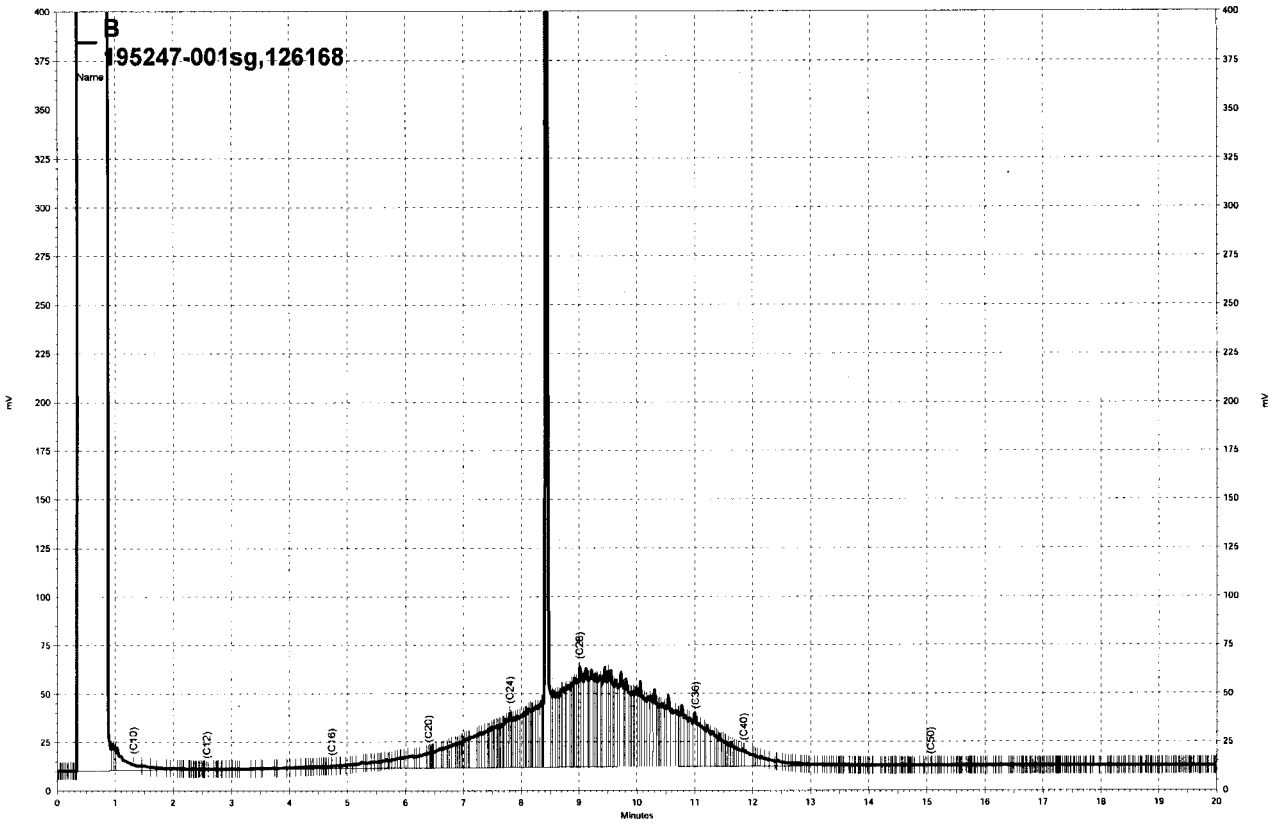
Field ID: LF10GW02 Analyzed: 06/13/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 195247-004

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

42.0



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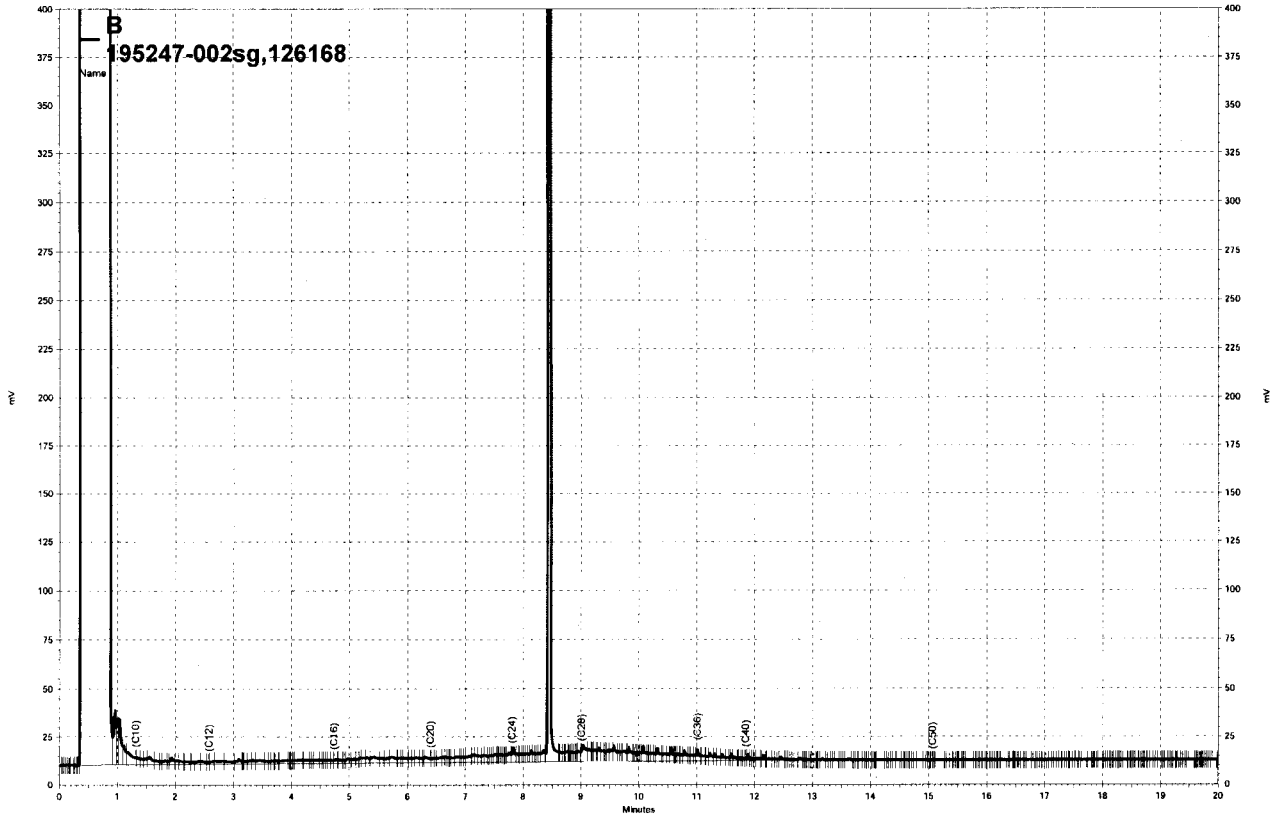
BB1PZ100



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BB1PZ101

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/11/07
Batch#:	126168		

Field ID:	LF10SP01	Analyzed:	06/13/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195247-005		

Analyte	Result	RL
Diesel C12-C24	210 Y Z	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

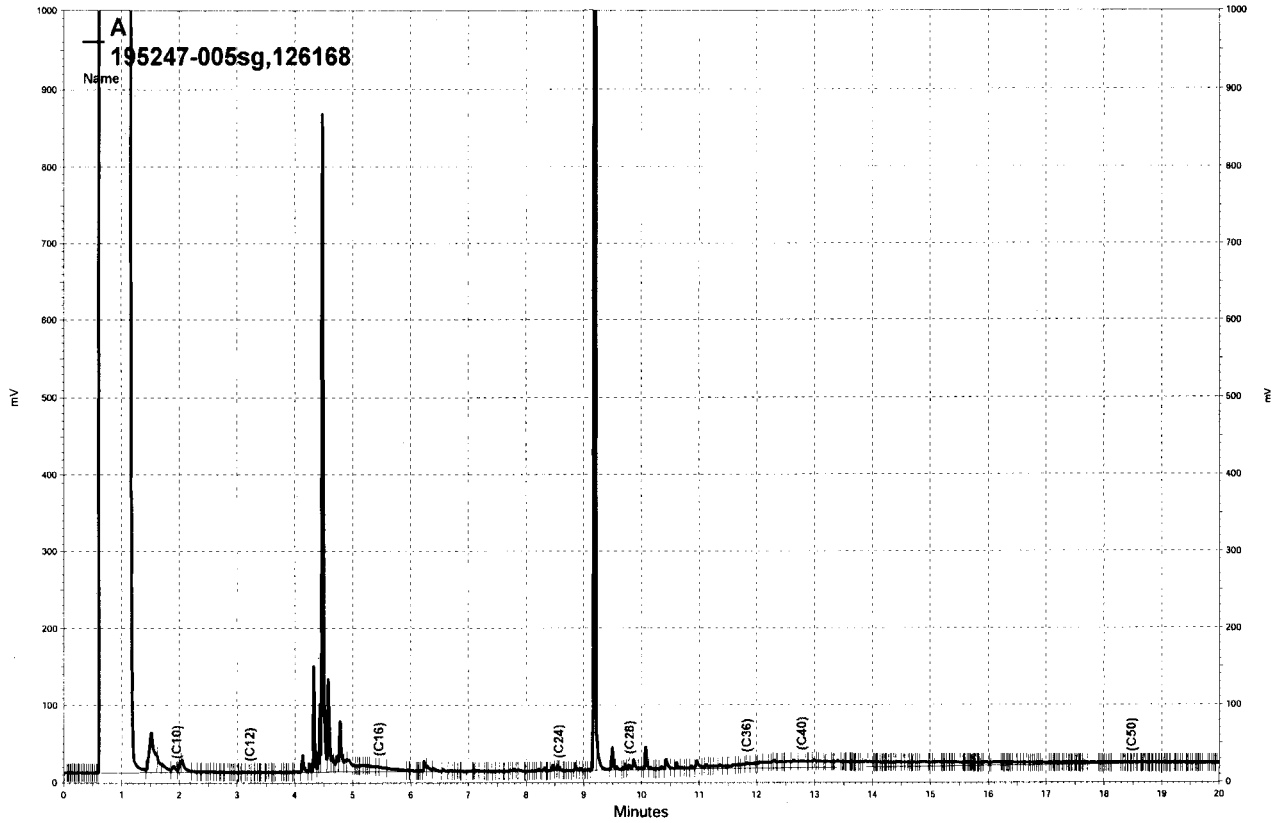
Type:	BLANK	Analyzed:	06/13/07
Lab ID:	QC391726	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	127	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

42.0



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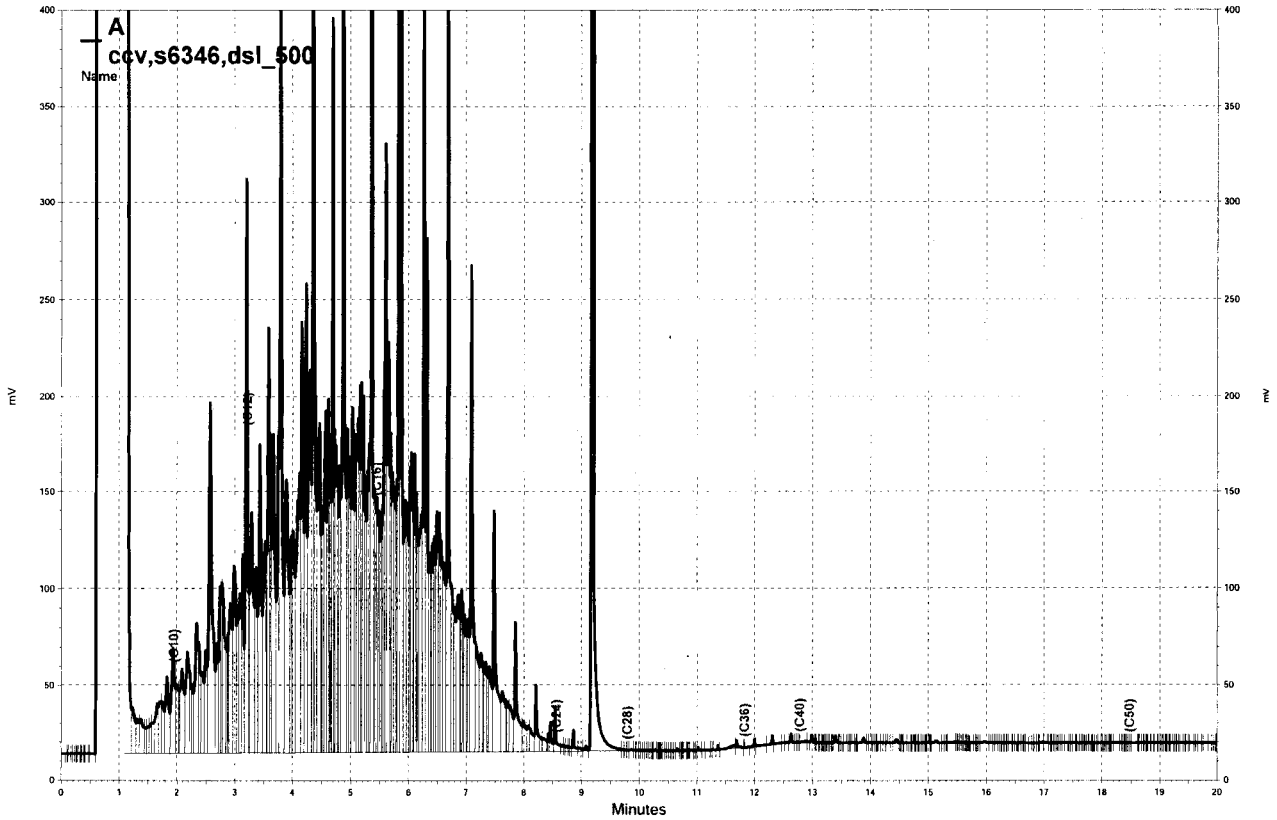
LF10SP01



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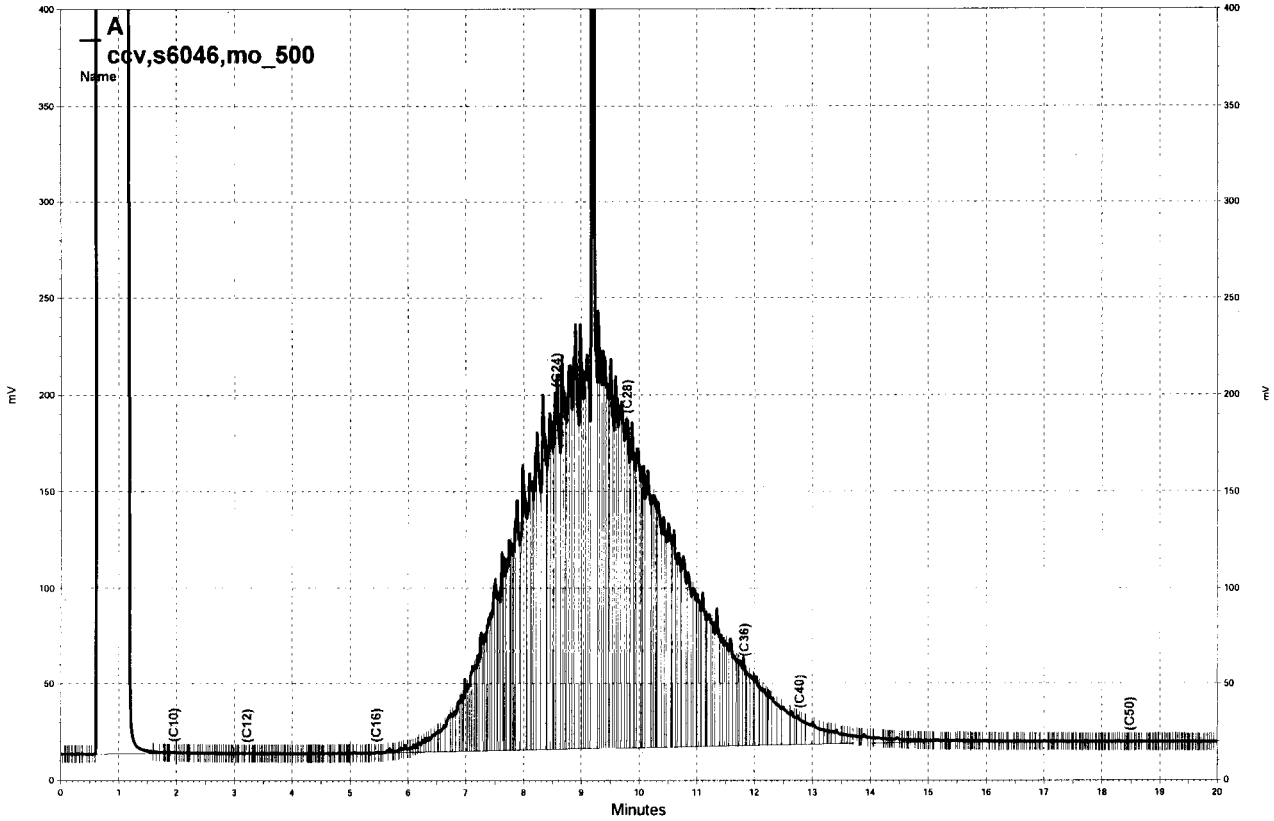
DIESEL



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MOTOR OIL

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391727	Batch#:	126168
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,644	106	65-135

Surrogate	%REC	Limits
Hexacosane	113	65-135

43.0

: 99933

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW01	Batch#:	126168
MSS Lab ID:	195247-003	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC391730

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,405	96	65-135

Surrogate	%REC	Limits
Hexacosane	105	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC391731

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,161	86	65-135	11	35

Surrogate	%REC	Limits
Hexacosane	92	65-135

RPD= Relative Percent Difference

44.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227227958001
Units : mg/L

Name : hexacosane
Date : 07-JUN-2007 11:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	158_010	227227958010	HEX_5	07-JUN-2007 11:30	S5751
L2	158_011	227227958011	HEX_10	07-JUN-2007 11:58	S5752
L3	158_012	227227958012	HEX_25	07-JUN-2007 12:25	S5753
L4	158_013	227227958013	HEX_50	07-JUN-2007 12:53	S5754
L5	158_014	227227958014	HEX_100	07-JUN-2007 13:21	S5755
L6	158_015	227227958015	HEX_200	07-JUN-2007 13:49	S5756

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	76011	73432	72003	72193	70728	72862	AVRG		1.37E-5		72871	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	5.000	4	10.00	1	25.00	-1	50.00	-1	100.0	-3	200.0	0

Analyst: CP Date: 06/07/07 Reviewer: CW Date: 06/08/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227227958001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118001
Units : mg/L

Name : DSL
Date : 16-APR-2007 22:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a010	177153118010	DSL_10	16-APR-2007 22:16	S5413
L2	106a011	177153118011	DSL_100	16-APR-2007 22:43	S5414
L3	106a012	177153118012	DSL_500	16-APR-2007 23:10	S5416
L4	106a013	177153118013	DSL_1000	16-APR-2007 23:38	S5417
L5	106a014	177153118014	DSL_5000	17-APR-2007 00:04	S5411
L6	106a015	177153118015	DSL_7500	17-APR-2007 00:32	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	71898	64898	73238	68474	66312	67917	AVRG		1.45E-5		68789	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	5	100.0	-6	500.0	6	1000	0	5000	-4	7500	-1

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177153118001

Name : DSL
Cal Date : 16-APR-2007

ICV 177153118017 (106a017 17-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	68789	68119	500.0	495.1	mg/L	-1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118002
Units : mg/L

Name : MO
Date : 17-APR-2007 02:47
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a020	177153118020	MO_50	17-APR-2007 02:47	S5523
L2	106a021	177153118021	MO_250	17-APR-2007 03:14	S5524
L3	106a022	177153118022	MO_500	17-APR-2007 03:41	S5525
L4	106a023	177153118023	MO_1000	17-APR-2007 04:09	S5526
L5	106a024	177153118024	MO_5000	17-APR-2007 04:35	S5522
L6	106a025	177153118025	MO_7500	17-APR-2007 05:02	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	42522	55240	53936	51516	47937	46757	AVRG		2.01E-5		49651	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-14	250.0	11	500.0	9	1000	4	5000	-3	7500	-6

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118003
Units : mg/L

Name : Hexacosane
Date : 17-APR-2007 05:57
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a027	177153118027	HEX_5	17-APR-2007 05:57	S5751
L2	106a028	177153118028	HEX_10	17-APR-2007 06:24	S5752
L3	106a029	177153118029	HEX_25	17-APR-2007 06:52	S5753
L4	106a030	177153118030	HEX_50	17-APR-2007 07:19	S5754
L5	106a031	177153118031	HEX_100	17-APR-2007 07:46	S5755
L6	106a032	177153118032	HEX_200	17-APR-2007 08:14	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	85626	79939	79901	77537	75605	82966	AVRG		1.25E-5		80262	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	7	10.00	0	25.00	0	50.00	-3	100.0	-6	200.0	3

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227236647004 File : 164_004 Time : 13-JUN-2007 09:34
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66745	500.0	514.3	mg/L	3	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	81334	50.00	55.81	mg/L	12	15	

DLM: 06/13/07 ATL: 06/13/07 MMP: 06/14/07

227236647004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647005 File : 164_005 Time : 13-JUN-2007 10:21
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	48917	500.0	532.2	mg/L	6	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79393	50.00	54.47	mg/L	9	15	

DLM: 06/13/07 ATL: 06/13/07 MMP: 06/14/07

227236647005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B
Seqnum : 227236647018
Standards: S6347

Run Name : DSL_1000
File : 164_018

IDF : 1.0
Time : 13-JUN-2007 16:32

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65185	1000	1004	mg/L	0	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	80136	50.00	54.98	mg/L	10	15	

DLM: 06/14/07 LH: 06/14/07 MMP: 06/14/07

227236647018

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647019 File : 164_019 Time : 13-JUN-2007 17:00
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	43894	500.0	477.5	mg/L	-4	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	72127	50.00	49.49	mg/L	-1	15	

DLM: 06/14/07 LH: 06/14/07 MMP: 06/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227236647023 File : 164_023 Time : 13-JUN-2007 18:51
Standards: S6345

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66221	250.0	255.1	mg/L	2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	78652	50.00	53.97	mg/L	8	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647024 File : 164_024 Time : 13-JUN-2007 19:19
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	48182	500.0	524.2	mg/L	5	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79896	50.00	54.82	mg/L	10	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647024

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227236647043 File : 164_043 Time : 14-JUN-2007 04:46
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	59531	500.0	458.7	mg/L	-8	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	71856	50.00	49.30	mg/L	-1	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647043

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227236647044 File : 164_044 Time : 14-JUN-2007 05:14
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	43314	500.0	471.2	mg/L	-6	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	70818	50.00	48.59	mg/L	-3	15	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/14/07

227236647044

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 177236639004 File : 164a004 Time : 13-JUN-2007 09:21
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	70194	500.0	510.2	mg/L	2	15	
Hexacosane	177153118003	17-APR-2007	80262	91956	50.00	57.28	mg/L	15	15	

Analyst: DLM Date: 06/13/07 Reviewer: CW Date: 06/13/07

177236639004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177236639005 File : 164a005 Time : 13-JUN-2007 09:49
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	50520	500.0	508.8	mg/L	2	15	
Hexacosane	177153118003	17-APR-2007	80262	81391	50.00	50.70	mg/L	1	15	

Analyst: DLM Date: 06/13/07 Reviewer: CW Date: 06/13/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 177236639019 File : 164a019 Time : 13-JUN-2007 16:27
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	67115	250.0	243.9	mg/L	-2	15	
Hexacosane	177153118003	17-APR-2007	80262	85983	50.00	53.56	mg/L	7	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

177236639019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177236639020 File : 164a020 Time : 13-JUN-2007 16:54
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	50494	500.0	508.5	mg/L	2	15	
Hexacosane	177153118003	17-APR-2007	80262	82290	50.00	51.26	mg/L	3	15	

DLM: 06/14/07 LH: 06/14/07 CW: 06/15/07

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177153118

Instrument : GC17A
Method : EPA 8015B

Begun : 04/16/07 07:58
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	106a001	X	PRIMER			04/16/07 07:58	1.0		
002	106a002	X	IB			04/16/07 08:25	1.0		
003	106a003	X	DSL_500			04/16/07 08:53	1.0	1	
004	106a004	X	MO_500			04/16/07 09:20	1.0	2	
005	106a005	X	IB			04/16/07 10:07	1.0		
006	106a006	X				04/16/07 10:34	1.0	3	
007	106a007	IB	CALIB			04/16/07 20:54	1.0		
008	106a008	CMARKER	C8-C50			04/16/07 21:22	1.0	3	
009	106a009	IB	CALIB			04/16/07 21:49	1.0		
010	106a010	ICAL	DSL_10			04/16/07 22:16	1.0	4	
011	106a011	ICAL	DSL_100			04/16/07 22:43	1.0	5	
012	106a012	ICAL	DSL_500			04/16/07 23:10	1.0	6	
013	106a013	ICAL	DSL_1000			04/16/07 23:38	1.0	7	
014	106a014	ICAL	DSL_5000			04/17/07 00:04	1.0	8	
015	106a015	ICAL	DSL_7500			04/17/07 00:32	1.0	9	
016	106a016	IB	CALIB			04/17/07 00:59	1.0		
017	106a017	ICV	DSL_500			04/17/07 01:26	1.0	10	
018	106a018	X	ICV			04/17/07 01:53	1.0	10	
019	106a019	IB	CALIB			04/17/07 02:20	1.0		
020	106a020	ICAL	MO_50			04/17/07 02:47	1.0	11	
021	106a021	ICAL	MO_250			04/17/07 03:14	1.0	12	
022	106a022	ICAL	MO_500			04/17/07 03:41	1.0	13	
023	106a023	ICAL	MO_1000			04/17/07 04:09	1.0	14	
024	106a024	ICAL	MO_5000			04/17/07 04:35	1.0	15	
025	106a025	ICAL	MO_7500			04/17/07 05:02	1.0	16	
026	106a026	IB	CALIB			04/17/07 05:30	1.0		
027	106a027	ICAL	HEX_5			04/17/07 05:57	1.0	17	
028	106a028	ICAL	HEX_10			04/17/07 06:24	1.0	18	
029	106a029	ICAL	HEX_25			04/17/07 06:52	1.0	19	
030	106a030	ICAL	HEX_50			04/17/07 07:19	1.0	20	
031	106a031	ICAL	HEX_100			04/17/07 07:46	1.0	21	
032	106a032	ICAL	HEX_200			04/17/07 08:14	1.0	22	
033	106a033	IB	CALIB			04/17/07 08:41	1.0		
034	106a034	ICAL	JP5_10			04/17/07 09:09	1.0	23	
035	106a035	ICAL	JP5_100			04/17/07 09:36	1.0	24	
036	106a036	ICAL	JP5_500			04/17/07 10:04	1.0	25	
037	106a037	ICAL	JP5_1500			04/17/07 10:31	1.0	26	
038	106a038	ICAL	JP5_5000			04/17/07 10:58	1.0	27	
039	106a039	IB	CALIB			04/17/07 11:25	1.0		

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Standards used: 1=S5731 2=S5734 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S5521 17=S5751 18=S5752 19=S5753 20=S5754 21=S5755 22=S5756 23=S5858 24=S5857 25=S5856 26=S5855 27=S5853

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177236639

Instrument : GC17A
Method : EPA 8015B

Begun : 06/13/07 07:59
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164a001	X	PRIMER				06/13/07 07:59	1.0		
002	164a002	X	IB				06/13/07 08:27	1.0		
003	164a003	X	CMARKER				06/13/07 08:54	1.0	1	
004	164a004	CCV	DSL_500				06/13/07 09:21	1.0	2	
005	164a005	CCV	MO_500				06/13/07 09:49	1.0	3	
006	164a006	SAMPLE	195215-013	S	Soil	126127	06/13/07 10:21	2.0		2:BUNKC:12-50=14000
007	164a007	SAMPLE	195269-007	S	Soil	126190	06/13/07 10:49	5.0		2:BUNKC:12-40=9000
008	164a008	SAMPLE	195269-007		Soil	126190	06/13/07 11:25	5.0		2:BUNKC:12-40=10000
009	164a009	X	IB				06/13/07 11:52	1.0		
010	164a010	MSS	195269-002	S	Soil	126190	06/13/07 12:20	10.0		3:BUNKC:12-40=16000
011	164a011	SAMPLE	195269-011	S	Soil	126190	06/13/07 12:47	20.0		3:BUNKC:12-40=15000
012	164a012	SAMPLE	195269-003	S	Soil	126190	06/13/07 13:15	40.0		2:BUNKC:12-40=13000
013	164a013	X	IB				06/13/07 13:42	1.0		
014	164a014	SAMPLE	195247-004	S	Water	126168	06/13/07 14:10	1.0		
015	164a015	SAMPLE	195247-005	S	Water	126168	06/13/07 14:37	1.0		
016	164a016	SAMPLE	195344-001	S	Water	126206	06/13/07 15:05	1.0		
017	164a017	SAMPLE	195344-002	S	Water	126206	06/13/07 15:32	1.0		
018	164a018	X	IB				06/13/07 16:00	1.0		
019	164a019	CCV	DSL_250				06/13/07 16:27	1.0	4	
020	164a020	CCV	MO_500				06/13/07 16:54	1.0	3	
021	164a021	MSS	195234-001	S	Water	126206	06/13/07 17:23	1.0		
022	164a022	MS	QC391883	S	Water	126206	06/13/07 17:50	1.0		
023	164a023	MSD	QC391884	S	Water	126206	06/13/07 18:18	1.0		
024	164a024	MSS	195234-003	S	Water	126206	06/13/07 18:45	1.0		
025	164a025	MS	QC391885	S	Water	126206	06/13/07 19:12	1.0		
026	164a026	MSD	QC391886	S	Water	126206	06/13/07 19:40	1.0		
027	164a027	X	IB				06/13/07 20:07	1.0		
028	164a028	BLANK	QC391881		Water	126206	06/13/07 20:35	1.0		
029	164a029	SAMPLE	195329-001		Water	126206	06/13/07 21:02	1.0		
030	164a030	SAMPLE	195234-002	S	Water	126206	06/13/07 21:29	1.0		
031	164a031	SAMPLE	195234-004	S	Water	126206	06/13/07 21:57	1.0		
032	164a032	X	IB				06/13/07 22:24	1.0		
033	164a033	X	CMARKER				06/13/07 22:51	1.0	1	
034	164a034	CCV	DSL_1000				06/13/07 23:19	1.0	5	
035	164a035	CCV	MO_500				06/13/07 23:46	1.0	3	
036	164a036	X	CCV				06/14/07 00:13	1.0	5	
037	164a037	X	CCV				06/14/07 00:41	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6345 5=S6347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	079_001	X	IB			03/20/07 10:30	1.0		
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1	
003	079_003	X	MO_500			03/20/07 11:26	1.0	2	
005	079_005	X	IB			03/20/07 12:53	1.0		
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1	
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2	
008	079_008	X	PRIMER			03/20/07 14:26	1.0		
009	079_009	X	PRIMER			03/20/07 14:54	1.0		
010	079_010	X	IB			03/20/07 15:22	1.0		
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3	
012	079_012	IB	CALIB			03/20/07 16:29	1.0		
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4	
014	079_014	IB	CALIB			03/20/07 17:43	1.0		
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5	
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6	
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7	
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8	
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9	
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10	
021	079_021	IB	CALIB			03/20/07 20:59	1.0		
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11	
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11	
024	079_024	IB	CALIB			03/20/07 22:23	1.0		
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12	
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13	
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14	
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15	
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16	
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17	
031	079_031	IB	CALIB			03/21/07 01:38	1.0		
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18	
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19	
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20	
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21	
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22	
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23	
038	079_038	IB	CALIB			03/21/07 04:54	1.0		

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227227958

Instrument : GC14B
Method : EPA 8015B

Begun : 06/07/07 07:18
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	PRIMER				06/07/07 07:18	1.0		
002	158_002	X	IB				06/07/07 07:46	1.0		
003	158_003	CMARKER	C8-50				06/07/07 08:14	1.0	1	
004	158_004	X	DSL_500				06/07/07 08:42	1.0	2	
005	158_005	X	MO_500				06/07/07 09:10	1.0	3	
006	158_006	X	DSL_1000				06/07/07 09:38	1.0	4	
007	158_007	X	MO_500				06/07/07 10:06	1.0	3	
008	158_008	X	IB				06/07/07 10:34	1.0		
009	158_009	IB	CALIB				06/07/07 11:02	1.0		
010	158_010	ICAL	HEX_5				06/07/07 11:30	1.0	5	
011	158_011	ICAL	HEX_10				06/07/07 11:58	1.0	6	
012	158_012	ICAL	HEX_25				06/07/07 12:25	1.0	7	
013	158_013	ICAL	HEX_50				06/07/07 12:53	1.0	8	
014	158_014	ICAL	HEX_100				06/07/07 13:21	1.0	9	
015	158_015	ICAL	HEX_200				06/07/07 13:49	1.0	10	
016	158_016	X	IB				06/07/07 15:30	1.0		
017	158_017	CCV	DSL_500				06/07/07 15:57	1.0	2	
018	158_018	CCV	MO_500				06/07/07 16:25	1.0	3	
019	158_019	BLANK	QC391198		Soil	126033	06/07/07 18:02	1.0		
020	158_020	MSS	195079-001		Soil	126033	06/07/07 18:30	1.0		
021	158_021	MS	QC391200		Soil	126033	06/07/07 18:58	1.0		
022	158_022	MSD	QC391201		Soil	126033	06/07/07 19:26	1.0		
023	158_023	SAMPLE	195256-001		Soil	126033	06/07/07 19:54	1.0		
024	158_024	SAMPLE	195230-003		Soil	126033	06/07/07 20:21	1.0		11:BUNKC:12-40=36000
025	158_025	X	IB				06/07/07 20:49	1.0		
026	158_026	SAMPLE	195217-002	S	Water	126010	06/07/07 21:17	1.0		
027	158_027	SAMPLE	195217-004	S	Water	126010	06/07/07 21:45	1.0		
028	158_028	SAMPLE	195217-005	S	Water	126010	06/07/07 22:12	1.0		
029	158_029	SAMPLE	195217-006	S	Water	126010	06/07/07 22:40	1.0		
030	158_030	X	IB				06/07/07 23:08	1.0		
031	158_031	X	CMARKER				06/07/07 23:36	1.0	1	
032	158_032	CCV	DSL_250				06/08/07 00:03	1.0	11	
033	158_033	CCV	MO_500				06/08/07 00:31	1.0	3	
034	158_034	X	CCV				06/08/07 00:59	1.0	11	
035	158_035	X	CCV				06/08/07 01:26	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S5751 6=S5752 7=S5753 8=S5754 9=S5755 10=S5756 11=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227236647

Instrument : GC14B
Method : EPA 8015B

Begun : 06/13/07 08:07
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	164_001	X	PRIMER				06/13/07 08:07	1.0		
002	164_002	X	IB				06/13/07 08:35	1.0		
003	164_003	X	CMARKER				06/13/07 09:06	1.0	1	
004	164_004	CCV	DSL_500				06/13/07 09:34	1.0	2	
005	164_005	CCV	MO_500				06/13/07 10:21	1.0	3	
006	164_006	LCS	QC391727	S	Water	126168	06/13/07 10:57	1.0		
007	164_007	BLANK	QC391726	S	Water	126168	06/13/07 11:25	1.0		
008	164_008	BLANK	QC391726		Water	126168	06/13/07 11:53	1.0		
009	164_009	SAMPLE	195321-008		Water	126168	06/13/07 12:21	1.0		
010	164_010	X	IB				06/13/07 12:48	1.0		
011	164_011	MSS	195231-002	S	Water	126168	06/13/07 13:16	1.0		
012	164_012	MS	QC391728	S	Water	126168	06/13/07 13:44	1.0		
013	164_013	MSD	QC391729	S	Water	126168	06/13/07 14:12	1.0		
014	164_014	MSS	195247-003	S	Water	126168	06/13/07 14:40	1.0		
015	164_015	MS	QC391730	S	Water	126168	06/13/07 15:08	1.0		
016	164_016	MSD	QC391731	S	Water	126168	06/13/07 15:36	1.0		
017	164_017	X	IB				06/13/07 16:04	1.0		
018	164_018	CCV	DSL_1000				06/13/07 16:32	1.0	4	
019	164_019	CCV	MO_500				06/13/07 17:00	1.0	3	
020	164_020	SAMPLE	195267-006	S	Water	126206	06/13/07 17:28	1.0		
021	164_021	SAMPLE	195321-009		Water	126206	06/13/07 17:56	1.0		
022	164_022	X	CMARKER				06/13/07 18:24	1.0	1	
023	164_023	CCV	DSL_250				06/13/07 18:51	1.0	5	
024	164_024	CCV	MO_500				06/13/07 19:19	1.0	3	
025	164_025	X	CCV				06/13/07 19:47	1.0	5	
026	164_026	X	CCV				06/13/07 20:15	1.0	3	
027	164_027	CCV	HYFL_1250				06/13/07 21:20	1.0	6	
028	164_028	X	CCV				06/13/07 21:47	1.0	6	
029	164_029	X	IB				06/13/07 22:16	1.0		
030	164_030	BLANK	QC391804		Soil	126190	06/13/07 22:43	1.0		
031	164_031	SAMPLE	195330-007		Soil	126190	06/13/07 23:11	5.0		2:BUNKC:12-40=9800
032	164_032	LCS	QC391882	S	Water	126206	06/13/07 23:39	1.0		
033	164_033	SAMPLE	195316-016	S	Water	126206	06/14/07 00:07	1.0		
034	164_034	SAMPLE	195241-001	S	Water	126168	06/14/07 00:35	1.0		
035	164_035	X	IB				06/14/07 01:03	1.0		
036	164_036	SAMPLE	195241-004	S	Water	126168	06/14/07 01:31	1.0		
037	164_037	SAMPLE	195241-005	S	Water	126168	06/14/07 01:59	1.0		
038	164_038	SAMPLE	195241-006	S	Water	126168	06/14/07 02:27	1.0		
039	164_039	SAMPLE	195247-001	S	Water	126168	06/14/07 02:55	1.0		
040	164_040	SAMPLE	195247-002	S	Water	126168	06/14/07 03:23	1.0		
041	164_041	X	IB				06/14/07 03:50	1.0		
042	164_042	X	CMARKER				06/14/07 04:18	1.0	1	
043	164_043	CCV	DSL_500				06/14/07 04:46	1.0	2	
044	164_044	CCV	MO_500				06/14/07 05:14	1.0	3	
045	164_045	CCV	HYFL_1250				06/14/07 05:42	1.0	6	
046	164_046	X	CCV				06/14/07 06:10	1.0	2	
047	164_047	X	CCV				06/14/07 06:39	1.0	3	
048	164_048	X	CCV				06/14/07 07:07	1.0	6	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S6345 6=S5778

REPORTING SUMMARY FOR 195247 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195247-001	GC15B	06/13/07 15:35	1.0				
195247-001	GC14B	06/14/07 02:55	1.0	+	+	+	
195247-002	GC15B	06/13/07 16:03	1.0				
195247-002	GC14B	06/14/07 03:23	1.0	+	+	+	
195247-003	GC14B	06/13/07 14:40	1.0	+	+	+	
195247-004	GC17A	06/13/07 14:10	1.0	+	+	+	
195247-005	GC17A	06/13/07 14:37	1.0	+	+	+	
QC391726	GC14B	06/13/07 11:25	1.0	+	+	+	
QC391726	GC14B	06/13/07 11:53	1.0				
QC391727	GC14B	06/13/07 10:57	1.0	+		+	
QC391728	GC14B	06/13/07 13:44	1.0				
QC391729	GC14B	06/13/07 14:12	1.0				
QC391730	GC14B	06/13/07 15:08	1.0	+		+	
QC391731	GC14B	06/13/07 15:36	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 126168
Started By : DJT
Method : 3520C
Spike #1 ID : S6349

Prep Date : 11-JUN-2007
Spike #2 ID : S6356

Analysis : TEHM
Finished By : RFW
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195231-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195241-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195241-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195247-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195247-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195321-008		Water	500	2.5	1	0.005	7	.5				TEHM	
QC391726	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC391727	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC391728	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391729	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391730	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	
QC391731	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C	TEHM	

Analyst: DLM Date: 06/14/07 Reviewer: LH Date: 06/18/07

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 126168
LIMS Analysis: TEHM
Date Extracted: 6/11/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195231-002 O	500	7	2.5	X	MSS
195241-001 D					
004 K					
005 J					
006 D					
195247-001 F					
002 F					
003 J					MSS
004 D					
005 D					
195321-008 I					
MB QC 391726		NA		X	
LCS 27					
MS 28		7			195231-002M
MSD 29					
MS 30					195247-003L
MSD 31					

RFW 6/12/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.5 mL of TEH_SURR was added to all samples	S6349D	DJ 6/11/07
0.5 mL of TEH_SP was added to all spikes	S6356C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS 065 076	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2	EM47110	
Extraction Start Time:	1525	
Extraction End Time:	0940	JM 6/12/07
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	RFW 6/12/07
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	0M46283706	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	Refrigerator #9	

Extraction Chemist — Date 6/11/07

Contined from Page ___
Continued on Page ___

Reviewed by — Date 6/12/07

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: RFW
Cleanup Date: 6/12/07

Benchbook # **BK 2520**
Page 4

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195231-002	126168	1.0	1.0	MSS
195241-001				
4				
5				
6				
195247-001				
2				
3				MSS
4				
5				
RFW 6/12/07 QMB QC391726				
LCS 27				
MS 28				
MSD 29				
MS 30				
MSD 31				
				RFW 6/12/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	RFW 6/12/07
☐ Extracts were cleaned up using 1.0 g cartridges	SP8605	
Extracts were eluted with 40 mL CH_2Cl_2	EM7096	
Concentrated to volumes as noted above	✓	

6/12/07
Extraction Chemist / Date

Continued from page —
Continued on page —

6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/27/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

00054

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0605071A	Batch#:	126048
Lab ID:	195247-007	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/07/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

1.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391255	Batch#:	126048
Matrix:	Water	Analyzed:	06/07/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126048
Units:	ug/L	Analyzed:	06/07/07
Diln Fac:	1.000		

Type: BS Lab ID: QC391256

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	13.73	110	65-135
Benzene	12.50	14.08	113	65-135
Trichloroethene	12.50	13.65	109	65-135
Toluene	12.50	14.29	114	65-135
Chlorobenzene	12.50	13.63	109	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	98	86-115

Type: BSD Lab ID: QC391257

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.20	106	65-135	4	35
Benzene	12.50	13.46	108	65-135	4	35
Trichloroethene	12.50	12.97	104	65-135	5	35
Toluene	12.50	13.27	106	65-135	7	35
Chlorobenzene	12.50	13.50	108	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	100	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195247 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 477218189003 File : hev03 Time : 31-MAY-2007 13:17

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	17464	21.12	
75	30.00% - 60.00% of mass 95	39472	47.75	
95		82672		
96	5.00% - 9.00% of mass 95	5881	7.11	
173	< 2.00% of mass 174	677	1.03	
174	> 50.00% and < 100.00% of mass 95	66008	79.84	
175	5.00% - 9.00% of mass 174	4270	6.47	
176	> 95.00% and < 101.00% of mass 174	64920	98.35	
177	5.00% - 9.00% of mass 176	4781	7.36	

Analyst: TEW Date: 05/31/07 Reviewer: LW Date: 06/05/07

477218189003

CURTIS & TOMPKINS BFB TUNE FOR 195247 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 477228007003 File : hf703 Time : 07-JUN-2007 11:33

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	16132	20.25	
75	30.00% - 60.00% of mass 95	33712	42.31	
95		79672		
96	5.00% - 9.00% of mass 95	5703	7.16	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	67152	84.29	
175	5.00% - 9.00% of mass 174	5043	7.51	
176	> 95.00% and < 101.00% of mass 174	65672	97.80	
177	5.00% - 9.00% of mass 176	3915	5.96	

Analyst: TEW Date: 06/07/07 Reviewer: LW Date: 06/08/07

477228007003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 MSVOA Water: EPA 8260B

Inst : MSVOA08
Calnum : 477218189002
Units : ug/L

Name : 826GOX8
Date : 31-MAY-2007 15:05
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hev06	477218189006	0.25/0.5PPB	31-MAY-2007 15:05	S6300 (200000X), S6301 (100000X), S6355 (200000X), S6084 (5000X)
L2	hev07	477218189007	0.5/1PPB	31-MAY-2007 15:43	S6300 (100000X), S6301 (50000X), S6355 (100000X), S6084 (5000X)
L3	hev08	477218189008	2PPB	31-MAY-2007 16:21	S6300 (50000X), S6301 (25000X), S6355 (25000X), S6084 (5000X)
L4	hev09	477218189009	5PPB	31-MAY-2007 17:00	S6300 (20000X), S6301 (10000X), S6355 (10000X), S6084 (5000X)
L5	hev10	477218189010	10PPB	31-MAY-2007 17:38	S6300 (10000X), S6301 (5000X), S6355 (5000X), S6084 (5000X)
L6	hev11	477218189011	20PPB	31-MAY-2007 18:16	S6217 (25000X), S6350 (25000X), S5720 (50000X), S6084 (5000X)
L7	hev12	477218189012	50PPB	31-MAY-2007 18:54	S6217 (10000X), S6350 (10000X), S5720 (20000X), S6084 (5000X)
L8	hev13	477218189013	75PPB	31-MAY-2007 19:32	S6217 (6667X), S6350 (6667X), S5720 (13330X), S6084 (5000X)
L9	hev14	477218189014	100PPB	31-MAY-2007 20:10	S6217 (5000X), S6350 (5000X), S5720 (10000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5911m	0.5682m	0.5151m	0.5381m	0.5743m	0.5272m	0.5013m	0.4887m	AVRG		1.85878		0.5380	7	15	0.10	0.99	
Vinyl Chloride	0.4764m	0.3904m	0.4177m	0.4211m	0.4554m	0.5050m	0.4523m	0.4496	0.4136	AVRG		2.26040		0.4424	8	15	0.05	0.99	
Bromomethane		0.2146m	0.2740m	0.1995m	0.2181m	0.2531m	0.2430m	0.2686m	0.2501m	AVRG		4.16440		0.2401	11	15	0.05	0.99	
Chloroethane		0.2434m	0.2373m	0.2373m	0.2507m	0.2680m	0.2582m	0.2367m	0.2295m	AVRG		4.07936		0.2451	5	15	0.05	0.99	
Acetone				0.1988	0.1953	0.1738	0.1760	0.1400		AVRG		5.65618		0.1768	13	15	0.05	0.99	
1,1-Dichloroethene		0.3074	0.2591	0.2518	0.2741	0.2473	0.2579	0.2533	0.2590	AVRG		3.79143		0.2638	7	15	0.05	0.99	
Methylene Chloride		0.3807	0.3657	0.3643	0.3803	0.3550	0.3783	0.3578	0.3576	AVRG		2.72141		0.3675	3	15	0.05	0.99	
Carbon Disulfide		1.3205	1.2171	1.1654	1.3319	1.1735	1.1898	1.1644	1.1358	AVRG		0.82488		1.2123	6	15	0.05	0.99	
MTBE		0.9539	0.9432	0.9052	0.9683	0.9322	0.9536	0.9444	0.9164	AVRG		1.06422		0.9397	2	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3411	0.3055	0.2992	0.3184	0.2937	0.3045	0.3047	0.3066	AVRG		3.23404		0.3092	5	15	0.05	0.99	
Vinyl Acetate		0.5452	0.7248	0.6503	0.5677	0.7772	0.7197			AVRG		1.50569		0.6641	14	15	0.05	0.99	
1,1-Dichloroethane		0.7119	0.6371	0.6132	0.6598	0.6192	0.6221	0.6112	0.5773	AVRG		1.58357		0.6315	6	15	0.10	0.99	
2-Butanone			0.2582	0.2256	0.2431	0.2286	0.2347	0.2190	0.2145	AVRG		4.31143		0.2319	6	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3507	0.3308	0.3182	0.3466	0.3290	0.3382	0.3360	0.3276	AVRG		2.98821		0.3346	3	15	0.05	0.99	
Chloroform		0.6237	0.5690	0.5508	0.5901	0.5412	0.5679	0.5398	0.5202	AVRG		1.77672		0.5628	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.4104	0.3659	0.3781	0.3994	0.3530	0.3589	0.3484	0.3464	AVRG		2.70216		0.3701	6	15	0.05	0.99	
Carbon Tetrachloride		0.1949	0.1729	0.1646	0.1871	0.1509	0.1576	0.1551	0.1550	AVRG		5.97952		0.1672	10	15	0.05	0.99	
1,2-Dichloroethane		0.2749	0.2815	0.2713	0.2765	0.2615	0.2831	0.2636	0.2508	AVRG		3.69840		0.2704	4	15	0.05	0.99	
Benzene		0.8263	0.7259	0.7098	0.7232	0.6695	0.7137	0.6606	0.6205	AVRG		1.41608		0.7062	9	15	0.05	0.99	
Trichloroethene		0.1855	0.1667	0.1656	0.1818	0.1563	0.1706	0.1643	0.1631	AVRG		5.90908		0.1692	6	15	0.05	0.99	
1,2-Dichloropropane		0.2309	0.2168	0.2188	0.2198	0.2031	0.2164	0.2105	0.1973	AVRG		4.66877		0.2142	5	15	0.05	0.99	
Bromodichloromethane		0.2652	0.2395	0.2362	0.2528	0.2387	0.2634	0.2483	0.2456	AVRG		4.02090		0.2487	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2765	0.2632	0.2829	0.2629	0.2906	0.2628	0.2566	AVRG		3.69284		0.2708	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.2776	0.2862	0.2861	0.3020	0.2807	0.3052	0.3007	0.2854	AVRG		3.44257		0.2905	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4176	0.4019	0.3840	0.4090	0.3538	0.3804	0.3771	0.3644	AVRG		2.59052		0.3860	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2418	0.2634	0.2481	0.2740	0.2531	0.2786	0.2668	0.2607	AVRG		3.83442		0.2608	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.0858	0.0947	0.0900	0.0942	0.0909	0.1015	0.0967	0.0963	AVRG		10.6661		0.0938	5	15	0.05	0.99	
2-Hexanone			0.2260	0.2159	0.2449	0.2230	0.2468	0.2273	0.2196	AVRG		4.36541		0.2291	5	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1684	0.1718	0.1827	0.1461	0.1515	0.1497	0.1621	AVRG		6.04036		0.1656	10	15	0.05	0.99	
Dibromochloromethane		0.2221	0.2154	0.1991	0.2172	0.2053	0.2351	0.2194	0.2320	AVRG		4.58298		0.2182	6	15	0.05	0.99	
Chlorobenzene		0.5786	0.5438	0.5198	0.5442	0.4796	0.5125	0.5006	0.4906	AVRG		1.91863		0.5212	6	15	0.30	0.99	
Ethylbenzene		1.0922	0.9674	0.9391	0.9848	0.8078	0.8147	0.7781	0.7708	AVRG		1.11812		0.8944	13	15	0.05	0.99	
m,p-Xylenes	0.3616	0.3637	0.3512	0.3363	0.3565	0.3009	0.3155	0.3032	0.3033	AVRG		3.00773		0.3325	8	15	0.05	0.99	
o-Xylene		0.3832	0.3126	0.3277	0.3501	0.2999	0.3086	0.3122	0.3099	AVRG		3.07201		0.3255	9	15	0.05	0.99	
Styrene		0.5544	0.5722	0.5546	0.5939	0.5216	0.5677	0.5467	0.5326	AVRG		1.80032		0.5555	4	15	0.05	0.99	
Bromoform		0.0903m	0.1070	0.1280	0.1402	0.1367	0.1611	0.1510	0.1631	LINR	1.31730	6.18683		0.1347	0.998	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6433	0.6754	0.6080	0.6080	0.5982	0.6650	0.6149	0.6229	AVRG		1.58868		0.6295	5	15	0.30	0.99	
Dibromofluoromethane	0.6411	0.6360	0.6456	0.6517	0.6572	0.6591	0.6454	0.6392	0.6249	AVRG		1.55171		0.6445	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4487	0.4367	0.4379	0.4426	0.4358	0.4284	0.4324	0.3931	0.3669	AVRG		2.35449		0.4247	6	15	0.05	0.99	
Toluene-d8	1.0525	1.0398	1.0604	1.0557	1.0131	1.0524	1.0725	1.0614	1.0198	AVRG		0.95465		1.0475	2	15	0.05	0.99	
Bromofluorobenzene	1.1368	1.1723	1.1391	1.1410	1.1208	1.1332	1.1090	1.0938	1.1021	AVRG		0.88687		1.1276	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	10	2.000	6	5.000	-4	10.00	0	20.00	7	50.00	-2	75.00	-7	100.0	-9
Vinyl Chloride	0.500	8	1.000	-12	2.000	-6	5.000	-5	10.00	3	20.00	14	50.00	2	75.00	2	100.0	-7
Bromomethane			1.000	-11	2.000	14	5.000	-17	10.00	-9	20.00	5	50.00	1	75.00	12	100.0	4
Chloroethane			1.000	-1	2.000	-3	5.000	-3	10.00	2	20.00	9	50.00	5	75.00	-3	100.0	-6
Acetone							5.000	12	10.00	10	20.00	-2	50.00	0	75.00	-21		
1,1-Dichloroethene			0.500	17	2.000	-2	5.000	-5	10.00	4	20.00	-6	50.00	-2	75.00	-4	100.0	-2
Methylene Chloride			0.500	4	2.000	0	5.000	-1	10.00	3	20.00	-3	50.00	3	75.00	-3	100.0	-3
Carbon Disulfide			0.500	9	2.000	0	5.000	-4	10.00	10	20.00	-3	50.00	-2	75.00	-4	100.0	-6
MTBE			0.500	2	2.000	0	5.000	-4	10.00	3	20.00	-1	50.00	1	75.00	1	100.0	-2
trans-1,2-Dichloroethene			0.500	10	2.000	-1	5.000	-3	10.00	3	20.00	-5	50.00	-2	75.00	-1	100.0	-1
Vinyl Acetate			0.500	-18	2.000	9	5.000	-2	10.00	-15	20.00	17	50.00	8				
1,1-Dichloroethane			0.500	13	2.000	1	5.000	-3	10.00	4	20.00	-2	50.00	-1	75.00	-3	100.0	-9
2-Butanone					2.000	11	5.000	-3	10.00	5	20.00	-1	50.00	1	75.00	-6	100.0	-8
cis-1,2-Dichloroethene			0.500	5	2.000	-1	5.000	-5	10.00	4	20.00	-2	50.00	1	75.00	0	100.0	-2
Chloroform			0.500	11	2.000	1	5.000	-2	10.00	5	20.00	-4	50.00	1	75.00	-4	100.0	-8
1,1,1-Trichloroethane			0.500	11	2.000	-1	5.000	2	10.00	8	20.00	-5	50.00	-3	75.00	-6	100.0	-6
Carbon Tetrachloride			0.500	17	2.000	3	5.000	-2	10.00	12	20.00	-10	50.00	-6	75.00	-7	100.0	-7
1,2-Dichloroethane			0.500	2	2.000	4	5.000	0	10.00	2	20.00	-3	50.00	5	75.00	-3	100.0	-7
Benzene			0.500	17	2.000	3	5.000	1	10.00	2	20.00	-5	50.00	1	75.00	-6	100.0	-12
Trichloroethene			0.500	10	2.000	-2	5.000	-2	10.00	7	20.00	-8	50.00	1	75.00	-3	100.0	-4
1,2-Dichloropropane			0.500	8	2.000	1	5.000	2	10.00	3	20.00	-5	50.00	1	75.00	-2	100.0	-8
Bromodichloromethane			0.500	7	2.000	-4	5.000	-5	10.00	2	20.00	-4	50.00	6	75.00	0	100.0	-1
4-Methyl-2-Pentanone					2.000	2	5.000	-3	10.00	4	20.00	-3	50.00	7	75.00	-3	100.0	-5
cis-1,3-Dichloropropene			0.500	-4	2.000	-1	5.000	-2	10.00	4	20.00	-3	50.00	5	75.00	4	100.0	-2
Toluene			0.500	8	2.000	4	5.000	-1	10.00	6	20.00	-8	50.00	-1	75.00	-2	100.0	-6
trans-1,3-Dichloropropene			0.500	-7	2.000	1	5.000	-5	10.00	5	20.00	-3	50.00	7	75.00	2	100.0	0
1,1,2-Trichloroethane			0.500	-9	2.000	1	5.000	-4	10.00	1	20.00	-3	50.00	8	75.00	3	100.0	3
2-Hexanone					2.000	-1	5.000	-6	10.00	7	20.00	-3	50.00	8	75.00	-1	100.0	-4
Tetrachloroethene			0.500	16	2.000	2	5.000	4	10.00	10	20.00	-12	50.00	-8	75.00	-10	100.0	-2
Dibromochloromethane			0.500	2	2.000	-1	5.000	-9	10.00	0	20.00	-6	50.00	8	75.00	1	100.0	6
Chlorobenzene			0.500	11	2.000	4	5.000	0	10.00	4	20.00	-8	50.00	-2	75.00	-4	100.0	-6
Ethylbenzene			0.500	22	2.000	8	5.000	5	10.00	10	20.00	-10	50.00	-9	75.00	-13	100.0	-14
m,p-Xylenes	0.500	9	1.000	9	4.000	6	10.00	1	20.00	7	40.00	-9	100.0	-5	150.0	-9	200.0	-9
o-Xylene			0.500	18	2.000	-4	5.000	1	10.00	8	20.00	-8	50.00	-5	75.00	-4	100.0	-5
Styrene			0.500	0	2.000	3	5.000	0	10.00	7	20.00	-6	50.00	2	75.00	-2	100.0	-4
Bromoform			0.500	219	2.000	32	5.000	6	10.00	0	20.00	-9	50.00	2	75.00	-5	100.0	2
1,1,2,2-Tetrachloroethane			0.500	2	2.000	7	5.000	-3	10.00	-3	20.00	-5	50.00	6	75.00	-2	100.0	-1
Dibromofluoromethane	50.00	-1	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	2	50.00	0	50.00	-1	50.00	-3
1,2-Dichloroethane-d4	50.00	6	50.00	3	50.00	3	50.00	4	50.00	3	50.00	1	50.00	2	50.00	-7	50.00	-14
Toluene-d8	50.00	0	50.00	-1	50.00	1	50.00	1	50.00	-3	50.00	0	50.00	2	50.00	1	50.00	-3
Bromofluorobenzene	50.00	1	50.00	4	50.00	1	50.00	1	50.00	-1	50.00	0	50.00	-2	50.00	-3	50.00	-2

TEW 06/04/07 : Fixed spike amount for gases in LIMS for run hev07.

Analyst: TEW Date: 06/04/07 Reviewer: LW Date: 06/05/07

m manual integration

instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 477218189002 Cal Date : 31-MAY-2007 Type : WATER

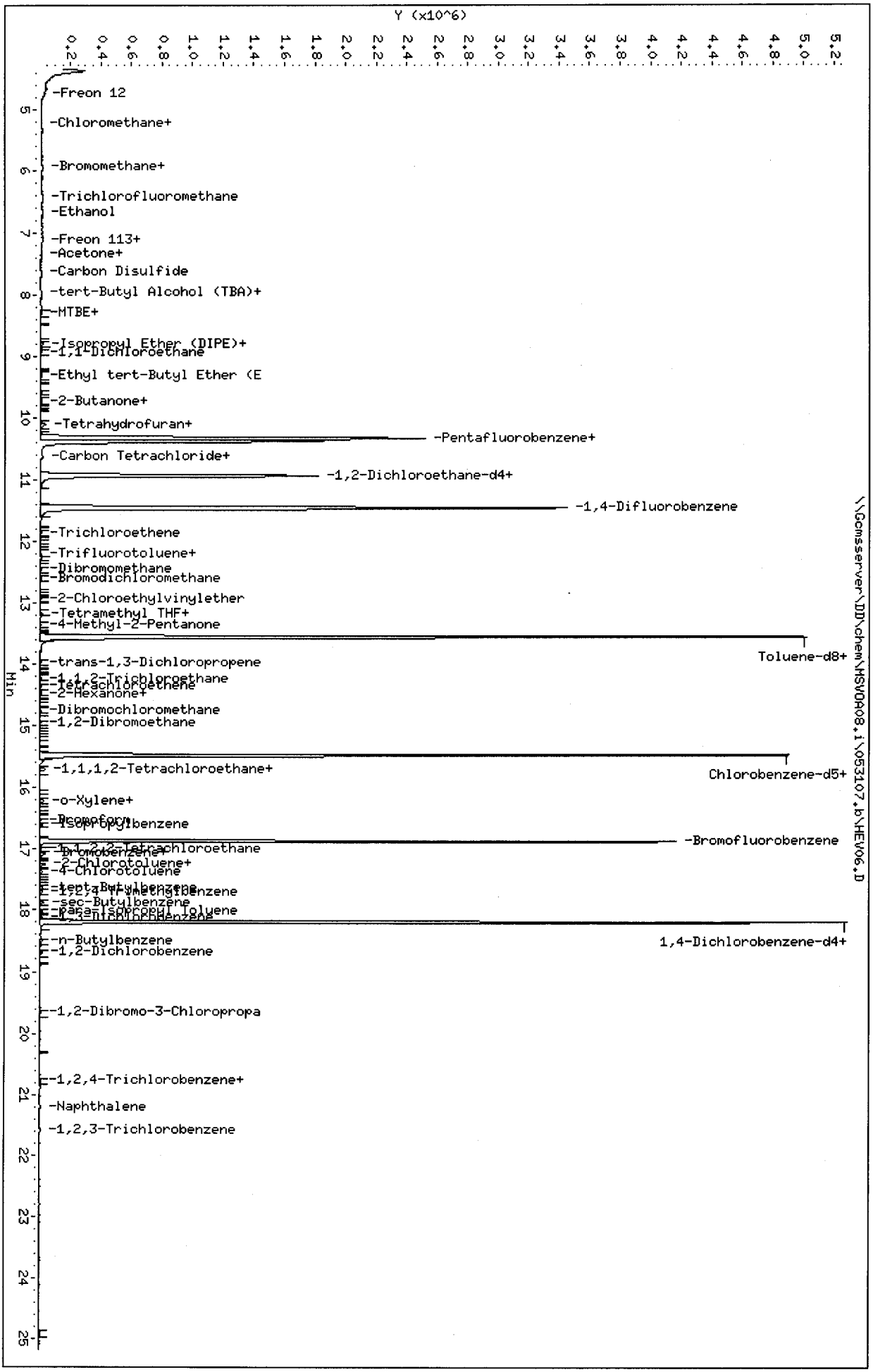
ICV 477218189015 (hev15 31-MAY-2007) stds: S6357 (10000X), S6084 (5000X)
ICV 477218189016 (hev16 31-MAY-2007) stds: S5968 (10000X), S6207 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	477218189015	0.5380	0.4110	25.00	19.10	ug/L	**-24**	30	!v- m
Vinyl Chloride	477218189015	0.4424	0.3691	25.00	20.86	ug/L	-17	20	m
Bromomethane	477218189015	0.2401	0.2033	25.00	21.17	ug/L	-15	30	m
Chloroethane	477218189015	0.2451	0.2130	25.00	21.72	ug/L	-13	30	m
Acetone	477218189016	0.1768	0.1248	25.00	17.65	ug/L	-29	40	
1,1-Dichloroethene	477218189016	0.2638	0.2164	25.00	20.51	ug/L	-18	20	
Methylene Chloride	477218189016	0.3675	0.3264	25.00	22.20	ug/L	-11	30	
Carbon Disulfide	477218189016	1.2123	0.7115	25.00	14.67	ug/L	**-41**	30	v- ***
MTBE	477218189016	0.9397	0.8597	25.00	22.87	ug/L	-9	30	
trans-1,2-Dichloroethene	477218189016	0.3092	0.2711	25.00	21.92	ug/L	-12	30	
Vinyl Acetate	477218189016	0.6641	0.6178	25.00	23.26	ug/L	-7	40	
1,1-Dichloroethane	477218189016	0.6315	0.5378	25.00	21.29	ug/L	-15	30	
2-Butanone	477218189016	0.2319	0.1814	25.00	19.55	ug/L	-22	40	
cis-1,2-Dichloroethene	477218189016	0.3346	0.3092	25.00	23.10	ug/L	-8	30	
Chloroform	477218189016	0.5628	0.5038	25.00	22.38	ug/L	-10	20	
1,1,1-Trichloroethane	477218189016	0.3701	0.3386	25.00	22.87	ug/L	-9	30	
Carbon Tetrachloride	477218189016	0.1672	0.1639	25.00	24.49	ug/L	-2	30	
1,2-Dichloroethane	477218189016	0.2704	0.2402	25.00	22.21	ug/L	-11	30	
Benzene	477218189016	0.7062	0.6824	25.00	24.16	ug/L	-3	30	
Trichloroethene	477218189016	0.1692	0.1599	25.00	23.62	ug/L	-6	30	
1,2-Dichloropropane	477218189016	0.2142	0.1849	25.00	21.58	ug/L	-14	20	
Bromodichloromethane	477218189016	0.2487	0.2408	25.00	24.20	ug/L	-3	30	
4-Methyl-2-Pentanone	477218189016	0.2708	0.2341	25.00	21.62	ug/L	-14	40	
cis-1,3-Dichloropropene	477218189016	0.2905	0.2767	25.00	23.82	ug/L	-5	30	
Toluene	477218189016	0.3860	0.3852	25.00	24.95	ug/L	0	20	
trans-1,3-Dichloropropene	477218189016	0.2608	0.2354	25.00	22.57	ug/L	-10	30	
1,1,2-Trichloroethane	477218189016	0.0938	0.0896	25.00	23.89	ug/L	-4	30	
2-Hexanone	477218189016	0.2291	0.1984	25.00	21.65	ug/L	-13	40	
Tetrachloroethene	477218189016	0.1656	0.1757	25.00	26.53	ug/L	6	30	
Dibromochloromethane	477218189016	0.2182	0.2092	25.00	23.97	ug/L	-4	30	
Chlorobenzene	477218189016	0.5212	0.5144	25.00	24.67	ug/L	-1	30	
Ethylbenzene	477218189016	0.8944	0.9128	25.00	25.51	ug/L	2	20	
m,p-Xylenes	477218189016	0.3325	0.3454	50.00	51.95	ug/L	4	30	
o-Xylene	477218189016	0.3255	0.3291	25.00	25.28	ug/L	1	30	
Styrene	477218189016	0.5555	0.5720	25.00	25.74	ug/L	3	30	
Bromoform	477218189016	0.1347	0.1408	25.00	23.09	ug/L	-8	30	
1,1,2,2-Tetrachloroethane	477218189016	0.6295	0.5607	25.00	22.27	ug/L	-11	30	

!=warning -=low bias m=manual integration v=ICV

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Date : 31-MAY-2007 15:05
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.00025/500,S6301,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 15:05 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.0025/500,S6301,0.005/500,
Misc Info : S6355,0.0025/500,0.25/0.5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:48 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 15:05 Cal File: HEV06.D
Als bottle: 6 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.743	4.743	(0.459)	2399	0.50000	0.1680(a)
2 Chloromethane	50	5.236	5.236	(0.507)	3084	0.50000	0.1748(a)
3 Vinyl Chloride	62	5.334	5.334	(0.517)	10844	0.50000	0.6336(M)
4 Bromomethane	94	5.945	5.945	(0.576)	1980	0.50000	0.2162(a)
5 Chloroethane	64	6.093	6.093	(0.590)	2890	0.50000	0.3088(a)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	8254	0.50000	0.4792(a)
7 Ethanol	45	6.675	6.675	(0.647)	6612	25.0000	26.8228(A)
8 Freon 113	101	7.119	7.119	(0.690)	3519	0.25000	0.3016(a)
9 1,1-Dichloroethene	96	7.227	7.227	(0.700)	3932	0.25000	0.3274(a)
10 Acetone	43	7.326	7.326	(0.710)	7355	0.25000	0.9137
11 Isopropanol	45	7.385	7.385	(0.715)	3597	2.50000	2.7478(A)
12 Carbon Disulfide	76	7.631	7.631	(0.739)	16589	0.25000	0.3005(a)
13 tert-Butyl Alcohol (TBA)	59	7.957	7.957	(0.771)	4438	2.50000	2.7475(A)
14 Methylene Chloride	84	7.976	7.976	(0.773)	3639	0.25000	0.2175(a)
15 MTBE	73	8.203	8.203	(0.795)	11465	0.25000	0.2679(a)
16 trans-1,2-Dichloroethene	96	8.282	8.282	(0.802)	5150	0.25000	0.3658(a)
17 Isopropyl Ether (DIPE)	45	8.805	8.805	(0.853)	18818	0.25000	0.2741(aA)
18 Vinyl Acetate	43	8.854	8.854	(0.858)	5485	0.25000	0.1813(a)
19 1,1-Dichloroethane	63	8.923	8.923	(0.864)	7984	0.25000	0.2776(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	13209	0.25000	0.2463(aA)
21 2-Butanone	43	9.702	9.702	(0.940)	3915	0.25000	0.3707(a)
22 2,2-Dichloropropane	77	9.722	9.722	(0.942)	1022	0.25000	0.0825(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.731	9.731	(0.943)	4170	0.25000	0.2736(a)
	24 Tetrahydrofuran	42	10.106	10.106	(0.979)	20207	2.50000	3.4100(A)
	25 Bromochloromethane	128	10.106	10.106	(0.979)	1810	0.25000	0.2439(a)
	26 Chloroform	83	10.126	10.126	(0.981)	7183	0.25000	0.2803(a)
*	27 Pentafluorobenzene	168	10.323	10.323	(1.000)	2276471	50.0000	
	28 Dibromofluoromethane	113	10.372	10.372	(1.005)	1459403	50.0000	49.7386
	29 1,1,1-Trichloroethane	97	10.412	10.412	(1.009)	4457	0.25000	0.2645(a)
	30 Carbon Tetrachloride	117	10.619	10.619	(0.928)	4192	0.25000	0.3233(a)
	31 1,1-Dichloropropene	75	10.638	10.638	(0.929)	6012	0.25000	0.3342(a)
	32 1,2-Dichloroethane-d4	65	10.924	10.924	(0.954)	1739162	50.0000	52.8252
	33 Benzene	78	10.954	10.954	(0.957)	17428	0.25000	0.3183(a)
	34 Methyl tert-Amyl Ether (TAME)	73	10.944	10.944	(0.956)	11401	0.25000	0.2795(aA)
	35 1,2-Dichloroethane	62	11.043	11.043	(0.965)	5763	0.25000	0.2749(a)
*	36 1,4-Difluorobenzene	114	11.447	11.447	(1.000)	3875834	50.0000	
	37 Trichloroethene	95	11.851	11.851	(1.035)	4009	0.25000	0.3056(a)
	38 Trifluorotoluene	146	12.216	12.216	(1.067)	5932	0.25000	0.0656(aA)
	39 1,2-Dichloropropane	63	12.246	12.246	(1.070)	4979	0.25000	0.2998(a)
	40 Dibromomethane	93	12.443	12.443	(1.087)	2807	0.25000	0.2702(a)
	41 Bromodichloromethane	83	12.591	12.591	(1.100)	5124	0.25000	0.2657(a)
	43 Tetramethyl THF	43	13.163	13.163	(1.150)	12186	0.25000	0.3021(aA)
	44 cis-1,3-Dichloropropene	75	13.212	13.212	(1.154)	5746	0.25000	0.2551(a)
	45 4-Methyl-2-Pentanone	43	13.350	13.350	(1.166)	6021	0.25000	0.2868(a)
	46 Toluene-d8	98	13.547	13.547	(1.183)	4079218	50.0000	50.2371
	47 Toluene	92	13.636	13.636	(1.191)	9039	0.25000	0.3020(a)
	48 trans-1,3-Dichloropropene	75	13.961	13.961	(1.220)	5459	0.25000	0.2700(a)
	49 1,1,2-Trichloroethane	85	14.227	14.227	(1.243)	1971	0.25000	0.2712(a)
	50 Tetrachloroethene	166	14.356	14.356	(0.927)	2937	0.25000	0.2798(a)
	51 2-Hexanone	43	14.444	14.444	(0.933)	4307	0.25000	0.2965(a)
	52 1,3-Dichloropropane	76	14.474	14.474	(0.935)	6735	0.25000	0.2875(a)
	53 Dibromochloromethane	129	14.750	14.750	(0.953)	2563	0.25000	0.1852(a)
	54 1,2-Dibromoethane	107	14.957	14.957	(1.307)	3794	0.25000	0.2711(a)
*	55 Chlorobenzene-d5	117	15.479	15.479	(1.000)	3169860	50.0000	
	56 Chlorobenzene	112	15.509	15.509	(1.002)	9447	0.25000	0.2859(a)
	57 Ethylbenzene	91	15.558	15.558	(1.005)	17400	0.25000	0.3068(a)
	58 1,1,1,2-Tetrachloroethane	131	15.588	15.588	(1.007)	3086	0.25000	0.2750(a)
	59 m,p-Xylenes	106	15.706	15.706	(1.015)	11462	0.50000	0.5437
	60 o-Xylene	106	16.199	16.199	(1.046)	5238	0.25000	0.2538(a)
	61 Styrene	104	16.219	16.219	(1.048)	9097	0.25000	0.2583(a)
	62 Bromoform	173	16.525	16.525	(1.068)	1417	0.25000	0.1789(a)
	63 Isopropylbenzene	105	16.594	16.594	(0.912)	14075	0.25000	0.2918(a)
	65 Bromofluorobenzene	95	16.860	16.860	(0.927)	1756890	50.0000	50.4096
	66 1,1,2,2-Tetrachloroethane	83	16.998	16.998	(0.934)	5408	0.25000	0.2779(a)
	67 Bromobenzene	156	17.067	17.067	(0.938)	3382	0.25000	0.2577(a)
	68 Propylbenzene	91	17.067	17.067	(0.938)	19697	0.25000	0.3045(a)
	69 1,2,3-Trichloropropane	110	17.096	17.096	(0.940)	1264	0.25000	0.2717(a)
	70 2-Chlorotoluene	91	17.244	17.244	(0.948)	12928	0.25000	0.2967(a)
	71 1,3,5-Trimethylbenzene	105	17.254	17.254	(0.949)	11772	0.25000	0.2910(a)
	72 4-Chlorotoluene	91	17.372	17.372	(0.955)	11802	0.25000	0.2899(a)
	73 tert-Butylbenzene	119	17.629	17.629	(0.969)	9487	0.25000	0.2935(a)
	74 1,2,4-Trimethylbenzene	105	17.698	17.698	(0.973)	11084	0.25000	0.2752(a)
	75 sec-Butylbenzene	105	17.875	17.875	(0.983)	15207	0.25000	0.3068(a)
	76 para-Isopropyl Toluene	119	18.023	18.023	(0.991)	9685	0.25000	0.2621(a)
	77 1,3-Dichlorobenzene	146	18.112	18.112	(0.996)	6788	0.25000	0.2878(a)
*	78 1,4-Dichlorobenzene-d4	152	18.191	18.191	(1.000)	1545474	50.0000	

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

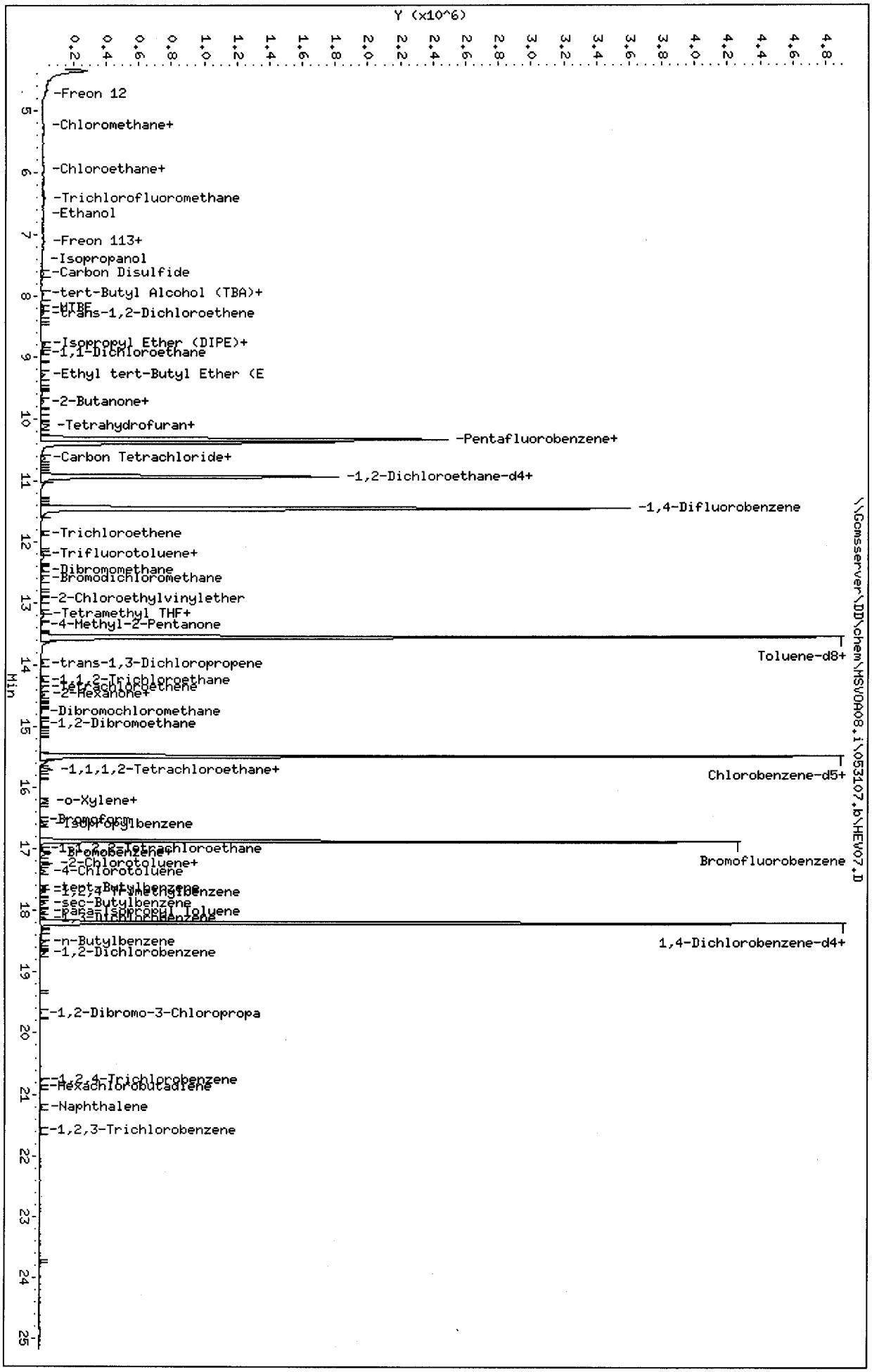
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
79 1,4-Dichlorobenzene	146	18.220	18.220	(1.002)	7834	0.25000	0.3103(a)
80 n-Butylbenzene	91	18.496	18.496	(1.017)	10772	0.25000	0.3099(a)
81 1,2-Dichlorobenzene	146	18.684	18.684	(1.027)	6535	0.25000	0.2782(a)
82 1,2-Dibromo-3-Chloropropane	75	19.670	19.670	(1.081)	1060	0.25000	0.3031(a)
83 1,2,4-Trichlorobenzene	180	20.774	20.774	(1.142)	2833	0.25000	0.2946(a)
85 Naphthalene	128	21.208	21.208	(1.166)	6762	0.25000	0.2743(a)
86 1,2,3-Trichlorobenzene	180	21.592	21.592	(1.187)	3011	0.25000	0.3333(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEW07.D
Date : 31-MAY-2007 15:43
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.005/500,S6301,0.001/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 15:43 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.005/500,S6301,0.001/500,
Misc Info : S6355,0.005/500,0.5/1PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 16:25 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 15:43 Cal File: HEV07.D
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.764	4.764	(0.461)	12256	1.00000	0.7008(M)
2 Chloromethane	50	5.247	5.247	(0.508)	26593	1.00000	1.0987(M)
3 Vinyl Chloride	62	5.326	5.326	(0.516)	17565	1.00000	0.8825(M)
4 Bromomethane	94	5.957	5.957	(0.577)	9656	1.00000	0.8937(M)
5 Chloroethane	64	6.085	6.085	(0.589)	10949	1.00000	0.9927(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	12965	1.00000	0.7617
7 Ethanol	45	6.667	6.667	(0.646)	14709	50.0000	60.3860(A)
8 Freon 113	101	7.120	7.120	(0.690)	5451	0.50000	0.4728(a)
9 1,1-Dichloroethene	96	7.229	7.229	(0.700)	6916	0.50000	0.5828
10 Acetone	43	7.308	7.308	(0.708)	10554	0.50000	1.3268
11 Isopropanol	45	7.396	7.396	(0.716)	8400	5.00000	6.4939(A)
12 Carbon Disulfide	76	7.633	7.633	(0.739)	29704	0.50000	0.5446
13 tert-Butyl Alcohol (TBA)	59	7.958	7.958	(0.771)	7843	5.00000	4.9139(A)
14 Methylene Chloride	84	7.978	7.978	(0.773)	8563	0.50000	0.5179
15 MTBE	73	8.195	8.195	(0.794)	21457	0.50000	0.5075
16 trans-1,2-Dichloroethene	96	8.284	8.284	(0.802)	7672	0.50000	0.5514
17 Isopropyl Ether (DIPE)	45	8.796	8.796	(0.852)	35221	0.50000	0.5193(A)
18 Vinyl Acetate	43	8.846	8.846	(0.857)	12264	0.50000	0.4104(a)
19 1,1-Dichloroethane	63	8.925	8.925	(0.864)	16013	0.50000	0.5636
20 Ethyl tert-Butyl Ether (ETBE)	59	9.299	9.299	(0.901)	27341	0.50000	0.5160(A)
21 2-Butanone	43	9.703	9.703	(0.940)	6260	0.50000	0.5999
22 2,2-Dichloropropane	77	9.703	9.703	(0.940)	4554	0.50000	0.3724(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.733	9.733	(0.943)	7889	0.50000	0.5239
	24 Tetrahydrofuran	42	10.108	10.108	(0.979)	33781	5.00000	5.7692(A)
	25 Bromochloromethane	128	10.098	10.098	(0.978)	3455	0.50000	0.4712(a)
	26 Chloroform	83	10.127	10.127	(0.981)	14029	0.50000	0.5540
*	27 Pentafluorobenzene	168	10.325	10.325	(1.000)	2249472	50.0000	
	28 Dibromofluoromethane	113	10.374	10.374	(1.005)	1430653	50.0000	49.3439
	29 1,1,1-Trichloroethane	97	10.413	10.413	(1.009)	9232	0.50000	0.5544
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	7509	0.50000	0.5826
	31 1,1-Dichloropropene	75	10.630	10.630	(0.929)	9808	0.50000	0.5485
	32 1,2-Dichloroethane-d4	65	10.926	10.926	(0.954)	1682686	50.0000	51.4093
	33 Benzene	78	10.946	10.946	(0.956)	31841	0.50000	0.5850
	34 Methyl tert-Amyl Ether (TAME)	73	10.956	10.956	(0.957)	21085	0.50000	0.5200(A)
	35 1,2-Dichloroethane	62	11.034	11.034	(0.964)	10591	0.50000	0.5082
*	36 1,4-Difluorobenzene	114	11.449	11.449	(1.000)	3853256	50.0000	
	37 Trichloroethene	95	11.853	11.853	(1.035)	7146	0.50000	0.5479
	38 Trifluorotoluene	146	12.198	12.198	(1.065)	9529	0.50000	0.2992(aA)
	39 1,2-Dichloropropane	63	12.257	12.257	(1.071)	8897	0.50000	0.5389
	40 Dibromomethane	93	12.454	12.454	(1.088)	5455	0.50000	0.5282
	41 Bromodichloromethane	83	12.602	12.602	(1.101)	10218	0.50000	0.5331
	42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	3360	1.00000	0.0955(a)
	43 Tetramethyl THF	43	13.164	13.164	(1.150)	20968	0.50000	0.5230(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	10698	0.50000	0.4778(a)
	45 4-Methyl-2-Pentanone	43	13.342	13.342	(1.165)	9993	0.50000	0.4788(a)
	46 Toluene-d8	98	13.539	13.539	(1.183)	4006575	50.0000	49.6316
	47 Toluene	92	13.637	13.637	(1.191)	16091	0.50000	0.5408
	48 trans-1,3-Dichloropropene	75	13.963	13.963	(1.220)	9318	0.50000	0.4636(a)
	49 1,1,2-Trichloroethane	85	14.219	14.219	(1.242)	3305	0.50000	0.4574(a)
	50 Tetrachloroethene	166	14.347	14.347	(0.927)	5816	0.50000	0.5805
	51 2-Hexanone	43	14.446	14.446	(0.934)	7170	0.50000	0.5172
	52 1,3-Dichloropropane	76	14.475	14.475	(0.936)	11650	0.50000	0.5210
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	6721	0.50000	0.5090
	54 1,2-Dibromoethane	107	14.959	14.959	(1.307)	7148	0.50000	0.5138
*	55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3025746	50.0000	
	56 Chlorobenzene	112	15.511	15.511	(1.003)	17507	0.50000	0.5550
	57 Ethylbenzene	91	15.560	15.560	(1.006)	33046	0.50000	0.6105
	58 1,1,1,2-Tetrachloroethane	131	15.590	15.590	(1.008)	6120	0.50000	0.5715
	59 m,p-Xylenes	106	15.698	15.698	(1.015)	22012	1.00000	1.0940
	60 o-Xylene	106	16.201	16.201	(1.047)	11594	0.50000	0.5885
	61 Styrene	104	16.221	16.221	(1.048)	16776	0.50000	0.4990(a)
	62 Bromoform	173	16.536	16.536	(1.069)	2731	0.50000	0.3350(aM)
	63 Isopropylbenzene	105	16.595	16.595	(0.912)	25701	0.50000	0.5654
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1707389	50.0000	51.9818
	66 1,1,2,2-Tetrachloroethane	83	17.009	17.009	(0.935)	9370	0.50000	0.5110
	67 Bromobenzene	156	17.068	17.068	(0.938)	6935	0.50000	0.5607
	68 Propylbenzene	91	17.068	17.068	(0.938)	34760	0.50000	0.5703
	69 1,2,3-Trichloropropane	110	17.098	17.098	(0.940)	2463	0.50000	0.5619
	70 2-Chlorotoluene	91	17.246	17.246	(0.948)	24453	0.50000	0.5956
	71 1,3,5-Trimethylbenzene	105	17.246	17.246	(0.948)	22445	0.50000	0.5888
	72 4-Chlorotoluene	91	17.364	17.364	(0.954)	22494	0.50000	0.5864
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	17900	0.50000	0.5876
	74 1,2,4-Trimethylbenzene	105	17.690	17.690	(0.972)	21398	0.50000	0.5638
	75 sec-Butylbenzene	105	17.877	17.877	(0.983)	26800	0.50000	0.5738
	76 para-Isopropyl Toluene	119	18.015	18.015	(0.990)	19607	0.50000	0.5631
	77 1,3-Dichlorobenzene	146	18.114	18.114	(0.996)	12269	0.50000	0.5520

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

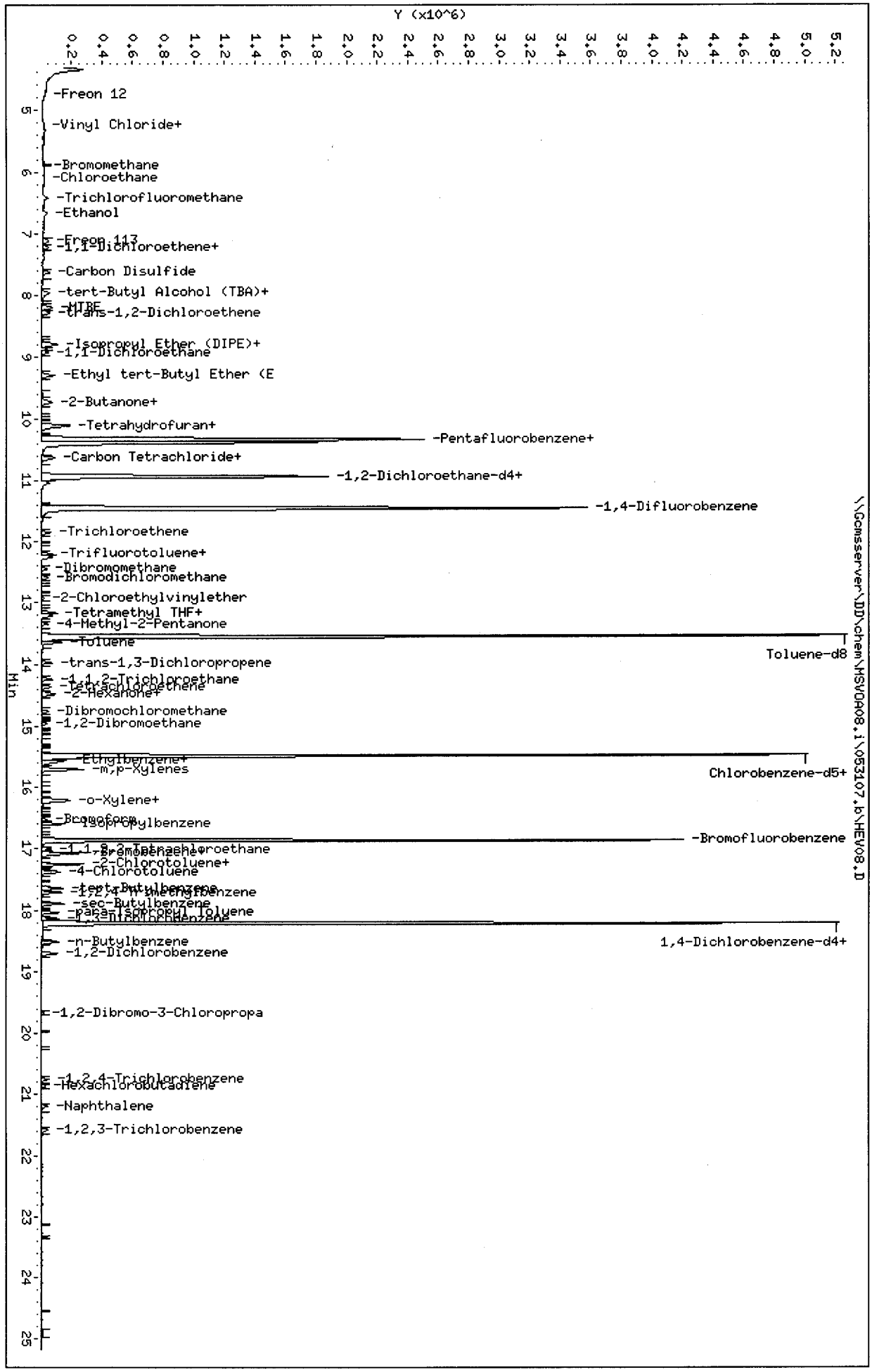
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1456505	50.0000	
79 1,4-Dichlorobenzene	146	18.222	18.222	(1.002)	14415	0.50000	0.6058
80 n-Butylbenzene	91	18.498	18.498	(1.017)	19135	0.50000	0.5842
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	12238	0.50000	0.5528
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	2043	0.50000	0.6200
83 1,2,4-Trichlorobenzene	180	20.776	20.776	(1.142)	5229	0.50000	0.5770
84 Hexachlorobutadiene	225	20.874	20.874	(1.147)	1642	0.50000	0.4778(a)
85 Naphthalene	128	21.209	21.209	(1.166)	10867	0.50000	0.4678(a)
86 1,2,3-Trichlorobenzene	180	21.604	21.604	(1.188)	4830	0.50000	0.5674

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Date : 31-MAY-2007 16:21
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.002/100,S6301,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 16:21 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.002/100,S6301,0.004/100,
Misc Info : S6355,0.004/100,2PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:49 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 16:21 Cal File: HEV08.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.773	4.773	(0.462)	33304	2.00000	2.0309(M)
2 Chloromethane	50	5.246	5.246	(0.508)	50708	2.00000	2.3859(M)
3 Vinyl Chloride	62	5.335	5.335	(0.517)	37280	2.00000	1.9412(M)
4 Bromomethane	94	5.956	5.956	(0.577)	24454	2.00000	2.2248(M)
5 Chloroethane	64	6.094	6.094	(0.590)	21173	2.00000	2.0304(M)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	33461	2.00000	1.9821
7 Ethanol	45	6.666	6.666	(0.646)	49699	200.000	205.7150(A)
8 Freon 113	101	7.129	7.129	(0.691)	26100	2.00000	2.2825
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	23122	2.00000	1.9646
10 Acetone	43	7.317	7.317	(0.709)	20990	2.00000	2.6606
11 Isopropanol	45	7.395	7.395	(0.716)	24935	20.0000	19.4358(A)
12 Carbon Disulfide	76	7.632	7.632	(0.739)	108621	2.00000	2.0079
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	32451	20.0000	20.4992(A)
14 Methylene Chloride	84	7.967	7.967	(0.772)	32640	2.00000	1.9906
15 MTBE	73	8.194	8.194	(0.794)	84170	2.00000	2.0074
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	27267	2.00000	1.9762
17 Isopropyl Ether (DIPE)	45	8.795	8.795	(0.852)	140983	2.00000	2.0959(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	64687	2.00000	2.1827
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	56861	2.00000	2.0179
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	105856	2.00000	2.0145(A)
21 2-Butanone	43	9.702	9.702	(0.940)	23039	2.00000	2.2260
22 2,2-Dichloropropane	77	9.712	9.712	(0.941)	24776	2.00000	2.0429

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	29526	2.00000	1.9772
	24 Tetrahydrofuran	42	10.107	10.107	(0.979)	124224	20.0000	21.3901(A)
	25 Bromochloromethane	128	10.097	10.097	(0.978)	14082	2.00000	1.9365
	26 Chloroform	83	10.136	10.136	(0.982)	50776	2.00000	2.0217
*	27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2231082	50.0000	
	28 Dibromofluoromethane	113	10.373	10.373	(1.005)	1440410	50.0000	50.0900
	29 1,1,1-Trichloroethane	97	10.412	10.412	(1.009)	32652	2.00000	1.9773
	30 Carbon Tetrachloride	117	10.619	10.619	(0.928)	26651	2.00000	2.0671
	31 1,1-Dichloropropene	75	10.629	10.629	(0.929)	37903	2.00000	2.1190
	32 1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1687840	50.0000	51.5489
	33 Benzene	78	10.945	10.945	(0.956)	111919	2.00000	2.0558
	34 Methyl tert-Amyl Ether (TAME)	73	10.955	10.955	(0.957)	84387	2.00000	2.0804(A)
	35 1,2-Dichloroethane	62	11.043	11.043	(0.965)	43396	2.00000	2.0818
*	36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3854589	50.0000	
	37 Trichloroethene	95	11.852	11.852	(1.035)	25697	2.00000	1.9696
	38 Trifluorotoluene	146	12.207	12.207	(1.066)	36782	2.00000	2.0513(A)
	39 1,2-Dichloropropane	63	12.246	12.246	(1.070)	33429	2.00000	2.0245
	40 Dibromomethane	93	12.443	12.443	(1.087)	20846	2.00000	2.0180
	41 Bromodichloromethane	83	12.591	12.591	(1.100)	36923	2.00000	1.9258
	42 2-Chloroethylvinylether	63	12.936	12.936	(1.130)	8754	2.00000	1.4038
	43 Tetramethyl THF	43	13.163	13.163	(1.150)	82182	2.00000	2.0491(A)
	44 cis-1,3-Dichloropropene	75	13.212	13.212	(1.154)	44120	2.00000	1.9701
	45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	42634	2.00000	2.0422
	46 Toluene-d8	98	13.538	13.538	(1.183)	4087387	50.0000	50.6152
	47 Toluene	92	13.636	13.636	(1.191)	61961	2.00000	2.0820
	48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	40606	2.00000	2.0196
	49 1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	14598	2.00000	2.0197
	50 Tetrachloroethene	166	14.356	14.356	(0.928)	20640	2.00000	2.0343
	51 2-Hexanone	43	14.445	14.445	(0.934)	27704	2.00000	1.9733
	52 1,3-Dichloropropane	76	14.474	14.474	(0.936)	47647	2.00000	2.1042
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	26402	2.00000	1.9743
	54 1,2-Dibromoethane	107	14.958	14.958	(1.307)	27313	2.00000	1.9628
*	55 Chlorobenzene-d5	117	15.470	15.470	(1.000)	3064245	50.0000	
	56 Chlorobenzene	112	15.510	15.510	(1.003)	66648	2.00000	2.0865
	57 Ethylbenzene	91	15.559	15.559	(1.006)	118571	2.00000	2.1632
	58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	21596	2.00000	1.9915
	59 m,p-Xylenes	106	15.697	15.697	(1.015)	86104	4.00000	4.2257
	60 o-Xylene	106	16.200	16.200	(1.047)	38314	2.00000	1.9205
	61 Styrene	104	16.229	16.229	(1.049)	70132	2.00000	2.0602
	62 Bromoform	173	16.535	16.535	(1.069)	13117	2.00000	1.5892
	63 Isopropylbenzene	105	16.594	16.594	(0.912)	101159	2.00000	2.1504
	65 Bromofluorobenzene	95	16.860	16.860	(0.927)	1717249	50.0000	50.5132
	66 1,1,2,2-Tetrachloroethane	83	17.008	17.008	(0.935)	40725	2.00000	2.1458
	67 Bromobenzene	156	17.067	17.067	(0.938)	26501	2.00000	2.0703
	68 Propylbenzene	91	17.067	17.067	(0.938)	139737	2.00000	2.2152
	69 1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	9112	2.00000	2.0086
	70 2-Chlorotoluene	91	17.245	17.245	(0.948)	91289	2.00000	2.1483
	71 1,3,5-Trimethylbenzene	105	17.245	17.245	(0.948)	86053	2.00000	2.1812
	72 4-Chlorotoluene	91	17.373	17.373	(0.955)	83605	2.00000	2.1058
	73 tert-Butylbenzene	119	17.629	17.629	(0.969)	66887	2.00000	2.1215
	74 1,2,4-Trimethylbenzene	105	17.698	17.698	(0.973)	81964	2.00000	2.0868
	75 sec-Butylbenzene	105	17.876	17.876	(0.983)	108725	2.00000	2.2492
	76 para-Isopropyl Toluene	119	18.014	18.014	(0.990)	76143	2.00000	2.1130
	77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	46224	2.00000	2.0093

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

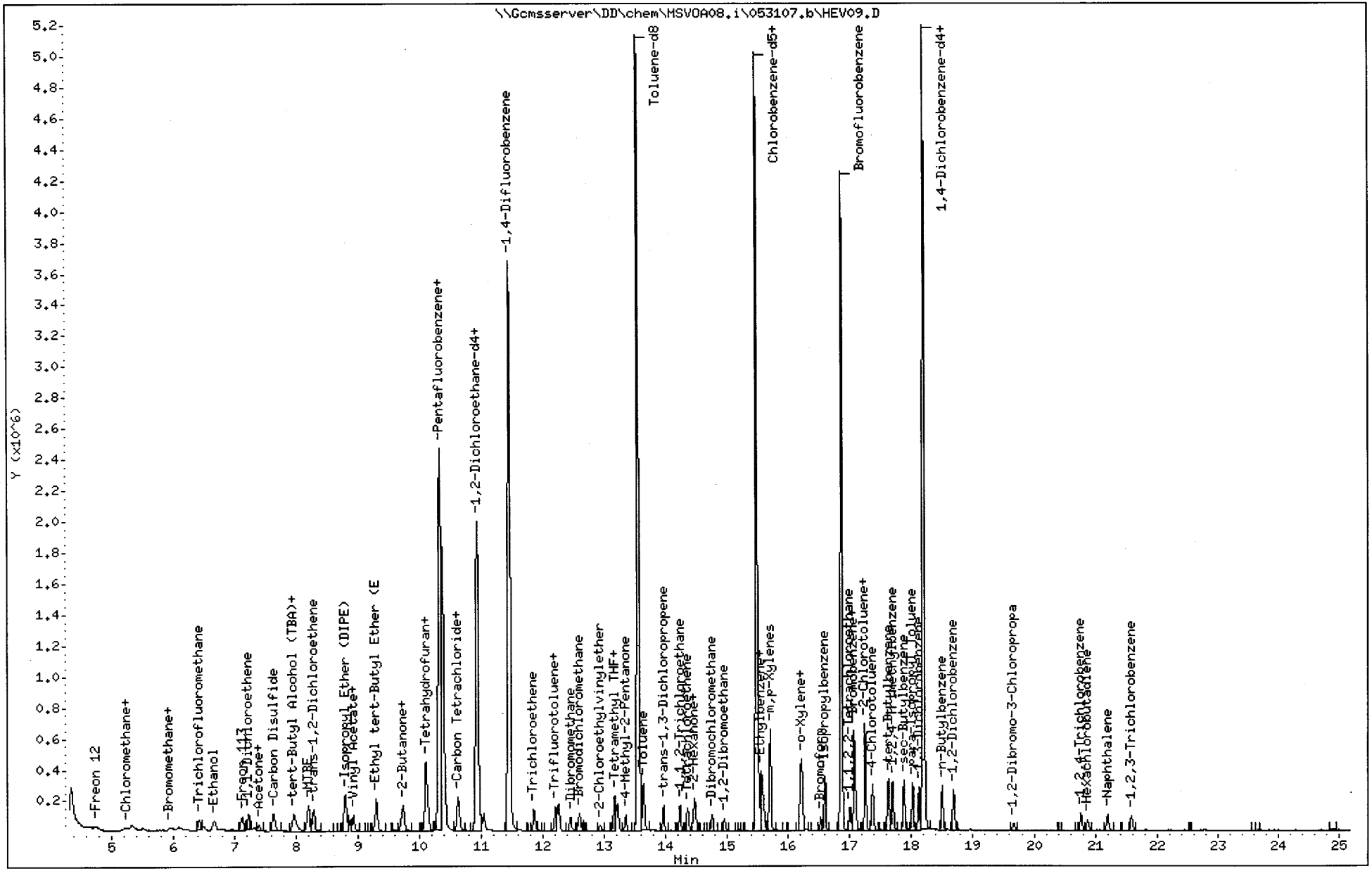
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.191	18.191	(1.000)	1507506	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	51806	2.00000	2.1038
80 n-Butylbenzene	91	18.497	18.497	(1.017)	76541	2.00000	2.2581
81 1,2-Dichlorobenzene	146	18.684	18.684	(1.027)	47359	2.00000	2.0670
82 1,2-Dibromo-3-Chloropropane	75	19.670	19.670	(1.081)	6734	2.00000	1.9746
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	17510	2.00000	1.8670
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	4778	2.00000	1.7670
85 Naphthalene	128	21.199	21.199	(1.165)	44667	2.00000	1.8578
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	17086	2.00000	1.9392

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Date : 31-MAY-2007 17:00
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.005/100,S6301,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 17:00 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.005/100,S6301,0.01/100,
Misc Info : S6355,0.01/100,5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:50 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 17:00 Cal File: HEV09.D
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.763	4.763	(0.461)	75612	5.00000	4.4077(M)
2 Chloromethane	50	5.256	5.256	(0.509)	114856	5.00000	5.1078(M)
3 Vinyl Chloride	62	5.335	5.335	(0.517)	93907	5.00000	4.7682(M)
4 Bromomethane	94	5.937	5.937	(0.575)	44486	5.00000	3.9511(M)
5 Chloroethane	64	6.084	6.084	(0.589)	52920	5.00000	4.9187(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	80754	5.00000	4.7861
7 Ethanol	45	6.676	6.676	(0.647)	118395	500.000	490.3115(A)
8 Freon 113	101	7.120	7.120	(0.690)	58208	5.00000	5.0932
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	56158	5.00000	4.7740
10 Acetone	43	7.317	7.317	(0.709)	44340	5.00000	5.6233
11 Isopropanol	45	7.396	7.396	(0.716)	62705	50.0000	48.9008(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	259882	5.00000	4.8066
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	73299	50.0000	46.3264(A)
14 Methylene Chloride	84	7.977	7.977	(0.773)	81228	5.00000	4.9564
15 MTBE	73	8.204	8.204	(0.795)	201860	5.00000	4.8167
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	66730	5.00000	4.8388
17 Isopropyl Ether (DIPE)	45	8.796	8.796	(0.852)	322388	5.00000	4.7953(A)
18 Vinyl Acetate	43	8.865	8.865	(0.859)	145010	5.00000	4.8956
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	136735	5.00000	4.8550
20 Ethyl tert-Butyl Ether (ETBE)	59	9.299	9.299	(0.901)	256229	5.00000	4.8788(A)
21 2-Butanone	43	9.693	9.693	(0.939)	50307	5.00000	4.8632
22 2,2-Dichloropropane	77	9.713	9.713	(0.941)	49101	5.00000	4.0507

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	70962	5.00000	4.7545
	24 Tetrahydrofuran	42	10.097	10.097	(0.978)	298268	50.0000	51.3849(A)
	25 Bromochloromethane	128	10.097	10.097	(0.978)	35054	5.00000	4.8229
	26 Chloroform	83	10.127	10.127	(0.981)	122831	5.00000	4.8933
*	27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2229950	50.0000	
	28 Dibromofluoromethane	113	10.373	10.373	(1.005)	1453163	50.0000	50.5591
	29 1,1,1-Trichloroethane	97	10.423	10.423	(1.010)	84323	5.00000	5.1089
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	64517	5.00000	4.9201
	31 1,1-Dichloropropene	75	10.640	10.640	(0.929)	93740	5.00000	5.1527
	32 1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1735154	50.0000	52.1041
	33 Benzene	78	10.955	10.955	(0.957)	278256	5.00000	5.0253
	34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	204293	5.00000	4.9520(A)
	35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	106365	5.00000	5.0170
*	36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3920418	50.0000	
	37 Trichloroethene	95	11.852	11.852	(1.035)	64913	5.00000	4.8920
	38 Trifluorotoluene	146	12.207	12.207	(1.066)	83294	5.00000	4.9521(A)
	39 1,2-Dichloropropane	63	12.256	12.256	(1.071)	85763	5.00000	5.1067
	40 Dibromomethane	93	12.444	12.444	(1.087)	49970	5.00000	4.7561
	41 Bromodichloromethane	83	12.602	12.602	(1.101)	92598	5.00000	4.7485
	42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	19295	5.00000	3.8528
	43 Tetramethyl THF	43	13.164	13.164	(1.150)	198351	5.00000	4.8627(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	112153	5.00000	4.9241
	45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	103197	5.00000	4.8603
	46 Toluene-d8	98	13.538	13.538	(1.183)	4138607	50.0000	50.3889
	47 Toluene	92	13.637	13.637	(1.191)	150527	5.00000	4.9732
	48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	97279	5.00000	4.7572
	49 1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	35265	5.00000	4.7972
	50 Tetrachloroethene	166	14.357	14.357	(0.928)	53377	5.00000	5.1876
	51 2-Hexanone	43	14.445	14.445	(0.934)	67083	5.00000	4.7118
	52 1,3-Dichloropropane	76	14.465	14.465	(0.935)	109188	5.00000	4.7550
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	61885	5.00000	4.5634
	54 1,2-Dibromoethane	107	14.958	14.958	(1.307)	68185	5.00000	4.8177
*	55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3107514	50.0000	
	56 Chlorobenzene	112	15.510	15.510	(1.003)	161523	5.00000	4.9863
	57 Ethylbenzene	91	15.559	15.559	(1.006)	291826	5.00000	5.2501
	58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	53406	5.00000	4.8563
	59 m,p-Xylenes	106	15.697	15.697	(1.015)	209004	10.0000	10.1146
	60 o-Xylene	106	16.200	16.200	(1.047)	101832	5.00000	5.0334
	61 Styrene	104	16.220	16.220	(1.048)	172331	5.00000	4.9919
	62 Bromoform	173	16.526	16.526	(1.068)	39770	5.00000	4.7514
	63 Isopropylbenzene	105	16.595	16.595	(0.912)	251094	5.00000	5.3011
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1731918	50.0000	50.5954
	66 1,1,2,2-Tetrachloroethane	83	16.999	16.999	(0.934)	92283	5.00000	4.8292
	67 Bromobenzene	156	17.068	17.068	(0.938)	61385	5.00000	4.7627
	68 Propylbenzene	91	17.068	17.068	(0.938)	334928	5.00000	5.2731
	69 1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	22162	5.00000	4.8518
	70 2-Chlorotoluene	91	17.245	17.245	(0.948)	227543	5.00000	5.3180
	71 1,3,5-Trimethylbenzene	105	17.245	17.245	(0.948)	209316	5.00000	5.2692
	72 4-Chlorotoluene	91	17.364	17.364	(0.954)	203515	5.00000	5.0911
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	168036	5.00000	5.2932
	74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	205575	5.00000	5.1982
	75 sec-Butylbenzene	105	17.876	17.876	(0.983)	259572	5.00000	5.3331
	76 para-Isopropyl Toluene	119	18.014	18.014	(0.990)	195916	5.00000	5.3995
	77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	118226	5.00000	5.1040

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

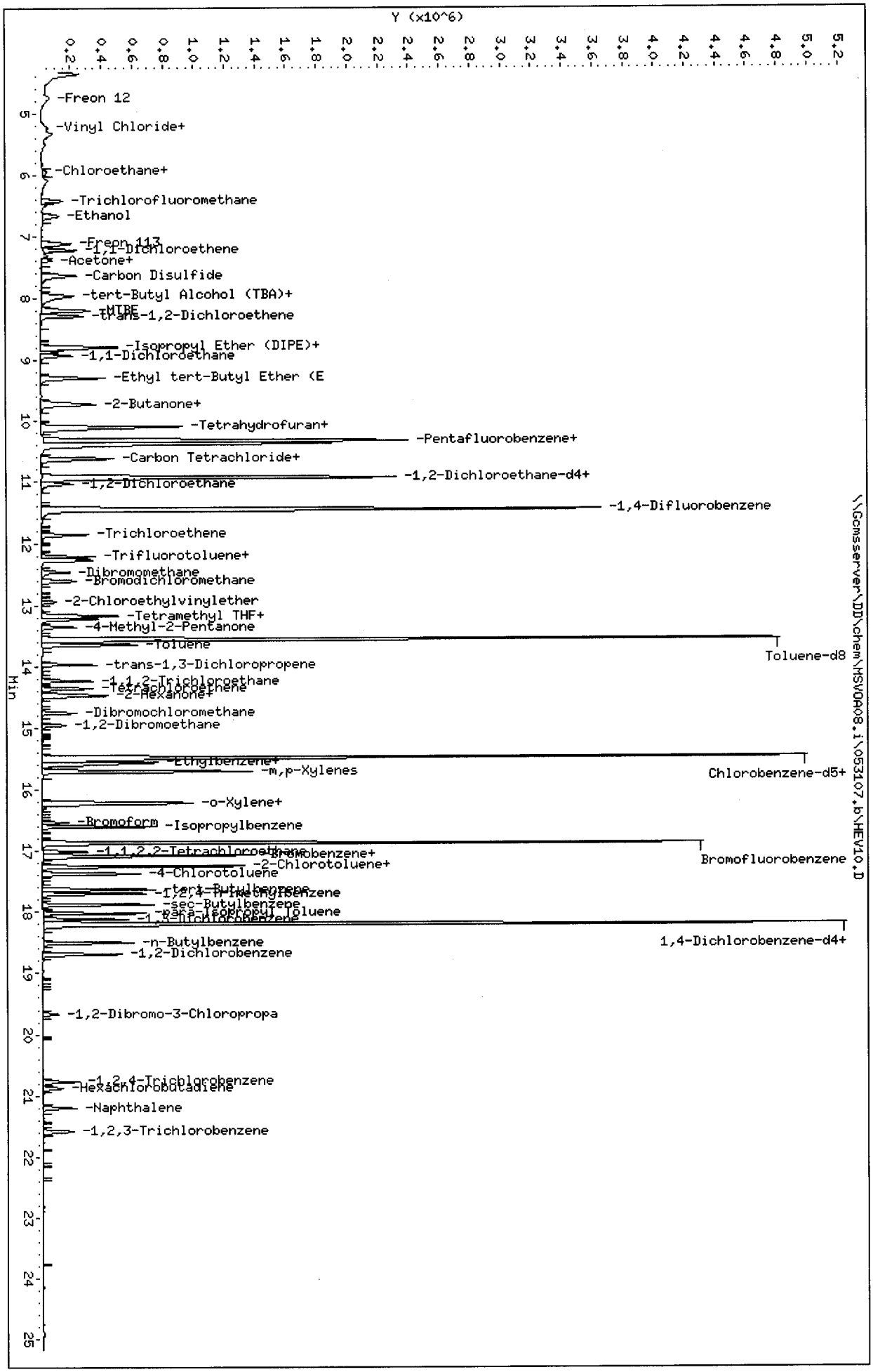
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1517913	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	123290	5.00000	4.9724
80 n-Butylbenzene	91	18.497	18.497	(1.017)	187401	5.00000	5.4908
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	115996	5.00000	5.0280
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	15316	5.00000	4.4603
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	46709	5.00000	4.9462
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	14584	5.00000	5.8318
85 Naphthalene	128	21.199	21.199	(1.165)	110963	5.00000	4.5837
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	42686	5.00000	4.8117

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Date : 31-MAY-2007 17:38
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.01/100,S6301,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 17:38 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.01/100,S6301,0.02/100,
Misc Info : S6355,0.02/100,10PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:51 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 17:38 Cal File: HEV10.D
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.753	4.753	(0.460)	182404	10.0000	10.6263(M)
2 Chloromethane	50	5.236	5.236	(0.507)	237747	10.0000	10.0306(M)
3 Vinyl Chloride	62	5.345	5.345	(0.518)	201218	10.0000	10.3114(M)
4 Bromomethane	94	5.956	5.956	(0.577)	96382	10.0000	8.4969(M)
5 Chloroethane	64	6.084	6.084	(0.589)	110780	10.0000	10.2584(M)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	174571	10.0000	10.4439
7 Ethanol	45	6.676	6.676	(0.647)	261799	1000.00	1094.3989(A)
8 Freon 113	101	7.119	7.119	(0.690)	138425	10.0000	12.2262
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	121095	10.0000	10.3913
10 Acetone	43	7.317	7.317	(0.709)	86293	10.0000	11.0469
11 Isopropanol	45	7.396	7.396	(0.716)	135126	100.000	106.3707(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	588486	10.0000	10.9867
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	168061	100.000	107.2177(A)
14 Methylene Chloride	84	7.967	7.967	(0.772)	168021	10.0000	10.3490
15 MTBE	73	8.194	8.194	(0.794)	427825	10.0000	10.3048
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	140662	10.0000	10.2959
17 Isopropyl Ether (DIPE)	45	8.786	8.786	(0.851)	709649	10.0000	10.6549(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	250808	10.0000	8.5471
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	291523	10.0000	10.4485
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	545781	10.0000	10.4900(A)
21 2-Butanone	43	9.703	9.703	(0.940)	107397	10.0000	10.4799
22 2,2-Dichloropropane	77	9.712	9.712	(0.941)	133430	10.0000	11.1114

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	153127	10.0000	10.3563
	24 Tetrahydrofuran	42	10.097	10.097	(0.978)	612958	100.000	106.5930(A)
	25 Bromochloromethane	128	10.097	10.097	(0.978)	74655	10.0000	10.3682
	26 Chloroform	83	10.136	10.136	(0.982)	260726	10.0000	10.4845
*	27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2209155	50.0000	
	28 Dibromofluoromethane	113	10.373	10.373	(1.005)	1451782	50.0000	50.9865
	29 1,1,1-Trichloroethane	97	10.422	10.422	(1.010)	176467	10.0000	10.7924
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	145744	10.0000	11.1857
	31 1,1-Dichloropropene	75	10.629	10.629	(0.929)	199947	10.0000	11.0611
	32 1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1697752	50.0000	51.3074
	33 Benzene	78	10.945	10.945	(0.956)	563406	10.0000	10.2404
	34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	420219	10.0000	10.2513(A)
	35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	215413	10.0000	10.2257
*	36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3895477	50.0000	
	37 Trichloroethene	95	11.852	11.852	(1.035)	141672	10.0000	10.7451
	38 Trifluorotoluene	146	12.207	12.207	(1.066)	188304	10.0000	11.6669(A)
	39 1,2-Dichloropropane	63	12.256	12.256	(1.071)	171274	10.0000	10.2636
	40 Dibromomethane	93	12.453	12.453	(1.088)	103683	10.0000	9.9317
	41 Bromodichloromethane	83	12.591	12.591	(1.100)	196965	10.0000	10.1653
	42 2-Chloroethylvinylether	63	12.927	12.927	(1.129)	48668	10.0000	10.6341
	43 Tetramethyl THF	43	13.163	13.163	(1.150)	435385	10.0000	10.7421(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	235317	10.0000	10.3978
	45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	220402	10.0000	10.4468
	46 Toluene-d8	98	13.548	13.548	(1.183)	3946611	50.0000	48.3590
	47 Toluene	92	13.637	13.637	(1.191)	318649	10.0000	10.5951
	48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	213437	10.0000	10.5045
	49 1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	73425	10.0000	10.0521
	50 Tetrachloroethene	166	14.356	14.356	(0.928)	113503	10.0000	11.0368
	51 2-Hexanone	43	14.445	14.445	(0.934)	152103	10.0000	10.6889
	52 1,3-Dichloropropane	76	14.475	14.475	(0.936)	244109	10.0000	10.6360
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	134924	10.0000	9.9543
	54 1,2-Dibromoethane	107	14.958	14.958	(1.307)	139848	10.0000	9.9445
*	55 Chlorobenzene-d5	117	15.470	15.470	(1.000)	3105963	50.0000	
	56 Chlorobenzene	112	15.510	15.510	(1.003)	338068	10.0000	10.4416
	57 Ethylbenzene	91	15.559	15.559	(1.006)	611763	10.0000	11.0114
	58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	113149	10.0000	10.2940
	59 m,p-Xylenes	106	15.697	15.697	(1.015)	442895	20.0000	21.4443
	60 o-Xylene	106	16.200	16.200	(1.047)	217495	10.0000	10.7558
	61 Styrene	104	16.230	16.230	(1.049)	368945	10.0000	10.6926
	62 Bromoform	173	16.525	16.525	(1.068)	87098	10.0000	10.4110
	63 Isopropylbenzene	105	16.594	16.594	(0.912)	544203	10.0000	11.2289
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1740722	50.0000	49.7005
	66 1,1,2,2-Tetrachloroethane	83	17.008	17.008	(0.935)	188857	10.0000	9.6591
	67 Bromobenzene	156	17.068	17.068	(0.938)	135417	10.0000	10.2686
	68 Propylbenzene	91	17.068	17.068	(0.938)	730846	10.0000	11.2458
	69 1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	48897	10.0000	10.4623
	70 2-Chlorotoluene	91	17.245	17.245	(0.948)	464067	10.0000	10.6003
	71 1,3,5-Trimethylbenzene	105	17.255	17.255	(0.949)	435344	10.0000	10.7109
	72 4-Chlorotoluene	91	17.373	17.373	(0.955)	440959	10.0000	10.7810
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	369303	10.0000	11.3696
	74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	437970	10.0000	10.8238
	75 sec-Butylbenzene	105	17.876	17.876	(0.983)	587924	10.0000	11.8058
	76 para-Isopropyl Toluene	119	18.014	18.014	(0.990)	426827	10.0000	11.4970
	77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	246543	10.0000	10.4026

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

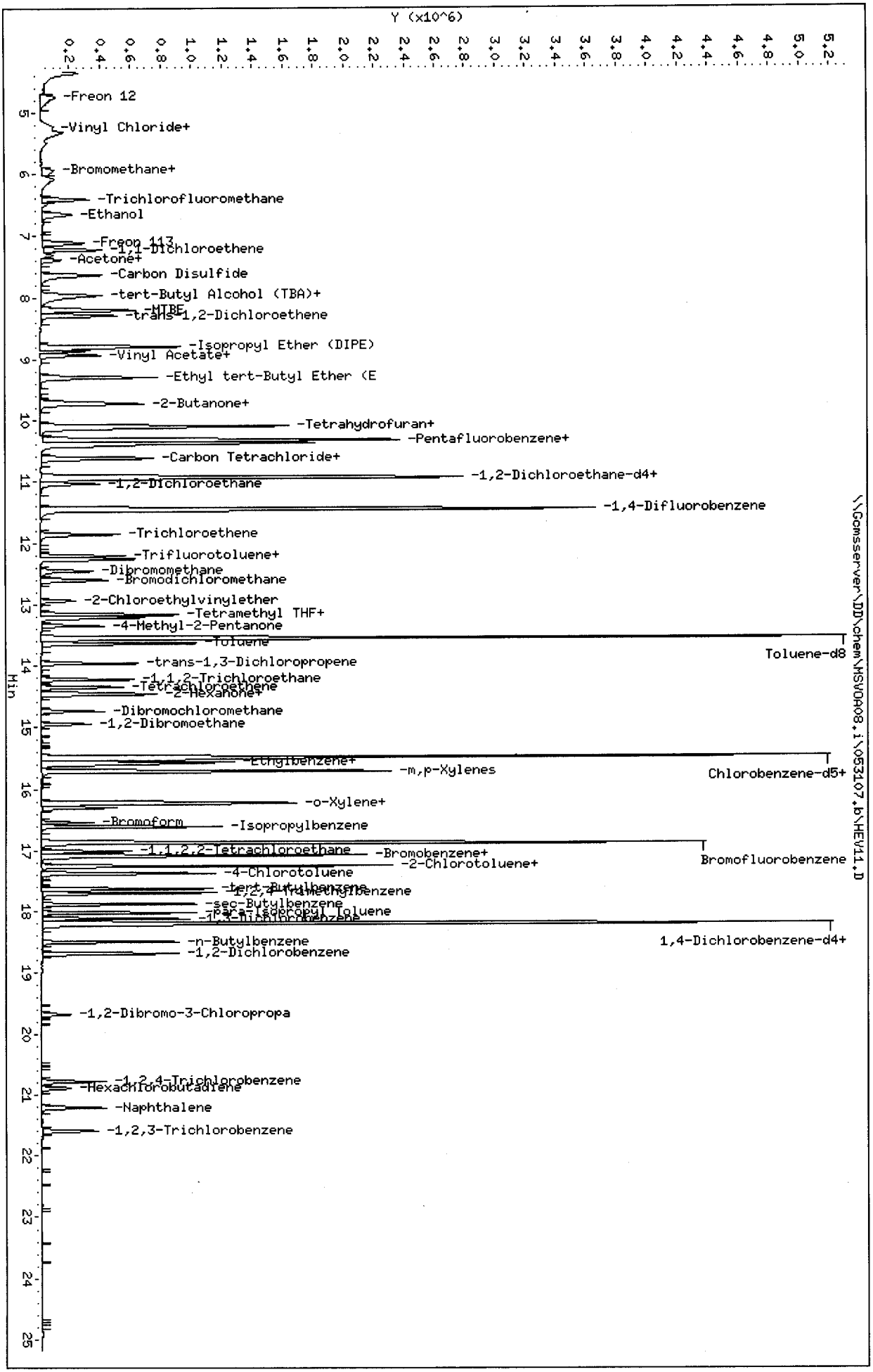
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1553098	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	264795	10.0000	10.4376
80 n-Butylbenzene	91	18.497	18.497	(1.017)	394687	10.0000	11.3023
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	243497	10.0000	10.3156
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	33494	10.0000	9.5332
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	96674	10.0000	10.0053
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	31330	10.0000	12.5014
85 Naphthalene	128	21.209	21.209	(1.166)	243702	10.0000	9.8389
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	88854	10.0000	9.7890

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Date : 31-MAY-2007 18:16
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.004/100,S6350,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 18:16 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.004/100,S6350,0.004/100,
Misc Info : S5720,0.002/100,20PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:51 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 18:16 Cal File: HEV11.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.747	4.747	(0.460)	385270	20.0000	23.0434(M)
2 Chloromethane	50	5.250	5.250	(0.508)	494049	20.0000	21.3803(M)
3 Vinyl Chloride	62	5.329	5.329	(0.516)	434488	20.0000	22.8325(M)
4 Bromomethane	94	5.950	5.950	(0.576)	217757	20.0000	19.6258(M)
5 Chloroethane	64	6.098	6.098	(0.590)	230533	20.0000	21.8727(M)
6 Trichlorofluoromethane	101	6.423	6.423	(0.622)	378696	20.0000	23.2709
7 Ethanol	45	6.670	6.670	(0.646)	452364	2000.00	1942.3529(A)
8 Freon 113	101	7.123	7.123	(0.690)	207994	20.0000	18.8695
9 1,1-Dichloroethene	96	7.232	7.232	(0.700)	212769	20.0000	18.7537
10 Acetone	43	7.321	7.321	(0.709)	149529	20.0000	19.6618
11 Isopropanol	45	7.390	7.390	(0.716)	250820	200.000	202.8046(A)
12 Carbon Disulfide	76	7.636	7.636	(0.739)	1009581	20.0000	19.3601
13 tert-Butyl Alcohol (TBA)	59	7.952	7.952	(0.770)	299935	200.000	196.5438(A)
14 Methylene Chloride	84	7.971	7.971	(0.772)	305375	20.0000	19.3198
15 MTBE	73	8.198	8.198	(0.794)	802005	20.0000	19.8419
16 trans-1,2-Dichloroethene	96	8.287	8.287	(0.802)	252694	20.0000	18.9983
17 Isopropyl Ether (DIPE)	45	8.790	8.790	(0.851)	1279659	20.0000	19.7348(A)
18 Vinyl Acetate	43	8.859	8.859	(0.858)	668618	20.0000	23.4040
19 1,1-Dichloroethane	63	8.928	8.928	(0.864)	532709	20.0000	19.6111
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	1006300	20.0000	19.8664(A)
21 2-Butanone	43	9.697	9.697	(0.939)	196643	20.0000	19.7095
22 2,2-Dichloropropane	77	9.716	9.716	(0.941)	260870	20.0000	22.3137

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.736	9.736	(0.943)	283058	20.0000	19.6635
	24 Tetrahydrofuran	42	10.101	10.101	(0.978)	1106466	200.000	197.6371(A)
	25 Bromochloromethane	128	10.101	10.101	(0.978)	136255	20.0000	19.4371
	26 Chloroform	83	10.131	10.131	(0.981)	465621	20.0000	19.2321
*	27 Pentafluorobenzene	168	10.328	10.328	(1.000)	2150769	50.0000	
	28 Dibromofluoromethane	113	10.377	10.377	(1.005)	1417567	50.0000	51.1364
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	303722	20.0000	19.0793
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	233628	20.0000	18.0419
	31 1,1-Dichloropropene	75	10.633	10.633	(0.929)	328792	20.0000	18.3015
	32 1,2-Dichloroethane-d4	65	10.929	10.929	(0.954)	1658388	50.0000	50.4284
	33 Benzene	78	10.949	10.949	(0.956)	1036731	20.0000	18.9603
	34 Methyl tert-Amyl Ether (TAME)	73	10.949	10.949	(0.956)	788750	20.0000	19.3610(A)
	35 1,2-Dichloroethane	62	11.038	11.038	(0.964)	404982	20.0000	19.3438
*	36 1,4-Difluorobenzene	114	11.452	11.452	(1.000)	3871482	50.0000	
	37 Trichloroethene	95	11.856	11.856	(1.035)	242101	20.0000	18.4760
	38 Trifluorotoluene	146	12.201	12.201	(1.065)	300459	20.0000	18.9212(A)
	39 1,2-Dichloropropane	63	12.250	12.250	(1.070)	314466	20.0000	18.9613
	40 Dibromomethane	93	12.448	12.448	(1.087)	191466	20.0000	18.4541
	41 Bromodichloromethane	83	12.595	12.595	(1.100)	369582	20.0000	19.1922
	42 2-Chloroethylvinylether	63	12.931	12.931	(1.129)	116468	20.0000	25.1607
	43 Tetramethyl THF	43	13.157	13.157	(1.149)	796723	20.0000	19.7792(A)
	44 cis-1,3-Dichloropropene	75	13.207	13.207	(1.153)	434616	20.0000	19.3232
	45 4-Methyl-2-Pentanone	43	13.345	13.345	(1.165)	407190	20.0000	19.4200
	46 Toluene-d8	98	13.542	13.542	(1.183)	4074373	50.0000	50.2339
	47 Toluene	92	13.641	13.641	(1.191)	547931	20.0000	18.3318
	48 trans-1,3-Dichloropropene	75	13.966	13.966	(1.220)	391926	20.0000	19.4086
	49 1,1,2-Trichloroethane	85	14.222	14.222	(1.242)	140712	20.0000	19.3834
	50 Tetrachloroethene	166	14.350	14.350	(0.927)	180664	20.0000	17.6461
	51 2-Hexanone	43	14.449	14.449	(0.934)	275833	20.0000	19.4709
	52 1,3-Dichloropropane	76	14.469	14.469	(0.935)	431668	20.0000	18.8925
	53 Dibromochloromethane	129	14.745	14.745	(0.953)	253915	20.0000	18.8170
	54 1,2-Dibromoethane	107	14.952	14.952	(1.306)	258725	20.0000	18.5118
*	55 Chlorobenzene-d5	117	15.474	15.474	(1.000)	3092107	50.0000	
	56 Chlorobenzene	112	15.514	15.514	(1.003)	593151	20.0000	18.4023
	57 Ethylbenzene	91	15.563	15.563	(1.006)	999136	20.0000	18.0645
	58 1,1,1,2-Tetrachloroethane	131	15.593	15.593	(1.008)	198487	20.0000	18.1387
	59 m,p-Xylenes	106	15.701	15.701	(1.015)	744350	40.0000	36.2019
	60 o-Xylene	106	16.204	16.204	(1.047)	370882	20.0000	18.4235
	61 Styrene	104	16.224	16.224	(1.048)	645091	20.0000	18.7796
	62 Bromoform	173	16.529	16.529	(1.068)	169128	20.0000	20.3068
	63 Isopropylbenzene	105	16.598	16.598	(0.912)	872337	20.0000	18.2582
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1735002	50.0000	50.2488
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.934)	366386	20.0000	19.0082
	67 Bromobenzene	156	17.072	17.072	(0.938)	237964	20.0000	18.3039
	68 Propylbenzene	91	17.072	17.072	(0.938)	1128170	20.0000	17.6089
	69 1,2,3-Trichloropropane	110	17.091	17.091	(0.939)	83131	20.0000	18.0428
	70 2-Chlorotoluene	91	17.249	17.249	(0.948)	792905	20.0000	18.3720
	71 1,3,5-Trimethylbenzene	105	17.249	17.249	(0.948)	726918	20.0000	18.1415
	72 4-Chlorotoluene	91	17.367	17.367	(0.954)	741961	20.0000	18.4009
	73 tert-Butylbenzene	119	17.624	17.624	(0.969)	578849	20.0000	18.0769
	74 1,2,4-Trimethylbenzene	105	17.693	17.693	(0.972)	736162	20.0000	18.4545
	75 sec-Butylbenzene	105	17.880	17.880	(0.983)	882019	20.0000	17.9658
	76 para-Isopropyl Toluene	119	18.018	18.018	(0.990)	663555	20.0000	18.1304
	77 1,3-Dichlorobenzene	146	18.117	18.117	(0.996)	434926	20.0000	18.6149

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

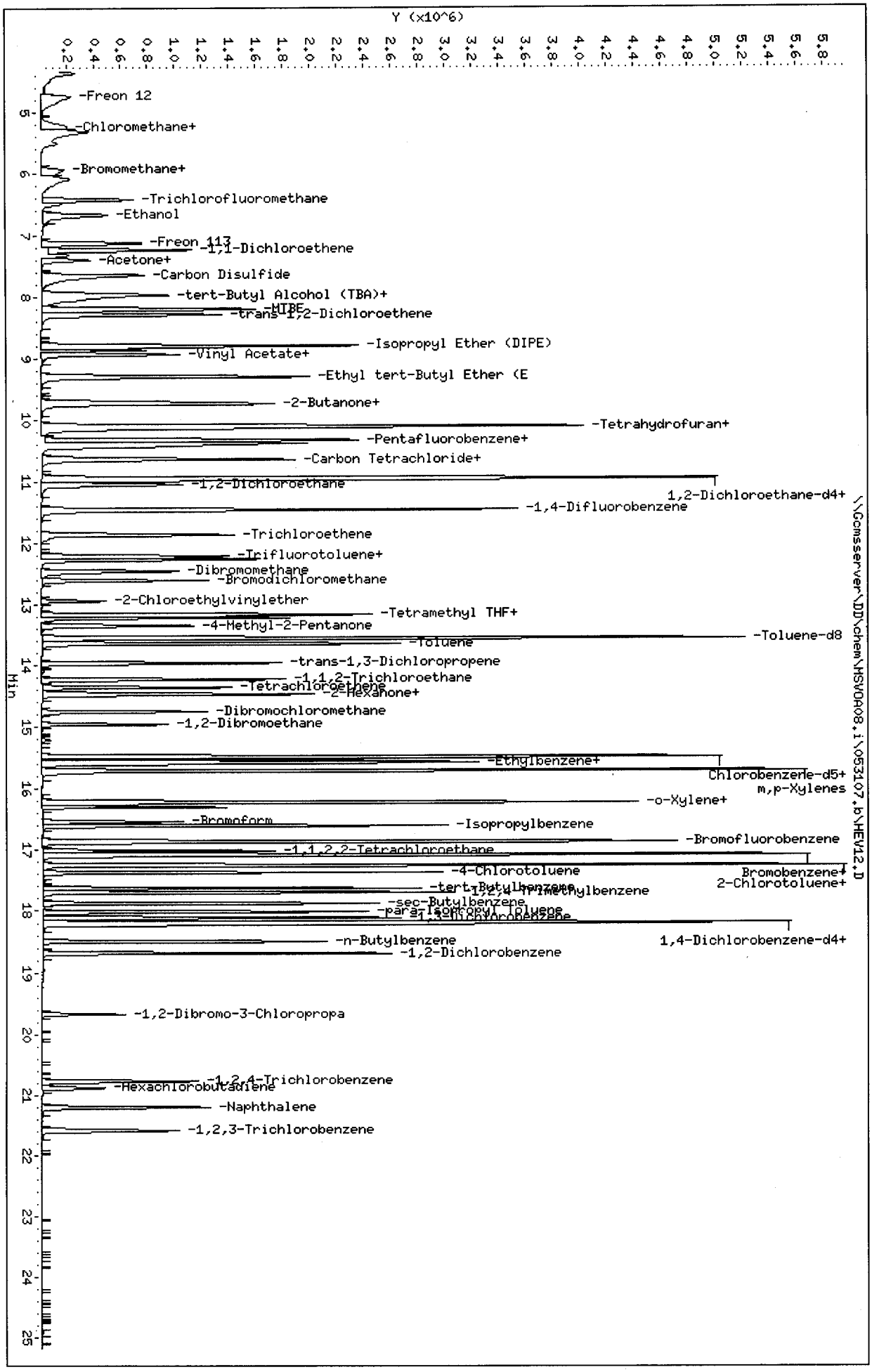
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.196	18.196	(1.000)	1531103	50.0000	
79 1,4-Dichlorobenzene	146	18.225	18.225	(1.002)	444012	20.0000	17.7534
80 n-Butylbenzene	91	18.501	18.501	(1.017)	625515	20.0000	18.1696
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.027)	422858	20.0000	18.1715
82 1,2-Dibromo-3-Chloropropane	75	19.665	19.665	(1.081)	62942	20.0000	18.1723
83 1,2,4-Trichlorobenzene	180	20.779	20.779	(1.142)	177934	20.0000	18.6798
84 Hexachlorobutadiene	225	20.887	20.887	(1.148)	48709	20.0000	19.8503
85 Naphthalene	128	21.203	21.203	(1.165)	475599	20.0000	19.4771
86 1,2,3-Trichlorobenzene	180	21.587	21.587	(1.186)	167505	20.0000	18.7190

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Date : 31-MAY-2007 18:54
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.01/100,S6350,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 18:54 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.01/100,S6350,0.01/100,
Misc Info : S5720,0.005/100,50PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:52 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 18:54 Cal File: HEV12.D
Als bottle: 12 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.748	4.748	(0.460)	964977	50.0000	54.9675(M)
2 Chloromethane	50	5.261	5.261	(0.509)	1190309	50.0000	49.0448(M)
3 Vinyl Chloride	62	5.340	5.340	(0.517)	1021185	50.0000	51.1215(M)
4 Bromomethane	94	5.961	5.961	(0.577)	548660	50.0000	46.9572(M)
5 Chloroethane	64	6.089	6.089	(0.590)	582939	50.0000	52.6513(M)
6 Trichlorofluoromethane	101	6.434	6.434	(0.623)	880484	50.0000	51.5446
7 Ethanol	45	6.681	6.681	(0.647)	1300815	5000.00	5321.0086(A)
8 Freon 113	101	7.134	7.134	(0.691)	551259	50.0000	47.6436
9 1,1-Dichloroethene	96	7.233	7.233	(0.700)	582289	50.0000	48.8940
10 Acetone	43	7.321	7.321	(0.709)	397384	50.0000	49.7792
11 Isopropanol	45	7.400	7.400	(0.717)	668678	500.000	515.0757(A)
12 Carbon Disulfide	76	7.647	7.647	(0.740)	2686061	50.0000	49.0706
13 tert-Butyl Alcohol (TBA)	59	7.943	7.943	(0.769)	815062	500.000	508.8166(A)
14 Methylene Chloride	84	7.972	7.972	(0.772)	854107	50.0000	51.4778
15 MTBE	73	8.199	8.199	(0.794)	2152894	50.0000	50.7421
16 trans-1,2-Dichloroethene	96	8.288	8.288	(0.802)	687517	50.0000	49.2428
17 Isopropyl Ether (DIPE)	45	8.790	8.790	(0.851)	3515688	50.0000	51.6522(A)
18 Vinyl Acetate	43	8.860	8.860	(0.858)	1624873	50.0000	54.1838
19 1,1-Dichloroethane	63	8.929	8.929	(0.864)	1404570	50.0000	49.2601
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	2744657	50.0000	51.6201(A)
21 2-Butanone	43	9.698	9.698	(0.939)	529856	50.0000	50.5933
22 2,2-Dichloropropane	77	9.717	9.717	(0.941)	611952	50.0000	49.8658

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.737	9.737	(0.943)	763577	50.0000	50.5334
	24 Tetrahydrofuran	42	10.092	10.092	(0.977)	2869106	500.000	488.2198(A)
	25 Bromochloromethane	128	10.102	10.102	(0.978)	390480	50.0000	53.0659
	26 Chloroform	83	10.131	10.131	(0.981)	1282054	50.0000	50.4475
*	27 Pentafluorobenzene	168	10.329	10.329	(1.000)	2257644	50.0000	
	28 Dibromofluoromethane	113	10.378	10.378	(1.005)	1457048	50.0000	50.0724
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	810216	50.0000	48.4871
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	616176	50.0000	47.1298
	31 1,1-Dichloropropene	75	10.634	10.634	(0.929)	860928	50.0000	47.4642
	32 1,2-Dichloroethane-d4	65	10.930	10.930	(0.954)	1690099	50.0000	50.9018
	33 Benzene	78	10.950	10.950	(0.956)	2789614	50.0000	50.5307
	34 Methyl tert-Amyl Ether (TAME)	73	10.950	10.950	(0.956)	2184691	50.0000	53.1144(A)
	35 1,2-Dichloroethane	62	11.038	11.038	(0.964)	1106619	50.0000	52.3524
*	36 1,4-Difluorobenzene	114	11.453	11.453	(1.000)	3908815	50.0000	
	37 Trichloroethene	95	11.857	11.857	(1.035)	666860	50.0000	50.4056
	38 Trifluorotoluene	146	12.202	12.202	(1.065)	793129	50.0000	49.9762(A)
	39 1,2-Dichloropropane	63	12.261	12.261	(1.071)	845708	50.0000	50.5065
	40 Dibromomethane	93	12.448	12.448	(1.087)	555128	50.0000	52.9940
	41 Bromodichloromethane	83	12.596	12.596	(1.100)	1029400	50.0000	52.9458
	42 2-Chloroethylvinylether	63	12.931	12.931	(1.129)	237252	50.0000	46.3511
	43 Tetramethyl THF	43	13.158	13.158	(1.149)	2155761	50.0000	53.0072(A)
	44 cis-1,3-Dichloropropene	75	13.208	13.208	(1.153)	1192864	50.0000	52.5289
	45 4-Methyl-2-Pentanone	43	13.346	13.346	(1.165)	1135954	50.0000	53.6594
	46 Toluene-d8	98	13.543	13.543	(1.183)	4192184	50.0000	51.1927
	47 Toluene	92	13.641	13.641	(1.191)	1486942	50.0000	49.2726
	48 trans-1,3-Dichloropropene	75	13.957	13.957	(1.219)	1088803	50.0000	53.4039
	49 1,1,2-Trichloroethane	85	14.223	14.223	(1.242)	396622	50.0000	54.1138
	50 Tetrachloroethene	166	14.351	14.351	(0.927)	485096	50.0000	45.7510
	51 2-Hexanone	43	14.440	14.440	(0.933)	790429	50.0000	53.8763
	52 1,3-Dichloropropane	76	14.470	14.470	(0.935)	1226799	50.0000	51.8451
	53 Dibromochloromethane	129	14.746	14.746	(0.953)	752726	50.0000	53.8636
	54 1,2-Dibromoethane	107	14.953	14.953	(1.306)	767402	50.0000	54.3834
*	55 Chlorobenzene-d5	117	15.475	15.475	(1.000)	3202283	50.0000	
	56 Chlorobenzene	112	15.515	15.515	(1.003)	1641326	50.0000	49.1695
	57 Ethylbenzene	91	15.564	15.564	(1.006)	2608998	50.0000	45.5482
	58 1,1,1,2-Tetrachloroethane	131	15.593	15.593	(1.008)	561179	50.0000	49.5190
	59 m,p-Xylenes	106	15.702	15.702	(1.015)	2020884	100.000	94.9053
	60 o-Xylene	106	16.205	16.205	(1.047)	988249	50.0000	47.4023
	61 Styrene	104	16.224	16.224	(1.048)	1818031	50.0000	51.1048
	62 Bromoform	173	16.530	16.530	(1.068)	515830	50.0000	59.8036
	63 Isopropylbenzene	105	16.599	16.599	(0.912)	2293040	50.0000	45.8574
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1777034	50.0000	49.1751
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.934)	1065633	50.0000	52.8242
	67 Bromobenzene	156	17.072	17.072	(0.938)	699605	50.0000	51.4174
	68 Propylbenzene	91	17.072	17.072	(0.938)	2896384	50.0000	43.1955
	69 1,2,3-Trichloropropane	110	17.092	17.092	(0.939)	248407	50.0000	51.5145
	70 2-Chlorotoluene	91	17.250	17.250	(0.948)	2116538	50.0000	46.8581
	71 1,3,5-Trimethylbenzene	105	17.250	17.250	(0.948)	1924214	50.0000	45.8845
	72 4-Chlorotoluene	91	17.368	17.368	(0.954)	1985804	50.0000	47.0564
	73 tert-Butylbenzene	119	17.625	17.625	(0.969)	1496460	50.0000	44.6527
	74 1,2,4-Trimethylbenzene	105	17.694	17.694	(0.972)	1945976	50.0000	46.6113
	75 sec-Butylbenzene	105	17.881	17.881	(0.983)	2210364	50.0000	43.0187
	76 para-Isopropyl Toluene	119	18.019	18.019	(0.990)	1639940	50.0000	42.8136
	77 1,3-Dichlorobenzene	146	18.117	18.117	(0.996)	1216690	50.0000	49.7566

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

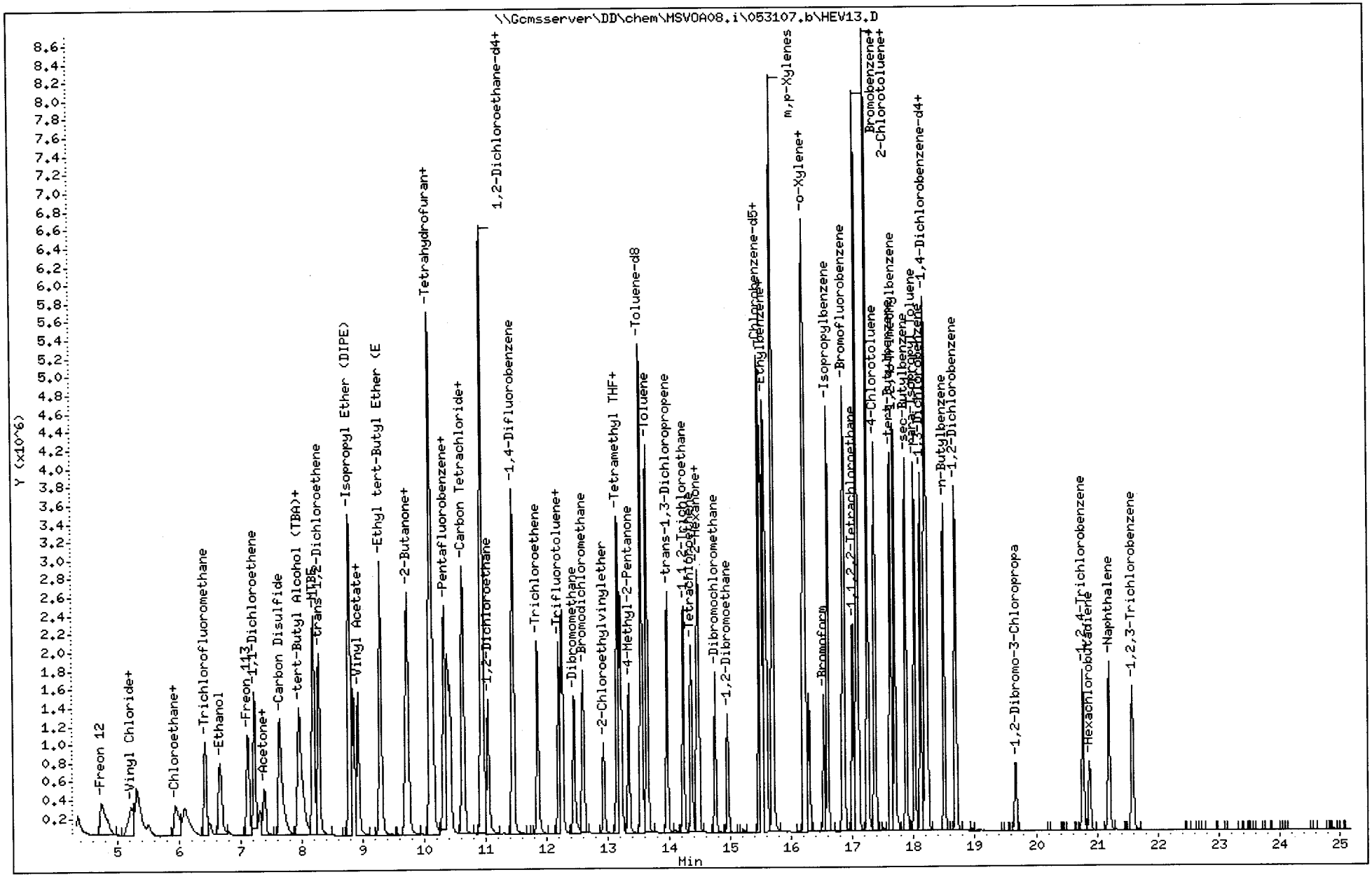
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.196	18.196	(1.000)	1602437	50.0000	
79 1,4-Dichlorobenzene	146	18.226	18.226	(1.002)	1269055	50.0000	48.4833
80 n-Butylbenzene	91	18.502	18.502	(1.017)	1518697	50.0000	42.1505
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.027)	1230283	50.0000	50.5156
82 1,2-Dibromo-3-Chloropropane	75	19.665	19.665	(1.081)	206056	50.0000	56.8432
83 1,2,4-Trichlorobenzene	180	20.770	20.770	(1.141)	477724	50.0000	47.9199
84 Hexachlorobutadiene	225	20.888	20.888	(1.148)	116249	50.0000	45.5653
85 Naphthalene	128	21.204	21.204	(1.165)	1394041	50.0000	54.5485
86 1,2,3-Trichlorobenzene	180	21.588	21.588	(1.186)	463014	50.0000	49.4395

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Date : 31-MAY-2007 19:32
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.015/100,S6350,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 19:32 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.015/100,S6350,0.015/100,
Misc Info : S5720,0.0075/100,75PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:53 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 19:32 Cal File: HEV13.D
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.754	4.754	(0.460)	1507636	75.0000	83.4956(M)
2 Chloromethane	50	5.237	5.237	(0.507)	1745935	75.0000	69.9272(M)
3 Vinyl Chloride	62	5.326	5.326	(0.516)	1565902	75.0000	76.2149
4 Bromomethane	94	5.947	5.947	(0.576)	935480	75.0000	77.8996(M)
5 Chloroethane	64	6.085	6.085	(0.589)	824501	75.0000	72.4027(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	1400933	75.0000	79.7363
7 Ethanol	45	6.666	6.666	(0.646)	1798464	7500.00	7152.4789(A)
8 Freon 113	101	7.120	7.120	(0.690)	786508	75.0000	66.0889
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	882327	75.0000	72.0316
10 Acetone	43	7.317	7.317	(0.709)	487697	75.0000	59.3969
11 Isopropanol	45	7.386	7.386	(0.715)	989409	750.000	740.9797(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	4055589	75.0000	72.0337
13 tert-Butyl Alcohol (TBA)	59	7.938	7.938	(0.769)	1227292	750.000	744.8948(A)
14 Methylene Chloride	84	7.978	7.978	(0.773)	1246317	75.0000	73.0319
15 MTBE	73	8.195	8.195	(0.794)	3289573	75.0000	75.3810
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	1061224	75.0000	73.8997
17 Isopropyl Ether (DIPE)	45	8.786	8.786	(0.851)	5051389	75.0000	72.1549(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	3546759	75.0000	114.9896
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	2128915	75.0000	72.5917
20 Ethyl tert-Butyl Ether (ETBE)	59	9.289	9.289	(0.900)	3997044	75.0000	73.0881(A)
21 2-Butanone	43	9.693	9.693	(0.939)	762757	75.0000	70.8106
22 2,2-Dichloropropane	77	9.713	9.713	(0.941)	1092200	75.0000	86.5295

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.733	9.733	(0.943)	1170190	75.0000	75.2936
24 Tetrahydrofuran	42	10.097	10.097	(0.978)	3954124	750.000	654.1774(A)
25 Bromochloromethane	128	10.097	10.097	(0.978)	589565	75.0000	77.8978
26 Chloroform	83	10.137	10.137	(0.982)	1880252	75.0000	71.9327
* 27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2322090	50.0000	
28 Dibromofluoromethane	113	10.374	10.374	(1.005)	1484165	50.0000	49.5888
29 1,1,1-Trichloroethane	97	10.413	10.413	(1.009)	1213657	75.0000	70.6152
30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	934946	75.0000	69.5359
31 1,1-Dichloropropene	75	10.630	10.630	(0.929)	1311898	75.0000	70.3284
32 1,2-Dichloroethane-d4	65	10.926	10.926	(0.954)	1580189	50.0000	46.2767
33 Benzene	78	10.945	10.945	(0.956)	3983418	75.0000	70.1615
34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	3053583	75.0000	72.1878(A)
35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	1589391	75.0000	73.1141
* 36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	4019882	50.0000	
37 Trichloroethene	95	11.852	11.852	(1.035)	990575	75.0000	72.8054
38 Trifluorotoluene	146	12.207	12.207	(1.066)	1208782	75.0000	74.2138(A)
39 1,2-Dichloropropane	63	12.257	12.257	(1.071)	1269299	75.0000	73.7094
40 Dibromomethane	93	12.444	12.444	(1.087)	816724	75.0000	75.8125
41 Bromodichloromethane	83	12.592	12.592	(1.100)	1497328	75.0000	74.8852
42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	529499	75.0000	75.5016
43 Tetramethyl THF	43	13.154	13.154	(1.149)	2951551	75.0000	70.5694(A)
44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	1813023	75.0000	77.6323
45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	1584578	75.0000	72.7831
46 Toluene-d8	98	13.538	13.538	(1.183)	4266589	50.0000	50.6618
47 Toluene	92	13.637	13.637	(1.191)	2274029	75.0000	73.2722
48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	1608541	75.0000	76.7163
49 1,1,2-Trichloroethane	85	14.229	14.229	(1.243)	583278	75.0000	77.3818
50 Tetrachloroethene	166	14.357	14.357	(0.928)	740819	75.0000	67.8269
51 2-Hexanone	43	14.445	14.445	(0.934)	1124864	75.0000	74.4306
52 1,3-Dichloropropane	76	14.465	14.465	(0.935)	1716391	75.0000	70.4153
53 Dibromochloromethane	129	14.751	14.751	(0.953)	1085386	75.0000	75.3979
54 1,2-Dibromoethane	107	14.948	14.948	(1.306)	1111891	75.0000	76.6192
* 55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3298700	50.0000	
56 Chlorobenzene	112	15.510	15.510	(1.003)	2476763	75.0000	72.0282
57 Ethylbenzene	91	15.560	15.560	(1.006)	3849956	75.0000	65.2485
58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	846223	75.0000	72.4890
59 m,p-Xylenes	106	15.698	15.698	(1.015)	3000490	150.000	136.7912
60 o-Xylene	106	16.200	16.200	(1.047)	1544979	75.0000	71.9403
61 Styrene	104	16.220	16.220	(1.048)	2704961	75.0000	73.8139
62 Bromoform	173	16.526	16.526	(1.068)	747381	75.0000	84.1163
63 Isopropylbenzene	105	16.595	16.595	(0.912)	3424206	75.0000	67.7714
65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1771065	50.0000	48.5035
66 1,1,2,2-Tetrachloroethane	83	17.009	17.009	(0.935)	1493341	75.0000	73.2611
67 Bromobenzene	156	17.068	17.068	(0.938)	1007199	75.0000	73.2591
68 Propylbenzene	91	17.068	17.068	(0.938)	4208216	75.0000	62.1112
69 1,2,3-Trichloropropane	110	17.098	17.098	(0.940)	349632	75.0000	71.7573
70 2-Chlorotoluene	91	17.246	17.246	(0.948)	3071497	75.0000	67.2973
71 1,3,5-Trimethylbenzene	105	17.246	17.246	(0.948)	2880692	75.0000	67.9827
72 4-Chlorotoluene	91	17.364	17.364	(0.954)	2950195	75.0000	69.1866
73 tert-Butylbenzene	119	17.630	17.630	(0.969)	2265288	75.0000	66.8953
74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	3017783	75.0000	71.5371
75 sec-Butylbenzene	105	17.877	17.877	(0.983)	3348946	75.0000	64.5046
76 para-Isopropyl Toluene	119	18.015	18.015	(0.990)	2664913	75.0000	68.8535
77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	1765418	75.0000	71.4508

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

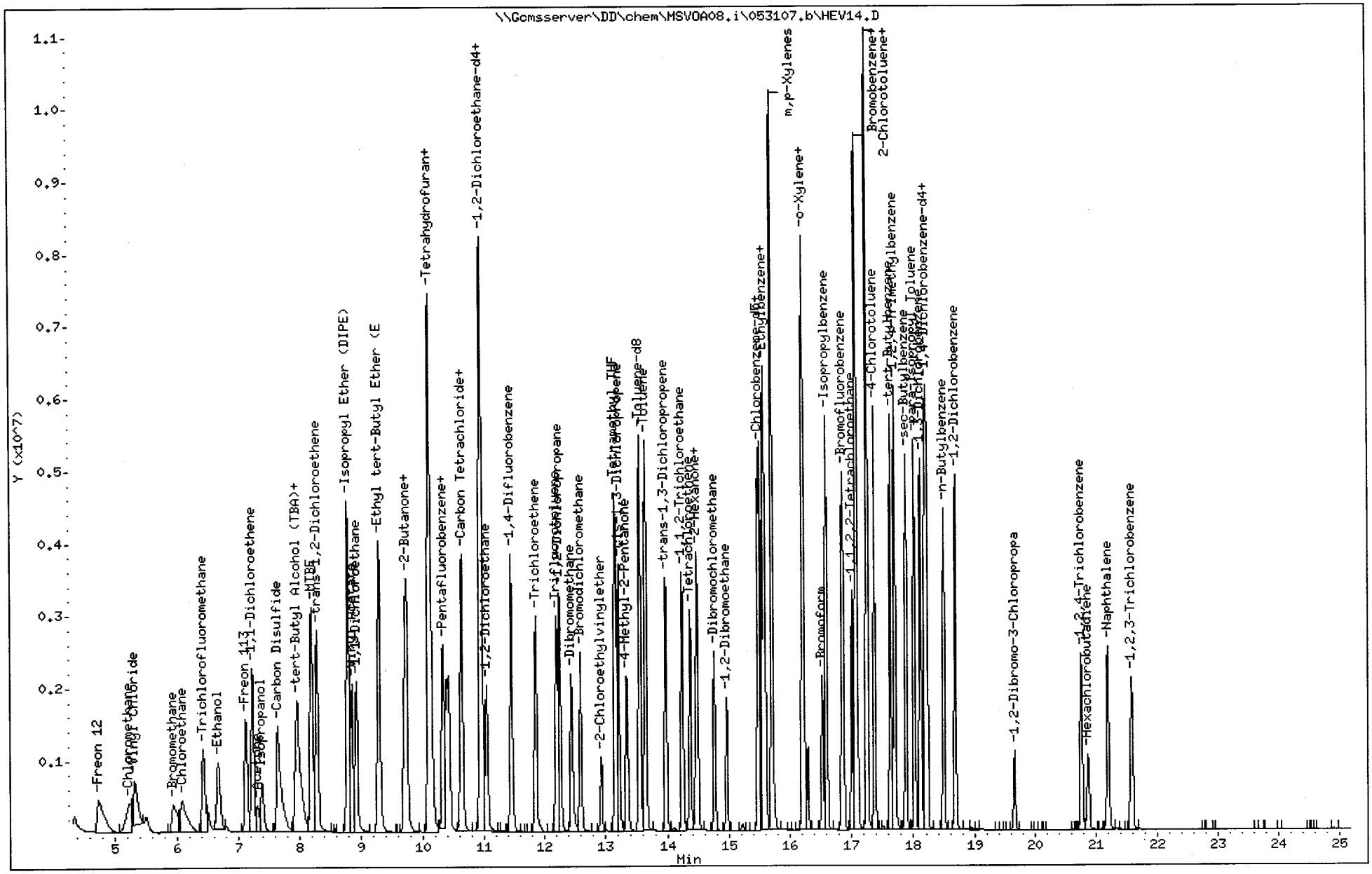
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1619168	50.0000	
79 1,4-Dichlorobenzene	146	18.222	18.222	(1.002)	1837123	75.0000	69.4607
80 n-Butylbenzene	91	18.498	18.498	(1.017)	2391378	75.0000	65.6854
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	1766111	75.0000	71.7675
82 1,2-Dibromo-3-Chloropropane	75	19.661	19.661	(1.081)	249935	75.0000	68.2353
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	757248	75.0000	75.1737
84 Hexachlorobutadiene	225	20.884	20.884	(1.148)	191507	75.0000	74.4354
85 Naphthalene	128	21.199	21.199	(1.165)	2119946	75.0000	82.0958
86 1,2,3-Trichlorobenzene	180	21.584	21.584	(1.186)	724799	75.0000	76.5926

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Date : 31-MAY-2007 20:10
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.02/100,S6350,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



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Report Date: 01-Jun-2007 15:54

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 20:10 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.02/100,S6350,0.02/100,
Misc Info : S5720,0.01/100,100PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:54 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 20:10 Cal File: HEV14.D
Als bottle: 14 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.748	4.748	(0.460)	2009697	100.000	103.9812(M)
2 Chloromethane	50	5.251	5.251	(0.508)	2429824	100.000	90.8384(M)
3 Vinyl Chloride	62	5.330	5.330	(0.516)	2056555	100.000	93.4960
4 Bromomethane	94	5.941	5.941	(0.575)	1243266	100.000	96.7608(M)
5 Chloroethane	64	6.089	6.089	(0.590)	1141290	100.000	93.6389(M)
6 Trichlorofluoromethane	101	6.424	6.424	(0.622)	1858314	100.000	98.7950
7 Ethanol	45	6.671	6.671	(0.646)	2442575	10000.0	9073.6071(A)
8 Freon 113	101	7.124	7.124	(0.690)	1139340	100.000	89.4244
9 1,1-Dichloroethene	96	7.233	7.233	(0.700)	1287868	100.000	98.2069
10 Acetone	43	7.322	7.322	(0.709)	661251	100.000	75.2242
11 Isopropanol	45	7.391	7.391	(0.716)	1364247	1000.00	954.3347(A)
12 Carbon Disulfide	76	7.647	7.647	(0.740)	5647147	100.000	93.6889
13 tert-Butyl Alcohol (TBA)	59	7.943	7.943	(0.769)	1727292	1000.00	979.2420(A)
14 Methylene Chloride	84	7.972	7.972	(0.772)	1778044	100.000	97.3204
15 MTBE	73	8.199	8.199	(0.794)	4556525	100.000	97.5289
16 trans-1,2-Dichloroethene	96	8.288	8.288	(0.802)	1524217	100.000	99.1425
17 Isopropyl Ether (DIPE)	45	8.791	8.791	(0.851)	6797211	100.000	90.6908(A)
18 Vinyl Acetate	43	8.860	8.860	(0.858)	4696652	100.000	142.2304
19 1,1-Dichloroethane	63	8.929	8.929	(0.864)	2870507	100.000	91.4249
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	5477291	100.000	93.5515(A)
21 2-Butanone	43	9.698	9.698	(0.939)	1066540	100.000	92.4840
22 2,2-Dichloropropane	77	9.717	9.717	(0.941)	1412983	100.000	104.5626

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Report Date: 01-Jun-2007 15:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.737	9.737	(0.943)	1629036	100.000	97.9061
	24 Tetrahydrofuran	42	10.092	10.092	(0.977)	5376285	1000.00	830.8158(A)
	25 Bromochloromethane	128	10.102	10.102	(0.978)	823258	100.000	101.6031
	26 Chloroform	83	10.131	10.131	(0.981)	2586496	100.000	92.4271
*	27 Pentafluorobenzene	168	10.329	10.329	(1.000)	2486004	50.0000	
	28 Dibromofluoromethane	113	10.378	10.378	(1.005)	1553529	50.0000	48.4839
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	1722380	100.000	93.6070
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	1334694	100.000	92.6725
	31 1,1-Dichloropropene	75	10.634	10.634	(0.929)	1807689	100.000	90.4693
	32 1,2-Dichloroethane-d4	65	10.930	10.930	(0.954)	1580018	50.0000	43.1978
	33 Benzene	78	10.950	10.950	(0.956)	5343835	100.000	87.8703
	34 Methyl tert-Amyl Ether (TAME)	73	10.950	10.950	(0.956)	4129266	100.000	91.1325(A)
	35 1,2-Dichloroethane	62	11.039	11.039	(0.964)	2159569	100.000	92.7436
*	36 1,4-Difluorobenzene	114	11.453	11.453	(1.000)	4305930	50.0000	
	37 Trichloroethene	95	11.857	11.857	(1.035)	1404535	100.000	96.3729
	38 Trifluorotoluene	146	12.202	12.202	(1.065)	1753271	100.000	100.6033(A)
	39 1,2-Dichloropropane	63	12.251	12.251	(1.070)	1698934	100.000	92.1048
	40 Dibromomethane	93	12.448	12.448	(1.087)	1150091	100.000	99.6653
	41 Bromodichloromethane	83	12.596	12.596	(1.100)	2115216	100.000	98.7598
	42 2-Chloroethylvinylether	63	12.932	12.932	(1.129)	538549	100.000	73.9594
	43 Tetramethyl THF	43	13.158	13.158	(1.149)	3998896	100.000	89.2592(A)
	44 cis-1,3-Dichloropropene	75	13.208	13.208	(1.153)	2458200	100.000	98.2659
	45 4-Methyl-2-Pentanone	43	13.336	13.336	(1.164)	2209602	100.000	94.7495
	46 Toluene-d8	98	13.543	13.543	(1.183)	4391346	50.0000	48.6793
	47 Toluene	92	13.632	13.632	(1.190)	3138220	100.000	94.4002
	48 trans-1,3-Dichloropropene	75	13.957	13.957	(1.219)	2245072	100.000	99.9614
	49 1,1,2-Trichloroethane	85	14.223	14.223	(1.242)	829544	100.000	102.7422
	50 Tetrachloroethene	166	14.351	14.351	(0.927)	1085585	100.000	97.8873
	51 2-Hexanone	43	14.440	14.440	(0.933)	1470922	100.000	95.8549
	52 1,3-Dichloropropane	76	14.470	14.470	(0.935)	2402523	100.000	97.0714
	53 Dibromochloromethane	129	14.746	14.746	(0.953)	1554139	100.000	106.3256
	54 1,2-Dibromoethane	107	14.953	14.953	(1.306)	1551363	100.000	99.8011
*	55 Chlorobenzene-d5	117	15.475	15.475	(1.000)	3349423	50.0000	
	56 Chlorobenzene	112	15.515	15.515	(1.003)	3286495	100.000	94.1292
	57 Ethylbenzene	91	15.564	15.564	(1.006)	5163532	100.000	86.1855
	58 1,1,1,2-Tetrachloroethane	131	15.594	15.594	(1.008)	1181366	100.000	99.6655
	59 m,p-Xylenes	106	15.702	15.702	(1.015)	4063320	200.000	182.4400
	60 o-Xylene	106	16.205	16.205	(1.047)	2075695	100.000	95.1889
	61 Styrene	104	16.225	16.225	(1.048)	3567611	100.000	95.8799
	62 Bromoform	173	16.530	16.530	(1.068)	1092377	100.000	121.0831
	63 Isopropylbenzene	105	16.599	16.599	(0.913)	4588113	100.000	87.7022
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1847691	50.0000	48.8717
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.935)	2088466	100.000	98.9536
	67 Bromobenzene	156	17.072	17.072	(0.939)	1343207	100.000	94.3580
	68 Propylbenzene	91	17.063	17.063	(0.938)	5301436	100.000	75.5710
	69 1,2,3-Trichloropropane	110	17.092	17.092	(0.940)	487324	100.000	96.5967
	70 2-Chlorotoluene	91	17.250	17.250	(0.948)	4054173	100.000	85.7906
	71 1,3,5-Trimethylbenzene	105	17.250	17.250	(0.948)	3841367	100.000	87.5542
	72 4-Chlorotoluene	91	17.368	17.368	(0.955)	3947935	100.000	89.4192
	73 tert-Butylbenzene	119	17.625	17.625	(0.969)	3083800	100.000	87.9525
	74 1,2,4-Trimethylbenzene	105	17.694	17.694	(0.973)	3922101	100.000	89.7949
	75 sec-Butylbenzene	105	17.881	17.881	(0.983)	4632222	100.000	86.1711
	76 para-Isopropyl Toluene	119	18.019	18.019	(0.991)	3633536	100.000	90.6697
	77 1,3-Dichlorobenzene	146	18.118	18.118	(0.996)	2434575	100.000	95.1640

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Report Date: 01-Jun-2007 15:54

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.187	18.187	(1.000)	1676495	50.0000	
79 1,4-Dichlorobenzene	146	18.216	18.216	(1.002)	2504441	100.000	91.4538
80 n-Butylbenzene	91	18.492	18.492	(1.017)	3191521	100.000	84.6658
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.028)	2415098	100.000	94.7839
82 1,2-Dibromo-3-Chloropropane	75	19.666	19.666	(1.081)	368585	100.000	97.1873
83 1,2,4-Trichlorobenzene	180	20.770	20.770	(1.142)	1072068	100.000	102.7874
84 Hexachlorobutadiene	225	20.888	20.888	(1.149)	271674	100.000	102.0707
85 Naphthalene	128	21.204	21.204	(1.166)	2875104	100.000	107.5325
86 1,2,3-Trichlorobenzene	180	21.588	21.588	(1.187)	987951	100.000	100.8310

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : 25PPB IDF : 1.0
Seqnum : 477228007004 File : hf704 Time : 07-JUN-2007 12:02
Cal : 477218189002 Caldate : 31-MAY-2007 Caltype : WATER
Standards: S6217 (20000X), S6350 (20000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5380	0.5606	25.00	26.05	ug/L	4	30	0.1000	m
Vinyl Chloride	0.4424	0.4518	25.00	25.53	ug/L	2	20	0.0500	m
Bromomethane	0.2401	0.2223	25.00	23.14	ug/L	-7	30	0.0500	m
Chloroethane	0.2451	0.2655	25.00	27.08	ug/L	8	30	0.0500	m
Acetone	0.1768	0.1804	25.00	25.51	ug/L	2	40	0.0500	
1,1-Dichloroethene	0.2638	0.2498	25.00	23.67	ug/L	-5	20	0.0500	
Methylene Chloride	0.3675	0.3759	25.00	25.58	ug/L	2	30	0.0500	
Carbon Disulfide	1.2123	1.2049	25.00	24.85	ug/L	-1	30	0.0500	
MTBE	0.9397	0.9508	25.00	25.30	ug/L	1	30	0.0500	
trans-1,2-Dichloroethene	0.3092	0.3155	25.00	25.51	ug/L	2	30	0.0500	
Vinyl Acetate	0.6641	1.0487	25.00	39.48	ug/L	**58**	40	0.0500	c+ ***
1,1-Dichloroethane	0.6315	0.6618	25.00	26.20	ug/L	5	30	0.1000	
2-Butanone	0.2319	0.2333	25.00	25.15	ug/L	1	40	0.0500	
cis-1,2-Dichloroethene	0.3346	0.3421	25.00	25.56	ug/L	2	30	0.0500	
Chloroform	0.5628	0.5896	25.00	26.19	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.3701	0.3723	25.00	25.15	ug/L	1	30	0.0500	
Carbon Tetrachloride	0.1672	0.1602	25.00	23.95	ug/L	-4	30	0.0500	
1,2-Dichloroethane	0.2704	0.2807	25.00	25.96	ug/L	4	30	0.0500	
Benzene	0.7062	0.7307	25.00	25.87	ug/L	3	30	0.0500	
Trichloroethene	0.1692	0.1648	25.00	24.34	ug/L	-3	30	0.0500	
1,2-Dichloropropane	0.2142	0.2160	25.00	25.21	ug/L	1	20	0.0500	
Bromodichloromethane	0.2487	0.2574	25.00	25.87	ug/L	3	30	0.0500	
4-Methyl-2-Pentanone	0.2708	0.2577	25.00	23.79	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.2905	0.3096	25.00	26.65	ug/L	7	30	0.0500	
Toluene	0.3860	0.3870	25.00	25.06	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.2608	0.2842	25.00	27.24	ug/L	9	30	0.0500	
1,1,2-Trichloroethane	0.0938	0.0959	25.00	25.58	ug/L	2	30	0.0500	
2-Hexanone	0.2291	0.2267	25.00	24.74	ug/L	-1	40	0.0500	
Tetrachloroethene	0.1656	0.1518	25.00	22.92	ug/L	-8	30	0.0500	
Dibromochloromethane	0.2182	0.2117	25.00	24.25	ug/L	-3	30	0.0500	
Chlorobenzene	0.5212	0.5246	25.00	25.16	ug/L	1	30	0.3000	
Ethylbenzene	0.8944	0.8694	25.00	24.30	ug/L	-3	20	0.0500	
m,p-Xylenes	0.3325	0.3208	50.00	48.24	ug/L	-4	30	0.0500	
o-Xylene	0.3255	0.3167	25.00	24.33	ug/L	-3	30	0.0500	
Styrene	0.5555	0.5799	25.00	26.10	ug/L	4	30	0.0500	
Bromoform	0.1347	0.1383	25.00	22.71	ug/L	-9	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6295	0.5934	25.00	23.57	ug/L	-6	30	0.3000	
Dibromofluoromethane	0.6445	0.6751	50.00	52.38	ug/L	5	30	0.0500	
1,2-Dichloroethane-d4	0.4247	0.4477	50.00	52.70	ug/L	5	30	0.0500	
Toluene-d8	1.0475	1.0684	50.00	51.00	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1276	1.1094	50.00	49.19	ug/L	-2	30	0.0500	

ISTD (ICAL hev12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2257644	2249965	-0.34	10.33	10.32	-0.01
1,4-Difluorobenzene	3908815	3972148	1.62	11.45	11.45	0.00
Chlorobenzene-d5	3202283	3272556	2.19	15.48	15.47	-0.01
1,4-Dichlorobenzene-d4	1602437	1627051	1.54	18.20	18.19	-0.01

Analyst: TEW Date: 06/07/07 Reviewer: LW Date: 06/08/07

+=high bias c=CCV m=manual integration

477228007004

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477228007

Date : 06/07/07 Reference : hev12
Sequence : MSVOA08 hf7 Analyzed : 05/31/07 18:54

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2257644	10.33	3908815	11.45	3202283	15.48	1602437	18.20
		LOWER LIMIT	1128822	9.83	1954408	10.95	1601142	14.98	801219	17.70
		UPPER LIMIT	4515288	10.83	7817630	11.95	6404566	15.98	3204874	18.70
004	CCV	25PPB	2249965	10.32	3972148	11.45	3272556	15.47	1627051	18.19
005	BS	QC391256	2342520	10.33	4005066	11.45	3309992	15.48	1697657	18.19
006	BSD	QC391257	2378195	10.33	4166655	11.45	3313372	15.47	1655887	18.19
008	BLANK	QC391255	2401195	10.33	4148338	11.45	3306482	15.48	1612012	18.20
009	SAMPLE	195247-007	2262437	10.32	3955590	11.45	3166563	15.47	1518824	18.19
010	SAMPLE	195246-001	2333350	10.33	4175604	11.45	3316132	15.47	1605713	18.19
011	SAMPLE	195246-002	2359812	10.33	4112488	11.45	3259471	15.47	1579879	18.19
012	SAMPLE	195246-003	2217357	10.33	3890816	11.45	3179303	15.48	1516922	18.20
013	SAMPLE	195246-004	2257707	10.33	4011251	11.46	3245548	15.48	1582610	18.19
014	SAMPLE	195246-005	2277742	10.33	4016885	11.45	3286679	15.48	1531613	18.20
015	SAMPLE	195246-006	2231584	10.33	3920636	11.45	3111457	15.47	1500836	18.19
016	SAMPLE	195246-007	2178750	10.32	3845369	11.45	3142312	15.47	1517112	18.19
017	SAMPLE	195246-008	2171527	10.32	3871909	11.45	3149438	15.47	1453024	18.19
018	SAMPLE	195246-009	2234303	10.33	3965300	11.45	3154979	15.48	1541584	18.19
019	SAMPLE	195246-010	2163896	10.33	3878899	11.45	3117535	15.47	1485707	18.20
020	SAMPLE	195213-004	2182214	10.32	3895514	11.45	3142401	15.47	1449779	18.19
021	SAMPLE	195213-001	2126132	10.33	3779306	11.45	3041250	15.47	1435832	18.20

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477218189

Instrument : MSVOA08 Begun : 05/31/07 12:29
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hev01	X	IB			05/31/07 12:29	1.0	1
002	hev02	X	BFB			05/31/07 12:59	1.0	2
003	hev03	TUN	BFB			05/31/07 13:17	1.0	2
004	hev04	X	IB			05/31/07 13:48	1.0	1
005	hev05	IB	CALIB IB			05/31/07 14:26	1.0	1
006	hev06	ICAL	0.25/0.5PPB			05/31/07 15:05	1.0	3 4 5 1
007	hev07	ICAL	0.5/1PPB			05/31/07 15:43	1.0	3 4 5 1
008	hev08	ICAL	2PPB			05/31/07 16:21	1.0	3 4 5 1
009	hev09	ICAL	5PPB			05/31/07 17:00	1.0	3 4 5 1
010	hev10	ICAL	10PPB			05/31/07 17:38	1.0	3 4 5 1
011	hev11	ICAL	20PPB			05/31/07 18:16	1.0	6 7 8 1
012	hev12	ICAL	50PPB			05/31/07 18:54	1.0	6 7 8 1
013	hev13	ICAL	75PPB			05/31/07 19:32	1.0	6 7 8 1
014	hev14	ICAL	100PPB			05/31/07 20:10	1.0	6 7 8 1
015	hev15	ICV	ICVGAS25PPB			05/31/07 20:48	1.0	9 1
016	hev16	ICV	ICV25PPB			05/31/07 21:26	1.0	10 11 1
017	hev17	X	IB			05/31/07 22:04	1.0	1
018	hev18	X	IB			05/31/07 22:42	1.0	1
019	hev19	X	IB			05/31/07 23:20	1.0	1

TEW 06/01/07 : Fixed spike amount for gases in run hev07.

Analyst: TEW Date: 06/01/07 Reviewer: LW Date: 06/05/07

Standards used: 1=S6084 2=S5117 3=S6300 4=S6301 5=S6355 6=S6217 7=S6350 8=S5720 9=S6357 10=S5968 11=S6207

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477228007

Instrument : MSVOA08 Begun : 06/07/07 08:07
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	hf701	X	IB			06/07/07 08:07	1.0	1	
002	hf702	X	BFB			06/07/07 11:17	1.0	2	
003	hf703	TUN	BFB			06/07/07 11:33	1.0	2	
004	hf704	CCV	25PPB			06/07/07 12:02	1.0	3 4 1	
005	hf705	BS	QC391256	Water	126048	06/07/07 12:54	1.0	5 6 7 1	
006	hf706	BSD	QC391257	Water	126048	06/07/07 13:31	1.0	5 6 7 1	
007	hf707	X	IB			06/07/07 14:32	1.0	1	
008	hf708	BLANK	QC391255	Water	126048	06/07/07 15:10	1.0	1	
009	hf709	SAMPLE	195247-007	Water	126048	06/07/07 15:48	1.0	1	
010	hf710	SAMPLE	195246-001	Water	126048	06/07/07 16:26	1.0	1	
011	hf711	SAMPLE	195246-002	Water	126048	06/07/07 17:04	1.0	1	
012	hf712	SAMPLE	195246-003	Water	126048	06/07/07 17:43	1.0	1	
013	hf713	SAMPLE	195246-004	Water	126048	06/07/07 18:21	1.0	1	
014	hf714	SAMPLE	195246-005	Water	126048	06/07/07 18:59	1.0	1	
015	hf715	SAMPLE	195246-006	Water	126048	06/07/07 19:38	1.0	1	
016	hf716	SAMPLE	195246-007	Water	126048	06/07/07 20:16	1.0	1	
017	hf717	SAMPLE	195246-008	Water	126048	06/07/07 20:55	1.0	1	
018	hf718	SAMPLE	195246-009	Water	126048	06/07/07 21:33	1.0	1	
019	hf719	SAMPLE	195246-010	Water	126048	06/07/07 22:11	1.0	1	
020	hf720	SAMPLE	195213-004	Water	126048	06/07/07 22:49	3.333	1	
021	hf721	SAMPLE	195213-001	Water	126048	06/07/07 23:26	142.9	1	1:TCE=110
022	hf722	X	IB			06/08/07 00:05	1.0	1	
023	hf723	X	IB			06/08/07 00:43	1.0	1	
024	hf724	X	IB			06/08/07 01:21	1.0	1	

Analyst: TEW Date: 06/08/07 Reviewer: LW Date: 06/08/07

Standards used: 1=S6084 2=S5117 3=S6217 4=S6350 5=S6207 6=S6357 7=S6392

REPORTING SUMMARY FOR 195247 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLME	VCRE	BCLE	CLME	AC1E	DTSE	MCNE	CTE	MDE	DCE	VAE	DCE	MCE	DCE	TAE	TCE	CTE	DCE	BTE	TCE	DZE	BCE	DCE	BDE	MDI	DCE	BZE	DCE	TCE	HXE	PCE	DBE	CLE	EBE	XYE	XYE	TOX	SYE	TTE	PBE	DCE	DBE	BRE	
195247-007	MSVOA08	06/07/07 15:48	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391255	MSVOA08	06/07/07 15:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391256	MSVOA08	06/07/07 12:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391257	MSVOA08	06/07/07 13:31	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/7/07
PREPPED BY. TEW

126048 **WATER**

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195213-001	0.35/50	B	<2			8	RRe 142x	
2	↓ -004	15/50	↓	↓			↓	↓ 3.33x	
3	195247-007		A	<2				TB	
4	195246-001		↓	↓				TB	
5	-002							EB	
6	-003							1x	
7	-004							↓	
8	-005								
9	-006								
10	-007		↓						
11	-008		B						
12	-009		A						
13	↓ -010		↓	↓			↓	↓	
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/27/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ100	Batch#:	126108
Lab ID:	195247-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000		

Analyte	Result	RL	Analyzed
alpha-BHC	ND	0.05	06/11/07
beta-BHC	ND	0.05	06/11/07
gamma-BHC	ND	0.05	06/11/07
delta-BHC	ND	0.05	06/11/07
Heptachlor	ND	0.05	06/11/07
Aldrin	ND	0.05	06/11/07
Heptachlor epoxide	ND	0.05	06/11/07
Endosulfan I	ND	0.05	06/11/07
Dieldrin	ND	0.1	06/11/07
4,4'-DDE	ND	0.1	06/11/07
Endrin	ND	0.1	06/11/07
Endosulfan II	ND	0.1	06/11/07
Endosulfan sulfate	ND	0.1	06/11/07
4,4'-DDD	ND	0.1	06/11/07
4,4'-DDT	ND	0.1	06/11/07
alpha-Chlordane	ND	0.05	06/11/07
gamma-Chlordane	ND	0.05	06/12/07
Methoxychlor	ND	0.5	06/11/07
Endrin ketone	ND	0.1	06/11/07
Toxaphene	ND	1.0	06/11/07

Surrogate	%REC	Limits	Analyzed
TCMX	71	65-135	06/11/07
Decachlorobiphenyl	46 *	65-135	06/11/07

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ101	Batch#:	126108
Lab ID:	195247-002	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/11/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	68	65-135
Decachlorobiphenyl	53 *	65-135

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391520	Batch#:	126108
Matrix:	Water	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/11/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	110	65-135

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	126108
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/11/07

Type: BS Lab ID: QC391521

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1836	92	65-135
Heptachlor	0.2000	0.1738	87	65-135
Aldrin	0.2000	0.1797	90	65-135
Dieldrin	0.4000	0.3753	94	65-135
Endrin	0.4000	0.3486	87	65-135
4,4'-DDT	0.4000	0.3069	77	65-135

Surrogate	%REC	Limits
TCMX	104	65-135
Decachlorobiphenyl	97	65-135

Type: BSD Lab ID: QC391522

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1786	89	65-135	3	35
Heptachlor	0.2000	0.1696	85	65-135	2	35
Aldrin	0.2000	0.1766	88	65-135	2	35
Dieldrin	0.4000	0.3728	93	65-135	1	35
Endrin	0.4000	0.3532	88	65-135	1	35
4,4'-DDT	0.4000	0.3190	80	65-135	4	35

Surrogate	%REC	Limits
TCMX	102	65-135
Decachlorobiphenyl	105	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807215412001
Units : pg

Name : gc23pest_149
Date : 29-MAY-2007 22:26
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	149_025	807215412025	PEST_1	29-MAY-2007 22:26	S6268
L2	149_026	807215412026	PEST_2	29-MAY-2007 22:47	S6269
L3	149_027	807215412027	PEST_3	29-MAY-2007 23:08	S6270
L4	149_028	807215412028	PEST_4	29-MAY-2007 23:30	S6271
L5	149_029	807215412029	PEST_5	29-MAY-2007 23:51	S5859
L6	149_030	807215412030	PEST_6	30-MAY-2007 00:13	S5860
L7	149_031	807215412031	PEST_7	30-MAY-2007 00:34	S6332

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	11833	12067	11172	10136	11406	10956	10487	AVRG		8.97E-5		11151	6	0.995	20	
gamma-BHC	A	11183	11226	10200	9251.0	10152	9727.8	9619.8	AVRG		9.81E-5		10194	7	0.995	20	
beta-BHC	A	4611.5	4560.6	3952.0	3614.3	4019.5	3690.7	3620.4	AVRG		2.49E-4		4009.9	11	0.995	20	
delta-BHC	A	13070	12391	10543	9615.1	10726	10262	9680.8	AVRG		9.18E-5		10898	12	0.995	20	
Heptachlor	A	10493	10492	9386.9	8625.0	9698.1	9257.7	8829.8	AVRG		1.05E-4		9540.3	8	0.995	20	
Aldrin	A	10397	10352	9410.7	8649.0	9517.2	9093.3	8849.6	AVRG		1.06E-4		9466.9	7	0.995	20	
Heptachlor epoxide	A	9633.5	9417.2	8283.5	7619.4	8378.1	7888.2	7531.9	AVRG		1.19E-4		8393.1	10	0.995	20	
gamma-Chlordane	A	9285.5	9242.8	8155.2	7579.9	8288.2	7899.6	7915.8	AVRG		1.20E-4		8338.1	8	0.995	20	
alpha-Chlordane	A	8893.5	8826.4	7729.0	7201.9	7791.6	7745.1	7729.9	AVRG		1.25E-4		7988.2	8	0.995	20	
4,4'-DDE	A	7999.0	8060.7	7242.6	6868.2	7924.8	7462.8	6399.8	AVRG		1.35E-4		7422.6	8	0.995	20	
Endosulfan I	A	8695.5	8709.8	7700.1	6938.2	7994.0	7139.3	6963.3	AVRG		1.29E-4		7734.3	10	0.995	20	
Dieldrin	A	8648.0	8715.0	7752.8	7363.9	8396.3	7730.4	6503.6	AVRG		1.27E-4		7872.9	10	0.995	20	
Endrin	A	7393.5	7583.8	6598.4	6286.9	7151.5	6717.1	5814.1	AVRG		1.47E-4		6792.2	9	0.995	20	
4,4'-DDD	A	6569.3	6468.6	5730.7	5474.4	6210.7	6147.0	5583.5	AVRG		1.66E-4		6026.3	7	0.995	20	
Endosulfan II	A	7219.5	7211.8	6317.5	5951.8	7029.7	6382.2	5629.4	AVRG		1.53E-4		6534.6	10	0.995	20	
4,4'-DDT	A	6307.0	6816.5	6087.7	5901.9	6515.7	6372.7	6073.1	AVRG		1.59E-4		6296.4	5	0.995	20	
Methoxychlor	A	2700.7	2732.6	2380.4	2301.7	2674.5	2185.4		AVRG		4.01E-4		2495.9	9	0.995	20	
Endosulfan sulfate	A	7013.0	6873.2	5794.3	5365.5	6113.2	5685.5	5288.5	AVRG		1.66E-4		6019.0	11	0.995	20	
Endrin ketone	A	7970.3	8321.6	6760.1	6351.6	7228.5	6797.0	5827.3	AVRG		1.42E-4		7036.6	12	0.995	20	
TCMX	A	6217.0	6552.9	6048.0	5424.2	6000.7	5620.7	5482.1	AVRG		1.69E-4		5906.5	7	0.995	20	
Decachlorobiphenyl	A	5278.3	5181.4	4518.5	4250.1	4850.3	4546.8	4236.9	AVRG		2.13E-4		4694.6	9	0.995	20	
alpha-BHC	B	12851	12443	10208	10774	12626	13697	13206	AVRG		8.16E-5		12258	10	0.995	20	
gamma-BHC	B	12137	11522	9465.4	9936.6	11317	12257	12204	AVRG		8.88E-5		11263	10	0.995	20	
beta-BHC	B	4930.0	4555.6	3708.2	3816.3	4398.2	4419.3	4255.6	AVRG		2.33E-4		4297.6	10	0.995	20	
delta-BHC	B	14195	12328	9817.5	10201	11961	12812	12197	AVRG		8.38E-5		11930	13	0.995	20	
Heptachlor	B	11085	10568	8610.5	9088.5	10711	11586	11144	AVRG		9.62E-5		10399	11	0.995	20	

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Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	12231	10766	8810.9	9213.7	10639	11298	11167	AVRG		9.44E-5		10589	11	0.995	20	
Heptachlor epoxide	B	10937	9799.8	7964.0	8225.3	9510.3	9811.2	9461.6	AVRG		1.07E-4		9387.0	11	0.995	20	
gamma-Chlordane	B	10548	9704.2	7982.9	8369.6	9426.7	9930.7	10132	AVRG		1.06E-4		9442.0	10	0.995	20	
alpha-Chlordane	B	10049	9210.8	7581.8	7898.8	9026.2	9477.8	9589.3	AVRG		1.11E-4		8976.3	10	0.995	20	
4,4'-DDE	B	8947.3	8469.6	7086.9	7530.4	9214.7	9782.6	8405.8	AVRG		1.18E-4		8491.0	11	0.995	20	
Endosulfan I	B	9792.0	8939.8	7382.4	7632.3	8673.6	8895.8	8733.5	AVRG		1.17E-4		8578.5	10	0.995	20	
Dieldrin	B	9720.3	9113.0	7359.5	8014.9	9718.3	9952.4	8304.6	AVRG		1.13E-4		8883.3	11	0.995	20	
Endrin	B	8220.5	7661.4	6087.5	6665.3	8001.7	8394.7	7270.5	AVRG		1.34E-4		7471.7	11	0.995	20	
4,4'-DDD	B	7849.3	7133.8	5815.9	6175.9	7510.9	8101.5	7254.1	AVRG		1.40E-4		7120.2	12	0.995	20	
Endosulfan II	B	7919.5	7401.6	6188.5	6544.6	7862.7	8258.3	7231.5	AVRG		1.36E-4		7343.8	10	0.995	20	
4,4'-DDT	B	7020.5	6744.8	5615.5	6361.9	7304.3	8184.7	7865.9	AVRG		1.43E-4		7013.9	13	0.995	20	
Methoxychlor	B	2913.0	2687.9	2139.7	2420.5	3087.2	2858.9	2108.8	AVRG		3.84E-4		2602.3	15	0.995	20	
Endosulfan sulfate	B	7561.8	6703.5	5275.7	5683.0	6780.4	6993.5	6439.6	AVRG		1.54E-4		6491.1	12	0.995	20	
Endrin ketone	B	8655.3	7728.8	6138.5	6563.1	8327.5	8509.2	7223.3	AVRG		1.32E-4		7592.2	13	0.995	20	
TCMX	B	6973.8	6825.5	5626.8	5612.1	6648.3	7052.2	6831.7	AVRG		1.54E-4		6510.0	10	0.995	20	
Decachlorobiphenyl	B	5684.5	5098.9	4120.4	4305.2	5477.2	5730.7	5439.3	AVRG		1.95E-4		5122.3	13	0.995	20	
Average EPA 8081A	A												(n=22)	9		20	
Average EPA 8081A	B												(n=22)	11		20	

807215412001

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	2.000	6	5.000	8	10.00	0	20.00	-9	25.00	2	50.00	-2	100.0	-6
gamma-BHC	A	2.000	10	5.000	10	10.00	0	20.00	-9	25.00	0	50.00	-5	100.0	-6
beta-BHC	A	2.000	15	5.000	14	10.00	-1	20.00	-10	25.00	0	50.00	-8	100.0	-10
delta-BHC	A	2.000	20	5.000	14	10.00	-3	20.00	-12	25.00	-2	50.00	-6	100.0	-11
Heptachlor	A	2.000	10	5.000	10	10.00	-2	20.00	-10	25.00	2	50.00	-3	100.0	-7
Aldrin	A	2.000	10	5.000	9	10.00	-1	20.00	-9	25.00	1	50.00	-4	100.0	-7
Heptachlor epoxide	A	2.000	15	5.000	12	10.00	-1	20.00	-9	25.00	0	50.00	-6	100.0	-10
gamma-Chlordane	A	2.000	11	5.000	11	10.00	-2	20.00	-9	25.00	-1	50.00	-5	100.0	-5
alpha-Chlordane	A	2.000	11	5.000	10	10.00	-3	20.00	-10	25.00	-2	50.00	-3	100.0	-3
4,4'-DDE	A	4.000	8	10.00	9	20.00	-2	40.00	-7	50.00	7	100.0	1	200.0	-14
Endosulfan I	A	2.000	12	5.000	13	10.00	0	20.00	-10	25.00	3	50.00	-8	100.0	-10
Dieldrin	A	4.000	10	10.00	11	20.00	-2	40.00	-6	50.00	7	100.0	-2	200.0	-17
Endrin	A	4.000	9	10.00	12	20.00	-3	40.00	-7	50.00	5	100.0	-1	200.0	-14
4,4'-DDD	A	4.000	9	10.00	7	20.00	-5	40.00	-9	50.00	3	100.0	2	200.0	-7
Endosulfan II	A	4.000	10	10.00	10	20.00	-3	40.00	-9	50.00	8	100.0	-2	200.0	-14
4,4'-DDT	A	4.000	0	10.00	8	20.00	-3	40.00	-6	50.00	3	100.0	1	200.0	-4
Methoxychlor	A	20.00	8	50.00	9	100.0	-5	200.0	-8	250.0	7	500.0	-12		
Endosulfan sulfate	A	4.000	17	10.00	14	20.00	-4	40.00	-11	50.00	2	100.0	-6	200.0	-12
Endrin ketone	A	4.000	13	10.00	18	20.00	-4	40.00	-10	50.00	3	100.0	-3	200.0	-17
TCMX	A	4.000	5	10.00	11	20.00	2	40.00	-8	50.00	2	100.0	-5	200.0	-7
Decachlorobiphenyl	A	4.000	12	10.00	10	20.00	-4	40.00	-9	50.00	3	100.0	-3	200.0	-10
alpha-BHC	B	2.000	5	5.000	2	10.00	-17	20.00	-12	25.00	3	50.00	12	100.0	8
gamma-BHC	B	2.000	8	5.000	2	10.00	-16	20.00	-12	25.00	0	50.00	9	100.0	8
beta-BHC	B	2.000	15	5.000	6	10.00	-14	20.00	-11	25.00	2	50.00	3	100.0	-1
delta-BHC	B	2.000	19	5.000	3	10.00	-18	20.00	-14	25.00	0	50.00	7	100.0	2
Heptachlor	B	2.000	7	5.000	2	10.00	-17	20.00	-13	25.00	3	50.00	11	100.0	7
Aldrin	B	2.000	16	5.000	2	10.00	-17	20.00	-13	25.00	0	50.00	7	100.0	5
Heptachlor epoxide	B	2.000	17	5.000	4	10.00	-15	20.00	-12	25.00	1	50.00	5	100.0	1
gamma-Chlordane	B	2.000	12	5.000	3	10.00	-15	20.00	-11	25.00	0	50.00	5	100.0	7
alpha-Chlordane	B	2.000	12	5.000	3	10.00	-16	20.00	-12	25.00	1	50.00	6	100.0	7
4,4'-DDE	B	4.000	5	10.00	0	20.00	-17	40.00	-11	50.00	9	100.0	15	200.0	-1
Endosulfan I	B	2.000	14	5.000	4	10.00	-14	20.00	-11	25.00	1	50.00	4	100.0	2
Dieldrin	B	4.000	9	10.00	3	20.00	-17	40.00	-10	50.00	9	100.0	12	200.0	-7
Endrin	B	4.000	10	10.00	3	20.00	-19	40.00	-11	50.00	7	100.0	12	200.0	-3
4,4'-DDD	B	4.000	10	10.00	0	20.00	-18	40.00	-13	50.00	5	100.0	14	200.0	2
Endosulfan II	B	4.000	8	10.00	1	20.00	-16	40.00	-11	50.00	7	100.0	12	200.0	-2
4,4'-DDT	B	4.000	0	10.00	-4	20.00	-20	40.00	-9	50.00	4	100.0	17	200.0	12
Methoxychlor	B	20.00	12	50.00	3	100.0	-18	200.0	-7	250.0	19	500.0	10	1000	-19
Endosulfan sulfate	B	4.000	16	10.00	3	20.00	-19	40.00	-12	50.00	4	100.0	8	200.0	-1
Endrin ketone	B	4.000	14	10.00	2	20.00	-19	40.00	-14	50.00	10	100.0	12	200.0	-5
TCMX	B	4.000	7	10.00	5	20.00	-14	40.00	-14	50.00	2	100.0	8	200.0	5
Decachlorobiphenyl	B	4.000	11	10.00	0	20.00	-20	40.00	-16	50.00	7	100.0	12	200.0	6

ADM 05/30/07 : Methoxychlor Level 7 point dropped to correct failing %D.

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 PEST Water
EPA 8081A

Inst : GC23
Calnum : 807215412001

Name : gc23pest_149
Cal Date : 29-MAY-2007

ICV 807215412034 (149_034 30-MAY-2007) stds: S5817

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	11151	10140	25.00	22.73	pg	-9	15	
gamma-BHC	A	10194	9232.4	25.00	22.64	pg	-9	15	
beta-BHC	A	4009.9	3591.1	25.00	22.39	pg	-10	15	
delta-BHC	A	10898	9742.0	25.00	22.35	pg	-11	15	
Heptachlor	A	9540.3	8612.4	25.00	22.57	pg	-10	15	
Aldrin	A	9466.9	8573.5	25.00	22.64	pg	-9	15	
Heptachlor epoxide	A	8393.1	7375.2	25.00	21.97	pg	-12	15	
gamma-Chlordane	A	8338.1	7442.0	25.00	22.31	pg	-11	15	
alpha-Chlordane	A	7988.2	6918.3	25.00	21.65	pg	-13	15	
4,4'-DDE	A	7422.6	7034.3	25.00	23.69	pg	-5	15	
Endosulfan I	A	7734.3	7008.9	25.00	22.66	pg	-9	15	
Dieldrin	A	7872.9	7509.4	25.00	23.85	pg	-5	15	
Endrin	A	6792.2	6438.0	25.00	23.70	pg	-5	15	
4,4'-DDD	A	6026.3	5361.8	25.00	22.24	pg	-11	15	
Endosulfan II	A	6534.6	6208.7	25.00	23.75	pg	-5	15	
4,4'-DDT	A	6296.4	5850.8	25.00	23.23	pg	-7	15	
Methoxychlor	A	2495.9	2210.3	275.0	243.5	pg	-11	15	
Endosulfan sulfate	A	6019.0	5432.7	25.00	22.56	pg	-10	15	
Endrin ketone	A	7036.6	6505.4	25.00	23.11	pg	-8	15	
alpha-BHC	B	12258	11734	25.00	23.93	pg	-4	15	
gamma-BHC	B	11263	10615	25.00	23.56	pg	-6	15	
beta-BHC	B	4297.6	4006.4	25.00	23.31	pg	-7	15	
delta-BHC	B	11930	11186	25.00	23.44	pg	-6	15	
Heptachlor	B	10399	9958.8	25.00	23.94	pg	-4	15	
Aldrin	B	10589	10048	25.00	23.72	pg	-5	15	
Heptachlor epoxide	B	9387.0	8632.3	25.00	22.99	pg	-8	15	
gamma-Chlordane	B	9442.0	8880.2	25.00	23.51	pg	-6	15	
alpha-Chlordane	B	8976.3	8419.3	25.00	23.45	pg	-6	15	
4,4'-DDE	B	8491.0	8323.2	25.00	24.51	pg	-2	15	
Endosulfan I	B	8578.5	8095.5	25.00	23.59	pg	-6	15	
Dieldrin	B	8883.3	8916.1	25.00	25.09	pg	0	15	
Endrin	B	7471.7	7373.6	25.00	24.67	pg	-1	15	
4,4'-DDD	B	7120.2	6928.4	25.00	24.33	pg	-3	15	
Endosulfan II	B	7343.8	7251.3	25.00	24.69	pg	-1	15	
4,4'-DDT	B	7013.9	6533.1	25.00	23.29	pg	-7	15	
Methoxychlor	B	2602.3	2744.7	275.0	290.0	pg	5	15	
Endosulfan sulfate	B	6491.1	6236.9	25.00	24.02	pg	-4	15	
Endrin ketone	B	7592.2	7630.5	25.00	25.13	pg	1	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 PEST Water: EPA 8081A

Inst : GC25
Calnum : 827197214001
Units : pg

Name : gc25pest_136
Date : 16-MAY-2007 23:48
X Axis : R

Reviewer : MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	136_020	827197214020	PEST_1	16-MAY-2007 23:48	S6268
L2	136_021	827197214021	PEST_2	17-MAY-2007 00:15	S6269
L3	136_022	827197214022	PEST_3	17-MAY-2007 00:42	S6270
L4	136_023	827197214023	PEST_4	17-MAY-2007 01:09	S6271
L5	136_024	827197214024	PEST_5	17-MAY-2007 01:36	S5859
L6	136_025	827197214025	PEST_6	17-MAY-2007 02:03	S5860
L7	136_026	827197214026	PEST_7	17-MAY-2007 02:30	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	9231.5	7856.6	9354.3	9776.6	9878.0	7970.4		AVRG		1.11E-4		9011.2	10	0.995	20	
gamma-BHC	A	8518.5	7199.8	8444.6	9048.8	8871.7	7273.9		AVRG		1.22E-4		8226.2	10	0.995	20	
beta-BHC	A	3185.0	2508.2	2518.7	2806.5	2981.2	3358.9	3015.2	AVRG		3.44E-4		2910.5	11	0.995	20	
delta-BHC	A	8705.5	7016.2	8242.6	8996.7	8655.2	7244.1		AVRG		1.23E-4		8143.4	10	0.995	20	
Heptachlor	A	7260.5	6382.6	7743.5	8418.5	8329.1	6861.6		AVRG		1.33E-4		7499.3	11	0.995	20	
Aldrin	A	7605.5	6305.2	7281.8	8058.4	7850.6	6603.1		AVRG		1.37E-4		7284.1	10	0.995	20	
Heptachlor epoxide	A	6385.0	5405.8	5924.8	6694.8	6574.0	5661.8		AVRG		1.64E-4		6107.7	9	0.995	20	
gamma-Chlordane	A	6212.0	5330.0	5913.8	6889.4	6672.5	5888.0		AVRG		1.63E-4		6150.9	9	0.995	20	
alpha-Chlordane	A	5807.5	4967.8	5474.1	6466.3	6391.2	5688.6		AVRG		1.72E-4		5799.2	10	0.995	20	
4,4'-DDE	A	5070.5	5067.8	5809.9	5694.1	5346.0			AVRG		1.85E-4		5397.7	6	0.995	20	
Endosulfan I	A	5653.0	4865.2	5342.8	6294.6	6278.5	5617.4		AVRG		1.76E-4		5675.2	10	0.995	20	
Dieldrin	A	5414.5	5346.4	6102.1	5831.1	5489.3			AVRG		1.77E-4		5636.7	6	0.995	20	
Endrin	A	4170.8	3865.2	4712.3	4973.9	4550.9	3628.5		AVRG		2.32E-4		4316.9	12	0.995	20	
4,4'-DDD	A	3766.0	3786.1	4268.6	4774.7	4571.4	3695.7		AVRG		2.41E-4		4143.7	11	0.995	20	
Endosulfan II	A	4093.8	4044.9	4535.2	4911.3	4681.6	3744.0		AVRG		2.31E-4		4335.1	10	0.995	20	
4,4'-DDT	A	3786.3	3839.4	4530.6	4991.5	4526.4	3731.8		AVRG		2.36E-4		4234.3	12	0.995	20	
Methoxychlor	A	1487.0	1690.4	1661.8	1444.0	1315.5			AVRG		6.58E-4		1519.7	10	0.995	20	
Endosulfan sulfate	A	3299.3	3146.3	3431.6	3897.7	3740.7	3198.0		AVRG		2.90E-4		3452.2	9	0.995	20	
Endrin ketone	A	3706.0	3813.2	4063.2	4381.1	4182.5	3310.0		AVRG		2.56E-4		3909.3	10	0.995	20	
TCMX	A	3634.5	3426.3	4082.6	4443.1	4511.8	3831.5	3205.0	AVRG		2.58E-4		3876.4	13	0.995	20	
"Decachlorobiphenyl	A	2155.0	2146.2	2272.1	2694.9	2684.6	2483.9	1950.3	AVRG		4.27E-4		2341.0	12	0.995	20	
alpha-BHC	B	10231	10163	9846.2	9373.4	10530	7772.9		AVRG		1.04E-4		9652.6	10	0.995	20	
gamma-BHC	B	9489.5	9437.2	9055.9	8679.8	9325.0	6910.3		AVRG		1.13E-4		8816.3	11	0.995	20	
beta-BHC	B	4005.0	3827.6	3495.7	3465.4	4134.8	3811.7	3199.0	AVRG		2.70E-4		3705.6	9	0.995	20	
delta-BHC	B	8649.5	8450.6	8122.8	7809.8	8532.9	6439.8		AVRG		1.25E-4		8000.9	10	0.995	20	
Heptachlor	B	8335.5	7847.6	7558.0	7587.2	8118.4	6113.8		AVRG		1.32E-4		7593.4	10	0.995	20	

827197214001

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	8375.0	8375.6	7994.2	7602.1	8015.6	5900.3		AVRG		1.30E-4		7710.5	12	0.995	20	
Heptachlor epoxide	B	7434.0	7302.8	6813.7	6488.2	6928.6	5079.1		AVRG		1.50E-4		6674.4	13	0.995	20	
gamma-Chlordane	B	7732.5	7428.4	7009.7	6825.0	7255.4	5421.8		AVRG		1.44E-4		6945.5	12	0.995	20	
alpha-Chlordane	B	7024.0	6907.4	6509.5	6420.6	6990.6	5155.2		AVRG		1.54E-4		6501.2	11	0.995	20	
4,4'-DDE	B	6794.3	7050.9	6537.3	5658.5	5886.9			AVRG		1.57E-4		6385.5	9	0.995	20	
Endosulfan I	B	6993.5	6759.4	6247.0	6126.4	6681.5	4982.9		AVRG		1.59E-4		6298.4	11	0.995	20	
Dieldrin	B	6801.8	7122.2	6412.4	5282.8	5281.7			AVRG		1.62E-4		6180.2	14	0.995	20	
Endrin	B	3879.5	3961.8	3718.9	3662.9	3842.6			AVRG		2.62E-4		3813.1	3	0.995	20	
4,4'-DDD	B	5395.5	5523.9	5303.1	4791.0	5021.8			AVRG		1.92E-4		5207.1	6	0.995	20	
Endosulfan II	B	5793.3	5846.9	5434.1	4711.1	4838.4			AVRG		1.88E-4		5324.7	10	0.995	20	
4,4'-DDT	B	5119.0	5274.5	5152.9	4708.2	4647.4			AVRG		2.01E-4		4980.4	6	0.995	20	
Methoxychlor	B	1961.6	2057.1	1703.0	1231.1	1207.1			AVRG		6.13E-4		1632.0	**24**	0.995	20	rsd ***
Endosulfan sulfate	B	4868.0	4881.8	4535.0	4010.7	4231.2			AVRG		2.22E-4		4505.3	9	0.995	20	
Endrin ketone	B	5787.3	5895.3	5367.1	4429.2	4352.6			AVRG		1.94E-4		5166.3	14	0.995	20	
TCMX	B	6082.3	6060.3	5793.5	5662.1	6378.3	4810.1		AVRG		1.72E-4		5797.8	9	0.995	20	
Decachlorobiphenyl	B	3538.0	3605.1	3660.1	3300.9	3720.0	2924.1		AVRG		2.89E-4		3458.0	9	0.995	20	
Average EPA 8081A	A												(n=22)	10		20	
Average EPA 8081A	B												(n=22)	11		20	

827197214001

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	2.000	2	5.000	-13	10.00	4	20.00	8	25.00	10	50.00	-12		
gamma-BHC	A	2.000	4	5.000	-12	10.00	3	20.00	10	25.00	8	50.00	-12		
beta-BHC	A	2.000	9	5.000	-14	10.00	-13	20.00	-4	25.00	2	50.00	15	100.0	4
delta-BHC	A	2.000	7	5.000	-14	10.00	1	20.00	10	25.00	6	50.00	-11		
Heptachlor	A	2.000	-3	5.000	-15	10.00	3	20.00	12	25.00	11	50.00	-9		
Aldrin	A	2.000	4	5.000	-13	10.00	0	20.00	11	25.00	8	50.00	-9		
Heptachlor epoxide	A	2.000	5	5.000	-11	10.00	-3	20.00	10	25.00	8	50.00	-7		
gamma-Chlordane	A	2.000	1	5.000	-13	10.00	-4	20.00	12	25.00	8	50.00	-4		
alpha-Chlordane	A	2.000	0	5.000	-14	10.00	-6	20.00	12	25.00	10	50.00	-2		
4,4'-DDE	A	4.000	-6	10.00	-6	20.00	8	40.00	5	50.00	-1				
Endosulfan I	A	2.000	0	5.000	-14	10.00	-6	20.00	11	25.00	11	50.00	-1		
Dieldrin	A	4.000	-4	10.00	-5	20.00	8	40.00	3	50.00	-3				
Endrin	A	4.000	-3	10.00	-10	20.00	9	40.00	15	50.00	5	100.0	-16		
4,4'-DDD	A	4.000	-9	10.00	-9	20.00	3	40.00	15	50.00	10	100.0	-11		
Endosulfan II	A	4.000	-6	10.00	-7	20.00	5	40.00	13	50.00	8	100.0	-14		
4,4'-DDT	A	4.000	-11	10.00	-9	20.00	7	40.00	18	50.00	7	100.0	-12		
Methoxychlor	A	20.00	-2	50.00	11	100.0	9	200.0	-5	250.0	-13				
Endosulfan sulfate	A	4.000	-4	10.00	-9	20.00	-1	40.00	13	50.00	8	100.0	-7		
Endrin ketone	A	4.000	-5	10.00	-2	20.00	4	40.00	12	50.00	7	100.0	-15		
TCMX	A	4.000	-6	10.00	-12	20.00	5	40.00	15	50.00	16	100.0	-1	200.0	-17
Decachlorobiphenyl	A	4.000	-8	10.00	-8	20.00	-3	40.00	15	50.00	15	100.0	6	200.0	-17
alpha-BHC	B	2.000	6	5.000	5	10.00	2	20.00	-3	25.00	9	50.00	-19		
gamma-BHC	B	2.000	8	5.000	7	10.00	3	20.00	-2	25.00	6	50.00	-22		
beta-BHC	B	2.000	8	5.000	3	10.00	-6	20.00	-6	25.00	12	50.00	3	100.0	-14
delta-BHC	B	2.000	8	5.000	6	10.00	2	20.00	-2	25.00	7	50.00	-20		
Heptachlor	B	2.000	10	5.000	3	10.00	0	20.00	0	25.00	7	50.00	-19		
Aldrin	B	2.000	9	5.000	9	10.00	4	20.00	-1	25.00	4	50.00	-23		
Heptachlor epoxide	B	2.000	11	5.000	9	10.00	2	20.00	-3	25.00	4	50.00	-24		
gamma-Chlordane	B	2.000	11	5.000	7	10.00	1	20.00	-2	25.00	4	50.00	-22		
alpha-Chlordane	B	2.000	8	5.000	6	10.00	0	20.00	-1	25.00	8	50.00	-21		
4,4'-DDE	B	4.000	6	10.00	10	20.00	2	40.00	-11	50.00	-8				
Endosulfan I	B	2.000	11	5.000	7	10.00	-1	20.00	-3	25.00	6	50.00	-21		
Dieldrin	B	4.000	10	10.00	15	20.00	4	40.00	-15	50.00	-15				
Endrin	B	4.000	2	10.00	4	20.00	-2	40.00	-4	50.00	1				
4,4'-DDD	B	4.000	4	10.00	6	20.00	2	40.00	-8	50.00	-4				
Endosulfan II	B	4.000	9	10.00	10	20.00	2	40.00	-12	50.00	-9				
4,4'-DDT	B	4.000	3	10.00	6	20.00	3	40.00	-5	50.00	-7				
Methoxychlor	B	20.00	20	50.00	26	100.0	4	200.0	-25	250.0	-26				
Endosulfan sulfate	B	4.000	8	10.00	8	20.00	1	40.00	-11	50.00	-6				
Endrin ketone	B	4.000	12	10.00	14	20.00	4	40.00	-14	50.00	-16				
TCMX	B	4.000	5	10.00	5	20.00	0	40.00	-2	50.00	10	100.0	-17		
Decachlorobiphenyl	B	4.000	2	10.00	4	20.00	6	40.00	-5	50.00	8	100.0	-15		

827197214001

Fmd=ICAL %RSD failure
Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 PEST Water
EPA 8081A

Inst : GC25
Calnum : 827197214001

Name : gc25pest_136
Cal Date : 16-MAY-2007

ICV 827197214029 (136_029 17-MAY-2007) stds: S5817

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	9011.2	9470.5	25.00	26.27	pg	5	15	
gamma-BHC	A	8226.2	8639.7	25.00	26.26	pg	5	15	
beta-BHC	A	2910.5	2858.1	25.00	24.55	pg	-2	15	
delta-BHC	A	8143.4	8666.6	25.00	26.61	pg	6	15	
Heptachlor	A	7499.3	8109.9	25.00	27.04	pg	8	15	
Aldrin	A	7284.1	7696.3	25.00	26.41	pg	6	15	
Heptachlor epoxide	A	6107.7	6305.2	25.00	25.81	pg	3	15	
gamma-Chlordane	A	6150.9	6571.2	25.00	26.71	pg	7	15	
alpha-Chlordane	A	5799.2	6293.4	25.00	27.13	pg	9	15	
4,4'-DDE	A	5397.7	6150.1	25.00	28.49	pg	14	15	
Endosulfan I	A	5675.2	6016.4	25.00	26.50	pg	6	15	
Dieldrin	A	5636.7	6308.4	25.00	27.98	pg	12	15	
Endrin	A	4316.9	4902.5	25.00	28.39	pg	14	15	
4,4'-DDD	A	4143.7	4642.1	25.00	28.01	pg	12	15	
Endosulfan II	A	4335.1	4861.3	25.00	28.03	pg	12	15	
4,4'-DDT	A	4234.3	4929.4	25.00	29.10	pg	**16**	15	v+ ***
Methoxychlor	A	1519.7	1194.7	275.0	216.2	pg	**-21**	15	v- ***
Endosulfan sulfate	A	3452.2	3759.5	25.00	27.23	pg	9	15	
Endrin ketone	A	3909.3	4508.0	25.00	28.83	pg	15	15	
alpha-BHC	B	9652.6	9094.4	25.00	23.55	pg	-6	15	
gamma-BHC	B	8816.3	8293.9	25.00	23.52	pg	-6	15	
beta-BHC	B	3705.6	3592.4	25.00	24.24	pg	-3	15	
delta-BHC	B	8000.9	7829.5	25.00	24.46	pg	-2	15	
Heptachlor	B	7593.4	7283.9	25.00	23.98	pg	-4	15	
Aldrin	B	7710.5	7331.2	25.00	23.77	pg	-5	15	
Heptachlor epoxide	B	6674.4	6235.8	25.00	23.36	pg	-7	15	
gamma-Chlordane	B	6945.5	6667.6	25.00	24.00	pg	-4	15	
alpha-Chlordane	B	6501.2	6379.1	25.00	24.53	pg	-2	15	
4,4'-DDE	B	6385.5	6703.3	25.00	26.24	pg	5	15	
Endosulfan I	B	6298.4	6072.1	25.00	24.10	pg	-4	15	
Dieldrin	B	6180.2	6453.5	25.00	26.11	pg	4	15	
Endrin	B	3813.1	4028.4	25.00	26.41	pg	6	15	
4,4'-DDD	B	5207.1	5497.8	25.00	26.40	pg	6	15	
Endosulfan II	B	5324.7	5535.0	25.00	25.99	pg	4	15	
4,4'-DDT	B	4980.4	5069.4	25.00	25.45	pg	2	15	
Methoxychlor	B	1632.0	1051.8	275.0	177.2	pg	**-36**	15	v- ***
Endosulfan sulfate	B	4505.3	4628.8	25.00	25.68	pg	3	15	
Endrin ketone	B	5166.3	5385.3	25.00	26.06	pg	4	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					6	15	

+=high bias -=low bias v=ICV

827197214001 ICVs

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319006 File : 162_006 Time : 11-JUN-2007 13:31

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	599263	7	15	
4,4'-DDE	A	2239			
4,4'-DDD	A	43673			
Endrin	A	337362	13	15	
Endrin aldehyde	A	14780			
Endrin ketone	A	37694			
4,4'-DDT	B	725460	7	15	
4,4'-DDE	B	2843			
4,4'-DDD	B	51661			
Endrin	B	389646	9	15	
Endrin aldehyde	B	14960			
Endrin ketone	B	23488			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319014 File : 162_014 Time : 11-JUN-2007 16:57

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	611640	7	15	
4,4'-DDE	A	1671			
4,4'-DDD	A	44196			
Endrin	A	355019	9	15	
Endrin aldehyde	A	5005			
Endrin ketone	A	29469			
4,4'-DDT	B	772522	5	15	
4,4'-DDE	B	1760			
4,4'-DDD	B	41075			
Endrin	B	405378	5	15	
Endrin aldehyde	B	4517			
Endrin ketone	B	16796			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319022 File : 162_022 Time : 11-JUN-2007 20:13

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	505867	7	15	
4,4'-DDE	A	1363			
4,4'-DDD	A	37644			
Endrin	A	296776	10	15	
Endrin aldehyde	A	5364			
Endrin ketone	A	27408			
4,4'-DDT	B	607030	9	15	
4,4'-DDE	B	2006			
4,4'-DDD	B	54392			
Endrin	B	343452	10	15	
Endrin aldehyde	B	13602			
Endrin ketone	B	25092			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319033 File : 162_033 Time : 12-JUN-2007 00:13

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	481562	11	15	
4,4'-DDE	A	1549			
4,4'-DDD	A	55019			
Endrin	A	303315	11	15	
Endrin aldehyde	A	4996			
Endrin ketone	A	31468			
4,4'-DDT	B	735765	7	15	
4,4'-DDE	B	1952			
4,4'-DDD	B	56738			
Endrin	B	407811	6	15	
Endrin aldehyde	B	4744			
Endrin ketone	B	21531			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 807234319007
Cal : 807215412001
Standards: S6271

Run Name : PEST_4
File : 162_007
Caldate : 29-MAY-2007

IDF : 1.0
Time : 11-JUN-2007 13:53

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10624	20.00	19.05	pg	-5	15	
gamma-BHC	A	10194	9759.8	20.00	19.15	pg	-4	15	
beta-BHC	A	4009.9	3806.5	20.00	18.99	pg	-5	15	
delta-BHC	A	10898	10149	20.00	18.63	pg	-7	15	
Heptachlor	A	9540.3	8777.5	20.00	18.40	pg	-8	15	
Aldrin	A	9466.9	9226.4	20.00	19.49	pg	-3	15	
Heptachlor epoxide	A	8393.1	8095.7	20.00	19.29	pg	-4	15	
gamma-Chlordane	A	8338.1	8094.5	20.00	19.42	pg	-3	15	
alpha-Chlordane	A	7988.2	7827.6	20.00	19.60	pg	-2	15	
4,4'-DDE	A	7422.6	7366.6	40.00	39.70	pg	-1	15	
Endosulfan I	A	7734.3	7347.8	20.00	19.00	pg	-5	15	
Dieldrin	A	7872.9	7956.9	40.00	40.43	pg	1	15	
Endrin	A	6792.2	6372.5	40.00	37.53	pg	-6	15	
4,4'-DDD	A	6026.3	6340.1	40.00	42.08	pg	5	15	
Endosulfan II	A	6534.6	6489.5	40.00	39.72	pg	-1	15	
4,4'-DDT	A	6296.4	5364.5	40.00	34.08	pg	-15	15	
Methoxychlor	A	2495.9	2212.3	200.0	177.3	pg	-11	15	
Endosulfan sulfate	A	6019.0	5876.3	40.00	39.05	pg	-2	15	
Endrin ketone	A	7036.6	7217.6	40.00	41.03	pg	3	15	
TCMX	A	5906.5	5600.2	40.00	37.93	pg	-5	15	
Decachlorobiphenyl	A	4694.6	4669.2	40.00	39.78	pg	-1	15	
alpha-BHC	B	12258	12489	20.00	20.38	pg	2	15	
gamma-BHC	B	11263	11456	20.00	20.34	pg	2	15	
beta-BHC	B	4297.6	4351.9	20.00	20.25	pg	1	15	
delta-BHC	B	11930	11963	20.00	20.06	pg	0	15	
Heptachlor	B	10399	10284	20.00	19.78	pg	-1	15	
Aldrin	B	10589	10642	20.00	20.10	pg	0	15	
Heptachlor epoxide	B	9387.0	9445.5	20.00	20.12	pg	1	15	
gamma-Chlordane	B	9442.0	9525.9	20.00	20.18	pg	1	15	
alpha-Chlordane	B	8976.3	9015.7	20.00	20.09	pg	0	15	
4,4'-DDE	B	8491.0	8850.7	40.00	41.69	pg	4	15	
Endosulfan I	B	8578.5	8691.0	20.00	20.26	pg	1	15	
Dieldrin	B	8883.3	9509.1	40.00	42.82	pg	7	15	
Endrin	B	7471.7	7662.1	40.00	41.02	pg	3	15	
4,4'-DDD	B	7120.2	7520.2	40.00	42.25	pg	6	15	
Endosulfan II	B	7343.8	7760.6	40.00	42.27	pg	6	15	
4,4'-DDT	B	7013.9	6761.5	40.00	38.56	pg	-4	15	
Methoxychlor	B	2602.3	2643.0	200.0	203.1	pg	2	15	
Endosulfan sulfate	B	6491.1	6793.1	40.00	41.86	pg	5	15	
Endrin ketone	B	7592.2	8387.1	40.00	44.19	pg	10	15	
TCMX	B	6510.0	6547.9	40.00	40.23	pg	1	15	
Decachlorobiphenyl	B	5122.3	5464.8	40.00	42.67	pg	7	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					3	15	

807234319007

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 807234319015
Cal : 807215412001
Standards: S6270

Run Name : PEST_3
File : 162_015
Caldate : 29-MAY-2007

IDF : 1.0
Time : 11-JUN-2007 17:19

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10948	10.00	9.817	pg	-2	15	
gamma-BHC	A	10194	10126	10.00	9.933	pg	-1	15	
beta-BHC	A	4009.9	3979.3	10.00	9.924	pg	-1	15	
delta-BHC	A	10898	10385	10.00	9.529	pg	-5	15	
Heptachlor	A	9540.3	9061.4	10.00	9.498	pg	-5	15	
Aldrin	A	9466.9	9494.5	10.00	10.03	pg	0	15	
Heptachlor epoxide	A	8393.1	8460.0	10.00	10.08	pg	1	15	
gamma-Chlordane	A	8338.1	8365.6	10.00	10.03	pg	0	15	
alpha-Chlordane	A	7988.2	7863.5	10.00	9.844	pg	-2	15	
4,4'-DDE	A	7422.6	7534.3	20.00	20.30	pg	2	15	
Endosulfan I	A	7734.3	7934.3	10.00	10.26	pg	3	15	
Dieldrin	A	7872.9	8169.9	20.00	20.75	pg	4	15	
Endrin	A	6792.2	6847.7	20.00	20.16	pg	1	15	
4,4'-DDD	A	6026.3	6372.7	20.00	21.15	pg	6	15	
Endosulfan II	A	6534.6	6876.4	20.00	21.05	pg	5	15	
4,4'-DDT	A	6296.4	5516.8	20.00	17.52	pg	-12	15	
Methoxychlor	A	2495.9	2346.7	100.0	94.02	pg	-6	15	
Endosulfan sulfate	A	6019.0	6202.6	20.00	20.61	pg	3	15	
Endrin ketone	A	7036.6	7536.5	20.00	21.42	pg	7	15	
TCMX	A	5906.5	5926.5	20.00	20.07	pg	0	15	
Decachlorobiphenyl	A	4694.6	5064.0	20.00	21.57	pg	8	15	
alpha-BHC	B	12258	11555	10.00	9.426	pg	-6	15	
gamma-BHC	B	11263	10488	10.00	9.312	pg	-7	15	
beta-BHC	B	4297.6	4023.7	10.00	9.363	pg	-6	15	
delta-BHC	B	11930	10663	10.00	8.938	pg	-11	15	
Heptachlor	B	10399	9298.7	10.00	8.942	pg	-11	15	
Aldrin	B	10589	9741.9	10.00	9.200	pg	-8	15	
Heptachlor epoxide	B	9387.0	8585.8	10.00	9.146	pg	-9	15	
gamma-Chlordane	B	9442.0	8572.7	10.00	9.079	pg	-9	15	
alpha-Chlordane	B	8976.3	8082.1	10.00	9.004	pg	-10	15	
4,4'-DDE	B	8491.0	7631.8	20.00	17.98	pg	-10	15	
Endosulfan I	B	8578.5	7911.3	10.00	9.222	pg	-8	15	
Dieldrin	B	8883.3	8295.2	20.00	18.68	pg	-7	15	
Endrin	B	7471.7	6672.3	20.00	17.86	pg	-11	15	
4,4'-DDD	B	7120.2	6796.9	20.00	19.09	pg	-5	15	
Endosulfan II	B	7343.8	6899.6	20.00	18.79	pg	-6	15	
4,4'-DDT	B	7013.9	5237.2	20.00	14.93	pg	**-25**	15	c- ***
Methoxychlor	B	2602.3	2109.3	100.0	81.06	pg	**-19**	15	c- ***
Endosulfan sulfate	B	6491.1	6024.8	20.00	18.56	pg	-7	15	
Endrin ketone	B	7592.2	7340.0	20.00	19.34	pg	-3	15	
TCMX	B	6510.0	6283.7	20.00	19.30	pg	-3	15	
Decachlorobiphenyl	B	5122.3	4675.8	20.00	18.26	pg	-9	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					9	15	

-=low bias c=CCV

807234319015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 807234319023
Cal : 807215412001
Standards: S6271

Run Name : PEST_4
File : 162_023
Caldate : 29-MAY-2007

IDF : 1.0
Time : 11-JUN-2007 20:35

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11545	20.00	20.71	pg	4	15	
gamma-BHC	A	10194	10408	20.00	20.42	pg	2	15	
beta-BHC	A	4009.9	3908.3	20.00	19.49	pg	-3	15	
delta-BHC	A	10898	10376	20.00	19.04	pg	-5	15	
Heptachlor	A	9540.3	9505.4	20.00	19.93	pg	0	15	
Aldrin	A	9466.9	9616.0	20.00	20.31	pg	2	15	
Heptachlor epoxide	A	8393.1	8327.2	20.00	19.84	pg	-1	15	
gamma-Chlordane	A	8338.1	8290.0	20.00	19.88	pg	-1	15	
alpha-Chlordane	A	7988.2	7947.7	20.00	19.90	pg	-1	15	
4,4'-DDE	A	7422.6	7629.7	40.00	41.12	pg	3	15	
Endosulfan I	A	7734.3	7576.7	20.00	19.59	pg	-2	15	
Dieldrin	A	7872.9	8219.7	40.00	41.76	pg	4	15	
Endrin	A	6792.2	6788.4	40.00	39.98	pg	0	15	
4,4'-DDD	A	6026.3	6410.5	40.00	42.55	pg	6	15	
Endosulfan II	A	6534.6	6564.5	40.00	40.18	pg	0	15	
4,4'-DDT	A	6296.4	5866.6	40.00	37.27	pg	-7	15	
Methoxychlor	A	2495.9	2429.3	200.0	194.7	pg	-3	15	
Endosulfan sulfate	A	6019.0	6005.1	40.00	39.91	pg	0	15	
Endrin ketone	A	7036.6	7317.9	40.00	41.60	pg	4	15	
TCMX	A	5906.5	6182.5	40.00	41.87	pg	5	15	
Decachlorobiphenyl	A	4694.6	4904.7	40.00	41.79	pg	4	15	
alpha-BHC	B	12258	11773	20.00	19.21	pg	-4	15	
gamma-BHC	B	11263	10691	20.00	18.98	pg	-5	15	
beta-BHC	B	4297.6	4010.1	20.00	18.66	pg	-7	15	
delta-BHC	B	11930	10904	20.00	18.28	pg	-9	15	
Heptachlor	B	10399	9672.5	20.00	18.60	pg	-7	15	
Aldrin	B	10589	9928.2	20.00	18.75	pg	-6	15	
Heptachlor epoxide	B	9387.0	8790.9	20.00	18.73	pg	-6	15	
gamma-Chlordane	B	9442.0	8832.9	20.00	18.71	pg	-6	15	
alpha-Chlordane	B	8976.3	8359.8	20.00	18.63	pg	-7	15	
4,4'-DDE	B	8491.0	8228.1	40.00	38.76	pg	-3	15	
Endosulfan I	B	8578.5	8074.9	20.00	18.83	pg	-6	15	
Dieldrin	B	8883.3	8832.4	40.00	39.77	pg	-1	15	
Endrin	B	7471.7	6993.1	40.00	37.44	pg	-6	15	
4,4'-DDD	B	7120.2	7166.3	40.00	40.26	pg	1	15	
Endosulfan II	B	7343.8	7205.4	40.00	39.25	pg	-2	15	
4,4'-DDT	B	7013.9	6054.9	40.00	34.53	pg	-14	15	
Methoxychlor	B	2602.3	2456.8	200.0	188.8	pg	-6	15	
Endosulfan sulfate	B	6491.1	6265.9	40.00	38.61	pg	-3	15	
Endrin ketone	B	7592.2	7904.9	40.00	41.65	pg	4	15	
TCMX	B	6510.0	6306.5	40.00	38.75	pg	-3	15	
Decachlorobiphenyl	B	5122.3	5114.2	40.00	39.94	pg	0	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					5	15	

807234319023

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 807234319034
Cal : 807215412001
Standards: S6425

Run Name : PEST_5
File : 162_034
Caldate : 29-MAY-2007

IDF : 1.0
Time : 12-JUN-2007 00:35

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11159	25.00	25.02	pg	0	15	
gamma-BHC	A	10194	10085	25.00	24.73	pg	-1	15	
beta-BHC	A	4009.9	3710.3	25.00	23.13	pg	-7	15	
delta-BHC	A	10898	10137	25.00	23.25	pg	-7	15	
Heptachlor	A	9540.3	9154.0	25.00	23.99	pg	-4	15	
Aldrin	A	9466.9	9407.8	25.00	24.84	pg	-1	15	
Heptachlor epoxide	A	8393.1	8100.4	25.00	24.13	pg	-3	15	
gamma-Chlordane	A	8338.1	8086.5	25.00	24.25	pg	-3	15	
alpha-Chlordane	A	7988.2	7435.0	25.00	23.27	pg	-7	15	
4,4'-DDE	A	7422.6	7516.4	50.00	50.63	pg	1	15	
Endosulfan I	A	7734.3	7738.6	25.00	25.01	pg	0	15	
Dieldrin	A	7872.9	8108.7	50.00	51.50	pg	3	15	
Endrin	A	6792.2	6676.6	50.00	49.15	pg	-2	15	
4,4'-DDD	A	6026.3	6071.7	50.00	50.38	pg	1	15	
Endosulfan II	A	6534.6	6828.2	50.00	52.25	pg	4	15	
4,4'-DDT	A	6296.4	5581.6	50.00	44.32	pg	-11	15	
Methoxychlor	A	2495.9	2297.5	250.0	230.1	pg	-8	15	
Endosulfan sulfate	A	6019.0	5770.0	50.00	47.93	pg	-4	15	
Endrin ketone	A	7036.6	7289.8	50.00	51.80	pg	4	15	
TCMX	A	5906.5	5949.8	50.00	50.37	pg	1	15	
Decachlorobiphenyl	A	4694.6	4701.9	50.00	50.08	pg	0	15	
alpha-BHC	B	12258	12652	25.00	25.80	pg	3	15	
gamma-BHC	B	11263	11616	25.00	25.78	pg	3	15	
beta-BHC	B	4297.6	4264.3	25.00	24.81	pg	-1	15	
delta-BHC	B	11930	11930	25.00	25.00	pg	0	15	
Heptachlor	B	10399	10758	25.00	25.86	pg	3	15	
Aldrin	B	10589	10725	25.00	25.32	pg	1	15	
Heptachlor epoxide	B	9387.0	9398.4	25.00	25.03	pg	0	15	
gamma-Chlordane	B	9442.0	9581.0	25.00	25.37	pg	1	15	
alpha-Chlordane	B	8976.3	8992.5	25.00	25.05	pg	0	15	
4,4'-DDE	B	8491.0	9323.0	50.00	54.90	pg	10	15	
Endosulfan I	B	8578.5	8656.2	25.00	25.23	pg	1	15	
Dieldrin	B	8883.3	9736.9	50.00	54.80	pg	10	15	
Endrin	B	7471.7	7998.9	50.00	53.53	pg	7	15	
4,4'-DDD	B	7120.2	7962.0	50.00	55.91	pg	12	15	
Endosulfan II	B	7343.8	7874.6	50.00	53.61	pg	7	15	
4,4'-DDT	B	7013.9	7152.6	50.00	50.99	pg	2	15	
Methoxychlor	B	2602.3	2909.1	250.0	279.5	pg	12	15	
Endosulfan sulfate	B	6491.1	6822.7	50.00	52.55	pg	5	15	
Endrin ketone	B	7592.2	8546.4	50.00	56.28	pg	13	15	
TCMX	B	6510.0	6725.3	50.00	51.65	pg	3	15	
Decachlorobiphenyl	B	5122.3	5512.4	50.00	53.81	pg	8	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

807234319034

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC25 Run Name : PEST_4 IDF : 1.0
Seqnum : 827235575005 File : 163_005 Time : 12-JUN-2007 17:06
Cal : 827197214001 Caldate : 16-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9011.2	10131	20.00	22.49	pg	12	15	
gamma-BHC	A	8226.2	9297.1	20.00	22.60	pg	13	15	
beta-BHC	A	2910.5	2877.8	20.00	19.77	pg	-1	15	
delta-BHC	A	8143.4	8986.8	20.00	22.07	pg	10	15	
Heptachlor	A	7499.3	8073.8	20.00	21.53	pg	8	15	
Aldrin	A	7284.1	7973.8	20.00	21.89	pg	9	15	
Heptachlor epoxide	A	6107.7	6539.9	20.00	21.42	pg	7	15	
gamma-Chlordane	A	6150.9	6671.3	20.00	21.69	pg	8	15	
alpha-Chlordane	A	5799.2	6319.8	20.00	21.80	pg	9	15	
4,4'-DDE	A	5397.7	5546.4	40.00	41.10	pg	3	15	
Endosulfan I	A	5675.2	6143.5	20.00	21.65	pg	8	15	
Dieldrin	A	5636.7	5736.9	40.00	40.71	pg	2	15	
Endrin	A	4316.9	4305.7	40.00	39.90	pg	0	15	
4,4'-DDD	A	4143.7	4704.8	40.00	45.42	pg	14	15	
Endosulfan II	A	4335.1	4914.6	40.00	45.35	pg	13	15	
4,4'-DDT	A	4234.3	4723.3	40.00	44.62	pg	12	15	
Methoxychlor	A	1519.7	1327.3	200.0	174.7	pg	-13	15	
Endosulfan sulfate	A	3452.2	3846.6	40.00	44.57	pg	11	15	
Endrin ketone	A	3909.3	4584.2	40.00	46.91	pg	**17**	15	c+ ***
TCMX	A	3876.4	4835.6	40.00	49.90	pg	**25**	15	c+
Decachlorobiphenyl	A	2341.0	2705.7	40.00	46.23	pg	**16**	15	c+
alpha-BHC	B	9652.6	10869	20.00	22.52	pg	13	15	
gamma-BHC	B	8816.3	9728.5	20.00	22.07	pg	10	15	
beta-BHC	B	3705.6	3957.5	20.00	21.36	pg	7	15	
delta-BHC	B	8000.9	8877.3	20.00	22.19	pg	11	15	
Heptachlor	B	7593.4	8782.7	20.00	23.13	pg	**16**	15	c+ ***
Aldrin	B	7710.5	8535.2	20.00	22.14	pg	11	15	
Heptachlor epoxide	B	6674.4	7268.6	20.00	21.78	pg	9	15	
gamma-Chlordane	B	6945.5	7695.0	20.00	22.16	pg	11	15	
alpha-Chlordane	B	6501.2	7275.2	20.00	22.38	pg	12	15	
4,4'-DDE	B	6385.5	6330.4	40.00	39.65	pg	-1	15	
Endosulfan I	B	6298.4	6942.1	20.00	22.04	pg	10	15	
Dieldrin	B	6180.2	5751.0	40.00	37.22	pg	-7	15	
Endrin	B	3813.1	3379.1	40.00	35.45	pg	-11	15	
4,4'-DDD	B	5207.1	5410.0	40.00	41.56	pg	4	15	
Endosulfan II	B	5324.7	5333.7	40.00	40.07	pg	0	15	
4,4'-DDT	B	4980.4	5000.4	40.00	40.16	pg	0	15	
Methoxychlor	B	1632.0	1287.6	200.0	157.8	pg	**-21**	15	c- rsd ***
Endosulfan sulfate	B	4505.3	4592.3	40.00	40.77	pg	2	15	
Endrin ketone	B	5166.3	5098.0	40.00	39.47	pg	-1	15	
TCMX	B	5797.8	6524.3	40.00	45.01	pg	13	15	
Decachlorobiphenyl	B	3458.0	4053.1	40.00	46.88	pg	**17**	15	c+
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					9	15	

+=high bias -=low bias c=CCV rsd=ICAL %RSD failure

827235575005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 PEST Water
EPA 8081A

Inst : GC25 Run Name : PEST_3 IDF : 1.0
Seqnum : 827235575012 File : 163_012 Time : 12-JUN-2007 20:38
Cal : 827197214001 Caldate : 16-MAY-2007
Standards: S6270

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9011.2	10169	10.00	11.29	pg	13	15	
gamma-BHC	A	8226.2	9208.6	10.00	11.19	pg	12	15	
beta-BHC	A	2910.5	2784.2	10.00	9.566	pg	-4	15	
delta-BHC	A	8143.4	9093.8	10.00	11.17	pg	12	15	
Heptachlor	A	7499.3	8046.3	10.00	10.73	pg	7	15	
Aldrin	A	7284.1	7846.6	10.00	10.77	pg	8	15	
Heptachlor epoxide	A	6107.7	6506.9	10.00	10.65	pg	7	15	
gamma-Chlordane	A	6150.9	6544.4	10.00	10.64	pg	6	15	
alpha-Chlordane	A	5799.2	6118.6	10.00	10.55	pg	6	15	
4,4'-DDE.	A	5397.7	6544.3	20.00	24.25	pg	**21**	15	c+ ***
Endosulfan I	A	5675.2	5988.7	10.00	10.55	pg	6	15	
Dieldrin	A	5636.7	6817.7	20.00	24.19	pg	**21**	15	c+ ***
Endrin	A	4316.9	4951.8	20.00	22.94	pg	15	15	
4,4'-DDD	A	4143.7	5284.5	20.00	25.51	pg	**28**	15	c+ ***
Endosulfan II	A	4335.1	5404.6	20.00	24.93	pg	**25**	15	c+ ***
4,4'-DDT	A	4234.3	4856.2	20.00	22.94	pg	15	15	
Methoxychlor	A	1519.7	1776.2	100.0	116.9	pg	**17**	15	c+ ***
Endosulfan sulfate	A	3452.2	4199.3	20.00	24.33	pg	**22**	15	c+ ***
Endrin ketone	A	3909.3	5176.4	20.00	26.48	pg	**32**	15	c+ ***
TCMX	A	3876.4	4697.0	20.00	24.23	pg	**21**	15	c+
Decachlorobiphenyl	A	2341.0	2937.5	20.00	25.10	pg	**25**	15	c+
alpha-BHC	B	9652.6	10288	10.00	10.66	pg	7	15	
gamma-BHC	B	8816.3	9377.0	10.00	10.64	pg	6	15	
beta-BHC	B	3705.6	3635.4	10.00	9.811	pg	-2	15	
delta-BHC	B	8000.9	8859.9	10.00	11.07	pg	11	15	
Heptachlor	B	7593.4	8350.3	10.00	11.00	pg	10	15	
Aldrin	B	7710.5	8560.9	10.00	11.10	pg	11	15	
Heptachlor epoxide	B	6674.4	7342.2	10.00	11.00	pg	10	15	
gamma-Chlordane	B	6945.5	7592.3	10.00	10.93	pg	9	15	
alpha-Chlordane	B	6501.2	7090.9	10.00	10.91	pg	9	15	
4,4'-DDE	B	6385.5	7103.1	20.00	22.25	pg	11	15	
Endosulfan I	B	6298.4	6796.0	10.00	10.79	pg	8	15	
Dieldrin	B	6180.2	6950.4	20.00	22.49	pg	12	15	
Endrin	B	3813.1	4003.1	20.00	21.00	pg	5	15	
4,4'-DDD	B	5207.1	6211.6	20.00	23.86	pg	**19**	15	c+ ***
Endosulfan II	B	5324.7	6130.6	20.00	23.03	pg	15	15	
4,4'-DDT	B	4980.4	5164.6	20.00	20.74	pg	4	15	
Methoxychlor	B	1632.0	1655.3	100.0	101.4	pg	1	15	rsd ***
Endosulfan sulfate	B	4505.3	5143.3	20.00	22.83	pg	14	15	
Endrin ketone	B	5166.3	6219.3	20.00	24.08	pg	**20**	15	c+ ***
TCMX	B	5797.8	6066.1	20.00	20.93	pg	5	15	
Decachlorobiphenyl	B	3458.0	4106.0	20.00	23.75	pg	**19**	15	c+
Average EPA 8081A	A	(n=22)					15	15	
Average EPA 8081A	B	(n=22)					10	15	

+=high bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807215412

Instrument : GC23
Method : EPA 8081A

Begun : 05/29/07 14:12
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	149_007	X	PEM			05/29/07 14:12	1.0	1	
008	149_008	X	PEST_3			05/29/07 14:33	1.0	2	
015	149_015	X	PEM			05/29/07 17:51	1.0	1	
016	149_016	X	PEST_4			05/29/07 18:12	1.0	3	
023	149_023	PEM	PEM			05/29/07 21:43	1.0	1	
024	149_024	IB	HEX			05/29/07 22:04	1.0		
025	149_025	ICAL	PEST_1			05/29/07 22:26	1.0	4	
026	149_026	ICAL	PEST_2			05/29/07 22:47	1.0	5	
027	149_027	ICAL	PEST_3			05/29/07 23:08	1.0	2	
028	149_028	ICAL	PEST_4			05/29/07 23:30	1.0	3	
029	149_029	ICAL	PEST_5			05/29/07 23:51	1.0	6	
030	149_030	ICAL	PEST_6			05/30/07 00:13	1.0	7	
031	149_031	ICAL	PEST_7			05/30/07 00:34	1.0	8	
034	149_034	ICV	ICV			05/30/07 01:39	1.0	9	
035	149_035	X	ICV			05/30/07 02:00	1.0	9	
036	149_036	IB	HEX			05/30/07 02:21	1.0		
037	149_037	ICAL	CHLOR_40			05/30/07 02:43	1.0	10	
038	149_038	ICAL	CHLOR_150			05/30/07 03:04	1.0	11	
039	149_039	ICAL	CHLOR_500			05/30/07 03:26	1.0	12	
040	149_040	ICAL	CHLOR_1000			05/30/07 03:47	1.0	13	
041	149_041	ICAL	CHLOR_1500			05/30/07 04:09	1.0	14	
042	149_042	ICAL	CHLOR_3000			05/30/07 04:30	1.0	15	

Analyst: ADM Date: 05/30/07 Reviewer: RH Date: 05/30/07

Standards used: 1=S5747 2=S6270 3=S6271 4=S6268 5=S6269 6=S5859 7=S5860 8=S6332 9=S5817 10=S6324 11=S6325 12=S6326 13=S6327 14=S6328 15=S6329

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807234319

Instrument : GC23
Method : EPA 8081A

Begun : 06/11/07 13:31
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
006	162_006	PEM	PEM			06/11/07 13:31	1.0	1	
007	162_007	CCV	PEST_4			06/11/07 13:53	1.0	2	
008	162_008	X	HEX			06/11/07 14:18	1.0		
009	162_009	BLANK	QC391520	Water	126108	06/11/07 14:43	1.0		
010	162_010	BS	QC391521	Water	126108	06/11/07 15:05	1.0		
011	162_011	BSD	QC391522	Water	126108	06/11/07 15:27	1.0		
012	162_012	SAMPLE	195242-001	Water	126108	06/11/07 15:53	1.0		1:GCHLORDANE=260
013	162_013	X	HEX			06/11/07 16:15	1.0		
014	162_014	PEM	PEM			06/11/07 16:57	1.0	1	
015	162_015	CCV	PEST_3			06/11/07 17:19	1.0	3	
017	162_017	BLANK	QC391712	Soil	126164	06/11/07 18:21	1.0		
018	162_018	BS	QC391713	Soil	126164	06/11/07 18:43	1.0		
019	162_019	BSD	QC391714	Soil	126164	06/11/07 19:05	1.0		
020	162_020	SAMPLE	195242-002	Soil	126164	06/11/07 19:29	1.0		
021	162_021	X	HEX			06/11/07 19:51	1.0		
022	162_022	PEM	PEM			06/11/07 20:13	1.0	1	
023	162_023	CCV	PEST_4			06/11/07 20:35	1.0	2	
024	162_024	X	PEST_4			06/11/07 20:57	1.0	2	
025	162_025	X	PEM			06/11/07 21:19	1.0	1	
026	162_026	X	HEX			06/11/07 21:40	1.0		
027	162_027	SAMPLE	195247-001	Water	126108	06/11/07 22:02	1.0		
028	162_028	SAMPLE	195247-002	Water	126108	06/11/07 22:24	1.0		
029	162_029	SAMPLE	195270-001	Water	126108	06/11/07 22:46	1.0		
030	162_030	SAMPLE	195270-002	Water	126108	06/11/07 23:08	1.0		1:BHCBETA=580
031	162_031	SAMPLE	195279-001	Water	126108	06/11/07 23:30	1.0		
032	162_032	X	HEX			06/11/07 23:51	1.0		
033	162_033	PEM	PEM			06/12/07 00:13	1.0	1	
034	162_034	CCV	PEST_5			06/12/07 00:35	1.0	4	
035	162_035	X	PEST_5			06/12/07 00:57	1.0	4	
036	162_036	X	PEM			06/12/07 01:19	1.0	1	
037	162_037	X	HEX			06/12/07 01:41	1.0		

Standards used: 1=S6458 2=S6271 3=S6270 4=S6425

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 827197214

Instrument : GC25
Method : EPA 8081A

Begun : 05/16/07 22:54
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
018	136_018	PEM	PEM			05/16/07 22:54	1.0	1	1:MTXYCL=310
019	136_019	X	HEX			05/16/07 23:21	1.0		
020	136_020	ICAL	PEST_1			05/16/07 23:48	1.0	2	
021	136_021	ICAL	PEST_2			05/17/07 00:15	1.0	3	
022	136_022	ICAL	PEST_3			05/17/07 00:42	1.0	4	
023	136_023	ICAL	PEST_4			05/17/07 01:09	1.0	5	
024	136_024	ICAL	PEST_5			05/17/07 01:36	1.0	6	
025	136_025	ICAL	PEST_6			05/17/07 02:03	1.0	7	
026	136_026	ICAL	PEST_7			05/17/07 02:30	1.0	8	
029	136_029	ICV	ICV			05/17/07 03:51	1.0	9	

Analyst: ADM Date: 06/12/07 Reviewer: _____ Date: _____

Standards used: 1=S5747 2=S6268 3=S6269 4=S6270 5=S6271 6=S5859 7=S5860 8=S5051 9=S5817

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 827235575

Instrument : GC25
Method : EPA 8081A

Begun : 06/12/07 13:48
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	163_001	X	HEX			06/12/07 13:48	1.0	
002	163_002	PEM	PEM			06/12/07 14:15	1.0	1
003	163_003	X	PEST_4			06/12/07 14:42	1.0	2
004	163_004	X	HEX			06/12/07 16:30	1.0	
005	163_005	CCV	PEST_4			06/12/07 17:06	1.0	2
006	163_006	X	HEX			06/12/07 17:36	1.0	
007	163_007	SAMPLE	195247-001	Water	126108	06/12/07 18:03	1.0	
008	163_008	X	HEX			06/12/07 18:35	1.0	
009	163_009	X	195270-001	Water	126108	06/12/07 19:17	1.0	
010	163_010	X	HEX			06/12/07 19:44	1.0	
011	163_011	PEM	PEM			06/12/07 20:11	1.0	1
012	163_012	CCV	PEST_3			06/12/07 20:38	1.0	3
013	163_013	X	PEST_3			06/12/07 21:04	1.0	3
014	163_014	X	PEM			06/12/07 21:31	1.0	1

Standards used: 1=S6458 2=S6271 3=S6270

REPORTING SUMMARY FOR 195247 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195247-001	alpha-BHC	GC23	A	06/11/07 22:02
195247-001	beta-BHC	GC23	A	06/11/07 22:02
195247-001	gamma-BHC	GC23	A	06/11/07 22:02
195247-001	delta-BHC	GC23	A	06/11/07 22:02
195247-001	Heptachlor	GC23	A	06/11/07 22:02
195247-001	Aldrin	GC23	A	06/11/07 22:02
195247-001	Heptachlor epoxide	GC23	A	06/11/07 22:02
195247-001	Endosulfan I	GC23	A	06/11/07 22:02
195247-001	Dieldrin	GC23	A	06/11/07 22:02
195247-001	4,4'-DDE	GC23	A	06/11/07 22:02
195247-001	Endrin	GC23	A	06/11/07 22:02
195247-001	Endosulfan II	GC23	A	06/11/07 22:02
195247-001	Endosulfan sulfate	GC23	A	06/11/07 22:02
195247-001	4,4'-DDD	GC23	A	06/11/07 22:02
195247-001	4,4'-DDT	GC23	A	06/11/07 22:02
195247-001	alpha-Chlordane	GC23	A	06/11/07 22:02
195247-001	gamma-Chlordane	GC25	A	06/12/07 18:03
195247-001	Methoxychlor	GC23	A	06/11/07 22:02
195247-001	Endrin ketone	GC23	A	06/11/07 22:02
195247-001	Toxaphene	GC23	A	06/11/07 22:02
195247-001	TCMX	GC23	A	06/11/07 22:02
195247-001	Decachlorobiphenyl	GC23	A	06/11/07 22:02
195247-002	alpha-BHC	GC23	A	06/11/07 22:24
195247-002	beta-BHC	GC23	A	06/11/07 22:24
195247-002	gamma-BHC	GC23	A	06/11/07 22:24
195247-002	delta-BHC	GC23	A	06/11/07 22:24
195247-002	Heptachlor	GC23	A	06/11/07 22:24
195247-002	Aldrin	GC23	A	06/11/07 22:24
195247-002	Heptachlor epoxide	GC23	A	06/11/07 22:24
195247-002	Endosulfan I	GC23	A	06/11/07 22:24
195247-002	Dieldrin	GC23	A	06/11/07 22:24
195247-002	4,4'-DDE	GC23	A	06/11/07 22:24
195247-002	Endrin	GC23	A	06/11/07 22:24
195247-002	Endosulfan II	GC23	A	06/11/07 22:24
195247-002	Endosulfan sulfate	GC23	A	06/11/07 22:24
195247-002	4,4'-DDD	GC23	A	06/11/07 22:24
195247-002	4,4'-DDT	GC23	A	06/11/07 22:24
195247-002	alpha-Chlordane	GC23	A	06/11/07 22:24
195247-002	gamma-Chlordane	GC23	A	06/11/07 22:24
195247-002	Methoxychlor	GC23	A	06/11/07 22:24
195247-002	Endrin ketone	GC23	A	06/11/07 22:24
195247-002	Toxaphene	GC23	A	06/11/07 22:24
195247-002	TCMX	GC23	A	06/11/07 22:24
195247-002	Decachlorobiphenyl	GC23	A	06/11/07 22:24
QC391520	alpha-BHC	GC23	A	06/11/07 14:43
QC391520	beta-BHC	GC23	A	06/11/07 14:43
QC391520	gamma-BHC	GC23	A	06/11/07 14:43
QC391520	delta-BHC	GC23	A	06/11/07 14:43
QC391520	Heptachlor	GC23	A	06/11/07 14:43
QC391520	Aldrin	GC23	A	06/11/07 14:43
QC391520	Heptachlor epoxide	GC23	A	06/11/07 14:43
QC391520	Endosulfan I	GC23	A	06/11/07 14:43

REPORTING SUMMARY FOR 195247 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391520	Dieldrin	GC23	A	06/11/07 14:43
QC391520	4,4'-DDE	GC23	A	06/11/07 14:43
QC391520	Endrin	GC23	A	06/11/07 14:43
QC391520	Endosulfan II	GC23	A	06/11/07 14:43
QC391520	Endosulfan sulfate	GC23	A	06/11/07 14:43
QC391520	4,4'-DDD	GC23	A	06/11/07 14:43
QC391520	4,4'-DDT	GC23	A	06/11/07 14:43
QC391520	alpha-Chlordane	GC23	A	06/11/07 14:43
QC391520	gamma-Chlordane	GC23	A	06/11/07 14:43
QC391520	Methoxychlor	GC23	A	06/11/07 14:43
QC391520	Endrin ketone	GC23	A	06/11/07 14:43
QC391520	Toxaphene	GC23	A	06/11/07 14:43
QC391520	TCMX	GC23	A	06/11/07 14:43
QC391520	Decachlorobiphenyl	GC23	A	06/11/07 14:43
QC391521	gamma-BHC	GC23	A	06/11/07 15:05
QC391521	Heptachlor	GC23	A	06/11/07 15:05
QC391521	Aldrin	GC23	A	06/11/07 15:05
QC391521	Dieldrin	GC23	A	06/11/07 15:05
QC391521	Endrin	GC23	A	06/11/07 15:05
QC391521	4,4'-DDT	GC23	A	06/11/07 15:05
QC391521	TCMX	GC23	A	06/11/07 15:05
QC391521	Decachlorobiphenyl	GC23	A	06/11/07 15:05
QC391522	gamma-BHC	GC23	A	06/11/07 15:27
QC391522	Heptachlor	GC23	A	06/11/07 15:27
QC391522	Aldrin	GC23	A	06/11/07 15:27
QC391522	Dieldrin	GC23	A	06/11/07 15:27
QC391522	Endrin	GC23	A	06/11/07 15:27
QC391522	4,4'-DDT	GC23	A	06/11/07 15:27
QC391522	TCMX	GC23	A	06/11/07 15:27
QC391522	Decachlorobiphenyl	GC23	A	06/11/07 15:27

SAMPLE PREPARATION SUMMARY

Batch # : 126108
Started By : JXM
Method : 3520C
Spike #1 ID : S6209

Prep Date : 08-JUN-2007
SOP Version : 8081_3520_rv16
Spike #2 ID : S5676

Analysis : 8081
Finished By : SFL
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195242-001		Water	975	10	1	0.01026	6	.025				8081	
195247-001		Water	1040	10	1	0.009615	6	.025				8081	
195247-002		Water	1050	10	1	0.009524	6	.025				8081	
195270-001		Water	1060	10	1	0.009434	6	.025				8081	
195270-002		Water	1060	10	1	0.009434	6	.025				8081	
195279-001		Water	1050	10	1	0.009524	5	.025				8081	
QC391520	BLANK	Water	1000	10	1	0.01		.025				8081	
QC391521	BS	Water	1000	10	1	0.01		.025	.025			8081	
QC391522	BSD	Water	1000	10	1	0.01		.025	.025			8081	

Analyst: ADM Date: 06/12/07 Reviewer: CW Date: 06/12/07

8081 Water Prep Log Curtis & Tompkins, Ltd.

BK 2498 Page: 11

LIMS Batch No: 126108
Date Extracted: 6/8/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195242-001G	975	6	10.0		
195247-001D	1040				
↓ 02E	1050				
195270-001L	1060				
↓ 025	↓	↓			
195279-001N	1050	5			
MB0C391520	1000	N/A			
BS 1					
BSD ↓ 2	↓	↓	↓		

6/10/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	66209B	JM 6/8/07
0.025 mL of matrix spiking solution was added to all spikes	25676D	
☒ EPA 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2	SM47110	
Extraction Start Time:	17:40	
Extraction End Time:	1243	6/9/07 KP
☐ EPA 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SFL 6/10/07
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ GRAN Na_2SO_4	EM1442837DL	
Exchanged 2x with Hexane	JTB E11E38	
Concentrated: ☑ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	
Extracts relinquished to the Pesticide Group	FHDLEV	

6/8/07
Extraction Chemist **Date**

Contined from Page ____
Continued on Page 1

6/10/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 06/27/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B	GC25 A	GC25 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061	0.0039	0.0060
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063	0.0042	0.0068
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044	0.0035	0.0054
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090	0.0068	0.017
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014	0.013	0.022
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015	0.011	0.019
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099	0.0038	0.0060
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012	0.0034	0.0087
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081	0.0040	0.0074
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055	0.0029	0.0081
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057	0.0027	0.012
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051	0.0029	0.0070
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057	0.0027	0.0085
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012	0.0068	0.017
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013	0.0097	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013	0.0094	0.015
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013	0.0066	0.019
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015	0.0055	0.020
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20	0.10	0.16
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081	0.075	0.073
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080	0.0066	0.017
Toxaphene	ug/L	0.39	0.25	0.19	0.19	0.29	0.32	0.13	0.21

:0015U

POLYAROMATIC HYDROCARBONS

: 00155

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ100	Batch#:	126173
Lab ID:	195247-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.1	
Acenaphthylene	ND	2.1	
Acenaphthene	ND	1.1	
Fluorene	ND	1.1	
Phenanthrene	ND	0.53	
Anthracene	ND	0.53	0.02
Fluoranthene	0.15 J	0.42	0.006
Pyrene	ND	0.21	
Benzo(a)anthracene	ND	0.11	
Chrysene	ND	0.11	
Benzo(b)fluoranthene	ND	0.21	
Benzo(k)fluoranthene	ND	0.11	
Benzo(a)pyrene	ND	0.11	
Dibenz(a,h)anthracene	ND	0.21	
Benzo(g,h,i)perylene	0.33	0.21	
Indeno(1,2,3-cd)pyrene	ND	0.15	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	82	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

45.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ101	Batch#:	126173
Lab ID:	195247-002	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	1.0	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	0.10	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

46.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391739	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

47.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391740	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.860	89	50-135
Fluorene	2.000	1.904	95	65-135
Pyrene	1.000	0.9258	93	65-135
Benzo(a)pyrene	1.000	0.8990	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	89	65-135

48.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	126173
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Lab ID: QC391741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09004	9.615	7.964	83	50-135
Fluorene	<0.009366	1.923	1.729	90	65-135
Pyrene	<0.003779	0.9615	0.7599	79	65-135
Benzo(a)pyrene	<0.01488	0.9615	0.3574	37 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	83	65-135

Type: MSD Lab ID: QC391742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.615	7.763	81	50-135	3	35
Fluorene	1.923	1.709	89	65-135	1	35
Pyrene	0.9615	0.7860	82	65-135	3	35
Benzo(a)pyrene	0.9615	0.4085	42 *	65-135	13	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	84	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

57.0

Confirmation Report for 195247 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
195247-001	BB1PZ100	Fluoranthene	0.1454 J	0.2644	58	82
195247-001	BB1PZ100	Benzo(g,h,i)perylene	0.3298	0.4126	22	25
195247-002	BB1PZ101	Fluorene	1.015	0.9871	3	-3
195247-002	BB1PZ101	Chrysene	0.09644	0.2809	98	191

J=estimated

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 HPLC Water: EPA 8310

Inst : HPLC04 Reviewer : CW
Calnum : 297149198001 Date : 13-APR-2007 17:16
Units : ug/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	10300006	297149198006		13-APR-2007 17:16	S5288
L2	10300007	297149198007		13-APR-2007 17:47	S5287
L3	10300008	297149198008		13-APR-2007 18:19	S5286
L4	10300009	297149198009		13-APR-2007 18:51	S5285
L5	10300010	297149198010		13-APR-2007 19:22	S5284
L6	10300011	297149198011		13-APR-2007 19:54	S5283
L7	10300012	297149198012		13-APR-2007 20:25	S5282

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0128	0.0132	0.0134	0.0134	0.0132	0.0132	0.0132	LINR	-10.001	75.7193		0.0132	1.000	0.99	20	
Acenaphthylene	1	0.0094	0.0096	0.0099	0.0099	0.0098	0.0098	0.0097	LINR	-59.664	102.661		0.0097	1.000	0.99	20	
Acenaphthene	1	0.0069	0.0052	0.0053	0.0053	0.0052	0.0052	0.0051	LINR	-79.957	194.506		0.0055	1.000	0.99	20	
Fluorene	1	0.0705	0.0643	0.0643	0.0645	0.0638	0.0636	0.0639	LINR	-0.7617	15.6594		0.0650	1.000	0.99	20	
Phenanthrene	1	0.1834	0.1774	0.1805	0.1806	0.1791	0.1787	0.1794	LINR	-0.0602	5.57891		0.1799	1.000	0.99	20	
Anthracene	1	0.4270	0.4295	0.4332	0.4337	0.4303	0.4275	0.4283	LINR	-2.0092	2.33653		0.4299	1.000	0.99	20	
Fluoranthene	1	0.0384	0.0403	0.0416	0.0414	0.0426	0.0424	0.0427	LINR	11.5991	23.4132		0.0414	1.000	0.99	20	
Benzo(a)anthracene	1	0.0994	0.0926	0.0938	0.0949	0.0943	0.0946	0.0957	LINR	5.77766	10.4563		0.0950	1.000	0.99	20	
Chrysene	1	0.1106	0.1334	0.1359	0.1363	0.1343	0.1345	0.1353	LINR	1.94264	7.39843		0.1314	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0921	0.1004	0.1054	0.1072	0.1079	0.1075	0.1081	LINR	8.26982	9.24895		0.1041	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0572	0.0735	0.0812	0.0822	0.0834	0.0831	0.0840	LINR	8.45959	11.8997		0.0778	1.000	0.99	20	
Benzo(a)pyrene	1	0.0643	0.0779	0.0904	0.0913	0.0906	0.0910	0.0920	LINR	8.12070	10.8643		0.0854	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0176	0.0165	0.0203	0.0207	0.0215	0.0218		LINR	27.2544	45.5744		0.0198	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0274	0.0281	0.0339	0.0342	0.0348	0.0356		LINR	22.9034	28.0539		0.0323	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0987	0.0879	0.0928	0.0934	0.0933	0.0956		LINR	6.49838	10.4688		0.0936	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0088	0.0088	0.0087	0.0086	0.0085	0.0085	LINR	-238.60	118.032		0.0086	1.000	0.99	20	
Acenaphthylene	2	0.0891	0.0894	0.0904	0.0892	0.0872	0.0854		LINR	-190.47	11.7213		0.0885	1.000	0.99	20	
Pyrene	2	0.1213	0.1229	0.1312	0.1305	0.1302	0.1292	0.1319	LINR	6.99417	7.59564		0.1282	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0218	0.0221	0.0220	0.0215	0.0207	0.0199		LINR	-722.70	50.4398		0.0213	0.999	0.99	20	
Naphthalene	3	0.0107	0.0106	0.0106	0.0104	0.0103	0.0102	0.0103	LINR	-15.063	97.2408		0.0104	1.000	0.99	20	
Acenaphthene	3	0.0231	0.0228	0.0230	0.0228	0.0225	0.0225	0.0224	LINR	-40.470	44.5908		0.0228	1.000	0.99	20	
Fluorene	3	0.1231	0.1210	0.1214	0.1202	0.1187	0.1184	0.1179	LINR	-9.5649	8.48288		0.1201	1.000	0.99	20	
Phenanthrene	3	0.1327	0.1299	0.1302	0.1298	0.1278	0.1286	0.1286	LINR	-0.7120	7.78012		0.1297	1.000	0.99	20	
Anthracene	3	0.4513	0.4443	0.4475	0.4488	0.4472	0.4445	0.4451	LINR	-1.5122	2.24797		0.4469	1.000	0.99	20	
Fluoranthene	3	0.0390	0.0393	0.0398	0.0399	0.0391	0.0394	0.0397	LINR	5.11764	25.2422		0.0394	1.000	0.99	20	
Pyrene	3	0.1131	0.1163	0.1162	0.1164	0.1147	0.1166	0.1174	LINR	5.95171	8.51800		0.1158	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1373	0.1411	0.1447	0.1447	0.1444	0.1447	0.1453	LINR	2.60785	6.88237		0.1432	1.000	0.99	20	
Chrysene	3	0.1623	0.1633	0.1673	0.1667	0.1644	0.1638	0.1652	LINR	0.68406	6.06206		0.1647	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0606	0.0613	0.0630	0.0635	0.0630	0.0629	0.0633	LINR	4.57699	15.8004		0.0625	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3579	0.3696	0.3798	0.3815	0.3780	0.3771	0.3775	LINR	-0.7017	2.64966		0.3745	1.000	0.99	20	
Benzo(a)pyrene	3	0.1958	0.2035	0.2110	0.2146	0.2122	0.2114	0.2134	LINR	3.00004	4.69025		0.2088	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0256	0.0253	0.0276	0.0282	0.0286	0.0295		LINR	24.2523	33.8597		0.0275	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0453	0.0481	0.0529	0.0544	0.0544	0.0553		LINR	15.3097	18.0511		0.0518	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0712	0.0807	0.0904	0.0937	0.0935	0.0941		LINR	6.17134	10.5948		0.0873	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0120	0.0117	0.0118	0.0116	0.0115	0.0115	0.0114	LINR	-170.78	87.4696		0.0116	1.000	0.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Naphthalene	1	166.7	-9	500.0	-2	2000	1	4000	1	10000	0	20000	0	40000	0
Acenaphthylene	1	333.3	-21	1000	-7	4000	0	8000	1	20000	0	40000	0	80000	0
Acenaphthene	1	166.7	-14	500.0	-16	2000	-2	4000	2	10000	1	20000	0	40000	0
Fluorene	1	33.33	8	100.0	0	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	1	16.67	2	50.00	-1	200.0	1	400.0	1	1000	0	2000	0	4000	0
Anthracene	1	16.67	-12	50.00	-4	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	1	33.33	25	100.0	6	400.0	0	800.0	-2	2000	0	4000	-1	8000	0
Benzo(a)anthracene	1	16.67	39	50.00	8	200.0	1	400.0	1	1000	-1	2000	-1	4000	0
Chrysene	1	16.67	-7	50.00	3	200.0	2	400.0	1	1000	0	2000	0	4000	0
Benzo(b)fluoranthene	1	33.33	10	100.0	1	400.0	0	800.0	0	2000	0	4000	0	8000	0
Benzo(k)fluoranthene	1	16.67	19	50.00	4	200.0	1	400.0	0	1000	0	2000	-1	4000	0
Benzo(a)pyrene	1	16.67	19	50.00	1	200.0	2	400.0	1	1000	-1	2000	-1	4000	0
Dibenz(a,h)anthracene	1	33.33	62	100.0	3	400.0	0	800.0	-2	2000	-1	4000	0		
Benzo(g,h,i)perylene	1	33.33	46	100.0	2	400.0	1	800.0	-1	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	1	16.67	42	50.00	5	200.0	0	400.0	-1	1000	-2	2000	0		
1-Methylnaphthalene (UV)	1	666.7	-33	2000	-8	8000	0	16000	1	40000	1	80000	0	2E+5	0
Acenaphthylene	2	333.3	-53	1000	-14	4000	1	8000	2	20000	1	40000	0		
Pyrene	2	16.67	34	50.00	7	200.0	3	400.0	1	1000	0	2000	-2	4000	0
1-Methylnaphthalene (UV)	2	666.7	-98	2000	-25	8000	2	16000	4	40000	2	80000	-1		
Naphthalene	3	166.7	-5	500.0	0	2000	2	4000	0	10000	0	20000	-1	40000	0
Acenaphthene	3	166.7	-21	500.0	-6	2000	0	4000	1	10000	0	20000	0	40000	0
Fluorene	3	33.33	-24	100.0	-7	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	3	16.67	-1	50.00	0	200.0	1	400.0	1	1000	-1	2000	0	4000	0
Anthracene	3	16.67	-8	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	3	33.33	14	100.0	4	400.0	2	800.0	1	2000	-1	4000	0	8000	0
Pyrene	3	16.67	32	50.00	11	200.0	2	400.0	1	1000	-2	2000	0	4000	0
Benzo(a)anthracene	3	16.67	10	50.00	2	200.0	1	400.0	0	1000	0	2000	0	4000	0
Chrysene	3	16.67	2	50.00	0	200.0	2	400.0	1	1000	0	2000	-1	4000	0
Benzo(b)fluoranthene	3	33.33	10	100.0	1	400.0	1	800.0	1	2000	0	4000	-1	8000	0
Benzo(k)fluoranthene	3	16.67	-9	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Benzo(a)pyrene	3	16.67	10	50.00	1	200.0	0	400.0	1	1000	0	2000	-1	4000	0
Dibenz(a,h)anthracene	3	33.33	59	100.0	10	400.0	-1	800.0	-1	2000	-2	4000	1		
Benzo(g,h,i)perylene	3	33.33	28	100.0	2	400.0	-1	800.0	0	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	3	16.67	12	50.00	-2	200.0	-1	400.0	1	1000	0	2000	0		
1-Methylnaphthalene (F)	3	666.7	-21	2000	-6	8000	1	16000	1	40000	0	80000	0	2E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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UPDATED RETENTION TIMES FROM CCV FILE 13400002. JM 15MAY2007

HPLC04 METHOD 8310

Calib. Data Modified : 5/15/2007 9:29:41 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.775	1	1	166.67000	2.12613	78.39140			Naphthalene
		2	500.00000	6.61840	75.54697			
		3	2000.00000	26.88920	74.37930			
		4	4000.00000	53.47171	74.80591			
		5	1.00000e4	131.95592	75.78288			
		6	2.00000e4	263.69684	75.84467			
		7	4.00000e4	528.67773	75.66046			
4.814	3	1	166.67000	1.79073	93.07379			Naphthalene
		2	500.00000	5.29465	94.43499			
		3	2000.00000	21.15345	94.54721			
		4	4000.00000	41.49194	96.40426			
		5	1.00000e4	103.01423	97.07397			
		6	2.00000e4	204.77448	97.66842			
		7	4.00000e4	411.98587	97.09071			
6.029	1	1	333.33000	3.13157	106.44193			Acenaphthylene
		2	1000.00000	9.62986	103.84365			
		3	4000.00000	39.68081	100.80440			
		4	8000.00000	79.44919	100.69329			
		5	2.00000e4	195.85706	102.11529			
		6	4.00000e4	390.32718	102.47813			
		7	8.00000e4	779.58801	102.61830			
6.030	2	1	333.33000	29.69775	11.22408			Acenaphthylene
		2	1000.00000	89.43451	11.18137			
		3	4000.00000	361.48309	11.06552			

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RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	713.72961	11.20873			
		5	2.00000e4	1744.82886	11.46244			
		6	4.00000e4	3414.72949	11.71396			
6.802	1	1	666.67000	5.78173	115.30625			1-Methylnaphthalene (UV)
		2	2000.00000	17.60884	113.57930			
		3	8000.00000	70.00924	114.27063			
		4	1.60000e4	139.49213	114.70181			
		5	4.00000e4	343.04321	116.60339			
		6	8.00000e4	679.21155	117.78363			
		7	1.60000e5	1357.17957	117.89155			
6.803	2	1	666.67000	14.56439	45.77399			1-Methylnaphthalene (UV)
		2	2000.00000	44.10336	45.34802			
		3	8000.00000	176.21402	45.39934			
		4	1.60000e4	343.70859	46.55106			
		5	4.00000e4	826.97571	48.36901			
		6	8.00000e4	1588.15674	50.37286			
6.842	3	1	666.67000	7.99987	83.33510			1-Methylnaphthalene (F)
		2	2000.00000	23.39339	85.49424			
		3	8000.00000	94.23004	84.89861			
		4	1.60000e4	186.37436	85.84872			
		5	4.00000e4	460.03391	86.95011			
		6	8.00000e4	917.08130	87.23327			
		7	1.60000e5	1830.53613	87.40609			
7.251	1	1	166.67000	1.98399	84.00737			2-Methylnaphthalene
		2	500.00000	5.83025	85.75956			
		3	2000.00000	22.91004	87.29797			
		4	4000.00000	46.08871	86.78914			
		5	1.00000e4	114.12836	87.62064			
		6	2.00000e4	225.58672	88.65770			
		7	4.00000e4	451.41702	88.60986			
7.292	3	1	166.67000	2.33092	71.50383			2-Methylnaphthalene
		2	500.00000	6.89568	72.50921			
		3	2000.00000	27.58432	72.50496			
		4	4000.00000	54.78667	73.01045			
		5	1.00000e4	135.95044	73.55622			
		6	2.00000e4	269.15958	74.30536			
		7	4.00000e4	542.89160	73.67953			
7.640	1	1	166.67000	1.14632	145.39623			Acenaphthene
		2	500.00000	2.57756	193.98155			
		3	2000.00000	10.51053	190.28528			
		4	4000.00000	21.31399	187.67017			
		5	1.00000e4	52.31623	191.14528			
		6	2.00000e4	103.27618	193.65550			
		7	4.00000e4	205.89775	194.27118			
7.680	3	1	166.67000	3.85663	43.21653			Acenaphthene
		2	500.00000	11.41417	43.80520			
		3	2000.00000	45.97927	43.49787			
		4	4000.00000	91.38386	43.77141			
		5	1.00000e4	225.47073	44.35165			
		6	2.00000e4	450.13852	44.43077			
		7	4.00000e4	897.44818	44.57082			
8.162	1	1	33.33300	2.34922	14.18896			Fluorene
		2	100.00000	6.42542	15.56318			
		3	400.00000	25.73475	15.54319			
		4	800.00000	51.57725	15.51072			
		5	2000.00000	127.57288	15.67731			
		6	4000.00000	254.38828	15.72400			
		7	8000.00000	511.46848	15.64124			
8.202	3	1	33.33300	4.10462	8.12084			Fluorene
		2	100.00000	12.10357	8.26203			
		3	400.00000	48.56486	8.23641			
		4	800.00000	96.16352	8.31916			
		5	2000.00000	237.35271	8.42628			

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RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	473.63272	8.44536			
		7	8000.00000	943.53278	8.47877			
9.288	1	1	16.66700	3.05610	5.45368			Phenanthrene
		2	50.00000	8.87007	5.63693			
		3	200.00000	36.09091	5.54156			
		4	400.00000	72.25112	5.53625			
		5	1000.00000	179.13455	5.58240			
		6	2000.00000	357.36267	5.59656			
		7	4000.00000	717.53351	5.57465			
9.326	3	1	16.66700	2.21108	7.53796			Phenanthrene
		2	50.00000	6.49372	7.69975			
		3	200.00000	26.03061	7.68326			
		4	400.00000	51.93502	7.70193			
		5	1000.00000	127.82927	7.82293			
		6	2000.00000	257.22650	7.77525			
		7	4000.00000	514.33234	7.77707			
10.303	1	1	16.66700	7.11729	2.34176			Anthracene
		2	50.00000	21.47680	2.32809			
		3	200.00000	86.63564	2.30852			
		4	400.00000	173.47972	2.30575			
		5	1000.00000	430.32001	2.32385			
		6	2000.00000	855.00366	2.33917			
		7	4000.00000	1713.20947	2.33480			
10.342	3	1	16.66700	7.52114	2.21602			Anthracene
		2	50.00000	22.21256	2.25098			
		3	200.00000	89.50451	2.23452			
		4	400.00000	179.52844	2.22806			
		5	1000.00000	447.20154	2.23613			
		6	2000.00000	888.95929	2.24982			
		7	4000.00000	1780.25928	2.24686			
11.462	1	1	33.33300	1.28108	26.01947			Fluoranthene
		2	100.00000	4.03425	24.78779			
		3	400.00000	16.62899	24.05437			
		4	800.00000	33.12579	24.15037			
		5	2000.00000	85.29985	23.44670			
		6	4000.00000	169.48399	23.60105			
		7	8000.00000	341.57843	23.42068			
11.501	3	1	33.33300	1.30039	25.63313			Fluoranthene
		2	100.00000	3.92913	25.45090			
		3	400.00000	15.91306	25.13658			
		4	800.00000	31.92663	25.05745			
		5	2000.00000	78.16699	25.58625			
		6	4000.00000	157.55948	25.38724			
		7	8000.00000	317.23450	25.21794			
12.216	2	1	16.66700	2.02209	8.24246			Pyrene
		2	50.00000	6.14506	8.13662			
		3	200.00000	26.24098	7.62167			
		4	400.00000	52.21975	7.65994			
		5	1000.00000	130.19414	7.68084			
		6	2000.00000	258.31161	7.74259			
		7	4000.00000	527.77155	7.57904			
12.256	3	1	16.66700	1.88428	8.84530			Pyrene
		2	50.00000	5.81487	8.59864			
		3	200.00000	23.24056	8.60564			
		4	400.00000	46.54547	8.59375			
		5	1000.00000	114.70278	8.71818			
		6	2000.00000	233.18887	8.57674			
		7	4000.00000	469.78665	8.51450			
14.978	1	1	16.66700	1.65656	10.06123			Benzo(a)anthracene
		2	50.00000	4.62886	10.80180			
		3	200.00000	18.76417	10.65861			
		4	400.00000	37.95211	10.53960			
		5	1000.00000	94.25475	10.60954			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	189.13774	10.57430			
		7	4000.00000	382.94766	10.44529			
15.018	3	1	16.66700	2.28920	7.28071			Benzo(a)anthracene
		2	50.00000	7.05404	7.08814			
		3	200.00000	28.93622	6.91175			
		4	400.00000	57.87023	6.91202			
		5	1000.00000	144.42162	6.92417			
		6	2000.00000	289.42532	6.91025			
		7	4000.00000	581.30914	6.88102			
15.450	1	1	16.66700	1.84303	9.04325			Chrysene
		2	50.00000	6.66891	7.49748			
		3	200.00000	27.17831	7.35881			
		4	400.00000	54.50307	7.33904			
		5	1000.00000	134.26915	7.44773			
		6	2000.00000	268.92798	7.43694			
		7	4000.00000	541.02679	7.39335			
15.497	3	1	16.66700	2.70424	6.16329			Chrysene
		2	50.00000	8.16577	6.12312			
		3	200.00000	33.46666	5.97610			
		4	400.00000	66.69530	5.99742			
		5	1000.00000	164.41519	6.08216			
		6	2000.00000	327.66275	6.10384			
		7	4000.00000	660.79785	6.05329			
17.660	1	1	33.33300	3.06990	10.85801			Benzo(b)fluoranthene
		2	100.00000	10.04300	9.95718			
		3	400.00000	42.15858	9.48799			
		4	800.00000	85.72279	9.33241			
		5	2000.00000	215.81119	9.26736			
		6	4000.00000	430.08072	9.30058			
		7	8000.00000	864.70093	9.25175			
17.699	3	1	33.33300	2.02153	16.48898			Benzo(b)fluoranthene
		2	100.00000	6.12518	16.32605			
		3	400.00000	25.21695	15.86235			
		4	800.00000	50.77764	15.75497			
		5	2000.00000	126.05885	15.86561			
		6	4000.00000	251.49760	15.90472			
		7	8000.00000	506.71603	15.78794			
18.594	1	1	16.66700	9.52995e-1	17.48908			Benzo(k)fluoranthene
		2	50.00000	3.67382	13.60981			
		3	200.00000	16.23658	12.31786			
		4	400.00000	32.87246	12.16824			
		5	1000.00000	83.36793	11.99502			
		6	2000.00000	166.19958	12.03372			
		7	4000.00000	335.99481	11.90495			
18.634	3	1	16.66700	5.96582	2.79375			Benzo(k)fluoranthene
		2	50.00000	18.47991	2.70564			
		3	200.00000	75.95864	2.63301			
		4	400.00000	152.59778	2.62127			
		5	1000.00000	377.99402	2.64554			
		6	2000.00000	754.19122	2.65185			
		7	4000.00000	1510.11670	2.64880			
19.526	1	1	16.66700	1.07194	15.54845			Benzo(a)pyrene
		2	50.00000	3.89495	12.83713			
		3	200.00000	18.07028	11.06790			
		4	400.00000	36.52415	10.95166			
		5	1000.00000	90.64273	11.03232			
		6	2000.00000	182.08386	10.98395			
		7	4000.00000	368.15787	10.86490			
19.567	3	1	16.66700	3.26395	5.10639			Benzo(a)pyrene
		2	50.00000	10.17375	4.91461			
		3	200.00000	42.19252	4.74018			
		4	400.00000	85.85696	4.65891			
		5	1000.00000	212.20137	4.71250			

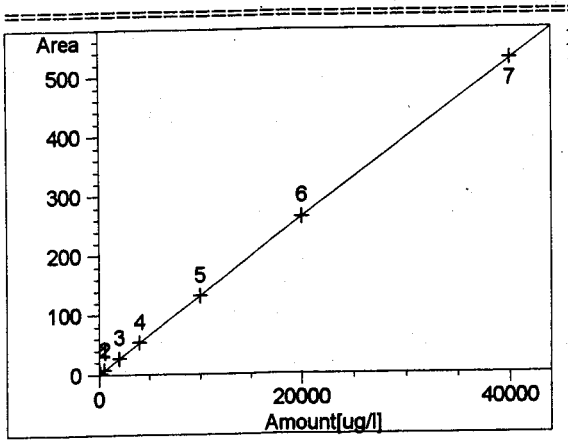
Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	422.78271	4.73056			
		7	4000.00000	853.64819	4.68577			
21.125	1	1	33.33300	5.87149e-1	56.77090			Dibenz(a,h)anthracene
		2	100.00000	1.65332	60.48420			
		3	400.00000	8.13782	49.15319			
		4	800.00000	16.52660	48.40682			
		5	2000.00000	43.03531	46.47347			
		6	4000.00000	87.38079	45.77665			
21.166	3	1	33.33300	8.53681e-1	39.04622			Dibenz(a,h)anthracene
		2	100.00000	2.53004	39.52501			
		3	400.00000	11.03330	36.25388			
		4	800.00000	22.57477	35.43779			
		5	2000.00000	57.27084	34.92179			
		6	4000.00000	118.01955	33.89269			
21.906	1	1	33.33300	9.14665e-1	36.44285			Benzo(g,h,i)perylene
		2	100.00000	2.81032	35.58320			
		3	400.00000	13.56283	29.49238			
		4	800.00000	27.32761	29.27443			
		5	2000.00000	69.65511	28.71290			
		6	4000.00000	142.23232	28.12300			
21.945	3	1	33.33300	1.51022	22.07160			Benzo(g,h,i)perylene
		2	100.00000	4.81285	20.77773			
		3	400.00000	21.17274	18.89222			
		4	800.00000	43.53913	18.37427			
		5	2000.00000	108.83624	18.37623			
		6	4000.00000	221.29349	18.07554			
22.404	1	1	16.66700	1.64575	10.12731			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.39383	11.37960			
		3	200.00000	18.55475	10.77891			
		4	400.00000	37.35328	10.70856			
		5	1000.00000	93.34637	10.71279			
		6	2000.00000	191.22902	10.45866			
22.442	3	1	16.66700	1.18608	14.05220			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.03285	12.39819			
		3	200.00000	18.07297	11.06625			
		4	400.00000	37.48116	10.67203			
		5	1000.00000	93.52203	10.69267			
		6	2000.00000	188.29039	10.62189			

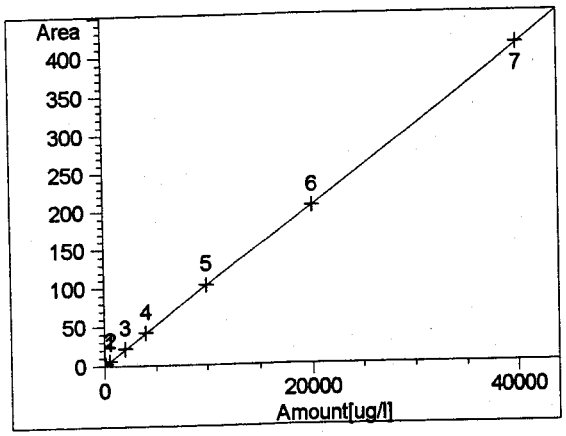
Peak Sum Table

No Entries in table

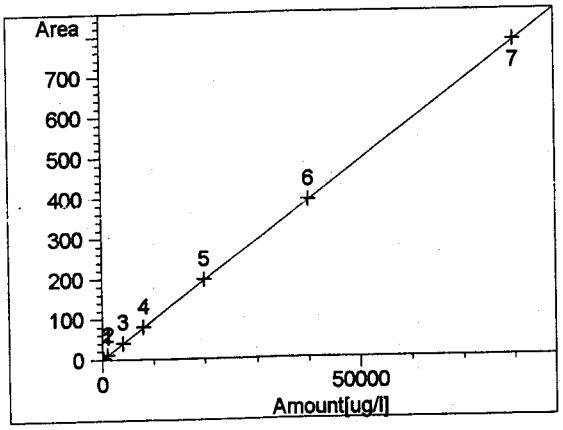
Calibration Curves



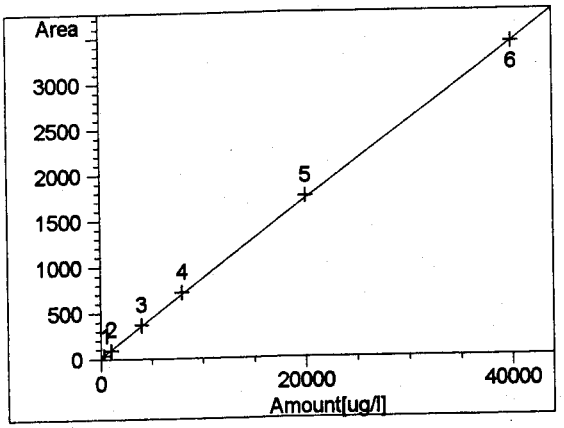
Naphthalene at exp. RT: 4.775
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.42379
Formula: y = mx + b
m: 1.32067e-2
b: 1.32078e-1
x: Amount[ug/l]
y: Area



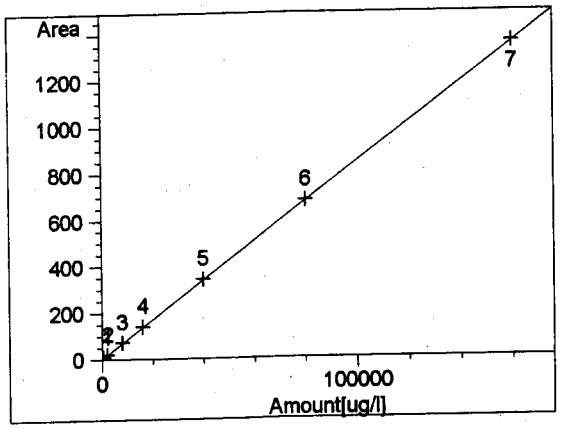
Naphthalene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.56187
Formula: y = mx + b
m: 1.02838e-2
b: 1.54902e-1
x: Amount[ug/l]
y: Area



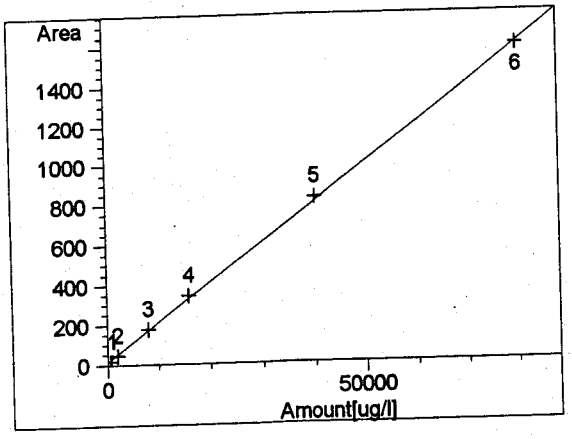
Acenaphthylene at exp. RT: 6.029
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.65727
Formula: y = mx + b
m: 9.74084e-3
b: 5.81179e-1
x: Amount[ug/l]
y: Area



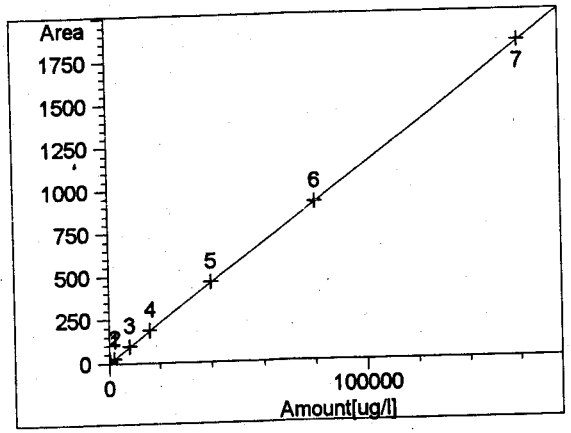
Acenaphthylene at exp. RT: 6.030
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 18.07740
Formula: y = mx + b
m: 8.53146e-2
b: 16.24956
x: Amount[ug/l]
y: Area



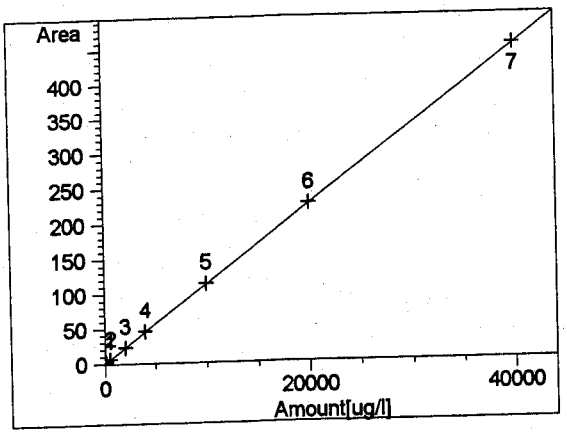
1-Methylnaphthalene (UV) at exp. RT: 6.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.68343
Formula: y = mx + b
m: 8.47231e-3
b: 2.02152
x: Amount[ug/l]
y: Area



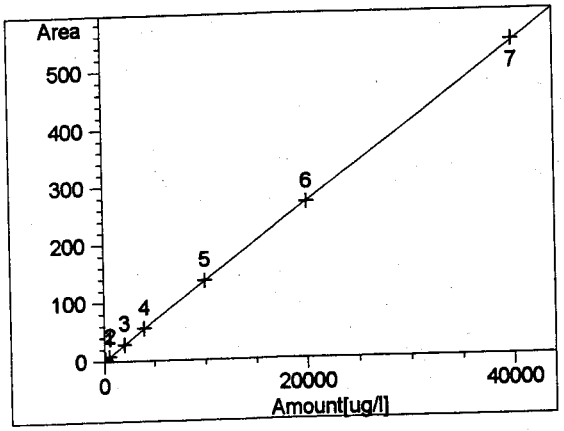
1-Methylnaphthalene (UV) at exp. RT: 6.803
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99974
Residual Std. Dev.: 15.48654
Formula: y = mx + b
m: 1.98256e-2
b: 14.32808
x: Amount[ug/l]
y: Area



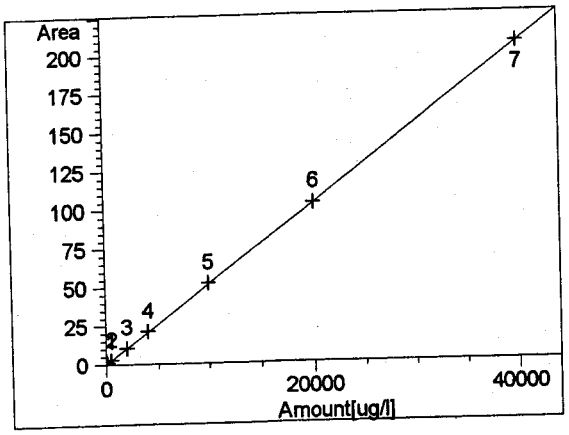
1-Methylnaphthalene (F) at exp. RT: 6.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.31914
Formula: y = mx + b
m: 1.14325e-2
b: 1.95255
x: Amount[ug/l]
y: Area



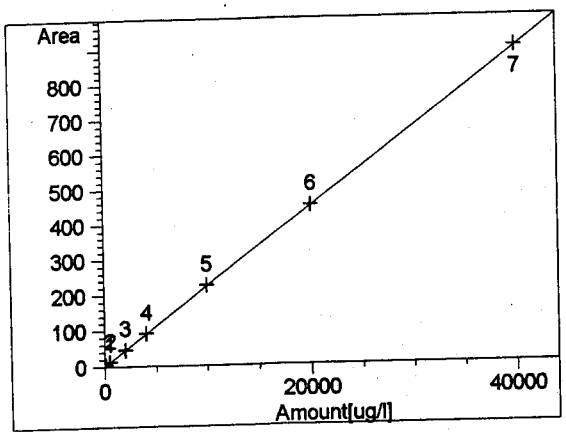
2-Methylnaphthalene at exp. RT: 7.251
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.53962
Formula: y = mx + b
m: 1.12737e-2
b: 5.18225e-1
x: Amount[ug/l]
y: Area



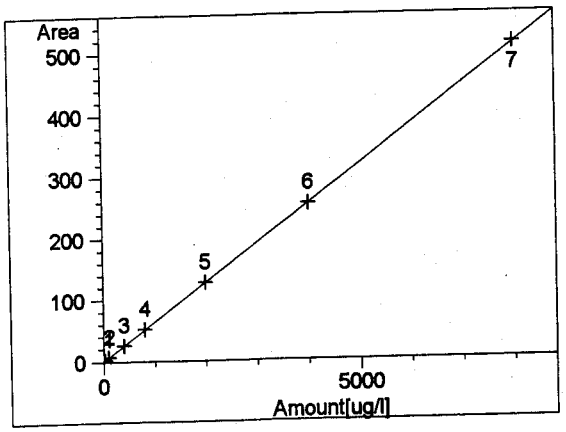
2-Methylnaphthalene at exp. RT: 7.292
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.98972
Formula: y = mx + b
m: 1.35487e-2
b: 1.23431e-1
x: Amount[ug/l]
y: Area



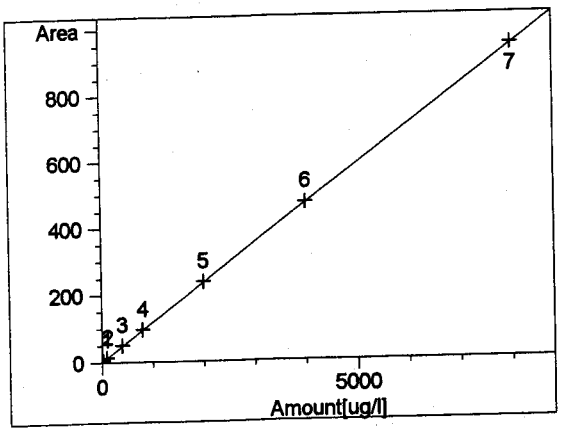
Acenaphthene at exp. RT: 7.640
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.34549
Formula: y = mx + b
m: 5.14123e-3
b: 4.11076e-1
x: Amount[ug/l]
y: Area



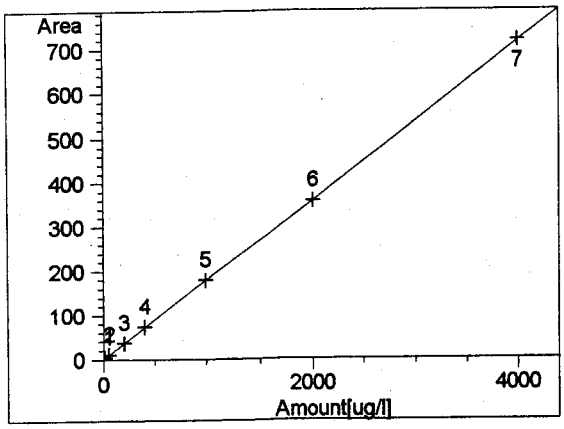
Acenaphthene at exp. RT: 7.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.72283
Formula: y = mx + b
m: 2.24261e-2
b: 9.07591e-1
x: Amount[ug/l]
y: Area



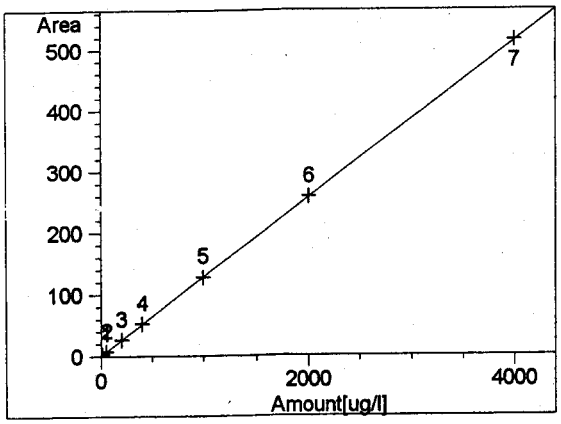
Fluorene at exp. RT: 8.162
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.59741
Formula: y = mx + b
m: 6.38593e-2
b: 4.86444e-2
x: Amount[ug/l]
y: Area



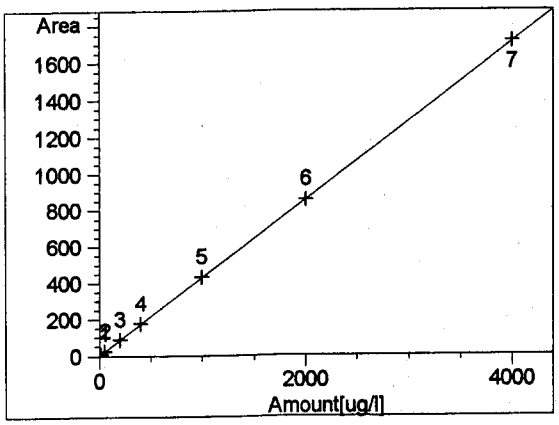
Fluorene at exp. RT: 8.202
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.86849
Formula: y = mx + b
m: 1.17884e-1
b: 1.12755
x: Amount[ug/l]
y: Area



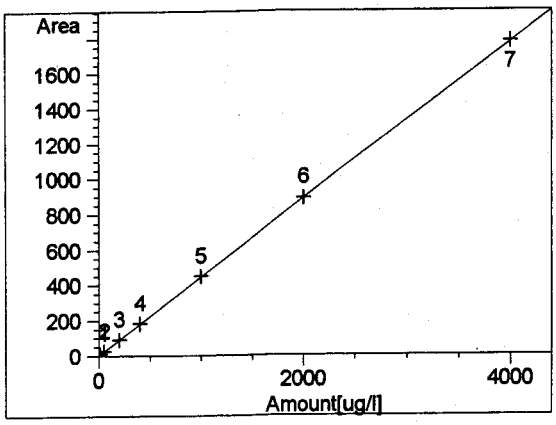
Phenanthrene at exp. RT: 9.288
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.62706
Formula: y = mx + b
m: 1.79247e-1
b: 1.07832e-2
x: Amount[ug/l]
y: Area



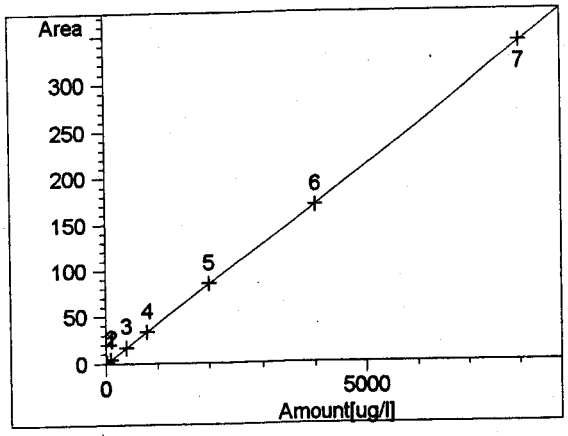
Phenanthrene at exp. RT: 9.326
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.42174
Formula: y = mx + b
m: 1.28533e-1
b: 9.15160e-2
x: Amount[ug/l]
y: Area



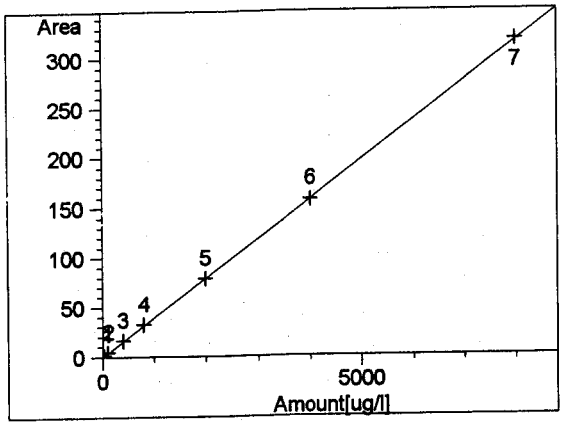
Anthracene at exp. RT: 10.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.35077
Formula: y = mx + b
m: 4.27986e-1
b: 8.59902e-1
x: Amount[ug/l]
y: Area



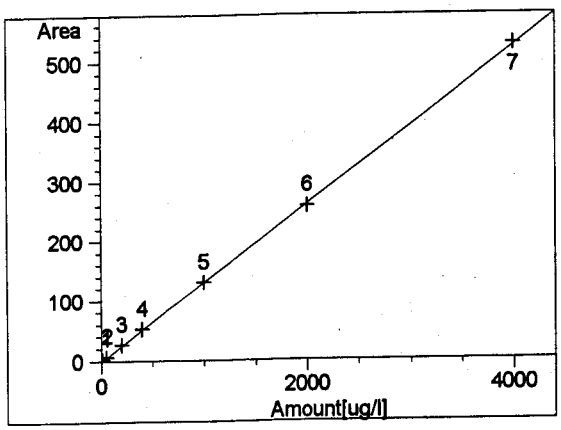
Anthracene at exp. RT: 10.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.14211
Formula: y = mx + b
m: 4.44845e-1
b: 6.72685e-1
x: Amount[ug/l]
y: Area



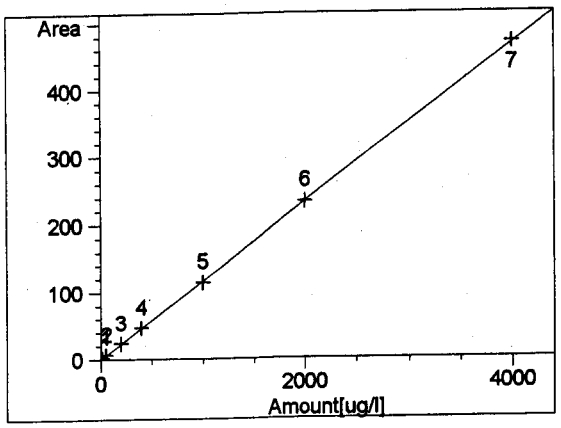
Fluoranthene at exp. RT: 11.462
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.55290
Formula: y = mx + b
m: 4.27109e-2
b: -4.95410e-1
x: Amount[ug/l]
y: Area



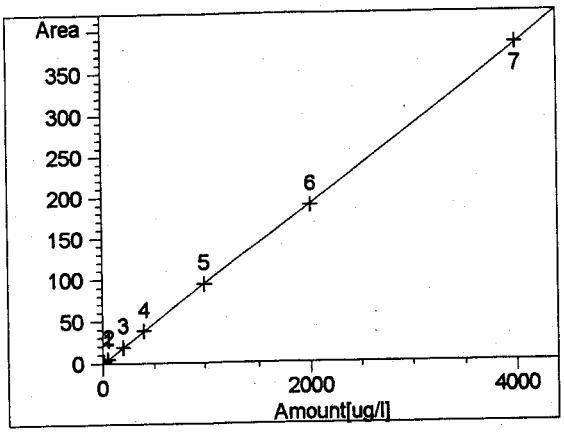
Fluoranthene at exp. RT: 11.501
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.60346
Formula: y = mx + b
m: 3.96163e-2
b: -2.02740e-1
x: Amount[ug/l]
y: Area



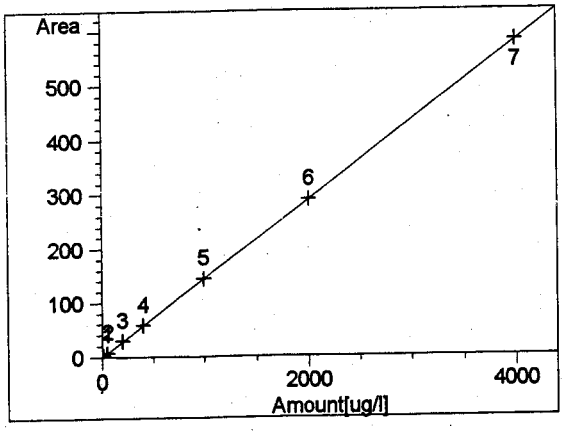
Pyrene at exp. RT: 12.216
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 2.14131
Formula: y = mx + b
m: 1.31654e-1
b: -9.20814e-1
x: Amount[ug/l]
y: Area



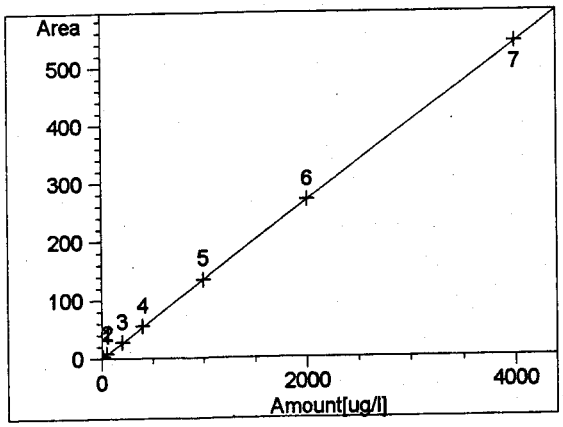
Pyrene at exp. RT: 12.256
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.15832
Formula: y = mx + b
m: 1.17398e-1
b: -6.98719e-1
x: Amount[ug/l]
y: Area



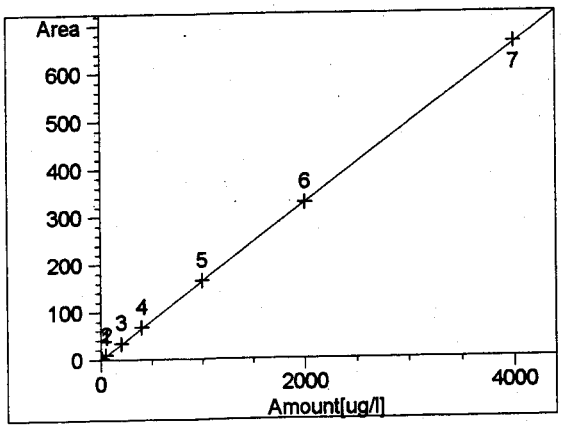
Benzo(a)anthracene at exp. RT: 14.978
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.97360
Formula: y = mx + b
m: 9.56360e-2
b: -5.52553e-1
x: Amount[ug/l]
y: Area



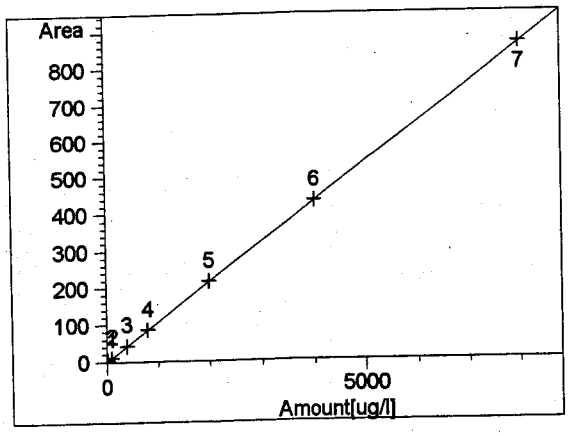
Benzo(a)anthracene at exp. RT: 15.018
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.50825
Formula: y = mx + b
m: 1.45299e-1
b: -3.78919e-1
x: Amount[ug/l]
y: Area



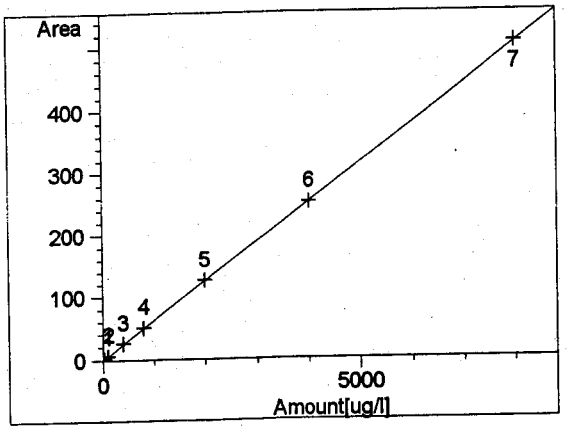
Chrysene at exp. RT: 15.450
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74873
Formula: y = mx + b
m: 1.35164e-1
b: -2.62574e-1
x: Amount[ug/l]
y: Area



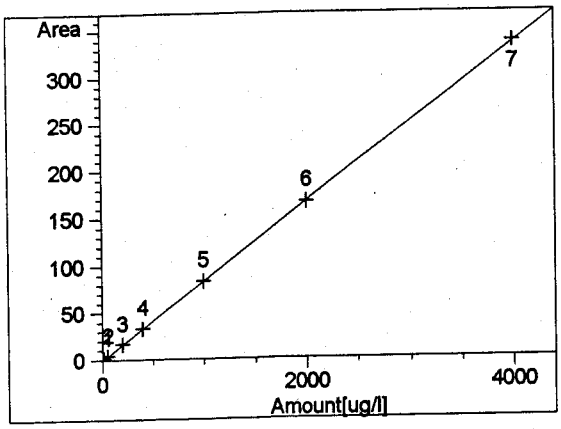
Chrysene at exp. RT: 15.497
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.17995
Formula: y = mx + b
m: 1.64961e-1
b: -1.12842e-1
x: Amount[ug/l]
y: Area



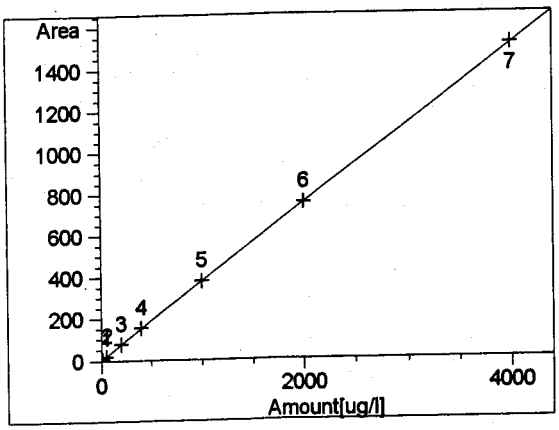
Benzo(b)fluoranthene at exp. RT: 17.660
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.78528
Formula: y = mx + b
m: 1.08120e-1
b: -8.94139e-1
x: Amount[ug/l]
y: Area



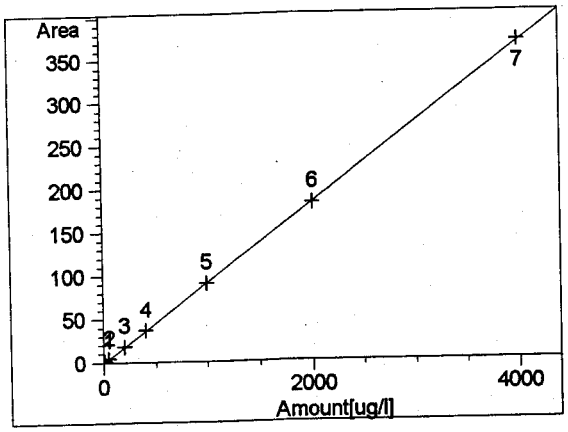
Benzo(b)fluoranthene at exp. RT: 17.699
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.73239
Formula: y = mx + b
m: 6.32897e-2
b: -2.89678e-1
x: Amount[ug/l]
y: Area



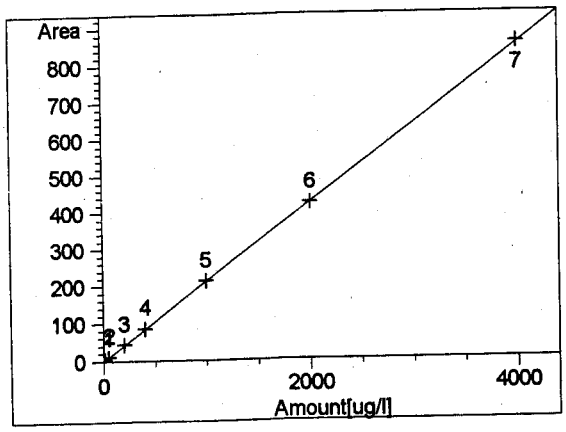
Benzo(k)fluoranthene at exp. RT: 18.594
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.59831
Formula: y = mx + b
m: 8.40358e-2
b: -7.10909e-1
x: Amount[ug/l]
y: Area



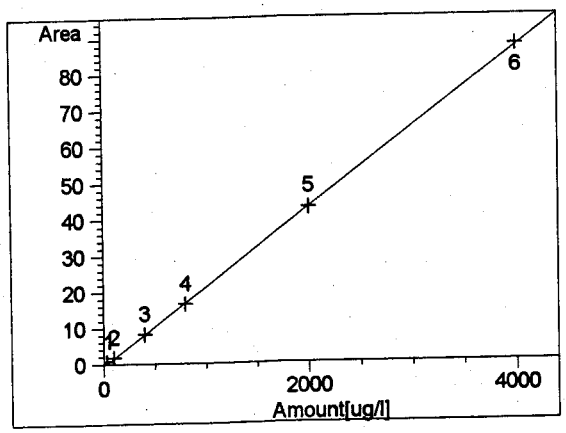
Benzo(k)fluoranthene at exp. RT: 18.634
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.85332
Formula: y = mx + b
m: 3.77407e-1
b: 2.64820e-1
x: Amount[ug/l]
y: Area



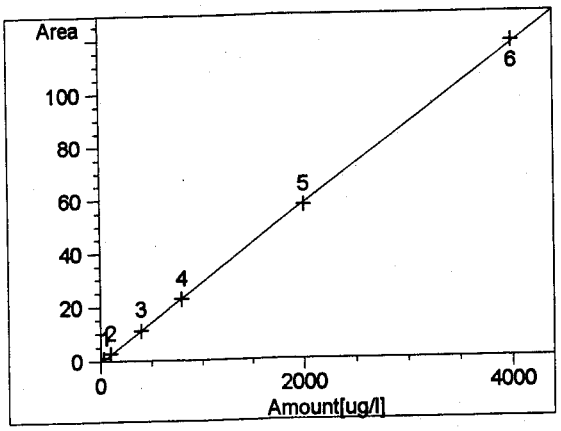
Benzo(a)pyrene at exp. RT: 19.526
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.77395
Formula: y = mx + b
m: 9.20450e-2
b: -7.47469e-1
x: Amount[ug/l]
y: Area



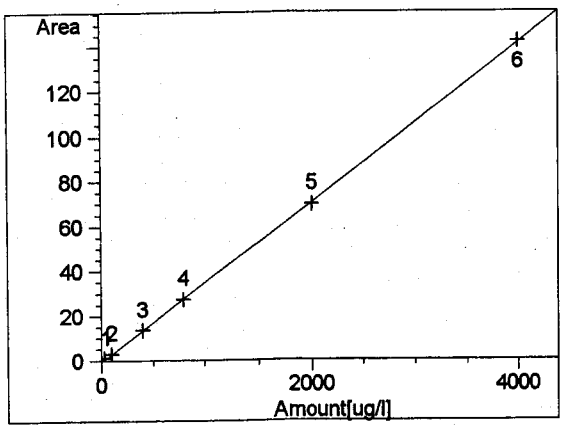
Benzo(a)pyrene at exp. RT: 19.567
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.60441
Formula: y = mx + b
m: 2.13208e-1
b: -6.39631e-1
x: Amount[ug/l]
y: Area



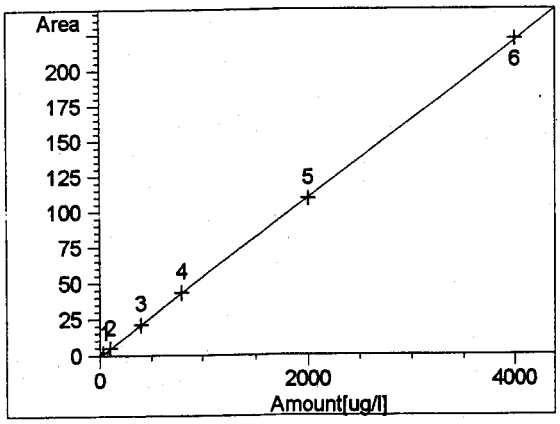
Dibenz(a,h)anthracene at exp. RT: 21.125
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.35432
Formula: y = mx + b
m: 2.19422e-2
b: -5.98019e-1
x: Amount[ug/l]
y: Area



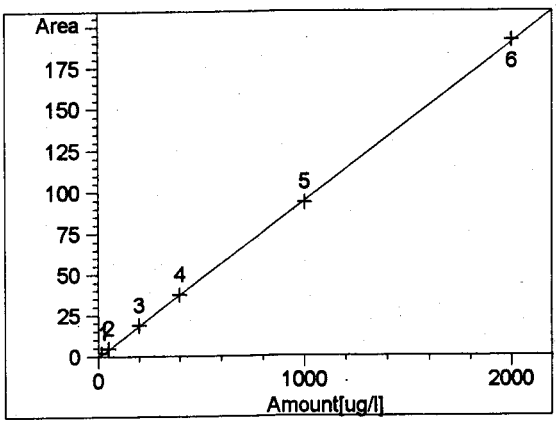
Dibenz(a,h)anthracene at exp. RT: 21.166
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 0.72004
Formula: y = mx + b
m: 2.95336e-2
b: -7.16255e-1
x: Amount[ug/l]
y: Area



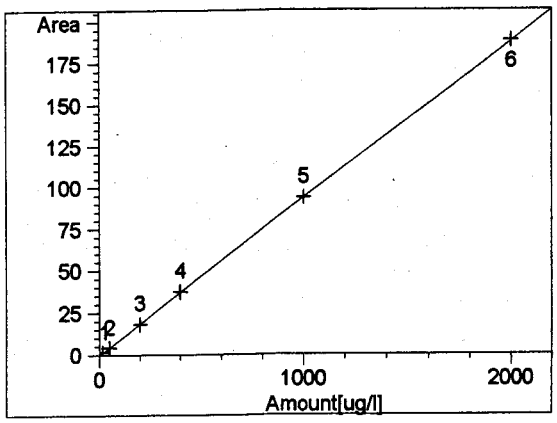
Benzo(g,h,i)perylene at exp. RT: 21.906
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.57908
Formula: y = mx + b
m: 3.56456e-2
b: -8.16409e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 21.945
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 0.67791
Formula: y = mx + b
m: 5.53982e-2
b: -8.48128e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.404
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99993
Residual Std. Dev.: 0.95379
Formula: y = mx + b
m: 9.55220e-2
b: -6.20739e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.442
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.26609
Formula: y = mx + b
m: 9.43856e-2
b: -5.82488e-1
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 297149198001 Cal Date : 13-APR-2007

ICV 297149198015 (10300015 13-APR-2007) stds: S5969

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0132	0.0132	5000	4985	ug/L	0	15	
Acenaphthylene	1	0.0097	0.0102	10000	10400	ug/L	4	15	
Acenaphthene	1	0.0055	0.0054	5000	5143	ug/L	3	15	
Fluorene	1	0.0650	0.0632	1000	988.9	ug/L	-1	15	
Phenanthrene	1	0.1799	0.1734	500.0	483.6	ug/L	-3	15	
Anthracene	1	0.4299	0.4187	500.0	487.2	ug/L	-3	15	
Fluoranthene	1	0.0414	0.0405	1000	958.8	ug/L	-4	15	
Benzo(a)anthracene	1	0.0950	0.0915	500.0	484.0	ug/L	-3	15	
Chrysene	1	0.1314	0.1297	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	1	0.1041	0.1040	1000	969.7	ug/L	-3	15	
Benzo(k)fluoranthene	1	0.0778	0.0799	500.0	484.0	ug/L	-3	15	
Benzo(a)pyrene	1	0.0854	0.0842	500.0	465.8	ug/L	-7	15	
Dibenz(a,h)anthracene	1	0.0198	0.0196	1000	919.4	ug/L	-8	15	
Benzo(g,h,i)perylene	1	0.0323	0.0325	1000	934.2	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0918	500.0	487.2	ug/L	-3	15	
Acenaphthylene	2	0.0885	0.0889	10000	10230	ug/L	2	15	
Pyrene	2	0.1282	0.1280	500.0	493.0	ug/L	-1	15	
Naphthalene	3	0.0104	0.0100	5000	4847	ug/L	-3	15	
Acenaphthene	3	0.0228	0.0221	5000	4878	ug/L	-2	15	
Fluorene	3	0.1201	0.1139	1000	956.8	ug/L	-4	15	
Phenanthrene	3	0.1297	0.1171	500.0	454.8	ug/L	-9	15	
Anthracene	3	0.4469	0.4331	500.0	485.3	ug/L	-3	15	
Fluoranthene	3	0.0394	0.0375	1000	952.4	ug/L	-5	15	
Pyrene	3	0.1158	0.1123	500.0	484.1	ug/L	-3	15	
Benzo(a)anthracene	3	0.1432	0.1386	500.0	479.4	ug/L	-4	15	
Chrysene	3	0.1647	0.1587	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0625	0.0604	1000	958.7	ug/L	-4	15	
Benzo(k)fluoranthene	3	0.3745	0.3647	500.0	482.4	ug/L	-4	15	
Benzo(a)pyrene	3	0.2088	0.1970	500.0	465.0	ug/L	-7	15	
Dibenz(a,h)anthracene	3	0.0275	0.0267	1000	928.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0518	0.0508	1000	932.5	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0919	500.0	492.9	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : L IDF : 1.0
Seqnum : 297236832002 File : 16400002 Time : 13-JUN-2007 11:43
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0137	2000	2058	ug/L	3	15	
Acenaphthylene	1	0.0097	0.0099	4000	3996	ug/L	0	15	
Acenaphthene	1	0.0055	0.0053	2000	1971	ug/L	-1	15	
Fluorene	1	0.0650	0.0652	400.0	407.7	ug/L	2	15	
Phenanthrene	1	0.1799	0.1832	200.0	204.3	ug/L	2	15	
Anthracene	1	0.4299	0.4347	200.0	201.1	ug/L	1	15	
Fluoranthene	1	0.0414	0.0439	400.0	422.7	ug/L	6	15	
Benzo(a)anthracene	1	0.0950	0.0948	200.0	204.1	ug/L	2	15	
Chrysene	1	0.1314	0.1394	200.0	208.2	ug/L	4	15	
Benzo(b)fluoranthene	1	0.1041	0.1074	400.0	405.7	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0778	0.0814	200.0	202.2	ug/L	1	15	
Benzo(a)pyrene	1	0.0854	0.0905	200.0	204.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0214	400.0	417.3	ug/L	4	15	
Benzo(g,h,i)perylene	1	0.0323	0.0336	400.0	400.1	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0913	200.0	197.6	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0089	8000	8119	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0913	4000	4090	ug/L	2	15	
Pyrene	2	0.1282	0.1313	200.0	206.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0222	8000	8253	ug/L	3	15	
Naphthalene	3	0.0104	0.0106	2000	2052	ug/L	3	15	
Acenaphthene	3	0.0228	0.0229	2000	2004	ug/L	0	15	
Fluorene	3	0.1201	0.1230	400.0	407.8	ug/L	2	15	
Phenanthrene	3	0.1297	0.1323	200.0	205.2	ug/L	3	15	
Anthracene	3	0.4469	0.4510	200.0	201.3	ug/L	1	15	
Fluoranthene	3	0.0394	0.0396	400.0	405.4	ug/L	1	15	
Pyrene	3	0.1158	0.1190	200.0	208.6	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1436	200.0	200.3	ug/L	0	15	
Chrysene	3	0.1647	0.1719	200.0	209.1	ug/L	5	15	
Benzo(b)fluoranthene	3	0.0625	0.0624	400.0	398.9	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3738	200.0	197.4	ug/L	-1	15	
Benzo(a)pyrene	3	0.2088	0.2124	200.0	202.3	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0275	0.0281	400.0	404.9	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0547	400.0	410.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0922	200.0	201.6	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0119	8000	8183	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : M IDF : 1.0
Seqnum : 297236832017 File : 16400017 Time : 13-JUN-2007 19:37
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	4000	4085	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	8000	8117	ug/L	1	15	
Acenaphthene	1	0.0055	0.0053	4000	4070	ug/L	2	15	
Fluorene	1	0.0650	0.0654	800.0	818.6	ug/L	2	15	
Phenanthrene	1	0.1799	0.1823	400.0	406.7	ug/L	2	15	
Anthracene	1	0.4299	0.4367	400.0	406.1	ug/L	2	15	
Fluoranthene	1	0.0414	0.0436	800.0	828.8	ug/L	4	15	
Benzo(a)anthracene	1	0.0950	0.0942	400.0	399.6	ug/L	0	15	
Chrysene	1	0.1314	0.1365	400.0	406.0	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1072	800.0	801.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0824	400.0	400.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0854	0.0921	400.0	408.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0210	800.0	792.8	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0350	800.0	807.7	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0943	400.0	401.5	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0088	16000	16320	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0903	8000	8273	ug/L	3	15	
Pyrene	2	0.1282	0.1321	400.0	408.4	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0219	16000	16930	ug/L	6	15	
Naphthalene	3	0.0104	0.0102	4000	3970	ug/L	-1	15	
Acenaphthene	3	0.0228	0.0223	4000	3945	ug/L	-1	15	
Fluorene	3	0.1201	0.1213	800.0	813.4	ug/L	2	15	
Phenanthrene	3	0.1297	0.1280	400.0	397.7	ug/L	-1	15	
Anthracene	3	0.4469	0.4493	400.0	402.5	ug/L	1	15	
Fluoranthene	3	0.0394	0.0393	800.0	798.9	ug/L	0	15	
Pyrene	3	0.1158	0.1162	400.0	401.7	ug/L	0	15	
Benzo(a)anthracene	3	0.1432	0.1423	400.0	394.2	ug/L	-1	15	
Chrysene	3	0.1647	0.1681	400.0	408.3	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0625	0.0621	800.0	789.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3721	400.0	393.7	ug/L	-2	15	
Benzo(a)pyrene	3	0.2088	0.2113	400.0	399.4	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0275	0.0284	800.0	794.0	ug/L	-1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0539	800.0	793.6	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0908	400.0	391.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0116	0.0115	16000	15960	ug/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195247 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 297236832027
Cal : 297149198001
Standards: S5284

Run Name : H
File : 16400027
Caldate : 13-APR-2007

IDF : 1.0
Time : 14-JUN-2007 00:53

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	10000	10240	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	20000	20480	ug/L	2	15	
Acenaphthene	1	0.0055	0.0054	10000	10350	ug/L	4	15	
Fluorene	1	0.0650	0.0654	2000	2049	ug/L	2	15	
Phenanthrene	1	0.1799	0.1822	1000	1016	ug/L	2	15	
Anthracene	1	0.4299	0.4408	1000	1028	ug/L	3	15	
Fluoranthene	1	0.0414	0.0433	2000	2041	ug/L	2	15	
Benzo(a)anthracene	1	0.0950	0.0967	1000	1017	ug/L	2	15	
Chrysene	1	0.1314	0.1385	1000	1027	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1041	0.1097	2000	2037	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0778	0.0852	1000	1022	ug/L	2	15	
Benzo(a)pyrene	1	0.0854	0.0955	1000	1045	ug/L	5	15	
Dibenz(a,h)anthracene	1	0.0198	0.0218	2000	2015	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0367	2000	2084	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0983	1000	1036	ug/L	4	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0087	40000	40870	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0891	20000	20700	ug/L	3	15	
Pyrene	2	0.1282	0.1349	1000	1032	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0211	40000	41940	ug/L	5	15	
Naphthalene	3	0.0104	0.0104	10000	10080	ug/L	1	15	
Acenaphthene	3	0.0228	0.0225	10000	10000	ug/L	0	15	
Fluorene	3	0.1201	0.1206	2000	2036	ug/L	2	15	
Phenanthrene	3	0.1297	0.1309	1000	1018	ug/L	2	15	
Anthracene	3	0.4469	0.4534	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0394	0.0398	2000	2016	ug/L	1	15	
Pyrene	3	0.1158	0.1211	1000	1038	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1469	1000	1014	ug/L	1	15	
Chrysene	3	0.1647	0.1701	1000	1032	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0625	0.0634	2000	2009	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3797	1000	1005	ug/L	1	15	
Benzo(a)pyrene	3	0.2088	0.2192	1000	1031	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0275	0.0295	2000	2025	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0578	2000	2102	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0945	1000	1007	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0116	40000	40300	ug/L	1	15	

SEQUENCE SUMMARY FOR 195247 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297149198 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-APR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	10300001	X	PRIMER - 103			13-APR-2007 14:38	1.0						
002	10300002	X	PRIMER			13-APR-2007 15:09	1.0						
003	10300003	X	IB - 103			13-APR-2007 15:41	1.0						
004	10300004	X	IB			13-APR-2007 16:13	1.0						
005	10300005	X	IB			13-APR-2007 16:44	1.0						
006	10300006	ICAL				13-APR-2007 17:16	1.0					1	
007	10300007	ICAL				13-APR-2007 17:47	1.0					2	
008	10300008	ICAL				13-APR-2007 18:19	1.0					3	
009	10300009	ICAL				13-APR-2007 18:51	1.0					4	
010	10300010	ICAL				13-APR-2007 19:22	1.0					5	
011	10300011	ICAL				13-APR-2007 19:54	1.0					6	
012	10300012	ICAL				13-APR-2007 20:25	1.0					7	
013	10300013	X	IB			13-APR-2007 20:57	1.0						
014	10300014	X	IB			13-APR-2007 21:29	1.0						
015	10300015	ICV				13-APR-2007 22:00	1.0		50			8	
016	10300016	X	ICV			13-APR-2007 22:32	1.0					8	
017	10300017	X	IB			13-APR-2007 23:03	1.0						

Stds used: 1=S5288 2=S5287 3=S5286 4=S5285 5=S5284 6=S5283 7=S5282 8=S5969

SEQUENCE SUMMARY FOR 195247 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297236832 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-JUN-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	16400001	X	IB - 164			13-JUN-2007 11:12	1.0						
002	16400002	CCV	L			13-JUN-2007 11:43	1.0	1.0			50	1	
003	16400003	X	CCV			13-JUN-2007 12:15	1.0					1	
004	16400004	X	IB			13-JUN-2007 12:46	1.0						
005	16400005	BLANK	QC391739	126173	Water	13-JUN-2007 13:18	1.0	0.002			50		
006	16400006	MSS	195270-013	126173	Water	13-JUN-2007 13:50	1.0	0.001923			50		
007	16400007	LCS	QC391740	126173	Water	13-JUN-2007 14:21	1.0	0.002			50		
008	16400008	MS	QC391741	126173	Water	13-JUN-2007 14:53	1.0	0.001923		5	50		
009	16400009	MSD	QC391742	126173	Water	13-JUN-2007 15:24	1.0	0.001923		2	50		
010	16400010	X	IB			13-JUN-2007 15:56	1.0						
011	16400011	SAMPLE	195270-014	126173	Water	13-JUN-2007 16:28	1.0	0.001887			50		
012	16400012	SAMPLE	195270-015	126173	Water	13-JUN-2007 16:59	1.0	0.001905			50		
013	16400013	SAMPLE	195270-016	126173	Water	13-JUN-2007 17:31	1.0	0.001905			50		
014	16400014	SAMPLE	195279-001	126173	Water	13-JUN-2007 18:03	1.0	0.001905			50		
015	16400015	SAMPLE	195303-030	126173	Water	13-JUN-2007 18:34	1.0	0.001923			50		
016	16400016	X	IB			13-JUN-2007 19:06	1.0						
017	16400017	CCV	M			13-JUN-2007 19:37	1.0	1.0			50	2	
018	16400018	X	CCV			13-JUN-2007 20:09	1.0					2	
019	16400019	X	IB			13-JUN-2007 20:41	1.0						
020	16400020	SAMPLE	195247-001	126173	Water	13-JUN-2007 21:12	1.0	0.002105			50		
021	16400021	SAMPLE	195247-002	126173	Water	13-JUN-2007 21:44	1.0	0.001905			50		
022	16400022	X	IB			13-JUN-2007 22:15	1.0						
023	16400023	SAMPLE	195270-001	126173	Water	13-JUN-2007 22:47	1.0	0.001887	6	1	50		6:MTNPH1=86805.2
024	16400024	SAMPLE	195270-002	126173	Water	13-JUN-2007 23:19	1.0	0.001905	6	1	50		6:MTNPH1=85026.4
025	16400025	X	IB			13-JUN-2007 23:50	1.0						
026	16400026	X	IB			14-JUN-2007 00:22	1.0						
027	16400027	CCV	H			14-JUN-2007 00:53	1.0	1.0			50	3	
028	16400028	X	CCV			14-JUN-2007 01:25	1.0					3	
029	16400029	X	IB			14-JUN-2007 01:56	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 195247 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195247-001	Naphthalene	HPLC04	1	06/13/07 21:12
195247-001	Acenaphthylene	HPLC04	1	06/13/07 21:12
195247-001	Acenaphthene	HPLC04	1	06/13/07 21:12
195247-001	Fluorene	HPLC04	1	06/13/07 21:12
195247-001	Phenanthrene	HPLC04	3	06/13/07 21:12
195247-001	Anthracene	HPLC04	3	06/13/07 21:12
195247-001	Fluoranthene	HPLC04	3	06/13/07 21:12
195247-001	Pyrene	HPLC04	3	06/13/07 21:12
195247-001	Benzo(a)anthracene	HPLC04	3	06/13/07 21:12
195247-001	Chrysene	HPLC04	3	06/13/07 21:12
195247-001	Benzo(b)fluoranthene	HPLC04	3	06/13/07 21:12
195247-001	Benzo(k)fluoranthene	HPLC04	3	06/13/07 21:12
195247-001	Benzo(a)pyrene	HPLC04	3	06/13/07 21:12
195247-001	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 21:12
195247-001	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 21:12
195247-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 21:12
195247-001	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 21:12
195247-001	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 21:12
195247-002	Naphthalene	HPLC04	1	06/13/07 21:44
195247-002	Acenaphthylene	HPLC04	1	06/13/07 21:44
195247-002	Acenaphthene	HPLC04	1	06/13/07 21:44
195247-002	Fluorene	HPLC04	1	06/13/07 21:44
195247-002	Phenanthrene	HPLC04	3	06/13/07 21:44
195247-002	Anthracene	HPLC04	3	06/13/07 21:44
195247-002	Fluoranthene	HPLC04	3	06/13/07 21:44
195247-002	Pyrene	HPLC04	3	06/13/07 21:44
195247-002	Benzo(a)anthracene	HPLC04	3	06/13/07 21:44
195247-002	Chrysene	HPLC04	3	06/13/07 21:44
195247-002	Benzo(b)fluoranthene	HPLC04	3	06/13/07 21:44
195247-002	Benzo(k)fluoranthene	HPLC04	3	06/13/07 21:44
195247-002	Benzo(a)pyrene	HPLC04	3	06/13/07 21:44
195247-002	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 21:44
195247-002	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 21:44
195247-002	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 21:44
195247-002	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 21:44
195247-002	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 21:44
QC391739	Naphthalene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthylene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthene	HPLC04	1	06/13/07 13:18
QC391739	Fluorene	HPLC04	1	06/13/07 13:18
QC391739	Phenanthrene	HPLC04	3	06/13/07 13:18
QC391739	Anthracene	HPLC04	3	06/13/07 13:18
QC391739	Fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Pyrene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Chrysene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(b)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(k)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)pyrene	HPLC04	3	06/13/07 13:18
QC391739	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 13:18
QC391739	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 13:18

REPORTING SUMMARY FOR 195247 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391739	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 13:18
QC391739	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 13:18
QC391740	Naphthalene	HPLC04	1	06/13/07 14:21
QC391740	Fluorene	HPLC04	1	06/13/07 14:21
QC391740	Pyrene	HPLC04	3	06/13/07 14:21
QC391740	Benzo(a)pyrene	HPLC04	3	06/13/07 14:21
QC391740	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:21
QC391740	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:21
QC391741	Naphthalene	HPLC04	1	06/13/07 14:53
QC391741	Fluorene	HPLC04	1	06/13/07 14:53
QC391741	Pyrene	HPLC04	3	06/13/07 14:53
QC391741	Benzo(a)pyrene	HPLC04	3	06/13/07 14:53
QC391741	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:53
QC391741	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:53
QC391742	Naphthalene	HPLC04	1	06/13/07 15:24
QC391742	Fluorene	HPLC04	1	06/13/07 15:24
QC391742	Pyrene	HPLC04	3	06/13/07 15:24
QC391742	Benzo(a)pyrene	HPLC04	3	06/13/07 15:24
QC391742	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 15:24
QC391742	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 15:24

5

Curtis & Tompkins Laboratories Sample Preparation Summary 12-JUN-2007 23:25

Batch Number : 126173
Date Extracted: 11-JUN-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S6106F
Spike #2 ID : S6358A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195247-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
195247-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-013		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		MSS
195270-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-015		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195279-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195303-030		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	4	.1	0		8310		
QC391739	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC391740	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC391741	MS of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		
QC391742	MSD of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		

Prep Chemist: JCM for JOM 6/13/07 Reviewed By: [signature] Date: 6/12/07

Relinquished By: [signature] Received By: [signature] Date: 13JUN2007

081187

8310 (PAH) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 126173
LIMS Analysis: 8310
Date Extracted: 11 June 07

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

	Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
①②	195247-001 G	950	7	2.0		
	02 H	1050				
	195270-001 J	1060				
②	02 K	1050				
	13 X	1040				MSS
	14 I	1060				
	15 H	1050				
	16 I					
	195279-001 Q					*
	195303-030 J	1040	4			*
	MB QC391739	1000	NA			
	LCS 40					
	MS 41	1040	7			195270-013 ~~AA~~ AA JM 6/11/07
	MSD 42	1040	7			

① while transporting samples to setups, cart jostled samples losing 1-5 mls
② went dry

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time:
Extraction End Time:
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granualr Na2SO4
Exchanged 2x with Acetonitrile
Concentrated to final volumes as noted above
Extracts filtered with 0.45 um PTFE syringe filter
Relinquished to the HPLC group

Lot# / LIMS # / Time	Date/ Initials
S6106F / K*	JM 6/11/07
S6356A	
EM47092	
1710	
1130	JM 6/12/07
NA	6/12/07 KR
EM46283706	
EM46173	
✓	
Whatman 0602	
✓	

VR 6/12/07

Jamie Thee 6/11/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

6/12/07
Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 06/27/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Sampled:	06/05/07
Lab ID:	195247-001	Received:	06/06/07
Matrix:	Water	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Batch#:	126087		

Analyte	Result	RL	Diln Fac
Aluminum	19,000	100	10.00
Antimony	3.0	1.0	10.00
Arsenic	11	5.0	10.00
Barium	960	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	4.5	1.0	10.00
Calcium	74,000	500	10.00
Chromium	1,100	10	10.00
Cobalt	61	10	10.00
Copper	390	1.0	10.00
Iron	110,000	100	10.00
Lead	2,700	10	100.0
Magnesium	250,000	1,000	100.0
Manganese	2,200	10	100.0
Nickel	1,000	20	10.00
Potassium	14,000	500	10.00
Selenium	ND	5.0	10.00
Silver	1.9	1.0	10.00
Sodium	180,000	500	10.00
Thallium	ND	1.0	10.00
Vanadium	98	10	10.00
Zinc	2,600	32	100.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Batch#:	126087
Lab ID:	195247-001	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/15/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	130	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	45,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	64,000	500
Manganese	140	10
Nickel	ND	20
Potassium	12,000	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	190,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

6.1

Curtis & Tompkins, Ltd.

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Sampled:	06/05/07
Lab ID:	195247-002	Received:	06/06/07
Matrix:	Water	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Batch#:	126087		

Analyte	Result	RL	Diln Fac
Aluminum	32,000	100	10.00
Antimony	ND	1.0	10.00
Arsenic	42	5.0	10.00
Barium	650	10	10.00
Beryllium	2.7	2.0	10.00
Cadmium	1.1	1.0	10.00
Calcium	120,000	500	10.00
Chromium	210	10	10.00
Cobalt	130	10	10.00
Copper	880	1.0	10.00
Iron	82,000	100	10.00
Lead	300	3.0	10.00
Magnesium	170,000	500	10.00
Manganese	6,400	10	50.00
Nickel	400	20	10.00
Potassium	6,300	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	160,000	500	10.00
Thallium	ND	1.0	10.00
Vanadium	180	10	10.00
Zinc	650	20	10.00

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Sampled:	06/05/07
Lab ID:	195247-002	Received:	06/06/07
Matrix:	Filtrate	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Batch#:	126087		

Analyte	Result	RL	Diln Fac
Aluminum	470	100	10.00
Antimony	3.2	1.0	10.00
Arsenic	6.3	5.0	10.00
Barium	100	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	84,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	640	100	10.00
Lead	3.2	3.0	10.00
Magnesium	110,000	500	10.00
Manganese	3,400	10	20.00
Nickel	ND	20	10.00
Potassium	4,600	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	170,000	500	10.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

7.1

: 00194

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	126087
Lab ID:	195247-006	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Antimony	ND	1.0	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Barium	97	10	5.000	06/14/07
Beryllium	ND	2.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	32,000	500	10.00	06/08/07
Chromium	ND	10	5.000	06/14/07
Cobalt	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	ND	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	100,000	500	10.00	06/08/07
Manganese	ND	10	5.000	06/14/07
Nickel	22	20	5.000	06/14/07
Potassium	710	500	5.000	06/14/07
Selenium	ND	5.0	5.000	06/14/07
Silver	ND	1.0	5.000	06/14/07
Sodium	130,000	500	10.00	06/08/07
Thallium	ND	1.0	5.000	06/14/07
Vanadium	ND	10	5.000	06/14/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

31.0

: 99195

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391439	Batch#:	126087
Matrix:	Filtrate	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

23.0

Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	1.000	Analyzed:	06/13/07
Batch#:	126218		

Field ID	Type	Lab ID	Result	RL
BB1PZ100	SAMPLE	195247-001	3.6	0.20
BB1PZ101	SAMPLE	195247-002	1.7	0.20
	BLANK	QC391955	ND	0.20

ND= Not Detected
RL= Reporting Limit

28.0

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	06/05/07
Units:	ug/L	Received:	06/06/07
Diln Fac:	1.000	Prepared:	06/13/07
Batch#:	126218	Analyzed:	06/13/07

Field ID	Type	Lab ID	Matrix	Result	RL
BB1PZ100	SAMPLE	195247-001	Filtrate	ND	0.20
BB1PZ101	SAMPLE	195247-002	Filtrate	ND	0.20
	BLANK	QC391955	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126087
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/08/07

Type: BS Lab ID: QC391440

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,330	103	80-120
Antimony	100.0	98.76	99	80-120
Arsenic	100.0	95.58	96	80-120
Barium	100.0	103.4	103	80-120
Beryllium	100.0	102.7	103	80-120
Cadmium	100.0	99.73	100	80-120
Calcium	10,000	10,410	104	80-120
Chromium	100.0	103.6	104	80-120
Cobalt	100.0	105.4	105	80-120
Copper	100.0	105.6	106	80-120
Iron	10,000	9,806	98	80-120
Lead	100.0	103.8	104	80-120
Magnesium	10,000	10,560	106	80-120
Manganese	100.0	99.95	100	80-120
Nickel	100.0	105.4	105	80-120
Potassium	10,000	10,500	105	80-120
Selenium	100.0	95.14	95	80-120
Silver	100.0	105.2	105	80-120
Sodium	10,000	10,410	104	80-120
Thallium	50.00	50.76	102	80-120
Vanadium	100.0	100.6	101	80-120
Zinc	100.0	95.98	96	80-120

Type: BSD Lab ID: QC391441

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,480	105	80-120	1	20
Antimony	100.0	96.63	97	80-120	2	20
Arsenic	100.0	98.41	98	80-120	3	20
Barium	100.0	103.6	104	80-120	0	20
Beryllium	100.0	104.2	104	80-120	1	20
Cadmium	100.0	99.47	99	80-120	0	20
Calcium	10,000	10,350	104	80-120	1	20
Chromium	100.0	104.7	105	80-120	1	20
Cobalt	100.0	106.9	107	80-120	1	20
Copper	100.0	108.7	109	80-120	3	20
Iron	10,000	9,937	99	80-120	1	20
Lead	100.0	103.5	104	80-120	0	20
Magnesium	10,000	10,650	107	80-120	1	20
Manganese	100.0	101.9	102	80-120	2	20
Nickel	100.0	107.0	107	80-120	2	20
Potassium	10,000	10,530	105	80-120	0	20
Selenium	100.0	98.59	99	80-120	4	20
Silver	100.0	103.1	103	80-120	2	20
Sodium	10,000	10,620	106	80-120	2	20
Thallium	50.00	50.90	102	80-120	0	20
Vanadium	100.0	103.3	103	80-120	3	20
Zinc	100.0	99.23	99	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126218
Field ID:	ZZZZZZZZZZ	Sampled:	06/08/07
MSS Lab ID:	195314-017	Received:	06/08/07
Matrix:	Water	Prepared:	06/13/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC391956		5.000	5.570	111	80-120		
BSD	QC391957		5.000	5.410	108	80-120	3	20
MS	QC391959	<0.02083	5.000	5.250	105	75-125		
MSD	QC391960		5.000	5.070	101	75-125	3	20

RPD= Relative Percent Difference

29.0

:00200

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	126087
MSS Lab ID:	195241-003	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391442

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	5.464	10,000	9,088	91	75-125	5.000	06/14/07
Antimony	0.2894	100.0	86.75	86	75-125	5.000	06/14/07
Arsenic	1.644	100.0	93.39	92	75-125	5.000	06/14/07
Barium	227.2	100.0	312.5	85	75-125	5.000	06/14/07
Beryllium	0.06022	100.0	91.59	92	75-125	5.000	06/14/07
Cadmium	0.1116	100.0	91.42	91	75-125	5.000	06/14/07
Calcium	73,820	10,000	80,640	68 NM	75-125	5.000	06/14/07
Chromium	3.823	100.0	94.93	91	75-125	5.000	06/14/07
Cobalt	0.4026	100.0	90.76	90	75-125	5.000	06/14/07
Copper	0.5596	100.0	91.94	91	75-125	5.000	06/14/07
Iron	14.81	10,000	9,263	92	75-125	5.000	06/14/07
Lead	0.08684	100.0	88.60	89	75-125	5.000	06/14/07
Magnesium	189,800	10,000	198,500	87 NM	75-125	10.00	06/08/07
Manganese	36.99	100.0	128.9	92	75-125	5.000	06/14/07
Nickel	20.31	100.0	110.4	90	75-125	5.000	06/14/07
Potassium	1,511	10,000	10,620	91	75-125	5.000	06/14/07
Selenium	0.09246	100.0	89.68	90	75-125	5.000	06/14/07
Silver	0.07346	100.0	85.37	85	75-125	5.000	06/14/07
Sodium	90,940	10,000	101,800	109 NM	75-125	10.00	06/08/07
Thallium	<0.01942	50.00	43.64	87	75-125	5.000	06/14/07
Vanadium	10.06	100.0	102.3	92	75-125	5.000	06/14/07
Zinc	6.083	100.0	105.9	100	75-125	5.000	06/14/07

Type: MSD Lab ID: QC391443

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	9,267	93	75-125	2	20	5.000	06/14/07
Antimony	100.0	87.93	88	75-125	1	20	5.000	06/14/07
Arsenic	100.0	94.70	93	75-125	1	20	5.000	06/14/07
Barium	100.0	314.2	87	75-125	1	20	5.000	06/14/07
Beryllium	100.0	92.11	92	75-125	1	20	5.000	06/14/07
Cadmium	100.0	93.91	94	75-125	3	20	5.000	06/14/07
Calcium	10,000	80,820	70 NM	75-125	0	20	5.000	06/14/07
Chromium	100.0	97.40	94	75-125	3	20	5.000	06/14/07
Cobalt	100.0	92.49	92	75-125	2	20	5.000	06/14/07
Copper	100.0	92.79	92	75-125	1	20	5.000	06/14/07
Iron	10,000	9,451	94	75-125	2	20	5.000	06/14/07
Lead	100.0	89.87	90	75-125	1	20	5.000	06/14/07
Magnesium	10,000	179,600	-102 NM	75-125	10	20	10.00	06/08/07
Manganese	100.0	131.7	95	75-125	2	20	5.000	06/14/07
Nickel	100.0	112.1	92	75-125	2	20	5.000	06/14/07
Potassium	10,000	10,810	93	75-125	2	20	5.000	06/14/07
Selenium	100.0	93.34	93	75-125	4	20	5.000	06/14/07
Silver	100.0	86.97	87	75-125	2	20	5.000	06/14/07
Sodium	10,000	94,390	35 NM	75-125	8	20	10.00	06/08/07
Thallium	50.00	44.43	89	75-125	2	20	5.000	06/14/07
Vanadium	100.0	104.5	94	75-125	2	20	5.000	06/14/07
Zinc	100.0	99.12	93	75-125	7	20	5.000	06/14/07

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

25.0

Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	126087
MSS Lab ID:	195247-006	Sampled:	06/05/07
Matrix:	Filtrate	Received:	06/06/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391446

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	40.79	10,000	9,158	91	75-125	5.000	06/14/07
Antimony	0.6981	100.0	87.67	87	75-125	5.000	06/14/07
Arsenic	1.241	100.0	92.39	91	75-125	5.000	06/14/07
Barium	97.06	100.0	187.4	90	75-125	5.000	06/14/07
Beryllium	0.3566	100.0	89.16	89	75-125	5.000	06/14/07
Cadmium	0.3675	100.0	90.98	91	75-125	5.000	06/14/07
Calcium	32,410	10,000	42,810	104	75-125	10.00	06/08/07
Chromium	8.355	100.0	97.97	90	75-125	5.000	06/14/07
Cobalt	0.4887	100.0	89.56	89	75-125	5.000	06/14/07
Copper	0.8288	100.0	89.78	89	75-125	5.000	06/14/07
Iron	40.46	10,000	9,073	90	75-125	5.000	06/14/07
Lead	0.3861	100.0	88.10	88	75-125	5.000	06/14/07
Magnesium	102,400	10,000	113,400	110 NM	75-125	10.00	06/08/07
Manganese	9.571	100.0	121.8	112	75-125	5.000	06/14/07
Nickel	22.42	100.0	109.9	87	75-125	5.000	06/14/07
Potassium	705.1	10,000	9,799	91	75-125	5.000	06/14/07
Selenium	0.9779	100.0	90.80	90	75-125	5.000	06/14/07
Silver	0.3181	100.0	84.43	84	75-125	5.000	06/14/07
Sodium	126,400	10,000	137,400	110 NM	75-125	10.00	06/08/07
Thallium	0.1754	50.00	41.17	82	75-125	5.000	06/14/07
Vanadium	6.619	100.0	95.75	89	75-125	5.000	06/14/07
Zinc	4.342	100.0	92.92	89	75-125	5.000	06/14/07

Type: MSD Lab ID: QC391447

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	10,270	102	75-125	11	20	5.000	06/14/07
Antimony	100.0	93.64	93	75-125	7	20	5.000	06/14/07
Arsenic	100.0	93.17	92	75-125	1	20	5.000	06/14/07
Barium	100.0	208.4	111	75-125	11	20	5.000	06/14/07
Beryllium	100.0	102.1	102	75-125	14	20	5.000	06/14/07
Cadmium	100.0	102.7	102	75-125	12	20	5.000	06/14/07
Calcium	10,000	42,490	101	75-125	1	20	10.00	06/08/07
Chromium	100.0	98.78	90	75-125	1	20	5.000	06/14/07
Cobalt	100.0	90.43	90	75-125	1	20	5.000	06/14/07
Copper	100.0	91.07	90	75-125	1	20	5.000	06/14/07
Iron	10,000	9,341	93	75-125	3	20	5.000	06/14/07
Lead	100.0	99.77	99	75-125	12	20	5.000	06/14/07
Magnesium	10,000	111,200	88 NM	75-125	2	20	10.00	06/08/07
Manganese	100.0	101.3	92	75-125	18	20	5.000	06/14/07
Nickel	100.0	111.5	89	75-125	1	20	5.000	06/14/07
Potassium	10,000	11,060	104	75-125	12	20	5.000	06/14/07
Selenium	100.0	92.33	91	75-125	2	20	5.000	06/14/07
Silver	100.0	95.21	95	75-125	12	20	5.000	06/14/07
Sodium	10,000	135,300	89 NM	75-125	2	20	10.00	06/08/07
Thallium	50.00	47.04	94	75-125	13	20	5.000	06/14/07
Vanadium	100.0	97.62	91	75-125	2	20	5.000	06/14/07
Zinc	100.0	94.38	90	75-125	2	20	5.000	06/14/07

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Units:	ug/L
Type:	Serial Dilution	Batch#:	126087
MSS Lab ID:	195241-003	Sampled:	06/05/07
Lab ID:	QC391444	Received:	06/06/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	27.80 J	250.0	NC	10	25.00	06/14/07
Antimony	ND	1.000	0.5545 J	2.500	NC	10	25.00	06/14/07
Arsenic	ND	5.000	2.793 J	5.000	NC	10	25.00	06/14/07
Barium	227.2	10.00	229.1	10.00	1	10	25.00	06/14/07
Beryllium	ND	2.000	ND	2.500	NC	10	25.00	06/14/07
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Calcium	73,820	500.0	76,350	500.0	3	10	25.00	06/14/07
Chromium	ND	10.00	4.159 J	10.00	NC	10	25.00	06/14/07
Cobalt	ND	10.00	0.7094 J	10.00	NC	10	25.00	06/14/07
Copper	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Iron	ND	100.0	ND	250.0	NC	10	25.00	06/14/07
Lead	ND	3.000	ND	3.000	NC	10	25.00	06/14/07
Magnesium	189,800	500.0	205,300	500.0	8	10	50.00	06/08/07
Manganese	36.99	10.00	37.32	10.00	1	10	25.00	06/14/07
Nickel	20.31	20.00	20.85	20.00	3	10	25.00	06/14/07
Potassium	1,511	500.0	1,616	500.0	7	10	25.00	06/14/07
Selenium	ND	5.000	ND	5.000	NC	10	25.00	06/14/07
Silver	ND	1.000	0.1519 J	2.500	NC	10	25.00	06/14/07
Sodium	90,940	500.0	98,930	500.0	9	10	50.00	06/08/07
Thallium	ND	1.000	ND	1.250	NC	10	25.00	06/14/07
Vanadium	12.23	10.00	27.43	10.00	124 *	10	50.00	06/08/07
Zinc	ND	20.00	8.760 J	20.00	NC	10	25.00	06/14/07

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	126218
MSS Lab ID:	195314-017	Sampled:	06/08/07
Lab ID:	QC391958	Received:	06/08/07
Matrix:	Water	Analyzed:	06/13/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

30.0

00294

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67230047027
File : f08s0027
IDF : 10.0
Lab ID : 195241-003
Matrix : Filtrate
Batch : 126087
Time : 08-JUN-2007 20:48
Cal : 67230047001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67230047031
File : f08s0031
IDF : 10.0
Lab ID : QC391445
Matrix : Filtrate
Batch : 126087
Time : 08-JUN-2007 21:11
Cal : 67230047001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	3.763	A	10000	9921	A	99	75-125	u
Antimony	0.04182	A	100.0	100.7	A	101	75-125	u
Arsenic	0.2330	E	100.0	102.4	E	102	75-125	u
Barium	25.98	A	100.0	133.7	A	108	75-125	u
Beryllium	0.01665	A	100.0	103.7	A	104	75-125	u
Cadmium	ND	A	100.0	103.8	A	104	75-125	u
Calcium	7856	A	10000	17810	A	100	75-125	u
Chromium	0.4758	E	100.0	103.2	E	103	75-125	u
Cobalt	0.07650	E	100.0	104.8	E	105	75-125	u
Copper	0.09310	E	100.0	105.8	E	106	75-125	u
Iron	5.167	H	10000	9723	H	97	75-125	u
Lead	ND	A	100.0	92.30	A	92	75-125	u
Magnesium	18980	A	10000	29040 >LR	A	101	75-125	>LR **b***
Manganese	4.097	E	100.0	103.6	E	100	75-125	u
Molybdenum	0.05194	A	100.0	101.5	A	101	75-125	u
Nickel	2.399	E	100.0	107.0	E	105	75-125	u
Potassium	170.1	A	10000	10250	A	101	75-125	u
Selenium	ND	H	100.0	105.5	H	106	75-125	u
Silver	0.02402	A	100.0	98.70	A	99	75-125	u
Sodium	9094	E	10000	19540	E	104	75-125	u
Thallium	0.03834	A	50.00	52.16	A	104	75-125	u
Vanadium	1.223	E	100.0	103.6	E	102	75-125	u
Zinc	0.2680	E	100.0	104.6	E	104	75-125	u

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1773181	1741148	-1.81
Scandium	A	2025754	2128924	5.09
Scandium	E	108386	96667	-10.81
Scandium	H	1119057	1124721	0.51
Germanium	H	223417	204269	-8.57
Germanium	E	57546	49285	-14.36
Indium	A	2719269	2426889	-10.75
Bismuth	A	948434	670034	-29.35
Yttrium	A	2789596	2696311	-3.34
Terbium	A	2901595	2518389	-13.21

>LR=overrange b=noncompliant u=use

67230047031

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897238321046
File : f1410046
IDF : 5.0
Lab ID : 195241-003
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 16:38
Cal : 897238321001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897238321057
File : f1410057
IDF : 5.0
Lab ID : QC391445
Matrix : Filtrate
Batch : 126087
Time : 14-JUN-2007 17:43
Cal : 897238321001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	1.093	A	10000	8896	A	89	75-125	
Antimony	0.05788	A	100.0	82.10	A	82	75-125	
Arsenic	0.3288	E	100.0	88.92	E	89	75-125	
Barium	45.44	A	100.0	133.7	A	88	75-125	
Beryllium	0.01204	A	100.0	88.92	A	89	75-125	
Cadmium	0.02232	A	100.0	89.98	A	90	75-125	
Calcium	14760	A	10000	23500 >LR	A	87	75-125	>LR **b***
Chromium	0.7646	E	100.0	88.64	E	88	75-125	
Cobalt	0.08052	E	100.0	87.72	E	88	75-125	
Copper	0.1119	E	100.0	87.90	E	88	75-125	
Iron	2.962	H	10000	8968	H	90	75-125	
Lead	0.01737	A	100.0	83.04	A	83	75-125	
Manganese	7.398	E	100.0	97.02	E	90	75-125	
Molybdenum	ND	A	100.0	84.08	A	84	75-125	u
Nickel	4.062	E	100.0	91.24	E	87	75-125	
Potassium	302.2	A	10000	9276	A	90	75-125	
Selenium	0.01849	H	100.0	90.22	H	90	75-125	
Silver	0.01469	A	100.0	78.70	A	79	75-125	
Sodium	15890	E	10000	24700 >LR	E	88	75-125	>LR **b***
Thallium	ND	A	50.00	45.96	A	92	75-125	
Vanadium	2.012	E	100.0	89.76	E	88	75-125	
Zinc	1.217	E	100.0	89.00	E	88	75-125	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2123286	2100033	-1.10
Scandium	A	1935693	2069262	6.90
Scandium	E	60849	65040	6.89
Scandium	H	853179	884638	3.69
Germanium	H	210213	217346	3.39
Germanium	E	46689	49565	6.16
Indium	A	2970271	3093621	4.15
Bismuth	A	3398867	3453144	1.60
Yttrium	A	2820269	3022760	7.18
Terbium	A	4719676	5066166	7.34

>LR=overrange b=noncompliant u=use

897238321057

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type	: MSS	Type	: PDS
Inst	: MET16	Inst	: MET16
Seqnum	: 897238321043	Seqnum	: 897238321044
File	: f1410043	File	: f1410044
IDF	: 20.0	IDF	: 20.0
Lab ID	: 195241-003	Lab ID	: QC391445
Matrix	: Filtrate	Matrix	: Filtrate
Batch	: 126087	Batch	: 126087
Time	: 14-JUN-2007 16:20	Time	: 14-JUN-2007 16:26
Cal	: 897238321001	Cal	: 897238321001
Units	: ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8925	A	89	75-125	
Antimony	ND	A	100.0	82.60	A	83	75-125	
Arsenic	0.1159	E	100.0	91.65	E	92	75-125	
Barium	11.63	A	100.0	104.8	A	93	75-125	
Beryllium	ND	A	100.0	92.45	A	92	75-125	
Cadmium	ND	A	100.0	92.80	A	93	75-125	
Calcium	3850	A	10000	13060	A	92	75-125	
Chromium	0.1995	E	100.0	91.15	E	91	75-125	
Cobalt	0.03015	E	100.0	91.40	E	91	75-125	
Copper	ND	E	100.0	91.45	E	91	75-125	
Iron	ND	H	10000	9305	H	93	75-125	
Lead	ND	A	100.0	85.75	A	86	75-125	
Magnesium	8865	A	10000	17450	A	86	75-125	u
Manganese	1.882	E	100.0	94.10	E	92	75-125	
Molybdenum	ND	A	100.0	86.05	A	86	75-125	u
Nickel	1.066	E	100.0	92.30	E	91	75-125	
Potassium	78.95	A	10000	9265	A	92	75-125	
Selenium	ND	H	100.0	92.50	H	93	75-125	
Silver	ND	A	100.0	86.85	A	87	75-125	
Sodium	4168	E	10000	12870	E	87	75-125	
Thallium	ND	A	50.00	47.05	A	94	75-125	
Zinc	ND	E	100.0	92.05	E	92	75-125	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2123286	2034050	-4.20
Scandium	A	1935693	2105863	8.79
Scandium	E	60849	65855	8.23
Scandium	H	853179	887427	4.01
Germanium	H	210213	219725	4.52
Germanium	E	46689	50344	7.83
Indium	A	2970271	3188199	7.34
Bismuth	A	3398867	3533048	3.95
Yttrium	A	2820269	3118480	10.57
Terbium	A	4719676	5166855	9.47

MISSING READINGS: **V**

u=use

897238321044

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67230047001
Units : ug/L

Date : 08-JUN-2007 18:26
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f08s0005	67230047005		08-JUN-2007 18:32	S6414
L2	f08s0006	67230047006		08-JUN-2007 18:38	S6416
L3	f08s0007	67230047007		08-JUN-2007 18:44	S6417
L4	f08s0008	67230047008		08-JUN-2007 18:50	S6418
L5	f08s0009	67230047009		08-JUN-2007 18:56	S6412
L6	f08s0010	67230047010		08-JUN-2007 19:06	S6413

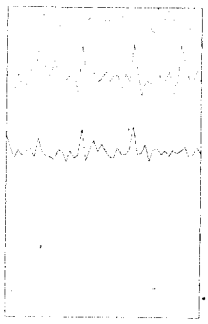
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.6051	0.4828	0.4576	0.4172	0.4095	0.4149	BLNK	-3.9835	2.41716		0.4645	1.000	0.995	
Antimony	A	0.2796	0.2003	0.2032	0.1880	0.1849	0.1889	BLNK	-0.0497	5.31900		0.2075	1.000	0.995	
Barium	A	0.1292	0.0858	0.0621	0.0572	0.0550	0.0548	BLNK	-0.0860	18.2335		0.0740	1.000	0.995	
Beryllium	A	0.2294	0.2146	0.2192	0.2125	0.2061	0.2104	BLNK	-0.0147	4.77337		0.2154	1.000	0.995	
Cadmium	A	0.1881	0.0873	0.0760	0.0635	0.0614	0.0620	BLNK	-0.2185	16.1758		0.0897	1.000	0.995	
Calcium	A	0.2340	0.0561	0.0362	0.0167	0.0139	0.0138	BLNK	-160.70	72.8711		0.0618	1.000	0.995	
Lead	A	0.4174	0.2988	0.2894	0.2629	0.2507	0.2448	BLNK	-0.1082	4.06727		0.2940	1.000	0.995	
Magnesium	A	0.4510	0.4028	0.3871	0.3549	0.3453	0.3470	BLNK	-2.4998	2.88480		0.3813	1.000	0.995	
Molybdenum	A	0.2739	0.1850	0.1758	0.1611	0.1564	0.1597	BLNK	-0.0851	6.29166		0.1853	1.000	0.995	
Potassium	A	3.0906	0.9541	0.7082	0.4529	0.4179	0.4194	BLNK	-63.850	2.39532		1.0072	1.000	0.995	
Silver	A	0.3580	0.2991	0.3056	0.2857	0.2758	0.2779	BLNK	-0.0414	3.60407		0.3004	1.000	0.995	
Thallium	A	1.0764	0.7210	0.6685	0.6295	0.6471	0.6673	BLNK	-0.0540	1.50885		0.7350	1.000	0.995	
Arsenic	E	0.5238	0.4390	0.3965	0.3935	0.3866	0.3802	BLNK	-0.0461	2.62196		0.4199	1.000	0.995	
Chromium	E	6.1805	2.9502	2.8672	2.1506	2.0586	2.0355	BLNK	-0.2261	0.49079		3.0404	1.000	0.995	
Cobalt	E	3.4317	3.2782	3.1045	3.0756	2.9472	2.8621	BLNK	-0.0235	0.34733		3.1165	1.000	0.995	
Copper	E	48.113	10.964	7.8521	4.5416	3.9574	3.7819	BLNK	-0.6443	0.26293		13.202	0.999	0.995	
Manganese	E	2.2788	1.4471	1.3527	1.2374	1.1986	1.1872	BLNK	-0.0902	0.84110		1.4503	1.000	0.995	
Nickel	E	5.7796	1.8019	1.4041	0.8693	0.7680	0.7355	BLNK	-0.6842	1.35294		1.8931	1.000	0.995	
Sodium	E	1.6940	0.6805	0.5517	0.4317	0.4012	0.3999	BLNK	-28.287	2.50288		0.6932	1.000	0.995	
Vanadium	E	4.5718	2.0943	1.8460	1.5928	1.5460	1.5424	BLNK	-0.1791	0.64871		2.1989	1.000	0.995	
Zinc	E	27.156	6.0829	3.5291	1.1154	0.7552	0.7136	BLNK	-3.5433	1.41397		6.5587	0.999	0.995	
Iron	H	0.6864	0.6102	0.5905	0.5506	0.5427	0.5311	BLNK	-2.3716	1.87495		0.5852	1.000	0.995	
Selenium	H	0.1092	0.1080	0.1023	0.1002	0.0974	0.0917	BLNK	-0.0306	10.7693		0.1015	0.999	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	6	50.00	9	100.0	7	1000	0	10000	-1	20000	0
Antimony	A	0.100	-1	0.500	-3	1.000	3	10.00	0	100.0	-2	200.0	0
Barium	A	0.100	50	0.500	39	1.000	5	10.00	3	100.0	0	200.0	0
Beryllium	A	0.100	-5	0.500	0	1.000	3	10.00	1	100.0	-2	200.0	0
Cadmium	A	0.100	-14	0.500	-3	1.000	1	10.00	0	100.0	-1	200.0	0
Calcium	A	10.00	-2	50.00	-13	100.0	3	1000	6	10000	0	20000	0
Lead	A	0.100	-38	0.500	0	1.000	7	10.00	6	100.0	2	200.0	0
Magnesium	A	10.00	5	50.00	11	100.0	9	1000	2	10000	0	20000	0
Molybdenum	A	0.100	-13	0.500	-1	1.000	2	10.00	1	100.0	-2	200.0	0
Potassium	A	10.00	2	50.00	1	100.0	6	1000	2	10000	-1	20000	0
Silver	A	0.100	-12	0.500	0	1.000	6	10.00	3	100.0	-1	200.0	0
Thallium	A	0.050	-46	0.250	-13	0.500	-10	5.000	-6	50.00	-2	100.0	1
Arsenic	E	0.100	-9	0.500	6	1.000	-1	10.00	3	100.0	1	200.0	0
Chromium	E	0.100	-23	0.500	0	1.000	18	10.00	3	100.0	1	200.0	0
Cobalt	E	0.100	-4	0.500	9	1.000	5	10.00	7	100.0	2	200.0	-1
Copper	E	0.100	521	0.500	59	1.000	42	10.00	13	100.0	3	200.0	-1
Manganese	E	0.100	1	0.500	4	1.000	5	10.00	3	100.0	1	200.0	0
Nickel	E	0.100	-2	0.500	7	1.000	22	10.00	11	100.0	3	200.0	-1
Sodium	E	10.00	41	50.00	14	100.0	10	1000	5	10000	0	20000	0
Vanadium	E	0.100	17	0.500	0	1.000	2	10.00	2	100.0	0	200.0	0
Zinc	E	0.100	196	0.500	51	1.000	45	10.00	22	100.0	3	200.0	-1
Iron	H	10.00	5	50.00	10	100.0	8	1000	3	10000	2	20000	0
Selenium	H	0.100	-13	0.500	10	1.000	7	10.00	8	100.0	5	200.0	-1

67230047001

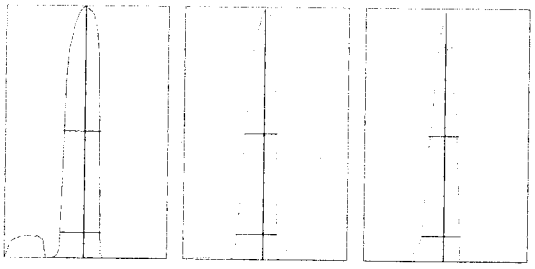
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	26505.0	26829.8	4.55	0.90
89	50,000	37898.0	39179.3	4.91	0.60
205	20,000	19491.0	19629.0	5.71	2.80

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.143%
Doubly Charged: 70/140 2.415%



m/z:	7	89	205
Height:	26,891	39,751	19,969
Axis:	7.00	89.00	205.00
W-50%:	0.70	0.60	0.55
W-10%:	0.7500	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.73 V
Smpl Depth	:	8 mm
Torch-H	:	0.7 mm
Torch-V	:	0.2 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-135 V
Omega Bias-ce	:	-34 V
Omega Lens-ce	:	0.8 V
Cell Entrance	:	-38 V
QP Focus	:	2 V
Cell Exit	:	-38 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-7 V

===Q-Pole Parameters===

AMU Gain	:	133
AMU Offset	:	125
Axis Gain	:	1.0006
Axis Offset	:	-0.06
QP Bias	:	-6 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1810 V
Pulse HV	:	1580 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	4.5 mL/min	51	64.4	14.65
Optional Gas:	--- %	59	7152.1	3.72
QP Focus:	-10 V	89	6169.4	6.16
Cell Exit:	-38 V			
OctP Bias:	-18 V			
QP Bias:	-14 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	4.5 mL/min	59	5991.1	3.67
Optional Gas:	--- %	78	0.6	146.77
QP Focus:	-8 V	89	30099.7	3.58
Cell Exit:	-40 V			
OctP Bias:	-18 V			
QP Bias:	-16 V			

Integration Time: 0.1000sec

Generated : Jun 08, 2007 17:53:05
Printed : Jun 08, 2007 17:54:45

00210

P/A Factor Tuning Report

Acquired:Jun 8 2007 06:03 pm

Mass[amu]	Element	P/A Factor
6	Li	0.084309
7	(Li)	Sensitivity too low
9	Be	0.094431
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.114496
45	Sc	0.114117
51	V	0.116035
52	Cr	0.120438
55	Mn	0.123298
56	Fe	Sensitivity too high
59	Co	0.130159
60	Ni	0.129878
63	Cu	0.134023
65	Cu	0.132853
66	Zn	Sensitivity too low
72	Ge	0.131363
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.130306
98	Mo	0.129257
99	(Ru)	Sensitivity too low
107	Ag	0.140489
111	Cd	Sensitivity too low
115	In	0.140389
118	(In)	0.139483
121	Sb	0.137011
137	Ba	Sensitivity too low
159	Tb	0.143391
205	Tl	0.148282
206	(Pb)	0.147728
207	(Pb)	0.147896
208	Pb	0.149984
209	Bi	0.150586

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1810 V
Pulse HV: 1580 V

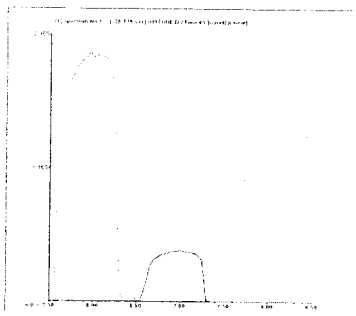
: 00211

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F08s00.B\001TUNE.D
Date Acquired:	Jun 8 2007 06:07 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.57	5.00	
59 Co	0.66	5.00	
115 In	0.98	5.00	
205 Tl	1.26	5.00	



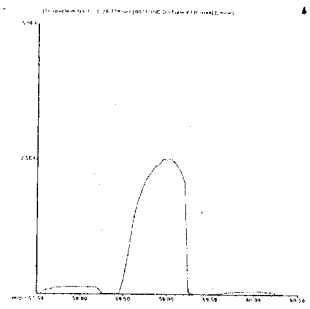
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



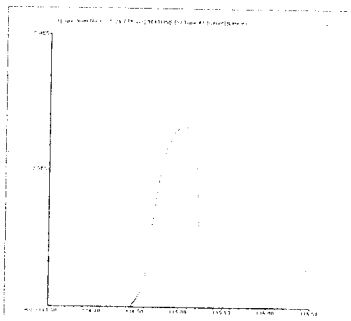
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



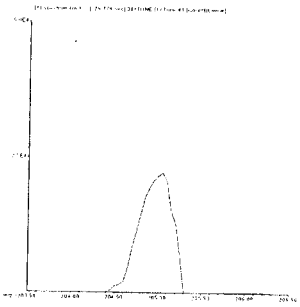
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	205.00	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004C
Date Acquired:	Jun 8 2007 06:24 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Jun 08 2007 06:28 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1773181.00	A	20760.00	1.17
7	(Li)		P		
9	Be	108.89	P	39.06	35.87
23	Na	24499.58	P	508.10	2.07
24	Mg	35079.21	P	10250.00	29.22
27	Al	66737.56	P	11710.00	17.55
39	K	1079841.00	A	18420.00	1.71
44	Ca	89344.61	P	228.70	0.26
45	Sc	1119057.00	A	8851.00	0.79
45	Sc	108386.00	P	1346.00	1.24
45	Sc	2025754.00	A	15670.00	0.77
51	V	598.54	P	33.97	5.68
52	Cr	997.89	P	95.15	9.54
55	Mn	232.60	P	25.68	11.04
56	Fe	28325.43	P	3221.00	11.37
59	Co	147.04	P	10.91	7.42
60	Ni	1096.35	P	25.35	2.31
63	Cu	2820.32	P	64.50	2.29
65	Cu	1347.12	P	21.93	1.63
66	Zn	2884.03	P	76.30	2.65
72	Ge	223416.59	P	2103.00	0.94
72	Ge	57545.94	P	233.50	0.41
75	As	20.22	P	6.47	32.02
78	Se	12.67	P	2.40	18.98
89	Y	2789595.00	A	32750.00	1.17
98	Mo	754.50	P	36.57	4.85
107	Ag	625.59	P	63.63	10.17
111	Cd	734.50	P	21.17	2.88
115	In	2719269.00	A	21240.00	0.78
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	508.92	P	75.75	14.88
137	Ba	273.35	P	52.39	19.17
159	Tb	2901595.00	A	20950.00	0.72
205	Tl	680.05	P	112.90	16.60
208	Pb	1543.43	P	164.20	10.64
209	Bi	948434.00	P	25490.00	2.69

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 8 2007 06:30 pm
Operator:
Sample Name: s6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 06:28 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1714681.00	A	15600.00	0.91
7 (Li)		P		
9 Be	786.72	P	40.42	5.14
23 Na	35322.23	P	423.80	1.20
24 Mg	178135.70	P	1968.00	1.10
27 Al	239008.00	P	707.40	0.30
39 K	1220681.00	A	10860.00	0.89
44 Ca	92413.95	P	89.74	0.10
45 Sc	1080007.00	A	1063.00	0.10
45 Sc	104262.60	P	714.10	0.68
45 Sc	1974920.00	A	15450.00	0.78
51 V	953.38	P	27.24	2.86
52 Cr	1288.59	P	34.07	2.64
55 Mn	475.20	P	18.90	3.98
56 Fe	148258.50	P	1846.00	1.25
59 Co	715.58	P	14.53	2.03
60 Ni	1205.25	P	22.70	1.88
63 Cu	5374.06	P	62.21	1.16
65 Cu	2619.91	P	72.66	2.77
66 Zn	3032.96	P	43.93	1.45
72 Ge	215641.30	P	520.60	0.24
72 Ge	55850.27	P	804.50	1.44
75 As	58.44	P	13.70	23.44
78 Se	47.11	P	7.31	15.52
89 Y	2742885.00	A	5605.00	0.20
98 Mo	1502.36	P	86.00	5.72
99 (Ru)	577.81	P	52.74	9.13
107 Ag	1906.87	P	89.52	4.69
111 Cd	1002.30	P	51.03	5.09
115 In	2663402.00	A	18250.00	0.69
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1489.02	P	50.60	3.40
137 Ba	734.49	P	23.41	3.19
159 Tb	2843189.00	A	18320.00	0.64
205 Tl	971.19	P	63.45	6.53
208 Pb	2373.51	P	145.70	6.14
209 Bi	901587.38	P	30470.00	3.38

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1714680.80	0.91	1773180.60	96.7	80 - 120	
45 Sc	1080006.90	0.10	1119056.80	96.5	80 - 120	
45 Sc	104262.56	0.68	108386.03	96.2	80 - 120	
45 Sc	1974920.40	0.78	2025754.40	97.5	80 - 120	
72 Ge	215641.30	0.24	223416.59	96.5	80 - 120	
72 Ge	55850.27	1.44	57545.94	97.1	80 - 120	
89 Y	2742885.00	0.20	2789595.50	98.3	80 - 120	
115 In	2663402.50	0.69	2719269.30	97.9	80 - 120	
159 Tb	2843188.80	0.64	2901595.30	98.0	80 - 120	
209 Bi	901587.38	3.38	948434.06	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 8 2007 06:36 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 06:34 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1785440.00	A	26640.00	1.49
7 (Li)		P		
9 Be	3831.75	P	134.90	3.52
23 Na	71742.92	P	1298.00	1.81
24 Mg	824672.69	P	4749.00	0.58
27 Al	988360.81	M	35440.00	3.59
39 K	1953206.00	A	23220.00	1.19
44 Ca	114755.90	P	713.80	0.62
45 Sc	1081850.00	A	3973.00	0.37
45 Sc	105432.50	P	1789.00	1.70
45 Sc	2047367.00	A	19260.00	0.94
51 V	2207.98	P	34.45	1.56
52 Cr	3110.75	P	82.94	2.67
55 Mn	1525.66	P	22.20	1.46
56 Fe	660119.19	P	2119.00	0.32
59 Co	3456.02	P	51.03	1.48
60 Ni	1899.04	P	30.45	1.60
63 Cu	6150.68	P	239.60	3.90
65 Cu	3066.30	P	38.57	1.26
66 Zn	3411.94	P	11.24	0.33
72 Ge	214878.41	P	1306.00	0.61
72 Ge	56092.02	P	282.40	0.50
75 As	246.23	P	3.85	1.56
78 Se	232.00	P	17.68	7.62
89 Y	2811277.00	A	19690.00	0.70
98 Mo	5200.08	P	203.10	3.91
99 (Ru)	518.92	P	18.36	3.54
107 Ag	8157.16	P	87.74	1.08
111 Cd	2380.29	P	8.82	0.37
115 In	2727681.00	A	24060.00	0.88
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5463.53	P	134.90	2.47
137 Ba	2474.77	P	22.20	0.90
159 Tb	2882808.00	A	5158.00	0.18
205 Tl	3283.89	P	243.70	7.42
208 Pb	8613.70	P	364.20	4.23
209 Bi	910129.88	P	30290.00	3.33

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1785439.80	1.49	1773180.60	100.7	80 - 120	
45 Sc	1081849.80	0.37	1119056.80	96.7	80 - 120	
45 Sc	105432.45	1.70	108386.03	97.3	80 - 120	
45 Sc	2047366.90	0.94	2025754.40	101.1	80 - 120	
72 Ge	214878.42	0.61	223416.59	96.2	80 - 120	
72 Ge	56092.02	0.50	57545.94	97.5	80 - 120	
89 Y	2811277.00	0.70	2789595.50	100.8	80 - 120	
115 In	2727681.30	0.88	2719269.30	100.3	80 - 120	
159 Tb	2882807.80	0.18	2901595.30	99.4	80 - 120	
209 Bi	910129.88	3.33	948434.06	96.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 8 2007 06:42 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 06:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1752643.00	A	12180.00	0.69
7 (Li)		P		
9 Be	7683.42	P	129.20	1.68
23 Na	119342.50	P	954.60	0.80
24 Mg	1568951.00	A	6710.00	0.43
27 Al	1854511.00	A	21020.00	1.13
39 K	2870608.00	A	14810.00	0.52
44 Ca	146931.91	P	221.80	0.15
45 Sc	1112751.00	A	12890.00	1.16
45 Sc	108163.30	P	1083.00	1.00
45 Sc	2026829.00	A	19920.00	0.98
51 V	3992.84	P	90.05	2.26
52 Cr	6201.44	P	102.70	1.66
55 Mn	2925.90	P	25.46	0.87
56 Fe	1314067.00	A	11160.00	0.85
59 Co	6715.76	P	78.05	1.16
60 Ni	3037.03	P	60.04	1.98
63 Cu	9054.50	P	64.18	0.71
65 Cu	4384.81	P	113.30	2.58
66 Zn	4069.53	P	17.89	0.44
72 Ge	218944.91	P	2007.00	0.92
72 Ge	57657.97	P	473.00	0.82
75 As	457.12	P	7.34	1.61
78 Se	448.01	P	34.08	7.61
89 Y	2761643.00	A	18740.00	0.68
98 Mo	9707.13	P	190.10	1.96
99 (Ru)	650.04	P	40.97	6.30
107 Ag	16377.11	P	171.60	1.05
111 Cd	4074.10	P	129.20	3.17
115 In	2679738.00	A	10630.00	0.40
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10892.57	P	127.70	1.17
137 Ba	3523.94	P	76.90	2.18
159 Tb	2839162.00	A	15570.00	0.55
205 Tl	5952.73	P	239.60	4.03
208 Pb	16435.83	P	470.20	2.86
209 Bi	890286.69	P	26590.00	2.99

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1752643.30	0.69	1773180.60	98.8	80 - 120	
45 Sc	1112750.90	1.16	1119056.80	99.4	80 - 120	
45 Sc	108163.26	1.00	108386.03	99.8	80 - 120	
45 Sc	2026829.50	0.98	2025754.40	100.1	80 - 120	
72 Ge	218944.95	0.92	223416.59	98.0	80 - 120	
72 Ge	57657.97	0.82	57545.94	100.2	80 - 120	
89 Y	2761643.30	0.68	2789595.50	99.0	80 - 120	
115 In	2679738.00	0.40	2719269.30	98.5	80 - 120	
159 Tb	2839162.50	0.55	2901595.30	97.8	80 - 120	
209 Bi	890286.75	2.99	948434.06	93.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 8 2007 06:48 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 06:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1803367.00	A	151200.00	8.38
7	(Li)		P		
9	Be	76241.36	P	779.10	1.02
23	Na	945899.81	M	28260.00	2.99
24	Mg	14903320.00	A	117600.00	0.79
27	Al	17515400.00	A	105100.00	0.60
39	K	19031910.00	A	118000.00	0.62
44	Ca	702047.31	P	928.10	0.13
45	Sc	1136548.00	A	8893.00	0.78
45	Sc	109539.10	P	1165.00	1.06
45	Sc	2123607.00	A	274500.00	12.93
51	V	34894.35	P	193.30	0.55
52	Cr	47113.04	P	341.10	0.72
55	Mn	27108.88	P	349.10	1.29
56	Fe	12514530.00	A	81600.00	0.65
59	Co	67378.16	P	657.70	0.98
60	Ni	19045.31	P	294.40	1.55
63	Cu	52477.00	P	542.40	1.03
65	Cu	25689.98	P	231.30	0.90
66	Zn	12887.55	P	107.50	0.83
72	Ge	224300.20	P	1474.00	0.66
72	Ge	57776.28	P	541.50	0.94
75	As	4546.55	P	78.80	1.73
78	Se	4495.65	P	105.20	2.34
89	Y	2857366.00	A	359000.00	12.56
98	Mo	91036.70	P	915.30	1.01
99	(Ru)	573.37	P	49.11	8.57
107	Ag	155024.00	P	733.80	0.47
111	Cd	34446.91	P	425.30	1.23
115	In	2739605.00	A	333500.00	12.17
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	102003.70	P	894.70	0.88
137	Ba	32704.28	P	324.10	0.99
159	Tb	2897500.00	A	397800.00	13.73
205	Tl	55010.49	P	2187.00	3.98
208	Pb	150182.30	P	5013.00	3.34
209	Bi	879273.31	P	89550.00	10.19

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	1803366.60	8.38	1773180.60	101.7	80 -	120	
45	Sc	1136547.80	0.78	1119056.80	101.6	80 -	120	
45	Sc	109539.10	1.06	108386.03	101.1	80 -	120	
45	Sc	2123607.00	12.93	2025754.40	104.8	80 -	120	
72	Ge	224300.22	0.66	223416.59	100.4	80 -	120	
72	Ge	57776.28	0.94	57545.94	100.4	80 -	120	
89	Y	2857366.30	12.56	2789595.50	102.4	80 -	120	
115	In	2739605.30	12.17	2719269.30	100.7	80 -	120	
159	Tb	2897500.30	13.73	2901595.30	99.9	80 -	120	
209	Bi	879273.31	10.19	948434.06	92.7	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 8 2007 06:54 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 06:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1668220.00	A	5365.00	0.32
7 (Li)		P		
9 Be	687632.50	P	3745.00	0.54
23 Na	8317092.00	A	104900.00	1.26
24 Mg	############	A	1254000.00	0.93
27 Al	############	A	1271000.00	0.79
39 K	############	A	1140000.00	0.70
44 Ca	5451043.00	A	33270.00	0.61
45 Sc	1101547.00	A	9917.00	0.90
45 Sc	103647.70	P	1574.00	1.52
45 Sc	1961661.00	A	27550.00	1.40
51 V	320466.09	P	4438.00	1.38
52 Cr	426704.59	P	2789.00	0.65
55 Mn	248454.50	P	2789.00	1.12
56 Fe	############	A	582600.00	0.49
59 Co	610935.31	P	9723.00	1.59
60 Ni	159196.59	P	1648.00	1.04
63 Cu	425138.50	P	2883.00	0.68
65 Cu	206649.91	P	2679.00	1.30
66 Zn	81128.51	P	274.30	0.34
72 Ge	212972.41	P	984.30	0.46
72 Ge	53717.12	P	650.00	1.21
75 As	41529.59	P	382.70	0.92
78 Se	41486.99	P	227.40	0.55
89 Y	2660331.00	A	23420.00	0.88
98 Mo	831930.69	P	1860.00	0.22
99 (Ru)	566.70	P	20.28	3.58
107 Ag	1385625.00	A	4444.00	0.32
111 Cd	308609.41	P	242.40	0.08
115 In	2511608.00	A	13300.00	0.53
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	928730.63	P	9971.00	1.07
137 Ba	298288.91	P	3164.00	1.06
159 Tb	2712282.00	A	26740.00	0.99
205 Tl	509846.09	P	15590.00	3.06
208 Pb	1360406.00	P	49420.00	3.63
209 Bi	787805.31	P	22270.00	2.83

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1668220.10	0.32	1773180.60	94.1	80 - 120	
45 Sc	1101547.30	0.90	1119056.80	98.4	80 - 120	
45 Sc	103647.75	1.52	108386.03	95.6	80 - 120	
45 Sc	1961661.40	1.40	2025754.40	96.8	80 - 120	
72 Ge	212972.39	0.46	223416.59	95.3	80 - 120	
72 Ge	53717.13	1.21	57545.94	93.3	80 - 120	
89 Y	2660330.50	0.88	2789595.50	95.4	80 - 120	
115 In	2511608.00	0.53	2719269.30	92.4	80 - 120	
159 Tb	2712282.30	0.99	2901595.30	93.5	80 - 120	
209 Bi	787805.31	2.83	948434.06	83.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08s00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 8 2007 07:04 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 07:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1545487.00	A	30190.00	1.95
7	(Li)		P		
9	Be	1300134.00	A	8900.00	0.68
23	Na	15844330.00	A	269300.00	1.70
24	Mg	###########	A	1115000.00	0.44
27	Al	###########	A	3743000.00	1.22
39	K	###########	A	3266000.00	1.05
44	Ca	10222350.00	A	79260.00	0.78
45	Sc	1087930.00	A	1329.00	0.12
45	Sc	99050.63	P	1720.00	1.74
45	Sc	1846100.00	A	9674.00	0.52
51	V	611101.19	P	9604.00	1.57
52	Cr	806534.13	P	18570.00	2.30
55	Mn	470356.09	P	6312.00	1.34
56	Fe	###########	A	1825000.00	0.79
59	Co	1133852.00	P	10770.00	0.95
60	Ni	291387.81	P	3402.00	1.17
63	Cu	770579.50	P	7779.00	1.01
65	Cu	370535.31	P	4492.00	1.21
66	Zn	145405.00	P	909.70	0.63
72	Ge	206672.91	P	1164.00	0.56
72	Ge	50939.71	P	346.90	0.68
75	As	77470.05	P	579.30	0.75
78	Se	75827.51	P	385.80	0.51
89	Y	2493543.00	A	20670.00	0.83
98	Mo	1592647.00	A	3271.00	0.21
99	(Ru)	565.59	P	13.88	2.45
107	Ag	2567816.00	A	19580.00	0.76
111	Cd	572956.13	P	2641.00	0.46
115	In	2309742.00	A	21140.00	0.92
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1744821.00	A	13670.00	0.78
137	Ba	559364.19	P	1679.00	0.30
159	Tb	2550136.00	A	21060.00	0.83
205	Tl	937885.50	P	33260.00	3.55
208	Pb	2497222.00	P	69720.00	2.79
209	Bi	702653.38	P	19720.00	2.81

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	1545486.90	1.95	1773180.60	87.2	80 -	120	
45	Sc	1087930.10	0.12	1119056.80	97.2	80 -	120	
45	Sc	99050.63	1.74	108386.03	91.4	80 -	120	
45	Sc	1846100.10	0.52	2025754.40	91.1	80 -	120	
72	Ge	206672.92	0.56	223416.59	92.5	80 -	120	
72	Ge	50939.71	0.68	57545.94	88.5	80 -	120	
89	Y	2493543.00	0.83	2789595.50	89.4	80 -	120	
115	In	2309742.50	0.92	2719269.30	84.9	80 -	120	
159	Tb	2550135.80	0.83	2901595.30	87.9	80 -	120	
209	Bi	702653.38	2.81	948434.06	74.1	80 -	120	ISFail

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Fail**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047012
Cal : 67230047001
Standards: S6419, S6035

File : f08s0012
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 19:18

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.4645	0.4235	10000	10230	ug/L	2	10	
Antimony	A	0.2075	0.1948	100.0	103.6	ug/L	4	10	
Barium	A	0.0740	0.0566	100.0	103.1	ug/L	3	10	
Beryllium	A	0.2154	0.2149	100.0	102.6	ug/L	3	10	
Cadmium	A	0.0897	0.0630	100.0	101.7	ug/L	2	10	
Calcium	A	0.0618	0.0144	10000	10310	ug/L	3	10	
Lead	A	0.2940	0.2518	100.0	102.3	ug/L	2	10	
Magnesium	A	0.3813	0.3579	10000	10320	ug/L	3	10	
Molybdenum	A	0.1853	0.1606	100.0	100.9	ug/L	1	10	
Potassium	A	1.0072	0.4331	10000	10310	ug/L	3	10	
Silver	A	0.3004	0.2829	100.0	101.9	ug/L	2	10	
Thallium	A	0.7350	0.6658	50.00	50.17	ug/L	0	10	
Arsenic	E	0.4199	0.3932	100.0	103.1	ug/L	3	10	
Chromium	E	3.0404	2.0762	100.0	101.7	ug/L	2	10	
Cobalt	E	3.1165	2.9548	100.0	102.6	ug/L	3	10	
Copper	E	13.202	3.9953	100.0	104.4	ug/L	4	10	
Manganese	E	1.4503	1.2064	100.0	101.4	ug/L	1	10	
Nickel	E	1.8931	0.7745	100.0	104.1	ug/L	4	10	
Sodium	E	0.6932	0.4101	10000	10240	ug/L	2	10	
Vanadium	E	2.1989	1.5550	100.0	100.7	ug/L	1	10	
Zinc	E	6.5587	0.7651	100.0	104.6	ug/L	5	10	
Iron	H	0.5852	0.5361	10000	10050	ug/L	1	10	
Selenium	H	0.1015	0.0972	100.0	104.7	ug/L	5	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1617963	-8.75
Scandium	A	2025754	1925325	-4.96
Scandium	E	108386	101952	-5.94
Scandium	H	1119057	1106145	-1.15
Germanium	H	223417	211674	-5.26
Germanium	E	57546	52488	-8.79
Indium	A	2719269	2436398	-10.40
Bismuth	A	948434	744479	-21.50
Yttrium	A	2789596	2606132	-6.58
Terbium	A	2901595	2620214	-9.70

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047015
Cal : 67230047001

File : f08s0015
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 19:36

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03079]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.382]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.807]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02690]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01587]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02009]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01854]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01876]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1768766	-0.25
Scandium	A	2025754	2025479	-0.01
Scandium	E	108386	106497	-1.74
Scandium	H	1119057	1115581	-0.31
Germanium	H	223417	218537	-2.18
Germanium	E	57546	56303	-2.16
Indium	A	2719269	2621889	-3.58
Bismuth	A	948434	815045	-14.06
Yttrium	A	2789596	2740341	-1.77
Terbium	A	2901595	2735849	-5.71

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67230047015

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67230047017 File : f08s0017 Time : 08-JUN-2007 19:48
Cal : 67230047001 Caldate : 08-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09496]	0.1000	ug/L	
Barium	A	1.318	0.1000	ug/L	
Beryllium	A	[0.02438]	0.1000	ug/L	
Cadmium	A	3.010	0.1000	ug/L	
Lead	A	0.4487	0.1000	ug/L	
Silver	A	0.2409	0.1000	ug/L	
Thallium	A	[0.02463]	0.05000	ug/L	
Arsenic	E	0.3644	0.1000	ug/L	
Chromium	E	1.521	0.1000	ug/L	
Cobalt	E	0.2806	0.1000	ug/L	
Copper	E	1.821	0.1000	ug/L	
Manganese	E	0.9525	0.1000	ug/L	
Nickel	E	1.155	0.1000	ug/L	
Vanadium	E	[0.04072]	0.1000	ug/L	
Zinc	E	2.280	0.1000	ug/L	
Selenium	H	0.1255	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	116800	ug/L	117
Calcium	A	300000	346300	ug/L	115
Magnesium	A	100000	113500	ug/L	114
Molybdenum	A	2000	2292	ug/L	115
Potassium	A	100000	116400	ug/L	116
Sodium	E	250000	288200	ug/L	115
Iron	H	250000	251100	ug/L	100

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1333733	-24.78
Scandium	A	2025754	1647899	-18.65
Scandium	E	108386	91231	-15.83
Scandium	H	1119057	1017283	-9.09
Germanium	H	223417	162599	-27.22
Germanium	E	57546	42239	-26.60
Indium	A	2719269	1852303	-31.88
Bismuth	A	948434	465100	-50.96
Yttrium	A	2789596	2121447	-23.95
Terbium	A	2901595	1940677	-33.12

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67230047018 File : f08s0018 Time : 08-JUN-2007 19:54
Cal : 67230047001 Caldate : 08-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	114600	ug/L	15		
Cadmium	A	100.0	111.5	ug/L	12	20	
Calcium	A	300000	339100	ug/L	13		
Magnesium	A	100000	111900	ug/L	12		
Molybdenum	A	2000	2240	ug/L	12		
Potassium	A	100000	114700	ug/L	15		
Silver	A	50.00	54.40	ug/L	9	20	
Arsenic	E	100.0	107.7	ug/L	8	20	
Chromium	E	200.0	210.4	ug/L	5	20	
Cobalt	E	200.0	193.5	ug/L	-3	20	
Copper	E	200.0	197.4	ug/L	-1	20	
Manganese	E	200.0	209.6	ug/L	5	20	
Nickel	E	200.0	185.5	ug/L	-7	20	
Sodium	E	250000	288600	ug/L	15		
Vanadium	E	200.0	216.7	ug/L	8	20	
Zinc	E	100.0	97.46	ug/L	-3	20	
Iron	H	250000	248300	ug/L	-1		
Selenium	H	100.0	101.4	ug/L	1	20	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119057	986968	-11.80
Scandium	A	2025754	1587333	-21.64
Scandium	E	108386	84120	-22.39
Germanium	H	223417	158588	-29.02
Germanium	E	57546	38572	-32.97
Indium	A	2719269	1823284	-32.95
Yttrium	A	2789596	2073539	-25.67

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047035
Cal : 67230047001
Standards: S6420, S6035

File : f08s0035
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:35

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4253	10000	10280	ug/L	3	10	
Antimony	A	0.2075	0.1931	100.0	102.7	ug/L	3	10	
Barium	A	0.0740	0.0594	100.0	108.2	ug/L	8	10	
Beryllium	A	0.2154	0.2104	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0897	0.0637	100.0	102.8	ug/L	3	10	
Calcium	A	0.0618	0.0142	10000	10150	ug/L	2	10	
Lead	A	0.2940	0.2329	100.0	94.62	ug/L	-5	10	
Magnesium	A	0.3813	0.3562	10000	10270	ug/L	3	10	
Molybdenum	A	0.1853	0.1586	100.0	99.73	ug/L	0	10	
Potassium	A	1.0072	0.4373	10000	10410	ug/L	4	10	
Silver	A	0.3004	0.2891	100.0	104.2	ug/L	4	10	
Thallium	A	0.7350	0.6655	50.00	50.16	ug/L	0	10	
Arsenic	E	0.4199	0.3975	100.0	104.2	ug/L	4	10	
Chromium	E	3.0404	2.0755	100.0	101.6	ug/L	2	10	
Cobalt	E	3.1165	2.9641	100.0	102.9	ug/L	3	10	
Copper	E	13.202	4.1033	100.0	107.2	ug/L	7	10	
Manganese	E	1.4503	1.1813	100.0	99.27	ug/L	-1	10	
Nickel	E	1.8931	0.7671	100.0	103.1	ug/L	3	10	
Sodium	E	0.6932	0.4109	10000	10260	ug/L	3	10	
Vanadium	E	2.1989	1.5765	100.0	102.1	ug/L	2	10	
Zinc	E	6.5587	0.7638	100.0	104.5	ug/L	5	10	
Iron	H	0.5852	0.5078	10000	9518	ug/L	-5	10	
Selenium	H	0.1015	0.0959	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1928042	8.73
Scandium	A	2025754	2250540	11.10
Scandium	E	108386	110694	2.13
Scandium	H	1119057	1285411	14.87
Germanium	H	223417	235177	5.26
Germanium	E	57546	55323	-3.86
Indium	A	2719269	2612966	-3.91
Bismuth	A	948434	693497	-26.88
Yttrium	A	2789596	2959603	6.09
Terbium	A	2901595	2631681	-9.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047038
Cal : 67230047001

File : f08s0038
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:53

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.970]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2089263	17.83
Scandium	A	2025754	2355569	16.28
Scandium	E	108386	114178	5.34
Scandium	H	1119057	1231801	10.07
Germanium	H	223417	232460	4.05
Germanium	E	57546	58176	1.09
Indium	A	2719269	2771076	1.91
Bismuth	A	948434	750612	-20.86
Yttrium	A	2789596	3064732	9.86
Terbium	A	2901595	2679612	-7.65

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67230047038

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047039
Cal : 67230047001

File : f08s0039
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 21:59

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	10.67	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.002786]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	10.56	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.04507]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2079151	17.26
Scandium	A	2025754	2354754	16.24
Scandium	E	108386	115917	6.95
Scandium	H	1119057	1260783	12.66
Germanium	H	223417	236899	6.03
Germanium	E	57546	59022	2.57
Indium	A	2719269	2822139	3.78
Bismuth	A	948434	756222	-20.27
Yttrium	A	2789596	3111011	11.52
Terbium	A	2901595	2683019	-7.53

=warning ib=instrument blank

67230047039

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047053
Cal : 67230047001
Standards: S6420, S6035

File : f08s0053
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 23:22

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4338	10000	10480	ug/L	5	10	
Antimony	A	0.2075	0.1957	100.0	104.1	ug/L	4	10	
Barium	A	0.0740	0.0611	100.0	111.3	ug/L	**11**	10	c+ ***
Beryllium	A	0.2154	0.2069	100.0	98.75	ug/L	-1	10	
Cadmium	A	0.0897	0.0646	100.0	104.2	ug/L	4	10	
Calcium	A	0.0618	0.0145	10000	10390	ug/L	4	10	
Lead	A	0.2940	0.2392	100.0	97.20	ug/L	-3	10	
Magnesium	A	0.3813	0.3678	10000	10610	ug/L	6	10	
Molybdenum	A	0.1853	0.1596	100.0	100.3	ug/L	0	10	
Potassium	A	1.0072	0.4506	10000	10730	ug/L	7	10	
Silver	A	0.3004	0.2915	100.0	105.0	ug/L	5	10	
Thallium	A	0.7350	0.6763	50.00	50.97	ug/L	2	10	
Arsenic	E	0.4199	0.3993	100.0	104.7	ug/L	5	10	
Chromium	E	3.0404	2.1032	100.0	103.0	ug/L	3	10	
Cobalt	E	3.1165	2.9797	100.0	103.5	ug/L	4	10	
Copper	E	13.202	4.1010	100.0	107.2	ug/L	7	10	
Manganese	E	1.4503	1.1895	100.0	99.96	ug/L	0	10	
Nickel	E	1.8931	0.7758	100.0	104.3	ug/L	4	10	
Sodium	E	0.6932	0.4196	10000	10470	ug/L	5	10	
Vanadium	E	2.1989	1.5866	100.0	102.7	ug/L	3	10	
Zinc	E	6.5587	0.7715	100.0	105.5	ug/L	6	10	
Iron	H	0.5852	0.5272	10000	9883	ug/L	-1	10	
Selenium	H	0.1015	0.0997	100.0	107.3	ug/L	7	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2072489	16.88
Scandium	A	2025754	2328346	14.94
Scandium	E	108386	113963	5.15
Scandium	H	1119057	1300383	16.20
Germanium	H	223417	238673	6.83
Germanium	E	57546	57328	-0.38
Indium	A	2719269	2680410	-1.43
Bismuth	A	948434	692596	-26.97
Yttrium	A	2789596	3046500	9.21
Terbium	A	2901595	2596212	-10.52

=high bias c=CCV

67230047053

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047056
Cal : 67230047001

File : f08s0056
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 23:40

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	i+ ***
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	13.82	10.00	7.074	ug/L	ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01199]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.006167]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2187819	23.38 *
Scandium	A	2025754	2399386	18.44
Scandium	E	108386	117285	8.21
Scandium	H	1119057	1281605	14.53
Germanium	H	223417	237951	6.51
Germanium	E	57546	59184	2.85
Indium	A	2719269	2807560	3.25
Bismuth	A	948434	750974	-20.82
Yttrium	A	2789596	3112187	11.56
Terbium	A	2901595	2654768	-8.51

=warning +=high bias i=ISTD failure ib=instrument blank

67230047056

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67230047062
Cal : 67230047001
Standards: S6420, S6035

File : f08s0062
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:16

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.4645	0.4317	10000	10430	ug/L	4	10	
Antimony	A	0.2075	0.1947	100.0	103.5	ug/L	4	10	
Barium	A	0.0740	0.0622	100.0	113.3	ug/L	**13**	10	c+ ***
Beryllium	A	0.2154	0.2086	100.0	99.54	ug/L	0	10	i+ ***
Cadmium	A	0.0897	0.0648	100.0	104.5	ug/L	5	10	
Calcium	A	0.0618	0.0145	10000	10370	ug/L	4	10	
Lead	A	0.2940	0.2382	100.0	96.76	ug/L	-3	10	
Magnesium	A	0.3813	0.3623	10000	10450	ug/L	5	10	
Molybdenum	A	0.1853	0.1603	100.0	100.8	ug/L	1	10	
Potassium	A	1.0072	0.4480	10000	10670	ug/L	7	10	
Silver	A	0.3004	0.2934	100.0	105.7	ug/L	6	10	
Thallium	A	0.7350	0.6781	50.00	51.10	ug/L	2	10	
Arsenic	E	0.4199	0.4011	100.0	105.1	ug/L	5	10	
Chromium	E	3.0404	2.0732	100.0	101.5	ug/L	2	10	
Cobalt	E	3.1165	2.9515	100.0	102.5	ug/L	3	10	
Copper	E	13.202	4.1653	100.0	108.9	ug/L	9	10	
Manganese	E	1.4503	1.1751	100.0	98.75	ug/L	-1	10	
Nickel	E	1.8931	0.7674	100.0	103.1	ug/L	3	10	
Sodium	E	0.6932	0.4144	10000	10340	ug/L	3	10	
Vanadium	E	2.1989	1.5770	100.0	102.1	ug/L	2	10	
Zinc	E	6.5587	0.7737	100.0	105.9	ug/L	6	10	
Iron	H	0.5852	0.5325	10000	9982	ug/L	0	10	i+ ***
Selenium	H	0.1015	0.1005	100.0	108.2	ug/L	8	10	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2139760	**20.67 ***
Scandium	A	2025754	2411964	19.06
Scandium	E	108386	118995	9.79
Scandium	H	1119057	1358144	**21.37 ***
Germanium	H	223417	245946	10.08
Germanium	E	57546	58400	1.48
Indium	A	2719269	2747368	1.03
Bismuth	A	948434	683373	-27.95
Yttrium	A	2789596	3138985	12.52
Terbium	A	2901595	2597850	-10.47

=high bias c=CCV i=ISTD failure

67230047062

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
Seqnum : 67230047064
Cal : 67230047001

File : f08s0064
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:28

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	i+ ***
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	i+ ***
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	i+ ***
Lead	A	ND	0.1000	0.002857	ug/L	
Magnesium	A	ND	10.00	3.328	ug/L	i+ ***
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	15.80	10.00	7.074	ug/L	i+ ib ***
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01607]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[4.863]	10.00	4.329	ug/L	!ib
Selenium	H	[0.04821]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	2296300	**29.50 ***
Scandium	A	2025754	2496856	**23.26 ***
Scandium	E	108386	122184	12.73
Scandium	H	1119057	1318030	17.78
Germanium	H	223417	248111	11.05
Germanium	E	57546	61419	6.73
Indium	A	2719269	2930539	7.77
Bismuth	A	948434	759245	-19.95
Yttrium	A	2789596	3268240	17.16
Terbium	A	2901595	2695592	-7.10

=warning +=high bias i=ISTD failure ib=instrument blank

67230047064

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
Seqnum : 67230047067
Cal : 67230047001
Standards: S6421, S6035

File : f08s0067
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:45

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05925]	0.1000	ug/L	
Barium	A	1.519	0.1000	ug/L	
Beryllium	A	[0.01873]	0.1000	ug/L	
Cadmium	A	3.349	0.1000	ug/L	
Lead	A	0.4297	0.1000	ug/L	
Silver	A	0.2354	0.1000	ug/L	
Thallium	A	[0.01638]	0.05000	ug/L	
Arsenic	E	0.3922	0.1000	ug/L	
Chromium	E	1.507	0.1000	ug/L	
Cobalt	E	0.2588	0.1000	ug/L	
Copper	E	1.917	0.1000	ug/L	
Manganese	E	0.8689	0.1000	ug/L	
Nickel	E	1.166	0.1000	ug/L	
Vanadium	E	[0.05732]	0.1000	ug/L	
Zinc	E	2.349	0.1000	ug/L	
Selenium	H	0.1381	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	124100	ug/L	124
Calcium	A	300000	368100	ug/L	123
Magnesium	A	100000	121900	ug/L	122
Molybdenum	A	2000	2321	ug/L	116
Potassium	A	100000	125100	ug/L	125
Sodium	E	250000	299100	ug/L	120
Iron	H	250000	259700	ug/L	104

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1773181	1619515	-8.67
Scandium	A	2025754	1959034	-3.29
Scandium	E	108386	100361	-7.40
Scandium	H	1119057	1129303	0.92
Germanium	H	223417	178853	-19.95
Germanium	E	57546	43861	-23.78
Indium	A	2719269	2029273	-25.37
Bismuth	A	948434	434492	-54.19
Yttrium	A	2789596	2423895	-13.11
Terbium	A	2901595	1938321	-33.20

67230047067

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
Seqnum : 67230047068 File : f08s0068 IDF : 1.0
Cal : 67230047001 Caldate : 08-JUN-2007 Time : 09-JUN-2007 00:52
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	121200	ug/L	21		
Cadmium	A	100.0	117.4	ug/L	17	20	
Calcium	A	300000	361400	ug/L	20		
Magnesium	A	100000	119800	ug/L	20		
Molybdenum	A	2000	2252	ug/L	13		
Potassium	A	100000	122700	ug/L	23		
Silver	A	50.00	57.84	ug/L	16	20	
Arsenic	E	100.0	111.0	ug/L	11	20	
Chromium	E	200.0	214.7	ug/L	7	20	
Cobalt	E	200.0	193.8	ug/L	-3	20	
Copper	E	200.0	209.2	ug/L	5	20	
Manganese	E	200.0	208.8	ug/L	4	20	
Nickel	E	200.0	188.0	ug/L	-6	20	
Sodium	E	250000	299800	ug/L	20		
Vanadium	E	200.0	222.0	ug/L	11	20	
Zinc	E	100.0	99.90	ug/L	0	20	
Iron	H	250000	254100	ug/L	2		
Selenium	H	100.0	107.2	ug/L	7	20	

ISTD (ICALBLK f08s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1119057	1123974	0.44
Scandium	A	2025754	1910495	-5.69
Scandium	E	108386	94652	-12.67
Germanium	H	223417	176163	-21.15
Germanium	E	57546	41489	-27.90
Indium	A	2719269	2046123	-24.75
Yttrium	A	2789596	2433083	-12.78

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67230047

Date : 06/08/07
Sequence : MET06 f08s0

Reference : f08s0004
Analyzed : 06/08/07 18:26

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1773181	2025754	108386	1119057	223417	57546	2719269	948434	2789596	2901595
		LOWER LIMIT	531954	607726	32516	335717	67025	17264	815781	284530	836879	870479
		UPPER LIMIT	2127817	2430905	130063	1342868	268100	69055	3263123	1138121	3347515	3481914
015	ICB		1768766	2025479	106497	1115581	218537	56303	2621889	815045	2740341	2735849
017	ICSA		1333733	1647899	91231	1017283	162599	42239	1852303	465100	2121447	1940677
018	ICSAB		1312246	1587333	84120	986968	158588	38572	1823284	476519	2073539	1958390
023	BLANK	QC391439	1715141	1887240	86599	988454	216458	51626	2358372	761738	2537351	2510125
024	BS	QC391440	1695268	1905967	89569	1036586	191395	45920	2326274	703883	2589034	2495037
025	BSD	QC391441	1665224	1872923	87366	1033391	188401	44419	2330029	695760	2536056	2466067
027	MSS	195241-003	1854152	2226116	100067	1095168	208656	51987	2589469	758546	2816103	2675047
028	SER	QC391444	1888820	2189597	103633	1154665	222848	54515	2659289	767771	2878628	2700105
029	MS	QC391442	1833732	2232269	101369	1134751	211224	52465	2556729	717758	2827507	2643410
030	MSD	QC391443	1875212	2295151	101105	1133455	210156	52031	2640340	746736	2921526	2724346
031	PDS	QC391445	1741148	2128924	96667	1124721	204269	49285	2426889	670034	2696311	2518389
035	CCV		1928042	2250540	110694	1285411	235177	55323	2612966	693497	2959603	2631681
038	CCB		2089263	2355569	114178	1231801	232460	58176	2771076	750612	3064732	2679612
039	CCB		2079151	2354754	115917	1260783	236899	59022	2822139	756222	3111011	2683019
040	MSS	195247-006	1976468	2309916	108728	1212328	225828	55135	2618538	704326	2925235	2548790
041	MS	QC391446	1958354	2295575	108204	1200112	221050	54529	2596019	688559	2916531	2562536
042	MSD	QC391447	1931676	2255992	106195	1187713	217832	54053	2571627	690843	2874678	2515156
043	SAMPLE	195241-002	2078705	2397773	111192	1225845	222195	55085	2615988	678543	2996144	2556536
044	SAMPLE	195241-004	1989266	2283142	104224	1183551	221224	53596	2632743	734435	2876722	2575505
045	SAMPLE	195241-005	1987571	2282847	106061	1182254	219385	54127	2659777	759319	2924257	2638537
046	SAMPLE	195241-007	2059742	2375982	110875	1208799	217269	54201	2548924	675341	2957210	2527413
047	SAMPLE	195247-001	2082840	2340161	111921	1253498	230992	56103	2674771	709191	2987823	2603390
048	SAMPLE	195247-002	2047210	2318467	111079	1215440	225637	55307	2653783	700484	2977080	2575198
049	SAMPLE	195247-001	1903009	2399304	110023	1258927	214563	52410	2482435	649877	2902309	2475332
053	CCV		2072489	2328346	113963	1300383	238673	57328	2680410	692596	3046500	2596212
056	CCB		2187819 *	2399386	117285	1281605	237951	59184	2807560	750974	3112187	2654768
058	SAMPLE	195247-002	2071885	2789986 *	121717	1379641 *	231709	56715	2638391	674730	3485796 *	2562300
062	CCV		2139760 *	2411964	118995	1358144 *	245946	58400	2747368	683373	3138985	2597850
064	CCB		2296300 *	2496856 *	122184	1318030	248111	61419	2930539	759245	3268240	2695592
067	ICSA		1619515	1959034	100361	1129303	178853	43861	2029273	434492	2423895	1938321
068	ICSAB		1572925	1910495	94652	1123974	176163	41489	2046123	452665	2433083	1963805

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f08s0001	TUN				08-JUN-2007 18:07	1.0	1.0				1	
002	f08s0002	X	RINSE			08-JUN-2007 18:14	1.0					2	
003	f08s0003	X	RINSE			08-JUN-2007 18:20	1.0					2	
004	f08s0004	ICALBLK	CALBLANK			08-JUN-2007 18:26	1.0	1.0				2	
005	f08s0005	ICAL				08-JUN-2007 18:32	1.0	1.0				3	
006	f08s0006	ICAL				08-JUN-2007 18:38	1.0	1.0				4	
007	f08s0007	ICAL				08-JUN-2007 18:44	1.0	1.0				5	
008	f08s0008	ICAL				08-JUN-2007 18:50	1.0	1.0				6	
009	f08s0009	ICAL				08-JUN-2007 18:56	1.0	1.0				7	
010	f08s0010	ICAL				08-JUN-2007 19:06	1.0	1.0				8	
011	f08s0011	X	RINSE			08-JUN-2007 19:12	1.0					2	
012	f08s0012	ICV				08-JUN-2007 19:18	1.0	1.0			1	9 2	
013	f08s0013	X	RINSE			08-JUN-2007 19:24	1.0					2	
014	f08s0014	X				08-JUN-2007 19:30	1.0					2	
015	f08s0015	ICB				08-JUN-2007 19:36	1.0	1.0			1	2	
016	f08s0016	X				08-JUN-2007 19:42	1.0					2	
017	f08s0017	ICSA				08-JUN-2007 19:48	1.0	1.0			1	10 2	7:CA=346300
018	f08s0018	ICSAB				08-JUN-2007 19:54	1.0	1.0			1	11 2	10:CA=339100
019	f08s0019	X	RINSE			08-JUN-2007 20:00	1.0					2	
020	f08s0020	X	RINSE			08-JUN-2007 20:06	1.0					2	
021	f08s0021	X	RINSE			08-JUN-2007 20:12	1.0					2	
022	f08s0022	X	RINSE			08-JUN-2007 20:18	1.0					2	
023	f08s0023	BLANK	QC391439	126087	Filtra	08-JUN-2007 20:24	1.0	1.0			1	2	
024	f08s0024	BS	QC391440	126087	Filtra	08-JUN-2007 20:30	1.0	1.0			1	2	
025	f08s0025	BSD	QC391441	126087	Filtra	08-JUN-2007 20:36	1.0	1.0			1	2	
026	f08s0026	X	RINSE			08-JUN-2007 20:42	1.0					2	
027	f08s0027	MSS	195241-003	126087	Filtra	08-JUN-2007 20:48	10.0	1.0			1	2	
028	f08s0028	SER	QC391444	126087	Filtra	08-JUN-2007 20:54	50.0	1.0		2	1	2	
029	f08s0029	MS	QC391442	126087	Filtra	08-JUN-2007 21:00	10.0	1.0		1	1	2	
030	f08s0030	MSD	QC391443	126087	Filtra	08-JUN-2007 21:05	10.0	1.0			1	2	
031	f08s0031	PDS	QC391445	126087	Filtra	08-JUN-2007 21:11	10.0	1.0	1		1	12 13 2	1:MG=29040.0

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	f08s0032	X	RINSE			08-JUN-2007 21:17	1.0				2	
033	f08s0033	X	RINSE			08-JUN-2007 21:23	1.0				2	
034	f08s0034	X	RINSE			08-JUN-2007 21:29	1.0				2	
035	f08s0035	CCV				08-JUN-2007 21:35	1.0	1.0		1	14 2	
036	f08s0036	X	RINSE			08-JUN-2007 21:41	1.0				2	
037	f08s0037	X				08-JUN-2007 21:47	1.0				2	
038	f08s0038	CCB				08-JUN-2007 21:53	1.0	1.0		1	2	
039	f08s0039	CCB				08-JUN-2007 21:59	1.0	1.0	2	1	2	
040	f08s0040	MSS	195247-006	126087	Filtra	08-JUN-2007 22:05	10.0	1.0	1	1	2	
041	f08s0041	MS	QC391446	126087	Filtra	08-JUN-2007 22:11	10.0	1.0	2	1	2	
042	f08s0042	MSD	QC391447	126087	Filtra	08-JUN-2007 22:17	10.0	1.0	2	1	2	
043	f08s0043	SAMPLE	195241-002	126087	Filtra	08-JUN-2007 22:23	10.0	1.0	1	1	2	1:MG=49050.0
044	f08s0044	SAMPLE	195241-004	126087	Filtra	08-JUN-2007 22:29	10.0	1.0		1	2	
045	f08s0045	SAMPLE	195241-005	126087	Filtra	08-JUN-2007 22:35	10.0	1.0		1	2	
046	f08s0046	SAMPLE	195241-007	126087	Filtra	08-JUN-2007 22:41	10.0	1.0	1	1	2	1:MG=52350.0
047	f08s0047	SAMPLE	195247-001	126087	Water	08-JUN-2007 22:47	10.0	1.0	2	1	2	1:NA=20780.0
048	f08s0048	SAMPLE	195247-002	126087	Water	08-JUN-2007 22:53	10.0	1.0	2	1	2	1:MN=342.000
049	f08s0049	SAMPLE	195247-001	126087	Filtra	08-JUN-2007 22:58	10.0	1.0	8	1	2	7:MG=69060.0
050	f08s0050	X	RINSE			08-JUN-2007 23:04	1.0				2	
051	f08s0051	X	RINSE			08-JUN-2007 23:10	1.0				2	
052	f08s0052	X	RINSE			08-JUN-2007 23:16	1.0				2	
053	f08s0053	CCV				08-JUN-2007 23:22	1.0	1.0	1	1	14 2	
054	f08s0054	X	RINSE			08-JUN-2007 23:28	1.0				2	
055	f08s0055	X				08-JUN-2007 23:34	1.0				2	
056	f08s0056	CCB				08-JUN-2007 23:40	1.0	1.0	2	1	2	
057	f08s0057	X				08-JUN-2007 23:46	1.0				2	
058	f08s0058	SAMPLE	195247-002	126087	Filtra	08-JUN-2007 23:52	10.0	1.0	7	1	2	3:MG=23740.0
059	f08s0059	X	RINSE			08-JUN-2007 23:58	1.0				2	
060	f08s0060	X	RINSE			09-JUN-2007 00:04	1.0				2	
061	f08s0061	X	RINSE			09-JUN-2007 00:10	1.0				2	
062	f08s0062	CCV				09-JUN-2007 00:16	1.0	1.0	3	1	14 2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67230047 Instrument: MET06 Agilent ICP-MS MET06 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f08s0063	X	RINSE			09-JUN-2007 00:22	1.0					2	
064	f08s0064	CCB				09-JUN-2007 00:28	1.0	1.0	5		1	2	
065	f08s0065	X				09-JUN-2007 00:33	1.0					2	
066	f08s0066	X				09-JUN-2007 00:39	1.0					2	
067	f08s0067	ICSA				09-JUN-2007 00:45	1.0	1.0			1	10 2	7:CA=368100
068	f08s0068	ICSAB				09-JUN-2007 00:52	1.0	1.0			1	11 2	11:CA=361400

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897238321001
Units : ug/L

Date : 14-JUN-2007 12:21
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f1410005	897238321005		14-JUN-2007 12:27	S6414
L2	f1410006	897238321006		14-JUN-2007 12:33	S6416
L3	f1410007	897238321007		14-JUN-2007 12:38	S6417
L4	f1410008	897238321008		14-JUN-2007 12:44	S6418
L5	f1410009	897238321009		14-JUN-2007 12:50	S6412
L6	f1410010	897238321010		14-JUN-2007 12:57	S6413

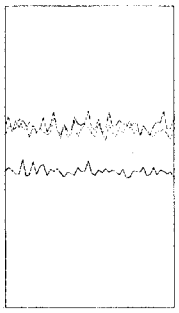
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4736	0.3867	0.3800	0.3468	0.3389	0.3349	BLNK	-0.8678	2.97863		0.3768	1.000	0.995	
Antimony	A	0.2715	0.1714	0.1763	0.1609	0.1716	0.1686	BLNK	-0.0121	5.91156		0.1867	1.000	0.995	
Barium	A	0.3402	0.0972	0.0525	0.0701	0.0374	0.0366	BLNK	-0.0182	27.1779		0.1057	0.997	0.995	
Beryllium	A	0.1433	0.1313	0.1385	0.1367	0.1374	0.1407	BLNK	-0.0011	7.13882		0.1380	1.000	0.995	
Cadmium	A	0.0474	0.0417	0.0421	0.0397	0.0395	0.0386	BLNK	-0.0068	25.7890		0.0415	1.000	0.995	
Calcium	A	0.1150	0.0318	0.0210	0.0115	0.0109	0.0106	BLNK	-67.374	94.2102		0.0335	1.000	0.995	
Lead	A	0.6300	0.5144	0.4646	0.4300	0.4390	0.4274	BLNK	-0.0206	2.32741		0.4842	1.000	0.995	
Magnesium	A	0.3973	0.3256	0.3309	0.2959	0.2873	0.2838	BLNK	-0.3465	3.51496		0.3201	1.000	0.995	
Molybdenum	A	0.1813	0.1248	0.1209	0.1123	0.1115	0.1185	BLNK	-0.0433	8.54399		0.1282	0.999	0.995	
Potassium	A	5.3623	1.1854	0.7821	0.4010	0.3612	0.3539	BLNK	-113.47	2.83305		1.4076	1.000	0.995	
Silver	A	0.2058	0.1827	0.1874	0.1785	0.1914	0.1837	BLNK	-0.0071	5.39993		0.1882	1.000	0.995	
Thallium	A	0.5824	0.4447	0.4542	0.4206	0.4547	0.4411	BLNK	-0.0186	2.25386		0.4663	1.000	0.995	
Arsenic	E	0.3914	0.3434	0.3065	0.3176	0.3143	0.3068	BLNK	-0.0332	3.24391		0.3300	1.000	0.995	
Chromium	E	4.6971	2.5413	2.4663	2.1754	2.1313	2.0632	BLNK	-0.0679	0.48165		2.6791	1.000	0.995	
Cobalt	E	4.0309	3.8504	3.7987	3.7203	3.6454	3.5396	BLNK	-0.0026	0.28082		3.7642	1.000	0.995	
Copper	E	45.345	8.6417	9.3033	3.9976	3.6771	3.5032	BLNK	-0.5548	0.28354		12.411	0.999	0.995	
Manganese	E	2.0019	1.0402	1.0233	0.9223	0.8999	0.8741	BLNK	-0.0312	1.13737		1.1270	1.000	0.995	
Nickel	E	5.4401	1.4199	1.2549	1.0366	1.0069	0.9697	BLNK	-0.1305	1.02410		1.8547	1.000	0.995	
Sodium	E	2.8243	0.7097	0.4920	0.2942	0.2574	0.2510	BLNK	-76.242	3.98119		0.8048	1.000	0.995	
Vanadium	E	3.3537	2.0274	1.8505	1.6439	1.6373	1.6027	BLNK	-0.1071	0.62164		2.0193	1.000	0.995	
Zinc	E	14.402	2.4833	1.2709	0.5690	0.4623	0.4429	BLNK	-1.1617	2.25283		3.2717	0.999	0.995	
Iron	H	0.6218	0.4894	0.4888	0.4490	0.4443	0.4317	BLNK	-0.6357	2.30285		0.4875	1.000	0.995	
Selenium	H	0.0735	0.0634	0.0698	0.0634	0.0642	0.0615	BLNK	-0.0154	16.1189		0.0659	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	32	50.00	13	100.0	12	1000	3	10000	1	20000	0
Antimony	A	0.100	48	0.500	-1	1.000	3	10.00	-5	100.0	1	200.0	0
Barium	A	0.100	806	0.500	160	1.000	41	10.00	90	100.0	2	200.0	-1
Beryllium	A	0.100	1	0.500	-6	1.000	-1	10.00	-2	100.0	-2	200.0	0
Cadmium	A	0.100	16	0.500	6	1.000	8	10.00	2	100.0	2	200.0	0
Calcium	A	10.00	310	50.00	65	100.0	31	1000	2	10000	2	20000	0
Lead	A	0.100	26	0.500	16	1.000	6	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	36	50.00	14	100.0	16	1000	4	10000	1	20000	0
Molybdenum	A	0.100	12	0.500	-2	1.000	-1	10.00	-4	100.0	-5	200.0	1
Potassium	A	10.00	284	50.00	9	100.0	8	1000	2	10000	1	20000	0
Silver	A	0.100	4	0.500	-3	1.000	0	10.00	-4	100.0	3	200.0	-1
Thallium	A	0.050	-6	0.250	-7	0.500	-1	5.000	-6	50.00	2	100.0	-1
Arsenic	E	0.100	-6	0.500	5	1.000	-4	10.00	3	100.0	2	200.0	0
Chromium	E	0.100	58	0.500	9	1.000	12	10.00	4	100.0	3	200.0	-1
Cobalt	E	0.100	11	0.500	8	1.000	6	10.00	4	100.0	2	200.0	-1
Copper	E	0.100	631	0.500	34	1.000	108	10.00	8	100.0	4	200.0	-1
Manganese	E	0.100	97	0.500	12	1.000	13	10.00	5	100.0	2	200.0	-1
Nickel	E	0.100	327	0.500	19	1.000	15	10.00	5	100.0	3	200.0	-1
Sodium	E	10.00	262	50.00	30	100.0	20	1000	10	10000	2	20000	0
Vanadium	E	0.100	1	0.500	5	1.000	4	10.00	1	100.0	2	200.0	0
Zinc	E	0.100	1983	0.500	227	1.000	70	10.00	17	100.0	3	200.0	-1
Iron	H	10.00	37	50.00	11	100.0	12	1000	3	10000	2	20000	-1
Selenium	H	0.100	3	0.500	-1	1.000	11	10.00	2	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

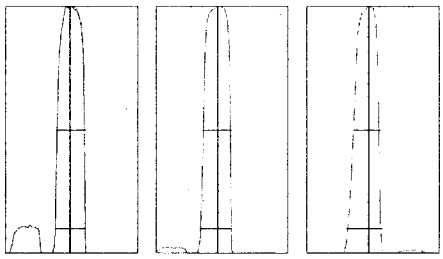
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	21444.0	22591.6	3.12	3.10
89	50,000	31330.0	30188.2	3.60	3.00
205	50,000	29632.0	29322.4	3.09	7.90

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.900%
Doubly Charged: 70/140 2.434%



m/z:	7	89	205
Height:	22,815	30,185	29,516
Axis:	7.00	88.95	204.95
W-50%:	0.65	0.65	0.60
W-10%:	0.700	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.68	V
Smpl Depth	9	mm
Torch-H	0.4	mm
Torch-V	0.3	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-165	V
Omega Bias-ce	-30	V
Omega Lens-ce	-2	V
Cell Entrance	-30	V
QP Focus	7	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	126	
AMU Offset	126	
Axis Gain	0.9997	
Axis Offset	0.04	
QP Bias	-1	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1670	V
Pulse HV	1070	V

===Reaction Cell===

Reaction Mode	OFF	
H2 Gas	0	mL/min
He Gas	0	mL/min
Optional Gas	---	%

Tune File : he.u

He Gas:	5.5	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	27.1	17.45
59	4881.7	3.02
89	3669.8	3.52

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	2779.1	3.79
78	0.3	187.30
89	26278.8	3.24

Integration Time: 0.1000sec

Generated : Jun 14, 2007 11:35:05
Printed : Jun 14, 2007 11:36:45 : 00240

P/A Factor Tuning Report

Acquired:Jun 14 2007 11:52 am

Mass[amu]	Element	P/A Factor
6	Li	0.062939
7	(Li)	Sensitivity too low
9	Be	0.072176
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.087631
45	Sc	0.086900
51	V	0.088135
52	Cr	0.092446
55	Mn	0.093325
56	Fe	Sensitivity too high
59	Co	0.096422
60	Ni	Sensitivity too low
63	Cu	0.102139
65	Cu	0.102353
66	Zn	Sensitivity too low
72	Ge	0.100167
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098109
98	Mo	0.099236
99	(Ru)	Sensitivity too low
107	Ag	0.106688
111	Cd	Sensitivity too low
115	In	0.105676
118	(In)	0.105310
121	Sb	0.105382
137	Ba	Sensitivity too low
159	Tb	0.108318
205	Tl	0.113774
206	(Pb)	0.114337
207	(Pb)	0.114473
208	Pb	0.113888
209	Bi	0.114090

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

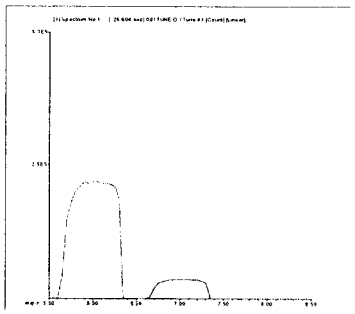
:00241

6020 QC Tune Report

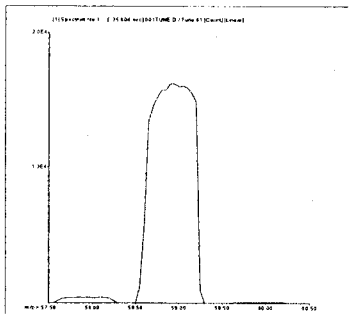
Data File: C:\ICPCHEM\1\DATA\07F14100.B\001TUNE.D
Date Acquired: Jun 14 2007 12:01 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

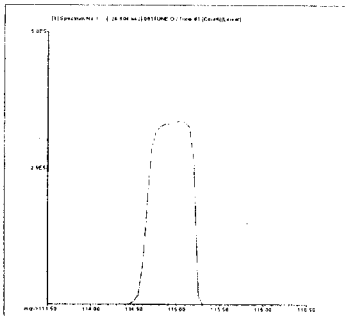
Element	Actual	Required	Flag
7 Li	0.49	5.00	
59 Co	0.35	5.00	
115 In	0.92	5.00	
205 Tl	0.43	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

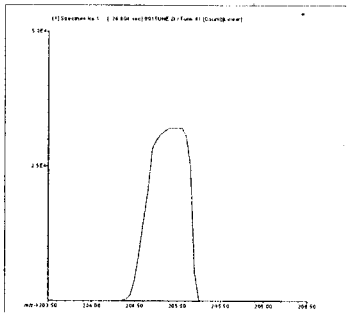
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

00243

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004C
Date Acquired: Jun 14 2007 12:19 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2123286.00	A	5430.00	0.26
7	(Li)		P		
9	Be	6.67	P	6.67	100.00
23	Na	23306.57	P	452.80	1.94
24	Mg	3815.03	P	109.20	2.86
27	Al	11278.81	P	169.50	1.50
39	K	1550541.00	A	2445.00	0.16
44	Ca	27682.83	P	553.70	2.00
45	Sc	853178.63	A	5859.00	0.69
45	Sc	60849.13	P	255.40	0.42
45	Sc	1935693.00	A	18210.00	0.94
51	V	209.63	P	7.14	3.41
52	Cr	171.48	P	3.90	2.28
55	Mn	33.33	P	8.82	26.46
56	Fe	4710.39	P	106.80	2.27
59	Co	11.48	P	3.39	29.56
60	Ni	155.19	P	24.78	15.97
63	Cu	1827.16	P	66.12	3.62
65	Cu	858.55	P	35.91	4.18
66	Zn	481.49	P	6.79	1.41
72	Ge	210213.09	P	1424.00	0.68
72	Ge	46689.03	P	521.30	1.12
75	As	9.56	P	3.42	35.80
78	Se	4.00	P	1.33	33.33
89	Y	2820269.00	A	9642.00	0.34
98	Mo	285.57	P	19.53	6.84
107	Ag	77.78	P	15.03	19.32
111	Cd	15.56	P	10.18	65.44
115	In	2970271.00	A	6980.00	0.24
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	121.12	P	17.11	14.13
137	Ba	63.34	P	6.67	10.53
159	Tb	4719676.00	A	28440.00	0.60
205	Tl	562.25	P	6.94	1.23
208	Pb	835.60	P	38.92	4.66
209	Bi	3398867.00	A	28920.00	0.85

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\005CALS.D\005CALS.D#
Date Acquired: Jun 14 2007 12:25 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2125205.00	A	4400.00	0.21
7 (Li)		P		
9 Be	608.92	P	40.74	6.69
23 Na	34807.84	P	399.60	1.15
24 Mg	155687.00	P	482.30	0.31
27 Al	185584.91	P	2610.00	1.41
39 K	2101065.00	A	6999.00	0.33
44 Ca	45056.55	P	420.80	0.93
45 Sc	912479.69	A	6363.00	0.70
45 Sc	61625.03	P	737.80	1.20
45 Sc	1959185.00	A	14270.00	0.73
51 V	413.34	P	9.10	2.20
52 Cr	578.91	P	6.94	1.20
55 Mn	246.67	P	22.96	9.31
56 Fe	113465.90	P	425.20	0.37
59 Co	496.68	P	21.46	4.32
60 Ni	670.39	P	7.14	1.07
63 Cu	4272.85	P	26.68	0.62
65 Cu	2086.46	P	20.62	0.99
66 Zn	1357.11	P	15.00	1.11
72 Ge	220831.50	P	151.80	0.07
72 Ge	47117.35	P	455.70	0.97
75 As	36.89	P	2.14	5.81
78 Se	32.44	P	2.04	6.28
89 Y	2822875.00	A	22590.00	0.80
98 Mo	1023.41	P	67.67	6.61
99 (Ru)	6.67	P	6.67	100.00
107 Ag	1228.98	P	33.56	2.73
111 Cd	283.35	P	10.00	3.53
115 In	2987017.00	A	27640.00	0.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1621.26	P	70.27	4.33
137 Ba	3252.69	P	146.20	4.49
159 Tb	4779337.00	A	47190.00	0.99
205 Tl	2003.54	P	38.45	1.92
208 Pb	6021.82	P	95.84	1.59
209 Bi	3440637.00	A	22180.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2125205.30	0.21	2123286.00	100.1	80 - 120	
45 Sc	912479.69	0.70	853178.63	107.0	80 - 120	
45 Sc	61625.03	1.20	60849.13	101.3	80 - 120	
45 Sc	1959184.80	0.73	1935692.90	101.2	80 - 120	
72 Ge	220831.48	0.07	210213.11	105.1	80 - 120	
72 Ge	47117.35	0.97	46689.04	100.9	80 - 120	
89 Y	2822875.30	0.80	2820268.80	100.1	80 - 120	
115 In	2987016.80	0.93	2970271.30	100.6	80 - 120	
159 Tb	4779337.50	0.99	4719676.00	101.3	80 - 120	
209 Bi	3440636.80	0.64	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\006CALS.D\006CALS.D#
Date Acquired: Jun 14 2007 12:30 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2115825.00	A	35250.00	1.67
7 (Li)		P		
9 Be	2778.11	P	94.85	3.41
23 Na	43015.66	P	443.60	1.03
24 Mg	634192.19	P	4000.00	0.63
27 Al	753216.50	P	9579.00	1.27
39 K	2308639.00	A	16880.00	0.73
44 Ca	61903.68	P	470.60	0.76
45 Sc	911309.50	A	9263.00	1.02
45 Sc	60607.47	P	551.40	0.91
45 Sc	1947585.00	A	21870.00	1.12
51 V	1228.58	P	21.27	1.73
52 Cr	1540.09	P	31.35	2.04
55 Mn	630.39	P	51.09	8.10
56 Fe	445953.91	P	843.90	0.19
59 Co	2333.90	P	115.10	4.93
60 Ni	860.78	P	41.24	4.79
63 Cu	4042.42	P	47.62	1.18
65 Cu	1894.95	P	12.39	0.65
66 Zn	1161.54	P	17.01	1.46
72 Ge	219898.70	P	999.60	0.45
72 Ge	46779.32	P	392.20	0.84
75 As	160.67	P	12.22	7.61
78 Se	139.34	P	13.32	9.56
89 Y	2820691.00	A	28550.00	1.01
98 Mo	3520.53	P	143.80	4.08
99 (Ru)	11.11	P	8.39	75.50
107 Ag	5434.48	P	56.89	1.05
111 Cd	1241.21	P	29.88	2.41
115 In	2975496.00	A	25430.00	0.85
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5099.93	P	83.32	1.63
137 Ba	4614.23	P	202.30	4.38
159 Tb	4748127.00	A	46280.00	0.97
205 Tl	7608.97	P	208.60	2.74
208 Pb	24421.42	P	175.50	0.72
209 Bi	3421595.00	A	27440.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2115825.50	1.67	2123286.00	99.6	80 - 120	
45 Sc	911309.50	1.02	853178.63	106.8	80 - 120	
45 Sc	60607.47	0.91	60849.13	99.6	80 - 120	
45 Sc	1947584.50	1.12	1935692.90	100.6	80 - 120	
72 Ge	219898.77	0.45	210213.11	104.6	80 - 120	
72 Ge	46779.32	0.84	46689.04	100.2	80 - 120	
89 Y	2820691.50	1.01	2820268.80	100.0	80 - 120	
115 In	2975496.30	0.85	2970271.30	100.2	80 - 120	
159 Tb	4748127.00	0.97	4719676.00	100.6	80 - 120	
209 Bi	3421595.30	0.80	3398866.80	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\007CALS.D\007CALS.D#
Date Acquired: Jun 14 2007 12:36 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:34 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2118959.00	A	16590.00	0.78
7	(Li)		P		
9	Be	5867.90	P	225.20	3.84
23	Na	58973.49	P	713.10	1.21
24	Mg	1282847.00	A	16670.00	1.30
27	Al	1473214.00	A	23330.00	1.58
39	K	3031913.00	A	6112.00	0.20
44	Ca	81475.94	P	452.90	0.56
45	Sc	899879.81	A	2883.00	0.32
45	Sc	59928.27	P	559.50	0.93
45	Sc	1938505.00	A	14250.00	0.74
51	V	2217.96	P	68.51	3.09
52	Cr	2956.24	P	55.12	1.86
55	Mn	1226.73	P	68.60	5.59
56	Fe	879706.00	A	6074.00	0.69
59	Co	4552.94	P	89.93	1.98
60	Ni	1503.80	P	30.26	2.01
63	Cu	8604.31	P	119.20	1.39
65	Cu	4100.95	P	66.82	1.63
66	Zn	1175.24	P	16.83	1.43
72	Ge	215496.80	P	767.40	0.36
72	Ge	46242.92	P	580.40	1.26
75	As	283.34	P	9.45	3.34
78	Se	300.67	P	24.23	8.06
89	Y	2839735.00	A	7756.00	0.27
98	Mo	6866.22	P	140.00	2.04
99	(Ru)	1.11	P	1.93	173.24
107	Ag	11167.87	P	237.20	2.12
111	Cd	2508.08	P	167.10	6.66
115	In	2979888.00	A	24150.00	0.81
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	10506.24	P	263.90	2.51
137	Ba	4996.60	P	125.40	2.51
159	Tb	4754287.00	A	34400.00	0.72
205	Tl	15624.66	P	171.20	1.10
208	Pb	44177.64	P	416.20	0.94
209	Bi	3439964.00	A	12710.00	0.37

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	2118958.50	0.78	2123286.00	99.8	80 - 120	
45	Sc	899879.75	0.32	853178.63	105.5	80 - 120	
45	Sc	59928.27	0.93	60849.13	98.5	80 - 120	
45	Sc	1938505.40	0.74	1935692.90	100.1	80 - 120	
72	Ge	215496.77	0.36	210213.11	102.5	80 - 120	
72	Ge	46242.92	1.26	46689.04	99.0	80 - 120	
89	Y	2839734.50	0.27	2820268.80	100.7	80 - 120	
115	In	2979887.80	0.81	2970271.30	100.3	80 - 120	
159	Tb	4754286.50	0.72	4719676.00	100.7	80 - 120	
209	Bi	3439963.80	0.37	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\008CALS.D\008CALS.D#
Date Acquired: Jun 14 2007 12:42 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2157544.00	A	30610.00	1.42
7 (Li)		P		
9 Be	58997.63	P	346.10	0.59
23 Na	363894.00	P	2845.00	0.78
24 Mg	11948130.00	A	67620.00	0.57
27 Al	14002570.00	A	84450.00	0.60
39 K	16193800.00	A	213900.00	1.32
44 Ca	466377.91	P	5160.00	1.11
45 Sc	910392.13	A	3317.00	0.36
45 Sc	61841.13	P	492.90	0.80
45 Sc	2019373.00	A	25040.00	1.24
51 V	20330.73	P	140.90	0.69
52 Cr	26904.37	P	125.70	0.47
55 Mn	11406.49	P	88.72	0.78
56 Fe	8175714.00	A	32430.00	0.40
59 Co	46010.13	P	351.20	0.76
60 Ni	12819.08	P	178.30	1.39
63 Cu	38079.33	P	272.20	0.71
65 Cu	18525.26	P	266.60	1.44
66 Zn	5419.89	P	34.99	0.65
72 Ge	221030.41	P	677.70	0.31
72 Ge	47627.43	P	168.30	0.35
75 As	3025.65	P	18.56	0.61
78 Se	2801.16	P	28.68	1.02
89 Y	2935243.00	A	21140.00	0.72
98 Mo	65940.08	P	476.30	0.72
99 (Ru)	10.00	P	12.02	120.20
107 Ag	109637.00	P	1165.00	1.06
111 Cd	24401.69	P	325.40	1.33
115 In	3071324.00	A	13100.00	0.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	98854.13	P	348.50	0.35
137 Ba	69323.04	P	944.10	1.36
159 Tb	4941350.00	A	33400.00	0.68
205 Tl	147109.91	P	1307.00	0.89
208 Pb	424911.00	P	1750.00	0.41
209 Bi	3497595.00	A	10790.00	0.31

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2157544.30	1.42	2123286.00	101.6	80 - 120	
45 Sc	910392.13	0.36	853178.63	106.7	80 - 120	
45 Sc	61841.13	0.80	60849.13	101.6	80 - 120	
45 Sc	2019372.90	1.24	1935692.90	104.3	80 - 120	
72 Ge	221030.42	0.31	210213.11	105.1	80 - 120	
72 Ge	47627.43	0.35	46689.04	102.0	80 - 120	
89 Y	2935242.80	0.72	2820268.80	104.1	80 - 120	
115 In	3071324.50	0.43	2970271.30	103.4	80 - 120	
159 Tb	4941349.50	0.68	4719676.00	104.7	80 - 120	
209 Bi	3497595.30	0.31	3398866.80	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\009CALS.D\009CALS.D#
Date Acquired: Jun 14 2007 12:48 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2149364.00	A	11980.00	0.56
7	(Li)		P		
9	Be	590824.63	P	2143.00	0.36
23	Na	3264606.00	A	49480.00	1.52
24	Mg	############	A	935700.00	0.78
27	Al	############	A	928200.00	0.65
39	K	############	A	947700.00	0.63
44	Ca	4562030.00	A	30600.00	0.67
45	Sc	906293.69	A	5379.00	0.59
45	Sc	63411.82	P	1148.00	1.81
45	Sc	2095251.00	A	17920.00	0.86
51	V	207633.00	P	2770.00	1.33
52	Cr	270273.31	P	2676.00	0.99
55	Mn	114124.60	P	1490.00	1.31
56	Fe	80539136.00	A	341400.00	0.42
59	Co	462253.31	P	2783.00	0.60
60	Ni	127680.80	P	1275.00	1.00
63	Cu	356467.00	P	3084.00	0.87
65	Cu	175722.09	P	672.50	0.38
66	Zn	44821.78	P	726.50	1.62
72	Ge	219754.30	P	1016.00	0.46
72	Ge	48470.79	P	145.80	0.30
75	As	30465.20	P	285.40	0.94
78	Se	28194.31	P	27.05	0.10
89	Y	3034818.00	A	13300.00	0.44
98	Mo	676509.50	P	5545.00	0.82
99	(Ru)	15.56	P	9.62	61.86
107	Ag	1193600.00	A	12960.00	1.09
111	Cd	246082.20	P	2770.00	1.13
115	In	3118424.00	A	35970.00	1.15
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1070428.00	A	12580.00	1.18
137	Ba	376012.31	P	1134.00	0.30
159	Tb	5025087.00	A	20820.00	0.41
205	Tl	1570654.00	A	21350.00	1.36
208	Pb	4411741.00	A	8087.00	0.18
209	Bi	3454579.00	A	33710.00	0.98

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	2149364.30	0.56	2123286.00	101.2	80 - 120	
45	Sc	906293.69	0.59	853178.63	106.2	80 - 120	
45	Sc	63411.82	1.81	60849.13	104.2	80 - 120	
45	Sc	2095250.80	0.86	1935692.90	108.2	80 - 120	
72	Ge	219754.34	0.46	210213.11	104.5	80 - 120	
72	Ge	48470.79	0.30	46689.04	103.8	80 - 120	
89	Y	3034817.80	0.44	2820268.80	107.6	80 - 120	
115	In	3118424.00	1.15	2970271.30	105.0	80 - 120	
159	Tb	5025087.50	0.41	4719676.00	106.5	80 - 120	
209	Bi	3454579.30	0.98	3398866.80	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\010CALS.D\010CALS.D#
Date Acquired: Jun 14 2007 12:55 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2093192.00	A	28740.00	1.37
7 (Li)		P		
9 Be	1178246.00	A	21430.00	1.82
23 Na	6233624.00	A	98240.00	1.58
24 Mg	############	A	2036000.00	0.87
27 Al	############	A	1294000.00	0.47
39 K	############	A	550700.00	0.19
44 Ca	8692791.00	A	43440.00	0.50
45 Sc	885110.88	A	4521.00	0.51
45 Sc	62087.48	P	797.60	1.28
45 Sc	2050386.00	A	22870.00	1.12
51 V	398028.91	P	4430.00	1.11
52 Cr	512373.31	P	4165.00	0.81
55 Mn	217084.30	P	1639.00	0.76
56 Fe	############	A	647500.00	0.42
59 Co	879003.88	P	5606.00	0.64
60 Ni	240794.50	P	2147.00	0.89
63 Cu	665169.50	P	4334.00	0.65
65 Cu	328918.81	P	2902.00	0.88
66 Zn	84105.08	P	869.40	1.03
72 Ge	215280.00	P	1443.00	0.67
72 Ge	47469.54	P	400.30	0.84
75 As	58261.38	P	736.10	1.26
78 Se	52971.80	P	339.60	0.64
89 Y	2974006.00	A	21420.00	0.72
98 Mo	1409516.00	A	5639.00	0.40
99 (Ru)	22.22	P	6.94	31.22
107 Ag	2216227.00	A	16890.00	0.76
111 Cd	465855.81	P	5862.00	1.26
115 In	3016750.00	A	34120.00	1.13
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2034085.00	A	5341.00	0.26
137 Ba	715974.50	P	2839.00	0.40
159 Tb	4895945.00	A	35310.00	0.72
205 Tl	2948132.00	A	21010.00	0.71
208 Pb	8369924.00	A	45790.00	0.55
209 Bi	3341917.00	A	48380.00	1.45

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2093191.90	1.37	2123286.00	98.6	80 - 120	
45 Sc	885110.94	0.51	853178.63	103.7	80 - 120	
45 Sc	62087.48	1.28	60849.13	102.0	80 - 120	
45 Sc	2050386.40	1.12	1935692.90	105.9	80 - 120	
72 Ge	215279.95	0.67	210213.11	102.4	80 - 120	
72 Ge	47469.54	0.84	46689.04	101.7	80 - 120	
89 Y	2974005.50	0.72	2820268.80	105.5	80 - 120	
115 In	3016749.80	1.13	2970271.30	101.6	80 - 120	
159 Tb	4895945.00	0.72	4719676.00	103.7	80 - 120	
209 Bi	3341917.30	1.45	3398866.80	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321012 File : f1410012 Time : 14-JUN-2007 13:11
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3768	0.3399	10000	10120	ug/L	1	10	
Antimony	A	0.1867	0.1712	100.0	101.2	ug/L	1	10	
Barium	A	0.1057	0.0378	100.0	102.6	ug/L	3	10	
Beryllium	A	0.1380	0.1409	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0415	0.0400	100.0	103.2	ug/L	3	10	
Calcium	A	0.0335	0.0111	10000	10380	ug/L	4	10	
Lead	A	0.4842	0.4284	100.0	99.68	ug/L	0	10	
Magnesium	A	0.3201	0.2906	10000	10210	ug/L	2	10	
Molybdenum	A	0.1282	0.1122	100.0	95.85	ug/L	-4	10	
Potassium	A	1.4076	0.3667	10000	10270	ug/L	3	10	
Silver	A	0.1882	0.1921	100.0	103.7	ug/L	4	10	
Thallium	A	0.4663	0.4543	50.00	51.17	ug/L	2	10	
Arsenic	E	0.3300	0.3183	100.0	103.2	ug/L	3	10	
Chromium	E	2.6791	2.1658	100.0	104.2	ug/L	4	10	
Cobalt	E	3.7642	3.6964	100.0	103.8	ug/L	4	10	
Copper	E	12.411	3.6773	100.0	103.7	ug/L	4	10	
Manganese	E	1.1270	0.9082	100.0	103.3	ug/L	3	10	
Nickel	E	1.8547	1.0238	100.0	104.7	ug/L	5	10	
Sodium	E	0.8048	0.2600	10000	10270	ug/L	3	10	
Vanadium	E	2.0193	1.6521	100.0	102.6	ug/L	3	10	
Zinc	E	3.2717	0.4661	100.0	103.8	ug/L	4	10	
Iron	H	0.4875	0.4535	10000	10440	ug/L	4	10	
Selenium	H	0.0659	0.0646	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2125998	0.13
Scandium	A	1935693	2082969	7.61
Scandium	E	60849	63401	4.19
Scandium	H	853179	895502	4.96
Germanium	H	210213	219107	4.23
Germanium	E	46689	48897	4.73
Indium	A	2970271	3128469	5.33
Bismuth	A	3398867	3489946	2.68
Yttrium	A	2820269	3031824	7.50
Terbium	A	4719676	5033023	6.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321015 File : f1410015 Time : 14-JUN-2007 13:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.201]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01789]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007702]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01254]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.02084]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01638]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.336]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01016]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009380]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.005686]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.004943]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.009330]	0.1000	0.002654	ug/L	!ib
Zinc	E	0.1191	0.1000	0.04457	ug/L	ib ***
Iron	H	[1.410]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01112]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2178902	2.62
Scandium	A	1935693	2043382	5.56
Scandium	E	60849	63074	3.66
Scandium	H	853179	902139	5.74
Germanium	H	210213	223063	6.11
Germanium	E	46689	48402	3.67
Indium	A	2970271	3169218	6.70
Bismuth	A	3398867	3611754	6.26
Yttrium	A	2820269	3006180	6.59
Terbium	A	4719676	5065969	7.34

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321017 File : f1410017 Time : 14-JUN-2007 13:40
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07234]	0.1000	ug/L	
Barium	A	0.9534	0.1000	ug/L	
Beryllium	A	[0.03115]	0.1000	ug/L	
Cadmium	A	0.8629	0.1000	ug/L	
Lead	A	0.4174	0.1000	ug/L	
Silver	A	0.1947	0.1000	ug/L	
Thallium	A	[0.03575]	0.05000	ug/L	
Arsenic	E	0.2491	0.1000	ug/L	
Chromium	E	1.307	0.1000	ug/L	
Cobalt	E	0.1911	0.1000	ug/L	
Copper	E	1.345	0.1000	ug/L	
Manganese	E	0.5379	0.1000	ug/L	
Nickel	E	1.082	0.1000	ug/L	
Vanadium	E	[0.02470]	0.1000	ug/L	
Zinc	E	2.085	0.1000	ug/L	
Selenium	H	[0.04793]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88390	ug/L	88
Calcium	A	300000	272500	ug/L	91
Magnesium	A	100000	86490	ug/L	86
Molybdenum	A	2000	1764	ug/L	88
Potassium	A	100000	89720	ug/L	90
Sodium	E	250000	219000	ug/L	88
Iron	H	250000	220700	ug/L	88

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1845484	-13.08
Scandium	A	1935693	2011932	3.94
Scandium	E	60849	63325	4.07
Scandium	H	853179	864634	1.34
Germanium	H	210213	201150	-4.31
Germanium	E	46689	46587	-0.22
Indium	A	2970271	2902550	-2.28
Bismuth	A	3398867	3043579	-10.45
Yttrium	A	2820269	2998242	6.31
Terbium	A	4719676	4871820	3.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321018 File : f1410018 Time : 14-JUN-2007 13:46
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96080	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	297000	ug/L	-1		
Magnesium	A	100000	93080	ug/L	-7		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97620	ug/L	-2		
Silver	A	50.00	45.19	ug/L	-10	20	
Arsenic	E	100.0	107.3	ug/L	7	20	
Chromium	E	200.0	198.8	ug/L	-1	20	
Cobalt	E	200.0	187.4	ug/L	-6	20	
Copper	E	200.0	185.2	ug/L	-7	20	
Manganese	E	200.0	200.8	ug/L	0	20	
Nickel	E	200.0	183.9	ug/L	-8	20	
Sodium	E	250000	238200	ug/L	-5		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	96.55	ug/L	-3	20	
Iron	H	250000	236000	ug/L	-6		
Selenium	H	100.0	106.3	ug/L	6	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	864005	1.27
Scandium	A	1935693	1966954	1.61
Scandium	E	60849	62771	3.16
Germanium	H	210213	200194	-4.77
Germanium	E	46689	45963	-1.56
Indium	A	2970271	2876364	-3.16
Yttrium	A	2820269	2953598	4.73

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321032 File : f1410032 Time : 14-JUN-2007 15:08
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3293	10000	9806	ug/L	-2	10	
Antimony	A	0.1867	0.1719	100.0	101.6	ug/L	2	10	
Barium	A	0.1057	0.0377	100.0	102.4	ug/L	2	10	
Beryllium	A	0.1380	0.1380	100.0	98.52	ug/L	-1	10	
Cadmium	A	0.0415	0.0393	100.0	101.4	ug/L	1	10	
Calcium	A	0.0335	0.0109	10000	10200	ug/L	2	10	
Lead	A	0.4842	0.4215	100.0	98.07	ug/L	-2	10	
Magnesium	A	0.3201	0.2809	10000	9873	ug/L	-1	10	
Molybdenum	A	0.1282	0.1100	100.0	93.94	ug/L	-6	10	
Potassium	A	1.4076	0.3607	10000	10110	ug/L	1	10	
Silver	A	0.1882	0.1885	100.0	101.8	ug/L	2	10	
Thallium	A	0.4663	0.4426	50.00	49.86	ug/L	0	10	
Arsenic	E	0.3300	0.3162	100.0	102.5	ug/L	3	10	
Chromium	E	2.6791	2.1217	100.0	102.1	ug/L	2	10	
Cobalt	E	3.7642	3.6262	100.0	101.8	ug/L	2	10	
Copper	E	12.411	3.6010	100.0	101.5	ug/L	2	10	
Manganese	E	1.1270	0.8949	100.0	101.8	ug/L	2	10	
Nickel	E	1.8547	1.0001	100.0	102.3	ug/L	2	10	
Sodium	E	0.8048	0.2511	10000	9922	ug/L	-1	10	
Vanadium	E	2.0193	1.6220	100.0	100.7	ug/L	1	10	
Zinc	E	3.2717	0.4573	100.0	101.9	ug/L	2	10	
Iron	H	0.4875	0.4450	10000	10250	ug/L	3	10	
Selenium	H	0.0659	0.0635	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2066227	-2.69
Scandium	A	1935693	2089148	7.93
Scandium	E	60849	65844	8.21
Scandium	H	853179	899458	5.42
Germanium	H	210213	221220	5.24
Germanium	E	46689	50519	8.20
Indium	A	2970271	3199101	7.70
Bismuth	A	3398867	3551272	4.48
Yttrium	A	2820269	3118381	10.57
Terbium	A	4719676	5126287	8.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321034 File : f1410034 Time : 14-JUN-2007 15:21
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01020]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01304]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.009081]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01658]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.8256]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008324]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01488]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01798]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01037]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01853]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.06537]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.7718]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.003412]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060529	-2.96
Scandium	A	1935693	1998648	3.25
Scandium	E	60849	63130	3.75
Scandium	H	853179	845745	-0.87
Germanium	H	210213	208799	-0.67
Germanium	E	46689	48706	4.32
Indium	A	2970271	3157907	6.32
Bismuth	A	3398867	3575553	5.20
Yttrium	A	2820269	2999921	6.37
Terbium	A	4719676	5020426	6.37

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321036 File : f1410036 Time : 14-JUN-2007 15:33
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06744]	0.1000	ug/L	
Barium	A	0.9319	0.1000	ug/L	
Beryllium	A	[0.02007]	0.1000	ug/L	
Cadmium	A	0.8898	0.1000	ug/L	
Lead	A	0.4060	0.1000	ug/L	
Silver	A	0.1986	0.1000	ug/L	
Thallium	A	[0.02499]	0.05000	ug/L	
Arsenic	E	0.2279	0.1000	ug/L	
Chromium	E	1.281	0.1000	ug/L	
Cobalt	E	0.1978	0.1000	ug/L	
Copper	E	1.319	0.1000	ug/L	
Manganese	E	0.5245	0.1000	ug/L	
Nickel	E	1.106	0.1000	ug/L	
Vanadium	E	[0.02397]	0.1000	ug/L	
Zinc	E	2.143	0.1000	ug/L	
Selenium	H	[0.02872]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88230	ug/L	88
Calcium	A	300000	276500	ug/L	92
Magnesium	A	100000	85780	ug/L	86
Molybdenum	A	2000	1769	ug/L	88
Potassium	A	100000	90480	ug/L	90
Sodium	E	250000	214700	ug/L	86
Iron	H	250000	218100	ug/L	87

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1740184	-18.04
Scandium	A	1935693	1956040	1.05
Scandium	E	60849	63764	4.79
Scandium	H	853179	848673	-0.53
Germanium	H	210213	198888	-5.39
Germanium	E	46689	46943	0.54
Indium	A	2970271	2900425	-2.35
Bismuth	A	3398867	3036197	-10.67
Yttrium	A	2820269	2975475	5.50
Terbium	A	4719676	4831390	2.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321037 File : f1410037 Time : 14-JUN-2007 15:39
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94480	ug/L	-6		
Cadmium	A	100.0	99.31	ug/L	-1	20	
Calcium	A	300000	295000	ug/L	-2		
Magnesium	A	100000	91410	ug/L	-9		
Molybdenum	A	2000	1901	ug/L	-5		
Potassium	A	100000	96800	ug/L	-3		
Silver	A	50.00	44.79	ug/L	-10	20	
Arsenic	E	100.0	106.3	ug/L	6	20	
Chromium	E	200.0	194.6	ug/L	-3	20	
Cobalt	E	200.0	183.7	ug/L	-8	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	179.8	ug/L	-10	20	
Sodium	E	250000	230200	ug/L	-8		
Vanadium	E	200.0	196.6	ug/L	-2	20	
Zinc	E	100.0	94.24	ug/L	-6	20	
Iron	H	250000	235400	ug/L	-6		
Selenium	H	100.0	104.0	ug/L	4	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	851598	-0.19
Scandium	A	1935693	1925910	-0.51
Scandium	E	60849	62621	2.91
Germanium	H	210213	199251	-5.21
Germanium	E	46689	45882	-1.73
Indium	A	2970271	2848256	-4.11
Yttrium	A	2820269	2921982	3.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321053 File : f1410053 Time : 14-JUN-2007 17:19
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3318	10000	9882	ug/L	-1	10	
Antimony	A	0.1867	0.1686	100.0	99.65	ug/L	0	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1355	100.0	96.71	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.4	ug/L	0	10	
Calcium	A	0.0335	0.0108	10000	10080	ug/L	1	10	
Lead	A	0.4842	0.4176	100.0	97.17	ug/L	-3	10	
Magnesium	A	0.3201	0.2833	10000	9958	ug/L	0	10	
Molybdenum	A	0.1282	0.1084	100.0	92.60	ug/L	-7	10	
Potassium	A	1.4076	0.3588	10000	10050	ug/L	1	10	
Silver	A	0.1882	0.1852	100.0	99.99	ug/L	0	10	
Thallium	A	0.4663	0.4395	50.00	49.51	ug/L	-1	10	
Arsenic	E	0.3300	0.3065	100.0	99.41	ug/L	-1	10	
Chromium	E	2.6791	2.0605	100.0	99.18	ug/L	-1	10	
Cobalt	E	3.7642	3.5063	100.0	98.46	ug/L	-2	10	
Copper	E	12.411	3.4763	100.0	98.01	ug/L	-2	10	
Manganese	E	1.1270	0.8786	100.0	99.90	ug/L	0	10	
Nickel	E	1.8547	0.9588	100.0	98.06	ug/L	-2	10	
Sodium	E	0.8048	0.2511	10000	9921	ug/L	-1	10	
Vanadium	E	2.0193	1.5843	100.0	98.38	ug/L	-2	10	
Zinc	E	3.2717	0.4425	100.0	98.53	ug/L	-1	10	
Iron	H	0.4875	0.4357	10000	10030	ug/L	0	10	
Selenium	H	0.0659	0.0623	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2158727	1.67
Scandium	A	1935693	2117451	9.39
Scandium	E	60849	65946	8.38
Scandium	H	853179	906373	6.23
Germanium	H	210213	222709	5.94
Germanium	E	46689	50550	8.27
Indium	A	2970271	3232612	8.83
Bismuth	A	3398867	3615349	6.37
Yttrium	A	2820269	3122011	10.70
Terbium	A	4719676	5231345	10.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321055 File : f1410055 Time : 14-JUN-2007 17:31
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01707]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006113]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008729]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01387]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.9751]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.845]	10.00	2.807	ug/L	!ib
Silver	A	[0.007633]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02817]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01738]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01162]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	0.1298	0.1000	0.002654	ug/L	ib ***
Zinc	E	[0.05617]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.5106]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2168826	2.14
Scandium	A	1935693	2030434	4.89
Scandium	E	60849	65550	7.73
Scandium	H	853179	908640	6.50
Germanium	H	210213	223541	6.34
Germanium	E	46689	49899	6.88
Indium	A	2970271	3202869	7.83
Bismuth	A	3398867	3630964	6.83
Yttrium	A	2820269	3023060	7.19
Terbium	A	4719676	5086287	7.77

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321069 File : f1410069 Time : 14-JUN-2007 19:00
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3270	10000	9741	ug/L	-3	10	
Antimony	A	0.1867	0.1656	100.0	97.88	ug/L	-2	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1342	100.0	95.77	ug/L	-4	10	
Cadmium	A	0.0415	0.0385	100.0	99.17	ug/L	-1	10	
Calcium	A	0.0335	0.0107	10000	10030	ug/L	0	10	
Lead	A	0.4842	0.4110	100.0	95.64	ug/L	-4	10	
Magnesium	A	0.3201	0.2801	10000	9845	ug/L	-2	10	
Molybdenum	A	0.1282	0.1073	100.0	91.63	ug/L	-8	10	
Potassium	A	1.4076	0.3549	10000	9940	ug/L	-1	10	
Silver	A	0.1882	0.1817	100.0	98.09	ug/L	-2	10	
Thallium	A	0.4663	0.4313	50.00	48.58	ug/L	-3	10	
Arsenic	E	0.3300	0.3025	100.0	98.09	ug/L	-2	10	
Chromium	E	2.6791	2.0178	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4224	100.0	96.11	ug/L	-4	10	
Copper	E	12.411	3.4303	100.0	96.71	ug/L	-3	10	
Manganese	E	1.1270	0.8723	100.0	99.18	ug/L	-1	10	
Nickel	E	1.8547	0.9431	100.0	96.45	ug/L	-4	10	
Sodium	E	0.8048	0.2473	10000	9769	ug/L	-2	10	
Vanadium	E	2.0193	1.5540	100.0	96.49	ug/L	-4	10	
Zinc	E	3.2717	0.4406	100.0	98.11	ug/L	-2	10	
Iron	H	0.4875	0.4344	10000	10000	ug/L	0	10	
Selenium	H	0.0659	0.0615	100.0	99.11	ug/L	-1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2225185	4.80
Scandium	A	1935693	2198147	13.56
Scandium	E	60849	68052	11.84
Scandium	H	853179	903094	5.85
Germanium	H	210213	221896	5.56
Germanium	E	46689	51886	11.13
Indium	A	2970271	3328207	12.05
Bismuth	A	3398867	3702771	8.94
Yttrium	A	2820269	3216777	14.06
Terbium	A	4719676	5321277	12.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321071 File : f1410071 Time : 14-JUN-2007 19:13
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.009915]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004371]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.004978]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01327]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002679]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01352]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01194]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.004531]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.08023]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.2809]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2208783	4.03
Scandium	A	1935693	2121375	9.59
Scandium	E	60849	68054	11.84
Scandium	H	853179	890576	4.38
Germanium	H	210213	222774	5.98
Germanium	E	46689	51697	10.73
Indium	A	2970271	3290972	10.80
Bismuth	A	3398867	3705815	9.03
Yttrium	A	2820269	3123217	10.74
Terbium	A	4719676	5213095	10.45

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321081 File : f1410081 Time : 14-JUN-2007 20:12
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3289	10000	9797	ug/L	-2	10	
Antimony	A	0.1867	0.1674	100.0	98.94	ug/L	-1	10	
Barium	A	0.1057	0.0364	100.0	98.90	ug/L	-1	10	
Beryllium	A	0.1380	0.1356	100.0	96.82	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.5	ug/L	1	10	
Calcium	A	0.0335	0.0107	10000	9978	ug/L	0	10	
Lead	A	0.4842	0.4125	100.0	95.97	ug/L	-4	10	
Magnesium	A	0.3201	0.2788	10000	9801	ug/L	-2	10	
Molybdenum	A	0.1282	0.1074	100.0	91.73	ug/L	-8	10	
Potassium	A	1.4076	0.3553	10000	9953	ug/L	0	10	
Silver	A	0.1882	0.1835	100.0	99.10	ug/L	-1	10	
Thallium	A	0.4663	0.4320	50.00	48.67	ug/L	-3	10	
Arsenic	E	0.3300	0.2997	100.0	97.19	ug/L	-3	10	
Chromium	E	2.6791	2.0179	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4337	100.0	96.42	ug/L	-4	10	
Copper	E	12.411	3.4111	100.0	96.16	ug/L	-4	10	
Manganese	E	1.1270	0.8685	100.0	98.75	ug/L	-1	10	
Nickel	E	1.8547	0.9442	100.0	96.57	ug/L	-3	10	
Sodium	E	0.8048	0.2465	10000	9737	ug/L	-3	10	
Vanadium	E	2.0193	1.5520	100.0	96.37	ug/L	-4	10	
Zinc	E	3.2717	0.4355	100.0	96.94	ug/L	-3	10	
Iron	H	0.4875	0.4273	10000	9838	ug/L	-2	10	
Selenium	H	0.0659	0.0610	100.0	98.29	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2192821	3.27
Scandium	A	1935693	2173428	12.28
Scandium	E	60849	67479	10.90
Scandium	H	853179	909197	6.57
Germanium	H	210213	222745	5.96
Germanium	E	46689	51818	10.99
Indium	A	2970271	3246361	9.30
Bismuth	A	3398867	3642671	7.17
Yttrium	A	2820269	3171171	12.44
Terbium	A	4719676	5285000	11.98

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321083 File : f14l0083 Time : 14-JUN-2007 20:25
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.211]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01778]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01011]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01484]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.01743]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01897]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.649]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01000]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007725]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002860]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06795]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.4897]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.002211]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2204190	3.81
Scandium	A	1935693	2131061	10.09
Scandium	E	60849	67012	10.13
Scandium	H	853179	907018	6.31
Germanium	H	210213	224474	6.78
Germanium	E	46689	51125	9.50
Indium	A	2970271	3304204	11.24
Bismuth	A	3398867	3738892	10.00
Yttrium	A	2820269	3133973	11.12
Terbium	A	4719676	5243867	11.11

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321085 File : f1410085 Time : 14-JUN-2007 20:37
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06889]	0.1000	ug/L	
Barium	A	0.9481	0.1000	ug/L	
Beryllium	A	[0.01890]	0.1000	ug/L	
Cadmium	A	0.8856	0.1000	ug/L	
Lead	A	0.4135	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02450]	0.05000	ug/L	
Arsenic	E	0.2388	0.1000	ug/L	
Chromium	E	1.223	0.1000	ug/L	
Cobalt	E	0.1843	0.1000	ug/L	
Copper	E	1.235	0.1000	ug/L	
Manganese	E	0.4939	0.1000	ug/L	
Nickel	E	1.019	0.1000	ug/L	
Vanadium	E	[0.02806]	0.1000	ug/L	
Zinc	E	2.132	0.1000	ug/L	
Selenium	H	[0.05955]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87380	ug/L	87
Calcium	A	300000	268400	ug/L	89
Magnesium	A	100000	84420	ug/L	84
Molybdenum	A	2000	1716	ug/L	86
Potassium	A	100000	88730	ug/L	89
Sodium	E	250000	209000	ug/L	84
Iron	H	250000	212100	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1843197	-13.19
Scandium	A	1935693	2070349	6.96
Scandium	E	60849	67911	11.61
Scandium	H	853179	879831	3.12
Germanium	H	210213	205671	-2.16
Germanium	E	46689	49716	6.48
Indium	A	2970271	3031373	2.06
Bismuth	A	3398867	3142413	-7.55
Yttrium	A	2820269	3119239	10.60
Terbium	A	4719676	5026124	6.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321086 File : f1410086 Time : 14-JUN-2007 20:43
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	93330	ug/L	-7		
Cadmium	A	100.0	97.70	ug/L	-2	20	
Calcium	A	300000	290900	ug/L	-3		
Magnesium	A	100000	90200	ug/L	-10		
Molybdenum	A	2000	1859	ug/L	-7		
Potassium	A	100000	95900	ug/L	-4		
Silver	A	50.00	43.94	ug/L	-12	20	
Arsenic	E	100.0	101.9	ug/L	2	20	
Chromium	E	200.0	186.3	ug/L	-7	20	
Cobalt	E	200.0	175.6	ug/L	-12	20	
Copper	E	200.0	172.7	ug/L	-14	20	
Manganese	E	200.0	192.6	ug/L	-4	20	
Nickel	E	200.0	171.0	ug/L	-15	20	
Sodium	E	250000	225300	ug/L	-10		
Vanadium	E	200.0	189.5	ug/L	-5	20	
Zinc	E	100.0	90.18	ug/L	-10	20	
Iron	H	250000	231200	ug/L	-8		
Selenium	H	100.0	101.5	ug/L	2	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	871866	2.19
Scandium	A	1935693	2047240	5.76
Scandium	E	60849	67173	10.39
Germanium	H	210213	205746	-2.13
Germanium	E	46689	49048	5.05
Indium	A	2970271	3017424	1.59
Yttrium	A	2820269	3110985	10.31

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321104 File : f1410104 Time : 14-JUN-2007 22:33
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3217	10000	9583	ug/L	-4	10	
Antimony	A	0.1867	0.1642	100.0	97.04	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.07	ug/L	-1	10	
Beryllium	A	0.1380	0.1323	100.0	94.46	ug/L	-6	10	
Cadmium	A	0.0415	0.0383	100.0	98.64	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9834	ug/L	-2	10	
Lead	A	0.4842	0.4088	100.0	95.13	ug/L	-5	10	
Magnesium	A	0.3201	0.2735	10000	9612	ug/L	-4	10	
Molybdenum	A	0.1282	0.1060	100.0	90.56	ug/L	-9	10	
Potassium	A	1.4076	0.3527	10000	9879	ug/L	-1	10	
Silver	A	0.1882	0.1800	100.0	97.21	ug/L	-3	10	
Thallium	A	0.4663	0.4313	50.00	48.59	ug/L	-3	10	
Arsenic	E	0.3300	0.3004	100.0	97.42	ug/L	-3	10	
Chromium	E	2.6791	2.0194	100.0	97.20	ug/L	-3	10	
Cobalt	E	3.7642	3.4542	100.0	97.00	ug/L	-3	10	
Copper	E	12.411	3.3899	100.0	95.56	ug/L	-4	10	
Manganese	E	1.1270	0.8697	100.0	98.89	ug/L	-1	10	
Nickel	E	1.8547	0.9473	100.0	96.88	ug/L	-3	10	
Sodium	E	0.8048	0.2444	10000	9652	ug/L	-3	10	
Vanadium	E	2.0193	1.5550	100.0	96.56	ug/L	-3	10	
Zinc	E	3.2717	0.4374	100.0	97.37	ug/L	-3	10	
Iron	H	0.4875	0.4301	10000	9903	ug/L	-1	10	
Selenium	H	0.0659	0.0608	100.0	98.00	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090516	-1.54
Scandium	A	1935693	2114113	9.22
Scandium	E	60849	64071	5.29
Scandium	H	853179	874960	2.55
Germanium	H	210213	216340	2.91
Germanium	E	46689	49541	6.11
Indium	A	2970271	3224571	8.56
Bismuth	A	3398867	3587446	5.55
Yttrium	A	2820269	3130602	11.00
Terbium	A	4719676	5222012	10.64

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321106 File : f14l0106 Time : 14-JUN-2007 22:47
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01657]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004316]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005309]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.007881]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.778]	10.00	2.807	ug/L	!ib
Silver	A	[0.003165]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02425]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01388]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007515]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05789]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5153]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2101720	-1.02
Scandium	A	1935693	2050005	5.91
Scandium	E	60849	64466	5.94
Scandium	H	853179	878462	2.96
Germanium	H	210213	219081	4.22
Germanium	E	46689	49601	6.24
Indium	A	2970271	3223465	8.52
Bismuth	A	3398867	3671727	8.03
Yttrium	A	2820269	3054901	8.32
Terbium	A	4719676	5161081	9.35

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897238321106

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321120 File : f1410120 Time : 15-JUN-2007 00:09
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3224	10000	9602	ug/L	-4	10	
Antimony	A	0.1867	0.1636	100.0	96.71	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.19	ug/L	-1	10	
Beryllium	A	0.1380	0.1328	100.0	94.79	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	98.94	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9861	ug/L	-1	10	
Lead	A	0.4842	0.4099	100.0	95.39	ug/L	-5	10	
Magnesium	A	0.3201	0.2737	10000	9619	ug/L	-4	10	
Molybdenum	A	0.1282	0.1063	100.0	90.75	ug/L	-9	10	
Potassium	A	1.4076	0.3532	10000	9893	ug/L	-1	10	
Silver	A	0.1882	0.1799	100.0	97.14	ug/L	-3	10	
Thallium	A	0.4663	0.4293	50.00	48.36	ug/L	-3	10	
Arsenic	E	0.3300	0.2978	100.0	96.56	ug/L	-3	10	
Chromium	E	2.6791	2.0074	100.0	96.62	ug/L	-3	10	
Cobalt	E	3.7642	3.4193	100.0	96.02	ug/L	-4	10	
Copper	E	12.411	3.3735	100.0	95.09	ug/L	-5	10	
Manganese	E	1.1270	0.8630	100.0	98.13	ug/L	-2	10	
Nickel	E	1.8547	0.9422	100.0	96.36	ug/L	-4	10	
Sodium	E	0.8048	0.2410	10000	9517	ug/L	-5	10	
Vanadium	E	2.0193	1.5395	100.0	95.59	ug/L	-4	10	
Zinc	E	3.2717	0.4323	100.0	96.22	ug/L	-4	10	
Iron	H	0.4875	0.5288	10000	12180	ug/L	**22**	10	c+ ***
Selenium	H	0.0659	0.0745	100.0	120.0	ug/L	**20**	10	c+ ***

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090591	-1.54
Scandium	A	1935693	2116451	9.34
Scandium	E	60849	64613	6.19
Scandium	H	853179	724396	-15.09
Germanium	H	210213	181314	-13.75
Germanium	E	46689	50144	7.40
Indium	A	2970271	3247887	9.35
Bismuth	A	3398867	3641722	7.15
Yttrium	A	2820269	3144205	11.49
Terbium	A	4719676	5235562	10.93

+=high bias c=CCV

897238321120

:00259

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321122 File : f1410122 Time : 15-JUN-2007 00:22
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.005889]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003319]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003493]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004107]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002443]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01918]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.02055]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.002569]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05233]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5130]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2069415	-2.54
Scandium	A	1935693	2037181	5.24
Scandium	E	60849	64093	5.33
Scandium	H	853179	859828	0.78
Germanium	H	210213	216334	2.91
Germanium	E	46689	49532	6.09
Indium	A	2970271	3185380	7.24
Bismuth	A	3398867	3670609	8.00
Yttrium	A	2820269	3035413	7.63
Terbium	A	4719676	5112231	8.32

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897238321122

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321131 File : f1410131
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

IDF : 1.0
Time : 15-JUN-2007 01:15

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3212	10000	9565	ug/L	-4	10	
Antimony	A	0.1867	0.1644	100.0	97.17	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.17	ug/L	-1	10	
Beryllium	A	0.1380	0.1331	100.0	95.02	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	99.06	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9803	ug/L	-2	10	
Lead	A	0.4842	0.4096	100.0	95.32	ug/L	-5	10	
Magnesium	A	0.3201	0.2738	10000	9625	ug/L	-4	10	
Molybdenum	A	0.1282	0.1062	100.0	90.70	ug/L	-9	10	
Potassium	A	1.4076	0.3493	10000	9782	ug/L	-2	10	
Silver	A	0.1882	0.1809	100.0	97.70	ug/L	-2	10	
Thallium	A	0.4663	0.4244	50.00	47.81	ug/L	-4	10	
Arsenic	E	0.3300	0.2940	100.0	95.35	ug/L	-5	10	
Chromium	E	2.6791	1.9864	100.0	95.60	ug/L	-4	10	
Cobalt	E	3.7642	3.3899	100.0	95.19	ug/L	-5	10	
Copper	E	12.411	3.3409	100.0	94.17	ug/L	-6	10	
Manganese	E	1.1270	0.8564	100.0	97.37	ug/L	-3	10	
Nickel	E	1.8547	0.9325	100.0	95.37	ug/L	-5	10	
Sodium	E	0.8048	0.2421	10000	9561	ug/L	-4	10	
Vanadium	E	2.0193	1.5284	100.0	94.90	ug/L	-5	10	
Zinc	E	3.2717	0.4321	100.0	96.18	ug/L	-4	10	
Iron	H	0.4875	0.4235	10000	9752	ug/L	-2	10	
Selenium	H	0.0659	0.0599	100.0	96.46	ug/L	-4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060483	-2.96
Scandium	A	1935693	2099690	8.47
Scandium	E	60849	64031	5.23
Scandium	H	853179	877900	2.90
Germanium	H	210213	219044	4.20
Germanium	E	46689	49382	5.77
Indium	A	2970271	3159989	6.39
Bismuth	A	3398867	3581620	5.38
Yttrium	A	2820269	3084796	9.38
Terbium	A	4719676	5123003	8.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321133 File : f1410133 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:29

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.007047]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003846]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004121]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007918]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06047]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2070192	-2.50
Scandium	A	1935693	2019477	4.33
Scandium	E	60849	63277	3.99
Scandium	H	853179	863991	1.27
Germanium	H	210213	217539	3.48
Germanium	E	46689	49107	5.18
Indium	A	2970271	3159069	6.36
Bismuth	A	3398867	3645648	7.26
Yttrium	A	2820269	3011744	6.79
Terbium	A	4719676	5068028	7.38

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897238321133

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897238321135 File : f1410135 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:40
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07062]	0.1000	ug/L	
Barium	A	0.9384	0.1000	ug/L	
Beryllium	A	[0.01950]	0.1000	ug/L	
Cadmium	A	0.9477	0.1000	ug/L	
Lead	A	0.4018	0.1000	ug/L	
Silver	A	0.1757	0.1000	ug/L	
Thallium	A	[0.02511]	0.05000	ug/L	
Arsenic	E	0.2359	0.1000	ug/L	
Chromium	E	1.229	0.1000	ug/L	
Cobalt	E	0.1855	0.1000	ug/L	
Copper	E	1.206	0.1000	ug/L	
Manganese	E	0.5246	0.1000	ug/L	
Nickel	E	1.037	0.1000	ug/L	
Vanadium	E	[0.01641]	0.1000	ug/L	
Zinc	E	2.051	0.1000	ug/L	
Selenium	H	[0.06772]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	85270	ug/L	85
Calcium	A	300000	266000	ug/L	89
Magnesium	A	100000	82520	ug/L	83
Molybdenum	A	2000	1698	ug/L	85
Potassium	A	100000	87750	ug/L	88
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212300	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1787817	-15.80
Scandium	A	1935693	2047588	5.78
Scandium	E	60849	64760	6.43
Scandium	H	853179	847491	-0.67
Germanium	H	210213	202834	-3.51
Germanium	E	46689	48200	3.24
Indium	A	2970271	3023443	1.79
Bismuth	A	3398867	3165919	-6.85
Yttrium	A	2820269	3102733	10.02
Terbium	A	4719676	5056718	7.14

897238321135

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321136 File : f1410136 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:46
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89790	ug/L	-10		
Cadmium	A	100.0	96.49	ug/L	-4	20	
Calcium	A	300000	282800	ug/L	-6		
Magnesium	A	100000	86730	ug/L	-13		
Molybdenum	A	2000	1815	ug/L	-9		
Potassium	A	100000	93170	ug/L	-7		
Silver	A	50.00	43.30	ug/L	-13	20	
Arsenic	E	100.0	101.5	ug/L	2	20	
Chromium	E	200.0	184.4	ug/L	-8	20	
Cobalt	E	200.0	173.8	ug/L	-13	20	
Copper	E	200.0	170.7	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	170.1	ug/L	-15	20	
Sodium	E	250000	220000	ug/L	-12		
Vanadium	E	200.0	187.5	ug/L	-6	20	
Zinc	E	100.0	89.27	ug/L	-11	20	
Iron	H	250000	230300	ug/L	-8		
Selenium	H	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	838972	-1.67
Scandium	A	1935693	2083546	7.64
Scandium	E	60849	65497	7.64
Germanium	H	210213	200315	-4.71
Germanium	E	46689	48070	2.96
Indium	A	2970271	3046687	2.57
Yttrium	A	2820269	3142183	11.41

897238321136

: 00274

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321151 File : f14l0151 Time : 15-JUN-2007 03:16
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3189	10000	9497	ug/L	-5	10	
Antimony	A	0.1867	0.1611	100.0	95.24	ug/L	-5	10	
Barium	A	0.1057	0.0365	100.0	99.06	ug/L	-1	10	
Beryllium	A	0.1380	0.1316	100.0	93.98	ug/L	-6	10	
Cadmium	A	0.0415	0.0374	100.0	96.56	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9748	ug/L	-3	10	
Lead	A	0.4842	0.4047	100.0	94.17	ug/L	-6	10	
Magnesium	A	0.3201	0.2669	10000	9382	ug/L	-6	10	
Molybdenum	A	0.1282	0.1052	100.0	89.86	ug/L	-10	10	
Potassium	A	1.4076	0.3496	10000	9792	ug/L	-2	10	
Silver	A	0.1882	0.1769	100.0	95.50	ug/L	-5	10	
Thallium	A	0.4663	0.4234	50.00	47.70	ug/L	-5	10	
Arsenic	E	0.3300	0.2939	100.0	95.32	ug/L	-5	10	
Chromium	E	2.6791	1.9637	100.0	94.51	ug/L	-5	10	
Cobalt	E	3.7642	3.3309	100.0	93.54	ug/L	-6	10	
Copper	E	12.411	3.3024	100.0	93.08	ug/L	-7	10	
Manganese	E	1.1270	0.8547	100.0	97.18	ug/L	-3	10	
Nickel	E	1.8547	0.9156	100.0	93.63	ug/L	-6	10	
Sodium	E	0.8048	0.2392	10000	9447	ug/L	-6	10	
Vanadium	E	2.0193	1.5131	100.0	93.95	ug/L	-6	10	
Zinc	E	3.2717	0.4269	100.0	95.01	ug/L	-5	10	
Iron	H	0.4875	0.4280	10000	9857	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2047685	-3.56
Scandium	A	1935693	2160709	11.62
Scandium	E	60849	64964	6.76
Scandium	H	853179	861252	0.95
Germanium	H	210213	217010	3.23
Germanium	E	46689	49959	7.00
Indium	A	2970271	3276769	10.32
Bismuth	A	3398867	3634465	6.93
Yttrium	A	2820269	3181032	12.79
Terbium	A	4719676	5256935	11.38

897238321151

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321153 File : f1410153 Time : 15-JUN-2007 03:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004630]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006884]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.006034]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.006944]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.096]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[9.695]	10.00	2.807	ug/L	!ib
Silver	A	[0.004858]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	calc
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002394]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	[5.225]	10.00	4.339	ug/L	!ib
Vanadium	E	[0.08781]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.04724]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4995]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2104532	-0.88
Scandium	A	1935693	2126593	9.86
Scandium	E	60849	64924	6.70
Scandium	H	853179	765293	-10.30
Germanium	H	210213	197282	-6.15
Germanium	E	46689	50156	7.43
Indium	A	2970271	3267513	10.01
Bismuth	A	3398867	3742180	10.10
Yttrium	A	2820269	3122739	10.72
Terbium	A	4719676	5229518	10.80

!=warning calc=check quantitation ib=instrument blank

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321158 File : f1410158 Time : 15-JUN-2007 03:59
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3178	10000	9466	ug/L	-5	10	
Antimony	A	0.1867	0.1621	100.0	95.80	ug/L	-4	10	
Barium	A	0.1057	0.0363	100.0	98.61	ug/L	-1	10	
Beryllium	A	0.1380	0.1305	100.0	93.19	ug/L	-7	10	
Cadmium	A	0.0415	0.0377	100.0	97.34	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9710	ug/L	-3	10	
Lead	A	0.4842	0.4051	100.0	94.26	ug/L	-6	10	
Magnesium	A	0.3201	0.2709	10000	9522	ug/L	-5	10	
Molybdenum	A	0.1282	0.1054	100.0	89.99	ug/L	-10	10	
Potassium	A	1.4076	0.3493	10000	9781	ug/L	-2	10	
Silver	A	0.1882	0.1767	100.0	95.40	ug/L	-5	10	
Thallium	A	0.4663	0.4221	50.00	47.55	ug/L	-5	10	
Arsenic	E	0.3300	0.2917	100.0	94.60	ug/L	-5	10	
Chromium	E	2.6791	1.9743	100.0	95.02	ug/L	-5	10	
Cobalt	E	3.7642	3.3668	100.0	94.54	ug/L	-5	10	
Copper	E	12.411	3.2850	100.0	92.59	ug/L	-7	10	
Manganese	E	1.1270	0.8565	100.0	97.39	ug/L	-3	10	
Nickel	E	1.8547	0.9233	100.0	94.43	ug/L	-6	10	
Sodium	E	0.8048	0.2396	10000	9464	ug/L	-5	10	
Vanadium	E	2.0193	1.5209	100.0	94.44	ug/L	-6	10	
Zinc	E	3.2717	0.4231	100.0	94.15	ug/L	-6	10	
Iron	H	0.4875	0.4285	10000	9866	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.78	ug/L	-3	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2036755	-4.08
Scandium	A	1935693	2100792	8.53
Scandium	E	60849	63006	3.54
Scandium	H	853179	846347	-0.80
Germanium	H	210213	213708	1.66
Germanium	E	46689	49190	5.36
Indium	A	2970271	3196261	7.61
Bismuth	A	3398867	3619250	6.48
Yttrium	A	2820269	3101553	9.97
Terbium	A	4719676	5166691	9.47

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321160 File : f1410160 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 04:12

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004600]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007487]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005068]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003520]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[5.665]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01211]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01158]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06753]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.07886]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4337]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2051900	-3.36
Scandium	A	1935693	2049233	5.87
Scandium	E	60849	62533	2.77
Scandium	H	853179	829702	-2.75
Germanium	H	210213	211838	0.77
Germanium	E	46689	48549	3.98
Indium	A	2970271	3214149	8.21
Bismuth	A	3398867	3669004	7.95
Yttrium	A	2820269	3055293	8.33
Terbium	A	4719676	5113478	8.34

!=warning ib=instrument blank

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321162 File : f1410162 Time : 15-JUN-2007 04:24
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05838]	0.1000	ug/L	
Barium	A	0.9070	0.1000	ug/L	
Beryllium	A	[0.02489]	0.1000	ug/L	
Cadmium	A	0.9693	0.1000	ug/L	
Lead	A	0.4065	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02371]	0.05000	ug/L	
Arsenic	E	0.2237	0.1000	ug/L	
Chromium	E	1.209	0.1000	ug/L	
Cobalt	E	0.1835	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.5249	0.1000	ug/L	
Nickel	E	1.041	0.1000	ug/L	
Vanadium	E	[0.02144]	0.1000	ug/L	
Zinc	E	1.959	0.1000	ug/L	
Selenium	H	[0.06371]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	83760	ug/L	84
Calcium	A	300000	263600	ug/L	88
Magnesium	A	100000	81200	ug/L	81
Molybdenum	A	2000	1693	ug/L	85
Potassium	A	100000	86660	ug/L	87
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212800	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1754350	-17.38
Scandium	A	1935693	2028904	4.82
Scandium	E	60849	63073	3.65
Scandium	H	853179	817123	-4.23
Germanium	H	210213	197016	-6.28
Germanium	E	46689	46633	-0.12
Indium	A	2970271	2962631	-0.26
Bismuth	A	3398867	3125373	-8.05
Yttrium	A	2820269	3058132	8.43
Terbium	A	4719676	5005488	6.06

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321163 File : f1410163 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 04:30
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90830	ug/L	-9		
Cadmium	A	100.0	96.08	ug/L	-4	20	
Calcium	A	300000	284400	ug/L	-5		
Magnesium	A	100000	87620	ug/L	-12		
Molybdenum	A	2000	1817	ug/L	-9		
Potassium	A	100000	93990	ug/L	-6		
Silver	A	50.00	43.31	ug/L	-13	20	
Arsenic	E	100.0	99.68	ug/L	0	20	
Chromium	E	200.0	184.2	ug/L	-8	20	
Cobalt	E	200.0	173.9	ug/L	-13	20	
Copper	E	200.0	169.3	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	169.5	ug/L	-15	20	
Sodium	E	250000	220100	ug/L	-12		
Vanadium	E	200.0	187.1	ug/L	-6	20	
Zinc	E	100.0	87.95	ug/L	-12	20	
Iron	H	250000	229500	ug/L	-8		
Selenium	H	100.0	100.2	ug/L	0	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	814243	-4.56
Scandium	A	1935693	2009495	3.81
Scandium	E	60849	63185	3.84
Germanium	H	210213	195217	-7.13
Germanium	E	46689	46665	-0.05
Indium	A	2970271	2977345	0.24
Yttrium	A	2820269	3062091	8.57

897238321163

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CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07
Sequence : MET16 f14l0

Reference : f14l0004
Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2123286	1935693	60849	853179	210213	46689	2970271	3398867	2820269	4719676
		LOWER LIMIT	636986	580708	18255	255954	63064	14007	891081	1019660	846081	1415903
		UPPER LIMIT	2547943	2322832	73019	1023814	252256	56027	3564325	4078640	3384323	5663611
015	ICB		2178902	2043382	63074	902139	223063	48402	3169218	3611754	3006180	5065969
017	ICSA		1845484	2011932	63325	864634	201150	46587	2902550	3043579	2998242	4871820
018	ICSAB		1789310	1966954	62771	864005	200194	45963	2876364	2993163	2953598	4790609
023	SAMPLE	195370-007	2093178	2147194	66008	874404	213265	50430	3321263	3730740	3235744	5245479
024	MSS	195328-001	2093143	2113440	66516	868904	216173	51295	3338196	3759901	3212766	5280191
025	SAMPLE	195328-003	2070660	2148688	67415	894791	218264	51081	3279132	3653165	3251539	5229845
026	SAMPLE	195370-006	2096710	2166773	68123	898056	219267	52171	3350689	3733175	3266292	5280417
027	SAMPLE	195370-007	2125889	2204542	68338	904091	219537	52211	3359272	3757411	3333353	5296095
028	SAMPLE	195370-017	2108346	2190487	68898	884210	216840	52161	3343336	3686052	3360983	5239221
029	SAMPLE	195257-027	2023968	2003587	63893	872441	218234	49866	3174653	3595074	2993048	5072635
032	CCV		2066227	2089148	65844	899458	221220	50519	3199101	3551272	3118381	5126287
034	CCB		2060529	1998648	63130	845745	208799	48706	3157907	3575553	2999921	5020426
036	ICSA		1740184	1956040	63764	848673	198888	46943	2900425	3036197	2975475	4831390
037	ICSAB		1702585	1925910	62621	851598	199251	45882	2848256	2977375	2921982	4794059
041	SAMPLE	195241-002	2174055	2138378	65310	857254	214538	50767	3288913	3653723	3175719	5218701
042	SAMPLE	195241-007	2184475	2197288	68753	887147	223900	53322	3343833	3671928	3256316	5284958
043	MSS	195241-003	2134800	2165467	67206	885953	226206	52267	3333433	3679162	3209193	5299030
044	PDS	QC391445	2034050	2105863	65855	887427	219725	50344	3188199	3533048	3118480	5166855
046	MSS	195241-003	2169139	2135785	67162	888322	222214	51456	3253695	3537083	3149919	5200219
047	SER	QC391444	2221686	2180411	69018	912692	229294	53419	3310049	3704255	3203989	5280419
048	MS	QC391442	2155213	2121049	66609	898310	222363	50733	3172575	3509755	3094686	5140928
049	MSD	QC391443	2172345	2097694	66812	906069	224309	51199	3140018	3513178	3073457	5126755
053	CCV		2158727	2117451	65946	906373	222709	50550	3232612	3615349	3122011	5231345
055	CCB		2168826	2030434	65550	908640	223541	49899	3202869	3630964	3023060	5086287
057	PDS	QC391445	2100033	2069262	65040	884638	217346	49565	3093621	3453144	3022760	5066166
058	MSS	195247-006	2257888	2139625	67841	899685	224993	51945	3209622	3539433	3109153	5166013
059	MS	QC391446	2190210	2091254	67261	914401	224691	51213	3156364	3518375	3069789	5138204
060	MSD	QC391447	1984480	1934029	67081	898087	222265	51100	2894106	3212987	2798803	4691210
061	SAMPLE	195241-002	2265439	2186455	69407	905209	221819	51656	3173820	3460018	3142632	5161565
062	SAMPLE	195241-004	2258518	2128143	69093	910698	228485	52475	3245985	3629591	3127034	5209884
063	SAMPLE	195241-005	2200017	2046358	65835	907813	224671	51094	3130664	3578989	3011580	5049995
064	SAMPLE	195241-007	2224536	2146903	67948	891035	216784	50207	3104936	3406667	3058703	5050142
065	SAMPLE	195247-001	2180083	2186713	68230	899948	221651	51224	3226576	3516455	3201630	5232553
066	SAMPLE	195247-002	2159424	2242040	69044	907819	219015	51670	3266640	3584623	3563677 *	5305325
069	CCV		2225185	2198147	68052	903094	221896	51886	3328207	3702771	3216777	5321277
071	CCB		2208783	2121375	68054	890576	222774	51697	3290972	3705815	3123217	5213095
073	SAMPLE	195247-001	2244540	2237885	69508	897409	223202	53014	3337373	3623553	3230278	5301073
074	SAMPLE	195247-002	2266883	2258657	70034	909392	224574	52915	3326664	3586784	3265797	5302374
075	SAMPLE	195247-001	2228774	2180279	67861	906186	227568	52141	3289913	3700538	3168955	5243923
076	SAMPLE	195247-002	2223950	2142002	66982	900053	224721	51577	3226004	3656113	3132604	5195809
077	SAMPLE	195247-001	2229325	2144248	67524	905559	227113	52019	3253639	3701572	3114616	5210586
078	SAMPLE	195247-002	2208628	2129771	67767	918456	229620	51925	3239722	3676779	3088014	5180643
081	CCV		2192821	2173428	67479	909197	222745	51818	3246361	3642671	3171171	5285000
083	CCB		2204190	2131061	67012	907018	224474	51125	3304204	3738892	3133973	5243867
085	ICSA		1843197	2070349	67911	879831	205671	49716	3031373	3142413	3119239	5026124
086	ICSAB		1795245	2047240	67173	871866	205746	49048	3017424	3126576	3110985	5053521
091	BLANK	QC392093	2099747	2044976	64708	867014	218694	50290	3262531	3730296	3062020	5196270
092	BS	QC392094	2074164	2116499	66111	834386	208272	50778	3235501	3637853	3153739	5208650

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07
Sequence : MET16 f1410

Reference : f1410004
Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
093	BSD	QC392095	2085663	2163564	66157	864044	216424	50603	3327277	3686688	3220491	5324552
097	MSS	195270-007	2137857	2192536	67870	899173	226001	52222	3323282	3605435	3228887	5232811
098	SER	QC392098	2175096	2153199	66768	888056	225786	52220	3297735	3693543	3168047	5231426
099	MS	QC392096	2076293	2145976	65920	872277	218623	50709	3207990	3509752	3131876	5165938
100	MSD	QC392097	2087344	2157742	65177	864291	217732	50264	3216713	3509365	3147237	5147000
101	PDS	QC392099	2070454	2197927	65071	872693	216284	50005	3240745	3542571	3198886	5249968
104	CCV		2090516	2114113	64071	874960	216340	49541	3224571	3587446	3130602	5222012
106	CCB		2101720	2050005	64466	878462	219081	49601	3223465	3671727	3054901	5161081
108	SAMPLE	195270-003	2113213	2161686	65381	879739	222073	51065	3273731	3627153	3145683	5199461
109	SAMPLE	195270-005	2121387	2175050	65982	875590	221350	51101	3258417	3654070	3160409	5218931
110	SAMPLE	195270-010	2112434	2110916	65306	874343	220526	50856	3233669	3607245	3087492	5130195
111	SAMPLE	195270-012	2141928	2104169	64959	865016	223360	50702	3205775	3661908	3074952	5130296
112	SAMPLE	195358-001	2112379	2078444	63832	876990	222855	49954	3179851	3683079	3025647	5071756
113	SAMPLE	195358-002	2119618	2062971	64030	869388	220135	49549	3182853	3688140	3035863	5099741
114	SAMPLE	195358-003	2102326	2047949	63392	871285	220110	49233	3216622	3659306	3044830	5130266
115	SAMPLE	195358-004	2064821	2035562	64325	877633	220585	50224	3190132	3650076	3009370	5095673
116	SAMPLE	195358-005	2034557	2007388	62298	873689	220521	49013	3125492	3618949	2956938	4989070
117	SAMPLE	195358-006	2069412	2017675	63949	873868	223591	50337	3158707	3652615	2985240	5011271
120	CCV		2090591	2116451	64613	724396	181314	50144	3247887	3641722	3144205	5235562
122	CCB		2069415	2037181	64093	859828	216334	49532	3185380	3670609	3035413	5112231
124	SAMPLE	195358-007	2073310	2014799	63269	860592	217976	49022	3170074	3668825	3005319	5068165
125	SAMPLE	195358-008	2083685	2051529	63424	874610	220977	49555	3177340	3709979	3032106	5087365
126	SAMPLE	195358-009	2099112	2032398	64052	874600	220998	49782	3199588	3700777	3022645	5072335
127	SAMPLE	195369-001	2099711	2237036	68507	877396	217363	51284	3270309	3434398	3229111	5204436
128	SAMPLE	195370-021	2175267	2158826	66833	783893	208011	51547	3292073	3714804	3135184	5173058
131	CCV		2060483	2099690	64031	877900	219044	49382	3159989	3581620	3084796	5123003
133	CCB		2070192	2019477	63277	863991	217539	49107	3159069	3645648	3011744	5068028
135	ICSA		1787817	2047588	64760	847491	202834	48200	3023443	3165919	3102733	5056718
136	ICSAB		1779278	2083546	65497	838972	200315	48070	3046687	3194510	3142183	5115916
141	SAMPLE	195251-001	2001213	2042398	62730	843659	215339	49074	3197238	3668990	3035524	5110156
142	SAMPLE	195251-006	2010125	2044622	63831	856226	220196	50099	3245166	3694459	3074011	5138806
143	SAMPLE	195251-007	2034171	2046521	62391	851529	216709	48932	3190535	3679407	3038210	5082347
144	SAMPLE	195337-001	1899908	2086075	62582	746676	185029	47652	3106807	3317126	3065059	5012234
145	SAMPLE	195337-002	1931472	2219732	67595	813817	199697	48961	3209082	3189239	3209227	5046720
146	SAMPLE	195337-003	1919360	2253575	68422	821959	198876	48854	3160493	3128159	3224104	5041204
147	SAMPLE	195285-012	2165256	2254500	68495	874447	229082	52698	3407477	3728943	3262720	5320019
148	SAMPLE	195285-013	2104590	2187725	66858	875561	225793	52006	3345712	3698355	3184999	5231128
151	CCV		2047685	2160709	64964	861252	217010	49959	3276769	3634465	3181032	5256935
153	CCB		2104532	2126593	64924	765293	197282	50156	3267513	3742180	3122739	5229518
155	SAMPLE	195285-014	2054094	2054966	62627	851357	216493	48931	3160407	3586088	3022706	5050165
158	CCV		2036755	2100792	63006	846347	213708	49190	3196261	3619250	3101553	5166691
160	CCB		2051900	2049233	62533	829702	211838	48549	3214149	3669004	3055293	5113478
162	ICSA		1754350	2028904	63073	817123	197016	46633	2962631	3125373	3058132	5005488
163	ICSAB		1704736	2009495	63185	814243	195217	46665	2977345	3155248	3062091	5026637

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	f1410001	TUN				14-JUN-2007 12:01	1.0	1.0			1	
002	f1410002	X	RINSE			14-JUN-2007 12:09	1.0				2	
003	f1410003	X	RINSE			14-JUN-2007 12:15	1.0				2	
004	f1410004	ICALBLK	CALBLANK			14-JUN-2007 12:21	1.0	1.0			2	
005	f1410005	ICAL				14-JUN-2007 12:27	1.0	1.0			3	
006	f1410006	ICAL				14-JUN-2007 12:33	1.0	1.0			4	
007	f1410007	ICAL				14-JUN-2007 12:38	1.0	1.0			5	
008	f1410008	ICAL				14-JUN-2007 12:44	1.0	1.0			6	
009	f1410009	ICAL				14-JUN-2007 12:50	1.0	1.0			7	
010	f1410010	ICAL				14-JUN-2007 12:57	1.0	1.0			8	
011	f1410011	X	RINSE			14-JUN-2007 13:05	1.0				2	
012	f1410012	ICV				14-JUN-2007 13:11	1.0	1.0		1	9	
013	f1410013	X	RINSE			14-JUN-2007 13:17	1.0				2	
014	f1410014	X				14-JUN-2007 13:23	1.0				2	
015	f1410015	ICB				14-JUN-2007 13:29	1.0	1.0	1	1	2	
016	f1410016	X				14-JUN-2007 13:35	1.0				2	
017	f1410017	ICSA				14-JUN-2007 13:40	1.0	1.0		1	10 2	7:CA=272500
018	f1410018	ICSAB				14-JUN-2007 13:46	1.0	1.0		1	11 2	9:CA=297000
019	f1410019	X	RINSE			14-JUN-2007 13:52	1.0				2	
020	f1410020	X	RINSE			14-JUN-2007 13:58	1.0				2	
021	f1410021	X	RINSE			14-JUN-2007 14:04	1.0				2	
022	f1410022	X	RINSE			14-JUN-2007 14:10	1.0				2	
023	f1410023	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:16	100.0	49.02		1	2	
024	f1410024	MSS	195328-001	126255	Soil	14-JUN-2007 14:22	50.0	52.08		1	2	
025	f1410025	SAMPLE	195328-003	126255	Soil	14-JUN-2007 14:28	50.0	54.95		1	2	1:MN=216.800
026	f1410026	SAMPLE	195370-006	126255	Soil	14-JUN-2007 14:33	50.0	52.08		1	2	
027	f1410027	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:39	50.0	49.02	1	1	2	2:PB=265.600
028	f1410028	SAMPLE	195370-017	126255	Soil	14-JUN-2007 14:45	50.0	50.51		1	2	
029	f1410029	SAMPLE	195257-027	126262	WET DI	14-JUN-2007 14:51	10.0	1.0		1	2	
030	f1410030	X	RINSE			14-JUN-2007 14:57	1.0				2	
031	f1410031	X	RINSE			14-JUN-2007 15:03	1.0				2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f1410032	CCV				14-JUN-2007 15:08	1.0	1.0			1	12 2	
033	f1410033	X	RINSE			14-JUN-2007 15:15	1.0					2	
034	f1410034	CCB				14-JUN-2007 15:21	1.0	1.0			1	2	
035	f1410035	X				14-JUN-2007 15:27	1.0					2	
036	f1410036	ICSA				14-JUN-2007 15:33	1.0	1.0			1	10 2	7:CA=276500
037	f1410037	ICSAB				14-JUN-2007 15:39	1.0	1.0			1	11 2	7:CA=295000
038	f1410038	X	RINSE			14-JUN-2007 15:45	1.0					2	
039	f1410039	X	RINSE			14-JUN-2007 15:51	1.0					2	
040	f1410040	X	RINSE			14-JUN-2007 16:02	1.0					2	
041	f1410041	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 16:08	50.0	1.0			1	2	
042	f1410042	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 16:14	50.0	1.0			1	2	
043	f1410043	MSS	195241-003	126087	Filtra	14-JUN-2007 16:20	20.0	1.0	1		1	2	
044	f1410044	PDS	QC391445	126087	Filtra	14-JUN-2007 16:26	20.0	1.0			1	13 14 2	
045	f1410045	X	RINSE			14-JUN-2007 16:32	1.0					2	
046	f1410046	MSS	195241-003	126087	Filtra	14-JUN-2007 16:38	5.0	1.0	1		1	2	1:MG=34540.0
047	f1410047	SER	QC391444	126087	Filtra	14-JUN-2007 16:43	25.0	1.0	1	1	1	2	
048	f1410048	MS	QC391442	126087	Filtra	14-JUN-2007 16:49	5.0	1.0			1	2	1:MG=35860.0
049	f1410049	MSD	QC391443	126087	Filtra	14-JUN-2007 16:55	5.0	1.0			1	2	1:MG=35740.0
050	f1410050	X	RINSE			14-JUN-2007 17:01	1.0					2	
051	f1410051	X	RINSE			14-JUN-2007 17:07	1.0					2	
052	f1410052	X	RINSE			14-JUN-2007 17:13	1.0					2	
053	f1410053	CCV				14-JUN-2007 17:19	1.0	1.0			1	12 2	
054	f1410054	X	RINSE			14-JUN-2007 17:25	1.0					2	
055	f1410055	CCB				14-JUN-2007 17:31	1.0	1.0	1		1	2	
056	f1410056	X				14-JUN-2007 17:37	1.0					2	
057	f1410057	PDS	QC391445	126087	Filtra	14-JUN-2007 17:43	5.0	1.0	2		1	13 14 2	3:MG=42560.0
058	f1410058	MSS	195247-006	126087	Filtra	14-JUN-2007 17:48	5.0	1.0	1		1	2	1:NA=22760.0
059	f1410059	MS	QC391446	126087	Filtra	14-JUN-2007 17:54	5.0	1.0		1	1	2	2:NA=24440.0
060	f1410060	MSD	QC391447	126087	Filtra	14-JUN-2007 18:00	5.0	1.0			1	2	2:NA=23940.0
061	f1410061	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 18:06	5.0	1.0	3		1	2	3:MG=90120.0
062	f1410062	SAMPLE	195241-004	126087	Filtra	14-JUN-2007 18:12	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f1410063	SAMPLE	195241-005	126087	Filtra	14-JUN-2007 18:18	5.0	1.0	1		1	2	1:MN=236.800
064	f1410064	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 18:24	5.0	1.0	3		1	2	3:MG=96860.0
065	f1410065	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 18:30	5.0	1.0	5		1	2	5:NA=37180.0
066	f1410066	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 18:35	5.0	1.0	4		1	2	4:NA=34400.0
067	f1410067	X	RINSE			14-JUN-2007 18:48	1.0					2	
068	f1410068	X	RINSE			14-JUN-2007 18:54	1.0					2	
069	f1410069	CCV				14-JUN-2007 19:00	1.0	1.0			1	12 2	
070	f1410070	X	RINSE			14-JUN-2007 19:07	1.0					2	
071	f1410071	CCB				14-JUN-2007 19:13	1.0	1.0			1	2	
072	f1410072	X				14-JUN-2007 19:19	1.0					2	
073	f1410073	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:25	5.0	1.0	1		1	2	1:NA=36760.0
074	f1410074	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:31	5.0	1.0	3		1	2	3:NA=35160.0
075	f1410075	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 19:37	50.0	1.0	1		1	2	
076	f1410076	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 19:43	50.0	1.0			1	2	
077	f1410077	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:49	50.0	1.0			1	2	
078	f1410078	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:55	50.0	1.0			1	2	
079	f1410079	X	RINSE			14-JUN-2007 20:01	1.0					2	
080	f1410080	X	RINSE			14-JUN-2007 20:07	1.0					2	
081	f1410081	CCV				14-JUN-2007 20:12	1.0	1.0			1	12 2	
082	f1410082	X	RINSE			14-JUN-2007 20:19	1.0					2	
083	f1410083	CCB				14-JUN-2007 20:25	1.0	1.0			1	2	
084	f1410084	X				14-JUN-2007 20:31	1.0					2	
085	f1410085	ICSA				14-JUN-2007 20:37	1.0	1.0			1	10 2	7:CA=268400
086	f1410086	ICSAB				14-JUN-2007 20:43	1.0	1.0			1	11 2	7:CA=290900
087	f1410087	X	RINSE			14-JUN-2007 20:49	1.0					2	
088	f1410088	X	RINSE			14-JUN-2007 20:55	1.0					2	
089	f1410089	X	RINSE			14-JUN-2007 21:01	1.0					2	
090	f1410090	X	RINSE			14-JUN-2007 21:07	1.0					2	
091	f1410091	BLANK	QC392093	126254	Filtra	14-JUN-2007 21:13	1.0	1.0			1	2	
092	f1410092	BS	QC392094	126254	Filtra	14-JUN-2007 21:18	1.0	1.0			1	2	
093	f1410093	BSD	QC392095	126254	Filtra	14-JUN-2007 21:26	1.0	1.0			1	2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f1410094	TUN				14-JUN-2007 21:33	1.0	1.0				1	
095	f1410095	X	RINSE			14-JUN-2007 21:41	1.0					2	
096	f1410096	X	RINSE			14-JUN-2007 21:47	1.0					2	
097	f1410097	MSS	195270-007	126254	Filtra	14-JUN-2007 21:52	5.0	1.0	1		1	2	1:NA=41300.0
098	f1410098	SER	QC392098	126254	Filtra	14-JUN-2007 21:58	25.0	1.0		1	1	2	
099	f1410099	MS	QC392096	126254	Filtra	14-JUN-2007 22:04	5.0	1.0			1	2	1:NA=45300.0
100	f1410100	MSD	QC392097	126254	Filtra	14-JUN-2007 22:10	5.0	1.0			1	2	1:NA=44500.0
101	f1410101	PDS	QC392099	126254	Filtra	14-JUN-2007 22:16	5.0	1.0	1		1	13 14 2	2:NA=49960.0
102	f1410102	X	RINSE			14-JUN-2007 22:22	1.0					2	
103	f1410103	X	RINSE			14-JUN-2007 22:28	1.0					2	
104	f1410104	CCV				14-JUN-2007 22:33	1.0	1.0			1	12 2	
105	f1410105	X	RINSE			14-JUN-2007 22:41	1.0					2	
106	f1410106	CCB				14-JUN-2007 22:47	1.0	1.0			1	2	
107	f1410107	X				14-JUN-2007 22:52	1.0					2	
108	f1410108	SAMPLE	195270-003	126254	Filtra	14-JUN-2007 22:58	5.0	1.0	1		1	2	1:NA=22900.0
109	f1410109	SAMPLE	195270-005	126254	Filtra	14-JUN-2007 23:04	5.0	1.0	1		1	2	1:NA=38520.0
110	f1410110	SAMPLE	195270-010	126254	Filtra	14-JUN-2007 23:10	5.0	1.0			1	2	
111	f1410111	SAMPLE	195270-012	126254	Water	14-JUN-2007 23:16	5.0	1.0			1	2	
112	f1410112	SAMPLE	195358-001	126254	Filtra	14-JUN-2007 23:22	5.0	1.0			1	2	
113	f1410113	SAMPLE	195358-002	126254	Filtra	14-JUN-2007 23:28	5.0	1.0	1		1	2	
114	f1410114	SAMPLE	195358-003	126254	Filtra	14-JUN-2007 23:34	5.0	1.0	1		1	2	
115	f1410115	SAMPLE	195358-004	126254	Filtra	14-JUN-2007 23:40	5.0	1.0	1		1	2	
116	f1410116	SAMPLE	195358-005	126254	Filtra	14-JUN-2007 23:46	5.0	1.0	1		1	2	
117	f1410117	SAMPLE	195358-006	126254	Filtra	14-JUN-2007 23:52	5.0	1.0			1	2	
118	f1410118	X	RINSE			14-JUN-2007 23:58	1.0					2	
119	f1410119	X	RINSE			15-JUN-2007 00:04	1.0					2	
120	f1410120	CCV				15-JUN-2007 00:09	1.0	1.0	2		1	12 2	
121	f1410121	X	RINSE			15-JUN-2007 00:16	1.0					2	
122	f1410122	CCB				15-JUN-2007 00:22	1.0	1.0			1	2	
123	f1410123	X				15-JUN-2007 00:28	1.0					2	
124	f1410124	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 00:34	5.0	1.0	1		1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
25	f1410125	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 00:40	5.0	1.0	1		1	2	
26	f1410126	SAMPLE	195358-009	126254	Filtra	15-JUN-2007 00:46	5.0	1.0			1	2	
27	f1410127	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 00:52	5.0	1.0	3		1	2	2:NA=176700
28	f1410128	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 00:58	5.0	1.0			1	2	
29	f1410129	X	RINSE			15-JUN-2007 01:04	1.0					2	
30	f1410130	X	RINSE			15-JUN-2007 01:10	1.0					2	
31	f1410131	CCV				15-JUN-2007 01:15	1.0	1.0			1	12 2	
32	f1410132	X	RINSE			15-JUN-2007 01:23	1.0					2	
33	f1410133	CCB				15-JUN-2007 01:29	1.0	1.0			1	2	
34	f1410134	X				15-JUN-2007 01:35	1.0					2	
35	f1410135	ICSA				15-JUN-2007 01:40	1.0	1.0			1	10 2	7:CA=266000
36	f1410136	ICSAB				15-JUN-2007 01:46	1.0	1.0			1	11 2	7:CA=282800
37	f1410137	X	RINSE			15-JUN-2007 01:53	1.0					2	
38	f1410138	X	RINSE			15-JUN-2007 01:58	1.0					2	
39	f1410139	X	RINSE			15-JUN-2007 02:04	1.0					2	
40	f1410140	X	RINSE			15-JUN-2007 02:10	1.0					2	
41	f1410141	SAMPLE	195251-001	126205	Water	15-JUN-2007 02:16	10.0	1.0			1.	2	
42	f1410142	SAMPLE	195251-006	126205	Water	15-JUN-2007 02:22	10.0	1.0			1	2	
43	f1410143	SAMPLE	195251-007	126205	Water	15-JUN-2007 02:28	10.0	1.0			1	2	
44	f1410144	SAMPLE	195337-001	126205	Filtra	15-JUN-2007 02:34	5.0	1.0	3		1	2	3:NA=221400
45	f1410145	SAMPLE	195337-002	126205	Filtra	15-JUN-2007 02:40	5.0	1.0	4		1	2	4:NA=490800
46	f1410146	SAMPLE	195337-003	126205	Filtra	15-JUN-2007 02:46	5.0	1.0	5		1	2	5:NA=654000
47	f1410147	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 02:52	5.0	1.0	2		1	2	
48	f1410148	SAMPLE	195285-013	126205	Filtra	15-JUN-2007 02:58	5.0	1.0			1	2	
49	f1410149	X	RINSE			15-JUN-2007 03:04	1.0					2	
50	f1410150	X	RINSE			15-JUN-2007 03:10	1.0					2	
51	f1410151	CCV				15-JUN-2007 03:16	1.0	1.0			1	12 2	
52	f1410152	X	RINSE			15-JUN-2007 03:23	1.0					2	
53	f1410153	CCB				15-JUN-2007 03:29	1.0	1.0			1	2	
54	f1410154	X				15-JUN-2007 03:35	1.0					2	
55	f1410155	SAMPLE	195285-014	126205	Filtra	15-JUN-2007 03:41	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
156	f1410156	X	RINSE			15-JUN-2007 03:47	1.0			2	
157	f1410157	X	RINSE			15-JUN-2007 03:53	1.0			2	
158	f1410158	CCV				15-JUN-2007 03:59	1.0	1.0	1	12 2	
159	f1410159	X	RINSE			15-JUN-2007 04:06	1.0			2	
160	f1410160	CCB				15-JUN-2007 04:12	1.0	1.0	1	2	
161	f1410161	X				15-JUN-2007 04:18	1.0			2	
162	f1410162	ICSA				15-JUN-2007 04:24	1.0	1.0	1	10 2	7:CA=263600
163	f1410163	ICSAB				15-JUN-2007 04:30	1.0	1.0	1	11 2	7:CA=284400

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897239429001
Units : ug/L

Date : 15-JUN-2007 06:49
X Axis : R

Reviewer : ---

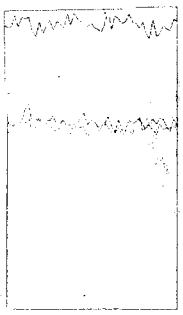
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f15g0005	897239429005		15-JUN-2007 06:55	S6414
L2	f15g0006	897239429006		15-JUN-2007 07:01	S6416
L3	f15g0007	897239429007		15-JUN-2007 07:07	S6417
L4	f15g0008	897239429008		15-JUN-2007 07:12	S6418
L5	f15g0009	897239429009		15-JUN-2007 07:18	S6412
L6	f15g0010	897239429010		15-JUN-2007 07:24	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8379	0.6912	0.6963	0.6420	0.6299	0.6117	BLNK	-0.8872	1.62499		0.6848	1.000	0.995	
Antimony	A	0.4972	0.3367	0.3225	0.2977	0.3237	0.3164	BLNK	-0.0110	3.14648		0.3490	1.000	0.995	
Barium	A	0.6126	0.1751	0.0963	0.1306	0.0689	0.0676	BLNK	-0.0123	14.7140		0.1918	0.997	0.995	
Beryllium	A	0.2633	0.2698	0.2792	0.2613	0.2655	0.2702	BLNK	-0.0028	3.71451		0.2682	1.000	0.995	
Cadmium	A	0.0807	0.0780	0.0771	0.0724	0.0730	0.0712	BLNK	-0.0091	13.9815		0.0754	1.000	0.995	
Calcium	A	0.1376	0.0463	0.0314	0.0206	0.0209	0.0201	BLNK	-34.647	49.5468		0.0461	1.000	0.995	
Lead	A	1.1822	0.9685	0.8699	0.8076	0.8424	0.8172	BLNK	-0.0227	1.21644		0.9146	1.000	0.995	
Magnesium	A	0.7133	0.5819	0.5965	0.5451	0.5306	0.5115	BLNK	-0.9436	1.94032		0.5798	1.000	0.995	
Molybdenum	A	0.3103	0.2155	0.2186	0.2057	0.2043	0.2198	BLNK	-0.0383	4.61652		0.2290	0.999	0.995	
Potassium	A	10.899	2.3764	1.5404	0.7748	0.6933	0.6702	BLNK	-123.90	1.49270		2.8257	1.000	0.995	
Silver	A	0.3842	0.3419	0.3447	0.3273	0.3551	0.3423	BLNK	-0.0048	2.90019		0.3492	1.000	0.995	
Thallium	A	0.9482	0.8386	0.8256	0.7752	0.8620	0.8419	BLNK	-0.0086	1.18243		0.8486	1.000	0.995	
Arsenic	E	0.6338	0.6460	0.6660	0.6233	0.6225	0.6046	BLNK	-0.0220	1.64441		0.6327	1.000	0.995	
Chromium	E	12.844	6.2294	6.0958	5.2339	5.2273	5.0080	BLNK	-0.0705	0.19802		6.7730	1.000	0.995	
Cobalt	E	11.177	10.044	9.9608	9.5281	9.5846	9.1156	BLNK	-0.0073	0.10858		9.9018	0.999	0.995	
Copper	E	128.66	25.626	23.781	9.1590	8.4346	7.9918	BLNK	-0.9798	0.12447		33.943	0.999	0.995	
Manganese	E	3.8162	2.1634	2.0131	1.8361	1.8215	1.7514	BLNK	-0.0200	0.56647		2.2336	1.000	0.995	
Nickel	E	11.799	3.2815	3.1075	2.7495	2.7111	2.5701	BLNK	-0.0544	0.38495		4.3698	0.999	0.995	
Sodium	E	5.3694	1.3433	0.9662	0.5862	0.5537	0.5221	BLNK	-68.857	1.90020		1.5568	0.999	0.995	
Vanadium	E	6.2827	4.3133	4.0415	3.7155	3.8125	3.6820	BLNK	-0.0646	0.26979		4.3079	1.000	0.995	
Zinc	E	22.601	4.0786	2.1071	1.0860	0.9304	0.8945	BLNK	-0.7877	1.11392		5.2830	1.000	0.995	
Iron	H	1.2092	0.9448	0.9430	0.8759	0.8672	0.8355	BLNK	-1.5779	1.18793		0.9459	1.000	0.995	
Selenium	H	0.1253	0.1268	0.1268	0.1221	0.1192	0.1154	BLNK	-0.0127	8.60551		0.1226	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	27	50.00	11	100.0	12	1000	4	10000	2	20000	-1
Antimony	A	0.100	45	0.500	4	1.000	0	10.00	-6	100.0	2	200.0	0
Barium	A	0.100	789	0.500	155	1.000	40	10.00	92	100.0	1	200.0	-1
Beryllium	A	0.100	-5	0.500	0	1.000	3	10.00	-3	100.0	-1	200.0	0
Cadmium	A	0.100	4	0.500	7	1.000	7	10.00	1	100.0	2	200.0	-1
Calcium	A	10.00	235	50.00	60	100.0	21	1000	-1	10000	3	20000	-1
Lead	A	0.100	21	0.500	13	1.000	4	10.00	-2	100.0	2	200.0	-1
Magnesium	A	10.00	29	50.00	11	100.0	15	1000	6	10000	3	20000	-1
Molybdenum	A	0.100	5	0.500	-8	1.000	-3	10.00	-5	100.0	-6	200.0	1
Potassium	A	10.00	288	50.00	7	100.0	6	1000	3	10000	2	20000	-1
Silver	A	0.100	7	0.500	-2	1.000	-1	10.00	-5	100.0	3	200.0	-1
Thallium	A	0.050	-5	0.250	-4	0.500	-4	5.000	-9	50.00	2	100.0	0
Arsenic	E	0.100	-18	0.500	2	1.000	7	10.00	2	100.0	2	200.0	-1
Chromium	E	0.100	84	0.500	9	1.000	14	10.00	3	100.0	3	200.0	-1
Cobalt	E	0.100	14	0.500	8	1.000	7	10.00	3	100.0	4	200.0	-1
Copper	E	0.100	522	0.500	23	1.000	98	10.00	4	100.0	4	200.0	-1
Manganese	E	0.100	96	0.500	19	1.000	12	10.00	4	100.0	3	200.0	-1
Nickel	E	0.100	300	0.500	15	1.000	14	10.00	5	100.0	4	200.0	-1
Sodium	E	10.00	232	50.00	18	100.0	15	1000	5	10000	5	20000	-1
Vanadium	E	0.100	5	0.500	3	1.000	3	10.00	0	100.0	3	200.0	-1
Zinc	E	0.100	1630	0.500	197	1.000	56	10.00	13	100.0	3	200.0	-1
Iron	H	10.00	28	50.00	9	100.0	10	1000	4	10000	3	20000	-1
Selenium	H	0.100	-5	0.500	7	1.000	8	10.00	5	100.0	3	200.0	-1

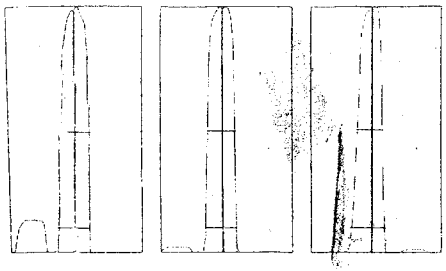
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19010.0	18934.6	2.44	2.60
89	50,000	30214.0	30949.4	2.80	2.60
205	50,000	29603.0	29907.4	2.55	7.50

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.968%
Doubly Charged: 70/140 1.953%



m/z:	7	89	205
Height:	18,827	30,950	29,729
Axis:	7.00	88.95	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.7500	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.68	V
Smpl Depth	9	mm
Torch-H	0.6	mm
Torch-V	0.3	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-170	V
Omega Bias-ce	-30	V
Omega Lens-ce	-2	V
Cell Entrance	-30	V
QP Focus	7	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	126	
AMU Offset	126	
Axis Gain	0.9997	
Axis Offset	0.04	
QP Bias	-1	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1670	V
Pulse HV	1070	V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	6 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
51	5.9	49.06
59	3512.0	3.09
89	2282.6	3.29

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	2881.9	3.58
78	0.2	179.76
89	27467.1	2.31

Integration Time: 0.1000sec

Generated : Jun 15, 2007 05:58:54
Printed : Jun 15, 2007 06:00:32

08291

P/A Factor Tuning Report

Acquired:Jun 15 2007 06:10 am

Mass[amu]	Element	P/A Factor
6	Li	0.062565
7	(Li)	0.066124
9	Be	0.071729
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.088556
45	Sc	0.087082
51	V	0.082241
52	Cr	0.091161
55	Mn	0.093202
56	Fe	Sensitivity too high
59	Co	0.096359
60	Ni	Sensitivity too low
63	Cu	0.098927
65	Cu	0.101419
66	Zn	Sensitivity too low
72	Ge	0.099373
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098348
98	Mo	0.098625
99	(Ru)	Sensitivity too low
107	Ag	0.106205
111	Cd	Sensitivity too low
115	In	0.104819
118	(In)	0.104631
121	Sb	0.104783
137	Ba	Sensitivity too low
159	Tb	0.108935
205	Tl	0.113946
206	(Pb)	0.113879
207	(Pb)	0.113809
208	Pb	0.114053
209	Bi	0.113471

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

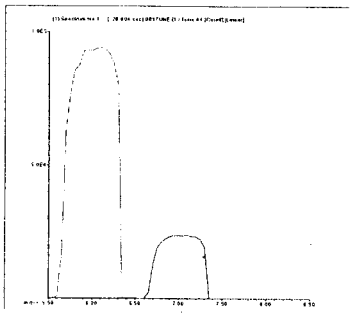
00292

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F15g00.B\001TUNE.D
Date Acquired:	Jun 15 2007 06:29 am
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.47	5.00	
59 Co	0.47	5.00	
115 In	1.69	5.00	
205 Tl	0.32	5.00	



7 Li

Mass Calib.

Actual: 7.00

Required: 6.90 - 7.10

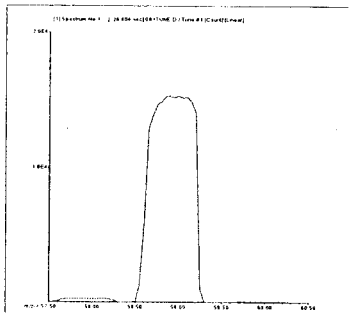
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 58.95

Required: 58.90 - 59.10

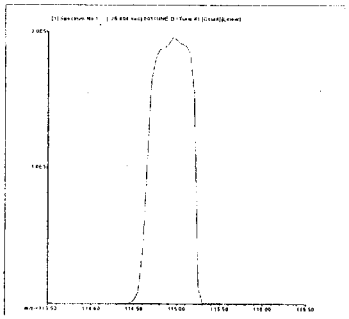
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



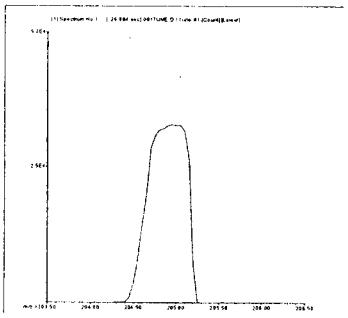
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 204.95
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:

00294

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004C
Date Acquired: Jun 15 2007 06:47 am
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:51 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	947755.13	A	4878.00	0.51
7	(Li)		P		
9	Be	14.44	P	10.18	70.48
23	Na	11762.49	P	236.60	2.01
24	Mg	9966.74	P	259.30	2.60
27	Al	11188.76	P	255.20	2.28
39	K	1701053.00	A	11670.00	0.69
44	Ca	14329.16	P	375.20	2.62
45	Sc	421162.09	P	4015.00	0.95
45	Sc	16229.98	P	243.20	1.50
45	Sc	1024786.00	A	9004.00	0.88
51	V	77.78	P	4.84	6.23
52	Cr	115.56	P	8.68	7.51
55	Mn	11.48	P	1.70	14.78
56	Fe	11191.89	P	600.50	5.37
59	Co	21.85	P	1.70	7.77
60	Ni	45.93	P	3.57	7.78
63	Cu	2342.05	P	81.38	3.47
65	Cu	1065.60	P	25.63	2.41
66	Zn	210.37	P	14.92	7.09
72	Ge	105465.50	P	1052.00	1.00
72	Ge	14880.62	P	152.60	1.03
75	As	4.00	P	1.76	44.10
78	Se	3.11	P	1.02	32.72
89	Y	1534317.00	A	31420.00	2.05
98	Mo	254.46	P	61.50	24.17
107	Ag	53.34	P	10.00	18.75
111	Cd	21.11	P	1.93	9.12
115	In	1615942.00	A	16590.00	1.03
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	113.34	P	10.00	8.82
137	Ba	44.45	P	5.09	11.46
159	Tb	2647564.00	A	44140.00	1.67
205	Tl	277.79	P	10.18	3.66
208	Pb	988.94	P	25.89	2.62
209	Bi	1910108.00	A	31210.00	1.63

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 15 2007 06:53 am
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:51 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	943913.69	A	10460.00	1.11
7	(Li)		P		
9	Be	496.69	P	45.10	9.08
23	Na	17573.51	P	104.90	0.60
24	Mg	143769.09	P	381.70	0.27
27	Al	168870.50	P	2292.00	1.36
39	K	2196536.00	A	15880.00	0.72
44	Ca	27721.76	P	181.20	0.65
45	Sc	423492.59	P	719.90	0.17
45	Sc	16368.64	P	296.20	1.81
45	Sc	1007752.00	A	8703.00	0.86
51	V	205.56	P	6.19	3.01
52	Cr	421.13	P	65.68	15.60
55	Mn	124.82	P	7.23	5.79
56	Fe	102414.10	P	543.30	0.53
59	Co	365.93	P	9.96	2.72
60	Ni	386.31	P	25.59	6.62
63	Cu	3835.33	P	58.60	1.53
65	Cu	1834.20	P	76.69	4.18
66	Zn	673.73	P	0.64	0.10
72	Ge	104706.60	P	642.20	0.61
72	Ge	14904.71	P	35.97	0.24
75	As	18.89	P	2.69	14.26
78	Se	26.22	P	4.29	16.35
89	Y	1516639.00	A	10060.00	0.66
98	Mo	941.17	P	16.44	1.75
99	(Ru)	2.22	P	1.93	86.62
107	Ag	1232.31	P	51.68	4.19
111	Cd	258.90	P	12.62	4.87
115	In	1604256.00	A	17620.00	1.10
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1595.70	P	100.10	6.27
137	Ba	3203.79	P	67.43	2.10
159	Tb	2615250.00	A	16420.00	0.63
205	Tl	1795.74	P	90.21	5.02
208	Pb	6182.97	P	223.70	3.62
209	Bi	1893869.00	A	8900.00	0.47

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	943913.75	1.11	947755.06	99.6	80 - 120	
45	Sc	423492.59	0.17	421162.13	100.6	80 - 120	
45	Sc	16368.65	1.81	16229.98	100.9	80 - 120	
45	Sc	1007751.80	0.86	1024785.60	98.3	80 - 120	
72	Ge	104706.61	0.61	105465.45	99.3	80 - 120	
72	Ge	14904.71	0.24	14880.62	100.2	80 - 120	
89	Y	1516638.90	0.66	1534317.40	98.8	80 - 120	
115	In	1604256.00	1.10	1615942.40	99.3	80 - 120	
159	Tb	2615250.00	0.63	2647563.80	98.8	80 - 120	
209	Bi	1893869.40	0.47	1910108.10	99.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 15 2007 06:59 am
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:57 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	935565.50	A	5843.00	0.62
7 (Li)		P		
9 Be	2523.61	P	120.40	4.77
23 Na	21363.79	P	213.40	1.00
24 Mg	590107.88	P	1293.00	0.22
27 Al	701022.13	P	3415.00	0.49
39 K	2410063.00	A	4210.00	0.17
44 Ca	46952.11	P	688.00	1.47
45 Sc	419219.81	P	2217.00	0.53
45 Sc	15904.46	P	102.60	0.65
45 Sc	1014195.00	A	4754.00	0.47
51 V	685.95	P	28.57	4.17
52 Cr	990.78	P	20.04	2.02
55 Mn	344.08	P	2.31	0.67
56 Fe	396080.69	P	242.30	0.06
59 Co	1597.51	P	39.67	2.48
60 Ni	521.87	P	17.01	3.26
63 Cu	3746.78	P	44.70	1.19
65 Cu	1764.20	P	32.86	1.86
66 Zn	596.31	P	17.37	2.91
72 Ge	104089.20	P	246.90	0.24
72 Ge	14621.12	P	41.27	0.28
75 As	94.45	P	2.78	2.94
78 Se	132.00	P	8.67	6.57
89 Y	1524579.00	A	2253.00	0.15
98 Mo	3286.02	P	188.60	5.74
99 (Ru)	2.22	P	3.85	173.20
107 Ag	5410.05	P	132.70	2.45
111 Cd	1234.54	P	97.90	7.93
115 In	1582749.00	A	9463.00	0.60
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5328.92	P	47.91	0.90
137 Ba	4576.43	P	82.26	1.80
159 Tb	2613691.00	A	15110.00	0.58
205 Tl	7898.03	P	83.73	1.06
208 Pb	25311.96	P	130.70	0.52
209 Bi	1883717.00	A	9275.00	0.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	935565.50	0.62	947755.06	98.7	80 - 120	
45 Sc	419219.84	0.53	421162.13	99.5	80 - 120	
45 Sc	15904.46	0.65	16229.98	98.0	80 - 120	
45 Sc	1014195.30	0.47	1024785.60	99.0	80 - 120	
72 Ge	104089.20	0.24	105465.45	98.7	80 - 120	
72 Ge	14621.13	0.28	14880.62	98.3	80 - 120	
89 Y	1524578.90	0.15	1534317.40	99.4	80 - 120	
115 In	1582749.10	0.60	1615942.40	97.9	80 - 120	
159 Tb	2613691.00	0.58	2647563.80	98.7	80 - 120	
209 Bi	1883717.00	0.49	1910108.10	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 15 2007 07:04 am
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:03 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	942098.50	A	8795.00	0.93
7 (Li)		P		
9 Be	5259.92	P	173.60	3.30
23 Na	30577.95	P	54.38	0.18
24 Mg	1206511.00	A	11400.00	0.94
27 Al	1408348.00	A	10220.00	0.73
39 K	3115731.00	A	8164.00	0.26
44 Ca	63469.97	P	699.90	1.10
45 Sc	420489.09	P	1528.00	0.36
45 Sc	15823.26	P	42.51	0.27
45 Sc	1011408.00	A	12040.00	1.19
51 V	1278.96	P	17.10	1.34
52 Cr	1929.03	P	38.89	2.02
55 Mn	637.06	P	14.33	2.25
56 Fe	793059.00	P	3320.00	0.42
59 Co	3152.20	P	31.46	1.00
60 Ni	983.37	P	14.70	1.49
63 Cu	6833.41	P	48.01	0.70
65 Cu	3375.22	P	162.30	4.81
66 Zn	605.58	P	15.44	2.55
72 Ge	104516.00	P	526.00	0.50
72 Ge	14368.27	P	192.40	1.34
75 As	191.34	P	4.67	2.44
78 Se	265.12	P	5.59	2.11
89 Y	1521320.00	A	9324.00	0.61
98 Mo	6651.69	P	229.30	3.45
99 (Ru)	6.67	P	3.33	49.99
107 Ag	10879.88	P	328.50	3.02
111 Cd	2434.73	P	87.97	3.61
115 In	1577913.00	A	10710.00	0.68
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10178.22	P	105.60	1.04
137 Ba	5038.80	P	130.40	2.59
159 Tb	2617613.00	A	11730.00	0.45
205 Tl	15564.65	P	322.70	2.07
208 Pb	45541.71	P	575.90	1.26
209 Bi	1885456.00	A	15510.00	0.82

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	942098.50	0.93	947755.06	99.4	80 - 120	
45 Sc	420489.13	0.36	421162.13	99.8	80 - 120	
45 Sc	15823.26	0.27	16229.98	97.5	80 - 120	
45 Sc	1011408.50	1.19	1024785.60	98.7	80 - 120	
72 Ge	104515.95	0.50	105465.45	99.1	80 - 120	
72 Ge	14368.27	1.34	14880.62	96.6	80 - 120	
89 Y	1521320.10	0.61	1534317.40	99.2	80 - 120	
115 In	1577912.60	0.68	1615942.40	97.6	80 - 120	
159 Tb	2617612.80	0.45	2647563.80	98.9	80 - 120	
209 Bi	1885455.60	0.82	1910108.10	98.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 15 2007 07:10 am
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:08 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	951113.00	A	6878.00	0.72
7	(Li)		P		
9	Be	49699.53	P	304.20	0.61
23	Na	188874.41	P	1504.00	0.80
24	Mg	11052280.00	A	89720.00	0.81
27	Al	13016580.00	A	98690.00	0.76
39	K	15708350.00	A	48390.00	0.31
44	Ca	418282.50	P	3273.00	0.78
45	Sc	416331.59	P	1506.00	0.36
45	Sc	16109.86	P	175.20	1.09
45	Sc	1013750.00	A	7365.00	0.73
51	V	11971.33	P	141.30	1.18
52	Cr	16863.27	P	181.80	1.08
55	Mn	5914.88	P	127.30	2.15
56	Fe	7293637.00	A	93150.00	1.28
59	Co	30698.50	P	249.40	0.81
60	Ni	8858.54	P	72.86	0.82
63	Cu	26973.89	P	258.30	0.96
65	Cu	13286.16	P	246.90	1.86
66	Zn	3198.51	P	14.33	0.45
72	Ge	104390.60	P	938.90	0.90
72	Ge	14726.03	P	125.60	0.85
75	As	1835.68	P	13.87	0.76
78	Se	2548.23	P	12.06	0.47
89	Y	1526105.00	A	1046.00	0.07
98	Mo	62786.71	P	263.50	0.42
99	(Ru)	7.78	P	7.70	98.97
107	Ag	104639.20	P	1218.00	1.16
111	Cd	23156.35	P	144.00	0.62
115	In	1598660.00	A	8575.00	0.54
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	95191.68	P	1283.00	1.35
137	Ba	68708.61	P	684.30	1.00
159	Tb	2631355.00	A	26910.00	1.02
205	Tl	147126.80	P	1274.00	0.87
208	Pb	424982.31	P	2413.00	0.57
209	Bi	1898198.00	A	30800.00	1.62

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	951113.00	0.72	947755.06	100.4	80 - 120	
45	Sc	416331.63	0.36	421162.13	98.9	80 - 120	
45	Sc	16109.87	1.09	16229.98	99.3	80 - 120	
45	Sc	1013750.30	0.73	1024785.60	98.9	80 - 120	
72	Ge	104390.56	0.90	105465.45	99.0	80 - 120	
72	Ge	14726.03	0.85	14880.62	99.0	80 - 120	
89	Y	1526105.40	0.07	1534317.40	99.5	80 - 120	
115	In	1598660.10	0.54	1615942.40	98.9	80 - 120	
159	Tb	2631355.30	1.02	2647563.80	99.4	80 - 120	
209	Bi	1898198.50	1.62	1910108.10	99.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 15 2007 07:16 am
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:14 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	936703.50	A	13980.00	1.49
7	(Li)		P		
9	Be	497381.91	P	1312.00	0.26
23	Na	1743709.00	A	5873.00	0.34
24	Mg	############	A	438900.00	0.40
27	Al	############	A	590200.00	0.45
39	K	############	A	390900.00	0.27
44	Ca	4346167.00	A	22000.00	0.51
45	Sc	414051.91	P	2356.00	0.57
45	Sc	15746.86	P	145.50	0.92
45	Sc	1039135.00	A	9048.00	0.87
51	V	120064.20	P	319.90	0.27
52	Cr	164626.00	P	1702.00	1.03
55	Mn	57363.88	P	501.30	0.87
56	Fe	71811048.00	A	586200.00	0.82
59	Co	301848.59	P	2289.00	0.76
60	Ni	85380.16	P	424.00	0.50
63	Cu	244811.20	P	1637.00	0.67
65	Cu	121538.20	P	869.10	0.72
66	Zn	27006.24	P	258.00	0.96
72	Ge	103637.00	P	416.20	0.40
72	Ge	14512.86	P	160.20	1.10
75	As	18067.30	P	184.60	1.02
78	Se	24709.22	P	183.70	0.74
89	Y	1548801.00	A	4534.00	0.29
98	Mo	632713.19	P	2582.00	0.41
99	(Ru)	24.45	P	1.93	7.87
107	Ag	1122046.00	A	6038.00	0.54
111	Cd	230635.00	P	851.20	0.37
115	In	1579861.00	A	15280.00	0.97
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	1022827.00	A	17250.00	1.69
137	Ba	361164.81	P	383.10	0.11
159	Tb	2621445.00	A	16840.00	0.64
205	Tl	1590165.00	A	3515.00	0.22
208	Pb	4416626.00	A	16620.00	0.38
209	Bi	1844639.00	A	4617.00	0.25

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	936703.50	1.49	947755.06	98.8	80 - 120	
45	Sc	414051.91	0.57	421162.13	98.3	80 - 120	
45	Sc	15746.86	0.92	16229.98	97.0	80 - 120	
45	Sc	1039135.20	0.87	1024785.60	101.4	80 - 120	
72	Ge	103636.99	0.40	105465.45	98.3	80 - 120	
72	Ge	14512.86	1.10	14880.62	97.5	80 - 120	
89	Y	1548800.90	0.29	1534317.40	100.9	80 - 120	
115	In	1579860.60	0.97	1615942.40	97.8	80 - 120	
159	Tb	2621444.50	0.64	2647563.80	99.0	80 - 120	
209	Bi	1844638.80	0.25	1910108.10	96.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 15 2007 07:22 am
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:20 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	945207.50	A	9548.00	1.01
7 (Li)		P		
9 Be	1021367.00	A	7885.00	0.77
23 Na	3380218.00	A	68720.00	2.03
24 Mg	############	A	1148000.00	0.53
27 Al	############	A	887300.00	0.34
39 K	############	A	1527000.00	0.54
44 Ca	8536508.00	A	77290.00	0.91
45 Sc	416098.19	P	1783.00	0.43
45 Sc	16186.22	P	196.30	1.21
45 Sc	1064233.00	A	5155.00	0.48
51 V	238387.59	P	2691.00	1.13
52 Cr	324230.31	P	2285.00	0.70
55 Mn	113389.10	P	1127.00	0.99
56 Fe	############	A	323700.00	0.23
59 Co	590176.38	P	5968.00	1.01
60 Ni	166400.09	P	1742.00	1.05
63 Cu	471635.31	P	3703.00	0.79
65 Cu	234991.70	P	1836.00	0.78
66 Zn	52793.06	P	527.70	1.00
72 Ge	103290.10	P	153.10	0.15
72 Ge	14755.69	P	257.90	1.75
75 As	35682.99	P	481.50	1.35
78 Se	47699.48	P	279.70	0.59
89 Y	1570082.00	A	4470.00	0.28
98 Mo	1380357.00	A	9603.00	0.70
99 (Ru)	32.22	P	8.39	26.03
107 Ag	2183102.00	A	20030.00	0.92
111 Cd	453833.41	P	2867.00	0.63
115 In	1594708.00	A	29540.00	1.85
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2018129.00	A	14570.00	0.72
137 Ba	712928.13	P	4885.00	0.69
159 Tb	2637372.00	A	17010.00	0.64
205 Tl	3058645.00	A	25580.00	0.84
208 Pb	8620622.00	A	41100.00	0.48
209 Bi	1816467.00	A	12510.00	0.69

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	945207.50	1.01	947755.06	99.7	80 - 120	
45 Sc	416098.25	0.43	421162.13	98.8	80 - 120	
45 Sc	16186.22	1.21	16229.98	99.7	80 - 120	
45 Sc	1064232.80	0.48	1024785.60	103.8	80 - 120	
72 Ge	103290.11	0.15	105465.45	97.9	80 - 120	
72 Ge	14755.69	1.75	14880.62	99.2	80 - 120	
89 Y	1570082.10	0.28	1534317.40	102.3	80 - 120	
115 In	1594707.80	1.85	1615942.40	98.7	80 - 120	
159 Tb	2637372.00	0.64	2647563.80	99.6	80 - 120	
209 Bi	1816466.90	0.69	1910108.10	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429012 File : f15g0012 Time : 15-JUN-2007 07:38
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6848	0.6310	10000	10250	ug/L	3	10	
Antimony	A	0.3490	0.3272	100.0	102.9	ug/L	3	10	
Barium	A	0.1918	0.0695	100.0	102.3	ug/L	2	10	
Beryllium	A	0.2682	0.2693	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0754	0.0736	100.0	102.9	ug/L	3	10	
Calcium	A	0.0461	0.0212	10000	10450	ug/L	5	10	
Lead	A	0.9146	0.8028	100.0	97.63	ug/L	-2	10	
Magnesium	A	0.5798	0.5293	10000	10270	ug/L	3	10	
Molybdenum	A	0.2290	0.2060	100.0	95.08	ug/L	-5	10	
Potassium	A	2.8257	0.7029	10000	10370	ug/L	4	10	
Silver	A	0.3492	0.3573	100.0	103.6	ug/L	4	10	
Thallium	A	0.8486	0.8470	50.00	50.07	ug/L	0	10	
Arsenic	E	0.6327	0.6332	100.0	104.1	ug/L	4	10	
Chromium	E	6.7730	5.2392	100.0	103.7	ug/L	4	10	
Cobalt	E	9.9018	9.5626	100.0	103.8	ug/L	4	10	
Copper	E	33.943	8.4931	100.0	104.7	ug/L	5	10	
Manganese	E	2.2336	1.8159	100.0	102.8	ug/L	3	10	
Nickel	E	4.3698	2.7099	100.0	104.3	ug/L	4	10	
Sodium	E	1.5568	0.5459	10000	10300	ug/L	3	10	
Vanadium	E	4.3079	3.8212	100.0	103.0	ug/L	3	10	
Zinc	E	5.2830	0.9410	100.0	104.0	ug/L	4	10	
Iron	H	0.9459	0.8699	10000	10330	ug/L	3	10	
Selenium	H	0.1226	0.1198	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	967922	2.13
Scandium	A	1024786	1081574	5.54
Scandium	E	16230	16326	0.59
Scandium	H	421162	421411	0.06
Germanium	H	105466	105444	-0.02
Germanium	E	14881	14851	-0.20
Indium	A	1615942	1660625	2.77
Bismuth	A	1910108	1893588	-0.86
Yttrium	A	1534317	1620583	5.62
Terbium	A	2647564	2741722	3.56

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429014 File : f15g0014 Time : 15-JUN-2007 07:51
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.006037]	0.1000	0.003333	ug/L	!ib
Barium	A	ND	0.1000	0.002418	ug/L	
Beryllium	A	[0.005327]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01143]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.006499]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	960938	1.39
Scandium	A	1024786	1055567	3.00
Scandium	E	16230	15956	-1.69
Scandium	H	421162	415756	-1.28
Germanium	H	105466	104447	-0.97
Germanium	E	14881	14746	-0.90
Indium	A	1615942	1648089	1.99
Bismuth	A	1910108	1921327	0.59
Yttrium	A	1534317	1569938	2.32
Terbium	A	2647564	2674692	1.02

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429017 File : f15g0017 Time : 15-JUN-2007 08:09
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05807]	0.1000	ug/L	
Barium	A	0.9493	0.1000	ug/L	
Beryllium	A	[0.02214]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4012	0.1000	ug/L	
Silver	A	0.1871	0.1000	ug/L	
Thallium	A	[0.03976]	0.05000	ug/L	
Arsenic	E	0.2114	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1931	0.1000	ug/L	
Copper	E	0.9288	0.1000	ug/L	
Manganese	E	0.5332	0.1000	ug/L	
Nickel	E	1.057	0.1000	ug/L	
Vanadium	E	[0.02332]	0.1000	ug/L	
Zinc	E	2.038	0.1000	ug/L	
Selenium	H	[0.05829]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91800	ug/L	92
Calcium	A	300000	277700	ug/L	93
Magnesium	A	100000	89350	ug/L	89
Molybdenum	A	2000	1789	ug/L	89
Potassium	A	100000	92090	ug/L	92
Sodium	E	250000	218800	ug/L	88
Iron	H	250000	219800	ug/L	88

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	833330	-12.07
Scandium	A	1024786	1031697	0.67
Scandium	E	16230	16359	0.79
Scandium	H	421162	407246	-3.30
Germanium	H	105466	97058	-7.97
Germanium	E	14881	14491	-2.62
Indium	A	1615942	1507874	-6.69
Bismuth	A	1910108	1645288	-13.86
Yttrium	A	1534317	1572313	2.48
Terbium	A	2647564	2615635	-1.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429018 File : f15g0018 Time : 15-JUN-2007 08:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96270	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	293900	ug/L	-2		
Magnesium	A	100000	93820	ug/L	-6		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97520	ug/L	-2		
Silver	A	50.00	44.80	ug/L	-10	20	
Arsenic	E	100.0	104.5	ug/L	5	20	
Chromium	E	200.0	195.5	ug/L	-2	20	
Cobalt	E	200.0	184.9	ug/L	-8	20	
Copper	E	200.0	180.6	ug/L	-10	20	
Manganese	E	200.0	196.4	ug/L	-2	20	
Nickel	E	200.0	181.2	ug/L	-9	20	
Sodium	E	250000	232400	ug/L	-7		
Vanadium	E	200.0	198.4	ug/L	-1	20	
Zinc	E	100.0	93.81	ug/L	-6	20	
Iron	H	250000	237400	ug/L	-5		
Selenium	H	100.0	104.3	ug/L	4	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	400547	-4.89
Scandium	A	1024786	1032868	0.79
Scandium	E	16230	16221	-0.06
Germanium	H	105466	95805	-9.16
Germanium	E	14881	14323	-3.75
Indium	A	1615942	1499416	-7.21
Yttrium	A	1534317	1555187	1.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429033 File : f15g0033 Time : 15-JUN-2007 09:43
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6098	10000	9909	ug/L	-1	10	
Antimony	A	0.3490	0.3195	100.0	100.5	ug/L	1	10	
Barium	A	0.1918	0.0682	100.0	100.4	ug/L	0	10	
Beryllium	A	0.2682	0.2603	100.0	96.70	ug/L	-3	10	
Cadmium	A	0.0754	0.0713	100.0	99.73	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7907	100.0	96.16	ug/L	-4	10	
Magnesium	A	0.5798	0.5137	10000	9967	ug/L	0	10	
Molybdenum	A	0.2290	0.2016	100.0	93.05	ug/L	-7	10	
Potassium	A	2.8257	0.6881	10000	10150	ug/L	2	10	
Silver	A	0.3492	0.3506	100.0	101.7	ug/L	2	10	
Thallium	A	0.8486	0.8269	50.00	48.88	ug/L	-2	10	
Arsenic	E	0.6327	0.6115	100.0	100.5	ug/L	1	10	
Chromium	E	6.7730	5.0698	100.0	100.3	ug/L	0	10	
Cobalt	E	9.9018	9.3019	100.0	101.0	ug/L	1	10	
Copper	E	33.943	8.0891	100.0	99.71	ug/L	0	10	
Manganese	E	2.2336	1.7638	100.0	99.89	ug/L	0	10	
Nickel	E	4.3698	2.6189	100.0	100.8	ug/L	1	10	
Sodium	E	1.5568	0.5324	10000	10050	ug/L	1	10	
Vanadium	E	4.3079	3.6857	100.0	99.37	ug/L	-1	10	
Zinc	E	5.2830	0.9007	100.0	99.54	ug/L	0	10	
Iron	H	0.9459	0.8588	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1172	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	943519	-0.45
Scandium	A	1024786	1059042	3.34
Scandium	E	16230	15887	-2.11
Scandium	H	421162	403931	-4.09
Germanium	H	105466	101462	-3.80
Germanium	E	14881	14629	-1.69
Indium	A	1615942	1632221	1.01
Bismuth	A	1910108	1884026	-1.37
Yttrium	A	1534317	1590028	3.63
Terbium	A	2647564	2695620	1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429035 File : f15g0035 Time : 15-JUN-2007 09:56
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007591]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.002789]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.002456]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.077]	10.00	2.807	ug/L	!ib
Silver	A	[0.002661]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	933251	-1.53
Scandium	A	1024786	1034023	0.90
Scandium	E	16230	15841	-2.40
Scandium	H	421162	406728	-3.43
Germanium	H	105466	102698	-2.62
Germanium	E	14881	14617	-1.77
Indium	A	1615942	1623222	0.45
Bismuth	A	1910108	1919394	0.49
Yttrium	A	1534317	1559025	1.61
Terbium	A	2647564	2648690	0.04

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429045 File : f15g0045 Time : 15-JUN-2007 10:56
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6166	10000	10020	ug/L	0	10	
Antimony	A	0.3490	0.3230	100.0	101.6	ug/L	2	10	
Barium	A	0.1918	0.0696	100.0	102.4	ug/L	2	10	
Beryllium	A	0.2682	0.2629	100.0	97.67	ug/L	-2	10	
Cadmium	A	0.0754	0.0725	100.0	101.3	ug/L	1	10	
Calcium	A	0.0461	0.0206	10000	10150	ug/L	2	10	
Lead	A	0.9146	0.8044	100.0	97.83	ug/L	-2	10	
Magnesium	A	0.5798	0.5176	10000	10040	ug/L	0	10	
Molybdenum	A	0.2290	0.2035	100.0	93.89	ug/L	-6	10	
Potassium	A	2.8257	0.6877	10000	10140	ug/L	1	10	
Silver	A	0.3492	0.3525	100.0	102.2	ug/L	2	10	
Thallium	A	0.8486	0.8271	50.00	48.89	ug/L	-2	10	
Arsenic	E	0.6327	0.6130	100.0	100.8	ug/L	1	10	
Chromium	E	6.7730	5.1279	100.0	101.5	ug/L	2	10	
Cobalt	E	9.9018	9.3985	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.1387	100.0	100.3	ug/L	0	10	
Manganese	E	2.2336	1.7887	100.0	101.3	ug/L	1	10	
Nickel	E	4.3698	2.6676	100.0	102.6	ug/L	3	10	
Sodium	E	1.5568	0.5310	10000	10020	ug/L	0	10	
Vanadium	E	4.3079	3.7382	100.0	100.8	ug/L	1	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8586	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1165	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	934487	-1.40
Scandium	A	1024786	1063004	3.73
Scandium	E	16230	15864	-2.25
Scandium	H	421162	404281	-4.01
Germanium	H	105466	102563	-2.75
Germanium	E	14881	14742	-0.93
Indium	A	1615942	1619302	0.21
Bismuth	A	1910108	1879041	-1.63
Yttrium	A	1534317	1580255	2.99
Terbium	A	2647564	2668564	0.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429047 File : f15g0047 Time : 15-JUN-2007 11:09
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01909]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01110]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01066]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003660]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.009153]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01491]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.008529]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007801]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.005921]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01222]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	948985	0.13
Scandium	A	1024786	1043876	1.86
Scandium	E	16230	16221	-0.06
Scandium	H	421162	408840	-2.93
Germanium	H	105466	103450	-1.91
Germanium	E	14881	14837	-0.29
Indium	A	1615942	1653960	2.35
Bismuth	A	1910108	1938084	1.46
Yttrium	A	1534317	1584245	3.25
Terbium	A	2647564	2686653	1.48

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429048 File : f15g0048 Time : 15-JUN-2007 11:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06394]	0.1000	ug/L	
Barium	A	0.9719	0.1000	ug/L	
Beryllium	A	[0.02085]	0.1000	ug/L	
Cadmium	A	1.012	0.1000	ug/L	
Lead	A	0.3937	0.1000	ug/L	
Silver	A	0.1800	0.1000	ug/L	
Thallium	A	[0.04098]	0.05000	ug/L	
Arsenic	E	0.1921	0.1000	ug/L	
Chromium	E	1.274	0.1000	ug/L	
Cobalt	E	0.1922	0.1000	ug/L	
Copper	E	0.7230	0.1000	ug/L	
Manganese	E	0.5492	0.1000	ug/L	
Nickel	E	1.078	0.1000	ug/L	
Vanadium	E	[0.03037]	0.1000	ug/L	
Zinc	E	1.799	0.1000	ug/L	
Selenium	H	[0.06244]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88400	ug/L	88
Calcium	A	300000	271600	ug/L	91
Magnesium	A	100000	86320	ug/L	86
Molybdenum	A	2000	1763	ug/L	88
Potassium	A	100000	89860	ug/L	90
Sodium	E	250000	213700	ug/L	85
Iron	H	250000	218000	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	819244	-13.56
Scandium	A	1024786	1022985	-0.18
Scandium	E	16230	15939	-1.79
Scandium	H	421162	391144	-7.13
Germanium	H	105466	94163	-10.72
Germanium	E	14881	14399	-3.24
Indium	A	1615942	1488941	-7.86
Bismuth	A	1910108	1632734	-14.52
Yttrium	A	1534317	1551970	1.15
Terbium	A	2647564	2568593	-2.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429049 File : f15g0049 Time : 15-JUN-2007 11:22
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95630	ug/L	-4		
Cadmium	A	100.0	99.05	ug/L	-1	20	
Calcium	A	300000	292500	ug/L	-3		
Magnesium	A	100000	92350	ug/L	-8		
Molybdenum	A	2000	1899	ug/L	-5		
Potassium	A	100000	96770	ug/L	-3		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.8	ug/L	3	20	
Chromium	E	200.0	192.6	ug/L	-4	20	
Cobalt	E	200.0	183.0	ug/L	-9	20	
Copper	E	200.0	177.7	ug/L	-11	20	
Manganese	E	200.0	194.0	ug/L	-3	20	
Nickel	E	200.0	179.5	ug/L	-10	20	
Sodium	E	250000	227700	ug/L	-9		
Vanadium	E	200.0	196.2	ug/L	-2	20	
Zinc	E	100.0	91.68	ug/L	-8	20	
Iron	H	250000	233800	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	388111	-7.85
Scandium	A	1024786	1020361	-0.43
Scandium	E	16230	15921	-1.90
Germanium	H	105466	93472	-11.37
Germanium	E	14881	14160	-4.84
Indium	A	1615942	1494260	-7.53
Yttrium	A	1534317	1557119	1.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429064 File : f15g0064 Time : 15-JUN-2007 12:53
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6067	10000	9857	ug/L	-1	10	
Antimony	A	0.3490	0.3187	100.0	100.3	ug/L	0	10	
Barium	A	0.1918	0.0689	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2682	0.2643	100.0	98.16	ug/L	-2	10	
Cadmium	A	0.0754	0.0714	100.0	99.86	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7900	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5798	0.5090	10000	9875	ug/L	-1	10	
Molybdenum	A	0.2290	0.2004	100.0	92.46	ug/L	-8	10	
Potassium	A	2.8257	0.6833	10000	10080	ug/L	1	10	
Silver	A	0.3492	0.3473	100.0	100.7	ug/L	1	10	
Thallium	A	0.8486	0.8240	50.00	48.70	ug/L	-3	10	
Arsenic	E	0.6327	0.6054	100.0	99.53	ug/L	0	10	
Chromium	E	6.7730	5.1008	100.0	100.9	ug/L	1	10	
Cobalt	E	9.9018	9.3976	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.0601	100.0	99.34	ug/L	-1	10	
Manganese	E	2.2336	1.7925	100.0	101.5	ug/L	2	10	
Nickel	E	4.3698	2.6406	100.0	101.6	ug/L	2	10	
Sodium	E	1.5568	0.5268	10000	9941	ug/L	-1	10	
Vanadium	E	4.3079	3.7136	100.0	100.1	ug/L	0	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8506	10000	10100	ug/L	1	10	
Selenium	H	0.1226	0.1146	100.0	98.57	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	882516	-6.88
Scandium	A	1024786	1036331	1.13
Scandium	E	16230	15338	-5.50
Scandium	H	421162	397946	-5.51
Germanium	H	105466	101486	-3.77
Germanium	E	14881	14329	-3.71
Indium	A	1615942	1610510	-0.34
Bismuth	A	1910108	1859725	-2.64
Yttrium	A	1534317	1571749	2.44
Terbium	A	2647564	2657826	0.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429066 File : f15g0066 Time : 15-JUN-2007 13:06
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007189]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.04414]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003535]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.0009182]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[3.915]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.805]	10.00	2.807	ug/L	!ib
Silver	A	[0.002428]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02625]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.03048]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007873]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02333]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.278]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01371]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	907185	-4.28
Scandium	A	1024786	1033343	0.84
Scandium	E	16230	15543	-4.23
Scandium	H	421162	397223	-5.68
Germanium	H	105466	101314	-3.94
Germanium	E	14881	14354	-3.54
Indium	A	1615942	1630685	0.91
Bismuth	A	1910108	1911848	0.09
Yttrium	A	1534317	1552222	1.17
Terbium	A	2647564	2634997	-0.47

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429068 File : f15g0068 Time : 15-JUN-2007 13:26
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08010]	0.1000	ug/L	
Barium	A	0.9621	0.1000	ug/L	
Beryllium	A	[0.03524]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4273	0.1000	ug/L	
Silver	A	0.2021	0.1000	ug/L	
Thallium	A	[0.04024]	0.05000	ug/L	
Arsenic	E	0.1992	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1943	0.1000	ug/L	
Copper	E	0.7740	0.1000	ug/L	
Manganese	E	0.5744	0.1000	ug/L	
Nickel	E	1.090	0.1000	ug/L	
Vanadium	E	[0.02704]	0.1000	ug/L	
Zinc	E	1.921	0.1000	ug/L	
Selenium	H	[0.06355]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87430	ug/L	87
Calcium	A	300000	267700	ug/L	89
Magnesium	A	100000	84840	ug/L	85
Molybdenum	A	2000	1722	ug/L	86
Potassium	A	100000	88840	ug/L	89
Sodium	E	250000	211400	ug/L	85
Iron	H	250000	217400	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	804946	-15.07
Scandium	A	1024786	1030614	0.57
Scandium	E	16230	15630	-3.70
Scandium	H	421162	378792	-10.06
Germanium	H	105466	91524	-13.22
Germanium	E	14881	13944	-6.29
Indium	A	1615942	1503115	-6.98
Bismuth	A	1910108	1655542	-13.33
Yttrium	A	1534317	1570747	2.37
Terbium	A	2647564	2595953	-1.95

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429069 File : f15g0069 Time : 15-JUN-2007 13:32
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94140	ug/L	-6		
Cadmium	A	100.0	99.59	ug/L	0	20	
Calcium	A	300000	289200	ug/L	-4		
Magnesium	A	100000	91210	ug/L	-9		
Molybdenum	A	2000	1886	ug/L	-6		
Potassium	A	100000	96090	ug/L	-4		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.4	ug/L	2	20	
Chromium	E	200.0	189.2	ug/L	-5	20	
Cobalt	E	200.0	180.4	ug/L	-10	20	
Copper	E	200.0	174.9	ug/L	-13	20	
Manganese	E	200.0	190.8	ug/L	-5	20	
Nickel	E	200.0	176.6	ug/L	-12	20	
Sodium	E	250000	222400	ug/L	-11		
Vanadium	E	200.0	192.2	ug/L	-4	20	
Zinc	E	100.0	90.41	ug/L	-10	20	
Iron	H	250000	234300	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	382792	-9.11
Scandium	A	1024786	1005539	-1.88
Scandium	E	16230	15907	-1.99
Germanium	H	105466	93454	-11.39
Germanium	E	14881	14107	-5.20
Indium	A	1615942	1464578	-9.37
Yttrium	A	1534317	1529443	-0.32

897239429069

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897239429

Date : 06/15/07 Reference : f15g0004
Sequence : MET16 f15g0 Analyzed : 06/15/07 06:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	947755	1024786	16230	421162	105466	14881	1615942	1910108	1534317	2647564
		LOWER LIMIT	284327	307436	4869	126349	31640	4464	484783	573032	460295	794269
		UPPER LIMIT	1137306	1229743	19476	505395	126559	17857	1939130	2292130	1841180	3177077
014	ICB		960938	1055567	15956	415756	104447	14746	1648089	1921327	1569938	2674692
017	ICSA		833330	1031697	16359	407246	97058	14491	1507874	1645288	1572313	2615635
018	ICSAB		826820	1032868	16221	400547	95805	14323	1499416	1632159	1555187	2578826
023	MSS	195270-007	941225	1040420	15625	401668	103175	14698	1634401	1893646	1559932	2645423
024	SER	QC392098	926152	1022826	15559	393809	101669	14539	1618799	1888480	1548121	2615464
025	PDS	QC392099	926984	1059908	15636	406621	101352	14437	1621243	1866895	1585621	2666920
026	SAMPLE	195358-002	940359	1051413	15472	396685	102158	14672	1649979	1951559	1582203	2675868
027	SAMPLE	195358-003	936459	1057872	15756	405459	103203	14714	1651724	1936384	1590081	2680105
028	SAMPLE	195358-004	935946	1070595	16328	410419	105354	15269	1674622	1953846	1608113	2695196
029	SAMPLE	195358-005	914117	1042688	15680	397643	102253	14671	1621086	1908139	1552137	2658461
030	SAMPLE	195358-007	922598	1029632	15795	400551	102899	14702	1635862	1933493	1553004	2643825
033	CCV		943519	1059042	15887	403931	101462	14629	1632221	1884026	1590028	2695620
035	CCB		933251	1034023	15841	406728	102698	14617	1623222	1919394	1559025	2648690
037	SAMPLE	195358-008	946423	1052531	15925	411412	104583	14897	1652446	1977125	1585580	2701637
038	SAMPLE	195369-001	931854	1053956	15640	401725	102537	14652	1632955	1889279	1577486	2655947
039	SAMPLE	195369-001	922843	1038048	15881	402499	102829	14710	1620555	1884993	1558636	2643475
040	SAMPLE	195370-021	948579	1053212	15915	407988	104309	14911	1651734	1957810	1591220	2685300
045	CCV		934487	1063004	15864	404281	102563	14742	1619302	1879041	1580255	2668564
047	CCB		948985	1043876	16221	408840	103450	14837	1653960	1938084	1584245	2686653
048	ICSA		819244	1022985	15939	391144	94163	14399	1488941	1632734	1551970	2568593
049	ICSAB		798431	1020361	15921	388111	93472	14160	1494260	1639891	1557119	2573101
054	SAMPLE	195247-001	909531	1057133	15657	393383	101247	14670	1639167	1873727	1586007	2658791
055	SAMPLE	195247-001	906076	1129493	15897	407510	101389	14531	1660078	1873486	1648103	2707845
056	SAMPLE	195247-002	917367	1071571	15691	390647	100623	14684	1659141	1872784	1589077	2688050
057	SAMPLE	195247-002	891732	1092948	16017	403287	99575	14507	1616176	1862333	1779288	2699796
059	SAMPLE	195247-001	891508	1026800	15401	392286	101760	14483	1616317	1884441	1552586	2616955
060	SAMPLE	195247-002	906046	1052050	15421	385742	99622	14549	1632728	1892629	1575453	2670191
061	SAMPLE	195247-002	891649	1031723	15232	391153	100261	14496	1614696	1882520	1590470	2639581
062	SAMPLE	195285-012	901670	1022402	15050	382705	99271	14112	1620068	1902865	1542205	2657134
064	CCV		882516	1036331	15338	397946	101486	14329	1610510	1859725	1571749	2657826
066	CCB		907185	1033343	15543	397223	101314	14354	1630685	1911848	1552222	2634997
068	ICSA		804946	1030614	15630	378792	91524	13944	1503115	1655542	1570747	2595953
069	ICSAB		767045	1005539	15907	382792	93454	14107	1464578	1602627	1529443	2535335

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f15g0001	TUN				15-JUN-2007 06:29	1.0	1.0				1	
002	f15g0002	X	RINSE			15-JUN-2007 06:37	1.0					2	
003	f15g0003	X	RINSE			15-JUN-2007 06:43	1.0					2	
004	f15g0004	ICALBLK	CALBLANK			15-JUN-2007 06:49	1.0	1.0				2	
005	f15g0005	ICAL				15-JUN-2007 06:55	1.0	1.0				3	
006	f15g0006	ICAL				15-JUN-2007 07:01	1.0	1.0				4	
007	f15g0007	ICAL				15-JUN-2007 07:07	1.0	1.0				5	
008	f15g0008	ICAL				15-JUN-2007 07:12	1.0	1.0				6	
009	f15g0009	ICAL				15-JUN-2007 07:18	1.0	1.0				7	
010	f15g0010	ICAL				15-JUN-2007 07:24	1.0	1.0				8	
011	f15g0011	X	RINSE			15-JUN-2007 07:33	1.0					2	
012	f15g0012	ICV				15-JUN-2007 07:38	1.0	1.0			1	9	
013	f15g0013	X	RINSE			15-JUN-2007 07:45	1.0					2	
014	f15g0014	ICB				15-JUN-2007 07:51	1.0	1.0			1	2	
015	f15g0015	X				15-JUN-2007 07:57	1.0					2	
016	f15g0016	X				15-JUN-2007 08:03	1.0					2	
017	f15g0017	ICSA				15-JUN-2007 08:09	1.0	1.0			1	10 2	7:CA=277700
018	f15g0018	ICSAB				15-JUN-2007 08:15	1.0	1.0			1	11 2	7:CA=293900
019	f15g0019	X	RINSE			15-JUN-2007 08:21	1.0					2	
020	f15g0020	X	RINSE			15-JUN-2007 08:27	1.0					2	
021	f15g0021	X	RINSE			15-JUN-2007 08:33	1.0					2	
022	f15g0022	X	RINSE			15-JUN-2007 08:38	1.0					2	
023	f15g0023	MSS	195270-007	126254	Filtra	15-JUN-2007 08:44	50.0	1.0			1	2	
024	f15g0024	SER	QC392098	126254	Filtra	15-JUN-2007 08:50	250.0	1.0		1	1	2	
025	f15g0025	PDS	QC392099	126254	Filtra	15-JUN-2007 08:56	50.0	1.0			1	12 13 2	
026	f15g0026	SAMPLE	195358-002	126254	Filtra	15-JUN-2007 09:02	5.0	1.0	3		1	2	
027	f15g0027	SAMPLE	195358-003	126254	Filtra	15-JUN-2007 09:08	5.0	1.0			1	2	
028	f15g0028	SAMPLE	195358-004	126254	Filtra	15-JUN-2007 09:14	5.0	1.0			1	2	
029	f15g0029	SAMPLE	195358-005	126254	Filtra	15-JUN-2007 09:20	5.0	1.0			1	2	
030	f15g0030	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 09:26	5.0	1.0			1	2	
031	f15g0031	X	RINSE			15-JUN-2007 09:32	1.0					2	

Stds used: 1=S6401 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f15g0032	X	RINSE			15-JUN-2007 09:38	1.0					2	
033	f15g0033	CCV				15-JUN-2007 09:43	1.0	1.0			1	14 2	
034	f15g0034	X	RINSE			15-JUN-2007 09:50	1.0					2	
035	f15g0035	CCB				15-JUN-2007 09:56	1.0	1.0			1	2	
036	f15g0036	X				15-JUN-2007 10:02	1.0					2	
037	f15g0037	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 10:08	5.0	1.0			1	2	
038	f15g0038	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:14	50.0	1.0			1	2	
039	f15g0039	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:20	100.0	1.0			1	2	
040	f15g0040	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 10:26	1.0	1.0			1	2	
041	f15g0041	X	RINSE			15-JUN-2007 10:32	1.0					2	
042	f15g0042	X	RINSE			15-JUN-2007 10:38	1.0					2	
043	f15g0043	X				15-JUN-2007 10:44	1.0	1.0	3		1	14 2	
044	f15g0044	X	RINSE			15-JUN-2007 10:50	1.0					2	
045	f15g0045	CCV				15-JUN-2007 10:56	1.0	1.0			1	14 2	
046	f15g0046	X	RINSE			15-JUN-2007 11:03	1.0					2	
047	f15g0047	CCB				15-JUN-2007 11:09	1.0	1.0			1	2	
048	f15g0048	ICSA				15-JUN-2007 11:15	1.0	1.0			1	10 2	7:CA=271600
049	f15g0049	ICSAB				15-JUN-2007 11:22	1.0	1.0			1	11 2	7:CA=292500
050	f15g0050	X	RINSE			15-JUN-2007 11:28	1.0					2	
051	f15g0051	X	RINSE			15-JUN-2007 11:34	1.0					2	
052	f15g0052	X	RINSE			15-JUN-2007 11:40	1.0					2	
053	f15g0053	X	RINSE			15-JUN-2007 11:46	1.0					2	
054	f15g0054	SAMPLE	195247-001	126087	Filtra	15-JUN-2007 11:52	10.0	1.0			1	2	
055	f15g0055	SAMPLE	195247-001	126087	Water	15-JUN-2007 11:58	10.0	1.0	4		1	2	4:MG=23420.0
056	f15g0056	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:04	10.0	1.0	1		1	2	1:MN=335.800
057	f15g0057	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:09	10.0	1.0	1		1	2	1:MN=610.100
058	f15g0058	X	RINSE			15-JUN-2007 12:15	1.0					2	
059	f15g0059	SAMPLE	195247-001	126087	Water	15-JUN-2007 12:22	100.0	1.0			1	2	
060	f15g0060	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:29	20.0	1.0	1		1	2	
061	f15g0061	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:35	50.0	1.0			1	2	
062	f15g0062	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 12:41	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RLA Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	f15g0063	X	RINSE			15-JUN-2007 12:47	1.0				2	
064	f15g0064	CCV				15-JUN-2007 12:53	1.0	1.0		1	14 2	
065	f15g0065	X	RINSE			15-JUN-2007 13:00	1.0				2	
066	f15g0066	CCB				15-JUN-2007 13:06	1.0	1.0		1	2	
067	f15g0067	X	RINSE			15-JUN-2007 13:12	1.0				2	
068	f15g0068	ICSA				15-JUN-2007 13:26	1.0	1.0		1	10 2	7:CA=267700
069	f15g0069	ICSAB				15-JUN-2007 13:32	1.0	1.0		1	11 2	7:CA=289200

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RCH Date: 6/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195247 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BBE	CDA	CAR	COU	CFE	PBG	MGN	HGI	NIE	KGA	SAL	ANZ
195247-001	MET06	06/08/07 22:47	10.0															
195247-001	MET14	06/13/07 13:22	1.0											+				
195247-001	MET16	06/14/07 19:25	5.0															
195247-001	MET16	06/14/07 19:49	50.0															
195247-001	MET16	06/15/07 11:58	10.0	+	+	+	+	+	+	+	+	+	+		+	+	+	+
195247-001	MET16	06/15/07 12:22	100.0									+	+	+				+
195247-002	MET06	06/08/07 22:53	10.0															
195247-002	MET14	06/13/07 13:29	1.0											+				
195247-002	MET16	06/14/07 19:31	5.0															
195247-002	MET16	06/14/07 19:55	50.0															
195247-002	MET16	06/15/07 12:09	10.0	+	+	+	+	+	+	+	+	+	+		+	+	+	+
195247-002	MET16	06/15/07 12:35	50.0										+					
QC391439	MET06	06/08/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+		+	+	+	+
QC391440	MET06	06/08/07 20:30	1.0	+	+	+	+	+	+	+	+	+	+		+	+	+	+
QC391441	MET06	06/08/07 20:36	1.0	+	+	+	+	+	+	+	+	+	+		+	+	+	+
QC391442	MET06	06/08/07 21:00	10.0									+					+	
QC391442	MET16	06/14/07 16:49	5.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391443	MET06	06/08/07 21:05	10.0									+					+	
QC391443	MET16	06/14/07 16:55	5.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391444	MET06	06/08/07 20:54	50.0									+					+	+
QC391444	MET16	06/14/07 16:43	25.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391445	MET06	06/08/07 21:11	10.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391445	MET16	06/14/07 16:26	20.0									+						
QC391445	MET16	06/14/07 17:43	5.0															
QC391446	MET06	06/08/07 22:11	10.0									+					+	
QC391446	MET16	06/14/07 17:54	5.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391447	MET06	06/08/07 22:17	10.0									+					+	
QC391447	MET16	06/14/07 18:00	5.0	+	+	+	+	+	+	+	+		+		+	+	+	+
QC391955	MET14	06/13/07 13:01	1.0											+				
QC391956	MET14	06/13/07 13:03	1.0											+				
QC391957	MET14	06/13/07 13:05	1.0											+				
QC391958	MET14	06/13/07 13:58	5.0											+				
QC391959	MET14	06/13/07 14:00	1.0											+				

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195247 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BBE	CDA	CCR	COU	CFE	PBG	MGN	HGI	NI	KE	SEG	AGA	NAL	TL	VN	ZN
QC391960	MET14	06/13/07 14:03	1.0											+								

00321

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195247 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBS	ABA	BEE	CDD	CAA	CRR	COO	CUU	FEE	PBB	MGG	MNN	HGG	NIN	KK	SE	AGG	NAA	TLL	VV	ZN
195247-001	MET06	06/08/07 22:58	10.0																						
195247-001	MET14	06/13/07 13:31	1.0														+								
195247-001	MET16	06/14/07 18:30	5.0																						
195247-001	MET16	06/14/07 19:37	50.0																						
195247-001	MET16	06/15/07 11:52	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
195247-002	MET06	06/08/07 23:52	10.0																						
195247-002	MET14	06/13/07 13:33	1.0														+								
195247-002	MET16	06/14/07 18:35	5.0																						
195247-002	MET16	06/14/07 19:43	50.0																						
195247-002	MET16	06/15/07 12:04	10.0	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
195247-002	MET16	06/15/07 12:29	20.0													+									
195247-006	MET06	06/08/07 22:05	10.0						+						+							+			
195247-006	MET16	06/14/07 17:48	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC391439	MET06	06/08/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391440	MET06	06/08/07 20:30	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391441	MET06	06/08/07 20:36	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391442	MET06	06/08/07 21:00	10.0												+							+			
QC391442	MET16	06/14/07 16:49	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
QC391443	MET06	06/08/07 21:05	10.0												+							+			
QC391443	MET16	06/14/07 16:55	5.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
QC391444	MET06	06/08/07 20:54	50.0												+							+		+	
QC391444	MET16	06/14/07 16:43	25.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+		+
QC391445	MET06	06/08/07 21:11	10.0	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+
QC391445	MET16	06/14/07 16:26	20.0												+										
QC391445	MET16	06/14/07 17:43	5.0																						
QC391446	MET06	06/08/07 22:11	10.0						+						+							+			
QC391446	MET16	06/14/07 17:54	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC391447	MET06	06/08/07 22:17	10.0						+						+							+			
QC391447	MET16	06/14/07 18:00	5.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC391955	MET14	06/13/07 13:01	1.0														+								
QC391956	MET14	06/13/07 13:03	1.0														+								
QC391957	MET14	06/13/07 13:05	1.0														+								
QC391958	MET14	06/13/07 13:58	5.0														+								

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195247 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALS	BAS	BEA	CDE	CAD	CRA	COR	CUO	FEU	PBE	MGB	MNG	HGN	NIG	K	SEI	AGE	NAG	TLA	V	ZNL
QC391959	MET14	06/13/07 14:00	1.0													+								
QC391960	MET14	06/13/07 14:03	1.0													+								

Curtis & Tompkins Laboratories **Sample Preparation Summary** **08-JUN-2007 12:48**

Batch Number : 126087
Date Extracted: 08-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195241-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195241-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195247-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195247-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195247-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195247-002			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195247-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC391439	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC391440	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391441	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391442	MS	of 195241-003		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391443	MSD	of 195241-003		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391444	SER	of 195241-003		Filtrate	50	mL	50	1.000000	1					ICAP		
QC391445	PDS	of 195241-003		Filtrate	50	mL	50	1.000000	1					ICAP		
QC391446	MS	of 195247-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391447	MSD	of 195247-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		

Prep Chemist: [illegible] 6/8/07 Reviewed By: [illegible] Date: 6/8/07

Relinquished By: [illegible] 6/8/07 Received By: [illegible] Date: 6/8/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 136087
Date Digested: 6/3/07
Digested by: KAH

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK 2479
Page 51
Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS -03				FIELD FILTERED
MSD -03				
195241-03				
02				
04				
05				
MS-04				
MSD 04				
195347-04				
01				
02				
347-01				
02				
				KAH 6/8/07

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KAH 6/8
0 mL of spike solution was added to all spikes	S6222	
	S6223	
concentrated HCl	A020023 BAKER	
concentrated HNO3	CA3023	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group		

KAH 6/8/07
Prep Chemist Signature / Date

6/8/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

st : MET14
lnum : 847236907001
its : ug/L

Date : 13-JUN-2007 12:27
X Axis : R

Reviewer : ---
Type : WATER

vel	File	Seqnum	Sample ID	Analyzed	Stds
1	126218	847236907003	STD03REP1	13-JUN-2007 12:32	S6475 (200X)
2	126218	847236907004	STD04REP1	13-JUN-2007 12:35	S6475 (50X)
3	126218	847236907005	STD05REP1	13-JUN-2007 12:37	S6475 (20X)
4	126218	847236907006	STD06REP1	13-JUN-2007 12:39	S6475 (10X)
5	126218	847236907008	STD02REP1	13-JUN-2007 12:48	S6475 (500X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
rcury	1838.0	1794.0	1663.4	1598.6	1520.0	LINR	-0.1006	6.26E-4		1682.8	0.999	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
rcury	0.500	-5	2.000	7	5.000	2	10.00	-1	0.200	-55

trument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847236907001

WinHg Database 1.5

File Utility Help

Protocol hgppb

Dataset/Proto 061307 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 6.26442e-4

C -1.00564e-1

Rho .999643

Type Linear

Calibrated

Accepted

Accept

µ Abs

15986

Accepted

New

Include S1 Rep 1 2 3 4 5

13-Jun-07 12:50

Conc 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.035	-.035	104	0	104		
02	.20000	.090	-.110	304	0%	304		
03	.50000	.475	-.025	919	0%	919		
04	2.0000	2.15	.147	3589	0%	3588		
05	5.0000	5.11	.110	8317	0%	8317		
06	10.000	9.91	-.086	15986	0%	15986		

Ready NUM SCRL

Protocol: hgppb

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 12:27:58 13 Jun 07 HG

Hg	.000	ppb	104
		Bkgd 1	16306815

~~*** Standard: 2 Rep: 1~~ Seq: 2 12:30:33 13 Jun 07 HG

Hg	.200	ppb	394
		~~Bkgd 1~~	~~16302539~~

*** Standard: 3 Rep: 1 Seq: 3 12:32:39 13 Jun 07 HG

Hg	.500	ppb	919
		Bkgd 1	16297819

*** Standard: 4 Rep: 1 Seq: 4 12:35:04 13 Jun 07 HG

Hg	2.00	ppb	3588
		Bkgd 1	16296883

*** Standard: 5 Rep: 1 Seq: 5 12:37:10 13 Jun 07 HG

Hg	5.00	ppb	8317
		Bkgd 1	16284956

*** Standard: 6 Rep: 1 Seq: 6 12:39:30 13 Jun 07 HG

Hg	10.0	ppb	15986
		Bkgd 1	16285005

~~*** Standard: 2 Rep: 1~~ Seq: 7 ~~12:44:32 13 Jun 07~~ HG

Hg	~~.200~~	~~ppb~~	234
		~~Bkgd 1~~	~~16286240~~

*** Standard: 2 Rep: 1 Seq: 8 12:48:54 13 Jun 07 HG

Hg	.200	ppb	304
		Bkgd 1	16292288

*** Check Standard: 2 Ck2S6477 Seq: 9 12:56:23 13 Jun 07 HG

Line	Flag		Intensities
Hg			8827
		Bkgd 1	16305858

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

quence: 847236907 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 13-JUN-2007
alytical Method: EPA 7470A SOP Version: HG_water_rv7
alyte: Mercury

Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
126218	ICALBLK	STD01REP1				13-JUN-2007 12:27	1.0	1.0									
126218	X					13-JUN-2007 12:30	1.0										
126218	ICAL	STD03REP1				13-JUN-2007 12:32	1.0	1.0									
126218	ICAL	STD04REP1				13-JUN-2007 12:35	1.0	1.0									
126218	ICAL	STD05REP1				13-JUN-2007 12:37	1.0	1.0									
126218	ICAL	STD06REP1				13-JUN-2007 12:39	1.0	1.0									
126218	X					13-JUN-2007 12:44	1.0										
126218	ICAL	STD02REP1				13-JUN-2007 12:48	1.0	1.0									
126218	ICV					13-JUN-2007 12:56	1.0	1.0	2	5.000	847236907001	5.430		ug/L	109		
126218	ICB					13-JUN-2007 12:59	1.0	1.0			847236907001	ND	0.20	ug/L			
126218	BLANK	QC391955		126218	Water	13-JUN-2007 13:01	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	BS	QC391956		126218	Water	13-JUN-2007 13:03	1.0	1.0		5.000	847236907001	5.570	0.20	ug/L	111		u
126218	BSD	QC391957		126218	Water	13-JUN-2007 13:05	1.0	1.0		5.000	847236907001	5.410	0.20	ug/L	108	3	u
126218	X			126218	Water	13-JUN-2007 13:07	1.0				847236907001	ND	0.20	ug/L			u
126218	X			126218	Water	13-JUN-2007 13:09	5.0				847236907001	ND	1.0	ug/L			u
126218	X			126218	Water	13-JUN-2007 13:12	1.0			5.000	847236907001	2.040	0.20	ug/L	41		u
126218	X			126218	Water	13-JUN-2007 13:14	1.0			5.000	847236907001	2.650	0.20	ug/L	53		u
126218	SAMPLE	195354-001		126218	Water	13-JUN-2007 13:16	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195242-001		126218	Water	13-JUN-2007 13:19	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195247-001		126218	Water	13-JUN-2007 13:22	1.0	1.0			847236907001	3.6	0.20	ug/L			u
126218	CCV					13-JUN-2007 13:24	1.0	1.0	3	7.500	847236907001	8.190		ug/L	109		
126218	CCB					13-JUN-2007 13:27	1.0	1.0			847236907001	ND	0.20	ug/L			
126218	SAMPLE	195247-002		126218	Water	13-JUN-2007 13:29	1.0	1.0			847236907001	1.7	0.20	ug/L			u
126218	SAMPLE	195247-001		126218	Filtra	13-JUN-2007 13:31	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195247-002		126218	Filtra	13-JUN-2007 13:33	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195267-002		126218	Filtra	13-JUN-2007 13:36	1.0	1.0			847236907001	0.066 J	0.20	ug/L			u
126218	SAMPLE	195267-003		126218	Filtra	13-JUN-2007 13:38	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195267-004		126218	Filtra	13-JUN-2007 13:40	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195267-005		126218	Filtra	13-JUN-2007 13:42	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195267-006		126218	Filtra	13-JUN-2007 13:44	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195285-012		126218	Filtra	13-JUN-2007 13:47	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195285-013		126218	Filtra	13-JUN-2007 13:50	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	CCV					13-JUN-2007 13:52	1.0	1.0	4	5.000	847236907001	5.630		ug/L	113		
126218	CCB					13-JUN-2007 13:54	1.0	1.0			847236907001	ND	0.20	ug/L			
126218	MSS	195314-017		126218	Water	13-JUN-2007 13:56	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SER	QC391958	195314-017	126218	Water	13-JUN-2007 13:58	5.0	1.0			847236907001	ND	1.0	ug/L	--		u
126218	MS	QC391959	195314-017	126218	Water	13-JUN-2007 14:00	1.0	1.0		5.000	847236907001	5.250	0.20	ug/L	105		u
126218	MSD	QC391960	195314-017	126218	Water	13-JUN-2007 14:03	1.0	1.0		5.000	847236907001	5.070	0.20	ug/L	101	3	u
126218	SAMPLE	195285-014		126218	Filtra	13-JUN-2007 14:05	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195286-012		126218	Filtra	13-JUN-2007 14:07	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195286-013		126218	Filtra	13-JUN-2007 14:10	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195286-014		126218	Filtra	13-JUN-2007 14:12	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	SAMPLE	195289-001		126218	Water	13-JUN-2007 14:14	1.0	1.0			847236907001	ND	0.20	ug/L			u

s used: 1=S6475 2=S6477 3=S6480 4=S6479 5=S6478
gs used: u=use

alyst: [signature] Date: 6/13/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

quence: 847236907 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 13-JUN-2007
alytical Method: EPA 7470A SOP Version: HG_water_rv7
alyte: Mercury

Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
126218	SAMPLE	195307-001		126218	Water	13-JUN-2007 14:16	1.0	1.0			847236907001	ND	0.20	ug/L			u
126218	CCV					13-JUN-2007 14:18	1.0	1.0	5	2.500	847236907001	2.660		ug/L	106		
126218	CCB					13-JUN-2007 14:20	1.0	1.0			847236907001	ND	0.20	ug/L			

used: 1=S6475 2=S6477 3=S6480 4=S6479 5=S6478
s used: u=use

yst: ~ Date: 6/13/07

of 2

Curtis & Tompkins Laboratories Sample Preparation Summary 13-JUN-2007 10:44

Batch Number : 126218
Date Extracted: 13-JUN-2007
Extracted by : Michael Wales
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S6475
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195242-001			Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1					PP13/HG		
195247-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG.		
195247-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
195247-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
195247-002			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
195267-002			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195267-003			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195267-004			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195267-005			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195267-006			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195285-012			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195285-013			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195285-014			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195286-012			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195286-013			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195286-014			U.S. Army Corps of Engineers	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195289-001			Baseline Environmental	Water	50	mL	50	1.000000	1					T26/HG		
195307-001			Matheson-Tri Gas	Water	50	mL	50	1.000000	1					T26/HG		
195314-017			URS Corporation	Water	50	mL	50	1.000000	1					T26/HG		
195354-001			Port of Oakland	Water	50	mL	50	1.000000	1					T26/HG		
QC391955	BLANK			Water	50	mL	50	1.000000	1					HG		
QC391956	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC391957	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC391958	SER	of 195314-017		Water	50	mL	50	1.000000	1					HG		
QC391959	MS	of 195314-017		Water	50	mL	50	1.000000	1		2.5			HG		
QC391960	MSD	of 195314-017		Water	50	mL	50	1.000000	1		2.5			HG		
QC391961	PDS	of 195314-017		Water	50	mL	50	1.000000	1					HG		

Prep Chemist: [signature] 6/13/07 Reviewed By: [signature] Date: 6/13/07

Relinquished By: [signature] 6/13/07 Received By: [signature] Date: 6/13/07

, Ltd.

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 126218
Date Digested: 6/13/07
Digested by: 6/13/07

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 2512
Page 23

Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
195242-001	A	50	50	V	H_2O
195247-001	C				
↓ -002	B				↓
195247-001	B				Filtrate (F.F.)
-002	C				(F.F.)
195267-002	G				
003					
004					
005					
006	↓				
195285-012	A				
013					
014	↓				↓
195286-012	A				
013					
↓ 014	↓				↓
195289-001	C				H_2O
195307-001	C				
Sample ~ ~~3X~~ 195314-017 MSS	A				
6/13/07 ~~195329-001~~ 6/13/07 195354-001					
BLK					H_2O
BS					H_2O
BSD					H_2O
MS 195314-017	A				H_2O
MSD 195314-017	A				H_2O

Date		Reagent ID/ LIMS# / Time	Initials / Date
6/13/07	2.5 mL of spike solution was added to all spikes	S6475	~ 6/13/07
	ICAL Source WS#	S6475	
	ICV / CCV WS#	S6477/78/79/80	
	Digestion of Samples & Standards: Time ON / Temperature ON	10:00 ~ 6/13/07 / 95°C	
	Time OFF/ Temperature OFF	~~7:00~~ 12:00 / 95°C	
	concentrated H_2SO_4	E08036	
	concentrated HNO_3	E11023	
	5% $KMnO_4$	K060607	
	5% $K_2S_2O_8$	K_2 060607	
	NaCl.hydroxylamine hydrochloride	Hy 060607	
	Stannous Chloride	$SnCl_2$ 060707	
	☒ filtered thru' 0.45 um syringe filter	millipore R6AN43832	

~ 6/13/07

Continued from page

6/13/07

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/27/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 06/27/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.059	0.021

GENERAL CHEMISTRY

: 00335

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126432		

Field ID: BB1PZ100 Lab ID: 195247-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	500	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	500	10

Field ID: BB1PZ101 Lab ID: 195247-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	670	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	670	10

Field ID: BB3GW100 Lab ID: 195247-006
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	330	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	330	10

Type: BLANK Lab ID: QC392849

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

54.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392850	Batch#:	126432
Matrix:	Water	Analyzed:	06/18/07

Spiked	Result	%REC	Limits
200.0	187.6	94	90-110

55.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	BB3GW100	Batch#:	126432
MSS Lab ID:	195247-006	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/18/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392851	327.0	500.0	776.0	90	69-112		
MSD	QC392852		500.0	780.0	91	69-112	1	25

RPD= Relative Percent Difference

56.0

00339

Analysis: **Alkalinity**
Method: **EPA 310.1** / SMWW 2320B
SOP#: Alkalinity_rv 7.doc

Analyst: SJ
Analysis Date: **06/18/07**
Batch No: **126432**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.8	100	0.00	0.00	ND			1.0		
LCS	10.0	25	2.42	4.69	187.60			4.0	94	
195247-006	7.1	10	0.00	3.27	327.00		n/a	10.0		
MS	9.3	10	1.30	7.76	776.00			10.0	90	
MSD	9.3	10	1.32	7.80	780.00			10.0	91	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195247-001	8.1	10	0.00	4.96	496.00		n/a	10.0
195247-002	7.6	10	0.00	6.68	668.00		n/a	10.0
195247-006	7.1	10	0.00	3.27	327.00		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: 6/19/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

000239

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/18/07
Batch No: 126432

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195247-001	0.0	496.0	496	496.000	0.000	0.000
195247-002	0.0	668.00	668.000	668.000	0.000	0.000
195247-006	0.0	327.00	327.000	327.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analysis Date: 06/18/07
Batch No: 126432

H_2SO_4 Normality = 0.02
Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
195247-001	496.000	604.747	0.000	0.000
195247-002	668.000	814.457	0.000	0.000
195247-006	327.000	398.694	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126432 Date: 6/18/07 Benchbook#: **BK2508**
Matrix: Water Time: 15:00 Page: **16**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51281
CAL-ph 10.0: SS#: 55862
Slope: 101.0
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 5694
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
(of #6352 Exp 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.8	100	—	<0.05		
LCS	10.0	25	2.42	4.69		
195247-1 A	8.1	10	—	4.96		
-2	7.6	10	—	6.68		
4/18 -36	7.1	10	—	5.27		
4/18 MS -36	9.3	10	1.30	7.76		
4/18 MSD -36	9.3	10	1.32	7.80		
					Aj 6/18	

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/18/07
Analyst / Date

6/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126432
Date Started: 19-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195247-001			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195247-002			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
195247-006			Treadwell & Rollo	Water	ALKALINITY	18-JUN-2007
QC392849	BLANK			Water	ALKALINITY	
QC392850	LCS			Water	ALKALINITY	
QC392851	MS	of 195247-006		Water	ALKALINITY	
QC392852	MSD	of 195247-006		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Field ID: BB1PZ100 Lab ID: 195247-001
Type: SAMPLE Sampled: 06/05/07 09:30

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Fluoride	0.10	0.10	1.000	125982	06/07/07 02:24
Chloride	280	4.0	20.00	126184	06/11/07 21:20
Nitrogen, Nitrite	ND	0.05	1.000	125982	06/07/07 02:24
Nitrogen, Nitrate	ND	0.05	1.000	125982	06/07/07 02:24
Sulfate	88	2.5	5.000	126184	06/12/07 00:48

Field ID: BB1PZ101 Lab ID: 195247-002
Type: SAMPLE Sampled: 06/05/07 10:34

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Fluoride	0.29	0.10	1.000	125982	06/07/07 02:41
Chloride	320	4.0	20.00	126184	06/11/07 21:37
Nitrogen, Nitrite	ND	0.05	1.000	125982	06/07/07 02:41
Nitrogen, Nitrate	ND	0.05	1.000	125982	06/07/07 02:41
Sulfate	150	2.5	5.000	126184	06/12/07 00:31

Field ID: BB3GW100 Batch#: 125982
Type: SAMPLE Sampled: 06/05/07 14:45
Lab ID: 195247-006

Analyte	Result	RL	Diln Fac	Analyzed
Fluoride	ND	10	100.0	06/06/07 20:49
Chloride	260	20	100.0	06/06/07 20:49
Nitrogen, Nitrite	ND	5.0	100.0	06/06/07 20:49
Nitrogen, Nitrate	520	10	200.0	06/06/07 22:54
Sulfate	260	50	100.0	06/06/07 20:49

ND= Not Detected
RL= Reporting Limit

14.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Received:	06/06/07
Units:	mg/L		

Type:	BLANK	Batch#:	125982
Lab ID:	QC391012	Analyzed:	06/06/07 10:15
Diln Fac:	1.000		

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type:	BLANK	Batch#:	126184
Lab ID:	QC391785	Analyzed:	06/11/07 17:17
Diln Fac:	1.000		

Analyte	Result	RL
Chloride	ND	0.20
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

14.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	125982

Type: BS Analyzed: 06/06/07 10:33
Lab ID: QC391013

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.097	105	80-120
Chloride	4.000	4.203	105	80-120
Nitrogen, Nitrite	1.000	1.046	105	80-120
Nitrogen, Nitrate	1.000	1.099	110	80-120
Sulfate	10.00	10.71	107	80-120

Type: BSD Analyzed: 06/06/07 10:50
Lab ID: QC391014

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	1.877	94	80-120	11	20
Chloride	4.000	4.007	100	80-120	5	20
Nitrogen, Nitrite	1.000	0.9664	97	80-120	8	20
Nitrogen, Nitrate	1.000	1.039	104	80-120	6	20
Sulfate	10.00	9.906	99	80-120	8	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	126184

Type: BS Analyzed: 06/11/07 17:34
Lab ID: QC391786

Analyte	Spiked	Result	%REC	Limits
Chloride	4.000	4.307	108	80-120
Sulfate	10.00	10.75	107	80-120

Type: BSD Analyzed: 06/11/07 17:52
Lab ID: QC391787

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	4.000	4.298	107	80-120	0	20
Sulfate	10.00	10.83	108	80-120	1	20

RPD= Relative Percent Difference

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	LF4GW104	Diln Fac:	20.00
MSS Lab ID:	195241-003	Batch#:	125982
Matrix:	Water	Sampled:	06/05/07 11:40
Units:	mg/L	Received:	06/06/07

Type: MS Analyzed: 06/07/07 04:09
Lab ID: QC391171

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	0.06908	20.00	18.60	93	78-120
Chloride	288.7	40.00	328.8	100 NM	80-120
Nitrogen, Nitrite	<0.008079	10.00	11.82	118	80-120
Nitrogen, Nitrate	0.4944	10.00	11.03	105	80-120
Sulfate	161.4	100.0	264.8	103	80-120

Type: MSD Analyzed: 06/07/07 04:26
Lab ID: QC391172

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	20.00	19.17	95	78-120	3	20
Chloride	40.00	329.8	103 NM	80-120	0	25
Nitrogen, Nitrite	10.00	11.43	114	80-120	3	25
Nitrogen, Nitrate	10.00	11.15	107	80-120	1	25
Sulfate	100.0	266.1	105	80-120	0	25

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	BB3GW100	Diln Fac:	200.0
MSS Lab ID:	195247-006	Batch#:	125982
Matrix:	Water	Sampled:	06/05/07 14:45
Units:	mg/L	Received:	06/06/07

Type: MS Analyzed: 06/07/07 07:04
Lab ID: QC391267

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<0.9179	100.0	162.6	163 *	78-120
Chloride	262.5	200.0	448.7	93	80-120
Nitrogen, Nitrite	<0.8079	50.00	51.60	103	80-120
Nitrogen, Nitrate	519.7	50.00	572.0	105 NM	80-120
Sulfate	256.6	500.0	670.9	83	80-120

Type: MSD Analyzed: 06/07/07 07:21
Lab ID: QC391268

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	100.0	167.4	167 *	78-120	3	20
Chloride	200.0	453.9	96	80-120	1	25
Nitrogen, Nitrite	50.00	48.35	97	80-120	7	25
Nitrogen, Nitrate	50.00	574.3	109 NM	80-120	0	25
Sulfate	500.0	686.6	86	80-120	2	25

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

17.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	231GW06	Diln Fac:	5.000
MSS Lab ID:	195234-002	Batch#:	126184
Matrix:	Water	Sampled:	06/05/07 12:30
Units:	mg/L	Received:	06/06/07

Type: MS Analyzed: 06/12/07 01:23
Lab ID: QC391870

Analyte	MSS Result	Spiked	Result	%REC	Limits
Chloride	53.90	10.00	63.75	99 NM	80-120
Sulfate	52.51	25.00	77.97	102	80-120

Type: MSD Analyzed: 06/12/07 01:41
Lab ID: QC391871

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Chloride	10.00	63.52	96 NM	80-120	0	25
Sulfate	25.00	78.21	103	80-120	0	25

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

19.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	-10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195247 IC Water: EPA 300.0

Inst : IC03
Calnum : 627218791001
Units : mg/L

Date : 31-MAY-2007 22:31
X Axis : A

Reviewer : RH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_3	627218791003	L1	31-MAY-2007 22:31	S6107 (500X)
L2	152_4	627218791004	L2	31-MAY-2007 22:49	S6107 (100X)
L3	152_5	627218791005	L3	31-MAY-2007 23:06	S6107 (25X)
L4	152_6	627218791006	L4	31-MAY-2007 23:24	S6107 (10X)
L5	152_7	627218791007	L5	31-MAY-2007 23:41	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1297	0.1872	0.1952	0.2113	0.2177	QORG		0.19988	0.001803	0.1882	1.000	0.990	
Chloride	0.1393	0.1328	0.1406	0.1501	0.1616	QORG		0.13746	0.001210	0.1449	1.000	0.990	
Nitrogen, Nitrite	0.3375	0.3005	0.2902	0.3084	0.3151	QORG		0.29647	0.003762	0.3103	1.000	0.990	
Nitrogen, Nitrate	0.3082	0.3189	0.3329	0.3458	0.3609	QORG		0.32886	0.006433	0.3333	1.000	0.990	
Sulfate	0.1108	0.1023	0.1034	0.1095	0.1158	QORG		0.10232	2.707E-4	0.1084	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-35	0.500	-7	2.000	-4	5.000	1	10.00	0
Chloride	0.200	1	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	14	0.250	1	1.000	-3	2.500	1	5.000	0
Nitrogen, Nitrate	0.050	-6	0.250	-3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	8	2.500	-1	10.00	-2	25.00	0	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195247 IC Water
EPA 300.0

Inst : IC03
Calnum : 627218791001 Cal Date : 31-MAY-2007

ICV 627218791009 (152_9 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1882	0.1903	1.000	0.9439	mg/L	-6	10	
Chloride	0.1449	0.1360	2.000	1.945	mg/L	-3	10	
Nitrogen, Nitrite	0.3103	0.2924	0.5000	0.4900	mg/L	-2	10	
Nitrogen, Nitrate	0.3333	0.3204	0.5000	0.4825	mg/L	-3	10	
Sulfate	0.1084	0.1028	5.000	4.961	mg/L	-1	10	

CONTINUING CALIBRATION SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.2574	0.2598	0.5000	0.4968	mg/L	-1	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.2574	0.2581	2.0000	1.9517	mg/L	-2	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.2574	0.2708	5.0000	5.0030	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.2574	0.2597	2.0000	1.9641	mg/L	-2	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.2574	0.2734	5.0000	5.0485	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.2574	0.2649	2.0000	2.0028	mg/L	0	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1882	0.1773	0.5000	0.4418	mg/L	**-12**	10	c- ***
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1882	0.2093	2.0000	2.0557	mg/L	3	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1882	0.2202	5.0000	5.2598	mg/L	5	10	

-=low bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.1750	0.1766	1.0000	1.0275	mg/L	3	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.1750	0.1765	4.0000	4.0157	mg/L	0	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.1750	0.1848	10.000	10.054	mg/L	1	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.1750	0.1769	4.0000	4.0258	mg/L	1	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.1750	0.1871	10.000	10.174	mg/L	2	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.1750	0.1783	4.0000	4.0551	mg/L	1	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1449	0.1480	1.0000	1.0667	mg/L	7	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1449	0.1546	4.0000	4.3335	mg/L	8	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1449	0.1641	10.000	10.896	mg/L	9	10	

CONTINUING CALIBRATION SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.3873	0.3870	0.2500	0.2547	mg/L	2	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.3873	0.3823	1.0000	1.0004	mg/L	0	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.3873	0.3849	2.5000	2.4897	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.3873	0.3772	1.0000	0.9871	mg/L	-1	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.3873	0.3915	2.5000	2.5313	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.3873	0.3847	1.0000	1.0066	mg/L	1	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3103	0.3228	0.2500	0.2712	mg/L	8	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3103	0.3204	1.0000	1.0661	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3103	0.3225	2.5000	2.6315	mg/L	5	10	

CONTINUING CALIBRATION SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.4432	0.4373	0.2500	0.2600	mg/L	4	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.4432	0.4513	1.0000	1.0546	mg/L	5	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.4432	0.4396	2.5000	2.4909	mg/L	0	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.4432	0.4442	1.0000	1.0385	mg/L	4	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.4432	0.4489	2.5000	2.5407	mg/L	2	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.4432	0.4555	1.0000	1.0642	mg/L	6	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.3333	0.3263	0.2500	0.2468	mg/L	-1	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.3333	0.3735	1.0000	1.1116	mg/L	**11**	10	c+ ***
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.3333	0.3802	2.5000	2.7434	mg/L	10	10	

+=high bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607226713008	06-JUN-2007 09:58	607218822002	01-JUN-2007	0.1369	0.1292	2.5000	2.5336	mg/L	1	10	
IC01	P	607226713020	06-JUN-2007 14:03	607218822002	01-JUN-2007	0.1369	0.1337	10.000	10.288	mg/L	3	10	
IC01	P	607226713028	06-JUN-2007 17:47	607218822002	01-JUN-2007	0.1369	0.1338	25.000	24.867	mg/L	-1	10	
IC01	P	607226713043	07-JUN-2007 00:21	607218822002	01-JUN-2007	0.1369	0.1333	10.000	10.260	mg/L	3	10	
IC01	P	607226713062	07-JUN-2007 05:54	607218822002	01-JUN-2007	0.1369	0.1363	25.000	25.301	mg/L	1	10	
IC01	P	607226713072	07-JUN-2007 08:49	607218822002	01-JUN-2007	0.1369	0.1346	10.000	10.360	mg/L	4	10	
IC03	P	627234079010	11-JUN-2007 13:53	627218791001	31-MAY-2007	0.1084	0.1090	2.5000	2.6447	mg/L	6	10	
IC03	P	627234079023	11-JUN-2007 23:04	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.698	mg/L	7	10	
IC03	P	627234079037	12-JUN-2007 03:08	627218791001	31-MAY-2007	0.1084	0.1177	25.000	26.861	mg/L	7	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713022 File : 158_22 Time : 06-JUN-2007 14:39
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

: 00350

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713029 File : 158_29 Time : 06-JUN-2007 18:04
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.008833]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713044.1 File : 158_44 Time : 07-JUN-2007 00:39
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

:00362

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713063.1 File : 158_63 Time : 07-JUN-2007 06:11
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.03627]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607226713073.1 File : 158_73 Time : 07-JUN-2007 09:06
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

: 00364

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079024.1 File : 162_24 Time : 11-JUN-2007 23:21
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195247 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627234079038.1 File : 162_38 Time : 12-JUN-2007 03:25
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03182]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0						1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0						1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:47	1.0			25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0			25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0			25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0			25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1		25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1		25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1		25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2		25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0			25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1		25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1		25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0			25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0			25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0			25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2		25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2		25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2		25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0			25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1		25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1		25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0			25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1		25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1		25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0			25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0			25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0			25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1		25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1		25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0			25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1		25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0			25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2		25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2		25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2		25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2		25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2		25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1		25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1		25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0			25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:14	1.0		25				
003	152_3	ICAL	L1			31-MAY-2007 22:31	1.0					1	
004	152_4	ICAL	L2			31-MAY-2007 22:49	1.0					1	
005	152_5	ICAL	L3			31-MAY-2007 23:06	1.0					1	
006	152_6	ICAL	L4			31-MAY-2007 23:24	1.0					1	
007	152_7	ICAL	L5			31-MAY-2007 23:41	1.0					1	
008	152_8	CCB				31-MAY-2007 23:58	1.0	1	25				
009	152_9	ICV				01-JUN-2007 00:16	1.0		25			2	
011	152_11	CCB/MB	QC390419	125840	Water	01-JUN-2007 00:51	1.0		25				
012	152_12	BS	QC390420	125840	Water	01-JUN-2007 01:08	1.0		25			1	
013	152_13	BSD	QC390421	125840	Water	01-JUN-2007 01:25	1.0		25			1	
014	152_14	SAMPLE	195096-001	125840	Water	01-JUN-2007 01:43	1.0	1	25				1:SO4=556.718
016	152_16	SAMPLE	195096-002	125840	Water	01-JUN-2007 02:18	2.0	1	25				2:SO4=598.434
018	152_18	SAMPLE	195096-003	125840	Water	01-JUN-2007 02:53	1.0	1	25				2:SO4=557.907
019	152_19	SAMPLE	195096-004	125840	Water	01-JUN-2007 03:10	1.0	1	25				2:SO4=559.245
021	152_21	SAMPLE	195089-002	125840	Water	01-JUN-2007 03:45	5.0	1	25				2:SO4=140.384
022	152_22	SAMPLE	195089-002	125840	Water	01-JUN-2007 04:02	1.0	2	25				3:SO4=490.019
024	152_24	SAMPLE	195089-004	125840	Water	01-JUN-2007 04:37	1.0	2	25				3:SO4=427.003
026	152_26	CCV	M	125840		01-JUN-2007 05:12	1.0		25			1	
027	152_27	CCB		125840		01-JUN-2007 05:29	1.0		25				
030	152_30	SAMPLE	195089-005	125840	Water	01-JUN-2007 06:21	1.0	1	25				2:SO4=489.308
031	152_31	SAMPLE	195089-006	125840	Water	01-JUN-2007 06:39	1.0	1	25				2:SO4=517.275
032	152_32	SAMPLE	195089-003	125840	Water	01-JUN-2007 06:56	1.0	1	25				2:SO4=373.460
034	152_34	SAMPLE	195096-005	125840	Water	01-JUN-2007 07:31	1.0	1	25				2:SO4=409.844
035	152_35	SAMPLE	195096-006	125840	Water	01-JUN-2007 07:48	1.0	1	25				2:SO4=144.475
037	152_37	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:23	10.0	1	25				1:SO4=195.820
038	152_38	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:41	5.0	1	25				2:SO4=339.862
039	152_39	SAMPLE	195089-007	125840	Water	01-JUN-2007 08:58	1.0	2	25				3:SO4=481.654
041	152_41	SAMPLE	195092-002	125840	Water	01-JUN-2007 09:33	1.0	2	25				2:SO4=430.097
042	152_42	SAMPLE	195092-003	125840	Water	01-JUN-2007 09:50	1.0	2	25				2:SO4=430.821
044	152_44	CCV	H	125840		01-JUN-2007 10:25	1.0		25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
045	152_45	CCB		125840		01-JUN-2007 10:43	1.0	1		25				
046	152_46	SAMPLE	195089-004	125840	Water	01-JUN-2007 11:00	5.0	1		25				2:SO4=117.984
047	152_47	SAMPLE	195112-001	125840	Water	01-JUN-2007 11:17	1.0			25				
048	152_48	MSS	195112-004	125840	Water	01-JUN-2007 11:35	1.0	2		25				1:CL=27.8197
050	152_50	SAMPLE	195089-007	125840	Water	01-JUN-2007 12:10	10.0	1		25				1:SO4=70.8983
051	152_51	MS	QC390422	125840	Water	01-JUN-2007 12:27	2.0	1		25			1	
052	152_52	MSD	QC390423	125840	Water	01-JUN-2007 12:44	2.0	1		25			1	
054	152_54	CCV	M	125840		01-JUN-2007 13:19	1.0			25			1	
055	152_55	CCB		125840		01-JUN-2007 13:37	1.0			25				
057	152_57	BLANK	QC390472	125850	Water	01-JUN-2007 15:12	1.0	1		25				
058	152_58	BS	QC390473	125850	Water	01-JUN-2007 15:29	1.0	1		25			1	
059	152_59	BSD	QC390474	125850	Water	01-JUN-2007 15:47	1.0	1		25			1	
060	152_60	SAMPLE	195127-003	125850	Water	01-JUN-2007 16:27	500.0			25				1:CL=25.2331
061	152_61	SAMPLE	195127-001	125850	Water	01-JUN-2007 16:54	20.0			25				2:CL=355.264
062	152_62	SAMPLE	195127-004	125850	Water	01-JUN-2007 17:11	20.0			25				2:CL=357.783
063	152_63	SAMPLE	195127-002	125850	Water	01-JUN-2007 17:28	20.0			25				2:CL=341.082
064	152_64	SAMPLE	195127-003	125850	Water	01-JUN-2007 18:03	20.0			25				2:CL=364.164
066	152_66	CCV	H	125850		01-JUN-2007 18:44	1.0			25			1	
067	152_67	CCB		125850		01-JUN-2007 19:01	20.0	1		25				
068	152_68	MSS	195123-005	125850	Water	01-JUN-2007 21:08	1.0	1		25				
070	152_70	MS	QC390480	125850	Water	01-JUN-2007 21:43	1.02	1		25			1	
071	152_71	MSD	QC390481	125850	Water	01-JUN-2007 22:00	1.02	1		25			1	
073	152_73	CCV	M	125850		01-JUN-2007 22:35	1.0			25			1	
074	152_74	CCB		125850		01-JUN-2007 22:52	1.0	1		25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 607226713 Instrument: IC01 Ion Chromatograph Begun: 06-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
008	158_8	CCV	L	125982		06-JUN-2007 09:58	1.0	1		25			1	
009	158_9	CCB/MB	QC391012	125982	Water	06-JUN-2007 10:15	1.0			25				
010	158_10	BS	QC391013	125982	Water	06-JUN-2007 10:33	1.0			25			1	
011	158_11	BSD	QC391014	125982	Water	06-JUN-2007 10:50	1.0			25			1	
012	158_12	SAMPLE	195192-001	125982	Water	06-JUN-2007 11:19	1.0	3		25				3:SO4=61.9759
013	158_13	SAMPLE	195192-002	125982	Water	06-JUN-2007 11:37	1.0	3		25				3:SO4=95.7954
014	158_14	SAMPLE	195192-003	125982	Water	06-JUN-2007 11:54	1.0	2		25				2:SO4=100.535
015	158_15	SAMPLE	195192-004	125982	Water	06-JUN-2007 12:12	1.0	2		25				2:SO4=85.9572
016	158_16	SAMPLE	195192-002	125982	Water	06-JUN-2007 12:53	10.0			25				
017	158_17	SAMPLE	195192-001	125982	Water	06-JUN-2007 13:11	5.0			25				
018	158_18	SAMPLE	195192-002	125982	Water	06-JUN-2007 13:28	5.0	1		25				1:CL=22.5500
020	158_20	CCV	M	125982		06-JUN-2007 14:03	1.0			25			1	
022	158_22	CCB		125982		06-JUN-2007 14:39	1.0			25				
023	158_23	SAMPLE	195192-003	125982	Water	06-JUN-2007 15:05	5.0			25				
024	158_24	SAMPLE	195192-004	125982	Water	06-JUN-2007 15:22	5.0			25				
025	158_25	X	195191-004	125982	Water	06-JUN-2007 15:40	25.0	1		25				2:CL=240.044
026	158_26	X	195191-004	125982	Water	06-JUN-2007 16:26	50.0			25				1:CL=121.459
028	158_28	CCV	H	125982		06-JUN-2007 17:47	1.0			25			1	
029	158_29	CCB		125982		06-JUN-2007 18:04	1.0	1		25				
030	158_30	SAMPLE	195226-004	125982	Water	06-JUN-2007 18:39	1.0	1		25				3:SO4=182.808
031	158_31	SAMPLE	195226-003	125982	Water	06-JUN-2007 19:12	1.0	1		25				3:SO4=164.597
032	158_32	SAMPLE	195226-002	125982	Water	06-JUN-2007 19:29	1.0			25				2:SO4=161.435
033	158_33	SAMPLE	195226-001	125982	Water	06-JUN-2007 19:54	1.0			25				
034	158_34	MSS	195241-003	125982	Water	06-JUN-2007 20:14	1.0	3		25				2:CL=189.449
036	158_36	MSS	195247-006	125982	Water	06-JUN-2007 20:49	100.0	2		25				1:NO3N=5.11758
038	158_38	MSS	195247-006	125982	Water	06-JUN-2007 22:54	200.0	1		25				
039	158_39	MSS	195241-003	125982	Water	06-JUN-2007 23:11	20.0	1		25				
040	158_40	SAMPLE	195226-004	125982	Water	06-JUN-2007 23:29	5.0			25				1:CL=35.4851
041	158_41	SAMPLE	195226-003	125982	Water	06-JUN-2007 23:46	5.0			25				1:CL=34.5339
043	158_43	CCV	M	125982		07-JUN-2007 00:21	1.0			25			1	
044	158_44	CCB		125982		07-JUN-2007 00:39	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 607226713 Instrument: IC01 Ion Chromatograph Begun: 06-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
047	158_47	SAMPLE	195241-004	125982	Water	07-JUN-2007 01:31	1.0	3		25				3:SO4=66.0012
048	158_48	SAMPLE	195241-005	125982	Water	07-JUN-2007 01:49	1.0			25				
050	158_50	SAMPLE	195247-001	125982	Water	07-JUN-2007 02:24	1.0	2		25				2:CL=171.949
051	158_51	SAMPLE	195247-002	125982	Water	07-JUN-2007 02:41	1.0	2		25				2:CL=191.286
053	158_53	SAMPLE	195241-002	125982	Water	07-JUN-2007 03:16	2.0	2		25				2:CL=217.656
054	158_54	SAMPLE	195241-007	125982	Water	07-JUN-2007 03:34	2.0	2		25				2:CL=217.587
056	158_56	MS	QC391171	125982	Water	07-JUN-2007 04:09	20.0			25			1	
057	158_57	MSD	QC391172	125982	Water	07-JUN-2007 04:26	20.0			25			1	
059	158_59	MS	QC391171	125982	Water	07-JUN-2007 05:01	20.0			25			1	
060	158_60	MSD	QC391172	125982	Water	07-JUN-2007 05:19	20.0			25			1	
062	158_62	CCV	H	125982		07-JUN-2007 05:54	1.0			25			1	
063	158_63	CCB		125982		07-JUN-2007 06:11	1.0			25				
066	158_66	MS	QC391267	125982	Water	07-JUN-2007 07:04	200.0		1	25			1	
067	158_67	MSD	QC391268	125982	Water	07-JUN-2007 07:21	200.0		1	25			1	
069	158_69	MS	QC391267	125982	Water	07-JUN-2007 07:56	200.0		1	25			1	
070	158_70	MSD	QC391268	125982	Water	07-JUN-2007 08:14	200.0		1	25			1	
072	158_72	CCV	M	125982		07-JUN-2007 08:49	1.0			25			1	
073	158_73	CCB		125982		07-JUN-2007 09:06	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Sequence: 627234079 Instrument: IC03 Ion Chromatograph Begun: 11-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	162_9	X	L			11-JUN-2007 13:19	1.0	6	25			1	
010	162_10	CCV	L			11-JUN-2007 13:53	1.0	1	25			1	
011	162_11	CCB/MB	QC391785	126184	Water	11-JUN-2007 17:17	1.0	1	25				
012	162_12	BS	QC391786	126184	Water	11-JUN-2007 17:34	1.0	2	25			1	
013	162_13	BSD	QC391787	126184	Water	11-JUN-2007 17:52	1.0	2	25			1	
015	162_15	MSS	195234-002	126184	Water	11-JUN-2007 20:45	5.0	3	25				
016	162_16	SAMPLE	195234-005	126184	Water	11-JUN-2007 21:02	20.0	3	25				
017	162_17	SAMPLE	195247-001	126184	Water	11-JUN-2007 21:20	20.0	3	25				
018	162_18	SAMPLE	195247-002	126184	Water	11-JUN-2007 21:37	20.0	3	25				
019	162_19	SAMPLE	195241-002	126184	Water	11-JUN-2007 21:54	20.0	4	25				1:CL=38.3195
020	162_20	SAMPLE	195241-007	126184	Water	11-JUN-2007 22:12	20.0	4	25				1:CL=38.1571
021	162_21	SAMPLE	195241-002	126184	Water	11-JUN-2007 22:29	10.0	4	25				1:CL=67.7637
023	162_23	CCV	M	126184		11-JUN-2007 23:04	1.0	1	25			1	
024	162_24	CCB		126184		11-JUN-2007 23:21	1.0		25				
025	162_25	X	M	126184		11-JUN-2007 23:39	1.0	1	25			1	
027	162_27	SAMPLE	195241-007	126184	Water	12-JUN-2007 00:14	10.0	3	25				1:CL=67.4744
028	162_28	SAMPLE	195247-002	126184	Water	12-JUN-2007 00:31	5.0	3	25				1:CL=57.2476
029	162_29	SAMPLE	195247-001	126184	Water	12-JUN-2007 00:48	5.0	3	25				1:CL=50.7985
031	162_31	MS	QC391870	126184	Water	12-JUN-2007 01:23	5.0	1	25			1	
032	162_32	MSD	QC391871	126184	Water	12-JUN-2007 01:41	5.0	1	25			1	
034	162_34	MS	QC391870	126184	Water	12-JUN-2007 02:16	5.0	1	25			1	
035	162_35	MSD	QC391871	126184	Water	12-JUN-2007 02:33	5.0	1	25			1	
037	162_37	CCV	H	126184		12-JUN-2007 03:08	1.0		25			1	
038	162_38	CCB		126184		12-JUN-2007 03:25	1.0	1	25				

Stds used: 1=S6107

REPORTING SUMMARY FOR 195247 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195247-001	IC01	06/07/07 02:24	1.0	+		+	+	
195247-001	IC03	06/11/07 21:20	20.0		+			
195247-001	IC03	06/12/07 00:48	5.0					+
195247-002	IC01	06/07/07 02:41	1.0	+		+	+	
195247-002	IC03	06/11/07 21:37	20.0		+			
195247-002	IC03	06/12/07 00:31	5.0					+
195247-006	IC01	06/06/07 20:49	100.0	+	+	+		+
195247-006	IC01	06/06/07 22:54	200.0				+	
QC391012	IC01	06/06/07 10:15	1.0	+	+	+	+	+
QC391013	IC01	06/06/07 10:33	1.0	+	+	+	+	+
QC391014	IC01	06/06/07 10:50	1.0	+	+	+	+	+
QC391171	IC01	06/07/07 04:09	20.0	+	+	+	+	+
QC391171	IC01	06/07/07 05:01	20.0					
QC391172	IC01	06/07/07 04:26	20.0	+	+	+	+	+
QC391172	IC01	06/07/07 05:19	20.0					
QC391267	IC01	06/07/07 07:04	200.0	+	+	+	+	+
QC391267	IC01	06/07/07 07:56	200.0					
QC391268	IC01	06/07/07 07:21	200.0	+	+	+	+	+
QC391268	IC01	06/07/07 08:14	200.0					
QC391785	IC03	06/11/07 17:17	1.0	+	+	+	+	+
QC391786	IC03	06/11/07 17:34	1.0	+	+	+	+	+
QC391787	IC03	06/11/07 17:52	1.0	+	+	+	+	+
QC391870	IC03	06/12/07 01:23	5.0	+	+	+	+	+
QC391870	IC03	06/12/07 02:16	5.0					
QC391871	IC03	06/12/07 01:41	5.0	+	+	+	+	+
QC391871	IC03	06/12/07 02:33	5.0					

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 125982
Date Started: 06-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195192-001			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-002			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-003			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195192-004			LFR Levine Fricke	Water	CHLORIDE, NITRATE, SULFATE	11-JUN-2007
195226-001			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-002			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-003			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195226-004			ConocoPhillips Com	Water	NITRATE	12-JUN-2007
195241-002			Treadwell & Rollo	Water	NITRATE, NITRITE	18-JUN-2007
195241-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	FLUORIDE, NITRITE	18-JUN-2007
195241-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
195241-007			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-001			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-002			Treadwell & Rollo	Water	FLUORIDE, NITRATE, NITRITE	18-JUN-2007
195247-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-JUN-2007
QC391012	BLANK			Water		
QC391013	BS			Water		
QC391014	BSD			Water		
QC391171	MS	of 195241-003		Water		
QC391172	MSD	of 195241-003		Water		
QC391267	MS	of 195247-006		Water		
QC391268	MSD	of 195247-006		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 135982
Date Started: 6/6/07
Prep Chemist: KSB

BK 2488
Page 79

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195191-004 O	24.0	20x/50x	S	
2	195192-001 A	.96	1x		
3	-002 A	1.32			
4	-003 E	.84			
5	-004 E	.78			
6	195226-001 B	.21			
7	-002	1.23			
8	-003	1.37	5x/1x		
9	-004	1.44	5x/1x		
10	195241-002 G	4.70	2x		
11	-003 G	2.14	1x/10x		MSS
12	-004 I	.85	1x/5x		
13	-006 H	.75	1x		
14	-007 C	4.68	2x		
15	195247-001 A	1.76	1x		
16	-002	2.12	1x		
17	-006	13.50	100x/200x		MSS
18	Blank 391012	N/A	N/A	N/A	
19	BS 013				
20	BSD 014				
	MS 171	2.14	20x	S	
	MSD 172	2.14	20x		
	MS 267	13.50	200x		
	MSD 268	13.50	200x		

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x MDW 4/19/07	KSB 6/9/07
BS/BSD Spiked with	.2 mL of :	SG107	
MS/MSD Spiked with	.1 mL of :	SG107	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10650522	

KSB 6/11/07

KSB 6/9/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CR 6/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126184
Date Started: 11-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195234-002			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195234-005			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195241-002			Treadwell & Rollo	Water	SULFATE	18-JUN-2007
195241-007			Treadwell & Rollo	Water	SULFATE	18-JUN-2007
195247-001			Treadwell & Rollo	Water	CHLORIDE, SULFATE	18-JUN-2007
195247-002			Treadwell & Rollo	Water	CHLORIDE, SULFATE	18-JUN-2007
QC391785	BLANK			Water		
QC391786	BS			Water		
QC391787	BSD			Water		
QC391870	MS	of 195234-002		Water		
QC391871	MSD	of 195234-002		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 26184
Date Started: 6/11/07
Prep Chemist: MSB

BK 2488
Page 87

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195234-002 J	.67	5x	S	MSS
2	↓ -005 H	1.31	20x	↓	
3	195241-002 G	4.70	20x	↓	
4	↓ -007 C	4.69	20x	↓	
5	195247-001 A	1.76	20x	↓	
6	↓ -002 A	2.12	20x	↓	
7	Blank 391785	N/A	1x	N/A	
8	BS 786	↓	↓	↓	
9	BSD 787	↓	↓	↓	
10	MS 870	.67	5x	S	
11	MSD ↓ 871	.67	5x	↓	
12					
13					
14					
15					
16					
17					MSB 6/12/07
18					
19					
20					

		Mfg & Lot # / Time / Program	Initials / Date
	Eluent Reagent ID	100x MDW 4/9/07	6/12/07 MSB
BS/BSD Spiked with	.2 mL of :	SG107	↓
MS/MSD Spiked with	.1 mL of :	SG107	
Filters Used:	Ag: OnGuard II Ag	NA	
	Na: OnGuard II Na	↓	
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10650522	↓

MSB 6/12/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

RM 6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/27/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126214
Field ID:	BB3GW100	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	mg/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	195247-006	760	10
BLANK	QC391928	ND	10

ND= Not Detected
RL= Reporting Limit

52.0

:00391

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195247	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126214
Matrix:	Water	Analyzed:	06/12/07
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln Fac	Sampled	Received
	BS		QC391929		100.0	84.00		84	75-126			1.000		
	BSD		QC391930		100.0	102.0		102	75-126	19	21	1.000		
ZZZZZZZZZZ	SDUP	195276-002	QC391935	29,180		29,980	100.0			3	24	10.00	06/07/07	06/07/07
231GW20	SDUP	195234-001	QC392734	42.00		68.00	10.00			47 *	24	1.000	06/05/07	06/06/07
231GW13	SDUP	195234-003	QC392735	814.0		858.0	10.00			5	24	1.000	06/05/07	06/06/07
LF4GW104	SDUP	195241-003	QC392736	1,116		1,206	10.00			8	24	1.000	06/05/07	06/06/07
BB3GW100	SDUP	195247-006	QC392737	756.0		812.0	10.00			7	24	1.000	06/05/07	06/06/07

*= Value outside of QC limits; see narrative
RL= Reporting Limit
RPD= Relative Percent Difference

53.0

Curtis & Tompkins, Ltd.

23262

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	EPA160.1 / SMWW 2540C	Analysis Date:	**12-Jun-07**
Matrix:	Water	Batch #:	**126214**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	58.2136	58.2140	0.0004	ND	10					
BS	50	1	55.1973	55.2015	0.0042	84.0	10	1,000	5	100	**84**	
BSD	50	1	54.5464	54.5515	0.0051	102.0	10	1,000	5	100	**102**	**19.35**
195234-001	50	1	56.4345	56.4366	0.0021	42.0	10					
SDUP	50	1	51.6893	51.6927	0.0034	68.0	10					**47.27 ***
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10					
SDUP	50	1	53.7581	53.8010	0.0429	858.0	10					**5.26**
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10					
SDUP	50	1	56.5424	56.6027	0.0603	1,206.0	10					**7.75**
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10					
SDUP	50	1	58.2072	58.2478	0.0406	812.0	10					**7.14**
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100					
SDUP	5	10	29.0120	29.1619	0.1499	29,980.0	100					**2.70**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF (50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195234-001	50	1	56.4345	56.4362	0.0017	34.0	10
195234-002	50	1	56.1267	56.1476	0.0209	418.0	10
195234-003	50	1	54.1641	54.2048	0.0407	814.0	10
195234-004	50	1	51.5206	51.5251	0.0045	90.0	10
195234-005	50	1	53.7383	53.7803	0.0420	840.0	10
195241-002	45	1.111	50.6462	50.7785	0.1323	2,940.0	11
195241-003	50	1	58.3177	58.3735	0.0558	1,116.0	10
195241-004	50	1	55.0726	55.0959	0.0233	466.0	10
195241-005	50	1	53.4748	53.4954	0.0206	412.0	10
195241-007	50	1	54.0442	54.1836	0.1394	2,788.0	10
195247-006	50	1	58.3492	58.3870	0.0378	756.0	10
195276-002	5	10	27.4540	27.5999	0.1459	29,180.0	100
195276-003	5	10	26.0931	26.2058	0.1127	22,540.0	100
195276-004	5	10	25.4312	25.5414	0.1102	22,040.0	100
195276-005	50	1	55.1482	55.2264	0.0782	1,564.0	10
195276-006	50	1	54.9902	55.0785	0.0883	1,766.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMB 6/18/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126214

Prep Date: 6/12/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **56**

Filter Mfg/ Lot#: Env. Exp. 655758
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/12/07	6/13/07	6/13/07	6/13/07	6/13/07	6/13/07
Time:	15:15	8:00	9:50	10:50	11:45	12:45
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	G5	58.2136	58.2140	58.2140	X
	BS		↓	GEE	55.1973	55.2019	55.2015	X
	BSD		↓	G44	54.5464	54.5527	54.5520	54.5515
	195234-1 S	150.5	50	G00D	56.4345	56.4366	56.4362	X
5	SDUP-1 ↓	↓	↓	GIVE	51.6893	51.6931	51.6917	51.6932
	-2 G	612	↓	GOP	56.1267	56.1476	56.1476	X
	-3 S	1320	↓	G41	54.1641	54.2058	54.2048	X
	SDUP-3 ↓	↓	↓	G43	53.7581	53.8007	53.8010	X
	-4 I	151.4	↓	GREP	51.5206	51.5259	51.5248	51.5251
10	-5 G	1364	↓	G55	53.7383	53.7808	53.7803	X
	195241-2 B	4030	45	ELF	50.6462	50.7788	50.7785	X
	-3 A	1809	50	PIT	58.3177	58.3744	58.3731	58.3735
	SDUP-3 ↓	↓	↓	G1A	56.5424	56.6029	56.6027	X
	-4 G	694	↓	GRAZE	55.0726	55.0962	55.0959	X
15	-5 ↓	630	↓	G42	53.4748	53.4959	53.4954	X
	-7 B	3820	↓	G38	54.0442	54.1860	54.1840	54.1836
	195247-6 H	1290	50	GULF	58.3492	58.3897	58.3887	58.3904
	SDUP-6 ↓	↓	↓	GAVEL	58.2072	58.2504	58.2489	58.2473
	195276-2 B	35,100	5	OAMO	27.4540	27.5977	27.6003	27.5999
20	SDUP-2 ↓	↓	↓	LA	29.0120	29.1592	29.1623	29.1619
	-3 A	27,600	↓	7	26.0931	26.2040	26.2060	26.2058
	-4 B	26,200	↓	BOMB	25.4312	25.5403	25.5419	25.5414
	-5 A	2,670	50	G34	55.1482	55.2379	55.2369	55.2264
	-6 ↓	2690	↓	G40	54.9902	55.0786	55.0785	X

* Constant weight must be within 0.0005 from previous reading.

6/12/07
Analyst / Date

6/13/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 1 2 4 2 1 Y cou 4

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2421**
Page: **57**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	6/13/07	6/14/07	6/14/07	~~6/18~~ 6/18/07		
Time:	13:50	9:30	10:30	9:00		
Temp (C):	180	180	180	180		

	Sample #/ Letter	EC Value (uS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	X							
	X							
	X							
	X							
5	51.6927	X						
	X							
	X							
	X							
	X							
10	X							
	X							
	X							
	X							
	X							
15	X							
	X							
	58.3871	58.3870	X					
	58.2478	X						
	X							
20	X							
	X							
	X							
	X							
	X							

* Constant weight must be within 0.0005 from previous reading.

6/13/07
Analyst / Date

6/13/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126214
Date Started: 12-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195234-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-002			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-003			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-004			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-005			Treadwell & Rollo	Water	TDS	18-JUN-2007
195241-007			Treadwell & Rollo	Water	TDS	18-JUN-2007
195247-006			Treadwell & Rollo	Water	TDS	18-JUN-2007
195276-002			Innovative Technic	Water	TDS	13-JUN-2007
195276-003			Innovative Technic	Water	TDS	13-JUN-2007
195276-004			Innovative Technic	Water	TDS	13-JUN-2007
195276-005			Innovative Technic	Water	TDS	13-JUN-2007
195276-006			Innovative Technic	Water	TDS	13-JUN-2007
QC391928	BLANK			Water	TDS	
QC391929	BS			Water	TDS	
QC391930	BSD			Water	TDS	
QC391935	SDUP	of 195276-002		Water	TDS	
QC392734	SDUP	of 195234-001		Water	TDS	
QC392735	SDUP	of 195234-003		Water	TDS	
QC392736	SDUP	of 195241-003		Water	TDS	
QC392737	SDUP	of 195247-006		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195270

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID
1349MW100	195270-001
DUP0606073A	195270-002
BHWGW04	195270-003
BHWGW04RBHWGW100	195270-004
HWGW101	195270-005
BHWGW05	195270-006
BHWGW01	195270-007
DUP0606073B	195270-008
TB0606073A	195270-009
231GW29	195270-010
DUP0606072A	195270-011
BB3SW101	195270-012
FM14EX07GW101	195270-013
FM14EX07GW102	195270-014
DUP0606071A	195270-015
1213GW101	195270-016
610GW101	195270-017
610GW102	195270-018
TB0606071A	195270-019
TB0606072A	195270-020

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/28/2007
Project Manager

Signature: _____ Date: 06/29/2007
Quality Assurance Director

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195270**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/07/07**
Samples Received:	**06/07/07**

This hardcopy data package contains sample and QC results for nineteen water samples, requested for the above referenced project on 06/07/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 05/03/07 13:35; this analyte was not detected at or above the RL in the associated samples. High responses were observed for vinyl acetate in the CCV analyzed 06/11/07 09:51 and the CCV analyzed 06/12/07 13:06; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Pesticides (EPA 8081A):
Low surrogate recovery was observed for decachlorobiphenyl in 1349MW100 (lab # 195270-001); the corresponding TCMX surrogate recovery was within limits. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of FM14EX07GW101 (lab # 195270-013); the LCS was within limits, and the associated RPD was within limits. High surrogate recoveries were observed for 1-methylnaphthalene (UV) in 1349MW100 (lab # 195270-001) and DUP0606073A (lab # 195270-002), due to matrix interference. No other analytical problems were encountered.

Metals (EPA 6020) Water:
High responses were observed for iron and selenium in the CCV analyzed 06/15/07 00:09; these analytes were not detected at or above the RL in the associated sample. High % difference was observed for vanadium in the serial dilution of BHWGW01 (lab # 195270-007); this analyte was not detected at or above the RL in the associated sample. Copper was detected above the RL in the method blank for batch 126092; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

108.0

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	195270
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio
Request Date:	06/07/07
Samples Received:	06/07/07

Metals (EPA 6020 and EPA 7470A) Filtrate:
Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of BHWGW01 (lab # 195270-007). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

108.0

Curtis & Tompkins, Ltd.

Chain of Custody

195270

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2161
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS B Proud
Recorder (signature required): [signature]
Sent to Laboratory (Name): Curtis & Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Containers & Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Metals - dissolved (23)						COMMENTS / NOTES
-1	1349MW100	6-6	850			X		6		1		5	X	X	X	X	X	X			X	X	X						
-2	DUP060603A		—			X		6		1		5	X	X	X	X	X	X			X	X	X						
-3	BHWGW04		1100			X				1		1					X		X										
-4	BHWGW04RBHWGW100		1110			X				1		1					X		X										
-5	HWGW101		1220			X				1		1					X		X										
-6	BHWGW05		1300			X				1		1					X		X										
-7	BHWGW01		1340			X				3		3	•			•	X		X										MS/MSD
-8	DUP060603B		—			X				1		1					X		X										
-9	TB060603A		—			X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) **(13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) **(9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) **(8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) **(3** - Al, Fe, and Cr) **(Other** -)

RELINQUISHED BY: [signature]	DATE: 6/7/07	RECEIVED BY: [signature]	DATE: 6/7/07
PRINT NAME: Brian Proud FIRM: BTS	TIME: 1330	PRINT NAME: ANDREW GREENER FIRM: C+T	TIME: 1330
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo 195270

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2162
Page: ____ of ____

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / P. Cornish, D. Rayner, B. Proud
Recorder (signature required):
Sent to Laboratory (Name): CTT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Containers & Preservation: HCl	H_2SO_4	HNO_3	NaOH/ZnAc	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Metals, Dissolved (14)	Metals / Sulfide	BTEX, MTBE	Pass. Metals (4)		COMMENTS / NOTES
-10 2316W29	6/6/07	1400			X		6		1	1	3	X	X	X	X	X				X		X	X				
-11 DUP060607 2A		1410			X		6		1	1	3	X	X	X	X	X				X		X	X				
-12 B635W101		1230			X													X									low volume
-13 FM14EX07GW101		1002			X		18				9	X	X	X							X		X	X			MS/MSD
-14 FM14EX07GW102		0906			X		6				3	X	X	X							X		X	X			
-15 DUP060607 1A		0926			X		6				3	X	X	X							X		X	X			No sulfide
-16 1213GW101		1056			X		6		1		4	X	X	X	X	X		X			X						
-17 610GW101		1215			X		6		1		3	X	X	X		X				X				X	X		
-18 610GW102		1350			X		6		1		3	X	X	X		X				X				X	X		
-19 TB060607 1A		-			X		2								X												
-20 TB060607 2A - SM 6/7	HOLD																										

* logged in as 14MET per SES

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (**13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (**9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (**8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (**3** - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 6/7/07	RECEIVED BY: [signature]	DATE: 6/7/07
PRINT NAME: Peter Cornish FIRM: BTS	TIME: 1330	PRINT NAME: AARON BENTER FIRM: CTT	TIME: 1330
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195270 Date Received: 6/7/07 Number of Coolers: 3
Client: Treadwell & Rollo Project: Presidio of SF

A. Preliminary Examination Phase
Date Opened: 6/7/07 By (print): S. Manteclaro (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? lip of cooler Seal date: 6/7/07 Seal name: unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 2.4°, 4.5°, 2.2°

B. Login Phase
Date Logged In: 6/7/07 By (print): S. Manteclaro (sign) [signature]

1. Describe type of packing in cooler: ziplock bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... YES (NO)
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
* Two VOAs labeled, "TB0606072A" sent → logged in on hold - sample - 020
(BG) Added HNO3 (# E11023) to sample-001
* Samples -017 & -018 metals logged in as HMET per SES.
*

Filename: F:\qc\forms\qc\cooler.doc Rev. 1, 4/95

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	126232
Lab ID:	195270-001	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	5.000		

Analyte	Result	RL
Gasoline C7-C12	5,000 H Y	250

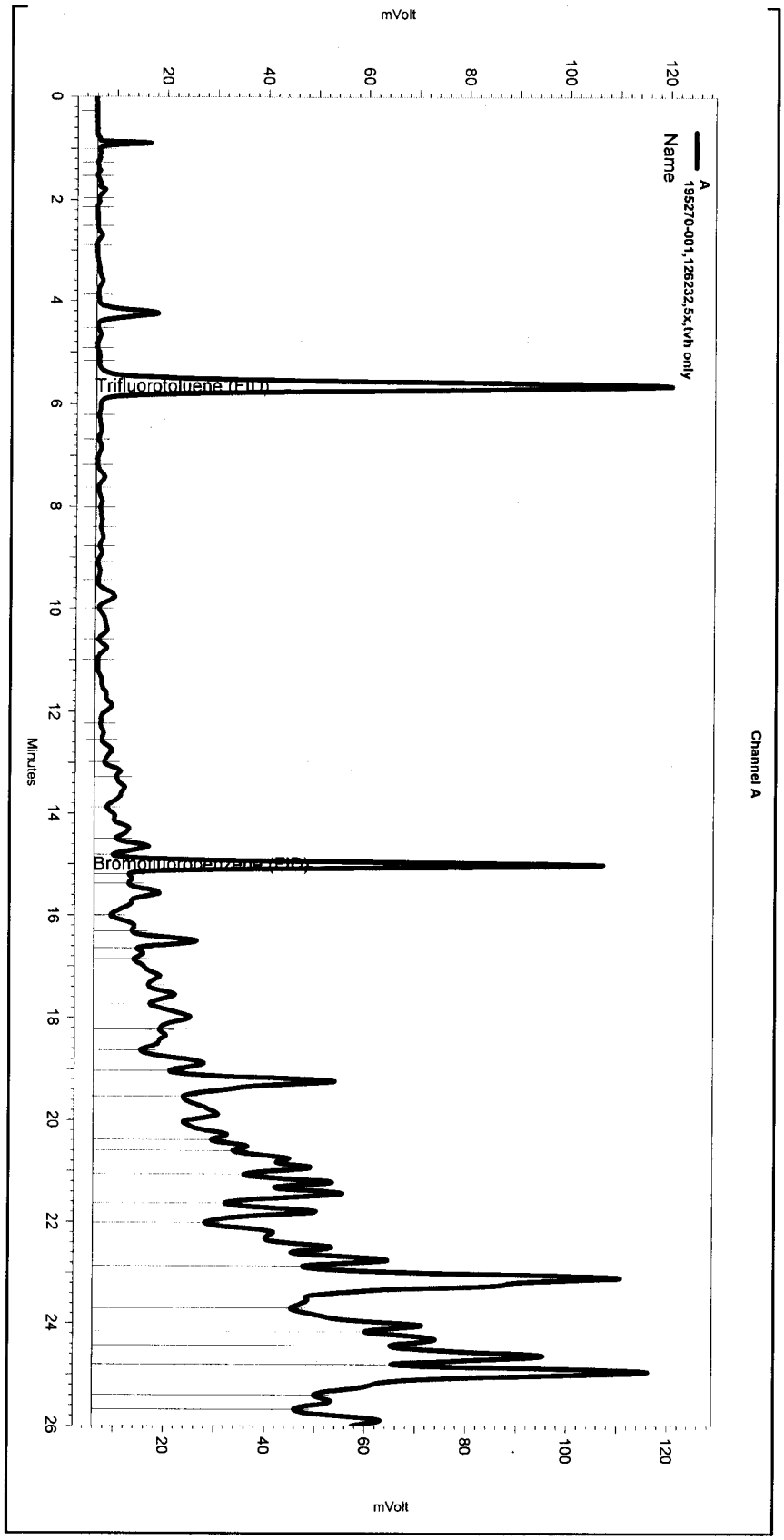
Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	131	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

61.0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\163.seq**
Sample Name: **195270-001,126232,5x,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\163_017**
Instrument: GC05 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/13/2007 2:53:06 AM
Analysis Date: 6/13/2007 1:52:56 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: D1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\163_017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	1.292	26.017	0

1349MW100

00010

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0606073A	Batch#:	126232
Lab ID:	195270-002	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	5.000		

Analyte	Result	RL
Gasoline C7-C12	1,500 H Y	250

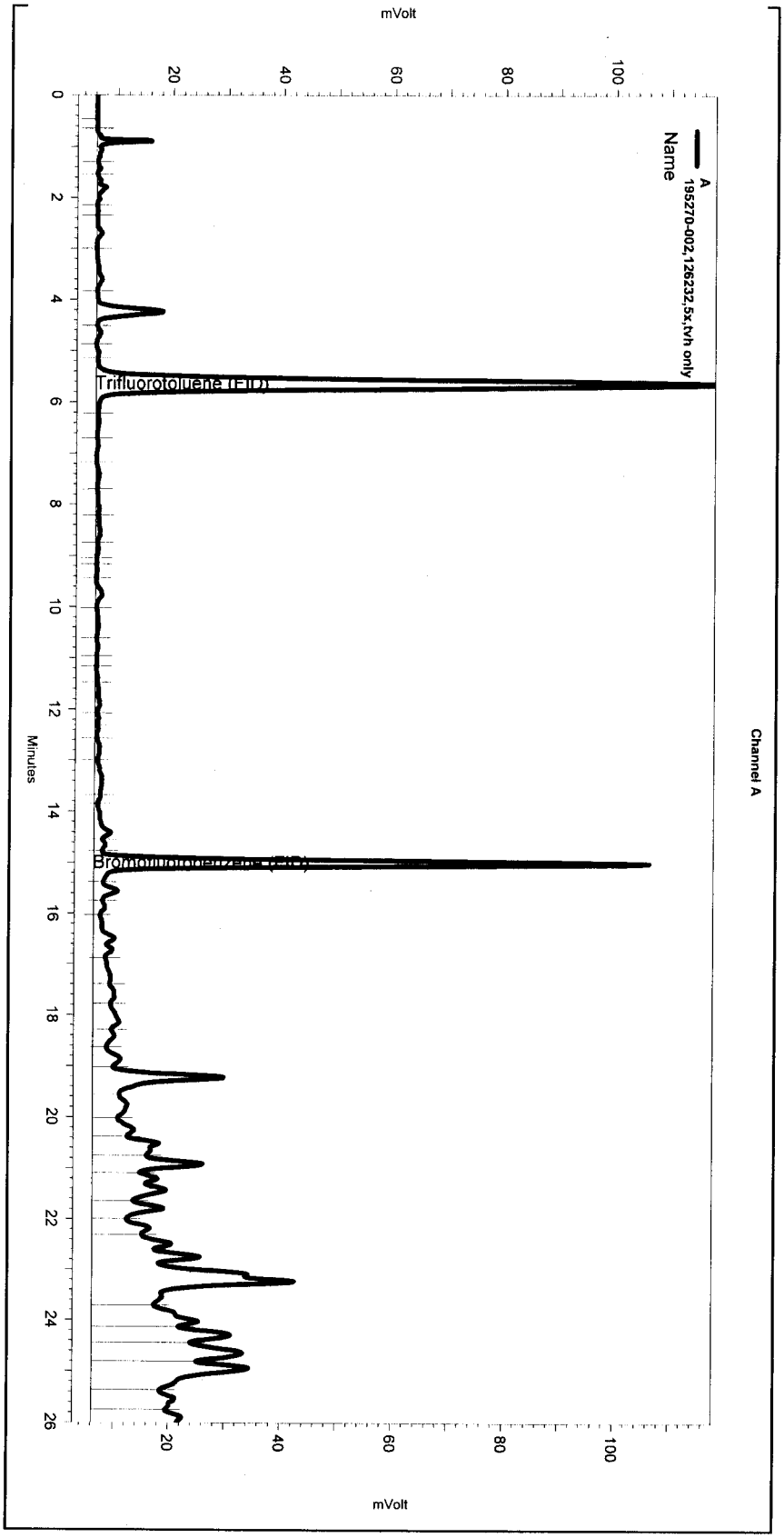
Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	128	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

62.0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\163.seq
Sample Name: **195270-002,126232,5x,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\163_018
Instrument: GC05 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/13/2007 3:29:35 AM
Analysis Date: 6/13/2007 1:53:00 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: C1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\163_018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0.587	26.017	0

DUP0606073A

00012

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW29	Batch#:	126232
Lab ID:	195270-010	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	115	65-135

ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0606072A	Batch#:	126232
Lab ID:	195270-011	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	128	65-135

ND= Not Detected
RL= Reporting Limit

64.0

00014

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW101	Batch#:	126232
Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.8	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	88	65-135	EPA 8015B
Bromofluorobenzene (FID)	97	65-135	EPA 8015B
Trifluorotoluene (PID)	84	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW102	Batch#:	126232
Lab ID:	195270-014	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	65-135	EPA 8015B
Bromofluorobenzene (FID)	104	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DUP0606071A	Batch#:	126232
Lab ID:	195270-015	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	65-135	EPA 8015B
Bromofluorobenzene (FID)	105	65-135	EPA 8015B
Trifluorotoluene (PID)	92	65-135	EPA 8021B
Bromofluorobenzene (PID)	108	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

67.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	126232
Lab ID:	195270-016	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	65-135
Bromofluorobenzene (FID)	126	65-135

ND= Not Detected
RL= Reporting Limit

68.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	610GW101	Batch#:	126232
Lab ID:	195270-017	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.6	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	65-135	EPA 8015B
Bromofluorobenzene (FID)	113	65-135	EPA 8015B
Trifluorotoluene (PID)	97	65-135	EPA 8021B
Bromofluorobenzene (PID)	116	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

69.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	610GW102	Batch#:	126232
Lab ID:	195270-018	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	65-135	EPA 8015B
Bromofluorobenzene (FID)	110	65-135	EPA 8015B
Trifluorotoluene (PID)	96	65-135	EPA 8021B
Bromofluorobenzene (PID)	111	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

70.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392018	Batch#:	126232
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

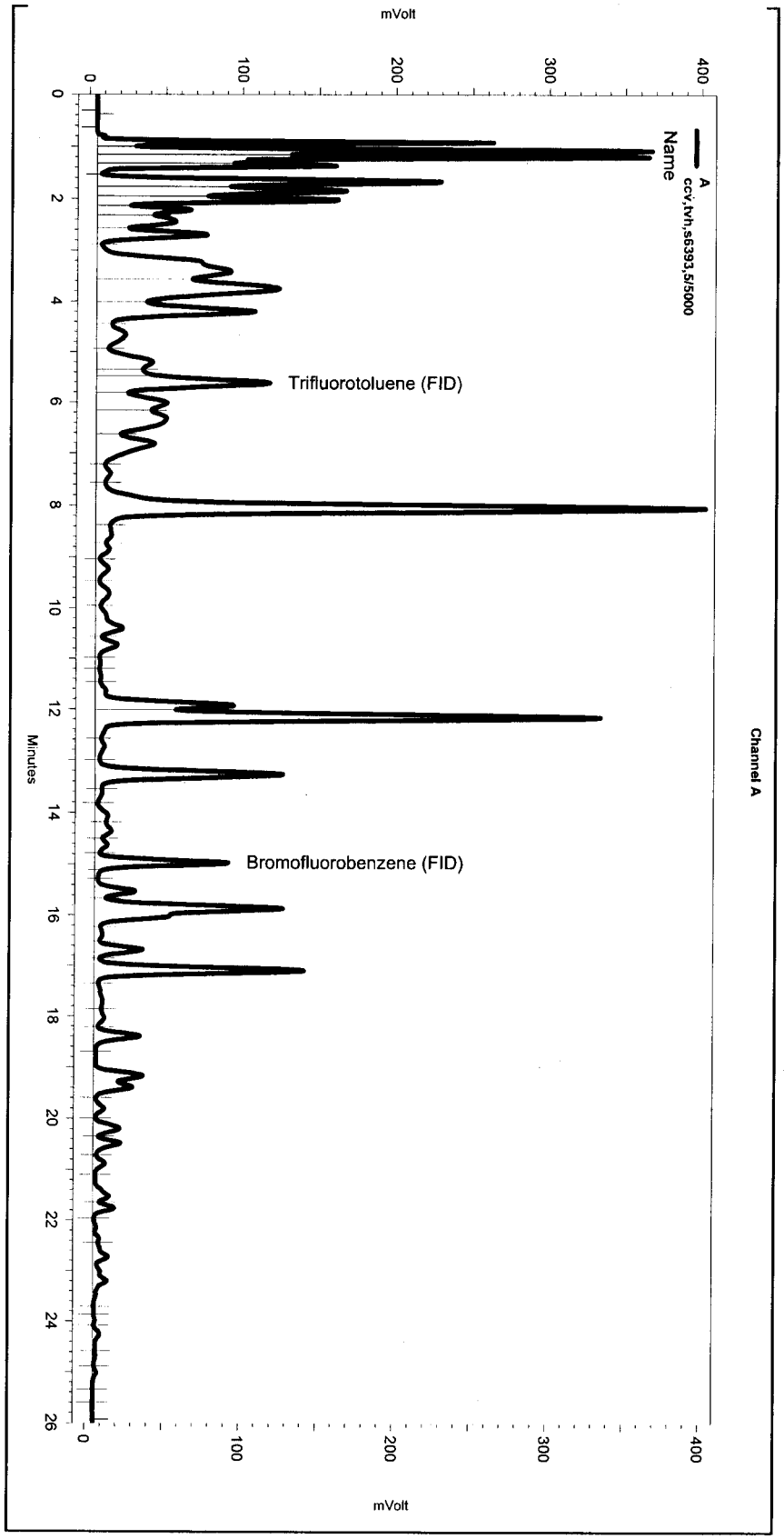
Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	65-135	EPA 8015B
Bromofluorobenzene (FID)	104	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

71.0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\163.seq** Sample Name: **ccv,tvh,s6393,5/5000** Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\163_002** Instrument: GC05 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3) Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met	Software Version 3.1.7 Run Date: 6/12/2007 4:16:55 PM Analysis Date: 6/13/2007 1:51:40 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\163_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.481	0	0
Yes	Split Peak	15.113	0	0

GASOLINE

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392019	Batch#:	126232
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.88	94	65-135
Benzene	20.00	20.03	100	65-135
Toluene	20.00	21.12	106	65-135
Ethylbenzene	20.00	20.88	104	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	65-135
Bromofluorobenzene (PID)	107	65-135

72.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392020	Batch#:	126232
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,106	105	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	109	65-135

73.0

00824

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	FM14EX07GW101	Batch#:	126232
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392021

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.85	2,000	2,278	113	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	65-135
Bromofluorobenzene (FID)	131	65-135

Type: MSD Lab ID: QC392022

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,183	108	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	130	65-135

RPD= Relative Percent Difference

74.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 317205342002
Units : ng

Name : GC05 TVH 142
Date : 23-MAY-2007 01:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	142_021	317205342021	TVH 1	23-MAY-2007 01:06	S5937 (1000X), S6108 (5000X)
L2	142_022	317205342022	TVH 2	23-MAY-2007 01:42	S5936 (1000X), S6108 (5000X)
L3	142_023	317205342023	TVH 3	23-MAY-2007 02:17	S5935 (1000X), S6108 (5000X)
L4	142_024	317205342024	TVH 4	23-MAY-2007 02:53	S5934 (2000X), S6108 (5000X)
L5	142_025	317205342025	TVH 5	23-MAY-2007 03:28	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2214.4	2023.3	2084.4	2170.8	2177.1	AVRG		4.69E-4		2134.0	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	4	2500	-5	10000	-2	25000	2	50000	2

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317205342002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 GCVOA Water
EPA 8015B

Inst : GC05 Name : GC05 TVH 142
Calnum : 317205342002 Cal Date : 23-MAY-2007

ICV 317205342027 (142_027 23-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2134.0	2020.9	10000	9470	ng	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 317226642001
Units : ng

Name : GC05 TFT/BFB 157
Date : 06-JUN-2007 09:59
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	157_002	317226642002	TFT/BFB_1	06-JUN-2007 09:59	S5951 (5000X)
L2	157_003	317226642003	TFT/BFB_2	06-JUN-2007 10:36	S5952 (5000X)
L3	157_004	317226642004	TFT/BFB_3	06-JUN-2007 11:12	S5953 (5000X)
L4	157_005	317226642005	TFT/BFB_4	06-JUN-2007 11:49	S5954 (5000X)
L5	157_006	317226642006	TFT/BFB_5	06-JUN-2007 12:29	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2992.6	3006.7	2878.3	2951.9	2787.7	AVRG		3.42E-4		2923.4	3	0.995	20	
Bromofluorobenzene (FID)	A	1315.2	1435.5	1486.6	1622.6	1525.6	AVRG		6.77E-4		1477.1	8	0.995	20	
Trifluorotoluene (PID)	B	11571	11536	11406	11657	11089	AVRG		8.73E-5		11452	2	0.995	20	
Bromofluorobenzene (PID)	B	16292	17761	18557	20742	19732	AVRG		5.37E-5		18616	9	0.995	20	
Trifluorotoluene (PID)	C	3117.0	3209.2	3259.3	3352.7	3213.6	AVRG		3.10E-4		3230.4	3	0.995	20	
Bromofluorobenzene (PID)	C	4439.2	5029.4	5662.1	6057.5	5826.2	AVRG		1.85E-4		5402.9	12	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	2	225.0	3	450.0	-2	675.0	1	950.0	-5
Bromofluorobenzene (FID)	A	150.0	-11	225.0	-3	450.0	1	675.0	10	950.0	3
Trifluorotoluene (PID)	B	150.0	1	225.0	1	450.0	0	675.0	2	950.0	-3
Bromofluorobenzene (PID)	B	150.0	-12	225.0	-5	450.0	0	675.0	11	950.0	6
Trifluorotoluene (PID)	C	150.0	-4	225.0	-1	450.0	1	675.0	4	950.0	-1
Bromofluorobenzene (PID)	C	150.0	-18	225.0	-7	450.0	5	675.0	12	950.0	8

Analyst: CW Date: 06/13/07 Reviewer: JCP Date: 06/19/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317226642001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCVOA Water: EPA 8021B

Inst : GC05
Calnum : 317226642002
Units : ng

Name : GC05 MBTXE 157
Date : 06-JUN-2007 17:01
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	157_009	317226642009	BTXE_1	06-JUN-2007 17:01	S6305 (1000X), S6435 (5000X)
L2	157_010	317226642010	BTXE_2	06-JUN-2007 17:37	S6304 (1250X), S6435 (5000X)
L3	157_011	317226642011	BTXE_3	06-JUN-2007 18:14	S6304 (500X), S6435 (5000X)
L4	157_012	317226642012	BTXE_4	06-JUN-2007 18:50	S6304 (125X), S6435 (5000X)
L5	157_013	317226642013	BTXE_5	06-JUN-2007 19:27	S6303 (1000X), S6435 (5000X)
L6	157_014	317226642014	BTXE_6	06-JUN-2007 20:03	S6303 (500X), S6435 (5000X)
L7	157_015	317226642015	BTXE_7	06-JUN-2007 20:40	S6303 (250X), S6435 (5000X)
L8	157_016	317226642016	MTBE_7	06-JUN-2007 21:16	S6302 (500X), S6435 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		11450	11547	12052	11341	11852	11721	11278	AVRG		8.62E-5		11606	2	0.995	20	
Benzene	B	30228	28492	30091	31245	29921	31438	31354		AVRG		3.29E-5		30396	3	0.995	20	
Toluene	B	29549	26522	27574	28094	26746	28047	27754		AVRG		3.60E-5		27755	4	0.995	20	
Ethylbenzene	B	21964	21663	22987	23380	22352	23720	23344		AVRG		4.39E-5		22773	3	0.995	20	
m,p-Xylenes	B	29448	26184	27488	29788	28385	29538	28892		AVRG		3.50E-5		28532	5	0.995	20	
o-Xylene	B	22720	21317	22627	24152	22874	23758	23336		AVRG		4.35E-5		22969	4	0.995	20	
MTBE	C		2898.4	2926.1	3255.1	3288.5	3551.5	3594.3	3484.8	AVRG		3.04E-4		3285.5	9	0.995	20	
Benzene	C	7905.6	7286.5	8098.1	9032.8	9032.0	9714.1	9862.5		AVRG		1.15E-4		8704.5	11	0.995	20	
Toluene	C	6766.4	6462.4	7122.8	8037.4	8119.6	8764.5	8917.8		AVRG		1.29E-4		7741.6	13	0.995	20	
Ethylbenzene	C	5468.8	5406.7	6179.3	7063.5	7249.7	7909.7	8051.2		AVRG		1.48E-4		6761.3	16	0.995	20	
m,p-Xylenes	C	6867.6	6317.3	7118.3	8101.3	8378.2	9208.2	9408.3		AVRG		1.26E-4		7914.2	15	0.995	20	
o-Xylene	C	5276.0	5013.7	5720.0	6749.6	6924.4	7618.6	7800.1		AVRG		1.55E-4		6443.2	17	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
MTBE	B			10.00	-1	25.00	-1	100.0	4	500.0	-2	1000	2	2000	1	5000	-3
Benzene	B	2.500	-1	10.00	-6	25.00	-1	100.0	3	500.0	-2	1000	3	2000	3		
Toluene	B	2.500	6	10.00	-4	25.00	-1	100.0	1	500.0	-4	1000	1	2000	0		
Ethylbenzene	B	2.500	-4	10.00	-5	25.00	1	100.0	3	500.0	-2	1000	4	2000	3		
m,p-Xylenes	B	2.500	3	10.00	-8	25.00	-4	100.0	4	500.0	-1	1000	4	2000	1		
o-Xylene	B	2.500	-1	10.00	-7	25.00	-1	100.0	5	500.0	0	1000	3	2000	2		
MTBE	C			10.00	-12	25.00	-11	100.0	-1	500.0	0	1000	8	2000	9	5000	6
Benzene	C	2.500	-9	10.00	-16	25.00	-7	100.0	4	500.0	4	1000	12	2000	13		
Toluene	C	2.500	-13	10.00	-17	25.00	-8	100.0	4	500.0	5	1000	13	2000	15		
Ethylbenzene	C	2.500	-19	10.00	-20	25.00	-9	100.0	4	500.0	7	1000	17	2000	19		
m,p-Xylenes	C	2.500	-13	10.00	-20	25.00	-10	100.0	2	500.0	6	1000	16	2000	19		
o-Xylene	C	2.500	-18	10.00	-22	25.00	-11	100.0	5	500.0	7	1000	18	2000	21		

Analyst: CW Date: 06/11/07 Reviewer: JCP Date: 06/19/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317226642002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 GCVOA Water
EPA 8021B

Inst : GC05 Name : GC05 MBTXE 157
Calnum : 317226642002 Cal Date : 06-JUN-2007

ICV 317226642019 (157_019 06-JUN-2007) stds: S6204 (1000X), S6435 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	11606	9871.7	100.0	85.06	ng	-15	15	
Benzene	B	30396	32368	100.0	106.5	ng	6	15	
Toluene	B	27755	29550	100.0	106.5	ng	6	15	
Ethylbenzene	B	22773	23920	100.0	105.0	ng	5	15	
m,p-Xylenes	B	28532	30431	200.0	213.3	ng	7	15	
o-Xylene	B	22969	24752	100.0	107.8	ng	8	15	
MTBE	C	3285.5	3023.6	100.0	92.03	ng	-8	15	
Benzene	C	8704.5	9929.5	100.0	114.1	ng	14	15	
Toluene	C	7741.6	8723.3	100.0	112.7	ng	13	15	
Ethylbenzene	C	6761.3	7624.7	100.0	112.8	ng	13	15	
m,p-Xylenes	C	7914.2	8883.7	200.0	224.5	ng	12	15	
o-Xylene	C	6443.2	7027.9	100.0	109.1	ng	9	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : QC392020 IDF : 1.0
Seqnum : 317235894002.3 File : 163_002 Time : 12-JUN-2007 16:16
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2246.8	10000	10530	ng	5	15	u
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3054.3	450.0	470.1	ng	4	15	u
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1615.5	450.0	492.2	ng	9	15	u
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	13037	450.0	512.3	ng	14	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	3653.3	450.0	508.9	ng	13	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	20579	450.0	497.4	ng	11	15	
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5680.3	450.0	473.1	ng	5	15	

Analyst: MJM Date: 06/15/07 Reviewer: CW Date: 06/19/07

u=use

317235894002.3

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : QC392019 IDF : 1.0
Seqnum : 317235894003.3 File : 163_003 Time : 12-JUN-2007 16:53
Standards: S5943 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	317226642002	06-JUN-2007	11606	10955	100.0	94.39	ng	-6	15	u
MTBE	C	317226642002	06-JUN-2007	3285.5	3116.5	100.0	94.86	ng	-5	15	
Benzene	B	317226642002	06-JUN-2007	30396	30444	100.0	100.2	ng	0	15	u
Benzene	C	317226642002	06-JUN-2007	8704.5	8630.0	100.0	99.14	ng	-1	15	
Toluene	B	317226642002	06-JUN-2007	27755	29303	100.0	105.6	ng	6	15	u
Toluene	C	317226642002	06-JUN-2007	7741.6	7915.5	100.0	102.2	ng	2	15	
Ethylbenzene	B	317226642002	06-JUN-2007	22773	23776	100.0	104.4	ng	4	15	u
Ethylbenzene	C	317226642002	06-JUN-2007	6761.3	6934.3	100.0	102.6	ng	3	15	
m,p-Xylenes	B	317226642002	06-JUN-2007	28532	31584	100.0	110.7	ng	11	15	u
m,p-Xylenes	C	317226642002	06-JUN-2007	7914.2	8074.4	100.0	102.0	ng	2	15	
o-Xylene	B	317226642002	06-JUN-2007	22969	25432	100.0	110.7	ng	11	15	u
o-Xylene	C	317226642002	06-JUN-2007	6443.2	6627.7	100.0	102.9	ng	3	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	2828.4	450.0	435.4	ng	-3	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1530.1	450.0	466.1	ng	4	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	11151	450.0	438.2	ng	-3	15	u
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	2880.8	450.0	401.3	ng	-11	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	19860	450.0	480.1	ng	7	15	u
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5388.5	450.0	448.8	ng	0	15	

Analyst: MJM Date: 06/15/07 Reviewer: CW Date: 06/19/07

u=use

317235894003.3

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894012 File : 163_012 Time : 12-JUN-2007 23:50
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2303.6	15000	16190	ng	8	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3193.5	450.0	491.6	ng	9	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1734.0	450.0	528.3	ng	**17**	15	c+
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	14188	450.0	557.5	ng	**24**	15	c+
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	21767	450.0	526.2	ng	**17**	15	c+
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	4287.7	450.0	597.3	ng	**33**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	6212.9	450.0	517.5	ng	15	15	

MJM 06/13/07 : PID surrogates are not applicable.

MJM 06/13/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/13/07 LH: 06/14/07 CW: 06/15/07

+=high bias c=CCV

317235894012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894014 File : 163_014 Time : 13-JUN-2007 01:03
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2229.6	15000	15670	ng	4	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3017.4	450.0	464.5	ng	3	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1525.5	450.0	464.8	ng	3	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	12968	450.0	509.6	ng	13	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	18946	450.0	458.0	ng	2	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	3927.8	450.0	547.1	ng	**22**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5434.8	450.0	452.7	ng	1	15	

MJM 06/13/07 : PID surrogates are not applicable.

MJM: 06/13/07 LH: 06/15/07 CW: 06/15/07

+=high bias c=CCV

317235894014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : BTXE IDF : 1.0
Seqnum : 317235894015 File : 163_015 Time : 13-JUN-2007 01:40
Standards: S5943 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	2550.9	450.0	392.7	ng	-13	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1458.3	450.0	444.3	ng	-1	15	
MTBE	B	317226642002	06-JUN-2007	11606	10538	150.0	136.2	ng	-9	15	
Benzene	B	317226642002	06-JUN-2007	30396	30261	150.0	149.3	ng	0	15	
Toluene	B	317226642002	06-JUN-2007	27755	29892	150.0	161.5	ng	8	15	
Ethylbenzene	B	317226642002	06-JUN-2007	22773	25254	150.0	166.3	ng	11	15	
m,p-Xylenes	B	317226642002	06-JUN-2007	28532	32674	150.0	171.8	ng	15	15	
o-Xylene	B	317226642002	06-JUN-2007	22969	26177	150.0	171.0	ng	14	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	9993.7	450.0	392.7	ng	-13	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	18489	450.0	446.9	ng	-1	15	
MTBE	C	317226642002	06-JUN-2007	3285.5	3250.5	150.0	148.4	ng	-1	15	
Benzene	C	317226642002	06-JUN-2007	8704.5	8903.2	150.0	153.4	ng	2	15	
Toluene	C	317226642002	06-JUN-2007	7741.6	8407.0	150.0	162.9	ng	9	15	
Ethylbenzene	C	317226642002	06-JUN-2007	6761.3	7567.7	150.0	167.9	ng	12	15	
m,p-Xylenes	C	317226642002	06-JUN-2007	7914.2	8836.2	150.0	167.5	ng	12	15	
o-Xylene	C	317226642002	06-JUN-2007	6443.2	7242.4	150.0	168.6	ng	12	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	2628.1	450.0	366.1	ng	**-19**	15	c-
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5130.3	450.0	427.3	ng	-5	15	

MJM 06/13/07 [Trifluorotoluene (PID) B]: Passes control limits.

MJM 06/13/07 : Above for Ch.C TFT(PID)

Analyst: MJM Date: 06/13/07 Reviewer: CW Date: 06/19/07

-=low bias c=CCV

317235894015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894028 File : 163_028 Time : 13-JUN-2007 09:34
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2273.5	20000	21310	ng	7	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3707.9	450.0	570.8	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1901.7	450.0	579.4	ng	**29**	15	c+
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	16568	450.0	651.0	ng	**45**	15	c+
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	24903	450.0	602.0	ng	**34**	15	c+
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	4954.0	450.0	690.1	ng	**53**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	7123.4	450.0	593.3	ng	**32**	15	c+

MJM 06/14/07 : PID surrogates are not applicable.

MJM 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits.

MJM 06/14/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/14/07 LH: 06/14/07 CW: 06/15/07

+=high bias c=CCV

317235894028

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317205342

Instrument : GC05 Begun : 05/22/07 11:01
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	142_001	X	IB			05/22/07 11:01	1.0	1
002	142_002	X	CCV			05/22/07 11:36	1.0	2 1
003	142_003	X	IB			05/22/07 12:23	1.0	1
004	142_004	X	BTXE_1			05/22/07 14:22	1.0	3 1
005	142_005	X	BTXE_7			05/22/07 15:20	1.0	4 1
006	142_006	X	IB			05/22/07 16:14	1.0	1
007	142_007	X	IB			05/22/07 16:49	1.0	1
008	142_008	ICAL	BTXE_1			05/22/07 17:25	1.0	3 1
009	142_009	ICAL	BTXE_2			05/22/07 18:00	1.0	5 1
010	142_010	ICAL	BTXE_3			05/22/07 18:36	1.0	5 1
011	142_011	ICAL	BTXE_4			05/22/07 19:11	1.0	5 1
012	142_012	ICAL	BTXE_5			05/22/07 19:47	1.0	4 1
013	142_013	ICAL	BTXE_6			05/22/07 20:22	1.0	4 1
014	142_014	ICAL	BTXE_7			05/22/07 20:58	1.0	4 1
015	142_015	ICAL	MTBE_7			05/22/07 21:33	1.0	6 1
016	142_016	X	IB			05/22/07 22:09	1.0	1
017	142_017	X	ICV			05/22/07 22:45	1.0	7 1
018	142_018	ICV	MBTXE			05/22/07 23:20	1.0	7 1
019	142_019	X	IB			05/22/07 23:55	1.0	1
020	142_020	X	IB			05/23/07 00:31	1.0	1
021	142_021	ICAL	TVH 1			05/23/07 01:06	1.0	8 1
022	142_022	ICAL	TVH 2			05/23/07 01:42	1.0	9 1
023	142_023	ICAL	TVH 3			05/23/07 02:17	1.0	10 1
024	142_024	ICAL	TVH 4			05/23/07 02:53	1.0	11 1
025	142_025	ICAL	TVH 5			05/23/07 03:28	1.0	11 1
026	142_026	X	IB			05/23/07 04:04	1.0	1
027	142_027	ICV	TVH			05/23/07 04:39	1.0	2 1
028	142_028	X	ICV			05/23/07 05:15	1.0	2 1
029	142_029	X	IB			05/23/07 05:50	1.0	1
030	142_030	CMARKER				05/23/07 06:25	1.0	12 13 1
031	142_031	X	IB			05/23/07 07:54	1.0	1
032	142_032	ICAL	TFT/BFB_1			05/23/07 08:30	1.0	14
033	142_033	ICAL	TFT/BFB_2			05/23/07 09:06	1.0	15
034	142_034	ICAL	TFT/BFB_3			05/23/07 09:41	1.0	16
035	142_035	ICAL	TFT/BFB_4			05/23/07 10:17	1.0	17
036	142_036	ICAL	TFT/BFB_5			05/23/07 10:52	1.0	18

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

Standards used: 1=S6108 2=S6066 3=S6305 4=S6303 5=S6304 6=S6302 7=S6204 8=S5937 9=S5936 10=S5935 11=S5934 12=S1646 13=S1645 14=S5951 15=S5952 16=S5953 17=S5954 18=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317226642

Instrument : GC05 Begun : 06/06/07 09:22
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	157_001	IB	CALIB			06/06/07 09:22	1.0	1	
002	157_002	ICAL	TFT/BFB_1			06/06/07 09:59	1.0	2	
003	157_003	ICAL	TFT/BFB_2			06/06/07 10:36	1.0	3	
004	157_004	ICAL	TFT/BFB_3			06/06/07 11:12	1.0	4	
005	157_005	ICAL	TFT/BFB_4			06/06/07 11:49	1.0	5	
006	157_006	ICAL	TFT/BFB_5			06/06/07 12:29	1.0	6	
007	157_007	X	IB			06/06/07 15:48	1.0	1	
008	157_008	IB	CALIB			06/06/07 16:24	1.0	1	
009	157_009	ICAL	BTXE_1			06/06/07 17:01	1.0	7 1	
010	157_010	ICAL	BTXE_2			06/06/07 17:37	1.0	8 1	
011	157_011	ICAL	BTXE_3			06/06/07 18:14	1.0	8 1	
012	157_012	ICAL	BTXE_4			06/06/07 18:50	1.0	8 1	
013	157_013	ICAL	BTXE_5			06/06/07 19:27	1.0	9 1	
014	157_014	ICAL	BTXE_6			06/06/07 20:03	1.0	9 1	
015	157_015	ICAL	BTXE_7			06/06/07 20:40	1.0	9 1	
016	157_016	ICAL	MTBE_7			06/06/07 21:16	1.0	10 1	
017	157_017	X	IB			06/06/07 21:53	1.0	1	
018	157_018	X	ICV			06/06/07 22:29	1.0	11 1	
019	157_019	ICV	MBTXE			06/06/07 23:06	1.0	11 1	

Analyst: JCP Date: 06/07/07 Reviewer: CW Date: 06/11/07

Standards used: 1=S6435 2=S5951 3=S5952 4=S5953 5=S5954 6=S5955 7=S6305 8=S6304 9=S6303 10=S6302 11=S6204

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317235894

Instrument : GC05 Begun : 06/12/07 15:40
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	163_001	X	CMARK			06/12/07 15:40	1.0	1 2	
002	163_002	CCV/LCS	QC392020	Water	126232	06/12/07 16:16	1.0	3 2	
003	163_003	CCV/LCS	QC392019	Water	126232	06/12/07 16:53	1.0	4 2	
004	163_004	BLANK	QC392018	Water	126232	06/12/07 18:13	1.0	2	
005	163_005	MSS	195270-013	Water	126232	06/12/07 19:34	1.0	2	
006	163_006	SAMPLE	195270-014	Water	126232	06/12/07 20:11	1.0	2	
007	163_007	SAMPLE	195270-015	Water	126232	06/12/07 20:48	1.0	2	
008	163_008	SAMPLE	195270-017	Water	126232	06/12/07 21:24	1.0	2	
009	163_009	SAMPLE	195270-018	Water	126232	06/12/07 22:01	1.0	2	
010	163_010	MS	QC392021	Water	126232	06/12/07 22:37	1.0	3 2	
011	163_011	MSD	QC392022	Water	126232	06/12/07 23:14	1.0	3 2	
012	163_012	CCV	TVH			06/12/07 23:50	1.0	3 2	
013	163_013	X	BTXE			06/13/07 00:26	1.0	4 2	
014	163_014	CCV	TVH			06/13/07 01:03	1.0	3 2	
015	163_015	CCV	BTXE			06/13/07 01:40	1.0	4 2	
016	163_016	X	CMARK			06/13/07 02:16	1.0	1 2	
017	163_017	SAMPLE	195270-001	Water	126232	06/13/07 02:53	5.0	2	pH > 2
018	163_018	SAMPLE	195270-002	Water	126232	06/13/07 03:29	5.0	2	
019	163_019	X	IB			06/13/07 04:06	1.0	2	
020	163_020	SAMPLE	195270-010	Water	126232	06/13/07 04:42	1.0	2	
021	163_021	SAMPLE	195270-011	Water	126232	06/13/07 05:18	1.0	2	
022	163_022	SAMPLE	195270-016	Water	126232	06/13/07 05:55	1.0	2	
023	163_023	SAMPLE	195279-001	Water	126232	06/13/07 06:31	1.0	2	
024	163_024	SAMPLE	195329-001	Water	126232	06/13/07 07:08	1.0	2	
025	163_025	SAMPLE	195318-002	Water	126232	06/13/07 07:45	1.0	2	pH > 2
026	163_026	SAMPLE	195318-003	Water	126232	06/13/07 08:21	1.0	2	pH > 2
027	163_027	SAMPLE	195318-004	Water	126232	06/13/07 08:58	1.0	2	pH > 2
028	163_028	CCV	TVH			06/13/07 09:34	1.0	3 2	
029	163_029	SAMPLE	195318-005	Water	126232	06/13/07 11:02	1.0	2	pH > 2
030	163_030	X	195344-001	Water	126232	06/13/07 11:38	1.0	2	
031	163_031	X	195344-002	Water	126232	06/13/07 12:15	1.0	2	
032	163_032	SAMPLE	195321-009	Water	126232	06/13/07 12:51	1.0	2	
033	163_033	CCV	TVH			06/13/07 15:40	1.0	3 2	

Analyst: MJM Date: 06/13/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S6393 4=S5943

REPORTING SUMMARY FOR 195270 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-001	Gasoline C7-C12	GC05	A	06/13/07 02:53
195270-001	Trifluorotoluene (FID)	GC05	A	06/13/07 02:53
195270-001	Bromofluorobenzene (FID)	GC05	A	06/13/07 02:53
195270-002	Gasoline C7-C12	GC05	A	06/13/07 03:29
195270-002	Trifluorotoluene (FID)	GC05	A	06/13/07 03:29
195270-002	Bromofluorobenzene (FID)	GC05	A	06/13/07 03:29
195270-010	Gasoline C7-C12	GC05	A	06/13/07 04:42
195270-010	Trifluorotoluene (FID)	GC05	A	06/13/07 04:42
195270-010	Bromofluorobenzene (FID)	GC05	A	06/13/07 04:42
195270-011	Gasoline C7-C12	GC05	A	06/13/07 05:18
195270-011	Trifluorotoluene (FID)	GC05	A	06/13/07 05:18
195270-011	Bromofluorobenzene (FID)	GC05	A	06/13/07 05:18
195270-013	Gasoline C7-C12	GC05	A	06/12/07 19:34
195270-013	MTBE	GC05	B	06/12/07 19:34
195270-013	Benzene	GC05	B	06/12/07 19:34
195270-013	Toluene	GC05	B	06/12/07 19:34
195270-013	Ethylbenzene	GC05	B	06/12/07 19:34
195270-013	Trifluorotoluene (FID)	GC05	A	06/12/07 19:34
195270-013	Bromofluorobenzene (FID)	GC05	A	06/12/07 19:34
195270-013	Trifluorotoluene (PID)	GC05	B	06/12/07 19:34
195270-013	Bromofluorobenzene (PID)	GC05	B	06/12/07 19:34
195270-013	Xylene (total)	GC05	B	06/12/07 19:34
195270-014	Gasoline C7-C12	GC05	A	06/12/07 20:11
195270-014	MTBE	GC05	B	06/12/07 20:11
195270-014	Benzene	GC05	B	06/12/07 20:11
195270-014	Toluene	GC05	B	06/12/07 20:11
195270-014	Ethylbenzene	GC05	B	06/12/07 20:11
195270-014	Trifluorotoluene (FID)	GC05	A	06/12/07 20:11
195270-014	Bromofluorobenzene (FID)	GC05	A	06/12/07 20:11
195270-014	Trifluorotoluene (PID)	GC05	B	06/12/07 20:11
195270-014	Bromofluorobenzene (PID)	GC05	B	06/12/07 20:11
195270-014	Xylene (total)	GC05	B	06/12/07 20:11
195270-015	Gasoline C7-C12	GC05	A	06/12/07 20:48
195270-015	MTBE	GC05	B	06/12/07 20:48
195270-015	Benzene	GC05	B	06/12/07 20:48
195270-015	Toluene	GC05	B	06/12/07 20:48
195270-015	Ethylbenzene	GC05	B	06/12/07 20:48
195270-015	Trifluorotoluene (FID)	GC05	A	06/12/07 20:48
195270-015	Bromofluorobenzene (FID)	GC05	A	06/12/07 20:48
195270-015	Trifluorotoluene (PID)	GC05	B	06/12/07 20:48
195270-015	Bromofluorobenzene (PID)	GC05	B	06/12/07 20:48
195270-015	Xylene (total)	GC05	B	06/12/07 20:48
195270-016	Gasoline C7-C12	GC05	A	06/13/07 05:55
195270-016	Trifluorotoluene (FID)	GC05	A	06/13/07 05:55
195270-016	Bromofluorobenzene (FID)	GC05	A	06/13/07 05:55
195270-017	Gasoline C7-C12	GC05	A	06/12/07 21:24

REPORTING SUMMARY FOR 195270 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-017	MTBE	GC05	B	06/12/07 21:24
195270-017	Benzene	GC05	B	06/12/07 21:24
195270-017	Toluene	GC05	B	06/12/07 21:24
195270-017	Ethylbenzene	GC05	B	06/12/07 21:24
195270-017	Trifluorotoluene (FID)	GC05	A	06/12/07 21:24
195270-017	Bromofluorobenzene (FID)	GC05	A	06/12/07 21:24
195270-017	Trifluorotoluene (PID)	GC05	B	06/12/07 21:24
195270-017	Bromofluorobenzene (PID)	GC05	B	06/12/07 21:24
195270-017	Xylene (total)	GC05	B	06/12/07 21:24
195270-018	Gasoline C7-C12	GC05	A	06/12/07 22:01
195270-018	MTBE	GC05	B	06/12/07 22:01
195270-018	Benzene	GC05	B	06/12/07 22:01
195270-018	Toluene	GC05	B	06/12/07 22:01
195270-018	Ethylbenzene	GC05	B	06/12/07 22:01
195270-018	Trifluorotoluene (FID)	GC05	A	06/12/07 22:01
195270-018	Bromofluorobenzene (FID)	GC05	A	06/12/07 22:01
195270-018	Trifluorotoluene (PID)	GC05	B	06/12/07 22:01
195270-018	Bromofluorobenzene (PID)	GC05	B	06/12/07 22:01
195270-018	Xylene (total)	GC05	B	06/12/07 22:01
QC392018	Gasoline C7-C12	GC05	A	06/12/07 18:13
QC392018	MTBE	GC05	B	06/12/07 18:13
QC392018	Benzene	GC05	B	06/12/07 18:13
QC392018	Toluene	GC05	B	06/12/07 18:13
QC392018	Ethylbenzene	GC05	B	06/12/07 18:13
QC392018	Trifluorotoluene (FID)	GC05	A	06/12/07 18:13
QC392018	Bromofluorobenzene (FID)	GC05	A	06/12/07 18:13
QC392018	Trifluorotoluene (PID)	GC05	B	06/12/07 18:13
QC392018	Bromofluorobenzene (PID)	GC05	B	06/12/07 18:13
QC392018	Xylene (total)	GC05	B	06/12/07 18:13
QC392019	MTBE	GC05	B	06/12/07 16:53
QC392019	Benzene	GC05	B	06/12/07 16:53
QC392019	Toluene	GC05	B	06/12/07 16:53
QC392019	Ethylbenzene	GC05	B	06/12/07 16:53
QC392019	Trifluorotoluene (PID)	GC05	B	06/12/07 16:53
QC392019	Bromofluorobenzene (PID)	GC05	B	06/12/07 16:53
QC392020	Gasoline C7-C12	GC05	A	06/12/07 16:16
QC392020	Trifluorotoluene (FID)	GC05	A	06/12/07 16:16
QC392020	Bromofluorobenzene (FID)	GC05	A	06/12/07 16:16
QC392021	Gasoline C7-C12	GC05	A	06/12/07 22:37
QC392021	Trifluorotoluene (FID)	GC05	A	06/12/07 22:37
QC392021	Bromofluorobenzene (FID)	GC05	A	06/12/07 22:37
QC392022	Gasoline C7-C12	GC05	A	06/12/07 23:14
QC392022	Trifluorotoluene (FID)	GC05	A	06/12/07 23:14
QC392022	Bromofluorobenzene (FID)	GC05	A	06/12/07 23:14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/28/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 06/28/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.25	0.61	0.73	0.74	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.090	0.14	0.028	0.25	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.19	0.21	0.074	0.20	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.16	0.093	0.024	0.22	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.11	0.069	0.21	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.15	0.064	0.14	0.13	0.14	0.13	0.030	0.14

TOTAL EXTRACTABLE HYDROCARBONS

: 00044

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/06/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000	Prepared:	06/18/07
Batch#:	126411		

Field ID:	1349MW100	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-001		

Analyte	Result	RL
Diesel C12-C24	13,000	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-135

Field ID:	DUP0606073A	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-002		

Analyte	Result	RL
Diesel C12-C24	20,000	50
Motor Oil C24-C36	360 L Y	300

Surrogate	%REC	Limits
Hexacosane	85	65-135

Field ID:	231GW29	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-010		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

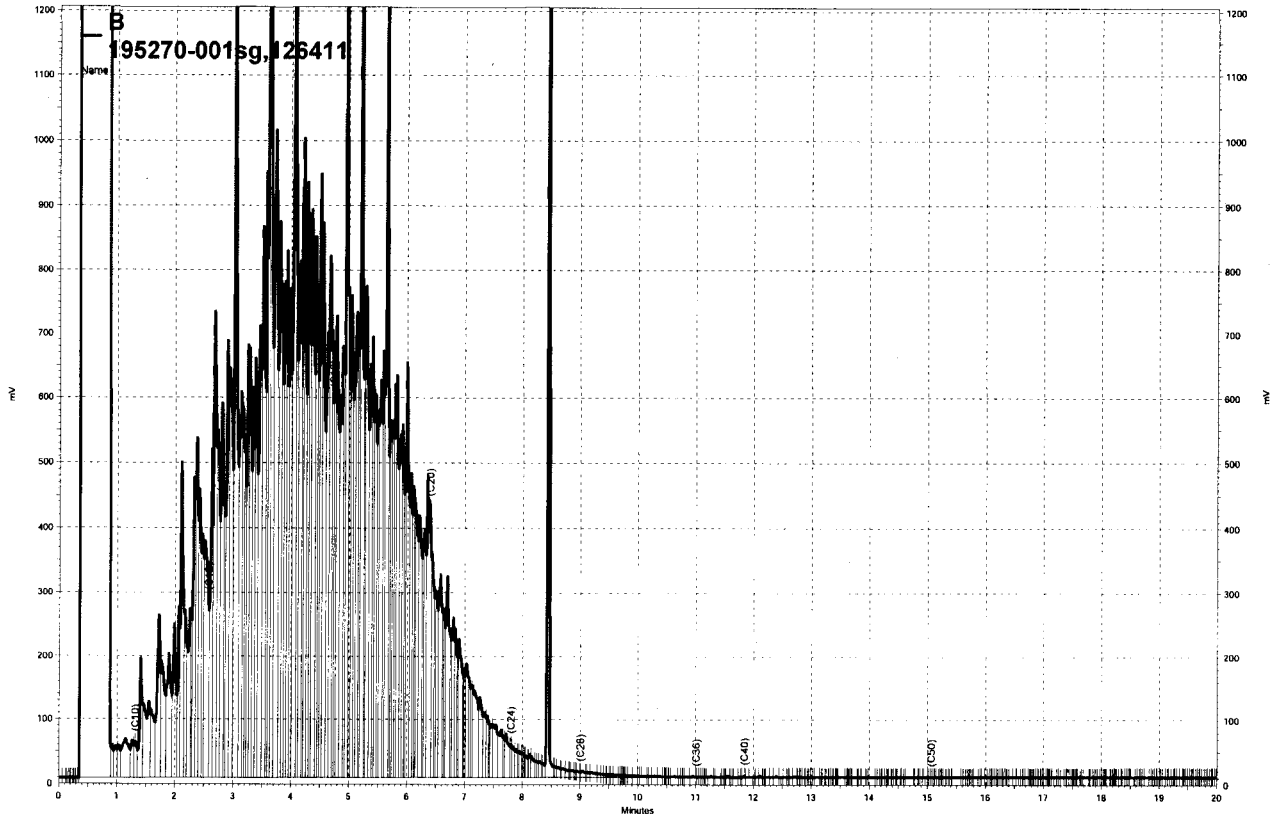
Field ID:	DUP0606072A	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-011		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	89	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

103.0



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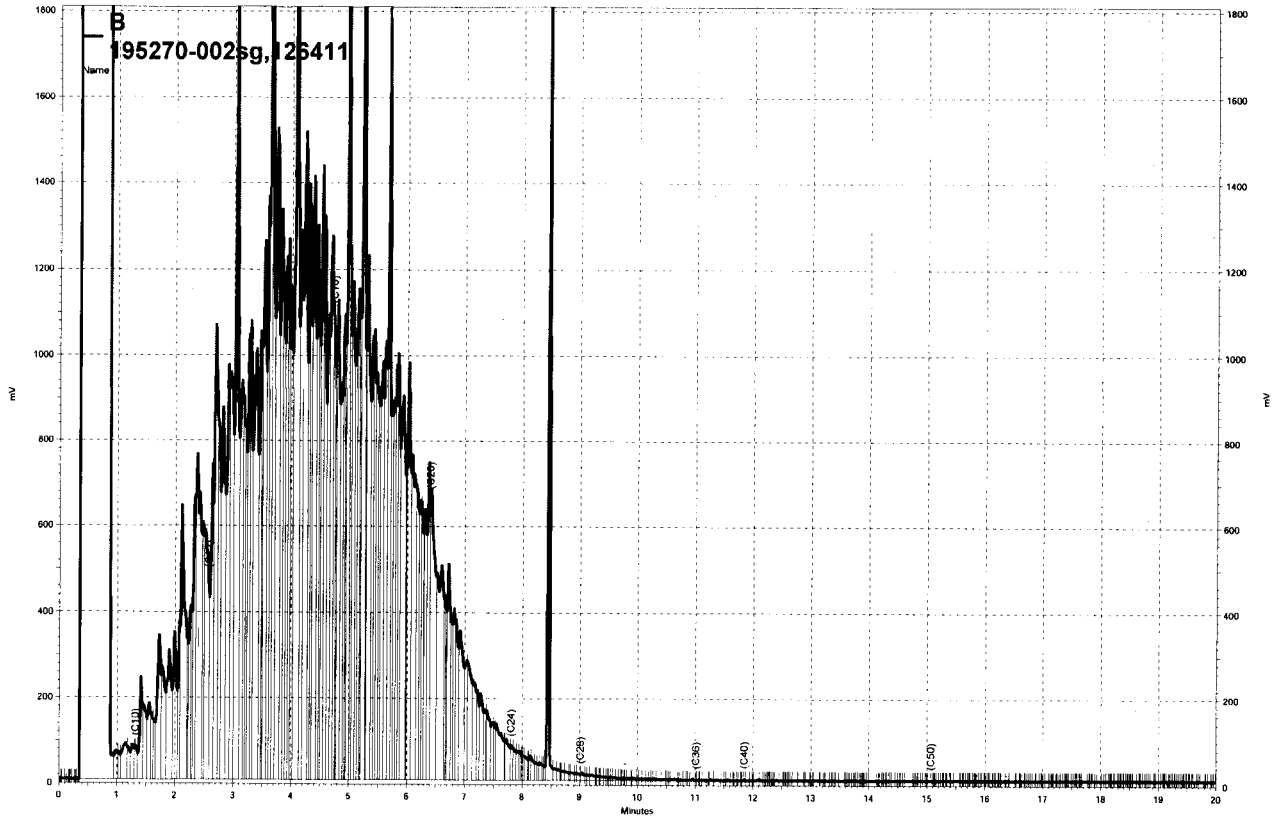
1349MW100



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DUP0606073A

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/06/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000	Prepared:	06/18/07
Batch#:	126411		

Field ID:	FM14EX07GW101	Analyzed:	06/20/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-013		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	122	65-135

Field ID:	FM14EX07GW102	Analyzed:	06/20/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-014		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID:	DUP0606071A	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-015		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

Field ID:	1213GW101	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-016		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

103.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/06/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000	Prepared:	06/18/07
Batch#:	126411		

Field ID:	610GW101	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-017		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

Field ID:	610GW102	Analyzed:	06/19/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	195270-018		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

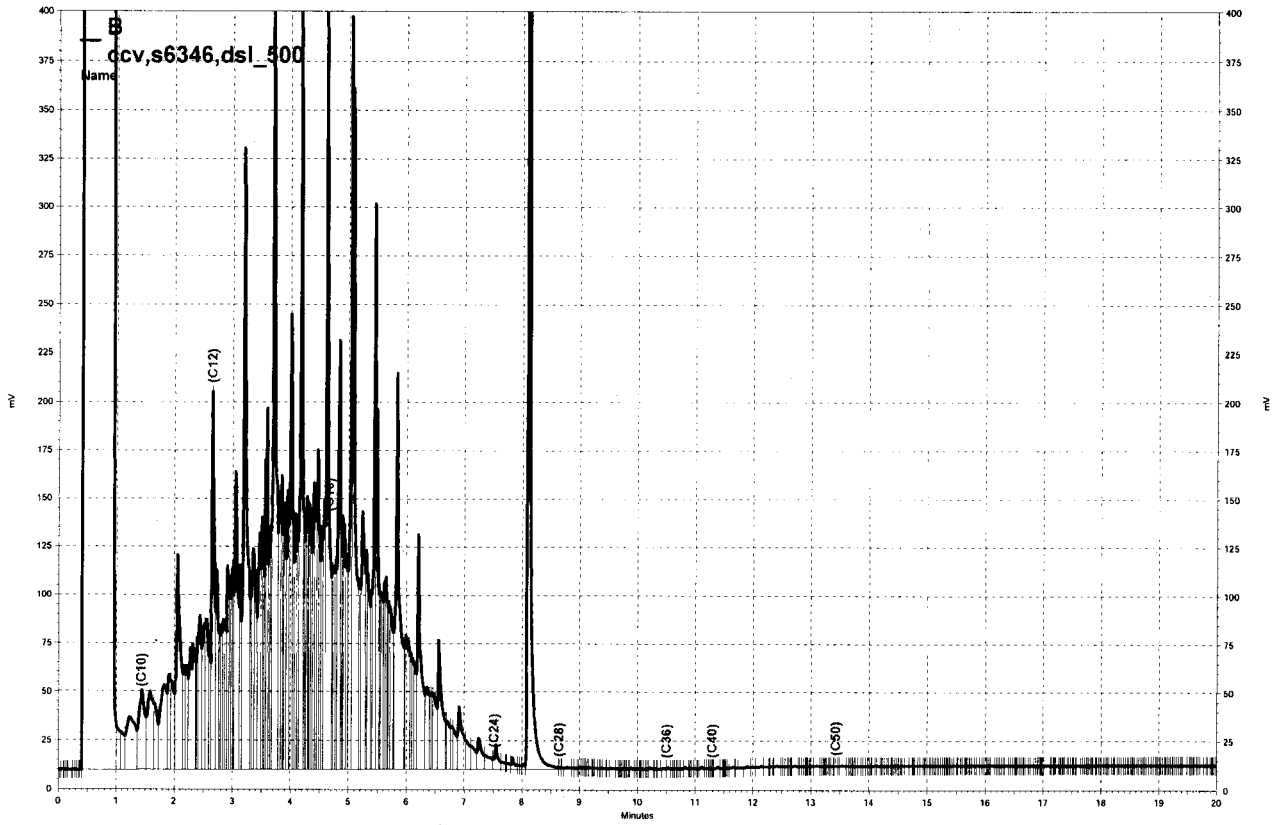
Type:	BLANK	Analyzed:	06/19/07
Lab ID:	QC392749	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

103.0



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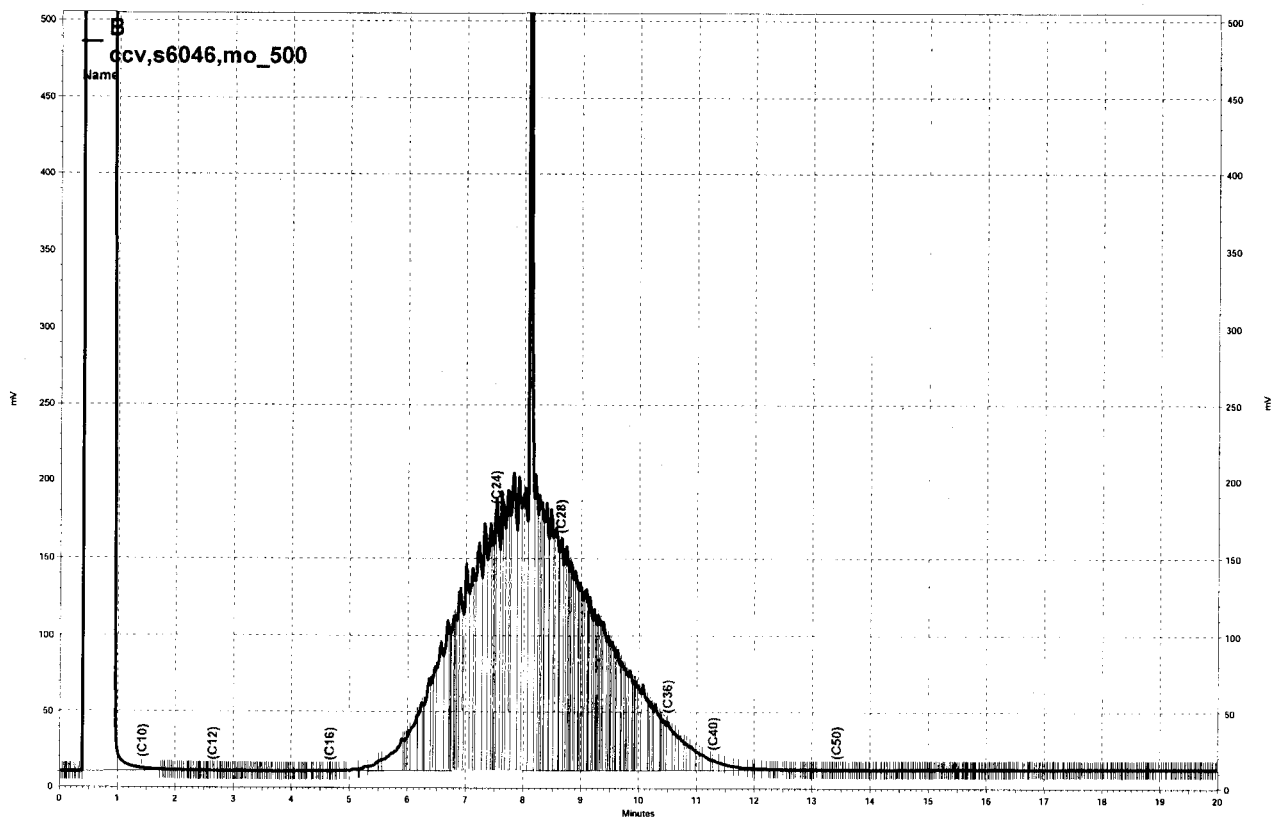
DIESEL



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MOTOR OIL

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392750	Batch#:	126411
Matrix:	Water	Prepared:	06/18/07
Units:	ug/L	Analyzed:	06/19/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,210	88	65-135

Surrogate	%REC	Limits
Hexacosane	101	65-135

104.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	FM14EX07GW101	Batch#:	126411
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/18/07
Diln Fac:	1.000	Analyzed:	06/20/07

Type: MS
Lab ID: QC392751
Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<16.36	2,500	2,012	80	65-135

Surrogate	%REC	Limits
Hexacosane	99	65-135

Type: MSD
Lab ID: QC392752
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	1,926	77	65-135	4	35

Surrogate	%REC	Limits
Hexacosane	90	65-135

RPD= Relative Percent Difference

105.0

: 00053

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

*Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227227958001
Units : mg/L

Name : hexacosane
Date : 07-JUN-2007 11:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	158_010	227227958010	HEX_5	07-JUN-2007 11:30	S5751
L2	158_011	227227958011	HEX_10	07-JUN-2007 11:58	S5752
L3	158_012	227227958012	HEX_25	07-JUN-2007 12:25	S5753
L4	158_013	227227958013	HEX_50	07-JUN-2007 12:53	S5754
L5	158_014	227227958014	HEX_100	07-JUN-2007 13:21	S5755
L6	158_015	227227958015	HEX_200	07-JUN-2007 13:49	S5756

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	76011	73432	72003	72193	70728	72862	AVRG		1.37E-5		72871	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	5.000	4	10.00	1	25.00	-1	50.00	-1	100.0	-3	200.0	0

Analyst: CP Date: 06/07/07 Reviewer: CW Date: 06/08/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227227958001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014001
Units : mg/L

Name : DSL
Date : 18-APR-2007 21:42
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b028	167156014028	DSL_10	18-APR-2007 21:42	S5413
L2	108b029	167156014029	DSL_100	18-APR-2007 22:10	S5414
L3	108b030	167156014030	DSL_500	18-APR-2007 22:38	S5416
L4	108b031	167156014031	DSL_1000	18-APR-2007 23:06	S5417
L5	108b032	167156014032	DSL_5000	18-APR-2007 23:34	S5411
L6	108b033	167156014033	DSL_7500	19-APR-2007 00:02	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	57791	53835	53110	54128	53620	50175	AVRG		1.86E-5		53776	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	7	100.0	0	500.0	-1	1000	1	5000	0	7500	-7

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 167156014001

Name : DSL
Cal Date : 18-APR-2007

ICV 167156014035 (108b035 19-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	53776	60453	500.0	562.1	mg/L	12	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014002
Units : mg/L

Name : Hexacosane
Date : 19-APR-2007 05:34
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b045	167156014045	HEX_5	19-APR-2007 05:34	S5751
L2	108b046	167156014046	HEX_10	19-APR-2007 06:02	S5752
L3	108b047	167156014047	HEX_25	19-APR-2007 08:04	S5753
L4	108b048	167156014048	HEX_50	19-APR-2007 08:31	S5754
L5	108b049	167156014049	HEX_100	19-APR-2007 08:59	S5755
L6	108b050	167156014050	HEX_200	19-APR-2007 09:27	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60849	59594	60334	60123	58538	58399	AVRG		1.68E-5		59639	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	2	10.00	0	25.00	1	50.00	1	100.0	-2	200.0	-2

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167238130001
Units : mg/L

Name : MOTOR OIL
Date : 14-JUN-2007 15:45
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	165b012	167238130012	MO_50	14-JUN-2007 15:45	S5523
L2	165b013	167238130013	MO_250	14-JUN-2007 16:13	S5524
L3	165b014	167238130014	MO_500	14-JUN-2007 16:41	S5525
L4	165b015	167238130015	MO_1000	14-JUN-2007 17:09	S5526
L5	165b016	167238130016	MO_5000	14-JUN-2007 17:37	S5522

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40450	41984	38095	36697	34923	AVRG		2.60E-5		38430	7	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	5	250.0	9	500.0	-1	1000	-5	5000	-9

Analyst: ATL Date: 06/14/07 Reviewer: RH Date: 06/18/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118001
Units : mg/L

Name : DSL
Date : 16-APR-2007 22:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a010	177153118010	DSL_10	16-APR-2007 22:16	S5413
L2	106a011	177153118011	DSL_100	16-APR-2007 22:43	S5414
L3	106a012	177153118012	DSL_500	16-APR-2007 23:10	S5416
L4	106a013	177153118013	DSL_1000	16-APR-2007 23:38	S5417
L5	106a014	177153118014	DSL_5000	17-APR-2007 00:04	S5411
L6	106a015	177153118015	DSL_7500	17-APR-2007 00:32	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	71898	64898	73238	68474	66312	67917	AVRG		1.45E-5		68789	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	5	100.0	-6	500.0	6	1000	0	5000	-4	7500	-1

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177153118001

Name : DSL
Cal Date : 16-APR-2007

ICV 177153118017 (106a017 17-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	68789	68119	500.0	495.1	mg/L	-1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118002
Units : mg/L

Name : MO
Date : 17-APR-2007 02:47
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a020	177153118020	MO_50	17-APR-2007 02:47	S5523
L2	106a021	177153118021	MO_250	17-APR-2007 03:14	S5524
L3	106a022	177153118022	MO_500	17-APR-2007 03:41	S5525
L4	106a023	177153118023	MO_1000	17-APR-2007 04:09	S5526
L5	106a024	177153118024	MO_5000	17-APR-2007 04:35	S5522
L6	106a025	177153118025	MO_7500	17-APR-2007 05:02	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	42522	55240	53936	51516	47937	46757	AVRG		2.01E-5		49651	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-14	250.0	11	500.0	9	1000	4	5000	-3	7500	-6

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

*Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118003
Units : mg/L

Name : Hexacosane
Date : 17-APR-2007 05:57
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a027	177153118027	HEX_5	17-APR-2007 05:57	S5751
L2	106a028	177153118028	HEX_10	17-APR-2007 06:24	S5752
L3	106a029	177153118029	HEX_25	17-APR-2007 06:52	S5753
L4	106a030	177153118030	HEX_50	17-APR-2007 07:19	S5754
L5	106a031	177153118031	HEX_100	17-APR-2007 07:46	S5755
L6	106a032	177153118032	HEX_200	17-APR-2007 08:14	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	85626	79939	79901	77537	75605	82966	AVRG		1.25E-5		80262	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	7	10.00	0	25.00	0	50.00	-3	100.0	-6	200.0	3

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

177153118003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 227245240015 File : 170_015 Time : 19-JUN-2007 14:58
Standards: S6347

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	63565	1000	979.5	mg/L	-2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79405	50.00	54.48	mg/L	9	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

227245240015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227245240016 File : 170_016 Time : 19-JUN-2007 15:26
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	45182	500.0	491.5	mg/L	-2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	78551	50.00	53.90	mg/L	8	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

227245240016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227245240033 File : 170_033 Time : 20-JUN-2007 03:06
Standards: S6345

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	66995	250.0	258.1	mg/L	3	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79431	50.00	54.50	mg/L	9	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

227245240033

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227245240034 File : 170_034 Time : 20-JUN-2007 03:34
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	39814	500.0	433.1	mg/L	-13	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	69108	50.00	47.42	mg/L	-5	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

227245240034

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 167245288003 File : 170b003 Time : 19-JUN-2007 09:03
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	54267	500.0	504.6	mg/L	1	15	
Hexacosane	167156014002	19-APR-2007	59639	66072	50.00	55.39	mg/L	11	15	

Analyst: DLM Date: 06/19/07 Reviewer: ATL Date: 06/19/07

167245288003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 167245288015 File : 170b015 Time : 19-JUN-2007 16:07
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167238130001	14-JUN-2007	38430	41023	500.0	533.7	mg/L	7	15	
Hexacosane	167156014002	19-APR-2007	59639	66775	50.00	55.98	mg/L	12	15	

Analyst: DLM Date: 06/20/07 Reviewer: CP Date: 06/20/07

167245288015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 167245288016 File : 170b016 Time : 19-JUN-2007 16:34
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	53760	1000	999.7	mg/L	0	15	
Hexacosane	167156014002	19-APR-2007	59639	65250	50.00	54.70	mg/L	9	15	

Analyst: DLM Date: 06/20/07 Reviewer: CP Date: 06/20/07

167245288016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 167245288024 File : 170b024 Time : 20-JUN-2007 00:01
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167238130001	14-JUN-2007	38430	40734	500.0	530.0	mg/L	6	15	
Hexacosane	167156014002	19-APR-2007	59639	64912	50.00	54.42	mg/L	9	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

167245288024

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
Seqnum : 167245288025 File : 170b025 Time : 20-JUN-2007 00:29
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	55720	250.0	259.0	mg/L	4	15	
Hexacosane	167156014002	19-APR-2007	59639	64425	50.00	54.01	mg/L	8	15	

Analyst: DLM Date: 06/20/07 Reviewer: ATL Date: 06/20/07

167245288025

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 177245236013 File : 170a013 Time : 19-JUN-2007 13:14
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	66556	250.0	241.9	mg/L	-3	15	
Hexacosane	177153118003	17-APR-2007	80262	83256	50.00	51.87	mg/L	4	15	

Analyst: ATL Date: 06/19/07 Reviewer: LH Date: 06/19/07

177245236013

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177245236014 File : 170a014 Time : 19-JUN-2007 13:41
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	50271	500.0	506.2	mg/L	1	15	
Hexacosane	177153118003	17-APR-2007	80262	80756	50.00	50.31	mg/L	1	15	

Analyst: ATL Date: 06/19/07 Reviewer: DLM Date: 06/20/07

177245236014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 177245236017 File : 170a017 Time : 19-JUN-2007 15:14
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	69512	1000	1011	mg/L	1	15	
Hexacosane	177153118003	17-APR-2007	80262	87876	50.00	54.74	mg/L	9	15	

Analyst: ATL Date: 06/19/07 Reviewer: DLM Date: 06/20/07

177245236017

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177245236018 File : 170a018 Time : 19-JUN-2007 15:41
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	50184	500.0	505.4	mg/L	1	15	
Hexacosane	177153118003	17-APR-2007	80262	80367	50.00	50.06	mg/L	0	15	

Analyst: ATL Date: 06/19/07 Reviewer: DLM Date: 06/20/07

177245236018

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	108b001	X	PRIMER				04/18/07 08:14	1.0		
002	108b002	X	IB				04/18/07 08:41	1.0		
003	108b003	CCV	DSL_500				04/18/07 09:09	1.0	1	
004	108b004	CCV	MO_500				04/18/07 09:37	1.0	2	
005	108b005	X	194211-014	S	Soil	124276	04/18/07 10:07	1.0		
006	108b006	SAMPLE	194211-013	S	Soil	124276	04/18/07 10:35	20.0		3:BUNKC:12-40=16000
007	108b007	MS	QC384076	S	Soil	124276	04/18/07 11:02	1.0		
008	108b008	MSD	QC384077	S	Soil	124276	04/18/07 11:30	1.0		
009	108b009	SAMPLE	194094-006	S	Water	124180	04/18/07 11:58	1.0		
010	108b010	SAMPLE	194094-007	S	Water	124180	04/18/07 12:26	1.0		
011	108b011	SAMPLE	194094-008	S	Water	124180	04/18/07 12:53	1.0		
012	108b012	X	IB				04/18/07 13:28	1.0		
013	108b013	BLANK	QC384097	S	Soil	124282	04/18/07 13:56	1.0		
014	108b014	SAMPLE	194154-001	S	Soil	124282	04/18/07 14:23	1.0		
015	108b015	SAMPLE	194154-002	S	Soil	124282	04/18/07 14:51	1.0		
016	108b016	X	DSL_1000				04/18/07 15:19	1.0	3	
017	108b017	CCV	MO_500				04/18/07 15:47	1.0	2	
018	108b018	CCV	DSL_1000				04/18/07 16:14	1.0	3	
019	108b019	X	MO_500				04/18/07 17:05	1.0	2	
020	108b020	XCMARKER	C10-C50				04/18/07 18:00	1.0	4	
021	108b021	X	MO_500				04/18/07 18:28	1.0	2	
022	108b022	CMARKER	C10-C50				04/18/07 18:56	1.0	4	
023	108b023	CCV	MO_500				04/18/07 19:24	1.0	2	
024	108b024	CCV	DSL_1000				04/18/07 19:52	1.0	3	2:BUNKC:12-40=5900
025	108b025	CCV	MO_500				04/18/07 20:19	1.0	2	
026	108b026	CCV	DSL_1000				04/18/07 20:47	1.0	3	
027	108b027	IB	CALIB				04/18/07 21:15	1.0		
028	108b028	ICAL	DSL_10				04/18/07 21:42	1.0	5	
029	108b029	ICAL	DSL_100				04/18/07 22:10	1.0	6	
030	108b030	ICAL	DSL_500				04/18/07 22:38	1.0	7	
031	108b031	ICAL	DSL_1000				04/18/07 23:06	1.0	8	
032	108b032	ICAL	DSL_5000				04/18/07 23:34	1.0	9	
033	108b033	ICAL	DSL_7500				04/19/07 00:02	1.0	10	
034	108b034	IB	CALIB				04/19/07 00:29	1.0		
035	108b035	ICV	DSL_500				04/19/07 00:57	1.0	11	
036	108b036	X	ICV				04/19/07 01:25	1.0	11	
037	108b037	IB	CALIB				04/19/07 01:52	1.0		
038	108b038	ICAL	MO_50				04/19/07 02:20	1.0	12	
039	108b039	ICAL	MO_250				04/19/07 02:48	1.0	13	
040	108b040	ICAL	MO_500				04/19/07 03:15	1.0	14	
041	108b041	X	MO_1000				04/19/07 03:43	1.0	15	
042	108b042	ICAL	MO_5000				04/19/07 04:11	1.0	16	
043	108b043	ICAL	MO_7500				04/19/07 04:39	1.0	17	
044	108b044	IB	CALIB				04/19/07 05:06	1.0		
045	108b045	ICAL	HEX_5				04/19/07 05:34	1.0	18	
046	108b046	ICAL	HEX_10				04/19/07 06:02	1.0	19	
047	108b047	ICAL	HEX_25				04/19/07 08:04	1.0	20	
048	108b048	ICAL	HEX_50				04/19/07 08:31	1.0	21	
049	108b049	ICAL	HEX_100				04/19/07 08:59	1.0	22	
050	108b050	ICAL	HEX_200				04/19/07 09:27	1.0	23	
051	108b051	IB	CALIB				04/19/07 09:55	1.0		
052	108b052	ICAL	MO_1000				04/19/07 14:41	1.0	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

DLM 04/19/07 : MO ICAL 1000 point was run at the end due to a mis-inject

Standards used: 1=S5731 2=S5734 3=S5732 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S5751 19=S5752 20=S5753 21=S5754 22=S5755 23=S5756

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167238130

Instrument : GC15B
Method : EPA 8015B

Begun : 06/14/07 08:50
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	165b001	X	PRIMER			06/14/07 08:50	1.0		
002	165b002	X	IB			06/14/07 09:17	1.0		
003	165b003	X	CMARKER			06/14/07 09:45	1.0	1	
004	165b004	X	DSL_500			06/14/07 10:13	1.0	2	
005	165b005	X	IB			06/14/07 11:57	1.0		
006	165b006	CMARKER	C8-50			06/14/07 12:25	1.0	1	
007	165b007	CCV	DSL_500			06/14/07 12:57	1.0	2	
008	165b008	CCV	MO_500			06/14/07 13:25	1.0	3	
009	165b009	CCV	MO_500			06/14/07 14:07	1.0	3	
010	165b010	X	IB			06/14/07 14:38	1.0		
011	165b011	IB	CALIB			06/14/07 15:18	1.0		
012	165b012	ICAL	MO_50			06/14/07 15:45	1.0	4	
013	165b013	ICAL	MO_250			06/14/07 16:13	1.0	5	
014	165b014	ICAL	MO_500			06/14/07 16:41	1.0	6	
015	165b015	ICAL	MO_1000			06/14/07 17:09	1.0	7	
016	165b016	ICAL	MO_5000			06/14/07 17:37	1.0	8	
017	165b017	IB	CALIB			06/14/07 18:05	1.0		
018	165b018	CCV	DSL_1000			06/14/07 18:33	1.0	9	
019	165b019	CCV	MO_500			06/14/07 19:01	1.0	3	

Analyst: ATL Date: 06/14/07 Reviewer: RH Date: 06/18/07

Standards used: 1=S4049 2=S6346 3=S6046 4=S5523 5=S5524 6=S5525 7=S5526 8=S5522 9=S6347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167245288

Instrument : GC15B
Method : EPA 8015B

Begun : 06/19/07 08:08
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	170b001	X	IB				06/19/07 08:08	1.0	
002	170b002	X	CMARKER				06/19/07 08:35	1.0	1
003	170b003	CCV	DSL_500				06/19/07 09:03	1.0	2
004	170b004	CCV	MO_500				06/19/07 09:31	1.0	3
005	170b005	BLANK	QC392584		Water	126372	06/19/07 10:03	1.0	
006	170b006	SAMPLE	195372-004	S	Water	126372	06/19/07 10:31	1.0	
007	170b007	SAMPLE	195322-014	S	Soil	126333	06/19/07 10:59	1.0	
008	170b008	SAMPLE	195258-003	S	Soil	126067	06/19/07 11:26	1.0	
009	170b009	SAMPLE	195258-004	S	Soil	126067	06/19/07 11:54	1.0	
010	170b010	SAMPLE	195258-002	S	Soil	126067	06/19/07 12:22	1.0	
011	170b011	LCS	QC392750	S	Water	126411	06/19/07 13:37	1.0	
012	170b012	SAMPLE	195461-003	S	Water	126411	06/19/07 14:04	1.0	
013	170b013	X	IB				06/19/07 15:11	1.0	
014	170b014	X	CCV				06/19/07 15:39	1.0	4
015	170b015	CCV	MO_500				06/19/07 16:07	1.0	3
016	170b016	CCV	DSL_1000				06/19/07 16:34	1.0	4
017	170b017	X	IB				06/19/07 20:48	1.0	
018	170b018	SAMPLE	195270-015	S	Water	126411	06/19/07 21:16	1.0	
019	170b019	SAMPLE	195270-016	S	Water	126411	06/19/07 21:43	1.0	
020	170b020	SAMPLE	195270-017	S	Water	126411	06/19/07 22:11	1.0	
021	170b021	SAMPLE	195270-018	S	Water	126411	06/19/07 22:38	1.0	
022	170b022	X	IB				06/19/07 23:06	1.0	
023	170b023	X	CMARKER				06/19/07 23:34	1.0	1
024	170b024	CCV	MO_500				06/20/07 00:01	1.0	3
025	170b025	CCV	DSL_250				06/20/07 00:29	1.0	5
026	170b026	X	CCV				06/20/07 00:57	1.0	3
027	170b027	X	CCV				06/20/07 01:24	1.0	5

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177153118

Instrument : GC17A
Method : EPA 8015B

Begun : 04/16/07 07:58
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	106a001	X	PRIMER			04/16/07 07:58	1.0		
002	106a002	X	IB			04/16/07 08:25	1.0		
003	106a003	X	DSL_500			04/16/07 08:53	1.0	1	
004	106a004	X	MO_500			04/16/07 09:20	1.0	2	
005	106a005	X	IB			04/16/07 10:07	1.0		
006	106a006	X				04/16/07 10:34	1.0	3	
007	106a007	IB	CALIB			04/16/07 20:54	1.0		
008	106a008	CMARKER	C8-C50			04/16/07 21:22	1.0	3	
009	106a009	IB	CALIB			04/16/07 21:49	1.0		
010	106a010	ICAL	DSL_10			04/16/07 22:16	1.0	4	
011	106a011	ICAL	DSL_100			04/16/07 22:43	1.0	5	
012	106a012	ICAL	DSL_500			04/16/07 23:10	1.0	6	
013	106a013	ICAL	DSL_1000			04/16/07 23:38	1.0	7	
014	106a014	ICAL	DSL_5000			04/17/07 00:04	1.0	8	
015	106a015	ICAL	DSL_7500			04/17/07 00:32	1.0	9	
016	106a016	IB	CALIB			04/17/07 00:59	1.0		
017	106a017	ICV	DSL_500			04/17/07 01:26	1.0	10	
018	106a018	X	ICV			04/17/07 01:53	1.0	10	
019	106a019	IB	CALIB			04/17/07 02:20	1.0		
020	106a020	ICAL	MO_50			04/17/07 02:47	1.0	11	
021	106a021	ICAL	MO_250			04/17/07 03:14	1.0	12	
022	106a022	ICAL	MO_500			04/17/07 03:41	1.0	13	
023	106a023	ICAL	MO_1000			04/17/07 04:09	1.0	14	
024	106a024	ICAL	MO_5000			04/17/07 04:35	1.0	15	
025	106a025	ICAL	MO_7500			04/17/07 05:02	1.0	16	
026	106a026	IB	CALIB			04/17/07 05:30	1.0		
027	106a027	ICAL	HEX_5			04/17/07 05:57	1.0	17	
028	106a028	ICAL	HEX_10			04/17/07 06:24	1.0	18	
029	106a029	ICAL	HEX_25			04/17/07 06:52	1.0	19	
030	106a030	ICAL	HEX_50			04/17/07 07:19	1.0	20	
031	106a031	ICAL	HEX_100			04/17/07 07:46	1.0	21	
032	106a032	ICAL	HEX_200			04/17/07 08:14	1.0	22	
033	106a033	IB	CALIB			04/17/07 08:41	1.0		
034	106a034	ICAL	JP5_10			04/17/07 09:09	1.0	23	
035	106a035	ICAL	JP5_100			04/17/07 09:36	1.0	24	
036	106a036	ICAL	JP5_500			04/17/07 10:04	1.0	25	
037	106a037	ICAL	JP5_1500			04/17/07 10:31	1.0	26	
038	106a038	ICAL	JP5_5000			04/17/07 10:58	1.0	27	
039	106a039	IB	CALIB			04/17/07 11:25	1.0		

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Standards used: 1=S5731 2=S5734 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S5521 17=S5751 18=S5752 19=S5753 20=S5754 21=S5755 22=S5756 23=S5858 24=S5857 25=S5856 26=S5855 27=S5853

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177245236

Instrument : GC17A
Method : EPA 8015B

Begun : 06/19/07 07:16
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	170a001	X	IB				06/19/07 07:16	1.0	
002	170a002	CMARKER	C8-50				06/19/07 07:44	1.0	1
003	170a003	CCV	DSL_500				06/19/07 08:11	1.0	2
004	170a004	CCV	MO_500				06/19/07 08:39	1.0	3
005	170a005	SAMPLE	195418-017		Soil	126399	06/19/07 09:17	1.0	
006	170a006	SAMPLE	195372-001	S	Water	126372	06/19/07 10:02	1.0	
007	170a007	SAMPLE	195372-002	S	Water	126372	06/19/07 10:30	1.0	
008	170a008	SAMPLE	195372-003	S	Water	126372	06/19/07 10:57	1.0	
009	170a009	SAMPLE	195372-005	S	Water	126372	06/19/07 11:24	1.0	
010	170a010	SAMPLE	195258-005	S	Soil	126067	06/19/07 11:52	1.0	
011	170a011	SAMPLE	195258-006	S	Soil	126067	06/19/07 12:19	1.0	
012	170a012	X	IB				06/19/07 12:47	1.0	
013	170a013	CCV	DSL_250				06/19/07 13:14	1.0	4
014	170a014	CCV	MO_500				06/19/07 13:41	1.0	3
015	170a015	CCV	JP5_250				06/19/07 14:09	1.0	5
016	170a016	BLANK	QC392749	S	Water	126411	06/19/07 14:37	1.0	
017	170a017	CCV	DSL_1000				06/19/07 15:14	1.0	6
018	170a018	CCV	MO_500				06/19/07 15:41	1.0	3
019	170a019	CCV	JP5_250				06/19/07 16:08	1.0	5
020	170a020	X	CCV				06/19/07 16:36	1.0	7
021	170a021	X	CCV				06/19/07 17:03	1.0	8
022	170a022	X	IB				06/19/07 18:34	1.0	
023	170a023	SAMPLE	195453-002		Soil	126399	06/19/07 19:01	1.0	
024	170a024	SAMPLE	195453-003		Soil	126399	06/19/07 19:28	1.0	
025	170a025	SAMPLE	195453-001		Soil	126399	06/19/07 19:56	1.0	
026	170a026	X	IB				06/19/07 20:23	1.0	
027	170a027	SAMPLE	195339-001	S	Water	126411	06/19/07 20:50	1.0	
028	170a028	SAMPLE	195339-002	S	Water	126411	06/19/07 21:18	1.0	
029	170a029	SAMPLE	195339-003	S	Water	126411	06/19/07 21:45	1.0	
030	170a030	MSS	195339-004	S	Water	126411	06/19/07 22:12	1.0	
031	170a031	X	IB				06/19/07 22:39	1.0	
032	170a032	BLANK	QC392749		Water	126411	06/19/07 23:07	1.0	
033	170a033	MS	QC392753	S	Water	126411	06/19/07 23:34	1.0	
034	170a034	MSD	QC392754	S	Water	126411	06/20/07 00:01	1.0	
035	170a035	X	CMARKER				06/20/07 00:29	1.0	1
036	170a036	CCV	DSL_250				06/20/07 00:56	1.0	4
037	170a037	CCV	MO_500				06/20/07 01:24	1.0	3
038	170a038	CCV	JP5_250				06/20/07 01:51	1.0	5
039	170a039	X	CCV				06/20/07 02:18	1.0	4
040	170a040	X	CCV				06/20/07 02:46	1.0	3
041	170a041	X	CCV				06/20/07 03:14	1.0	5

Standards used: 1=S4049 2=S6346 3=S6046 4=S6345 5=S5801 6=S6347 7=S6505 8=S6506

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	079_001	X	IB			03/20/07 10:30	1.0	
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1
003	079_003	X	MO_500			03/20/07 11:26	1.0	2
005	079_005	X	IB			03/20/07 12:53	1.0	
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2
008	079_008	X	PRIMER			03/20/07 14:26	1.0	
009	079_009	X	PRIMER			03/20/07 14:54	1.0	
010	079_010	X	IB			03/20/07 15:22	1.0	
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3
012	079_012	IB	CALIB			03/20/07 16:29	1.0	
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4
014	079_014	IB	CALIB			03/20/07 17:43	1.0	
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10
021	079_021	IB	CALIB			03/20/07 20:59	1.0	
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11
024	079_024	IB	CALIB			03/20/07 22:23	1.0	
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17
031	079_031	IB	CALIB			03/21/07 01:38	1.0	
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23
038	079_038	IB	CALIB			03/21/07 04:54	1.0	

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227227958

Instrument : GC14B
Method : EPA 8015B

Begun : 06/07/07 07:18
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	PRIMER				06/07/07 07:18	1.0		
002	158_002	X	IB				06/07/07 07:46	1.0		
003	158_003	CMARKER	C8-50				06/07/07 08:14	1.0	1	
004	158_004	X	DSL_500				06/07/07 08:42	1.0	2	
005	158_005	X	MO_500				06/07/07 09:10	1.0	3	
006	158_006	X	DSL_1000				06/07/07 09:38	1.0	4	
007	158_007	X	MO_500				06/07/07 10:06	1.0	3	
008	158_008	X	IB				06/07/07 10:34	1.0		
009	158_009	IB	CALIB				06/07/07 11:02	1.0		
010	158_010	ICAL	HEX_5				06/07/07 11:30	1.0	5	
011	158_011	ICAL	HEX_10				06/07/07 11:58	1.0	6	
012	158_012	ICAL	HEX_25				06/07/07 12:25	1.0	7	
013	158_013	ICAL	HEX_50				06/07/07 12:53	1.0	8	
014	158_014	ICAL	HEX_100				06/07/07 13:21	1.0	9	
015	158_015	ICAL	HEX_200				06/07/07 13:49	1.0	10	
016	158_016	X	IB				06/07/07 15:30	1.0		
017	158_017	CCV	DSL_500				06/07/07 15:57	1.0	2	
018	158_018	CCV	MO_500				06/07/07 16:25	1.0	3	
019	158_019	BLANK	QC391198		Soil	126033	06/07/07 18:02	1.0		
020	158_020	MSS	195079-001		Soil	126033	06/07/07 18:30	1.0		
021	158_021	MS	QC391200		Soil	126033	06/07/07 18:58	1.0		
022	158_022	MSD	QC391201		Soil	126033	06/07/07 19:26	1.0		
023	158_023	SAMPLE	195256-001		Soil	126033	06/07/07 19:54	1.0		
024	158_024	SAMPLE	195230-003		Soil	126033	06/07/07 20:21	1.0		11:BUNKC:12-40=36000
025	158_025	X	IB				06/07/07 20:49	1.0		
026	158_026	SAMPLE	195217-002	S	Water	126010	06/07/07 21:17	1.0		
027	158_027	SAMPLE	195217-004	S	Water	126010	06/07/07 21:45	1.0		
028	158_028	SAMPLE	195217-005	S	Water	126010	06/07/07 22:12	1.0		
029	158_029	SAMPLE	195217-006	S	Water	126010	06/07/07 22:40	1.0		
030	158_030	X	IB				06/07/07 23:08	1.0		
031	158_031	X	CMARKER				06/07/07 23:36	1.0	1	
032	158_032	CCV	DSL_250				06/08/07 00:03	1.0	11	
033	158_033	CCV	MO_500				06/08/07 00:31	1.0	3	
034	158_034	X	CCV				06/08/07 00:59	1.0	11	
035	158_035	X	CCV				06/08/07 01:26	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S5751 6=S5752 7=S5753 8=S5754 9=S5755 10=S5756 11=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227245240

Instrument : GC14B
Method : EPA 8015B

Begun : 06/19/07 07:20
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	170_001	X	PRIMER				06/19/07 07:20	1.0		
002	170_002	X	IB				06/19/07 07:48	1.0		
003	170_003	X	CMARKER				06/19/07 08:16	1.0	1	
004	170_004	CCV	DSL_500				06/19/07 08:44	1.0	2	
005	170_005	CCV	MO_500				06/19/07 09:12	1.0	3	
006	170_006	SAMPLE	195279-001	S	Water	126372	06/19/07 10:06	1.0		
007	170_007	SAMPLE	195367-011		Water	126372	06/19/07 10:34	1.0		
008	170_008	MSS	195258-001	S	Soil	126067	06/19/07 11:02	1.0		
009	170_009	MS	QC391355	S	Soil	126067	06/19/07 11:30	1.0		
010	170_010	MSD	QC391356	S	Soil	126067	06/19/07 11:58	1.0		
011	170_011	SAMPLE	195258-007	S	Soil	126067	06/19/07 12:26	1.0		
012	170_012	X	IB				06/19/07 13:35	1.0		
013	170_013	SAMPLE	195461-001	S	Water	126411	06/19/07 14:03	1.0		
014	170_014	SAMPLE	195461-002	S	Water	126411	06/19/07 14:30	1.0		
015	170_015	CCV	DSL_1000				06/19/07 14:58	1.0	4	
016	170_016	CCV	MO_500				06/19/07 15:26	1.0	3	
017	170_017	X	TEST				06/19/07 15:58	1.0	5	
018	170_018	X	TEST				06/19/07 16:25	1.0	6	
019	170_019	X	IB				06/19/07 20:36	1.0		
020	170_020	SAMPLE	195300-008		Water	126411	06/19/07 21:04	1.0		
021	170_021	SAMPLE	195300-009		Water	126411	06/19/07 21:32	1.0		
022	170_022	SAMPLE	195270-001	S	Water	126411	06/19/07 22:00	1.0		2:BUNKC:12-40=7100
023	170_023	SAMPLE	195270-002	S	Water	126411	06/19/07 22:27	1.0		2:BUNKC:12-40=11000
024	170_024	SAMPLE	195270-010	S	Water	126411	06/19/07 22:55	1.0		
025	170_025	X	IB				06/19/07 23:23	1.0		
026	170_026	SAMPLE	195270-011	S	Water	126411	06/19/07 23:52	1.0		
027	170_027	MSS	195270-013	S	Water	126411	06/20/07 00:19	1.0		
028	170_028	MS	QC392751	S	Water	126411	06/20/07 00:47	1.0		
029	170_029	MSD	QC392752	S	Water	126411	06/20/07 01:15	1.0		
030	170_030	SAMPLE	195270-014	S	Water	126411	06/20/07 01:43	1.0		
031	170_031	X	IB				06/20/07 02:11	1.0		
032	170_032	X	CMARKER				06/20/07 02:38	1.0	1	
033	170_033	CCV	DSL_250				06/20/07 03:06	1.0	7	
034	170_034	CCV	MO_500				06/20/07 03:34	1.0	3	
035	170_035	X	CCV				06/20/07 04:02	1.0	7	
036	170_036	X	CCV				06/20/07 04:30	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S6506 6=S6505 7=S6345

REPORTING SUMMARY FOR 195270 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195270-001	GC14B	06/19/07 22:00	1.0	+	+	+	
195270-002	GC14B	06/19/07 22:27	1.0	+	+	+	
195270-010	GC14B	06/19/07 22:55	1.0	+	+	+	
195270-011	GC14B	06/19/07 23:52	1.0	+	+	+	
195270-013	GC14B	06/20/07 00:19	1.0	+	+	+	
195270-014	GC14B	06/20/07 01:43	1.0	+	+	+	
195270-015	GC15B	06/19/07 21:16	1.0	+	+	+	
195270-016	GC15B	06/19/07 21:43	1.0	+	+	+	
195270-017	GC15B	06/19/07 22:11	1.0	+	+	+	
195270-018	GC15B	06/19/07 22:38	1.0	+	+	+	
QC392749	GC17A	06/19/07 14:37	1.0	+	+	+	
QC392749	GC17A	06/19/07 23:07	1.0				
QC392750	GC15B	06/19/07 13:37	1.0	+		+	
QC392751	GC14B	06/20/07 00:47	1.0	+		+	
QC392752	GC14B	06/20/07 01:15	1.0	+		+	
QC392753	GC17A	06/19/07 23:34	1.0				
QC392754	GC17A	06/20/07 00:01	1.0				

SAMPLE PREPARATION SUMMARY

Batch # : 126411
Started By : JDG
Method : 3520C
Spike #1 ID : S6349

Prep Date : 18-JUN-2007
SOP Version : TEH_3520_rv11
Spike #2 ID : S6469

Analysis : TEH
Finished By : JLM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195270-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195270-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195270-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195300-008		Water	500	2.5	1	0.005	7	.5				TEH	
195300-009		Water	500	2.5	1	0.005	7	.5				TEH	
195339-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195339-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195339-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195339-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
195461-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195461-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195461-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC392749	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC392750	LCS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC392751	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC392752	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC392753	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC392754	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C		

Analyst: DLM Date: 06/20/07 Reviewer: LH Date: 06/20/07

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 126411
LIMS Analysis: TEH/A
Date Extracted: 6/18/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195270-001 K	500	7	2.5	X	
002 L					
010 F					
011					
013 W					MSS
014 G					
015 I					
016 J					
017					
018					
195300-008 D					
009					
195339-001 I				X	
002 J					
003 H					
004 P					MSS
195461-001 D			2.5		
002					
003					
MB QC392749					
LCS 50					
MS 51			2.5		195270-0013V
MSD 52					
MS 53					195339-004T
MSD 54					, Added this line

0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2
Extraction Start Time:
Extraction End Time:
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above
Relinquished to TEH Department

Mfg & Lot# / LIMS # / Time	Date/ Initials
S6349E	6/18/07
S6469C	
FS005076	
EM47110	
1645	
1045	JLM 6/19/07
N/A	
EM46283706	
✓	
✓ hood	

Janice Gary 6/18/07
Extraction Chemist Date

Contined from Page 1
Continued on Page

6/20/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: JLM
Cleanup Date: 6/19/07

Benchbook # **BK 2520**
Page 13

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195461-001	126411	1.0	1.0	
002				
003				
MB QC392749				
LCS 50				
195270-001				
-002				
010				
011				
013				MSS
-014				
015				
016				
-017				
018				
195339-001				
002				
003				
004				MSS
MS QC392751				
MSD 2				
MS 3				
MSD 4				
				JLM 6/20/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	N/A	JLM 6/19/07
☒ Extracts were cleaned up using 1.0 g cartridges	~~EM~~ JLM 6/19/07 SP8605	
Extracts were eluted with 4.0 mL CH_2Cl_2	EMM 7110	
Concentrated to volumes as noted above	✓	

6/19/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

6/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/28/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

00092

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	126189
Lab ID:	195270-001	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	25	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.5	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.8	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	94	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

4.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0606073A	Batch#:	126137
Lab ID:	195270-002	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	24	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.7	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	95	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0606073A	Batch#:	126189
Lab ID:	195270-009	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW29	Batch#:	126137
Lab ID:	195270-010	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

7.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0606072A	Batch#:	126137
Lab ID:	195270-011	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	126189
Lab ID:	195270-016	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	0.5	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	0.6	0.5	
Benzene	1.3	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	0.8	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0606071A	Batch#:	126137
Lab ID:	195270-019	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

10.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391610	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

11.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391801	Batch#:	126189
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391611	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.29	109	65-135
Benzene	25.00	25.33	101	65-135
Trichloroethene	25.00	23.61	94	65-135
Toluene	25.00	26.05	104	65-135
Chlorobenzene	25.00	25.10	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126189
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type: BS Lab ID: QC391802

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.99	112	65-135
Benzene	25.00	26.11	104	65-135
Trichloroethene	25.00	25.18	101	65-135
Toluene	25.00	27.20	109	65-135
Chlorobenzene	25.00	26.22	105	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

Type: BSD Lab ID: QC391803

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.32	109	65-135	2	35
Benzene	25.00	25.80	103	65-135	1	35
Trichloroethene	25.00	25.06	100	65-135	0	35
Toluene	25.00	26.98	108	65-135	1	35
Chlorobenzene	25.00	25.79	103	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW20	Batch#:	126137
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391631

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	28.63	115	65-135
Benzene	<0.2500	25.00	27.23	109	65-135
Trichloroethene	<0.1151	25.00	26.05	104	65-135
Toluene	<0.1338	25.00	28.11	112	65-135
Chlorobenzene	<0.1569	25.00	26.79	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC391632

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.24	117	65-135	2	35
Benzene	25.00	26.96	108	65-135	1	35
Trichloroethene	25.00	25.29	101	65-135	3	35
Toluene	25.00	27.95	112	65-135	1	35
Chlorobenzene	25.00	26.40	106	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	98	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497177754005 File : je305 Time : 03-MAY-2007 12:11

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	79938	21.98	
75	30.00% - 60.00% of mass 95	161536	44.42	
95		363648		
96	5.00% - 9.00% of mass 95	24247	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	279530	76.87	
175	5.00% - 9.00% of mass 174	21048	7.53	
176	> 95.00% and < 101.00% of mass 174	272661	97.54	
177	5.00% - 9.00% of mass 176	17603	6.46	

Analyst: ACM Date: 05/04/07 Reviewer: LW Date: 05/04/07

497177754005

CURTIS & TOMPKINS BFB TUNE FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497233759004 File : jfb04 Time : 11-JUN-2007 09:30

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	177728	21.13	
75	30.00% - 60.00% of mass 95	367530	43.69	
95		841280		
96	5.00% - 9.00% of mass 95	55977	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	657920	78.20	
175	5.00% - 9.00% of mass 174	45770	6.96	
176	> 95.00% and < 101.00% of mass 174	628778	95.57	
177	5.00% - 9.00% of mass 176	40829	6.49	

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

497233759004

CURTIS & TOMPKINS BFB TUNE FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497235206002 File : jfc02 Time : 12-JUN-2007 08:48

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	233078	21.52	
75	30.00% - 60.00% of mass 95	473749	43.74	
95		1083008		
96	5.00% - 9.00% of mass 95	72970	6.74	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	807232	74.54	
175	5.00% - 9.00% of mass 174	61818	7.66	
176	> 95.00% and < 101.00% of mass 174	794026	98.36	
177	5.00% - 9.00% of mass 176	52738	6.64	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

497235206002

CURTIS & TOMPKINS BFB TUNE FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497235206009 File : jfc09 Time : 12-JUN-2007 12:48

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	175018	21.13	
75	30.00% - 60.00% of mass 95	360341	43.50	
95		828416		
96	5.00% - 9.00% of mass 95	55533	6.70	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	623040	75.21	
175	5.00% - 9.00% of mass 174	48890	7.85	
176	> 95.00% and < 101.00% of mass 174	612224	98.26	
177	5.00% - 9.00% of mass 176	40125	6.55	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

497235206009

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum : 497177754004
Units : ug/L

Name : 826GOX10
Date : 03-MAY-2007 13:35
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	je308	497177754008	0.25/0.5PPB	03-MAY-2007 13:35	S5194 (2000000X), S6072 (2000000X), S5938 (1000000X), S6084 (5000X)
L2	je309	497177754009	0.5/1PPB	03-MAY-2007 14:07	S5194 (1000000X), S6072 (1000000X), S5938 (500000X), S6084 (5000X)
L3	je310	497177754010	2PPB	03-MAY-2007 14:40	S5194 (500000X), S6072 (250000X), S5938 (250000X), S6084 (5000X)
L4	je311	497177754011	5PPB	03-MAY-2007 15:13	S5194 (200000X), S6072 (100000X), S5938 (100000X), S6084 (5000X)
L5	je312	497177754012	10PPB	03-MAY-2007 15:46	S5194 (100000X), S6072 (50000X), S5938 (50000X), S6084 (5000X)
L6	je313	497177754013	20PPB	03-MAY-2007 16:19	S5194 (50000X), S6072 (25000X), S5938 (25000X), S6084 (5000X)
L7	je314	497177754014	50PPB	03-MAY-2007 16:51	S5194 (20000X), S6072 (10000X), S5938 (10000X), S6084 (5000X)
L8	je315	497177754015	75PPB	03-MAY-2007 17:24	S5194 (13330X), S6072 (6667X), S5938 (6667X), S6084 (5000X)
L9	je316	497177754016	100PPB	03-MAY-2007 17:57	S5194 (10000X), S6072 (5000X), S5938 (5000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5947	0.5426	0.5709	0.4865	0.4975	0.4780	0.4537	0.4433	AVRG		1.96694		0.5084	11	15	0.10	0.99	
Vinyl Chloride	0.4132	0.4168m	0.3671m	0.4167	0.3655	0.3629	0.3690	0.3540	0.3529	AVRG		2.63311		0.3798	7	15	0.05	0.99	
Bromomethane		0.2909m	0.2714	0.2949m	0.2511	0.2691	0.2676	0.2750	0.2711	AVRG		3.65109		0.2739	5	15	0.05	0.99	
Chloroethane		0.2584	0.2745m	0.2998	0.2712	0.2697	0.2621	0.2640	0.2563	AVRG		3.71065		0.2695	5	15	0.05	0.99	
Acetone			0.1599m	0.1925	0.1879	0.1586	0.1600			AVRG		5.82201		0.1718	10	15	0.05	0.99	
1,1-Dichloroethene		0.2358m	0.2192	0.2400	0.2414	0.2539	0.2359	0.2494	0.2390	AVRG		4.17827		0.2393	4	15	0.05	0.99	
Methylene Chloride			0.3563m	0.3576	0.3346	0.3304	0.3296	0.3230	0.3254	AVRG		2.97009		0.3367	4	15	0.05	0.99	
Carbon Disulfide		1.0985	0.9961	0.9893	0.9633	1.0131	0.9946	1.0407	0.9939	AVRG		0.98894		1.0112	4	15	0.05	0.99	
MTBE		0.9046m	0.8559	0.8149	0.7674	0.7714	0.7576	0.7442	0.7584	AVRG		1.25500		0.7968	7	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3511m	0.3343	0.3015	0.2976	0.3008	0.2824	0.2812	0.2841	AVRG		3.28796		0.3041	8	15	0.05	0.99	
Vinyl Acetate			0.6363m	0.7199m	0.5324m	0.6892	0.4476	1.0222	0.9214	AVRG		1.40874		0.7099	**29**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.5984	0.5968	0.5961	0.5669	0.5703	0.5508	0.5494	0.5471	AVRG		1.74835		0.5720	4	15	0.10	0.99	
2-Butanone			0.2289	0.2082	0.2129	0.2042	0.2146	0.2015	0.2006	AVRG		4.75928		0.2101	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3134m	0.3691	0.3166	0.3211	0.3199	0.3116	0.3046	0.3123	AVRG		3.11460		0.3211	6	15	0.05	0.99	
Chloroform		0.5213	0.5072	0.4977	0.4926	0.4839	0.4701	0.4623	0.4625	AVRG		2.05257		0.4872	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.3612m	0.2999	0.3138	0.3185	0.3174	0.3049	0.3316	0.3040	AVRG		3.13579		0.3189	6	15	0.05	0.99	
Carbon Tetrachloride		0.1391	0.1316	0.1437	0.1413	0.1537	0.1384	0.1655	0.1415	AVRG		6.92765		0.1443	7	15	0.05	0.99	
1,2-Dichloroethane		0.2645	0.2512	0.2471	0.2515	0.2517	0.2485	0.2447	0.2399	AVRG		4.00187		0.2499	3	15	0.05	0.99	
Benzene		0.7629	0.6956	0.7249	0.6984	0.7058	0.6774	0.6946	0.6560	AVRG		1.42458		0.7020	5	15	0.05	0.99	
Trichloroethene		0.2129	0.1627	0.1791	0.1769	0.1796	0.1703	0.1713	0.1567	AVRG		5.67516		0.1762	10	15	0.05	0.99	
2-Dichloropropane		0.2415	0.2196	0.2213	0.2200	0.2208	0.2144	0.2096	0.2025	AVRG		4.57198		0.2187	5	15	0.05	0.99	
Bromodichloromethane		0.2698	0.2371	0.2414	0.2352	0.2365	0.2326	0.2294	0.2301	AVRG		4.18364		0.2390	5	15	0.05	0.99	
4-Methyl-2-Pentanone		0.3021m	0.3421	0.2832	0.2608	0.3025	0.2871	0.2918	0.2661	AVRG		3.42524		0.2919	9	15	0.05	0.99	
cis-1,3-Dichloropropene		0.3284	0.2954	0.3264	0.3072	0.3089	0.3021	0.3088	0.3032	AVRG		3.22531		0.3100	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4330m	0.3869	0.4279	0.3911	0.4056	0.3845	0.4001	0.3547	AVRG		2.51270		0.3980	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2852m	0.2591	0.2780m	0.2711	0.2765	0.2696	0.2741	0.2690	AVRG		3.66524		0.2728	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1044	0.0983	0.0998	0.0980	0.0982	0.0954	0.0972	0.0943	AVRG		10.1845		0.0982	3	15	0.05	0.99	
2-Hexanone			0.1999	0.2144	0.2166	0.1983	0.2045	0.2061	0.1956	AVRG		4.87644		0.2051	4	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1437	0.1819	0.1672	0.1725	0.1573	0.1823	0.1526	AVRG		5.92719		0.1687	10	15	0.05	0.99	
Dibromochloromethane		0.2225	0.2112	0.2281	0.2269	0.2208	0.2263	0.2212	0.2238	AVRG		4.49237		0.2226	2	15	0.05	0.99	
Chlorobenzene		0.5715	0.5242	0.5556	0.5183	0.5228	0.5061	0.5114	0.4731	AVRG		1.91246		0.5229	6	15	0.30	0.99	
Ethylbenzene		0.9731	0.7932	0.9252	0.8386	0.8567	0.7886	0.8468	0.7221	AVRG		1.18619		0.8430	9	15	0.05	0.99	
m,p-Xylenes	0.3103	0.3178	0.3067	0.3430	0.3061	0.3158	0.2914	0.3124	0.2660	AVRG		3.24970		0.3077	7	15	0.05	0.99	
o-Xylene		0.3480	0.3095	0.3483	0.3139	0.3192	0.2940	0.3052	0.2640	AVRG		3.19746		0.3127	9	15	0.05	0.99	
Styrene		0.5857	0.5274	0.6027	0.5445	0.5650	0.5276	0.5378	0.4787	AVRG		1.83087		0.5462	7	15	0.05	0.99	
Bromoform		0.1601	0.1548	0.1656	0.1611	0.1585	0.1626	0.1639	0.1657	AVRG		6.19057		0.1615	2	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6707m	0.6326	0.6403	0.5798	0.6019	0.5675	0.6023	0.5756	AVRG		1.64250		0.6088	6	15	0.30	0.99	
Dibromofluoromethane	0.5647	0.5635	0.5630	0.5511	0.5725	0.5604	0.5593	0.5552	0.5745	AVRG		1.77720		0.5627	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3895	0.3906	0.3874	0.3894	0.3937	0.3894	0.3860	0.3792	0.3779	AVRG		2.58388		0.3870	1	15	0.05	0.99	
Toluene-d8	1.0751	1.0857	1.0863	1.0981	1.0869	1.0914	1.0678	1.0854	1.0649	AVRG		0.92388		1.0824	1	15	0.05	0.99	
Bromofluorobenzene	1.1530	1.1357	1.1445	1.1312	1.1260	1.0989	1.0858	1.0642	1.0625	AVRG		0.89982		1.1113	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	17	2.000	7	5.000	12	10.00	-4	20.00	-2	50.00	-6	75.00	-11	100.0	-13
Vinyl Chloride	0.500	9	1.000	10	2.000	-3	5.000	10	10.00	-4	20.00	-4	50.00	-3	75.00	-7	100.0	-7
Bromomethane			1.000	6	2.000	-1	5.000	8	10.00	-8	20.00	-2	50.00	-2	75.00	0	100.0	-1
Chloroethane			1.000	-4	2.000	2	5.000	11	10.00	1	20.00	0	50.00	-3	75.00	-2	100.0	-5
Acetone					2.000	-7	5.000	12	10.00	9	20.00	-8	50.00	-7				
1,1-Dichloroethene			0.500	-1	2.000	-8	5.000	0	10.00	1	20.00	6	50.00	-1	75.00	4	100.0	0
Methylene Chloride					2.000	6	5.000	6	10.00	-1	20.00	-2	50.00	-2	75.00	-4	100.0	-3
Carbon Disulfide			0.500	9	2.000	-1	5.000	-2	10.00	-5	20.00	0	50.00	-2	75.00	3	100.0	-2
MTBE			0.500	14	2.000	7	5.000	2	10.00	-4	20.00	-3	50.00	-5	75.00	-7	100.0	-5
trans-1,2-Dichloroethene			0.500	15	2.000	10	5.000	-1	10.00	-2	20.00	-1	50.00	-7	75.00	-8	100.0	-7
Vinyl Acetate					2.000	-10	5.000	1	10.00	-25	20.00	-3	50.00	-37	75.00	44	100.0	30
1,1-Dichloroethane			0.500	5	2.000	4	5.000	4	10.00	-1	20.00	0	50.00	-4	75.00	-4	100.0	-4
2-Butanone					2.000	9	5.000	-1	10.00	1	20.00	-3	50.00	2	75.00	-4	100.0	-5
cis-1,2-Dichloroethene			0.500	-2	2.000	15	5.000	-1	10.00	0	20.00	0	50.00	-3	75.00	-5	100.0	-3
Chloroform			0.500	7	2.000	4	5.000	2	10.00	1	20.00	-1	50.00	-4	75.00	-5	100.0	-5
1,1,1-Trichloroethane			0.500	13	2.000	-6	5.000	-2	10.00	0	20.00	0	50.00	-4	75.00	4	100.0	-5
Carbon Tetrachloride			0.500	-4	2.000	-9	5.000	0	10.00	-2	20.00	6	50.00	-4	75.00	15	100.0	-2
1,2-Dichloroethane			0.500	6	2.000	1	5.000	-1	10.00	1	20.00	1	50.00	-1	75.00	-2	100.0	-4
Benzene			0.500	9	2.000	-1	5.000	3	10.00	-1	20.00	1	50.00	-3	75.00	-1	100.0	-7
Trichloroethene			0.500	21	2.000	-8	5.000	2	10.00	0	20.00	2	50.00	-3	75.00	-3	100.0	-11
1,2-Dichloropropane			0.500	10	2.000	0	5.000	1	10.00	1	20.00	1	50.00	-2	75.00	-4	100.0	-7
Bromodichloromethane			0.500	13	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	-3	75.00	-4	100.0	-4
4-Methyl-2-Pentanone			0.500	3	2.000	17	5.000	-3	10.00	-11	20.00	4	50.00	-2	75.00	0	100.0	-9
cis-1,3-Dichloropropene			0.500	6	2.000	-5	5.000	5	10.00	-1	20.00	0	50.00	-3	75.00	0	100.0	-2
Toluene			0.500	9	2.000	-3	5.000	8	10.00	-2	20.00	2	50.00	-3	75.00	1	100.0	-11
trans-1,3-Dichloropropene			0.500	5	2.000	-5	5.000	2	10.00	-1	20.00	1	50.00	-1	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	6	2.000	0	5.000	2	10.00	0	20.00	0	50.00	-3	75.00	-1	100.0	-4
2-Hexanone					2.000	-3	5.000	5	10.00	6	20.00	-3	50.00	0	75.00	1	100.0	-5
Tetrachloroethene			0.500	14	2.000	-15	5.000	8	10.00	-1	20.00	2	50.00	-7	75.00	8	100.0	-10
Dibromochloromethane			0.500	0	2.000	-5	5.000	2	10.00	2	20.00	-1	50.00	2	75.00	-1	100.0	1
Chlorobenzene			0.500	9	2.000	0	5.000	6	10.00	-1	20.00	0	50.00	-3	75.00	-2	100.0	-10
Ethylbenzene			0.500	15	2.000	-6	5.000	10	10.00	-1	20.00	2	50.00	-6	75.00	0	100.0	-14
m,p-Xylenes	0.500	1	1.000	3	4.000	0	10.00	11	20.00	-1	40.00	3	100.0	-5	150.0	2	200.0	-14
o-Xylene			0.500	11	2.000	-1	5.000	11	10.00	0	20.00	2	50.00	-6	75.00	-2	100.0	-16
Styrene			0.500	7	2.000	-3	5.000	10	10.00	0	20.00	3	50.00	-3	75.00	-2	100.0	-12
Bromoform			0.500	-1	2.000	-4	5.000	3	10.00	0	20.00	-2	50.00	1	75.00	1	100.0	3
1,1,2,2-Tetrachloroethane			0.500	10	2.000	4	5.000	5	10.00	-5	20.00	-1	50.00	-7	75.00	-1	100.0	-5
Dibromofluoromethane	50.00	0	50.00	0	50.00	0	50.00	-2	50.00	2	50.00	0	50.00	-1	50.00	-1	50.00	2
1,2-Dichloroethane-d4	50.00	1	50.00	1	50.00	0	50.00	1	50.00	2	50.00	1	50.00	0	50.00	-2	50.00	-2
Toluene-d8	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1	50.00	-1	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-1	50.00	-2	50.00	-4	50.00	-4

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

m=manual integration rsd=ICAL %RSD failure

instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497177754004 Cal Date : 03-MAY-2007 Type : WATER

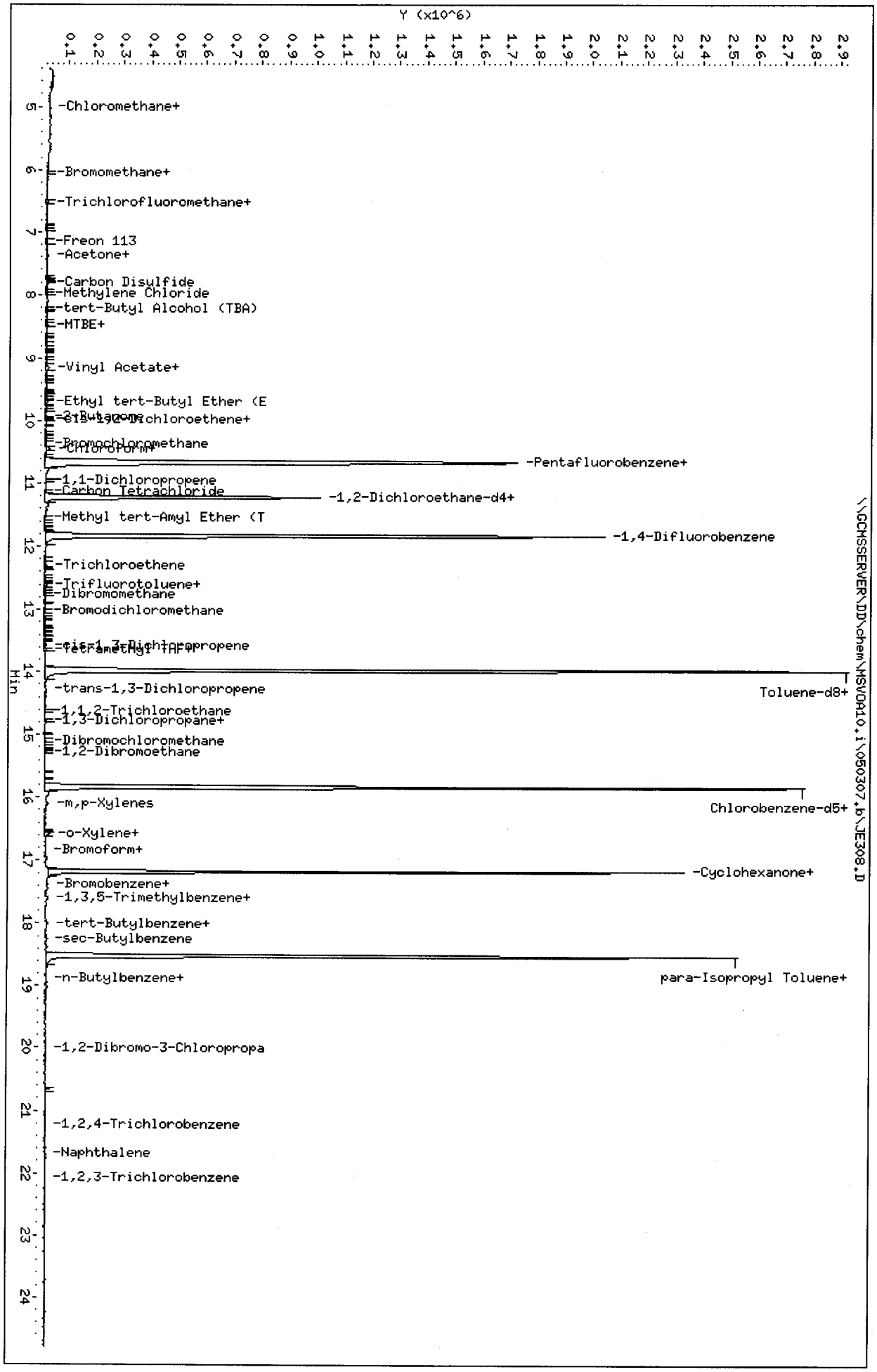
ICV 497177754017 (je317 03-MAY-2007) stds: S6044 (10000X), S6084 (5000X)
ICV 497177754018 (je318 03-MAY-2007) stds: S5723 (10000X), S5968 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497177754017	0.5084	0.4111	25.00	20.21	ug/L	-19	30	
Vinyl Chloride	497177754017	0.3798	0.3070	25.00	20.21	ug/L	-19	20	
Bromomethane	497177754017	0.2739	0.2259	25.00	20.62	ug/L	-18	30	
Chloroethane	497177754017	0.2695	0.2323	25.00	21.55	ug/L	-14	30	
Acetone	497177754018	0.1718	0.1276	25.00	18.58	ug/L	-26	40	
1,1-Dichloroethene	497177754018	0.2393	0.2311	25.00	24.14	ug/L	-3	20	
Methylene Chloride	497177754018	0.3367	0.3190	25.00	23.68	ug/L	-5	30	
Carbon Disulfide	497177754018	1.0112	0.7101	25.00	17.56	ug/L	**-30**	30	!v-
MTBE	497177754018	0.7968	0.7580	25.00	23.78	ug/L	-5	30	
trans-1,2-Dichloroethene	497177754018	0.3041	0.2775	25.00	22.81	ug/L	-9	30	
Vinyl Acetate	497177754018	0.7099	0.5644	25.00	19.88	ug/L	-20	40	
1,1-Dichloroethane	497177754018	0.5720	0.5352	25.00	23.39	ug/L	-6	30	
2-Butanone	497177754018	0.2101	0.1974	25.00	23.49	ug/L	-6	40	
cis-1,2-Dichloroethene	497177754018	0.3211	0.3185	25.00	24.80	ug/L	-1	30	
Chloroform	497177754018	0.4872	0.4701	25.00	24.13	ug/L	-3	20	
1,1,1-Trichloroethane	497177754018	0.3189	0.3310	25.00	25.95	ug/L	4	30	
Carbon Tetrachloride	497177754018	0.1443	0.1676	25.00	29.02	ug/L	16	30	
1,2-Dichloroethane	497177754018	0.2499	0.2386	25.00	23.87	ug/L	-5	30	
Benzene	497177754018	0.7020	0.6819	25.00	24.29	ug/L	-3	30	
Trichloroethene	497177754018	0.1762	0.1691	25.00	23.99	ug/L	-4	30	
1,2-Dichloropropane	497177754018	0.2187	0.2025	25.00	23.14	ug/L	-7	20	
Bromodichloromethane	497177754018	0.2390	0.2343	25.00	24.51	ug/L	-2	30	
4-Methyl-2-Pentanone	497177754018	0.2919	0.2795	25.00	23.93	ug/L	-4	40	
cis-1,3-Dichloropropene	497177754018	0.3100	0.2924	25.00	23.58	ug/L	-6	30	
Toluene	497177754018	0.3980	0.3901	25.00	24.51	ug/L	-2	20	
trans-1,3-Dichloropropene	497177754018	0.2728	0.2441	25.00	22.36	ug/L	-11	30	
1,1,2-Trichloroethane	497177754018	0.0982	0.0933	25.00	23.75	ug/L	-5	30	
2-Hexanone	497177754018	0.2051	0.1990	25.00	24.26	ug/L	-3	40	
Tetrachloroethene	497177754018	0.1687	0.1930	25.00	28.60	ug/L	14	30	
Dibromochloromethane	497177754018	0.2226	0.2254	25.00	25.32	ug/L	1	30	
Chlorobenzene	497177754018	0.5229	0.5163	25.00	24.69	ug/L	-1	30	
Ethylbenzene	497177754018	0.8430	0.8699	25.00	25.80	ug/L	3	20	
m,p-Xylenes	497177754018	0.3077	0.3165	50.00	51.43	ug/L	3	30	
o-Xylene	497177754018	0.3127	0.3132	25.00	25.04	ug/L	0	30	
Styrene	497177754018	0.5462	0.5576	25.00	25.52	ug/L	2	30	
Bromoform	497177754018	0.1615	0.1666	25.00	25.78	ug/L	3	30	
1,1,2,2-Tetrachloroethane	497177754018	0.6088	0.5836	25.00	23.97	ug/L	-4	30	

!=warning -=low bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Date : 03-MAY-2007 13:35
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 13:35 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Misc Info : S5938,0.001/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 09:39 target Quant Type: ISTD
Cal Date : 03-MAY-2007 13:35 Cal File: JE308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	5430	0.50000	0.5581
2 Chloromethane	50	5.000	5.000	(0.470)	9979	0.50000	0.7132
3 Vinyl Chloride	62	5.187	5.187	(0.487)	5685	0.50000	0.5439
4 Bromomethane	94	5.877	5.877	(0.552)	3082	0.50000	0.4088
5 Chloroethane	64	6.055	6.055	(0.569)	2787	0.50000	0.3757
6 Trichlorofluoromethane	101	6.518	6.518	(0.612)	4360	0.50000	0.4666
7 Ethanol	45	6.696	6.696	(0.629)	4018	25.0000	24.7192
8 Freon 113	101	7.346	7.346	(0.690)	704	0.25000	0.1412
9 Acetone	43	7.376	7.376	(0.693)	2734	0.25000	0.5783
10 1,1-Dichloroethene	96	7.376	7.376	(0.693)	3326	0.25000	0.5049
11 Isopropanol	45	7.465	7.465	(0.701)	363	2.50000	0.5458
12 Carbon Disulfide	76	7.820	7.820	(0.734)	8164	0.25000	0.2933
13 Methylene Chloride	84	8.086	8.086	(0.759)	3956	0.25000	0.4269
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.761)	2356	2.50000	3.0033
15 MTBE	73	8.480	8.480	(0.796)	8169	0.25000	0.3725
16 trans-1,2-Dichloroethene	96	8.480	8.480	(0.796)	531	0.25000	0.0634
18 Vinyl Acetate	43	9.161	9.161	(0.860)	8848	0.25000	0.4529
19 1,1-Dichloroethane	63	9.151	9.151	(0.859)	4205	0.25000	0.2671
20 Isopropyl Ether (DIPE)	45	9.170	9.170	(0.861)	10678	0.25000	0.2798
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.911)	5516	0.25000	0.2484
22 2-Butanone	43	9.949	9.949	(0.934)	720	0.25000	0.1245
23 cis-1,2-Dichloroethene	96	9.989	9.989	(0.938)	2514	0.25000	0.2745

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

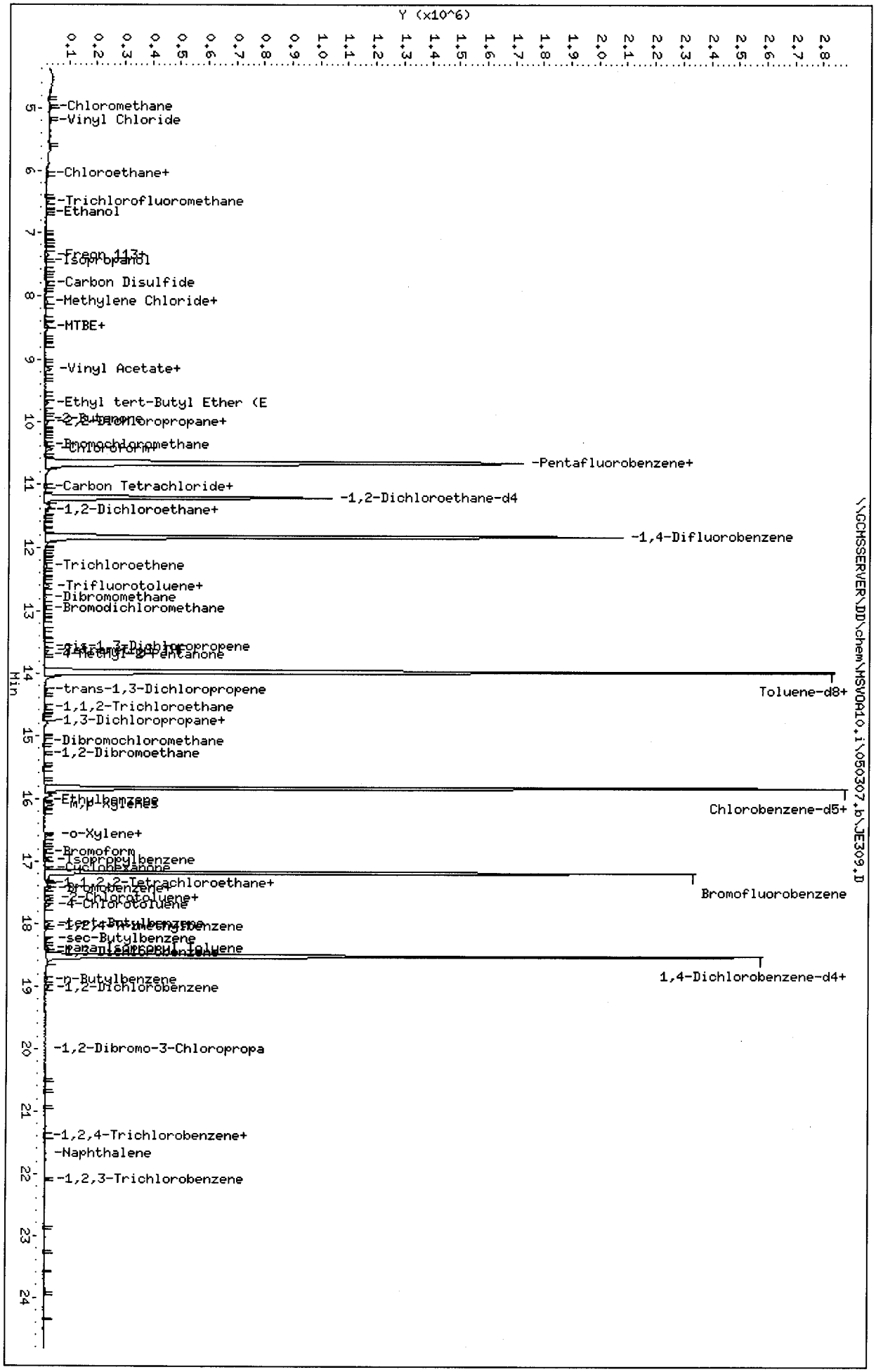
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.018	10.018	(0.941)	2575	0.25000	0.3138
25 Bromochloromethane	128	10.383	10.383	(0.975)	925	0.25000	0.2116
26 Chloroform	83	10.432	10.432	(0.980)	4394	0.25000	0.3277
27 Tetrahydrofuran	42	10.452	10.452	(0.981)	15211	2.50000	4.8892
* 28 Pentafluorobenzene	168	10.649	10.649	(1.000)	1375990	50.0000	
29 Dibromofluoromethane	113	10.669	10.669	(1.002)	777088	50.0000	50.1834
30 1,1,1-Trichloroethane	97	10.797	10.797	(1.014)	2518	0.25000	0.2869
31 1,1-Dichloropropene	75	11.034	11.034	(0.933)	3024	0.25000	0.3077
32 Carbon Tetrachloride	117	11.093	11.093	(0.938)	861	0.25000	0.1329
33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	873566	50.0000	50.3262
34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	2796	0.25000	0.2494
35 Benzene	78	11.359	11.359	(0.960)	8881	0.25000	0.2820
36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	5525	0.25000	0.3383
* 37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2242556	50.0000	
38 Trichloroethene	95	12.296	12.296	(1.039)	2094	0.25000	0.2649
39 Trifluorotoluene	146	12.611	12.611	(1.066)	2164	0.25000	0.2187
40 1,2-Dichloropropane	63	12.601	12.601	(1.065)	2664	0.25000	0.2715
41 Dibromomethane	93	12.789	12.789	(1.081)	1256	0.25000	0.2177
42 Bromodichloromethane	83	12.966	12.966	(1.096)	2921	0.25000	0.2724
44 cis-1,3-Dichloropropene	75	13.577	13.577	(1.147)	3299	0.25000	0.2372
45 Tetramethyl THF	43	13.646	13.646	(1.153)	9418	0.25000	0.3932
46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	3667	0.25000	0.2800
47 Toluene-d8	98	13.972	13.972	(1.181)	2411012	50.0000	49.6640
48 Toluene	92	14.061	14.061	(1.188)	4374	0.25000	0.2450
49 trans-1,3-Dichloropropene	75	14.268	14.268	(1.206)	3240	0.25000	0.2647
50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	894	0.25000	0.2030
51 1,3-Dichloropropane	76	14.770	14.770	(0.933)	3490	0.25000	0.2617
52 2-Hexanone	43	14.790	14.790	(0.935)	236	0.25000	0.0306
53 Tetrachloroethene	166	14.800	14.800	(0.935)	1739	0.25000	0.2740
54 Dibromochloromethane	129	15.096	15.096	(0.954)	1708	0.25000	0.2040
55 1,2-Dibromoethane	107	15.293	15.293	(1.292)	1963	0.25000	0.2391
* 56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	1880260	50.0000	
57 Chlorobenzene	112	15.865	15.865	(1.002)	4849	0.25000	0.2466
58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.007)	1822	0.25000	0.2737
59 Ethylbenzene	91	15.963	15.963	(1.009)	7946	0.25000	0.2506
60 m,p-Xylenes	106	16.101	16.101	(1.017)	5835	0.50000	0.5042
61 o-Xylene	106	16.585	16.585	(1.048)	2819	0.25000	0.2396
62 Styrene	104	16.585	16.585	(1.048)	3876	0.25000	0.1887
63 Bromoform	173	16.841	16.841	(1.064)	988	0.25000	0.1626
64 Isopropylbenzene	105	16.969	16.969	(0.916)	7135	0.25000	0.2766
65 Cyclohexanone	55	17.127	17.127	(0.925)	4680	2.50000	3.4062
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	971769	50.0000	51.8751
67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	3370	0.25000	0.3283
68 1,2,3-Trichloropropane	75	17.363	17.363	(0.938)	3037	0.25000	0.3130
69 Bromobenzene	156	17.393	17.393	(0.939)	1709	0.25000	0.2147
70 Propylbenzene	91	17.442	17.442	(0.942)	8660	0.25000	0.2698
71 2-Chlorotoluene	91	17.580	17.580	(0.949)	6371	0.25000	0.2759
72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	4814	0.25000	0.2502
73 4-Chlorotoluene	91	17.699	17.699	(0.956)	6630	0.25000	0.3041
74 tert-Butylbenzene	119	18.004	18.004	(0.972)	4269	0.25000	0.2460
75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	4283	0.25000	0.2472
76 sec-Butylbenzene	105	18.251	18.251	(0.986)	6214	0.25000	0.2523
77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	4295	0.25000	0.2436
78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	3719	0.25000	0.2696

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	842814	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	4000	0.25000	0.2833
81 n-Butylbenzene	91	18.892	18.892	(1.020)	3200	0.25000	0.2331
82 1,2-Dichlorobenzene	146	19.030	19.030	(1.028)	3023	0.25000	0.2215
83 1,2-Dibromo-3-Chloropropane	75	20.006	20.006	(1.080)	431	0.25000	0.2578
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	859	0.25000	0.3226
86 Naphthalene	128	21.692	21.692	(1.171)	1424	0.25000	0.1448
87 1,2,3-Trichlorobenzene	180	22.076	22.076	(1.192)	441	0.25000	0.1047

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Date : 03-MAY-2007 14:07
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/1000,S6072,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:07 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/1000,S6072,0.001/1000
Misc Info : S5938,0.002/1000, 0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 12:22 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:07 Cal File: JE309.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	10407	1.00000	1.0722(M)
2 Chloromethane	50	4.994	4.994	(0.469)	16328	1.00000	1.1697
3 Vinyl Chloride	62	5.191	5.191	(0.487)	11443	1.00000	1.0974(M)
4 Bromomethane	94	5.871	5.871	(0.551)	7986	1.00000	1.0619(M)
5 Chloroethane	64	6.049	6.049	(0.568)	7094	1.00000	0.9587
6 Trichlorofluoromethane	101	6.512	6.512	(0.611)	9598	1.00000	1.0297
7 Ethanol	45	6.690	6.690	(0.628)	9931	50.0000	61.2383
8 Freon 113	101	7.340	7.340	(0.689)	2601	0.50000	0.5228
9 Acetone	43	7.380	7.380	(0.693)	3812	0.50000	0.8083
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	3237	0.50000	0.4926(MH)
11 Isopropanol	45	7.498	7.498	(0.704)	3143	5.00000	4.7370
12 Carbon Disulfide	76	7.814	7.814	(0.733)	15080	0.50000	0.5431
13 Methylene Chloride	84	8.090	8.090	(0.759)	7434	0.50000	0.8041(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	4307	5.00000	5.5032(M)
15 MTBE	73	8.474	8.474	(0.795)	12418	0.50000	0.5676(H)
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	4820	0.50000	0.5772(MH)
18 Vinyl Acetate	43	9.154	9.154	(0.859)	19125	0.50000	0.9812
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	8215	0.50000	0.5231
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	21707	0.50000	0.5702
21 Ethyl tert-Butyl Ether (ETBE)	59	9.707	9.707	(0.911)	11934	0.50000	0.5387
22 2-Butanone	43	9.983	9.983	(0.937)	1252	0.50000	0.2170
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	4303	0.50000	0.4881(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	5225	0.50000	0.6382
	25 Bromochloromethane	128	10.377	10.377	(0.974)	1971	0.50000	0.4519
	26 Chloroform	83	10.426	10.426	(0.979)	7156	0.50000	0.5349
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	25372	5.00000	8.1742
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1372806	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	773510	50.0000	50.0681
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.013)	4958	0.50000	0.5662(H)
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	5906	0.50000	0.5994(H)
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	3128	0.50000	0.4819
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	878193	50.0000	50.4645
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	5947	0.50000	0.5292
	35 Benzene	78	11.363	11.363	(0.961)	17153	0.50000	0.5434
	36 Methyl tert-Amyl Ether (TAME)	73	11.432	11.432	(0.967)	7852	0.50000	0.4797(H)
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2248254	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	4787	0.50000	0.6041
	39 Trifluorotoluene	146	12.615	12.615	(1.067)	5706	0.50000	0.5752
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	5429	0.50000	0.5520
	41 Dibromomethane	93	12.783	12.783	(1.081)	2917	0.50000	0.5045
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	6065	0.50000	0.5642
	44 cis-1,3-Dichloropropene	75	13.571	13.571	(1.148)	7383	0.50000	0.5295
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	12608	0.50000	0.5251(H)
	46 4-Methyl-2-Pentanone	43	13.709	13.709	(1.159)	6792	0.50000	0.5173(M)
	47 Toluene-d8	98	13.966	13.966	(1.181)	2440868	50.0000	50.1516
	48 Toluene	92	14.064	14.064	(1.189)	9736	0.50000	0.5440(H)
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	6412	0.50000	0.5226(M)
	50 1,1,2-Trichloroethane	85	14.547	14.547	(1.230)	2347	0.50000	0.5315
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	6587	0.50000	0.4853
	52 2-Hexanone	43	14.824	14.824	(0.936)	3944	0.50000	0.5025
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	3677	0.50000	0.5694
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	4258	0.50000	0.4998
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	3499	0.50000	0.4251
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1913461	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	10935	0.50000	0.5464
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	3381	0.50000	0.4991
	59 Ethylbenzene	91	15.957	15.957	(1.008)	18619	0.50000	0.5771
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	12163	1.00000	1.0328
	61 o-Xylene	106	16.578	16.578	(1.047)	6658	0.50000	0.5562
	62 Styrene	104	16.588	16.588	(1.048)	11207	0.50000	0.5361
	63 Bromoform	173	16.845	16.845	(1.064)	3063	0.50000	0.4954
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	15404	0.50000	0.5714
	65 Cyclohexanone	55	17.121	17.121	(0.925)	7204	5.00000	5.0156
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1000580	50.0000	51.0949
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	5909	0.50000	0.5507(H)
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.938)	6053	0.50000	0.5967(M)
	69 Bromobenzene	156	17.397	17.397	(0.940)	4101	0.50000	0.4928
	70 Propylbenzene	91	17.436	17.436	(0.942)	19074	0.50000	0.5685
	71 2-Chlorotoluene	91	17.584	17.584	(0.950)	13578	0.50000	0.5625
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	10926	0.50000	0.5433
	73 4-Chlorotoluene	91	17.702	17.702	(0.956)	13842	0.50000	0.6075
	74 tert-Butylbenzene	119	18.008	18.008	(0.973)	11010	0.50000	0.6071(H)
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	7948	0.50000	0.4388
	76 sec-Butylbenzene	105	18.245	18.245	(0.986)	14248	0.50000	0.5535
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	9704	0.50000	0.5265(M)
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	7247	0.50000	0.5027

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

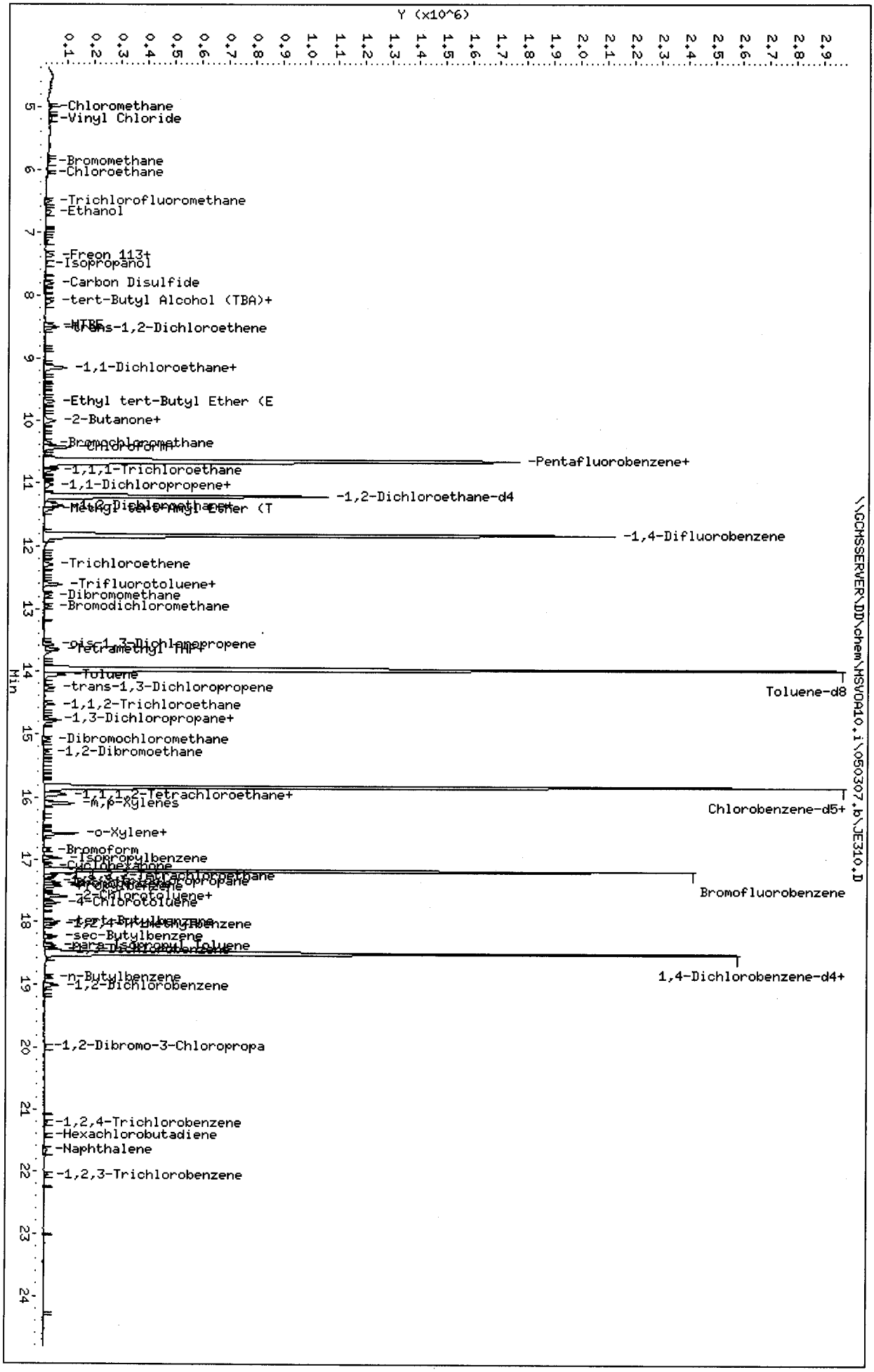
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	881052	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	7762	0.50000	0.5259
81 n-Butylbenzene	91	18.886	18.886	(1.020)	6916	0.50000	0.4819(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.028)	6866	0.50000	0.4812
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	1068	0.50000	0.6113
84 1,2,4-Trichlorobenzene	180	21.242	21.242	(1.148)	1386	0.50000	0.4234(M)
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	1319	0.50000	0.5957(M)
86 Naphthalene	128	21.686	21.686	(1.171)	4817	0.50000	0.4688(M)
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1848	0.50000	0.4200

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Date : 03-MAY-2007 14:40
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/500,S6072,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:40 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/500,S6072,0.002/500
Misc Info : S5938,0.002/500, 2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:06 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:40 Cal File: JE310.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.425)	21455	2.00000	2.1527(M)
2 Chloromethane	50	4.994	4.994	(0.469)	30595	2.00000	2.1345
3 Vinyl Chloride	62	5.191	5.191	(0.487)	20697	2.00000	1.9330(M)
4 Bromomethane	94	5.862	5.862	(0.550)	15302	2.00000	1.9817
5 Chloroethane	64	6.049	6.049	(0.568)	15478	2.00000	2.0372(M)
6 Trichlorofluoromethane	101	6.502	6.502	(0.610)	18360	2.00000	1.9183
7 Ethanol	45	6.680	6.680	(0.627)	33778	200.000	202.8496(M)
8 Freon 113	101	7.331	7.331	(0.688)	7449	2.00000	1.4584
9 Acetone	43	7.380	7.380	(0.693)	9015	2.00000	2.0242(M)
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	12359	2.00000	1.8316
11 Isopropanol	45	7.498	7.498	(0.704)	14554	20.0000	21.3625
12 Carbon Disulfide	76	7.814	7.814	(0.733)	56163	2.00000	1.9701
13 Methylene Chloride	84	8.090	8.090	(0.759)	20092	2.00000	2.1167(M)
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.762)	16309	20.0000	20.2945
15 MTBE	73	8.484	8.484	(0.796)	48260	2.00000	2.1483
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.800)	18850	2.00000	2.1984
18 Vinyl Acetate	43	9.135	9.135	(0.857)	35877	2.00000	1.7623(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	33652	2.00000	2.0869
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	80941	2.00000	2.0708
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.910)	47098	2.00000	2.0706
22 2-Butanone	43	9.953	9.953	(0.934)	12909	2.00000	2.1792
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	20810	2.00000	2.2186

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	16115	2.00000	1.9170
	25 Bromochloromethane	128	10.367	10.367	(0.973)	9211	2.00000	2.0571
	26 Chloroform	83	10.436	10.436	(0.980)	28600	2.00000	2.0822
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	73173	20.0000	22.9590
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1409612	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	793635	50.0000	50.0295
	30 1,1,1-Trichloroethane	97	10.801	10.801	(1.014)	16912	2.00000	1.8811
	31 1,1-Dichloropropene	75	11.038	11.038	(0.933)	19064	2.00000	1.8790
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	12184	2.00000	1.8228
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	896823	50.0000	50.0441
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	23266	2.00000	2.0107
	35 Benzene	78	11.363	11.363	(0.961)	64423	2.00000	1.9819
	36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.966)	35656	2.00000	2.1153
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2315236	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	15070	2.00000	1.8469
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	16673	2.00000	1.6322
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	20339	2.00000	2.0082
	41 Dibromomethane	93	12.793	12.793	(1.082)	11983	2.00000	2.0127
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	21961	2.00000	1.9841
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	27358	2.00000	1.9055
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	48611	2.00000	1.9660
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	31678	2.00000	2.3432
	47 Toluene-d8	98	13.976	13.976	(1.182)	2515013	50.0000	50.1800
	48 Toluene	92	14.064	14.064	(1.189)	35831	2.00000	1.9443
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	23991	2.00000	1.8990
	50 1,1,2-Trichloroethane	85	14.538	14.538	(1.229)	9099	2.00000	2.0012
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	27964	2.00000	2.0115
	52 2-Hexanone	43	14.804	14.804	(0.935)	15672	2.00000	1.9494
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	11264	2.00000	1.7030
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	16558	2.00000	1.8974
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	17395	2.00000	2.0523
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1960105	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	41103	2.00000	2.0051
	58 1,1,1,2-Tetrachloroethane	131	15.938	15.938	(1.007)	14123	2.00000	2.0355
	59 Ethylbenzene	91	15.957	15.957	(1.008)	62188	2.00000	1.8817
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	48096	4.00000	3.9869
	61 o-Xylene	106	16.579	16.579	(1.047)	24267	2.00000	1.9793
	62 Styrene	104	16.588	16.588	(1.048)	41353	2.00000	1.9313
	63 Bromoform	173	16.845	16.845	(1.064)	12136	2.00000	1.9164
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	49516	2.00000	1.8050
	65 Cyclohexanone	55	17.121	17.121	(0.924)	13929	20.0000	10.3005
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1026075	50.0000	51.4913
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	22687	2.00000	2.0781
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.937)	23367	2.00000	2.2639
	69 Bromobenzene	156	17.397	17.397	(0.939)	16684	2.00000	1.9705
	70 Propylbenzene	91	17.436	17.436	(0.941)	61471	2.00000	1.8006
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	48976	2.00000	1.9939
	72 1,3,5-Trimethylbenzene	105	17.614	17.614	(0.951)	36953	2.00000	1.8058
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	45466	2.00000	1.9609
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	31632	2.00000	1.7140
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	32323	2.00000	1.7538
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	43904	2.00000	1.6761
	77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	31404	2.00000	1.6747
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	30465	2.00000	2.0768

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

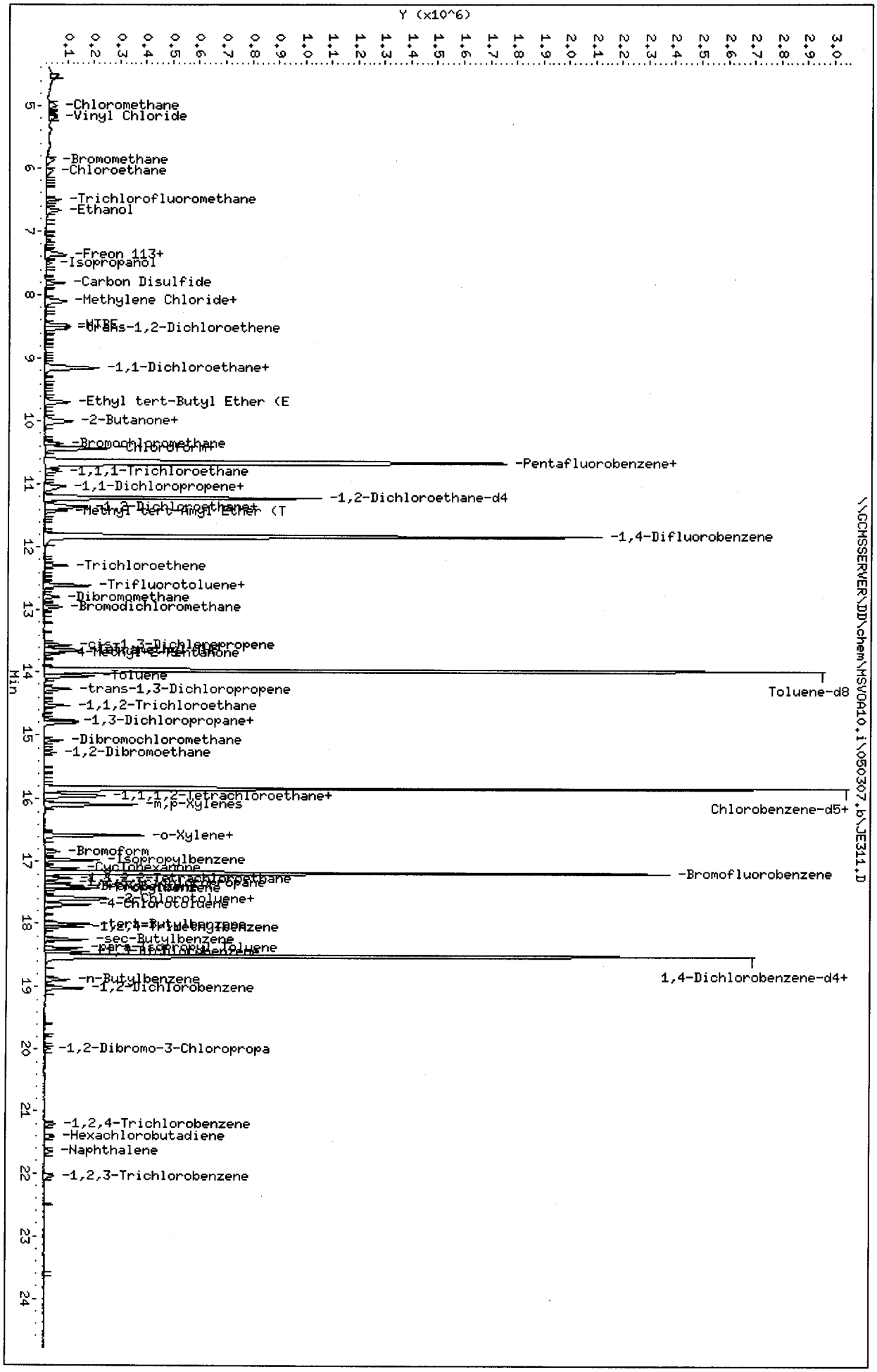
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	896547	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	31850	2.00000	2.1208
81 n-Butylbenzene	91	18.895	18.895	(1.020)	22218	2.00000	1.6087(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	30243	2.00000	2.0833
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	3790	2.00000	2.1318
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	8276	2.00000	1.6536(M)
85 Hexachlorobutadiene	225	21.419	21.419	(1.157)	3542	2.00000	1.6348
86 Naphthalene	128	21.656	21.656	(1.169)	18914	2.00000	1.6799
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	7831	2.00000	1.8252

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Date : 03-MAY-2007 15:13
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0025/500,S6072,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:13 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0025/500,S6072,0.005/500
Misc Info : S5938,0.005/500, 5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:07 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:13 Cal File: JE311.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.426)	60142	5.00000	6.0582(M)
2 Chloromethane	50	5.003	5.003	(0.470)	80156	5.00000	5.6144
3 Vinyl Chloride	62	5.180	5.180	(0.487)	58511	5.00000	5.4864
4 Bromomethane	94	5.861	5.861	(0.551)	41404	5.00000	5.3832(M)
5 Chloroethane	64	6.038	6.038	(0.567)	42093	5.00000	5.5621
6 Trichlorofluoromethane	101	6.501	6.501	(0.611)	52185	5.00000	5.4741
7 Ethanol	45	6.679	6.679	(0.628)	86031	500.000	518.6896(M)
8 Freon 113	101	7.339	7.339	(0.690)	24887	5.00000	4.8918
9 Acetone	43	7.369	7.369	(0.692)	27028	5.00000	6.0928
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	33704	5.00000	5.0148
11 Isopropanol	45	7.497	7.497	(0.704)	35324	50.0000	52.0538
12 Carbon Disulfide	76	7.813	7.813	(0.734)	138901	5.00000	4.8916
13 Methylene Chloride	84	8.089	8.089	(0.760)	50214	5.00000	5.3110
14 tert-Butyl Alcohol (TBA)	59	8.108	8.108	(0.762)	42177	50.0000	52.6913
15 MTBE	73	8.483	8.483	(0.797)	114414	5.00000	5.1133
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	42339	5.00000	4.9573
18 Vinyl Acetate	43	9.124	9.124	(0.857)	101080	5.00000	4.9847(M)
19 1,1-Dichloroethane	63	9.144	9.144	(0.859)	83695	5.00000	5.2108
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	195814	5.00000	5.0297
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.911)	115251	5.00000	5.0869
22 2-Butanone	43	9.942	9.942	(0.934)	29234	5.00000	4.9546
23 cis-1,2-Dichloroethene	96	10.001	10.001	(0.940)	44459	5.00000	4.7586

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.943)	42729	5.00000	5.1031
	25 Bromochloromethane	128	10.366	10.366	(0.974)	22695	5.00000	5.0886
	26 Chloroform	83	10.425	10.425	(0.980)	69881	5.00000	5.1078
	27 Tetrahydrofuran	42	10.445	10.445	(0.981)	173265	50.0000	54.5791
*	28 Pentafluorobenzene	168	10.642	10.642	(1.000)	1404065	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.003)	773811	50.0000	48.9725
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.015)	44056	5.00000	4.9196
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	49607	5.00000	4.9696
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	32728	5.00000	4.9765
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	887080	50.0000	50.3104
	34 1,2-Dichloroethane	62	11.332	11.332	(0.958)	56295	5.00000	4.9448
	35 Benzene	78	11.362	11.362	(0.961)	165120	5.00000	5.1631
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	82681	5.00000	4.9853
*	37 1,4-Difluorobenzene	114	11.825	11.825	(1.000)	2277963	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	40795	5.00000	5.0816
	39 Trifluorotoluene	146	12.604	12.604	(1.066)	50157	5.00000	4.9907
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	50403	5.00000	5.0580
	41 Dibromomethane	93	12.792	12.792	(1.082)	29674	5.00000	5.0657
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	54991	5.00000	5.0497
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	74358	5.00000	5.2640
	45 Tetramethyl THF	43	13.640	13.640	(1.153)	124119	5.00000	5.1019
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	64514	5.00000	4.8503
	47 Toluene-d8	98	13.965	13.965	(1.181)	2501333	50.0000	50.7236
	48 Toluene	92	14.063	14.063	(1.189)	97478	5.00000	5.3761
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	63333	5.00000	5.0951(M)
	50 1,1,2-Trichloroethane	85	14.527	14.527	(1.228)	22727	5.00000	5.0804
	51 1,3-Dichloropropane	76	14.763	14.763	(0.933)	72677	5.00000	5.2249
	52 2-Hexanone	43	14.793	14.793	(0.935)	42055	5.00000	5.2284
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	35679	5.00000	5.3915
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	44728	5.00000	5.1227
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	43475	5.00000	5.2132
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	1961186	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	108962	5.00000	5.3127
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	36766	5.00000	5.2960
	59 Ethylbenzene	91	15.956	15.956	(1.008)	181453	5.00000	5.4874
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	134518	10.0000	11.1448
	61 o-Xylene	106	16.578	16.578	(1.047)	68308	5.00000	5.5683
	62 Styrene	104	16.578	16.578	(1.047)	118195	5.00000	5.5170
	63 Bromoform	173	16.834	16.834	(1.064)	32477	5.00000	5.1257
	64 Isopropylbenzene	105	16.972	16.972	(0.916)	156395	5.00000	5.6433
	65 Cyclohexanone	55	17.110	17.110	(0.924)	69537	50.0000	50.9016
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1024582	50.0000	50.8951
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.932)	57991	5.00000	5.2581
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	54968	5.00000	5.2716
	69 Bromobenzene	156	17.396	17.396	(0.939)	47690	5.00000	5.5754
	70 Propylbenzene	91	17.435	17.435	(0.941)	189282	5.00000	5.4884
	71 2-Chlorotoluene	91	17.583	17.583	(0.949)	140027	5.00000	5.6431
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.950)	112043	5.00000	5.4197
	73 4-Chlorotoluene	91	17.692	17.692	(0.955)	125176	5.00000	5.3441
	74 tert-Butylbenzene	119	18.007	18.007	(0.972)	100747	5.00000	5.4039
	75 1,2,4-Trimethylbenzene	105	18.056	18.056	(0.975)	99183	5.00000	5.3271
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	138952	5.00000	5.2510
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.993)	97726	5.00000	5.1587
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.996)	82601	5.00000	5.5738

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

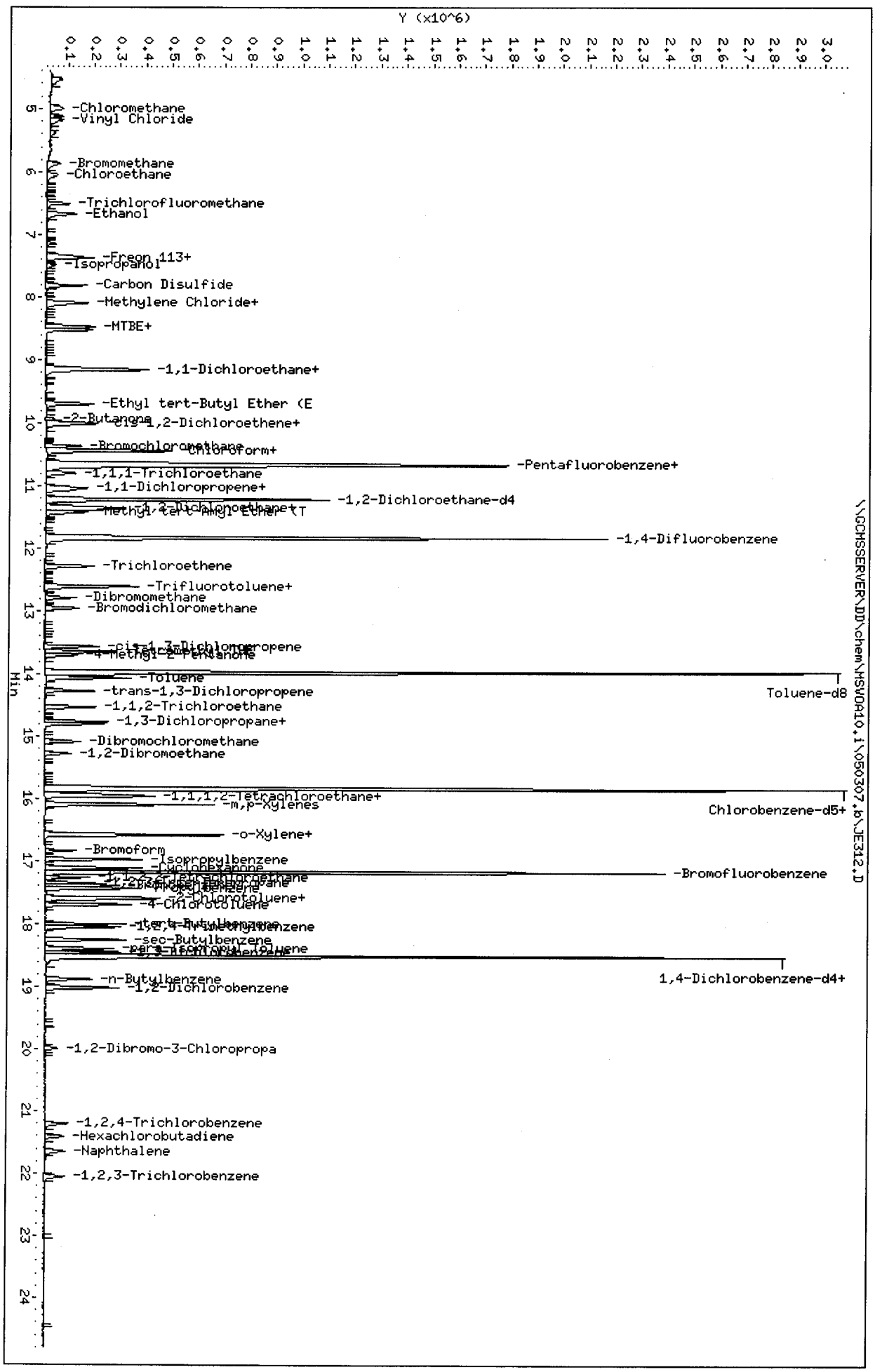
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.520	18.520	(1.000)	905730	50.0000	
80 1,4-Dichlorobenzene	146	18.540	18.540	(1.001)	81814	5.00000	5.3927
81 n-Butylbenzene	91	18.885	18.885	(1.020)	71286	5.00000	5.1093
82 1,2-Dichlorobenzene	146	19.023	19.023	(1.027)	80088	5.00000	5.4610
83 1,2-Dibromo-3-Chloropropane	75	19.999	19.999	(1.080)	8698	5.00000	4.8429
84 1,2,4-Trichlorobenzene	180	21.211	21.211	(1.145)	25865	5.00000	5.1158
85 Hexachlorobutadiene	225	21.418	21.418	(1.157)	11692	5.00000	5.3419
86 Naphthalene	128	21.655	21.655	(1.169)	49271	5.00000	4.3319(M)
87 1,2,3-Trichlorobenzene	180	22.059	22.059	(1.191)	21699	5.00000	5.0063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Date : 03-MAY-2007 15:46
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/100,S6072,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:46 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/100,S6072,0.002/100
Misc Info : S5938,0.002/100, 10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:08 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:46 Cal File: JE312.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	89915	10.0000	8.9778
2 Chloromethane	50	4.985	4.985	(0.468)	137830	10.0000	9.5694
3 Vinyl Chloride	62	5.182	5.182	(0.487)	103548	10.0000	9.6241
4 Bromomethane	94	5.872	5.872	(0.552)	71127	10.0000	9.1665
5 Chloroethane	64	6.049	6.049	(0.568)	76838	10.0000	10.0641
6 Trichlorofluoromethane	101	6.503	6.503	(0.611)	92032	10.0000	9.5691
7 Ethanol	45	6.671	6.671	(0.627)	161047	1000.00	962.4395(M)
8 Freon 113	101	7.341	7.341	(0.690)	55009	10.0000	10.7176
9 Acetone	43	7.371	7.371	(0.692)	53227	10.0000	11.8934
10 1,1-Dichloroethene	96	7.371	7.371	(0.692)	68395	10.0000	10.0872
11 Isopropanol	45	7.489	7.489	(0.704)	66367	100.000	96.9400
12 Carbon Disulfide	76	7.814	7.814	(0.734)	272891	10.0000	9.5260
13 Methylene Chloride	84	8.090	8.090	(0.760)	94781	10.0000	9.9366
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	79384	100.000	98.3025
15 MTBE	73	8.475	8.475	(0.796)	217419	10.0000	9.6314
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	84302	10.0000	9.7839
18 Vinyl Acetate	43	9.145	9.145	(0.859)	150833	10.0000	7.3729(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	160593	10.0000	9.9107
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	389154	10.0000	9.9081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	228996	10.0000	10.0186
22 2-Butanone	43	9.944	9.944	(0.934)	60306	10.0000	10.1310
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	90961	10.0000	9.6504

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	77576	10.0000	9.1836
25 Bromochloromethane	128	10.368	10.368	(0.974)	45844	10.0000	10.1888
26 Chloroform	83	10.427	10.427	(0.980)	139559	10.0000	10.1113
27 Tetrahydrofuran	42	10.437	10.437	(0.981)	332722	100.000	103.8881
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1416508	50.0000	
29 Dibromofluoromethane	113	10.673	10.673	(1.003)	810949	50.0000	50.8721
30 1,1,1-Trichloroethane	97	10.802	10.802	(1.015)	90225	10.0000	9.9867
31 1,1-Dichloropropene	75	11.028	11.028	(0.932)	97202	10.0000	9.5272
32 Carbon Tetrachloride	117	11.078	11.078	(0.937)	65802	10.0000	9.7893
33 1,2-Dichloroethane-d4	65	11.216	11.216	(0.948)	916714	50.0000	50.8670
34 1,2-Dichloroethane	62	11.334	11.334	(0.958)	117103	10.0000	10.0637
35 Benzene	78	11.364	11.364	(0.961)	325224	10.0000	9.9494
36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.966)	176886	10.0000	10.4349
* 37 1,4-Difluorobenzene	114	11.827	11.827	(1.000)	2328303	50.0000	
38 Trichloroethene	95	12.290	12.290	(1.039)	82390	10.0000	10.0411
39 Trifluorotoluene	146	12.606	12.606	(1.066)	100609	10.0000	9.7943
40 1,2-Dichloropropane	63	12.606	12.606	(1.066)	102462	10.0000	10.0600
41 Dibromomethane	93	12.783	12.783	(1.081)	59720	10.0000	9.9744
42 Bromodichloromethane	83	12.951	12.951	(1.095)	109536	10.0000	9.8410
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	143043	10.0000	9.9076
45 Tetramethyl THF	43	13.641	13.641	(1.153)	252528	10.0000	10.1558
46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	121435	10.0000	8.9323
47 Toluene-d8	98	13.966	13.966	(1.181)	2530522	50.0000	50.2061
48 Toluene	92	14.065	14.065	(1.189)	182138	10.0000	9.8281
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.207)	126263	10.0000	9.9382
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.228)	45657	10.0000	9.9857
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	141062	10.0000	10.0983
52 2-Hexanone	43	14.785	14.785	(0.934)	85327	10.0000	10.5632
53 Tetrachloroethene	166	14.805	14.805	(0.935)	65859	10.0000	9.9099
54 Dibromochloromethane	129	15.090	15.090	(0.953)	89381	10.0000	10.1936
55 1,2-Dibromoethane	107	15.278	15.278	(1.292)	86172	10.0000	10.1098
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	1969525	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	204176	10.0000	9.9130
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69320	10.0000	9.9431
59 Ethylbenzene	91	15.958	15.958	(1.008)	330342	10.0000	9.9478
60 m,p-Xylenes	106	16.086	16.086	(1.016)	241168	20.0000	19.8962
61 o-Xylene	106	16.569	16.569	(1.047)	123646	10.0000	10.0367
62 Styrene	104	16.579	16.579	(1.047)	214488	10.0000	9.9694
63 Bromoform	173	16.836	16.836	(1.064)	63442	10.0000	9.9704
64 Isopropylbenzene	105	16.974	16.974	(0.917)	281407	10.0000	10.0269
65 Cyclohexanone	55	17.112	17.112	(0.924)	192898	100.000	139.4326
66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1032818	50.0000	50.6609
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	106355	10.0000	9.5225
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	104123	10.0000	9.8606
69 Bromobenzene	156	17.397	17.397	(0.940)	87921	10.0000	10.1500
70 Propylbenzene	91	17.437	17.437	(0.942)	340232	10.0000	9.7417
71 2-Chlorotoluene	91	17.585	17.585	(0.950)	247340	10.0000	9.8428
72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	205208	10.0000	9.8018
73 4-Chlorotoluene	91	17.693	17.693	(0.956)	233535	10.0000	9.8452
74 tert-Butylbenzene	119	18.009	18.009	(0.973)	182493	10.0000	9.6660
75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	184412	10.0000	9.7805
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	257624	10.0000	9.6135
77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	179820	10.0000	9.3732
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	148256	10.0000	9.8787

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

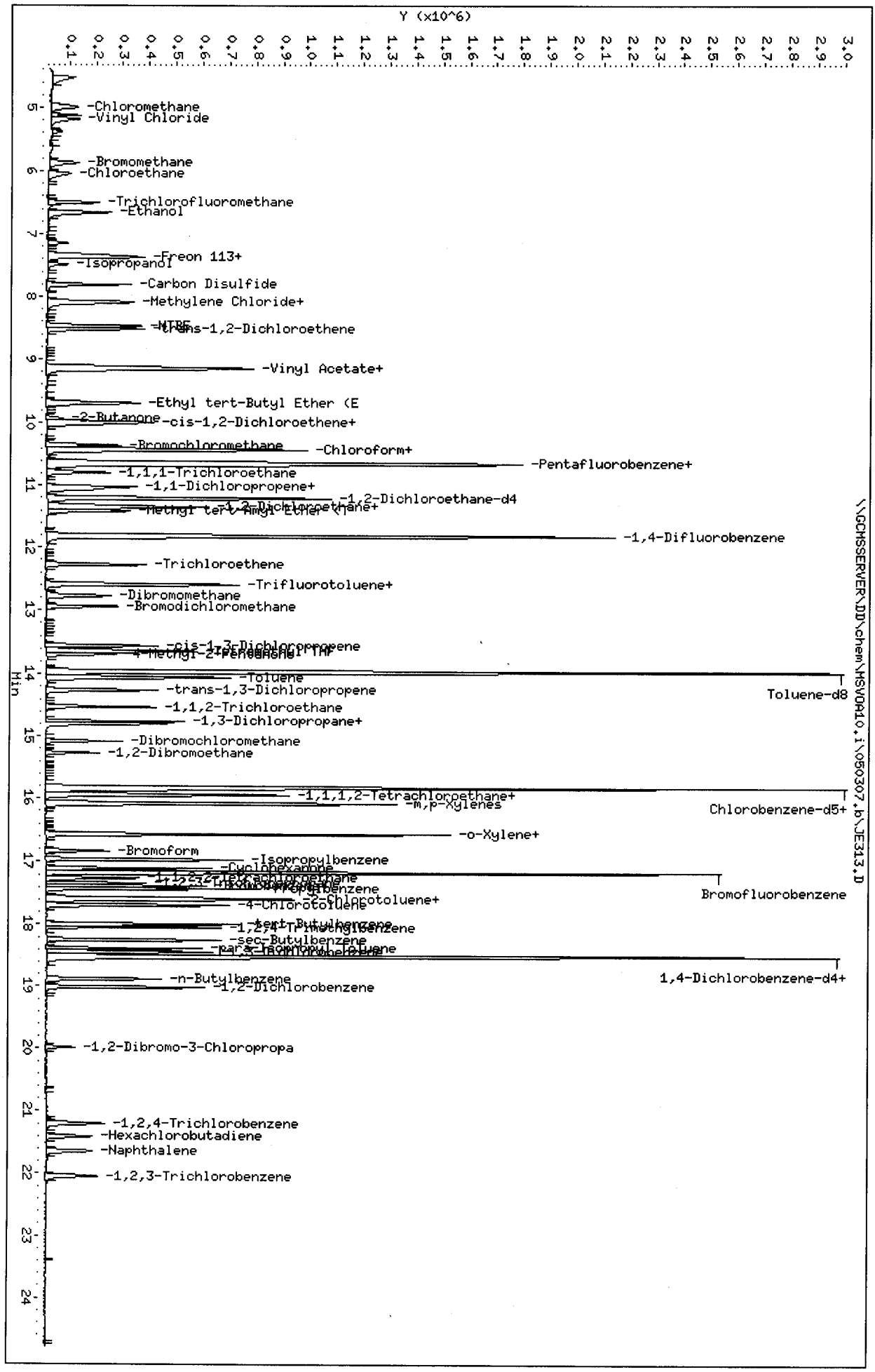
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	917230	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	149173	10.0000	9.7093
81 n-Butylbenzene	91	18.886	18.886	(1.020)	137283	10.0000	9.7163
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	151600	10.0000	10.2077
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	18722	10.0000	10.2934
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	48031	10.0000	9.3808
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	21706	10.0000	9.7928
86 Naphthalene	128	21.647	21.647	(1.169)	104760	10.0000	9.0951(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	45414	10.0000	10.3465

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Date : 03-MAY-2007 16:19
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.002/100,S6072,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:19 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.002/100,S6072,0.004/100
Misc Info : S5938,0.004/100, 20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:09 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:19 Cal File: JE313.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	186996	20.0000	18.5814
2 Chloromethane	50	4.994	4.994	(0.470)	283247	20.0000	19.5710
3 Vinyl Chloride	62	5.181	5.181	(0.487)	206595	20.0000	19.1092
4 Bromomethane	94	5.872	5.872	(0.552)	153230	20.0000	19.6527
5 Chloroethane	64	6.039	6.039	(0.568)	153527	20.0000	20.0120
6 Trichlorofluoromethane	101	6.503	6.503	(0.612)	186970	20.0000	19.3469
7 Ethanol	45	6.660	6.660	(0.626)	320064	2000.00	1903.5449
8 Freon 113	101	7.331	7.331	(0.689)	120374	20.0000	23.3401
9 Acetone	43	7.360	7.360	(0.692)	90282	20.0000	20.0762
10 1,1-Dichloroethene	96	7.370	7.370	(0.693)	144580	20.0000	21.2207
11 Isopropanol	45	7.479	7.479	(0.703)	138719	200.000	201.6472
12 Carbon Disulfide	76	7.814	7.814	(0.735)	576816	20.0000	20.0385
13 Methylene Chloride	84	8.080	8.080	(0.760)	188113	20.0000	19.6265
14 tert-Butyl Alcohol (TBA)	59	8.100	8.100	(0.762)	155391	200.000	191.4976
15 MTBE	73	8.474	8.474	(0.797)	439195	20.0000	19.3623
16 trans-1,2-Dichloroethene	96	8.514	8.514	(0.801)	171269	20.0000	19.7816
18 Vinyl Acetate	43	9.115	9.115	(0.857)	392386	20.0000	19.0882
19 1,1-Dichloroethane	63	9.135	9.135	(0.859)	324682	20.0000	19.9408
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.861)	781752	20.0000	19.8081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.911)	446941	20.0000	19.4597
22 2-Butanone	43	9.934	9.934	(0.934)	116262	20.0000	19.4373
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.940)	182121	20.0000	19.2290

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

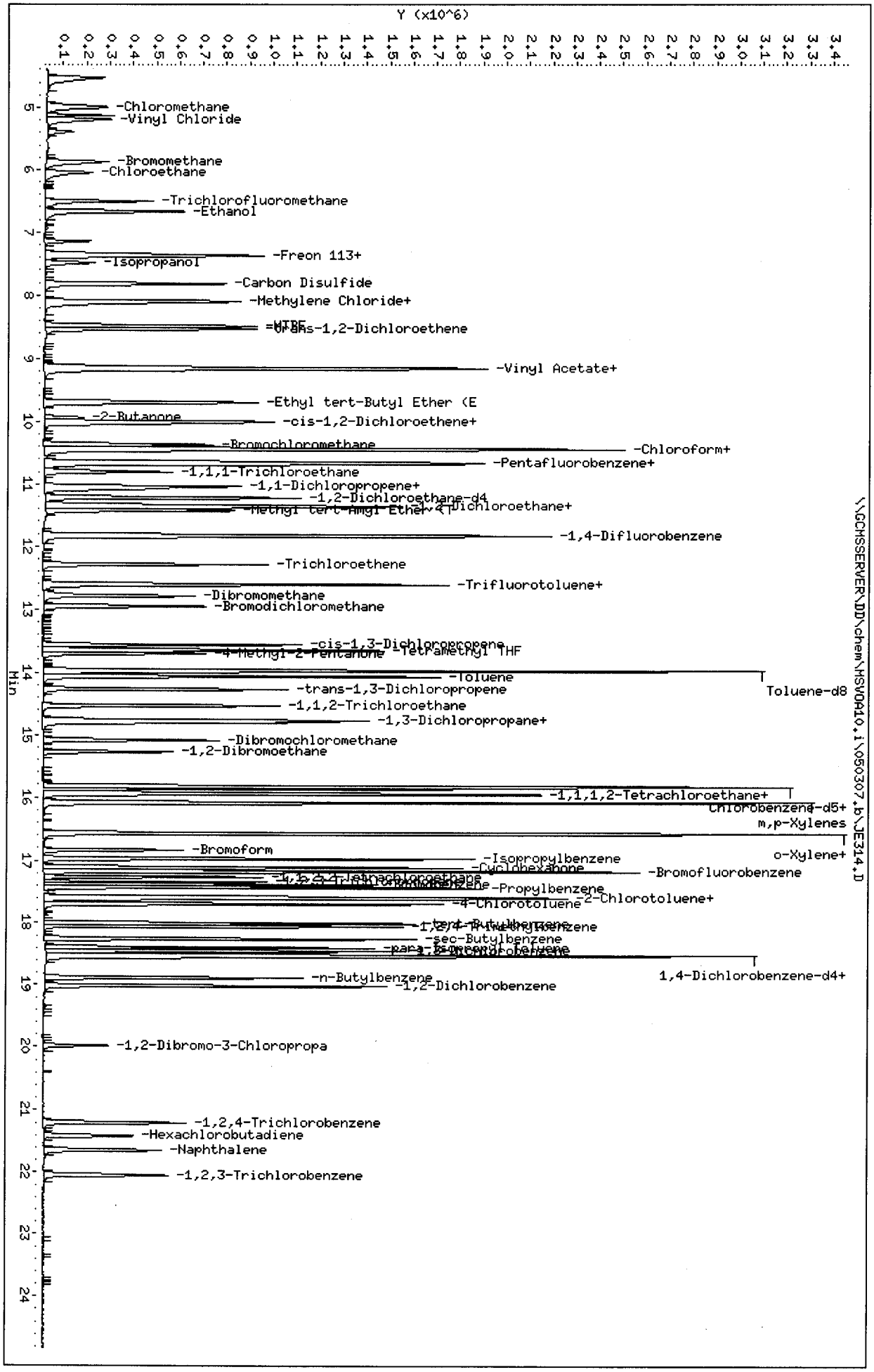
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.022	10.022	(0.943)	158641	20.0000	18.6899
25 Bromochloromethane	128	10.358	10.358	(0.974)	84899	20.0000	18.7780
26 Chloroform	83	10.417	10.417	(0.980)	275479	20.0000	19.8629
27 Tetrahydrofuran	42	10.427	10.427	(0.981)	652109	200.000	202.6329
* 28 Pentafluorobenzene	168	10.634	10.634	(1.000)	1423356	50.0000	
29 Dibromofluoromethane	113	10.663	10.663	(1.003)	797583	50.0000	49.7929
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.015)	180700	20.0000	19.9049
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	205746	20.0000	20.3188
32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	142086	20.0000	21.2982
33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	899776	50.0000	50.3052
34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	232643	20.0000	20.1446
35 Benzene	78	11.353	11.353	(0.961)	652382	20.0000	20.1092
36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	331747	20.0000	19.7187
* 37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2310806	50.0000	
38 Trichloroethene	95	12.280	12.280	(1.039)	166052	20.0000	20.3905
39 Trifluorotoluene	146	12.596	12.596	(1.066)	213223	20.0000	20.9145
40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	204108	20.0000	20.1916
41 Dibromomethane	93	12.783	12.783	(1.082)	119315	20.0000	20.0789
42 Bromodichloromethane	83	12.951	12.951	(1.096)	218625	20.0000	19.7906
44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	285542	20.0000	19.9272
45 Tetramethyl THF	43	13.641	13.641	(1.154)	498432	20.0000	20.1970
46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	279568	20.0000	20.7197
47 Toluene-d8	98	13.966	13.966	(1.182)	2522015	50.0000	50.4162
48 Toluene	92	14.055	14.055	(1.189)	374923	20.0000	20.3839
49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	255546	20.0000	20.2664
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	90788	20.0000	20.0067
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	284194	20.0000	20.1328
52 2-Hexanone	43	14.775	14.775	(0.934)	157898	20.0000	19.3436
53 Tetrachloroethene	166	14.804	14.804	(0.936)	137319	20.0000	20.4473
54 Dibromochloromethane	129	15.080	15.080	(0.953)	175743	20.0000	19.8340
55 1,2-Dibromoethane	107	15.268	15.268	(1.292)	173857	20.0000	20.5517
* 56 Chlorobenzene-d5	117	15.820	15.820	(1.000)	1990271	50.0000	
57 Chlorobenzene	112	15.859	15.859	(1.002)	416244	20.0000	19.9985
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.007)	140426	20.0000	19.9325
59 Ethylbenzene	91	15.948	15.948	(1.008)	681994	20.0000	20.3232
60 m,p-Xylenes	106	16.086	16.086	(1.017)	502784	40.0000	41.0470
61 o-Xylene	106	16.569	16.569	(1.047)	254094	20.0000	20.4106
62 Styrene	104	16.569	16.569	(1.047)	449841	20.0000	20.6906
63 Bromoform	173	16.835	16.835	(1.064)	126201	20.0000	19.6268
64 Isopropylbenzene	105	16.973	16.973	(0.917)	588609	20.0000	20.4755
65 Cyclohexanone	55	17.111	17.111	(0.924)	326970	200.000	230.7389
66 Bromofluorobenzene	95	17.170	17.170	(0.928)	1032455	50.0000	49.4421
67 1,1,2,2-Tetrachloroethane	83	17.259	17.259	(0.932)	226191	20.0000	19.7718
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	200446	20.0000	18.5325
69 Bromobenzene	156	17.387	17.387	(0.939)	177320	20.0000	19.9852
70 Propylbenzene	91	17.427	17.427	(0.941)	740774	20.0000	20.7072
71 2-Chlorotoluene	91	17.575	17.575	(0.949)	524562	20.0000	20.3798
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	444224	20.0000	20.7154
73 4-Chlorotoluene	91	17.693	17.693	(0.956)	481709	20.0000	19.8261
74 tert-Butylbenzene	119	17.999	17.999	(0.972)	406505	20.0000	21.0205
75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	401618	20.0000	20.7952
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	583693	20.0000	21.2647
77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	416853	20.0000	21.2134
78 1,3-Dichlorobenzene	146	18.442	18.442	(0.996)	313184	20.0000	20.3735

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	939511	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	317560	20.0000	20.1791
81 n-Butylbenzene	91	18.876	18.876	(1.020)	328911	20.0000	22.7269
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	310012	20.0000	20.3791
83 1,2-Dibromo-3-Chloropropane	75	19.980	19.980	(1.079)	36842	20.0000	19.7754
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	112830	20.0000	21.5140
85 Hexachlorobutadiene	225	21.410	21.410	(1.157)	50968	20.0000	22.4492
86 Naphthalene	128	21.646	21.646	(1.169)	233435	20.0000	19.7859
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	105637	20.0000	23.4961

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Date : 03-MAY-2007 16:51
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.005/100,S6072,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:51 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.005/100,S6072,0.01/100
Misc Info : S5938,0.01/100, 50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:11 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:51 Cal File: JE314.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	504201	50.0000	48.1788
2 Chloromethane	50	4.993	4.993	(0.469)	707558	50.0000	47.0128
3 Vinyl Chloride	62	5.190	5.190	(0.487)	546211	50.0000	48.5838
4 Bromomethane	94	5.871	5.871	(0.551)	396118	50.0000	48.8551
5 Chloroethane	64	6.048	6.048	(0.568)	387910	50.0000	48.6232
6 Trichlorofluoromethane	101	6.511	6.511	(0.611)	500419	50.0000	49.7944
7 Ethanol	45	6.669	6.669	(0.626)	858506	5000.00	4909.9409
8 Freon 113	101	7.340	7.340	(0.689)	270265	50.0000	50.3927
9 Acetone	43	7.369	7.369	(0.692)	236787	50.0000	50.6344
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	349227	50.0000	49.2909
11 Isopropanol	45	7.488	7.488	(0.703)	363163	500.000	507.6502
12 Carbon Disulfide	76	7.813	7.813	(0.733)	1472141	50.0000	49.1794
13 Methylene Chloride	84	8.089	8.089	(0.759)	487837	50.0000	48.9448
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	415778	500.000	492.7261
15 MTBE	73	8.483	8.483	(0.796)	1121415	50.0000	47.5416
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	418054	50.0000	46.4324
18 Vinyl Acetate	43	9.124	9.124	(0.857)	662519	50.0000	30.9925
19 1,1-Dichloroethane	63	9.144	9.144	(0.858)	815210	50.0000	48.1461
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	1986230	50.0000	48.3962
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.910)	1163899	50.0000	48.7313
22 2-Butanone	43	9.933	9.933	(0.932)	317573	50.0000	51.0561
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	461181	50.0000	46.8246

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

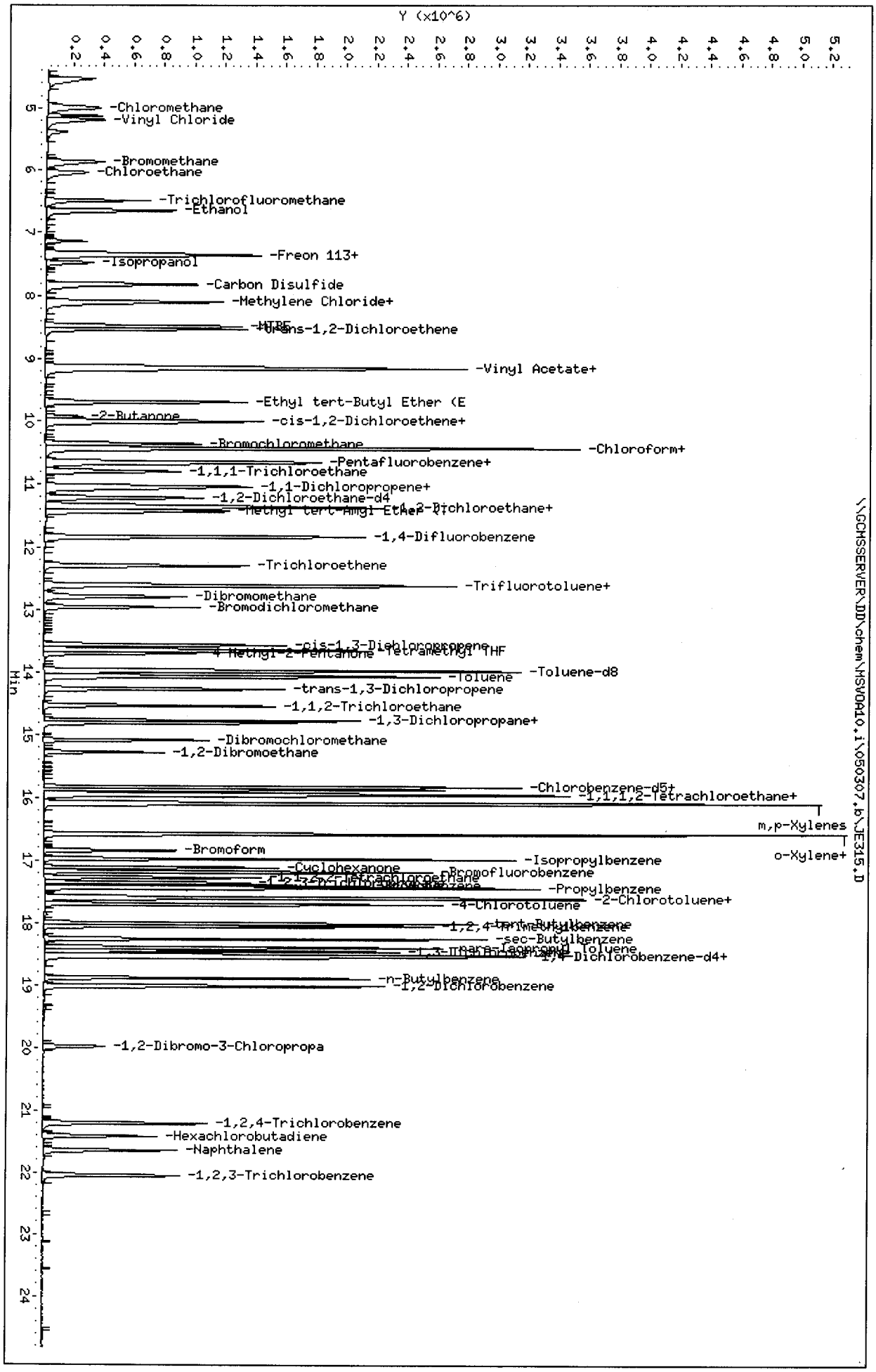
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.942)	383785	50.0000	43.4798
	25 Bromochloromethane	128	10.366	10.366	(0.973)	244827	50.0000	52.0730
	26 Chloroform	83	10.426	10.426	(0.979)	695749	50.0000	48.2407
	27 Tetrahydrofuran	42	10.435	10.435	(0.980)	1649055	500.000	492.7557
*	28 Pentafluorobenzene	168	10.652	10.652	(1.000)	1480154	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.002)	827867	50.0000	49.7002
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.014)	451274	50.0000	47.8024
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	497318	50.0000	46.4788
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	337901	50.0000	47.9331
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	942516	50.0000	49.8679
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	606711	50.0000	49.7170
	35 Benzene	78	11.362	11.362	(0.961)	1654107	50.0000	48.2516
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	871811	50.0000	49.0398
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2441798	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	415910	50.0000	48.3322
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	501243	50.0000	46.5283
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	523637	50.0000	49.0224
	41 Dibromomethane	93	12.792	12.792	(1.082)	312416	50.0000	49.7546
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	567978	50.0000	48.6570
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	737707	50.0000	48.7209
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	1290754	50.0000	49.4971
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	700920	50.0000	49.1609
	47 Toluene-d8	98	13.975	13.975	(1.182)	2607428	50.0000	49.3274
	48 Toluene	92	14.064	14.064	(1.189)	938763	50.0000	48.3010
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	658296	50.0000	49.4064
	50 1,1,2-Trichloroethane	85	14.537	14.537	(1.229)	232911	50.0000	48.5725
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	737516	50.0000	50.7404
	52 2-Hexanone	43	14.783	14.783	(0.934)	419054	50.0000	49.8565
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	322443	50.0000	46.6285
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	463746	50.0000	50.8282
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	456727	50.0000	51.0935
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	2049371	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	1037125	50.0000	48.3919
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	356863	50.0000	49.1936
	59 Ethylbenzene	91	15.957	15.957	(1.008)	1616160	50.0000	46.7723
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	1194176	100.000	94.6805
	61 o-Xylene	106	16.568	16.568	(1.047)	602548	50.0000	47.0052
	62 Styrene	104	16.578	16.578	(1.047)	1081235	50.0000	48.2978
	63 Bromoform	173	16.844	16.844	(1.064)	333182	50.0000	50.3224
	64 Isopropylbenzene	105	16.972	16.972	(0.917)	1372436	50.0000	45.9643
	65 Cyclohexanone	55	17.110	17.110	(0.924)	887316	500.000	602.8524
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1059615	50.0000	48.8533
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.933)	553835	50.0000	46.6093
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	525205	50.0000	46.7504
	69 Bromobenzene	156	17.396	17.396	(0.940)	454747	50.0000	49.3446
	70 Propylbenzene	91	17.436	17.436	(0.942)	1733700	50.0000	46.6585
	71 2-Chlorotoluene	91	17.583	17.583	(0.950)	1239951	50.0000	46.3796
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.951)	1049707	50.0000	47.1280
	73 4-Chlorotoluene	91	17.692	17.692	(0.956)	1175242	50.0000	46.5693
	74 tert-Butylbenzene	119	18.007	18.007	(0.973)	909810	50.0000	45.2949
	75 1,2,4-Trimethylbenzene	105	18.047	18.047	(0.975)	1020238	50.0000	50.8594
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	1337856	50.0000	46.9250
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.994)	981456	50.0000	48.0860
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.997)	766485	50.0000	48.0055

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.510	18.510	(1.000)	975848	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	776019	50.0000	47.4755
81 n-Butylbenzene	91	18.885	18.885	(1.020)	786615	50.0000	52.3291
82 1,2-Dichlorobenzene	146	19.013	19.013	(1.027)	772624	50.0000	48.8985
83 1,2-Dibromo-3-Chloropropane	75	19.979	19.979	(1.079)	96383	50.0000	49.8085
84 1,2,4-Trichlorobenzene	180	21.202	21.202	(1.145)	306325	50.0000	56.2341
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	119376	50.0000	50.6221
86 Naphthalene	128	21.645	21.645	(1.169)	671401	50.0000	54.7888
87 1,2,3-Trichlorobenzene	180	22.050	22.050	(1.191)	294335	50.0000	63.0293

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Date : 03-MAY-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0075/100,S6072,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:24 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0075/100,S6072,0.015/100
Misc Info : S5938,0.015/100, 75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:12 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:24 Cal File: JE315.D
Als bottle: 15 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.532	4.532	(0.425)	665322	75.0000	65.7168
2 Chloromethane	50	4.995	4.995	(0.469)	974450	75.0000	66.9277
3 Vinyl Chloride	62	5.183	5.183	(0.486)	760407	75.0000	69.9148
4 Bromomethane	94	5.873	5.873	(0.551)	590747	75.0000	75.3145
5 Chloroethane	64	6.041	6.041	(0.567)	567112	75.0000	73.4808
6 Trichlorofluoromethane	101	6.504	6.504	(0.610)	715607	75.0000	73.6061
7 Ethanol	45	6.662	6.662	(0.625)	1183509	7500.00	6996.7488
8 Freon 113	101	7.342	7.342	(0.689)	531594	75.0000	102.4589
9 Acetone	43	7.372	7.372	(0.692)	254933	75.0000	56.3515
10 1,1-Dichloroethene	96	7.372	7.372	(0.692)	535637	75.0000	78.1486
11 Isopropanol	45	7.490	7.490	(0.703)	519306	750.000	750.3745
12 Carbon Disulfide	76	7.825	7.825	(0.734)	2235289	75.0000	77.1898
13 Methylene Chloride	84	8.091	8.091	(0.759)	693668	75.0000	71.9408
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.760)	589656	750.000	722.3283
15 MTBE	73	8.476	8.476	(0.795)	1598518	75.0000	70.0514
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.800)	603947	75.0000	69.3393
18 Vinyl Acetate	43	9.117	9.117	(0.856)	2195548	75.0000	106.1678
19 1,1-Dichloroethane	63	9.146	9.146	(0.858)	1180046	75.0000	72.0414
20 Isopropyl Ether (DIPE)	45	9.166	9.166	(0.860)	2786954	75.0000	70.1945
21 Ethyl tert-Butyl Ether (ETBE)	59	9.698	9.698	(0.910)	1673445	75.0000	72.4262
22 2-Butanone	43	9.935	9.935	(0.932)	432725	75.0000	71.9131
23 cis-1,2-Dichloroethene	96	10.004	10.004	(0.939)	654240	75.0000	68.6644

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

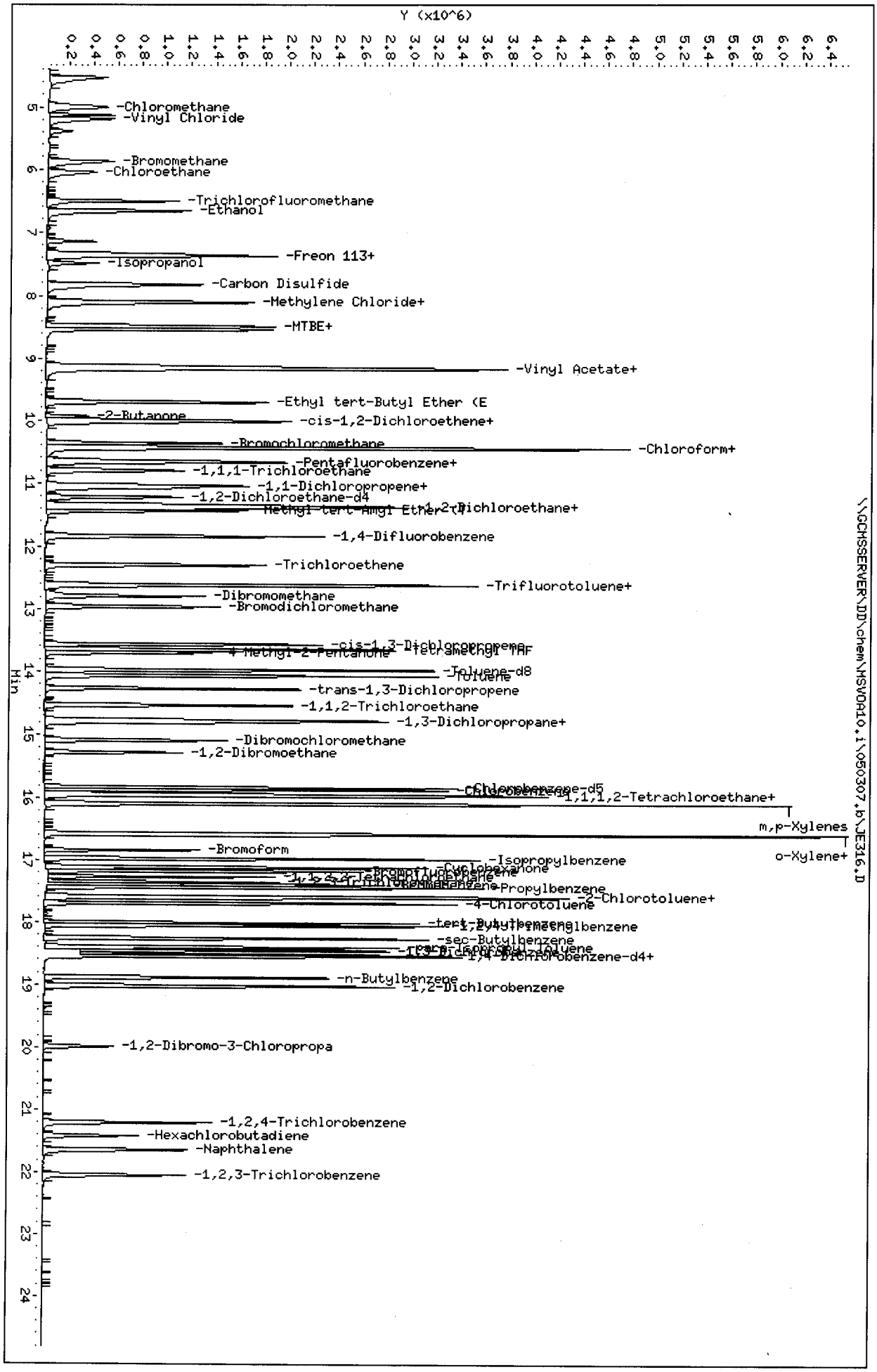
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.034	10.034	(0.942)	674821	75.0000	79.0278
	25 Bromochloromethane	128	10.369	10.369	(0.973)	346491	75.0000	76.1793
	26 Chloroform	83	10.428	10.428	(0.979)	992915	75.0000	71.1648
	27 Tetrahydrofuran	42	10.438	10.438	(0.980)	2326615	750.000	718.6425
*	28 Pentafluorobenzene	168	10.655	10.655	(1.000)	1431908	50.0000	
	29 Dibromofluoromethane	113	10.674	10.674	(1.002)	794941	50.0000	49.3315
	30 1,1,1-Trichloroethane	97	10.803	10.803	(1.014)	712263	75.0000	77.9906
	31 1,1-Dichloropropene	75	11.039	11.039	(0.933)	811214	75.0000	79.0893
	32 Carbon Tetrachloride	117	11.079	11.079	(0.936)	581089	75.0000	85.9905
	33 1,2-Dichloroethane-d4	65	11.217	11.217	(0.948)	887578	50.0000	48.9892
	34 1,2-Dichloroethane	62	11.335	11.335	(0.958)	859136	75.0000	73.4424
	35 Benzene	78	11.365	11.365	(0.960)	2438748	75.0000	74.2124
	36 Methyl tert-Amyl Ether (TAME)	73	11.424	11.424	(0.965)	1287513	75.0000	75.5509
*	37 1,4-Difluorobenzene	114	11.838	11.838	(1.000)	2340712	50.0000	
	38 Trichloroethene	95	12.291	12.291	(1.038)	601330	75.0000	72.8975
	39 Trifluorotoluene	146	12.607	12.607	(1.065)	880330	75.0000	85.2464
	40 1,2-Dichloropropane	63	12.617	12.617	(1.066)	735908	75.0000	71.8704
	41 Dibromomethane	93	12.794	12.794	(1.081)	446568	75.0000	74.1907
	42 Bromodichloromethane	83	12.962	12.962	(1.095)	805593	75.0000	71.9932
	44 cis-1,3-Dichloropropene	75	13.563	13.563	(1.146)	1084077	75.0000	74.6885
	45 Tetramethyl THF	43	13.652	13.652	(1.153)	1835005	75.0000	73.4067
	46 4-Methyl-2-Pentanone	43	13.701	13.701	(1.157)	1024558	75.0000	74.9635
	47 Toluene-d8	98	13.977	13.977	(1.181)	2540553	50.0000	50.1379
	48 Toluene	92	14.066	14.066	(1.188)	1404739	75.0000	75.3976
	49 trans-1,3-Dichloropropene	75	14.273	14.273	(1.206)	962509	75.0000	75.3579
	50 1,1,2-Trichloroethane	85	14.539	14.539	(1.228)	341139	75.0000	74.2154
	51 1,3-Dichloropropane	76	14.776	14.776	(0.933)	1041947	75.0000	73.1952
	52 2-Hexanone	43	14.786	14.786	(0.934)	620581	75.0000	75.3885
	53 Tetrachloroethene	166	14.815	14.815	(0.936)	548973	75.0000	81.0595
	54 Dibromochloromethane	129	15.091	15.091	(0.953)	666030	75.0000	74.5371
	55 1,2-Dibromoethane	107	15.279	15.279	(1.291)	656303	75.0000	76.5906
*	56 Chlorobenzene-d5	117	15.831	15.831	(1.000)	2007086	50.0000	
	57 Chlorobenzene	112	15.870	15.870	(1.002)	1539594	75.0000	73.3504
	58 1,1,1,2-Tetrachloroethane	131	15.939	15.939	(1.007)	529692	75.0000	74.5565
	59 Ethylbenzene	91	15.959	15.959	(1.008)	2549462	75.0000	75.3369
	60 m,p-Xylenes	106	16.087	16.087	(1.016)	1881000	150.000	152.2775
	61 o-Xylene	106	16.570	16.570	(1.047)	918795	75.0000	73.1859
	62 Styrene	104	16.580	16.580	(1.047)	1619179	75.0000	73.8510
	63 Bromoform	173	16.846	16.846	(1.064)	493552	75.0000	76.1144
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	2314351	75.0000	77.8734
	65 Cyclohexanone	55	17.113	17.113	(0.924)	755425	750.000	515.6506
	66 Bromofluorobenzene	95	17.182	17.182	(0.928)	1033698	50.0000	47.8818
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.932)	877482	75.0000	74.1928
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	759185	75.0000	67.8946
	69 Bromobenzene	156	17.398	17.398	(0.939)	677822	75.0000	73.8954
	70 Propylbenzene	91	17.438	17.438	(0.941)	2936524	75.0000	79.4002
	71 2-Chlorotoluene	91	17.586	17.586	(0.949)	1944419	75.0000	73.0709
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.950)	1781595	75.0000	80.3621
	73 4-Chlorotoluene	91	17.694	17.694	(0.955)	1818583	75.0000	72.3998
	74 tert-Butylbenzene	119	18.010	18.010	(0.972)	1596504	75.0000	79.8546
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.974)	1716961	75.0000	85.9928
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	2427192	75.0000	85.5324
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.993)	1777865	75.0000	87.5141
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.996)	1174619	75.0000	73.9121

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.522	18.522	(1.000)	971294	50.0000	
80 1,4-Dichlorobenzene	146	18.552	18.552	(1.002)	1204801	75.0000	74.0532
81 n-Butylbenzene	91	18.887	18.887	(1.020)	1518145	75.0000	101.4673
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1157808	75.0000	73.6199
83 1,2-Dibromo-3-Chloropropane	75	19.982	19.982	(1.079)	146672	75.0000	76.1521
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	521665	75.0000	96.2145
85 Hexachlorobutadiene	225	21.421	21.421	(1.156)	237706	75.0000	101.2734
86 Naphthalene	128	21.648	21.648	(1.169)	1152774	75.0000	94.5117
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	491536	75.0000	105.7518

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Date : 03-MAY-2007 17:57
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.01/100,S6072,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:57 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.01/100,S6072,0.02/100
Misc Info : S5938,0.02/100, 100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:13 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:57 Cal File: JE316.D
Als bottle: 16 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	1042510	100.000	97.3115
2 Chloromethane	50	5.000	5.000	(0.469)	1343417	100.000	87.1959
3 Vinyl Chloride	62	5.187	5.187	(0.487)	1069343	100.000	92.9136
4 Bromomethane	94	5.877	5.877	(0.551)	821645	100.000	98.9921
5 Chloroethane	64	6.045	6.045	(0.567)	776666	100.000	95.0995
6 Trichlorofluoromethane	101	6.508	6.508	(0.611)	1043901	100.000	101.4700
7 Ethanol	45	6.666	6.666	(0.625)	1601102	10000.0	8945.0516
8 Freon 113	101	7.347	7.347	(0.689)	602012	100.000	109.6514
9 Acetone	43	7.366	7.366	(0.691)	394572	100.000	82.4224
10 1,1-Dichloroethene	96	7.376	7.376	(0.692)	724134	100.000	99.8410
11 Isopropanol	45	7.485	7.485	(0.702)	695681	1000.00	949.9572
12 Carbon Disulfide	76	7.820	7.820	(0.734)	3012077	100.000	98.2950
13 Methylene Chloride	84	8.096	8.096	(0.760)	985974	100.000	96.6336
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.760)	813490	1000.00	941.7319
15 MTBE	73	8.480	8.480	(0.796)	2298292	100.000	95.1796
16 trans-1,2-Dichloroethene	96	8.530	8.530	(0.800)	861081	100.000	93.4252
18 Vinyl Acetate	43	9.121	9.121	(0.856)	2792120	100.000	127.5919
19 1,1-Dichloroethane	63	9.151	9.151	(0.858)	1657969	100.000	95.6531
20 Isopropyl Ether (DIPE)	45	9.161	9.161	(0.859)	3919823	100.000	93.2995
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.910)	2334131	100.000	95.4660
22 2-Butanone	43	9.939	9.939	(0.932)	607783	100.000	95.4518
23 cis-1,2-Dichloroethene	96	9.999	9.999	(0.938)	946267	100.000	93.8529

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.038	10.038	(0.942)	874839	100.000	96.8185
25 Bromochloromethane	128	10.373	10.373	(0.973)	498011	100.000	103.4721
26 Chloroform	83	10.432	10.432	(0.979)	1401696	100.000	94.9394
27 Tetrahydrofuran	42	10.442	10.442	(0.980)	3126694	1000.00	912.6681
* 28 Pentafluorobenzene	168	10.659	10.659	(1.000)	1515221	50.0000	
29 Dibromofluoromethane	113	10.679	10.679	(1.002)	870486	50.0000	51.0494
30 1,1,1-Trichloroethane	97	10.807	10.807	(1.014)	921129	100.000	95.3150
31 1,1-Dichloropropene	75	11.044	11.044	(0.933)	1008555	100.000	91.4784
32 Carbon Tetrachloride	117	11.083	11.083	(0.937)	712106	100.000	98.0368
33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	950850	50.0000	48.8250
34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	1206991	100.000	95.9899
35 Benzene	78	11.369	11.369	(0.961)	3301088	100.000	93.4552
36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	1773716	100.000	96.8297
* 37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2516004	50.0000	
38 Trichloroethene	95	12.296	12.296	(1.039)	788744	100.000	88.9554
39 Trifluorotoluene	146	12.611	12.611	(1.066)	1046574	100.000	94.2838
40 1,2-Dichloropropane	63	12.621	12.621	(1.067)	1019121	100.000	92.5953
41 Dibromomethane	93	12.789	12.789	(1.081)	637752	100.000	98.5713
42 Bromodichloromethane	83	12.966	12.966	(1.096)	1157889	100.000	96.2674
44 cis-1,3-Dichloropropene	75	13.568	13.568	(1.147)	1525588	100.000	97.7839
45 Tetramethyl THF	43	13.647	13.647	(1.153)	2558674	100.000	95.2248
46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	1339185	100.000	91.1571
47 Toluene-d8	98	13.972	13.972	(1.181)	2679339	50.0000	49.1928
48 Toluene	92	14.071	14.071	(1.189)	1784637	100.000	89.1146
49 trans-1,3-Dichloropropene	75	14.278	14.278	(1.207)	1353823	100.000	98.6103
50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	474407	100.000	96.0175
51 1,3-Dichloropropane	76	14.771	14.771	(0.933)	1449685	100.000	97.1285
52 2-Hexanone	43	14.790	14.790	(0.934)	823179	100.000	95.3755
53 Tetrachloroethene	166	14.820	14.820	(0.936)	642222	100.000	90.4428
54 Dibromochloromethane	129	15.096	15.096	(0.953)	942103	100.000	100.5572
55 1,2-Dibromoethane	107	15.283	15.283	(1.292)	920390	100.000	99.9263
* 56 Chlorobenzene-d5	117	15.835	15.835	(1.000)	2104409	50.0000	
57 Chlorobenzene	112	15.875	15.875	(1.002)	1991338	100.000	90.4851
58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.006)	711948	100.000	95.5755
59 Ethylbenzene	91	15.963	15.963	(1.008)	3039166	100.000	85.6543
60 m,p-Xylenes	106	16.092	16.092	(1.016)	2239233	200.000	172.8948
61 o-Xylene	106	16.575	16.575	(1.047)	1110918	100.000	84.3970
62 Styrene	104	16.585	16.585	(1.047)	2014865	100.000	87.6483
63 Bromoform	173	16.841	16.841	(1.064)	697528	100.000	102.5963
64 Isopropylbenzene	105	16.979	16.979	(0.917)	2619349	100.000	84.1948
65 Cyclohexanone	55	17.117	17.117	(0.924)	1572948	1000.00	1025.6774
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1080351	50.0000	47.8051
67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	1170494	100.000	94.5421
68 1,2,3-Trichloropropane	75	17.354	17.354	(0.937)	1015049	100.000	86.7175
69 Bromobenzene	156	17.403	17.403	(0.940)	890556	100.000	92.7460
70 Propylbenzene	91	17.442	17.442	(0.942)	3342900	100.000	86.3463
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	2351583	100.000	84.4203
72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	2080533	100.000	89.6498
73 4-Chlorotoluene	91	17.699	17.699	(0.956)	2269523	100.000	86.3120
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	1799173	100.000	85.9677
75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	2086737	100.000	99.8393
76 sec-Butylbenzene	105	18.261	18.261	(0.986)	2676991	100.000	90.1168
77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	2022673	100.000	95.1125
78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	1479296	100.000	88.9214

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	1016760	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	1519696	100.000	89.2314
81 n-Butylbenzene	91	18.892	18.892	(1.020)	1732052	100.000	110.5875
82 1,2-Dichlorobenzene	146	19.020	19.020	(1.027)	1488601	100.000	90.4211
83 1,2-Dibromo-3-Chloropropane	75	19.986	19.986	(1.079)	188687	100.000	93.5856
84 1,2,4-Trichlorobenzene	180	21.209	21.209	(1.145)	661244	100.000	116.5046
85 Hexachlorobutadiene	225	21.426	21.426	(1.157)	233928	100.000	95.2071
86 Naphthalene	128	21.642	21.642	(1.169)	1491468	100.000	116.8120
87 1,2,3-Trichlorobenzene	180	22.047	22.047	(1.191)	640903	100.000	131.7216

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 25PPB IDF : 1.0
Seqnum : 497233759005 File : jfb05 Time : 11-JUN-2007 09:51
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (20000X), S6337 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5722	25.00	28.14	ug/L	13	30	0.1000	
Vinyl Chloride	0.3798	0.4180	25.00	27.52	ug/L	10	20	0.0500	
Bromomethane	0.2739	0.2595	25.00	23.68	ug/L	-5	30	0.0500	
Chloroethane	0.2695	0.2837	25.00	26.32	ug/L	5	30	0.0500	
Acetone	0.1718	0.1369	25.00	19.92	ug/L	-20	40	0.0500	
1,1-Dichloroethene	0.2393	0.2671	25.00	27.90	ug/L	12	20	0.0500	
Methylene Chloride	0.3367	0.3603	25.00	26.75	ug/L	7	30	0.0500	
Carbon Disulfide	1.0112	1.1361	25.00	28.09	ug/L	12	30	0.0500	
MTBE	0.7968	0.8357	25.00	26.22	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3149	25.00	25.89	ug/L	4	30	0.0500	
Vinyl Acetate	0.7099	1.0694	25.00	37.66	ug/L	**51**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5974	25.00	26.11	ug/L	4	30	0.1000	
2-Butanone	0.2101	0.2013	25.00	23.95	ug/L	-4	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3360	25.00	26.16	ug/L	5	30	0.0500	
Chloroform	0.4872	0.5021	25.00	25.76	ug/L	3	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3389	25.00	26.57	ug/L	6	30	0.0500	
Carbon Tetrachloride	0.1443	0.1634	25.00	28.30	ug/L	13	30	0.0500	
1,2-Dichloroethane	0.2499	0.2561	25.00	25.63	ug/L	3	30	0.0500	
Benzene	0.7020	0.7384	25.00	26.30	ug/L	5	30	0.0500	
Trichloroethene	0.1762	0.1737	25.00	24.64	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.2187	0.2216	25.00	25.32	ug/L	1	20	0.0500	
Bromodichloromethane	0.2390	0.2342	25.00	24.50	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2763	25.00	23.66	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3260	25.00	26.29	ug/L	5	30	0.0500	
Toluene	0.3980	0.4291	25.00	26.95	ug/L	8	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2796	25.00	25.62	ug/L	2	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0946	25.00	24.07	ug/L	-4	30	0.0500	
2-Hexanone	0.2051	0.1854	25.00	22.60	ug/L	-10	40	0.0500	
Tetrachloroethene	0.1687	0.1930	25.00	28.60	ug/L	14	30	0.0500	
Dibromochloromethane	0.2226	0.2283	25.00	25.65	ug/L	3	30	0.0500	
Chlorobenzene	0.5229	0.5539	25.00	26.48	ug/L	6	30	0.3000	
Ethylbenzene	0.8430	0.9083	25.00	26.94	ug/L	8	20	0.0500	
m,p-Xylenes	0.3077	0.3417	50.00	55.53	ug/L	11	30	0.0500	
o-Xylene	0.3127	0.3400	25.00	27.18	ug/L	9	30	0.0500	
Styrene	0.5462	0.5819	25.00	26.63	ug/L	7	30	0.0500	
Bromoform	0.1615	0.1530	25.00	23.68	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.6019	25.00	24.72	ug/L	-1	30	0.3000	
Dibromofluoromethane	0.5627	0.5702	50.00	50.67	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3732	50.00	48.22	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.0652	50.00	49.21	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0953	50.00	49.28	ug/L	-1	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2017688	36.32	10.65	10.61	-0.04
1,4-Difluorobenzene	2441798	3381629	38.49	11.83	11.79	-0.04
Chlorobenzene-d5	2049371	2810835	37.16	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1331605	36.46	18.51	18.49	-0.02

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497233759005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
Seqnum : 497235206003 File : jfc03 Time : 12-JUN-2007 09:06
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (16670X), S6450 (16670X), S5720 (33330X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5706	30.00	33.67	ug/L	12	30	0.1000	
Vinyl Chloride	0.3798	0.4397	30.00	34.73	ug/L	16	20	0.0500	
Bromomethane	0.2739	0.2240	30.00	24.54	ug/L	-18	30	0.0500	
Chloroethane	0.2695	0.2832	30.00	31.53	ug/L	5	30	0.0500	
Acetone	0.1718	0.1388	30.00	24.24	ug/L	-19	40	0.0500	
1,1-Dichloroethene	0.2393	0.2661	30.00	33.36	ug/L	11	20	0.0500	
Methylene Chloride	0.3367	0.3416	30.00	30.44	ug/L	1	30	0.0500	
Carbon Disulfide	1.0112	1.1238	30.00	33.34	ug/L	11	30	0.0500	
MTBE	0.7968	0.8312	30.00	31.30	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3044	30.00	30.03	ug/L	0	30	0.0500	
Vinyl Acetate	0.7099	1.0100	30.00	42.68	ug/L	**42**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5801	30.00	30.42	ug/L	1	30	0.1000	
2-Butanone	0.2101	0.1957	30.00	27.94	ug/L	-7	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3197	30.00	29.87	ug/L	0	30	0.0500	
Chloroform	0.4872	0.4834	30.00	29.77	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3415	30.00	32.12	ug/L	7	30	0.0500	
Carbon Tetrachloride	0.1443	0.1693	30.00	35.18	ug/L	17	30	0.0500	
1,2-Dichloroethane	0.2499	0.2460	30.00	29.54	ug/L	-2	30	0.0500	
Benzene	0.7020	0.7179	30.00	30.68	ug/L	2	30	0.0500	
Trichloroethene	0.1762	0.1725	30.00	29.37	ug/L	-2	30	0.0500	
1,2-Dichloropropane	0.2187	0.2145	30.00	29.42	ug/L	-2	20	0.0500	
Bromodichloromethane	0.2390	0.2267	30.00	28.45	ug/L	-5	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2897	30.00	29.77	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3141	30.00	30.39	ug/L	1	30	0.0500	
Toluene	0.3980	0.4090	30.00	30.83	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2734	30.00	30.07	ug/L	0	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0965	30.00	29.48	ug/L	-2	30	0.0500	
2-Hexanone	0.2051	0.1859	30.00	27.19	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1687	0.1994	30.00	35.45	ug/L	18	30	0.0500	
Dibromochloromethane	0.2226	0.2115	30.00	28.50	ug/L	-5	30	0.0500	
Chlorobenzene	0.5229	0.5371	30.00	30.82	ug/L	3	30	0.3000	
Ethylbenzene	0.8430	0.9036	30.00	32.16	ug/L	7	20	0.0500	
m,p-Xylenes	0.3077	0.3373	60.00	65.78	ug/L	10	30	0.0500	
o-Xylene	0.3127	0.3308	30.00	31.74	ug/L	6	30	0.0500	
Styrene	0.5462	0.5737	30.00	31.51	ug/L	5	30	0.0500	
Bromoform	0.1615	0.1529	30.00	28.40	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5874	30.00	28.94	ug/L	-4	30	0.3000	
Dibromofluoromethane	0.5627	0.5608	50.00	49.83	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3766	50.00	48.65	ug/L	-3	30	0.0500	
Toluene-d8	1.0824	1.0752	50.00	49.67	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.1113	1.0985	50.00	49.42	ug/L	-1	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2050454	38.53	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	3432898	40.59	11.83	11.78	-0.05
Chlorobenzene-d5	2049371	2909938	41.99	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1366860	40.07	18.51	18.48	-0.03

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497235206003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
Seqnum : 497235206010 File : jfc10 Time : 12-JUN-2007 13:06
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (16670X), S6450 (16670X), S5720 (33330X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5144	30.00	30.35	ug/L	1	30	0.1000	
Vinyl Chloride	0.3798	0.3882	30.00	30.66	ug/L	2	20	0.0500	
Bromomethane	0.2739	0.2238	30.00	24.51	ug/L	-18	30	0.0500	
Chloroethane	0.2695	0.2617	30.00	29.13	ug/L	-3	30	0.0500	
Acetone	0.1718	0.1230	30.00	21.48	ug/L	-28	40	0.0500	m
1,1-Dichloroethene	0.2393	0.2411	30.00	30.22	ug/L	1	20	0.0500	
Methylene Chloride	0.3367	0.3245	30.00	28.91	ug/L	-4	30	0.0500	
Carbon Disulfide	1.0112	1.0268	30.00	30.46	ug/L	2	30	0.0500	
MTBE	0.7968	0.8274	30.00	31.15	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.2814	30.00	27.75	ug/L	-7	30	0.0500	
Vinyl Acetate	0.7099	1.0682	30.00	45.15	ug/L	**50**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5363	30.00	28.13	ug/L	-6	30	0.1000	
2-Butanone	0.2101	0.1990	30.00	28.42	ug/L	-5	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3089	30.00	28.86	ug/L	-4	30	0.0500	
Chloroform	0.4872	0.4677	30.00	28.80	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3289	30.00	30.94	ug/L	3	30	0.0500	
Carbon Tetrachloride	0.1443	0.1609	30.00	33.44	ug/L	11	30	0.0500	
1,2-Dichloroethane	0.2499	0.2352	30.00	28.24	ug/L	-6	30	0.0500	
Benzene	0.7020	0.6840	30.00	29.23	ug/L	-3	30	0.0500	
Trichloroethene	0.1762	0.1649	30.00	28.07	ug/L	-6	30	0.0500	
1,2-Dichloropropane	0.2187	0.2072	30.00	28.42	ug/L	-5	20	0.0500	
Bromodichloromethane	0.2390	0.2209	30.00	27.73	ug/L	-8	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2707	30.00	27.81	ug/L	-7	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3063	30.00	29.64	ug/L	-1	30	0.0500	
Toluene	0.3980	0.4005	30.00	30.19	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2649	30.00	29.13	ug/L	-3	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0906	30.00	27.68	ug/L	-8	30	0.0500	
2-Hexanone	0.2051	0.1784	30.00	26.10	ug/L	-13	40	0.0500	
Tetrachloroethene	0.1687	0.1889	30.00	33.58	ug/L	12	30	0.0500	
Dibromochloromethane	0.2226	0.2130	30.00	28.71	ug/L	-4	30	0.0500	
Chlorobenzene	0.5229	0.5145	30.00	29.52	ug/L	-2	30	0.3000	
Ethylbenzene	0.8430	0.8609	30.00	30.64	ug/L	2	20	0.0500	
m,p-Xylenes	0.3077	0.3230	60.00	62.98	ug/L	5	30	0.0500	
o-Xylene	0.3127	0.3196	30.00	30.66	ug/L	2	30	0.0500	
Styrene	0.5462	0.5458	30.00	29.98	ug/L	0	30	0.0500	
Bromoform	0.1615	0.1482	30.00	27.53	ug/L	-8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5706	30.00	28.11	ug/L	-6	30	0.3000	
Dibromofluoromethane	0.5627	0.5607	50.00	49.82	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3702	50.00	47.83	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.0629	50.00	49.10	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0669	50.00	48.00	ug/L	-4	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2007315	35.62	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	3323366	36.10	11.83	11.77	-0.06
Chlorobenzene-d5	2049371	2829291	38.06	15.83	15.79	-0.04
1,4-Dichlorobenzene-d4	975848	1346630	38.00	18.51	18.49	-0.02

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497235206010

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 MSVOA Water
EPA 8260B

Inst : MSVOA10 IDF : 1.0
Seqnum : 497235206011 File : jfc11 Time : 12-JUN-2007 13:39
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S5264 (6667X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Dibromofluoromethane	0.5627	0.5572	50.00	49.52	ug/L	-1	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3693	50.00	47.71	ug/L	-5	30	0.0500	
Toluene-d8	1.0824	1.0656	50.00	49.23	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0634	50.00	47.84	ug/L	-4	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1886685	27.47	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	3125661	28.01	11.83	11.78	-0.05
1,4-Dichlorobenzene-d4	975848	1256018	28.71	18.51	18.48	-0.03

ISTD (ICAL je419)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Chlorobenzene-d5 TIC	8290864	8259981	-0.37	15.82	15.80	-0.02

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

497235206011

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497233759

Date : 06/11/07 Reference : je314
Sequence : MSVOA10 jfb Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
005	CCV	25PPB	2017688	10.61	3381629	11.79	2810835	15.80	1331605	18.49
006	LCS	QC391611	2097016	10.60	3445938	11.79	2931210	15.81	1392427	18.49
008	BLANK	QC391610	1912752	10.60	3184818	11.79	2768982	15.81	1282170	18.50
009	SAMPLE	195270-009	2085195	10.61	3448360	11.79	2916802	15.80	1366839	18.50
010	SAMPLE	195270-019	2013497	10.61	3347384	11.79	2845061	15.81	1317775	18.49
011	SAMPLE	195270-002	2005941	10.61	3351706	11.79	2834187	15.80	1383043	18.49
012	SAMPLE	195270-010	1908574	10.61	3160867	11.79	2685615	15.80	1283051	18.50
013	SAMPLE	195270-011	1906901	10.61	3160315	11.79	2695330	15.80	1301913	18.49
014	SAMPLE	195279-001	1923241	10.60	3271069	11.79	2764580	15.80	1304517	18.49
015	MSS	195234-001	1919706	10.61	3164331	11.79	2687214	15.80	1270037	18.50
016	SAMPLE	195300-008	1927107	10.60	3228807	11.79	2779472	15.81	1312173	18.49
017	SAMPLE	195270-001	1955664	10.61	3233345	11.79	2749881	15.80	1342625	18.50
018	SAMPLE	195300-009	1907589	10.60	3188285	11.78	2689257	15.81	1275032	18.50
019	SAMPLE	195255-002	1901103	10.60	3170383	11.79	2723527	15.81	1289215	18.49
020	SAMPLE	195270-016	1935778	10.60	3261082	11.79	2750695	15.80	1272237	18.49
021	SAMPLE	195229-002	1890409	10.60	3154866	11.79	2684798	15.80	1249757	18.49
022	SAMPLE	195250-014	1915392	10.61	3172166	11.79	2729191	15.81	1295819	18.50
023	MS	QC391631	1909503	10.60	3139149	11.79	2668628	15.81	1275577	18.49
024	MSD	QC391632	1895276	10.60	3165701	11.79	2696778	15.80	1272294	18.49

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497235206

Date : 06/12/07 Reference : je314
Sequence : MSVOA10 jfc Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
003	CCV	30PPB	2050454	10.59	3432898	11.78	2909938	15.80	1366860	18.48
005	BS	QC391802	1953928	10.59	3254051	11.78	2772395	15.79	1305999	18.48
006	BSD	QC391803	1943317	10.59	3206913	11.78	2736313	15.79	1300185	18.48
007	CCV/BS	QC391854	2069494	10.60	3424675	11.78	2859192	15.79	1370438	18.48
008	BSD	QC391855	1987918	10.59	3302425	11.78	2792398	15.79	1318409	18.48
010	CCV	30PPB	2007315	10.59	3323366	11.77	2829291	15.79	1346630	18.49
011	CCV		1886685	10.59	3125661	11.78	2650567	15.80	1256018	18.48
013	BLANK	QC391801	1963338	10.60	3249608	11.77	2749879	15.79	1269604	18.48
014	SAMPLE	195303-007	1911208	10.59	3160320	11.78	2676927	15.79	1247352	18.48
015	SAMPLE	195303-014	1905249	10.59	3140151	11.78	2668847	15.80	1233721	18.49
016	SAMPLE	195270-009	1866810	10.60	3131704	11.78	2632732	15.79	1215780	18.48
017	SAMPLE	195270-001	1868066	10.59	3089567	11.78	2627350	15.80	1292031	18.49
018	SAMPLE	195270-016	1883032	10.59	3137287	11.78	2657223	15.80	1251218	18.49
019	SAMPLE	195303-002	1907193	10.60	3168865	11.78	2647761	15.79	1264527	18.49
020	SAMPLE	195303-003	1972663	10.59	3230678	11.78	2725722	15.80	1295792	18.49
021	SAMPLE	195303-004	1956477	10.60	3243015	11.78	2743505	15.80	1290802	18.48
022	SAMPLE	195303-015	1926751	10.59	3184259	11.78	2695973	15.80	1281407	18.49
023	SAMPLE	195303-016	1888314	10.59	3188062	11.78	2673073	15.80	1241376	18.48
024	SAMPLE	195303-017	1943050	10.59	3199118	11.78	2769119	15.80	1255602	18.49
025	SAMPLE	195303-018	1908565	10.59	3200335	11.77	2714086	15.80	1240818	18.49
026	SAMPLE	195303-019	1904007	10.60	3183065	11.78	2694370	15.79	1249512	18.48
027	SAMPLE	195354-001	1908816	10.60	3157378	11.78	2675500	15.79	1265042	18.49
028	SAMPLE	195303-013	1860080	10.59	3094319	11.78	2642834	15.80	1282156	18.49
029	SAMPLE	195303-005	1842717	10.59	3081793	11.77	2622878	15.79	1266244	18.49
030	SAMPLE	195303-006	1897705	10.59	3148326	11.78	2685074	15.80	1285319	18.49
031	SAMPLE	195303-012	1888801	10.60	3098036	11.78	2634920	15.79	1246272	18.48

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497235206

Date : 06/12/07 Reference : je419
Sequence : MSVOA10 jfc Analyzed : 05/04/07 20:33

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	8290864	15.82
		LOWER LIMIT	4145432	15.32
		UPPER LIMIT	16581728	16.32
007	CCV/BS	QC391854	9095337	15.79
011	CCV		8259981	15.80
027	SAMPLE	195354-001	8335462	15.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497177754

Instrument : MSVOA10 Begun : 05/03/07 10:34
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	je301	TUN	BFB			05/03/07 10:34	1.0	1
002	je302	TUN	BFB			05/03/07 10:47	1.0	1
003	je303	X	IB			05/03/07 11:05	1.0	2
004	je304	X	LOWPOINT			05/03/07 11:39	1.0	2
005	je305	TUN	BFB			05/03/07 12:11	1.0	1
006	je306	X	IB			05/03/07 12:29	1.0	2
007	je307	IB	CALIB			05/03/07 13:01	1.0	2
008	je308	ICAL	0.25/0.5PPB			05/03/07 13:35	1.0	3 4 5 2
009	je309	ICAL	0.5/1PPB			05/03/07 14:07	1.0	3 4 5 2
010	je310	ICAL	2PPB			05/03/07 14:40	1.0	3 4 5 2
011	je311	ICAL	5PPB			05/03/07 15:13	1.0	3 4 5 2
012	je312	ICAL	10PPB			05/03/07 15:46	1.0	3 4 5 2
013	je313	ICAL	20PPB			05/03/07 16:19	1.0	3 4 5 2
014	je314	ICAL	50PPB			05/03/07 16:51	1.0	3 4 5 2
015	je315	ICAL	75PPB			05/03/07 17:24	1.0	3 4 5 2
016	je316	ICAL	100PPB			05/03/07 17:57	1.0	3 4 5 2
017	je317	ICV				05/03/07 18:30	1.0	6 2
018	je318	ICV				05/03/07 19:03	1.0	7 8 2
019	je319	X	IB			05/03/07 19:36	1.0	2
020	je320	X	IB			05/03/07 20:08	1.0	2
021	je321	X	IB			05/03/07 20:41	1.0	2

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

Standards used: 1=S5117 2=S6084 3=S5194 4=S6072 5=S5938 6=S6044 7=S5723 8=S5968

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497233759

Instrument : MSVOA10 Begun : 06/11/07 07:59
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfb01	X	IB			06/11/07 07:59	1.0	1	
002	jfb02	X	BFB			06/11/07 08:37	1.0	2	
003	jfb03	X	25PPB			06/11/07 08:54	1.0	3 4 5 1	
004	jfb04	TUN	BFB			06/11/07 09:30	1.0	2	
005	jfb05	CCV	25PPB			06/11/07 09:51	1.0	3 4 5 1	
006	jfb06	LCS	QC391611	Water	126137	06/11/07 10:32	1.0	6 7 8 1	
007	jfb07	X	IB			06/11/07 11:05	1.0	1	
008	jfb08	BLANK	QC391610	Water	126137	06/11/07 11:38	1.0	1	
009	jfb09	SAMPLE	195270-009	Water	126137	06/11/07 12:11	1.0	1	
010	jfb10	SAMPLE	195270-019	Water	126137	06/11/07 12:44	1.0	1	
011	jfb11	SAMPLE	195270-002	Water	126137	06/11/07 13:18	1.0	1	
012	jfb12	SAMPLE	195270-010	Water	126137	06/11/07 13:51	1.0	1	
013	jfb13	SAMPLE	195270-011	Water	126137	06/11/07 14:23	1.0	1	
014	jfb14	SAMPLE	195279-001	Water	126137	06/11/07 14:56	1.0	1	
015	jfb15	MSS	195234-001	Water	126137	06/11/07 15:29	1.0	1	
016	jfb16	SAMPLE	195300-008	Water	126137	06/11/07 16:02	1.0	1	
017	jfb17	SAMPLE	195270-001	Water	126137	06/11/07 16:35	1.429	1	
018	jfb18	SAMPLE	195300-009	Water	126137	06/11/07 17:07	2.0	1	
019	jfb19	SAMPLE	195255-002	Water	126137	06/11/07 17:40	5.0	1	
020	jfb20	SAMPLE	195270-016	Water	126137	06/11/07 18:13	8.333	1	
021	jfb21	SAMPLE	195229-002	Water	126137	06/11/07 18:46	40.0	1	
022	jfb22	SAMPLE	195250-014	Water	126137	06/11/07 19:19	16.67	1	pH > 2, headspace <= 1 mL
023	jfb23	MS	QC391631	Water	126137	06/11/07 19:51	1.0	6 7 8 1	
024	jfb24	MSD	QC391632	Water	126137	06/11/07 20:24	1.0	6 7 8 1	
025	jfb25	X	IB			06/11/07 20:57	1.0	1	
026	jfb26	X	IB			06/11/07 21:30	1.0	1	
027	jfb27	X	IB			06/11/07 22:02	1.0	1	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/12/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6337 5=S5720 6=S6392 7=S6207 8=S6357

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497235206

Instrument : MSVOA10 Begun : 06/12/07 08:06
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfc01	X	IB			06/12/07 08:06	1.0	1	
002	jfc02	TUN	BFB			06/12/07 08:48	1.0	2	
003	jfc03	CCV	30PPB			06/12/07 09:06	1.0	3 4 5 1	
004	jfc04	X	QC391802	Water	126189	06/12/07 09:48	1.0	6 7 8 1	
005	jfc05	BS	QC391802	Water	126189	06/12/07 10:20	1.0	6 7 8 1	
006	jfc06	BSD	QC391803	Water	126189	06/12/07 10:53	1.0	6 7 8 1	
007	jfc07	CCV/BS	QC391854	Water	126189	06/12/07 11:47	1.0	9 1	1:BZME=120
008	jfc08	BSD	QC391855	Water	126189	06/12/07 12:20	1.0	9 1	1:BZME=120
009	jfc09	TUN	BFB			06/12/07 12:48	1.0	2	
010	jfc10	CCV	30PPB			06/12/07 13:06	1.0	3 4 5 1	
011	jfc11	CCV				06/12/07 13:39	1.0	9 1	1:BZME=130
012	jfc12	X	IB			06/12/07 14:14	1.0	1	
013	jfc13	BLANK	QC391801	Water	126189	06/12/07 14:47	1.0	1	
014	jfc14	SAMPLE	195303-007	Water	126189	06/12/07 15:19	1.0	1	
015	jfc15	SAMPLE	195303-014	Water	126189	06/12/07 15:52	1.0	1	
016	jfc16	SAMPLE	195270-009	Water	126189	06/12/07 16:25	1.0	1	
017	jfc17	SAMPLE	195270-001	Water	126189	06/12/07 16:58	1.0	1	
018	jfc18	SAMPLE	195270-016	Water	126189	06/12/07 17:31	1.0	1	
019	jfc19	SAMPLE	195303-002	Water	126189	06/12/07 18:03	1.0	1	
020	jfc20	SAMPLE	195303-003	Water	126189	06/12/07 18:36	1.0	1	
021	jfc21	SAMPLE	195303-004	Water	126189	06/12/07 19:08	1.0	1	
022	jfc22	SAMPLE	195303-015	Water	126189	06/12/07 19:41	1.0	1	
023	jfc23	SAMPLE	195303-016	Water	126189	06/12/07 20:14	1.0	1	
024	jfc24	SAMPLE	195303-017	Water	126189	06/12/07 20:46	1.0	1	
025	jfc25	SAMPLE	195303-018	Water	126189	06/12/07 21:19	1.0	1	
026	jfc26	SAMPLE	195303-019	Water	126189	06/12/07 21:52	1.0	1	
027	jfc27	SAMPLE	195354-001	Water	126189	06/12/07 22:24	5.0	1	
028	jfc28	SAMPLE	195303-013	Water	126189	06/12/07 22:57	16.67	1	
029	jfc29	SAMPLE	195303-005	Water	126189	06/12/07 23:30	33.33	1	
030	jfc30	SAMPLE	195303-006	Water	126189	06/13/07 00:03	62.50	1	
031	jfc31	SAMPLE	195303-012	Water	126189	06/13/07 00:36	83.33	1	
032	jfc32	X	IB			06/13/07 01:08	1.0	1	
033	jfc33	X	IB			06/13/07 01:41	1.0	1	
034	jfc34	X	IB			06/13/07 02:14	1.0	1	

Analyst: SJD Date: 06/13/07 Reviewer: ACM Date: 06/13/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6450 5=S5720 6=S6392 7=S6207 8=S6357 9=S5264

REPORTING SUMMARY FOR 195270 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLME	VCMEE	BRE1N	CLEA	AC1	DCEE	MTLS	CTE1S	MTB2	DCBE	VAE1	DA1	MKC1	DE3	TCM	TC3	CLD	CA2	DZ	BC	TC	DC	BD	MI	DPK	BC1	DZP	BE	MPM	DP1	TA1	HA2	PO2	DE	CM	CB	EB	XL	XZ	TL	SM	TO	TX	SE	TB	PC	DB	DA	BF	BM	B4	BR
195270-001	MSVOA10	06/11/07 16:35	1.429																																																							
195270-001	MSVOA10	06/12/07 16:58	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-002	MSVOA10	06/11/07 13:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-009	MSVOA10	06/11/07 12:11	1.0																																																								
195270-009	MSVOA10	06/12/07 16:25	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-010	MSVOA10	06/11/07 13:51	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-011	MSVOA10	06/11/07 14:23	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-016	MSVOA10	06/11/07 18:13	8.333																																																								
195270-016	MSVOA10	06/12/07 17:31	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-019	MSVOA10	06/11/07 12:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391610	MSVOA10	06/11/07 11:38	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391611	MSVOA10	06/11/07 10:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391631	MSVOA10	06/11/07 19:51	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391632	MSVOA10	06/11/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391801	MSVOA10	06/12/07 14:47	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391802	MSVOA10	06/12/07 10:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391803	MSVOA10	06/12/07 10:53	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391854	MSVOA10	06/12/07 11:47	1.0																																																								
QC391855	MSVOA10	06/12/07 12:20	1.0																																																								

00164

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/11/07
PREPPED BY. ZR

WATER

126137

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195255-002		F	<2			10	RR 5x V.C. >LR	
2	195250-014		A	7	1mL			RR 16.67 Surr ↑	
3	195229-002		E	<2				RR 40x Toluene >LR	
4	195270-001		B					1.42x	
5	-002			<2				1x	
6	-009		A					TB Punctured but not sampled	
7	-010							1x	
8	-011							1x	
9	-016			<2				8.32x	
10	-019							TB	
11	195279-001							1x	
12	~~195283-014~~		BCD					~~1x MSS/MSD/MSD~~	
13	195300-008			<2				1X	
14	-009			<2				2X	
15	195234-001		BCDE	<2			10	1x MSS/MSD/MSD	
16									
17									
18									
19									
20									
21									
22									
23									
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42									

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/12/07
PREPPED BY. Eric

WATER

126189

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195270-001		C	<2			10	RR/x 0.D.	tight limits
2	~~195308-008~~							~~RR/x 1,2,4 TCB 0.D.~~	J to MDL
3	~~-009~~							~~RR/x 0.D.~~	
4	195270-016		B	<2			10	RR/x 0.D. Silty	tight limits
5	195270-009							RR TB vial thread broke	
6	195303-002		A					1x	
7	-003							1x	
8	-004							1x	
9	-005		B	<2				33.3x	
10	-006		A					62.5x	
11	-007			<2				TB	
12	-012		B	<2				83.3x	
13	-013							16.7x	
14	-014		A	<2				TB	
15	-015							1x	
16	-016								
17	-017								
18	-018								
19	-019								
20	195354-001		A	<2				5x	
21									
22									
23									
24									
25									
26									
27									
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42									

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

PESTICIDES

: 00159

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	126108
Lab ID:	195270-001	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/12/07

Analyte	Result	RL
alpha-BHC	ND	0.5
beta-BHC	ND	0.5
gamma-BHC	ND	0.5
delta-BHC	ND	0.5
Heptachlor	0.8 C	0.5
Aldrin	ND	0.5
Heptachlor epoxide	ND	0.5
Endosulfan I	ND	0.5
Dieldrin	ND	0.9
4,4'-DDE	ND	0.9
Endrin	ND	0.9
Endosulfan II	ND	0.9
Endosulfan sulfate	ND	0.9
4,4'-DDD	ND	0.9
4,4'-DDT	ND	0.9
alpha-Chlordane	ND	0.5
gamma-Chlordane	ND	0.5
Methoxychlor	ND	4.7
Endrin ketone	ND	0.9
Toxaphene	ND	9.4

Surrogate	%REC	Limits
TCMX	106	65-135
Decachlorobiphenyl	57 *	65-135

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

17.2

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0606073A	Batch#:	126108
Lab ID:	195270-002	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/12/07

Analyte	Result	RL
alpha-BHC	ND	0.5
beta-BHC	ND	0.5
gamma-BHC	ND	0.5
delta-BHC	ND	0.5
Heptachlor	0.9 C	0.5
Aldrin	ND	0.5
Heptachlor epoxide	ND	0.5
Endosulfan I	ND	0.5
Dieldrin	ND	0.9
4,4'-DDE	ND	0.9
Endrin	ND	0.9
Endosulfan II	ND	0.9
Endosulfan sulfate	ND	0.9
4,4'-DDD	ND	0.9
4,4'-DDT	ND	0.9
alpha-Chlordane	ND	0.5
gamma-Chlordane	ND	0.5
Methoxychlor	ND	4.7
Endrin ketone	ND	0.9
Toxaphene	ND	9.4

Surrogate	%REC	Limits
TCMX	133	65-135
Decachlorobiphenyl	68	65-135

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391520	Batch#:	126108
Matrix:	Water	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/11/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	110	65-135

ND= Not Detected
RL= Reporting Limit

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	126108
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/11/07

Type: BS Lab ID: QC391521

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1836	92	65-135
Heptachlor	0.2000	0.1738	87	65-135
Aldrin	0.2000	0.1797	90	65-135
Dieldrin	0.4000	0.3753	94	65-135
Endrin	0.4000	0.3486	87	65-135
4,4'-DDT	0.4000	0.3069	77	65-135

Surrogate	%REC	Limits
TCMX	104	65-135
Decachlorobiphenyl	97	65-135

Type: BSD Lab ID: QC391522

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1786	89	65-135	3	35
Heptachlor	0.2000	0.1696	85	65-135	2	35
Aldrin	0.2000	0.1766	88	65-135	2	35
Dieldrin	0.4000	0.3728	93	65-135	1	35
Endrin	0.4000	0.3532	88	65-135	1	35
4,4'-DDT	0.4000	0.3190	80	65-135	4	35

Surrogate	%REC	Limits
TCMX	102	65-135
Decachlorobiphenyl	105	65-135

RPD= Relative Percent Difference

Confirmation Report for 195270 PEST Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
195270-001	1349MW100	Heptachlor	0.8331 C	0.3341	85	-60
195270-002	DUP0606073A	Heptachlor	0.8577 C	0.5307	47	-38

C=RPD between columns exceeds 40%

: 00174

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807215412001
Units : pg

Name : gc23pest_149
Date : 29-MAY-2007 22:26
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	149_025	807215412025	PEST_1	29-MAY-2007 22:26	S6268
L2	149_026	807215412026	PEST_2	29-MAY-2007 22:47	S6269
L3	149_027	807215412027	PEST_3	29-MAY-2007 23:08	S6270
L4	149_028	807215412028	PEST_4	29-MAY-2007 23:30	S6271
L5	149_029	807215412029	PEST_5	29-MAY-2007 23:51	S5859
L6	149_030	807215412030	PEST_6	30-MAY-2007 00:13	S5860
L7	149_031	807215412031	PEST_7	30-MAY-2007 00:34	S6332

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	11833	12067	11172	10136	11406	10956	10487	AVRG		8.97E-5		11151	6	0.995	20	
gamma-BHC	A	11183	11226	10200	9251.0	10152	9727.8	9619.8	AVRG		9.81E-5		10194	7	0.995	20	
beta-BHC	A	4611.5	4560.6	3952.0	3614.3	4019.5	3690.7	3620.4	AVRG		2.49E-4		4009.9	11	0.995	20	
delta-BHC	A	13070	12391	10543	9615.1	10726	10262	9680.8	AVRG		9.18E-5		10898	12	0.995	20	
Heptachlor	A	10493	10492	9386.9	8625.0	9698.1	9257.7	8829.8	AVRG		1.05E-4		9540.3	8	0.995	20	
Aldrin	A	10397	10352	9410.7	8649.0	9517.2	9093.3	8849.6	AVRG		1.06E-4		9466.9	7	0.995	20	
Heptachlor epoxide	A	9633.5	9417.2	8283.5	7619.4	8378.1	7888.2	7531.9	AVRG		1.19E-4		8393.1	10	0.995	20	
gamma-Chlordane	A	9285.5	9242.8	8155.2	7579.9	8288.2	7899.6	7915.8	AVRG		1.20E-4		8338.1	8	0.995	20	
alpha-Chlordane	A	8893.5	8826.4	7729.0	7201.9	7791.6	7745.1	7729.9	AVRG		1.25E-4		7988.2	8	0.995	20	
4,4'-DDE	A	7999.0	8060.7	7242.6	6868.2	7924.8	7462.8	6399.8	AVRG		1.35E-4		7422.6	8	0.995	20	
Endosulfan I	A	8695.5	8709.8	7700.1	6938.2	7994.0	7139.3	6963.3	AVRG		1.29E-4		7734.3	10	0.995	20	
Dieldrin	A	8648.0	8715.0	7752.8	7363.9	8396.3	7730.4	6503.6	AVRG		1.27E-4		7872.9	10	0.995	20	
Endrin	A	7393.5	7583.8	6598.4	6286.9	7151.5	6717.1	5814.1	AVRG		1.47E-4		6792.2	9	0.995	20	
4,4'-DDD	A	6569.3	6468.6	5730.7	5474.4	6210.7	6147.0	5583.5	AVRG		1.66E-4		6026.3	7	0.995	20	
Endosulfan II	A	7219.5	7211.8	6317.5	5951.8	7029.7	6382.2	5629.4	AVRG		1.53E-4		6534.6	10	0.995	20	
4,4'-DDT	A	6307.0	6816.5	6087.7	5901.9	6515.7	6372.7	6073.1	AVRG		1.59E-4		6296.4	5	0.995	20	
Methoxychlor	A	2700.7	2732.6	2380.4	2301.7	2674.5	2185.4		AVRG		4.01E-4		2495.9	9	0.995	20	
Endosulfan sulfate	A	7013.0	6873.2	5794.3	5365.5	6113.2	5685.5	5288.5	AVRG		1.66E-4		6019.0	11	0.995	20	
Endrin ketone	A	7970.3	8321.6	6760.1	6351.6	7228.5	6797.0	5827.3	AVRG		1.42E-4		7036.6	12	0.995	20	
TCMX	A	6217.0	6552.9	6048.0	5424.2	6000.7	5620.7	5482.1	AVRG		1.69E-4		5906.5	7	0.995	20	
Decachlorobiphenyl	A	5278.3	5181.4	4518.5	4250.1	4850.3	4546.8	4236.9	AVRG		2.13E-4		4694.6	9	0.995	20	
alpha-BHC	B	12851	12443	10208	10774	12626	13697	13206	AVRG		8.16E-5		12258	10	0.995	20	
gamma-BHC	B	12137	11522	9465.4	9936.6	11317	12257	12204	AVRG		8.88E-5		11263	10	0.995	20	
beta-BHC	B	4930.0	4555.6	3708.2	3816.3	4398.2	4419.3	4255.6	AVRG		2.33E-4		4297.6	10	0.995	20	
delta-BHC	B	14195	12328	9817.5	10201	11961	12812	12197	AVRG		8.38E-5		11930	13	0.995	20	
Heptachlor	B	11085	10568	8610.5	9088.5	10711	11586	11144	AVRG		9.62E-5		10399	11	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	12231	10766	8810.9	9213.7	10639	11298	11167	AVRG		9.44E-5		10589	11	0.995	20	
Heptachlor epoxide	B	10937	9799.8	7964.0	8225.3	9510.3	9811.2	9461.6	AVRG		1.07E-4		9387.0	11	0.995	20	
gamma-Chlordane	B	10548	9704.2	7982.9	8369.6	9426.7	9930.7	10132	AVRG		1.06E-4		9442.0	10	0.995	20	
alpha-Chlordane	B	10049	9210.8	7581.8	7898.8	9026.2	9477.8	9589.3	AVRG		1.11E-4		8976.3	10	0.995	20	
4,4'-DDE	B	8947.3	8469.6	7086.9	7530.4	9214.7	9782.6	8405.8	AVRG		1.18E-4		8491.0	11	0.995	20	
Endosulfan I	B	9792.0	8939.8	7382.4	7632.3	8673.6	8895.8	8733.5	AVRG		1.17E-4		8578.5	10	0.995	20	
Dieldrin	B	9720.3	9113.0	7359.5	8014.9	9718.3	9952.4	8304.6	AVRG		1.13E-4		8883.3	11	0.995	20	
Endrin	B	8220.5	7661.4	6087.5	6665.3	8001.7	8394.7	7270.5	AVRG		1.34E-4		7471.7	11	0.995	20	
4,4'-DDD	B	7849.3	7133.8	5815.9	6175.9	7510.9	8101.5	7254.1	AVRG		1.40E-4		7120.2	12	0.995	20	
Endosulfan II	B	7919.5	7401.6	6188.5	6544.6	7862.7	8258.3	7231.5	AVRG		1.36E-4		7343.8	10	0.995	20	
4,4'-DDT	B	7020.5	6744.8	5615.5	6361.9	7304.3	8184.7	7865.9	AVRG		1.43E-4		7013.9	13	0.995	20	
Methoxychlor	B	2913.0	2687.9	2139.7	2420.5	3087.2	2858.9	2108.8	AVRG		3.84E-4		2602.3	15	0.995	20	
Endosulfan sulfate	B	7561.8	6703.5	5275.7	5683.0	6780.4	6993.5	6439.6	AVRG		1.54E-4		6491.1	12	0.995	20	
Endrin ketone	B	8655.3	7728.8	6138.5	6563.1	8327.5	8509.2	7223.3	AVRG		1.32E-4		7592.2	13	0.995	20	
TCMX	B	6973.8	6825.5	5626.8	5612.1	6648.3	7052.2	6831.7	AVRG		1.54E-4		6510.0	10	0.995	20	
Decachlorobiphenyl	B	5684.5	5098.9	4120.4	4305.2	5477.2	5730.7	5439.3	AVRG		1.95E-4		5122.3	13	0.995	20	
Average EPA 8081A	A												(n=22)	9		20	
Average EPA 8081A	B												(n=22)	11		20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	2.000	6	5.000	8	10.00	0	20.00	-9	25.00	2	50.00	-2	100.0	-6
gamma-BHC	A	2.000	10	5.000	10	10.00	0	20.00	-9	25.00	0	50.00	-5	100.0	-6
beta-BHC	A	2.000	15	5.000	14	10.00	-1	20.00	-10	25.00	0	50.00	-8	100.0	-10
delta-BHC	A	2.000	20	5.000	14	10.00	-3	20.00	-12	25.00	-2	50.00	-6	100.0	-11
Heptachlor	A	2.000	10	5.000	10	10.00	-2	20.00	-10	25.00	2	50.00	-3	100.0	-7
Aldrin	A	2.000	10	5.000	9	10.00	-1	20.00	-9	25.00	1	50.00	-4	100.0	-7
Heptachlor epoxide	A	2.000	15	5.000	12	10.00	-1	20.00	-9	25.00	0	50.00	-6	100.0	-10
gamma-Chlordane	A	2.000	11	5.000	11	10.00	-2	20.00	-9	25.00	-1	50.00	-5	100.0	-5
alpha-Chlordane	A	2.000	11	5.000	10	10.00	-3	20.00	-10	25.00	-2	50.00	-3	100.0	-3
4,4'-DDE	A	4.000	8	10.00	9	20.00	-2	40.00	-7	50.00	7	100.0	1	200.0	-14
Endosulfan I	A	2.000	12	5.000	13	10.00	0	20.00	-10	25.00	3	50.00	-8	100.0	-10
Dieldrin	A	4.000	10	10.00	11	20.00	-2	40.00	-6	50.00	7	100.0	-2	200.0	-17
Endrin	A	4.000	9	10.00	12	20.00	-3	40.00	-7	50.00	5	100.0	-1	200.0	-14
4,4'-DDD	A	4.000	9	10.00	7	20.00	-5	40.00	-9	50.00	3	100.0	2	200.0	-7
Endosulfan II	A	4.000	10	10.00	10	20.00	-3	40.00	-9	50.00	8	100.0	-2	200.0	-14
4,4'-DDT	A	4.000	0	10.00	8	20.00	-3	40.00	-6	50.00	3	100.0	1	200.0	-4
Methoxychlor	A	20.00	8	50.00	9	100.0	-5	200.0	-8	250.0	7	500.0	-12		
Endosulfan sulfate	A	4.000	17	10.00	14	20.00	-4	40.00	-11	50.00	2	100.0	-6	200.0	-12
Endrin ketone	A	4.000	13	10.00	18	20.00	-4	40.00	-10	50.00	3	100.0	-3	200.0	-17
TCMX	A	4.000	5	10.00	11	20.00	2	40.00	-8	50.00	2	100.0	-5	200.0	-7
Decachlorobiphenyl	A	4.000	12	10.00	10	20.00	-4	40.00	-9	50.00	3	100.0	-3	200.0	-10
alpha-BHC	B	2.000	5	5.000	2	10.00	-17	20.00	-12	25.00	3	50.00	12	100.0	8
gamma-BHC	B	2.000	8	5.000	2	10.00	-16	20.00	-12	25.00	0	50.00	9	100.0	8
beta-BHC	B	2.000	15	5.000	6	10.00	-14	20.00	-11	25.00	2	50.00	3	100.0	-1
delta-BHC	B	2.000	19	5.000	3	10.00	-18	20.00	-14	25.00	0	50.00	7	100.0	2
Heptachlor	B	2.000	7	5.000	2	10.00	-17	20.00	-13	25.00	3	50.00	11	100.0	7
Aldrin	B	2.000	16	5.000	2	10.00	-17	20.00	-13	25.00	0	50.00	7	100.0	5
Heptachlor epoxide	B	2.000	17	5.000	4	10.00	-15	20.00	-12	25.00	1	50.00	5	100.0	1
gamma-Chlordane	B	2.000	12	5.000	3	10.00	-15	20.00	-11	25.00	0	50.00	5	100.0	7
alpha-Chlordane	B	2.000	12	5.000	3	10.00	-16	20.00	-12	25.00	1	50.00	6	100.0	7
4,4'-DDE	B	4.000	5	10.00	0	20.00	-17	40.00	-11	50.00	9	100.0	15	200.0	-1
Endosulfan I	B	2.000	14	5.000	4	10.00	-14	20.00	-11	25.00	1	50.00	4	100.0	2
Dieldrin	B	4.000	9	10.00	3	20.00	-17	40.00	-10	50.00	9	100.0	12	200.0	-7
Endrin	B	4.000	10	10.00	3	20.00	-19	40.00	-11	50.00	7	100.0	12	200.0	-3
4,4'-DDD	B	4.000	10	10.00	0	20.00	-18	40.00	-13	50.00	5	100.0	14	200.0	2
Endosulfan II	B	4.000	8	10.00	1	20.00	-16	40.00	-11	50.00	7	100.0	12	200.0	-2
4,4'-DDT	B	4.000	0	10.00	-4	20.00	-20	40.00	-9	50.00	4	100.0	17	200.0	12
Methoxychlor	B	20.00	12	50.00	3	100.0	-18	200.0	-7	250.0	19	500.0	10	1000	-19
Endosulfan sulfate	B	4.000	16	10.00	3	20.00	-19	40.00	-12	50.00	4	100.0	8	200.0	-1
Endrin ketone	B	4.000	14	10.00	2	20.00	-19	40.00	-14	50.00	10	100.0	12	200.0	-5
TCMX	B	4.000	7	10.00	5	20.00	-14	40.00	-14	50.00	2	100.0	8	200.0	5
Decachlorobiphenyl	B	4.000	11	10.00	0	20.00	-20	40.00	-16	50.00	7	100.0	12	200.0	6

ADM 05/30/07 : Methoxychlor Level 7 point dropped to correct failing %D.

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_149
Calnum : 807215412001 Cal Date : 29-MAY-2007

ICV 807215412034 (149_034 30-MAY-2007) stds: S5817

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	11151	10140	25.00	22.73	pg	-9	15	
gamma-BHC	A	10194	9232.4	25.00	22.64	pg	-9	15	
beta-BHC	A	4009.9	3591.1	25.00	22.39	pg	-10	15	
delta-BHC	A	10898	9742.0	25.00	22.35	pg	-11	15	
Heptachlor	A	9540.3	8612.4	25.00	22.57	pg	-10	15	
Aldrin	A	9466.9	8573.5	25.00	22.64	pg	-9	15	
Heptachlor epoxide	A	8393.1	7375.2	25.00	21.97	pg	-12	15	
gamma-Chlordane	A	8338.1	7442.0	25.00	22.31	pg	-11	15	
alpha-Chlordane	A	7988.2	6918.3	25.00	21.65	pg	-13	15	
4,4'-DDE	A	7422.6	7034.3	25.00	23.69	pg	-5	15	
Endosulfan I	A	7734.3	7008.9	25.00	22.66	pg	-9	15	
Dieldrin	A	7872.9	7509.4	25.00	23.85	pg	-5	15	
Endrin	A	6792.2	6438.0	25.00	23.70	pg	-5	15	
4,4'-DDD	A	6026.3	5361.8	25.00	22.24	pg	-11	15	
Endosulfan II	A	6534.6	6208.7	25.00	23.75	pg	-5	15	
4,4'-DDT	A	6296.4	5850.8	25.00	23.23	pg	-7	15	
Methoxychlor	A	2495.9	2210.3	275.0	243.5	pg	-11	15	
Endosulfan sulfate	A	6019.0	5432.7	25.00	22.56	pg	-10	15	
Endrin ketone	A	7036.6	6505.4	25.00	23.11	pg	-8	15	
alpha-BHC	B	12258	11734	25.00	23.93	pg	-4	15	
gamma-BHC	B	11263	10615	25.00	23.56	pg	-6	15	
beta-BHC	B	4297.6	4006.4	25.00	23.31	pg	-7	15	
delta-BHC	B	11930	11186	25.00	23.44	pg	-6	15	
Heptachlor	B	10399	9958.8	25.00	23.94	pg	-4	15	
Aldrin	B	10589	10048	25.00	23.72	pg	-5	15	
Heptachlor epoxide	B	9387.0	8632.3	25.00	22.99	pg	-8	15	
gamma-Chlordane	B	9442.0	8880.2	25.00	23.51	pg	-6	15	
alpha-Chlordane	B	8976.3	8419.3	25.00	23.45	pg	-6	15	
4,4'-DDE	B	8491.0	8323.2	25.00	24.51	pg	-2	15	
Endosulfan I	B	8578.5	8095.5	25.00	23.59	pg	-6	15	
Dieldrin	B	8883.3	8916.1	25.00	25.09	pg	0	15	
Endrin	B	7471.7	7373.6	25.00	24.67	pg	-1	15	
4,4'-DDD	B	7120.2	6928.4	25.00	24.33	pg	-3	15	
Endosulfan II	B	7343.8	7251.3	25.00	24.69	pg	-1	15	
4,4'-DDT	B	7013.9	6533.1	25.00	23.29	pg	-7	15	
Methoxychlor	B	2602.3	2744.7	275.0	290.0	pg	5	15	
Endosulfan sulfate	B	6491.1	6236.9	25.00	24.02	pg	-4	15	
Endrin ketone	B	7592.2	7630.5	25.00	25.13	pg	1	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319006 File : 162_006 Time : 11-JUN-2007 13:31

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	599263	7	15	
4,4'-DDE	A	2239			
4,4'-DDD	A	43673			
Endrin	A	337362	13	15	
Endrin aldehyde	A	14780			
Endrin ketone	A	37694			
4,4'-DDT	B	725460	7	15	
4,4'-DDE	B	2843			
4,4'-DDD	B	51661			
Endrin	B	389646	9	15	
Endrin aldehyde	B	14960			
Endrin ketone	B	23488			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319014 File : 162_014 Time : 11-JUN-2007 16:57

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	611640	7	15	
4,4'-DDE	A	1671			
4,4'-DDD	A	44196			
Endrin	A	355019	9	15	
Endrin aldehyde	A	5005			
Endrin ketone	A	29469			
4,4'-DDT	B	772522	5	15	
4,4'-DDE	B	1760			
4,4'-DDD	B	41075			
Endrin	B	405378	5	15	
Endrin aldehyde	B	4517			
Endrin ketone	B	16796			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807235416002 File : 163_002 Time : 12-JUN-2007 11:36

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	524291	8	15	
4,4'-DDE	A	1697			
4,4'-DDD	A	43415			
Endrin	A	302515	11	15	
Endrin aldehyde	A	7646			
Endrin ketone	A	31159			
4,4'-DDT	B	759136	6	15	
4,4'-DDE	B	1970			
4,4'-DDD	B	48527			
Endrin	B	401173	6	15	
Endrin aldehyde	B	5628			
Endrin ketone	B	21460			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807235416010 File : 163_010 Time : 12-JUN-2007 19:20

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	608155	8	15	
4,4'-DDE	A	2057			
4,4'-DDD	A	49199			
Endrin	A	347951	11	15	
Endrin aldehyde	A	8373			
Endrin ketone	A	32959			
4,4'-DDT	B	731506	8	15	
4,4'-DDE	B	2491			
4,4'-DDD	B	64258			
Endrin	B	398686	8	15	
Endrin aldehyde	B	7235			
Endrin ketone	B	27342			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 807234319007 File : 162_007 Time : 11-JUN-2007 13:53
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10624	20.00	19.05	pg	-5	15	
gamma-BHC	A	10194	9759.8	20.00	19.15	pg	-4	15	
beta-BHC	A	4009.9	3806.5	20.00	18.99	pg	-5	15	
delta-BHC	A	10898	10149	20.00	18.63	pg	-7	15	
Heptachlor	A	9540.3	8777.5	20.00	18.40	pg	-8	15	
Aldrin	A	9466.9	9226.4	20.00	19.49	pg	-3	15	
Heptachlor epoxide	A	8393.1	8095.7	20.00	19.29	pg	-4	15	
gamma-Chlordane	A	8338.1	8094.5	20.00	19.42	pg	-3	15	
alpha-Chlordane	A	7988.2	7827.6	20.00	19.60	pg	-2	15	
4,4'-DDE	A	7422.6	7366.6	40.00	39.70	pg	-1	15	
Endosulfan I	A	7734.3	7347.8	20.00	19.00	pg	-5	15	
Dieldrin	A	7872.9	7956.9	40.00	40.43	pg	1	15	
Endrin	A	6792.2	6372.5	40.00	37.53	pg	-6	15	
4,4'-DDD	A	6026.3	6340.1	40.00	42.08	pg	5	15	
Endosulfan II	A	6534.6	6489.5	40.00	39.72	pg	-1	15	
4,4'-DDT	A	6296.4	5364.5	40.00	34.08	pg	-15	15	
Methoxychlor	A	2495.9	2212.3	200.0	177.3	pg	-11	15	
Endosulfan sulfate	A	6019.0	5876.3	40.00	39.05	pg	-2	15	
Endrin ketone	A	7036.6	7217.6	40.00	41.03	pg	3	15	
TCMX	A	5906.5	5600.2	40.00	37.93	pg	-5	15	
Decachlorobiphenyl	A	4694.6	4669.2	40.00	39.78	pg	-1	15	
alpha-BHC	B	12258	12489	20.00	20.38	pg	2	15	
gamma-BHC	B	11263	11456	20.00	20.34	pg	2	15	
beta-BHC	B	4297.6	4351.9	20.00	20.25	pg	1	15	
delta-BHC	B	11930	11963	20.00	20.06	pg	0	15	
Heptachlor	B	10399	10284	20.00	19.78	pg	-1	15	
Aldrin	B	10589	10642	20.00	20.10	pg	0	15	
Heptachlor epoxide	B	9387.0	9445.5	20.00	20.12	pg	1	15	
gamma-Chlordane	B	9442.0	9525.9	20.00	20.18	pg	1	15	
alpha-Chlordane	B	8976.3	9015.7	20.00	20.09	pg	0	15	
4,4'-DDE	B	8491.0	8850.7	40.00	41.69	pg	4	15	
Endosulfan I	B	8578.5	8691.0	20.00	20.26	pg	1	15	
Dieldrin	B	8883.3	9509.1	40.00	42.82	pg	7	15	
Endrin	B	7471.7	7662.1	40.00	41.02	pg	3	15	
4,4'-DDD	B	7120.2	7520.2	40.00	42.25	pg	6	15	
Endosulfan II	B	7343.8	7760.6	40.00	42.27	pg	6	15	
4,4'-DDT	B	7013.9	6761.5	40.00	38.56	pg	-4	15	
Methoxychlor	B	2602.3	2643.0	200.0	203.1	pg	2	15	
Endosulfan sulfate	B	6491.1	6793.1	40.00	41.86	pg	5	15	
Endrin ketone	B	7592.2	8387.1	40.00	44.19	pg	10	15	
TCMX	B	6510.0	6547.9	40.00	40.23	pg	1	15	
Decachlorobiphenyl	B	5122.3	5464.8	40.00	42.67	pg	7	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					3	15	

807234319007

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 807234319015 File : 162_015 Time : 11-JUN-2007 17:19
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6270

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10948	10.00	9.817	pg	-2	15	
gamma-BHC	A	10194	10126	10.00	9.933	pg	-1	15	
beta-BHC	A	4009.9	3979.3	10.00	9.924	pg	-1	15	
delta-BHC	A	10898	10385	10.00	9.529	pg	-5	15	
Heptachlor	A	9540.3	9061.4	10.00	9.498	pg	-5	15	
Aldrin	A	9466.9	9494.5	10.00	10.03	pg	0	15	
Heptachlor epoxide	A	8393.1	8460.0	10.00	10.08	pg	1	15	
gamma-Chlordane	A	8338.1	8365.6	10.00	10.03	pg	0	15	
alpha-Chlordane	A	7988.2	7863.5	10.00	9.844	pg	-2	15	
4,4'-DDE	A	7422.6	7534.3	20.00	20.30	pg	2	15	
Endosulfan I	A	7734.3	7934.3	10.00	10.26	pg	3	15	
Dieldrin	A	7872.9	8169.9	20.00	20.75	pg	4	15	
Endrin	A	6792.2	6847.7	20.00	20.16	pg	1	15	
4,4'-DDD	A	6026.3	6372.7	20.00	21.15	pg	6	15	
Endosulfan II	A	6534.6	6876.4	20.00	21.05	pg	5	15	
4,4'-DDT	A	6296.4	5516.8	20.00	17.52	pg	-12	15	
Methoxychlor	A	2495.9	2346.7	100.0	94.02	pg	-6	15	
Endosulfan sulfate	A	6019.0	6202.6	20.00	20.61	pg	3	15	
Endrin ketone	A	7036.6	7536.5	20.00	21.42	pg	7	15	
TCMX	A	5906.5	5926.5	20.00	20.07	pg	0	15	
Decachlorobiphenyl	A	4694.6	5064.0	20.00	21.57	pg	8	15	
alpha-BHC	B	12258	11555	10.00	9.426	pg	-6	15	
gamma-BHC	B	11263	10488	10.00	9.312	pg	-7	15	
beta-BHC	B	4297.6	4023.7	10.00	9.363	pg	-6	15	
delta-BHC	B	11930	10663	10.00	8.938	pg	-11	15	
Heptachlor	B	10399	9298.7	10.00	8.942	pg	-11	15	
Aldrin	B	10589	9741.9	10.00	9.200	pg	-8	15	
Heptachlor epoxide	B	9387.0	8585.8	10.00	9.146	pg	-9	15	
gamma-Chlordane	B	9442.0	8572.7	10.00	9.079	pg	-9	15	
alpha-Chlordane	B	8976.3	8082.1	10.00	9.004	pg	-10	15	
4,4'-DDE	B	8491.0	7631.8	20.00	17.98	pg	-10	15	
Endosulfan I	B	8578.5	7911.3	10.00	9.222	pg	-8	15	
Dieldrin	B	8883.3	8295.2	20.00	18.68	pg	-7	15	
Endrin	B	7471.7	6672.3	20.00	17.86	pg	-11	15	
4,4'-DDD	B	7120.2	6796.9	20.00	19.09	pg	-5	15	
Endosulfan II	B	7343.8	6899.6	20.00	18.79	pg	-6	15	
4,4'-DDT	B	7013.9	5237.2	20.00	14.93	pg	**-25**	15	c- ***
Methoxychlor	B	2602.3	2109.3	100.0	81.06	pg	**-19**	15	c- ***
Endosulfan sulfate	B	6491.1	6024.8	20.00	18.56	pg	-7	15	
Endrin ketone	B	7592.2	7340.0	20.00	19.34	pg	-3	15	
TCMX	B	6510.0	6283.7	20.00	19.30	pg	-3	15	
Decachlorobiphenyl	B	5122.3	4675.8	20.00	18.26	pg	-9	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					9	15	

-=low bias c=CCV

807234319015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 807235416004 File : 163_004 Time : 12-JUN-2007 16:51
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11325	20.00	20.31	pg	2	15	
gamma-BHC	A	10194	10539	20.00	20.68	pg	3	15	
beta-BHC	A	4009.9	4005.0	20.00	19.98	pg	0	15	
delta-BHC	A	10898	10712	20.00	19.66	pg	-2	15	
Heptachlor	A	9540.3	9777.2	20.00	20.50	pg	2	15	
Aldrin	A	9466.9	9798.2	20.00	20.70	pg	4	15	
Heptachlor epoxide	A	8393.1	8572.3	20.00	20.43	pg	2	15	
gamma-Chlordane	A	8338.1	8620.6	20.00	20.68	pg	3	15	
alpha-Chlordane	A	7988.2	8272.2	20.00	20.71	pg	4	15	
4,4'-DDE	A	7422.6	7992.4	40.00	43.07	pg	8	15	
Endosulfan I	A	7734.3	7880.6	20.00	20.38	pg	2	15	
Dieldrin	A	7872.9	8527.2	40.00	43.32	pg	8	15	
Endrin	A	6792.2	7179.0	40.00	42.28	pg	6	15	
4,4'-DDD	A	6026.3	6648.0	40.00	44.13	pg	10	15	
Endosulfan II	A	6534.6	6840.6	40.00	41.87	pg	5	15	
4,4'-DDT	A	6296.4	6541.6	40.00	41.56	pg	4	15	
Methoxychlor	A	2495.9	2570.5	200.0	206.0	pg	3	15	
Endosulfan sulfate	A	6019.0	6266.5	40.00	41.64	pg	4	15	
Endrin ketone	A	7036.6	7466.3	40.00	42.44	pg	6	15	
TCMX	A	5906.5	5989.7	40.00	40.56	pg	1	15	
Decachlorobiphenyl	A	4694.6	5066.6	40.00	43.17	pg	8	15	
alpha-BHC	B	12258	12382	20.00	20.20	pg	1	15	
gamma-BHC	B	11263	11315	20.00	20.09	pg	0	15	
beta-BHC	B	4297.6	4203.6	20.00	19.56	pg	-2	15	
delta-BHC	B	11930	11451	20.00	19.20	pg	-4	15	
Heptachlor	B	10399	10242	20.00	19.70	pg	-2	15	
Aldrin	B	10589	10400	20.00	19.64	pg	-2	15	
Heptachlor epoxide	B	9387.0	9173.0	20.00	19.54	pg	-2	15	
gamma-Chlordane	B	9442.0	9249.8	20.00	19.59	pg	-2	15	
alpha-Chlordane	B	8976.3	8762.9	20.00	19.52	pg	-2	15	
4,4'-DDE	B	8491.0	8674.9	40.00	40.87	pg	2	15	
Endosulfan I	B	8578.5	8391.5	20.00	19.56	pg	-2	15	
Dieldrin	B	8883.3	9193.0	40.00	41.39	pg	3	15	
Endrin	B	7471.7	7467.7	40.00	39.98	pg	0	15	
4,4'-DDD	B	7120.2	7349.8	40.00	41.29	pg	3	15	
Endosulfan II	B	7343.8	7512.3	40.00	40.92	pg	2	15	
4,4'-DDT	B	7013.9	6678.3	40.00	38.09	pg	-5	15	
Methoxychlor	B	2602.3	2613.0	200.0	200.8	pg	0	15	
Endosulfan sulfate	B	6491.1	6477.1	40.00	39.91	pg	0	15	
Endrin ketone	B	7592.2	8064.2	40.00	42.49	pg	6	15	
TCMX	B	6510.0	6533.4	40.00	40.14	pg	0	15	
Decachlorobiphenyl	B	5122.3	5159.7	40.00	40.29	pg	1	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 807235416009 File : 163_009 Time : 12-JUN-2007 18:47
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6270

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11498	10.00	10.31	pg	3	15	
gamma-BHC	A	10194	10541	10.00	10.34	pg	3	15	
beta-BHC	A	4009.9	4100.9	10.00	10.23	pg	2	15	
delta-BHC	A	10898	10693	10.00	9.812	pg	-2	15	
Heptachlor	A	9540.3	9643.6	10.00	10.11	pg	1	15	
Aldrin	A	9466.9	9858.7	10.00	10.41	pg	4	15	
Heptachlor epoxide	A	8393.1	8761.6	10.00	10.44	pg	4	15	
gamma-Chlordane	A	8338.1	8661.4	10.00	10.39	pg	4	15	
alpha-Chlordane	A	7988.2	8005.4	10.00	10.02	pg	0	15	
4,4'-DDE	A	7422.6	7852.4	20.00	21.16	pg	6	15	
Endosulfan I	A	7734.3	8348.6	10.00	10.79	pg	8	15	
Dieldrin	A	7872.9	8480.9	20.00	21.54	pg	8	15	
Endrin	A	6792.2	6947.1	20.00	20.46	pg	2	15	
4,4'-DDD	A	6026.3	6439.7	20.00	21.37	pg	7	15	
Endosulfan II	A	6534.6	7235.5	20.00	22.15	pg	11	15	
4,4'-DDT	A	6296.4	5570.2	20.00	17.69	pg	-12	15	
Methoxychlor	A	2495.9	2336.9	100.0	93.63	pg	-6	15	
Endosulfan sulfate	A	6019.0	6283.8	20.00	20.88	pg	4	15	
Endrin ketone	A	7036.6	7649.1	20.00	21.74	pg	9	15	
TCMX	A	5906.5	6136.8	20.00	20.78	pg	4	15	
Decachlorobiphenyl	A	4694.6	5019.9	20.00	21.39	pg	7	15	
alpha-BHC	B	12258	12312	10.00	10.04	pg	0	15	
gamma-BHC	B	11263	11220	10.00	9.962	pg	0	15	
beta-BHC	B	4297.6	4332.1	10.00	10.08	pg	1	15	
delta-BHC	B	11930	11407	10.00	9.562	pg	-4	15	
Heptachlor	B	10399	10155	10.00	9.766	pg	-2	15	
Aldrin	B	10589	10522	10.00	9.937	pg	-1	15	
Heptachlor epoxide	B	9387.0	9343.1	10.00	9.953	pg	0	15	
gamma-Chlordane	B	9442.0	9330.8	10.00	9.882	pg	-1	15	
alpha-Chlordane	B	8976.3	8914.4	10.00	9.931	pg	-1	15	
4,4'-DDE	B	8491.0	8557.5	20.00	20.16	pg	1	15	
Endosulfan I	B	8578.5	8689.0	10.00	10.13	pg	1	15	
Dieldrin	B	8883.3	9100.4	20.00	20.49	pg	2	15	
Endrin	B	7471.7	7260.6	20.00	19.43	pg	-3	15	
4,4'-DDD	B	7120.2	7584.6	20.00	21.30	pg	7	15	
Endosulfan II	B	7343.8	7530.5	20.00	20.51	pg	3	15	
4,4'-DDT	B	7013.9	5829.7	20.00	16.62	pg	**-17**	15	c- ***
Methoxychlor	B	2602.3	2402.3	100.0	92.32	pg	-8	15	
Endosulfan sulfate	B	6491.1	6591.8	20.00	20.31	pg	2	15	
Endrin ketone	B	7592.2	8143.3	20.00	21.45	pg	7	15	
TCMX	B	6510.0	6621.4	20.00	20.34	pg	2	15	
Decachlorobiphenyl	B	5122.3	5323.4	20.00	20.79	pg	4	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					3	15	

-=low bias c=CCV

807235416009

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807215412

Instrument : GC23 Begun : 05/29/07 14:12
Method : EPA 8081A SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	149_007	X	PEM			05/29/07 14:12	1.0	1	
008	149_008	X	PEST_3			05/29/07 14:33	1.0	2	
015	149_015	X	PEM			05/29/07 17:51	1.0	1	
016	149_016	X	PEST_4			05/29/07 18:12	1.0	3	
023	149_023	PEM	PEM			05/29/07 21:43	1.0	1	
024	149_024	IB	HEX			05/29/07 22:04	1.0		
025	149_025	ICAL	PEST_1			05/29/07 22:26	1.0	4	
026	149_026	ICAL	PEST_2			05/29/07 22:47	1.0	5	
027	149_027	ICAL	PEST_3			05/29/07 23:08	1.0	2	
028	149_028	ICAL	PEST_4			05/29/07 23:30	1.0	3	
029	149_029	ICAL	PEST_5			05/29/07 23:51	1.0	6	
030	149_030	ICAL	PEST_6			05/30/07 00:13	1.0	7	
031	149_031	ICAL	PEST_7			05/30/07 00:34	1.0	8	
034	149_034	ICV	ICV			05/30/07 01:39	1.0	9	
035	149_035	X	ICV			05/30/07 02:00	1.0	9	
036	149_036	IB	HEX			05/30/07 02:21	1.0		
037	149_037	ICAL	CHLOR_40			05/30/07 02:43	1.0	10	
038	149_038	ICAL	CHLOR_150			05/30/07 03:04	1.0	11	
039	149_039	ICAL	CHLOR_500			05/30/07 03:26	1.0	12	
040	149_040	ICAL	CHLOR_1000			05/30/07 03:47	1.0	13	
041	149_041	ICAL	CHLOR_1500			05/30/07 04:09	1.0	14	
042	149_042	ICAL	CHLOR_3000			05/30/07 04:30	1.0	15	

Analyst: ADM Date: 05/30/07 Reviewer: RH Date: 05/30/07

Standards used: 1=S5747 2=S6270 3=S6271 4=S6268 5=S6269 6=S5859 7=S5860 8=S6332 9=S5817 10=S6324 11=S6325 12=S6326 13=S6327 14=S6328 15=S6329

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807234319

Instrument : GC23 Begun : 06/11/07 13:31
Method : EPA 8081A SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
006	162_006	PEM	PEM			06/11/07 13:31	1.0	1	
007	162_007	CCV	PEST_4			06/11/07 13:53	1.0	2	
008	162_008	X	HEX			06/11/07 14:18	1.0		
009	162_009	BLANK	QC391520	Water	126108	06/11/07 14:43	1.0		
010	162_010	BS	QC391521	Water	126108	06/11/07 15:05	1.0		
011	162_011	BSD	QC391522	Water	126108	06/11/07 15:27	1.0		
012	162_012	SAMPLE	195242-001	Water	126108	06/11/07 15:53	1.0		1:GCHLORDANE=260
013	162_013	X	HEX			06/11/07 16:15	1.0		
014	162_014	PEM	PEM			06/11/07 16:57	1.0	1	
015	162_015	CCV	PEST_3			06/11/07 17:19	1.0	3	
017	162_017	BLANK	QC391712	Soil	126164	06/11/07 18:21	1.0		
018	162_018	BS	QC391713	Soil	126164	06/11/07 18:43	1.0		
019	162_019	BSD	QC391714	Soil	126164	06/11/07 19:05	1.0		
020	162_020	SAMPLE	195242-002	Soil	126164	06/11/07 19:29	1.0		
021	162_021	X	HEX			06/11/07 19:51	1.0		
022	162_022	PEM	PEM			06/11/07 20:13	1.0	1	
023	162_023	CCV	PEST_4			06/11/07 20:35	1.0	2	
024	162_024	X	PEST_4			06/11/07 20:57	1.0	2	
025	162_025	X	PEM			06/11/07 21:19	1.0	1	
026	162_026	X	HEX			06/11/07 21:40	1.0		
027	162_027	SAMPLE	195247-001	Water	126108	06/11/07 22:02	1.0		
028	162_028	SAMPLE	195247-002	Water	126108	06/11/07 22:24	1.0		
029	162_029	SAMPLE	195270-001	Water	126108	06/11/07 22:46	1.0		
030	162_030	SAMPLE	195270-002	Water	126108	06/11/07 23:08	1.0		1:BHCBETA=580
031	162_031	SAMPLE	195279-001	Water	126108	06/11/07 23:30	1.0		
032	162_032	X	HEX			06/11/07 23:51	1.0		
033	162_033	PEM	PEM			06/12/07 00:13	1.0	1	
034	162_034	CCV	PEST_5			06/12/07 00:35	1.0	4	
035	162_035	X	PEST_5			06/12/07 00:57	1.0	4	
036	162_036	X	PEM			06/12/07 01:19	1.0	1	
037	162_037	X	HEX			06/12/07 01:41	1.0		

Standards used: 1=S6458 2=S6271 3=S6270 4=S6425

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807235416

Instrument : GC23 Begun : 06/12/07 11:36
Method : EPA 8081A SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
002	163_002	PEM	PEM			06/12/07 11:36	1.0	1
003	163_003	X	PEST_4			06/12/07 11:58	1.0	2
004	163_004	CCV	PEST_4			06/12/07 16:51	1.0	2
006	163_006	SAMPLE	195270-001	Water	126108	06/12/07 17:35	10.0	
007	163_007	SAMPLE	195270-002	Water	126108	06/12/07 17:57	10.0	
009	163_009	CCV	PEST_3			06/12/07 18:47	1.0	3
010	163_010	PEM	PEM			06/12/07 19:20	1.0	1

Standards used: 1=S6458 2=S6271 3=S6270

REPORTING SUMMARY FOR 195270 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-001	alpha-BHC	GC23	A	06/12/07 17:35
195270-001	beta-BHC	GC23	A	06/12/07 17:35
195270-001	gamma-BHC	GC23	A	06/12/07 17:35
195270-001	delta-BHC	GC23	A	06/12/07 17:35
195270-001	Heptachlor	GC23	A	06/12/07 17:35
195270-001	Aldrin	GC23	A	06/12/07 17:35
195270-001	Heptachlor epoxide	GC23	A	06/12/07 17:35
195270-001	Endosulfan I	GC23	A	06/12/07 17:35
195270-001	Dieldrin	GC23	A	06/12/07 17:35
195270-001	4,4'-DDE	GC23	A	06/12/07 17:35
195270-001	Endrin	GC23	A	06/12/07 17:35
195270-001	Endosulfan II	GC23	A	06/12/07 17:35
195270-001	Endosulfan sulfate	GC23	A	06/12/07 17:35
195270-001	4,4'-DDD	GC23	A	06/12/07 17:35
195270-001	4,4'-DDT	GC23	A	06/12/07 17:35
195270-001	alpha-Chlordane	GC23	A	06/12/07 17:35
195270-001	gamma-Chlordane	GC23	A	06/12/07 17:35
195270-001	Methoxychlor	GC23	A	06/12/07 17:35
195270-001	Endrin ketone	GC23	A	06/12/07 17:35
195270-001	Toxaphene	GC23	A	06/12/07 17:35
195270-001	TCMX	GC23	B	06/12/07 17:35
195270-001	Decachlorobiphenyl	GC23	B	06/12/07 17:35
195270-002	alpha-BHC	GC23	A	06/12/07 17:57
195270-002	beta-BHC	GC23	A	06/12/07 17:57
195270-002	gamma-BHC	GC23	A	06/12/07 17:57
195270-002	delta-BHC	GC23	A	06/12/07 17:57
195270-002	Heptachlor	GC23	A	06/12/07 17:57
195270-002	Aldrin	GC23	A	06/12/07 17:57
195270-002	Heptachlor epoxide	GC23	A	06/12/07 17:57
195270-002	Endosulfan I	GC23	A	06/12/07 17:57
195270-002	Dieldrin	GC23	A	06/12/07 17:57
195270-002	4,4'-DDE	GC23	A	06/12/07 17:57
195270-002	Endrin	GC23	A	06/12/07 17:57
195270-002	Endosulfan II	GC23	A	06/12/07 17:57
195270-002	Endosulfan sulfate	GC23	A	06/12/07 17:57
195270-002	4,4'-DDD	GC23	A	06/12/07 17:57
195270-002	4,4'-DDT	GC23	A	06/12/07 17:57
195270-002	alpha-Chlordane	GC23	A	06/12/07 17:57
195270-002	gamma-Chlordane	GC23	A	06/12/07 17:57
195270-002	Methoxychlor	GC23	A	06/12/07 17:57
195270-002	Endrin ketone	GC23	A	06/12/07 17:57
195270-002	Toxaphene	GC23	A	06/12/07 17:57
195270-002	TCMX	GC23	B	06/12/07 17:57
195270-002	Decachlorobiphenyl	GC23	B	06/12/07 17:57
QC391520	alpha-BHC	GC23	A	06/11/07 14:43
QC391520	beta-BHC	GC23	A	06/11/07 14:43
QC391520	gamma-BHC	GC23	A	06/11/07 14:43
QC391520	delta-BHC	GC23	A	06/11/07 14:43
QC391520	Heptachlor	GC23	A	06/11/07 14:43
QC391520	Aldrin	GC23	A	06/11/07 14:43
QC391520	Heptachlor epoxide	GC23	A	06/11/07 14:43
QC391520	Endosulfan I	GC23	A	06/11/07 14:43

REPORTING SUMMARY FOR 195270 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391520	Dieldrin	GC23	A	06/11/07 14:43
QC391520	4,4'-DDE	GC23	A	06/11/07 14:43
QC391520	Endrin	GC23	A	06/11/07 14:43
QC391520	Endosulfan II	GC23	A	06/11/07 14:43
QC391520	Endosulfan sulfate	GC23	A	06/11/07 14:43
QC391520	4,4'-DDD	GC23	A	06/11/07 14:43
QC391520	4,4'-DDT	GC23	A	06/11/07 14:43
QC391520	alpha-Chlordane	GC23	A	06/11/07 14:43
QC391520	gamma-Chlordane	GC23	A	06/11/07 14:43
QC391520	Methoxychlor	GC23	A	06/11/07 14:43
QC391520	Endrin ketone	GC23	A	06/11/07 14:43
QC391520	Toxaphene	GC23	A	06/11/07 14:43
QC391520	TCMX	GC23	A	06/11/07 14:43
QC391520	Decachlorobiphenyl	GC23	A	06/11/07 14:43
QC391521	gamma-BHC	GC23	A	06/11/07 15:05
QC391521	Heptachlor	GC23	A	06/11/07 15:05
QC391521	Aldrin	GC23	A	06/11/07 15:05
QC391521	Dieldrin	GC23	A	06/11/07 15:05
QC391521	Endrin	GC23	A	06/11/07 15:05
QC391521	4,4'-DDT	GC23	A	06/11/07 15:05
QC391521	TCMX	GC23	A	06/11/07 15:05
QC391521	Decachlorobiphenyl	GC23	A	06/11/07 15:05
QC391522	gamma-BHC	GC23	A	06/11/07 15:27
QC391522	Heptachlor	GC23	A	06/11/07 15:27
QC391522	Aldrin	GC23	A	06/11/07 15:27
QC391522	Dieldrin	GC23	A	06/11/07 15:27
QC391522	Endrin	GC23	A	06/11/07 15:27
QC391522	4,4'-DDT	GC23	A	06/11/07 15:27
QC391522	TCMX	GC23	A	06/11/07 15:27
QC391522	Decachlorobiphenyl	GC23	A	06/11/07 15:27

SAMPLE PREPARATION SUMMARY

Batch # : 126108
Started By : JXM
Method : 3520C
Spike #1 ID : S6209

Prep Date : 08-JUN-2007
SOP Version : 8081_3520_rv16
Spike #2 ID : S5676

Analysis : 8081
Finished By : SFL
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195242-001		Water	975	10	1	0.01026	6	.025				8081	
195247-001		Water	1040	10	1	0.009615	6	.025				8081	
195247-002		Water	1050	10	1	0.009524	6	.025				8081	
195270-001		Water	1060	10	1	0.009434	6	.025				8081	
195270-002		Water	1060	10	1	0.009434	6	.025				8081	
195279-001		Water	1050	10	1	0.009524	5	.025				8081	
QC391520	BLANK	Water	1000	10	1	0.01		.025				8081	
QC391521	BS	Water	1000	10	1	0.01		.025	.025			8081	
QC391522	BSD	Water	1000	10	1	0.01		.025	.025			8081	

Analyst: ADM Date: 06/12/07 Reviewer: CW Date: 06/12/07

8081 Water Prep Log Curtis & Tompkins, Ltd.

BK 2498 Page: 11

LIMS Batch No: 126108
Date Extracted: 6/8/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195242-001G	975	6	10.0		
195247-001D	1040	↓	↓		
↓ 02E	1050	↓	↓		
195270-001L	1060	↓	↓		
↓ 025	↓	↓	↓		
195279-001N	1050	5	↓		
MBQC391520	1000	N/A	↓		
BS ↓ 1	↓	↓	↓		
BSD ↓ 2	↓	↓	↓		

6/10/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	66209B	JM 6/8/07
0.025 mL of matrix spiking solution was added to all spikes	25676D	↓
☒ EPA 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2	SM47110	↓
Extraction Start Time:	17:40	↓
Extraction End Time:	1243	6/9/07 KP
☐ EPA 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	SF 6/10/07
Extracts filtered through baked, CH_2Cl_2 rinsed ~~powdered~~ GRAN Na_2SO_4	EM1442837026	↓
Exchanged 2x with Hexane	JTB E11B38	↓
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	↓
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	↓
Extracts relinquished to the Pesticide Group	FHDLEV	↓

6/8/07
Extraction Chemist **Date**

Contined from Page ___
Continued on Page 1

6/10/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 06/28/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B	GC25 A	GC25 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061	0.0039	0.0060
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063	0.0042	0.0068
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044	0.0035	0.0054
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090	0.0068	0.017
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014	0.013	0.022
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015	0.011	0.019
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099	0.0038	0.0060
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012	0.0034	0.0087
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081	0.0040	0.0074
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055	0.0029	0.0081
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057	0.0027	0.012
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051	0.0029	0.0070
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057	0.0027	0.0085
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012	0.0068	0.017
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013	0.0097	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013	0.0094	0.015
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013	0.0066	0.019
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015	0.0055	0.020
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20	0.10	0.16
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081	0.075	0.073
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080	0.0066	0.017
Toxaphene	ug/L	0.39	0.25	0.19	0.19	0.29	0.32	0.13	0.21

POLYAROMATIC HYDROCARBONS

: 00196

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	126173
Lab ID:	195270-001	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07

Analyte	Result	RL	MDL	Diln Fac	Analyzed
Naphthalene	ND	0.94		1.000	06/13/07
Acenaphthylene	ND	1.9		1.000	06/13/07
Acenaphthene	5.1	0.94		1.000	06/13/07
Fluorene	16	9.4		10.00	06/14/07
Phenanthrene	29	4.7		10.00	06/14/07
Anthracene	1.4	0.47	0.02	1.000	06/13/07
Fluoranthene	8.5	0.38	0.005	1.000	06/13/07
Pyrene	3.7	0.19		1.000	06/13/07
Benzo(a)anthracene	2.6	0.09		1.000	06/13/07
Chrysene	2.5	0.09		1.000	06/13/07
Benzo(b)fluoranthene	ND	0.19		1.000	06/13/07
Benzo(k)fluoranthene	0.16	0.09		1.000	06/13/07
Benzo(a)pyrene	ND	0.09		1.000	06/13/07
Dibenz(a,h)anthracene	ND	0.19		1.000	06/13/07
Benzo(g,h,i)perylene	ND	0.19		1.000	06/13/07
Indeno(1,2,3-cd)pyrene	ND	0.13		1.000	06/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
1-Methylnaphthalene (UV)	191 *	65-135	1.000	06/13/07
1-Methylnaphthalene (F)	128	65-135	1.000	06/13/07

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

75.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0606073A	Batch#:	126173
Lab ID:	195270-002	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07

Analyte	Result	RL	MDL	Diln Fac	Analyzed
Naphthalene	ND	0.95		1.000	06/13/07
Acenaphthylene	ND	1.9		1.000	06/13/07
Acenaphthene	6.2	0.95		1.000	06/13/07
Fluorene	16	9.5		10.00	06/14/07
Phenanthrene	27	4.8		10.00	06/14/07
Anthracene	1.4	0.48	0.02	1.000	06/13/07
Fluoranthene	8.0	0.38	0.005	1.000	06/13/07
Pyrene	3.4	0.19		1.000	06/13/07
Benzo(a)anthracene	2.2	0.10		1.000	06/13/07
Chrysene	2.4	0.10		1.000	06/13/07
Benzo(b)fluoranthene	ND	0.19		1.000	06/13/07
Benzo(k)fluoranthene	0.14	0.10		1.000	06/13/07
Benzo(a)pyrene	ND	0.10		1.000	06/13/07
Dibenz(a,h)anthracene	ND	0.19		1.000	06/13/07
Benzo(g,h,i)perylene	ND	0.19		1.000	06/13/07
Indeno(1,2,3-cd)pyrene	ND	0.13		1.000	06/13/07

Surrogate	%REC	Limits	Diln Fac	Analyzed
1-Methylnaphthalene (UV)	180 *	65-135	1.000	06/13/07
1-Methylnaphthalene (F)	123	65-135	1.000	06/13/07

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

76.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	126173
Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.03 J	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	87	65-135

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

77.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW102	Batch#:	126173
Lab ID:	195270-014	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

78.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0606071A	Batch#:	126173
Lab ID:	195270-015	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	83	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

79.0

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1213GW101	Batch#:	126173
Lab ID:	195270-016	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

80.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391739	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

81.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391740	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.860	89	50-135
Fluorene	2.000	1.904	95	65-135
Pyrene	1.000	0.9258	93	65-135
Benzo(a)pyrene	1.000	0.8990	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	89	65-135

82.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	126173
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Lab ID: QC391741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09004	9.615	7.964	83	50-135
Fluorene	<0.009366	1.923	1.729	90	65-135
Pyrene	<0.003779	0.9615	0.7599	79	65-135
Benzo(a)pyrene	<0.01488	0.9615	0.3574	37 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	83	65-135

Type: MSD Lab ID: QC391742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.615	7.763	81	50-135	3	35
Fluorene	1.923	1.709	89	65-135	1	35
Pyrene	0.9615	0.7860	82	65-135	3	35
Benzo(a)pyrene	0.9615	0.4085	42 *	65-135	13	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	84	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

83.0

Confirmation Report for 195270 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
195270-001	1349MW100	Acenaphthene	5.110	6.234	20	22
195270-001	1349MW100	Fluorene	16.24	10.90	39	-33
195270-001	1349MW100	Phenanthrene	28.71	24.46	16	-15
195270-001	1349MW100	Anthracene	1.448	4.317	100	198
195270-001	1349MW100	Fluoranthene	8.515	37.37	126	339
195270-001	1349MW100	Pyrene	3.722	49.08	172	1219
195270-001	1349MW100	Benzo(a)anthracene	2.556	5.614	75	120
195270-001	1349MW100	Chrysene	2.548	5.393	72	112
195270-001	1349MW100	Benzo(k)fluoranthene	0.1595	0.8901	139	458
195270-002	DUP0606073A	Acenaphthene	6.189	6.327	2	2
195270-002	DUP0606073A	Fluorene	16.02	10.51	42	-34
195270-002	DUP0606073A	Phenanthrene	27.37	23.44	15	-14
195270-002	DUP0606073A	Anthracene	1.400	4.108	98	193
195270-002	DUP0606073A	Fluoranthene	7.960	34.17	124	329
195270-002	DUP0606073A	Pyrene	3.373	40.22	169	1093
195270-002	DUP0606073A	Benzo(a)anthracene	2.192	4.844	75	121
195270-002	DUP0606073A	Chrysene	2.382	4.772	67	100
195270-002	DUP0606073A	Benzo(k)fluoranthene	0.1378	0.7907	141	474
195270-013	FM14EX07GW101	Fluoranthene	0.02751 J	0.08679	104	216

J=estimated

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 297149198001
Units : ug/L

Date : 13-APR-2007 17:16
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	10300006	297149198006		13-APR-2007 17:16	S5288
L2	10300007	297149198007		13-APR-2007 17:47	S5287
L3	10300008	297149198008		13-APR-2007 18:19	S5286
L4	10300009	297149198009		13-APR-2007 18:51	S5285
L5	10300010	297149198010		13-APR-2007 19:22	S5284
L6	10300011	297149198011		13-APR-2007 19:54	S5283
L7	10300012	297149198012		13-APR-2007 20:25	S5282

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0128	0.0132	0.0134	0.0134	0.0132	0.0132	0.0132	LINR	-10.001	75.7193		0.0132	1.000	0.99	20	
Acenaphthylene	1	0.0094	0.0096	0.0099	0.0099	0.0098	0.0098	0.0097	LINR	-59.664	102.661		0.0097	1.000	0.99	20	
Acenaphthene	1	0.0069	0.0052	0.0053	0.0053	0.0052	0.0052	0.0051	LINR	-79.957	194.506		0.0055	1.000	0.99	20	
Fluorene	1	0.0705	0.0643	0.0643	0.0645	0.0638	0.0636	0.0639	LINR	-0.7617	15.6594		0.0650	1.000	0.99	20	
Phenanthrene	1	0.1834	0.1774	0.1805	0.1806	0.1791	0.1787	0.1794	LINR	-0.0602	5.57891		0.1799	1.000	0.99	20	
Anthracene	1	0.4270	0.4295	0.4332	0.4337	0.4303	0.4275	0.4283	LINR	-2.0092	2.33653		0.4299	1.000	0.99	20	
Fluoranthene	1	0.0384	0.0403	0.0416	0.0414	0.0426	0.0424	0.0427	LINR	11.5991	23.4132		0.0414	1.000	0.99	20	
Benzo(a)anthracene	1	0.0994	0.0926	0.0938	0.0949	0.0943	0.0946	0.0957	LINR	5.77766	10.4563		0.0950	1.000	0.99	20	
Chrysene	1	0.1106	0.1334	0.1359	0.1363	0.1343	0.1345	0.1353	LINR	1.94264	7.39843		0.1314	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0921	0.1004	0.1054	0.1072	0.1079	0.1075	0.1081	LINR	8.26982	9.24895		0.1041	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0572	0.0735	0.0812	0.0822	0.0834	0.0831	0.0840	LINR	8.45959	11.8997		0.0778	1.000	0.99	20	
Benzo(a)pyrene	1	0.0643	0.0779	0.0904	0.0913	0.0906	0.0910	0.0920	LINR	8.12070	10.8643		0.0854	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0176	0.0165	0.0203	0.0207	0.0215	0.0218		LINR	27.2544	45.5744		0.0198	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0274	0.0281	0.0339	0.0342	0.0348	0.0356		LINR	22.9034	28.0539		0.0323	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0987	0.0879	0.0928	0.0934	0.0933	0.0956		LINR	6.49838	10.4688		0.0936	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0088	0.0088	0.0087	0.0086	0.0085	0.0085	LINR	-238.60	118.032		0.0086	1.000	0.99	20	
Acenaphthylene	2	0.0891	0.0894	0.0904	0.0892	0.0872	0.0854		LINR	-190.47	11.7213		0.0885	1.000	0.99	20	
Pyrene	2	0.1213	0.1229	0.1312	0.1305	0.1302	0.1292	0.1319	LINR	6.99417	7.59564		0.1282	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0218	0.0221	0.0220	0.0215	0.0207	0.0199		LINR	-722.70	50.4398		0.0213	0.999	0.99	20	
Naphthalene	3	0.0107	0.0106	0.0106	0.0104	0.0103	0.0102	0.0103	LINR	-15.063	97.2408		0.0104	1.000	0.99	20	
Acenaphthene	3	0.0231	0.0228	0.0230	0.0228	0.0225	0.0225	0.0224	LINR	-40.470	44.5908		0.0228	1.000	0.99	20	
Fluorene	3	0.1231	0.1210	0.1214	0.1202	0.1187	0.1184	0.1179	LINR	-9.5649	8.48288		0.1201	1.000	0.99	20	
Phenanthrene	3	0.1327	0.1299	0.1302	0.1298	0.1278	0.1286	0.1286	LINR	-0.7120	7.78012		0.1297	1.000	0.99	20	
Anthracene	3	0.4513	0.4443	0.4475	0.4488	0.4472	0.4445	0.4451	LINR	-1.5122	2.24797		0.4469	1.000	0.99	20	
Fluoranthene	3	0.0390	0.0393	0.0398	0.0399	0.0391	0.0394	0.0397	LINR	5.11764	25.2422		0.0394	1.000	0.99	20	
Pyrene	3	0.1131	0.1163	0.1162	0.1164	0.1147	0.1166	0.1174	LINR	5.95171	8.51800		0.1158	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1373	0.1411	0.1447	0.1447	0.1444	0.1447	0.1453	LINR	2.60785	6.88237		0.1432	1.000	0.99	20	
Chrysene	3	0.1623	0.1633	0.1673	0.1667	0.1644	0.1638	0.1652	LINR	0.68406	6.06206		0.1647	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0606	0.0613	0.0630	0.0635	0.0630	0.0629	0.0633	LINR	4.57699	15.8004		0.0625	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3579	0.3696	0.3798	0.3815	0.3780	0.3771	0.3775	LINR	-0.7017	2.64966		0.3745	1.000	0.99	20	
Benzo(a)pyrene	3	0.1958	0.2035	0.2110	0.2146	0.2122	0.2114	0.2134	LINR	3.00004	4.69025		0.2088	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0256	0.0253	0.0276	0.0282	0.0286	0.0295		LINR	24.2523	33.8597		0.0275	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0453	0.0481	0.0529	0.0544	0.0544	0.0553		LINR	15.3097	18.0511		0.0518	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0712	0.0807	0.0904	0.0937	0.0935	0.0941		LINR	6.17134	10.5948		0.0873	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0120	0.0117	0.0118	0.0116	0.0115	0.0115	0.0114	LINR	-170.78	87.4696		0.0116	1.000	0.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Naphthalene	1	166.7	-9	500.0	-2	2000	1	4000	1	10000	0	20000	0	40000	0
Acenaphthylene	1	333.3	-21	1000	-7	4000	0	8000	1	20000	0	40000	0	80000	0
Acenaphthene	1	166.7	-14	500.0	-16	2000	-2	4000	2	10000	1	20000	0	40000	0
Fluorene	1	33.33	8	100.0	0	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	1	16.67	2	50.00	-1	200.0	1	400.0	1	1000	0	2000	0	4000	0
Anthracene	1	16.67	-12	50.00	-4	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	1	33.33	25	100.0	6	400.0	0	800.0	-2	2000	0	4000	-1	8000	0
Benzo(a)anthracene	1	16.67	39	50.00	8	200.0	1	400.0	1	1000	-1	2000	-1	4000	0
Chrysene	1	16.67	-7	50.00	3	200.0	2	400.0	1	1000	0	2000	0	4000	0
Benzo(b)fluoranthene	1	33.33	10	100.0	1	400.0	0	800.0	0	2000	0	4000	0	8000	0
Benzo(k)fluoranthene	1	16.67	19	50.00	4	200.0	1	400.0	0	1000	0	2000	-1	4000	0
Benzo(a)pyrene	1	16.67	19	50.00	1	200.0	2	400.0	1	1000	-1	2000	-1	4000	0
Dibenz(a,h)anthracene	1	33.33	62	100.0	3	400.0	0	800.0	-2	2000	-1	4000	0		
Benzo(g,h,i)perylene	1	33.33	46	100.0	2	400.0	1	800.0	-1	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	1	16.67	42	50.00	5	200.0	0	400.0	-1	1000	-2	2000	0		
1-Methylnaphthalene (UV)	1	666.7	-33	2000	-8	8000	0	16000	1	40000	1	80000	0	2E+5	0
Acenaphthylene	2	333.3	-53	1000	-14	4000	1	8000	2	20000	1	40000	0		
Pyrene	2	16.67	34	50.00	7	200.0	3	400.0	1	1000	0	2000	-2	4000	0
1-Methylnaphthalene (UV)	2	666.7	-98	2000	-25	8000	2	16000	4	40000	2	80000	-1		
Naphthalene	3	166.7	-5	500.0	0	2000	2	4000	0	10000	0	20000	-1	40000	0
Acenaphthene	3	166.7	-21	500.0	-6	2000	0	4000	1	10000	0	20000	0	40000	0
Fluorene	3	33.33	-24	100.0	-7	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	3	16.67	-1	50.00	0	200.0	1	400.0	1	1000	-1	2000	0	4000	0
Anthracene	3	16.67	-8	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	3	33.33	14	100.0	4	400.0	2	800.0	1	2000	-1	4000	0	8000	0
Pyrene	3	16.67	32	50.00	11	200.0	2	400.0	1	1000	-2	2000	0	4000	0
Benzo(a)anthracene	3	16.67	10	50.00	2	200.0	1	400.0	0	1000	0	2000	0	4000	0
Chrysene	3	16.67	2	50.00	0	200.0	2	400.0	1	1000	0	2000	-1	4000	0
Benzo(b)fluoranthene	3	33.33	10	100.0	1	400.0	1	800.0	1	2000	0	4000	-1	8000	0
Benzo(k)fluoranthene	3	16.67	-9	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Benzo(a)pyrene	3	16.67	10	50.00	1	200.0	0	400.0	1	1000	0	2000	-1	4000	0
Dibenz(a,h)anthracene	3	33.33	59	100.0	10	400.0	-1	800.0	-1	2000	-2	4000	1		
Benzo(g,h,i)perylene	3	33.33	28	100.0	2	400.0	-1	800.0	0	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	3	16.67	12	50.00	-2	200.0	-1	400.0	1	1000	0	2000	0		
1-Methylnaphthalene (F)	3	666.7	-21	2000	-6	8000	1	16000	1	40000	0	80000	0	2E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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UPDATED RETENTION TIMES FROM CCU FILE 13400002. JM 15MAY2007

HPLC04 METHOD 8310

Calib. Data Modified : 5/15/2007 9:29:41 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.775	1	1	166.67000	2.12613	78.39140			Naphthalene
		2	500.00000	6.61840	75.54697			
		3	2000.00000	26.88920	74.37930			
		4	4000.00000	53.47171	74.80591			
		5	1.00000e4	131.95592	75.78288			
		6	2.00000e4	263.69684	75.84467			
		7	4.00000e4	528.67773	75.66046			
4.814	3	1	166.67000	1.79073	93.07379			Naphthalene
		2	500.00000	5.29465	94.43499			
		3	2000.00000	21.15345	94.54721			
		4	4000.00000	41.49194	96.40426			
		5	1.00000e4	103.01423	97.07397			
		6	2.00000e4	204.77448	97.66842			
		7	4.00000e4	411.98587	97.09071			
6.029	1	1	333.33000	3.13157	106.44193			Acenaphthylene
		2	1000.00000	9.62986	103.84365			
		3	4000.00000	39.68081	100.80440			
		4	8000.00000	79.44919	100.69329			
		5	2.00000e4	195.85706	102.11529			
		6	4.00000e4	390.32718	102.47813			
		7	8.00000e4	779.58801	102.61830			
6.030	2	1	333.33000	29.69775	11.22408			Acenaphthylene
		2	1000.00000	89.43451	11.18137			
		3	4000.00000	361.48309	11.06552			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	713.72961	11.20873			
		5	2.00000e4	1744.82886	11.46244			
		6	4.00000e4	3414.72949	11.71396			
6.802	1	1	666.67000	5.78173	115.30625			1-Methylnaphthalene (UV)
		2	2000.00000	17.60884	113.57930			
		3	8000.00000	70.00924	114.27063			
		4	1.60000e4	139.49213	114.70181			
		5	4.00000e4	343.04321	116.60339			
		6	8.00000e4	679.21155	117.78363			
		7	1.60000e5	1357.17957	117.89155			
6.803	2	1	666.67000	14.56439	45.77399			1-Methylnaphthalene (UV)
		2	2000.00000	44.10336	45.34802			
		3	8000.00000	176.21402	45.39934			
		4	1.60000e4	343.70859	46.55106			
		5	4.00000e4	826.97571	48.36901			
		6	8.00000e4	1588.15674	50.37286			
6.842	3	1	666.67000	7.99987	83.33510			1-Methylnaphthalene (F)
		2	2000.00000	23.39339	85.49424			
		3	8000.00000	94.23004	84.89861			
		4	1.60000e4	186.37436	85.84872			
		5	4.00000e4	460.03391	86.95011			
		6	8.00000e4	917.08130	87.23327			
		7	1.60000e5	1830.53613	87.40609			
7.251	1	1	166.67000	1.98399	84.00737			2-Methylnaphthalene
		2	500.00000	5.83025	85.75956			
		3	2000.00000	22.91004	87.29797			
		4	4000.00000	46.08871	86.78914			
		5	1.00000e4	114.12836	87.62064			
		6	2.00000e4	225.58672	88.65770			
		7	4.00000e4	451.41702	88.60986			
7.292	3	1	166.67000	2.33092	71.50383			2-Methylnaphthalene
		2	500.00000	6.89568	72.50921			
		3	2000.00000	27.58432	72.50496			
		4	4000.00000	54.78667	73.01045			
		5	1.00000e4	135.95044	73.55622			
		6	2.00000e4	269.15958	74.30536			
		7	4.00000e4	542.89160	73.67953			
7.640	1	1	166.67000	1.14632	145.39623			Acenaphthene
		2	500.00000	2.57756	193.98155			
		3	2000.00000	10.51053	190.28528			
		4	4000.00000	21.31399	187.67017			
		5	1.00000e4	52.31623	191.14528			
		6	2.00000e4	103.27618	193.65550			
		7	4.00000e4	205.89775	194.27118			
7.680	3	1	166.67000	3.85663	43.21653			Acenaphthene
		2	500.00000	11.41417	43.80520			
		3	2000.00000	45.97927	43.49787			
		4	4000.00000	91.38386	43.77141			
		5	1.00000e4	225.47073	44.35165			
		6	2.00000e4	450.13852	44.43077			
		7	4.00000e4	897.44818	44.57082			
8.162	1	1	33.33300	2.34922	14.18896			Fluorene
		2	100.00000	6.42542	15.56318			
		3	400.00000	25.73475	15.54319			
		4	800.00000	51.57725	15.51072			
		5	2000.00000	127.57288	15.67731			
		6	4000.00000	254.38828	15.72400			
		7	8000.00000	511.46848	15.64124			
8.202	3	1	33.33300	4.10462	8.12084			Fluorene
		2	100.00000	12.10357	8.26203			
		3	400.00000	48.56486	8.23641			
		4	800.00000	96.16352	8.31916			
		5	2000.00000	237.35271	8.42628			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	473.63272	8.44536			
		7	8000.00000	943.53278	8.47877			
9.288	1	1	16.66700	3.05610	5.45368			Phenanthrene
		2	50.00000	8.87007	5.63693			
		3	200.00000	36.09091	5.54156			
		4	400.00000	72.25112	5.53625			
		5	1000.00000	179.13455	5.58240			
		6	2000.00000	357.36267	5.59656			
		7	4000.00000	717.53351	5.57465			
9.326	3	1	16.66700	2.21108	7.53796			Phenanthrene
		2	50.00000	6.49372	7.69975			
		3	200.00000	26.03061	7.68326			
		4	400.00000	51.93502	7.70193			
		5	1000.00000	127.82927	7.82293			
		6	2000.00000	257.22650	7.77525			
		7	4000.00000	514.33234	7.77707			
10.303	1	1	16.66700	7.11729	2.34176			Anthracene
		2	50.00000	21.47680	2.32809			
		3	200.00000	86.63564	2.30852			
		4	400.00000	173.47972	2.30575			
		5	1000.00000	430.32001	2.32385			
		6	2000.00000	855.00366	2.33917			
		7	4000.00000	1713.20947	2.33480			
10.342	3	1	16.66700	7.52114	2.21602			Anthracene
		2	50.00000	22.21256	2.25098			
		3	200.00000	89.50451	2.23452			
		4	400.00000	179.52844	2.22806			
		5	1000.00000	447.20154	2.23613			
		6	2000.00000	888.95929	2.24982			
		7	4000.00000	1780.25928	2.24686			
11.462	1	1	33.33300	1.28108	26.01947			Fluoranthene
		2	100.00000	4.03425	24.78779			
		3	400.00000	16.62899	24.05437			
		4	800.00000	33.12579	24.15037			
		5	2000.00000	85.29985	23.44670			
		6	4000.00000	169.48399	23.60105			
		7	8000.00000	341.57843	23.42068			
11.501	3	1	33.33300	1.30039	25.63313			Fluoranthene
		2	100.00000	3.92913	25.45090			
		3	400.00000	15.91306	25.13658			
		4	800.00000	31.92663	25.05745			
		5	2000.00000	78.16699	25.58625			
		6	4000.00000	157.55948	25.38724			
		7	8000.00000	317.23450	25.21794			
12.216	2	1	16.66700	2.02209	8.24246			Pyrene
		2	50.00000	6.14506	8.13662			
		3	200.00000	26.24098	7.62167			
		4	400.00000	52.21975	7.65994			
		5	1000.00000	130.19414	7.68084			
		6	2000.00000	258.31161	7.74259			
		7	4000.00000	527.77155	7.57904			
12.256	3	1	16.66700	1.88428	8.84530			Pyrene
		2	50.00000	5.81487	8.59864			
		3	200.00000	23.24056	8.60564			
		4	400.00000	46.54547	8.59375			
		5	1000.00000	114.70278	8.71818			
		6	2000.00000	233.18887	8.57674			
		7	4000.00000	469.78665	8.51450			
14.978	1	1	16.66700	1.65656	10.06123			Benzo(a)anthracene
		2	50.00000	4.62886	10.80180			
		3	200.00000	18.76417	10.65861			
		4	400.00000	37.95211	10.53960			
		5	1000.00000	94.25475	10.60954			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	189.13774	10.57430			
		7	4000.00000	382.94766	10.44529			
15.018	3	1	16.66700	2.28920	7.28071			Benzo(a)anthracene
		2	50.00000	7.05404	7.08814			
		3	200.00000	28.93622	6.91175			
		4	400.00000	57.87023	6.91202			
		5	1000.00000	144.42162	6.92417			
		6	2000.00000	289.42532	6.91025			
		7	4000.00000	581.30914	6.88102			
15.450	1	1	16.66700	1.84303	9.04325			Chrysene
		2	50.00000	6.66891	7.49748			
		3	200.00000	27.17831	7.35881			
		4	400.00000	54.50307	7.33904			
		5	1000.00000	134.26915	7.44773			
		6	2000.00000	268.92798	7.43694			
		7	4000.00000	541.02679	7.39335			
15.497	3	1	16.66700	2.70424	6.16329			Chrysene
		2	50.00000	8.16577	6.12312			
		3	200.00000	33.46666	5.97610			
		4	400.00000	66.69530	5.99742			
		5	1000.00000	164.41519	6.08216			
		6	2000.00000	327.66275	6.10384			
		7	4000.00000	660.79785	6.05329			
17.660	1	1	33.33300	3.06990	10.85801			Benzo(b)fluoranthene
		2	100.00000	10.04300	9.95718			
		3	400.00000	42.15858	9.48799			
		4	800.00000	85.72279	9.33241			
		5	2000.00000	215.81119	9.26736			
		6	4000.00000	430.08072	9.30058			
		7	8000.00000	864.70093	9.25175			
17.699	3	1	33.33300	2.02153	16.48898			Benzo(b)fluoranthene
		2	100.00000	6.12518	16.32605			
		3	400.00000	25.21695	15.86235			
		4	800.00000	50.77764	15.75497			
		5	2000.00000	126.05885	15.86561			
		6	4000.00000	251.49760	15.90472			
		7	8000.00000	506.71603	15.78794			
18.594	1	1	16.66700	9.52995e-1	17.48908			Benzo(k)fluoranthene
		2	50.00000	3.67382	13.60981			
		3	200.00000	16.23658	12.31786			
		4	400.00000	32.87246	12.16824			
		5	1000.00000	83.36793	11.99502			
		6	2000.00000	166.19958	12.03372			
		7	4000.00000	335.99481	11.90495			
18.634	3	1	16.66700	5.96582	2.79375			Benzo(k)fluoranthene
		2	50.00000	18.47991	2.70564			
		3	200.00000	75.95864	2.63301			
		4	400.00000	152.59778	2.62127			
		5	1000.00000	377.99402	2.64554			
		6	2000.00000	754.19122	2.65185			
		7	4000.00000	1510.11670	2.64880			
19.526	1	1	16.66700	1.07194	15.54845			Benzo(a)pyrene
		2	50.00000	3.89495	12.83713			
		3	200.00000	18.07028	11.06790			
		4	400.00000	36.52415	10.95166			
		5	1000.00000	90.64273	11.03232			
		6	2000.00000	182.08386	10.98395			
		7	4000.00000	368.15787	10.86490			
19.567	3	1	16.66700	3.26395	5.10639			Benzo(a)pyrene
		2	50.00000	10.17375	4.91461			
		3	200.00000	42.19252	4.74018			
		4	400.00000	85.85696	4.65891			
		5	1000.00000	212.20137	4.71250			

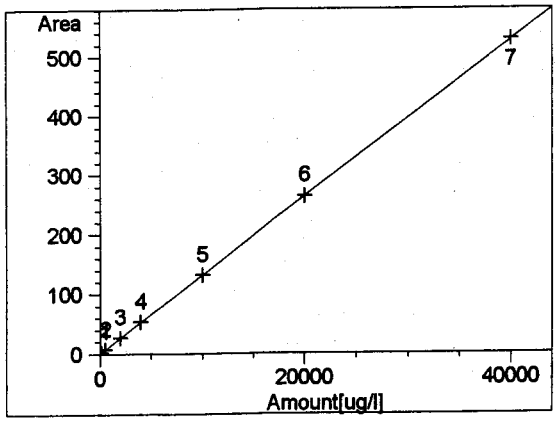
Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	422.78271	4.73056			
		7	4000.00000	853.64819	4.68577			
21.125	1	1	33.33300	5.87149e-1	56.77090			Dibenz(a,h)anthracene
		2	100.00000	1.65332	60.48420			
		3	400.00000	8.13782	49.15319			
		4	800.00000	16.52660	48.40682			
		5	2000.00000	43.03531	46.47347			
		6	4000.00000	87.38079	45.77665			
21.166	3	1	33.33300	8.53681e-1	39.04622			Dibenz(a,h)anthracene
		2	100.00000	2.53004	39.52501			
		3	400.00000	11.03330	36.25388			
		4	800.00000	22.57477	35.43779			
		5	2000.00000	57.27084	34.92179			
		6	4000.00000	118.01955	33.89269			
21.906	1	1	33.33300	9.14665e-1	36.44285			Benzo(g,h,i)perylene
		2	100.00000	2.81032	35.58320			
		3	400.00000	13.56283	29.49238			
		4	800.00000	27.32761	29.27443			
		5	2000.00000	69.65511	28.71290			
		6	4000.00000	142.23232	28.12300			
21.945	3	1	33.33300	1.51022	22.07160			Benzo(g,h,i)perylene
		2	100.00000	4.81285	20.77773			
		3	400.00000	21.17274	18.89222			
		4	800.00000	43.53913	18.37427			
		5	2000.00000	108.83624	18.37623			
		6	4000.00000	221.29349	18.07554			
22.404	1	1	16.66700	1.64575	10.12731			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.39383	11.37960			
		3	200.00000	18.55475	10.77891			
		4	400.00000	37.35328	10.70856			
		5	1000.00000	93.34637	10.71279			
		6	2000.00000	191.22902	10.45866			
22.442	3	1	16.66700	1.18608	14.05220			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.03285	12.39819			
		3	200.00000	18.07297	11.06625			
		4	400.00000	37.48116	10.67203			
		5	1000.00000	93.52203	10.69267			
		6	2000.00000	188.29039	10.62189			

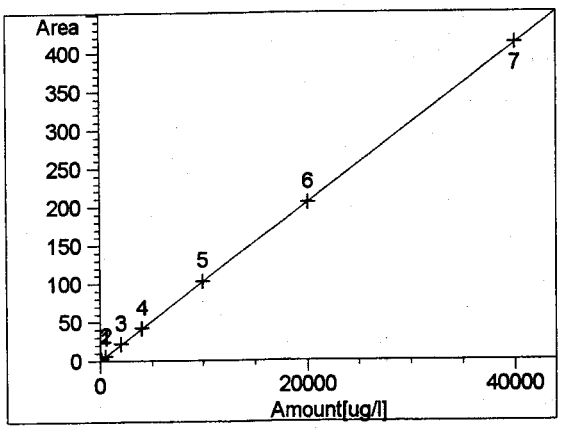
Peak Sum Table

No Entries in table

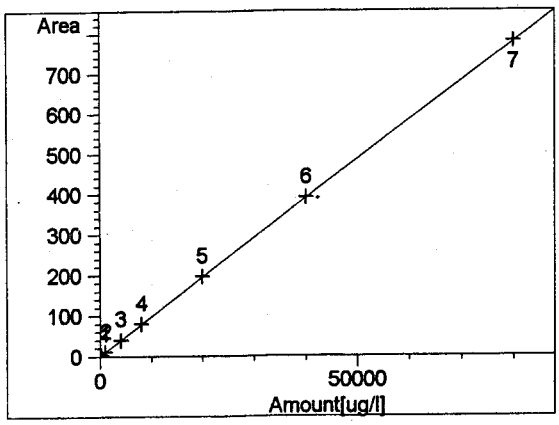
Calibration Curves



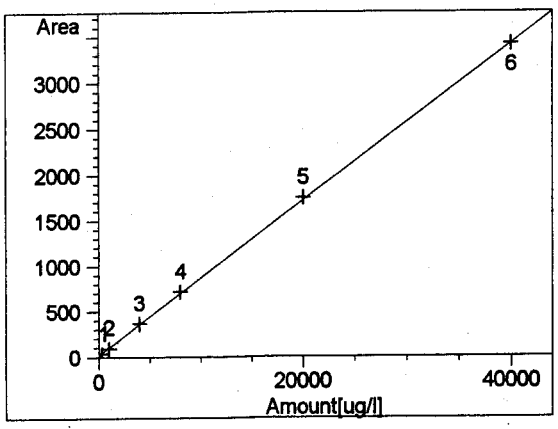
Naphthalene at exp. RT: 4.775
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.42379
Formula: y = mx + b
m: 1.32067e-2
b: 1.32078e-1
x: Amount[ug/l]
y: Area



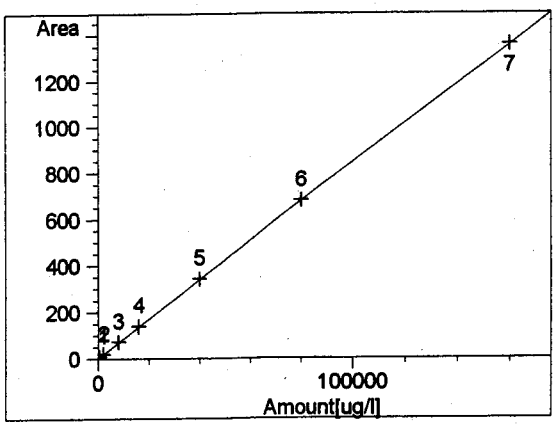
Naphthalene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.56187
Formula: y = mx + b
m: 1.02838e-2
b: 1.54902e-1
x: Amount[ug/l]
y: Area



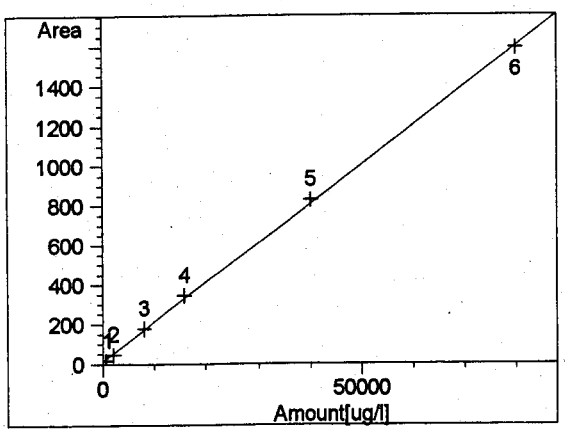
Acenaphthylene at exp. RT: 6.029
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.65727
Formula: y = mx + b
m: 9.74084e-3
b: 5.81179e-1
x: Amount[ug/l]
y: Area



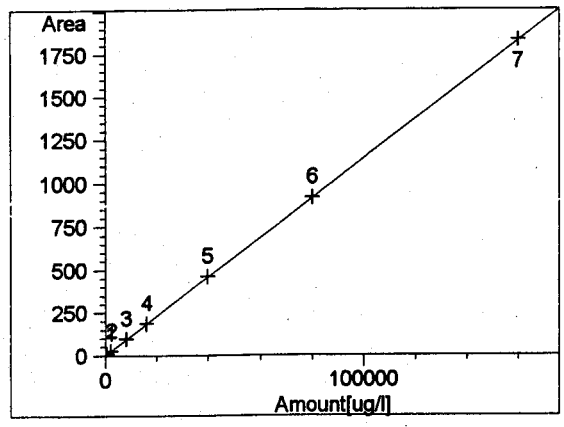
Acenaphthylene at exp. RT: 6.030
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 18.07740
Formula: y = mx + b
m: 8.53146e-2
b: 16.24956
x: Amount[ug/l]
y: Area



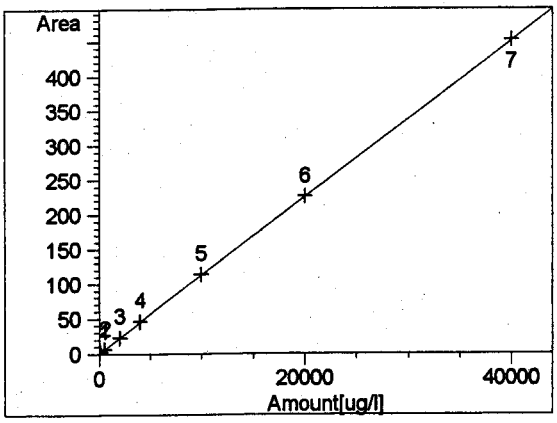
1-Methylnaphthalene (UV) at exp. RT: 6.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.68343
Formula: y = mx + b
m: 8.47231e-3
b: 2.02152
x: Amount[ug/l]
y: Area



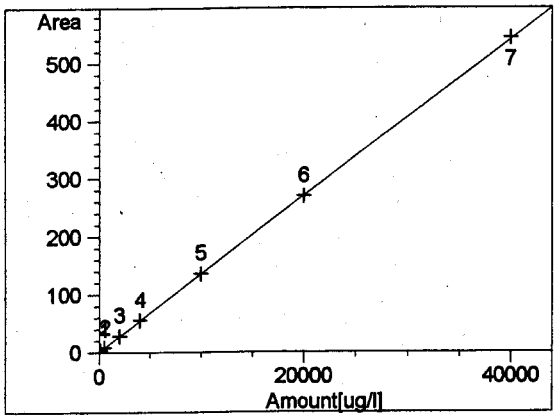
1-Methylnaphthalene (UV) at exp. RT: 6.803
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99974
Residual Std. Dev.: 15.48654
Formula: y = mx + b
m: 1.98256e-2
b: 14.32808
x: Amount[ug/l]
y: Area



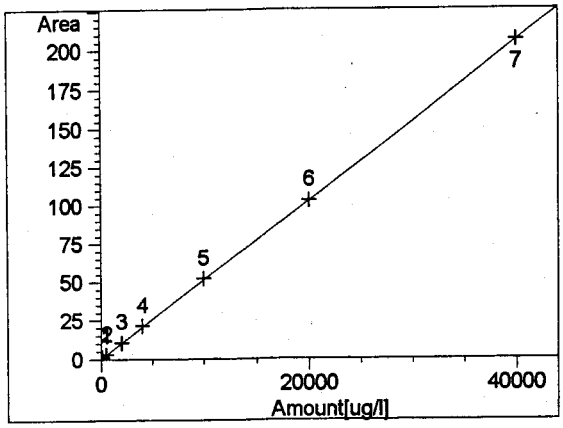
1-Methylnaphthalene (F) at exp. RT: 6.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.31914
Formula: y = mx + b
m: 1.14325e-2
b: 1.95255
x: Amount[ug/l]
y: Area



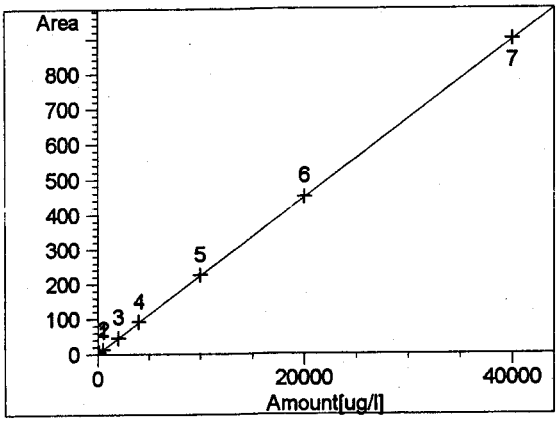
2-Methylnaphthalene at exp. RT: 7.251
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.53962
Formula: y = mx + b
m: 1.12737e-2
b: 5.18225e-1
x: Amount[ug/l]
y: Area



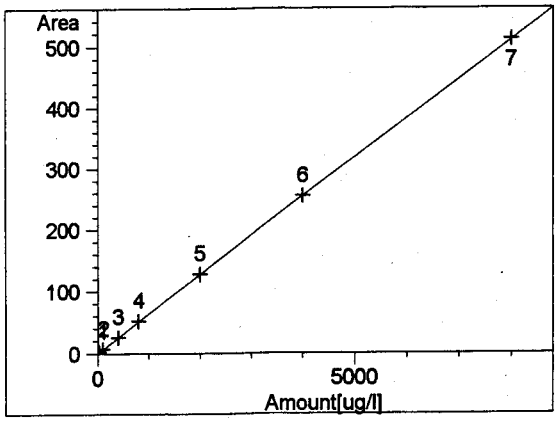
2-Methylnaphthalene at exp. RT: 7.292
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.98972
Formula: y = mx + b
m: 1.35487e-2
b: 1.23431e-1
x: Amount[ug/l]
y: Area



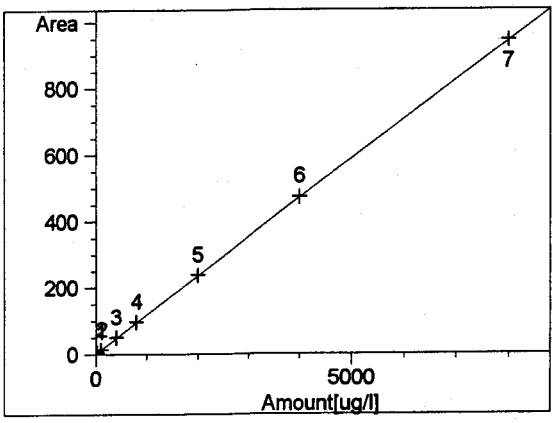
Acenaphthene at exp. RT: 7.640
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.34549
Formula: y = mx + b
m: 5.14123e-3
b: 4.11076e-1
x: Amount[ug/l]
y: Area



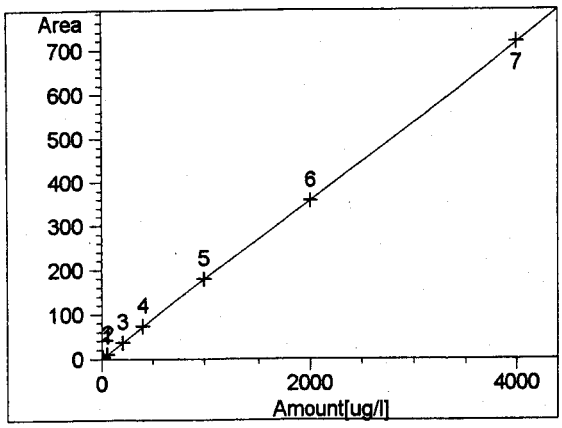
Acenaphthene at exp. RT: 7.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.72283
Formula: y = mx + b
m: 2.24261e-2
b: 9.07591e-1
x: Amount[ug/l]
y: Area



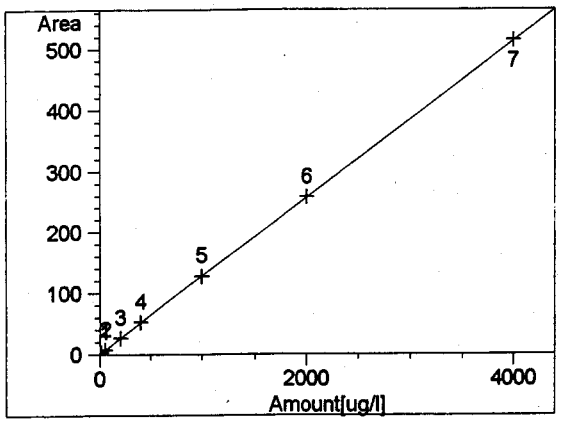
Fluorene at exp. RT: 8.162
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.59741
Formula: y = mx + b
m: 6.38593e-2
b: 4.86444e-2
x: Amount[ug/l]
y: Area



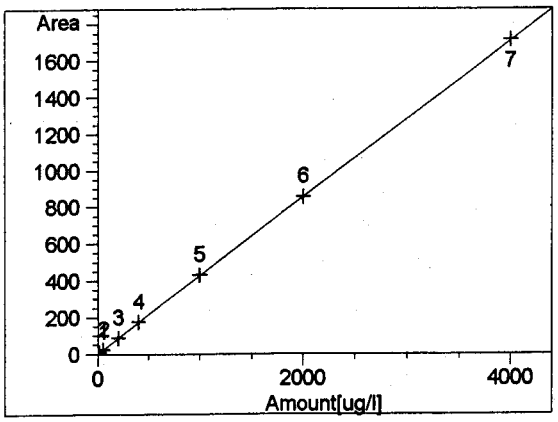
Fluorene at exp. RT: 8.202
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.86849
Formula: y = mx + b
m: 1.17884e-1
b: 1.12755
x: Amount[ug/l]
y: Area



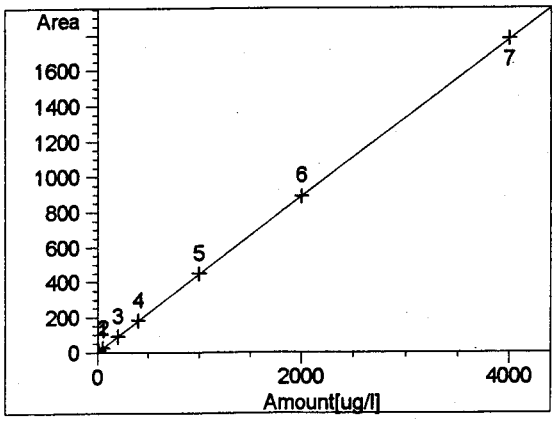
Phenanthrene at exp. RT: 9.288
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.62706
Formula: y = mx + b
m: 1.79247e-1
b: 1.07832e-2
x: Amount[ug/l]
y: Area



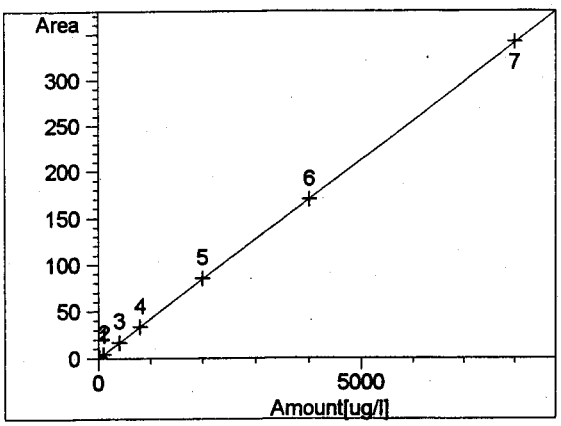
Phenanthrene at exp. RT: 9.326
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.42174
Formula: y = mx + b
m: 1.28533e-1
b: 9.15160e-2
x: Amount[ug/l]
y: Area



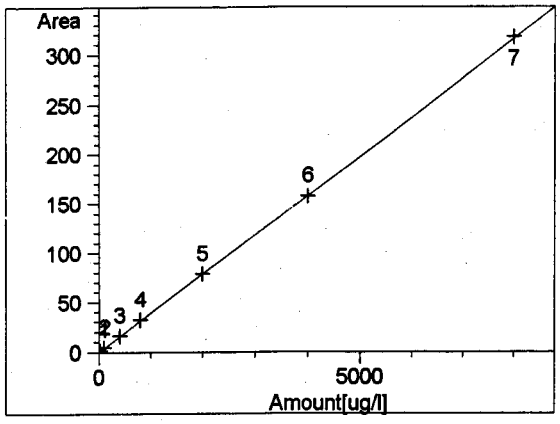
Anthracene at exp. RT: 10.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.35077
Formula: y = mx + b
m: 4.27986e-1
b: 8.59902e-1
x: Amount[ug/l]
y: Area



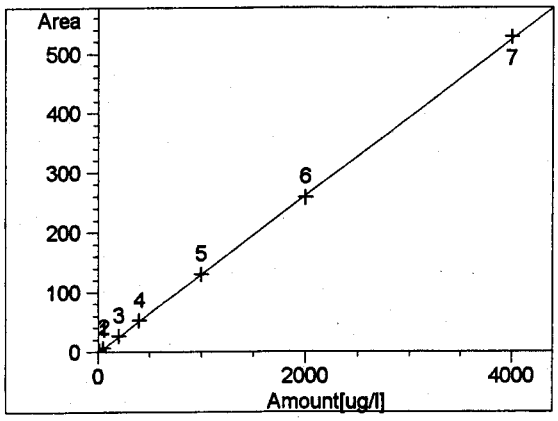
Anthracene at exp. RT: 10.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.14211
Formula: y = mx + b
m: 4.44845e-1
b: 6.72685e-1
x: Amount[ug/l]
y: Area



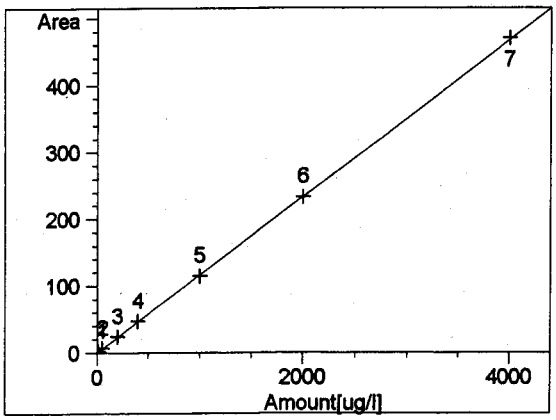
Fluoranthene at exp. RT: 11.462
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.55290
Formula: y = mx + b
m: 4.27109e-2
b: -4.95410e-1
x: Amount[ug/l]
y: Area



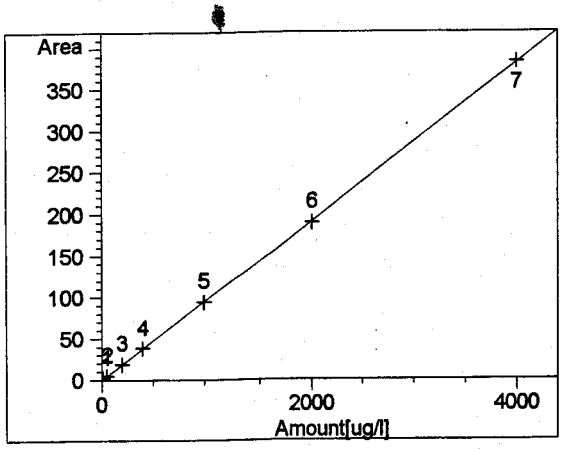
Fluoranthene at exp. RT: 11.501
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.60346
Formula: y = mx + b
m: 3.96163e-2
b: -2.02740e-1
x: Amount[ug/l]
y: Area



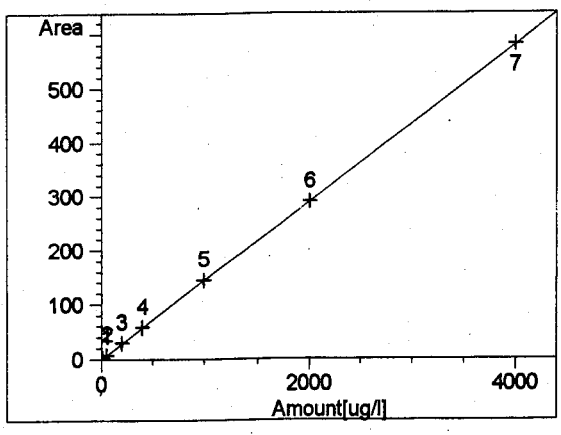
Pyrene at exp. RT: 12.216
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 2.14131
Formula: y = mx + b
m: 1.31654e-1
b: -9.20814e-1
x: Amount[ug/l]
y: Area



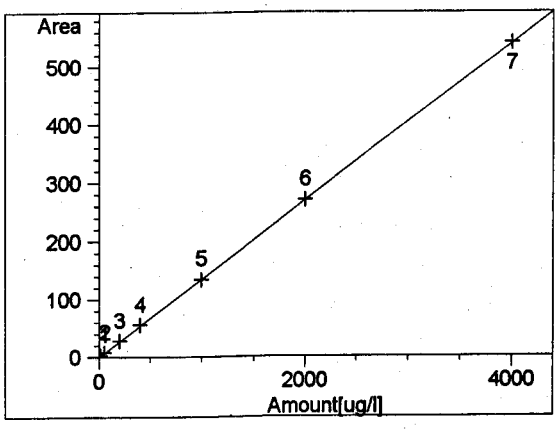
Pyrene at exp. RT: 12.256
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.15832
Formula: y = mx + b
m: 1.17398e-1
b: -6.98719e-1
x: Amount[ug/l]
y: Area



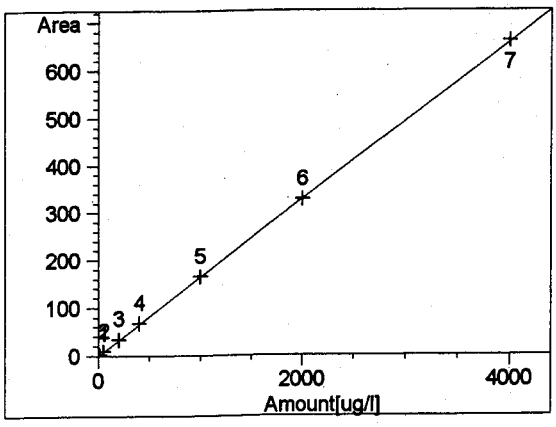
Benzo(a)anthracene at exp. RT: 14.978
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.97360
Formula: y = mx + b
m: 9.56360e-2
b: -5.52553e-1
x: Amount[ug/l]
y: Area



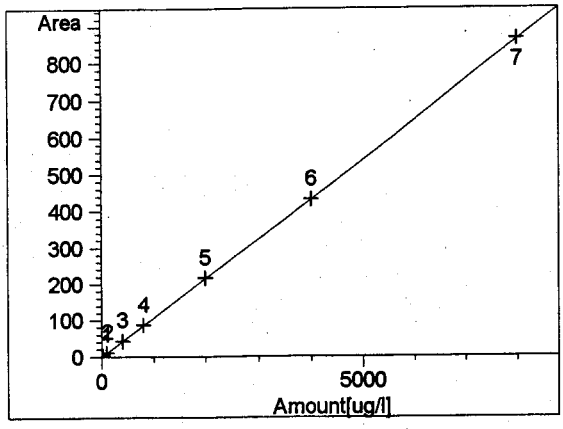
Benzo(a)anthracene at exp. RT: 15.018
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.50825
Formula: y = mx + b
m: 1.45299e-1
b: -3.78919e-1
x: Amount[ug/l]
y: Area



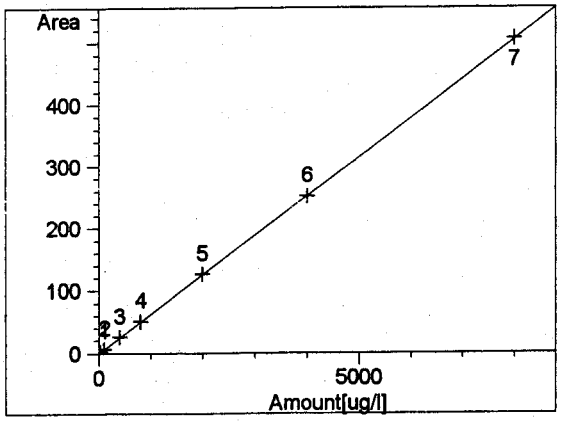
Chrysene at exp. RT: 15.450
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74873
Formula: y = mx + b
m: 1.35164e-1
b: -2.62574e-1
x: Amount[ug/l]
y: Area



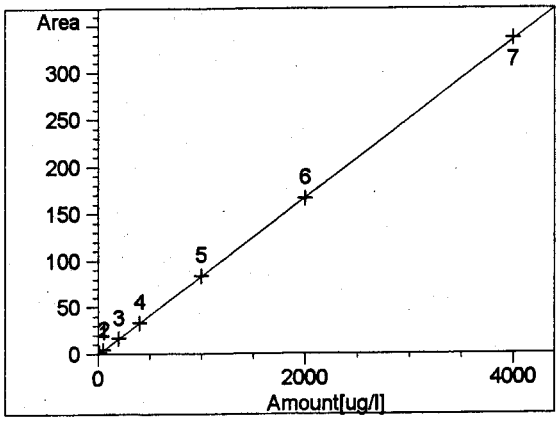
Chrysene at exp. RT: 15.497
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.17995
Formula: y = mx + b
m: 1.64961e-1
b: -1.12842e-1
x: Amount[ug/l]
y: Area



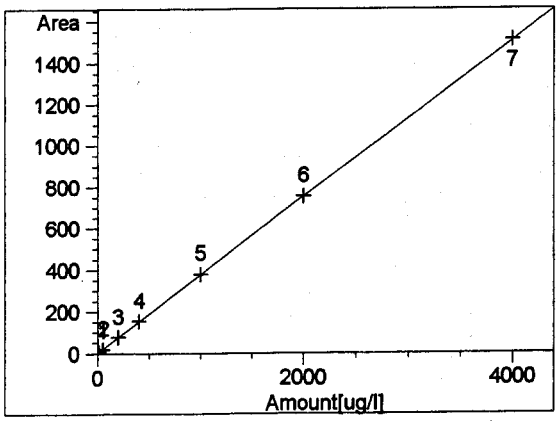
Benzo(b)fluoranthene at exp. RT: 17.660
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.78528
Formula: y = mx + b
m: 1.08120e-1
b: -8.94139e-1
x: Amount[ug/l]
y: Area



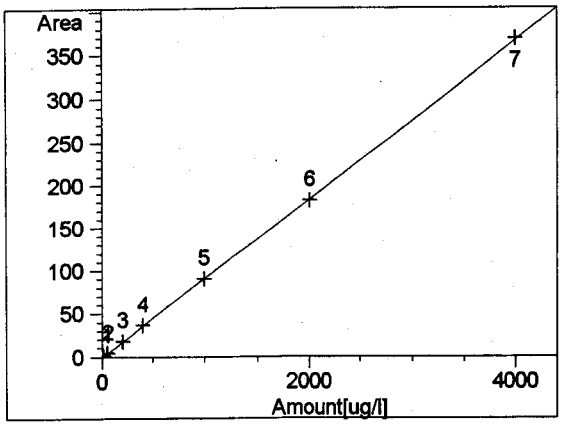
Benzo(b)fluoranthene at exp. RT: 17.699
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.73239
Formula: y = mx + b
m: 6.32897e-2
b: -2.89678e-1
x: Amount[ug/l]
y: Area



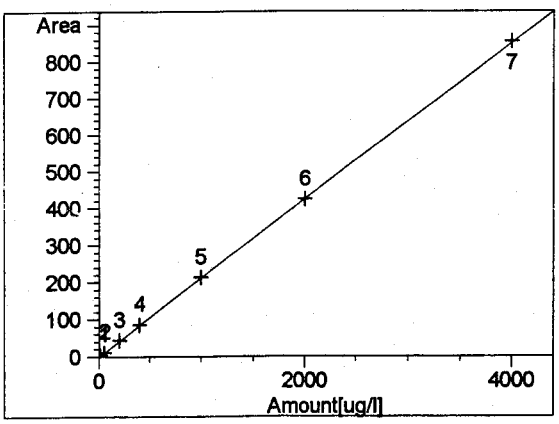
Benzo(k)fluoranthene at exp. RT: 18.594
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.59831
Formula: y = mx + b
m: 8.40358e-2
b: -7.10909e-1
x: Amount[ug/l]
y: Area



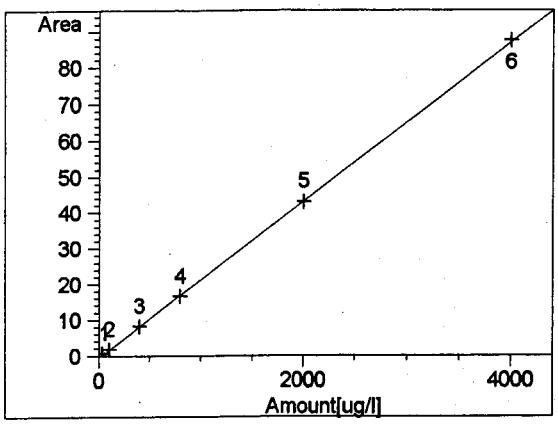
Benzo(k)fluoranthene at exp. RT: 18.634
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.85332
Formula: y = mx + b
m: 3.77407e-1
b: 2.64820e-1
x: Amount[ug/l]
y: Area



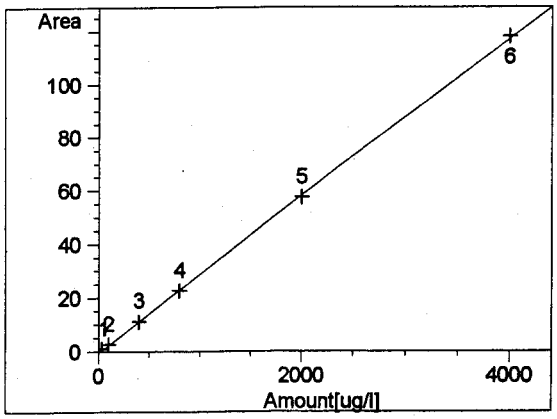
Benzo(a)pyrene at exp. RT: 19.526
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.77395
Formula: y = mx + b
m: 9.20450e-2
b: -7.47469e-1
x: Amount[ug/l]
y: Area



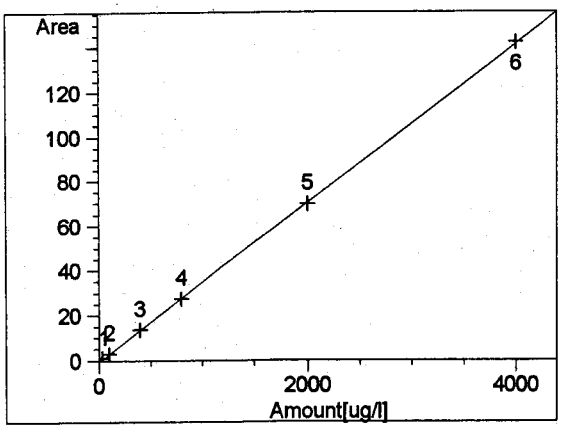
Benzo(a)pyrene at exp. RT: 19.567
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.60441
Formula: y = mx + b
m: 2.13208e-1
b: -6.39631e-1
x: Amount[ug/l]
y: Area



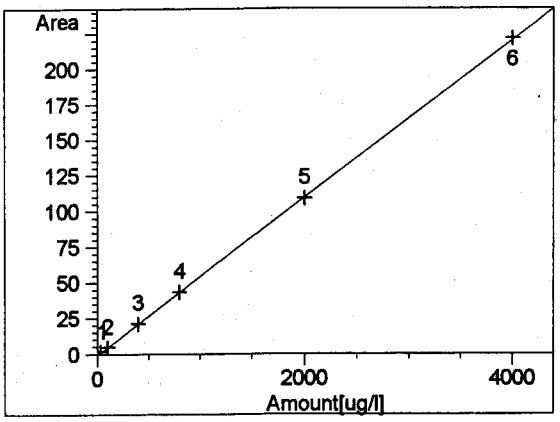
Dibenz(a,h)anthracene at exp. RT: 21.125
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.35432
Formula: y = mx + b
m: 2.19422e-2
b: -5.98019e-1
x: Amount[ug/l]
y: Area



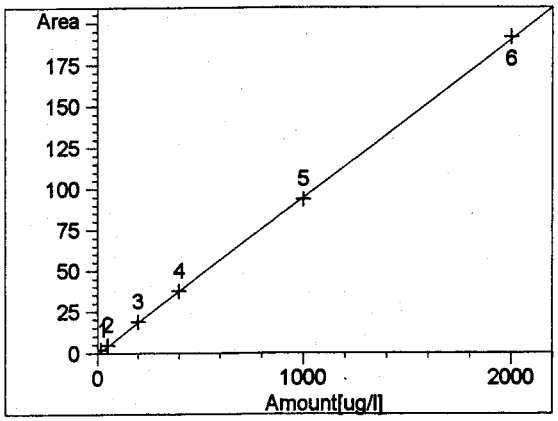
Dibenz(a,h)anthracene at exp. RT: 21.166
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 0.72004
Formula: y = mx + b
m: 2.95336e-2
b: -7.16255e-1
x: Amount[ug/l]
y: Area



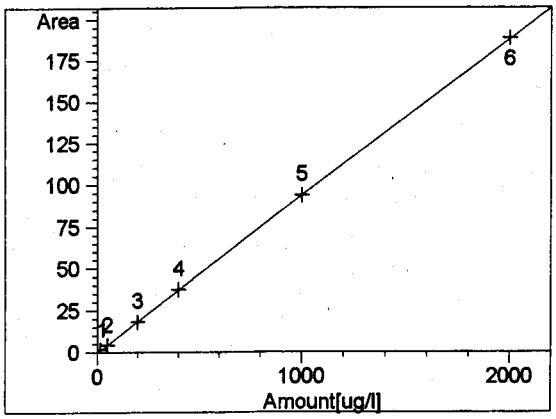
Benzo(g,h,i)perylene at exp. RT: 21.906
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.57908
Formula: y = mx + b
m: 3.56456e-2
b: -8.16409e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 21.945
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 0.67791
Formula: y = mx + b
m: 5.53982e-2
b: -6.48128e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.404
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99993
Residual Std. Dev.: 0.95379
Formula: y = mx + b
m: 9.55220e-2
b: -6.20739e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.442
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.26609
Formula: y = mx + b
m: 9.43856e-2
b: -5.82488e-1
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 297149198001 Cal Date : 13-APR-2007

ICV 297149198015 (10300015 13-APR-2007) stds: S5969

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0132	0.0132	5000	4985	ug/L	0	15	
Acenaphthylene	1	0.0097	0.0102	10000	10400	ug/L	4	15	
Acenaphthene	1	0.0055	0.0054	5000	5143	ug/L	3	15	
Fluorene	1	0.0650	0.0632	1000	988.9	ug/L	-1	15	
Phenanthrene	1	0.1799	0.1734	500.0	483.6	ug/L	-3	15	
Anthracene	1	0.4299	0.4187	500.0	487.2	ug/L	-3	15	
Fluoranthene	1	0.0414	0.0405	1000	958.8	ug/L	-4	15	
Benzo(a)anthracene	1	0.0950	0.0915	500.0	484.0	ug/L	-3	15	
Chrysene	1	0.1314	0.1297	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	1	0.1041	0.1040	1000	969.7	ug/L	-3	15	
Benzo(k)fluoranthene	1	0.0778	0.0799	500.0	484.0	ug/L	-3	15	
Benzo(a)pyrene	1	0.0854	0.0842	500.0	465.8	ug/L	-7	15	
Dibenz(a,h)anthracene	1	0.0198	0.0196	1000	919.4	ug/L	-8	15	
Benzo(g,h,i)perylene	1	0.0323	0.0325	1000	934.2	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0918	500.0	487.2	ug/L	-3	15	
Acenaphthylene	2	0.0885	0.0889	10000	10230	ug/L	2	15	
Pyrene	2	0.1282	0.1280	500.0	493.0	ug/L	-1	15	
Naphthalene	3	0.0104	0.0100	5000	4847	ug/L	-3	15	
Acenaphthene	3	0.0228	0.0221	5000	4878	ug/L	-2	15	
Fluorene	3	0.1201	0.1139	1000	956.8	ug/L	-4	15	
Phenanthrene	3	0.1297	0.1171	500.0	454.8	ug/L	-9	15	
Anthracene	3	0.4469	0.4331	500.0	485.3	ug/L	-3	15	
Fluoranthene	3	0.0394	0.0375	1000	952.4	ug/L	-5	15	
Pyrene	3	0.1158	0.1123	500.0	484.1	ug/L	-3	15	
Benzo(a)anthracene	3	0.1432	0.1386	500.0	479.4	ug/L	-4	15	
Chrysene	3	0.1647	0.1587	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0625	0.0604	1000	958.7	ug/L	-4	15	
Benzo(k)fluoranthene	3	0.3745	0.3647	500.0	482.4	ug/L	-4	15	
Benzo(a)pyrene	3	0.2088	0.1970	500.0	465.0	ug/L	-7	15	
Dibenz(a,h)anthracene	3	0.0275	0.0267	1000	928.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0518	0.0508	1000	932.5	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0919	500.0	492.9	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : L IDF : 1.0
Seqnum : 297236832002 File : 16400002 Time : 13-JUN-2007 11:43
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0137	2000	2058	ug/L	3	15	
Acenaphthylene	1	0.0097	0.0099	4000	3996	ug/L	0	15	
Acenaphthene	1	0.0055	0.0053	2000	1971	ug/L	-1	15	
Fluorene	1	0.0650	0.0652	400.0	407.7	ug/L	2	15	
Phenanthrene	1	0.1799	0.1832	200.0	204.3	ug/L	2	15	
Anthracene	1	0.4299	0.4347	200.0	201.1	ug/L	1	15	
Fluoranthene	1	0.0414	0.0439	400.0	422.7	ug/L	6	15	
Benzo(a)anthracene	1	0.0950	0.0948	200.0	204.1	ug/L	2	15	
Chrysene	1	0.1314	0.1394	200.0	208.2	ug/L	4	15	
Benzo(b)fluoranthene	1	0.1041	0.1074	400.0	405.7	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0778	0.0814	200.0	202.2	ug/L	1	15	
Benzo(a)pyrene	1	0.0854	0.0905	200.0	204.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0214	400.0	417.3	ug/L	4	15	
Benzo(g,h,i)perylene	1	0.0323	0.0336	400.0	400.1	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0913	200.0	197.6	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0089	8000	8119	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0913	4000	4090	ug/L	2	15	
Pyrene	2	0.1282	0.1313	200.0	206.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0222	8000	8253	ug/L	3	15	
Naphthalene	3	0.0104	0.0106	2000	2052	ug/L	3	15	
Acenaphthene	3	0.0228	0.0229	2000	2004	ug/L	0	15	
Fluorene	3	0.1201	0.1230	400.0	407.8	ug/L	2	15	
Phenanthrene	3	0.1297	0.1323	200.0	205.2	ug/L	3	15	
Anthracene	3	0.4469	0.4510	200.0	201.3	ug/L	1	15	
Fluoranthene	3	0.0394	0.0396	400.0	405.4	ug/L	1	15	
Pyrene	3	0.1158	0.1190	200.0	208.6	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1436	200.0	200.3	ug/L	0	15	
Chrysene	3	0.1647	0.1719	200.0	209.1	ug/L	5	15	
Benzo(b)fluoranthene	3	0.0625	0.0624	400.0	398.9	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3738	200.0	197.4	ug/L	-1	15	
Benzo(a)pyrene	3	0.2088	0.2124	200.0	202.3	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0275	0.0281	400.0	404.9	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0547	400.0	410.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0922	200.0	201.6	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0119	8000	8183	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 297236832017
Cal : 297149198001
Standards: S5285

Run Name : M
File : 16400017
Caldate : 13-APR-2007

IDF : 1.0
Time : 13-JUN-2007 19:37

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	4000	4085	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	8000	8117	ug/L	1	15	
Acenaphthene	1	0.0055	0.0053	4000	4070	ug/L	2	15	
Fluorene	1	0.0650	0.0654	800.0	818.6	ug/L	2	15	
Phenanthrene	1	0.1799	0.1823	400.0	406.7	ug/L	2	15	
Anthracene	1	0.4299	0.4367	400.0	406.1	ug/L	2	15	
Fluoranthene	1	0.0414	0.0436	800.0	828.8	ug/L	4	15	
Benzo(a)anthracene	1	0.0950	0.0942	400.0	399.6	ug/L	0	15	
Chrysene	1	0.1314	0.1365	400.0	406.0	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1072	800.0	801.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0824	400.0	400.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0854	0.0921	400.0	408.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0210	800.0	792.8	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0350	800.0	807.7	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0943	400.0	401.5	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0088	16000	16320	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0903	8000	8273	ug/L	3	15	
Pyrene	2	0.1282	0.1321	400.0	408.4	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0219	16000	16930	ug/L	6	15	
Naphthalene	3	0.0104	0.0102	4000	3970	ug/L	-1	15	
Acenaphthene	3	0.0228	0.0223	4000	3945	ug/L	-1	15	
Fluorene	3	0.1201	0.1213	800.0	813.4	ug/L	2	15	
Phenanthrene	3	0.1297	0.1280	400.0	397.7	ug/L	-1	15	
Anthracene	3	0.4469	0.4493	400.0	402.5	ug/L	1	15	
Fluoranthene	3	0.0394	0.0393	800.0	798.9	ug/L	0	15	
Pyrene	3	0.1158	0.1162	400.0	401.7	ug/L	0	15	
Benzo(a)anthracene	3	0.1432	0.1423	400.0	394.2	ug/L	-1	15	
Chrysene	3	0.1647	0.1681	400.0	408.3	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0625	0.0621	800.0	789.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3721	400.0	393.7	ug/L	-2	15	
Benzo(a)pyrene	3	0.2088	0.2113	400.0	399.4	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0275	0.0284	800.0	794.0	ug/L	-1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0539	800.0	793.6	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0908	400.0	391.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0116	0.0115	16000	15960	ug/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : H IDF : 1.0
Seqnum : 297236832027 File : 16400027 Time : 14-JUN-2007 00:53
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	10000	10240	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	20000	20480	ug/L	2	15	
Acenaphthene	1	0.0055	0.0054	10000	10350	ug/L	4	15	
Fluorene	1	0.0650	0.0654	2000	2049	ug/L	2	15	
Phenanthrene	1	0.1799	0.1822	1000	1016	ug/L	2	15	
Anthracene	1	0.4299	0.4408	1000	1028	ug/L	3	15	
Fluoranthene	1	0.0414	0.0433	2000	2041	ug/L	2	15	
Benzo(a)anthracene	1	0.0950	0.0967	1000	1017	ug/L	2	15	
Chrysene	1	0.1314	0.1385	1000	1027	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1041	0.1097	2000	2037	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0778	0.0852	1000	1022	ug/L	2	15	
Benzo(a)pyrene	1	0.0854	0.0955	1000	1045	ug/L	5	15	
Dibenz(a,h)anthracene	1	0.0198	0.0218	2000	2015	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0367	2000	2084	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0983	1000	1036	ug/L	4	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0087	40000	40870	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0891	20000	20700	ug/L	3	15	
Pyrene	2	0.1282	0.1349	1000	1032	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0211	40000	41940	ug/L	5	15	
Naphthalene	3	0.0104	0.0104	10000	10080	ug/L	1	15	
Acenaphthene	3	0.0228	0.0225	10000	10000	ug/L	0	15	
Fluorene	3	0.1201	0.1206	2000	2036	ug/L	2	15	
Phenanthrene	3	0.1297	0.1309	1000	1018	ug/L	2	15	
Anthracene	3	0.4469	0.4534	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0394	0.0398	2000	2016	ug/L	1	15	
Pyrene	3	0.1158	0.1211	1000	1038	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1469	1000	1014	ug/L	1	15	
Chrysene	3	0.1647	0.1701	1000	1032	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0625	0.0634	2000	2009	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3797	1000	1005	ug/L	1	15	
Benzo(a)pyrene	3	0.2088	0.2192	1000	1031	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0275	0.0295	2000	2025	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0578	2000	2102	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0945	1000	1007	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0116	40000	40300	ug/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : M IDF : 1.0
Seqnum : 297238314002 File : 16500002 Time : 14-JUN-2007 12:25
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	4000	4068	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	8000	8121	ug/L	2	15	
Acenaphthene	1	0.0055	0.0053	4000	4024	ug/L	1	15	
Fluorene	1	0.0650	0.0643	800.0	804.2	ug/L	1	15	
Phenanthrene	1	0.1799	0.1800	400.0	401.6	ug/L	0	15	
Anthracene	1	0.4299	0.4406	400.0	409.8	ug/L	2	15	
Fluoranthene	1	0.0414	0.0432	800.0	820.5	ug/L	3	15	
Benzo(a)anthracene	1	0.0950	0.0956	400.0	405.7	ug/L	1	15	
Chrysene	1	0.1314	0.1370	400.0	407.3	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1073	800.0	802.0	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0846	400.0	411.2	ug/L	3	15	
Benzo(a)pyrene	1	0.0854	0.0946	400.0	419.3	ug/L	5	15	
Dibenz(a,h)anthracene	1	0.0198	0.0207	800.0	782.9	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0323	0.0355	800.0	820.2	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0951	400.0	404.9	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0087	16000	16170	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0897	8000	8219	ug/L	3	15	
Pyrene	2	0.1282	0.1349	400.0	416.8	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0218	16000	16890	ug/L	6	15	
Naphthalene	3	0.0104	0.0104	4000	4015	ug/L	0	15	
Acenaphthene	3	0.0228	0.0226	4000	3983	ug/L	0	15	
Fluorene	3	0.1201	0.1207	800.0	809.3	ug/L	1	15	
Phenanthrene	3	0.1297	0.1296	400.0	402.5	ug/L	1	15	
Anthracene	3	0.4469	0.4575	400.0	409.8	ug/L	2	15	
Fluoranthene	3	0.0394	0.0397	800.0	806.9	ug/L	1	15	
Pyrene	3	0.1158	0.1197	400.0	413.9	ug/L	3	15	
Benzo(a)anthracene	3	0.1432	0.1466	400.0	406.3	ug/L	2	15	
Chrysene	3	0.1647	0.1691	400.0	410.7	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0625	0.0625	800.0	794.4	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3775	400.0	399.4	ug/L	0	15	
Benzo(a)pyrene	3	0.2088	0.2210	400.0	417.6	ug/L	4	15	
Dibenz(a,h)anthracene	3	0.0275	0.0285	800.0	795.5	ug/L	-1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0554	800.0	815.4	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0926	400.0	398.6	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0116	0.0116	16000	16090	ug/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195270 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : H IDF : 1.0
Seqnum : 297238314008 File : 16500008 Time : 14-JUN-2007 15:35
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5284

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0134	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0097	0.0099	20000	20180	ug/L	1	15	
Acenaphthene	1	0.0055	0.0053	10000	10260	ug/L	3	15	
Fluorene	1	0.0650	0.0645	2000	2019	ug/L	1	15	
Phenanthrene	1	0.1799	0.1794	1000	1001	ug/L	0	15	
Anthracene	1	0.4299	0.4403	1000	1027	ug/L	3	15	
Fluoranthene	1	0.0414	0.0429	2000	2019	ug/L	1	15	
Benzo(a)anthracene	1	0.0950	0.0962	1000	1012	ug/L	1	15	
Chrysene	1	0.1314	0.1370	1000	1015	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1080	2000	2006	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0848	1000	1017	ug/L	2	15	
Benzo(a)pyrene	1	0.0854	0.0961	1000	1052	ug/L	5	15	
Dibenz(a,h)anthracene	1	0.0198	0.0216	2000	1996	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0323	0.0366	2000	2074	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0972	1000	1024	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0086	40000	40340	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0880	20000	20450	ug/L	2	15	
Pyrene	2	0.1282	0.1357	1000	1037	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0210	40000	41720	ug/L	4	15	
Naphthalene	3	0.0104	0.0102	10000	9867	ug/L	-1	15	
Acenaphthene	3	0.0228	0.0221	10000	9831	ug/L	-2	15	
Fluorene	3	0.1201	0.1193	2000	2014	ug/L	1	15	
Phenanthrene	3	0.1297	0.1276	1000	991.9	ug/L	-1	15	
Anthracene	3	0.4469	0.4533	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0394	0.0395	2000	1998	ug/L	0	15	
Pyrene	3	0.1158	0.1174	1000	1006	ug/L	1	15	
Benzo(a)anthracene	3	0.1432	0.1443	1000	995.7	ug/L	0	15	
Chrysene	3	0.1647	0.1660	1000	1007	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0625	0.0623	2000	1975	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3763	1000	996.3	ug/L	0	15	
Benzo(a)pyrene	3	0.2088	0.2209	1000	1039	ug/L	4	15	
Dibenz(a,h)anthracene	3	0.0275	0.0292	2000	2000	ug/L	0	15	
Benzo(g,h,i)perylene	3	0.0518	0.0564	2000	2051	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0948	1000	1011	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0113	40000	39410	ug/L	-1	15	

SEQUENCE SUMMARY FOR 195270 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297149198 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-APR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	10300001	X	PRIMER - 103			13-APR-2007 14:38	1.0						
002	10300002	X	PRIMER			13-APR-2007 15:09	1.0						
003	10300003	X	IB - 103			13-APR-2007 15:41	1.0						
004	10300004	X	IB			13-APR-2007 16:13	1.0						
005	10300005	X	IB			13-APR-2007 16:44	1.0						
006	10300006	ICAL				13-APR-2007 17:16	1.0					1	
007	10300007	ICAL				13-APR-2007 17:47	1.0					2	
008	10300008	ICAL				13-APR-2007 18:19	1.0					3	
009	10300009	ICAL				13-APR-2007 18:51	1.0					4	
010	10300010	ICAL				13-APR-2007 19:22	1.0					5	
011	10300011	ICAL				13-APR-2007 19:54	1.0					6	
012	10300012	ICAL				13-APR-2007 20:25	1.0					7	
013	10300013	X	IB			13-APR-2007 20:57	1.0						
014	10300014	X	IB			13-APR-2007 21:29	1.0						
015	10300015	ICV				13-APR-2007 22:00	1.0		50			8	
016	10300016	X	ICV			13-APR-2007 22:32	1.0					8	
017	10300017	X	IB			13-APR-2007 23:03	1.0						

Stds used: 1=S5288 2=S5287 3=S5286 4=S5285 5=S5284 6=S5283 7=S5282 8=S5969

SEQUENCE SUMMARY FOR 195270 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297236832 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-JUN-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	16400001	X	IB - 164			13-JUN-2007 11:12	1.0						
002	16400002	CCV	L			13-JUN-2007 11:43	1.0	1.0			50	1	
003	16400003	X	CCV			13-JUN-2007 12:15	1.0					1	
004	16400004	X	IB			13-JUN-2007 12:46	1.0						
005	16400005	BLANK	QC391739	126173	Water	13-JUN-2007 13:18	1.0	0.002			50		
006	16400006	MSS	195270-013	126173	Water	13-JUN-2007 13:50	1.0	0.001923			50		
007	16400007	LCS	QC391740	126173	Water	13-JUN-2007 14:21	1.0	0.002			50		
008	16400008	MS	QC391741	126173	Water	13-JUN-2007 14:53	1.0	0.001923		5	50		
009	16400009	MSD	QC391742	126173	Water	13-JUN-2007 15:24	1.0	0.001923		2	50		
010	16400010	X	IB			13-JUN-2007 15:56	1.0						
011	16400011	SAMPLE	195270-014	126173	Water	13-JUN-2007 16:28	1.0	0.001887			50		
012	16400012	SAMPLE	195270-015	126173	Water	13-JUN-2007 16:59	1.0	0.001905			50		
013	16400013	SAMPLE	195270-016	126173	Water	13-JUN-2007 17:31	1.0	0.001905			50		
014	16400014	SAMPLE	195279-001	126173	Water	13-JUN-2007 18:03	1.0	0.001905			50		
015	16400015	SAMPLE	195303-030	126173	Water	13-JUN-2007 18:34	1.0	0.001923			50		
016	16400016	X	IB			13-JUN-2007 19:06	1.0						
017	16400017	CCV	M			13-JUN-2007 19:37	1.0	1.0			50	2	
018	16400018	X	CCV			13-JUN-2007 20:09	1.0					2	
019	16400019	X	IB			13-JUN-2007 20:41	1.0						
020	16400020	SAMPLE	195247-001	126173	Water	13-JUN-2007 21:12	1.0	0.002105			50		
021	16400021	SAMPLE	195247-002	126173	Water	13-JUN-2007 21:44	1.0	0.001905			50		
022	16400022	X	IB			13-JUN-2007 22:15	1.0						
023	16400023	SAMPLE	195270-001	126173	Water	13-JUN-2007 22:47	1.0	0.001887	6	1	50		6:MTNPH1=86805.2
024	16400024	SAMPLE	195270-002	126173	Water	13-JUN-2007 23:19	1.0	0.001905	6	1	50		6:MTNPH1=85026.4
025	16400025	X	IB			13-JUN-2007 23:50	1.0						
026	16400026	X	IB			14-JUN-2007 00:22	1.0						
027	16400027	CCV	H			14-JUN-2007 00:53	1.0	1.0			50	3	
028	16400028	X	CCV			14-JUN-2007 01:25	1.0					3	
029	16400029	X	IB			14-JUN-2007 01:56	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

SEQUENCE SUMMARY FOR 195270 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297238314 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 14-JUN-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
001	16500001	X	IB - 165			14-JUN-2007 11:54	1.0				
002	16500002	CCV	M			14-JUN-2007 12:25	1.0	1.0	50	1	
003	16500003	X	CCV			14-JUN-2007 12:57	1.0			1	
004	16500004	X	IB			14-JUN-2007 13:28	1.0				
005	16500005	SAMPLE	195270-001	126173	Water	14-JUN-2007 14:00	10.0	0.001887	50		
006	16500006	SAMPLE	195270-002	126173	Water	14-JUN-2007 14:32	10.0	0.001905	50		
007	16500007	X	IB			14-JUN-2007 15:03	1.0				
008	16500008	CCV	H			14-JUN-2007 15:35	1.0	1.0	50	2	
009	16500009	X	CCV			14-JUN-2007 16:06	1.0			2	
010	16500010	X	IB			14-JUN-2007 16:38	1.0				

Stds used: 1=S5285 2=S5284

REPORTING SUMMARY FOR 195270 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-001	Naphthalene	HPLC04	1	06/13/07 22:47
195270-001	Acenaphthylene	HPLC04	1	06/13/07 22:47
195270-001	Acenaphthene	HPLC04	1	06/13/07 22:47
195270-001	Fluorene	HPLC04	1	06/14/07 14:00
195270-001	Phenanthrene	HPLC04	3	06/14/07 14:00
195270-001	Anthracene	HPLC04	3	06/13/07 22:47
195270-001	Fluoranthene	HPLC04	3	06/13/07 22:47
195270-001	Pyrene	HPLC04	3	06/13/07 22:47
195270-001	Benzo(a)anthracene	HPLC04	3	06/13/07 22:47
195270-001	Chrysene	HPLC04	3	06/13/07 22:47
195270-001	Benzo(b)fluoranthene	HPLC04	3	06/13/07 22:47
195270-001	Benzo(k)fluoranthene	HPLC04	3	06/13/07 22:47
195270-001	Benzo(a)pyrene	HPLC04	3	06/13/07 22:47
195270-001	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 22:47
195270-001	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 22:47
195270-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 22:47
195270-001	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 22:47
195270-001	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 22:47
195270-002	Naphthalene	HPLC04	1	06/13/07 23:19
195270-002	Acenaphthylene	HPLC04	1	06/13/07 23:19
195270-002	Acenaphthene	HPLC04	1	06/13/07 23:19
195270-002	Fluorene	HPLC04	1	06/14/07 14:32
195270-002	Phenanthrene	HPLC04	3	06/14/07 14:32
195270-002	Anthracene	HPLC04	3	06/13/07 23:19
195270-002	Fluoranthene	HPLC04	3	06/13/07 23:19
195270-002	Pyrene	HPLC04	3	06/13/07 23:19
195270-002	Benzo(a)anthracene	HPLC04	3	06/13/07 23:19
195270-002	Chrysene	HPLC04	3	06/13/07 23:19
195270-002	Benzo(b)fluoranthene	HPLC04	3	06/13/07 23:19
195270-002	Benzo(k)fluoranthene	HPLC04	3	06/13/07 23:19
195270-002	Benzo(a)pyrene	HPLC04	3	06/13/07 23:19
195270-002	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 23:19
195270-002	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 23:19
195270-002	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 23:19
195270-002	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 23:19
195270-002	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 23:19
195270-013	Naphthalene	HPLC04	1	06/13/07 13:50
195270-013	Acenaphthylene	HPLC04	1	06/13/07 13:50
195270-013	Acenaphthene	HPLC04	1	06/13/07 13:50
195270-013	Fluorene	HPLC04	1	06/13/07 13:50
195270-013	Phenanthrene	HPLC04	3	06/13/07 13:50
195270-013	Anthracene	HPLC04	3	06/13/07 13:50
195270-013	Fluoranthene	HPLC04	3	06/13/07 13:50
195270-013	Pyrene	HPLC04	3	06/13/07 13:50
195270-013	Benzo(a)anthracene	HPLC04	3	06/13/07 13:50
195270-013	Chrysene	HPLC04	3	06/13/07 13:50
195270-013	Benzo(b)fluoranthene	HPLC04	3	06/13/07 13:50
195270-013	Benzo(k)fluoranthene	HPLC04	3	06/13/07 13:50
195270-013	Benzo(a)pyrene	HPLC04	3	06/13/07 13:50
195270-013	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 13:50
195270-013	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 13:50
195270-013	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 13:50

REPORTING SUMMARY FOR 195270 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-013	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 13:50
195270-013	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 13:50
195270-014	Naphthalene	HPLC04	1	06/13/07 16:28
195270-014	Acenaphthylene	HPLC04	1	06/13/07 16:28
195270-014	Acenaphthene	HPLC04	1	06/13/07 16:28
195270-014	Fluorene	HPLC04	1	06/13/07 16:28
195270-014	Phenanthrene	HPLC04	3	06/13/07 16:28
195270-014	Anthracene	HPLC04	3	06/13/07 16:28
195270-014	Fluoranthene	HPLC04	3	06/13/07 16:28
195270-014	Pyrene	HPLC04	3	06/13/07 16:28
195270-014	Benzo(a)anthracene	HPLC04	3	06/13/07 16:28
195270-014	Chrysene	HPLC04	3	06/13/07 16:28
195270-014	Benzo(b)fluoranthene	HPLC04	3	06/13/07 16:28
195270-014	Benzo(k)fluoranthene	HPLC04	3	06/13/07 16:28
195270-014	Benzo(a)pyrene	HPLC04	3	06/13/07 16:28
195270-014	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 16:28
195270-014	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 16:28
195270-014	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 16:28
195270-014	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 16:28
195270-014	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 16:28
195270-015	Naphthalene	HPLC04	1	06/13/07 16:59
195270-015	Acenaphthylene	HPLC04	1	06/13/07 16:59
195270-015	Acenaphthene	HPLC04	1	06/13/07 16:59
195270-015	Fluorene	HPLC04	1	06/13/07 16:59
195270-015	Phenanthrene	HPLC04	3	06/13/07 16:59
195270-015	Anthracene	HPLC04	3	06/13/07 16:59
195270-015	Fluoranthene	HPLC04	3	06/13/07 16:59
195270-015	Pyrene	HPLC04	3	06/13/07 16:59
195270-015	Benzo(a)anthracene	HPLC04	3	06/13/07 16:59
195270-015	Chrysene	HPLC04	3	06/13/07 16:59
195270-015	Benzo(b)fluoranthene	HPLC04	3	06/13/07 16:59
195270-015	Benzo(k)fluoranthene	HPLC04	3	06/13/07 16:59
195270-015	Benzo(a)pyrene	HPLC04	3	06/13/07 16:59
195270-015	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 16:59
195270-015	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 16:59
195270-015	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 16:59
195270-015	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 16:59
195270-015	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 16:59
195270-016	Naphthalene	HPLC04	1	06/13/07 17:31
195270-016	Acenaphthylene	HPLC04	1	06/13/07 17:31
195270-016	Acenaphthene	HPLC04	1	06/13/07 17:31
195270-016	Fluorene	HPLC04	1	06/13/07 17:31
195270-016	Phenanthrene	HPLC04	3	06/13/07 17:31
195270-016	Anthracene	HPLC04	3	06/13/07 17:31
195270-016	Fluoranthene	HPLC04	3	06/13/07 17:31
195270-016	Pyrene	HPLC04	3	06/13/07 17:31
195270-016	Benzo(a)anthracene	HPLC04	3	06/13/07 17:31
195270-016	Chrysene	HPLC04	3	06/13/07 17:31
195270-016	Benzo(b)fluoranthene	HPLC04	3	06/13/07 17:31
195270-016	Benzo(k)fluoranthene	HPLC04	3	06/13/07 17:31
195270-016	Benzo(a)pyrene	HPLC04	3	06/13/07 17:31

REPORTING SUMMARY FOR 195270 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195270-016	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 17:31
195270-016	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 17:31
195270-016	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 17:31
195270-016	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 17:31
195270-016	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 17:31
QC391739	Naphthalene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthylene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthene	HPLC04	1	06/13/07 13:18
QC391739	Fluorene	HPLC04	1	06/13/07 13:18
QC391739	Phenanthrene	HPLC04	3	06/13/07 13:18
QC391739	Anthracene	HPLC04	3	06/13/07 13:18
QC391739	Fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Pyrene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Chrysene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(b)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(k)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)pyrene	HPLC04	3	06/13/07 13:18
QC391739	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 13:18
QC391739	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 13:18
QC391739	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 13:18
QC391739	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 13:18
QC391740	Naphthalene	HPLC04	1	06/13/07 14:21
QC391740	Fluorene	HPLC04	1	06/13/07 14:21
QC391740	Pyrene	HPLC04	3	06/13/07 14:21
QC391740	Benzo(a)pyrene	HPLC04	3	06/13/07 14:21
QC391740	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:21
QC391740	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:21
QC391741	Naphthalene	HPLC04	1	06/13/07 14:53
QC391741	Fluorene	HPLC04	1	06/13/07 14:53
QC391741	Pyrene	HPLC04	3	06/13/07 14:53
QC391741	Benzo(a)pyrene	HPLC04	3	06/13/07 14:53
QC391741	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:53
QC391741	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:53
QC391742	Naphthalene	HPLC04	1	06/13/07 15:24
QC391742	Fluorene	HPLC04	1	06/13/07 15:24
QC391742	Pyrene	HPLC04	3	06/13/07 15:24
QC391742	Benzo(a)pyrene	HPLC04	3	06/13/07 15:24
QC391742	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 15:24
QC391742	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 15:24

5

Curtis & Tompkins Laboratories Sample Preparation Summary 12-JUN-2007 23:25

Batch Number : 126173
Date Extracted: 11-JUN-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S6106F
Spike #2 ID : S6358A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195247-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
195247-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-013		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		MSS
195270-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-015		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195279-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195303-030		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	4	.1	0		8310		
QC391739	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC391740	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC391741	MS of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		
QC391742	MSD of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		

Prep Chemist: JLM for JOM 6/13/07 Reviewed By: [signature] Date: 6/12/07

Relinquished By: [signature] Received By: [signature] Date: 13JUN2007

09225

8310 (PAH) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 126173
LIMS Analysis: 8310
Date Extracted: 11 June 07

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

	Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
①②	195247-001 G	950	7	2.0		
	02 H	1050				
	195270-001 J	1060				
②	02 K	1050				
	13 X	1040				MSS
	14 I	1060				
	15 H	1050				
	16 I					
	195279-001 Q					*
	195303-030 J	1040	4			*
	MB QC391739	1000	NA			
	LCS 40					
	MS 41	1040	7			195270-013 ~~AA~~ AA JM 6/11/07
	MSD 42	1040	7			

① While transporting samples to setups, cart jostled samples losing 1-5 mls
② went dry

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1710
Extraction End Time: 1130
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granualr Na2SO4
Exchanged 2x with Acetonitrile
Concentrated to final volumes as noted above
Extracts filtered with 0.45 um PTFE syringe filter
Relinquished to the HPLC group

Lot# / LIMS # / Time	Date/ Initials
S6106F K*	JM 6/11/07
S6358A	
EM47092	
1710	
1130	JM 6/12/07
NA	6/12/07 KR
EM46283706	
EM46173	
✓	
Whatman 0602	
✓	

VR 6/12/07

Jessie Nee 6/11/07
Extraction Chemist **Date**

Contined from Page ____
Continued on Page ____

6/12/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 06/28/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

00239

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Batch#:	126092
Lab ID:	195270-001	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	06/08/07
Antimony	ND	1.0	10.00	06/08/07
Arsenic	9.4	5.0	10.00	06/08/07
Barium	610	10	10.00	06/08/07
Beryllium	ND	2.0	10.00	06/08/07
Cadmium	ND	1.0	10.00	06/08/07
Calcium	140,000	500	10.00	06/08/07
Chromium	ND	10	10.00	06/08/07
Cobalt	ND	10	10.00	06/08/07
Copper	ND	1.0	10.00	06/08/07
Iron	39,000	100	10.00	06/08/07
Lead	ND	3.0	10.00	06/08/07
Magnesium	190,000	1,000	100.0	06/15/07
Manganese	13,000	10	100.0	06/15/07
Nickel	ND	20	10.00	06/08/07
Potassium	2,000	500	10.00	06/08/07
Selenium	ND	5.0	10.00	06/08/07
Silver	ND	1.0	10.00	06/08/07
Sodium	350,000	1,000	100.0	06/15/07
Thallium	ND	1.0	10.00	06/08/07
Vanadium	ND	10	10.00	06/08/07
Zinc	ND	20	10.00	06/08/07

ND= Not Detected
RL= Reporting Limit

41.1

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0606073A	Batch#:	126092
Lab ID:	195270-002	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	06/08/07
Antimony	ND	1.0	10.00	06/08/07
Arsenic	8.5	5.0	10.00	06/08/07
Barium	620	10	10.00	06/08/07
Beryllium	ND	2.0	10.00	06/08/07
Cadmium	ND	1.0	10.00	06/08/07
Calcium	150,000	500	10.00	06/08/07
Chromium	ND	10	10.00	06/08/07
Cobalt	ND	10	10.00	06/08/07
Copper	ND	1.0	10.00	06/08/07
Iron	41,000	100	10.00	06/08/07
Lead	ND	3.0	10.00	06/08/07
Magnesium	190,000	1,000	100.0	06/15/07
Manganese	13,000	10	100.0	06/15/07
Nickel	ND	20	10.00	06/08/07
Potassium	2,100	500	10.00	06/08/07
Selenium	ND	5.0	10.00	06/08/07
Silver	ND	1.0	10.00	06/08/07
Sodium	360,000	1,000	100.0	06/15/07
Thallium	ND	1.0	10.00	06/08/07
Vanadium	ND	10	10.00	06/08/07
Zinc	ND	20	10.00	06/08/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Units:	ug/L
Lab ID:	195270-003	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	5.000	126254	06/13/07	06/14/07
Antimony	ND	1.0	5.000	126254	06/13/07	06/14/07
Arsenic	ND	5.0	5.000	126254	06/13/07	06/14/07
Barium	36	10	5.000	126254	06/13/07	06/14/07
Beryllium	ND	2.0	5.000	126254	06/13/07	06/14/07
Cadmium	ND	1.0	5.000	126254	06/13/07	06/14/07
Calcium	16,000	500	5.000	126254	06/13/07	06/14/07
Chromium	ND	10	5.000	126254	06/13/07	06/14/07
Cobalt	ND	10	5.000	126254	06/13/07	06/14/07
Copper	ND	1.0	5.000	126254	06/13/07	06/14/07
Iron	ND	100	10.00	126092	06/08/07	06/08/07
Lead	ND	3.0	5.000	126254	06/13/07	06/14/07
Magnesium	40,000	500	5.000	126254	06/13/07	06/14/07
Manganese	ND	10	5.000	126254	06/13/07	06/14/07
Nickel	ND	20	5.000	126254	06/13/07	06/14/07
Potassium	ND	500	5.000	126254	06/13/07	06/14/07
Selenium	ND	5.0	10.00	126092	06/08/07	06/08/07
Silver	ND	1.0	5.000	126254	06/13/07	06/14/07
Sodium	120,000	500	10.00	126092	06/08/07	06/08/07
Thallium	ND	1.0	5.000	126254	06/13/07	06/14/07
Vanadium	ND	10	5.000	126254	06/13/07	06/14/07
Zinc	ND	20	5.000	126254	06/13/07	06/14/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04RBHWGW100	Batch#:	126092
Lab ID:	195270-004	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	960	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	530	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

44.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW101	Units:	ug/L
Lab ID:	195270-005	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	5.000	126254	06/13/07	06/14/07
Antimony	ND	1.0	5.000	126254	06/13/07	06/14/07
Arsenic	ND	5.0	5.000	126254	06/13/07	06/14/07
Barium	ND	10	5.000	126254	06/13/07	06/14/07
Beryllium	ND	2.0	5.000	126254	06/13/07	06/14/07
Cadmium	ND	1.0	5.000	126254	06/13/07	06/14/07
Calcium	12,000	500	5.000	126254	06/13/07	06/14/07
Chromium	20	10	5.000	126254	06/13/07	06/14/07
Cobalt	ND	10	5.000	126254	06/13/07	06/14/07
Copper	ND	1.0	5.000	126254	06/13/07	06/14/07
Iron	ND	100	10.00	126092	06/08/07	06/08/07
Lead	ND	3.0	5.000	126254	06/13/07	06/14/07
Magnesium	23,000	500	5.000	126254	06/13/07	06/14/07
Manganese	ND	10	5.000	126254	06/13/07	06/14/07
Nickel	ND	20	5.000	126254	06/13/07	06/14/07
Potassium	660	500	5.000	126254	06/13/07	06/14/07
Selenium	ND	5.0	10.00	126092	06/08/07	06/08/07
Silver	ND	1.0	5.000	126254	06/13/07	06/14/07
Sodium	200,000	500	10.00	126092	06/08/07	06/08/07
Thallium	ND	1.0	5.000	126254	06/13/07	06/14/07
Vanadium	ND	10	5.000	126254	06/13/07	06/14/07
Zinc	ND	20	5.000	126254	06/13/07	06/14/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05	Batch#:	126092
Lab ID:	195270-006	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	89	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	71,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	74,000	500
Manganese	780	10
Nickel	42	20
Potassium	3,100	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	200,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

46.0

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	126254
Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/13/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/14/07
Antimony	ND	1.0	5.000	06/14/07
Arsenic	ND	5.0	5.000	06/14/07
Barium	46	10	5.000	06/14/07
Beryllium	ND	2.0	5.000	06/14/07
Cadmium	ND	1.0	5.000	06/14/07
Calcium	17,000	500	5.000	06/14/07
Chromium	100	10	5.000	06/14/07
Cobalt	ND	10	5.000	06/14/07
Copper	ND	1.0	5.000	06/14/07
Iron	ND	100	5.000	06/14/07
Lead	ND	3.0	5.000	06/14/07
Magnesium	77,000	500	5.000	06/14/07
Manganese	ND	10	5.000	06/14/07
Nickel	ND	20	5.000	06/14/07
Potassium	ND	500	5.000	06/14/07
Selenium	ND	5.0	5.000	06/14/07
Silver	ND	1.0	5.000	06/14/07
Sodium	220,000	500	50.00	06/15/07
Thallium	ND	1.0	5.000	06/14/07
Vanadium	ND	10	5.000	06/14/07
Zinc	ND	20	5.000	06/14/07

ND= Not Detected
RL= Reporting Limit

47.0

00245

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0606073B	Batch#:	126092
Lab ID:	195270-008	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	06/08/07
Antimony	ND	1.0	10.00	06/08/07
Arsenic	ND	5.0	10.00	06/08/07
Barium	45	10	10.00	06/08/07
Beryllium	ND	2.0	10.00	06/08/07
Cadmium	ND	1.0	10.00	06/08/07
Calcium	18,000	500	10.00	06/08/07
Chromium	110	10	10.00	06/08/07
Cobalt	ND	10	10.00	06/08/07
Copper	ND	1.0	10.00	06/08/07
Iron	ND	100	10.00	06/08/07
Lead	ND	3.0	10.00	06/08/07
Magnesium	81,000	500	10.00	06/08/07
Manganese	ND	10	10.00	06/08/07
Nickel	ND	20	10.00	06/08/07
Potassium	ND	500	10.00	06/08/07
Selenium	ND	5.0	10.00	06/08/07
Silver	ND	1.0	10.00	06/08/07
Sodium	220,000	500	50.00	06/15/07
Thallium	ND	1.0	10.00	06/08/07
Vanadium	ND	10	10.00	06/08/07
Zinc	ND	20	10.00	06/08/07

ND= Not Detected
RL= Reporting Limit

48.1

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW29	Units:	ug/L
Lab ID:	195270-010	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed
Aluminum	ND	100	5.000	126254	06/13/07	06/14/07
Arsenic	ND	5.0	5.000	126254	06/13/07	06/14/07
Cadmium	ND	1.0	5.000	126254	06/13/07	06/14/07
Calcium	27,000	500	5.000	126254	06/13/07	06/14/07
Chromium	ND	10	5.000	126254	06/13/07	06/14/07
Copper	ND	1.0	5.000	126254	06/13/07	06/14/07
Iron	ND	100	10.00	126092	06/08/07	06/08/07
Lead	ND	3.0	5.000	126254	06/13/07	06/14/07
Magnesium	53,000	500	5.000	126254	06/13/07	06/14/07
Manganese	140	10	5.000	126254	06/13/07	06/14/07
Nickel	ND	20	5.000	126254	06/13/07	06/14/07
Potassium	4,000	500	5.000	126254	06/13/07	06/14/07
Sodium	46,000	500	5.000	126254	06/13/07	06/14/07
Zinc	ND	20	5.000	126254	06/13/07	06/14/07

ND= Not Detected
RL= Reporting Limit

31.1

00248

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0606072A	Batch#:	126092
Lab ID:	195270-011	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	27,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	54,000	500
Manganese	150	10
Nickel	ND	20
Potassium	4,000	500
Sodium	49,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3SW101	Batch#:	126254
Lab ID:	195270-012	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	5.000	Analyzed:	06/14/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	12	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	8,000	500
Chromium	ND	10
Cobalt	ND	10
Copper	1.6	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	12,000	500
Manganese	260	10
Nickel	ND	20
Potassium	890	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	38,000	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

113.1

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Batch#:	126092
Lab ID:	195270-016	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	06/08/07
Antimony	ND	1.0	10.00	06/08/07
Arsenic	ND	5.0	10.00	06/08/07
Barium	56	10	10.00	06/08/07
Beryllium	ND	2.0	10.00	06/08/07
Cadmium	ND	1.0	10.00	06/08/07
Calcium	16,000	500	10.00	06/08/07
Chromium	39	10	10.00	06/08/07
Cobalt	ND	10	10.00	06/08/07
Copper	ND	1.0	10.00	06/08/07
Iron	ND	100	10.00	06/08/07
Lead	ND	3.0	10.00	06/08/07
Magnesium	150,000	500	10.00	06/08/07
Manganese	23	10	10.00	06/08/07
Nickel	ND	20	10.00	06/08/07
Potassium	640	500	10.00	06/08/07
Selenium	ND	5.0	10.00	06/08/07
Silver	ND	1.0	10.00	06/08/07
Sodium	320,000	500	50.00	06/15/07
Thallium	ND	1.0	10.00	06/08/07
Vanadium	ND	10	10.00	06/08/07
Zinc	ND	20	10.00	06/08/07

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	610GW101	Batch#:	126092
Lab ID:	195270-017	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	63,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	5,200	100
Lead	ND	3.0
Magnesium	48,000	500
Manganese	430	10
Nickel	ND	20
Potassium	7,100	500
Sodium	81,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

111.1

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	610GW102	Batch#:	126092
Lab ID:	195270-018	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	06/08/07
Arsenic	ND	5.0	10.00	06/08/07
Cadmium	ND	1.0	10.00	06/08/07
Calcium	61,000	500	10.00	06/08/07
Chromium	ND	10	10.00	06/08/07
Copper	ND	1.0	10.00	06/08/07
Iron	2,300	100	10.00	06/08/07
Lead	ND	3.0	10.00	06/08/07
Magnesium	29,000	500	10.00	06/08/07
Manganese	2,200	10	20.00	06/15/07
Nickel	ND	20	10.00	06/08/07
Potassium	4,800	500	10.00	06/08/07
Sodium	73,000	500	10.00	06/08/07
Zinc	ND	20	10.00	06/08/07

ND= Not Detected
RL= Reporting Limit

112.2

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391463	Batch#:	126092
Matrix:	Filtrate	Prepared:	06/08/07
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/08/07
Antimony	ND	1.0	06/08/07
Arsenic	ND	5.0	06/08/07
Barium	ND	10	06/08/07
Beryllium	ND	2.0	06/08/07
Cadmium	ND	1.0	06/08/07
Calcium	ND	500	06/08/07
Chromium	ND	10	06/11/07
Cobalt	ND	10	06/08/07
Copper	5.0 b	1.0	06/08/07
Iron	ND	100	06/08/07
Lead	ND	3.0	06/08/07
Magnesium	ND	500	06/08/07
Manganese	ND	10	06/08/07
Nickel	ND	20	06/08/07
Potassium	ND	500	06/08/07
Selenium	ND	5.0	06/08/07
Silver	ND	1.0	06/08/07
Sodium	ND	500	06/08/07
Thallium	ND	1.0	06/08/07
Vanadium	ND	10	06/08/07
Zinc	ND	20	06/08/07

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392093	Batch#:	126254
Matrix:	Filtrate	Prepared:	06/13/07
Units:	ug/L	Analyzed:	06/14/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	06/06/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000	Prepared:	06/14/07
Batch#:	126221	Analyzed:	06/14/07

Field ID	Type	Lab ID	Matrix	Result	RL
1349MW100	SAMPLE	195270-001	Filtrate	ND	0.20
DUP0606073A	SAMPLE	195270-002	Filtrate	ND	0.20
	BLANK	QC391965	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

58.0

: 00256

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126092
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/08/07

Type: BS Lab ID: QC391464

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,491	95	80-120
Antimony	100.0	96.92	97	80-120
Arsenic	100.0	93.26	93	80-120
Barium	100.0	91.76	92	80-120
Beryllium	100.0	98.72	99	80-120
Cadmium	100.0	96.17	96	80-120
Calcium	10,000	9,777	98	80-120
Chromium	100.0	98.24	98	80-120
Cobalt	100.0	98.32	98	80-120
Copper	100.0	98.60	99	80-120
Iron	10,000	9,850	99	80-120
Lead	100.0	96.70	97	80-120
Magnesium	10,000	9,493	95	80-120
Manganese	100.0	97.73	98	80-120
Nickel	100.0	98.59	99	80-120
Potassium	10,000	9,613	96	80-120
Selenium	100.0	98.83	99	80-120
Silver	100.0	97.15	97	80-120
Sodium	10,000	9,873	99	80-120
Thallium	50.00	47.96	96	80-120
Vanadium	100.0	96.17	96	80-120
Zinc	100.0	96.69	97	80-120

Type: BSD Lab ID: QC391465

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,253	93	80-120	3	20
Antimony	100.0	94.75	95	80-120	2	20
Arsenic	100.0	92.91	93	80-120	0	20
Barium	100.0	89.84	90	80-120	2	20
Beryllium	100.0	97.58	98	80-120	1	20
Cadmium	100.0	94.66	95	80-120	2	20
Calcium	10,000	9,505	95	80-120	3	20
Chromium	100.0	96.17	96	80-120	2	20
Cobalt	100.0	96.53	97	80-120	2	20
Copper	100.0	97.34	97	80-120	1	20
Iron	10,000	9,653	97	80-120	2	20
Lead	100.0	93.77	94	80-120	3	20
Magnesium	10,000	9,261	93	80-120	2	20
Manganese	100.0	96.11	96	80-120	2	20
Nickel	100.0	97.16	97	80-120	1	20
Potassium	10,000	9,404	94	80-120	2	20
Selenium	100.0	98.07	98	80-120	1	20
Silver	100.0	95.56	96	80-120	2	20
Sodium	10,000	9,741	97	80-120	1	20
Thallium	50.00	47.36	95	80-120	1	20
Vanadium	100.0	94.38	94	80-120	2	20
Zinc	100.0	99.92	100	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126254
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	1.000	Analyzed:	06/14/07

Type: BS Lab ID: QC392094

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,037	90	80-120
Antimony	100.0	92.32	92	80-120
Arsenic	100.0	90.45	90	80-120
Barium	100.0	93.26	93	80-120
Beryllium	100.0	88.54	89	80-120
Cadmium	100.0	91.85	92	80-120
Calcium	10,000	9,230	92	80-120
Chromium	100.0	89.49	89	80-120
Cobalt	100.0	89.03	89	80-120
Copper	100.0	89.31	89	80-120
Iron	10,000	9,790	98	80-120
Lead	100.0	93.08	93	80-120
Magnesium	10,000	8,952	90	80-120
Manganese	100.0	91.39	91	80-120
Nickel	100.0	89.18	89	80-120
Potassium	10,000	9,224	92	80-120
Selenium	100.0	96.72	97	80-120
Silver	100.0	91.53	92	80-120
Sodium	10,000	8,937	89	80-120
Thallium	50.00	46.10	92	80-120
Vanadium	100.0	88.98	89	80-120
Zinc	100.0	90.26	90	80-120

Type: BSD Lab ID: QC392095

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	8,852	89	80-120	2	20
Antimony	100.0	90.20	90	80-120	2	20
Arsenic	100.0	90.56	91	80-120	0	20
Barium	100.0	92.20	92	80-120	1	20
Beryllium	100.0	88.32	88	80-120	0	20
Cadmium	100.0	90.06	90	80-120	2	20
Calcium	10,000	9,073	91	80-120	2	20
Chromium	100.0	89.51	90	80-120	0	20
Cobalt	100.0	89.47	89	80-120	0	20
Copper	100.0	89.74	90	80-120	0	20
Iron	10,000	9,348	93	80-120	5	20
Lead	100.0	92.00	92	80-120	1	20
Magnesium	10,000	8,788	88	80-120	2	20
Manganese	100.0	91.57	92	80-120	0	20
Nickel	100.0	89.05	89	80-120	0	20
Potassium	10,000	9,125	91	80-120	1	20
Selenium	100.0	92.42	92	80-120	5	20
Silver	100.0	90.03	90	80-120	2	20
Sodium	10,000	8,921	89	80-120	0	20
Thallium	50.00	45.45	91	80-120	1	20
Vanadium	100.0	89.41	89	80-120	0	20
Zinc	100.0	90.53	91	80-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126221
Field ID:	ZZZZZZZZZZ	Sampled:	06/06/07
MSS Lab ID:	195271-001	Received:	06/07/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	1.000	Analyzed:	06/14/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC391966	Water		5.000	4.350	87	80-120		
BSD	QC391967	Water		5.000	4.620	92	80-120	6	20
MS	QC391969	WET Leachate	<0.1041	5.000	5.330	107	75-125		
MSD	QC391970	WET Leachate		5.000	5.320	106	75-125	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	126092
MSS Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391466

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	20.12	10,000	9,586	96	75-125	10.00	06/08/07
Antimony	0.4612	100.0	90.65	90	75-125	10.00	06/08/07
Arsenic	1.096	100.0	98.84	98	75-125	10.00	06/08/07
Barium	46.24	100.0	139.9	94	75-125	10.00	06/08/07
Beryllium	0.4381	100.0	96.32	96	75-125	10.00	06/08/07
Cadmium	0.2802	100.0	97.00	97	75-125	10.00	06/08/07
Calcium	18,940	10,000	28,430	95	75-125	10.00	06/08/07
Chromium	112.1	100.0	209.0	97	75-125	10.00	06/08/07
Cobalt	0.6531	100.0	98.27	98	75-125	10.00	06/08/07
Copper	1.557	100.0	98.98	97	75-125	10.00	06/08/07
Iron	<22.60	10,000	9,987	100	75-125	10.00	06/08/07
Lead	0.5220	100.0	92.97	92	75-125	10.00	06/08/07
Magnesium	83,680	10,000	92,230	86 NM	75-125	10.00	06/08/07
Manganese	1.477	100.0	98.32	97	75-125	10.00	06/08/07
Nickel	4.334	100.0	101.1	97	75-125	10.00	06/08/07
Potassium	118.2	10,000	9,729	96	75-125	10.00	06/08/07
Selenium	1.327	100.0	101.7	100	75-125	10.00	06/08/07
Silver	0.3267	100.0	90.54	90	75-125	10.00	06/08/07
Sodium	217,900	10,000	224,800	69 NM	75-125	100.0	06/15/07
Thallium	0.5990	50.00	44.94	89	75-125	10.00	06/08/07
Vanadium	5.086	100.0	100.2	95	75-125	10.00	06/08/07
Zinc	<3.210	100.0	106.6	107	75-125	10.00	06/08/07

Type: MSD Lab ID: QC391467

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	9,502	95	75-125	1	20	10.00	06/08/07
Antimony	100.0	92.53	92	75-125	2	20	10.00	06/08/07
Arsenic	100.0	96.49	95	75-125	2	20	10.00	06/08/07
Barium	100.0	139.8	94	75-125	0	20	10.00	06/08/07
Beryllium	100.0	93.81	93	75-125	3	20	10.00	06/08/07
Cadmium	100.0	96.19	96	75-125	1	20	10.00	06/08/07
Calcium	10,000	28,370	94	75-125	0	20	10.00	06/08/07
Chromium	100.0	208.5	96	75-125	0	20	10.00	06/08/07
Cobalt	100.0	97.51	97	75-125	1	20	10.00	06/08/07
Copper	100.0	97.25	96	75-125	2	20	10.00	06/08/07
Iron	10,000	9,978	100	75-125	0	20	10.00	06/08/07
Lead	100.0	91.38	91	75-125	2	20	10.00	06/08/07
Magnesium	10,000	91,970	83 NM	75-125	0	20	10.00	06/08/07
Manganese	100.0	96.81	95	75-125	2	20	10.00	06/08/07
Nickel	100.0	100.6	96	75-125	0	20	10.00	06/08/07
Potassium	10,000	9,639	95	75-125	1	20	10.00	06/08/07
Selenium	100.0	102.7	101	75-125	1	20	10.00	06/08/07
Silver	100.0	91.12	91	75-125	1	20	10.00	06/08/07
Sodium	10,000	227,700	98 NM	75-125	1	20	100.0	06/15/07
Thallium	50.00	44.98	89	75-125	0	20	10.00	06/08/07
Vanadium	100.0	100.9	96	75-125	1	20	10.00	06/08/07
Zinc	100.0	99.80	100	75-125	7	20	10.00	06/08/07

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	126254
MSS Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	5.000	Analyzed:	06/14/07

Type: MS Lab ID: QC392096

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	<3.706	10,000	9,249	92	75-125
Antimony	<0.07201	100.0	88.71	89	75-125
Arsenic	0.4548	100.0	93.37	93	75-125
Barium	45.61	100.0	142.6	97	75-125
Beryllium	<0.05328	100.0	92.53	93	75-125
Cadmium	0.05681	100.0	93.93	94	75-125
Calcium	17,050	10,000	26,830	98	75-125
Chromium	102.2	100.0	196.9	95	75-125
Cobalt	0.3505	100.0	89.73	89	75-125
Copper	0.3122	100.0	89.10	89	75-125
Iron	<11.30	10,000	9,293	93	75-125
Lead	0.2189	100.0	90.60	90	75-125
Magnesium	77,170	10,000	89,720	126 NM	75-125
Manganese	0.8022	100.0	92.93	92	75-125
Nickel	3.354	100.0	92.10	89	75-125
Potassium	165.8	10,000	9,547	94	75-125
Selenium	0.5215	100.0	92.15	92	75-125
Silver	<0.02741	100.0	85.50	86	75-125
Sodium	219,300	10,000	226,500 >LR	72 NM	75-125
Thallium	<0.01942	50.00	43.92	88	75-125
Vanadium	3.849	100.0	95.36	92	75-125
Zinc	3.928	100.0	92.83	89	75-125

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

56.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	126254
MSS Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	5.000	Analyzed:	06/14/07

Type: MSD Lab ID: QC392097

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,028	90	75-125	2	20
Antimony	100.0	86.00	86	75-125	3	20
Arsenic	100.0	91.00	91	75-125	3	20
Barium	100.0	138.9	93	75-125	3	20
Beryllium	100.0	89.84	90	75-125	3	20
Cadmium	100.0	91.57	92	75-125	3	20
Calcium	10,000	26,430	94	75-125	2	20
Chromium	100.0	193.3	91	75-125	2	20
Cobalt	100.0	87.71	87	75-125	2	20
Copper	100.0	87.85	88	75-125	1	20
Iron	10,000	9,318	93	75-125	0	20
Lead	100.0	88.36	88	75-125	3	20
Magnesium	10,000	88,190	110 NM	75-125	2	20
Manganese	100.0	92.19	91	75-125	1	20
Nickel	100.0	90.69	87	75-125	2	20
Potassium	10,000	9,267	91	75-125	3	20
Selenium	100.0	90.74	90	75-125	2	20
Silver	100.0	83.32	83	75-125	3	20
Sodium	10,000	222,500 >LR	32 NM	75-125	NC	20
Thallium	50.00	42.61	85	75-125	3	20
Vanadium	100.0	93.25	89	75-125	2	20
Zinc	100.0	92.55	89	75-125	0	20

NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Units:	ug/L
Type:	Serial Dilution	Batch#:	126092
MSS Lab ID:	195270-007	Sampled:	06/06/07
Lab ID:	QC391468	Received:	06/07/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	ND	500.0	NC	10	50.00	06/08/07
Antimony	ND	1.000	ND	5.000	NC	10	50.00	06/08/07
Arsenic	ND	5.000	1.805 J	5.000	NC	10	50.00	06/08/07
Barium	46.24	10.00	47.95	10.00	4	10	50.00	06/08/07
Beryllium	ND	2.000	ND	5.000	NC	10	50.00	06/08/07
Cadmium	ND	1.000	ND	5.000	NC	10	50.00	06/08/07
Calcium	18,940	500.0	19,160	500.0	1	10	50.00	06/08/07
Chromium	112.1	10.00	115.6	10.00	3	10	50.00	06/08/07
Cobalt	ND	10.00	0.8872 J	10.00	NC	10	50.00	06/08/07
Copper	1.557	1.000	ND	5.000	NC	10	50.00	06/08/07
Iron	ND	100.0	ND	500.0	NC	10	50.00	06/08/07
Lead	ND	3.000	0.8631 J	5.000	NC	10	50.00	06/08/07
Magnesium	83,680	500.0	85,020	500.0	2	10	50.00	06/08/07
Manganese	ND	10.00	2.039 J	10.00	NC	10	50.00	06/08/07
Nickel	ND	20.00	4.960 J	20.00	NC	10	50.00	06/08/07
Potassium	ND	500.0	ND	500.0	NC	10	50.00	06/08/07
Selenium	ND	5.000	1.053 J	5.000	NC	10	50.00	06/08/07
Silver	ND	1.000	0.3753 J	5.000	NC	10	50.00	06/08/07
Sodium	217,900	1,000	215,700	5,000	1	10	500.0	06/15/07
Thallium	ND	1.000	1.368 J	2.500	NC	10	50.00	06/08/07
Vanadium	ND	10.00	12.06	10.00	NC	10	50.00	06/08/07
Zinc	ND	20.00	ND	20.00	NC	10	50.00	06/08/07

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Units:	ug/L
Type:	Serial Dilution	Batch#:	126254
MSS Lab ID:	195270-007	Sampled:	06/06/07
Lab ID:	QC392098	Received:	06/07/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	25.00	06/14/07
Antimony	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Arsenic	ND	5.000	1.397 J	5.000	NC	10	25.00	06/14/07
Barium	45.61	10.00	46.88	10.00	3	10	25.00	06/14/07
Beryllium	ND	2.000	ND	2.500	NC	10	25.00	06/14/07
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Calcium	17,050	500.0	16,610	500.0	3	10	25.00	06/14/07
Chromium	102.2	10.00	105.3	10.00	3	10	25.00	06/14/07
Cobalt	ND	10.00	0.4331 J	10.00	NC	10	25.00	06/14/07
Copper	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Iron	ND	100.0	ND	250.0	NC	10	25.00	06/14/07
Lead	ND	3.000	ND	3.000	NC	10	25.00	06/14/07
Magnesium	77,170	500.0	78,980	500.0	2	10	25.00	06/14/07
Manganese	ND	10.00	0.7679 J	10.00	NC	10	25.00	06/14/07
Nickel	ND	20.00	2.984 J	20.00	NC	10	25.00	06/14/07
Potassium	ND	500.0	256.3 J	500.0	NC	10	25.00	06/14/07
Selenium	ND	5.000	0.4094 J	5.000	NC	10	25.00	06/14/07
Silver	ND	1.000	ND	2.500	NC	10	25.00	06/14/07
Sodium	219,300	500.0	215,300	2,500	2	10	250.0	06/15/07
Thallium	ND	1.000	ND	1.250	NC	10	25.00	06/14/07
Vanadium	ND	10.00	12.62	10.00	228 *	10	25.00	06/14/07
Zinc	ND	20.00	ND	20.00	NC	10	25.00	06/14/07

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	126221
MSS Lab ID:	195271-001	Sampled:	06/06/07
Lab ID:	QC391968	Received:	06/07/07
Matrix:	WET Leachate	Analyzed:	06/14/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	1.000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

60.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897229804064
File : f08o0064
IDF : 10.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126092
Time : 08-JUN-2007 20:23
Cal : 897229804001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897229804068
File : f08o0068
IDF : 10.0
Lab ID : QC391469
Matrix : Filtrate
Batch : 126092
Time : 08-JUN-2007 20:46
Cal : 897229804001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	2.012	A	10000	9549	A	95	75-125	u
Antimony	0.04612	A	100.0	97.33	A	97	75-125	u
Arsenic	0.1096	E	100.0	95.58	E	95	75-125	u
Barium	4.624	A	100.0	98.47	A	94	75-125	u
Beryllium	0.04381	A	100.0	94.17	A	94	75-125	u
Cadmium	0.02802	A	100.0	96.89	A	97	75-125	u
Calcium	1894	A	10000	11410	A	95	75-125	u
Chromium	11.21	E	100.0	106.0	E	95	75-125	u
Cobalt	0.06531	E	100.0	95.95	E	96	75-125	u
Copper	0.1557	E	100.0	96.99	E	97	75-125	u
Iron	ND	H	10000	9769	H	98	75-125	u
Lead	0.05220	A	100.0	88.23	A	88	75-125	u
Magnesium	8368	A	10000	17900	A	95	75-125	u
Manganese	0.1477	E	100.0	95.53	E	95	75-125	u
Molybdenum	ND	A	100.0	88.78	A	89	75-125	u
Nickel	0.4334	E	100.0	96.22	E	96	75-125	u
Potassium	11.82	A	10000	9624	A	96	75-125	u
Selenium	0.1327	H	100.0	99.88	H	100	75-125	u
Silver	0.03267	A	100.0	91.19	A	91	75-125	u
Thallium	0.05990	A	50.00	48.56	A	97	75-125	u
Vanadium	0.5086	E	100.0	94.74	E	94	75-125	u
Zinc	ND	E	100.0	96.78	E	97	75-125	u

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1041364	1077653	3.48
Scandium	A	1368535	1406196	2.75
Scandium	E	23334	24529	5.12
Scandium	H	149247	123500	-17.25
Germanium	H	37109	30737	-17.17
Germanium	E	18011	18633	3.45
Indium	A	2003326	1963712	-1.98
Bismuth	A	1840338	1718485	-6.62
Yttrium	A	2032903	2057593	1.21
Terbium	A	2868431	2845305	-0.81

u=use

897229804068

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897239429074
File : f15g0074
IDF : 100.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126092
Time : 15-JUN-2007 14:02
Cal : 897239429001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897239429078
File : f15g0078
IDF : 100.0
Lab ID : QC391469
Matrix : Filtrate
Batch : 126092
Time : 15-JUN-2007 14:26
Cal : 897239429001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8980	A	90	75-125	
Antimony	ND	A	100.0	76.79	A	77	75-125	
Arsenic	ND	E	100.0	91.49	E	91	75-125	
Barium	0.4853	A	100.0	94.05	A	94	75-125	
Beryllium	ND	A	100.0	90.76	A	91	75-125	
Cadmium	ND	A	100.0	92.01	A	92	75-125	
Calcium	164.9	A	10000	9484	A	93	75-125	
Chromium	1.111	E	100.0	92.82	E	92	75-125	
Cobalt	ND	E	100.0	93.92	E	94	75-125	
Copper	0.03792	E	100.0	93.31	E	93	75-125	
Iron	ND	H	10000	9306	H	93	75-125	
Lead	ND	A	100.0	84.62	A	85	75-125	
Magnesium	814.8	A	10000	9707	A	89	75-125	
Manganese	ND	E	100.0	92.60	E	93	75-125	
Molybdenum	0.05828	A	100.0	84.86	A	85	75-125	u
Nickel	0.04665	E	100.0	94.33	E	94	75-125	
Potassium	5.133	A	10000	9262	A	93	75-125	
Selenium	ND	H	100.0	92.59	H	93	75-125	
Silver	ND	A	100.0	80.05	A	80	75-125	
Sodium	2179	E	10000	11140	E	90	75-125	u
Thallium	ND	A	50.00	46.07	A	92	75-125	
Vanadium	0.03007	E	100.0	91.85	E	92	75-125	
Zinc	ND	E	100.0	94.26	E	94	75-125	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	947755	858570	-9.41
Scandium	A	1024786	1024630	-0.02
Scandium	E	16230	14988	-7.65
Scandium	H	421162	379599	-9.87
Germanium	H	105466	97376	-7.67
Germanium	E	14881	13811	-7.19
Indium	A	1615942	1582240	-2.09
Bismuth	A	1910108	1822820	-4.57
Yttrium	A	1534317	1544389	0.66
Terbium	A	2647564	2614328	-1.26

u=use

897239429078

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897238321097
File : f1410097
IDF : 5.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126254
Time : 14-JUN-2007 21:52
Cal : 897238321001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897238321101
File : f1410101
IDF : 5.0
Lab ID : QC392099
Matrix : Filtrate
Batch : 126254
Time : 14-JUN-2007 22:16
Cal : 897238321001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8708	A	87	75-125	u
Antimony	ND	A	100.0	80.62	A	81	75-125	u
Arsenic	0.09096	E	100.0	87.92	E	88	75-125	u
Barium	9.122	A	100.0	100.0	A	91	75-125	u
Beryllium	ND	A	100.0	88.56	A	89	75-125	u
Cadmium	0.01136	A	100.0	89.88	A	90	75-125	u
Calcium	3410	A	10000	12140	A	87	75-125	u
Chromium	20.44	E	100.0	107.7	E	87	75-125	u
Cobalt	0.07010	E	100.0	87.24	E	87	75-125	u
Copper	0.06244	E	100.0	86.50	E	86	75-125	u
Iron	ND	H	10000	8938	H	89	75-125	u
Lead	0.04378	A	100.0	81.98	A	82	75-125	u
Magnesium	15430	A	10000	23580 >LR	A	81	75-125	>LR **b***
Manganese	0.1604	E	100.0	89.92	E	90	75-125	u
Molybdenum	0.05286	A	100.0	83.08	A	83	75-125	u
Nickel	0.6708	E	100.0	87.32	E	87	75-125	u
Potassium	33.16	A	10000	8966	A	89	75-125	u
Selenium	0.1043	H	100.0	88.96	H	89	75-125	u
Silver	ND	A	100.0	80.86	A	81	75-125	u
Thallium	ND	A	50.00	45.64	A	91	75-125	u
Vanadium	0.7698	E	100.0	88.42	E	88	75-125	u
Zinc	0.7856	E	100.0	88.42	E	88	75-125	u

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2123286	2070454	-2.49
Scandium	A	1935693	2197927	13.55
Scandium	E	60849	65071	6.94
Scandium	H	853179	872693	2.29
Germanium	H	210213	216284	2.89
Germanium	E	46689	50005	7.10
Indium	A	2970271	3240745	9.11
Bismuth	A	3398867	3542571	4.23
Yttrium	A	2820269	3198886	13.42
Terbium	A	4719676	5249968	11.24

>LR=overrange b=noncompliant u=use

897238321101

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897239429023
File : f15g0023
IDF : 50.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126254
Time : 15-JUN-2007 08:44
Cal : 897239429001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897239429025
File : f15g0025
IDF : 50.0
Lab ID : QC392099
Matrix : Filtrate
Batch : 126254
Time : 15-JUN-2007 08:56
Cal : 897239429001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	9142	A	91	75-125	
Antimony	ND	A	100.0	80.26	A	80	75-125	
Arsenic	ND	E	100.0	90.68	E	91	75-125	
Barium	0.8880	A	100.0	93.10	A	92	75-125	
Beryllium	ND	A	100.0	90.88	A	91	75-125	
Cadmium	ND	A	100.0	91.66	A	92	75-125	
Calcium	353.8	A	10000	9646	A	93	75-125	
Chromium	2.090	E	100.0	93.96	E	92	75-125	
Cobalt	ND	E	100.0	93.52	E	94	75-125	
Copper	ND	E	100.0	93.04	E	93	75-125	
Iron	ND	H	10000	9034	H	90	75-125	
Lead	ND	A	100.0	83.76	A	84	75-125	
Magnesium	1594	A	10000	10710	A	91	75-125	u
Manganese	0.02694	E	100.0	93.04	E	93	75-125	
Molybdenum	ND	A	100.0	84.82	A	85	75-125	
Nickel	0.04086	E	100.0	93.86	E	94	75-125	
Potassium	6.514	A	10000	9298	A	93	75-125	
Selenium	ND	H	100.0	91.78	H	92	75-125	
Silver	ND	A	100.0	79.88	A	80	75-125	
Sodium	4386	E	10000	13410	E	90	75-125	u
Thallium	ND	A	50.00	45.80	A	92	75-125	
Vanadium	0.07570	E	100.0	92.06	E	92	75-125	
Zinc	ND	E	100.0	93.00	E	93	75-125	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	947755	926984	-2.19
Scandium	A	1024786	1059908	3.43
Scandium	E	16230	15636	-3.66
Scandium	H	421162	406621	-3.45
Germanium	H	105466	101352	-3.90
Germanium	E	14881	14437	-2.98
Indium	A	1615942	1621243	0.33
Bismuth	A	1910108	1866895	-2.26
Yttrium	A	1534317	1585621	3.34
Terbium	A	2647564	2666920	0.73

u=use

897239429025

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897229804001
Units : ug/L

Date : 08-JUN-2007 14:24
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f08o0005	897229804005		08-JUN-2007 14:30	S6414
L2	f08o0006	897229804006		08-JUN-2007 14:36	S6416
L3	f08o0007	897229804007		08-JUN-2007 14:42	S6417
L4	f08o0008	897229804008		08-JUN-2007 14:48	S6418
L5	f08o0009	897229804009		08-JUN-2007 14:53	S6412
L6	f08o0010	897229804010		08-JUN-2007 14:59	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.6809	0.5984	0.5872	0.5419	0.5354	0.5223	BLNK	-2.6426	1.90533		0.5777	1.000	0.995	
Antimony	A	0.4266	0.2828	0.2858	0.2603	0.2786	0.2672	BLNK	-0.0241	3.71136		0.3002	1.000	0.995	
Barium	A	0.5943	0.0841	0.0863	0.1225	0.0722	0.0719	BLNK	-0.0129	13.8799		0.1719	0.999	0.995	
Beryllium	A	0.2430	0.2178	0.2303	0.2271	0.2206	0.2224	BLNK	-0.0024	4.50414		0.2268	1.000	0.995	
Cadmium	A	0.0776	0.0696	0.0725	0.0689	0.0685	0.0659	BLNK	-0.0142	15.0623		0.0705	1.000	0.995	
Calcium	A	0.0918	0.0296	0.0251	0.0190	0.0192	0.0186	BLNK	-21.934	53.4229		0.0339	1.000	0.995	
Lead	A	0.9276	0.6916	0.6974	0.6520	0.6688	0.6492	BLNK	-0.0184	1.53127		0.7144	1.000	0.995	
Magnesium	A	0.5820	0.4887	0.4843	0.4400	0.4349	0.4197	BLNK	-3.1258	2.36572		0.4749	1.000	0.995	
Molybdenum	A	0.2904	0.2206	0.1970	0.1850	0.1932	0.1951	BLNK	-0.0772	5.13737		0.2135	1.000	0.995	
Potassium	A	9.5679	2.1026	1.3886	0.7183	0.6511	0.6270	BLNK	-115.21	1.59359		2.5092	1.000	0.995	
Silver	A	0.3447	0.3189	0.3268	0.3119	0.3319	0.3177	BLNK	-0.0060	3.12024		0.3253	1.000	0.995	
Thallium	A	0.8193	0.7448	0.7556	0.7236	0.7948	0.7708	BLNK	-0.0072	1.28965		0.7681	1.000	0.995	
Arsenic	E	0.6795	0.5642	0.6098	0.5481	0.5571	0.5370	BLNK	-0.0251	1.84864		0.5826	1.000	0.995	
Chromium	E	7.6132	4.4681	4.1983	3.7420	3.6846	3.5667	BLNK	-0.0951	0.27867		4.5455	1.000	0.995	
Cobalt	E	7.1346	6.6316	6.6404	6.3644	6.2324	6.0095	BLNK	-0.0054	0.16517		6.5022	1.000	0.995	
Copper	E	54.647	9.6242	10.237	6.6343	6.3380	6.0017	BLNK	-0.2020	0.16495		15.580	0.999	0.995	
Manganese	E	2.7844	1.6900	1.6855	1.6306	1.6186	1.5699	BLNK	-0.0105	0.63304		1.8299	1.000	0.995	
Nickel	E	7.3546	2.0003	1.9542	1.8044	1.7193	1.6479	BLNK	-0.0468	0.60169		2.7468	1.000	0.995	
Sodium	E	3.8876	1.0345	0.7545	0.5052	0.4732	0.4552	BLNK	-59.636	2.18713		1.1850	1.000	0.995	
Vanadium	E	4.7742	3.2262	2.9878	2.8079	2.7719	2.7108	BLNK	-0.0726	0.36739		3.2131	1.000	0.995	
Zinc	E	20.163	2.8060	1.8252	0.9903	0.8467	0.8028	BLNK	-0.9182	1.23860		4.5722	0.999	0.995	
Iron	H	1.1616	1.0056	0.9923	0.9422	0.9264	0.8937	BLNK	-8.7485	1.11132		0.9870	1.000	0.995	
Selenium	H	0.1824	0.1534	0.1567	0.1567	0.1501	0.1449	BLNK	-0.0062	6.85209		0.1573	1.000	0.995	

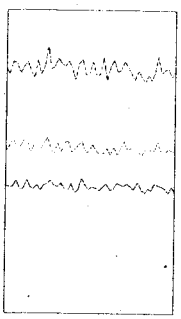
897229804001

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	3	50.00	9	100.0	9	1000	3	10000	2	20000	-1
Antimony	A	0.100	34	0.500	0	1.000	4	10.00	-4	100.0	3	200.0	-1
Barium	A	0.100	712	0.500	14	1.000	18	10.00	70	100.0	0	200.0	0
Beryllium	A	0.100	7	0.500	-2	1.000	3	10.00	2	100.0	-1	200.0	0
Cadmium	A	0.100	3	0.500	2	1.000	8	10.00	4	100.0	3	200.0	-1
Calcium	A	10.00	171	50.00	14	100.0	12	1000	0	10000	3	20000	-1
Lead	A	0.100	24	0.500	2	1.000	5	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	6	50.00	9	100.0	11	1000	4	10000	3	20000	-1
Molybdenum	A	0.100	-28	0.500	-2	1.000	-7	10.00	-6	100.0	-1	200.0	0
Potassium	A	10.00	273	50.00	5	100.0	6	1000	3	10000	3	20000	-1
Silver	A	0.100	2	0.500	-2	1.000	1	10.00	-3	100.0	4	200.0	-1
Thallium	A	0.050	-9	0.250	-7	0.500	-4	5.000	-7	50.00	2	100.0	-1
Arsenic	E	0.100	0	0.500	-1	1.000	10	10.00	1	100.0	3	200.0	-1
Chromium	E	0.100	17	0.500	5	1.000	7	10.00	3	100.0	3	200.0	-1
Cobalt	E	0.100	12	0.500	8	1.000	9	10.00	5	100.0	3	200.0	-1
Copper	E	0.100	599	0.500	18	1.000	49	10.00	7	100.0	4	200.0	-1
Manganese	E	0.100	66	0.500	5	1.000	6	10.00	3	100.0	2	200.0	-1
Nickel	E	0.100	296	0.500	11	1.000	13	10.00	8	100.0	3	200.0	-1
Sodium	E	10.00	154	50.00	7	100.0	5	1000	5	10000	3	20000	-1
Vanadium	E	0.100	3	0.500	4	1.000	3	10.00	2	100.0	2	200.0	0
Zinc	E	0.100	1479	0.500	64	1.000	34	10.00	13	100.0	4	200.0	-1
Iron	H	10.00	-58	50.00	-6	100.0	2	1000	4	10000	3	20000	-1
Selenium	H	0.100	19	0.500	4	1.000	7	10.00	7	100.0	3	200.0	-1

897229804001

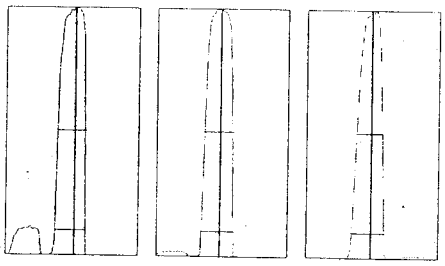
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	20156.0	20904.5	2.77	1.50
89	50,000	39987.0	40303.9	3.12	0.90
205	50,000	26808.0	27249.9	2.82	4.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.857%
Doubly Charged: 70/140 2.153%



m/z:	7	89	205
Height:	20,907	40,249	27,048
Axis:	7.10	89.00	205.00
W-50%:	0.65	0.70	0.60
W-10%:	0.700	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.68 V
Smpl Depth	:	8 mm
Torch-H	:	0.8 mm
Torch-V	:	0.2 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-160 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-0.2 V
Cell Entrance	:	-30 V
QP Focus	:	7 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	126
AMU Offset	:	126
Axis Gain	:	0.9997
Axis Offset	:	0.06
QP Bias	:	-3 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1680 V
Pulse HV	:	1050 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	5.5 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
51	14.5	28.84
59	3610.9	2.98
89	2798.0	3.20

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	1548.8	6.49
78	0.0	494.87
89	14176.8	4.86

Integration Time: 0.1000sec

Generated : Jun 08, 2007 07:29:00 : 00272
Printed : Jun 08, 2007 07:30:30

P/A Factor Tuning Report

Acquired:Jun 8 2007 07:51 am

Mass[amu]	Element	P/A Factor
6	Li	0.060365
7	(Li)	0.063439
9	Be	0.068615
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.084373
45	Sc	0.082643
51	V	0.082787
52	Cr	0.085094
55	Mn	0.087978
56	Fe	Sensitivity too high
59	Co	0.090548
60	Ni	Sensitivity too low
63	Cu	0.092647
65	Cu	0.095275
66	Zn	Sensitivity too low
72	Ge	0.093302
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.092633
98	Mo	0.092682
99	(Ru)	Sensitivity too low
107	Ag	0.097755
111	Cd	Sensitivity too low
115	In	0.097621
118	(In)	0.097444
121	Sb	0.097388
137	Ba	Sensitivity too low
159	Tb	0.100711
205	Tl	0.104857
206	(Pb)	0.104715
207	(Pb)	0.104834
208	Pb	0.104843
209	Bi	0.104478

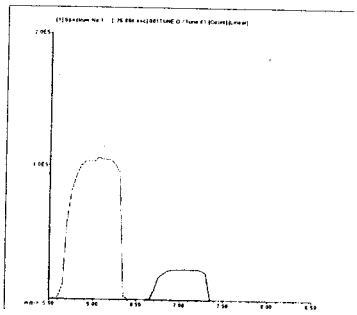
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1680 V
Pulse HV: 1050 V

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F08o00.B\001TUNE.D
Date Acquired:	Jun 8 2007 02:04 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.06	5.00	
59 Co	0.78	5.00	
115 In	1.03	5.00	
205 Tl	0.59	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

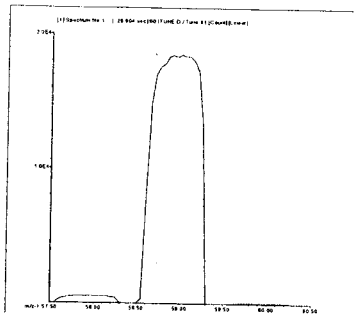
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 58.95

Required: 58.90 - 59.10

Flag:

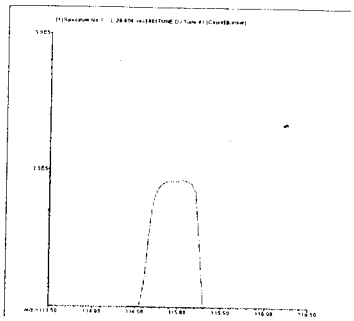
Peak Width

Actual: 0.65

Required: 0.90

Flag:

00274



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

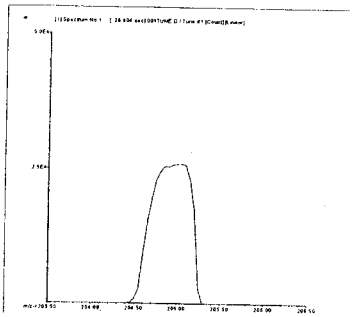
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004C
Date Acquired:	Jun 8 2007 02:22 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Jun 08 2007 02:26 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1041364.00	A	11530.00	1.11
7	(Li)		P		
9	Be	11.11	P	3.85	34.64
23	Na	12725.45	P	235.30	1.85
24	Mg	36172.70	P	2839.00	7.85
27	Al	37971.18	P	3527.00	9.29
39	K	1978737.00	A	3228.00	0.16
44	Ca	11237.73	P	131.80	1.17
45	Sc	149246.91	P	377.80	0.25
45	Sc	23334.45	P	127.30	0.55
45	Sc	1368535.00	A	5864.00	0.43
51	V	92.22	P	8.01	8.69
52	Cr	159.26	P	9.05	5.68
55	Mn	7.78	P	3.33	42.85
56	Fe	23502.47	P	4172.00	17.75
59	Co	15.19	P	5.70	37.55
60	Ni	36.30	P	5.70	15.71
63	Cu	441.12	P	15.28	3.46
65	Cu	230.37	P	11.13	4.83
66	Zn	267.04	P	12.78	4.79
72	Ge	37108.82	P	496.40	1.34
72	Ge	18011.00	P	182.30	1.01
75	As	4.89	P	2.34	47.88
78	Se	0.67	P	0.00	0.00
89	Y	2032902.00	A	17270.00	0.85
98	Mo	611.14	P	20.37	3.33
107	Ag	76.67	P	13.33	17.39
111	Cd	37.78	P	1.93	5.10
115	In	2003326.00	A	7094.00	0.35
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	260.01	P	8.82	3.39
137	Ba	53.34	P	23.33	43.74
159	Tb	2868431.00	A	9594.00	0.33
205	Tl	204.45	P	10.18	4.98
208	Pb	690.03	P	32.15	4.66
209	Bi	1840338.00	A	14640.00	0.80

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 8 2007 02:28 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1051950.00	A	14820.00	1.41
7	(Li)		P		
9	Be	511.14	P	10.18	1.99
23	Na	18309.91	P	268.30	1.47
24	Mg	155892.50	P	948.40	0.61
27	Al	182391.30	P	3087.00	1.69
39	K	2562958.00	A	17200.00	0.67
44	Ca	24577.59	P	167.60	0.68
45	Sc	147248.50	P	985.00	0.67
45	Sc	23549.61	P	277.50	1.18
45	Sc	1339353.00	A	4755.00	0.36
51	V	224.82	P	3.57	1.59
52	Cr	358.53	P	12.29	3.43
55	Mn	131.11	P	11.11	8.47
56	Fe	34208.86	P	226.00	0.66
59	Co	335.93	P	9.05	2.69
60	Ni	346.30	P	11.13	3.21
63	Cu	1983.48	P	27.38	1.38
65	Cu	961.89	P	52.26	5.43
66	Zn	731.88	P	35.53	4.85
72	Ge	36520.33	P	252.50	0.69
72	Ge	18148.23	P	41.13	0.23
75	As	24.67	P	4.81	19.49
78	Se	13.33	P	4.05	30.41
89	Y	2009007.00	A	8119.00	0.40
98	Mo	1166.75	P	23.33	2.00
99	(Ru)	4.44	P	1.93	43.31
107	Ag	1372.33	P	32.89	2.40
111	Cd	308.90	P	10.71	3.47
115	In	1991045.00	A	21300.00	1.07
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1699.05	P	75.31	4.43
137	Ba	3370.50	P	21.86	0.65
159	Tb	2835739.00	A	24630.00	0.87
205	Tl	1497.91	P	109.10	7.28
208	Pb	5260.57	P	147.30	2.80
209	Bi	1828405.00	A	6107.00	0.33

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	1051950.30	1.41	1041364.40	101.0	80 -	120	
45	Sc	147248.48	0.67	149246.92	98.7	80 -	120	
45	Sc	23549.62	1.18	23334.45	100.9	80 -	120	
45	Sc	1339353.00	0.36	1368535.10	97.9	80 -	120	
72	Ge	36520.33	0.69	37108.82	98.4	80 -	120	
72	Ge	18148.23	0.23	18011.00	100.8	80 -	120	
89	Y	2009007.30	0.40	2032902.50	98.8	80 -	120	
115	In	1991045.10	1.07	2003326.40	99.4	80 -	120	
159	Tb	2835739.00	0.87	2868430.80	98.9	80 -	120	
209	Bi	1828404.80	0.33	1840338.10	99.4	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 8 2007 02:34 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:32 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1056267.00	A	12310.00	1.17
7 (Li)		P		
9 Be	2301.35	P	105.20	4.57
23 Na	24039.92	P	248.70	1.03
24 Mg	663772.63	P	7335.00	1.11
27 Al	812870.63	A	5875.00	0.72
39 K	2855907.00	A	6207.00	0.22
44 Ca	40145.60	P	571.50	1.42
45 Sc	144758.70	P	399.60	0.28
45 Sc	23239.51	P	302.20	1.30
45 Sc	1358297.00	A	8197.00	0.60
51 V	749.66	P	17.65	2.35
52 Cr	1038.19	P	14.67	1.41
55 Mn	392.97	P	31.94	8.13
56 Fe	145566.09	P	203.10	0.14
59 Co	1540.83	P	31.22	2.03
60 Ni	464.83	P	8.41	1.81
63 Cu	1723.82	P	10.50	0.61
65 Cu	842.25	P	48.93	5.81
66 Zn	502.98	P	49.01	9.74
72 Ge	35936.34	P	272.70	0.76
72 Ge	17914.25	P	344.20	1.92
75 As	101.11	P	6.71	6.64
78 Se	55.11	P	3.91	7.09
89 Y	2015374.00	A	25050.00	1.24
98 Mo	4445.25	P	187.70	4.22
99 (Ru)	2.22	P	1.93	86.62
107 Ag	6373.79	P	319.40	5.01
111 Cd	1390.11	P	30.55	2.20
115 In	1998472.00	A	3540.00	0.18
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5652.37	P	190.50	3.37
137 Ba	2411.39	P	48.59	2.02
159 Tb	2868718.00	A	48050.00	1.68
205 Tl	6776.32	P	346.30	5.11
208 Pb	19837.28	P	284.00	1.43
209 Bi	1819488.00	A	11220.00	0.62

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1056267.30	1.17	1041364.40	101.4	80 - 120	
45 Sc	144758.72	0.28	149246.92	97.0	80 - 120	
45 Sc	23239.51	1.30	23334.45	99.6	80 - 120	
45 Sc	1358297.50	0.60	1368535.10	99.3	80 - 120	
72 Ge	35936.34	0.76	37108.82	96.8	80 - 120	
72 Ge	17914.25	1.92	18011.00	99.5	80 - 120	
89 Y	2015374.10	1.24	2032902.50	99.1	80 - 120	
115 In	1998471.60	0.18	2003326.40	99.8	80 - 120	
159 Tb	2868718.30	1.68	2868430.80	100.0	80 - 120	
209 Bi	1819487.90	0.62	1840338.10	98.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 8 2007 02:40 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:38 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1046229.00	A	10520.00	1.01
7 (Li)		P		
9 Be	4816.42	P	211.90	4.40
23 Na	35698.66	P	859.50	2.41
24 Mg	1313997.00	A	11020.00	0.84
27 Al	1593258.00	A	10910.00	0.68
39 K	3767560.00	A	16170.00	0.43
44 Ca	68069.18	P	531.30	0.78
45 Sc	145211.00	P	579.00	0.40
45 Sc	23658.29	P	460.10	1.94
45 Sc	1356647.00	A	3369.00	0.25
51 V	1413.78	P	34.52	2.44
52 Cr	1986.44	P	46.04	2.32
55 Mn	797.44	P	11.24	1.41
56 Fe	288184.19	P	818.40	0.28
59 Co	3140.72	P	53.48	1.70
60 Ni	924.11	P	25.73	2.78
63 Cu	3714.55	P	138.70	3.73
65 Cu	1937.55	P	11.19	0.58
66 Zn	662.24	P	21.69	3.28
72 Ge	36034.40	P	126.50	0.35
72 Ge	18139.70	P	387.70	2.14
75 As	221.11	P	6.58	2.97
78 Se	112.89	P	4.34	3.84
89 Y	2015822.00	A	16030.00	0.80
98 Mo	7941.24	P	126.10	1.59
99 (Ru)	8.89	P	1.93	21.66
107 Ag	12979.34	P	449.30	3.46
111 Cd	2879.26	P	30.06	1.04
115 In	1985748.00	A	8593.00	0.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	11349.13	P	196.90	1.73
137 Ba	4872.07	P	64.68	1.33
159 Tb	2823081.00	A	13130.00	0.47
205 Tl	13679.30	P	124.00	0.91
208 Pb	39376.41	P	225.70	0.57
209 Bi	1810391.00	A	3430.00	0.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	1046229.60	1.01	1041364.40	100.5	80 -	120	
45 Sc	145210.97	0.40	149246.92	97.3	80 -	120	
45 Sc	23658.30	1.94	23334.45	101.4	80 -	120	
45 Sc	1356646.50	0.25	1368535.10	99.1	80 -	120	
72 Ge	36034.40	0.35	37108.82	97.1	80 -	120	
72 Ge	18139.70	2.14	18011.00	100.7	80 -	120	
89 Y	2015822.00	0.80	2032902.50	99.2	80 -	120	
115 In	1985748.10	0.43	2003326.40	99.1	80 -	120	
159 Tb	2823080.80	0.47	2868430.80	98.4	80 -	120	
209 Bi	1810391.30	0.19	1840338.10	98.4	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 8 2007 02:45 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:44 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1070916.00	A	5885.00	0.55
7 (Li)		P		
9 Be	48629.83	P	117.50	0.24
23 Na	242954.70	P	1549.00	0.64
24 Mg	12380180.00	A	100600.00	0.81
27 Al	15247630.00	A	119000.00	0.78
39 K	20211400.00	A	119700.00	0.59
44 Ca	535714.00	P	1914.00	0.36
45 Sc	143430.70	P	875.20	0.61
45 Sc	24047.41	P	329.60	1.37
45 Sc	1406983.00	A	4397.00	0.31
51 V	13503.32	P	75.42	0.56
52 Cr	17993.06	P	201.80	1.12
55 Mn	7840.56	P	102.70	1.31
56 Fe	2702916.00	A	27860.00	1.03
59 Co	30604.60	P	221.70	0.72
60 Ni	8678.42	P	168.20	1.94
63 Cu	24553.62	P	116.10	0.47
65 Cu	12232.33	P	157.50	1.29
66 Zn	3665.28	P	108.20	2.95
72 Ge	35788.62	P	274.60	0.77
72 Ge	18505.29	P	87.21	0.47
75 As	2028.59	P	41.64	2.05
78 Se	1121.38	P	20.67	1.84
89 Y	2081366.00	A	21140.00	1.02
98 Mo	76996.61	P	777.40	1.01
99 (Ru)	10.00	P	8.82	88.19
107 Ag	127117.50	P	702.90	0.55
111 Cd	28094.91	P	558.40	1.99
115 In	2037795.00	A	7013.00	0.34
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	106073.40	P	113.40	0.11
137 Ba	71079.10	P	770.70	1.08
159 Tb	2901633.00	A	28650.00	0.99
205 Tl	132735.91	P	657.60	0.50
208 Pb	378348.41	P	399.10	0.11
209 Bi	1834471.00	A	6373.00	0.35

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1070915.60	0.55	1041364.40	102.8	80 - 120	
45 Sc	143430.73	0.61	149246.92	96.1	80 - 120	
45 Sc	24047.41	1.37	23334.45	103.1	80 - 120	
45 Sc	1406983.40	0.31	1368535.10	102.8	80 - 120	
72 Ge	35788.62	0.77	37108.82	96.4	80 - 120	
72 Ge	18505.29	0.47	18011.00	102.7	80 - 120	
89 Y	2081365.80	1.02	2032902.50	102.4	80 - 120	
115 In	2037795.10	0.34	2003326.40	101.7	80 - 120	
159 Tb	2901632.80	0.99	2868430.80	101.2	80 - 120	
209 Bi	1834471.30	0.35	1840338.10	99.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 8 2007 02:51 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:49 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1108661.00	A	4736.00	0.43
7 (Li)		P		
9 Be	489097.19	P	414.70	0.08
23 Na	2360799.00	A	23130.00	0.98
24 Mg	###########	A	192800.00	0.15
27 Al	###########	A	112100.00	0.07
39 K	###########	A	752400.00	0.40
44 Ca	5611444.00	A	38480.00	0.69
45 Sc	143837.09	P	689.80	0.48
45 Sc	24945.85	P	334.20	1.34
45 Sc	1458951.00	A	1855.00	0.13
51 V	138278.80	P	817.80	0.59
52 Cr	183813.80	P	691.70	0.38
55 Mn	80749.91	P	368.10	0.46
56 Fe	26650800.00	A	107100.00	0.40
59 Co	310916.50	P	1110.00	0.36
60 Ni	85773.61	P	597.20	0.70
63 Cu	241698.00	P	1954.00	0.81
65 Cu	119944.60	P	743.80	0.62
66 Zn	32288.90	P	369.00	1.14
72 Ge	35767.10	P	316.30	0.88
72 Ge	19067.45	P	163.40	0.86
75 As	21246.02	P	153.00	0.72
78 Se	10733.58	P	91.71	0.85
89 Y	2132237.00	A	7893.00	0.37
98 Mo	824007.69	M	34430.00	4.18
99 (Ru)	34.45	P	9.62	27.94
107 Ag	1343614.00	A	8265.00	0.62
111 Cd	277293.41	P	968.40	0.35
115 In	2024096.00	A	8804.00	0.43
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1127643.00	A	7046.00	0.62
137 Ba	420128.41	P	525.20	0.13
159 Tb	2910194.00	A	4756.00	0.16
205 Tl	1421965.00	A	2181.00	0.15
208 Pb	3892889.00	A	9310.00	0.24
209 Bi	1789179.00	A	13950.00	0.78

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1108661.40	0.43	1041364.40	106.5	80 - 120	
45 Sc	143837.13	0.48	149246.92	96.4	80 - 120	
45 Sc	24945.85	1.34	23334.45	106.9	80 - 120	
45 Sc	1458951.10	0.13	1368535.10	106.6	80 - 120	
72 Ge	35767.11	0.88	37108.82	96.4	80 - 120	
72 Ge	19067.45	0.86	18011.00	105.9	80 - 120	
89 Y	2132236.80	0.37	2032902.50	104.9	80 - 120	
115 In	2024096.40	0.43	2003326.40	101.0	80 - 120	
159 Tb	2910194.30	0.16	2868430.80	101.5	80 - 120	
209 Bi	1789178.90	0.78	1840338.10	97.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 8 2007 02:57 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:55 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1114010.00	A	2865.00	0.26
7 (Li)		P		
9 Be	990868.31	A	5531.00	0.56
23 Na	4541605.00	A	28120.00	0.62
24 Mg	############	A	1729000.00	0.71
27 Al	############	A	2001000.00	0.66
39 K	############	A	1514000.00	0.41
44 Ca	10859830.00	A	21380.00	0.20
45 Sc	144474.50	P	399.90	0.28
45 Sc	24942.10	P	121.20	0.49
45 Sc	1458040.00	A	12800.00	0.88
51 V	270444.69	P	284.90	0.11
52 Cr	355839.59	P	234.70	0.07
55 Mn	156629.41	P	164.10	0.10
56 Fe	51645952.00	A	341600.00	0.66
59 Co	599546.00	P	2387.00	0.40
60 Ni	164406.91	P	622.90	0.38
63 Cu	459088.09	P	190.40	0.04
65 Cu	228791.91	P	478.50	0.21
66 Zn	61407.96	P	235.70	0.38
72 Ge	35815.00	P	181.90	0.51
72 Ge	19125.32	P	231.20	1.21
75 As	41075.28	P	163.00	0.40
78 Se	20756.52	P	137.50	0.66
89 Y	2104923.00	A	10100.00	0.48
98 Mo	1643034.00	A	4159.00	0.25
99 (Ru)	60.00	P	3.33	5.56
107 Ag	2541543.00	A	3807.00	0.15
111 Cd	526957.50	P	1136.00	0.22
115 In	2000158.00	A	6143.00	0.31
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2138057.00	A	8434.00	0.39
137 Ba	827876.88	M	32690.00	3.95
159 Tb	2878432.00	A	21670.00	0.75
205 Tl	2676372.00	A	12370.00	0.46
208 Pb	7474480.00	A	17760.00	0.24
209 Bi	1736168.00	A	6295.00	0.36

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1114010.10	0.26	1041364.40	107.0	80 - 120	
45 Sc	144474.47	0.28	149246.92	96.8	80 - 120	
45 Sc	24942.10	0.49	23334.45	106.9	80 - 120	
45 Sc	1458040.40	0.88	1368535.10	106.5	80 - 120	
72 Ge	35815.00	0.51	37108.82	96.5	80 - 120	
72 Ge	19125.32	1.21	18011.00	106.2	80 - 120	
89 Y	2104922.80	0.48	2032902.50	103.5	80 - 120	
115 In	2000158.30	0.31	2003326.40	99.8	80 - 120	
159 Tb	2878431.80	0.75	2868430.80	100.3	80 - 120	
209 Bi	1736168.00	0.36	1840338.10	94.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804012 File : f08o0012 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 15:11
Standards: S6419, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.5777	0.5343	10000	10180	ug/L	2	10	
Antimony	A	0.3002	0.2721	100.0	100.9	ug/L	1	10	
Barium	A	0.1719	0.0719	100.0	99.76	ug/L	0	10	
Beryllium	A	0.2268	0.2233	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0705	0.0680	100.0	102.4	ug/L	2	10	
Calcium	A	0.0339	0.0192	10000	10250	ug/L	3	10	
Lead	A	0.7144	0.6126	100.0	93.78	ug/L	-6	10	
Magnesium	A	0.4749	0.4306	10000	10180	ug/L	2	10	
Molybdenum	A	0.2135	0.1977	100.0	101.5	ug/L	2	10	
Potassium	A	2.5092	0.6503	10000	10250	ug/L	3	10	
Silver	A	0.3253	0.3136	100.0	97.83	ug/L	-2	10	
Thallium	A	0.7681	0.7918	50.00	51.05	ug/L	2	10	
Arsenic	E	0.5826	0.5384	100.0	99.51	ug/L	0	10	
Chromium	E	4.5455	3.6405	100.0	101.4	ug/L	1	10	
Cobalt	E	6.5022	6.2069	100.0	102.5	ug/L	3	10	
Copper	E	15.580	6.2760	100.0	103.3	ug/L	3	10	
Manganese	E	1.8299	1.5961	100.0	101.0	ug/L	1	10	
Nickel	E	2.7468	1.7166	100.0	103.2	ug/L	3	10	
Sodium	E	1.1850	0.4654	10000	10120	ug/L	1	10	
Vanadium	E	3.2131	2.7385	100.0	100.5	ug/L	1	10	
Zinc	E	4.5722	0.8368	100.0	102.7	ug/L	3	10	
Iron	H	0.9870	0.9215	10000	10230	ug/L	2	10	
Selenium	H	0.1573	0.1501	100.0	102.9	ug/L	3	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1146565	10.10
Scandium	A	1368535	1512180	10.50
Scandium	E	23334	25939	11.16
Scandium	H	149247	146616	-1.76
Germanium	H	37109	36758	-0.95
Germanium	E	18011	19911	10.55
Indium	A	2003326	2085980	4.13
Bismuth	A	1840338	1813746	-1.44
Yttrium	A	2032903	2168843	6.69
Terbium	A	2868431	2989627	4.23

897229804012

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804014 File : f08o0014 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 15:23

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.03275]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.03845]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.02029]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01863]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01112]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01446]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01261]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01373]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01250]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.009268]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.02484]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01637]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1094855	5.14
Scandium	A	1368535	1469601	7.38
Scandium	E	23334	25479	9.19
Scandium	H	149247	150256	0.68
Germanium	H	37109	37196	0.23
Germanium	E	18011	19741	9.61
Indium	A	2003326	2140312	6.84
Bismuth	A	1840338	1898549	3.16
Yttrium	A	2032903	2187534	7.61
Terbium	A	2868431	3006374	4.81

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897229804016 File : f08o0016 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 15:35
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	0.1189	0.1000	ug/L	
Barium	A	0.7702	0.1000	ug/L	
Beryllium	A	[0.02868]	0.1000	ug/L	
Cadmium	A	1.073	0.1000	ug/L	
Lead	A	0.3623	0.1000	ug/L	
Silver	A	0.1642	0.1000	ug/L	
Thallium	A	[0.03989]	0.05000	ug/L	
Arsenic	E	0.2030	0.1000	ug/L	
Chromium	E	1.104	0.1000	ug/L	
Cobalt	E	0.1742	0.1000	ug/L	
Copper	E	1.015	0.1000	ug/L	
Manganese	E	0.4571	0.1000	ug/L	
Nickel	E	0.9681	0.1000	ug/L	
Vanadium	E	[0.04627]	0.1000	ug/L	
Zinc	E	1.114	0.1000	ug/L	
Selenium	H	[0.06547]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78980	ug/L	79
Calcium	A	300000	237800	ug/L	79
Magnesium	A	100000	77590	ug/L	78
Molybdenum	A	2000	1542	ug/L	77
Potassium	A	100000	78440	ug/L	78
Sodium	E	250000	192100	ug/L	77
Iron	H	250000	187500	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	982613	-5.64
Scandium	A	1368535	1351056	-1.28
Scandium	E	23334	24057	3.10
Scandium	H	149247	146119	-2.10
Germanium	H	37109	34050	-8.24
Germanium	E	18011	17822	-1.05
Indium	A	2003326	1765334	-11.88
Bismuth	A	1840338	1489179	-19.08
Yttrium	A	2032903	1970168	-3.09
Terbium	A	2868431	2667484	-7.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897229804017 File : f08o0017 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 15:41
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100800	ug/L	1		
Cadmium	A	100.0	102.3	ug/L	2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	98570	ug/L	-1		
Molybdenum	A	2000	1954	ug/L	-2		
Potassium	A	100000	100200	ug/L	0		
Silver	A	50.00	46.65	ug/L	-7	20	
Arsenic	E	100.0	106.2	ug/L	6	20	
Chromium	E	200.0	201.2	ug/L	1	20	
Cobalt	E	200.0	190.6	ug/L	-5	20	
Copper	E	200.0	186.3	ug/L	-7	20	
Manganese	E	200.0	200.1	ug/L	0	20	
Nickel	E	200.0	186.9	ug/L	-7	20	
Sodium	E	250000	245800	ug/L	-2		
Vanadium	E	200.0	204.5	ug/L	2	20	
Zinc	E	100.0	95.71	ug/L	-4	20	
Iron	H	250000	236500	ug/L	-5		
Selenium	H	100.0	100.6	ug/L	1	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	154720	3.67
Scandium	A	1368535	1340075	-2.08
Scandium	E	23334	23714	1.63
Germanium	H	37109	35816	-3.48
Germanium	E	18011	17441	-3.16
Indium	A	2003326	1745887	-12.85
Yttrium	A	2032903	1947939	-4.18

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804033 File : f08o0033 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 17:16
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5294	10000	10080	ug/L	1	10	
Antimony	A	0.3002	0.2731	100.0	101.3	ug/L	1	10	
Barium	A	0.1719	0.0715	100.0	99.26	ug/L	-1	10	
Beryllium	A	0.2268	0.2224	100.0	100.2	ug/L	0	10	
Cadmium	A	0.0705	0.0679	100.0	102.3	ug/L	2	10	
Calcium	A	0.0339	0.0192	10000	10230	ug/L	2	10	
Lead	A	0.7144	0.6211	100.0	95.09	ug/L	-5	10	
Magnesium	A	0.4749	0.4289	10000	10140	ug/L	1	10	
Molybdenum	A	0.2135	0.1949	100.0	100.0	ug/L	0	10	
Potassium	A	2.5092	0.6440	10000	10150	ug/L	2	10	
Silver	A	0.3253	0.3116	100.0	97.22	ug/L	-3	10	
Thallium	A	0.7681	0.7896	50.00	50.91	ug/L	2	10	
Arsenic	E	0.5826	0.5390	100.0	99.61	ug/L	0	10	
Chromium	E	4.5455	3.6116	100.0	100.5	ug/L	1	10	
Cobalt	E	6.5022	6.1839	100.0	102.1	ug/L	2	10	
Copper	E	15.580	6.3313	100.0	104.2	ug/L	4	10	
Manganese	E	1.8299	1.5868	100.0	100.4	ug/L	0	10	
Nickel	E	2.7468	1.7098	100.0	102.8	ug/L	3	10	
Sodium	E	1.1850	0.4635	10000	10080	ug/L	1	10	
Vanadium	E	3.2131	2.7228	100.0	99.96	ug/L	0	10	
Zinc	E	4.5722	0.8463	100.0	103.9	ug/L	4	10	
Iron	H	0.9870	0.9116	10000	10120	ug/L	1	10	
Selenium	H	0.1573	0.1507	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1143603	9.82
Scandium	A	1368535	1517698	10.90
Scandium	E	23334	26577	13.90
Scandium	H	149247	140546	-5.83
Germanium	H	37109	35007	-5.66
Germanium	E	18011	20074	11.45
Indium	A	2003326	2108823	5.27
Bismuth	A	1840338	1865983	1.39
Yttrium	A	2032903	2201876	8.31
Terbium	A	2868431	3051832	6.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804035
Cal : 897229804001

File : f08o0035
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 17:27

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01601]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01269]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01224]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.006105]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003956]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.004325]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01019]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01662]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01118]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01800]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1077738	3.49
Scandium	A	1368535	1451202	6.04
Scandium	E	23334	25502	9.29
Scandium	H	149247	139638	-6.44
Germanium	H	37109	34670	-6.57
Germanium	E	18011	19772	9.78
Indium	A	2003326	2114957	5.57
Bismuth	A	1840338	1901720	3.34
Yttrium	A	2032903	2160734	6.29
Terbium	A	2868431	3011865	5.00

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804050
Cal : 897229804001
Standards: S6420, S6035

File : f08o0050
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 18:59

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5355	10000	10200	ug/L	2	10	
Antimony	A	0.3002	0.2721	100.0	101.0	ug/L	1	10	
Barium	A	0.1719	0.0720	100.0	99.90	ug/L	0	10	
Beryllium	A	0.2268	0.2228	100.0	100.3	ug/L	0	10	
Cadmium	A	0.0705	0.0678	100.0	102.1	ug/L	2	10	
Calcium	A	0.0339	0.0194	10000	10330	ug/L	3	10	
Lead	A	0.7144	0.6212	100.0	95.11	ug/L	-5	10	
Magnesium	A	0.4749	0.4345	10000	10280	ug/L	3	10	
Molybdenum	A	0.2135	0.1963	100.0	100.8	ug/L	1	10	
Potassium	A	2.5092	0.6511	10000	10260	ug/L	3	10	
Silver	A	0.3253	0.3114	100.0	97.17	ug/L	-3	10	
Thallium	A	0.7681	0.7918	50.00	51.05	ug/L	2	10	
Arsenic	E	0.5826	0.5392	100.0	99.66	ug/L	0	10	
Chromium	E	4.5455	3.6395	100.0	101.3	ug/L	1	10	
Cobalt	E	6.5022	6.2101	100.0	102.6	ug/L	3	10	
Copper	E	15.580	6.2832	100.0	103.4	ug/L	3	10	
Manganese	E	1.8299	1.6038	100.0	101.5	ug/L	2	10	
Nickel	E	2.7468	1.7127	100.0	103.0	ug/L	3	10	
Sodium	E	1.1850	0.4679	10000	10170	ug/L	2	10	
Vanadium	E	3.2131	2.7481	100.0	100.9	ug/L	1	10	
Zinc	E	4.5722	0.8402	100.0	103.1	ug/L	3	10	
Iron	H	0.9870	0.9361	10000	10390	ug/L	4	10	
Selenium	H	0.1573	0.1527	100.0	104.6	ug/L	5	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1167994	12.16
Scandium	A	1368535	1523351	11.31
Scandium	E	23334	27201	16.57
Scandium	H	149247	133779	-10.36
Germanium	H	37109	33600	-9.46
Germanium	E	18011	20694	14.90
Indium	A	2003326	2115613	5.61
Bismuth	A	1840338	1842823	0.14
Yttrium	A	2032903	2211888	8.80
Terbium	A	2868431	3019539	5.27

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804052 File : f08o0052 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:11

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[3.671]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.03815]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.05075]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.04045]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.02851]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.03358]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.869]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.03273]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009620]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.004849]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.009276]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01228]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01585]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01737]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1115987	7.17
Scandium	A	1368535	1479372	8.10
Scandium	E	23334	25460	9.11
Scandium	H	149247	131751	-11.72
Germanium	H	37109	32422	-12.63
Germanium	E	18011	19505	8.29
Indium	A	2003326	2128177	6.23
Bismuth	A	1840338	1919072	4.28
Yttrium	A	2032903	2193077	7.88
Terbium	A	2868431	3054820	6.50

!=warning ib=instrument blank

897229804052

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897229804054
Cal : 897229804001
Standards: S6421, S6035

File : f08o0054
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 19:23

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09637]	0.1000	ug/L	
Barium	A	0.7260	0.1000	ug/L	
Beryllium	A	[0.01861]	0.1000	ug/L	
Cadmium	A	0.9808	0.1000	ug/L	
Lead	A	0.3424	0.1000	ug/L	
Silver	A	0.1490	0.1000	ug/L	
Thallium	A	[0.02690]	0.05000	ug/L	
Arsenic	E	0.2173	0.1000	ug/L	
Chromium	E	1.078	0.1000	ug/L	
Cobalt	E	0.1739	0.1000	ug/L	
Copper	E	1.010	0.1000	ug/L	
Manganese	E	0.4238	0.1000	ug/L	
Nickel	E	0.9460	0.1000	ug/L	
Vanadium	E	[0.03627]	0.1000	ug/L	
Zinc	E	1.084	0.1000	ug/L	
Selenium	H	[0.09081]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78800	ug/L	79
Calcium	A	300000	237700	ug/L	79
Magnesium	A	100000	77390	ug/L	77
Molybdenum	A	2000	1544	ug/L	77
Potassium	A	100000	78220	ug/L	78
Sodium	E	250000	191200	ug/L	76
Iron	H	250000	187800	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	989170	-5.01
Scandium	A	1368535	1354390	-1.03
Scandium	E	23334	24751	6.07
Scandium	H	149247	138981	-6.88
Germanium	H	37109	32155	-13.35
Germanium	E	18011	18219	1.15
Indium	A	2003326	1790587	-10.62
Bismuth	A	1840338	1518765	-17.47
Yttrium	A	2032903	1964427	-3.37
Terbium	A	2868431	2721306	-5.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897229804055 File : f08o0055 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:29
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	101.0	ug/L	1	20	
Calcium	A	300000	302500	ug/L	1		
Magnesium	A	100000	98230	ug/L	-2		
Molybdenum	A	2000	1952	ug/L	-2		
Potassium	A	100000	99170	ug/L	-1		
Silver	A	50.00	46.29	ug/L	-7	20	
Arsenic	E	100.0	104.9	ug/L	5	20	
Chromium	E	200.0	199.0	ug/L	-1	20	
Cobalt	E	200.0	188.4	ug/L	-6	20	
Copper	E	200.0	182.3	ug/L	-9	20	
Manganese	E	200.0	198.4	ug/L	-1	20	
Nickel	E	200.0	184.7	ug/L	-8	20	
Sodium	E	250000	244800	ug/L	-2		
Vanadium	E	200.0	201.4	ug/L	1	20	
Zinc	E	100.0	95.08	ug/L	-5	20	
Iron	H	250000	235400	ug/L	-6		
Selenium	H	100.0	102.7	ug/L	3	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	147482	-1.18
Scandium	A	1368535	1317675	-3.72
Scandium	E	23334	24019	2.93
Germanium	H	37109	33818	-8.87
Germanium	E	18011	17837	-0.97
Indium	A	2003326	1739156	-13.19
Yttrium	A	2032903	1929083	-5.11

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804071 File : f08o0071 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 21:04
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5260	10000	10020	ug/L	0	10	
Antimony	A	0.3002	0.2711	100.0	100.6	ug/L	1	10	
Barium	A	0.1719	0.0703	100.0	97.62	ug/L	-2	10	
Beryllium	A	0.2268	0.2158	100.0	97.21	ug/L	-3	10	
Cadmium	A	0.0705	0.0668	100.0	100.6	ug/L	1	10	
Calcium	A	0.0339	0.0191	10000	10190	ug/L	2	10	
Lead	A	0.7144	0.6063	100.0	92.82	ug/L	-7	10	
Magnesium	A	0.4749	0.4256	10000	10060	ug/L	1	10	
Molybdenum	A	0.2135	0.1849	100.0	94.93	ug/L	-5	10	
Potassium	A	2.5092	0.6402	10000	10090	ug/L	1	10	
Silver	A	0.3253	0.3053	100.0	95.27	ug/L	-5	10	
Thallium	A	0.7681	0.7778	50.00	50.14	ug/L	0	10	
Arsenic	E	0.5826	0.5692	100.0	105.2	ug/L	5	10	
Chromium	E	4.5455	3.8705	100.0	107.8	ug/L	8	10	
Cobalt	E	6.5022	6.6237	100.0	109.4	ug/L	9	10	
Copper	E	15.580	6.6612	100.0	109.7	ug/L	10	10	
Manganese	E	1.8299	1.6955	100.0	107.3	ug/L	7	10	
Nickel	E	2.7468	1.8230	100.0	109.6	ug/L	10	10	
Sodium	E	1.1850	0.4951	10000	10770	ug/L	8	10	
Vanadium	E	3.2131	2.9193	100.0	107.2	ug/L	7	10	
Zinc	E	4.5722	0.8914	100.0	109.5	ug/L	10	10	
Iron	H	0.9870	0.9276	10000	10300	ug/L	3	10	
Selenium	H	0.1573	0.1539	100.0	105.4	ug/L	5	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1120239	7.57
Scandium	A	1368535	1450540	5.99
Scandium	E	23334	23233	-0.43
Scandium	H	149247	124205	-16.78
Germanium	H	37109	31020	-16.41
Germanium	E	18011	17921	-0.50
Indium	A	2003326	2031357	1.40
Bismuth	A	1840338	1809860	-1.66
Yttrium	A	2032903	2108716	3.73
Terbium	A	2868431	2947922	2.77

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804073 File : f08o0073 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 21:16

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01685]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01331]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01450]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01351]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008678]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03103]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.03204]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01953]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02379]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.03297]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.02947]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.04417]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1051245	0.95
Scandium	A	1368535	1385965	1.27
Scandium	E	23334	23605	1.16
Scandium	H	149247	121297	-18.73
Germanium	H	37109	30292	-18.37
Germanium	E	18011	18341	1.83
Indium	A	2003326	2024682	1.07
Bismuth	A	1840338	1847105	0.37
Yttrium	A	2032903	2056461	1.16
Terbium	A	2868431	2911952	1.52

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804089
Cal : 897229804001
Standards: S6420, S6035

File : f08o0089
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 22:52

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5242	10000	9985	ug/L	0	10	
Antimony	A	0.3002	0.2708	100.0	100.5	ug/L	1	10	
Barium	A	0.1719	0.0708	100.0	98.22	ug/L	-2	10	
Beryllium	A	0.2268	0.2182	100.0	98.28	ug/L	-2	10	
Cadmium	A	0.0705	0.0675	100.0	101.6	ug/L	2	10	
Calcium	A	0.0339	0.0189	10000	10100	ug/L	1	10	
Lead	A	0.7144	0.6107	100.0	93.50	ug/L	-7	10	
Magnesium	A	0.4749	0.4238	10000	10020	ug/L	0	10	
Molybdenum	A	0.2135	0.1826	100.0	93.74	ug/L	-6	10	
Potassium	A	2.5092	0.6395	10000	10080	ug/L	1	10	
Silver	A	0.3253	0.3073	100.0	95.86	ug/L	-4	10	
Thallium	A	0.7681	0.7781	50.00	50.16	ug/L	0	10	
Arsenic	E	0.5826	0.5284	100.0	97.65	ug/L	-2	10	
Chromium	E	4.5455	3.6508	100.0	101.6	ug/L	2	10	
Cobalt	E	6.5022	6.2331	100.0	102.9	ug/L	3	10	
Copper	E	15.580	6.1873	100.0	101.9	ug/L	2	10	
Manganese	E	1.8299	1.5988	100.0	101.2	ug/L	1	10	
Nickel	E	2.7468	1.7255	100.0	103.8	ug/L	4	10	
Sodium	E	1.1850	0.4686	10000	10190	ug/L	2	10	
Vanadium	E	3.2131	2.7405	100.0	100.6	ug/L	1	10	
Zinc	E	4.5722	0.8278	100.0	101.6	ug/L	2	10	
Iron	H	0.9870	0.9076	10000	10080	ug/L	1	10	
Selenium	H	0.1573	0.1511	100.0	103.5	ug/L	4	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1144857	9.94
Scandium	A	1368535	1480943	8.21
Scandium	E	23334	25146	7.76
Scandium	H	149247	120671	-19.15
Germanium	H	37109	29937	-19.33
Germanium	E	18011	19646	9.08
Indium	A	2003326	2053808	2.52
Bismuth	A	1840338	1830393	-0.54
Yttrium	A	2032903	2136348	5.09
Terbium	A	2868431	2977981	3.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804091 File : f08o0091 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 23:03

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01252]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01559]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01574]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01120]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008713]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05102]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.04193]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.04360]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.04271]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.05963]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05071]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.02465]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1063509	2.13
Scandium	A	1368535	1383653	1.10
Scandium	E	23334	23307	-0.12
Scandium	H	149247	119848	-19.70
Germanium	H	37109	29665	-20.06
Germanium	E	18011	18181	0.94
Indium	A	2003326	2032394	1.45
Bismuth	A	1840338	1876625	1.97
Yttrium	A	2032903	2046298	0.66
Terbium	A	2868431	2923301	1.91

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804099
Cal : 897229804001
Standards: S6420, S6035

File : f08o0099
Caldate : 08-JUN-2007

IDF : 1.0
Time : 08-JUN-2007 23:51

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5273	10000	10040	ug/L	0	10	
Antimony	A	0.3002	0.2700	100.0	100.2	ug/L	0	10	
Barium	A	0.1719	0.0708	100.0	98.32	ug/L	-2	10	
Beryllium	A	0.2268	0.2177	100.0	98.07	ug/L	-2	10	
Cadmium	A	0.0705	0.0675	100.0	101.6	ug/L	2	10	
Calcium	A	0.0339	0.0190	10000	10140	ug/L	1	10	
Lead	A	0.7144	0.6164	100.0	94.37	ug/L	-6	10	
Magnesium	A	0.4749	0.4277	10000	10120	ug/L	1	10	
Molybdenum	A	0.2135	0.1869	100.0	95.93	ug/L	-4	10	
Potassium	A	2.5092	0.6400	10000	10080	ug/L	1	10	
Silver	A	0.3253	0.3073	100.0	95.87	ug/L	-4	10	
Thallium	A	0.7681	0.7763	50.00	50.05	ug/L	0	10	
Arsenic	E	0.5826	0.5289	100.0	97.74	ug/L	-2	10	
Chromium	E	4.5455	3.6168	100.0	100.7	ug/L	1	10	
Cobalt	E	6.5022	6.1713	100.0	101.9	ug/L	2	10	
Copper	E	15.580	6.1696	100.0	101.6	ug/L	2	10	
Manganese	E	1.8299	1.5850	100.0	100.3	ug/L	0	10	
Nickel	E	2.7468	1.7019	100.0	102.4	ug/L	2	10	
Sodium	E	1.1850	0.4656	10000	10120	ug/L	1	10	
Vanadium	E	3.2131	2.7229	100.0	99.96	ug/L	0	10	
Zinc	E	4.5722	0.8287	100.0	101.7	ug/L	2	10	
Iron	H	0.9870	0.9161	10000	10170	ug/L	2	10	
Selenium	H	0.1573	0.1546	100.0	105.9	ug/L	6	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1168482	12.21
Scandium	A	1368535	1488337	8.75
Scandium	E	23334	25653	9.94
Scandium	H	149247	120196	-19.46
Germanium	H	37109	29647	-20.11
Germanium	E	18011	19886	10.41
Indium	A	2003326	2070128	3.33
Bismuth	A	1840338	1834604	-0.31
Yttrium	A	2032903	2150743	5.80
Terbium	A	2868431	2983638	4.02

897229804099

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804101
Cal : 897229804001

File : f08o0101
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:03

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.009019]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008238]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.002483]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002401]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01045]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01163]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.009803]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01535]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01545]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01418]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01758]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1082989	4.00
Scandium	A	1368535	1402077	2.45
Scandium	E	23334	23990	2.81
Scandium	H	149247	116028	-22.26
Germanium	H	37109	28769	-22.47
Germanium	E	18011	18529	2.88
Indium	A	2003326	2050180	2.34
Bismuth	A	1840338	1875762	1.92
Yttrium	A	2032903	2095674	3.09
Terbium	A	2868431	2955060	3.02

!=warning ib=instrument blank

897229804101

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897229804103 File : f08o0103 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 09-JUN-2007 00:15
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08186]	0.1000	ug/L	
Barium	A	0.7387	0.1000	ug/L	
Beryllium	A	[0.02035]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.3437	0.1000	ug/L	
Silver	A	0.1450	0.1000	ug/L	
Thallium	A	[0.02845]	0.05000	ug/L	
Arsenic	E	0.1758	0.1000	ug/L	
Chromium	E	1.079	0.1000	ug/L	
Cobalt	E	0.1658	0.1000	ug/L	
Copper	E	0.9883	0.1000	ug/L	
Manganese	E	0.4487	0.1000	ug/L	
Nickel	E	0.9450	0.1000	ug/L	
Vanadium	E	[0.04183]	0.1000	ug/L	
Zinc	E	1.006	0.1000	ug/L	
Selenium	H	[0.04061]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78090	ug/L	78
Calcium	A	300000	234400	ug/L	78
Magnesium	A	100000	76830	ug/L	77
Molybdenum	A	2000	1508	ug/L	75
Potassium	A	100000	77650	ug/L	78
Sodium	E	250000	190600	ug/L	76
Iron	H	250000	187700	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1002204	-3.76
Scandium	A	1368535	1336833	-2.32
Scandium	E	23334	23841	2.17
Scandium	H	149247	119545	-19.90
Germanium	H	37109	27626	-25.55
Germanium	E	18011	17795	-1.20
Indium	A	2003326	1778660	-11.21
Bismuth	A	1840338	1518957	-17.46
Yttrium	A	2032903	1960367	-3.57
Terbium	A	2868431	2705070	-5.70

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897229804104 File : f08o0104 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 09-JUN-2007 00:21
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	100.5	ug/L	1	20	
Calcium	A	300000	301200	ug/L	0		
Magnesium	A	100000	97990	ug/L	-2		
Molybdenum	A	2000	1929	ug/L	-4		
Potassium	A	100000	99200	ug/L	-1		
Silver	A	50.00	45.97	ug/L	-8	20	
Arsenic	E	100.0	103.7	ug/L	4	20	
Chromium	E	200.0	198.5	ug/L	-1	20	
Cobalt	E	200.0	188.2	ug/L	-6	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	197.5	ug/L	-1	20	
Nickel	E	200.0	184.5	ug/L	-8	20	
Sodium	E	250000	244300	ug/L	-2		
Vanadium	E	200.0	201.0	ug/L	1	20	
Zinc	E	100.0	93.86	ug/L	-6	20	
Iron	H	250000	237700	ug/L	-5		
Selenium	H	100.0	104.1	ug/L	4	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	127673	-14.46
Scandium	A	1368535	1288116	-5.88
Scandium	E	23334	23157	-0.76
Germanium	H	37109	29286	-21.08
Germanium	E	18011	17372	-3.55
Indium	A	2003326	1713487	-14.47
Yttrium	A	2032903	1893131	-6.88

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897229804

Date : 06/08/07
Sequence : MET16 f08o0

Reference : f08o0004
Analyzed : 06/08/07 14:24

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1041364	1368535	23334	149247	37109	18011	2003326	1840338	2032903	2868431
		LOWER LIMIT	312409	410561	7000	44774	11133	5403	600998	552101	609871	860529
		UPPER LIMIT	1249637	1642242	28001	179096	44531	21613	2403991	2208406	2439484	3442117
014	ICB		1094855	1469601	25479	150256	37196	19741	2140312	1898549	2187534	3006374
016	ICSA		982613	1351056	24057	146119	34050	17822	1765334	1489179	1970168	2667484
017	ICSAB		989167	1340075	23714	154720	35816	17441	1745887	1467986	1947939	2662553
022	SAMPLE	195215-002	1024843	1412603	24139	136396	33479	18480	2057376	1895362	2129115	2950109
023	SAMPLE	195215-004	1067955	1548465	26557	142288	33518	19759	2111251	1875863	2315201	3035752
024	SAMPLE	195215-005	1115268	1557439	26710	141303	35266	20431	2204782	1968938	2293341	3131442
025	SAMPLE	195215-006	1091424	1591117	27279	144268	34323	20167	2152874	1899729	2333090	3077308
026	SAMPLE	195215-007	1112409	1560423	26796	143831	35215	20535	2177571	1936854	2301377	3114807
028	SAMPLE	195215-008	1104652	1594080	27902	142166	34188	20602	2174901	1923367	2356446	3085578
029	SAMPLE	195215-009	1096415	1522258	26613	146629	36147	20129	2167553	1959906	2282870	3086461
030	SAMPLE	195215-010	1121376	1566554	27165	142460	35103	20757	2192061	1949769	2304515	3088068
033	CCV		1143603	1517698	26577	140546	35007	20074	2108823	1865983	2201876	3051832
035	CCB		1077738	1451202	25502	139638	34670	19772	2114957	1901720	2160734	3011865
037	SAMPLE	195215-011	1130705	1535120	27016	132862	32963	20387	2186006	1943402	2276410	3054105
038	SAMPLE	195215-012	1149492	1583626	27431	136493	33161	20593	2198083	1969046	2325703	3095774
039	SAMPLE	195215-013	1122817	1544697	27638	137818	33992	20763	2178414	1935185	2288871	3083777
040	SAMPLE	195215-014	1132472	1548517	27364	134950	32776	20723	2141147	1916241	2280486	3044601
042	SAMPLE	195215-015	1159013	1595583	28102 *	137701	33419	21010	2197656	1953340	2342364	3113474
043	SAMPLE	195215-016	1137689	1535758	26701	134172	32808	20397	2155603	1929605	2260790	3036312
044	SAMPLE	195215-017	1152581	1570639	27691	131998	31962	20696	2190218	1953264	2308255	3077076
045	SAMPLE	195215-018	1161219	1569097	27390	131300	32247	21073	2192555	1961674	2297804	3104780
046	SAMPLE	195215-019	1148884	1540829	26948	129172	31657	20615	2164844	1963914	2268624	3097317
047	SAMPLE	195215-015	1107329	1544008	26866	127701	31045	20218	2166830	1950478	2278966	3104453
050	CCV		1167994	1523351	27201	133779	33600	20694	2115613	1842823	2211888	3019539
052	CCB		1115987	1479372	25460	131751	32422	19505	2128177	1919072	2193077	3054820
054	ICSA		989170	1354390	24751	138981	32155	18219	1790587	1518765	1964427	2721306
055	ICSAB		961709	1317675	24019	147482	33818	17837	1739156	1460467	1929083	2656764
060	BLANK	QC391463	907014	1244270	21107	108991	32489	19361	1860271	1771665	1895829	2789854
061	BS	QC391464	947890	1328402	22517	115075	28337	17309	1933726	1761549	2002485	2855882
062	BSD	QC391465	946431	1343191	22758	115955	28511	17428	1932619	1767494	2001679	2876487
064	MSS	195270-007	1083030	1450411	24815	122663	30727	19369	2062642	1831372	2119867	2972260
065	SER	QC391468	1069703	1397239	23971	120675	30743	18767	2045588	1856971	2067958	2924885
066	MS	QC391466	1088772	1457774	24655	122714	30879	18981	2048026	1817742	2121054	2943579
067	MSD	QC391467	1113129	1477491	24652	122802	30717	19258	2076073	1829736	2162635	3003661
068	PDS	QC391469	1077653	1406196	24529	123500	30737	18633	1963712	1718485	2057593	2845305
071	CCV		1120239	1450540	23233	124205	31020	17921	2031357	1809860	2108716	2947922
073	CCB		1051245	1385965	23605	121297	30292	18341	2024682	1847105	2056461	2911952
075	SAMPLE	195270-001	1121033	1453502	24677	121209	29753	18878	2046241	1775338	2116061	2929362
076	SAMPLE	195270-002	1102106	1456807	23887	121481	30116	18320	2029475	1799377	2105041	2941138
077	SAMPLE	195270-003	1027020	1306979	22190	124180	31317	17359	1900944	1777943	1923979	2789053
078	SAMPLE	195270-004	1023566	1298294	22026	122084	30919	17260	1949506	1834565	1949437	2823327
079	SAMPLE	195270-005	1048118	1332274	22722	121323	30803	17796	1930303	1782963	1950080	2781234
080	SAMPLE	195270-006	1059737	1375277	23155	120242	30205	17942	1969016	1785141	2010453	2832526
081	SAMPLE	195270-008	1071429	1382978	23303	117240	29684	18228	1964705	1769529	1999720	2829688
082	SAMPLE	195270-010	1068010	1345241	22847	115640	29309	18016	1946642	1799564	1976032	2847745
083	SAMPLE	195270-011	1064589	1349570	22899	112446	28364	18023	1973963	1807449	1987531	2847779
084	SAMPLE	195270-012	1060812	1350263	22713	112904	28745	18007	1973551	1818975	1990721	2849723
089	CCV		1144857	1480943	25146	120671	29937	19646	2053808	1830393	2136348	2977981

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897229804

Date : 06/08/07
Sequence : MET16 f08o0

Reference : f08o0004
Analyzed : 06/08/07 14:24

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
091	CCB		1063509	1383653	23307	119848	29665	18181	2032394	1876625	2046298	2923301
093	SAMPLE	195270-016	1166373	1495710	25611	114630	28560	19778	2060919	1799327	2143757	2951749
094	SAMPLE	195270-017	1092729	1383720	23625	118535	29858	18499	1990016	1808839	2026715	2883471
095	SAMPLE	195270-018	1083222	1377757	23700	116559	29422	18433	1996105	1821092	2033968	2861310
096	SAMPLE	195279-001	1045757	1343834	22788	116197	29191	17753	1989999	1834619	1998589	2864137
099	CCV		1168482	1488337	25653	120196	29647	19886	2070128	1834604	2150743	2983638
101	CCB		1082989	1402077	23990	116028	28769	18529	2050180	1875762	2095674	2955060
103	ICSA		1002204	1336833	23841	119545	27626	17795	1778660	1518957	1960367	2705070
104	ICSAB		975051	1288116	23157	127673	29286	17372	1713487	1457117	1893131	2622544

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
01	f08o0001	TUN				08-JUN-2007 14:04	1.0	1.0			1	
02	f08o0002	X	RINSE			08-JUN-2007 14:12	1.0				2	
03	f08o0003	X	RINSE			08-JUN-2007 14:17	1.0				2	
04	f08o0004	ICALBLK	CALBLANK			08-JUN-2007 14:24	1.0	1.0			2	
05	f08o0005	ICAL				08-JUN-2007 14:30	1.0	1.0			3	
06	f08o0006	ICAL				08-JUN-2007 14:36	1.0	1.0			4	
07	f08o0007	ICAL				08-JUN-2007 14:42	1.0	1.0			5	
08	f08o0008	ICAL				08-JUN-2007 14:48	1.0	1.0			6	
09	f08o0009	ICAL				08-JUN-2007 14:53	1.0	1.0			7	
10	f08o0010	ICAL				08-JUN-2007 14:59	1.0	1.0			8	
11	f08o0011	X	RINSE			08-JUN-2007 15:05	1.0				2	
12	f08o0012	ICV				08-JUN-2007 15:11	1.0	1.0		1	9 2	
13	f08o0013	X	RINSE			08-JUN-2007 15:17	1.0				2	
14	f08o0014	ICB				08-JUN-2007 15:23	1.0	1.0		1	2	
15	f08o0015	X				08-JUN-2007 15:29	1.0				2	
16	f08o0016	ICSA				08-JUN-2007 15:35	1.0	1.0		1	10 2	7:CA=237800
17	f08o0017	ICSAB				08-JUN-2007 15:41	1.0	1.0		1	11 2	10:CA=302800
18	f08o0018	X	RINSE			08-JUN-2007 15:47	1.0				2	
19	f08o0019	X	RINSE			08-JUN-2007 15:53	1.0				2	
20	f08o0020	X	RINSE			08-JUN-2007 15:59	1.0				2	
21	f08o0021	X	RINSE			08-JUN-2007 16:05	1.0				2	
22	f08o0022	SAMPLE	195215-002	126073	Soil	08-JUN-2007 16:11	50.0	46.30	1	1	2	
23	f08o0023	SAMPLE	195215-004	126073	Soil	08-JUN-2007 16:17	50.0	45.87		1	2	1:MN=213.000
24	f08o0024	SAMPLE	195215-005	126073	Soil	08-JUN-2007 16:23	50.0	49.50		1	2	
25	f08o0025	SAMPLE	195215-006	126073	Soil	08-JUN-2007 16:28	50.0	49.50		1	2	
26	f08o0026	SAMPLE	195215-007	126073	Soil	08-JUN-2007 16:34	50.0	47.62		1	2	
27	f08o0027	X	RINSE			08-JUN-2007 16:40	1.0				2	
28	f08o0028	SAMPLE	195215-008	126073	Soil	08-JUN-2007 16:46	50.0	46.30		1	2	
29	f08o0029	SAMPLE	195215-009	126073	Soil	08-JUN-2007 16:52	50.0	45.87		1	2	
30	f08o0030	SAMPLE	195215-010	126073	Soil	08-JUN-2007 16:58	50.0	50.0		1	2	
31	f08o0031	X	RINSE			08-JUN-2007 17:04	1.0				2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
32	f08o0032	X	RINSE			08-JUN-2007 17:10	1.0				2	
33	f08o0033	CCV				08-JUN-2007 17:16	1.0	1.0		1	12 2	
34	f08o0034	X	RINSE			08-JUN-2007 17:21	1.0				2	
35	f08o0035	CCB				08-JUN-2007 17:27	1.0	1.0		1	2	
36	f08o0036	X				08-JUN-2007 17:33	1.0				2	
37	f08o0037	SAMPLE	195215-011	126073	Soil	08-JUN-2007 17:39	50.0	49.50		1	2	
38	f08o0038	SAMPLE	195215-012	126073	Soil	08-JUN-2007 17:45	50.0	45.05		1	2	
39	f08o0039	SAMPLE	195215-013	126073	Soil	08-JUN-2007 17:51	50.0	49.02		1	2	
40	f08o0040	SAMPLE	195215-014	126073	Soil	08-JUN-2007 17:57	50.0	45.05		1	2	
41	f08o0041	X	RINSE			08-JUN-2007 18:03	1.0				2	
42	f08o0042	SAMPLE	195215-015	126073	Soil	08-JUN-2007 18:09	50.0	46.30	4	1	2	
43	f08o0043	SAMPLE	195215-016	126073	Soil	08-JUN-2007 18:15	50.0	45.87		1	2	
44	f08o0044	SAMPLE	195215-017	126073	Soil	08-JUN-2007 18:21	50.0	48.08		1	2	
45	f08o0045	SAMPLE	195215-018	126073	Soil	08-JUN-2007 18:27	50.0	45.87		1	2	
46	f08o0046	SAMPLE	195215-019	126073	Soil	08-JUN-2007 18:33	50.0	45.87		1	2	
47	f08o0047	SAMPLE	195215-015	126073	Soil	08-JUN-2007 18:39	100.0	46.30		1	2	
48	f08o0048	X	RINSE			08-JUN-2007 18:47	1.0				2	
49	f08o0049	X	RINSE			08-JUN-2007 18:53	1.0				2	
50	f08o0050	CCV				08-JUN-2007 18:59	1.0	1.0		1	12 2	
51	f08o0051	X	RINSE			08-JUN-2007 19:05	1.0				2	
52	f08o0052	CCB				08-JUN-2007 19:11	1.0	1.0		1	2	
53	f08o0053	X	RINSE			08-JUN-2007 19:17	1.0				2	
54	f08o0054	ICSA				08-JUN-2007 19:23	1.0	1.0		1	10 2	7:CA=237700
55	f08o0055	ICSAB				08-JUN-2007 19:29	1.0	1.0		1	11 2	8:CA=302500
56	f08o0056	X	RINSE			08-JUN-2007 19:35	1.0				2	
57	f08o0057	X	RINSE			08-JUN-2007 19:41	1.0				2	
58	f08o0058	X	RINSE			08-JUN-2007 19:47	1.0				2	
59	f08o0059	X	RINSE			08-JUN-2007 19:53	1.0				2	
60	f08o0060	BLANK	QC391463	126092	Filtra	08-JUN-2007 19:59	1.0	1.0		1	2	
61	f08o0061	BS	QC391464	126092	Filtra	08-JUN-2007 20:05	1.0	1.0		1	2	
62	f08o0062	BSD	QC391465	126092	Filtra	08-JUN-2007 20:10	1.0	1.0		1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
63	f08o0063	X	RINSE			08-JUN-2007 20:17	1.0					2	
64	f08o0064	MSS	195270-007	126092	Filtra	08-JUN-2007 20:23	10.0	1.0	1		1	2	1:NA=22570.0
65	f08o0065	SER	QC391468	126092	Filtra	08-JUN-2007 20:29	50.0	1.0			1	2	
66	f08o0066	MS	QC391466	126092	Filtra	08-JUN-2007 20:35	10.0	1.0			1	2	1:NA=23430.0
67	f08o0067	MSD	QC391467	126092	Filtra	08-JUN-2007 20:40	10.0	1.0			1	2	1:NA=23370.0
68	f08o0068	PDS	QC391469	126092	Filtra	08-JUN-2007 20:46	10.0	1.0			1	13 14 2	1:NA=31930.(
69	f08o0069	X	RINSE			08-JUN-2007 20:52	1.0					2	
70	f08o0070	X	RINSE			08-JUN-2007 20:58	1.0					2	
71	f08o0071	CCV				08-JUN-2007 21:04	1.0	1.0			1	12 2	
72	f08o0072	X	RINSE			08-JUN-2007 21:10	1.0					2	
73	f08o0073	CCB				08-JUN-2007 21:16	1.0	1.0			1	2	
74	f08o0074	X				08-JUN-2007 21:22	1.0					2	
75	f08o0075	SAMPLE	195270-001	126092	Filtra	08-JUN-2007 21:28	10.0	1.0	3		1	2	3:NA=36790.0
76	f08o0076	SAMPLE	195270-002	126092	Filtra	08-JUN-2007 21:34	10.0	1.0	3		1	2	3:NA=39510.0
77	f08o0077	SAMPLE	195270-003	126092	Filtra	08-JUN-2007 21:40	10.0	1.0			1	2	
78	f08o0078	SAMPLE	195270-004	126092	Filtra	08-JUN-2007 21:46	10.0	1.0			1	2	
79	f08o0079	SAMPLE	195270-005	126092	Filtra	08-JUN-2007 21:51	10.0	1.0			1	2	
80	f08o0080	SAMPLE	195270-006	126092	Filtra	08-JUN-2007 21:57	10.0	1.0			1	2	
81	f08o0081	SAMPLE	195270-008	126092	Filtra	08-JUN-2007 22:03	10.0	1.0	1		1	2	1:NA=21990.0
82	f08o0082	SAMPLE	195270-010	126092	Filtra	08-JUN-2007 22:09	10.0	1.0			1	2	
83	f08o0083	SAMPLE	195270-011	126092	Filtra	08-JUN-2007 22:15	10.0	1.0			1	2	
84	f08o0084	SAMPLE	195270-012	126092	Water	08-JUN-2007 22:21	10.0	1.0			1	2	
85	f08o0085	TUN				08-JUN-2007 22:26	1.0	1.0				1	
86	f08o0086	X	RINSE			08-JUN-2007 22:34	1.0					2	
87	f08o0087	X	RINSE			08-JUN-2007 22:40	1.0					2	
88	f08o0088	X	RINSE			08-JUN-2007 22:46	1.0					2	
89	f08o0089	CCV				08-JUN-2007 22:52	1.0	1.0			1	12 2	
90	f08o0090	X	RINSE			08-JUN-2007 22:57	1.0					2	
91	f08o0091	CCB				08-JUN-2007 23:03	1.0	1.0			1	2	
92	f08o0092	X				08-JUN-2007 23:09	1.0					2	
93	f08o0093	SAMPLE	195270-016	126092	Filtra	08-JUN-2007 23:15	10.0	1.0	1		1	2	1:NA=34530.0

ds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: _____ Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

equence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
nalytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
94	f08o0094	SAMPLE	195270-017	126092	Water	08-JUN-2007 23:21	10.0	1.0		1	2	
95	f08o0095	SAMPLE	195270-018	126092	Water	08-JUN-2007 23:27	10.0	1.0	1	1	2	1:MN=224.100
96	f08o0096	SAMPLE	195279-001	126092	Filtra	08-JUN-2007 23:33	10.0	1.0		1	2	
97	f08o0097	X	RINSE			08-JUN-2007 23:39	1.0				2	
98	f08o0098	X	RINSE			08-JUN-2007 23:45	1.0				2	
99	f08o0099	CCV				08-JUN-2007 23:51	1.0	1.0		1	12 2	
00	f08o0100	X	RINSE			08-JUN-2007 23:57	1.0				2	
01	f08o0101	CCB				09-JUN-2007 00:03	1.0	1.0		1	2	
02	f08o0102	X				09-JUN-2007 00:09	1.0				2	
03	f08o0103	ICSA				09-JUN-2007 00:15	1.0	1.0		1	10 2	7:CA=234400
04	f08o0104	ICSAB				09-JUN-2007 00:21	1.0	1.0		1	11 2	8:CA=301200

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897238321001
Units : ug/L

Date : 14-JUN-2007 12:21
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f1410005	897238321005		14-JUN-2007 12:27	S6414
L2	f1410006	897238321006		14-JUN-2007 12:33	S6416
L3	f1410007	897238321007		14-JUN-2007 12:38	S6417
L4	f1410008	897238321008		14-JUN-2007 12:44	S6418
L5	f1410009	897238321009		14-JUN-2007 12:50	S6412
L6	f1410010	897238321010		14-JUN-2007 12:57	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4736	0.3867	0.3800	0.3468	0.3389	0.3349	BLNK	-0.8678	2.97863		0.3768	1.000	0.995	
Antimony	A	0.2715	0.1714	0.1763	0.1609	0.1716	0.1686	BLNK	-0.0121	5.91156		0.1867	1.000	0.995	
Barium	A	0.3402	0.0972	0.0525	0.0701	0.0374	0.0366	BLNK	-0.0182	27.1779		0.1057	0.997	0.995	
Beryllium	A	0.1433	0.1313	0.1385	0.1367	0.1374	0.1407	BLNK	-0.0011	7.13882		0.1380	1.000	0.995	
Cadmium	A	0.0474	0.0417	0.0421	0.0397	0.0395	0.0386	BLNK	-0.0068	25.7890		0.0415	1.000	0.995	
Calcium	A	0.1150	0.0318	0.0210	0.0115	0.0109	0.0106	BLNK	-67.374	94.2102		0.0335	1.000	0.995	
Lead	A	0.6300	0.5144	0.4646	0.4300	0.4390	0.4274	BLNK	-0.0206	2.32741		0.4842	1.000	0.995	
Magnesium	A	0.3973	0.3256	0.3309	0.2959	0.2873	0.2838	BLNK	-0.3465	3.51496		0.3201	1.000	0.995	
Molybdenum	A	0.1813	0.1248	0.1209	0.1123	0.1115	0.1185	BLNK	-0.0433	8.54399		0.1282	0.999	0.995	
Potassium	A	5.3623	1.1854	0.7821	0.4010	0.3612	0.3539	BLNK	-113.47	2.83305		1.4076	1.000	0.995	
Silver	A	0.2058	0.1827	0.1874	0.1785	0.1914	0.1837	BLNK	-0.0071	5.39993		0.1882	1.000	0.995	
Thallium	A	0.5824	0.4447	0.4542	0.4206	0.4547	0.4411	BLNK	-0.0186	2.25386		0.4663	1.000	0.995	
Arsenic	E	0.3914	0.3434	0.3065	0.3176	0.3143	0.3068	BLNK	-0.0332	3.24391		0.3300	1.000	0.995	
Chromium	E	4.6971	2.5413	2.4663	2.1754	2.1313	2.0632	BLNK	-0.0679	0.48165		2.6791	1.000	0.995	
Cobalt	E	4.0309	3.8504	3.7987	3.7203	3.6454	3.5396	BLNK	-0.0026	0.28082		3.7642	1.000	0.995	
Copper	E	45.345	8.6417	9.3033	3.9976	3.6771	3.5032	BLNK	-0.5548	0.28354		12.411	0.999	0.995	
Manganese	E	2.0019	1.0402	1.0233	0.9223	0.8999	0.8741	BLNK	-0.0312	1.13737		1.1270	1.000	0.995	
Nickel	E	5.4401	1.4199	1.2549	1.0366	1.0069	0.9697	BLNK	-0.1305	1.02410		1.8547	1.000	0.995	
Sodium	E	2.8243	0.7097	0.4920	0.2942	0.2574	0.2510	BLNK	-76.242	3.98119		0.8048	1.000	0.995	
Vanadium	E	3.3537	2.0274	1.8505	1.6439	1.6373	1.6027	BLNK	-0.1071	0.62164		2.0193	1.000	0.995	
Zinc	E	14.402	2.4833	1.2709	0.5690	0.4623	0.4429	BLNK	-1.1617	2.25283		3.2717	0.999	0.995	
Iron	H	0.6218	0.4894	0.4888	0.4490	0.4443	0.4317	BLNK	-0.6357	2.30285		0.4875	1.000	0.995	
Selenium	H	0.0735	0.0634	0.0698	0.0634	0.0642	0.0615	BLNK	-0.0154	16.1189		0.0659	1.000	0.995	

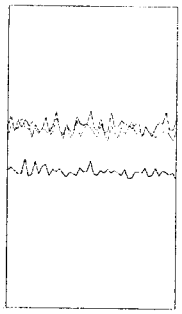
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	32	50.00	13	100.0	12	1000	3	10000	1	20000	0
Antimony	A	0.100	48	0.500	-1	1.000	3	10.00	-5	100.0	1	200.0	0
Barium	A	0.100	806	0.500	160	1.000	41	10.00	90	100.0	2	200.0	-1
Beryllium	A	0.100	1	0.500	-6	1.000	-1	10.00	-2	100.0	-2	200.0	0
Cadmium	A	0.100	16	0.500	6	1.000	8	10.00	2	100.0	2	200.0	0
Calcium	A	10.00	310	50.00	65	100.0	31	1000	2	10000	2	20000	0
Lead	A	0.100	26	0.500	16	1.000	6	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	36	50.00	14	100.0	16	1000	4	10000	1	20000	0
Molybdenum	A	0.100	12	0.500	-2	1.000	-1	10.00	-4	100.0	-5	200.0	1
Potassium	A	10.00	284	50.00	9	100.0	8	1000	2	10000	1	20000	0
Silver	A	0.100	4	0.500	-3	1.000	0	10.00	-4	100.0	3	200.0	-1
Thallium	A	0.050	-6	0.250	-7	0.500	-1	5.000	-6	50.00	2	100.0	-1
Arsenic	E	0.100	-6	0.500	5	1.000	-4	10.00	3	100.0	2	200.0	0
Chromium	E	0.100	58	0.500	9	1.000	12	10.00	4	100.0	3	200.0	-1
Cobalt	E	0.100	11	0.500	8	1.000	6	10.00	4	100.0	2	200.0	-1
Copper	E	0.100	631	0.500	34	1.000	108	10.00	8	100.0	4	200.0	-1
Manganese	E	0.100	97	0.500	12	1.000	13	10.00	5	100.0	2	200.0	-1
Nickel	E	0.100	327	0.500	19	1.000	15	10.00	5	100.0	3	200.0	-1
Sodium	E	10.00	262	50.00	30	100.0	20	1000	10	10000	2	20000	0
Vanadium	E	0.100	1	0.500	5	1.000	4	10.00	1	100.0	2	200.0	0
Zinc	E	0.100	1983	0.500	227	1.000	70	10.00	17	100.0	3	200.0	-1
Iron	H	10.00	37	50.00	11	100.0	12	1000	3	10000	2	20000	-1
Selenium	H	0.100	3	0.500	-1	1.000	11	10.00	2	100.0	3	200.0	-1

rument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

897238321001

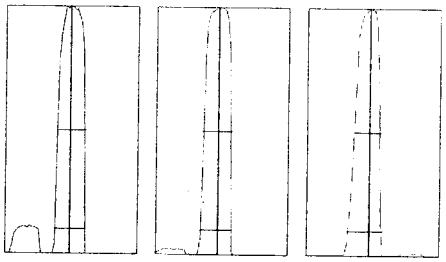
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	21444.0	22591.6	3.12	3.10
89	50,000	31330.0	30188.2	3.60	3.00
205	50,000	29632.0	29322.4	3.09	7.90

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.900%
Doubly Charged: 70/140 2.434%



m/z:	7	89	205
Height:	22,815	30,185	29,516
Axis:	7.00	88.95	204.95
W-50%:	0.65	0.65	0.60
W-10%:	0.700	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.68 V
Smpl Depth	:	9 mm
Torch-H	:	0.4 mm
Torch-V	:	0.3 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-165 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-2 V
Cell Entrance	:	-30 V
QP Focus	:	7 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	126
AMU Offset	:	126
Axis Gain	:	0.9997
Axis Offset	:	0.04
QP Bias	:	-1 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1670 V
Pulse HV	:	1070 V

===Reaction Cell===

Reaction Mode	:	OFF
H2 Gas	:	0 mL/min
He Gas	:	0 mL/min
Optional Gas	:	--- %

Tune File : he.u

He Gas:	5.5	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	27.1	17.45
59	4881.7	3.02
89	3669.8	3.52

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	2779.1	3.79
78	0.3	187.30
89	26278.8	3.24

Integration Time: 0.1000sec

Generated : Jun 14, 2007 11:35:05
Printed : Jun 14, 2007 11:36:45 : 00309

P/A Factor Tuning Report

Acquired:Jun 14 2007 11:52 am

Mass [amu]	Element	P/A Factor
6	Li	0.062939
7	(Li)	Sensitivity too low
9	Be	0.072176
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.087631
45	Sc	0.086900
51	V	0.088135
52	Cr	0.092446
55	Mn	0.093325
56	Fe	Sensitivity too high
59	Co	0.096422
60	Ni	Sensitivity too low
63	Cu	0.102139
65	Cu	0.102353
66	Zn	Sensitivity too low
72	Ge	0.100167
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098109
98	Mo	0.099236
99	(Ru)	Sensitivity too low
107	Ag	0.106688
111	Cd	Sensitivity too low
115	In	0.105676
118	(In)	0.105310
121	Sb	0.105382
137	Ba	Sensitivity too low
159	Tb	0.108318
205	Tl	0.113774
206	(Pb)	0.114337
207	(Pb)	0.114473
208	Pb	0.113888
209	Bi	0.114090

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

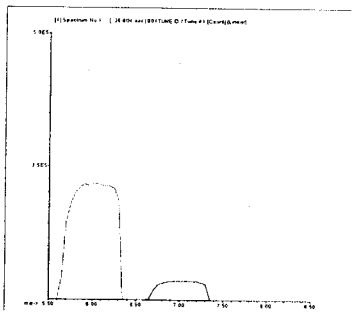
00319

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F14100.B\001TUNE.D
Date Acquired:	Jun 14 2007 12:01 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.49	5.00	
59 Co	0.35	5.00	
115 In	0.92	5.00	
205 Tl	0.43	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

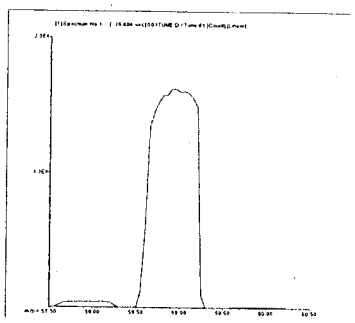
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

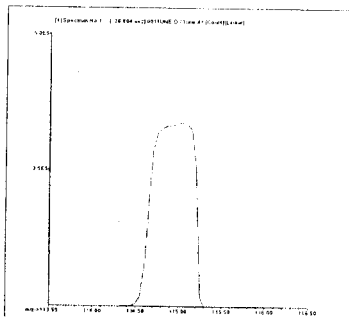
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

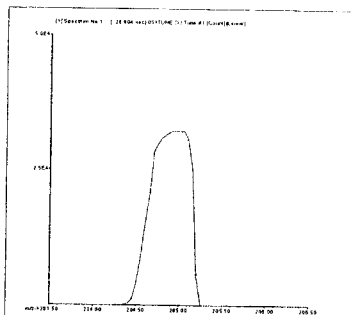
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

00312

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004C
Date Acquired: Jun 14 2007 12:19 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2123286.00	A	5430.00	0.26
7	(Li)		P		
9	Be	6.67	P	6.67	100.00
23	Na	23306.57	P	452.80	1.94
24	Mg	3815.03	P	109.20	2.86
27	Al	11278.81	P	169.50	1.50
39	K	1550541.00	A	2445.00	0.16
44	Ca	27682.83	P	553.70	2.00
45	Sc	853178.63	A	5859.00	0.69
45	Sc	60849.13	P	255.40	0.42
45	Sc	1935693.00	A	18210.00	0.94
51	V	209.63	P	7.14	3.41
52	Cr	171.48	P	3.90	2.28
55	Mn	33.33	P	8.82	26.46
56	Fe	4710.39	P	106.80	2.27
59	Co	11.48	P	3.39	29.56
60	Ni	155.19	P	24.78	15.97
63	Cu	1827.16	P	66.12	3.62
65	Cu	858.55	P	35.91	4.18
66	Zn	481.49	P	6.79	1.41
72	Ge	210213.09	P	1424.00	0.68
72	Ge	46689.03	P	521.30	1.12
75	As	9.56	P	3.42	35.80
78	Se	4.00	P	1.33	33.33
89	Y	2820269.00	A	9642.00	0.34
98	Mo	285.57	P	19.53	6.84
107	Ag	77.78	P	15.03	19.32
111	Cd	15.56	P	10.18	65.44
115	In	2970271.00	A	6980.00	0.24
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	121.12	P	17.11	14.13
137	Ba	63.34	P	6.67	10.53
159	Tb	4719676.00	A	28440.00	0.60
205	Tl	562.25	P	6.94	1.23
208	Pb	835.60	P	38.92	4.66
209	Bi	3398867.00	A	28920.00	0.85

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\005CALS.D\005CALS.D#
Date Acquired: Jun 14 2007 12:25 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:23 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2125205.00	A	4400.00	0.21
7 (Li)		P		
9 Be	608.92	P	40.74	6.69
23 Na	34807.84	P	399.60	1.15
24 Mg	155687.00	P	482.30	0.31
27 Al	185584.91	P	2610.00	1.41
39 K	2101065.00	A	6999.00	0.33
44 Ca	45056.55	P	420.80	0.93
45 Sc	912479.69	A	6363.00	0.70
45 Sc	61625.03	P	737.80	1.20
45 Sc	1959185.00	A	14270.00	0.73
51 V	413.34	P	9.10	2.20
52 Cr	578.91	P	6.94	1.20
55 Mn	246.67	P	22.96	9.31
56 Fe	113465.90	P	425.20	0.37
59 Co	496.68	P	21.46	4.32
60 Ni	670.39	P	7.14	1.07
63 Cu	4272.85	P	26.68	0.62
65 Cu	2086.46	P	20.62	0.99
66 Zn	1357.11	P	15.00	1.11
72 Ge	220831.50	P	151.80	0.07
72 Ge	47117.35	P	455.70	0.97
75 As	36.89	P	2.14	5.81
78 Se	32.44	P	2.04	6.28
89 Y	2822875.00	A	22590.00	0.80
98 Mo	1023.41	P	67.67	6.61
99 (Ru)	6.67	P	6.67	100.00
107 Ag	1228.98	P	33.56	2.73
111 Cd	283.35	P	10.00	3.53
115 In	2987017.00	A	27640.00	0.93
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1621.26	P	70.27	4.33
137 Ba	3252.69	P	146.20	4.49
159 Tb	4779337.00	A	47190.00	0.99
205 Tl	2003.54	P	38.45	1.92
208 Pb	6021.82	P	95.84	1.59
209 Bi	3440637.00	A	22180.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2125205.30	0.21	2123286.00	100.1	80 - 120	
45 Sc	912479.69	0.70	853178.63	107.0	80 - 120	
45 Sc	61625.03	1.20	60849.13	101.3	80 - 120	
45 Sc	1959184.80	0.73	1935692.90	101.2	80 - 120	
72 Ge	220831.48	0.07	210213.11	105.1	80 - 120	
72 Ge	47117.35	0.97	46689.04	100.9	80 - 120	
89 Y	2822875.30	0.80	2820268.80	100.1	80 - 120	
115 In	2987016.80	0.93	2970271.30	100.6	80 - 120	
159 Tb	4779337.50	0.99	4719676.00	101.3	80 - 120	
209 Bi	3440636.80	0.64	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\006CALS.D\006CALS.D#
Date Acquired: Jun 14 2007 12:30 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2115825.00	A	35250.00	1.67
7 (Li)		P		
9 Be	2778.11	P	94.85	3.41
23 Na	43015.66	P	443.60	1.03
24 Mg	634192.19	P	4000.00	0.63
27 Al	753216.50	P	9579.00	1.27
39 K	2308639.00	A	16880.00	0.73
44 Ca	61903.68	P	470.60	0.76
45 Sc	911309.50	A	9263.00	1.02
45 Sc	60607.47	P	551.40	0.91
45 Sc	1947585.00	A	21870.00	1.12
51 V	1228.58	P	21.27	1.73
52 Cr	1540.09	P	31.35	2.04
55 Mn	630.39	P	51.09	8.10
56 Fe	445953.91	P	843.90	0.19
59 Co	2333.90	P	115.10	4.93
60 Ni	860.78	P	41.24	4.79
63 Cu	4042.42	P	47.62	1.18
65 Cu	1894.95	P	12.39	0.65
66 Zn	1161.54	P	17.01	1.46
72 Ge	219898.70	P	999.60	0.45
72 Ge	46779.32	P	392.20	0.84
75 As	160.67	P	12.22	7.61
78 Se	139.34	P	13.32	9.56
89 Y	2820691.00	A	28550.00	1.01
98 Mo	3520.53	P	143.80	4.08
99 (Ru)	11.11	P	8.39	75.50
107 Ag	5434.48	P	56.89	1.05
111 Cd	1241.21	P	29.88	2.41
115 In	2975496.00	A	25430.00	0.85
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5099.93	P	83.32	1.63
137 Ba	4614.23	P	202.30	4.38
159 Tb	4748127.00	A	46280.00	0.97
205 Tl	7608.97	P	208.60	2.74
208 Pb	24421.42	P	175.50	0.72
209 Bi	3421595.00	A	27440.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2115825.50	1.67	2123286.00	99.6	80 - 120	
45 Sc	911309.50	1.02	853178.63	106.8	80 - 120	
45 Sc	60607.47	0.91	60849.13	99.6	80 - 120	
45 Sc	1947584.50	1.12	1935692.90	100.6	80 - 120	
72 Ge	219898.77	0.45	210213.11	104.6	80 - 120	
72 Ge	46779.32	0.84	46689.04	100.2	80 - 120	
89 Y	2820691.50	1.01	2820268.80	100.0	80 - 120	
115 In	2975496.30	0.85	2970271.30	100.2	80 - 120	
159 Tb	4748127.00	0.97	4719676.00	100.6	80 - 120	
209 Bi	3421595.30	0.80	3398866.80	100.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\007CALS.D\007CALS.D#
Date Acquired: Jun 14 2007 12:36 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:34 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2118959.00	A	16590.00	0.78
7 (Li)		P		
9 Be	5867.90	P	225.20	3.84
23 Na	58973.49	P	713.10	1.21
24 Mg	1282847.00	A	16670.00	1.30
27 Al	1473214.00	A	23330.00	1.58
39 K	3031913.00	A	6112.00	0.20
44 Ca	81475.94	P	452.90	0.56
45 Sc	899879.81	A	2883.00	0.32
45 Sc	59928.27	P	559.50	0.93
45 Sc	1938505.00	A	14250.00	0.74
51 V	2217.96	P	68.51	3.09
52 Cr	2956.24	P	55.12	1.86
55 Mn	1226.73	P	68.60	5.59
56 Fe	879706.00	A	6074.00	0.69
59 Co	4552.94	P	89.93	1.98
60 Ni	1503.80	P	30.26	2.01
63 Cu	8604.31	P	119.20	1.39
65 Cu	4100.95	P	66.82	1.63
66 Zn	1175.24	P	16.83	1.43
72 Ge	215496.80	P	767.40	0.36
72 Ge	46242.92	P	580.40	1.26
75 As	283.34	P	9.45	3.34
78 Se	300.67	P	24.23	8.06
89 Y	2839735.00	A	7756.00	0.27
98 Mo	6866.22	P	140.00	2.04
99 (Ru)	1.11	P	1.93	173.24
107 Ag	11167.87	P	237.20	2.12
111 Cd	2508.08	P	167.10	6.66
115 In	2979888.00	A	24150.00	0.81
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10506.24	P	263.90	2.51
137 Ba	4996.60	P	125.40	2.51
159 Tb	4754287.00	A	34400.00	0.72
205 Tl	15624.66	P	171.20	1.10
208 Pb	44177.64	P	416.20	0.94
209 Bi	3439964.00	A	12710.00	0.37

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2118958.50	0.78	2123286.00	99.8	80 - 120	
45 Sc	899879.75	0.32	853178.63	105.5	80 - 120	
45 Sc	59928.27	0.93	60849.13	98.5	80 - 120	
45 Sc	1938505.40	0.74	1935692.90	100.1	80 - 120	
72 Ge	215496.77	0.36	210213.11	102.5	80 - 120	
72 Ge	46242.92	1.26	46689.04	99.0	80 - 120	
89 Y	2839734.50	0.27	2820268.80	100.7	80 - 120	
115 In	2979887.80	0.81	2970271.30	100.3	80 - 120	
159 Tb	4754286.50	0.72	4719676.00	100.7	80 - 120	
209 Bi	3439963.80	0.37	3398866.80	101.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\008CALS.D\008CALS.D#
Date Acquired: Jun 14 2007 12:42 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:40 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2157544.00	A	30610.00	1.42
7	(Li)		P		
9	Be	58997.63	P	346.10	0.59
23	Na	363894.00	P	2845.00	0.78
24	Mg	11948130.00	A	67620.00	0.57
27	Al	14002570.00	A	84450.00	0.60
39	K	16193800.00	A	213900.00	1.32
44	Ca	466377.91	P	5160.00	1.11
45	Sc	910392.13	A	3317.00	0.36
45	Sc	61841.13	P	492.90	0.80
45	Sc	2019373.00	A	25040.00	1.24
51	V	20330.73	P	140.90	0.69
52	Cr	26904.37	P	125.70	0.47
55	Mn	11406.49	P	88.72	0.78
56	Fe	8175714.00	A	32430.00	0.40
59	Co	46010.13	P	351.20	0.76
60	Ni	12819.08	P	178.30	1.39
63	Cu	38079.33	P	272.20	0.71
65	Cu	18525.26	P	266.60	1.44
66	Zn	5419.89	P	34.99	0.65
72	Ge	221030.41	P	677.70	0.31
72	Ge	47627.43	P	168.30	0.35
75	As	3025.65	P	18.56	0.61
78	Se	2801.16	P	28.68	1.02
89	Y	2935243.00	A	21140.00	0.72
98	Mo	65940.08	P	476.30	0.72
99	(Ru)	10.00	P	12.02	120.20
107	Ag	109637.00	P	1165.00	1.06
111	Cd	24401.69	P	325.40	1.33
115	In	3071324.00	A	13100.00	0.43
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	98854.13	P	348.50	0.35
137	Ba	69323.04	P	944.10	1.36
159	Tb	4941350.00	A	33400.00	0.68
205	Tl	147109.91	P	1307.00	0.89
208	Pb	424911.00	P	1750.00	0.41
209	Bi	3497595.00	A	10790.00	0.31

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	2157544.30	1.42	2123286.00	101.6	80 - 120	
45	Sc	910392.13	0.36	853178.63	106.7	80 - 120	
45	Sc	61841.13	0.80	60849.13	101.6	80 - 120	
45	Sc	2019372.90	1.24	1935692.90	104.3	80 - 120	
72	Ge	221030.42	0.31	210213.11	105.1	80 - 120	
72	Ge	47627.43	0.35	46689.04	102.0	80 - 120	
89	Y	2935242.80	0.72	2820268.80	104.1	80 - 120	
115	In	3071324.50	0.43	2970271.30	103.4	80 - 120	
159	Tb	4941349.50	0.68	4719676.00	104.7	80 - 120	
209	Bi	3497595.30	0.31	3398866.80	102.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\009CALS.D\009CALS.D#
Date Acquired: Jun 14 2007 12:48 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:46 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2149364.00	A	11980.00	0.56
7 (Li)		P		
9 Be	590824.63	P	2143.00	0.36
23 Na	3264606.00	A	49480.00	1.52
24 Mg	############	A	935700.00	0.78
27 Al	############	A	928200.00	0.65
39 K	############	A	947700.00	0.63
44 Ca	4562030.00	A	30600.00	0.67
45 Sc	906293.69	A	5379.00	0.59
45 Sc	63411.82	P	1148.00	1.81
45 Sc	2095251.00	A	17920.00	0.86
51 V	207633.00	P	2770.00	1.33
52 Cr	270273.31	P	2676.00	0.99
55 Mn	114124.60	P	1490.00	1.31
56 Fe	80539136.00	A	341400.00	0.42
59 Co	462253.31	P	2783.00	0.60
60 Ni	127680.80	P	1275.00	1.00
63 Cu	356467.00	P	3084.00	0.87
65 Cu	175722.09	P	672.50	0.38
66 Zn	44821.78	P	726.50	1.62
72 Ge	219754.30	P	1016.00	0.46
72 Ge	48470.79	P	145.80	0.30
75 As	30465.20	P	285.40	0.94
78 Se	28194.31	P	27.05	0.10
89 Y	3034818.00	A	13300.00	0.44
98 Mo	676509.50	P	5545.00	0.82
99 (Ru)	15.56	P	9.62	61.86
107 Ag	1193600.00	A	12960.00	1.09
111 Cd	246082.20	P	2770.00	1.13
115 In	3118424.00	A	35970.00	1.15
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1070428.00	A	12580.00	1.18
137 Ba	376012.31	P	1134.00	0.30
159 Tb	5025087.00	A	20820.00	0.41
205 Tl	1570654.00	A	21350.00	1.36
208 Pb	4411741.00	A	8087.00	0.18
209 Bi	3454579.00	A	33710.00	0.98

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2149364.30	0.56	2123286.00	101.2	80 - 120	
45 Sc	906293.69	0.59	853178.63	106.2	80 - 120	
45 Sc	63411.82	1.81	60849.13	104.2	80 - 120	
45 Sc	2095250.80	0.86	1935692.90	108.2	80 - 120	
72 Ge	219754.34	0.46	210213.11	104.5	80 - 120	
72 Ge	48470.79	0.30	46689.04	103.8	80 - 120	
89 Y	3034817.80	0.44	2820268.80	107.6	80 - 120	
115 In	3118424.00	1.15	2970271.30	105.0	80 - 120	
159 Tb	5025087.50	0.41	4719676.00	106.5	80 - 120	
209 Bi	3454579.30	0.98	3398866.80	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F14100.B\010CALS.D\010CALS.D#
Date Acquired: Jun 14 2007 12:55 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 14 2007 12:53 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2093192.00	A	28740.00	1.37
7 (Li)		P		
9 Be	1178246.00	A	21430.00	1.82
23 Na	6233624.00	A	98240.00	1.58
24 Mg	###########	A	2036000.00	0.87
27 Al	###########	A	1294000.00	0.47
39 K	###########	A	550700.00	0.19
44 Ca	8692791.00	A	43440.00	0.50
45 Sc	885110.88	A	4521.00	0.51
45 Sc	62087.48	P	797.60	1.28
45 Sc	2050386.00	A	22870.00	1.12
51 V	398028.91	P	4430.00	1.11
52 Cr	512373.31	P	4165.00	0.81
55 Mn	217084.30	P	1639.00	0.76
56 Fe	###########	A	647500.00	0.42
59 Co	879003.88	P	5606.00	0.64
60 Ni	240794.50	P	2147.00	0.89
63 Cu	665169.50	P	4334.00	0.65
65 Cu	328918.81	P	2902.00	0.88
66 Zn	84105.08	P	869.40	1.03
72 Ge	215280.00	P	1443.00	0.67
72 Ge	47469.54	P	400.30	0.84
75 As	58261.38	P	736.10	1.26
78 Se	52971.80	P	339.60	0.64
89 Y	2974006.00	A	21420.00	0.72
98 Mo	1409516.00	A	5639.00	0.40
99 (Ru)	22.22	P	6.94	31.22
107 Ag	2216227.00	A	16890.00	0.76
111 Cd	465855.81	P	5862.00	1.26
115 In	3016750.00	A	34120.00	1.13
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2034085.00	A	5341.00	0.26
137 Ba	715974.50	P	2839.00	0.40
159 Tb	4895945.00	A	35310.00	0.72
205 Tl	2948132.00	A	21010.00	0.71
208 Pb	8369924.00	A	45790.00	0.55
209 Bi	3341917.00	A	48380.00	1.45

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2093191.90	1.37	2123286.00	98.6	80 - 120	
45 Sc	885110.94	0.51	853178.63	103.7	80 - 120	
45 Sc	62087.48	1.28	60849.13	102.0	80 - 120	
45 Sc	2050386.40	1.12	1935692.90	105.9	80 - 120	
72 Ge	215279.95	0.67	210213.11	102.4	80 - 120	
72 Ge	47469.54	0.84	46689.04	101.7	80 - 120	
89 Y	2974005.50	0.72	2820268.80	105.5	80 - 120	
115 In	3016749.80	1.13	2970271.30	101.6	80 - 120	
159 Tb	4895945.00	0.72	4719676.00	103.7	80 - 120	
209 Bi	3341917.30	1.45	3398866.80	98.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F14100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321012 File : f1410012 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 13:11
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3768	0.3399	10000	10120	ug/L	1	10	
Antimony	A	0.1867	0.1712	100.0	101.2	ug/L	1	10	
Barium	A	0.1057	0.0378	100.0	102.6	ug/L	3	10	
Beryllium	A	0.1380	0.1409	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0415	0.0400	100.0	103.2	ug/L	3	10	
Calcium	A	0.0335	0.0111	10000	10380	ug/L	4	10	
Lead	A	0.4842	0.4284	100.0	99.68	ug/L	0	10	
Magnesium	A	0.3201	0.2906	10000	10210	ug/L	2	10	
Molybdenum	A	0.1282	0.1122	100.0	95.85	ug/L	-4	10	
Potassium	A	1.4076	0.3667	10000	10270	ug/L	3	10	
Silver	A	0.1882	0.1921	100.0	103.7	ug/L	4	10	
Thallium	A	0.4663	0.4543	50.00	51.17	ug/L	2	10	
Arsenic	E	0.3300	0.3183	100.0	103.2	ug/L	3	10	
Chromium	E	2.6791	2.1658	100.0	104.2	ug/L	4	10	
Cobalt	E	3.7642	3.6964	100.0	103.8	ug/L	4	10	
Copper	E	12.411	3.6773	100.0	103.7	ug/L	4	10	
Manganese	E	1.1270	0.9082	100.0	103.3	ug/L	3	10	
Nickel	E	1.8547	1.0238	100.0	104.7	ug/L	5	10	
Sodium	E	0.8048	0.2600	10000	10270	ug/L	3	10	
Vanadium	E	2.0193	1.6521	100.0	102.6	ug/L	3	10	
Zinc	E	3.2717	0.4661	100.0	103.8	ug/L	4	10	
Iron	H	0.4875	0.4535	10000	10440	ug/L	4	10	
Selenium	H	0.0659	0.0646	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2125998	0.13
Scandium	A	1935693	2082969	7.61
Scandium	E	60849	63401	4.19
Scandium	H	853179	895502	4.96
Germanium	H	210213	219107	4.23
Germanium	E	46689	48897	4.73
Indium	A	2970271	3128469	5.33
Bismuth	A	3398867	3489946	2.68
Yttrium	A	2820269	3031824	7.50
Terbium	A	4719676	5033023	6.64

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321015 File : f1410015 Time : 14-JUN-2007 13:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.201]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01789]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007702]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01254]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.02084]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01638]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.336]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01016]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009380]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.005686]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.004943]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.009330]	0.1000	0.002654	ug/L	!ib
Zinc	E	0.1191	0.1000	0.04457	ug/L	ib ***
Iron	H	[1.410]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01112]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2178902	2.62
Scandium	A	1935693	2043382	5.56
Scandium	E	60849	63074	3.66
Scandium	H	853179	902139	5.74
Germanium	H	210213	223063	6.11
Germanium	E	46689	48402	3.67
Indium	A	2970271	3169218	6.70
Bismuth	A	3398867	3611754	6.26
Yttrium	A	2820269	3006180	6.59
Terbium	A	4719676	5065969	7.34

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321017 File : f1410017 Time : 14-JUN-2007 13:40
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07234]	0.1000	ug/L	
Barium	A	0.9534	0.1000	ug/L	
Beryllium	A	[0.03115]	0.1000	ug/L	
Cadmium	A	0.8629	0.1000	ug/L	
Lead	A	0.4174	0.1000	ug/L	
Silver	A	0.1947	0.1000	ug/L	
Thallium	A	[0.03575]	0.05000	ug/L	
Arsenic	E	0.2491	0.1000	ug/L	
Chromium	E	1.307	0.1000	ug/L	
Cobalt	E	0.1911	0.1000	ug/L	
Copper	E	1.345	0.1000	ug/L	
Manganese	E	0.5379	0.1000	ug/L	
Nickel	E	1.082	0.1000	ug/L	
Vanadium	E	[0.02470]	0.1000	ug/L	
Zinc	E	2.085	0.1000	ug/L	
Selenium	H	[0.04793]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88390	ug/L	88
Calcium	A	300000	272500	ug/L	91
Magnesium	A	100000	86490	ug/L	86
Molybdenum	A	2000	1764	ug/L	88
Potassium	A	100000	89720	ug/L	90
Sodium	E	250000	219000	ug/L	88
Iron	H	250000	220700	ug/L	88

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1845484	-13.08
Scandium	A	1935693	2011932	3.94
Scandium	E	60849	63325	4.07
Scandium	H	853179	864634	1.34
Germanium	H	210213	201150	-4.31
Germanium	E	46689	46587	-0.22
Indium	A	2970271	2902550	-2.28
Bismuth	A	3398867	3043579	-10.45
Yttrium	A	2820269	2998242	6.31
Terbium	A	4719676	4871820	3.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321018 File : f1410018 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 13:46
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96080	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	297000	ug/L	-1		
Magnesium	A	100000	93080	ug/L	-7		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97620	ug/L	-2		
Silver	A	50.00	45.19	ug/L	-10	20	
Arsenic	E	100.0	107.3	ug/L	7	20	
Chromium	E	200.0	198.8	ug/L	-1	20	
Cobalt	E	200.0	187.4	ug/L	-6	20	
Copper	E	200.0	185.2	ug/L	-7	20	
Manganese	E	200.0	200.8	ug/L	0	20	
Nickel	E	200.0	183.9	ug/L	-8	20	
Sodium	E	250000	238200	ug/L	-5		
Vanadium	E	200.0	201.3	ug/L	1	20	
Zinc	E	100.0	96.55	ug/L	-3	20	
Iron	H	250000	236000	ug/L	-6		
Selenium	H	100.0	106.3	ug/L	6	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	864005	1.27
Scandium	A	1935693	1966954	1.61
Scandium	E	60849	62771	3.16
Germanium	H	210213	200194	-4.77
Germanium	E	46689	45963	-1.56
Indium	A	2970271	2876364	-3.16
Yttrium	A	2820269	2953598	4.73

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321032 File : f1410032
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

IDF : 1.0
Time : 14-JUN-2007 15:08

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3293	10000	9806	ug/L	-2	10	
Antimony	A	0.1867	0.1719	100.0	101.6	ug/L	2	10	
Barium	A	0.1057	0.0377	100.0	102.4	ug/L	2	10	
Beryllium	A	0.1380	0.1380	100.0	98.52	ug/L	-1	10	
Cadmium	A	0.0415	0.0393	100.0	101.4	ug/L	1	10	
Calcium	A	0.0335	0.0109	10000	10200	ug/L	2	10	
Lead	A	0.4842	0.4215	100.0	98.07	ug/L	-2	10	
Magnesium	A	0.3201	0.2809	10000	9873	ug/L	-1	10	
Molybdenum	A	0.1282	0.1100	100.0	93.94	ug/L	-6	10	
Potassium	A	1.4076	0.3607	10000	10110	ug/L	1	10	
Silver	A	0.1882	0.1885	100.0	101.8	ug/L	2	10	
Thallium	A	0.4663	0.4426	50.00	49.86	ug/L	0	10	
Arsenic	E	0.3300	0.3162	100.0	102.5	ug/L	3	10	
Chromium	E	2.6791	2.1217	100.0	102.1	ug/L	2	10	
Cobalt	E	3.7642	3.6262	100.0	101.8	ug/L	2	10	
Copper	E	12.411	3.6010	100.0	101.5	ug/L	2	10	
Manganese	E	1.1270	0.8949	100.0	101.8	ug/L	2	10	
Nickel	E	1.8547	1.0001	100.0	102.3	ug/L	2	10	
Sodium	E	0.8048	0.2511	10000	9922	ug/L	-1	10	
Vanadium	E	2.0193	1.6220	100.0	100.7	ug/L	1	10	
Zinc	E	3.2717	0.4573	100.0	101.9	ug/L	2	10	
Iron	H	0.4875	0.4450	10000	10250	ug/L	3	10	
Selenium	H	0.0659	0.0635	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2066227	-2.69
Scandium	A	1935693	2089148	7.93
Scandium	E	60849	65844	8.21
Scandium	H	853179	899458	5.42
Germanium	H	210213	221220	5.24
Germanium	E	46689	50519	8.20
Indium	A	2970271	3199101	7.70
Bismuth	A	3398867	3551272	4.48
Yttrium	A	2820269	3118381	10.57
Terbium	A	4719676	5126287	8.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321034 File : f1410034 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 15:21

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01020]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01304]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.009081]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01658]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.8256]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008324]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01488]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01798]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01037]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01853]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.06537]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.7718]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.003412]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060529	-2.96
Scandium	A	1935693	1998648	3.25
Scandium	E	60849	63130	3.75
Scandium	H	853179	845745	-0.87
Germanium	H	210213	208799	-0.67
Germanium	E	46689	48706	4.32
Indium	A	2970271	3157907	6.32
Bismuth	A	3398867	3575553	5.20
Yttrium	A	2820269	2999921	6.37
Terbium	A	4719676	5020426	6.37

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321036 File : f14l0036 Time : 14-JUN-2007 15:33
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06744]	0.1000	ug/L	
Barium	A	0.9319	0.1000	ug/L	
Beryllium	A	[0.02007]	0.1000	ug/L	
Cadmium	A	0.8898	0.1000	ug/L	
Lead	A	0.4060	0.1000	ug/L	
Silver	A	0.1986	0.1000	ug/L	
Thallium	A	[0.02499]	0.05000	ug/L	
Arsenic	E	0.2279	0.1000	ug/L	
Chromium	E	1.281	0.1000	ug/L	
Cobalt	E	0.1978	0.1000	ug/L	
Copper	E	1.319	0.1000	ug/L	
Manganese	E	0.5245	0.1000	ug/L	
Nickel	E	1.106	0.1000	ug/L	
Vanadium	E	[0.02397]	0.1000	ug/L	
Zinc	E	2.143	0.1000	ug/L	
Selenium	H	[0.02872]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88230	ug/L	88
Calcium	A	300000	276500	ug/L	92
Magnesium	A	100000	85780	ug/L	86
Molybdenum	A	2000	1769	ug/L	88
Potassium	A	100000	90480	ug/L	90
Sodium	E	250000	214700	ug/L	86
Iron	H	250000	218100	ug/L	87

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1740184	-18.04
Scandium	A	1935693	1956040	1.05
Scandium	E	60849	63764	4.79
Scandium	H	853179	848673	-0.53
Germanium	H	210213	198888	-5.39
Germanium	E	46689	46943	0.54
Indium	A	2970271	2900425	-2.35
Bismuth	A	3398867	3036197	-10.67
Yttrium	A	2820269	2975475	5.50
Terbium	A	4719676	4831390	2.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321037 File : f1410037 Time : 14-JUN-2007 15:39
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94480	ug/L	-6		
Cadmium	A	100.0	99.31	ug/L	-1	20	
Calcium	A	300000	295000	ug/L	-2		
Magnesium	A	100000	91410	ug/L	-9		
Molybdenum	A	2000	1901	ug/L	-5		
Potassium	A	100000	96800	ug/L	-3		
Silver	A	50.00	44.79	ug/L	-10	20	
Arsenic	E	100.0	106.3	ug/L	6	20	
Chromium	E	200.0	194.6	ug/L	-3	20	
Cobalt	E	200.0	183.7	ug/L	-8	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	197.1	ug/L	-1	20	
Nickel	E	200.0	179.8	ug/L	-10	20	
Sodium	E	250000	230200	ug/L	-8		
Vanadium	E	200.0	196.6	ug/L	-2	20	
Zinc	E	100.0	94.24	ug/L	-6	20	
Iron	H	250000	235400	ug/L	-6		
Selenium	H	100.0	104.0	ug/L	4	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	851598	-0.19
Scandium	A	1935693	1925910	-0.51
Scandium	E	60849	62621	2.91
Germanium	H	210213	199251	-5.21
Germanium	E	46689	45882	-1.73
Indium	A	2970271	2848256	-4.11
Yttrium	A	2820269	2921982	3.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321053 File : f1410053 Time : 14-JUN-2007 17:19
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3318	10000	9882	ug/L	-1	10	
Antimony	A	0.1867	0.1686	100.0	99.65	ug/L	0	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1355	100.0	96.71	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.4	ug/L	0	10	
Calcium	A	0.0335	0.0108	10000	10080	ug/L	1	10	
Lead	A	0.4842	0.4176	100.0	97.17	ug/L	-3	10	
Magnesium	A	0.3201	0.2833	10000	9958	ug/L	0	10	
Molybdenum	A	0.1282	0.1084	100.0	92.60	ug/L	-7	10	
Potassium	A	1.4076	0.3588	10000	10050	ug/L	1	10	
Silver	A	0.1882	0.1852	100.0	99.99	ug/L	0	10	
Thallium	A	0.4663	0.4395	50.00	49.51	ug/L	-1	10	
Arsenic	E	0.3300	0.3065	100.0	99.41	ug/L	-1	10	
Chromium	E	2.6791	2.0605	100.0	99.18	ug/L	-1	10	
Cobalt	E	3.7642	3.5063	100.0	98.46	ug/L	-2	10	
Copper	E	12.411	3.4763	100.0	98.01	ug/L	-2	10	
Manganese	E	1.1270	0.8786	100.0	99.90	ug/L	0	10	
Nickel	E	1.8547	0.9588	100.0	98.06	ug/L	-2	10	
Sodium	E	0.8048	0.2511	10000	9921	ug/L	-1	10	
Vanadium	E	2.0193	1.5843	100.0	98.38	ug/L	-2	10	
Zinc	E	3.2717	0.4425	100.0	98.53	ug/L	-1	10	
Iron	H	0.4875	0.4357	10000	10030	ug/L	0	10	
Selenium	H	0.0659	0.0623	100.0	100.5	ug/L	1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2158727	1.67
Scandium	A	1935693	2117451	9.39
Scandium	E	60849	65946	8.38
Scandium	H	853179	906373	6.23
Germanium	H	210213	222709	5.94
Germanium	E	46689	50550	8.27
Indium	A	2970271	3232612	8.83
Bismuth	A	3398867	3615349	6.37
Yttrium	A	2820269	3122011	10.70
Terbium	A	4719676	5231345	10.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321055 File : f1410055 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 17:31

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01707]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006113]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008729]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01387]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[0.9751]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.845]	10.00	2.807	ug/L	!ib
Silver	A	[0.007633]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02817]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01738]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01162]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	0.1298	0.1000	0.002654	ug/L	ib ***
Zinc	E	[0.05617]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.5106]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2168826	2.14
Scandium	A	1935693	2030434	4.89
Scandium	E	60849	65550	7.73
Scandium	H	853179	908640	6.50
Germanium	H	210213	223541	6.34
Germanium	E	46689	49899	6.88
Indium	A	2970271	3202869	7.83
Bismuth	A	3398867	3630964	6.83
Yttrium	A	2820269	3023060	7.19
Terbium	A	4719676	5086287	7.77

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321069 File : f1410069 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 19:00
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3270	10000	9741	ug/L	-3	10	
Antimony	A	0.1867	0.1656	100.0	97.88	ug/L	-2	10	
Barium	A	0.1057	0.0368	100.0	100.1	ug/L	0	10	
Beryllium	A	0.1380	0.1342	100.0	95.77	ug/L	-4	10	
Cadmium	A	0.0415	0.0385	100.0	99.17	ug/L	-1	10	
Calcium	A	0.0335	0.0107	10000	10030	ug/L	0	10	
Lead	A	0.4842	0.4110	100.0	95.64	ug/L	-4	10	
Magnesium	A	0.3201	0.2801	10000	9845	ug/L	-2	10	
Molybdenum	A	0.1282	0.1073	100.0	91.63	ug/L	-8	10	
Potassium	A	1.4076	0.3549	10000	9940	ug/L	-1	10	
Silver	A	0.1882	0.1817	100.0	98.09	ug/L	-2	10	
Thallium	A	0.4663	0.4313	50.00	48.58	ug/L	-3	10	
Arsenic	E	0.3300	0.3025	100.0	98.09	ug/L	-2	10	
Chromium	E	2.6791	2.0178	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4224	100.0	96.11	ug/L	-4	10	
Copper	E	12.411	3.4303	100.0	96.71	ug/L	-3	10	
Manganese	E	1.1270	0.8723	100.0	99.18	ug/L	-1	10	
Nickel	E	1.8547	0.9431	100.0	96.45	ug/L	-4	10	
Sodium	E	0.8048	0.2473	10000	9769	ug/L	-2	10	
Vanadium	E	2.0193	1.5540	100.0	96.49	ug/L	-4	10	
Zinc	E	3.2717	0.4406	100.0	98.11	ug/L	-2	10	
Iron	H	0.4875	0.4344	10000	10000	ug/L	0	10	
Selenium	H	0.0659	0.0615	100.0	99.11	ug/L	-1	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2225185	4.80
Scandium	A	1935693	2198147	13.56
Scandium	E	60849	68052	11.84
Scandium	H	853179	903094	5.85
Germanium	H	210213	221896	5.56
Germanium	E	46689	51886	11.13
Indium	A	2970271	3328207	12.05
Bismuth	A	3398867	3702771	8.94
Yttrium	A	2820269	3216777	14.06
Terbium	A	4719676	5321277	12.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321071 File : f1410071 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 19:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.009915]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004371]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.004978]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01327]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002679]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01352]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01194]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.004531]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.08023]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.2809]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2208783	4.03
Scandium	A	1935693	2121375	9.59
Scandium	E	60849	68054	11.84
Scandium	H	853179	890576	4.38
Germanium	H	210213	222774	5.98
Germanium	E	46689	51697	10.73
Indium	A	2970271	3290972	10.80
Bismuth	A	3398867	3705815	9.03
Yttrium	A	2820269	3123217	10.74
Terbium	A	4719676	5213095	10.45

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897238321071

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321081 File : f1410081 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 20:12
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3289	10000	9797	ug/L	-2	10	
Antimony	A	0.1867	0.1674	100.0	98.94	ug/L	-1	10	
Barium	A	0.1057	0.0364	100.0	98.90	ug/L	-1	10	
Beryllium	A	0.1380	0.1356	100.0	96.82	ug/L	-3	10	
Cadmium	A	0.0415	0.0390	100.0	100.5	ug/L	1	10	
Calcium	A	0.0335	0.0107	10000	9978	ug/L	0	10	
Lead	A	0.4842	0.4125	100.0	95.97	ug/L	-4	10	
Magnesium	A	0.3201	0.2788	10000	9801	ug/L	-2	10	
Molybdenum	A	0.1282	0.1074	100.0	91.73	ug/L	-8	10	
Potassium	A	1.4076	0.3553	10000	9953	ug/L	0	10	
Silver	A	0.1882	0.1835	100.0	99.10	ug/L	-1	10	
Thallium	A	0.4663	0.4320	50.00	48.67	ug/L	-3	10	
Arsenic	E	0.3300	0.2997	100.0	97.19	ug/L	-3	10	
Chromium	E	2.6791	2.0179	100.0	97.12	ug/L	-3	10	
Cobalt	E	3.7642	3.4337	100.0	96.42	ug/L	-4	10	
Copper	E	12.411	3.4111	100.0	96.16	ug/L	-4	10	
Manganese	E	1.1270	0.8685	100.0	98.75	ug/L	-1	10	
Nickel	E	1.8547	0.9442	100.0	96.57	ug/L	-3	10	
Sodium	E	0.8048	0.2465	10000	9737	ug/L	-3	10	
Vanadium	E	2.0193	1.5520	100.0	96.37	ug/L	-4	10	
Zinc	E	3.2717	0.4355	100.0	96.94	ug/L	-3	10	
Iron	H	0.4875	0.4273	10000	9838	ug/L	-2	10	
Selenium	H	0.0659	0.0610	100.0	98.29	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2192821	3.27
Scandium	A	1935693	2173428	12.28
Scandium	E	60849	67479	10.90
Scandium	H	853179	909197	6.57
Germanium	H	210213	222745	5.96
Germanium	E	46689	51818	10.99
Indium	A	2970271	3246361	9.30
Bismuth	A	3398867	3642671	7.17
Yttrium	A	2820269	3171171	12.44
Terbium	A	4719676	5285000	11.98

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321083 File : f1410083 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 20:25

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.211]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01778]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01011]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01484]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.01743]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01897]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.649]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01000]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007725]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002860]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06795]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.4897]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.002211]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2204190	3.81
Scandium	A	1935693	2131061	10.09
Scandium	E	60849	67012	10.13
Scandium	H	853179	907018	6.31
Germanium	H	210213	224474	6.78
Germanium	E	46689	51125	9.50
Indium	A	2970271	3304204	11.24
Bismuth	A	3398867	3738892	10.00
Yttrium	A	2820269	3133973	11.12
Terbium	A	4719676	5243867	11.11

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321085 File : f1410085 Time : 14-JUN-2007 20:37
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06889]	0.1000	ug/L	
Barium	A	0.9481	0.1000	ug/L	
Beryllium	A	[0.01890]	0.1000	ug/L	
Cadmium	A	0.8856	0.1000	ug/L	
Lead	A	0.4135	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02450]	0.05000	ug/L	
Arsenic	E	0.2388	0.1000	ug/L	
Chromium	E	1.223	0.1000	ug/L	
Cobalt	E	0.1843	0.1000	ug/L	
Copper	E	1.235	0.1000	ug/L	
Manganese	E	0.4939	0.1000	ug/L	
Nickel	E	1.019	0.1000	ug/L	
Vanadium	E	[0.02806]	0.1000	ug/L	
Zinc	E	2.132	0.1000	ug/L	
Selenium	H	[0.05955]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87380	ug/L	87
Calcium	A	300000	268400	ug/L	89
Magnesium	A	100000	84420	ug/L	84
Molybdenum	A	2000	1716	ug/L	86
Potassium	A	100000	88730	ug/L	89
Sodium	E	250000	209000	ug/L	84
Iron	H	250000	212100	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1843197	-13.19
Scandium	A	1935693	2070349	6.96
Scandium	E	60849	67911	11.61
Scandium	H	853179	879831	3.12
Germanium	H	210213	205671	-2.16
Germanium	E	46689	49716	6.48
Indium	A	2970271	3031373	2.06
Bismuth	A	3398867	3142413	-7.55
Yttrium	A	2820269	3119239	10.60
Terbium	A	4719676	5026124	6.49

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321086 File : f1410086 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 20:43
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	93330	ug/L	-7		
Cadmium	A	100.0	97.70	ug/L	-2	20	
Calcium	A	300000	290900	ug/L	-3		
Magnesium	A	100000	90200	ug/L	-10		
Molybdenum	A	2000	1859	ug/L	-7		
Potassium	A	100000	95900	ug/L	-4		
Silver	A	50.00	43.94	ug/L	-12	20	
Arsenic	E	100.0	101.9	ug/L	2	20	
Chromium	E	200.0	186.3	ug/L	-7	20	
Cobalt	E	200.0	175.6	ug/L	-12	20	
Copper	E	200.0	172.7	ug/L	-14	20	
Manganese	E	200.0	192.6	ug/L	-4	20	
Nickel	E	200.0	171.0	ug/L	-15	20	
Sodium	E	250000	225300	ug/L	-10		
Vanadium	E	200.0	189.5	ug/L	-5	20	
Zinc	E	100.0	90.18	ug/L	-10	20	
Iron	H	250000	231200	ug/L	-8		
Selenium	H	100.0	101.5	ug/L	2	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	871866	2.19
Scandium	A	1935693	2047240	5.76
Scandium	E	60849	67173	10.39
Germanium	H	210213	205746	-2.13
Germanium	E	46689	49048	5.05
Indium	A	2970271	3017424	1.59
Yttrium	A	2820269	3110985	10.31

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321104 File : f1410104 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 22:33
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3217	10000	9583	ug/L	-4	10	
Antimony	A	0.1867	0.1642	100.0	97.04	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.07	ug/L	-1	10	
Beryllium	A	0.1380	0.1323	100.0	94.46	ug/L	-6	10	
Cadmium	A	0.0415	0.0383	100.0	98.64	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9834	ug/L	-2	10	
Lead	A	0.4842	0.4088	100.0	95.13	ug/L	-5	10	
Magnesium	A	0.3201	0.2735	10000	9612	ug/L	-4	10	
Molybdenum	A	0.1282	0.1060	100.0	90.56	ug/L	-9	10	
Potassium	A	1.4076	0.3527	10000	9879	ug/L	-1	10	
Silver	A	0.1882	0.1800	100.0	97.21	ug/L	-3	10	
Thallium	A	0.4663	0.4313	50.00	48.59	ug/L	-3	10	
Arsenic	E	0.3300	0.3004	100.0	97.42	ug/L	-3	10	
Chromium	E	2.6791	2.0194	100.0	97.20	ug/L	-3	10	
Cobalt	E	3.7642	3.4542	100.0	97.00	ug/L	-3	10	
Copper	E	12.411	3.3899	100.0	95.56	ug/L	-4	10	
Manganese	E	1.1270	0.8697	100.0	98.89	ug/L	-1	10	
Nickel	E	1.8547	0.9473	100.0	96.88	ug/L	-3	10	
Sodium	E	0.8048	0.2444	10000	9652	ug/L	-3	10	
Vanadium	E	2.0193	1.5550	100.0	96.56	ug/L	-3	10	
Zinc	E	3.2717	0.4374	100.0	97.37	ug/L	-3	10	
Iron	H	0.4875	0.4301	10000	9903	ug/L	-1	10	
Selenium	H	0.0659	0.0608	100.0	98.00	ug/L	-2	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090516	-1.54
Scandium	A	1935693	2114113	9.22
Scandium	E	60849	64071	5.29
Scandium	H	853179	874960	2.55
Germanium	H	210213	216340	2.91
Germanium	E	46689	49541	6.11
Indium	A	2970271	3224571	8.56
Bismuth	A	3398867	3587446	5.55
Yttrium	A	2820269	3130602	11.00
Terbium	A	4719676	5222012	10.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321106 File : f1410106 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 14-JUN-2007 22:47

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01657]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004316]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005309]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.007881]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.778]	10.00	2.807	ug/L	!ib
Silver	A	[0.003165]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02425]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01388]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007515]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05789]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5153]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2101720	-1.02
Scandium	A	1935693	2050005	5.91
Scandium	E	60849	64466	5.94
Scandium	H	853179	878462	2.96
Germanium	H	210213	219081	4.22
Germanium	E	46689	49601	6.24
Indium	A	2970271	3223465	8.52
Bismuth	A	3398867	3671727	8.03
Yttrium	A	2820269	3054901	8.32
Terbium	A	4719676	5161081	9.35

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321120 File : f1410120 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 00:09
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3224	10000	9602	ug/L	-4	10	
Antimony	A	0.1867	0.1636	100.0	96.71	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.19	ug/L	-1	10	
Beryllium	A	0.1380	0.1328	100.0	94.79	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	98.94	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9861	ug/L	-1	10	
Lead	A	0.4842	0.4099	100.0	95.39	ug/L	-5	10	
Magnesium	A	0.3201	0.2737	10000	9619	ug/L	-4	10	
Molybdenum	A	0.1282	0.1063	100.0	90.75	ug/L	-9	10	
Potassium	A	1.4076	0.3532	10000	9893	ug/L	-1	10	
Silver	A	0.1882	0.1799	100.0	97.14	ug/L	-3	10	
Thallium	A	0.4663	0.4293	50.00	48.36	ug/L	-3	10	
Arsenic	E	0.3300	0.2978	100.0	96.56	ug/L	-3	10	
Chromium	E	2.6791	2.0074	100.0	96.62	ug/L	-3	10	
Cobalt	E	3.7642	3.4193	100.0	96.02	ug/L	-4	10	
Copper	E	12.411	3.3735	100.0	95.09	ug/L	-5	10	
Manganese	E	1.1270	0.8630	100.0	98.13	ug/L	-2	10	
Nickel	E	1.8547	0.9422	100.0	96.36	ug/L	-4	10	
Sodium	E	0.8048	0.2410	10000	9517	ug/L	-5	10	
Vanadium	E	2.0193	1.5395	100.0	95.59	ug/L	-4	10	
Zinc	E	3.2717	0.4323	100.0	96.22	ug/L	-4	10	
Iron	H	0.4875	0.5288	10000	12180	ug/L	**22**	10	c+ ***
Selenium	H	0.0659	0.0745	100.0	120.0	ug/L	**20**	10	c+ ***

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2090591	-1.54
Scandium	A	1935693	2116451	9.34
Scandium	E	60849	64613	6.19
Scandium	H	853179	724396	-15.09
Germanium	H	210213	181314	-13.75
Germanium	E	46689	50144	7.40
Indium	A	2970271	3247887	9.35
Bismuth	A	3398867	3641722	7.15
Yttrium	A	2820269	3144205	11.49
Terbium	A	4719676	5235562	10.93

+=high bias c=CCV

897238321120

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321122 File : f1410122 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 00:22

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.005889]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003319]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003493]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004107]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002443]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01918]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.02055]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.002569]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05233]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5130]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2069415	-2.54
Scandium	A	1935693	2037181	5.24
Scandium	E	60849	64093	5.33
Scandium	H	853179	859828	0.78
Germanium	H	210213	216334	2.91
Germanium	E	46689	49532	6.09
Indium	A	2970271	3185380	7.24
Bismuth	A	3398867	3670609	8.00
Yttrium	A	2820269	3035413	7.63
Terbium	A	4719676	5112231	8.32

!=warning ib=instrument blank

897238321122

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897238321131 File : f1410131 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:15
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3212	10000	9565	ug/L	-4	10	
Antimony	A	0.1867	0.1644	100.0	97.17	ug/L	-3	10	
Barium	A	0.1057	0.0365	100.0	99.17	ug/L	-1	10	
Beryllium	A	0.1380	0.1331	100.0	95.02	ug/L	-5	10	
Cadmium	A	0.0415	0.0384	100.0	99.06	ug/L	-1	10	
Calcium	A	0.0335	0.0105	10000	9803	ug/L	-2	10	
Lead	A	0.4842	0.4096	100.0	95.32	ug/L	-5	10	
Magnesium	A	0.3201	0.2738	10000	9625	ug/L	-4	10	
Molybdenum	A	0.1282	0.1062	100.0	90.70	ug/L	-9	10	
Potassium	A	1.4076	0.3493	10000	9782	ug/L	-2	10	
Silver	A	0.1882	0.1809	100.0	97.70	ug/L	-2	10	
Thallium	A	0.4663	0.4244	50.00	47.81	ug/L	-4	10	
Arsenic	E	0.3300	0.2940	100.0	95.35	ug/L	-5	10	
Chromium	E	2.6791	1.9864	100.0	95.60	ug/L	-4	10	
Cobalt	E	3.7642	3.3899	100.0	95.19	ug/L	-5	10	
Copper	E	12.411	3.3409	100.0	94.17	ug/L	-6	10	
Manganese	E	1.1270	0.8564	100.0	97.37	ug/L	-3	10	
Nickel	E	1.8547	0.9325	100.0	95.37	ug/L	-5	10	
Sodium	E	0.8048	0.2421	10000	9561	ug/L	-4	10	
Vanadium	E	2.0193	1.5284	100.0	94.90	ug/L	-5	10	
Zinc	E	3.2717	0.4321	100.0	96.18	ug/L	-4	10	
Iron	H	0.4875	0.4235	10000	9752	ug/L	-2	10	
Selenium	H	0.0659	0.0599	100.0	96.46	ug/L	-4	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2060483	-2.96
Scandium	A	1935693	2099690	8.47
Scandium	E	60849	64031	5.23
Scandium	H	853179	877900	2.90
Germanium	H	210213	219044	4.20
Germanium	E	46689	49382	5.77
Indium	A	2970271	3159989	6.39
Bismuth	A	3398867	3581620	5.38
Yttrium	A	2820269	3084796	9.38
Terbium	A	4719676	5123003	8.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321133 File : f1410133 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:29

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.007047]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003846]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004121]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.007918]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06047]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2070192	-2.50
Scandium	A	1935693	2019477	4.33
Scandium	E	60849	63277	3.99
Scandium	H	853179	863991	1.27
Germanium	H	210213	217539	3.48
Germanium	E	46689	49107	5.18
Indium	A	2970271	3159069	6.36
Bismuth	A	3398867	3645648	7.26
Yttrium	A	2820269	3011744	6.79
Terbium	A	4719676	5068028	7.38

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897238321133

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897238321135 File : f1410135 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:40
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07062]	0.1000	ug/L	
Barium	A	0.9384	0.1000	ug/L	
Beryllium	A	[0.01950]	0.1000	ug/L	
Cadmium	A	0.9477	0.1000	ug/L	
Lead	A	0.4018	0.1000	ug/L	
Silver	A	0.1757	0.1000	ug/L	
Thallium	A	[0.02511]	0.05000	ug/L	
Arsenic	E	0.2359	0.1000	ug/L	
Chromium	E	1.229	0.1000	ug/L	
Cobalt	E	0.1855	0.1000	ug/L	
Copper	E	1.206	0.1000	ug/L	
Manganese	E	0.5246	0.1000	ug/L	
Nickel	E	1.037	0.1000	ug/L	
Vanadium	E	[0.01641]	0.1000	ug/L	
Zinc	E	2.051	0.1000	ug/L	
Selenium	H	[0.06772]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	85270	ug/L	85
Calcium	A	300000	266000	ug/L	89
Magnesium	A	100000	82520	ug/L	83
Molybdenum	A	2000	1698	ug/L	85
Potassium	A	100000	87750	ug/L	88
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212300	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1787817	-15.80
Scandium	A	1935693	2047588	5.78
Scandium	E	60849	64760	6.43
Scandium	H	853179	847491	-0.67
Germanium	H	210213	202834	-3.51
Germanium	E	46689	48200	3.24
Indium	A	2970271	3023443	1.79
Bismuth	A	3398867	3165919	-6.85
Yttrium	A	2820269	3102733	10.02
Terbium	A	4719676	5056718	7.14

897238321135

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321136 File : f1410136 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 01:46
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	89790	ug/L	-10		
Cadmium	A	100.0	96.49	ug/L	-4	20	
Calcium	A	300000	282800	ug/L	-6		
Magnesium	A	100000	86730	ug/L	-13		
Molybdenum	A	2000	1815	ug/L	-9		
Potassium	A	100000	93170	ug/L	-7		
Silver	A	50.00	43.30	ug/L	-13	20	
Arsenic	E	100.0	101.5	ug/L	2	20	
Chromium	E	200.0	184.4	ug/L	-8	20	
Cobalt	E	200.0	173.8	ug/L	-13	20	
Copper	E	200.0	170.7	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	170.1	ug/L	-15	20	
Sodium	E	250000	220000	ug/L	-12		
Vanadium	E	200.0	187.5	ug/L	-6	20	
Zinc	E	100.0	89.27	ug/L	-11	20	
Iron	H	250000	230300	ug/L	-8		
Selenium	H	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	838972	-1.67
Scandium	A	1935693	2083546	7.64
Scandium	E	60849	65497	7.64
Germanium	H	210213	200315	-4.71
Germanium	E	46689	48070	2.96
Indium	A	2970271	3046687	2.57
Yttrium	A	2820269	3142183	11.41

897238321136

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321151 File : f1410151 Time : 15-JUN-2007 03:16
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3189	10000	9497	ug/L	-5	10	
Antimony	A	0.1867	0.1611	100.0	95.24	ug/L	-5	10	
Barium	A	0.1057	0.0365	100.0	99.06	ug/L	-1	10	
Beryllium	A	0.1380	0.1316	100.0	93.98	ug/L	-6	10	
Cadmium	A	0.0415	0.0374	100.0	96.56	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9748	ug/L	-3	10	
Lead	A	0.4842	0.4047	100.0	94.17	ug/L	-6	10	
Magnesium	A	0.3201	0.2669	10000	9382	ug/L	-6	10	
Molybdenum	A	0.1282	0.1052	100.0	89.86	ug/L	-10	10	
Potassium	A	1.4076	0.3496	10000	9792	ug/L	-2	10	
Silver	A	0.1882	0.1769	100.0	95.50	ug/L	-5	10	
Thallium	A	0.4663	0.4234	50.00	47.70	ug/L	-5	10	
Arsenic	E	0.3300	0.2939	100.0	95.32	ug/L	-5	10	
Chromium	E	2.6791	1.9637	100.0	94.51	ug/L	-5	10	
Cobalt	E	3.7642	3.3309	100.0	93.54	ug/L	-6	10	
Copper	E	12.411	3.3024	100.0	93.08	ug/L	-7	10	
Manganese	E	1.1270	0.8547	100.0	97.18	ug/L	-3	10	
Nickel	E	1.8547	0.9156	100.0	93.63	ug/L	-6	10	
Sodium	E	0.8048	0.2392	10000	9447	ug/L	-6	10	
Vanadium	E	2.0193	1.5131	100.0	93.95	ug/L	-6	10	
Zinc	E	3.2717	0.4269	100.0	95.01	ug/L	-5	10	
Iron	H	0.4875	0.4280	10000	9857	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.81	ug/L	-3	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2047685	-3.56
Scandium	A	1935693	2160709	11.62
Scandium	E	60849	64964	6.76
Scandium	H	853179	861252	0.95
Germanium	H	210213	217010	3.23
Germanium	E	46689	49959	7.00
Indium	A	2970271	3276769	10.32
Bismuth	A	3398867	3634465	6.93
Yttrium	A	2820269	3181032	12.79
Terbium	A	4719676	5256935	11.38

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321153 File : f1410153 Time : 15-JUN-2007 03:29
Cal : 897238321001 Caldate : 14-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004630]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.006884]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.006034]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.006944]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.096]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[9.695]	10.00	2.807	ug/L	!ib
Silver	A	[0.004858]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	calc
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.002394]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	[5.225]	10.00	4.339	ug/L	!ib
Vanadium	E	[0.08781]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.04724]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4995]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2104532	-0.88
Scandium	A	1935693	2126593	9.86
Scandium	E	60849	64924	6.70
Scandium	H	853179	765293	-10.30
Germanium	H	210213	197282	-6.15
Germanium	E	46689	50156	7.43
Indium	A	2970271	3267513	10.01
Bismuth	A	3398867	3742180	10.10
Yttrium	A	2820269	3122739	10.72
Terbium	A	4719676	5229518	10.80

!=warning calc=check quantitation ib=instrument blank

897238321153

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897238321158 File : f1410158 Time : 15-JUN-2007 03:59
Cal : 897238321001 Caldate : 14-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3768	0.3178	10000	9466	ug/L	-5	10	
Antimony	A	0.1867	0.1621	100.0	95.80	ug/L	-4	10	
Barium	A	0.1057	0.0363	100.0	98.61	ug/L	-1	10	
Beryllium	A	0.1380	0.1305	100.0	93.19	ug/L	-7	10	
Cadmium	A	0.0415	0.0377	100.0	97.34	ug/L	-3	10	
Calcium	A	0.0335	0.0104	10000	9710	ug/L	-3	10	
Lead	A	0.4842	0.4051	100.0	94.26	ug/L	-6	10	
Magnesium	A	0.3201	0.2709	10000	9522	ug/L	-5	10	
Molybdenum	A	0.1282	0.1054	100.0	89.99	ug/L	-10	10	
Potassium	A	1.4076	0.3493	10000	9781	ug/L	-2	10	
Silver	A	0.1882	0.1767	100.0	95.40	ug/L	-5	10	
Thallium	A	0.4663	0.4221	50.00	47.55	ug/L	-5	10	
Arsenic	E	0.3300	0.2917	100.0	94.60	ug/L	-5	10	
Chromium	E	2.6791	1.9743	100.0	95.02	ug/L	-5	10	
Cobalt	E	3.7642	3.3668	100.0	94.54	ug/L	-5	10	
Copper	E	12.411	3.2850	100.0	92.59	ug/L	-7	10	
Manganese	E	1.1270	0.8565	100.0	97.39	ug/L	-3	10	
Nickel	E	1.8547	0.9233	100.0	94.43	ug/L	-6	10	
Sodium	E	0.8048	0.2396	10000	9464	ug/L	-5	10	
Vanadium	E	2.0193	1.5209	100.0	94.44	ug/L	-6	10	
Zinc	E	3.2717	0.4231	100.0	94.15	ug/L	-6	10	
Iron	H	0.4875	0.4285	10000	9866	ug/L	-1	10	
Selenium	H	0.0659	0.0601	100.0	96.78	ug/L	-3	10	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2036755	-4.08
Scandium	A	1935693	2100792	8.53
Scandium	E	60849	63006	3.54
Scandium	H	853179	846347	-0.80
Germanium	H	210213	213708	1.66
Germanium	E	46689	49190	5.36
Indium	A	2970271	3196261	7.61
Bismuth	A	3398867	3619250	6.48
Yttrium	A	2820269	3101553	9.97
Terbium	A	4719676	5166691	9.47

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897238321160 File : f14l0160 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 04:12

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.004600]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.007487]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.005068]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003520]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[5.665]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01211]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01158]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.06753]	0.1000	0.002654	ug/L	!ib
Zinc	E	[0.07886]	0.1000	0.04457	ug/L	!ib
Iron	H	[0.4337]	10.00	0.2518	ug/L	!ib
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f14l0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	2051900	-3.36
Scandium	A	1935693	2049233	5.87
Scandium	E	60849	62533	2.77
Scandium	H	853179	829702	-2.75
Germanium	H	210213	211838	0.77
Germanium	E	46689	48549	3.98
Indium	A	2970271	3214149	8.21
Bismuth	A	3398867	3669004	7.95
Yttrium	A	2820269	3055293	8.33
Terbium	A	4719676	5113478	8.34

!=warning ib=instrument blank

897238321160

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897238321162 File : f1410162 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 04:24
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05838]	0.1000	ug/L	
Barium	A	0.9070	0.1000	ug/L	
Beryllium	A	[0.02489]	0.1000	ug/L	
Cadmium	A	0.9693	0.1000	ug/L	
Lead	A	0.4065	0.1000	ug/L	
Silver	A	0.1819	0.1000	ug/L	
Thallium	A	[0.02371]	0.05000	ug/L	
Arsenic	E	0.2237	0.1000	ug/L	
Chromium	E	1.209	0.1000	ug/L	
Cobalt	E	0.1835	0.1000	ug/L	
Copper	E	1.191	0.1000	ug/L	
Manganese	E	0.5249	0.1000	ug/L	
Nickel	E	1.041	0.1000	ug/L	
Vanadium	E	[0.02144]	0.1000	ug/L	
Zinc	E	1.959	0.1000	ug/L	
Selenium	H	[0.06371]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	83760	ug/L	84
Calcium	A	300000	263600	ug/L	88
Magnesium	A	100000	81200	ug/L	81
Molybdenum	A	2000	1693	ug/L	85
Potassium	A	100000	86660	ug/L	87
Sodium	E	250000	204400	ug/L	82
Iron	H	250000	212800	ug/L	85

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2123286	1754350	-17.38
Scandium	A	1935693	2028904	4.82
Scandium	E	60849	63073	3.65
Scandium	H	853179	817123	-4.23
Germanium	H	210213	197016	-6.28
Germanium	E	46689	46633	-0.12
Indium	A	2970271	2962631	-0.26
Bismuth	A	3398867	3125373	-8.05
Yttrium	A	2820269	3058132	8.43
Terbium	A	4719676	5005488	6.06

897238321162

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897238321163 File : f1410163 IDF : 1.0
Cal : 897238321001 Caldate : 14-JUN-2007 Time : 15-JUN-2007 04:30
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	90830	ug/L	-9		
Cadmium	A	100.0	96.08	ug/L	-4	20	
Calcium	A	300000	284400	ug/L	-5		
Magnesium	A	100000	87620	ug/L	-12		
Molybdenum	A	2000	1817	ug/L	-9		
Potassium	A	100000	93990	ug/L	-6		
Silver	A	50.00	43.31	ug/L	-13	20	
Arsenic	E	100.0	99.68	ug/L	0	20	
Chromium	E	200.0	184.2	ug/L	-8	20	
Cobalt	E	200.0	173.9	ug/L	-13	20	
Copper	E	200.0	169.3	ug/L	-15	20	
Manganese	E	200.0	189.2	ug/L	-5	20	
Nickel	E	200.0	169.5	ug/L	-15	20	
Sodium	E	250000	220100	ug/L	-12		
Vanadium	E	200.0	187.1	ug/L	-6	20	
Zinc	E	100.0	87.95	ug/L	-12	20	
Iron	H	250000	229500	ug/L	-8		
Selenium	H	100.0	100.2	ug/L	0	20	

ISTD (ICALBLK f1410004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	853179	814243	-4.56
Scandium	A	1935693	2009495	3.81
Scandium	E	60849	63185	3.84
Germanium	H	210213	195217	-7.13
Germanium	E	46689	46665	-0.05
Indium	A	2970271	2977345	0.24
Yttrium	A	2820269	3062091	8.57

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07
Sequence : MET16 f1410

Reference : f1410004
Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2123286	1935693	60849	853179	210213	46689	2970271	3398867	2820269	4719676
		LOWER LIMIT	636986	580708	18255	255954	63064	14007	891081	1019660	846081	1415903
		UPPER LIMIT	2547943	2322832	73019	1023814	252256	56027	3564325	4078640	3384323	5663611
015	ICB		2178902	2043382	63074	902139	223063	48402	3169218	3611754	3006180	5065969
017	ICSA		1845484	2011932	63325	864634	201150	46587	2902550	3043579	2998242	4871820
018	ICSAB		1789310	1966954	62771	864005	200194	45963	2876364	2993163	2953598	4790609
023	SAMPLE	195370-007	2093178	2147194	66008	874404	213265	50430	3321263	3730740	3235744	5245479
024	MSS	195328-001	2093143	2113440	66516	868904	216173	51295	3338196	3759901	3212766	5280191
025	SAMPLE	195328-003	2070660	2148688	67415	894791	218264	51081	3279132	3653165	3251539	5229845
026	SAMPLE	195370-006	2096710	2166773	68123	898056	219267	52171	3350689	3733175	3266292	5280417
027	SAMPLE	195370-007	2125889	2204542	68338	904091	219537	52211	3359272	3757411	3333353	5296095
028	SAMPLE	195370-017	2108346	2190487	68898	884210	216840	52161	3343336	3686052	3360983	5239221
029	SAMPLE	195257-027	2023968	2003587	63893	872441	218234	49866	3174653	3595074	2993048	5072635
032	CCV		2066227	2089148	65844	899458	221220	50519	3199101	3551272	3118381	5126287
034	CCB		2060529	1998648	63130	845745	208799	48706	3157907	3575553	2999921	5020426
036	ICSA		1740184	1956040	63764	848673	198888	46943	2900425	3036197	2975475	4831390
037	ICSAB		1702585	1925910	62621	851598	199251	45882	2848256	2977375	2921982	4794059
041	SAMPLE	195241-002	2174055	2138378	65310	857254	214538	50767	3288913	3653723	3175719	5218701
042	SAMPLE	195241-007	2184475	2197288	68753	887147	223900	53322	3343833	3671928	3256316	5284958
043	MSS	195241-003	2134800	2165467	67206	885953	226206	52267	3333433	3679162	3209193	5299030
044	PDS	QC391445	2034050	2105863	65855	887427	219725	50344	3188199	3533048	3118480	5166855
046	MSS	195241-003	2169139	2135785	67162	888322	222214	51456	3253695	3537083	3149919	5200219
047	SER	QC391444	2221686	2180411	69018	912692	229294	53419	3310049	3704255	3203989	5280419
048	MS	QC391442	2155213	2121049	66609	898310	222363	50733	3172575	3509755	3094686	5140928
049	MSD	QC391443	2172345	2097694	66812	906069	224309	51199	3140018	3513178	3073457	5126755
053	CCV		2158727	2117451	65946	906373	222709	50550	3232612	3615349	3122011	5231345
055	CCB		2168826	2030434	65550	908640	223541	49899	3202869	3630964	3023060	5086287
057	PDS	QC391445	2100033	2069262	65040	884638	217346	49565	3093621	3453144	3022760	5066166
058	MSS	195247-006	2257888	2139625	67841	899685	224993	51945	3209622	3539433	3109153	5166013
059	MS	QC391446	2190210	2091254	67261	914401	224691	51213	3156364	3518375	3069789	5138204
060	MSD	QC391447	1984480	1934029	67081	898087	222265	51100	2894106	3212987	2798803	4691210
061	SAMPLE	195241-002	2265439	2186455	69407	905209	221819	51656	3173820	3460018	3142632	5161565
062	SAMPLE	195241-004	2258518	2128143	69093	910698	228485	52475	3245985	3629591	3127034	5209884
063	SAMPLE	195241-005	2200017	2046358	65835	907813	224671	51094	3130664	3578989	3011580	5049995
064	SAMPLE	195241-007	2224536	2146903	67948	891035	216784	50207	3104936	3406667	3058703	5050142
065	SAMPLE	195247-001	2180083	2186713	68230	899948	221651	51224	3226576	3516455	3201630	5232553
066	SAMPLE	195247-002	2159424	2242040	69044	907819	219015	51670	3266640	3584623	3563677 *	5305325
069	CCV		2225185	2198147	68052	903094	221896	51886	3328207	3702771	3216777	5321277
071	CCB		2208783	2121375	68054	890576	222774	51697	3290972	3705815	3123217	5213095
073	SAMPLE	195247-001	2244540	2237885	69508	897409	223202	53014	3337373	3623553	3230278	5301073
074	SAMPLE	195247-002	2266883	2258657	70034	909392	224574	52915	3326664	3586784	3265797	5302374
075	SAMPLE	195247-001	2228774	2180279	67861	906186	227568	52141	3289913	3700538	3168955	5243923
076	SAMPLE	195247-002	2223950	2142002	66982	900053	224721	51577	3226004	3656113	3132604	5195809
077	SAMPLE	195247-001	2229325	2144248	67524	905559	227113	52019	3253639	3701572	3114616	5210586
078	SAMPLE	195247-002	2208628	2129771	67767	918456	229620	51925	3239722	3676779	3088014	5180643
081	CCV		2192821	2173428	67479	909197	222745	51818	3246361	3642671	3171171	5285000
083	CCB		2204190	2131061	67012	907018	224474	51125	3304204	3738892	3133973	5243867
085	ICSA		1843197	2070349	67911	879831	205671	49716	3031373	3142413	3119239	5026124
086	ICSAB		1795245	2047240	67173	871866	205746	49048	3017424	3126576	3110985	5053521
091	BLANK	QC392093	2099747	2044976	64708	867014	218694	50290	3262531	3730296	3062020	5196270
092	BS	QC392094	2074164	2116499	66111	834386	208272	50778	3235501	3637853	3153739	5208650

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897238321

Date : 06/14/07
Sequence : MET16 f1410

Reference : f1410004
Analyzed : 06/14/07 12:21

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
093	BSD	QC392095	2085663	2163564	66157	864044	216424	50603	3327277	3686688	3220491	5324552
097	MSS	195270-007	2137857	2192536	67870	899173	226001	52222	3323282	3605435	3228887	5232811
098	SER	QC392098	2175096	2153199	66768	888056	225786	52220	3297735	3693543	3168047	5231426
099	MS	QC392096	2076293	2145976	65920	872277	218623	50709	3207990	3509752	3131876	5165938
100	MSD	QC392097	2087344	2157742	65177	864291	217732	50264	3216713	3509365	3147237	5147000
101	PDS	QC392099	2070454	2197927	65071	872693	216284	50005	3240745	3542571	3198886	5249968
104	CCV		2090516	2114113	64071	874960	216340	49541	3224571	3587446	3130602	5222012
106	CCB		2101720	2050005	64466	878462	219081	49601	3223465	3671727	3054901	5161081
108	SAMPLE	195270-003	2113213	2161686	65381	879739	222073	51065	3273731	3627153	3145683	5199461
109	SAMPLE	195270-005	2121387	2175050	65982	875590	221350	51101	3258417	3654070	3160409	5218931
110	SAMPLE	195270-010	2112434	2110916	65306	874343	220526	50856	3233669	3607245	3087492	5130195
111	SAMPLE	195270-012	2141928	2104169	64959	865016	223360	50702	3205775	3661908	3074952	5130296
112	SAMPLE	195358-001	2112379	2078444	63832	876990	222855	49954	3179851	3683079	3025647	5071756
113	SAMPLE	195358-002	2119618	2062971	64030	869388	220135	49549	3182853	3688140	3035863	5099741
114	SAMPLE	195358-003	2102326	2047949	63392	871285	220110	49233	3216622	3659306	3044830	5130266
115	SAMPLE	195358-004	2064821	2035562	64325	877633	220585	50224	3190132	3650076	3009370	5095673
116	SAMPLE	195358-005	2034557	2007388	62298	873689	220521	49013	3125492	3618949	2956938	4989070
117	SAMPLE	195358-006	2069412	2017675	63949	873868	223591	50337	3158707	3652615	2985240	5011271
120	CCV		2090591	2116451	64613	724396	181314	50144	3247887	3641722	3144205	5235562
122	CCB		2069415	2037181	64093	859828	216334	49532	3185380	3670609	3035413	5112231
124	SAMPLE	195358-007	2073310	2014799	63269	860592	217976	49022	3170074	3668825	3005319	5068165
125	SAMPLE	195358-008	2083685	2051529	63424	874610	220977	49555	3177340	3709979	3032106	5087365
126	SAMPLE	195358-009	2099112	2032398	64052	874600	220998	49782	3199588	3700777	3022645	5072335
127	SAMPLE	195369-001	2099711	2237036	68507	877396	217363	51284	3270309	3434398	3229111	5204436
128	SAMPLE	195370-021	2175267	2158826	66833	783893	208011	51547	3292073	3714804	3135184	5173058
131	CCV		2060483	2099690	64031	877900	219044	49382	3159989	3581620	3084796	5123003
133	CCB		2070192	2019477	63277	863991	217539	49107	3159069	3645648	3011744	5068028
135	ICSA		1787817	2047588	64760	847491	202834	48200	3023443	3165919	3102733	5056718
136	ICSAB		1779278	2083546	65497	838972	200315	48070	3046687	3194510	3142183	5115916
141	SAMPLE	195251-001	2001213	2042398	62730	843659	215339	49074	3197238	3668990	3035524	5110156
142	SAMPLE	195251-006	2010125	2044622	63831	856226	220196	50099	3245166	3694459	3074011	5138806
143	SAMPLE	195251-007	2034171	2046521	62391	851529	216709	48932	3190535	3679407	3038210	5082347
144	SAMPLE	195337-001	1899908	2086075	62582	746676	185029	47652	3106807	3317126	3065059	5012234
145	SAMPLE	195337-002	1931472	2219732	67595	813817	199697	48961	3209082	3189239	3209227	5046720
146	SAMPLE	195337-003	1919360	2253575	68422	821959	198876	48854	3160493	3128159	3224104	5041204
147	SAMPLE	195285-012	2165256	2254500	68495	874447	229082	52698	3407477	3728943	3262720	5320019
148	SAMPLE	195285-013	2104590	2187725	66858	875561	225793	52006	3345712	3698355	3184999	5231128
151	CCV		2047685	2160709	64964	861252	217010	49959	3276769	3634465	3181032	5256935
153	CCB		2104532	2126593	64924	765293	197282	50156	3267513	3742180	3122739	5229518
155	SAMPLE	195285-014	2054094	2054966	62627	851357	216493	48931	3160407	3586088	3022706	5050165
158	CCV		2036755	2100792	63006	846347	213708	49190	3196261	3619250	3101553	5166691
160	CCB		2051900	2049233	62533	829702	211838	48549	3214149	3669004	3055293	5113478
162	ICSA		1754350	2028904	63073	817123	197016	46633	2962631	3125373	3058132	5005488
163	ICSAB		1704736	2009495	63185	814243	195217	46665	2977345	3155248	3062091	5026637

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	f1410001	TUN				14-JUN-2007 12:01	1.0	1.0			1	
002	f1410002	X	RINSE			14-JUN-2007 12:09	1.0				2	
003	f1410003	X	RINSE			14-JUN-2007 12:15	1.0				2	
004	f1410004	ICALBLK	CALBLANK			14-JUN-2007 12:21	1.0	1.0			2	
005	f1410005	ICAL				14-JUN-2007 12:27	1.0	1.0			3	
006	f1410006	ICAL				14-JUN-2007 12:33	1.0	1.0			4	
007	f1410007	ICAL				14-JUN-2007 12:38	1.0	1.0			5	
008	f1410008	ICAL				14-JUN-2007 12:44	1.0	1.0			6	
009	f1410009	ICAL				14-JUN-2007 12:50	1.0	1.0			7	
010	f1410010	ICAL				14-JUN-2007 12:57	1.0	1.0			8	
011	f1410011	X	RINSE			14-JUN-2007 13:05	1.0				2	
012	f1410012	ICV				14-JUN-2007 13:11	1.0	1.0		1	9	
013	f1410013	X	RINSE			14-JUN-2007 13:17	1.0				2	
014	f1410014	X				14-JUN-2007 13:23	1.0				2	
015	f1410015	ICB				14-JUN-2007 13:29	1.0	1.0	1	1	2	
016	f1410016	X				14-JUN-2007 13:35	1.0				2	
017	f1410017	ICSA				14-JUN-2007 13:40	1.0	1.0		1	10 2	7:CA=272500
018	f1410018	ICSAB				14-JUN-2007 13:46	1.0	1.0		1	11 2	9:CA=297000
019	f1410019	X	RINSE			14-JUN-2007 13:52	1.0				2	
020	f1410020	X	RINSE			14-JUN-2007 13:58	1.0				2	
021	f1410021	X	RINSE			14-JUN-2007 14:04	1.0				2	
022	f1410022	X	RINSE			14-JUN-2007 14:10	1.0				2	
023	f1410023	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:16	100.0	49.02		1	2	
024	f1410024	MSS	195328-001	126255	Soil	14-JUN-2007 14:22	50.0	52.08		1	2	
025	f1410025	SAMPLE	195328-003	126255	Soil	14-JUN-2007 14:28	50.0	54.95		1	2	1:MN=216.800
026	f1410026	SAMPLE	195370-006	126255	Soil	14-JUN-2007 14:33	50.0	52.08		1	2	
027	f1410027	SAMPLE	195370-007	126255	Soil	14-JUN-2007 14:39	50.0	49.02	1	1	2	2:PB=265.600
28	f1410028	SAMPLE	195370-017	126255	Soil	14-JUN-2007 14:45	50.0	50.51		1	2	
29	f1410029	SAMPLE	195257-027	126262	WET DI	14-JUN-2007 14:51	10.0	1.0		1	2	
30	f1410030	X	RINSE			14-JUN-2007 14:57	1.0				2	
31	f1410031	X	RINSE			14-JUN-2007 15:03	1.0				2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f1410032	CCV				14-JUN-2007 15:08	1.0	1.0			1	12 2	
033	f1410033	X	RINSE			14-JUN-2007 15:15	1.0					2	
034	f1410034	CCB				14-JUN-2007 15:21	1.0	1.0			1	2	
035	f1410035	X				14-JUN-2007 15:27	1.0					2	
036	f1410036	ICSA				14-JUN-2007 15:33	1.0	1.0			1	10 2	7:CA=276500
037	f1410037	ICSAB				14-JUN-2007 15:39	1.0	1.0			1	11 2	7:CA=295000
038	f1410038	X	RINSE			14-JUN-2007 15:45	1.0					2	
039	f1410039	X	RINSE			14-JUN-2007 15:51	1.0					2	
040	f1410040	X	RINSE			14-JUN-2007 16:02	1.0					2	
041	f1410041	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 16:08	50.0	1.0			1	2	
042	f1410042	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 16:14	50.0	1.0			1	2	
043	f1410043	MSS	195241-003	126087	Filtra	14-JUN-2007 16:20	20.0	1.0	1		1	2	
044	f1410044	PDS	QC391445	126087	Filtra	14-JUN-2007 16:26	20.0	1.0			1	13 14 2	
045	f1410045	X	RINSE			14-JUN-2007 16:32	1.0					2	
046	f1410046	MSS	195241-003	126087	Filtra	14-JUN-2007 16:38	5.0	1.0	1		1	2	1:MG=34540.0
047	f1410047	SER	QC391444	126087	Filtra	14-JUN-2007 16:43	25.0	1.0	1	1	1	2	
048	f1410048	MS	QC391442	126087	Filtra	14-JUN-2007 16:49	5.0	1.0			1	2	1:MG=35860.0
049	f1410049	MSD	QC391443	126087	Filtra	14-JUN-2007 16:55	5.0	1.0			1	2	1:MG=35740.0
50	f1410050	X	RINSE			14-JUN-2007 17:01	1.0					2	
51	f1410051	X	RINSE			14-JUN-2007 17:07	1.0					2	
52	f1410052	X	RINSE			14-JUN-2007 17:13	1.0					2	
53	f1410053	CCV				14-JUN-2007 17:19	1.0	1.0			1	12 2	
54	f1410054	X	RINSE			14-JUN-2007 17:25	1.0					2	
55	f1410055	CCB				14-JUN-2007 17:31	1.0	1.0	1		1	2	
56	f1410056	X				14-JUN-2007 17:37	1.0					2	
57	f1410057	PDS	QC391445	126087	Filtra	14-JUN-2007 17:43	5.0	1.0	2		1	13 14 2	3:MG=42560.0
58	f1410058	MSS	195247-006	126087	Filtra	14-JUN-2007 17:48	5.0	1.0	1		1	2	1:NA=22760.0
59	f1410059	MS	QC391446	126087	Filtra	14-JUN-2007 17:54	5.0	1.0		1	1	2	2:NA=24440.0
60	f1410060	MSD	QC391447	126087	Filtra	14-JUN-2007 18:00	5.0	1.0			1	2	2:NA=23940.0
61	f1410061	SAMPLE	195241-002	126087	Filtra	14-JUN-2007 18:06	5.0	1.0	3		1	2	3:MG=90120.0
62	f1410062	SAMPLE	195241-004	126087	Filtra	14-JUN-2007 18:12	5.0	1.0			1	2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f1410063	SAMPLE	195241-005	126087	Filtra	14-JUN-2007 18:18	5.0	1.0	1		1	2	1:MN=236.800
064	f1410064	SAMPLE	195241-007	126087	Filtra	14-JUN-2007 18:24	5.0	1.0	3		1	2	3:MG=96860.0
065	f1410065	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 18:30	5.0	1.0	5		1	2	5:NA=37180.0
066	f1410066	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 18:35	5.0	1.0	4		1	2	4:NA=34400.0
067	f1410067	X	RINSE			14-JUN-2007 18:48	1.0					2	
068	f1410068	X	RINSE			14-JUN-2007 18:54	1.0					2	
069	f1410069	CCV				14-JUN-2007 19:00	1.0	1.0			1	12 2	
070	f1410070	X	RINSE			14-JUN-2007 19:07	1.0					2	
071	f1410071	CCB				14-JUN-2007 19:13	1.0	1.0			1	2	
072	f1410072	X				14-JUN-2007 19:19	1.0					2	
073	f1410073	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:25	5.0	1.0	1		1	2	1:NA=36760.0
074	f1410074	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:31	5.0	1.0	3		1	2	3:NA=35160.0
075	f1410075	SAMPLE	195247-001	126087	Filtra	14-JUN-2007 19:37	50.0	1.0	1		1	2	
076	f1410076	SAMPLE	195247-002	126087	Filtra	14-JUN-2007 19:43	50.0	1.0			1	2	
077	f1410077	SAMPLE	195247-001	126087	Water	14-JUN-2007 19:49	50.0	1.0			1	2	
078	f1410078	SAMPLE	195247-002	126087	Water	14-JUN-2007 19:55	50.0	1.0			1	2	
079	f1410079	X	RINSE			14-JUN-2007 20:01	1.0					2	
080	f1410080	X	RINSE			14-JUN-2007 20:07	1.0					2	
081	f1410081	CCV				14-JUN-2007 20:12	1.0	1.0			1	12 2	
082	f1410082	X	RINSE			14-JUN-2007 20:19	1.0					2	
083	f1410083	CCB				14-JUN-2007 20:25	1.0	1.0			1	2	
084	f1410084	X				14-JUN-2007 20:31	1.0					2	
085	f1410085	ICSA				14-JUN-2007 20:37	1.0	1.0			1	10 2	7:CA=268400
086	f1410086	ICSAB				14-JUN-2007 20:43	1.0	1.0			1	11 2	7:CA=290900
087	f1410087	X	RINSE			14-JUN-2007 20:49	1.0					2	
088	f1410088	X	RINSE			14-JUN-2007 20:55	1.0					2	
089	f1410089	X	RINSE			14-JUN-2007 21:01	1.0					2	
090	f1410090	X	RINSE			14-JUN-2007 21:07	1.0					2	
091	f1410091	BLANK	QC392093	126254	Filtra	14-JUN-2007 21:13	1.0	1.0			1	2	
092	f1410092	BS	QC392094	126254	Filtra	14-JUN-2007 21:18	1.0	1.0			1	2	
093	f1410093	BSD	QC392095	126254	Filtra	14-JUN-2007 21:26	1.0	1.0			1	2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f1410094	TUN				14-JUN-2007 21:33	1.0	1.0				1	
095	f1410095	X	RINSE			14-JUN-2007 21:41	1.0					2	
096	f1410096	X	RINSE			14-JUN-2007 21:47	1.0					2	
097	f1410097	MSS	195270-007	126254	Filtra	14-JUN-2007 21:52	5.0	1.0	1		1	2	1:NA=41300.0
098	f1410098	SER	QC392098	126254	Filtra	14-JUN-2007 21:58	25.0	1.0		1	1	2	
099	f1410099	MS	QC392096	126254	Filtra	14-JUN-2007 22:04	5.0	1.0			1	2	1:NA=45300.0
100	f1410100	MSD	QC392097	126254	Filtra	14-JUN-2007 22:10	5.0	1.0			1	2	1:NA=44500.0
101	f1410101	PDS	QC392099	126254	Filtra	14-JUN-2007 22:16	5.0	1.0	1		1	13 14 2	2:NA=49960.0
102	f1410102	X	RINSE			14-JUN-2007 22:22	1.0					2	
103	f1410103	X	RINSE			14-JUN-2007 22:28	1.0					2	
104	f1410104	CCV				14-JUN-2007 22:33	1.0	1.0			1	12 2	
105	f1410105	X	RINSE			14-JUN-2007 22:41	1.0					2	
106	f1410106	CCB				14-JUN-2007 22:47	1.0	1.0			1	2	
107	f1410107	X				14-JUN-2007 22:52	1.0					2	
108	f1410108	SAMPLE	195270-003	126254	Filtra	14-JUN-2007 22:58	5.0	1.0	1		1	2	1:NA=22900.0
109	f1410109	SAMPLE	195270-005	126254	Filtra	14-JUN-2007 23:04	5.0	1.0	1		1	2	1:NA=38520.0
110	f1410110	SAMPLE	195270-010	126254	Filtra	14-JUN-2007 23:10	5.0	1.0			1	2	
111	f1410111	SAMPLE	195270-012	126254	Water	14-JUN-2007 23:16	5.0	1.0			1	2	
112	f1410112	SAMPLE	195358-001	126254	Filtra	14-JUN-2007 23:22	5.0	1.0			1	2	
113	f1410113	SAMPLE	195358-002	126254	Filtra	14-JUN-2007 23:28	5.0	1.0	1		1	2	
114	f1410114	SAMPLE	195358-003	126254	Filtra	14-JUN-2007 23:34	5.0	1.0	1		1	2	
115	f1410115	SAMPLE	195358-004	126254	Filtra	14-JUN-2007 23:40	5.0	1.0	1		1	2	
116	f1410116	SAMPLE	195358-005	126254	Filtra	14-JUN-2007 23:46	5.0	1.0	1		1	2	
117	f1410117	SAMPLE	195358-006	126254	Filtra	14-JUN-2007 23:52	5.0	1.0			1	2	
118	f1410118	X	RINSE			14-JUN-2007 23:58	1.0					2	
119	f1410119	X	RINSE			15-JUN-2007 00:04	1.0					2	
120	f1410120	CCV				15-JUN-2007 00:09	1.0	1.0	2		1	12 2	
121	f1410121	X	RINSE			15-JUN-2007 00:16	1.0					2	
122	f1410122	CCB				15-JUN-2007 00:22	1.0	1.0			1	2	
123	f1410123	X				15-JUN-2007 00:28	1.0					2	
124	f1410124	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 00:34	5.0	1.0	1		1	2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

nalyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
125	f1410125	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 00:40	5.0	1.0	1		1	2	
126	f1410126	SAMPLE	195358-009	126254	Filtra	15-JUN-2007 00:46	5.0	1.0			1	2	
127	f1410127	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 00:52	5.0	1.0	3		1	2	2:NA=176700
128	f1410128	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 00:58	5.0	1.0			1	2	
129	f1410129	X	RINSE			15-JUN-2007 01:04	1.0					2	
130	f1410130	X	RINSE			15-JUN-2007 01:10	1.0					2	
131	f1410131	CCV				15-JUN-2007 01:15	1.0	1.0			1	12 2	
132	f1410132	X	RINSE			15-JUN-2007 01:23	1.0					2	
133	f1410133	CCB				15-JUN-2007 01:29	1.0	1.0			1	2	
134	f1410134	X				15-JUN-2007 01:35	1.0					2	
135	f1410135	ICSA				15-JUN-2007 01:40	1.0	1.0			1	10 2	7:CA=266000
136	f1410136	ICSAB				15-JUN-2007 01:46	1.0	1.0			1	11 2	7:CA=282800
137	f1410137	X	RINSE			15-JUN-2007 01:53	1.0					2	
138	f1410138	X	RINSE			15-JUN-2007 01:58	1.0					2	
139	f1410139	X	RINSE			15-JUN-2007 02:04	1.0					2	
140	f1410140	X	RINSE			15-JUN-2007 02:10	1.0					2	
141	f1410141	SAMPLE	195251-001	126205	Water	15-JUN-2007 02:16	10.0	1.0			1	2	
142	f1410142	SAMPLE	195251-006	126205	Water	15-JUN-2007 02:22	10.0	1.0			1	2	
143	f1410143	SAMPLE	195251-007	126205	Water	15-JUN-2007 02:28	10.0	1.0			1	2	
144	f1410144	SAMPLE	195337-001	126205	Filtra	15-JUN-2007 02:34	5.0	1.0	3		1	2	3:NA=221400
145	f1410145	SAMPLE	195337-002	126205	Filtra	15-JUN-2007 02:40	5.0	1.0	4		1	2	4:NA=490800
146	f1410146	SAMPLE	195337-003	126205	Filtra	15-JUN-2007 02:46	5.0	1.0	5		1	2	5:NA=654000
147	f1410147	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 02:52	5.0	1.0	2		1	2	
148	f1410148	SAMPLE	195285-013	126205	Filtra	15-JUN-2007 02:58	5.0	1.0			1	2	
149	f1410149	X	RINSE			15-JUN-2007 03:04	1.0					2	
150	f1410150	X	RINSE			15-JUN-2007 03:10	1.0					2	
151	f1410151	CCV				15-JUN-2007 03:16	1.0	1.0			1	12 2	
152	f1410152	X	RINSE			15-JUN-2007 03:23	1.0					2	
153	f1410153	CCB				15-JUN-2007 03:29	1.0	1.0			1	2	
154	f1410154	X				15-JUN-2007 03:35	1.0					2	
155	f1410155	SAMPLE	195285-014	126205	Filtra	15-JUN-2007 03:41	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897238321 Instrument: MET16 Agilent ICP-MS MET16 Begun: 14-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
156	f1410156	X	RINSE			15-JUN-2007 03:47	1.0			2	
157	f1410157	X	RINSE			15-JUN-2007 03:53	1.0			2	
158	f1410158	CCV				15-JUN-2007 03:59	1.0	1.0	1	12 2	
159	f1410159	X	RINSE			15-JUN-2007 04:06	1.0			2	
160	f1410160	CCB				15-JUN-2007 04:12	1.0	1.0	1	2	
161	f1410161	X				15-JUN-2007 04:18	1.0			2	
162	f1410162	ICSA				15-JUN-2007 04:24	1.0	1.0	1	10 2	7:CA=263600
163	f1410163	ICSAB				15-JUN-2007 04:30	1.0	1.0	1	11 2	7:CA=284400

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/15/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897239429001
Units : ug/L

Date : 15-JUN-2007 06:49
X Axis : R

Reviewer : ---

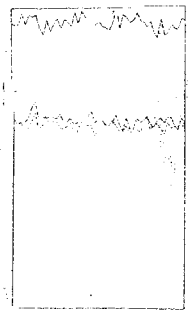
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f15g0005	897239429005		15-JUN-2007 06:55	S6414
L2	f15g0006	897239429006		15-JUN-2007 07:01	S6416
L3	f15g0007	897239429007		15-JUN-2007 07:07	S6417
L4	f15g0008	897239429008		15-JUN-2007 07:12	S6418
L5	f15g0009	897239429009		15-JUN-2007 07:18	S6412
L6	f15g0010	897239429010		15-JUN-2007 07:24	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8379	0.6912	0.6963	0.6420	0.6299	0.6117	BLNK	-0.8872	1.62499		0.6848	1.000	0.995	
Antimony	A	0.4972	0.3367	0.3225	0.2977	0.3237	0.3164	BLNK	-0.0110	3.14648		0.3490	1.000	0.995	
Barium	A	0.6126	0.1751	0.0963	0.1306	0.0689	0.0676	BLNK	-0.0123	14.7140		0.1918	0.997	0.995	
Beryllium	A	0.2633	0.2698	0.2792	0.2613	0.2655	0.2702	BLNK	-0.0028	3.71451		0.2682	1.000	0.995	
Cadmium	A	0.0807	0.0780	0.0771	0.0724	0.0730	0.0712	BLNK	-0.0091	13.9815		0.0754	1.000	0.995	
Calcium	A	0.1376	0.0463	0.0314	0.0206	0.0209	0.0201	BLNK	-34.647	49.5468		0.0461	1.000	0.995	
Lead	A	1.1822	0.9685	0.8699	0.8076	0.8424	0.8172	BLNK	-0.0227	1.21644		0.9146	1.000	0.995	
Magnesium	A	0.7133	0.5819	0.5965	0.5451	0.5306	0.5115	BLNK	-0.9436	1.94032		0.5798	1.000	0.995	
Molybdenum	A	0.3103	0.2155	0.2186	0.2057	0.2043	0.2198	BLNK	-0.0383	4.61652		0.2290	0.999	0.995	
Potassium	A	10.899	2.3764	1.5404	0.7748	0.6933	0.6702	BLNK	-123.90	1.49270		2.8257	1.000	0.995	
Silver	A	0.3842	0.3419	0.3447	0.3273	0.3551	0.3423	BLNK	-0.0048	2.90019		0.3492	1.000	0.995	
Thallium	A	0.9482	0.8386	0.8256	0.7752	0.8620	0.8419	BLNK	-0.0086	1.18243		0.8486	1.000	0.995	
Arsenic	E	0.6338	0.6460	0.6660	0.6233	0.6225	0.6046	BLNK	-0.0220	1.64441		0.6327	1.000	0.995	
Chromium	E	12.844	6.2294	6.0958	5.2339	5.2273	5.0080	BLNK	-0.0705	0.19802		6.7730	1.000	0.995	
Cobalt	E	11.177	10.044	9.9608	9.5281	9.5846	9.1156	BLNK	-0.0073	0.10858		9.9018	0.999	0.995	
Copper	E	128.66	25.626	23.781	9.1590	8.4346	7.9918	BLNK	-0.9798	0.12447		33.943	0.999	0.995	
Manganese	E	3.8162	2.1634	2.0131	1.8361	1.8215	1.7514	BLNK	-0.0200	0.56647		2.2336	1.000	0.995	
Nickel	E	11.799	3.2815	3.1075	2.7495	2.7111	2.5701	BLNK	-0.0544	0.38495		4.3698	0.999	0.995	
Sodium	E	5.3694	1.3433	0.9662	0.5862	0.5537	0.5221	BLNK	-68.857	1.90020		1.5568	0.999	0.995	
Vanadium	E	6.2827	4.3133	4.0415	3.7155	3.8125	3.6820	BLNK	-0.0646	0.26979		4.3079	1.000	0.995	
Zinc	E	22.601	4.0786	2.1071	1.0860	0.9304	0.8945	BLNK	-0.7877	1.11392		5.2830	1.000	0.995	
Iron	H	1.2092	0.9448	0.9430	0.8759	0.8672	0.8355	BLNK	-1.5779	1.18793		0.9459	1.000	0.995	
Selenium	H	0.1253	0.1268	0.1268	0.1221	0.1192	0.1154	BLNK	-0.0127	8.60551		0.1226	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	27	50.00	11	100.0	12	1000	4	10000	2	20000	-1
Antimony	A	0.100	45	0.500	4	1.000	0	10.00	-6	100.0	2	200.0	0
Barium	A	0.100	789	0.500	155	1.000	40	10.00	92	100.0	1	200.0	-1
Beryllium	A	0.100	-5	0.500	0	1.000	3	10.00	-3	100.0	-1	200.0	0
Cadmium	A	0.100	4	0.500	7	1.000	7	10.00	1	100.0	2	200.0	-1
Calcium	A	10.00	235	50.00	60	100.0	21	1000	-1	10000	3	20000	-1
Lead	A	0.100	21	0.500	13	1.000	4	10.00	-2	100.0	2	200.0	-1
Magnesium	A	10.00	29	50.00	11	100.0	15	1000	6	10000	3	20000	-1
Molybdenum	A	0.100	5	0.500	-8	1.000	-3	10.00	-5	100.0	-6	200.0	1
Potassium	A	10.00	288	50.00	7	100.0	6	1000	3	10000	2	20000	-1
Silver	A	0.100	7	0.500	-2	1.000	-1	10.00	-5	100.0	3	200.0	-1
Thallium	A	0.050	-5	0.250	-4	0.500	-4	5.000	-9	50.00	2	100.0	0
Arsenic	E	0.100	-18	0.500	2	1.000	7	10.00	2	100.0	2	200.0	-1
Chromium	E	0.100	84	0.500	9	1.000	14	10.00	3	100.0	3	200.0	-1
Cobalt	E	0.100	14	0.500	8	1.000	7	10.00	3	100.0	4	200.0	-1
Copper	E	0.100	522	0.500	23	1.000	98	10.00	4	100.0	4	200.0	-1
Manganese	E	0.100	96	0.500	19	1.000	12	10.00	4	100.0	3	200.0	-1
Nickel	E	0.100	300	0.500	15	1.000	14	10.00	5	100.0	4	200.0	-1
Sodium	E	10.00	232	50.00	18	100.0	15	1000	5	10000	5	20000	-1
Vanadium	E	0.100	5	0.500	3	1.000	3	10.00	0	100.0	3	200.0	-1
Zinc	E	0.100	1630	0.500	197	1.000	56	10.00	13	100.0	3	200.0	-1
Iron	H	10.00	28	50.00	9	100.0	10	1000	4	10000	3	20000	-1
Selenium	H	0.100	-5	0.500	7	1.000	8	10.00	5	100.0	3	200.0	-1

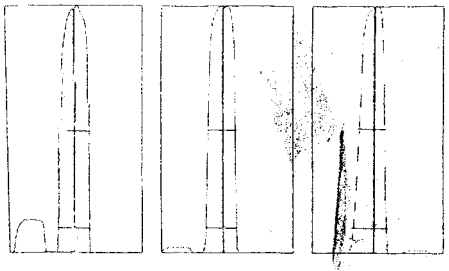
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19010.0	18934.6	2.44	2.60
89	50,000	30214.0	30949.4	2.80	2.60
205	50,000	29603.0	29907.4	2.55	7.50

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.968%
Doubly Charged: 70/140 1.953%



m/z:	7	89	205
Height:	18,827	30,950	29,729
Axis:	7.00	88.95	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.7500	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.68 V
Smpl Depth	:	9 mm
Torch-H	:	0.6 mm
Torch-V	:	0.3 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-170 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-2 V
Cell Entrance	:	-30 V
QP Focus	:	7 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	126
AMU Offset	:	126
Axis Gain	:	0.9997
Axis Offset	:	0.04
QP Bias	:	-1 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1670 V
Pulse HV	:	1070 V

===Reaction Cell===

Reaction Mode	:	OFF
H2 Gas	:	0 mL/min
He Gas	:	0 mL/min
Optional Gas	:	--- %

Tune File : he.u

He Gas:	6	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	5.9	49.06
59	3512.0	3.09
89	2282.6	3.29

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	2881.9	3.58
78	0.2	179.76
89	27467.1	2.31

Integration Time: 0.1000sec

Generated : Jun 15, 2007 05:58:54
Printed : Jun 15, 2007 06:00:22

P/A Factor Tuning Report

Acquired:Jun 15 2007 06:10 am

Mass[amu]	Element	P/A Factor
6	Li	0.062565
7	(Li)	0.066124
9	Be	0.071729
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.088556
45	Sc	0.087082
51	V	0.082241
52	Cr	0.091161
55	Mn	0.093202
56	Fe	Sensitivity too high
59	Co	0.096359
60	Ni	Sensitivity too low
63	Cu	0.098927
65	Cu	0.101419
66	Zn	Sensitivity too low
72	Ge	0.099373
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098348
98	Mo	0.098625
99	(Ru)	Sensitivity too low
107	Ag	0.106205
111	Cd	Sensitivity too low
115	In	0.104819
118	(In)	0.104631
121	Sb	0.104783
137	Ba	Sensitivity too low
159	Tb	0.108935
205	Tl	0.113946
206	(Pb)	0.113879
207	(Pb)	0.113809
208	Pb	0.114053
209	Bi	0.113471

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

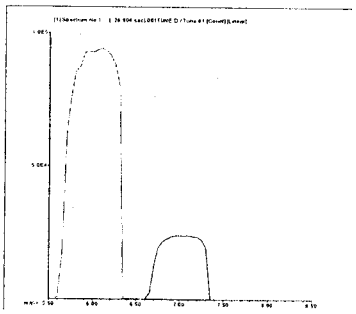
00361

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F15g00.B\001TUNE.D
Date Acquired:	Jun 15 2007 06:29 am
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.47	5.00	
59 Co	0.47	5.00	
115 In	1.69	5.00	
205 Tl	0.32	5.00	



7 Li

Mass Calib.

Actual: 7.00

Required: 6.90 - 7.10

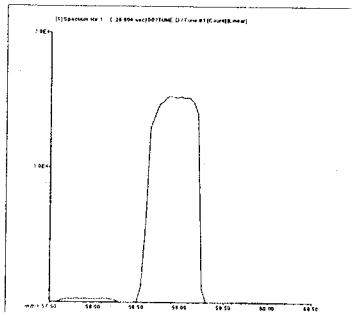
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 58.95

Required: 58.90 - 59.10

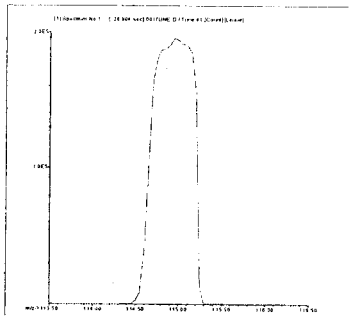
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

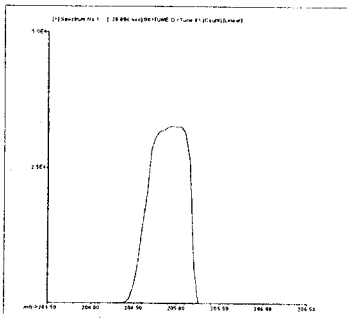
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:

00363

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004C
Date Acquired:	Jun 15 2007 06:47 am
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Jun 15 2007 06:51 am
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	947755.13	A	4878.00	0.51
7	(Li)		P		
9	Be	14.44	P	10.18	70.48
23	Na	11762.49	P	236.60	2.01
24	Mg	9966.74	P	259.30	2.60
27	Al	11188.76	P	255.20	2.28
39	K	1701053.00	A	11670.00	0.69
44	Ca	14329.16	P	375.20	2.62
45	Sc	421162.09	P	4015.00	0.95
45	Sc	16229.98	P	243.20	1.50
45	Sc	1024786.00	A	9004.00	0.88
51	V	77.78	P	4.84	6.23
52	Cr	115.56	P	8.68	7.51
55	Mn	11.48	P	1.70	14.78
56	Fe	11191.89	P	600.50	5.37
59	Co	21.85	P	1.70	7.77
60	Ni	45.93	P	3.57	7.78
63	Cu	2342.05	P	81.38	3.47
65	Cu	1065.60	P	25.63	2.41
66	Zn	210.37	P	14.92	7.09
72	Ge	105465.50	P	1052.00	1.00
72	Ge	14880.62	P	152.60	1.03
75	As	4.00	P	1.76	44.10
78	Se	3.11	P	1.02	32.72
89	Y	1534317.00	A	31420.00	2.05
98	Mo	254.46	P	61.50	24.17
107	Ag	53.34	P	10.00	18.75
111	Cd	21.11	P	1.93	9.12
115	In	1615942.00	A	16590.00	1.03
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	113.34	P	10.00	8.82
137	Ba	44.45	P	5.09	11.46
159	Tb	2647564.00	A	44140.00	1.67
205	Tl	277.79	P	10.18	3.66
208	Pb	988.94	P	25.89	2.62
209	Bi	1910108.00	A	31210.00	1.63

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 15 2007 06:53 am
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:51 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	943913.69	A	10460.00	1.11
7	(Li)		P		
9	Be	496.69	P	45.10	9.08
23	Na	17573.51	P	104.90	0.60
24	Mg	143769.09	P	381.70	0.27
27	Al	168870.50	P	2292.00	1.36
39	K	2196536.00	A	15880.00	0.72
44	Ca	27721.76	P	181.20	0.65
45	Sc	423492.59	P	719.90	0.17
45	Sc	16368.64	P	296.20	1.81
45	Sc	1007752.00	A	8703.00	0.86
51	V	205.56	P	6.19	3.01
52	Cr	421.13	P	65.68	15.60
55	Mn	124.82	P	7.23	5.79
56	Fe	102414.10	P	543.30	0.53
59	Co	365.93	P	9.96	2.72
60	Ni	386.31	P	25.59	6.62
63	Cu	3835.33	P	58.60	1.53
65	Cu	1834.20	P	76.69	4.18
66	Zn	673.73	P	0.64	0.10
72	Ge	104706.60	P	642.20	0.61
72	Ge	14904.71	P	35.97	0.24
75	As	18.89	P	2.69	14.26
78	Se	26.22	P	4.29	16.35
89	Y	1516639.00	A	10060.00	0.66
98	Mo	941.17	P	16.44	1.75
99	(Ru)	2.22	P	1.93	86.62
107	Ag	1232.31	P	51.68	4.19
111	Cd	258.90	P	12.62	4.87
115	In	1604256.00	A	17620.00	1.10
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1595.70	P	100.10	6.27
137	Ba	3203.79	P	67.43	2.10
159	Tb	2615250.00	A	16420.00	0.63
205	Tl	1795.74	P	90.21	5.02
208	Pb	6182.97	P	223.70	3.62
209	Bi	1893869.00	A	8900.00	0.47

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	943913.75	1.11	947755.06	99.6	80 - 120	
45	Sc	423492.59	0.17	421162.13	100.6	80 - 120	
45	Sc	16368.65	1.81	16229.98	100.9	80 - 120	
45	Sc	1007751.80	0.86	1024785.60	98.3	80 - 120	
72	Ge	104706.61	0.61	105465.45	99.3	80 - 120	
72	Ge	14904.71	0.24	14880.62	100.2	80 - 120	
89	Y	1516638.90	0.66	1534317.40	98.8	80 - 120	
115	In	1604256.00	1.10	1615942.40	99.3	80 - 120	
159	Tb	2615250.00	0.63	2647563.80	98.8	80 - 120	
209	Bi	1893869.40	0.47	1910108.10	99.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 15 2007 06:59 am
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:57 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	935565.50	A	5843.00	0.62
7	(Li)		P		
9	Be	2523.61	P	120.40	4.77
23	Na	21363.79	P	213.40	1.00
24	Mg	590107.88	P	1293.00	0.22
27	Al	701022.13	P	3415.00	0.49
39	K	2410063.00	A	4210.00	0.17
44	Ca	46952.11	P	688.00	1.47
45	Sc	419219.81	P	2217.00	0.53
45	Sc	15904.46	P	102.60	0.65
45	Sc	1014195.00	A	4754.00	0.47
51	V	685.95	P	28.57	4.17
52	Cr	990.78	P	20.04	2.02
55	Mn	344.08	P	2.31	0.67
56	Fe	396080.69	P	242.30	0.06
59	Co	1597.51	P	39.67	2.48
60	Ni	521.87	P	17.01	3.26
63	Cu	3746.78	P	44.70	1.19
65	Cu	1764.20	P	32.86	1.86
66	Zn	596.31	P	17.37	2.91
72	Ge	104089.20	P	246.90	0.24
72	Ge	14621.12	P	41.27	0.28
75	As	94.45	P	2.78	2.94
78	Se	132.00	P	8.67	6.57
89	Y	1524579.00	A	2253.00	0.15
98	Mo	3286.02	P	188.60	5.74
99	(Ru)	2.22	P	3.85	173.20
107	Ag	5410.05	P	132.70	2.45
111	Cd	1234.54	P	97.90	7.93
115	In	1582749.00	A	9463.00	0.60
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	5328.92	P	47.91	0.90
137	Ba	4576.43	P	82.26	1.80
159	Tb	2613691.00	A	15110.00	0.58
205	Tl	7898.03	P	83.73	1.06
208	Pb	25311.96	P	130.70	0.52
209	Bi	1883717.00	A	9275.00	0.49

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	935565.50	0.62	947755.06	98.7	80 - 120	
45	Sc	419219.84	0.53	421162.13	99.5	80 - 120	
45	Sc	15904.46	0.65	16229.98	98.0	80 - 120	
45	Sc	1014195.30	0.47	1024785.60	99.0	80 - 120	
72	Ge	104089.20	0.24	105465.45	98.7	80 - 120	
72	Ge	14621.13	0.28	14880.62	98.3	80 - 120	
89	Y	1524578.90	0.15	1534317.40	99.4	80 - 120	
115	In	1582749.10	0.60	1615942.40	97.9	80 - 120	
159	Tb	2613691.00	0.58	2647563.80	98.7	80 - 120	
209	Bi	1883717.00	0.49	1910108.10	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 15 2007 07:04 am
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:03 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	942098.50	A	8795.00	0.93
7	(Li)		P		
9	Be	5259.92	P	173.60	3.30
23	Na	30577.95	P	54.38	0.18
24	Mg	1206511.00	A	11400.00	0.94
27	Al	1408348.00	A	10220.00	0.73
39	K	3115731.00	A	8164.00	0.26
44	Ca	63469.97	P	699.90	1.10
45	Sc	420489.09	P	1528.00	0.36
45	Sc	15823.26	P	42.51	0.27
45	Sc	1011408.00	A	12040.00	1.19
51	V	1278.96	P	17.10	1.34
52	Cr	1929.03	P	38.89	2.02
55	Mn	637.06	P	14.33	2.25
56	Fe	793059.00	P	3320.00	0.42
59	Co	3152.20	P	31.46	1.00
60	Ni	983.37	P	14.70	1.49
63	Cu	6833.41	P	48.01	0.70
65	Cu	3375.22	P	162.30	4.81
66	Zn	605.58	P	15.44	2.55
72	Ge	104516.00	P	526.00	0.50
72	Ge	14368.27	P	192.40	1.34
75	As	191.34	P	4.67	2.44
78	Se	265.12	P	5.59	2.11
89	Y	1521320.00	A	9324.00	0.61
98	Mo	6651.69	P	229.30	3.45
99	(Ru)	6.67	P	3.33	49.99
107	Ag	10879.88	P	328.50	3.02
111	Cd	2434.73	P	87.97	3.61
115	In	1577913.00	A	10710.00	0.68
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	10178.22	P	105.60	1.04
137	Ba	5038.80	P	130.40	2.59
159	Tb	2617613.00	A	11730.00	0.45
205	Tl	15564.65	P	322.70	2.07
208	Pb	45541.71	P	575.90	1.26
209	Bi	1885456.00	A	15510.00	0.82

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	942098.50	0.93	947755.06	99.4	80 - 120	
45	Sc	420489.13	0.36	421162.13	99.8	80 - 120	
45	Sc	15823.26	0.27	16229.98	97.5	80 - 120	
45	Sc	1011408.50	1.19	1024785.60	98.7	80 - 120	
72	Ge	104515.95	0.50	105465.45	99.1	80 - 120	
72	Ge	14368.27	1.34	14880.62	96.6	80 - 120	
89	Y	1521320.10	0.61	1534317.40	99.2	80 - 120	
115	In	1577912.60	0.68	1615942.40	97.6	80 - 120	
159	Tb	2617612.80	0.45	2647563.80	98.9	80 - 120	
209	Bi	1885455.60	0.82	1910108.10	98.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 15 2007 07:10 am
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:08 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	951113.00	A	6878.00	0.72
7	(Li)		P		
9	Be	49699.53	P	304.20	0.61
23	Na	188874.41	P	1504.00	0.80
24	Mg	11052280.00	A	89720.00	0.81
27	Al	13016580.00	A	98690.00	0.76
39	K	15708350.00	A	48390.00	0.31
44	Ca	418282.50	P	3273.00	0.78
45	Sc	416331.59	P	1506.00	0.36
45	Sc	16109.86	P	175.20	1.09
45	Sc	1013750.00	A	7365.00	0.73
51	V	11971.33	P	141.30	1.18
52	Cr	16863.27	P	181.80	1.08
55	Mn	5914.88	P	127.30	2.15
56	Fe	7293637.00	A	93150.00	1.28
59	Co	30698.50	P	249.40	0.81
60	Ni	8858.54	P	72.86	0.82
63	Cu	26973.89	P	258.30	0.96
65	Cu	13286.16	P	246.90	1.86
66	Zn	3198.51	P	14.33	0.45
72	Ge	104390.60	P	938.90	0.90
72	Ge	14726.03	P	125.60	0.85
75	As	1835.68	P	13.87	0.76
78	Se	2548.23	P	12.06	0.47
89	Y	1526105.00	A	1046.00	0.07
98	Mo	62786.71	P	263.50	0.42
99	(Ru)	7.78	P	7.70	98.97
107	Ag	104639.20	P	1218.00	1.16
111	Cd	23156.35	P	144.00	0.62
115	In	1598660.00	A	8575.00	0.54
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	95191.68	P	1283.00	1.35
137	Ba	68708.61	P	684.30	1.00
159	Tb	2631355.00	A	26910.00	1.02
205	Tl	147126.80	P	1274.00	0.87
208	Pb	424982.31	P	2413.00	0.57
209	Bi	1898198.00	A	30800.00	1.62

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6	Li	951113.00	0.72	947755.06	100.4	80 -	120	
45	Sc	416331.63	0.36	421162.13	98.9	80 -	120	
45	Sc	16109.87	1.09	16229.98	99.3	80 -	120	
45	Sc	1013750.30	0.73	1024785.60	98.9	80 -	120	
72	Ge	104390.56	0.90	105465.45	99.0	80 -	120	
72	Ge	14726.03	0.85	14880.62	99.0	80 -	120	
89	Y	1526105.40	0.07	1534317.40	99.5	80 -	120	
115	In	1598660.10	0.54	1615942.40	98.9	80 -	120	
159	Tb	2631355.30	1.02	2647563.80	99.4	80 -	120	
209	Bi	1898198.50	1.62	1910108.10	99.4	80 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 15 2007 07:16 am
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:14 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	936703.50	A	13980.00	1.49
7 (Li)		P		
9 Be	497381.91	P	1312.00	0.26
23 Na	1743709.00	A	5873.00	0.34
24 Mg	############	A	438900.00	0.40
27 Al	############	A	590200.00	0.45
39 K	############	A	390900.00	0.27
44 Ca	4346167.00	A	22000.00	0.51
45 Sc	414051.91	P	2356.00	0.57
45 Sc	15746.86	P	145.50	0.92
45 Sc	1039135.00	A	9048.00	0.87
51 V	120064.20	P	319.90	0.27
52 Cr	164626.00	P	1702.00	1.03
55 Mn	57363.88	P	501.30	0.87
56 Fe	71811048.00	A	586200.00	0.82
59 Co	301848.59	P	2289.00	0.76
60 Ni	85380.16	P	424.00	0.50
63 Cu	244811.20	P	1637.00	0.67
65 Cu	121538.20	P	869.10	0.72
66 Zn	27006.24	P	258.00	0.96
72 Ge	103637.00	P	416.20	0.40
72 Ge	14512.86	P	160.20	1.10
75 As	18067.30	P	184.60	1.02
78 Se	24709.22	P	183.70	0.74
89 Y	1548801.00	A	4534.00	0.29
98 Mo	632713.19	P	2582.00	0.41
99 (Ru)	24.45	P	1.93	7.87
107 Ag	1122046.00	A	6038.00	0.54
111 Cd	230635.00	P	851.20	0.37
115 In	1579861.00	A	15280.00	0.97
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	1022827.00	A	17250.00	1.69
137 Ba	361164.81	P	383.10	0.11
159 Tb	2621445.00	A	16840.00	0.64
205 Tl	1590165.00	A	3515.00	0.22
208 Pb	4416626.00	A	16620.00	0.38
209 Bi	1844639.00	A	4617.00	0.25

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	936703.50	1.49	947755.06	98.8	80 - 120	
45 Sc	414051.91	0.57	421162.13	98.3	80 - 120	
45 Sc	15746.86	0.92	16229.98	97.0	80 - 120	
45 Sc	1039135.20	0.87	1024785.60	101.4	80 - 120	
72 Ge	103636.99	0.40	105465.45	98.3	80 - 120	
72 Ge	14512.86	1.10	14880.62	97.5	80 - 120	
89 Y	1548800.90	0.29	1534317.40	100.9	80 - 120	
115 In	1579860.60	0.97	1615942.40	97.8	80 - 120	
159 Tb	2621444.50	0.64	2647563.80	99.0	80 - 120	
209 Bi	1844638.80	0.25	1910108.10	96.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 15 2007 07:22 am
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:20 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	945207.50	A	9548.00	1.01
7	(Li)		P		
9	Be	1021367.00	A	7885.00	0.77
23	Na	3380218.00	A	68720.00	2.03
24	Mg	###########	A	1148000.00	0.53
27	Al	###########	A	887300.00	0.34
39	K	###########	A	1527000.00	0.54
44	Ca	8536508.00	A	77290.00	0.91
45	Sc	416098.19	P	1783.00	0.43
45	Sc	16186.22	P	196.30	1.21
45	Sc	1064233.00	A	5155.00	0.48
51	V	238387.59	P	2691.00	1.13
52	Cr	324230.31	P	2285.00	0.70
55	Mn	113389.10	P	1127.00	0.99
56	Fe	###########	A	323700.00	0.23
59	Co	590176.38	P	5968.00	1.01
60	Ni	166400.09	P	1742.00	1.05
63	Cu	471635.31	P	3703.00	0.79
65	Cu	234991.70	P	1836.00	0.78
66	Zn	52793.06	P	527.70	1.00
72	Ge	103290.10	P	153.10	0.15
72	Ge	14755.69	P	257.90	1.75
75	As	35682.99	P	481.50	1.35
78	Se	47699.48	P	279.70	0.59
89	Y	1570082.00	A	4470.00	0.28
98	Mo	1380357.00	A	9603.00	0.70
99	(Ru)	32.22	P	8.39	26.03
107	Ag	2183102.00	A	20030.00	0.92
111	Cd	453833.41	P	2867.00	0.63
115	In	1594708.00	A	29540.00	1.85
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2018129.00	A	14570.00	0.72
137	Ba	712928.13	P	4885.00	0.69
159	Tb	2637372.00	A	17010.00	0.64
205	Tl	3058645.00	A	25580.00	0.84
208	Pb	8620622.00	A	41100.00	0.48
209	Bi	1816467.00	A	12510.00	0.69

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	945207.50	1.01	947755.06	99.7	80 - 120	
45	Sc	416098.25	0.43	421162.13	98.8	80 - 120	
45	Sc	16186.22	1.21	16229.98	99.7	80 - 120	
45	Sc	1064232.80	0.48	1024785.60	103.8	80 - 120	
72	Ge	103290.11	0.15	105465.45	97.9	80 - 120	
72	Ge	14755.69	1.75	14880.62	99.2	80 - 120	
89	Y	1570082.10	0.28	1534317.40	102.3	80 - 120	
115	In	1594707.80	1.85	1615942.40	98.7	80 - 120	
159	Tb	2637372.00	0.64	2647563.80	99.6	80 - 120	
209	Bi	1816466.90	0.69	1910108.10	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429012 File : f15g0012 Time : 15-JUN-2007 07:38
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6848	0.6310	10000	10250	ug/L	3	10	
Antimony	A	0.3490	0.3272	100.0	102.9	ug/L	3	10	
Barium	A	0.1918	0.0695	100.0	102.3	ug/L	2	10	
Beryllium	A	0.2682	0.2693	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0754	0.0736	100.0	102.9	ug/L	3	10	
Calcium	A	0.0461	0.0212	10000	10450	ug/L	5	10	
Lead	A	0.9146	0.8028	100.0	97.63	ug/L	-2	10	
Magnesium	A	0.5798	0.5293	10000	10270	ug/L	3	10	
Molybdenum	A	0.2290	0.2060	100.0	95.08	ug/L	-5	10	
Potassium	A	2.8257	0.7029	10000	10370	ug/L	4	10	
Silver	A	0.3492	0.3573	100.0	103.6	ug/L	4	10	
Thallium	A	0.8486	0.8470	50.00	50.07	ug/L	0	10	
Arsenic	E	0.6327	0.6332	100.0	104.1	ug/L	4	10	
Chromium	E	6.7730	5.2392	100.0	103.7	ug/L	4	10	
Cobalt	E	9.9018	9.5626	100.0	103.8	ug/L	4	10	
Copper	E	33.943	8.4931	100.0	104.7	ug/L	5	10	
Manganese	E	2.2336	1.8159	100.0	102.8	ug/L	3	10	
Nickel	E	4.3698	2.7099	100.0	104.3	ug/L	4	10	
Sodium	E	1.5568	0.5459	10000	10300	ug/L	3	10	
Vanadium	E	4.3079	3.8212	100.0	103.0	ug/L	3	10	
Zinc	E	5.2830	0.9410	100.0	104.0	ug/L	4	10	
Iron	H	0.9459	0.8699	10000	10330	ug/L	3	10	
Selenium	H	0.1226	0.1198	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	967922	2.13
Scandium	A	1024786	1081574	5.54
Scandium	E	16230	16326	0.59
Scandium	H	421162	421411	0.06
Germanium	H	105466	105444	-0.02
Germanium	E	14881	14851	-0.20
Indium	A	1615942	1660625	2.77
Bismuth	A	1910108	1893588	-0.86
Yttrium	A	1534317	1620583	5.62
Terbium	A	2647564	2741722	3.56

897239429012

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429014 File : f15g0014 Time : 15-JUN-2007 07:51
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.006037]	0.1000	0.003333	ug/L	!ib
Barium	A	ND	0.1000	0.002418	ug/L	
Beryllium	A	[0.005327]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01143]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.006499]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	960938	1.39
Scandium	A	1024786	1055567	3.00
Scandium	E	16230	15956	-1.69
Scandium	H	421162	415756	-1.28
Germanium	H	105466	104447	-0.97
Germanium	E	14881	14746	-0.90
Indium	A	1615942	1648089	1.99
Bismuth	A	1910108	1921327	0.59
Yttrium	A	1534317	1569938	2.32
Terbium	A	2647564	2674692	1.02

!=warning ib=instrument blank

897239429014

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429017 File : f15g0017 Time : 15-JUN-2007 08:09
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05807]	0.1000	ug/L	
Barium	A	0.9493	0.1000	ug/L	
Beryllium	A	[0.02214]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4012	0.1000	ug/L	
Silver	A	0.1871	0.1000	ug/L	
Thallium	A	[0.03976]	0.05000	ug/L	
Arsenic	E	0.2114	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1931	0.1000	ug/L	
Copper	E	0.9288	0.1000	ug/L	
Manganese	E	0.5332	0.1000	ug/L	
Nickel	E	1.057	0.1000	ug/L	
Vanadium	E	[0.02332]	0.1000	ug/L	
Zinc	E	2.038	0.1000	ug/L	
Selenium	H	[0.05829]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91800	ug/L	92
Calcium	A	300000	277700	ug/L	93
Magnesium	A	100000	89350	ug/L	89
Molybdenum	A	2000	1789	ug/L	89
Potassium	A	100000	92090	ug/L	92
Sodium	E	250000	218800	ug/L	88
Iron	H	250000	219800	ug/L	88

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	833330	-12.07
Scandium	A	1024786	1031697	0.67
Scandium	E	16230	16359	0.79
Scandium	H	421162	407246	-3.30
Germanium	H	105466	97058	-7.97
Germanium	E	14881	14491	-2.62
Indium	A	1615942	1507874	-6.69
Bismuth	A	1910108	1645288	-13.86
Yttrium	A	1534317	1572313	2.48
Terbium	A	2647564	2615635	-1.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429018 File : f15g0018 Time : 15-JUN-2007 08:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96270	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	293900	ug/L	-2		
Magnesium	A	100000	93820	ug/L	-6		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97520	ug/L	-2		
Silver	A	50.00	44.80	ug/L	-10	20	
Arsenic	E	100.0	104.5	ug/L	5	20	
Chromium	E	200.0	195.5	ug/L	-2	20	
Cobalt	E	200.0	184.9	ug/L	-8	20	
Copper	E	200.0	180.6	ug/L	-10	20	
Manganese	E	200.0	196.4	ug/L	-2	20	
Nickel	E	200.0	181.2	ug/L	-9	20	
Sodium	E	250000	232400	ug/L	-7		
Vanadium	E	200.0	198.4	ug/L	-1	20	
Zinc	E	100.0	93.81	ug/L	-6	20	
Iron	H	250000	237400	ug/L	-5		
Selenium	H	100.0	104.3	ug/L	4	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	400547	-4.89
Scandium	A	1024786	1032868	0.79
Scandium	E	16230	16221	-0.06
Germanium	H	105466	95805	-9.16
Germanium	E	14881	14323	-3.75
Indium	A	1615942	1499416	-7.21
Yttrium	A	1534317	1555187	1.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429033 File : f15g0033 Time : 15-JUN-2007 09:43
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6098	10000	9909	ug/L	-1	10	
Antimony	A	0.3490	0.3195	100.0	100.5	ug/L	1	10	
Barium	A	0.1918	0.0682	100.0	100.4	ug/L	0	10	
Beryllium	A	0.2682	0.2603	100.0	96.70	ug/L	-3	10	
Cadmium	A	0.0754	0.0713	100.0	99.73	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7907	100.0	96.16	ug/L	-4	10	
Magnesium	A	0.5798	0.5137	10000	9967	ug/L	0	10	
Molybdenum	A	0.2290	0.2016	100.0	93.05	ug/L	-7	10	
Potassium	A	2.8257	0.6881	10000	10150	ug/L	2	10	
Silver	A	0.3492	0.3506	100.0	101.7	ug/L	2	10	
Thallium	A	0.8486	0.8269	50.00	48.88	ug/L	-2	10	
Arsenic	E	0.6327	0.6115	100.0	100.5	ug/L	1	10	
Chromium	E	6.7730	5.0698	100.0	100.3	ug/L	0	10	
Cobalt	E	9.9018	9.3019	100.0	101.0	ug/L	1	10	
Copper	E	33.943	8.0891	100.0	99.71	ug/L	0	10	
Manganese	E	2.2336	1.7638	100.0	99.89	ug/L	0	10	
Nickel	E	4.3698	2.6189	100.0	100.8	ug/L	1	10	
Sodium	E	1.5568	0.5324	10000	10050	ug/L	1	10	
Vanadium	E	4.3079	3.6857	100.0	99.37	ug/L	-1	10	
Zinc	E	5.2830	0.9007	100.0	99.54	ug/L	0	10	
Iron	H	0.9459	0.8588	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1172	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	943519	-0.45
Scandium	A	1024786	1059042	3.34
Scandium	E	16230	15887	-2.11
Scandium	H	421162	403931	-4.09
Germanium	H	105466	101462	-3.80
Germanium	E	14881	14629	-1.69
Indium	A	1615942	1632221	1.01
Bismuth	A	1910108	1884026	-1.37
Yttrium	A	1534317	1590028	3.63
Terbium	A	2647564	2695620	1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429035 File : f15g0035 Time : 15-JUN-2007 09:56
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007591]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.002789]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.002456]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.077]	10.00	2.807	ug/L	!ib
Silver	A	[0.002661]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	933251	-1.53
Scandium	A	1024786	1034023	0.90
Scandium	E	16230	15841	-2.40
Scandium	H	421162	406728	-3.43
Germanium	H	105466	102698	-2.62
Germanium	E	14881	14617	-1.77
Indium	A	1615942	1623222	0.45
Bismuth	A	1910108	1919394	0.49
Yttrium	A	1534317	1559025	1.61
Terbium	A	2647564	2648690	0.04

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429045 File : f15g0045 Time : 15-JUN-2007 10:56
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6166	10000	10020	ug/L	0	10	
Antimony	A	0.3490	0.3230	100.0	101.6	ug/L	2	10	
Barium	A	0.1918	0.0696	100.0	102.4	ug/L	2	10	
Beryllium	A	0.2682	0.2629	100.0	97.67	ug/L	-2	10	
Cadmium	A	0.0754	0.0725	100.0	101.3	ug/L	1	10	
Calcium	A	0.0461	0.0206	10000	10150	ug/L	2	10	
Lead	A	0.9146	0.8044	100.0	97.83	ug/L	-2	10	
Magnesium	A	0.5798	0.5176	10000	10040	ug/L	0	10	
Molybdenum	A	0.2290	0.2035	100.0	93.89	ug/L	-6	10	
Potassium	A	2.8257	0.6877	10000	10140	ug/L	1	10	
Silver	A	0.3492	0.3525	100.0	102.2	ug/L	2	10	
Thallium	A	0.8486	0.8271	50.00	48.89	ug/L	-2	10	
Arsenic	E	0.6327	0.6130	100.0	100.8	ug/L	1	10	
Chromium	E	6.7730	5.1279	100.0	101.5	ug/L	2	10	
Cobalt	E	9.9018	9.3985	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.1387	100.0	100.3	ug/L	0	10	
Manganese	E	2.2336	1.7887	100.0	101.3	ug/L	1	10	
Nickel	E	4.3698	2.6676	100.0	102.6	ug/L	3	10	
Sodium	E	1.5568	0.5310	10000	10020	ug/L	0	10	
Vanadium	E	4.3079	3.7382	100.0	100.8	ug/L	1	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8586	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1165	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	934487	-1.40
Scandium	A	1024786	1063004	3.73
Scandium	E	16230	15864	-2.25
Scandium	H	421162	404281	-4.01
Germanium	H	105466	102563	-2.75
Germanium	E	14881	14742	-0.93
Indium	A	1615942	1619302	0.21
Bismuth	A	1910108	1879041	-1.63
Yttrium	A	1534317	1580255	2.99
Terbium	A	2647564	2668564	0.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429047 File : f15g0047 Time : 15-JUN-2007 11:09
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01909]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01110]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01066]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003660]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.009153]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01491]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.008529]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007801]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.005921]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01222]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	948985	0.13
Scandium	A	1024786	1043876	1.86
Scandium	E	16230	16221	-0.06
Scandium	H	421162	408840	-2.93
Germanium	H	105466	103450	-1.91
Germanium	E	14881	14837	-0.29
Indium	A	1615942	1653960	2.35
Bismuth	A	1910108	1938084	1.46
Yttrium	A	1534317	1584245	3.25
Terbium	A	2647564	2686653	1.48

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429048 File : f15g0048 Time : 15-JUN-2007 11:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06394]	0.1000	ug/L	
Barium	A	0.9719	0.1000	ug/L	
Beryllium	A	[0.02085]	0.1000	ug/L	
Cadmium	A	1.012	0.1000	ug/L	
Lead	A	0.3937	0.1000	ug/L	
Silver	A	0.1800	0.1000	ug/L	
Thallium	A	[0.04098]	0.05000	ug/L	
Arsenic	E	0.1921	0.1000	ug/L	
Chromium	E	1.274	0.1000	ug/L	
Cobalt	E	0.1922	0.1000	ug/L	
Copper	E	0.7230	0.1000	ug/L	
Manganese	E	0.5492	0.1000	ug/L	
Nickel	E	1.078	0.1000	ug/L	
Vanadium	E	[0.03037]	0.1000	ug/L	
Zinc	E	1.799	0.1000	ug/L	
Selenium	H	[0.06244]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88400	ug/L	88
Calcium	A	300000	271600	ug/L	91
Magnesium	A	100000	86320	ug/L	86
Molybdenum	A	2000	1763	ug/L	88
Potassium	A	100000	89860	ug/L	90
Sodium	E	250000	213700	ug/L	85
Iron	H	250000	218000	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	819244	-13.56
Scandium	A	1024786	1022985	-0.18
Scandium	E	16230	15939	-1.79
Scandium	H	421162	391144	-7.13
Germanium	H	105466	94163	-10.72
Germanium	E	14881	14399	-3.24
Indium	A	1615942	1488941	-7.86
Bismuth	A	1910108	1632734	-14.52
Yttrium	A	1534317	1551970	1.15
Terbium	A	2647564	2568593	-2.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429049 File : f15g0049 Time : 15-JUN-2007 11:22
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95630	ug/L	-4		
Cadmium	A	100.0	99.05	ug/L	-1	20	
Calcium	A	300000	292500	ug/L	-3		
Magnesium	A	100000	92350	ug/L	-8		
Molybdenum	A	2000	1899	ug/L	-5		
Potassium	A	100000	96770	ug/L	-3		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.8	ug/L	3	20	
Chromium	E	200.0	192.6	ug/L	-4	20	
Cobalt	E	200.0	183.0	ug/L	-9	20	
Copper	E	200.0	177.7	ug/L	-11	20	
Manganese	E	200.0	194.0	ug/L	-3	20	
Nickel	E	200.0	179.5	ug/L	-10	20	
Sodium	E	250000	227700	ug/L	-9		
Vanadium	E	200.0	196.2	ug/L	-2	20	
Zinc	E	100.0	91.68	ug/L	-8	20	
Iron	H	250000	233800	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	388111	-7.85
Scandium	A	1024786	1020361	-0.43
Scandium	E	16230	15921	-1.90
Germanium	H	105466	93472	-11.37
Germanium	E	14881	14160	-4.84
Indium	A	1615942	1494260	-7.53
Yttrium	A	1534317	1557119	1.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429064 File : f15g0064 Time : 15-JUN-2007 12:53
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6067	10000	9857	ug/L	-1	10	
Antimony	A	0.3490	0.3187	100.0	100.3	ug/L	0	10	
Barium	A	0.1918	0.0689	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2682	0.2643	100.0	98.16	ug/L	-2	10	
Cadmium	A	0.0754	0.0714	100.0	99.86	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7900	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5798	0.5090	10000	9875	ug/L	-1	10	
Molybdenum	A	0.2290	0.2004	100.0	92.46	ug/L	-8	10	
Potassium	A	2.8257	0.6833	10000	10080	ug/L	1	10	
Silver	A	0.3492	0.3473	100.0	100.7	ug/L	1	10	
Thallium	A	0.8486	0.8240	50.00	48.70	ug/L	-3	10	
Arsenic	E	0.6327	0.6054	100.0	99.53	ug/L	0	10	
Chromium	E	6.7730	5.1008	100.0	100.9	ug/L	1	10	
Cobalt	E	9.9018	9.3976	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.0601	100.0	99.34	ug/L	-1	10	
Manganese	E	2.2336	1.7925	100.0	101.5	ug/L	2	10	
Nickel	E	4.3698	2.6406	100.0	101.6	ug/L	2	10	
Sodium	E	1.5568	0.5268	10000	9941	ug/L	-1	10	
Vanadium	E	4.3079	3.7136	100.0	100.1	ug/L	0	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8506	10000	10100	ug/L	1	10	
Selenium	H	0.1226	0.1146	100.0	98.57	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	882516	-6.88
Scandium	A	1024786	1036331	1.13
Scandium	E	16230	15338	-5.50
Scandium	H	421162	397946	-5.51
Germanium	H	105466	101486	-3.77
Germanium	E	14881	14329	-3.71
Indium	A	1615942	1610510	-0.34
Bismuth	A	1910108	1859725	-2.64
Yttrium	A	1534317	1571749	2.44
Terbium	A	2647564	2657826	0.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429066 File : f15g0066 Time : 15-JUN-2007 13:06
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007189]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.04414]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003535]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.0009182]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[3.915]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.805]	10.00	2.807	ug/L	!ib
Silver	A	[0.002428]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02625]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.03048]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007873]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02333]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.278]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01371]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	907185	-4.28
Scandium	A	1024786	1033343	0.84
Scandium	E	16230	15543	-4.23
Scandium	H	421162	397223	-5.68
Germanium	H	105466	101314	-3.94
Germanium	E	14881	14354	-3.54
Indium	A	1615942	1630685	0.91
Bismuth	A	1910108	1911848	0.09
Yttrium	A	1534317	1552222	1.17
Terbium	A	2647564	2634997	-0.47

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897239429066

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429068 File : f15g0068 Time : 15-JUN-2007 13:26
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08010]	0.1000	ug/L	
Barium	A	0.9621	0.1000	ug/L	
Beryllium	A	[0.03524]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4273	0.1000	ug/L	
Silver	A	0.2021	0.1000	ug/L	
Thallium	A	[0.04024]	0.05000	ug/L	
Arsenic	E	0.1992	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1943	0.1000	ug/L	
Copper	E	0.7740	0.1000	ug/L	
Manganese	E	0.5744	0.1000	ug/L	
Nickel	E	1.090	0.1000	ug/L	
Vanadium	E	[0.02704]	0.1000	ug/L	
Zinc	E	1.921	0.1000	ug/L	
Selenium	H	[0.06355]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87430	ug/L	87
Calcium	A	300000	267700	ug/L	89
Magnesium	A	100000	84840	ug/L	85
Molybdenum	A	2000	1722	ug/L	86
Potassium	A	100000	88840	ug/L	89
Sodium	E	250000	211400	ug/L	85
Iron	H	250000	217400	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	804946	-15.07
Scandium	A	1024786	1030614	0.57
Scandium	E	16230	15630	-3.70
Scandium	H	421162	378792	-10.06
Germanium	H	105466	91524	-13.22
Germanium	E	14881	13944	-6.29
Indium	A	1615942	1503115	-6.98
Bismuth	A	1910108	1655542	-13.33
Yttrium	A	1534317	1570747	2.37
Terbium	A	2647564	2595953	-1.95

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429069 File : f15g0069 Time : 15-JUN-2007 13:32
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94140	ug/L	-6		
Cadmium	A	100.0	99.59	ug/L	0	20	
Calcium	A	300000	289200	ug/L	-4		
Magnesium	A	100000	91210	ug/L	-9		
Molybdenum	A	2000	1886	ug/L	-6		
Potassium	A	100000	96090	ug/L	-4		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.4	ug/L	2	20	
Chromium	E	200.0	189.2	ug/L	-5	20	
Cobalt	E	200.0	180.4	ug/L	-10	20	
Copper	E	200.0	174.9	ug/L	-13	20	
Manganese	E	200.0	190.8	ug/L	-5	20	
Nickel	E	200.0	176.6	ug/L	-12	20	
Sodium	E	250000	222400	ug/L	-11		
Vanadium	E	200.0	192.2	ug/L	-4	20	
Zinc	E	100.0	90.41	ug/L	-10	20	
Iron	H	250000	234300	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	382792	-9.11
Scandium	A	1024786	1005539	-1.88
Scandium	E	16230	15907	-1.99
Germanium	H	105466	93454	-11.39
Germanium	E	14881	14107	-5.20
Indium	A	1615942	1464578	-9.37
Yttrium	A	1534317	1529443	-0.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429084 File : f15g0084 Time : 15-JUN-2007 15:02
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6085	10000	9887	ug/L	-1	10	
Antimony	A	0.3490	0.3147	100.0	98.99	ug/L	-1	10	
Barium	A	0.1918	0.0691	100.0	101.6	ug/L	2	10	
Beryllium	A	0.2682	0.2630	100.0	97.68	ug/L	-2	10	
Cadmium	A	0.0754	0.0716	100.0	100.1	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10110	ug/L	1	10	
Lead	A	0.9146	0.7881	100.0	95.85	ug/L	-4	10	
Magnesium	A	0.5798	0.5055	10000	9808	ug/L	-2	10	
Molybdenum	A	0.2290	0.2010	100.0	92.75	ug/L	-7	10	
Potassium	A	2.8257	0.6882	10000	10150	ug/L	2	10	
Silver	A	0.3492	0.3444	100.0	99.88	ug/L	0	10	
Thallium	A	0.8486	0.8267	50.00	48.87	ug/L	-2	10	
Arsenic	E	0.6327	0.5975	100.0	98.23	ug/L	-2	10	
Chromium	E	6.7730	5.0257	100.0	99.45	ug/L	-1	10	
Cobalt	E	9.9018	9.2586	100.0	100.5	ug/L	1	10	
Copper	E	33.943	7.9619	100.0	98.12	ug/L	-2	10	
Manganese	E	2.2336	1.7630	100.0	99.85	ug/L	0	10	
Nickel	E	4.3698	2.6232	100.0	100.9	ug/L	1	10	
Sodium	E	1.5568	0.5188	10000	9789	ug/L	-2	10	
Vanadium	E	4.3079	3.6576	100.0	98.61	ug/L	-1	10	
Zinc	E	5.2830	0.8869	100.0	98.01	ug/L	-2	10	
Iron	H	0.9459	0.8590	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1145	100.0	98.52	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	859558	-9.31
Scandium	A	1024786	1018025	-0.66
Scandium	E	16230	15156	-6.62
Scandium	H	421162	385710	-8.42
Germanium	H	105466	98385	-6.71
Germanium	E	14881	14075	-5.41
Indium	A	1615942	1587087	-1.79
Bismuth	A	1910108	1827595	-4.32
Yttrium	A	1534317	1536503	0.14
Terbium	A	2647564	2632505	-0.57

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897239429086
Cal : 897239429001

File : f15g0086
Caldate : 15-JUN-2007

IDF : 1.0
Time : 15-JUN-2007 15:15

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01642]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003242]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003257]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[3.745]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.004953]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.004316]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01550]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.4285]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.009711]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	879685	-7.18
Scandium	A	1024786	1020235	-0.44
Scandium	E	16230	14926	-8.03
Scandium	H	421162	383625	-8.91
Germanium	H	105466	98055	-7.03
Germanium	E	14881	13890	-6.66
Indium	A	1615942	1605182	-0.67
Bismuth	A	1910108	1901312	-0.46
Yttrium	A	1534317	1548193	0.90
Terbium	A	2647564	2623557	-0.91

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429106 File : f15g0106 Time : 15-JUN-2007 17:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6055	10000	9838	ug/L	-2	10	
Antimony	A	0.3490	0.3133	100.0	98.57	ug/L	-1	10	
Barium	A	0.1918	0.0694	100.0	102.1	ug/L	2	10	
Beryllium	A	0.2682	0.2617	100.0	97.20	ug/L	-3	10	
Cadmium	A	0.0754	0.0713	100.0	99.71	ug/L	0	10	
Calcium	A	0.0461	0.0204	10000	10090	ug/L	1	10	
Lead	A	0.9146	0.7882	100.0	95.86	ug/L	-4	10	
Magnesium	A	0.5798	0.5037	10000	9773	ug/L	-2	10	
Molybdenum	A	0.2290	0.2000	100.0	92.29	ug/L	-8	10	
Potassium	A	2.8257	0.6853	10000	10110	ug/L	1	10	
Silver	A	0.3492	0.3477	100.0	100.8	ug/L	1	10	
Thallium	A	0.8486	0.8261	50.00	48.83	ug/L	-2	10	
Arsenic	E	0.6327	0.6002	100.0	98.68	ug/L	-1	10	
Chromium	E	6.7730	4.9599	100.0	98.15	ug/L	-2	10	
Cobalt	E	9.9018	9.0567	100.0	98.33	ug/L	-2	10	
Copper	E	33.943	7.8809	100.0	97.11	ug/L	-3	10	
Manganese	E	2.2336	1.7632	100.0	99.86	ug/L	0	10	
Nickel	E	4.3698	2.5472	100.0	98.00	ug/L	-2	10	
Sodium	E	1.5568	0.5153	10000	9722	ug/L	-3	10	
Vanadium	E	4.3079	3.6154	100.0	97.47	ug/L	-3	10	
Zinc	E	5.2830	0.8917	100.0	98.54	ug/L	-1	10	
Iron	H	0.9459	0.8489	10000	10080	ug/L	1	10	
Selenium	H	0.1226	0.1147	100.0	98.67	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	889304	-6.17
Scandium	A	1024786	1068569	4.27
Scandium	E	16230	15863	-2.26
Scandium	H	421162	384563	-8.69
Germanium	H	105466	99053	-6.08
Germanium	E	14881	14603	-1.87
Indium	A	1615942	1634381	1.14
Bismuth	A	1910108	1871055	-2.04
Yttrium	A	1534317	1604959	4.60
Terbium	A	2647564	2674277	1.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897239429109
Cal : 897239429001

File : f15g0109
Caldate : 15-JUN-2007

IDF : 1.0
Time : 15-JUN-2007 17:34

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01023]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003276]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.0005870]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[4.606]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[8.512]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.005142]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	[6.713]	10.00	4.339	ug/L	!ib
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.001948]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	906200	-4.38
Scandium	A	1024786	1049302	2.39
Scandium	E	16230	15449	-4.81
Scandium	H	421162	378238	-10.19
Germanium	H	105466	97296	-7.75
Germanium	E	14881	14259	-4.18
Indium	A	1615942	1629587	0.84
Bismuth	A	1910108	1905312	-0.25
Yttrium	A	1534317	1563066	1.87
Terbium	A	2647564	2618747	-1.09

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429117 File : f15g0117 Time : 15-JUN-2007 18:22
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.5947	10000	9664	ug/L	-3	10	
Antimony	A	0.3490	0.3147	100.0	99.01	ug/L	-1	10	
Barium	A	0.1918	0.0698	100.0	102.7	ug/L	3	10	
Beryllium	A	0.2682	0.2648	100.0	98.37	ug/L	-2	10	
Cadmium	A	0.0754	0.0719	100.0	100.5	ug/L	1	10	
Calcium	A	0.0461	0.0202	10000	9961	ug/L	0	10	
Lead	A	0.9146	0.7863	100.0	95.62	ug/L	-4	10	
Magnesium	A	0.5798	0.4941	10000	9587	ug/L	-4	10	
Molybdenum	A	0.2290	0.1990	100.0	91.81	ug/L	-8	10	
Potassium	A	2.8257	0.6760	10000	9967	ug/L	0	10	
Silver	A	0.3492	0.3481	100.0	101.0	ug/L	1	10	
Thallium	A	0.8486	0.8178	50.00	48.34	ug/L	-3	10	
Arsenic	E	0.6327	0.6039	100.0	99.28	ug/L	-1	10	
Chromium	E	6.7730	4.9743	100.0	98.43	ug/L	-2	10	
Cobalt	E	9.9018	9.1178	100.0	98.99	ug/L	-1	10	
Copper	E	33.943	7.9283	100.0	97.70	ug/L	-2	10	
Manganese	E	2.2336	1.7796	100.0	100.8	ug/L	1	10	
Nickel	E	4.3698	2.5689	100.0	98.83	ug/L	-1	10	
Sodium	E	1.5568	0.5171	10000	9758	ug/L	-2	10	
Vanadium	E	4.3079	3.6482	100.0	98.36	ug/L	-2	10	
Zinc	E	5.2830	0.8992	100.0	99.37	ug/L	-1	10	
Iron	H	0.9459	0.8556	10000	10160	ug/L	2	10	
Selenium	H	0.1226	0.1129	100.0	97.15	ug/L	-3	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	880356	-7.11
Scandium	A	1024786	1112381	8.55
Scandium	E	16230	16092	-0.85
Scandium	H	421162	393219	-6.63
Germanium	H	105466	102398	-2.91
Germanium	E	14881	14789	-0.62
Indium	A	1615942	1665675	3.08
Bismuth	A	1910108	1910179	0.00
Yttrium	A	1534317	1651673	7.65
Terbium	A	2647564	2718473	2.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897239429119 File : f15g0119
Cal : 897239429001 Caldate : 15-JUN-2007
IDF : 1.0
Time : 15-JUN-2007 18:35

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01509]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003082]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003833]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[4.852]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	10.11	10.00	2.807	ug/L	ib ***
Silver	A	[0.002998]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	[0.01284]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	56.67	10.00	4.339	ug/L	ib ***
Vanadium	E	[0.01806]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.3474]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.008623]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	896374	-5.42
Scandium	A	1024786	1080167	5.40
Scandium	E	16230	15838	-2.42
Scandium	H	421162	382453	-9.19
Germanium	H	105466	98635	-6.48
Germanium	E	14881	14677	-1.37
Indium	A	1615942	1698513	5.11
Bismuth	A	1910108	1947843	1.98
Yttrium	A	1534317	1620373	5.61
Terbium	A	2647564	2701409	2.03

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429122 File : f15g0122 Time : 15-JUN-2007 18:52
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07852]	0.1000	ug/L	
Barium	A	0.9525	0.1000	ug/L	
Beryllium	A	[0.02630]	0.1000	ug/L	
Cadmium	A	1.113	0.1000	ug/L	
Lead	A	0.3956	0.1000	ug/L	
Silver	A	0.1908	0.1000	ug/L	
Thallium	A	[0.03009]	0.05000	ug/L	
Arsenic	E	0.1677	0.1000	ug/L	
Chromium	E	1.282	0.1000	ug/L	
Cobalt	E	0.1912	0.1000	ug/L	
Copper	E	0.7079	0.1000	ug/L	
Manganese	E	0.5184	0.1000	ug/L	
Nickel	E	1.112	0.1000	ug/L	
Vanadium	E	[0.02775]	0.1000	ug/L	
Zinc	E	1.975	0.1000	ug/L	
Selenium	H	[0.05514]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87080	ug/L	87
Calcium	A	300000	267600	ug/L	89
Magnesium	A	100000	84540	ug/L	85
Molybdenum	A	2000	1729	ug/L	86
Potassium	A	100000	88970	ug/L	89
Sodium	E	250000	209100	ug/L	84
Iron	H	250000	216000	ug/L	86

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	779180	-17.79
Scandium	A	1024786	1008208	-1.62
Scandium	E	16230	15197	-6.36
Scandium	H	421162	366792	-12.91
Germanium	H	105466	90194	-14.48
Germanium	E	14881	13571	-8.80
Indium	A	1615942	1453970	-10.02
Bismuth	A	1910108	1623389	-15.01
Yttrium	A	1534317	1524972	-0.61
Terbium	A	2647564	2529526	-4.46

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429123 File : f15g0123 Time : 15-JUN-2007 18:59
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94400	ug/L	-6		
Cadmium	A	100.0	99.27	ug/L	-1	20	
Calcium	A	300000	290300	ug/L	-3		
Magnesium	A	100000	91270	ug/L	-9		
Molybdenum	A	2000	1885	ug/L	-6		
Potassium	A	100000	96900	ug/L	-3		
Silver	A	50.00	44.65	ug/L	-11	20	
Arsenic	E	100.0	103.3	ug/L	3	20	
Chromium	E	200.0	191.0	ug/L	-5	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	176.3	ug/L	-12	20	
Manganese	E	200.0	194.9	ug/L	-3	20	
Nickel	E	200.0	178.5	ug/L	-11	20	
Sodium	E	250000	223900	ug/L	-10		
Vanadium	E	200.0	194.5	ug/L	-3	20	
Zinc	E	100.0	90.41	ug/L	-10	20	
Iron	H	250000	234500	ug/L	-6		
Selenium	H	100.0	102.7	ug/L	3	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	361757	-14.11
Scandium	A	1024786	979329	-4.44
Scandium	E	16230	14989	-7.65
Germanium	H	105466	88193	-16.38
Germanium	E	14881	13364	-10.19
Indium	A	1615942	1429401	-11.54
Yttrium	A	1534317	1484689	-3.23

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897239429

Date : 06/15/07
Sequence : MET16 f15g0

Reference : f15g0004
Analyzed : 06/15/07 06:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	947755	1024786	16230	421162	105466	14881	1615942	1910108	1534317	2647564
		LOWER LIMIT	284327	307436	4869	126349	31640	4464	484783	573032	460295	794269
		UPPER LIMIT	1137306	1229743	19476	505395	126559	17857	1939130	2292130	1841180	3177077
014	ICB		960938	1055567	15956	415756	104447	14746	1648089	1921327	1569938	2674692
017	ICSA		833330	1031697	16359	407246	97058	14491	1507874	1645288	1572313	2615635
018	ICSAB		826820	1032868	16221	400547	95805	14323	1499416	1632159	1555187	2578826
023	MSS	195270-007	941225	1040420	15625	401668	103175	14698	1634401	1893646	1559932	2645423
024	SER	QC392098	926152	1022826	15559	393809	101669	14539	1618799	1888480	1548121	2615464
025	PDS	QC392099	926984	1059908	15636	406621	101352	14437	1621243	1866895	1585621	2666920
026	SAMPLE	195358-002	940359	1051413	15472	396685	102158	14672	1649979	1951559	1582203	2675868
027	SAMPLE	195358-003	936459	1057872	15756	405459	103203	14714	1651724	1936384	1590081	2680105
028	SAMPLE	195358-004	935946	1070595	16328	410419	105354	15269	1674622	1953846	1608113	2695196
029	SAMPLE	195358-005	914117	1042688	15680	397643	102253	14671	1621086	1908139	1552137	2658461
030	SAMPLE	195358-007	922598	1029632	15795	400551	102899	14702	1635862	1933493	1553004	2643825
033	CCV		943519	1059042	15887	403931	101462	14629	1632221	1884026	1590028	2695620
035	CCB		933251	1034023	15841	406728	102698	14617	1623222	1919394	1559025	2648690
037	SAMPLE	195358-008	946423	1052531	15925	411412	104583	14897	1652446	1977125	1585580	2701637
038	SAMPLE	195369-001	931854	1053956	15640	401725	102537	14652	1632955	1889279	1577486	2655947
039	SAMPLE	195369-001	922843	1038048	15881	402499	102829	14710	1620555	1884993	1558636	2643475
040	SAMPLE	195370-021	948579	1053212	15915	407988	104309	14911	1651734	1957810	1591220	2685300
045	CCV		934487	1063004	15864	404281	102563	14742	1619302	1879041	1580255	2668564
047	CCB		948985	1043876	16221	408840	103450	14837	1653960	1938084	1584245	2686653
048	ICSA		819244	1022985	15939	391144	94163	14399	1488941	1632734	1551970	2568593
049	ICSAB		798431	1020361	15921	388111	93472	14160	1494260	1639891	1557119	2573101
054	SAMPLE	195247-001	909531	1057133	15657	393383	101247	14670	1639167	1873727	1586007	2658791
055	SAMPLE	195247-001	906076	1129493	15897	407510	101389	14531	1660078	1873486	1648103	2707845
056	SAMPLE	195247-002	917367	1071571	15691	390647	100623	14684	1659141	1872784	1589077	2688050
057	SAMPLE	195247-002	891732	1092948	16017	403287	99575	14507	1616176	1862333	1779288	2699796
059	SAMPLE	195247-001	891508	1026800	15401	392286	101760	14483	1616317	1884441	1552586	2616955
060	SAMPLE	195247-002	906046	1052050	15421	385742	99622	14549	1632728	1892629	1575453	2670191
061	SAMPLE	195247-002	891649	1031723	15232	391153	100261	14496	1614696	1882520	1590470	2639581
062	SAMPLE	195285-012	901670	1022402	15050	382705	99271	14112	1620068	1902865	1542205	2657134
064	CCV		882516	1036331	15338	397946	101486	14329	1610510	1859725	1571749	2657826
066	CCB		907185	1033343	15543	397223	101314	14354	1630685	1911848	1552222	2634997
068	ICSA		804946	1030614	15630	378792	91524	13944	1503115	1655542	1570747	2595953
069	ICSAB		767045	1005539	15907	382792	93454	14107	1464578	1602627	1529443	2535335
075	SER	QC391468	864315	1013119	14826	380314	99218	14038	1605044	1890279	1529788	2605749
079	SAMPLE	195270-001	876503	1019507	15050	378607	97915	14104	1621935	1869459	1551053	2634259
080	SAMPLE	195270-002	862032	1003304	14952	380467	97866	14163	1598720	1858605	1516872	2577494
081	SAMPLE	195270-008	866537	1010621	14820	381084	98730	13954	1597959	1863336	1530356	2601374
084	CCV		859558	1018025	15156	385710	98385	14075	1587087	1827595	1536503	2632505
086	CCB		879685	1020235	14926	383625	98055	13890	1605182	1901312	1548193	2623557
088	SAMPLE	195270-016	865682	987930	15243	382250	99258	14277	1574459	1834428	1504614	2552961
089	SAMPLE	195270-018	860093	983738	14709	380028	98656	13847	1569795	1845558	1493218	2562581
093	BLANK	QC392525	878762	998763	15255	383287	98294	14008	1574613	1888024	1512991	2595978
094	BS	QC392526	866356	1014988	14974	391653	99324	13892	1560549	1837300	1540696	2621791
095	BSD	QC392527	878257	1042263	15068	388065	98844	14055	1606750	1860783	1579136	2656154
096	MSS	195390-003	790342	1036458	15444	369943	89737	13267	1473669	1566861	1544092	2461319
099	MS	QC392528	784645	1033504	15635	375707	90528	13534	1469144	1562146	1526620	2448168
100	MSD	QC392529	783812	1039193	15907	373710	90538	13592	1485981	1567150	1547715	2464397
102	SAMPLE	195390-001	920341	1098800	16053	385836	100721	15050	1689849	1983724	1639761	2736765

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897239429

Date : 06/15/07
Sequence : MET16 f15g0

Reference : f15g0004
Analyzed : 06/15/07 06:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
103	SAMPLE	195390-002	876501	1139937	17126	376751	92598	14916	1603596	1662081	1650919	2615906
106	CCV		889304	1068569	15863	384563	99053	14603	1634381	1871055	1604959	2674277
109	CCB		906200	1049302	15449	378238	97296	14259	1629587	1905312	1563066	2618747
110	SAMPLE	195390-004	890107	1126346	16663	373917	92978	14705	1623263	1703291	1648843	2618488
111	SAMPLE	195390-005	859644	1159592	18187	385093	91535	15304	1605512	1603101	1680174	2580411
112	SAMPLE	195390-006	879431	1172977	18225	380083	91883	15338	1612053	1627343	1678160	2616488
113	SAMPLE	195390-007	874154	1190255	18161	382332	92799	15248	1630728	1645740	1696725	2639860
117	CCV		880356	1112381	16092	393219	102398	14789	1665675	1910179	1651673	2718473
119	CCB		896374	1080167	15838	382453	98635	14677	1698513	1947843	1620373	2701409
122	ICSA		779180	1008208	15197	366792	90194	13571	1453970	1623389	1524972	2529526
123	ICSAB		743431	979329	14989	361757	88193	13364	1429401	1582507	1484689	2477404

: 00394

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f15g0001	TUN				15-JUN-2007 06:29	1.0	1.0				1	
002	f15g0002	X	RINSE			15-JUN-2007 06:37	1.0					2	
003	f15g0003	X	RINSE			15-JUN-2007 06:43	1.0					2	
004	f15g0004	ICALBLK	CALBLANK			15-JUN-2007 06:49	1.0	1.0				2	
005	f15g0005	ICAL				15-JUN-2007 06:55	1.0	1.0				3	
006	f15g0006	ICAL				15-JUN-2007 07:01	1.0	1.0				4	
007	f15g0007	ICAL				15-JUN-2007 07:07	1.0	1.0				5	
008	f15g0008	ICAL				15-JUN-2007 07:12	1.0	1.0				6	
009	f15g0009	ICAL				15-JUN-2007 07:18	1.0	1.0				7	
010	f15g0010	ICAL				15-JUN-2007 07:24	1.0	1.0				8	
011	f15g0011	X	RINSE			15-JUN-2007 07:33	1.0					2	
012	f15g0012	ICV				15-JUN-2007 07:38	1.0	1.0			1	9	
013	f15g0013	X	RINSE			15-JUN-2007 07:45	1.0					2	
014	f15g0014	ICB				15-JUN-2007 07:51	1.0	1.0			1	2	
015	f15g0015	X				15-JUN-2007 07:57	1.0					2	
016	f15g0016	X				15-JUN-2007 08:03	1.0					2	
017	f15g0017	ICSA				15-JUN-2007 08:09	1.0	1.0			1	10 2	7:CA=277700
018	f15g0018	ICSAB				15-JUN-2007 08:15	1.0	1.0			1	11 2	7:CA=293900
19	f15g0019	X	RINSE			15-JUN-2007 08:21	1.0					2	
20	f15g0020	X	RINSE			15-JUN-2007 08:27	1.0					2	
21	f15g0021	X	RINSE			15-JUN-2007 08:33	1.0					2	
22	f15g0022	X	RINSE			15-JUN-2007 08:38	1.0					2	
23	f15g0023	MSS	195270-007	126254	Filtra	15-JUN-2007 08:44	50.0	1.0			1	2	
24	f15g0024	SER	QC392098	126254	Filtra	15-JUN-2007 08:50	250.0	1.0		1	1	2	
25	f15g0025	PDS	QC392099	126254	Filtra	15-JUN-2007 08:56	50.0	1.0			1	12 13 2	
26	f15g0026	SAMPLE	195358-002	126254	Filtra	15-JUN-2007 09:02	5.0	1.0	3		1	2	
27	f15g0027	SAMPLE	195358-003	126254	Filtra	15-JUN-2007 09:08	5.0	1.0			1	2	
28	f15g0028	SAMPLE	195358-004	126254	Filtra	15-JUN-2007 09:14	5.0	1.0			1	2	
29	f15g0029	SAMPLE	195358-005	126254	Filtra	15-JUN-2007 09:20	5.0	1.0			1	2	
30	f15g0030	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 09:26	5.0	1.0			1	2	
31	f15g0031	X	RINSE			15-JUN-2007 09:32	1.0					2	

tds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

nalyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
32	f15g0032	X	RINSE			15-JUN-2007 09:38	1.0					2	
33	f15g0033	CCV				15-JUN-2007 09:43	1.0	1.0			1	14 2	
34	f15g0034	X	RINSE			15-JUN-2007 09:50	1.0					2	
35	f15g0035	CCB				15-JUN-2007 09:56	1.0	1.0			1	2	
36	f15g0036	X				15-JUN-2007 10:02	1.0					2	
37	f15g0037	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 10:08	5.0	1.0			1	2	
38	f15g0038	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:14	50.0	1.0			1	2	
39	f15g0039	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:20	100.0	1.0			1	2	
40	f15g0040	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 10:26	1.0	1.0			1	2	
41	f15g0041	X	RINSE			15-JUN-2007 10:32	1.0					2	
42	f15g0042	X	RINSE			15-JUN-2007 10:38	1.0					2	
43	f15g0043	X				15-JUN-2007 10:44	1.0	1.0	3		1	14 2	
44	f15g0044	X	RINSE			15-JUN-2007 10:50	1.0					2	
45	f15g0045	CCV				15-JUN-2007 10:56	1.0	1.0			1	14 2	
46	f15g0046	X	RINSE			15-JUN-2007 11:03	1.0					2	
47	f15g0047	CCB				15-JUN-2007 11:09	1.0	1.0			1	2	
48	f15g0048	ICSA				15-JUN-2007 11:15	1.0	1.0			1	10 2	7:CA=271600
49	f15g0049	ICSAB				15-JUN-2007 11:22	1.0	1.0			1	11 2	7:CA=292500
50	f15g0050	X	RINSE			15-JUN-2007 11:28	1.0					2	
51	f15g0051	X	RINSE			15-JUN-2007 11:34	1.0					2	
52	f15g0052	X	RINSE			15-JUN-2007 11:40	1.0					2	
53	f15g0053	X	RINSE			15-JUN-2007 11:46	1.0					2	
54	f15g0054	SAMPLE	195247-001	126087	Filtra	15-JUN-2007 11:52	10.0	1.0			1	2	
55	f15g0055	SAMPLE	195247-001	126087	Water	15-JUN-2007 11:58	10.0	1.0	4		1	2	4:MG=23420.0
56	f15g0056	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:04	10.0	1.0	1		1	2	1:MN=335.800
57	f15g0057	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:09	10.0	1.0	1		1	2	1:MN=610.100
58	f15g0058	X	RINSE			15-JUN-2007 12:15	1.0					2	
59	f15g0059	SAMPLE	195247-001	126087	Water	15-JUN-2007 12:22	100.0	1.0			1	2	
60	f15g0060	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:29	20.0	1.0	1		1	2	
61	f15g0061	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:35	50.0	1.0			1	2	
62	f15g0062	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 12:41	5.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
063	f15g0063	X	RINSE			15-JUN-2007 12:47	1.0				2	
064	f15g0064	CCV				15-JUN-2007 12:53	1.0	1.0		1	14 2	
065	f15g0065	X	RINSE			15-JUN-2007 13:00	1.0				2	
066	f15g0066	CCB				15-JUN-2007 13:06	1.0	1.0		1	2	
067	f15g0067	X	RINSE			15-JUN-2007 13:12	1.0				2	
068	f15g0068	ICSA				15-JUN-2007 13:26	1.0	1.0		1	10 2	7:CA=267700
069	f15g0069	ICSAB				15-JUN-2007 13:32	1.0	1.0		1	11 2	7:CA=289200
70	f15g0070	X	RINSE			15-JUN-2007 13:38	1.0				2	
71	f15g0071	X	RINSE			15-JUN-2007 13:44	1.0				2	
72	f15g0072	X	RINSE			15-JUN-2007 13:50	1.0				2	
73	f15g0073	X	RINSE			15-JUN-2007 13:56	1.0				2	
74	f15g0074	MSS	195270-007	126092	Filtra	15-JUN-2007 14:02	100.0			1	2	
75	f15g0075	SER	QC391468	126092	Filtra	15-JUN-2007 14:08	500.0	1.0		1	2	
76	f15g0076	MS	QC391466	126092	Filtra	15-JUN-2007 14:14	100.0	1.0		1	2	
77	f15g0077	MSD	QC391467	126092	Filtra	15-JUN-2007 14:20	100.0	1.0		1	2	
78	f15g0078	PDS	QC391469	126092	Filtra	15-JUN-2007 14:26	100.0	1.0		1	12 13 2	
79	f15g0079	SAMPLE	195270-001	126092	Filtra	15-JUN-2007 14:32	100.0	1.0		1	2	
80	f15g0080	SAMPLE	195270-002	126092	Filtra	15-JUN-2007 14:38	100.0	1.0		1	2	
81	f15g0081	SAMPLE	195270-008	126092	Filtra	15-JUN-2007 14:44	50.0	1.0		1	2	
82	f15g0082	X	RINSE			15-JUN-2007 14:50	1.0				2	
83	f15g0083	X	RINSE			15-JUN-2007 14:56	1.0				2	
84	f15g0084	CCV				15-JUN-2007 15:02	1.0	1.0		1	14 2	
85	f15g0085	X	RINSE			15-JUN-2007 15:09	1.0				2	
86	f15g0086	CCB				15-JUN-2007 15:15	1.0	1.0		1	2	
87	f15g0087	X				15-JUN-2007 15:21	1.0				2	
88	f15g0088	SAMPLE	195270-016	126092	Filtra	15-JUN-2007 15:26	50.0	1.0		1	2	
89	f15g0089	SAMPLE	195270-018	126092	Water	15-JUN-2007 15:32	20.0	1.0		1	2	
90	f15g0090	X	RINSE			15-JUN-2007 15:38	1.0				2	
91	f15g0091	X	RINSE			15-JUN-2007 15:45	1.0				2	
92	f15g0092	X	RINSE			15-JUN-2007 15:51	1.0				2	
93	f15g0093	BLANK	QC392525	126355	Water	15-JUN-2007 15:57	1.0	1.0		1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f15g0094	BS	QC392526	126355	Water	15-JUN-2007 16:03	1.0	1.0		1	1	2	
095	f15g0095	BSD	QC392527	126355	Water	15-JUN-2007 16:08	1.0	1.0		1	1	2	
096	f15g0096	MSS	195390-003	126355	Water	15-JUN-2007 16:15	20.0	1.0	5		1	2	5:NA=742500
097	f15g0097	TUN				15-JUN-2007 16:20	1.0	1.0				1	
098	f15g0098	X	RINSE			15-JUN-2007 16:28	1.0					2	
099	f15g0099	MS	QC392528	126355	Water	15-JUN-2007 16:33	20.0	1.0		3	1	2	5:NA=746000
100	f15g0100	MSD	QC392529	126355	Water	15-JUN-2007 16:39	20.0	1.0		4	1	2	5:NA=738500
101	f15g0101	X	RINSE			15-JUN-2007 16:45	1.0					2	
102	f15g0102	SAMPLE	195390-001	126355	Water	15-JUN-2007 16:51	1.0	1.0			1	2	
103	f15g0103	SAMPLE	195390-002	126355	Water	15-JUN-2007 16:57	20.0	1.0			1	2	2:NA=585000
104	f15g0104	X	RINSE			15-JUN-2007 17:03	1.0					2	
105	f15g0105	X	RINSE			15-JUN-2007 17:09	1.0					2	
106	f15g0106	CCV				15-JUN-2007 17:15	1.0	1.0			1	14 2	
107	f15g0107	X	RINSE			15-JUN-2007 17:22	1.0					2	
108	f15g0108	X				15-JUN-2007 17:28	1.0					2	
109	f15g0109	CCB				15-JUN-2007 17:34	1.0	1.0			1	2	
110	f15g0110	SAMPLE	195390-004	126355	Water	15-JUN-2007 17:40	20.0	1.0			1	2	2:NA=382650
111	f15g0111	SAMPLE	195390-005	126355	Water	15-JUN-2007 17:46	20.0	1.0			1	2	3:NA=1013500
112	f15g0112	SAMPLE	195390-006	126355	Water	15-JUN-2007 17:52	20.0	1.0			1	2	3:NA=856000
113	f15g0113	SAMPLE	195390-007	126355	Water	15-JUN-2007 17:58	20.0	1.0			1	2	3:NA=850500
114	f15g0114	X	RINSE			15-JUN-2007 18:04	1.0					2	
115	f15g0115	X	RINSE			15-JUN-2007 18:10	1.0					2	
116	f15g0116	X	RINSE			15-JUN-2007 18:16	1.0					2	
117	f15g0117	CCV				15-JUN-2007 18:22	1.0	1.0			1	14 2	
118	f15g0118	X	RINSE			15-JUN-2007 18:29	1.0					2	
119	f15g0119	CCB				15-JUN-2007 18:35	1.0	1.0	2		1	2	
120	f15g0120	X				15-JUN-2007 18:41	1.0					2	
121	f15g0121	X				15-JUN-2007 18:47	1.0					2	
122	f15g0122	ICSA				15-JUN-2007 18:52	1.0	1.0			1	10 2	7:CA=267600
123	f15g0123	ICSAB				15-JUN-2007 18:59	1.0	1.0			1	11 2	7:CA=290300

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RKO Date: 6/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195270 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
195270-012	MET16	06/08/07 22:21	10.0																						
195270-012	MET16	06/14/07 23:16	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195270-017	MET16	06/08/07 23:21	10.0	+		+			+	+	+		+	+	+	+	+	+	+			+			+
195270-018	MET16	06/08/07 23:27	10.0	+		+			+	+	+		+	+	+	+		+	+			+			+
195270-018	MET16	06/15/07 15:32	20.0														+								
QC391463	MET16	06/08/07 19:59	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391463	MET16	06/11/07 13:02	1.0								+														
QC391464	MET16	06/08/07 20:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391465	MET16	06/08/07 20:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391466	MET16	06/08/07 20:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
QC391466	MET16	06/15/07 14:14	100.0																			+			
QC391467	MET16	06/08/07 20:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
QC391467	MET16	06/15/07 14:20	100.0																			+			
QC391468	MET16	06/08/07 20:29	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
QC391468	MET16	06/15/07 14:08	500.0																			+			
QC391469	MET16	06/08/07 20:46	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
QC391469	MET16	06/15/07 14:26	100.0																			+			
QC392093	MET16	06/14/07 21:13	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392094	MET16	06/14/07 21:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392095	MET16	06/14/07 21:26	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392096	MET16	06/14/07 22:04	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392097	MET16	06/14/07 22:10	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392098	MET16	06/14/07 21:58	25.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+
QC392098	MET16	06/15/07 08:50	250.0																			+			
QC392099	MET16	06/14/07 22:16	5.0	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+
QC392099	MET16	06/15/07 08:56	50.0													+						+			

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195270 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
195270-001	MET16	06/08/07 21:28	10.0	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
195270-001	MET14	06/14/07 13:06	1.0															+								
195270-001	MET16	06/15/07 14:32	100.0													+	+						+			
195270-002	MET16	06/08/07 21:34	10.0	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
195270-002	MET14	06/14/07 13:08	1.0															+								
195270-002	MET16	06/15/07 14:38	100.0													+	+						+			
195270-003	MET16	06/08/07 21:40	10.0											+							+		+			
195270-003	MET16	06/14/07 22:58	5.0	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+		+		+	+	+
195270-004	MET16	06/08/07 21:46	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
195270-005	MET16	06/08/07 21:51	10.0											+							+		+			
195270-005	MET16	06/14/07 23:04	5.0	+	+	+	+	+	+	+	+	+	+		+	+	+		+	+		+		+	+	+
195270-006	MET16	06/08/07 21:57	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
195270-007	MET16	06/08/07 20:23	10.0																							
195270-007	MET16	06/14/07 21:52	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
195270-007	MET16	06/15/07 08:44	50.0																				+			
195270-007	MET16	06/15/07 14:02	100.0																							
195270-008	MET16	06/08/07 22:03	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
195270-008	MET16	06/15/07 14:44	50.0																				+			
195270-010	MET16	06/08/07 22:09	10.0											+												
195270-010	MET16	06/14/07 23:10	5.0	+		+			+	+	+		+		+	+	+		+	+			+			+
195270-011	MET16	06/08/07 22:15	10.0	+		+			+	+	+		+	+	+	+	+		+	+			+			+
195270-016	MET16	06/08/07 23:15	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
195270-016	MET16	06/15/07 15:26	50.0																				+			
QC391463	MET16	06/08/07 19:59	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391463	MET16	06/11/07 13:02	1.0								+															
QC391464	MET16	06/08/07 20:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391465	MET16	06/08/07 20:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391466	MET16	06/08/07 20:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391466	MET16	06/15/07 14:14	100.0																				+			
QC391467	MET16	06/08/07 20:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391467	MET16	06/15/07 14:20	100.0																				+			
QC391468	MET16	06/08/07 20:29	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+

00400

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195270 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
QC391468	MET16	06/15/07 14:08	500.0																				+			
QC391469	MET16	06/08/07 20:46	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391469	MET16	06/15/07 14:26	100.0																				+			
QC391965	MET14	06/14/07 12:49	1.0															+								
QC391966	MET14	06/14/07 12:52	1.0															+								
QC391967	MET14	06/14/07 12:54	1.0															+								
QC391968	MET14	06/14/07 12:59	5.0															+								
QC391969	MET14	06/14/07 13:01	1.0															+								
QC391970	MET14	06/14/07 13:03	1.0															+								
QC392348	MET14	06/14/07 14:09	1.0															+								
QC392093	MET16	06/14/07 21:13	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392094	MET16	06/14/07 21:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392095	MET16	06/14/07 21:26	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392096	MET16	06/14/07 22:04	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392097	MET16	06/14/07 22:10	5.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392098	MET16	06/14/07 21:58	25.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC392098	MET16	06/15/07 08:50	250.0																				+			
QC392099	MET16	06/14/07 22:16	5.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	+
QC392099	MET16	06/15/07 08:56	50.0													+							+			

00481

Curtis & Tompkins Laboratories Sample Preparation Summary 08-JUN-2007 13:15

Batch Number : 126092
Date Extracted: 08-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195270-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195270-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195270-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195270-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-017			Treadwell & Rollo	Water	50	mL	50	1.000000	1					14MET		
195270-018			Treadwell & Rollo	Water	50	mL	50	1.000000	1					14MET		
195279-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC391463	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC391464	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391465	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391466	MS	of 195270-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391467	MSD	of 195270-007		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC391468	SER	of 195270-007		Filtrate	50	mL	50	1.000000	1					ICAP		
QC391469	PDS	of 195270-007		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: 6/8/07 Reviewed By: Date: 6/8/07

Relinquished By: 6/8/07 Received By: Date: 6/8/07

Curtis & Tompkins Laboratories Sample Preparation Summary 14-JUN-2007 18:32

Batch Number : 126254
Date Extracted: 13-JUN-2007
Extracted by : Ryan Harrington
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195270-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195270-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195270-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
195358-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-005		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-006		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-007		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-008		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195358-009		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					HARDNESS, TAL/ICP		
195369-001		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195370-021		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC392093	BLANK		Filtrate	50	mL	50	1.000000	1					ICAP		
QC392094	BS		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392095	BSD		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392096	MS	of 195270-007	Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392097	MSD	of 195270-007	Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392098	SER	of 195270-007	Filtrate	50	mL	50	1.000000	1					ICAP		
QC392099	PDS	of 195270-007	Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: _____ Reviewed By: _____ Date: 6/15/07

Relinquished By: _____ Received By: _____ Date: 6/13/07

00163

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 126032
Date Digested: 6/8/07
Digested by: KL

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK 2479
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Continued From: /
Continued On: /

	Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK	50	50		
	BS				
	BSD				
	MS-01				FILTERED
5	MSD-01				
	126032-07				
	01				
	02				
	03				
10	04				
	05				
	06				
	08				
	10				
15	11				
	13				TOTALS
	16				
	17				TOTALS
	18				
20	279-01				
					6/8/07

	Reagent ID or LIMS #	Initials / Date
5 digestion temperature (90-95 degrees C)	95	KLA 6/8
.5 mL of spike solution was added to all spikes	36222	
	36223	
concentrated HCl	002025 BAKER	
concentrated HNO3	049025	
☐ filtered thru' Whatman # 541	MA	
Relinquished to ICP group		

Prep Chemist Signature / Date 6/8/07

Reviewer Signature / Date 6/8/07

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 126254
Date Digested: 6/13/07
Digested by: RAA

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK 2479
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Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
Blank	50	50	N	
BS				
BSD				
MS-007A				Field Filt.
MSD-007				
195270-007				MSS,
-003				
-005				
-010I				Field Filt. ~~Water~~ RAA
-012A				WATER ~~Field Filt.~~ RAA 6/13/07
195369-001A				Field Filt.
195370-021A				
195358-001B				
-002				
-003				
-004				
-005				
-006				
-007				
-008				
-009				
				RAA 6/13/07

	Reagent ID or LIMS #	Initials / Date
0.5 digestion temperature (90-95 degrees C)	95	RAA 6/13/07
mL of spike solution was added to all spikes	~~S68277~~ S6222	
RAA 6/13	~~S6623~~ S6223	
concentrated HCl	E02023	
concentrated HNO3	C49029	
☐ filtered thru' Whatman # 541	NA	
Relinquished to ICP group	MS	

RAA 6/13/07
Prep Chemist Signature / Date

6/13/07
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847238329001
Units : ug/L

Date : 14-JUN-2007 12:09
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	126221	847238329002	STD02REP1	14-JUN-2007 12:12	S6475 (500X)
L2	126221	847238329003	STD03REP1	14-JUN-2007 12:14	S6475 (200X)
L3	126221	847238329004	STD04REP1	14-JUN-2007 12:17	S6475 (50X)
L4	126221	847238329005	STD05REP1	14-JUN-2007 12:20	S6475 (20X)
L5	126221	847238329006	STD06REP1	14-JUN-2007 12:22	S6475 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	1970.0	2236.0	1821.0	1744.8	1726.4	LINR	-0.1149	5.86E-4		1899.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-42	0.500	8	2.000	1	5.000	0	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847238329001

WinHg Database 1.5

File Utility Help

Protocol hgppb

Dataset/Proto 061407a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 5.85748e-4

C -1.14927e-1

Rho .999934

Type Linear

Calibrated

Accepted

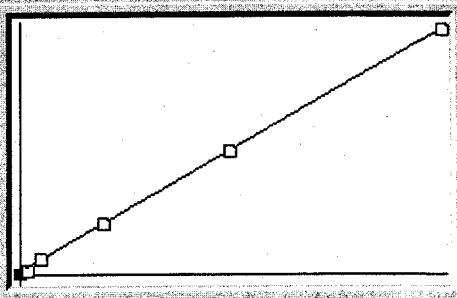
Accept

µ Abs.

17264

Accepted

New



Include S1 Rep 1 2 3 4 5

14-Jun-07 12:32 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.033	.033	254	0	253		
02	.20000	.116	-.084	395	0%	394		
03	.50000	.540	.040	1118	0%	1118		
04	2.0000	2.02	.018	3643	0%	3642		
05	5.0000	5.00	-.005	8724	0%	8724		
06	10.000	10.0	-.003	17265	0%	17264		

Ready

CAP NUM SCRL

```
Line    Conc.  Units      SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Standard: 1 Rep: 1                Seq:  1       12:09:56 14 Jun 07   HG

Hg     .000    ppb       253
               Bkgd 1    16338604                                        =
                                                                         =
*** Standard: 2 Rep: 1                Seq:  2       12:12:30 14 Jun 07   HG

Hg     .200    ppb       394
               Bkgd 1    16331586                                        =
                                                                         =
*** Standard: 3 Rep: 1                Seq:  3       12:14:33 14 Jun 07   HG

Hg     .500    ppb       1118
               Bkgd 1    16328632                                        =
                                                                         =
*** Standard: 4 Rep: 1                Seq:  4       12:17:41 14 Jun 07   HG

Hg     2.00    ppb       3642
               Bkgd 1    16319935                                        =
                                                                         =
*** Standard: 5 Rep: 1                Seq:  5       12:20:17 14 Jun 07   HG

Hg     5.00    ppb       8724
               Bkgd 1    16317658                                        =
                                                                         =
*** Standard: 6 Rep: 1                Seq:  6       12:22:32 14 Jun 07   HG

Hg     10.0    ppb       17264
               Bkgd 1    16312929                                        =
                                                                         =
*** Sample ID: qc391965               Seq:  7       12:33:44 14 Jun 07   HG
                         126221,1
Hg     .035    ppb       256                    ~ 6/14/07
               Bkgd 1    16286155                                        =
                                                                         =
*** Check Standard: 2    Ck2S6477     Seq:  8       12:45:38 14 Jun 07   HG
Line   Flag              Intensities
Hg                       8962
               Bkgd 1    16276358                                        =
                                                                         =
*** Check Standard: 1    Ck1ICB       Seq:  9       12:47:45 14 Jun 07   HG
Line   Flag              Intensities
Hg                       126
               Bkgd 1    16264699                                        =
                                                                         =
```

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847238329 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 14-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	126221	ICALBLK	STD01REP1				14-JUN-2007 12:09	1.0	1.0									
002	126221	ICAL	STD02REP1				14-JUN-2007 12:12	1.0	1.0									
003	126221	ICAL	STD03REP1				14-JUN-2007 12:14	1.0	1.0									
004	126221	ICAL	STD04REP1				14-JUN-2007 12:17	1.0	1.0									
005	126221	ICAL	STD05REP1				14-JUN-2007 12:20	1.0	1.0									
006	126221	ICAL	STD06REP1				14-JUN-2007 12:22	1.0	1.0									
007	126221	X	QC391965		126221	Water	14-JUN-2007 12:33	1.0	1.0			847238329001	[0.03500]	0.20	ug/L			?<ib ?>
008	126221	ICV					14-JUN-2007 12:45	1.0	1.0	2	5.000	847238329001	5.130		ug/L	103		
009	126221	ICB					14-JUN-2007 12:47	1.0	1.0			847238329001	ND	0.20	ug/L			
010	126221	BLANK	QC391965		126221	Water	14-JUN-2007 12:49	1.0	1.0			847238329001	ND	0.20	ug/L			u
011	126221	BS	QC391966		126221	Water	14-JUN-2007 12:52	1.0	1.0		5.000	847238329001	4.350	0.20	ug/L	87		u
012	126221	BSD	QC391967		126221	Water	14-JUN-2007 12:54	1.0	1.0		5.000	847238329001	4.620	0.20	ug/L	92	6	u
013	126221	MSS	195271-001		126221	WET Le	14-JUN-2007 12:56	1.0	5.0			847238329001	ND	2.0	ug/L			u
014	126221	SER	QC391968	195271-001	126221	WET Le	14-JUN-2007 12:59	5.0	1.0			847238329001	ND	1.0	ug/L		--	u
015	126221	MS	QC391969	195271-001	126221	WET Le	14-JUN-2007 13:01	1.0	1.0		5.000	847238329001	5.330	0.20	ug/L	107		u
016	126221	MSD	QC391970	195271-001	126221	WET Le	14-JUN-2007 13:03	1.0	1.0		5.000	847238329001	5.320	0.20	ug/L	106	0	u
017	126221	SAMPLE	195270-001		126221	Filtra	14-JUN-2007 13:06	1.0	1.0			847238329001	ND	0.20	ug/L			u
018	126221	SAMPLE	195270-002		126221	Filtra	14-JUN-2007 13:08	1.0	1.0			847238329001	ND	0.20	ug/L			u
019	126221	SAMPLE	195271-003		126221	WET Le	14-JUN-2007 13:10	1.0	5.0			847238329001	9.0	2.0	ug/L			u
020	126221	CCV					14-JUN-2007 13:12	1.0	1.0	3	7.500	847238329001	7.640		ug/L	102		
021	126221	CCB					14-JUN-2007 13:14	1.0	1.0			847238329001	ND	0.20	ug/L			
022	126221	SAMPLE	195279-001		126221	Filtra	14-JUN-2007 13:16	1.0	1.0			847238329001	ND	0.20	ug/L			u
023	126221	SAMPLE	195306-001		126221	Water	14-JUN-2007 13:19	1.0	1.0			847238329001	ND	0.20	ug/L			u
024	126221	SAMPLE	195306-005		126221	Water	14-JUN-2007 13:21	1.0	1.0			847238329001	ND	0.20	ug/L			u
025	126221	SAMPLE	195317-002		126221	Filtra	14-JUN-2007 13:23	1.0	1.0			847238329001	0.039 J	0.20	ug/L			u
026	126221	SAMPLE	195317-003		126221	Filtra	14-JUN-2007 13:26	1.0	1.0			847238329001	ND	0.20	ug/L			u
027	126221	SAMPLE	195317-004		126221	Filtra	14-JUN-2007 13:28	1.0	1.0			847238329001	ND	0.20	ug/L			u
028	126221	SAMPLE	195317-005		126221	Filtra	14-JUN-2007 13:31	1.0	1.0			847238329001	ND	0.20	ug/L			u
029	126221	SAMPLE	195318-002		126221	Filtra	14-JUN-2007 13:33	1.0	1.0			847238329001	ND	0.20	ug/L			u
030	126221	SAMPLE	195318-003		126221	Filtra	14-JUN-2007 13:35	1.0	1.0			847238329001	0.024 J	0.20	ug/L			u
031	126221	SAMPLE	195318-004		126221	Filtra	14-JUN-2007 13:37	1.0	1.0			847238329001	ND	0.20	ug/L			u
032	126221	CCV					14-JUN-2007 13:39	1.0	1.0	4	2.500	847238329001	2.620		ug/L	105		
033	126221	CCB					14-JUN-2007 13:41	1.0	1.0			847238329001	ND	0.20	ug/L			
034	126221	SAMPLE	195318-005		126221	Filtra	14-JUN-2007 13:43	1.0	1.0			847238329001	ND	0.20	ug/L			u
035	126221	SAMPLE	195329-001		126221	Water	14-JUN-2007 13:46	1.0	1.0			847238329001	ND	0.20	ug/L			u
036	126221	SAMPLE	195337-001		126221	Filtra	14-JUN-2007 13:48	1.0	1.0			847238329001	ND	0.20	ug/L			u
037	126221	SAMPLE	195337-002		126221	Filtra	14-JUN-2007 13:50	1.0	1.0			847238329001	ND	0.20	ug/L			u
038	126221	SAMPLE	195337-003		126221	Filtra	14-JUN-2007 13:52	1.0	1.0			847238329001	ND	0.20	ug/L			u
039	126221	SAMPLE	195370-021		126221	Filtra	14-JUN-2007 13:55	1.0	1.0			847238329001	ND	0.20	ug/L			u
040	126221	CCV					14-JUN-2007 13:57	1.0	1.0	5	5.000	847238329001	5.400		ug/L	108		
041	126221	CCB					14-JUN-2007 13:59	1.0	1.0			847238329001	ND	0.20	ug/L			
042	126221	PREPBLK	QC392348		126221	Water	14-JUN-2007 14:09	1.0	5.0			847238329001	ND	1.0	ug/L			u
043	126221	CCV					14-JUN-2007 14:11	1.0	1.0	5	5.000	847238329001	5.270		ug/L	105		

Stds used: 1=S6475 2=S6477 3=S6480 4=S6478 5=S6479
Flags used: <=opening >=closing ?=missing b=noncompliant c=CCV ib=instrument blank u=use

Analyst: _____ Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847238329 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 14-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
044	126221	CCB					14-JUN-2007 14:13	1.0	1.0			847238329001	ND	0.20	ug/L			

Stds used: 1=S6475 2=S6477 3=S6480 4=S6478 5=S6479
Flags used: <=opening >=closing ?=missing b=noncompliant c=CCV ib=instrument blank u=use

Analyst: _____ Date: 6/14/07

Curtis & Tompkins Laboratories Sample Preparation Summary 14-JUN-2007 13:12

Batch Number : 126221
Date Extracted: 14-JUN-2007
Extracted by : Michael Wales
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S6475
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195270-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
195270-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
195271-001		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1					HG		
195271-003		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1					HG		
195279-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
195306-001		Polymatrix	Water	50	mL	50	1.000000	1					HG		
195306-005		Polymatrix	Water	50	mL	50	1.000000	1					HG		
195317-002		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195317-003		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195317-004		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195317-005		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195318-002		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195318-003		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195318-004		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195318-005		Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195329-001		Innovative Technical Solutions	Water	50	mL	50	1.000000	1					T26/HG		
195337-001		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
195337-002		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
195337-003		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					T26/HG		
195370-021		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1					T26/HG		
QC391965	BLANK		Water	50	mL	50	1.000000	1					HG		
QC391966	BS		Water	50	mL	50	1.000000	1		2.5			HG		
QC391967	BSD		Water	50	mL	50	1.000000	1		2.5			HG		
QC391968	SER of 195271-001		WET Leacha	50	mL	50	1.000000	1					HG		
QC391969	MS of 195271-001		WET Leacha	50	mL	50	1.000000	1		2.5			HG		
QC391970	MSD of 195271-001		WET Leacha	50	mL	50	1.000000	1		2.5			HG		
QC391971	PDS of 195271-001		WET Leacha	50	mL	50	1.000000	1					HG		
QC392348	PREPBLK		Water	10	mL	50	5.000000	1					HG		

Prep Chemist: 6/14/07 Reviewed By: Date: 6/14/07

Relinquished By: 6/14/07 Received By: Date: 6/14/07

Water Digestion for Mercury ~ 6/17/07

Curtis & Tompkins, Ltd.

LIMS Batch #: ~~126211~~ 126221

Date Digested: 6/14/07

Digested by: ~

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2512

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	Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	195270-001	H	50	50	N	Filtrate (F.F.)
	↓ -002	H	50			↓
	195271-001	MSS	10			wet leachate
	↓ -003		10			wet leachate
5	195279-001	G	50			Filtrate (F.F.)
	195306-001	A				H_2O
	↓ -005	A				H_2O ~ 6/13/07
	195317-002	G				~~H_2O~~ Filtrate (F.F)
	-003					
10	-004					
	↓ -005	↓				↓
	195377-001	A				Filtrate (F.F.)
	-002					↓
	-003					
15	195318-002	G				~~H_2O~~ Filtrate (F.F.)
	-003					
	-004					
	-005					
	195329-001	B				H_2O
20	195370-021	A				Filtrate (F.F.)
	Blank				X	
	BS					
	BSD					
	MS ~~195271-001~~ ~~195279-002~~		10			wet leachate
	MSD ↓ ~ 6/13/07		10			wet leachate
	Prep Blk		10			

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	56475	~ 6/14/07
ICAL Source WS#	56475	
ICV / CCV WS#	56477/78/79/80	
Digestion of Samples & Standards: Time ON / Temperature ON	12:00 / 95°C	
Time OFF/ Temperature OFF	2:00 / 95°C	
concentrated H_2SO_4	E080036	
concentrated HNO_3	E0110Z	
5% $KMnO_4$	K061307	
5% $K_2S_2O_8$	K_2 060607	
NaCl.hydroxylamine hydrochloride	Hy061107	
Stannous Chloride	$SnCl_2$ 061307	
☒ filtered thru' 0.45 um syringe filter	Millipore R4AN3832	

~ 6/14/07

Prep Chemist / Date

Continued from page ___

Continued on page ___

6/14/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/28/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

: 08113

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 06/28/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.059	0.021

GENERAL CHEMISTRY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/06/07
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000	Analyzed:	06/19/07
Batch#:	126454		

Field ID: 1349MW100 Lab ID: 195270-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	470	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	470	10

Field ID: DUP0606073A Lab ID: 195270-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	920	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	920	10

Field ID: BHWGW04 Lab ID: 195270-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	310	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	310	10

Field ID: BHWGW04RBHWGW100 Lab ID: 195270-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Field ID: HWGW101 Lab ID: 195270-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	500	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	500	10

ND= Not Detected
RL= Reporting Limit

: 00416

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/06/07
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000	Analyzed:	06/19/07
Batch#:	126454		

Field ID: BHWGW05 Lab ID: 195270-006
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	750	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	750	10

Field ID: BHWGW01 Lab ID: 195270-007
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID: DUP0606073B Lab ID: 195270-008
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	540	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	540	10

Field ID: 231GW29 Lab ID: 195270-010
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	270	10

Field ID: DUP0606072A Lab ID: 195270-011
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

ND= Not Detected
RL= Reporting Limit

100.1

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	06/06/07
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000	Analyzed:	06/19/07
Batch#:	126454		

Field ID: 1213GW101 Lab ID: 195270-016
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	380	10
Alkalinity, Carbonate	34	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	420	10

Field ID: 610GW101 Lab ID: 195270-017
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	500	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	500	10

Field ID: 610GW102 Lab ID: 195270-018
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	360	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	360	10

Type: BLANK Lab ID: QC392928

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

100.1

00419

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392929	Batch#:	126454
Matrix:	Water	Analyzed:	06/19/07

Spiked	Result	%REC	Limits
200.0	184.4	92	90-110

101.0

00419

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	BHWGW01	Batch#:	126454
MSS Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/19/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392930	537.0	500.0	985.0	90	69-112		
MSD	QC392931		500.0	986.0	90	69-112	0	25

RPD= Relative Percent Difference

102.0

: 00420

Analysis: **Alkalinity**
Method: **EPA 310.1** / SMWW 2320B
SOP#: Alkalinity_rv 7.doc

Analyst: SJ
Analysis Date: **06/19/07**
Batch No: **126454**

H_2SO_4 Normality = **0.02**
conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.9	100	0.00	0.00	ND			1.0		
LCS	10.2	25	2.77	4.61	184.40			4.0	92	
195270-007	7.9	10	0.00	5.37	537.00		n/a	10.0		
MS	9.4	10	2.11	9.85	985.00			10.0	90	
MSD	9.4	10	2.14	9.86	986.00			10.0	90	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195251-007	7.4	25	0.00	3.00	120.00		n/a	4.0
195270-001	6.5	10	0.00	4.68	468.00		n/a	10.0
195270-002	6.6	10	0.00	9.19	919.00		n/a	10.0
195270-003	7.5	10	0.00	3.06	306.00		n/a	10.0
195270-004	5.4	100	0.00	0.16	rpt low alk	0.28	ND	1.0
195270-005	7.6	10	0.00	4.95	495.00		n/a	10.0
195270-006	7.6	10	0.00	7.45	745.00		n/a	10.0
195270-007	7.9	10	0.00	5.37	537.00		n/a	10.0
195270-008	7.9	10	0.00	5.42	542.00		n/a	10.0
195270-010	7.4	10	0.00	2.73	273.00		n/a	10.0
195270-011	7.5	10	0.00	2.90	290.00		n/a	10.0
195270-016	8.4	10	0.17	4.16	416.00		n/a	10.0
195270-017	7.6	10	0.00	5.03	503.00		n/a	10.0
195270-018	7.2	10	0.00	3.60	360.00		n/a	10.0
195285-002	7.2	100	0.00	5.84	58.40		n/a	1.0
195285-003	7.2	100	0.00	6.99	69.90		n/a	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: JW 6/19/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Curtis Tompkins, Ltd.

Template: F:\inorgan\wetstuff\alkalinity.xls
Ver.8.6, Effective 2/19/07

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/19/07
Batch No: 126454

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195251-007	0.0	120.0	120	120.000	0.000	0.000
195270-001	0.0	468.00	468.000	468.000	0.000	0.000
195270-002	0.0	919.00	919.000	919.000	0.000	0.000
195270-003	0.0	306.00	306.000	306.000	0.000	0.000
195270-004	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
195270-005	0.0	495.00	495.000	495.000	0.000	0.000
195270-006	0.0	745.00	745.000	745.000	0.000	0.000
195270-007	0.0	537.00	537.000	537.000	0.000	0.000
195270-008	0.0	542.00	542.000	542.000	0.000	0.000
195270-010	0.0	273.00	273.000	273.000	0.000	0.000
195270-011	0.0	290.00	290.000	290.000	0.000	0.000
195270-016	17.0	399.00	416.000	382.000	34.000	0.000
195270-017	0.0	503.00	503.000	503.000	0.000	0.000
195270-018	0.0	360.00	360.000	360.000	0.000	0.000
195285-002	0.0	58.40	58.400	58.400	0.000	0.000
195285-003	0.0	69.90	69.900	69.900	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 06/19/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 126454 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
195251-007	120.000	146.310	0.000	0.000
195270-001	468.000	570.608	0.000	0.000
195270-002	919.000	1120.488	0.000	0.000
195270-003	306.000	373.090	0.000	0.000
195270-004	ND	not applicable	not applicable	not applicable
195270-005	495.000	603.527	0.000	0.000
195270-006	745.000	908.339	0.000	0.000
195270-007	537.000	654.736	0.000	0.000
195270-008	542.000	660.832	0.000	0.000
195270-010	273.000	332.854	0.000	0.000
195270-011	290.000	353.582	0.000	0.000
195270-016	416.000	465.752	20.389	0.000
195270-017	503.000	613.281	0.000	0.000
195270-018	360.000	438.929	0.000	0.000
195285-002	58.400	71.204	0.000	0.000
195285-003	69.900	85.225	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126454 Date: 6/19/07 Benchbook#: **BK2508**
Matrix: water Time: 12:30 Page: **18**

CAL-ph 4.0: SS#: 8749
CAL-ph 7.0: SS#: 8129
CAL-ph 10.0: SS#: 55862
Slope: 100.1
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 86014
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: UNR 3229-4
Lot #6352 Exp. 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.9	100	—	<0.05		
LCS	10.2	25	2.77	4.61		
195271-7A	7.4	25	—	3.00		
195270-1G	6.5	10	—	9.68		
-2	6.6	10	—	9.19		
-3 B	7.5	10	—	3.06		
-4	5.8	25	—	<2mL		
-4	5.4	100	—	0.16	0.28	
-5	7.6	10	—	4.95		
-6	7.6	10	—	7.45		
-7 D	7.9	10	—	5.37		
MS-7	9.4		2.11	9.85		
MSD-7	9.4		2.14	9.86		
195270-8 B	7.9	10	—	5.42		
-10 J	7.4	10	—	2.73		
-11	7.5	10	—	2.90		
4A -~~12~~16H	8.4	10	0.17	4.16		
-17H	7.6	10	—	5.23		
-18	7.2	10	—	3.60		
195285-2A	7.4	25	—	<2mL		
-2	7.2	100	—	5.84		
-3	7.2	25	—	<2mL		
-3	7.2	100	—	6.99		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/19/07
Analyst / Date

6/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126454
Date Started: 19-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195251-007			URS Corporation	Water	ALKALINITY	19-JUN-2007
195270-001			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-002			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-003			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-004			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-005			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-006			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-007			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-008			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-010			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-011			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-016			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-017			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195270-018			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195285-002			U.S. Army Corps of	Water	ALKALINITY	19-JUN-2007
195285-003			U.S. Army Corps of	Water	ALKALINITY	19-JUN-2007
QC392928	BLANK			Water	ALKALINITY	
QC392929	LCS			Water	ALKALINITY	
QC392930	MS	of 195270-007		Water	ALKALINITY	
QC392931	MSD	of 195270-007		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Chloride

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	06/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1349MW100	SAMPLE	195270-001	910	20	100.0	126061	06/06/07 08:50	06/07/07 17:55
DUP0606073A	SAMPLE	195270-002	1,100	20	100.0	126061	06/06/07	06/07/07 18:25
BHWGW04	SAMPLE	195270-003	94	2.0	10.00	126059	06/06/07 11:00	06/07/07 23:35
BHWGW04RBHWGW100	SAMPLE	195270-004	ND	0.20	1.000	126061	06/06/07 11:10	06/08/07 00:07
HWGW101	SAMPLE	195270-005	46	5.0	25.00	126061	06/06/07 12:20	06/07/07 22:22
BHWGW05	SAMPLE	195270-006	110	10	50.00	126061	06/06/07 13:00	06/07/07 21:47
BHWGW01	SAMPLE	195270-007	230	10	50.00	126059	06/06/07 13:40	06/07/07 22:08
DUP0606073B	SAMPLE	195270-008	230	10	50.00	126059	06/06/07	06/07/07 21:50
231GW29	SAMPLE	195270-010	54	2.0	10.00	126059	06/06/07 14:00	06/08/07 00:10
DUP0606072A	SAMPLE	195270-011	54	2.0	10.00	126059	06/06/07 14:10	06/07/07 23:52
1213GW101	SAMPLE	195270-016	1,100	20	100.0	126059	06/06/07 10:55	06/07/07 17:58
610GW101	SAMPLE	195270-017	46	5.0	25.00	126061	06/06/07 12:15	06/07/07 22:04
610GW102	SAMPLE	195270-018	50	2.0	10.00	126059	06/06/07 13:50	06/08/07 01:54
	BLANK	QC391314	ND	0.20	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.20	1.000	126061		06/07/07 14:55

ND= Not Detected
RL= Reporting Limit

21.0

Fluoride

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	06/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1349MW100	SAMPLE	195270-001	0.30	0.20	2.000	126061	06/06/07 08:50	06/08/07 02:27
DUP0606073A	SAMPLE	195270-002	0.29	0.20	2.000	126061	06/06/07	06/08/07 01:52
BHWGW04	SAMPLE	195270-003	ND	0.10	1.000	126059	06/06/07 11:00	06/08/07 04:48
BHWGW04RBHWGW100	SAMPLE	195270-004	ND	0.10	1.000	126061	06/06/07 11:10	06/08/07 00:07
HWGW101	SAMPLE	195270-005	ND	0.10	1.000	126061	06/06/07 12:20	06/08/07 04:12
BHWGW05	SAMPLE	195270-006	0.11	0.10	1.000	126061	06/06/07 13:00	06/08/07 03:37
BHWGW01	SAMPLE	195270-007	0.12	0.10	1.000	126059	06/06/07 13:40	06/08/07 07:42
DUP0606073B	SAMPLE	195270-008	0.12	0.10	1.000	126059	06/06/07	06/08/07 05:58
231GW29	SAMPLE	195270-010	ND	0.10	1.000	126059	06/06/07 14:00	06/08/07 05:23
DUP0606072A	SAMPLE	195270-011	ND	0.10	1.000	126059	06/06/07 14:10	06/08/07 08:17
1213GW101	SAMPLE	195270-016	ND	0.50	5.000	126059	06/06/07 10:55	06/08/07 03:04
610GW101	SAMPLE	195270-017	0.19	0.10	1.000	126061	06/06/07 12:15	06/08/07 03:02
610GW102	SAMPLE	195270-018	0.29	0.10	1.000	126059	06/06/07 13:50	06/08/07 03:39
	BLANK	QC391314	ND	0.10	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.10	1.000	126061		06/07/07 14:55

ND= Not Detected
RL= Reporting Limit

23.1

Curtis & Tompkins, Ltd.

00127

Nitrate Nitrogen

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	06/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1349MW100	SAMPLE	195270-001	ND	0.10	2.000	126061	06/06/07 08:50	06/08/07 02:27
DUP0606073A	SAMPLE	195270-002	ND	0.10	2.000	126061	06/06/07	06/08/07 01:52
BHWGW04	SAMPLE	195270-003	5.1	0.50	10.00	126059	06/06/07 11:00	06/07/07 23:35
BHWGW04RBHWGW100	SAMPLE	195270-004	0.08	0.05	1.000	126061	06/06/07 11:10	06/08/07 00:07
HWGW101	SAMPLE	195270-005	1.7	0.05	1.000	126061	06/06/07 12:20	06/08/07 04:12
BHWGW05	SAMPLE	195270-006	ND	0.05	1.000	126061	06/06/07 13:00	06/08/07 03:37
BHWGW01	SAMPLE	195270-007	5.7	2.5	50.00	126059	06/06/07 13:40	06/07/07 22:08
DUP0606073B	SAMPLE	195270-008	5.7	2.5	50.00	126059	06/06/07	06/07/07 21:50
231GW29	SAMPLE	195270-010	1.5	0.05	1.000	126059	06/06/07 14:00	06/08/07 05:23
DUP0606072A	SAMPLE	195270-011	1.5	0.05	1.000	126059	06/06/07 14:10	06/08/07 08:17
1213GW101	SAMPLE	195270-016	2.2	0.25	5.000	126059	06/06/07 10:55	06/08/07 03:04
610GW101	SAMPLE	195270-017	ND	0.05	1.000	126061	06/06/07 12:15	06/08/07 03:02
610GW102	SAMPLE	195270-018	0.29	0.05	1.000	126059	06/06/07 13:50	06/08/07 03:39
	BLANK	QC391314	ND	0.05	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.05	1.000	126061		06/07/07 14:55

ND= Not Detected
RL= Reporting Limit

25.1

Curtis & Tompkins, Ltd.

09123

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	06/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1349MW100	SAMPLE	195270-001	ND	0.10	2.000	126061	06/06/07 08:50	06/08/07 02:27
DUP0606073A	SAMPLE	195270-002	ND	0.10	2.000	126061	06/06/07	06/08/07 01:52
BHWGW04	SAMPLE	195270-003	ND	0.05	1.000	126059	06/06/07 11:00	06/08/07 04:48
BHWGW04RBHWGW100	SAMPLE	195270-004	ND	0.05	1.000	126061	06/06/07 11:10	06/08/07 00:07
HWGW101	SAMPLE	195270-005	ND	0.05	1.000	126061	06/06/07 12:20	06/08/07 04:12
BHWGW05	SAMPLE	195270-006	ND	0.05	1.000	126061	06/06/07 13:00	06/08/07 03:37
BHWGW01	SAMPLE	195270-007	ND	0.05	1.000	126059	06/06/07 13:40	06/08/07 07:42
DUP0606073B	SAMPLE	195270-008	ND	0.05	1.000	126059	06/06/07	06/08/07 05:58
231GW29	SAMPLE	195270-010	ND	0.05	1.000	126059	06/06/07 14:00	06/08/07 05:23
DUP0606072A	SAMPLE	195270-011	ND	0.05	1.000	126059	06/06/07 14:10	06/08/07 08:17
1213GW101	SAMPLE	195270-016	ND	0.25	5.000	126059	06/06/07 10:55	06/08/07 03:04
610GW101	SAMPLE	195270-017	ND	0.05	1.000	126061	06/06/07 12:15	06/08/07 03:02
610GW102	SAMPLE	195270-018	ND	0.05	1.000	126059	06/06/07 13:50	06/08/07 03:39
	BLANK	QC391314	ND	0.05	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.05	1.000	126061		06/07/07 14:55

ND= Not Detected
RL= Reporting Limit

Sulfate

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	06/07/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
1349MW100	SAMPLE	195270-001	5.0	1.0	2.000	126061	06/06/07 08:50	06/08/07 02:27
DUP0606073A	SAMPLE	195270-002	5.0	1.0	2.000	126061	06/06/07	06/08/07 01:52
BHWGW04	SAMPLE	195270-003	61	5.0	10.00	126059	06/06/07 11:00	06/07/07 23:35
BHWGW04RBHWGW100	SAMPLE	195270-004	ND	0.50	1.000	126061	06/06/07 11:10	06/08/07 00:07
HWGW101	SAMPLE	195270-005	74	13	25.00	126061	06/06/07 12:20	06/07/07 22:22
BHWGW05	SAMPLE	195270-006	110	25	50.00	126061	06/06/07 13:00	06/07/07 21:47
BHWGW01	SAMPLE	195270-007	67	25	50.00	126059	06/06/07 13:40	06/07/07 22:08
DUP0606073B	SAMPLE	195270-008	70	25	50.00	126059	06/06/07	06/07/07 21:50
231GW29	SAMPLE	195270-010	70	5.0	10.00	126059	06/06/07 14:00	06/08/07 00:10
DUP0606072A	SAMPLE	195270-011	71	5.0	10.00	126059	06/06/07 14:10	06/07/07 23:52
1213GW101	SAMPLE	195270-016	140	2.5	5.000	126059	06/06/07 10:55	06/08/07 03:04
610GW101	SAMPLE	195270-017	0.73	0.50	1.000	126061	06/06/07 12:15	06/08/07 03:02
610GW102	SAMPLE	195270-018	1.2	0.50	1.000	126059	06/06/07 13:50	06/08/07 03:39
	BLANK	QC391314	ND	0.50	1.000	126059		06/07/07 14:26
	BLANK	QC391320	ND	0.50	1.000	126061		06/07/07 14:55

ND= Not Detected
RL= Reporting Limit

29.1

Curtis & Tompkins, Ltd.

00129

Batch QC Report

Chloride

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391315		4.000	4.312	108	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		4.000	4.262	107	80-120	1	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	9.712	2.040	11.83	104 NM	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		2.040	11.87	106 NM	80-120	0	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	230.9	100.0	343.1	112	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		100.0	338.4	107	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		4.000	4.068	102	80-120			1.000	126061			06/07/07 15:12
	BSD		QC391322		4.000	4.025	101	80-120	1	20	1.000	126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	202.1	40.00	235.3	83 NM	80-120			20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		40.00	235.7	84 NM	80-120	0	25	20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:59

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

22.0

Curtis & Tompkins, Ltd.

00123

Batch QC Report

Fluoride

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391315		2.000	2.019	101	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		2.000	2.096	105	80-120	4	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	0.01985	1.020	0.9537	92	78-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		1.020	0.9721	93	78-120	2	20	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	0.1201	50.00	43.21	86	78-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		50.00	44.46	89	78-120	3	20	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		2.000	2.060	103	80-120			1.000	126061			06/07/07 15:12
	BSD		QC391322		2.000	2.015	101	80-120	2	20	1.000	126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	0.8121	20.00	19.59	94	78-120			20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		20.00	19.50	93	78-120	0	20	20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:59

RPD= Relative Percent Difference

24.0

Curtis & Tompkins, Ltd.

00152

Batch QC Report

Nitrate Nitrogen

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391315		1.000	1.104	110	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		1.000	1.108	111	80-120	0	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	0.6578	0.5100	1.226	111	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		0.5100	1.240	114	80-120	1	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	5.678	25.00	33.86	113	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		25.00	33.36	111	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		1.000	1.089	109	80-120			1.000	126061			06/07/07 15:12
	BSD		QC391322		1.000	1.062	106	80-120	3	20	1.000	126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	0.6472	10.00	10.74	101	80-120			20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		10.00	10.89	102	80-120	1	25	20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:59

RPD= Relative Percent Difference

26.0

Curtis & Tompkins, Ltd.

00133

Batch QC Report

Nitrite Nitrogen

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391315		1.000	1.035	104	80-120			1.000	126059			06/07/07 14:43
	BSD		QC391316		1.000	1.079	108	80-120	4	20	1.000	126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	<0.01089	0.5100	0.5944	117	80-120			1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		0.5100	0.5801	114	80-120	2	25	1.020	126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	<0.01089	25.00	26.42	106	80-120			50.00	126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		25.00	26.69	107	80-120	1	25	50.00	126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		1.000	1.010	101	80-120			1.000	126061			06/07/07 15:12
	BSD		QC391322		1.000	1.013	101	80-120	0	20	1.000	126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	<0.1616	10.00	11.32	113	80-120			20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		10.00	11.19	112	80-120	1	25	20.00	126061	06/05/07 13:30	06/06/07	06/07/07 16:59

RPD= Relative Percent Difference

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391315		10.00	10.91	109	80-120			1.000		126059			06/07/07 14:43
	BSD		QC391316		10.00	10.96	110	80-120	1	20	1.000		126059			06/07/07 15:01
231GW20	MS	195234-001	QC391337	8.809	5.100	14.35	109	80-120			1.020		126059	06/05/07 10:30	06/06/07	06/07/07 16:09
231GW20	MSD	195234-001	QC391338		5.100	14.44	110	80-120	1	25	1.020		126059	06/05/07 10:30	06/06/07	06/07/07 16:26
BHWGW01	MS	195270-007	QC391437	67.12	250.0	336.6	108	80-120			50.00		126059	06/06/07 13:40	06/07/07	06/07/07 22:43
BHWGW01	MSD	195270-007	QC391438		250.0	330.9	106	80-120	2	25	50.00		126059	06/06/07 13:40	06/07/07	06/07/07 23:00
	BS		QC391321		10.00	10.70	107	80-120			1.000		126061			06/07/07 15:12
	BSD		QC391322		10.00	10.45	104	80-120	2	20	1.000		126061			06/07/07 15:30
231GW13	MS	195234-003	QC391339	<0.9383	100.0	99.16	99	80-120			20.00		126061	06/05/07 13:30	06/06/07	06/07/07 16:42
231GW13	MSD	195234-003	QC391340		100.0	100.6	101	80-120	1	25	20.00		126061	06/05/07 13:30	06/06/07	06/07/07 16:59

RPD= Relative Percent Difference

30.0

Curtis & Tompkins, Ltd.

00135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	-10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195270 IC Water: EPA 300.0

Inst : IC03
Calnum : 627218791001
Units : mg/L

Date : 31-MAY-2007 22:31
X Axis : A

Reviewer : RH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_3	627218791003	L1	31-MAY-2007 22:31	S6107 (500X)
L2	152_4	627218791004	L2	31-MAY-2007 22:49	S6107 (100X)
L3	152_5	627218791005	L3	31-MAY-2007 23:06	S6107 (25X)
L4	152_6	627218791006	L4	31-MAY-2007 23:24	S6107 (10X)
L5	152_7	627218791007	L5	31-MAY-2007 23:41	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1297	0.1872	0.1952	0.2113	0.2177	QORG		0.19988	0.001803	0.1882	1.000	0.990	
Chloride	0.1393	0.1328	0.1406	0.1501	0.1616	QORG		0.13746	0.001210	0.1449	1.000	0.990	
Nitrogen, Nitrite	0.3375	0.3005	0.2902	0.3084	0.3151	QORG		0.29647	0.003762	0.3103	1.000	0.990	
Nitrogen, Nitrate	0.3082	0.3189	0.3329	0.3458	0.3609	QORG		0.32886	0.006433	0.3333	1.000	0.990	
Sulfate	0.1108	0.1023	0.1034	0.1095	0.1158	QORG		0.10232	2.707E-4	0.1084	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-35	0.500	-7	2.000	-4	5.000	1	10.00	0
Chloride	0.200	1	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	14	0.250	1	1.000	-3	2.500	1	5.000	0
Nitrogen, Nitrate	0.050	-6	0.250	-3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	8	2.500	-1	10.00	-2	25.00	0	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195270 IC Water
EPA 300.0

Inst : IC03
Calnum : 627218791001 Cal Date : 31-MAY-2007

ICV 627218791009 (152_9 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1882	0.1903	1.000	0.9439	mg/L	-6	10	
Chloride	0.1449	0.1360	2.000	1.945	mg/L	-3	10	
Nitrogen, Nitrite	0.3103	0.2924	0.5000	0.4900	mg/L	-2	10	
Nitrogen, Nitrate	0.3333	0.3204	0.5000	0.4825	mg/L	-3	10	
Sulfate	0.1084	0.1028	5.000	4.961	mg/L	-1	10	

:88439

CONTINUING CALIBRATION SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.2574	0.2742	0.5000	0.5242	mg/L	5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.2574	0.2610	2.0000	1.9733	mg/L	-1	10	
IC01	P	607228348032	08-JUN-2007 00:42	607218822002	01-JUN-2007	0.2574	0.2719	5.0000	5.0216	mg/L	0	10	
IC01	P	607228348050	08-JUN-2007 05:57	607218822002	01-JUN-2007	0.2574	0.2578	2.0000	1.9495	mg/L	-3	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1882	0.1941	0.5000	0.4834	mg/L	-3	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1882	0.2030	2.0000	1.9951	mg/L	0	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1882	0.2192	5.0000	5.2360	mg/L	5	10	
IC03	P	627228309058	08-JUN-2007 07:07	627218791001	31-MAY-2007	0.1882	0.2041	2.0000	2.0061	mg/L	0	10	
IC03	P	627228309066	08-JUN-2007 09:27	627218791001	31-MAY-2007	0.1882	0.2125	5.0000	5.0817	mg/L	2	10	

CONTINUING CALIBRATION SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.1750	0.1721	1.0000	1.0016	mg/L	0	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.1750	0.1772	4.0000	4.0320	mg/L	1	10	
IC01	P	607228348032	08-JUN-2007 00:42	607218822002	01-JUN-2007	0.1750	0.1862	10.000	10.125	mg/L	1	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1449	0.1472	1.0000	1.0609	mg/L	6	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1449	0.1522	4.0000	4.2678	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1449	0.1648	10.000	10.939	mg/L	9	10	
IC03	P	627228309058	08-JUN-2007 07:07	627218791001	31-MAY-2007	0.1449	0.1502	4.0000	4.2150	mg/L	5	10	

CONTINUING CALIBRATION SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.3873	0.3549	0.2500	0.2336	mg/L	-7	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.3873	0.3918	1.0000	1.0251	mg/L	3	10	
IC01	P	607228348032	08-JUN-2007 00:42	607218822002	01-JUN-2007	0.3873	0.4057	2.5000	2.6215	mg/L	5	10	
IC01	P	607228348050	08-JUN-2007 05:57	607218822002	01-JUN-2007	0.3873	0.3959	1.0000	1.0358	mg/L	4	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3103	0.2965	0.2500	0.2493	mg/L	0	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3103	0.3087	1.0000	1.0280	mg/L	3	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3103	0.3352	2.5000	2.7317	mg/L	9	10	
IC03	P	627228309058	08-JUN-2007 07:07	627218791001	31-MAY-2007	0.3103	0.3142	1.0000	1.0458	mg/L	5	10	
IC03	P	627228309066	08-JUN-2007 09:27	627218791001	31-MAY-2007	0.3103	0.3284	2.5000	2.6782	mg/L	7	10	

: 08442

CONTINUING CALIBRATION SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.4432	0.3982	0.2500	0.2368	mg/L	-5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.4432	0.4541	1.0000	1.0611	mg/L	6	10	
IC01	P	607228348032	08-JUN-2007 00:42	607218822002	01-JUN-2007	0.4432	0.4577	2.5000	2.5880	mg/L	4	10	
IC01	P	607228348050	08-JUN-2007 05:57	607218822002	01-JUN-2007	0.4432	0.4558	1.0000	1.0649	mg/L	6	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.3333	0.3444	0.2500	0.2605	mg/L	4	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.3333	0.3693	1.0000	1.0992	mg/L	10	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.3333	0.3807	2.5000	2.7463	mg/L	10	10	
IC03	P	627228309058	08-JUN-2007 07:07	627218791001	31-MAY-2007	0.3333	0.3637	1.0000	1.0831	mg/L	8	10	
IC03	P	627228309066	08-JUN-2007 09:27	627218791001	31-MAY-2007	0.3333	0.3747	2.5000	2.7051	mg/L	8	10	

CONTINUING CALIBRATION SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607228348008	07-JUN-2007 14:25	607218822002	01-JUN-2007	0.1369	0.1335	2.5000	2.6178	mg/L	5	10	
IC01	P	607228348019	07-JUN-2007 18:51	607218822002	01-JUN-2007	0.1369	0.1344	10.000	10.341	mg/L	3	10	
IC01	P	607228348032	08-JUN-2007 00:42	607218822002	01-JUN-2007	0.1369	0.1372	25.000	25.462	mg/L	2	10	
IC01	P	607228348050	08-JUN-2007 05:57	607218822002	01-JUN-2007	0.1369	0.1342	10.000	10.330	mg/L	3	10	
IC03	P	627228309010	07-JUN-2007 13:45	627218791001	31-MAY-2007	0.1084	0.1082	2.5000	2.6258	mg/L	5	10	
IC03	P	627228309021	07-JUN-2007 18:33	627218791001	31-MAY-2007	0.1084	0.1126	10.000	10.705	mg/L	7	10	
IC03	P	627228309036	08-JUN-2007 00:44	627218791001	31-MAY-2007	0.1084	0.1191	25.000	27.154	mg/L	9	10	
IC03	P	627228309058	08-JUN-2007 07:07	627218791001	31-MAY-2007	0.1084	0.1120	10.000	10.646	mg/L	6	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607228348020 File : 159_20 Time : 07-JUN-2007 19:08
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	[0.01263]	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

: 08445

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607228348033 File : 159_33 Time : 08-JUN-2007 00:59
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607228348051 File : 159_51 Time : 08-JUN-2007 06:14
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309022 File : 158_22 Time : 07-JUN-2007 18:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309037 File : 158_37 Time : 08-JUN-2007 01:02
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

00449

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309057 File : 158_57 Time : 08-JUN-2007 06:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

00450

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195270 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627228309065 File : 158_65 Time : 08-JUN-2007 09:09
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02457]	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0						1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0						1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:47	1.0			25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0			25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0			25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0			25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1		25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1		25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1		25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2		25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0			25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1		25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1		25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0			25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0			25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0			25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2		25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2		25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2		25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0			25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1		25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1		25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0			25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1		25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1		25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0		25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0		25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0		25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1	25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1	25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0		25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1	25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0		25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2	25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2	25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2	25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2	25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2	25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1	25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1	25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0		25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0		25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:14	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 22:31	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 22:49	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:06	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:24	1.0						1	
007	152_7	ICAL	L5			31-MAY-2007 23:41	1.0						1	
008	152_8	CCB				31-MAY-2007 23:58	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:16	1.0			25			2	
011	152_11	CCB/MB	QC390419	125840	Water	01-JUN-2007 00:51	1.0			25				
012	152_12	BS	QC390420	125840	Water	01-JUN-2007 01:08	1.0			25			1	
013	152_13	BSD	QC390421	125840	Water	01-JUN-2007 01:25	1.0			25			1	
014	152_14	SAMPLE	195096-001	125840	Water	01-JUN-2007 01:43	1.0	1		25				1:SO4=556.718
016	152_16	SAMPLE	195096-002	125840	Water	01-JUN-2007 02:18	2.0	1		25				2:SO4=598.434
018	152_18	SAMPLE	195096-003	125840	Water	01-JUN-2007 02:53	1.0	1		25				2:SO4=557.907
019	152_19	SAMPLE	195096-004	125840	Water	01-JUN-2007 03:10	1.0	1		25				2:SO4=559.245
021	152_21	SAMPLE	195089-002	125840	Water	01-JUN-2007 03:45	5.0	1		25				2:SO4=140.384
022	152_22	SAMPLE	195089-002	125840	Water	01-JUN-2007 04:02	1.0	2		25				3:SO4=490.019
024	152_24	SAMPLE	195089-004	125840	Water	01-JUN-2007 04:37	1.0	2		25				3:SO4=427.003
026	152_26	CCV	M	125840		01-JUN-2007 05:12	1.0			25			1	
027	152_27	CCB		125840		01-JUN-2007 05:29	1.0			25				
030	152_30	SAMPLE	195089-005	125840	Water	01-JUN-2007 06:21	1.0	1		25				2:SO4=489.308
031	152_31	SAMPLE	195089-006	125840	Water	01-JUN-2007 06:39	1.0	1		25				2:SO4=517.275
032	152_32	SAMPLE	195089-003	125840	Water	01-JUN-2007 06:56	1.0	1		25				2:SO4=373.460
034	152_34	SAMPLE	195096-005	125840	Water	01-JUN-2007 07:31	1.0	1		25				2:SO4=409.844
035	152_35	SAMPLE	195096-006	125840	Water	01-JUN-2007 07:48	1.0	1		25				2:SO4=144.475
037	152_37	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:23	10.0	1		25				1:SO4=195.820
038	152_38	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:41	5.0	1		25				2:SO4=339.862
039	152_39	SAMPLE	195089-007	125840	Water	01-JUN-2007 08:58	1.0	2		25				3:SO4=481.654
041	152_41	SAMPLE	195092-002	125840	Water	01-JUN-2007 09:33	1.0	2		25				2:SO4=430.097
042	152_42	SAMPLE	195092-003	125840	Water	01-JUN-2007 09:50	1.0	2		25				2:SO4=430.821
044	152_44	CCV	H	125840		01-JUN-2007 10:25	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
045	152_45	CCB		125840		01-JUN-2007 10:43	1.0	1	25				
046	152_46	SAMPLE	195089-004	125840	Water	01-JUN-2007 11:00	5.0	1	25				2:SO4=117.984
047	152_47	SAMPLE	195112-001	125840	Water	01-JUN-2007 11:17	1.0		25				
048	152_48	MSS	195112-004	125840	Water	01-JUN-2007 11:35	1.0	2	25				1:CL=27.8197
050	152_50	SAMPLE	195089-007	125840	Water	01-JUN-2007 12:10	10.0	1	25				1:SO4=70.8983
051	152_51	MS	QC390422	125840	Water	01-JUN-2007 12:27	2.0	1	25			1	
052	152_52	MSD	QC390423	125840	Water	01-JUN-2007 12:44	2.0	1	25			1	
054	152_54	CCV	M	125840		01-JUN-2007 13:19	1.0		25			1	
055	152_55	CCB		125840		01-JUN-2007 13:37	1.0		25				
057	152_57	BLANK	QC390472	125850	Water	01-JUN-2007 15:12	1.0	1	25				
058	152_58	BS	QC390473	125850	Water	01-JUN-2007 15:29	1.0	1	25			1	
059	152_59	BSD	QC390474	125850	Water	01-JUN-2007 15:47	1.0	1	25			1	
060	152_60	SAMPLE	195127-003	125850	Water	01-JUN-2007 16:27	500.0		25				1:CL=25.2331
061	152_61	SAMPLE	195127-001	125850	Water	01-JUN-2007 16:54	20.0		25				2:CL=355.264
062	152_62	SAMPLE	195127-004	125850	Water	01-JUN-2007 17:11	20.0		25				2:CL=357.783
063	152_63	SAMPLE	195127-002	125850	Water	01-JUN-2007 17:28	20.0		25				2:CL=341.082
064	152_64	SAMPLE	195127-003	125850	Water	01-JUN-2007 18:03	20.0		25				2:CL=364.164
066	152_66	CCV	H	125850		01-JUN-2007 18:44	1.0		25			1	
067	152_67	CCB		125850		01-JUN-2007 19:01	20.0	1	25				
068	152_68	MSS	195123-005	125850	Water	01-JUN-2007 21:08	1.0	1	25				
070	152_70	MS	QC390480	125850	Water	01-JUN-2007 21:43	1.02	1	25			1	
071	152_71	MSD	QC390481	125850	Water	01-JUN-2007 22:00	1.02	1	25			1	
073	152_73	CCV	M	125850		01-JUN-2007 22:35	1.0		25			1	
074	152_74	CCB		125850		01-JUN-2007 22:52	1.0	1	25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 607228348 Instrument: IC01 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	159_7	X	L			07-JUN-2007 13:48	1.0	3		25			1	
008	159_8	CCV	L			07-JUN-2007 14:25	1.0	1		25			1	
009	159_9	CCB/MB	QC391320	126061	Water	07-JUN-2007 14:55	1.0			25				
010	159_10	BS	QC391321	126061	Water	07-JUN-2007 15:12	1.0			25			1	
011	159_11	BSD	QC391322	126061	Water	07-JUN-2007 15:30	1.0			25			1	
012	159_12	SAMPLE	195251-003	126061	Water	07-JUN-2007 16:01	1.0			25				1:CL=23.1349
013	159_13	MSS	195234-003	126061	Water	07-JUN-2007 16:24	20.0	1		25				
014	159_14	MS	QC391339	126061	Water	07-JUN-2007 16:42	20.0			25			1	
015	159_15	MSD	QC391340	126061	Water	07-JUN-2007 16:59	20.0			25			1	
016	159_16	SAMPLE	195265-005	126061	Water	07-JUN-2007 17:28	100.0			25				
017	159_17	SAMPLE	195270-001	126061	Water	07-JUN-2007 17:55	100.0			25				
018	159_18	SAMPLE	195270-002	126061	Water	07-JUN-2007 18:25	100.0			25				
019	159_19	CCV	M	126061		07-JUN-2007 18:51	1.0			25			1	
020	159_20	CCB		126061		07-JUN-2007 19:08	1.0			25				
021	159_21	SAMPLE	195265-004	126061	Water	07-JUN-2007 21:29	100.0			25				
022	159_22	SAMPLE	195270-006	126061	Water	07-JUN-2007 21:47	50.0			25				
023	159_23	SAMPLE	195270-017	126061	Water	07-JUN-2007 22:04	25.0			25				
024	159_24	SAMPLE	195270-005	126061	Water	07-JUN-2007 22:22	25.0			25				
025	159_25	SAMPLE	195265-005	126061	Water	07-JUN-2007 22:39	10.0	1		25				1:SO4=163.563
026	159_26	SAMPLE	195265-004	126061	Water	07-JUN-2007 22:57	5.0	2		25				2:SO4=250.819
028	159_28	SAMPLE	195286-006	126061	Water	07-JUN-2007 23:32	1.0			25				
029	159_29	SAMPLE	195286-007	126061	Water	07-JUN-2007 23:49	1.0	1		25				1:CL=23.7991
030	159_30	SAMPLE	195270-004	126061	Water	08-JUN-2007 00:07	1.0			25				
032	159_32	CCV	H	126061		08-JUN-2007 00:42	1.0			25			1	
033	159_33	CCB		126061		08-JUN-2007 00:59	1.0	1		25				
036	159_36	SAMPLE	195270-002	126061	Water	08-JUN-2007 01:52	2.0	1		25				1:CL=184.501
038	159_38	SAMPLE	195270-001	126061	Water	08-JUN-2007 02:27	2.0	1		25				1:CL=180.400
040	159_40	SAMPLE	195270-017	126061	Water	08-JUN-2007 03:02	1.0	1		25				1:CL=44.1005
042	159_42	SAMPLE	195270-006	126061	Water	08-JUN-2007 03:37	1.0	2		25				2:SO4=104.807
044	159_44	SAMPLE	195270-005	126061	Water	08-JUN-2007 04:12	1.0	2		25				2:SO4=72.7118
046	159_46	SAMPLE	195265-007	126061	Water	08-JUN-2007 04:47	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 607228348 Instrument: IC01 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC SPK uL	VL	pH	Stds Used	>LR
048	159_48	SAMPLE	195265-008	126061	Water	08-JUN-2007 05:22	1.0	25				
050	159_50	CCV	M	126061		08-JUN-2007 05:57	1.0	25			1	
051	159_51	CCB		126061		08-JUN-2007 06:14	1.0	25				
053	159_53	X	CCB	126061		08-JUN-2007 06:49	1.0					

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
009	158_9	X	L			07-JUN-2007 13:09	1.0	4		25			1	
010	158_10	CCV	L			07-JUN-2007 13:45	1.0	2		25			1	
012	158_12	CCB/MB	QC391314	126059	Water	07-JUN-2007 14:26	1.0			25				
013	158_13	BS	QC391315	126059	Water	07-JUN-2007 14:43	1.0			25			1	
014	158_14	BSD	QC391316	126059	Water	07-JUN-2007 15:01	1.0			25			1	
015	158_15	SAMPLE	195241-004	126059	Water	07-JUN-2007 15:29	5.0			25				
016	158_16	MSS	195234-001	126059	Water	07-JUN-2007 15:52	1.0			25				
017	158_17	MS	QC391337	126059	Water	07-JUN-2007 16:09	1.02			25			1	
018	158_18	MSD	QC391338	126059	Water	07-JUN-2007 16:26	1.02			25			1	
019	158_19	SAMPLE	195265-006	126059	Water	07-JUN-2007 17:16	100.0			25				
020	158_20	SAMPLE	195270-016	126059	Water	07-JUN-2007 17:58	100.0			25				
021	158_21	CCV	M	126059		07-JUN-2007 18:33	1.0			25			1	
022	158_22	CCB		126059		07-JUN-2007 18:50	1.0			25				
023	158_23	SAMPLE	195265-001	126059	Water	07-JUN-2007 20:16	100.0			25				
024	158_24	SAMPLE	195265-002	126059	Water	07-JUN-2007 21:16	100.0			25				
025	158_25	SAMPLE	195265-003	126059	Water	07-JUN-2007 21:33	50.0			25				
026	158_26	SAMPLE	195270-008	126059	Water	07-JUN-2007 21:50	50.0			25				
027	158_27	MSS	195270-007	126059	Water	07-JUN-2007 22:08	50.0	1		25				
029	158_29	MS	QC391437	126059	Water	07-JUN-2007 22:43	50.0			25			1	
030	158_30	MSD	QC391438	126059	Water	07-JUN-2007 23:00	50.0			25			1	
032	158_32	SAMPLE	195270-003	126059	Water	07-JUN-2007 23:35	10.0			25				
033	158_33	SAMPLE	195270-011	126059	Water	07-JUN-2007 23:52	10.0			25				
034	158_34	SAMPLE	195270-010	126059	Water	08-JUN-2007 00:10	10.0			25				
036	158_36	CCV	H	126059		08-JUN-2007 00:44	1.0			25			1	
037	158_37	CCB		126059		08-JUN-2007 01:02	1.0	1		25				
040	158_40	SAMPLE	195270-018	126059	Water	08-JUN-2007 01:54	10.0			25				
041	158_41	SAMPLE	195265-006	126059	Water	08-JUN-2007 02:11	5.0	2		25				2:SO4=307.196
042	158_42	SAMPLE	195265-001	126059	Water	08-JUN-2007 02:29	5.0	1		25				1:SO4=319.354
043	158_43	SAMPLE	195265-002	126059	Water	08-JUN-2007 02:46	5.0	1		25				1:SO4=318.946
044	158_44	SAMPLE	195270-016	126059	Water	08-JUN-2007 03:04	3.0	1		25				1:CL=135.740
046	158_46	SAMPLE	195270-018	126059	Water	08-JUN-2007 03:39	1.0	1		25				1:CL=45.2684

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Sequence: 627228309 Instrument: IC03 Ion Chromatograph Begun: 07-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
048	158_48	SAMPLE	195265-003	126059	Water	08-JUN-2007 04:13	1.0	1		25				1:SO4=509.677
050	158_50	SAMPLE	195270-003	126059	Water	08-JUN-2007 04:48	1.0	3		25				3:CL=77.9724
052	158_52	SAMPLE	195270-010	126059	Water	08-JUN-2007 05:23	1.0	2		25				2:SO4=71.9237
054	158_54	SAMPLE	195270-008	126059	Water	08-JUN-2007 05:58	1.0	3		25				3:CL=157.193
056	158_56	X	M	126059		08-JUN-2007 06:33	1.0	1		25			1	
057	158_57	CCB		126059		08-JUN-2007 06:50	1.0			25				
058	158_58	CCV	M	126059		08-JUN-2007 07:07	1.0			25			1	
060	158_60	MSS	195270-007	126059	Water	08-JUN-2007 07:42	1.0	4		25				3:CL=152.910
062	158_62	SAMPLE	195270-011	126059	Water	08-JUN-2007 08:17	1.0	2		25				2:SO4=71.7433
064	158_64	X	H	126059		08-JUN-2007 08:52	1.0	3		25			1	
065	158_65	CCB		126059		08-JUN-2007 09:09	1.0	1		25				
066	158_66	CCV	H	126059		08-JUN-2007 09:27	1.0			25			1	

Stds used: 1=S6107

REPORTING SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195270-001	IC01	06/07/07 17:55	100.0		+			
195270-001	IC01	06/08/07 02:27	2.0	+		+	+	+
195270-002	IC01	06/07/07 18:25	100.0		+			
195270-002	IC01	06/08/07 01:52	2.0	+		+	+	+
195270-003	IC03	06/07/07 23:35	10.0		+		+	+
195270-003	IC03	06/08/07 04:48	1.0	+		+		
195270-004	IC01	06/08/07 00:07	1.0	+	+	+	+	+
195270-005	IC01	06/07/07 22:22	25.0		+			+
195270-005	IC01	06/08/07 04:12	1.0	+		+	+	
195270-006	IC01	06/07/07 21:47	50.0		+			+
195270-006	IC01	06/08/07 03:37	1.0	+		+	+	
195270-007	IC03	06/07/07 22:08	50.0		+		+	+
195270-007	IC03	06/08/07 07:42	1.0	+		+		
195270-008	IC03	06/07/07 21:50	50.0		+		+	+
195270-008	IC03	06/08/07 05:58	1.0	+		+		
195270-010	IC03	06/08/07 00:10	10.0		+			+
195270-010	IC03	06/08/07 05:23	1.0	+		+	+	
195270-011	IC03	06/07/07 23:52	10.0		+			+
195270-011	IC03	06/08/07 08:17	1.0	+		+	+	
195270-016	IC03	06/07/07 17:58	100.0		+			
195270-016	IC03	06/08/07 03:04	5.0	+		+	+	+
195270-017	IC01	06/07/07 22:04	25.0		+			
195270-017	IC01	06/08/07 03:02	1.0	+		+	+	+
195270-018	IC03	06/08/07 01:54	10.0		+			
195270-018	IC03	06/08/07 03:39	1.0	+		+	+	+
QC391314	IC03	06/07/07 14:26	1.0	+	+	+	+	+
QC391315	IC03	06/07/07 14:43	1.0	+	+	+	+	+
QC391316	IC03	06/07/07 15:01	1.0	+	+	+	+	+
QC391337	IC03	06/07/07 16:09	1.02	+	+	+	+	+
QC391338	IC03	06/07/07 16:26	1.02	+	+	+	+	+
QC391437	IC03	06/07/07 22:43	50.0	+	+	+	+	+
QC391438	IC03	06/07/07 23:00	50.0	+	+	+	+	+

REPORTING SUMMARY FOR 195270 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC391320	IC01	06/07/07 14:55	1.0	+	+	+	+	+	
QC391321	IC01	06/07/07 15:12	1.0	+	+	+	+	+	
QC391322	IC01	06/07/07 15:30	1.0	+	+	+	+	+	
QC391339	IC01	06/07/07 16:42	20.0	+	+	+	+	+	
QC391340	IC01	06/07/07 16:59	20.0	+	+	+	+	+	

: 00452

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126059
Date Started: 07-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, SULFATE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	CHLORIDE, NITRATE, SULFATE	18-JUN-2007
195265-001			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-002			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-003			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-006			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195270-003			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-007			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-011			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, SULFATE	19-JUN-2007
195270-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
QC391314	BLANK			Water	NITRATE	
QC391315	BS			Water	NITRATE	
QC391316	BSD			Water	NITRATE	
QC391337	MS	of 195234-001		Water		
QC391338	MSD	of 195234-001		Water		
QC391437	MS	of 195270-007		Water		
QC391438	MSD	of 195270-007		Water		

: 00463

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126069
Date Started: 6/7/07
Prep Chemist: KSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195234-001 AD	.16	1x	S	MSS
2	195241-004 I	.85	5x		
3	195265-001 F	3.15	5x/100x		
4	-002	3.21	5x/100x		
5	-003	1.89	1x/100x		
6	195270-003 B	.99	1x/10x		
7	-007 B	1.74	1x/50x		MSS
8	-008 B	1.74	1x/50x		
9	-010 J	.77	1x/10x		
10	-011 J	.77	1x/10x		
11	-016 H	3.00	3x/100x		
12	-017 H	1.00	1x/25x		
13	-018 H	.79	1x/10x		
14	Blank 391314	N/A	1x	N/A	
15	BS 316				
16	BSD 316				
17	MS 337	.16	1x	S	
18	MSD 338	.16	1x		
19	MS 437	1.74	50x		
20	MSD 436	1.74	50x		

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x MDW 4/9/07	KSB 6/9/07
BS/BSD Spiked with	.2 mL of :	SG/07	
MS/MSD Spiked with	.1 mL of :	SG/07	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10650522	

KSB 6/8/07
KSB 6/9/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CP 6/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126061
Date Started: 07-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195234-003			Treadwell & Rollo	Water	CHLORIDE, SULFATE	18-JUN-2007
195241-002			Treadwell & Rollo	Water	CHLORIDE	18-JUN-2007
195251-003			URS Corporation	Water	NITRATE	19-JUN-2007
195265-004			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-005			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-007			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195265-008			MWH	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	15-JUN-2007
195270-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-002			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-004			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-005			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-006			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195270-017			Treadwell & Rollo	Water	NITRATE, NITRITE	19-JUN-2007
195286-006			U.S. Army Corps of	Water	CHLORIDE, NITRATE, SULFATE	19-JUN-2007
195286-007			U.S. Army Corps of	Water	NITRATE, SULFATE	19-JUN-2007
QC391320	BLANK			Water		
QC391321	BS			Water		
QC391322	BSD			Water		
QC391339	MS	of 195234-003		Water		
QC391340	MSD	of 195234-003		Water		

00455

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126061
Date Started: 6/7/07
Prep Chemist: MSB

BK 2488
Page 82

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195234-003 AB	1.43	20x	S	MSS
2	195241-002 G	4.70	100x	↓	
3	195251-003 E	.33	1x	↓	
4	195265-004 F	3.21	100x/5x	↓	
5	-005	3.45	100x/10x	↓	
6	-007	.18	100x/5x	↓	
7	-008	.13	1x	↓	
8	195270-001 I	4.10	100x/2x	↓	
9	-002 I	4.10	100x/2x	↓	
10	-004 B	.02	1x	↓	
11	-005 B	1.10	1x/25x	↓	
12	-006 B	1.70	1x/50x	↓	
13	-017 H	1.00	1x/25x	↓	
14	195286-006 A	.14	1x	↓	
15	-007 A	.17	1x	↓	
16	Blank 391320	N/A	1x	N/A	
17	BS 321	↓	1x	N/A	
18	MS 322	↓	20x	S	
19	BSD 339	↓	1x	N/A	
20	MSD 340	↓	20x	S	

CR 6/8/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	100x MDW 4/9/07	MSB 6/8/07
BS/BSD Spiked with .2 mL of :	SG107	↓
MS/MSD Spiked with .1 mL of :	SG107	↓
Filters Used: Ag: OnGuard II Ag	N/A	↓
Na: OnGuard II Na	↓	↓
P: OnGuard II P	↓	↓
RP: OnGuard II RP	↓	↓
S: 0.20um/0.45um	Acrodisc #1065052	↓

MSB 6/6/07
Extraction Chemist / Date

Continued from page ____
Continued on page ____

CR 6/8/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/28/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

00467

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/06/07
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	Lab ID	Result	RL
231GW29	SAMPLE	195270-010	ND	0.04
DUP0606072A	SAMPLE	195270-011	ND	0.04
	BLANK	QC391812	ND	0.04

ND= Not Detected
RL= Reporting Limit

2.0

: 00459

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126192
Matrix:	Water	Sampled:	06/05/07
Units:	mg/L	Received:	06/06/07
Diln Fac:	1.000	Analyzed:	06/12/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
231GW20	MS	195234-001	QC391813	<0.04000	0.2667	0.2240	84	75-125		
231GW20	MSD	195234-001	QC391814		0.2667	0.2202	83	75-125	2	20
231GW13	MS	195234-003	QC391815	<0.04000	0.2667	0.2051	77	75-125		
231GW13	MSD	195234-003	QC391816		0.2667	0.2041	77	75-125	0	20
	LCS		QC391817		0.2667	0.2442	92	75-125		

RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	DM
Method:	EPA 376.2	Prep Date:	**06/12/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/12/07**
Wavelength:	626 nm	Batch:	**126192**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1486	0.2442	0.2668	92%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1463	0.2405	0.2668	90%	90 - 110%
CCB	0.0026	0.0043	0.0000		
CCV	0.1479	0.2431	0.2668	91%	90 - 110%
CCB	0.0012	0.0020	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: 126192
Prep Date: 06/12/07
Analysis Date: 06/12/07
Analyst: DM

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report** mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1486		**0.24424**	0.040	0.0500	40.0000	0.2667	**92**	
195234-1	7.5000	1.0000	0.0003		**ND**	0.040					
195234-1ms	7.5000	1.0000	0.1363		**0.22402**	0.040	0.0500	40.0000	0.2667	**84**	
195234-1msd	7.5000	1.0000	0.1340		**0.22024**	0.040	0.0500	40.0000	0.2667	**83**	**2**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

195234-3	7.5000	1.0000	0.0093		**ND**	0.040					
195234-3ms	7.5000	1.0000	0.1248		**0.20512**	0.040	0.0500	40.0000	0.2667	**77**	
195234-3msd	7.5000	1.0000	0.1242		**0.20414**	0.040	0.0500	40.0000	0.2667	**77**	**0**
195234-2	7.5000	1.0000	0.0093		**ND**	0.040					
195234-4	7.5000	1.0000	0.0106		**ND**	0.040					
195234-5	7.5000	1.0000	0.0086		**ND**	0.040					
195241-4	7.5000	1.0000	0.0080		**ND**	0.040					
195241-5	7.5000	1.0000	0.0079		**ND**	0.040					
195270-10	7.5000	1.0000	0.0045		**ND**	0.040					
195270-11	7.5000	1.0000	0.0047		**ND**	0.040					

bm 6-12-07

Date : 6/12/2007 Time : 11:12:31

Concentration Results

Date: 6/12/2007 Time: 10:52:52 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 126192.RCO
Autozero performed: 6/12/2007 10:52:41 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
626.0	0.0	ICBMB	0.0000	1.0000	0.0000	mg/L	
626.0	0.0	~~CCVLCS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	DW 6-12-07
626.0	0.0	CCVLCS	0.1486	1.0000	0.2259	mg/L	
626.0	0.0	~~234-1~~	~~0.0460~~	~~1.0000~~	~~0.0700~~	~~mg/L~~	
626.0	0.0	~~234-1~~	~~0.0468~~	~~1.0000~~	~~0.0711~~	~~mg/L~~	
626.0	0.0	234-1	0.0003	1.0000	0.0004	mg/L	
626.0	0.0	234-1MS	0.1363	1.0000	0.2073	mg/L	
626.0	0.0	234-1MSD	0.1340	1.0000	0.2038	mg/L	
626.0	0.0	234-2	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	234-3	0.0093	1.0000	0.0141	mg/L	
626.0	0.0	~~234-3MS~~	~~-0.049~~	~~1.0000~~	~~-0.075*~~	~~mg/L~~	
626.0	0.0	234-3MS	0.1248	1.0000	0.1898	mg/L	
626.0	0.0	234-3MSD	0.1242	1.0000	0.1889	mg/L	
626.0	0.0	234-4	0.0106	1.0000	0.0161	mg/L	
626.0	0.0	~~CCV~~	~~0.1456~~	~~1.0000~~	~~0.2214~~	~~mg/L~~	
626.0	0.0	CCV	0.1463	1.0000	0.2225	mg/L	
626.0	0.0	~~CCB~~	~~0.0101~~	~~1.0000~~	~~0.0153~~	~~mg/L~~	
626.0	0.0	CCB	0.0026	1.0000	0.0040	mg/L	
626.0	0.0	234-5	0.0086	1.0000	0.0131	mg/L	
626.0	0.0	241-4	0.0080	1.0000	0.0122	mg/L	
626.0	0.0	241-5	0.0079	1.0000	0.0120	mg/L	
626.0	0.0	270-10	0.0045	1.0000	0.0069	mg/L	
626.0	0.0	270-11	0.0047	1.0000	0.0071	mg/L	
626.0	0.0	CCV	0.1479	1.0000	0.2249	mg/L	
626.0	0.0	CCB	0.0012	1.0000	0.0019	mg/L	
626.0	0.0	sam20	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam21	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam22	0.0000	1.0000	0.0000*	mg/L	Sample skipped

CALIBRATION

Date: 6/12/2007 Time: 10:52:42 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

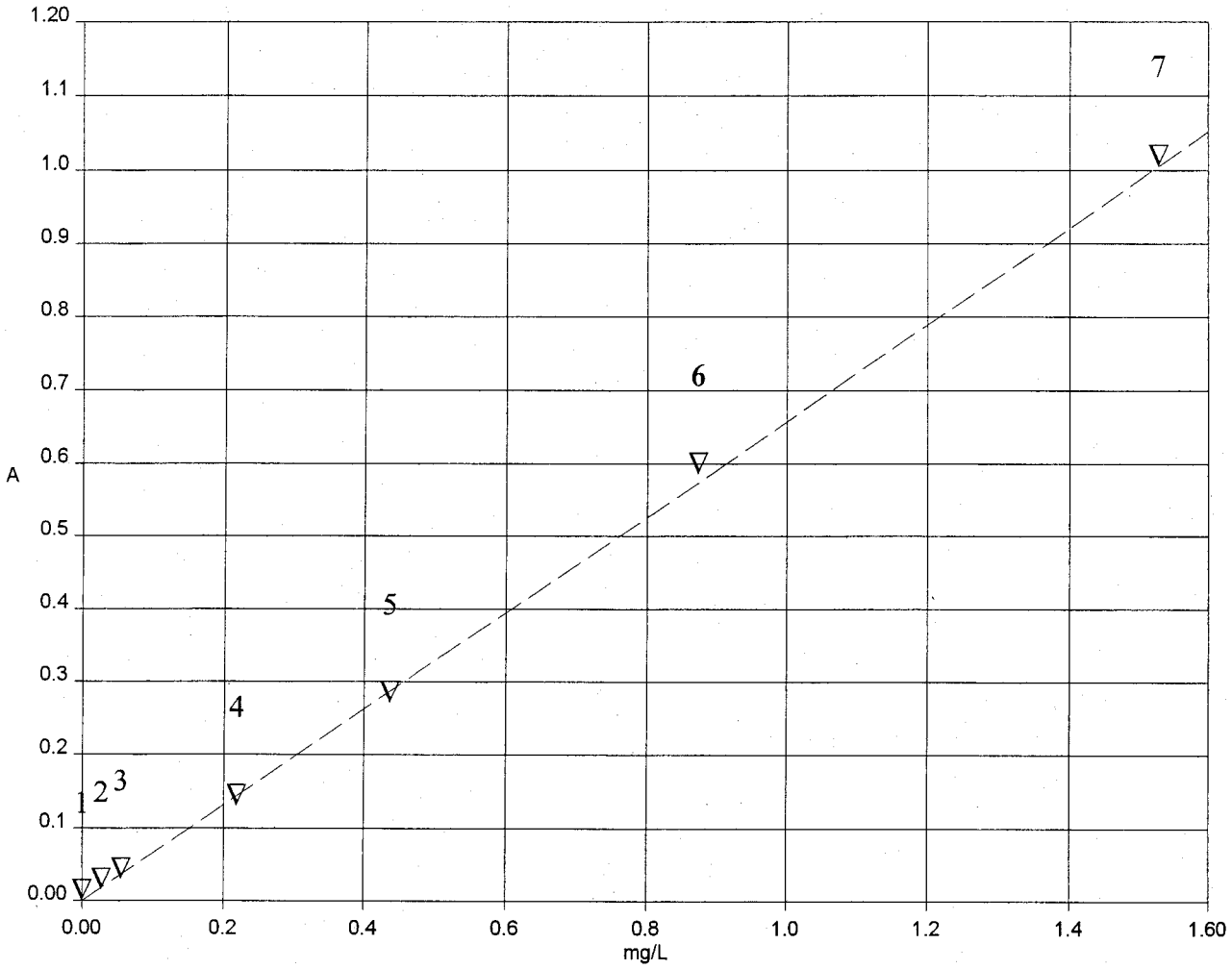
Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
626.0	0.0	ss1106.A01	0.0000	mg/L	0.0000	
626.0	0.0	ss1106.A02	0.0270	mg/L	0.0150	
626.0	0.0	ss1106.A03	0.0550	mg/L	0.0301	
626.0	0.0	ss1106.A04	0.2180	mg/L	0.1302	
626.0	0.0	ss1106.A05	0.4370	mg/L	0.2716	
626.0	0.0	ss1106.A06	0.8730	mg/L	0.5861	
626.0	0.0	ss1106.A07	1.5290	mg/L	1.0054	

Equation: y = 6.576329e-01 * x

Residual error: 0.010105
Correlation coefficient: 0.999641

: 00474

Calibration Curve



Spectrum Name: SULFIDE

Description: y = 6.576329e-01 * x

Comments: RE = 1.010533e-02, CC = 9.996406e-01

Date Created: Thu Nov 16 09:51:35 2006

Sulfide EPA 376.2 B 126192

Sample	Vol (ml)	Final Vol (ml)	ABS
195234-1	7.5	7.5	.0003
-1MS			.1363
-1MSD			.1340
-2			.0093
-3			.0093
-3MS	+.05ml (40 mg/L from 04SS292)	S=std.	.1248
-3MSD	same as MS		.1242
-4			.0106
-5			.0086
195241-4			.0080
-5			.0079
195270-10			.0045
-11			.0047
LCB/MB			.0000
LCV/LCS	same as MS		.1486
CCV			.1453
CCB			.0026
CCV			.1479
CCB			.0012

S= std.
≈.4g 04SS292 + 50ml D2H2O
1.0ml S=
5.0ml I .025N
3.0ml S_2O_3 .025N

$$\frac{.1250 - .0750 \times 16000}{1.0ml} = 800.0 mg/L$$

1:20 = 40.0mg/L
.05 — 7.5 = .2668 mg/L

Dm 6.12.07 Dmp 6/14/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126192
Date Started: 12-JUN-2007
Batched by : Dennis McCanna

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195234-001			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-002			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-003			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195234-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-004			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195241-005			Treadwell & Rollo	Water	SULFIDE	18-JUN-2007
195270-010			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
195270-011			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
QC391812	BLANK			Water	SULFIDE	
QC391813	MS	of 195234-001		Water	SULFIDE	
QC391814	MSD	of 195234-001		Water	SULFIDE	
QC391815	MS	of 195234-003		Water	SULFIDE	
QC391816	MSD	of 195234-003		Water	SULFIDE	
QC391817	LCS			Water	SULFIDE	

Curtis & Tompkins, Ltd.

Analysis:	Sulfide	Analysis Date:	1/24/2007
Method:	EPA 376.2	Analyst:	SY
Instrument:	**Perkin-Elmer Spectrometer**		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.0821
Units:	mg/L
1	0.06624
2	0.06476
3	0.06180
4	0.06328
5	0.05769
6	0.06295
7	0.05670
Average:	0.062
Std Deviation:	0.0035307
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0111** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS

✓ PKW 2/28/07

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/13/07
Batch#:	126263		

Field ID	Type	Lab ID	Result	RL	Diln Fac
1349MW100	SAMPLE	195270-001	2,920	50	5.000
DUP0606073A	SAMPLE	195270-002	2,280	20	2.000
231GW29	SAMPLE	195270-010	500	10	1.000
DUP0606072A	SAMPLE	195270-011	470	10	1.000
610GW101	SAMPLE	195270-017	590	10	1.000
610GW102	SAMPLE	195270-018	480	10	1.000
	BLANK	QC392145	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

85.0

: 08479

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195270	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	126263
MSS Lab ID:	195251-006	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/13/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC392146		100.0	110.0		110	75-126		
BSD	QC392147		100.0	110.0		110	75-126	0	21
SDUP	QC392148	160.0		158.0	10.00			1	24

RL= Reporting Limit
RPD= Relative Percent Difference

86.0

00488

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	**EPA160.1** / SMWW 2540c	Analysis Date:	**13-Jun-07**
Matrix:	Water	Batch #:	**126263**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	51.4748	51.4752	0.0004	ND	10					
BS	50	1	48.3806	48.3861	0.0055	110.0	10	1,000	5	100	**110**	
BSD	50	1	54.4275	54.4330	0.0055	110.0	10	1,000	5	100	**110**	**0.00**
195251-006	50	1	49.1194	49.1274	0.0080	160.0	10					
SDUP	50	1	46.7339	46.7418	0.0079	158.0	10					**1.26**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195251-006	50	1	49.1194	49.1274	0.0080	160.0	10
195270-001	10	5	45.0507	45.0799	0.0292	2,920.0	50
195270-002	25	2	45.3163	45.3733	0.0570	2,280.0	20
195270-010	50	1	51.2213	51.2461	0.0248	496.0	10
195270-011	50	1	47.4322	47.4557	0.0235	470.0	10
195270-017	50	1	48.6165	48.6459	0.0294	588.0	10
195270-018	50	1	43.5513	43.5751	0.0238	476.0	10
195279-001	50	1	46.8208	46.8230	0.0022	44.0	10
195285-004	50	1	43.6417	43.6477	0.0060	120.0	10
195285-005	50	1	48.3826	48.3984	0.0158	316.0	10
195286-004	50	1	48.4086	48.4140	0.0054	108.0	10
195286-005	50	1	49.0038	49.0100	0.0062	124.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMM 6/19/07

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126263

Prep Date: 6/13/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **58**

Filter Mfg/ Lot#: Enk. Exp. 655758
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/13/07	6/14/07	6/18/07	6/18/07	6/18/07	6/18/07
Time:	14:45	10:30	9:00	10:00	11:00	12:00
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	69	51.4748	51.4754	51.4752	X
	BS			BUM	48.3806	48.3860	48.3861	X
	BSD			~~54.4~~ PIP	54.4275	54.4330	54.4330	X
	195251-6 G	160.8	50	NEMO	49.1194	49.1270	49.1274	X
5	SDUP-6			ZOMBIE	46.7339	46.7413	46.7418	X
	195270-1 G	3280	~~50~~ 10	SC	45.0507	45.0804	45.0799	X
	-2	3340	25	OZ	45.3163	45.3745	45.3731	45.3749
	-10	693	50	(Y)	51.2213	51.2456	51.2461	X
	-11	702		S10	47.4322	47.4555	47.4557	X
10	-17	879		P3	48.6165	48.6454	48.6459	X
	18	696		8	43.5513	43.5751	43.5751	X
	195279-1 I	1.53	50	J	46.8208	46.8227	46.8230	X
	195285-4A	147.4		W000	43.6417	43.6477	43.6402	
	-5	479		(Q)	48.3826	48.3994	48.3982	48.3994
15	195286-4	138.2		(P)	48.4086	48.4142	48.4140	X
	-5	162.8		H	49.0038	49.0097	49.0100	X
20								

* Constant weight must be within 0.0005 from previous reading.

6/13/07
Analyst / Date

6/14/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126263 cont.

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2421**
Page: **59**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-~~2~~5	Out-~~2~~5	In-3	Out-3
Date:	6/18/07	6/19/07	6/19/07	6/19/07		
Time:	13:30	9:30	9:00	10:00		
Temp (C):	180	180	180	180		

	Sample # / Letter 4	EC Value (uS/cm) 5	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1								
5								
	45.3736	45.3773	X					
10								
	48.3980	48.3984	X					
15								
20								

* Constant weight must be within 0.0005 from previous reading.

6/19/07
Analyst / Date

DMR 6/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126263
Date Started: 13-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
195251-006		URS Corporation	Water	TDS	19-JUN-2007
195270-001		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-002		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-010		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-011		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-017		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-018		Treadwell & Rollo	Water	TDS	19-JUN-2007
195279-001		Treadwell & Rollo	Water	TDS	19-JUN-2007
195285-004		U.S. Army Corps of	Water	TDS	19-JUN-2007
195285-005		U.S. Army Corps of	Water	TDS	19-JUN-2007
195286-004		U.S. Army Corps of	Water	TDS	19-JUN-2007
195286-005		U.S. Army Corps of	Water	TDS	19-JUN-2007
QC392145	BLANK		Water	TDS	
QC392146	BS		Water	TDS	
QC392147	BSD		Water	TDS	
QC392148	SDUP of 195251-006		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195279

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio of San Francisco Level : III

Sample ID	Lab ID
DW060707A	195279-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/28/2007
Project Manager

Signature: _____ Date: 06/29/2007
Quality Assurance Director

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195279**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio of San Francisco**
Request Date:	**06/07/07**
Samples Received:	**06/07/07**

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 06/07/07. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 05/03/07 13:35; this analyte was not detected at or above the RL in the associated samples. High response was observed for vinyl acetate in the CCV analyzed 06/11/07 09:51; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Pesticides (EPA 8081A):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of FM14EX07GW101 (lab # 195270-013); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):
Copper was detected above the RL in the method blank for batch 126092; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	195279
Client:	Treadwell & Rollo
Project:	2893.04.51
Location:	Presidio of San Francisco
Request Date:	06/07/07
Samples Received:	06/07/07

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

41.0

Curtis & Tompkins, Ltd.

Chain of Custody

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

195279

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / William Jones
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

REQUESTED ANALYSES

SAMPLE INDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M) [1]	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (~~8081~~) (8260)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	SULFIDE (376.2)
-1) DW060707A	6/7/07	1230			X		6		1	1	7	X	X	X	X	X	X	X		X	X	X

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) **(13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Z
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) **(3** - Al, Fe, and Cr) **(Other** -

RELINQUISHED BY: [signature]	DATE: 6/7/07	RECEIVED BY: [signature] (Sample Custody)	
PRINT NAME: William Jones FIRM: BTS	TIME: 1250	PRINT NAME: W Jones	FIRM: BTS ~~LAB~~
RELINQUISHED BY: [signature]	DATE: 6/7/07	RECEIVED BY: [signature]	
PRINT NAME: Ken Shah FIRM: BTS	TIME: 1440	PRINT NAME: Rick Grams	FIRM: C&T

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment: ____

White Copy - Orignial Yel

intact cold RC

00055

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195279 Date Received: 6/7/07 Number of Coolers: 1
Client: Treadwell & Rollo Project: Presidio of San Francisco

A. Preliminary Examination Phase
Date Opened: 6/7/07 By (print): Patricia P (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES NO
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES NO
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
4. Were custody papers dry and intact when received? ..... YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO
7. Was project identifiable from custody papers? ..... YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES NO
   Type of ice: Wet Temperature: No temp blank

B. Login Phase
Date Logged In: 6/7/07 By (print): Patricia P (sign) [signature]

1. Describe type of packing in cooler: zip lock bags
2. Did all bottles arrive unbroken? ..... YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES NO
4. Did bottle labels agree with custody papers? ..... YES NO
5. Were appropriate containers used for the tests indicated? ..... YES NO
6. Were correct preservatives added to samples? ..... YES NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
AG Samples on ice, received from field, cooling had begun.

TOTAL VOLATILE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW060707A	Batch#:	126232
Matrix:	Water	Sampled:	06/07/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 06/13/07
Lab ID: 195279-001

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	117	65-135

Type: BLANK Analyzed: 06/12/07
Lab ID: QC392018

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	104	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392020	Batch#:	126232
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,106	105	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	109	65-135

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	FM14EX07GW101	Batch#:	126232
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392021

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.85	2,000	2,278	113	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	65-135
Bromofluorobenzene (FID)	131	65-135

Type: MSD Lab ID: QC392022

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,183	108	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	130	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 317205342002
Units : ng

Name : GC05 TVH 142
Date : 23-MAY-2007 01:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	142_021	317205342021	TVH 1	23-MAY-2007 01:06	S5937 (1000X), S6108 (5000X)
L2	142_022	317205342022	TVH 2	23-MAY-2007 01:42	S5936 (1000X), S6108 (5000X)
L3	142_023	317205342023	TVH 3	23-MAY-2007 02:17	S5935 (1000X), S6108 (5000X)
L4	142_024	317205342024	TVH 4	23-MAY-2007 02:53	S5934 (2000X), S6108 (5000X)
L5	142_025	317205342025	TVH 5	23-MAY-2007 03:28	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2214.4	2023.3	2084.4	2170.8	2177.1	AVRG		4.69E-4		2134.0	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	4	2500	-5	10000	-2	25000	2	50000	2

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

*Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317205342002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 317205342002

Name : GC05 TVH 142
Cal Date : 23-MAY-2007

ICV 317205342027 (142_027 23-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2134.0	2020.9	10000	9470	ng	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 317226642001
Units : ng

Name : GC05 TFT/BFB 157
Date : 06-JUN-2007 09:59
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	157_002	317226642002	TFT/BFB_1	06-JUN-2007 09:59	S5951 (5000X)
L2	157_003	317226642003	TFT/BFB_2	06-JUN-2007 10:36	S5952 (5000X)
L3	157_004	317226642004	TFT/BFB_3	06-JUN-2007 11:12	S5953 (5000X)
L4	157_005	317226642005	TFT/BFB_4	06-JUN-2007 11:49	S5954 (5000X)
L5	157_006	317226642006	TFT/BFB_5	06-JUN-2007 12:29	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2992.6	3006.7	2878.3	2951.9	2787.7	AVRG		3.42E-4		2923.4	3	0.995	20	
Bromofluorobenzene (FID)	A	1315.2	1435.5	1486.6	1622.6	1525.6	AVRG		6.77E-4		1477.1	8	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	2	225.0	3	450.0	-2	675.0	1	950.0	-5
Bromofluorobenzene (FID)	A	150.0	-11	225.0	-3	450.0	1	675.0	10	950.0	3

Analyst: JCP Date: 06/07/07 * Reviewer: CW Date: 06/13/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317226642001

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195279 GCVOA Water
EPA 8015B

Inst : GC05 Run Name : QC392020 IDF : 1.0
Seqnum : 317235894002.4 File : 163_002 Time : 12-JUN-2007 16:16
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2246.8	10000	10530	ng	5	15	u
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3054.3	450.0	470.1	ng	4	15	u
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1615.5	450.0	492.2	ng	9	15	u

LH 06/18/07 : Sample name on the raw data file should also include qc392020, 126232.

MJM: 06/15/07 LH: 06/18/07 CW: 06/19/07

u=use

317235894002.4

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCVOA Water
EPA 8015B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894012 File : 163_012 Time : 12-JUN-2007 23:50
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2303.6	15000	16190	ng	8	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3193.5	450.0	491.6	ng	9	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1734.0	450.0	528.3	ng	**17**	15	c+

MJM 06/13/07 : PID surrogates are not applicable.

MJM 06/13/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/13/07 LH: 06/14/07 CW: 06/15/07

+=high bias c=CCV

317235894012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCVOA Water
EPA 8015B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894014 File : 163_014 Time : 13-JUN-2007 01:03
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2229.6	15000	15670	ng	4	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3017.4	450.0	464.5	ng	3	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1525.5	450.0	464.8	ng	3	15	

MJM 06/13/07 : PID surrogates are not applicable.

MJM: 06/13/07 LH: 06/15/07 CW: 06/15/07

317235894014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCVOA Water
EPA 8015B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317235894028 File : 163_028 Time : 13-JUN-2007 09:34
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2273.5	20000	21310	ng	7	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3707.9	450.0	570.8	ng	**27**	15	c+
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1901.7	450.0	579.4	ng	**29**	15	c+

MJM 06/14/07 : PID surrogates are not applicable.

MJM 06/14/07 [Trifluorotoluene (FID) A]: Passes control limits.

MJM 06/14/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/14/07 LH: 06/14/07 CW: 06/15/07

+=high bias c=CCV

317235894028

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317205342

Instrument : GC05 Begun : 05/22/07 11:01
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	142_001	X	IB			05/22/07 11:01	1.0	1
002	142_002	X	CCV			05/22/07 11:36	1.0	2 1
003	142_003	X	IB			05/22/07 12:23	1.0	1
004	142_004	X	BTXE_1			05/22/07 14:22	1.0	3 1
005	142_005	X	BTXE_7			05/22/07 15:20	1.0	4 1
006	142_006	X	IB			05/22/07 16:14	1.0	1
007	142_007	X	IB			05/22/07 16:49	1.0	1
008	142_008	ICAL	BTXE_1			05/22/07 17:25	1.0	3 1
009	142_009	ICAL	BTXE_2			05/22/07 18:00	1.0	5 1
010	142_010	ICAL	BTXE_3			05/22/07 18:36	1.0	5 1
011	142_011	ICAL	BTXE_4			05/22/07 19:11	1.0	5 1
012	142_012	ICAL	BTXE_5			05/22/07 19:47	1.0	4 1
013	142_013	ICAL	BTXE_6			05/22/07 20:22	1.0	4 1
014	142_014	ICAL	BTXE_7			05/22/07 20:58	1.0	4 1
015	142_015	ICAL	MTBE_7			05/22/07 21:33	1.0	6 1
016	142_016	X	IB			05/22/07 22:09	1.0	1
017	142_017	X	ICV			05/22/07 22:45	1.0	7 1
018	142_018	ICV	MBTXE			05/22/07 23:20	1.0	7 1
019	142_019	X	IB			05/22/07 23:55	1.0	1
020	142_020	X	IB			05/23/07 00:31	1.0	1
021	142_021	ICAL	TVH 1			05/23/07 01:06	1.0	8 1
022	142_022	ICAL	TVH 2			05/23/07 01:42	1.0	9 1
023	142_023	ICAL	TVH 3			05/23/07 02:17	1.0	10 1
024	142_024	ICAL	TVH 4			05/23/07 02:53	1.0	11 1
025	142_025	ICAL	TVH 5			05/23/07 03:28	1.0	11 1
026	142_026	X	IB			05/23/07 04:04	1.0	1
027	142_027	ICV	TVH			05/23/07 04:39	1.0	2 1
028	142_028	X	ICV			05/23/07 05:15	1.0	2 1
029	142_029	X	IB			05/23/07 05:50	1.0	1
030	142_030	CMARKER				05/23/07 06:25	1.0	12 13 1
031	142_031	X	IB			05/23/07 07:54	1.0	1
032	142_032	ICAL	TFT/BFB_1			05/23/07 08:30	1.0	14
033	142_033	ICAL	TFT/BFB_2			05/23/07 09:06	1.0	15
034	142_034	ICAL	TFT/BFB_3			05/23/07 09:41	1.0	16
035	142_035	ICAL	TFT/BFB_4			05/23/07 10:17	1.0	17
036	142_036	ICAL	TFT/BFB_5			05/23/07 10:52	1.0	18

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

Standards used: 1=S6108 2=S6066 3=S6305 4=S6303 5=S6304 6=S6302 7=S6204 8=S5937 9=S5936 10=S5935 11=S5934 12=S1646 13=S1645 14=S5951 15=S5952 16=S5953 17=S5954 18=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317226642

Instrument : GC05 Begun : 06/06/07 09:22
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	157_001	IB	CALIB			06/06/07 09:22	1.0	1	
002	157_002	ICAL	TFT/BFB_1			06/06/07 09:59	1.0	2	
003	157_003	ICAL	TFT/BFB_2			06/06/07 10:36	1.0	3	
004	157_004	ICAL	TFT/BFB_3			06/06/07 11:12	1.0	4	
005	157_005	ICAL	TFT/BFB_4			06/06/07 11:49	1.0	5	
006	157_006	ICAL	TFT/BFB_5			06/06/07 12:29	1.0	6	
007	157_007	X	IB			06/06/07 15:48	1.0	1	
008	157_008	IB	CALIB			06/06/07 16:24	1.0	1	
009	157_009	ICAL	BTXE_1			06/06/07 17:01	1.0	7 1	
010	157_010	ICAL	BTXE_2			06/06/07 17:37	1.0	8 1	
011	157_011	ICAL	BTXE_3			06/06/07 18:14	1.0	8 1	
012	157_012	ICAL	BTXE_4			06/06/07 18:50	1.0	8 1	
013	157_013	ICAL	BTXE_5			06/06/07 19:27	1.0	9 1	
014	157_014	ICAL	BTXE_6			06/06/07 20:03	1.0	9 1	
015	157_015	ICAL	BTXE_7			06/06/07 20:40	1.0	9 1	
016	157_016	ICAL	MTBE_7			06/06/07 21:16	1.0	10 1	
017	157_017	X	IB			06/06/07 21:53	1.0	1	
018	157_018	X	ICV			06/06/07 22:29	1.0	11 1	
019	157_019	ICV	MBTXE			06/06/07 23:06	1.0	11 1	

Analyst: JCP Date: 06/07/07 Reviewer: CW Date: 06/11/07

Standards used: 1=S6435 2=S5951 3=S5952 4=S5953 5=S5954 6=S5955 7=S6305 8=S6304 9=S6303 10=S6302 11=S6204

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317235894

Instrument : GC05 Begun : 06/12/07 15:40
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	163_001	X	CMARK			06/12/07 15:40	1.0	1 2	
002	163_002	CCV/LCS	QC392020	Water	126232	06/12/07 16:16	1.0	3 2	
003	163_003	CCV/LCS	QC392019	Water	126232	06/12/07 16:53	1.0	4 2	
004	163_004	BLANK	QC392018	Water	126232	06/12/07 18:13	1.0	2	
005	163_005	MSS	195270-013	Water	126232	06/12/07 19:34	1.0	2	
006	163_006	SAMPLE	195270-014	Water	126232	06/12/07 20:11	1.0	2	
007	163_007	SAMPLE	195270-015	Water	126232	06/12/07 20:48	1.0	2	
008	163_008	SAMPLE	195270-017	Water	126232	06/12/07 21:24	1.0	2	
009	163_009	SAMPLE	195270-018	Water	126232	06/12/07 22:01	1.0	2	
010	163_010	MS	QC392021	Water	126232	06/12/07 22:37	1.0	3 2	
011	163_011	MSD	QC392022	Water	126232	06/12/07 23:14	1.0	3 2	
012	163_012	CCV	TVH			06/12/07 23:50	1.0	3 2	
013	163_013	X	BTXE			06/13/07 00:26	1.0	4 2	
014	163_014	CCV	TVH			06/13/07 01:03	1.0	3 2	
015	163_015	CCV	BTXE			06/13/07 01:40	1.0	4 2	
016	163_016	X	CMARK			06/13/07 02:16	1.0	1 2	
017	163_017	SAMPLE	195270-001	Water	126232	06/13/07 02:53	5.0	2	pH > 2
018	163_018	SAMPLE	195270-002	Water	126232	06/13/07 03:29	5.0	2	
019	163_019	X	IB			06/13/07 04:06	1.0	2	
020	163_020	SAMPLE	195270-010	Water	126232	06/13/07 04:42	1.0	2	
021	163_021	SAMPLE	195270-011	Water	126232	06/13/07 05:18	1.0	2	
022	163_022	SAMPLE	195270-016	Water	126232	06/13/07 05:55	1.0	2	
023	163_023	SAMPLE	195279-001	Water	126232	06/13/07 06:31	1.0	2	
024	163_024	SAMPLE	195329-001	Water	126232	06/13/07 07:08	1.0	2	
025	163_025	SAMPLE	195318-002	Water	126232	06/13/07 07:45	1.0	2	pH > 2
026	163_026	SAMPLE	195318-003	Water	126232	06/13/07 08:21	1.0	2	pH > 2
027	163_027	SAMPLE	195318-004	Water	126232	06/13/07 08:58	1.0	2	pH > 2
028	163_028	CCV	TVH			06/13/07 09:34	1.0	3 2	
029	163_029	SAMPLE	195318-005	Water	126232	06/13/07 11:02	1.0	2	pH > 2
030	163_030	X	195344-001	Water	126232	06/13/07 11:38	1.0	2	
031	163_031	X	195344-002	Water	126232	06/13/07 12:15	1.0	2	
032	163_032	SAMPLE	195321-009	Water	126232	06/13/07 12:51	1.0	2	
033	163_033	CCV	TVH			06/13/07 15:40	1.0	3 2	

Analyst: MJM Date: 06/13/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S6393 4=S5943

REPORTING SUMMARY FOR 195279 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	F3BZ	BR4F	
195279-001	GC05	06/13/07 06:31	1.0	+		+	+	
QC392018	GC05	06/12/07 18:13	1.0	+		+	+	
QC392019	GC05	06/12/07 16:53	1.0					
QC392020	GC05	06/12/07 16:16	1.0	+		+	+	
QC392021	GC05	06/12/07 22:37	1.0	+		+	+	
QC392022	GC05	06/12/07 23:14	1.0	+		+	+	

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/28/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

TOTAL EXTRACTABLE HYDROCARBONS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW060707A	Batch#:	126372
Matrix:	Water	Sampled:	06/07/07
Units:	ug/L	Received:	06/07/07
Diln Fac:	1.000	Prepared:	06/16/07

Type:	SAMPLE	Analyzed:	06/19/07
Lab ID:	195279-001	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Type:	BLANK	Analyzed:	06/17/07
Lab ID:	QC392584	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126372
Units:	ug/L	Prepared:	06/16/07
Diln Fac:	1.000	Analyzed:	06/17/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC392585

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	1,923	77	65-135

Surrogate	%REC	Limits
Hexacosane	83	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC392586

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,072	83	65-135	7	35

Surrogate	%REC	Limits
Hexacosane	91	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390001

00026

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227114390002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227227958001
Units : mg/L

Name : hexacosane
Date : 07-JUN-2007 11:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	158_010	227227958010	HEX_5	07-JUN-2007 11:30	S5751
L2	158_011	227227958011	HEX_10	07-JUN-2007 11:58	S5752
L3	158_012	227227958012	HEX_25	07-JUN-2007 12:25	S5753
L4	158_013	227227958013	HEX_50	07-JUN-2007 12:53	S5754
L5	158_014	227227958014	HEX_100	07-JUN-2007 13:21	S5755
L6	158_015	227227958015	HEX_200	07-JUN-2007 13:49	S5756

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	76011	73432	72003	72193	70728	72862	AVRG		1.37E-5		72871	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	5.000	4	10.00	1	25.00	-1	50.00	-1	100.0	-3	200.0	0

Analyst: CP Date: 06/07/07 Reviewer: CW Date: 06/08/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227227958001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118001
Units : mg/L

Name : DSL
Date : 16-APR-2007 22:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a010	177153118010	DSL_10	16-APR-2007 22:16	S5413
L2	106a011	177153118011	DSL_100	16-APR-2007 22:43	S5414
L3	106a012	177153118012	DSL_500	16-APR-2007 23:10	S5416
L4	106a013	177153118013	DSL_1000	16-APR-2007 23:38	S5417
L5	106a014	177153118014	DSL_5000	17-APR-2007 00:04	S5411
L6	106a015	177153118015	DSL_7500	17-APR-2007 00:32	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	71898	64898	73238	68474	66312	67917	AVRG		1.45E-5		68789	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	5	100.0	-6	500.0	6	1000	0	5000	-4	7500	-1

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177153118001

Name : DSL
Cal Date : 16-APR-2007

ICV 177153118017 (106a017 17-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	68789	68119	500.0	495.1	mg/L	-1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118002
Units : mg/L

Name : MO
Date : 17-APR-2007 02:47
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a020	177153118020	MO_50	17-APR-2007 02:47	S5523
L2	106a021	177153118021	MO_250	17-APR-2007 03:14	S5524
L3	106a022	177153118022	MO_500	17-APR-2007 03:41	S5525
L4	106a023	177153118023	MO_1000	17-APR-2007 04:09	S5526
L5	106a024	177153118024	MO_5000	17-APR-2007 04:35	S5522
L6	106a025	177153118025	MO_7500	17-APR-2007 05:02	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	42522	55240	53936	51516	47937	46757	AVRG		2.01E-5		49651	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-14	250.0	11	500.0	9	1000	4	5000	-3	7500	-6

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118003
Units : mg/L

Name : Hexacosane
Date : 17-APR-2007 05:57
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a027	177153118027	HEX_5	17-APR-2007 05:57	S5751
L2	106a028	177153118028	HEX_10	17-APR-2007 06:24	S5752
L3	106a029	177153118029	HEX_25	17-APR-2007 06:52	S5753
L4	106a030	177153118030	HEX_50	17-APR-2007 07:19	S5754
L5	106a031	177153118031	HEX_100	17-APR-2007 07:46	S5755
L6	106a032	177153118032	HEX_200	17-APR-2007 08:14	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	85626	79939	79901	77537	75605	82966	AVRG		1.25E-5		80262	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	7	10.00	0	25.00	0	50.00	-3	100.0	-6	200.0	3

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

00033

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227245240004 File : 170_004 Time : 19-JUN-2007 08:44
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65397	500.0	503.9	mg/L	1	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	81246	50.00	55.75	mg/L	11	15	

Analyst: DLM Date: 06/19/07 Reviewer: ATL Date: 06/19/07

227245240004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227245240005 File : 170_005 Time : 19-JUN-2007 09:12
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	45521	500.0	495.2	mg/L	-1	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	76717	50.00	52.64	mg/L	5	15	

Analyst: DLM Date: 06/19/07 Reviewer: ATL Date: 06/19/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
Seqnum : 227245240015 File : 170_015 Time : 19-JUN-2007 14:58
Standards: S6347

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	63565	1000	979.5	mg/L	-2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	79405	50.00	54.48	mg/L	9	15	

DLM: 06/20/07 ATL: 06/20/07 LH: 06/21/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227245240016 File : 170_016 Time : 19-JUN-2007 15:26
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	45182	500.0	491.5	mg/L	-2	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	78551	50.00	53.90	mg/L	8	15	

DLM: 06/20/07 ATL: 06/20/07 LH: 06/21/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 177242473009 File : 168a009 Time : 17-JUN-2007 13:18
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	60858	500.0	442.3	mg/L	-12	15	
Hexacosane	177153118003	17-APR-2007	80262	74605	50.00	46.48	mg/L	-7	15	

Analyst: DLM Date: 06/18/07 Reviewer: ATL Date: 06/18/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177242473010 File : 168a010 Time : 17-JUN-2007 13:45
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	47292	500.0	476.2	mg/L	-5	15	
Hexacosane	177153118003	17-APR-2007	80262	75127	50.00	46.80	mg/L	-6	15	

Analyst: DLM Date: 06/18/07 Reviewer: LH Date: 06/18/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 177242473023 File : 168a023 Time : 17-JUN-2007 19:57
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	60042	1000	872.8	mg/L	-13	15	
Hexacosane	177153118003	17-APR-2007	80262	70083	50.00	43.66	mg/L	-13	15	

Analyst: DLM Date: 06/18/07 Reviewer: ATL Date: 06/18/07

177242473023

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177242473024 File : 168a024 Time : 17-JUN-2007 20:25
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	47878	500.0	482.1	mg/L	-4	15	
Hexacosane	177153118003	17-APR-2007	80262	78912	50.00	49.16	mg/L	-2	15	

Analyst: DLM Date: 06/18/07 Reviewer: LH Date: 06/18/07

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177153118

Instrument : GC17A
Method : EPA 8015B

Begun : 04/16/07 07:58
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	106a001	X	PRIMER			04/16/07 07:58	1.0		
002	106a002	X	IB			04/16/07 08:25	1.0		
003	106a003	X	DSL_500			04/16/07 08:53	1.0	1	
004	106a004	X	MO_500			04/16/07 09:20	1.0	2	
005	106a005	X	IB			04/16/07 10:07	1.0		
006	106a006	X				04/16/07 10:34	1.0	3	
007	106a007	IB	CALIB			04/16/07 20:54	1.0		
008	106a008	CMARKER	C8-C50			04/16/07 21:22	1.0	3	
009	106a009	IB	CALIB			04/16/07 21:49	1.0		
010	106a010	ICAL	DSL_10			04/16/07 22:16	1.0	4	
011	106a011	ICAL	DSL_100			04/16/07 22:43	1.0	5	
012	106a012	ICAL	DSL_500			04/16/07 23:10	1.0	6	
013	106a013	ICAL	DSL_1000			04/16/07 23:38	1.0	7	
014	106a014	ICAL	DSL_5000			04/17/07 00:04	1.0	8	
015	106a015	ICAL	DSL_7500			04/17/07 00:32	1.0	9	
016	106a016	IB	CALIB			04/17/07 00:59	1.0		
017	106a017	ICV	DSL_500			04/17/07 01:26	1.0	10	
018	106a018	X	ICV			04/17/07 01:53	1.0	10	
019	106a019	IB	CALIB			04/17/07 02:20	1.0		
020	106a020	ICAL	MO_50			04/17/07 02:47	1.0	11	
021	106a021	ICAL	MO_250			04/17/07 03:14	1.0	12	
022	106a022	ICAL	MO_500			04/17/07 03:41	1.0	13	
023	106a023	ICAL	MO_1000			04/17/07 04:09	1.0	14	
024	106a024	ICAL	MO_5000			04/17/07 04:35	1.0	15	
025	106a025	ICAL	MO_7500			04/17/07 05:02	1.0	16	
026	106a026	IB	CALIB			04/17/07 05:30	1.0		
027	106a027	ICAL	HEX_5			04/17/07 05:57	1.0	17	
028	106a028	ICAL	HEX_10			04/17/07 06:24	1.0	18	
029	106a029	ICAL	HEX_25			04/17/07 06:52	1.0	19	
030	106a030	ICAL	HEX_50			04/17/07 07:19	1.0	20	
031	106a031	ICAL	HEX_100			04/17/07 07:46	1.0	21	
032	106a032	ICAL	HEX_200			04/17/07 08:14	1.0	22	
033	106a033	IB	CALIB			04/17/07 08:41	1.0		
034	106a034	ICAL	JP5_10			04/17/07 09:09	1.0	23	
035	106a035	ICAL	JP5_100			04/17/07 09:36	1.0	24	
036	106a036	ICAL	JP5_500			04/17/07 10:04	1.0	25	
037	106a037	ICAL	JP5_1500			04/17/07 10:31	1.0	26	
038	106a038	ICAL	JP5_5000			04/17/07 10:58	1.0	27	
039	106a039	IB	CALIB			04/17/07 11:25	1.0		

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Standards used: 1=S5731 2=S5734 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S5521 17=S5751 18=S5752 19=S5753 20=S5754 21=S5755 22=S5756 23=S5858 24=S5857 25=S5856 26=S5855 27=S5853

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177242473

Instrument : GC17A
Method : EPA 8015B

Begun : 06/17/07 09:13
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	168a001	X	PRIMER				06/17/07 09:13	1.0		
006	168a006	X	IB				06/17/07 11:56	1.0		
007	168a007	X	IB				06/17/07 12:23	1.0		
008	168a008	X	CMARKER				06/17/07 12:50	1.0	1	
009	168a009	CCV	DSL_500				06/17/07 13:18	1.0	2	
010	168a010	CCV	MO_500				06/17/07 13:45	1.0	3	
011	168a011	SAMPLE	195371-011	S	Soil	126361	06/17/07 14:29	1.0		
012	168a012	SAMPLE	195371-013	S	Soil	126361	06/17/07 14:56	1.0		
013	168a013	SAMPLE	195371-008	S	Soil	126361	06/17/07 15:24	1.0		2:BUNKC:12-40=9100
014	168a014	SAMPLE	195371-009	S	Soil	126361	06/17/07 15:51	1.0		5:BUNKC:12-40=19000
015	168a015	SAMPLE	195371-010	S	Soil	126361	06/17/07 16:18	1.0		10:BUNKC:12-40=39000
016	168a016	X	IB				06/17/07 16:46	1.0		
017	168a017	BS	QC392585	S	Water	126372	06/17/07 17:13	1.0		
018	168a018	BSD	QC392586	S	Water	126372	06/17/07 17:40	1.0		
019	168a019	BLANK	QC392584	S	Water	126372	06/17/07 18:08	1.0		
020	168a020	SAMPLE	195191-014	S	Water	126372	06/17/07 18:35	1.0		
021	168a021	SAMPLE	195191-015	S	Water	126372	06/17/07 19:02	1.0		
022	168a022	X	IB				06/17/07 19:29	1.0		
023	168a023	CCV	DSL_1000				06/17/07 19:57	1.0	4	
024	168a024	CCV	MO_500				06/17/07 20:25	1.0	3	
025	168a025	X	CCV				06/17/07 20:52	1.0	4	
026	168a026	X	CCV				06/17/07 21:19	1.0	3	
027	168a027	X	CMARKER				06/17/07 21:47	1.0	1	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	079_001	X	IB			03/20/07 10:30	1.0		
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1	
003	079_003	X	MO_500			03/20/07 11:26	1.0	2	
005	079_005	X	IB			03/20/07 12:53	1.0		
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1	
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2	
008	079_008	X	PRIMER			03/20/07 14:26	1.0		
009	079_009	X	PRIMER			03/20/07 14:54	1.0		
010	079_010	X	IB			03/20/07 15:22	1.0		
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3	
012	079_012	IB	CALIB			03/20/07 16:29	1.0		
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4	
014	079_014	IB	CALIB			03/20/07 17:43	1.0		
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5	
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6	
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7	
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8	
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9	
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10	
021	079_021	IB	CALIB			03/20/07 20:59	1.0		
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11	
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11	
024	079_024	IB	CALIB			03/20/07 22:23	1.0		
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12	
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13	
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14	
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15	
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16	
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17	
031	079_031	IB	CALIB			03/21/07 01:38	1.0		
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18	
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19	
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20	
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21	
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22	
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23	
038	079_038	IB	CALIB			03/21/07 04:54	1.0		

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227227958

Instrument : GC14B
Method : EPA 8015B

Begun : 06/07/07 07:18
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	PRIMER				06/07/07 07:18	1.0		
002	158_002	X	IB				06/07/07 07:46	1.0		
003	158_003	CMARKER	C8-50				06/07/07 08:14	1.0	1	
004	158_004	X	DSL_500				06/07/07 08:42	1.0	2	
005	158_005	X	MO_500				06/07/07 09:10	1.0	3	
006	158_006	X	DSL_1000				06/07/07 09:38	1.0	4	
007	158_007	X	MO_500				06/07/07 10:06	1.0	3	
008	158_008	X	IB				06/07/07 10:34	1.0		
009	158_009	IB	CALIB				06/07/07 11:02	1.0		
010	158_010	ICAL	HEX_5				06/07/07 11:30	1.0	5	
011	158_011	ICAL	HEX_10				06/07/07 11:58	1.0	6	
012	158_012	ICAL	HEX_25				06/07/07 12:25	1.0	7	
013	158_013	ICAL	HEX_50				06/07/07 12:53	1.0	8	
014	158_014	ICAL	HEX_100				06/07/07 13:21	1.0	9	
015	158_015	ICAL	HEX_200				06/07/07 13:49	1.0	10	
016	158_016	X	IB				06/07/07 15:30	1.0		
017	158_017	CCV	DSL_500				06/07/07 15:57	1.0	2	
018	158_018	CCV	MO_500				06/07/07 16:25	1.0	3	
019	158_019	BLANK	QC391198		Soil	126033	06/07/07 18:02	1.0		
020	158_020	MSS	195079-001		Soil	126033	06/07/07 18:30	1.0		
021	158_021	MS	QC391200		Soil	126033	06/07/07 18:58	1.0		
022	158_022	MSD	QC391201		Soil	126033	06/07/07 19:26	1.0		
023	158_023	SAMPLE	195256-001		Soil	126033	06/07/07 19:54	1.0		
024	158_024	SAMPLE	195230-003		Soil	126033	06/07/07 20:21	1.0		11:BUNKC:12-40=36000
025	158_025	X	IB				06/07/07 20:49	1.0		
026	158_026	SAMPLE	195217-002	S	Water	126010	06/07/07 21:17	1.0		
027	158_027	SAMPLE	195217-004	S	Water	126010	06/07/07 21:45	1.0		
028	158_028	SAMPLE	195217-005	S	Water	126010	06/07/07 22:12	1.0		
029	158_029	SAMPLE	195217-006	S	Water	126010	06/07/07 22:40	1.0		
030	158_030	X	IB				06/07/07 23:08	1.0		
031	158_031	X	CMARKER				06/07/07 23:36	1.0	1	
032	158_032	CCV	DSL_250				06/08/07 00:03	1.0	11	
033	158_033	CCV	MO_500				06/08/07 00:31	1.0	3	
034	158_034	X	CCV				06/08/07 00:59	1.0	11	
035	158_035	X	CCV				06/08/07 01:26	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S5751 6=S5752 7=S5753 8=S5754 9=S5755 10=S5756 11=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227245240

Instrument : GC14B **Begun : 06/19/07 07:20**
Method : EPA 8015B **SOP Version : TEH_rv12**

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	170_001	X	PRIMER				06/19/07 07:20	1.0		
002	170_002	X	IB				06/19/07 07:48	1.0		
003	170_003	X	CMARKER				06/19/07 08:16	1.0	1	
004	170_004	CCV	DSL_500				06/19/07 08:44	1.0	2	
005	170_005	CCV	MO_500				06/19/07 09:12	1.0	3	
006	170_006	SAMPLE	195279-001	S	Water	126372	06/19/07 10:06	1.0		
007	170_007	SAMPLE	195367-011		Water	126372	06/19/07 10:34	1.0		
008	170_008	MSS	195258-001	S	Soil	126067	06/19/07 11:02	1.0		
009	170_009	MS	QC391355	S	Soil	126067	06/19/07 11:30	1.0		
010	170_010	MSD	QC391356	S	Soil	126067	06/19/07 11:58	1.0		
011	170_011	SAMPLE	195258-007	S	Soil	126067	06/19/07 12:26	1.0		
012	170_012	X	IB				06/19/07 13:35	1.0		
013	170_013	SAMPLE	195461-001	S	Water	126411	06/19/07 14:03	1.0		
014	170_014	SAMPLE	195461-002	S	Water	126411	06/19/07 14:30	1.0		
015	170_015	CCV	DSL_1000				06/19/07 14:58	1.0	4	
016	170_016	CCV	MO_500				06/19/07 15:26	1.0	3	
017	170_017	X	TEST				06/19/07 15:58	1.0	5	
018	170_018	X	TEST				06/19/07 16:25	1.0	6	
019	170_019	X	IB				06/19/07 20:36	1.0		
020	170_020	SAMPLE	195300-008		Water	126411	06/19/07 21:04	1.0		
021	170_021	SAMPLE	195300-009		Water	126411	06/19/07 21:32	1.0		
022	170_022	SAMPLE	195270-001	S	Water	126411	06/19/07 22:00	1.0		2:BUNKC:12-40=7100
023	170_023	SAMPLE	195270-002	S	Water	126411	06/19/07 22:27	1.0		2:BUNKC:12-40=11000
024	170_024	SAMPLE	195270-010	S	Water	126411	06/19/07 22:55	1.0		
025	170_025	X	IB				06/19/07 23:23	1.0		
026	170_026	SAMPLE	195270-011	S	Water	126411	06/19/07 23:52	1.0		
027	170_027	MSS	195270-013	S	Water	126411	06/20/07 00:19	1.0		
028	170_028	MS	QC392751	S	Water	126411	06/20/07 00:47	1.0		
029	170_029	MSD	QC392752	S	Water	126411	06/20/07 01:15	1.0		
030	170_030	SAMPLE	195270-014	S	Water	126411	06/20/07 01:43	1.0		
031	170_031	X	IB				06/20/07 02:11	1.0		
032	170_032	X	CMARKER				06/20/07 02:38	1.0	1	
033	170_033	CCV	DSL_250				06/20/07 03:06	1.0	7	
034	170_034	CCV	MO_500				06/20/07 03:34	1.0	3	
035	170_035	X	CCV				06/20/07 04:02	1.0	7	
036	170_036	X	CCV				06/20/07 04:30	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S6506 6=S6505 7=S6345

REPORTING SUMMARY FOR 195279 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195279-001	GC11A	06/18/07 11:41	1.0				
195279-001	GC14B	06/19/07 10:06	1.0	+	+	+	
QC392584	GC17A	06/17/07 18:08	1.0	+	+	+	
QC392584	GC11A	06/18/07 10:46	1.0				
QC392584	GC15B	06/19/07 10:03	1.0				
QC392585	GC17A	06/17/07 17:13	1.0	+		+	
QC392586	GC17A	06/17/07 17:40	1.0	+		+	
QC392587	GC15B	06/17/07 19:00	1.0				

SAMPLE PREPARATION SUMMARY

Batch # : 126372
Started By : KR
Method : 3520C
Spike #1 ID : S6349

Prep Date : 16-JUN-2007
SOP Version : TEH_3520_rv11
Spike #2 ID : S6469

Analysis : TEHM
Finished By : DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195191-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195191-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195279-001		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
195362-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
195362-002		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
195362-003		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
195367-002		Water	1000	5	1	0.005	8	1				TEH	
195367-011		Water	1000	5	1	0.005	8	1				TEH	
195370-021		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
195371-005		WET DI Leachate	500	2.5	1	0.005	6	.5			3630C	TEHM	
195371-006		WET DI Leachate	500	2.5	1	0.005	6	.5			3630C	TEHM	
195371-007		WET DI Leachate	500	2.5	1	0.005	6	.5			3630C	TEHM	
195371-008		WET DI Leachate	500	2.5	1	0.005	7	.5			3630C	TEHM	
195371-009		WET DI Leachate	500	2.5	1	0.005	7	.5			3630C	TEHM	
195371-010		WET DI Leachate	500	2.5	1	0.005	7	.5			3630C	TEHM	
195372-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195372-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195372-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195372-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195372-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC392584	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC392585	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC392586	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC392587	PREPBLK	Water	500	2.5	1	0.005		.5			3630C	TEHM	

TKM 06/18/07 : reviewed Prep Entry

LH 06/20/07 : QC392587 is the TEH/M extracted version of QC392577, which is the Wet DI Leachate prep . blank.

Analyst: DLM Date: 06/20/07 Reviewer: LH Date: 06/20/07

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

Page 42 BK 2491

LIMS Batch No: 126372
LIMS Analysis: TEH/M
Date Extracted: 6/16/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195191-014	500	7	2.5	X	aliquot 195191-004Q
15		7		X	5H
195279-001L		5		X	
195362-001E		7		X	
2E		7			
3E		7			
195367-002K	1000	8	5.0		
1G		8			
195370-021D	500	5	2.5	X	
195371-005		6		X	
6		6			
7		6			
8		7			
9		7			
10		7			
Prep Blk QC392587		NA		X	
195372-001K		7		X	
2J					
3K					
4H					
5J					
BLANK QC392584		NA		X	
BS 5				X	
BSD 6				X	

6/17/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
*1.0 / 0.5 mL of TEH_SURR was added to all samples	S6349E	6/16/07 KR
0.5 mL of TEH_SP was added to all spikes	S6169A	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2 & NaCl Na_2SO_4	EM47110/EM47115	
Extraction Start Time:	1315	
Extraction End Time:	745	6/17/07
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	NA	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46283706	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	✓	

6/16/07
Extraction Chemist Date

Contined from Page
Continued on Page

Dan McGee 6/18/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 6/17/07

Benchbook # **BK 2520**
Page 11

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195191-014	126372	1.0	1.0	
015				
195279-001				
195362-001				
002				
003				
195370-021				
195371-005				
006				
007				
008				
009				
010				
195372-001				
002				
003				
004				
005				
MB QC392584				
BS 5				
BSD 6				
PREP BLK 7				
				DJT 6/17/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	DJT 6/17/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP 8605	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47092	
Concentrated to volumes as noted above	✓	

6/17/07
Extraction Chemist / Date

Continued from page —
Continued on page —

Dan McGr 6/18/07
Reviewed by / Date

W.E.T (STLC) EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 126367 Date/ Time ON: 6-14-07 12pm Page: 82
Extraction Method: WET DI Temp (F) ON: 24C Benchbook#: BK 2449
Rotator #'s: 2 Date/ Time OFF: 6-16-07 11pm
— Temp (F) OFF: 24C

Sample # / Letter	Sample Mass (g)	Sieved? (y/n)*	Extract Vol (mL)	*Comments
BLK 392577QC	—	n	500	
193371-005	50			
-006				
-007				
-008				
-009				
-010				

Temperature Limits: 20 - 40 C
Extraction Fluid pH Limits: 4.9 - 5.1 su

	Mfg & Lot #	Date/ Initials
Used Citric Acid	—	6-16-07 HO.
Used Sodium Hydroxide (NaOH)	—	
Extraction Fluid pH	DI H2O	
Extract filtered through 0.45um cellulose fiber filter paper	MILLIPORE RGMN81800	
Metals extracts acidified with 5% HNO_3	N	

6-16-07
Extraction Chemist **Date**

6/18/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/28/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

VOLATILE ORGANIC COMPOUNDS

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW060707A	Batch#:	126137
Lab ID:	195279-001	Sampled:	06/07/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391610	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391611	Batch#:	126137
Matrix:	Water	Analyzed:	06/11/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.29	109	65-135
Benzene	25.00	25.33	101	65-135
Trichloroethene	25.00	23.61	94	65-135
Toluene	25.00	26.05	104	65-135
Chlorobenzene	25.00	25.10	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW20	Batch#:	126137
MSS Lab ID:	195234-001	Sampled:	06/05/07
Matrix:	Water	Received:	06/06/07
Units:	ug/L	Analyzed:	06/11/07
Diln Fac:	1.000		

Type: MS Lab ID: QC391631

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09386	25.00	28.63	115	65-135
Benzene	<0.2500	25.00	27.23	109	65-135
Trichloroethene	<0.1151	25.00	26.05	104	65-135
Toluene	<0.1338	25.00	28.11	112	65-135
Chlorobenzene	<0.1569	25.00	26.79	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	94	86-115

Type: MSD Lab ID: QC391632

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	29.24	117	65-135	2	35
Benzene	25.00	26.96	108	65-135	1	35
Trichloroethene	25.00	25.29	101	65-135	3	35
Toluene	25.00	27.95	112	65-135	1	35
Chlorobenzene	25.00	26.40	106	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	98	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195279 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497177754005 File : je305 Time : 03-MAY-2007 12:11

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	79938	21.98	
75	30.00% - 60.00% of mass 95	161536	44.42	
95		363648		
96	5.00% - 9.00% of mass 95	24247	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	279530	76.87	
175	5.00% - 9.00% of mass 174	21048	7.53	
176	> 95.00% and < 101.00% of mass 174	272661	97.54	
177	5.00% - 9.00% of mass 176	17603	6.46	

Analyst: ACM Date: 05/04/07 Reviewer: LW Date: 05/04/07

497177754005

CURTIS & TOMPKINS BFB TUNE FOR 195279 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497233759004 File : jfb04 Time : 11-JUN-2007 09:30

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	177728	21.13	
75	30.00% - 60.00% of mass 95	367530	43.69	
95		841280		
96	5.00% - 9.00% of mass 95	55977	6.65	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	657920	78.20	
175	5.00% - 9.00% of mass 174	45770	6.96	
176	> 95.00% and < 101.00% of mass 174	628778	95.57	
177	5.00% - 9.00% of mass 176	40829	6.49	

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

497233759004

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum : 497177754004
Units : ug/L

Name : 826GOX10
Date : 03-MAY-2007 13:35
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	je308	497177754008	0.25/0.5PPB	03-MAY-2007 13:35	S5194 (2000000X), S6072 (2000000X), S5938 (1000000X), S6084 (5000X)
L2	je309	497177754009	0.5/1PPB	03-MAY-2007 14:07	S5194 (1000000X), S6072 (1000000X), S5938 (500000X), S6084 (5000X)
L3	je310	497177754010	2PPB	03-MAY-2007 14:40	S5194 (500000X), S6072 (250000X), S5938 (250000X), S6084 (5000X)
L4	je311	497177754011	5PPB	03-MAY-2007 15:13	S5194 (200000X), S6072 (100000X), S5938 (100000X), S6084 (5000X)
L5	je312	497177754012	10PPB	03-MAY-2007 15:46	S5194 (100000X), S6072 (50000X), S5938 (50000X), S6084 (5000X)
L6	je313	497177754013	20PPB	03-MAY-2007 16:19	S5194 (50000X), S6072 (25000X), S5938 (25000X), S6084 (5000X)
L7	je314	497177754014	50PPB	03-MAY-2007 16:51	S5194 (20000X), S6072 (10000X), S5938 (10000X), S6084 (5000X)
L8	je315	497177754015	75PPB	03-MAY-2007 17:24	S5194 (13330X), S6072 (6667X), S5938 (6667X), S6084 (5000X)
L9	je316	497177754016	100PPB	03-MAY-2007 17:57	S5194 (10000X), S6072 (5000X), S5938 (5000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5947	0.5426	0.5709	0.4865	0.4975	0.4780	0.4537	0.4433	AVRG		1.96694		0.5084	11	15	0.10	0.99	
Vinyl Chloride	0.4132	0.4168m	0.3671m	0.4167	0.3655	0.3629	0.3690	0.3540	0.3529	AVRG		2.63311		0.3798	7	15	0.05	0.99	
Bromomethane		0.2909m	0.2714	0.2949m	0.2511	0.2691	0.2676	0.2750	0.2711	AVRG		3.65109		0.2739	5	15	0.05	0.99	
Chloroethane		0.2584	0.2745m	0.2998	0.2712	0.2697	0.2621	0.2640	0.2563	AVRG		3.71065		0.2695	5	15	0.05	0.99	
Acetone			0.1599m	0.1925	0.1879	0.1586	0.1600			AVRG		5.82201		0.1718	10	15	0.05	0.99	
1,1-Dichloroethene		0.2358m	0.2192	0.2400	0.2414	0.2539	0.2359	0.2494	0.2390	AVRG		4.17827		0.2393	4	15	0.05	0.99	
Methylene Chloride			0.3563m	0.3576	0.3346	0.3304	0.3296	0.3230	0.3254	AVRG		2.97009		0.3367	4	15	0.05	0.99	
Carbon Disulfide		1.0985	0.9961	0.9893	0.9633	1.0131	0.9946	1.0407	0.9939	AVRG		0.98894		1.0112	4	15	0.05	0.99	
MTBE		0.9046m	0.8559	0.8149	0.7674	0.7714	0.7576	0.7442	0.7584	AVRG		1.25500		0.7968	7	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3511m	0.3343	0.3015	0.2976	0.3008	0.2824	0.2812	0.2841	AVRG		3.28796		0.3041	8	15	0.05	0.99	
Vinyl Acetate			0.6363m	0.7199m	0.5324m	0.6892	0.4476	1.0222	0.9214	AVRG		1.40874		0.7099	**29**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.5984	0.5968	0.5961	0.5669	0.5703	0.5508	0.5494	0.5471	AVRG		1.74835		0.5720	4	15	0.10	0.99	
2-Butanone			0.2289	0.2082	0.2129	0.2042	0.2146	0.2015	0.2006	AVRG		4.75928		0.2101	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3134m	0.3691	0.3166	0.3211	0.3199	0.3116	0.3046	0.3123	AVRG		3.11460		0.3211	6	15	0.05	0.99	
Chloroform		0.5213	0.5072	0.4977	0.4926	0.4839	0.4701	0.4623	0.4625	AVRG		2.05257		0.4872	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.3612m	0.2999	0.3138	0.3185	0.3174	0.3049	0.3316	0.3040	AVRG		3.13579		0.3189	6	15	0.05	0.99	
Carbon Tetrachloride		0.1391	0.1316	0.1437	0.1413	0.1537	0.1384	0.1655	0.1415	AVRG		6.92765		0.1443	7	15	0.05	0.99	
1,2-Dichloroethane		0.2645	0.2512	0.2471	0.2515	0.2517	0.2485	0.2447	0.2399	AVRG		4.00187		0.2499	3	15	0.05	0.99	
Benzene		0.7629	0.6956	0.7249	0.6984	0.7058	0.6774	0.6946	0.6560	AVRG		1.42458		0.7020	5	15	0.05	0.99	
richloroethene		0.2129	0.1627	0.1791	0.1769	0.1796	0.1703	0.1713	0.1567	AVRG		5.67516		0.1762	10	15	0.05	0.99	
,2-Dichloropropane		0.2415	0.2196	0.2213	0.2200	0.2208	0.2144	0.2096	0.2025	AVRG		4.57198		0.2187	5	15	0.05	0.99	
romodichloromethane		0.2698	0.2371	0.2414	0.2352	0.2365	0.2326	0.2294	0.2301	AVRG		4.18364		0.2390	5	15	0.05	0.99	
-Methyl-2-Pentanone		0.3021m	0.3421	0.2832	0.2608	0.3025	0.2871	0.2918	0.2661	AVRG		3.42524		0.2919	9	15	0.05	0.99	
cis-1,3-Dichloropropene		0.3284	0.2954	0.3264	0.3072	0.3089	0.3021	0.3088	0.3032	AVRG		3.22531		0.3100	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4330m	0.3869	0.4279	0.3911	0.4056	0.3845	0.4001	0.3547	AVRG		2.51270		0.3980	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2852m	0.2591	0.2780m	0.2711	0.2765	0.2696	0.2741	0.2690	AVRG		3.66524		0.2728	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1044	0.0983	0.0998	0.0980	0.0982	0.0954	0.0972	0.0943	AVRG		10.1845		0.0982	3	15	0.05	0.99	
2-Hexanone			0.1999	0.2144	0.2166	0.1983	0.2045	0.2061	0.1956	AVRG		4.87644		0.2051	4	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1437	0.1819	0.1672	0.1725	0.1573	0.1823	0.1526	AVRG		5.92719		0.1687	10	15	0.05	0.99	
Dibromochloromethane		0.2225	0.2112	0.2281	0.2269	0.2208	0.2263	0.2212	0.2238	AVRG		4.49237		0.2226	2	15	0.05	0.99	
Chlorobenzene		0.5715	0.5242	0.5556	0.5183	0.5228	0.5061	0.5114	0.4731	AVRG		1.91246		0.5229	6	15	0.30	0.99	
Ethylbenzene		0.9731	0.7932	0.9252	0.8386	0.8567	0.7886	0.8468	0.7221	AVRG		1.18619		0.8430	9	15	0.05	0.99	
m,p-Xylenes	0.3103	0.3178	0.3067	0.3430	0.3061	0.3158	0.2914	0.3124	0.2660	AVRG		3.24970		0.3077	7	15	0.05	0.99	
o-Xylene		0.3480	0.3095	0.3483	0.3139	0.3192	0.2940	0.3052	0.2640	AVRG		3.19746		0.3127	9	15	0.05	0.99	
Styrene		0.5857	0.5274	0.6027	0.5445	0.5650	0.5276	0.5378	0.4787	AVRG		1.83087		0.5462	7	15	0.05	0.99	
Bromoform		0.1601	0.1548	0.1656	0.1611	0.1585	0.1626	0.1639	0.1657	AVRG		6.19057		0.1615	2	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6707m	0.6326	0.6403	0.5798	0.6019	0.5675	0.6023	0.5756	AVRG		1.64250		0.6088	6	15	0.30	0.99	
Dibromofluoromethane	0.5647	0.5635	0.5630	0.5511	0.5725	0.5604	0.5593	0.5552	0.5745	AVRG		1.77720		0.5627	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3895	0.3906	0.3874	0.3894	0.3937	0.3894	0.3860	0.3792	0.3779	AVRG		2.58388		0.3870	1	15	0.05	0.99	
Toluene-d8	1.0751	1.0857	1.0863	1.0981	1.0869	1.0914	1.0678	1.0854	1.0649	AVRG		0.92388		1.0824	1	15	0.05	0.99	
Bromofluorobenzene	1.1530	1.1357	1.1445	1.1312	1.1260	1.0989	1.0858	1.0642	1.0625	AVRG		0.89982		1.1113	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	17	2.000	7	5.000	12	10.00	-4	20.00	-2	50.00	-6	75.00	-11	100.0	-13
Vinyl Chloride	0.500	9	1.000	10	2.000	-3	5.000	10	10.00	-4	20.00	-4	50.00	-3	75.00	-7	100.0	-7
Bromomethane			1.000	6	2.000	-1	5.000	8	10.00	-8	20.00	-2	50.00	-2	75.00	0	100.0	-1
Chloroethane			1.000	-4	2.000	2	5.000	11	10.00	1	20.00	0	50.00	-3	75.00	-2	100.0	-5
Acetone					2.000	-7	5.000	12	10.00	9	20.00	-8	50.00	-7				
1,1-Dichloroethene			0.500	-1	2.000	-8	5.000	0	10.00	1	20.00	6	50.00	-1	75.00	4	100.0	0
Methylene Chloride					2.000	6	5.000	6	10.00	-1	20.00	-2	50.00	-2	75.00	-4	100.0	-3
Carbon Disulfide			0.500	9	2.000	-1	5.000	-2	10.00	-5	20.00	0	50.00	-2	75.00	3	100.0	-2
MTBE			0.500	14	2.000	7	5.000	2	10.00	-4	20.00	-3	50.00	-5	75.00	-7	100.0	-5
trans-1,2-Dichloroethene			0.500	15	2.000	10	5.000	-1	10.00	-2	20.00	-1	50.00	-7	75.00	-8	100.0	-7
Vinyl Acetate					2.000	-10	5.000	1	10.00	-25	20.00	-3	50.00	-37	75.00	44	100.0	30
1,1-Dichloroethane			0.500	5	2.000	4	5.000	4	10.00	-1	20.00	0	50.00	-4	75.00	-4	100.0	-4
2-Butanone					2.000	9	5.000	-1	10.00	1	20.00	-3	50.00	2	75.00	-4	100.0	-5
cis-1,2-Dichloroethene			0.500	-2	2.000	15	5.000	-1	10.00	0	20.00	0	50.00	-3	75.00	-5	100.0	-3
Chloroform			0.500	7	2.000	4	5.000	2	10.00	1	20.00	-1	50.00	-4	75.00	-5	100.0	-5
1,1,1-Trichloroethane			0.500	13	2.000	-6	5.000	-2	10.00	0	20.00	0	50.00	-4	75.00	4	100.0	-5
Carbon Tetrachloride			0.500	-4	2.000	-9	5.000	0	10.00	-2	20.00	6	50.00	-4	75.00	15	100.0	-2
1,2-Dichloroethane			0.500	6	2.000	1	5.000	-1	10.00	1	20.00	1	50.00	-1	75.00	-2	100.0	-4
Benzene			0.500	9	2.000	-1	5.000	3	10.00	-1	20.00	1	50.00	-3	75.00	-1	100.0	-7
Trichloroethene			0.500	21	2.000	-8	5.000	2	10.00	0	20.00	2	50.00	-3	75.00	-3	100.0	-11
1,2-Dichloropropane			0.500	10	2.000	0	5.000	1	10.00	1	20.00	1	50.00	-2	75.00	-4	100.0	-7
Bromodichloromethane			0.500	13	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	-3	75.00	-4	100.0	-4
4-Methyl-2-Pentanone			0.500	3	2.000	17	5.000	-3	10.00	-11	20.00	4	50.00	-2	75.00	0	100.0	-9
cis-1,3-Dichloropropene			0.500	6	2.000	-5	5.000	5	10.00	-1	20.00	0	50.00	-3	75.00	0	100.0	-2
Toluene			0.500	9	2.000	-3	5.000	8	10.00	-2	20.00	2	50.00	-3	75.00	1	100.0	-11
trans-1,3-Dichloropropene			0.500	5	2.000	-5	5.000	2	10.00	-1	20.00	1	50.00	-1	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	6	2.000	0	5.000	2	10.00	0	20.00	0	50.00	-3	75.00	-1	100.0	-4
2-Hexanone					2.000	-3	5.000	5	10.00	6	20.00	-3	50.00	0	75.00	1	100.0	-5
Tetrachloroethene			0.500	14	2.000	-15	5.000	8	10.00	-1	20.00	2	50.00	-7	75.00	8	100.0	-10
Dibromochloromethane			0.500	0	2.000	-5	5.000	2	10.00	2	20.00	-1	50.00	2	75.00	-1	100.0	1
Chlorobenzene			0.500	9	2.000	0	5.000	6	10.00	-1	20.00	0	50.00	-3	75.00	-2	100.0	-10
Ethylbenzene			0.500	15	2.000	-6	5.000	10	10.00	-1	20.00	2	50.00	-6	75.00	0	100.0	-14
m,p-Xylenes	0.500	1	1.000	3	4.000	0	10.00	11	20.00	-1	40.00	3	100.0	-5	150.0	2	200.0	-14
o-Xylene			0.500	11	2.000	-1	5.000	11	10.00	0	20.00	2	50.00	-6	75.00	-2	100.0	-16
Styrene			0.500	7	2.000	-3	5.000	10	10.00	0	20.00	3	50.00	-3	75.00	-2	100.0	-12
Bromoform			0.500	-1	2.000	-4	5.000	3	10.00	0	20.00	-2	50.00	1	75.00	1	100.0	3
1,1,2,2-Tetrachloroethane			0.500	10	2.000	4	5.000	5	10.00	-5	20.00	-1	50.00	-7	75.00	-1	100.0	-5
Dibromofluoromethane	50.00	0	50.00	0	50.00	0	50.00	-2	50.00	2	50.00	0	50.00	-1	50.00	-1	50.00	2
1,2-Dichloroethane-d4	50.00	1	50.00	1	50.00	0	50.00	1	50.00	2	50.00	1	50.00	0	50.00	-2	50.00	-2
Toluene-d8	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1	50.00	-1	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-1	50.00	-2	50.00	-4	50.00	-4

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

*manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497177754004 Cal Date : 03-MAY-2007 Type : WATER

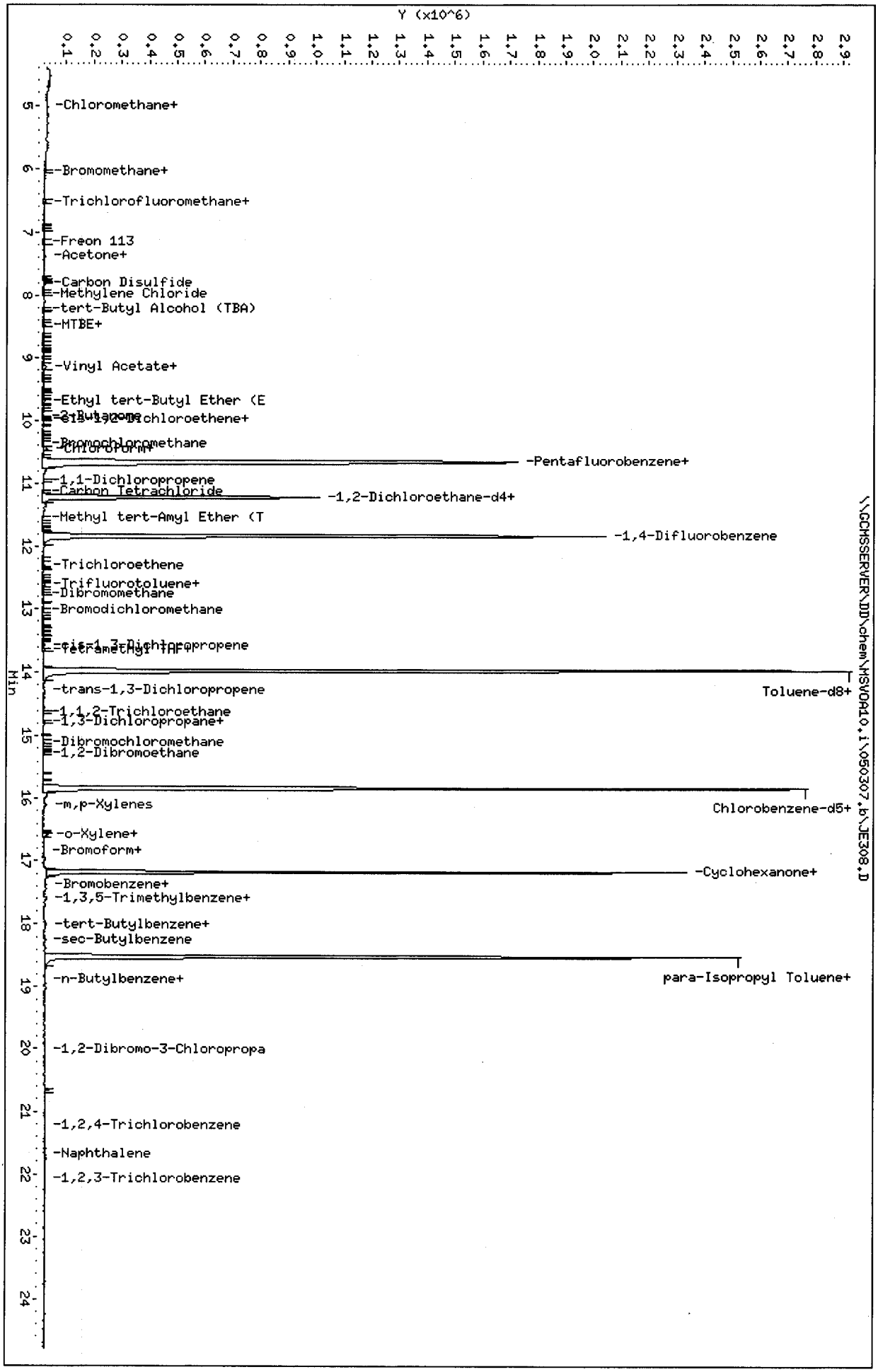
ICV 497177754017 (je317 03-MAY-2007) stds: S6044 (10000X), S6084 (5000X)
ICV 497177754018 (je318 03-MAY-2007) stds: S5723 (10000X), S5968 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497177754017	0.5084	0.4111	25.00	20.21	ug/L	-19	30	
Vinyl Chloride	497177754017	0.3798	0.3070	25.00	20.21	ug/L	-19	20	
Bromomethane	497177754017	0.2739	0.2259	25.00	20.62	ug/L	-18	30	
Chloroethane	497177754017	0.2695	0.2323	25.00	21.55	ug/L	-14	30	
Acetone	497177754018	0.1718	0.1276	25.00	18.58	ug/L	-26	40	
1,1-Dichloroethene	497177754018	0.2393	0.2311	25.00	24.14	ug/L	-3	20	
Methylene Chloride	497177754018	0.3367	0.3190	25.00	23.68	ug/L	-5	30	
Carbon Disulfide	497177754018	1.0112	0.7101	25.00	17.56	ug/L	**-30**	30	!v-
MTBE	497177754018	0.7968	0.7580	25.00	23.78	ug/L	-5	30	
trans-1,2-Dichloroethene	497177754018	0.3041	0.2775	25.00	22.81	ug/L	-9	30	
Vinyl Acetate	497177754018	0.7099	0.5644	25.00	19.88	ug/L	-20	40	
1,1-Dichloroethane	497177754018	0.5720	0.5352	25.00	23.39	ug/L	-6	30	
2-Butanone	497177754018	0.2101	0.1974	25.00	23.49	ug/L	-6	40	
cis-1,2-Dichloroethene	497177754018	0.3211	0.3185	25.00	24.80	ug/L	-1	30	
Chloroform	497177754018	0.4872	0.4701	25.00	24.13	ug/L	-3	20	
1,1,1-Trichloroethane	497177754018	0.3189	0.3310	25.00	25.95	ug/L	4	30	
Carbon Tetrachloride	497177754018	0.1443	0.1676	25.00	29.02	ug/L	16	30	
1,2-Dichloroethane	497177754018	0.2499	0.2386	25.00	23.87	ug/L	-5	30	
Benzene	497177754018	0.7020	0.6819	25.00	24.29	ug/L	-3	30	
Trichloroethene	497177754018	0.1762	0.1691	25.00	23.99	ug/L	-4	30	
1,2-Dichloropropane	497177754018	0.2187	0.2025	25.00	23.14	ug/L	-7	20	
Bromodichloromethane	497177754018	0.2390	0.2343	25.00	24.51	ug/L	-2	30	
4-Methyl-2-Pentanone	497177754018	0.2919	0.2795	25.00	23.93	ug/L	-4	40	
cis-1,3-Dichloropropene	497177754018	0.3100	0.2924	25.00	23.58	ug/L	-6	30	
Toluene	497177754018	0.3980	0.3901	25.00	24.51	ug/L	-2	20	
trans-1,3-Dichloropropene	497177754018	0.2728	0.2441	25.00	22.36	ug/L	-11	30	
1,1,2-Trichloroethane	497177754018	0.0982	0.0933	25.00	23.75	ug/L	-5	30	
2-Hexanone	497177754018	0.2051	0.1990	25.00	24.26	ug/L	-3	40	
Tetrachloroethene	497177754018	0.1687	0.1930	25.00	28.60	ug/L	14	30	
Dibromochloromethane	497177754018	0.2226	0.2254	25.00	25.32	ug/L	1	30	
Chlorobenzene	497177754018	0.5229	0.5163	25.00	24.69	ug/L	-1	30	
Ethylbenzene	497177754018	0.8430	0.8699	25.00	25.80	ug/L	3	20	
m,p-Xylenes	497177754018	0.3077	0.3165	50.00	51.43	ug/L	3	30	
o-Xylene	497177754018	0.3127	0.3132	25.00	25.04	ug/L	0	30	
Styrene	497177754018	0.5462	0.5576	25.00	25.52	ug/L	2	30	
Bromoform	497177754018	0.1615	0.1666	25.00	25.78	ug/L	3	30	
1,1,2,2-Tetrachloroethane	497177754018	0.6088	0.5836	25.00	23.97	ug/L	-4	30	

!=warning -=low bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Date : 03-MAY-2007 13:35
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 13:35 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Misc Info : S5938,0.001/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 09:39 target Quant Type: ISTD
Cal Date : 03-MAY-2007 13:35 Cal File: JE308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	5430	0.50000	0.5581
2 Chloromethane	50	5.000	5.000	(0.470)	9979	0.50000	0.7132
3 Vinyl Chloride	62	5.187	5.187	(0.487)	5685	0.50000	0.5439
4 Bromomethane	94	5.877	5.877	(0.552)	3082	0.50000	0.4088
5 Chloroethane	64	6.055	6.055	(0.569)	2787	0.50000	0.3757
6 Trichlorofluoromethane	101	6.518	6.518	(0.612)	4360	0.50000	0.4666
7 Ethanol	45	6.696	6.696	(0.629)	4018	25.0000	24.7192
8 Freon 113	101	7.346	7.346	(0.690)	704	0.25000	0.1412
9 Acetone	43	7.376	7.376	(0.693)	2734	0.25000	0.5783
10 1,1-Dichloroethene	96	7.376	7.376	(0.693)	3326	0.25000	0.5049
11 Isopropanol	45	7.465	7.465	(0.701)	363	2.50000	0.5458
12 Carbon Disulfide	76	7.820	7.820	(0.734)	8164	0.25000	0.2933
13 Methylene Chloride	84	8.086	8.086	(0.759)	3956	0.25000	0.4269
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.761)	2356	2.50000	3.0033
15 MTBE	73	8.480	8.480	(0.796)	8169	0.25000	0.3725
16 trans-1,2-Dichloroethene	96	8.480	8.480	(0.796)	531	0.25000	0.0634
18 Vinyl Acetate	43	9.161	9.161	(0.860)	8848	0.25000	0.4529
19 1,1-Dichloroethane	63	9.151	9.151	(0.859)	4205	0.25000	0.2671
20 Isopropyl Ether (DIPE)	45	9.170	9.170	(0.861)	10678	0.25000	0.2798
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.911)	5516	0.25000	0.2484
22 2-Butanone	43	9.949	9.949	(0.934)	720	0.25000	0.1245
23 cis-1,2-Dichloroethene	96	9.989	9.989	(0.938)	2514	0.25000	0.2745

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

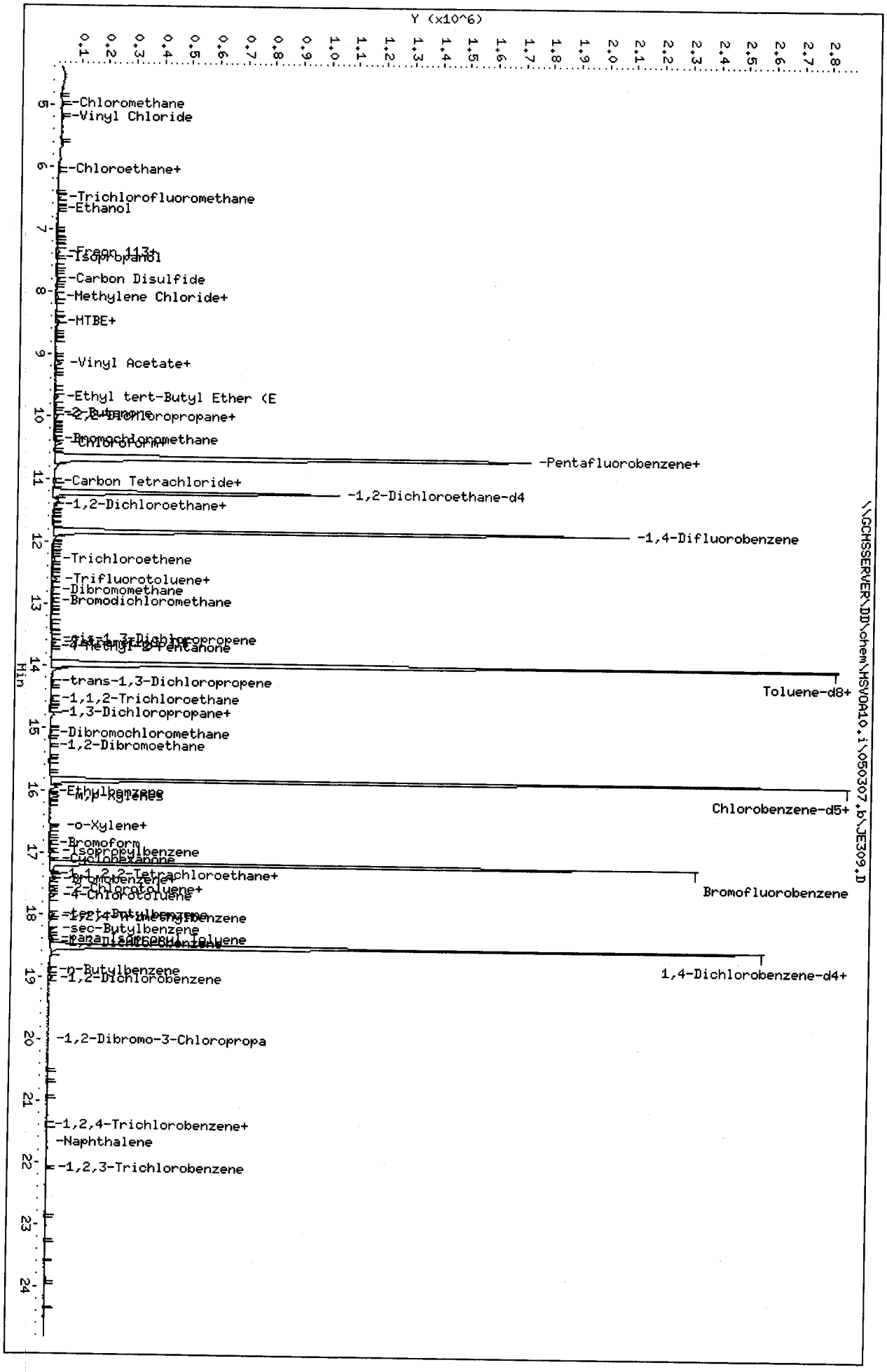
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.018	10.018	(0.941)	2575	0.25000	0.3138
	25 Bromochloromethane	128	10.383	10.383	(0.975)	925	0.25000	0.2116
	26 Chloroform	83	10.432	10.432	(0.980)	4394	0.25000	0.3277
	27 Tetrahydrofuran	42	10.452	10.452	(0.981)	15211	2.50000	4.8892
*	28 Pentafluorobenzene	168	10.649	10.649	(1.000)	1375990	50.0000	
	29 Dibromofluoromethane	113	10.669	10.669	(1.002)	777088	50.0000	50.1834
	30 1,1,1-Trichloroethane	97	10.797	10.797	(1.014)	2518	0.25000	0.2869
	31 1,1-Dichloropropene	75	11.034	11.034	(0.933)	3024	0.25000	0.3077
	32 Carbon Tetrachloride	117	11.093	11.093	(0.938)	861	0.25000	0.1329
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	873566	50.0000	50.3262
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	2796	0.25000	0.2494
	35 Benzene	78	11.359	11.359	(0.960)	8881	0.25000	0.2820
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	5525	0.25000	0.3383
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2242556	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	2094	0.25000	0.2649
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	2164	0.25000	0.2187
	40 1,2-Dichloropropane	63	12.601	12.601	(1.065)	2664	0.25000	0.2715
	41 Dibromomethane	93	12.789	12.789	(1.081)	1256	0.25000	0.2177
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	2921	0.25000	0.2724
	44 cis-1,3-Dichloropropene	75	13.577	13.577	(1.147)	3299	0.25000	0.2372
	45 Tetramethyl THF	43	13.646	13.646	(1.153)	9418	0.25000	0.3932
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	3667	0.25000	0.2800
	47 Toluene-d8	98	13.972	13.972	(1.181)	2411012	50.0000	49.6640
	48 Toluene	92	14.061	14.061	(1.188)	4374	0.25000	0.2450
	49 trans-1,3-Dichloropropene	75	14.268	14.268	(1.206)	3240	0.25000	0.2647
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	894	0.25000	0.2030
	51 1,3-Dichloropropane	76	14.770	14.770	(0.933)	3490	0.25000	0.2617
	52 2-Hexanone	43	14.790	14.790	(0.935)	236	0.25000	0.0306
	53 Tetrachloroethene	166	14.800	14.800	(0.935)	1739	0.25000	0.2740
	54 Dibromochloromethane	129	15.096	15.096	(0.954)	1708	0.25000	0.2040
	55 1,2-Dibromoethane	107	15.293	15.293	(1.292)	1963	0.25000	0.2391
*	56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	1880260	50.0000	
	57 Chlorobenzene	112	15.865	15.865	(1.002)	4849	0.25000	0.2466
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.007)	1822	0.25000	0.2737
	59 Ethylbenzene	91	15.963	15.963	(1.009)	7946	0.25000	0.2506
	60 m,p-Xylenes	106	16.101	16.101	(1.017)	5835	0.50000	0.5042
	61 o-Xylene	106	16.585	16.585	(1.048)	2819	0.25000	0.2396
	62 Styrene	104	16.585	16.585	(1.048)	3876	0.25000	0.1887
	63 Bromoform	173	16.841	16.841	(1.064)	988	0.25000	0.1626
	64 Isopropylbenzene	105	16.969	16.969	(0.916)	7135	0.25000	0.2766
	65 Cyclohexanone	55	17.127	17.127	(0.925)	4680	2.50000	3.4062
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	971769	50.0000	51.8751
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	3370	0.25000	0.3283
	68 1,2,3-Trichloropropane	75	17.363	17.363	(0.938)	3037	0.25000	0.3130
	69 Bromobenzene	156	17.393	17.393	(0.939)	1709	0.25000	0.2147
	70 Propylbenzene	91	17.442	17.442	(0.942)	8660	0.25000	0.2698
	71 2-Chlorotoluene	91	17.580	17.580	(0.949)	6371	0.25000	0.2759
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	4814	0.25000	0.2502
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	6630	0.25000	0.3041
	74 tert-Butylbenzene	119	18.004	18.004	(0.972)	4269	0.25000	0.2460
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	4283	0.25000	0.2472
	76 sec-Butylbenzene	105	18.251	18.251	(0.986)	6214	0.25000	0.2523
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	4295	0.25000	0.2436
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	3719	0.25000	0.2696

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	842814	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	4000	0.25000	0.2833
81 n-Butylbenzene	91	18.892	18.892	(1.020)	3200	0.25000	0.2331
82 1,2-Dichlorobenzene	146	19.030	19.030	(1.028)	3023	0.25000	0.2215
83 1,2-Dibromo-3-Chloropropane	75	20.006	20.006	(1.080)	431	0.25000	0.2578
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	859	0.25000	0.3226
86 Naphthalene	128	21.692	21.692	(1.171)	1424	0.25000	0.1448
87 1,2,3-Trichlorobenzene	180	22.076	22.076	(1.192)	441	0.25000	0.1047

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Date : 03-MAY-2007 14:07
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/1000,S6072,0.001/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:07 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/1000,S6072,0.001/1000
Misc Info : S5938,0.002/1000, 0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 12:22 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:07 Cal File: JE309.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	10407	1.00000	1.0722(M)
2 Chloromethane	50	4.994	4.994	(0.469)	16328	1.00000	1.1697
3 Vinyl Chloride	62	5.191	5.191	(0.487)	11443	1.00000	1.0974(M)
4 Bromomethane	94	5.871	5.871	(0.551)	7986	1.00000	1.0619(M)
5 Chloroethane	64	6.049	6.049	(0.568)	7094	1.00000	0.9587
6 Trichlorofluoromethane	101	6.512	6.512	(0.611)	9598	1.00000	1.0297
7 Ethanol	45	6.690	6.690	(0.628)	9931	50.0000	61.2383
8 Freon 113	101	7.340	7.340	(0.689)	2601	0.50000	0.5228
9 Acetone	43	7.380	7.380	(0.693)	3812	0.50000	0.8083
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	3237	0.50000	0.4926(MH)
11 Isopropanol	45	7.498	7.498	(0.704)	3143	5.00000	4.7370
12 Carbon Disulfide	76	7.814	7.814	(0.733)	15080	0.50000	0.5431
13 Methylene Chloride	84	8.090	8.090	(0.759)	7434	0.50000	0.8041(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	4307	5.00000	5.5032(M)
15 MTBE	73	8.474	8.474	(0.795)	12418	0.50000	0.5676(H)
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	4820	0.50000	0.5772(MH)
18 Vinyl Acetate	43	9.154	9.154	(0.859)	19125	0.50000	0.9812
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	8215	0.50000	0.5231
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	21707	0.50000	0.5702
21 Ethyl tert-Butyl Ether (ETBE)	59	9.707	9.707	(0.911)	11934	0.50000	0.5387
22 2-Butanone	43	9.983	9.983	(0.937)	1252	0.50000	0.2170
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	4303	0.50000	0.4881(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	5225	0.50000	0.6382
25 Bromochloromethane	128	10.377	10.377	(0.974)	1971	0.50000	0.4519
26 Chloroform	83	10.426	10.426	(0.979)	7156	0.50000	0.5349
27 Tetrahydrofuran	42	10.446	10.446	(0.981)	25372	5.00000	8.1742
* 28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1372806	50.0000	
29 Dibromofluoromethane	113	10.673	10.673	(1.002)	773510	50.0000	50.0681
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.013)	4958	0.50000	0.5662(H)
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	5906	0.50000	0.5994(H)
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	3128	0.50000	0.4819
33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	878193	50.0000	50.4645
34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	5947	0.50000	0.5292
35 Benzene	78	11.363	11.363	(0.961)	17153	0.50000	0.5434
36 Methyl tert-Amyl Ether (TAME)	73	11.432	11.432	(0.967)	7852	0.50000	0.4797(H)
* 37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2248254	50.0000	
38 Trichloroethene	95	12.290	12.290	(1.039)	4787	0.50000	0.6041
39 Trifluorotoluene	146	12.615	12.615	(1.067)	5706	0.50000	0.5752
40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	5429	0.50000	0.5520
41 Dibromomethane	93	12.783	12.783	(1.081)	2917	0.50000	0.5045
42 Bromodichloromethane	83	12.960	12.960	(1.096)	6065	0.50000	0.5642
44 cis-1,3-Dichloropropene	75	13.571	13.571	(1.148)	7383	0.50000	0.5295
45 Tetramethyl THF	43	13.650	13.650	(1.154)	12608	0.50000	0.5251(H)
46 4-Methyl-2-Pentanone	43	13.709	13.709	(1.159)	6792	0.50000	0.5173(M)
47 Toluene-d8	98	13.966	13.966	(1.181)	2440868	50.0000	50.1516
48 Toluene	92	14.064	14.064	(1.189)	9736	0.50000	0.5440(H)
49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	6412	0.50000	0.5226(M)
50 1,1,2-Trichloroethane	85	14.547	14.547	(1.230)	2347	0.50000	0.5315
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	6587	0.50000	0.4853
52 2-Hexanone	43	14.824	14.824	(0.936)	3944	0.50000	0.5025
53 Tetrachloroethene	166	14.814	14.814	(0.936)	3677	0.50000	0.5694
54 Dibromochloromethane	129	15.090	15.090	(0.953)	4258	0.50000	0.4998
55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	3499	0.50000	0.4251
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1913461	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	10935	0.50000	0.5464
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	3381	0.50000	0.4991
59 Ethylbenzene	91	15.957	15.957	(1.008)	18619	0.50000	0.5771
60 m,p-Xylenes	106	16.095	16.095	(1.017)	12163	1.00000	1.0328
61 o-Xylene	106	16.578	16.578	(1.047)	6658	0.50000	0.5562
62 Styrene	104	16.588	16.588	(1.048)	11207	0.50000	0.5361
63 Bromoform	173	16.845	16.845	(1.064)	3063	0.50000	0.4954
64 Isopropylbenzene	105	16.973	16.973	(0.917)	15404	0.50000	0.5714
65 Cyclohexanone	55	17.121	17.121	(0.925)	7204	5.00000	5.0156
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1000580	50.0000	51.0949
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	5909	0.50000	0.5507(H)
68 1,2,3-Trichloropropane	75	17.357	17.357	(0.938)	6053	0.50000	0.5967(M)
69 Bromobenzene	156	17.397	17.397	(0.940)	4101	0.50000	0.4928
70 Propylbenzene	91	17.436	17.436	(0.942)	19074	0.50000	0.5685
71 2-Chlorotoluene	91	17.584	17.584	(0.950)	13578	0.50000	0.5625
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	10926	0.50000	0.5433
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	13842	0.50000	0.6075
74 tert-Butylbenzene	119	18.008	18.008	(0.973)	11010	0.50000	0.6071(H)
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	7948	0.50000	0.4388
76 sec-Butylbenzene	105	18.245	18.245	(0.986)	14248	0.50000	0.5535
77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	9704	0.50000	0.5265(M)
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	7247	0.50000	0.5027

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

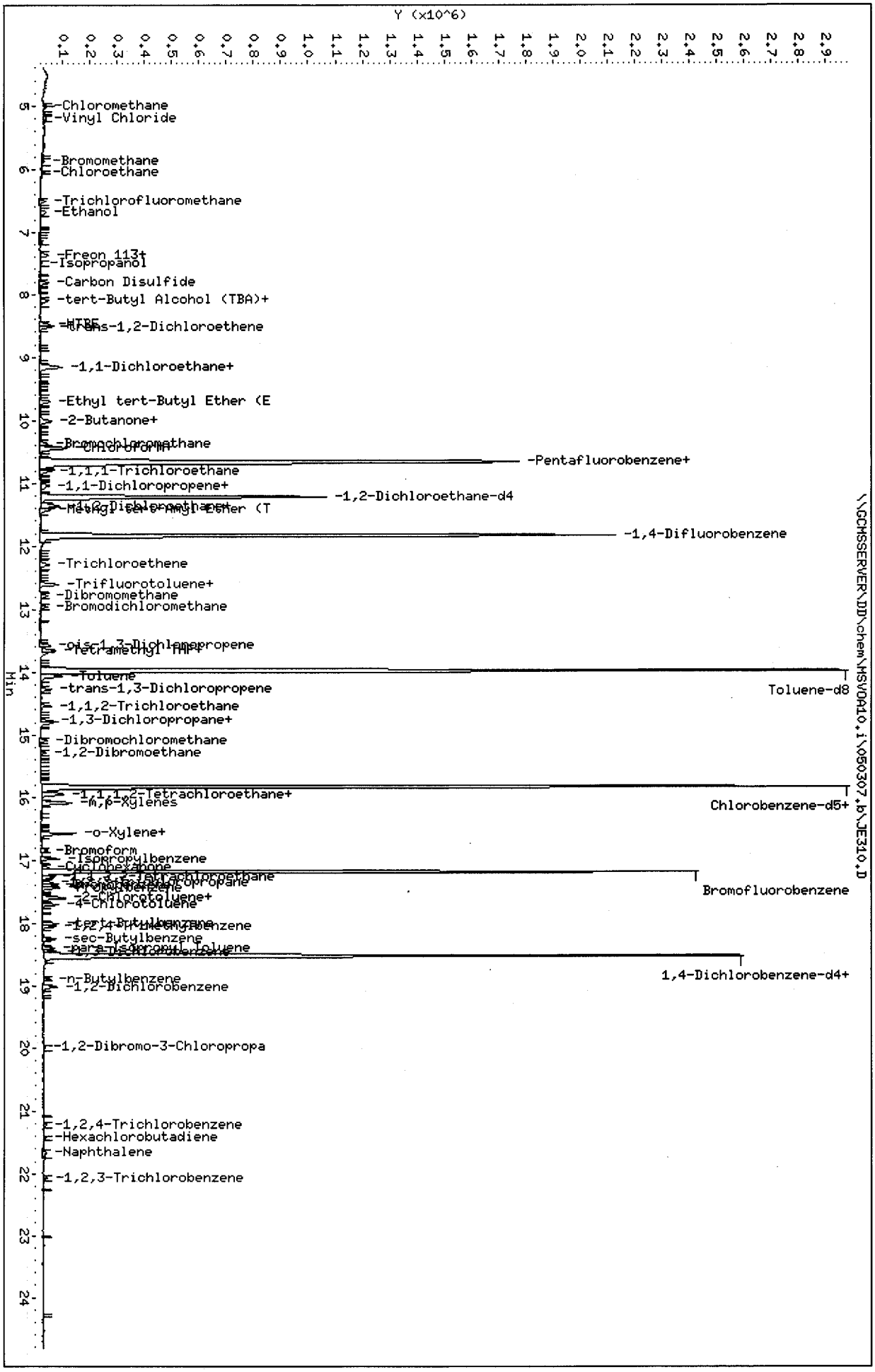
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	881052	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	7762	0.50000	0.5259
81 n-Butylbenzene	91	18.886	18.886	(1.020)	6916	0.50000	0.4819(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.028)	6866	0.50000	0.4812
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	1068	0.50000	0.6113
84 1,2,4-Trichlorobenzene	180	21.242	21.242	(1.148)	1386	0.50000	0.4234(M)
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	1319	0.50000	0.5957(M)
86 Naphthalene	128	21.686	21.686	(1.171)	4817	0.50000	0.4688(M)
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1848	0.50000	0.4200

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Date : 03-MAY-2007 14:40
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/500,S6072,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:40 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/500,S6072,0.002/500
Misc Info : S5938,0.002/500, 2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:06 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:40 Cal File: JE310.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.425)	21455	2.00000	2.1527(M)
2 Chloromethane	50	4.994	4.994	(0.469)	30595	2.00000	2.1345
3 Vinyl Chloride	62	5.191	5.191	(0.487)	20697	2.00000	1.9330(M)
4 Bromomethane	94	5.862	5.862	(0.550)	15302	2.00000	1.9817
5 Chloroethane	64	6.049	6.049	(0.568)	15478	2.00000	2.0372(M)
6 Trichlorofluoromethane	101	6.502	6.502	(0.610)	18360	2.00000	1.9183
7 Ethanol	45	6.680	6.680	(0.627)	33778	200.000	202.8496(M)
8 Freon 113	101	7.331	7.331	(0.688)	7449	2.00000	1.4584
9 Acetone	43	7.380	7.380	(0.693)	9015	2.00000	2.0242(M)
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	12359	2.00000	1.8316
11 Isopropanol	45	7.498	7.498	(0.704)	14554	20.0000	21.3625
12 Carbon Disulfide	76	7.814	7.814	(0.733)	56163	2.00000	1.9701
13 Methylene Chloride	84	8.090	8.090	(0.759)	20092	2.00000	2.1167(M)
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.762)	16309	20.0000	20.2945
15 MTBE	73	8.484	8.484	(0.796)	48260	2.00000	2.1483
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.800)	18850	2.00000	2.1984
18 Vinyl Acetate	43	9.135	9.135	(0.857)	35877	2.00000	1.7623(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	33652	2.00000	2.0869
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	80941	2.00000	2.0708
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.910)	47098	2.00000	2.0706
22 2-Butanone	43	9.953	9.953	(0.934)	12909	2.00000	2.1792
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	20810	2.00000	2.2186

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	16115	2.00000	1.9170
	25 Bromochloromethane	128	10.367	10.367	(0.973)	9211	2.00000	2.0571
	26 Chloroform	83	10.436	10.436	(0.980)	28600	2.00000	2.0822
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	73173	20.0000	22.9590
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1409612	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	793635	50.0000	50.0295
	30 1,1,1-Trichloroethane	97	10.801	10.801	(1.014)	16912	2.00000	1.8811
	31 1,1-Dichloropropene	75	11.038	11.038	(0.933)	19064	2.00000	1.8790
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	12184	2.00000	1.8228
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	896823	50.0000	50.0441
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	23266	2.00000	2.0107
	35 Benzene	78	11.363	11.363	(0.961)	64423	2.00000	1.9819
	36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.966)	35656	2.00000	2.1153
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2315236	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	15070	2.00000	1.8469
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	16673	2.00000	1.6322
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	20339	2.00000	2.0082
	41 Dibromomethane	93	12.793	12.793	(1.082)	11983	2.00000	2.0127
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	21961	2.00000	1.9841
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	27358	2.00000	1.9055
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	48611	2.00000	1.9660
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	31678	2.00000	2.3432
	47 Toluene-d8	98	13.976	13.976	(1.182)	2515013	50.0000	50.1800
	48 Toluene	92	14.064	14.064	(1.189)	35831	2.00000	1.9443
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	23991	2.00000	1.8990
	50 1,1,2-Trichloroethane	85	14.538	14.538	(1.229)	9099	2.00000	2.0012
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	27964	2.00000	2.0115
	52 2-Hexanone	43	14.804	14.804	(0.935)	15672	2.00000	1.9494
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	11264	2.00000	1.7030
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	16558	2.00000	1.8974
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	17395	2.00000	2.0523
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1960105	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	41103	2.00000	2.0051
	58 1,1,1,2-Tetrachloroethane	131	15.938	15.938	(1.007)	14123	2.00000	2.0355
	59 Ethylbenzene	91	15.957	15.957	(1.008)	62188	2.00000	1.8817
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	48096	4.00000	3.9869
	61 o-Xylene	106	16.579	16.579	(1.047)	24267	2.00000	1.9793
	62 Styrene	104	16.588	16.588	(1.048)	41353	2.00000	1.9313
	63 Bromoform	173	16.845	16.845	(1.064)	12136	2.00000	1.9164
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	49516	2.00000	1.8050
	65 Cyclohexanone	55	17.121	17.121	(0.924)	13929	20.0000	10.3005
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1026075	50.0000	51.4913
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	22687	2.00000	2.0781
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.937)	23367	2.00000	2.2639
	69 Bromobenzene	156	17.397	17.397	(0.939)	16684	2.00000	1.9705
	70 Propylbenzene	91	17.436	17.436	(0.941)	61471	2.00000	1.8006
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	48976	2.00000	1.9939
	72 1,3,5-Trimethylbenzene	105	17.614	17.614	(0.951)	36953	2.00000	1.8058
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	45466	2.00000	1.9609
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	31632	2.00000	1.7140
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	32323	2.00000	1.7538
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	43904	2.00000	1.6761
	77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	31404	2.00000	1.6747
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	30465	2.00000	2.0768

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

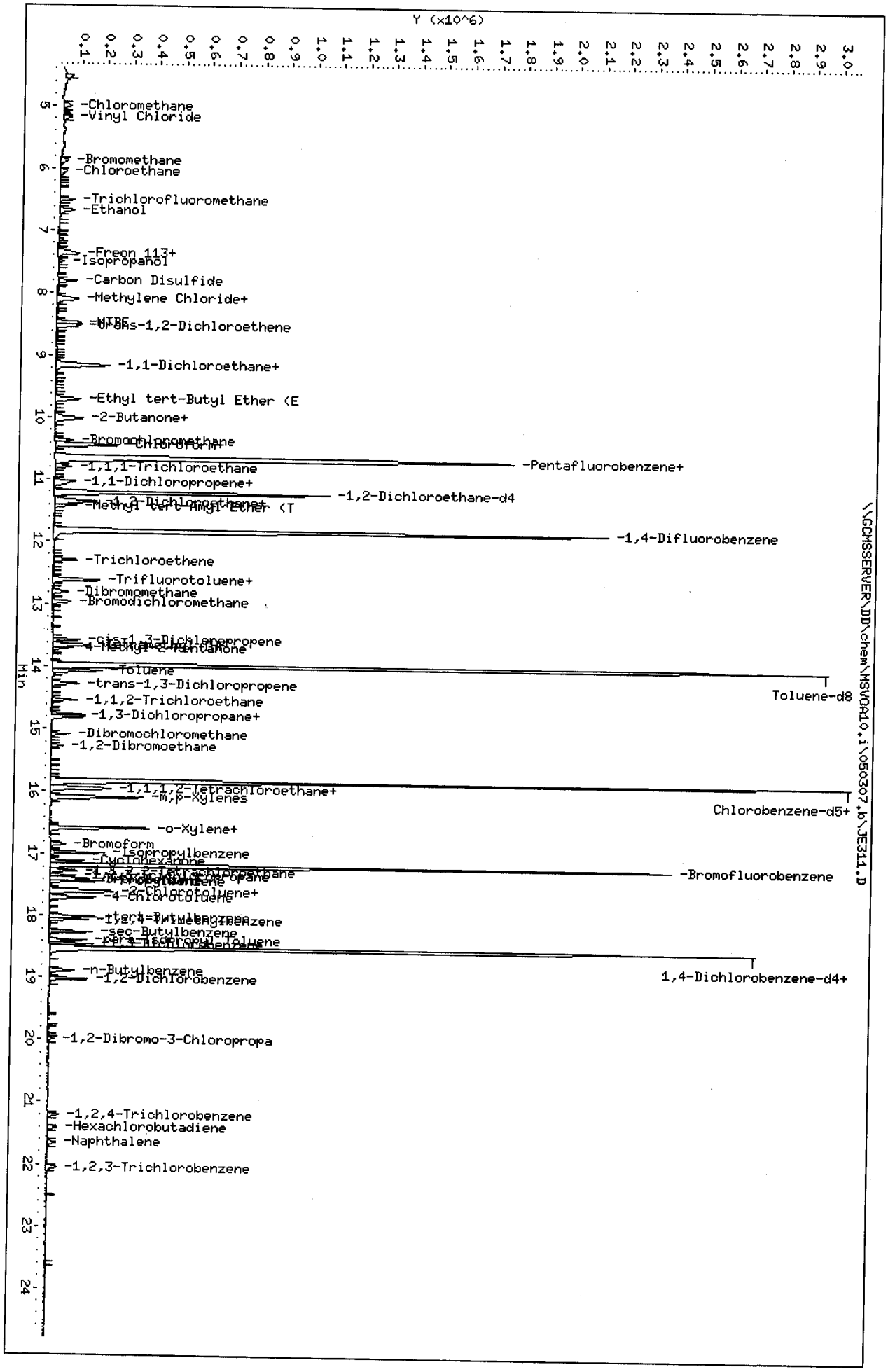
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	896547	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	31850	2.00000	2.1208
81 n-Butylbenzene	91	18.895	18.895	(1.020)	22218	2.00000	1.6087(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	30243	2.00000	2.0833
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	3790	2.00000	2.1318
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	8276	2.00000	1.6536(M)
85 Hexachlorobutadiene	225	21.419	21.419	(1.157)	3542	2.00000	1.6348
86 Naphthalene	128	21.656	21.656	(1.169)	18914	2.00000	1.6799
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	7831	2.00000	1.8252

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Date : 03-MAY-2007 15:13
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0025/500,S6072,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:13 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0025/500,S6072,0.005/500
Misc Info : S5938,0.005/500, 5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:07 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:13 Cal File: JE311.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.426)	60142	5.00000	6.0582(M)
2 Chloromethane	50	5.003	5.003	(0.470)	80156	5.00000	5.6144
3 Vinyl Chloride	62	5.180	5.180	(0.487)	58511	5.00000	5.4864
4 Bromomethane	94	5.861	5.861	(0.551)	41404	5.00000	5.3832(M)
5 Chloroethane	64	6.038	6.038	(0.567)	42093	5.00000	5.5621
6 Trichlorofluoromethane	101	6.501	6.501	(0.611)	52185	5.00000	5.4741
7 Ethanol	45	6.679	6.679	(0.628)	86031	500.000	518.6896(M)
8 Freon 113	101	7.339	7.339	(0.690)	24887	5.00000	4.8918
9 Acetone	43	7.369	7.369	(0.692)	27028	5.00000	6.0928
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	33704	5.00000	5.0148
11 Isopropanol	45	7.497	7.497	(0.704)	35324	50.0000	52.0538
12 Carbon Disulfide	76	7.813	7.813	(0.734)	138901	5.00000	4.8916
13 Methylene Chloride	84	8.089	8.089	(0.760)	50214	5.00000	5.3110
14 tert-Butyl Alcohol (TBA)	59	8.108	8.108	(0.762)	42177	50.0000	52.6913
15 MTBE	73	8.483	8.483	(0.797)	114414	5.00000	5.1133
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	42339	5.00000	4.9573
18 Vinyl Acetate	43	9.124	9.124	(0.857)	101080	5.00000	4.9847(M)
19 1,1-Dichloroethane	63	9.144	9.144	(0.859)	83695	5.00000	5.2108
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	195814	5.00000	5.0297
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.911)	115251	5.00000	5.0869
22 2-Butanone	43	9.942	9.942	(0.934)	29234	5.00000	4.9546
23 cis-1,2-Dichloroethene	96	10.001	10.001	(0.940)	44459	5.00000	4.7586

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.943)	42729	5.00000	5.1031
	25 Bromochloromethane	128	10.366	10.366	(0.974)	22695	5.00000	5.0886
	26 Chloroform	83	10.425	10.425	(0.980)	69881	5.00000	5.1078
	27 Tetrahydrofuran	42	10.445	10.445	(0.981)	173265	50.0000	54.5791
*	28 Pentafluorobenzene	168	10.642	10.642	(1.000)	1404065	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.003)	773811	50.0000	48.9725
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.015)	44056	5.00000	4.9196
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	49607	5.00000	4.9696
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	32728	5.00000	4.9765
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	887080	50.0000	50.3104
	34 1,2-Dichloroethane	62	11.332	11.332	(0.958)	56295	5.00000	4.9448
	35 Benzene	78	11.362	11.362	(0.961)	165120	5.00000	5.1631
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	82681	5.00000	4.9853
*	37 1,4-Difluorobenzene	114	11.825	11.825	(1.000)	2277963	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	40795	5.00000	5.0816
	39 Trifluorotoluene	146	12.604	12.604	(1.066)	50157	5.00000	4.9907
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	50403	5.00000	5.0580
	41 Dibromomethane	93	12.792	12.792	(1.082)	29674	5.00000	5.0657
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	54991	5.00000	5.0497
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	74358	5.00000	5.2640
	45 Tetramethyl THF	43	13.640	13.640	(1.153)	124119	5.00000	5.1019
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	64514	5.00000	4.8503
	47 Toluene-d8	98	13.965	13.965	(1.181)	2501333	50.0000	50.7236
	48 Toluene	92	14.063	14.063	(1.189)	97478	5.00000	5.3761
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	63333	5.00000	5.0951(M)
	50 1,1,2-Trichloroethane	85	14.527	14.527	(1.228)	22727	5.00000	5.0804
	51 1,3-Dichloropropane	76	14.763	14.763	(0.933)	72677	5.00000	5.2249
	52 2-Hexanone	43	14.793	14.793	(0.935)	42055	5.00000	5.2284
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	35679	5.00000	5.3915
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	44728	5.00000	5.1227
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	43475	5.00000	5.2132
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	1961186	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	108962	5.00000	5.3127
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	36766	5.00000	5.2960
	59 Ethylbenzene	91	15.956	15.956	(1.008)	181453	5.00000	5.4874
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	134518	10.0000	11.1448
	61 o-Xylene	106	16.578	16.578	(1.047)	68308	5.00000	5.5683
	62 Styrene	104	16.578	16.578	(1.047)	118195	5.00000	5.5170
	63 Bromoform	173	16.834	16.834	(1.064)	32477	5.00000	5.1257
	64 Isopropylbenzene	105	16.972	16.972	(0.916)	156395	5.00000	5.6433
	65 Cyclohexanone	55	17.110	17.110	(0.924)	69537	50.0000	50.9016
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1024582	50.0000	50.8951
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.932)	57991	5.00000	5.2581
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	54968	5.00000	5.2716
	69 Bromobenzene	156	17.396	17.396	(0.939)	47690	5.00000	5.5754
	70 Propylbenzene	91	17.435	17.435	(0.941)	189282	5.00000	5.4884
	71 2-Chlorotoluene	91	17.583	17.583	(0.949)	140027	5.00000	5.6431
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.950)	112043	5.00000	5.4197
	73 4-Chlorotoluene	91	17.692	17.692	(0.955)	125176	5.00000	5.3441
	74 tert-Butylbenzene	119	18.007	18.007	(0.972)	100747	5.00000	5.4039
	75 1,2,4-Trimethylbenzene	105	18.056	18.056	(0.975)	99183	5.00000	5.3271
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	138952	5.00000	5.2510
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.993)	97726	5.00000	5.1587
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.996)	82601	5.00000	5.5738

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

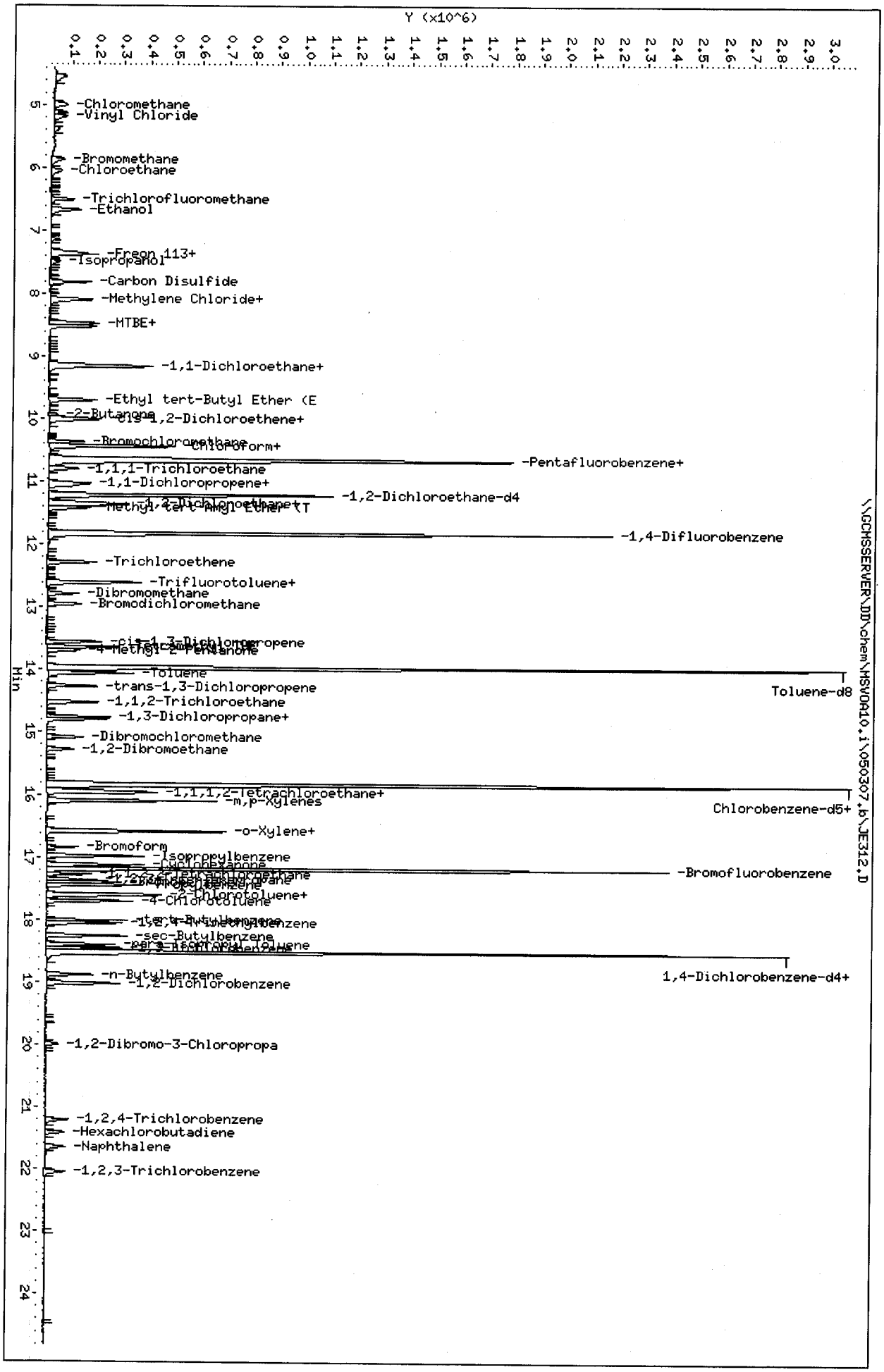
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.520	18.520	(1.000)	905730	50.0000	
80 1,4-Dichlorobenzene	146	18.540	18.540	(1.001)	81814	5.00000	5.3927
81 n-Butylbenzene	91	18.885	18.885	(1.020)	71286	5.00000	5.1093
82 1,2-Dichlorobenzene	146	19.023	19.023	(1.027)	80088	5.00000	5.4610
83 1,2-Dibromo-3-Chloropropane	75	19.999	19.999	(1.080)	8698	5.00000	4.8429
84 1,2,4-Trichlorobenzene	180	21.211	21.211	(1.145)	25865	5.00000	5.1158
85 Hexachlorobutadiene	225	21.418	21.418	(1.157)	11692	5.00000	5.3419
86 Naphthalene	128	21.655	21.655	(1.169)	49271	5.00000	4.3319(M)
87 1,2,3-Trichlorobenzene	180	22.059	22.059	(1.191)	21699	5.00000	5.0063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Date : 03-MAY-2007 15:46
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/100,S6072,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:46 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/100,S6072,0.002/100
Misc Info : S5938,0.002/100, 10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:08 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:46 Cal File: JE312.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	89915	10.0000	8.9778
2 Chloromethane	50	4.985	4.985	(0.468)	137830	10.0000	9.5694
3 Vinyl Chloride	62	5.182	5.182	(0.487)	103548	10.0000	9.6241
4 Bromomethane	94	5.872	5.872	(0.552)	71127	10.0000	9.1665
5 Chloroethane	64	6.049	6.049	(0.568)	76838	10.0000	10.0641
6 Trichlorofluoromethane	101	6.503	6.503	(0.611)	92032	10.0000	9.5691
7 Ethanol	45	6.671	6.671	(0.627)	161047	1000.00	962.4395(M)
8 Freon 113	101	7.341	7.341	(0.690)	55009	10.0000	10.7176
9 Acetone	43	7.371	7.371	(0.692)	53227	10.0000	11.8934
10 1,1-Dichloroethene	96	7.371	7.371	(0.692)	68395	10.0000	10.0872
11 Isopropanol	45	7.489	7.489	(0.704)	66367	100.000	96.9400
12 Carbon Disulfide	76	7.814	7.814	(0.734)	272891	10.0000	9.5260
13 Methylene Chloride	84	8.090	8.090	(0.760)	94781	10.0000	9.9366
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	79384	100.000	98.3025
15 MTBE	73	8.475	8.475	(0.796)	217419	10.0000	9.6314
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	84302	10.0000	9.7839
18 Vinyl Acetate	43	9.145	9.145	(0.859)	150833	10.0000	7.3729(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	160593	10.0000	9.9107
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	389154	10.0000	9.9081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	228996	10.0000	10.0186
22 2-Butanone	43	9.944	9.944	(0.934)	60306	10.0000	10.1310
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	90961	10.0000	9.6504

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Report Date: 04-May-2007 08:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	77576	10.0000	9.1836
25 Bromochloromethane	128	10.368	10.368	(0.974)	45844	10.0000	10.1888
26 Chloroform	83	10.427	10.427	(0.980)	139559	10.0000	10.1113
27 Tetrahydrofuran	42	10.437	10.437	(0.981)	332722	100.000	103.8881
* 28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1416508	50.0000	
29 Dibromofluoromethane	113	10.673	10.673	(1.003)	810949	50.0000	50.8721
30 1,1,1-Trichloroethane	97	10.802	10.802	(1.015)	90225	10.0000	9.9867
31 1,1-Dichloropropene	75	11.028	11.028	(0.932)	97202	10.0000	9.5272
32 Carbon Tetrachloride	117	11.078	11.078	(0.937)	65802	10.0000	9.7893
33 1,2-Dichloroethane-d4	65	11.216	11.216	(0.948)	916714	50.0000	50.8670
34 1,2-Dichloroethane	62	11.334	11.334	(0.958)	117103	10.0000	10.0637
35 Benzene	78	11.364	11.364	(0.961)	325224	10.0000	9.9494
36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.966)	176886	10.0000	10.4349
* 37 1,4-Difluorobenzene	114	11.827	11.827	(1.000)	2328303	50.0000	
38 Trichloroethene	95	12.290	12.290	(1.039)	82390	10.0000	10.0411
39 Trifluorotoluene	146	12.606	12.606	(1.066)	100609	10.0000	9.7943
40 1,2-Dichloropropane	63	12.606	12.606	(1.066)	102462	10.0000	10.0600
41 Dibromomethane	93	12.783	12.783	(1.081)	59720	10.0000	9.9744
42 Bromodichloromethane	83	12.951	12.951	(1.095)	109536	10.0000	9.8410
44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	143043	10.0000	9.9076
45 Tetramethyl THF	43	13.641	13.641	(1.153)	252528	10.0000	10.1558
46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	121435	10.0000	8.9323
47 Toluene-d8	98	13.966	13.966	(1.181)	2530522	50.0000	50.2061
48 Toluene	92	14.065	14.065	(1.189)	182138	10.0000	9.8281
49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.207)	126263	10.0000	9.9382
50 1,1,2-Trichloroethane	85	14.528	14.528	(1.228)	45657	10.0000	9.9857
51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	141062	10.0000	10.0983
52 2-Hexanone	43	14.785	14.785	(0.934)	85327	10.0000	10.5632
53 Tetrachloroethene	166	14.805	14.805	(0.935)	65859	10.0000	9.9099
54 Dibromochloromethane	129	15.090	15.090	(0.953)	89381	10.0000	10.1936
55 1,2-Dibromoethane	107	15.278	15.278	(1.292)	86172	10.0000	10.1098
* 56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	1969525	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	204176	10.0000	9.9130
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69320	10.0000	9.9431
59 Ethylbenzene	91	15.958	15.958	(1.008)	330342	10.0000	9.9478
60 m,p-Xylenes	106	16.086	16.086	(1.016)	241168	20.0000	19.8962
61 o-Xylene	106	16.569	16.569	(1.047)	123646	10.0000	10.0367
62 Styrene	104	16.579	16.579	(1.047)	214488	10.0000	9.9694
63 Bromoform	173	16.836	16.836	(1.064)	63442	10.0000	9.9704
64 Isopropylbenzene	105	16.974	16.974	(0.917)	281407	10.0000	10.0269
65 Cyclohexanone	55	17.112	17.112	(0.924)	192898	100.000	139.4326
66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1032818	50.0000	50.6609
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	106355	10.0000	9.5225
68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	104123	10.0000	9.8606
69 Bromobenzene	156	17.397	17.397	(0.940)	87921	10.0000	10.1500
70 Propylbenzene	91	17.437	17.437	(0.942)	340232	10.0000	9.7417
71 2-Chlorotoluene	91	17.585	17.585	(0.950)	247340	10.0000	9.8428
72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	205208	10.0000	9.8018
73 4-Chlorotoluene	91	17.693	17.693	(0.956)	233535	10.0000	9.8452
74 tert-Butylbenzene	119	18.009	18.009	(0.973)	182493	10.0000	9.6660
75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	184412	10.0000	9.7805
76 sec-Butylbenzene	105	18.255	18.255	(0.986)	257624	10.0000	9.6135
77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	179820	10.0000	9.3732
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	148256	10.0000	9.8787

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Report Date: 04-May-2007 08:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	917230	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	149173	10.0000	9.7093
81 n-Butylbenzene	91	18.886	18.886	(1.020)	137283	10.0000	9.7163
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	151600	10.0000	10.2077
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	18722	10.0000	10.2934
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	48031	10.0000	9.3808
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	21706	10.0000	9.7928
86 Naphthalene	128	21.647	21.647	(1.169)	104760	10.0000	9.0951(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	45414	10.0000	10.3465

QC Flag Legend

M - Compound response manually integrated.

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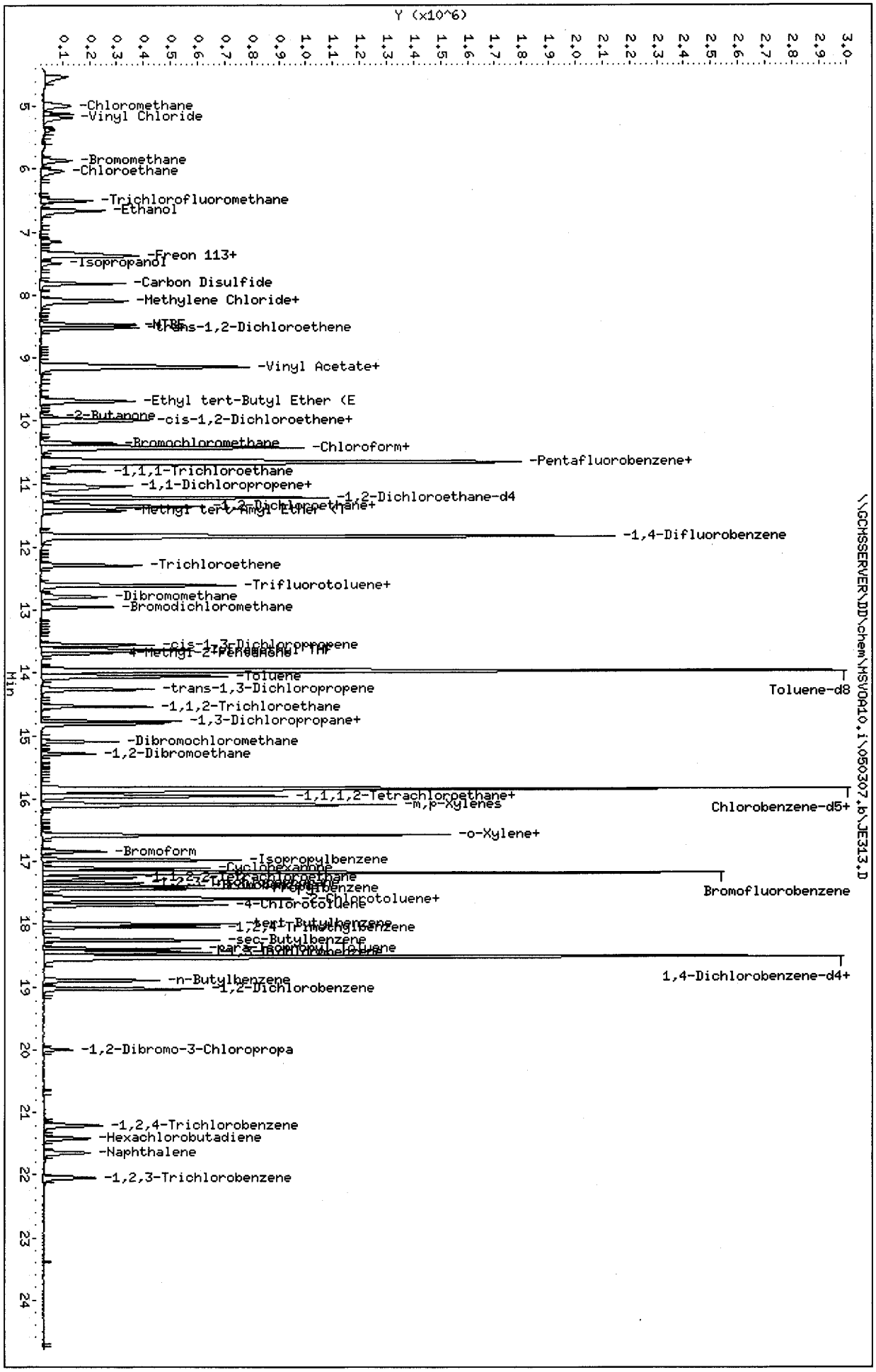
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



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Report Date: 04-May-2007 08:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
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Cal Date : 03-MAY-2007 16:19 Cal File: JE313.D
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Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	186996	20.0000	18.5814
2 Chloromethane	50	4.994	4.994	(0.470)	283247	20.0000	19.5710
3 Vinyl Chloride	62	5.181	5.181	(0.487)	206595	20.0000	19.1092
4 Bromomethane	94	5.872	5.872	(0.552)	153230	20.0000	19.6527
5 Chloroethane	64	6.039	6.039	(0.568)	153527	20.0000	20.0120
6 Trichlorofluoromethane	101	6.503	6.503	(0.612)	186970	20.0000	19.3469
7 Ethanol	45	6.660	6.660	(0.626)	320064	2000.00	1903.5449
8 Freon 113	101	7.331	7.331	(0.689)	120374	20.0000	23.3401
9 Acetone	43	7.360	7.360	(0.692)	90282	20.0000	20.0762
10 1,1-Dichloroethene	96	7.370	7.370	(0.693)	144580	20.0000	21.2207
11 Isopropanol	45	7.479	7.479	(0.703)	138719	200.000	201.6472
12 Carbon Disulfide	76	7.814	7.814	(0.735)	576816	20.0000	20.0385
13 Methylene Chloride	84	8.080	8.080	(0.760)	188113	20.0000	19.6265
14 tert-Butyl Alcohol (TBA)	59	8.100	8.100	(0.762)	155391	200.000	191.4976
15 MTBE	73	8.474	8.474	(0.797)	439195	20.0000	19.3623
16 trans-1,2-Dichloroethene	96	8.514	8.514	(0.801)	171269	20.0000	19.7816
18 Vinyl Acetate	43	9.115	9.115	(0.857)	392386	20.0000	19.0882
19 1,1-Dichloroethane	63	9.135	9.135	(0.859)	324682	20.0000	19.9408
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.861)	781752	20.0000	19.8081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.911)	446941	20.0000	19.4597
22 2-Butanone	43	9.934	9.934	(0.934)	116262	20.0000	19.4373
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.940)	182121	20.0000	19.2290

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Report Date: 04-May-2007 08:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.943)	158641	20.0000	18.6899
	25 Bromochloromethane	128	10.358	10.358	(0.974)	84899	20.0000	18.7780
	26 Chloroform	83	10.417	10.417	(0.980)	275479	20.0000	19.8629
	27 Tetrahydrofuran	42	10.427	10.427	(0.981)	652109	200.000	202.6329
*	28 Pentafluorobenzene	168	10.634	10.634	(1.000)	1423356	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.003)	797583	50.0000	49.7929
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.015)	180700	20.0000	19.9049
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	205746	20.0000	20.3188
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	142086	20.0000	21.2982
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	899776	50.0000	50.3052
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	232643	20.0000	20.1446
	35 Benzene	78	11.353	11.353	(0.961)	652382	20.0000	20.1092
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	331747	20.0000	19.7187
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2310806	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	166052	20.0000	20.3905
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	213223	20.0000	20.9145
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	204108	20.0000	20.1916
	41 Dibromomethane	93	12.783	12.783	(1.082)	119315	20.0000	20.0789
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	218625	20.0000	19.7906
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	285542	20.0000	19.9272
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	498432	20.0000	20.1970
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	279568	20.0000	20.7197
	47 Toluene-d8	98	13.966	13.966	(1.182)	2522015	50.0000	50.4162
	48 Toluene	92	14.055	14.055	(1.189)	374923	20.0000	20.3839
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	255546	20.0000	20.2664
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	90788	20.0000	20.0067
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	284194	20.0000	20.1328
	52 2-Hexanone	43	14.775	14.775	(0.934)	157898	20.0000	19.3436
	53 Tetrachloroethene	166	14.804	14.804	(0.936)	137319	20.0000	20.4473
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175743	20.0000	19.8340
	55 1,2-Dibromoethane	107	15.268	15.268	(1.292)	173857	20.0000	20.5517
*	56 Chlorobenzene-d5	117	15.820	15.820	(1.000)	1990271	50.0000	
	57 Chlorobenzene	112	15.859	15.859	(1.002)	416244	20.0000	19.9985
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.007)	140426	20.0000	19.9325
	59 Ethylbenzene	91	15.948	15.948	(1.008)	681994	20.0000	20.3232
	60 m,p-Xylenes	106	16.086	16.086	(1.017)	502784	40.0000	41.0470
	61 o-Xylene	106	16.569	16.569	(1.047)	254094	20.0000	20.4106
	62 Styrene	104	16.569	16.569	(1.047)	449841	20.0000	20.6906
	63 Bromoform	173	16.835	16.835	(1.064)	126201	20.0000	19.6268
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	588609	20.0000	20.4755
	65 Cyclohexanone	55	17.111	17.111	(0.924)	326970	200.000	230.7389
	66 Bromofluorobenzene	95	17.170	17.170	(0.928)	1032455	50.0000	49.4421
	67 1,1,2,2-Tetrachloroethane	83	17.259	17.259	(0.932)	226191	20.0000	19.7718
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	200446	20.0000	18.5325
	69 Bromobenzene	156	17.387	17.387	(0.939)	177320	20.0000	19.9852
	70 Propylbenzene	91	17.427	17.427	(0.941)	740774	20.0000	20.7072
	71 2-Chlorotoluene	91	17.575	17.575	(0.949)	524562	20.0000	20.3798
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	444224	20.0000	20.7154
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	481709	20.0000	19.8261
	74 tert-Butylbenzene	119	17.999	17.999	(0.972)	406505	20.0000	21.0205
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	401618	20.0000	20.7952
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	583693	20.0000	21.2647
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	416853	20.0000	21.2134
	78 1,3-Dichlorobenzene	146	18.442	18.442	(0.996)	313184	20.0000	20.3735

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	939511	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	317560	20.0000	20.1791
81 n-Butylbenzene	91	18.876	18.876	(1.020)	328911	20.0000	22.7269
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	310012	20.0000	20.3791
83 1,2-Dibromo-3-Chloropropane	75	19.980	19.980	(1.079)	36842	20.0000	19.7754
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	112830	20.0000	21.5140
85 Hexachlorobutadiene	225	21.410	21.410	(1.157)	50968	20.0000	22.4492
86 Naphthalene	128	21.646	21.646	(1.169)	233435	20.0000	19.7859
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	105637	20.0000	23.4961

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Instrument: MSVOA10.i
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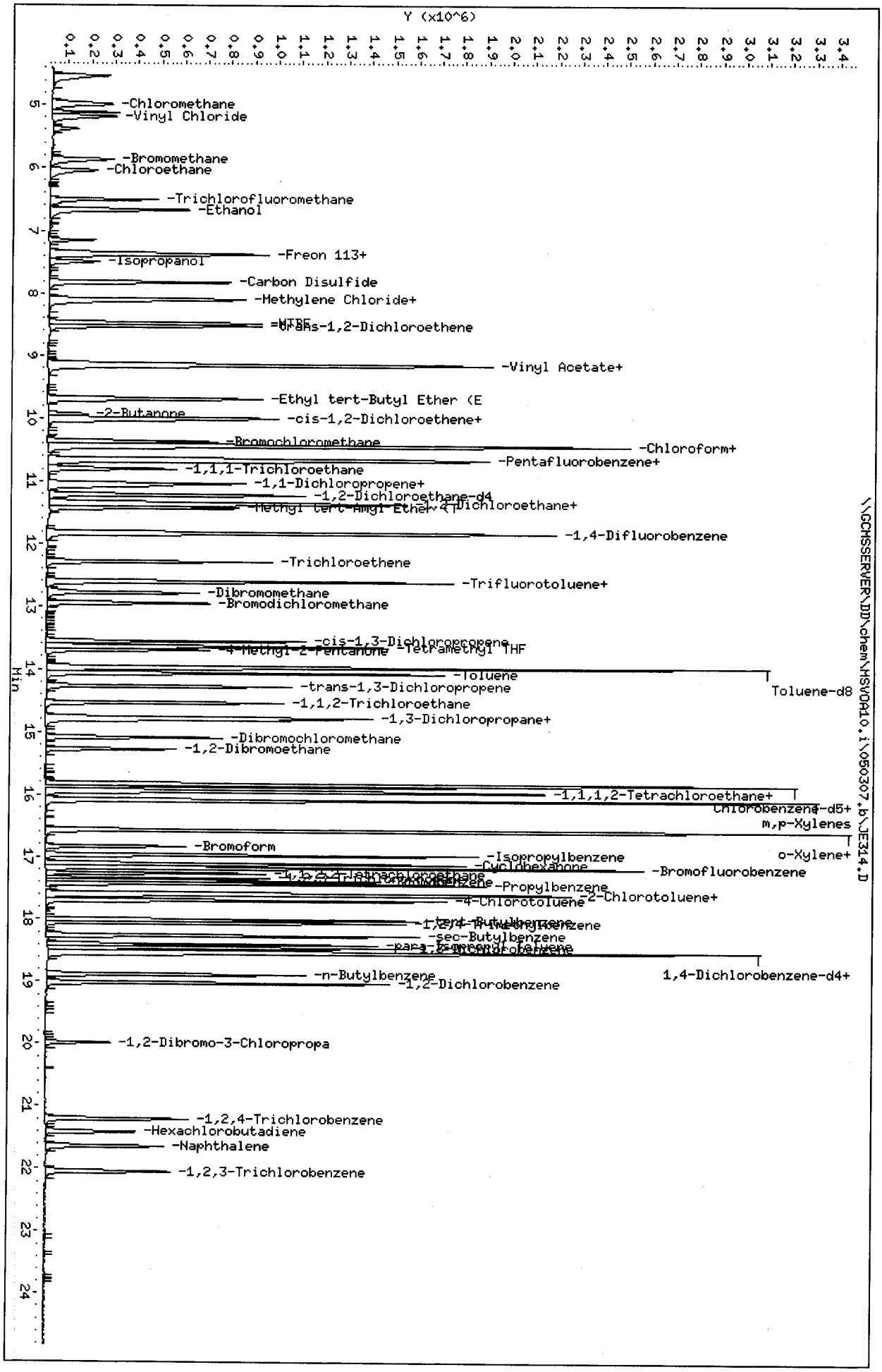

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Laboratory Name

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Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:51 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.005/100,S6072,0.01/100
Misc Info : S5938,0.01/100, 50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:11 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:51 Cal File: JE314.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	504201	50.0000	48.1788
2 Chloromethane	50	4.993	4.993	(0.469)	707558	50.0000	47.0128
3 Vinyl Chloride	62	5.190	5.190	(0.487)	546211	50.0000	48.5838
4 Bromomethane	94	5.871	5.871	(0.551)	396118	50.0000	48.8551
5 Chloroethane	64	6.048	6.048	(0.568)	387910	50.0000	48.6232
6 Trichlorofluoromethane	101	6.511	6.511	(0.611)	500419	50.0000	49.7944
7 Ethanol	45	6.669	6.669	(0.626)	858506	5000.00	4909.9409
8 Freon 113	101	7.340	7.340	(0.689)	270265	50.0000	50.3927
9 Acetone	43	7.369	7.369	(0.692)	236787	50.0000	50.6344
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	349227	50.0000	49.2909
11 Isopropanol	45	7.488	7.488	(0.703)	363163	500.000	507.6502
12 Carbon Disulfide	76	7.813	7.813	(0.733)	1472141	50.0000	49.1794
13 Methylene Chloride	84	8.089	8.089	(0.759)	487837	50.0000	48.9448
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	415778	500.000	492.7261
15 MTBE	73	8.483	8.483	(0.796)	1121415	50.0000	47.5416
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	418054	50.0000	46.4324
18 Vinyl Acetate	43	9.124	9.124	(0.857)	662519	50.0000	30.9925
19 1,1-Dichloroethane	63	9.144	9.144	(0.858)	815210	50.0000	48.1461
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	1986230	50.0000	48.3962
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.910)	1163899	50.0000	48.7313
22 2-Butanone	43	9.933	9.933	(0.932)	317573	50.0000	51.0561
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	461181	50.0000	46.8246

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

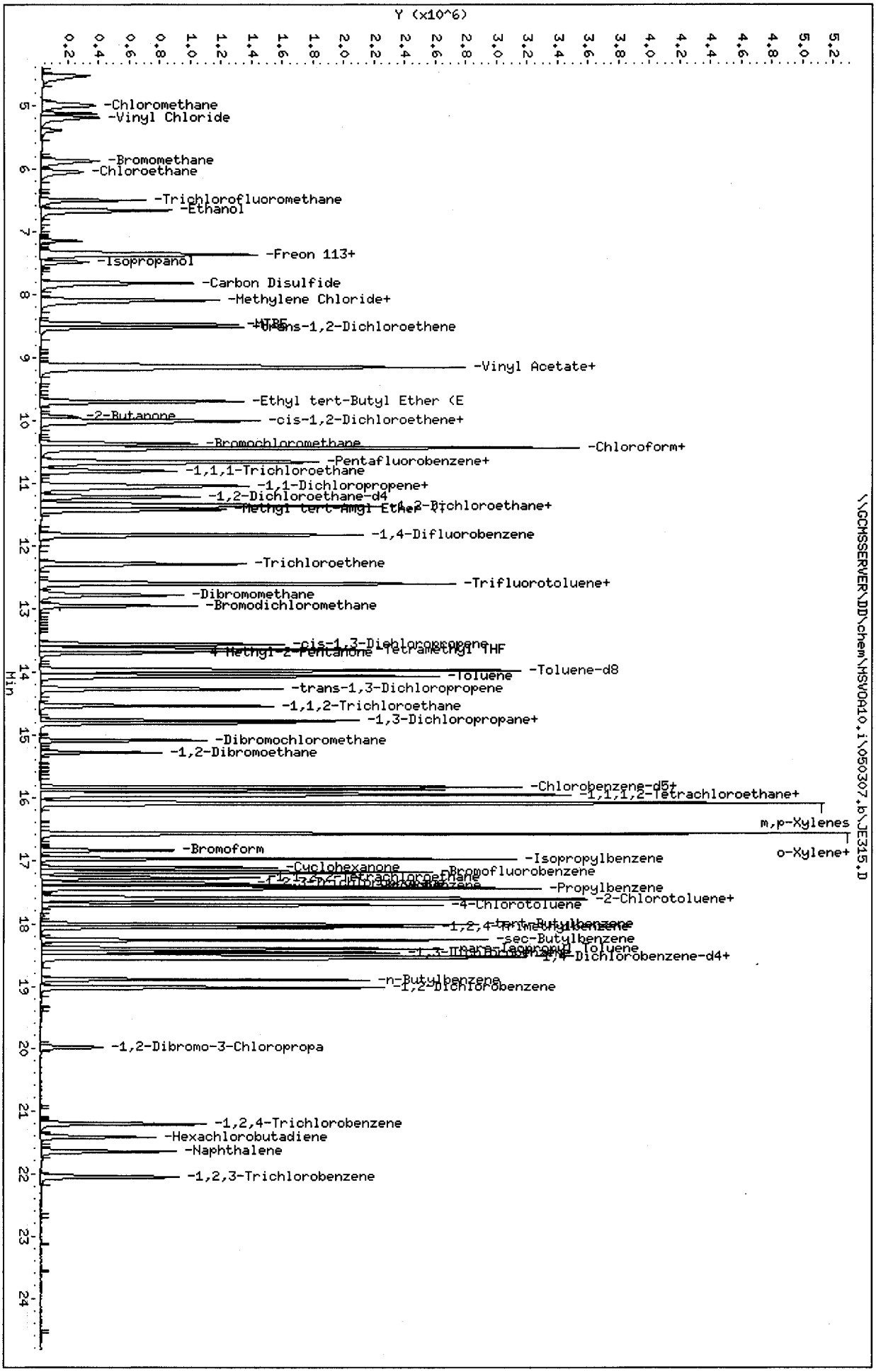
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.942)	383785	50.0000	43.4798
	25 Bromochloromethane	128	10.366	10.366	(0.973)	244827	50.0000	52.0730
	26 Chloroform	83	10.426	10.426	(0.979)	695749	50.0000	48.2407
	27 Tetrahydrofuran	42	10.435	10.435	(0.980)	1649055	500.000	492.7557
*	28 Pentafluorobenzene	168	10.652	10.652	(1.000)	1480154	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.002)	827867	50.0000	49.7002
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.014)	451274	50.0000	47.8024
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	497318	50.0000	46.4788
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	337901	50.0000	47.9331
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	942516	50.0000	49.8679
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	606711	50.0000	49.7170
	35 Benzene	78	11.362	11.362	(0.961)	1654107	50.0000	48.2516
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	871811	50.0000	49.0398
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2441798	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	415910	50.0000	48.3322
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	501243	50.0000	46.5283
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	523637	50.0000	49.0224
	41 Dibromomethane	93	12.792	12.792	(1.082)	312416	50.0000	49.7546
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	567978	50.0000	48.6570
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	737707	50.0000	48.7209
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	1290754	50.0000	49.4971
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	700920	50.0000	49.1609
	47 Toluene-d8	98	13.975	13.975	(1.182)	2607428	50.0000	49.3274
	48 Toluene	92	14.064	14.064	(1.189)	938763	50.0000	48.3010
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	658296	50.0000	49.4064
	50 1,1,2-Trichloroethane	85	14.537	14.537	(1.229)	232911	50.0000	48.5725
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	737516	50.0000	50.7404
	52 2-Hexanone	43	14.783	14.783	(0.934)	419054	50.0000	49.8565
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	322443	50.0000	46.6285
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	463746	50.0000	50.8282
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	456727	50.0000	51.0935
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	2049371	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	1037125	50.0000	48.3919
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	356863	50.0000	49.1936
	59 Ethylbenzene	91	15.957	15.957	(1.008)	1616160	50.0000	46.7723
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	1194176	100.000	94.6805
	61 o-Xylene	106	16.568	16.568	(1.047)	602548	50.0000	47.0052
	62 Styrene	104	16.578	16.578	(1.047)	1081235	50.0000	48.2978
	63 Bromoform	173	16.844	16.844	(1.064)	333182	50.0000	50.3224
	64 Isopropylbenzene	105	16.972	16.972	(0.917)	1372436	50.0000	45.9643
	65 Cyclohexanone	55	17.110	17.110	(0.924)	887316	500.000	602.8524
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1059615	50.0000	48.8533
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.933)	553835	50.0000	46.6093
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	525205	50.0000	46.7504
	69 Bromobenzene	156	17.396	17.396	(0.940)	454747	50.0000	49.3446
	70 Propylbenzene	91	17.436	17.436	(0.942)	1733700	50.0000	46.6585
	71 2-Chlorotoluene	91	17.583	17.583	(0.950)	1239951	50.0000	46.3796
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.951)	1049707	50.0000	47.1280
	73 4-Chlorotoluene	91	17.692	17.692	(0.956)	1175242	50.0000	46.5693
	74 tert-Butylbenzene	119	18.007	18.007	(0.973)	909810	50.0000	45.2949
	75 1,2,4-Trimethylbenzene	105	18.047	18.047	(0.975)	1020238	50.0000	50.8594
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	1337856	50.0000	46.9250
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.994)	981456	50.0000	48.0860
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.997)	766485	50.0000	48.0055

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.510	18.510	(1.000)	975848	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	776019	50.0000	47.4755
81 n-Butylbenzene	91	18.885	18.885	(1.020)	786615	50.0000	52.3291
82 1,2-Dichlorobenzene	146	19.013	19.013	(1.027)	772624	50.0000	48.8985
83 1,2-Dibromo-3-Chloropropane	75	19.979	19.979	(1.079)	96383	50.0000	49.8085
84 1,2,4-Trichlorobenzene	180	21.202	21.202	(1.145)	306325	50.0000	56.2341
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	119376	50.0000	50.6221
86 Naphthalene	128	21.645	21.645	(1.169)	671401	50.0000	54.7888
87 1,2,3-Trichlorobenzene	180	22.050	22.050	(1.191)	294335	50.0000	63.0293

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Date : 03-MAY-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0075/100,S6072,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:24 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0075/100,S6072,0.015/100
Misc Info : S5938,0.015/100, 75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:12 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:24 Cal File: JE315.D
Als bottle: 15 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.532	4.532	(0.425)	665322	75.0000	65.7168
2 Chloromethane	50	4.995	4.995	(0.469)	974450	75.0000	66.9277
3 Vinyl Chloride	62	5.183	5.183	(0.486)	760407	75.0000	69.9148
4 Bromomethane	94	5.873	5.873	(0.551)	590747	75.0000	75.3145
5 Chloroethane	64	6.041	6.041	(0.567)	567112	75.0000	73.4808
6 Trichlorofluoromethane	101	6.504	6.504	(0.610)	715607	75.0000	73.6061
7 Ethanol	45	6.662	6.662	(0.625)	1183509	7500.00	6996.7488
8 Freon 113	101	7.342	7.342	(0.689)	531594	75.0000	102.4589
9 Acetone	43	7.372	7.372	(0.692)	254933	75.0000	56.3515
10 1,1-Dichloroethene	96	7.372	7.372	(0.692)	535637	75.0000	78.1486
11 Isopropanol	45	7.490	7.490	(0.703)	519306	750.000	750.3745
12 Carbon Disulfide	76	7.825	7.825	(0.734)	2235289	75.0000	77.1898
13 Methylene Chloride	84	8.091	8.091	(0.759)	693668	75.0000	71.9408
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.760)	589656	750.000	722.3283
15 MTBE	73	8.476	8.476	(0.795)	1598518	75.0000	70.0514
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.800)	603947	75.0000	69.3393
18 Vinyl Acetate	43	9.117	9.117	(0.856)	2195548	75.0000	106.1678
19 1,1-Dichloroethane	63	9.146	9.146	(0.858)	1180046	75.0000	72.0414
20 Isopropyl Ether (DIPE)	45	9.166	9.166	(0.860)	2786954	75.0000	70.1945
21 Ethyl tert-Butyl Ether (ETBE)	59	9.698	9.698	(0.910)	1673445	75.0000	72.4262
22 2-Butanone	43	9.935	9.935	(0.932)	432725	75.0000	71.9131
23 cis-1,2-Dichloroethene	96	10.004	10.004	(0.939)	654240	75.0000	68.6644

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

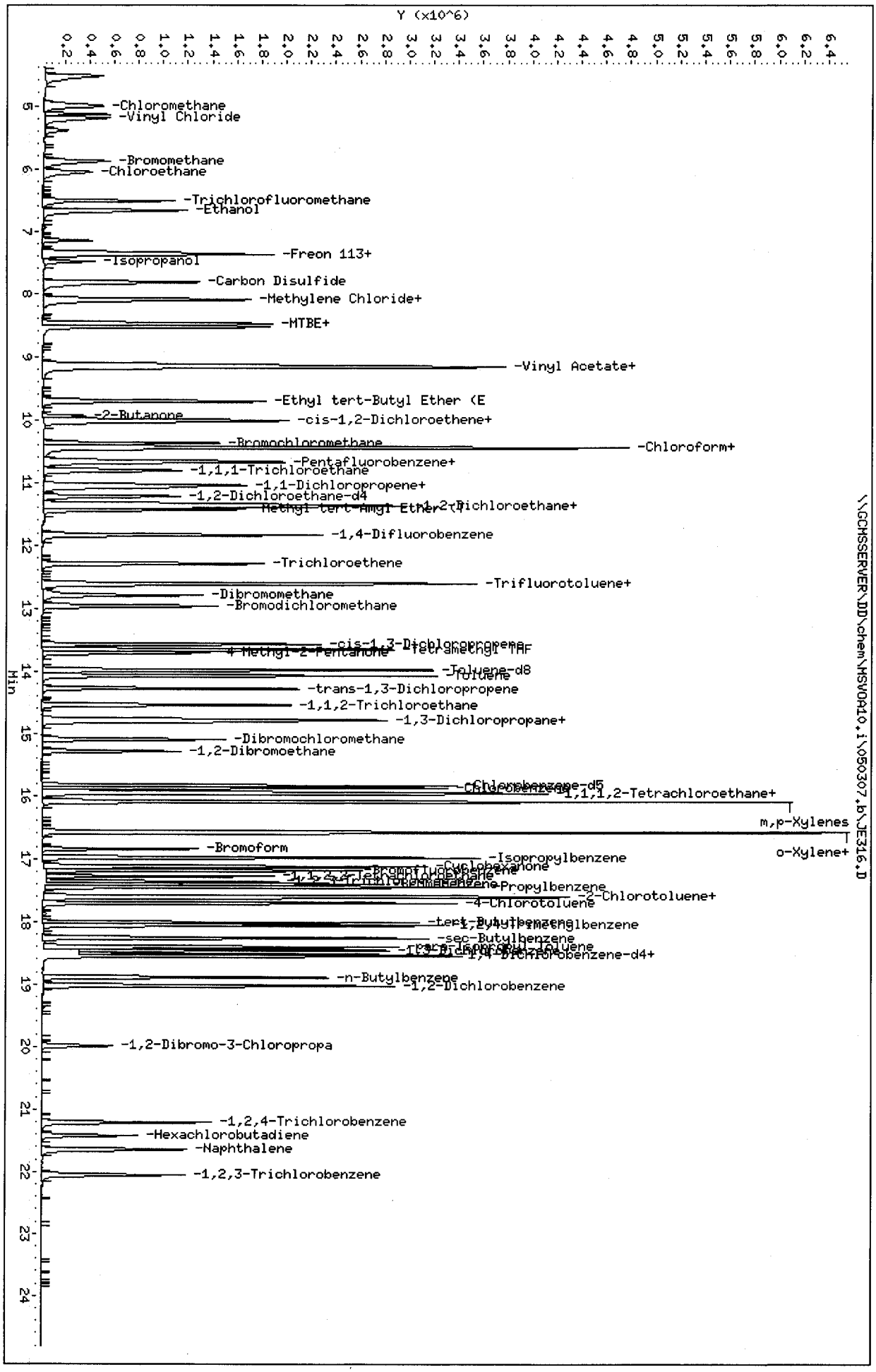
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.034	10.034	(0.942)	674821	75.0000	79.0278
	25 Bromochloromethane	128	10.369	10.369	(0.973)	346491	75.0000	76.1793
	26 Chloroform	83	10.428	10.428	(0.979)	992915	75.0000	71.1648
	27 Tetrahydrofuran	42	10.438	10.438	(0.980)	2326615	750.000	718.6425
*	28 Pentafluorobenzene	168	10.655	10.655	(1.000)	1431908	50.0000	
	29 Dibromofluoromethane	113	10.674	10.674	(1.002)	794941	50.0000	49.3315
	30 1,1,1-Trichloroethane	97	10.803	10.803	(1.014)	712263	75.0000	77.9906
	31 1,1-Dichloropropene	75	11.039	11.039	(0.933)	811214	75.0000	79.0893
	32 Carbon Tetrachloride	117	11.079	11.079	(0.936)	581089	75.0000	85.9905
	33 1,2-Dichloroethane-d4	65	11.217	11.217	(0.948)	887578	50.0000	48.9892
	34 1,2-Dichloroethane	62	11.335	11.335	(0.958)	859136	75.0000	73.4424
	35 Benzene	78	11.365	11.365	(0.960)	2438748	75.0000	74.2124
	36 Methyl tert-Amyl Ether (TAME)	73	11.424	11.424	(0.965)	1287513	75.0000	75.5509
*	37 1,4-Difluorobenzene	114	11.838	11.838	(1.000)	2340712	50.0000	
	38 Trichloroethene	95	12.291	12.291	(1.038)	601330	75.0000	72.8975
	39 Trifluorotoluene	146	12.607	12.607	(1.065)	880330	75.0000	85.2464
	40 1,2-Dichloropropane	63	12.617	12.617	(1.066)	735908	75.0000	71.8704
	41 Dibromomethane	93	12.794	12.794	(1.081)	446568	75.0000	74.1907
	42 Bromodichloromethane	83	12.962	12.962	(1.095)	805593	75.0000	71.9932
	44 cis-1,3-Dichloropropene	75	13.563	13.563	(1.146)	1084077	75.0000	74.6885
	45 Tetramethyl THF	43	13.652	13.652	(1.153)	1835005	75.0000	73.4067
	46 4-Methyl-2-Pentanone	43	13.701	13.701	(1.157)	1024558	75.0000	74.9635
	47 Toluene-d8	98	13.977	13.977	(1.181)	2540553	50.0000	50.1379
	48 Toluene	92	14.066	14.066	(1.188)	1404739	75.0000	75.3976
	49 trans-1,3-Dichloropropene	75	14.273	14.273	(1.206)	962509	75.0000	75.3579
	50 1,1,2-Trichloroethane	85	14.539	14.539	(1.228)	341139	75.0000	74.2154
	51 1,3-Dichloropropane	76	14.776	14.776	(0.933)	1041947	75.0000	73.1952
	52 2-Hexanone	43	14.786	14.786	(0.934)	620581	75.0000	75.3885
	53 Tetrachloroethene	166	14.815	14.815	(0.936)	548973	75.0000	81.0595
	54 Dibromochloromethane	129	15.091	15.091	(0.953)	666030	75.0000	74.5371
	55 1,2-Dibromoethane	107	15.279	15.279	(1.291)	656303	75.0000	76.5906
*	56 Chlorobenzene-d5	117	15.831	15.831	(1.000)	2007086	50.0000	
	57 Chlorobenzene	112	15.870	15.870	(1.002)	1539594	75.0000	73.3504
	58 1,1,1,2-Tetrachloroethane	131	15.939	15.939	(1.007)	529692	75.0000	74.5565
	59 Ethylbenzene	91	15.959	15.959	(1.008)	2549462	75.0000	75.3369
	60 m,p-Xylenes	106	16.087	16.087	(1.016)	1881000	150.000	152.2775
	61 o-Xylene	106	16.570	16.570	(1.047)	918795	75.0000	73.1859
	62 Styrene	104	16.580	16.580	(1.047)	1619179	75.0000	73.8510
	63 Bromoform	173	16.846	16.846	(1.064)	493552	75.0000	76.1144
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	2314351	75.0000	77.8734
	65 Cyclohexanone	55	17.113	17.113	(0.924)	755425	750.000	515.6506
	66 Bromofluorobenzene	95	17.182	17.182	(0.928)	1033698	50.0000	47.8818
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.932)	877482	75.0000	74.1928
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	759185	75.0000	67.8946
	69 Bromobenzene	156	17.398	17.398	(0.939)	677822	75.0000	73.8954
	70 Propylbenzene	91	17.438	17.438	(0.941)	2936524	75.0000	79.4002
	71 2-Chlorotoluene	91	17.586	17.586	(0.949)	1944419	75.0000	73.0709
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.950)	1781595	75.0000	80.3621
	73 4-Chlorotoluene	91	17.694	17.694	(0.955)	1818583	75.0000	72.3998
	74 tert-Butylbenzene	119	18.010	18.010	(0.972)	1596504	75.0000	79.8546
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.974)	1716961	75.0000	85.9928
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	2427192	75.0000	85.5324
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.993)	1777865	75.0000	87.5141
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.996)	1174619	75.0000	73.9121

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.522	18.522	(1.000)	971294	50.0000	
80 1,4-Dichlorobenzene	146	18.552	18.552	(1.002)	1204801	75.0000	74.0532
81 n-Butylbenzene	91	18.887	18.887	(1.020)	1518145	75.0000	101.4673
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1157808	75.0000	73.6199
83 1,2-Dibromo-3-Chloropropane	75	19.982	19.982	(1.079)	146672	75.0000	76.1521
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	521665	75.0000	96.2145
85 Hexachlorobutadiene	225	21.421	21.421	(1.156)	237706	75.0000	101.2734
86 Naphthalene	128	21.648	21.648	(1.169)	1152774	75.0000	94.5117
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	491536	75.0000	105.7518

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Date : 03-MAY-2007 17:57
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.01/100,S6072,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:57 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.01/100,S6072,0.02/100
Misc Info : S5938,0.02/100, 100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:13 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:57 Cal File: JE316.D
Als bottle: 16 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	1042510	100.000	97.3115
2 Chloromethane	50	5.000	5.000	(0.469)	1343417	100.000	87.1959
3 Vinyl Chloride	62	5.187	5.187	(0.487)	1069343	100.000	92.9136
4 Bromomethane	94	5.877	5.877	(0.551)	821645	100.000	98.9921
5 Chloroethane	64	6.045	6.045	(0.567)	776666	100.000	95.0995
6 Trichlorofluoromethane	101	6.508	6.508	(0.611)	1043901	100.000	101.4700
7 Ethanol	45	6.666	6.666	(0.625)	1601102	10000.0	8945.0516
8 Freon 113	101	7.347	7.347	(0.689)	602012	100.000	109.6514
9 Acetone	43	7.366	7.366	(0.691)	394572	100.000	82.4224
10 1,1-Dichloroethene	96	7.376	7.376	(0.692)	724134	100.000	99.8410
11 Isopropanol	45	7.485	7.485	(0.702)	695681	1000.00	949.9572
12 Carbon Disulfide	76	7.820	7.820	(0.734)	3012077	100.000	98.2950
13 Methylene Chloride	84	8.096	8.096	(0.760)	985974	100.000	96.6336
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.760)	813490	1000.00	941.7319
15 MTBE	73	8.480	8.480	(0.796)	2298292	100.000	95.1796
16 trans-1,2-Dichloroethene	96	8.530	8.530	(0.800)	861081	100.000	93.4252
18 Vinyl Acetate	43	9.121	9.121	(0.856)	2792120	100.000	127.5919
19 1,1-Dichloroethane	63	9.151	9.151	(0.858)	1657969	100.000	95.6531
20 Isopropyl Ether (DIPE)	45	9.161	9.161	(0.859)	3919823	100.000	93.2995
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.910)	2334131	100.000	95.4660
22 2-Butanone	43	9.939	9.939	(0.932)	607783	100.000	95.4518
23 cis-1,2-Dichloroethene	96	9.999	9.999	(0.938)	946267	100.000	93.8529

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.038	10.038	(0.942)	874839	100.000	96.8185
	25 Bromochloromethane	128	10.373	10.373	(0.973)	498011	100.000	103.4721
	26 Chloroform	83	10.432	10.432	(0.979)	1401696	100.000	94.9394
	27 Tetrahydrofuran	42	10.442	10.442	(0.980)	3126694	1000.00	912.6681
*	28 Pentafluorobenzene	168	10.659	10.659	(1.000)	1515221	50.0000	
	29 Dibromofluoromethane	113	10.679	10.679	(1.002)	870486	50.0000	51.0494
	30 1,1,1-Trichloroethane	97	10.807	10.807	(1.014)	921129	100.000	95.3150
	31 1,1-Dichloropropene	75	11.044	11.044	(0.933)	1008555	100.000	91.4784
	32 Carbon Tetrachloride	117	11.083	11.083	(0.937)	712106	100.000	98.0368
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	950850	50.0000	48.8250
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	1206991	100.000	95.9899
	35 Benzene	78	11.369	11.369	(0.961)	3301088	100.000	93.4552
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	1773716	100.000	96.8297
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2516004	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	788744	100.000	88.9554
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	1046574	100.000	94.2838
	40 1,2-Dichloropropane	63	12.621	12.621	(1.067)	1019121	100.000	92.5953
	41 Dibromomethane	93	12.789	12.789	(1.081)	637752	100.000	98.5713
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	1157889	100.000	96.2674
	44 cis-1,3-Dichloropropene	75	13.568	13.568	(1.147)	1525588	100.000	97.7839
	45 Tetramethyl THF	43	13.647	13.647	(1.153)	2558674	100.000	95.2248
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	1339185	100.000	91.1571
	47 Toluene-d8	98	13.972	13.972	(1.181)	2679339	50.0000	49.1928
	48 Toluene	92	14.071	14.071	(1.189)	1784637	100.000	89.1146
	49 trans-1,3-Dichloropropene	75	14.278	14.278	(1.207)	1353823	100.000	98.6103
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	474407	100.000	96.0175
	51 1,3-Dichloropropane	76	14.771	14.771	(0.933)	1449685	100.000	97.1285
	52 2-Hexanone	43	14.790	14.790	(0.934)	823179	100.000	95.3755
	53 Tetrachloroethene	166	14.820	14.820	(0.936)	642222	100.000	90.4428
	54 Dibromochloromethane	129	15.096	15.096	(0.953)	942103	100.000	100.5572
	55 1,2-Dibromoethane	107	15.283	15.283	(1.292)	920390	100.000	99.9263
*	56 Chlorobenzene-d5	117	15.835	15.835	(1.000)	2104409	50.0000	
	57 Chlorobenzene	112	15.875	15.875	(1.002)	1991338	100.000	90.4851
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.006)	711948	100.000	95.5755
	59 Ethylbenzene	91	15.963	15.963	(1.008)	3039166	100.000	85.6543
	60 m,p-Xylenes	106	16.092	16.092	(1.016)	2239233	200.000	172.8948
	61 o-Xylene	106	16.575	16.575	(1.047)	1110918	100.000	84.3970
	62 Styrene	104	16.585	16.585	(1.047)	2014865	100.000	87.6483
	63 Bromoform	173	16.841	16.841	(1.064)	697528	100.000	102.5963
	64 Isopropylbenzene	105	16.979	16.979	(0.917)	2619349	100.000	84.1948
	65 Cyclohexanone	55	17.117	17.117	(0.924)	1572948	1000.00	1025.6774
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1080351	50.0000	47.8051
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	1170494	100.000	94.5421
	68 1,2,3-Trichloropropane	75	17.354	17.354	(0.937)	1015049	100.000	86.7175
	69 Bromobenzene	156	17.403	17.403	(0.940)	890556	100.000	92.7460
	70 Propylbenzene	91	17.442	17.442	(0.942)	3342900	100.000	86.3463
	71 2-Chlorotoluene	91	17.590	17.590	(0.950)	2351583	100.000	84.4203
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	2080533	100.000	89.6498
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	2269523	100.000	86.3120
	74 tert-Butylbenzene	119	18.014	18.014	(0.973)	1799173	100.000	85.9677
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	2086737	100.000	99.8393
	76 sec-Butylbenzene	105	18.261	18.261	(0.986)	2676991	100.000	90.1168
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	2022673	100.000	95.1125
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	1479296	100.000	88.9214

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	1016760	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	1519696	100.000	89.2314
81 n-Butylbenzene	91	18.892	18.892	(1.020)	1732052	100.000	110.5875
82 1,2-Dichlorobenzene	146	19.020	19.020	(1.027)	1488601	100.000	90.4211
83 1,2-Dibromo-3-Chloropropane	75	19.986	19.986	(1.079)	188687	100.000	93.5856
84 1,2,4-Trichlorobenzene	180	21.209	21.209	(1.145)	661244	100.000	116.5046
85 Hexachlorobutadiene	225	21.426	21.426	(1.157)	233928	100.000	95.2071
86 Naphthalene	128	21.642	21.642	(1.169)	1491468	100.000	116.8120
87 1,2,3-Trichlorobenzene	180	22.047	22.047	(1.191)	640903	100.000	131.7216

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 25PPB IDF : 1.0
Seqnum : 497233759005 File : jfb05 Time : 11-JUN-2007 09:51
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (20000X), S6337 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5722	25.00	28.14	ug/L	13	30	0.1000	
Vinyl Chloride	0.3798	0.4180	25.00	27.52	ug/L	10	20	0.0500	
Bromomethane	0.2739	0.2595	25.00	23.68	ug/L	-5	30	0.0500	
Chloroethane	0.2695	0.2837	25.00	26.32	ug/L	5	30	0.0500	
Acetone	0.1718	0.1369	25.00	19.92	ug/L	-20	40	0.0500	
1,1-Dichloroethene	0.2393	0.2671	25.00	27.90	ug/L	12	20	0.0500	
Methylene Chloride	0.3367	0.3603	25.00	26.75	ug/L	7	30	0.0500	
Carbon Disulfide	1.0112	1.1361	25.00	28.09	ug/L	12	30	0.0500	
MTBE	0.7968	0.8357	25.00	26.22	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3149	25.00	25.89	ug/L	4	30	0.0500	
Vinyl Acetate	0.7099	1.0694	25.00	37.66	ug/L	**51**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5974	25.00	26.11	ug/L	4	30	0.1000	
2-Butanone	0.2101	0.2013	25.00	23.95	ug/L	-4	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3360	25.00	26.16	ug/L	5	30	0.0500	
Chloroform	0.4872	0.5021	25.00	25.76	ug/L	3	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3389	25.00	26.57	ug/L	6	30	0.0500	
Carbon Tetrachloride	0.1443	0.1634	25.00	28.30	ug/L	13	30	0.0500	
1,2-Dichloroethane	0.2499	0.2561	25.00	25.63	ug/L	3	30	0.0500	
Benzene	0.7020	0.7384	25.00	26.30	ug/L	5	30	0.0500	
Trichloroethene	0.1762	0.1737	25.00	24.64	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.2187	0.2216	25.00	25.32	ug/L	1	20	0.0500	
Bromodichloromethane	0.2390	0.2342	25.00	24.50	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2763	25.00	23.66	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3260	25.00	26.29	ug/L	5	30	0.0500	
Toluene	0.3980	0.4291	25.00	26.95	ug/L	8	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2796	25.00	25.62	ug/L	2	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0946	25.00	24.07	ug/L	-4	30	0.0500	
2-Hexanone	0.2051	0.1854	25.00	22.60	ug/L	-10	40	0.0500	
Tetrachloroethene	0.1687	0.1930	25.00	28.60	ug/L	14	30	0.0500	
Dibromochloromethane	0.2226	0.2283	25.00	25.65	ug/L	3	30	0.0500	
Chlorobenzene	0.5229	0.5539	25.00	26.48	ug/L	6	30	0.3000	
Ethylbenzene	0.8430	0.9083	25.00	26.94	ug/L	8	20	0.0500	
m,p-Xylenes	0.3077	0.3417	50.00	55.53	ug/L	11	30	0.0500	
o-Xylene	0.3127	0.3400	25.00	27.18	ug/L	9	30	0.0500	
Styrene	0.5462	0.5819	25.00	26.63	ug/L	7	30	0.0500	
Bromoform	0.1615	0.1530	25.00	23.68	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.6019	25.00	24.72	ug/L	-1	30	0.3000	
Dibromofluoromethane	0.5627	0.5702	50.00	50.67	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3732	50.00	48.22	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.0652	50.00	49.21	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0953	50.00	49.28	ug/L	-1	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2017688	36.32	10.65	10.61	-0.04
1,4-Difluorobenzene	2441798	3381629	38.49	11.83	11.79	-0.04
Chlorobenzene-d5	2049371	2810835	37.16	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1331605	36.46	18.51	18.49	-0.02

Analyst: SJD Date: 06/11/07 Reviewer: ACM Date: 06/12/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497233759005

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497233759

Date : 06/11/07 Reference : je314
Sequence : MSVOA10 jfb Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
005	CCV	25PPB	2017688	10.61	3381629	11.79	2810835	15.80	1331605	18.49
006	LCS	QC391611	2097016	10.60	3445938	11.79	2931210	15.81	1392427	18.49
008	BLANK	QC391610	1912752	10.60	3184818	11.79	2768982	15.81	1282170	18.50
009	SAMPLE	195270-009	2085195	10.61	3448360	11.79	2916802	15.80	1366839	18.50
010	SAMPLE	195270-019	2013497	10.61	3347384	11.79	2845061	15.81	1317775	18.49
011	SAMPLE	195270-002	2005941	10.61	3351706	11.79	2834187	15.80	1383043	18.49
012	SAMPLE	195270-010	1908574	10.61	3160867	11.79	2685615	15.80	1283051	18.50
013	SAMPLE	195270-011	1906901	10.61	3160315	11.79	2695330	15.80	1301913	18.49
014	SAMPLE	195279-001	1923241	10.60	3271069	11.79	2764580	15.80	1304517	18.49
015	MSS	195234-001	1919706	10.61	3164331	11.79	2687214	15.80	1270037	18.50
016	SAMPLE	195300-008	1927107	10.60	3228807	11.79	2779472	15.81	1312173	18.49
017	SAMPLE	195270-001	1955664	10.61	3233345	11.79	2749881	15.80	1342625	18.50
018	SAMPLE	195300-009	1907589	10.60	3188285	11.78	2689257	15.81	1275032	18.50
019	SAMPLE	195255-002	1901103	10.60	3170383	11.79	2723527	15.81	1289215	18.49
020	SAMPLE	195270-016	1935778	10.60	3261082	11.79	2750695	15.80	1272237	18.49
021	SAMPLE	195229-002	1890409	10.60	3154866	11.79	2684798	15.80	1249757	18.49
022	SAMPLE	195250-014	1915392	10.61	3172166	11.79	2729191	15.81	1295819	18.50
023	MS	QC391631	1909503	10.60	3139149	11.79	2668628	15.81	1275577	18.49
024	MSD	QC391632	1895276	10.60	3165701	11.79	2696778	15.80	1272294	18.49

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497177754

Instrument : MSVOA10 Begun : 05/03/07 10:34
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	je301	TUN	BFB			05/03/07 10:34	1.0	1	
002	je302	TUN	BFB			05/03/07 10:47	1.0	1	
003	je303	X	IB			05/03/07 11:05	1.0	2	
004	je304	X	LOWPOINT			05/03/07 11:39	1.0	2	
005	je305	TUN	BFB			05/03/07 12:11	1.0	1	
006	je306	X	IB			05/03/07 12:29	1.0	2	
007	je307	IB	CALIB			05/03/07 13:01	1.0	2	
008	je308	ICAL	0.25/0.5PPB			05/03/07 13:35	1.0	3 4 5 2	
009	je309	ICAL	0.5/1PPB			05/03/07 14:07	1.0	3 4 5 2	
010	je310	ICAL	2PPB			05/03/07 14:40	1.0	3 4 5 2	
011	je311	ICAL	5PPB			05/03/07 15:13	1.0	3 4 5 2	
012	je312	ICAL	10PPB			05/03/07 15:46	1.0	3 4 5 2	
013	je313	ICAL	20PPB			05/03/07 16:19	1.0	3 4 5 2	
014	je314	ICAL	50PPB			05/03/07 16:51	1.0	3 4 5 2	
015	je315	ICAL	75PPB			05/03/07 17:24	1.0	3 4 5 2	
016	je316	ICAL	100PPB			05/03/07 17:57	1.0	3 4 5 2	
017	je317	ICV				05/03/07 18:30	1.0	6 2	
018	je318	ICV				05/03/07 19:03	1.0	7 8 2	
019	je319	X	IB			05/03/07 19:36	1.0	2	
020	je320	X	IB			05/03/07 20:08	1.0	2	
021	je321	X	IB			05/03/07 20:41	1.0	2	

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

Standards used: 1=S5117 2=S6084 3=S5194 4=S6072 5=S5938 6=S6044 7=S5723 8=S5968

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497233759

Instrument : MSVOA10 Begun : 06/11/07 07:59
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfb01	X	IB			06/11/07 07:59	1.0	1	
002	jfb02	X	BFB			06/11/07 08:37	1.0	2	
003	jfb03	X	25PPB			06/11/07 08:54	1.0	3 4 5 1	
004	jfb04	TUN	BFB			06/11/07 09:30	1.0	2	
005	jfb05	CCV	25PPB			06/11/07 09:51	1.0	3 4 5 1	
006	jfb06	LCS	QC391611	Water	126137	06/11/07 10:32	1.0	6 7 8 1	
007	jfb07	X	IB			06/11/07 11:05	1.0	1	
008	jfb08	BLANK	QC391610	Water	126137	06/11/07 11:38	1.0	1	
009	jfb09	SAMPLE	195270-009	Water	126137	06/11/07 12:11	1.0	1	
010	jfb10	SAMPLE	195270-019	Water	126137	06/11/07 12:44	1.0	1	
011	jfb11	SAMPLE	195270-002	Water	126137	06/11/07 13:18	1.0	1	
012	jfb12	SAMPLE	195270-010	Water	126137	06/11/07 13:51	1.0	1	
013	jfb13	SAMPLE	195270-011	Water	126137	06/11/07 14:23	1.0	1	
014	jfb14	SAMPLE	195279-001	Water	126137	06/11/07 14:56	1.0	1	
015	jfb15	MSS	195234-001	Water	126137	06/11/07 15:29	1.0	1	
016	jfb16	SAMPLE	195300-008	Water	126137	06/11/07 16:02	1.0	1	
017	jfb17	SAMPLE	195270-001	Water	126137	06/11/07 16:35	1.429	1	
018	jfb18	SAMPLE	195300-009	Water	126137	06/11/07 17:07	2.0	1	
019	jfb19	SAMPLE	195255-002	Water	126137	06/11/07 17:40	5.0	1	
020	jfb20	SAMPLE	195270-016	Water	126137	06/11/07 18:13	8.333	1	
021	jfb21	SAMPLE	195229-002	Water	126137	06/11/07 18:46	40.0	1	
022	jfb22	SAMPLE	195250-014	Water	126137	06/11/07 19:19	16.67	1	pH > 2, headspace <= 1 mL
023	jfb23	MS	QC391631	Water	126137	06/11/07 19:51	1.0	6 7 8 1	
024	jfb24	MSD	QC391632	Water	126137	06/11/07 20:24	1.0	6 7 8 1	
025	jfb25	X	IB			06/11/07 20:57	1.0	1	
026	jfb26	X	IB			06/11/07 21:30	1.0	1	
027	jfb27	X	IB			06/11/07 22:02	1.0	1	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/12/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6337 5=S5720 6=S6392 7=S6207 8=S6357

REPORTING SUMMARY FOR 195279 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM	CVE	BRA	CLE	CCE	ACL	DCE	MTS	CCE	MCL	DCE	VCL	DTS	MCL	DCA	TCE	TCE	CCL	DCA	TCE	CCL	DCA	BZD	TCA	DCP	BCM	DCP	BCM	DCD	DIB	TCM	DCP	BCM	DCP	TCE	HXC	PCB	DCB	CLB	EZL	XYL	XYL	TOL	STB	TYM	PCM	DAF	DCA	BMF	BM4
195279-001	MSVOA10	06/11/07 14:56	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391610	MSVOA10	06/11/07 11:38	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391611	MSVOA10	06/11/07 10:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391631	MSVOA10	06/11/07 19:51	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391632	MSVOA10	06/11/07 20:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/11/07

PREPPED BY. ZR

WATER

126137

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195255-002		F	<2			10	RR 5x VC>LR	
2	195250-014		A	7	10mL			RR 16.67 SLCC↑	
3	195229-002		E	<2				RR 40x Toluene >LR	
4	195270-001		B					1.42x	
5	-002			<2				1x	
6	-009		A					TB Punctured but not sampled	
7	-010							1x	
8	-011							1x	
9	-016			<2				8.32x	
10	-019							TB	
11	195279-001							1x	
12	~~195283-014~~		BCD					~~1x MSS/MSD/MSD~~	
13	195300-008			<2				1X	
14	-009			<2				2X	
15	195234-001		BCDE	<2			10	1x MSS/MSD/MSD	
16									
17									
18									
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20									
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

PESTICIDES

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW060707A	Batch#:	126108
Lab ID:	195279-001	Sampled:	06/07/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/11/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	78	65-135

ND= Not Detected
RL= Reporting Limit

15.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391520	Batch#:	126108
Matrix:	Water	Prepared:	06/08/07
Units:	ug/L	Analyzed:	06/11/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	110	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	126108
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/11/07

Type: BS Lab ID: QC391521

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1836	92	65-135
Heptachlor	0.2000	0.1738	87	65-135
Aldrin	0.2000	0.1797	90	65-135
Dieldrin	0.4000	0.3753	94	65-135
Endrin	0.4000	0.3486	87	65-135
4,4'-DDT	0.4000	0.3069	77	65-135

Surrogate	%REC	Limits
TCMX	104	65-135
Decachlorobiphenyl	97	65-135

Type: BSD Lab ID: QC391522

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1786	89	65-135	3	35
Heptachlor	0.2000	0.1696	85	65-135	2	35
Aldrin	0.2000	0.1766	88	65-135	2	35
Dieldrin	0.4000	0.3728	93	65-135	1	35
Endrin	0.4000	0.3532	88	65-135	1	35
4,4'-DDT	0.4000	0.3190	80	65-135	4	35

Surrogate	%REC	Limits
TCMX	102	65-135
Decachlorobiphenyl	105	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807215412001
Units : pg

Name : gc23pest_149
Date : 29-MAY-2007 22:26
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	149_025	807215412025	PEST_1	29-MAY-2007 22:26	S6268
L2	149_026	807215412026	PEST_2	29-MAY-2007 22:47	S6269
L3	149_027	807215412027	PEST_3	29-MAY-2007 23:08	S6270
L4	149_028	807215412028	PEST_4	29-MAY-2007 23:30	S6271
L5	149_029	807215412029	PEST_5	29-MAY-2007 23:51	S5859
L6	149_030	807215412030	PEST_6	30-MAY-2007 00:13	S5860
L7	149_031	807215412031	PEST_7	30-MAY-2007 00:34	S6332

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	11833	12067	11172	10136	11406	10956	10487	AVRG		8.97E-5		11151	6	0.995	20	
gamma-BHC	A	11183	11226	10200	9251.0	10152	9727.8	9619.8	AVRG		9.81E-5		10194	7	0.995	20	
beta-BHC	A	4611.5	4560.6	3952.0	3614.3	4019.5	3690.7	3620.4	AVRG		2.49E-4		4009.9	11	0.995	20	
delta-BHC	A	13070	12391	10543	9615.1	10726	10262	9680.8	AVRG		9.18E-5		10898	12	0.995	20	
Heptachlor	A	10493	10492	9386.9	8625.0	9698.1	9257.7	8829.8	AVRG		1.05E-4		9540.3	8	0.995	20	
Aldrin	A	10397	10352	9410.7	8649.0	9517.2	9093.3	8849.6	AVRG		1.06E-4		9466.9	7	0.995	20	
Heptachlor epoxide	A	9633.5	9417.2	8283.5	7619.4	8378.1	7888.2	7531.9	AVRG		1.19E-4		8393.1	10	0.995	20	
gamma-Chlordane	A	9285.5	9242.8	8155.2	7579.9	8288.2	7899.6	7915.8	AVRG		1.20E-4		8338.1	8	0.995	20	
alpha-Chlordane	A	8893.5	8826.4	7729.0	7201.9	7791.6	7745.1	7729.9	AVRG		1.25E-4		7988.2	8	0.995	20	
4,4'-DDE	A	7999.0	8060.7	7242.6	6868.2	7924.8	7462.8	6399.8	AVRG		1.35E-4		7422.6	8	0.995	20	
Endosulfan I	A	8695.5	8709.8	7700.1	6938.2	7994.0	7139.3	6963.3	AVRG		1.29E-4		7734.3	10	0.995	20	
Dieldrin	A	8648.0	8715.0	7752.8	7363.9	8396.3	7730.4	6503.6	AVRG		1.27E-4		7872.9	10	0.995	20	
Endrin	A	7393.5	7583.8	6598.4	6286.9	7151.5	6717.1	5814.1	AVRG		1.47E-4		6792.2	9	0.995	20	
4,4'-DDD	A	6569.3	6468.6	5730.7	5474.4	6210.7	6147.0	5583.5	AVRG		1.66E-4		6026.3	7	0.995	20	
Endosulfan II	A	7219.5	7211.8	6317.5	5951.8	7029.7	6382.2	5629.4	AVRG		1.53E-4		6534.6	10	0.995	20	
4,4'-DDT	A	6307.0	6816.5	6087.7	5901.9	6515.7	6372.7	6073.1	AVRG		1.59E-4		6296.4	5	0.995	20	
Methoxychlor	A	2700.7	2732.6	2380.4	2301.7	2674.5	2185.4		AVRG		4.01E-4		2495.9	9	0.995	20	
Endosulfan sulfate	A	7013.0	6873.2	5794.3	5365.5	6113.2	5685.5	5288.5	AVRG		1.66E-4		6019.0	11	0.995	20	
Endrin ketone	A	7970.3	8321.6	6760.1	6351.6	7228.5	6797.0	5827.3	AVRG		1.42E-4		7036.6	12	0.995	20	
TCMX	A	6217.0	6552.9	6048.0	5424.2	6000.7	5620.7	5482.1	AVRG		1.69E-4		5906.5	7	0.995	20	
*Decachlorobiphenyl	A	5278.3	5181.4	4518.5	4250.1	4850.3	4546.8	4236.9	AVRG		2.13E-4		4694.6	9	0.995	20	
alpha-BHC	B	12851	12443	10208	10774	12626	13697	13206	AVRG		8.16E-5		12258	10	0.995	20	
gamma-BHC	B	12137	11522	9465.4	9936.6	11317	12257	12204	AVRG		8.88E-5		11263	10	0.995	20	
beta-BHC	B	4930.0	4555.6	3708.2	3816.3	4398.2	4419.3	4255.6	AVRG		2.33E-4		4297.6	10	0.995	20	
delta-BHC	B	14195	12328	9817.5	10201	11961	12812	12197	AVRG		8.38E-5		11930	13	0.995	20	
Heptachlor	B	11085	10568	8610.5	9088.5	10711	11586	11144	AVRG		9.62E-5		10399	11	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	12231	10766	8810.9	9213.7	10639	11298	11167	AVRG		9.44E-5		10589	11	0.995	20	
Heptachlor epoxide	B	10937	9799.8	7964.0	8225.3	9510.3	9811.2	9461.6	AVRG		1.07E-4		9387.0	11	0.995	20	
gamma-Chlordane	B	10548	9704.2	7982.9	8369.6	9426.7	9930.7	10132	AVRG		1.06E-4		9442.0	10	0.995	20	
alpha-Chlordane	B	10049	9210.8	7581.8	7898.8	9026.2	9477.8	9589.3	AVRG		1.11E-4		8976.3	10	0.995	20	
4,4'-DDE	B	8947.3	8469.6	7086.9	7530.4	9214.7	9782.6	8405.8	AVRG		1.18E-4		8491.0	11	0.995	20	
Endosulfan I	B	9792.0	8939.8	7382.4	7632.3	8673.6	8895.8	8733.5	AVRG		1.17E-4		8578.5	10	0.995	20	
Dieldrin	B	9720.3	9113.0	7359.5	8014.9	9718.3	9952.4	8304.6	AVRG		1.13E-4		8883.3	11	0.995	20	
Endrin	B	8220.5	7661.4	6087.5	6665.3	8001.7	8394.7	7270.5	AVRG		1.34E-4		7471.7	11	0.995	20	
4,4'-DDD	B	7849.3	7133.8	5815.9	6175.9	7510.9	8101.5	7254.1	AVRG		1.40E-4		7120.2	12	0.995	20	
Endosulfan II	B	7919.5	7401.6	6188.5	6544.6	7862.7	8258.3	7231.5	AVRG		1.36E-4		7343.8	10	0.995	20	
4,4'-DDT	B	7020.5	6744.8	5615.5	6361.9	7304.3	8184.7	7865.9	AVRG		1.43E-4		7013.9	13	0.995	20	
Methoxychlor	B	2913.0	2687.9	2139.7	2420.5	3087.2	2858.9	2108.8	AVRG		3.84E-4		2602.3	15	0.995	20	
Endosulfan sulfate	B	7561.8	6703.5	5275.7	5683.0	6780.4	6993.5	6439.6	AVRG		1.54E-4		6491.1	12	0.995	20	
Endrin ketone	B	8655.3	7728.8	6138.5	6563.1	8327.5	8509.2	7223.3	AVRG		1.32E-4		7592.2	13	0.995	20	
TCMX	B	6973.8	6825.5	5626.8	5612.1	6648.3	7052.2	6831.7	AVRG		1.54E-4		6510.0	10	0.995	20	
Decachlorobiphenyl	B	5684.5	5098.9	4120.4	4305.2	5477.2	5730.7	5439.3	AVRG		1.95E-4		5122.3	13	0.995	20	
Average EPA 8081A	A												(n=22)	9		20	
Average EPA 8081A	B												(n=22)	11		20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	2.000	6	5.000	8	10.00	0	20.00	-9	25.00	2	50.00	-2	100.0	-6
gamma-BHC	A	2.000	10	5.000	10	10.00	0	20.00	-9	25.00	0	50.00	-5	100.0	-6
beta-BHC	A	2.000	15	5.000	14	10.00	-1	20.00	-10	25.00	0	50.00	-8	100.0	-10
delta-BHC	A	2.000	20	5.000	14	10.00	-3	20.00	-12	25.00	-2	50.00	-6	100.0	-11
Heptachlor	A	2.000	10	5.000	10	10.00	-2	20.00	-10	25.00	2	50.00	-3	100.0	-7
Aldrin	A	2.000	10	5.000	9	10.00	-1	20.00	-9	25.00	1	50.00	-4	100.0	-7
Heptachlor epoxide	A	2.000	15	5.000	12	10.00	-1	20.00	-9	25.00	0	50.00	-6	100.0	-10
gamma-Chlordane	A	2.000	11	5.000	11	10.00	-2	20.00	-9	25.00	-1	50.00	-5	100.0	-5
alpha-Chlordane	A	2.000	11	5.000	10	10.00	-3	20.00	-10	25.00	-2	50.00	-3	100.0	-3
4,4'-DDE	A	4.000	8	10.00	9	20.00	-2	40.00	-7	50.00	7	100.0	1	200.0	-14
Endosulfan I	A	2.000	12	5.000	13	10.00	0	20.00	-10	25.00	3	50.00	-8	100.0	-10
Dieldrin	A	4.000	10	10.00	11	20.00	-2	40.00	-6	50.00	7	100.0	-2	200.0	-17
Endrin	A	4.000	9	10.00	12	20.00	-3	40.00	-7	50.00	5	100.0	-1	200.0	-14
4,4'-DDD	A	4.000	9	10.00	7	20.00	-5	40.00	-9	50.00	3	100.0	2	200.0	-7
Endosulfan II	A	4.000	10	10.00	10	20.00	-3	40.00	-9	50.00	8	100.0	-2	200.0	-14
4,4'-DDT	A	4.000	0	10.00	8	20.00	-3	40.00	-6	50.00	3	100.0	1	200.0	-4
Methoxychlor	A	20.00	8	50.00	9	100.0	-5	200.0	-8	250.0	7	500.0	-12		
Endosulfan sulfate	A	4.000	17	10.00	14	20.00	-4	40.00	-11	50.00	2	100.0	-6	200.0	-12
Endrin ketone	A	4.000	13	10.00	18	20.00	-4	40.00	-10	50.00	3	100.0	-3	200.0	-17
TCMX	A	4.000	5	10.00	11	20.00	2	40.00	-8	50.00	2	100.0	-5	200.0	-7
Decachlorobiphenyl	A	4.000	12	10.00	10	20.00	-4	40.00	-9	50.00	3	100.0	-3	200.0	-10
alpha-BHC	B	2.000	5	5.000	2	10.00	-17	20.00	-12	25.00	3	50.00	12	100.0	8
gamma-BHC	B	2.000	8	5.000	2	10.00	-16	20.00	-12	25.00	0	50.00	9	100.0	8
beta-BHC	B	2.000	15	5.000	6	10.00	-14	20.00	-11	25.00	2	50.00	3	100.0	-1
delta-BHC	B	2.000	19	5.000	3	10.00	-18	20.00	-14	25.00	0	50.00	7	100.0	2
Heptachlor	B	2.000	7	5.000	2	10.00	-17	20.00	-13	25.00	3	50.00	11	100.0	7
Aldrin	B	2.000	16	5.000	2	10.00	-17	20.00	-13	25.00	0	50.00	7	100.0	5
Heptachlor epoxide	B	2.000	17	5.000	4	10.00	-15	20.00	-12	25.00	1	50.00	5	100.0	1
gamma-Chlordane	B	2.000	12	5.000	3	10.00	-15	20.00	-11	25.00	0	50.00	5	100.0	7
alpha-Chlordane	B	2.000	12	5.000	3	10.00	-16	20.00	-12	25.00	1	50.00	6	100.0	7
4,4'-DDE	B	4.000	5	10.00	0	20.00	-17	40.00	-11	50.00	9	100.0	15	200.0	-1
Endosulfan I	B	2.000	14	5.000	4	10.00	-14	20.00	-11	25.00	1	50.00	4	100.0	2
Dieldrin	B	4.000	9	10.00	3	20.00	-17	40.00	-10	50.00	9	100.0	12	200.0	-7
Endrin	B	4.000	10	10.00	3	20.00	-19	40.00	-11	50.00	7	100.0	12	200.0	-3
4,4'-DDD	B	4.000	10	10.00	0	20.00	-18	40.00	-13	50.00	5	100.0	14	200.0	2
Endosulfan II	B	4.000	8	10.00	1	20.00	-16	40.00	-11	50.00	7	100.0	12	200.0	-2
4,4'-DDT	B	4.000	0	10.00	-4	20.00	-20	40.00	-9	50.00	4	100.0	17	200.0	12
Methoxychlor	B	20.00	12	50.00	3	100.0	-18	200.0	-7	250.0	19	500.0	10	1000	-19
Endosulfan sulfate	B	4.000	16	10.00	3	20.00	-19	40.00	-12	50.00	4	100.0	8	200.0	-1
Endrin ketone	B	4.000	14	10.00	2	20.00	-19	40.00	-14	50.00	10	100.0	12	200.0	-5
TCMX	B	4.000	7	10.00	5	20.00	-14	40.00	-14	50.00	2	100.0	8	200.0	5
Decachlorobiphenyl	B	4.000	11	10.00	0	20.00	-20	40.00	-16	50.00	7	100.0	12	200.0	6

ADM 05/30/07 : Methoxychlor Level 7 point dropped to correct failing %D.

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_149
Calnum : 807215412001 Cal Date : 29-MAY-2007

ICV 807215412034 (149_034 30-MAY-2007) stds: S5817

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	11151	10140	25.00	22.73	pg	-9	15	
gamma-BHC	A	10194	9232.4	25.00	22.64	pg	-9	15	
beta-BHC	A	4009.9	3591.1	25.00	22.39	pg	-10	15	
delta-BHC	A	10898	9742.0	25.00	22.35	pg	-11	15	
Heptachlor	A	9540.3	8612.4	25.00	22.57	pg	-10	15	
Aldrin	A	9466.9	8573.5	25.00	22.64	pg	-9	15	
Heptachlor epoxide	A	8393.1	7375.2	25.00	21.97	pg	-12	15	
gamma-Chlordane	A	8338.1	7442.0	25.00	22.31	pg	-11	15	
alpha-Chlordane	A	7988.2	6918.3	25.00	21.65	pg	-13	15	
4,4'-DDE	A	7422.6	7034.3	25.00	23.69	pg	-5	15	
Endosulfan I	A	7734.3	7008.9	25.00	22.66	pg	-9	15	
Dieldrin	A	7872.9	7509.4	25.00	23.85	pg	-5	15	
Endrin	A	6792.2	6438.0	25.00	23.70	pg	-5	15	
4,4'-DDD	A	6026.3	5361.8	25.00	22.24	pg	-11	15	
Endosulfan II	A	6534.6	6208.7	25.00	23.75	pg	-5	15	
4,4'-DDT	A	6296.4	5850.8	25.00	23.23	pg	-7	15	
Methoxychlor	A	2495.9	2210.3	275.0	243.5	pg	-11	15	
Endosulfan sulfate	A	6019.0	5432.7	25.00	22.56	pg	-10	15	
Endrin ketone	A	7036.6	6505.4	25.00	23.11	pg	-8	15	
alpha-BHC	B	12258	11734	25.00	23.93	pg	-4	15	
gamma-BHC	B	11263	10615	25.00	23.56	pg	-6	15	
beta-BHC	B	4297.6	4006.4	25.00	23.31	pg	-7	15	
delta-BHC	B	11930	11186	25.00	23.44	pg	-6	15	
Heptachlor	B	10399	9958.8	25.00	23.94	pg	-4	15	
Aldrin	B	10589	10048	25.00	23.72	pg	-5	15	
Heptachlor epoxide	B	9387.0	8632.3	25.00	22.99	pg	-8	15	
gamma-Chlordane	B	9442.0	8880.2	25.00	23.51	pg	-6	15	
alpha-Chlordane	B	8976.3	8419.3	25.00	23.45	pg	-6	15	
4,4'-DDE	B	8491.0	8323.2	25.00	24.51	pg	-2	15	
Endosulfan I	B	8578.5	8095.5	25.00	23.59	pg	-6	15	
Dieldrin	B	8883.3	8916.1	25.00	25.09	pg	0	15	
Endrin	B	7471.7	7373.6	25.00	24.67	pg	-1	15	
4,4'-DDD	B	7120.2	6928.4	25.00	24.33	pg	-3	15	
Endosulfan II	B	7343.8	7251.3	25.00	24.69	pg	-1	15	
4,4'-DDT	B	7013.9	6533.1	25.00	23.29	pg	-7	15	
Methoxychlor	B	2602.3	2744.7	275.0	290.0	pg	5	15	
Endosulfan sulfate	B	6491.1	6236.9	25.00	24.02	pg	-4	15	
Endrin ketone	B	7592.2	7630.5	25.00	25.13	pg	1	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319006 File : 162_006 Time : 11-JUN-2007 13:31

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	599263	7	15	
4,4'-DDE	A	2239			
4,4'-DDD	A	43673			
Endrin	A	337362	13	15	
Endrin aldehyde	A	14780			
Endrin ketone	A	37694			
4,4'-DDT	B	725460	7	15	
4,4'-DDE	B	2843			
4,4'-DDD	B	51661			
Endrin	B	389646	9	15	
Endrin aldehyde	B	14960			
Endrin ketone	B	23488			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319014 File : 162_014 Time : 11-JUN-2007 16:57

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	611640	7	15	
4,4'-DDE	A	1671			
4,4'-DDD	A	44196			
Endrin	A	355019	9	15	
Endrin aldehyde	A	5005			
Endrin ketone	A	29469			
4,4'-DDT	B	772522	5	15	
4,4'-DDE	B	1760			
4,4'-DDD	B	41075			
Endrin	B	405378	5	15	
Endrin aldehyde	B	4517			
Endrin ketone	B	16796			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319022 File : 162_022 Time : 11-JUN-2007 20:13

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	505867	7	15	
4,4'-DDE	A	1363			
4,4'-DDD	A	37644			
Endrin	A	296776	10	15	
Endrin aldehyde	A	5364			
Endrin ketone	A	27408			
4,4'-DDT	B	607030	9	15	
4,4'-DDE	B	2006			
4,4'-DDD	B	54392			
Endrin	B	343452	10	15	
Endrin aldehyde	B	13602			
Endrin ketone	B	25092			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807234319033 File : 162_033 Time : 12-JUN-2007 00:13

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	481562	11	15	
4,4'-DDE	A	1549			
4,4'-DDD	A	55019			
Endrin	A	303315	11	15	
Endrin aldehyde	A	4996			
Endrin ketone	A	31468			
4,4'-DDT	B	735765	7	15	
4,4'-DDE	B	1952			
4,4'-DDD	B	56738			
Endrin	B	407811	6	15	
Endrin aldehyde	B	4744			
Endrin ketone	B	21531			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 807234319007 File : 162_007 Time : 11-JUN-2007 13:53
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10624	20.00	19.05	pg	-5	15	
gamma-BHC	A	10194	9759.8	20.00	19.15	pg	-4	15	
beta-BHC	A	4009.9	3806.5	20.00	18.99	pg	-5	15	
delta-BHC	A	10898	10149	20.00	18.63	pg	-7	15	
Heptachlor	A	9540.3	8777.5	20.00	18.40	pg	-8	15	
Aldrin	A	9466.9	9226.4	20.00	19.49	pg	-3	15	
Heptachlor epoxide	A	8393.1	8095.7	20.00	19.29	pg	-4	15	
gamma-Chlordane	A	8338.1	8094.5	20.00	19.42	pg	-3	15	
alpha-Chlordane	A	7988.2	7827.6	20.00	19.60	pg	-2	15	
4,4'-DDE	A	7422.6	7366.6	40.00	39.70	pg	-1	15	
Endosulfan I	A	7734.3	7347.8	20.00	19.00	pg	-5	15	
Dieldrin	A	7872.9	7956.9	40.00	40.43	pg	1	15	
Endrin	A	6792.2	6372.5	40.00	37.53	pg	-6	15	
4,4'-DDD	A	6026.3	6340.1	40.00	42.08	pg	5	15	
Endosulfan II	A	6534.6	6489.5	40.00	39.72	pg	-1	15	
4,4'-DDT	A	6296.4	5364.5	40.00	34.08	pg	-15	15	
Methoxychlor	A	2495.9	2212.3	200.0	177.3	pg	-11	15	
Endosulfan sulfate	A	6019.0	5876.3	40.00	39.05	pg	-2	15	
Endrin ketone	A	7036.6	7217.6	40.00	41.03	pg	3	15	
TCMX	A	5906.5	5600.2	40.00	37.93	pg	-5	15	
Decachlorobiphenyl	A	4694.6	4669.2	40.00	39.78	pg	-1	15	
alpha-BHC	B	12258	12489	20.00	20.38	pg	2	15	
gamma-BHC	B	11263	11456	20.00	20.34	pg	2	15	
beta-BHC	B	4297.6	4351.9	20.00	20.25	pg	1	15	
delta-BHC	B	11930	11963	20.00	20.06	pg	0	15	
Heptachlor	B	10399	10284	20.00	19.78	pg	-1	15	
Aldrin	B	10589	10642	20.00	20.10	pg	0	15	
Heptachlor epoxide	B	9387.0	9445.5	20.00	20.12	pg	1	15	
gamma-Chlordane	B	9442.0	9525.9	20.00	20.18	pg	1	15	
alpha-Chlordane	B	8976.3	9015.7	20.00	20.09	pg	0	15	
4,4'-DDE	B	8491.0	8850.7	40.00	41.69	pg	4	15	
Endosulfan I	B	8578.5	8691.0	20.00	20.26	pg	1	15	
Dieldrin	B	8883.3	9509.1	40.00	42.82	pg	7	15	
Endrin	B	7471.7	7662.1	40.00	41.02	pg	3	15	
4,4'-DDD	B	7120.2	7520.2	40.00	42.25	pg	6	15	
Endosulfan II	B	7343.8	7760.6	40.00	42.27	pg	6	15	
4,4'-DDT	B	7013.9	6761.5	40.00	38.56	pg	-4	15	
Methoxychlor	B	2602.3	2643.0	200.0	203.1	pg	2	15	
Endosulfan sulfate	B	6491.1	6793.1	40.00	41.86	pg	5	15	
Endrin ketone	B	7592.2	8387.1	40.00	44.19	pg	10	15	
TCMX	B	6510.0	6547.9	40.00	40.23	pg	1	15	
Decachlorobiphenyl	B	5122.3	5464.8	40.00	42.67	pg	7	15	
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 807234319015 File : 162_015 Time : 11-JUN-2007 17:19
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6270

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	10948	10.00	9.817	pg	-2	15	
gamma-BHC	A	10194	10126	10.00	9.933	pg	-1	15	
beta-BHC	A	4009.9	3979.3	10.00	9.924	pg	-1	15	
delta-BHC	A	10898	10385	10.00	9.529	pg	-5	15	
Heptachlor	A	9540.3	9061.4	10.00	9.498	pg	-5	15	
Aldrin	A	9466.9	9494.5	10.00	10.03	pg	0	15	
Heptachlor epoxide	A	8393.1	8460.0	10.00	10.08	pg	1	15	
gamma-Chlordane	A	8338.1	8365.6	10.00	10.03	pg	0	15	
alpha-Chlordane	A	7988.2	7863.5	10.00	9.844	pg	-2	15	
4,4'-DDE	A	7422.6	7534.3	20.00	20.30	pg	2	15	
Endosulfan I	A	7734.3	7934.3	10.00	10.26	pg	3	15	
Dieldrin	A	7872.9	8169.9	20.00	20.75	pg	4	15	
Endrin	A	6792.2	6847.7	20.00	20.16	pg	1	15	
4,4'-DDD	A	6026.3	6372.7	20.00	21.15	pg	6	15	
Endosulfan II	A	6534.6	6876.4	20.00	21.05	pg	5	15	
4,4'-DDT	A	6296.4	5516.8	20.00	17.52	pg	-12	15	
Methoxychlor	A	2495.9	2346.7	100.0	94.02	pg	-6	15	
Endosulfan sulfate	A	6019.0	6202.6	20.00	20.61	pg	3	15	
Endrin ketone	A	7036.6	7536.5	20.00	21.42	pg	7	15	
TCMX	A	5906.5	5926.5	20.00	20.07	pg	0	15	
Decachlorobiphenyl	A	4694.6	5064.0	20.00	21.57	pg	8	15	
alpha-BHC	B	12258	11555	10.00	9.426	pg	-6	15	
gamma-BHC	B	11263	10488	10.00	9.312	pg	-7	15	
beta-BHC	B	4297.6	4023.7	10.00	9.363	pg	-6	15	
delta-BHC	B	11930	10663	10.00	8.938	pg	-11	15	
Heptachlor	B	10399	9298.7	10.00	8.942	pg	-11	15	
Aldrin	B	10589	9741.9	10.00	9.200	pg	-8	15	
Heptachlor epoxide	B	9387.0	8585.8	10.00	9.146	pg	-9	15	
gamma-Chlordane	B	9442.0	8572.7	10.00	9.079	pg	-9	15	
alpha-Chlordane	B	8976.3	8082.1	10.00	9.004	pg	-10	15	
4,4'-DDE	B	8491.0	7631.8	20.00	17.98	pg	-10	15	
Endosulfan I	B	8578.5	7911.3	10.00	9.222	pg	-8	15	
Dieldrin	B	8883.3	8295.2	20.00	18.68	pg	-7	15	
Endrin	B	7471.7	6672.3	20.00	17.86	pg	-11	15	
4,4'-DDD	B	7120.2	6796.9	20.00	19.09	pg	-5	15	
Endosulfan II	B	7343.8	6899.6	20.00	18.79	pg	-6	15	
4,4'-DDT	B	7013.9	5237.2	20.00	14.93	pg	**-25**	15	c- ***
Methoxychlor	B	2602.3	2109.3	100.0	81.06	pg	**-19**	15	c- ***
Endosulfan sulfate	B	6491.1	6024.8	20.00	18.56	pg	-7	15	
Endrin ketone	B	7592.2	7340.0	20.00	19.34	pg	-3	15	
TCMX	B	6510.0	6283.7	20.00	19.30	pg	-3	15	
Decachlorobiphenyl	B	5122.3	4675.8	20.00	18.26	pg	-9	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					9	15	

-=low bias c=CCV

807234319015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 807234319023 File : 162_023 Time : 11-JUN-2007 20:35
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11545	20.00	20.71	pg	4	15	
gamma-BHC	A	10194	10408	20.00	20.42	pg	2	15	
beta-BHC	A	4009.9	3908.3	20.00	19.49	pg	-3	15	
delta-BHC	A	10898	10376	20.00	19.04	pg	-5	15	
Heptachlor	A	9540.3	9505.4	20.00	19.93	pg	0	15	
Aldrin	A	9466.9	9616.0	20.00	20.31	pg	2	15	
Heptachlor epoxide	A	8393.1	8327.2	20.00	19.84	pg	-1	15	
gamma-Chlordane	A	8338.1	8290.0	20.00	19.88	pg	-1	15	
alpha-Chlordane	A	7988.2	7947.7	20.00	19.90	pg	-1	15	
4,4'-DDE	A	7422.6	7629.7	40.00	41.12	pg	3	15	
Endosulfan I	A	7734.3	7576.7	20.00	19.59	pg	-2	15	
Dieldrin	A	7872.9	8219.7	40.00	41.76	pg	4	15	
Endrin	A	6792.2	6788.4	40.00	39.98	pg	0	15	
4,4'-DDD	A	6026.3	6410.5	40.00	42.55	pg	6	15	
Endosulfan II	A	6534.6	6564.5	40.00	40.18	pg	0	15	
4,4'-DDT	A	6296.4	5866.6	40.00	37.27	pg	-7	15	
Methoxychlor	A	2495.9	2429.3	200.0	194.7	pg	-3	15	
Endosulfan sulfate	A	6019.0	6005.1	40.00	39.91	pg	0	15	
Endrin ketone	A	7036.6	7317.9	40.00	41.60	pg	4	15	
TCMX	A	5906.5	6182.5	40.00	41.87	pg	5	15	
Decachlorobiphenyl	A	4694.6	4904.7	40.00	41.79	pg	4	15	
alpha-BHC	B	12258	11773	20.00	19.21	pg	-4	15	
gamma-BHC	B	11263	10691	20.00	18.98	pg	-5	15	
beta-BHC	B	4297.6	4010.1	20.00	18.66	pg	-7	15	
delta-BHC	B	11930	10904	20.00	18.28	pg	-9	15	
Heptachlor	B	10399	9672.5	20.00	18.60	pg	-7	15	
Aldrin	B	10589	9928.2	20.00	18.75	pg	-6	15	
Heptachlor epoxide	B	9387.0	8790.9	20.00	18.73	pg	-6	15	
gamma-Chlordane	B	9442.0	8832.9	20.00	18.71	pg	-6	15	
alpha-Chlordane	B	8976.3	8359.8	20.00	18.63	pg	-7	15	
4,4'-DDE	B	8491.0	8228.1	40.00	38.76	pg	-3	15	
Endosulfan I	B	8578.5	8074.9	20.00	18.83	pg	-6	15	
Dieldrin	B	8883.3	8832.4	40.00	39.77	pg	-1	15	
Endrin	B	7471.7	6993.1	40.00	37.44	pg	-6	15	
4,4'-DDD	B	7120.2	7166.3	40.00	40.26	pg	1	15	
Endosulfan II	B	7343.8	7205.4	40.00	39.25	pg	-2	15	
4,4'-DDT	B	7013.9	6054.9	40.00	34.53	pg	-14	15	
Methoxychlor	B	2602.3	2456.8	200.0	188.8	pg	-6	15	
Endosulfan sulfate	B	6491.1	6265.9	40.00	38.61	pg	-3	15	
Endrin ketone	B	7592.2	7904.9	40.00	41.65	pg	4	15	
TCMX	B	6510.0	6306.5	40.00	38.75	pg	-3	15	
Decachlorobiphenyl	B	5122.3	5114.2	40.00	39.94	pg	0	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_5 IDF : 1.0
Seqnum : 807234319034 File : 162_034 Time : 12-JUN-2007 00:35
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6425

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11159	25.00	25.02	pg	0	15	
gamma-BHC	A	10194	10085	25.00	24.73	pg	-1	15	
beta-BHC	A	4009.9	3710.3	25.00	23.13	pg	-7	15	
delta-BHC	A	10898	10137	25.00	23.25	pg	-7	15	
Heptachlor	A	9540.3	9154.0	25.00	23.99	pg	-4	15	
Aldrin	A	9466.9	9407.8	25.00	24.84	pg	-1	15	
Heptachlor epoxide	A	8393.1	8100.4	25.00	24.13	pg	-3	15	
gamma-Chlordane	A	8338.1	8086.5	25.00	24.25	pg	-3	15	
alpha-Chlordane	A	7988.2	7435.0	25.00	23.27	pg	-7	15	
4,4'-DDE	A	7422.6	7516.4	50.00	50.63	pg	1	15	
Endosulfan I	A	7734.3	7738.6	25.00	25.01	pg	0	15	
Dieldrin	A	7872.9	8108.7	50.00	51.50	pg	3	15	
Endrin	A	6792.2	6676.6	50.00	49.15	pg	-2	15	
4,4'-DDD	A	6026.3	6071.7	50.00	50.38	pg	1	15	
Endosulfan II	A	6534.6	6828.2	50.00	52.25	pg	4	15	
4,4'-DDT	A	6296.4	5581.6	50.00	44.32	pg	-11	15	
Methoxychlor	A	2495.9	2297.5	250.0	230.1	pg	-8	15	
Endosulfan sulfate	A	6019.0	5770.0	50.00	47.93	pg	-4	15	
Endrin ketone	A	7036.6	7289.8	50.00	51.80	pg	4	15	
TCMX	A	5906.5	5949.8	50.00	50.37	pg	1	15	
Decachlorobiphenyl	A	4694.6	4701.9	50.00	50.08	pg	0	15	
alpha-BHC	B	12258	12652	25.00	25.80	pg	3	15	
gamma-BHC	B	11263	11616	25.00	25.78	pg	3	15	
beta-BHC	B	4297.6	4264.3	25.00	24.81	pg	-1	15	
delta-BHC	B	11930	11930	25.00	25.00	pg	0	15	
Heptachlor	B	10399	10758	25.00	25.86	pg	3	15	
Aldrin	B	10589	10725	25.00	25.32	pg	1	15	
Heptachlor epoxide	B	9387.0	9398.4	25.00	25.03	pg	0	15	
gamma-Chlordane	B	9442.0	9581.0	25.00	25.37	pg	1	15	
alpha-Chlordane	B	8976.3	8992.5	25.00	25.05	pg	0	15	
4,4'-DDE	B	8491.0	9323.0	50.00	54.90	pg	10	15	
Endosulfan I	B	8578.5	8656.2	25.00	25.23	pg	1	15	
Dieldrin	B	8883.3	9736.9	50.00	54.80	pg	10	15	
Endrin	B	7471.7	7998.9	50.00	53.53	pg	7	15	
4,4'-DDD	B	7120.2	7962.0	50.00	55.91	pg	12	15	
Endosulfan II	B	7343.8	7874.6	50.00	53.61	pg	7	15	
4,4'-DDT	B	7013.9	7152.6	50.00	50.99	pg	2	15	
Methoxychlor	B	2602.3	2909.1	250.0	279.5	pg	12	15	
Endosulfan sulfate	B	6491.1	6822.7	50.00	52.55	pg	5	15	
Endrin ketone	B	7592.2	8546.4	50.00	56.28	pg	13	15	
TCMX	B	6510.0	6725.3	50.00	51.65	pg	3	15	
Decachlorobiphenyl	B	5122.3	5512.4	50.00	53.81	pg	8	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807215412

Instrument : GC23 Begun : 05/29/07 14:12
Method : EPA 8081A SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
007	149_007	X	PEM			05/29/07 14:12	1.0	1	
008	149_008	X	PEST_3			05/29/07 14:33	1.0	2	
015	149_015	X	PEM			05/29/07 17:51	1.0	1	
016	149_016	X	PEST_4			05/29/07 18:12	1.0	3	
023	149_023	PEM	PEM			05/29/07 21:43	1.0	1	
024	149_024	IB	HEX			05/29/07 22:04	1.0		
025	149_025	ICAL	PEST_1			05/29/07 22:26	1.0	4	
026	149_026	ICAL	PEST_2			05/29/07 22:47	1.0	5	
027	149_027	ICAL	PEST_3			05/29/07 23:08	1.0	2	
028	149_028	ICAL	PEST_4			05/29/07 23:30	1.0	3	
029	149_029	ICAL	PEST_5			05/29/07 23:51	1.0	6	
030	149_030	ICAL	PEST_6			05/30/07 00:13	1.0	7	
031	149_031	ICAL	PEST_7			05/30/07 00:34	1.0	8	
034	149_034	ICV	ICV			05/30/07 01:39	1.0	9	
035	149_035	X	ICV			05/30/07 02:00	1.0	9	
036	149_036	IB	HEX			05/30/07 02:21	1.0		
037	149_037	ICAL	CHLOR_40			05/30/07 02:43	1.0	10	
038	149_038	ICAL	CHLOR_150			05/30/07 03:04	1.0	11	
039	149_039	ICAL	CHLOR_500			05/30/07 03:26	1.0	12	
040	149_040	ICAL	CHLOR_1000			05/30/07 03:47	1.0	13	
041	149_041	ICAL	CHLOR_1500			05/30/07 04:09	1.0	14	
042	149_042	ICAL	CHLOR_3000			05/30/07 04:30	1.0	15	

Analyst: ADM Date: 05/30/07 Reviewer: RH Date: 05/30/07

Standards used: 1=S5747 2=S6270 3=S6271 4=S6268 5=S6269 6=S5859 7=S5860 8=S6332 9=S5817 10=S6324 11=S6325 12=S6326 13=S6327 14=S6328 15=S6329

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807234319

Instrument : GC23
Method : EPA 8081A

Begun : 06/11/07 13:31
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
006	162_006	PEM	PEM			06/11/07 13:31	1.0	1	
007	162_007	CCV	PEST_4			06/11/07 13:53	1.0	2	
008	162_008	X	HEX			06/11/07 14:18	1.0		
009	162_009	BLANK	QC391520	Water	126108	06/11/07 14:43	1.0		
010	162_010	BS	QC391521	Water	126108	06/11/07 15:05	1.0		
011	162_011	BSD	QC391522	Water	126108	06/11/07 15:27	1.0		
012	162_012	SAMPLE	195242-001	Water	126108	06/11/07 15:53	1.0		1:GCHLORDANE=260
013	162_013	X	HEX			06/11/07 16:15	1.0		
014	162_014	PEM	PEM			06/11/07 16:57	1.0	1	
015	162_015	CCV	PEST_3			06/11/07 17:19	1.0	3	
017	162_017	BLANK	QC391712	Soil	126164	06/11/07 18:21	1.0		
018	162_018	BS	QC391713	Soil	126164	06/11/07 18:43	1.0		
019	162_019	BSD	QC391714	Soil	126164	06/11/07 19:05	1.0		
020	162_020	SAMPLE	195242-002	Soil	126164	06/11/07 19:29	1.0		
021	162_021	X	HEX			06/11/07 19:51	1.0		
022	162_022	PEM	PEM			06/11/07 20:13	1.0	1	
023	162_023	CCV	PEST_4			06/11/07 20:35	1.0	2	
024	162_024	X	PEST_4			06/11/07 20:57	1.0	2	
025	162_025	X	PEM			06/11/07 21:19	1.0	1	
026	162_026	X	HEX			06/11/07 21:40	1.0		
027	162_027	SAMPLE	195247-001	Water	126108	06/11/07 22:02	1.0		
028	162_028	SAMPLE	195247-002	Water	126108	06/11/07 22:24	1.0		
029	162_029	SAMPLE	195270-001	Water	126108	06/11/07 22:46	1.0		
030	162_030	SAMPLE	195270-002	Water	126108	06/11/07 23:08	1.0		1:BHCBETA=580
031	162_031	SAMPLE	195279-001	Water	126108	06/11/07 23:30	1.0		
032	162_032	X	HEX			06/11/07 23:51	1.0		
033	162_033	PEM	PEM			06/12/07 00:13	1.0	1	
034	162_034	CCV	PEST_5			06/12/07 00:35	1.0	4	
035	162_035	X	PEST_5			06/12/07 00:57	1.0	4	
036	162_036	X	PEM			06/12/07 01:19	1.0	1	
037	162_037	X	HEX			06/12/07 01:41	1.0		

Standards used: 1=S6458 2=S6271 3=S6270 4=S6425

REPORTING SUMMARY FOR 195279 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195279-001	alpha-BHC	GC23	A	06/11/07 23:30
195279-001	beta-BHC	GC23	A	06/11/07 23:30
195279-001	gamma-BHC	GC23	A	06/11/07 23:30
195279-001	delta-BHC	GC23	A	06/11/07 23:30
195279-001	Heptachlor	GC23	A	06/11/07 23:30
195279-001	Aldrin	GC23	A	06/11/07 23:30
195279-001	Heptachlor epoxide	GC23	A	06/11/07 23:30
195279-001	Endosulfan I	GC23	A	06/11/07 23:30
195279-001	Dieldrin	GC23	A	06/11/07 23:30
195279-001	4,4'-DDE	GC23	A	06/11/07 23:30
195279-001	Endrin	GC23	A	06/11/07 23:30
195279-001	Endosulfan II	GC23	A	06/11/07 23:30
195279-001	Endosulfan sulfate	GC23	A	06/11/07 23:30
195279-001	4,4'-DDD	GC23	A	06/11/07 23:30
195279-001	4,4'-DDT	GC23	A	06/11/07 23:30
195279-001	alpha-Chlordane	GC23	A	06/11/07 23:30
195279-001	gamma-Chlordane	GC23	A	06/11/07 23:30
195279-001	Methoxychlor	GC23	A	06/11/07 23:30
195279-001	Endrin ketone	GC23	A	06/11/07 23:30
195279-001	Toxaphene	GC23	A	06/11/07 23:30
195279-001	TCMX	GC23	A	06/11/07 23:30
195279-001	Decachlorobiphenyl	GC23	A	06/11/07 23:30
QC391520	alpha-BHC	GC23	A	06/11/07 14:43
QC391520	beta-BHC	GC23	A	06/11/07 14:43
QC391520	gamma-BHC	GC23	A	06/11/07 14:43
QC391520	delta-BHC	GC23	A	06/11/07 14:43
QC391520	Heptachlor	GC23	A	06/11/07 14:43
QC391520	Aldrin	GC23	A	06/11/07 14:43
QC391520	Heptachlor epoxide	GC23	A	06/11/07 14:43
QC391520	Endosulfan I	GC23	A	06/11/07 14:43
QC391520	Dieldrin	GC23	A	06/11/07 14:43
QC391520	4,4'-DDE	GC23	A	06/11/07 14:43
QC391520	Endrin	GC23	A	06/11/07 14:43
QC391520	Endosulfan II	GC23	A	06/11/07 14:43
QC391520	Endosulfan sulfate	GC23	A	06/11/07 14:43
QC391520	4,4'-DDD	GC23	A	06/11/07 14:43
QC391520	4,4'-DDT	GC23	A	06/11/07 14:43
QC391520	alpha-Chlordane	GC23	A	06/11/07 14:43
QC391520	gamma-Chlordane	GC23	A	06/11/07 14:43
QC391520	Methoxychlor	GC23	A	06/11/07 14:43
QC391520	Endrin ketone	GC23	A	06/11/07 14:43
QC391520	Toxaphene	GC23	A	06/11/07 14:43
QC391520	TCMX	GC23	A	06/11/07 14:43
QC391520	Decachlorobiphenyl	GC23	A	06/11/07 14:43
QC391521	gamma-BHC	GC23	A	06/11/07 15:05
QC391521	Heptachlor	GC23	A	06/11/07 15:05
QC391521	Aldrin	GC23	A	06/11/07 15:05
QC391521	Dieldrin	GC23	A	06/11/07 15:05
QC391521	Endrin	GC23	A	06/11/07 15:05
QC391521	4,4'-DDT	GC23	A	06/11/07 15:05
QC391521	TCMX	GC23	A	06/11/07 15:05
QC391521	Decachlorobiphenyl	GC23	A	06/11/07 15:05

REPORTING SUMMARY FOR 195279 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391522	gamma-BHC	GC23	A	06/11/07 15:27
QC391522	Heptachlor	GC23	A	06/11/07 15:27
QC391522	Aldrin	GC23	A	06/11/07 15:27
QC391522	Dieldrin	GC23	A	06/11/07 15:27
QC391522	Endrin	GC23	A	06/11/07 15:27
QC391522	4,4'-DDT	GC23	A	06/11/07 15:27
QC391522	TCMX	GC23	A	06/11/07 15:27
QC391522	Decachlorobiphenyl	GC23	A	06/11/07 15:27

SAMPLE PREPARATION SUMMARY

Batch # : 126108
Started By : JXM
Method : 3520C
Spike #1 ID : S6209

Prep Date : 08-JUN-2007
SOP Version : 8081_3520_rv16
Spike #2 ID : S5676

Analysis : 8081
Finished By : SFL
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195242-001		Water	975	10	1	0.01026	6	.025				8081	
195247-001		Water	1040	10	1	0.009615	6	.025				8081	
195247-002		Water	1050	10	1	0.009524	6	.025				8081	
195270-001		Water	1060	10	1	0.009434	6	.025				8081	
195270-002		Water	1060	10	1	0.009434	6	.025				8081	
195279-001		Water	1050	10	1	0.009524	5	.025				8081	
QC391520	BLANK	Water	1000	10	1	0.01		.025				8081	
QC391521	BS	Water	1000	10	1	0.01		.025	.025			8081	
QC391522	BSD	Water	1000	10	1	0.01		.025	.025			8081	

Analyst: ADM Date: 06/12/07 Reviewer: CW Date: 06/12/07

8081 Water Prep Log Curtis & Tompkins, Ltd.

BK 2498 Page: 11

LIMS Batch No: 126108
Date Extracted: 6/8/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195242-001G	975	6	10.0		
195247-001D	1040				
↓ 02E	1050				
195270-001L	1060				
↓ 025	↓	↓			
195279-001N	1050	5			
MBQC391520	1000	N/A			
BS ↓ 1	↓	↓			
BSD ↓ 2	↓	↓	↓		

6/10/07

	Mfg & Lot# / LIMS # / Time	Date/ Initials
0.025 mL of surrogate solution was added to all samples	66209B	JM 6/8/07
0.025 mL of matrix spiking solution was added to all spikes	25676D	↓
☒ EPA 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2	SM47110	
Extraction Start Time:	17:40	↓
Extraction End Time:	1243	6/9/07 KP
☐ EPA 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	6/10/07
Extracts filtered through baked, CH_2Cl_2-rinsed ~~powdered~~ GRAN Na_2SO_4	EM4W2837DL	↓
Exchanged 2x with Hexane	JTB EHDB	
Concentrated: ☒ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil	N/A	
Extracts relinquished to the Pesticide Group	FHDLEV	↓

6/8/07
Extraction Chemist **Date**

Contined from Page ____
Continued on Page 1

6/10/07
Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 06/28/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B	GC25 A	GC25 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061	0.0039	0.0060
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063	0.0042	0.0068
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044	0.0035	0.0054
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090	0.0068	0.017
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014	0.013	0.022
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015	0.011	0.019
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099	0.0038	0.0060
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012	0.0034	0.0087
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081	0.0040	0.0074
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055	0.0029	0.0081
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057	0.0027	0.012
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051	0.0029	0.0070
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057	0.0027	0.0085
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012	0.0068	0.017
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013	0.0097	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013	0.0094	0.015
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013	0.0066	0.019
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015	0.0055	0.020
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20	0.10	0.16
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081	0.075	0.073
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080	0.0066	0.017
Toxaphene	ug/L	0.39	0.25	0.19	0.19	0.29	0.32	0.13	0.21

POLYAROMATIC HYDROCARBONS

: 00134

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW060707A	Batch#:	126173
Lab ID:	195279-001	Sampled:	06/07/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	83	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391739	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

29.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391740	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.860	89	50-135
Fluorene	2.000	1.904	95	65-135
Pyrene	1.000	0.9258	93	65-135
Benzo(a)pyrene	1.000	0.8990	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	89	65-135

30.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	126173
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Lab ID: QC391741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09004	9.615	7.964	83	50-135
Fluorene	<0.009366	1.923	1.729	90	65-135
Pyrene	<0.003779	0.9615	0.7599	79	65-135
Benzo(a)pyrene	<0.01488	0.9615	0.3574	37 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	83	65-135

Type: MSD Lab ID: QC391742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.615	7.763	81	50-135	3	35
Fluorene	1.923	1.709	89	65-135	1	35
Pyrene	0.9615	0.7860	82	65-135	3	35
Benzo(a)pyrene	0.9615	0.4085	42 *	65-135	13	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	84	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

31.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 297149198001
Units : ug/L

Date : 13-APR-2007 17:16
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	10300006	297149198006		13-APR-2007 17:16	S5288
L2	10300007	297149198007		13-APR-2007 17:47	S5287
L3	10300008	297149198008		13-APR-2007 18:19	S5286
L4	10300009	297149198009		13-APR-2007 18:51	S5285
L5	10300010	297149198010		13-APR-2007 19:22	S5284
L6	10300011	297149198011		13-APR-2007 19:54	S5283
L7	10300012	297149198012		13-APR-2007 20:25	S5282

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0128	0.0132	0.0134	0.0134	0.0132	0.0132	0.0132	LINR	-10.001	75.7193		0.0132	1.000	0.99	20	
Acenaphthylene	1	0.0094	0.0096	0.0099	0.0099	0.0098	0.0098	0.0097	LINR	-59.664	102.661		0.0097	1.000	0.99	20	
Acenaphthene	1	0.0069	0.0052	0.0053	0.0053	0.0052	0.0052	0.0051	LINR	-79.957	194.506		0.0055	1.000	0.99	20	
Fluorene	1	0.0705	0.0643	0.0643	0.0645	0.0638	0.0636	0.0639	LINR	-0.7617	15.6594		0.0650	1.000	0.99	20	
Phenanthrene	1	0.1834	0.1774	0.1805	0.1806	0.1791	0.1787	0.1794	LINR	-0.0602	5.57891		0.1799	1.000	0.99	20	
Anthracene	1	0.4270	0.4295	0.4332	0.4337	0.4303	0.4275	0.4283	LINR	-2.0092	2.33653		0.4299	1.000	0.99	20	
Fluoranthene	1	0.0384	0.0403	0.0416	0.0414	0.0426	0.0424	0.0427	LINR	11.5991	23.4132		0.0414	1.000	0.99	20	
Benzo(a)anthracene	1	0.0994	0.0926	0.0938	0.0949	0.0943	0.0946	0.0957	LINR	5.77766	10.4563		0.0950	1.000	0.99	20	
Chrysene	1	0.1106	0.1334	0.1359	0.1363	0.1343	0.1345	0.1353	LINR	1.94264	7.39843		0.1314	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0921	0.1004	0.1054	0.1072	0.1079	0.1075	0.1081	LINR	8.26982	9.24895		0.1041	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0572	0.0735	0.0812	0.0822	0.0834	0.0831	0.0840	LINR	8.45959	11.8997		0.0778	1.000	0.99	20	
Benzo(a)pyrene	1	0.0643	0.0779	0.0904	0.0913	0.0906	0.0910	0.0920	LINR	8.12070	10.8643		0.0854	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0176	0.0165	0.0203	0.0207	0.0215	0.0218		LINR	27.2544	45.5744		0.0198	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0274	0.0281	0.0339	0.0342	0.0348	0.0356		LINR	22.9034	28.0539		0.0323	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0987	0.0879	0.0928	0.0934	0.0933	0.0956		LINR	6.49838	10.4688		0.0936	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0088	0.0088	0.0087	0.0086	0.0085	0.0085	LINR	-238.60	118.032		0.0086	1.000	0.99	20	
Acenaphthylene	2	0.0891	0.0894	0.0904	0.0892	0.0872	0.0854		LINR	-190.47	11.7213		0.0885	1.000	0.99	20	
Pyrene	2	0.1213	0.1229	0.1312	0.1305	0.1302	0.1292	0.1319	LINR	6.99417	7.59564		0.1282	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0218	0.0221	0.0220	0.0215	0.0207	0.0199		LINR	-722.70	50.4398		0.0213	0.999	0.99	20	
Naphthalene	3	0.0107	0.0106	0.0106	0.0104	0.0103	0.0102	0.0103	LINR	-15.063	97.2408		0.0104	1.000	0.99	20	
Acenaphthene	3	0.0231	0.0228	0.0230	0.0228	0.0225	0.0225	0.0224	LINR	-40.470	44.5908		0.0228	1.000	0.99	20	
Fluorene	3	0.1231	0.1210	0.1214	0.1202	0.1187	0.1184	0.1179	LINR	-9.5649	8.48288		0.1201	1.000	0.99	20	
Phenanthrene	3	0.1327	0.1299	0.1302	0.1298	0.1278	0.1286	0.1286	LINR	-0.7120	7.78012		0.1297	1.000	0.99	20	
Anthracene	3	0.4513	0.4443	0.4475	0.4488	0.4472	0.4445	0.4451	LINR	-1.5122	2.24797		0.4469	1.000	0.99	20	
Fluoranthene	3	0.0390	0.0393	0.0398	0.0399	0.0391	0.0394	0.0397	LINR	5.11764	25.2422		0.0394	1.000	0.99	20	
Pyrene	3	0.1131	0.1163	0.1162	0.1164	0.1147	0.1166	0.1174	LINR	5.95171	8.51800		0.1158	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1373	0.1411	0.1447	0.1447	0.1444	0.1447	0.1453	LINR	2.60785	6.88237		0.1432	1.000	0.99	20	
Chrysene	3	0.1623	0.1633	0.1673	0.1667	0.1644	0.1638	0.1652	LINR	0.68406	6.06206		0.1647	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0606	0.0613	0.0630	0.0635	0.0630	0.0629	0.0633	LINR	4.57699	15.8004		0.0625	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3579	0.3696	0.3798	0.3815	0.3780	0.3771	0.3775	LINR	-0.7017	2.64966		0.3745	1.000	0.99	20	
Benzo(a)pyrene	3	0.1958	0.2035	0.2110	0.2146	0.2122	0.2114	0.2134	LINR	3.00004	4.69025		0.2088	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0256	0.0253	0.0276	0.0282	0.0286	0.0295		LINR	24.2523	33.8597		0.0275	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0453	0.0481	0.0529	0.0544	0.0544	0.0553		LINR	15.3097	18.0511		0.0518	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0712	0.0807	0.0904	0.0937	0.0935	0.0941		LINR	6.17134	10.5948		0.0873	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0120	0.0117	0.0118	0.0116	0.0115	0.0115	0.0114	LINR	-170.78	87.4696		0.0116	1.000	0.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Naphthalene	1	166.7	-9	500.0	-2	2000	1	4000	1	10000	0	20000	0	40000	0
Acenaphthylene	1	333.3	-21	1000	-7	4000	0	8000	1	20000	0	40000	0	80000	0
Acenaphthene	1	166.7	-14	500.0	-16	2000	-2	4000	2	10000	1	20000	0	40000	0
Fluorene	1	33.33	8	100.0	0	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	1	16.67	2	50.00	-1	200.0	1	400.0	1	1000	0	2000	0	4000	0
Anthracene	1	16.67	-12	50.00	-4	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	1	33.33	25	100.0	6	400.0	0	800.0	-2	2000	0	4000	-1	8000	0
Benzo(a)anthracene	1	16.67	39	50.00	8	200.0	1	400.0	1	1000	-1	2000	-1	4000	0
Chrysene	1	16.67	-7	50.00	3	200.0	2	400.0	1	1000	0	2000	0	4000	0
Benzo(b)fluoranthene	1	33.33	10	100.0	1	400.0	0	800.0	0	2000	0	4000	0	8000	0
Benzo(k)fluoranthene	1	16.67	19	50.00	4	200.0	1	400.0	0	1000	0	2000	-1	4000	0
Benzo(a)pyrene	1	16.67	19	50.00	1	200.0	2	400.0	1	1000	-1	2000	-1	4000	0
Dibenz(a,h)anthracene	1	33.33	62	100.0	3	400.0	0	800.0	-2	2000	-1	4000	0		
Benzo(g,h,i)perylene	1	33.33	46	100.0	2	400.0	1	800.0	-1	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	1	16.67	42	50.00	5	200.0	0	400.0	-1	1000	-2	2000	0		
1-Methylnaphthalene (UV)	1	666.7	-33	2000	-8	8000	0	16000	1	40000	1	80000	0	2E+5	0
Acenaphthylene	2	333.3	-53	1000	-14	4000	1	8000	2	20000	1	40000	0		
Pyrene	2	16.67	34	50.00	7	200.0	3	400.0	1	1000	0	2000	-2	4000	0
1-Methylnaphthalene (UV)	2	666.7	-98	2000	-25	8000	2	16000	4	40000	2	80000	-1		
Naphthalene	3	166.7	-5	500.0	0	2000	2	4000	0	10000	0	20000	-1	40000	0
Acenaphthene	3	166.7	-21	500.0	-6	2000	0	4000	1	10000	0	20000	0	40000	0
Fluorene	3	33.33	-24	100.0	-7	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	3	16.67	-1	50.00	0	200.0	1	400.0	1	1000	-1	2000	0	4000	0
Anthracene	3	16.67	-8	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	3	33.33	14	100.0	4	400.0	2	800.0	1	2000	-1	4000	0	8000	0
Pyrene	3	16.67	32	50.00	11	200.0	2	400.0	1	1000	-2	2000	0	4000	0
Benzo(a)anthracene	3	16.67	10	50.00	2	200.0	1	400.0	0	1000	0	2000	0	4000	0
Chrysene	3	16.67	2	50.00	0	200.0	2	400.0	1	1000	0	2000	-1	4000	0
Benzo(b)fluoranthene	3	33.33	10	100.0	1	400.0	1	800.0	1	2000	0	4000	-1	8000	0
Benzo(k)fluoranthene	3	16.67	-9	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Benzo(a)pyrene	3	16.67	10	50.00	1	200.0	0	400.0	1	1000	0	2000	-1	4000	0
Dibenz(a,h)anthracene	3	33.33	59	100.0	10	400.0	-1	800.0	-1	2000	-2	4000	1		
Benzo(g,h,i)perylene	3	33.33	28	100.0	2	400.0	-1	800.0	0	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	3	16.67	12	50.00	-2	200.0	-1	400.0	1	1000	0	2000	0		
1-Methylnaphthalene (F)	3	666.7	-21	2000	-6	8000	1	16000	1	40000	0	80000	0	2E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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UPDATED RETENTION TIMES FROM CCU FILE 13400002. JM 15MAY2007

HPLC04 METHOD 8310

Calib. Data Modified : 5/15/2007 9:29:41 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.775	1	1	166.67000	2.12613	78.39140			Naphthalene
		2	500.00000	6.61840	75.54697			
		3	2000.00000	26.88920	74.37930			
		4	4000.00000	53.47171	74.80591			
		5	1.00000e4	131.95592	75.78288			
		6	2.00000e4	263.69684	75.84467			
		7	4.00000e4	528.67773	75.66046			
4.814	3	1	166.67000	1.79073	93.07379			Naphthalene
		2	500.00000	5.29465	94.43499			
		3	2000.00000	21.15345	94.54721			
		4	4000.00000	41.49194	96.40426			
		5	1.00000e4	103.01423	97.07397			
		6	2.00000e4	204.77448	97.66842			
		7	4.00000e4	411.98587	97.09071			
6.029	1	1	333.33000	3.13157	106.44193			Acenaphthylene
		2	1000.00000	9.62986	103.84365			
		3	4000.00000	39.68081	100.80440			
		4	8000.00000	79.44919	100.69329			
		5	2.00000e4	195.85706	102.11529			
		6	4.00000e4	390.32718	102.47813			
		7	8.00000e4	779.58801	102.61830			
6.030	2	1	333.33000	29.69775	11.22408			Acenaphthylene
		2	1000.00000	89.43451	11.18137			
		3	4000.00000	361.48309	11.06552			

Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	713.72961	11.20873			
		5	2.00000e4	1744.82886	11.46244			
		6	4.00000e4	3414.72949	11.71396			
6.802	1	1	666.67000	5.78173	115.30625			1-Methylnaphthalene (UV)
		2	2000.00000	17.60884	113.57930			
		3	8000.00000	70.00924	114.27063			
		4	1.60000e4	139.49213	114.70181			
		5	4.00000e4	343.04321	116.60339			
		6	8.00000e4	679.21155	117.78363			
		7	1.60000e5	1357.17957	117.89155			
6.803	2	1	666.67000	14.56439	45.77399			1-Methylnaphthalene (UV)
		2	2000.00000	44.10336	45.34802			
		3	8000.00000	176.21402	45.39934			
		4	1.60000e4	343.70859	46.55106			
		5	4.00000e4	826.97571	48.36901			
		6	8.00000e4	1588.15674	50.37286			
6.842	3	1	666.67000	7.99987	83.33510			1-Methylnaphthalene (F)
		2	2000.00000	23.39339	85.49424			
		3	8000.00000	94.23004	84.89861			
		4	1.60000e4	186.37436	85.84872			
		5	4.00000e4	460.03391	86.95011			
		6	8.00000e4	917.08130	87.23327			
		7	1.60000e5	1830.53613	87.40609			
7.251	1	1	166.67000	1.98399	84.00737			2-Methylnaphthalene
		2	500.00000	5.83025	85.75956			
		3	2000.00000	22.91004	87.29797			
		4	4000.00000	46.08871	86.78914			
		5	1.00000e4	114.12836	87.62064			
		6	2.00000e4	225.58672	88.65770			
		7	4.00000e4	451.41702	88.60986			
7.292	3	1	166.67000	2.33092	71.50383			2-Methylnaphthalene
		2	500.00000	6.89568	72.50921			
		3	2000.00000	27.58432	72.50496			
		4	4000.00000	54.78667	73.01045			
		5	1.00000e4	135.95044	73.55622			
		6	2.00000e4	269.15958	74.30536			
		7	4.00000e4	542.89160	73.67953			
7.640	1	1	166.67000	1.14632	145.39623			Acenaphthene
		2	500.00000	2.57756	193.98155			
		3	2000.00000	10.51053	190.28528			
		4	4000.00000	21.31399	187.67017			
		5	1.00000e4	52.31623	191.14528			
		6	2.00000e4	103.27618	193.65550			
		7	4.00000e4	205.89775	194.27118			
7.680	3	1	166.67000	3.85663	43.21653			Acenaphthene
		2	500.00000	11.41417	43.80520			
		3	2000.00000	45.97927	43.49787			
		4	4000.00000	91.38386	43.77141			
		5	1.00000e4	225.47073	44.35165			
		6	2.00000e4	450.13852	44.43077			
		7	4.00000e4	897.44818	44.57082			
8.162	1	1	33.33300	2.34922	14.18896			Fluorene
		2	100.00000	6.42542	15.56318			
		3	400.00000	25.73475	15.54319			
		4	800.00000	51.57725	15.51072			
		5	2000.00000	127.57288	15.67731			
		6	4000.00000	254.38828	15.72400			
		7	8000.00000	511.46848	15.64124			
8.202	3	1	33.33300	4.10462	8.12084			Fluorene
		2	100.00000	12.10357	8.26203			
		3	400.00000	48.56486	8.23641			
		4	800.00000	96.16352	8.31916			
		5	2000.00000	237.35271	8.42628			

Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	473.63272	8.44536			
		7	8000.00000	943.53278	8.47877			
9.288	1	1	16.66700	3.05610	5.45368			Phenanthrene
		2	50.00000	8.87007	5.63693			
		3	200.00000	36.09091	5.54156			
		4	400.00000	72.25112	5.53625			
		5	1000.00000	179.13455	5.58240			
		6	2000.00000	357.36267	5.59656			
		7	4000.00000	717.53351	5.57465			
9.326	3	1	16.66700	2.21108	7.53796			Phenanthrene
		2	50.00000	6.49372	7.69975			
		3	200.00000	26.03061	7.68326			
		4	400.00000	51.93502	7.70193			
		5	1000.00000	127.82927	7.82293			
		6	2000.00000	257.22650	7.77525			
		7	4000.00000	514.33234	7.77707			
10.303	1	1	16.66700	7.11729	2.34176			Anthracene
		2	50.00000	21.47680	2.32809			
		3	200.00000	86.63564	2.30852			
		4	400.00000	173.47972	2.30575			
		5	1000.00000	430.32001	2.32385			
		6	2000.00000	855.00366	2.33917			
		7	4000.00000	1713.20947	2.33480			
10.342	3	1	16.66700	7.52114	2.21602			Anthracene
		2	50.00000	22.21256	2.25098			
		3	200.00000	89.50451	2.23452			
		4	400.00000	179.52844	2.22806			
		5	1000.00000	447.20154	2.23613			
		6	2000.00000	888.95929	2.24982			
		7	4000.00000	1780.25928	2.24686			
11.462	1	1	33.33300	1.28108	26.01947			Fluoranthene
		2	100.00000	4.03425	24.78779			
		3	400.00000	16.62899	24.05437			
		4	800.00000	33.12579	24.15037			
		5	2000.00000	85.29985	23.44670			
		6	4000.00000	169.48399	23.60105			
		7	8000.00000	341.57843	23.42068			
11.501	3	1	33.33300	1.30039	25.63313			Fluoranthene
		2	100.00000	3.92913	25.45090			
		3	400.00000	15.91306	25.13658			
		4	800.00000	31.92663	25.05745			
		5	2000.00000	78.16699	25.58625			
		6	4000.00000	157.55948	25.38724			
		7	8000.00000	317.23450	25.21794			
12.216	2	1	16.66700	2.02209	8.24246			Pyrene
		2	50.00000	6.14506	8.13662			
		3	200.00000	26.24098	7.62167			
		4	400.00000	52.21975	7.65994			
		5	1000.00000	130.19414	7.68084			
		6	2000.00000	258.31161	7.74259			
		7	4000.00000	527.77155	7.57904			
12.256	3	1	16.66700	1.88428	8.84530			Pyrene
		2	50.00000	5.81487	8.59864			
		3	200.00000	23.24056	8.60564			
		4	400.00000	46.54547	8.59375			
		5	1000.00000	114.70278	8.71818			
		6	2000.00000	233.18887	8.57674			
		7	4000.00000	469.78665	8.51450			
14.978	1	1	16.66700	1.65656	10.06123			Benzo(a)anthracene
		2	50.00000	4.62886	10.80180			
		3	200.00000	18.76417	10.65861			
		4	400.00000	37.95211	10.53960			
		5	1000.00000	94.25475	10.60954			

Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	189.13774	10.57430			
		7	4000.00000	382.94766	10.44529			
15.018	3	1	16.66700	2.28920	7.28071			Benzo(a)anthracene
		2	50.00000	7.05404	7.08814			
		3	200.00000	28.93622	6.91175			
		4	400.00000	57.87023	6.91202			
		5	1000.00000	144.42162	6.92417			
		6	2000.00000	289.42532	6.91025			
		7	4000.00000	581.30914	6.88102			
15.450	1	1	16.66700	1.84303	9.04325			Chrysene
		2	50.00000	6.66891	7.49748			
		3	200.00000	27.17831	7.35881			
		4	400.00000	54.50307	7.33904			
		5	1000.00000	134.26915	7.44773			
		6	2000.00000	268.92798	7.43694			
		7	4000.00000	541.02679	7.39335			
15.497	3	1	16.66700	2.70424	6.16329			Chrysene
		2	50.00000	8.16577	6.12312			
		3	200.00000	33.46666	5.97610			
		4	400.00000	66.69530	5.99742			
		5	1000.00000	164.41519	6.08216			
		6	2000.00000	327.66275	6.10384			
		7	4000.00000	660.79785	6.05329			
17.660	1	1	33.33300	3.06990	10.85801			Benzo(b)fluoranthene
		2	100.00000	10.04300	9.95718			
		3	400.00000	42.15858	9.48799			
		4	800.00000	85.72279	9.33241			
		5	2000.00000	215.81119	9.26736			
		6	4000.00000	430.08072	9.30058			
		7	8000.00000	864.70093	9.25175			
17.699	3	1	33.33300	2.02153	16.48898			Benzo(b)fluoranthene
		2	100.00000	6.12518	16.32605			
		3	400.00000	25.21695	15.86235			
		4	800.00000	50.77764	15.75497			
		5	2000.00000	126.05885	15.86561			
		6	4000.00000	251.49760	15.90472			
		7	8000.00000	506.71603	15.78794			
18.594	1	1	16.66700	9.52995e-1	17.48908			Benzo(k)fluoranthene
		2	50.00000	3.67382	13.60981			
		3	200.00000	16.23658	12.31786			
		4	400.00000	32.87246	12.16824			
		5	1000.00000	83.36793	11.99502			
		6	2000.00000	166.19958	12.03372			
		7	4000.00000	335.99481	11.90495			
18.634	3	1	16.66700	5.96582	2.79375			Benzo(k)fluoranthene
		2	50.00000	18.47991	2.70564			
		3	200.00000	75.95864	2.63301			
		4	400.00000	152.59778	2.62127			
		5	1000.00000	377.99402	2.64554			
		6	2000.00000	754.19122	2.65185			
		7	4000.00000	1510.11670	2.64880			
19.526	1	1	16.66700	1.07194	15.54845			Benzo(a)pyrene
		2	50.00000	3.89495	12.83713			
		3	200.00000	18.07028	11.06790			
		4	400.00000	36.52415	10.95166			
		5	1000.00000	90.64273	11.03232			
		6	2000.00000	182.08386	10.98395			
		7	4000.00000	368.15787	10.86490			
19.567	3	1	16.66700	3.26395	5.10639			Benzo(a)pyrene
		2	50.00000	10.17375	4.91461			
		3	200.00000	42.19252	4.74018			
		4	400.00000	85.85696	4.65891			
		5	1000.00000	212.20137	4.71250			

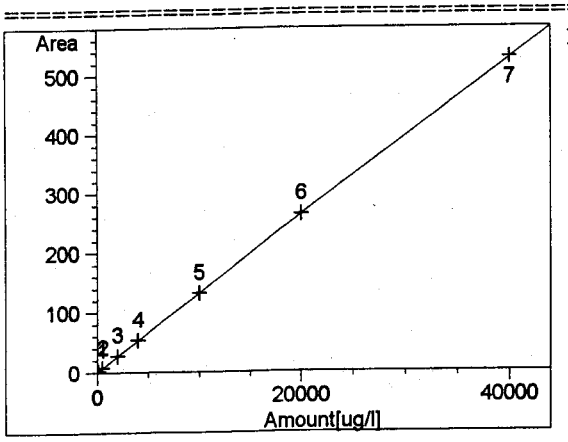
Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	422.78271	4.73056			
		7	4000.00000	853.64819	4.68577			
21.125	1	1	33.33300	5.87149e-1	56.77090			Dibenz(a,h)anthracene
		2	100.00000	1.65332	60.48420			
		3	400.00000	8.13782	49.15319			
		4	800.00000	16.52660	48.40682			
		5	2000.00000	43.03531	46.47347			
		6	4000.00000	87.38079	45.77665			
21.166	3	1	33.33300	8.53681e-1	39.04622			Dibenz(a,h)anthracene
		2	100.00000	2.53004	39.52501			
		3	400.00000	11.03330	36.25388			
		4	800.00000	22.57477	35.43779			
		5	2000.00000	57.27084	34.92179			
		6	4000.00000	118.01955	33.89269			
21.906	1	1	33.33300	9.14665e-1	36.44285			Benzo(g,h,i)perylene
		2	100.00000	2.81032	35.58320			
		3	400.00000	13.56283	29.49238			
		4	800.00000	27.32761	29.27443			
		5	2000.00000	69.65511	28.71290			
		6	4000.00000	142.23232	28.12300			
21.945	3	1	33.33300	1.51022	22.07160			Benzo(g,h,i)perylene
		2	100.00000	4.81285	20.77773			
		3	400.00000	21.17274	18.89222			
		4	800.00000	43.53913	18.37427			
		5	2000.00000	108.83624	18.37623			
		6	4000.00000	221.29349	18.07554			
22.404	1	1	16.66700	1.64575	10.12731			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.39383	11.37960			
		3	200.00000	18.55475	10.77891			
		4	400.00000	37.35328	10.70856			
		5	1000.00000	93.34637	10.71279			
		6	2000.00000	191.22902	10.45866			
22.442	3	1	16.66700	1.18608	14.05220			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.03285	12.39819			
		3	200.00000	18.07297	11.06625			
		4	400.00000	37.48116	10.67203			
		5	1000.00000	93.52203	10.69267			
		6	2000.00000	188.29039	10.62189			

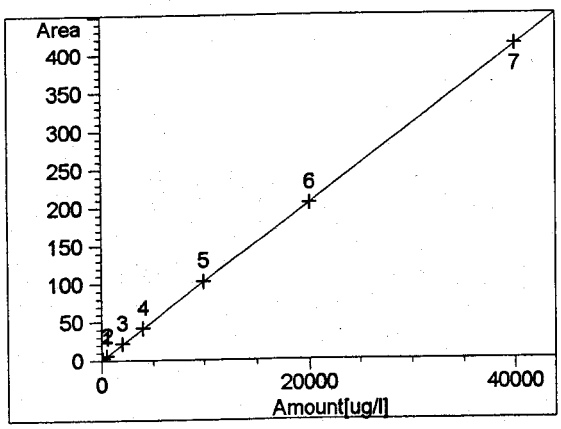
Peak Sum Table

No Entries in table

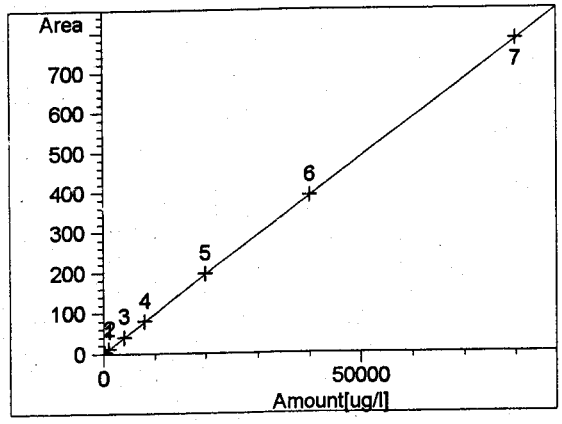
Calibration Curves



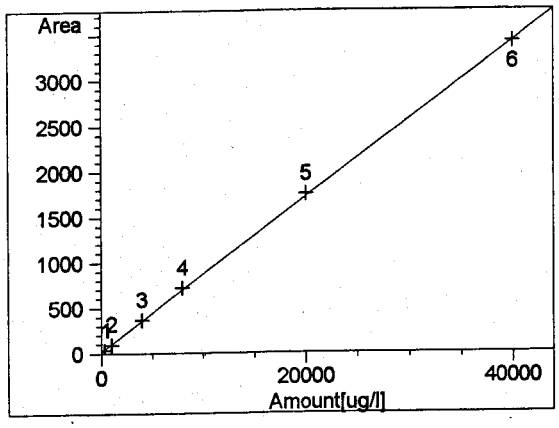
Naphthalene at exp. RT: 4.775
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.42379
Formula: y = mx + b
m: 1.32067e-2
b: 1.32078e-1
x: Amount[ug/l]
y: Area



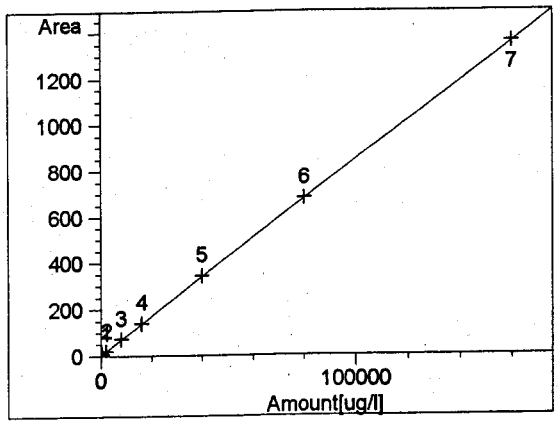
Naphthalene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.56187
Formula: y = mx + b
m: 1.02838e-2
b: 1.54902e-1
x: Amount[ug/l]
y: Area



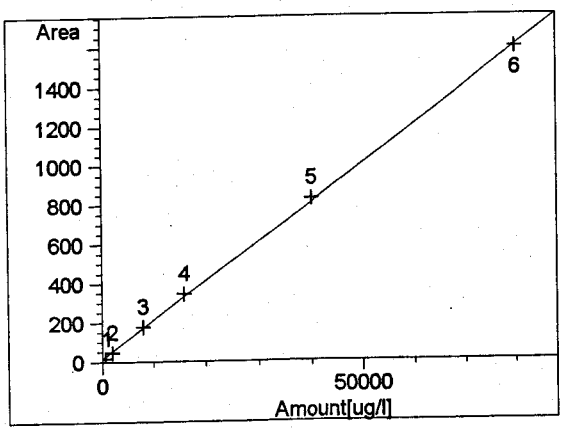
Acenaphthylene at exp. RT: 6.029
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.65727
Formula: y = mx + b
m: 9.74084e-3
b: 5.81179e-1
x: Amount[ug/l]
y: Area



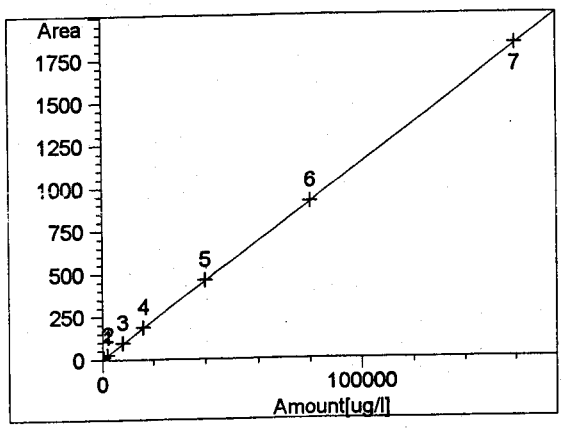
Acenaphthylene at exp. RT: 6.030
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 18.07740
Formula: y = mx + b
m: 8.53146e-2
b: 16.24956
x: Amount[ug/l]
y: Area



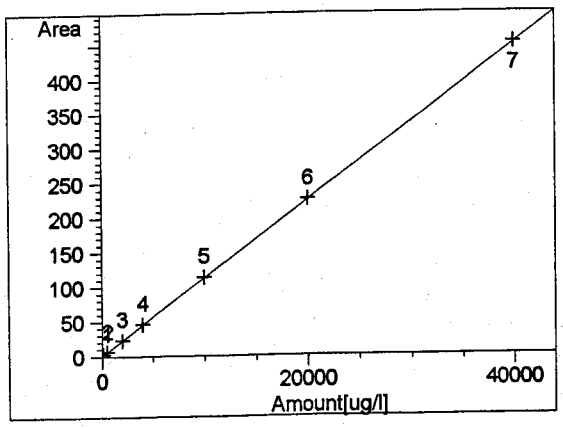
1-Methylnaphthalene (UV) at exp. RT: 6.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.68343
Formula: y = mx + b
m: 8.47231e-3
b: 2.02152
x: Amount[ug/l]
y: Area



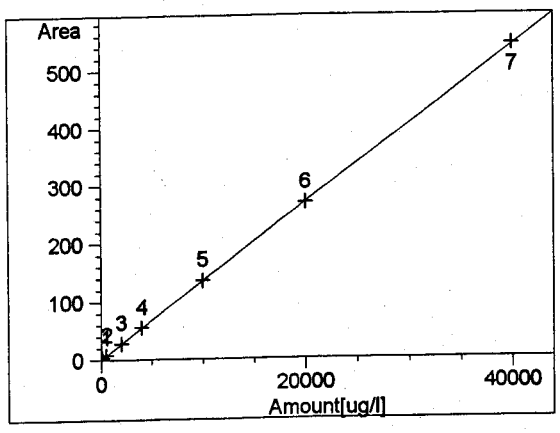
1-Methylnaphthalene (UV) at exp. RT: 6.803
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99974
Residual Std. Dev.: 15.48654
Formula: y = mx + b
m: 1.98256e-2
b: 14.32808
x: Amount[ug/l]
y: Area



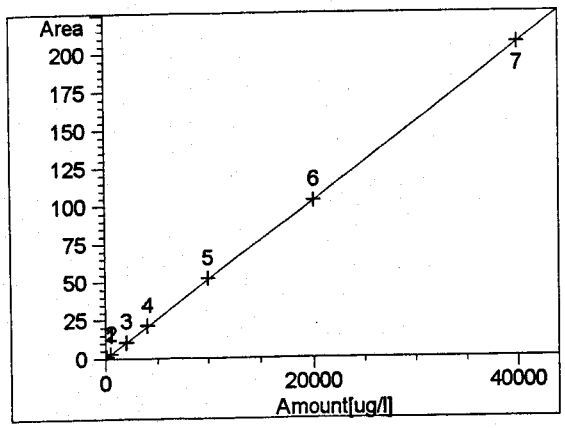
1-Methylnaphthalene (F) at exp. RT: 6.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.31914
Formula: y = mx + b
m: 1.14325e-2
b: 1.95255
x: Amount[ug/l]
y: Area



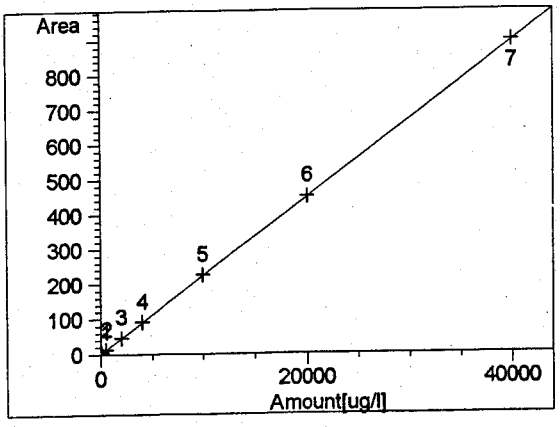
2-Methylnaphthalene at exp. RT: 7.251
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.53962
Formula: y = mx + b
m: 1.12737e-2
b: 5.18225e-1
x: Amount[ug/l]
y: Area



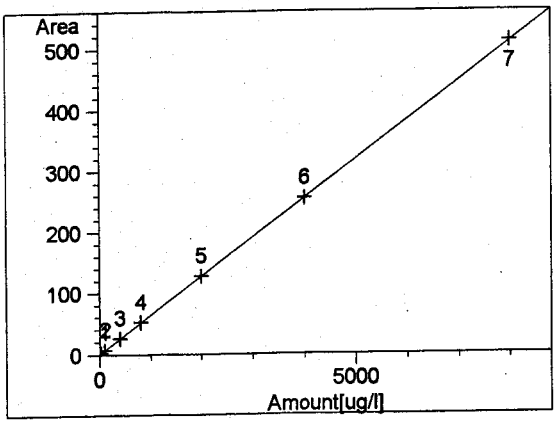
2-Methylnaphthalene at exp. RT: 7.292
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.98972
Formula: y = mx + b
m: 1.35487e-2
b: 1.23431e-1
x: Amount[ug/l]
y: Area



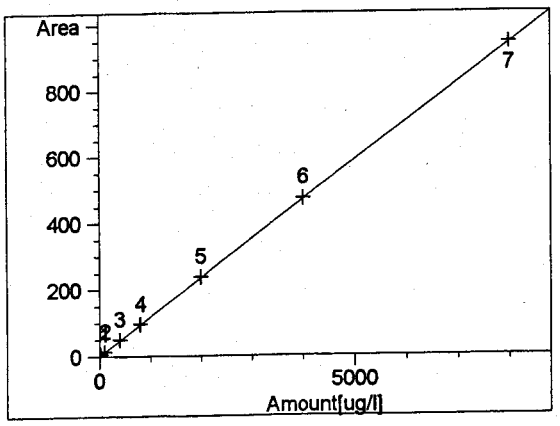
Acenaphthene at exp. RT: 7.640
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.34549
Formula: y = mx + b
m: 5.14123e-3
b: 4.11076e-1
x: Amount[ug/l]
y: Area



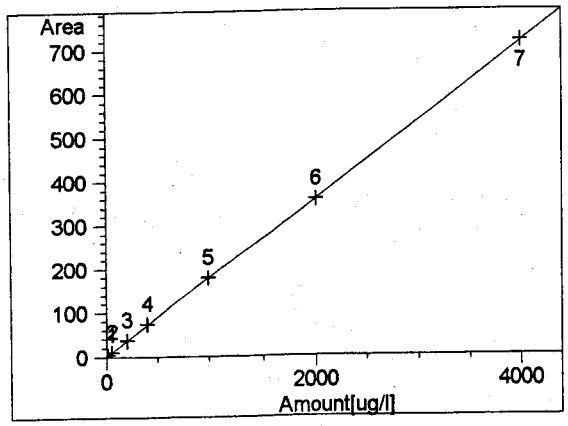
Acenaphthene at exp. RT: 7.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.72283
Formula: y = mx + b
m: 2.24261e-2
b: 9.07591e-1
x: Amount[ug/l]
y: Area



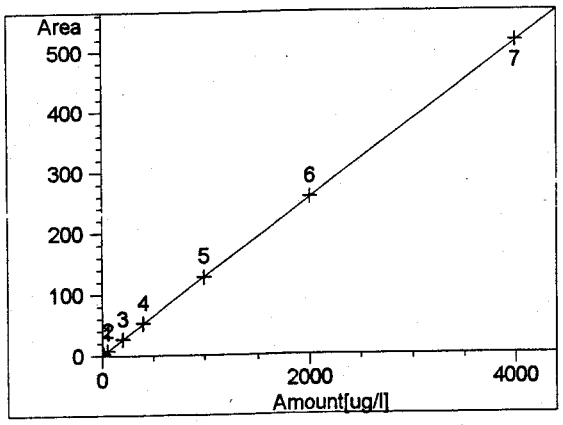
Fluorene at exp. RT: 8.162
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.59741
Formula: y = mx + b
m: 6.38593e-2
b: 4.86444e-2
x: Amount[ug/l]
y: Area



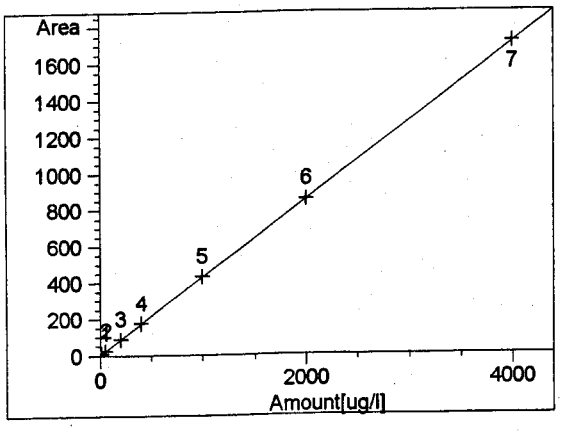
Fluorene at exp. RT: 8.202
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.86849
Formula: y = mx + b
m: 1.17884e-1
b: 1.12755
x: Amount[ug/l]
y: Area



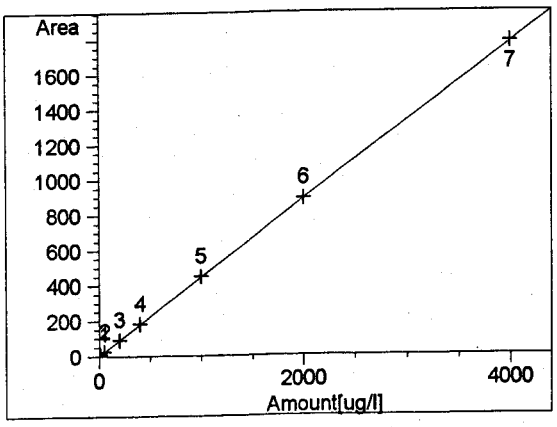
Phenanthrene at exp. RT: 9.288
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.62706
Formula: y = mx + b
m: 1.79247e-1
b: 1.07832e-2
x: Amount[ug/l]
y: Area



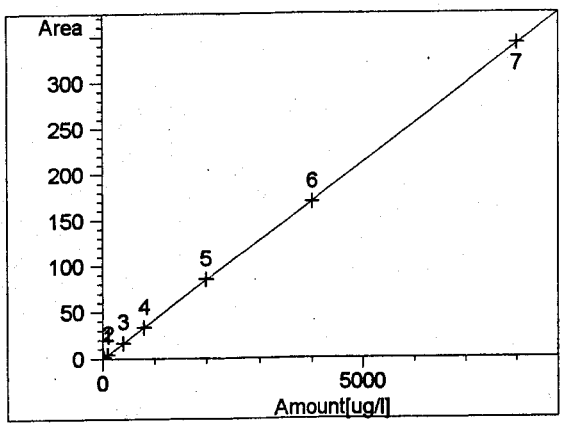
Phenanthrene at exp. RT: 9.326
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.42174
Formula: y = mx + b
m: 1.28533e-1
b: 9.15160e-2
x: Amount[ug/l]
y: Area



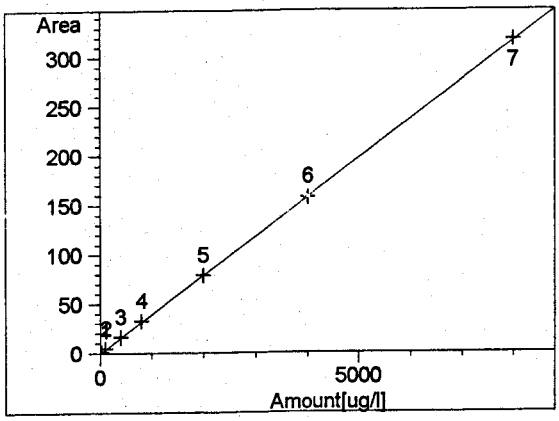
Anthracene at exp. RT: 10.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.35077
Formula: y = mx + b
m: 4.27986e-1
b: 8.59902e-1
x: Amount[ug/l]
y: Area



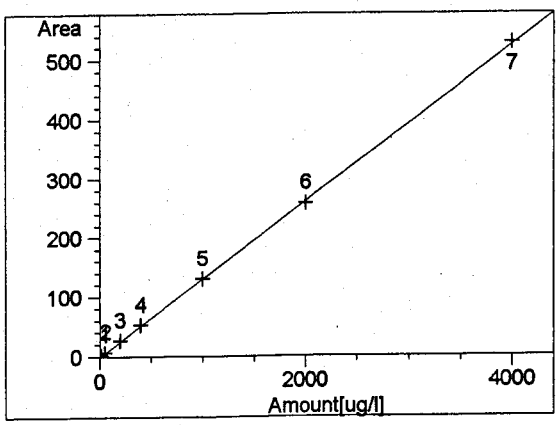
Anthracene at exp. RT: 10.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.14211
Formula: y = mx + b
m: 4.44845e-1
b: 6.72685e-1
x: Amount[ug/l]
y: Area



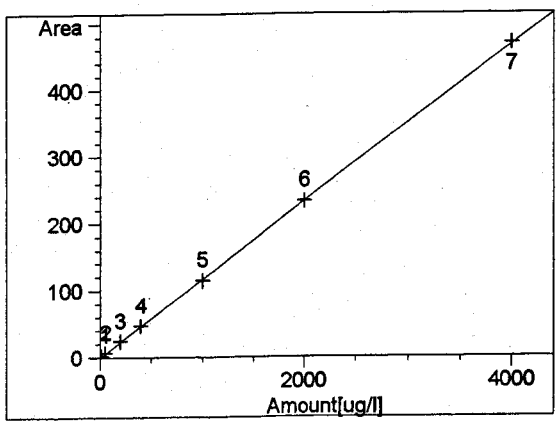
Fluoranthene at exp. RT: 11.462
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.55290
Formula: y = mx + b
m: 4.27109e-2
b: -4.95410e-1
x: Amount[ug/l]
y: Area



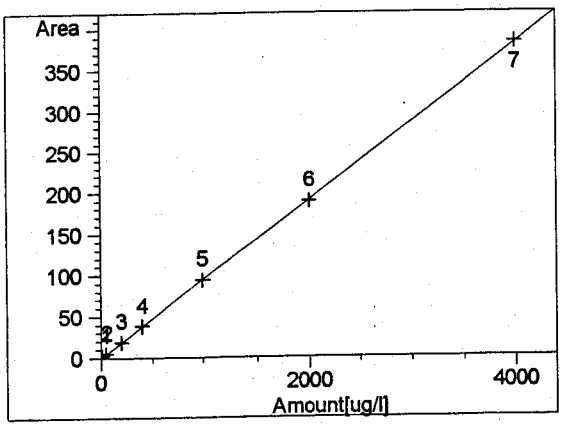
Fluoranthene at exp. RT: 11.501
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.60346
Formula: y = mx + b
m: 3.96163e-2
b: -2.02740e-1
x: Amount[ug/l]
y: Area



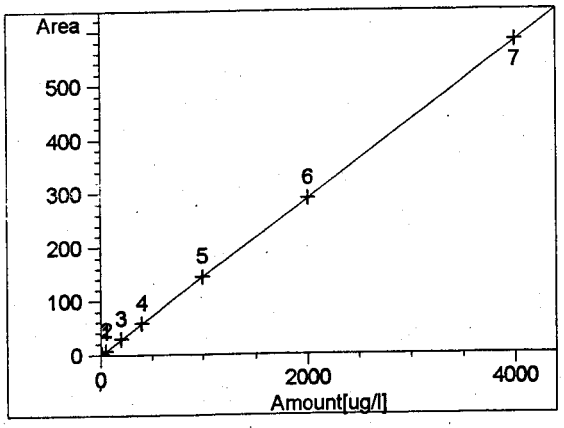
Pyrene at exp. RT: 12.216
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 2.14131
Formula: y = mx + b
m: 1.31654e-1
b: -9.20814e-1
x: Amount[ug/l]
y: Area



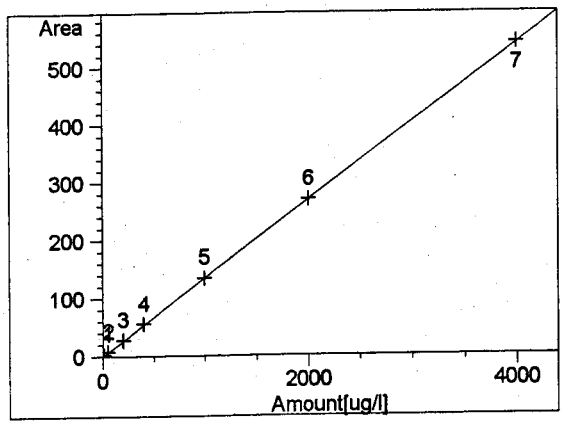
Pyrene at exp. RT: 12.256
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.15832
Formula: y = mx + b
m: 1.17398e-1
b: -6.98719e-1
x: Amount[ug/l]
y: Area



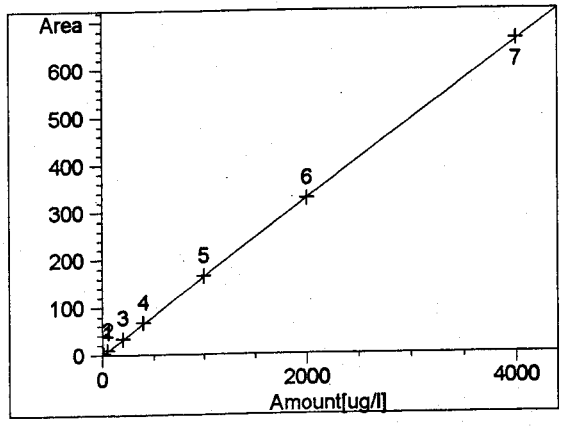
Benzo(a)anthracene at exp. RT: 14.978
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.97360
Formula: y = mx + b
m: 9.56360e-2
b: -5.52553e-1
x: Amount[ug/l]
y: Area



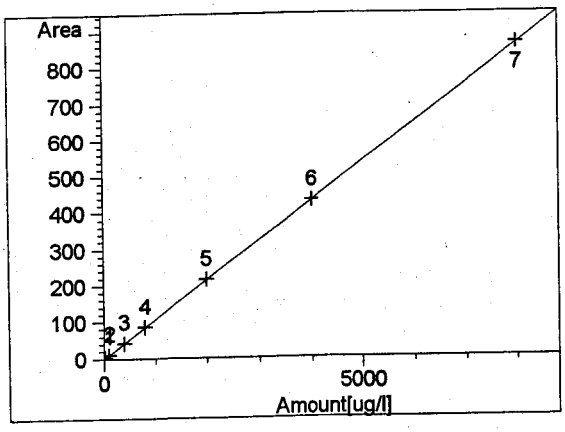
Benzo(a)anthracene at exp. RT: 15.018
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.50825
Formula: y = mx + b
m: 1.45299e-1
b: -3.78919e-1
x: Amount[ug/l]
y: Area



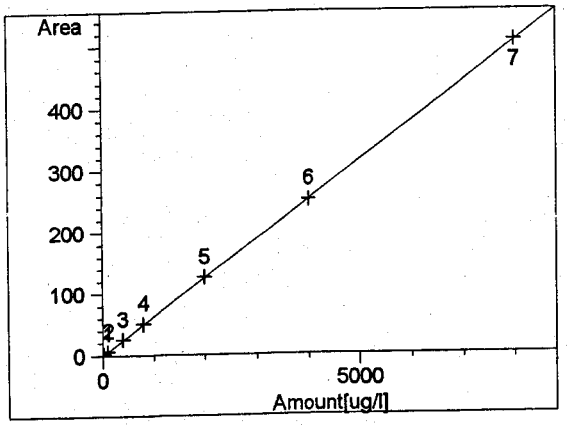
Chrysene at exp. RT: 15.450
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74873
Formula: y = mx + b
m: 1.35164e-1
b: -2.62574e-1
x: Amount[ug/l]
y: Area



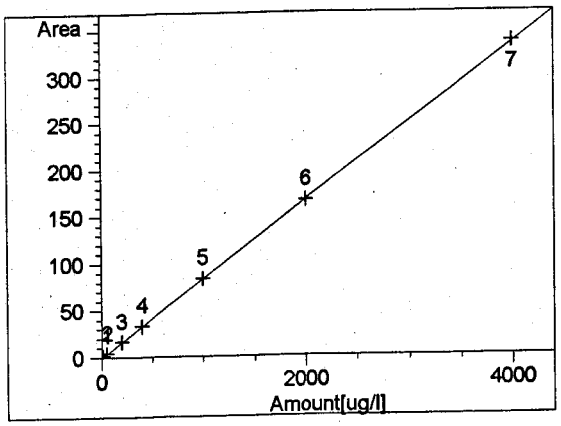
Chrysene at exp. RT: 15.497
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.17995
Formula: y = mx + b
m: 1.64961e-1
b: -1.12842e-1
x: Amount[ug/l]
y: Area



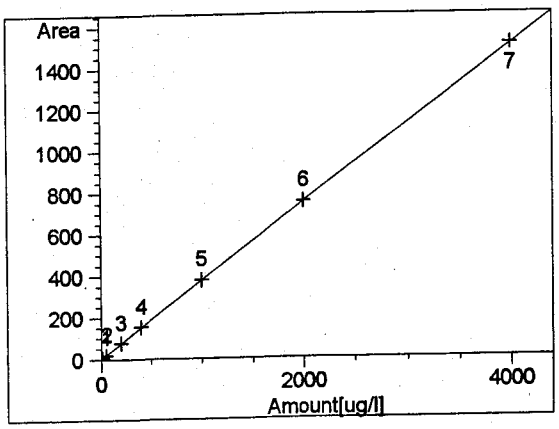
Benzo(b)fluoranthene at exp. RT: 17.660
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.78528
Formula: y = mx + b
m: 1.08120e-1
b: -8.94139e-1
x: Amount[ug/l]
y: Area



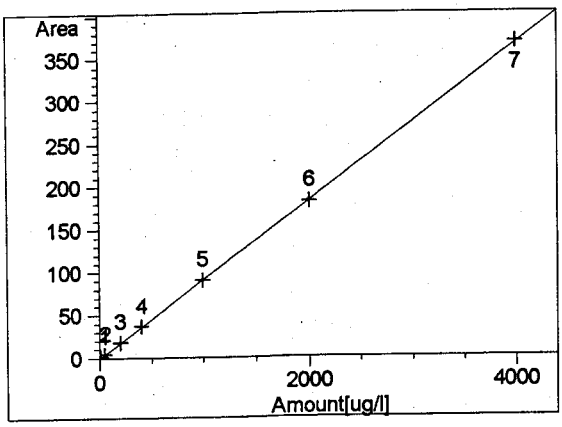
Benzo(b)fluoranthene at exp. RT: 17.699
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.73239
Formula: y = mx + b
m: 6.32897e-2
b: -2.89678e-1
x: Amount[ug/l]
y: Area



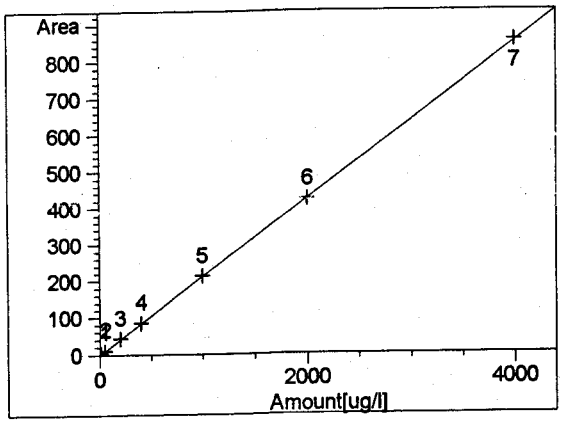
Benzo(k)fluoranthene at exp. RT: 18.594
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.59831
Formula: y = mx + b
m: 8.40358e-2
b: -7.10909e-1
x: Amount[ug/l]
y: Area



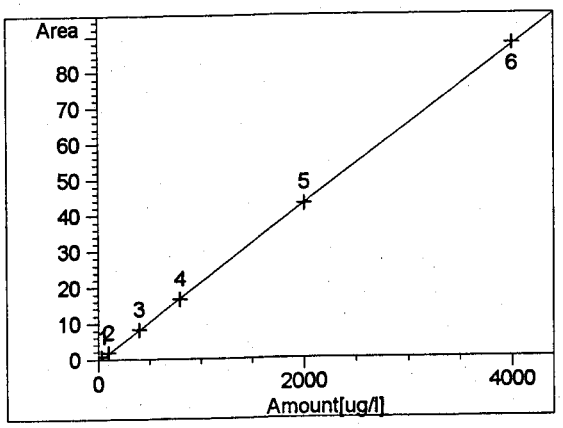
Benzo(k)fluoranthene at exp. RT: 18.634
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.85332
Formula: y = mx + b
m: 3.77407e-1
b: 2.64820e-1
x: Amount[ug/l]
y: Area



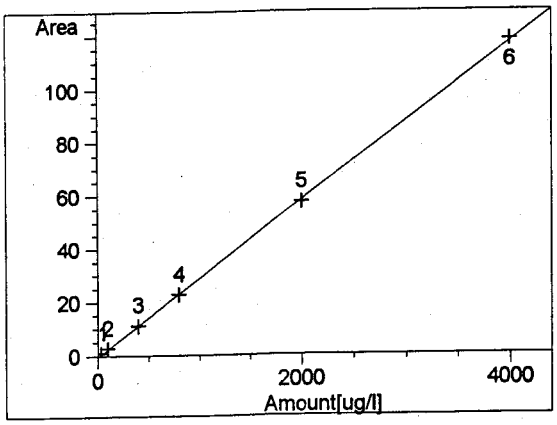
Benzo(a)pyrene at exp. RT: 19.526
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.77395
Formula: y = mx + b
m: 9.20450e-2
b: -7.47469e-1
x: Amount[ug/l]
y: Area



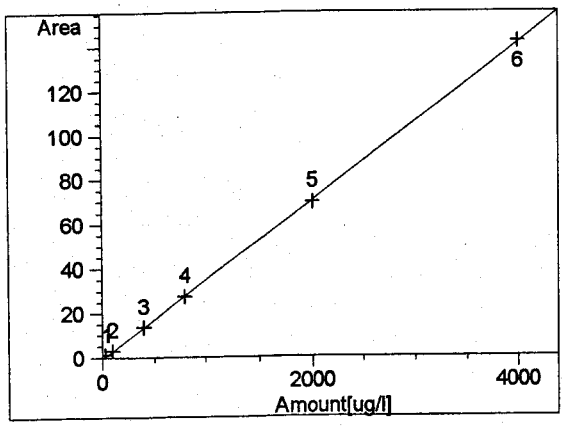
Benzo(a)pyrene at exp. RT: 19.567
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.60441
Formula: y = mx + b
m: 2.13208e-1
b: -6.39631e-1
x: Amount[ug/l]
y: Area



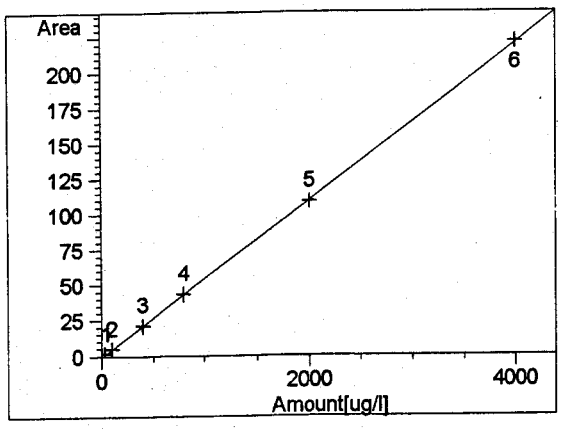
Dibenz(a,h)anthracene at exp. RT: 21.125
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.35432
Formula: y = mx + b
m: 2.19422e-2
b: -5.98019e-1
x: Amount[ug/l]
y: Area



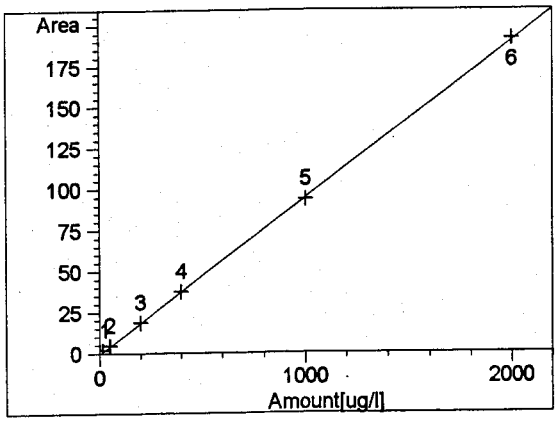
Dibenz(a,h)anthracene at exp. RT: 21.166
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 0.72004
Formula: y = mx + b
m: 2.95336e-2
b: -7.16255e-1
x: Amount[ug/l]
y: Area



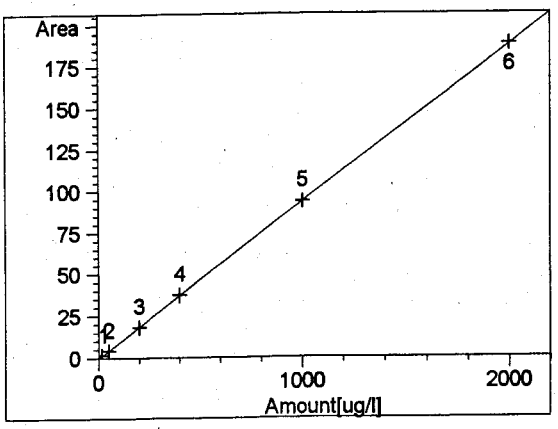
Benzo(g,h,i)perylene at exp. RT: 21.906
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.57908
Formula: y = mx + b
m: 3.56456e-2
b: -8.16409e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 21.945
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 0.67791
Formula: y = mx + b
m: 5.53982e-2
b: -8.48128e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.404
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99993
Residual Std. Dev.: 0.95379
Formula: y = mx + b
m: 9.55220e-2
b: -6.20739e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.442
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.26609
Formula: y = mx + b
m: 9.43856e-2
b: -5.82488e-1
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 297149198001 Cal Date : 13-APR-2007

ICV 297149198015 (10300015 13-APR-2007) stds: S5969

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0132	0.0132	5000	4985	ug/L	0	15	
Acenaphthylene	1	0.0097	0.0102	10000	10400	ug/L	4	15	
Acenaphthene	1	0.0055	0.0054	5000	5143	ug/L	3	15	
Fluorene	1	0.0650	0.0632	1000	988.9	ug/L	-1	15	
Phenanthrene	1	0.1799	0.1734	500.0	483.6	ug/L	-3	15	
Anthracene	1	0.4299	0.4187	500.0	487.2	ug/L	-3	15	
Fluoranthene	1	0.0414	0.0405	1000	958.8	ug/L	-4	15	
Benzo(a)anthracene	1	0.0950	0.0915	500.0	484.0	ug/L	-3	15	
Chrysene	1	0.1314	0.1297	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	1	0.1041	0.1040	1000	969.7	ug/L	-3	15	
Benzo(k)fluoranthene	1	0.0778	0.0799	500.0	484.0	ug/L	-3	15	
Benzo(a)pyrene	1	0.0854	0.0842	500.0	465.8	ug/L	-7	15	
Dibenz(a,h)anthracene	1	0.0198	0.0196	1000	919.4	ug/L	-8	15	
Benzo(g,h,i)perylene	1	0.0323	0.0325	1000	934.2	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0918	500.0	487.2	ug/L	-3	15	
Acenaphthylene	2	0.0885	0.0889	10000	10230	ug/L	2	15	
Pyrene	2	0.1282	0.1280	500.0	493.0	ug/L	-1	15	
Naphthalene	3	0.0104	0.0100	5000	4847	ug/L	-3	15	
Acenaphthene	3	0.0228	0.0221	5000	4878	ug/L	-2	15	
Fluorene	3	0.1201	0.1139	1000	956.8	ug/L	-4	15	
Phenanthrene	3	0.1297	0.1171	500.0	454.8	ug/L	-9	15	
Anthracene	3	0.4469	0.4331	500.0	485.3	ug/L	-3	15	
Fluoranthene	3	0.0394	0.0375	1000	952.4	ug/L	-5	15	
Pyrene	3	0.1158	0.1123	500.0	484.1	ug/L	-3	15	
Benzo(a)anthracene	3	0.1432	0.1386	500.0	479.4	ug/L	-4	15	
Chrysene	3	0.1647	0.1587	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0625	0.0604	1000	958.7	ug/L	-4	15	
Benzo(k)fluoranthene	3	0.3745	0.3647	500.0	482.4	ug/L	-4	15	
Benzo(a)pyrene	3	0.2088	0.1970	500.0	465.0	ug/L	-7	15	
Dibenz(a,h)anthracene	3	0.0275	0.0267	1000	928.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0518	0.0508	1000	932.5	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0919	500.0	492.9	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : L IDF : 1.0
Seqnum : 297236832002 File : 16400002 Time : 13-JUN-2007 11:43
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0137	2000	2058	ug/L	3	15	
Acenaphthylene	1	0.0097	0.0099	4000	3996	ug/L	0	15	
Acenaphthene	1	0.0055	0.0053	2000	1971	ug/L	-1	15	
Fluorene	1	0.0650	0.0652	400.0	407.7	ug/L	2	15	
Phenanthrene	1	0.1799	0.1832	200.0	204.3	ug/L	2	15	
Anthracene	1	0.4299	0.4347	200.0	201.1	ug/L	1	15	
Fluoranthene	1	0.0414	0.0439	400.0	422.7	ug/L	6	15	
Benzo(a)anthracene	1	0.0950	0.0948	200.0	204.1	ug/L	2	15	
Chrysene	1	0.1314	0.1394	200.0	208.2	ug/L	4	15	
Benzo(b)fluoranthene	1	0.1041	0.1074	400.0	405.7	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0778	0.0814	200.0	202.2	ug/L	1	15	
Benzo(a)pyrene	1	0.0854	0.0905	200.0	204.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0214	400.0	417.3	ug/L	4	15	
Benzo(g,h,i)perylene	1	0.0323	0.0336	400.0	400.1	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0913	200.0	197.6	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0089	8000	8119	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0913	4000	4090	ug/L	2	15	
Pyrene	2	0.1282	0.1313	200.0	206.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0222	8000	8253	ug/L	3	15	
Naphthalene	3	0.0104	0.0106	2000	2052	ug/L	3	15	
Acenaphthene	3	0.0228	0.0229	2000	2004	ug/L	0	15	
Fluorene	3	0.1201	0.1230	400.0	407.8	ug/L	2	15	
Phenanthrene	3	0.1297	0.1323	200.0	205.2	ug/L	3	15	
Anthracene	3	0.4469	0.4510	200.0	201.3	ug/L	1	15	
Fluoranthene	3	0.0394	0.0396	400.0	405.4	ug/L	1	15	
Pyrene	3	0.1158	0.1190	200.0	208.6	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1436	200.0	200.3	ug/L	0	15	
Chrysene	3	0.1647	0.1719	200.0	209.1	ug/L	5	15	
Benzo(b)fluoranthene	3	0.0625	0.0624	400.0	398.9	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3738	200.0	197.4	ug/L	-1	15	
Benzo(a)pyrene	3	0.2088	0.2124	200.0	202.3	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0275	0.0281	400.0	404.9	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0547	400.0	410.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0922	200.0	201.6	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0119	8000	8183	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : M IDF : 1.0
Seqnum : 297236832017 File : 16400017 Time : 13-JUN-2007 19:37
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	4000	4085	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	8000	8117	ug/L	1	15	
Acenaphthene	1	0.0055	0.0053	4000	4070	ug/L	2	15	
Fluorene	1	0.0650	0.0654	800.0	818.6	ug/L	2	15	
Phenanthrene	1	0.1799	0.1823	400.0	406.7	ug/L	2	15	
Anthracene	1	0.4299	0.4367	400.0	406.1	ug/L	2	15	
Fluoranthene	1	0.0414	0.0436	800.0	828.8	ug/L	4	15	
Benzo(a)anthracene	1	0.0950	0.0942	400.0	399.6	ug/L	0	15	
Chrysene	1	0.1314	0.1365	400.0	406.0	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1072	800.0	801.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0824	400.0	400.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0854	0.0921	400.0	408.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0210	800.0	792.8	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0350	800.0	807.7	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0943	400.0	401.5	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0088	16000	16320	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0903	8000	8273	ug/L	3	15	
Pyrene	2	0.1282	0.1321	400.0	408.4	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0219	16000	16930	ug/L	6	15	
Naphthalene	3	0.0104	0.0102	4000	3970	ug/L	-1	15	
Acenaphthene	3	0.0228	0.0223	4000	3945	ug/L	-1	15	
Fluorene	3	0.1201	0.1213	800.0	813.4	ug/L	2	15	
Phenanthrene	3	0.1297	0.1280	400.0	397.7	ug/L	-1	15	
Anthracene	3	0.4469	0.4493	400.0	402.5	ug/L	1	15	
Fluoranthene	3	0.0394	0.0393	800.0	798.9	ug/L	0	15	
Pyrene	3	0.1158	0.1162	400.0	401.7	ug/L	0	15	
Benzo(a)anthracene	3	0.1432	0.1423	400.0	394.2	ug/L	-1	15	
Chrysene	3	0.1647	0.1681	400.0	408.3	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0625	0.0621	800.0	789.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3721	400.0	393.7	ug/L	-2	15	
Benzo(a)pyrene	3	0.2088	0.2113	400.0	399.4	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0275	0.0284	800.0	794.0	ug/L	-1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0539	800.0	793.6	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0908	400.0	391.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0116	0.0115	16000	15960	ug/L	0	15	

SEQUENCE SUMMARY FOR 195279 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297149198 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-APR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	10300001	X	PRIMER - 103			13-APR-2007 14:38	1.0						
002	10300002	X	PRIMER			13-APR-2007 15:09	1.0						
003	10300003	X	IB - 103			13-APR-2007 15:41	1.0						
004	10300004	X	IB			13-APR-2007 16:13	1.0						
005	10300005	X	IB			13-APR-2007 16:44	1.0						
006	10300006	ICAL				13-APR-2007 17:16	1.0					1	
007	10300007	ICAL				13-APR-2007 17:47	1.0					2	
008	10300008	ICAL				13-APR-2007 18:19	1.0					3	
009	10300009	ICAL				13-APR-2007 18:51	1.0					4	
010	10300010	ICAL				13-APR-2007 19:22	1.0					5	
011	10300011	ICAL				13-APR-2007 19:54	1.0					6	
012	10300012	ICAL				13-APR-2007 20:25	1.0					7	
013	10300013	X	IB			13-APR-2007 20:57	1.0						
014	10300014	X	IB			13-APR-2007 21:29	1.0						
015	10300015	ICV				13-APR-2007 22:00	1.0		50			8	
016	10300016	X	ICV			13-APR-2007 22:32	1.0					8	
017	10300017	X	IB			13-APR-2007 23:03	1.0						

Stds used: 1=S5288 2=S5287 3=S5286 4=S5285 5=S5284 6=S5283 7=S5282 8=S5969

SEQUENCE SUMMARY FOR 195279 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297236832 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-JUN-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	16400001	X	IB - 164			13-JUN-2007 11:12	1.0						
002	16400002	CCV	L			13-JUN-2007 11:43	1.0	1.0			50	1	
003	16400003	X	CCV			13-JUN-2007 12:15	1.0					1	
004	16400004	X	IB			13-JUN-2007 12:46	1.0						
005	16400005	BLANK	QC391739	126173	Water	13-JUN-2007 13:18	1.0	0.002			50		
006	16400006	MSS	195270-013	126173	Water	13-JUN-2007 13:50	1.0	0.001923			50		
007	16400007	LCS	QC391740	126173	Water	13-JUN-2007 14:21	1.0	0.002			50		
008	16400008	MS	QC391741	126173	Water	13-JUN-2007 14:53	1.0	0.001923		5	50		
009	16400009	MSD	QC391742	126173	Water	13-JUN-2007 15:24	1.0	0.001923		2	50		
010	16400010	X	IB			13-JUN-2007 15:56	1.0						
011	16400011	SAMPLE	195270-014	126173	Water	13-JUN-2007 16:28	1.0	0.001887			50		
012	16400012	SAMPLE	195270-015	126173	Water	13-JUN-2007 16:59	1.0	0.001905			50		
013	16400013	SAMPLE	195270-016	126173	Water	13-JUN-2007 17:31	1.0	0.001905			50		
014	16400014	SAMPLE	195279-001	126173	Water	13-JUN-2007 18:03	1.0	0.001905			50		
015	16400015	SAMPLE	195303-030	126173	Water	13-JUN-2007 18:34	1.0	0.001923			50		
016	16400016	X	IB			13-JUN-2007 19:06	1.0						
017	16400017	CCV	M			13-JUN-2007 19:37	1.0	1.0			50	2	
018	16400018	X	CCV			13-JUN-2007 20:09	1.0					2	
019	16400019	X	IB			13-JUN-2007 20:41	1.0						
020	16400020	SAMPLE	195247-001	126173	Water	13-JUN-2007 21:12	1.0	0.002105			50		
021	16400021	SAMPLE	195247-002	126173	Water	13-JUN-2007 21:44	1.0	0.001905			50		
022	16400022	X	IB			13-JUN-2007 22:15	1.0						
023	16400023	SAMPLE	195270-001	126173	Water	13-JUN-2007 22:47	1.0	0.001887	6	1	50		6:MTNPH1=86805.2
024	16400024	SAMPLE	195270-002	126173	Water	13-JUN-2007 23:19	1.0	0.001905	6	1	50		6:MTNPH1=85026.4
025	16400025	X	IB			13-JUN-2007 23:50	1.0						
026	16400026	X	IB			14-JUN-2007 00:22	1.0						
027	16400027	CCV	H			14-JUN-2007 00:53	1.0	1.0			50	3	
028	16400028	X	CCV			14-JUN-2007 01:25	1.0					3	
029	16400029	X	IB			14-JUN-2007 01:56	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 195279 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195279-001	Naphthalene	HPLC04	1	06/13/07 18:03
195279-001	Acenaphthylene	HPLC04	1	06/13/07 18:03
195279-001	Acenaphthene	HPLC04	1	06/13/07 18:03
195279-001	Fluorene	HPLC04	1	06/13/07 18:03
195279-001	Phenanthrene	HPLC04	3	06/13/07 18:03
195279-001	Anthracene	HPLC04	3	06/13/07 18:03
195279-001	Fluoranthene	HPLC04	3	06/13/07 18:03
195279-001	Pyrene	HPLC04	3	06/13/07 18:03
195279-001	Benzo(a)anthracene	HPLC04	3	06/13/07 18:03
195279-001	Chrysene	HPLC04	3	06/13/07 18:03
195279-001	Benzo(b)fluoranthene	HPLC04	3	06/13/07 18:03
195279-001	Benzo(k)fluoranthene	HPLC04	3	06/13/07 18:03
195279-001	Benzo(a)pyrene	HPLC04	3	06/13/07 18:03
195279-001	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 18:03
195279-001	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 18:03
195279-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 18:03
195279-001	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 18:03
195279-001	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 18:03
QC391739	Naphthalene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthylene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthene	HPLC04	1	06/13/07 13:18
QC391739	Fluorene	HPLC04	1	06/13/07 13:18
QC391739	Phenanthrene	HPLC04	3	06/13/07 13:18
QC391739	Anthracene	HPLC04	3	06/13/07 13:18
QC391739	Fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Pyrene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Chrysene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(b)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(k)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)pyrene	HPLC04	3	06/13/07 13:18
QC391739	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 13:18
QC391739	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 13:18
QC391739	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 13:18
QC391739	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 13:18
QC391740	Naphthalene	HPLC04	1	06/13/07 14:21
QC391740	Fluorene	HPLC04	1	06/13/07 14:21
QC391740	Pyrene	HPLC04	3	06/13/07 14:21
QC391740	Benzo(a)pyrene	HPLC04	3	06/13/07 14:21
QC391740	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:21
QC391740	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:21
QC391741	Naphthalene	HPLC04	1	06/13/07 14:53
QC391741	Fluorene	HPLC04	1	06/13/07 14:53
QC391741	Pyrene	HPLC04	3	06/13/07 14:53
QC391741	Benzo(a)pyrene	HPLC04	3	06/13/07 14:53
QC391741	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:53
QC391741	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:53
QC391742	Naphthalene	HPLC04	1	06/13/07 15:24
QC391742	Fluorene	HPLC04	1	06/13/07 15:24

REPORTING SUMMARY FOR 195279 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391742	Pyrene	HPLC04	3	06/13/07 15:24
QC391742	Benzo(a)pyrene	HPLC04	3	06/13/07 15:24
QC391742	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 15:24
QC391742	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 15:24

5

Curtis & Tompkins Laboratories **Sample Preparation Summary** **12-JUN-2007 23:25**

Batch Number : 126173
Date Extracted: 11-JUN-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S6106F
Spike #2 ID : S6358A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195247-001		Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
195247-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-002		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-013		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		MSS
195270-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-015		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-016		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195279-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195303-030		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	4	.1	0		8310		
QC391739	BLANK		Water	1000	mL	2	0.002000	1		.1	0		8310		
QC391740	LCS		Water	1000	mL	2	0.002000	1		.1	1		8310		
QC391741	MS	of 195270-013	Water	1040	mL	2	0.001923	1	7	.1	1		8310		
QC391742	MSD	of 195270-013	Water	1040	mL	2	0.001923	1	7	.1	1		8310		

Prep Chemist: JCM for JOM 6/13/07 Reviewed By: [signature] Date: 6/12/07

Relinquished By: [signature] Received By: [signature] Date: 13JUN2007

00153

8310 (PAH) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 126173
LIMS Analysis: 8310
Date Extracted: 11 June 07

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

	Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
①②	195247-001 G	950	7	2.0		
	↓ 02 H	1050				
	195270-001 J	1060				
②	02 K	1050				
5	13 X	1040				MSS
	14 I	1060				
	15 H	1050				
	16 I					
	195279-001 Q					*
10	195303-030 J	1040	4			*
	MB QC391739	1000	NA			
	LCS 40					
	MS 41	1040	7			195270-013 ~~AK~~ AA
	MSD 42	1040	7			
15						
20						

① while transporting samples to setups, cart jostled samples losing 1-5mls
② went dry

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1710
Extraction End Time: 1130
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granualr Na2SO4
Exchanged 2x with Acetonitrile
Concentrated to final volumes as noted above
Extracts filtered with 0.45 um PTFE syringe filter
Relinquished to the HPLC group

Lot# / LIMS # / Time	Date/ Initials
S6106F/K*	JLM 6/11/07
S6358A	
EM47092	
1710	
1130	JLM 6/12/07
NA	6/12/07 KR
EM46283706	
EM46173	
✓	
Whatman 0602	
✓	

Jennie Mee 6/11/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

6/12/07
Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 06/28/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

METALS

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW060707A	Batch#:	126092
Lab ID:	195279-001	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	10.00	Analyzed:	06/08/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	720	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

6.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391463	Batch#:	126092
Matrix:	Filtrate	Prepared:	06/08/07
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/08/07
Antimony	ND	1.0	06/08/07
Arsenic	ND	5.0	06/08/07
Barium	ND	10	06/08/07
Beryllium	ND	2.0	06/08/07
Cadmium	ND	1.0	06/08/07
Calcium	ND	500	06/08/07
Chromium	ND	10	06/11/07
Cobalt	ND	10	06/08/07
Copper	5.0 b	1.0	06/08/07
Iron	ND	100	06/08/07
Lead	ND	3.0	06/08/07
Magnesium	ND	500	06/08/07
Manganese	ND	10	06/08/07
Nickel	ND	20	06/08/07
Potassium	ND	500	06/08/07
Selenium	ND	5.0	06/08/07
Silver	ND	1.0	06/08/07
Sodium	ND	500	06/08/07
Thallium	ND	1.0	06/08/07
Vanadium	ND	10	06/08/07
Zinc	ND	20	06/08/07

b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	06/07/07
Field ID:	DW060707A	Received:	06/07/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	1.000	Analyzed:	06/14/07
Batch#:	126221		

Type	Lab ID	Matrix	Result	RL
SAMPLE	195279-001	Filtrate	ND	0.20
BLANK	QC391965	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

11.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126092
Units:	ug/L	Prepared:	06/08/07
Diln Fac:	1.000	Analyzed:	06/08/07

Type: BS Lab ID: QC391464

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,491	95	80-120
Antimony	100.0	96.92	97	80-120
Arsenic	100.0	93.26	93	80-120
Barium	100.0	91.76	92	80-120
Beryllium	100.0	98.72	99	80-120
Cadmium	100.0	96.17	96	80-120
Calcium	10,000	9,777	98	80-120
Chromium	100.0	98.24	98	80-120
Cobalt	100.0	98.32	98	80-120
Copper	100.0	98.60	99	80-120
Iron	10,000	9,850	99	80-120
Lead	100.0	96.70	97	80-120
Magnesium	10,000	9,493	95	80-120
Manganese	100.0	97.73	98	80-120
Nickel	100.0	98.59	99	80-120
Potassium	10,000	9,613	96	80-120
Selenium	100.0	98.83	99	80-120
Silver	100.0	97.15	97	80-120
Sodium	10,000	9,873	99	80-120
Thallium	50.00	47.96	96	80-120
Vanadium	100.0	96.17	96	80-120
Zinc	100.0	96.69	97	80-120

Type: BSD Lab ID: QC391465

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,253	93	80-120	3	20
Antimony	100.0	94.75	95	80-120	2	20
Arsenic	100.0	92.91	93	80-120	0	20
Barium	100.0	89.84	90	80-120	2	20
Beryllium	100.0	97.58	98	80-120	1	20
Cadmium	100.0	94.66	95	80-120	2	20
Calcium	10,000	9,505	95	80-120	3	20
Chromium	100.0	96.17	96	80-120	2	20
Cobalt	100.0	96.53	97	80-120	2	20
Copper	100.0	97.34	97	80-120	1	20
Iron	10,000	9,653	97	80-120	2	20
Lead	100.0	93.77	94	80-120	3	20
Magnesium	10,000	9,261	93	80-120	2	20
Manganese	100.0	96.11	96	80-120	2	20
Nickel	100.0	97.16	97	80-120	1	20
Potassium	10,000	9,404	94	80-120	2	20
Selenium	100.0	98.07	98	80-120	1	20
Silver	100.0	95.56	96	80-120	2	20
Sodium	10,000	9,741	97	80-120	1	20
Thallium	50.00	47.36	95	80-120	1	20
Vanadium	100.0	94.38	94	80-120	2	20
Zinc	100.0	99.92	100	80-120	3	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126221
Field ID:	ZZZZZZZZZZ	Sampled:	06/06/07
MSS Lab ID:	195271-001	Received:	06/07/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	1.000	Analyzed:	06/14/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC391966	Water		5.000	4.350	87	80-120		
BSD	QC391967	Water		5.000	4.620	92	80-120	6	20
MS	QC391969	WET Leachate	<0.1041	5.000	5.330	107	75-125		
MSD	QC391970	WET Leachate		5.000	5.320	106	75-125	0	20

RPD= Relative Percent Difference

24.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	126092
MSS Lab ID:	195270-007	Sampled:	06/06/07
Matrix:	Filtrate	Received:	06/07/07
Units:	ug/L	Prepared:	06/08/07

Type: MS Lab ID: QC391466

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln Fac	Analyzed
Aluminum	20.12	10,000	9,586	96	75-125	10.00	06/08/07
Antimony	0.4612	100.0	90.65	90	75-125	10.00	06/08/07
Arsenic	1.096	100.0	98.84	98	75-125	10.00	06/08/07
Barium	46.24	100.0	139.9	94	75-125	10.00	06/08/07
Beryllium	0.4381	100.0	96.32	96	75-125	10.00	06/08/07
Cadmium	0.2802	100.0	97.00	97	75-125	10.00	06/08/07
Calcium	18,940	10,000	28,430	95	75-125	10.00	06/08/07
Chromium	112.1	100.0	209.0	97	75-125	10.00	06/08/07
Cobalt	0.6531	100.0	98.27	98	75-125	10.00	06/08/07
Copper	1.557	100.0	98.98	97	75-125	10.00	06/08/07
Iron	<22.60	10,000	9,987	100	75-125	10.00	06/08/07
Lead	0.5220	100.0	92.97	92	75-125	10.00	06/08/07
Magnesium	83,680	10,000	92,230	86 NM	75-125	10.00	06/08/07
Manganese	1.477	100.0	98.32	97	75-125	10.00	06/08/07
Nickel	4.334	100.0	101.1	97	75-125	10.00	06/08/07
Potassium	118.2	10,000	9,729	96	75-125	10.00	06/08/07
Selenium	1.327	100.0	101.7	100	75-125	10.00	06/08/07
Silver	0.3267	100.0	90.54	90	75-125	10.00	06/08/07
Sodium	217,900	10,000	224,800	69 NM	75-125	100.0	06/15/07
Thallium	0.5990	50.00	44.94	89	75-125	10.00	06/08/07
Vanadium	5.086	100.0	100.2	95	75-125	10.00	06/08/07
Zinc	<3.210	100.0	106.6	107	75-125	10.00	06/08/07

Type: MSD Lab ID: QC391467

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Aluminum	10,000	9,502	95	75-125	1	20	10.00	06/08/07
Antimony	100.0	92.53	92	75-125	2	20	10.00	06/08/07
Arsenic	100.0	96.49	95	75-125	2	20	10.00	06/08/07
Barium	100.0	139.8	94	75-125	0	20	10.00	06/08/07
Beryllium	100.0	93.81	93	75-125	3	20	10.00	06/08/07
Cadmium	100.0	96.19	96	75-125	1	20	10.00	06/08/07
Calcium	10,000	28,370	94	75-125	0	20	10.00	06/08/07
Chromium	100.0	208.5	96	75-125	0	20	10.00	06/08/07
Cobalt	100.0	97.51	97	75-125	1	20	10.00	06/08/07
Copper	100.0	97.25	96	75-125	2	20	10.00	06/08/07
Iron	10,000	9,978	100	75-125	0	20	10.00	06/08/07
Lead	100.0	91.38	91	75-125	2	20	10.00	06/08/07
Magnesium	10,000	91,970	83 NM	75-125	0	20	10.00	06/08/07
Manganese	100.0	96.81	95	75-125	2	20	10.00	06/08/07
Nickel	100.0	100.6	96	75-125	0	20	10.00	06/08/07
Potassium	10,000	9,639	95	75-125	1	20	10.00	06/08/07
Selenium	100.0	102.7	101	75-125	1	20	10.00	06/08/07
Silver	100.0	91.12	91	75-125	1	20	10.00	06/08/07
Sodium	10,000	227,700	98 NM	75-125	1	20	100.0	06/15/07
Thallium	50.00	44.98	89	75-125	0	20	10.00	06/08/07
Vanadium	100.0	100.9	96	75-125	1	20	10.00	06/08/07
Zinc	100.0	99.80	100	75-125	7	20	10.00	06/08/07

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Units:	ug/L
Type:	Serial Dilution	Batch#:	126092
MSS Lab ID:	195270-007	Sampled:	06/06/07
Lab ID:	QC391468	Received:	06/07/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	ND	500.0	NC	10	50.00	06/08/07
Antimony	ND	1.000	ND	5.000	NC	10	50.00	06/08/07
Arsenic	ND	5.000	1.805 J	5.000	NC	10	50.00	06/08/07
Barium	46.24	10.00	47.95	10.00	4	10	50.00	06/08/07
Beryllium	ND	2.000	ND	5.000	NC	10	50.00	06/08/07
Cadmium	ND	1.000	ND	5.000	NC	10	50.00	06/08/07
Calcium	18,940	500.0	19,160	500.0	1	10	50.00	06/08/07
Chromium	112.1	10.00	115.6	10.00	3	10	50.00	06/08/07
Cobalt	ND	10.00	0.8872 J	10.00	NC	10	50.00	06/08/07
Copper	1.557	1.000	ND	5.000	NC	10	50.00	06/08/07
Iron	ND	100.0	ND	500.0	NC	10	50.00	06/08/07
Lead	ND	3.000	0.8631 J	5.000	NC	10	50.00	06/08/07
Magnesium	83,680	500.0	85,020	500.0	2	10	50.00	06/08/07
Manganese	ND	10.00	2.039 J	10.00	NC	10	50.00	06/08/07
Nickel	ND	20.00	4.960 J	20.00	NC	10	50.00	06/08/07
Potassium	ND	500.0	ND	500.0	NC	10	50.00	06/08/07
Selenium	ND	5.000	1.053 J	5.000	NC	10	50.00	06/08/07
Silver	ND	1.000	0.3753 J	5.000	NC	10	50.00	06/08/07
Sodium	217,900	1,000	215,700	5,000	1	10	500.0	06/15/07
Thallium	ND	1.000	1.368 J	2.500	NC	10	50.00	06/08/07
Vanadium	ND	10.00	12.06	10.00	NC	10	50.00	06/08/07
Zinc	ND	20.00	ND	20.00	NC	10	50.00	06/08/07

= Estimated value
= Not Calculated
= Not Detected
= Reporting Limit

10.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	126221
MSS Lab ID:	195271-001	Sampled:	06/06/07
Lab ID:	QC391968	Received:	06/07/07
Matrix:	WET Leachate	Analyzed:	06/14/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	1.000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

25.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897229804064
File : f08o0064
IDF : 10.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126092
Time : 08-JUN-2007 20:23
Cal : 897229804001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897229804068
File : f08o0068
IDF : 10.0
Lab ID : QC391469
Matrix : Filtrate
Batch : 126092
Time : 08-JUN-2007 20:46
Cal : 897229804001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	2.012	A	10000	9549	A	95	75-125	u
Antimony	0.04612	A	100.0	97.33	A	97	75-125	u
Arsenic	0.1096	E	100.0	95.58	E	95	75-125	u
Barium	4.624	A	100.0	98.47	A	94	75-125	u
Beryllium	0.04381	A	100.0	94.17	A	94	75-125	u
Cadmium	0.02802	A	100.0	96.89	A	97	75-125	u
Calcium	1894	A	10000	11410	A	95	75-125	u
Chromium	11.21	E	100.0	106.0	E	95	75-125	u
Cobalt	0.06531	E	100.0	95.95	E	96	75-125	u
Copper	0.1557	E	100.0	96.99	E	97	75-125	u
Iron	ND	H	10000	9769	H	98	75-125	u
Lead	0.05220	A	100.0	88.23	A	88	75-125	u
Magnesium	8368	A	10000	17900	A	95	75-125	u
Manganese	0.1477	E	100.0	95.53	E	95	75-125	u
Molybdenum	ND	A	100.0	88.78	A	89	75-125	u
Nickel	0.4334	E	100.0	96.22	E	96	75-125	u
Potassium	11.82	A	10000	9624	A	96	75-125	u
Selenium	0.1327	H	100.0	99.88	H	100	75-125	u
Silver	0.03267	A	100.0	91.19	A	91	75-125	u
Thallium	0.05990	A	50.00	48.56	A	97	75-125	u
Vanadium	0.5086	E	100.0	94.74	E	94	75-125	u
Zinc	ND	E	100.0	96.78	E	97	75-125	u

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1041364	1077653	3.48
Scandium	A	1368535	1406196	2.75
Scandium	E	23334	24529	5.12
Scandium	H	149247	123500	-17.25
Germanium	H	37109	30737	-17.17
Germanium	E	18011	18633	3.45
Indium	A	2003326	1963712	-1.98
Bismuth	A	1840338	1718485	-6.62
Yttrium	A	2032903	2057593	1.21
Terbium	A	2868431	2845305	-0.81

u=use

897229804068

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET16
Seqnum : 897239429074
File : f15g0074
IDF : 100.0
Lab ID : 195270-007
Matrix : Filtrate
Batch : 126092
Time : 15-JUN-2007 14:02
Cal : 897239429001
Units : ug/L

Type : PDS
Inst : MET16
Seqnum : 897239429078
File : f15g0078
IDF : 100.0
Lab ID : QC391469
Matrix : Filtrate
Batch : 126092
Time : 15-JUN-2007 14:26
Cal : 897239429001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	ND	A	10000	8980	A	90	75-125	
Antimony	ND	A	100.0	76.79	A	77	75-125	
Arsenic	ND	E	100.0	91.49	E	91	75-125	
Barium	0.4853	A	100.0	94.05	A	94	75-125	
Beryllium	ND	A	100.0	90.76	A	91	75-125	
Cadmium	ND	A	100.0	92.01	A	92	75-125	
Calcium	164.9	A	10000	9484	A	93	75-125	
Chromium	1.111	E	100.0	92.82	E	92	75-125	
Cobalt	ND	E	100.0	93.92	E	94	75-125	
Copper	0.03792	E	100.0	93.31	E	93	75-125	
Iron	ND	H	10000	9306	H	93	75-125	
Lead	ND	A	100.0	84.62	A	85	75-125	
Magnesium	814.8	A	10000	9707	A	89	75-125	
Manganese	ND	E	100.0	92.60	E	93	75-125	
Molybdenum	0.05828	A	100.0	84.86	A	85	75-125	u
Nickel	0.04665	E	100.0	94.33	E	94	75-125	
Potassium	5.133	A	10000	9262	A	93	75-125	
Selenium	ND	H	100.0	92.59	H	93	75-125	
Silver	ND	A	100.0	80.05	A	80	75-125	
Sodium	2179	E	10000	11140	E	90	75-125	u
Thallium	ND	A	50.00	46.07	A	92	75-125	
Vanadium	0.03007	E	100.0	91.85	E	92	75-125	
Zinc	ND	E	100.0	94.26	E	94	75-125	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	947755	858570	-9.41
Scandium	A	1024786	1024630	-0.02
Scandium	E	16230	14988	-7.65
Scandium	H	421162	379599	-9.87
Germanium	H	105466	97376	-7.67
Germanium	E	14881	13811	-7.19
Indium	A	1615942	1582240	-2.09
Bismuth	A	1910108	1822820	-4.57
Yttrium	A	1534317	1544389	0.66
Terbium	A	2647564	2614328	-1.26

u=use

897239429078

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897229804001
Units : ug/L

Date : 08-JUN-2007 14:24
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f08o0005	897229804005		08-JUN-2007 14:30	S6414
L2	f08o0006	897229804006		08-JUN-2007 14:36	S6416
L3	f08o0007	897229804007		08-JUN-2007 14:42	S6417
L4	f08o0008	897229804008		08-JUN-2007 14:48	S6418
L5	f08o0009	897229804009		08-JUN-2007 14:53	S6412
L6	f08o0010	897229804010		08-JUN-2007 14:59	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.6809	0.5984	0.5872	0.5419	0.5354	0.5223	BLNK	-2.6426	1.90533		0.5777	1.000	0.995	
Antimony	A	0.4266	0.2828	0.2858	0.2603	0.2786	0.2672	BLNK	-0.0241	3.71136		0.3002	1.000	0.995	
Barium	A	0.5943	0.0841	0.0863	0.1225	0.0722	0.0719	BLNK	-0.0129	13.8799		0.1719	0.999	0.995	
Beryllium	A	0.2430	0.2178	0.2303	0.2271	0.2206	0.2224	BLNK	-0.0024	4.50414		0.2268	1.000	0.995	
Cadmium	A	0.0776	0.0696	0.0725	0.0689	0.0685	0.0659	BLNK	-0.0142	15.0623		0.0705	1.000	0.995	
Calcium	A	0.0918	0.0296	0.0251	0.0190	0.0192	0.0186	BLNK	-21.934	53.4229		0.0339	1.000	0.995	
Lead	A	0.9276	0.6916	0.6974	0.6520	0.6688	0.6492	BLNK	-0.0184	1.53127		0.7144	1.000	0.995	
Magnesium	A	0.5820	0.4887	0.4843	0.4400	0.4349	0.4197	BLNK	-3.1258	2.36572		0.4749	1.000	0.995	
Molybdenum	A	0.2904	0.2206	0.1970	0.1850	0.1932	0.1951	BLNK	-0.0772	5.13737		0.2135	1.000	0.995	
Potassium	A	9.5679	2.1026	1.3886	0.7183	0.6511	0.6270	BLNK	-115.21	1.59359		2.5092	1.000	0.995	
Silver	A	0.3447	0.3189	0.3268	0.3119	0.3319	0.3177	BLNK	-0.0060	3.12024		0.3253	1.000	0.995	
Thallium	A	0.8193	0.7448	0.7556	0.7236	0.7948	0.7708	BLNK	-0.0072	1.28965		0.7681	1.000	0.995	
Arsenic	E	0.6795	0.5642	0.6098	0.5481	0.5571	0.5370	BLNK	-0.0251	1.84864		0.5826	1.000	0.995	
Chromium	E	7.6132	4.4681	4.1983	3.7420	3.6846	3.5667	BLNK	-0.0951	0.27867		4.5455	1.000	0.995	
Cobalt	E	7.1346	6.6316	6.6404	6.3644	6.2324	6.0095	BLNK	-0.0054	0.16517		6.5022	1.000	0.995	
Copper	E	54.647	9.6242	10.237	6.6343	6.3380	6.0017	BLNK	-0.2020	0.16495		15.580	0.999	0.995	
Manganese	E	2.7844	1.6900	1.6855	1.6306	1.6186	1.5699	BLNK	-0.0105	0.63304		1.8299	1.000	0.995	
Nickel	E	7.3546	2.0003	1.9542	1.8044	1.7193	1.6479	BLNK	-0.0468	0.60169		2.7468	1.000	0.995	
Sodium	E	3.8876	1.0345	0.7545	0.5052	0.4732	0.4552	BLNK	-59.636	2.18713		1.1850	1.000	0.995	
Vanadium	E	4.7742	3.2262	2.9878	2.8079	2.7719	2.7108	BLNK	-0.0726	0.36739		3.2131	1.000	0.995	
Zinc	E	20.163	2.8060	1.8252	0.9903	0.8467	0.8028	BLNK	-0.9182	1.23860		4.5722	0.999	0.995	
Iron	H	1.1616	1.0056	0.9923	0.9422	0.9264	0.8937	BLNK	-8.7485	1.11132		0.9870	1.000	0.995	
Selenium	H	0.1824	0.1534	0.1567	0.1567	0.1501	0.1449	BLNK	-0.0062	6.85209		0.1573	1.000	0.995	

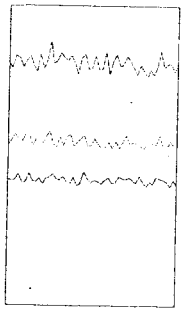
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	3	50.00	9	100.0	9	1000	3	10000	2	20000	-1
Antimony	A	0.100	34	0.500	0	1.000	4	10.00	-4	100.0	3	200.0	-1
Barium	A	0.100	712	0.500	14	1.000	18	10.00	70	100.0	0	200.0	0
Beryllium	A	0.100	7	0.500	-2	1.000	3	10.00	2	100.0	-1	200.0	0
Cadmium	A	0.100	3	0.500	2	1.000	8	10.00	4	100.0	3	200.0	-1
Calcium	A	10.00	171	50.00	14	100.0	12	1000	0	10000	3	20000	-1
Lead	A	0.100	24	0.500	2	1.000	5	10.00	0	100.0	2	200.0	-1
Magnesium	A	10.00	6	50.00	9	100.0	11	1000	4	10000	3	20000	-1
Molybdenum	A	0.100	-28	0.500	-2	1.000	-7	10.00	-6	100.0	-1	200.0	0
Potassium	A	10.00	273	50.00	5	100.0	6	1000	3	10000	3	20000	-1
Silver	A	0.100	2	0.500	-2	1.000	1	10.00	-3	100.0	4	200.0	-1
Thallium	A	0.050	-9	0.250	-7	0.500	-4	5.000	-7	50.00	2	100.0	-1
Arsenic	E	0.100	0	0.500	-1	1.000	10	10.00	1	100.0	3	200.0	-1
Chromium	E	0.100	17	0.500	5	1.000	7	10.00	3	100.0	3	200.0	-1
Cobalt	E	0.100	12	0.500	8	1.000	9	10.00	5	100.0	3	200.0	-1
Copper	E	0.100	599	0.500	18	1.000	49	10.00	7	100.0	4	200.0	-1
Manganese	E	0.100	66	0.500	5	1.000	6	10.00	3	100.0	2	200.0	-1
Nickel	E	0.100	296	0.500	11	1.000	13	10.00	8	100.0	3	200.0	-1
Sodium	E	10.00	154	50.00	7	100.0	5	1000	5	10000	3	20000	-1
Vanadium	E	0.100	3	0.500	4	1.000	3	10.00	2	100.0	2	200.0	0
Zinc	E	0.100	1479	0.500	64	1.000	34	10.00	13	100.0	4	200.0	-1
Iron	H	10.00	-58	50.00	-6	100.0	2	1000	4	10000	3	20000	-1
Selenium	H	0.100	19	0.500	4	1.000	7	10.00	7	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

897229804001

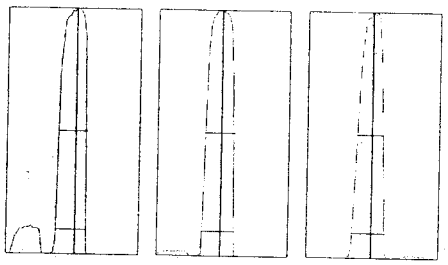
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	20156.0	20904.5	2.77	1.50
89	50,000	39987.0	40303.9	3.12	0.90
205	50,000	26808.0	27249.9	2.82	4.70

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.857%
Doubly Charged: 70/140 2.153%



m/z:	7	89	205
Height:	20,907	40,249	27,048
Axis:	7.10	89.00	205.00
W-50%:	0.65	0.70	0.60
W-10%:	0.700	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.68 V
Smpl Depth	:	8 mm
Torch-H	:	0.8 mm
Torch-V	:	0.2 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-160 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-0.2 V
Cell Entrance	:	-30 V
QP Focus	:	7 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	126
AMU Offset	:	126
Axis Gain	:	0.9997
Axis Offset	:	0.06
QP Bias	:	-3 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1680 V
Pulse HV	:	1050 V

===Reaction Cell===

Reaction Mode	:	OFF
H2 Gas	:	0 mL/min

He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	5.5	mL/min
Optional Gas:	---	%
QP Focus:	-10	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
51	14.5	28.84
59	3610.9	2.98
89	2798.0	3.20

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4	mL/min
Optional Gas:	---	%
QP Focus:	-8	V
Cell Exit:	-38	V
OctP Bias:	-18	V
QP Bias:	-16	V

m/z	Count(Mean)	RSD%
59	1548.8	6.49
78	0.0	494.87
89	14176.8	4.86

Integration Time: 0.1000sec

Generated : Jun 08, 2007 07:29:00
Printed : Jun 08, 2007 07:30:38

00179

P/A Factor Tuning Report

Acquired:Jun 8 2007 07:51 am

Mass[amu]	Element	P/A Factor
6	Li	0.060365
7	(Li)	0.063439
9	Be	0.068615
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.084373
45	Sc	0.082643
51	V	0.082787
52	Cr	0.085094
55	Mn	0.087978
56	Fe	Sensitivity too high
59	Co	0.090548
60	Ni	Sensitivity too low
63	Cu	0.092647
65	Cu	0.095275
66	Zn	Sensitivity too low
72	Ge	0.093302
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.092633
98	Mo	0.092682
99	(Ru)	Sensitivity too low
107	Ag	0.097755
111	Cd	Sensitivity too low
115	In	0.097621
118	(In)	0.097444
121	Sb	0.097388
137	Ba	Sensitivity too low
159	Tb	0.100711
205	Tl	0.104857
206	(Pb)	0.104715
207	(Pb)	0.104834
208	Pb	0.104843
209	Bi	0.104478

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1680 V
Pulse HV: 1050 V

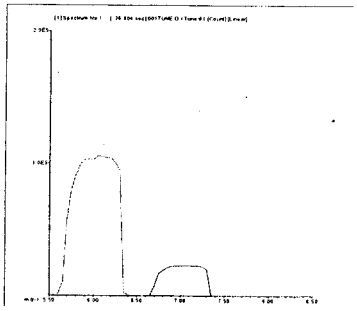
00160

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F08o00.B\001TUNE.D
Date Acquired:	Jun 8 2007 02:04 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.06	5.00	
59 Co	0.78	5.00	
115 In	1.03	5.00	
205 Tl	0.59	5.00	



7 Li

Mass Calib.

Actual: 7.05

Required: 6.90 - 7.10

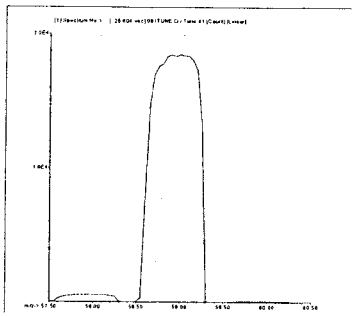
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 58.95

Required: 58.90 - 59.10

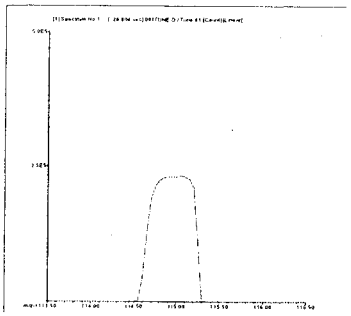
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

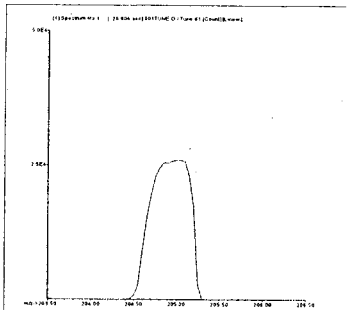
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004C
Date Acquired:	Jun 8 2007 02:22 pm
Operator:	
Sample Name:	calblank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File:	C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update:	Jun 08 2007 02:26 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1041364.00	A	11530.00	1.11
7	(Li)		P		
9	Be	11.11	P	3.85	34.64
23	Na	12725.45	P	235.30	1.85
24	Mg	36172.70	P	2839.00	7.85
27	Al	37971.18	P	3527.00	9.29
39	K	1978737.00	A	3228.00	0.16
44	Ca	11237.73	P	131.80	1.17
45	Sc	149246.91	P	377.80	0.25
45	Sc	23334.45	P	127.30	0.55
45	Sc	1368535.00	A	5864.00	0.43
51	V	92.22	P	8.01	8.69
52	Cr	159.26	P	9.05	5.68
55	Mn	7.78	P	3.33	42.85
56	Fe	23502.47	P	4172.00	17.75
59	Co	15.19	P	5.70	37.55
60	Ni	36.30	P	5.70	15.71
63	Cu	441.12	P	15.28	3.46
65	Cu	230.37	P	11.13	4.83
66	Zn	267.04	P	12.78	4.79
72	Ge	37108.82	P	496.40	1.34
72	Ge	18011.00	P	182.30	1.01
75	As	4.89	P	2.34	47.88
78	Se	0.67	P	0.00	0.00
89	Y	2032902.00	A	17270.00	0.85
98	Mo	611.14	P	20.37	3.33
107	Ag	76.67	P	13.33	17.39
111	Cd	37.78	P	1.93	5.10
115	In	2003326.00	A	7094.00	0.35
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	260.01	P	8.82	3.39
137	Ba	53.34	P	23.33	43.74
159	Tb	2868431.00	A	9594.00	0.33
205	Tl	204.45	P	10.18	4.98
208	Pb	690.03	P	32.15	4.66
209	Bi	1840338.00	A	14640.00	0.80

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 8 2007 02:28 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1051950.00	A	14820.00	1.41
7 (Li)		P		
9 Be	511.14	P	10.18	1.99
23 Na	18309.91	P	268.30	1.47
24 Mg	155892.50	P	948.40	0.61
27 Al	182391.30	P	3087.00	1.69
39 K	2562958.00	A	17200.00	0.67
44 Ca	24577.59	P	167.60	0.68
45 Sc	147248.50	P	985.00	0.67
45 Sc	23549.61	P	277.50	1.18
45 Sc	1339353.00	A	4755.00	0.36
51 V	224.82	P	3.57	1.59
52 Cr	358.53	P	12.29	3.43
55 Mn	131.11	P	11.11	8.47
56 Fe	34208.86	P	226.00	0.66
59 Co	335.93	P	9.05	2.69
60 Ni	346.30	P	11.13	3.21
63 Cu	1983.48	P	27.38	1.38
65 Cu	961.89	P	52.26	5.43
66 Zn	731.88	P	35.53	4.85
72 Ge	36520.33	P	252.50	0.69
72 Ge	18148.23	P	41.13	0.23
75 As	24.67	P	4.81	19.49
78 Se	13.33	P	4.05	30.41
89 Y	2009007.00	A	8119.00	0.40
98 Mo	1166.75	P	23.33	2.00
99 (Ru)	4.44	P	1.93	43.31
107 Ag	1372.33	P	32.89	2.40
111 Cd	308.90	P	10.71	3.47
115 In	1991045.00	A	21300.00	1.07
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1699.05	P	75.31	4.43
137 Ba	3370.50	P	21.86	0.65
159 Tb	2835739.00	A	24630.00	0.87
205 Tl	1497.91	P	109.10	7.28
208 Pb	5260.57	P	147.30	2.80
209 Bi	1828405.00	A	6107.00	0.33

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1051950.30	1.41	1041364.40	101.0	80 - 120	
45 Sc	147248.48	0.67	149246.92	98.7	80 - 120	
45 Sc	23549.62	1.18	23334.45	100.9	80 - 120	
45 Sc	1339353.00	0.36	1368535.10	97.9	80 - 120	
72 Ge	36520.33	0.69	37108.82	98.4	80 - 120	
72 Ge	18148.23	0.23	18011.00	100.8	80 - 120	
89 Y	2009007.30	0.40	2032902.50	98.8	80 - 120	
115 In	1991045.10	1.07	2003326.40	99.4	80 - 120	
159 Tb	2835739.00	0.87	2868430.80	98.9	80 - 120	
209 Bi	1828404.80	0.33	1840338.10	99.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 8 2007 02:34 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 08 2007 02:32 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1056267.00	A	12310.00	1.17
7 (Li)		P		
9 Be	2301.35	P	105.20	4.57
23 Na	24039.92	P	248.70	1.03
24 Mg	663772.63	P	7335.00	1.11
27 Al	812870.63	A	5875.00	0.72
39 K	2855907.00	A	6207.00	0.22
44 Ca	40145.60	P	571.50	1.42
45 Sc	144758.70	P	399.60	0.28
45 Sc	23239.51	P	302.20	1.30
45 Sc	1358297.00	A	8197.00	0.60
51 V	749.66	P	17.65	2.35
52 Cr	1038.19	P	14.67	1.41
55 Mn	392.97	P	31.94	8.13
56 Fe	145566.09	P	203.10	0.14
59 Co	1540.83	P	31.22	2.03
60 Ni	464.83	P	8.41	1.81
63 Cu	1723.82	P	10.50	0.61
65 Cu	842.25	P	48.93	5.81
66 Zn	502.98	P	49.01	9.74
72 Ge	35936.34	P	272.70	0.76
72 Ge	17914.25	P	344.20	1.92
75 As	101.11	P	6.71	6.64
78 Se	55.11	P	3.91	7.09
89 Y	2015374.00	A	25050.00	1.24
98 Mo	4445.25	P	187.70	4.22
99 (Ru)	2.22	P	1.93	86.62
107 Ag	6373.79	P	319.40	5.01
111 Cd	1390.11	P	30.55	2.20
115 In	1998472.00	A	3540.00	0.18
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5652.37	P	190.50	3.37
137 Ba	2411.39	P	48.59	2.02
159 Tb	2868718.00	A	48050.00	1.68
205 Tl	6776.32	P	346.30	5.11
208 Pb	19837.28	P	284.00	1.43
209 Bi	1819488.00	A	11220.00	0.62

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1056267.30	1.17	1041364.40	101.4	80 - 120	
45 Sc	144758.72	0.28	149246.92	97.0	80 - 120	
45 Sc	23239.51	1.30	23334.45	99.6	80 - 120	
45 Sc	1358297.50	0.60	1368535.10	99.3	80 - 120	
72 Ge	35936.34	0.76	37108.82	96.8	80 - 120	
72 Ge	17914.25	1.92	18011.00	99.5	80 - 120	
89 Y	2015374.10	1.24	2032902.50	99.1	80 - 120	
115 In	1998471.60	0.18	2003326.40	99.8	80 - 120	
159 Tb	2868718.30	1.68	2868430.80	100.0	80 - 120	
209 Bi	1819487.90	0.62	1840338.10	98.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 8 2007 02:40 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:38 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1046229.00	A	10520.00	1.01
7 (Li)		P		
9 Be	4816.42	P	211.90	4.40
23 Na	35698.66	P	859.50	2.41
24 Mg	1313997.00	A	11020.00	0.84
27 Al	1593258.00	A	10910.00	0.68
39 K	3767560.00	A	16170.00	0.43
44 Ca	68069.18	P	531.30	0.78
45 Sc	145211.00	P	579.00	0.40
45 Sc	23658.29	P	460.10	1.94
45 Sc	1356647.00	A	3369.00	0.25
51 V	1413.78	P	34.52	2.44
52 Cr	1986.44	P	46.04	2.32
55 Mn	797.44	P	11.24	1.41
56 Fe	288184.19	P	818.40	0.28
59 Co	3140.72	P	53.48	1.70
60 Ni	924.11	P	25.73	2.78
63 Cu	3714.55	P	138.70	3.73
65 Cu	1937.55	P	11.19	0.58
66 Zn	662.24	P	21.69	3.28
72 Ge	36034.40	P	126.50	0.35
72 Ge	18139.70	P	387.70	2.14
75 As	221.11	P	6.58	2.97
78 Se	112.89	P	4.34	3.84
89 Y	2015822.00	A	16030.00	0.80
98 Mo	7941.24	P	126.10	1.59
99 (Ru)	8.89	P	1.93	21.66
107 Ag	12979.34	P	449.30	3.46
111 Cd	2879.26	P	30.06	1.04
115 In	1985748.00	A	8593.00	0.43
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	11349.13	P	196.90	1.73
137 Ba	4872.07	P	64.68	1.33
159 Tb	2823081.00	A	13130.00	0.47
205 Tl	13679.30	P	124.00	0.91
208 Pb	39376.41	P	225.70	0.57
209 Bi	1810391.00	A	3430.00	0.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1046229.60	1.01	1041364.40	100.5	80 - 120	
45 Sc	145210.97	0.40	149246.92	97.3	80 - 120	
45 Sc	23658.30	1.94	23334.45	101.4	80 - 120	
45 Sc	1356646.50	0.25	1368535.10	99.1	80 - 120	
72 Ge	36034.40	0.35	37108.82	97.1	80 - 120	
72 Ge	18139.70	2.14	18011.00	100.7	80 - 120	
89 Y	2015822.00	0.80	2032902.50	99.2	80 - 120	
115 In	1985748.10	0.43	2003326.40	99.1	80 - 120	
159 Tb	2823080.80	0.47	2868430.80	98.4	80 - 120	
209 Bi	1810391.30	0.19	1840338.10	98.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 8 2007 02:45 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:44 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1070916.00	A	5885.00	0.55
7 (Li)		P		
9 Be	48629.83	P	117.50	0.24
23 Na	242954.70	P	1549.00	0.64
24 Mg	12380180.00	A	100600.00	0.81
27 Al	15247630.00	A	119000.00	0.78
39 K	20211400.00	A	119700.00	0.59
44 Ca	535714.00	P	1914.00	0.36
45 Sc	143430.70	P	875.20	0.61
45 Sc	24047.41	P	329.60	1.37
45 Sc	1406983.00	A	4397.00	0.31
51 V	13503.32	P	75.42	0.56
52 Cr	17993.06	P	201.80	1.12
55 Mn	7840.56	P	102.70	1.31
56 Fe	2702916.00	A	27860.00	1.03
59 Co	30604.60	P	221.70	0.72
60 Ni	8678.42	P	168.20	1.94
63 Cu	24553.62	P	116.10	0.47
65 Cu	12232.33	P	157.50	1.29
66 Zn	3665.28	P	108.20	2.95
72 Ge	35788.62	P	274.60	0.77
72 Ge	18505.29	P	87.21	0.47
75 As	2028.59	P	41.64	2.05
78 Se	1121.38	P	20.67	1.84
89 Y	2081366.00	A	21140.00	1.02
98 Mo	76996.61	P	777.40	1.01
99 (Ru)	10.00	P	8.82	88.19
107 Ag	127117.50	P	702.90	0.55
111 Cd	28094.91	P	558.40	1.99
115 In	2037795.00	A	7013.00	0.34
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	106073.40	P	113.40	0.11
137 Ba	71079.10	P	770.70	1.08
159 Tb	2901633.00	A	28650.00	0.99
205 Tl	132735.91	P	657.60	0.50
208 Pb	378348.41	P	399.10	0.11
209 Bi	1834471.00	A	6373.00	0.35

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1070915.60	0.55	1041364.40	102.8	80 - 120	
45 Sc	143430.73	0.61	149246.92	96.1	80 - 120	
45 Sc	24047.41	1.37	23334.45	103.1	80 - 120	
45 Sc	1406983.40	0.31	1368535.10	102.8	80 - 120	
72 Ge	35788.62	0.77	37108.82	96.4	80 - 120	
72 Ge	18505.29	0.47	18011.00	102.7	80 - 120	
89 Y	2081365.80	1.02	2032902.50	102.4	80 - 120	
115 In	2037795.10	0.34	2003326.40	101.7	80 - 120	
159 Tb	2901632.80	0.99	2868430.80	101.2	80 - 120	
209 Bi	1834471.30	0.35	1840338.10	99.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 8 2007 02:51 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:49 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1108661.00	A	4736.00	0.43
7	(Li)		P		
9	Be	489097.19	P	414.70	0.08
23	Na	2360799.00	A	23130.00	0.98
24	Mg	############	A	192800.00	0.15
27	Al	############	A	112100.00	0.07
39	K	############	A	752400.00	0.40
44	Ca	5611444.00	A	38480.00	0.69
45	Sc	143837.09	P	689.80	0.48
45	Sc	24945.85	P	334.20	1.34
45	Sc	1458951.00	A	1855.00	0.13
51	V	138278.80	P	817.80	0.59
52	Cr	183813.80	P	691.70	0.38
55	Mn	80749.91	P	368.10	0.46
56	Fe	26650800.00	A	107100.00	0.40
59	Co	310916.50	P	1110.00	0.36
60	Ni	85773.61	P	597.20	0.70
63	Cu	241698.00	P	1954.00	0.81
65	Cu	119944.60	P	743.80	0.62
66	Zn	32288.90	P	369.00	1.14
72	Ge	35767.10	P	316.30	0.88
72	Ge	19067.45	P	163.40	0.86
75	As	21246.02	P	153.00	0.72
78	Se	10733.58	P	91.71	0.85
89	Y	2132237.00	A	7893.00	0.37
98	Mo	824007.69	M	34430.00	4.18
99	(Ru)	34.45	P	9.62	27.94
107	Ag	1343614.00	A	8265.00	0.62
111	Cd	277293.41	P	968.40	0.35
115	In	2024096.00	A	8804.00	0.43
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	1127643.00	A	7046.00	0.62
137	Ba	420128.41	P	525.20	0.13
159	Tb	2910194.00	A	4756.00	0.16
205	Tl	1421965.00	A	2181.00	0.15
208	Pb	3892889.00	A	9310.00	0.24
209	Bi	1789179.00	A	13950.00	0.78

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1108661.40	0.43	1041364.40	106.5	80 - 120	
45	Sc	143837.13	0.48	149246.92	96.4	80 - 120	
45	Sc	24945.85	1.34	23334.45	106.9	80 - 120	
45	Sc	1458951.10	0.13	1368535.10	106.6	80 - 120	
72	Ge	35767.11	0.88	37108.82	96.4	80 - 120	
72	Ge	19067.45	0.86	18011.00	105.9	80 - 120	
89	Y	2132236.80	0.37	2032902.50	104.9	80 - 120	
115	In	2024096.40	0.43	2003326.40	101.0	80 - 120	
159	Tb	2910194.30	0.16	2868430.80	101.5	80 - 120	
209	Bi	1789178.90	0.78	1840338.10	97.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F08o00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 8 2007 02:57 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 08 2007 02:55 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1114010.00	A	2865.00	0.26
7 (Li)		P		
9 Be	990868.31	A	5531.00	0.56
23 Na	4541605.00	A	28120.00	0.62
24 Mg	###########	A	1729000.00	0.71
27 Al	###########	A	2001000.00	0.66
39 K	###########	A	1514000.00	0.41
44 Ca	10859830.00	A	21380.00	0.20
45 Sc	144474.50	P	399.90	0.28
45 Sc	24942.10	P	121.20	0.49
45 Sc	1458040.00	A	12800.00	0.88
51 V	270444.69	P	284.90	0.11
52 Cr	355839.59	P	234.70	0.07
55 Mn	156629.41	P	164.10	0.10
56 Fe	51645952.00	A	341600.00	0.66
59 Co	599546.00	P	2387.00	0.40
60 Ni	164406.91	P	622.90	0.38
63 Cu	459088.09	P	190.40	0.04
65 Cu	228791.91	P	478.50	0.21
66 Zn	61407.96	P	235.70	0.38
72 Ge	35815.00	P	181.90	0.51
72 Ge	19125.32	P	231.20	1.21
75 As	41075.28	P	163.00	0.40
78 Se	20756.52	P	137.50	0.66
89 Y	2104923.00	A	10100.00	0.48
98 Mo	1643034.00	A	4159.00	0.25
99 (Ru)	60.00	P	3.33	5.56
107 Ag	2541543.00	A	3807.00	0.15
111 Cd	526957.50	P	1136.00	0.22
115 In	2000158.00	A	6143.00	0.31
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2138057.00	A	8434.00	0.39
137 Ba	827876.88	M	32690.00	3.95
159 Tb	2878432.00	A	21670.00	0.75
205 Tl	2676372.00	A	12370.00	0.46
208 Pb	7474480.00	A	17760.00	0.24
209 Bi	1736168.00	A	6295.00	0.36

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1114010.10	0.26	1041364.40	107.0	80 - 120	
45 Sc	144474.47	0.28	149246.92	96.8	80 - 120	
45 Sc	24942.10	0.49	23334.45	106.9	80 - 120	
45 Sc	1458040.40	0.88	1368535.10	106.5	80 - 120	
72 Ge	35815.00	0.51	37108.82	96.5	80 - 120	
72 Ge	19125.32	1.21	18011.00	106.2	80 - 120	
89 Y	2104922.80	0.48	2032902.50	103.5	80 - 120	
115 In	2000158.30	0.31	2003326.40	99.8	80 - 120	
159 Tb	2878431.80	0.75	2868430.80	100.3	80 - 120	
209 Bi	1736168.00	0.36	1840338.10	94.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F08o00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804012 File : f08o0012 Time : 08-JUN-2007 15:11
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6419, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.5777	0.5343	10000	10180	ug/L	2	10	
Antimony	A	0.3002	0.2721	100.0	100.9	ug/L	1	10	
Barium	A	0.1719	0.0719	100.0	99.76	ug/L	0	10	
Beryllium	A	0.2268	0.2233	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0705	0.0680	100.0	102.4	ug/L	2	10	
Calcium	A	0.0339	0.0192	10000	10250	ug/L	3	10	
Lead	A	0.7144	0.6126	100.0	93.78	ug/L	-6	10	
Magnesium	A	0.4749	0.4306	10000	10180	ug/L	2	10	
Molybdenum	A	0.2135	0.1977	100.0	101.5	ug/L	2	10	
Potassium	A	2.5092	0.6503	10000	10250	ug/L	3	10	
Silver	A	0.3253	0.3136	100.0	97.83	ug/L	-2	10	
Thallium	A	0.7681	0.7918	50.00	51.05	ug/L	2	10	
Arsenic	E	0.5826	0.5384	100.0	99.51	ug/L	0	10	
Chromium	E	4.5455	3.6405	100.0	101.4	ug/L	1	10	
Cobalt	E	6.5022	6.2069	100.0	102.5	ug/L	3	10	
Copper	E	15.580	6.2760	100.0	103.3	ug/L	3	10	
Manganese	E	1.8299	1.5961	100.0	101.0	ug/L	1	10	
Nickel	E	2.7468	1.7166	100.0	103.2	ug/L	3	10	
Sodium	E	1.1850	0.4654	10000	10120	ug/L	1	10	
Vanadium	E	3.2131	2.7385	100.0	100.5	ug/L	1	10	
Zinc	E	4.5722	0.8368	100.0	102.7	ug/L	3	10	
Iron	H	0.9870	0.9215	10000	10230	ug/L	2	10	
Selenium	H	0.1573	0.1501	100.0	102.9	ug/L	3	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1146565	10.10
Scandium	A	1368535	1512180	10.50
Scandium	E	23334	25939	11.16
Scandium	H	149247	146616	-1.76
Germanium	H	37109	36758	-0.95
Germanium	E	18011	19911	10.55
Indium	A	2003326	2085980	4.13
Bismuth	A	1840338	1813746	-1.44
Yttrium	A	2032903	2168843	6.69
Terbium	A	2868431	2989627	4.23

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804014 File : f08o0014 Time : 08-JUN-2007 15:23
Cal : 897229804001 Caldate : 08-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.03275]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.03845]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.02029]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01863]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.01112]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01446]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01261]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01373]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01250]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.009268]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.02484]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01637]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1094855	5.14
Scandium	A	1368535	1469601	7.38
Scandium	E	23334	25479	9.19
Scandium	H	149247	150256	0.68
Germanium	H	37109	37196	0.23
Germanium	E	18011	19741	9.61
Indium	A	2003326	2140312	6.84
Bismuth	A	1840338	1898549	3.16
Yttrium	A	2032903	2187534	7.61
Terbium	A	2868431	3006374	4.81

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804016 File : f08o0016 Time : 08-JUN-2007 15:35
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	0.1189	0.1000	ug/L	
Barium	A	0.7702	0.1000	ug/L	
Beryllium	A	[0.02868]	0.1000	ug/L	
Cadmium	A	1.073	0.1000	ug/L	
Lead	A	0.3623	0.1000	ug/L	
Silver	A	0.1642	0.1000	ug/L	
Thallium	A	[0.03989]	0.05000	ug/L	
Arsenic	E	0.2030	0.1000	ug/L	
Chromium	E	1.104	0.1000	ug/L	
Cobalt	E	0.1742	0.1000	ug/L	
Copper	E	1.015	0.1000	ug/L	
Manganese	E	0.4571	0.1000	ug/L	
Nickel	E	0.9681	0.1000	ug/L	
Vanadium	E	[0.04627]	0.1000	ug/L	
Zinc	E	1.114	0.1000	ug/L	
Selenium	H	[0.06547]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78980	ug/L	79
Calcium	A	300000	237800	ug/L	79
Magnesium	A	100000	77590	ug/L	78
Molybdenum	A	2000	1542	ug/L	77
Potassium	A	100000	78440	ug/L	78
Sodium	E	250000	192100	ug/L	77
Iron	H	250000	187500	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	982613	-5.64
Scandium	A	1368535	1351056	-1.28
Scandium	E	23334	24057	3.10
Scandium	H	149247	146119	-2.10
Germanium	H	37109	34050	-8.24
Germanium	E	18011	17822	-1.05
Indium	A	2003326	1765334	-11.88
Bismuth	A	1840338	1489179	-19.08
Yttrium	A	2032903	1970168	-3.09
Terbium	A	2868431	2667484	-7.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804017 File : f08o0017 Time : 08-JUN-2007 15:41
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100800	ug/L	1		
Cadmium	A	100.0	102.3	ug/L	2	20	
Calcium	A	300000	302800	ug/L	1		
Magnesium	A	100000	98570	ug/L	-1		
Molybdenum	A	2000	1954	ug/L	-2		
Potassium	A	100000	100200	ug/L	0		
Silver	A	50.00	46.65	ug/L	-7	20	
Arsenic	E	100.0	106.2	ug/L	6	20	
Chromium	E	200.0	201.2	ug/L	1	20	
Cobalt	E	200.0	190.6	ug/L	-5	20	
Copper	E	200.0	186.3	ug/L	-7	20	
Manganese	E	200.0	200.1	ug/L	0	20	
Nickel	E	200.0	186.9	ug/L	-7	20	
Sodium	E	250000	245800	ug/L	-2		
Vanadium	E	200.0	204.5	ug/L	2	20	
Zinc	E	100.0	95.71	ug/L	-4	20	
Iron	H	250000	236500	ug/L	-5		
Selenium	H	100.0	100.6	ug/L	1	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	154720	3.67
Scandium	A	1368535	1340075	-2.08
Scandium	E	23334	23714	1.63
Germanium	H	37109	35816	-3.48
Germanium	E	18011	17441	-3.16
Indium	A	2003326	1745887	-12.85
Yttrium	A	2032903	1947939	-4.18

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804033 File : f08o0033 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 17:16
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5294	10000	10080	ug/L	1	10	
Antimony	A	0.3002	0.2731	100.0	101.3	ug/L	1	10	
Barium	A	0.1719	0.0715	100.0	99.26	ug/L	-1	10	
Beryllium	A	0.2268	0.2224	100.0	100.2	ug/L	0	10	
Cadmium	A	0.0705	0.0679	100.0	102.3	ug/L	2	10	
Calcium	A	0.0339	0.0192	10000	10230	ug/L	2	10	
Lead	A	0.7144	0.6211	100.0	95.09	ug/L	-5	10	
Magnesium	A	0.4749	0.4289	10000	10140	ug/L	1	10	
Molybdenum	A	0.2135	0.1949	100.0	100.0	ug/L	0	10	
Potassium	A	2.5092	0.6440	10000	10150	ug/L	2	10	
Silver	A	0.3253	0.3116	100.0	97.22	ug/L	-3	10	
Thallium	A	0.7681	0.7896	50.00	50.91	ug/L	2	10	
Arsenic	E	0.5826	0.5390	100.0	99.61	ug/L	0	10	
Chromium	E	4.5455	3.6116	100.0	100.5	ug/L	1	10	
Cobalt	E	6.5022	6.1839	100.0	102.1	ug/L	2	10	
Copper	E	15.580	6.3313	100.0	104.2	ug/L	4	10	
Manganese	E	1.8299	1.5868	100.0	100.4	ug/L	0	10	
Nickel	E	2.7468	1.7098	100.0	102.8	ug/L	3	10	
Sodium	E	1.1850	0.4635	10000	10080	ug/L	1	10	
Vanadium	E	3.2131	2.7228	100.0	99.96	ug/L	0	10	
Zinc	E	4.5722	0.8463	100.0	103.9	ug/L	4	10	
Iron	H	0.9870	0.9116	10000	10120	ug/L	1	10	
Selenium	H	0.1573	0.1507	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1143603	9.82
Scandium	A	1368535	1517698	10.90
Scandium	E	23334	26577	13.90
Scandium	H	149247	140546	-5.83
Germanium	H	37109	35007	-5.66
Germanium	E	18011	20074	11.45
Indium	A	2003326	2108823	5.27
Bismuth	A	1840338	1865983	1.39
Yttrium	A	2032903	2201876	8.31
Terbium	A	2868431	3051832	6.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804035 File : f08o0035 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 17:27

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01601]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01269]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01224]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.006105]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.003956]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.004325]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01019]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01662]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01118]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01800]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1077738	3.49
Scandium	A	1368535	1451202	6.04
Scandium	E	23334	25502	9.29
Scandium	H	149247	139638	-6.44
Germanium	H	37109	34670	-6.57
Germanium	E	18011	19772	9.78
Indium	A	2003326	2114957	5.57
Bismuth	A	1840338	1901720	3.34
Yttrium	A	2032903	2160734	6.29
Terbium	A	2868431	3011865	5.00

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804050 File : f08o0050 Time : 08-JUN-2007 18:59
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5355	10000	10200	ug/L	2	10	
Antimony	A	0.3002	0.2721	100.0	101.0	ug/L	1	10	
Barium	A	0.1719	0.0720	100.0	99.90	ug/L	0	10	
Beryllium	A	0.2268	0.2228	100.0	100.3	ug/L	0	10	
Cadmium	A	0.0705	0.0678	100.0	102.1	ug/L	2	10	
Calcium	A	0.0339	0.0194	10000	10330	ug/L	3	10	
Lead	A	0.7144	0.6212	100.0	95.11	ug/L	-5	10	
Magnesium	A	0.4749	0.4345	10000	10280	ug/L	3	10	
Molybdenum	A	0.2135	0.1963	100.0	100.8	ug/L	1	10	
Potassium	A	2.5092	0.6511	10000	10260	ug/L	3	10	
Silver	A	0.3253	0.3114	100.0	97.17	ug/L	-3	10	
Thallium	A	0.7681	0.7918	50.00	51.05	ug/L	2	10	
Arsenic	E	0.5826	0.5392	100.0	99.66	ug/L	0	10	
Chromium	E	4.5455	3.6395	100.0	101.3	ug/L	1	10	
Cobalt	E	6.5022	6.2101	100.0	102.6	ug/L	3	10	
Copper	E	15.580	6.2832	100.0	103.4	ug/L	3	10	
Manganese	E	1.8299	1.6038	100.0	101.5	ug/L	2	10	
Nickel	E	2.7468	1.7127	100.0	103.0	ug/L	3	10	
Sodium	E	1.1850	0.4679	10000	10170	ug/L	2	10	
Vanadium	E	3.2131	2.7481	100.0	100.9	ug/L	1	10	
Zinc	E	4.5722	0.8402	100.0	103.1	ug/L	3	10	
Iron	H	0.9870	0.9361	10000	10390	ug/L	4	10	
Selenium	H	0.1573	0.1527	100.0	104.6	ug/L	5	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1167994	12.16
Scandium	A	1368535	1523351	11.31
Scandium	E	23334	27201	16.57
Scandium	H	149247	133779	-10.36
Germanium	H	37109	33600	-9.46
Germanium	E	18011	20694	14.90
Indium	A	2003326	2115613	5.61
Bismuth	A	1840338	1842823	0.14
Yttrium	A	2032903	2211888	8.80
Terbium	A	2868431	3019539	5.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804052 File : f08o0052 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:11

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[3.671]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.03815]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.05075]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.04045]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.02851]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.03358]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.869]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.03273]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.009620]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.004849]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.009276]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01228]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01585]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01737]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1115987	7.17
Scandium	A	1368535	1479372	8.10
Scandium	E	23334	25460	9.11
Scandium	H	149247	131751	-11.72
Germanium	H	37109	32422	-12.63
Germanium	E	18011	19505	8.29
Indium	A	2003326	2128177	6.23
Bismuth	A	1840338	1919072	4.28
Yttrium	A	2032903	2193077	7.88
Terbium	A	2868431	3054820	6.50

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897229804054 File : f08o0054 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 19:23
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.09637]	0.1000	ug/L	
Barium	A	0.7260	0.1000	ug/L	
Beryllium	A	[0.01861]	0.1000	ug/L	
Cadmium	A	0.9808	0.1000	ug/L	
Lead	A	0.3424	0.1000	ug/L	
Silver	A	0.1490	0.1000	ug/L	
Thallium	A	[0.02690]	0.05000	ug/L	
Arsenic	E	0.2173	0.1000	ug/L	
Chromium	E	1.078	0.1000	ug/L	
Cobalt	E	0.1739	0.1000	ug/L	
Copper	E	1.010	0.1000	ug/L	
Manganese	E	0.4238	0.1000	ug/L	
Nickel	E	0.9460	0.1000	ug/L	
Vanadium	E	[0.03627]	0.1000	ug/L	
Zinc	E	1.084	0.1000	ug/L	
Selenium	H	[0.09081]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78800	ug/L	79
Calcium	A	300000	237700	ug/L	79
Magnesium	A	100000	77390	ug/L	77
Molybdenum	A	2000	1544	ug/L	77
Potassium	A	100000	78220	ug/L	78
Sodium	E	250000	191200	ug/L	76
Iron	H	250000	187800	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	989170	-5.01
Scandium	A	1368535	1354390	-1.03
Scandium	E	23334	24751	6.07
Scandium	H	149247	138981	-6.88
Germanium	H	37109	32155	-13.35
Germanium	E	18011	18219	1.15
Indium	A	2003326	1790587	-10.62
Bismuth	A	1840338	1518765	-17.47
Yttrium	A	2032903	1964427	-3.37
Terbium	A	2868431	2721306	-5.13

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804055 File : f08o0055 Time : 08-JUN-2007 19:29
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	101.0	ug/L	1	20	
Calcium	A	300000	302500	ug/L	1		
Magnesium	A	100000	98230	ug/L	-2		
Molybdenum	A	2000	1952	ug/L	-2		
Potassium	A	100000	99170	ug/L	-1		
Silver	A	50.00	46.29	ug/L	-7	20	
Arsenic	E	100.0	104.9	ug/L	5	20	
Chromium	E	200.0	199.0	ug/L	-1	20	
Cobalt	E	200.0	188.4	ug/L	-6	20	
Copper	E	200.0	182.3	ug/L	-9	20	
Manganese	E	200.0	198.4	ug/L	-1	20	
Nickel	E	200.0	184.7	ug/L	-8	20	
Sodium	E	250000	244800	ug/L	-2		
Vanadium	E	200.0	201.4	ug/L	1	20	
Zinc	E	100.0	95.08	ug/L	-5	20	
Iron	H	250000	235400	ug/L	-6		
Selenium	H	100.0	102.7	ug/L	3	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	147482	-1.18
Scandium	A	1368535	1317675	-3.72
Scandium	E	23334	24019	2.93
Germanium	H	37109	33818	-8.87
Germanium	E	18011	17837	-0.97
Indium	A	2003326	1739156	-13.19
Yttrium	A	2032903	1929083	-5.11

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804071 File : f08o0071 Time : 08-JUN-2007 21:04
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5260	10000	10020	ug/L	0	10	
Antimony	A	0.3002	0.2711	100.0	100.6	ug/L	1	10	
Barium	A	0.1719	0.0703	100.0	97.62	ug/L	-2	10	
Beryllium	A	0.2268	0.2158	100.0	97.21	ug/L	-3	10	
Cadmium	A	0.0705	0.0668	100.0	100.6	ug/L	1	10	
Calcium	A	0.0339	0.0191	10000	10190	ug/L	2	10	
Lead	A	0.7144	0.6063	100.0	92.82	ug/L	-7	10	
Magnesium	A	0.4749	0.4256	10000	10060	ug/L	1	10	
Molybdenum	A	0.2135	0.1849	100.0	94.93	ug/L	-5	10	
Potassium	A	2.5092	0.6402	10000	10090	ug/L	1	10	
Silver	A	0.3253	0.3053	100.0	95.27	ug/L	-5	10	
Thallium	A	0.7681	0.7778	50.00	50.14	ug/L	0	10	
Arsenic	E	0.5826	0.5692	100.0	105.2	ug/L	5	10	
Chromium	E	4.5455	3.8705	100.0	107.8	ug/L	8	10	
Cobalt	E	6.5022	6.6237	100.0	109.4	ug/L	9	10	
Copper	E	15.580	6.6612	100.0	109.7	ug/L	10	10	
Manganese	E	1.8299	1.6955	100.0	107.3	ug/L	7	10	
Nickel	E	2.7468	1.8230	100.0	109.6	ug/L	10	10	
Sodium	E	1.1850	0.4951	10000	10770	ug/L	8	10	
Vanadium	E	3.2131	2.9193	100.0	107.2	ug/L	7	10	
Zinc	E	4.5722	0.8914	100.0	109.5	ug/L	10	10	
Iron	H	0.9870	0.9276	10000	10300	ug/L	3	10	
Selenium	H	0.1573	0.1539	100.0	105.4	ug/L	5	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1120239	7.57
Scandium	A	1368535	1450540	5.99
Scandium	E	23334	23233	-0.43
Scandium	H	149247	124205	-16.78
Germanium	H	37109	31020	-16.41
Germanium	E	18011	17921	-0.50
Indium	A	2003326	2031357	1.40
Bismuth	A	1840338	1809860	-1.66
Yttrium	A	2032903	2108716	3.73
Terbium	A	2868431	2947922	2.77

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804073 File : f08o0073 Time : 08-JUN-2007 21:16
Cal : 897229804001 Caldate : 08-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01685]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01331]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01450]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01351]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008678]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.03103]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.03204]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01953]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02379]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.03297]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.02947]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.04417]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1051245	0.95
Scandium	A	1368535	1385965	1.27
Scandium	E	23334	23605	1.16
Scandium	H	149247	121297	-18.73
Germanium	H	37109	30292	-18.37
Germanium	E	18011	18341	1.83
Indium	A	2003326	2024682	1.07
Bismuth	A	1840338	1847105	0.37
Yttrium	A	2032903	2056461	1.16
Terbium	A	2868431	2911952	1.52

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804089 File : f08o0089 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 22:52
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5242	10000	9985	ug/L	0	10	
Antimony	A	0.3002	0.2708	100.0	100.5	ug/L	1	10	
Barium	A	0.1719	0.0708	100.0	98.22	ug/L	-2	10	
Beryllium	A	0.2268	0.2182	100.0	98.28	ug/L	-2	10	
Cadmium	A	0.0705	0.0675	100.0	101.6	ug/L	2	10	
Calcium	A	0.0339	0.0189	10000	10100	ug/L	1	10	
Lead	A	0.7144	0.6107	100.0	93.50	ug/L	-7	10	
Magnesium	A	0.4749	0.4238	10000	10020	ug/L	0	10	
Molybdenum	A	0.2135	0.1826	100.0	93.74	ug/L	-6	10	
Potassium	A	2.5092	0.6395	10000	10080	ug/L	1	10	
Silver	A	0.3253	0.3073	100.0	95.86	ug/L	-4	10	
Thallium	A	0.7681	0.7781	50.00	50.16	ug/L	0	10	
Arsenic	E	0.5826	0.5284	100.0	97.65	ug/L	-2	10	
Chromium	E	4.5455	3.6508	100.0	101.6	ug/L	2	10	
Cobalt	E	6.5022	6.2331	100.0	102.9	ug/L	3	10	
Copper	E	15.580	6.1873	100.0	101.9	ug/L	2	10	
Manganese	E	1.8299	1.5988	100.0	101.2	ug/L	1	10	
Nickel	E	2.7468	1.7255	100.0	103.8	ug/L	4	10	
Sodium	E	1.1850	0.4686	10000	10190	ug/L	2	10	
Vanadium	E	3.2131	2.7405	100.0	100.6	ug/L	1	10	
Zinc	E	4.5722	0.8278	100.0	101.6	ug/L	2	10	
Iron	H	0.9870	0.9076	10000	10080	ug/L	1	10	
Selenium	H	0.1573	0.1511	100.0	103.5	ug/L	4	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1144857	9.94
Scandium	A	1368535	1480943	8.21
Scandium	E	23334	25146	7.76
Scandium	H	149247	120671	-19.15
Germanium	H	37109	29937	-19.33
Germanium	E	18011	19646	9.08
Indium	A	2003326	2053808	2.52
Bismuth	A	1840338	1830393	-0.54
Yttrium	A	2032903	2136348	5.09
Terbium	A	2868431	2977981	3.82

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897229804091 File : f08o0091
Cal : 897229804001 Caldate : 08-JUN-2007
IDF : 1.0
Time : 08-JUN-2007 23:03

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01252]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01559]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01574]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.01120]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.008713]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.05102]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.04193]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.04360]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.04271]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.05963]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.05071]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.02465]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1063509	2.13
Scandium	A	1368535	1383653	1.10
Scandium	E	23334	23307	-0.12
Scandium	H	149247	119848	-19.70
Germanium	H	37109	29665	-20.06
Germanium	E	18011	18181	0.94
Indium	A	2003326	2032394	1.45
Bismuth	A	1840338	1876625	1.97
Yttrium	A	2032903	2046298	0.66
Terbium	A	2868431	2923301	1.91

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897229804099 File : f08o0099 IDF : 1.0
Cal : 897229804001 Caldate : 08-JUN-2007 Time : 08-JUN-2007 23:51
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5777	0.5273	10000	10040	ug/L	0	10	
Antimony	A	0.3002	0.2700	100.0	100.2	ug/L	0	10	
Barium	A	0.1719	0.0708	100.0	98.32	ug/L	-2	10	
Beryllium	A	0.2268	0.2177	100.0	98.07	ug/L	-2	10	
Cadmium	A	0.0705	0.0675	100.0	101.6	ug/L	2	10	
Calcium	A	0.0339	0.0190	10000	10140	ug/L	1	10	
Lead	A	0.7144	0.6164	100.0	94.37	ug/L	-6	10	
Magnesium	A	0.4749	0.4277	10000	10120	ug/L	1	10	
Molybdenum	A	0.2135	0.1869	100.0	95.93	ug/L	-4	10	
Potassium	A	2.5092	0.6400	10000	10080	ug/L	1	10	
Silver	A	0.3253	0.3073	100.0	95.87	ug/L	-4	10	
Thallium	A	0.7681	0.7763	50.00	50.05	ug/L	0	10	
Arsenic	E	0.5826	0.5289	100.0	97.74	ug/L	-2	10	
Chromium	E	4.5455	3.6168	100.0	100.7	ug/L	1	10	
Cobalt	E	6.5022	6.1713	100.0	101.9	ug/L	2	10	
Copper	E	15.580	6.1696	100.0	101.6	ug/L	2	10	
Manganese	E	1.8299	1.5850	100.0	100.3	ug/L	0	10	
Nickel	E	2.7468	1.7019	100.0	102.4	ug/L	2	10	
Sodium	E	1.1850	0.4656	10000	10120	ug/L	1	10	
Vanadium	E	3.2131	2.7229	100.0	99.96	ug/L	0	10	
Zinc	E	4.5722	0.8287	100.0	101.7	ug/L	2	10	
Iron	H	0.9870	0.9161	10000	10170	ug/L	2	10	
Selenium	H	0.1573	0.1546	100.0	105.9	ug/L	6	10	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1168482	12.21
Scandium	A	1368535	1488337	8.75
Scandium	E	23334	25653	9.94
Scandium	H	149247	120196	-19.46
Germanium	H	37109	29647	-20.11
Germanium	E	18011	19886	10.41
Indium	A	2003326	2070128	3.33
Bismuth	A	1840338	1834604	-0.31
Yttrium	A	2032903	2150743	5.80
Terbium	A	2868431	2983638	4.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897229804101 File : f08o0101 Time : 09-JUN-2007 00:03
Cal : 897229804001 Caldate : 08-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	ND	0.1000	0.003333	ug/L	
Barium	A	[0.009019]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008238]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.002483]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002401]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01045]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01163]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.009803]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.01535]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.01545]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01418]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01758]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1082989	4.00
Scandium	A	1368535	1402077	2.45
Scandium	E	23334	23990	2.81
Scandium	H	149247	116028	-22.26
Germanium	H	37109	28769	-22.47
Germanium	E	18011	18529	2.88
Indium	A	2003326	2050180	2.34
Bismuth	A	1840338	1875762	1.92
Yttrium	A	2032903	2095674	3.09
Terbium	A	2868431	2955060	3.02

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16
Seqnum : 897229804103 File : f08o0103
Cal : 897229804001 Caldate : 08-JUN-2007
Standards: S6421, S6035

IDF : 1.0
Time : 09-JUN-2007 00:15

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08186]	0.1000	ug/L	
Barium	A	0.7387	0.1000	ug/L	
Beryllium	A	[0.02035]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.3437	0.1000	ug/L	
Silver	A	0.1450	0.1000	ug/L	
Thallium	A	[0.02845]	0.05000	ug/L	
Arsenic	E	0.1758	0.1000	ug/L	
Chromium	E	1.079	0.1000	ug/L	
Cobalt	E	0.1658	0.1000	ug/L	
Copper	E	0.9883	0.1000	ug/L	
Manganese	E	0.4487	0.1000	ug/L	
Nickel	E	0.9450	0.1000	ug/L	
Vanadium	E	[0.04183]	0.1000	ug/L	
Zinc	E	1.006	0.1000	ug/L	
Selenium	H	[0.04061]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	78090	ug/L	78
Calcium	A	300000	234400	ug/L	78
Magnesium	A	100000	76830	ug/L	77
Molybdenum	A	2000	1508	ug/L	75
Potassium	A	100000	77650	ug/L	78
Sodium	E	250000	190600	ug/L	76
Iron	H	250000	187700	ug/L	75

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1041364	1002204	-3.76
Scandium	A	1368535	1336833	-2.32
Scandium	E	23334	23841	2.17
Scandium	H	149247	119545	-19.90
Germanium	H	37109	27626	-25.55
Germanium	E	18011	17795	-1.20
Indium	A	2003326	1778660	-11.21
Bismuth	A	1840338	1518957	-17.46
Yttrium	A	2032903	1960367	-3.57
Terbium	A	2868431	2705070	-5.70

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16
Seqnum : 897229804104
Cal : 897229804001
Standards: S6422, S6035

File : f08o0104
Caldate : 08-JUN-2007

IDF : 1.0
Time : 09-JUN-2007 00:21

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	100400	ug/L	0		
Cadmium	A	100.0	100.5	ug/L	1	20	
Calcium	A	300000	301200	ug/L	0		
Magnesium	A	100000	97990	ug/L	-2		
Molybdenum	A	2000	1929	ug/L	-4		
Potassium	A	100000	99200	ug/L	-1		
Silver	A	50.00	45.97	ug/L	-8	20	
Arsenic	E	100.0	103.7	ug/L	4	20	
Chromium	E	200.0	198.5	ug/L	-1	20	
Cobalt	E	200.0	188.2	ug/L	-6	20	
Copper	E	200.0	180.9	ug/L	-10	20	
Manganese	E	200.0	197.5	ug/L	-1	20	
Nickel	E	200.0	184.5	ug/L	-8	20	
Sodium	E	250000	244300	ug/L	-2		
Vanadium	E	200.0	201.0	ug/L	1	20	
Zinc	E	100.0	93.86	ug/L	-6	20	
Iron	H	250000	237700	ug/L	-5		
Selenium	H	100.0	104.1	ug/L	4	20	

ISTD (ICALBLK f08o0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	149247	127673	-14.46
Scandium	A	1368535	1288116	-5.88
Scandium	E	23334	23157	-0.76
Germanium	H	37109	29286	-21.08
Germanium	E	18011	17372	-3.55
Indium	A	2003326	1713487	-14.47
Yttrium	A	2032903	1893131	-6.88

897229804104

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897229804

Date : 06/08/07
Sequence : MET16 f08o0

Reference : f08o0004
Analyzed : 06/08/07 14:24

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1041364	1368535	23334	149247	37109	18011	2003326	1840338	2032903	2868431
		LOWER LIMIT	312409	410561	7000	44774	11133	5403	600998	552101	609871	860529
		UPPER LIMIT	1249637	1642242	28001	179096	44531	21613	2403991	2208406	2439484	3442117
014	ICB		1094855	1469601	25479	150256	37196	19741	2140312	1898549	2187534	3006374
016	ICSA		982613	1351056	24057	146119	34050	17822	1765334	1489179	1970168	2667484
017	ICSAB		989167	1340075	23714	154720	35816	17441	1745887	1467986	1947939	2662553
022	SAMPLE	195215-002	1024843	1412603	24139	136396	33479	18480	2057376	1895362	2129115	2950109
023	SAMPLE	195215-004	1067955	1548465	26557	142288	33518	19759	2111251	1875863	2315201	3035752
024	SAMPLE	195215-005	1115268	1557439	26710	141303	35266	20431	2204782	1968938	2293341	3131442
025	SAMPLE	195215-006	1091424	1591117	27279	144268	34323	20167	2152874	1899729	2333090	3077308
026	SAMPLE	195215-007	1112409	1560423	26796	143831	35215	20535	2177571	1936854	2301377	3114807
028	SAMPLE	195215-008	1104652	1594080	27902	142166	34188	20602	2174901	1923367	2356446	3085578
029	SAMPLE	195215-009	1096415	1522258	26613	146629	36147	20129	2167553	1959906	2282870	3086461
030	SAMPLE	195215-010	1121376	1566554	27165	142460	35103	20757	2192061	1949769	2304515	3088068
033	CCV		1143603	1517698	26577	140546	35007	20074	2108823	1865983	2201876	3051832
035	CCB		1077738	1451202	25502	139638	34670	19772	2114957	1901720	2160734	3011865
037	SAMPLE	195215-011	1130705	1535120	27016	132862	32963	20387	2186006	1943402	2276410	3054105
038	SAMPLE	195215-012	1149492	1583626	27431	136493	33161	20593	2198083	1969046	2325703	3095774
039	SAMPLE	195215-013	1122817	1544697	27638	137818	33992	20763	2178414	1935185	2288871	3083777
040	SAMPLE	195215-014	1132472	1548517	27364	134950	32776	20723	2141147	1916241	2280486	3044601
042	SAMPLE	195215-015	1159013	1595583	28102 *	137701	33419	21010	2197656	1953340	2342364	3113474
043	SAMPLE	195215-016	1137689	1535758	26701	134172	32808	20397	2155603	1929605	2260790	3036312
044	SAMPLE	195215-017	1152581	1570639	27691	131998	31962	20696	2190218	1953264	2308255	3077076
045	SAMPLE	195215-018	1161219	1569097	27390	131300	32247	21073	2192555	1961674	2297804	3104780
046	SAMPLE	195215-019	1148884	1540829	26948	129172	31657	20615	2164844	1963914	2268624	3097317
047	SAMPLE	195215-015	1107329	1544008	26866	127701	31045	20218	2166830	1950478	2278966	3104453
050	CCV		1167994	1523351	27201	133779	33600	20694	2115613	1842823	2211888	3019539
052	CCB		1115987	1479372	25460	131751	32422	19505	2128177	1919072	2193077	3054820
054	ICSA		989170	1354390	24751	138981	32155	18219	1790587	1518765	1964427	2721306
055	ICSAB		961709	1317675	24019	147482	33818	17837	1739156	1460467	1929083	2656764
060	BLANK	QC391463	907014	1244270	21107	108991	32489	19361	1860271	1771665	1895829	2789854
061	BS	QC391464	947890	1328402	22517	115075	28337	17309	1933726	1761549	2002485	2855882
062	BSD	QC391465	946431	1343191	22758	115955	28511	17428	1932619	1767494	2001679	2876487
064	MSS	195270-007	1083030	1450411	24815	122663	30727	19369	2062642	1831372	2119867	2972260
065	SER	QC391468	1069703	1397239	23971	120675	30743	18767	2045588	1856971	2067958	2924885
066	MS	QC391466	1088772	1457774	24655	122714	30879	18981	2048026	1817742	2121054	2943579
067	MSD	QC391467	1113129	1477491	24652	122802	30717	19258	2076073	1829736	2162635	3003661
068	PDS	QC391469	1077653	1406196	24529	123500	30737	18633	1963712	1718485	2057593	2845305
071	CCV		1120239	1450540	23233	124205	31020	17921	2031357	1809860	2108716	2947922
073	CCB		1051245	1385965	23605	121297	30292	18341	2024682	1847105	2056461	2911952
075	SAMPLE	195270-001	1121033	1453502	24677	121209	29753	18878	2046241	1775338	2116061	2929362
076	SAMPLE	195270-002	1102106	1456807	23887	121481	30116	18320	2029475	1799377	2105041	2941138
077	SAMPLE	195270-003	1027020	1306979	22190	124180	31317	17359	1900944	1777943	1923979	2789053
078	SAMPLE	195270-004	1023566	1298294	22026	122084	30919	17260	1949506	1834565	1949437	2823327
079	SAMPLE	195270-005	1048118	1332274	22722	121323	30803	17796	1930303	1782963	1950080	2781234
080	SAMPLE	195270-006	1059737	1375277	23155	120242	30205	17942	1969016	1785141	2010453	2832526
081	SAMPLE	195270-008	1071429	1382978	23303	117240	29684	18228	1964705	1769529	1999720	2829688
082	SAMPLE	195270-010	1068010	1345241	22847	115640	29309	18016	1946642	1799564	1976032	2847745
083	SAMPLE	195270-011	1064589	1349570	22899	112446	28364	18023	1973963	1807449	1987531	2847779
084	SAMPLE	195270-012	1060812	1350263	22713	112904	28745	18007	1973551	1818975	1990721	2849723
089	CCV		1144857	1480943	25146	120671	29937	19646	2053808	1830393	2136348	2977981

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897229804

Date : 06/08/07 Reference : f08o0004
Sequence : MET16 f08o0 Analyzed : 06/08/07 14:24

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
091	CCB		1063509	1383653	23307	119848	29665	18181	2032394	1876625	2046298	2923301
093	SAMPLE	195270-016	1166373	1495710	25611	114630	28560	19778	2060919	1799327	2143757	2951749
094	SAMPLE	195270-017	1092729	1383720	23625	118535	29858	18499	1990016	1808839	2026715	2883471
095	SAMPLE	195270-018	1083222	1377757	23700	116559	29422	18433	1996105	1821092	2033968	2861310
096	SAMPLE	195279-001	1045757	1343834	22788	116197	29191	17753	1989999	1834619	1998589	2864137
099	CCV		1168482	1488337	25653	120196	29647	19886	2070128	1834604	2150743	2983638
101	CCB		1082989	1402077	23990	116028	28769	18529	2050180	1875762	2095674	2955060
103	ICSA		1002204	1336833	23841	119545	27626	17795	1778660	1518957	1960367	2705070
104	ICSAB		975051	1288116	23157	127673	29286	17372	1713487	1457117	1893131	2622544

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 08-JUN-2007

Sequence: 897229804 Instrument: MET16 Agilent ICP-MS MET16
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	f08o0001	TUN				08-JUN-2007 14:04	1.0	1.0			1	
002	f08o0002	X	RINSE			08-JUN-2007 14:12	1.0				2	
003	f08o0003	X	RINSE			08-JUN-2007 14:17	1.0				2	
004	f08o0004	ICALBLK	CALBLANK			08-JUN-2007 14:24	1.0	1.0			2	
005	f08o0005	ICAL				08-JUN-2007 14:30	1.0	1.0			3	
006	f08o0006	ICAL				08-JUN-2007 14:36	1.0	1.0			4	
007	f08o0007	ICAL				08-JUN-2007 14:42	1.0	1.0			5	
008	f08o0008	ICAL				08-JUN-2007 14:48	1.0	1.0			6	
009	f08o0009	ICAL				08-JUN-2007 14:53	1.0	1.0			7	
010	f08o0010	ICAL				08-JUN-2007 14:59	1.0	1.0			8	
011	f08o0011	X	RINSE			08-JUN-2007 15:05	1.0				2	
012	f08o0012	ICV				08-JUN-2007 15:11	1.0	1.0		1	9 2	
013	f08o0013	X	RINSE			08-JUN-2007 15:17	1.0				2	
014	f08o0014	ICB				08-JUN-2007 15:23	1.0	1.0		1	2	
015	f08o0015	X				08-JUN-2007 15:29	1.0				2	
016	f08o0016	ICSA				08-JUN-2007 15:35	1.0	1.0		1	10 2	7:CA=237800
017	f08o0017	ICSAB				08-JUN-2007 15:41	1.0	1.0		1	11 2	10:CA=302800
018	f08o0018	X	RINSE			08-JUN-2007 15:47	1.0				2	
019	f08o0019	X	RINSE			08-JUN-2007 15:53	1.0				2	
020	f08o0020	X	RINSE			08-JUN-2007 15:59	1.0				2	
021	f08o0021	X	RINSE			08-JUN-2007 16:05	1.0				2	
022	f08o0022	SAMPLE	195215-002	126073	Soil	08-JUN-2007 16:11	50.0	46.30	1	1	2	
023	f08o0023	SAMPLE	195215-004	126073	Soil	08-JUN-2007 16:17	50.0	45.87		1	2	1:MN=213.000
024	f08o0024	SAMPLE	195215-005	126073	Soil	08-JUN-2007 16:23	50.0	49.50		1	2	
025	f08o0025	SAMPLE	195215-006	126073	Soil	08-JUN-2007 16:28	50.0	49.50		1	2	
026	f08o0026	SAMPLE	195215-007	126073	Soil	08-JUN-2007 16:34	50.0	47.62		1	2	
027	f08o0027	X	RINSE			08-JUN-2007 16:40	1.0				2	
028	f08o0028	SAMPLE	195215-008	126073	Soil	08-JUN-2007 16:46	50.0	46.30		1	2	
029	f08o0029	SAMPLE	195215-009	126073	Soil	08-JUN-2007 16:52	50.0	45.87		1	2	
030	f08o0030	SAMPLE	195215-010	126073	Soil	08-JUN-2007 16:58	50.0	50.0		1	2	
031	f08o0031	X	RINSE			08-JUN-2007 17:04	1.0				2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 8/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 08-JUN-2007

Sequence: 897229804 Instrument: MET16 Agilent ICP-MS MET16
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	f08o0032	X	RINSE			08-JUN-2007 17:10	1.0				2	
033	f08o0033	CCV				08-JUN-2007 17:16	1.0	1.0		1	12 2	
034	f08o0034	X	RINSE			08-JUN-2007 17:21	1.0				2	
035	f08o0035	CCB				08-JUN-2007 17:27	1.0	1.0		1	2	
036	f08o0036	X				08-JUN-2007 17:33	1.0				2	
037	f08o0037	SAMPLE	195215-011	126073	Soil	08-JUN-2007 17:39	50.0	49.50		1	2	
038	f08o0038	SAMPLE	195215-012	126073	Soil	08-JUN-2007 17:45	50.0	45.05		1	2	
039	f08o0039	SAMPLE	195215-013	126073	Soil	08-JUN-2007 17:51	50.0	49.02		1	2	
040	f08o0040	SAMPLE	195215-014	126073	Soil	08-JUN-2007 17:57	50.0	45.05		1	2	
041	f08o0041	X	RINSE			08-JUN-2007 18:03	1.0				2	
042	f08o0042	SAMPLE	195215-015	126073	Soil	08-JUN-2007 18:09	50.0	46.30	4	1	2	
043	f08o0043	SAMPLE	195215-016	126073	Soil	08-JUN-2007 18:15	50.0	45.87		1	2	
044	f08o0044	SAMPLE	195215-017	126073	Soil	08-JUN-2007 18:21	50.0	48.08		1	2	
045	f08o0045	SAMPLE	195215-018	126073	Soil	08-JUN-2007 18:27	50.0	45.87		1	2	
046	f08o0046	SAMPLE	195215-019	126073	Soil	08-JUN-2007 18:33	50.0	45.87		1	2	
047	f08o0047	SAMPLE	195215-015	126073	Soil	08-JUN-2007 18:39	100.0	46.30		1	2	
048	f08o0048	X	RINSE			08-JUN-2007 18:47	1.0				2	
049	f08o0049	X	RINSE			08-JUN-2007 18:53	1.0				2	
050	f08o0050	CCV				08-JUN-2007 18:59	1.0	1.0		1	12 2	
051	f08o0051	X	RINSE			08-JUN-2007 19:05	1.0				2	
052	f08o0052	CCB				08-JUN-2007 19:11	1.0	1.0		1	2	
053	f08o0053	X	RINSE			08-JUN-2007 19:17	1.0				2	
054	f08o0054	ICSA				08-JUN-2007 19:23	1.0	1.0		1	10 2	7:CA=237700
055	f08o0055	ICSAB				08-JUN-2007 19:29	1.0	1.0		1	11 2	8:CA=302500
056	f08o0056	X	RINSE			08-JUN-2007 19:35	1.0				2	
057	f08o0057	X	RINSE			08-JUN-2007 19:41	1.0				2	
058	f08o0058	X	RINSE			08-JUN-2007 19:47	1.0				2	
059	f08o0059	X	RINSE			08-JUN-2007 19:53	1.0				2	
060	f08o0060	BLANK	QC391463	126092	Filtra	08-JUN-2007 19:59	1.0	1.0		1	2	
061	f08o0061	BS	QC391464	126092	Filtra	08-JUN-2007 20:05	1.0	1.0		1	2	
062	f08o0062	BSD	QC391465	126092	Filtra	08-JUN-2007 20:10	1.0	1.0		1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f08o0063	X	RINSE			08-JUN-2007 20:17	1.0					2	
064	f08o0064	MSS	195270-007	126092	Filtra	08-JUN-2007 20:23	10.0	1.0	1		1	2	1:NA=22570.0
065	f08o0065	SER	QC391468	126092	Filtra	08-JUN-2007 20:29	50.0	1.0			1	2	
066	f08o0066	MS	QC391466	126092	Filtra	08-JUN-2007 20:35	10.0	1.0			1	2	1:NA=23430.0
067	f08o0067	MSD	QC391467	126092	Filtra	08-JUN-2007 20:40	10.0	1.0			1	2	1:NA=23370.0
068	f08o0068	PDS	QC391469	126092	Filtra	08-JUN-2007 20:46	10.0	1.0			1	13 14 2	1:NA=31930.0
069	f08o0069	X	RINSE			08-JUN-2007 20:52	1.0					2	
070	f08o0070	X	RINSE			08-JUN-2007 20:58	1.0					2	
071	f08o0071	CCV				08-JUN-2007 21:04	1.0	1.0			1	12 2	
072	f08o0072	X	RINSE			08-JUN-2007 21:10	1.0					2	
073	f08o0073	CCB				08-JUN-2007 21:16	1.0	1.0			1	2	
074	f08o0074	X				08-JUN-2007 21:22	1.0					2	
075	f08o0075	SAMPLE	195270-001	126092	Filtra	08-JUN-2007 21:28	10.0	1.0	3		1	2	3:NA=36790.0
076	f08o0076	SAMPLE	195270-002	126092	Filtra	08-JUN-2007 21:34	10.0	1.0	3		1	2	3:NA=39510.0
077	f08o0077	SAMPLE	195270-003	126092	Filtra	08-JUN-2007 21:40	10.0	1.0			1	2	
078	f08o0078	SAMPLE	195270-004	126092	Filtra	08-JUN-2007 21:46	10.0	1.0			1	2	
079	f08o0079	SAMPLE	195270-005	126092	Filtra	08-JUN-2007 21:51	10.0	1.0			1	2	
080	f08o0080	SAMPLE	195270-006	126092	Filtra	08-JUN-2007 21:57	10.0	1.0			1	2	
081	f08o0081	SAMPLE	195270-008	126092	Filtra	08-JUN-2007 22:03	10.0	1.0	1		1	2	1:NA=21990.0
082	f08o0082	SAMPLE	195270-010	126092	Filtra	08-JUN-2007 22:09	10.0	1.0			1	2	
083	f08o0083	SAMPLE	195270-011	126092	Filtra	08-JUN-2007 22:15	10.0	1.0			1	2	
084	f08o0084	SAMPLE	195270-012	126092	Water	08-JUN-2007 22:21	10.0	1.0			1	2	
085	f08o0085	TUN				08-JUN-2007 22:26	1.0	1.0				1	
086	f08o0086	X	RINSE			08-JUN-2007 22:34	1.0					2	
087	f08o0087	X	RINSE			08-JUN-2007 22:40	1.0					2	
088	f08o0088	X	RINSE			08-JUN-2007 22:46	1.0					2	
089	f08o0089	CCV				08-JUN-2007 22:52	1.0	1.0			1	12 2	
090	f08o0090	X	RINSE			08-JUN-2007 22:57	1.0					2	
091	f08o0091	CCB				08-JUN-2007 23:03	1.0	1.0			1	2	
092	f08o0092	X				08-JUN-2007 23:09	1.0					2	
093	f08o0093	SAMPLE	195270-016	126092	Filtra	08-JUN-2007 23:15	10.0	1.0	1		1	2	1:NA=34530.0

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: [signature] Date: 6/11/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897229804 Instrument: MET16 Agilent ICP-MS MET16 Begun: 08-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f08o0094	SAMPLE	195270-017	126092	Water	08-JUN-2007 23:21	10.0	1.0			1	2	
095	f08o0095	SAMPLE	195270-018	126092	Water	08-JUN-2007 23:27	10.0	1.0	1		1	2	1:MN=224.100
096	f08o0096	SAMPLE	195279-001	126092	Filtra	08-JUN-2007 23:33	10.0	1.0			1	2	
097	f08o0097	X	RINSE			08-JUN-2007 23:39	1.0					2	
098	f08o0098	X	RINSE			08-JUN-2007 23:45	1.0					2	
099	f08o0099	CCV				08-JUN-2007 23:51	1.0	1.0			1	12 2	
100	f08o0100	X	RINSE			08-JUN-2007 23:57	1.0					2	
101	f08o0101	CCB				09-JUN-2007 00:03	1.0	1.0			1	2	
102	f08o0102	X				09-JUN-2007 00:09	1.0					2	
103	f08o0103	ICSA				09-JUN-2007 00:15	1.0	1.0			1	10 2	7:CA=234400
104	f08o0104	ICSAB				09-JUN-2007 00:21	1.0	1.0			1	11 2	8:CA=301200

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6420 13=S5054 14=S5055

Analyst: _____ Date: 6/11/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897239429001
Units : ug/L

Date : 15-JUN-2007 06:49
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f15g0005	897239429005		15-JUN-2007 06:55	S6414
L2	f15g0006	897239429006		15-JUN-2007 07:01	S6416
L3	f15g0007	897239429007		15-JUN-2007 07:07	S6417
L4	f15g0008	897239429008		15-JUN-2007 07:12	S6418
L5	f15g0009	897239429009		15-JUN-2007 07:18	S6412
L6	f15g0010	897239429010		15-JUN-2007 07:24	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.8379	0.6912	0.6963	0.6420	0.6299	0.6117	BLNK	-0.8872	1.62499		0.6848	1.000	0.995	
Antimony	A	0.4972	0.3367	0.3225	0.2977	0.3237	0.3164	BLNK	-0.0110	3.14648		0.3490	1.000	0.995	
Barium	A	0.6126	0.1751	0.0963	0.1306	0.0689	0.0676	BLNK	-0.0123	14.7140		0.1918	0.997	0.995	
Beryllium	A	0.2633	0.2698	0.2792	0.2613	0.2655	0.2702	BLNK	-0.0028	3.71451		0.2682	1.000	0.995	
Cadmium	A	0.0807	0.0780	0.0771	0.0724	0.0730	0.0712	BLNK	-0.0091	13.9815		0.0754	1.000	0.995	
Calcium	A	0.1376	0.0463	0.0314	0.0206	0.0209	0.0201	BLNK	-34.647	49.5468		0.0461	1.000	0.995	
Lead	A	1.1822	0.9685	0.8699	0.8076	0.8424	0.8172	BLNK	-0.0227	1.21644		0.9146	1.000	0.995	
Magnesium	A	0.7133	0.5819	0.5965	0.5451	0.5306	0.5115	BLNK	-0.9436	1.94032		0.5798	1.000	0.995	
Molybdenum	A	0.3103	0.2155	0.2186	0.2057	0.2043	0.2198	BLNK	-0.0383	4.61652		0.2290	0.999	0.995	
Potassium	A	10.899	2.3764	1.5404	0.7748	0.6933	0.6702	BLNK	-123.90	1.49270		2.8257	1.000	0.995	
Silver	A	0.3842	0.3419	0.3447	0.3273	0.3551	0.3423	BLNK	-0.0048	2.90019		0.3492	1.000	0.995	
Thallium	A	0.9482	0.8386	0.8256	0.7752	0.8620	0.8419	BLNK	-0.0086	1.18243		0.8486	1.000	0.995	
Arsenic	E	0.6338	0.6460	0.6660	0.6233	0.6225	0.6046	BLNK	-0.0220	1.64441		0.6327	1.000	0.995	
Chromium	E	12.844	6.2294	6.0958	5.2339	5.2273	5.0080	BLNK	-0.0705	0.19802		6.7730	1.000	0.995	
Cobalt	E	11.177	10.044	9.9608	9.5281	9.5846	9.1156	BLNK	-0.0073	0.10858		9.9018	0.999	0.995	
Copper	E	128.66	25.626	23.781	9.1590	8.4346	7.9918	BLNK	-0.9798	0.12447		33.943	0.999	0.995	
Manganese	E	3.8162	2.1634	2.0131	1.8361	1.8215	1.7514	BLNK	-0.0200	0.56647		2.2336	1.000	0.995	
Nickel	E	11.799	3.2815	3.1075	2.7495	2.7111	2.5701	BLNK	-0.0544	0.38495		4.3698	0.999	0.995	
Sodium	E	5.3694	1.3433	0.9662	0.5862	0.5537	0.5221	BLNK	-68.857	1.90020		1.5568	0.999	0.995	
Vanadium	E	6.2827	4.3133	4.0415	3.7155	3.8125	3.6820	BLNK	-0.0646	0.26979		4.3079	1.000	0.995	
Zinc	E	22.601	4.0786	2.1071	1.0860	0.9304	0.8945	BLNK	-0.7877	1.11392		5.2830	1.000	0.995	
Iron	H	1.2092	0.9448	0.9430	0.8759	0.8672	0.8355	BLNK	-1.5779	1.18793		0.9459	1.000	0.995	
Selenium	H	0.1253	0.1268	0.1268	0.1221	0.1192	0.1154	BLNK	-0.0127	8.60551		0.1226	1.000	0.995	

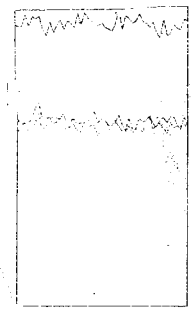
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	27	50.00	11	100.0	12	1000	4	10000	2	20000	-1
Antimony	A	0.100	45	0.500	4	1.000	0	10.00	-6	100.0	2	200.0	0
Barium	A	0.100	789	0.500	155	1.000	40	10.00	92	100.0	1	200.0	-1
Beryllium	A	0.100	-5	0.500	0	1.000	3	10.00	-3	100.0	-1	200.0	0
Cadmium	A	0.100	4	0.500	7	1.000	7	10.00	1	100.0	2	200.0	-1
Calcium	A	10.00	235	50.00	60	100.0	21	1000	-1	10000	3	20000	-1
Lead	A	0.100	21	0.500	13	1.000	4	10.00	-2	100.0	2	200.0	-1
Magnesium	A	10.00	29	50.00	11	100.0	15	1000	6	10000	3	20000	-1
Molybdenum	A	0.100	5	0.500	-8	1.000	-3	10.00	-5	100.0	-6	200.0	1
Potassium	A	10.00	288	50.00	7	100.0	6	1000	3	10000	2	20000	-1
Silver	A	0.100	7	0.500	-2	1.000	-1	10.00	-5	100.0	3	200.0	-1
Thallium	A	0.050	-5	0.250	-4	0.500	-4	5.000	-9	50.00	2	100.0	0
Arsenic	E	0.100	-18	0.500	2	1.000	7	10.00	2	100.0	2	200.0	-1
Chromium	E	0.100	84	0.500	9	1.000	14	10.00	3	100.0	3	200.0	-1
Cobalt	E	0.100	14	0.500	8	1.000	7	10.00	3	100.0	4	200.0	-1
Copper	E	0.100	522	0.500	23	1.000	98	10.00	4	100.0	4	200.0	-1
Manganese	E	0.100	96	0.500	19	1.000	12	10.00	4	100.0	3	200.0	-1
Nickel	E	0.100	300	0.500	15	1.000	14	10.00	5	100.0	4	200.0	-1
Sodium	E	10.00	232	50.00	18	100.0	15	1000	5	10000	5	20000	-1
Vanadium	E	0.100	5	0.500	3	1.000	3	10.00	0	100.0	3	200.0	-1
Zinc	E	0.100	1630	0.500	197	1.000	56	10.00	13	100.0	3	200.0	-1
Iron	H	10.00	28	50.00	9	100.0	10	1000	4	10000	3	20000	-1
Selenium	H	0.100	-5	0.500	7	1.000	8	10.00	5	100.0	3	200.0	-1

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

897239429001

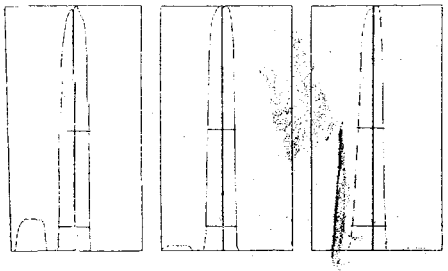
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	19010.0	18934.6	2.44	2.60
89	50,000	30214.0	30949.4	2.80	2.60
205	50,000	29603.0	29907.4	2.55	7.50

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.968%
Doubly Charged: 70/140 1.953%



m/z:	7	89	205
Height:	18,827	30,950	29,729
Axis:	7.00	88.95	204.95
W-50%:	0.70	0.65	0.60
W-10%:	0.7500	0.700	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.68	V
Smpl Depth	9	mm
Torch-H	0.6	mm
Torch-V	0.3	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-170	V
Omega Bias-ce	-30	V
Omega Lens-ce	-2	V
Cell Entrance	-30	V
QP Focus	7	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	126	
AMU Offset	126	
Axis Gain	0.9997	
Axis Offset	0.04	
QP Bias	-1	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1670	V
Pulse HV	1070	V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	6 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
51	5.9	49.06
59	3512.0	3.09
89	2282.6	3.29

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	2881.9	3.58
78	0.2	179.76
89	27467.1	2.31

Integration Time: 0.1000sec

Generated : Jun 15, 2007 05:58:54 : 00216
Printed : Jun 15, 2007 06:00:32

P/A Factor Tuning Report

Acquired:Jun 15 2007 06:10 am

Mass[amu]	Element	P/A Factor
6	Li	0.062565
7	(Li)	0.066124
9	Be	0.071729
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.088556
45	Sc	0.087082
51	V	0.082241
52	Cr	0.091161
55	Mn	0.093202
56	Fe	Sensitivity too high
59	Co	0.096359
60	Ni	Sensitivity too low
63	Cu	0.098927
65	Cu	0.101419
66	Zn	Sensitivity too low
72	Ge	0.099373
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.098348
98	Mo	0.098625
99	(Ru)	Sensitivity too low
107	Ag	0.106205
111	Cd	Sensitivity too low
115	In	0.104819
118	(In)	0.104631
121	Sb	0.104783
137	Ba	Sensitivity too low
159	Tb	0.108935
205	Tl	0.113946
206	(Pb)	0.113879
207	(Pb)	0.113809
208	Pb	0.114053
209	Bi	0.113471

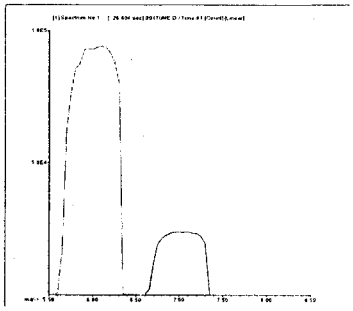
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1070 V

6020 QC Tune Report

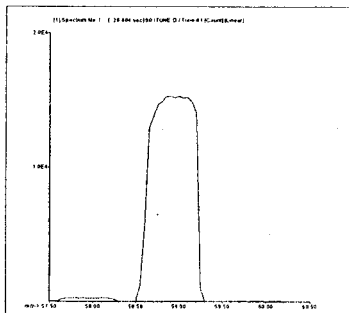
Data File: C:\ICPCHEM\1\DATA\07F15g00.B\001TUNE.D
Date Acquired: Jun 15 2007 06:29 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

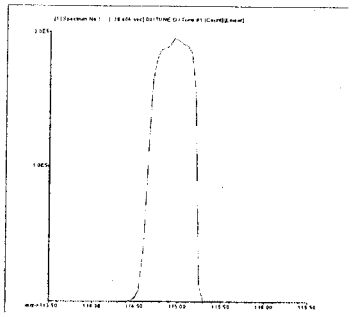
Element	Actual	Required	Flag
7 Li	0.47	5.00	
59 Co	0.47	5.00	
115 In	1.69	5.00	
205 Tl	0.32	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



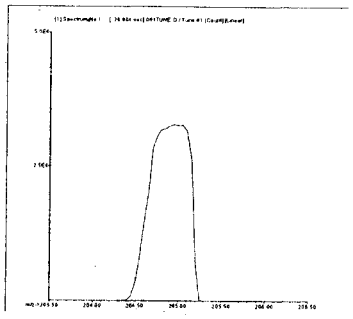
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



205 Tl

Mass Calib.

Actual: 204.95
Required: 204.90 - 205.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004C
Date Acquired: Jun 15 2007 06:47 am
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:51 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	947755.13	A	4878.00	0.51
7	(Li)		P		
9	Be	14.44	P	10.18	70.48
23	Na	11762.49	P	236.60	2.01
24	Mg	9966.74	P	259.30	2.60
27	Al	11188.76	P	255.20	2.28
39	K	1701053.00	A	11670.00	0.69
44	Ca	14329.16	P	375.20	2.62
45	Sc	421162.09	P	4015.00	0.95
45	Sc	16229.98	P	243.20	1.50
45	Sc	1024786.00	A	9004.00	0.88
51	V	77.78	P	4.84	6.23
52	Cr	115.56	P	8.68	7.51
55	Mn	11.48	P	1.70	14.78
56	Fe	11191.89	P	600.50	5.37
59	Co	21.85	P	1.70	7.77
60	Ni	45.93	P	3.57	7.78
63	Cu	2342.05	P	81.38	3.47
65	Cu	1065.60	P	25.63	2.41
66	Zn	210.37	P	14.92	7.09
72	Ge	105465.50	P	1052.00	1.00
72	Ge	14880.62	P	152.60	1.03
75	As	4.00	P	1.76	44.10
78	Se	3.11	P	1.02	32.72
89	Y	1534317.00	A	31420.00	2.05
98	Mo	254.46	P	61.50	24.17
107	Ag	53.34	P	10.00	18.75
111	Cd	21.11	P	1.93	9.12
115	In	1615942.00	A	16590.00	1.03
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	113.34	P	10.00	8.82
137	Ba	44.45	P	5.09	11.46
159	Tb	2647564.00	A	44140.00	1.67
205	Tl	277.79	P	10.18	3.66
208	Pb	988.94	P	25.89	2.62
209	Bi	1910108.00	A	31210.00	1.63

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 15 2007 06:53 am
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:51 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	943913.69	A	10460.00	1.11
7 (Li)		P		
9 Be	496.69	P	45.10	9.08
23 Na	17573.51	P	104.90	0.60
24 Mg	143769.09	P	381.70	0.27
27 Al	168870.50	P	2292.00	1.36
39 K	2196536.00	A	15880.00	0.72
44 Ca	27721.76	P	181.20	0.65
45 Sc	423492.59	P	719.90	0.17
45 Sc	16368.64	P	296.20	1.81
45 Sc	1007752.00	A	8703.00	0.86
51 V	205.56	P	6.19	3.01
52 Cr	421.13	P	65.68	15.60
55 Mn	124.82	P	7.23	5.79
56 Fe	102414.10	P	543.30	0.53
59 Co	365.93	P	9.96	2.72
60 Ni	386.31	P	25.59	6.62
63 Cu	3835.33	P	58.60	1.53
65 Cu	1834.20	P	76.69	4.18
66 Zn	673.73	P	0.64	0.10
72 Ge	104706.60	P	642.20	0.61
72 Ge	14904.71	P	35.97	0.24
75 As	18.89	P	2.69	14.26
78 Se	26.22	P	4.29	16.35
89 Y	1516639.00	A	10060.00	0.66
98 Mo	941.17	P	16.44	1.75
99 (Ru)	2.22	P	1.93	86.62
107 Ag	1232.31	P	51.68	4.19
111 Cd	258.90	P	12.62	4.87
115 In	1604256.00	A	17620.00	1.10
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1595.70	P	100.10	6.27
137 Ba	3203.79	P	67.43	2.10
159 Tb	2615250.00	A	16420.00	0.63
205 Tl	1795.74	P	90.21	5.02
208 Pb	6182.97	P	223.70	3.62
209 Bi	1893869.00	A	8900.00	0.47

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	943913.75	1.11	947755.06	99.6	80 - 120	
45 Sc	423492.59	0.17	421162.13	100.6	80 - 120	
45 Sc	16368.65	1.81	16229.98	100.9	80 - 120	
45 Sc	1007751.80	0.86	1024785.60	98.3	80 - 120	
72 Ge	104706.61	0.61	105465.45	99.3	80 - 120	
72 Ge	14904.71	0.24	14880.62	100.2	80 - 120	
89 Y	1516638.90	0.66	1534317.40	98.8	80 - 120	
115 In	1604256.00	1.10	1615942.40	99.3	80 - 120	
159 Tb	2615250.00	0.63	2647563.80	98.8	80 - 120	
209 Bi	1893869.40	0.47	1910108.10	99.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 15 2007 06:59 am
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 06:57 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	935565.50	A	5843.00	0.62
7 (Li)		P		
9 Be	2523.61	P	120.40	4.77
23 Na	21363.79	P	213.40	1.00
24 Mg	590107.88	P	1293.00	0.22
27 Al	701022.13	P	3415.00	0.49
39 K	2410063.00	A	4210.00	0.17
44 Ca	46952.11	P	688.00	1.47
45 Sc	419219.81	P	2217.00	0.53
45 Sc	15904.46	P	102.60	0.65
45 Sc	1014195.00	A	4754.00	0.47
51 V	685.95	P	28.57	4.17
52 Cr	990.78	P	20.04	2.02
55 Mn	344.08	P	2.31	0.67
56 Fe	396080.69	P	242.30	0.06
59 Co	1597.51	P	39.67	2.48
60 Ni	521.87	P	17.01	3.26
63 Cu	3746.78	P	44.70	1.19
65 Cu	1764.20	P	32.86	1.86
66 Zn	596.31	P	17.37	2.91
72 Ge	104089.20	P	246.90	0.24
72 Ge	14621.12	P	41.27	0.28
75 As	94.45	P	2.78	2.94
78 Se	132.00	P	8.67	6.57
89 Y	1524579.00	A	2253.00	0.15
98 Mo	3286.02	P	188.60	5.74
99 (Ru)	2.22	P	3.85	173.20
107 Ag	5410.05	P	132.70	2.45
111 Cd	1234.54	P	97.90	7.93
115 In	1582749.00	A	9463.00	0.60
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	5328.92	P	47.91	0.90
137 Ba	4576.43	P	82.26	1.80
159 Tb	2613691.00	A	15110.00	0.58
205 Tl	7898.03	P	83.73	1.06
208 Pb	25311.96	P	130.70	0.52
209 Bi	1883717.00	A	9275.00	0.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	935565.50	0.62	947755.06	98.7	80 - 120	
45 Sc	419219.84	0.53	421162.13	99.5	80 - 120	
45 Sc	15904.46	0.65	16229.98	98.0	80 - 120	
45 Sc	1014195.30	0.47	1024785.60	99.0	80 - 120	
72 Ge	104089.20	0.24	105465.45	98.7	80 - 120	
72 Ge	14621.13	0.28	14880.62	98.3	80 - 120	
89 Y	1524578.90	0.15	1534317.40	99.4	80 - 120	
115 In	1582749.10	0.60	1615942.40	97.9	80 - 120	
159 Tb	2613691.00	0.58	2647563.80	98.7	80 - 120	
209 Bi	1883717.00	0.49	1910108.10	98.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 15 2007 07:04 am
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:03 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	942098.50	A	8795.00	0.93
7 (Li)		P		
9 Be	5259.92	P	173.60	3.30
23 Na	30577.95	P	54.38	0.18
24 Mg	1206511.00	A	11400.00	0.94
27 Al	1408348.00	A	10220.00	0.73
39 K	3115731.00	A	8164.00	0.26
44 Ca	63469.97	P	699.90	1.10
45 Sc	420489.09	P	1528.00	0.36
45 Sc	15823.26	P	42.51	0.27
45 Sc	1011408.00	A	12040.00	1.19
51 V	1278.96	P	17.10	1.34
52 Cr	1929.03	P	38.89	2.02
55 Mn	637.06	P	14.33	2.25
56 Fe	793059.00	P	3320.00	0.42
59 Co	3152.20	P	31.46	1.00
60 Ni	983.37	P	14.70	1.49
63 Cu	6833.41	P	48.01	0.70
65 Cu	3375.22	P	162.30	4.81
66 Zn	605.58	P	15.44	2.55
72 Ge	104516.00	P	526.00	0.50
72 Ge	14368.27	P	192.40	1.34
75 As	191.34	P	4.67	2.44
78 Se	265.12	P	5.59	2.11
89 Y	1521320.00	A	9324.00	0.61
98 Mo	6651.69	P	229.30	3.45
99 (Ru)	6.67	P	3.33	49.99
107 Ag	10879.88	P	328.50	3.02
111 Cd	2434.73	P	87.97	3.61
115 In	1577913.00	A	10710.00	0.68
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	10178.22	P	105.60	1.04
137 Ba	5038.80	P	130.40	2.59
159 Tb	2617613.00	A	11730.00	0.45
205 Tl	15564.65	P	322.70	2.07
208 Pb	45541.71	P	575.90	1.26
209 Bi	1885456.00	A	15510.00	0.82

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	942098.50	0.93	947755.06	99.4	80 - 120	
45 Sc	420489.13	0.36	421162.13	99.8	80 - 120	
45 Sc	15823.26	0.27	16229.98	97.5	80 - 120	
45 Sc	1011408.50	1.19	1024785.60	98.7	80 - 120	
72 Ge	104515.95	0.50	105465.45	99.1	80 - 120	
72 Ge	14368.27	1.34	14880.62	96.6	80 - 120	
89 Y	1521320.10	0.61	1534317.40	99.2	80 - 120	
115 In	1577912.60	0.68	1615942.40	97.6	80 - 120	
159 Tb	2617612.80	0.45	2647563.80	98.9	80 - 120	
209 Bi	1885455.60	0.82	1910108.10	98.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 15 2007 07:10 am
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:08 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	951113.00	A	6878.00	0.72
7 (Li)		P		
9 Be	49699.53	P	304.20	0.61
23 Na	188874.41	P	1504.00	0.80
24 Mg	11052280.00	A	89720.00	0.81
27 Al	13016580.00	A	98690.00	0.76
39 K	15708350.00	A	48390.00	0.31
44 Ca	418282.50	P	3273.00	0.78
45 Sc	416331.59	P	1506.00	0.36
45 Sc	16109.86	P	175.20	1.09
45 Sc	1013750.00	A	7365.00	0.73
51 V	11971.33	P	141.30	1.18
52 Cr	16863.27	P	181.80	1.08
55 Mn	5914.88	P	127.30	2.15
56 Fe	7293637.00	A	93150.00	1.28
59 Co	30698.50	P	249.40	0.81
60 Ni	8858.54	P	72.86	0.82
63 Cu	26973.89	P	258.30	0.96
65 Cu	13286.16	P	246.90	1.86
66 Zn	3198.51	P	14.33	0.45
72 Ge	104390.60	P	938.90	0.90
72 Ge	14726.03	P	125.60	0.85
75 As	1835.68	P	13.87	0.76
78 Se	2548.23	P	12.06	0.47
89 Y	1526105.00	A	1046.00	0.07
98 Mo	62786.71	P	263.50	0.42
99 (Ru)	7.78	P	7.70	98.97
107 Ag	104639.20	P	1218.00	1.16
111 Cd	23156.35	P	144.00	0.62
115 In	1598660.00	A	8575.00	0.54
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	95191.68	P	1283.00	1.35
137 Ba	68708.61	P	684.30	1.00
159 Tb	2631355.00	A	26910.00	1.02
205 Tl	147126.80	P	1274.00	0.87
208 Pb	424982.31	P	2413.00	0.57
209 Bi	1898198.00	A	30800.00	1.62

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	951113.00	0.72	947755.06	100.4	80 - 120	
45 Sc	416331.63	0.36	421162.13	98.9	80 - 120	
45 Sc	16109.87	1.09	16229.98	99.3	80 - 120	
45 Sc	1013750.30	0.73	1024785.60	98.9	80 - 120	
72 Ge	104390.56	0.90	105465.45	99.0	80 - 120	
72 Ge	14726.03	0.85	14880.62	99.0	80 - 120	
89 Y	1526105.40	0.07	1534317.40	99.5	80 - 120	
115 In	1598660.10	0.54	1615942.40	98.9	80 - 120	
159 Tb	2631355.30	1.02	2647563.80	99.4	80 - 120	
209 Bi	1898198.50	1.62	1910108.10	99.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 15 2007 07:16 am
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:14 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	936703.50	A	13980.00	1.49
7	(Li)		P		
9	Be	497381.91	P	1312.00	0.26
23	Na	1743709.00	A	5873.00	0.34
24	Mg	############	A	438900.00	0.40
27	Al	############	A	590200.00	0.45
39	K	############	A	390900.00	0.27
44	Ca	4346167.00	A	22000.00	0.51
45	Sc	414051.91	P	2356.00	0.57
45	Sc	15746.86	P	145.50	0.92
45	Sc	1039135.00	A	9048.00	0.87
51	V	120064.20	P	319.90	0.27
52	Cr	164626.00	P	1702.00	1.03
55	Mn	57363.88	P	501.30	0.87
56	Fe	71811048.00	A	586200.00	0.82
59	Co	301848.59	P	2289.00	0.76
60	Ni	85380.16	P	424.00	0.50
63	Cu	244811.20	P	1637.00	0.67
65	Cu	121538.20	P	869.10	0.72
66	Zn	27006.24	P	258.00	0.96
72	Ge	103637.00	P	416.20	0.40
72	Ge	14512.86	P	160.20	1.10
75	As	18067.30	P	184.60	1.02
78	Se	24709.22	P	183.70	0.74
89	Y	1548801.00	A	4534.00	0.29
98	Mo	632713.19	P	2582.00	0.41
99	(Ru)	24.45	P	1.93	7.87
107	Ag	1122046.00	A	6038.00	0.54
111	Cd	230635.00	P	851.20	0.37
115	In	1579861.00	A	15280.00	0.97
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	1022827.00	A	17250.00	1.69
137	Ba	361164.81	P	383.10	0.11
159	Tb	2621445.00	A	16840.00	0.64
205	Tl	1590165.00	A	3515.00	0.22
208	Pb	4416626.00	A	16620.00	0.38
209	Bi	1844639.00	A	4617.00	0.25

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	936703.50	1.49	947755.06	98.8	80 - 120	
45	Sc	414051.91	0.57	421162.13	98.3	80 - 120	
45	Sc	15746.86	0.92	16229.98	97.0	80 - 120	
45	Sc	1039135.20	0.87	1024785.60	101.4	80 - 120	
72	Ge	103636.99	0.40	105465.45	98.3	80 - 120	
72	Ge	14512.86	1.10	14880.62	97.5	80 - 120	
89	Y	1548800.90	0.29	1534317.40	100.9	80 - 120	
115	In	1579860.60	0.97	1615942.40	97.8	80 - 120	
159	Tb	2621444.50	0.64	2647563.80	99.0	80 - 120	
209	Bi	1844638.80	0.25	1910108.10	96.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F15g00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 15 2007 07:22 am
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 15 2007 07:20 am
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	945207.50	A	9548.00	1.01
7	(Li)		P		
9	Be	1021367.00	A	7885.00	0.77
23	Na	3380218.00	A	68720.00	2.03
24	Mg	############	A	1148000.00	0.53
27	Al	############	A	887300.00	0.34
39	K	############	A	1527000.00	0.54
44	Ca	8536508.00	A	77290.00	0.91
45	Sc	416098.19	P	1783.00	0.43
45	Sc	16186.22	P	196.30	1.21
45	Sc	1064233.00	A	5155.00	0.48
51	V	238387.59	P	2691.00	1.13
52	Cr	324230.31	P	2285.00	0.70
55	Mn	113389.10	P	1127.00	0.99
56	Fe	############	A	323700.00	0.23
59	Co	590176.38	P	5968.00	1.01
60	Ni	166400.09	P	1742.00	1.05
63	Cu	471635.31	P	3703.00	0.79
65	Cu	234991.70	P	1836.00	0.78
66	Zn	52793.06	P	527.70	1.00
72	Ge	103290.10	P	153.10	0.15
72	Ge	14755.69	P	257.90	1.75
75	As	35682.99	P	481.50	1.35
78	Se	47699.48	P	279.70	0.59
89	Y	1570082.00	A	4470.00	0.28
98	Mo	1380357.00	A	9603.00	0.70
99	(Ru)	32.22	P	8.39	26.03
107	Ag	2183102.00	A	20030.00	0.92
111	Cd	453833.41	P	2867.00	0.63
115	In	1594708.00	A	29540.00	1.85
118	(In)		A		
118	(In)		A		
118	(In)		A		
121	Sb	2018129.00	A	14570.00	0.72
137	Ba	712928.13	P	4885.00	0.69
159	Tb	2637372.00	A	17010.00	0.64
205	Tl	3058645.00	A	25580.00	0.84
208	Pb	8620622.00	A	41100.00	0.48
209	Bi	1816467.00	A	12510.00	0.69

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	945207.50	1.01	947755.06	99.7	80 - 120	
45	Sc	416098.25	0.43	421162.13	98.8	80 - 120	
45	Sc	16186.22	1.21	16229.98	99.7	80 - 120	
45	Sc	1064232.80	0.48	1024785.60	103.8	80 - 120	
72	Ge	103290.11	0.15	105465.45	97.9	80 - 120	
72	Ge	14755.69	1.75	14880.62	99.2	80 - 120	
89	Y	1570082.10	0.28	1534317.40	102.3	80 - 120	
115	In	1594707.80	1.85	1615942.40	98.7	80 - 120	
159	Tb	2637372.00	0.64	2647563.80	99.6	80 - 120	
209	Bi	1816466.90	0.69	1910108.10	95.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F15g00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429012 File : f15g0012 Time : 15-JUN-2007 07:38
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6848	0.6310	10000	10250	ug/L	3	10	
Antimony	A	0.3490	0.3272	100.0	102.9	ug/L	3	10	
Barium	A	0.1918	0.0695	100.0	102.3	ug/L	2	10	
Beryllium	A	0.2682	0.2693	100.0	100.0	ug/L	0	10	
Cadmium	A	0.0754	0.0736	100.0	102.9	ug/L	3	10	
Calcium	A	0.0461	0.0212	10000	10450	ug/L	5	10	
Lead	A	0.9146	0.8028	100.0	97.63	ug/L	-2	10	
Magnesium	A	0.5798	0.5293	10000	10270	ug/L	3	10	
Molybdenum	A	0.2290	0.2060	100.0	95.08	ug/L	-5	10	
Potassium	A	2.8257	0.7029	10000	10370	ug/L	4	10	
Silver	A	0.3492	0.3573	100.0	103.6	ug/L	4	10	
Thallium	A	0.8486	0.8470	50.00	50.07	ug/L	0	10	
Arsenic	E	0.6327	0.6332	100.0	104.1	ug/L	4	10	
Chromium	E	6.7730	5.2392	100.0	103.7	ug/L	4	10	
Cobalt	E	9.9018	9.5626	100.0	103.8	ug/L	4	10	
Copper	E	33.943	8.4931	100.0	104.7	ug/L	5	10	
Manganese	E	2.2336	1.8159	100.0	102.8	ug/L	3	10	
Nickel	E	4.3698	2.7099	100.0	104.3	ug/L	4	10	
Sodium	E	1.5568	0.5459	10000	10300	ug/L	3	10	
Vanadium	E	4.3079	3.8212	100.0	103.0	ug/L	3	10	
Zinc	E	5.2830	0.9410	100.0	104.0	ug/L	4	10	
Iron	H	0.9459	0.8699	10000	10330	ug/L	3	10	
Selenium	H	0.1226	0.1198	100.0	103.1	ug/L	3	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	967922	2.13
Scandium	A	1024786	1081574	5.54
Scandium	E	16230	16326	0.59
Scandium	H	421162	421411	0.06
Germanium	H	105466	105444	-0.02
Germanium	E	14881	14851	-0.20
Indium	A	1615942	1660625	2.77
Bismuth	A	1910108	1893588	-0.86
Yttrium	A	1534317	1620583	5.62
Terbium	A	2647564	2741722	3.56

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429014 File : f15g0014 Time : 15-JUN-2007 07:51
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.006037]	0.1000	0.003333	ug/L	!ib
Barium	A	ND	0.1000	0.002418	ug/L	
Beryllium	A	[0.005327]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01143]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.006499]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	960938	1.39
Scandium	A	1024786	1055567	3.00
Scandium	E	16230	15956	-1.69
Scandium	H	421162	415756	-1.28
Germanium	H	105466	104447	-0.97
Germanium	E	14881	14746	-0.90
Indium	A	1615942	1648089	1.99
Bismuth	A	1910108	1921327	0.59
Yttrium	A	1534317	1569938	2.32
Terbium	A	2647564	2674692	1.02

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429017 File : f15g0017 Time : 15-JUN-2007 08:09
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05807]	0.1000	ug/L	
Barium	A	0.9493	0.1000	ug/L	
Beryllium	A	[0.02214]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4012	0.1000	ug/L	
Silver	A	0.1871	0.1000	ug/L	
Thallium	A	[0.03976]	0.05000	ug/L	
Arsenic	E	0.2114	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1931	0.1000	ug/L	
Copper	E	0.9288	0.1000	ug/L	
Manganese	E	0.5332	0.1000	ug/L	
Nickel	E	1.057	0.1000	ug/L	
Vanadium	E	[0.02332]	0.1000	ug/L	
Zinc	E	2.038	0.1000	ug/L	
Selenium	H	[0.05829]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91800	ug/L	92
Calcium	A	300000	277700	ug/L	93
Magnesium	A	100000	89350	ug/L	89
Molybdenum	A	2000	1789	ug/L	89
Potassium	A	100000	92090	ug/L	92
Sodium	E	250000	218800	ug/L	88
Iron	H	250000	219800	ug/L	88

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	833330	-12.07
Scandium	A	1024786	1031697	0.67
Scandium	E	16230	16359	0.79
Scandium	H	421162	407246	-3.30
Germanium	H	105466	97058	-7.97
Germanium	E	14881	14491	-2.62
Indium	A	1615942	1507874	-6.69
Bismuth	A	1910108	1645288	-13.86
Yttrium	A	1534317	1572313	2.48
Terbium	A	2647564	2615635	-1.21

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429018 File : f15g0018 Time : 15-JUN-2007 08:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	96270	ug/L	-4		
Cadmium	A	100.0	100.2	ug/L	0	20	
Calcium	A	300000	293900	ug/L	-2		
Magnesium	A	100000	93820	ug/L	-6		
Molybdenum	A	2000	1914	ug/L	-4		
Potassium	A	100000	97520	ug/L	-2		
Silver	A	50.00	44.80	ug/L	-10	20	
Arsenic	E	100.0	104.5	ug/L	5	20	
Chromium	E	200.0	195.5	ug/L	-2	20	
Cobalt	E	200.0	184.9	ug/L	-8	20	
Copper	E	200.0	180.6	ug/L	-10	20	
Manganese	E	200.0	196.4	ug/L	-2	20	
Nickel	E	200.0	181.2	ug/L	-9	20	
Sodium	E	250000	232400	ug/L	-7		
Vanadium	E	200.0	198.4	ug/L	-1	20	
Zinc	E	100.0	93.81	ug/L	-6	20	
Iron	H	250000	237400	ug/L	-5		
Selenium	H	100.0	104.3	ug/L	4	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	400547	-4.89
Scandium	A	1024786	1032868	0.79
Scandium	E	16230	16221	-0.06
Germanium	H	105466	95805	-9.16
Germanium	E	14881	14323	-3.75
Indium	A	1615942	1499416	-7.21
Yttrium	A	1534317	1555187	1.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429033 File : f15g0033 Time : 15-JUN-2007 09:43
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6098	10000	9909	ug/L	-1	10	
Antimony	A	0.3490	0.3195	100.0	100.5	ug/L	1	10	
Barium	A	0.1918	0.0682	100.0	100.4	ug/L	0	10	
Beryllium	A	0.2682	0.2603	100.0	96.70	ug/L	-3	10	
Cadmium	A	0.0754	0.0713	100.0	99.73	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7907	100.0	96.16	ug/L	-4	10	
Magnesium	A	0.5798	0.5137	10000	9967	ug/L	0	10	
Molybdenum	A	0.2290	0.2016	100.0	93.05	ug/L	-7	10	
Potassium	A	2.8257	0.6881	10000	10150	ug/L	2	10	
Silver	A	0.3492	0.3506	100.0	101.7	ug/L	2	10	
Thallium	A	0.8486	0.8269	50.00	48.88	ug/L	-2	10	
Arsenic	E	0.6327	0.6115	100.0	100.5	ug/L	1	10	
Chromium	E	6.7730	5.0698	100.0	100.3	ug/L	0	10	
Cobalt	E	9.9018	9.3019	100.0	101.0	ug/L	1	10	
Copper	E	33.943	8.0891	100.0	99.71	ug/L	0	10	
Manganese	E	2.2336	1.7638	100.0	99.89	ug/L	0	10	
Nickel	E	4.3698	2.6189	100.0	100.8	ug/L	1	10	
Sodium	E	1.5568	0.5324	10000	10050	ug/L	1	10	
Vanadium	E	4.3079	3.6857	100.0	99.37	ug/L	-1	10	
Zinc	E	5.2830	0.9007	100.0	99.54	ug/L	0	10	
Iron	H	0.9459	0.8588	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1172	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	943519	-0.45
Scandium	A	1024786	1059042	3.34
Scandium	E	16230	15887	-2.11
Scandium	H	421162	403931	-4.09
Germanium	H	105466	101462	-3.80
Germanium	E	14881	14629	-1.69
Indium	A	1615942	1632221	1.01
Bismuth	A	1910108	1884026	-1.37
Yttrium	A	1534317	1590028	3.63
Terbium	A	2647564	2695620	1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429035 File : f15g0035 Time : 15-JUN-2007 09:56
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007591]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.002789]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.002456]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.077]	10.00	2.807	ug/L	!ib
Silver	A	[0.002661]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	ND	0.1000	0.001592	ug/L	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	933251	-1.53
Scandium	A	1024786	1034023	0.90
Scandium	E	16230	15841	-2.40
Scandium	H	421162	406728	-3.43
Germanium	H	105466	102698	-2.62
Germanium	E	14881	14617	-1.77
Indium	A	1615942	1623222	0.45
Bismuth	A	1910108	1919394	0.49
Yttrium	A	1534317	1559025	1.61
Terbium	A	2647564	2648690	0.04

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429045 File : f15g0045 Time : 15-JUN-2007 10:56
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6166	10000	10020	ug/L	0	10	
Antimony	A	0.3490	0.3230	100.0	101.6	ug/L	2	10	
Barium	A	0.1918	0.0696	100.0	102.4	ug/L	2	10	
Beryllium	A	0.2682	0.2629	100.0	97.67	ug/L	-2	10	
Cadmium	A	0.0754	0.0725	100.0	101.3	ug/L	1	10	
Calcium	A	0.0461	0.0206	10000	10150	ug/L	2	10	
Lead	A	0.9146	0.8044	100.0	97.83	ug/L	-2	10	
Magnesium	A	0.5798	0.5176	10000	10040	ug/L	0	10	
Molybdenum	A	0.2290	0.2035	100.0	93.89	ug/L	-6	10	
Potassium	A	2.8257	0.6877	10000	10140	ug/L	1	10	
Silver	A	0.3492	0.3525	100.0	102.2	ug/L	2	10	
Thallium	A	0.8486	0.8271	50.00	48.89	ug/L	-2	10	
Arsenic	E	0.6327	0.6130	100.0	100.8	ug/L	1	10	
Chromium	E	6.7730	5.1279	100.0	101.5	ug/L	2	10	
Cobalt	E	9.9018	9.3985	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.1387	100.0	100.3	ug/L	0	10	
Manganese	E	2.2336	1.7887	100.0	101.3	ug/L	1	10	
Nickel	E	4.3698	2.6676	100.0	102.6	ug/L	3	10	
Sodium	E	1.5568	0.5310	10000	10020	ug/L	0	10	
Vanadium	E	4.3079	3.7382	100.0	100.8	ug/L	1	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8586	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1165	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	934487	-1.40
Scandium	A	1024786	1063004	3.73
Scandium	E	16230	15864	-2.25
Scandium	H	421162	404281	-4.01
Germanium	H	105466	102563	-2.75
Germanium	E	14881	14742	-0.93
Indium	A	1615942	1619302	0.21
Bismuth	A	1910108	1879041	-1.63
Yttrium	A	1534317	1580255	2.99
Terbium	A	2647564	2668564	0.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429047 File : f15g0047 Time : 15-JUN-2007 11:09
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01909]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01110]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01066]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003660]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.009153]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01491]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.008529]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007801]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.005921]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.01222]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	948985	0.13
Scandium	A	1024786	1043876	1.86
Scandium	E	16230	16221	-0.06
Scandium	H	421162	408840	-2.93
Germanium	H	105466	103450	-1.91
Germanium	E	14881	14837	-0.29
Indium	A	1615942	1653960	2.35
Bismuth	A	1910108	1938084	1.46
Yttrium	A	1534317	1584245	3.25
Terbium	A	2647564	2686653	1.48

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429048 File : f15g0048 Time : 15-JUN-2007 11:15
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06394]	0.1000	ug/L	
Barium	A	0.9719	0.1000	ug/L	
Beryllium	A	[0.02085]	0.1000	ug/L	
Cadmium	A	1.012	0.1000	ug/L	
Lead	A	0.3937	0.1000	ug/L	
Silver	A	0.1800	0.1000	ug/L	
Thallium	A	[0.04098]	0.05000	ug/L	
Arsenic	E	0.1921	0.1000	ug/L	
Chromium	E	1.274	0.1000	ug/L	
Cobalt	E	0.1922	0.1000	ug/L	
Copper	E	0.7230	0.1000	ug/L	
Manganese	E	0.5492	0.1000	ug/L	
Nickel	E	1.078	0.1000	ug/L	
Vanadium	E	[0.03037]	0.1000	ug/L	
Zinc	E	1.799	0.1000	ug/L	
Selenium	H	[0.06244]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	88400	ug/L	88
Calcium	A	300000	271600	ug/L	91
Magnesium	A	100000	86320	ug/L	86
Molybdenum	A	2000	1763	ug/L	88
Potassium	A	100000	89860	ug/L	90
Sodium	E	250000	213700	ug/L	85
Iron	H	250000	218000	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	819244	-13.56
Scandium	A	1024786	1022985	-0.18
Scandium	E	16230	15939	-1.79
Scandium	H	421162	391144	-7.13
Germanium	H	105466	94163	-10.72
Germanium	E	14881	14399	-3.24
Indium	A	1615942	1488941	-7.86
Bismuth	A	1910108	1632734	-14.52
Yttrium	A	1534317	1551970	1.15
Terbium	A	2647564	2568593	-2.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429049 File : f15g0049 Time : 15-JUN-2007 11:22
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95630	ug/L	-4		
Cadmium	A	100.0	99.05	ug/L	-1	20	
Calcium	A	300000	292500	ug/L	-3		
Magnesium	A	100000	92350	ug/L	-8		
Molybdenum	A	2000	1899	ug/L	-5		
Potassium	A	100000	96770	ug/L	-3		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.8	ug/L	3	20	
Chromium	E	200.0	192.6	ug/L	-4	20	
Cobalt	E	200.0	183.0	ug/L	-9	20	
Copper	E	200.0	177.7	ug/L	-11	20	
Manganese	E	200.0	194.0	ug/L	-3	20	
Nickel	E	200.0	179.5	ug/L	-10	20	
Sodium	E	250000	227700	ug/L	-9		
Vanadium	E	200.0	196.2	ug/L	-2	20	
Zinc	E	100.0	91.68	ug/L	-8	20	
Iron	H	250000	233800	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	388111	-7.85
Scandium	A	1024786	1020361	-0.43
Scandium	E	16230	15921	-1.90
Germanium	H	105466	93472	-11.37
Germanium	E	14881	14160	-4.84
Indium	A	1615942	1494260	-7.53
Yttrium	A	1534317	1557119	1.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429064 File : f15g0064 Time : 15-JUN-2007 12:53
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6067	10000	9857	ug/L	-1	10	
Antimony	A	0.3490	0.3187	100.0	100.3	ug/L	0	10	
Barium	A	0.1918	0.0689	100.0	101.3	ug/L	1	10	
Beryllium	A	0.2682	0.2643	100.0	98.16	ug/L	-2	10	
Cadmium	A	0.0754	0.0714	100.0	99.86	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10130	ug/L	1	10	
Lead	A	0.9146	0.7900	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.5798	0.5090	10000	9875	ug/L	-1	10	
Molybdenum	A	0.2290	0.2004	100.0	92.46	ug/L	-8	10	
Potassium	A	2.8257	0.6833	10000	10080	ug/L	1	10	
Silver	A	0.3492	0.3473	100.0	100.7	ug/L	1	10	
Thallium	A	0.8486	0.8240	50.00	48.70	ug/L	-3	10	
Arsenic	E	0.6327	0.6054	100.0	99.53	ug/L	0	10	
Chromium	E	6.7730	5.1008	100.0	100.9	ug/L	1	10	
Cobalt	E	9.9018	9.3976	100.0	102.0	ug/L	2	10	
Copper	E	33.943	8.0601	100.0	99.34	ug/L	-1	10	
Manganese	E	2.2336	1.7925	100.0	101.5	ug/L	2	10	
Nickel	E	4.3698	2.6406	100.0	101.6	ug/L	2	10	
Sodium	E	1.5568	0.5268	10000	9941	ug/L	-1	10	
Vanadium	E	4.3079	3.7136	100.0	100.1	ug/L	0	10	
Zinc	E	5.2830	0.9111	100.0	100.7	ug/L	1	10	
Iron	H	0.9459	0.8506	10000	10100	ug/L	1	10	
Selenium	H	0.1226	0.1146	100.0	98.57	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	882516	-6.88
Scandium	A	1024786	1036331	1.13
Scandium	E	16230	15338	-5.50
Scandium	H	421162	397946	-5.51
Germanium	H	105466	101486	-3.77
Germanium	E	14881	14329	-3.71
Indium	A	1615942	1610510	-0.34
Bismuth	A	1910108	1859725	-2.64
Yttrium	A	1534317	1571749	2.44
Terbium	A	2647564	2657826	0.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429066 File : f15g0066 Time : 15-JUN-2007 13:06
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007189]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.04414]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003535]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.0009182]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[3.915]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[4.805]	10.00	2.807	ug/L	!ib
Silver	A	[0.002428]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02625]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.03048]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.007873]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.02333]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.278]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01371]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	907185	-4.28
Scandium	A	1024786	1033343	0.84
Scandium	E	16230	15543	-4.23
Scandium	H	421162	397223	-5.68
Germanium	H	105466	101314	-3.94
Germanium	E	14881	14354	-3.54
Indium	A	1615942	1630685	0.91
Bismuth	A	1910108	1911848	0.09
Yttrium	A	1534317	1552222	1.17
Terbium	A	2647564	2634997	-0.47

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429068 File : f15g0068 Time : 15-JUN-2007 13:26
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08010]	0.1000	ug/L	
Barium	A	0.9621	0.1000	ug/L	
Beryllium	A	[0.03524]	0.1000	ug/L	
Cadmium	A	1.076	0.1000	ug/L	
Lead	A	0.4273	0.1000	ug/L	
Silver	A	0.2021	0.1000	ug/L	
Thallium	A	[0.04024]	0.05000	ug/L	
Arsenic	E	0.1992	0.1000	ug/L	
Chromium	E	1.315	0.1000	ug/L	
Cobalt	E	0.1943	0.1000	ug/L	
Copper	E	0.7740	0.1000	ug/L	
Manganese	E	0.5744	0.1000	ug/L	
Nickel	E	1.090	0.1000	ug/L	
Vanadium	E	[0.02704]	0.1000	ug/L	
Zinc	E	1.921	0.1000	ug/L	
Selenium	H	[0.06355]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87430	ug/L	87
Calcium	A	300000	267700	ug/L	89
Magnesium	A	100000	84840	ug/L	85
Molybdenum	A	2000	1722	ug/L	86
Potassium	A	100000	88840	ug/L	89
Sodium	E	250000	211400	ug/L	85
Iron	H	250000	217400	ug/L	87

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	804946	-15.07
Scandium	A	1024786	1030614	0.57
Scandium	E	16230	15630	-3.70
Scandium	H	421162	378792	-10.06
Germanium	H	105466	91524	-13.22
Germanium	E	14881	13944	-6.29
Indium	A	1615942	1503115	-6.98
Bismuth	A	1910108	1655542	-13.33
Yttrium	A	1534317	1570747	2.37
Terbium	A	2647564	2595953	-1.95

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429069 File : f15g0069 Time : 15-JUN-2007 13:32
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94140	ug/L	-6		
Cadmium	A	100.0	99.59	ug/L	0	20	
Calcium	A	300000	289200	ug/L	-4		
Magnesium	A	100000	91210	ug/L	-9		
Molybdenum	A	2000	1886	ug/L	-6		
Potassium	A	100000	96090	ug/L	-4		
Silver	A	50.00	44.56	ug/L	-11	20	
Arsenic	E	100.0	102.4	ug/L	2	20	
Chromium	E	200.0	189.2	ug/L	-5	20	
Cobalt	E	200.0	180.4	ug/L	-10	20	
Copper	E	200.0	174.9	ug/L	-13	20	
Manganese	E	200.0	190.8	ug/L	-5	20	
Nickel	E	200.0	176.6	ug/L	-12	20	
Sodium	E	250000	222400	ug/L	-11		
Vanadium	E	200.0	192.2	ug/L	-4	20	
Zinc	E	100.0	90.41	ug/L	-10	20	
Iron	H	250000	234300	ug/L	-6		
Selenium	H	100.0	102.4	ug/L	2	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	382792	-9.11
Scandium	A	1024786	1005539	-1.88
Scandium	E	16230	15907	-1.99
Germanium	H	105466	93454	-11.39
Germanium	E	14881	14107	-5.20
Indium	A	1615942	1464578	-9.37
Yttrium	A	1534317	1529443	-0.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429084 File : f15g0084 Time : 15-JUN-2007 15:02
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6085	10000	9887	ug/L	-1	10	
Antimony	A	0.3490	0.3147	100.0	98.99	ug/L	-1	10	
Barium	A	0.1918	0.0691	100.0	101.6	ug/L	2	10	
Beryllium	A	0.2682	0.2630	100.0	97.68	ug/L	-2	10	
Cadmium	A	0.0754	0.0716	100.0	100.1	ug/L	0	10	
Calcium	A	0.0461	0.0205	10000	10110	ug/L	1	10	
Lead	A	0.9146	0.7881	100.0	95.85	ug/L	-4	10	
Magnesium	A	0.5798	0.5055	10000	9808	ug/L	-2	10	
Molybdenum	A	0.2290	0.2010	100.0	92.75	ug/L	-7	10	
Potassium	A	2.8257	0.6882	10000	10150	ug/L	2	10	
Silver	A	0.3492	0.3444	100.0	99.88	ug/L	0	10	
Thallium	A	0.8486	0.8267	50.00	48.87	ug/L	-2	10	
Arsenic	E	0.6327	0.5975	100.0	98.23	ug/L	-2	10	
Chromium	E	6.7730	5.0257	100.0	99.45	ug/L	-1	10	
Cobalt	E	9.9018	9.2586	100.0	100.5	ug/L	1	10	
Copper	E	33.943	7.9619	100.0	98.12	ug/L	-2	10	
Manganese	E	2.2336	1.7630	100.0	99.85	ug/L	0	10	
Nickel	E	4.3698	2.6232	100.0	100.9	ug/L	1	10	
Sodium	E	1.5568	0.5188	10000	9789	ug/L	-2	10	
Vanadium	E	4.3079	3.6576	100.0	98.61	ug/L	-1	10	
Zinc	E	5.2830	0.8869	100.0	98.01	ug/L	-2	10	
Iron	H	0.9459	0.8590	10000	10200	ug/L	2	10	
Selenium	H	0.1226	0.1145	100.0	98.52	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	859558	-9.31
Scandium	A	1024786	1018025	-0.66
Scandium	E	16230	15156	-6.62
Scandium	H	421162	385710	-8.42
Germanium	H	105466	98385	-6.71
Germanium	E	14881	14075	-5.41
Indium	A	1615942	1587087	-1.79
Bismuth	A	1910108	1827595	-4.32
Yttrium	A	1534317	1536503	0.14
Terbium	A	2647564	2632505	-0.57

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897239429086
Cal : 897239429001

File : f15g0086
Caldate : 15-JUN-2007

IDF : 1.0
Time : 15-JUN-2007 15:15

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01642]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003242]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003257]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[3.745]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.004953]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.004316]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01550]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.4285]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.009711]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	879685	-7.18
Scandium	A	1024786	1020235	-0.44
Scandium	E	16230	14926	-8.03
Scandium	H	421162	383625	-8.91
Germanium	H	105466	98055	-7.03
Germanium	E	14881	13890	-6.66
Indium	A	1615942	1605182	-0.67
Bismuth	A	1910108	1901312	-0.46
Yttrium	A	1534317	1548193	0.90
Terbium	A	2647564	2623557	-0.91

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897239429106 File : f15g0106
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6420, S6035

IDF : 1.0
Time : 15-JUN-2007 17:15

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.6055	10000	9838	ug/L	-2	10	
Antimony	A	0.3490	0.3133	100.0	98.57	ug/L	-1	10	
Barium	A	0.1918	0.0694	100.0	102.1	ug/L	2	10	
Beryllium	A	0.2682	0.2617	100.0	97.20	ug/L	-3	10	
Cadmium	A	0.0754	0.0713	100.0	99.71	ug/L	0	10	
Calcium	A	0.0461	0.0204	10000	10090	ug/L	1	10	
Lead	A	0.9146	0.7882	100.0	95.86	ug/L	-4	10	
Magnesium	A	0.5798	0.5037	10000	9773	ug/L	-2	10	
Molybdenum	A	0.2290	0.2000	100.0	92.29	ug/L	-8	10	
Potassium	A	2.8257	0.6853	10000	10110	ug/L	1	10	
Silver	A	0.3492	0.3477	100.0	100.8	ug/L	1	10	
Thallium	A	0.8486	0.8261	50.00	48.83	ug/L	-2	10	
Arsenic	E	0.6327	0.6002	100.0	98.68	ug/L	-1	10	
Chromium	E	6.7730	4.9599	100.0	98.15	ug/L	-2	10	
Cobalt	E	9.9018	9.0567	100.0	98.33	ug/L	-2	10	
Copper	E	33.943	7.8809	100.0	97.11	ug/L	-3	10	
Manganese	E	2.2336	1.7632	100.0	99.86	ug/L	0	10	
Nickel	E	4.3698	2.5472	100.0	98.00	ug/L	-2	10	
Sodium	E	1.5568	0.5153	10000	9722	ug/L	-3	10	
Vanadium	E	4.3079	3.6154	100.0	97.47	ug/L	-3	10	
Zinc	E	5.2830	0.8917	100.0	98.54	ug/L	-1	10	
Iron	H	0.9459	0.8489	10000	10080	ug/L	1	10	
Selenium	H	0.1226	0.1147	100.0	98.67	ug/L	-1	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	889304	-6.17
Scandium	A	1024786	1068569	4.27
Scandium	E	16230	15863	-2.26
Scandium	H	421162	384563	-8.69
Germanium	H	105466	99053	-6.08
Germanium	E	14881	14603	-1.87
Indium	A	1615942	1634381	1.14
Bismuth	A	1910108	1871055	-2.04
Yttrium	A	1534317	1604959	4.60
Terbium	A	2647564	2674277	1.01

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CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16
Seqnum : 897239429109
Cal : 897239429001

File : f15g0109
Caldate : 15-JUN-2007

IDF : 1.0
Time : 15-JUN-2007 17:34

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01023]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003276]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.0005870]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[4.606]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[8.512]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.005142]	0.1000	0.004496	ug/L	!ib
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	[6.713]	10.00	4.339	ug/L	!ib
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.001948]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	906200	-4.38
Scandium	A	1024786	1049302	2.39
Scandium	E	16230	15449	-4.81
Scandium	H	421162	378238	-10.19
Germanium	H	105466	97296	-7.75
Germanium	E	14881	14259	-4.18
Indium	A	1615942	1629587	0.84
Bismuth	A	1910108	1905312	-0.25
Yttrium	A	1534317	1563066	1.87
Terbium	A	2647564	2618747	-1.09

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897239429117 File : f15g0117 IDF : 1.0
Cal : 897239429001 Caldate : 15-JUN-2007 Time : 15-JUN-2007 18:22
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6848	0.5947	10000	9664	ug/L	-3	10	
Antimony	A	0.3490	0.3147	100.0	99.01	ug/L	-1	10	
Barium	A	0.1918	0.0698	100.0	102.7	ug/L	3	10	
Beryllium	A	0.2682	0.2648	100.0	98.37	ug/L	-2	10	
Cadmium	A	0.0754	0.0719	100.0	100.5	ug/L	1	10	
Calcium	A	0.0461	0.0202	10000	9961	ug/L	0	10	
Lead	A	0.9146	0.7863	100.0	95.62	ug/L	-4	10	
Magnesium	A	0.5798	0.4941	10000	9587	ug/L	-4	10	
Molybdenum	A	0.2290	0.1990	100.0	91.81	ug/L	-8	10	
Potassium	A	2.8257	0.6760	10000	9967	ug/L	0	10	
Silver	A	0.3492	0.3481	100.0	101.0	ug/L	1	10	
Thallium	A	0.8486	0.8178	50.00	48.34	ug/L	-3	10	
Arsenic	E	0.6327	0.6039	100.0	99.28	ug/L	-1	10	
Chromium	E	6.7730	4.9743	100.0	98.43	ug/L	-2	10	
Cobalt	E	9.9018	9.1178	100.0	98.99	ug/L	-1	10	
Copper	E	33.943	7.9283	100.0	97.70	ug/L	-2	10	
Manganese	E	2.2336	1.7796	100.0	100.8	ug/L	1	10	
Nickel	E	4.3698	2.5689	100.0	98.83	ug/L	-1	10	
Sodium	E	1.5568	0.5171	10000	9758	ug/L	-2	10	
Vanadium	E	4.3079	3.6482	100.0	98.36	ug/L	-2	10	
Zinc	E	5.2830	0.8992	100.0	99.37	ug/L	-1	10	
Iron	H	0.9459	0.8556	10000	10160	ug/L	2	10	
Selenium	H	0.1226	0.1129	100.0	97.15	ug/L	-3	10	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	880356	-7.11
Scandium	A	1024786	1112381	8.55
Scandium	E	16230	16092	-0.85
Scandium	H	421162	393219	-6.63
Germanium	H	105466	102398	-2.91
Germanium	E	14881	14789	-0.62
Indium	A	1615942	1665675	3.08
Bismuth	A	1910108	1910179	0.00
Yttrium	A	1534317	1651673	7.65
Terbium	A	2647564	2718473	2.68

897239429117

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429119 File : f15g0119 Time : 15-JUN-2007 18:35
Cal : 897239429001 Caldate : 15-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01509]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.003082]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003833]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	ND	0.1000	0.0007223	ug/L	
Magnesium	A	[4.852]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	10.11	10.00	2.807	ug/L	ib ***
Silver	A	[0.002998]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	[0.01284]	0.1000	0.008214	ug/L	!ib
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	56.67	10.00	4.339	ug/L	ib ***
Vanadium	E	[0.01806]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.3474]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.008623]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	896374	-5.42
Scandium	A	1024786	1080167	5.40
Scandium	E	16230	15838	-2.42
Scandium	H	421162	382453	-9.19
Germanium	H	105466	98635	-6.48
Germanium	E	14881	14677	-1.37
Indium	A	1615942	1698513	5.11
Bismuth	A	1910108	1947843	1.98
Yttrium	A	1534317	1620373	5.61
Terbium	A	2647564	2701409	2.03

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429122 File : f15g0122 Time : 15-JUN-2007 18:52
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.07852]	0.1000	ug/L	
Barium	A	0.9525	0.1000	ug/L	
Beryllium	A	[0.02630]	0.1000	ug/L	
Cadmium	A	1.113	0.1000	ug/L	
Lead	A	0.3956	0.1000	ug/L	
Silver	A	0.1908	0.1000	ug/L	
Thallium	A	[0.03009]	0.05000	ug/L	
Arsenic	E	0.1677	0.1000	ug/L	
Chromium	E	1.282	0.1000	ug/L	
Cobalt	E	0.1912	0.1000	ug/L	
Copper	E	0.7079	0.1000	ug/L	
Manganese	E	0.5184	0.1000	ug/L	
Nickel	E	1.112	0.1000	ug/L	
Vanadium	E	[0.02775]	0.1000	ug/L	
Zinc	E	1.975	0.1000	ug/L	
Selenium	H	[0.05514]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	87080	ug/L	87
Calcium	A	300000	267600	ug/L	89
Magnesium	A	100000	84540	ug/L	85
Molybdenum	A	2000	1729	ug/L	86
Potassium	A	100000	88970	ug/L	89
Sodium	E	250000	209100	ug/L	84
Iron	H	250000	216000	ug/L	86

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	947755	779180	-17.79
Scandium	A	1024786	1008208	-1.62
Scandium	E	16230	15197	-6.36
Scandium	H	421162	366792	-12.91
Germanium	H	105466	90194	-14.48
Germanium	E	14881	13571	-8.80
Indium	A	1615942	1453970	-10.02
Bismuth	A	1910108	1623389	-15.01
Yttrium	A	1534317	1524972	-0.61
Terbium	A	2647564	2529526	-4.46

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897239429123 File : f15g0123 Time : 15-JUN-2007 18:59
Cal : 897239429001 Caldate : 15-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94400	ug/L	-6		
Cadmium	A	100.0	99.27	ug/L	-1	20	
Calcium	A	300000	290300	ug/L	-3		
Magnesium	A	100000	91270	ug/L	-9		
Molybdenum	A	2000	1885	ug/L	-6		
Potassium	A	100000	96900	ug/L	-3		
Silver	A	50.00	44.65	ug/L	-11	20	
Arsenic	E	100.0	103.3	ug/L	3	20	
Chromium	E	200.0	191.0	ug/L	-5	20	
Cobalt	E	200.0	182.6	ug/L	-9	20	
Copper	E	200.0	176.3	ug/L	-12	20	
Manganese	E	200.0	194.9	ug/L	-3	20	
Nickel	E	200.0	178.5	ug/L	-11	20	
Sodium	E	250000	223900	ug/L	-10		
Vanadium	E	200.0	194.5	ug/L	-3	20	
Zinc	E	100.0	90.41	ug/L	-10	20	
Iron	H	250000	234500	ug/L	-6		
Selenium	H	100.0	102.7	ug/L	3	20	

ISTD (ICALBLK f15g0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	421162	361757	-14.11
Scandium	A	1024786	979329	-4.44
Scandium	E	16230	14989	-7.65
Germanium	H	105466	88193	-16.38
Germanium	E	14881	13364	-10.19
Indium	A	1615942	1429401	-11.54
Yttrium	A	1534317	1484689	-3.23

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897239429

Date : 06/15/07 Reference : f15g0004
Sequence : MET16 f15g0 Analyzed : 06/15/07 06:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	947755	1024786	16230	421162	105466	14881	1615942	1910108	1534317	2647564
		LOWER LIMIT	284327	307436	4869	126349	31640	4464	484783	573032	460295	794269
		UPPER LIMIT	1137306	1229743	19476	505395	126559	17857	1939130	2292130	1841180	3177077
014	ICB		960938	1055567	15956	415756	104447	14746	1648089	1921327	1569938	2674692
017	ICSA		833330	1031697	16359	407246	97058	14491	1507874	1645288	1572313	2615635
018	ICSAB		826820	1032868	16221	400547	95805	14323	1499416	1632159	1555187	2578826
023	MSS	195270-007	941225	1040420	15625	401668	103175	14698	1634401	1893646	1559932	2645423
024	SER	QC392098	926152	1022826	15559	393809	101669	14539	1618799	1888480	1548121	2615464
025	PDS	QC392099	926984	1059908	15636	406621	101352	14437	1621243	1866895	1585621	2666920
026	SAMPLE	195358-002	940359	1051413	15472	396685	102158	14672	1649979	1951559	1582203	2675868
027	SAMPLE	195358-003	936459	1057872	15756	405459	103203	14714	1651724	1936384	1590081	2680105
028	SAMPLE	195358-004	935946	1070595	16328	410419	105354	15269	1674622	1953846	1608113	2695196
029	SAMPLE	195358-005	914117	1042688	15680	397643	102253	14671	1621086	1908139	1552137	2658461
030	SAMPLE	195358-007	922598	1029632	15795	400551	102899	14702	1635862	1933493	1553004	2643825
033	CCV		943519	1059042	15887	403931	101462	14629	1632221	1884026	1590028	2695620
035	CCB		933251	1034023	15841	406728	102698	14617	1623222	1919394	1559025	2648690
037	SAMPLE	195358-008	946423	1052531	15925	411412	104583	14897	1652446	1977125	1585580	2701637
038	SAMPLE	195369-001	931854	1053956	15640	401725	102537	14652	1632955	1889279	1577486	2655947
039	SAMPLE	195369-001	922843	1038048	15881	402499	102829	14710	1620555	1884993	1558636	2643475
040	SAMPLE	195370-021	948579	1053212	15915	407988	104309	14911	1651734	1957810	1591220	2685300
045	CCV		934487	1063004	15864	404281	102563	14742	1619302	1879041	1580255	2668564
047	CCB		948985	1043876	16221	408840	103450	14837	1653960	1938084	1584245	2686653
048	ICSA		819244	1022985	15939	391144	94163	14399	1488941	1632734	1551970	2568593
049	ICSAB		798431	1020361	15921	388111	93472	14160	1494260	1639891	1557119	2573101
054	SAMPLE	195247-001	909531	1057133	15657	393383	101247	14670	1639167	1873727	1586007	2658791
055	SAMPLE	195247-001	906076	1129493	15897	407510	101389	14531	1660078	1873486	1648103	2707845
056	SAMPLE	195247-002	917367	1071571	15691	390647	100623	14684	1659141	1872784	1589077	2688050
057	SAMPLE	195247-002	891732	1092948	16017	403287	99575	14507	1616176	1862333	1779288	2699796
059	SAMPLE	195247-001	891508	1026800	15401	392286	101760	14483	1616317	1884441	1552586	2616955
060	SAMPLE	195247-002	906046	1052050	15421	385742	99622	14549	1632728	1892629	1575453	2670191
061	SAMPLE	195247-002	891649	1031723	15232	391153	100261	14496	1614696	1882520	1590470	2639581
062	SAMPLE	195285-012	901670	1022402	15050	382705	99271	14112	1620068	1902865	1542205	2657134
064	CCV		882516	1036331	15338	397946	101486	14329	1610510	1859725	1571749	2657826
066	CCB		907185	1033343	15543	397223	101314	14354	1630685	1911848	1552222	2634997
068	ICSA		804946	1030614	15630	378792	91524	13944	1503115	1655542	1570747	2595953
069	ICSAB		767045	1005539	15907	382792	93454	14107	1464578	1602627	1529443	2535335
075	SER	QC391468	864315	1013119	14826	380314	99218	14038	1605044	1890279	1529788	2605749
079	SAMPLE	195270-001	876503	1019507	15050	378607	97915	14104	1621935	1869459	1551053	2634259
080	SAMPLE	195270-002	862032	1003304	14952	380467	97866	14163	1598720	1858605	1516872	2577494
081	SAMPLE	195270-008	866537	1010621	14820	381084	98730	13954	1597959	1863336	1530356	2601374
084	CCV		859558	1018025	15156	385710	98385	14075	1587087	1827595	1536503	2632505
086	CCB		879685	1020235	14926	383625	98055	13890	1605182	1901312	1548193	2623557
088	SAMPLE	195270-016	865682	987930	15243	382250	99258	14277	1574459	1834428	1504614	2552961
089	SAMPLE	195270-018	860093	983738	14709	380028	98656	13847	1569795	1845558	1493218	2562581
093	BLANK	QC392525	878762	998763	15255	383287	98294	14008	1574613	1888024	1512991	2595978
094	BS	QC392526	866356	1014988	14974	391653	99324	13892	1560549	1837300	1540696	2621791
095	BSD	QC392527	878257	1042263	15068	388065	98844	14055	1606750	1860783	1579136	2656154
096	MSS	195390-003	790342	1036458	15444	369943	89737	13267	1473669	1566861	1544092	2461319
099	MS	QC392528	784645	1033504	15635	375707	90528	13534	1469144	1562146	1526620	2448168
100	MSD	QC392529	783812	1039193	15907	373710	90538	13592	1485981	1567150	1547715	2464397
102	SAMPLE	195390-001	920341	1098800	16053	385836	100721	15050	1689849	1983724	1639761	2736765

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897239429

Date : 06/15/07
Sequence : MET16 f15g0

Reference : f15g0004
Analyzed : 06/15/07 06:49

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
103	SAMPLE	195390-002	876501	1139937	17126	376751	92598	14916	1603596	1662081	1650919	2615906
106	CCV		889304	1068569	15863	384563	99053	14603	1634381	1871055	1604959	2674277
109	CCB		906200	1049302	15449	378238	97296	14259	1629587	1905312	1563066	2618747
110	SAMPLE	195390-004	890107	1126346	16663	373917	92978	14705	1623263	1703291	1648843	2618488
111	SAMPLE	195390-005	859644	1159592	18187	385093	91535	15304	1605512	1603101	1680174	2580411
112	SAMPLE	195390-006	879431	1172977	18225	380083	91883	15338	1612053	1627343	1678160	2616488
113	SAMPLE	195390-007	874154	1190255	18161	382332	92799	15248	1630728	1645740	1696725	2639860
117	CCV		880356	1112381	16092	393219	102398	14789	1665675	1910179	1651673	2718473
119	CCB		896374	1080167	15838	382453	98635	14677	1698513	1947843	1620373	2701409
122	ICSA		779180	1008208	15197	366792	90194	13571	1453970	1623389	1524972	2529526
123	ICSAB		743431	979329	14989	361757	88193	13364	1429401	1582507	1484689	2477404

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f15g0001	TUN				15-JUN-2007 06:29	1.0	1.0				1	
002	f15g0002	X	RINSE			15-JUN-2007 06:37	1.0					2	
003	f15g0003	X	RINSE			15-JUN-2007 06:43	1.0					2	
004	f15g0004	ICALBLK	CALBLANK			15-JUN-2007 06:49	1.0	1.0				2	
005	f15g0005	ICAL				15-JUN-2007 06:55	1.0	1.0				3	
006	f15g0006	ICAL				15-JUN-2007 07:01	1.0	1.0				4	
007	f15g0007	ICAL				15-JUN-2007 07:07	1.0	1.0				5	
008	f15g0008	ICAL				15-JUN-2007 07:12	1.0	1.0				6	
009	f15g0009	ICAL				15-JUN-2007 07:18	1.0	1.0				7	
010	f15g0010	ICAL				15-JUN-2007 07:24	1.0	1.0				8	
011	f15g0011	X	RINSE			15-JUN-2007 07:33	1.0					2	
012	f15g0012	ICV				15-JUN-2007 07:38	1.0	1.0			1	9	
013	f15g0013	X	RINSE			15-JUN-2007 07:45	1.0					2	
014	f15g0014	ICB				15-JUN-2007 07:51	1.0	1.0			1	2	
015	f15g0015	X				15-JUN-2007 07:57	1.0					2	
016	f15g0016	X				15-JUN-2007 08:03	1.0					2	
017	f15g0017	ICSA				15-JUN-2007 08:09	1.0	1.0			1	10 2	7:CA=277700
018	f15g0018	ICSAB				15-JUN-2007 08:15	1.0	1.0			1	11 2	7:CA=293900
019	f15g0019	X	RINSE			15-JUN-2007 08:21	1.0					2	
020	f15g0020	X	RINSE			15-JUN-2007 08:27	1.0					2	
021	f15g0021	X	RINSE			15-JUN-2007 08:33	1.0					2	
022	f15g0022	X	RINSE			15-JUN-2007 08:38	1.0					2	
023	f15g0023	MSS	195270-007	126254	Filtra	15-JUN-2007 08:44	50.0	1.0			1	2	
024	f15g0024	SER	QC392098	126254	Filtra	15-JUN-2007 08:50	250.0	1.0		1	1	2	
025	f15g0025	PDS	QC392099	126254	Filtra	15-JUN-2007 08:56	50.0	1.0			1	12 13 2	
026	f15g0026	SAMPLE	195358-002	126254	Filtra	15-JUN-2007 09:02	5.0	1.0	3		1	2	
027	f15g0027	SAMPLE	195358-003	126254	Filtra	15-JUN-2007 09:08	5.0	1.0			1	2	
028	f15g0028	SAMPLE	195358-004	126254	Filtra	15-JUN-2007 09:14	5.0	1.0			1	2	
029	f15g0029	SAMPLE	195358-005	126254	Filtra	15-JUN-2007 09:20	5.0	1.0			1	2	
030	f15g0030	SAMPLE	195358-007	126254	Filtra	15-JUN-2007 09:26	5.0	1.0			1	2	
031	f15g0031	X	RINSE			15-JUN-2007 09:32	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	f15g0032	X	RINSE			15-JUN-2007 09:38	1.0				2	
033	f15g0033	CCV				15-JUN-2007 09:43	1.0	1.0		1	14 2	
034	f15g0034	X	RINSE			15-JUN-2007 09:50	1.0				2	
035	f15g0035	CCB				15-JUN-2007 09:56	1.0	1.0		1	2	
036	f15g0036	X				15-JUN-2007 10:02	1.0				2	
037	f15g0037	SAMPLE	195358-008	126254	Filtra	15-JUN-2007 10:08	5.0	1.0		1	2	
038	f15g0038	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:14	50.0	1.0		1	2	
039	f15g0039	SAMPLE	195369-001	126254	Filtra	15-JUN-2007 10:20	100.0	1.0		1	2	
040	f15g0040	SAMPLE	195370-021	126254	Filtra	15-JUN-2007 10:26	1.0	1.0		1	2	
041	f15g0041	X	RINSE			15-JUN-2007 10:32	1.0				2	
042	f15g0042	X	RINSE			15-JUN-2007 10:38	1.0				2	
043	f15g0043	X				15-JUN-2007 10:44	1.0	1.0	3	1	14 2	
044	f15g0044	X	RINSE			15-JUN-2007 10:50	1.0				2	
045	f15g0045	CCV				15-JUN-2007 10:56	1.0	1.0		1	14 2	
046	f15g0046	X	RINSE			15-JUN-2007 11:03	1.0				2	
047	f15g0047	CCB				15-JUN-2007 11:09	1.0	1.0		1	2	
048	f15g0048	ICSA				15-JUN-2007 11:15	1.0	1.0		1	10 2	7:CA=271600
049	f15g0049	ICSAB				15-JUN-2007 11:22	1.0	1.0		1	11 2	7:CA=292500
050	f15g0050	X	RINSE			15-JUN-2007 11:28	1.0				2	
051	f15g0051	X	RINSE			15-JUN-2007 11:34	1.0				2	
052	f15g0052	X	RINSE			15-JUN-2007 11:40	1.0				2	
053	f15g0053	X	RINSE			15-JUN-2007 11:46	1.0				2	
054	f15g0054	SAMPLE	195247-001	126087	Filtra	15-JUN-2007 11:52	10.0	1.0		1	2	
055	f15g0055	SAMPLE	195247-001	126087	Water	15-JUN-2007 11:58	10.0	1.0	4	1	2	4:MG=23420.0
056	f15g0056	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:04	10.0	1.0	1	1	2	1:MN=335.800
057	f15g0057	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:09	10.0	1.0	1	1	2	1:MN=610.100
058	f15g0058	X	RINSE			15-JUN-2007 12:15	1.0				2	
059	f15g0059	SAMPLE	195247-001	126087	Water	15-JUN-2007 12:22	100.0	1.0		1	2	
060	f15g0060	SAMPLE	195247-002	126087	Filtra	15-JUN-2007 12:29	20.0	1.0	1	1	2	
061	f15g0061	SAMPLE	195247-002	126087	Water	15-JUN-2007 12:35	50.0	1.0		1	2	
062	f15g0062	SAMPLE	195285-012	126205	Filtra	15-JUN-2007 12:41	5.0	1.0		1	2	

Stds used: 1=S6411 2=S6435 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: _____ Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC SPK uL	Stds Used	>LR
063	f15g0063	X	RINSE			15-JUN-2007 12:47	1.0			2	
064	f15g0064	CCV				15-JUN-2007 12:53	1.0	1.0	1	14 2	
065	f15g0065	X	RINSE			15-JUN-2007 13:00	1.0			2	
066	f15g0066	CCB				15-JUN-2007 13:06	1.0	1.0	1	2	
067	f15g0067	X	RINSE			15-JUN-2007 13:12	1.0			2	
068	f15g0068	ICSA				15-JUN-2007 13:26	1.0	1.0	1	10 2	7:CA=267700
069	f15g0069	ICSAB				15-JUN-2007 13:32	1.0	1.0	1	11 2	7:CA=289200
070	f15g0070	X	RINSE			15-JUN-2007 13:38	1.0			2	
071	f15g0071	X	RINSE			15-JUN-2007 13:44	1.0			2	
072	f15g0072	X	RINSE			15-JUN-2007 13:50	1.0			2	
073	f15g0073	X	RINSE			15-JUN-2007 13:56	1.0			2	
074	f15g0074	MSS	195270-007	126092	Filtra	15-JUN-2007 14:02	100.0		1	2	
075	f15g0075	SER	QC391468	126092	Filtra	15-JUN-2007 14:08	500.0	1.0	1	2	
076	f15g0076	MS	QC391466	126092	Filtra	15-JUN-2007 14:14	100.0	1.0	1	2	
077	f15g0077	MSD	QC391467	126092	Filtra	15-JUN-2007 14:20	100.0	1.0	1	2	
078	f15g0078	PDS	QC391469	126092	Filtra	15-JUN-2007 14:26	100.0	1.0	1	12 13 2	
079	f15g0079	SAMPLE	195270-001	126092	Filtra	15-JUN-2007 14:32	100.0	1.0	1	2	
080	f15g0080	SAMPLE	195270-002	126092	Filtra	15-JUN-2007 14:38	100.0	1.0	1	2	
081	f15g0081	SAMPLE	195270-008	126092	Filtra	15-JUN-2007 14:44	50.0	1.0	1	2	
082	f15g0082	X	RINSE			15-JUN-2007 14:50	1.0			2	
083	f15g0083	X	RINSE			15-JUN-2007 14:56	1.0			2	
084	f15g0084	CCV				15-JUN-2007 15:02	1.0	1.0	1	14 2	
085	f15g0085	X	RINSE			15-JUN-2007 15:09	1.0			2	
086	f15g0086	CCB				15-JUN-2007 15:15	1.0	1.0	1	2	
087	f15g0087	X				15-JUN-2007 15:21	1.0			2	
088	f15g0088	SAMPLE	195270-016	126092	Filtra	15-JUN-2007 15:26	50.0	1.0	1	2	
089	f15g0089	SAMPLE	195270-018	126092	Water	15-JUN-2007 15:32	20.0	1.0	1	2	
090	f15g0090	X	RINSE			15-JUN-2007 15:38	1.0			2	
091	f15g0091	X	RINSE			15-JUN-2007 15:45	1.0			2	
092	f15g0092	X	RINSE			15-JUN-2007 15:51	1.0			2	
093	f15g0093	BLANK	QC392525	126355	Water	15-JUN-2007 15:57	1.0	1.0	1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: [signature] Date: 6/15/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897239429 Instrument: MET16 Agilent ICP-MS MET16 Begun: 15-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f15g0094	BS	QC392526	126355	Water	15-JUN-2007 16:03	1.0	1.0		1	1	2	
095	f15g0095	BSD	QC392527	126355	Water	15-JUN-2007 16:08	1.0	1.0		1	1	2	
096	f15g0096	MSS	195390-003	126355	Water	15-JUN-2007 16:15	20.0	1.0	5		1	2	5:NA=742500
097	f15g0097	TUN				15-JUN-2007 16:20	1.0	1.0				1	
098	f15g0098	X	RINSE			15-JUN-2007 16:28	1.0					2	
099	f15g0099	MS	QC392528	126355	Water	15-JUN-2007 16:33	20.0	1.0		3	1	2	5:NA=746000
100	f15g0100	MSD	QC392529	126355	Water	15-JUN-2007 16:39	20.0	1.0		4	1	2	5:NA=738500
101	f15g0101	X	RINSE			15-JUN-2007 16:45	1.0					2	
102	f15g0102	SAMPLE	195390-001	126355	Water	15-JUN-2007 16:51	1.0	1.0			1	2	
103	f15g0103	SAMPLE	195390-002	126355	Water	15-JUN-2007 16:57	20.0	1.0			1	2	2:NA=585000
104	f15g0104	X	RINSE			15-JUN-2007 17:03	1.0					2	
105	f15g0105	X	RINSE			15-JUN-2007 17:09	1.0					2	
106	f15g0106	CCV				15-JUN-2007 17:15	1.0	1.0			1	14 2	
107	f15g0107	X	RINSE			15-JUN-2007 17:22	1.0					2	
108	f15g0108	X				15-JUN-2007 17:28	1.0					2	
109	f15g0109	CCB				15-JUN-2007 17:34	1.0	1.0			1	2	
110	f15g0110	SAMPLE	195390-004	126355	Water	15-JUN-2007 17:40	20.0	1.0			1	2	2:NA=382650
111	f15g0111	SAMPLE	195390-005	126355	Water	15-JUN-2007 17:46	20.0	1.0			1	2	3:NA=1013500
112	f15g0112	SAMPLE	195390-006	126355	Water	15-JUN-2007 17:52	20.0	1.0			1	2	3:NA=856000
113	f15g0113	SAMPLE	195390-007	126355	Water	15-JUN-2007 17:58	20.0	1.0			1	2	3:NA=850500
114	f15g0114	X	RINSE			15-JUN-2007 18:04	1.0					2	
115	f15g0115	X	RINSE			15-JUN-2007 18:10	1.0					2	
116	f15g0116	X	RINSE			15-JUN-2007 18:16	1.0					2	
117	f15g0117	CCV				15-JUN-2007 18:22	1.0	1.0			1	14 2	
118	f15g0118	X	RINSE			15-JUN-2007 18:29	1.0					2	
119	f15g0119	CCB				15-JUN-2007 18:35	1.0	1.0	2		1	2	
120	f15g0120	X				15-JUN-2007 18:41	1.0					2	
121	f15g0121	X				15-JUN-2007 18:47	1.0					2	
122	f15g0122	ICSA				15-JUN-2007 18:52	1.0	1.0			1	10 2	7:CA=267600
123	f15g0123	ICSAB				15-JUN-2007 18:59	1.0	1.0			1	11 2	7:CA=290300

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RKA Date: 6/15/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195279 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALB	SBA	ASE	BDA	BEA	CDE	CAD	CRA	COR	CUO	FEU	PBE	MGB	MNG	HG	NI	K	SE	AG	NA	TL	V	ZN
195279-001	MET16	06/08/07 23:33	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
195279-001	MET14	06/14/07 13:16	1.0															+								
QC391463	MET16	06/08/07 19:59	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391463	MET16	06/11/07 13:02	1.0								+															
QC391464	MET16	06/08/07 20:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391465	MET16	06/08/07 20:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC391466	MET16	06/08/07 20:35	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391466	MET16	06/15/07 14:14	100.0																				+			
QC391467	MET16	06/08/07 20:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391467	MET16	06/15/07 14:20	100.0																				+			
QC391468	MET16	06/08/07 20:29	50.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391468	MET16	06/15/07 14:08	500.0																				+			
QC391469	MET16	06/08/07 20:46	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC391469	MET16	06/15/07 14:26	100.0																				+			
QC391965	MET14	06/14/07 12:49	1.0															+								
QC391966	MET14	06/14/07 12:52	1.0															+								
QC391967	MET14	06/14/07 12:54	1.0															+								
QC391968	MET14	06/14/07 12:59	5.0															+								
QC391969	MET14	06/14/07 13:01	1.0															+								
QC391970	MET14	06/14/07 13:03	1.0															+								
QC392348	MET14	06/14/07 14:09	1.0															+								

Curtis & Tompkins Laboratories **Sample Preparation Summary** **08-JUN-2007 13:15**

Batch Number : 126092
Date Extracted: 08-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195270-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-007			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195270-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
195270-012			Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
195270-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
195270-017			Treadwell & Rollo	Water	50	mL	50	1.000000	1				14MET		
195270-018			Treadwell & Rollo	Water	50	mL	50	1.000000	1				14MET		
195279-001			Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
QC391463	BLANK			Filtrate	50	mL	50	1.000000	1				ICAP		
QC391464	BS			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391465	BSD			Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391466	MS	of 195270-007		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391467	MSD	of 195270-007		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC391468	SER	of 195270-007		Filtrate	50	mL	50	1.000000	1				ICAP		
QC391469	PDS	of 195270-007		Filtrate	50	mL	50	1.000000	1				ICAP		

Prep Chemist: [signature] 6/8/07 Reviewed By: [signature] Date: 6/8/07

Relinquished By: [signature] 6/8/07 Received By: [signature] Date: 6/8/07

S6255

Water Digestion for ICP-MS Curtis & Tompkins, Ltd.

LIMS Batch #: 126032
Date Digested: 6/8/07
Digested by: KLB

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK 2479
Page 52
Continued From:
Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
BS				
BSD				
MS-01				SPIKED FILTERED
MSD-01				
1552207				
01				
02				
03				
04				
05				
06				
08				
10				
11				
12				TOTALS
16				
17				TOTALS
18				
275-01				

6/8/07

	Reagent ID or LIMS #	Initials / Date
✓ digestion temperature (90-95 degrees C)	95	KLA 6/8
.5 mL of spike solution was added to all spikes	362222	
	362223	
concentrated HCl	1020023 BAKER	
concentrated HNO3	049025	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group		

Prep Chemist Signature / Date 6/8/07

Reviewer Signature / Date 6/8/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847238329001
Units : ug/L

Date : 14-JUN-2007 12:09
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	126221	847238329002	STD02REP1	14-JUN-2007 12:12	S6475 (500X)
L2	126221	847238329003	STD03REP1	14-JUN-2007 12:14	S6475 (200X)
L3	126221	847238329004	STD04REP1	14-JUN-2007 12:17	S6475 (50X)
L4	126221	847238329005	STD05REP1	14-JUN-2007 12:20	S6475 (20X)
L5	126221	847238329006	STD06REP1	14-JUN-2007 12:22	S6475 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	1970.0	2236.0	1821.0	1744.8	1726.4	LINR	-0.1149	5.06E-4		1899.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-42	0.500	8	2.000	1	5.000	0	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847238329001

00259

WinHg Database 1.5

File Utility Help

RN RN

Protocol hgppb

Dataset/Proto 061407a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 5.85748e-4

C -1.14927e-1

Rho .999934

Type Linear

☑ Calibrated

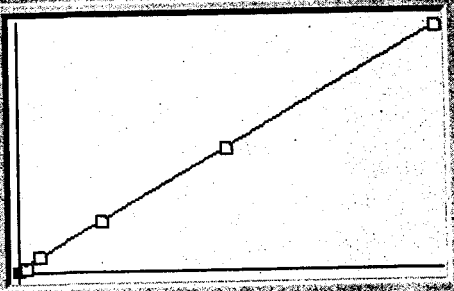
☑ Accepted

Accept

μ Abs. 17264

Accepted

New



Include S1 Rep 1 ☑ 2 ☐ 3 ☐ 4 ☐ 5 ☐

14-Jun-07 12:32 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.033	.033	254	0	253		
02	.20000	.116	-.084	395	0%	394		
03	.50000	.540	.040	1118	0%	1118		
04	2.0000	2.02	.018	3643	0%	3642		
05	5.0000	5.00	-.005	8724	0%	8724		
06	10.000	10.0	-.003	17265	0%	17264		

Ready CAP NUM SCRL

Folder: 061407a
Protocol: hgppb
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		12:09:56 14 Jun 07		HG	
Hg	.000	ppb	253						=
		Bkgd 1	16338604						=
*** Standard: 2 Rep: 1				Seq: 2		12:12:30 14 Jun 07		HG	
Hg	.200	ppb	394						=
		Bkgd 1	16331586						=
*** Standard: 3 Rep: 1				Seq: 3		12:14:33 14 Jun 07		HG	
Hg	.500	ppb	1118						=
		Bkgd 1	16328632						=
*** Standard: 4 Rep: 1				Seq: 4		12:17:41 14 Jun 07		HG	
Hg	2.00	ppb	3642						=
		Bkgd 1	16319935						=
*** Standard: 5 Rep: 1				Seq: 5		12:20:17 14 Jun 07		HG	
Hg	5.00	ppb	8724						=
		Bkgd 1	16317658						=
*** Standard: 6 Rep: 1				Seq: 6		12:22:32 14 Jun 07		HG	
Hg	10.0	ppb	17264						=
		Bkgd 1	16312929						=
~~*** Sample ID: qc391965~~				~~Seq: 7~~		~~12:33:44 14 Jun 07~~		~~HG~~	
			~~126221,1~~			~~6/14/07~~			
~~Hg~~	~~.035~~	~~ppb~~	~~256~~						~~=~~
		~~Bkgd 1~~	~~16286155~~						~~=~~
*** Check Standard: 2			Ck2S6477	Seq: 8		12:45:38 14 Jun 07		HG	
Line Flag			Intensities						
Hg			8962						=
		Bkgd 1	16276358						=
*** Check Standard: 1			Ck1ICB	Seq: 9		12:47:45 14 Jun 07		HG	
Line Flag			Intensities						
Hg			126						=
		Bkgd 1	16264699						=

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847238329 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 14-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	126221	ICALBLK	STD01REP1				14-JUN-2007 12:09	1.0	1.0									
002	126221	ICAL	STD02REP1				14-JUN-2007 12:12	1.0	1.0									
003	126221	ICAL	STD03REP1				14-JUN-2007 12:14	1.0	1.0									
004	126221	ICAL	STD04REP1				14-JUN-2007 12:17	1.0	1.0									
005	126221	ICAL	STD05REP1				14-JUN-2007 12:20	1.0	1.0									
006	126221	ICAL	STD06REP1				14-JUN-2007 12:22	1.0	1.0									
007	126221	X	QC391965		126221	Water	14-JUN-2007 12:33	1.0	1.0			847238329001	[0.03500]	0.20	ug/L			?<ib ?>
008	126221	ICV					14-JUN-2007 12:45	1.0	1.0	2	5.000	847238329001	5.130		ug/L	103		
009	126221	ICB					14-JUN-2007 12:47	1.0	1.0			847238329001	ND	0.20	ug/L			
010	126221	BLANK	QC391965		126221	Water	14-JUN-2007 12:49	1.0	1.0			847238329001	ND	0.20	ug/L			u
011	126221	BS	QC391966		126221	Water	14-JUN-2007 12:52	1.0	1.0		5.000	847238329001	4.350	0.20	ug/L	87		u
012	126221	BSD	QC391967		126221	Water	14-JUN-2007 12:54	1.0	1.0		5.000	847238329001	4.620	0.20	ug/L	92	6	u
013	126221	MSS	195271-001		126221	WET Le	14-JUN-2007 12:56	1.0	5.0			847238329001	ND	2.0	ug/L			u
014	126221	SER	QC391968	195271-001	126221	WET Le	14-JUN-2007 12:59	5.0	1.0			847238329001	ND	1.0	ug/L		--	u
015	126221	MS	QC391969	195271-001	126221	WET Le	14-JUN-2007 13:01	1.0	1.0		5.000	847238329001	5.330	0.20	ug/L	107		u
016	126221	MSD	QC391970	195271-001	126221	WET Le	14-JUN-2007 13:03	1.0	1.0		5.000	847238329001	5.320	0.20	ug/L	106	0	u
017	126221	SAMPLE	195270-001		126221	Filtra	14-JUN-2007 13:06	1.0	1.0			847238329001	ND	0.20	ug/L			u
018	126221	SAMPLE	195270-002		126221	Filtra	14-JUN-2007 13:08	1.0	1.0			847238329001	ND	0.20	ug/L			u
019	126221	SAMPLE	195271-003		126221	WET Le	14-JUN-2007 13:10	1.0	5.0			847238329001	9.0	2.0	ug/L			u
020	126221	CCV					14-JUN-2007 13:12	1.0	1.0	3	7.500	847238329001	7.640		ug/L	102		
021	126221	CCB					14-JUN-2007 13:14	1.0	1.0			847238329001	ND	0.20	ug/L			
022	126221	SAMPLE	195279-001		126221	Filtra	14-JUN-2007 13:16	1.0	1.0			847238329001	ND	0.20	ug/L			u
023	126221	SAMPLE	195306-001		126221	Water	14-JUN-2007 13:19	1.0	1.0			847238329001	ND	0.20	ug/L			u
024	126221	SAMPLE	195306-005		126221	Water	14-JUN-2007 13:21	1.0	1.0			847238329001	ND	0.20	ug/L			u
025	126221	SAMPLE	195317-002		126221	Filtra	14-JUN-2007 13:23	1.0	1.0			847238329001	0.039 J	0.20	ug/L			u
026	126221	SAMPLE	195317-003		126221	Filtra	14-JUN-2007 13:26	1.0	1.0			847238329001	ND	0.20	ug/L			u
027	126221	SAMPLE	195317-004		126221	Filtra	14-JUN-2007 13:28	1.0	1.0			847238329001	ND	0.20	ug/L			u
028	126221	SAMPLE	195317-005		126221	Filtra	14-JUN-2007 13:31	1.0	1.0			847238329001	ND	0.20	ug/L			u
029	126221	SAMPLE	195318-002		126221	Filtra	14-JUN-2007 13:33	1.0	1.0			847238329001	0.024 J	0.20	ug/L			u
030	126221	SAMPLE	195318-003		126221	Filtra	14-JUN-2007 13:35	1.0	1.0			847238329001	ND	0.20	ug/L			u
031	126221	SAMPLE	195318-004		126221	Filtra	14-JUN-2007 13:37	1.0	1.0			847238329001	2.620		ug/L	105		
032	126221	CCV					14-JUN-2007 13:39	1.0	1.0	4	2.500	847238329001	ND	0.20	ug/L			
033	126221	CCB					14-JUN-2007 13:41	1.0	1.0			847238329001	ND	0.20	ug/L			u
034	126221	SAMPLE	195318-005		126221	Filtra	14-JUN-2007 13:43	1.0	1.0			847238329001	ND	0.20	ug/L			u
035	126221	SAMPLE	195329-001		126221	Water	14-JUN-2007 13:46	1.0	1.0			847238329001	ND	0.20	ug/L			u
036	126221	SAMPLE	195337-001		126221	Filtra	14-JUN-2007 13:48	1.0	1.0			847238329001	ND	0.20	ug/L			u
037	126221	SAMPLE	195337-002		126221	Filtra	14-JUN-2007 13:50	1.0	1.0			847238329001	ND	0.20	ug/L			u
038	126221	SAMPLE	195337-003		126221	Filtra	14-JUN-2007 13:52	1.0	1.0			847238329001	ND	0.20	ug/L			u
039	126221	SAMPLE	195370-021		126221	Filtra	14-JUN-2007 13:55	1.0	1.0			847238329001	ND	0.20	ug/L			u
040	126221	CCV					14-JUN-2007 13:57	1.0	1.0	5	5.000	847238329001	5.400		ug/L	108		
041	126221	CCB					14-JUN-2007 13:59	1.0	1.0			847238329001	ND	0.20	ug/L			
042	126221	PREPBLK	QC392348		126221	Water	14-JUN-2007 14:09	1.0	5.0			847238329001	ND	1.0	ug/L			u
043	126221	CCV					14-JUN-2007 14:11	1.0	1.0	5	5.000	847238329001	5.270		ug/L	105		

Stds used: 1=S6475 2=S6477 3=S6480 4=S6478 5=S6479
Flags used: <=opening >=closing ?=missing b=noncompliant c=CCV ib=instrument blank u=use

Analyst: _____ Date: 6/14/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847238329 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 14-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj	Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
044	126221	CCB						14-JUN-2007 14:13	1.0	1.0			847238329001	ND	0.20	ug/L			

Stds used: 1=S6475 2=S6477 3=S6480 4=S6478 5=S6479
Flags used: <=opening >=closing ?=missing b=noncompliant c=CCV ib=instrument blank u=use

Analyst: _____ Date: 6/14/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **14-JUN-2007 13:12**

Batch Number : 126221
Date Extracted: 14-JUN-2007
Extracted by : Michael Wales
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S6475
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195270-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
195270-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
195271-001		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1				HG		
195271-003		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1				HG		
195279-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
195306-001		Polymatrix	Water	50	mL	50	1.000000	1				HG		
195306-005		Polymatrix	Water	50	mL	50	1.000000	1				HG		
195317-002		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195317-003		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195317-004		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195317-005		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195318-002		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195318-003		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195318-004		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195318-005		Weston Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195329-001		Innovative Technical Solutions	Water	50	mL	50	1.000000	1				T26/HG		
195337-001		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				T26/HG		
195337-002		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				T26/HG		
195337-003		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				T26/HG		
195370-021		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
QC391965	BLANK		Water	50	mL	50	1.000000	1				HG		
QC391966	BS		Water	50	mL	50	1.000000	1	2.5			HG		
QC391967	BSD		Water	50	mL	50	1.000000	1	2.5			HG		
QC391968	SER of 195271-001		WET Leacha	50	mL	50	1.000000	1				HG		
QC391969	MS of 195271-001		WET Leacha	50	mL	50	1.000000	1	2.5			HG		
QC391970	MSD of 195271-001		WET Leacha	50	mL	50	1.000000	1	2.5			HG		
QC391971	PDS of 195271-001		WET Leacha	50	mL	50	1.000000	1				HG		
QC392348	PREPBLK		Water	10	mL	50	5.000000	1				HG		

Prep Chemist: 6/14/07 Reviewed By: Date: 6/14/07

Relinquished By: 6/14/07 Received By: Date: 6/14/07

00253

Water Digestion for Mercury ~ 6/13/07

Curtis & Tompkins, Ltd.

LIMS Batch #: ~~126211~~ 126221

Date Digested: 6/14/07

Digested by: ~

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2512

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Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
195270-001	H	50	50	N	Filtrate (F.F.)
↓ -002	H	50			↓
195271-001	MSS	10			wet Leachate
↓ -003		10			wet Leachate
195279-001	G	50			Filtrate (F.F.)
195306-001	A				H_2O
↓ -005	A				H_2O ~ 6/13/07
195317-002	G				~~H_2O~~ Filtrate (F.F)
-003					
-004					
↓ -005	↓				↓ ↓
195337-001	A				Filtrate (F.F.)
-002					
-003					
195318-002	G				~~H_2O~~ Filtrate (F.F.)
-003					
-004					
-005					
195329-001	B				H_2O
195370-021	A				Filtrate (F.F.)
Blank				X	
BS					
BSD					
MS ~~195271-001~~ ~~195279-002~~		10			wet Leachate
MSD ↓ ~ 6/13/07		10			wet Leachate
Prep Blk		10			

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	56475	~ 6/14/07
ICAL Source WS#	56475	
ICV / CCV WS#	56477/78/79/80	
Digestion of Samples & Standards: Time ON / Temperature ON	12:00 / 95°C	
Time OFF/ Temperature OFF	2:00 / 95°C	
concentrated H_2SO_4	E08036	
concentrated HNO_3	E01102	
5% $KMnO_4$	K061307	
5% $K_2S_2O_8$	K2 060607	
NaCl.hydroxylamine hydrochloride	Hy061107	
Stannous Chloride	SnCl2 061307	
☒ filtered thru' 0.45 um syringe filter	Millipore RLAN3832	

~ 6/14/07

Prep Chemist / Date

Continued from page ____

Continued on page ____

6/14/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/28/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 06/28/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.059	0.021

GENERAL CHEMISTRY

00267

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Field ID:	DW060707A	Batch#:	126434
Matrix:	Water	Sampled:	06/07/07
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000	Analyzed:	06/19/07

Type: SAMPLE Lab ID: 195279-001

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type: BLANK Lab ID: QC392858

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

34.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392859	Batch#:	126434
Matrix:	Water	Analyzed:	06/19/07

Spiked	Result	%REC	Limits
200.0	188.8	94	90-110

35.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	126434
MSS Lab ID:	195358-004	Sampled:	06/12/07
Matrix:	Water	Received:	06/12/07
Units:	mg/L	Analyzed:	06/19/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392860	99.60	200.0	270.8	86	69-112		
MSD	QC392861		200.0	267.6	84	69-112	1	25

RPD= Relative Percent Difference

36.0

: 00270

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1** / SMWW 2320B Analysis Date: **06/19/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **123434** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	4.5	100	0.00	0.00	ND			1.0		
LCS	10.1	25	2.61	4.72	188.80			4.0	94	
195358-004	6.2	25	0.00	2.49	99.60		n/a	4.0		
MS	6.3	25	0.00	6.77	270.80			4.0	86	
MSD	6.3	25	0.00	6.69	267.60			4.0	84	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195279-001	3.6	100	0.00	0.00	ND		n/a	1.0
195286-002	7.2	100	0.00	4.46	44.60		n/a	1.0
195286-003	6.7	100	0.00	4.45	44.50		n/a	1.0
195358-001	5.5	100	0.00	1.36	rpt low alk	1.58	11.400	1.0
195358-002	4.9	100	0.00	0.34	rpt low alk	0.52	1.600	1.0
195358-003	5.4	100	0.00	4.53	45.30		n/a	1.0
195358-004	6.2	25	0.00	2.49	99.60		n/a	4.0
195358-005	6.7	20	0.00	2.60	130.00		n/a	5.0
195358-006	5.0	100	0.00	0.37	rpt low alk	0.51	2.300	1.0
195358-007	6.5	100	0.00	3.49	34.90		n/a	1.0
195358-008	6.7	100	0.00	3.60	36.00		n/a	1.0
195358-009	4.9	100	0.00	0.07	rpt low alk	0.10	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Reviewed by/ Date: 6/19/07

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/19/07
Batch No: 123434

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195279-001	0.0	#VALUE!	ND	#VALUE!	#VALUE!	#VALUE!
195286-002	0.0	44.60	44.600	44.600	0.000	0.000
195286-003	0.0	44.50	44.500	44.500	0.000	0.000
195358-001	0.0	#VALUE!	11.400	not applicable	not applicable	not applicable
195358-002	0.0	#VALUE!	1.600	not applicable	not applicable	not applicable
195358-003	0.0	45.30	45.300	45.300	0.000	0.000
195358-004	0.0	99.60	99.600	99.600	0.000	0.000
195358-005	0.0	130.00	130.000	130.000	0.000	0.000
195358-006	0.0	#VALUE!	2.300	not applicable	not applicable	not applicable
195358-007	0.0	34.90	34.900	34.900	0.000	0.000
195358-008	0.0	36.00	36.000	36.000	0.000	0.000
195358-009	0.0	#VALUE!	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

002172

Analysis: **Alkalinity** Analysis Date: 06/19/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 123434 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
195279-001	ND	#VALUE!	#VALUE!	#VALUE!
195286-002	44.600	54.378	0.000	0.000
195286-003	44.500	54.256	0.000	0.000
195358-001	11.400	not applicable	not applicable	not applicable
195358-002	1.600	not applicable	not applicable	not applicable
195358-003	45.300	55.232	0.000	0.000
195358-004	99.600	121.437	0.000	0.000
195358-005	130.000	158.502	0.000	0.000
195358-006	2.300	not applicable	not applicable	not applicable
195358-007	34.900	42.552	0.000	0.000
195358-008	36.000	43.893	0.000	0.000
195358-009	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126434 Date: 6/19/07 Benchbook#: **BK2508**
Matrix: Water Time: 9:00 Page: **17**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55862
Slope: 100.1
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 56014
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
lot #6352 Exp. 31-Dec 07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.5	100	—	<0.05		
LCS	10.1	25	2.61	4.72		
195279-1 K	5.5	25	—	<2mL		
-1	3.6	100	—	—		
195286-2 A	6.9	25	—	<2mL		
-2	7.2	100	—	4.46		
-3	6.8	25	—	<2mL		
-3	6.7	100	—	4.45		
195358-1 C	6.4	25	—	<2mL		
-1	5.5	100	—	1.36	1.58	
-2	4.9	25	—	<2mL		
-2	4.9	100	—	0.34	6/19 0.52	
-3	5.5	25	—	<2mL		
-3	5.4	100	—	4.53		
-4	6.2	25	—	2.49		
-5	6.7	20	—	2.60		
-6	5.2	25	—	<2mL		
-6	5.0	100	—	0.37	0.51	
-7	6.7	25	—	<2mL		
-7	6.5	100	—	3.49		
-8	7.2	25	—	<2mL		
-8	6.7	100	—	3.60		
-9	5.3	25	—	<2mL		
-9	4.9	100	—	0.07	0.10	
MS-4	6.3	25	—	6.77		
MSD-4	6.3	25	—	6.69		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/19/07
Analyst / Date

DMB 6/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126434
Date Started: 19-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195279-001			Treadwell & Rollo	Water	ALKALINITY	19-JUN-2007
195286-002			U.S. Army Corps of	Water	ALKALINITY	19-JUN-2007
195286-003			U.S. Army Corps of	Water	ALKALINITY	19-JUN-2007
195358-001			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-002			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-003			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-004			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-005			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-006			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-007			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-008			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
195358-009			Blasland, Bouck &	Water	ALKALINITY	18-JUN-2007
QC392858	BLANK			Water	ALKALINITY	
QC392859	LCS			Water	ALKALINITY	
QC392860	MS	of 195358-004		Water	ALKALINITY	
QC392861	MSD	of 195358-004		Water	ALKALINITY	

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW060707A	Batch#:	126083
Matrix:	Water	Sampled:	06/07/07 12:30
Units:	mg/L	Received:	06/07/07
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 06/08/07 14:49
Lab ID: 195279-001

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type: BLANK Analyzed: 06/08/07 09:58
Lab ID: QC391417

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected
RL= Reporting Limit

18.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	126083

Type: BS Analyzed: 06/08/07 10:16
Lab ID: QC391418

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.143	107	80-120
Chloride	4.000	4.315	108	80-120
Nitrogen, Nitrite	1.000	1.096	110	80-120
Nitrogen, Nitrate	1.000	1.133	113	80-120
Sulfate	10.00	11.27	113	80-120

Type: BSD Analyzed: 06/08/07 10:33
Lab ID: QC391419

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.054	103	80-120	4	20
Chloride	4.000	4.089	102	80-120	5	20
Nitrogen, Nitrite	1.000	1.055	105	80-120	4	20
Nitrogen, Nitrate	1.000	1.085	109	80-120	4	20
Sulfate	10.00	10.59	106	80-120	6	20

RPD= Relative Percent Difference

19.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW060707A	Diln Fac:	1.020
MSS Lab ID:	195279-001	Batch#:	126083
Matrix:	Water	Sampled:	06/07/07 12:30
Units:	mg/L	Received:	06/07/07

Type: MS Analyzed: 06/08/07 21:52
Lab ID: QC391692

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<0.009179	1.020	0.9917	97	78-120
Chloride	0.01506	2.040	1.985	97	80-120
Nitrogen, Nitrite	<0.008079	0.5100	0.4793	94	80-120
Nitrogen, Nitrate	<0.008046	0.5100	0.4892	96	80-120
Sulfate	<0.04691	5.100	5.066	99	80-120

Type: MSD Analyzed: 06/08/07 22:10
Lab ID: QC391693

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	1.020	1.022	100	78-120	3	20
Chloride	2.040	2.052	100	80-120	3	25
Nitrogen, Nitrite	0.5100	0.5331	105	80-120	11	25
Nitrogen, Nitrate	0.5100	0.5396	106	80-120	10	25
Sulfate	5.100	5.277	103	80-120	4	25

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195279 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	-10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

607218822002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195279 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 IC Water
EPA 300.0

Inst : IC01 Run Name : L IDF : 1.0
Seqnum : 607229541007 File : 160_7 Time : 08-JUN-2007 09:41
Cal : 607218822002 Caldate : 01-JUN-2007
Standards: S6107 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2574	0.2688	0.5000	0.5140	mg/L	3	10	
Chloride	0.1750	0.1767	1.000	1.028	mg/L	3	10	
Nitrogen, Nitrite	0.3873	0.4117	0.2500	0.2709	mg/L	8	10	
Nitrogen, Nitrate	0.4432	0.4163	0.2500	0.2475	mg/L	-1	10	
Sulfate	0.1369	0.1356	2.500	2.658	mg/L	6	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 IC Water
EPA 300.0

Inst : IC01 Run Name : M IDF : 1.0
Seqnum : 607229541018 File : 160_18 Time : 08-JUN-2007 17:33
Cal : 607218822002 Caldate : 01-JUN-2007
Standards: S6107 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2574	0.2740	2.000	2.070	mg/L	4	10	
Chloride	0.1750	0.1825	4.000	4.148	mg/L	4	10	
Nitrogen, Nitrite	0.3873	0.4090	1.000	1.070	mg/L	7	10	
Nitrogen, Nitrate	0.4432	0.4720	1.000	1.102	mg/L	10	10	
Sulfate	0.1369	0.1421	10.00	10.92	mg/L	9	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195279 IC Water
EPA 300.0

Inst : IC01 Run Name : H IDF : 1.0
Seqnum : 607229541033 File : 160_33 Time : 09-JUN-2007 01:05
Cal : 607218822002 Caldate : 01-JUN-2007
Standards: S6107 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.2574	0.2663	5.000	4.922	mg/L	-2	10	
Chloride	0.1750	0.1805	10.00	9.839	mg/L	-2	10	
Nitrogen, Nitrite	0.3873	0.3810	2.500	2.465	mg/L	-1	10	
Nitrogen, Nitrate	0.4432	0.4387	2.500	2.486	mg/L	-1	10	
Sulfate	0.1369	0.1363	25.00	25.29	mg/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195279 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541019 File : 160_19 Time : 08-JUN-2007 17:50
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195279 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541034 File : 160_34 Time : 09-JUN-2007 01:22
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

SEQUENCE SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0		25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0					1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0					1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0					1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0					1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0					1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1	25				
009	152_9	ICV				01-JUN-2007 00:47	1.0		25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0		25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0		25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0		25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1	25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1	25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1	25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2	25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0		25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1	25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1	25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0		25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0		25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0		25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2	25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2	25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2	25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0		25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1	25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1	25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0		25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1	25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1	25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0		25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0		25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0		25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0		25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1	25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1	25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0		25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1	25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0		25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2	25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2	25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2	25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2	25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2	25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1	25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1	25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0		25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0		25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Sequence: 607229541 Instrument: IC01 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	160_7	CCV	L			08-JUN-2007 09:41	1.0	1		25			1	
008	160_8	CCB/MB	QC391417	126083	Water	08-JUN-2007 09:58	1.0			25				
009	160_9	BS	QC391418	126083	Water	08-JUN-2007 10:16	1.0			25			1	
010	160_10	BSD	QC391419	126083	Water	08-JUN-2007 10:33	1.0			25			1	
011	160_11	SAMPLE	195285-007	126083	Water	08-JUN-2007 11:09	1.0	1		25				1:CL=96.7730
013	160_13	SAMPLE	195285-006	126083	Water	08-JUN-2007 12:05	1.0			25				
014	160_14	SAMPLE	195285-007	126083	Water	08-JUN-2007 14:13	2.0	1		25				1:CL=54.2856
016	160_16	MSS	195279-001	126083	Water	08-JUN-2007 14:49	1.0			25				
017	160_17	SAMPLE	195285-007	126083	Water	08-JUN-2007 15:06	10.0			25				
018	160_18	CCV	M	126083		08-JUN-2007 17:33	1.0			25			1	
019	160_19	CCB		126083		08-JUN-2007 17:50	1.0			25				
020	160_20	SAMPLE	195307-003	126083	Water	08-JUN-2007 19:24	1.0			25				1:CL=89.9481
022	160_22	MS	QC391692	126083	Water	08-JUN-2007 21:52	1.02			25			1	
023	160_23	MSD	QC391693	126083	Water	08-JUN-2007 22:10	1.02			25			1	
025	160_25	SAMPLE	195303-008	126083	Water	08-JUN-2007 22:45	50.0			25				
026	160_26	SAMPLE	195303-022	126083	Water	08-JUN-2007 23:02	10.0			25				
027	160_27	SAMPLE	195303-024	126083	Water	08-JUN-2007 23:20	10.0			25				
028	160_28	SAMPLE	195303-025	126083	Water	08-JUN-2007 23:37	10.0			25				
029	160_29	SAMPLE	195303-010	126083	Water	08-JUN-2007 23:55	10.0			25				
030	160_30	SAMPLE	195303-019	126083	Water	09-JUN-2007 00:12	10.0			25				
031	160_31	SAMPLE	195303-015	126083	Water	09-JUN-2007 00:30	10.0			25				
033	160_33	CCV	H	126083		09-JUN-2007 01:05	1.0			25			1	
034	160_34	CCB		126083		09-JUN-2007 01:22	1.0			25				
037	160_37	SAMPLE	195303-016	126083	Water	09-JUN-2007 02:15	10.0			25				
038	160_38	SAMPLE	195303-017	126083	Water	09-JUN-2007 02:32	10.0			25				
039	160_39	SAMPLE	195303-018	126083	Water	09-JUN-2007 02:50	10.0			25				
040	160_40	SAMPLE	195303-019	126083	Water	09-JUN-2007 03:07	1.0	1		25				1:CL=55.4192
042	160_42	SAMPLE	195303-030	126083	Water	09-JUN-2007 03:42	1.0			25				
044	160_44	SAMPLE	195303-016	126083	Water	09-JUN-2007 04:17	1.0	3		25				3:SO4=65.0646
046	160_46	SAMPLE	195303-017	126083	Water	09-JUN-2007 04:52	1.0	1		25				1:CL=37.5251
048	160_48	SAMPLE	195303-018	126083	Water	09-JUN-2007 05:27	1.0	1		25				1:CL=30.7758

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Sequence: 607229541 Instrument: IC01 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
050	160_50	SAMPLE	195303-008	126083	Water	09-JUN-2007 06:02	1.0	1	25				1:CL=131.384
052	160_52	SAMPLE	195303-022	126083	Water	09-JUN-2007 06:37	1.0	1	25				1:CL=48.2716
054	160_54	CCV	M	126083		09-JUN-2007 07:12	1.0		25			1	
055	160_55	CCB		126083		09-JUN-2007 07:30	1.0		25				
058	160_58	SAMPLE	195303-015	126083	Water	09-JUN-2007 08:22	1.0	2	25				2:CL=31.6735
060	160_60	SAMPLE	195303-024	126083	Water	09-JUN-2007 08:57	1.0	2	25				2:CL=35.0225
062	160_62	SAMPLE	195303-010	126083	Water	09-JUN-2007 09:32	1.0	1	25				1:CL=45.6776
064	160_64	SAMPLE	195303-025	126083	Water	09-JUN-2007 10:07	1.0	3	25				3:SO4=69.0396
066	160_66	CCV	H	126083		09-JUN-2007 10:42	1.0		25			1	
067	160_67	CCB		126083		09-JUN-2007 11:00	1.0	1	25				

Stds used: 1=S6107

REPORTING SUMMARY FOR 195279 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
195279-001	IC01	06/08/07 14:49	1.0	+	+	+	+	+	
QC391417	IC01	06/08/07 09:58	1.0	+	+	+	+	+	
QC391418	IC01	06/08/07 10:16	1.0	+	+	+	+	+	
QC391419	IC01	06/08/07 10:33	1.0	+	+	+	+	+	
QC391692	IC01	06/08/07 21:52	1.02	+	+	+	+	+	
QC391693	IC01	06/08/07 22:10	1.02	+	+	+	+	+	

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126083
Date Started: 08-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195279-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195285-006			U.S. Army Corps of	Water	NITRATE	19-JUN-2007
195285-007			U.S. Army Corps of	Water	NITRATE	19-JUN-2007
195303-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-024			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-025			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-030			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195307-003			Matheson-Tri Gas	Water	NITRATE, NITRITE	14-JUN-2007
QC391417	BLANK			Water		
QC391418	BS			Water		
QC391419	BSD			Water		
QC391692	MS	of 195279-001		Water		
QC391693	MSD	of 195279-001		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126083
Date Started: 6/6/07
Prep Chemist: MSB

BK 2488
Page 85

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195279-001 I	.01	1x	S	MSS
2	195285-006 A	.15	1x	↓	
3	↓ -007 A	.52	1x/10x		
4	195303-008 G	1.31	50x/1x		
5	-010	.95	10x/1x		
6	-015	.66	10x/1x		
7	-016	.78	10x/1x		
8	-017	.70	10x/1x		
9	-018	.71	10x/1x		
10	-019	.78	10x/1x		
11	-022	.88	10x/1x		
12	-024	.70	10x/1x		
13	-025	.81	10x/1x		
14	↓ -030 ↓	.06	1x		
15	195307-003 A	.50	1x	↓	
16	Blank 391417	N/A	1x	N/A	
17	BS 391418	↓	↓	↓	
18	BSD 391419	↓		↓	
19	MS C92	.01		S	
20	MSD ↓ 693	.01	↓	↓	
				CP	6/12/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	10X22 MDW 4/9/07	MSB 6/11/07
BS/BSD Spiked with .2 mL of :	SG1(5)	↓
MS/MSD Spiked with .1 mL of :	SG1(5)	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na	↓	
P: OnGuard II P		
RP: OnGuard II RP	↓	
S: 0.20um/0.45um	Acrodisc #10650572	↓

MSB 6/11/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CP 6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/28/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

00294

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	126299
Field ID:	DW060707A	Sampled:	06/07/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	195279-001	ND	0.04
BLANK	QC392288	ND	0.04

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	WT060807	Batch#:	126299
MSS Lab ID:	195303-026	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392289	<0.04000	0.2400	0.2281	95	75-125		
MSD	QC392290		0.2400	0.2352	98	75-125	3	20
LCS	QC392291		0.2400	0.2367	99	75-125		

RPD= Relative Percent Difference

Analysis:	**SULFIDE**	Analyst:	dm
Method:	EPA 376.2	Prep Date:	**06/14/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/14/07**
Wavelength:	626 nm	Batch:	**126299**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1440	0.2367	0.2400	99%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1420	0.2334	0.2400	97%	90 - 110%
CCB	0.0000	0.0000	0.0000		
CCV	0.1412	0.2321	0.2400	97%	90 - 110%
CCB	0.0015	0.0025	0.0000		

002937

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: 126299
Prep Date: 06/14/07
Analysis Date: 06/14/07
Analyst: dm

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report** mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1440		**0.23668**	0.040	0.0500	36.0000	0.2400	**99**	
195303-26	7.5000	1.0000	0.0058		**ND**	0.040					
195303-26m	7.5000	1.0000	0.1388		**0.22813**	0.040	0.0500	36.0000	0.2400	**95**	
195303-26m	7.5000	1.0000	0.1431		**0.23520**	0.040	0.0500	36.0000	0.2400	**98**	**3**
195303-17	7.5000	1.0000	0.0010		**ND**	0.040					
195303-18	7.5000	1.0000	0.0214		**ND**	0.040					
195303-19	7.5000	1.0000	0.0083		**ND**	0.040					
195303-20	7.5000	1.0000	0.0077		**ND**	0.040					
195303-21	7.5000	1.0000	0.0035		**ND**	0.040					
195303-22	7.5000	1.0000	0.0033		**ND**	0.040					
195303-24	7.5000	1.0000	0.0042		**ND**	0.040					
195303-25	7.5000	1.0000	0.0102		**ND**	0.040					
195303-27	7.5000	2.0000	0.6619		**2.17581**	0.080					
195303-30	7.5000	1.0000	0.0004		**ND**	0.040					
195279-1	7.5000	1.0000	0.0074		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

Reviewed by/ Date: DMB 6/19/07

002598

Date : 6/14/2007 Time : 11:33:00

Concentration Results

Date: 6/14/2007 Time: 10:57:16 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Slit: UV/VIS: 1.00 nm
Baseline: No correction (0.00 0.00)
Result Filename: 126299.RCO
Autozero performed: 6/14/2007 10:57:07 AM
Analyst: 0.00 [analyst]

Wavelength(s)		Sample ID	Ordinate	Factor	Concentration		Sample Info
626.0	0.0	ICBMB	-0.000	1.0000	-0.000*	mg/L	
626.0	0.0	ICVLCS	0.1440	1.0000	0.2190	mg/L	
626.0	0.0	303-17	0.0010	1.0000	0.0016	mg/L	
626.0	0.0	303-18	0.0214	1.0000	0.0326	mg/L	
626.0	0.0	303-19	0.0083	1.0000	0.0127	mg/L	
626.0	0.0	303-20	0.0077	1.0000	0.0117	mg/L	
626.0	0.0	303-21	0.0035	1.0000	0.0053	mg/L	
626.0	0.0	303-22	0.0033	1.0000	0.0050	mg/L	
626.0	0.0	303-24	0.0042	1.0000	0.0064	mg/L	
626.0	0.0	303-25	0.0102	1.0000	0.0154	mg/L	
626.0	0.0	CCV	0.1420	1.0000	0.2160	mg/L	
626.0	0.0	CCB	-0.000	1.0000	-0.000*	mg/L	
626.0	0.0	303-27	0.6619	1.0000	1.0064	mg/L	
626.0	0.0	~~303-12~~	~~0.0004~~	~~1.0000~~	~~0.0006~~	~~mg/L~~	
626.0	0.0	303-30	0.0004	1.0000	0.0005	mg/L	
626.0	0.0	303-26	0.0058	1.0000	0.0088	mg/L	
626.0	0.0	303-26MS	0.1388	1.0000	0.2110	mg/L	
626.0	0.0	303-26MS	0.1431	1.0000	0.2176	mg/L	
626.0	0.0	279-1	0.0074	1.0000	0.0112	mg/L	
626.0	0.0	CCV	0.1412	1.0000	0.2147	mg/L	
626.0	0.0	CCB	0.0015	1.0000	0.0024	mg/L	
626.0	0.0	sam22	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam23	0.0000	1.0000	0.0000*	mg/L	Sample skipped
626.0	0.0	sam24	0.0000	1.0000	0.0000*	mg/L	Sample skipped

CALIBRATION

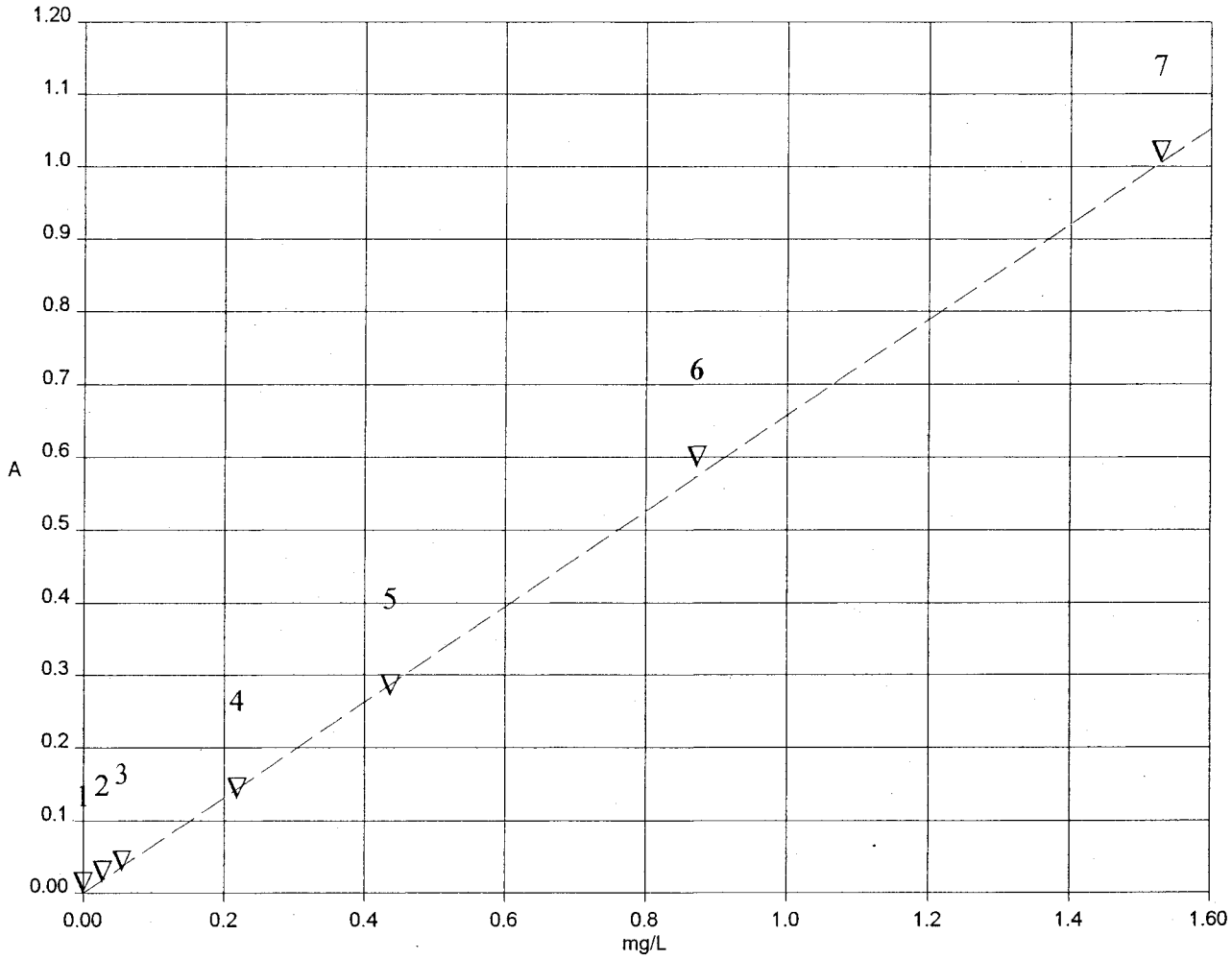
Date: 6/14/2007 Time: 10:57:07 AM
Instrument: PerkinElmer Lambda 25 Serial No: 101N5091105
Method: SULFIDE
Ordinate mode: Single wavelength
Baseline: No correction (0.00 0.00)
Analyst: WETCHEM

Wavelength(s)		Sample ID	Concentration		Ord. value	Comment
626.0	0.0	ss1106.A01	0.0000	mg/L	0.0000	
626.0	0.0	ss1106.A02	0.0270	mg/L	0.0150	
626.0	0.0	ss1106.A03	0.0550	mg/L	0.0301	
626.0	0.0	ss1106.A04	0.2180	mg/L	0.1302	
626.0	0.0	ss1106.A05	0.4370	mg/L	0.2716	
626.0	0.0	ss1106.A06	0.8730	mg/L	0.5861	
626.0	0.0	ss1106.A07	1.5290	mg/L	1.0054	

Equation: y = 6.576329e-01 * x

Residual error: 0.010105
Correlation coefficient: 0.999641

Calibration Curve



Spectrum Name: SULFIDE

Description: y = 6.576329e-01 * x

Comments: RE = 1.010533e-02, CC = 9.996406e-01

Date Created: Thu Nov 16 09:51:35 2006

Dis sulfide / Sulfide EPA 376.2 B126299

Sample	Vol (ml)	Final Vol (ml)	ABS
195303-17I	7.5	7.5	.0010
-18			.0219
-19			.0083
-20			.0077
-21			.0035
-22			.0033
-24			.0042
-25			.0102
-27			.0619 x 2
-30L			.0004
* 195303-26L			.0056
-26MS	+.05ml (36mg/L S= from OAS5292)		.1388
-26MSD	same as MS		.1431
195279-1H			.0074
ICB/MB			-.000
ICV/LCS	same as MS		.1440
CCV			.1420
CCB			-.000
CCV			.412
CCB			.0015

Std on pg 2 BK2521

* filter thru Whatman .45μ filter lot F785

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
Dm	6.14.07	DMB	6/19/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126299
Date Started: 14-JUN-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195279-001			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
195303-017			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-018			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-019			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-020			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-021			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-022			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-024			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-025			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-026			Treadwell & Rollo	Water	DISS SULFIDE	20-JUN-2007
195303-027			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-030			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
QC392288	BLANK			Water	DISS SULFIDE	
QC392289	MS	of 195303-026		Water	DISS SULFIDE	
QC392290	MSD	of 195303-026		Water	DISS SULFIDE	
QC392291	LCS			Water	DISS SULFIDE	

Curtis & Tompkins, Ltd.

Analysis:	Sulfide	Analysis Date:	1/24/2007
Method:	EPA 376.2	Analyst:	SY
Instrument:	**Perkin-Elmer Spectrometer**		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.0821
Units:	mg/L
1	0.06624
2	0.06476
3	0.06180
4	0.06328
5	0.05769
6	0.06295
7	0.05670
Average:	0.062
Std Deviation:	0.0035307
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0111** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS

✓RKW 2/28/07

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	126263
Field ID:	DW060707A	Sampled:	06/07/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	195279-001	44	10
BLANK	QC392145	ND	10

ND= Not Detected
RL= Reporting Limit

37.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195279	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	126263
MSS Lab ID:	195251-006	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	mg/L	Analyzed:	06/13/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC392146		100.0	110.0		110	75-126		
BSD	QC392147		100.0	110.0		110	75-126	0	21
SDUP	QC392148	160.0		158.0	10.00			1	24

RL= Reporting Limit
RPD= Relative Percent Difference

38.0

00306

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	**EPA160.1** / SMWW 2540c	Analysis Date:	**13-Jun-07**
Matrix:	Water	Batch #:	**126263**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	51.4748	51.4752	0.0004	ND	10					
BS	50	1	48.3806	48.3861	0.0055	110.0	10	1,000	5	100	**110**	
BSD	50	1	54.4275	54.4330	0.0055	110.0	10	1,000	5	100	**110**	**0.00**
195251-006	50	1	49.1194	49.1274	0.0080	160.0	10					
SDUP	50	1	46.7339	46.7418	0.0079	158.0	10					**1.26**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195251-006	50	1	49.1194	49.1274	0.0080	160.0	10
195270-001	10	5	45.0507	45.0799	0.0292	2,920.0	50
195270-002	25	2	45.3163	45.3733	0.0570	2,280.0	20
195270-010	50	1	51.2213	51.2461	0.0248	496.0	10
195270-011	50	1	47.4322	47.4557	0.0235	470.0	10
195270-017	50	1	48.6165	48.6459	0.0294	588.0	10
195270-018	50	1	43.5513	43.5751	0.0238	476.0	10
195279-001	50	1	46.8208	46.8230	0.0022	44.0	10
195285-004	50	1	43.6417	43.6477	0.0060	120.0	10
195285-005	50	1	48.3826	48.3984	0.0158	316.0	10
195286-004	50	1	48.4086	48.4140	0.0054	108.0	10
195286-005	50	1	49.0038	49.0100	0.0062	124.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: DMW 6/19/07

LOCCO

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126263

Prep Date: 6/13/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **58**

Filter Mfg/ Lot#: Ent. Exp. 655758
Spike WS#: 55560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/13/07	6/14/07	6/18/07	6/18/07	6/18/07	6/18/07
Time:	14:45	10:30	9:00	10:00	11:00	12:00
Temp (C):	90	180	180	180	180	180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	MB		50	69	51.4748	51.4754	51.4752	X
	BS		↓	BUM	48.3806	48.3860	48.3861	X
	BSD		↓	~~54.4~~ REP	54.4275	54.4330	54.4330	X
	195251-6 G	160.8	50	NEMO	49.1194	49.1270	49.1274	X
5	SDUP-6 ↓	↓	↓	ZOMBIE	46.7339	46.7413	46.7418	X
	195270-1 G	3280	~~50~~ 10	SC	45.0507	45.0804	45.0799	X
	-2	3340	25	OZ	45.3163	45.3745	45.3731	45.3743
	-10	693	50	Y	51.2213	51.2456	51.2461	X
	-11	702		510	47.4322	47.4555	47.4557	X
10	-17	879		P3	48.6165	48.6454	48.6459	X
	-18 ↓	696	↓	8	43.5513	43.5751	43.5751	X
	195279-1 I	1.53	50	J	46.8208	46.8227	46.8230	X
	195285-4 A	147.4	↓	WOOD	43.6417	43.6477	43.6402	
	-5	479		Q	48.3826	48.3994	48.3982	48.3994
15	195286-4	138.2		P	48.4086	48.4142	48.4140	X
	-5 ↓	162.8	↓	H	49.0038	49.0097	49.0100	X
20								

* Constant weight must be within 0.0005 from previous reading.

6/13/07
Analyst / Date

6/14/07
Reviewed by / Date

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126263 cont.

Prep Date: _____
Prep Time: _____

Benchbook#: **BK 2421**
Page: **59**

Filter Mfg/ Lot#: _____
Spike WS#: _____

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In -4	Out -4	In-~~2~~ 5	Out-~~2~~ 5	In-3	Out-3
Date:	6/18/07	6/19/07	6/19/07	6/19/07		
Time:	13:30	9:30	9:00	10:00		
Temp (C):	180	180	180	180		

Sample # 4 Letter 4/19	EC Value 5 (uS/cm) 6/19	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
45.3736	45.3733	X					
48.3980	48.3984	X					

* Constant weight must be within 0.0005 from previous reading.

6/19/07
Analyst / Date

DMB 6/19/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126263
Date Started: 13-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
195251-006		URS Corporation	Water	TDS	19-JUN-2007
195270-001		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-002		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-010		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-011		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-017		Treadwell & Rollo	Water	TDS	19-JUN-2007
195270-018		Treadwell & Rollo	Water	TDS	19-JUN-2007
195279-001		Treadwell & Rollo	Water	TDS	19-JUN-2007
195285-004		U.S. Army Corps of	Water	TDS	19-JUN-2007
195285-005		U.S. Army Corps of	Water	TDS	19-JUN-2007
195286-004		U.S. Army Corps of	Water	TDS	19-JUN-2007
195286-005		U.S. Army Corps of	Water	TDS	19-JUN-2007
QC392145	BLANK		Water	TDS	
QC392146	BS		Water	TDS	
QC392147	BSD		Water	TDS	
QC392148	SDUP of 195251-006		Water	TDS	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195303

Treadwell & Rollo 555 Montgomery Street San Francisco, CA 94111	Project : 2893.04.51 Location : Presidio Level : III

Sample ID	Lab ID	Sample ID	Lab ID
HWGW100	195303-001	231GW24	195303-017
231GW10	195303-002	231GW19	195303-018
231GW16	195303-003	231GW15	195303-019
231GW30	195303-004	231GW25	195303-020
231GW21	195303-005	231GW23	195303-021
231GW22	195303-006	231GW11	195303-022
TB0607073A	195303-007	TB0607072A	195303-023
1065MW103A	195303-008	231GW26	195303-024
600GW106	195303-009	231GW27	195303-025
610GW103	195303-010	WT060807	195303-026
610SP01	195303-011	207GW03	195303-027
231PZ04	195303-012	231PZ01	195303-028
231PZ03	195303-013	231PZ02	195303-029
TB0607071A	195303-014	DW060807B	195303-030
231GW17	195303-015	WT061307	195303-031
231GW18	195303-016		

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: _____ Date: 06/28/2007
Project Manager

Signature: _____ Date: 06/28/2007
Operations Manager

NELAP # 01107CA

00001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195303**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	**06/08/07, 06/13/07**
Samples Received:	**06/08/07, 06/13/07**

This hardcopy data package contains sample and QC results for thirty one water samples, requested for the above referenced project on 06/08/07 and 06/13/07. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High ICAL percent RSD (relative standard deviation) was observed for vinyl acetate in the calibration analyzed 05/03/07 13:35; this analyte was not detected at or above the RL in the associated samples. Low response was observed for carbon disulfide in the ICV analyzed 05/31/07 21:26; this analyte was not detected at or above the RL in the associated samples. Low response was observed for bromomethane in the CCV analyzed 06/13/07 10:42; this analyte met minimum response criteria. High response was observed for vinyl acetate; this analyte was not detected at or above the RL in the associated samples. High responses were observed for vinyl acetate in a number of CCVs; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Pesticides (EPA 8081A):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene in the MS/MSD of FM14EX07GW101 (lab # 195270-013); these low recoveries were confirmed by re-analysis, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:
Response exceeding the instrument's linear range was observed for manganese in the MS of 231GW19 (lab # 195303-018). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:
Low recoveries were observed for thallium and zinc in the MSD of HWGW100 (lab # 195303-001); the BS/BSD were within limits, and the associated RPDs were within limits. Low recovery was observed for calcium in the MSD of 231GW19

#
182.2

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	195303
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	06/08/07, 06/13/07
Samples Received:	06/08/07, 06/13/07

Metals (EPA 6020 and EPA 7470A) Filtrate:
(lab # 195303-018); the BS/BSD were within limits, and the associated RPD was within limits. Responses exceeding the instrument's linear range were observed for magnesium, manganese, and sodium in the MS/MSD of HWGW100 (lab # 195303-001) and the MS of 231GW19 (lab # 195303-018). High % differences were observed for barium, calcium, and vanadium in the serial dilution of HWGW100 (lab # 195303-001) and the serial dilution of 231GW19 (lab # 195303-018). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):
Samples HWGW100 (195303-001) and 231GW23 (195303-021) were analyzed outside of hold time for nitrate and nitrite analysis. They were analyzed on the day of the hold but were not analyzed within the hour of the hold. No other analytical problems were encountered.

Total Cyanide (EPA 335.2):
No analytical problems were encountered.

Total Oil & Grease (HEM) (EPA 1664A):
Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

Phenolic Compounds (EPA 420.1):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
Low recoveries were observed for sulfide in the MS/MSD of 231GW18 (lab # 195303-016); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Dissolved Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
207GW03 (lab # 195303-027), 231GW26 (lab # 195303-024), 231GW27 (lab # 195303-025), DW060807B (lab # 195303-030), and WT060807 (lab # 195303-026) were not analyzed within hold time due to analyst error. The client was contacted by phone and requested the analysis be cancelled for these samples.

#
182.2

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**195303**
Client:	**Treadwell & Rollo**
Project:	**2893.04.51**
Location:	**Presidio**
Request Date:	06/08/07, 06/13/07
Samples Received:	06/08/07, 06/13/07

Total Dissolved Solids (TDS) (EPA 160.1):
No other analytical problems were encountered.

pH (EPA 9040B):
No analytical problems were encountered.

#
182.2

Chain of Custody

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

195303

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2125
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTJ B Brown
Recorder (signature required): [signature]
Sent to Laboratory (Name): Curtis + Tompkins

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Dissolved (14) (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total Sulfide					COMMENTS / NOTES
-1	HWGW100	6-7-07	820			X				1		1					X		X									
-2	231GW10		910			X		6		1		4	X	X	X	X	X			X	X		X					
-3	231GW16		945			X		6		1		4	X	X	X	X	X			X	X		X					
-4	231GW30		1050			X		6		1		4	X	X	X	X	X			X	X		X					
-5	231GW21		1125			X		6		1		4	X	X	X	X	X			X	X		X					
-6	231GW22		1205			X		6		1		4	X	X	X	X	X			X	X		X					
-7	TB060707 3A		—			X		2								X												

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other - 14-Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn)

RELINQUISHED BY: [signature]	DATE: 6/8/7	RECEIVED BY: [signature]	DATE: 6/8/7
PRINT NAME: Brian Brown FIRM: BTJ	TIME: 1300	PRINT NAME: AARON GRENIER FIRM: C+T	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Cold & Intact

195303

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2127
Page: ____ of ____

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): P. Cornish, S. Rose BTS
Recorder (signature required): [signature]
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260)	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other) (4)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other) (4)	TDS (160.1)	PAHs (8310)	total sulfide	Diss. Methyl (4)	BTEX, MTBE				COMMENTS / NOTES
-8	1065MW103A	6/7/07	0905			X		6		1	1	2	X				X				X		X	X	X				
-9	600GW106		0940			X		6		1		3	X	X	X		X				X			X	X				
-10	610GW103		1035			X		6		1		3	X	X	X		X				X			X	X				
-11	610SF01		1045			X		6		2		3	X	X	X		X			X	X			X	X				
-12	231PZ04		1232			X		6		1	1	3	X	X	X	X	X		X		X		X						
13	231PZ03		1410			X		6		1	1	3	X	X	X	X	X		X		X		X						
-14	TB06070710		→			X		2					•			X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** - H, Al, As, Ca Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni, Zn) List 4 → Al, As, Fe, Mn)

RELINQUISHED BY: [signature]	DATE: 6/8/07	RECEIVED BY: [signature]	DATE: 6/8/7
PRINT NAME: Pete Cornish FIRM: BTS	TIME: 1100	PRINT NAME: AARON GREUTER FIRM: C+T	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

cold & Intact

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111

Ph: 415.955.9040 FAX: 415.955.9041

195303

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2163

Page: ___ of ___

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

Sampled By (Firm and Samplers): D. Rayml / BTS

Recorder (signature required): [signature]

Sent to Laboratory (Name): CT

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH/Zn(Ac)2	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (4)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total Sulfide					COMMENTS / NOTES
-15	231GW17	6/7/07	1500			X		6		1	X	3	X	X	X	X	X		X		X		X					1 container of NaOH + Zn(Ac)
-16	231GW18		1400			X		6		1	1	3	X	X	X	X	X		X		X		X					
-17	231GW24		1320			X		6		1	1	3	X	X	X	X	X		X		X		X					
-18	231GW19		1150			X		6		1	1	3	X	X	X	X	X		X		X		X					
-19	231GW15		1115			X		6		1	1	3	X	X	X	X	X		X		X		X					
-20	231GW25		1035			X		6		1	1	3	X	X	X	X	X		X		X		X					
-21	231GW23		0940			X		6		1	1	3	X	X	X	X	X		X		X		X					
-22	231GW11		0855			X		6		1	1	3	X	X	X	X	X		X		X		X					
-23	TB070072A					X		2								X												

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (**13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (**9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (**8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (**7** - As, Cr, Cd, Cu, Pb, Ni and Zn) (**3** - Al, Fe, and Cr) (**Other** - 14 - Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Ni, and Zn)

RELINQUISHED BY: [signature]	DATE: 6/8/7	RECEIVED BY: [signature]	DATE: 6/8/7
PRINT NAME: D. Rayml	FIRM: BTS	TIME: 1100	PRINT NAME: AARON GREENLEE	FIRM: CT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

195303

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2126
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS, D. Raynal / P. Cornish
Recorder (signature required): [signature]
Sent to Laboratory (Name): CFT

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

	SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH/Zinc	Other	TPHg (8015M)	TPHd (8015M)[1]	TPHfo (8015M)[1]	VOCs (8260)/MTBE	General Chemistry[2]	OCPs (8081)	Metals - Dissolved[3] (23, 22, 13, 9, 8, 7, 3, Other) (14)	Metals - Total[3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total Sulfide	Tot. Metals *	PCB's	Dis. Metals (23)	VOC's	Dis. Sulfide	COMMENTS / NOTES
24	231GW26	6/8/07	0825			X		6		1	1	3	X	X	X	X	X		X		X		X						
25	231GW27		0915			X		6		1	1	3	X	X	X	X	X		X		X		X						
26→	WT060807 *		1030			X		6		1	1	2						X	X		X			X	X			X	[redacted]
27→	207GW03		0850			X		6		1	1	3	X	X	X	X	X		X		X		X						No H_2SO_4
28→	231PZ101	6/7/07	1430			X		6		1	1	3	X	X	X	X	X		X		X		X	TPHg, d, fo & VOCs only					No H_2SO_4 / Low vol. on Amber
29→	231PZ102	6/7/07	1442			X		6		1	1	3	X	X	X	X	X		X		X		X						No H_2SO_4 / Low vol. on Amber
30→	DW060807B	6/8/07	1005			X		6		1		8	X	X	X	·	X	X			X	X	X			X	X		

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** - 14 - Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)

* total test Cont. 10 - As, Cr, Cd, Cu, Pb, Ni, and Au

RELINQUISHED BY: [signature]	DATE: 6/8/07	RECEIVED BY: [signature]	DATE: 6/8/7
PRINT NAME: Devin Raynal FIRM: BTS	TIME: 1100	PRINT NAME: AARON GRENTER FIRM: CFT	TIME: 1300
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

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* Should be logged for 1664, CYANIDE, PHENOL/WET, METALS, DISS SULFIDE
No 8081, PCB, or 14 MET. pH will arrive separately.
6/12/07 SJS

Cold & Intact

Treadwell&Rollo
Environmental and Geotechnical Consultants
555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

195303

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2210
Page: ___ of ___

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): T&R Mike Chamberlain
Recorder (signature required):
Sent to Laboratory (Name): C&T

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893 . 65

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	pH					COMMENTS / NOTES
3| WT061307	6/13/07	0750			X						X											X					short hold time!
												•			•												

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (**13** - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (**9** - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (**8** - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (**7** - As, Cr, Cd, Cu, Pb, Ni and Zn) (**3** - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY:	DATE: 6/13/07	RECEIVED BY:		DATE: 6.13.07	
PRINT NAME: MICHAEL CHAMBERLAIN	FIRM: T&R	TIME: 0830	PRINT NAME: Tony Rojas	FIRM: C&T	TIME: 1140
RELINQUISHED BY:	DATE:	RECEIVED BY:		DATE:	
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: x Client Request By: J.Graber Date/Time: 6/12/07 15:47 Initials: SES

Login Review Data Review

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
195303-026		WT060807	Water	Cancel	8081, PCB	6/20
			Filtrate	Cancel	14MET	6/20

Steve Stanley

From: "Joshua Graber" <jdgraber@treadwellrollo.com>
To: "Steve Stanley" <steve@ctberk.com>
Cc: "Carole Nuttall" <cnuttall@treadwellrollo.com>; "Greg Johnson" <gejohnson@treadwellrollo.com>; <bjones@blainetech.com>
Sent: Wednesday, June 13, 2007 5:09 PM
Subject: RE: 2893.04.51 - C&T Login Summary (195303)

Hey Steve,

A couple sample ID mistakes. 231PZ101 should be 231PZ01 and 231PZ102 should be 231PZ02.

Thanks!

Joshua D. Graber, REA I
Senior Project Manager / Scientist
Treadwell & Rollo, Inc.
(415) 955-9040

****
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****

From: Steve Stanley [mailto:steve@ctberk.com]
Sent: Tuesday, June 12, 2007 4:09 PM
To: Joshua Graber
Cc: Carole Nuttall; Greg Johnson; ssung@blainetech.com; bjones@blainetech.com
Subject: 2893.04.51 - C&T Login Summary (195303)

NOTE: The wrong parameters were requested on the COC for sample WT060807 (lab # 195303-026). The correct analyses are now listed sans pH which will be collected 6/13/07 per J.Graber. Also, should sample DW060807B (lab # 195303-030) be logged in for PCBs?

C&T Login Summary for 195303

Project: 2893.04.51 **Site:** Presidio **Lab Login #:** 195303 **Report Due:** 06/22/07 **PO#:** **C&T Proj Mgr:** Steve Stanley	**Report To:** Treadwell & Rollo 555 Montgomery Street Suite 1300 San Francisco, CA 94111 ATTN: Josh Graber (415) 955-9040	**Bill To:** Treadwell & Rollo 555 Montgomery Stree Suite 1300 San Francisco, CA 941 ATTN: Josh Graber (415) 955-9040

Client ID	Lab ID	Sampled	Received	Matrix	Analyses	COC #	Comments
HWGW100	001	06/07	06/08			2125	SILICA GEL!!! DATAV

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 195303 Date Received: 6-08-2007 Number of Coolers: 6
Client: Treadwell & Rollo Project: Presidio

A. Preliminary Examination Phase
Date Opened: 6-08-2007 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 on lid of cooler Seal date: 6-8-07 Seal name: PL
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: Wet Temperature: 3.6°C, 2.1°C, 2.8°C, 1.9°C 2.0°C, 2.6°C

B. Login Phase
Date Logged In: 6-08-2007 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: Ziploc Bags
2. Did all bottles arrive unbroken? ..... YES (NO)
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ... (YES) NO
4. Did bottle labels agree with custody papers? ..... YES (NO)
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:
2.) One VOA broken in sample set 231PZ03
4.) Sample TB0607071A has 4 VOA's. COC states 2 VOA's
Sample TB0607072A has 4 VOA's; COC states 2 VOA's
* Sample -026 total metals list state Au (gold) on COC and omits Hg; logged for Ag (Silver) and Hg per SES
also omits ZN; logged for ZN per SES

Sample -031 (WT061307) received on ice via courier

Curtis & Tompkins, Ltd.

TPH-Purgeables and BTXE

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW10	Batch#:	126319
Lab ID:	195303-002	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	65-135
Bromofluorobenzene (FID)	110	65-135

ND= Not Detected
RL= Reporting Limit

57.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW16	Batch#:	126319
Lab ID:	195303-003	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	65-135
Bromofluorobenzene (FID)	105	65-135

ND= Not Detected
RL= Reporting Limit

58.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW30	Batch#:	126319
Lab ID:	195303-004	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	116	65-135

ND= Not Detected
RL= Reporting Limit

59.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW21	Batch#:	126319
Lab ID:	195303-005	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	4,100	50

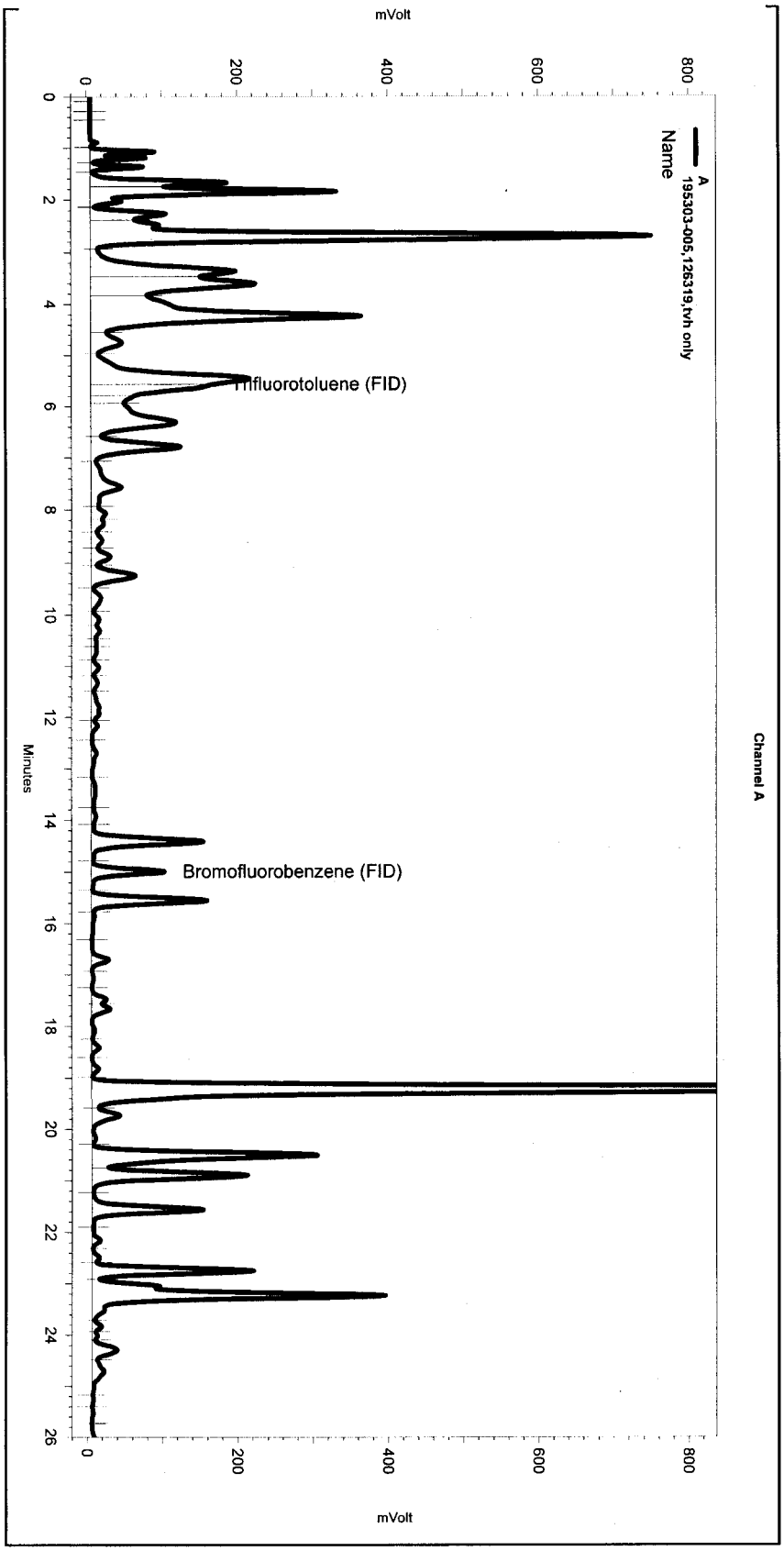
Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	126	65-135

RL= Reporting Limit

60.0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\165.seq
Sample Name: **195303-005,126319,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\165_020**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/15/2007 2:19:51 AM
Analysis Date: 6/15/2007 11:06:26 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: D1.3



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No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\165_020

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.561	0	0
Yes	Split Peak	5.776	0	0

231GW21

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW22	Batch#:	126319
Lab ID:	195303-006	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	11,000	100

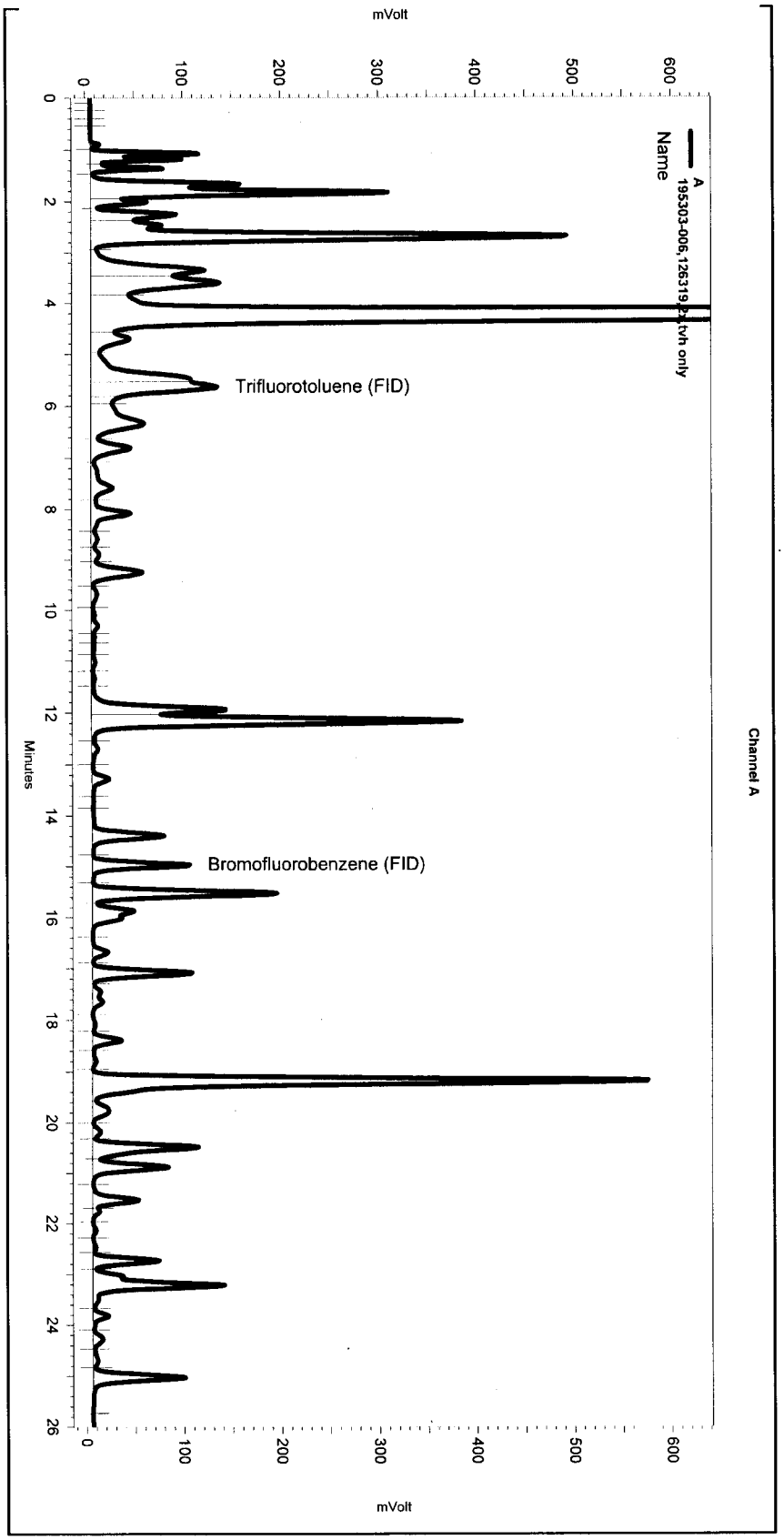
Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	126	65-135

RL= Reporting Limit

61.0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\165.seq**
Sample Name: **195303-006,126319,2x,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\165_034**
Instrument: GC05 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/15/2007 11:08:43 AM
Analysis Date: 6/15/2007 11:38:20 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: E1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\165_034

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.541	0	0
Yes	Split Peak	5.823	0	0

231GW22

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW103A	Batch#:	126319
Lab ID:	195303-008	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	65-135	EPA 8015B
Bromofluorobenzene (FID)	109	65-135	EPA 8015B
Trifluorotoluene (PID)	92	65-135	EPA 8021B
Bromofluorobenzene (PID)	113	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

62.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	600GW106	Batch#:	126319
Lab ID:	195303-009	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	65-135	EPA 8015B
Bromofluorobenzene (FID)	112	65-135	EPA 8015B
Trifluorotoluene (PID)	95	65-135	EPA 8021B
Bromofluorobenzene (PID)	115	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

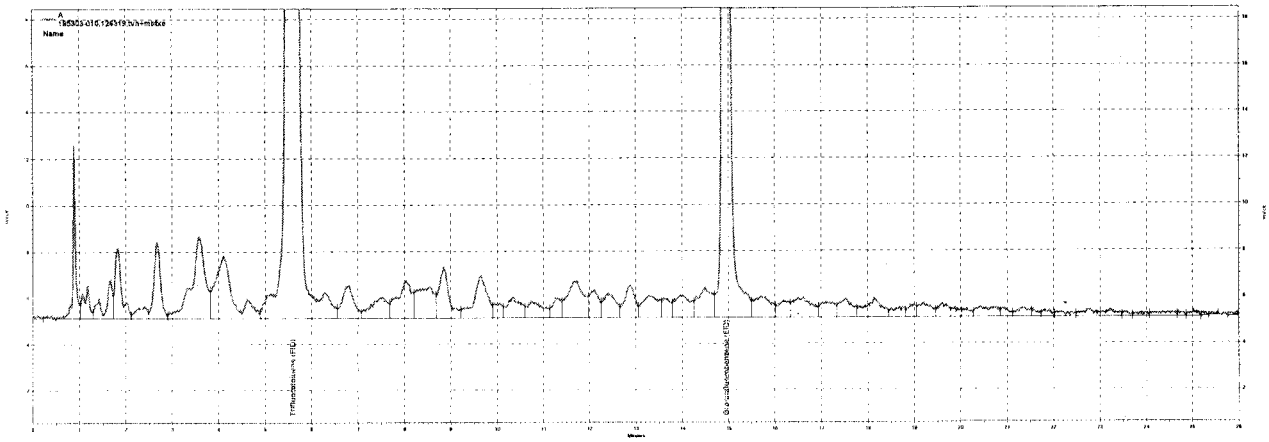
Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	610GW103	Batch#:	126319
Lab ID:	195303-010	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	60 L	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.66	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	65-135	EPA 8015B
Bromofluorobenzene (FID)	120	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	121	65-135	EPA 8021B

L= Lighter hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

64.0



\\Lims\gdrive\ezchrom\Projects\GC05\Data\165_008, A

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	610SP01	Batch#:	126319
Lab ID:	195303-011	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.55 C	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	65-135	EPA 8015B
Bromofluorobenzene (FID)	126	65-135	EPA 8015B
Trifluorotoluene (PID)	101	65-135	EPA 8021B
Bromofluorobenzene (PID)	127	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231PZ04	Batch#:	126319
Lab ID:	195303-012	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL
Gasoline C7-C12	5,200	250

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	65-135
Bromofluorobenzene (FID)	119	65-135

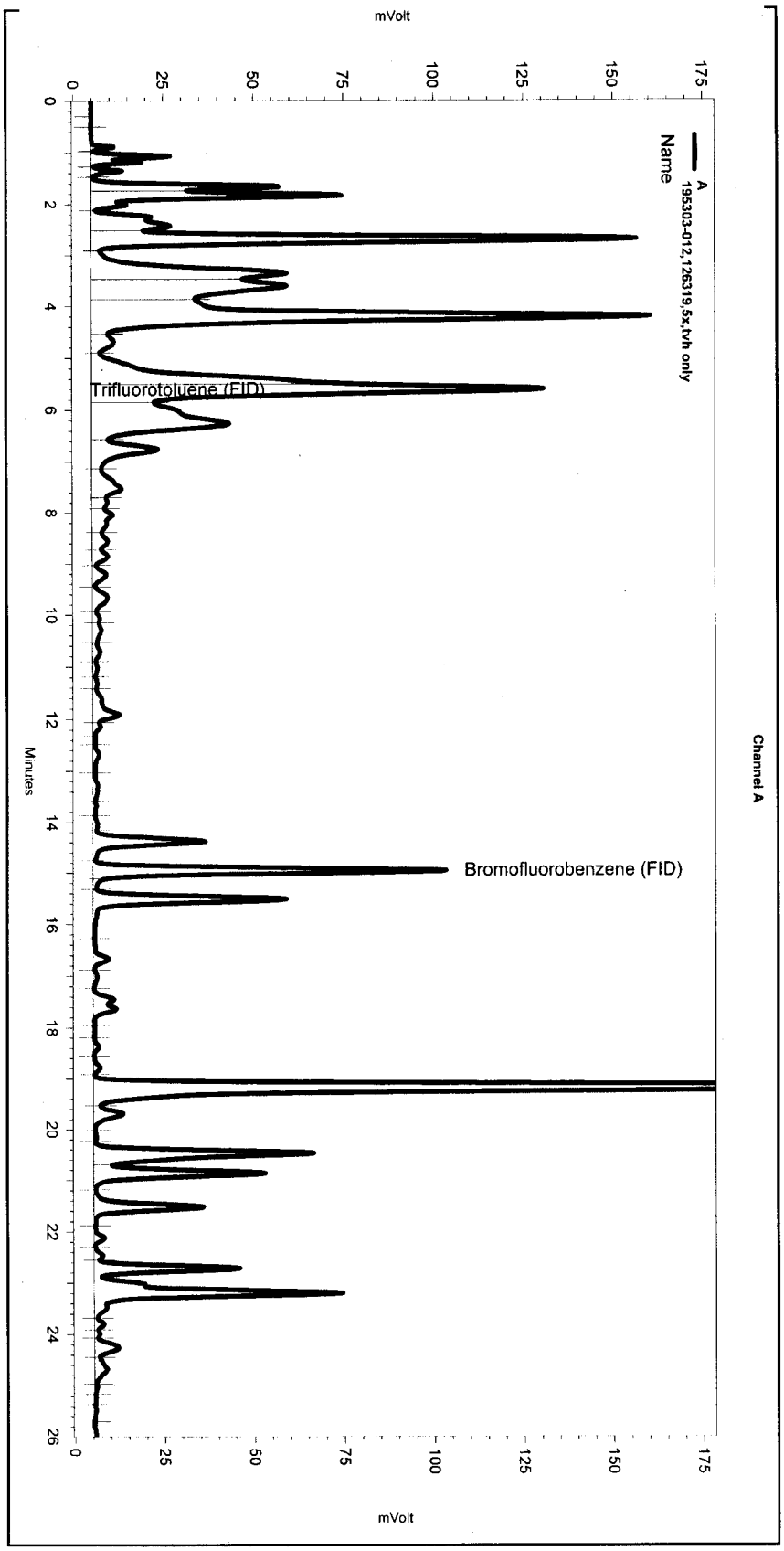
RL= Reporting Limit

66.0

: 98027

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\165.seq
Sample Name: **195303-012,126319,5x,tvh only**
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\165_005
Instrument: GC05 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/14/2007 4:52:57 PM
Analysis Date: 6/15/2007 9:00:38 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: D1.3



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\165_005

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.505	0	0
Yes	Split Peak	15.118	0	0

231PZ04

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231PZ03	Batch#:	126319
Lab ID:	195303-013	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	4,900	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	134	65-135

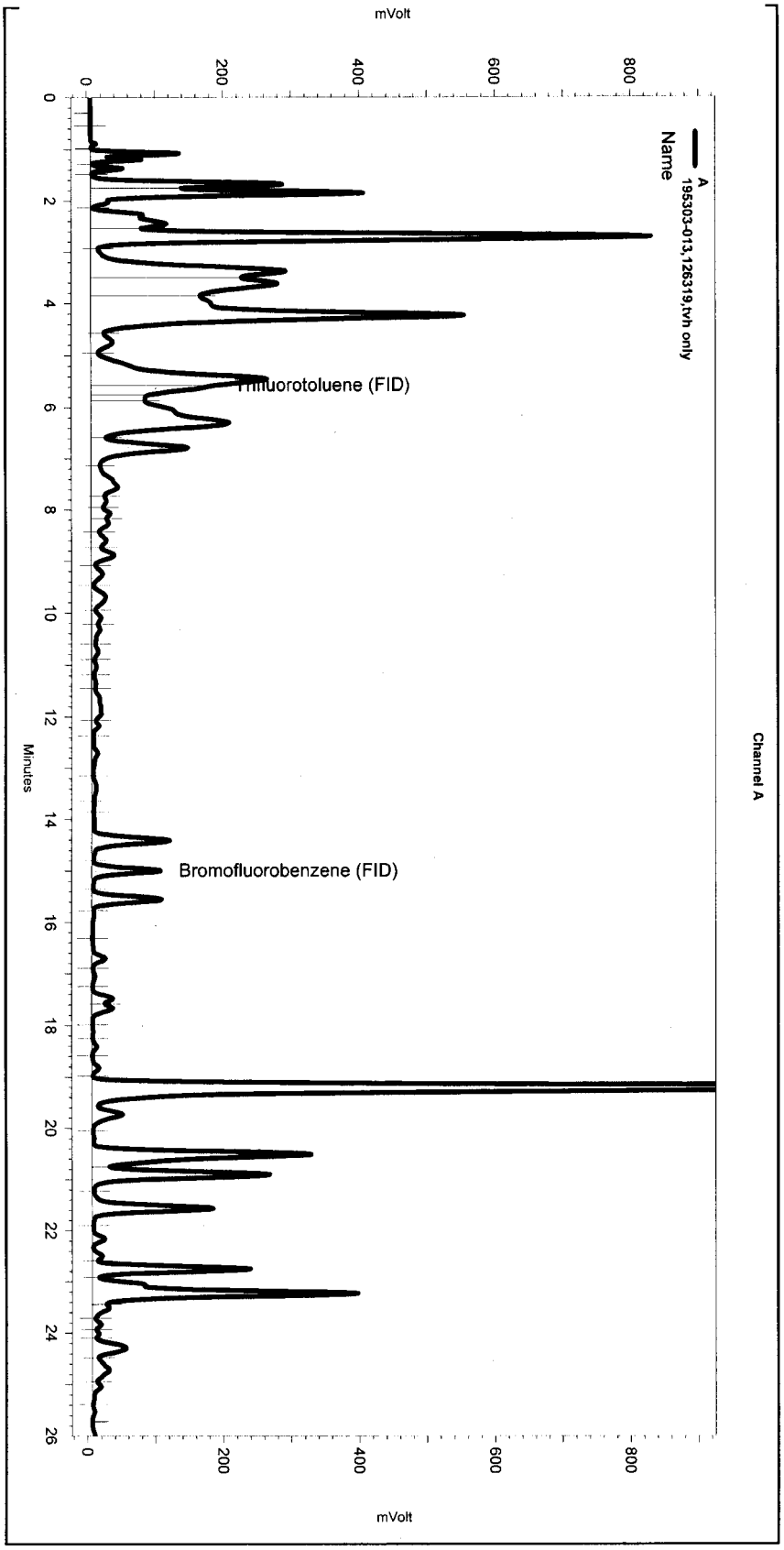
RL= Reporting Limit

67.0

: 000029

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\165.seq**
Sample Name: **195303-013,126319,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\165_022**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe157.met

Software Version 3.1.7
Run Date: 6/15/2007 3:32:47 AM
Analysis Date: 6/15/2007 11:07:18 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: A1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\165_022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.568	0	0
Yes	Split Peak	5.753	0	0

231PZ03

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW17	Batch#:	126319
Lab ID:	195303-015	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

68.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW18	Batch#:	126319
Lab ID:	195303-016	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	118	65-135

ND= Not Detected
RL= Reporting Limit

69.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW24	Batch#:	126319
Lab ID:	195303-017	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	122	65-135

ND= Not Detected
RL= Reporting Limit

70.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW19	Batch#:	126319
Lab ID:	195303-018	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	115	65-135

ND= Not Detected
RL= Reporting Limit

71.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW15	Batch#:	126319
Lab ID:	195303-019	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	65-135
Bromofluorobenzene (FID)	108	65-135

ND= Not Detected
RL= Reporting Limit

72.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW25	Batch#:	126319
Lab ID:	195303-020	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

73.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW23	Batch#:	126319
Lab ID:	195303-021	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

74.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW11	Batch#:	126319
Lab ID:	195303-022	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	65-135
Bromofluorobenzene (FID)	111	65-135

ND= Not Detected
RL= Reporting Limit

75.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW26	Batch#:	126319
Lab ID:	195303-024	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/15/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	114	65-135

ND= Not Detected
RL= Reporting Limit

76.0

00039

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW27	Batch#:	126320
Lab ID:	195303-025	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	113	65-135

ND= Not Detected
RL= Reporting Limit

77.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	207GW03	Batch#:	126320
Lab ID:	195303-027	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	103	65-135

ND= Not Detected
RL= Reporting Limit

78.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231PZ01	Batch#:	126320
Lab ID:	195303-028	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	13,000	100

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	65-135
Bromofluorobenzene (FID)	110	65-135

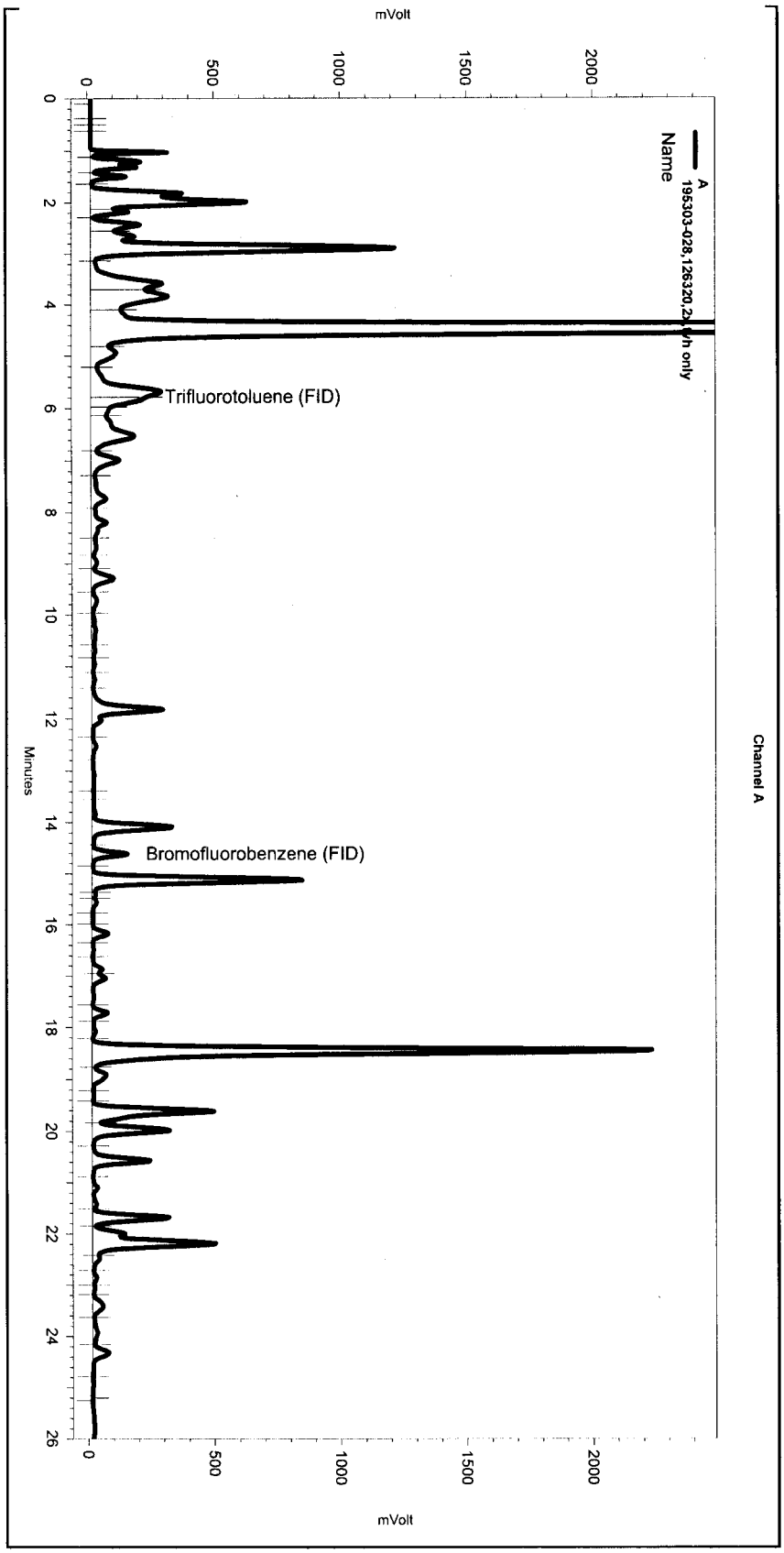
RL= Reporting Limit

79.0

: 99942

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\165.seq**
Sample Name: **195303-028,126320,2x,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\165_006**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe150.met

Software Version 3.1.7
Run Date: 6/14/2007 4:03:31 PM
Analysis Date: 6/15/2007 8:28:27 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: D1.3



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\165_006

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.781	0	0
Yes	Split Peak	5.967	0	0

231PZ01

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231PZ02	Batch#:	126320
Lab ID:	195303-029	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	840 L	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	65-135
Bromofluorobenzene (FID)	112	65-135

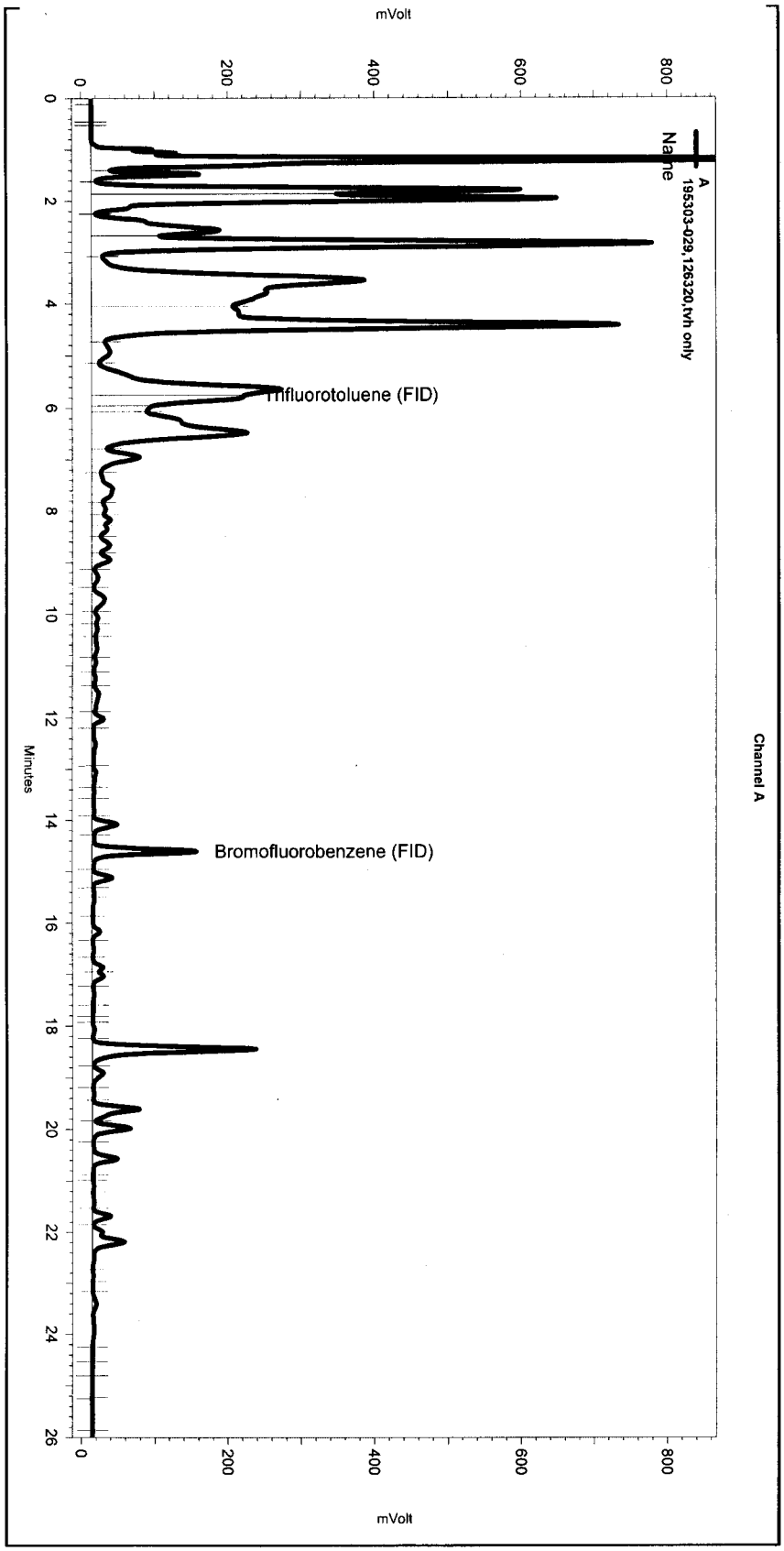
L= Lighter hydrocarbons contributed to the quantitation
RL= Reporting Limit

80.1

: 00044

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\165.seq**
Sample Name: **195303-029,126320,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\165_012**
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe150.met

Software Version 3.1.7
Run Date: 6/14/2007 8:05:46 PM
Analysis Date: 6/15/2007 1:32:10 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: D1.3



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\165_012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.749	0	0
Yes	Split Peak	5.951	0	0
Yes	Reassign Peak	5.986	5.878	0

231PZ02

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW060807B	Batch#:	126320
Lab ID:	195303-030	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	65-135
Bromofluorobenzene (FID)	106	65-135

ND= Not Detected
RL= Reporting Limit

81.0

:98845

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392374	Batch#:	126319
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	85	65-135	EPA 8015B
Bromofluorobenzene (FID)	91	65-135	EPA 8015B
Trifluorotoluene (PID)	77	65-135	EPA 8021B
Bromofluorobenzene (PID)	89	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

82.0

: 00047

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392379	Batch#:	126320
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50

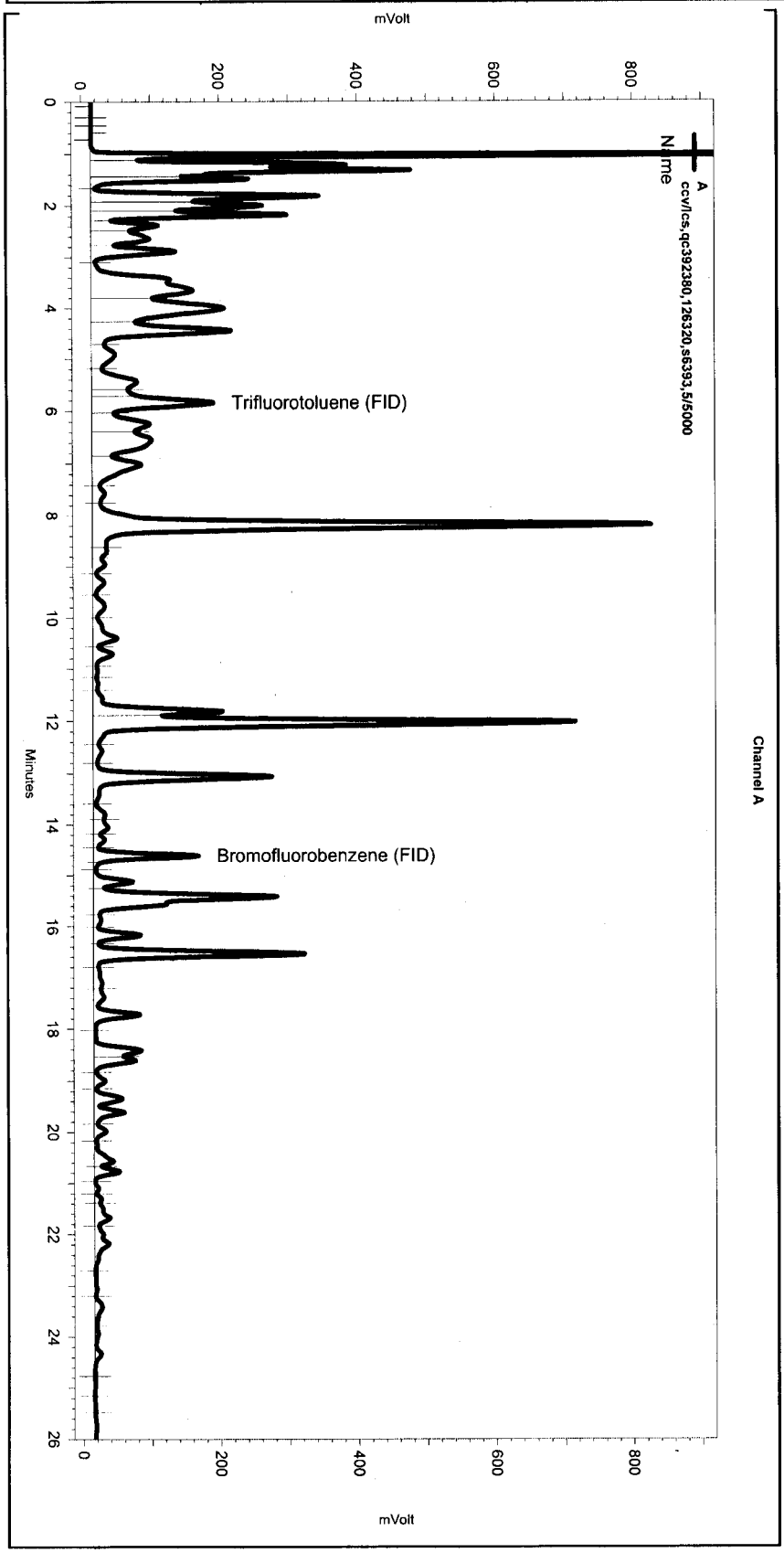
Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	98	65-135

ND= Not Detected
RL= Reporting Limit

86.0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\165.seq**
Sample Name: **ccv/lcs,qc392380,126320,s6393,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\165_002**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe150.met

Software Version 3.1.7
Run Date: 6/14/2007 9:57:09 AM
Analysis Date: 6/15/2007 8:28:08 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0
Yes	Threshold	0	0	10

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\165_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.722	0	0
Yes	Split Peak	14.734	0	0

GASOLINE

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392375	Batch#:	126319
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.78	89	65-135
Benzene	20.00	19.26	96	65-135
Toluene	20.00	20.67	103	65-135
Ethylbenzene	20.00	20.68	103	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	89	65-135
Bromofluorobenzene (PID)	99	65-135

83.0

: 000050

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392376	Batch#:	126319
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,008	100	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	65-135
Bromofluorobenzene (FID)	120	65-135

84.0

: 000051

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC392380	Batch#:	126320
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,829	91	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	65-135
Bromofluorobenzene (FID)	112	65-135

87.0

: 99852

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW10	Batch#:	126319
MSS Lab ID:	195303-002	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392377

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	15.73	2,000	2,103	104	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	65-135
Bromofluorobenzene (FID)	130	65-135

Type: MSD Lab ID: QC392378

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,188	109	65-135	4	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	116	65-135

RPD= Relative Percent Difference

85.0

: 99953

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW27	Batch#:	126320
MSS Lab ID:	195303-025	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Type: MS Lab ID: QC392381

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	15.98	2,000	1,741	86	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	65-135
Bromofluorobenzene (FID)	124	65-135

Type: MSD Lab ID: QC392382

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,707	85	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	110	65-135

RPD= Relative Percent Difference

88.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCVOA Water: EPA 8015B

Inst : GC04
Calnum : 307209896001
Units : ng

Name : gc04gasoline145
Date : 26-MAY-2007 06:03
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	145_018	307209896018	TVH 1	26-MAY-2007 06:03	S5937 (1000X), S6108 (5000X)
L2	145_019	307209896019	TVH 2	26-MAY-2007 06:41	S5936 (1000X), S6108 (5000X)
L3	145_020	307209896020	TVH 3	26-MAY-2007 07:19	S5935 (1000X), S6108 (5000X)
L4	145_021	307209896021	TVH 4	26-MAY-2007 07:57	S5934 (2000X), S6108 (5000X)
L5	145_022	307209896022	TVH 5	26-MAY-2007 08:35	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	5812.4	4598.9	4121.4	4408.3	4162.4	AVRG		2.16E-4		4620.7	15	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	26	2500	0	10000	-11	25000	-5	50000	-10

Analyst: MJM Date: 05/30/07 Reviewer: CW Date: 06/01/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCVOA Water
EPA 8015B

Inst : GC04 Name : gc04gasoline145
Calnum : 307209896001 Cal Date : 26-MAY-2007

ICV 307209896024 (145_024 26-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	4620.7	4321.0	10000	9352	ng	-6	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC04
Calnum : 307216985002
Units : ng

Name : GC04 TFT/BFB 150
Date : 31-MAY-2007 11:19
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	150_018	307216985018	TFT/BFB_1	31-MAY-2007 11:19	S5951 (5000X)
L2	150_019	307216985019	TFT/BFB_2	31-MAY-2007 11:58	S5952 (5000X)
L3	150_020	307216985020	TFT/BFB_3	31-MAY-2007 12:50	S5953 (5000X)
L4	150_021	307216985021	TFT/BFB_4	31-MAY-2007 13:28	S5954 (5000X)
L5	150_022	307216985022	TFT/BFB_5	31-MAY-2007 14:17	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	3434.1	3849.1	3671.5	3538.0	3490.3	AVRG		2.78E-4		3596.6	5	0.995	20	
Bromofluorobenzene (FID)	A	2182.3	2394.4	2260.1	2154.4	2170.6	AVRG		4.48E-4		2232.4	4	0.995	20	
Trifluorotoluene (PID)	B	1595.3	1813.9	1721.9	1639.4	1648.2	AVRG		5.94E-4		1683.8	5	0.995	20	
Bromofluorobenzene (PID)	B	3382.6	3820.0	3658.1	3417.6	3408.3	AVRG		2.83E-4		3537.3	5	0.995	20	
Trifluorotoluene (PID)	C	170.71	205.22	207.69	209.44	208.88	AVRG		0.00499		200.39	8	0.995	20	
Bromofluorobenzene (PID)	C	343.04	420.29	421.02	403.22	415.37	AVRG		0.00250		400.59	8	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	-5	225.0	7	450.0	2	675.0	-2	950.0	-3
Bromofluorobenzene (FID)	A	150.0	-2	225.0	7	450.0	1	675.0	-3	950.0	-3
Trifluorotoluene (PID)	B	150.0	-5	225.0	8	450.0	2	675.0	-3	950.0	-2
Bromofluorobenzene (PID)	B	150.0	-4	225.0	8	450.0	3	675.0	-3	950.0	-4
Trifluorotoluene (PID)	C	150.0	-15	225.0	2	450.0	4	675.0	5	950.0	4
Bromofluorobenzene (PID)	C	150.0	-14	225.0	5	450.0	5	675.0	1	950.0	4

Analyst: JCP Date: 05/31/07 Reviewer: CW Date: 06/01/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 317205342002
Units : ng

Name : GC05 TVH 142
Date : 23-MAY-2007 01:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	142_021	317205342021	TVH 1	23-MAY-2007 01:06	S5937 (1000X), S6108 (5000X)
L2	142_022	317205342022	TVH 2	23-MAY-2007 01:42	S5936 (1000X), S6108 (5000X)
L3	142_023	317205342023	TVH 3	23-MAY-2007 02:17	S5935 (1000X), S6108 (5000X)
L4	142_024	317205342024	TVH 4	23-MAY-2007 02:53	S5934 (2000X), S6108 (5000X)
L5	142_025	317205342025	TVH 5	23-MAY-2007 03:28	S5934 (1000X), S6108 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2214.4	2023.3	2084.4	2170.8	2177.1	AVRG		4.69E-4		2134.0	4	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Gasoline C7-C12	A	250.0	4	2500	-5	10000	-2	25000	2	50000	2

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

317205342002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCVOA Water
EPA 8015B

Inst : GC05 Name : GC05 TVH 142
Calnum : 317205342002 Cal Date : 23-MAY-2007

ICV 317205342027 (142_027 23-MAY-2007) stds: S6066 (1000X), S6108 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2134.0	2020.9	10000	9470	ng	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 317226642001
Units : ng

Name : GC05 TFT/BFB 157
Date : 06-JUN-2007 09:59
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	157_002	317226642002	TFT/BFB_1	06-JUN-2007 09:59	S5951 (5000X)
L2	157_003	317226642003	TFT/BFB_2	06-JUN-2007 10:36	S5952 (5000X)
L3	157_004	317226642004	TFT/BFB_3	06-JUN-2007 11:12	S5953 (5000X)
L4	157_005	317226642005	TFT/BFB_4	06-JUN-2007 11:49	S5954 (5000X)
L5	157_006	317226642006	TFT/BFB_5	06-JUN-2007 12:29	S5955 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	2992.6	3006.7	2878.3	2951.9	2787.7	AVRG		3.42E-4		2923.4	3	0.995	20	
Bromofluorobenzene (FID)	A	1315.2	1435.5	1486.6	1622.6	1525.6	AVRG		6.77E-4		1477.1	8	0.995	20	
Trifluorotoluene (PID)	B	11571	11536	11406	11657	11089	AVRG		8.73E-5		11452	2	0.995	20	
Bromofluorobenzene (PID)	B	16292	17761	18557	20742	19732	AVRG		5.37E-5		18616	9	0.995	20	
Trifluorotoluene (PID)	C	3117.0	3209.2	3259.3	3352.7	3213.6	AVRG		3.10E-4		3230.4	3	0.995	20	
Bromofluorobenzene (PID)	C	4439.2	5029.4	5662.1	6057.5	5826.2	AVRG		1.85E-4		5402.9	12	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Trifluorotoluene (FID)	A	150.0	2	225.0	3	450.0	-2	675.0	1	950.0	-5
Bromofluorobenzene (FID)	A	150.0	-11	225.0	-3	450.0	1	675.0	10	950.0	3
Trifluorotoluene (PID)	B	150.0	1	225.0	1	450.0	0	675.0	2	950.0	-3
Bromofluorobenzene (PID)	B	150.0	-12	225.0	-5	450.0	0	675.0	11	950.0	6
Trifluorotoluene (PID)	C	150.0	-4	225.0	-1	450.0	1	675.0	4	950.0	-1
Bromofluorobenzene (PID)	C	150.0	-18	225.0	-7	450.0	5	675.0	12	950.0	8

Analyst: CW Date: 06/13/07 Reviewer: JCP Date: 06/19/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCVOA Water: EPA 8021B

Inst : GC05
Calnum : 317226642002
Units : ng

Name : GC05 MBTXE 157
Date : 06-JUN-2007 17:01
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	157_009	317226642009	BTXE_1	06-JUN-2007 17:01	S6305 (1000X), S6435 (5000X)
L2	157_010	317226642010	BTXE_2	06-JUN-2007 17:37	S6304 (1250X), S6435 (5000X)
L3	157_011	317226642011	BTXE_3	06-JUN-2007 18:14	S6304 (500X), S6435 (5000X)
L4	157_012	317226642012	BTXE_4	06-JUN-2007 18:50	S6304 (125X), S6435 (5000X)
L5	157_013	317226642013	BTXE_5	06-JUN-2007 19:27	S6303 (1000X), S6435 (5000X)
L6	157_014	317226642014	BTXE_6	06-JUN-2007 20:03	S6303 (500X), S6435 (5000X)
L7	157_015	317226642015	BTXE_7	06-JUN-2007 20:40	S6303 (250X), S6435 (5000X)
L8	157_016	317226642016	MTBE_7	06-JUN-2007 21:16	S6302 (500X), S6435 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
MTBE	B		11450	11547	12052	11341	11852	11721	11278	AVRG		8.62E-5		11606	2	0.995	20	
Benzene	B	30228	28492	30091	31245	29921	31438	31354		AVRG		3.29E-5		30396	3	0.995	20	
Toluene	B	29549	26522	27574	28094	26746	28047	27754		AVRG		3.60E-5		27755	4	0.995	20	
Ethylbenzene	B	21964	21663	22987	23380	22352	23720	23344		AVRG		4.39E-5		22773	3	0.995	20	
m,p-Xylenes	B	29448	26184	27488	29788	28385	29538	28892		AVRG		3.50E-5		28532	5	0.995	20	
o-Xylene	B	22720	21317	22627	24152	22874	23758	23336		AVRG		4.35E-5		22969	4	0.995	20	
MTBE	C		2898.4	2926.1	3255.1	3288.5	3551.5	3594.3	3484.8	AVRG		3.04E-4		3285.5	9	0.995	20	
Benzene	C	7905.6	7286.5	8098.1	9032.8	9032.0	9714.1	9862.5		AVRG		1.15E-4		8704.5	11	0.995	20	
Toluene	C	6766.4	6462.4	7122.8	8037.4	8119.6	8764.5	8917.8		AVRG		1.29E-4		7741.6	13	0.995	20	
Ethylbenzene	C	5468.8	5406.7	6179.3	7063.5	7249.7	7909.7	8051.2		AVRG		1.48E-4		6761.3	16	0.995	20	
m,p-Xylenes	C	6867.6	6317.3	7118.3	8101.3	8378.2	9208.2	9408.3		AVRG		1.26E-4		7914.2	15	0.995	20	
o-Xylene	C	5276.0	5013.7	5720.0	6749.6	6924.4	7618.6	7800.1		AVRG		1.55E-4		6443.2	17	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
MTBE	B			10.00	-1	25.00	-1	100.0	4	500.0	-2	1000	2	2000	1	5000	-3
Benzene	B	2.500	-1	10.00	-6	25.00	-1	100.0	3	500.0	-2	1000	3	2000	3		
Toluene	B	2.500	6	10.00	-4	25.00	-1	100.0	1	500.0	-4	1000	1	2000	0		
Ethylbenzene	B	2.500	-4	10.00	-5	25.00	1	100.0	3	500.0	-2	1000	4	2000	3		
m,p-Xylenes	B	2.500	3	10.00	-8	25.00	-4	100.0	4	500.0	-1	1000	4	2000	1		
o-Xylene	B	2.500	-1	10.00	-7	25.00	-1	100.0	5	500.0	0	1000	3	2000	2		
MTBE	C			10.00	-12	25.00	-11	100.0	-1	500.0	0	1000	8	2000	9	5000	6
Benzene	C	2.500	-9	10.00	-16	25.00	-7	100.0	4	500.0	4	1000	12	2000	13		
Toluene	C	2.500	-13	10.00	-17	25.00	-8	100.0	4	500.0	5	1000	13	2000	15		
Ethylbenzene	C	2.500	-19	10.00	-20	25.00	-9	100.0	4	500.0	7	1000	17	2000	19		
m,p-Xylenes	C	2.500	-13	10.00	-20	25.00	-10	100.0	2	500.0	6	1000	16	2000	19		
o-Xylene	C	2.500	-18	10.00	-22	25.00	-11	100.0	5	500.0	7	1000	18	2000	21		

Analyst: CW Date: 06/11/07 Reviewer: JCP Date: 06/19/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCVOA Water
EPA 8021B

Inst : GC05 Name : GC05 MBTXE 157
Calnum : 317226642002 Cal Date : 06-JUN-2007

ICV 317226642019 (157_019 06-JUN-2007) stds: S6204 (1000X), S6435 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	11606	9871.7	100.0	85.06	ng	-15	15	
Benzene	B	30396	32368	100.0	106.5	ng	6	15	
Toluene	B	27755	29550	100.0	106.5	ng	6	15	
Ethylbenzene	B	22773	23920	100.0	105.0	ng	5	15	
m,p-Xylenes	B	28532	30431	200.0	213.3	ng	7	15	
o-Xylene	B	22969	24752	100.0	107.8	ng	8	15	
MTBE	C	3285.5	3023.6	100.0	92.03	ng	-8	15	
Benzene	C	8704.5	9929.5	100.0	114.1	ng	14	15	
Toluene	C	7741.6	8723.3	100.0	112.7	ng	13	15	
Ethylbenzene	C	6761.3	7624.7	100.0	112.8	ng	13	15	
m,p-Xylenes	C	7914.2	8883.7	200.0	224.5	ng	12	15	
o-Xylene	C	6443.2	7027.9	100.0	109.1	ng	9	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : QC392380 IDF : 1.0
Seqnum : 307238159002.1 File : 165_002 Time : 14-JUN-2007 09:57
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	4225.3	10000	9144	ng	-9	15	u
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4498.3	450.0	562.8	ng	**25**	15	c+ u
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2505.3	450.0	505.0	ng	12	15	u
Trifluorotoluene (PID)	B	307216985002	31-MAY-2007	1683.8	1710.2	450.0	457.1	ng	2	15	
Trifluorotoluene (PID)	C	307216985002	31-MAY-2007	200.39	340.69	450.0	765.1	ng	**70**	15	c+
Bromofluorobenzene (PID)	B	307216985002	31-MAY-2007	3537.3	3148.1	450.0	400.5	ng	-11	15	
Bromofluorobenzene (PID)	C	307216985002	31-MAY-2007	400.59	576.08	450.0	647.1	ng	**44**	15	c+

MJM 06/15/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

MJM 06/19/07 : PID surrogates are not applicable.

MJM: 06/19/07 LH: 06/20/07 CW: 06/20/07

+=high bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name : TVH IDF : 1.0
Seqnum : 307238159015 File : 165_015 Time : 14-JUN-2007 21:59
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	307209896001	26-MAY-2007	4620.7	3934.1	15000	12770	ng	-15	15	
Trifluorotoluene (FID)	A	307216985002	31-MAY-2007	3596.6	4761.3	450.0	595.7	ng	**32**	15	c+
Bromofluorobenzene (FID)	A	307216985002	31-MAY-2007	2232.4	2808.8	450.0	566.2	ng	**26**	15	c+
Trifluorotoluene (PID)	B	307216985002	31-MAY-2007	1683.8	1905.2	450.0	509.2	ng	13	15	
Bromofluorobenzene (PID)	B	307216985002	31-MAY-2007	3537.3	3278.9	450.0	417.1	ng	-7	15	
Trifluorotoluene (PID)	C	307216985002	31-MAY-2007	200.39	461.15	450.0	1036	ng	**130**	15	>LR c+ ***
Bromofluorobenzene (PID)	C	307216985002	31-MAY-2007	400.59	709.42	450.0	796.9	ng	**77**	15	c+

MJM 06/15/07 : PID surrogates are not applicable.

MJM 06/15/07 [Trifluorotoluene (FID) A]: Passes control limits.

MJM 06/15/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/15/07 LH: 06/20/07 CW: 06/20/07

+=high bias >LR=overrange c=CCV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : QC392376 IDF : 1.0
Seqnum : 317238365002.1 File : 165_002 Time : 14-JUN-2007 13:22
Standards: S6393 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2142.1	10000	10040	ng	0	15	u
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3764.6	450.0	579.5	ng	**29**	15	c+ u
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1768.2	450.0	538.7	ng	**20**	15	c+ u
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	13435	450.0	527.9	ng	**17**	15	c+
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	3697.9	450.0	515.1	ng	14	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	21853	450.0	528.2	ng	**17**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5951.7	450.0	495.7	ng	10	15	

MJM 06/15/07 : PID surrogates are not applicable. [general version]

MJM 06/15/07 [Trifluorotoluene (FID) A]: Passes control limits. [general version]

MJM 06/15/07 [Bromofluorobenzene (FID) A]: Passes control limits. [general version]

MJM: 06/19/07 LH: 06/20/07 CW: 06/20/07

+=high bias c=CCV u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : QC392375 IDF : 1.0
Seqnum : 317238365003.1 File : 165_003 Time : 14-JUN-2007 13:58
Standards: S5943 (1000X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	317226642002	06-JUN-2007	11606	10320	100.0	88.92	ng	-11	15	u
MTBE	C	317226642002	06-JUN-2007	3285.5	2965.5	100.0	90.26	ng	-10	15	
Benzene	B	317226642002	06-JUN-2007	30396	29264	100.0	96.28	ng	-4	15	u
Benzene	C	317226642002	06-JUN-2007	8704.5	8270.6	100.0	95.02	ng	-5	15	
Toluene	B	317226642002	06-JUN-2007	27755	28687	100.0	103.4	ng	3	15	u
Toluene	C	317226642002	06-JUN-2007	7741.6	7669.3	100.0	99.07	ng	-1	15	
Ethylbenzene	B	317226642002	06-JUN-2007	22773	23544	100.0	103.4	ng	3	15	u
Ethylbenzene	C	317226642002	06-JUN-2007	6761.3	6695.4	100.0	99.03	ng	-1	15	
m,p-Xylenes	B	317226642002	06-JUN-2007	28532	30779	100.0	107.9	ng	8	15	u
m,p-Xylenes	C	317226642002	06-JUN-2007	7914.2	7805.6	100.0	98.63	ng	-1	15	
o-Xylene	B	317226642002	06-JUN-2007	22969	24951	100.0	108.6	ng	9	15	u
o-Xylene	C	317226642002	06-JUN-2007	6443.2	6396.7	100.0	99.28	ng	-1	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	2648.1	450.0	407.6	ng	-9	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1424.7	450.0	434.0	ng	-4	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	10231	450.0	402.0	ng	-11	15	u
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	2591.1	450.0	360.9	ng	**-20**	15	c-
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	18395	450.0	444.6	ng	-1	15	u
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	4866.2	450.0	405.3	ng	-10	15	

MJM: 06/19/07 LH: 06/20/07 CW: 06/20/07

-=low bias c=CCV u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317238365012 File : 165_012 Time : 14-JUN-2007 21:27
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2234.3	15000	15700	ng	5	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3048.0	450.0	469.2	ng	4	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1650.4	450.0	502.8	ng	12	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	13318	450.0	523.3	ng	**16**	15	c+
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	20395	450.0	493.0	ng	10	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	3832.9	450.0	533.9	ng	**19**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5671.8	450.0	472.4	ng	5	15	

MJM 06/15/07 : PID surrogates are not applicable.

MJM: 06/15/07 LH: 06/20/07 CW: 06/20/07

+=high bias c=CCV

317238365012

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : BTXE IDF : 1.0
Seqnum : 317238365015 File : 165_015 Time : 14-JUN-2007 23:17
Standards: S5943 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	2634.8	450.0	405.6	ng	-10	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1472.2	450.0	448.5	ng	0	15	
MTBE	B	317226642002	06-JUN-2007	11606	10535	150.0	136.2	ng	-9	15	
Benzene	B	317226642002	06-JUN-2007	30396	30036	150.0	148.2	ng	-1	15	
Toluene	B	317226642002	06-JUN-2007	27755	29410	150.0	158.9	ng	6	15	
Ethylbenzene	B	317226642002	06-JUN-2007	22773	25280	150.0	166.5	ng	11	15	
m,p-Xylenes	B	317226642002	06-JUN-2007	28532	31617	150.0	166.2	ng	11	15	
o-Xylene	B	317226642002	06-JUN-2007	22969	26306	150.0	171.8	ng	15	15	
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	10197	450.0	400.7	ng	-11	15	
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	18999	450.0	459.2	ng	2	15	
MTBE	C	317226642002	06-JUN-2007	3285.5	3087.8	150.0	141.0	ng	-6	15	
Benzene	C	317226642002	06-JUN-2007	8704.5	8512.1	150.0	146.7	ng	-2	15	
Toluene	C	317226642002	06-JUN-2007	7741.6	7954.8	150.0	154.1	ng	3	15	
Ethylbenzene	C	317226642002	06-JUN-2007	6761.3	7091.5	150.0	157.3	ng	5	15	
m,p-Xylenes	C	317226642002	06-JUN-2007	7914.2	8298.1	150.0	157.3	ng	5	15	
o-Xylene	C	317226642002	06-JUN-2007	6443.2	6871.4	150.0	160.0	ng	7	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	2569.7	450.0	358.0	ng	**-20**	15	c-
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5046.3	450.0	420.3	ng	-7	15	

MJM 06/15/07 [Trifluorotoluene (PID) B]: Passes control limits.

MJM: 06/15/07 LH: 06/20/07 CW: 06/20/07

-=low bias c=CCV

317238365015

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317238365028 File : 165_028 Time : 15-JUN-2007 07:11
Standards: S6393 (500X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2131.8	20000	19980	ng	0	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3128.3	450.0	481.5	ng	7	15	
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1793.8	450.0	546.5	ng	**21**	15	c+
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	14296	450.0	561.8	ng	**25**	15	c+
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	20376	450.0	492.5	ng	9	15	
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	4336.6	450.0	604.1	ng	**34**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	5722.6	450.0	476.6	ng	6	15	

MJM 06/15/07 : PID surrogates are not applicable.

MJM 06/15/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/15/07 LH: 06/20/07 CW: 06/20/07

+=high bias c=CCV

317238365028

: 00070

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name : TVH IDF : 1.0
Seqnum : 317238365036 File : 165_036 Time : 15-JUN-2007 12:55
Standards: S6393 (666.7X), S6435 (5000X)

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	317205342002	23-MAY-2007	2134.0	2154.2	15000	15140	ng	1	15	
Trifluorotoluene (FID)	A	317226642001	06-JUN-2007	2923.4	3433.5	450.0	528.5	ng	**17**	15	c+
Bromofluorobenzene (FID)	A	317226642001	06-JUN-2007	1477.1	1788.0	450.0	544.7	ng	**21**	15	c+
Trifluorotoluene (PID)	B	317226642001	06-JUN-2007	11452	15466	450.0	607.7	ng	**35**	15	c+
Bromofluorobenzene (PID)	B	317226642001	06-JUN-2007	18616	23277	450.0	562.6	ng	**25**	15	c+
Trifluorotoluene (PID)	C	317226642001	06-JUN-2007	3230.4	4377.7	450.0	609.8	ng	**36**	15	c+
Bromofluorobenzene (PID)	C	317226642001	06-JUN-2007	5402.9	6421.2	450.0	534.8	ng	**19**	15	c+

MJM 06/15/07 : PID surrogates are not applicable.

MJM 06/15/07 [Trifluorotoluene (FID) A]: Passes control limits.

MJM 06/15/07 [Bromofluorobenzene (FID) A]: Passes control limits.

MJM: 06/15/07 LH: 06/20/07 CW: 06/20/07

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307209896

Instrument : GC04 Begun : 05/25/07 18:16
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
002	145_002	X	TEST			05/25/07 18:16	1.0	1 2
016	145_016	X	IB			05/26/07 04:48	1.0	2
017	145_017	X	IB			05/26/07 05:26	1.0	2
018	145_018	ICAL	TVH 1			05/26/07 06:03	1.0	3 2
019	145_019	ICAL	TVH 2			05/26/07 06:41	1.0	4 2
020	145_020	ICAL	TVH 3			05/26/07 07:19	1.0	5 2
021	145_021	ICAL	TVH 4			05/26/07 07:57	1.0	6 2
022	145_022	ICAL	TVH 5			05/26/07 08:35	1.0	6 2
023	145_023	X	IB			05/26/07 09:13	1.0	2
024	145_024	ICV	TVH			05/26/07 09:51	1.0	7 2
025	145_025	ICV	TVH			05/26/07 10:29	1.0	7 2
026	145_026	X	IB			05/26/07 11:06	1.0	2
027	145_027	CMARKER				05/26/07 11:44	1.0	8 9 2

MJM 05/30/07 : Maintenance performed 5/25/06 and BTXE calibration run from 145_003 to 145_016. BTXE cal. not used due to faulty PID Lamp.

Analyst: MJM Date: 05/30/07 Reviewer: CW Date: 06/01/07

Standards used: 1=S6305 2=S6108 3=S5937 4=S5936 5=S5935 6=S5934 7=S6066 8=S1646 9=S1645

: 88972

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307216985

Instrument : GC04 Begun : 05/30/07 16:25
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	150_001	X	IB			05/30/07 16:25	1.0	1	
002	150_002	X	IB			05/30/07 17:03	1.0	1	
003	150_003	ICAL	BTXE_1			05/30/07 17:41	1.0	2 1	
004	150_004	X	BTXE_2			05/30/07 18:19	1.0	3 1	
005	150_005	ICAL	BTXE_3			05/30/07 18:57	1.0	3 1	
006	150_006	ICAL	BTXE_4			05/30/07 19:35	1.0	3 1	
007	150_007	ICAL	BTXE_5			05/30/07 20:13	1.0	4 1	
008	150_008	ICAL	BTXE_6			05/30/07 20:51	1.0	4 1	
009	150_009	ICAL	BTXE_7			05/30/07 21:28	1.0	4 1	
010	150_010	ICAL	MTBE_7			05/30/07 22:06	1.0	5 1	
011	150_011	X	IB			05/30/07 22:44	1.0	1	
012	150_012	X	ICV			05/30/07 23:22	1.0	6 1	
013	150_013	X	ICV			05/31/07 00:00	1.0	6 1	
014	150_014	X	IB			05/31/07 08:32	1.0	1	
015	150_015	ICAL	BTXE_2			05/31/07 09:10	1.0	3 1	
016	150_016	ICV	MBTXE			05/31/07 09:47	1.0	6 1	
017	150_017	X	IB			05/31/07 10:41	1.0	1	
018	150_018	ICAL	TFT/BFB_1			05/31/07 11:19	1.0	7	
019	150_019	ICAL	TFT/BFB_2			05/31/07 11:58	1.0	8	
020	150_020	ICAL	TFT/BFB_3			05/31/07 12:50	1.0	9	
021	150_021	ICAL	TFT/BFB_4			05/31/07 13:28	1.0	10	
022	150_022	ICAL	TFT/BFB_5			05/31/07 14:17	1.0	11	

Analyst: JCP Date: 05/31/07 Reviewer: CW Date: 06/01/07

Standards used: 1=S6108 2=S6305 3=S6304 4=S6303 5=S6302 6=S6204 7=S5951 8=S5952 9=S5953 10=S5954 11=S5955

00073

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 307238159

Instrument : GC04 Begun : 06/14/07 09:19
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	165_001	X	CMARK			06/14/07 09:19	1.0	1 2	
002	165_002	CCV/LCS	QC392380	Water	126320	06/14/07 09:57	1.0	3 2	
003	165_003	X	CCV			06/14/07 10:35	1.0	4 2	
004	165_004	X	IB			06/14/07 12:47	1.0	2	
005	165_005	BLANK	QC392379	Water	126320	06/14/07 13:25	1.0	2	
006	165_006	SAMPLE	195303-028	Water	126320	06/14/07 16:03	2.0	2	1:BZ=9900
007	165_007	X	IB			06/14/07 16:56	1.0	2	
008	165_008	MS	QC392381	Water	126320	06/14/07 17:34	1.0	3 2	
009	165_009	MSD	QC392382	Water	126320	06/14/07 18:12	1.0	3 2	
010	165_010	MSS	195303-025	Water	126320	06/14/07 18:49	1.0	2	
011	165_011	SAMPLE	195303-027	Water	126320	06/14/07 19:27	1.0	2	
012	165_012	SAMPLE	195303-029	Water	126320	06/14/07 20:05	1.0	2	
013	165_013	SAMPLE	195303-030	Water	126320	06/14/07 20:43	1.0	2	
014	165_014	SAMPLE	195357-001	Water	126320	06/14/07 21:21	1.0	2	
015	165_015	CCV	TVH			06/14/07 21:59	1.0	3 2	
016	165_016	CCV	TVH			06/14/07 22:37	1.0	3 2	

Analyst: MJM Date: 06/15/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S6393 4=S5943

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317205342

Instrument : GC05 Begun : 05/22/07 11:01
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	142_001	X	IB			05/22/07 11:01	1.0	1
002	142_002	X	CCV			05/22/07 11:36	1.0	2 1
003	142_003	X	IB			05/22/07 12:23	1.0	1
004	142_004	X	BTXE_1			05/22/07 14:22	1.0	3 1
005	142_005	X	BTXE_7			05/22/07 15:20	1.0	4 1
006	142_006	X	IB			05/22/07 16:14	1.0	1
007	142_007	X	IB			05/22/07 16:49	1.0	1
008	142_008	ICAL	BTXE_1			05/22/07 17:25	1.0	3 1
009	142_009	ICAL	BTXE_2			05/22/07 18:00	1.0	5 1
010	142_010	ICAL	BTXE_3			05/22/07 18:36	1.0	5 1
011	142_011	ICAL	BTXE_4			05/22/07 19:11	1.0	5 1
012	142_012	ICAL	BTXE_5			05/22/07 19:47	1.0	4 1
013	142_013	ICAL	BTXE_6			05/22/07 20:22	1.0	4 1
014	142_014	ICAL	BTXE_7			05/22/07 20:58	1.0	4 1
015	142_015	ICAL	MTBE_7			05/22/07 21:33	1.0	6 1
016	142_016	X	IB			05/22/07 22:09	1.0	1
017	142_017	X	ICV			05/22/07 22:45	1.0	7 1
018	142_018	ICV	MBTXE			05/22/07 23:20	1.0	7 1
019	142_019	X	IB			05/22/07 23:55	1.0	1
020	142_020	X	IB			05/23/07 00:31	1.0	1
021	142_021	ICAL	TVH 1			05/23/07 01:06	1.0	8 1
022	142_022	ICAL	TVH 2			05/23/07 01:42	1.0	9 1
023	142_023	ICAL	TVH 3			05/23/07 02:17	1.0	10 1
024	142_024	ICAL	TVH 4			05/23/07 02:53	1.0	11 1
025	142_025	ICAL	TVH 5			05/23/07 03:28	1.0	11 1
026	142_026	X	IB			05/23/07 04:04	1.0	1
027	142_027	ICV	TVH			05/23/07 04:39	1.0	2 1
028	142_028	X	ICV			05/23/07 05:15	1.0	2 1
029	142_029	X	IB			05/23/07 05:50	1.0	1
030	142_030	CMARKER				05/23/07 06:25	1.0	12 13 1
031	142_031	X	IB			05/23/07 07:54	1.0	1
032	142_032	ICAL	TFT/BFB_1			05/23/07 08:30	1.0	14
033	142_033	ICAL	TFT/BFB_2			05/23/07 09:06	1.0	15
034	142_034	ICAL	TFT/BFB_3			05/23/07 09:41	1.0	16
035	142_035	ICAL	TFT/BFB_4			05/23/07 10:17	1.0	17
036	142_036	ICAL	TFT/BFB_5			05/23/07 10:52	1.0	18

Analyst: JCP Date: 05/23/07 Reviewer: CW Date: 05/24/07

Standards used: 1=S6108 2=S6066 3=S6305 4=S6303 5=S6304 6=S6302 7=S6204 8=S5937 9=S5936 10=S5935 11=S5934 12=S1646 13=S1645 14=S5951 15=S5952 16=S5953 17=S5954 18=S5955

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317226642

Instrument : GC05 Begun : 06/06/07 09:22
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	157_001	IB	CALIB			06/06/07 09:22	1.0	1	
002	157_002	ICAL	TFT/BFB_1			06/06/07 09:59	1.0	2	
003	157_003	ICAL	TFT/BFB_2			06/06/07 10:36	1.0	3	
004	157_004	ICAL	TFT/BFB_3			06/06/07 11:12	1.0	4	
005	157_005	ICAL	TFT/BFB_4			06/06/07 11:49	1.0	5	
006	157_006	ICAL	TFT/BFB_5			06/06/07 12:29	1.0	6	
007	157_007	X	IB			06/06/07 15:48	1.0	1	
008	157_008	IB	CALIB			06/06/07 16:24	1.0	1	
009	157_009	ICAL	BTXE_1			06/06/07 17:01	1.0	7 1	
010	157_010	ICAL	BTXE_2			06/06/07 17:37	1.0	8 1	
011	157_011	ICAL	BTXE_3			06/06/07 18:14	1.0	8 1	
012	157_012	ICAL	BTXE_4			06/06/07 18:50	1.0	8 1	
013	157_013	ICAL	BTXE_5			06/06/07 19:27	1.0	9 1	
014	157_014	ICAL	BTXE_6			06/06/07 20:03	1.0	9 1	
015	157_015	ICAL	BTXE_7			06/06/07 20:40	1.0	9 1	
016	157_016	ICAL	MTBE_7			06/06/07 21:16	1.0	10 1	
017	157_017	X	IB			06/06/07 21:53	1.0	1	
018	157_018	X	ICV			06/06/07 22:29	1.0	11 1	
019	157_019	ICV	MBTXE			06/06/07 23:06	1.0	11 1	

Analyst: JCP Date: 06/07/07 Reviewer: CW Date: 06/11/07

Standards used: 1=S6435 2=S5951 3=S5952 4=S5953 5=S5954 6=S5955 7=S6305 8=S6304 9=S6303 10=S6302 11=S6204

: 99875

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 317238365

Instrument : GC05 Begun : 06/14/07 12:45
Method : EPA 8015B, EPA 8021B SOP Version : TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	165_001	X	CMARK			06/14/07 12:45	1.0	1 2	
002	165_002	CCV/LCS	QC392376	Water	126319	06/14/07 13:22	1.0	3 2	
003	165_003	CCV/LCS	QC392375	Water	126319	06/14/07 13:58	1.0	4 2	
004	165_004	BLANK	QC392374	Water	126319	06/14/07 15:31	1.0	2	
005	165_005	SAMPLE	195303-012	Water	126319	06/14/07 16:52	5.0	2	
006	165_006	SAMPLE	195303-008	Water	126319	06/14/07 17:48	1.0	2	
007	165_007	SAMPLE	195303-009	Water	126319	06/14/07 18:25	1.0	2	
008	165_008	SAMPLE	195303-010	Water	126319	06/14/07 19:01	1.0	2	
009	165_009	SAMPLE	195303-011	Water	126319	06/14/07 19:38	1.0	2	
010	165_010	MS	QC392377	Water	126319	06/14/07 20:14	1.0	3 2	
011	165_011	MSD	QC392378	Water	126319	06/14/07 20:51	1.0	3 2	
012	165_012	CCV	TVH			06/14/07 21:27	1.0	3 2	
013	165_013	X	CCV			06/14/07 22:04	1.0	4 2	
014	165_014	X	TVH			06/14/07 22:40	1.0	3 2	
015	165_015	CCV	BTXE			06/14/07 23:17	1.0	4 2	
016	165_016	X	CMARK			06/14/07 23:53	1.0	1 2	
017	165_017	MSS	195303-002	Water	126319	06/15/07 00:30	1.0	2	
018	165_018	SAMPLE	195303-003	Water	126319	06/15/07 01:06	1.0	2	
019	165_019	SAMPLE	195303-004	Water	126319	06/15/07 01:43	1.0	2	
020	165_020	SAMPLE	195303-005	Water	126319	06/15/07 02:19	1.0	2	1:F3BZME-PID=1200
021	165_021	SAMPLE	195303-006	Water	126319	06/15/07 02:56	1.0	2	3:GAS:7-12=54000
022	165_022	SAMPLE	195303-013	Water	126319	06/15/07 03:32	1.0	2	
023	165_023	SAMPLE	195303-015	Water	126319	06/15/07 04:09	1.0	2	
024	165_024	SAMPLE	195303-016	Water	126319	06/15/07 04:45	1.0	2	
025	165_025	SAMPLE	195303-017	Water	126319	06/15/07 05:22	1.0	2	
026	165_026	SAMPLE	195303-018	Water	126319	06/15/07 05:58	1.0	2	
027	165_027	X	TVH			06/15/07 06:35	1.0	3 2	
028	165_028	CCV	TVH			06/15/07 07:11	1.0	3 2	
029	165_029	SAMPLE	195303-019	Water	126319	06/15/07 07:48	1.0	2	
030	165_030	SAMPLE	195303-020	Water	126319	06/15/07 08:24	1.0	2	
031	165_031	SAMPLE	195303-021	Water	126319	06/15/07 09:01	1.0	2	
032	165_032	SAMPLE	195303-022	Water	126319	06/15/07 09:37	1.0	2	
033	165_033	SAMPLE	195303-024	Water	126319	06/15/07 10:14	1.0	2	
034	165_034	SAMPLE	195303-006	Water	126319	06/15/07 11:08	2.0	2	1:BZ=7400
035	165_035	X	CCV			06/15/07 11:55	1.0	3 2	
036	165_036	CCV	TVH			06/15/07 12:55	1.0	3 2	

Analyst: MJM Date: 06/15/07 Reviewer: _____ Date: _____

Standards used: 1=S6383 2=S6435 3=S6393 4=S5943

000077

REPORTING SUMMARY FOR 195303 GCVOA Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	MTBE	BZ	BZME	EBZ	XYLM	TOTX	XYLO	F3BZ	BR4F	F3BZ2	BR4F2
195303-002	GC05	06/15/07 00:30	1.0	+									+	+		
195303-003	GC05	06/15/07 01:06	1.0	+									+	+		
195303-004	GC05	06/15/07 01:43	1.0	+									+	+		
195303-005	GC05	06/15/07 02:19	1.0	+									+	+		
195303-006	GC05	06/15/07 02:56	1.0													
195303-006	GC05	06/15/07 11:08	2.0	+									+	+		
195303-008	GC05	06/14/07 17:48	1.0	+		+	+	+	+	+		+	+	+	+	+
195303-009	GC05	06/14/07 18:25	1.0	+		+	+	+	+	+		+	+	+	+	+
195303-010	GC05	06/14/07 19:01	1.0	+		+	+	+	+	+		+	+	+	+	+
195303-011	GC05	06/14/07 19:38	1.0	+		+	+	+	+	+		+	+	+	+	+
195303-012	GC05	06/14/07 16:52	5.0	+									+	+		
195303-013	GC05	06/15/07 03:32	1.0	+									+	+		
195303-015	GC05	06/15/07 04:09	1.0	+									+	+		
195303-016	GC05	06/15/07 04:45	1.0	+									+	+		
195303-017	GC05	06/15/07 05:22	1.0	+									+	+		
195303-018	GC05	06/15/07 05:58	1.0	+									+	+		
195303-019	GC05	06/15/07 07:48	1.0	+									+	+		
195303-020	GC05	06/15/07 08:24	1.0	+									+	+		
195303-021	GC05	06/15/07 09:01	1.0	+									+	+		
195303-022	GC05	06/15/07 09:37	1.0	+									+	+		
195303-024	GC05	06/15/07 10:14	1.0	+									+	+		
195303-025	GC04	06/14/07 18:49	1.0	+									+	+		
195303-027	GC04	06/14/07 19:27	1.0	+									+	+		
195303-028	GC04	06/14/07 16:03	2.0	+									+	+		
195303-029	GC04	06/14/07 20:05	1.0	+									+	+		
195303-030	GC04	06/14/07 20:43	1.0	+									+	+		

: 88878

REPORTING SUMMARY FOR 195303 GCVOA Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	GAS:	STOD	MTBE	BZ	BZME	EBZ	XYLM	TOTX	XYLO	F3BZ	BR4F	F3BZ2	BR4F2	
QC392374	GC05	06/14/07 15:31	1.0	+		+	+	+	+	+		+	+	+	+	+	
QC392375	GC05	06/14/07 13:58	1.0			+	+	+	+	+		+			+	+	
QC392376	GC05	06/14/07 13:22	1.0	+									+	+			
QC392377	GC05	06/14/07 20:14	1.0	+									+	+			
QC392378	GC05	06/14/07 20:51	1.0	+									+	+			
QC392379	GC04	06/14/07 13:25	1.0	+									+	+			
QC392380	GC04	06/14/07 09:57	1.0	+									+	+			
QC392381	GC04	06/14/07 17:34	1.0	+									+	+			
QC392382	GC04	06/14/07 18:12	1.0	+									+	+			

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 06/28/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	13	14	14	13
Gasoline C6-C12	ug/L	8.9	21	13	11	11	11
Gasoline C7-C12	ug/L	3.3	27	16	7.4	7.4	14
JP-4 C7-C12	ug/L	15		14	8.1		7.1
Trifluorotoluene (FID)	ug/L			5.3			4.9
Bromofluorobenzene (FID)	ug/L			4.5			4.3

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 06/28/07

Analyte	Units	GC19 B	GC19 C	GC04 B	GC04 C	GC05 B	GC05 C	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.25	0.61	0.73	0.74	0.73	0.74	0.45	0.39
Benzene	ug/L	0.24	0.21	0.090	0.14	0.028	0.25	0.028	0.25	0.025	0.23
Toluene	ug/L	0.15	0.14	0.19	0.21	0.074	0.20	0.074	0.20	0.036	0.11
Ethylbenzene	ug/L	0.12	0.11	0.16	0.093	0.024	0.22	0.024	0.22	0.040	0.18
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.11	0.069	0.21	0.069	0.21	0.048	0.13
o-Xylene	ug/L	0.19	0.20	0.15	0.064	0.14	0.13	0.14	0.13	0.030	0.14

Curtis & Tompkins, Ltd.

TPH/Extractable Data

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	231GW10	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-002	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID:	231GW16	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-003	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	231GW30	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-004	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	70 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

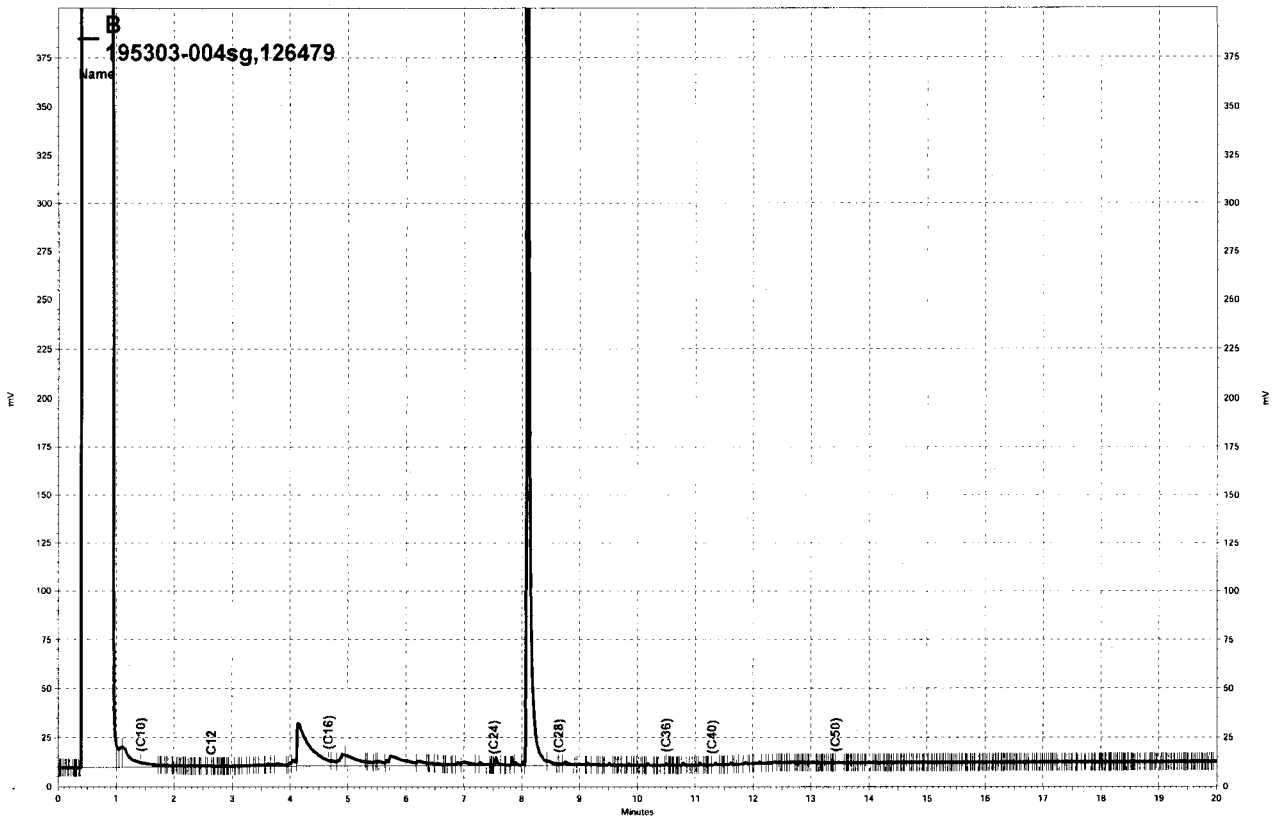
Field ID:	231GW21	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-005	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	180 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	112	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

177.2



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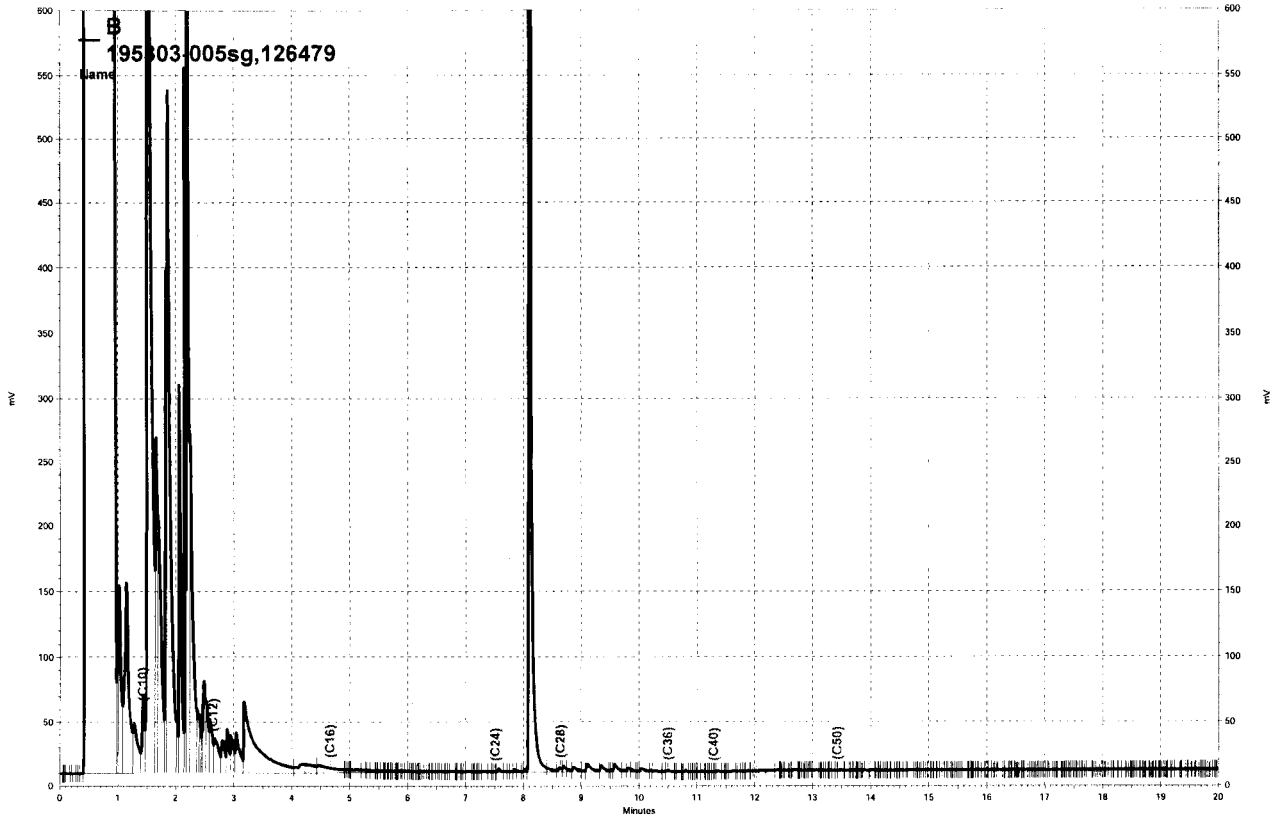
231GW30



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231GW21

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	231GW22	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-006	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	210 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

Field ID:	600GW106	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-009	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID:	610GW103	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-010	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-135

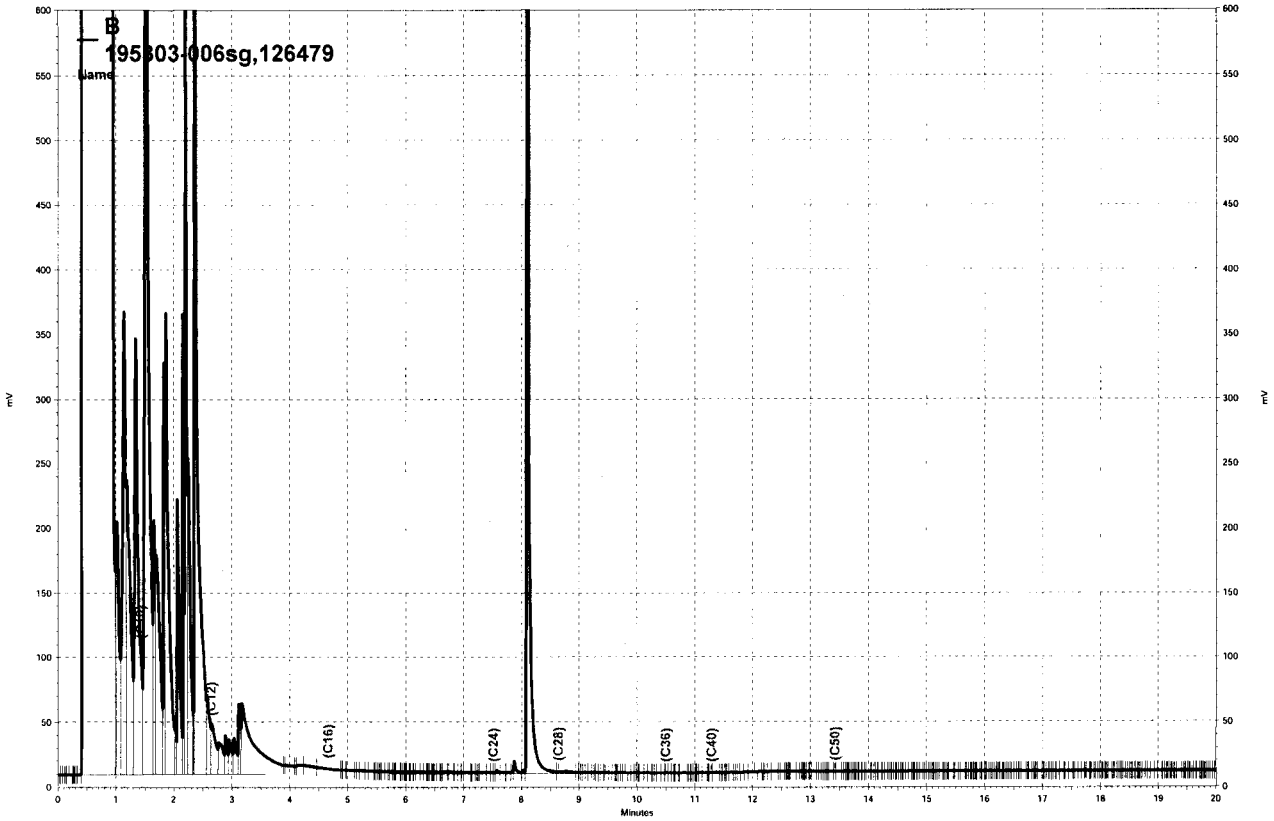
Field ID:	610SP01	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-011	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	130 Y	50
Motor Oil C24-C36	490	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

177.2



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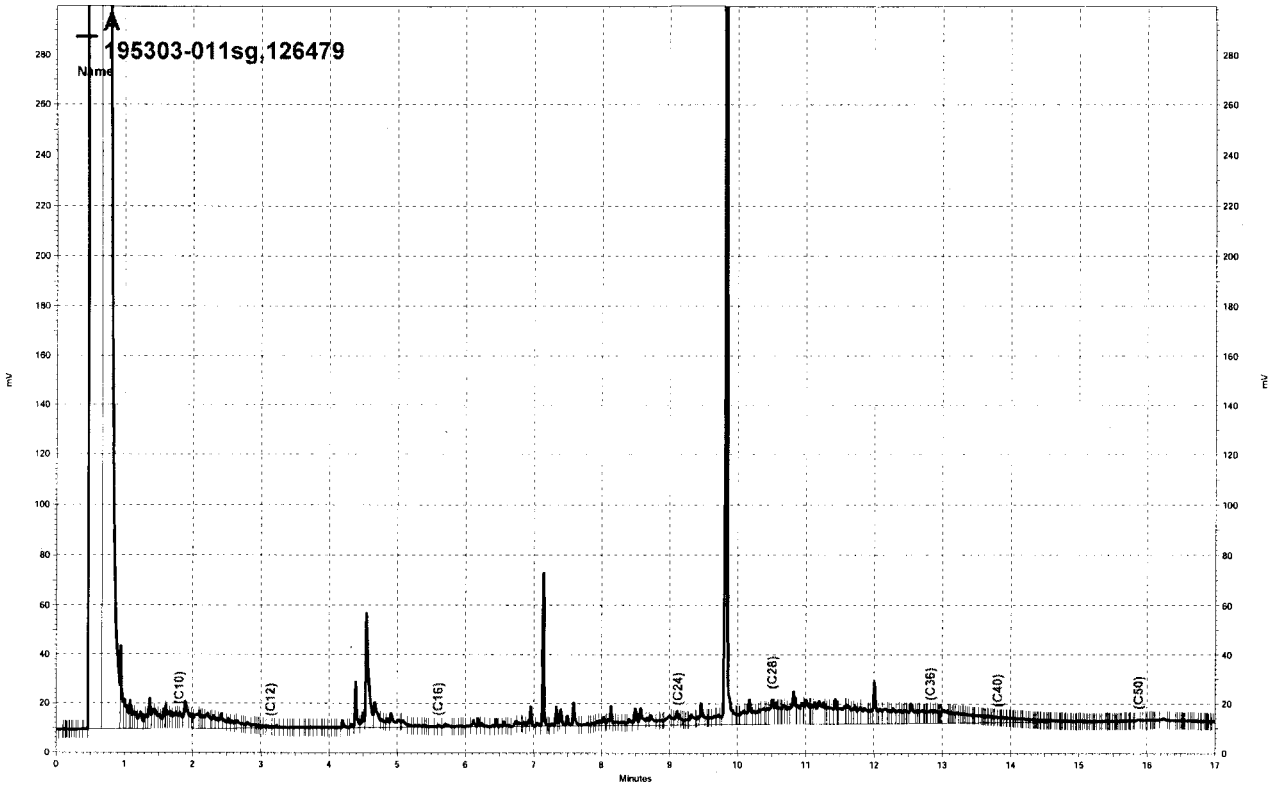
231GW22



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610SP01

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	231PZ04	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-012	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	190 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-135

Field ID:	231PZ03	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-013	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	160 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-135

Field ID:	231GW17	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-015	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

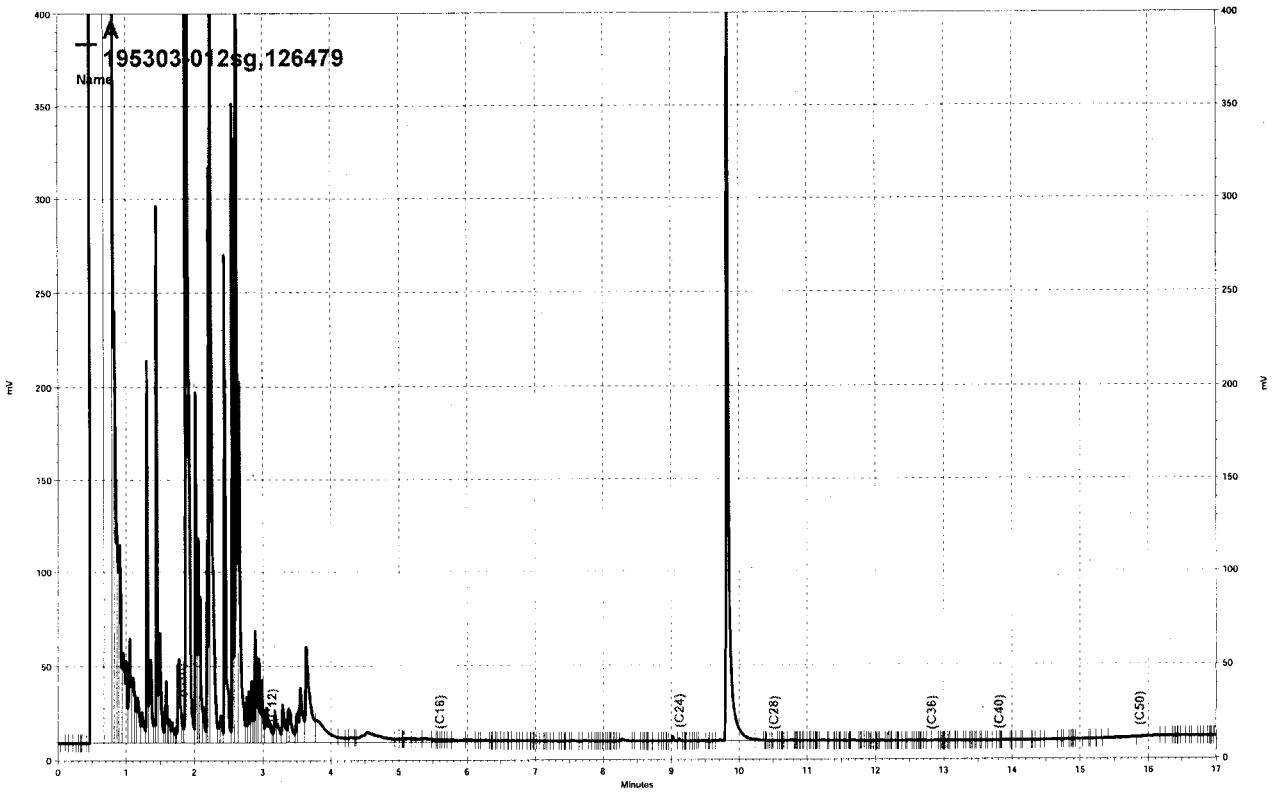
Surrogate	%REC	Limits
Hexacosane	96	65-135

Field ID:	231GW18	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-016	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	83	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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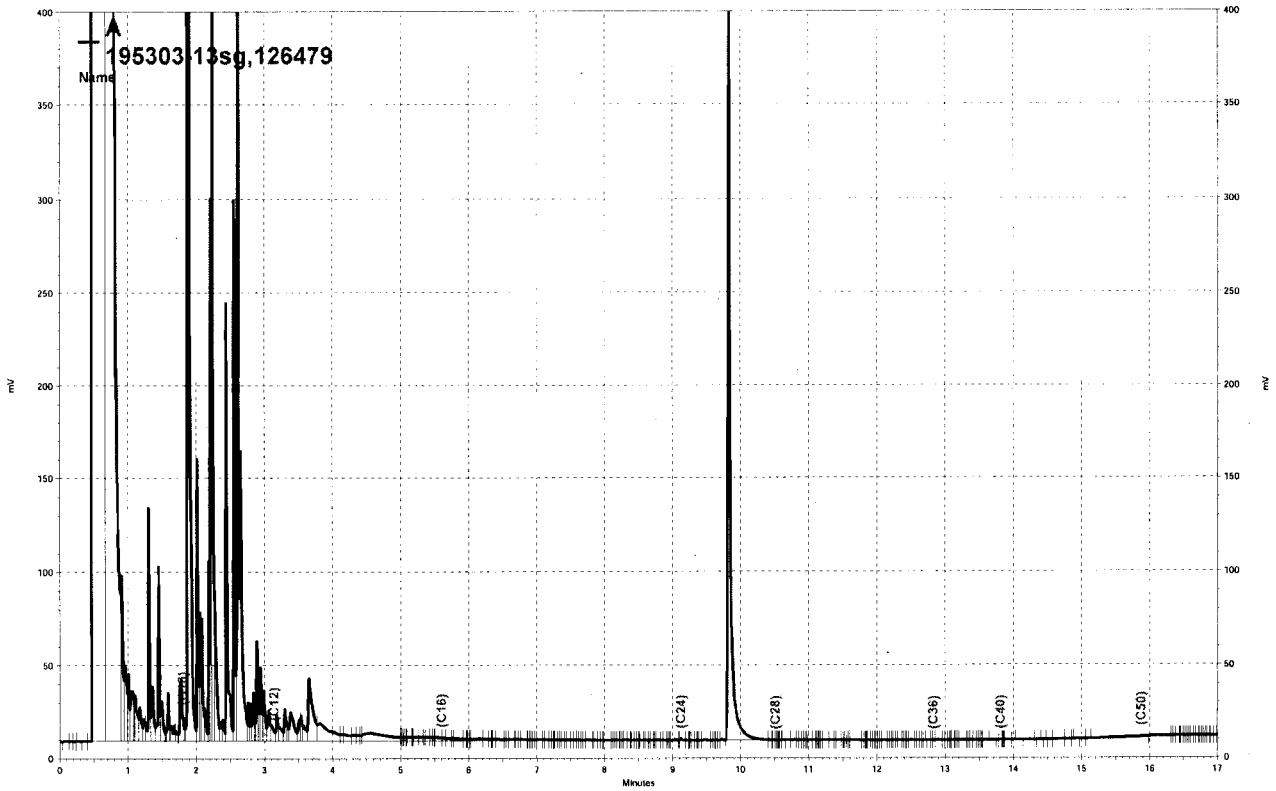
231PZ04



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231PZ03

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	231GW24	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-017	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

Field ID:	231GW19	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-018	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

Field ID:	231GW15	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-019	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-135

Field ID:	231GW25	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-020	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	231GW23	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-021	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

Field ID:	231GW11	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-022	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID:	231GW26	Sampled:	06/08/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-024	Cleanup Method:	EPA 3630C
Batch#:	126486		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

Field ID:	231GW27	Sampled:	06/08/07
Type:	SAMPLE	Analyzed:	06/22/07
Lab ID:	195303-025	Cleanup Method:	EPA 3630C
Batch#:	126486		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Field ID:	207GW03	Sampled:	06/08/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-027	Cleanup Method:	EPA 3630C
Batch#:	126486		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	65-135

Field ID:	231PZ01	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-028	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	430 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	65-135

Field ID:	231PZ02	Sampled:	06/07/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-029	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	100 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	89	65-135

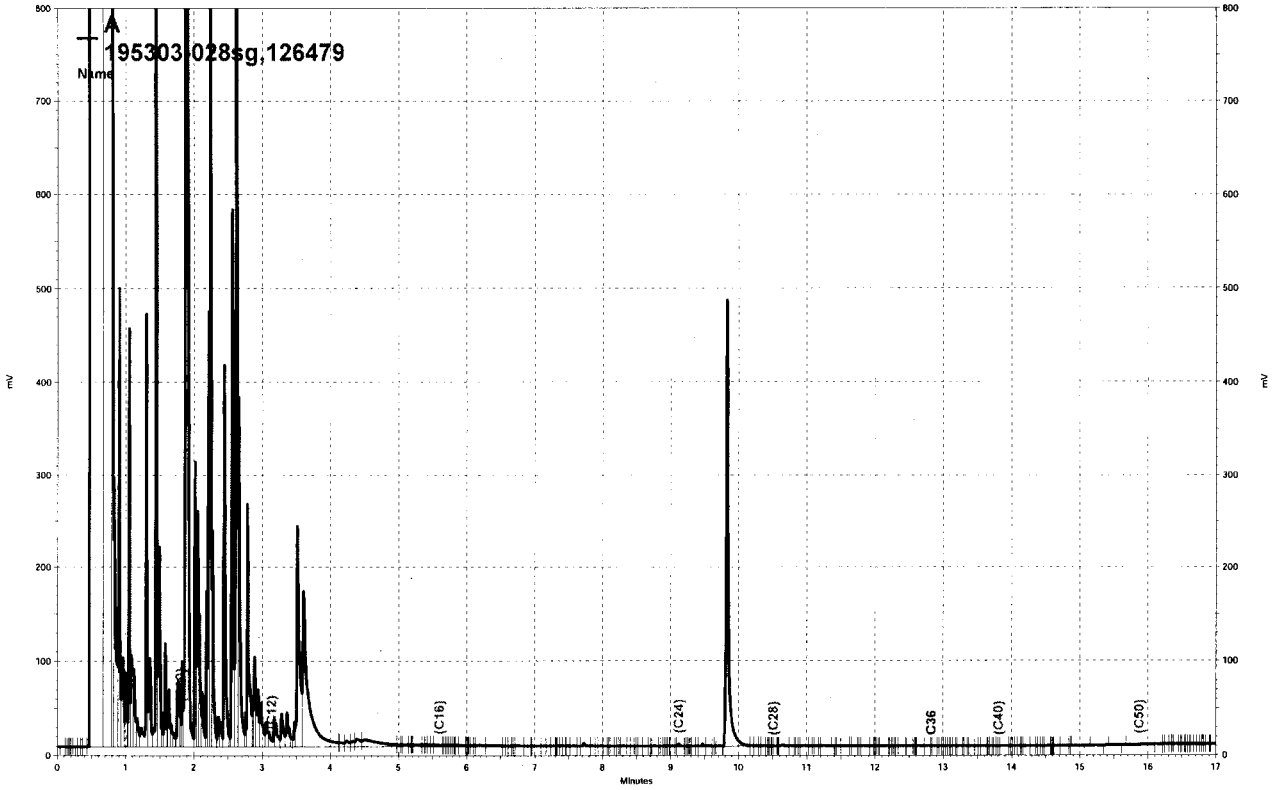
Field ID:	DW060807B	Sampled:	06/08/07
Type:	SAMPLE	Analyzed:	06/21/07
Lab ID:	195303-030	Cleanup Method:	EPA 3630C
Batch#:	126486		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

177.2



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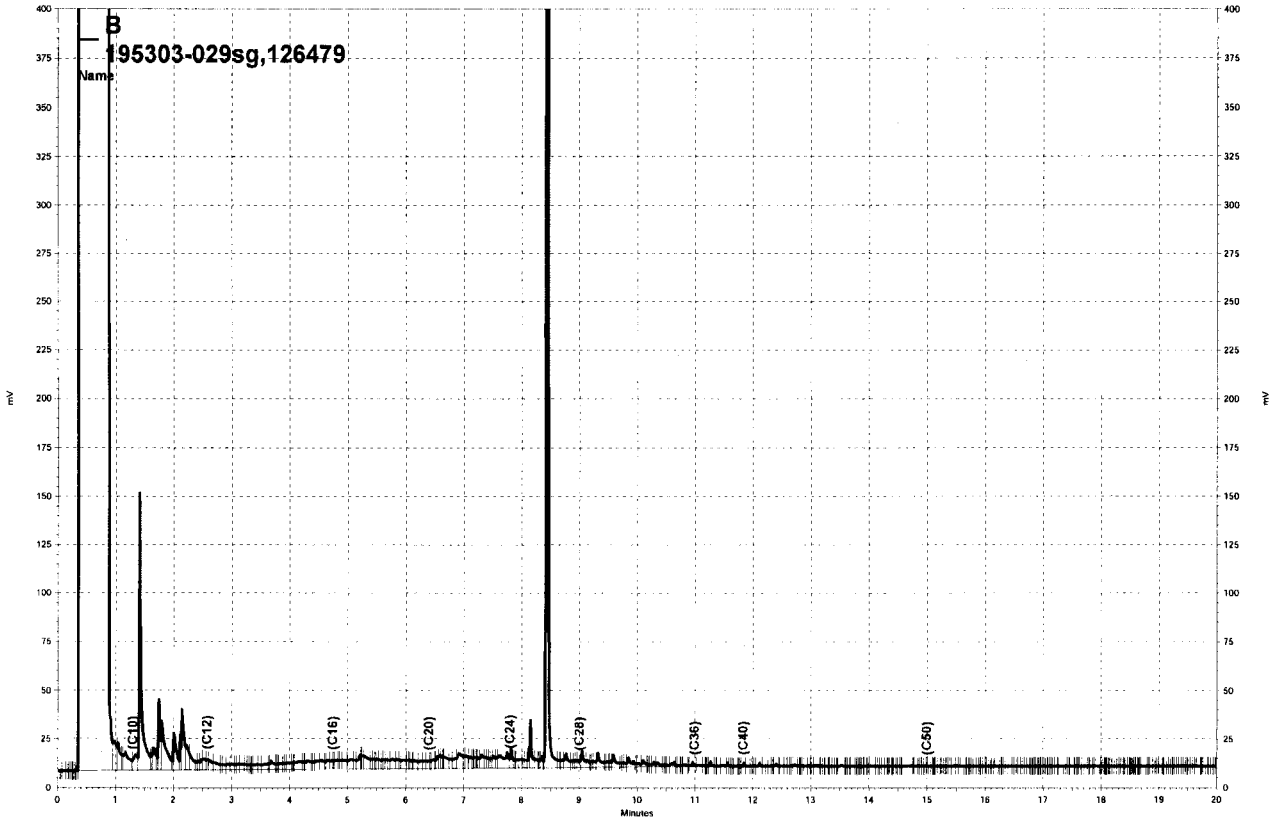
231PZ01



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231PZ02

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000		

Type:	BLANK	Analyzed:	06/21/07
Lab ID:	QC393022	Cleanup Method:	EPA 3630C
Batch#:	126479		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

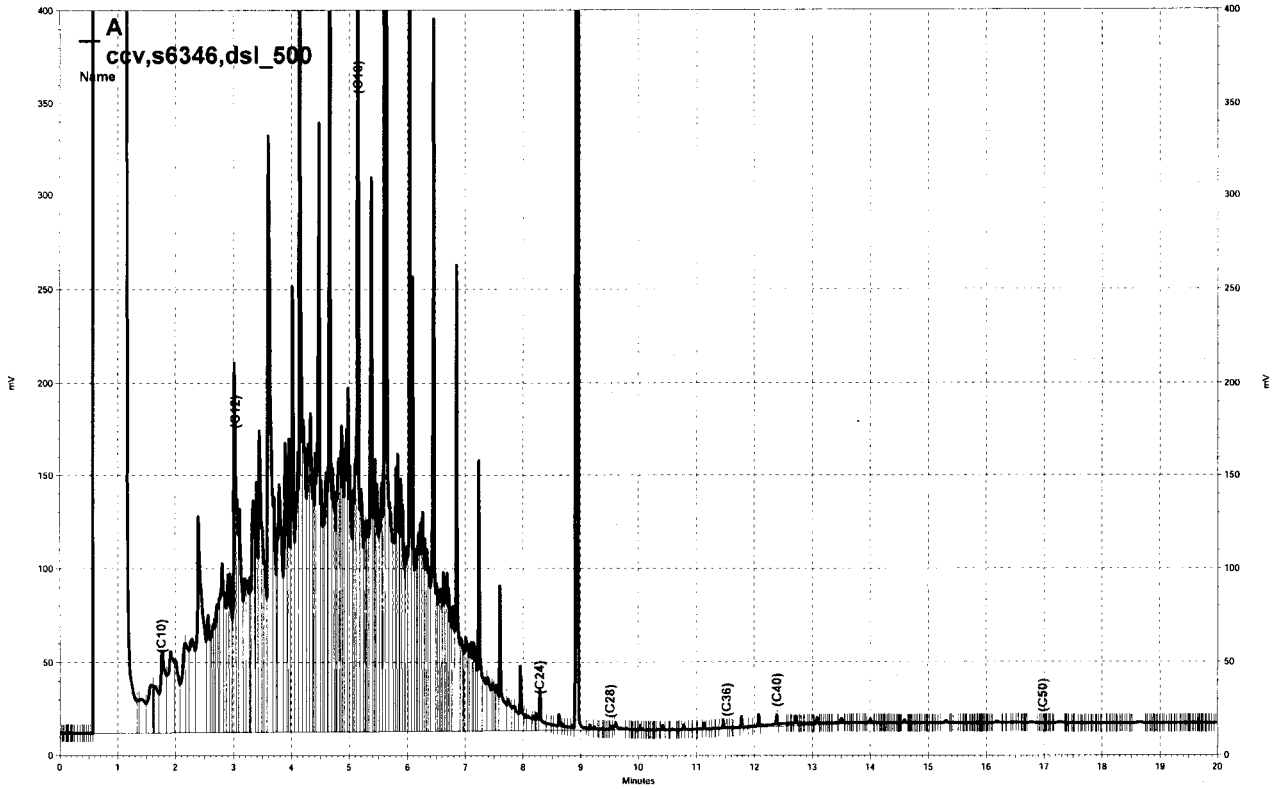
Surrogate	%REC	Limits
Hexacosane	91	65-135

Type:	BLANK	Analyzed:	06/21/07
Lab ID:	QC393055	Cleanup Method:	EPA 3630C
Batch#:	126486		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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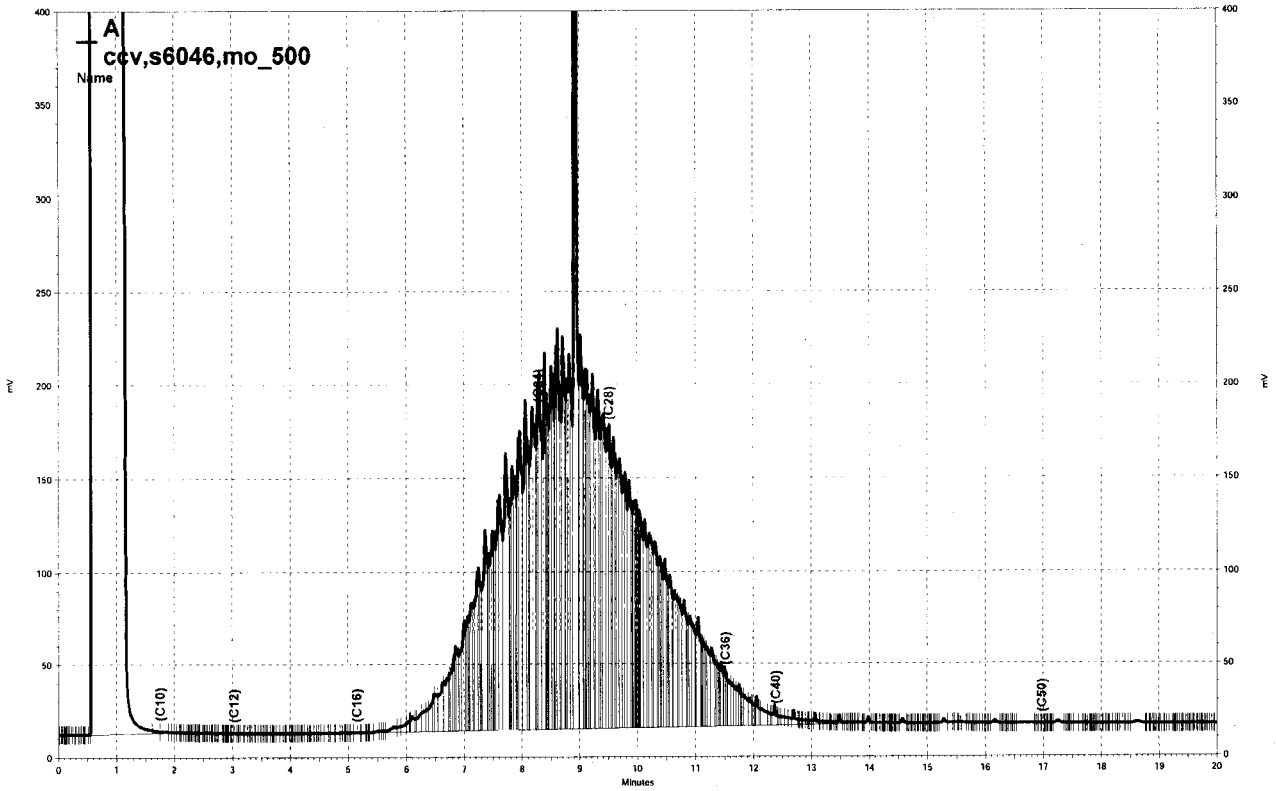
DIESEL



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MOTOR OIL

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126479
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000	Analyzed:	06/21/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC393023

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,269	91	65-135

Surrogate	%REC	Limits
Hexacosane	103	65-135

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC393024

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,278	91	65-135	0	35

Surrogate	%REC	Limits
Hexacosane	101	65-135

RPD= Relative Percent Difference

178.0

: 99199

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	126486
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000	Analyzed:	06/21/07

Type: BS
Lab ID: QC393056
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,289	92	65-135

Surrogate	%REC	Limits
Hexacosane	100	65-135

Type: BSD
Lab ID: QC393057
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,166	87	65-135	5	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

179.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117037956001
Units : mg/L

Name : Motor Oil GC11A
Date : 26-JAN-2007 23:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	026a020	117037956020	MO_50	26-JAN-2007 23:30	S4754
L2	026a021	117037956021	MO_250	26-JAN-2007 23:58	S4755
L3	026a022	117037956022	MO_500	27-JAN-2007 00:26	S4756
L4	026a023	117037956023	MO_1000	27-JAN-2007 00:54	S4758
L5	026a024	117037956024	MO_5000	27-JAN-2007 01:22	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40074	42672	44538	43763	36228	AVRG		2.41E-5		41455	8	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	-3	250.0	3	500.0	7	1000	6	5000	-13

Analyst: MCH Date: 01/29/07 Reviewer: CW Date: 02/27/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

117037956001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117061448001
Units : mg/L

Name : Diesel
Date : 11-FEB-2007 21:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	042a009	117061448009	DSL_10	11-FEB-2007 21:13	S5413
L2	042a010	117061448010	DSL_100	11-FEB-2007 21:41	S5414
L3	042a011	117061448011	DSL_500	11-FEB-2007 22:09	S5416
L4	042a012	117061448012	DSL_1000	11-FEB-2007 22:37	S5417
L5	042a013	117061448013	DSL_5000	11-FEB-2007 23:05	S5411
L6	042a014	117061448014	DSL_7500	11-FEB-2007 23:33	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	55919	55653	56285	69462	54976	57202	AVRG		1.72E-5		58249	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	-4	100.0	-4	500.0	-3	1000	19	5000	-6	7500	-2

Analyst: MCH Date: 02/12/07 Reviewer: CP Date: 02/12/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 117061448001

Name : Diesel
Cal Date : 11-FEB-2007

ICV 117061448016 (042a016 12-FEB-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	58249	55207	500.0	473.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 117245263001
Units : mg/L

Name : Hexacosane
Date : 19-JUN-2007 15:44
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	170a013	117245263013	HEX_5	19-JUN-2007 15:44	S5751
L2	170a014	117245263014	HEX_10	19-JUN-2007 16:12	S5752
L3	170a015	117245263015	HEX_25	19-JUN-2007 16:39	S5753
L4	170a016	117245263016	HEX_50	19-JUN-2007 17:07	S5754
L5	170a017	117245263017	HEX_100	19-JUN-2007 17:35	S5755
L6	170a018	117245263018	HEX_200	19-JUN-2007 18:03	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	73443	70316	70392	69800	67695	67745	AVRG		1.43E-5		69898	3	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	5	10.00	1	25.00	1	50.00	0	100.0	-3	200.0	-3

Analyst: DLM Date: 06/20/07 Reviewer: CW Date: 06/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390001
Units : mg/L

Name : Diesel 14b
Date : 20-MAR-2007 18:11
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_015	227114390015	DSL_10	20-MAR-2007 18:11	S5413
L2	079_016	227114390016	DSL_100	20-MAR-2007 18:39	S5414
L3	079_017	227114390017	DSL_500	20-MAR-2007 19:07	S5416
L4	079_018	227114390018	DSL_1000	20-MAR-2007 19:35	S5417
L5	079_019	227114390019	DSL_5000	20-MAR-2007 20:03	S5411
L6	079_020	227114390020	DSL_7500	20-MAR-2007 20:31	S5412

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	B	53730	67879	67960	67910	65438	66449	AVRG		1.54E-5		64894	9	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	B	10.00	-17	100.0	5	500.0	5	1000	5	5000	1	7500	2

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 227114390001

Name : Diesel 14b
Cal Date : 20-MAR-2007

ICV 227114390022 (079_022 20-MAR-2007) stds: S5419 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	64894	71382	500.0	550.0	mg/L	10	

: 00197

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227114390002
Units : mg/L

Name : Motor oil 14b
Date : 20-MAR-2007 22:51
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	079_025	227114390025	MO_50	20-MAR-2007 22:51	S5523
L2	079_026	227114390026	MO_250	20-MAR-2007 23:19	S5524
L3	079_027	227114390027	MO_500	20-MAR-2007 23:47	S5525
L4	079_028	227114390028	MO_1000	21-MAR-2007 00:14	S5526
L5	079_029	227114390029	MO_5000	21-MAR-2007 00:42	S5522
L6	079_030	227114390030	MO_7500	21-MAR-2007 01:10	S5521

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	B	46281	47246	45276	46435	47320	43193	AVRG		2.18E-5		45959	3	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	B	50.00	1	250.0	3	500.0	-1	1000	1	5000	3	7500	-6

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC14B
Calnum : 227227958001
Units : mg/L

Name : hexacosane
Date : 07-JUN-2007 11:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	158_010	227227958010	HEX_5	07-JUN-2007 11:30	S5751
L2	158_011	227227958011	HEX_10	07-JUN-2007 11:58	S5752
L3	158_012	227227958012	HEX_25	07-JUN-2007 12:25	S5753
L4	158_013	227227958013	HEX_50	07-JUN-2007 12:53	S5754
L5	158_014	227227958014	HEX_100	07-JUN-2007 13:21	S5755
L6	158_015	227227958015	HEX_200	07-JUN-2007 13:49	S5756

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	B	76011	73432	72003	72193	70728	72862	AVRG		1.37E-5		72871	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	B	5.000	4	10.00	1	25.00	-1	50.00	-1	100.0	-3	200.0	0

Analyst: CP Date: 06/07/07 Reviewer: CW Date: 06/08/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

227227958001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014001
Units : mg/L

Name : DSL
Date : 18-APR-2007 21:42
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b028	167156014028	DSL_10	18-APR-2007 21:42	S5413
L2	108b029	167156014029	DSL_100	18-APR-2007 22:10	S5414
L3	108b030	167156014030	DSL_500	18-APR-2007 22:38	S5416
L4	108b031	167156014031	DSL_1000	18-APR-2007 23:06	S5417
L5	108b032	167156014032	DSL_5000	18-APR-2007 23:34	S5411
L6	108b033	167156014033	DSL_7500	19-APR-2007 00:02	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	57791	53835	53110	54128	53620	50175	AVRG		1.86E-5		53776	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	7	100.0	0	500.0	-1	1000	1	5000	0	7500	-7

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

167156014001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 167156014001

Name : DSL
Cal Date : 18-APR-2007

ICV 167156014035 (108b035 19-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	53776	60453	500.0	562.1	mg/L	12	

: 00111

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167156014002
Units : mg/L

Name : Hexacosane
Date : 19-APR-2007 05:34
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	108b045	167156014045	HEX_5	19-APR-2007 05:34	S5751
L2	108b046	167156014046	HEX_10	19-APR-2007 06:02	S5752
L3	108b047	167156014047	HEX_25	19-APR-2007 08:04	S5753
L4	108b048	167156014048	HEX_50	19-APR-2007 08:31	S5754
L5	108b049	167156014049	HEX_100	19-APR-2007 08:59	S5755
L6	108b050	167156014050	HEX_200	19-APR-2007 09:27	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	60849	59594	60334	60123	58538	58399	AVRG		1.68E-5		59639	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	2	10.00	0	25.00	1	50.00	1	100.0	-2	200.0	-2

Analyst: DLM Date: 04/19/07 Reviewer: MCH Date: 04/20/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 167238130001
Units : mg/L

Name : MOTOR OIL
Date : 14-JUN-2007 15:45
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	165b012	167238130012	MO_50	14-JUN-2007 15:45	S5523
L2	165b013	167238130013	MO_250	14-JUN-2007 16:13	S5524
L3	165b014	167238130014	MO_500	14-JUN-2007 16:41	S5525
L4	165b015	167238130015	MO_1000	14-JUN-2007 17:09	S5526
L5	165b016	167238130016	MO_5000	14-JUN-2007 17:37	S5522

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	40450	41984	38095	36697	34923	AVRG		2.60E-5		38430	7	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	50.00	5	250.0	9	500.0	-1	1000	-5	5000	-9

Analyst: ATL Date: 06/14/07 Reviewer: RH Date: 06/18/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118001
Units : mg/L

Name : DSL
Date : 16-APR-2007 22:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a010	177153118010	DSL_10	16-APR-2007 22:16	S5413
L2	106a011	177153118011	DSL_100	16-APR-2007 22:43	S5414
L3	106a012	177153118012	DSL_500	16-APR-2007 23:10	S5416
L4	106a013	177153118013	DSL_1000	16-APR-2007 23:38	S5417
L5	106a014	177153118014	DSL_5000	17-APR-2007 00:04	S5411
L6	106a015	177153118015	DSL_7500	17-APR-2007 00:32	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	71898	64898	73238	68474	66312	67917	AVRG		1.45E-5		68789	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	5	100.0	-6	500.0	6	1000	0	5000	-4	7500	-1

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 177153118001

Name : DSL
Cal Date : 16-APR-2007

ICV 177153118017 (106a017 17-APR-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	68789	68119	500.0	495.1	mg/L	-1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118002
Units : mg/L

Name : MO
Date : 17-APR-2007 02:47
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a020	177153118020	MO_50	17-APR-2007 02:47	S5523
L2	106a021	177153118021	MO_250	17-APR-2007 03:14	S5524
L3	106a022	177153118022	MO_500	17-APR-2007 03:41	S5525
L4	106a023	177153118023	MO_1000	17-APR-2007 04:09	S5526
L5	106a024	177153118024	MO_5000	17-APR-2007 04:35	S5522
L6	106a025	177153118025	MO_7500	17-APR-2007 05:02	S5521

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	42522	55240	53936	51516	47937	46757	AVRG		2.01E-5		49651	10	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C24-C36	50.00	-14	250.0	11	500.0	9	1000	4	5000	-3	7500	-6

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 177153118003
Units : mg/L

Name : Hexacosane
Date : 17-APR-2007 05:57
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	106a027	177153118027	HEX_5	17-APR-2007 05:57	S5751
L2	106a028	177153118028	HEX_10	17-APR-2007 06:24	S5752
L3	106a029	177153118029	HEX_25	17-APR-2007 06:52	S5753
L4	106a030	177153118030	HEX_50	17-APR-2007 07:19	S5754
L5	106a031	177153118031	HEX_100	17-APR-2007 07:46	S5755
L6	106a032	177153118032	HEX_200	17-APR-2007 08:14	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	85626	79939	79901	77537	75605	82966	AVRG		1.25E-5		80262	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	7	10.00	0	25.00	0	50.00	-3	100.0	-6	200.0	3

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 867204194001
Units : mg/L

Name : DSL 26A
Date : 21-MAY-2007 20:05
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	141a008	867204194008	DSL_10	21-MAY-2007 20:05	S5413
L2	141a009	867204194009	DSL_100	21-MAY-2007 20:30	S5414
L3	141a010	867204194010	DSL_500	21-MAY-2007 20:55	S5416
L4	141a011	867204194011	DSL_1000	21-MAY-2007 21:21	S5417
L5	141a012	867204194012	DSL_5000	21-MAY-2007 21:46	S5411
L6	141a013	867204194013	DSL_7500	21-MAY-2007 22:11	S5412

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C12-C24	29161	28170	28533	27379	24888	25096	AVRG		3.68E-5		27204	7	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C12-C24	10.00	7	100.0	4	500.0	5	1000	1	5000	-9	7500	-8

Analyst: DLM Date: 05/22/07 Reviewer: MCH Date: 05/23/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

867204194001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 867204194001

Name : DSL 26A
Cal Date : 21-MAY-2007

ICV 867204194015 (141a015 21-MAY-2007) stds: S5419 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	27204	27728	500.0	509.6	mg/L	2	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 867204194003
Units : mg/L

Name : motor oil 26a
Date : 22-MAY-2007 00:41
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	141a019	867204194019	MO_250	22-MAY-2007 00:41	S5524
L2	141a020	867204194020	MO_500	22-MAY-2007 01:07	S5525
L3	141a021	867204194021	MO_1000	22-MAY-2007 01:32	S5526
L4	141a022	867204194022	MO_5000	22-MAY-2007 01:57	S5522
L5	141a035	867204194035	MO_50	22-MAY-2007 17:09	S5523

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C24-C36	11437	11575	12632	13715	15804	AVRG		7.67E-5		13033	14	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Motor Oil C24-C36	250.0	-12	500.0	-11	1000	-3	5000	5	50.00	21

MCH 05/23/07 : 7500 ppm ICAL level dropped for all ranges. ICAL will not be used for Mo ranges 28-36 and 28-40.

Analyst: CP Date: 05/23/07 Reviewer: MCH Date: 05/23/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 GCSV Water: EPA 8015B

Inst : GC26A
Calnum : 867204194002
Units : mg/L

Name : Hexacosane 26A
Date : 22-MAY-2007 03:12
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	141a025	867204194025	HEX_5	22-MAY-2007 03:12	S5751
L2	141a026	867204194026	HEX_10	22-MAY-2007 03:38	S5752
L3	141a027	867204194027	HEX_25	22-MAY-2007 04:03	S5753
L4	141a028	867204194028	HEX_50	22-MAY-2007 04:28	S5754
L5	141a029	867204194029	HEX_100	22-MAY-2007 04:53	S5755
L6	141a030	867204194030	HEX_200	22-MAY-2007 05:19	S5756

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Hexacosane	25574	22616	23846	25587	24902	24147	AVRG		4.09E-5		24445	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Hexacosane	5.000	5	10.00	-7	25.00	-2	50.00	5	100.0	2	200.0	-1

Analyst: DLM Date: 05/22/07 Reviewer: MCH Date: 05/23/07

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A
Seqnum : 117248228004
Standards: S6346

Run Name : DSL_500
File : 172a004

IDF : 1.0
Time : 21-JUN-2007 10:32

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	63746	500.0	547.2	mg/L	9	15	
Hexacosane	117245263001	19-JUN-2007	69898	79971	50.00	57.21	mg/L	14	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/22/07

117248228004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117248228005 File : 172a005 Time : 21-JUN-2007 11:00
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	46327	500.0	558.8	mg/L	12	15	
Hexacosane	117245263001	19-JUN-2007	69898	77227	50.00	55.24	mg/L	10	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/22/07

117248228005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A Run Name : DSL_250 IDF : 1.0
Seqnum : 117248228013 File : 172a013 Time : 21-JUN-2007 16:25
Standards: S6345

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	64636	250.0	277.4	mg/L	11	15	
Hexacosane	117245263001	19-JUN-2007	69898	77491	50.00	55.43	mg/L	11	15	

Analyst: ATL Date: 06/21/07 Reviewer: DLM Date: 06/22/07

117248228013

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117248228014 File : 172a014 Time : 21-JUN-2007 16:52
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	45341	500.0	546.9	mg/L	9	15	
Hexacosane	117245263001	19-JUN-2007	69898	74749	50.00	53.47	mg/L	7	15	

Analyst: ATL Date: 06/21/07 Reviewer: DLM Date: 06/22/07

117248228014

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A Run Name : DSL_1000 IDF : 1.0
Seqnum : 117248228020 File : 172a020 Time : 22-JUN-2007 01:40
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	117061448001	11-FEB-2007	58249	61075	1000	1049	mg/L	5	15	
Hexacosane	117245263001	19-JUN-2007	69898	77129	50.00	55.17	mg/L	10	15	

Analyst: DLM Date: 06/22/07 Reviewer: ATL Date: 06/22/07

117248228020

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC11A Run Name : MO_500 IDF : 1.0
Seqnum : 117248228021 File : 172a021 Time : 22-JUN-2007 02:08
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	117037956001	26-JAN-2007	41455	46497	500.0	560.8	mg/L	12	15	
Hexacosane	117245263001	19-JUN-2007	69898	76934	50.00	55.03	mg/L	10	15	

Analyst: DLM Date: 06/22/07 Reviewer: ATL Date: 06/22/07

117248228021

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
Seqnum : 227248192004 File : 172_004 Time : 21-JUN-2007 09:56
Standards: S6346

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	65457	500.0	504.3	mg/L	1	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	77705	50.00	53.32	mg/L	7	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

227248192004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227248192005 File : 172_005 Time : 21-JUN-2007 10:24
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	43564	500.0	473.9	mg/L	-5	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	76508	50.00	52.49	mg/L	5	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

227248192005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
Seqnum : 227248192016 File : 172_016 Time : 21-JUN-2007 17:13
Standards: S6345

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	B	227114390001	20-MAR-2007	64894	61352	250.0	236.4	mg/L	-5	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	72579	50.00	49.80	mg/L	0	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

227248192016

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
Seqnum : 227248192017 File : 172_017 Time : 21-JUN-2007 17:41
Standards: S6046

Analyte	Ch	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	B	227114390002	20-MAR-2007	45959	41958	500.0	456.5	mg/L	-9	15	
Hexacosane	B	227227958001	07-JUN-2007	72871	71463	50.00	49.03	mg/L	-2	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

227248192017

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
Seqnum : 167248187004 File : 172b004 Time : 21-JUN-2007 09:50
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	56260	500.0	523.1	mg/L	5	15	
Hexacosane	167156014002	19-APR-2007	59639	67672	50.00	56.73	mg/L	13	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/21/07

167248187004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 167248187005 File : 172b005 Time : 21-JUN-2007 10:17
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167238130001	14-JUN-2007	38430	39131	500.0	509.1	mg/L	2	15	
Hexacosane	167156014002	19-APR-2007	59639	63517	50.00	53.25	mg/L	7	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/21/07

167248187005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
Seqnum : 167248187018 File : 172b018 Time : 21-JUN-2007 16:41
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	167156014001	18-APR-2007	53776	53796	1000	1000	mg/L	0	15	
Hexacosane	167156014002	19-APR-2007	59639	64201	50.00	53.82	mg/L	8	15	

Analyst: DLM Date: 06/22/07 Reviewer: ATL Date: 06/22/07

167248187018

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 167248187019 File : 172b019 Time : 21-JUN-2007 17:09
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	167238130001	14-JUN-2007	38430	37864	500.0	492.6	mg/L	-1	15	
Hexacosane	167156014002	19-APR-2007	59639	62307	50.00	52.24	mg/L	4	15	

Analyst: DLM Date: 06/22/07 Reviewer: ATL Date: 06/22/07

167248187019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 177248187004 File : 172a004 Time : 21-JUN-2007 09:49
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	70187	500.0	510.2	mg/L	2	15	
Hexacosane	177153118003	17-APR-2007	80262	87138	50.00	54.28	mg/L	9	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/21/07

177248187004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
Seqnum : 177248187005 File : 172a005 Time : 21-JUN-2007 10:17
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	51275	500.0	516.3	mg/L	3	15	
Hexacosane	177153118003	17-APR-2007	80262	83282	50.00	51.88	mg/L	4	15	

Analyst: DLM Date: 06/21/07 Reviewer: ATL Date: 06/21/07

177248187005

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 177248187018 File : 172a018 Time : 21-JUN-2007 16:38
Standards: S6347

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	177153118001	16-APR-2007	68789	67496	1000	981.2	mg/L	-2	15	
Hexacosane	177153118003	17-APR-2007	80262	84446	50.00	52.61	mg/L	5	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC17A
Seqnum : 177248187019
Standards: S6046

Run Name : MO_500
File : 172a019

IDF : 1.0
Time : 21-JUN-2007 17:06

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	177153118002	17-APR-2007	49651	49954	500.0	503.0	mg/L	1	15	
Hexacosane	177153118003	17-APR-2007	80262	81587	50.00	50.83	mg/L	2	15	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

177248187019

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
Seqnum : 867248383006 File : 172a006 Time : 21-JUN-2007 11:43
Standards: S6346

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	867204194001	21-MAY-2007	27204	26132	500.0	480.3	mg/L	-4	15	
Hexacosane	867204194002	22-MAY-2007	24445	23198	50.00	47.45	mg/L	-5	15	

Analyst: ATL Date: 06/21/07 Reviewer: CW Date: 06/22/07

867248383006

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 867248383007 File : 172a007 Time : 21-JUN-2007 12:09
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	867204194003	22-MAY-2007	13033	12564	500.0	482.0	mg/L	-4	15	
Hexacosane	867204194002	22-MAY-2007	24445	22287	50.00	45.58	mg/L	-9	15	

Analyst: ATL Date: 06/21/07 Reviewer: CW Date: 06/22/07

867248383007

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC26A
Seqnum : 867248383020
Standards: S6347

Run Name : DSL_1000
File : 172a020

IDF : 1.0
Time : 21-JUN-2007 17:38

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C12-C24	867204194001	21-MAY-2007	27204	26713	1000	981.9	mg/L	-2	15	
Hexacosane	867204194002	22-MAY-2007	24445	22999	50.00	47.04	mg/L	-6	15	

Analyst: ATL Date: 06/21/07 Reviewer: CW Date: 06/22/07

867248383020

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
Seqnum : 867248383021 File : 172a021 Time : 21-JUN-2007 18:03
Standards: S6046

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C24-C36	867204194003	22-MAY-2007	13033	12526	500.0	480.6	mg/L	-4	15	
Hexacosane	867204194002	22-MAY-2007	24445	22009	50.00	45.02	mg/L	-10	15	

Analyst: ATL Date: 06/21/07 Reviewer: CW Date: 06/22/07

867248383021

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117037956

Instrument : GC11A
Method : EPA 8015B

Begun : 01/26/07 08:36
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	026a001	X	IB			01/26/07 08:36	1.0	
002	026a002	XCCV	DSL_500			01/26/07 09:04	1.0	1
003	026a003	XCCV	MO_500			01/26/07 09:32	1.0	2
006	026a006	X	HEX_5			01/26/07 16:57	1.0	
007	026a007	X	IB			01/26/07 17:25	1.0	
008	026a008	CMARKER	C8-C50			01/26/07 17:55	1.0	3
009	026a009	X	CALIB			01/26/07 18:22	1.0	
010	026a010	XICAL	DSL_10			01/26/07 18:50	1.0	4
011	026a011	XICAL	DSL_100			01/26/07 19:18	1.0	5
012	026a012	XICAL	DSL_500			01/26/07 19:46	1.0	6
013	026a013	XICAL	DSL_1000			01/26/07 20:14	1.0	7
014	026a014	XICAL	DSL_5000			01/26/07 20:42	1.0	8
015	026a015	XICAL	DSL_7500			01/26/07 21:10	1.0	9
016	026a016	X	IB			01/26/07 21:38	1.0	
017	026a017	XICV	DSL_500			01/26/07 22:06	10.0	10
018	026a018	XICV	DSL_500			01/26/07 22:34	10.0	10
019	026a019	IB	CALIB			01/26/07 23:02	1.0	
020	026a020	ICAL	MO_50			01/26/07 23:30	1.0	11
021	026a021	ICAL	MO_250			01/26/07 23:58	1.0	12
022	026a022	ICAL	MO_500			01/27/07 00:26	1.0	13
023	026a023	ICAL	MO_1000			01/27/07 00:54	1.0	14
024	026a024	ICAL	MO_5000			01/27/07 01:22	1.0	15
025	026a025	IB	CALIB			01/27/07 01:50	1.0	
026	026a026	ICAL	HEX_5			01/27/07 02:18	1.0	16
027	026a027	ICAL	HEX_10			01/27/07 02:46	1.0	17
028	026a028	ICAL	HEX_25			01/27/07 03:14	1.0	18
029	026a029	ICAL	HEX_50			01/27/07 03:42	1.0	19
030	026a030	ICAL	HEX_100			01/27/07 04:10	1.0	20
031	026a031	ICAL	HEX_200			01/27/07 04:38	1.0	21
032	026a032	IB	CALIB			01/27/07 05:06	1.0	
033	026a033	ICAL	BUNK_50			01/27/07 05:35	1.0	22
034	026a034	ICAL	BUNK_500			01/27/07 06:03	1.0	23
035	026a035	ICAL	BUNK_1250			01/27/07 06:31	1.0	24
036	026a036	ICAL	BUNK_2500			01/27/07 06:59	1.0	25
037	026a037	ICAL	BUNK_5000			01/27/07 07:27	1.0	26
038	026a038	IB	CALIB			01/27/07 07:55	1.0	
039	026a039	ICAL	JP5_10			01/27/07 08:23	1.0	27
040	026a040	ICAL	JP5_100			01/27/07 08:52	1.0	28
041	026a041	ICAL	JP5_500			01/27/07 09:20	1.0	29
042	026a042	ICAL	JP5_1500			01/27/07 09:48	1.0	30
043	026a043	ICAL	JP5_3000			01/27/07 10:16	1.0	31
044	026a044	ICAL	JP5_5000			01/27/07 10:44	1.0	32
045	026a045	X	IB			01/27/07 11:12	1.0	

CP 01/29/07 : Need to re-run diesel ical. standards have concentrated and need to be re-made then re-run.

Analyst: CP Date: 01/29/07 Reviewer: MCH Date: 01/29/07

Standards used: 1=S5157 2=S5274 3=S4049 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S5402 20=S4644 21=S4645 22=S4708 23=S4709 24=S4710 25=S4711 26=S4712 27=S4284 28=S4285 29=S4286 30=S4287 31=S4288 32=S4283

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117061448

Instrument : GC11A
Method : EPA 8015B

Begun : 02/11/07 16:08
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042a001	X	IB			02/11/07 16:08	1.0	
002	042a002	X	DSL_500			02/11/07 16:35	1.0	1
003	042a003	X	MO_500			02/11/07 17:03	1.0	2
004	042a004	X	MO_500			02/11/07 17:47	1.0	2
005	042a005	CCV	MO_500			02/11/07 18:33	1.0	2
006	042a006	CCV	DSL_500			02/11/07 19:02	1.0	1
007	042a007	CCV	DSL_500			02/11/07 19:30	1.0	1
008	042a008	X	IB			02/11/07 20:45	1.0	
009	042a009	ICAL	DSL_10			02/11/07 21:13	1.0	3
010	042a010	ICAL	DSL_100			02/11/07 21:41	1.0	4
011	042a011	ICAL	DSL_500			02/11/07 22:09	1.0	5
012	042a012	ICAL	DSL_1000			02/11/07 22:37	1.0	6
013	042a013	ICAL	DSL_5000			02/11/07 23:05	1.0	7
014	042a014	ICAL	DSL_7500			02/11/07 23:33	1.0	8
015	042a015	IB	CALIB			02/12/07 00:01	1.0	
016	042a016	ICV	DSL_500			02/12/07 00:28	1.0	9
017	042a017	XICV	DSL_500			02/12/07 00:57	1.0	9
018	042a018	X	IB			02/12/07 01:24	1.0	
019	042a019	CMARKER	C8-C50			02/12/07 09:23	1.0	10

CP 02/12/07 : carbon markers run after ical.

Analyst: CP Date: 02/12/07 Reviewer: MCH Date: 02/12/07

Standards used: 1=S5517 2=S4886 3=S5413 4=S5414 5=S5416 6=S5417 7=S5411 8=S5412 9=S5419 10=S4049

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117245263

Instrument : GC11A
Method : EPA 8015B

Begun : 06/19/07 07:43
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	170a001	X	PRIMER			06/19/07 07:43	1.0	
002	170a002	X	IB			06/19/07 08:11	1.0	
003	170a003	CMARKER	C8-C50			06/19/07 08:40	1.0	1
004	170a004	X	DSL_500			06/19/07 09:08	1.0	2
005	170a005	X	MO_500			06/19/07 09:36	1.0	3
006	170a006	X	MO_500			06/19/07 11:15	1.0	3
008	170a008	X	IB			06/19/07 12:29	1.0	
009	170a009	X	CMARKER			06/19/07 12:57	1.0	1
010	170a010	X	DSL_500			06/19/07 13:24	1.0	2
011	170a011	X	MO_500			06/19/07 13:52	1.0	3
012	170a012	IB	CALIB			06/19/07 15:16	1.0	
013	170a013	ICAL	HEX_5			06/19/07 15:44	1.0	4
014	170a014	ICAL	HEX_10			06/19/07 16:12	1.0	5
015	170a015	ICAL	HEX_25			06/19/07 16:39	1.0	6
016	170a016	ICAL	HEX_50			06/19/07 17:07	1.0	7
017	170a017	ICAL	HEX_100			06/19/07 17:35	1.0	8
018	170a018	ICAL	HEX_200			06/19/07 18:03	1.0	9
019	170a019	X	IB			06/19/07 18:30	1.0	

Analyst: DLM Date: 06/19/07 Reviewer: CW Date: 06/20/07

Standards used: 1=S4049 2=S6346 3=S6046 4=S5751 5=S5752 6=S5753 7=S5754 8=S5755 9=S5756

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 117248228

Instrument : GC11A
Method : EPA 8015B

Begun : 06/21/07 09:08
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	172a001	X	PRIMER				06/21/07 09:08	1.0	
002	172a002	X	IB				06/21/07 09:36	1.0	
003	172a003	CMARKER	C8-50				06/21/07 10:04	1.0	1
004	172a004	CCV	DSL_500				06/21/07 10:32	1.0	2
005	172a005	CCV	MO_500				06/21/07 11:00	1.0	3
006	172a006	SAMPLE	195303-024	S	Water	126486	06/21/07 11:36	1.0	
007	172a007	SAMPLE	195303-025	S	Water	126486	06/21/07 12:04	1.0	
008	172a008	SAMPLE	195303-027	S	Water	126486	06/21/07 12:32	1.0	
009	172a009	SAMPLE	195303-030	S	Water	126486	06/21/07 13:00	1.0	
010	172a010	X	IB				06/21/07 13:28	1.0	
011	172a011	X	CMARKER				06/21/07 13:56	1.0	4
012	172a012	X	IB				06/21/07 15:57	1.0	
013	172a013	CCV	DSL_250				06/21/07 16:25	1.0	5
014	172a014	CCV	MO_500				06/21/07 16:52	1.0	3
015	172a015	X	CMARKER				06/21/07 17:53	1.0	1
016	172a016	X	IB				06/21/07 23:48	1.0	
017	172a017	SAMPLE	195303-025	S	Water	126486	06/22/07 00:17	1.0	
018	172a018	X	195303-025		Water	126486	06/22/07 00:44	1.0	
019	172a019	X	CMARKER				06/22/07 01:12	1.0	1
020	172a020	CCV	DSL_1000				06/22/07 01:40	1.0	6
021	172a021	CCV	MO_500				06/22/07 02:08	1.0	3
022	172a022	X	CCV				06/22/07 02:36	1.0	6
023	172a023	X	CCV				06/22/07 03:04	1.0	3

Standards used: 1=S4049 2=S6346 3=S6046 4=S6508 5=S6345 6=S6347

00147

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	108b001	X	PRIMER				04/18/07 08:14	1.0		
002	108b002	X	IB				04/18/07 08:41	1.0		
003	108b003	CCV	DSL_500				04/18/07 09:09	1.0	1	
004	108b004	CCV	MO_500				04/18/07 09:37	1.0	2	
005	108b005	X	194211-014	S	Soil	124276	04/18/07 10:07	1.0		
006	108b006	SAMPLE	194211-013	S	Soil	124276	04/18/07 10:35	20.0		3:BUNKC:12-40=16000
007	108b007	MS	QC384076	S	Soil	124276	04/18/07 11:02	1.0		
008	108b008	MSD	QC384077	S	Soil	124276	04/18/07 11:30	1.0		
009	108b009	SAMPLE	194094-006	S	Water	124180	04/18/07 11:58	1.0		
010	108b010	SAMPLE	194094-007	S	Water	124180	04/18/07 12:26	1.0		
011	108b011	SAMPLE	194094-008	S	Water	124180	04/18/07 12:53	1.0		
012	108b012	X	IB				04/18/07 13:28	1.0		
013	108b013	BLANK	QC384097	S	Soil	124282	04/18/07 13:56	1.0		
014	108b014	SAMPLE	194154-001	S	Soil	124282	04/18/07 14:23	1.0		
015	108b015	SAMPLE	194154-002	S	Soil	124282	04/18/07 14:51	1.0		
016	108b016	X	DSL_1000				04/18/07 15:19	1.0	3	
017	108b017	CCV	MO_500				04/18/07 15:47	1.0	2	
018	108b018	CCV	DSL_1000				04/18/07 16:14	1.0	3	
019	108b019	X	MO_500				04/18/07 17:05	1.0	2	
020	108b020	XCMARKER	C10-C50				04/18/07 18:00	1.0	4	
021	108b021	X	MO_500				04/18/07 18:28	1.0	2	
022	108b022	CMARKER	C10-C50				04/18/07 18:56	1.0	4	
023	108b023	CCV	MO_500				04/18/07 19:24	1.0	2	
024	108b024	CCV	DSL_1000				04/18/07 19:52	1.0	3	2:BUNKC:12-40=5900
025	108b025	CCV	MO_500				04/18/07 20:19	1.0	2	
026	108b026	CCV	DSL_1000				04/18/07 20:47	1.0	3	
027	108b027	IB	CALIB				04/18/07 21:15	1.0		
028	108b028	ICAL	DSL_10				04/18/07 21:42	1.0	5	
029	108b029	ICAL	DSL_100				04/18/07 22:10	1.0	6	
030	108b030	ICAL	DSL_500				04/18/07 22:38	1.0	7	
031	108b031	ICAL	DSL_1000				04/18/07 23:06	1.0	8	
032	108b032	ICAL	DSL_5000				04/18/07 23:34	1.0	9	
033	108b033	ICAL	DSL_7500				04/19/07 00:02	1.0	10	
034	108b034	IB	CALIB				04/19/07 00:29	1.0		
035	108b035	ICV	DSL_500				04/19/07 00:57	1.0	11	
036	108b036	X	ICV				04/19/07 01:25	1.0	11	
037	108b037	IB	CALIB				04/19/07 01:52	1.0		
038	108b038	ICAL	MO_50				04/19/07 02:20	1.0	12	
039	108b039	ICAL	MO_250				04/19/07 02:48	1.0	13	
040	108b040	ICAL	MO_500				04/19/07 03:15	1.0	14	
041	108b041	X	MO_1000				04/19/07 03:43	1.0	15	
042	108b042	ICAL	MO_5000				04/19/07 04:11	1.0	16	
043	108b043	ICAL	MO_7500				04/19/07 04:39	1.0	17	
044	108b044	IB	CALIB				04/19/07 05:06	1.0		
045	108b045	ICAL	HEX_5				04/19/07 05:34	1.0	18	
046	108b046	ICAL	HEX_10				04/19/07 06:02	1.0	19	
047	108b047	ICAL	HEX_25				04/19/07 08:04	1.0	20	
048	108b048	ICAL	HEX_50				04/19/07 08:31	1.0	21	
049	108b049	ICAL	HEX_100				04/19/07 08:59	1.0	22	
050	108b050	ICAL	HEX_200				04/19/07 09:27	1.0	23	
051	108b051	IB	CALIB				04/19/07 09:55	1.0		
052	108b052	ICAL	MO_1000				04/19/07 14:41	1.0	15	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167156014

Instrument : GC15B
Method : EPA 8015B

Begun : 04/18/07 08:14
SOP Version : TEH_rv12

DLM 04/19/07 : MO ICAL 1000 point was run at the end due to a mis-inject

Standards used: 1=S5731 2=S5734 3=S5732 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S5751 19=S5752 20=S5753 21=S5754 22=S5755 23=S5756

:08149

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167238130

Instrument : GC15B
Method : EPA 8015B

Begun : 06/14/07 08:50
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	165b001	X	PRIMER			06/14/07 08:50	1.0	
002	165b002	X	IB			06/14/07 09:17	1.0	
003	165b003	X	CMARKER			06/14/07 09:45	1.0	1
004	165b004	X	DSL_500			06/14/07 10:13	1.0	2
005	165b005	X	IB			06/14/07 11:57	1.0	
006	165b006	CMARKER	C8-50			06/14/07 12:25	1.0	1
007	165b007	CCV	DSL_500			06/14/07 12:57	1.0	2
008	165b008	CCV	MO_500			06/14/07 13:25	1.0	3
009	165b009	CCV	MO_500			06/14/07 14:07	1.0	3
010	165b010	X	IB			06/14/07 14:38	1.0	
011	165b011	IB	CALIB			06/14/07 15:18	1.0	
012	165b012	ICAL	MO_50			06/14/07 15:45	1.0	4
013	165b013	ICAL	MO_250			06/14/07 16:13	1.0	5
014	165b014	ICAL	MO_500			06/14/07 16:41	1.0	6
015	165b015	ICAL	MO_1000			06/14/07 17:09	1.0	7
016	165b016	ICAL	MO_5000			06/14/07 17:37	1.0	8
017	165b017	IB	CALIB			06/14/07 18:05	1.0	
018	165b018	CCV	DSL_1000			06/14/07 18:33	1.0	9
019	165b019	CCV	MO_500			06/14/07 19:01	1.0	3

Analyst: ATL Date: 06/14/07 Reviewer: RH Date: 06/18/07

Standards used: 1=S4049 2=S6346 3=S6046 4=S5523 5=S5524 6=S5525 7=S5526 8=S5522 9=S6347

02158

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 167248187

Instrument : GC15B
Method : EPA 8015B

Begun : 06/21/07 08:27
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	172b001	X	PRIMER				06/21/07 08:27	1.0	
002	172b002	X	IB				06/21/07 08:54	1.0	
003	172b003	X	CMARKER				06/21/07 09:22	1.0	1
004	172b004	CCV	DSL_500				06/21/07 09:50	1.0	2
005	172b005	CCV	MO_500				06/21/07 10:17	1.0	3
006	172b006	SAMPLE	195396-013	S	Water	126486	06/21/07 11:10	1.0	
007	172b007	SAMPLE	195396-014	S	Water	126486	06/21/07 11:37	1.0	
008	172b008	SAMPLE	195396-015	S	Water	126486	06/21/07 12:05	1.0	
009	172b009	SAMPLE	195396-016	S	Water	126486	06/21/07 12:32	1.0	
010	172b010	SAMPLE	195303-002	S	Water	126479	06/21/07 13:00	1.0	
011	172b011	X	IB				06/21/07 13:28	1.0	
012	172b012	SAMPLE	195303-003	S	Water	126479	06/21/07 13:55	1.0	
013	172b013	SAMPLE	195303-004	S	Water	126479	06/21/07 14:23	1.0	
014	172b014	SAMPLE	195303-005	S	Water	126479	06/21/07 14:50	1.0	
015	172b015	SAMPLE	195303-006	S	Water	126479	06/21/07 15:18	1.0	
016	172b016	SAMPLE	195303-009	S	Water	126479	06/21/07 15:46	1.0	
017	172b017	X	IB				06/21/07 16:13	1.0	
018	172b018	CCV	DSL_1000				06/21/07 16:41	1.0	4
019	172b019	CCV	MO_500				06/21/07 17:09	1.0	3
020	172b020	X	CMARKER				06/21/07 17:52	1.0	1

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347

: 22151

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177153118

Instrument : GC17A
Method : EPA 8015B

Begun : 04/16/07 07:58
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	106a001	X	PRIMER			04/16/07 07:58	1.0	
002	106a002	X	IB			04/16/07 08:25	1.0	
003	106a003	X	DSL_500			04/16/07 08:53	1.0	1
004	106a004	X	MO_500			04/16/07 09:20	1.0	2
005	106a005	X	IB			04/16/07 10:07	1.0	
006	106a006	X				04/16/07 10:34	1.0	3
007	106a007	IB	CALIB			04/16/07 20:54	1.0	
008	106a008	CMARKER	C8-C50			04/16/07 21:22	1.0	3
009	106a009	IB	CALIB			04/16/07 21:49	1.0	
010	106a010	ICAL	DSL_10			04/16/07 22:16	1.0	4
011	106a011	ICAL	DSL_100			04/16/07 22:43	1.0	5
012	106a012	ICAL	DSL_500			04/16/07 23:10	1.0	6
013	106a013	ICAL	DSL_1000			04/16/07 23:38	1.0	7
014	106a014	ICAL	DSL_5000			04/17/07 00:04	1.0	8
015	106a015	ICAL	DSL_7500			04/17/07 00:32	1.0	9
016	106a016	IB	CALIB			04/17/07 00:59	1.0	
017	106a017	ICV	DSL_500			04/17/07 01:26	1.0	10
018	106a018	X	ICV			04/17/07 01:53	1.0	10
019	106a019	IB	CALIB			04/17/07 02:20	1.0	
020	106a020	ICAL	MO_50			04/17/07 02:47	1.0	11
021	106a021	ICAL	MO_250			04/17/07 03:14	1.0	12
022	106a022	ICAL	MO_500			04/17/07 03:41	1.0	13
023	106a023	ICAL	MO_1000			04/17/07 04:09	1.0	14
024	106a024	ICAL	MO_5000			04/17/07 04:35	1.0	15
025	106a025	ICAL	MO_7500			04/17/07 05:02	1.0	16
026	106a026	IB	CALIB			04/17/07 05:30	1.0	
027	106a027	ICAL	HEX_5			04/17/07 05:57	1.0	17
028	106a028	ICAL	HEX_10			04/17/07 06:24	1.0	18
029	106a029	ICAL	HEX_25			04/17/07 06:52	1.0	19
030	106a030	ICAL	HEX_50			04/17/07 07:19	1.0	20
031	106a031	ICAL	HEX_100			04/17/07 07:46	1.0	21
032	106a032	ICAL	HEX_200			04/17/07 08:14	1.0	22
033	106a033	IB	CALIB			04/17/07 08:41	1.0	
034	106a034	ICAL	JP5_10			04/17/07 09:09	1.0	23
035	106a035	ICAL	JP5_100			04/17/07 09:36	1.0	24
036	106a036	ICAL	JP5_500			04/17/07 10:04	1.0	25
037	106a037	ICAL	JP5_1500			04/17/07 10:31	1.0	26
038	106a038	ICAL	JP5_5000			04/17/07 10:58	1.0	27
039	106a039	IB	CALIB			04/17/07 11:25	1.0	

Analyst: DLM Date: 04/17/07 Reviewer: CP Date: 04/17/07

Standards used: 1=S5731 2=S5734 3=S4049 4=S5413 5=S5414 6=S5416 7=S5417 8=S5411 9=S5412 10=S5419 11=S5523 12=S5524 13=S5525 14=S5526 15=S5522 16=S5521 17=S5751 18=S5752 19=S5753 20=S5754 21=S5755 22=S5756 23=S5858 24=S5857 25=S5856 26=S5855 27=S5853

: 88152

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 177248187

Instrument : GC17A
Method : EPA 8015B

Begun : 06/21/07 08:27
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	172a001	X	PRIMER				06/21/07 08:27	1.0	
002	172a002	X	IB				06/21/07 08:54	1.0	
003	172a003	X	CMARKER				06/21/07 09:22	1.0	1
004	172a004	CCV	DSL_500				06/21/07 09:49	1.0	2
005	172a005	CCV	MO_500				06/21/07 10:17	1.0	3
006	172a006	SAMPLE	195396-017	S	Water	126486	06/21/07 11:10	1.0	
007	172a007	SAMPLE	195396-018	S	Water	126486	06/21/07 11:37	1.0	
008	172a008	SAMPLE	195396-019	S	Water	126486	06/21/07 12:04	1.0	
009	172a009	SAMPLE	195396-020	S	Water	126486	06/21/07 12:32	1.0	
010	172a010	X	IB				06/21/07 12:59	1.0	
011	172a011	BLANK	QC392925	S	Water	126453	06/21/07 13:26	1.0	
012	172a012	SAMPLE	195396-010	S	Water	126453	06/21/07 13:54	1.0	
013	172a013	SAMPLE	195396-012	S	Water	126453	06/21/07 14:21	1.0	
014	172a014	SAMPLE	195303-015	S	Water	126479	06/21/07 14:48	1.0	
015	172a015	SAMPLE	195303-016	S	Water	126479	06/21/07 15:16	1.0	
016	172a016	SAMPLE	195303-017	S	Water	126479	06/21/07 15:44	1.0	
017	172a017	X	IB				06/21/07 16:11	1.0	
018	172a018	CCV	DSL_1000				06/21/07 16:38	1.0	4
019	172a019	CCV	MO_500				06/21/07 17:06	1.0	3
020	172a020	X	CMARKER				06/21/07 17:50	1.0	1

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227114390

Instrument : GC14B
Method : EPA 8015B

Begun : 03/20/07 10:30
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	079_001	X	IB			03/20/07 10:30	1.0	
002	079_002	X	DSL_250			03/20/07 10:58	1.0	1
003	079_003	X	MO_500			03/20/07 11:26	1.0	2
005	079_005	X	IB			03/20/07 12:53	1.0	
006	079_006	CCV	DSL_250			03/20/07 13:20	1.0	1
007	079_007	CCV	MO_500			03/20/07 13:49	1.0	2
008	079_008	X	PRIMER			03/20/07 14:26	1.0	
009	079_009	X	PRIMER			03/20/07 14:54	1.0	
010	079_010	X	IB			03/20/07 15:22	1.0	
011	079_011	CCV	DSL_1000			03/20/07 15:50	1.0	3
012	079_012	IB	CALIB			03/20/07 16:29	1.0	
013	079_013	CMARKER	C8-C50			03/20/07 17:15	1.0	4
014	079_014	IB	CALIB			03/20/07 17:43	1.0	
015	079_015	ICAL	DSL_10			03/20/07 18:11	1.0	5
016	079_016	ICAL	DSL_100			03/20/07 18:39	1.0	6
017	079_017	ICAL	DSL_500			03/20/07 19:07	1.0	7
018	079_018	ICAL	DSL_1000			03/20/07 19:35	1.0	8
019	079_019	ICAL	DSL_5000			03/20/07 20:03	1.0	9
020	079_020	ICAL	DSL_7500			03/20/07 20:31	1.0	10
021	079_021	IB	CALIB			03/20/07 20:59	1.0	
022	079_022	ICV	DSL_500			03/20/07 21:27	1.0	11
023	079_023	X	DSL_500			03/20/07 21:55	1.0	11
024	079_024	IB	CALIB			03/20/07 22:23	1.0	
025	079_025	ICAL	MO_50			03/20/07 22:51	1.0	12
026	079_026	ICAL	MO_250			03/20/07 23:19	1.0	13
027	079_027	ICAL	MO_500			03/20/07 23:47	1.0	14
028	079_028	ICAL	MO_1000			03/21/07 00:14	1.0	15
029	079_029	ICAL	MO_5000			03/21/07 00:42	1.0	16
030	079_030	ICAL	MO_7500			03/21/07 01:10	1.0	17
031	079_031	IB	CALIB			03/21/07 01:38	1.0	
032	079_032	ICAL	HEX_5			03/21/07 02:06	1.0	18
033	079_033	ICAL	HEX_10			03/21/07 02:34	1.0	19
034	079_034	ICAL	HEX_25			03/21/07 03:02	1.0	20
035	079_035	ICAL	HEX_50			03/21/07 03:30	1.0	21
036	079_036	ICAL	HEX_100			03/21/07 03:58	1.0	22
037	079_037	ICAL	HEX_200			03/21/07 04:26	1.0	23
038	079_038	IB	CALIB			03/21/07 04:54	1.0	

Analyst: DLM Date: 03/21/07 Reviewer: MCH Date: 03/21/07

Standards used: 1=S5258 2=S5603 3=S5259 4=S4049 5=S5413 6=S5414 7=S5416 8=S5417 9=S5411 10=S5412 11=S5419 12=S5523 13=S5524 14=S5525 15=S5526 16=S5522 17=S5521 18=S4639 19=S4640 20=S4641 21=S5402 22=S4644 23=S4645

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227227958

Instrument : GC14B
Method : EPA 8015B

Begun : 06/07/07 07:18
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	158_001	X	PRIMER				06/07/07 07:18	1.0		
002	158_002	X	IB				06/07/07 07:46	1.0		
003	158_003	CMARKER	C8-50				06/07/07 08:14	1.0	1	
004	158_004	X	DSL_500				06/07/07 08:42	1.0	2	
005	158_005	X	MO_500				06/07/07 09:10	1.0	3	
006	158_006	X	DSL_1000				06/07/07 09:38	1.0	4	
007	158_007	X	MO_500				06/07/07 10:06	1.0	3	
008	158_008	X	IB				06/07/07 10:34	1.0		
009	158_009	IB	CALIB				06/07/07 11:02	1.0		
010	158_010	ICAL	HEX_5				06/07/07 11:30	1.0	5	
011	158_011	ICAL	HEX_10				06/07/07 11:58	1.0	6	
012	158_012	ICAL	HEX_25				06/07/07 12:25	1.0	7	
013	158_013	ICAL	HEX_50				06/07/07 12:53	1.0	8	
014	158_014	ICAL	HEX_100				06/07/07 13:21	1.0	9	
015	158_015	ICAL	HEX_200				06/07/07 13:49	1.0	10	
016	158_016	X	IB				06/07/07 15:30	1.0		
017	158_017	CCV	DSL_500				06/07/07 15:57	1.0	2	
018	158_018	CCV	MO_500				06/07/07 16:25	1.0	3	
019	158_019	BLANK	QC391198		Soil	126033	06/07/07 18:02	1.0		
020	158_020	MSS	195079-001		Soil	126033	06/07/07 18:30	1.0		
021	158_021	MS	QC391200		Soil	126033	06/07/07 18:58	1.0		
022	158_022	MSD	QC391201		Soil	126033	06/07/07 19:26	1.0		
023	158_023	SAMPLE	195256-001		Soil	126033	06/07/07 19:54	1.0		
024	158_024	SAMPLE	195230-003		Soil	126033	06/07/07 20:21	1.0		11:BUNKC:12-40=36000
025	158_025	X	IB				06/07/07 20:49	1.0		
026	158_026	SAMPLE	195217-002	S	Water	126010	06/07/07 21:17	1.0		
027	158_027	SAMPLE	195217-004	S	Water	126010	06/07/07 21:45	1.0		
028	158_028	SAMPLE	195217-005	S	Water	126010	06/07/07 22:12	1.0		
029	158_029	SAMPLE	195217-006	S	Water	126010	06/07/07 22:40	1.0		
030	158_030	X	IB				06/07/07 23:08	1.0		
031	158_031	X	CMARKER				06/07/07 23:36	1.0	1	
032	158_032	CCV	DSL_250				06/08/07 00:03	1.0	11	
033	158_033	CCV	MO_500				06/08/07 00:31	1.0	3	
034	158_034	X	CCV				06/08/07 00:59	1.0	11	
035	158_035	X	CCV				06/08/07 01:26	1.0	3	

Standards used: 1=S4049 2=S6346 3=S6046 4=S6347 5=S5751 6=S5752 7=S5753 8=S5754 9=S5755 10=S5756 11=S6345

: 98155

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 227248192

Instrument : GC14B
Method : EPA 8015B

Begun : 06/21/07 08:32
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	172_001	X	PRIMER				06/21/07 08:32	1.0	
002	172_002	X	IB				06/21/07 09:00	1.0	
003	172_003	X	CMARKER				06/21/07 09:28	1.0	1
004	172_004	CCV	DSL_500				06/21/07 09:56	1.0	2
005	172_005	CCV	MO_500				06/21/07 10:24	1.0	3
006	172_006	BLANK	QC393055	S	Water	126486	06/21/07 10:55	1.0	
007	172_007	BS	QC393056	S	Water	126486	06/21/07 11:23	1.0	
008	172_008	BSD	QC393057	S	Water	126486	06/21/07 11:51	1.0	
009	172_009	BLANK	QC393022	S	Water	126479	06/21/07 12:19	1.0	
010	172_010	BS	QC393023	S	Water	126479	06/21/07 12:47	1.0	
011	172_011	BSD	QC393024	S	Water	126479	06/21/07 13:15	1.0	
012	172_012	SAMPLE	195303-029	S	Water	126479	06/21/07 13:43	1.0	
013	172_013	X	IB				06/21/07 14:11	1.0	
014	172_014	XCM	TEST				06/21/07 14:38	1.0	4
015	172_015	X	IB				06/21/07 16:45	1.0	
016	172_016	CCV	DSL_250				06/21/07 17:13	1.0	5
017	172_017	CCV	MO_500				06/21/07 17:41	1.0	3
018	172_018	X	CMARKER				06/21/07 18:09	1.0	1

Standards used: 1=S4049 2=S6346 3=S6046 4=S6508 5=S6345

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 867204194

Instrument : GC26A
Method : EPA 8015B

Begun : 05/21/07 19:14
SOP Version : TEH_rv12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
006	141a006	CMARKER	C8-C50			05/21/07 19:14	1.0	1
007	141a007	IB	CALIB			05/21/07 19:39	1.0	
008	141a008	ICAL	DSL_10			05/21/07 20:05	1.0	2
009	141a009	ICAL	DSL_100			05/21/07 20:30	1.0	3
010	141a010	ICAL	DSL_500			05/21/07 20:55	1.0	4
011	141a011	ICAL	DSL_1000			05/21/07 21:21	1.0	5
012	141a012	ICAL	DSL_5000			05/21/07 21:46	1.0	6
013	141a013	ICAL	DSL_7500			05/21/07 22:11	1.0	7
014	141a014	IB	CALIB			05/21/07 22:36	1.0	
015	141a015	ICV	DSL_500			05/21/07 23:01	1.0	8
017	141a017	IB	CALIB			05/21/07 23:51	1.0	
018	141a018	X	MO_50			05/22/07 00:16	1.0	9
019	141a019	ICAL	MO_250			05/22/07 00:41	1.0	10
020	141a020	ICAL	MO_500			05/22/07 01:07	1.0	11
021	141a021	ICAL	MO_1000			05/22/07 01:32	1.0	12
022	141a022	ICAL	MO_5000			05/22/07 01:57	1.0	13
023	141a023	ICAL	MO_7500			05/22/07 02:22	1.0	14
024	141a024	IB	CALIB			05/22/07 02:47	1.0	
025	141a025	ICAL	HEX_5			05/22/07 03:12	1.0	15
026	141a026	ICAL	HEX_10			05/22/07 03:38	1.0	16
027	141a027	ICAL	HEX_25			05/22/07 04:03	1.0	17
028	141a028	ICAL	HEX_50			05/22/07 04:28	1.0	18
029	141a029	ICAL	HEX_100			05/22/07 04:53	1.0	19
030	141a030	ICAL	HEX_200			05/22/07 05:19	1.0	20
031	141a031	IB	CALIB			05/22/07 05:44	1.0	
034	141a034	X	IB			05/22/07 16:44	1.0	
035	141a035	ICAL	MO_50			05/22/07 17:09	1.0	9

CP 05/23/07 : mo 50 ical point re-run at end of sequence.

Analyst: DLM Date: 05/22/07 Reviewer: MCH Date: 05/23/07

Standards used: 1=S4049 2=S5413 3=S5414 4=S5416 5=S5417 6=S5411 7=S5412 8=S5419 9=S5523 10=S5524 11=S5525 12=S5526 13=S5522 14=S5521 15=S5751 16=S5752 17=S5753 18=S5754 19=S5755 20=S5756

: 22157

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 867248383

Instrument : GC26A
Method : EPA 8015B

Begun : 06/21/07 11:43
SOP Version : TEH_rv12

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
006	172a006	CCV	DSL_500				06/21/07 11:43	1.0	1
007	172a007	CCV	MO_500				06/21/07 12:09	1.0	2
008	172a008	SAMPLE	195303-010	S	Water	126479	06/21/07 12:37	1.0	
009	172a009	SAMPLE	195303-012	S	Water	126479	06/21/07 13:02	1.0	
010	172a010	SAMPLE	195303-013	S	Water	126479	06/21/07 13:27	1.0	
011	172a011	SAMPLE	195303-011	S	Water	126479	06/21/07 13:52	1.0	
013	172a013	SAMPLE	195303-018	S	Water	126479	06/21/07 14:42	1.0	
014	172a014	SAMPLE	195303-019	S	Water	126479	06/21/07 15:07	1.0	
015	172a015	SAMPLE	195303-020	S	Water	126479	06/21/07 15:33	1.0	
016	172a016	SAMPLE	195303-021	S	Water	126479	06/21/07 15:57	1.0	
017	172a017	SAMPLE	195303-022	S	Water	126479	06/21/07 16:23	1.0	
018	172a018	SAMPLE	195303-028	S	Water	126479	06/21/07 16:48	1.0	
020	172a020	CCV	DSL_1000				06/21/07 17:38	1.0	3
021	172a021	CCV	MO_500				06/21/07 18:03	1.0	2

Standards used: 1=S6346 2=S6046 3=S6347

REPORTING SUMMARY FOR 195303 GCSV Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
195303-002	GC15B	06/21/07 13:00	1.0	+	+	+	
195303-003	GC15B	06/21/07 13:55	1.0	+	+	+	
195303-004	GC15B	06/21/07 14:23	1.0	+	+	+	
195303-005	GC15B	06/21/07 14:50	1.0	+	+	+	
195303-006	GC15B	06/21/07 15:18	1.0	+	+	+	
195303-009	GC15B	06/21/07 15:46	1.0	+	+	+	
195303-010	GC26A	06/21/07 12:37	1.0	+	+	+	
195303-011	GC26A	06/21/07 13:52	1.0	+	+	+	
195303-012	GC26A	06/21/07 13:02	1.0	+	+	+	
195303-013	GC26A	06/21/07 13:27	1.0	+	+	+	
195303-015	GC17A	06/21/07 14:48	1.0	+	+	+	
195303-016	GC17A	06/21/07 15:16	1.0	+	+	+	
195303-017	GC17A	06/21/07 15:44	1.0	+	+	+	
195303-018	GC26A	06/21/07 14:42	1.0	+	+	+	
195303-019	GC26A	06/21/07 15:07	1.0	+	+	+	
195303-020	GC26A	06/21/07 15:33	1.0	+	+	+	
195303-021	GC26A	06/21/07 15:57	1.0	+	+	+	
195303-022	GC26A	06/21/07 16:23	1.0	+	+	+	
195303-024	GC11A	06/21/07 11:36	1.0	+	+	+	
195303-025	GC11A	06/21/07 12:04	1.0				
195303-025	GC11A	06/22/07 00:17	1.0	+	+	+	
195303-027	GC11A	06/21/07 12:32	1.0	+	+	+	
195303-028	GC26A	06/21/07 16:48	1.0	+	+	+	
195303-029	GC14B	06/21/07 13:43	1.0	+	+	+	
195303-030	GC11A	06/21/07 13:00	1.0	+	+	+	
QC393022	GC14B	06/21/07 12:19	1.0	+	+	+	

REPORTING SUMMARY FOR 195303 GCSV Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	DSL:	MO:2	HXCS	
QC393023	GC14B	06/21/07 12:47	1.0	+		+	
QC393024	GC14B	06/21/07 13:15	1.0	+		+	
QC393055	GC14B	06/21/07 10:55	1.0	+	+	+	
QC393056	GC14B	06/21/07 11:23	1.0	+		+	
QC393057	GC14B	06/21/07 11:51	1.0	+		+	

SAMPLE PREPARATION SUMMARY

Batch # : 126479
Started By : JLM
Method : 3520C
Spike #1 ID : S6507

Prep Date : 20-JUN-2007
Spike #2 ID : S6469

Analysis : TEHM
Finished By : DJT
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195303-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-020		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-021		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-022		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-028		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-029		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC393022	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC393023	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC393024	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

:09101

TEH (8015) Water Prep Log Curtis & Tompkins, Ltd.

Page 52 BK 2491

LIMS Batch No: 126479
LIMS Analysis: TEHM
Date Extracted: 6/20/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195303-002 K	500	7	2.5	X	
003					
004					
005					
006					
009 J					
010					
011 K					very thick, dark, sandy sample
012					
013 J					
015 K					
016					
017					
018					
019					
020					
021					
022					
028 E					
-029					
MB QC393022		N/A			
BS 3					
BSD 4					

JLM 6/22/07

* condensation on condensors when first placed on L/L, pos. contam.

	Mfg & Lot# / LIMS # / Time	Date/ Initial
0.5 mL of TEH_SURR was added to all samples	56507E	JLM 6/20/07
0.5 mL of TEH_SP was added to all spikes	56469C	
pH of all samples adjusted to pH ≤ 2 with H_2SO_4	FS065076	
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2 + Manopure	EM47110	
Extraction Start Time:	1125	
Extraction End Time:	0710	JLM for DJT 6/26
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2	N/A	
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4	EM46283786	
Concentrated to volumes as noted above	✓	
Relinquished to TEH Department	✓	

6/22/07
Extraction Chemist Date

Contined from Page 1
Continued on Page 1

6/22/07
Reviewed by Date

Curtis & Tompkins, Ltd. **Silica Gel Cleanup** **EPA 3630c**

Prep Chemist: DJT
Cleanup Date: 6/21/07

Benchbook # **BK 2520**
Page 18

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195303-002	126479	1.0	1.0	
003				
004				
005				
006				
009				
010				
011				
012				
013				
015				
016				
017				
018				
019				
020				
021				
022				
028				
029				
MB QC393022				
BS 3				
BSD 4				
				DJT 6/21/07

	Mfg & Lot # / Time / Program	Initials / Date
☐ Extracts were cleaned up using C&T assembled — g columns	NA	DJT 6/21/07
☒ Extracts were cleaned up using 1.0 g cartridges	SP8605	
Extracts were eluted with 4.0 mL CH_2Cl_2	EM47110	
Concentrated to volumes as noted above	✓	

6/21/07
Extraction Chemist / Date

Continued from page —
Continued on page —

6/22/07
Reviewed by / Date

SAMPLE PREPARATION SUMMARY

Batch # : 126486
Started By : JLM
Method : 3520C
Spike #1 ID : S6507

Prep Date : 20-JUN-2007
Spike #2 ID : S6469

Analysis : TEHM
Finished By : JLM
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195303-024		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-025		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-027		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195303-030		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
195396-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-016		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-017		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-018		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-019		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
195396-020		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC393055	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC393056	BS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC393057	BSD	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	

Analyst: DLM Date: 06/22/07 Reviewer: CP Date: 06/22/07

:22154

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 126486
LIMS Analysis: TEH M
Date Extracted: 6/20/07

Extraction Method:
☐ mod. EPA 3510c sep. funnel
☒ mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
☒ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195303-024 K	500	7	2.5	X	
025					
027					
030 N		5			
195396-013 J		7			
014 M					
015 I					
016 K					
017 L					
018 I					
019 M					
020 K					
MB QC393055		N/A			
BS 6					
BSD 7					

JLM 6/22/07

0.5 mL of TEH_SURR was added to all samples
0.5 mL of TEH_SP was added to all spikes
pH of all samples adjusted to pH ≤ 2 with H_2SO_4
☒ 3520c: Samples were continually extracted about 450 mL of CH_2Cl_2 + hexane
Extraction Start Time:
Extraction End Time:
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granular Na2SO4
Concentrated to volumes as noted above
Relinquished to TEH Department

Mfg & Lot# / LIMS # / Time	Date/ Initials
S6507E	JLM 6/20/07
S6469C	
FS065076	
EM47110	
1325	
0730	JLM 6/21/07
N/A	
EM46285706	
✓	
Good ✓	

Extraction Chemist 6/22/07 Date

Contined from Page /
Continued on Page /

Reviewed by 6/22/07 Date

Curtis & Tompkins, Ltd.

Silica Gel Cleanup

EPA 3630c

Prep Chemist: JLM
Cleanup Date: 6/21/07

Benchbook # **BK 2520**
Page 17

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
195303-024	126486	1.0	1.0	
-025				
-027				
-030				
195396-013				
-014				
-015				
-016				
-017				
-018				
-019				
-020				
MB QC393055				
BS 6				
BSD 7				

6/22/07

☐ Extracts were cleaned up using C&T assembled ___ g columns
☒ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 4.0 mL CH_2Cl_2
Concentrated to volumes as noted above

	Mfg & Lot # / Time / Program	Initials / Date
	U/A	JLM 6/21/07
	SP8605	
	EM47092	
	✓	

6/21/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

6/22/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water 3520C
As of 06/28/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B	GC26A	GC26B
JP-5 C10-C16	ug/L	8.7	16	8.1	9.2	6.7	14	6.5
Diesel C10-C28	ug/L	12		16	21	15	16	12
Diesel C10-C24	ug/L	9.5		17	19	15	16	11
Diesel C12-C22	ug/L	10		17	22	17	17	12
Diesel C12-C24	ug/L	11		18	22	16	17	12
Diesel C12-C32	ug/L	14		19	23	17	18	13
Diesel C10-C20	ug/L	8.6		16	19	16	17	10
Diesel C10-C22	ug/L	9.0		16	19	16	16	11
Diesel C16-C24	ug/L							6.0
Motor Oil C22-C36	ug/L	69	110	86	61	62	120	140
Motor Oil C28-C40	ug/L	41	68	100	63	75	120	130
Motor Oil C28-C36	ug/L	41	74	98	67	66	110	130
Motor Oil C24-C36	ug/L	56	140	85	56	64	110	130
Motor Oil C20-C36	ug/L	67	99	85	67	61	110	140
Motor Oil C22-C32	ug/L	72	130	86	65	59	120	140
Hexacosane	ug/L	4.5	16	13	3.1	17		

: 02157

Curtis & Tompkins, Ltd.

Volatile Organics
Water

: 00158

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW10	Batch#:	126189
Lab ID:	195303-002	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	97	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

8.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW16	Batch#:	126189
Lab ID:	195303-003	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

9.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW30	Batch#:	126189
Lab ID:	195303-004	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

10.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW21	Batch#:	126237
Lab ID:	195303-005	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Chloromethane	ND	2.0	
Vinyl Chloride	ND	1.0	
Bromomethane	ND	2.0	
Chloroethane	ND	2.0	
Acetone	ND	20	
1,1-Dichloroethene	ND	1.0	
Methylene Chloride	ND	8.0	
Carbon Disulfide	ND	1.0	
MTBE	ND	1.0	
trans-1,2-Dichloroethene	ND	1.0	
Vinyl Acetate	ND	20	
1,1-Dichloroethane	ND	1.0	
2-Butanone	ND	20	
cis-1,2-Dichloroethene	ND	1.0	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	1.0	
Carbon Tetrachloride	ND	1.0	
1,2-Dichloroethane	ND	1.0	
Benzene	130	1.0	0.5
Trichloroethene	ND	1.0	
1,2-Dichloropropane	ND	1.0	
Bromodichloromethane	ND	1.0	
4-Methyl-2-Pentanone	ND	20	
cis-1,3-Dichloropropene	ND	1.0	
Toluene	5.5	1.0	
trans-1,3-Dichloropropene	ND	1.0	
1,1,2-Trichloroethane	ND	1.0	
2-Hexanone	ND	20	
Tetrachloroethene	ND	1.0	
Dibromochloromethane	ND	1.0	
Chlorobenzene	ND	1.0	
Ethylbenzene	3.3	1.0	
Styrene	ND	1.0	
Bromoform	ND	2.0	
1,1,2,2-Tetrachloroethane	ND	1.0	
Xylene (total)	3.6	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-123
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

11.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW22	Batch#:	126298
Lab ID:	195303-006	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	50.00		

Analyte	Result	RL	MDL
Chloromethane	ND	50	
Vinyl Chloride	ND	25	
Bromomethane	ND	50	
Chloroethane	ND	50	
Acetone	ND	500	
1,1-Dichloroethene	ND	25	
Methylene Chloride	ND	200	
Carbon Disulfide	ND	25	
MTBE	ND	25	
trans-1,2-Dichloroethene	ND	25	
Vinyl Acetate	ND	500	
1,1-Dichloroethane	ND	25	
2-Butanone	ND	500	
cis-1,2-Dichloroethene	ND	25	
Chloroform	ND	25	
1,1,1-Trichloroethane	ND	25	
Carbon Tetrachloride	ND	25	
1,2-Dichloroethane	ND	25	
Benzene	2,800	25	13
Trichloroethene	ND	25	
1,2-Dichloropropane	ND	25	
Bromodichloromethane	ND	25	
4-Methyl-2-Pentanone	ND	500	
cis-1,3-Dichloropropene	ND	25	
Toluene	31	25	
trans-1,3-Dichloropropene	ND	25	
1,1,2-Trichloroethane	ND	25	
2-Hexanone	ND	500	
Tetrachloroethene	ND	25	
Dibromochloromethane	ND	25	
Chlorobenzene	ND	25	
Ethylbenzene	100	25	
Styrene	ND	25	
Bromoform	ND	50	
1,1,2,2-Tetrachloroethane	ND	25	
Xylene (total)	280	50	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	106	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

12.0

: 00179

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0607073A	Batch#:	126189
Lab ID:	195303-007	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

13.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231PZ04	Units:	ug/L
Lab ID:	195303-012	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	2.5		2.500	126298	06/14/07
Vinyl Chloride	ND	1.3		2.500	126298	06/14/07
Bromomethane	ND	2.5		2.500	126298	06/14/07
Chloroethane	ND	2.5		2.500	126298	06/14/07
Acetone	ND	25		2.500	126298	06/14/07
1,1-Dichloroethene	ND	1.3		2.500	126298	06/14/07
Methylene Chloride	ND	10		2.500	126298	06/14/07
Carbon Disulfide	ND	1.3		2.500	126298	06/14/07
MTBE	ND	1.3		2.500	126298	06/14/07
trans-1,2-Dichloroethene	ND	1.3		2.500	126298	06/14/07
Vinyl Acetate	ND	25		2.500	126298	06/14/07
1,1-Dichloroethane	ND	1.3		2.500	126298	06/14/07
2-Butanone	ND	25		2.500	126298	06/14/07
cis-1,2-Dichloroethene	ND	1.3		2.500	126298	06/14/07
Chloroform	ND	1.3		2.500	126298	06/14/07
1,1,1-Trichloroethane	ND	1.3		2.500	126298	06/14/07
Carbon Tetrachloride	ND	1.3		2.500	126298	06/14/07
1,2-Dichloroethane	ND	1.3		2.500	126298	06/14/07
Benzene	260	25	13	50.00	126237	06/13/07
Trichloroethene	ND	1.3		2.500	126298	06/14/07
1,2-Dichloropropane	ND	1.3		2.500	126298	06/14/07
Bromodichloromethane	ND	1.3		2.500	126298	06/14/07
4-Methyl-2-Pentanone	ND	25		2.500	126298	06/14/07
cis-1,3-Dichloropropene	ND	1.3		2.500	126298	06/14/07
Toluene	6.7	1.3		2.500	126298	06/14/07
trans-1,3-Dichloropropene	ND	1.3		2.500	126298	06/14/07
1,1,2-Trichloroethane	ND	1.3		2.500	126298	06/14/07
2-Hexanone	ND	25		2.500	126298	06/14/07
Tetrachloroethene	ND	1.3		2.500	126298	06/14/07
Dibromochloromethane	ND	1.3		2.500	126298	06/14/07
Chlorobenzene	ND	1.3		2.500	126298	06/14/07
Ethylbenzene	13	1.3		2.500	126298	06/14/07
Styrene	ND	1.3		2.500	126298	06/14/07
Bromoform	ND	2.5		2.500	126298	06/14/07
1,1,2,2-Tetrachloroethane	ND	1.3		2.500	126298	06/14/07
Xylene (total)	2.8	2.5		2.500	126298	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	111	80-123	2.500	126298	06/14/07
1,2-Dichloroethane-d4	99	76-114	2.500	126298	06/14/07
Toluene-d8	99	88-110	2.500	126298	06/14/07
Bromofluorobenzene	102	86-115	2.500	126298	06/14/07

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

14.0

198175

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231PZ03	Batch#:	126298
Lab ID:	195303-013	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	2.500		

Analyte	Result	RL	MDL
Chloromethane	ND	2.5	
Vinyl Chloride	ND	1.3	
Bromomethane	ND	2.5	
Chloroethane	ND	2.5	
Acetone	ND	25	
1,1-Dichloroethene	ND	1.3	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	1.3	
MTBE	ND	1.3	
trans-1,2-Dichloroethene	ND	1.3	
Vinyl Acetate	ND	25	
1,1-Dichloroethane	ND	1.3	
2-Butanone	ND	25	
cis-1,2-Dichloroethene	ND	1.3	
Chloroform	ND	1.3	
1,1,1-Trichloroethane	ND	1.3	
Carbon Tetrachloride	ND	1.3	
1,2-Dichloroethane	ND	1.3	
Benzene	190	1.3	0.6
Trichloroethene	ND	1.3	
1,2-Dichloropropane	ND	1.3	
Bromodichloromethane	ND	1.3	
4-Methyl-2-Pentanone	ND	25	
cis-1,3-Dichloropropene	ND	1.3	
Toluene	7.1	1.3	
trans-1,3-Dichloropropene	ND	1.3	
1,1,2-Trichloroethane	ND	1.3	
2-Hexanone	ND	25	
Tetrachloroethene	ND	1.3	
Dibromochloromethane	ND	1.3	
Chlorobenzene	ND	1.3	
Ethylbenzene	3.8	1.3	
Styrene	ND	1.3	
Bromoform	ND	2.5	
1,1,2,2-Tetrachloroethane	ND	1.3	
Xylene (total)	4.2	2.5	

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

15.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0607071A	Batch#:	126189
Lab ID:	195303-014	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

16.0

128177

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW17	Batch#:	126189
Lab ID:	195303-015	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	2.1	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	97	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

17.0

: 00178

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW18	Batch#:	126189
Lab ID:	195303-016	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	0.6	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

18.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW24	Batch#:	126189
Lab ID:	195303-017	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

19.0

: 02199

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW19	Batch#:	126189
Lab ID:	195303-018	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

20.0

:GB1B1

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW15	Batch#:	126189
Lab ID:	195303-019	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW25	Batch#:	126195
Lab ID:	195303-020	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

22.0

: 86183

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW23	Batch#:	126195
Lab ID:	195303-021	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

23.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW11	Batch#:	126195
Lab ID:	195303-022	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	107	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

24.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0607072A	Batch#:	126195
Lab ID:	195303-023	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

25.0

195195

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW26	Batch#:	126195
Lab ID:	195303-024	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	1.1	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.06 J	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

26.0

08197

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW27	Batch#:	126195
Lab ID:	195303-025	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	0.9	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.04 J	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	107	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

27.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	207GW03	Batch#:	126195
Lab ID:	195303-027	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	104	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

28.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231PZ01	Batch#:	126250
Lab ID:	195303-028	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	62.50		

Analyte	Result	RL	MDL
Chloromethane	ND	63	
Vinyl Chloride	ND	31	
Bromomethane	ND	63	
Chloroethane	ND	63	
Acetone	ND	630	
1,1-Dichloroethene	ND	31	
Methylene Chloride	ND	250	
Carbon Disulfide	ND	31	
MTBE	ND	31	
trans-1,2-Dichloroethene	ND	31	
Vinyl Acetate	ND	630	
1,1-Dichloroethane	ND	31	
2-Butanone	ND	630	
cis-1,2-Dichloroethene	ND	31	
Chloroform	ND	31	
1,1,1-Trichloroethane	ND	31	
Carbon Tetrachloride	ND	31	
1,2-Dichloroethane	ND	31	
Benzene	4,700	31	1.8
Trichloroethene	ND	31	
1,2-Dichloropropane	ND	31	
Bromodichloromethane	ND	31	
4-Methyl-2-Pentanone	ND	630	
cis-1,3-Dichloropropene	ND	31	
Toluene	ND	31	
trans-1,3-Dichloropropene	ND	31	
1,1,2-Trichloroethane	ND	31	
2-Hexanone	ND	630	
Tetrachloroethene	ND	31	
Dibromochloromethane	ND	31	
Chlorobenzene	ND	31	
Ethylbenzene	130	31	
Styrene	ND	31	
Bromoform	ND	63	
1,1,2,2-Tetrachloroethane	ND	31	
Xylene (total)	ND	63	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231PZ02	Batch#:	126250
Lab ID:	195303-029	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Chloromethane	ND	2.0	
Vinyl Chloride	ND	1.0	
Bromomethane	ND	2.0	
Chloroethane	ND	2.0	
Acetone	ND	20	
1,1-Dichloroethene	ND	1.0	
Methylene Chloride	ND	8.0	
Carbon Disulfide	ND	1.0	
MTBE	ND	1.0	
trans-1,2-Dichloroethene	ND	1.0	
Vinyl Acetate	ND	20	
1,1-Dichloroethane	ND	1.0	
2-Butanone	ND	20	
cis-1,2-Dichloroethene	ND	1.0	
Chloroform	ND	1.0	
1,1,1-Trichloroethane	ND	1.0	
Carbon Tetrachloride	ND	1.0	
1,2-Dichloroethane	ND	1.0	
Benzene	140	1.0	0.06
Trichloroethene	ND	1.0	
1,2-Dichloropropane	ND	1.0	
Bromodichloromethane	ND	1.0	
4-Methyl-2-Pentanone	ND	20	
cis-1,3-Dichloropropene	ND	1.0	
Toluene	3.4	1.0	
trans-1,3-Dichloropropene	ND	1.0	
1,1,2-Trichloroethane	ND	1.0	
2-Hexanone	ND	20	
Tetrachloroethene	ND	1.0	
Dibromochloromethane	ND	1.0	
Chlorobenzene	ND	1.0	
Ethylbenzene	ND	1.0	
Styrene	ND	1.0	
Bromoform	ND	2.0	
1,1,2,2-Tetrachloroethane	ND	1.0	
Xylene (total)	2.3	2.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

30.1

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW060807B	Batch#:	126195
Lab ID:	195303-030	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

31.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391801	Batch#:	126189
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

32.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391839	Batch#:	126195
Matrix:	Water	Analyzed:	06/12/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392036	Batch#:	126237
Matrix:	Water	Analyzed:	06/13/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

36.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392081	Batch#:	126250
Matrix:	Water	Analyzed:	06/13/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

38.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392287	Batch#:	126298
Matrix:	Water	Analyzed:	06/14/07
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.3
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

41.0

:88197

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126189
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type: BS Lab ID: QC391802

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.99	112	65-135
Benzene	25.00	26.11	104	65-135
Trichloroethene	25.00	25.18	101	65-135
Toluene	25.00	27.20	109	65-135
Chlorobenzene	25.00	26.22	105	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

Type: BSD Lab ID: QC391803

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.32	109	65-135	2	35
Benzene	25.00	25.80	103	65-135	1	35
Trichloroethene	25.00	25.06	100	65-135	0	35
Toluene	25.00	26.98	108	65-135	1	35
Chlorobenzene	25.00	25.79	103	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126195
Units:	ug/L	Analyzed:	06/12/07
Diln Fac:	1.000		

Type: BS Lab ID: QC391840

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	14.39	115	65-135
Benzene	12.50	13.87	111	65-135
Trichloroethene	12.50	13.81	110	65-135
Toluene	12.50	13.69	110	65-135
Chlorobenzene	12.50	13.67	109	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	96	86-115

Type: BSD Lab ID: QC391841

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	13.83	111	65-135	4	35
Benzene	12.50	13.66	109	65-135	2	35
Trichloroethene	12.50	13.66	109	65-135	1	35
Toluene	12.50	13.77	110	65-135	1	35
Chlorobenzene	12.50	13.20	106	65-135	4	35

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	102	86-115

RPD= Relative Percent Difference

35.0

:00159

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126237
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type: BS Lab ID: QC392037

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.25	105	65-135
Benzene	25.00	24.74	99	65-135
Trichloroethene	25.00	22.91	92	65-135
Toluene	25.00	25.48	102	65-135
Chlorobenzene	25.00	23.98	96	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	99	86-115

Type: BSD Lab ID: QC392038

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.03	108	65-135	3	35
Benzene	25.00	25.31	101	65-135	2	35
Trichloroethene	25.00	24.26	97	65-135	6	35
Toluene	25.00	25.75	103	65-135	1	35
Chlorobenzene	25.00	24.64	99	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-123
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	101	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126250
Units:	ug/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type: BS Lab ID: QC392082

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	15.24	122	65-135
Benzene	12.50	14.69	118	65-135
Trichloroethene	12.50	14.11	113	65-135
Toluene	12.50	14.54	116	65-135
Chlorobenzene	12.50	14.01	112	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	99	86-115

Type: BSD Lab ID: QC392083

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	14.17	113	65-135	7	35
Benzene	12.50	13.98	112	65-135	5	35
Trichloroethene	12.50	13.97	112	65-135	1	35
Toluene	12.50	14.01	112	65-135	4	35
Chlorobenzene	12.50	13.97	112	65-135	0	35

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	98	86-115

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	126298
Units:	ug/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Type: BS Lab ID: QC392285

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.12	112	65-135
Benzene	25.00	26.07	104	65-135
Trichloroethene	25.00	24.29	97	65-135
Toluene	25.00	26.76	107	65-135
Chlorobenzene	25.00	25.43	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	102	86-115

Type: BSD Lab ID: QC392286

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	30.95	124	65-135	10	35
Benzene	25.00	28.23	113	65-135	8	35
Trichloroethene	25.00	26.11	104	65-135	7	35
Toluene	25.00	28.15	113	65-135	5	35
Chlorobenzene	25.00	27.06	108	65-135	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	104	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 477218189003 File : hev03 Time : 31-MAY-2007 13:17

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	17464	21.12	
75	30.00% - 60.00% of mass 95	39472	47.75	
95		82672		
96	5.00% - 9.00% of mass 95	5881	7.11	
173	< 2.00% of mass 174	677	1.03	
174	> 50.00% and < 100.00% of mass 95	66008	79.84	
175	5.00% - 9.00% of mass 174	4270	6.47	
176	> 95.00% and < 101.00% of mass 174	64920	98.35	
177	5.00% - 9.00% of mass 176	4781	7.36	

Analyst: TEW Date: 05/31/07 Reviewer: LW Date: 06/05/07

477218189003

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 477235217002 File : hfc02 Time : 12-JUN-2007 09:44

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15569	22.83	
75	30.00% - 60.00% of mass 95	30538	44.78	
95		68194		
96	5.00% - 9.00% of mass 95	4725	6.93	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	46674	68.44	
175	5.00% - 9.00% of mass 174	3664	7.85	
176	> 95.00% and < 101.00% of mass 174	44541	95.43	
177	5.00% - 9.00% of mass 176	3405	7.64	

Analyst: TEW Date: 06/12/07 Reviewer: ACM Date: 06/13/07

477235217002

:88284

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : BFB IDF : 1.0
Seqnum : 477236639002 File : hfd02 Time : 13-JUN-2007 10:14

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	24938	21.67	
75	30.00% - 60.00% of mass 95	51237	44.52	
95		115098		
96	5.00% - 9.00% of mass 95	7044	6.12	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	81728	71.01	
175	5.00% - 9.00% of mass 174	4554	5.57	
176	> 95.00% and < 101.00% of mass 174	79954	97.83	
177	5.00% - 9.00% of mass 176	5066	6.34	

Analyst: TEW Date: 06/13/07 Reviewer: ACM Date: 06/14/07

477236639002

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497177754005 File : je305 Time : 03-MAY-2007 12:11

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	79938	21.98	
75	30.00% - 60.00% of mass 95	161536	44.42	
95		363648		
96	5.00% - 9.00% of mass 95	24247	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	279530	76.87	
175	5.00% - 9.00% of mass 174	21048	7.53	
176	> 95.00% and < 101.00% of mass 174	272661	97.54	
177	5.00% - 9.00% of mass 176	17603	6.46	

Analyst: ACM Date: 05/04/07 Reviewer: LW Date: 05/04/07

497177754005

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497235206002 File : jfc02 Time : 12-JUN-2007 08:48

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	233078	21.52	
75	30.00% - 60.00% of mass 95	473749	43.74	
95		1083008		
96	5.00% - 9.00% of mass 95	72970	6.74	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	807232	74.54	
175	5.00% - 9.00% of mass 174	61818	7.66	
176	> 95.00% and < 101.00% of mass 174	794026	98.36	
177	5.00% - 9.00% of mass 176	52738	6.64	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

497235206002

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497235206009 File : jfc09 Time : 12-JUN-2007 12:48

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	175018	21.13	
75	30.00% - 60.00% of mass 95	360341	43.50	
95		828416		
96	5.00% - 9.00% of mass 95	55533	6.70	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	623040	75.21	
175	5.00% - 9.00% of mass 174	48890	7.85	
176	> 95.00% and < 101.00% of mass 174	612224	98.26	
177	5.00% - 9.00% of mass 176	40125	6.55	

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

497235206009

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497236627006 File : jfd06 Time : 13-JUN-2007 10:32

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	101733	21.06	
75	30.00% - 60.00% of mass 95	205589	42.56	
95		483093		
96	5.00% - 9.00% of mass 95	32298	6.69	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	369600	76.51	
175	5.00% - 9.00% of mass 174	28248	7.64	
176	> 95.00% and < 101.00% of mass 174	360874	97.64	
177	5.00% - 9.00% of mass 176	23749	6.58	

SJD: 06/13/07 ACM: 06/13/07 CW: 06/14/07

CURTIS & TOMPKINS BFB TUNE FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 497238068004 File : jfe04 Time : 14-JUN-2007 09:27

Standards: S5117

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	125826	20.55	
75	30.00% - 60.00% of mass 95	253546	41.41	
95		612288		
96	5.00% - 9.00% of mass 95	41813	6.83	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	466282	76.15	
175	5.00% - 9.00% of mass 174	36584	7.85	
176	> 95.00% and < 101.00% of mass 174	452757	97.10	
177	5.00% - 9.00% of mass 176	29120	6.43	

Analyst: ACM Date: 06/15/07 Reviewer: CW Date: 06/15/07

497238068004

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 MSVOA Water: EPA 8260B

Inst : MSVOA08
Calnum : 477218189002
Units : ug/L

Name : 826GOX8
Date : 31-MAY-2007 15:05
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	hev06	477218189006	0.25/0.5PPB	31-MAY-2007 15:05	S6300 (200000X), S6301 (100000X), S6355 (200000X), S6084 (5000X)
L2	hev07	477218189007	0.5/1PPB	31-MAY-2007 15:43	S6300 (100000X), S6301 (50000X), S6355 (100000X), S6084 (5000X)
L3	hev08	477218189008	2PPB	31-MAY-2007 16:21	S6300 (50000X), S6301 (25000X), S6355 (25000X), S6084 (5000X)
L4	hev09	477218189009	5PPB	31-MAY-2007 17:00	S6300 (20000X), S6301 (10000X), S6355 (10000X), S6084 (5000X)
L5	hev10	477218189010	10PPB	31-MAY-2007 17:38	S6300 (10000X), S6301 (5000X), S6355 (5000X), S6084 (5000X)
L6	hev11	477218189011	20PPB	31-MAY-2007 18:16	S6217 (25000X), S6350 (25000X), S5720 (50000X), S6084 (5000X)
L7	hev12	477218189012	50PPB	31-MAY-2007 18:54	S6217 (10000X), S6350 (10000X), S5720 (20000X), S6084 (5000X)
L8	hev13	477218189013	75PPB	31-MAY-2007 19:32	S6217 (6667X), S6350 (6667X), S5720 (13330X), S6084 (5000X)
L9	hev14	477218189014	100PPB	31-MAY-2007 20:10	S6217 (5000X), S6350 (5000X), S5720 (10000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5911m	0.5682m	0.5151m	0.5381m	0.5743m	0.5272m	0.5013m	0.4887m	AVRG		1.85878		0.5380	7	15	0.10	0.99	
Vinyl Chloride	0.4764m	0.3904m	0.4177m	0.4211m	0.4554m	0.5050m	0.4523m	0.4496	0.4136	AVRG		2.26040		0.4424	8	15	0.05	0.99	
Bromomethane		0.2146m	0.2740m	0.1995m	0.2181m	0.2531m	0.2430m	0.2686m	0.2501m	AVRG		4.16440		0.2401	11	15	0.05	0.99	
Chloroethane		0.2434m	0.2373m	0.2373m	0.2507m	0.2680m	0.2582m	0.2367m	0.2295m	AVRG		4.07936		0.2451	5	15	0.05	0.99	
Acetone				0.1988	0.1953	0.1738	0.1760	0.1400		AVRG		5.65618		0.1768	13	15	0.05	0.99	
1,1-Dichloroethene		0.3074	0.2591	0.2518	0.2741	0.2473	0.2579	0.2533	0.2590	AVRG		3.79143		0.2638	7	15	0.05	0.99	
Methylene Chloride		0.3807	0.3657	0.3643	0.3803	0.3550	0.3783	0.3578	0.3576	AVRG		2.72141		0.3675	3	15	0.05	0.99	
Carbon Disulfide		1.3205	1.2171	1.1654	1.3319	1.1735	1.1898	1.1644	1.1358	AVRG		0.82488		1.2123	6	15	0.05	0.99	
MTBE		0.9539	0.9432	0.9052	0.9683	0.9322	0.9536	0.9444	0.9164	AVRG		1.06422		0.9397	2	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3411	0.3055	0.2992	0.3184	0.2937	0.3045	0.3047	0.3066	AVRG		3.23404		0.3092	5	15	0.05	0.99	
Vinyl Acetate		0.5452	0.7248	0.6503	0.5677	0.7772	0.7197			AVRG		1.50569		0.6641	14	15	0.05	0.99	
1,1-Dichloroethane		0.7119	0.6371	0.6132	0.6598	0.6192	0.6221	0.6112	0.5773	AVRG		1.58357		0.6315	6	15	0.10	0.99	
2-Butanone			0.2582	0.2256	0.2431	0.2286	0.2347	0.2190	0.2145	AVRG		4.31143		0.2319	6	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3507	0.3308	0.3182	0.3466	0.3290	0.3382	0.3360	0.3276	AVRG		2.98821		0.3346	3	15	0.05	0.99	
Chloroform		0.6237	0.5690	0.5508	0.5901	0.5412	0.5679	0.5398	0.5202	AVRG		1.77672		0.5628	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.4104	0.3659	0.3781	0.3994	0.3530	0.3589	0.3484	0.3464	AVRG		2.70216		0.3701	6	15	0.05	0.99	
Carbon Tetrachloride		0.1949	0.1729	0.1646	0.1871	0.1509	0.1576	0.1551	0.1550	AVRG		5.97952		0.1672	10	15	0.05	0.99	
1,2-Dichloroethane		0.2749	0.2815	0.2713	0.2765	0.2615	0.2831	0.2636	0.2508	AVRG		3.69840		0.2704	4	15	0.05	0.99	
Benzene		0.8263	0.7259	0.7098	0.7232	0.6695	0.7137	0.6606	0.6205	AVRG		1.41608		0.7062	9	15	0.05	0.99	
Trichloroethene		0.1855	0.1667	0.1656	0.1818	0.1563	0.1706	0.1643	0.1631	AVRG		5.90908		0.1692	6	15	0.05	0.99	
1,2-Dichloropropane		0.2309	0.2168	0.2188	0.2198	0.2031	0.2164	0.2105	0.1973	AVRG		4.66877		0.2142	5	15	0.05	0.99	
Bromodichloromethane		0.2652	0.2395	0.2362	0.2528	0.2387	0.2634	0.2483	0.2456	AVRG		4.02090		0.2487	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2765	0.2632	0.2829	0.2629	0.2906	0.2628	0.2566	AVRG		3.69284		0.2708	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.2776	0.2862	0.2861	0.3020	0.2807	0.3052	0.3007	0.2854	AVRG		3.44257		0.2905	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4176	0.4019	0.3840	0.4090	0.3538	0.3804	0.3771	0.3644	AVRG		2.59052		0.3860	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2418	0.2634	0.2481	0.2740	0.2531	0.2786	0.2668	0.2607	AVRG		3.83442		0.2608	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.0858	0.0947	0.0900	0.0942	0.0909	0.1015	0.0967	0.0963	AVRG		10.6661		0.0938	5	15	0.05	0.99	
2-Hexanone			0.2260	0.2159	0.2449	0.2230	0.2468	0.2273	0.2196	AVRG		4.36541		0.2291	5	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1684	0.1718	0.1827	0.1461	0.1515	0.1497	0.1621	AVRG		6.04036		0.1656	10	15	0.05	0.99	
Dibromochloromethane		0.2221	0.2154	0.1991	0.2172	0.2053	0.2351	0.2194	0.2320	AVRG		4.58298		0.2182	6	15	0.05	0.99	
Chlorobenzene		0.5786	0.5438	0.5198	0.5442	0.4796	0.5125	0.5006	0.4906	AVRG		1.91863		0.5212	6	15	0.30	0.99	
Ethylbenzene		1.0922	0.9674	0.9391	0.9848	0.8078	0.8147	0.7781	0.7708	AVRG		1.11812		0.8944	13	15	0.05	0.99	
m,p-Xylenes	0.3616	0.3637	0.3512	0.3363	0.3565	0.3009	0.3155	0.3032	0.3033	AVRG		3.00773		0.3325	8	15	0.05	0.99	
o-Xylene		0.3832	0.3126	0.3277	0.3501	0.2999	0.3086	0.3122	0.3099	AVRG		3.07201		0.3255	9	15	0.05	0.99	
Styrene		0.5544	0.5722	0.5546	0.5939	0.5216	0.5677	0.5467	0.5326	AVRG		1.80032		0.5555	4	15	0.05	0.99	
Bromoform		0.0903m	0.1070	0.1280	0.1402	0.1367	0.1611	0.1510	0.1631	LINR	1.31730	6.18683		0.1347	0.998	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6433	0.6754	0.6080	0.6080	0.5982	0.6650	0.6149	0.6229	AVRG		1.58868		0.6295	5	15	0.30	0.99	
Dibromofluoromethane	0.6411	0.6360	0.6456	0.6517	0.6572	0.6591	0.6454	0.6392	0.6249	AVRG		1.55171		0.6445	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.4487	0.4367	0.4379	0.4426	0.4358	0.4284	0.4324	0.3931	0.3669	AVRG		2.35449		0.4247	6	15	0.05	0.99	
Toluene-d8	1.0525	1.0398	1.0604	1.0557	1.0131	1.0524	1.0725	1.0614	1.0198	AVRG		0.95465		1.0475	2	15	0.05	0.99	
Bromofluorobenzene	1.1368	1.1723	1.1391	1.1410	1.1208	1.1332	1.1090	1.0938	1.1021	AVRG		0.88687		1.1276	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	10	2.000	6	5.000	-4	10.00	0	20.00	7	50.00	-2	75.00	-7	100.0	-9
Vinyl Chloride	0.500	8	1.000	-12	2.000	-6	5.000	-5	10.00	3	20.00	14	50.00	2	75.00	2	100.0	-7
Bromomethane			1.000	-11	2.000	14	5.000	-17	10.00	-9	20.00	5	50.00	1	75.00	12	100.0	4
Chloroethane			1.000	-1	2.000	-3	5.000	-3	10.00	2	20.00	9	50.00	5	75.00	-3	100.0	-6
Acetone							5.000	12	10.00	10	20.00	-2	50.00	0	75.00	-21		
1,1-Dichloroethene			0.500	17	2.000	-2	5.000	-5	10.00	4	20.00	-6	50.00	-2	75.00	-4	100.0	-2
Methylene Chloride			0.500	4	2.000	0	5.000	-1	10.00	3	20.00	-3	50.00	3	75.00	-3	100.0	-3
Carbon Disulfide			0.500	9	2.000	0	5.000	-4	10.00	10	20.00	-3	50.00	-2	75.00	-4	100.0	-6
MTBE			0.500	2	2.000	0	5.000	-4	10.00	3	20.00	-1	50.00	1	75.00	1	100.0	-2
trans-1,2-Dichloroethene			0.500	10	2.000	-1	5.000	-3	10.00	3	20.00	-5	50.00	-2	75.00	-1	100.0	-1
Vinyl Acetate			0.500	-18	2.000	9	5.000	-2	10.00	-15	20.00	17	50.00	8				
1,1-Dichloroethane			0.500	13	2.000	1	5.000	-3	10.00	4	20.00	-2	50.00	-1	75.00	-3	100.0	-9
2-Butanone					2.000	11	5.000	-3	10.00	5	20.00	-1	50.00	1	75.00	-6	100.0	-8
cis-1,2-Dichloroethene			0.500	5	2.000	-1	5.000	-5	10.00	4	20.00	-2	50.00	1	75.00	0	100.0	-2
Chloroform			0.500	11	2.000	1	5.000	-2	10.00	5	20.00	-4	50.00	1	75.00	-4	100.0	-8
1,1,1-Trichloroethane			0.500	11	2.000	-1	5.000	2	10.00	8	20.00	-5	50.00	-3	75.00	-6	100.0	-6
Carbon Tetrachloride			0.500	17	2.000	3	5.000	-2	10.00	12	20.00	-10	50.00	-6	75.00	-7	100.0	-7
1,2-Dichloroethane			0.500	2	2.000	4	5.000	0	10.00	2	20.00	-3	50.00	5	75.00	-3	100.0	-7
Benzene			0.500	17	2.000	3	5.000	1	10.00	2	20.00	-5	50.00	1	75.00	-6	100.0	-12
Trichloroethene			0.500	10	2.000	-2	5.000	-2	10.00	7	20.00	-8	50.00	1	75.00	-3	100.0	-4
1,2-Dichloropropane			0.500	8	2.000	1	5.000	2	10.00	3	20.00	-5	50.00	1	75.00	-2	100.0	-8
Bromodichloromethane			0.500	7	2.000	-4	5.000	-5	10.00	2	20.00	-4	50.00	6	75.00	0	100.0	-1
4-Methyl-2-Pentanone					2.000	2	5.000	-3	10.00	4	20.00	-3	50.00	7	75.00	-3	100.0	-5
cis-1,3-Dichloropropene			0.500	-4	2.000	-1	5.000	-2	10.00	4	20.00	-3	50.00	5	75.00	4	100.0	-2
Toluene			0.500	8	2.000	4	5.000	-1	10.00	6	20.00	-8	50.00	-1	75.00	-2	100.0	-6
trans-1,3-Dichloropropene			0.500	-7	2.000	1	5.000	-5	10.00	5	20.00	-3	50.00	7	75.00	2	100.0	0
1,1,2-Trichloroethane			0.500	-9	2.000	1	5.000	-4	10.00	1	20.00	-3	50.00	8	75.00	3	100.0	3
2-Hexanone					2.000	-1	5.000	-6	10.00	7	20.00	-3	50.00	8	75.00	-1	100.0	-4
Tetrachloroethene			0.500	16	2.000	2	5.000	4	10.00	10	20.00	-12	50.00	-8	75.00	-10	100.0	-2
Dibromochloromethane			0.500	2	2.000	-1	5.000	-9	10.00	0	20.00	-6	50.00	8	75.00	1	100.0	6
Chlorobenzene			0.500	11	2.000	4	5.000	0	10.00	4	20.00	-8	50.00	-2	75.00	-4	100.0	-6
Ethylbenzene			0.500	22	2.000	8	5.000	5	10.00	10	20.00	-10	50.00	-9	75.00	-13	100.0	-14
m,p-Xylenes	0.500	9	1.000	9	4.000	6	10.00	1	20.00	7	40.00	-9	100.0	-5	150.0	-9	200.0	-9
o-Xylene			0.500	18	2.000	-4	5.000	1	10.00	8	20.00	-8	50.00	-5	75.00	-4	100.0	-5
Styrene			0.500	0	2.000	3	5.000	0	10.00	7	20.00	-6	50.00	2	75.00	-2	100.0	-4
Bromoform			0.500	219	2.000	32	5.000	6	10.00	0	20.00	-9	50.00	2	75.00	-5	100.0	2
1,1,2,2-Tetrachloroethane			0.500	2	2.000	7	5.000	-3	10.00	-3	20.00	-5	50.00	6	75.00	-2	100.0	-1
Dibromofluoromethane	50.00	-1	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	2	50.00	0	50.00	-1	50.00	-3
1,2-Dichloroethane-d4	50.00	6	50.00	3	50.00	3	50.00	4	50.00	3	50.00	1	50.00	2	50.00	-7	50.00	-14
Toluene-d8	50.00	0	50.00	-1	50.00	1	50.00	1	50.00	-3	50.00	0	50.00	2	50.00	1	50.00	-3
Bromofluorobenzene	50.00	1	50.00	4	50.00	1	50.00	1	50.00	-1	50.00	0	50.00	-2	50.00	-3	50.00	-2

TEW 06/04/07 : Fixed spike amount for gases in LIMS for run hev07.

Analyst: TEW Date: 06/04/07 Reviewer: LW Date: 06/05/07

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression

477218189002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Name : 826GOX8
Calnum : 477218189002 Cal Date : 31-MAY-2007 Type : WATER

ICV 477218189015 (hev15 31-MAY-2007) stds: S6357 (10000X), S6084 (5000X)
ICV 477218189016 (hev16 31-MAY-2007) stds: S5968 (10000X), S6207 (10000X), S6084 (5000X)

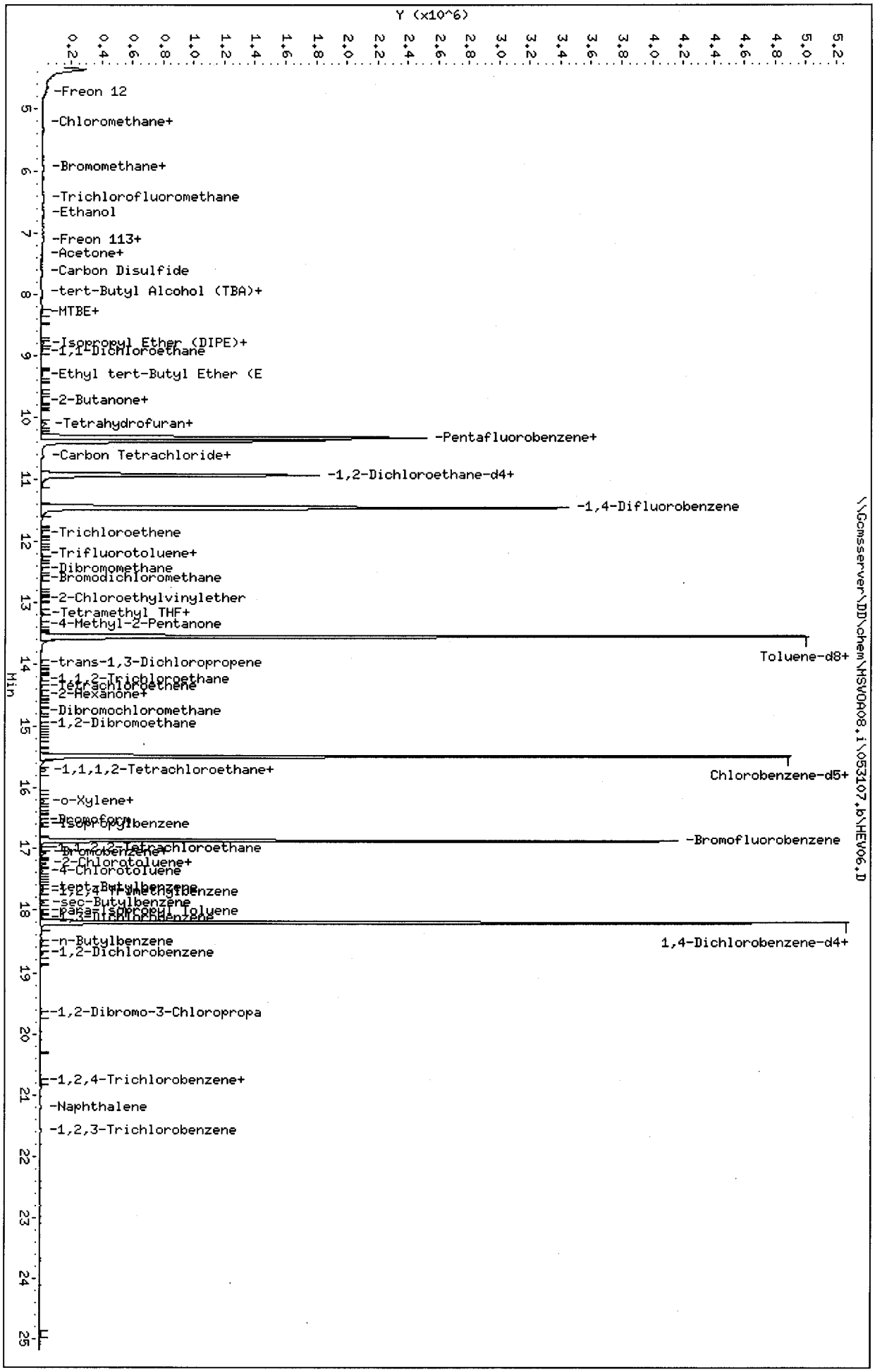
Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	477218189015	0.5380	0.4110	25.00	19.10	ug/L	**-24**	30	!v- m
Vinyl Chloride	477218189015	0.4424	0.3691	25.00	20.86	ug/L	-17	20	m
Bromomethane	477218189015	0.2401	0.2033	25.00	21.17	ug/L	-15	30	m
Chloroethane	477218189015	0.2451	0.2130	25.00	21.72	ug/L	-13	30	m
Acetone	477218189016	0.1768	0.1248	25.00	17.65	ug/L	-29	40	
1,1-Dichloroethene	477218189016	0.2638	0.2164	25.00	20.51	ug/L	-18	20	
Methylene Chloride	477218189016	0.3675	0.3264	25.00	22.20	ug/L	-11	30	
Carbon Disulfide	477218189016	1.2123	0.7115	25.00	14.67	ug/L	**-41**	30	v- ***
MTBE	477218189016	0.9397	0.8597	25.00	22.87	ug/L	-9	30	
trans-1,2-Dichloroethene	477218189016	0.3092	0.2711	25.00	21.92	ug/L	-12	30	
Vinyl Acetate	477218189016	0.6641	0.6178	25.00	23.26	ug/L	-7	40	
1,1-Dichloroethane	477218189016	0.6315	0.5378	25.00	21.29	ug/L	-15	30	
2-Butanone	477218189016	0.2319	0.1814	25.00	19.55	ug/L	-22	40	
cis-1,2-Dichloroethene	477218189016	0.3346	0.3092	25.00	23.10	ug/L	-8	30	
Chloroform	477218189016	0.5628	0.5038	25.00	22.38	ug/L	-10	20	
1,1,1-Trichloroethane	477218189016	0.3701	0.3386	25.00	22.87	ug/L	-9	30	
Carbon Tetrachloride	477218189016	0.1672	0.1639	25.00	24.49	ug/L	-2	30	
1,2-Dichloroethane	477218189016	0.2704	0.2402	25.00	22.21	ug/L	-11	30	
Benzene	477218189016	0.7062	0.6824	25.00	24.16	ug/L	-3	30	
Trichloroethene	477218189016	0.1692	0.1599	25.00	23.62	ug/L	-6	30	
1,2-Dichloropropane	477218189016	0.2142	0.1849	25.00	21.58	ug/L	-14	20	
Bromodichloromethane	477218189016	0.2487	0.2408	25.00	24.20	ug/L	-3	30	
4-Methyl-2-Pentanone	477218189016	0.2708	0.2341	25.00	21.62	ug/L	-14	40	
cis-1,3-Dichloropropene	477218189016	0.2905	0.2767	25.00	23.82	ug/L	-5	30	
Toluene	477218189016	0.3860	0.3852	25.00	24.95	ug/L	0	20	
trans-1,3-Dichloropropene	477218189016	0.2608	0.2354	25.00	22.57	ug/L	-10	30	
1,1,2-Trichloroethane	477218189016	0.0938	0.0896	25.00	23.89	ug/L	-4	30	
2-Hexanone	477218189016	0.2291	0.1984	25.00	21.65	ug/L	-13	40	
Tetrachloroethene	477218189016	0.1656	0.1757	25.00	26.53	ug/L	6	30	
Dibromochloromethane	477218189016	0.2182	0.2092	25.00	23.97	ug/L	-4	30	
Chlorobenzene	477218189016	0.5212	0.5144	25.00	24.67	ug/L	-1	30	
Ethylbenzene	477218189016	0.8944	0.9128	25.00	25.51	ug/L	2	20	
m,p-Xylenes	477218189016	0.3325	0.3454	50.00	51.95	ug/L	4	30	
o-Xylene	477218189016	0.3255	0.3291	25.00	25.28	ug/L	1	30	
Styrene	477218189016	0.5555	0.5720	25.00	25.74	ug/L	3	30	
Bromoform	477218189016	0.1347	0.1408	25.00	23.09	ug/L	-8	30	
1,1,2,2-Tetrachloroethane	477218189016	0.6295	0.5607	25.00	22.27	ug/L	-11	30	

!=warning -=low bias m=manual integration v=ICV

00215

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Date : 31-MAY-2007 15:05
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.0025/500,S6301,0.005/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 15:05 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.0025/500,S6301,0.005/500,
Misc Info : S6355,0.0025/500,0.25/0.5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:48 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 15:05 Cal File: HEV06.D
Als bottle: 6 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.743	4.743	(0.459)	2399	0.50000	0.1680(a)
2 Chloromethane	50	5.236	5.236	(0.507)	3084	0.50000	0.1748(a)
3 Vinyl Chloride	62	5.334	5.334	(0.517)	10844	0.50000	0.6336(M)
4 Bromomethane	94	5.945	5.945	(0.576)	1980	0.50000	0.2162(a)
5 Chloroethane	64	6.093	6.093	(0.590)	2890	0.50000	0.3088(a)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	8254	0.50000	0.4792(a)
7 Ethanol	45	6.675	6.675	(0.647)	6612	25.0000	26.8228(A)
8 Freon 113	101	7.119	7.119	(0.690)	3519	0.25000	0.3016(a)
9 1,1-Dichloroethene	96	7.227	7.227	(0.700)	3932	0.25000	0.3274(a)
10 Acetone	43	7.326	7.326	(0.710)	7355	0.25000	0.9137
11 Isopropanol	45	7.385	7.385	(0.715)	3597	2.50000	2.7478(A)
12 Carbon Disulfide	76	7.631	7.631	(0.739)	16589	0.25000	0.3005(a)
13 tert-Butyl Alcohol (TBA)	59	7.957	7.957	(0.771)	4438	2.50000	2.7475(A)
14 Methylene Chloride	84	7.976	7.976	(0.773)	3639	0.25000	0.2175(a)
15 MTBE	73	8.203	8.203	(0.795)	11465	0.25000	0.2679(a)
16 trans-1,2-Dichloroethene	96	8.282	8.282	(0.802)	5150	0.25000	0.3658(a)
17 Isopropyl Ether (DIPE)	45	8.805	8.805	(0.853)	18818	0.25000	0.2741(aA)
18 Vinyl Acetate	43	8.854	8.854	(0.858)	5485	0.25000	0.1813(a)
19 1,1-Dichloroethane	63	8.923	8.923	(0.864)	7984	0.25000	0.2776(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	13209	0.25000	0.2463(aA)
21 2-Butanone	43	9.702	9.702	(0.940)	3915	0.25000	0.3707(a)
22 2,2-Dichloropropane	77	9.722	9.722	(0.942)	1022	0.25000	0.0825(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.731	9.731	(0.943)	4170	0.25000	0.2736(a)
	24 Tetrahydrofuran	42	10.106	10.106	(0.979)	20207	2.50000	3.4100(A)
	25 Bromochloromethane	128	10.106	10.106	(0.979)	1810	0.25000	0.2439(a)
	26 Chloroform	83	10.126	10.126	(0.981)	7183	0.25000	0.2803(a)
*	27 Pentafluorobenzene	168	10.323	10.323	(1.000)	2276471	50.0000	
	28 Dibromofluoromethane	113	10.372	10.372	(1.005)	1459403	50.0000	49.7386
	29 1,1,1-Trichloroethane	97	10.412	10.412	(1.009)	4457	0.25000	0.2645(a)
	30 Carbon Tetrachloride	117	10.619	10.619	(0.928)	4192	0.25000	0.3233(a)
	31 1,1-Dichloropropene	75	10.638	10.638	(0.929)	6012	0.25000	0.3342(a)
	32 1,2-Dichloroethane-d4	65	10.924	10.924	(0.954)	1739162	50.0000	52.8252
	33 Benzene	78	10.954	10.954	(0.957)	17428	0.25000	0.3183(a)
	34 Methyl tert-Amyl Ether (TAME)	73	10.944	10.944	(0.956)	11401	0.25000	0.2795(aA)
	35 1,2-Dichloroethane	62	11.043	11.043	(0.965)	5763	0.25000	0.2749(a)
*	36 1,4-Difluorobenzene	114	11.447	11.447	(1.000)	3875834	50.0000	
	37 Trichloroethene	95	11.851	11.851	(1.035)	4009	0.25000	0.3056(a)
	38 Trifluorotoluene	146	12.216	12.216	(1.067)	5932	0.25000	0.0656(aA)
	39 1,2-Dichloropropane	63	12.246	12.246	(1.070)	4979	0.25000	0.2998(a)
	40 Dibromomethane	93	12.443	12.443	(1.087)	2807	0.25000	0.2702(a)
	41 Bromodichloromethane	83	12.591	12.591	(1.100)	5124	0.25000	0.2657(a)
	43 Tetramethyl THF	43	13.163	13.163	(1.150)	12186	0.25000	0.3021(aA)
	44 cis-1,3-Dichloropropene	75	13.212	13.212	(1.154)	5746	0.25000	0.2551(a)
	45 4-Methyl-2-Pentanone	43	13.350	13.350	(1.166)	6021	0.25000	0.2868(a)
	46 Toluene-d8	98	13.547	13.547	(1.183)	4079218	50.0000	50.2371
	47 Toluene	92	13.636	13.636	(1.191)	9039	0.25000	0.3020(a)
	48 trans-1,3-Dichloropropene	75	13.961	13.961	(1.220)	5459	0.25000	0.2700(a)
	49 1,1,2-Trichloroethane	85	14.227	14.227	(1.243)	1971	0.25000	0.2712(a)
	50 Tetrachloroethene	166	14.356	14.356	(0.927)	2937	0.25000	0.2798(a)
	51 2-Hexanone	43	14.444	14.444	(0.933)	4307	0.25000	0.2965(a)
	52 1,3-Dichloropropane	76	14.474	14.474	(0.935)	6735	0.25000	0.2875(a)
	53 Dibromochloromethane	129	14.750	14.750	(0.953)	2563	0.25000	0.1852(a)
	54 1,2-Dibromoethane	107	14.957	14.957	(1.307)	3794	0.25000	0.2711(a)
*	55 Chlorobenzene-d5	117	15.479	15.479	(1.000)	3169860	50.0000	
	56 Chlorobenzene	112	15.509	15.509	(1.002)	9447	0.25000	0.2859(a)
	57 Ethylbenzene	91	15.558	15.558	(1.005)	17400	0.25000	0.3068(a)
	58 1,1,1,2-Tetrachloroethane	131	15.588	15.588	(1.007)	3086	0.25000	0.2750(a)
	59 m,p-Xylenes	106	15.706	15.706	(1.015)	11462	0.50000	0.5437
	60 o-Xylene	106	16.199	16.199	(1.046)	5238	0.25000	0.2538(a)
	61 Styrene	104	16.219	16.219	(1.048)	9097	0.25000	0.2583(a)
	62 Bromoform	173	16.525	16.525	(1.068)	1417	0.25000	0.1789(a)
	63 Isopropylbenzene	105	16.594	16.594	(0.912)	14075	0.25000	0.2918(a)
	65 Bromofluorobenzene	95	16.860	16.860	(0.927)	1756890	50.0000	50.4096
	66 1,1,2,2-Tetrachloroethane	83	16.998	16.998	(0.934)	5408	0.25000	0.2779(a)
	67 Bromobenzene	156	17.067	17.067	(0.938)	3382	0.25000	0.2577(a)
	68 Propylbenzene	91	17.067	17.067	(0.938)	19697	0.25000	0.3045(a)
	69 1,2,3-Trichloropropane	110	17.096	17.096	(0.940)	1264	0.25000	0.2717(a)
	70 2-Chlorotoluene	91	17.244	17.244	(0.948)	12928	0.25000	0.2967(a)
	71 1,3,5-Trimethylbenzene	105	17.254	17.254	(0.949)	11772	0.25000	0.2910(a)
	72 4-Chlorotoluene	91	17.372	17.372	(0.955)	11802	0.25000	0.2899(a)
	73 tert-Butylbenzene	119	17.629	17.629	(0.969)	9487	0.25000	0.2935(a)
	74 1,2,4-Trimethylbenzene	105	17.698	17.698	(0.973)	11084	0.25000	0.2752(a)
	75 sec-Butylbenzene	105	17.875	17.875	(0.983)	15207	0.25000	0.3068(a)
	76 para-Isopropyl Toluene	119	18.023	18.023	(0.991)	9685	0.25000	0.2621(a)
	77 1,3-Dichlorobenzene	146	18.112	18.112	(0.996)	6788	0.25000	0.2878(a)
*	78 1,4-Dichlorobenzene-d4	152	18.191	18.191	(1.000)	1545474	50.0000	

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV06.D
Report Date: 01-Jun-2007 15:48

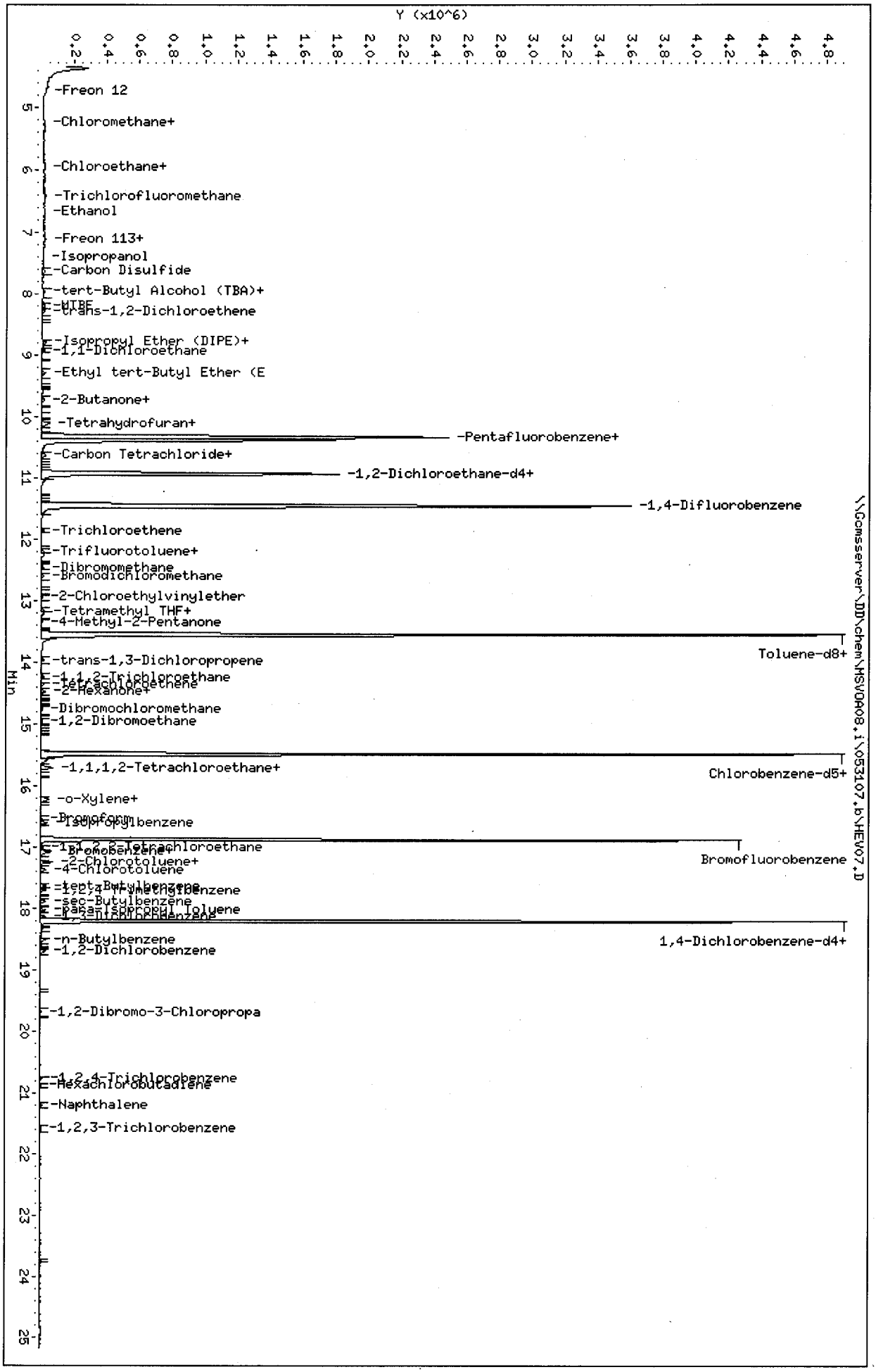
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
79 1,4-Dichlorobenzene	146	18.220	18.220	(1.002)	7834	0.25000	0.3103(a)
80 n-Butylbenzene	91	18.496	18.496	(1.017)	10772	0.25000	0.3099(a)
81 1,2-Dichlorobenzene	146	18.684	18.684	(1.027)	6535	0.25000	0.2782(a)
82 1,2-Dibromo-3-Chloropropane	75	19.670	19.670	(1.081)	1060	0.25000	0.3031(a)
83 1,2,4-Trichlorobenzene	180	20.774	20.774	(1.142)	2833	0.25000	0.2946(a)
85 Naphthalene	128	21.208	21.208	(1.166)	6762	0.25000	0.2743(a)
86 1,2,3-Trichlorobenzene	180	21.592	21.592	(1.187)	3011	0.25000	0.3333(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Comsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Date : 31-MAY-2007 15:43
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.005/500,S6301,0.001/500,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 15:43 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.005/500,S6301,0.001/500,
Misc Info : S6355,0.005/500,0.5/1PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 16:25 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 15:43 Cal File: HEV07.D
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.764	4.764	(0.461)	12256	1.00000	0.7008(M)
2 Chloromethane	50	5.247	5.247	(0.508)	26593	1.00000	1.0987(M)
3 Vinyl Chloride	62	5.326	5.326	(0.516)	17565	1.00000	0.8825(M)
4 Bromomethane	94	5.957	5.957	(0.577)	9656	1.00000	0.8937(M)
5 Chloroethane	64	6.085	6.085	(0.589)	10949	1.00000	0.9927(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	12965	1.00000	0.7617
7 Ethanol	45	6.667	6.667	(0.646)	14709	50.0000	60.3860(A)
8 Freon 113	101	7.120	7.120	(0.690)	5451	0.50000	0.4728(a)
9 1,1-Dichloroethene	96	7.229	7.229	(0.700)	6916	0.50000	0.5828
10 Acetone	43	7.308	7.308	(0.708)	10554	0.50000	1.3268
11 Isopropanol	45	7.396	7.396	(0.716)	8400	5.00000	6.4939(A)
12 Carbon Disulfide	76	7.633	7.633	(0.739)	29704	0.50000	0.5446
13 tert-Butyl Alcohol (TBA)	59	7.958	7.958	(0.771)	7843	5.00000	4.9139(A)
14 Methylene Chloride	84	7.978	7.978	(0.773)	8563	0.50000	0.5179
15 MTBE	73	8.195	8.195	(0.794)	21457	0.50000	0.5075
16 trans-1,2-Dichloroethene	96	8.284	8.284	(0.802)	7672	0.50000	0.5514
17 Isopropyl Ether (DIPE)	45	8.796	8.796	(0.852)	35221	0.50000	0.5193(A)
18 Vinyl Acetate	43	8.846	8.846	(0.857)	12264	0.50000	0.4104(a)
19 1,1-Dichloroethane	63	8.925	8.925	(0.864)	16013	0.50000	0.5636
20 Ethyl tert-Butyl Ether (ETBE)	59	9.299	9.299	(0.901)	27341	0.50000	0.5160(A)
21 2-Butanone	43	9.703	9.703	(0.940)	6260	0.50000	0.5999
22 2,2-Dichloropropane	77	9.703	9.703	(0.940)	4554	0.50000	0.3724(a)

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.733	9.733	(0.943)	7889	0.50000	0.5239
	24 Tetrahydrofuran	42	10.108	10.108	(0.979)	33781	5.00000	5.7692(A)
	25 Bromochloromethane	128	10.098	10.098	(0.978)	3455	0.50000	0.4712(a)
	26 Chloroform	83	10.127	10.127	(0.981)	14029	0.50000	0.5540
*	27 Pentafluorobenzene	168	10.325	10.325	(1.000)	2249472	50.0000	
	28 Dibromofluoromethane	113	10.374	10.374	(1.005)	1430653	50.0000	49.3439
	29 1,1,1-Trichloroethane	97	10.413	10.413	(1.009)	9232	0.50000	0.5544
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	7509	0.50000	0.5826
	31 1,1-Dichloropropene	75	10.630	10.630	(0.929)	9808	0.50000	0.5485
	32 1,2-Dichloroethane-d4	65	10.926	10.926	(0.954)	1682686	50.0000	51.4093
	33 Benzene	78	10.946	10.946	(0.956)	31841	0.50000	0.5850
	34 Methyl tert-Amyl Ether (TAME)	73	10.956	10.956	(0.957)	21085	0.50000	0.5200(A)
	35 1,2-Dichloroethane	62	11.034	11.034	(0.964)	10591	0.50000	0.5082
*	36 1,4-Difluorobenzene	114	11.449	11.449	(1.000)	3853256	50.0000	
	37 Trichloroethene	95	11.853	11.853	(1.035)	7146	0.50000	0.5479
	38 Trifluorotoluene	146	12.198	12.198	(1.065)	9529	0.50000	0.2992(aA)
	39 1,2-Dichloropropane	63	12.257	12.257	(1.071)	8897	0.50000	0.5389
	40 Dibromomethane	93	12.454	12.454	(1.088)	5455	0.50000	0.5282
	41 Bromodichloromethane	83	12.602	12.602	(1.101)	10218	0.50000	0.5331
	42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	3360	1.00000	0.0955(a)
	43 Tetramethyl THF	43	13.164	13.164	(1.150)	20968	0.50000	0.5230(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	10698	0.50000	0.4778(a)
	45 4-Methyl-2-Pentanone	43	13.342	13.342	(1.165)	9993	0.50000	0.4788(a)
	46 Toluene-d8	98	13.539	13.539	(1.183)	4006575	50.0000	49.6316
	47 Toluene	92	13.637	13.637	(1.191)	16091	0.50000	0.5408
	48 trans-1,3-Dichloropropene	75	13.963	13.963	(1.220)	9318	0.50000	0.4636(a)
	49 1,1,2-Trichloroethane	85	14.219	14.219	(1.242)	3305	0.50000	0.4574(a)
	50 Tetrachloroethene	166	14.347	14.347	(0.927)	5816	0.50000	0.5805
	51 2-Hexanone	43	14.446	14.446	(0.934)	7170	0.50000	0.5172
	52 1,3-Dichloropropane	76	14.475	14.475	(0.936)	11650	0.50000	0.5210
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	6721	0.50000	0.5090
	54 1,2-Dibromoethane	107	14.959	14.959	(1.307)	7148	0.50000	0.5138
*	55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3025746	50.0000	
	56 Chlorobenzene	112	15.511	15.511	(1.003)	17507	0.50000	0.5550
	57 Ethylbenzene	91	15.560	15.560	(1.006)	33046	0.50000	0.6105
	58 1,1,1,2-Tetrachloroethane	131	15.590	15.590	(1.008)	6120	0.50000	0.5715
	59 m,p-Xylenes	106	15.698	15.698	(1.015)	22012	1.00000	1.0940
	60 o-Xylene	106	16.201	16.201	(1.047)	11594	0.50000	0.5885
	61 Styrene	104	16.221	16.221	(1.048)	16776	0.50000	0.4990(a)
	62 Bromoform	173	16.536	16.536	(1.069)	2731	0.50000	0.3350(aM)
	63 Isopropylbenzene	105	16.595	16.595	(0.912)	25701	0.50000	0.5654
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1707389	50.0000	51.9818
	66 1,1,2,2-Tetrachloroethane	83	17.009	17.009	(0.935)	9370	0.50000	0.5110
	67 Bromobenzene	156	17.068	17.068	(0.938)	6935	0.50000	0.5607
	68 Propylbenzene	91	17.068	17.068	(0.938)	34760	0.50000	0.5703
	69 1,2,3-Trichloropropane	110	17.098	17.098	(0.940)	2463	0.50000	0.5619
	70 2-Chlorotoluene	91	17.246	17.246	(0.948)	24453	0.50000	0.5956
	71 1,3,5-Trimethylbenzene	105	17.246	17.246	(0.948)	22445	0.50000	0.5888
	72 4-Chlorotoluene	91	17.364	17.364	(0.954)	22494	0.50000	0.5864
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	17900	0.50000	0.5876
	74 1,2,4-Trimethylbenzene	105	17.690	17.690	(0.972)	21398	0.50000	0.5638
	75 sec-Butylbenzene	105	17.877	17.877	(0.983)	26800	0.50000	0.5738
	76 para-Isopropyl Toluene	119	18.015	18.015	(0.990)	19607	0.50000	0.5631
	77 1,3-Dichlorobenzene	146	18.114	18.114	(0.996)	12269	0.50000	0.5520

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV07.D
Report Date: 01-Jun-2007 16:26

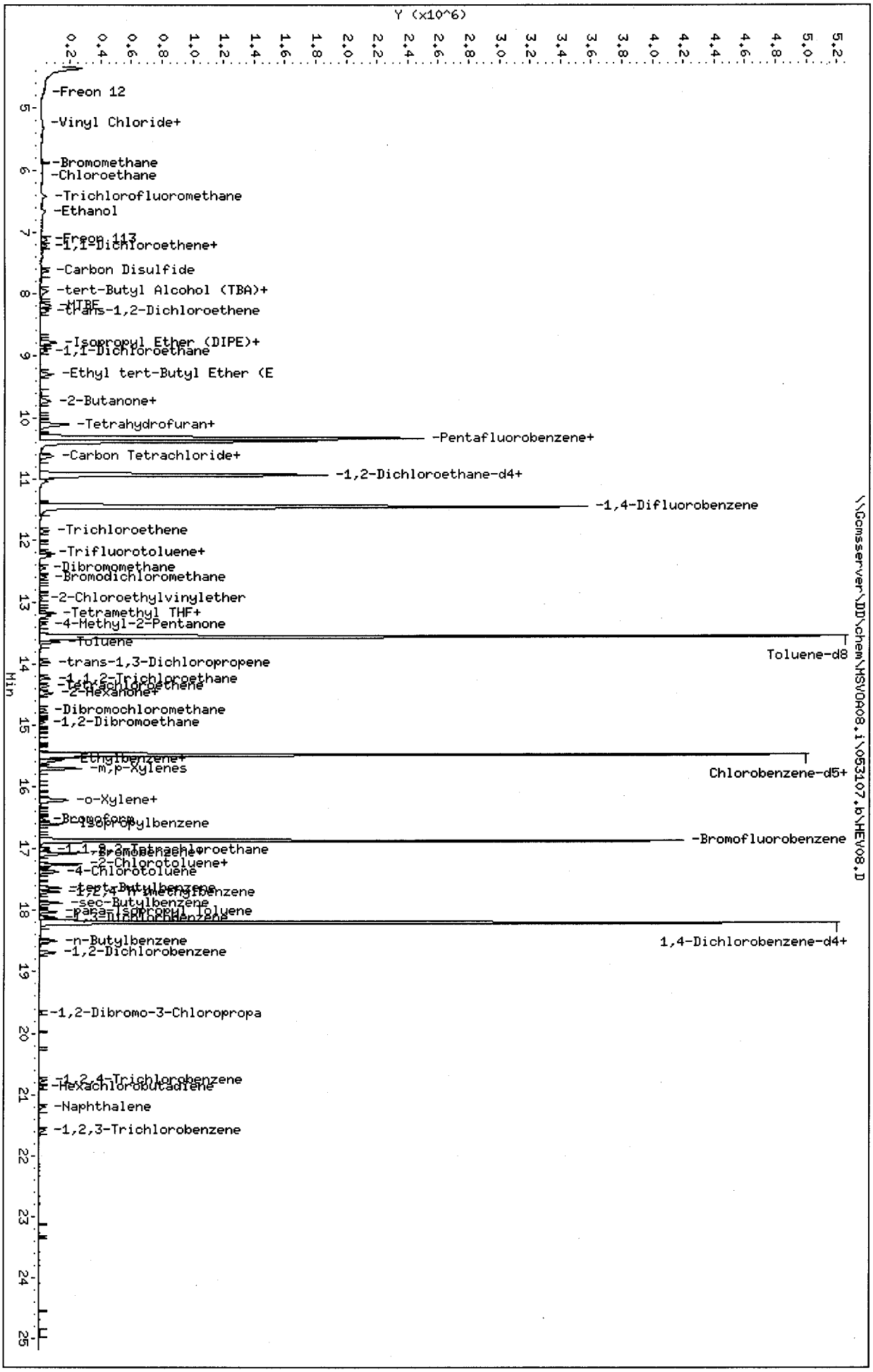
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1456505	50.0000	
79 1,4-Dichlorobenzene	146	18.222	18.222	(1.002)	14415	0.50000	0.6058
80 n-Butylbenzene	91	18.498	18.498	(1.017)	19135	0.50000	0.5842
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	12238	0.50000	0.5528
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	2043	0.50000	0.6200
83 1,2,4-Trichlorobenzene	180	20.776	20.776	(1.142)	5229	0.50000	0.5770
84 Hexachlorobutadiene	225	20.874	20.874	(1.147)	1642	0.50000	0.4778(a)
85 Naphthalene	128	21.209	21.209	(1.166)	10867	0.50000	0.4678(a)
86 1,2,3-Trichlorobenzene	180	21.604	21.604	(1.188)	4830	0.50000	0.5674

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Comsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Date : 31-MAY-2007 16:21
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.002/100,S6301,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 16:21 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.002/100,S6301,0.004/100,
Misc Info : S6355,0.004/100,2PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:49 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 16:21 Cal File: HEV08.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.773	4.773	(0.462)	33304	2.00000	2.0309(M)
2 Chloromethane	50	5.246	5.246	(0.508)	50708	2.00000	2.3859(M)
3 Vinyl Chloride	62	5.335	5.335	(0.517)	37280	2.00000	1.9412(M)
4 Bromomethane	94	5.956	5.956	(0.577)	24454	2.00000	2.2248(M)
5 Chloroethane	64	6.094	6.094	(0.590)	21173	2.00000	2.0304(M)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	33461	2.00000	1.9821
7 Ethanol	45	6.666	6.666	(0.646)	49699	200.000	205.7150(A)
8 Freon 113	101	7.129	7.129	(0.691)	26100	2.00000	2.2825
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	23122	2.00000	1.9646
10 Acetone	43	7.317	7.317	(0.709)	20990	2.00000	2.6606
11 Isopropanol	45	7.395	7.395	(0.716)	24935	20.0000	19.4358(A)
12 Carbon Disulfide	76	7.632	7.632	(0.739)	108621	2.00000	2.0079
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	32451	20.0000	20.4992(A)
14 Methylene Chloride	84	7.967	7.967	(0.772)	32640	2.00000	1.9906
15 MTBE	73	8.194	8.194	(0.794)	84170	2.00000	2.0074
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	27267	2.00000	1.9762
17 Isopropyl Ether (DIPE)	45	8.795	8.795	(0.852)	140983	2.00000	2.0959(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	64687	2.00000	2.1827
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	56861	2.00000	2.0179
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	105856	2.00000	2.0145(A)
21 2-Butanone	43	9.702	9.702	(0.940)	23039	2.00000	2.2260
22 2,2-Dichloropropane	77	9.712	9.712	(0.941)	24776	2.00000	2.0429

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	29526	2.00000	1.9772
24	Tetrahydrofuran	42	10.107	10.107	(0.979)	124224	20.0000	21.3901(A)
25	Bromochloromethane	128	10.097	10.097	(0.978)	14082	2.00000	1.9365
26	Chloroform	83	10.136	10.136	(0.982)	50776	2.00000	2.0217
* 27	Pentafluorobenzene	168	10.324	10.324	(1.000)	2231082	50.0000	
28	Dibromofluoromethane	113	10.373	10.373	(1.005)	1440410	50.0000	50.0900
29	1,1,1-Trichloroethane	97	10.412	10.412	(1.009)	32652	2.00000	1.9773
30	Carbon Tetrachloride	117	10.619	10.619	(0.928)	26651	2.00000	2.0671
31	1,1-Dichloropropene	75	10.629	10.629	(0.929)	37903	2.00000	2.1190
32	1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1687840	50.0000	51.5489
33	Benzene	78	10.945	10.945	(0.956)	111919	2.00000	2.0558
34	Methyl tert-Amyl Ether (TAME)	73	10.955	10.955	(0.957)	84387	2.00000	2.0804(A)
35	1,2-Dichloroethane	62	11.043	11.043	(0.965)	43396	2.00000	2.0818
* 36	1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3854589	50.0000	
37	Trichloroethene	95	11.852	11.852	(1.035)	25697	2.00000	1.9696
38	Trifluorotoluene	146	12.207	12.207	(1.066)	36782	2.00000	2.0513(A)
39	1,2-Dichloropropane	63	12.246	12.246	(1.070)	33429	2.00000	2.0245
40	Dibromomethane	93	12.443	12.443	(1.087)	20846	2.00000	2.0180
41	Bromodichloromethane	83	12.591	12.591	(1.100)	36923	2.00000	1.9258
42	2-Chloroethylvinylether	63	12.936	12.936	(1.130)	8754	2.00000	1.4038
43	Tetramethyl THF	43	13.163	13.163	(1.150)	82182	2.00000	2.0491(A)
44	cis-1,3-Dichloropropene	75	13.212	13.212	(1.154)	44120	2.00000	1.9701
45	4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	42634	2.00000	2.0422
46	Toluene-d8	98	13.538	13.538	(1.183)	4087387	50.0000	50.6152
47	Toluene	92	13.636	13.636	(1.191)	61961	2.00000	2.0820
48	trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	40606	2.00000	2.0196
49	1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	14598	2.00000	2.0197
50	Tetrachloroethene	166	14.356	14.356	(0.928)	20640	2.00000	2.0343
51	2-Hexanone	43	14.445	14.445	(0.934)	27704	2.00000	1.9733
52	1,3-Dichloropropane	76	14.474	14.474	(0.936)	47647	2.00000	2.1042
53	Dibromochloromethane	129	14.751	14.751	(0.953)	26402	2.00000	1.9743
54	1,2-Dibromoethane	107	14.958	14.958	(1.307)	27313	2.00000	1.9628
* 55	Chlorobenzene-d5	117	15.470	15.470	(1.000)	3064245	50.0000	
56	Chlorobenzene	112	15.510	15.510	(1.003)	66648	2.00000	2.0865
57	Ethylbenzene	91	15.559	15.559	(1.006)	118571	2.00000	2.1632
58	1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	21596	2.00000	1.9915
59	m,p-Xylenes	106	15.697	15.697	(1.015)	86104	4.00000	4.2257
60	o-Xylene	106	16.200	16.200	(1.047)	38314	2.00000	1.9205
61	Styrene	104	16.229	16.229	(1.049)	70132	2.00000	2.0602
62	Bromoform	173	16.535	16.535	(1.069)	13117	2.00000	1.5892
63	Isopropylbenzene	105	16.594	16.594	(0.912)	101159	2.00000	2.1504
65	Bromofluorobenzene	95	16.860	16.860	(0.927)	1717249	50.0000	50.5132
66	1,1,2,2-Tetrachloroethane	83	17.008	17.008	(0.935)	40725	2.00000	2.1458
67	Bromobenzene	156	17.067	17.067	(0.938)	26501	2.00000	2.0703
68	Propylbenzene	91	17.067	17.067	(0.938)	139737	2.00000	2.2152
69	1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	9112	2.00000	2.0086
70	2-Chlorotoluene	91	17.245	17.245	(0.948)	91289	2.00000	2.1483
71	1,3,5-Trimethylbenzene	105	17.245	17.245	(0.948)	86053	2.00000	2.1812
72	4-Chlorotoluene	91	17.373	17.373	(0.955)	83605	2.00000	2.1058
73	tert-Butylbenzene	119	17.629	17.629	(0.969)	66887	2.00000	2.1215
74	1,2,4-Trimethylbenzene	105	17.698	17.698	(0.973)	81964	2.00000	2.0868
75	sec-Butylbenzene	105	17.876	17.876	(0.983)	108725	2.00000	2.2492
76	para-Isopropyl Toluene	119	18.014	18.014	(0.990)	76143	2.00000	2.1130
77	1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	46224	2.00000	2.0093

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV08.D
Report Date: 01-Jun-2007 15:49

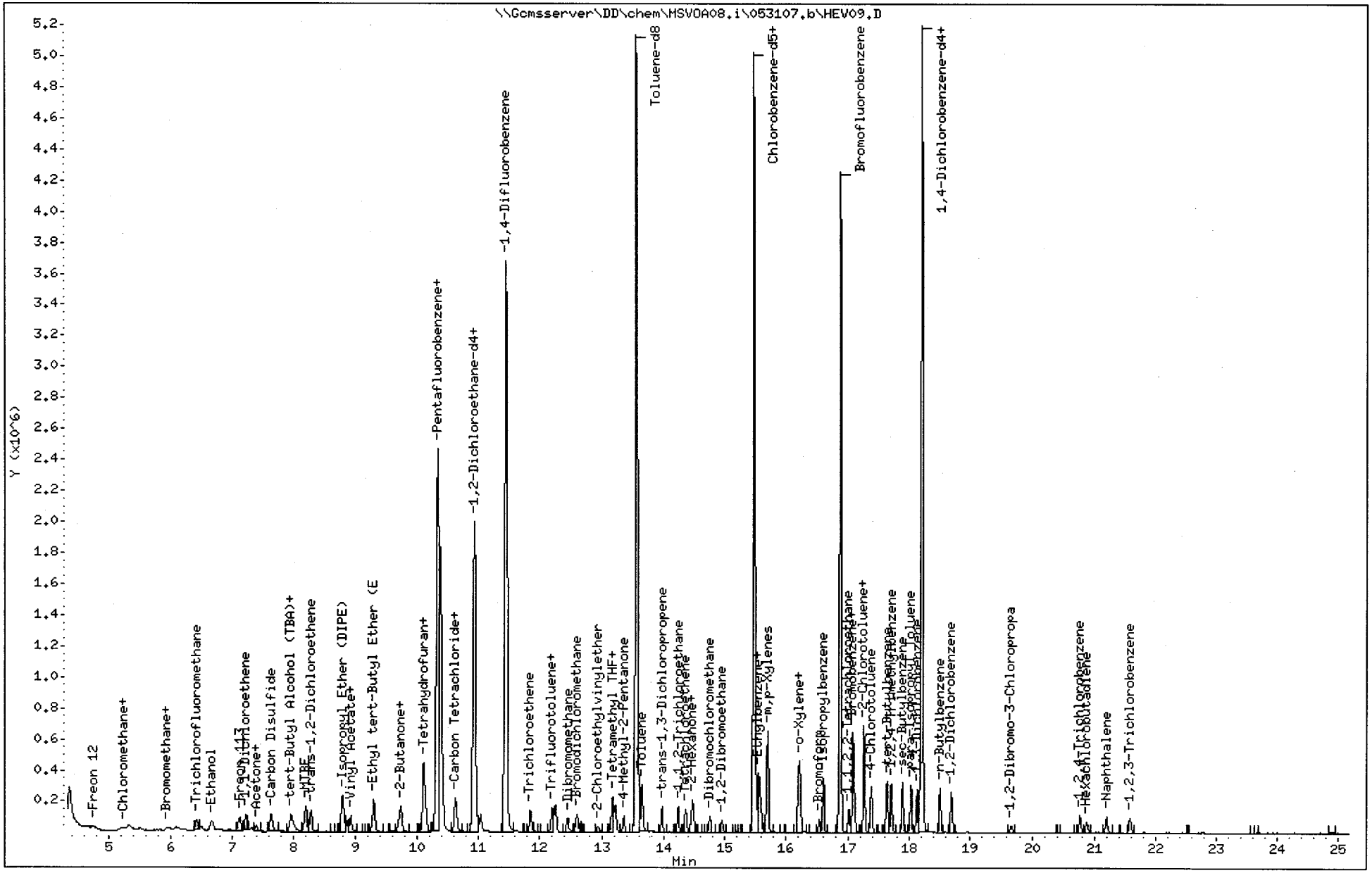
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.191	18.191	(1.000)	1507506	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	51806	2.00000	2.1038
80 n-Butylbenzene	91	18.497	18.497	(1.017)	76541	2.00000	2.2581
81 1,2-Dichlorobenzene	146	18.684	18.684	(1.027)	47359	2.00000	2.0670
82 1,2-Dibromo-3-Chloropropane	75	19.670	19.670	(1.081)	6734	2.00000	1.9746
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	17510	2.00000	1.8670
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	4778	2.00000	1.7670
85 Naphthalene	128	21.199	21.199	(1.165)	44667	2.00000	1.8578
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	17086	2.00000	1.9392

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Date : 31-MAY-2007 17:00
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.005/100,S6301,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 17:00 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.005/100,S6301,0.01/100,
Misc Info : S6355,0.01/100,5PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:50 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 17:00 Cal File: HEV09.D
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.763	4.763	(0.461)	75612	5.00000	4.4077(M)
2 Chloromethane	50	5.256	5.256	(0.509)	114856	5.00000	5.1078(M)
3 Vinyl Chloride	62	5.335	5.335	(0.517)	93907	5.00000	4.7682(M)
4 Bromomethane	94	5.937	5.937	(0.575)	44486	5.00000	3.9511(M)
5 Chloroethane	64	6.084	6.084	(0.589)	52920	5.00000	4.9187(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	80754	5.00000	4.7861
7 Ethanol	45	6.676	6.676	(0.647)	118395	500.000	490.3115(A)
8 Freon 113	101	7.120	7.120	(0.690)	58208	5.00000	5.0932
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	56158	5.00000	4.7740
10 Acetone	43	7.317	7.317	(0.709)	44340	5.00000	5.6233
11 Isopropanol	45	7.396	7.396	(0.716)	62705	50.0000	48.9008(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	259882	5.00000	4.8066
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	73299	50.0000	46.3264(A)
14 Methylene Chloride	84	7.977	7.977	(0.773)	81228	5.00000	4.9564
15 MTBE	73	8.204	8.204	(0.795)	201860	5.00000	4.8167
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	66730	5.00000	4.8388
17 Isopropyl Ether (DIPE)	45	8.796	8.796	(0.852)	322388	5.00000	4.7953(A)
18 Vinyl Acetate	43	8.865	8.865	(0.859)	145010	5.00000	4.8956
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	136735	5.00000	4.8550
20 Ethyl tert-Butyl Ether (ETBE)	59	9.299	9.299	(0.901)	256229	5.00000	4.8788(A)
21 2-Butanone	43	9.693	9.693	(0.939)	50307	5.00000	4.8632
22 2,2-Dichloropropane	77	9.713	9.713	(0.941)	49101	5.00000	4.0507

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	70962	5.00000	4.7545
24 Tetrahydrofuran	42	10.097	10.097	(0.978)	298268	50.0000	51.3849(A)
25 Bromochloromethane	128	10.097	10.097	(0.978)	35054	5.00000	4.8229
26 Chloroform	83	10.127	10.127	(0.981)	122831	5.00000	4.8933
* 27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2229950	50.0000	
28 Dibromofluoromethane	113	10.373	10.373	(1.005)	1453163	50.0000	50.5591
29 1,1,1-Trichloroethane	97	10.423	10.423	(1.010)	84323	5.00000	5.1089
30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	64517	5.00000	4.9201
31 1,1-Dichloropropene	75	10.640	10.640	(0.929)	93740	5.00000	5.1527
32 1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1735154	50.0000	52.1041
33 Benzene	78	10.955	10.955	(0.957)	278256	5.00000	5.0253
34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	204293	5.00000	4.9520(A)
35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	106365	5.00000	5.0170
* 36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3920418	50.0000	
37 Trichloroethene	95	11.852	11.852	(1.035)	64913	5.00000	4.8920
38 Trifluorotoluene	146	12.207	12.207	(1.066)	83294	5.00000	4.9521(A)
39 1,2-Dichloropropane	63	12.256	12.256	(1.071)	85763	5.00000	5.1067
40 Dibromomethane	93	12.444	12.444	(1.087)	49970	5.00000	4.7561
41 Bromodichloromethane	83	12.602	12.602	(1.101)	92598	5.00000	4.7485
42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	19295	5.00000	3.8528
43 Tetramethyl THF	43	13.164	13.164	(1.150)	198351	5.00000	4.8627(A)
44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	112153	5.00000	4.9241
45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	103197	5.00000	4.8603
46 Toluene-d8	98	13.538	13.538	(1.183)	4138607	50.0000	50.3889
47 Toluene	92	13.637	13.637	(1.191)	150527	5.00000	4.9732
48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	97279	5.00000	4.7572
49 1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	35265	5.00000	4.7972
50 Tetrachloroethene	166	14.357	14.357	(0.928)	53377	5.00000	5.1876
51 2-Hexanone	43	14.445	14.445	(0.934)	67083	5.00000	4.7118
52 1,3-Dichloropropane	76	14.465	14.465	(0.935)	109188	5.00000	4.7550
53 Dibromochloromethane	129	14.751	14.751	(0.953)	61885	5.00000	4.5634
54 1,2-Dibromoethane	107	14.958	14.958	(1.307)	68185	5.00000	4.8177
* 55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3107514	50.0000	
56 Chlorobenzene	112	15.510	15.510	(1.003)	161523	5.00000	4.9863
57 Ethylbenzene	91	15.559	15.559	(1.006)	291826	5.00000	5.2501
58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	53406	5.00000	4.8563
59 m,p-Xylenes	106	15.697	15.697	(1.015)	209004	10.0000	10.1146
60 o-Xylene	106	16.200	16.200	(1.047)	101832	5.00000	5.0334
61 Styrene	104	16.220	16.220	(1.048)	172331	5.00000	4.9919
62 Bromoform	173	16.526	16.526	(1.068)	39770	5.00000	4.7514
63 Isopropylbenzene	105	16.595	16.595	(0.912)	251094	5.00000	5.3011
65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1731918	50.0000	50.5954
66 1,1,2,2-Tetrachloroethane	83	16.999	16.999	(0.934)	92283	5.00000	4.8292
67 Bromobenzene	156	17.068	17.068	(0.938)	61385	5.00000	4.7627
68 Propylbenzene	91	17.068	17.068	(0.938)	334928	5.00000	5.2731
69 1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	22162	5.00000	4.8518
70 2-Chlorotoluene	91	17.245	17.245	(0.948)	227543	5.00000	5.3180
71 1,3,5-Trimethylbenzene	105	17.245	17.245	(0.948)	209316	5.00000	5.2692
72 4-Chlorotoluene	91	17.364	17.364	(0.954)	203515	5.00000	5.0911
73 tert-Butylbenzene	119	17.630	17.630	(0.969)	168036	5.00000	5.2932
74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	205575	5.00000	5.1982
75 sec-Butylbenzene	105	17.876	17.876	(0.983)	259572	5.00000	5.3331
76 para-Isopropyl Toluene	119	18.014	18.014	(0.990)	195916	5.00000	5.3995
77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	118226	5.00000	5.1040

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV09.D
Report Date: 01-Jun-2007 15:50

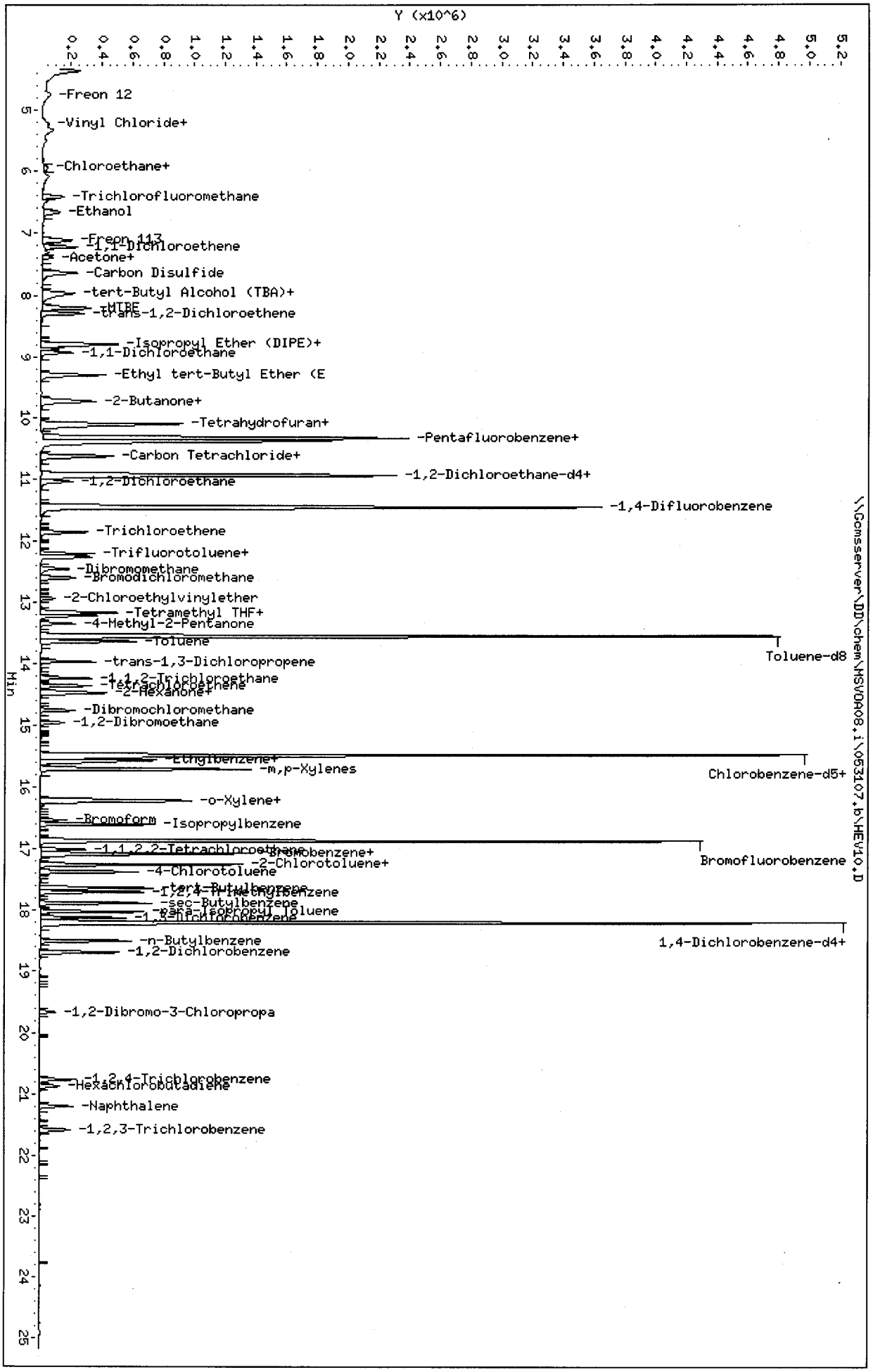
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1517913	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	123290	5.00000	4.9724
80 n-Butylbenzene	91	18.497	18.497	(1.017)	187401	5.00000	5.4908
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	115996	5.00000	5.0280
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	15316	5.00000	4.4603
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	46709	5.00000	4.9462
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	14584	5.00000	5.8318
85 Naphthalene	128	21.199	21.199	(1.165)	110963	5.00000	4.5837
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	42686	5.00000	4.8117

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Date : 31-MAY-2007 17:38
Client ID: DYNA P&T
Sample Info: ICAL,S6300,0.01/100,S6301,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 17:38 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6300,0.01/100,S6301,0.02/100,
Misc Info : S6355,0.02/100,10PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:51 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 17:38 Cal File: HEV10.D
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.753	4.753	(0.460)	182404	10.0000	10.6263(M)
2 Chloromethane	50	5.236	5.236	(0.507)	237747	10.0000	10.0306(M)
3 Vinyl Chloride	62	5.345	5.345	(0.518)	201218	10.0000	10.3114(M)
4 Bromomethane	94	5.956	5.956	(0.577)	96382	10.0000	8.4969(M)
5 Chloroethane	64	6.084	6.084	(0.589)	110780	10.0000	10.2584(M)
6 Trichlorofluoromethane	101	6.419	6.419	(0.622)	174571	10.0000	10.4439
7 Ethanol	45	6.676	6.676	(0.647)	261799	1000.00	1094.3989(A)
8 Freon 113	101	7.119	7.119	(0.690)	138425	10.0000	12.2262
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	121095	10.0000	10.3913
10 Acetone	43	7.317	7.317	(0.709)	86293	10.0000	11.0469
11 Isopropanol	45	7.396	7.396	(0.716)	135126	100.000	106.3707(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	588486	10.0000	10.9867
13 tert-Butyl Alcohol (TBA)	59	7.948	7.948	(0.770)	168061	100.000	107.2177(A)
14 Methylene Chloride	84	7.967	7.967	(0.772)	168021	10.0000	10.3490
15 MTBE	73	8.194	8.194	(0.794)	427825	10.0000	10.3048
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	140662	10.0000	10.2959
17 Isopropyl Ether (DIPE)	45	8.786	8.786	(0.851)	709649	10.0000	10.6549(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	250808	10.0000	8.5471
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	291523	10.0000	10.4485
20 Ethyl tert-Butyl Ether (ETBE)	59	9.298	9.298	(0.901)	545781	10.0000	10.4900(A)
21 2-Butanone	43	9.703	9.703	(0.940)	107397	10.0000	10.4799
22 2,2-Dichloropropane	77	9.712	9.712	(0.941)	133430	10.0000	11.1114

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.732	9.732	(0.943)	153127	10.0000	10.3563
	24 Tetrahydrofuran	42	10.097	10.097	(0.978)	612958	100.000	106.5930(A)
	25 Bromochloromethane	128	10.097	10.097	(0.978)	74655	10.0000	10.3682
	26 Chloroform	83	10.136	10.136	(0.982)	260726	10.0000	10.4845
*	27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2209155	50.0000	
	28 Dibromofluoromethane	113	10.373	10.373	(1.005)	1451782	50.0000	50.9865
	29 1,1,1-Trichloroethane	97	10.422	10.422	(1.010)	176467	10.0000	10.7924
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	145744	10.0000	11.1857
	31 1,1-Dichloropropene	75	10.629	10.629	(0.929)	199947	10.0000	11.0611
	32 1,2-Dichloroethane-d4	65	10.925	10.925	(0.954)	1697752	50.0000	51.3074
	33 Benzene	78	10.945	10.945	(0.956)	563406	10.0000	10.2404
	34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	420219	10.0000	10.2513(A)
	35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	215413	10.0000	10.2257
*	36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	3895477	50.0000	
	37 Trichloroethene	95	11.852	11.852	(1.035)	141672	10.0000	10.7451
	38 Trifluorotoluene	146	12.207	12.207	(1.066)	188304	10.0000	11.6669(A)
	39 1,2-Dichloropropane	63	12.256	12.256	(1.071)	171274	10.0000	10.2636
	40 Dibromomethane	93	12.453	12.453	(1.088)	103683	10.0000	9.9317
	41 Bromodichloromethane	83	12.591	12.591	(1.100)	196965	10.0000	10.1653
	42 2-Chloroethylvinylether	63	12.927	12.927	(1.129)	48668	10.0000	10.6341
	43 Tetramethyl THF	43	13.163	13.163	(1.150)	435385	10.0000	10.7421(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	235317	10.0000	10.3978
	45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	220402	10.0000	10.4468
	46 Toluene-d8	98	13.548	13.548	(1.183)	3946611	50.0000	48.3590
	47 Toluene	92	13.637	13.637	(1.191)	318649	10.0000	10.5951
	48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	213437	10.0000	10.5045
	49 1,1,2-Trichloroethane	85	14.228	14.228	(1.243)	73425	10.0000	10.0521
	50 Tetrachloroethene	166	14.356	14.356	(0.928)	113503	10.0000	11.0368
	51 2-Hexanone	43	14.445	14.445	(0.934)	152103	10.0000	10.6889
	52 1,3-Dichloropropane	76	14.475	14.475	(0.936)	244109	10.0000	10.6360
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	134924	10.0000	9.9543
	54 1,2-Dibromoethane	107	14.958	14.958	(1.307)	139848	10.0000	9.9445
*	55 Chlorobenzene-d5	117	15.470	15.470	(1.000)	3105963	50.0000	
	56 Chlorobenzene	112	15.510	15.510	(1.003)	338068	10.0000	10.4416
	57 Ethylbenzene	91	15.559	15.559	(1.006)	611763	10.0000	11.0114
	58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	113149	10.0000	10.2940
	59 m,p-Xylenes	106	15.697	15.697	(1.015)	442895	20.0000	21.4443
	60 o-Xylene	106	16.200	16.200	(1.047)	217495	10.0000	10.7558
	61 Styrene	104	16.230	16.230	(1.049)	368945	10.0000	10.6926
	62 Bromoform	173	16.525	16.525	(1.068)	87098	10.0000	10.4110
	63 Isopropylbenzene	105	16.594	16.594	(0.912)	544203	10.0000	11.2289
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1740722	50.0000	49.7005
	66 1,1,2,2-Tetrachloroethane	83	17.008	17.008	(0.935)	188857	10.0000	9.6591
	67 Bromobenzene	156	17.068	17.068	(0.938)	135417	10.0000	10.2686
	68 Propylbenzene	91	17.068	17.068	(0.938)	730846	10.0000	11.2458
	69 1,2,3-Trichloropropane	110	17.097	17.097	(0.940)	48897	10.0000	10.4623
	70 2-Chlorotoluene	91	17.245	17.245	(0.948)	464067	10.0000	10.6003
	71 1,3,5-Trimethylbenzene	105	17.255	17.255	(0.949)	435344	10.0000	10.7109
	72 4-Chlorotoluene	91	17.373	17.373	(0.955)	440959	10.0000	10.7810
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	369303	10.0000	11.3696
	74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	437970	10.0000	10.8238
	75 sec-Butylbenzene	105	17.876	17.876	(0.983)	587924	10.0000	11.8058
	76 para-Isopropyl Toluene	119	18.014	18.014	(0.990)	426827	10.0000	11.4970
	77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	246543	10.0000	10.4026

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV10.D
Report Date: 01-Jun-2007 15:51

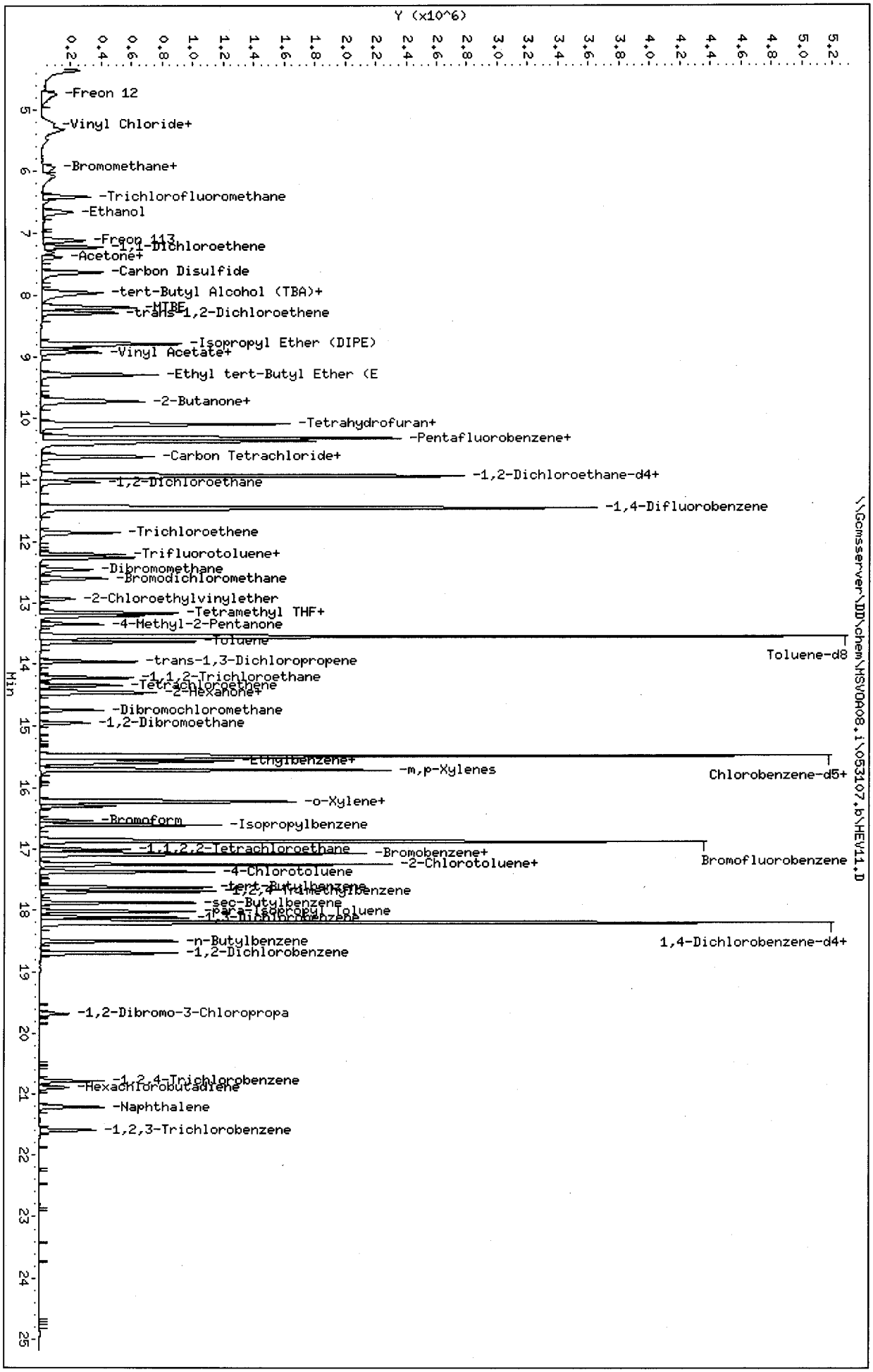
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1553098	50.0000	
79 1,4-Dichlorobenzene	146	18.221	18.221	(1.002)	264795	10.0000	10.4376
80 n-Butylbenzene	91	18.497	18.497	(1.017)	394687	10.0000	11.3023
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	243497	10.0000	10.3156
82 1,2-Dibromo-3-Chloropropane	75	19.671	19.671	(1.081)	33494	10.0000	9.5332
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	96674	10.0000	10.0053
84 Hexachlorobutadiene	225	20.883	20.883	(1.148)	31330	10.0000	12.5014
85 Naphthalene	128	21.209	21.209	(1.166)	243702	10.0000	9.8389
86 1,2,3-Trichlorobenzene	180	21.593	21.593	(1.187)	88854	10.0000	9.7890

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Date : 31-MAY-2007 18:16
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.004/100,S6350,0.004/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 18:16 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.004/100,S6350,0.004/100,
Misc Info : S5720,0.002/100,20PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:51 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 18:16 Cal File: HEV11.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.747	4.747	(0.460)	385270	20.0000	23.0434(M)
2 Chloromethane	50	5.250	5.250	(0.508)	494049	20.0000	21.3803(M)
3 Vinyl Chloride	62	5.329	5.329	(0.516)	434488	20.0000	22.8325(M)
4 Bromomethane	94	5.950	5.950	(0.576)	217757	20.0000	19.6258(M)
5 Chloroethane	64	6.098	6.098	(0.590)	230533	20.0000	21.8727(M)
6 Trichlorofluoromethane	101	6.423	6.423	(0.622)	378696	20.0000	23.2709
7 Ethanol	45	6.670	6.670	(0.646)	452364	2000.00	1942.3529(A)
8 Freon 113	101	7.123	7.123	(0.690)	207994	20.0000	18.8695
9 1,1-Dichloroethene	96	7.232	7.232	(0.700)	212769	20.0000	18.7537
10 Acetone	43	7.321	7.321	(0.709)	149529	20.0000	19.6618
11 Isopropanol	45	7.390	7.390	(0.716)	250820	200.000	202.8046(A)
12 Carbon Disulfide	76	7.636	7.636	(0.739)	1009581	20.0000	19.3601
13 tert-Butyl Alcohol (TBA)	59	7.952	7.952	(0.770)	299935	200.000	196.5438(A)
14 Methylene Chloride	84	7.971	7.971	(0.772)	305375	20.0000	19.3198
15 MTBE	73	8.198	8.198	(0.794)	802005	20.0000	19.8419
16 trans-1,2-Dichloroethene	96	8.287	8.287	(0.802)	252694	20.0000	18.9983
17 Isopropyl Ether (DIPE)	45	8.790	8.790	(0.851)	1279659	20.0000	19.7348(A)
18 Vinyl Acetate	43	8.859	8.859	(0.858)	668618	20.0000	23.4040
19 1,1-Dichloroethane	63	8.928	8.928	(0.864)	532709	20.0000	19.6111
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	1006300	20.0000	19.8664(A)
21 2-Butanone	43	9.697	9.697	(0.939)	196643	20.0000	19.7095
22 2,2-Dichloropropane	77	9.716	9.716	(0.941)	260870	20.0000	22.3137

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.736	9.736	(0.943)	283058	20.0000	19.6635
	24 Tetrahydrofuran	42	10.101	10.101	(0.978)	1106466	200.000	197.6371(A)
	25 Bromochloromethane	128	10.101	10.101	(0.978)	136255	20.0000	19.4371
	26 Chloroform	83	10.131	10.131	(0.981)	465621	20.0000	19.2321
*	27 Pentafluorobenzene	168	10.328	10.328	(1.000)	2150769	50.0000	
	28 Dibromofluoromethane	113	10.377	10.377	(1.005)	1417567	50.0000	51.1364
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	303722	20.0000	19.0793
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	233628	20.0000	18.0419
	31 1,1-Dichloropropene	75	10.633	10.633	(0.929)	328792	20.0000	18.3015
	32 1,2-Dichloroethane-d4	65	10.929	10.929	(0.954)	1658388	50.0000	50.4284
	33 Benzene	78	10.949	10.949	(0.956)	1036731	20.0000	18.9603
	34 Methyl tert-Amyl Ether (TAME)	73	10.949	10.949	(0.956)	788750	20.0000	19.3610(A)
	35 1,2-Dichloroethane	62	11.038	11.038	(0.964)	404982	20.0000	19.3438
*	36 1,4-Difluorobenzene	114	11.452	11.452	(1.000)	3871482	50.0000	
	37 Trichloroethene	95	11.856	11.856	(1.035)	242101	20.0000	18.4760
	38 Trifluorotoluene	146	12.201	12.201	(1.065)	300459	20.0000	18.9212(A)
	39 1,2-Dichloropropane	63	12.250	12.250	(1.070)	314466	20.0000	18.9613
	40 Dibromomethane	93	12.448	12.448	(1.087)	191466	20.0000	18.4541
	41 Bromodichloromethane	83	12.595	12.595	(1.100)	369582	20.0000	19.1922
	42 2-Chloroethylvinylether	63	12.931	12.931	(1.129)	116468	20.0000	25.1607
	43 Tetramethyl THF	43	13.157	13.157	(1.149)	796723	20.0000	19.7792(A)
	44 cis-1,3-Dichloropropene	75	13.207	13.207	(1.153)	434616	20.0000	19.3232
	45 4-Methyl-2-Pentanone	43	13.345	13.345	(1.165)	407190	20.0000	19.4200
	46 Toluene-d8	98	13.542	13.542	(1.183)	4074373	50.0000	50.2339
	47 Toluene	92	13.641	13.641	(1.191)	547931	20.0000	18.3318
	48 trans-1,3-Dichloropropene	75	13.966	13.966	(1.220)	391926	20.0000	19.4086
	49 1,1,2-Trichloroethane	85	14.222	14.222	(1.242)	140712	20.0000	19.3834
	50 Tetrachloroethene	166	14.350	14.350	(0.927)	180664	20.0000	17.6461
	51 2-Hexanone	43	14.449	14.449	(0.934)	275833	20.0000	19.4709
	52 1,3-Dichloropropane	76	14.469	14.469	(0.935)	431668	20.0000	18.8925
	53 Dibromochloromethane	129	14.745	14.745	(0.953)	253915	20.0000	18.8170
	54 1,2-Dibromoethane	107	14.952	14.952	(1.306)	258725	20.0000	18.5118
*	55 Chlorobenzene-d5	117	15.474	15.474	(1.000)	3092107	50.0000	
	56 Chlorobenzene	112	15.514	15.514	(1.003)	593151	20.0000	18.4023
	57 Ethylbenzene	91	15.563	15.563	(1.006)	999136	20.0000	18.0645
	58 1,1,1,2-Tetrachloroethane	131	15.593	15.593	(1.008)	198487	20.0000	18.1387
	59 m,p-Xylenes	106	15.701	15.701	(1.015)	744350	40.0000	36.2019
	60 o-Xylene	106	16.204	16.204	(1.047)	370882	20.0000	18.4235
	61 Styrene	104	16.224	16.224	(1.048)	645091	20.0000	18.7796
	62 Bromoform	173	16.529	16.529	(1.068)	169128	20.0000	20.3068
	63 Isopropylbenzene	105	16.598	16.598	(0.912)	872337	20.0000	18.2582
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1735002	50.0000	50.2488
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.934)	366386	20.0000	19.0082
	67 Bromobenzene	156	17.072	17.072	(0.938)	237964	20.0000	18.3039
	68 Propylbenzene	91	17.072	17.072	(0.938)	1128170	20.0000	17.6089
	69 1,2,3-Trichloropropane	110	17.091	17.091	(0.939)	83131	20.0000	18.0428
	70 2-Chlorotoluene	91	17.249	17.249	(0.948)	792905	20.0000	18.3720
	71 1,3,5-Trimethylbenzene	105	17.249	17.249	(0.948)	726918	20.0000	18.1415
	72 4-Chlorotoluene	91	17.367	17.367	(0.954)	741961	20.0000	18.4009
	73 tert-Butylbenzene	119	17.624	17.624	(0.969)	578849	20.0000	18.0769
	74 1,2,4-Trimethylbenzene	105	17.693	17.693	(0.972)	736162	20.0000	18.4545
	75 sec-Butylbenzene	105	17.880	17.880	(0.983)	882019	20.0000	17.9658
	76 para-Isopropyl Toluene	119	18.018	18.018	(0.990)	663555	20.0000	18.1304
	77 1,3-Dichlorobenzene	146	18.117	18.117	(0.996)	434926	20.0000	18.6149

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV11.D
Report Date: 01-Jun-2007 15:51

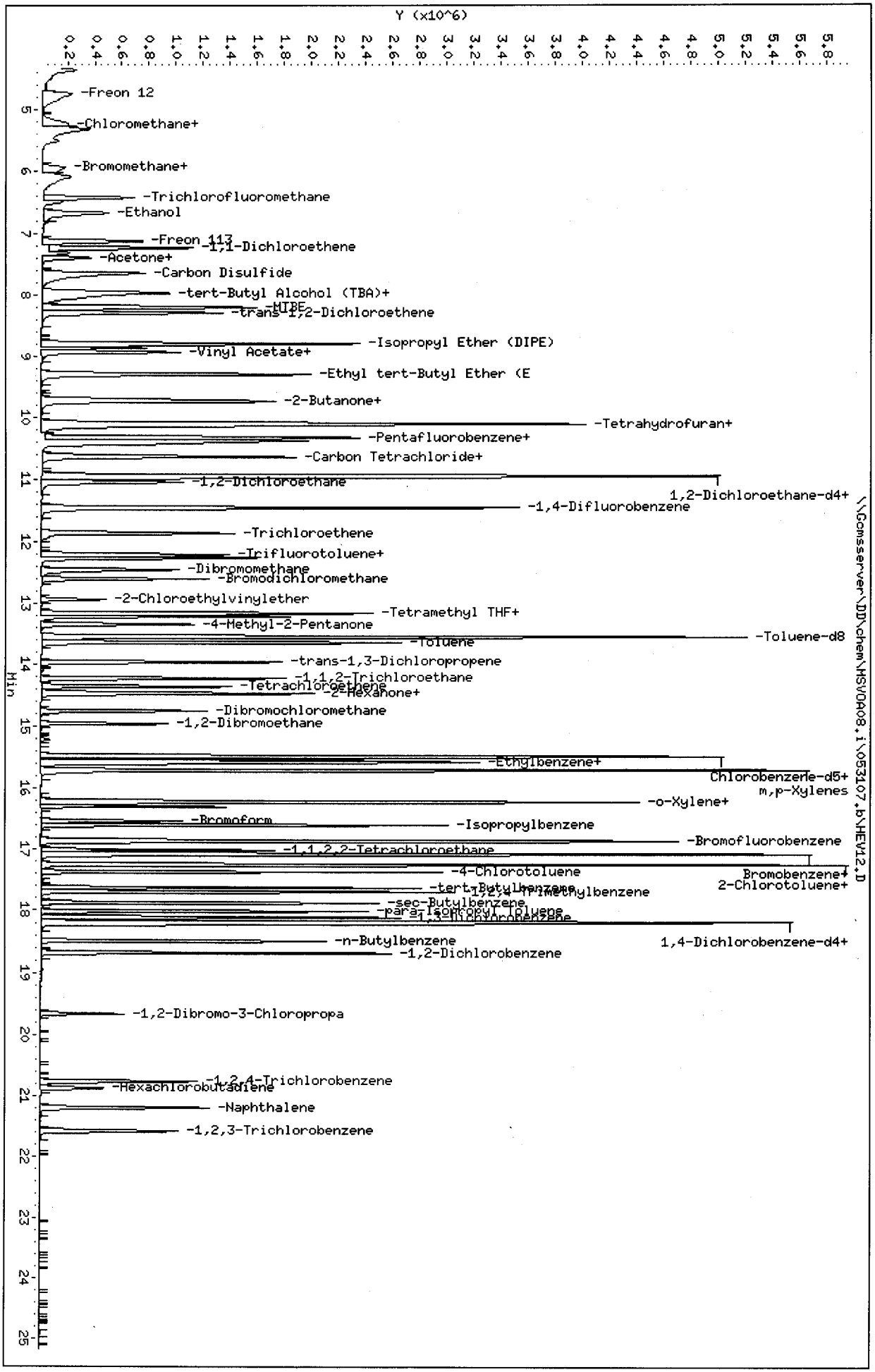
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.196	18.196	(1.000)	1531103	50.0000	
79 1,4-Dichlorobenzene	146	18.225	18.225	(1.002)	444012	20.0000	17.7534
80 n-Butylbenzene	91	18.501	18.501	(1.017)	625515	20.0000	18.1696
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.027)	422858	20.0000	18.1715
82 1,2-Dibromo-3-Chloropropane	75	19.665	19.665	(1.081)	62942	20.0000	18.1723
83 1,2,4-Trichlorobenzene	180	20.779	20.779	(1.142)	177934	20.0000	18.6798
84 Hexachlorobutadiene	225	20.887	20.887	(1.148)	48709	20.0000	19.8503
85 Naphthalene	128	21.203	21.203	(1.165)	475599	20.0000	19.4771
86 1,2,3-Trichlorobenzene	180	21.587	21.587	(1.186)	167505	20.0000	18.7190

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Date : 31-MAY-2007 18:54
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.01/100,S6350,0.01/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 18:54 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.01/100,S6350,0.01/100,
Misc Info : S5720,0.005/100,50PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:52 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 18:54 Cal File: HEV12.D
Als bottle: 12 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.748	4.748	(0.460)	964977	50.0000	54.9675(M)
2 Chloromethane	50	5.261	5.261	(0.509)	1190309	50.0000	49.0448(M)
3 Vinyl Chloride	62	5.340	5.340	(0.517)	1021185	50.0000	51.1215(M)
4 Bromomethane	94	5.961	5.961	(0.577)	548660	50.0000	46.9572(M)
5 Chloroethane	64	6.089	6.089	(0.590)	582939	50.0000	52.6513(M)
6 Trichlorofluoromethane	101	6.434	6.434	(0.623)	880484	50.0000	51.5446
7 Ethanol	45	6.681	6.681	(0.647)	1300815	5000.00	5321.0086(A)
8 Freon 113	101	7.134	7.134	(0.691)	551259	50.0000	47.6436
9 1,1-Dichloroethene	96	7.233	7.233	(0.700)	582289	50.0000	48.8940
10 Acetone	43	7.321	7.321	(0.709)	397384	50.0000	49.7792
11 Isopropanol	45	7.400	7.400	(0.717)	668678	500.000	515.0757(A)
12 Carbon Disulfide	76	7.647	7.647	(0.740)	2686061	50.0000	49.0706
13 tert-Butyl Alcohol (TBA)	59	7.943	7.943	(0.769)	815062	500.000	508.8166(A)
14 Methylene Chloride	84	7.972	7.972	(0.772)	854107	50.0000	51.4778
15 MTBE	73	8.199	8.199	(0.794)	2152894	50.0000	50.7421
16 trans-1,2-Dichloroethene	96	8.288	8.288	(0.802)	687517	50.0000	49.2428
17 Isopropyl Ether (DIPE)	45	8.790	8.790	(0.851)	3515688	50.0000	51.6522(A)
18 Vinyl Acetate	43	8.860	8.860	(0.858)	1624873	50.0000	54.1838
19 1,1-Dichloroethane	63	8.929	8.929	(0.864)	1404570	50.0000	49.2601
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	2744657	50.0000	51.6201(A)
21 2-Butanone	43	9.698	9.698	(0.939)	529856	50.0000	50.5933
22 2,2-Dichloropropane	77	9.717	9.717	(0.941)	611952	50.0000	49.8658

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.737	9.737	(0.943)	763577	50.0000	50.5334
	24 Tetrahydrofuran	42	10.092	10.092	(0.977)	2869106	500.000	488.2198(A)
	25 Bromochloromethane	128	10.102	10.102	(0.978)	390480	50.0000	53.0659
	26 Chloroform	83	10.131	10.131	(0.981)	1282054	50.0000	50.4475
*	27 Pentafluorobenzene	168	10.329	10.329	(1.000)	2257644	50.0000	
	28 Dibromofluoromethane	113	10.378	10.378	(1.005)	1457048	50.0000	50.0724
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	810216	50.0000	48.4871
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	616176	50.0000	47.1298
	31 1,1-Dichloropropene	75	10.634	10.634	(0.929)	860928	50.0000	47.4642
	32 1,2-Dichloroethane-d4	65	10.930	10.930	(0.954)	1690099	50.0000	50.9018
	33 Benzene	78	10.950	10.950	(0.956)	2789614	50.0000	50.5307
	34 Methyl tert-Amyl Ether (TAME)	73	10.950	10.950	(0.956)	2184691	50.0000	53.1144(A)
	35 1,2-Dichloroethane	62	11.038	11.038	(0.964)	1106619	50.0000	52.3524
*	36 1,4-Difluorobenzene	114	11.453	11.453	(1.000)	3908815	50.0000	
	37 Trichloroethene	95	11.857	11.857	(1.035)	666860	50.0000	50.4056
	38 Trifluorotoluene	146	12.202	12.202	(1.065)	793129	50.0000	49.9762(A)
	39 1,2-Dichloropropane	63	12.261	12.261	(1.071)	845708	50.0000	50.5065
	40 Dibromomethane	93	12.448	12.448	(1.087)	555128	50.0000	52.9940
	41 Bromodichloromethane	83	12.596	12.596	(1.100)	1029400	50.0000	52.9458
	42 2-Chloroethylvinylether	63	12.931	12.931	(1.129)	237252	50.0000	46.3511
	43 Tetramethyl THF	43	13.158	13.158	(1.149)	2155761	50.0000	53.0072(A)
	44 cis-1,3-Dichloropropene	75	13.208	13.208	(1.153)	1192864	50.0000	52.5289
	45 4-Methyl-2-Pentanone	43	13.346	13.346	(1.165)	1135954	50.0000	53.6594
	46 Toluene-d8	98	13.543	13.543	(1.183)	4192184	50.0000	51.1927
	47 Toluene	92	13.641	13.641	(1.191)	1486942	50.0000	49.2726
	48 trans-1,3-Dichloropropene	75	13.957	13.957	(1.219)	1088803	50.0000	53.4039
	49 1,1,2-Trichloroethane	85	14.223	14.223	(1.242)	396622	50.0000	54.1138
	50 Tetrachloroethene	166	14.351	14.351	(0.927)	485096	50.0000	45.7510
	51 2-Hexanone	43	14.440	14.440	(0.933)	790429	50.0000	53.8763
	52 1,3-Dichloropropane	76	14.470	14.470	(0.935)	1226799	50.0000	51.8451
	53 Dibromochloromethane	129	14.746	14.746	(0.953)	752726	50.0000	53.8636
	54 1,2-Dibromoethane	107	14.953	14.953	(1.306)	767402	50.0000	54.3834
*	55 Chlorobenzene-d5	117	15.475	15.475	(1.000)	3202283	50.0000	
	56 Chlorobenzene	112	15.515	15.515	(1.003)	1641326	50.0000	49.1695
	57 Ethylbenzene	91	15.564	15.564	(1.006)	2608998	50.0000	45.5482
	58 1,1,1,2-Tetrachloroethane	131	15.593	15.593	(1.008)	561179	50.0000	49.5190
	59 m,p-Xylenes	106	15.702	15.702	(1.015)	2020884	100.000	94.9053
	60 o-Xylene	106	16.205	16.205	(1.047)	988249	50.0000	47.4023
	61 Styrene	104	16.224	16.224	(1.048)	1818031	50.0000	51.1048
	62 Bromoform	173	16.530	16.530	(1.068)	515830	50.0000	59.8036
	63 Isopropylbenzene	105	16.599	16.599	(0.912)	2293040	50.0000	45.8574
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1777034	50.0000	49.1751
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.934)	1065633	50.0000	52.8242
	67 Bromobenzene	156	17.072	17.072	(0.938)	699605	50.0000	51.4174
	68 Propylbenzene	91	17.072	17.072	(0.938)	2896384	50.0000	43.1955
	69 1,2,3-Trichloropropane	110	17.092	17.092	(0.939)	248407	50.0000	51.5145
	70 2-Chlorotoluene	91	17.250	17.250	(0.948)	2116538	50.0000	46.8581
	71 1,3,5-Trimethylbenzene	105	17.250	17.250	(0.948)	1924214	50.0000	45.8845
	72 4-Chlorotoluene	91	17.368	17.368	(0.954)	1985804	50.0000	47.0564
	73 tert-Butylbenzene	119	17.625	17.625	(0.969)	1496460	50.0000	44.6527
	74 1,2,4-Trimethylbenzene	105	17.694	17.694	(0.972)	1945976	50.0000	46.6113
	75 sec-Butylbenzene	105	17.881	17.881	(0.983)	2210364	50.0000	43.0187
	76 para-Isopropyl Toluene	119	18.019	18.019	(0.990)	1639940	50.0000	42.8136
	77 1,3-Dichlorobenzene	146	18.117	18.117	(0.996)	1216690	50.0000	49.7566

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV12.D
Report Date: 01-Jun-2007 15:52

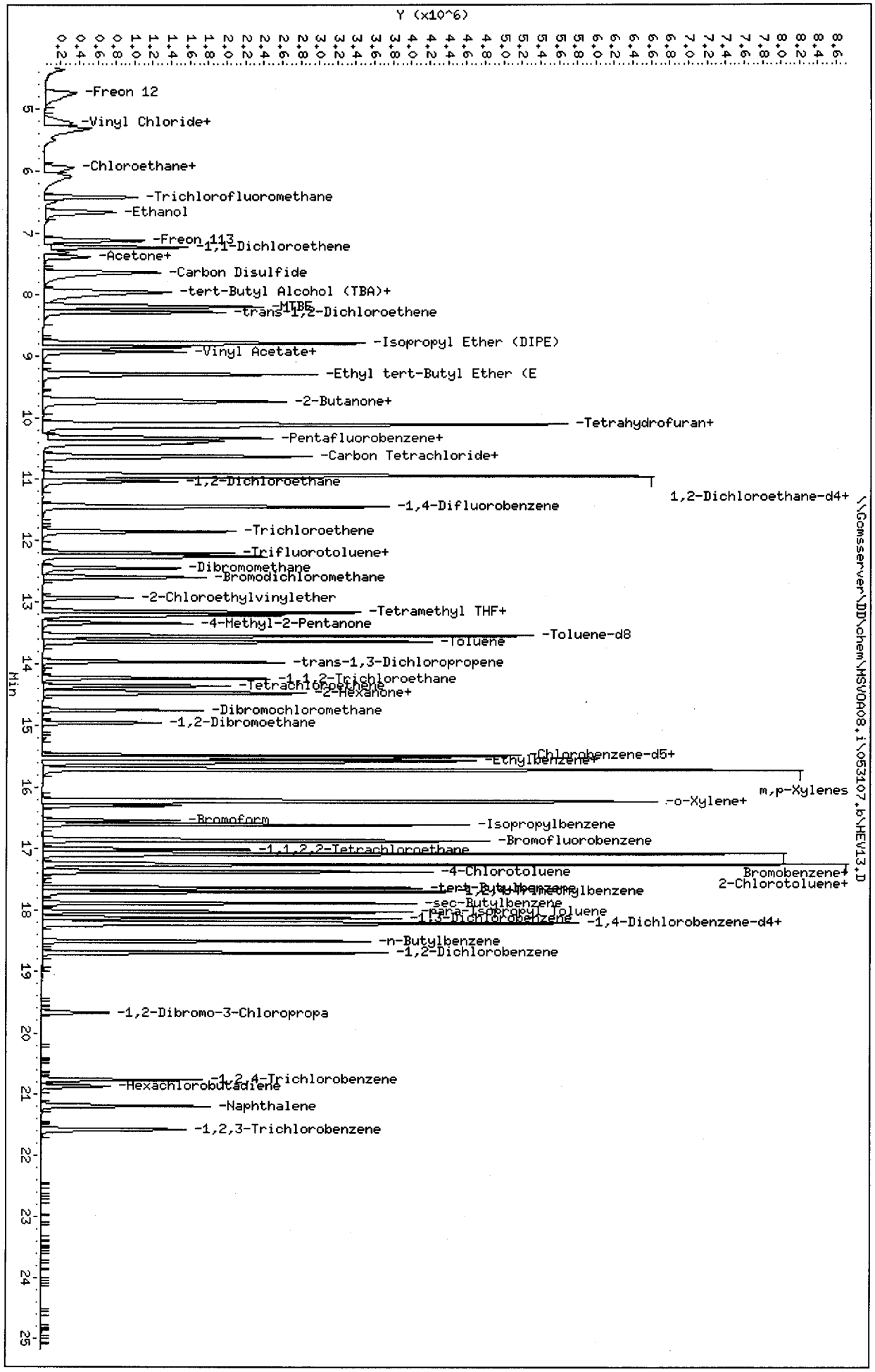
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.196	18.196	(1.000)	1602437	50.0000	
79 1,4-Dichlorobenzene	146	18.226	18.226	(1.002)	1269055	50.0000	48.4833
80 n-Butylbenzene	91	18.502	18.502	(1.017)	1518697	50.0000	42.1505
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.027)	1230283	50.0000	50.5156
82 1,2-Dibromo-3-Chloropropane	75	19.665	19.665	(1.081)	206056	50.0000	56.8432
83 1,2,4-Trichlorobenzene	180	20.770	20.770	(1.141)	477724	50.0000	47.9199
84 Hexachlorobutadiene	225	20.888	20.888	(1.148)	116249	50.0000	45.5653
85 Naphthalene	128	21.204	21.204	(1.165)	1394041	50.0000	54.5485
86 1,2,3-Trichlorobenzene	180	21.588	21.588	(1.186)	463014	50.0000	49.4395

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Date : 31-MAY-2007 19:32
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.015/100,S6350,0.015/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 19:32 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.015/100,S6350,0.015/100,
Misc Info : S5720,0.0075/100,75PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:53 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 19:32 Cal File: HEV13.D
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.754	4.754	(0.460)	1507636	75.0000	83.4956(M)
2 Chloromethane	50	5.237	5.237	(0.507)	1745935	75.0000	69.9272(M)
3 Vinyl Chloride	62	5.326	5.326	(0.516)	1565902	75.0000	76.2149
4 Bromomethane	94	5.947	5.947	(0.576)	935480	75.0000	77.8996(M)
5 Chloroethane	64	6.085	6.085	(0.589)	824501	75.0000	72.4027(M)
6 Trichlorofluoromethane	101	6.420	6.420	(0.622)	1400933	75.0000	79.7363
7 Ethanol	45	6.666	6.666	(0.646)	1798464	7500.00	7152.4789(A)
8 Freon 113	101	7.120	7.120	(0.690)	786508	75.0000	66.0889
9 1,1-Dichloroethene	96	7.228	7.228	(0.700)	882327	75.0000	72.0316
10 Acetone	43	7.317	7.317	(0.709)	487697	75.0000	59.3969
11 Isopropanol	45	7.386	7.386	(0.715)	989409	750.000	740.9797(A)
12 Carbon Disulfide	76	7.642	7.642	(0.740)	4055589	75.0000	72.0337
13 tert-Butyl Alcohol (TBA)	59	7.938	7.938	(0.769)	1227292	750.000	744.8948(A)
14 Methylene Chloride	84	7.978	7.978	(0.773)	1246317	75.0000	73.0319
15 MTBE	73	8.195	8.195	(0.794)	3289573	75.0000	75.3810
16 trans-1,2-Dichloroethene	96	8.283	8.283	(0.802)	1061224	75.0000	73.8997
17 Isopropyl Ether (DIPE)	45	8.786	8.786	(0.851)	5051389	75.0000	72.1549(A)
18 Vinyl Acetate	43	8.855	8.855	(0.858)	3546759	75.0000	114.9896
19 1,1-Dichloroethane	63	8.924	8.924	(0.864)	2128915	75.0000	72.5917
20 Ethyl tert-Butyl Ether (ETBE)	59	9.289	9.289	(0.900)	3997044	75.0000	73.0881(A)
21 2-Butanone	43	9.693	9.693	(0.939)	762757	75.0000	70.8106
22 2,2-Dichloropropane	77	9.713	9.713	(0.941)	1092200	75.0000	86.5295

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.733	9.733	(0.943)	1170190	75.0000	75.2936
	24 Tetrahydrofuran	42	10.097	10.097	(0.978)	3954124	750.000	654.1774(A)
	25 Bromochloromethane	128	10.097	10.097	(0.978)	589565	75.0000	77.8978
	26 Chloroform	83	10.137	10.137	(0.982)	1880252	75.0000	71.9327
*	27 Pentafluorobenzene	168	10.324	10.324	(1.000)	2322090	50.0000	
	28 Dibromofluoromethane	113	10.374	10.374	(1.005)	1484165	50.0000	49.5888
	29 1,1,1-Trichloroethane	97	10.413	10.413	(1.009)	1213657	75.0000	70.6152
	30 Carbon Tetrachloride	117	10.620	10.620	(0.928)	934946	75.0000	69.5359
	31 1,1-Dichloropropene	75	10.630	10.630	(0.929)	1311898	75.0000	70.3284
	32 1,2-Dichloroethane-d4	65	10.926	10.926	(0.954)	1580189	50.0000	46.2767
	33 Benzene	78	10.945	10.945	(0.956)	3983418	75.0000	70.1615
	34 Methyl tert-Amyl Ether (TAME)	73	10.945	10.945	(0.956)	3053583	75.0000	72.1878(A)
	35 1,2-Dichloroethane	62	11.044	11.044	(0.965)	1589391	75.0000	73.1141
*	36 1,4-Difluorobenzene	114	11.448	11.448	(1.000)	4019882	50.0000	
	37 Trichloroethene	95	11.852	11.852	(1.035)	990575	75.0000	72.8054
	38 Trifluorotoluene	146	12.207	12.207	(1.066)	1208782	75.0000	74.2138(A)
	39 1,2-Dichloropropane	63	12.257	12.257	(1.071)	1269299	75.0000	73.7094
	40 Dibromomethane	93	12.444	12.444	(1.087)	816724	75.0000	75.8125
	41 Bromodichloromethane	83	12.592	12.592	(1.100)	1497328	75.0000	74.8852
	42 2-Chloroethylvinylether	63	12.937	12.937	(1.130)	529499	75.0000	75.5016
	43 Tetramethyl THF	43	13.154	13.154	(1.149)	2951551	75.0000	70.5694(A)
	44 cis-1,3-Dichloropropene	75	13.213	13.213	(1.154)	1813023	75.0000	77.6323
	45 4-Methyl-2-Pentanone	43	13.341	13.341	(1.165)	1584578	75.0000	72.7831
	46 Toluene-d8	98	13.538	13.538	(1.183)	4266589	50.0000	50.6618
	47 Toluene	92	13.637	13.637	(1.191)	2274029	75.0000	73.2722
	48 trans-1,3-Dichloropropene	75	13.962	13.962	(1.220)	1608541	75.0000	76.7163
	49 1,1,2-Trichloroethane	85	14.229	14.229	(1.243)	583278	75.0000	77.3818
	50 Tetrachloroethene	166	14.357	14.357	(0.928)	740819	75.0000	67.8269
	51 2-Hexanone	43	14.445	14.445	(0.934)	1124864	75.0000	74.4306
	52 1,3-Dichloropropane	76	14.465	14.465	(0.935)	1716391	75.0000	70.4153
	53 Dibromochloromethane	129	14.751	14.751	(0.953)	1085386	75.0000	75.3979
	54 1,2-Dibromoethane	107	14.948	14.948	(1.306)	1111891	75.0000	76.6192
*	55 Chlorobenzene-d5	117	15.471	15.471	(1.000)	3298700	50.0000	
	56 Chlorobenzene	112	15.510	15.510	(1.003)	2476763	75.0000	72.0282
	57 Ethylbenzene	91	15.560	15.560	(1.006)	3849956	75.0000	65.2485
	58 1,1,1,2-Tetrachloroethane	131	15.589	15.589	(1.008)	846223	75.0000	72.4890
	59 m,p-Xylenes	106	15.698	15.698	(1.015)	3000490	150.000	136.7912
	60 o-Xylene	106	16.200	16.200	(1.047)	1544979	75.0000	71.9403
	61 Styrene	104	16.220	16.220	(1.048)	2704961	75.0000	73.8139
	62 Bromoform	173	16.526	16.526	(1.068)	747381	75.0000	84.1163
	63 Isopropylbenzene	105	16.595	16.595	(0.912)	3424206	75.0000	67.7714
	65 Bromofluorobenzene	95	16.861	16.861	(0.927)	1771065	50.0000	48.5035
	66 1,1,2,2-Tetrachloroethane	83	17.009	17.009	(0.935)	1493341	75.0000	73.2611
	67 Bromobenzene	156	17.068	17.068	(0.938)	1007199	75.0000	73.2591
	68 Propylbenzene	91	17.068	17.068	(0.938)	4208216	75.0000	62.1112
	69 1,2,3-Trichloropropane	110	17.098	17.098	(0.940)	349632	75.0000	71.7573
	70 2-Chlorotoluene	91	17.246	17.246	(0.948)	3071497	75.0000	67.2973
	71 1,3,5-Trimethylbenzene	105	17.246	17.246	(0.948)	2880692	75.0000	67.9827
	72 4-Chlorotoluene	91	17.364	17.364	(0.954)	2950195	75.0000	69.1866
	73 tert-Butylbenzene	119	17.630	17.630	(0.969)	2265288	75.0000	66.8953
	74 1,2,4-Trimethylbenzene	105	17.699	17.699	(0.973)	3017783	75.0000	71.5371
	75 sec-Butylbenzene	105	17.877	17.877	(0.983)	3348946	75.0000	64.5046
	76 para-Isopropyl Toluene	119	18.015	18.015	(0.990)	2664913	75.0000	68.8535
	77 1,3-Dichlorobenzene	146	18.113	18.113	(0.996)	1765418	75.0000	71.4508

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV13.D
Report Date: 01-Jun-2007 15:53

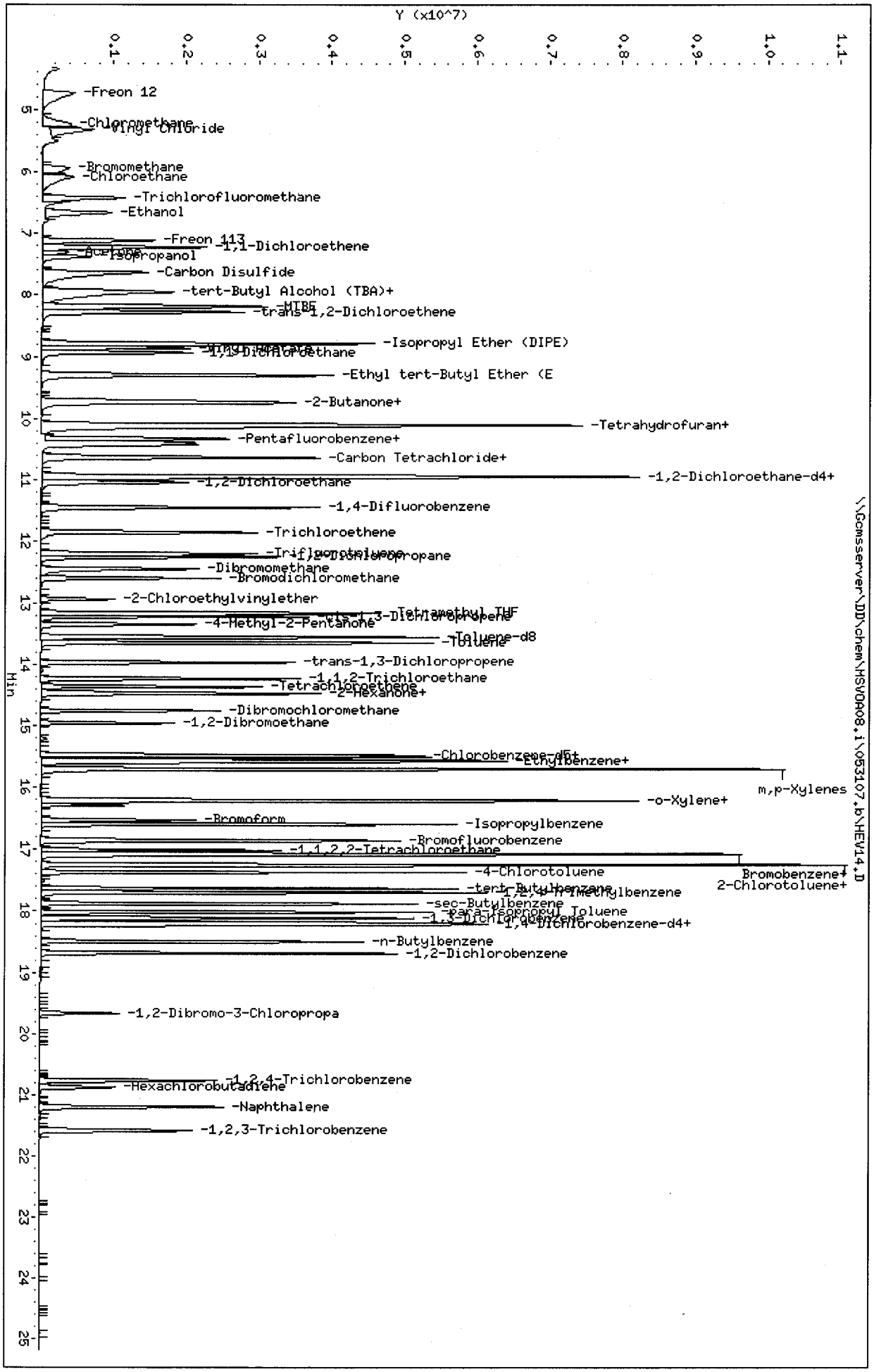
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.192	18.192	(1.000)	1619168	50.0000	
79 1,4-Dichlorobenzene	146	18.222	18.222	(1.002)	1837123	75.0000	69.4607
80 n-Butylbenzene	91	18.498	18.498	(1.017)	2391378	75.0000	65.6854
81 1,2-Dichlorobenzene	146	18.685	18.685	(1.027)	1766111	75.0000	71.7675
82 1,2-Dibromo-3-Chloropropane	75	19.661	19.661	(1.081)	249935	75.0000	68.2353
83 1,2,4-Trichlorobenzene	180	20.775	20.775	(1.142)	757248	75.0000	75.1737
84 Hexachlorobutadiene	225	20.884	20.884	(1.148)	191507	75.0000	74.4354
85 Naphthalene	128	21.199	21.199	(1.165)	2119946	75.0000	82.0958
86 1,2,3-Trichlorobenzene	180	21.584	21.584	(1.186)	724799	75.0000	76.5926

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\Comsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Date : 31-MAY-2007 20:10
Client ID: DYNA P&T
Sample Info: ICAL,S6217,0.02/100,S6350,0.02/100,
Purge Volume: 5.0
Column phase: RTX 624

Instrument: MSVOA08.i
Operator: voc
Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Report Date: 01-Jun-2007 15:54

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 31-MAY-2007 20:10 MS Autotune Date: 27-JUL-2006 10:42
Operator : voc Inst ID: MSVOA08.i
Smp Info : ICAL,S6217,0.02/100,S6350,0.02/100,
Misc Info : S5720,0.01/100,100PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\826GOX8.m
Meth Date : 01-Jun-2007 15:54 lara Quant Type: ISTD
Cal Date : 31-MAY-2007 20:10 Cal File: HEV14.D
Als bottle: 14 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK02

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.748	4.748	(0.460)	2009697	100.000	103.9812(M)
2 Chloromethane	50	5.251	5.251	(0.508)	2429824	100.000	90.8384(M)
3 Vinyl Chloride	62	5.330	5.330	(0.516)	2056555	100.000	93.4960
4 Bromomethane	94	5.941	5.941	(0.575)	1243266	100.000	96.7608(M)
5 Chloroethane	64	6.089	6.089	(0.590)	1141290	100.000	93.6389(M)
6 Trichlorofluoromethane	101	6.424	6.424	(0.622)	1858314	100.000	98.7950
7 Ethanol	45	6.671	6.671	(0.646)	2442575	10000.0	9073.6071(A)
8 Freon 113	101	7.124	7.124	(0.690)	1139340	100.000	89.4244
9 1,1-Dichloroethene	96	7.233	7.233	(0.700)	1287868	100.000	98.2069
10 Acetone	43	7.322	7.322	(0.709)	661251	100.000	75.2242
11 Isopropanol	45	7.391	7.391	(0.716)	1364247	1000.00	954.3347(A)
12 Carbon Disulfide	76	7.647	7.647	(0.740)	5647147	100.000	93.6889
13 tert-Butyl Alcohol (TBA)	59	7.943	7.943	(0.769)	1727292	1000.00	979.2420(A)
14 Methylene Chloride	84	7.972	7.972	(0.772)	1778044	100.000	97.3204
15 MTBE	73	8.199	8.199	(0.794)	4556525	100.000	97.5289
16 trans-1,2-Dichloroethene	96	8.288	8.288	(0.802)	1524217	100.000	99.1425
17 Isopropyl Ether (DIPE)	45	8.791	8.791	(0.851)	6797211	100.000	90.6908(A)
18 Vinyl Acetate	43	8.860	8.860	(0.858)	4696652	100.000	142.2304
19 1,1-Dichloroethane	63	8.929	8.929	(0.864)	2870507	100.000	91.4249
20 Ethyl tert-Butyl Ether (ETBE)	59	9.293	9.293	(0.900)	5477291	100.000	93.5515(A)
21 2-Butanone	43	9.698	9.698	(0.939)	1066540	100.000	92.4840
22 2,2-Dichloropropane	77	9.717	9.717	(0.941)	1412983	100.000	104.5626

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Report Date: 01-Jun-2007 15:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 cis-1,2-Dichloroethene	96	9.737	9.737	(0.943)	1629036	100.000	97.9061
	24 Tetrahydrofuran	42	10.092	10.092	(0.977)	5376285	1000.00	830.8158(A)
	25 Bromochloromethane	128	10.102	10.102	(0.978)	823258	100.000	101.6031
	26 Chloroform	83	10.131	10.131	(0.981)	2586496	100.000	92.4271
*	27 Pentafluorobenzene	168	10.329	10.329	(1.000)	2486004	50.0000	
	28 Dibromofluoromethane	113	10.378	10.378	(1.005)	1553529	50.0000	48.4839
	29 1,1,1-Trichloroethane	97	10.417	10.417	(1.009)	1722380	100.000	93.6070
	30 Carbon Tetrachloride	117	10.624	10.624	(0.928)	1334694	100.000	92.6725
	31 1,1-Dichloropropene	75	10.634	10.634	(0.929)	1807689	100.000	90.4693
	32 1,2-Dichloroethane-d4	65	10.930	10.930	(0.954)	1580018	50.0000	43.1978
	33 Benzene	78	10.950	10.950	(0.956)	5343835	100.000	87.8703
	34 Methyl tert-Amyl Ether (TAME)	73	10.950	10.950	(0.956)	4129266	100.000	91.1325(A)
	35 1,2-Dichloroethane	62	11.039	11.039	(0.964)	2159569	100.000	92.7436
*	36 1,4-Difluorobenzene	114	11.453	11.453	(1.000)	4305930	50.0000	
	37 Trichloroethene	95	11.857	11.857	(1.035)	1404535	100.000	96.3729
	38 Trifluorotoluene	146	12.202	12.202	(1.065)	1753271	100.000	100.6033(A)
	39 1,2-Dichloropropane	63	12.251	12.251	(1.070)	1698934	100.000	92.1048
	40 Dibromomethane	93	12.448	12.448	(1.087)	1150091	100.000	99.6653
	41 Bromodichloromethane	83	12.596	12.596	(1.100)	2115216	100.000	98.7598
	42 2-Chloroethylvinylether	63	12.932	12.932	(1.129)	538549	100.000	73.9594
	43 Tetramethyl THF	43	13.158	13.158	(1.149)	3998896	100.000	89.2592(A)
	44 cis-1,3-Dichloropropene	75	13.208	13.208	(1.153)	2458200	100.000	98.2659
	45 4-Methyl-2-Pentanone	43	13.336	13.336	(1.164)	2209602	100.000	94.7495
	46 Toluene-d8	98	13.543	13.543	(1.183)	4391346	50.0000	48.6793
	47 Toluene	92	13.632	13.632	(1.190)	3138220	100.000	94.4002
	48 trans-1,3-Dichloropropene	75	13.957	13.957	(1.219)	2245072	100.000	99.9614
	49 1,1,2-Trichloroethane	85	14.223	14.223	(1.242)	829544	100.000	102.7422
	50 Tetrachloroethene	166	14.351	14.351	(0.927)	1085585	100.000	97.8873
	51 2-Hexanone	43	14.440	14.440	(0.933)	1470922	100.000	95.8549
	52 1,3-Dichloropropane	76	14.470	14.470	(0.935)	2402523	100.000	97.0714
	53 Dibromochloromethane	129	14.746	14.746	(0.953)	1554139	100.000	106.3256
	54 1,2-Dibromoethane	107	14.953	14.953	(1.306)	1551363	100.000	99.8011
*	55 Chlorobenzene-d5	117	15.475	15.475	(1.000)	3349423	50.0000	
	56 Chlorobenzene	112	15.515	15.515	(1.003)	3286495	100.000	94.1292
	57 Ethylbenzene	91	15.564	15.564	(1.006)	5163532	100.000	86.1855
	58 1,1,1,2-Tetrachloroethane	131	15.594	15.594	(1.008)	1181366	100.000	99.6655
	59 m,p-Xylenes	106	15.702	15.702	(1.015)	4063320	200.000	182.4400
	60 o-Xylene	106	16.205	16.205	(1.047)	2075695	100.000	95.1889
	61 Styrene	104	16.225	16.225	(1.048)	3567611	100.000	95.8799
	62 Bromoform	173	16.530	16.530	(1.068)	1092377	100.000	121.0831
	63 Isopropylbenzene	105	16.599	16.599	(0.913)	4588113	100.000	87.7022
	65 Bromofluorobenzene	95	16.865	16.865	(0.927)	1847691	50.0000	48.8717
	66 1,1,2,2-Tetrachloroethane	83	17.003	17.003	(0.935)	2088466	100.000	98.9536
	67 Bromobenzene	156	17.072	17.072	(0.939)	1343207	100.000	94.3580
	68 Propylbenzene	91	17.063	17.063	(0.938)	5301436	100.000	75.5710
	69 1,2,3-Trichloropropane	110	17.092	17.092	(0.940)	487324	100.000	96.5967
	70 2-Chlorotoluene	91	17.250	17.250	(0.948)	4054173	100.000	85.7906
	71 1,3,5-Trimethylbenzene	105	17.250	17.250	(0.948)	3841367	100.000	87.5542
	72 4-Chlorotoluene	91	17.368	17.368	(0.955)	3947935	100.000	89.4192
	73 tert-Butylbenzene	119	17.625	17.625	(0.969)	3083800	100.000	87.9525
	74 1,2,4-Trimethylbenzene	105	17.694	17.694	(0.973)	3922101	100.000	89.7949
	75 sec-Butylbenzene	105	17.881	17.881	(0.983)	4632222	100.000	86.1711
	76 para-Isopropyl Toluene	119	18.019	18.019	(0.991)	3633536	100.000	90.6697
	77 1,3-Dichlorobenzene	146	18.118	18.118	(0.996)	2434575	100.000	95.1640

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\053107.b\HEV14.D
Report Date: 01-Jun-2007 15:54

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	18.187	18.187	(1.000)	1676495	50.0000	
79 1,4-Dichlorobenzene	146	18.216	18.216	(1.002)	2504441	100.000	91.4538
80 n-Butylbenzene	91	18.492	18.492	(1.017)	3191521	100.000	84.6658
81 1,2-Dichlorobenzene	146	18.689	18.689	(1.028)	2415098	100.000	94.7839
82 1,2-Dibromo-3-Chloropropane	75	19.666	19.666	(1.081)	368585	100.000	97.1873
83 1,2,4-Trichlorobenzene	180	20.770	20.770	(1.142)	1072068	100.000	102.7874
84 Hexachlorobutadiene	225	20.888	20.888	(1.149)	271674	100.000	102.0707
85 Naphthalene	128	21.204	21.204	(1.166)	2875104	100.000	107.5325
86 1,2,3-Trichlorobenzene	180	21.588	21.588	(1.187)	987951	100.000	100.8310

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 MSVOA Water: EPA 8260B

Inst : MSVOA10
Calnum : 497177754004
Units : ug/L

Name : 826GOX10
Date : 03-MAY-2007 13:35
X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	je308	497177754008	0.25/0.5PPB	03-MAY-2007 13:35	S5194 (2000000X), S6072 (2000000X), S5938 (1000000X), S6084 (5000X)
L2	je309	497177754009	0.5/1PPB	03-MAY-2007 14:07	S5194 (1000000X), S6072 (1000000X), S5938 (500000X), S6084 (5000X)
L3	je310	497177754010	2PPB	03-MAY-2007 14:40	S5194 (500000X), S6072 (250000X), S5938 (250000X), S6084 (5000X)
L4	je311	497177754011	5PPB	03-MAY-2007 15:13	S5194 (200000X), S6072 (100000X), S5938 (100000X), S6084 (5000X)
L5	je312	497177754012	10PPB	03-MAY-2007 15:46	S5194 (100000X), S6072 (50000X), S5938 (50000X), S6084 (5000X)
L6	je313	497177754013	20PPB	03-MAY-2007 16:19	S5194 (50000X), S6072 (25000X), S5938 (25000X), S6084 (5000X)
L7	je314	497177754014	50PPB	03-MAY-2007 16:51	S5194 (20000X), S6072 (10000X), S5938 (10000X), S6084 (5000X)
L8	je315	497177754015	75PPB	03-MAY-2007 17:24	S5194 (13330X), S6072 (6667X), S5938 (6667X), S6084 (5000X)
L9	je316	497177754016	100PPB	03-MAY-2007 17:57	S5194 (10000X), S6072 (5000X), S5938 (5000X), S6084 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Chloromethane		0.5947	0.5426	0.5709	0.4865	0.4975	0.4780	0.4537	0.4433	AVRG		1.96694		0.5084	11	15	0.10	0.99	
Vinyl Chloride	0.4132	0.4168m	0.3671m	0.4167	0.3655	0.3629	0.3690	0.3540	0.3529	AVRG		2.63311		0.3798	7	15	0.05	0.99	
Bromomethane		0.2909m	0.2714	0.2949m	0.2511	0.2691	0.2676	0.2750	0.2711	AVRG		3.65109		0.2739	5	15	0.05	0.99	
Chloroethane		0.2584	0.2745m	0.2998	0.2712	0.2697	0.2621	0.2640	0.2563	AVRG		3.71065		0.2695	5	15	0.05	0.99	
Acetone			0.1599m	0.1925	0.1879	0.1586	0.1600			AVRG		5.82201		0.1718	10	15	0.05	0.99	
1,1-Dichloroethene		0.2358m	0.2192	0.2400	0.2414	0.2539	0.2359	0.2494	0.2390	AVRG		4.17827		0.2393	4	15	0.05	0.99	
Methylene Chloride			0.3563m	0.3576	0.3346	0.3304	0.3296	0.3230	0.3254	AVRG		2.97009		0.3367	4	15	0.05	0.99	
Carbon Disulfide		1.0985	0.9961	0.9893	0.9633	1.0131	0.9946	1.0407	0.9939	AVRG		0.98894		1.0112	4	15	0.05	0.99	
MTBE		0.9046m	0.8559	0.8149	0.7674	0.7714	0.7576	0.7442	0.7584	AVRG		1.25500		0.7968	7	15	0.05	0.99	
trans-1,2-Dichloroethene		0.3511m	0.3343	0.3015	0.2976	0.3008	0.2824	0.2812	0.2841	AVRG		3.28796		0.3041	8	15	0.05	0.99	
Vinyl Acetate			0.6363m	0.7199m	0.5324m	0.6892	0.4476	1.0222	0.9214	AVRG		1.40874		0.7099	**29**	15	0.05	0.99	rsd
1,1-Dichloroethane		0.5984	0.5968	0.5961	0.5669	0.5703	0.5508	0.5494	0.5471	AVRG		1.74835		0.5720	4	15	0.10	0.99	
2-Butanone			0.2289	0.2082	0.2129	0.2042	0.2146	0.2015	0.2006	AVRG		4.75928		0.2101	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.3134m	0.3691	0.3166	0.3211	0.3199	0.3116	0.3046	0.3123	AVRG		3.11460		0.3211	6	15	0.05	0.99	
Chloroform		0.5213	0.5072	0.4977	0.4926	0.4839	0.4701	0.4623	0.4625	AVRG		2.05257		0.4872	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.3612m	0.2999	0.3138	0.3185	0.3174	0.3049	0.3316	0.3040	AVRG		3.13579		0.3189	6	15	0.05	0.99	
Carbon Tetrachloride		0.1391	0.1316	0.1437	0.1413	0.1537	0.1384	0.1655	0.1415	AVRG		6.92765		0.1443	7	15	0.05	0.99	
1,2-Dichloroethane		0.2645	0.2512	0.2471	0.2515	0.2517	0.2485	0.2447	0.2399	AVRG		4.00187		0.2499	3	15	0.05	0.99	
Benzene		0.7629	0.6956	0.7249	0.6984	0.7058	0.6774	0.6946	0.6560	AVRG		1.42458		0.7020	5	15	0.05	0.99	
Trichloroethene		0.2129	0.1627	0.1791	0.1769	0.1796	0.1703	0.1713	0.1567	AVRG		5.67516		0.1762	10	15	0.05	0.99	
1,2-Dichloropropane		0.2415	0.2196	0.2213	0.2200	0.2208	0.2144	0.2096	0.2025	AVRG		4.57198		0.2187	5	15	0.05	0.99	
Bromodichloromethane		0.2698	0.2371	0.2414	0.2352	0.2365	0.2326	0.2294	0.2301	AVRG		4.18364		0.2390	5	15	0.05	0.99	
4-Methyl-2-Pentanone		0.3021m	0.3421	0.2832	0.2608	0.3025	0.2871	0.2918	0.2661	AVRG		3.42524		0.2919	9	15	0.05	0.99	
cis-1,3-Dichloropropene		0.3284	0.2954	0.3264	0.3072	0.3089	0.3021	0.3088	0.3032	AVRG		3.22531		0.3100	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Toluene		0.4330m	0.3869	0.4279	0.3911	0.4056	0.3845	0.4001	0.3547	AVRG		2.51270		0.3980	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.2852m	0.2591	0.2780m	0.2711	0.2765	0.2696	0.2741	0.2690	AVRG		3.66524		0.2728	3	15	0.05	0.99	
1,1,2-Trichloroethane		0.1044	0.0983	0.0998	0.0980	0.0982	0.0954	0.0972	0.0943	AVRG		10.1845		0.0982	3	15	0.05	0.99	
2-Hexanone			0.1999	0.2144	0.2166	0.1983	0.2045	0.2061	0.1956	AVRG		4.87644		0.2051	4	15	0.05	0.99	
Tetrachloroethene		0.1922	0.1437	0.1819	0.1672	0.1725	0.1573	0.1823	0.1526	AVRG		5.92719		0.1687	10	15	0.05	0.99	
Dibromochloromethane		0.2225	0.2112	0.2281	0.2269	0.2208	0.2263	0.2212	0.2238	AVRG		4.49237		0.2226	2	15	0.05	0.99	
Chlorobenzene		0.5715	0.5242	0.5556	0.5183	0.5228	0.5061	0.5114	0.4731	AVRG		1.91246		0.5229	6	15	0.30	0.99	
Ethylbenzene		0.9731	0.7932	0.9252	0.8386	0.8567	0.7886	0.8468	0.7221	AVRG		1.18619		0.8430	9	15	0.05	0.99	
m,p-Xylenes	0.3103	0.3178	0.3067	0.3430	0.3061	0.3158	0.2914	0.3124	0.2660	AVRG		3.24970		0.3077	7	15	0.05	0.99	
o-Xylene		0.3480	0.3095	0.3483	0.3139	0.3192	0.2940	0.3052	0.2640	AVRG		3.19746		0.3127	9	15	0.05	0.99	
Styrene		0.5857	0.5274	0.6027	0.5445	0.5650	0.5276	0.5378	0.4787	AVRG		1.83087		0.5462	7	15	0.05	0.99	
Bromoform		0.1601	0.1548	0.1656	0.1611	0.1585	0.1626	0.1639	0.1657	AVRG		6.19057		0.1615	2	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.6707m	0.6326	0.6403	0.5798	0.6019	0.5675	0.6023	0.5756	AVRG		1.64250		0.6088	6	15	0.30	0.99	
Dibromofluoromethane	0.5647	0.5635	0.5630	0.5511	0.5725	0.5604	0.5593	0.5552	0.5745	AVRG		1.77720		0.5627	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3895	0.3906	0.3874	0.3894	0.3937	0.3894	0.3860	0.3792	0.3779	AVRG		2.58388		0.3870	1	15	0.05	0.99	
Toluene-d8	1.0751	1.0857	1.0863	1.0981	1.0869	1.0914	1.0678	1.0854	1.0649	AVRG		0.92388		1.0824	1	15	0.05	0.99	
Bromofluorobenzene	1.1530	1.1357	1.1445	1.1312	1.1260	1.0989	1.0858	1.0642	1.0625	AVRG		0.89982		1.1113	3	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Chloromethane			1.000	17	2.000	7	5.000	12	10.00	-4	20.00	-2	50.00	-6	75.00	-11	100.0	-13
Vinyl Chloride	0.500	9	1.000	10	2.000	-3	5.000	10	10.00	-4	20.00	-4	50.00	-3	75.00	-7	100.0	-7
Bromomethane			1.000	6	2.000	-1	5.000	8	10.00	-8	20.00	-2	50.00	-2	75.00	0	100.0	-1
Chloroethane			1.000	-4	2.000	2	5.000	11	10.00	1	20.00	0	50.00	-3	75.00	-2	100.0	-5
Acetone					2.000	-7	5.000	12	10.00	9	20.00	-8	50.00	-7				
1,1-Dichloroethene			0.500	-1	2.000	-8	5.000	0	10.00	1	20.00	6	50.00	-1	75.00	4	100.0	0
Methylene Chloride					2.000	6	5.000	6	10.00	-1	20.00	-2	50.00	-2	75.00	-4	100.0	-3
Carbon Disulfide			0.500	9	2.000	-1	5.000	-2	10.00	-5	20.00	0	50.00	-2	75.00	3	100.0	-2
MTBE			0.500	14	2.000	7	5.000	2	10.00	-4	20.00	-3	50.00	-5	75.00	-7	100.0	-5
trans-1,2-Dichloroethene			0.500	15	2.000	10	5.000	-1	10.00	-2	20.00	-1	50.00	-7	75.00	-8	100.0	-7
Vinyl Acetate					2.000	-10	5.000	1	10.00	-25	20.00	-3	50.00	-37	75.00	44	100.0	30
1,1-Dichloroethane			0.500	5	2.000	4	5.000	4	10.00	-1	20.00	0	50.00	-4	75.00	-4	100.0	-4
2-Butanone					2.000	9	5.000	-1	10.00	1	20.00	-3	50.00	2	75.00	-4	100.0	-5
cis-1,2-Dichloroethene			0.500	-2	2.000	15	5.000	-1	10.00	0	20.00	0	50.00	-3	75.00	-5	100.0	-3
Chloroform			0.500	7	2.000	4	5.000	2	10.00	1	20.00	-1	50.00	-4	75.00	-5	100.0	-5
1,1,1-Trichloroethane			0.500	13	2.000	-6	5.000	-2	10.00	0	20.00	0	50.00	-4	75.00	4	100.0	-5
Carbon Tetrachloride			0.500	-4	2.000	-9	5.000	0	10.00	-2	20.00	6	50.00	-4	75.00	15	100.0	-2
1,2-Dichloroethane			0.500	6	2.000	1	5.000	-1	10.00	1	20.00	1	50.00	-1	75.00	-2	100.0	-4
Benzene			0.500	9	2.000	-1	5.000	3	10.00	-1	20.00	1	50.00	-3	75.00	-1	100.0	-7
Trichloroethene			0.500	21	2.000	-8	5.000	2	10.00	0	20.00	2	50.00	-3	75.00	-3	100.0	-11
1,2-Dichloropropane			0.500	10	2.000	0	5.000	1	10.00	1	20.00	1	50.00	-2	75.00	-4	100.0	-7
Bromodichloromethane			0.500	13	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	-3	75.00	-4	100.0	-4
4-Methyl-2-Pentanone			0.500	3	2.000	17	5.000	-3	10.00	-11	20.00	4	50.00	-2	75.00	0	100.0	-9
cis-1,3-Dichloropropene			0.500	6	2.000	-5	5.000	5	10.00	-1	20.00	0	50.00	-3	75.00	0	100.0	-2
Toluene			0.500	9	2.000	-3	5.000	8	10.00	-2	20.00	2	50.00	-3	75.00	1	100.0	-11
trans-1,3-Dichloropropene			0.500	5	2.000	-5	5.000	2	10.00	-1	20.00	1	50.00	-1	75.00	0	100.0	-1
1,1,2-Trichloroethane			0.500	6	2.000	0	5.000	2	10.00	0	20.00	0	50.00	-3	75.00	-1	100.0	-4
2-Hexanone					2.000	-3	5.000	5	10.00	6	20.00	-3	50.00	0	75.00	1	100.0	-5
Tetrachloroethene			0.500	14	2.000	-15	5.000	8	10.00	-1	20.00	2	50.00	-7	75.00	8	100.0	-10
Dibromochloromethane			0.500	0	2.000	-5	5.000	2	10.00	2	20.00	-1	50.00	2	75.00	-1	100.0	1
Chlorobenzene			0.500	9	2.000	0	5.000	6	10.00	-1	20.00	0	50.00	-3	75.00	-2	100.0	-10
Ethylbenzene			0.500	15	2.000	-6	5.000	10	10.00	-1	20.00	2	50.00	-6	75.00	0	100.0	-14
m,p-Xylenes	0.500	1	1.000	3	4.000	0	10.00	11	20.00	-1	40.00	3	100.0	-5	150.0	2	200.0	-14
o-Xylene			0.500	11	2.000	-1	5.000	11	10.00	0	20.00	2	50.00	-6	75.00	-2	100.0	-16
Styrene			0.500	7	2.000	-3	5.000	10	10.00	0	20.00	3	50.00	-3	75.00	-2	100.0	-12
Bromoform			0.500	-1	2.000	-4	5.000	3	10.00	0	20.00	-2	50.00	1	75.00	1	100.0	3
1,1,2,2-Tetrachloroethane			0.500	10	2.000	4	5.000	5	10.00	-5	20.00	-1	50.00	-7	75.00	-1	100.0	-5
Dibromofluoromethane	50.00	0	50.00	0	50.00	0	50.00	-2	50.00	2	50.00	0	50.00	-1	50.00	-1	50.00	2
1,2-Dichloroethane-d4	50.00	1	50.00	1	50.00	0	50.00	1	50.00	2	50.00	1	50.00	0	50.00	-2	50.00	-2
Toluene-d8	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1	50.00	-1	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-1	50.00	-2	50.00	-4	50.00	-4

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

m=manual integration rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 497177754004 Cal Date : 03-MAY-2007 Type : WATER

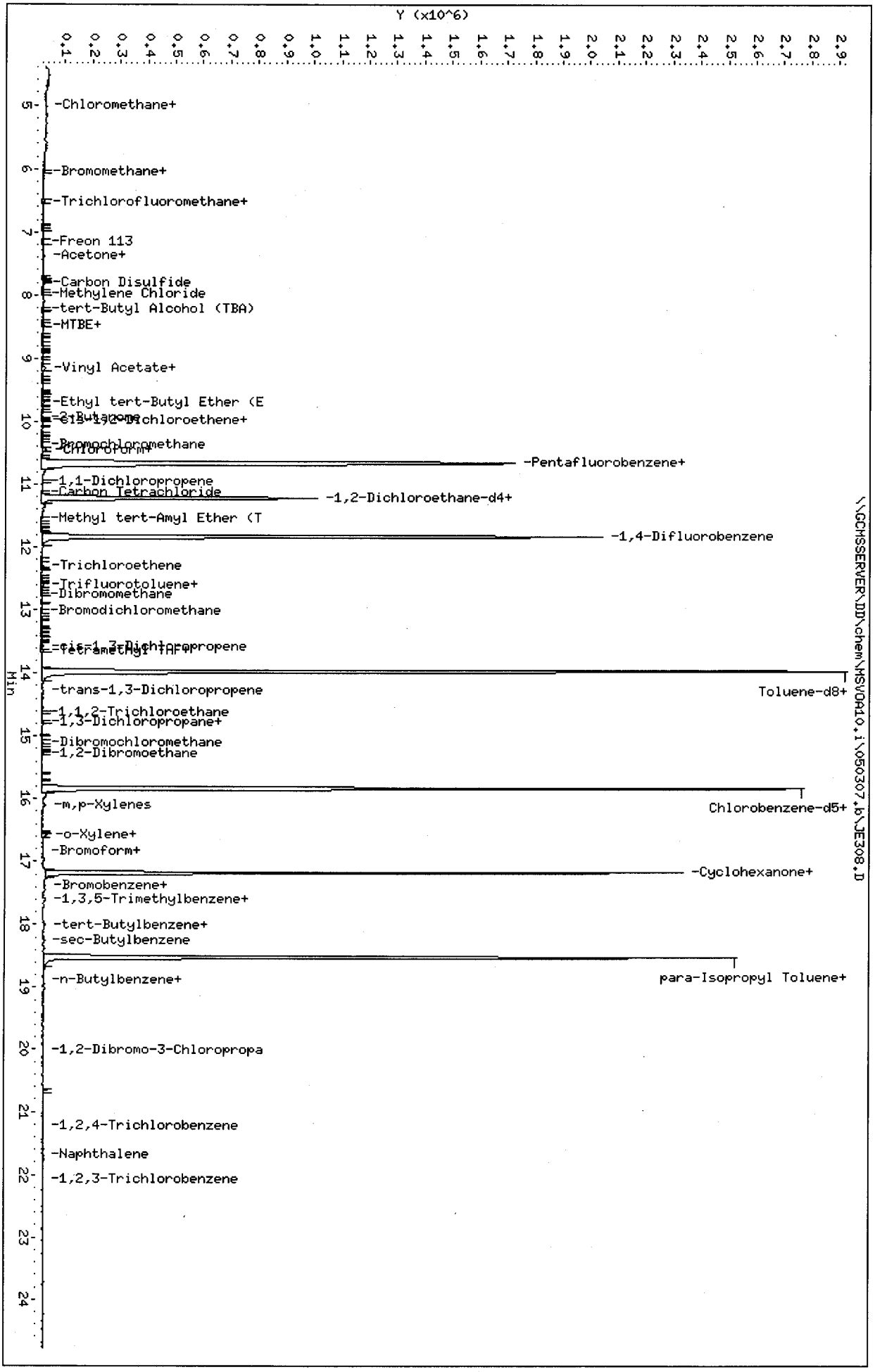
ICV 497177754017 (je317 03-MAY-2007) stds: S6044 (10000X), S6084 (5000X)
ICV 497177754018 (je318 03-MAY-2007) stds: S5723 (10000X), S5968 (10000X), S6084 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	497177754017	0.5084	0.4111	25.00	20.21	ug/L	-19	30	
Vinyl Chloride	497177754017	0.3798	0.3070	25.00	20.21	ug/L	-19	20	
Bromomethane	497177754017	0.2739	0.2259	25.00	20.62	ug/L	-18	30	
Chloroethane	497177754017	0.2695	0.2323	25.00	21.55	ug/L	-14	30	
Acetone	497177754018	0.1718	0.1276	25.00	18.58	ug/L	-26	40	
1,1-Dichloroethene	497177754018	0.2393	0.2311	25.00	24.14	ug/L	-3	20	
Methylene Chloride	497177754018	0.3367	0.3190	25.00	23.68	ug/L	-5	30	
Carbon Disulfide	497177754018	1.0112	0.7101	25.00	17.56	ug/L	**-30**	30	!v-
MTBE	497177754018	0.7968	0.7580	25.00	23.78	ug/L	-5	30	
trans-1,2-Dichloroethene	497177754018	0.3041	0.2775	25.00	22.81	ug/L	-9	30	
Vinyl Acetate	497177754018	0.7099	0.5644	25.00	19.88	ug/L	-20	40	
1,1-Dichloroethane	497177754018	0.5720	0.5352	25.00	23.39	ug/L	-6	30	
2-Butanone	497177754018	0.2101	0.1974	25.00	23.49	ug/L	-6	40	
cis-1,2-Dichloroethene	497177754018	0.3211	0.3185	25.00	24.80	ug/L	-1	30	
Chloroform	497177754018	0.4872	0.4701	25.00	24.13	ug/L	-3	20	
1,1,1-Trichloroethane	497177754018	0.3189	0.3310	25.00	25.95	ug/L	4	30	
Carbon Tetrachloride	497177754018	0.1443	0.1676	25.00	29.02	ug/L	16	30	
1,2-Dichloroethane	497177754018	0.2499	0.2386	25.00	23.87	ug/L	-5	30	
Benzene	497177754018	0.7020	0.6819	25.00	24.29	ug/L	-3	30	
Trichloroethene	497177754018	0.1762	0.1691	25.00	23.99	ug/L	-4	30	
1,2-Dichloropropane	497177754018	0.2187	0.2025	25.00	23.14	ug/L	-7	20	
Bromodichloromethane	497177754018	0.2390	0.2343	25.00	24.51	ug/L	-2	30	
4-Methyl-2-Pentanone	497177754018	0.2919	0.2795	25.00	23.93	ug/L	-4	40	
cis-1,3-Dichloropropene	497177754018	0.3100	0.2924	25.00	23.58	ug/L	-6	30	
Toluene	497177754018	0.3980	0.3901	25.00	24.51	ug/L	-2	20	
trans-1,3-Dichloropropene	497177754018	0.2728	0.2441	25.00	22.36	ug/L	-11	30	
1,1,2-Trichloroethane	497177754018	0.0982	0.0933	25.00	23.75	ug/L	-5	30	
2-Hexanone	497177754018	0.2051	0.1990	25.00	24.26	ug/L	-3	40	
Tetrachloroethene	497177754018	0.1687	0.1930	25.00	28.60	ug/L	14	30	
Dibromochloromethane	497177754018	0.2226	0.2254	25.00	25.32	ug/L	1	30	
Chlorobenzene	497177754018	0.5229	0.5163	25.00	24.69	ug/L	-1	30	
Ethylbenzene	497177754018	0.8430	0.8699	25.00	25.80	ug/L	3	20	
m,p-Xylenes	497177754018	0.3077	0.3165	50.00	51.43	ug/L	3	30	
o-Xylene	497177754018	0.3127	0.3132	25.00	25.04	ug/L	0	30	
Styrene	497177754018	0.5462	0.5576	25.00	25.52	ug/L	2	30	
Bromoform	497177754018	0.1615	0.1666	25.00	25.78	ug/L	3	30	
1,1,2,2-Tetrachloroethane	497177754018	0.6088	0.5836	25.00	23.97	ug/L	-4	30	

!=warning -=low bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Date : 03-MAY-2007 13:35
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 13:35 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0005/1000,S6072,0.0005/1000
Misc Info : S5938,0.001/1000,0.25/0.5PPB
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Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 09:39 target Quant Type: ISTD
Cal Date : 03-MAY-2007 13:35 Cal File: JE308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	5430	0.50000	0.5581
2 Chloromethane	50	5.000	5.000	(0.470)	9979	0.50000	0.7132
3 Vinyl Chloride	62	5.187	5.187	(0.487)	5685	0.50000	0.5439
4 Bromomethane	94	5.877	5.877	(0.552)	3082	0.50000	0.4088
5 Chloroethane	64	6.055	6.055	(0.569)	2787	0.50000	0.3757
6 Trichlorofluoromethane	101	6.518	6.518	(0.612)	4360	0.50000	0.4666
7 Ethanol	45	6.696	6.696	(0.629)	4018	25.0000	24.7192
8 Freon 113	101	7.346	7.346	(0.690)	704	0.25000	0.1412
9 Acetone	43	7.376	7.376	(0.693)	2734	0.25000	0.5783
10 1,1-Dichloroethene	96	7.376	7.376	(0.693)	3326	0.25000	0.5049
11 Isopropanol	45	7.465	7.465	(0.701)	363	2.50000	0.5458
12 Carbon Disulfide	76	7.820	7.820	(0.734)	8164	0.25000	0.2933
13 Methylene Chloride	84	8.086	8.086	(0.759)	3956	0.25000	0.4269
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.761)	2356	2.50000	3.0033
15 MTBE	73	8.480	8.480	(0.796)	8169	0.25000	0.3725
16 trans-1,2-Dichloroethene	96	8.480	8.480	(0.796)	531	0.25000	0.0634
18 Vinyl Acetate	43	9.161	9.161	(0.860)	8848	0.25000	0.4529
19 1,1-Dichloroethane	63	9.151	9.151	(0.859)	4205	0.25000	0.2671
20 Isopropyl Ether (DIPE)	45	9.170	9.170	(0.861)	10678	0.25000	0.2798
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.911)	5516	0.25000	0.2484
22 2-Butanone	43	9.949	9.949	(0.934)	720	0.25000	0.1245
23 cis-1,2-Dichloroethene	96	9.989	9.989	(0.938)	2514	0.25000	0.2745

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.018	10.018	(0.941)	2575	0.25000	0.3138
	25 Bromochloromethane	128	10.383	10.383	(0.975)	925	0.25000	0.2116
	26 Chloroform	83	10.432	10.432	(0.980)	4394	0.25000	0.3277
	27 Tetrahydrofuran	42	10.452	10.452	(0.981)	15211	2.50000	4.8892
*	28 Pentafluorobenzene	168	10.649	10.649	(1.000)	1375990	50.0000	
	29 Dibromofluoromethane	113	10.669	10.669	(1.002)	777088	50.0000	50.1834
	30 1,1,1-Trichloroethane	97	10.797	10.797	(1.014)	2518	0.25000	0.2869
	31 1,1-Dichloropropene	75	11.034	11.034	(0.933)	3024	0.25000	0.3077
	32 Carbon Tetrachloride	117	11.093	11.093	(0.938)	861	0.25000	0.1329
	33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	873566	50.0000	50.3262
	34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	2796	0.25000	0.2494
	35 Benzene	78	11.359	11.359	(0.960)	8881	0.25000	0.2820
	36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	5525	0.25000	0.3383
*	37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2242556	50.0000	
	38 Trichloroethene	95	12.296	12.296	(1.039)	2094	0.25000	0.2649
	39 Trifluorotoluene	146	12.611	12.611	(1.066)	2164	0.25000	0.2187
	40 1,2-Dichloropropane	63	12.601	12.601	(1.065)	2664	0.25000	0.2715
	41 Dibromomethane	93	12.789	12.789	(1.081)	1256	0.25000	0.2177
	42 Bromodichloromethane	83	12.966	12.966	(1.096)	2921	0.25000	0.2724
	44 cis-1,3-Dichloropropene	75	13.577	13.577	(1.147)	3299	0.25000	0.2372
	45 Tetramethyl THF	43	13.646	13.646	(1.153)	9418	0.25000	0.3932
	46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	3667	0.25000	0.2800
	47 Toluene-d8	98	13.972	13.972	(1.181)	2411012	50.0000	49.6640
	48 Toluene	92	14.061	14.061	(1.188)	4374	0.25000	0.2450
	49 trans-1,3-Dichloropropene	75	14.268	14.268	(1.206)	3240	0.25000	0.2647
	50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	894	0.25000	0.2030
	51 1,3-Dichloropropane	76	14.770	14.770	(0.933)	3490	0.25000	0.2617
	52 2-Hexanone	43	14.790	14.790	(0.935)	236	0.25000	0.0306
	53 Tetrachloroethene	166	14.800	14.800	(0.935)	1739	0.25000	0.2740
	54 Dibromochloromethane	129	15.096	15.096	(0.954)	1708	0.25000	0.2040
	55 1,2-Dibromoethane	107	15.293	15.293	(1.292)	1963	0.25000	0.2391
*	56 Chlorobenzene-d5	117	15.825	15.825	(1.000)	1880260	50.0000	
	57 Chlorobenzene	112	15.865	15.865	(1.002)	4849	0.25000	0.2466
	58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.007)	1822	0.25000	0.2737
	59 Ethylbenzene	91	15.963	15.963	(1.009)	7946	0.25000	0.2506
	60 m,p-Xylenes	106	16.101	16.101	(1.017)	5835	0.50000	0.5042
	61 o-Xylene	106	16.585	16.585	(1.048)	2819	0.25000	0.2396
	62 Styrene	104	16.585	16.585	(1.048)	3876	0.25000	0.1887
	63 Bromoform	173	16.841	16.841	(1.064)	988	0.25000	0.1626
	64 Isopropylbenzene	105	16.969	16.969	(0.916)	7135	0.25000	0.2766
	65 Cyclohexanone	55	17.127	17.127	(0.925)	4680	2.50000	3.4062
	66 Bromofluorobenzene	95	17.176	17.176	(0.928)	971769	50.0000	51.8751
	67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	3370	0.25000	0.3283
	68 1,2,3-Trichloropropane	75	17.363	17.363	(0.938)	3037	0.25000	0.3130
	69 Bromobenzene	156	17.393	17.393	(0.939)	1709	0.25000	0.2147
	70 Propylbenzene	91	17.442	17.442	(0.942)	8660	0.25000	0.2698
	71 2-Chlorotoluene	91	17.580	17.580	(0.949)	6371	0.25000	0.2759
	72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	4814	0.25000	0.2502
	73 4-Chlorotoluene	91	17.699	17.699	(0.956)	6630	0.25000	0.3041
	74 tert-Butylbenzene	119	18.004	18.004	(0.972)	4269	0.25000	0.2460
	75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	4283	0.25000	0.2472
	76 sec-Butylbenzene	105	18.251	18.251	(0.986)	6214	0.25000	0.2523
	77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	4295	0.25000	0.2436
	78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	3719	0.25000	0.2696

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE308.D
Report Date: 04-May-2007 09:39

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	842814	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	4000	0.25000	0.2833
81 n-Butylbenzene	91	18.892	18.892	(1.020)	3200	0.25000	0.2331
82 1,2-Dichlorobenzene	146	19.030	19.030	(1.028)	3023	0.25000	0.2215
83 1,2-Dibromo-3-Chloropropane	75	20.006	20.006	(1.080)	431	0.25000	0.2578
84 1,2,4-Trichlorobenzene	180	21.228	21.228	(1.146)	859	0.25000	0.3226
86 Naphthalene	128	21.692	21.692	(1.171)	1424	0.25000	0.1448
87 1,2,3-Trichlorobenzene	180	22.076	22.076	(1.192)	441	0.25000	0.1047

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Date : 03-MAY-2007 14:07
Client ID: DYNA P&T
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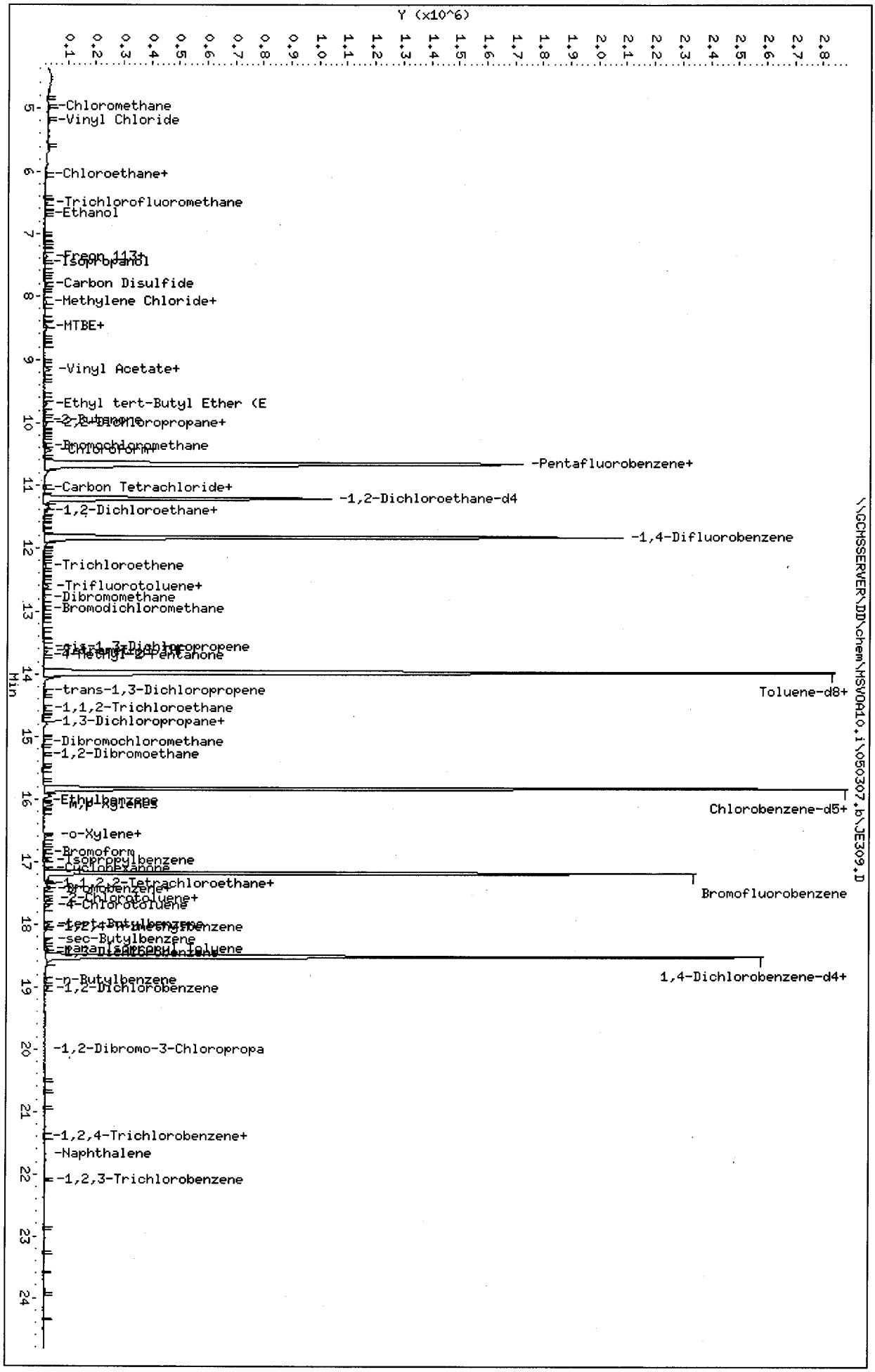
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:07 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/1000,S6072,0.001/1000
Misc Info : S5938,0.002/1000, 0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 12:22 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:07 Cal File: JE309.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	10407	1.00000	1.0722(M)
2 Chloromethane	50	4.994	4.994	(0.469)	16328	1.00000	1.1697
3 Vinyl Chloride	62	5.191	5.191	(0.487)	11443	1.00000	1.0974(M)
4 Bromomethane	94	5.871	5.871	(0.551)	7986	1.00000	1.0619(M)
5 Chloroethane	64	6.049	6.049	(0.568)	7094	1.00000	0.9587
6 Trichlorofluoromethane	101	6.512	6.512	(0.611)	9598	1.00000	1.0297
7 Ethanol	45	6.690	6.690	(0.628)	9931	50.0000	61.2383
8 Freon 113	101	7.340	7.340	(0.689)	2601	0.50000	0.5228
9 Acetone	43	7.380	7.380	(0.693)	3812	0.50000	0.8083
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	3237	0.50000	0.4926(MH)
11 Isopropanol	45	7.498	7.498	(0.704)	3143	5.00000	4.7370
12 Carbon Disulfide	76	7.814	7.814	(0.733)	15080	0.50000	0.5431
13 Methylene Chloride	84	8.090	8.090	(0.759)	7434	0.50000	0.8041(M)
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	4307	5.00000	5.5032(M)
15 MTBE	73	8.474	8.474	(0.795)	12418	0.50000	0.5676(H)
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	4820	0.50000	0.5772(MH)
18 Vinyl Acetate	43	9.154	9.154	(0.859)	19125	0.50000	0.9812
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	8215	0.50000	0.5231
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	21707	0.50000	0.5702
21 Ethyl tert-Butyl Ether (ETBE)	59	9.707	9.707	(0.911)	11934	0.50000	0.5387
22 2-Butanone	43	9.983	9.983	(0.937)	1252	0.50000	0.2170
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	4303	0.50000	0.4881(M)

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	5225	0.50000	0.6382
25 Bromochloromethane	128	10.377	10.377	(0.974)	1971	0.50000	0.4519
26 Chloroform	83	10.426	10.426	(0.979)	7156	0.50000	0.5349
27 Tetrahydrofuran	42	10.446	10.446	(0.981)	25372	5.00000	8.1742
* 28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1372806	50.0000	
29 Dibromofluoromethane	113	10.673	10.673	(1.002)	773510	50.0000	50.0681
30 1,1,1-Trichloroethane	97	10.791	10.791	(1.013)	4958	0.50000	0.5662(H)
31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	5906	0.50000	0.5994(H)
32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	3128	0.50000	0.4819
33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	878193	50.0000	50.4645
34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	5947	0.50000	0.5292
35 Benzene	78	11.363	11.363	(0.961)	17153	0.50000	0.5434
36 Methyl tert-Amyl Ether (TAME)	73	11.432	11.432	(0.967)	7852	0.50000	0.4797(H)
* 37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2248254	50.0000	
38 Trichloroethene	95	12.290	12.290	(1.039)	4787	0.50000	0.6041
39 Trifluorotoluene	146	12.615	12.615	(1.067)	5706	0.50000	0.5752
40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	5429	0.50000	0.5520
41 Dibromomethane	93	12.783	12.783	(1.081)	2917	0.50000	0.5045
42 Bromodichloromethane	83	12.960	12.960	(1.096)	6065	0.50000	0.5642
44 cis-1,3-Dichloropropene	75	13.571	13.571	(1.148)	7383	0.50000	0.5295
45 Tetramethyl THF	43	13.650	13.650	(1.154)	12608	0.50000	0.5251(H)
46 4-Methyl-2-Pentanone	43	13.709	13.709	(1.159)	6792	0.50000	0.5173(M)
47 Toluene-d8	98	13.966	13.966	(1.181)	2440868	50.0000	50.1516
48 Toluene	92	14.064	14.064	(1.189)	9736	0.50000	0.5440(H)
49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	6412	0.50000	0.5226(M)
50 1,1,2-Trichloroethane	85	14.547	14.547	(1.230)	2347	0.50000	0.5315
51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	6587	0.50000	0.4853
52 2-Hexanone	43	14.824	14.824	(0.936)	3944	0.50000	0.5025
53 Tetrachloroethene	166	14.814	14.814	(0.936)	3677	0.50000	0.5694
54 Dibromochloromethane	129	15.090	15.090	(0.953)	4258	0.50000	0.4998
55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	3499	0.50000	0.4251
* 56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1913461	50.0000	
57 Chlorobenzene	112	15.869	15.869	(1.002)	10935	0.50000	0.5464
58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	3381	0.50000	0.4991
59 Ethylbenzene	91	15.957	15.957	(1.008)	18619	0.50000	0.5771
60 m,p-Xylenes	106	16.095	16.095	(1.017)	12163	1.00000	1.0328
61 o-Xylene	106	16.578	16.578	(1.047)	6658	0.50000	0.5562
62 Styrene	104	16.588	16.588	(1.048)	11207	0.50000	0.5361
63 Bromoform	173	16.845	16.845	(1.064)	3063	0.50000	0.4954
64 Isopropylbenzene	105	16.973	16.973	(0.917)	15404	0.50000	0.5714
65 Cyclohexanone	55	17.121	17.121	(0.925)	7204	5.00000	5.0156
66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1000580	50.0000	51.0949
67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	5909	0.50000	0.5507(H)
68 1,2,3-Trichloropropane	75	17.357	17.357	(0.938)	6053	0.50000	0.5967(M)
69 Bromobenzene	156	17.397	17.397	(0.940)	4101	0.50000	0.4928
70 Propylbenzene	91	17.436	17.436	(0.942)	19074	0.50000	0.5685
71 2-Chlorotoluene	91	17.584	17.584	(0.950)	13578	0.50000	0.5625
72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	10926	0.50000	0.5433
73 4-Chlorotoluene	91	17.702	17.702	(0.956)	13842	0.50000	0.6075
74 tert-Butylbenzene	119	18.008	18.008	(0.973)	11010	0.50000	0.6071(H)
75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	7948	0.50000	0.4388
76 sec-Butylbenzene	105	18.245	18.245	(0.986)	14248	0.50000	0.5535
77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	9704	0.50000	0.5265(M)
78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	7247	0.50000	0.5027

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE309.D
Report Date: 04-May-2007 12:22

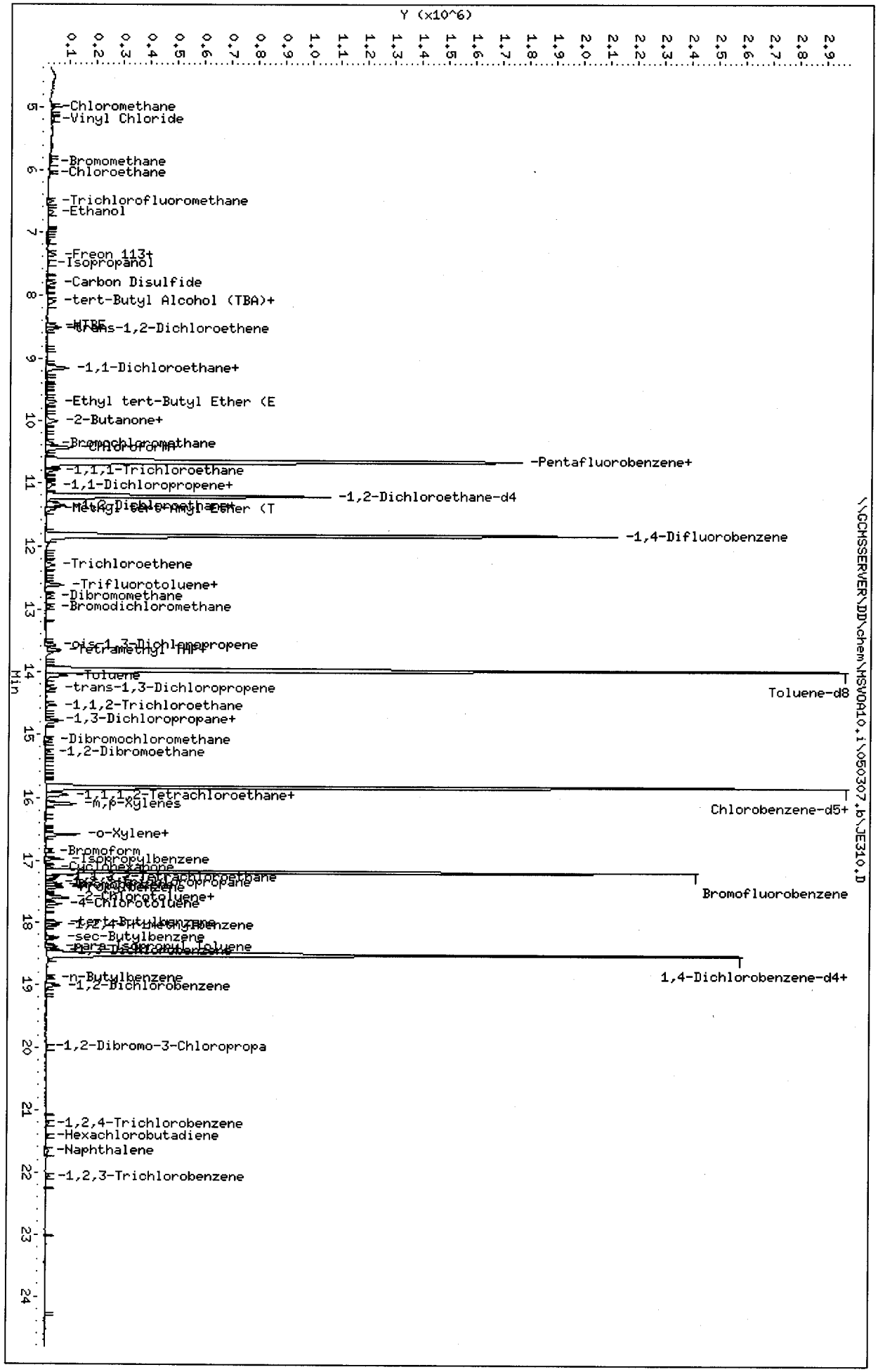
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	881052	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	7762	0.50000	0.5259
81 n-Butylbenzene	91	18.886	18.886	(1.020)	6916	0.50000	0.4819(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.028)	6866	0.50000	0.4812
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	1068	0.50000	0.6113
84 1,2,4-Trichlorobenzene	180	21.242	21.242	(1.148)	1386	0.50000	0.4234(M)
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	1319	0.50000	0.5957(M)
86 Naphthalene	128	21.686	21.686	(1.171)	4817	0.50000	0.4688(M)
87 1,2,3-Trichlorobenzene	180	22.070	22.070	(1.192)	1848	0.50000	0.4200

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Date : 03-MAY-2007 14:40
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/500,S6072,0.002/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 14:40 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/500,S6072,0.002/500
Misc Info : S5938,0.002/500, 2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:06 target Quant Type: ISTD
Cal Date : 03-MAY-2007 14:40 Cal File: JE310.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.425)	21455	2.00000	2.1527(M)
2 Chloromethane	50	4.994	4.994	(0.469)	30595	2.00000	2.1345
3 Vinyl Chloride	62	5.191	5.191	(0.487)	20697	2.00000	1.9330(M)
4 Bromomethane	94	5.862	5.862	(0.550)	15302	2.00000	1.9817
5 Chloroethane	64	6.049	6.049	(0.568)	15478	2.00000	2.0372(M)
6 Trichlorofluoromethane	101	6.502	6.502	(0.610)	18360	2.00000	1.9183
7 Ethanol	45	6.680	6.680	(0.627)	33778	200.000	202.8496(M)
8 Freon 113	101	7.331	7.331	(0.688)	7449	2.00000	1.4584
9 Acetone	43	7.380	7.380	(0.693)	9015	2.00000	2.0242(M)
10 1,1-Dichloroethene	96	7.370	7.370	(0.692)	12359	2.00000	1.8316
11 Isopropanol	45	7.498	7.498	(0.704)	14554	20.0000	21.3625
12 Carbon Disulfide	76	7.814	7.814	(0.733)	56163	2.00000	1.9701
13 Methylene Chloride	84	8.090	8.090	(0.759)	20092	2.00000	2.1167(M)
14 tert-Butyl Alcohol (TBA)	59	8.119	8.119	(0.762)	16309	20.0000	20.2945
15 MTBE	73	8.484	8.484	(0.796)	48260	2.00000	2.1483
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.800)	18850	2.00000	2.1984
18 Vinyl Acetate	43	9.135	9.135	(0.857)	35877	2.00000	1.7623(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.858)	33652	2.00000	2.0869
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	80941	2.00000	2.0708
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.910)	47098	2.00000	2.0706
22 2-Butanone	43	9.953	9.953	(0.934)	12909	2.00000	2.1792
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	20810	2.00000	2.2186

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.032	10.032	(0.942)	16115	2.00000	1.9170
	25 Bromochloromethane	128	10.367	10.367	(0.973)	9211	2.00000	2.0571
	26 Chloroform	83	10.436	10.436	(0.980)	28600	2.00000	2.0822
	27 Tetrahydrofuran	42	10.446	10.446	(0.981)	73173	20.0000	22.9590
*	28 Pentafluorobenzene	168	10.653	10.653	(1.000)	1409612	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.002)	793635	50.0000	50.0295
	30 1,1,1-Trichloroethane	97	10.801	10.801	(1.014)	16912	2.00000	1.8811
	31 1,1-Dichloropropene	75	11.038	11.038	(0.933)	19064	2.00000	1.8790
	32 Carbon Tetrachloride	117	11.077	11.077	(0.937)	12184	2.00000	1.8228
	33 1,2-Dichloroethane-d4	65	11.215	11.215	(0.948)	896823	50.0000	50.0441
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	23266	2.00000	2.0107
	35 Benzene	78	11.363	11.363	(0.961)	64423	2.00000	1.9819
	36 Methyl tert-Amyl Ether (TAME)	73	11.422	11.422	(0.966)	35656	2.00000	2.1153
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2315236	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	15070	2.00000	1.8469
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	16673	2.00000	1.6322
	40 1,2-Dichloropropane	63	12.615	12.615	(1.067)	20339	2.00000	2.0082
	41 Dibromomethane	93	12.793	12.793	(1.082)	11983	2.00000	2.0127
	42 Bromodichloromethane	83	12.960	12.960	(1.096)	21961	2.00000	1.9841
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	27358	2.00000	1.9055
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	48611	2.00000	1.9660
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	31678	2.00000	2.3432
	47 Toluene-d8	98	13.976	13.976	(1.182)	2515013	50.0000	50.1800
	48 Toluene	92	14.064	14.064	(1.189)	35831	2.00000	1.9443
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	23991	2.00000	1.8990
	50 1,1,2-Trichloroethane	85	14.538	14.538	(1.229)	9099	2.00000	2.0012
	51 1,3-Dichloropropane	76	14.774	14.774	(0.933)	27964	2.00000	2.0115
	52 2-Hexanone	43	14.804	14.804	(0.935)	15672	2.00000	1.9494
	53 Tetrachloroethene	166	14.814	14.814	(0.936)	11264	2.00000	1.7030
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	16558	2.00000	1.8974
	55 1,2-Dibromoethane	107	15.287	15.287	(1.293)	17395	2.00000	2.0523
*	56 Chlorobenzene-d5	117	15.829	15.829	(1.000)	1960105	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	41103	2.00000	2.0051
	58 1,1,1,2-Tetrachloroethane	131	15.938	15.938	(1.007)	14123	2.00000	2.0355
	59 Ethylbenzene	91	15.957	15.957	(1.008)	62188	2.00000	1.8817
	60 m,p-Xylenes	106	16.095	16.095	(1.017)	48096	4.00000	3.9869
	61 o-Xylene	106	16.579	16.579	(1.047)	24267	2.00000	1.9793
	62 Styrene	104	16.588	16.588	(1.048)	41353	2.00000	1.9313
	63 Bromoform	173	16.845	16.845	(1.064)	12136	2.00000	1.9164
	64 Isopropylbenzene	105	16.973	16.973	(0.916)	49516	2.00000	1.8050
	65 Cyclohexanone	55	17.121	17.121	(0.924)	13929	20.0000	10.3005
	66 Bromofluorobenzene	95	17.180	17.180	(0.928)	1026075	50.0000	51.4913
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.932)	22687	2.00000	2.0781
	68 1,2,3-Trichloropropane	75	17.357	17.357	(0.937)	23367	2.00000	2.2639
	69 Bromobenzene	156	17.397	17.397	(0.939)	16684	2.00000	1.9705
	70 Propylbenzene	91	17.436	17.436	(0.941)	61471	2.00000	1.8006
	71 2-Chlorotoluene	91	17.584	17.584	(0.949)	48976	2.00000	1.9939
	72 1,3,5-Trimethylbenzene	105	17.614	17.614	(0.951)	36953	2.00000	1.8058
	73 4-Chlorotoluene	91	17.703	17.703	(0.956)	45466	2.00000	1.9609
	74 tert-Butylbenzene	119	18.008	18.008	(0.972)	31632	2.00000	1.7140
	75 1,2,4-Trimethylbenzene	105	18.057	18.057	(0.975)	32323	2.00000	1.7538
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	43904	2.00000	1.6761
	77 para-Isopropyl Toluene	119	18.403	18.403	(0.994)	31404	2.00000	1.6747
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.996)	30465	2.00000	2.0768

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE310.D
Report Date: 04-May-2007 08:06

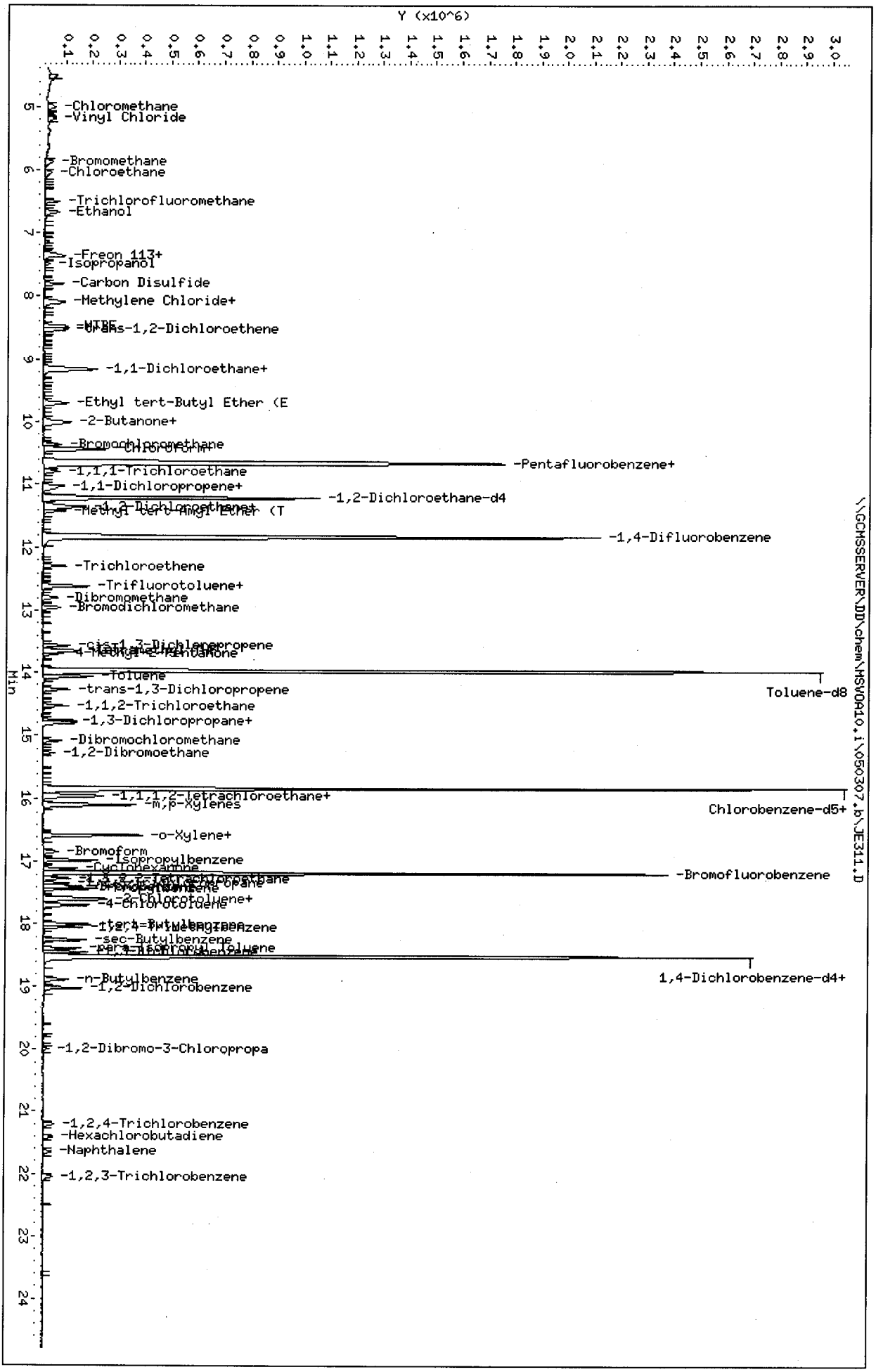
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.521	18.521	(1.000)	896547	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	31850	2.00000	2.1208
81 n-Butylbenzene	91	18.895	18.895	(1.020)	22218	2.00000	1.6087(M)
82 1,2-Dichlorobenzene	146	19.024	19.024	(1.027)	30243	2.00000	2.0833
83 1,2-Dibromo-3-Chloropropane	75	20.000	20.000	(1.080)	3790	2.00000	2.1318
84 1,2,4-Trichlorobenzene	180	21.222	21.222	(1.146)	8276	2.00000	1.6536(M)
85 Hexachlorobutadiene	225	21.419	21.419	(1.157)	3542	2.00000	1.6348
86 Naphthalene	128	21.656	21.656	(1.169)	18914	2.00000	1.6799
87 1,2,3-Trichlorobenzene	180	22.060	22.060	(1.191)	7831	2.00000	1.8252

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Date : 03-MAY-2007 15:13
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0025/500,S6072,0.005/500
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:13 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0025/500,S6072,0.005/500
Misc Info : S5938,0.005/500, 5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:07 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:13 Cal File: JE311.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.426)	60142	5.00000	6.0582(M)
2 Chloromethane	50	5.003	5.003	(0.470)	80156	5.00000	5.6144
3 Vinyl Chloride	62	5.180	5.180	(0.487)	58511	5.00000	5.4864
4 Bromomethane	94	5.861	5.861	(0.551)	41404	5.00000	5.3832(M)
5 Chloroethane	64	6.038	6.038	(0.567)	42093	5.00000	5.5621
6 Trichlorofluoromethane	101	6.501	6.501	(0.611)	52185	5.00000	5.4741
7 Ethanol	45	6.679	6.679	(0.628)	86031	500.000	518.6896(M)
8 Freon 113	101	7.339	7.339	(0.690)	24887	5.00000	4.8918
9 Acetone	43	7.369	7.369	(0.692)	27028	5.00000	6.0928
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	33704	5.00000	5.0148
11 Isopropanol	45	7.497	7.497	(0.704)	35324	50.0000	52.0538
12 Carbon Disulfide	76	7.813	7.813	(0.734)	138901	5.00000	4.8916
13 Methylene Chloride	84	8.089	8.089	(0.760)	50214	5.00000	5.3110
14 tert-Butyl Alcohol (TBA)	59	8.108	8.108	(0.762)	42177	50.0000	52.6913
15 MTBE	73	8.483	8.483	(0.797)	114414	5.00000	5.1133
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.801)	42339	5.00000	4.9573
18 Vinyl Acetate	43	9.124	9.124	(0.857)	101080	5.00000	4.9847(M)
19 1,1-Dichloroethane	63	9.144	9.144	(0.859)	83695	5.00000	5.2108
20 Isopropyl Ether (DIPE)	45	9.154	9.154	(0.860)	195814	5.00000	5.0297
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.911)	115251	5.00000	5.0869
22 2-Butanone	43	9.942	9.942	(0.934)	29234	5.00000	4.9546
23 cis-1,2-Dichloroethene	96	10.001	10.001	(0.940)	44459	5.00000	4.7586

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.031	10.031	(0.943)	42729	5.00000	5.1031
25 Bromochloromethane	128	10.366	10.366	(0.974)	22695	5.00000	5.0886
26 Chloroform	83	10.425	10.425	(0.980)	69881	5.00000	5.1078
27 Tetrahydrofuran	42	10.445	10.445	(0.981)	173265	50.0000	54.5791
* 28 Pentafluorobenzene	168	10.642	10.642	(1.000)	1404065	50.0000	
29 Dibromofluoromethane	113	10.672	10.672	(1.003)	773811	50.0000	48.9725
30 1,1,1-Trichloroethane	97	10.800	10.800	(1.015)	44056	5.00000	4.9196
31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	49607	5.00000	4.9696
32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	32728	5.00000	4.9765
33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	887080	50.0000	50.3104
34 1,2-Dichloroethane	62	11.332	11.332	(0.958)	56295	5.00000	4.9448
35 Benzene	78	11.362	11.362	(0.961)	165120	5.00000	5.1631
36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	82681	5.00000	4.9853
* 37 1,4-Difluorobenzene	114	11.825	11.825	(1.000)	2277963	50.0000	
38 Trichloroethene	95	12.289	12.289	(1.039)	40795	5.00000	5.0816
39 Trifluorotoluene	146	12.604	12.604	(1.066)	50157	5.00000	4.9907
40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	50403	5.00000	5.0580
41 Dibromomethane	93	12.792	12.792	(1.082)	29674	5.00000	5.0657
42 Bromodichloromethane	83	12.959	12.959	(1.096)	54991	5.00000	5.0497
44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	74358	5.00000	5.2640
45 Tetramethyl THF	43	13.640	13.640	(1.153)	124119	5.00000	5.1019
46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	64514	5.00000	4.8503
47 Toluene-d8	98	13.965	13.965	(1.181)	2501333	50.0000	50.7236
48 Toluene	92	14.063	14.063	(1.189)	97478	5.00000	5.3761
49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	63333	5.00000	5.0951(M)
50 1,1,2-Trichloroethane	85	14.527	14.527	(1.228)	22727	5.00000	5.0804
51 1,3-Dichloropropane	76	14.763	14.763	(0.933)	72677	5.00000	5.2249
52 2-Hexanone	43	14.793	14.793	(0.935)	42055	5.00000	5.2284
53 Tetrachloroethene	166	14.813	14.813	(0.936)	35679	5.00000	5.3915
54 Dibromochloromethane	129	15.089	15.089	(0.953)	44728	5.00000	5.1227
55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	43475	5.00000	5.2132
* 56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	1961186	50.0000	
57 Chlorobenzene	112	15.868	15.868	(1.002)	108962	5.00000	5.3127
58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	36766	5.00000	5.2960
59 Ethylbenzene	91	15.956	15.956	(1.008)	181453	5.00000	5.4874
60 m,p-Xylenes	106	16.085	16.085	(1.016)	134518	10.0000	11.1448
61 o-Xylene	106	16.578	16.578	(1.047)	68308	5.00000	5.5683
62 Styrene	104	16.578	16.578	(1.047)	118195	5.00000	5.5170
63 Bromoform	173	16.834	16.834	(1.064)	32477	5.00000	5.1257
64 Isopropylbenzene	105	16.972	16.972	(0.916)	156395	5.00000	5.6433
65 Cyclohexanone	55	17.110	17.110	(0.924)	69537	50.0000	50.9016
66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1024582	50.0000	50.8951
67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.932)	57991	5.00000	5.2581
68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	54968	5.00000	5.2716
69 Bromobenzene	156	17.396	17.396	(0.939)	47690	5.00000	5.5754
70 Propylbenzene	91	17.435	17.435	(0.941)	189282	5.00000	5.4884
71 2-Chlorotoluene	91	17.583	17.583	(0.949)	140027	5.00000	5.6431
72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.950)	112043	5.00000	5.4197
73 4-Chlorotoluene	91	17.692	17.692	(0.955)	125176	5.00000	5.3441
74 tert-Butylbenzene	119	18.007	18.007	(0.972)	100747	5.00000	5.4039
75 1,2,4-Trimethylbenzene	105	18.056	18.056	(0.975)	99183	5.00000	5.3271
76 sec-Butylbenzene	105	18.254	18.254	(0.986)	138952	5.00000	5.2510
77 para-Isopropyl Toluene	119	18.392	18.392	(0.993)	97726	5.00000	5.1587
78 1,3-Dichlorobenzene	146	18.451	18.451	(0.996)	82601	5.00000	5.5738

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE311.D
Report Date: 04-May-2007 08:07

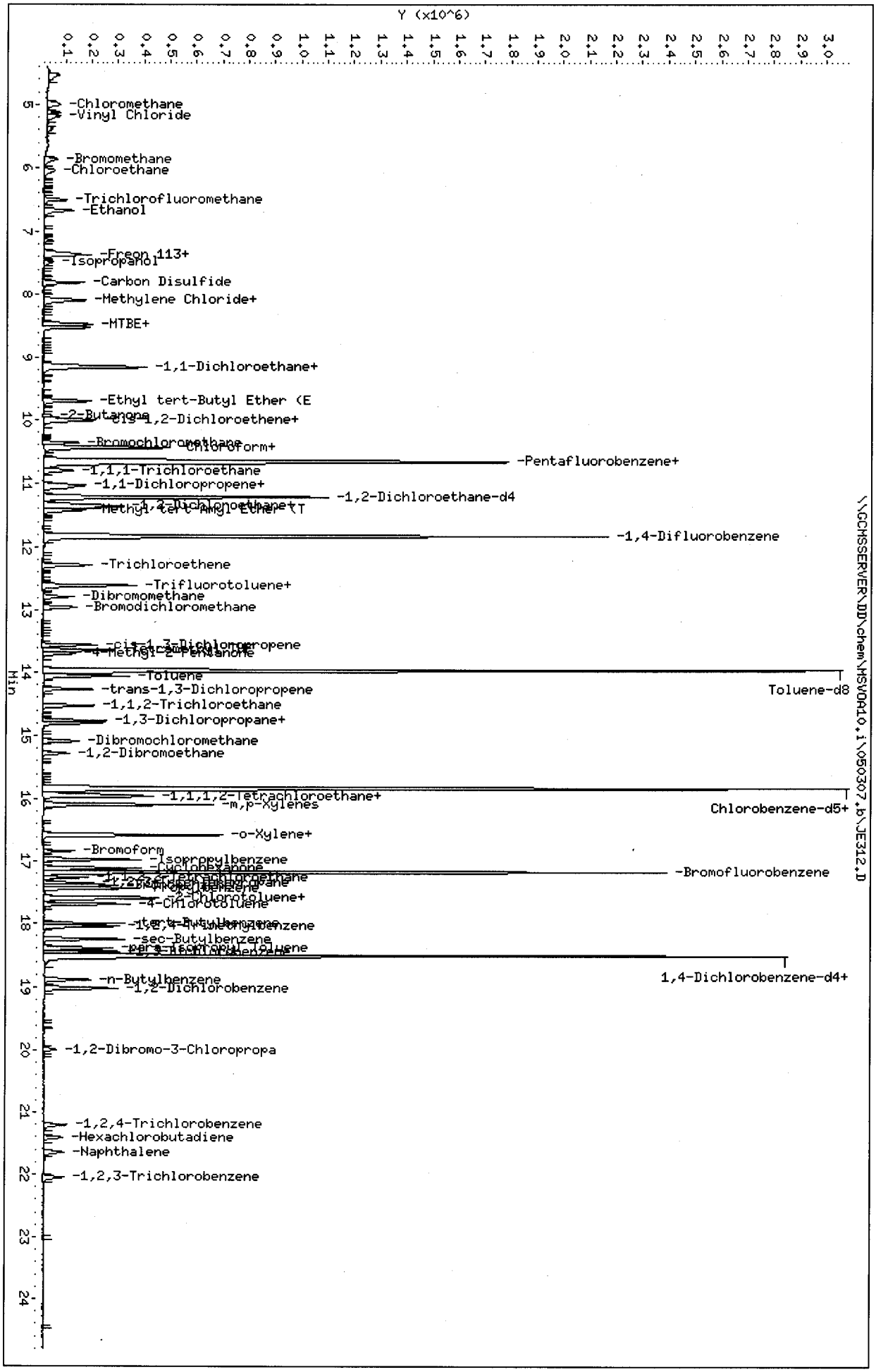
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.520	18.520	(1.000)	905730	50.0000	
80 1,4-Dichlorobenzene	146	18.540	18.540	(1.001)	81814	5.00000	5.3927
81 n-Butylbenzene	91	18.885	18.885	(1.020)	71286	5.00000	5.1093
82 1,2-Dichlorobenzene	146	19.023	19.023	(1.027)	80088	5.00000	5.4610
83 1,2-Dibromo-3-Chloropropane	75	19.999	19.999	(1.080)	8698	5.00000	4.8429
84 1,2,4-Trichlorobenzene	180	21.211	21.211	(1.145)	25865	5.00000	5.1158
85 Hexachlorobutadiene	225	21.418	21.418	(1.157)	11692	5.00000	5.3419
86 Naphthalene	128	21.655	21.655	(1.169)	49271	5.00000	4.3319(M)
87 1,2,3-Trichlorobenzene	180	22.059	22.059	(1.191)	21699	5.00000	5.0063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Date : 03-MAY-2007 15:46
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.001/100,S6072,0.002/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 15:46 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.001/100,S6072,0.002/100
Misc Info : S5938,0.002/100, 10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:08 target Quant Type: ISTD
Cal Date : 03-MAY-2007 15:46 Cal File: JE312.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	89915	10.0000	8.9778
2 Chloromethane	50	4.985	4.985	(0.468)	137830	10.0000	9.5694
3 Vinyl Chloride	62	5.182	5.182	(0.487)	103548	10.0000	9.6241
4 Bromomethane	94	5.872	5.872	(0.552)	71127	10.0000	9.1665
5 Chloroethane	64	6.049	6.049	(0.568)	76838	10.0000	10.0641
6 Trichlorofluoromethane	101	6.503	6.503	(0.611)	92032	10.0000	9.5691
7 Ethanol	45	6.671	6.671	(0.627)	161047	1000.00	962.4395(M)
8 Freon 113	101	7.341	7.341	(0.690)	55009	10.0000	10.7176
9 Acetone	43	7.371	7.371	(0.692)	53227	10.0000	11.8934
10 1,1-Dichloroethene	96	7.371	7.371	(0.692)	68395	10.0000	10.0872
11 Isopropanol	45	7.489	7.489	(0.704)	66367	100.000	96.9400
12 Carbon Disulfide	76	7.814	7.814	(0.734)	272891	10.0000	9.5260
13 Methylene Chloride	84	8.090	8.090	(0.760)	94781	10.0000	9.9366
14 tert-Butyl Alcohol (TBA)	59	8.110	8.110	(0.762)	79384	100.000	98.3025
15 MTBE	73	8.475	8.475	(0.796)	217419	10.0000	9.6314
16 trans-1,2-Dichloroethene	96	8.524	8.524	(0.801)	84302	10.0000	9.7839
18 Vinyl Acetate	43	9.145	9.145	(0.859)	150833	10.0000	7.3729(M)
19 1,1-Dichloroethane	63	9.145	9.145	(0.859)	160593	10.0000	9.9107
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.860)	389154	10.0000	9.9081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.697	9.697	(0.911)	228996	10.0000	10.0186
22 2-Butanone	43	9.944	9.944	(0.934)	60306	10.0000	10.1310
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.939)	90961	10.0000	9.6504

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.023	10.023	(0.942)	77576	10.0000	9.1836
	25 Bromochloromethane	128	10.368	10.368	(0.974)	45844	10.0000	10.1888
	26 Chloroform	83	10.427	10.427	(0.980)	139559	10.0000	10.1113
	27 Tetrahydrofuran	42	10.437	10.437	(0.981)	332722	100.000	103.8881
*	28 Pentafluorobenzene	168	10.644	10.644	(1.000)	1416508	50.0000	
	29 Dibromofluoromethane	113	10.673	10.673	(1.003)	810949	50.0000	50.8721
	30 1,1,1-Trichloroethane	97	10.802	10.802	(1.015)	90225	10.0000	9.9867
	31 1,1-Dichloropropene	75	11.028	11.028	(0.932)	97202	10.0000	9.5272
	32 Carbon Tetrachloride	117	11.078	11.078	(0.937)	65802	10.0000	9.7893
	33 1,2-Dichloroethane-d4	65	11.216	11.216	(0.948)	916714	50.0000	50.8670
	34 1,2-Dichloroethane	62	11.334	11.334	(0.958)	117103	10.0000	10.0637
	35 Benzene	78	11.364	11.364	(0.961)	325224	10.0000	9.9494
	36 Methyl tert-Amyl Ether (TAME)	73	11.423	11.423	(0.966)	176886	10.0000	10.4349
*	37 1,4-Difluorobenzene	114	11.827	11.827	(1.000)	2328303	50.0000	
	38 Trichloroethene	95	12.290	12.290	(1.039)	82390	10.0000	10.0411
	39 Trifluorotoluene	146	12.606	12.606	(1.066)	100609	10.0000	9.7943
	40 1,2-Dichloropropane	63	12.606	12.606	(1.066)	102462	10.0000	10.0600
	41 Dibromomethane	93	12.783	12.783	(1.081)	59720	10.0000	9.9744
	42 Bromodichloromethane	83	12.951	12.951	(1.095)	109536	10.0000	9.8410
	44 cis-1,3-Dichloropropene	75	13.562	13.562	(1.147)	143043	10.0000	9.9076
	45 Tetramethyl THF	43	13.641	13.641	(1.153)	252528	10.0000	10.1558
	46 4-Methyl-2-Pentanone	43	13.700	13.700	(1.158)	121435	10.0000	8.9323
	47 Toluene-d8	98	13.966	13.966	(1.181)	2530522	50.0000	50.2061
	48 Toluene	92	14.065	14.065	(1.189)	182138	10.0000	9.8281
	49 trans-1,3-Dichloropropene	75	14.272	14.272	(1.207)	126263	10.0000	9.9382
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.228)	45657	10.0000	9.9857
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	141062	10.0000	10.0983
	52 2-Hexanone	43	14.785	14.785	(0.934)	85327	10.0000	10.5632
	53 Tetrachloroethene	166	14.805	14.805	(0.935)	65859	10.0000	9.9099
	54 Dibromochloromethane	129	15.090	15.090	(0.953)	89381	10.0000	10.1936
	55 1,2-Dibromoethane	107	15.278	15.278	(1.292)	86172	10.0000	10.1098
*	56 Chlorobenzene-d5	117	15.830	15.830	(1.000)	1969525	50.0000	
	57 Chlorobenzene	112	15.869	15.869	(1.002)	204176	10.0000	9.9130
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.006)	69320	10.0000	9.9431
	59 Ethylbenzene	91	15.958	15.958	(1.008)	330342	10.0000	9.9478
	60 m,p-Xylenes	106	16.086	16.086	(1.016)	241168	20.0000	19.8962
	61 o-Xylene	106	16.569	16.569	(1.047)	123646	10.0000	10.0367
	62 Styrene	104	16.579	16.579	(1.047)	214488	10.0000	9.9694
	63 Bromoform	173	16.836	16.836	(1.064)	63442	10.0000	9.9704
	64 Isopropylbenzene	105	16.974	16.974	(0.917)	281407	10.0000	10.0269
	65 Cyclohexanone	55	17.112	17.112	(0.924)	192898	100.000	139.4326
	66 Bromofluorobenzene	95	17.171	17.171	(0.928)	1032818	50.0000	50.6609
	67 1,1,2,2-Tetrachloroethane	83	17.269	17.269	(0.933)	106355	10.0000	9.5225
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	104123	10.0000	9.8606
	69 Bromobenzene	156	17.397	17.397	(0.940)	87921	10.0000	10.1500
	70 Propylbenzene	91	17.437	17.437	(0.942)	340232	10.0000	9.7417
	71 2-Chlorotoluene	91	17.585	17.585	(0.950)	247340	10.0000	9.8428
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.951)	205208	10.0000	9.8018
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	233535	10.0000	9.8452
	74 tert-Butylbenzene	119	18.009	18.009	(0.973)	182493	10.0000	9.6660
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	184412	10.0000	9.7805
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	257624	10.0000	9.6135
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	179820	10.0000	9.3732
	78 1,3-Dichlorobenzene	146	18.452	18.452	(0.997)	148256	10.0000	9.8787

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE312.D
Report Date: 04-May-2007 08:09

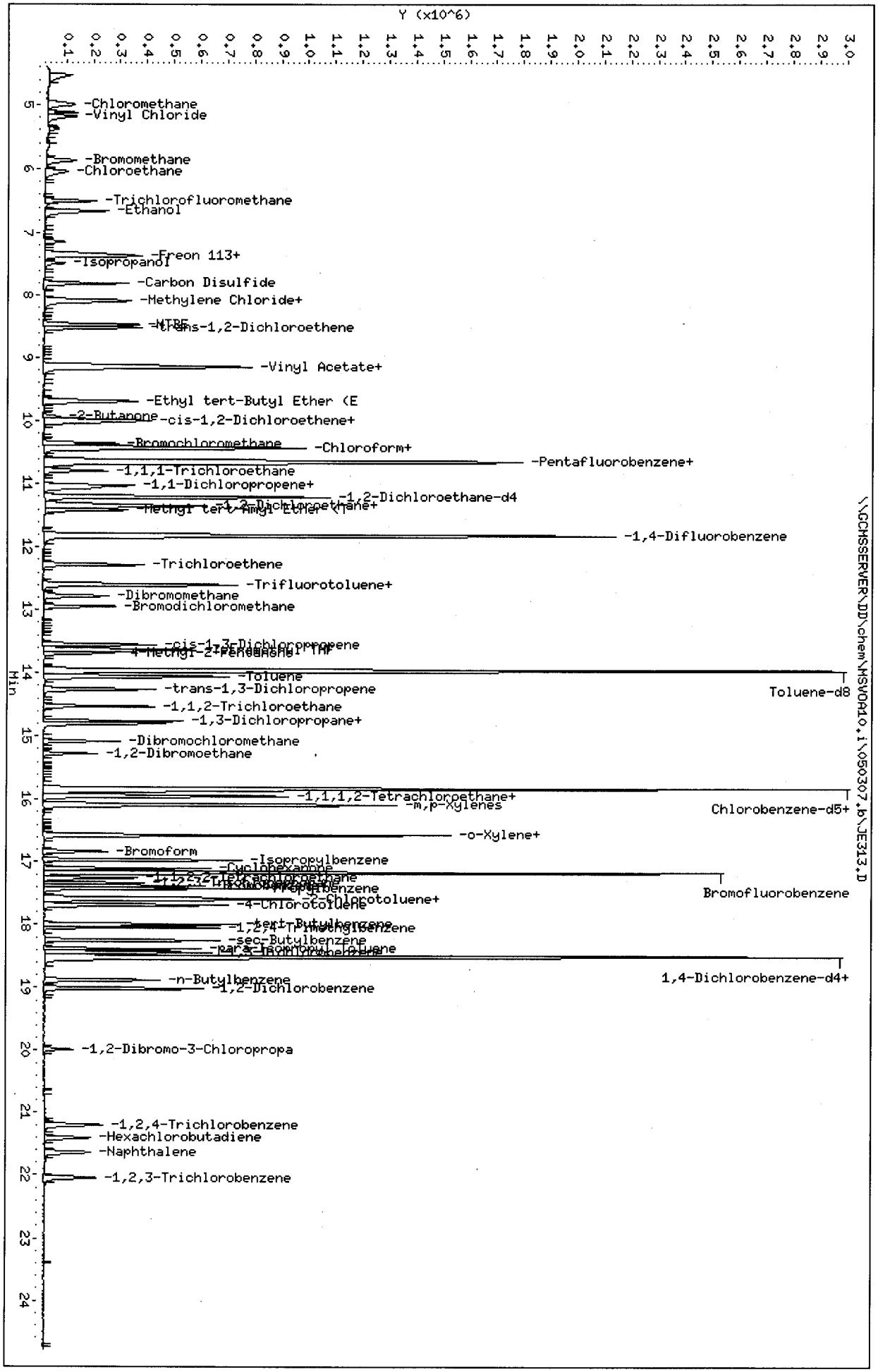
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.512	18.512	(1.000)	917230	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	149173	10.0000	9.7093
81 n-Butylbenzene	91	18.886	18.886	(1.020)	137283	10.0000	9.7163
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	151600	10.0000	10.2077
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.079)	18722	10.0000	10.2934
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	48031	10.0000	9.3808
85 Hexachlorobutadiene	225	21.420	21.420	(1.157)	21706	10.0000	9.7928
86 Naphthalene	128	21.647	21.647	(1.169)	104760	10.0000	9.0951(M)
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	45414	10.0000	10.3465

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Date : 03-MAY-2007 16:19
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.002/100,S6072,0.004/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:19 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.002/100,S6072,0.004/100
Misc Info : S5938,0.004/100, 20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:09 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:19 Cal File: JE313.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.531	4.531	(0.426)	186996	20.0000	18.5814
2 Chloromethane	50	4.994	4.994	(0.470)	283247	20.0000	19.5710
3 Vinyl Chloride	62	5.181	5.181	(0.487)	206595	20.0000	19.1092
4 Bromomethane	94	5.872	5.872	(0.552)	153230	20.0000	19.6527
5 Chloroethane	64	6.039	6.039	(0.568)	153527	20.0000	20.0120
6 Trichlorofluoromethane	101	6.503	6.503	(0.612)	186970	20.0000	19.3469
7 Ethanol	45	6.660	6.660	(0.626)	320064	2000.00	1903.5449
8 Freon 113	101	7.331	7.331	(0.689)	120374	20.0000	23.3401
9 Acetone	43	7.360	7.360	(0.692)	90282	20.0000	20.0762
10 1,1-Dichloroethene	96	7.370	7.370	(0.693)	144580	20.0000	21.2207
11 Isopropanol	45	7.479	7.479	(0.703)	138719	200.000	201.6472
12 Carbon Disulfide	76	7.814	7.814	(0.735)	576816	20.0000	20.0385
13 Methylene Chloride	84	8.080	8.080	(0.760)	188113	20.0000	19.6265
14 tert-Butyl Alcohol (TBA)	59	8.100	8.100	(0.762)	155391	200.000	191.4976
15 MTBE	73	8.474	8.474	(0.797)	439195	20.0000	19.3623
16 trans-1,2-Dichloroethene	96	8.514	8.514	(0.801)	171269	20.0000	19.7816
18 Vinyl Acetate	43	9.115	9.115	(0.857)	392386	20.0000	19.0882
19 1,1-Dichloroethane	63	9.135	9.135	(0.859)	324682	20.0000	19.9408
20 Isopropyl Ether (DIPE)	45	9.155	9.155	(0.861)	781752	20.0000	19.8081
21 Ethyl tert-Butyl Ether (ETBE)	59	9.687	9.687	(0.911)	446941	20.0000	19.4597
22 2-Butanone	43	9.934	9.934	(0.934)	116262	20.0000	19.4373
23 cis-1,2-Dichloroethene	96	9.993	9.993	(0.940)	182121	20.0000	19.2290

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

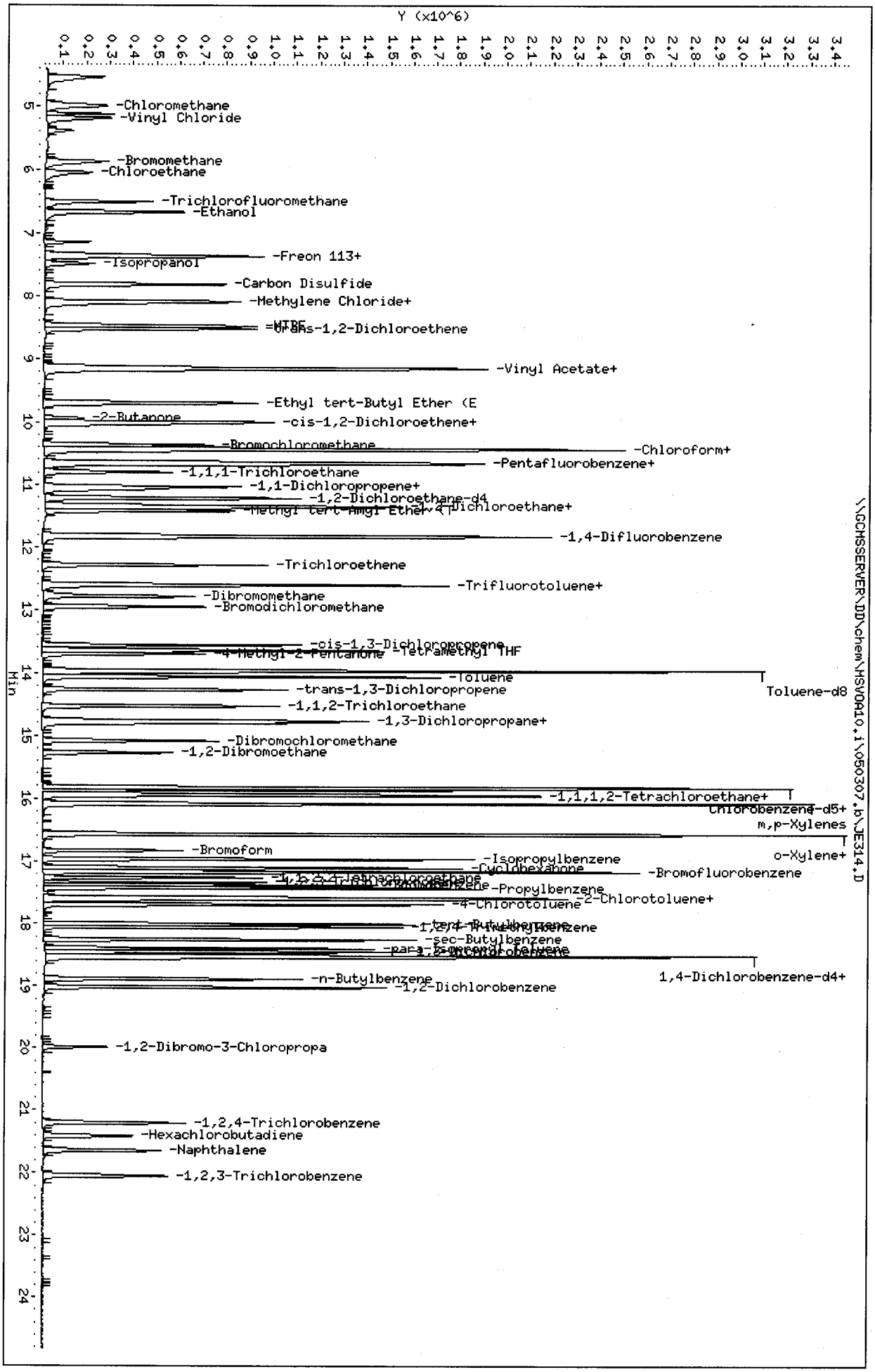
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.022	10.022	(0.943)	158641	20.0000	18.6899
	25 Bromochloromethane	128	10.358	10.358	(0.974)	84899	20.0000	18.7780
	26 Chloroform	83	10.417	10.417	(0.980)	275479	20.0000	19.8629
	27 Tetrahydrofuran	42	10.427	10.427	(0.981)	652109	200.000	202.6329
*	28 Pentafluorobenzene	168	10.634	10.634	(1.000)	1423356	50.0000	
	29 Dibromofluoromethane	113	10.663	10.663	(1.003)	797583	50.0000	49.7929
	30 1,1,1-Trichloroethane	97	10.791	10.791	(1.015)	180700	20.0000	19.9049
	31 1,1-Dichloropropene	75	11.018	11.018	(0.932)	205746	20.0000	20.3188
	32 Carbon Tetrachloride	117	11.067	11.067	(0.937)	142086	20.0000	21.2982
	33 1,2-Dichloroethane-d4	65	11.205	11.205	(0.948)	899776	50.0000	50.3052
	34 1,2-Dichloroethane	62	11.324	11.324	(0.958)	232643	20.0000	20.1446
	35 Benzene	78	11.353	11.353	(0.961)	652382	20.0000	20.1092
	36 Methyl tert-Amyl Ether (TAME)	73	11.413	11.413	(0.966)	331747	20.0000	19.7187
*	37 1,4-Difluorobenzene	114	11.817	11.817	(1.000)	2310806	50.0000	
	38 Trichloroethene	95	12.280	12.280	(1.039)	166052	20.0000	20.3905
	39 Trifluorotoluene	146	12.596	12.596	(1.066)	213223	20.0000	20.9145
	40 1,2-Dichloropropane	63	12.606	12.606	(1.067)	204108	20.0000	20.1916
	41 Dibromomethane	93	12.783	12.783	(1.082)	119315	20.0000	20.0789
	42 Bromodichloromethane	83	12.951	12.951	(1.096)	218625	20.0000	19.7906
	44 cis-1,3-Dichloropropene	75	13.552	13.552	(1.147)	285542	20.0000	19.9272
	45 Tetramethyl THF	43	13.641	13.641	(1.154)	498432	20.0000	20.1970
	46 4-Methyl-2-Pentanone	43	13.690	13.690	(1.159)	279568	20.0000	20.7197
	47 Toluene-d8	98	13.966	13.966	(1.182)	2522015	50.0000	50.4162
	48 Toluene	92	14.055	14.055	(1.189)	374923	20.0000	20.3839
	49 trans-1,3-Dichloropropene	75	14.262	14.262	(1.207)	255546	20.0000	20.2664
	50 1,1,2-Trichloroethane	85	14.528	14.528	(1.229)	90788	20.0000	20.0067
	51 1,3-Dichloropropane	76	14.765	14.765	(0.933)	284194	20.0000	20.1328
	52 2-Hexanone	43	14.775	14.775	(0.934)	157898	20.0000	19.3436
	53 Tetrachloroethene	166	14.804	14.804	(0.936)	137319	20.0000	20.4473
	54 Dibromochloromethane	129	15.080	15.080	(0.953)	175743	20.0000	19.8340
	55 1,2-Dibromoethane	107	15.268	15.268	(1.292)	173857	20.0000	20.5517
*	56 Chlorobenzene-d5	117	15.820	15.820	(1.000)	1990271	50.0000	
	57 Chlorobenzene	112	15.859	15.859	(1.002)	416244	20.0000	19.9985
	58 1,1,1,2-Tetrachloroethane	131	15.928	15.928	(1.007)	140426	20.0000	19.9325
	59 Ethylbenzene	91	15.948	15.948	(1.008)	681994	20.0000	20.3232
	60 m,p-Xylenes	106	16.086	16.086	(1.017)	502784	40.0000	41.0470
	61 o-Xylene	106	16.569	16.569	(1.047)	254094	20.0000	20.4106
	62 Styrene	104	16.569	16.569	(1.047)	449841	20.0000	20.6906
	63 Bromoform	173	16.835	16.835	(1.064)	126201	20.0000	19.6268
	64 Isopropylbenzene	105	16.973	16.973	(0.917)	588609	20.0000	20.4755
	65 Cyclohexanone	55	17.111	17.111	(0.924)	326970	200.000	230.7389
	66 Bromofluorobenzene	95	17.170	17.170	(0.928)	1032455	50.0000	49.4421
	67 1,1,2,2-Tetrachloroethane	83	17.259	17.259	(0.932)	226191	20.0000	19.7718
	68 1,2,3-Trichloropropane	75	17.348	17.348	(0.937)	200446	20.0000	18.5325
	69 Bromobenzene	156	17.387	17.387	(0.939)	177320	20.0000	19.9852
	70 Propylbenzene	91	17.427	17.427	(0.941)	740774	20.0000	20.7072
	71 2-Chlorotoluene	91	17.575	17.575	(0.949)	524562	20.0000	20.3798
	72 1,3,5-Trimethylbenzene	105	17.604	17.604	(0.951)	444224	20.0000	20.7154
	73 4-Chlorotoluene	91	17.693	17.693	(0.956)	481709	20.0000	19.8261
	74 tert-Butylbenzene	119	17.999	17.999	(0.972)	406505	20.0000	21.0205
	75 1,2,4-Trimethylbenzene	105	18.048	18.048	(0.975)	401618	20.0000	20.7952
	76 sec-Butylbenzene	105	18.255	18.255	(0.986)	583693	20.0000	21.2647
	77 para-Isopropyl Toluene	119	18.393	18.393	(0.994)	416853	20.0000	21.2134
	78 1,3-Dichlorobenzene	146	18.442	18.442	(0.996)	313184	20.0000	20.3735

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE313.D
Report Date: 04-May-2007 08:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.511	18.511	(1.000)	939511	50.0000	
80 1,4-Dichlorobenzene	146	18.541	18.541	(1.002)	317560	20.0000	20.1791
81 n-Butylbenzene	91	18.876	18.876	(1.020)	328911	20.0000	22.7269
82 1,2-Dichlorobenzene	146	19.014	19.014	(1.027)	310012	20.0000	20.3791
83 1,2-Dibromo-3-Chloropropane	75	19.980	19.980	(1.079)	36842	20.0000	19.7754
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.145)	112830	20.0000	21.5140
85 Hexachlorobutadiene	225	21.410	21.410	(1.157)	50968	20.0000	22.4492
86 Naphthalene	128	21.646	21.646	(1.169)	233435	20.0000	19.7859
87 1,2,3-Trichlorobenzene	180	22.051	22.051	(1.191)	105637	20.0000	23.4961

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Date : 03-MAY-2007 16:51
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.005/100,S6072,0.01/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 16:51 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.005/100,S6072,0.01/100
Misc Info : S5938,0.01/100, 50PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:11 target Quant Type: ISTD
Cal Date : 03-MAY-2007 16:51 Cal File: JE314.D
Als bottle: 14 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.530	4.530	(0.425)	504201	50.0000	48.1788
2 Chloromethane	50	4.993	4.993	(0.469)	707558	50.0000	47.0128
3 Vinyl Chloride	62	5.190	5.190	(0.487)	546211	50.0000	48.5838
4 Bromomethane	94	5.871	5.871	(0.551)	396118	50.0000	48.8551
5 Chloroethane	64	6.048	6.048	(0.568)	387910	50.0000	48.6232
6 Trichlorofluoromethane	101	6.511	6.511	(0.611)	500419	50.0000	49.7944
7 Ethanol	45	6.669	6.669	(0.626)	858506	5000.00	4909.9409
8 Freon 113	101	7.340	7.340	(0.689)	270265	50.0000	50.3927
9 Acetone	43	7.369	7.369	(0.692)	236787	50.0000	50.6344
10 1,1-Dichloroethene	96	7.379	7.379	(0.693)	349227	50.0000	49.2909
11 Isopropanol	45	7.488	7.488	(0.703)	363163	500.000	507.6502
12 Carbon Disulfide	76	7.813	7.813	(0.733)	1472141	50.0000	49.1794
13 Methylene Chloride	84	8.089	8.089	(0.759)	487837	50.0000	48.9448
14 tert-Butyl Alcohol (TBA)	59	8.109	8.109	(0.761)	415778	500.000	492.7261
15 MTBE	73	8.483	8.483	(0.796)	1121415	50.0000	47.5416
16 trans-1,2-Dichloroethene	96	8.523	8.523	(0.800)	418054	50.0000	46.4324
18 Vinyl Acetate	43	9.124	9.124	(0.857)	662519	50.0000	30.9925
19 1,1-Dichloroethane	63	9.144	9.144	(0.858)	815210	50.0000	48.1461
20 Isopropyl Ether (DIPE)	45	9.164	9.164	(0.860)	1986230	50.0000	48.3962
21 Ethyl tert-Butyl Ether (ETBE)	59	9.696	9.696	(0.910)	1163899	50.0000	48.7313
22 2-Butanone	43	9.933	9.933	(0.932)	317573	50.0000	51.0561
23 cis-1,2-Dichloroethene	96	10.002	10.002	(0.939)	461181	50.0000	46.8246

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

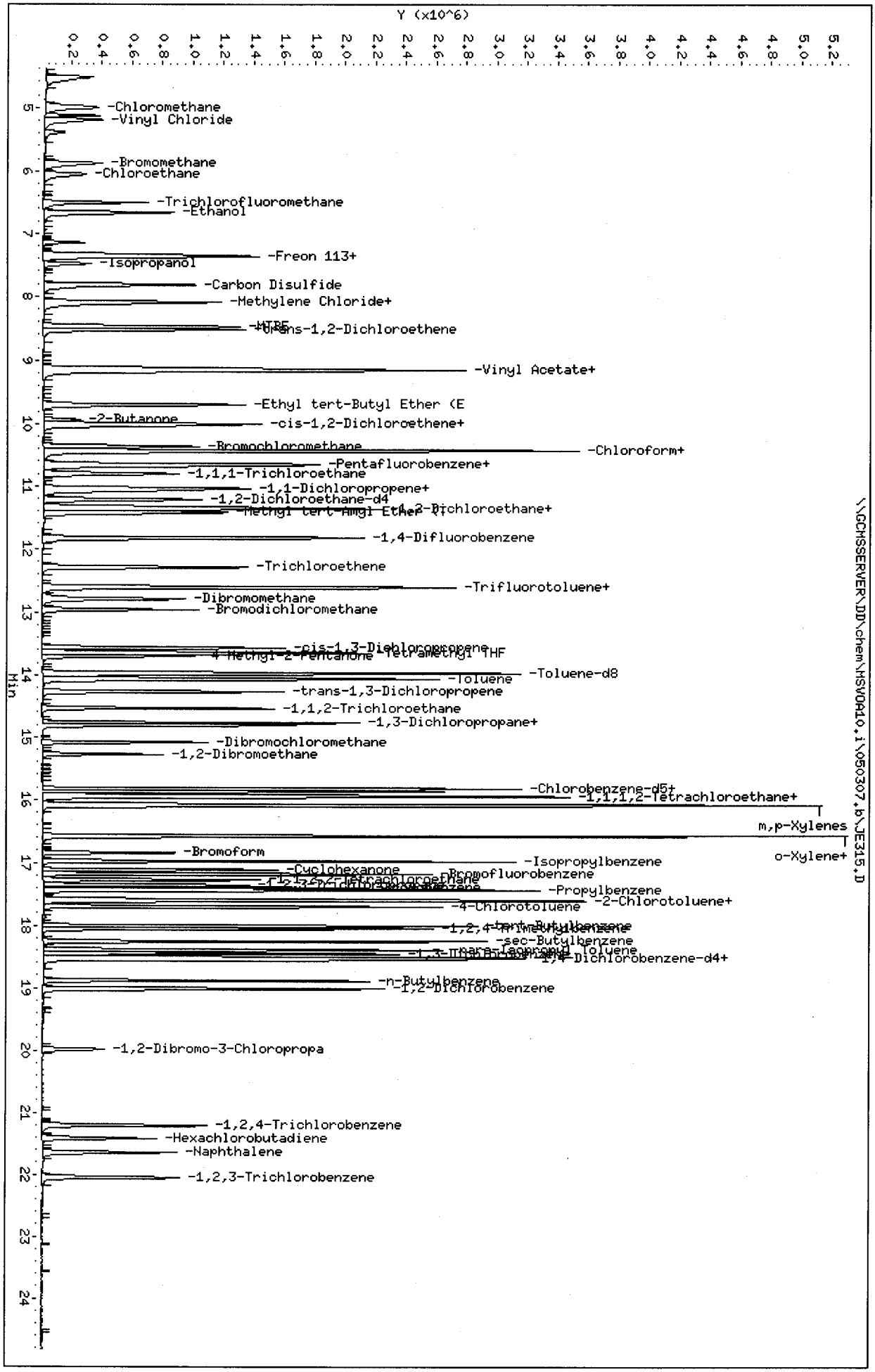
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.031	10.031	(0.942)	383785	50.0000	43.4798
	25 Bromochloromethane	128	10.366	10.366	(0.973)	244827	50.0000	52.0730
	26 Chloroform	83	10.426	10.426	(0.979)	695749	50.0000	48.2407
	27 Tetrahydrofuran	42	10.435	10.435	(0.980)	1649055	500.000	492.7557
*	28 Pentafluorobenzene	168	10.652	10.652	(1.000)	1480154	50.0000	
	29 Dibromofluoromethane	113	10.672	10.672	(1.002)	827867	50.0000	49.7002
	30 1,1,1-Trichloroethane	97	10.800	10.800	(1.014)	451274	50.0000	47.8024
	31 1,1-Dichloropropene	75	11.037	11.037	(0.933)	497318	50.0000	46.4788
	32 Carbon Tetrachloride	117	11.076	11.076	(0.937)	337901	50.0000	47.9331
	33 1,2-Dichloroethane-d4	65	11.214	11.214	(0.948)	942516	50.0000	49.8679
	34 1,2-Dichloroethane	62	11.333	11.333	(0.958)	606711	50.0000	49.7170
	35 Benzene	78	11.362	11.362	(0.961)	1654107	50.0000	48.2516
	36 Methyl tert-Amyl Ether (TAME)	73	11.421	11.421	(0.966)	871811	50.0000	49.0398
*	37 1,4-Difluorobenzene	114	11.826	11.826	(1.000)	2441798	50.0000	
	38 Trichloroethene	95	12.289	12.289	(1.039)	415910	50.0000	48.3322
	39 Trifluorotoluene	146	12.605	12.605	(1.066)	501243	50.0000	46.5283
	40 1,2-Dichloropropane	63	12.614	12.614	(1.067)	523637	50.0000	49.0224
	41 Dibromomethane	93	12.792	12.792	(1.082)	312416	50.0000	49.7546
	42 Bromodichloromethane	83	12.959	12.959	(1.096)	567978	50.0000	48.6570
	44 cis-1,3-Dichloropropene	75	13.561	13.561	(1.147)	737707	50.0000	48.7209
	45 Tetramethyl THF	43	13.650	13.650	(1.154)	1290754	50.0000	49.4971
	46 4-Methyl-2-Pentanone	43	13.699	13.699	(1.158)	700920	50.0000	49.1609
	47 Toluene-d8	98	13.975	13.975	(1.182)	2607428	50.0000	49.3274
	48 Toluene	92	14.064	14.064	(1.189)	938763	50.0000	48.3010
	49 trans-1,3-Dichloropropene	75	14.271	14.271	(1.207)	658296	50.0000	49.4064
	50 1,1,2-Trichloroethane	85	14.537	14.537	(1.229)	232911	50.0000	48.5725
	51 1,3-Dichloropropane	76	14.764	14.764	(0.933)	737516	50.0000	50.7404
	52 2-Hexanone	43	14.783	14.783	(0.934)	419054	50.0000	49.8565
	53 Tetrachloroethene	166	14.813	14.813	(0.936)	322443	50.0000	46.6285
	54 Dibromochloromethane	129	15.089	15.089	(0.953)	463746	50.0000	50.8282
	55 1,2-Dibromoethane	107	15.276	15.276	(1.292)	456727	50.0000	51.0935
*	56 Chlorobenzene-d5	117	15.828	15.828	(1.000)	2049371	50.0000	
	57 Chlorobenzene	112	15.868	15.868	(1.002)	1037125	50.0000	48.3919
	58 1,1,1,2-Tetrachloroethane	131	15.937	15.937	(1.007)	356863	50.0000	49.1936
	59 Ethylbenzene	91	15.957	15.957	(1.008)	1616160	50.0000	46.7723
	60 m,p-Xylenes	106	16.085	16.085	(1.016)	1194176	100.000	94.6805
	61 o-Xylene	106	16.568	16.568	(1.047)	602548	50.0000	47.0052
	62 Styrene	104	16.578	16.578	(1.047)	1081235	50.0000	48.2978
	63 Bromoform	173	16.844	16.844	(1.064)	333182	50.0000	50.3224
	64 Isopropylbenzene	105	16.972	16.972	(0.917)	1372436	50.0000	45.9643
	65 Cyclohexanone	55	17.110	17.110	(0.924)	887316	500.000	602.8524
	66 Bromofluorobenzene	95	17.179	17.179	(0.928)	1059615	50.0000	48.8533
	67 1,1,2,2-Tetrachloroethane	83	17.268	17.268	(0.933)	553835	50.0000	46.6093
	68 1,2,3-Trichloropropane	75	17.347	17.347	(0.937)	525205	50.0000	46.7504
	69 Bromobenzene	156	17.396	17.396	(0.940)	454747	50.0000	49.3446
	70 Propylbenzene	91	17.436	17.436	(0.942)	1733700	50.0000	46.6585
	71 2-Chlorotoluene	91	17.583	17.583	(0.950)	1239951	50.0000	46.3796
	72 1,3,5-Trimethylbenzene	105	17.603	17.603	(0.951)	1049707	50.0000	47.1280
	73 4-Chlorotoluene	91	17.692	17.692	(0.956)	1175242	50.0000	46.5693
	74 tert-Butylbenzene	119	18.007	18.007	(0.973)	909810	50.0000	45.2949
	75 1,2,4-Trimethylbenzene	105	18.047	18.047	(0.975)	1020238	50.0000	50.8594
	76 sec-Butylbenzene	105	18.254	18.254	(0.986)	1337856	50.0000	46.9250
	77 para-Isopropyl Toluene	119	18.392	18.392	(0.994)	981456	50.0000	48.0860
	78 1,3-Dichlorobenzene	146	18.451	18.451	(0.997)	766485	50.0000	48.0055

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE314.D
Report Date: 04-May-2007 08:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.510	18.510	(1.000)	975848	50.0000	
80 1,4-Dichlorobenzene	146	18.550	18.550	(1.002)	776019	50.0000	47.4755
81 n-Butylbenzene	91	18.885	18.885	(1.020)	786615	50.0000	52.3291
82 1,2-Dichlorobenzene	146	19.013	19.013	(1.027)	772624	50.0000	48.8985
83 1,2-Dibromo-3-Chloropropane	75	19.979	19.979	(1.079)	96383	50.0000	49.8085
84 1,2,4-Trichlorobenzene	180	21.202	21.202	(1.145)	306325	50.0000	56.2341
85 Hexachlorobutadiene	225	21.409	21.409	(1.157)	119376	50.0000	50.6221
86 Naphthalene	128	21.645	21.645	(1.169)	671401	50.0000	54.7888
87 1,2,3-Trichlorobenzene	180	22.050	22.050	(1.191)	294335	50.0000	63.0293

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Date : 03-MAY-2007 17:24
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.0075/100,S6072,0.015/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:24 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.0075/100,S6072,0.015/100
Misc Info : S5938,0.015/100, 75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:12 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:24 Cal File: JE315.D
Als bottle: 15 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.532	4.532	(0.425)	665322	75.0000	65.7168
2 Chloromethane	50	4.995	4.995	(0.469)	974450	75.0000	66.9277
3 Vinyl Chloride	62	5.183	5.183	(0.486)	760407	75.0000	69.9148
4 Bromomethane	94	5.873	5.873	(0.551)	590747	75.0000	75.3145
5 Chloroethane	64	6.041	6.041	(0.567)	567112	75.0000	73.4808
6 Trichlorofluoromethane	101	6.504	6.504	(0.610)	715607	75.0000	73.6061
7 Ethanol	45	6.662	6.662	(0.625)	1183509	7500.00	6996.7488
8 Freon 113	101	7.342	7.342	(0.689)	531594	75.0000	102.4589
9 Acetone	43	7.372	7.372	(0.692)	254933	75.0000	56.3515
10 1,1-Dichloroethene	96	7.372	7.372	(0.692)	535637	75.0000	78.1486
11 Isopropanol	45	7.490	7.490	(0.703)	519306	750.000	750.3745
12 Carbon Disulfide	76	7.825	7.825	(0.734)	2235289	75.0000	77.1898
13 Methylene Chloride	84	8.091	8.091	(0.759)	693668	75.0000	71.9408
14 tert-Butyl Alcohol (TBA)	59	8.101	8.101	(0.760)	589656	750.000	722.3283
15 MTBE	73	8.476	8.476	(0.795)	1598518	75.0000	70.0514
16 trans-1,2-Dichloroethene	96	8.525	8.525	(0.800)	603947	75.0000	69.3393
18 Vinyl Acetate	43	9.117	9.117	(0.856)	2195548	75.0000	106.1678
19 1,1-Dichloroethane	63	9.146	9.146	(0.858)	1180046	75.0000	72.0414
20 Isopropyl Ether (DIPE)	45	9.166	9.166	(0.860)	2786954	75.0000	70.1945
21 Ethyl tert-Butyl Ether (ETBE)	59	9.698	9.698	(0.910)	1673445	75.0000	72.4262
22 2-Butanone	43	9.935	9.935	(0.932)	432725	75.0000	71.9131
23 cis-1,2-Dichloroethene	96	10.004	10.004	(0.939)	654240	75.0000	68.6644

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

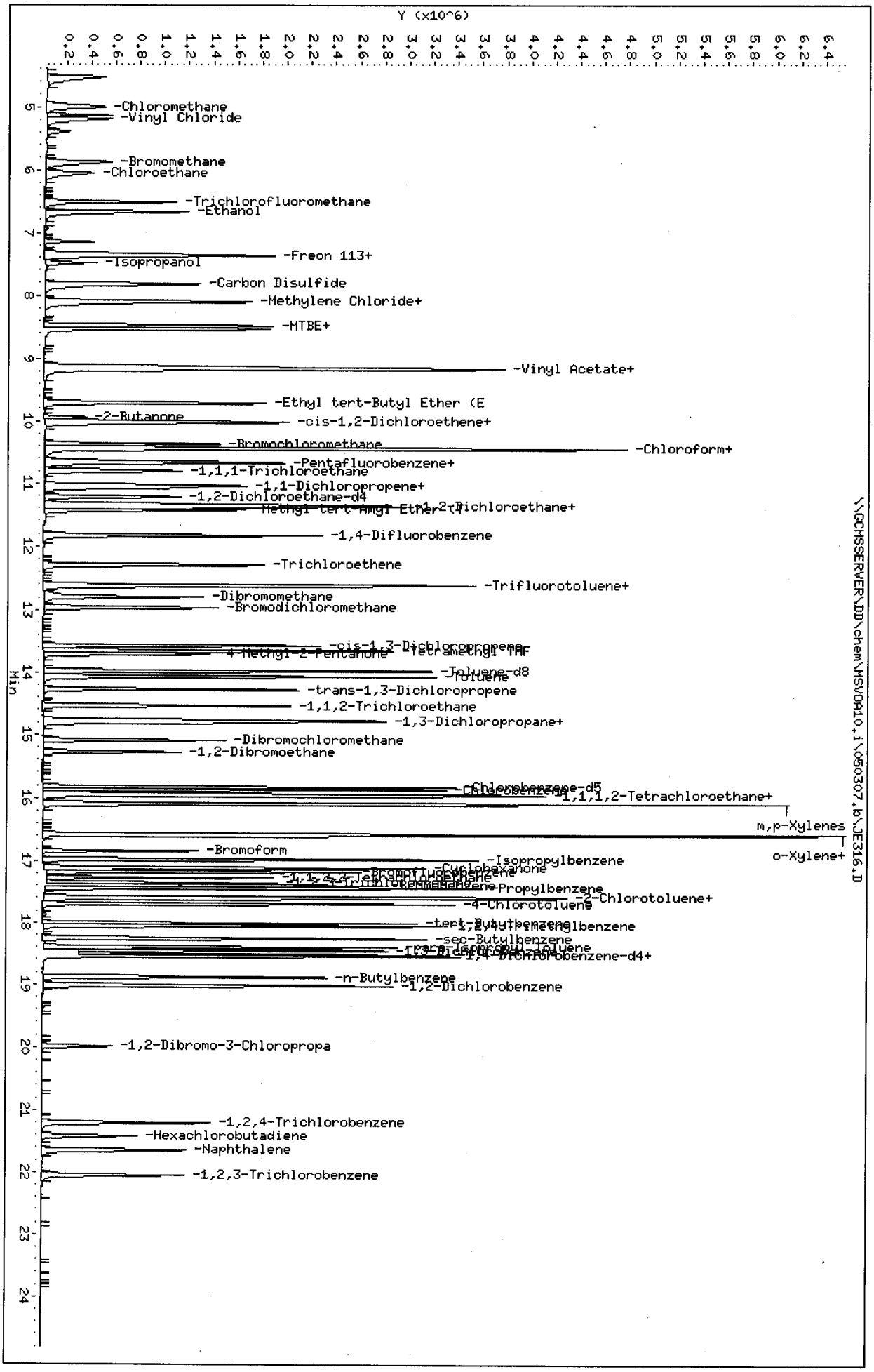
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	24 2,2-Dichloropropane	77	10.034	10.034	(0.942)	674821	75.0000	79.0278
	25 Bromochloromethane	128	10.369	10.369	(0.973)	346491	75.0000	76.1793
	26 Chloroform	83	10.428	10.428	(0.979)	992915	75.0000	71.1648
	27 Tetrahydrofuran	42	10.438	10.438	(0.980)	2326615	750.000	718.6425
*	28 Pentafluorobenzene	168	10.655	10.655	(1.000)	1431908	50.0000	
	29 Dibromofluoromethane	113	10.674	10.674	(1.002)	794941	50.0000	49.3315
	30 1,1,1-Trichloroethane	97	10.803	10.803	(1.014)	712263	75.0000	77.9906
	31 1,1-Dichloropropene	75	11.039	11.039	(0.933)	811214	75.0000	79.0893
	32 Carbon Tetrachloride	117	11.079	11.079	(0.936)	581089	75.0000	85.9905
	33 1,2-Dichloroethane-d4	65	11.217	11.217	(0.948)	887578	50.0000	48.9892
	34 1,2-Dichloroethane	62	11.335	11.335	(0.958)	859136	75.0000	73.4424
	35 Benzene	78	11.365	11.365	(0.960)	2438748	75.0000	74.2124
	36 Methyl tert-Amyl Ether (TAME)	73	11.424	11.424	(0.965)	1287513	75.0000	75.5509
*	37 1,4-Difluorobenzene	114	11.838	11.838	(1.000)	2340712	50.0000	
	38 Trichloroethene	95	12.291	12.291	(1.038)	601330	75.0000	72.8975
	39 Trifluorotoluene	146	12.607	12.607	(1.065)	880330	75.0000	85.2464
	40 1,2-Dichloropropane	63	12.617	12.617	(1.066)	735908	75.0000	71.8704
	41 Dibromomethane	93	12.794	12.794	(1.081)	446568	75.0000	74.1907
	42 Bromodichloromethane	83	12.962	12.962	(1.095)	805593	75.0000	71.9932
	44 cis-1,3-Dichloropropene	75	13.563	13.563	(1.146)	1084077	75.0000	74.6885
	45 Tetramethyl THF	43	13.652	13.652	(1.153)	1835005	75.0000	73.4067
	46 4-Methyl-2-Pentanone	43	13.701	13.701	(1.157)	1024558	75.0000	74.9635
	47 Toluene-d8	98	13.977	13.977	(1.181)	2540553	50.0000	50.1379
	48 Toluene	92	14.066	14.066	(1.188)	1404739	75.0000	75.3976
	49 trans-1,3-Dichloropropene	75	14.273	14.273	(1.206)	962509	75.0000	75.3579
	50 1,1,2-Trichloroethane	85	14.539	14.539	(1.228)	341139	75.0000	74.2154
	51 1,3-Dichloropropane	76	14.776	14.776	(0.933)	1041947	75.0000	73.1952
	52 2-Hexanone	43	14.786	14.786	(0.934)	620581	75.0000	75.3885
	53 Tetrachloroethene	166	14.815	14.815	(0.936)	548973	75.0000	81.0595
	54 Dibromochloromethane	129	15.091	15.091	(0.953)	666030	75.0000	74.5371
	55 1,2-Dibromoethane	107	15.279	15.279	(1.291)	656303	75.0000	76.5906
*	56 Chlorobenzene-d5	117	15.831	15.831	(1.000)	2007086	50.0000	
	57 Chlorobenzene	112	15.870	15.870	(1.002)	1539594	75.0000	73.3504
	58 1,1,1,2-Tetrachloroethane	131	15.939	15.939	(1.007)	529692	75.0000	74.5565
	59 Ethylbenzene	91	15.959	15.959	(1.008)	2549462	75.0000	75.3369
	60 m,p-Xylenes	106	16.087	16.087	(1.016)	1881000	150.000	152.2775
	61 o-Xylene	106	16.570	16.570	(1.047)	918795	75.0000	73.1859
	62 Styrene	104	16.580	16.580	(1.047)	1619179	75.0000	73.8510
	63 Bromoform	173	16.846	16.846	(1.064)	493552	75.0000	76.1144
	64 Isopropylbenzene	105	16.974	16.974	(0.916)	2314351	75.0000	77.8734
	65 Cyclohexanone	55	17.113	17.113	(0.924)	755425	750.000	515.6506
	66 Bromofluorobenzene	95	17.182	17.182	(0.928)	1033698	50.0000	47.8818
	67 1,1,2,2-Tetrachloroethane	83	17.270	17.270	(0.932)	877482	75.0000	74.1928
	68 1,2,3-Trichloropropane	75	17.349	17.349	(0.937)	759185	75.0000	67.8946
	69 Bromobenzene	156	17.398	17.398	(0.939)	677822	75.0000	73.8954
	70 Propylbenzene	91	17.438	17.438	(0.941)	2936524	75.0000	79.4002
	71 2-Chlorotoluene	91	17.586	17.586	(0.949)	1944419	75.0000	73.0709
	72 1,3,5-Trimethylbenzene	105	17.605	17.605	(0.950)	1781595	75.0000	80.3621
	73 4-Chlorotoluene	91	17.694	17.694	(0.955)	1818583	75.0000	72.3998
	74 tert-Butylbenzene	119	18.010	18.010	(0.972)	1596504	75.0000	79.8546
	75 1,2,4-Trimethylbenzene	105	18.049	18.049	(0.974)	1716961	75.0000	85.9928
	76 sec-Butylbenzene	105	18.256	18.256	(0.986)	2427192	75.0000	85.5324
	77 para-Isopropyl Toluene	119	18.394	18.394	(0.993)	1777865	75.0000	87.5141
	78 1,3-Dichlorobenzene	146	18.453	18.453	(0.996)	1174619	75.0000	73.9121

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE315.D
Report Date: 04-May-2007 08:12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.522	18.522	(1.000)	971294	50.0000	
80 1,4-Dichlorobenzene	146	18.552	18.552	(1.002)	1204801	75.0000	74.0532
81 n-Butylbenzene	91	18.887	18.887	(1.020)	1518145	75.0000	101.4673
82 1,2-Dichlorobenzene	146	19.015	19.015	(1.027)	1157808	75.0000	73.6199
83 1,2-Dibromo-3-Chloropropane	75	19.982	19.982	(1.079)	146672	75.0000	76.1521
84 1,2,4-Trichlorobenzene	180	21.204	21.204	(1.145)	521665	75.0000	96.2145
85 Hexachlorobutadiene	225	21.421	21.421	(1.156)	237706	75.0000	101.2734
86 Naphthalene	128	21.648	21.648	(1.169)	1152774	75.0000	94.5117
87 1,2,3-Trichlorobenzene	180	22.052	22.052	(1.191)	491536	75.0000	105.7518

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Date : 03-MAY-2007 17:57
Client ID: DYNA P&T
Sample Info: ICAL,S5194,0.01/100,S6072,0.02/100
Purge Volume: 5.0
Column phase: RTx Volatiles

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 03-MAY-2007 17:57 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5194,0.01/100,S6072,0.02/100
Misc Info : S5938,0.02/100, 100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\826GOX10.m
Meth Date : 04-May-2007 08:13 target Quant Type: ISTD
Cal Date : 03-MAY-2007 17:57 Cal File: JE316.D
Als bottle: 16 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Freon 12	85	4.537	4.537	(0.426)	1042510	100.000	97.3115
2 Chloromethane	50	5.000	5.000	(0.469)	1343417	100.000	87.1959
3 Vinyl Chloride	62	5.187	5.187	(0.487)	1069343	100.000	92.9136
4 Bromomethane	94	5.877	5.877	(0.551)	821645	100.000	98.9921
5 Chloroethane	64	6.045	6.045	(0.567)	776666	100.000	95.0995
6 Trichlorofluoromethane	101	6.508	6.508	(0.611)	1043901	100.000	101.4700
7 Ethanol	45	6.666	6.666	(0.625)	1601102	10000.0	8945.0516
8 Freon 113	101	7.347	7.347	(0.689)	602012	100.000	109.6514
9 Acetone	43	7.366	7.366	(0.691)	394572	100.000	82.4224
10 1,1-Dichloroethene	96	7.376	7.376	(0.692)	724134	100.000	99.8410
11 Isopropanol	45	7.485	7.485	(0.702)	695681	1000.00	949.9572
12 Carbon Disulfide	76	7.820	7.820	(0.734)	3012077	100.000	98.2950
13 Methylene Chloride	84	8.096	8.096	(0.760)	985974	100.000	96.6336
14 tert-Butyl Alcohol (TBA)	59	8.106	8.106	(0.760)	813490	1000.00	941.7319
15 MTBE	73	8.480	8.480	(0.796)	2298292	100.000	95.1796
16 trans-1,2-Dichloroethene	96	8.530	8.530	(0.800)	861081	100.000	93.4252
18 Vinyl Acetate	43	9.121	9.121	(0.856)	2792120	100.000	127.5919
19 1,1-Dichloroethane	63	9.151	9.151	(0.858)	1657969	100.000	95.6531
20 Isopropyl Ether (DIPE)	45	9.161	9.161	(0.859)	3919823	100.000	93.2995
21 Ethyl tert-Butyl Ether (ETBE)	59	9.703	9.703	(0.910)	2334131	100.000	95.4660
22 2-Butanone	43	9.939	9.939	(0.932)	607783	100.000	95.4518
23 cis-1,2-Dichloroethene	96	9.999	9.999	(0.938)	946267	100.000	93.8529

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 2,2-Dichloropropane	77	10.038	10.038	(0.942)	874839	100.000	96.8185
25 Bromochloromethane	128	10.373	10.373	(0.973)	498011	100.000	103.4721
26 Chloroform	83	10.432	10.432	(0.979)	1401696	100.000	94.9394
27 Tetrahydrofuran	42	10.442	10.442	(0.980)	3126694	1000.00	912.6681
* 28 Pentafluorobenzene	168	10.659	10.659	(1.000)	1515221	50.0000	
29 Dibromofluoromethane	113	10.679	10.679	(1.002)	870486	50.0000	51.0494
30 1,1,1-Trichloroethane	97	10.807	10.807	(1.014)	921129	100.000	95.3150
31 1,1-Dichloropropene	75	11.044	11.044	(0.933)	1008555	100.000	91.4784
32 Carbon Tetrachloride	117	11.083	11.083	(0.937)	712106	100.000	98.0368
33 1,2-Dichloroethane-d4	65	11.221	11.221	(0.948)	950850	50.0000	48.8250
34 1,2-Dichloroethane	62	11.339	11.339	(0.958)	1206991	100.000	95.9899
35 Benzene	78	11.369	11.369	(0.961)	3301088	100.000	93.4552
36 Methyl tert-Amyl Ether (TAME)	73	11.428	11.428	(0.966)	1773716	100.000	96.8297
* 37 1,4-Difluorobenzene	114	11.832	11.832	(1.000)	2516004	50.0000	
38 Trichloroethene	95	12.296	12.296	(1.039)	788744	100.000	88.9554
39 Trifluorotoluene	146	12.611	12.611	(1.066)	1046574	100.000	94.2838
40 1,2-Dichloropropane	63	12.621	12.621	(1.067)	1019121	100.000	92.5953
41 Dibromomethane	93	12.789	12.789	(1.081)	637752	100.000	98.5713
42 Bromodichloromethane	83	12.966	12.966	(1.096)	1157889	100.000	96.2674
44 cis-1,3-Dichloropropene	75	13.568	13.568	(1.147)	1525588	100.000	97.7839
45 Tetramethyl THF	43	13.647	13.647	(1.153)	2558674	100.000	95.2248
46 4-Methyl-2-Pentanone	43	13.706	13.706	(1.158)	1339185	100.000	91.1571
47 Toluene-d8	98	13.972	13.972	(1.181)	2679339	50.0000	49.1928
48 Toluene	92	14.071	14.071	(1.189)	1784637	100.000	89.1146
49 trans-1,3-Dichloropropene	75	14.278	14.278	(1.207)	1353823	100.000	98.6103
50 1,1,2-Trichloroethane	85	14.544	14.544	(1.229)	474407	100.000	96.0175
51 1,3-Dichloropropane	76	14.771	14.771	(0.933)	1449685	100.000	97.1285
52 2-Hexanone	43	14.790	14.790	(0.934)	823179	100.000	95.3755
53 Tetrachloroethene	166	14.820	14.820	(0.936)	642222	100.000	90.4428
54 Dibromochloromethane	129	15.096	15.096	(0.953)	942103	100.000	100.5572
55 1,2-Dibromoethane	107	15.283	15.283	(1.292)	920390	100.000	99.9263
* 56 Chlorobenzene-d5	117	15.835	15.835	(1.000)	2104409	50.0000	
57 Chlorobenzene	112	15.875	15.875	(1.002)	1991338	100.000	90.4851
58 1,1,1,2-Tetrachloroethane	131	15.934	15.934	(1.006)	711948	100.000	95.5755
59 Ethylbenzene	91	15.963	15.963	(1.008)	3039166	100.000	85.6543
60 m,p-Xylenes	106	16.092	16.092	(1.016)	2239233	200.000	172.8948
61 o-Xylene	106	16.575	16.575	(1.047)	1110918	100.000	84.3970
62 Styrene	104	16.585	16.585	(1.047)	2014865	100.000	87.6483
63 Bromoform	173	16.841	16.841	(1.064)	697528	100.000	102.5963
64 Isopropylbenzene	105	16.979	16.979	(0.917)	2619349	100.000	84.1948
65 Cyclohexanone	55	17.117	17.117	(0.924)	1572948	1000.00	1025.6774
66 Bromofluorobenzene	95	17.176	17.176	(0.928)	1080351	50.0000	47.8051
67 1,1,2,2-Tetrachloroethane	83	17.275	17.275	(0.933)	1170494	100.000	94.5421
68 1,2,3-Trichloropropane	75	17.354	17.354	(0.937)	1015049	100.000	86.7175
69 Bromobenzene	156	17.403	17.403	(0.940)	890556	100.000	92.7460
70 Propylbenzene	91	17.442	17.442	(0.942)	3342900	100.000	86.3463
71 2-Chlorotoluene	91	17.590	17.590	(0.950)	2351583	100.000	84.4203
72 1,3,5-Trimethylbenzene	105	17.610	17.610	(0.951)	2080533	100.000	89.6498
73 4-Chlorotoluene	91	17.699	17.699	(0.956)	2269523	100.000	86.3120
74 tert-Butylbenzene	119	18.014	18.014	(0.973)	1799173	100.000	85.9677
75 1,2,4-Trimethylbenzene	105	18.054	18.054	(0.975)	2086737	100.000	99.8393
76 sec-Butylbenzene	105	18.261	18.261	(0.986)	2676991	100.000	90.1168
77 para-Isopropyl Toluene	119	18.399	18.399	(0.994)	2022673	100.000	95.1125
78 1,3-Dichlorobenzene	146	18.458	18.458	(0.997)	1479296	100.000	88.9214

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\050307.b\JE316.D
Report Date: 04-May-2007 08:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 79 1,4-Dichlorobenzene-d4	152	18.517	18.517	(1.000)	1016760	50.0000	
80 1,4-Dichlorobenzene	146	18.547	18.547	(1.002)	1519696	100.000	89.2314
81 n-Butylbenzene	91	18.892	18.892	(1.020)	1732052	100.000	110.5875
82 1,2-Dichlorobenzene	146	19.020	19.020	(1.027)	1488601	100.000	90.4211
83 1,2-Dibromo-3-Chloropropane	75	19.986	19.986	(1.079)	188687	100.000	93.5856
84 1,2,4-Trichlorobenzene	180	21.209	21.209	(1.145)	661244	100.000	116.5046
85 Hexachlorobutadiene	225	21.426	21.426	(1.157)	233928	100.000	95.2071
86 Naphthalene	128	21.642	21.642	(1.169)	1491468	100.000	116.8120
87 1,2,3-Trichlorobenzene	180	22.047	22.047	(1.191)	640903	100.000	131.7216

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : 25PPB IDF : 1.0
Seqnum : 477235217004 File : hfc04 Time : 12-JUN-2007 10:51
Cal : 477218189002 Caldate : 31-MAY-2007 Caltype : WATER
Standards: S6337 (20000X), S6350 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5380	0.6488	25.00	30.15	ug/L	**21**	30	0.1000	!c+ m
Vinyl Chloride	0.4424	0.5244	25.00	29.63	ug/L	19	20	0.0500	m
Bromomethane	0.2401	0.2835	25.00	29.52	ug/L	18	30	0.0500	m
Chloroethane	0.2451	0.3001	25.00	30.60	ug/L	**22**	30	0.0500	!c+ m
Acetone	0.1768	0.1851	25.00	26.17	ug/L	5	40	0.0500	
1,1-Dichloroethene	0.2638	0.2819	25.00	26.72	ug/L	7	20	0.0500	
Methylene Chloride	0.3675	0.3836	25.00	26.10	ug/L	4	30	0.0500	
Carbon Disulfide	1.2123	1.2819	25.00	26.44	ug/L	6	30	0.0500	
MTBE	0.9397	1.0320	25.00	27.46	ug/L	10	30	0.0500	
trans-1,2-Dichloroethene	0.3092	0.3329	25.00	26.91	ug/L	8	30	0.0500	
Vinyl Acetate	0.6641	1.0426	25.00	39.25	ug/L	**57**	40	0.0500	c+ ***
1,1-Dichloroethane	0.6315	0.6893	25.00	27.29	ug/L	9	30	0.1000	
2-Butanone	0.2319	0.2630	25.00	28.35	ug/L	13	40	0.0500	
cis-1,2-Dichloroethene	0.3346	0.3479	25.00	25.99	ug/L	4	30	0.0500	
Chloroform	0.5628	0.6071	25.00	26.97	ug/L	8	20	0.0500	
1,1,1-Trichloroethane	0.3701	0.4273	25.00	28.87	ug/L	15	30	0.0500	
Carbon Tetrachloride	0.1672	0.1902	25.00	28.43	ug/L	14	30	0.0500	
1,2-Dichloroethane	0.2704	0.2881	25.00	26.64	ug/L	7	30	0.0500	
Benzene	0.7062	0.7564	25.00	26.78	ug/L	7	30	0.0500	
Trichloroethene	0.1692	0.1803	25.00	26.63	ug/L	7	30	0.0500	
1,2-Dichloropropane	0.2142	0.2250	25.00	26.26	ug/L	5	20	0.0500	
Bromodichloromethane	0.2487	0.2586	25.00	26.00	ug/L	4	30	0.0500	
4-Methyl-2-Pentanone	0.2708	0.2986	25.00	27.56	ug/L	10	40	0.0500	
cis-1,3-Dichloropropene	0.2905	0.3244	25.00	27.92	ug/L	12	30	0.0500	
Toluene	0.3860	0.4184	25.00	27.10	ug/L	8	20	0.0500	
trans-1,3-Dichloropropene	0.2608	0.2862	25.00	27.44	ug/L	10	30	0.0500	
1,1,2-Trichloroethane	0.0938	0.0995	25.00	26.53	ug/L	6	30	0.0500	
2-Hexanone	0.2291	0.2559	25.00	27.93	ug/L	12	40	0.0500	
Tetrachloroethene	0.1656	0.1856	25.00	28.03	ug/L	12	30	0.0500	
Dibromochloromethane	0.2182	0.2190	25.00	25.09	ug/L	0	30	0.0500	
Chlorobenzene	0.5212	0.5459	25.00	26.19	ug/L	5	30	0.3000	
Ethylbenzene	0.8944	1.0039	25.00	28.06	ug/L	12	20	0.0500	
m,p-Xylenes	0.3325	0.3644	50.00	54.81	ug/L	10	30	0.0500	
o-Xylene	0.3255	0.3583	25.00	27.51	ug/L	10	30	0.0500	
Styrene	0.5555	0.6111	25.00	27.51	ug/L	10	30	0.0500	
Bromoform	0.1347	0.1446	25.00	23.68	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6295	0.6701	25.00	26.61	ug/L	6	30	0.3000	
Dibromofluoromethane	0.6445	0.6654	50.00	51.62	ug/L	3	30	0.0500	
1,2-Dichloroethane-d4	0.4247	0.4522	50.00	53.23	ug/L	6	30	0.0500	
Toluene-d8	1.0475	1.0536	50.00	50.29	ug/L	1	30	0.0500	
Bromofluorobenzene	1.1276	1.1414	50.00	50.61	ug/L	1	30	0.0500	

00293

ISTD (ICAL hev12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2257644	2291603	1.50	10.33	10.33	0.00
1,4-Difluorobenzene	3908815	4080106	4.38	11.45	11.45	0.00
Chlorobenzene-d5	3202283	3273926	2.24	15.48	15.48	0.00
1,4-Dichlorobenzene-d4	1602437	1602177	-0.02	18.20	18.19	-0.01

Analyst: TEW Date: 06/12/07 Reviewer: ACM Date: 06/13/07

!=warning +=high bias c=CCV m=manual integration

477235217004

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name : 20PPB IDF : 1.0
Seqnum : 477236639003 File : hfd03 Time : 13-JUN-2007 10:42
Cal : 477218189002 Caldate : 31-MAY-2007 Caltype : WATER
Standards: S6337 (25000X), S6350 (25000X), S5720 (50000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5380	0.6225	20.00	23.14	ug/L	16	30	0.1000	m
Vinyl Chloride	0.4424	0.5194	20.00	23.48	ug/L	17	20	0.0500	m
Bromomethane	0.2401	0.1276	20.00	10.63	ug/L	**-47**	30	0.0500	c- m ***
Chloroethane	0.2451	0.3093	20.00	25.23	ug/L	**26**	30	0.0500	!c+ m
Acetone	0.1768	0.1984	20.00	22.45	ug/L	12	40	0.0500	
1,1-Dichloroethene	0.2638	0.2813	20.00	21.33	ug/L	7	20	0.0500	
Methylene Chloride	0.3675	0.3994	20.00	21.74	ug/L	9	30	0.0500	
Carbon Disulfide	1.2123	1.3361	20.00	22.04	ug/L	10	30	0.0500	
MTBE	0.9397	0.9837	20.00	20.94	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3092	0.3295	20.00	21.31	ug/L	7	30	0.0500	
Vinyl Acetate	0.6641	1.1406	20.00	34.35	ug/L	**72**	40	0.0500	c+ ***
1,1-Dichloroethane	0.6315	0.7153	20.00	22.65	ug/L	13	30	0.1000	
2-Butanone	0.2319	0.2655	20.00	22.90	ug/L	14	40	0.0500	
cis-1,2-Dichloroethene	0.3346	0.3516	20.00	21.01	ug/L	5	30	0.0500	
Chloroform	0.5628	0.6114	20.00	21.73	ug/L	9	20	0.0500	
1,1,1-Trichloroethane	0.3701	0.4228	20.00	22.85	ug/L	14	30	0.0500	
Carbon Tetrachloride	0.1672	0.1922	20.00	22.98	ug/L	15	30	0.0500	
1,2-Dichloroethane	0.2704	0.2877	20.00	21.28	ug/L	6	30	0.0500	
Benzene	0.7062	0.7562	20.00	21.42	ug/L	7	30	0.0500	
Trichloroethene	0.1692	0.1780	20.00	21.04	ug/L	5	30	0.0500	
1,2-Dichloropropane	0.2142	0.2246	20.00	20.98	ug/L	5	20	0.0500	
Bromodichloromethane	0.2487	0.2481	20.00	19.95	ug/L	0	30	0.0500	
4-Methyl-2-Pentanone	0.2708	0.2964	20.00	21.89	ug/L	9	40	0.0500	
cis-1,3-Dichloropropene	0.2905	0.3106	20.00	21.38	ug/L	7	30	0.0500	
Toluene	0.3860	0.4490	20.00	23.26	ug/L	16	20	0.0500	
trans-1,3-Dichloropropene	0.2608	0.2830	20.00	21.70	ug/L	9	30	0.0500	
1,1,2-Trichloroethane	0.0938	0.0948	20.00	20.22	ug/L	1	30	0.0500	
2-Hexanone	0.2291	0.2562	20.00	22.37	ug/L	12	40	0.0500	
Tetrachloroethene	0.1656	0.1803	20.00	21.78	ug/L	9	30	0.0500	
Dibromochloromethane	0.2182	0.2106	20.00	19.30	ug/L	-3	30	0.0500	
Chlorobenzene	0.5212	0.5511	20.00	21.15	ug/L	6	30	0.3000	
Ethylbenzene	0.8944	0.9999	20.00	22.36	ug/L	12	20	0.0500	
m,p-Xylenes	0.3325	0.3793	40.00	45.63	ug/L	14	30	0.0500	
o-Xylene	0.3255	0.3528	20.00	21.68	ug/L	8	30	0.0500	
Styrene	0.5555	0.5902	20.00	21.25	ug/L	6	30	0.0500	
Bromoform	0.1347	0.1430	20.00	19.02	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6295	0.6310	20.00	20.05	ug/L	0	30	0.3000	
Dibromofluoromethane	0.6445	0.6841	50.00	53.08	ug/L	6	30	0.0500	
1,2-Dichloroethane-d4	0.4247	0.4508	50.00	53.07	ug/L	6	30	0.0500	
Toluene-d8	1.0475	1.0887	50.00	51.97	ug/L	4	30	0.0500	
Bromofluorobenzene	1.1276	1.1102	50.00	49.23	ug/L	-2	30	0.0500	

ISTD (ICAL hev12)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2257644	2132870	-5.53	10.33	10.32	-0.01
1,4-Difluorobenzene	3908815	3859018	-1.27	11.45	11.45	0.00
Chlorobenzene-d5	3202283	3102438	-3.12	15.48	15.47	-0.01
1,4-Dichlorobenzene-d4	1602437	1612113	0.60	18.20	18.19	-0.01

Analyst: TEW Date: 06/13/07 Reviewer: ACM Date: 06/14/07

!=warning +=high bias -=low bias c=CCV m=manual integration

477236639003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
Seqnum : 497235206003 File : jfc03 Time : 12-JUN-2007 09:06
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (16670X), S6450 (16670X), S5720 (33330X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5706	30.00	33.67	ug/L	12	30	0.1000	
Vinyl Chloride	0.3798	0.4397	30.00	34.73	ug/L	16	20	0.0500	
Bromomethane	0.2739	0.2240	30.00	24.54	ug/L	-18	30	0.0500	
Chloroethane	0.2695	0.2832	30.00	31.53	ug/L	5	30	0.0500	
Acetone	0.1718	0.1388	30.00	24.24	ug/L	-19	40	0.0500	
1,1-Dichloroethene	0.2393	0.2661	30.00	33.36	ug/L	11	20	0.0500	
Methylene Chloride	0.3367	0.3416	30.00	30.44	ug/L	1	30	0.0500	
Carbon Disulfide	1.0112	1.1238	30.00	33.34	ug/L	11	30	0.0500	
MTBE	0.7968	0.8312	30.00	31.30	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.3044	30.00	30.03	ug/L	0	30	0.0500	
Vinyl Acetate	0.7099	1.0100	30.00	42.68	ug/L	**42**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5801	30.00	30.42	ug/L	1	30	0.1000	
2-Butanone	0.2101	0.1957	30.00	27.94	ug/L	-7	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3197	30.00	29.87	ug/L	0	30	0.0500	
Chloroform	0.4872	0.4834	30.00	29.77	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3415	30.00	32.12	ug/L	7	30	0.0500	
Carbon Tetrachloride	0.1443	0.1693	30.00	35.18	ug/L	17	30	0.0500	
1,2-Dichloroethane	0.2499	0.2460	30.00	29.54	ug/L	-2	30	0.0500	
Benzene	0.7020	0.7179	30.00	30.68	ug/L	2	30	0.0500	
Trichloroethene	0.1762	0.1725	30.00	29.37	ug/L	-2	30	0.0500	
1,2-Dichloropropane	0.2187	0.2145	30.00	29.42	ug/L	-2	20	0.0500	
Bromodichloromethane	0.2390	0.2267	30.00	28.45	ug/L	-5	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2897	30.00	29.77	ug/L	-1	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3141	30.00	30.39	ug/L	1	30	0.0500	
Toluene	0.3980	0.4090	30.00	30.83	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2734	30.00	30.07	ug/L	0	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0965	30.00	29.48	ug/L	-2	30	0.0500	
2-Hexanone	0.2051	0.1859	30.00	27.19	ug/L	-9	40	0.0500	
Tetrachloroethene	0.1687	0.1994	30.00	35.45	ug/L	18	30	0.0500	
Dibromochloromethane	0.2226	0.2115	30.00	28.50	ug/L	-5	30	0.0500	
Chlorobenzene	0.5229	0.5371	30.00	30.82	ug/L	3	30	0.3000	
Ethylbenzene	0.8430	0.9036	30.00	32.16	ug/L	7	20	0.0500	
m,p-Xylenes	0.3077	0.3373	60.00	65.78	ug/L	10	30	0.0500	
o-Xylene	0.3127	0.3308	30.00	31.74	ug/L	6	30	0.0500	
Styrene	0.5462	0.5737	30.00	31.51	ug/L	5	30	0.0500	
Bromoform	0.1615	0.1529	30.00	28.40	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5874	30.00	28.94	ug/L	-4	30	0.3000	
Dibromofluoromethane	0.5627	0.5608	50.00	49.83	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3766	50.00	48.65	ug/L	-3	30	0.0500	
Toluene-d8	1.0824	1.0752	50.00	49.67	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.1113	1.0985	50.00	49.42	ug/L	-1	30	0.0500	

: 88257

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2050454	38.53	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	3432898	40.59	11.83	11.78	-0.05
Chlorobenzene-d5	2049371	2909938	41.99	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1366860	40.07	18.51	18.48	-0.03

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497235206003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
Seqnum : 497235206010 File : jfc10 Time : 12-JUN-2007 13:06
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (16670X), S6450 (16670X), S5720 (33330X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5144	30.00	30.35	ug/L	1	30	0.1000	
Vinyl Chloride	0.3798	0.3882	30.00	30.66	ug/L	2	20	0.0500	
Bromomethane	0.2739	0.2238	30.00	24.51	ug/L	-18	30	0.0500	
Chloroethane	0.2695	0.2617	30.00	29.13	ug/L	-3	30	0.0500	
Acetone	0.1718	0.1230	30.00	21.48	ug/L	-28	40	0.0500	m
1,1-Dichloroethene	0.2393	0.2411	30.00	30.22	ug/L	1	20	0.0500	
Methylene Chloride	0.3367	0.3245	30.00	28.91	ug/L	-4	30	0.0500	
Carbon Disulfide	1.0112	1.0268	30.00	30.46	ug/L	2	30	0.0500	
MTBE	0.7968	0.8274	30.00	31.15	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.2814	30.00	27.75	ug/L	-7	30	0.0500	
Vinyl Acetate	0.7099	1.0682	30.00	45.15	ug/L	**50**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5363	30.00	28.13	ug/L	-6	30	0.1000	
2-Butanone	0.2101	0.1990	30.00	28.42	ug/L	-5	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3089	30.00	28.86	ug/L	-4	30	0.0500	
Chloroform	0.4872	0.4677	30.00	28.80	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3289	30.00	30.94	ug/L	3	30	0.0500	
Carbon Tetrachloride	0.1443	0.1609	30.00	33.44	ug/L	11	30	0.0500	
1,2-Dichloroethane	0.2499	0.2352	30.00	28.24	ug/L	-6	30	0.0500	
Benzene	0.7020	0.6840	30.00	29.23	ug/L	-3	30	0.0500	
Trichloroethene	0.1762	0.1649	30.00	28.07	ug/L	-6	30	0.0500	
1,2-Dichloropropane	0.2187	0.2072	30.00	28.42	ug/L	-5	20	0.0500	
Bromodichloromethane	0.2390	0.2209	30.00	27.73	ug/L	-8	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.2707	30.00	27.81	ug/L	-7	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3063	30.00	29.64	ug/L	-1	30	0.0500	
Toluene	0.3980	0.4005	30.00	30.19	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2649	30.00	29.13	ug/L	-3	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0906	30.00	27.68	ug/L	-8	30	0.0500	
2-Hexanone	0.2051	0.1784	30.00	26.10	ug/L	-13	40	0.0500	
Tetrachloroethene	0.1687	0.1889	30.00	33.58	ug/L	12	30	0.0500	
Dibromochloromethane	0.2226	0.2130	30.00	28.71	ug/L	-4	30	0.0500	
Chlorobenzene	0.5229	0.5145	30.00	29.52	ug/L	-2	30	0.3000	
Ethylbenzene	0.8430	0.8609	30.00	30.64	ug/L	2	20	0.0500	
m,p-Xylenes	0.3077	0.3230	60.00	62.98	ug/L	5	30	0.0500	
o-Xylene	0.3127	0.3196	30.00	30.66	ug/L	2	30	0.0500	
Styrene	0.5462	0.5458	30.00	29.98	ug/L	0	30	0.0500	
Bromoform	0.1615	0.1482	30.00	27.53	ug/L	-8	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.5706	30.00	28.11	ug/L	-6	30	0.3000	
Dibromofluoromethane	0.5627	0.5607	50.00	49.82	ug/L	0	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3702	50.00	47.83	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.0629	50.00	49.10	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.1113	1.0669	50.00	48.00	ug/L	-4	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	2007315	35.62	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	3323366	36.10	11.83	11.77	-0.06
Chlorobenzene-d5	2049371	2829291	38.06	15.83	15.79	-0.04
1,4-Dichlorobenzene-d4	975848	1346630	38.00	18.51	18.49	-0.02

Analyst: SJD Date: 06/12/07 Reviewer: ACM Date: 06/13/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497235206010

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 25PPB IDF : 1.0
Seqnum : 497236627007 File : jfd07 Time : 13-JUN-2007 10:50
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (20000X), S6450 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5949	25.00	29.26	ug/L	17	30	0.1000	
Vinyl Chloride	0.3798	0.4429	25.00	29.16	ug/L	17	20	0.0500	
Bromomethane	0.2739	0.2546	25.00	23.24	ug/L	-7	30	0.0500	
Chloroethane	0.2695	0.2853	25.00	26.47	ug/L	6	30	0.0500	
Acetone	0.1718	0.1521	25.00	22.14	ug/L	-11	40	0.0500	
1,1-Dichloroethene	0.2393	0.2581	25.00	26.96	ug/L	8	20	0.0500	
Methylene Chloride	0.3367	0.3433	25.00	25.49	ug/L	2	30	0.0500	
Carbon Disulfide	1.0112	1.0975	25.00	27.13	ug/L	9	30	0.0500	
MTBE	0.7968	0.8355	25.00	26.21	ug/L	5	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.2971	25.00	24.42	ug/L	-2	30	0.0500	
Vinyl Acetate	0.7099	1.0960	25.00	38.60	ug/L	**54**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5999	25.00	26.22	ug/L	5	30	0.1000	
2-Butanone	0.2101	0.2267	25.00	26.97	ug/L	8	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3238	25.00	25.22	ug/L	1	30	0.0500	
Chloroform	0.4872	0.4787	25.00	24.56	ug/L	-2	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3192	25.00	25.02	ug/L	0	30	0.0500	
Carbon Tetrachloride	0.1443	0.1515	25.00	26.23	ug/L	5	30	0.0500	
1,2-Dichloroethane	0.2499	0.2294	25.00	22.96	ug/L	-8	30	0.0500	
Benzene	0.7020	0.7045	25.00	25.09	ug/L	0	30	0.0500	
Trichloroethene	0.1762	0.1700	25.00	24.12	ug/L	-4	30	0.0500	
1,2-Dichloropropane	0.2187	0.2223	25.00	25.41	ug/L	2	20	0.0500	
Bromodichloromethane	0.2390	0.2199	25.00	23.00	ug/L	-8	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.3131	25.00	26.81	ug/L	7	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3126	25.00	25.21	ug/L	1	30	0.0500	
Toluene	0.3980	0.4072	25.00	25.58	ug/L	2	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2647	25.00	24.25	ug/L	-3	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0961	25.00	24.46	ug/L	-2	30	0.0500	
2-Hexanone	0.2051	0.2047	25.00	24.95	ug/L	0	40	0.0500	
Tetrachloroethene	0.1687	0.1821	25.00	26.98	ug/L	8	30	0.0500	
Dibromochloromethane	0.2226	0.2013	25.00	22.60	ug/L	-10	30	0.0500	
Chlorobenzene	0.5229	0.5141	25.00	24.58	ug/L	-2	30	0.3000	
Ethylbenzene	0.8430	0.8450	25.00	25.06	ug/L	0	20	0.0500	
m,p-Xylenes	0.3077	0.3191	50.00	51.85	ug/L	4	30	0.0500	
o-Xylene	0.3127	0.3184	25.00	25.45	ug/L	2	30	0.0500	
Styrene	0.5462	0.5424	25.00	24.82	ug/L	-1	30	0.0500	
Bromoform	0.1615	0.1422	25.00	22.01	ug/L	-12	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.6118	25.00	25.12	ug/L	0	30	0.3000	
Dibromofluoromethane	0.5627	0.5812	50.00	51.65	ug/L	3	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3721	50.00	48.08	ug/L	-4	30	0.0500	
Toluene-d8	1.0824	1.1028	50.00	50.94	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1113	1.1193	50.00	50.36	ug/L	1	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1404455	-5.11	10.65	10.59	-0.06
1,4-Difluorobenzene	2441798	2403105	-1.58	11.83	11.78	-0.05
Chlorobenzene-d5	2049371	2061559	0.59	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	931304	-4.56	18.51	18.48	-0.03

SJD: 06/13/07 BO: 06/13/07 ACM: 06/13/07 CW: 06/14/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497236627007

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 25PPB IDF : 1.0
Seqnum : 497238068005 File : jfe05 Time : 14-JUN-2007 09:45
Cal : 497177754004 Caldate : 03-MAY-2007 Caltype : WATER
Standards: S6350 (20000X), S6450 (20000X), S5720 (40000X), S6084 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5084	0.5861	25.00	28.82	ug/L	15	30	0.1000	m
Vinyl Chloride	0.3798	0.3930	25.00	25.87	ug/L	3	20	0.0500	
Bromomethane	0.2739	0.2479	25.00	22.63	ug/L	-9	30	0.0500	
Chloroethane	0.2695	0.2693	25.00	24.98	ug/L	0	30	0.0500	
Acetone	0.1718	0.1394	25.00	20.28	ug/L	-19	40	0.0500	
1,1-Dichloroethene	0.2393	0.2552	25.00	26.66	ug/L	7	20	0.0500	
Methylene Chloride	0.3367	0.3453	25.00	25.64	ug/L	3	30	0.0500	
Carbon Disulfide	1.0112	1.1097	25.00	27.43	ug/L	10	30	0.0500	
MTBE	0.7968	0.8292	25.00	26.02	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.3041	0.2880	25.00	23.67	ug/L	-5	30	0.0500	
Vinyl Acetate	0.7099	1.0788	25.00	37.99	ug/L	**52**	40	0.0500	c+ m rsd ***
1,1-Dichloroethane	0.5720	0.5980	25.00	26.14	ug/L	5	30	0.1000	
2-Butanone	0.2101	0.2197	25.00	26.14	ug/L	5	40	0.0500	
cis-1,2-Dichloroethene	0.3211	0.3179	25.00	24.75	ug/L	-1	30	0.0500	
Chloroform	0.4872	0.4814	25.00	24.70	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.3189	0.3178	25.00	24.92	ug/L	0	30	0.0500	
Carbon Tetrachloride	0.1443	0.1479	25.00	25.61	ug/L	2	30	0.0500	
1,2-Dichloroethane	0.2499	0.2285	25.00	22.86	ug/L	-9	30	0.0500	
Benzene	0.7020	0.7136	25.00	25.41	ug/L	2	30	0.0500	
Trichloroethene	0.1762	0.1637	25.00	23.23	ug/L	-7	30	0.0500	
1,2-Dichloropropane	0.2187	0.2242	25.00	25.62	ug/L	2	20	0.0500	
Bromodichloromethane	0.2390	0.2198	25.00	22.99	ug/L	-8	30	0.0500	
4-Methyl-2-Pentanone	0.2919	0.3091	25.00	26.47	ug/L	6	40	0.0500	
cis-1,3-Dichloropropene	0.3100	0.3082	25.00	24.85	ug/L	-1	30	0.0500	
Toluene	0.3980	0.4148	25.00	26.06	ug/L	4	20	0.0500	
trans-1,3-Dichloropropene	0.2728	0.2676	25.00	24.52	ug/L	-2	30	0.0500	
1,1,2-Trichloroethane	0.0982	0.0983	25.00	25.02	ug/L	0	30	0.0500	
2-Hexanone	0.2051	0.1923	25.00	23.44	ug/L	-6	40	0.0500	
Tetrachloroethene	0.1687	0.1781	25.00	26.39	ug/L	6	30	0.0500	
Dibromochloromethane	0.2226	0.1963	25.00	22.05	ug/L	-12	30	0.0500	
Chlorobenzene	0.5229	0.5076	25.00	24.27	ug/L	-3	30	0.3000	
Ethylbenzene	0.8430	0.8672	25.00	25.72	ug/L	3	20	0.0500	
m,p-Xylenes	0.3077	0.3240	50.00	52.64	ug/L	5	30	0.0500	
o-Xylene	0.3127	0.3209	25.00	25.65	ug/L	3	30	0.0500	
Styrene	0.5462	0.5434	25.00	24.87	ug/L	-1	30	0.0500	
Bromoform	0.1615	0.1394	25.00	21.58	ug/L	-14	30	0.1000	
1,1,2,2-Tetrachloroethane	0.6088	0.6105	25.00	25.07	ug/L	0	30	0.3000	
Dibromofluoromethane	0.5627	0.5702	50.00	50.67	ug/L	1	30	0.0500	
1,2-Dichloroethane-d4	0.3870	0.3624	50.00	46.82	ug/L	-6	30	0.0500	
Toluene-d8	1.0824	1.1022	50.00	50.91	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1113	1.1317	50.00	50.91	ug/L	2	30	0.0500	

ISTD (ICAL je314)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1480154	1575145	6.42	10.65	10.60	-0.05
1,4-Difluorobenzene	2441798	2707705	10.89	11.83	11.79	-0.04
Chlorobenzene-d5	2049371	2340249	14.19	15.83	15.80	-0.03
1,4-Dichlorobenzene-d4	975848	1063220	8.95	18.51	18.49	-0.02

ACM 06/15/07 : Manual integrations by BO

Analyst: ACM Date: 06/15/07 Reviewer: CW Date: 06/15/07

+=high bias c=CCV m=manual integration rsd=ICAL %RSD failure

497238068005

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477235217

Date : 06/12/07 Reference : hev12
Sequence : MSVOA08 hfc Analyzed : 05/31/07 18:54

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2257644	10.33	3908815	11.45	3202283	15.48	1602437	18.20
		LOWER LIMIT	1128822	9.83	1954408	10.95	1601142	14.98	801219	17.70
		UPPER LIMIT	4515288	10.83	7817630	11.95	6404566	15.98	3204874	18.70
004	CCV	25PPB	2291603	10.33	4080106	11.45	3273926	15.48	1602177	18.19
005	BS	QC391840	2371249	10.33	4154663	11.45	3390646	15.48	1707702	18.19
006	BSD	QC391841	2352632	10.32	4213255	11.45	3375015	15.47	1635247	18.19
008	BLANK	QC391839	2335434	10.33	4024162	11.45	3219884	15.47	1567528	18.20
009	SAMPLE	195303-023	2292756	10.32	4024069	11.45	3209109	15.47	1535204	18.19
010	SAMPLE	195303-020	2309212	10.33	4050916	11.45	3304371	15.48	1521453	18.20
011	SAMPLE	195303-021	2284284	10.33	4057354	11.45	3334012	15.47	1555296	18.19
012	SAMPLE	195303-022	2247588	10.33	3976625	11.46	3268811	15.48	1545249	18.19
013	SAMPLE	195303-024	2210556	10.32	3933246	11.45	3187339	15.47	1542514	18.19
014	SAMPLE	195303-025	2485866	10.33	4501025	11.45	3476318	15.48	1502207	18.20
015	SAMPLE	195303-027	2287389	10.33	4095384	11.45	3297958	15.47	1551040	18.19
016	SAMPLE	195303-030	2178981	10.33	3902540	11.45	3226671	15.48	1524972	18.20
017	SAMPLE	195303-029	2168893	10.32	3935071	11.46	3138031	15.47	1484555	18.19
018	SAMPLE	195303-028	2168138	10.32	3871887	11.45	3174955	15.47	1485747	18.19

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 477236639

Date : 06/13/07 Reference : hev12
Sequence : MSVOA08 hfd Analyzed : 05/31/07 18:54

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2257644	10.33	3908815	11.45	3202283	15.48	1602437	18.20
		LOWER LIMIT	1128822	9.83	1954408	10.95	1601142	14.98	801219	17.70
		UPPER LIMIT	4515288	10.83	7817630	11.95	6404566	15.98	3204874	18.70
003	CCV	20PPB	2132870	10.32	3859018	11.45	3102438	15.47	1612113	18.19
004	BS	QC392082	2267052	10.33	3952191	11.45	3213392	15.48	1636869	18.19
005	BSD	QC392083	2278771	10.33	4092199	11.45	3276933	15.47	1656786	18.19
007	BLANK	QC392081	2232341	10.32	3979987	11.45	3179395	15.47	1529691	18.19
008	SAMPLE	195376-001	2290389	10.33	4045329	11.46	3278193	15.47	1574157	18.19
009	SAMPLE	195376-002	2296091	10.32	4035861	11.45	3320586	15.47	1541902	18.19
010	SAMPLE	195376-003	2301822	10.33	4073763	11.45	3334860	15.48	1585651	18.19
011	SAMPLE	195376-004	2215846	10.33	4077794	11.45	3310987	15.48	1565351	18.19
012	SAMPLE	195376-006	2225518	10.33	4062253	11.45	3269172	15.48	1538485	18.19
013	SAMPLE	195303-029	2260110	10.33	4039715	11.45	3344514	15.48	1635585	18.19
015	SAMPLE	195303-028	2227279	10.33	4071614	11.45	3219014	15.47	1589041	18.19

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497235206

Date : 06/12/07 Reference : je314
Sequence : MSVOA10 jfc Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
003	CCV	30PPB	2050454	10.59	3432898	11.78	2909938	15.80	1366860	18.48
005	BS	QC391802	1953928	10.59	3254051	11.78	2772395	15.79	1305999	18.48
006	BSD	QC391803	1943317	10.59	3206913	11.78	2736313	15.79	1300185	18.48
007	CCV/BS	QC391854	2069494	10.60	3424675	11.78	2859192	15.79	1370438	18.48
008	BSD	QC391855	1987918	10.59	3302425	11.78	2792398	15.79	1318409	18.48
010	CCV	30PPB	2007315	10.59	3323366	11.77	2829291	15.79	1346630	18.49
011	CCV		1886685	10.59	3125661	11.78	2650567	15.80	1256018	18.48
013	BLANK	QC391801	1963338	10.60	3249608	11.77	2749879	15.79	1269604	18.48
014	SAMPLE	195303-007	1911208	10.59	3160320	11.78	2676927	15.79	1247352	18.48
015	SAMPLE	195303-014	1905249	10.59	3140151	11.78	2668847	15.80	1233721	18.49
016	SAMPLE	195270-009	1866810	10.60	3131704	11.78	2632732	15.79	1215780	18.48
017	SAMPLE	195270-001	1868066	10.59	3089567	11.78	2627350	15.80	1292031	18.49
018	SAMPLE	195270-016	1883032	10.59	3137287	11.78	2657223	15.80	1251218	18.49
019	SAMPLE	195303-002	1907193	10.60	3168865	11.78	2647761	15.79	1264527	18.49
020	SAMPLE	195303-003	1972663	10.59	3230678	11.78	2725722	15.80	1295792	18.49
021	SAMPLE	195303-004	1956477	10.60	3243015	11.78	2743505	15.80	1290802	18.48
022	SAMPLE	195303-015	1926751	10.59	3184259	11.78	2695973	15.80	1281407	18.49
023	SAMPLE	195303-016	1888314	10.59	3188062	11.78	2673073	15.80	1241376	18.48
024	SAMPLE	195303-017	1943050	10.59	3199118	11.78	2769119	15.80	1255602	18.49
025	SAMPLE	195303-018	1908565	10.59	3200335	11.77	2714086	15.80	1240818	18.49
026	SAMPLE	195303-019	1904007	10.60	3183065	11.78	2694370	15.79	1249512	18.48
027	SAMPLE	195354-001	1908816	10.60	3157378	11.78	2675500	15.79	1265042	18.49
028	SAMPLE	195303-013	1860080	10.59	3094319	11.78	2642834	15.80	1282156	18.49
029	SAMPLE	195303-005	1842717	10.59	3081793	11.77	2622878	15.79	1266244	18.49
030	SAMPLE	195303-006	1897705	10.59	3148326	11.78	2685074	15.80	1285319	18.49
031	SAMPLE	195303-012	1888801	10.60	3098036	11.78	2634920	15.79	1246272	18.48

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497236627

Date : 06/13/07 Reference : je314
Sequence : MSVOA10 jfd Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
007	CCV	25PPB	1404455	10.59	2403105	11.78	2061559	15.80	931304	18.48
008	BS	QC392037	1453482	10.59	2549456	11.78	2162245	15.80	995567	18.48
009	BSD	QC392038	1418601	10.60	2492590	11.78	2105797	15.79	970555	18.48
011	BLANK	QC392036	1409114	10.60	2453266	11.78	2104631	15.80	931489	18.49
012	SAMPLE	195299-001	1456496	10.59	2555063	11.78	2158041	15.80	966831	18.49
013	SAMPLE	195329-002	1389984	10.59	2456112	11.78	2083041	15.80	917987	18.49
014	SAMPLE	195329-001	1407122	10.60	2485081	11.78	2115646	15.80	910282	18.49
015	SAMPLE	195372-006	1366753	10.60	2413852	11.78	2038314	15.80	914511	18.50
016	SAMPLE	195372-007	1359477	10.60	2455387	11.78	2092636	15.79	914175	18.49
017	SAMPLE	195339-002	1365370	10.60	2438554	11.79	2089997	15.80	925305	18.49
018	SAMPLE	195372-001	1360066	10.60	2418840	11.79	2066221	15.80	892207	18.49
019	SAMPLE	195372-003	1375137	10.60	2428422	11.79	2067813	15.80	901488	18.49
020	SAMPLE	195372-004	1415711	10.60	2513163	11.79	2147557	15.80	931156	18.49
021	SAMPLE	195372-005	1371185	10.60	2431077	11.78	2051697	15.80	874631	18.49
022	SAMPLE	195372-002	1440115	10.61	2532292	11.78	2155799	15.81	939981	18.50
023	SAMPLE	195303-005	1370385	10.61	2456737	11.79	2100614	15.80	936064	18.49
024	SAMPLE	195303-006	1414476	10.60	2488322	11.79	2116442	15.80	966900	18.49
025	SAMPLE	195303-013	1522021	10.60	2657835	11.79	2282317	15.80	1039703	18.49
026	SAMPLE	195303-012	1580523	10.60	2723124	11.79	2316767	15.80	1026062	18.49

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 497238068

Date : 06/14/07 Reference : je314
Sequence : MSVOA10 jfe Analyzed : 05/03/07 16:51

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1480154	10.65	2441798	11.83	2049371	15.83	975848	18.51
		LOWER LIMIT	740077	10.15	1220899	11.33	1024686	15.33	487924	18.01
		UPPER LIMIT	2960308	11.15	4883596	12.33	4098742	16.33	1951696	19.01
005	CCV	25PPB	1575145	10.60	2707705	11.79	2340249	15.80	1063220	18.49
007	BS	QC392285	1597004	10.61	2775149	11.79	2336339	15.80	1058389	18.49
009	BSD	QC392286	1515017	10.60	2648554	11.79	2226006	15.81	992775	18.49
011	BLANK	QC392287	1522237	10.61	2671583	11.79	2266571	15.80	981948	18.50
012	SAMPLE	195366-001	1610297	10.61	2790942	11.79	2381918	15.80	1032160	18.50
013	SAMPLE	195366-002	1606678	10.61	2767329	11.80	2347637	15.81	1020551	18.50
014	SAMPLE	195366-003	1529519	10.61	2694694	11.80	2241508	15.81	946216	18.50
015	SAMPLE	195366-004	1470844	10.61	2607136	11.80	2188692	15.81	952213	18.50
016	SAMPLE	195388-001	1468752	10.61	2594096	11.80	2152102	15.81	930805	18.50
017	SAMPLE	195388-002	1454704	10.61	2609857	11.80	2176208	15.81	928867	18.50
018	SAMPLE	195303-013	1496948	10.61	2653319	11.80	2221970	15.81	1013481	18.50
019	SAMPLE	195303-012	1514149	10.61	2656783	11.80	2190308	15.81	984928	18.50
021	SAMPLE	195303-006	1473153	10.61	2568540	11.79	2210158	15.81	949535	18.50

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477218189

Instrument : MSVOA08 Begun : 05/31/07 12:29
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hev01	X	IB			05/31/07 12:29	1.0	1
002	hev02	X	BFB			05/31/07 12:59	1.0	2
003	hev03	TUN	BFB			05/31/07 13:17	1.0	2
004	hev04	X	IB			05/31/07 13:48	1.0	1
005	hev05	IB	CALIB IB			05/31/07 14:26	1.0	1
006	hev06	ICAL	0.25/0.5PPB			05/31/07 15:05	1.0	3 4 5 1
007	hev07	ICAL	0.5/1PPB			05/31/07 15:43	1.0	3 4 5 1
008	hev08	ICAL	2PPB			05/31/07 16:21	1.0	3 4 5 1
009	hev09	ICAL	5PPB			05/31/07 17:00	1.0	3 4 5 1
010	hev10	ICAL	10PPB			05/31/07 17:38	1.0	3 4 5 1
011	hev11	ICAL	20PPB			05/31/07 18:16	1.0	6 7 8 1
012	hev12	ICAL	50PPB			05/31/07 18:54	1.0	6 7 8 1
013	hev13	ICAL	75PPB			05/31/07 19:32	1.0	6 7 8 1
014	hev14	ICAL	100PPB			05/31/07 20:10	1.0	6 7 8 1
015	hev15	ICV	ICVGAS25PPB			05/31/07 20:48	1.0	9 1
016	hev16	ICV	ICV25PPB			05/31/07 21:26	1.0	10 11 1
017	hev17	X	IB			05/31/07 22:04	1.0	1
018	hev18	X	IB			05/31/07 22:42	1.0	1
019	hev19	X	IB			05/31/07 23:20	1.0	1

TEW 06/01/07 : Fixed spike amount for gases in run hev07.

Analyst: TEW Date: 06/01/07 Reviewer: LW Date: 06/05/07

Standards used: 1=S6084 2=S5117 3=S6300 4=S6301 5=S6355 6=S6217 7=S6350 8=S5720 9=S6357 10=S5968 11=S6207

00319

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477235217

Instrument : MSVOA08 Begun : 06/12/07 08:17
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hfc01	X	IB			06/12/07 08:17	1.0	1
002	hfc02	TUN	BFB			06/12/07 09:44	1.0	2
003	hfc03	X	25PPB / 30PPB			06/12/07 10:13	1.0	3 4 1
004	hfc04	CCV	25PPB			06/12/07 10:51	1.0	3 4 5 1
005	hfc05	BS	QC391840	Water	126195	06/12/07 11:42	1.0	6 7 8 1
006	hfc06	BSD	QC391841	Water	126195	06/12/07 12:20	1.0	6 7 8 1
007	hfc07	X	IB			06/12/07 13:16	1.0	1
008	hfc08	BLANK	QC391839	Water	126195	06/12/07 13:54	1.0	1
009	hfc09	SAMPLE	195303-023	Water	126195	06/12/07 14:42	1.0	1
010	hfc10	SAMPLE	195303-020	Water	126195	06/12/07 15:20	1.0	1
011	hfc11	SAMPLE	195303-021	Water	126195	06/12/07 15:59	1.0	1
012	hfc12	SAMPLE	195303-022	Water	126195	06/12/07 16:36	1.0	1
013	hfc13	SAMPLE	195303-024	Water	126195	06/12/07 17:14	1.0	1
014	hfc14	SAMPLE	195303-025	Water	126195	06/12/07 17:53	1.0	1
015	hfc15	SAMPLE	195303-027	Water	126195	06/12/07 18:32	1.0	1
016	hfc16	SAMPLE	195303-030	Water	126195	06/12/07 19:10	1.0	1
017	hfc17	SAMPLE	195303-029	Water	126195	06/12/07 19:48	25.0	1
018	hfc18	SAMPLE	195303-028	Water	126195	06/12/07 20:26	250.0	1
019	hfc19	X	IB			06/12/07 21:05	1.0	1
020	hfc20	X	IB			06/12/07 21:43	1.0	1
021	hfc21	X	IB			06/12/07 22:20	1.0	1

Analyst: TEW Date: 06/13/07 Reviewer: SJD Date: 06/13/07

Standards used: 1=S6084 2=S5117 3=S6337 4=S6350 5=S5720 6=S6207 7=S6357 8=S6392

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 477236639

Instrument : MSVOA08 Begun : 06/13/07 07:59
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	hfd01	X	IB			06/13/07 07:59	1.0	1
002	hfd02	TUN	BFB			06/13/07 10:14	1.0	2
003	hfd03	CCV	20PPB			06/13/07 10:42	1.0	3 4 5 1
004	hfd04	BS	QC392082	Water	126250	06/13/07 11:34	1.0	6 7 8 1
005	hfd05	BSD	QC392083	Water	126250	06/13/07 12:12	1.0	6 7 8 1
006	hfd06	X	IB			06/13/07 13:07	1.0	1
007	hfd07	BLANK	QC392081	Water	126250	06/13/07 13:45	1.0	1
008	hfd08	SAMPLE	195376-001	Water	126250	06/13/07 14:36	1.0	1
009	hfd09	SAMPLE	195376-002	Water	126250	06/13/07 15:14	1.0	1
010	hfd10	SAMPLE	195376-003	Water	126250	06/13/07 15:52	1.0	1
011	hfd11	SAMPLE	195376-004	Water	126250	06/13/07 16:31	1.0	1
012	hfd12	SAMPLE	195376-006	Water	126250	06/13/07 17:09	1.0	1
013	hfd13	SAMPLE	195303-029	Water	126250	06/13/07 17:47	2.0	1
014	hfd14	X	IB			06/13/07 18:25	1.0	1
015	hfd15	SAMPLE	195303-028	Water	126250	06/13/07 19:03	62.50	1
016	hfd16	X	IB			06/13/07 19:41	1.0	1
017	hfd17	X	IB			06/13/07 20:19	1.0	1
018	hfd18	X	IB			06/13/07 20:57	1.0	1

Analyst: TEW Date: 06/14/07 Reviewer: ACM Date: 06/14/07

Standards used: 1=S6084 2=S5117 3=S6337 4=S6350 5=S5720 6=S6207 7=S6357 8=S6392

: 88312

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497177754

Instrument : MSVOA10 Begun : 05/03/07 10:34
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	je301	TUN	BFB			05/03/07 10:34	1.0	1
002	je302	TUN	BFB			05/03/07 10:47	1.0	1
003	je303	X	IB			05/03/07 11:05	1.0	2
004	je304	X	LOWPOINT			05/03/07 11:39	1.0	2
005	je305	TUN	BFB			05/03/07 12:11	1.0	1
006	je306	X	IB			05/03/07 12:29	1.0	2
007	je307	IB	CALIB			05/03/07 13:01	1.0	2
008	je308	ICAL	0.25/0.5PPB			05/03/07 13:35	1.0	3 4 5 2
009	je309	ICAL	0.5/1PPB			05/03/07 14:07	1.0	3 4 5 2
010	je310	ICAL	2PPB			05/03/07 14:40	1.0	3 4 5 2
011	je311	ICAL	5PPB			05/03/07 15:13	1.0	3 4 5 2
012	je312	ICAL	10PPB			05/03/07 15:46	1.0	3 4 5 2
013	je313	ICAL	20PPB			05/03/07 16:19	1.0	3 4 5 2
014	je314	ICAL	50PPB			05/03/07 16:51	1.0	3 4 5 2
015	je315	ICAL	75PPB			05/03/07 17:24	1.0	3 4 5 2
016	je316	ICAL	100PPB			05/03/07 17:57	1.0	3 4 5 2
017	je317	ICV				05/03/07 18:30	1.0	6 2
018	je318	ICV				05/03/07 19:03	1.0	7 8 2
019	je319	X	IB			05/03/07 19:36	1.0	2
020	je320	X	IB			05/03/07 20:08	1.0	2
021	je321	X	IB			05/03/07 20:41	1.0	2

Analyst: ACM Date: 05/04/07 Reviewer: SJD Date: 05/04/07

Standards used: 1=S5117 2=S6084 3=S5194 4=S6072 5=S5938 6=S6044 7=S5723 8=S5968

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497235206

Instrument : MSVOA10 Begun : 06/12/07 08:06
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfc01	X	IB			06/12/07 08:06	1.0	1	
002	jfc02	TUN	BFB			06/12/07 08:48	1.0	2	
003	jfc03	CCV	30PPB			06/12/07 09:06	1.0	3 4 5 1	
004	jfc04	X	QC391802	Water	126189	06/12/07 09:48	1.0	6 7 8 1	
005	jfc05	BS	QC391802	Water	126189	06/12/07 10:20	1.0	6 7 8 1	
006	jfc06	BSD	QC391803	Water	126189	06/12/07 10:53	1.0	6 7 8 1	
007	jfc07	CCV/BS	QC391854	Water	126189	06/12/07 11:47	1.0	9 1	1:BZME=120
008	jfc08	BSD	QC391855	Water	126189	06/12/07 12:20	1.0	9 1	1:BZME=120
009	jfc09	TUN	BFB			06/12/07 12:48	1.0	2	
010	jfc10	CCV	30PPB			06/12/07 13:06	1.0	3 4 5 1	
011	jfc11	CCV				06/12/07 13:39	1.0	9 1	1:BZME=130
012	jfc12	X	IB			06/12/07 14:14	1.0	1	
013	jfc13	BLANK	QC391801	Water	126189	06/12/07 14:47	1.0	1	
014	jfc14	SAMPLE	195303-007	Water	126189	06/12/07 15:19	1.0	1	
015	jfc15	SAMPLE	195303-014	Water	126189	06/12/07 15:52	1.0	1	
016	jfc16	SAMPLE	195270-009	Water	126189	06/12/07 16:25	1.0	1	
017	jfc17	SAMPLE	195270-001	Water	126189	06/12/07 16:58	1.0	1	
018	jfc18	SAMPLE	195270-016	Water	126189	06/12/07 17:31	1.0	1	
019	jfc19	SAMPLE	195303-002	Water	126189	06/12/07 18:03	1.0	1	
020	jfc20	SAMPLE	195303-003	Water	126189	06/12/07 18:36	1.0	1	
021	jfc21	SAMPLE	195303-004	Water	126189	06/12/07 19:08	1.0	1	
022	jfc22	SAMPLE	195303-015	Water	126189	06/12/07 19:41	1.0	1	
023	jfc23	SAMPLE	195303-016	Water	126189	06/12/07 20:14	1.0	1	
024	jfc24	SAMPLE	195303-017	Water	126189	06/12/07 20:46	1.0	1	
025	jfc25	SAMPLE	195303-018	Water	126189	06/12/07 21:19	1.0	1	
026	jfc26	SAMPLE	195303-019	Water	126189	06/12/07 21:52	1.0	1	
027	jfc27	SAMPLE	195354-001	Water	126189	06/12/07 22:24	5.0	1	
028	jfc28	SAMPLE	195303-013	Water	126189	06/12/07 22:57	16.67	1	
029	jfc29	SAMPLE	195303-005	Water	126189	06/12/07 23:30	33.33	1	
030	jfc30	SAMPLE	195303-006	Water	126189	06/13/07 00:03	62.50	1	
031	jfc31	SAMPLE	195303-012	Water	126189	06/13/07 00:36	83.33	1	
032	jfc32	X	IB			06/13/07 01:08	1.0	1	
033	jfc33	X	IB			06/13/07 01:41	1.0	1	
034	jfc34	X	IB			06/13/07 02:14	1.0	1	

Analyst: SJD Date: 06/13/07 Reviewer: ACM Date: 06/13/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6450 5=S5720 6=S6392 7=S6207 8=S6357 9=S5264

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497236627

Instrument : MSVOA10 Begun : 06/13/07 07:47
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfd01	X	IB			06/13/07 07:47	1.0	1	
002	jfd02	X	BFB			06/13/07 08:35	1.0	2	
003	jfd03	X	25PPB			06/13/07 08:53	1.0	3 4 5 1	
004	jfd04	X	BFB			06/13/07 09:26	1.0	2	
005	jfd05	X	25PPB			06/13/07 09:44	1.0	3 4 5 1	
006	jfd06	TUN	BFB			06/13/07 10:32	1.0	2	
007	jfd07	CCV	25PPB			06/13/07 10:50	1.0	3 4 5 1	
008	jfd08	BS	QC392037	Water	126237	06/13/07 11:31	1.0	6 7 8 1	
009	jfd09	BSD	QC392038	Water	126237	06/13/07 12:04	1.0	6 7 8 1	
010	jfd10	X	IB			06/13/07 12:37	1.0	1	
011	jfd11	BLANK	QC392036	Water	126237	06/13/07 13:10	1.0	1	
012	jfd12	SAMPLE	195299-001	Water	126237	06/13/07 13:43	83.33	1	
013	jfd13	SAMPLE	195329-002	Water	126237	06/13/07 14:15	1.0	1	
014	jfd14	SAMPLE	195329-001	Water	126237	06/13/07 14:48	1.0	1	
015	jfd15	SAMPLE	195372-006	Water	126237	06/13/07 15:21	1.0	1	
016	jfd16	SAMPLE	195372-007	Water	126237	06/13/07 15:53	1.0	1	
017	jfd17	SAMPLE	195339-002	Water	126237	06/13/07 16:27	1.0	1	
018	jfd18	SAMPLE	195372-001	Water	126237	06/13/07 17:00	1.0	1	
019	jfd19	SAMPLE	195372-003	Water	126237	06/13/07 17:33	1.0	1	
020	jfd20	SAMPLE	195372-004	Water	126237	06/13/07 18:06	1.0	1	
021	jfd21	SAMPLE	195372-005	Water	126237	06/13/07 18:38	1.0	1	
022	jfd22	SAMPLE	195372-002	Water	126237	06/13/07 19:12	1.0	1	
023	jfd23	SAMPLE	195303-005	Water	126237	06/13/07 19:45	2.0	1	
024	jfd24	SAMPLE	195303-006	Water	126237	06/13/07 20:18	2.500	1	2:BZ=720
025	jfd25	SAMPLE	195303-013	Water	126237	06/13/07 20:51	2.500	1	
026	jfd26	SAMPLE	195303-012	Water	126237	06/13/07 21:23	50.0	1	
027	jfd27	X	IB			06/13/07 21:56	1.0	1	
028	jfd28	X	IB			06/13/07 22:29	1.0	1	
029	jfd29	X	IB			06/13/07 23:02	1.0	1	

Analyst: ACM Date: 06/14/07 Reviewer: CW Date: 06/14/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6450 5=S5720 6=S6392 7=S6207 8=S6357

00015

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 497238068

Instrument : MSVOA10 Begun : 06/14/07 07:48
Method : EPA 8260B SOP Version : 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jfe01	X	IB			06/14/07 07:48	1.0	1	
002	jfe02	X	BFB			06/14/07 08:19	1.0	2	
003	jfe03	X	25PPB			06/14/07 08:37	1.0	3 4 5 1	
004	jfe04	TUN	BFB			06/14/07 09:27	1.0	2	
005	jfe05	CCV	25PPB			06/14/07 09:45	1.0	3 4 5 1	
006	jfe06	X	QC392285	Water	126298	06/14/07 10:32	1.0	6 7 8 1	
007	jfe07	BS	QC392285	Water	126298	06/14/07 11:05	1.0	6 7 8 1	
008	jfe08	ICAL	DIOX200PPB			06/14/07 11:38	1.0	9 1	
009	jfe09	BSD	QC392286	Water	126298	06/14/07 12:11	1.0	6 10 7 1	
010	jfe10	X	IB			06/14/07 12:44	1.0	1	
011	jfe11	BLANK	QC392287	Water	126298	06/14/07 13:17	1.0	1	
012	jfe12	SAMPLE	195366-001	Water	126298	06/14/07 13:49	1.0	1	
013	jfe13	SAMPLE	195366-002	Water	126298	06/14/07 14:22	1.0	1	
014	jfe14	SAMPLE	195366-003	Water	126298	06/14/07 14:55	1.0	1	
015	jfe15	SAMPLE	195366-004	Water	126298	06/14/07 15:28	1.0	1	
016	jfe16	SAMPLE	195388-001	Water	126298	06/14/07 16:01	1.0	1	
017	jfe17	SAMPLE	195388-002	Water	126298	06/14/07 16:34	1.0	1	
018	jfe18	SAMPLE	195303-013	Water	126298	06/14/07 17:07	2.500	1	
019	jfe19	SAMPLE	195303-012	Water	126298	06/14/07 17:39	2.500	1	1:BZ=110
020	jfe20	X	IB			06/14/07 18:12	1.0	1	
021	jfe21	SAMPLE	195303-006	Water	126298	06/14/07 18:45	50.0	1	
022	jfe22	X	IB			06/14/07 19:17	1.0	1	
023	jfe23	X	IB			06/14/07 19:50	1.0	1	

ACM 06/15/07 : Single point calibration for 1,4-Dioxane not needed.

Analyst: ACM Date: 06/15/07 Reviewer: CW Date: 06/15/07

Standards used: 1=S6084 2=S5117 3=S6350 4=S6450 5=S5720 6=S6392 7=S6207 8=S6357 9=S2837 10=S6427

REPORTING SUMMARY FOR 195303 MSVOA Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLM	CMC	VRE	BCE	CEA	DCE	MCL	DCE	VCC	DTC	MCC	DTC	TCT	CCC	DCT	BCC	TZA	DCC	BCD	MDI	DCK	BZP	DCM	TCP	HAM	PPK	DAC	CEO	XCE	XCB	TLB	SZY	TLL	YOT	MYO	AXT	TSE	TYY	PMT	DAM	DFA	BAF	BMA	BM1	BE4	BF
195303-002	MSVOA10	06/12/07 18:03	1.0																																															
195303-003	MSVOA10	06/12/07 18:36	1.0																																															
195303-004	MSVOA10	06/12/07 19:08	1.0																																															
195303-005	MSVOA10	06/12/07 23:30	33.33																																															
195303-005	MSVOA10	06/13/07 19:45	2.0																																															
195303-006	MSVOA10	06/13/07 00:03	62.50																																															
195303-006	MSVOA10	06/13/07 20:18	2.500																																															
195303-006	MSVOA10	06/14/07 18:45	50.0																																															
195303-007	MSVOA10	06/12/07 15:19	1.0																																															
195303-012	MSVOA10	06/13/07 00:36	83.33																																															
195303-012	MSVOA10	06/13/07 21:23	50.0																																															
195303-012	MSVOA10	06/14/07 17:39	2.500																																															
195303-013	MSVOA10	06/12/07 22:57	16.67																																															
195303-013	MSVOA10	06/13/07 20:51	2.500																																															
195303-013	MSVOA10	06/14/07 17:07	2.500																																															
195303-014	MSVOA10	06/12/07 15:52	1.0																																															
195303-015	MSVOA10	06/12/07 19:41	1.0																																															
195303-016	MSVOA10	06/12/07 20:14	1.0																																															
195303-017	MSVOA10	06/12/07 20:46	1.0																																															
195303-018	MSVOA10	06/12/07 21:19	1.0																																															
195303-019	MSVOA10	06/12/07 21:52	1.0																																															
195303-020	MSVOA08	06/12/07 15:20	1.0																																															
195303-021	MSVOA08	06/12/07 15:59	1.0																																															
195303-022	MSVOA08	06/12/07 16:36	1.0																																															
195303-023	MSVOA08	06/12/07 14:42	1.0																																															
195303-024	MSVOA08	06/12/07 17:14	1.0																																															
195303-025	MSVOA08	06/12/07 17:53	1.0																																															
195303-027	MSVOA08	06/12/07 18:32	1.0																																															
195303-028	MSVOA08	06/12/07 20:26	250.0																																															

REPORTING SUMMARY FOR 195303 MSVOA Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	CLME	VCMR	BMEA	CEE1	AEL1	DCCN	MTDL	CDTS	MCCE	DTCB	VCCA	DAC1	MEC1	DCCL	TCCA	TCCL	CCCA	DCCA	BZCE	TCZ1	DCC1	BCDA	TEPM	DAMB	MIKP	DCB1	BCZP	DCEM	TCCE	HXCA	PXCM	DCBZ	CCBL	EBZ1	XYLM	XYLO	TLX1	SYT2	TMEE	PAM1	DOM2	DTA3	BCF2	BCA2	CAM1	ZRM3	BE2F
195303-028	MSVOA08	06/13/07 19:03	62.50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195303-029	MSVOA08	06/12/07 19:48	25.0																																																
195303-029	MSVOA08	06/13/07 17:47	2.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
195303-030	MSVOA08	06/12/07 19:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391801	MSVOA10	06/12/07 14:47	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391802	MSVOA10	06/12/07 10:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391803	MSVOA10	06/12/07 10:53	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391854	MSVOA10	06/12/07 11:47	1.0																																														+	+	+	+
QC391855	MSVOA10	06/12/07 12:20	1.0																																														+	+	+	+
QC391839	MSVOA08	06/12/07 13:54	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391840	MSVOA08	06/12/07 11:42	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC391841	MSVOA08	06/12/07 12:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392036	MSVOA10	06/13/07 13:10	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392037	MSVOA10	06/13/07 11:31	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392038	MSVOA10	06/13/07 12:04	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392081	MSVOA08	06/13/07 13:45	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392082	MSVOA08	06/13/07 11:34	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392083	MSVOA08	06/13/07 12:12	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392285	MSVOA10	06/14/07 11:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392286	MSVOA10	06/14/07 12:11	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC392287	MSVOA10	06/14/07 13:17	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/12/07
PREPPED BY. Eric

WATER

126189

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195270-001		C	<2			10	RR/x O.D.	tight limits
2	~~195300-008~~							~~RR/x 1,2,4 TCB B-flds~~	J to MDL
3	~~-009~~							~~RR/x O.D.~~	
4	195270-016		B	<2			10	RR/x O.D. Silty	tight limits
5	195270-009							RR TB vial thread broke	
6	195303-002		A					1x	
7	-003							1x	
8	-004							1x	
9	-005		B	<2				33.3x	
10	-006		A					62.5x	
11	-007			<2				TB	
12	-012		B	<2				83.3x	
13	-013							16.7x	
14	-014		A	<2				TB	
15	-015							1x	
16	-016								
17	-017								
18	-018								
19	-019								
20	195354-001		A	<2				5x	
21									
22									
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6-12-07
PREPPED BY: [illegible]

126195

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195303-020		A	<2			8	1x	
2	-021								
3	-022							TB	
4	-023								
5	-024								
6	-025								
7	-027							250x	
8	-028		B	<2				25x	
9	-029							1x	
10	-030			<2					
11									
12									
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PREPFORM.XLS

7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/13/07
PREPPED BY: Zie

WATER

126237

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195229 -001		F	<2			10	RR 1x high surr CS2 V-	
2	-002		B				10	CS2 V- 1X	
3	~~195287-012~~							RR	
4	195303-013		C	<2			10	RR 2.5x O.D.	
5	-012							RR 50x O.D.	
6	-006		B					RR 2.5x O.D	
7	-005		C					RR 2x O.D.	
8	195339-002			<2				RR 1x tert/Sec V-	
9	195372-001		B					1X	
10	-002							1X	
11	-003							1X	
12	-004							1X	
13	-005							1X	
14	-006		A					TB	
15	-007							TB	
16	195299-001		B	<2				83.3x RR	
17									
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PREPFORM.XLS

7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/13/07
PREPPED BY: Zie

126250

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195303-029		C	<2			8	RR C 2x OD	
2	↓ -028		↓	↓			↓	↓ 625x ↓	
3	195376-001		A	<2				1x	
4	↓ -002		B	↓			↓	↓	
5	-003		A						
6	-004		↓	↓			↓	↓	
7	↓ -006								
8									
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PREPFORM.XLS

7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 6/14/07

PREPPED BY: JS

126298

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	195388 - 1		C	<2			10	RL 1x Neh ↑RL	
2	2		E					RL	
3	195366 - 1		C					RL	
4	2							RL	
5	3							RL	
6	4							RL	
7	195303 - 6		D	<2				RL 50x anomalous?	
8	12		E					RL 2-5x	
9	13							RL 2-5x BZ Co	
10									
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Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	28	4.8	48	25	22	10	38
1,1-Dichloroethene	ug/L	0.094	0.12	0.093	0.12	0.17	0.094	0.071
Benzene	ug/L	0.082	0.063	0.040	0.028	0.10	0.25	0.013
Trichloroethene	ug/L	0.084	0.085	0.14	0.056	0.13	0.12	0.044
Toluene	ug/L	0.10	0.12	0.060	0.090	0.085	0.13	0.059
Chlorobenzene	ug/L	0.063	0.11	0.062	0.058	0.098	0.16	0.034
Freon 12	ug/L	0.067	0.13	0.16	0.068	0.47	0.24	0.081
Chloromethane	ug/L	0.20	0.24	0.064	0.090	0.34	0.24	0.040
Vinyl Chloride	ug/L	0.13	0.087	0.11	0.11	0.097	0.11	0.084
Bromomethane	ug/L	0.39	0.22	0.13	0.24	0.34	0.15	0.095
Chloroethane	ug/L	0.21	0.13	0.14	0.28	0.45	0.20	0.086
Trichlorofluoromethane	ug/L	0.098	0.12	0.12	0.098	0.46	0.18	0.031
Acetone	ug/L	0.43	0.48	0.52	0.31	0.20	1.0	0.28
Freon 113	ug/L	0.16	0.13	0.25	0.075	0.19	0.14	0.050
Methylene Chloride	ug/L	0.19	0.20	0.051	0.14	0.29	0.18	0.15
MTBE	ug/L	0.045	0.072	0.030	0.036	0.15	0.047	0.028
Carbon Disulfide	ug/L	0.093	0.14	0.074	0.077	0.14	0.054	0.020
trans-1,2-Dichloroethene	ug/L	0.13	0.14	0.10	0.092	0.15	0.12	0.058
Vinyl Acetate	ug/L	0.17	0.11	0.042	0.19	0.13	0.80	0.51
1,1-Dichloroethane	ug/L	0.023	0.077	0.054	0.070	0.14	0.055	0.041
2-Butanone	ug/L	0.29	0.10	0.35	0.15	0.23	0.41	0.15
cis-1,2-Dichloroethene	ug/L	0.068	0.13	0.046	0.11	0.12	0.14	0.042
2,2-Dichloropropane	ug/L	0.20	0.13	0.066	0.080	0.15	0.062	0.062
Chloroform	ug/L	0.12	0.080	0.045	0.060	0.16	0.16	0.030
Bromochloromethane	ug/L	0.14	0.087	0.079	0.16	0.18	0.093	0.10
1,1,1-Trichloroethane	ug/L	0.12	0.059	0.069	0.093	0.12	0.11	0.035
1,1-Dichloropropene	ug/L	0.071	0.054	0.15	0.098	0.11	0.14	0.032
Carbon Tetrachloride	ug/L	0.15	0.13	0.17	0.095	0.14	0.11	0.061
1,2-Dichloroethane	ug/L	0.068	0.053	0.048	0.097	0.18	0.086	0.048
1,2-Dichloropropane	ug/L	0.14	0.067	0.046	0.067	0.16	0.14	0.045
Bromodichloromethane	ug/L	0.090	0.078	0.040	0.10	0.14	0.065	0.030
Dibromomethane	ug/L	0.076	0.10	0.057	0.073	0.18	0.070	0.053
4-Methyl-2-Pentanone	ug/L	0.13	0.10	0.26	0.056	0.14	0.17	0.15
cis-1,3-Dichloropropene	ug/L	0.054	0.068	0.084	0.075	0.094	0.048	0.037
trans-1,3-Dichloropropene	ug/L	0.072	0.048	0.051	0.068	0.13	0.069	0.022
1,1,2-Trichloroethane	ug/L	0.072	0.073	0.082	0.15	0.21	0.15	0.037
2-Hexanone	ug/L	0.076	0.062	0.12	0.067	0.13	0.46	0.13
1,3-Dichloropropane	ug/L	0.056	0.065	0.078	0.048	0.14	0.15	0.037
Tetrachloroethene	ug/L	0.092	0.16	0.12	0.11	0.092	0.20	0.012
Dibromochloromethane	ug/L	0.067	0.069	0.043	0.14	0.15	0.10	0.018
1,2-Dibromoethane	ug/L	0.14	0.050	0.043	0.089	0.13	0.099	0.060
2-Chloroethylvinylether	ug/L	0.46	0.12	0.18	0.32	0.19		0.16
1,1,1,2-Tetrachloroethane	ug/L	0.12	0.048	0.068	0.12	0.10	0.16	0.040
Ethylbenzene	ug/L	0.067	0.11	0.062	0.062	0.11	0.14	0.033
m,p-Xylenes	ug/L	0.24	0.077	0.16	0.17	0.19	0.30	0.10
o-Xylene	ug/L	0.096	0.041	0.082	0.056	0.087	0.16	0.073
Styrene	ug/L	0.083	0.032	0.035	0.058	0.11	0.090	0.023
Bromoform	ug/L	0.16	0.058	0.046	0.14	0.12	0.10	0.15
Isopropylbenzene	ug/L	0.072	0.030	0.13	0.074	0.11	0.19	0.026
1,1,2,2-Tetrachloroethane	ug/L	0.14	0.073	0.072	0.047	0.20	0.13	0.036

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 06/28/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.11	0.12	0.089	0.13	0.19	0.26	0.050
Propylbenzene	ug/L	0.087	0.031	0.10	0.055	0.12	0.15	0.023
Bromobenzene	ug/L	0.080	0.040	0.093	0.039	0.17	0.10	0.050
1,3,5-Trimethylbenzene	ug/L	0.11	0.095	0.081	0.078	0.13	0.19	0.030
2-Chlorotoluene	ug/L	0.097	0.049	0.084	0.095	0.10	0.18	0.027
4-Chlorotoluene	ug/L	0.10	0.074	0.064	0.090	0.14	0.14	0.034
tert-Butylbenzene	ug/L	0.097	0.095	0.096	0.058	0.13	0.17	0.026
1,2,4-Trimethylbenzene	ug/L	0.097	0.041	0.054	0.085	0.082	0.15	0.048
sec-Butylbenzene	ug/L	0.10	0.10	0.12	0.095	0.088	0.14	0.026
para-Isopropyl Toluene	ug/L	0.068	0.11	0.083	0.13	0.071	0.19	0.044
1,3-Dichlorobenzene	ug/L	0.073	0.044	0.073	0.10	0.13	0.17	0.037
1,4-Dichlorobenzene	ug/L	0.11	0.041	0.096	0.12	0.10	0.15	0.035
n-Butylbenzene	ug/L	0.12	0.050	0.11	0.095	0.11	0.11	0.028
1,2-Dichlorobenzene	ug/L	0.11	0.054	0.097	0.11	0.16	0.20	0.028
1,2-Dibromo-3-Chloropropane	ug/L	0.20	0.18	0.25	0.17	0.17	0.45	0.25
1,2,4-Trichlorobenzene	ug/L	0.096	0.080	0.12	0.19	0.12	0.17	0.077
Hexachlorobutadiene	ug/L	0.12	0.17	0.45	0.77	0.065	0.22	0.082
Naphthalene	ug/L	0.086	0.10	0.056	0.10	0.11	0.19	0.068
1,2,3-Trichlorobenzene	ug/L	0.029	0.10	0.13	0.20	0.10	0.22	0.073
tert-Butyl Alcohol (TBA)	ug/L	1.4	1.1	1.0	1.1	1.1	1.6	2.6
Isopropyl Ether (DIPE)	ug/L	0.028	0.064	0.020	0.049	0.14	0.040	0.026
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.060	0.10	0.026	0.034	0.13	0.074	0.038
Methyl tert-Amyl Ether (TAME)	ug/L	0.072	0.059	0.049	0.042	0.10	0.049	0.019
Isopropanol	ug/L	3.7	1.2	1.7	1.2	1.4	0.89	2.2
Cyclohexanone	ug/L				1.6	1.3	3.8	1.0
Tetrahydrofuran	ug/L	1.0	0.94	0.50	0.58	2.1	1.2	3.3
Tetramethyl THF	ug/L	0.061	0.055	0.021	0.090	0.13	0.13	0.014
Gasoline C6-C10	ug/L				15		10	11
Gasoline C7-C12	ug/L				13		3.5	11
Dibromofluoromethane	ug/L					1.1	1.2	1.1
1,2-Dichloroethane-d4	ug/L					1.7	2.3	1.0
Toluene-d8	ug/L					1.5	1.5	0.96
Bromofluorobenzene	ug/L					2.5	1.6	0.62

PESTICIDE DATA

(WATER)

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW060807B	Batch#:	126290
Lab ID:	195303-030	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	1.000	Analyzed:	06/14/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	88	65-135

ND= Not Detected
RL= Reporting Limit

43.0

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392257	Batch#:	126290
Matrix:	Water	Prepared:	06/13/07
Units:	ug/L	Analyzed:	06/14/07

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	94	65-135

ND= Not Detected
RL= Reporting Limit

44.0

00327

Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	126290
Units:	ug/L	Prepared:	06/13/07
Diln Fac:	1.000	Analyzed:	06/14/07

Type: BS Lab ID: QC392258

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.2065	103	65-135
Heptachlor	0.2000	0.2020	101	65-135
Aldrin	0.2000	0.2007	100	65-135
Dieldrin	0.4000	0.4386	110	65-135
Endrin	0.4000	0.4121	103	65-135
4,4'-DDT	0.4000	0.3564	89	65-135

Surrogate	%REC	Limits
TCMX	109	65-135
Decachlorobiphenyl	111	65-135

Type: BSD Lab ID: QC392259

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.2039	102	65-135	1	35
Heptachlor	0.2000	0.2004	100	65-135	1	35
Aldrin	0.2000	0.2026	101	65-135	1	35
Dieldrin	0.4000	0.4495	112	65-135	2	35
Endrin	0.4000	0.4271	107	65-135	4	35
4,4'-DDT	0.4000	0.3741	94	65-135	5	35

Surrogate	%REC	Limits
TCMX	104	65-135
Decachlorobiphenyl	113	65-135

RPD= Relative Percent Difference

45.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 PEST Water: EPA 8081A

Inst : GC23
Calnum : 807215412001
Units : pg

Name : gc23pest_149
Date : 29-MAY-2007 22:26
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	149_025	807215412025	PEST_1	29-MAY-2007 22:26	S6268
L2	149_026	807215412026	PEST_2	29-MAY-2007 22:47	S6269
L3	149_027	807215412027	PEST_3	29-MAY-2007 23:08	S6270
L4	149_028	807215412028	PEST_4	29-MAY-2007 23:30	S6271
L5	149_029	807215412029	PEST_5	29-MAY-2007 23:51	S5859
L6	149_030	807215412030	PEST_6	30-MAY-2007 00:13	S5860
L7	149_031	807215412031	PEST_7	30-MAY-2007 00:34	S6332

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
alpha-BHC	A	11833	12067	11172	10136	11406	10956	10487	AVRG		8.97E-5		11151	6	0.995	20	
gamma-BHC	A	11183	11226	10200	9251.0	10152	9727.8	9619.8	AVRG		9.81E-5		10194	7	0.995	20	
beta-BHC	A	4611.5	4560.6	3952.0	3614.3	4019.5	3690.7	3620.4	AVRG		2.49E-4		4009.9	11	0.995	20	
delta-BHC	A	13070	12391	10543	9615.1	10726	10262	9680.8	AVRG		9.18E-5		10898	12	0.995	20	
Heptachlor	A	10493	10492	9386.9	8625.0	9698.1	9257.7	8829.8	AVRG		1.05E-4		9540.3	8	0.995	20	
Aldrin	A	10397	10352	9410.7	8649.0	9517.2	9093.3	8849.6	AVRG		1.06E-4		9466.9	7	0.995	20	
Heptachlor epoxide	A	9633.5	9417.2	8283.5	7619.4	8378.1	7888.2	7531.9	AVRG		1.19E-4		8393.1	10	0.995	20	
gamma-Chlordane	A	9285.5	9242.8	8155.2	7579.9	8288.2	7899.6	7915.8	AVRG		1.20E-4		8338.1	8	0.995	20	
alpha-Chlordane	A	8893.5	8826.4	7729.0	7201.9	7791.6	7745.1	7729.9	AVRG		1.25E-4		7988.2	8	0.995	20	
4,4'-DDE	A	7999.0	8060.7	7242.6	6868.2	7924.8	7462.8	6399.8	AVRG		1.35E-4		7422.6	8	0.995	20	
Endosulfan I	A	8695.5	8709.8	7700.1	6938.2	7994.0	7139.3	6963.3	AVRG		1.29E-4		7734.3	10	0.995	20	
Dieldrin	A	8648.0	8715.0	7752.8	7363.9	8396.3	7730.4	6503.6	AVRG		1.27E-4		7872.9	10	0.995	20	
Endrin	A	7393.5	7583.8	6598.4	6286.9	7151.5	6717.1	5814.1	AVRG		1.47E-4		6792.2	9	0.995	20	
4,4'-DDD	A	6569.3	6468.6	5730.7	5474.4	6210.7	6147.0	5583.5	AVRG		1.66E-4		6026.3	7	0.995	20	
Endosulfan II	A	7219.5	7211.8	6317.5	5951.8	7029.7	6382.2	5629.4	AVRG		1.53E-4		6534.6	10	0.995	20	
4,4'-DDT	A	6307.0	6816.5	6087.7	5901.9	6515.7	6372.7	6073.1	AVRG		1.59E-4		6296.4	5	0.995	20	
Methoxychlor	A	2700.7	2732.6	2380.4	2301.7	2674.5	2185.4		AVRG		4.01E-4		2495.9	9	0.995	20	
Endosulfan sulfate	A	7013.0	6873.2	5794.3	5365.5	6113.2	5685.5	5288.5	AVRG		1.66E-4		6019.0	11	0.995	20	
Endrin ketone	A	7970.3	8321.6	6760.1	6351.6	7228.5	6797.0	5827.3	AVRG		1.42E-4		7036.6	12	0.995	20	
TCMX	A	6217.0	6552.9	6048.0	5424.2	6000.7	5620.7	5482.1	AVRG		1.69E-4		5906.5	7	0.995	20	
Decachlorobiphenyl	A	5278.3	5181.4	4518.5	4250.1	4850.3	4546.8	4236.9	AVRG		2.13E-4		4694.6	9	0.995	20	
alpha-BHC	B	12851	12443	10208	10774	12626	13697	13206	AVRG		8.16E-5		12258	10	0.995	20	
gamma-BHC	B	12137	11522	9465.4	9936.6	11317	12257	12204	AVRG		8.88E-5		11263	10	0.995	20	
beta-BHC	B	4930.0	4555.6	3708.2	3816.3	4398.2	4419.3	4255.6	AVRG		2.33E-4		4297.6	10	0.995	20	
delta-BHC	B	14195	12328	9817.5	10201	11961	12812	12197	AVRG		8.38E-5		11930	13	0.995	20	
Heptachlor	B	11085	10568	8610.5	9088.5	10711	11586	11144	AVRG		9.62E-5		10399	11	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Aldrin	B	12231	10766	8810.9	9213.7	10639	11298	11167	AVRG		9.44E-5		10589	11	0.995	20	
Heptachlor epoxide	B	10937	9799.8	7964.0	8225.3	9510.3	9811.2	9461.6	AVRG		1.07E-4		9387.0	11	0.995	20	
gamma-Chlordane	B	10548	9704.2	7982.9	8369.6	9426.7	9930.7	10132	AVRG		1.06E-4		9442.0	10	0.995	20	
alpha-Chlordane	B	10049	9210.8	7581.8	7898.8	9026.2	9477.8	9589.3	AVRG		1.11E-4		8976.3	10	0.995	20	
4,4'-DDE	B	8947.3	8469.6	7086.9	7530.4	9214.7	9782.6	8405.8	AVRG		1.18E-4		8491.0	11	0.995	20	
Endosulfan I	B	9792.0	8939.8	7382.4	7632.3	8673.6	8895.8	8733.5	AVRG		1.17E-4		8578.5	10	0.995	20	
Dieldrin	B	9720.3	9113.0	7359.5	8014.9	9718.3	9952.4	8304.6	AVRG		1.13E-4		8883.3	11	0.995	20	
Endrin	B	8220.5	7661.4	6087.5	6665.3	8001.7	8394.7	7270.5	AVRG		1.34E-4		7471.7	11	0.995	20	
4,4'-DDD	B	7849.3	7133.8	5815.9	6175.9	7510.9	8101.5	7254.1	AVRG		1.40E-4		7120.2	12	0.995	20	
Endosulfan II	B	7919.5	7401.6	6188.5	6544.6	7862.7	8258.3	7231.5	AVRG		1.36E-4		7343.8	10	0.995	20	
4,4'-DDT	B	7020.5	6744.8	5615.5	6361.9	7304.3	8184.7	7865.9	AVRG		1.43E-4		7013.9	13	0.995	20	
Methoxychlor	B	2913.0	2687.9	2139.7	2420.5	3087.2	2858.9	2108.8	AVRG		3.84E-4		2602.3	15	0.995	20	
Endosulfan sulfate	B	7561.8	6703.5	5275.7	5683.0	6780.4	6993.5	6439.6	AVRG		1.54E-4		6491.1	12	0.995	20	
Endrin ketone	B	8655.3	7728.8	6138.5	6563.1	8327.5	8509.2	7223.3	AVRG		1.32E-4		7592.2	13	0.995	20	
TCMX	B	6973.8	6825.5	5626.8	5612.1	6648.3	7052.2	6831.7	AVRG		1.54E-4		6510.0	10	0.995	20	
Decachlorobiphenyl	B	5684.5	5098.9	4120.4	4305.2	5477.2	5730.7	5439.3	AVRG		1.95E-4		5122.3	13	0.995	20	
Average EPA 8081A	A												(n=22)	9		20	
Average EPA 8081A	B												(n=22)	11		20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
alpha-BHC	A	2.000	6	5.000	8	10.00	0	20.00	-9	25.00	2	50.00	-2	100.0	-6
gamma-BHC	A	2.000	10	5.000	10	10.00	0	20.00	-9	25.00	0	50.00	-5	100.0	-6
beta-BHC	A	2.000	15	5.000	14	10.00	-1	20.00	-10	25.00	0	50.00	-8	100.0	-10
delta-BHC	A	2.000	20	5.000	14	10.00	-3	20.00	-12	25.00	-2	50.00	-6	100.0	-11
Heptachlor	A	2.000	10	5.000	10	10.00	-2	20.00	-10	25.00	2	50.00	-3	100.0	-7
Aldrin	A	2.000	10	5.000	9	10.00	-1	20.00	-9	25.00	1	50.00	-4	100.0	-7
Heptachlor epoxide	A	2.000	15	5.000	12	10.00	-1	20.00	-9	25.00	0	50.00	-6	100.0	-10
gamma-Chlordane	A	2.000	11	5.000	11	10.00	-2	20.00	-9	25.00	-1	50.00	-5	100.0	-5
alpha-Chlordane	A	2.000	11	5.000	10	10.00	-3	20.00	-10	25.00	-2	50.00	-3	100.0	-3
4,4'-DDE	A	4.000	8	10.00	9	20.00	-2	40.00	-7	50.00	7	100.0	1	200.0	-14
Endosulfan I	A	2.000	12	5.000	13	10.00	0	20.00	-10	25.00	3	50.00	-8	100.0	-10
Dieldrin	A	4.000	10	10.00	11	20.00	-2	40.00	-6	50.00	7	100.0	-2	200.0	-17
Endrin	A	4.000	9	10.00	12	20.00	-3	40.00	-7	50.00	5	100.0	-1	200.0	-14
4,4'-DDD	A	4.000	9	10.00	7	20.00	-5	40.00	-9	50.00	3	100.0	2	200.0	-7
Endosulfan II	A	4.000	10	10.00	10	20.00	-3	40.00	-9	50.00	8	100.0	-2	200.0	-14
4,4'-DDT	A	4.000	0	10.00	8	20.00	-3	40.00	-6	50.00	3	100.0	1	200.0	-4
Methoxychlor	A	20.00	8	50.00	9	100.0	-5	200.0	-8	250.0	7	500.0	-12		
Endosulfan sulfate	A	4.000	17	10.00	14	20.00	-4	40.00	-11	50.00	2	100.0	-6	200.0	-12
Endrin ketone	A	4.000	13	10.00	18	20.00	-4	40.00	-10	50.00	3	100.0	-3	200.0	-17
TCMX	A	4.000	5	10.00	11	20.00	2	40.00	-8	50.00	2	100.0	-5	200.0	-7
Decachlorobiphenyl	A	4.000	12	10.00	10	20.00	-4	40.00	-9	50.00	3	100.0	-3	200.0	-10
alpha-BHC	B	2.000	5	5.000	2	10.00	-17	20.00	-12	25.00	3	50.00	12	100.0	8
gamma-BHC	B	2.000	8	5.000	2	10.00	-16	20.00	-12	25.00	0	50.00	9	100.0	8
beta-BHC	B	2.000	15	5.000	6	10.00	-14	20.00	-11	25.00	2	50.00	3	100.0	-1
delta-BHC	B	2.000	19	5.000	3	10.00	-18	20.00	-14	25.00	0	50.00	7	100.0	2
Heptachlor	B	2.000	7	5.000	2	10.00	-17	20.00	-13	25.00	3	50.00	11	100.0	7
Aldrin	B	2.000	16	5.000	2	10.00	-17	20.00	-13	25.00	0	50.00	7	100.0	5
Heptachlor epoxide	B	2.000	17	5.000	4	10.00	-15	20.00	-12	25.00	1	50.00	5	100.0	1
gamma-Chlordane	B	2.000	12	5.000	3	10.00	-15	20.00	-11	25.00	0	50.00	5	100.0	7
alpha-Chlordane	B	2.000	12	5.000	3	10.00	-16	20.00	-12	25.00	1	50.00	6	100.0	7
4,4'-DDE	B	4.000	5	10.00	0	20.00	-17	40.00	-11	50.00	9	100.0	15	200.0	-1
Endosulfan I	B	2.000	14	5.000	4	10.00	-14	20.00	-11	25.00	1	50.00	4	100.0	2
Dieldrin	B	4.000	9	10.00	3	20.00	-17	40.00	-10	50.00	9	100.0	12	200.0	-7
Endrin	B	4.000	10	10.00	3	20.00	-19	40.00	-11	50.00	7	100.0	12	200.0	-3
4,4'-DDD	B	4.000	10	10.00	0	20.00	-18	40.00	-13	50.00	5	100.0	14	200.0	2
Endosulfan II	B	4.000	8	10.00	1	20.00	-16	40.00	-11	50.00	7	100.0	12	200.0	-2
4,4'-DDT	B	4.000	0	10.00	-4	20.00	-20	40.00	-9	50.00	4	100.0	17	200.0	12
Methoxychlor	B	20.00	12	50.00	3	100.0	-18	200.0	-7	250.0	19	500.0	10	1000	-19
Endosulfan sulfate	B	4.000	16	10.00	3	20.00	-19	40.00	-12	50.00	4	100.0	8	200.0	-1
Endrin ketone	B	4.000	14	10.00	2	20.00	-19	40.00	-14	50.00	10	100.0	12	200.0	-5
TCMX	B	4.000	7	10.00	5	20.00	-14	40.00	-14	50.00	2	100.0	8	200.0	5
Decachlorobiphenyl	B	4.000	11	10.00	0	20.00	-20	40.00	-16	50.00	7	100.0	12	200.0	6

ADM 05/30/07 : Methoxychlor Level 7 point dropped to correct failing %D.

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 PEST Water
EPA 8081A

Inst : GC23 Name : gc23pest_149
Calnum : 807215412001 Cal Date : 29-MAY-2007

ICV 807215412034 (149_034 30-MAY-2007) stds: S5817

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	11151	10140	25.00	22.73	pg	-9	15	
gamma-BHC	A	10194	9232.4	25.00	22.64	pg	-9	15	
beta-BHC	A	4009.9	3591.1	25.00	22.39	pg	-10	15	
delta-BHC	A	10898	9742.0	25.00	22.35	pg	-11	15	
Heptachlor	A	9540.3	8612.4	25.00	22.57	pg	-10	15	
Aldrin	A	9466.9	8573.5	25.00	22.64	pg	-9	15	
Heptachlor epoxide	A	8393.1	7375.2	25.00	21.97	pg	-12	15	
gamma-Chlordane	A	8338.1	7442.0	25.00	22.31	pg	-11	15	
alpha-Chlordane	A	7988.2	6918.3	25.00	21.65	pg	-13	15	
4,4'-DDE	A	7422.6	7034.3	25.00	23.69	pg	-5	15	
Endosulfan I	A	7734.3	7008.9	25.00	22.66	pg	-9	15	
Dieldrin	A	7872.9	7509.4	25.00	23.85	pg	-5	15	
Endrin	A	6792.2	6438.0	25.00	23.70	pg	-5	15	
4,4'-DDD	A	6026.3	5361.8	25.00	22.24	pg	-11	15	
Endosulfan II	A	6534.6	6208.7	25.00	23.75	pg	-5	15	
4,4'-DDT	A	6296.4	5850.8	25.00	23.23	pg	-7	15	
Methoxychlor	A	2495.9	2210.3	275.0	243.5	pg	-11	15	
Endosulfan sulfate	A	6019.0	5432.7	25.00	22.56	pg	-10	15	
Endrin ketone	A	7036.6	6505.4	25.00	23.11	pg	-8	15	
alpha-BHC	B	12258	11734	25.00	23.93	pg	-4	15	
gamma-BHC	B	11263	10615	25.00	23.56	pg	-6	15	
beta-BHC	B	4297.6	4006.4	25.00	23.31	pg	-7	15	
delta-BHC	B	11930	11186	25.00	23.44	pg	-6	15	
Heptachlor	B	10399	9958.8	25.00	23.94	pg	-4	15	
Aldrin	B	10589	10048	25.00	23.72	pg	-5	15	
Heptachlor epoxide	B	9387.0	8632.3	25.00	22.99	pg	-8	15	
gamma-Chlordane	B	9442.0	8880.2	25.00	23.51	pg	-6	15	
alpha-Chlordane	B	8976.3	8419.3	25.00	23.45	pg	-6	15	
4,4'-DDE	B	8491.0	8323.2	25.00	24.51	pg	-2	15	
Endosulfan I	B	8578.5	8095.5	25.00	23.59	pg	-6	15	
Dieldrin	B	8883.3	8916.1	25.00	25.09	pg	0	15	
Endrin	B	7471.7	7373.6	25.00	24.67	pg	-1	15	
4,4'-DDD	B	7120.2	6928.4	25.00	24.33	pg	-3	15	
Endosulfan II	B	7343.8	7251.3	25.00	24.69	pg	-1	15	
4,4'-DDT	B	7013.9	6533.1	25.00	23.29	pg	-7	15	
Methoxychlor	B	2602.3	2744.7	275.0	290.0	pg	5	15	
Endosulfan sulfate	B	6491.1	6236.9	25.00	24.02	pg	-4	15	
Endrin ketone	B	7592.2	7630.5	25.00	25.13	pg	1	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195303 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807238321002 File : 165_002 Time : 14-JUN-2007 12:01

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	651812	7	15	
4,4'-DDE	A	1367			
4,4'-DDD	A	47128			
Endrin	A	369992	8	15	
Endrin aldehyde	A	6754			
Endrin ketone	A	27246			
4,4'-DDT	B	707422	8	15	
4,4'-DDE	B	2012			
4,4'-DDD	B	63701			
Endrin	B	391006	7	15	
Endrin aldehyde	B	4981			
Endrin ketone	B	23342			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 195303 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEM IDF : 1.0
Seqnum : 807238321014 File : 165_014 Time : 14-JUN-2007 22:02

Standards: S6458

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	592266	7	15	
4,4'-DDE	A	1372			
4,4'-DDD	A	44960			
Endrin	A	338303	9	15	
Endrin aldehyde	A	6387			
Endrin ketone	A	27365			
4,4'-DDT	B	638425	10	15	
4,4'-DDE	B	1744			
4,4'-DDD	B	69540			
Endrin	B	370431	8	15	
Endrin aldehyde	B	4935			
Endrin ketone	B	27153			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_4 IDF : 1.0
Seqnum : 807238321003 File : 165_003 Time : 14-JUN-2007 12:23
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6271

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11732	20.00	21.04	pg	5	15	
gamma-BHC	A	10194	10680	20.00	20.95	pg	5	15	
beta-BHC	A	4009.9	4030.5	20.00	20.10	pg	1	15	
delta-BHC	A	10898	10779	20.00	19.78	pg	-1	15	
Heptachlor	A	9540.3	9881.0	20.00	20.71	pg	4	15	
Aldrin	A	9466.9	9934.7	20.00	20.99	pg	5	15	
Heptachlor epoxide	A	8393.1	8675.1	20.00	20.67	pg	3	15	
gamma-Chlordane	A	8338.1	8618.1	20.00	20.67	pg	3	15	
alpha-Chlordane	A	7988.2	8111.4	20.00	20.31	pg	2	15	
4,4'-DDE	A	7422.6	7998.2	40.00	43.10	pg	8	15	
Endosulfan I	A	7734.3	8059.9	20.00	20.84	pg	4	15	
Dieldrin	A	7872.9	8647.0	40.00	43.93	pg	10	15	
Endrin	A	6792.2	7271.6	40.00	42.82	pg	7	15	
4,4'-DDD	A	6026.3	6632.3	40.00	44.02	pg	10	15	
Endosulfan II	A	6534.6	7337.9	40.00	44.92	pg	12	15	
4,4'-DDT	A	6296.4	6262.3	40.00	39.78	pg	-1	15	
Methoxychlor	A	2495.9	2587.2	200.0	207.3	pg	4	15	
Endosulfan sulfate	A	6019.0	6476.6	40.00	43.04	pg	8	15	
Endrin ketone	A	7036.6	7795.8	40.00	44.32	pg	11	15	
TCMX	A	5906.5	6267.1	40.00	42.44	pg	6	15	
Decachlorobiphenyl	A	4694.6	5345.4	40.00	45.54	pg	14	15	
alpha-BHC	B	12258	12441	20.00	20.30	pg	1	15	
gamma-BHC	B	11263	11296	20.00	20.06	pg	0	15	
beta-BHC	B	4297.6	4208.2	20.00	19.58	pg	-2	15	
delta-BHC	B	11930	11523	20.00	19.32	pg	-3	15	
Heptachlor	B	10399	10191	20.00	19.60	pg	-2	15	
Aldrin	B	10589	10410	20.00	19.66	pg	-2	15	
Heptachlor epoxide	B	9387.0	9188.7	20.00	19.58	pg	-2	15	
gamma-Chlordane	B	9442.0	9297.5	20.00	19.69	pg	-2	15	
alpha-Chlordane	B	8976.3	8776.2	20.00	19.55	pg	-2	15	
4,4'-DDE	B	8491.0	8783.6	40.00	41.38	pg	3	15	
Endosulfan I	B	8578.5	8507.7	20.00	19.83	pg	-1	15	
Dieldrin	B	8883.3	9324.6	40.00	41.99	pg	5	15	
Endrin	B	7471.7	7600.6	40.00	40.69	pg	2	15	
4,4'-DDD	B	7120.2	7750.8	40.00	43.54	pg	9	15	
Endosulfan II	B	7343.8	7664.5	40.00	41.75	pg	4	15	
4,4'-DDT	B	7013.9	6480.1	40.00	36.96	pg	-8	15	
Methoxychlor	B	2602.3	2653.7	200.0	204.0	pg	2	15	
Endosulfan sulfate	B	6491.1	6670.6	40.00	41.11	pg	3	15	
Endrin ketone	B	7592.2	8305.2	40.00	43.76	pg	9	15	
TCMX	B	6510.0	6564.7	40.00	40.34	pg	1	15	
Decachlorobiphenyl	B	5122.3	5375.1	40.00	41.97	pg	5	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					3	15	

807238321003

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 PEST Water
EPA 8081A

Inst : GC23 Run Name : PEST_3 IDF : 1.0
Seqnum : 807238321015 File : 165_015 Time : 14-JUN-2007 22:24
Cal : 807215412001 Caldate : 29-MAY-2007
Standards: S6270

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	11151	11043	10.00	9.903	pg	-1	15	
gamma-BHC	A	10194	10068	10.00	9.876	pg	-1	15	
beta-BHC	A	4009.9	3874.6	10.00	9.663	pg	-3	15	
delta-BHC	A	10898	10108	10.00	9.274	pg	-7	15	
Heptachlor	A	9540.3	9320.0	10.00	9.769	pg	-2	15	
Aldrin	A	9466.9	9475.0	10.00	10.01	pg	0	15	
Heptachlor epoxide	A	8393.1	8423.1	10.00	10.04	pg	0	15	
gamma-Chlordane	A	8338.1	8365.2	10.00	10.03	pg	0	15	
alpha-Chlordane	A	7988.2	8042.0	10.00	10.07	pg	1	15	
4,4'-DDE	A	7422.6	7502.8	20.00	20.22	pg	1	15	
Endosulfan I	A	7734.3	7717.6	10.00	9.978	pg	0	15	
Dieldrin	A	7872.9	8192.9	20.00	20.81	pg	4	15	
Endrin	A	6792.2	6825.4	20.00	20.10	pg	0	15	
4,4'-DDD	A	6026.3	6539.9	20.00	21.70	pg	9	15	
Endosulfan II	A	6534.6	6610.9	20.00	20.23	pg	1	15	
4,4'-DDT	A	6296.4	5623.6	20.00	17.86	pg	-11	15	
Methoxychlor	A	2495.9	2420.1	100.0	96.97	pg	-3	15	
Endosulfan sulfate	A	6019.0	6174.2	20.00	20.52	pg	3	15	
Endrin ketone	A	7036.6	7453.2	20.00	21.18	pg	6	15	
TCMX	A	5906.5	5969.4	20.00	20.21	pg	1	15	
Decachlorobiphenyl	A	4694.6	5202.8	20.00	22.17	pg	11	15	
alpha-BHC	B	12258	11591	10.00	9.456	pg	-5	15	
gamma-BHC	B	11263	10480	10.00	9.305	pg	-7	15	
beta-BHC	B	4297.6	3990.6	10.00	9.286	pg	-7	15	
delta-BHC	B	11930	10518	10.00	8.817	pg	-12	15	
Heptachlor	B	10399	9551.0	10.00	9.185	pg	-8	15	
Aldrin	B	10589	9854.3	10.00	9.306	pg	-7	15	
Heptachlor epoxide	B	9387.0	8659.7	10.00	9.225	pg	-8	15	
gamma-Chlordane	B	9442.0	8620.6	10.00	9.130	pg	-9	15	
alpha-Chlordane	B	8976.3	8230.0	10.00	9.169	pg	-8	15	
4,4'-DDE	B	8491.0	7770.1	20.00	18.30	pg	-8	15	
Endosulfan I	B	8578.5	8006.6	10.00	9.333	pg	-7	15	
Dieldrin	B	8883.3	8450.3	20.00	19.03	pg	-5	15	
Endrin	B	7471.7	6759.7	20.00	18.09	pg	-10	15	
4,4'-DDD	B	7120.2	6938.3	20.00	19.49	pg	-3	15	
Endosulfan II	B	7343.8	6916.0	20.00	18.83	pg	-6	15	
4,4'-DDT	B	7013.9	5357.0	20.00	15.28	pg	**-24**	15	c- ***
Methoxychlor	B	2602.3	2183.9	100.0	83.92	pg	**-16**	15	c- ***
Endosulfan sulfate	B	6491.1	6039.5	20.00	18.61	pg	-7	15	
Endrin ketone	B	7592.2	7376.7	20.00	19.43	pg	-3	15	
TCMX	B	6510.0	6228.2	20.00	19.13	pg	-4	15	
Decachlorobiphenyl	B	5122.3	4765.8	20.00	18.61	pg	-7	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					8	15	

GP 06/15/07 : samples reported from Ch.A

-=low bias c=CCV

807238321015

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807215412

Instrument : GC23 Begun : 05/29/07 14:12
Method : EPA 8081A SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
007	149_007	X	PEM			05/29/07 14:12	1.0	1
008	149_008	X	PEST_3			05/29/07 14:33	1.0	2
015	149_015	X	PEM			05/29/07 17:51	1.0	1
016	149_016	X	PEST_4			05/29/07 18:12	1.0	3
023	149_023	PEM	PEM			05/29/07 21:43	1.0	1
024	149_024	IB	HEX			05/29/07 22:04	1.0	
025	149_025	ICAL	PEST_1			05/29/07 22:26	1.0	4
026	149_026	ICAL	PEST_2			05/29/07 22:47	1.0	5
027	149_027	ICAL	PEST_3			05/29/07 23:08	1.0	2
028	149_028	ICAL	PEST_4			05/29/07 23:30	1.0	3
029	149_029	ICAL	PEST_5			05/29/07 23:51	1.0	6
030	149_030	ICAL	PEST_6			05/30/07 00:13	1.0	7
031	149_031	ICAL	PEST_7			05/30/07 00:34	1.0	8
034	149_034	ICV	ICV			05/30/07 01:39	1.0	9
035	149_035	X	ICV			05/30/07 02:00	1.0	9
036	149_036	IB	HEX			05/30/07 02:21	1.0	
037	149_037	ICAL	CHLOR_40			05/30/07 02:43	1.0	10
038	149_038	ICAL	CHLOR_150			05/30/07 03:04	1.0	11
039	149_039	ICAL	CHLOR_500			05/30/07 03:26	1.0	12
040	149_040	ICAL	CHLOR_1000			05/30/07 03:47	1.0	13
041	149_041	ICAL	CHLOR_1500			05/30/07 04:09	1.0	14
042	149_042	ICAL	CHLOR_3000			05/30/07 04:30	1.0	15

Analyst: ADM Date: 05/30/07 Reviewer: RH Date: 05/30/07

Standards used: 1=S5747 2=S6270 3=S6271 4=S6268 5=S6269 6=S5859 7=S5860 8=S6332 9=S5817 10=S6324 11=S6325 12=S6326 13=S6327 14=S6328 15=S6329

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 807238321

Instrument : GC23
Method : EPA 8081A

Begun : 06/14/07 12:01
SOP Version : 8081_rv7

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
002	165_002	PEM	PEM			06/14/07 12:01	1.0	1
003	165_003	CCV	PEST_4			06/14/07 12:23	1.0	2
004	165_004	X,CCV	PEST_4			06/14/07 17:58	1.0	2
006	165_006	BLANK	QC392257	Water	126290	06/14/07 19:07	1.0	
007	165_007	BS	QC392258	Water	126290	06/14/07 19:28	1.0	
008	165_008	BSD	QC392259	Water	126290	06/14/07 19:50	1.0	
009	165_009	SAMPLE	195303-030	Water	126290	06/14/07 20:12	1.0	
010	165_010	SAMPLE	195362-001	Water	126290	06/14/07 20:34	1.0	
011	165_011	SAMPLE	195362-002	Water	126290	06/14/07 20:56	1.0	
012	165_012	SAMPLE	195362-003	Water	126290	06/14/07 21:18	1.0	
014	165_014	PEM	PEM			06/14/07 22:02	1.0	1
015	165_015	CCV	PEST_3			06/14/07 22:24	1.0	3

Standards used: 1=S6458 2=S6271 3=S6270

REPORTING SUMMARY FOR 195303 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195303-030	alpha-BHC	GC23	A	06/14/07 20:12
195303-030	beta-BHC	GC23	A	06/14/07 20:12
195303-030	gamma-BHC	GC23	A	06/14/07 20:12
195303-030	delta-BHC	GC23	A	06/14/07 20:12
195303-030	Heptachlor	GC23	A	06/14/07 20:12
195303-030	Aldrin	GC23	A	06/14/07 20:12
195303-030	Heptachlor epoxide	GC23	A	06/14/07 20:12
195303-030	Endosulfan I	GC23	A	06/14/07 20:12
195303-030	Dieldrin	GC23	A	06/14/07 20:12
195303-030	4,4'-DDE	GC23	A	06/14/07 20:12
195303-030	Endrin	GC23	A	06/14/07 20:12
195303-030	Endosulfan II	GC23	A	06/14/07 20:12
195303-030	Endosulfan sulfate	GC23	A	06/14/07 20:12
195303-030	4,4'-DDD	GC23	A	06/14/07 20:12
195303-030	4,4'-DDT	GC23	A	06/14/07 20:12
195303-030	alpha-Chlordane	GC23	A	06/14/07 20:12
195303-030	gamma-Chlordane	GC23	A	06/14/07 20:12
195303-030	Methoxychlor	GC23	A	06/14/07 20:12
195303-030	Endrin ketone	GC23	A	06/14/07 20:12
195303-030	Toxaphene	GC23	A	06/14/07 20:12
195303-030	TCMX	GC23	A	06/14/07 20:12
195303-030	Decachlorobiphenyl	GC23	A	06/14/07 20:12
QC392257	alpha-BHC	GC23	A	06/14/07 19:07
QC392257	beta-BHC	GC23	A	06/14/07 19:07
QC392257	gamma-BHC	GC23	A	06/14/07 19:07
QC392257	delta-BHC	GC23	A	06/14/07 19:07
QC392257	Heptachlor	GC23	A	06/14/07 19:07
QC392257	Aldrin	GC23	A	06/14/07 19:07
QC392257	Heptachlor epoxide	GC23	A	06/14/07 19:07
QC392257	Endosulfan I	GC23	A	06/14/07 19:07
QC392257	Dieldrin	GC23	A	06/14/07 19:07
QC392257	4,4'-DDE	GC23	A	06/14/07 19:07
QC392257	Endrin	GC23	A	06/14/07 19:07
QC392257	Endosulfan II	GC23	A	06/14/07 19:07
QC392257	Endosulfan sulfate	GC23	A	06/14/07 19:07
QC392257	4,4'-DDD	GC23	A	06/14/07 19:07
QC392257	4,4'-DDT	GC23	A	06/14/07 19:07
QC392257	alpha-Chlordane	GC23	A	06/14/07 19:07
QC392257	gamma-Chlordane	GC23	A	06/14/07 19:07
QC392257	Methoxychlor	GC23	A	06/14/07 19:07
QC392257	Endrin ketone	GC23	A	06/14/07 19:07
QC392257	Toxaphene	GC23	A	06/14/07 19:07
QC392257	TCMX	GC23	A	06/14/07 19:07
QC392257	Decachlorobiphenyl	GC23	A	06/14/07 19:07
QC392258	gamma-BHC	GC23	A	06/14/07 19:28
QC392258	Heptachlor	GC23	A	06/14/07 19:28
QC392258	Aldrin	GC23	A	06/14/07 19:28
QC392258	Dieldrin	GC23	A	06/14/07 19:28
QC392258	Endrin	GC23	A	06/14/07 19:28
QC392258	4,4'-DDT	GC23	A	06/14/07 19:28
QC392258	TCMX	GC23	A	06/14/07 19:28
QC392258	Decachlorobiphenyl	GC23	A	06/14/07 19:28

REPORTING SUMMARY FOR 195303 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC392259	gamma-BHC	GC23	A	06/14/07 19:50
QC392259	Heptachlor	GC23	A	06/14/07 19:50
QC392259	Aldrin	GC23	A	06/14/07 19:50
QC392259	Dieldrin	GC23	A	06/14/07 19:50
QC392259	Endrin	GC23	A	06/14/07 19:50
QC392259	4,4'-DDT	GC23	A	06/14/07 19:50
QC392259	TCMX	GC23	A	06/14/07 19:50
QC392259	Decachlorobiphenyl	GC23	A	06/14/07 19:50

SAMPLE PREPARATION SUMMARY

Batch # : 126290
Started By : RFW
Method : 3520C
Spike #1 ID : S6481

Prep Date : 13-JUN-2007
SOP Version : 8081_3520_rv16
Spike #2 ID : S6430

Analysis : 8081
Finished By : KR
Units : mL

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
195303-030		Water	1060	10	1	0.009434	5	.025				8081	
195362-001		Water	500	5	1	0.01	6	.0125				8081	
195362-002		Water	500	5	1	0.01	6	.0125				8081	
195362-003		Water	500	5	1	0.01	6	.0125				8081	
QC392257	BLANK	Water	1000	10	1	0.01		.025				8081	
QC392258	BS	Water	1000	10	1	0.01		.025	.025			8081	
QC392259	BSD	Water	1000	10	1	0.01		.025	.025			8081	

Analyst: GP Date: 06/15/07 Reviewer: RH Date: 06/18/07

8081 Water Prep Log

Curtis & Tompkins, Ltd.

BK 2498 Page: 12

LIMS Batch No: 126290
Date Extracted: 6/13/07

Extraction Method:
- ☐ EPA 3510c sep. funnel
- ☒ EPA 3520c cont. L/L
- ☐ _____

Cleanup Method (if needed):
- ☐ EPA 3640a GPC
- ☐ EPA 3620b Florisil
- ☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
195303-030I	1060	5	10.0		
195362-001E	500	6	5.0		limited sample ☆
2E	↓	↓	↓	↓	↓
3F	↓	↓	↓	↓	↓
MB QC392257	1000	NA	10.0		
BS 8	↓	↓	↓		
BSD 9	↓	↓	↓		

KR 6/14/07

☆0.0125 / 0.025 mL of surrogate solution was added to all samples
0.025 mL of matrix spiking solution was added to all spikes

☒ EPA 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2

☐ EPA 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2

Extracts filtered through baked, CH_2Cl_2 rinsed powdered Na_2SO_4

Exchanged 2x with Hexane

Concentrated: ☒ to volumes as noted above ☐ to clean-up volume

Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil

Extracts relinquished to the Pesticide Group

	Mfg & Lot# / LIMS # / Time	Date/ Initials
	564813	RPW 6/13/07
	564305	↓
	EM47110	↓
Extraction Start Time:	1910	↓
Extraction End Time:	1330	6/14/07 JDC
	NA	6/14/07 KR
	EM46283706	↓
	JB EH1E86	↓
	✓	↓
	NA	↓
	head ✓	↓

6/13/07

Extraction Chemist **Date**

Contined from Page 1
Continued on Page 1

6/14/07

Reviewed by **Date**

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water 3520C
As of 06/28/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B	GC25 A	GC25 B
gamma-BHC	ug/L	0.0036	0.0045	0.0053	0.0039	0.0057	0.0061	0.0039	0.0060
Heptachlor	ug/L	0.0070	0.0037	0.0058	0.0089	0.0055	0.0063	0.0042	0.0068
Aldrin	ug/L	0.0046	0.0044	0.0037	0.0032	0.0055	0.0044	0.0035	0.0054
Dieldrin	ug/L	0.0060	0.010	0.0069	0.0077	0.011	0.0090	0.0068	0.017
Endrin	ug/L	0.0075	0.021	0.011	0.0095	0.011	0.014	0.013	0.022
4,4'-DDT	ug/L	0.0055	0.020	0.014	0.012	0.012	0.015	0.011	0.019
alpha-BHC	ug/L	0.0028	0.0058	0.0036	0.0031	0.0059	0.0099	0.0038	0.0060
beta-BHC	ug/L	0.0035	0.017	0.0092	0.0063	0.0082	0.012	0.0034	0.0087
delta-BHC	ug/L	0.0031	0.0074	0.0065	0.0045	0.0043	0.0081	0.0040	0.0074
Heptachlor epoxide	ug/L	0.0032	0.0050	0.0033	0.0040	0.0044	0.0055	0.0029	0.0081
gamma-Chlordane	ug/L	0.0031	0.0049	0.0038	0.0032	0.0079	0.0057	0.0027	0.012
alpha-Chlordane	ug/L	0.0034	0.0053	0.0041	0.0037	0.0063	0.0051	0.0029	0.0070
Endosulfan I	ug/L	0.0025	0.0052	0.0035	0.0037	0.0055	0.0057	0.0027	0.0085
4,4'-DDE	ug/L	0.0086	0.011	0.0082	0.0085	0.014	0.012	0.0068	0.017
Endosulfan II	ug/L	0.0064	0.013	0.013	0.0090	0.026	0.013	0.0097	0.013
Endosulfan sulfate	ug/L	0.0063	0.015	0.011	0.011	0.011	0.013	0.0094	0.015
4,4'-DDD	ug/L	0.0061	0.012	0.0099	0.010	0.013	0.013	0.0066	0.019
Endrin aldehyde	ug/L	0.0056	0.017	0.011	0.0079	0.014	0.015	0.0055	0.020
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20	0.10	0.16
Methoxychlor	ug/L	0.031	0.10	0.086	0.12	0.052	0.081	0.075	0.073
Endrin ketone	ug/L	0.012	0.017	0.013	0.012	0.010	0.0080	0.0066	0.017
Toxaphene	ug/L	0.39	0.25	0.19	0.19	0.29	0.32	0.13	0.21

00344

PAH Water Data
EPA 8310

Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW060807B	Batch#:	126173
Lab ID:	195303-030	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.005
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	80	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

89.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC391739	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.005
Pyrene	ND	0.20	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.20	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.20	
Benzo(g,h,i)perylene	ND	0.20	
Indeno(1,2,3-cd)pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	79	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

90.0

: 88347

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC391740	Batch#:	126173
Matrix:	Water	Prepared:	06/11/07
Units:	ug/L	Analyzed:	06/13/07

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.860	89	50-135
Fluorene	2.000	1.904	95	65-135
Pyrene	1.000	0.9258	93	65-135
Benzo(a)pyrene	1.000	0.8990	90	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	89	65-135

91.0

Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	126173
MSS Lab ID:	195270-013	Sampled:	06/06/07
Matrix:	Water	Received:	06/07/07
Units:	ug/L	Prepared:	06/11/07
Diln Fac:	1.000	Analyzed:	06/13/07

Type: MS Lab ID: QC391741

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09004	9.615	7.964	83	50-135
Fluorene	<0.009366	1.923	1.729	90	65-135
Pyrene	<0.003779	0.9615	0.7599	79	65-135
Benzo(a)pyrene	<0.01488	0.9615	0.3574	37 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	83	65-135

Type: MSD Lab ID: QC391742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.615	7.763	81	50-135	3	35
Fluorene	1.923	1.709	89	65-135	1	35
Pyrene	0.9615	0.7860	82	65-135	3	35
Benzo(a)pyrene	0.9615	0.4085	42 *	65-135	13	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	84	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

92.0

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 HPLC Water: EPA 8310

Inst : HPLC04
Calnum : 297149198001
Units : ug/L

Date : 13-APR-2007 17:16
X Axis : R

Reviewer : CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	10300006	297149198006		13-APR-2007 17:16	S5288
L2	10300007	297149198007		13-APR-2007 17:47	S5287
L3	10300008	297149198008		13-APR-2007 18:19	S5286
L4	10300009	297149198009		13-APR-2007 18:51	S5285
L5	10300010	297149198010		13-APR-2007 19:22	S5284
L6	10300011	297149198011		13-APR-2007 19:54	S5283
L7	10300012	297149198012		13-APR-2007 20:25	S5282

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Naphthalene	1	0.0128	0.0132	0.0134	0.0134	0.0132	0.0132	0.0132	LINR	-10.001	75.7193		0.0132	1.000	0.99	20	
Acenaphthylene	1	0.0094	0.0096	0.0099	0.0099	0.0098	0.0098	0.0097	LINR	-59.664	102.661		0.0097	1.000	0.99	20	
Acenaphthene	1	0.0069	0.0052	0.0053	0.0053	0.0052	0.0052	0.0051	LINR	-79.957	194.506		0.0055	1.000	0.99	20	
Fluorene	1	0.0705	0.0643	0.0643	0.0645	0.0638	0.0636	0.0639	LINR	-0.7617	15.6594		0.0650	1.000	0.99	20	
Phenanthrene	1	0.1834	0.1774	0.1805	0.1806	0.1791	0.1787	0.1794	LINR	-0.0602	5.57891		0.1799	1.000	0.99	20	
Anthracene	1	0.4270	0.4295	0.4332	0.4337	0.4303	0.4275	0.4283	LINR	-2.0092	2.33653		0.4299	1.000	0.99	20	
Fluoranthene	1	0.0384	0.0403	0.0416	0.0414	0.0426	0.0424	0.0427	LINR	11.5991	23.4132		0.0414	1.000	0.99	20	
Benzo(a)anthracene	1	0.0994	0.0926	0.0938	0.0949	0.0943	0.0946	0.0957	LINR	5.77766	10.4563		0.0950	1.000	0.99	20	
Chrysene	1	0.1106	0.1334	0.1359	0.1363	0.1343	0.1345	0.1353	LINR	1.94264	7.39843		0.1314	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.0921	0.1004	0.1054	0.1072	0.1079	0.1075	0.1081	LINR	8.26982	9.24895		0.1041	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0572	0.0735	0.0812	0.0822	0.0834	0.0831	0.0840	LINR	8.45959	11.8997		0.0778	1.000	0.99	20	
Benzo(a)pyrene	1	0.0643	0.0779	0.0904	0.0913	0.0906	0.0910	0.0920	LINR	8.12070	10.8643		0.0854	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0176	0.0165	0.0203	0.0207	0.0215	0.0218		LINR	27.2544	45.5744		0.0198	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0274	0.0281	0.0339	0.0342	0.0348	0.0356		LINR	22.9034	28.0539		0.0323	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0987	0.0879	0.0928	0.0934	0.0933	0.0956		LINR	6.49838	10.4688		0.0936	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0087	0.0088	0.0088	0.0087	0.0086	0.0085	0.0085	LINR	-238.60	118.032		0.0086	1.000	0.99	20	
Acenaphthylene	2	0.0891	0.0894	0.0904	0.0892	0.0872	0.0854		LINR	-190.47	11.7213		0.0885	1.000	0.99	20	
Pyrene	2	0.1213	0.1229	0.1312	0.1305	0.1302	0.1292	0.1319	LINR	6.99417	7.59564		0.1282	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0218	0.0221	0.0220	0.0215	0.0207	0.0199		LINR	-722.70	50.4398		0.0213	0.999	0.99	20	
Naphthalene	3	0.0107	0.0106	0.0106	0.0104	0.0103	0.0102	0.0103	LINR	-15.063	97.2408		0.0104	1.000	0.99	20	
Acenaphthene	3	0.0231	0.0228	0.0230	0.0228	0.0225	0.0225	0.0224	LINR	-40.470	44.5908		0.0228	1.000	0.99	20	
Fluorene	3	0.1231	0.1210	0.1214	0.1202	0.1187	0.1184	0.1179	LINR	-9.5649	8.48288		0.1201	1.000	0.99	20	
Phenanthrene	3	0.1327	0.1299	0.1302	0.1298	0.1278	0.1286	0.1286	LINR	-0.7120	7.78012		0.1297	1.000	0.99	20	
Anthracene	3	0.4513	0.4443	0.4475	0.4488	0.4472	0.4445	0.4451	LINR	-1.5122	2.24797		0.4469	1.000	0.99	20	
Fluoranthene	3	0.0390	0.0393	0.0398	0.0399	0.0391	0.0394	0.0397	LINR	5.11764	25.2422		0.0394	1.000	0.99	20	
Pyrene	3	0.1131	0.1163	0.1162	0.1164	0.1147	0.1166	0.1174	LINR	5.95171	8.51800		0.1158	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Benzo(a)anthracene	3	0.1373	0.1411	0.1447	0.1447	0.1444	0.1447	0.1453	LINR	2.60785	6.88237		0.1432	1.000	0.99	20	
Chrysene	3	0.1623	0.1633	0.1673	0.1667	0.1644	0.1638	0.1652	LINR	0.68406	6.06206		0.1647	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0606	0.0613	0.0630	0.0635	0.0630	0.0629	0.0633	LINR	4.57699	15.8004		0.0625	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.3579	0.3696	0.3798	0.3815	0.3780	0.3771	0.3775	LINR	-0.7017	2.64966		0.3745	1.000	0.99	20	
Benzo(a)pyrene	3	0.1958	0.2035	0.2110	0.2146	0.2122	0.2114	0.2134	LINR	3.00004	4.69025		0.2088	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0256	0.0253	0.0276	0.0282	0.0286	0.0295		LINR	24.2523	33.8597		0.0275	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0453	0.0481	0.0529	0.0544	0.0544	0.0553		LINR	15.3097	18.0511		0.0518	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0712	0.0807	0.0904	0.0937	0.0935	0.0941		LINR	6.17134	10.5948		0.0873	1.000	0.99	20	
1-Methylnaphthalene (F)	3	0.0120	0.0117	0.0118	0.0116	0.0115	0.0115	0.0114	LINR	-170.78	87.4696		0.0116	1.000	0.99	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D
Naphthalene	1	166.7	-9	500.0	-2	2000	1	4000	1	10000	0	20000	0	40000	0
Acenaphthylene	1	333.3	-21	1000	-7	4000	0	8000	1	20000	0	40000	0	80000	0
Acenaphthene	1	166.7	-14	500.0	-16	2000	-2	4000	2	10000	1	20000	0	40000	0
Fluorene	1	33.33	8	100.0	0	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	1	16.67	2	50.00	-1	200.0	1	400.0	1	1000	0	2000	0	4000	0
Anthracene	1	16.67	-12	50.00	-4	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	1	33.33	25	100.0	6	400.0	0	800.0	-2	2000	0	4000	-1	8000	0
Benzo(a)anthracene	1	16.67	39	50.00	8	200.0	1	400.0	1	1000	-1	2000	-1	4000	0
Chrysene	1	16.67	-7	50.00	3	200.0	2	400.0	1	1000	0	2000	0	4000	0
Benzo(b)fluoranthene	1	33.33	10	100.0	1	400.0	0	800.0	0	2000	0	4000	0	8000	0
Benzo(k)fluoranthene	1	16.67	19	50.00	4	200.0	1	400.0	0	1000	0	2000	-1	4000	0
Benzo(a)pyrene	1	16.67	19	50.00	1	200.0	2	400.0	1	1000	-1	2000	-1	4000	0
Dibenz(a,h)anthracene	1	33.33	62	100.0	3	400.0	0	800.0	-2	2000	-1	4000	0		
Benzo(g,h,i)perylene	1	33.33	46	100.0	2	400.0	1	800.0	-1	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	1	16.67	42	50.00	5	200.0	0	400.0	-1	1000	-2	2000	0		
1-Methylnaphthalene (UV)	1	666.7	-33	2000	-8	8000	0	16000	1	40000	1	80000	0	2E+5	0
Acenaphthylene	2	333.3	-53	1000	-14	4000	1	8000	2	20000	1	40000	0		
Pyrene	2	16.67	34	50.00	7	200.0	3	400.0	1	1000	0	2000	-2	4000	0
1-Methylnaphthalene (UV)	2	666.7	-98	2000	-25	8000	2	16000	4	40000	2	80000	-1		
Naphthalene	3	166.7	-5	500.0	0	2000	2	4000	0	10000	0	20000	-1	40000	0
Acenaphthene	3	166.7	-21	500.0	-6	2000	0	4000	1	10000	0	20000	0	40000	0
Fluorene	3	33.33	-24	100.0	-7	400.0	1	800.0	1	2000	0	4000	0	8000	0
Phenanthrene	3	16.67	-1	50.00	0	200.0	1	400.0	1	1000	-1	2000	0	4000	0
Anthracene	3	16.67	-8	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Fluoranthene	3	33.33	14	100.0	4	400.0	2	800.0	1	2000	-1	4000	0	8000	0
Pyrene	3	16.67	32	50.00	11	200.0	2	400.0	1	1000	-2	2000	0	4000	0
Benzo(a)anthracene	3	16.67	10	50.00	2	200.0	1	400.0	0	1000	0	2000	0	4000	0
Chrysene	3	16.67	2	50.00	0	200.0	2	400.0	1	1000	0	2000	-1	4000	0
Benzo(b)fluoranthene	3	33.33	10	100.0	1	400.0	1	800.0	1	2000	0	4000	-1	8000	0
Benzo(k)fluoranthene	3	16.67	-9	50.00	-3	200.0	0	400.0	1	1000	0	2000	0	4000	0
Benzo(a)pyrene	3	16.67	10	50.00	1	200.0	0	400.0	1	1000	0	2000	-1	4000	0
Dibenz(a,h)anthracene	3	33.33	59	100.0	10	400.0	-1	800.0	-1	2000	-2	4000	1		
Benzo(g,h,i)perylene	3	33.33	28	100.0	2	400.0	-1	800.0	0	2000	-1	4000	0		
Indeno(1,2,3-cd)pyrene	3	16.67	12	50.00	-2	200.0	-1	400.0	1	1000	0	2000	0		
1-Methylnaphthalene (F)	3	666.7	-21	2000	-6	8000	1	16000	1	40000	0	80000	0	2E+5	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

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Calibration Table

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UPDATED RETENTION TIMES FROM CCU FILE 13400002. JM 15MAY2007

HPLC04 METHOD 8310

Calib. Data Modified : 5/15/2007 9:29:41 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.200 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
4.775	1	1	166.67000	2.12613	78.39140			Naphthalene
		2	500.00000	6.61840	75.54697			
		3	2000.00000	26.88920	74.37930			
		4	4000.00000	53.47171	74.80591			
		5	1.00000e4	131.95592	75.78288			
		6	2.00000e4	263.69684	75.84467			
		7	4.00000e4	528.67773	75.66046			
4.814	3	1	166.67000	1.79073	93.07379			Naphthalene
		2	500.00000	5.29465	94.43499			
		3	2000.00000	21.15345	94.54721			
		4	4000.00000	41.49194	96.40426			
		5	1.00000e4	103.01423	97.07397			
		6	2.00000e4	204.77448	97.66842			
		7	4.00000e4	411.98587	97.09071			
6.029	1	1	333.33000	3.13157	106.44193			Acenaphthylene
		2	1000.00000	9.62986	103.84365			
		3	4000.00000	39.68081	100.80440			
		4	8000.00000	79.44919	100.69329			
		5	2.00000e4	195.85706	102.11529			
		6	4.00000e4	390.32718	102.47813			
		7	8.00000e4	779.58801	102.61830			
6.030	2	1	333.33000	29.69775	11.22408			Acenaphthylene
		2	1000.00000	89.43451	11.18137			
		3	4000.00000	361.48309	11.06552			

Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Lvl Sig		Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		4	8000.00000	713.72961	11.20873			
		5	2.00000e4	1744.82886	11.46244			
		6	4.00000e4	3414.72949	11.71396			
6.802	1	1	666.67000	5.78173	115.30625			1-Methylnaphthalene (UV)
		2	2000.00000	17.60884	113.57930			
		3	8000.00000	70.00924	114.27063			
		4	1.60000e4	139.49213	114.70181			
		5	4.00000e4	343.04321	116.60339			
		6	8.00000e4	679.21155	117.78363			
		7	1.60000e5	1357.17957	117.89155			
6.803	2	1	666.67000	14.56439	45.77399			1-Methylnaphthalene (UV)
		2	2000.00000	44.10336	45.34802			
		3	8000.00000	176.21402	45.39934			
		4	1.60000e4	343.70859	46.55106			
		5	4.00000e4	826.97571	48.36901			
		6	8.00000e4	1588.15674	50.37286			
6.842	3	1	666.67000	7.99987	83.33510			1-Methylnaphthalene (F)
		2	2000.00000	23.39339	85.49424			
		3	8000.00000	94.23004	84.89861			
		4	1.60000e4	186.37436	85.84872			
		5	4.00000e4	460.03391	86.95011			
		6	8.00000e4	917.08130	87.23327			
		7	1.60000e5	1830.53613	87.40609			
7.251	1	1	166.67000	1.98399	84.00737			2-Methylnaphthalene
		2	500.00000	5.83025	85.75956			
		3	2000.00000	22.91004	87.29797			
		4	4000.00000	46.08871	86.78914			
		5	1.00000e4	114.12836	87.62064			
		6	2.00000e4	225.58672	88.65770			
		7	4.00000e4	451.41702	88.60986			
7.292	3	1	166.67000	2.33092	71.50383			2-Methylnaphthalene
		2	500.00000	6.89568	72.50921			
		3	2000.00000	27.58432	72.50496			
		4	4000.00000	54.78667	73.01045			
		5	1.00000e4	135.95044	73.55622			
		6	2.00000e4	269.15958	74.30536			
		7	4.00000e4	542.89160	73.67953			
7.640	1	1	166.67000	1.14632	145.39623			Acenaphthene
		2	500.00000	2.57756	193.98155			
		3	2000.00000	10.51053	190.28528			
		4	4000.00000	21.31399	187.67017			
		5	1.00000e4	52.31623	191.14528			
		6	2.00000e4	103.27618	193.65550			
		7	4.00000e4	205.89775	194.27118			
7.680	3	1	166.67000	3.85663	43.21653			Acenaphthene
		2	500.00000	11.41417	43.80520			
		3	2000.00000	45.97927	43.49787			
		4	4000.00000	91.38386	43.77141			
		5	1.00000e4	225.47073	44.35165			
		6	2.00000e4	450.13852	44.43077			
		7	4.00000e4	897.44818	44.57082			
8.162	1	1	33.33300	2.34922	14.18896			Fluorene
		2	100.00000	6.42542	15.56318			
		3	400.00000	25.73475	15.54319			
		4	800.00000	51.57725	15.51072			
		5	2000.00000	127.57288	15.67731			
		6	4000.00000	254.38828	15.72400			
		7	8000.00000	511.46848	15.64124			
8.202	3	1	33.33300	4.10462	8.12084			Fluorene
		2	100.00000	12.10357	8.26203			
		3	400.00000	48.56486	8.23641			
		4	800.00000	96.16352	8.31916			
		5	2000.00000	237.35271	8.42628			

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	4000.00000	473.63272	8.44536			
		7	8000.00000	943.53278	8.47877			
9.288	1	1	16.66700	3.05610	5.45368			Phenanthrene
		2	50.00000	8.87007	5.63693			
		3	200.00000	36.09091	5.54156			
		4	400.00000	72.25112	5.53625			
		5	1000.00000	179.13455	5.58240			
		6	2000.00000	357.36267	5.59656			
		7	4000.00000	717.53351	5.57465			
9.326	3	1	16.66700	2.21108	7.53796			Phenanthrene
		2	50.00000	6.49372	7.69975			
		3	200.00000	26.03061	7.68326			
		4	400.00000	51.93502	7.70193			
		5	1000.00000	127.82927	7.82293			
		6	2000.00000	257.22650	7.77525			
		7	4000.00000	514.33234	7.77707			
10.303	1	1	16.66700	7.11729	2.34176			Anthracene
		2	50.00000	21.47680	2.32809			
		3	200.00000	86.63564	2.30852			
		4	400.00000	173.47972	2.30575			
		5	1000.00000	430.32001	2.32385			
		6	2000.00000	855.00366	2.33917			
		7	4000.00000	1713.20947	2.33480			
10.342	3	1	16.66700	7.52114	2.21602			Anthracene
		2	50.00000	22.21256	2.25098			
		3	200.00000	89.50451	2.23452			
		4	400.00000	179.52844	2.22806			
		5	1000.00000	447.20154	2.23613			
		6	2000.00000	888.95929	2.24982			
		7	4000.00000	1780.25928	2.24686			
11.462	1	1	33.33300	1.28108	26.01947			Fluoranthene
		2	100.00000	4.03425	24.78779			
		3	400.00000	16.62899	24.05437			
		4	800.00000	33.12579	24.15037			
		5	2000.00000	85.29985	23.44670			
		6	4000.00000	169.48399	23.60105			
		7	8000.00000	341.57843	23.42068			
11.501	3	1	33.33300	1.30039	25.63313			Fluoranthene
		2	100.00000	3.92913	25.45090			
		3	400.00000	15.91306	25.13658			
		4	800.00000	31.92663	25.05745			
		5	2000.00000	78.16699	25.58625			
		6	4000.00000	157.55948	25.38724			
		7	8000.00000	317.23450	25.21794			
12.216	2	1	16.66700	2.02209	8.24246			Pyrene
		2	50.00000	6.14506	8.13662			
		3	200.00000	26.24098	7.62167			
		4	400.00000	52.21975	7.65994			
		5	1000.00000	130.19414	7.68084			
		6	2000.00000	258.31161	7.74259			
		7	4000.00000	527.77155	7.57904			
12.256	3	1	16.66700	1.88428	8.84530			Pyrene
		2	50.00000	5.81487	8.59864			
		3	200.00000	23.24056	8.60564			
		4	400.00000	46.54547	8.59375			
		5	1000.00000	114.70278	8.71818			
		6	2000.00000	233.18887	8.57674			
		7	4000.00000	469.78665	8.51450			
14.978	1	1	16.66700	1.65656	10.06123			Benzo(a)anthracene
		2	50.00000	4.62886	10.80180			
		3	200.00000	18.76417	10.65861			
		4	400.00000	37.95211	10.53960			
		5	1000.00000	94.25475	10.60954			

Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	189.13774	10.57430			
		7	4000.00000	382.94766	10.44529			
15.018	3	1	16.66700	2.28920	7.28071			Benzo(a)anthracene
		2	50.00000	7.05404	7.08814			
		3	200.00000	28.93622	6.91175			
		4	400.00000	57.87023	6.91202			
		5	1000.00000	144.42162	6.92417			
		6	2000.00000	289.42532	6.91025			
		7	4000.00000	581.30914	6.88102			
15.450	1	1	16.66700	1.84303	9.04325			Chrysene
		2	50.00000	6.66891	7.49748			
		3	200.00000	27.17831	7.35881			
		4	400.00000	54.50307	7.33904			
		5	1000.00000	134.26915	7.44773			
		6	2000.00000	268.92798	7.43694			
		7	4000.00000	541.02679	7.39335			
15.497	3	1	16.66700	2.70424	6.16329			Chrysene
		2	50.00000	8.16577	6.12312			
		3	200.00000	33.46666	5.97610			
		4	400.00000	66.69530	5.99742			
		5	1000.00000	164.41519	6.08216			
		6	2000.00000	327.66275	6.10384			
		7	4000.00000	660.79785	6.05329			
17.660	1	1	33.33300	3.06990	10.85801			Benzo(b)fluoranthene
		2	100.00000	10.04300	9.95718			
		3	400.00000	42.15858	9.48799			
		4	800.00000	85.72279	9.33241			
		5	2000.00000	215.81119	9.26736			
		6	4000.00000	430.08072	9.30058			
		7	8000.00000	864.70093	9.25175			
17.699	3	1	33.33300	2.02153	16.48898			Benzo(b)fluoranthene
		2	100.00000	6.12518	16.32605			
		3	400.00000	25.21695	15.86235			
		4	800.00000	50.77764	15.75497			
		5	2000.00000	126.05885	15.86561			
		6	4000.00000	251.49760	15.90472			
		7	8000.00000	506.71603	15.78794			
18.594	1	1	16.66700	9.52995e-1	17.48908			Benzo(k)fluoranthene
		2	50.00000	3.67382	13.60981			
		3	200.00000	16.23658	12.31786			
		4	400.00000	32.87246	12.16824			
		5	1000.00000	83.36793	11.99502			
		6	2000.00000	166.19958	12.03372			
		7	4000.00000	335.99481	11.90495			
18.634	3	1	16.66700	5.96582	2.79375			Benzo(k)fluoranthene
		2	50.00000	18.47991	2.70564			
		3	200.00000	75.95864	2.63301			
		4	400.00000	152.59778	2.62127			
		5	1000.00000	377.99402	2.64554			
		6	2000.00000	754.19122	2.65185			
		7	4000.00000	1510.11670	2.64880			
19.526	1	1	16.66700	1.07194	15.54845			Benzo(a)pyrene
		2	50.00000	3.89495	12.83713			
		3	200.00000	18.07028	11.06790			
		4	400.00000	36.52415	10.95166			
		5	1000.00000	90.64273	11.03232			
		6	2000.00000	182.08386	10.98395			
		7	4000.00000	368.15787	10.86490			
19.567	3	1	16.66700	3.26395	5.10639			Benzo(a)pyrene
		2	50.00000	10.17375	4.91461			
		3	200.00000	42.19252	4.74018			
		4	400.00000	85.85696	4.65891			
		5	1000.00000	212.20137	4.71250			

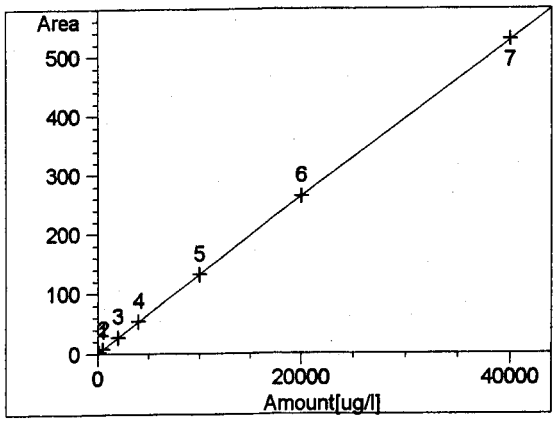
Method G:\HPLC4\METHODS\8310-134.M

RetTime [min]	Sig	Lvl	Amount [ug/l]	Area	Amt/Area	Ref	Grp	Name
		6	2000.00000	422.78271	4.73056			
		7	4000.00000	853.64819	4.68577			
21.125	1	1	33.33300	5.87149e-1	56.77090			Dibenz(a,h)anthracene
		2	100.00000	1.65332	60.48420			
		3	400.00000	8.13782	49.15319			
		4	800.00000	16.52660	48.40682			
		5	2000.00000	43.03531	46.47347			
		6	4000.00000	87.38079	45.77665			
21.166	3	1	33.33300	8.53681e-1	39.04622			Dibenz(a,h)anthracene
		2	100.00000	2.53004	39.52501			
		3	400.00000	11.03330	36.25388			
		4	800.00000	22.57477	35.43779			
		5	2000.00000	57.27084	34.92179			
		6	4000.00000	118.01955	33.89269			
21.906	1	1	33.33300	9.14665e-1	36.44285			Benzo(g,h,i)perylene
		2	100.00000	2.81032	35.58320			
		3	400.00000	13.56283	29.49238			
		4	800.00000	27.32761	29.27443			
		5	2000.00000	69.65511	28.71290			
		6	4000.00000	142.23232	28.12300			
21.945	3	1	33.33300	1.51022	22.07160			Benzo(g,h,i)perylene
		2	100.00000	4.81285	20.77773			
		3	400.00000	21.17274	18.89222			
		4	800.00000	43.53913	18.37427			
		5	2000.00000	108.83624	18.37623			
		6	4000.00000	221.29349	18.07554			
22.404	1	1	16.66700	1.64575	10.12731			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.39383	11.37960			
		3	200.00000	18.55475	10.77891			
		4	400.00000	37.35328	10.70856			
		5	1000.00000	93.34637	10.71279			
		6	2000.00000	191.22902	10.45866			
22.442	3	1	16.66700	1.18608	14.05220			Indeno(1,2,3-cd)pyrene
		2	50.00000	4.03285	12.39819			
		3	200.00000	18.07297	11.06625			
		4	400.00000	37.48116	10.67203			
		5	1000.00000	93.52203	10.69267			
		6	2000.00000	188.29039	10.62189			

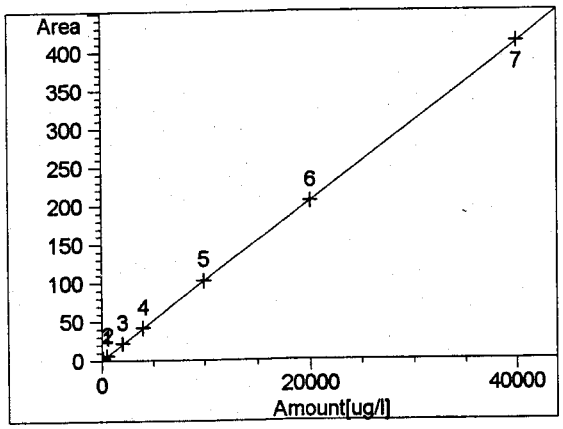
Peak Sum Table

No Entries in table

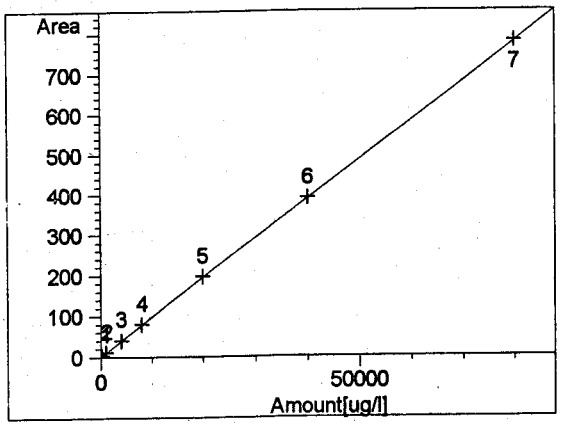
Calibration Curves



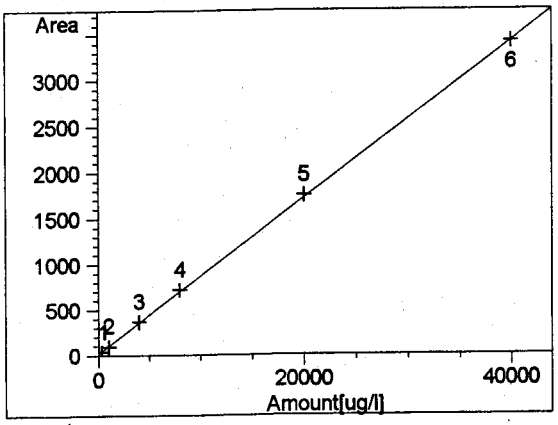
Naphthalene at exp. RT: 4.775
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.42379
Formula: y = mx + b
m: 1.32067e-2
b: 1.32078e-1
x: Amount[ug/l]
y: Area



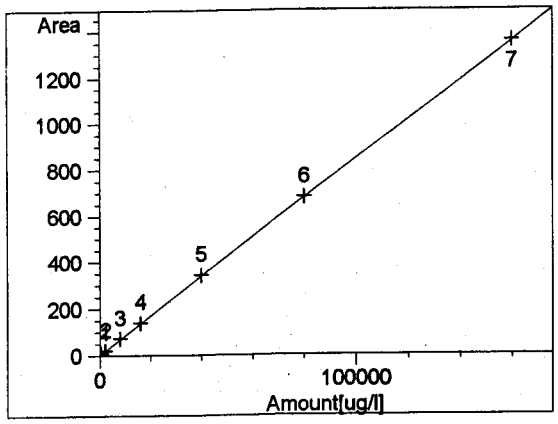
Naphthalene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.56187
Formula: y = mx + b
m: 1.02838e-2
b: 1.54902e-1
x: Amount[ug/l]
y: Area



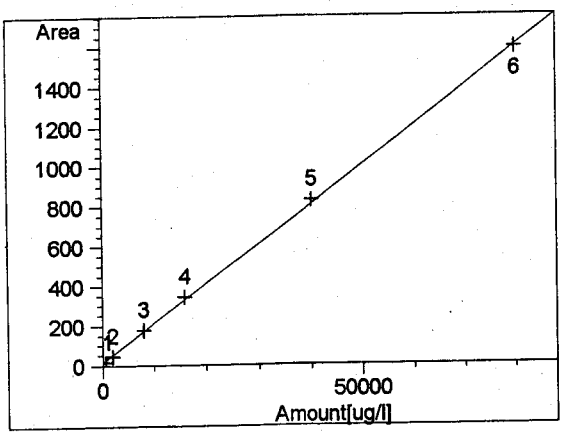
Acenaphthylene at exp. RT: 6.029
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.65727
Formula: y = mx + b
m: 9.74084e-3
b: 5.81179e-1
x: Amount[ug/l]
y: Area



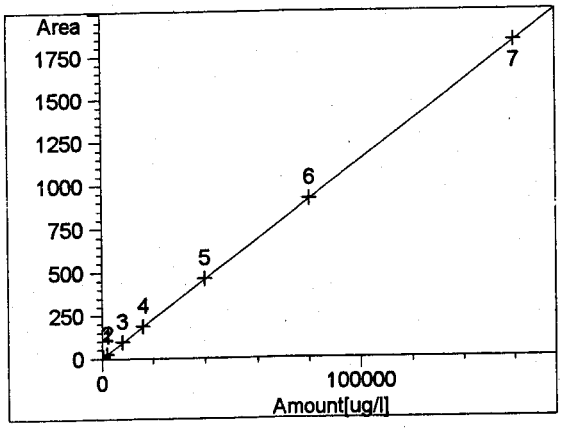
Acenaphthylene at exp. RT: 6.030
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 18.07740
Formula: y = mx + b
m: 8.53146e-2
b: 16.24956
x: Amount[ug/l]
y: Area



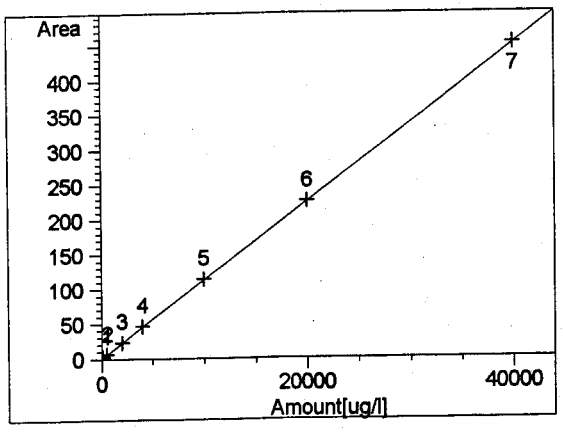
1-Methylnaphthalene (UV) at exp. RT: 6.802
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.68343
Formula: y = mx + b
m: 8.47231e-3
b: 2.02152
x: Amount[ug/l]
y: Area



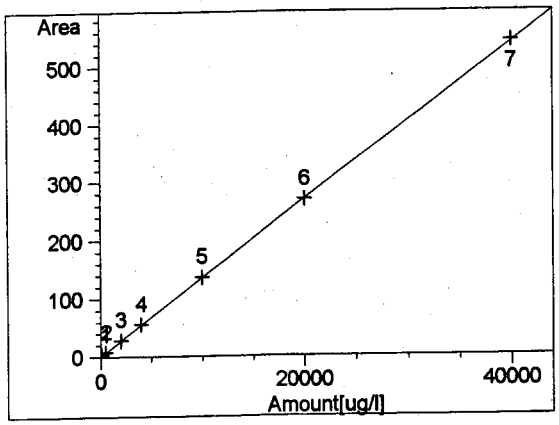
1-Methylnaphthalene (UV) at exp. RT: 6.803
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99974
Residual Std. Dev.: 15.48654
Formula: y = mx + b
m: 1.98256e-2
b: 14.32808
x: Amount[ug/l]
y: Area



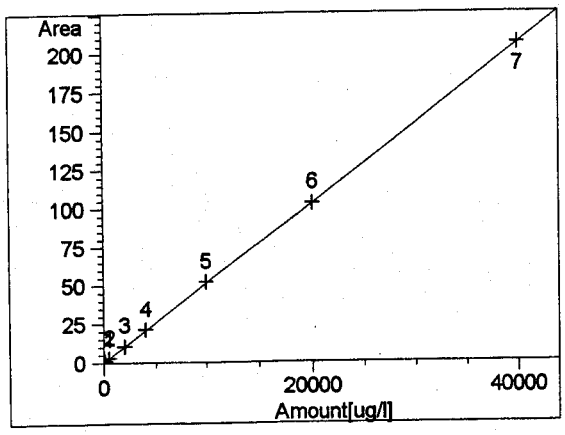
1-Methylnaphthalene (F) at exp. RT: 6.842
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.31914
Formula: y = mx + b
m: 1.14325e-2
b: 1.95255
x: Amount[ug/l]
y: Area



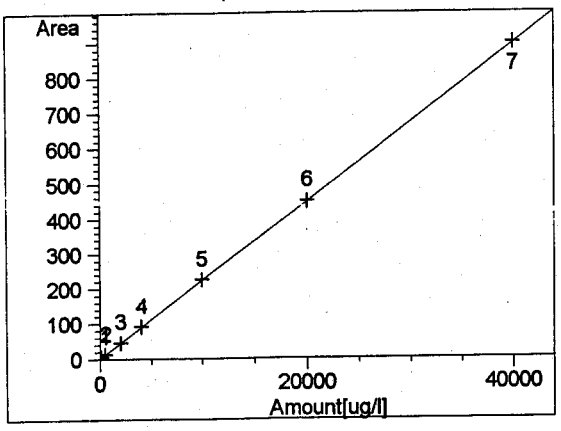
2-Methylnaphthalene at exp. RT: 7.251
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.53962
Formula: y = mx + b
m: 1.12737e-2
b: 5.18225e-1
x: Amount[ug/l]
y: Area



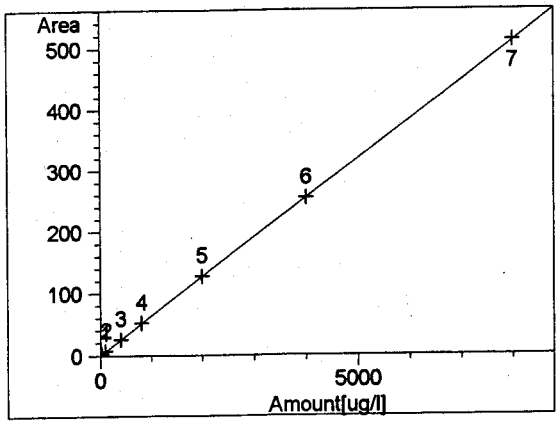
2-Methylnaphthalene at exp. RT: 7.292
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.98972
Formula: y = mx + b
m: 1.35487e-2
b: 1.23431e-1
x: Amount[ug/l]
y: Area



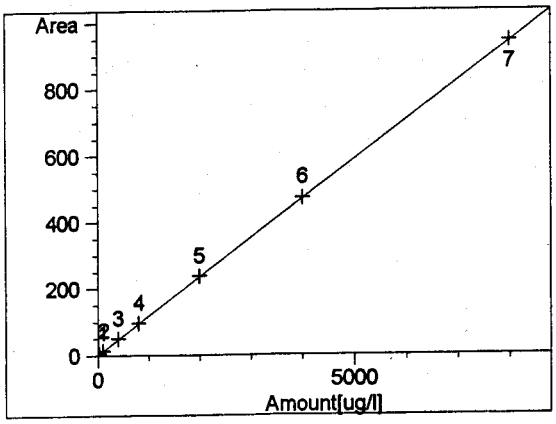
Acenaphthene at exp. RT: 7.640
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.34549
Formula: y = mx + b
m: 5.14123e-3
b: 4.11076e-1
x: Amount[ug/l]
y: Area



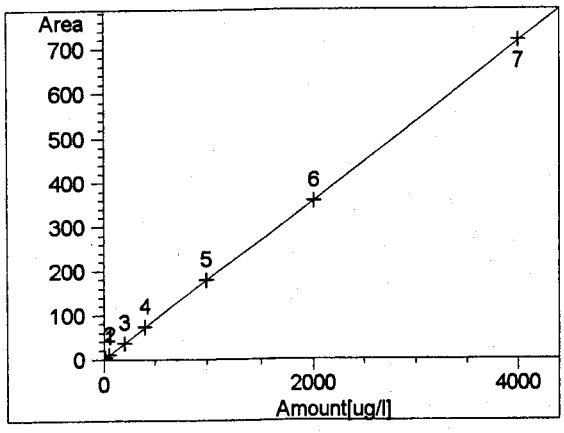
Acenaphthene at exp. RT: 7.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.72283
Formula: y = mx + b
m: 2.24261e-2
b: 9.07591e-1
x: Amount[ug/l]
y: Area



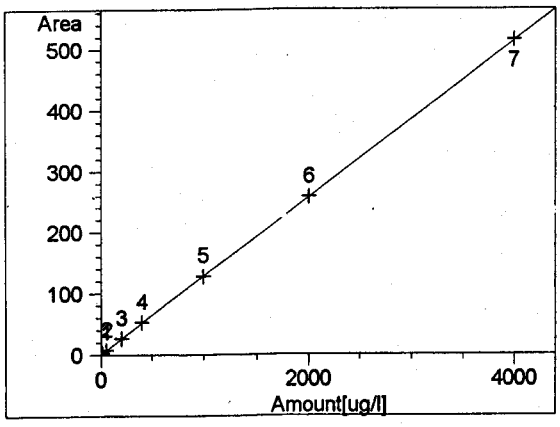
Fluorene at exp. RT: 8.162
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.59741
Formula: y = mx + b
m: 6.38593e-2
b: 4.86444e-2
x: Amount[ug/l]
y: Area



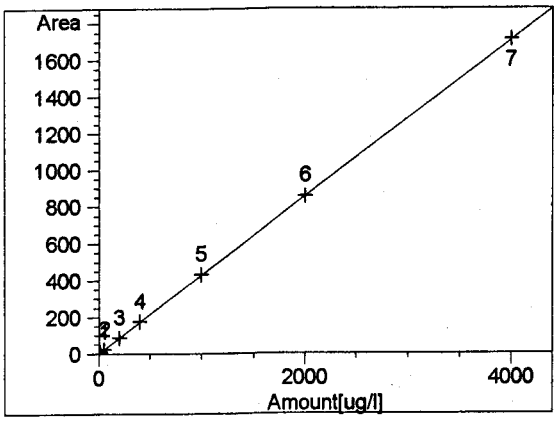
Fluorene at exp. RT: 8.202
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.86849
Formula: y = mx + b
m: 1.17884e-1
b: 1.12755
x: Amount[ug/l]
y: Area



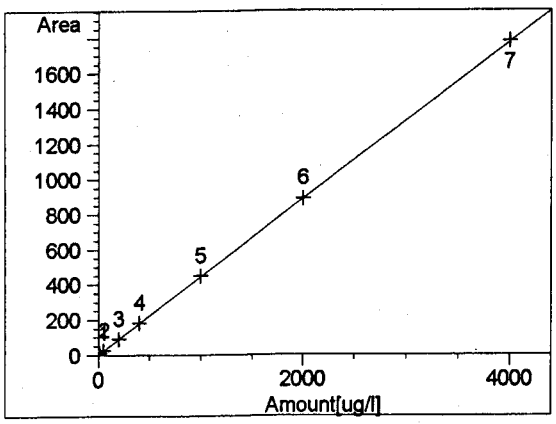
Phenanthrene at exp. RT: 9.288
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.62706
Formula: y = mx + b
m: 1.79247e-1
b: 1.07832e-2
x: Amount[ug/l]
y: Area



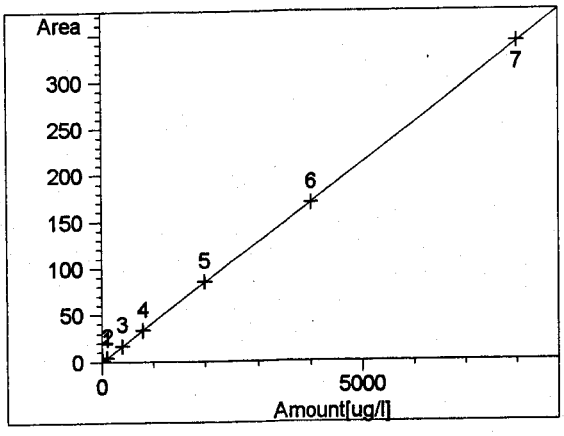
Phenanthrene at exp. RT: 9.326
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.42174
Formula: y = mx + b
m: 1.28533e-1
b: 9.15160e-2
x: Amount[ug/l]
y: Area



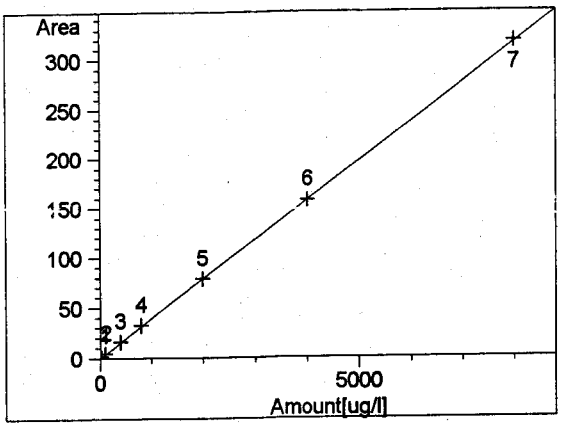
Anthracene at exp. RT: 10.303
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 1.35077
Formula: y = mx + b
m: 4.27986e-1
b: 8.59902e-1
x: Amount[ug/l]
y: Area



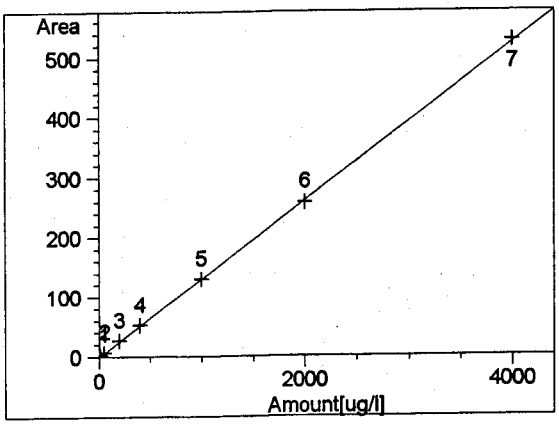
Anthracene at exp. RT: 10.342
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 1.14211
Formula: y = mx + b
m: 4.44845e-1
b: 6.72685e-1
x: Amount[ug/l]
y: Area



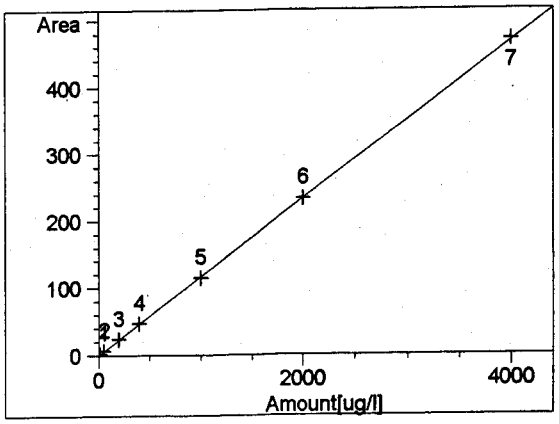
Fluoranthene at exp. RT: 11.462
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.55290
Formula: y = mx + b
m: 4.27109e-2
b: -4.95410e-1
x: Amount[ug/l]
y: Area



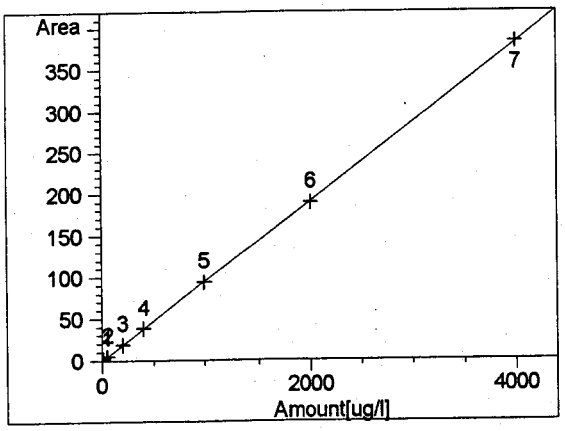
Fluoranthene at exp. RT: 11.501
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.60346
Formula: y = mx + b
m: 3.96163e-2
b: -2.02740e-1
x: Amount[ug/l]
y: Area



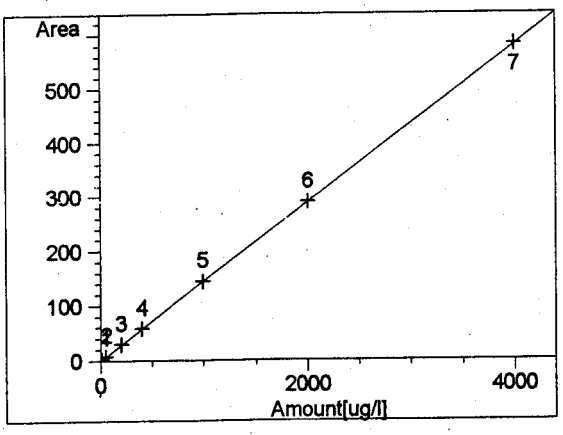
Pyrene at exp. RT: 12.216
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99995
Residual Std. Dev.: 2.14131
Formula: y = mx + b
m: 1.31654e-1
b: -9.20814e-1
x: Amount[ug/l]
y: Area



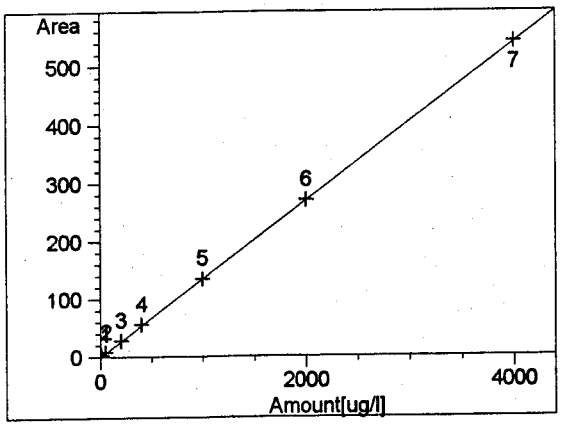
Pyrene at exp. RT: 12.256
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99998
Residual Std. Dev.: 1.15832
Formula: y = mx + b
m: 1.17398e-1
b: -6.98719e-1
x: Amount[ug/l]
y: Area



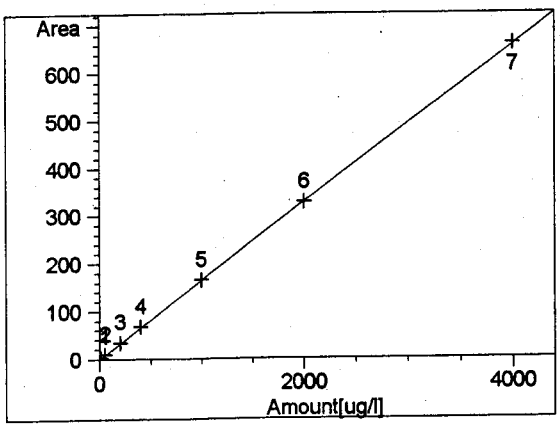
Benzo(a)anthracene at exp. RT: 14.978
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.97360
Formula: y = mx + b
m: 9.56360e-2
b: -5.52553e-1
x: Amount[ug/l]
y: Area



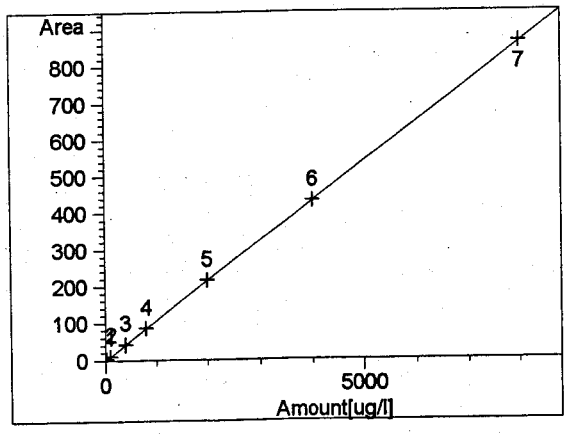
Benzo(a)anthracene at exp. RT: 15.018
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.50825
Formula: y = mx + b
m: 1.45299e-1
b: -3.78919e-1
x: Amount[ug/l]
y: Area



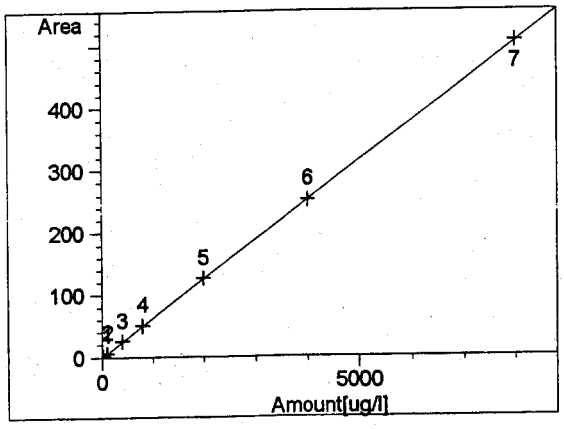
Chrysene at exp. RT: 15.450
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.74873
Formula: y = mx + b
m: 1.35164e-1
b: -2.62574e-1
x: Amount[ug/l]
y: Area



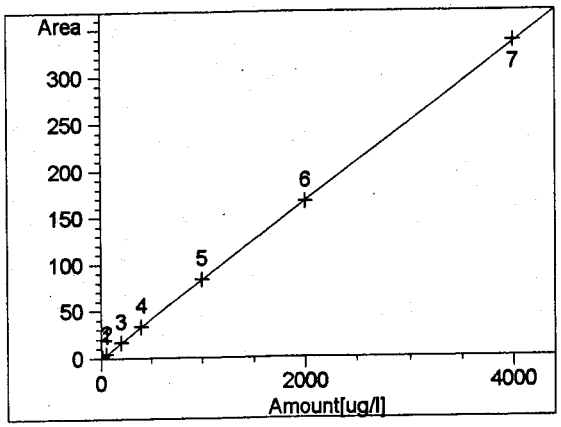
Chrysene at exp. RT: 15.497
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.17995
Formula: y = mx + b
m: 1.64961e-1
b: -1.12842e-1
x: Amount[ug/l]
y: Area



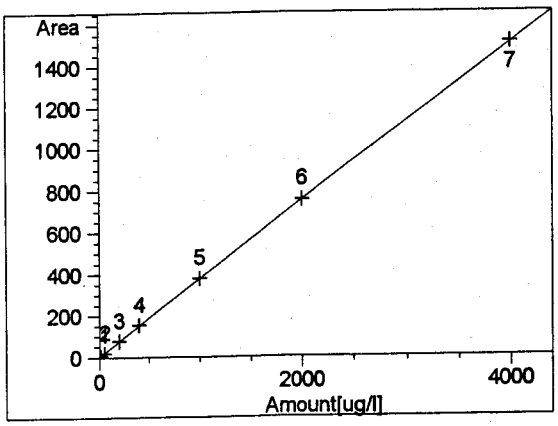
Benzo(b)fluoranthene at exp. RT: 17.660
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.78528
Formula: y = mx + b
m: 1.08120e-1
b: -8.94139e-1
x: Amount[ug/l]
y: Area



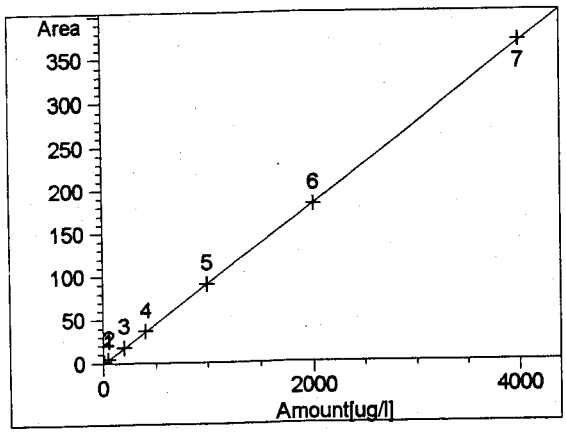
Benzo(b)fluoranthene at exp. RT: 17.699
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.73239
Formula: y = mx + b
m: 6.32897e-2
b: -2.89678e-1
x: Amount[ug/l]
y: Area



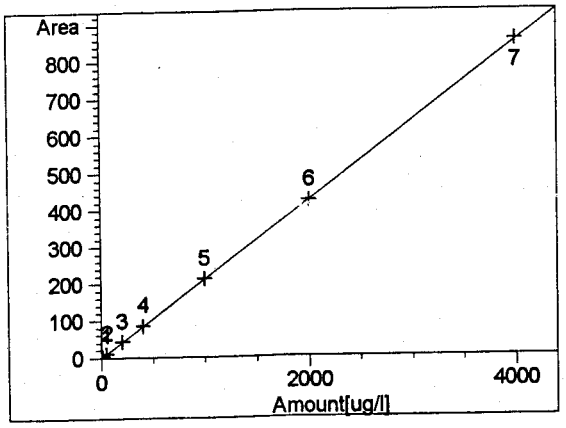
Benzo(k)fluoranthene at exp. RT: 18.594
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.59831
Formula: y = mx + b
m: 8.40358e-2
b: -7.10909e-1
x: Amount[ug/l]
y: Area



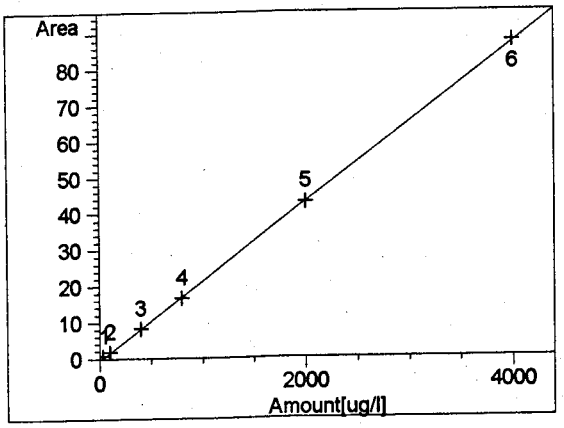
Benzo(k)fluoranthene at exp. RT: 18.634
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.85332
Formula: y = mx + b
m: 3.77407e-1
b: 2.64820e-1
x: Amount[ug/l]
y: Area



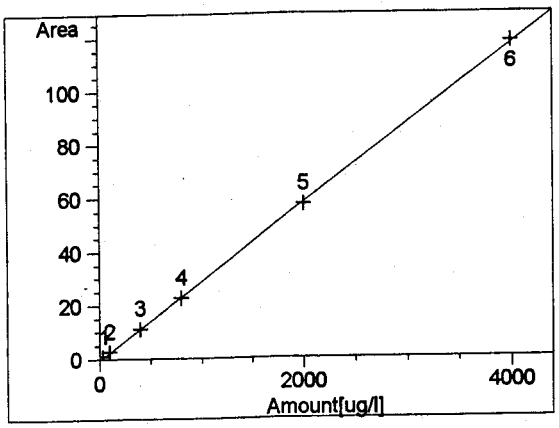
Benzo(a)pyrene at exp. RT: 19.526
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.77395
Formula: y = mx + b
m: 9.20450e-2
b: -7.47469e-1
x: Amount[ug/l]
y: Area



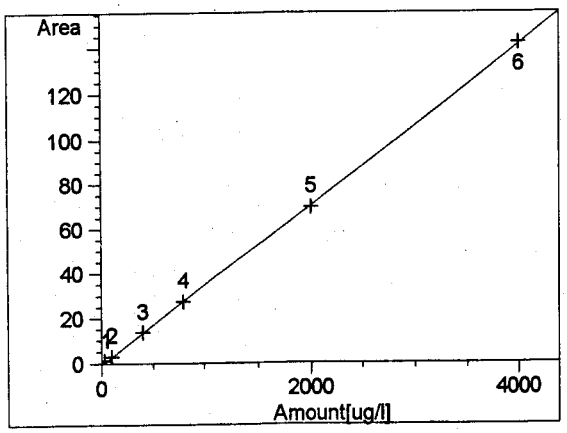
Benzo(a)pyrene at exp. RT: 19.567
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 1.60441
Formula: y = mx + b
m: 2.13208e-1
b: -6.39631e-1
x: Amount[ug/l]
y: Area



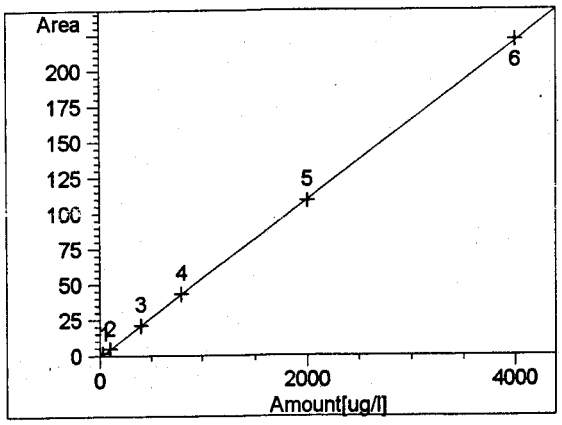
Dibenz(a,h)anthracene at exp. RT: 21.125
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.35432
Formula: y = mx + b
m: 2.19422e-2
b: -5.98019e-1
x: Amount[ug/l]
y: Area



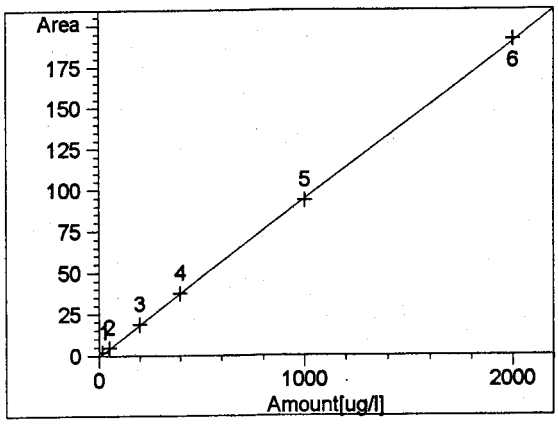
Dibenz(a,h)anthracene at exp. RT: 21.166
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 0.72004
Formula: y = mx + b
m: 2.95336e-2
b: -7.16255e-1
x: Amount[ug/l]
y: Area



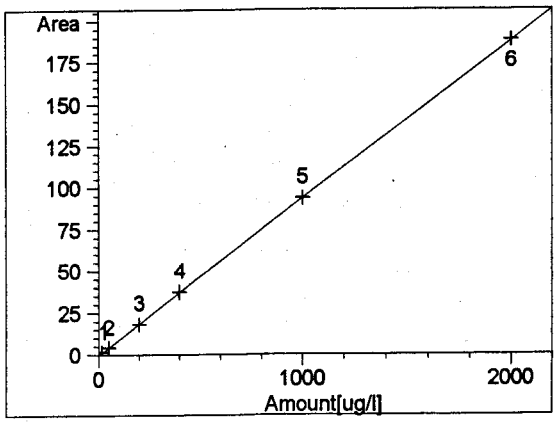
Benzo(g,h,i)perylene at exp. RT: 21.906
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99996
Residual Std. Dev.: 0.57908
Formula: y = mx + b
m: 3.56456e-2
b: -8.16409e-1
x: Amount[ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 21.945
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99997
Residual Std. Dev.: 0.67791
Formula: y = mx + b
m: 5.53982e-2
b: -8.48128e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.404
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99993
Residual Std. Dev.: 0.95379
Formula: y = mx + b
m: 9.55220e-2
b: -6.20739e-1
x: Amount[ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.442
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99999
Residual Std. Dev.: 0.26609
Formula: y = mx + b
m: 9.43856e-2
b: -5.82488e-1
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 297149198001 Cal Date : 13-APR-2007

ICV 297149198015 (10300015 13-APR-2007) stds: S5969

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0132	0.0132	5000	4985	ug/L	0	15	
Acenaphthylene	1	0.0097	0.0102	10000	10400	ug/L	4	15	
Acenaphthene	1	0.0055	0.0054	5000	5143	ug/L	3	15	
Fluorene	1	0.0650	0.0632	1000	988.9	ug/L	-1	15	
Phenanthrene	1	0.1799	0.1734	500.0	483.6	ug/L	-3	15	
Anthracene	1	0.4299	0.4187	500.0	487.2	ug/L	-3	15	
Fluoranthene	1	0.0414	0.0405	1000	958.8	ug/L	-4	15	
Benzo(a)anthracene	1	0.0950	0.0915	500.0	484.0	ug/L	-3	15	
Chrysene	1	0.1314	0.1297	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	1	0.1041	0.1040	1000	969.7	ug/L	-3	15	
Benzo(k)fluoranthene	1	0.0778	0.0799	500.0	484.0	ug/L	-3	15	
Benzo(a)pyrene	1	0.0854	0.0842	500.0	465.8	ug/L	-7	15	
Dibenz(a,h)anthracene	1	0.0198	0.0196	1000	919.4	ug/L	-8	15	
Benzo(g,h,i)perylene	1	0.0323	0.0325	1000	934.2	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0918	500.0	487.2	ug/L	-3	15	
Acenaphthylene	2	0.0885	0.0889	10000	10230	ug/L	2	15	
Pyrene	2	0.1282	0.1280	500.0	493.0	ug/L	-1	15	
Naphthalene	3	0.0104	0.0100	5000	4847	ug/L	-3	15	
Acenaphthene	3	0.0228	0.0221	5000	4878	ug/L	-2	15	
Fluorene	3	0.1201	0.1139	1000	956.8	ug/L	-4	15	
Phenanthrene	3	0.1297	0.1171	500.0	454.8	ug/L	-9	15	
Anthracene	3	0.4469	0.4331	500.0	485.3	ug/L	-3	15	
Fluoranthene	3	0.0394	0.0375	1000	952.4	ug/L	-5	15	
Pyrene	3	0.1158	0.1123	500.0	484.1	ug/L	-3	15	
Benzo(a)anthracene	3	0.1432	0.1386	500.0	479.4	ug/L	-4	15	
Chrysene	3	0.1647	0.1587	500.0	481.9	ug/L	-4	15	
Benzo(b)fluoranthene	3	0.0625	0.0604	1000	958.7	ug/L	-4	15	
Benzo(k)fluoranthene	3	0.3745	0.3647	500.0	482.4	ug/L	-4	15	
Benzo(a)pyrene	3	0.2088	0.1970	500.0	465.0	ug/L	-7	15	
Dibenz(a,h)anthracene	3	0.0275	0.0267	1000	928.1	ug/L	-7	15	
Benzo(g,h,i)perylene	3	0.0518	0.0508	1000	932.5	ug/L	-7	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0919	500.0	492.9	ug/L	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : L IDF : 1.0
Seqnum : 297236832002 File : 16400002 Time : 13-JUN-2007 11:43
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5286

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0137	2000	2058	ug/L	3	15	
Acenaphthylene	1	0.0097	0.0099	4000	3996	ug/L	0	15	
Acenaphthene	1	0.0055	0.0053	2000	1971	ug/L	-1	15	
Fluorene	1	0.0650	0.0652	400.0	407.7	ug/L	2	15	
Phenanthrene	1	0.1799	0.1832	200.0	204.3	ug/L	2	15	
Anthracene	1	0.4299	0.4347	200.0	201.1	ug/L	1	15	
Fluoranthene	1	0.0414	0.0439	400.0	422.7	ug/L	6	15	
Benzo(a)anthracene	1	0.0950	0.0948	200.0	204.1	ug/L	2	15	
Chrysene	1	0.1314	0.1394	200.0	208.2	ug/L	4	15	
Benzo(b)fluoranthene	1	0.1041	0.1074	400.0	405.7	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0778	0.0814	200.0	202.2	ug/L	1	15	
Benzo(a)pyrene	1	0.0854	0.0905	200.0	204.7	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0214	400.0	417.3	ug/L	4	15	
Benzo(g,h,i)perylene	1	0.0323	0.0336	400.0	400.1	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0913	200.0	197.6	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0089	8000	8119	ug/L	1	15	
Acenaphthylene	2	0.0885	0.0913	4000	4090	ug/L	2	15	
Pyrene	2	0.1282	0.1313	200.0	206.5	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0222	8000	8253	ug/L	3	15	
Naphthalene	3	0.0104	0.0106	2000	2052	ug/L	3	15	
Acenaphthene	3	0.0228	0.0229	2000	2004	ug/L	0	15	
Fluorene	3	0.1201	0.1230	400.0	407.8	ug/L	2	15	
Phenanthrene	3	0.1297	0.1323	200.0	205.2	ug/L	3	15	
Anthracene	3	0.4469	0.4510	200.0	201.3	ug/L	1	15	
Fluoranthene	3	0.0394	0.0396	400.0	405.4	ug/L	1	15	
Pyrene	3	0.1158	0.1190	200.0	208.6	ug/L	4	15	
Benzo(a)anthracene	3	0.1432	0.1436	200.0	200.3	ug/L	0	15	
Chrysene	3	0.1647	0.1719	200.0	209.1	ug/L	5	15	
Benzo(b)fluoranthene	3	0.0625	0.0624	400.0	398.9	ug/L	0	15	
Benzo(k)fluoranthene	3	0.3745	0.3738	200.0	197.4	ug/L	-1	15	
Benzo(a)pyrene	3	0.2088	0.2124	200.0	202.3	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0275	0.0281	400.0	404.9	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0547	400.0	410.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0922	200.0	201.6	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0116	0.0119	8000	8183	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 195303 HPLC Water
EPA 8310

Inst : HPLC04 Run Name : M IDF : 1.0
Seqnum : 297236832017 File : 16400017 Time : 13-JUN-2007 19:37
Cal : 297149198001 Caldate : 13-APR-2007
Standards: S5285

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0132	0.0135	4000	4085	ug/L	2	15	
Acenaphthylene	1	0.0097	0.0100	8000	8117	ug/L	1	15	
Acenaphthene	1	0.0055	0.0053	4000	4070	ug/L	2	15	
Fluorene	1	0.0650	0.0654	800.0	818.6	ug/L	2	15	
Phenanthrene	1	0.1799	0.1823	400.0	406.7	ug/L	2	15	
Anthracene	1	0.4299	0.4367	400.0	406.1	ug/L	2	15	
Fluoranthene	1	0.0414	0.0436	800.0	828.8	ug/L	4	15	
Benzo(a)anthracene	1	0.0950	0.0942	400.0	399.6	ug/L	0	15	
Chrysene	1	0.1314	0.1365	400.0	406.0	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1041	0.1072	800.0	801.8	ug/L	0	15	
Benzo(k)fluoranthene	1	0.0778	0.0824	400.0	400.6	ug/L	0	15	
Benzo(a)pyrene	1	0.0854	0.0921	400.0	408.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0198	0.0210	800.0	792.8	ug/L	-1	15	
Benzo(g,h,i)perylene	1	0.0323	0.0350	800.0	807.7	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0936	0.0943	400.0	401.5	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0086	0.0088	16000	16320	ug/L	2	15	
Acenaphthylene	2	0.0885	0.0903	8000	8273	ug/L	3	15	
Pyrene	2	0.1282	0.1321	400.0	408.4	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0213	0.0219	16000	16930	ug/L	6	15	
Naphthalene	3	0.0104	0.0102	4000	3970	ug/L	-1	15	
Acenaphthene	3	0.0228	0.0223	4000	3945	ug/L	-1	15	
Fluorene	3	0.1201	0.1213	800.0	813.4	ug/L	2	15	
Phenanthrene	3	0.1297	0.1280	400.0	397.7	ug/L	-1	15	
Anthracene	3	0.4469	0.4493	400.0	402.5	ug/L	1	15	
Fluoranthene	3	0.0394	0.0393	800.0	798.9	ug/L	0	15	
Pyrene	3	0.1158	0.1162	400.0	401.7	ug/L	0	15	
Benzo(a)anthracene	3	0.1432	0.1423	400.0	394.2	ug/L	-1	15	
Chrysene	3	0.1647	0.1681	400.0	408.3	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0625	0.0621	800.0	789.1	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.3745	0.3721	400.0	393.7	ug/L	-2	15	
Benzo(a)pyrene	3	0.2088	0.2113	400.0	399.4	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0275	0.0284	800.0	794.0	ug/L	-1	15	
Benzo(g,h,i)perylene	3	0.0518	0.0539	800.0	793.6	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	3	0.0873	0.0908	400.0	391.0	ug/L	-2	15	
1-Methylnaphthalene (F)	3	0.0116	0.0115	16000	15960	ug/L	0	15	

SEQUENCE SUMMARY FOR 195303 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297149198 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-APR-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
001	10300001	X	PRIMER - 103			13-APR-2007 14:38	1.0						
002	10300002	X	PRIMER			13-APR-2007 15:09	1.0						
003	10300003	X	IB - 103			13-APR-2007 15:41	1.0						
004	10300004	X	IB			13-APR-2007 16:13	1.0						
005	10300005	X	IB			13-APR-2007 16:44	1.0						
006	10300006	ICAL				13-APR-2007 17:16	1.0					1	
007	10300007	ICAL				13-APR-2007 17:47	1.0					2	
008	10300008	ICAL				13-APR-2007 18:19	1.0					3	
009	10300009	ICAL				13-APR-2007 18:51	1.0					4	
010	10300010	ICAL				13-APR-2007 19:22	1.0					5	
011	10300011	ICAL				13-APR-2007 19:54	1.0					6	
012	10300012	ICAL				13-APR-2007 20:25	1.0					7	
013	10300013	X	IB			13-APR-2007 20:57	1.0						
014	10300014	X	IB			13-APR-2007 21:29	1.0						
015	10300015	ICV				13-APR-2007 22:00	1.0		50			8	
016	10300016	X	ICV			13-APR-2007 22:32	1.0					8	
017	10300017	X	IB			13-APR-2007 23:03	1.0						

Stds used: 1=S5288 2=S5287 3=S5286 4=S5285 5=S5284 6=S5283 7=S5282 8=S5969

SEQUENCE SUMMARY FOR 195303 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 297236832 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 13-JUN-2007
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	16400001	X	IB - 164			13-JUN-2007 11:12	1.0						
002	16400002	CCV	L			13-JUN-2007 11:43	1.0	1.0			50	1	
003	16400003	X	CCV			13-JUN-2007 12:15	1.0					1	
004	16400004	X	IB			13-JUN-2007 12:46	1.0						
005	16400005	BLANK	QC391739	126173	Water	13-JUN-2007 13:18	1.0	0.002			50		
006	16400006	MSS	195270-013	126173	Water	13-JUN-2007 13:50	1.0	0.001923			50		
007	16400007	LCS	QC391740	126173	Water	13-JUN-2007 14:21	1.0	0.002			50		
008	16400008	MS	QC391741	126173	Water	13-JUN-2007 14:53	1.0	0.001923		5	50		
009	16400009	MSD	QC391742	126173	Water	13-JUN-2007 15:24	1.0	0.001923		2	50		
010	16400010	X	IB			13-JUN-2007 15:56	1.0						
011	16400011	SAMPLE	195270-014	126173	Water	13-JUN-2007 16:28	1.0	0.001887			50		
012	16400012	SAMPLE	195270-015	126173	Water	13-JUN-2007 16:59	1.0	0.001905			50		
013	16400013	SAMPLE	195270-016	126173	Water	13-JUN-2007 17:31	1.0	0.001905			50		
014	16400014	SAMPLE	195279-001	126173	Water	13-JUN-2007 18:03	1.0	0.001905			50		
015	16400015	SAMPLE	195303-030	126173	Water	13-JUN-2007 18:34	1.0	0.001923			50		
016	16400016	X	IB			13-JUN-2007 19:06	1.0						
017	16400017	CCV	M			13-JUN-2007 19:37	1.0	1.0			50	2	
018	16400018	X	CCV			13-JUN-2007 20:09	1.0					2	
019	16400019	X	IB			13-JUN-2007 20:41	1.0						
020	16400020	SAMPLE	195247-001	126173	Water	13-JUN-2007 21:12	1.0	0.002105			50		
021	16400021	SAMPLE	195247-002	126173	Water	13-JUN-2007 21:44	1.0	0.001905			50		
022	16400022	X	IB			13-JUN-2007 22:15	1.0						
023	16400023	SAMPLE	195270-001	126173	Water	13-JUN-2007 22:47	1.0	0.001887	6	1	50		6:MTNPH1=86805.2
024	16400024	SAMPLE	195270-002	126173	Water	13-JUN-2007 23:19	1.0	0.001905	6	1	50		6:MTNPH1=85026.4
025	16400025	X	IB			13-JUN-2007 23:50	1.0						
026	16400026	X	IB			14-JUN-2007 00:22	1.0						
027	16400027	CCV	H			14-JUN-2007 00:53	1.0	1.0			50	3	
028	16400028	X	CCV			14-JUN-2007 01:25	1.0					3	
029	16400029	X	IB			14-JUN-2007 01:56	1.0						

Stds used: 1=S5286 2=S5285 3=S5284

REPORTING SUMMARY FOR 195303 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
195303-030	Naphthalene	HPLC04	1	06/13/07 18:34
195303-030	Acenaphthylene	HPLC04	1	06/13/07 18:34
195303-030	Acenaphthene	HPLC04	1	06/13/07 18:34
195303-030	Fluorene	HPLC04	1	06/13/07 18:34
195303-030	Phenanthrene	HPLC04	3	06/13/07 18:34
195303-030	Anthracene	HPLC04	3	06/13/07 18:34
195303-030	Fluoranthene	HPLC04	3	06/13/07 18:34
195303-030	Pyrene	HPLC04	3	06/13/07 18:34
195303-030	Benzo(a)anthracene	HPLC04	3	06/13/07 18:34
195303-030	Chrysene	HPLC04	3	06/13/07 18:34
195303-030	Benzo(b)fluoranthene	HPLC04	3	06/13/07 18:34
195303-030	Benzo(k)fluoranthene	HPLC04	3	06/13/07 18:34
195303-030	Benzo(a)pyrene	HPLC04	3	06/13/07 18:34
195303-030	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 18:34
195303-030	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 18:34
195303-030	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 18:34
195303-030	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 18:34
195303-030	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 18:34
QC391739	Naphthalene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthylene	HPLC04	1	06/13/07 13:18
QC391739	Acenaphthene	HPLC04	1	06/13/07 13:18
QC391739	Fluorene	HPLC04	1	06/13/07 13:18
QC391739	Phenanthrene	HPLC04	3	06/13/07 13:18
QC391739	Anthracene	HPLC04	3	06/13/07 13:18
QC391739	Fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Pyrene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Chrysene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(b)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(k)fluoranthene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(a)pyrene	HPLC04	3	06/13/07 13:18
QC391739	Dibenz(a,h)anthracene	HPLC04	3	06/13/07 13:18
QC391739	Benzo(g,h,i)perylene	HPLC04	3	06/13/07 13:18
QC391739	Indeno(1,2,3-cd)pyrene	HPLC04	3	06/13/07 13:18
QC391739	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 13:18
QC391739	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 13:18
QC391740	Naphthalene	HPLC04	1	06/13/07 14:21
QC391740	Fluorene	HPLC04	1	06/13/07 14:21
QC391740	Pyrene	HPLC04	3	06/13/07 14:21
QC391740	Benzo(a)pyrene	HPLC04	3	06/13/07 14:21
QC391740	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:21
QC391740	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:21
QC391741	Naphthalene	HPLC04	1	06/13/07 14:53
QC391741	Fluorene	HPLC04	1	06/13/07 14:53
QC391741	Pyrene	HPLC04	3	06/13/07 14:53
QC391741	Benzo(a)pyrene	HPLC04	3	06/13/07 14:53
QC391741	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 14:53
QC391741	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 14:53
QC391742	Naphthalene	HPLC04	1	06/13/07 15:24
QC391742	Fluorene	HPLC04	1	06/13/07 15:24

REPORTING SUMMARY FOR 195303 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC391742	Pyrene	HPLC04	3	06/13/07 15:24
QC391742	Benzo(a)pyrene	HPLC04	3	06/13/07 15:24
QC391742	1-Methylnaphthalene (UV)	HPLC04	1	06/13/07 15:24
QC391742	1-Methylnaphthalene (F)	HPLC04	3	06/13/07 15:24

5

Curtis & Tompkins Laboratories Sample Preparation Summary 12-JUN-2007 23:25

Batch Number : 126173
Date Extracted: 11-JUN-2007
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S6106F
Spike #2 ID : S6358A
Spike #3 ID :
SOP Version : 8310w_3520_rv7

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195247-001			Treadwell & Rollo	Water	950	mL	2	0.002105	1	7	.1	0		8310		
195247-002			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-001			Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-002			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-013			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0		8310		MSS
195270-014			Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0		8310		
195270-015			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195270-016			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195279-001			Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0		8310		
195303-030			Treadwell & Rollo	Water	1040	mL	2	0.001923	1	4	.1	0		8310		
QC391739	BLANK			Water	1000	mL	2	0.002000	1		.1	0		8310		
QC391740	LCS			Water	1000	mL	2	0.002000	1		.1	1		8310		
QC391741	MS	of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		
QC391742	MSD	of 195270-013		Water	1040	mL	2	0.001923	1	7	.1	1		8310		

Prep Chemist: JCM for JOM 6/13/07 Reviewed By: [signature] Date: 6/12/07

Relinquished By: [signature] Received By: [signature] Date: 13JUN2007

8310 (PAH) Water Prep Log Curtis & Tompkins, Ltd.

LIMS Batch No: 126173
LIMS Analysis: 8310
Date Extracted: 11 June 07

Extraction Method:
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
①② 195247-001 G	950	7	2.0		
↓ 02 H	1050				
195270-001 J	1060				
② 02 K	1050				
13 X	1040				MSS
14 I	1060				
15 H	1050				
16 I					
195279-001 Q					*
195303-030 J	1040	4			*
MB QC391739	1000	NA			
LCS 40					
MS 41	1040	7			195270-013 ~~AA~~ AA JJM 6/11/07
MSD 42	1040	7			

① While transporting samples to setups, cart jostled samples losing 1-5 mls
② went dry

VIR 6/12/07

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ 3520c: Samples continuously extracted with about 450 mL of CH_2Cl_2
Extraction Start Time: 1710
Extraction End Time: 1130
☐ 3510c: Samples were extracted 3 times with 60 mL of CH_2Cl_2
Extracts filtered through baked, CH2Cl2-rinsed granualr Na2SO4
Exchanged 2x with Acetonitrile
Concentrated to final volumes as noted above
Extracts filtered with 0.45 um PTFE syringe filter
Relinquished to the HPLC group

Lot# / LIMS # / Time	Date/ Initials
S6106F/K*	JJM 6/11/07
S6358A	
EM47092	
1710	
1130	JJM 6/12/07
NA	6/12/07 KR
EM46283706	
EM46173	
✓	
Whatman 0602	
✓	

Jennie Mee 6/11/07
Extraction Chemist Date

Contined from Page ____
Continued on Page ____

6/12/07
Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 06/28/07

Analyte	Units	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.30	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L	0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			1.7			1.8

: 98376

Metals Data

: 88377

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Batch#:	126310
Lab ID:	195303-001	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Antimony	ND	1.0	5.000	06/21/07
Arsenic	ND	5.0	5.000	06/21/07
Barium	27	10	5.000	06/21/07
Beryllium	ND	2.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	35,000	500	5.000	06/21/07
Chromium	11	10	5.000	06/21/07
Cobalt	ND	10	5.000	06/21/07
Copper	1.2	1.0	5.000	06/19/07
Iron	ND	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	170,000	500	50.00	06/20/07
Manganese	86	10	5.000	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	1,700	500	5.000	06/21/07
Selenium	ND	5.0	5.000	06/21/07
Silver	ND	1.0	5.000	06/21/07
Sodium	340,000	500	50.00	06/20/07
Thallium	ND	1.0	5.000	06/21/07
Vanadium	ND	10	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

134.0

: 88375

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW10	Batch#:	126310
Lab ID:	195303-002	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	10	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	64,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	16,000	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	59,000	500	5.000	06/21/07
Manganese	1,400	10	10.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	4,600	500	5.000	06/21/07
Sodium	100,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

108.0

00378A

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW16	Batch#:	126310
Lab ID:	195303-003	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	ND	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	68,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	1,100	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	39,000	500	5.000	06/21/07
Manganese	470	10	5.000	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	17,000	500	5.000	06/21/07
Sodium	270,000	500	50.00	06/20/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

109.0

: 28379

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW30	Batch#:	126310
Lab ID:	195303-004	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	15	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	96,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	12,000	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	31,000	500	5.000	06/21/07
Manganese	1,800	10	10.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	14,000	500	5.000	06/21/07
Sodium	100,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

110.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW21	Batch#:	126310
Lab ID:	195303-005	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	21	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	71,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	27,000	100	5.000	06/21/07
Lead	3.6	3.0	5.000	06/21/07
Magnesium	49,000	500	5.000	06/21/07
Manganese	1,500	10	10.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	4,200	500	5.000	06/21/07
Sodium	46,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

111.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW22	Batch#:	126310
Lab ID:	195303-006	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	33	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	75,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	32,000	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	82,000	500	5.000	06/21/07
Manganese	1,300	10	10.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	35,000	500	5.000	06/21/07
Sodium	83,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

112.0

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	610SP01	Batch#:	126311
Lab ID:	195303-011	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	520,000	500	50.00	06/21/07
Arsenic	720	5.0	5.000	06/19/07
Iron	1,000,000	1,000	100.0	06/22/07
Manganese	12,000	10	100.0	06/22/07

RL= Reporting Limit

163.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231PZ04	Batch#:	126310
Lab ID:	195303-012	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	12	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	97,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	20,000	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	60,000	500	5.000	06/21/07
Manganese	2,500	10	50.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	8,000	500	5.000	06/21/07
Sodium	49,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

113.0

08384

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231PZ03	Batch#:	126310
Lab ID:	195303-013	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	8.5	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	99,000	500	5.000	06/19/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	20,000	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	61,000	500	5.000	06/21/07
Manganese	2,400	10	50.00	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	8,300	500	5.000	06/21/07
Sodium	53,000	500	5.000	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

114.0

00385

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW17	Batch#:	126310
Lab ID:	195303-015	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/21/07
Arsenic	ND	5.0	06/21/07
Cadmium	ND	1.0	06/21/07
Calcium	13,000	500	06/21/07
Chromium	18	10	06/21/07
Copper	ND	1.0	06/19/07
Iron	ND	100	06/21/07
Lead	ND	3.0	06/21/07
Magnesium	50,000	500	06/21/07
Manganese	ND	10	06/21/07
Nickel	ND	20	06/21/07
Potassium	640	500	06/21/07
Sodium	39,000	500	06/21/07
Zinc	ND	20	06/21/07

ND= Not Detected
RL= Reporting Limit

115.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW18	Batch#:	126310
Lab ID:	195303-016	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/21/07
Arsenic	ND	5.0	06/21/07
Cadmium	ND	1.0	06/21/07
Calcium	24,000	500	06/21/07
Chromium	15	10	06/21/07
Copper	ND	1.0	06/19/07
Iron	ND	100	06/21/07
Lead	ND	3.0	06/21/07
Magnesium	59,000	500	06/21/07
Manganese	ND	10	06/21/07
Nickel	ND	20	06/21/07
Potassium	1,800	500	06/21/07
Sodium	55,000	500	06/21/07
Zinc	ND	20	06/21/07

ND= Not Detected
RL= Reporting Limit

116.0

: 00387

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW24	Batch#:	126310
Lab ID:	195303-017	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/19/07
Arsenic	5.9	5.0	06/19/07
Cadmium	ND	1.0	06/19/07
Calcium	23,000	500	06/19/07
Chromium	ND	10	06/19/07
Copper	ND	1.0	06/19/07
Iron	3,500	100	06/21/07
Lead	ND	3.0	06/19/07
Magnesium	50,000	500	06/19/07
Manganese	130	10	06/19/07
Nickel	ND	20	06/19/07
Potassium	3,600	500	06/19/07
Sodium	49,000	500	06/19/07
Zinc	ND	20	06/19/07

ND= Not Detected
RL= Reporting Limit

117.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW19	Batch#:	126311
Lab ID:	195303-018	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/20/07
Arsenic	18	5.0	06/20/07
Cadmium	ND	1.0	06/20/07
Calcium	39,000	500	06/19/07
Chromium	ND	10	06/20/07
Copper	1.1	1.0	06/19/07
Iron	16,000	100	06/19/07
Lead	ND	3.0	06/20/07
Magnesium	30,000	500	06/19/07
Manganese	970	10	06/19/07
Nickel	ND	20	06/20/07
Potassium	8,000	500	06/19/07
Sodium	63,000	500	06/19/07
Zinc	20	20	06/20/07

ND= Not Detected
RL= Reporting Limit

118.1

: 00389

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW15	Batch#:	126311
Lab ID:	195303-019	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	450	100	06/20/07
Arsenic	ND	5.0	06/20/07
Cadmium	ND	1.0	06/20/07
Calcium	26,000	500	06/20/07
Chromium	ND	10	06/20/07
Copper	3.8	1.0	06/19/07
Iron	1,500	100	06/20/07
Lead	ND	3.0	06/20/07
Magnesium	44,000	500	06/20/07
Manganese	86	10	06/20/07
Nickel	ND	20	06/20/07
Potassium	11,000	500	06/20/07
Sodium	57,000	500	06/20/07
Zinc	ND	20	06/20/07

ND= Not Detected
RL= Reporting Limit

119.0

: 22359

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW25	Batch#:	126311
Lab ID:	195303-020	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/20/07
Arsenic	15	5.0	5.000	06/20/07
Cadmium	ND	1.0	5.000	06/20/07
Calcium	87,000	500	5.000	06/20/07
Chromium	ND	10	5.000	06/20/07
Copper	1.7	1.0	5.000	06/19/07
Iron	31,000	100	5.000	06/20/07
Lead	ND	3.0	5.000	06/20/07
Magnesium	67,000	500	5.000	06/20/07
Manganese	3,700	10	50.00	06/21/07
Nickel	ND	20	5.000	06/20/07
Potassium	9,800	500	5.000	06/20/07
Sodium	160,000	500	50.00	06/21/07
Zinc	ND	20	5.000	06/20/07

ND= Not Detected
RL= Reporting Limit

120.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW23	Batch#:	126311
Lab ID:	195303-021	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/20/07
Arsenic	7.6	5.0	5.000	06/20/07
Cadmium	ND	1.0	5.000	06/20/07
Calcium	50,000	500	5.000	06/20/07
Chromium	ND	10	5.000	06/20/07
Copper	ND	1.0	5.000	06/19/07
Iron	31,000	100	5.000	06/20/07
Lead	ND	3.0	5.000	06/20/07
Magnesium	73,000	500	5.000	06/20/07
Manganese	2,500	10	50.00	06/21/07
Nickel	ND	20	5.000	06/20/07
Potassium	19,000	500	5.000	06/20/07
Sodium	68,000	500	5.000	06/20/07
Zinc	ND	20	5.000	06/20/07

ND= Not Detected
RL= Reporting Limit

121.0

: 99392

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW11	Batch#:	126311
Lab ID:	195303-022	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000	Analyzed:	06/21/07

Analyte	Result	RL
Aluminum	ND	100
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	24,000	500
Chromium	ND	10
Copper	ND	1.0
Iron	600	100
Lead	ND	3.0
Magnesium	44,000	500
Manganese	74	10
Nickel	ND	20
Potassium	8,600	500
Sodium	86,000	500
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

122.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW26	Batch#:	126311
Lab ID:	195303-024	Sampled:	06/08/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/21/07
Arsenic	ND	5.0	06/21/07
Cadmium	ND	1.0	06/21/07
Calcium	21,000	500	06/21/07
Chromium	ND	10	06/21/07
Copper	ND	1.0	06/19/07
Iron	ND	100	06/21/07
Lead	ND	3.0	06/21/07
Magnesium	39,000	500	06/21/07
Manganese	ND	10	06/21/07
Nickel	ND	20	06/21/07
Potassium	1,300	500	06/21/07
Sodium	44,000	500	06/21/07
Zinc	ND	20	06/21/07

ND= Not Detected
RL= Reporting Limit

123.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW27	Batch#:	126311
Lab ID:	195303-025	Sampled:	06/08/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/21/07
Arsenic	ND	5.0	06/21/07
Cadmium	ND	1.0	06/21/07
Calcium	25,000	500	06/21/07
Chromium	27	10	06/21/07
Copper	ND	1.0	06/19/07
Iron	ND	100	06/21/07
Lead	ND	3.0	06/21/07
Magnesium	52,000	500	06/21/07
Manganese	ND	10	06/21/07
Nickel	ND	20	06/21/07
Potassium	660	500	06/21/07
Sodium	52,000	500	06/21/07
Zinc	ND	20	06/21/07

ND= Not Detected
RL= Reporting Limit

124.0

: 00395

Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	195303	Project#:	2893.04.51
Client:	Treadwell & Rollo	Location:	Presidio
Field ID:	WT060807	Sampled:	06/08/07
Lab ID:	195303-026	Received:	06/08/07
Matrix:	Water	Prepared:	06/20/07
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Prep	Analysis
Arsenic	9.8	5.0	5.000	126468	06/21/07	200.8	EPA 6020
Cadmium	ND	1.0	5.000	126468	06/21/07	200.8	EPA 6020
Chromium	39	10	5.000	126468	06/21/07	200.8	EPA 6020
Copper	30	1.0	5.000	126468	06/21/07	200.8	EPA 6020
Lead	18	3.0	5.000	126468	06/21/07	200.8	EPA 6020
Mercury	ND	0.20	1.000	126485	06/20/07	METHOD	EPA 7470A
Nickel	66	20	5.000	126468	06/21/07	200.8	EPA 6020
Silver	ND	1.0	5.000	126468	06/21/07	200.8	EPA 6020
Zinc	75	20	5.000	126468	06/21/07	200.8	EPA 6020

ND= Not Detected
RL= Reporting Limit

164.0

Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	207GW03	Batch#:	126311
Lab ID:	195303-027	Sampled:	06/08/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	5.000	06/21/07
Arsenic	ND	5.0	5.000	06/21/07
Cadmium	ND	1.0	5.000	06/21/07
Calcium	14,000	500	5.000	06/21/07
Chromium	ND	10	5.000	06/21/07
Copper	ND	1.0	5.000	06/19/07
Iron	ND	100	5.000	06/21/07
Lead	ND	3.0	5.000	06/21/07
Magnesium	31,000	500	5.000	06/21/07
Manganese	ND	10	5.000	06/21/07
Nickel	ND	20	5.000	06/21/07
Potassium	20,000	500	5.000	06/21/07
Sodium	190,000	500	10.00	06/21/07
Zinc	ND	20	5.000	06/21/07

ND= Not Detected
RL= Reporting Limit

125.0

: 00397

Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW060807B	Batch#:	126311
Lab ID:	195303-030	Sampled:	06/08/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	06/21/07
Antimony	15	1.0	06/21/07
Arsenic	ND	5.0	06/21/07
Barium	ND	10	06/21/07
Beryllium	ND	2.0	06/21/07
Cadmium	ND	1.0	06/21/07
Calcium	ND	500	06/21/07
Chromium	ND	10	06/21/07
Cobalt	ND	10	06/21/07
Copper	ND	1.0	06/19/07
Iron	ND	100	06/21/07
Lead	ND	3.0	06/21/07
Magnesium	ND	500	06/21/07
Manganese	ND	10	06/21/07
Nickel	ND	20	06/21/07
Potassium	ND	500	06/21/07
Selenium	ND	5.0	06/21/07
Silver	ND	1.0	06/21/07
Sodium	ND	500	06/21/07
Thallium	ND	1.0	06/21/07
Vanadium	ND	10	06/21/07
Zinc	ND	20	06/21/07

ND= Not Detected
RL= Reporting Limit

135.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392325	Batch#:	126310
Matrix:	Filtrate	Prepared:	06/14/07
Units:	ug/L	Analyzed:	06/21/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

136.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392332	Batch#:	126311
Matrix:	Filtrate	Prepared:	06/14/07
Units:	ug/L	Analyzed:	06/20/07

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

137.2

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC392983	Batch#:	126468
Matrix:	Filtrate	Prepared:	06/20/07
Units:	ug/L	Analyzed:	06/21/07

Analyte	Result	RL
Arsenic	ND	5.0
Cadmium	ND	1.0
Chromium	ND	10
Copper	ND	1.0
Lead	ND	3.0
Nickel	ND	20
Silver	ND	1.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit

166.0

18428

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	126485
Lab ID:	QC393049	Prepared:	06/20/07
Matrix:	Water	Analyzed:	06/20/07
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected
RL= Reporting Limit

167.0

Curtis & Tompkins, Ltd.

Dissolved Aluminum

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Aluminum	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Analyzed
1065MW103A	SAMPLE	195303-008	ND	100	5.000	126310	06/21/07
600GW106	SAMPLE	195303-009	ND	100	5.000	126310	06/21/07
610GW103	SAMPLE	195303-010	ND	100	5.000	126310	06/21/07
610SP01	SAMPLE	195303-011	ND	100	5.000	126310	06/21/07
	BLANK	QC392325	ND	100	1.000	126310	06/21/07
	BLANK	QC392332	ND	100	1.000	126311	06/20/07

ND= Not Detected
RL= Reporting Limit

144.1

Curtis & Tompkins, Ltd.

Dissolved Arsenic

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Arsenic	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Analyzed
1065MW103A	SAMPLE	195303-008	ND	5.0	5.000	126310	06/21/07
600GW106	SAMPLE	195303-009	ND	5.0	5.000	126310	06/21/07
610GW103	SAMPLE	195303-010	ND	5.0	5.000	126310	06/21/07
610SP01	SAMPLE	195303-011	28	5.0	5.000	126310	06/21/07
	BLANK	QC392325	ND	5.0	1.000	126310	06/21/07
	BLANK	QC392332	ND	5.0	1.000	126311	06/20/07

ND= Not Detected
RL= Reporting Limit

148.1

Curtis & Tompkins, Ltd.

Dissolved Iron

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Iron	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Analyzed
1065MW103A	SAMPLE	195303-008	110	100	5.000	126310	06/21/07
600GW106	SAMPLE	195303-009	ND	100	5.000	126310	06/21/07
610GW103	SAMPLE	195303-010	2,300	100	5.000	126310	06/21/07
610SP01	SAMPLE	195303-011	1,100	100	5.000	126310	06/21/07
	BLANK	QC392325	ND	100	1.000	126310	06/21/07
	BLANK	QC392332	ND	100	1.000	126311	06/20/07

ND= Not Detected
RL= Reporting Limit

152.1

Curtis & Tompkins, Ltd.

Dissolved Manganese

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Manganese	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Analyzed
1065MW103A	SAMPLE	195303-008	850	10	5.000	126310	06/21/07
600GW106	SAMPLE	195303-009	1,600	10	10.00	126310	06/21/07
610GW103	SAMPLE	195303-010	3,500	10	50.00	126310	06/21/07
610SP01	SAMPLE	195303-011	780	10	5.000	126310	06/21/07
	BLANK	QC392325	ND	10	1.000	126310	06/21/07
	BLANK	QC392332	ND	10	1.000	126311	06/20/07

ND= Not Detected
RL= Reporting Limit

159.1

: 00405

Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	06/08/07
Field ID:	DW060807B	Received:	06/08/07
Units:	ug/L	Prepared:	06/18/07
Diln Fac:	1.000	Analyzed:	06/18/07
Batch#:	126388		

Type	Lab ID	Matrix	Result	RL
SAMPLE	195303-030	Filtrate	ND	0.20
BLANK	QC392634	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

156.0

: 89487

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126310
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	1.000	Analyzed:	06/21/07

Type: BS Lab ID: QC392326

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	9,051	91	80-120
Antimony	100.0	91.89	92	80-120
Arsenic	100.0	87.14	87	80-120
Barium	100.0	90.58	91	80-120
Beryllium	100.0	91.61	92	80-120
Cadmium	100.0	90.95	91	80-120
Calcium	10,000	8,443	84	80-120
Chromium	100.0	92.07	92	80-120
Cobalt	100.0	91.83	92	80-120
Copper	100.0	90.07	90	80-120
Iron	10,000	10,030	100	80-120
Lead	100.0	90.71	91	80-120
Magnesium	10,000	9,071	91	80-120
Manganese	100.0	91.31	91	80-120
Nickel	100.0	91.97	92	80-120
Potassium	10,000	9,389	94	80-120
Selenium	100.0	89.84	90	80-120
Silver	100.0	93.80	94	80-120
Sodium	10,000	9,380	94	80-120
Thallium	50.00	47.16	94	80-120
Vanadium	100.0	90.94	91	80-120
Zinc	100.0	86.32	86	80-120

Type: BSD Lab ID: QC392327

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	9,294	93	80-120	3	20
Antimony	100.0	93.60	94	80-120	2	20
Arsenic	100.0	91.09	91	80-120	4	20
Barium	100.0	93.65	94	80-120	3	20
Beryllium	100.0	93.49	93	80-120	2	20
Cadmium	100.0	93.71	94	80-120	3	20
Calcium	10,000	8,659	87	80-120	3	20
Chromium	100.0	95.10	95	80-120	3	20
Cobalt	100.0	94.58	95	80-120	3	20
Copper	100.0	94.80	95	80-120	5	20
Iron	10,000	10,340	103	80-120	3	20
Lead	100.0	94.16	94	80-120	4	20
Magnesium	10,000	9,241	92	80-120	2	20
Manganese	100.0	94.29	94	80-120	3	20
Nickel	100.0	94.83	95	80-120	3	20
Potassium	10,000	9,649	96	80-120	3	20
Selenium	100.0	93.40	93	80-120	4	20
Silver	100.0	95.56	96	80-120	2	20
Sodium	10,000	9,438	94	80-120	1	20
Thallium	50.00	48.42	97	80-120	3	20
Vanadium	100.0	93.82	94	80-120	3	20
Zinc	100.0	90.80	91	80-120	5	20

RPD= Relative Percent Difference

138.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126311
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	1.000		

Type: BS Lab ID: QC392333

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	9,253	93	80-120	06/19/07
Antimony	100.0	95.32	95	80-120	06/19/07
Arsenic	100.0	90.29	90	80-120	06/19/07
Barium	100.0	93.31	93	80-120	06/19/07
Beryllium	100.0	111.2	111	80-120	06/19/07
Cadmium	100.0	90.72	91	80-120	06/19/07
Calcium	10,000	9,632	96	80-120	06/19/07
Chromium	100.0	98.00	98	80-120	06/20/07
Cobalt	100.0	97.00	97	80-120	06/19/07
Copper	100.0	100.7	101	80-120	06/19/07
Iron	10,000	9,999	100	80-120	06/19/07
Lead	100.0	96.91	97	80-120	06/19/07
Magnesium	10,000	9,243	92	80-120	06/19/07
Manganese	100.0	95.03	95	80-120	06/19/07
Nickel	100.0	97.09	97	80-120	06/19/07
Potassium	10,000	9,496	95	80-120	06/19/07
Selenium	100.0	93.73	94	80-120	06/20/07
Silver	100.0	95.69	96	80-120	06/19/07
Sodium	10,000	9,746	97	80-120	06/19/07
Thallium	50.00	49.34	99	80-120	06/20/07
Vanadium	100.0	96.11	96	80-120	06/20/07
Zinc	100.0	93.21	93	80-120	06/19/07

Type: BSD Lab ID: QC392334

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	9,255	93	80-120	0	20	06/19/07
Antimony	100.0	94.34	94	80-120	1	20	06/19/07
Arsenic	100.0	89.45	89	80-120	1	20	06/19/07
Barium	100.0	94.07	94	80-120	1	20	06/19/07
Beryllium	100.0	109.3	109	80-120	2	20	06/19/07
Cadmium	100.0	91.08	91	80-120	0	20	06/19/07
Calcium	10,000	9,552	96	80-120	1	20	06/19/07
Chromium	100.0	97.37	97	80-120	1	20	06/20/07
Cobalt	100.0	95.93	96	80-120	1	20	06/19/07
Copper	100.0	99.08	99	80-120	2	20	06/19/07
Iron	10,000	10,200	102	80-120	2	20	06/19/07
Lead	100.0	96.27	96	80-120	1	20	06/19/07
Magnesium	10,000	9,220	92	80-120	0	20	06/19/07
Manganese	100.0	93.51	94	80-120	2	20	06/19/07
Nickel	100.0	96.62	97	80-120	0	20	06/19/07
Potassium	10,000	9,491	95	80-120	0	20	06/19/07
Selenium	100.0	94.89	95	80-120	1	20	06/20/07
Silver	100.0	95.16	95	80-120	1	20	06/19/07
Sodium	10,000	9,585	96	80-120	2	20	06/19/07
Thallium	50.00	48.55	97	80-120	2	20	06/20/07
Vanadium	100.0	95.83	96	80-120	0	20	06/20/07
Zinc	100.0	90.80	91	80-120	3	20	06/19/07

RPD= Relative Percent Difference

141.0

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	126468
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	1.000	Analyzed:	06/21/07

Type: BS Lab ID: QC392984

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	89.53	90	80-120
Cadmium	100.0	92.73	93	80-120
Chromium	100.0	96.07	96	80-120
Copper	100.0	92.19	92	80-120
Lead	100.0	94.65	95	80-120
Nickel	100.0	94.87	95	80-120
Silver	100.0	95.28	95	80-120
Zinc	100.0	89.48	89	80-120

Type: BSD Lab ID: QC392985

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	89.50	90	80-120	0	20
Cadmium	100.0	93.77	94	80-120	1	20
Chromium	100.0	94.69	95	80-120	1	20
Copper	100.0	92.51	93	80-120	0	20
Lead	100.0	95.69	96	80-120	1	20
Nickel	100.0	93.96	94	80-120	1	20
Silver	100.0	96.22	96	80-120	1	20
Zinc	100.0	89.29	89	80-120	0	20

RPD= Relative Percent Difference

171.0

:08418

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126485
Matrix:	Water	Prepared:	06/20/07
Units:	ug/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC393050	5.000	5.600	112	80-120		
BSD	QC393051	5.000	4.950	99	80-120	12	20

RPD= Relative Percent Difference

174.0

00411

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126388
Field ID:	ZZZZZZZZZZ	Sampled:	05/30/07
MSS Lab ID:	195374-002	Received:	05/30/07
Units:	ug/L	Prepared:	06/18/07
Diln Fac:	1.000	Analyzed:	06/18/07

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC392635	Water		5.000	5.040	101	80-120		
BSD	QC392636	Water		5.000	4.840	97	80-120	4	20
MS	QC392638	WET Leachate	2.840	25.00	23.80	84	75-125		
MSD	QC392639	WET Leachate		25.00	26.60	95	75-125	11	20

RPD= Relative Percent Difference

157.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Batch#:	126310
MSS Lab ID:	195303-001	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Type: MS Lab ID: QC392328

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Aluminum	8.377	10,000	9,288	93	75-125	06/21/07
Antimony	0.7133	100.0	90.50	90	75-125	06/21/07
Arsenic	4.076	100.0	97.74	94	75-125	06/21/07
Barium	27.32	100.0	121.5	94	75-125	06/21/07
Beryllium	<0.05328	100.0	91.53	92	75-125	06/21/07
Cadmium	0.04355	100.0	92.72	93	75-125	06/21/07
Calcium	34,970	10,000	45,370	104	75-125	06/21/07
Chromium	11.05	100.0	103.8	93	75-125	06/21/07
Cobalt	0.8754	100.0	92.52	92	75-125	06/21/07
Copper	1.163	100.0	89.88	89	75-125	06/19/07
Iron	19.62	10,000	10,200	102	75-125	06/21/07
Lead	0.1510	100.0	87.20	87	75-125	06/21/07
Magnesium	174,900	10,000	157,800 >LR	-171 NM	75-125	06/21/07
Manganese	86.20	100.0	177.5	91	75-125	06/21/07
Nickel	6.799	100.0	97.95	91	75-125	06/21/07
Potassium	1,740	10,000	11,080	93	75-125	06/21/07
Selenium	0.3780	100.0	94.75	94	75-125	06/21/07
Silver	<0.02741	100.0	88.23	88	75-125	06/21/07
Sodium	344,100	10,000	306,100 >LR	-380 NM	75-125	06/21/07
Thallium	0.1652	50.00	40.76	81	75-125	06/21/07
Vanadium	5.229	100.0	97.48	92	75-125	06/21/07
Zinc	16.25	100.0	95.68	79	75-125	06/21/07

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

139.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Batch#:	126310
MSS Lab ID:	195303-001	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Type: MSD Lab ID: QC392329

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	8,657	86	75-125	7	20	06/21/07
Antimony	100.0	87.09	86	75-125	4	20	06/21/07
Arsenic	100.0	90.71	87	75-125	7	20	06/21/07
Barium	100.0	114.7	87	75-125	6	20	06/21/07
Beryllium	100.0	86.18	86	75-125	6	20	06/21/07
Cadmium	100.0	87.26	87	75-125	6	20	06/21/07
Calcium	10,000	45,300	103	75-125	0	20	06/21/07
Chromium	100.0	96.11	85	75-125	8	20	06/21/07
Cobalt	100.0	85.60	85	75-125	8	20	06/21/07
Copper	100.0	88.53	87	75-125	2	20	06/19/07
Iron	10,000	9,452	94	75-125	8	20	06/21/07
Lead	100.0	81.45	81	75-125	7	20	06/21/07
Magnesium	10,000	150,200 >LR	-247 NM	75-125	NC	20	06/21/07
Manganese	100.0	166.2	80	75-125	7	20	06/21/07
Nickel	100.0	89.56	83	75-125	9	20	06/21/07
Potassium	10,000	10,370	86	75-125	7	20	06/21/07
Selenium	100.0	87.41	87	75-125	8	20	06/21/07
Silver	100.0	82.91	83	75-125	6	20	06/21/07
Sodium	10,000	292,700 >LR	-514 NM	75-125	NC	20	06/21/07
Thallium	50.00	35.19	70 *	75-125	15	20	06/21/07
Vanadium	100.0	91.38	86	75-125	6	20	06/21/07
Zinc	100.0	87.46	71 *	75-125	9	20	06/21/07

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

139.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW19	Batch#:	126311
MSS Lab ID:	195303-018	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Type: MS Lab ID: QC392335

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Aluminum	22.96	10,000	9,376	94	75-125	06/20/07
Antimony	0.2345	100.0	87.53	87	75-125	06/20/07
Arsenic	17.87	100.0	112.8	95	75-125	06/20/07
Barium	55.91	100.0	151.0	95	75-125	06/20/07
Beryllium	0.06693	100.0	93.69	94	75-125	06/20/07
Cadmium	0.1089	100.0	95.05	95	75-125	06/20/07
Calcium	38,810	10,000	47,480	87	75-125	06/19/07
Chromium	2.299	100.0	98.25	96	75-125	06/20/07
Cobalt	0.4810	100.0	96.39	96	75-125	06/20/07
Copper	1.134	100.0	97.32	96	75-125	06/20/07
Iron	15,800	10,000	27,050	113	75-125	06/19/07
Lead	0.1415	100.0	89.45	89	75-125	06/20/07
Magnesium	30,410	10,000	40,470	101	75-125	06/20/07
Manganese	966.5	100.0	1,048 >LR	82 NM	75-125	06/20/07
Nickel	2.248	100.0	98.23	96	75-125	06/20/07
Potassium	8,003	10,000	17,760	98	75-125	06/20/07
Selenium	0.1270	100.0	95.39	95	75-125	06/20/07
Silver	0.06238	100.0	90.39	90	75-125	06/20/07
Sodium	62,690	10,000	72,020	93 NM	75-125	06/20/07
Thallium	0.2067	50.00	41.66	83	75-125	06/20/07
Vanadium	2.502	100.0	97.49	95	75-125	06/20/07
Zinc	20.27	100.0	104.5	84	75-125	06/20/07

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

142.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW19	Batch#:	126311
MSS Lab ID:	195303-018	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07
Units:	ug/L	Prepared:	06/14/07
Diln Fac:	5.000		

Type: MSD Lab ID: QC392336

Analyte	Spiked	Result	%REC		Limits	RPD	Lim	Analyzed
Aluminum	10,000	9,332	93		75-125	0	20	06/20/07
Antimony	100.0	88.06	88		75-125	1	20	06/20/07
Arsenic	100.0	113.2	95		75-125	0	20	06/20/07
Barium	100.0	147.9	92		75-125	2	20	06/20/07
Beryllium	100.0	92.45	92		75-125	1	20	06/20/07
Cadmium	100.0	93.62	94		75-125	2	20	06/20/07
Calcium	10,000	42,950	41	*	75-125	10	20	06/19/07
Chromium	100.0	100.0	98		75-125	2	20	06/20/07
Cobalt	100.0	98.58	98		75-125	2	20	06/20/07
Copper	100.0	105.6	104		75-125	8	20	06/20/07
Iron	10,000	24,610	88		75-125	9	20	06/19/07
Lead	100.0	90.06	90		75-125	1	20	06/20/07
Magnesium	10,000	37,880	75		75-125	7	20	06/20/07
Manganese	100.0	996.3	30	NM	75-125	NC	20	06/20/07
Nickel	100.0	100.4	98		75-125	2	20	06/20/07
Potassium	10,000	16,930	89		75-125	5	20	06/20/07
Selenium	100.0	96.42	96		75-125	1	20	06/20/07
Silver	100.0	89.51	89		75-125	1	20	06/20/07
Sodium	10,000	68,100	54	NM	75-125	6	20	06/20/07
Thallium	50.00	41.88	83		75-125	1	20	06/20/07
Vanadium	100.0	98.90	96		75-125	1	20	06/20/07
Zinc	100.0	102.8	83		75-125	2	20	06/20/07

*= Value outside of QC limits; see narrative
NC= Not Calculated
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

142.0

:86415

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	126468
MSS Lab ID:	195373-006	Sampled:	06/12/07
Matrix:	Filtrate	Received:	06/13/07
Units:	ug/L	Prepared:	06/20/07
Diln Fac:	5.000	Analyzed:	06/21/07

Type: MS Lab ID: QC392986

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	8.700	100.0	100.4	92	75-125
Cadmium	0.1402	100.0	92.00	92	75-125
Chromium	114.0	100.0	203.2	89	75-125
Copper	0.6366	100.0	92.57	92	75-125
Lead	0.2747	100.0	89.59	89	75-125
Nickel	33.17	100.0	124.0	91	75-125
Silver	0.1163	100.0	90.80	91	75-125
Zinc	18.71	100.0	113.2	94	75-125

Type: MSD Lab ID: QC392987

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	104.4	96	75-125	4	20
Cadmium	100.0	93.15	93	75-125	1	20
Chromium	100.0	214.5	101	75-125	5	20
Copper	100.0	94.90	94	75-125	2	20
Lead	100.0	90.20	90	75-125	1	20
Nickel	100.0	128.3	95	75-125	3	20
Silver	100.0	91.92	92	75-125	1	20
Zinc	100.0	108.4	90	75-125	4	20

RPD= Relative Percent Difference

172.0

: 00417

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	126485
Field ID:	WT060807	Sampled:	06/08/07
MSS Lab ID:	195303-026	Received:	06/08/07
Matrix:	Water	Prepared:	06/20/07
Units:	ug/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC393053	0.1400	5.000	5.030	98	75-125		
MSD	QC393054		5.000	5.090	99	75-125	1	20

RPD= Relative Percent Difference

176.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Units:	ug/L
Type:	Serial Dilution	Batch#:	126310
MSS Lab ID:	195303-001	Sampled:	06/07/07
Lab ID:	QC392330	Received:	06/08/07
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	25.00	06/21/07
Antimony	ND	1.000	0.8462 J	2.500	NC	10	25.00	06/21/07
Arsenic	ND	5.000	4.443 J	5.000	NC	10	25.00	06/21/07
Barium	27.32	10.00	28.94	10.00	6	10	25.00	06/21/07
Beryllium	ND	2.000	ND	2.500	NC	10	25.00	06/21/07
Cadmium	ND	1.000	ND	2.500	NC	10	25.00	06/21/07
Calcium	34,970	500.0	23,940	500.0	32 *	10	25.00	06/21/07
Chromium	11.05	10.00	11.46	10.00	4	10	25.00	06/21/07
Cobalt	ND	10.00	0.8427 J	10.00	NC	10	25.00	06/21/07
Copper	1.163	1.000	ND	3.851	NC	10	25.00	06/19/07
Iron	ND	100.0	ND	250.0	NC	10	25.00	06/21/07
Lead	ND	3.000	ND	3.000	NC	10	25.00	06/21/07
Magnesium	174,900	500.0	174,100	2,500	0	10	250.0	06/20/07
Manganese	86.20	10.00	90.21	10.00	5	10	25.00	06/21/07
Nickel	ND	20.00	7.952 J	20.00	NC	10	25.00	06/21/07
Potassium	1,740	500.0	1,855	500.0	7	10	25.00	06/21/07
Selenium	ND	5.000	0.3861 J	5.000	NC	10	25.00	06/21/07
Silver	ND	1.000	ND	2.500	NC	10	25.00	06/21/07
Sodium	344,100	500.0	353,900	2,500	3	10	250.0	06/20/07
Thallium	ND	1.000	0.4468 J	1.250	NC	10	25.00	06/21/07
Vanadium	ND	10.00	5.878 J	10.00	12 *	10	25.00	06/21/07
Zinc	ND	20.00	25.58	20.00	NC	10	25.00	06/21/07

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

140.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW19	Units:	ug/L
Type:	Serial Dilution	Diln Fac:	25.00
MSS Lab ID:	195303-018	Batch#:	126311
Lab ID:	QC392337	Sampled:	06/07/07
Matrix:	Filtrate	Received:	06/08/07

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Analyzed
Aluminum	ND	100.0	19.70 J	250.0	NC	10	06/20/07
Antimony	ND	1.000	0.3890 J	2.500	NC	10	06/20/07
Arsenic	17.87	5.000	18.17	5.000	2	10	06/19/07
Barium	55.91	10.00	65.69	10.00	17 *	10	06/20/07
Beryllium	ND	2.000	ND	2.500	NC	10	06/20/07
Cadmium	ND	1.000	ND	2.500	NC	10	06/20/07
Calcium	38,810	500.0	39,660	500.0	2	10	06/19/07
Chromium	ND	10.00	2.824 J	10.00	NC	10	06/20/07
Cobalt	ND	10.00	0.5541 J	10.00	NC	10	06/20/07
Copper	1.134	1.000	7.628	2.500	NC	10	06/20/07
Iron	15,800	100.0	16,270	250.0	3	10	06/20/07
Lead	ND	3.000	ND	3.000	NC	10	06/20/07
Magnesium	30,410	500.0	30,850	500.0	1	10	06/19/07
Manganese	966.5	10.00	957.7	10.00	1	10	06/19/07
Nickel	ND	20.00	2.958 J	20.00	NC	10	06/20/07
Potassium	8,003	500.0	7,929	500.0	1	10	06/19/07
Selenium	ND	5.000	ND	5.000	NC	10	06/20/07
Silver	ND	1.000	ND	2.500	NC	10	06/20/07
Sodium	62,690	500.0	63,120	500.0	1	10	06/19/07
Thallium	ND	1.000	0.5425 J	1.250	NC	10	06/20/07
Vanadium	ND	10.00	2.961 J	10.00	NC	10	06/20/07
Zinc	20.27	20.00	20.28	20.00	NC	10	06/20/07

*= Value outside of QC limits; see narrative
J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

143.0

: 000128

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
Type:	Serial Dilution	Batch#:	126468
MSS Lab ID:	195373-006	Sampled:	06/12/07
Lab ID:	QC392988	Received:	06/13/07
Matrix:	Filtrate	Analyzed:	06/21/07
Units:	ug/L		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim
Arsenic	8.700	5.000	9.093	5.000	5	10
Cadmium	ND	1.000	ND	2.500	NC	10
Chromium	114.0	10.00	118.4	10.00	4	10
Copper	ND	1.000	ND	3.851	NC	10
Lead	ND	3.000	0.4075 J	3.000	NC	10
Nickel	33.17	20.00	34.57	20.00	4	10
Silver	ND	1.000	ND	2.500	NC	10
Zinc	ND	20.00	41.35	20.00	NC	10

J= Estimated value
NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

173.0

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	126388
MSS Lab ID:	195374-002	Sampled:	05/30/07
Lab ID:	QC392637	Received:	05/30/07
Matrix:	WET Leachate	Analyzed:	06/18/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
2.840	1.000	4.875 J	5.000	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

158.0

: 080422

Curtis & Tompkins, Ltd.

Batch QC Report

Metals Analytical Report

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	WT060807	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	126485
MSS Lab ID:	195303-026	Sampled:	06/08/07
Lab ID:	QC393052	Received:	06/08/07
Matrix:	Water	Analyzed:	06/20/07

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	5.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

175.0

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67244712027
File : f18w0027
IDF : 5.0
Lab ID : 195303-018
Matrix : Filtrate
Batch : 126311
Time : 19-JUN-2007 01:11
Cal : 67244712001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67244712031
File : f18w0031
IDF : 5.0
Lab ID : QC392338
Matrix : Filtrate
Batch : 126311
Time : 19-JUN-2007 01:35
Cal : 67244712001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	3.954	A	10000	9048	A	90	75-125	u
Arsenic	3.696	E	100.0	97.54	E	94	75-125	u
Barium	11.95	A	100.0	105.6	A	94	75-125	u
Beryllium	ND	A	100.0	100.8	A	101	75-125	u
Cadmium	0.02014	A	100.0	94.08	A	94	75-125	u
Calcium	7762	A	10000	16320	A	86	75-125	u
Chromium	0.4840	E	100.0	95.80	E	95	75-125	<ab+ **b***
Cobalt	0.1025	E	100.0	95.84	E	96	75-125	u
Copper	0.2268	E	100.0	95.96	E	96	75-125	u
Iron	3160	H	10000	13280	H	101	75-125	u
Lead	0.03188	A	100.0	97.54	A	98	75-125	u
Magnesium	6082	A	10000	14750	A	87	75-125	u
Manganese	193.3	E	100.0	274.0 >LR	E	81	75-125	>LR **b***
Nickel	0.3940	E	100.0	96.68	E	96	75-125	u
Potassium	1601	A	10000	10710	A	91	75-125	u
Selenium	ND	H	100.0	110.7	H	111	75-125	>c+ **b***
Silver	0.01016	A	100.0	93.68	A	94	75-125	u
Sodium	12540	E	10000	21300 >LR	E	88	75-125	>LR **b***
Zinc	6.060	E	100.0	97.68	E	92	75-125	u

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	467644	415423	-11.17
Scandium	A	1143918	1185880	3.67
Scandium	E	35628	35040	-1.65
Scandium	H	60552	30303	-49.96
Germanium	H	13449	6001	-55.38
Germanium	E	21027	20485	-2.58
Indium	A	1526077	1453645	-4.75
Terbium	A	1978759	1948721	-1.52

=high bias <=opening >=closing >LR=overrange ab=ICSAB b=noncompliant c=CCV u=use

67244712031

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type	: MSS	Type	: PDS
Inst	: MET06	Inst	: MET06
Seqnum	: 67244712067	Seqnum	: 67244712071
File	: f18w0067	File	: f18w0071
IDF	: 5.0	IDF	: 5.0
Lab ID	: 195303-001	Lab ID	: QC392331
Matrix	: Filtrate	Matrix	: Filtrate
Batch	: 126310	Batch	: 126310
Time	: 19-JUN-2007 05:12	Time	: 19-JUN-2007 05:36
Cal	: 67244712001	Cal	: 67244712001
Units	: ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X), S6223 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	6.016	A	10000	8776	A	88	75-125	u
Antimony	0.1923	A	100.0	104.4	A	104	75-125	u
Arsenic	0.9470	E	100.0	92.88	E	92	75-125	u
Barium	5.472	A	100.0	96.94	A	91	75-125	u
Beryllium	0.05064	A	100.0	94.22	A	94	75-125	u
Cadmium	0.04684	A	100.0	94.04	A	94	75-125	u
Calcium	7476	A	10000	16240	A	88	75-125	u
Cobalt	0.2198	E	100.0	93.74	E	94	75-125	u
Copper	0.2326	E	100.0	91.28	E	91	75-125	u
Lead	0.07156	A	100.0	98.26	A	98	75-125	u
Manganese	17.59	E	100.0	112.6	E	95	75-125	u
Molybdenum	0.3644	A	100.0	100.1	A	100	75-125	u
Nickel	1.366	E	100.0	94.00	E	93	75-125	u
Potassium	321.2	A	10000	9170	A	88	75-125	u
Silver	0.04456	A	100.0	90.76	A	91	75-125	u
Vanadium	1.650	E	100.0	96.46	E	95	75-125	<ab+ <ib >ib **b***
Zinc	2.554	E	100.0	92.72	E	90	75-125	u

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	467644	382698	-18.16
Scandium	A	1143918	991054	-13.36
Scandium	E	35628	28213	-20.81
Germanium	E	21027	16669	-20.73
Indium	A	1526077	1180115	-22.67
Yttrium	A	1472223	1219187	-17.19
Terbium	A	1978759	1669042	-15.65

+=high bias <=opening >=closing ab=ICSAB b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET16
Seqnum : 897247417029
File : f20t0029
IDF : 5.0
Lab ID : QC392338
Matrix : Filtrate
Batch : 126311
Time : 20-JUN-2007 22:42
Cal : 897247417001
MSS : 195303-018
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67244712027	3.954	A	10000	9284	A	93	75-125	
Antimony	897247417025	0.04690	A	100.0	92.66	A	93	75-125	u
Arsenic	67244712027	3.696	E	100.0	97.58	E	94	75-125	
Barium	897247417025	11.18	A	100.0	104.4	A	93	75-125	
Beryllium	897247417025	0.01339	A	100.0	93.08	A	93	75-125	
Cadmium	67244712027	0.02014	A	100.0	94.66	A	95	75-125	
Calcium	67244712027	7762	A	10000	16360	A	86	75-125	
Chromium	67244712027	0.4840	E	100.0	95.34	E	95	75-125	u
Cobalt	897247417025	0.09620	E	100.0	96.06	E	96	75-125	
Copper	67244712027	0.2268	E	100.0	96.80	E	97	75-125	
Iron	67244712027	3160	H	10000	12280	H	91	75-125	
Lead	67244712027	0.03188	A	100.0	87.24	A	87	75-125	
Magnesium	67244712027	6082	A	10000	15120	A	90	75-125	
Manganese	67244712027	193.3	E	100.0	274.8 >LR	E	82	75-125	>LR **b***
Molybdenum	897247417025	0.1132	A	100.0	93.40	A	93	75-125	u
Nickel	67244712027	0.3940	E	100.0	96.56	E	96	75-125	
Potassium	67244712027	1601	A	10000	11010	A	94	75-125	
Selenium	897247417025	0.02540	H	100.0	95.84	H	96	75-125	u
Silver	897247417025	0.01248	A	100.0	90.00	A	90	75-125	
Sodium	67244712027	12540	E	10000	21100 >LR	E	86	75-125	>LR **b***
Thallium	897247417025	0.04134	A	50.00	48.36	A	97	75-125	u
Vanadium	897247417025	0.5004	E	100.0	95.24	E	95	75-125	u
Zinc	67244712027	6.060	E	100.0	98.72	E	93	75-125	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1689883	1576354	-6.72
Scandium	A	3066425	3042321	-0.79
Scandium	E	79053	79150	0.12
Scandium	H	1743580	1697848	-2.62
Germanium	H	433599	433080	-0.12
Germanium	E	69550	69260	-0.42
Indium	A	5412757	5250032	-3.01
Bismuth	A	5521002	5122800	-7.21
Yttrium	A	5007553	4962774	-0.89
Terbium	A	8478244	8336276	-1.67

>LR=overrange b=noncompliant u=use

897247417029

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67247468023
File : f20u0023
IDF : 50.0
Lab ID : 195303-001
Matrix : Filtrate
Batch : 126310
Time : 20-JUN-2007 22:47
Cal : 67247468001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67247468027
File : f20u0027
IDF : 50.0
Lab ID : QC392331
Matrix : Filtrate
Batch : 126310
Time : 20-JUN-2007 23:11
Cal : 67247468001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Arsenic	0.08832	E	100.0	101.9	E	102	75-125	
Barium	0.5984	A	100.0	103.0	A	102	75-125	
Beryllium	ND	A	100.0	106.7	A	107	75-125	
Cadmium	0.01409	A	100.0	100.8	A	101	75-125	
Calcium	606.6	A	10000	10780	A	102	75-125	
Chromium	0.2582	E	100.0	103.2	E	103	75-125	
Cobalt	0.02670	E	100.0	103.8	E	104	75-125	
Copper	ND	E	100.0	102.2	E	102	75-125	
Iron	15.98	H	10000	10240	H	102	75-125	
Lead	ND	A	100.0	102.1	A	102	75-125	
Magnesium	3498	A	10000	14130	A	106	75-125	u
Manganese	1.983	E	100.0	104.3	E	102	75-125	
Nickel	0.08738	E	100.0	104.4	E	104	75-125	
Potassium	51.32	A	10000	10480	A	104	75-125	
Selenium	ND	H	100.0	102.8	H	103	75-125	
Silver	0.007020	A	100.0	102.3	A	102	75-125	
Sodium	6882	E	10000	17370	E	105	75-125	u
Thallium	ND	A	50.00	44.96	A	90	75-125	
Vanadium	0.1282	E	100.0	103.1	E	103	75-125	
Zinc	0.4400	E	100.0	101.2	E	101	75-125	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1883591	1835344	-2.56
Scandium	A	3243592	3403926	4.94
Scandium	E	52314	52181	-0.25
Scandium	H	809463	838642	3.60
Germanium	H	196987	200462	1.76
Germanium	E	33875	33964	0.26
Indium	A	4193528	4295614	2.43
Bismuth	A	2978911	2877859	-3.39
Terbium	A	5092110	5270748	3.51

MISSING READINGS: **AL**

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67247468059
File : f20u0059
IDF : 10.0
Lab ID : 195303-018
Matrix : Filtrate
Batch : 126311
Time : 21-JUN-2007 02:25
Cal : 67247468001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67247468060
File : f20u0060
IDF : 10.0
Lab ID : QC392338
Matrix : Filtrate
Batch : 126311
Time : 21-JUN-2007 02:31
Cal : 67247468001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	1.759	A	10000	10110	A	101	75-125	
Arsenic	1.878	E	100.0	100.8	E	99	75-125	
Barium	6.219	A	100.0	106.9	A	101	75-125	
Beryllium	ND	A	100.0	106.2	A	106	75-125	
Cadmium	ND	A	100.0	99.84	A	100	75-125	
Calcium	3216	A	10000	13200	A	100	75-125	
Chromium	0.2415	E	100.0	101.8	E	102	75-125	
Cobalt	0.04426	E	100.0	102.5	E	102	75-125	
Copper	ND	E	100.0	100.4	E	100	75-125	
Iron	1484	H	10000	11710	H	102	75-125	
Lead	ND	A	100.0	99.83	A	100	75-125	
Magnesium	3264	A	10000	13270	A	100	75-125	
Manganese	99.74	E	100.0	197.9	E	98	75-125	u
Nickel	0.1344	E	100.0	102.4	E	102	75-125	
Potassium	855.5	A	10000	11160	A	103	75-125	
Selenium	ND	H	100.0	100.8	H	101	75-125	
Silver	ND	A	100.0	102.0	A	102	75-125	
Sodium	6248	E	10000	16120	E	99	75-125	u
Thallium	ND	A	50.00	46.10	A	92	75-125	
Vanadium	0.2427	E	100.0	102.1	E	102	75-125	
Zinc	2.194	E	100.0	101.1	E	99	75-125	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1883591	1870307	-0.71
Scandium	A	3243592	3495903	7.78
Scandium	E	52314	53106	1.51
Scandium	H	809463	849553	4.95
Germanium	H	196987	204873	4.00
Germanium	E	33875	34462	1.73
Indium	A	4193528	4341409	3.53
Bismuth	A	2978911	2878662	-3.37
Terbium	A	5092110	5361082	5.28

u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
Inst : MET16
Seqnum : 897247417080
File : f20t0080
IDF : 5.0
Lab ID : QC392331
Matrix : Filtrate
Batch : 126310
Time : 21-JUN-2007 04:01
Cal : 897247417001
MSS : 195303-001
Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S5054 (100X), S5055 (100X), S6035

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	67244712067	6.016	A	10000	9298	A	93	75-125	
Antimony	67244712067	0.1923	A	100.0	97.08	A	97	75-125	
Arsenic	67244712067	0.9470	E	100.0	96.32	E	95	75-125	
Barium	67244712067	5.472	A	100.0	102.9	A	97	75-125	
Beryllium	67244712067	0.05064	A	100.0	94.86	A	95	75-125	
Cadmium	67244712067	0.04684	A	100.0	95.40	A	95	75-125	
Calcium	67244712067	7476	A	10000	17930	A	105	75-125	
Chromium	897247417076	2.210	E	100.0	95.86	E	94	75-125	u
Cobalt	67244712067	0.2198	E	100.0	93.56	E	93	75-125	
Copper	67244712067	0.2326	E	100.0	93.92	E	94	75-125	>ib **b***
Iron	897247417076	3.924	H	10000	10250	H	102	75-125	u
Lead	67244712067	0.07156	A	100.0	85.20	A	85	75-125	
Manganese	67244712067	17.59	E	100.0	111.5	E	94	75-125	
Molybdenum	897247417076	0.2740	A	100.0	94.16	A	94	75-125	u
Nickel	67244712067	1.366	E	100.0	94.06	E	93	75-125	
Potassium	67244712067	321.2	A	10000	9892	A	96	75-125	
Selenium	897247417076	0.07560	H	100.0	95.10	H	95	75-125	u
Silver	67244712067	0.04456	A	100.0	89.86	A	90	75-125	
Thallium	897247417076	0.03304	A	50.00	43.92	A	88	75-125	u
Vanadium	67244712067	1.650	E	100.0	95.46	E	94	75-125	u
Zinc	67244712067	2.554	E	100.0	96.20	E	94	75-125	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1689883	1722232	1.91
Scandium	A	3066425	3534258	15.26
Scandium	E	79053	86619	9.57
Scandium	H	1743580	1689799	-3.08
Germanium	H	433599	458396	5.72
Germanium	E	69550	74674	7.37
Indium	A	5412757	5713911	5.56
Bismuth	A	5521002	5235818	-5.17
Yttrium	A	5007553	5572519	11.28
Terbium	A	8478244	8904153	5.02

>=closing b=noncompliant ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67248763027
File : f21s0027
IDF : 5.0
Lab ID : 195373-006
Matrix : Filtrate
Batch : 126468
Time : 21-JUN-2007 20:48
Cal : 67248763001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67248763031
File : f21s0031
IDF : 5.0
Lab ID : QC392989
Matrix : Filtrate
Batch : 126468
Time : 21-JUN-2007 21:12
Cal : 67248763001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X), S6223 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	8.418	A	10000	9080	A	91	75-125	u
Antimony	0.1746	A	100.0	93.48	A	93	75-125	u
Arsenic	1.740	E	100.0	101.7	E	100	75-125	u
Barium	114.2	A	100.0	206.6 >LR	A	92	75-125	>LR **b***
Beryllium	0.02358	A	100.0	97.52	A	97	75-125	u
Cadmium	0.02804	A	100.0	90.88	A	91	75-125	u
Chromium	22.80	E	100.0	123.6	E	101	75-125	u
Cobalt	0.3578	E	100.0	97.90	E	98	75-125	u
Copper	0.1273	E	100.0	97.48	E	97	75-125	u
Iron	5104	H	10000	14770	H	97	75-125	u
Lead	0.05494	A	100.0	89.32	A	89	75-125	u
Molybdenum	0.4336	A	100.0	92.92	A	92	75-125	u
Nickel	6.634	E	100.0	104.3	E	98	75-125	u
Potassium	17140	A	10000	25980 >LR	A	88	75-125	>LR **b***
Selenium	0.08638	H	100.0	97.72	H	98	75-125	u
Silver	0.02326	A	100.0	91.86	A	92	75-125	u
Thallium	0.02574	A	50.00	47.02	A	94	75-125	u
Vanadium	5.460	E	100.0	105.5	E	100	75-125	u
Zinc	3.742	E	100.0	100.5	E	97	75-125	u

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2088532	2015165	-3.51
Scandium	A	3928048	4379705	11.50
Scandium	E	147335	144559	-1.88
Scandium	H	1465758	1640487	11.92
Germanium	H	383721	397761	3.66
Germanium	E	84935	81279	-4.30
Indium	A	5706536	5801562	1.67
Bismuth	A	4310286	4091892	-5.07
Yttrium	A	5746939	6245083	8.67
Terbium	A	7824256	8200936	4.81

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
Inst : MET06
Seqnum : 67248763069
File : f21s0069
IDF : 50.0
Lab ID : 195373-006
Matrix : Filtrate
Batch : 126468
Time : 22-JUN-2007 01:00
Cal : 67248763001
Units : ug/L

Type : PDS
Inst : MET06
Seqnum : 67248763081
File : f21s0081
IDF : 50.0
Lab ID : QC392989
Matrix : Filtrate
Batch : 126468
Time : 22-JUN-2007 02:12
Cal : 67248763001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S6222 (100X), S6223 (100X), S6035

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	1.473	A	10000	9674	A	97	75-125	
Antimony	0.01628	A	100.0	94.20	A	94	75-125	
Barium	11.44	A	100.0	108.2	A	97	75-125	u
Beryllium	ND	A	100.0	95.04	A	95	75-125	
Cadmium	ND	A	100.0	95.68	A	96	75-125	
Calcium	6260	A	10000	16160	A	99	75-125	u
Chromium	2.276	E	100.0	99.54	E	97	75-125	
Cobalt	0.02972	E	100.0	97.44	E	97	75-125	
Copper	ND	E	100.0	95.60	E	96	75-125	
Iron	523.0	H	10000	10080	H	96	75-125	u
Lead	ND	A	100.0	96.10	A	96	75-125	
Magnesium	2466	A	10000	12060	A	96	75-125	u
Manganese	25.88	E	100.0	123.0	E	97	75-125	u
Molybdenum	0.03882	A	100.0	95.58	A	96	75-125	
Nickel	0.7124	E	100.0	98.74	E	98	75-125	
Potassium	1773	A	10000	11640	A	99	75-125	u
Selenium	ND	H	100.0	94.44	H	94	75-125	
Silver	ND	A	100.0	98.06	A	98	75-125	
Thallium	ND	A	50.00	47.28	A	95	75-125	
Vanadium	0.7312	E	100.0	98.06	E	97	75-125	
Zinc	0.5906	E	100.0	95.86	E	95	75-125	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	2088532	1966073	-5.86
Scandium	A	3928048	3903216	-0.63
Scandium	E	147335	139063	-5.61
Scandium	H	1465758	1545246	5.42
Germanium	H	383721	387809	1.07
Germanium	E	84935	80515	-5.20
Indium	A	5706536	5431957	-4.81
Bismuth	A	4310286	3934688	-8.71
Yttrium	A	5746939	5706388	-0.71
Terbium	A	7824256	7509433	-4.02

u=use

67248763081

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

ıst : MET06
ılnum : 67244712001
ıits : ug/L

Date : 18-JUN-2007 22:54
X Axis : R

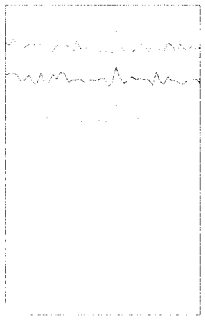
Reviewer : ---

vel	File	Seqnum	Sample ID	Analyzed	Stds
1	f18w0005	67244712005		18-JUN-2007 23:00	S6414
2	f18w0006	67244712006		18-JUN-2007 23:06	S6416
3	f18w0007	67244712007		18-JUN-2007 23:12	S6417
4	f18w0008	67244712008		18-JUN-2007 23:18	S6418
5	f18w0009	67244712009		18-JUN-2007 23:24	S6412
6	f18w0010	67244712010		18-JUN-2007 23:30	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
uminum	A	0.5799	0.5432	0.4827	0.4594	0.4612	0.4960	BLNK	-0.5464	2.04517		0.5037	0.999	0.995	
timony	A	0.2439	0.2081	0.2091	0.2019	0.2005	0.2070	BLNK	-0.0180	4.86148		0.2118	1.000	0.995	
rium	A	0.0976	0.0709	0.0696	0.0680	0.0672	0.0714	BLNK	-0.0167	14.1797		0.0741	0.999	0.995	
ryllium	A	0.3262	0.3380	0.3448	0.3441	0.3406	0.3564	BLNK	-0.0017	2.83103		0.3417	1.000	0.995	
dmium	A	0.0648	0.0644	0.0631	0.0618	0.0620	0.0659	BLNK	-0.0078	15.3501		0.0637	0.999	0.995	
lcium	A	0.0901	0.0322	0.0239	0.0177	0.0165	0.0176	BLNK	-40.171	57.6132		0.0330	0.999	0.995	
ad	A	0.6264	0.5611	0.5555	0.5271	0.5077	0.5429	BLNK	-0.0149	1.86629		0.5535	0.999	0.995	
gnesium	A	0.4494	0.4252	0.3809	0.3628	0.3590	0.3859	BLNK	-0.5803	2.62858		0.3939	0.999	0.995	
lybdenum	A	0.2517	0.1776	0.1736	0.1667	0.1661	0.1674	BLNK	-0.0409	5.98292		0.1839	1.000	0.995	
tassium	A	6.5235	1.7952	1.1731	0.6331	0.5756	0.6141	BLNK	-97.578	1.65881		1.8858	0.999	0.995	
lver	A	0.2984	0.2849	0.2896	0.2892	0.2866	0.3043	BLNK	-0.0069	3.32580		0.2921	0.999	0.995	
allium	A	0.8044	0.6718	0.6711	0.6706	0.7007	0.7913	BLNK	-0.0071	1.29380		0.7183	0.997	0.995	
senic	E	0.7132	0.4768	0.5194	0.4781	0.4816	0.5093	BLNK	-0.0546	1.98585		0.5297	0.999	0.995	
romium	E	4.7870	3.0959	2.9947	2.6467	2.6478	2.8226	BLNK	-0.0739	0.35892		3.1658	0.999	0.995	
balt	E	4.1825	4.3695	4.3833	4.2725	4.2568	4.4887	BLNK	-0.0027	0.22513		4.3256	0.999	0.995	
pper	E	17.160	12.708	6.6023	5.6315	5.4320	5.6197	BLNK	-0.2073	0.17937		8.8589	1.000	0.995	
nganese	E	1.4845	1.4976	1.4205	1.3589	1.3562	1.4411	BLNK	-0.0098	0.70230		1.4265	0.999	0.995	
ckel	E	3.0767	1.5969	1.4003	1.2001	1.1539	1.2085	BLNK	-0.1655	0.83585		1.6061	0.999	0.995	
dium	E	3.0091	1.0463	0.7684	0.5402	0.4749	0.5090	BLNK	-52.940	1.99752		1.0580	0.999	0.995	
nadium	E	4.9848	2.4595	2.3099	2.0142	2.0065	2.1561	BLNK	-0.1101	0.47070		2.6552	0.999	0.995	
nc	E	17.372	4.0923	2.1200	0.9247	0.7887	0.8049	BLNK	-1.8957	1.26170		4.3504	1.000	0.995	
on	H	1.0731	0.8751	0.8731	0.8642	0.8120	0.8578	BLNK	-1.2489	1.17842		0.8925	0.999	0.995	
enium	H	0.2117	0.1624	0.1588	0.1741	0.1771	0.1856	BLNK	-0.0179	5.43881		0.1783	0.999	0.995	

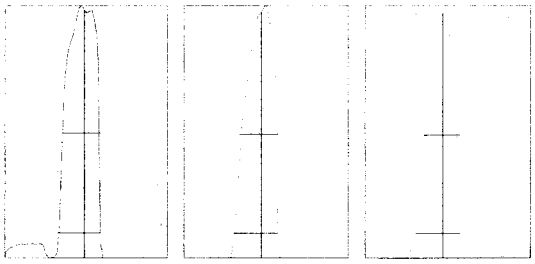
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	10,000	7470.0	7608.9	1.73	0.40
89	20,000	17250.0	17286.9	1.61	0.80
205	20,000	12607.0	12775.2	1.93	2.20

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.981%
Doubly Charged: 70/140 1.282%



m/z:	7	89	205
Height:	7,551	17,032	12,671
Axis:	7.00	88.95	204.95
W-50%:	0.70	0.70	0.65
W-10%:	0.800	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.74	V
Smpl Depth	7	mm
Torch-H	0.8	mm
Torch-V	0.3	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-130	V
Omega Bias-ce	-26	V
Omega Lens-ce	-0.6	V
Cell Entrance	-50	V
QP Focus	6	V
Cell Exit	-50	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	136	
AMU Offset	124	
Axis Gain	1.0008	
Axis Offset	-0.04	
QP Bias	-6	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1850	V
Pulse HV	1570	V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

			m/z	Count(Mean)	RSD%
He Gas:	5	mL/min	51	6.9	43.82
Optional Gas:	---	%	59	2309.0	6.10
QP Focus:	-10	V	89	1897.0	6.28
Cell Exit:	-58	V			
OctP Bias:	-18	V			
QP Bias:	-16	V			

Integration Time: 0.1000sec

Tune File : h2.u

			m/z	Count(Mean)	RSD%
H2 Gas:	4	mL/min	59	755.3	6.60
Optional Gas:	---	%	78	0.1	399.83
QP Focus:	-8	V	89	4582.8	4.64
Cell Exit:	-30	V			
OctP Bias:	-18	V			
QP Bias:	-16	V			

Integration Time: 0.1000sec

Generated : Jun 18, 2007 17:37:51
Printed : Jun 18, 2007 17:39:29

P/A Factor Tuning Report

Acquired:Jun 18 2007 05:54 pm

Mass[amu]	Element	P/A Factor
6	Li	0.074124
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.102707
45	Sc	0.103360
51	V	0.106717
52	Cr	0.110224
55	Mn	0.113405
56	Fe	Sensitivity too high
59	Co	0.117007
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.120445
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.131655
111	Cd	Sensitivity too low
115	In	0.132576
118	(In)	0.131681
121	Sb	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.135183
205	Tl	0.142711
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.143551
209	Bi	0.144934

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1850 V
Pulse HV: 1570 V

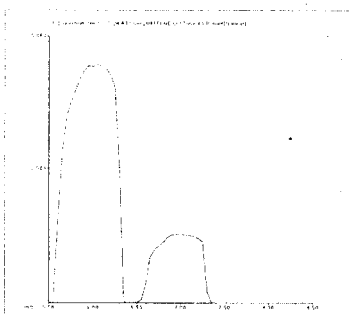
: 88435

6020 QC Tune Report

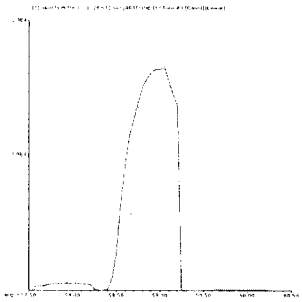
Data File: C:\ICPCHEM\1\DATA\07F18w00.B\001TUNE.D
Date Acquired: Jun 18 2007 10:32 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

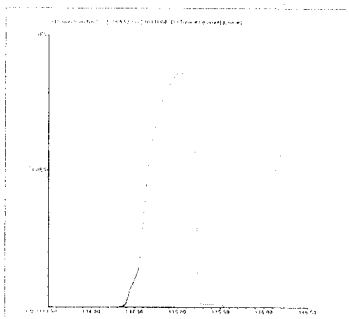
Element	Actual	Required	Flag
7 Li	1.29	5.00	
59 Co	0.42	5.00	
115 In	0.43	5.00	
205 Tl	0.92	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 58.95
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



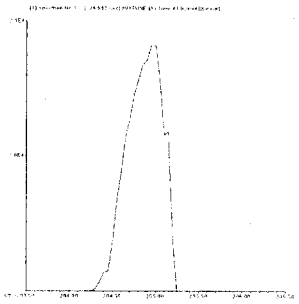
115 In

Mass Calib.

Actual:	114.95	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.90	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	

00137

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004C
Date Acquired: Jun 18 2007 10:52 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 18 2007 10:56 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	467643.91	P	3840.00	0.82
7	(Li)		P		
9	Be	5.56	P	1.93	34.65
23	Na	18879.71	P	320.70	1.70
24	Mg	5051.13	P	70.99	1.41
27	Al	6112.69	P	61.54	1.01
39	K	1345782.00	A	10590.00	0.79
44	Ca	15951.89	P	418.90	2.63
45	Sc	60551.73	P	441.30	0.73
45	Sc	35628.14	P	558.80	1.57
45	Sc	1143918.00	A	6745.00	0.59
51	V	166.67	P	5.77	3.46
52	Cr	146.67	P	2.22	1.52
55	Mn	10.00	P	3.33	33.33
56	Fe	1283.42	P	36.84	2.87
59	Co	8.52	P	5.01	58.81
60	Ni	141.11	P	9.69	6.86
63	Cu	485.94	P	38.50	7.92
65	Cu	243.34	P	8.39	3.45
66	Zn	631.87	P	17.72	2.80
72	Ge	13449.19	P	198.70	1.48
72	Ge	21027.08	P	49.26	0.23
75	As	11.56	P	2.04	17.63
78	Se	0.89	P	0.38	43.30
89	Y	1472223.00	A	9947.00	0.68
98	Mo	201.12	P	38.64	19.21
107	Ag	63.34	P	6.67	10.53
111	Cd	15.56	P	1.93	12.37
115	In	1526077.00	A	10130.00	0.66
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	113.34	P	26.67	23.53
137	Ba	46.67	P	18.56	39.77
159	Tb	1978759.00	A	15170.00	0.77
205	Tl	130.01	P	23.33	17.95
208	Pb	316.68	P	46.67	14.74
209	Bi	1176869.00	P	7218.00	0.61

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 18 2007 10:58 pm
Operator:
Sample Name: s6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 18 2007 10:56 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	466613.09	P	2939.00	0.63
7 (Li)		P		
9 Be	304.46	P	11.71	3.85
23 Na	21849.50	P	110.10	0.50
24 Mg	106427.90	P	925.30	0.87
27 Al	137325.20	P	758.90	0.55
39 K	1544907.00	A	7877.00	0.51
44 Ca	21335.77	P	291.70	1.37
45 Sc	62249.01	P	744.40	1.20
45 Sc	36307.95	P	409.90	1.13
45 Sc	1184155.00	A	11710.00	0.99
51 V	361.86	P	13.71	3.79
52 Cr	347.42	P	26.81	7.72
55 Mn	107.78	P	20.40	18.93
56 Fe	13363.70	P	994.40	7.44
59 Co	303.71	P	10.91	3.59
60 Ni	223.34	P	8.68	3.89
63 Cu	733.36	P	45.72	6.23
65 Cu	344.08	P	26.35	7.66
66 Zn	741.88	P	9.45	1.27
72 Ge	13632.72	P	186.30	1.37
72 Ge	21358.36	P	318.60	1.49
75 As	30.44	P	5.59	18.36
78 Se	5.78	P	1.02	17.62
89 Y	1527559.00	A	3079.00	0.20
98 Mo	768.94	P	59.85	7.78
99 (Ru)	11.11	P	5.09	45.83
107 Ag	936.74	P	43.72	4.67
111 Cd	203.34	P	29.63	14.57
115 In	1569557.00	A	6528.00	0.42
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	765.61	P	76.92	10.05
137 Ba	396.69	P	64.30	16.21
159 Tb	2031279.00	A	6844.00	0.34
205 Tl	962.30	P	61.95	6.44
208 Pb	2544.65	P	40.06	1.57
209 Bi	1196170.00	P	4920.00	0.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	466613.06	0.63	467643.91	99.8	80 - 120	
45 Sc	62249.01	1.20	60551.73	102.8	80 - 120	
45 Sc	36307.95	1.13	35628.14	101.9	80 - 120	
45 Sc	1184154.60	0.99	1143918.10	103.5	80 - 120	
72 Ge	13632.72	1.37	13449.19	101.4	80 - 120	
72 Ge	21358.37	1.49	21027.08	101.6	80 - 120	
89 Y	1527559.50	0.20	1472223.00	103.8	80 - 120	
115 In	1569557.30	0.42	1526077.40	102.8	80 - 120	
159 Tb	2031279.40	0.34	1978759.40	102.7	80 - 120	
209 Bi	1196170.10	0.41	1176869.00	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 18 2007 11:04 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 18 2007 11:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	467778.81	P	3016.00	0.64
7 (Li)		P		
9 Be	1581.26	P	51.26	3.24
23 Na	38822.43	P	905.40	2.33
24 Mg	507226.50	P	1395.00	0.28
27 Al	647891.88	P	1374.00	0.21
39 K	2141283.00	A	8591.00	0.40
44 Ca	38390.85	P	365.90	0.95
45 Sc	61605.96	P	438.60	0.71
45 Sc	37191.27	P	2610.00	7.02
45 Sc	1192824.00	A	6265.00	0.53
51 V	913.00	P	41.04	4.50
52 Cr	1148.21	P	24.66	2.15
55 Mn	554.46	P	15.56	2.81
56 Fe	53912.09	P	204.10	0.38
59 Co	1619.74	P	12.83	0.79
60 Ni	593.72	P	39.01	6.57
63 Cu	2759.94	P	75.26	2.73
65 Cu	1352.31	P	26.97	1.99
66 Zn	890.04	P	47.02	5.28
72 Ge	13547.46	P	96.10	0.71
72 Ge	21757.24	P	1339.00	6.15
75 As	103.56	P	4.73	4.57
78 Se	22.00	P	1.76	8.02
89 Y	1522525.00	A	12930.00	0.85
98 Mo	2703.70	P	17.32	0.64
99 (Ru)	11.11	P	1.93	17.32
107 Ag	4506.47	P	91.59	2.03
111 Cd	1018.97	P	66.20	6.50
115 In	1582051.00	A	12220.00	0.77
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	3291.64	P	171.10	5.20
137 Ba	1445.69	P	64.76	4.48
159 Tb	2039692.00	A	6556.00	0.32
205 Tl	4006.34	P	72.47	1.81
208 Pb	11444.70	P	316.10	2.76
209 Bi	1192770.00	P	9474.00	0.79

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	467778.84	0.64	467643.91	100.0	80 - 120	
45 Sc	61605.96	0.71	60551.73	101.7	80 - 120	
45 Sc	37191.27	7.02	35628.14	104.4	80 - 120	
45 Sc	1192824.00	0.53	1143918.10	104.3	80 - 120	
72 Ge	13547.46	0.71	13449.19	100.7	80 - 120	
72 Ge	21757.25	6.15	21027.08	103.5	80 - 120	
89 Y	1522525.30	0.85	1472223.00	103.4	80 - 120	
115 In	1582050.90	0.77	1526077.40	103.7	80 - 120	
159 Tb	2039692.30	0.32	1978759.40	103.1	80 - 120	
209 Bi	1192769.90	0.79	1176869.00	101.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 18 2007 11:10 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 18 2007 11:08 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	459652.50	P	5139.00	1.12
7 (Li)		P		
9 Be	3170.46	P	86.89	2.74
23 Na	56767.75	P	1013.00	1.78
24 Mg	912956.81	A	7492.00	0.82
27 Al	1156872.00	A	5093.00	0.44
39 K	2811590.00	A	18340.00	0.65
44 Ca	57258.85	P	603.10	1.05
45 Sc	60358.71	P	562.90	0.93
45 Sc	36935.12	P	166.60	0.45
45 Sc	1198339.00	A	4077.00	0.34
51 V	1706.42	P	36.59	2.14
52 Cr	2212.05	P	79.46	3.59
55 Mn	1049.31	P	34.52	3.29
56 Fe	105394.30	P	853.60	0.81
59 Co	3238.19	P	111.70	3.45
60 Ni	1034.50	P	37.34	3.61
63 Cu	2899.97	P	51.76	1.78
65 Cu	1423.80	P	44.37	3.12
66 Zn	931.15	P	23.41	2.51
72 Ge	13161.13	P	196.40	1.49
72 Ge	21966.32	P	347.80	1.58
75 As	228.23	P	9.44	4.13
78 Se	41.78	P	1.54	3.69
89 Y	1536798.00	A	3131.00	0.20
98 Mo	5336.79	P	184.10	3.45
99 (Ru)	7.78	P	5.09	65.47
107 Ag	9150.10	P	312.30	3.41
111 Cd	1993.56	P	56.67	2.84
115 In	1579973.00	A	4698.00	0.30
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	6608.52	P	40.98	0.62
137 Ba	2820.41	P	161.90	5.74
159 Tb	2026721.00	A	3555.00	0.18
205 Tl	8016.17	P	72.18	0.90
208 Pb	22518.70	P	131.40	0.58
209 Bi	1194605.00	P	12420.00	1.04

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	459652.53	1.12	467643.91	98.3	80 - 120	
45 Sc	60358.71	0.93	60551.73	99.7	80 - 120	
45 Sc	36935.13	0.45	35628.14	103.7	80 - 120	
45 Sc	1198339.10	0.34	1143918.10	104.8	80 - 120	
72 Ge	13161.13	1.49	13449.19	97.9	80 - 120	
72 Ge	21966.32	1.58	21027.08	104.5	80 - 120	
89 Y	1536797.60	0.20	1472223.00	104.4	80 - 120	
115 In	1579973.50	0.30	1526077.40	103.5	80 - 120	
159 Tb	2026720.80	0.18	1978759.40	102.4	80 - 120	
209 Bi	1194604.90	1.04	1176869.00	101.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 18 2007 11:16 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 18 2007 11:14 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	495699.91	P	4437.00	0.90
7 (Li)		P		
9 Be	34116.45	P	156.90	0.46
23 Na	422208.59	P	3418.00	0.81
24 Mg	9275411.00	A	52300.00	0.56
27 Al	11744060.00	A	66040.00	0.56
39 K	16185120.00	A	171000.00	1.06
44 Ca	453507.81	P	2417.00	0.53
45 Sc	59519.62	P	362.50	0.61
45 Sc	39082.69	P	740.70	1.90
45 Sc	1278337.00	A	8888.00	0.70
51 V	15744.08	P	339.60	2.16
52 Cr	20685.29	P	187.60	0.91
55 Mn	10619.65	P	95.52	0.90
56 Fe	1028683.00	P	3958.00	0.38
59 Co	33394.57	P	523.90	1.57
60 Ni	9380.26	P	165.20	1.76
63 Cu	25879.90	P	416.60	1.61
65 Cu	12680.29	P	146.90	1.16
66 Zn	4250.32	P	129.80	3.05
72 Ge	12758.92	P	118.80	0.93
72 Ge	22978.33	P	406.70	1.77
75 As	2197.30	P	58.87	2.68
78 Se	444.23	P	13.34	3.00
89 Y	1625314.00	A	9409.00	0.58
98 Mo	54195.91	P	406.70	0.75
99 (Ru)	7.78	P	1.93	24.75
107 Ag	96496.96	P	1013.00	1.05
111 Cd	20607.38	P	218.90	1.06
115 In	1668316.00	A	4023.00	0.24
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	67372.30	P	726.30	1.08
137 Ba	29276.28	P	491.00	1.68
159 Tb	2153388.00	A	11880.00	0.55
205 Tl	82127.97	P	571.30	0.70
208 Pb	227022.59	P	557.30	0.25
209 Bi	1224651.00	P	6563.00	0.54

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	495699.88	0.90	467643.91	106.0	80 - 120	
45 Sc	59519.62	0.61	60551.73	98.3	80 - 120	
45 Sc	39082.70	1.90	35628.14	109.7	80 - 120	
45 Sc	1278337.10	0.70	1143918.10	111.8	80 - 120	
72 Ge	12758.92	0.93	13449.19	94.9	80 - 120	
72 Ge	22978.33	1.77	21027.08	109.3	80 - 120	
89 Y	1625313.90	0.58	1472223.00	110.4	80 - 120	
115 In	1668316.00	0.24	1526077.40	109.3	80 - 120	
159 Tb	2153388.00	0.55	1978759.40	108.8	80 - 120	
209 Bi	1224651.50	0.54	1176869.00	104.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 18 2007 11:22 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 18 2007 11:20 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	515469.91	P	2297.00	0.45
7 (Li)		P		
9 Be	351158.19	P	635.60	0.18
23 Na	3890299.00	A	63370.00	1.63
24 Mg	95974608.00	A	131600.00	0.14
27 Al	############	A	769100.00	0.62
39 K	############	A	1281000.00	0.83
44 Ca	4417575.00	A	36060.00	0.82
45 Sc	58049.85	P	185.80	0.32
45 Sc	40957.63	P	373.20	0.91
45 Sc	1336803.00	A	4710.00	0.35
51 V	164363.09	P	2023.00	1.23
52 Cr	216898.20	P	2262.00	1.04
55 Mn	111091.70	P	1325.00	1.19
56 Fe	9427252.00	A	86800.00	0.92
59 Co	348697.91	P	3189.00	0.91
60 Ni	94519.46	P	1130.00	1.20
63 Cu	257552.20	P	2231.00	0.87
65 Cu	126444.90	P	1177.00	0.93
66 Zn	37390.67	P	490.90	1.31
72 Ge	12356.34	P	300.70	2.43
72 Ge	23710.66	P	459.90	1.94
75 As	22835.87	P	326.80	1.43
78 Se	4373.16	P	69.29	1.58
89 Y	1681288.00	A	11980.00	0.71
98 Mo	558642.00	P	1175.00	0.21
99 (Ru)	42.22	P	10.18	24.11
107 Ag	960318.38	P	966.80	0.10
111 Cd	207754.09	P	637.50	0.31
115 In	1675535.00	A	8179.00	0.49
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	671821.38	P	782.90	0.12
137 Ba	297849.19	P	881.00	0.30
159 Tb	2217408.00	A	6947.00	0.31
205 Tl	828386.88	P	3763.00	0.45
208 Pb	2251583.00	P	7326.00	0.33
209 Bi	1182309.00	P	5978.00	0.51

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	515469.88	0.45	467643.91	110.2	80 - 120	
45 Sc	58049.86	0.32	60551.73	95.9	80 - 120	
45 Sc	40957.63	0.91	35628.14	115.0	80 - 120	
45 Sc	1336803.30	0.35	1143918.10	116.9	80 - 120	
72 Ge	12356.34	2.43	13449.19	91.9	80 - 120	
72 Ge	23710.66	1.94	21027.08	112.8	80 - 120	
89 Y	1681287.90	0.71	1472223.00	114.2	80 - 120	
115 In	1675535.40	0.49	1526077.40	109.8	80 - 120	
159 Tb	2217408.50	0.31	1978759.40	112.1	80 - 120	
209 Bi	1182309.60	0.51	1176869.00	100.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F18w00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 18 2007 11:28 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 18 2007 11:26 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	516165.59	P	1418.00	0.27
7 (Li)		P		
9 Be	735861.38	P	5432.00	0.74
23 Na	8148822.00	A	42720.00	0.52
24 Mg	############	A	274800.00	0.14
27 Al	############	A	1251000.00	0.48
39 K	############	A	2351000.00	0.73
44 Ca	9196773.00	A	9643.00	0.10
45 Sc	58834.54	P	694.40	1.18
45 Sc	40025.32	P	431.70	1.08
45 Sc	1305034.00	A	10190.00	0.78
51 V	345186.09	P	3220.00	0.93
52 Cr	451901.50	P	4016.00	0.89
55 Mn	230723.70	P	2945.00	1.28
56 Fe	20185720.00	A	93970.00	0.47
59 Co	718638.88	P	7383.00	1.03
60 Ni	193487.50	P	2041.00	1.05
63 Cu	519668.19	P	3932.00	0.76
65 Cu	254058.09	P	2470.00	0.97
66 Zn	74428.91	P	858.30	1.15
72 Ge	12220.29	P	130.80	1.07
72 Ge	23117.81	P	132.10	0.57
75 As	47099.95	P	600.00	1.27
78 Se	9072.56	P	29.72	0.33
89 Y	1646795.00	A	5541.00	0.34
98 Mo	1103076.00	M	38590.00	3.50
99 (Ru)	58.89	P	7.70	13.07
107 Ag	1960284.00	A	7005.00	0.36
111 Cd	424883.50	P	771.60	0.18
115 In	1610761.00	A	9422.00	0.58
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1333952.00	A	4809.00	0.36
137 Ba	618650.38	P	2554.00	0.41
159 Tb	2166887.00	A	15510.00	0.72
205 Tl	1764030.00	A	1616.00	0.09
208 Pb	4705781.00	A	7739.00	0.16
209 Bi	1114608.00	P	3121.00	0.28

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	516165.56	0.27	467643.91	110.4	80 - 120	
45 Sc	58834.54	1.18	60551.73	97.2	80 - 120	
45 Sc	40025.32	1.08	35628.14	112.3	80 - 120	
45 Sc	1305033.50	0.78	1143918.10	114.1	80 - 120	
72 Ge	12220.29	1.07	13449.19	90.9	80 - 120	
72 Ge	23117.81	0.57	21027.08	109.9	80 - 120	
89 Y	1646795.30	0.34	1472223.00	111.9	80 - 120	
115 In	1610761.40	0.58	1526077.40	105.5	80 - 120	
159 Tb	2166887.50	0.72	1978759.40	109.5	80 - 120	
209 Bi	1114608.30	0.28	1176869.00	94.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F18w00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712012 File : f18w0012 Time : 18-JUN-2007 23:41
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.5037	0.4627	10000	9462	ug/L	-5	10	
Antimony	A	0.2118	0.2186	100.0	106.3	ug/L	6	10	
Barium	A	0.0741	0.0669	100.0	94.84	ug/L	-5	10	
Beryllium	A	0.3417	0.3455	100.0	97.81	ug/L	-2	10	
Cadmium	A	0.0637	0.0621	100.0	95.36	ug/L	-5	10	
Calcium	A	0.0330	0.0168	10000	9651	ug/L	-3	10	
Lead	A	0.5535	0.4816	100.0	89.86	ug/L	-10	10	
Magnesium	A	0.3939	0.3620	10000	9515	ug/L	-5	10	
Molybdenum	A	0.1839	0.1755	100.0	105.0	ug/L	5	10	
Potassium	A	1.8858	0.5833	10000	9579	ug/L	-4	10	
Silver	A	0.2921	0.2860	100.0	95.12	ug/L	-5	10	
Thallium	A	0.7183	0.6786	50.00	43.89	ug/L	**-12**	10	v- ***
Arsenic	E	0.5297	0.4870	100.0	96.66	ug/L	-3	10	
Chromium	E	3.1658	2.6804	100.0	96.13	ug/L	-4	10	
Cobalt	E	4.3256	4.2726	100.0	96.19	ug/L	-4	10	
Copper	E	8.8589	5.4216	100.0	97.04	ug/L	-3	10	
Manganese	E	1.4265	1.3528	100.0	95.00	ug/L	-5	10	
Nickel	E	1.6061	1.1663	100.0	97.32	ug/L	-3	10	
Sodium	E	1.0580	0.4788	10000	9511	ug/L	-5	10	
Vanadium	E	2.6552	2.0098	100.0	94.49	ug/L	-6	10	
Zinc	E	4.3504	0.7948	100.0	98.39	ug/L	-2	10	
Iron	H	0.8925	0.8136	10000	9586	ug/L	-4	10	
Selenium	H	0.1783	0.1800	100.0	97.87	ug/L	-2	10	

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	506824	8.38
Scandium	A	1143918	1297567	13.43
Scandium	E	35628	39902	12.00
Scandium	H	60552	55265	-8.73
Germanium	H	13449	11547	-14.14
Germanium	E	21027	23076	9.74
Indium	A	1526077	1634236	7.09
Bismuth	A	1176869	1153863	-1.95
Yttrium	A	1472223	1627912	10.58
Terbium	A	1978759	2143891	8.35

-=low bias v=ICV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712014 File : f18w0014 Time : 18-JUN-2007 23:53
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.007915]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008944]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01439]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.009489]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01810]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1280	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02638]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	532855	13.94
Scandium	A	1143918	1289159	12.70
Scandium	E	35628	41020	15.13
Scandium	H	60552	44536	-26.45
Germanium	H	13449	9535	-29.10
Germanium	E	21027	24052	14.39
Indium	A	1526077	1678646	10.00
Bismuth	A	1176869	1218433	3.53
Yttrium	A	1472223	1619030	9.97
Terbium	A	1978759	2160336	9.18

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712017 File : f18w0017 Time : 19-JUN-2007 00:11
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	0.1277	0.1000	ug/L	
Barium	A	1.232	0.1000	ug/L	
Beryllium	A	[0.02561]	0.1000	ug/L	
Cadmium	A	1.823	0.1000	ug/L	
Lead	A	0.4791	0.1000	ug/L	
Silver	A	0.2396	0.1000	ug/L	
Thallium	A	[0.04722]	0.05000	ug/L	
Arsenic	E	0.2608	0.1000	ug/L	i+ ***
Chromium	E	1.545	0.1000	ug/L	
Cobalt	E	0.2441	0.1000	ug/L	
Copper	E	1.771	0.1000	ug/L	i+ ***
Manganese	E	1.168	0.1000	ug/L	
Nickel	E	1.375	0.1000	ug/L	
Vanadium	E	[0.06429]	0.1000	ug/L	
Zinc	E	5.960	0.1000	ug/L	i+ ***
Selenium	H	[0.01667]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107500	ug/L	108
Calcium	A	300000	323800	ug/L	108
Magnesium	A	100000	103300	ug/L	103
Molybdenum	A	2000	2416	ug/L	121
Potassium	A	100000	106300	ug/L	106
Sodium	E	250000	256500	ug/L	103
Iron	H	250000	245200	ug/L	98

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	506540	8.32
Scandium	A	1143918	1335916	16.78
Scandium	E	35628	42526	19.36
Scandium	H	60552	71583	18.22
Germanium	H	13449	14002	4.11
Germanium	E	21027	25259	**20.13 ***
Indium	A	1526077	1671861	9.55
Bismuth	A	1176869	1045934	-11.13
Yttrium	A	1472223	1690199	14.81
Terbium	A	1978759	2326159	17.56

+=high bias i=ISTD failure

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712018 File : f18w0018 Time : 19-JUN-2007 00:17
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	125200	ug/L	25		
Cadmium	A	100.0	116.9	ug/L	17	20	
Calcium	A	300000	380100	ug/L	27		
Magnesium	A	100000	119800	ug/L	20		
Molybdenum	A	2000	2829	ug/L	41		
Potassium	A	100000	124900	ug/L	25		
Silver	A	50.00	56.22	ug/L	12	20	
Arsenic	E	100.0	116.2	ug/L	16	20	
Chromium	E	200.0	245.8	ug/L	**23**	20	ab+ ***
Cobalt	E	200.0	228.8	ug/L	14	20	
Copper	E	200.0	208.4	ug/L	4	20	
Manganese	E	200.0	239.3	ug/L	20	20	
Nickel	E	200.0	221.8	ug/L	11	20	
Sodium	E	250000	301500	ug/L	21		
Vanadium	E	200.0	251.2	ug/L	**26**	20	ab+ ***
Zinc	E	100.0	102.8	ug/L	3	20	
Iron	H	250000	280800	ug/L	12		
Selenium	H	100.0	116.3	ug/L	16	20	

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	60552	69234	14.34
Scandium	A	1143918	1207233	5.53
Scandium	E	35628	39646	11.28
Germanium	H	13449	12981	-3.48
Germanium	E	21027	23447	11.51
Indium	A	1526077	1508481	-1.15
Yttrium	A	1472223	1526056	3.66

+=high bias ab=ICSAB

67244712018

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712035 File : f18w0035 Time : 19-JUN-2007 01:59
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5037	0.4500	10000	9202	ug/L	-8	10	
Antimony	A	0.2118	0.2184	100.0	106.2	ug/L	6	10	
Barium	A	0.0741	0.0656	100.0	92.98	ug/L	-7	10	
Beryllium	A	0.3417	0.3477	100.0	98.44	ug/L	-2	10	
Cadmium	A	0.0637	0.0618	100.0	94.78	ug/L	-5	10	
Calcium	A	0.0330	0.0167	10000	9596	ug/L	-4	10	
Lead	A	0.5535	0.4931	100.0	92.01	ug/L	-8	10	
Magnesium	A	0.3939	0.3555	10000	9344	ug/L	-7	10	
Molybdenum	A	0.1839	0.1746	100.0	104.4	ug/L	4	10	
Potassium	A	1.8858	0.5761	10000	9459	ug/L	-5	10	
Silver	A	0.2921	0.2848	100.0	94.73	ug/L	-5	10	
Thallium	A	0.7183	0.6720	50.00	43.46	ug/L	**-13**	10	c- ***
Arsenic	E	0.5297	0.4721	100.0	93.69	ug/L	-6	10	
Chromium	E	3.1658	2.6698	100.0	95.75	ug/L	-4	10	
Cobalt	E	4.3256	4.2571	100.0	95.84	ug/L	-4	10	
Copper	E	8.8589	5.3186	100.0	95.19	ug/L	-5	10	
Manganese	E	1.4265	1.3454	100.0	94.47	ug/L	-6	10	
Nickel	E	1.6061	1.1674	100.0	97.41	ug/L	-3	10	
Sodium	E	1.0580	0.4768	10000	9472	ug/L	-5	10	
Vanadium	E	2.6552	2.0011	100.0	94.08	ug/L	-6	10	
Zinc	E	4.3504	0.7819	100.0	96.76	ug/L	-3	10	
Iron	H	0.8925	0.8854	10000	10430	ug/L	4	10	
Selenium	H	0.1783	0.2115	100.0	115.0	ug/L	**15**	10	c+ ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	430365	-7.97
Scandium	A	1143918	1070664	-6.40
Scandium	E	35628	32633	-8.41
Scandium	H	60552	25834	-57.34
Germanium	H	13449	5194	-61.38
Germanium	E	21027	19297	-8.23
Indium	A	1526077	1375111	-9.89
Bismuth	A	1176869	1016389	-13.64
Yttrium	A	1472223	1357725	-7.78
Terbium	A	1978759	1832105	-7.41

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712039 File : f18w0039 Time : 19-JUN-2007 02:23
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	ND	0.1000	0.0005836	ug/L	
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.005806]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.006225]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.006346]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.02037]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1586	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02624]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	436964	-6.56
Scandium	A	1143918	952026	-16.77
Scandium	E	35628	31005	-12.98
Scandium	H	60552	19399	-67.96
Germanium	H	13449	4073	-69.72
Germanium	E	21027	18588	-11.60
Indium	A	1526077	1291463	-15.37
Bismuth	A	1176869	992843	-15.64
Yttrium	A	1472223	1230298	-16.43
Terbium	A	1978759	1674941	-15.35

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712052 File : f18w0052 Time : 19-JUN-2007 03:41
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5037	0.4653	10000	9516	ug/L	-5	10	
Antimony	A	0.2118	0.2254	100.0	109.6	ug/L	10	10	
Barium	A	0.0741	0.0646	100.0	91.59	ug/L	-8	10	
Beryllium	A	0.3417	0.3257	100.0	92.20	ug/L	-8	10	
Cadmium	A	0.0637	0.0636	100.0	97.65	ug/L	-2	10	
Calcium	A	0.0330	0.0173	10000	9949	ug/L	-1	10	
Lead	A	0.5535	0.5079	100.0	94.78	ug/L	-5	10	
Magnesium	A	0.3939	0.3710	10000	9752	ug/L	-2	10	
Molybdenum	A	0.1839	0.1775	100.0	106.1	ug/L	6	10	
Potassium	A	1.8858	0.5890	10000	9672	ug/L	-3	10	
Silver	A	0.2921	0.2890	100.0	96.12	ug/L	-4	10	
Thallium	A	0.7183	0.6651	50.00	43.02	ug/L	**-14**	10	c- ***
Arsenic	E	0.5297	0.4741	100.0	94.10	ug/L	-6	10	
Chromium	E	3.1658	2.6337	100.0	94.45	ug/L	-6	10	
Cobalt	E	4.3256	4.1908	100.0	94.34	ug/L	-6	10	
Copper	E	8.8589	5.1885	100.0	92.86	ug/L	-7	10	
Manganese	E	1.4265	1.3587	100.0	95.41	ug/L	-5	10	
Nickel	E	1.6061	1.1525	100.0	96.17	ug/L	-4	10	
Sodium	E	1.0580	0.4841	10000	9617	ug/L	-4	10	
Vanadium	E	2.6552	1.9797	100.0	93.08	ug/L	-7	10	
Zinc	E	4.3504	0.7719	100.0	95.49	ug/L	-5	10	
Iron	H	0.8925	0.8927	10000	10520	ug/L	5	10	
Selenium	H	0.1783	0.2009	100.0	109.3	ug/L	9	10	

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	391401	-16.30
Scandium	A	1143918	788474	-31.07
Scandium	E	35628	25258	-29.11
Scandium	H	60552	20144	-66.73
Germanium	H	13449	4369	-67.51
Germanium	E	21027	15052	-28.42
Indium	A	1526077	1043918	-31.59
Bismuth	A	1176869	845597	-28.15
Yttrium	A	1472223	1026309	-30.29
Terbium	A	1978759	1467373	-25.84

-=low bias c=CCV

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712054 File : f18w0054 Time : 19-JUN-2007 03:53
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.07564]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06762]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.871]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.06793]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.07777]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.07705]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.05638]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.2232	0.1000	0	ug/L	ib ***
Zinc	E	[0.09359]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	i- ***
Selenium	H	[0.04953]	0.1000	0.004672	ug/L	!ib i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	385676	-17.53
Scandium	A	1143918	752885	-34.18
Scandium	E	35628	24275	-31.87
Scandium	H	60552	16218	**-73.22 ***
Germanium	H	13449	3509	**-73.91 ***
Germanium	E	21027	14748	-29.86
Indium	A	1526077	1032269	-32.36
Bismuth	A	1176869	857409	-27.14
Yttrium	A	1472223	980771	-33.38
Terbium	A	1978759	1404532	-29.02

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712057 File : f18w0057 Time : 19-JUN-2007 04:12
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05343]	0.1000	ug/L	
Barium	A	1.222	0.1000	ug/L	
Beryllium	A	[0.02397]	0.1000	ug/L	
Cadmium	A	1.876	0.1000	ug/L	
Lead	A	0.5050	0.1000	ug/L	
Silver	A	0.2323	0.1000	ug/L	
Thallium	A	[0.04718]	0.05000	ug/L	
Arsenic	E	0.2516	0.1000	ug/L	
Chromium	E	1.503	0.1000	ug/L	
Cobalt	E	0.2303	0.1000	ug/L	
Copper	E	1.745	0.1000	ug/L	
Manganese	E	1.139	0.1000	ug/L	
Nickel	E	1.292	0.1000	ug/L	
Vanadium	E	[0.06847]	0.1000	ug/L	
Zinc	E	5.910	0.1000	ug/L	
Selenium	H	[0.03132]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	106900	ug/L	107
Calcium	A	300000	320400	ug/L	107
Magnesium	A	100000	103900	ug/L	104
Molybdenum	A	2000	2406	ug/L	120
Potassium	A	100000	105200	ug/L	105
Sodium	E	250000	249100	ug/L	100
Iron	H	250000	265300	ug/L	106

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	514386	10.00
Scandium	A	1143918	1133041	-0.95
Scandium	E	35628	35114	-1.44
Scandium	H	60552	31352	-48.22
Germanium	H	13449	6105	-54.61
Germanium	E	21027	20695	-1.58
Indium	A	1526077	1419697	-6.97
Bismuth	A	1176869	935521	-20.51
Yttrium	A	1472223	1413229	-4.01
Terbium	A	1978759	1948492	-1.53

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712058 File : f18w0058 Time : 19-JUN-2007 04:18
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	119400	ug/L	19		
Cadmium	A	100.0	113.2	ug/L	13	20	
Calcium	A	300000	364200	ug/L	21		
Magnesium	A	100000	114700	ug/L	15		
Molybdenum	A	2000	2731	ug/L	37		
Potassium	A	100000	119400	ug/L	19		
Silver	A	50.00	54.60	ug/L	9	20	
Arsenic	E	100.0	114.9	ug/L	15	20	
Chromium	E	200.0	242.9	ug/L	**21**	20	ab+ ***
Cobalt	E	200.0	226.7	ug/L	13	20	
Copper	E	200.0	204.2	ug/L	2	20	
Manganese	E	200.0	236.9	ug/L	18	20	
Nickel	E	200.0	220.4	ug/L	10	20	
Sodium	E	250000	297600	ug/L	19		
Vanadium	E	200.0	248.7	ug/L	**24**	20	ab+ ***
Zinc	E	100.0	101.5	ug/L	2	20	
Iron	H	250000	297600	ug/L	19		
Selenium	H	100.0	131.8	ug/L	**32**	20	ab+ ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	60552	36869	-39.11
Scandium	A	1143918	1147647	0.33
Scandium	E	35628	36505	2.46
Germanium	H	13449	6786	-49.54
Germanium	E	21027	21928	4.28
Indium	A	1526077	1421814	-6.83
Yttrium	A	1472223	1443278	-1.97

+=high bias ab=ICSAB

67244712058

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67244712075
Cal : 67244712001
Standards: S6420, S6035

File : f18w0075
Caldate : 18-JUN-2007

IDF : 1.0
Time : 19-JUN-2007 06:00

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5037	0.4564	10000	9333	ug/L	-7	10	
Antimony	A	0.2118	0.2226	100.0	108.2	ug/L	8	10	
Barium	A	0.0741	0.0641	100.0	90.87	ug/L	-9	10	
Beryllium	A	0.3417	0.3400	100.0	96.25	ug/L	-4	10	
Cadmium	A	0.0637	0.0632	100.0	97.00	ug/L	-3	10	
Calcium	A	0.0330	0.0172	10000	9872	ug/L	-1	10	
Lead	A	0.5535	0.5141	100.0	95.94	ug/L	-4	10	
Magnesium	A	0.3939	0.3637	10000	9559	ug/L	-4	10	
Molybdenum	A	0.1839	0.1762	100.0	105.4	ug/L	5	10	
Potassium	A	1.8858	0.5858	10000	9620	ug/L	-4	10	
Silver	A	0.2921	0.2870	100.0	95.45	ug/L	-5	10	
Thallium	A	0.7183	0.6652	50.00	43.02	ug/L	**-14**	10	c- ***
Arsenic	E	0.5297	0.4693	100.0	93.15	ug/L	-7	10	
Chromium	E	3.1658	2.6704	100.0	95.77	ug/L	-4	10	
Cobalt	E	4.3256	4.2593	100.0	95.89	ug/L	-4	10	
Copper	E	8.8589	5.2028	100.0	93.11	ug/L	-7	10	
Manganese	E	1.4265	1.3714	100.0	96.30	ug/L	-4	10	
Nickel	E	1.6061	1.1726	100.0	97.84	ug/L	-2	10	
Sodium	E	1.0580	0.4876	10000	9688	ug/L	-3	10	
Vanadium	E	2.6552	2.0026	100.0	94.15	ug/L	-6	10	
Zinc	E	4.3504	0.7796	100.0	96.46	ug/L	-4	10	
Iron	H	0.8925	0.8733	10000	10290	ug/L	3	10	i- ***
Selenium	H	0.1783	0.2135	100.0	116.1	ug/L	**16**	10	c+ i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	355551	-23.97
Scandium	A	1143918	802805	-29.82
Scandium	E	35628	24661	-30.78
Scandium	H	60552	14680	**-75.76 ***
Germanium	H	13449	2876	**-78.62 ***
Germanium	E	21027	14906	-29.11
Indium	A	1526077	1069824	-29.90
Bismuth	A	1176869	877642	-25.43
Yttrium	A	1472223	1054353	-28.38
Terbium	A	1978759	1507092	-23.84

+=high bias -=low bias c=CCV i=ISTD failure

67244712075

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712077 File : f18w0077 Time : 19-JUN-2007 06:12
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.04589]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.06146]	0.1000	0.002857	ug/L	!ib
Magnesium	A	11.51	10.00	3.328	ug/L	ib ***
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	0.05217	0.05000	0	ug/L	ib ***
Arsenic	E	[0.04522]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.05518]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05853]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04875]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.2061	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	[7.035]	10.00	4.329	ug/L	!ib i- ***
Selenium	H	[0.05409]	0.1000	0.004672	ug/L	!ib i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	361686	-22.66
Scandium	A	1143918	781152	-31.71
Scandium	E	35628	24360	-31.63
Scandium	H	60552	12061	**-80.08 ***
Germanium	H	13449	2493	**-81.46 ***
Germanium	E	21027	14811	-29.56
Indium	A	1526077	1079155	-29.29
Bismuth	A	1176869	907571	-22.88
Yttrium	A	1472223	1029707	-30.06
Terbium	A	1978759	1472800	-25.57

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712093 File : f18w0093 Time : 19-JUN-2007 07:49
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5037	0.4531	10000	9267	ug/L	-7	10	
Antimony	A	0.2118	0.2241	100.0	108.9	ug/L	9	10	
Barium	A	0.0741	0.0657	100.0	93.20	ug/L	-7	10	
Beryllium	A	0.3417	0.3176	100.0	89.91	ug/L	-10	10	
Cadmium	A	0.0637	0.0628	100.0	96.36	ug/L	-4	10	
Calcium	A	0.0330	0.0173	10000	9918	ug/L	-1	10	
Lead	A	0.5535	0.5443	100.0	101.6	ug/L	2	10	
Magnesium	A	0.3939	0.3628	10000	9537	ug/L	-5	10	
Molybdenum	A	0.1839	0.1759	100.0	105.2	ug/L	5	10	
Potassium	A	1.8858	0.5770	10000	9475	ug/L	-5	10	
Silver	A	0.2921	0.2852	100.0	94.86	ug/L	-5	10	
Thallium	A	0.7183	0.6631	50.00	42.89	ug/L	**-14**	10	c- ***
Arsenic	E	0.5297	0.4650	100.0	92.29	ug/L	-8	10	
Chromium	E	3.1658	2.6143	100.0	93.76	ug/L	-6	10	
Cobalt	E	4.3256	4.2051	100.0	94.67	ug/L	-5	10	
Copper	E	8.8589	5.1489	100.0	92.15	ug/L	-8	10	
Manganese	E	1.4265	1.3690	100.0	96.14	ug/L	-4	10	
Nickel	E	1.6061	1.1488	100.0	95.86	ug/L	-4	10	
Sodium	E	1.0580	0.4790	10000	9514	ug/L	-5	10	
Vanadium	E	2.6552	1.9719	100.0	92.71	ug/L	-7	10	
Zinc	E	4.3504	0.7759	100.0	96.00	ug/L	-4	10	
Iron	H	0.8925	0.9688	10000	11410	ug/L	**14**	10	c+ i- ***
Selenium	H	0.1783	0.2272	100.0	123.6	ug/L	**24**	10	c+ i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	320366	-31.49
Scandium	A	1143918	619702	-45.83
Scandium	E	35628	19137	-46.29
Scandium	H	60552	9497	**-84.32 ***
Germanium	H	13449	2019	**-84.99 ***
Germanium	E	21027	11552	-45.06
Indium	A	1526077	852647	-44.13
Bismuth	A	1176869	734044	-37.63
Yttrium	A	1472223	830965	-43.56
Terbium	A	1978759	1189427	-39.89

+=high bias -=low bias c=CCV i=ISTD failure

67244712093

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712096 File : f18w0096 Time : 19-JUN-2007 08:07
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01329]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01753]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.02360]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03108]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.04839]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1265	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i- ***
Selenium	H	[0.09334]	0.1000	0.004672	ug/L	!ib i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	315434	-32.55
Scandium	A	1143918	588210	-48.58
Scandium	E	35628	18828	-47.15
Scandium	H	60552	7687	**-87.31 ***
Germanium	H	13449	1630	**-87.88 ***
Germanium	E	21027	11637	-44.66
Indium	A	1526077	846101	-44.56
Bismuth	A	1176869	756266	-35.74
Yttrium	A	1472223	797611	-45.82
Terbium	A	1978759	1141352	-42.32

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712107 File : f18w0107 Time : 19-JUN-2007 09:15
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5037	0.4510	10000	9223	ug/L	-8	10	
Antimony	A	0.2118	0.2247	100.0	109.2	ug/L	9	10	
Barium	A	0.0741	0.0655	100.0	92.93	ug/L	-7	10	
Beryllium	A	0.3417	0.3060	100.0	86.64	ug/L	**-13**	10	c- ***
Cadmium	A	0.0637	0.0630	100.0	96.72	ug/L	-3	10	
Calcium	A	0.0330	0.0172	10000	9858	ug/L	-1	10	
Lead	A	0.5535	0.5505	100.0	102.7	ug/L	3	10	
Magnesium	A	0.3939	0.3632	10000	9547	ug/L	-5	10	
Molybdenum	A	0.1839	0.1743	100.0	104.2	ug/L	4	10	
Potassium	A	1.8858	0.5735	10000	9416	ug/L	-6	10	
Silver	A	0.2921	0.2849	100.0	94.75	ug/L	-5	10	
Thallium	A	0.7183	0.6561	50.00	42.43	ug/L	**-15**	10	c- ***
Arsenic	E	0.5297	0.4651	100.0	92.30	ug/L	-8	10	
Chromium	E	3.1658	2.6321	100.0	94.40	ug/L	-6	10	
Cobalt	E	4.3256	4.2393	100.0	95.44	ug/L	-5	10	
Copper	E	8.8589	5.0973	100.0	91.22	ug/L	-9	10	
Manganese	E	1.4265	1.3770	100.0	96.70	ug/L	-3	10	
Nickel	E	1.6061	1.1526	100.0	96.18	ug/L	-4	10	
Sodium	E	1.0580	0.4823	10000	9581	ug/L	-4	10	
Vanadium	E	2.6552	1.9758	100.0	92.89	ug/L	-7	10	
Zinc	E	4.3504	0.7727	100.0	95.59	ug/L	-4	10	
Iron	H	0.8925	1.0187	10000	12000	ug/L	**20**	10	c+ i- ***
Selenium	H	0.1783	0.2400	100.0	130.5	ug/L	**31**	10	c+ i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	300165	-35.81
Scandium	A	1143918	532448	-53.45
Scandium	E	35628	16233	-54.44
Scandium	H	60552	6669	**-88.99 ***
Germanium	H	13449	1449	**-89.23 ***
Germanium	E	21027	10011	-52.39
Indium	A	1526077	745696	-51.14
Bismuth	A	1176869	659759	-43.94
Yttrium	A	1472223	722364	-50.93
Terbium	A	1978759	1046073	-47.13

+=high bias -=low bias c=CCV i=ISTD failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712110 File : f18w0110 Time : 19-JUN-2007 09:34
Cal : 67244712001 Caldate : 18-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01942]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01951]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.01261]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02748]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.009353]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	0.1378	0.1000	0	ug/L	ib ***
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	i- ***
Selenium	H	ND	0.1000	0.004672	ug/L	i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	286370	-38.76
Scandium	A	1143918	492909	-56.91
Scandium	E	35628	15677	-56.00
Scandium	H	60552	5824	**-90.38 ***
Germanium	H	13449	1243	**-90.76 ***
Germanium	E	21027	9909	-52.88
Indium	A	1526077	720236	-52.80
Bismuth	A	1176869	661674	-43.78
Yttrium	A	1472223	675318	-54.13
Terbium	A	1978759	991056	-49.92

!=warning -=low bias i=ISTD failure ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712112 File : f18w0112 Time : 19-JUN-2007 09:47
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05626]	0.1000	ug/L	
Barium	A	1.184	0.1000	ug/L	
Beryllium	A	[0.02070]	0.1000	ug/L	
Cadmium	A	2.073	0.1000	ug/L	
Lead	A	0.5413	0.1000	ug/L	
Silver	A	0.2386	0.1000	ug/L	
Thallium	A	[0.04272]	0.05000	ug/L	
Arsenic	E	0.3083	0.1000	ug/L	
Chromium	E	1.494	0.1000	ug/L	
Cobalt	E	0.2426	0.1000	ug/L	
Copper	E	1.711	0.1000	ug/L	
Manganese	E	1.196	0.1000	ug/L	
Nickel	E	1.352	0.1000	ug/L	
Vanadium	E	[0.05515]	0.1000	ug/L	
Zinc	E	5.779	0.1000	ug/L	
Selenium	H	[0.03696]	0.1000	ug/L	i- ***

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	107300	ug/L	107
Calcium	A	300000	326500	ug/L	109
Magnesium	A	100000	106100	ug/L	106
Molybdenum	A	2000	2426	ug/L	121
Potassium	A	100000	106300	ug/L	106
Sodium	E	250000	249800	ug/L	100
Iron	H	250000	292900	ug/L	117

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	467644	440023	-5.91
Scandium	A	1143918	834900	-27.01
Scandium	E	35628	24294	-31.81
Scandium	H	60552	11034	**-81.78 ***
Germanium	H	13449	2195	**-83.68 ***
Germanium	E	21027	14808	-29.58
Indium	A	1526077	1062814	-30.36
Bismuth	A	1176869	789728	-32.90
Yttrium	A	1472223	1056649	-28.23
Terbium	A	1978759	1509884	-23.70

-=low bias i=ISTD failure

67244712112

:09461

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67244712113 File : f18w0113 Time : 19-JUN-2007 09:53
Cal : 67244712001 Caldate : 18-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	114400	ug/L	14		
Cadmium	A	100.0	110.5	ug/L	11	20	
Calcium	A	300000	349600	ug/L	17		
Magnesium	A	100000	110700	ug/L	11		
Molybdenum	A	2000	2601	ug/L	30		
Potassium	A	100000	114800	ug/L	15		
Silver	A	50.00	53.32	ug/L	7	20	
Arsenic	E	100.0	113.1	ug/L	13	20	
Chromium	E	200.0	241.0	ug/L	**21**	20	ab+ ***
Cobalt	E	200.0	225.9	ug/L	13	20	
Copper	E	200.0	202.7	ug/L	1	20	
Manganese	E	200.0	235.0	ug/L	18	20	
Nickel	E	200.0	220.0	ug/L	10	20	
Sodium	E	250000	291500	ug/L	17		
Vanadium	E	200.0	246.7	ug/L	**23**	20	ab+ ***
Zinc	E	100.0	100.4	ug/L	0	20	
Iron	H	250000	319400	ug/L	28		i- ***
Selenium	H	100.0	155.7	ug/L	**56**	20	ab+ i- ***

ISTD (ICALBLK f18w0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	60552	15269	**-74.78 ***
Scandium	A	1143918	1041557	-8.95
Scandium	E	35628	30700	-13.83
Germanium	H	13449	2712	**-79.84 ***
Germanium	E	21027	18618	-11.46
Indium	A	1526077	1284523	-15.83
Yttrium	A	1472223	1315670	-10.63

+=high bias -=low bias ab=ICSAB i=ISTD failure

67244712113

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67244712

Date : 06/18/07
Sequence : MET06 f18w0

Reference : f18w0004
Analyzed : 06/18/07 22:54

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	467644	1143918	35628	60552	13449	21027	1526077	1176869	1472223	1978759
		LOWER LIMIT	140293	343175	10688	18166	4035	6308	457823	353061	441667	593628
		UPPER LIMIT	561173	1372702	42754	72662	16139	25232	1831292	1412243	1766668	2374511
014	ICB		532855	1289159	41020	44536	9535	24052	1678646	1218433	1619030	2160336
017	ICSA		506540	1335916	42526	71583	14002	25259 *	1671861	1045934	1690199	2326159
018	ICSAB		425501	1207233	39646	69234	12981	23447	1508481	957844	1526056	2077805
023	BLANK	QC392332	332317	1094682	31938	34782	7236	18665	1411588	1071574	1432226	1857257
024	BS	QC392333	369129	1225580	35181	34437	6579	19722	1528197	1098525	1576210	2048434
025	BSD	QC392334	389983	1273819	37647	32208	6085	21289	1588838	1124453	1621057	2105154
027	MSS	195303-018	414394	1248882	37208	34736	7159	22229	1584165	1162641	1561743	2080022
028	SER	QC392337	429613	1207855	37785	33356	7011	22771	1594805	1193498	1546733	2051327
029	MS	QC392335	416975	1245573	36842	31860	6526	21778	1563782	1131530	1556057	2048580
030	MSD	QC392336	418502	1246380	36299	31213	6267	21627	1564715	1129614	1551299	2052180
031	PDS	QC392338	415423	1185880	35040	30303	6001	20485	1453645	1058391	1473583	1948721
035	CCV		430365	1070664	32633	25834	5194	19297	1375111	1016389	1357725	1832105
039	CCB		436964	952026	31005	19399	4073	18588	1291463	992843	1230298	1674941
040	SAMPLE	195303-011	437158	1652900 *	49729 *	35977	4905	21193	1370312	969724	2224758 *	1887714
041	SAMPLE	195303-019	383891	1008026	31991	24749	5206	18957	1299837	986712	1268901	1715720
042	SAMPLE	195303-020	426159	1088670	32017	25443	5243	18784	1361302	1017087	1349955	1825535
043	SAMPLE	195303-021	420619	1071383	31994	26634	5528	18936	1350492	1013125	1334427	1805748
044	SAMPLE	195303-022	418988	1060673	30975	23824	4990	18146	1353705	1006981	1309184	1780853
045	SAMPLE	195303-024	438311	1065687	32387	22015	4642	19267	1355186	1025524	1311029	1775487
046	SAMPLE	195303-025	452254	1069742	32329	22799	4728	18959	1356096	1030831	1309159	1783879
047	SAMPLE	195303-027	457679	1043934	31947	22262	4636	18574	1322547	989871	1291175	1746794
048	SAMPLE	195303-030	440925	954550	30678	20384	4349	17991	1289094	1013959	1229973	1688108
052	CCV		391401	788474	25258	20144	4369	15052	1043918	845597	1026309	1467373
054	CCB		385676	752885	24275	16218 *	3509 *	14748	1032269	857409	980771	1404532
057	ICSA		514386	1133041	35114	31352	6105	20695	1419697	935521	1413229	1948492
058	ICSAB		405991	1147647	36505	36869	6786	21928	1421814	937012	1443278	1969430
063	BLANK	QC392325	290830	1032209	29827	16224 *	3081 *	18069	1364824	1050098	1373751	1795758
064	BS	QC392326	311292	1066938	30788	15754 *	2737 *	17640	1354744	1003982	1378623	1802656
065	BSD	QC392327	335795	1086686	31410	14397 *	2533 *	17975	1363890	1009417	1394704	1823004
067	MSS	195303-001	403131	1095841	32020	14036 *	2683 *	18812	1339172	986863	1335287	1796569
068	SER	QC392330	412507	1003930	31111	13053 *	2570 *	18863	1320992	1021723	1277606	1742491
069	MS	QC392328	396801	1004077	29891	14583 *	2855 *	17586	1214409	935092	1234302	1703827
070	MSD	QC392329	399501	1020834	29739	16749 *	3366 *	17337	1231064	952891	1264178	1720876
071	PDS	QC392331	382698	991054	28213	17017 *	3370 *	16669	1180115	910599	1219187	1669042
075	CCV		355551	802805	24661	14680 *	2876 *	14906	1069824	877642	1054353	1507092
077	CCB		361686	781152	24360	12061 *	2493 *	14811	1079155	907571	1029707	1472800
080	SAMPLE	195303-002	368183	810989	24229	14008 *	2844 *	14357	1060161	872370	1041893	1480095
081	SAMPLE	195303-003	390291	867210	26371	14408 *	2920 *	15569	1126965	888118	1104185	1557594
082	SAMPLE	195303-004	364059	857612	25782	14921 *	2981 *	15221	1113425	896559	1097699	1541445
083	SAMPLE	195303-005	364326	829312	25160	14666 *	2926 *	14815	1087940	898594	1068308	1520984
084	SAMPLE	195303-006	367786	841435	25020	13733 *	2769 *	14868	1082706	880417	1070922	1520465
085	SAMPLE	195303-008	379418	838850	25637	12258 *	2456 *	15122	1102280	886424	1079832	1521836
086	SAMPLE	195303-009	363676	811068	24216	12012 *	2464 *	14637	1059430	864827	1036428	1459227
087	SAMPLE	195303-010	356842	789667	23751	12038 *	2424 *	13945	1025080	846217	1005080	1440104
088	SAMPLE	195303-011	366541	801456	23982	12302 *	2454 *	14313	1033024	829328	1014823	1448877
089	SAMPLE	195303-012	341242	744174	22530	11838 *	2479 *	13303	972669	820406	954697	1377791
093	CCV		320366	619702	19137	9497 *	2019 *	11552	852647	734044	830965	1189427
096	CCB		315434	588210	18828	7687 *	1630 *	11637	846101	756266	797611	1141352

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67244712

Date : 06/18/07
Sequence : MET06 f18w0

Reference : f18w0004
Analyzed : 06/18/07 22:54

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
098	SAMPLE	195303-013	340570	691663	20059	8981 *	1827 *	12253	905506	774581	888780	1275138
101	SAMPLE	195303-015	338171	699909	20924	9527 *	1943 *	12677	915935	782586	891377	1277372
102	SAMPLE	195303-016	348348	715635	21485	8637 *	1716 *	12844	924264	784631	906678	1305336
103	SAMPLE	195303-017	328006	638292	19515	8101 *	1690 *	11789	849452	738253	822474	1164214
107	CCV		300165	532448	16233	6669 *	1449 *	10011	745696	659759	722364	1046073
110	CCB		286370	492909	15677	5824 *	1243 *	9909	720236	661674	675318	991056
112	ICSA		440023	834900	24294	11034 *	2195 *	14808	1062814	789728	1056649	1509884
113	ICSAB		402481	1041557	30700	15269 *	2712 *	18618	1284523	907295	1315670	1819721

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67244712 Instrument: MET06 Agilent ICP-MS MET06 Begun: 18-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f18w0001	TUN				18-JUN-2007 22:32	1.0	1.0				1	
002	f18w0002	X	RINSE			18-JUN-2007 22:42	1.0					2	
003	f18w0003	X	RINSE			18-JUN-2007 22:48	1.0					2	
004	f18w0004	ICALBLK	CALBLANK			18-JUN-2007 22:54	1.0	1.0				2	
005	f18w0005	ICAL				18-JUN-2007 23:00	1.0	1.0				3	
006	f18w0006	ICAL				18-JUN-2007 23:06	1.0	1.0				4	
007	f18w0007	ICAL				18-JUN-2007 23:12	1.0	1.0				5	
008	f18w0008	ICAL				18-JUN-2007 23:18	1.0	1.0				6	
009	f18w0009	ICAL				18-JUN-2007 23:24	1.0	1.0				7	
010	f18w0010	ICAL				18-JUN-2007 23:30	1.0	1.0				8	
011	f18w0011	X	RINSE			18-JUN-2007 23:36	1.0					2	
012	f18w0012	ICV				18-JUN-2007 23:41	1.0	1.0	1		1	9	
013	f18w0013	X	RINSE			18-JUN-2007 23:47	1.0					2	
014	f18w0014	ICB				18-JUN-2007 23:53	1.0	1.0	1		1	2	
015	f18w0015	X				18-JUN-2007 23:59	1.0	1.0	1		1	2	
016	f18w0016	X				19-JUN-2007 00:05	1.0	1.0	1		1	2	
017	f18w0017	ICSA				19-JUN-2007 00:11	1.0	1.0	3		1	10 2	7:CA=323800
018	f18w0018	ICSAB				19-JUN-2007 00:17	1.0	1.0	2		1	11 2	13:CA=380100
019	f18w0019	X	RINSE			19-JUN-2007 00:24	1.0					2	
020	f18w0020	X	RINSE			19-JUN-2007 00:30	1.0					2	
021	f18w0021	X	RINSE			19-JUN-2007 00:36	1.0					2	
022	f18w0022	X	RINSE			19-JUN-2007 00:42	1.0					2	
023	f18w0023	BLANK	QC392332	126311	Filtra	19-JUN-2007 00:48	1.0	1.0	3		1	2	
024	f18w0024	BS	QC392333	126311	Filtra	19-JUN-2007 00:54	1.0	1.0	4		1	2	
025	f18w0025	BSD	QC392334	126311	Filtra	19-JUN-2007 00:59	1.0	1.0	4		1	2	
026	f18w0026	X				19-JUN-2007 01:05	1.0					2	
027	f18w0027	MSS	195303-018	126311	Filtra	19-JUN-2007 01:11	5.0	1.0	2		1	2	
028	f18w0028	SER	QC392337	126311	Filtra	19-JUN-2007 01:17	25.0	1.0	1		1	2	
029	f18w0029	MS	QC392335	126311	Filtra	19-JUN-2007 01:23	5.0	1.0	2		1	2	1:MN=212.800
030	f18w0030	MSD	QC392336	126311	Filtra	19-JUN-2007 01:29	5.0	1.0	2	2	1	2	
031	f18w0031	PDS	QC392338	126311	Filtra	19-JUN-2007 01:35	5.0	1.0	4		1	12	2:NA=21300.0

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420 14=S6223

Analyst: RH Date: 6/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67244712 Instrument: MET06 Agilent ICP-MS MET06 Begun: 18-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
032	f18w0032	X	RINSE			19-JUN-2007 01:41	1.0				2	
033	f18w0033	X	RINSE			19-JUN-2007 01:47	1.0				2	
034	f18w0034	X	RINSE			19-JUN-2007 01:53	1.0				2	
035	f18w0035	CCV				19-JUN-2007 01:59	1.0	1.0	2	1	13	
036	f18w0036	X	RINSE			19-JUN-2007 02:05	1.0				2	
037	f18w0037	X				19-JUN-2007 02:11	1.0	1.0	2	1	2	
038	f18w0038	X				19-JUN-2007 02:17	1.0	1.0	1	1	2	
039	f18w0039	CCB				19-JUN-2007 02:23	1.0	1.0	1	1	2	
040	f18w0040	SAMPLE	195303-011	126311	Water	19-JUN-2007 02:29	5.0	1.0	3	1	2	10:FE=136740
041	f18w0041	SAMPLE	195303-019	126311	Filtra	19-JUN-2007 02:35	5.0	1.0	4	1	2	
042	f18w0042	SAMPLE	195303-020	126311	Filtra	19-JUN-2007 02:41	5.0	1.0	3	1	2	2:NA=27540.0
043	f18w0043	SAMPLE	195303-021	126311	Filtra	19-JUN-2007 02:47	5.0	1.0	1	1	2	1:MN=456.000
044	f18w0044	SAMPLE	195303-022	126311	Filtra	19-JUN-2007 02:53	5.0	1.0		1	2	
045	f18w0045	SAMPLE	195303-024	126311	Filtra	19-JUN-2007 02:59	5.0	1.0		1	2	
046	f18w0046	SAMPLE	195303-025	126311	Filtra	19-JUN-2007 03:05	5.0	1.0	1	1	2	
047	f18w0047	SAMPLE	195303-027	126311	Filtra	19-JUN-2007 03:11	5.0	1.0	1	1	2	1:NA=33960.0
048	f18w0048	SAMPLE	195303-030	126311	Filtra	19-JUN-2007 03:17	5.0	1.0	1	1	2	
049	f18w0049	X	RINSE			19-JUN-2007 03:23	1.0				2	
050	f18w0050	X	RINSE			19-JUN-2007 03:29	1.0				2	
051	f18w0051	X	RINSE			19-JUN-2007 03:35	1.0				2	
052	f18w0052	CCV				19-JUN-2007 03:41	1.0	1.0	1	1	13	
053	f18w0053	X	RINSE			19-JUN-2007 03:47	1.0				2	
054	f18w0054	CCB				19-JUN-2007 03:53	1.0	1.0	3	1	2	
055	f18w0055	X				19-JUN-2007 03:59	1.0	1.0	3	1	2	
056	f18w0056	X				19-JUN-2007 04:06	1.0	1.0	3	1	2	
057	f18w0057	ICSA				19-JUN-2007 04:12	1.0	1.0		1	10 2	7:CA=320400
058	f18w0058	ICSAB				19-JUN-2007 04:18	1.0	1.0	3	1	11 2	13:CA=364200
059	f18w0059	X	RINSE			19-JUN-2007 04:24	1.0				2	
060	f18w0060	X	RINSE			19-JUN-2007 04:30	1.0				2	
061	f18w0061	X	RINSE			19-JUN-2007 04:36	1.0				2	
062	f18w0062	X	RINSE			19-JUN-2007 04:42	1.0				2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420 14=S6223

Analyst: _____ Date: 6/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67244712 Instrument: MET06 Agilent ICP-MS MET06 Begun: 18-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f18w0063	BLANK	QC392325	126310	Filtra	19-JUN-2007 04:48	1.0	1.0	5		1	2	
064	f18w0064	BS	QC392326	126310	Filtra	19-JUN-2007 04:54	1.0	1.0	5	1	1	2	
065	f18w0065	BSD	QC392327	126310	Filtra	19-JUN-2007 05:00	1.0	1.0	5	1	1	2	
066	f18w0066	X				19-JUN-2007 05:06	1.0					2	
067	f18w0067	MSS	195303-001	126310	Filtra	19-JUN-2007 05:12	5.0	1.0	6		1	2	2:NA=60500.0
068	f18w0068	SER	QC392330	126310	Filtra	19-JUN-2007 05:18	25.0	1.0	1	1	1	2	
069	f18w0069	MS	QC392328	126310	Filtra	19-JUN-2007 05:24	5.0	1.0	1		1	2	2:NA=60040.0
070	f18w0070	MSD	QC392329	126310	Filtra	19-JUN-2007 05:30	5.0	1.0	1		1	2	2:NA=60000.0
071	f18w0071	PDS	QC392331	126310	Filtra	19-JUN-2007 05:36	5.0	1.0	1		1	12 14 2	2:NA=70540.0
072	f18w0072	X	RINSE			19-JUN-2007 05:42	1.0					2	
073	f18w0073	X	RINSE			19-JUN-2007 05:48	1.0					2	
074	f18w0074	X	RINSE			19-JUN-2007 05:54	1.0					2	
075	f18w0075	CCV				19-JUN-2007 06:00	1.0	1.0	3		1	13 2	
076	f18w0076	X	RINSE			19-JUN-2007 06:06	1.0					2	
077	f18w0077	CCB				19-JUN-2007 06:12	1.0	1.0	5		1	2	
078	f18w0078	X				19-JUN-2007 06:18	1.0	1.0	7		1	2	
079	f18w0079	X				19-JUN-2007 06:24	1.0	1.0	4		1	2	
080	f18w0080	SAMPLE	195303-002	126310	Filtra	19-JUN-2007 06:30	5.0	1.0	2		1	2	1:MN=251.600
081	f18w0081	SAMPLE	195303-003	126310	Filtra	19-JUN-2007 06:36	5.0	1.0	2		1	2	1:NA=48060.0
082	f18w0082	SAMPLE	195303-004	126310	Filtra	19-JUN-2007 06:42	5.0	1.0	3		1	2	2:NA=20200.0
083	f18w0083	SAMPLE	195303-005	126310	Filtra	19-JUN-2007 06:48	5.0	1.0	2		1	2	1:MN=278.400
084	f18w0084	SAMPLE	195303-006	126310	Filtra	19-JUN-2007 06:55	5.0	1.0	2		1	2	1:MN=238.400
085	f18w0085	SAMPLE	195303-008	126310	Filtra	19-JUN-2007 07:01	5.0	1.0	1		1	2	1:NA=21640.0
086	f18w0086	SAMPLE	195303-009	126310	Filtra	19-JUN-2007 07:07	5.0	1.0	2		1	2	1:MN=341.200
087	f18w0087	SAMPLE	195303-010	126310	Filtra	19-JUN-2007 07:13	5.0	1.0	2		1	2	1:MN=654.000
088	f18w0088	SAMPLE	195303-011	126310	Filtra	19-JUN-2007 07:19	5.0	1.0	1		1	2	1:NA=56340.0
089	f18w0089	SAMPLE	195303-012	126310	Filtra	19-JUN-2007 07:25	5.0	1.0	2		1	2	1:MN=443.400
090	f18w0090	X	RINSE			19-JUN-2007 07:31	1.0					2	
091	f18w0091	X	RINSE			19-JUN-2007 07:37	1.0					2	
092	f18w0092	X	RINSE			19-JUN-2007 07:43	1.0					2	
093	f18w0093	CCV				19-JUN-2007 07:49	1.0	1.0	3		1	13 2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420 14=S6223

Analyst: RA Date: 6/19/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67244712 Instrument: MET06 Agilent ICP-MS MET06 Begun: 18-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
094	f18w0094	X	RINSE			19-JUN-2007 07:55	1.0				2	
095	f18w0095	X				19-JUN-2007 08:01	1.0	1.0	3	1	2	
096	f18w0096	CCB				19-JUN-2007 08:07	1.0	1.0	3	1	2	
097	f18w0097	X				19-JUN-2007 08:13	1.0	1.0	3	1	2	
098	f18w0098	SAMPLE	195303-013	126310	Filtra	19-JUN-2007 08:20	5.0	1.0	2	1	2	1:MN=469.600
100	f18w0100	X	RINSE			19-JUN-2007 08:33	1.0				2	
101	f18w0101	SAMPLE	195303-015	126310	Filtra	19-JUN-2007 08:39	5.0	1.0	2	1	2	
102	f18w0102	SAMPLE	195303-016	126310	Filtra	19-JUN-2007 08:45	5.0	1.0	2	1	2	
103	f18w0103	SAMPLE	195303-017	126310	Filtra	19-JUN-2007 08:51	5.0	1.0	1	1	2	
104	f18w0104	X	RINSE			19-JUN-2007 08:57	1.0				2	
105	f18w0105	X	RINSE			19-JUN-2007 09:03	1.0				2	
106	f18w0106	X	RINSE			19-JUN-2007 09:09	1.0				2	
107	f18w0107	CCV				19-JUN-2007 09:15	1.0	1.0	4	1	13 2	
108	f18w0108	X	RINSE			19-JUN-2007 09:22	1.0				2	
109	f18w0109	X				19-JUN-2007 09:28	1.0	1.0	3	1	2	
110	f18w0110	CCB				19-JUN-2007 09:34	1.0	1.0	3	1	2	
111	f18w0111	X				19-JUN-2007 09:41	1.0				2	
112	f18w0112	ICSA				19-JUN-2007 09:47	1.0	1.0	2	1	10 2	7:CA=326500
113	f18w0113	ICSAB				19-JUN-2007 09:53	1.0	1.0	4	1	11 2	13:CA=349600

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420 14=S6223

Analyst: _____ Date: 6/19/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET16
Calnum : 897247417001
Units : ug/L

Date : 20-JUN-2007 19:56
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f20t0005	897247417005		20-JUN-2007 20:02	S6414
L2	f20t0006	897247417006		20-JUN-2007 20:08	S6416
L3	f20t0007	897247417007		20-JUN-2007 20:14	S6417
L4	f20t0008	897247417008		20-JUN-2007 20:20	S6418
L5	f20t0009	897247417009		20-JUN-2007 20:25	S6412
L6	f20t0010	897247417010		20-JUN-2007 20:34	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.3644	0.2643	0.2668	0.2431	0.2419	0.2324	BLNK	-0.8743	4.26864		0.2688	1.000	0.995	
Antimony	A	0.2524	0.1537	0.1569	0.1404	0.1539	0.1494	BLNK	-0.0072	6.65474		0.1678	1.000	0.995	
Barium	A	0.3027	0.0863	0.0645	0.0630	0.0336	0.0329	BLNK	-0.0338	30.2112		0.0972	0.997	0.995	
Beryllium	A	0.1436	0.1416	0.1448	0.1427	0.1421	0.1450	BLNK	-0.0007	6.92438		0.1433	1.000	0.995	
Cadmium	A	0.0454	0.0402	0.0411	0.0388	0.0393	0.0381	BLNK	-0.0094	26.0955		0.0405	1.000	0.995	
Calcium	A	2.3907	0.4756	0.2450	0.0314	0.0107	0.0094	BLNK	-2855.5	121.307		0.5271	1.000	0.995	
Lead	A	0.6500	0.4480	0.4007	0.3617	0.3806	0.3620	BLNK	-0.0512	2.73537		0.4338	0.999	0.995	
Magnesium	A	0.3126	0.2444	0.2317	0.2061	0.2056	0.1979	BLNK	-1.1357	5.01424		0.2331	1.000	0.995	
Molybdenum	A	0.1863	0.1245	0.1197	0.1084	0.1178	0.1143	BLNK	-0.0589	8.69688		0.1285	1.000	0.995	
Potassium	A	3.0203	0.6671	0.5133	0.2817	0.2656	0.2542	BLNK	-76.715	3.91659		0.8337	1.000	0.995	
Silver	A	0.2126	0.1784	0.1849	0.1740	0.1869	0.1774	BLNK	-0.0066	5.57765		0.1857	0.999	0.995	
Thallium	A	0.4541	0.4182	0.4227	0.3904	0.4256	0.4078	BLNK	-0.0072	2.43138		0.4198	1.000	0.995	
Arsenic	E	0.3337	0.3053	0.3003	0.2862	0.2873	0.2819	BLNK	-0.0169	3.53418		0.2991	1.000	0.995	
Chromium	E	5.4223	2.8054	2.6489	2.2483	2.2418	2.1748	BLNK	-0.0667	0.45715		2.9236	1.000	0.995	
Cobalt	E	4.4369	4.1186	4.2431	4.0344	4.0246	3.8939	BLNK	-0.0020	0.25509		4.1253	1.000	0.995	
Copper	E	44.919	8.1464	9.6257	4.0510	3.7944	3.6511	BLNK	-0.3689	0.27232		12.365	1.000	0.995	
Manganese	E	2.4668	1.2435	1.1509	0.9724	0.9641	0.9412	BLNK	-0.0634	1.05770		1.2898	1.000	0.995	
Nickel	E	5.7479	1.5393	1.7339	1.1733	1.1461	1.0978	BLNK	-0.0743	0.90324		2.0730	1.000	0.995	
Sodium	E	3.1478	0.7406	0.5780	0.2511	0.2085	0.1993	BLNK	-113.25	5.00304		0.8542	1.000	0.995	
Vanadium	E	2.5297	1.8213	1.7230	1.5758	1.5857	1.5581	BLNK	-0.0529	0.63973		1.7990	1.000	0.995	
Zinc	E	19.378	3.7680	2.4252	0.6304	0.4916	0.4682	BLNK	-2.2287	2.14228		4.5270	0.999	0.995	
Iron	H	0.6034	0.4590	0.4448	0.3907	0.3982	0.3922	BLNK	-0.7216	2.54226		0.4480	1.000	0.995	
Selenium	H	0.0665	0.0657	0.0628	0.0597	0.0607	0.0594	BLNK	-0.0077	16.7706		0.0625	1.000	0.995	

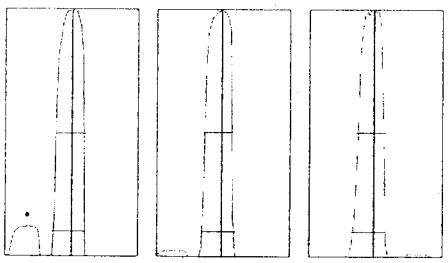
Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	47	50.00	11	100.0	13	1000	4	10000	3	20000	-1
Antimony	A	0.100	61	0.500	1	1.000	4	10.00	-7	100.0	2	200.0	-1
Barium	A	0.100	781	0.500	154	1.000	92	10.00	90	100.0	2	200.0	-1
Beryllium	A	0.100	-1	0.500	-2	1.000	0	10.00	-1	100.0	-2	200.0	0
Cadmium	A	0.100	9	0.500	3	1.000	6	10.00	1	100.0	2	200.0	-1
Calcium	A	10.00	345	50.00	-42	100.0	16	1000	-5	10000	1	20000	0
Lead	A	0.100	27	0.500	12	1.000	4	10.00	-2	100.0	4	200.0	-1
Magnesium	A	10.00	45	50.00	20	100.0	15	1000	3	10000	3	20000	-1
Molybdenum	A	0.100	3	0.500	-4	1.000	-2	10.00	-6	100.0	2	200.0	-1
Potassium	A	10.00	316	50.00	8	100.0	24	1000	3	10000	3	20000	-1
Silver	A	0.100	12	0.500	-2	1.000	2	10.00	-3	100.0	4	200.0	-1
Thallium	A	0.050	-4	0.250	-1	0.500	1	5.000	-5	50.00	3	100.0	-1
Arsenic	E	0.100	1	0.500	5	1.000	4	10.00	1	100.0	2	200.0	0
Chromium	E	0.100	81	0.500	15	1.000	14	10.00	2	100.0	2	200.0	-1
Cobalt	E	0.100	11	0.500	5	1.000	8	10.00	3	100.0	3	200.0	-1
Copper	E	0.100	754	0.500	48	1.000	125	10.00	7	100.0	3	200.0	-1
Manganese	E	0.100	97	0.500	19	1.000	15	10.00	2	100.0	2	200.0	0
Nickel	E	0.100	345	0.500	24	1.000	49	10.00	5	100.0	3	200.0	-1
Sodium	E	10.00	342	50.00	44	100.0	76	1000	14	10000	3	20000	-1
Vanadium	E	0.100	9	0.500	6	1.000	5	10.00	0	100.0	1	200.0	0
Zinc	E	0.100	1823	0.500	261	1.000	197	10.00	13	100.0	3	200.0	-1
Iron	H	10.00	46	50.00	15	100.0	12	1000	-1	10000	1	20000	0
Selenium	H	0.100	4	0.500	9	1.000	5	10.00	0	100.0	2	200.0	0

Tune Report

Tune File : nogas.u
Comment :

m/z	Range	Count	Mean	RSD%	Background
7	20,000	19042.0	17972.2	3.06	1.00
89	50,000	49162.0	49251.7	4.11	0.80
205	50,000	39947.0	39787.0	3.41	3.90

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.785%
Doubly Charged: 70/140 2.624%



m/z:	7	89	205
Height:	17,949	49,933	39,797
Axis:	7.05	89.00	205.00
W-50%:	0.70	0.65	0.65
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	:	1600 W
RF Matching	:	1.68 V
Smpl Depth	:	8 mm
Torch-H	:	0.6 mm
Torch-V	:	0.3 mm
Carrier Gas	:	1.05 L/min
Makeup Gas	:	0 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-125 V
Omega Bias-ce	:	-24 V
Omega Lens-ce	:	-0.6 V
Cell Entrance	:	-30 V
QP Focus	:	1 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	200 V
OctP Bias	:	-6 V

===Q-Pole Parameters===

AMU Gain	:	126
AMU Offset	:	126
Axis Gain	:	0.9997
Axis Offset	:	0.04
QP Bias	:	-1 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1670 V
Pulse HV	:	1120 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

He Gas:	5.5 mL/min
Optional Gas:	--- %
QP Focus:	-10 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
51	29.8	19.73
59	6666.4	4.72
89	5077.3	3.96

Integration Time: 0.1000sec

Tune File : h2.u

H2 Gas:	4 mL/min
Optional Gas:	--- %
QP Focus:	-8 V
Cell Exit:	-38 V
OctP Bias:	-18 V
QP Bias:	-16 V

m/z	Count(Mean)	RSD%
59	7100.2	3.85
78	0.8	114.74
89	45617.3	3.57

Integration Time: 0.1000sec

Generated : Jun 20, 2007 13:06:57
Printed : Jun 20, 2007 13:08:37

P/A Factor Tuning Report

Acquired:Jun 20 2007 01:15 pm

Mass[amu]	Element	P/A Factor
6	Li	0.065857
7	(Li)	Sensitivity too low
9	Be	0.076833
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.086433
45	Sc	0.094895
51	V	0.098774
52	Cr	0.102537
55	Mn	0.104885
56	Fe	Sensitivity too high
59	Co	0.110607
60	Ni	0.114405
63	Cu	0.116394
65	Cu	0.118121
66	Zn	Sensitivity too low
72	Ge	0.113336
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.112324
98	Mo	0.112841
99	(Ru)	Sensitivity too low
107	Ag	0.124351
111	Cd	0.124916
115	In	0.124851
118	(In)	0.124133
121	Sb	0.122896
137	Ba	0.124866
159	Tb	Sensitivity too high
205	Tl	0.138470
206	(Pb)	0.138027
207	(Pb)	0.139435
208	Pb	0.139042
209	Bi	0.139769

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1670 V
Pulse HV: 1120 V

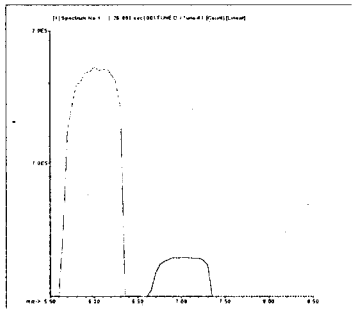
08472

6020 QC Tune Report

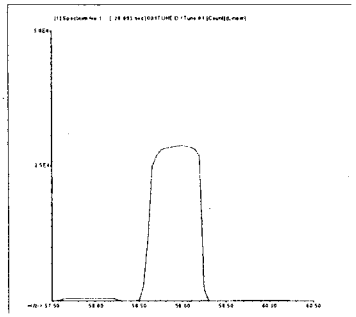
Data File: C:\ICPCHEM\1\DATA\07F20t00.B\001TUNE.D
Date Acquired: Jun 20 2007 07:37 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

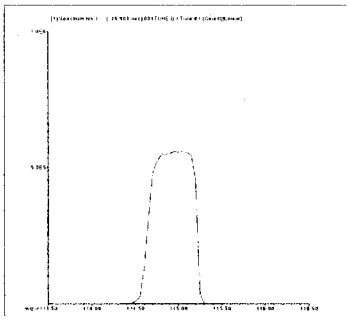
Element	Actual	Required	Flag
7 Li	0.60	5.00	
59 Co	1.00	5.00	
115 In	0.84	5.00	
205 Tl	0.56	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



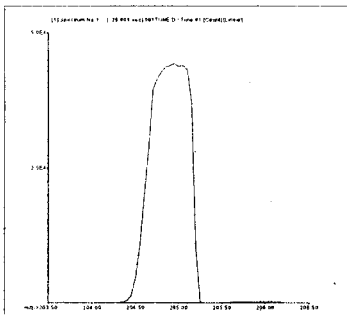
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004C
Date Acquired: Jun 20 2007 07:54 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 07:58 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1689883.00	A	17770.00	1.05
7	(Li)		P		
9	Be	3.33	P	0.00	0.00
23	Na	35787.73	P	359.80	1.01
24	Mg	13890.95	P	482.80	3.48
27	Al	12560.93	P	252.60	2.01
39	K	1201168.00	A	6012.00	0.50
44	Ca	1443372.00	A	16810.00	1.16
45	Sc	1743580.00	A	6715.00	0.39
45	Sc	79052.76	P	298.70	0.38
45	Sc	3066425.00	A	37940.00	1.24
51	V	130.74	P	10.02	7.66
52	Cr	230.75	P	19.95	8.65
55	Mn	94.82	P	3.57	3.77
56	Fe	9897.69	P	29.48	0.30
59	Co	12.22	P	3.33	27.27
60	Ni	130.00	P	8.89	6.84
63	Cu	1884.21	P	254.00	13.48
65	Cu	902.26	P	127.80	14.16
66	Zn	1447.12	P	74.02	5.12
72	Ge	433598.81	P	589.60	0.14
72	Ge	69549.91	P	111.70	0.16
75	As	6.67	P	0.67	10.00
78	Se	4.00	P	2.40	60.10
89	Y	5007553.00	A	77690.00	1.55
98	Mo	677.82	P	50.48	7.45
107	Ag	128.89	P	30.97	24.03
111	Cd	38.89	P	21.43	55.10
115	In	5412757.00	A	21600.00	0.40
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	116.67	P	28.48	24.41
137	Ba	190.01	P	23.33	12.28
159	Tb	8478244.00	A	34400.00	0.41
205	Tl	325.57	P	18.96	5.82
208	Pb	3173.59	P	77.69	2.45
209	Bi	5521002.00	A	15890.00	0.29

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 20 2007 08:00 pm
Operator:
Sample Name: S6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 07:58 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1704163.00	A	29740.00	1.75
7 (Li)		P		
9 Be	490.02	P	59.26	12.09
23 Na	49819.93	P	392.00	0.79
24 Mg	192643.70	P	1507.00	0.78
27 Al	224507.30	P	1452.00	0.65
39 K	1861061.00	A	16510.00	0.89
44 Ca	1472908.00	A	15510.00	1.05
45 Sc	1721829.00	A	4173.00	0.24
45 Sc	79133.79	P	303.10	0.38
45 Sc	3081120.00	A	43350.00	1.41
51 V	400.38	P	5.01	1.25
52 Cr	858.18	P	5.25	0.61
55 Mn	390.38	P	13.26	3.40
56 Fe	207776.80	P	1341.00	0.65
59 Co	702.25	P	18.49	2.63
60 Ni	909.67	P	42.23	4.64
63 Cu	6312.46	P	58.04	0.92
65 Cu	3071.82	P	43.70	1.42
66 Zn	2723.23	P	74.09	2.72
72 Ge	432508.19	P	1295.00	0.30
72 Ge	70264.77	P	70.97	0.10
75 As	46.89	P	3.42	7.30
78 Se	57.56	P	14.91	25.91
89 Y	5000663.00	A	9726.00	0.19
98 Mo	1863.51	P	21.86	1.17
99 (Ru)	0.00	P	0.00	0.00
107 Ag	2312.48	P	89.55	3.87
111 Cd	493.36	P	58.12	11.78
115 In	5437211.00	A	79420.00	1.46
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	2744.80	P	90.22	3.29
137 Ba	5162.21	P	111.30	2.16
159 Tb	8527020.00	A	42810.00	0.50
205 Tl	2508.09	P	35.96	1.43
208 Pb	11085.49	P	198.20	1.79
209 Bi	5523946.00	A	41840.00	0.76

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1704163.30	1.75	1689883.40	100.8	80 - 120	
45 Sc	1721828.50	0.24	1743579.60	98.8	80 - 120	
45 Sc	79133.79	0.38	79052.76	100.1	80 - 120	
45 Sc	3081119.80	1.41	3066424.50	100.5	80 - 120	
72 Ge	432508.19	0.30	433598.78	99.7	80 - 120	
72 Ge	70264.77	0.10	69549.91	101.0	80 - 120	
89 Y	5000663.50	0.19	5007553.00	99.9	80 - 120	
115 In	5437211.00	1.46	5412756.50	100.5	80 - 120	
159 Tb	8527020.00	0.50	8478244.00	100.6	80 - 120	
209 Bi	5523946.00	0.76	5521002.00	100.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 20 2007 08:06 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:04 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1716649.00	A	30110.00	1.75
7 (Li)		P		
9 Be	2429.15	P	90.23	3.71
23 Na	58613.38	P	469.90	0.80
24 Mg	765395.69	P	4561.00	0.60
27 Al	827788.50	A	9209.00	1.11
39 K	2089275.00	A	8574.00	0.41
44 Ca	1489162.00	A	8129.00	0.55
45 Sc	1722995.00	A	10350.00	0.60
45 Sc	79142.02	P	476.00	0.60
45 Sc	3132591.00	A	66330.00	2.12
51 V	1441.19	P	55.66	3.86
52 Cr	2220.18	P	19.47	0.88
55 Mn	984.12	P	18.80	1.91
56 Fe	790847.31	P	2358.00	0.30
59 Co	3259.63	P	48.52	1.49
60 Ni	1218.21	P	8.98	0.74
63 Cu	5685.17	P	49.42	0.87
65 Cu	2809.91	P	77.30	2.75
66 Zn	2629.88	P	35.43	1.35
72 Ge	432136.00	P	200.80	0.05
72 Ge	69792.60	P	465.70	0.67
75 As	213.11	P	10.01	4.70
78 Se	284.00	P	22.81	8.03
89 Y	5099339.00	A	89310.00	1.75
98 Mo	6344.88	P	258.50	4.07
99 (Ru)	1.11	P	1.93	173.24
107 Ag	9863.57	P	107.90	1.09
111 Cd	2221.35	P	19.24	0.87
115 In	5528810.00	A	59390.00	1.07
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8498.29	P	175.00	2.06
137 Ba	7396.55	P	228.90	3.09
159 Tb	8568983.00	A	130200.00	1.52
205 Tl	11536.21	P	122.20	1.06
208 Pb	38384.14	P	75.98	0.20
209 Bi	5517877.00	A	63220.00	1.15

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1716649.30	1.75	1689883.40	101.6	80 - 120	
45 Sc	1722994.80	0.60	1743579.60	98.8	80 - 120	
45 Sc	79142.02	0.60	79052.76	100.1	80 - 120	
45 Sc	3132590.50	2.12	3066424.50	102.2	80 - 120	
72 Ge	432136.00	0.05	433598.78	99.7	80 - 120	
72 Ge	69792.59	0.67	69549.91	100.3	80 - 120	
89 Y	5099338.50	1.75	5007553.00	101.8	80 - 120	
115 In	5528810.00	1.07	5412756.50	102.1	80 - 120	
159 Tb	8568983.00	1.52	8478244.00	101.1	80 - 120	
209 Bi	5517877.50	1.15	5521002.00	99.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 20 2007 08:12 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:10 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1694717.00	A	2575.00	0.15
7 (Li)		P		
9 Be	4907.58	P	160.20	3.26
23 Na	91335.76	P	1288.00	1.41
24 Mg	1422004.00	A	8023.00	0.56
27 Al	1637795.00	A	3131.00	0.19
39 K	3150608.00	A	17440.00	0.55
44 Ca	1503580.00	A	1078.00	0.07
45 Sc	1747564.00	A	26220.00	1.50
45 Sc	79012.49	P	485.80	0.61
45 Sc	3068862.00	A	19170.00	0.62
51 V	2722.86	P	28.15	1.03
52 Cr	4185.79	P	36.77	0.88
55 Mn	1818.65	P	21.15	1.16
56 Fe	1554634.00	A	12400.00	0.80
59 Co	6705.22	P	78.99	1.18
60 Ni	2739.90	P	37.30	1.36
63 Cu	13320.27	P	61.88	0.46
65 Cu	6582.58	P	81.35	1.24
66 Zn	3355.95	P	65.40	1.95
72 Ge	432258.41	P	3031.00	0.70
72 Ge	69193.50	P	437.60	0.63
75 As	415.56	P	14.70	3.54
78 Se	543.12	P	9.67	1.78
89 Y	4980636.00	A	21010.00	0.42
98 Mo	11925.08	P	248.60	2.08
99 (Ru)	2.22	P	1.93	86.62
107 Ag	20097.36	P	181.70	0.90
111 Cd	4468.60	P	51.90	1.16
115 In	5436046.00	A	43960.00	0.81
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	17063.61	P	371.60	2.18
137 Ba	10828.79	P	71.72	0.66
159 Tb	8389646.00	A	73920.00	0.88
205 Tl	22865.99	P	158.50	0.69
208 Pb	67224.24	P	275.30	0.41
209 Bi	5409735.00	A	34570.00	0.64

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1694717.50	0.15	1689883.40	100.3	80 - 120	
45 Sc	1747564.30	1.50	1743579.60	100.2	80 - 120	
45 Sc	79012.48	0.61	79052.76	99.9	80 - 120	
45 Sc	3068862.30	0.62	3066424.50	100.1	80 - 120	
72 Ge	432258.38	0.70	433598.78	99.7	80 - 120	
72 Ge	69193.51	0.63	69549.91	99.5	80 - 120	
89 Y	4980636.00	0.42	5007553.00	99.5	80 - 120	
115 In	5436046.00	0.81	5412756.50	100.4	80 - 120	
159 Tb	8389646.00	0.88	8478244.00	99.0	80 - 120	
209 Bi	5409735.00	0.64	5521002.00	98.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 20 2007 08:18 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:16 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1747958.00	A	28750.00	1.64
7 (Li)		P		
9 Be	49891.44	P	528.30	1.06
23 Na	412195.50	P	1660.00	0.40
24 Mg	13180300.00	A	65010.00	0.49
27 Al	15546580.00	A	162200.00	1.04
39 K	18018420.00	A	87910.00	0.49
44 Ca	2007946.00	A	5489.00	0.27
45 Sc	1805793.00	A	37900.00	2.10
45 Sc	82089.65	P	166.50	0.20
45 Sc	3198075.00	A	44830.00	1.40
51 V	25871.91	P	181.70	0.70
52 Cr	36912.53	P	488.40	1.32
55 Mn	15964.96	P	199.00	1.25
56 Fe	14104730.00	A	158800.00	1.13
59 Co	66236.38	P	390.80	0.59
60 Ni	19263.19	P	221.50	1.15
63 Cu	58238.31	P	752.90	1.29
65 Cu	28721.20	P	197.70	0.69
66 Zn	9062.73	P	171.40	1.89
72 Ge	452483.59	P	9102.00	2.01
72 Ge	71879.50	P	246.70	0.34
75 As	4114.35	P	37.92	0.92
78 Se	5403.43	P	110.50	2.05
89 Y	5169522.00	A	39480.00	0.76
98 Mo	112055.30	P	171.60	0.15
99 (Ru)	2.22	P	3.85	173.20
107 Ag	196670.80	P	1351.00	0.69
111 Cd	43902.09	P	835.70	1.90
115 In	5653634.00	A	103100.00	1.82
118 (In)		A		
118 (In)		P		
118 (In)		A		
121 Sb	158710.59	P	1101.00	0.69
137 Ba	109475.40	P	1356.00	1.24
159 Tb	8687293.00	A	126500.00	1.46
205 Tl	217343.09	P	1745.00	0.80
208 Pb	628341.38	P	697.90	0.11
209 Bi	5568109.00	A	48290.00	0.87

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1747957.60	1.64	1689883.40	103.4	80 - 120	
45 Sc	1805792.80	2.10	1743579.60	103.6	80 - 120	
45 Sc	82089.65	0.20	79052.76	103.8	80 - 120	
45 Sc	3198074.50	1.40	3066424.50	104.3	80 - 120	
72 Ge	452483.56	2.01	433598.78	104.4	80 - 120	
72 Ge	71879.50	0.34	69549.91	103.3	80 - 120	
89 Y	5169521.50	0.76	5007553.00	103.2	80 - 120	
115 In	5653634.00	1.82	5412756.50	104.5	80 - 120	
159 Tb	8687293.00	1.46	8478244.00	102.5	80 - 120	
209 Bi	5568108.50	0.87	5521002.00	100.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 20 2007 08:23 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:22 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1697332.00	A	5151.00	0.30
7 (Li)		P		
9 Be	482327.41	P	1814.00	0.38
23 Na	3282585.00	A	20350.00	0.62
24 Mg	###########	A	931700.00	0.73
27 Al	###########	A	1363000.00	0.91
39 K	###########	A	809800.00	0.49
44 Ca	6607105.00	A	14720.00	0.22
45 Sc	1692806.00	A	7671.00	0.45
45 Sc	78718.06	P	234.80	0.30
45 Sc	3085388.00	A	24120.00	0.78
51 V	249643.09	P	1500.00	0.60
52 Cr	352945.81	P	331.30	0.09
55 Mn	151785.70	P	906.80	0.60
56 Fe	###########	A	520300.00	0.39
59 Co	633616.38	P	3289.00	0.52
60 Ni	180439.91	P	446.40	0.25
63 Cu	523540.19	P	1302.00	0.25
65 Cu	261038.80	P	777.10	0.30
66 Zn	67830.69	P	187.40	0.28
72 Ge	425421.81	P	3315.00	0.78
72 Ge	68988.85	P	416.70	0.60
75 As	39640.52	P	80.64	0.20
78 Se	51621.60	P	450.80	0.87
89 Y	4995022.00	A	17560.00	0.35
98 Mo	1177251.00	A	11850.00	1.01
99 (Ru)	17.78	P	6.94	39.03
107 Ag	1980079.00	A	15530.00	0.78
111 Cd	416002.19	P	1815.00	0.44
115 In	5295841.00	A	19060.00	0.36
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1629668.00	A	2502.00	0.15
137 Ba	561118.88	P	855.60	0.15
159 Tb	8344652.00	A	69390.00	0.83
205 Tl	2237495.00	A	16380.00	0.73
208 Pb	6352252.00	A	33210.00	0.52
209 Bi	5257275.00	A	13270.00	0.25

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1697332.30	0.30	1689883.40	100.4	80 - 120	
45 Sc	1692805.60	0.45	1743579.60	97.1	80 - 120	
45 Sc	78718.06	0.30	79052.76	99.6	80 - 120	
45 Sc	3085388.30	0.78	3066424.50	100.6	80 - 120	
72 Ge	425421.78	0.78	433598.78	98.1	80 - 120	
72 Ge	68988.84	0.60	69549.91	99.2	80 - 120	
89 Y	4995022.00	0.35	5007553.00	99.7	80 - 120	
115 In	5295841.00	0.36	5412756.50	97.8	80 - 120	
159 Tb	8344652.50	0.83	8478244.00	98.4	80 - 120	
209 Bi	5257275.00	0.25	5521002.00	95.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20t00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 20 2007 08:32 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:30 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1637871.00	A	24980.00	1.53
7 (Li)		P		
9 Be	949930.88	A	7709.00	0.81
23 Na	6101484.00	A	25840.00	0.42
24 Mg	############	A	2370000.00	0.99
27 Al	############	A	1259000.00	0.45
39 K	############	A	2490000.00	0.81
44 Ca	11348760.00	A	53750.00	0.47
45 Sc	1657108.00	A	7362.00	0.44
45 Sc	76519.88	P	426.70	0.56
45 Sc	3020273.00	A	13240.00	0.44
51 V	476903.31	P	1204.00	0.25
52 Cr	665666.31	P	1288.00	0.19
55 Mn	288072.69	P	1386.00	0.48
56 Fe	############	A	2028000.00	0.78
59 Co	1191764.00	A	23190.00	1.95
60 Ni	336015.50	P	1559.00	0.46
63 Cu	974447.69	P	1066.00	0.11
65 Cu	485221.31	P	1753.00	0.36
66 Zn	124961.70	P	402.60	0.32
72 Ge	415813.69	P	354.60	0.09
72 Ge	66727.92	P	641.50	0.96
75 As	75237.88	P	411.80	0.55
78 Se	98748.79	P	115.20	0.12
89 Y	4852910.00	A	12100.00	0.25
98 Mo	2219485.00	A	4589.00	0.21
99 (Ru)	25.56	P	6.94	27.15
107 Ag	3652490.00	A	14350.00	0.39
111 Cd	784120.50	P	5157.00	0.66
115 In	5147427.00	A	25030.00	0.49
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	3076101.00	A	6968.00	0.23
137 Ba	1076418.00	M	15280.00	1.42
159 Tb	8178699.00	A	49960.00	0.61
205 Tl	4171949.00	A	20380.00	0.49
208 Pb	11841810.00	A	121500.00	1.03
209 Bi	5115272.00	A	30180.00	0.59

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1637871.10	1.53	1689883.40	96.9	80 - 120	
45 Sc	1657108.00	0.44	1743579.60	95.0	80 - 120	
45 Sc	76519.88	0.56	79052.76	96.8	80 - 120	
45 Sc	3020273.00	0.44	3066424.50	98.5	80 - 120	
72 Ge	415813.72	0.09	433598.78	95.9	80 - 120	
72 Ge	66727.92	0.96	69549.91	95.9	80 - 120	
89 Y	4852910.00	0.25	5007553.00	96.9	80 - 120	
115 In	5147427.00	0.49	5412756.50	95.1	80 - 120	
159 Tb	8178699.00	0.61	8478244.00	96.5	80 - 120	
209 Bi	5115272.50	0.59	5521002.00	92.7	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20t00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417012 File : f20t0012 Time : 20-JUN-2007 20:50
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6419, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.2688	0.2344	10000	10010	ug/L	0	10	
Antimony	A	0.1678	0.1506	100.0	100.2	ug/L	0	10	
Barium	A	0.0972	0.0317	100.0	95.71	ug/L	-4	10	
Beryllium	A	0.1433	0.1390	100.0	96.23	ug/L	-4	10	
Cadmium	A	0.0405	0.0385	100.0	100.3	ug/L	0	10	
Calcium	A	0.5271	0.0104	10000	9756	ug/L	-2	10	
Lead	A	0.4338	0.3363	100.0	91.95	ug/L	-8	10	
Magnesium	A	0.2331	0.2015	10000	10100	ug/L	1	10	
Molybdenum	A	0.1285	0.1143	100.0	99.39	ug/L	-1	10	
Potassium	A	0.8337	0.2579	10000	10020	ug/L	0	10	
Silver	A	0.1857	0.1798	100.0	100.3	ug/L	0	10	
Thallium	A	0.4198	0.4028	50.00	48.96	ug/L	-2	10	
Arsenic	E	0.2991	0.2825	100.0	99.82	ug/L	0	10	
Chromium	E	2.9236	2.1629	100.0	98.81	ug/L	-1	10	
Cobalt	E	4.1253	3.8659	100.0	98.61	ug/L	-1	10	
Copper	E	12.365	3.6683	100.0	99.52	ug/L	0	10	
Manganese	E	1.2898	0.9254	100.0	97.82	ug/L	-2	10	
Nickel	E	2.0730	1.1044	100.0	99.68	ug/L	0	10	
Sodium	E	0.8542	0.1969	10000	9739	ug/L	-3	10	
Vanadium	E	1.7990	1.5247	100.0	97.48	ug/L	-3	10	
Zinc	E	4.5270	0.4876	100.0	102.2	ug/L	2	10	
Iron	H	0.4480	0.3864	10000	9823	ug/L	-2	10	
Selenium	H	0.0625	0.0594	100.0	99.63	ug/L	0	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1701236	0.67
Scandium	A	3066425	3039510	-0.88
Scandium	E	79053	78172	-1.11
Scandium	H	1743580	1686664	-3.26
Germanium	H	433599	426255	-1.69
Germanium	E	69550	67997	-2.23
Indium	A	5412757	5278789	-2.48
Bismuth	A	5521002	5238989	-5.11
Yttrium	A	5007553	4903660	-2.07
Terbium	A	8478244	8424662	-0.63

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417015 File : f20t0015 Time : 20-JUN-2007 21:11
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.005442]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.004492]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003420]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003966]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.004159	ug/L	
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.008217]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	calc
Iron	H	ND	10.00	0.2518	ug/L	
Selenium	H	[0.008729]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1780928	5.39
Scandium	A	3066425	3145851	2.59
Scandium	E	79053	81235	2.76
Scandium	H	1743580	1724876	-1.07
Germanium	H	433599	441223	1.76
Germanium	E	69550	70903	1.95
Indium	A	5412757	5475069	1.15
Bismuth	A	5521002	5456061	-1.18
Yttrium	A	5007553	5041506	0.68
Terbium	A	8478244	8405168	-0.86

!=warning calc=check quantitation ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417017 File : f20t0017 Time : 20-JUN-2007 21:22
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05325]	0.1000	ug/L	
Barium	A	0.9806	0.1000	ug/L	
Beryllium	A	[0.02577]	0.1000	ug/L	
Cadmium	A	1.440	0.1000	ug/L	
Lead	A	0.4209	0.1000	ug/L	
Silver	A	0.1987	0.1000	ug/L	
Thallium	A	[0.04268]	0.05000	ug/L	
Arsenic	E	0.2428	0.1000	ug/L	
Chromium	E	1.321	0.1000	ug/L	
Cobalt	E	0.2074	0.1000	ug/L	
Copper	E	1.444	0.1000	ug/L	
Manganese	E	0.5502	0.1000	ug/L	
Nickel	E	1.175	0.1000	ug/L	
Vanadium	E	[0.06999]	0.1000	ug/L	
Zinc	E	2.511	0.1000	ug/L	
Selenium	H	[0.07409]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	95020	ug/L	95
Calcium	A	300000	296400	ug/L	99
Magnesium	A	100000	92190	ug/L	92
Molybdenum	A	2000	1865	ug/L	93
Potassium	A	100000	95680	ug/L	96
Sodium	E	250000	224900	ug/L	90
Iron	H	250000	225300	ug/L	90

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1440193	-14.78
Scandium	A	3066425	2888044	-5.82
Scandium	E	79053	79843	1.00
Scandium	H	1743580	1640096	-5.94
Germanium	H	433599	391749	-9.65
Germanium	E	69550	67843	-2.45
Indium	A	5412757	4711067	-12.96
Bismuth	A	5521002	4303322	-22.06
Yttrium	A	5007553	4674699	-6.65
Terbium	A	8478244	7593464	-10.44

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417018 File : f20t0018 Time : 20-JUN-2007 21:29
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95580	ug/L	-4		
Cadmium	A	100.0	101.7	ug/L	2	20	
Calcium	A	300000	302500	ug/L	1		
Magnesium	A	100000	92100	ug/L	-8		
Molybdenum	A	2000	1877	ug/L	-6		
Potassium	A	100000	96770	ug/L	-3		
Silver	A	50.00	46.88	ug/L	-6	20	
Arsenic	E	100.0	106.4	ug/L	6	20	
Chromium	E	200.0	200.8	ug/L	0	20	
Cobalt	E	200.0	191.9	ug/L	-4	20	
Copper	E	200.0	181.4	ug/L	-9	20	
Manganese	E	200.0	197.3	ug/L	-1	20	
Nickel	E	200.0	186.9	ug/L	-7	20	
Sodium	E	250000	230800	ug/L	-8		
Vanadium	E	200.0	205.0	ug/L	3	20	
Zinc	E	100.0	99.61	ug/L	0	20	
Iron	H	250000	228900	ug/L	-8		
Selenium	H	100.0	103.0	ug/L	3	20	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1743580	1662996	-4.62
Scandium	A	3066425	2796855	-8.79
Scandium	E	79053	78309	-0.94
Germanium	H	433599	394495	-9.02
Germanium	E	69550	67109	-3.51
Indium	A	5412757	4679601	-13.54
Yttrium	A	5007553	4676954	-6.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417033 File : f20t0033 Time : 20-JUN-2007 23:07
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2333	10000	9957	ug/L	0	10	
Antimony	A	0.1678	0.1522	100.0	101.3	ug/L	1	10	
Barium	A	0.0972	0.0326	100.0	98.52	ug/L	-1	10	
Beryllium	A	0.1433	0.1394	100.0	96.50	ug/L	-4	10	
Cadmium	A	0.0405	0.0386	100.0	100.8	ug/L	1	10	
Calcium	A	0.5271	0.0102	10000	9520	ug/L	-5	10	
Lead	A	0.4338	0.3393	100.0	92.77	ug/L	-7	10	
Magnesium	A	0.2331	0.1994	10000	9998	ug/L	0	10	
Molybdenum	A	0.1285	0.1136	100.0	98.70	ug/L	-1	10	
Potassium	A	0.8337	0.2616	10000	10170	ug/L	2	10	
Silver	A	0.1857	0.1822	100.0	101.6	ug/L	2	10	
Thallium	A	0.4198	0.4048	50.00	49.20	ug/L	-2	10	
Arsenic	E	0.2991	0.2828	100.0	99.93	ug/L	0	10	
Chromium	E	2.9236	2.2083	100.0	100.9	ug/L	1	10	
Cobalt	E	4.1253	3.9347	100.0	100.4	ug/L	0	10	
Copper	E	12.365	3.6821	100.0	99.90	ug/L	0	10	
Manganese	E	1.2898	0.9422	100.0	99.59	ug/L	0	10	
Nickel	E	2.0730	1.1260	100.0	101.6	ug/L	2	10	
Sodium	E	0.8542	0.2006	10000	9924	ug/L	-1	10	
Vanadium	E	1.7990	1.5544	100.0	99.39	ug/L	-1	10	
Zinc	E	4.5270	0.4876	100.0	102.2	ug/L	2	10	
Iron	H	0.4480	0.4009	10000	10190	ug/L	2	10	
Selenium	H	0.0625	0.0606	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1696984	0.42
Scandium	A	3066425	3150132	2.73
Scandium	E	79053	81226	2.75
Scandium	H	1743580	1728460	-0.87
Germanium	H	433599	443390	2.26
Germanium	E	69550	71684	3.07
Indium	A	5412757	5418707	0.11
Bismuth	A	5521002	5259986	-4.73
Yttrium	A	5007553	5115554	2.16
Terbium	A	8478244	8495427	0.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417035 File : f20t0035 Time : 20-JUN-2007 23:21
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01316]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.008983]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.002848]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.004575]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.002079]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.004813]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.003030]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	ND	0.1000	0.008672	ug/L	
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.003910]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.3485]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.003752]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1738433	2.87
Scandium	A	3066425	3165650	3.24
Scandium	E	79053	80316	1.60
Scandium	H	1743580	1665143	-4.50
Germanium	H	433599	437916	1.00
Germanium	E	69550	70463	1.31
Indium	A	5412757	5546566	2.47
Bismuth	A	5521002	5440466	-1.46
Yttrium	A	5007553	5168548	3.22
Terbium	A	8478244	8583487	1.24

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417052 File : f20t0052 Time : 21-JUN-2007 01:01
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2354	10000	10050	ug/L	1	10	
Antimony	A	0.1678	0.1521	100.0	101.2	ug/L	1	10	
Barium	A	0.0972	0.0330	100.0	99.70	ug/L	0	10	
Beryllium	A	0.1433	0.1418	100.0	98.16	ug/L	-2	10	
Cadmium	A	0.0405	0.0387	100.0	100.9	ug/L	1	10	
Calcium	A	0.5271	0.0102	10000	9492	ug/L	-5	10	
Lead	A	0.4338	0.3343	100.0	91.39	ug/L	-9	10	
Magnesium	A	0.2331	0.2022	10000	10140	ug/L	1	10	
Molybdenum	A	0.1285	0.1146	100.0	99.60	ug/L	0	10	
Potassium	A	0.8337	0.2644	10000	10280	ug/L	3	10	
Silver	A	0.1857	0.1821	100.0	101.5	ug/L	2	10	
Thallium	A	0.4198	0.4091	50.00	49.72	ug/L	-1	10	
Arsenic	E	0.2991	0.2850	100.0	100.7	ug/L	1	10	
Chromium	E	2.9236	2.1834	100.0	99.75	ug/L	0	10	
Cobalt	E	4.1253	3.9046	100.0	99.60	ug/L	0	10	
Copper	E	12.365	3.6678	100.0	99.51	ug/L	0	10	
Manganese	E	1.2898	0.9334	100.0	98.66	ug/L	-1	10	
Nickel	E	2.0730	1.1118	100.0	100.3	ug/L	0	10	
Sodium	E	0.8542	0.1962	10000	9705	ug/L	-3	10	
Vanadium	E	1.7990	1.5438	100.0	98.71	ug/L	-1	10	
Zinc	E	4.5270	0.4875	100.0	102.2	ug/L	2	10	
Iron	H	0.4480	0.4260	10000	10830	ug/L	8	10	
Selenium	H	0.0625	0.0594	100.0	99.61	ug/L	0	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1756051	3.92
Scandium	A	3066425	3306225	7.82
Scandium	E	79053	84842	7.32
Scandium	H	1743580	1675295	-3.92
Germanium	H	433599	462274	6.61
Germanium	E	69550	74200	6.69
Indium	A	5412757	5588924	3.25
Bismuth	A	5521002	5286022	-4.26
Yttrium	A	5007553	5292551	5.69
Terbium	A	8478244	8679247	2.37

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417054 File : f20t0054 Time : 21-JUN-2007 01:15
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01553]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01355]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.006703]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.003319]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.004452]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01464]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.009358]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.002902]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	[0.01961]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.6891]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.008129]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1821375	7.78
Scandium	A	3066425	3330112	8.60
Scandium	E	79053	86247	9.10
Scandium	H	1743580	1676301	-3.86
Germanium	H	433599	469926	8.38
Germanium	E	69550	74609	7.27
Indium	A	5412757	5809080	7.32
Bismuth	A	5521002	5630021	1.97
Yttrium	A	5007553	5464249	9.12
Terbium	A	8478244	8886820	4.82

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417061 File : f20t0061 Time : 21-JUN-2007 01:57
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2378	10000	10150	ug/L	2	10	
Antimony	A	0.1678	0.1500	100.0	99.83	ug/L	0	10	
Barium	A	0.0972	0.0334	100.0	100.9	ug/L	1	10	
Beryllium	A	0.1433	0.1412	100.0	97.77	ug/L	-2	10	
Cadmium	A	0.0405	0.0388	100.0	101.2	ug/L	1	10	
Calcium	A	0.5271	0.0104	10000	9705	ug/L	-3	10	
Lead	A	0.4338	0.3348	100.0	91.54	ug/L	-8	10	
Magnesium	A	0.2331	0.2018	10000	10120	ug/L	1	10	
Molybdenum	A	0.1285	0.1145	100.0	99.56	ug/L	0	10	
Potassium	A	0.8337	0.2650	10000	10300	ug/L	3	10	
Silver	A	0.1857	0.1826	100.0	101.9	ug/L	2	10	
Thallium	A	0.4198	0.4081	50.00	49.60	ug/L	-1	10	
Arsenic	E	0.2991	0.2865	100.0	101.2	ug/L	1	10	
Chromium	E	2.9236	2.1670	100.0	99.00	ug/L	-1	10	
Cobalt	E	4.1253	3.8607	100.0	98.48	ug/L	-2	10	
Copper	E	12.365	3.6821	100.0	99.90	ug/L	0	10	
Manganese	E	1.2898	0.9320	100.0	98.52	ug/L	-1	10	
Nickel	E	2.0730	1.1022	100.0	99.48	ug/L	-1	10	
Sodium	E	0.8542	0.1941	10000	9599	ug/L	-4	10	
Vanadium	E	1.7990	1.5311	100.0	97.90	ug/L	-2	10	
Zinc	E	4.5270	0.4886	100.0	102.4	ug/L	2	10	
Iron	H	0.4480	0.4268	10000	10850	ug/L	9	10	
Selenium	H	0.0625	0.0592	100.0	99.19	ug/L	-1	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1850558	9.51
Scandium	A	3066425	3433252	11.96
Scandium	E	79053	87655	10.88
Scandium	H	1743580	1715000	-1.64
Germanium	H	433599	478062	10.25
Germanium	E	69550	75468	8.51
Indium	A	5412757	5719211	5.66
Bismuth	A	5521002	5350320	-3.09
Yttrium	A	5007553	5432364	8.48
Terbium	A	8478244	8778526	3.54

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417063 File : f20t0063 Time : 21-JUN-2007 02:11
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.01155]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01221]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.003192]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.001760]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.001087]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01682]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.008781]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.002694]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	[0.02271]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.004644]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.7584]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.009079]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1884937	11.54
Scandium	A	3066425	3491493	13.86
Scandium	E	79053	88918	12.48
Scandium	H	1743580	1711877	-1.82
Germanium	H	433599	476363	9.86
Germanium	E	69550	76756	10.36
Indium	A	5412757	5979189	10.46
Bismuth	A	5521002	5677824	2.84
Yttrium	A	5007553	5566434	11.16
Terbium	A	8478244	9037122	6.59

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417066 File : f20t0066 Time : 21-JUN-2007 02:29
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05678]	0.1000	ug/L	
Barium	A	0.9900	0.1000	ug/L	
Beryllium	A	[0.02222]	0.1000	ug/L	
Cadmium	A	1.036	0.1000	ug/L	
Lead	A	0.4130	0.1000	ug/L	
Silver	A	0.2055	0.1000	ug/L	
Thallium	A	[0.03499]	0.05000	ug/L	
Arsenic	E	0.2332	0.1000	ug/L	
Chromium	E	1.325	0.1000	ug/L	
Cobalt	E	0.2065	0.1000	ug/L	
Copper	E	1.500	0.1000	ug/L	
Manganese	E	0.5305	0.1000	ug/L	
Nickel	E	1.199	0.1000	ug/L	
Vanadium	E	[0.06184]	0.1000	ug/L	
Zinc	E	2.573	0.1000	ug/L	
Selenium	H	[0.05421]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94390	ug/L	94
Calcium	A	300000	298300	ug/L	99
Magnesium	A	100000	91050	ug/L	91
Molybdenum	A	2000	1845	ug/L	92
Potassium	A	100000	96080	ug/L	96
Sodium	E	250000	221700	ug/L	89
Iron	H	250000	249700	ug/L	100

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1478307	-12.52
Scandium	A	3066425	3034806	-1.03
Scandium	E	79053	83832	6.05
Scandium	H	1743580	1571234	-9.88
Germanium	H	433599	415230	-4.24
Germanium	E	69550	70941	2.00
Indium	A	5412757	4878829	-9.86
Bismuth	A	5521002	4409265	-20.14
Yttrium	A	5007553	4924166	-1.67
Terbium	A	8478244	7874174	-7.12

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417067 File : f20t0067 Time : 21-JUN-2007 02:35
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94720	ug/L	-5		
Cadmium	A	100.0	101.5	ug/L	2	20	
Calcium	A	300000	303200	ug/L	1		
Magnesium	A	100000	90730	ug/L	-9		
Molybdenum	A	2000	1862	ug/L	-7		
Potassium	A	100000	97260	ug/L	-3		
Silver	A	50.00	47.05	ug/L	-6	20	
Arsenic	E	100.0	107.1	ug/L	7	20	
Chromium	E	200.0	199.6	ug/L	0	20	
Cobalt	E	200.0	188.6	ug/L	-6	20	
Copper	E	200.0	182.3	ug/L	-9	20	
Manganese	E	200.0	196.5	ug/L	-2	20	
Nickel	E	200.0	185.6	ug/L	-7	20	
Sodium	E	250000	229100	ug/L	-8		
Vanadium	E	200.0	204.2	ug/L	2	20	
Zinc	E	100.0	100.1	ug/L	0	20	
Iron	H	250000	252700	ug/L	1		
Selenium	H	100.0	103.6	ug/L	4	20	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1743580	1543155	-11.50
Scandium	A	3066425	2896319	-5.55
Scandium	E	79053	81026	2.50
Germanium	H	433599	405060	-6.58
Germanium	E	69550	68587	-1.38
Indium	A	5412757	4779412	-11.70
Yttrium	A	5007553	4816199	-3.82

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417084 File : f20t0084 Time : 21-JUN-2007 04:28
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2298	10000	9810	ug/L	-2	10	
Antimony	A	0.1678	0.1507	100.0	100.3	ug/L	0	10	
Barium	A	0.0972	0.0333	100.0	100.4	ug/L	0	10	
Beryllium	A	0.1433	0.1399	100.0	96.90	ug/L	-3	10	
Cadmium	A	0.0405	0.0388	100.0	101.1	ug/L	1	10	
Calcium	A	0.5271	0.0107	10000	10080	ug/L	1	10	
Lead	A	0.4338	0.3342	100.0	91.36	ug/L	-9	10	
Magnesium	A	0.2331	0.1951	10000	9783	ug/L	-2	10	
Molybdenum	A	0.1285	0.1128	100.0	98.00	ug/L	-2	10	
Potassium	A	0.8337	0.2604	10000	10120	ug/L	1	10	
Silver	A	0.1857	0.1811	100.0	101.0	ug/L	1	10	
Thallium	A	0.4198	0.4039	50.00	49.10	ug/L	-2	10	
Arsenic	E	0.2991	0.2828	100.0	99.92	ug/L	0	10	
Chromium	E	2.9236	2.1450	100.0	97.99	ug/L	-2	10	
Cobalt	E	4.1253	3.8206	100.0	97.45	ug/L	-3	10	
Copper	E	12.365	3.5843	100.0	97.23	ug/L	-3	10	
Manganese	E	1.2898	0.9265	100.0	97.93	ug/L	-2	10	
Nickel	E	2.0730	1.0835	100.0	97.79	ug/L	-2	10	
Sodium	E	0.8542	0.1958	10000	9685	ug/L	-3	10	
Vanadium	E	1.7990	1.5254	100.0	97.53	ug/L	-2	10	
Zinc	E	4.5270	0.4795	100.0	100.5	ug/L	1	10	
Iron	H	0.4480	0.4246	10000	10790	ug/L	8	10	
Selenium	H	0.0625	0.0594	100.0	99.56	ug/L	0	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1830234	8.31
Scandium	A	3066425	3613711	17.85
Scandium	E	79053	92300	16.76
Scandium	H	1743580	1778638	2.01
Germanium	H	433599	490012	13.01
Germanium	E	69550	80108	15.18
Indium	A	5412757	5939422	9.73
Bismuth	A	5521002	5525719	0.09
Yttrium	A	5007553	5671282	13.25
Terbium	A	8478244	9121782	7.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417088 File : f20t0088 Time : 21-JUN-2007 04:55
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.7379	ug/L	
Antimony	A	[0.007424]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01655]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.002834]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.002128]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.942]	10.00	2.807	ug/L	!ib
Silver	A	ND	0.1000	0.0007981	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008137]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	ND	0.1000	0.001911	ug/L	
Copper	E	0.1055	0.1000	0.05276	ug/L	ib ***
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	[0.02618]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	ND	0.1000	0.002654	ug/L	
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[0.5813]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.005191]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1860501	10.10
Scandium	A	3066425	3510051	14.47
Scandium	E	79053	90279	14.20
Scandium	H	1743580	1701604	-2.41
Germanium	H	433599	475940	9.77
Germanium	E	69550	78286	12.56
Indium	A	5412757	5956366	10.04
Bismuth	A	5521002	5598987	1.41
Yttrium	A	5007553	5556704	10.97
Terbium	A	8478244	8989099	6.03

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417104 File : f20t0104 Time : 21-JUN-2007 06:29
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2333	10000	9959	ug/L	0	10	i+ ***
Antimony	A	0.1678	0.1496	100.0	99.57	ug/L	0	10	
Barium	A	0.0972	0.0337	100.0	101.7	ug/L	2	10	
Beryllium	A	0.1433	0.1408	100.0	97.47	ug/L	-3	10	
Cadmium	A	0.0405	0.0385	100.0	100.4	ug/L	0	10	
Calcium	A	0.5271	0.0108	10000	10240	ug/L	2	10	i+ ***
Lead	A	0.4338	0.3329	100.0	91.02	ug/L	-9	10	
Magnesium	A	0.2331	0.1981	10000	9932	ug/L	-1	10	i+ ***
Molybdenum	A	0.1285	0.1121	100.0	97.48	ug/L	-3	10	
Potassium	A	0.8337	0.2639	10000	10260	ug/L	3	10	i+ ***
Silver	A	0.1857	0.1809	100.0	100.9	ug/L	1	10	
Thallium	A	0.4198	0.4040	50.00	49.11	ug/L	-2	10	
Arsenic	E	0.2991	0.2844	100.0	100.5	ug/L	1	10	
Chromium	E	2.9236	2.1360	100.0	97.58	ug/L	-2	10	i+ ***
Cobalt	E	4.1253	3.7798	100.0	96.41	ug/L	-4	10	i+ ***
Copper	E	12.365	3.5977	100.0	97.60	ug/L	-2	10	
Manganese	E	1.2898	0.9216	100.0	97.42	ug/L	-3	10	i+ ***
Nickel	E	2.0730	1.0766	100.0	97.16	ug/L	-3	10	i+ ***
Sodium	E	0.8542	0.1938	10000	9582	ug/L	-4	10	i+ ***
Vanadium	E	1.7990	1.5186	100.0	97.10	ug/L	-3	10	i+ ***
Zinc	E	4.5270	0.4821	100.0	101.1	ug/L	1	10	
Iron	H	0.4480	0.4209	10000	10700	ug/L	7	10	
Selenium	H	0.0625	0.0594	100.0	99.59	ug/L	0	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1910559	13.06
Scandium	A	3066425	3735108	**21.81 ***
Scandium	E	79053	95816	**21.21 ***
Scandium	H	1743580	1818208	4.28
Germanium	H	433599	496179	14.43
Germanium	E	69550	82217	18.21
Indium	A	5412757	6120924	13.08
Bismuth	A	5521002	5608276	1.58
Yttrium	A	5007553	5887810	17.58
Terbium	A	8478244	9314296	9.86

+=high bias i=ISTD failure

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417106 File : f20t0106 Time : 21-JUN-2007 06:44
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[0.7479]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01335]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.01047]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.008030]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	ND	0.1000	0.01337	ug/L	
Calcium	A	[6.059]	10.00	0.2604	ug/L	!ib
Lead	A	[0.004355]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	ND	10.00	0.7647	ug/L	
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	[3.944]	10.00	2.807	ug/L	!ib
Silver	A	[0.004479]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01194]	0.1000	0.004159	ug/L	!ib
Chromium	E	ND	0.1000	0.008214	ug/L	
Cobalt	E	[0.007000]	0.1000	0.001911	ug/L	!ib
Copper	E	[0.09467]	0.1000	0.05276	ug/L	!ib
Manganese	E	ND	0.1000	0.004496	ug/L	
Nickel	E	[0.03115]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.003474]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[1.206]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01137]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1942929	14.97
Scandium	A	3066425	3657840	19.29
Scandium	E	79053	94757	19.87
Scandium	H	1743580	1798026	3.12
Germanium	H	433599	497737	14.79
Germanium	E	69550	81638	17.38
Indium	A	5412757	6105905	12.81
Bismuth	A	5521002	5734614	3.87
Yttrium	A	5007553	5739760	14.62
Terbium	A	8478244	9203511	8.55

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET16
Seqnum : 897247417116 File : f20t0116
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6420, S6035

IDF : 1.0
Time : 21-JUN-2007 07:43

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2688	0.2366	10000	10100	ug/L	1	10	
Antimony	A	0.1678	0.1493	100.0	99.35	ug/L	-1	10	
Barium	A	0.0972	0.0336	100.0	101.5	ug/L	2	10	
Beryllium	A	0.1433	0.1381	100.0	95.62	ug/L	-4	10	
Cadmium	A	0.0405	0.0385	100.0	100.4	ug/L	0	10	
Calcium	A	0.5271	0.0102	10000	9486	ug/L	-5	10	
Lead	A	0.4338	0.3316	100.0	90.65	ug/L	-9	10	
Magnesium	A	0.2331	0.1999	10000	10020	ug/L	0	10	
Molybdenum	A	0.1285	0.1120	100.0	97.38	ug/L	-3	10	
Potassium	A	0.8337	0.2642	10000	10270	ug/L	3	10	
Silver	A	0.1857	0.1797	100.0	100.2	ug/L	0	10	
Thallium	A	0.4198	0.4006	50.00	48.69	ug/L	-3	10	
Arsenic	E	0.2991	0.2822	100.0	99.71	ug/L	0	10	
Chromium	E	2.9236	2.1308	100.0	97.34	ug/L	-3	10	
Cobalt	E	4.1253	3.7872	100.0	96.60	ug/L	-3	10	
Copper	E	12.365	3.5789	100.0	97.09	ug/L	-3	10	
Manganese	E	1.2898	0.9237	100.0	97.63	ug/L	-2	10	
Nickel	E	2.0730	1.0785	100.0	97.34	ug/L	-3	10	
Sodium	E	0.8542	0.1943	10000	9608	ug/L	-4	10	
Vanadium	E	1.7990	1.5145	100.0	96.83	ug/L	-3	10	
Zinc	E	4.5270	0.4778	100.0	100.1	ug/L	0	10	
Iron	H	0.4480	0.4241	10000	10780	ug/L	8	10	
Selenium	H	0.0625	0.0588	100.0	98.53	ug/L	-1	10	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1939344	14.76
Scandium	A	3066425	3619059	18.02
Scandium	E	79053	92408	16.89
Scandium	H	1743580	1758052	0.83
Germanium	H	433599	489081	12.80
Germanium	E	69550	79964	14.97
Indium	A	5412757	5982816	10.53
Bismuth	A	5521002	5529764	0.16
Yttrium	A	5007553	5732461	14.48
Terbium	A	8478244	9115725	7.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417118 File : f20t0118 Time : 21-JUN-2007 07:57
Cal : 897247417001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.351]	10.00	0.7379	ug/L	!ib
Antimony	A	[0.01716]	0.1000	0.003333	ug/L	!ib
Barium	A	[0.02247]	0.1000	0.002418	ug/L	!ib
Beryllium	A	[0.01290]	0.1000	0.0004985	ug/L	!ib
Cadmium	A	[0.01383]	0.1000	0.01337	ug/L	!ib
Calcium	A	ND	10.00	0.2604	ug/L	
Lead	A	[0.009739]	0.1000	0.0007223	ug/L	!ib
Magnesium	A	[1.144]	10.00	0.7647	ug/L	!ib
Molybdenum	A	ND	0.1000	0.01888	ug/L	
Potassium	A	ND	10.00	2.807	ug/L	
Silver	A	[0.009156]	0.1000	0.0007981	ug/L	!ib
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01644]	0.1000	0.004159	ug/L	!ib
Chromium	E	[0.01795]	0.1000	0.008214	ug/L	!ib
Cobalt	E	[0.01942]	0.1000	0.001911	ug/L	!ib
Copper	E	ND	0.1000	0.05276	ug/L	
Manganese	E	[0.008490]	0.1000	0.004496	ug/L	!ib
Nickel	E	[0.03404]	0.1000	0.008672	ug/L	!ib
Sodium	E	ND	10.00	4.339	ug/L	
Vanadium	E	[0.01844]	0.1000	0.002654	ug/L	!ib
Zinc	E	ND	0.1000	0.04457	ug/L	
Iron	H	[2.436]	10.00	0.2518	ug/L	!ib
Selenium	H	[0.01721]	0.1000	0.001592	ug/L	!ib

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1954430	15:65
Scandium	A	3066425	3608690	17.68
Scandium	E	79053	92349	16.82
Scandium	H	1743580	1736886	-0.38
Germanium	H	433599	485589	11.99
Germanium	E	69550	79980	15.00
Indium	A	5412757	6060808	11.97
Bismuth	A	5521002	5648501	2.31
Yttrium	A	5007553	5677218	13.37
Terbium	A	8478244	9089125	7.21

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417121 File : f20t0121 Time : 21-JUN-2007 08:15
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.04948]	0.1000	ug/L	
Barium	A	1.049	0.1000	ug/L	
Beryllium	A	[0.02160]	0.1000	ug/L	
Cadmium	A	1.067	0.1000	ug/L	
Lead	A	0.4099	0.1000	ug/L	
Silver	A	0.1960	0.1000	ug/L	
Thallium	A	[0.03733]	0.05000	ug/L	
Arsenic	E	0.2421	0.1000	ug/L	
Chromium	E	1.329	0.1000	ug/L	
Cobalt	E	0.2045	0.1000	ug/L	
Copper	E	1.482	0.1000	ug/L	
Manganese	E	0.5183	0.1000	ug/L	
Nickel	E	1.190	0.1000	ug/L	
Vanadium	E	[0.06004]	0.1000	ug/L	
Zinc	E	2.495	0.1000	ug/L	
Selenium	H	[0.05496]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94440	ug/L	94
Calcium	A	300000	299300	ug/L	100
Magnesium	A	100000	90570	ug/L	91
Molybdenum	A	2000	1818	ug/L	91
Potassium	A	100000	96810	ug/L	97
Sodium	E	250000	221400	ug/L	89
Iron	H	250000	245500	ug/L	98

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1689883	1500488	-11.21
Scandium	A	3066425	3162705	3.14
Scandium	E	79053	88333	11.74
Scandium	H	1743580	1624351	-6.84
Germanium	H	433599	425066	-1.97
Germanium	E	69550	73826	6.15
Indium	A	5412757	5076732	-6.21
Bismuth	A	5521002	4426732	-19.82
Yttrium	A	5007553	5128622	2.42
Terbium	A	8478244	8055150	-4.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET16 IDF : 1.0
Seqnum : 897247417122 File : f20t0122 Time : 21-JUN-2007 08:21
Cal : 897247417001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94550	ug/L	-5		
Cadmium	A	100.0	100.9	ug/L	1	20	
Calcium	A	300000	304200	ug/L	1		
Magnesium	A	100000	91050	ug/L	-9		
Molybdenum	A	2000	1860	ug/L	-7		
Potassium	A	100000	97940	ug/L	-2		
Silver	A	50.00	46.38	ug/L	-7	20	
Arsenic	E	100.0	105.0	ug/L	5	20	
Chromium	E	200.0	197.0	ug/L	-2	20	
Cobalt	E	200.0	186.1	ug/L	-7	20	
Copper	E	200.0	178.1	ug/L	-11	20	
Manganese	E	200.0	195.4	ug/L	-2	20	
Nickel	E	200.0	182.7	ug/L	-9	20	
Sodium	E	250000	228900	ug/L	-8		
Vanadium	E	200.0	202.3	ug/L	1	20	
Zinc	E	100.0	98.10	ug/L	-2	20	
Iron	H	250000	251600	ug/L	1		
Selenium	H	100.0	103.1	ug/L	3	20	

ISTD (ICALBLK f20t0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1743580	1603355	-8.04
Scandium	A	3066425	3003523	-2.05
Scandium	E	79053	85839	8.58
Germanium	H	433599	421435	-2.81
Germanium	E	69550	73047	5.03
Indium	A	5412757	4973943	-8.11
Yttrium	A	5007553	4962841	-0.89

00581

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897247417

Date : 06/20/07 Reference : f20t0004
Sequence : MET16 f20t0 Analyzed : 06/20/07 19:56

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1689883	3066425	79053	1743580	433599	69550	5412757	5521002	5007553	8478244
		LOWER LIMIT	506965	919928	23716	523074	130080	20865	1623827	1656301	1502266	2543473
		UPPER LIMIT	2027860	3679710	94863	2092296	520319	83460	6495308	6625202	6009064	10173893
015	ICB		1780928	3145851	81235	1724876	441223	70903	5475069	5456061	5041506	8405168
017	ICSA		1440193	2888044	79843	1640096	391749	67843	4711067	4303322	4674699	7593464
018	ICSAB		1370414	2796855	78309	1662996	394495	67109	4679601	4354238	4676954	7689071
021	BLANK	QC392332	1449109	2656332	76005	1650471	463221	75366	5158205	5396965	4690177	8295503
022	BS	QC392333	1447905	2730743	76018	1684504	427700	68503	5080251	5168989	4699469	8247000
023	BSD	QC392334	1483647	2754656	76578	1636556	415606	67901	5078597	5196600	4745965	8257098
025	MSS	195303-018	1590006	3015046	79560	1700691	438308	71119	5401579	5390115	4998688	8468479
026	SER	QC392337	1640742	3072103	80434	1721199	446276	71559	5482991	5451318	5056116	8513591
027	MS	QC392335	1587196	3057733	79655	1735988	442617	70855	5398989	5278792	5056351	8551230
028	MSD	QC392336	1602258	3088157	79041	1732267	441112	70837	5455822	5286619	5045640	8501280
029	PDS	QC392338	1576354	3042321	79150	1697848	433080	69260	5250032	5122800	4962774	8336276
033	CCV		1696984	3150132	81226	1728460	443390	71684	5418707	5259986	5115554	8495427
035	CCB		1738433	3165650	80316	1665143	437916	70463	5546566	5440466	5168548	8583487
038	SAMPLE	195303-011	1515724	3984429 *	105526 *	2056260	428199	72717	5262145	4938409	6940090 *	8475465
039	SAMPLE	195303-019	1619929	3160319	83282	1647243	457339	74393	5564979	5366041	5179328	8644948
040	SAMPLE	195303-020	1634705	3077393	79584	1584285	439150	70555	5416427	5215234	5057401	8535813
041	SAMPLE	195303-021	1641413	3084522	79384	1582767	438643	70962	5398251	5308753	5036162	8515407
042	SAMPLE	195303-022	1646931	3112190	80084	1587821	442440	71489	5479519	5367567	5095556	8644363
043	SAMPLE	195303-024	1671127	3153853	82827	1633318	456326	73575	5534184	5451385	5153176	8692549
044	SAMPLE	195303-025	1670921	3153214	81672	1641004	456157	72848	5570160	5463301	5188331	8700312
045	SAMPLE	195303-027	1671366	3261639	83202	1656047	460866	73923	5677705	5409612	5290059	8864775
046	SAMPLE	195303-030	1725688	3332235	85777	1703607	473051	76035	5857514	5697073	5443106	8945679
048	SAMPLE	195337-002	1758629	3379384	86374	1725783	478758	75761	5836639	5399041	5461148	8907052
052	CCV		1756051	3306225	84842	1675295	462274	74200	5588924	5286022	5292551	8679247
054	CCB		1821375	3330112	86247	1676301	469926	74609	5809080	5630021	5464249	8886820
057	SAMPLE	195337-003	1828326	3550234	89271	1716501	476722	77736	5913580	5412237	5572652	8899507
061	CCV		1850558	3433252	87655	1715000	478062	75468	5719211	5350320	5432364	8778526
063	CCB		1884937	3491493	88918	1711877	476363	76756	5979189	5677824	5566434	9037122
066	ICSA		1478307	3034806	83832	1571234	415230	70941	4878829	4409265	4924166	7874174
067	ICSAB		1373301	2896319	81026	1543155	405060	68587	4779412	4387791	4816199	7848190
072	BLANK	QC392325	1540832	2954990	81585	1591603	485509	79592	5457054	5554164	5078261	8742284
073	BS	QC392326	1548383	2970464	81168	1608598	446193	72305	5347829	5236437	5074791	8558868
074	BSD	QC392327	1577090	3036832	81678	1612736	441376	71389	5414217	5244259	5078224	8549832
076	MSS	195303-001	1681756	3264307	84490	1652640	456204	73788	5533373	5157224	5246139	8602117
077	SER	QC392330	1739043	3347924	86724	1695621	474393	76443	5757937	5442784	5417739	8801010
078	MS	QC392328	1708392	3350768	85337	1675157	457265	74331	5590802	5190134	5331198	8690315
079	MSD	QC392329	1710721	3415242	86356	1669800	457316	74792	5617614	5206906	5378045	8747419
080	PDS	QC392331	1722232	3534258	86619	1689799	458396	74674	5713911	5235818	5572519	8904153
084	CCV		1830234	3613711	92300	1778638	490012	80108	5939422	5525719	5671282	9121782
088	CCB		1860501	3510051	90279	1701604	475940	78286	5956366	5598987	5556704	8989099
089	SAMPLE	195303-002	1788140	3436804	88261	1707458	469900	76856	5763733	5451702	5430731	8892143
090	SAMPLE	195303-003	1770319	3487200	90649	1739407	478825	78856	5786866	5402147	5508511	8983731
091	SAMPLE	195303-004	1767238	3445337	88272	1721214	476472	78014	5788131	5492620	5476924	8934520
092	SAMPLE	195303-005	1812704	3516929	89768	1740898	480885	78868	5919548	5616045	5581410	9167948
093	SAMPLE	195303-006	1793815	3472632	90109	1753668	479902	79059	5774694	5457528	5511885	8955802
094	SAMPLE	195303-008	1773456	3479929	89981	1747936	480633	79339	5829989	5511639	5482350	8955722
095	SAMPLE	195303-009	1777697	3509916	90349	1747797	487481	80180	5869834	5575114	5574199	9025706
096	SAMPLE	195303-010	1776289	3533267	91296	1751570	485650	79871	5855202	5546727	5555279	9041002

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 897247417

Date : 06/20/07
Sequence : MET16 f20t0

Reference : f20t0004
Analyzed : 06/20/07 19:56

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
097	SAMPLE	195303-011	1794524	3579146	91983	1759634	485691	80577	5950699	5527021	5662651	9211790
100	SAMPLE	195303-012	1810911	3504175	90891	1856003	477473	79374	5848590	5570906	5552838	9043838
104	CCV		1910559	3735108 *	95816 *	1818208	496179	82217	6120924	5608276	5887810	9314296
106	CCB		1942929	3657840	94757	1798026	497737	81638	6105905	5734614	5739760	9203511
109	SAMPLE	195303-013	1820403	3435177	84208	1668182	465070	74801	5802156	5512186	5465370	8957164
110	SAMPLE	195303-015	1862822	3581388	91936	1732754	485524	80612	6024664	5675576	5676961	9267782
111	SAMPLE	195303-016	1802304	3461711	91621	1835362	503681	80426	5849237	5501534	5511721	8998969
112	SAMPLE	195303-017	1843215	3485195	90118	1719994	486178	79333	5869436	5514186	5548910	9027730
116	CCV		1939344	3619059	92408	1758052	489081	79964	5982816	5529764	5732461	9115725
118	CCB		1954430	3608690	92349	1736886	485589	79980	6060808	5648501	5677218	9089125
121	ICSA		1500488	3162705	88333	1624351	425066	73826	5076732	4426732	5128622	8055150
122	ICSAB		1411569	3003523	85839	1603355	421435	73047	4973943	4405812	4962841	8009306

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897247417 Instrument: MET16 Agilent ICP-MS MET16 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f20t0001	TUN				20-JUN-2007 19:37	1.0	1.0				1	
002	f20t0002	X	RINSE			20-JUN-2007 19:45	1.0					2	
003	f20t0003	X	RINSE			20-JUN-2007 19:51	1.0					2	
004	f20t0004	ICALBLK	CALBLANK			20-JUN-2007 19:56	1.0	1.0				2	
005	f20t0005	ICAL				20-JUN-2007 20:02	1.0	1.0				3	
006	f20t0006	ICAL				20-JUN-2007 20:08	1.0	1.0				4	
007	f20t0007	ICAL				20-JUN-2007 20:14	1.0	1.0				5	
008	f20t0008	ICAL				20-JUN-2007 20:20	1.0	1.0				6	
009	f20t0009	ICAL				20-JUN-2007 20:25	1.0	1.0				7	
010	f20t0010	ICAL				20-JUN-2007 20:34	1.0	1.0				8	
011	f20t0011	X	RINSE			20-JUN-2007 20:44	1.0					2	
012	f20t0012	ICV				20-JUN-2007 20:50	1.0	1.0			1	9 2	
013	f20t0013	X	RINSE			20-JUN-2007 20:59	1.0					2	
014	f20t0014	X				20-JUN-2007 21:05	1.0					2	
015	f20t0015	ICB				20-JUN-2007 21:11	1.0	1.0			1	2	
016	f20t0016	X				20-JUN-2007 21:17	1.0					2	
017	f20t0017	ICSA				20-JUN-2007 21:22	1.0	1.0			1	10 2	7:CA=296400
018	f20t0018	ICSAB				20-JUN-2007 21:29	1.0	1.0			1	11 2	9:CA=302500
019	f20t0019	X	RINSE			20-JUN-2007 21:35	1.0					2	
020	f20t0020	X	RINSE			20-JUN-2007 21:40	1.0					2	
021	f20t0021	BLANK	QC392332	126311	Filtra	20-JUN-2007 21:46	1.0	1.0			1	2	
022	f20t0022	BS	QC392333	126311	Filtra	20-JUN-2007 21:52	1.0	1.0			1	2	
023	f20t0023	BSD	QC392334	126311	Filtra	20-JUN-2007 22:01	1.0	1.0			1	2	
024	f20t0024	X	RINSE			20-JUN-2007 22:12	1.0					2	
025	f20t0025	MSS	195303-018	126311	Filtra	20-JUN-2007 22:18	5.0	1.0			1	2	
026	f20t0026	SER	QC392337	126311	Filtra	20-JUN-2007 22:23	25.0	1.0	1	7	1	2	
027	f20t0027	MS	QC392335	126311	Filtra	20-JUN-2007 22:29	5.0	1.0			1	2	1:MN=209.600
028	f20t0028	MSD	QC392336	126311	Filtra	20-JUN-2007 22:35	5.0	1.0		2	1	2	
029	f20t0029	PDS	QC392338	126311	Filtra	20-JUN-2007 22:42	5.0	1.0	2		1	12 13 2	2:NA=21100.(
030	f20t0030	X	RINSE			20-JUN-2007 22:50	1.0					2	
031	f20t0031	X	RINSE			20-JUN-2007 22:56	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RAT Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897247417 Instrument: MET16 Agilent ICP-MS MET16 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f20t0032	X	RINSE			20-JUN-2007 23:02	1.0					2	
033	f20t0033	CCV				20-JUN-2007 23:07	1.0	1.0			1	14 2	
034	f20t0034	X	RINSE			20-JUN-2007 23:15	1.0					2	
035	f20t0035	CCB				20-JUN-2007 23:21	1.0	1.0			1	2	
036	f20t0036	X				20-JUN-2007 23:27	1.0					2	
037	f20t0037	X				20-JUN-2007 23:33	1.0					2	
038	f20t0038	SAMPLE	195303-011	126311	Water	20-JUN-2007 23:39	5.0	1.0	3		1	2	11:FE=158820
039	f20t0039	SAMPLE	195303-019	126311	Filtra	20-JUN-2007 23:45	5.0	1.0			1	2	
040	f20t0040	SAMPLE	195303-020	126311	Filtra	20-JUN-2007 23:51	5.0	1.0	2		1	2	2:NA=28180.0
041	f20t0041	SAMPLE	195303-021	126311	Filtra	20-JUN-2007 23:57	5.0	1.0	1		1	2	1:MN=472.000
042	f20t0042	SAMPLE	195303-022	126311	Filtra	21-JUN-2007 00:03	5.0	1.0			1	2	
043	f20t0043	SAMPLE	195303-024	126311	Filtra	21-JUN-2007 00:08	5.0	1.0			1	2	
044	f20t0044	SAMPLE	195303-025	126311	Filtra	21-JUN-2007 00:14	5.0	1.0			1	2	
045	f20t0045	SAMPLE	195303-027	126311	Filtra	21-JUN-2007 00:20	5.0	1.0	1		1	2	1:NA=34540.0
046	f20t0046	SAMPLE	195303-030	126311	Filtra	21-JUN-2007 00:26	5.0	1.0			1	2	
047	f20t0047	X	RINSE			21-JUN-2007 00:32	1.0					2	
048	f20t0048	SAMPLE	195337-002	126205	Filtra	21-JUN-2007 00:38	100.0	1.0	1		1	2	1:NA=27980.0
049	f20t0049	X	RINSE			21-JUN-2007 00:44	1.0					2	
050	f20t0050	X	RINSE			21-JUN-2007 00:50	1.0					2	
051	f20t0051	X	RINSE			21-JUN-2007 00:56	1.0					2	
052	f20t0052	CCV				21-JUN-2007 01:01	1.0	1.0			1	14 2	
053	f20t0053	X	RINSE			21-JUN-2007 01:09	1.0					2	
054	f20t0054	CCB				21-JUN-2007 01:15	1.0	1.0			1	2	
055	f20t0055	X				21-JUN-2007 01:21	1.0					2	
056	f20t0056	X				21-JUN-2007 01:27	1.0					2	
057	f20t0057	SAMPLE	195337-003	126205	Filtra	21-JUN-2007 01:33	100.0	1.0	1		1	2	1:NA=36240.0
058	f20t0058	X	RINSE			21-JUN-2007 01:39	1.0					2	
059	f20t0059	X	RINSE			21-JUN-2007 01:45	1.0					2	
060	f20t0060	X	RINSE			21-JUN-2007 01:51	1.0					2	
061	f20t0061	CCV				21-JUN-2007 01:57	1.0	1.0			1	14 2	
062	f20t0062	X	RINSE			21-JUN-2007 02:05	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RLH Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897247417 Instrument: MET16 Agilent ICP-MS MET16 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f20t0063	CCB				21-JUN-2007 02:11	1.0	1.0			1	2	
064	f20t0064	X				21-JUN-2007 02:17	1.0					2	
065	f20t0065	X				21-JUN-2007 02:23	1.0					2	
066	f20t0066	ICSA				21-JUN-2007 02:29	1.0	1.0			1	10 2	7:CA=298300
067	f20t0067	ICSAB				21-JUN-2007 02:35	1.0	1.0			1	11 2	8:CA=303200
068	f20t0068	X	RINSE			21-JUN-2007 02:41	1.0					2	
069	f20t0069	X	RINSE			21-JUN-2007 02:47	1.0					2	
070	f20t0070	X	RINSE			21-JUN-2007 02:53	1.0					2	
071	f20t0071	X	RINSE			21-JUN-2007 02:59	1.0					2	
072	f20t0072	BLANK	QC392325	126310	Filtra	21-JUN-2007 03:05	1.0	1.0			1	2	
073	f20t0073	BS	QC392326	126310	Filtra	21-JUN-2007 03:11	1.0	1.0			1	2	
074	f20t0074	BSD	QC392327	126310	Filtra	21-JUN-2007 03:20	1.0	1.0			1	2	
075	f20t0075	X	RINSE			21-JUN-2007 03:31	1.0					2	
076	f20t0076	MSS	195303-001	126310	Filtra	21-JUN-2007 03:36	5.0	1.0	2		1	2	2:NA=60440.0
077	f20t0077	SER	QC392330	126310	Filtra	21-JUN-2007 03:42	25.0	1.0	1	4	1	2	
078	f20t0078	MS	QC392328	126310	Filtra	21-JUN-2007 03:48	5.0	1.0	1		1	2	2:NA=61220.0
079	f20t0079	MSD	QC392329	126310	Filtra	21-JUN-2007 03:54	5.0	1.0	1	1	1	2	2:NA=58540.0
080	f20t0080	PDS	QC392331	126310	Filtra	21-JUN-2007 04:01	5.0	1.0	1		1	12 13 2	2:NA=70760.0
081	f20t0081	X	RINSE			21-JUN-2007 04:11	1.0					2	
082	f20t0082	X	RINSE			21-JUN-2007 04:17	1.0					2	
083	f20t0083	X	RINSE			21-JUN-2007 04:23	1.0					2	
084	f20t0084	CCV				21-JUN-2007 04:28	1.0	1.0			1	14 2	
085	f20t0085	X	RINSE			21-JUN-2007 04:37	1.0					2	
086	f20t0086	X				21-JUN-2007 04:43	1.0					2	
087	f20t0087	X				21-JUN-2007 04:49	1.0					2	
088	f20t0088	CCB				21-JUN-2007 04:55	1.0	1.0	1		1	2	
089	f20t0089	SAMPLE	195303-002	126310	Filtra	21-JUN-2007 05:01	5.0	1.0	1		1	2	1:MN=260.800
090	f20t0090	SAMPLE	195303-003	126310	Filtra	21-JUN-2007 05:06	5.0	1.0	1		1	2	1:NA=49740.0
091	f20t0091	SAMPLE	195303-004	126310	Filtra	21-JUN-2007 05:12	5.0	1.0	1		1	2	1:MN=338.400
092	f20t0092	SAMPLE	195303-005	126310	Filtra	21-JUN-2007 05:18	5.0	1.0	1		1	2	1:MN=279.600
093	f20t0093	SAMPLE	195303-006	126310	Filtra	21-JUN-2007 05:24	5.0	1.0	1		1	2	1:MN=240.800

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: RAT Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 897247417 Instrument: MET16 Agilent ICP-MS MET16 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
094	f20t0094	SAMPLE	195303-008	126310	Filtra	21-JUN-2007 05:30	5.0	1.0			1	2	1:NA=21960.0
095	f20t0095	SAMPLE	195303-009	126310	Filtra	21-JUN-2007 05:36	5.0	1.0	1		1	2	1:MN=326.000
096	f20t0096	SAMPLE	195303-010	126310	Filtra	21-JUN-2007 05:41	5.0	1.0	1		1	2	1:MN=643.800
097	f20t0097	SAMPLE	195303-011	126310	Filtra	21-JUN-2007 05:47	5.0	1.0			1	2	1:NA=58700.0
098	f20t0098	TUN				21-JUN-2007 05:52	1.0	1.0				1	
099	f20t0099	X	RINSE			21-JUN-2007 06:00	1.0					2	
100	f20t0100	SAMPLE	195303-012	126310	Filtra	21-JUN-2007 06:06	5.0	1.0	1		1	2	1:MN=454.400
101	f20t0101	X	RINSE			21-JUN-2007 06:12	1.0					2	
102	f20t0102	X	RINSE			21-JUN-2007 06:18	1.0					2	
103	f20t0103	X	RINSE			21-JUN-2007 06:24	1.0					2	
104	f20t0104	CCV				21-JUN-2007 06:29	1.0	1.0	10		1	14 2	
105	f20t0105	X	RINSE			21-JUN-2007 06:38	1.0					2	
106	f20t0106	CCB				21-JUN-2007 06:44	1.0	1.0			1	2	
107	f20t0107	X				21-JUN-2007 06:50	1.0					2	
108	f20t0108	X				21-JUN-2007 06:56	1.0					2	
109	f20t0109	SAMPLE	195303-013	126310	Filtra	21-JUN-2007 07:02	5.0	1.0	2		1	2	2:CA=20260.0
110	f20t0110	SAMPLE	195303-015	126310	Filtra	21-JUN-2007 07:08	5.0	1.0			1	2	
111	f20t0111	SAMPLE	195303-016	126310	Filtra	21-JUN-2007 07:13	5.0	1.0			1	2	
112	f20t0112	SAMPLE	195303-017	126310	Filtra	21-JUN-2007 07:19	5.0	1.0			1	2	
113	f20t0113	X	RINSE			21-JUN-2007 07:25	1.0					2	
114	f20t0114	X	RINSE			21-JUN-2007 07:31	1.0					2	
115	f20t0115	X	RINSE			21-JUN-2007 07:37	1.0					2	
116	f20t0116	CCV				21-JUN-2007 07:43	1.0	1.0			1	14 2	
117	f20t0117	X	RINSE			21-JUN-2007 07:51	1.0					2	
118	f20t0118	CCB				21-JUN-2007 07:57	1.0	1.0			1	2	
119	f20t0119	X				21-JUN-2007 08:03	1.0					2	
120	f20t0120	X				21-JUN-2007 08:09	1.0					2	
121	f20t0121	ICSA				21-JUN-2007 08:15	1.0	1.0			1	10 2	7:CA=299300
122	f20t0122	ICSAB				21-JUN-2007 08:21	1.0	1.0			1	11 2	8:CA=304200

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S5054 13=S5055 14=S6420

Analyst: [signature] Date: 6/26/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67247468001
Units : ug/L

Date : 20-JUN-2007 20:48
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f20u0005	67247468005		20-JUN-2007 20:54	S6414
L2	f20u0006	67247468006		20-JUN-2007 21:00	S6416
L3	f20u0007	67247468007		20-JUN-2007 21:06	S6417
L4	f20u0008	67247468008		20-JUN-2007 21:11	S6418
L5	f20u0009	67247468009		20-JUN-2007 21:17	S6412
L6	f20u0010	67247468010		20-JUN-2007 21:24	S6413

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.4180	0.3713	0.3514	0.3354	0.3400	0.3336	BLNK	-0.7670	2.98654		0.3583	1.000	0.995	
Antimony	A	0.1964	0.1877	0.1721	0.1634	0.1689	0.1697	BLNK	-0.0082	5.89861		0.1764	1.000	0.995	
Barium	A	0.0808	0.0823	0.0548	0.0522	0.0521	0.0529	BLNK	-0.0155	18.9559		0.0625	1.000	0.995	
Beryllium	A	0.2096	0.2174	0.2111	0.2063	0.2189	0.2131	BLNK	-0.0044	4.66791		0.2127	1.000	0.995	
Cadmium	A	0.0561	0.0540	0.0519	0.0504	0.0509	0.0509	BLNK	-0.0102	19.6565		0.0524	1.000	0.995	
Calcium	A	1.5753	0.3279	0.1614	0.0267	0.0134	0.0126	BLNK	-1389.5	85.1364		0.3529	1.000	0.995	
Lead	A	0.4875	0.4441	0.4083	0.3887	0.3908	0.3859	BLNK	-0.0218	2.58506		0.4176	1.000	0.995	
Magnesium	A	0.3264	0.3026	0.2884	0.2716	0.2746	0.2679	BLNK	-0.6521	3.71366		0.2886	1.000	0.995	
Molybdenum	A	0.2131	0.1565	0.1443	0.1355	0.1401	0.1418	BLNK	-0.0474	7.06974		0.1552	1.000	0.995	
Potassium	A	3.5965	1.0686	0.6974	0.4009	0.3774	0.3716	BLNK	-87.645	2.69651		1.0854	1.000	0.995	
Silver	A	0.2762	0.2563	0.2449	0.2394	0.2436	0.2375	BLNK	-0.0068	4.18971		0.2496	1.000	0.995	
Thallium	A	0.7561	0.5410	0.5080	0.4815	0.5228	0.5169	BLNK	-0.0302	1.93110		0.5544	1.000	0.995	
Arsenic	E	0.5067	0.3932	0.3844	0.3660	0.3664	0.3760	BLNK	-0.0386	2.67393		0.3988	1.000	0.995	
Chromium	E	4.8010	3.0749	2.9449	2.6516	2.6326	2.6795	BLNK	-0.0627	0.37467		3.1307	1.000	0.995	
Cobalt	E	4.9680	4.6183	4.8305	4.6897	4.5997	4.6732	BLNK	-0.0049	0.21466		4.7299	1.000	0.995	
Copper	E	103.69	28.671	16.747	7.2296	6.1184	6.1044	BLNK	-1.8011	0.16550		28.094	1.000	0.995	
Manganese	E	1.6940	1.1341	1.1739	1.0901	1.0794	1.0968	BLNK	-0.0567	0.91499		1.2114	1.000	0.995	
Nickel	E	3.1773	1.9850	1.6248	1.4183	1.3515	1.3576	BLNK	-0.1879	0.73805		1.8191	1.000	0.995	
Sodium	E	2.3882	0.7772	0.6142	0.4109	0.3846	0.3908	BLNK	-52.133	2.57517		0.8277	1.000	0.995	
Vanadium	E	3.8814	2.1654	2.1082	1.8519	1.8753	1.9139	BLNK	-0.1081	0.52500		2.2993	1.000	0.995	
Zinc	E	13.315	4.2396	2.4188	0.8554	0.7197	0.7129	BLNK	-1.8745	1.41568		3.7102	1.000	0.995	
Iron	H	0.6122	0.5577	0.5604	0.5302	0.5231	0.5279	BLNK	-0.8989	1.89784		0.5519	1.000	0.995	
Selenium	H	0.0905	0.0824	0.0809	0.0816	0.0808	0.0802	BLNK	-0.0099	12.4455		0.0827	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	17	50.00	9	100.0	4	1000	0	10000	2	20000	0
Antimony	A	0.100	8	0.500	9	1.000	1	10.00	-4	100.0	0	200.0	0
Barium	A	0.100	38	0.500	53	1.000	2	10.00	-1	100.0	-1	200.0	0
Beryllium	A	0.100	-7	0.500	1	1.000	-2	10.00	-4	100.0	2	200.0	-1
Cadmium	A	0.100	0	0.500	4	1.000	1	10.00	-1	100.0	0	200.0	0
Calcium	A	10.00	-583	50.00	-87	100.0	-115	1000	-11	10000	0	20000	0
Lead	A	0.100	4	0.500	10	1.000	3	10.00	0	100.0	1	200.0	0
Magnesium	A	10.00	15	50.00	11	100.0	6	1000	1	10000	2	20000	0
Molybdenum	A	0.100	3	0.500	1	1.000	-3	10.00	-5	100.0	-1	200.0	0
Potassium	A	10.00	-7	50.00	13	100.0	0	1000	-1	10000	1	20000	0
Silver	A	0.100	9	0.500	6	1.000	2	10.00	0	100.0	2	200.0	-1
Thallium	A	0.050	-14	0.250	-8	0.500	-8	5.000	-8	50.00	1	100.0	0
Arsenic	E	0.100	-3	0.500	-3	1.000	-1	10.00	-3	100.0	-2	200.0	1
Chromium	E	0.100	17	0.500	3	1.000	4	10.00	-1	100.0	-1	200.0	0
Cobalt	E	0.100	2	0.500	-2	1.000	3	10.00	1	100.0	-1	200.0	0
Copper	E	0.100	-185	0.500	14	1.000	-3	10.00	2	100.0	-1	200.0	0
Manganese	E	0.100	-2	0.500	-8	1.000	2	10.00	-1	100.0	-1	200.0	0
Nickel	E	0.100	-53	0.500	9	1.000	1	10.00	3	100.0	0	200.0	0
Sodium	E	10.00	-6	50.00	-4	100.0	6	1000	1	10000	-1	20000	0
Vanadium	E	0.100	-4	0.500	-8	1.000	0	10.00	-4	100.0	-2	200.0	0
Zinc	E	0.100	-90	0.500	125	1.000	55	10.00	2	100.0	0	200.0	0
Iron	H	10.00	7	50.00	4	100.0	5	1000	1	10000	-1	20000	0
Selenium	H	0.100	3	0.500	1	1.000	0	10.00	1	100.0	1	200.0	0

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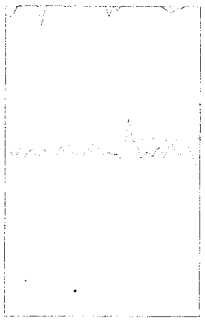
67247468001

Tune Report

Tune File : nogas.u
Comment :



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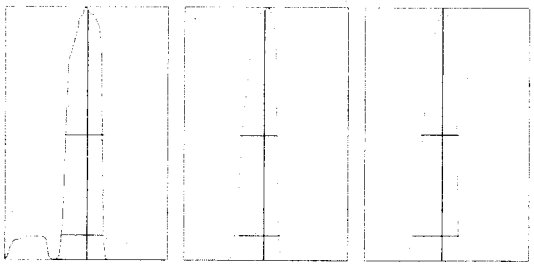
7	20,000	20543.0	20583.9	4.73	0.50
89	100,000	52217.0	52923.0	4.29	0.70
205	50,000	28538.0	28892.1	3.95	2.30

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.924%
Doubly Charged: 70/140 2.149%



m/z:	7	89	205
Height:	20,968	52,583	29,089
Axis:	7.05	89.00	204.95
W-50%:	0.70	0.70	0.70
W-10%:	0.800	0.8500	0.8500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	1600	W	Extract 1	0	V	AMU Gain	136	
RF Matching	1.74	V	Extract 2	-120	V	AMU Offset	123	
Smpl Depth	8	mm	Omega Bias-ce	-30	V	Axis Gain	1.0008	
Torch-H	1	mm	Omega Lens-ce	0.8	V	Axis Offset	-0.01	
Torch-V	0.1	mm	Cell Entrance	-34	V	QP Bias	-6	V
Carrier Gas	1.05	L/min	QP Focus	7	V			
Makeup Gas	0	L/min	Cell Exit	-34	V	===Detector Parameters===		
Optional Gas	---	%				Discriminator	8	mV
Nebulizer Pump	0.1	rps	===Octopole Parameters===			Analog HV	1850	V
Sample Pump	---	rps	OctP RF	200	V	Pulse HV	1510	V
S/C Temp	2	degC	OctP Bias	-6	V			

===Reaction Cell===
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u
He Gas: 5 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -58 V
OctP Bias: -18 V
QP Bias: -14 V

m/z	Count(Mean)	RSD%
51	7.0	41.52
59	5078.5	3.85
89	2716.7	3.79

Integration Time: 0.1000sec

Tune File : h2.u
H2 Gas: 4.5 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -58 V
OctP Bias: -18 V
QP Bias: -14 V

m/z	Count(Mean)	RSD%
59	4779.4	3.86
78	0.1	250.36
89	27060.3	2.92

Integration Time: 0.1000sec

Generated : Jun 20, 2007 19:34:07
Printed : Jun 20, 2007 19:35:48

P/A Factor Tuning Report

Acquired:Jun 20 2007 08:03 pm

Mass[amu]	Element	P/A Factor
6	Li	0.067323
7	(Li)	Sensitivity too low
9	Be	0.076014
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	Sensitivity too high
45	Sc	0.091897
51	V	0.094239
52	Cr	0.097137
55	Mn	0.099443
56	Fe	Sensitivity too high
59	Co	0.104125
60	Ni	0.106551
63	Cu	0.108038
65	Cu	0.108933
66	Zn	0.107468
72	Ge	0.106080
75	As	0.103985
78	Se	Sensitivity too low
89	Y	Sensitivity too high
98	Mo	0.103993
99	(Ru)	Sensitivity too low
107	Ag	0.113197
111	Cd	0.112408
115	In	Sensitivity too high
118	(In)	Sensitivity too high
121	Sb	0.110326
137	Ba	0.111952
159	Tb	Sensitivity too high
205	Tl	0.119498
206	(Pb)	0.119324
207	(Pb)	0.120898
208	Pb	0.121199
209	Bi	0.121714

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1850 V
Pulse HV: 1510 V

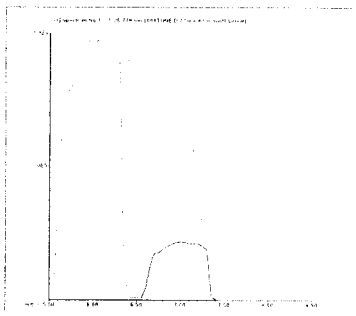
99511

6020 QC Tune Report

Data File:	C:\ICPCHEM\1\DATA\07F20u00.B\001TUNE.D
Date Acquired:	Jun 20 2007 08:28 pm
Acq. Method:	TN6020.M
Operator:	
Sample Name:	tun,s6411
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.58	5.00	
59 Co	0.37	5.00	
115 In	0.43	5.00	
205 Tl	2.09	5.00	



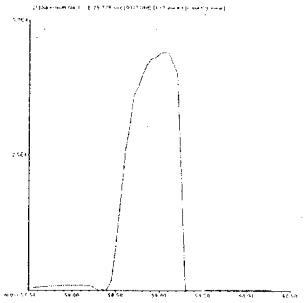
7 Li

Mass Calib.

Actual: 7.05
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.70
Required: 0.90
Flag:



59 Co

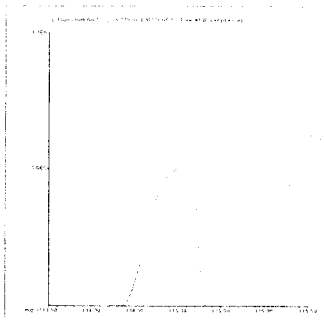
Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.70
Required: 0.90
Flag:

00512



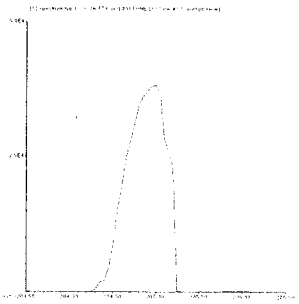
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.70
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004C
Date Acquired: Jun 20 2007 08:46 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:49 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1883590.00	A	32060.00	1.70
7	(Li)		P		
9	Be	35.56	P	11.71	32.93
23	Na	21179.61	P	79.86	0.38
24	Mg	11393.85	P	555.50	4.88
27	Al	16658.04	P	684.80	4.11
39	K	2107852.00	A	8868.00	0.42
44	Ca	1058451.00	A	5838.00	0.55
45	Sc	809462.88	M	4696.00	0.58
45	Sc	52313.66	P	501.30	0.96
45	Sc	3243592.00	A	75810.00	2.34
51	V	215.56	P	18.29	8.48
52	Cr	175.19	P	10.02	5.72
55	Mn	64.82	P	7.14	11.02
56	Fe	7659.98	P	2064.00	26.95
59	Co	23.70	P	4.63	19.52
60	Ni	266.30	P	3.90	1.47
63	Cu	7372.76	P	41.04	0.56
65	Cu	3577.16	P	35.65	1.00
66	Zn	897.08	P	14.50	1.62
72	Ge	196986.50	P	1873.00	0.95
72	Ge	33874.58	P	22.75	0.07
75	As	9.78	P	1.68	17.16
78	Se	3.11	P	2.52	81.13
89	Y	4393408.00	A	144300.00	3.28
98	Mo	588.92	P	57.48	9.76
107	Ag	136.67	P	18.56	13.58
111	Cd	43.34	P	5.77	13.32
115	In	4193528.00	A	135100.00	3.22
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	115.56	P	13.47	11.66
137	Ba	83.34	P	12.02	14.42
159	Tb	5092110.00	A	169400.00	3.33
205	Tl	933.41	P	62.45	6.69
208	Pb	856.71	P	29.06	3.39
209	Bi	2978911.00	A	56090.00	1.88

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 20 2007 08:51 pm
Operator:
Sample Name: s6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 20 2007 08:50 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1928571.00	A	74260.00	3.85
7	(Li)		P		
9	Be	807.83	P	6.94	0.86
23	Na	24908.96	P	169.90	0.68
24	Mg	214305.59	P	3046.00	1.42
27	Al	274634.59	P	1465.00	0.53
39	K	2362649.00	A	3727.00	0.16
44	Ca	1034777.00	A	1605.00	0.16
45	Sc	812381.38	P	2274.00	0.28
45	Sc	52150.89	P	227.50	0.44
45	Sc	3291361.00	A	184400.00	5.60
51	V	404.83	P	11.98	2.96
52	Cr	500.76	P	11.98	2.39
55	Mn	176.67	P	8.82	4.99
56	Fe	99474.19	P	125.30	0.13
59	Co	518.16	P	20.86	4.03
60	Ni	331.49	P	40.25	12.14
63	Cu	7049.63	P	108.30	1.54
65	Cu	3453.06	P	42.06	1.22
66	Zn	905.23	P	2.31	0.26
72	Ge	196408.09	P	1341.00	0.68
72	Ge	33993.06	P	113.30	0.33
75	As	34.44	P	2.78	8.06
78	Se	35.56	P	2.14	6.03
89	Y	4438609.00	A	270200.00	6.09
98	Mo	1885.76	P	35.64	1.89
99	(Ru)	15.56	P	6.94	44.61
107	Ag	2343.63	P	38.45	1.64
111	Cd	474.47	P	44.02	9.28
115	In	4249169.00	A	240800.00	5.67
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	1664.62	P	43.50	2.61
137	Ba	823.39	P	91.72	11.14
159	Tb	5126164.00	A	304200.00	5.93
205	Tl	2273.62	P	69.86	3.07
208	Pb	4988.36	P	111.70	2.24
209	Bi	3009204.00	A	155100.00	5.15

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1928571.40	3.85	1883590.60	102.4	80 - 120	
45	Sc	812381.44	0.28	809462.94	100.4	80 - 120	
45	Sc	52150.89	0.44	52313.66	99.7	80 - 120	
45	Sc	3291361.00	5.60	3243592.00	101.5	80 - 120	
72	Ge	196408.14	0.68	196986.50	99.7	80 - 120	
72	Ge	33993.06	0.33	33874.58	100.3	80 - 120	
89	Y	4438609.00	6.09	4393408.50	101.0	80 - 120	
115	In	4249168.50	5.67	4193527.80	101.3	80 - 120	
159	Tb	5126163.50	5.93	5092109.50	100.7	80 - 120	
209	Bi	3009204.30	5.15	2978911.30	101.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 20 2007 08:57 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 08:56 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1857301.00	A	151000.00	8.13
7	(Li)		P		
9	Be	4017.37	P	81.13	2.02
23	Na	42419.26	P	394.60	0.93
24	Mg	962178.19	A	12440.00	1.29
27	Al	1179307.00	A	6324.00	0.54
39	K	3396904.00	A	22590.00	0.67
44	Ca	1042673.00	A	6993.00	0.67
45	Sc	814637.13	P	3596.00	0.44
45	Sc	54622.88	P	1719.00	3.15
45	Sc	3210622.00	A	384400.00	11.97
51	V	1181.55	P	32.09	2.72
52	Cr	1679.01	P	25.63	1.53
55	Mn	619.65	P	50.40	8.13
56	Fe	454359.41	P	4630.00	1.02
59	Co	2521.37	P	20.37	0.81
60	Ni	1084.13	P	31.94	2.95
63	Cu	10020.35	P	101.60	1.01
65	Cu	4967.24	P	160.80	3.24
66	Zn	1481.95	P	34.83	2.35
72	Ge	194627.41	P	1300.00	0.67
72	Ge	34956.01	P	605.40	1.73
75	As	137.34	P	10.41	7.58
78	Se	160.45	P	8.34	5.20
89	Y	4286643.00	A	560000.00	13.06
98	Mo	6656.32	P	337.80	5.07
99	(Ru)	10.00	P	6.67	66.67
107	Ag	10502.20	P	53.92	0.51
111	Cd	2213.60	P	15.29	0.69
115	In	4136214.00	A	462200.00	11.17
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	7670.27	P	317.50	4.14
137	Ba	4093.01	P	88.80	2.17
159	Tb	5030475.00	A	623600.00	12.40
205	Tl	7884.96	P	223.10	2.83
208	Pb	22100.54	P	173.40	0.78
209	Bi	2933072.00	A	249400.00	8.50

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1857300.60	8.13	1883590.60	98.6	80 - 120	
45	Sc	814637.13	0.44	809462.94	100.6	80 - 120	
45	Sc	54622.88	3.15	52313.66	104.4	80 - 120	
45	Sc	3210621.50	11.97	3243592.00	99.0	80 - 120	
72	Ge	194627.41	0.67	196986.50	98.8	80 - 120	
72	Ge	34956.00	1.73	33874.58	103.2	80 - 120	
89	Y	4286643.00	13.06	4393408.50	97.6	80 - 120	
115	In	4136213.80	11.17	4193527.80	98.6	80 - 120	
159	Tb	5030475.00	12.40	5092109.50	98.8	80 - 120	
209	Bi	2933072.00	8.50	2978911.30	98.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 20 2007 09:03 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 20 2007 09:02 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1949756.00	A	18550.00	0.95
7 (Li)		P		
9 Be	8232.60	P	77.71	0.94
23 Na	64671.31	P	329.50	0.51
24 Mg	1955018.00	A	20300.00	1.04
27 Al	2381362.00	A	21380.00	0.90
39 K	4726942.00	A	36160.00	0.76
44 Ca	1094111.00	A	7198.00	0.66
45 Sc	815945.63	P	4318.00	0.53
45 Sc	52646.76	P	154.70	0.29
45 Sc	3388856.00	A	22140.00	0.65
51 V	2219.83	P	34.08	1.54
52 Cr	3100.75	P	72.93	2.35
55 Mn	1235.99	P	46.14	3.73
56 Fe	914397.31	M	8245.00	0.90
59 Co	5086.16	P	45.56	0.90
60 Ni	1710.87	P	34.69	2.03
63 Cu	11460.73	P	180.00	1.57
65 Cu	5665.66	P	67.43	1.19
66 Zn	1654.93	P	31.71	1.92
72 Ge	196595.91	P	714.10	0.36
72 Ge	34215.45	P	313.90	0.92
75 As	263.12	P	22.00	8.36
78 Se	318.01	P	22.04	6.93
89 Y	4504052.00	A	47780.00	1.06
98 Mo	12997.76	P	56.84	0.44
99 (Ru)	24.45	P	12.62	51.63
107 Ag	21407.60	P	386.10	1.80
111 Cd	4540.93	P	108.40	2.39
115 In	4370400.00	A	51960.00	1.19
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	15044.42	P	792.10	5.27
137 Ba	5781.48	P	165.10	2.86
159 Tb	5273049.00	A	62040.00	1.18
205 Tl	15452.09	P	265.00	1.72
208 Pb	43059.96	P	443.30	1.03
209 Bi	3041622.00	A	14480.00	0.48

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1949756.30	0.95	1883590.60	103.5	80 - 120	
45 Sc	815945.56	0.53	809462.94	100.8	80 - 120	
45 Sc	52646.77	0.29	52313.66	100.6	80 - 120	
45 Sc	3388856.50	0.65	3243592.00	104.5	80 - 120	
72 Ge	196595.88	0.36	196986.50	99.8	80 - 120	
72 Ge	34215.45	0.92	33874.58	101.0	80 - 120	
89 Y	4504052.50	1.06	4393408.50	102.5	80 - 120	
115 In	4370399.50	1.19	4193527.80	104.2	80 - 120	
159 Tb	5273048.50	1.18	5092109.50	103.6	80 - 120	
209 Bi	3041622.00	0.48	2978911.30	102.1	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 20 2007 09:09 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 09:07 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1945434.00	A	62090.00	3.19
7	(Li)		P		
9	Be	80206.85	P	272.60	0.34
23	Na	433380.41	P	3402.00	0.78
24	Mg	18250480.00	A	199200.00	1.09
27	Al	22537150.00	A	152000.00	0.67
39	K	26935330.00	A	176700.00	0.66
44	Ca	1796530.00	A	3307.00	0.18
45	Sc	815473.63	P	3429.00	0.42
45	Sc	52730.80	P	264.30	0.50
45	Sc	3360406.00	A	86690.00	2.58
51	V	19530.31	P	72.41	0.37
52	Cr	27963.02	P	171.20	0.61
55	Mn	11496.65	P	150.20	1.31
56	Fe	8646592.00	A	22660.00	0.26
59	Co	49459.13	P	381.30	0.77
60	Ni	14957.73	P	204.40	1.37
63	Cu	49295.33	P	52.69	0.11
65	Cu	24271.19	P	205.90	0.85
66	Zn	5832.76	P	63.51	1.09
72	Ge	196599.70	P	579.20	0.29
72	Ge	34092.87	P	131.10	0.38
75	As	2495.35	P	50.76	2.03
78	Se	3207.50	P	15.98	0.50
89	Y	4452807.00	A	80980.00	1.82
98	Mo	120659.70	P	465.70	0.39
99	(Ru)	18.89	P	9.62	50.94
107	Ag	206055.80	P	1049.00	0.51
111	Cd	43351.59	P	243.40	0.56
115	In	4304813.00	A	78440.00	1.82
118	(In)		P		
118	(In)		P		
118	(In)		A		
121	Sb	140634.50	P	573.60	0.41
137	Ba	55007.91	P	263.20	0.48
159	Tb	5266623.00	A	122800.00	2.33
205	Tl	146034.09	P	1750.00	1.20
208	Pb	409367.19	P	3097.00	0.76
209	Bi	3033131.00	A	65350.00	2.15

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1945434.40	3.19	1883590.60	103.3	80 - 120	
45	Sc	815473.56	0.42	809462.94	100.7	80 - 120	
45	Sc	52730.80	0.50	52313.66	100.8	80 - 120	
45	Sc	3360405.50	2.58	3243592.00	103.6	80 - 120	
72	Ge	196599.75	0.29	196986.50	99.8	80 - 120	
72	Ge	34092.88	0.38	33874.58	100.6	80 - 120	
89	Y	4452806.50	1.82	4393408.50	101.4	80 - 120	
115	In	4304813.00	1.82	4193527.80	102.7	80 - 120	
159	Tb	5266623.50	2.33	5092109.50	103.4	80 - 120	
209	Bi	3033130.50	2.15	2978911.30	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 20 2007 09:15 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 20 2007 09:13 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	1892792.00	A	13670.00	0.72
7	(Li)		P		
9	Be	828494.69	A	7991.00	0.96
23	Na	3994843.00	A	19390.00	0.49
24	Mg	############	A	1628000.00	0.89
27	Al	############	A	2901000.00	1.28
39	K	############	A	1698000.00	0.67
44	Ca	8932329.00	A	17330.00	0.19
45	Sc	813760.00	P	3712.00	0.46
45	Sc	51936.13	P	703.60	1.35
45	Sc	3340297.00	A	21820.00	0.65
51	V	194763.80	P	1093.00	0.56
52	Cr	273424.00	P	1259.00	0.46
55	Mn	112112.50	P	1135.00	1.01
56	Fe	85134232.00	A	845900.00	0.99
59	Co	477716.31	P	3306.00	0.69
60	Ni	140369.70	P	423.80	0.30
63	Cu	405366.09	P	1545.00	0.38
65	Cu	201447.20	P	973.00	0.48
66	Zn	47684.42	P	348.90	0.73
72	Ge	193131.70	P	1453.00	0.75
72	Ge	33127.98	P	322.20	0.97
75	As	24278.49	P	458.40	1.89
78	Se	31209.93	P	232.80	0.75
89	Y	4398378.00	A	57230.00	1.30
98	Mo	1232571.00	A	9225.00	0.75
99	(Ru)	36.67	P	0.00	0.00
107	Ag	2028880.00	A	15040.00	0.74
111	Cd	423889.81	P	3725.00	0.88
115	In	4164903.00	A	11980.00	0.29
118	(In)		A		
118	(In)		P		
118	(In)		A		
121	Sb	1407312.00	A	6451.00	0.46
137	Ba	547464.81	P	3452.00	0.63
159	Tb	5257690.00	A	59200.00	1.13
205	Tl	1506881.00	A	5383.00	0.36
208	Pb	4109055.00	A	20940.00	0.51
209	Bi	2882595.00	A	20840.00	0.72

ISTD Elements

Element		CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1892792.50	0.72	1883590.60	100.5	80 - 120	
45	Sc	813760.06	0.46	809462.94	100.5	80 - 120	
45	Sc	51936.13	1.35	52313.66	99.3	80 - 120	
45	Sc	3340297.00	0.65	3243592.00	103.0	80 - 120	
72	Ge	193131.66	0.75	196986.50	98.0	80 - 120	
72	Ge	33127.98	0.97	33874.58	97.8	80 - 120	
89	Y	4398378.00	1.30	4393408.50	100.1	80 - 120	
115	In	4164903.30	0.29	4193527.80	99.3	80 - 120	
159	Tb	5257690.50	1.13	5092109.50	103.3	80 - 120	
209	Bi	2882594.50	0.72	2978911.30	96.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F20u00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 20 2007 09:22 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\1cj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\1cj6020.C
Last Cal Update: Jun 20 2007 09:20 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1896576.00	A	71450.00	3.77
7 (Li)		P		
9 Be	1615252.00	A	13130.00	0.81
23 Na	8014298.00	A	96520.00	1.20
24 Mg	############	A	2995000.00	0.81
27 Al	############	A	1024000.00	0.22
39 K	############	A	4197000.00	0.82
44 Ca	17258800.00	A	92790.00	0.54
45 Sc	816596.13	P	7407.00	0.91
45 Sc	51273.25	P	181.60	0.35
45 Sc	3439600.00	A	188900.00	5.49
51 V	392523.59	P	3959.00	1.01
52 Cr	549542.00	P	5482.00	1.00
55 Mn	224940.00	P	1657.00	0.74
56 Fe	############	A	1181000.00	0.68
59 Co	958447.69	M	6807.00	0.71
60 Ni	278430.09	P	1074.00	0.39
63 Cu	794127.63	P	5056.00	0.64
65 Cu	391945.41	P	901.70	0.23
66 Zn	92745.55	P	996.90	1.07
72 Ge	192207.59	P	1242.00	0.65
72 Ge	32523.21	P	302.30	0.93
75 As	48916.00	P	523.40	1.07
78 Se	61690.80	P	360.00	0.58
89 Y	4496372.00	A	215900.00	4.80
98 Mo	2546918.00	A	16030.00	0.63
99 (Ru)	78.89	P	5.09	6.45
107 Ag	3941362.00	A	21460.00	0.54
111 Cd	844517.13	P	3417.00	0.40
115 In	4160707.00	A	259500.00	6.24
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	2816522.00	A	18110.00	0.64
137 Ba	1108207.00	A	7250.00	0.65
159 Tb	5244174.00	A	292600.00	5.58
205 Tl	2928746.00	A	12120.00	0.41
208 Pb	8075263.00	A	103300.00	1.28
209 Bi	2835006.00	A	94180.00	3.32

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1896576.30	3.77	1883590.60	100.7	80 - 120	
45 Sc	816596.06	0.91	809462.94	100.9	80 - 120	
45 Sc	51273.25	0.35	52313.66	98.0	80 - 120	
45 Sc	3439600.30	5.49	3243592.00	106.0	80 - 120	
72 Ge	192207.58	0.65	196986.50	97.6	80 - 120	
72 Ge	32523.21	0.93	33874.58	96.0	80 - 120	
89 Y	4496371.50	4.80	4393408.50	102.3	80 - 120	
115 In	4160707.50	6.24	4193527.80	99.2	80 - 120	
159 Tb	5244174.00	5.58	5092109.50	103.0	80 - 120	
209 Bi	2835006.00	3.32	2978911.30	95.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F20u00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468012 File : f20u0012 Time : 20-JUN-2007 21:39
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6419

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.3583	0.3489	10000	10420	ug/L	4	10	
Antimony	A	0.1764	0.1798	100.0	106.1	ug/L	6	10	
Barium	A	0.0625	0.0539	100.0	102.2	ug/L	2	10	
Beryllium	A	0.2127	0.2298	100.0	107.3	ug/L	7	10	
Cadmium	A	0.0524	0.0531	100.0	104.3	ug/L	4	10	
Calcium	A	0.3529	0.0139	10000	10420	ug/L	4	10	
Lead	A	0.4176	0.3807	100.0	98.38	ug/L	-2	10	
Magnesium	A	0.2886	0.2825	10000	10490	ug/L	5	10	
Molybdenum	A	0.1552	0.1440	100.0	101.8	ug/L	2	10	
Potassium	A	1.0854	0.3925	10000	10490	ug/L	5	10	
Silver	A	0.2496	0.2560	100.0	107.2	ug/L	7	10	
Thallium	A	0.5544	0.5133	50.00	49.53	ug/L	-1	10	
Arsenic	E	0.3988	0.3816	100.0	102.0	ug/L	2	10	
Chromium	E	3.1307	2.7350	100.0	102.4	ug/L	2	10	
Cobalt	E	4.7299	4.7822	100.0	102.7	ug/L	3	10	
Copper	E	28.094	6.2787	100.0	102.1	ug/L	2	10	
Manganese	E	1.2114	1.1195	100.0	102.4	ug/L	2	10	
Nickel	E	1.8191	1.4081	100.0	103.7	ug/L	4	10	
Sodium	E	0.8277	0.3934	10000	10080	ug/L	1	10	
Vanadium	E	2.2993	1.9354	100.0	101.5	ug/L	2	10	
Zinc	E	3.7102	0.7387	100.0	102.7	ug/L	3	10	
Iron	H	0.5519	0.5467	10000	10380	ug/L	4	10	
Selenium	H	0.0827	0.0814	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1882189	-0.07
Scandium	A	3243592	3375235	4.06
Scandium	E	52314	52583	0.51
Scandium	H	809463	861055	6.37
Germanium	H	196987	207130	5.15
Germanium	E	33875	33693	-0.54
Indium	A	4193528	4192100	-0.03
Bismuth	A	2978911	2899282	-2.67
Yttrium	A	4393409	4447223	1.22
Terbium	A	5092110	5239749	2.90

00521

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468014 File : f20u0014 Time : 20-JUN-2007 21:53
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02234]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02936]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01649]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.008779]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01716]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1969753	4.57
Scandium	A	3243592	3479929	7.29
Scandium	E	52314	53835	2.91
Scandium	H	809463	780741	-3.55
Germanium	H	196987	195931	-0.54
Germanium	E	33875	35081	3.56
Indium	A	4193528	4498668	7.28
Bismuth	A	2978911	3091855	3.79
Yttrium	A	4393409	4637875	5.56
Terbium	A	5092110	5329013	4.65

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468017 File : f20u0017 Time : 20-JUN-2007 22:11
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.08082]	0.1000	ug/L	
Barium	A	1.021	0.1000	ug/L	
Beryllium	A	[0.01780]	0.1000	ug/L	
Cadmium	A	2.439	0.1000	ug/L	
Lead	A	0.4386	0.1000	ug/L	
Silver	A	0.2513	0.1000	ug/L	
Thallium	A	[0.02858]	0.05000	ug/L	
Arsenic	E	0.2868	0.1000	ug/L	
Chromium	E	1.362	0.1000	ug/L	
Cobalt	E	0.2068	0.1000	ug/L	
Copper	E	2.607	0.1000	ug/L	
Manganese	E	0.8258	0.1000	ug/L	
Nickel	E	1.153	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	5.436	0.1000	ug/L	
Selenium	H	[0.03680]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	97240	ug/L	97
Calcium	A	300000	292600	ug/L	98
Magnesium	A	100000	94750	ug/L	95
Molybdenum	A	2000	1900	ug/L	95
Potassium	A	100000	96500	ug/L	97
Sodium	E	250000	238900	ug/L	96
Iron	H	250000	226700	ug/L	91

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1719031	-8.74
Scandium	A	3243592	3392488	4.59
Scandium	E	52314	52864	1.05
Scandium	H	809463	849622	4.96
Germanium	H	196987	180993	-8.12
Germanium	E	33875	32443	-4.23
Indium	A	4193528	3689513	-12.02
Bismuth	A	2978911	2278146	-23.52
Yttrium	A	4393409	4228658	-3.75
Terbium	A	5092110	4657720	-8.53

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468018 File : f20u0018 Time : 20-JUN-2007 22:17
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	106300	ug/L	6		
Cadmium	A	100.0	110.4	ug/L	10	20	
Calcium	A	300000	322200	ug/L	7		
Magnesium	A	100000	103500	ug/L	4		
Molybdenum	A	2000	2075	ug/L	4		
Potassium	A	100000	105800	ug/L	6		
Silver	A	50.00	53.91	ug/L	8	20	
Arsenic	E	100.0	112.5	ug/L	13	20	
Chromium	E	200.0	219.7	ug/L	10	20	
Cobalt	E	200.0	209.4	ug/L	5	20	
Copper	E	200.0	203.8	ug/L	2	20	
Manganese	E	200.0	214.5	ug/L	7	20	
Nickel	E	200.0	202.1	ug/L	1	20	
Sodium	E	250000	269600	ug/L	8		
Vanadium	E	200.0	223.7	ug/L	12	20	
Zinc	E	100.0	106.1	ug/L	6	20	
Iron	H	250000	247500	ug/L	-1		
Selenium	H	100.0	112.7	ug/L	13	20	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	809463	829719	2.50
Scandium	A	3243592	3403657	4.93
Scandium	E	52314	49690	-5.02
Germanium	H	196987	174787	-11.27
Germanium	E	33875	30396	-10.27
Indium	A	4193528	3716918	-11.37
Yttrium	A	4393409	4281773	-2.54

00524

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468034 File : f20u0034 Time : 20-JUN-2007 23:54
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3441	10000	10280	ug/L	3	10	
Antimony	A	0.1764	0.1742	100.0	102.7	ug/L	3	10	
Barium	A	0.0625	0.0534	100.0	101.1	ug/L	1	10	
Beryllium	A	0.2127	0.2274	100.0	106.1	ug/L	6	10	
Cadmium	A	0.0524	0.0516	100.0	101.5	ug/L	2	10	
Calcium	A	0.3529	0.0131	10000	9750	ug/L	-3	10	
Lead	A	0.4176	0.3717	100.0	96.06	ug/L	-4	10	
Magnesium	A	0.2886	0.2782	10000	10330	ug/L	3	10	
Molybdenum	A	0.1552	0.1408	100.0	99.51	ug/L	0	10	
Potassium	A	1.0854	0.3940	10000	10540	ug/L	5	10	
Silver	A	0.2496	0.2479	100.0	103.9	ug/L	4	10	
Thallium	A	0.5544	0.5103	50.00	49.24	ug/L	-2	10	
Arsenic	E	0.3988	0.3827	100.0	102.3	ug/L	2	10	
Chromium	E	3.1307	2.7786	100.0	104.0	ug/L	4	10	
Cobalt	E	4.7299	4.8743	100.0	104.6	ug/L	5	10	
Copper	E	28.094	6.3189	100.0	102.8	ug/L	3	10	
Manganese	E	1.2114	1.1199	100.0	102.4	ug/L	2	10	
Nickel	E	1.8191	1.4272	100.0	105.1	ug/L	5	10	
Sodium	E	0.8277	0.3943	10000	10100	ug/L	1	10	
Vanadium	E	2.2993	1.9546	100.0	102.5	ug/L	3	10	
Zinc	E	3.7102	0.7402	100.0	102.9	ug/L	3	10	
Iron	H	0.5519	0.5423	10000	10290	ug/L	3	10	
Selenium	H	0.0827	0.0837	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1902630	1.01
Scandium	A	3243592	3459753	6.66
Scandium	E	52314	51927	-0.74
Scandium	H	809463	834264	3.06
Germanium	H	196987	201172	2.12
Germanium	E	33875	33529	-1.02
Indium	A	4193528	4401636	4.96
Bismuth	A	2978911	2935712	-1.45
Yttrium	A	4393409	4653568	5.92
Terbium	A	5092110	5400892	6.06

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468036 File : f20u0036 Time : 21-JUN-2007 00:07
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01695]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02216]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04816]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02426]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01606]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1885395	0.10
Scandium	A	3243592	3373083	3.99
Scandium	E	52314	53046	1.40
Scandium	H	809463	832742	2.88
Germanium	H	196987	202778	2.94
Germanium	E	33875	35261	4.09
Indium	A	4193528	4430468	5.65
Bismuth	A	2978911	3045632	2.24
Yttrium	A	4393409	4610709	4.95
Terbium	A	5092110	5280808	3.71

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67247468053
Cal : 67247468001
Standards: S6420

File : f20u0053
Caldate : 20-JUN-2007

IDF : 1.0
Time : 21-JUN-2007 01:48

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3311	10000	9888	ug/L	-1	10	
Antimony	A	0.1764	0.1688	100.0	99.54	ug/L	0	10	
Barium	A	0.0625	0.0519	100.0	98.29	ug/L	-2	10	
Beryllium	A	0.2127	0.2217	100.0	103.5	ug/L	4	10	
Cadmium	A	0.0524	0.0497	100.0	97.76	ug/L	-2	10	
Calcium	A	0.3529	0.0124	10000	9182	ug/L	-8	10	
Lead	A	0.4176	0.3523	100.0	91.06	ug/L	-9	10	
Magnesium	A	0.2886	0.2675	10000	9935	ug/L	-1	10	
Molybdenum	A	0.1552	0.1354	100.0	95.70	ug/L	-4	10	
Potassium	A	1.0854	0.3794	10000	10140	ug/L	1	10	
Silver	A	0.2496	0.2410	100.0	100.9	ug/L	1	10	
Thallium	A	0.5544	0.4868	50.00	46.98	ug/L	-6	10	
Arsenic	E	0.3988	0.3803	100.0	101.7	ug/L	2	10	
Chromium	E	3.1307	2.7517	100.0	103.0	ug/L	3	10	
Cobalt	E	4.7299	4.8387	100.0	103.9	ug/L	4	10	
Copper	E	28.094	6.2252	100.0	101.2	ug/L	1	10	
Manganese	E	1.2114	1.1122	100.0	101.7	ug/L	2	10	
Nickel	E	1.8191	1.4083	100.0	103.7	ug/L	4	10	
Sodium	E	0.8277	0.3872	10000	9918	ug/L	-1	10	
Vanadium	E	2.2993	1.9477	100.0	102.1	ug/L	2	10	
Zinc	E	3.7102	0.7284	100.0	101.2	ug/L	1	10	
Iron	H	0.5519	0.5333	10000	10120	ug/L	1	10	
Selenium	H	0.0827	0.0829	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1977846	5.00
Scandium	A	3243592	3673008	13.24
Scandium	E	52314	53535	2.33
Scandium	H	809463	855118	5.64
Germanium	H	196987	205320	4.23
Germanium	E	33875	34781	2.68
Indium	A	4193528	4526295	7.94
Bismuth	A	2978911	3011178	1.08
Yttrium	A	4393409	4894961	11.42
Terbium	A	5092110	5541454	8.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468055 File : f20u0055 Time : 21-JUN-2007 02:01
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01653]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01373]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.008951]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1907713	1.28
Scandium	A	3243592	3465235	6.83
Scandium	E	52314	55183	5.48
Scandium	H	809463	914690	13.00
Germanium	H	196987	219577	11.47
Germanium	E	33875	36118	6.62
Indium	A	4193528	4526614	7.94
Bismuth	A	2978911	3045505	2.24
Yttrium	A	4393409	4742142	7.94
Terbium	A	5092110	5374836	5.55

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67247468055

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468065 File : f20u0065 Time : 21-JUN-2007 03:03
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3435	10000	10260	ug/L	3	10	
Antimony	A	0.1764	0.1738	100.0	102.5	ug/L	3	10	
Barium	A	0.0625	0.0538	100.0	102.0	ug/L	2	10	
Beryllium	A	0.2127	0.2257	100.0	105.3	ug/L	5	10	
Cadmium	A	0.0524	0.0522	100.0	102.6	ug/L	3	10	
Calcium	A	0.3529	0.0128	10000	9533	ug/L	-5	10	
Lead	A	0.4176	0.3666	100.0	94.74	ug/L	-5	10	
Magnesium	A	0.2886	0.2747	10000	10200	ug/L	2	10	
Molybdenum	A	0.1552	0.1391	100.0	98.32	ug/L	-2	10	
Potassium	A	1.0854	0.3933	10000	10520	ug/L	5	10	
Silver	A	0.2496	0.2523	100.0	105.7	ug/L	6	10	
Thallium	A	0.5544	0.5061	50.00	48.84	ug/L	-2	10	
Arsenic	E	0.3988	0.3820	100.0	102.1	ug/L	2	10	
Chromium	E	3.1307	2.7336	100.0	102.4	ug/L	2	10	
Cobalt	E	4.7299	4.7631	100.0	102.2	ug/L	2	10	
Copper	E	28.094	6.2337	100.0	101.4	ug/L	1	10	
Manganese	E	1.2114	1.1042	100.0	101.0	ug/L	1	10	
Nickel	E	1.8191	1.3946	100.0	102.7	ug/L	3	10	
Sodium	E	0.8277	0.3843	10000	9845	ug/L	-2	10	
Vanadium	E	2.2993	1.9169	100.0	100.5	ug/L	1	10	
Zinc	E	3.7102	0.7294	100.0	101.4	ug/L	1	10	
Iron	H	0.5519	0.5427	10000	10300	ug/L	3	10	
Selenium	H	0.0827	0.0821	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1903432	1.05
Scandium	A	3243592	3488668	7.56
Scandium	E	52314	54235	3.67
Scandium	H	809463	856828	5.85
Germanium	H	196987	207665	5.42
Germanium	E	33875	34769	2.64
Indium	A	4193528	4324587	3.13
Bismuth	A	2978911	2869546	-3.67
Yttrium	A	4393409	4679239	6.51
Terbium	A	5092110	5273749	3.57

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468067 File : f20u0067 Time : 21-JUN-2007 03:16
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.005564]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.006121]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01109]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01211]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.005200]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1943441	3.18
Scandium	A	3243592	3494142	7.72
Scandium	E	52314	56483	7.97
Scandium	H	809463	859660	6.20
Germanium	H	196987	210949	7.09
Germanium	E	33875	36511	7.78
Indium	A	4193528	4495682	7.21
Bismuth	A	2978911	3032748	1.81
Yttrium	A	4393409	4722072	7.48
Terbium	A	5092110	5406220	6.17

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CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468070 File : f20u0070 Time : 21-JUN-2007 03:34
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05586]	0.1000	ug/L	
Barium	A	1.037	0.1000	ug/L	
Beryllium	A	[0.01935]	0.1000	ug/L	
Cadmium	A	2.123	0.1000	ug/L	
Lead	A	0.4513	0.1000	ug/L	
Silver	A	0.2519	0.1000	ug/L	
Thallium	A	[0.02446]	0.05000	ug/L	
Arsenic	E	0.2769	0.1000	ug/L	
Chromium	E	1.405	0.1000	ug/L	
Cobalt	E	0.2166	0.1000	ug/L	
Copper	E	2.510	0.1000	ug/L	
Manganese	E	0.8109	0.1000	ug/L	
Nickel	E	1.145	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	5.308	0.1000	ug/L	
Selenium	H	[0.03922]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	100200	ug/L	100
Calcium	A	300000	301600	ug/L	101
Magnesium	A	100000	97540	ug/L	98
Molybdenum	A	2000	1893	ug/L	95
Potassium	A	100000	99690	ug/L	100
Sodium	E	250000	235200	ug/L	94
Iron	H	250000	225900	ug/L	90

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1549594	-17.73
Scandium	A	3243592	3226797	-0.52
Scandium	E	52314	50446	-3.57
Scandium	H	809463	832718	2.87
Germanium	H	196987	180299	-8.47
Germanium	E	33875	31738	-6.31
Indium	A	4193528	3711817	-11.49
Bismuth	A	2978911	2308356	-22.51
Yttrium	A	4393409	4263416	-2.96
Terbium	A	5092110	4724186	-7.23

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468071 File : f20u0071 Time : 21-JUN-2007 03:40
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	109100	ug/L	9		
Cadmium	A	100.0	111.7	ug/L	12	20	
Calcium	A	300000	327100	ug/L	9		
Magnesium	A	100000	107000	ug/L	7		
Molybdenum	A	2000	2068	ug/L	3		
Potassium	A	100000	108700	ug/L	9		
Silver	A	50.00	54.31	ug/L	9	20	
Arsenic	E	100.0	112.7	ug/L	13	20	
Chromium	E	200.0	224.2	ug/L	12	20	
Cobalt	E	200.0	211.8	ug/L	6	20	
Copper	E	200.0	201.8	ug/L	1	20	
Manganese	E	200.0	212.9	ug/L	6	20	
Nickel	E	200.0	205.9	ug/L	3	20	
Sodium	E	250000	268600	ug/L	7		
Vanadium	E	200.0	226.9	ug/L	13	20	
Zinc	E	100.0	104.2	ug/L	4	20	
Iron	H	250000	253000	ug/L	1		
Selenium	H	100.0	113.9	ug/L	14	20	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	809463	794029	-1.91
Scandium	A	3243592	3177178	-2.05
Scandium	E	52314	47321	-9.54
Germanium	H	196987	170509	-13.44
Germanium	E	33875	29569	-12.71
Indium	A	4193528	3697920	-11.82
Yttrium	A	4393409	4245543	-3.37

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67247468088 File : f20u0088 IDF : 1.0
Cal : 67247468001 Caldate : 20-JUN-2007 Time : 21-JUN-2007 05:27
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3438	10000	10270	ug/L	3	10	
Antimony	A	0.1764	0.1732	100.0	102.2	ug/L	2	10	
Barium	A	0.0625	0.0536	100.0	101.6	ug/L	2	10	
Beryllium	A	0.2127	0.2283	100.0	106.5	ug/L	7	10	
Cadmium	A	0.0524	0.0518	100.0	101.7	ug/L	2	10	
Calcium	A	0.3529	0.0127	10000	9398	ug/L	-6	10	
Lead	A	0.4176	0.3667	100.0	94.78	ug/L	-5	10	
Magnesium	A	0.2886	0.2762	10000	10260	ug/L	3	10	
Molybdenum	A	0.1552	0.1391	100.0	98.26	ug/L	-2	10	
Potassium	A	1.0854	0.3963	10000	10600	ug/L	6	10	
Silver	A	0.2496	0.2479	100.0	103.9	ug/L	4	10	
Thallium	A	0.5544	0.5003	50.00	48.28	ug/L	-3	10	
Arsenic	E	0.3988	0.3740	100.0	99.97	ug/L	0	10	
Chromium	E	3.1307	2.7449	100.0	102.8	ug/L	3	10	
Cobalt	E	4.7299	4.8019	100.0	103.1	ug/L	3	10	
Copper	E	28.094	6.1258	100.0	99.58	ug/L	0	10	
Manganese	E	1.2114	1.1070	100.0	101.2	ug/L	1	10	
Nickel	E	1.8191	1.4091	100.0	103.8	ug/L	4	10	
Sodium	E	0.8277	0.3933	10000	10080	ug/L	1	10	
Vanadium	E	2.2993	1.9388	100.0	101.7	ug/L	2	10	
Zinc	E	3.7102	0.7175	100.0	99.70	ug/L	0	10	
Iron	H	0.5519	0.5380	10000	10210	ug/L	2	10	
Selenium	H	0.0827	0.0826	100.0	102.7	ug/L	3	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1853678	-1.59
Scandium	A	3243592	3483412	7.39
Scandium	E	52314	52273	-0.08
Scandium	H	809463	841023	3.90
Germanium	H	196987	203151	3.13
Germanium	E	33875	34407	1.57
Indium	A	4193528	4406932	5.09
Bismuth	A	2978911	2939939	-1.31
Yttrium	A	4393409	4739417	7.88
Terbium	A	5092110	5397996	6.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468090 File : f20u0090 Time : 21-JUN-2007 05:41
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01520]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01708]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01382]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01437]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02169]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1866775	-0.89
Scandium	A	3243592	3442730	6.14
Scandium	E	52314	53736	2.72
Scandium	H	809463	867892	7.22
Germanium	H	196987	210484	6.85
Germanium	E	33875	35217	3.96
Indium	A	4193528	4551957	8.55
Bismuth	A	2978911	3060956	2.75
Yttrium	A	4393409	4711541	7.24
Terbium	A	5092110	5364116	5.34

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468108 File : f20u0108 Time : 21-JUN-2007 07:30
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3462	10000	10340	ug/L	3	10	***
Antimony	A	0.1764	0.1756	100.0	103.6	ug/L	4	10	***
Barium	A	0.0625	0.0546	100.0	103.4	ug/L	3	10	***
Beryllium	A	0.2127	0.2276	100.0	106.2	ug/L	6	10	***
Cadmium	A	0.0524	0.0526	100.0	103.5	ug/L	4	10	***
Calcium	A	0.3529	0.0127	10000	9430	ug/L	-6	10	***
Lead	A	0.4176	0.3725	100.0	96.27	ug/L	-4	10	***
Magnesium	A	0.2886	0.2801	10000	10400	ug/L	4	10	***
Molybdenum	A	0.1552	0.1419	100.0	100.3	ug/L	0	10	***
Potassium	A	1.0854	0.3985	10000	10660	ug/L	7	10	***
Silver	A	0.2496	0.2502	100.0	104.8	ug/L	5	10	***
Thallium	A	0.5544	0.4910	50.00	47.37	ug/L	-5	10	***
Arsenic	E	0.3988	0.3754	100.0	100.3	ug/L	0	10	***
Chromium	E	3.1307	2.7159	100.0	101.7	ug/L	2	10	***
Cobalt	E	4.7299	4.7151	100.0	101.2	ug/L	1	10	***
Copper	E	28.094	6.1139	100.0	99.39	ug/L	-1	10	***
Manganese	E	1.2114	1.0915	100.0	99.82	ug/L	0	10	***
Nickel	E	1.8191	1.3861	100.0	102.1	ug/L	2	10	***
Sodium	E	0.8277	0.3844	10000	9848	ug/L	-2	10	***
Vanadium	E	2.2993	1.9132	100.0	100.3	ug/L	0	10	***
Zinc	E	3.7102	0.7202	100.0	100.1	ug/L	0	10	***
Iron	H	0.5519	0.4886	10000	9272	ug/L	-7	10	***
Selenium	H	0.0827	0.0769	100.0	95.75	ug/L	-4	10	***

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1865671	-0.95
Scandium	A	3243592	3427235	5.66
Scandium	E	52314	53368	2.02
Scandium	H	809463	924102	14.16
Germanium	H	196987	217524	10.43
Germanium	E	33875	34586	2.10
Indium	A	4193528	4302574	2.60
Bismuth	A	2978911	2872376	-3.58
Yttrium	A	4393409	4597151	4.64
Terbium	A	5092110	5201501	2.15

tune failure (A) tune failure (E) tune failure (H)

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468110 File : f20u0110 Time : 21-JUN-2007 07:43
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	***
Antimony	A	ND	0.1000	0	ug/L	***
Barium	A	ND	0.1000	0	ug/L	***
Beryllium	A	ND	0.1000	0	ug/L	***
Cadmium	A	[0.006386]	0.1000	0.0005836	ug/L	!ib ***
Calcium	A	ND	10.00	0	ug/L	***
Lead	A	[0.007055]	0.1000	0.002857	ug/L	!ib ***
Magnesium	A	ND	10.00	3.328	ug/L	***
Molybdenum	A	ND	0.1000	0.07293	ug/L	***
Potassium	A	ND	10.00	7.074	ug/L	***
Silver	A	ND	0.1000	0	ug/L	***
Thallium	A	ND	0.05000	0	ug/L	***
Arsenic	E	[0.008602]	0.1000	0.002285	ug/L	!ib ***
Chromium	E	[0.01961]	0.1000	0.0001137	ug/L	!ib ***
Cobalt	E	ND	0.1000	0	ug/L	***
Copper	E	ND	0.1000	0.1296	ug/L	***
Manganese	E	ND	0.1000	0.004522	ug/L	***
Nickel	E	ND	0.1000	0.001252	ug/L	***
Sodium	E	ND	10.00	7.900	ug/L	***
Vanadium	E	ND	0.1000	0	ug/L	***
Zinc	E	ND	0.1000	0.01127	ug/L	***
Iron	H	ND	10.00	4.329	ug/L	***
Selenium	H	[0.01086]	0.1000	0.004672	ug/L	!ib ***

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1884496	0.05
Scandium	A	3243592	3410937	5.16
Scandium	E	52314	51806	-0.97
Scandium	H	809463	855091	5.64
Germanium	H	196987	206896	5.03
Germanium	E	33875	34040	0.49
Indium	A	4193528	4413743	5.25
Bismuth	A	2978911	3008025	0.98
Yttrium	A	4393409	4619626	5.15
Terbium	A	5092110	5295572	4.00

tune failure (A) tune failure (E) tune failure (H)

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
Seqnum : 67247468119 File : f20u0119 IDF : 1.0
Cal : 67247468001 Caldate : 20-JUN-2007 Time : 21-JUN-2007 08:37
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3425	10000	10230	ug/L	2	10	***
Antimony	A	0.1764	0.1723	100.0	101.6	ug/L	2	10	***
Barium	A	0.0625	0.0537	100.0	101.9	ug/L	2	10	***
Beryllium	A	0.2127	0.2284	100.0	106.6	ug/L	7	10	***
Cadmium	A	0.0524	0.0516	100.0	101.3	ug/L	1	10	***
Calcium	A	0.3529	0.0126	10000	9354	ug/L	-6	10	***
Lead	A	0.4176	0.3645	100.0	94.19	ug/L	-6	10	***
Magnesium	A	0.2886	0.2751	10000	10210	ug/L	2	10	***
Molybdenum	A	0.1552	0.1400	100.0	98.93	ug/L	-1	10	***
Potassium	A	1.0854	0.3941	10000	10540	ug/L	5	10	***
Silver	A	0.2496	0.2470	100.0	103.5	ug/L	4	10	***
Thallium	A	0.5544	0.4855	50.00	46.84	ug/L	-6	10	***
Arsenic	E	0.3988	0.3776	100.0	100.9	ug/L	1	10	***
Chromium	E	3.1307	2.7219	100.0	101.9	ug/L	2	10	***
Cobalt	E	4.7299	4.7775	100.0	102.6	ug/L	3	10	***
Copper	E	28.094	6.2071	100.0	100.9	ug/L	1	10	***
Manganese	E	1.2114	1.1003	100.0	100.6	ug/L	1	10	***
Nickel	E	1.8191	1.3903	100.0	102.4	ug/L	2	10	***
Sodium	E	0.8277	0.3848	10000	9857	ug/L	-1	10	***
Vanadium	E	2.2993	1.9231	100.0	100.9	ug/L	1	10	***
Zinc	E	3.7102	0.7248	100.0	100.7	ug/L	1	10	***
Iron	H	0.5519	0.5847	10000	11100	ug/L	**11**	10	c+ ***
Selenium	H	0.0827	0.0847	100.0	105.5	ug/L	6	10	***

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1857121	-1.41
Scandium	A	3243592	3483885	7.41
Scandium	E	52314	53811	2.86
Scandium	H	809463	807047	-0.30
Germanium	H	196987	202964	3.03
Germanium	E	33875	34789	2.70
Indium	A	4193528	4398348	4.88
Bismuth	A	2978911	2885822	-3.12
Yttrium	A	4393409	4695105	6.87
Terbium	A	5092110	5316764	4.41

tune failure (A) tune failure (E) tune failure (H)

+=high bias c=CCV

67247468119

08537

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468121 File : f20u0121 Time : 21-JUN-2007 08:51
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	***
Antimony	A	ND	0.1000	0	ug/L	***
Barium	A	ND	0.1000	0	ug/L	***
Beryllium	A	ND	0.1000	0	ug/L	***
Cadmium	A	ND	0.1000	0.0005836	ug/L	***
Calcium	A	ND	10.00	0	ug/L	***
Lead	A	ND	0.1000	0.002857	ug/L	***
Magnesium	A	ND	10.00	3.328	ug/L	***
Molybdenum	A	ND	0.1000	0.07293	ug/L	***
Potassium	A	ND	10.00	7.074	ug/L	***
Silver	A	ND	0.1000	0	ug/L	***
Thallium	A	ND	0.05000	0	ug/L	***
Arsenic	E	[0.01194]	0.1000	0.002285	ug/L	!ib ***
Chromium	E	[0.01379]	0.1000	0.0001137	ug/L	!ib ***
Cobalt	E	ND	0.1000	0	ug/L	***
Copper	E	ND	0.1000	0.1296	ug/L	***
Manganese	E	ND	0.1000	0.004522	ug/L	***
Nickel	E	ND	0.1000	0.001252	ug/L	***
Sodium	E	ND	10.00	7.900	ug/L	***
Vanadium	E	ND	0.1000	0	ug/L	***
Zinc	E	ND	0.1000	0.01127	ug/L	***
Iron	H	ND	10.00	4.329	ug/L	***
Selenium	H	[0.01107]	0.1000	0.004672	ug/L	!ib ***

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1870765	-0.68
Scandium	A	3243592	3365057	3.74
Scandium	E	52314	54871	4.89
Scandium	H	809463	852408	5.31
Germanium	H	196987	211288	7.26
Germanium	E	33875	35817	5.73
Indium	A	4193528	4489555	7.06
Bismuth	A	2978911	2984759	0.20
Yttrium	A	4393409	4603943	4.79
Terbium	A	5092110	5276316	3.62

tune failure (A) tune failure (E) tune failure (H)

!=warning ib=instrument blank

67247468121

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468124 File : f20u0124 Time : 21-JUN-2007 09:09
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.05118]	0.1000	ug/L	***
Barium	A	1.046	0.1000	ug/L	***
Beryllium	A	[0.02553]	0.1000	ug/L	***
Cadmium	A	2.016	0.1000	ug/L	***
Lead	A	0.4494	0.1000	ug/L	***
Silver	A	0.2480	0.1000	ug/L	***
Thallium	A	[0.01910]	0.05000	ug/L	***
Arsenic	E	0.2812	0.1000	ug/L	***
Chromium	E	1.382	0.1000	ug/L	***
Cobalt	E	0.2195	0.1000	ug/L	***
Copper	E	2.504	0.1000	ug/L	***
Manganese	E	0.7994	0.1000	ug/L	***
Nickel	E	1.185	0.1000	ug/L	***
Vanadium	E	[0]	0.1000	ug/L	***
Zinc	E	5.292	0.1000	ug/L	***
Selenium	H	[0.03643]	0.1000	ug/L	***

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98640	ug/L	99
Calcium	A	300000	298800	ug/L	100
Magnesium	A	100000	95930	ug/L	96
Molybdenum	A	2000	1873	ug/L	94
Potassium	A	100000	100400	ug/L	100
Sodium	E	250000	232400	ug/L	93
Iron	H	250000	223300	ug/L	89

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1473627	-21.77
Scandium	A	3243592	3188634	-1.69
Scandium	E	52314	50383	-3.69
Scandium	H	809463	836621	3.36
Germanium	H	196987	184833	-6.17
Germanium	E	33875	31496	-7.02
Indium	A	4193528	3744423	-10.71
Bismuth	A	2978911	2313319	-22.34
Yttrium	A	4393409	4279149	-2.60
Terbium	A	5092110	4704324	-7.62

tune failure (A) tune failure (E) tune failure (H)

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468125 File : f20u0125 Time : 21-JUN-2007 09:15
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	107900	ug/L	8		***
Cadmium	A	100.0	109.5	ug/L	10	20	***
Calcium	A	300000	326100	ug/L	9		***
Magnesium	A	100000	104100	ug/L	4		***
Molybdenum	A	2000	2034	ug/L	2		***
Potassium	A	100000	108500	ug/L	9		***
Silver	A	50.00	53.01	ug/L	6	20	***
Arsenic	E	100.0	110.2	ug/L	10	20	***
Chromium	E	200.0	218.9	ug/L	9	20	***
Cobalt	E	200.0	206.8	ug/L	3	20	***
Copper	E	200.0	198.7	ug/L	-1	20	***
Manganese	E	200.0	210.6	ug/L	5	20	***
Nickel	E	200.0	201.8	ug/L	1	20	***
Sodium	E	250000	263200	ug/L	5		***
Vanadium	E	200.0	222.5	ug/L	11	20	***
Zinc	E	100.0	103.3	ug/L	3	20	***
Iron	H	250000	248000	ug/L	-1		***
Selenium	H	100.0	111.2	ug/L	11	20	***

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	809463	793746	-1.94
Scandium	A	3243592	3142962	-3.10
Scandium	E	52314	47188	-9.80
Germanium	H	196987	171559	-12.91
Germanium	E	33875	29464	-13.02
Indium	A	4193528	3757508	-10.40
Yttrium	A	4393409	4290714	-2.34

tune failure (A) tune failure (E) tune failure (H)

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468088 File : f20u0088 Time : 21-JUN-2007 05:27
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3438	10000	10270	ug/L	3	10	
Antimony	A	0.1764	0.1732	100.0	102.2	ug/L	2	10	
Barium	A	0.0625	0.0536	100.0	101.6	ug/L	2	10	
Beryllium	A	0.2127	0.2283	100.0	106.5	ug/L	7	10	
Cadmium	A	0.0524	0.0518	100.0	101.7	ug/L	2	10	
Calcium	A	0.3529	0.0127	10000	9398	ug/L	-6	10	
Lead	A	0.4176	0.3667	100.0	94.78	ug/L	-5	10	
Magnesium	A	0.2886	0.2762	10000	10260	ug/L	3	10	
Molybdenum	A	0.1552	0.1391	100.0	98.26	ug/L	-2	10	
Potassium	A	1.0854	0.3963	10000	10600	ug/L	6	10	
Silver	A	0.2496	0.2479	100.0	103.9	ug/L	4	10	
Thallium	A	0.5544	0.5003	50.00	48.28	ug/L	-3	10	
Arsenic	E	0.3988	0.3740	100.0	99.97	ug/L	0	10	
Chromium	E	3.1307	2.7449	100.0	102.8	ug/L	3	10	
Cobalt	E	4.7299	4.8019	100.0	103.1	ug/L	3	10	
Copper	E	28.094	6.1258	100.0	99.58	ug/L	0	10	
Manganese	E	1.2114	1.1070	100.0	101.2	ug/L	1	10	
Nickel	E	1.8191	1.4091	100.0	103.8	ug/L	4	10	
Sodium	E	0.8277	0.3933	10000	10080	ug/L	1	10	
Vanadium	E	2.2993	1.9388	100.0	101.7	ug/L	2	10	
Zinc	E	3.7102	0.7175	100.0	99.70	ug/L	0	10	
Iron	H	0.5519	0.5380	10000	10210	ug/L	2	10	
Selenium	H	0.0827	0.0826	100.0	102.7	ug/L	3	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1853678	-1.59
Scandium	A	3243592	3483412	7.39
Scandium	E	52314	52273	-0.08
Scandium	H	809463	841023	3.90
Germanium	H	196987	203151	3.13
Germanium	E	33875	34407	1.57
Indium	A	4193528	4406932	5.09
Bismuth	A	2978911	2939939	-1.31
Yttrium	A	4393409	4739417	7.88
Terbium	A	5092110	5397996	6.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468090 File : f20u0090 Time : 21-JUN-2007 05:41
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01520]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01708]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01382]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01437]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02169]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1866775	-0.89
Scandium	A	3243592	3442730	6.14
Scandium	E	52314	53736	2.72
Scandium	H	809463	867892	7.22
Germanium	H	196987	210484	6.85
Germanium	E	33875	35217	3.96
Indium	A	4193528	4551957	8.55
Bismuth	A	2978911	3060956	2.75
Yttrium	A	4393409	4711541	7.24
Terbium	A	5092110	5364116	5.34

!=warning ib=instrument blank

67247468090

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468108 File : f20u0108 Time : 21-JUN-2007 07:30
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3462	10000	10340	ug/L	3	10	
Antimony	A	0.1764	0.1756	100.0	103.6	ug/L	4	10	
Barium	A	0.0625	0.0546	100.0	103.4	ug/L	3	10	
Beryllium	A	0.2127	0.2276	100.0	106.2	ug/L	6	10	
Cadmium	A	0.0524	0.0526	100.0	103.5	ug/L	4	10	
Calcium	A	0.3529	0.0127	10000	9430	ug/L	-6	10	
Lead	A	0.4176	0.3725	100.0	96.27	ug/L	-4	10	
Magnesium	A	0.2886	0.2801	10000	10400	ug/L	4	10	
Molybdenum	A	0.1552	0.1419	100.0	100.3	ug/L	0	10	
Potassium	A	1.0854	0.3985	10000	10660	ug/L	7	10	
Silver	A	0.2496	0.2502	100.0	104.8	ug/L	5	10	
Thallium	A	0.5544	0.4910	50.00	47.37	ug/L	-5	10	
Arsenic	E	0.3988	0.3754	100.0	100.3	ug/L	0	10	
Chromium	E	3.1307	2.7159	100.0	101.7	ug/L	2	10	
Cobalt	E	4.7299	4.7151	100.0	101.2	ug/L	1	10	
Copper	E	28.094	6.1139	100.0	99.39	ug/L	-1	10	
Manganese	E	1.2114	1.0915	100.0	99.82	ug/L	0	10	
Nickel	E	1.8191	1.3861	100.0	102.1	ug/L	2	10	
Sodium	E	0.8277	0.3844	10000	9848	ug/L	-2	10	
Vanadium	E	2.2993	1.9132	100.0	100.3	ug/L	0	10	
Zinc	E	3.7102	0.7202	100.0	100.1	ug/L	0	10	
Iron	H	0.5519	0.4886	10000	9272	ug/L	-7	10	
Selenium	H	0.0827	0.0769	100.0	95.75	ug/L	-4	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1865671	-0.95
Scandium	A	3243592	3427235	5.66
Scandium	E	52314	53368	2.02
Scandium	H	809463	924102	14.16
Germanium	H	196987	217524	10.43
Germanium	E	33875	34586	2.10
Indium	A	4193528	4302574	2.60
Bismuth	A	2978911	2872376	-3.58
Yttrium	A	4393409	4597151	4.64
Terbium	A	5092110	5201501	2.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468110 File : f20u0110 Time : 21-JUN-2007 07:43
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.006386]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.007055]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.008602]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01961]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01086]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1884496	0.05
Scandium	A	3243592	3410937	5.16
Scandium	E	52314	51806	-0.97
Scandium	H	809463	855091	5.64
Germanium	H	196987	206896	5.03
Germanium	E	33875	34040	0.49
Indium	A	4193528	4413743	5.25
Bismuth	A	2978911	3008025	0.98
Yttrium	A	4393409	4619626	5.15
Terbium	A	5092110	5295572	4.00

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468172 File : f20u0172 Time : 21-JUN-2007 14:12
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3417	10000	10200	ug/L	2	10	
Antimony	A	0.1764	0.1725	100.0	101.8	ug/L	2	10	
Barium	A	0.0625	0.0541	100.0	102.5	ug/L	3	10	
Beryllium	A	0.2127	0.2177	100.0	101.6	ug/L	2	10	
Cadmium	A	0.0524	0.0514	100.0	101.1	ug/L	1	10	
Calcium	A	0.3529	0.0125	10000	9274	ug/L	-7	10	
Lead	A	0.4176	0.3603	100.0	93.13	ug/L	-7	10	
Magnesium	A	0.2886	0.2744	10000	10190	ug/L	2	10	
Molybdenum	A	0.1552	0.1365	100.0	96.46	ug/L	-4	10	
Potassium	A	1.0854	0.3933	10000	10520	ug/L	5	10	
Silver	A	0.2496	0.2429	100.0	101.8	ug/L	2	10	
Thallium	A	0.5544	0.5004	50.00	48.28	ug/L	-3	10	
Arsenic	E	0.3988	0.3646	100.0	97.45	ug/L	-3	10	
Chromium	E	3.1307	2.6413	100.0	98.90	ug/L	-1	10	
Cobalt	E	4.7299	4.6217	100.0	99.21	ug/L	-1	10	
Copper	E	28.094	5.7590	100.0	93.51	ug/L	-6	10	
Manganese	E	1.2114	1.0671	100.0	97.58	ug/L	-2	10	
Nickel	E	1.8191	1.3347	100.0	98.32	ug/L	-2	10	
Sodium	E	0.8277	0.3818	10000	9780	ug/L	-2	10	
Vanadium	E	2.2993	1.8829	100.0	98.75	ug/L	-1	10	
Zinc	E	3.7102	0.6951	100.0	96.53	ug/L	-3	10	
Iron	H	0.5519	0.5079	10000	9638	ug/L	-4	10	
Selenium	H	0.0827	0.0776	100.0	96.59	ug/L	-3	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	2010074	6.71
Scandium	A	3243592	3709885	14.38
Scandium	E	52314	56136	7.31
Scandium	H	809463	902535	11.50
Germanium	H	196987	217846	10.59
Germanium	E	33875	36955	9.09
Indium	A	4193528	4737182	12.96
Bismuth	A	2978911	3155734	5.94
Yttrium	A	4393409	5053208	15.02
Terbium	A	5092110	5851807	14.92

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468174 File : f20u0174 Time : 21-JUN-2007 14:24
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02801]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03617]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[4.723]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[9.314]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02210]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.03819]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.01467]	0.1000	0.004522	ug/L	!ib
Nickel	E	ND	0.1000	0.001252	ug/L	
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.03136]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	2143241	13.78
Scandium	A	3243592	3760276	15.93
Scandium	E	52314	58463	11.75
Scandium	H	809463	891653	10.15
Germanium	H	196987	221385	12.39
Germanium	E	33875	38664	14.14
Indium	A	4193528	4913506	17.17
Bismuth	A	2978911	3268961	9.74
Yttrium	A	4393409	5083621	15.71
Terbium	A	5092110	5888033	15.63

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468187 File : f20u0187 Time : 21-JUN-2007 15:48
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.3583	0.3366	10000	10050	ug/L	1	10	
Antimony	A	0.1764	0.1729	100.0	102.0	ug/L	2	10	
Barium	A	0.0625	0.0539	100.0	102.2	ug/L	2	10	
Beryllium	A	0.2127	0.2160	100.0	100.8	ug/L	1	10	
Cadmium	A	0.0524	0.0510	100.0	100.3	ug/L	0	10	
Calcium	A	0.3529	0.0125	10000	9235	ug/L	-8	10	
Lead	A	0.4176	0.3571	100.0	92.28	ug/L	-8	10	
Magnesium	A	0.2886	0.2735	10000	10160	ug/L	2	10	
Molybdenum	A	0.1552	0.1357	100.0	95.92	ug/L	-4	10	
Potassium	A	1.0854	0.3916	10000	10470	ug/L	5	10	
Silver	A	0.2496	0.2391	100.0	100.2	ug/L	0	10	
Thallium	A	0.5544	0.4943	50.00	47.70	ug/L	-5	10	
Arsenic	E	0.3988	0.3645	100.0	97.43	ug/L	-3	10	
Chromium	E	3.1307	2.6145	100.0	97.89	ug/L	-2	10	
Cobalt	E	4.7299	4.5711	100.0	98.12	ug/L	-2	10	
Copper	E	28.094	5.7362	100.0	93.13	ug/L	-7	10	
Manganese	E	1.2114	1.0681	100.0	97.67	ug/L	-2	10	
Nickel	E	1.8191	1.3184	100.0	97.12	ug/L	-3	10	
Sodium	E	0.8277	0.3746	10000	9595	ug/L	-4	10	
Vanadium	E	2.2993	1.8623	100.0	97.66	ug/L	-2	10	
Zinc	E	3.7102	0.6887	100.0	95.63	ug/L	-4	10	
Iron	H	0.5519	0.5319	10000	10090	ug/L	1	10	
Selenium	H	0.0827	0.0801	100.0	99.70	ug/L	0	10	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	2061398	9.44
Scandium	A	3243592	3720092	14.69
Scandium	E	52314	57908	10.69
Scandium	H	809463	894703	10.53
Germanium	H	196987	219436	11.40
Germanium	E	33875	37802	11.59
Indium	A	4193528	4688416	11.80
Bismuth	A	2978911	3102076	4.13
Yttrium	A	4393409	5033537	14.57
Terbium	A	5092110	5783760	13.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468190 File : f20u0190 Time : 21-JUN-2007 16:06
Cal : 67247468001 Caldate : 20-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.05190]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.04456]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[7.136]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.595]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.06551]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.06768]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.07219]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.005780]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02810]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	2087818	10.84
Scandium	A	3243592	3691119	13.80
Scandium	E	52314	58985	12.75
Scandium	H	809463	935547	15.58
Germanium	H	196987	230342	16.93
Germanium	E	33875	39177	15.65
Indium	A	4193528	4865184	16.02
Bismuth	A	2978911	3279822	10.10
Yttrium	A	4393409	5064031	15.26
Terbium	A	5092110	5772016	13.35

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: 88548

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468192 File : f20u0192 Time : 21-JUN-2007 16:18
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06447]	0.1000	ug/L	
Barium	A	1.045	0.1000	ug/L	
Beryllium	A	[0.04305]	0.1000	ug/L	
Cadmium	A	2.110	0.1000	ug/L	
Lead	A	0.4439	0.1000	ug/L	
Silver	A	0.2566	0.1000	ug/L	
Thallium	A	[0.04058]	0.05000	ug/L	
Arsenic	E	0.3562	0.1000	ug/L	
Chromium	E	1.351	0.1000	ug/L	
Cobalt	E	0.2203	0.1000	ug/L	
Copper	E	2.252	0.1000	ug/L	
Manganese	E	0.9297	0.1000	ug/L	
Nickel	E	1.089	0.1000	ug/L	
Vanadium	E	[0.007149]	0.1000	ug/L	
Zinc	E	5.137	0.1000	ug/L	
Selenium	H	[0.06293]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	97390	ug/L	97
Calcium	A	300000	299100	ug/L	100
Magnesium	A	100000	93850	ug/L	94
Molybdenum	A	2000	1829	ug/L	91
Potassium	A	100000	98900	ug/L	99
Sodium	E	250000	224500	ug/L	90
Iron	H	250000	223000	ug/L	89

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1883591	1552071	-17.60
Scandium	A	3243592	3386531	4.41
Scandium	E	52314	53975	3.18
Scandium	H	809463	839619	3.73
Germanium	H	196987	186199	-5.48
Germanium	E	33875	33731	-0.42
Indium	A	4193528	3994231	-4.75
Bismuth	A	2978911	2407221	-19.19
Yttrium	A	4393409	4520662	2.90
Terbium	A	5092110	4985888	-2.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67247468193 File : f20u0193 Time : 21-JUN-2007 16:24
Cal : 67247468001 Caldate : 20-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	104500	ug/L	5		
Cadmium	A	100.0	106.3	ug/L	6	20	
Calcium	A	300000	322800	ug/L	8		
Magnesium	A	100000	100700	ug/L	1		
Molybdenum	A	2000	1965	ug/L	-2		
Potassium	A	100000	106700	ug/L	7		
Silver	A	50.00	50.97	ug/L	2	20	
Arsenic	E	100.0	107.0	ug/L	7	20	
Chromium	E	200.0	209.1	ug/L	5	20	
Cobalt	E	200.0	197.0	ug/L	-2	20	
Copper	E	200.0	185.5	ug/L	-7	20	
Manganese	E	200.0	200.9	ug/L	0	20	
Nickel	E	200.0	189.7	ug/L	-5	20	
Sodium	E	250000	253000	ug/L	1		
Vanadium	E	200.0	214.4	ug/L	7	20	
Zinc	E	100.0	97.56	ug/L	-2	20	
Iron	H	250000	244100	ug/L	-2		
Selenium	H	100.0	107.7	ug/L	8	20	

ISTD (ICALBLK f20u0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	809463	829995	2.54
Scandium	A	3243592	3309839	2.04
Scandium	E	52314	50870	-2.76
Germanium	H	196987	182065	-7.57
Germanium	E	33875	31990	-5.56
Indium	A	4193528	4000639	-4.60
Yttrium	A	4393409	4551354	3.60

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67247468

Date : 06/20/07
Sequence : MET06 f20u0

Reference : f20u0004
Analyzed : 06/20/07 20:48

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	1883591	3243592	52314	809463	196987	33875	4193528	2978911	4393409	5092110
		LOWER LIMIT	565077	973078	15694	242839	59096	10162	1258058	893673	1318023	1527633
		UPPER LIMIT	2260309	3892310	62776	971355	236384	40649	5032234	3574693	5272091	6110532
014	ICB		1969753	3479929	53835	780741	195931	35081	4498668	3091855	4637875	5329013
017	ICSA		1719031	3392488	52864	849622	180993	32443	3689513	2278146	4228658	4657720
018	ICSAB		1638722	3403657	49690	829719	174787	30396	3716918	2267471	4281773	4729903
023	MSS	195303-001	1968600	3502878	51640	832995	201547	34427	4538186	3074622	4680941	5435302
024	SER	QC392330	1946653	3481576	52753	819261	203195	35164	4507172	3089655	4667186	5414728
025	MS	QC392328	1969217	3516791	54530	836087	205552	35690	4581831	3064625	4738014	5467037
026	MSD	QC392329	1943271	3509623	55269	859129	210883	36059	4535324	3001506	4744411	5404343
027	PDS	QC392331	1835344	3403926	52181	838642	200462	33964	4295614	2877859	4583215	5270748
028	SAMPLE	195303-003	1873397	3431052	52438	821163	200833	34780	4569352	3092932	4714620	5512914
029	SAMPLE	195303-010	1830239	3369304	50738	805254	196033	33621	4435185	3019554	4608299	5454160
030	SAMPLE	195303-011	1875554	3427222	52602	826179	204200	34844	4550149	3075582	4637559	5404824
034	CCV		1902630	3459753	51927	834264	201172	33529	4401636	2935712	4653568	5400892
036	CCB		1885395	3373083	53046	832742	202778	35261	4430468	3045632	4610709	5280808
039	SAMPLE	195303-012	1953614	3569365	52462	833200	203173	34680	4678875	3207838	4862263	5688673
040	SAMPLE	195303-013	1886407	3382133	53176	824616	202654	35107	4429791	3057896	4621389	5425972
041	SAMPLE	195303-011	1879001	3598493	55600	882273	208221	35521	4345275	2910755	4861645	5287711
042	SAMPLE	195303-020	1865242	3404098	53224	837814	203212	34910	4431626	3017640	4626184	5364536
043	SAMPLE	195303-021	1887430	3438360	53908	838960	208475	35516	4492398	3078511	4681517	5406282
045	SAMPLE	195303-002	1849825	3399190	52411	825853	200661	34350	4344359	2958162	4593564	5293129
046	SAMPLE	195303-004	1837639	3352145	51218	814355	197675	33880	4364207	2952394	4563008	5361866
047	SAMPLE	195303-005	1866977	3424715	53541	837644	203517	35272	4413070	2990450	4632988	5345025
048	SAMPLE	195303-006	1871783	3444930	52527	839142	202675	34724	4346855	2955254	4626458	5311059
049	SAMPLE	195303-008	1896441	3402303	52689	842560	204548	34700	4385962	2956348	4633396	5354641
053	CCV		1977846	3673008	53535	855118	205320	34781	4526295	3011178	4894961	5541454
055	CCB		1907713	3465235	55183	914690	219577	36118	4526614	3045505	4742142	5374836
058	SAMPLE	195303-009	1857120	3443790	55248	852663	212001	36290	4490193	2994066	4713720	5304521
059	MSS	195303-018	1850264	3460952	54622	849230	210012	36059	4425011	2949517	4686559	5316668
060	PDS	QC392338	1870307	3495903	53106	849553	204873	34462	4341409	2878662	4666645	5361082
061	SAMPLE	195303-027	1870692	3501282	54446	851293	208296	35761	4409901	2879860	4687735	5236291
065	CCV		1903432	3488668	54235	856828	207665	34769	4324587	2869546	4679239	5273749
067	CCB		1943441	3494142	56483	859660	210949	36511	4495682	3032748	4722072	5406220
070	ICSA		1549594	3226797	50446	832718	180299	31738	3711817	2308356	4263416	4724186
071	ICSAB		1435282	3177178	47321	794029	170509	29569	3697920	2320480	4245543	4780593
076	BLANK	QC392803	1555771	3041549	42822	701526	181621	30561	4219396	3140095	4321658	5533439
077	BS	QC392804	1758098	3382779	48858	799429	188720	31632	4439506	3078504	4698577	5662559
078.	BSD	QC392805	1733851	3363539	48240	792419	185254	31715	4364200	3025699	4632326	5556002
080	MSS	195443-001	1797948	3371664	50378	804117	195814	33941	4550791	3163533	4696016	5576939
081	SER	QC392808	1838426	3440592	51088	812334	200248	34108	4599978	3194239	4770984	5620061
082	MS	QC392806	1831247	3494971	52130	822129	200105	34588	4581168	3076268	4784086	5560491
083	MSD	QC392807	1805134	3445800	50603	883637	210368	34038	4503166	3031819	4698907	5498216
084	PDS	QC392809	1781905	3409053	50660	824385	196054	33279	4380766	2952519	4655414	5438772
088	CCV		1853678	3483412	52273	841023	203151	34407	4406932	2939939	4739417	5397996
090	CCB		1866775	3442730	53736	867892	210484	35217	4551957	3060956	4711541	5364116
093	SAMPLE	195443-002	1825371	3464858	54105	846542	208685	35674	4541430	2985609	4717559	5381784
094	SAMPLE	195443-003	1844101	3485015	53999	955618	228623	36086	4525454	3022004	4738225	5406064
095	SAMPLE	195443-004	1829099	3481553	54808	867740	214308	36331	4514599	2959791	4751611	5362536
096	SAMPLE	195443-005	1806765	3430182	55103	849670	212042	36218	4467152	3015442	4653753	5356314
097	SAMPLE	195443-006	1807204	3422632	53052	916018	222538	35554	4497240	3025554	4701239	5365697

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67247468

Date : 06/20/07
Sequence : MET06 f20u0

Reference : f20u0004
Analyzed : 06/20/07 20:48

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
098	SAMPLE	195443-007	1841061	3455977	54831	850221	210894	36528	4509591	2982057	4701813	5372616
101	SAMPLE	195443-008	1845323	3510380	54261	852762	210649	35708	4544293	3010412	4809865	5407630
102	SAMPLE	195443-010	1890934	3549058	55314	857806	213154	36205	4617579	3099004	4870809	5464472
103	SAMPLE	195443-011	1878158	3556497	55421	881676	217857	36217	4455389	2895067	4779296	5298781
104	SAMPLE	195443-012	1845448	3461548	52549	886408	219053	34931	4483442	3009449	4716275	5395830
108	CCV		1865671	3427235	53368	924102	217524	34586	4302574	2872376	4597151	5201501
110	CCB		1884496	3410937	51806	855091	206896	34040	4413743	3008025	4619626	5295572
113	SAMPLE	195443-013	1799467	3362622	52383	769083	197126	34624	4408735	2989878	4599130	5337767
114	SAMPLE	195443-014	1817198	3342661	51811	860231	212682	34677	4379612	2975680	4559545	5325387
115	SAMPLE	195443-015	1787458	3411444	53031	836025	206939	35345	4429048	2971833	4675380	5317736
172	CCV		2010074	3709885	56136	902535	217846	36955	4737182	3155734	5053208	5851807
174	CCB		2143241	3760276	58463	891653	221385	38664	4913506	3268961	5083621	5888033
177	BLANK	QC392803	2052858	3621895	56812	858298	214547	37342	4832249	3262406	4935015	5784170
178	BLANK	QC392325	1989954	3520855	53367	818863	212793	37086	4646702	3180740	4874967	5815298
179	BLANK	QC392983	1975309	3535762	53764	839624	223139	38339	4679260	3190982	4876283	5807421
180	BS	QC392984	2072681	3760031	56531	866151	208305	36571	4817878	3175336	5087907	5980645
181	BSD	QC392985	2043998	3740397	56903	882763	213223	36691	4737763	3133050	5033283	5869188
183	SAMPLE	195303-009	2050703	3773580	59529	885754	222584	39800	4762244	3097239	5097138	5782019
184	SAMPLE	195303-010	2095458	3744177	58517	887673	222407	38979	4866537	3248828	5085294	5809461
187	CCV		2061398	3720092	57908	894703	219436	37802	4688416	3102076	5033537	5783760
190	CCB		2087818	3691119	58985	935547	230342	39177	4865184	3279822	5064031	5772016
192	ICSA		1552071	3386531	53975	839619	186199	33731	3994231	2407221	4520662	4985888
193	ICSAB		1400418	3309839	50870	829995	182065	31990	4000639	2443636	4551354	5090152

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	f20u0001	TUN				20-JUN-2007 20:28	1.0	1.0				1	
002	f20u0002	X	RINSE			20-JUN-2007 20:36	1.0					2	
003	f20u0003	X	RINSE			20-JUN-2007 20:42	1.0					2	
004	f20u0004	ICALBLK	CALBLANK			20-JUN-2007 20:48	1.0	1.0				2	
005	f20u0005	ICAL				20-JUN-2007 20:54	1.0	1.0				3	
006	f20u0006	ICAL				20-JUN-2007 21:00	1.0	1.0				4	
007	f20u0007	ICAL				20-JUN-2007 21:06	1.0	1.0				5	
008	f20u0008	ICAL				20-JUN-2007 21:11	1.0	1.0				6	
009	f20u0009	ICAL				20-JUN-2007 21:17	1.0	1.0				7	
010	f20u0010	ICAL				20-JUN-2007 21:24	1.0	1.0				8	
011	f20u0011	X	RINSE			20-JUN-2007 21:33	1.0					2	
012	f20u0012	ICV				20-JUN-2007 21:39	1.0	1.0			1	9	
013	f20u0013	X	RINSE			20-JUN-2007 21:47	1.0					2	
014	f20u0014	ICB				20-JUN-2007 21:53	1.0	1.0			1	2	
015	f20u0015	X				20-JUN-2007 21:59	1.0	1.0			1	2	
016	f20u0016	X				20-JUN-2007 22:05	1.0	1.0			1	2	
017	f20u0017	ICSA				20-JUN-2007 22:11	1.0	1.0			1	10 2	7:CA=292600
018	f20u0018	ICSAB				20-JUN-2007 22:17	1.0	1.0			1	11 2	13:CA=322200
019	f20u0019	X	RINSE			20-JUN-2007 22:23	1.0					2	
020	f20u0020	X	RINSE			20-JUN-2007 22:29	1.0					2	
021	f20u0021	X	RINSE			20-JUN-2007 22:35	1.0					2	
022	f20u0022	X	RINSE			20-JUN-2007 22:41	1.0					2	
023	f20u0023	MSS	195303-001	126310	Filtra	20-JUN-2007 22:47	50.0	1.0	2		1	2	
024	f20u0024	SER	QC392330	126310	Filtra	20-JUN-2007 22:53	250.0	1.0		1	1	2	
025	f20u0025	MS	QC392328	126310	Filtra	20-JUN-2007 22:59	50.0	1.0		1	1	2	
026	f20u0026	MSD	QC392329	126310	Filtra	20-JUN-2007 23:05	50.0	1.0		1	1	2	
027	f20u0027	PDS	QC392331	126310	Filtra	20-JUN-2007 23:11	50.0	1.0			1	12	
028	f20u0028	SAMPLE	195303-003	126310	Filtra	20-JUN-2007 23:18	50.0	1.0			1	2	
029	f20u0029	SAMPLE	195303-010	126310	Filtra	20-JUN-2007 23:24	50.0	1.0	1		1	2	1:MN=356.000
030	f20u0030	SAMPLE	195303-011	126310	Filtra	20-JUN-2007 23:30	50.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: _____ Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
031	f20u0031	X	RINSE			20-JUN-2007 23:36	1.0				2	
032	f20u0032	X	RINSE			20-JUN-2007 23:42	1.0				2	
033	f20u0033	X	RINSE			20-JUN-2007 23:48	1.0				2	
034	f20u0034	CCV				20-JUN-2007 23:54	1.0	1.0		1	13	
035	f20u0035	X	RINSE			21-JUN-2007 00:01	1.0				2	
036	f20u0036	CCB				21-JUN-2007 00:07	1.0	1.0		1	2	
037	f20u0037	X				21-JUN-2007 00:13	1.0	1.0		1	2	
038	f20u0038	X				21-JUN-2007 00:19	1.0	1.0		1	2	
039	f20u0039	SAMPLE	195303-012	126310	Filtra	21-JUN-2007 00:25	50.0	1.0		1	2	
040	f20u0040	SAMPLE	195303-013	126310	Filtra	21-JUN-2007 00:30	50.0	1.0		1	2	
041	f20u0041	SAMPLE	195303-011	126311	Water	21-JUN-2007 00:36	50.0	1.0	2	1	2	2:FE=20740.0
042	f20u0042	SAMPLE	195303-020	126311	Filtra	21-JUN-2007 00:42	50.0	1.0		1	2	
043	f20u0043	SAMPLE	195303-021	126311	Filtra	21-JUN-2007 00:48	50.0	1.0		1	2	
044	f20u0044	X				21-JUN-2007 00:54	1.0				2	
045	f20u0045	SAMPLE	195303-002	126310	Filtra	21-JUN-2007 01:00	10.0	1.0		1	2	
046	f20u0046	SAMPLE	195303-004	126310	Filtra	21-JUN-2007 01:06	10.0	1.0		1	2	
047	f20u0047	SAMPLE	195303-005	126310	Filtra	21-JUN-2007 01:12	10.0	1.0		1	2	
048	f20u0048	SAMPLE	195303-006	126310	Filtra	21-JUN-2007 01:18	10.0	1.0		1	2	
049	f20u0049	SAMPLE	195303-008	126310	Filtra	21-JUN-2007 01:24	10.0	1.0		1	2	
050	f20u0050	X	RINSE			21-JUN-2007 01:30	1.0				2	
051	f20u0051	X	RINSE			21-JUN-2007 01:36	1.0				2	
052	f20u0052	X	RINSE			21-JUN-2007 01:42	1.0				2	
053	f20u0053	CCV				21-JUN-2007 01:48	1.0	1.0		1	13	
054	f20u0054	X	RINSE			21-JUN-2007 01:55	1.0				2	
055	f20u0055	CCB				21-JUN-2007 02:01	1.0	1.0		1	2	
056	f20u0056	X				21-JUN-2007 02:07	1.0	1.0		1	2	
057	f20u0057	X				21-JUN-2007 02:13	1.0	1.0		1	2	
058	f20u0058	SAMPLE	195303-009	126310	Filtra	21-JUN-2007 02:19	10.0	1.0		1	2	
059	f20u0059	MSS	195303-018	126311	Filtra	21-JUN-2007 02:25	10.0	1.0		1	2	
060	f20u0060	PDS	QC392338	126311	Filtra	21-JUN-2007 02:31	10.0	1.0		1	12	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: RLH Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
061	f20u0061	SAMPLE	195303-027	126311	Filtra	21-JUN-2007 02:39	10.0	1.0	1		1	2	
062	f20u0062	X	RINSE			21-JUN-2007 02:45	1.0					2	
063	f20u0063	X	RINSE			21-JUN-2007 02:51	1.0					2	
064	f20u0064	X	RINSE			21-JUN-2007 02:57	1.0					2	
065	f20u0065	CCV				21-JUN-2007 03:03	1.0	1.0			1	13	
066	f20u0066	X	RINSE			21-JUN-2007 03:10	1.0					2	
067	f20u0067	CCB				21-JUN-2007 03:16	1.0	1.0			1	2	
068	f20u0068	X				21-JUN-2007 03:22	1.0	1.0			1	2	
069	f20u0069	X				21-JUN-2007 03:28	1.0	1.0			1	2	
070	f20u0070	ICSA				21-JUN-2007 03:34	1.0	1.0			1	10 2	7:CA=301600
071	f20u0071	ICSAB				21-JUN-2007 03:40	1.0	1.0			1	11 2	13:CA=327100
072	f20u0072	X	RINSE			21-JUN-2007 03:46	1.0					2	
073	f20u0073	X	RINSE			21-JUN-2007 03:52	1.0					2	
074	f20u0074	X	RINSE			21-JUN-2007 03:58	1.0					2	
075	f20u0075	X	RINSE			21-JUN-2007 04:04	1.0					2	
076	f20u0076	BLANK	QC392803	126423	Filtra	21-JUN-2007 04:10	1.0	1.0			1	2	
077	f20u0077	BS	QC392804	126423	Filtra	21-JUN-2007 04:16	1.0	1.0			1	2	
078	f20u0078	BSD	QC392805	126423	Filtra	21-JUN-2007 04:23	1.0	1.0			1	2	
079	f20u0079	X				21-JUN-2007 04:32	1.0					2	
080	f20u0080	MSS	195443-001	126423	Filtra	21-JUN-2007 04:38	5.0	1.0			1	2	
081	f20u0081	SER	QC392808	126423	Filtra	21-JUN-2007 04:44	25.0	1.0		2	1	2	
082	f20u0082	MS	QC392806	126423	Filtra	21-JUN-2007 04:50	5.0	1.0		1	1	2	
083	f20u0083	MSD	QC392807	126423	Filtra	21-JUN-2007 04:56	5.0	1.0		1	1	2	
084	f20u0084	PDS	QC392809	126423	Filtra	21-JUN-2007 05:02	5.0	1.0			1	12	
085	f20u0085	X	RINSE			21-JUN-2007 05:09	1.0					2	
086	f20u0086	X	RINSE			21-JUN-2007 05:16	1.0					2	
087	f20u0087	X	RINSE			21-JUN-2007 05:22	1.0					2	
088	f20u0088	CCV				21-JUN-2007 05:27	1.0	1.0			1	13	
089	f20u0089	X	RINSE			21-JUN-2007 05:35	1.0					2	
090	f20u0090	CCB				21-JUN-2007 05:41	1.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: RDH Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
091	f20u0091	X				21-JUN-2007 05:47	1.0	1.0			1	2	
092	f20u0092	X				21-JUN-2007 05:53	1.0	1.0			1	2	
093	f20u0093	SAMPLE	195443-002	126423	Filtra	21-JUN-2007 05:59	5.0	1.0			1	2	
094	f20u0094	SAMPLE	195443-003	126423	Filtra	21-JUN-2007 06:05	5.0	1.0			1	2	
095	f20u0095	SAMPLE	195443-004	126423	Filtra	21-JUN-2007 06:11	5.0	1.0			1	2	
096	f20u0096	SAMPLE	195443-005	126423	Filtra	21-JUN-2007 06:17	5.0	1.0			1	2	
097	f20u0097	SAMPLE	195443-006	126423	Filtra	21-JUN-2007 06:23	5.0	1.0			1	2	
098	f20u0098	SAMPLE	195443-007	126423	Filtra	21-JUN-2007 06:29	5.0	1.0			1	2	
099	f20u0099	XTUN				21-JUN-2007 06:34	1.0	1.0	4			1 t	
100	f20u0100	X	RINSE			21-JUN-2007 06:42	1.0					2	
101	f20u0101	SAMPLE	195443-008	126423	Filtra	21-JUN-2007 06:48	5.0	1.0			1	2	
102	f20u0102	SAMPLE	195443-010	126423	Filtra	21-JUN-2007 06:54	5.0	1.0			1	2	
103	f20u0103	SAMPLE	195443-011	126423	Filtra	21-JUN-2007 07:00	5.0	1.0			1	2	1:NA=40300.0
104	f20u0104	SAMPLE	195443-012	126423	Filtra	21-JUN-2007 07:06	5.0	1.0			1	2	
105	f20u0105	X	RINSE			21-JUN-2007 07:12	1.0					2	
106	f20u0106	X	RINSE			21-JUN-2007 07:18	1.0					2	
107	f20u0107	X	RINSE			21-JUN-2007 07:24	1.0					2	
108	f20u0108	CCV				21-JUN-2007 07:30	1.0	1.0			1	13	
109	f20u0109	X	RINSE			21-JUN-2007 07:37	1.0					2	
110	f20u0110	CCB				21-JUN-2007 07:43	1.0	1.0			1	2	
111	f20u0111	X				21-JUN-2007 07:49	1.0	1.0	23		1	2 t	
112	f20u0112	X				21-JUN-2007 07:55	1.0	1.0	23		1	2 t	
113	f20u0113	SAMPLE	195443-013	126423	Filtra	21-JUN-2007 08:01	5.0	1.0			1	2	
114	f20u0114	SAMPLE	195443-014	126423	Filtra	21-JUN-2007 08:07	5.0	1.0			1	2	
115	f20u0115	SAMPLE	195443-015	126423	Filtra	21-JUN-2007 08:13	5.0	1.0			1	2	1:MN=559.000
116	f20u0116	X	RINSE			21-JUN-2007 08:19	1.0					2	
117	f20u0117	X	RINSE			21-JUN-2007 08:26	1.0					2	
118	f20u0118	X	RINSE			21-JUN-2007 08:32	1.0					2	
119	f20u0119	XCCV				21-JUN-2007 08:37	1.0	1.0	23		1	13 <<t	
120	f20u0120	X	RINSE			21-JUN-2007 08:45	1.0					2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: [signature] Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
121	f20u0121	XCCB				21-JUN-2007 08:51	1.0	1.0	23		1	2 <<t	
122	f20u0122	X				21-JUN-2007 08:57	1.0	1.0	23		1	2 t	
123	f20u0123	X				21-JUN-2007 09:03	1.0	1.0	23		1	2 t	
124	f20u0124	XICSA				21-JUN-2007 09:09	1.0	1.0	23		1	10 2 <<t	7:CA=2988(
125	f20u0125	XICSAB				21-JUN-2007 09:15	1.0	1.0	18		1	11 2 <<t	12:CA=3261(
126	f20u0126	X	RINSE			21-JUN-2007 09:21	1.0					2	
127	f20u0127	X	RINSE			21-JUN-2007 09:27	1.0					2	
128	f20u0128	X	RINSE			21-JUN-2007 09:33	1.0					2	
129	f20u0129	X	RINSE			21-JUN-2007 09:40	1.0					2	
130	f20u0130	XSAMPLE	195390-002	195390	Filtra	21-JUN-2007 09:46	10.0					2	
131	f20u0131	XBLANK	QC392983	126468	Filtra	21-JUN-2007 09:52	1.0	1.0	23		1	2 t	
132	f20u0132	XBS	QC392984	126468	Filtra	21-JUN-2007 09:58	1.0	1.0	23		1	2 t	
133	f20u0133	XBSD	QC392985	126468	Filtra	21-JUN-2007 10:04	1.0	1.0	23		1	2 t	
134	f20u0134	X				21-JUN-2007 10:13	1.0					2	
135	f20u0135	XMSS	195373-006	126468	Filtra	21-JUN-2007 10:19	5.0	1.0	23		1	2 t	4:CA=64880.0
136	f20u0136	XSER	QC392988	126468	Filtra	21-JUN-2007 10:25	25.0	1.0			1	2 t	
137	f20u0137	XMS	QC392986	126468	Filtra	21-JUN-2007 10:30	5.0	1.0			1	2 t	4:CA=63200.0
138	f20u0138	XMSD	QC392987	126468	Filtra	21-JUN-2007 10:36	5.0	1.0			1	2 t	5:CA=67420.0
139	f20u0139	XPDS	QC392989	126468	Filtra	21-JUN-2007 10:43	5.0	1.0			1	12 t	6:CA=75300.0
140	f20u0140	X	RINSE			21-JUN-2007 10:50	1.0					2	
141	f20u0141	X	RINSE			21-JUN-2007 10:56	1.0					2	
142	f20u0142	X	RINSE			21-JUN-2007 11:03	1.0					2	
143	f20u0143	XCCV				21-JUN-2007 11:08	1.0	1.0	23		1	13 t	
144	f20u0144	X	RINSE			21-JUN-2007 11:17	1.0					2	
145	f20u0145	XCCB				21-JUN-2007 11:23	1.0	1.0	23		1	2 t	
146	f20u0146	X				21-JUN-2007 11:29	1.0					2	
147	f20u0147	X				21-JUN-2007 11:35	1.0					2	
148	f20u0148	XSAMPLE	195303-026	126468	Water	21-JUN-2007 11:41	5.0	1.0	8		1	2 t	1:NA=23420.0
149	f20u0149	XSAMPLE	195373-007	126468	Filtra	21-JUN-2007 11:47	5.0	1.0	16		1	2 t	4:CA=67220.0
150	f20u0150	XSAMPLE	195373-011	126468	Filtra	21-JUN-2007 11:53	5.0	1.0	16		1	2 t	4:CA=70320.0

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: RH Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
151	f20u0151	XSAMPLE	195373-012	126468	Filtra	21-JUN-2007 11:59	5.0	1.0	16		1	2 t	3:NA=62100.0
152	f20u0152	XSAMPLE	195391-002	126468	Filtra	21-JUN-2007 12:05	5.0	1.0	13		1	2 t	
153	f20u0153	XSAMPLE	195391-003	126468	Filtra	21-JUN-2007 12:11	5.0	1.0	13		1	2 t	2:NA=49040.0
154	f20u0154	XSAMPLE	195391-004	126468	Filtra	21-JUN-2007 12:17	5.0	1.0	13		1	2 t	3:NA=71580.0
155	f20u0155	XSAMPLE	195391-005	126468	Filtra	21-JUN-2007 12:23	5.0	1.0	13		1	2 t	1:NA=24180.0
156	f20u0156	XSAMPLE	195391-006	126468	Filtra	21-JUN-2007 12:29	5.0	1.0	13		1	2 t	1:NA=24120.0
157	f20u0157	XSAMPLE	195391-007	126468	Filtra	21-JUN-2007 12:35	5.0	1.0	13		1	2 <<t	5:CA=95900.0
158	f20u0158	X	RINSE			21-JUN-2007 12:41	1.0					2	
159	f20u0159	X	RINSE			21-JUN-2007 12:47	1.0					2	
160	f20u0160	X	RINSE			21-JUN-2007 12:53	1.0					2	
161	f20u0161	XCCV				21-JUN-2007 12:59	1.0	1.0	23		1	13 2 <<t	
162	f20u0162	X	RINSE			21-JUN-2007 13:07	1.0					2	
163	f20u0163	XCCB				21-JUN-2007 13:13	1.0	1.0	23		1	2 <<t	
164	f20u0164	X				21-JUN-2007 13:19	1.0	1.0	23		1	2 <<t	
165	f20u0165	X				21-JUN-2007 13:25	1.0	1.0	23		1	2 <<t	
166	f20u0166	XBLANK	QC392325	126310	Filtra	21-JUN-2007 13:31	1.0	1.0	23		1	2 <<t	
167	f20u0167	XSAMPLE	195303-011	126311	Water	21-JUN-2007 13:38	100.0	1.0	4		1	2 <<t	
168	f20u0168	XSAMPLE	195303-010	126310	Filtra	21-JUN-2007 13:44	50.0	1.0	4		1	2 <<t	
169	f20u0169	TUN				21-JUN-2007 13:51	1.0	1.0				1	
170	f20u0170	X	RINSE			21-JUN-2007 13:59	1.0					2	
171	f20u0171	X	RINSE			21-JUN-2007 14:06	1.0					2	
172	f20u0172	CCV				21-JUN-2007 14:12	1.0	1.0			1	13 2	
173	f20u0173	X	RINSE			21-JUN-2007 14:18	1.0					2	
174	f20u0174	CCB				21-JUN-2007 14:24	1.0	1.0			1	2	
175	f20u0175	X				21-JUN-2007 14:30	1.0					2	
176	f20u0176	X				21-JUN-2007 14:36	1.0					2	
177	f20u0177	BLANK	QC392803	126423	Filtra	21-JUN-2007 14:43	1.0	1.0			1	2	
178	f20u0178	BLANK	QC392325	126310	Filtra	21-JUN-2007 14:49	1.0	1.0			1	2	
179	f20u0179	BLANK	QC392983	126468	Filtra	21-JUN-2007 14:55	1.0	1.0			1	2	
180	f20u0180	BS	QC392984	126468	Filtra	21-JUN-2007 15:01	1.0	1.0			1	2	

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: RAA Date: 6/21/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67247468 Instrument: MET06 Agilent ICP-MS MET06 Begun: 20-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
181	f20u0181	BSD	QC392985	126468	Filtra	21-JUN-2007 15:07	1.0	1.0		1	2	
182	f20u0182	X				21-JUN-2007 15:13	1.0				2	
183	f20u0183	SAMPLE	195303-009	126310	Filtra	21-JUN-2007 15:24	10.0	1.0		1	2	1:NA=23550.0
184	f20u0184	SAMPLE	195303-010	126310	Filtra	21-JUN-2007 15:30	50.0	1.0		1	2	
185	f20u0185	X	RINSE			21-JUN-2007 15:36	1.0				2	
186	f20u0186	X	RINSE			21-JUN-2007 15:42	1.0				2	
187	f20u0187	CCV				21-JUN-2007 15:48	1.0	1.0		1	13 2	
188	f20u0188	X	RINSE			21-JUN-2007 15:54	1.0				2	
189	f20u0189	X				21-JUN-2007 16:00	1.0				2	
190	f20u0190	CCB				21-JUN-2007 16:06	1.0	1.0		1	2	
191	f20u0191	X				21-JUN-2007 16:12	1.0				2	
192	f20u0192	ICSA				21-JUN-2007 16:18	1.0	1.0		1	10 2	7:CA=299100
193	f20u0193	ICSAB				21-JUN-2007 16:24	1.0	1.0		1	11 2	10:CA=322800

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6420
Flags used: <<t=out of clock t=tune failure

Analyst: RW Date: 6/21/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 67248763001
Units : ug/L

Date : 21-JUN-2007 18:23
X Axis : R

Reviewer : ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	f21s0005	67248763005		21-JUN-2007 18:29	S6414
L2	f21s0006	67248763006		21-JUN-2007 18:35	S6416
L3	f21s0007	67248763007		21-JUN-2007 18:41	S6417
L4	f21s0008	67248763008		21-JUN-2007 18:47	S6418
L5	f21s0009	67248763009		21-JUN-2007 18:52	S6412
L6	f21s0010	67248763010		21-JUN-2007 18:59	S6413

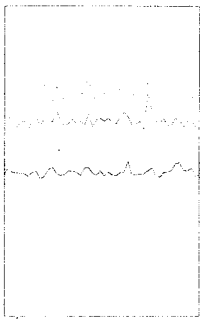
Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Aluminum	A	0.3425	0.3150	0.2950	0.2777	0.2797	0.2814	BLNK	-0.7792	3.55784		0.2986	1.000	0.995	
Antimony	A	0.1421	0.1478	0.1357	0.1302	0.1366	0.1406	BLNK	-0.0056	7.15442		0.1388	1.000	0.995	
Barium	A	0.0618	0.0558	0.0402	0.0382	0.0376	0.0392	BLNK	-0.0496	25.7530		0.0455	1.000	0.995	
Beryllium	A	0.1631	0.1593	0.1532	0.1548	0.1574	0.1617	BLNK	-0.0055	6.21829		0.1583	1.000	0.995	
Cadmium	A	0.0440	0.0417	0.0408	0.0388	0.0393	0.0396	BLNK	-0.0103	25.2968		0.0407	1.000	0.995	
Calcium	A	0.1115	0.0333	0.0201	0.0110	0.0097	0.0097	BLNK	-106.35	103.353		0.0326	1.000	0.995	
Lead	A	0.3711	0.3244	0.3146	0.2972	0.2994	0.2984	BLNK	-0.0194	3.34936		0.3175	1.000	0.995	
Magnesium	A	0.2848	0.2675	0.2483	0.2306	0.2311	0.2306	BLNK	-0.8832	4.33460		0.2488	1.000	0.995	
Molybdenum	A	0.1523	0.1233	0.1082	0.1002	0.1033	0.1068	BLNK	-0.0411	9.42568		0.1157	1.000	0.995	
Potassium	A	2.8560	0.8423	0.5687	0.3276	0.3079	0.3058	BLNK	-84.685	3.28234		0.8681	1.000	0.995	
Silver	A	0.1952	0.1815	0.1825	0.1742	0.1786	0.1756	BLNK	-0.0077	5.67476		0.1813	1.000	0.995	
Thallium	A	0.5015	0.4266	0.3861	0.3748	0.4097	0.4155	BLNK	-0.0164	2.41448		0.4190	1.000	0.995	
Arsenic	E	0.3463	0.2984	0.2867	0.2623	0.2669	0.2702	BLNK	-0.0524	3.71106		0.2885	1.000	0.995	
Chromium	E	2.9205	1.7778	1.6670	1.5176	1.5040	1.5198	BLNK	-0.0842	0.65967		1.8178	1.000	0.995	
Cobalt	E	2.7160	2.5549	2.5069	2.4482	2.4263	2.4732	BLNK	-0.0031	0.40589		2.5209	1.000	0.995	
Copper	E	25.751	9.6170	6.1763	3.5348	3.2217	3.2826	BLNK	-0.6301	0.30691		8.5972	1.000	0.995	
Manganese	E	1.0231	0.8750	0.8633	0.7918	0.7872	0.7941	BLNK	-0.0203	1.26165		0.8557	1.000	0.995	
Nickel	E	2.3476	1.1760	0.8751	0.7040	0.6696	0.6674	BLNK	-0.2433	1.49946		1.0733	1.000	0.995	
Sodium	E	1.5981	0.5939	0.4293	0.2812	0.2641	0.2684	BLNK	-47.848	3.74823		0.5725	1.000	0.995	
Vanadium	E	2.9093	1.4990	1.3416	1.1453	1.1505	1.1665	BLNK	-0.1509	0.86043		1.5354	1.000	0.995	
Zinc	E	5.6215	2.1637	1.2496	0.5303	0.4691	0.4668	BLNK	-1.0362	2.15327		1.7502	1.000	0.995	
Iron	H	0.5109	0.4537	0.4276	0.4013	0.3973	0.3923	BLNK	-0.5997	2.54266		0.4305	1.000	0.995	
Selenium	H	0.0725	0.0617	0.0605	0.0593	0.0589	0.0584	BLNK	-0.0082	17.0942		0.0619	1.000	0.995	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Aluminum	A	10.00	14	50.00	10	100.0	4	1000	-1	10000	-1	20000	0
Antimony	A	0.100	-4	0.500	5	1.000	-3	10.00	-7	100.0	-2	200.0	1
Barium	A	0.100	10	0.500	34	1.000	-1	10.00	-2	100.0	-3	200.0	1
Beryllium	A	0.100	-4	0.500	-2	1.000	-5	10.00	-4	100.0	-2	200.0	1
Cadmium	A	0.100	1	0.500	4	1.000	2	10.00	-2	100.0	-1	200.0	0
Calcium	A	10.00	-12	50.00	32	100.0	2	1000	3	10000	-1	20000	0
Lead	A	0.100	5	0.500	5	1.000	3	10.00	-1	100.0	0	200.0	0
Magnesium	A	10.00	15	50.00	14	100.0	7	1000	0	10000	0	20000	0
Molybdenum	A	0.100	2	0.500	8	1.000	-2	10.00	-6	100.0	-3	200.0	1
Potassium	A	10.00	-9	50.00	7	100.0	2	1000	-1	10000	0	20000	0
Silver	A	0.100	3	0.500	1	1.000	3	10.00	-1	100.0	1	200.0	0
Thallium	A	0.050	-12	0.250	-4	0.500	-10	5.000	-10	50.00	-1	100.0	0
Arsenic	E	0.100	-24	0.500	0	1.000	1	10.00	-3	100.0	-1	200.0	0
Chromium	E	0.100	9	0.500	0	1.000	2	10.00	-1	100.0	-1	200.0	0
Cobalt	E	0.100	7	0.500	3	1.000	1	10.00	-1	100.0	-2	200.0	0
Copper	E	0.100	60	0.500	69	1.000	27	10.00	2	100.0	-2	200.0	0
Manganese	E	0.100	9	0.500	6	1.000	7	10.00	0	100.0	-1	200.0	0
Nickel	E	0.100	9	0.500	28	1.000	7	10.00	3	100.0	0	200.0	0
Sodium	E	10.00	21	50.00	27	100.0	13	1000	1	10000	-1	20000	0
Vanadium	E	0.100	-1	0.500	-1	1.000	0	10.00	-3	100.0	-1	200.0	0
Zinc	E	0.100	74	0.500	159	1.000	65	10.00	4	100.0	0	200.0	0
Iron	H	10.00	24	50.00	14	100.0	8	1000	2	10000	1	20000	0
Selenium	H	0.100	16	0.500	4	1.000	3	10.00	1	100.0	1	200.0	0

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

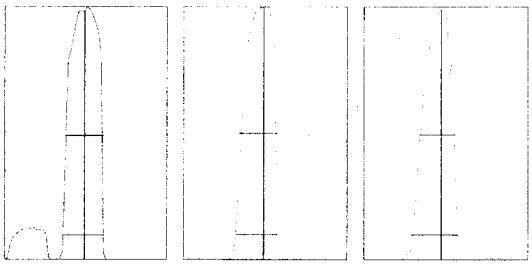
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	50,000	22816.0	23236.6	2.58	0.60
89	100,000	60078.0	62977.2	3.08	1.30
205	50,000	35594.0	36065.6	2.36	2.50

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 0.925%
Doubly Charged: 70/140 2.919%



m/z:	7	89	205
Height:	23,114	61,901	35,605
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.70	0.65
W-10%:	0.7500	0.7500	0.8500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power	1600	W
RF Matching	1.74	V
Smpl Depth	8	mm
Torch-H	1	mm
Torch-V	0.1	mm
Carrier Gas	1.05	L/min
Makeup Gas	0	L/min
Optional Gas	---	%
Nebulizer Pump	0.1	rps
Sample Pump	---	rps
S/C Temp	2	degC

===Ion Lenses===

Extract 1	0	V
Extract 2	-130	V
Omega Bias-ce	-26	V
Omega Lens-ce	1	V
Cell Entrance	-30	V
QP Focus	3	V
Cell Exit	-30	V

===Octopole Parameters===

OctP RF	200	V
OctP Bias	-6	V

===Q-Pole Parameters===

AMU Gain	136	
AMU Offset	123	
Axis Gain	1.0008	
Axis Offset	-0.01	
QP Bias	-2	V

===Detector Parameters===

Discriminator	8	mV
Analog HV	1850	V
Pulse HV	1510	V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

Tune File : he.u

		m/z	Count(Mean)	RSD%
He Gas:	4.5 mL/min	51	41.9	14.65
Optional Gas:	--- %	59	8237.1	2.46
QP Focus:	-10 V	89	6396.2	2.03
Cell Exit:	-58 V			
OctP Bias:	-18 V			
QP Bias:	-14 V			

Integration Time: 0.1000sec

Tune File : h2.u

		m/z	Count(Mean)	RSD%
H2 Gas:	4.5 mL/min	59	7195.7	2.58
Optional Gas:	--- %	78	0.4	158.52
QP Focus:	-8 V	89	44922.3	2.06
Cell Exit:	-58 V			
OctP Bias:	-18 V			
QP Bias:	-16 V			

Integration Time: 0.1000sec

Generated : Jun 21, 2007 17:38:40
Printed : Jun 21, 2007 17:40:20

00502

P/A Factor Tuning Report

Acquired:Jun 21 2007 05:48 pm

Mass[amu]	Element	P/A Factor
6	Li	0.064784
7	(Li)	Sensitivity too low
9	Be	0.073621
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.091424
45	Sc	0.090869
51	V	0.092426
52	Cr	0.095683
55	Mn	0.097690
56	Fe	Sensitivity too high
59	Co	0.101544
60	Ni	0.104794
63	Cu	0.105969
65	Cu	0.107117
66	Zn	Sensitivity too low
72	Ge	0.104239
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	Sensitivity too high
98	Mo	0.101939
99	(Ru)	Sensitivity too low
107	Ag	0.111381
111	Cd	Sensitivity too low
115	In	Sensitivity too high
118	(In)	Sensitivity too high
121	Sb	0.108876
137	Ba	0.110247
159	Tb	Sensitivity too high
205	Tl	0.117775
206	(Pb)	0.117522
207	(Pb)	0.119394
208	Pb	0.119352
209	Bi	0.119822

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1850 V
Pulse HV: 1510 V

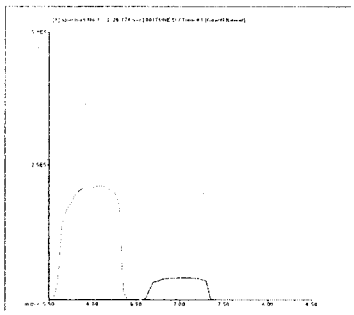
00553

6020 QC Tune Report

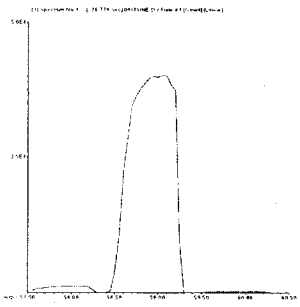
Data File: C:\ICPCHEM\1\DATA\07F21s00.B\001TUNE.D
Date Acquired: Jun 21 2007 06:03 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s6411
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

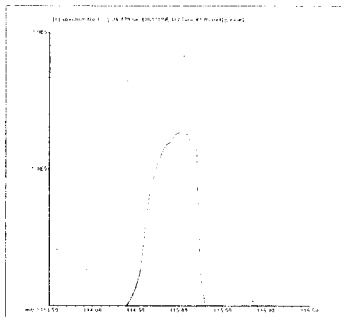
Element	Actual	Required	Flag
7 Li	1.20	5.00	
59 Co	0.26	5.00	
115 In	0.94	5.00	
205 Tl	2.71	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.90
Flag:



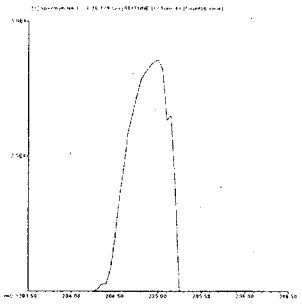
115 In

Mass Calib.

Actual:	115.00	
Required:	114.90 -	115.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



205 Tl

Mass Calib.

Actual:	204.95	
Required:	204.90 -	205.10
Flag:		

Peak Width

Actual:	0.65
Required:	0.90
Flag:	

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004C
Date Acquired: Jun 21 2007 06:21 pm
Operator:
Sample Name: calblank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:25 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	2088532.00	A	77090.00	3.69
7	(Li)		P		
9	Be	36.67	P	14.53	39.63
23	Na	37615.87	P	300.60	0.80
24	Mg	15934.90	P	117.50	0.74
27	Al	17135.29	P	440.00	2.57
39	K	2016848.00	A	10550.00	0.52
44	Ca	80482.29	P	961.50	1.19
45	Sc	1465758.00	A	232300.00	15.85
45	Sc	147334.80	P	334.30	0.23
45	Sc	3928048.00	A	324600.00	8.26
51	V	516.68	P	7.78	1.51
52	Cr	375.94	P	31.51	8.38
55	Mn	47.41	P	3.21	6.77
56	Fe	6838.78	P	443.40	6.48
59	Co	22.22	P	2.94	13.23
60	Ni	478.16	P	32.25	6.74
63	Cu	3487.51	P	120.50	3.46
65	Cu	1754.58	P	30.87	1.76
66	Zn	817.44	P	25.05	3.06
72	Ge	383720.81	P	36010.00	9.38
72	Ge	84934.73	P	281.50	0.33
75	As	24.00	P	3.33	13.89
78	Se	3.78	P	1.68	44.42
89	Y	5746939.00	A	441600.00	7.68
98	Mo	502.25	P	52.32	10.42
107	Ag	154.45	P	12.62	8.17
111	Cd	46.67	P	11.55	24.75
115	In	5706536.00	A	432200.00	7.57
118	(In)		P		
118	(In)		P		
118	(In)		P		
121	Sb	90.00	P	23.09	25.65
137	Ba	301.13	P	45.51	15.11
159	Tb	7824256.00	A	619000.00	7.91
205	Tl	582.26	P	18.36	3.15
208	Pb	904.49	P	86.76	9.59
209	Bi	4310285.00	A	255900.00	5.94

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\005CALS.D\005CALS.D#
Date Acquired: Jun 21 2007 06:27 pm
Operator:
Sample Name: s6414
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:25 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2081678.00	A	20520.00	0.99
7 (Li)		P		
9 Be	678.93	P	53.17	7.83
23 Na	46615.69	P	603.30	1.29
24 Mg	224196.20	P	1130.00	0.50
27 Al	269597.50	P	1545.00	0.57
39 K	2248331.00	A	22280.00	0.99
44 Ca	87739.18	P	549.90	0.63
45 Sc	1484274.00	A	193400.00	13.03
45 Sc	145852.80	P	393.80	0.27
45 Sc	3936251.00	A	43780.00	1.11
51 V	848.55	P	60.27	7.10
52 Cr	851.89	P	18.51	2.17
55 Mn	298.53	P	42.53	14.25
56 Fe	149694.91	P	1299.00	0.87
59 Co	792.25	P	18.36	2.32
60 Ni	684.84	P	15.57	2.27
63 Cu	4344.80	P	30.03	0.69
65 Cu	2094.63	P	23.34	1.11
66 Zn	948.56	P	35.77	3.77
72 Ge	390749.19	P	28450.00	7.28
72 Ge	84362.66	P	268.20	0.32
75 As	58.45	P	10.63	18.19
78 Se	56.45	P	0.77	1.36
89 Y	5735455.00	A	48670.00	0.85
98 Mo	1746.85	P	75.36	4.31
99 (Ru)	2.22	P	3.85	173.20
107 Ag	2232.49	P	19.54	0.88
111 Cd	503.36	P	48.08	9.55
115 In	5718936.00	A	28340.00	0.50
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	1625.72	P	80.73	4.97
137 Ba	964.52	P	83.83	8.69
159 Tb	7801969.00	A	70350.00	0.90
205 Tl	2200.28	P	156.50	7.11
208 Pb	5790.74	P	179.00	3.09
209 Bi	4388007.00	A	18330.00	0.42

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2081678.10	0.99	2088531.60	99.7	80 - 120	
45 Sc	1484274.50	13.03	1465758.40	101.3	80 - 120	
45 Sc	145852.84	0.27	147334.75	99.0	80 - 120	
45 Sc	3936250.80	1.11	3928048.30	100.2	80 - 120	
72 Ge	390749.19	7.28	383720.78	101.8	80 - 120	
72 Ge	84362.66	0.32	84934.73	99.3	80 - 120	
89 Y	5735455.50	0.85	5746938.50	99.8	80 - 120	
115 In	5718935.50	0.50	5706536.00	100.2	80 - 120	
159 Tb	7801969.00	0.90	7824255.50	99.7	80 - 120	
209 Bi	4388007.50	0.42	4310285.50	101.8	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\006CALS.D\006CALS.D#
Date Acquired: Jun 21 2007 06:33 pm
Operator:
Sample Name: s6416
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\icj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:31 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2130611.00	A	9314.00	0.44
7 (Li)		P		
9 Be	3394.96	P	21.70	0.64
23 Na	88884.25	P	886.80	1.00
24 Mg	1073983.00	A	10880.00	1.01
27 Al	1264630.00	A	19000.00	1.50
39 K	3381927.00	A	16210.00	0.48
44 Ca	133853.00	P	1191.00	0.89
45 Sc	1590185.00	A	200100.00	12.58
45 Sc	149669.00	P	370.40	0.25
45 Sc	4015045.00	A	28420.00	0.71
51 V	2243.54	P	51.04	2.28
52 Cr	2661.02	P	105.90	3.98
55 Mn	1309.71	P	58.39	4.46
56 Fe	713673.00	P	5459.00	0.76
59 Co	3823.90	P	50.83	1.33
60 Ni	1760.13	P	47.78	2.71
63 Cu	8278.81	P	40.36	0.49
65 Cu	4001.36	P	50.21	1.25
66 Zn	1862.74	P	33.53	1.80
72 Ge	406423.19	P	32550.00	8.01
72 Ge	86088.84	P	706.80	0.82
75 As	256.89	P	6.01	2.34
78 Se	249.34	P	19.01	7.62
89 Y	5892094.00	A	31440.00	0.53
98 Mo	7263.32	P	145.90	2.01
99 (Ru)	4.44	P	1.93	43.31
107 Ag	10535.55	P	93.50	0.89
111 Cd	2423.64	P	80.91	3.34
115 In	5805552.00	A	23520.00	0.41
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	8580.79	P	31.70	0.37
137 Ba	4433.12	P	129.50	2.92
159 Tb	7946909.00	A	108000.00	1.36
205 Tl	9410.47	P	57.90	0.62
208 Pb	25782.26	P	317.90	1.23
209 Bi	4412459.00	A	18760.00	0.43

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2130611.50	0.44	2088531.60	102.0	80 - 120	
45 Sc	1590185.40	12.58	1465758.40	108.5	80 - 120	
45 Sc	149669.06	0.25	147334.75	101.6	80 - 120	
45 Sc	4015044.50	0.71	3928048.30	102.2	80 - 120	
72 Ge	406423.25	8.01	383720.78	105.9	80 - 120	
72 Ge	86088.84	0.82	84934.73	101.4	80 - 120	
89 Y	5892093.50	0.53	5746938.50	102.5	80 - 120	
115 In	5805552.50	0.41	5706536.00	101.7	80 - 120	
159 Tb	7946909.00	1.36	7824255.50	101.6	80 - 120	
209 Bi	4412458.50	0.43	4310285.50	102.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\007CALS.D\007CALS.D#
Date Acquired: Jun 21 2007 06:39 pm
Operator:
Sample Name: s6417
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:37 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2133730.00	A	17720.00	0.83
7 (Li)		P		
9 Be	6538.37	P	196.60	3.01
23 Na	129154.50	P	323.20	0.25
24 Mg	1972752.00	A	14300.00	0.72
27 Al	2343865.00	A	17550.00	0.75
39 K	4517993.00	A	31460.00	0.70
44 Ca	160055.41	P	665.90	0.42
45 Sc	1627834.00	A	12140.00	0.75
45 Sc	150411.09	P	824.70	0.55
45 Sc	3972173.00	A	37470.00	0.94
51 V	4035.81	P	46.11	1.14
52 Cr	5014.29	P	91.16	1.82
55 Mn	2596.94	P	15.40	0.59
56 Fe	1391943.00	A	14680.00	1.05
59 Co	7541.36	P	161.40	2.14
60 Ni	2632.13	P	68.24	2.59
63 Cu	10714.19	P	50.19	0.47
65 Cu	5310.33	P	54.70	1.03
66 Zn	2167.60	P	55.90	2.58
72 Ge	411612.41	P	1277.00	0.31
72 Ge	86740.93	P	960.20	1.11
75 As	497.35	P	12.77	2.57
78 Se	498.01	P	22.70	4.56
89 Y	5853509.00	A	38280.00	0.65
98 Mo	12668.52	P	342.00	2.70
99 (Ru)	4.44	P	1.93	43.31
107 Ag	20972.34	P	19.00	0.09
111 Cd	4685.44	P	72.00	1.54
115 In	5746364.00	A	10100.00	0.18
118 (In)		P		
118 (In)		P		
118 (In)		P		
121 Sb	15597.31	P	338.10	2.17
137 Ba	6317.29	P	201.80	3.19
159 Tb	7851012.00	A	25840.00	0.33
205 Tl	16958.48	P	202.20	1.19
208 Pb	49401.34	P	646.90	1.31
209 Bi	4392580.00	A	61990.00	1.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2133730.50	0.83	2088531.60	102.2	80 - 120	
45 Sc	1627834.40	0.75	1465758.40	111.1	80 - 120	
45 Sc	150411.11	0.55	147334.75	102.1	80 - 120	
45 Sc	3972172.80	0.94	3928048.30	101.1	80 - 120	
72 Ge	411612.38	0.31	383720.78	107.3	80 - 120	
72 Ge	86740.92	1.11	84934.73	102.1	80 - 120	
89 Y	5853509.50	0.65	5746938.50	101.9	80 - 120	
115 In	5746363.50	0.18	5706536.00	100.7	80 - 120	
159 Tb	7851012.50	0.33	7824255.50	100.3	80 - 120	
209 Bi	4392580.50	1.41	4310285.50	101.9	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\008CALS.D\008CALS.D#
Date Acquired: Jun 21 2007 06:45 pm
Operator:
Sample Name: s6418
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:43 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2135728.00	A	10310.00	0.48
7 (Li)		P		
9 Be	66105.85	P	170.30	0.26
23 Na	859078.38	A	11060.00	1.29
24 Mg	18717590.00	A	85070.00	0.45
27 Al	22538820.00	A	11310.00	0.05
39 K	26588030.00	A	26420.00	0.10
44 Ca	891165.38	A	2557.00	0.29
45 Sc	1644006.00	A	13700.00	0.83
45 Sc	152753.70	P	949.90	0.62
45 Sc	4057961.00	A	28200.00	0.69
51 V	34990.76	P	189.70	0.54
52 Cr	46360.37	P	288.00	0.62
55 Mn	24187.51	P	136.30	0.56
56 Fe	13195650.00	A	64070.00	0.49
59 Co	74791.05	P	155.40	0.21
60 Ni	21508.46	P	188.70	0.88
63 Cu	62391.86	P	518.30	0.83
65 Cu	30906.78	P	186.70	0.60
66 Zn	9360.27	P	48.24	0.52
72 Ge	416613.59	P	3067.00	0.74
72 Ge	88252.80	P	351.70	0.40
75 As	4630.13	P	45.05	0.97
78 Se	4939.80	P	47.38	0.96
89 Y	5939162.00	A	48720.00	0.82
98 Mo	119071.50	P	354.20	0.30
99 (Ru)	4.44	P	1.93	43.31
107 Ag	203940.91	P	865.40	0.42
111 Cd	45377.98	P	749.70	1.65
115 In	5852311.00	A	8485.00	0.14
118 (In)		M		
118 (In)		P		
118 (In)		A		
121 Sb	152376.20	P	916.00	0.60
137 Ba	60311.43	P	122.60	0.20
159 Tb	7893340.00	A	39320.00	0.50
205 Tl	164128.50	P	1595.00	0.97
208 Pb	469127.81	P	3126.00	0.67
209 Bi	4378896.00	A	18000.00	0.41

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2135727.80	0.48	2088531.60	102.3	80 - 120	
45 Sc	1644006.00	0.83	1465758.40	112.2	80 - 120	
45 Sc	152753.70	0.62	147334.75	103.7	80 - 120	
45 Sc	4057961.30	0.69	3928048.30	103.3	80 - 120	
72 Ge	416613.59	0.74	383720.78	108.6	80 - 120	
72 Ge	88252.80	0.40	84934.73	103.9	80 - 120	
89 Y	5939161.50	0.82	5746938.50	103.3	80 - 120	
115 In	5852310.50	0.14	5706536.00	102.6	80 - 120	
159 Tb	7893340.00	0.50	7824255.50	100.9	80 - 120	
209 Bi	4378896.00	0.41	4310285.50	101.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\009CALS.D\009CALS.D#
Date Acquired: Jun 21 2007 06:50 pm
Operator:
Sample Name: s6412
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:49 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	2075028.00	A	13680.00	0.66
7 (Li)		P		
9 Be	653200.19	P	3515.00	0.54
23 Na	7835556.00	A	13920.00	0.18
24 Mg	############	A	1369000.00	0.73
27 Al	############	A	743500.00	0.33
39 K	############	A	411700.00	0.17
44 Ca	7845017.00	A	34920.00	0.45
45 Sc	1640101.00	A	6396.00	0.39
45 Sc	148351.20	P	372.10	0.25
45 Sc	4035750.00	A	12810.00	0.32
51 V	341351.81	P	1068.00	0.31
52 Cr	446245.81	P	2543.00	0.57
55 Mn	233551.70	P	394.20	0.17
56 Fe	############	A	454000.00	0.35
59 Co	719882.63	P	3819.00	0.53
60 Ni	198657.00	P	1349.00	0.68
63 Cu	548699.38	P	2997.00	0.55
65 Cu	270162.50	P	1371.00	0.51
66 Zn	79889.03	P	404.70	0.51
72 Ge	410928.69	P	1597.00	0.39
72 Ge	85155.98	P	132.40	0.16
75 As	45458.32	P	232.50	0.51
78 Se	48397.89	P	128.20	0.26
89 Y	5839266.00	A	33450.00	0.57
98 Mo	1206128.00	A	14940.00	1.24
99 (Ru)	23.33	P	12.02	51.51
107 Ag	1990671.00	A	13560.00	0.68
111 Cd	438072.09	P	1570.00	0.36
115 In	5573509.00	A	33460.00	0.60
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	1523217.00	A	18910.00	1.24
137 Ba	583485.00	P	2676.00	0.46
159 Tb	7762507.00	A	54400.00	0.70
205 Tl	1682836.00	A	16440.00	0.98
208 Pb	4647661.00	A	31610.00	0.68
209 Bi	4107955.00	A	18820.00	0.46

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2075028.30	0.66	2088531.60	99.4	80 - 120	
45 Sc	1640100.80	0.39	1465758.40	111.9	80 - 120	
45 Sc	148351.20	0.25	147334.75	100.7	80 - 120	
45 Sc	4035750.30	0.32	3928048.30	102.7	80 - 120	
72 Ge	410928.66	0.39	383720.78	107.1	80 - 120	
72 Ge	85155.98	0.16	84934.73	100.3	80 - 120	
89 Y	5839266.00	0.57	5746938.50	101.6	80 - 120	
115 In	5573508.50	0.60	5706536.00	97.7	80 - 120	
159 Tb	7762507.50	0.70	7824255.50	99.2	80 - 120	
209 Bi	4107955.30	0.46	4310285.50	95.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\07F21s00.B\010CALS.D\010CALS.D#
Date Acquired: Jun 21 2007 06:58 pm
Operator:
Sample Name: s6413
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
Last Cal Update: Jun 21 2007 06:56 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)
6 Li	1999107.00	A	5506.00	0.28
7 (Li)		P		
9 Be	1292953.00	A	2487.00	0.19
23 Na	15905390.00	A	13080.00	0.08
24 Mg	############	A	3599000.00	0.98
27 Al	############	A	1791000.00	0.40
39 K	############	A	1526000.00	0.31
44 Ca	15558760.00	A	4565.00	0.03
45 Sc	1640279.00	A	27570.00	1.68
45 Sc	148151.59	P	1742.00	1.18
45 Sc	3993138.00	A	18370.00	0.46
51 V	691246.63	P	3253.00	0.47
52 Cr	900607.69	P	5675.00	0.63
55 Mn	470543.00	P	3375.00	0.72
56 Fe	############	A	1693000.00	0.66
59 Co	1465390.00	A	12590.00	0.86
60 Ni	395464.69	P	1062.00	0.27
63 Cu	1106334.00	A	5195.00	0.47
65 Cu	532038.69	P	2792.00	0.52
66 Zn	157321.50	P	541.20	0.34
72 Ge	405433.31	P	1484.00	0.37
72 Ge	84258.36	P	401.10	0.48
75 As	91074.04	P	493.50	0.54
78 Se	94714.16	P	283.80	0.30
89 Y	5790982.00	A	37080.00	0.64
98 Mo	2474881.00	A	5613.00	0.23
99 (Ru)	50.00	P	10.00	20.00
107 Ag	3849072.00	A	29100.00	0.76
111 Cd	867651.19	P	2851.00	0.33
115 In	5478503.00	A	11820.00	0.22
118 (In)		A		
118 (In)		A		
118 (In)		A		
121 Sb	3080803.00	A	14030.00	0.46
137 Ba	1192189.00	A	2382.00	0.20
159 Tb	7611521.00	A	41110.00	0.54
205 Tl	3276033.00	A	18870.00	0.58
208 Pb	9085156.00	A	105500.00	1.16
209 Bi	3942421.00	A	20530.00	0.52

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1999107.50	0.28	2088531.60	95.7	80 - 120	
45 Sc	1640279.50	1.68	1465758.40	111.9	80 - 120	
45 Sc	148151.58	1.18	147334.75	100.6	80 - 120	
45 Sc	3993137.80	0.46	3928048.30	101.7	80 - 120	
72 Ge	405433.31	0.37	383720.78	105.7	80 - 120	
72 Ge	84258.36	0.48	84934.73	99.2	80 - 120	
89 Y	5790982.50	0.64	5746938.50	100.8	80 - 120	
115 In	5478503.50	0.22	5706536.00	96.0	80 - 120	
159 Tb	7611520.50	0.54	7824255.50	97.3	80 - 120	
209 Bi	3942421.30	0.52	4310285.50	91.5	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\07F21s00.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763012 File : f21s0012 Time : 21-JUN-2007 19:14
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6419, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.2986	0.2845	10000	10120	ug/L	1	10	
Antimony	A	0.1388	0.1410	100.0	100.8	ug/L	1	10	
Barium	A	0.0455	0.0385	100.0	99.13	ug/L	-1	10	
Beryllium	A	0.1583	0.1657	100.0	103.0	ug/L	3	10	
Cadmium	A	0.0407	0.0405	100.0	102.5	ug/L	3	10	
Calcium	A	0.0326	0.0100	10000	10250	ug/L	3	10	
Lead	A	0.3175	0.2876	100.0	96.30	ug/L	-4	10	
Magnesium	A	0.2488	0.2374	10000	10290	ug/L	3	10	
Molybdenum	A	0.1157	0.1055	100.0	99.36	ug/L	-1	10	
Potassium	A	0.8681	0.3176	10000	10340	ug/L	3	10	
Silver	A	0.1813	0.1835	100.0	104.2	ug/L	4	10	
Thallium	A	0.4190	0.3985	50.00	48.09	ug/L	-4	10	
Arsenic	E	0.2885	0.2775	100.0	102.9	ug/L	3	10	
Chromium	E	1.8178	1.5576	100.0	102.7	ug/L	3	10	
Cobalt	E	2.5209	2.4986	100.0	101.4	ug/L	1	10	
Copper	E	8.5972	3.3253	100.0	101.4	ug/L	1	10	
Manganese	E	0.8557	0.8072	100.0	101.8	ug/L	2	10	
Nickel	E	1.0733	0.6941	100.0	103.8	ug/L	4	10	
Sodium	E	0.5725	0.2711	10000	10110	ug/L	1	10	
Vanadium	E	1.5354	1.1828	100.0	101.6	ug/L	2	10	
Zinc	E	1.7502	0.4884	100.0	104.1	ug/L	4	10	
Iron	H	0.4305	0.4182	10000	10630	ug/L	6	10	
Selenium	H	0.0619	0.0605	100.0	103.4	ug/L	3	10	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2123230	1.66
Scandium	A	3928048	4071347	3.65
Scandium	E	147335	149981	1.80
Scandium	H	1465758	1653872	12.83
Germanium	H	383721	418843	9.15
Germanium	E	84935	85559	0.73
Indium	A	5706536	5657433	-0.86
Bismuth	A	4310286	4133128	-4.11
Yttrium	A	5746939	5891233	2.51
Terbium	A	7824256	7778318	-0.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763015 File : f21s0015 Time : 21-JUN-2007 19:32
Cal : 67248763001 Caldate : 21-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02547]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03518]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[5.448]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.02493]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.02652]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.04191]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.03384]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.06055]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2175477	4.16
Scandium	A	3928048	4055970	3.26
Scandium	E	147335	152883	3.77
Scandium	H	1465758	1621570	10.63
Germanium	H	383721	416516	8.55
Germanium	E	84935	88461	4.15
Indium	A	5706536	5813530	1.87
Bismuth	A	4310286	4345207	0.81
Yttrium	A	5746939	5950343	3.54
Terbium	A	7824256	7897073	0.93

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763017 File : f21s0017 Time : 21-JUN-2007 19:44
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06740]	0.1000	ug/L	
Barium	A	1.025	0.1000	ug/L	
Beryllium	A	[0.03700]	0.1000	ug/L	
Cadmium	A	1.670	0.1000	ug/L	
Lead	A	0.4513	0.1000	ug/L	
Silver	A	0.2577	0.1000	ug/L	
Thallium	A	[0.03926]	0.05000	ug/L	
Arsenic	E	0.3164	0.1000	ug/L	
Chromium	E	1.401	0.1000	ug/L	
Cobalt	E	0.2246	0.1000	ug/L	
Copper	E	4.365	0.1000	ug/L	
Manganese	E	0.9361	0.1000	ug/L	
Nickel	E	1.249	0.1000	ug/L	
Vanadium	E	[0.01244]	0.1000	ug/L	
Zinc	E	5.828	0.1000	ug/L	
Selenium	H	[0.06041]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	93480	ug/L	93
Calcium	A	300000	295800	ug/L	99
Magnesium	A	100000	90850	ug/L	91
Molybdenum	A	2000	1881	ug/L	94
Potassium	A	100000	96240	ug/L	96
Sodium	E	250000	241000	ug/L	96
Iron	H	250000	230000	ug/L	92

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	1413887	-32.30
Scandium	A	3928048	3641922	-7.28
Scandium	E	147335	136484	-7.36
Scandium	H	1465758	1635162	11.56
Germanium	H	383721	379057	-1.22
Germanium	E	84935	75907	-10.63
Indium	A	5706536	4754355	-16.69
Bismuth	A	4310286	3114317	-27.75
Yttrium	A	5746939	5278076	-8.16
Terbium	A	7824256	6596746	-15.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763018 File : f21s0018 Time : 21-JUN-2007 19:51
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95640	ug/L	-4		
Cadmium	A	100.0	107.2	ug/L	7	20	
Calcium	A	300000	314700	ug/L	5		
Magnesium	A	100000	91620	ug/L	-8		
Molybdenum	A	2000	2007	ug/L	0		
Potassium	A	100000	100800	ug/L	1		
Silver	A	50.00	51.58	ug/L	3	20	
Arsenic	E	100.0	114.1	ug/L	14	20	
Chromium	E	200.0	226.8	ug/L	13	20	
Cobalt	E	200.0	217.1	ug/L	9	20	
Copper	E	200.0	205.4	ug/L	3	20	
Manganese	E	200.0	215.5	ug/L	8	20	
Nickel	E	200.0	211.2	ug/L	6	20	
Sodium	E	250000	273800	ug/L	10		
Vanadium	E	200.0	228.7	ug/L	14	20	
Zinc	E	100.0	108.2	ug/L	8	20	
Iron	H	250000	250100	ug/L	0		
Selenium	H	100.0	111.5	ug/L	12	20	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1465758	1619436	10.48
Scandium	A	3928048	3616843	-7.92
Scandium	E	147335	128297	-12.92
Germanium	H	383721	372039	-3.04
Germanium	E	84935	72042	-15.18
Indium	A	5706536	4821494	-15.51
Yttrium	A	5746939	5333957	-7.19

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763035 File : f21s0035 Time : 21-JUN-2007 21:36
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2986	0.2809	10000	9992	ug/L	0	10	
Antimony	A	0.1388	0.1378	100.0	98.60	ug/L	-1	10	
Barium	A	0.0455	0.0380	100.0	97.81	ug/L	-2	10	
Beryllium	A	0.1583	0.1613	100.0	100.3	ug/L	0	10	
Cadmium	A	0.0407	0.0395	100.0	99.83	ug/L	0	10	
Calcium	A	0.0326	0.0099	10000	10120	ug/L	1	10	
Lead	A	0.3175	0.2799	100.0	93.74	ug/L	-6	10	
Magnesium	A	0.2488	0.2330	10000	10100	ug/L	1	10	
Molybdenum	A	0.1157	0.1049	100.0	98.87	ug/L	-1	10	
Potassium	A	0.8681	0.3127	10000	10180	ug/L	2	10	
Silver	A	0.1813	0.1801	100.0	102.2	ug/L	2	10	
Thallium	A	0.4190	0.3848	50.00	46.43	ug/L	-7	10	
Arsenic	E	0.2885	0.2747	100.0	101.9	ug/L	2	10	
Chromium	E	1.8178	1.5593	100.0	102.8	ug/L	3	10	
Cobalt	E	2.5209	2.5047	100.0	101.7	ug/L	2	10	
Copper	E	8.5972	3.2800	100.0	100.0	ug/L	0	10	
Manganese	E	0.8557	0.8009	100.0	101.0	ug/L	1	10	
Nickel	E	1.0733	0.6940	100.0	103.8	ug/L	4	10	
Sodium	E	0.5725	0.2711	10000	10110	ug/L	1	10	
Vanadium	E	1.5354	1.1836	100.0	101.7	ug/L	2	10	
Zinc	E	1.7502	0.4814	100.0	102.6	ug/L	3	10	
Iron	H	0.4305	0.3979	10000	10120	ug/L	1	10	
Selenium	H	0.0619	0.0600	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2111447	1.10
Scandium	A	3928048	4059294	3.34
Scandium	E	147335	143980	-2.28
Scandium	H	1465758	1623451	10.76
Germanium	H	383721	401620	4.66
Germanium	E	84935	83306	-1.92
Indium	A	5706536	5662272	-0.78
Bismuth	A	4310286	4113323	-4.57
Yttrium	A	5746939	5886368	2.43
Terbium	A	7824256	7763179	-0.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763037 File : f21s0037 Time : 21-JUN-2007 21:50
Cal : 67248763001 Caldate : 21-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.01053]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.02075]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.01810]	0.1000	0.002285	ug/L	!ib
Chromium	E	[0.01488]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.02120]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.01363]	0.1000	0.001252	ug/L	!ib
Sodium	E	ND	10.00	7.900	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02084]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2201724	5.42
Scandium	A	3928048	4055275	3.24
Scandium	E	147335	149233	1.29
Scandium	H	1465758	1605759	9.55
Germanium	H.	383721	411286	7.18
Germanium	E	84935	86523	1.87
Indium	A	5706536	5864363	2.77
Bismuth	A	4310286	4270545	-0.92
Yttrium	A	5746939	5937955	3.32
Terbium	A	7824256	7829519	0.07

!=warning ib=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763053 File : f21s0053 Time : 21-JUN-2007 23:24
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2986	0.2781	10000	9894	ug/L	-1	10	
Antimony	A	0.1388	0.1389	100.0	99.34	ug/L	-1	10	
Barium	A	0.0455	0.0382	100.0	98.22	ug/L	-2	10	
Beryllium	A	0.1583	0.1551	100.0	96.44	ug/L	-4	10	
Cadmium	A	0.0407	0.0395	100.0	100.0	ug/L	0	10	
Calcium	A	0.0326	0.0098	10000	10040	ug/L	0	10	
Lead	A	0.3175	0.2798	100.0	93.68	ug/L	-6	10	
Magnesium	A	0.2488	0.2306	10000	9993	ug/L	0	10	
Molybdenum	A	0.1157	0.1030	100.0	97.04	ug/L	-3	10	
Potassium	A	0.8681	0.3118	10000	10150	ug/L	2	10	
Silver	A	0.1813	0.1775	100.0	100.7	ug/L	1	10	
Thallium	A	0.4190	0.3834	50.00	46.27	ug/L	-7	10	
Arsenic	E	0.2885	0.2702	100.0	100.2	ug/L	0	10	
Chromium	E	1.8178	1.5267	100.0	100.6	ug/L	1	10	
Cobalt	E	2.5209	2.4707	100.0	100.3	ug/L	0	10	
Copper	E	8.5972	3.1917	100.0	97.32	ug/L	-3	10	
Manganese	E	0.8557	0.7911	100.0	99.79	ug/L	0	10	
Nickel	E	1.0733	0.6808	100.0	101.8	ug/L	2	10	
Sodium	E	0.5725	0.2644	10000	9861	ug/L	-1	10	
Vanadium	E	1.5354	1.1645	100.0	100.0	ug/L	0	10	
Zinc	E	1.7502	0.4676	100.0	99.64	ug/L	0	10	
Iron	H	0.4305	0.3982	10000	10120	ug/L	1	10	
Selenium	H	0.0619	0.0589	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2043754	-2.14
Scandium	A	3928048	3868296	-1.52
Scandium	E	147335	139786	-5.12
Scandium	H	1465758	1531840	4.51
Germanium	H	383721	388002	1.12
Germanium	E	84935	81337	-4.24
Indium	A	5706536	5509337	-3.46
Bismuth	A	4310286	4038008	-6.32
Yttrium	A	5746939	5722437	-0.43
Terbium	A	7824256	7591993	-2.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763055 File : f21s0055 Time : 21-JUN-2007 23:37
Cal : 67248763001 Caldate : 21-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.02962]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.03626]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[6.211]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[7.125]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	ND	0.1000	0.002285	ug/L	
Chromium	E	[0.007745]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.05903]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02596]	0.1000	0.001252	ug/L	!ib
Sodium	E	[8.226]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.03454]	0.1000	0.01127	ug/L	!ib
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.01790]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2114883	1.26
Scandium	A	3928048	3843749	-2.15
Scandium	E	147335	141979	-3.64
Scandium	H	1465758	1523556	3.94
Germanium	H	383721	392544	2.30
Germanium	E	84935	83125	-2.13
Indium	A	5706536	5658695	-0.84
Bismuth	A	4310286	4248671	-1.43
Yttrium	A	5746939	5688898	-1.01
Terbium	A	7824256	7681604	-1.82

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763074 File : f21s0074 Time : 22-JUN-2007 01:30
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2986	0.2763	10000	9831	ug/L	-2	10	
Antimony	A	0.1388	0.1380	100.0	98.74	ug/L	-1	10	
Barium	A	0.0455	0.0382	100.0	98.23	ug/L	-2	10	
Beryllium	A	0.1583	0.1574	100.0	97.85	ug/L	-2	10	
Cadmium	A	0.0407	0.0394	100.0	99.63	ug/L	0	10	
Calcium	A	0.0326	0.0098	10000	9987	ug/L	0	10	
Lead	A	0.3175	0.2790	100.0	93.43	ug/L	-7	10	
Magnesium	A	0.2488	0.2286	10000	9908	ug/L	-1	10	
Molybdenum	A	0.1157	0.1021	100.0	96.23	ug/L	-4	10	
Potassium	A	0.8681	0.3115	10000	10140	ug/L	1	10	
Silver	A	0.1813	0.1784	100.0	101.2	ug/L	1	10	
Thallium	A	0.4190	0.3848	50.00	46.44	ug/L	-7	10	
Arsenic	E	0.2885	0.2703	100.0	100.2	ug/L	0	10	
Chromium	E	1.8178	1.5267	100.0	100.6	ug/L	1	10	
Cobalt	E	2.5209	2.4704	100.0	100.3	ug/L	0	10	
Copper	E	8.5972	3.1953	100.0	97.43	ug/L	-3	10	
Manganese	E	0.8557	0.7867	100.0	99.23	ug/L	-1	10	
Nickel	E	1.0733	0.6814	100.0	101.9	ug/L	2	10	
Sodium	E	0.5725	0.2659	10000	9918	ug/L	-1	10	
Vanadium	E	1.5354	1.1688	100.0	100.4	ug/L	0	10	
Zinc	E	1.7502	0.4649	100.0	99.06	ug/L	-1	10	
Iron	H	0.4305	0.4026	10000	10240	ug/L	2	10	
Selenium	H	0.0619	0.0589	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	1985367	-4.94
Scandium	A	3928048	3886231	-1.06
Scandium	E	147335	136862	-7.11
Scandium	H	1465758	1476714	0.75
Germanium	H	383721	375546	-2.13
Germanium	E	84935	79754	-6.10
Indium	A	5706536	5511817	-3.41
Bismuth	A	4310286	4028254	-6.54
Yttrium	A	5746939	5733122	-0.24
Terbium	A	7824256	7583193	-3.08

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763076 File : f21s0076 Time : 22-JUN-2007 01:42
Cal : 67248763001 Caldate : 21-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.009210]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.01207]	0.1000	0.002857	ug/L	!ib
Magnesium	A	[3.938]	10.00	3.328	ug/L	!ib
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	[8.667]	10.00	7.074	ug/L	!ib
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	0.2583	0.1000	0.002285	ug/L	ib ***
Chromium	E	[0.01261]	0.1000	0.0001137	ug/L	!ib
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	[0.03222]	0.1000	0.004522	ug/L	!ib
Nickel	E	[0.02096]	0.1000	0.001252	ug/L	!ib
Sodium	E	42.93	10.00	7.900	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	[0.02950]	0.1000	0.004672	ug/L	!ib

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2086049	-0.12
Scandium	A	3928048	3949884	0.56
Scandium	E	147335	142656	-3.18
Scandium	H	1465758	1529560	4.35
Germanium	H	383721	392473	2.28
Germanium	E	84935	83221	-2.02
Indium	A	5706536	5746234	0.70
Bismuth	A	4310286	4183149	-2.95
Yttrium	A	5746939	5812486	1.14
Terbium	A	7824256	7670403	-1.97

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67248763076

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763086 File : f21s0086 Time : 22-JUN-2007 02:42
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6420, S6035

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.2986	0.2793	10000	9937	ug/L	-1	10	
Antimony	A	0.1388	0.1395	100.0	99.79	ug/L	0	10	
Barium	A	0.0455	0.0387	100.0	99.67	ug/L	0	10	
Beryllium	A	0.1583	0.1593	100.0	99.03	ug/L	-1	10	
Cadmium	A	0.0407	0.0395	100.0	99.90	ug/L	0	10	
Calcium	A	0.0326	0.0098	10000	10040	ug/L	0	10	
Lead	A	0.3175	0.2779	100.0	93.05	ug/L	-7	10	
Magnesium	A	0.2488	0.2300	10000	9967	ug/L	0	10	
Molybdenum	A	0.1157	0.1032	100.0	97.28	ug/L	-3	10	
Potassium	A	0.8681	0.3139	10000	10220	ug/L	2	10	
Silver	A	0.1813	0.1800	100.0	102.1	ug/L	2	10	
Thallium	A	0.4190	0.3860	50.00	46.58	ug/L	-7	10	
Arsenic	E	0.2885	0.2697	100.0	100.0	ug/L	0	10	
Chromium	E	1.8178	1.5283	100.0	100.7	ug/L	1	10	
Cobalt	E	2.5209	2.4657	100.0	100.1	ug/L	0	10	
Copper	E	8.5972	3.2208	100.0	98.22	ug/L	-2	10	
Manganese	E	0.8557	0.7886	100.0	99.47	ug/L	-1	10	
Nickel	E	1.0733	0.6823	100.0	102.1	ug/L	2	10	
Sodium	E	0.5725	0.2652	10000	9891	ug/L	-1	10	
Vanadium	E	1.5354	1.1661	100.0	100.2	ug/L	0	10	
Zinc	E	1.7502	0.4671	100.0	99.55	ug/L	0	10	
Iron	H	0.4305	0.3977	10000	10110	ug/L	1	10	
Selenium	H	0.0619	0.0590	100.0	100.9	ug/L	1	10	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	1987665	-4.83
Scandium	A	3928048	3898550	-0.75
Scandium	E	147335	140184	-4.85
Scandium	H	1465758	1535489	4.76
Germanium	H	383721	386976	0.85
Germanium	E	84935	81628	-3.89
Indium	A	5706536	5468566	-4.17
Bismuth	A	4310286	3938628	-8.62
Yttrium	A	5746939	5710803	-0.63
Terbium	A	7824256	7483143	-4.36

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763089 File : f21s0089 Time : 22-JUN-2007 03:02
Cal : 67248763001 Caldate : 21-JUN-2007

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	11.04	ug/L	
Antimony	A	ND	0.1000	0	ug/L	
Barium	A	ND	0.1000	0	ug/L	
Beryllium	A	ND	0.1000	0	ug/L	
Cadmium	A	[0.004778]	0.1000	0.0005836	ug/L	!ib
Calcium	A	ND	10.00	0	ug/L	
Lead	A	[0.008697]	0.1000	0.002857	ug/L	!ib
Magnesium	A	ND	10.00	3.328	ug/L	
Molybdenum	A	ND	0.1000	0.07293	ug/L	
Potassium	A	ND	10.00	7.074	ug/L	
Silver	A	ND	0.1000	0	ug/L	
Thallium	A	ND	0.05000	0	ug/L	
Arsenic	E	[0.04954]	0.1000	0.002285	ug/L	!ib
Chromium	E	ND	0.1000	0.0001137	ug/L	
Cobalt	E	ND	0.1000	0	ug/L	
Copper	E	ND	0.1000	0.1296	ug/L	
Manganese	E	ND	0.1000	0.004522	ug/L	
Nickel	E	[0.009402]	0.1000	0.001252	ug/L	!ib
Sodium	E	[9.489]	10.00	7.900	ug/L	!ib
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.01127	ug/L	
Iron	H	ND	10.00	4.329	ug/L	
Selenium	H	ND	0.1000	0.004672	ug/L	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	2029970	-2.80
Scandium	A	3928048	3849543	-2.00
Scandium	E	147335	141502	-3.96
Scandium	H	1465758	1518649	3.61
Germanium	H	383721	391363	1.99
Germanium	E	84935	82902	-2.39
Indium	A	5706536	5589064	-2.06
Bismuth	A	4310286	4128047	-4.23
Yttrium	A	5746939	5684472	-1.09
Terbium	A	7824256	7499583	-4.15

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67248763089

: 00584

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763091 File : f21s0091 Time : 22-JUN-2007 03:14
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6421, S6035

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	[0.06178]	0.1000	ug/L	
Barium	A	1.026	0.1000	ug/L	
Beryllium	A	[0.02865]	0.1000	ug/L	
Cadmium	A	1.574	0.1000	ug/L	
Lead	A	0.4332	0.1000	ug/L	
Silver	A	0.2412	0.1000	ug/L	
Thallium	A	[0.03118]	0.05000	ug/L	
Arsenic	E	0.4429	0.1000	ug/L	
Chromium	E	1.379	0.1000	ug/L	
Cobalt	E	0.2248	0.1000	ug/L	
Copper	E	2.983	0.1000	ug/L	
Manganese	E	0.9629	0.1000	ug/L	
Nickel	E	1.294	0.1000	ug/L	
Vanadium	E	[0.008438]	0.1000	ug/L	
Zinc	E	5.719	0.1000	ug/L	
Selenium	H	[0.06347]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	91310	ug/L	91
Calcium	A	300000	293100	ug/L	98
Magnesium	A	100000	86890	ug/L	87
Molybdenum	A	2000	1846	ug/L	92
Potassium	A	100000	95150	ug/L	95
Sodium	E	250000	239700	ug/L	96
Iron	H	250000	229700	ug/L	92

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	2088532	1244193	-40.43
Scandium	A	3928048	3499495	-10.91
Scandium	E	147335	125859	-14.58
Scandium	H	1465758	1500201	2.35
Germanium	H	383721	352313	-8.19
Germanium	E	84935	71883	-15.37
Indium	A	5706536	4655090	-18.43
Bismuth	A	4310286	3027489	-29.76
Yttrium	A	5746939	5153583	-10.32
Terbium	A	7824256	6506393	-16.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06 IDF : 1.0
Seqnum : 67248763092 File : f21s0092 Time : 22-JUN-2007 03:20
Cal : 67248763001 Caldate : 21-JUN-2007
Standards: S6422, S6035

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	94830	ug/L	-5		
Cadmium	A	100.0	107.5	ug/L	8	20	
Calcium	A	300000	318600	ug/L	6		
Magnesium	A	100000	90070	ug/L	-10		
Molybdenum	A	2000	2002	ug/L	0		
Potassium	A	100000	102600	ug/L	3		
Silver	A	50.00	51.35	ug/L	3	20	
Arsenic	E	100.0	112.4	ug/L	12	20	
Chromium	E	200.0	225.0	ug/L	13	20	
Cobalt	E	200.0	215.9	ug/L	8	20	
Copper	E	200.0	200.5	ug/L	0	20	
Manganese	E	200.0	209.9	ug/L	5	20	
Nickel	E	200.0	210.7	ug/L	5	20	
Sodium	E	250000	271600	ug/L	9		
Vanadium	E	200.0	227.3	ug/L	14	20	
Zinc	E	100.0	105.1	ug/L	5	20	
Iron	H	250000	247600	ug/L	-1		
Selenium	H	100.0	110.3	ug/L	10	20	

ISTD (ICALBLK f21s0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	1465758	1491448	1.75
Scandium	A	3928048	3381789	-13.91
Scandium	E	147335	117232	-20.43
Germanium	H	383721	342600	-10.72
Germanium	E	84935	67024	-21.09
Indium	A	5706536	4644029	-18.62
Yttrium	A	5746939	5096496	-11.32

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 67248763

Date : 06/21/07
Sequence : MET06 f21s0

Reference : f21s0004
Analyzed : 06/21/07 18:23

#	Type	Sample ID	LI A	SC A	SC E	SC H	GE H	GE E	IN A	BI A	Y A	TB A
		IB+ICALBLK STD	2088532	3928048	147335	1465758	383721	84935	5706536	4310286	5746939	7824256
		LOWER LIMIT	626560	1178414	44200	439727	115116	25480	1711961	1293086	1724082	2347277
		UPPER LIMIT	2506238	4713658	176802	1758910	460465	101922	6847843	5172343	6896327	9389107
015	ICB		2175477	4055970	152883	1621570	416516	88461	5813530	4345207	5950343	7897073
017	ICSA		1413887	3641922	136484	1635162	379057	75907	4754355	3114317	5278076	6596746
018	ICSAB		1154137	3616843	128297	1619436	372039	72042	4821494	3255636	5333957	6999985
023	BLANK	QC392983	1737513	3849036	135803	1576379	432232	83839	5528359	4400582	5645750	8065585
024	BS	QC392984	1939101	3959982	139136	1582751	388242	78824	5563326	4238868	5781927	7958099
025	BSD	QC392985	1927800	4016105	142092	1587267	392189	80935	5626616	4172164	5857199	7970324
027	MSS	195373-006	1983424	4146071	147788	1645063	405346	83264	5608962	3970940	5902419	7745970
028	SER	QC392988	2110098	4134006	149172	1657647	416277	86225	5756797	4190696	5927524	7823880
029	MS	QC392986	1993916	4074760	145090	1653210	403505	81822	5447491	3904844	5791709	7591470
030	MSD	QC392987	1989606	4127041	145204	1636227	398646	82120	5556929	3907380	5861566	7716858
031	PDS	QC392989	2015165	4379705	144559	1640487	397761	81279	5801562	4091892	6245083	8200936
035	CCV		2111447	4059294	143980	1623451	401620	83306	5662272	4113323	5886368	7763179
037	CCB		2201724	4055275	149233	1605759	411286	86523	5864363	4270545	5937955	7829519
040	SAMPLE	195303-026	2070578	4061689	145078	1589473	399399	83250	5616452	4089103	5827442	7738672
041	SAMPLE	195373-007	2037508	4040813	143262	1598920	392408	81342	5404967	3837115	5728862	7514642
042	SAMPLE	195373-011	2063207	4054757	142594	1598628	392641	81086	5442245	3773427	5723012	7493617
043	SAMPLE	195373-012	2187257	4386463	145125	1594653	395424	82756	5962051	4069705	6277464	8133512
044	SAMPLE	195391-002	2176846	3939315	144836	1580621	401632	84298	5680357	4224717	5750646	7663272
045	SAMPLE	195391-003	2068580	3960711	143255	1430991	372732	82259	5463176	3959267	5670493	7521990
046	SAMPLE	195391-004	2009696	4007995	142269	1566043	390614	81481	5545492	3921533	5717600	7547730
047	SAMPLE	195391-005	2082062	4071798	142719	1577757	400356	83190	5666380	4179640	5831574	7783439
048	SAMPLE	195391-006	2032932	3952800	142192	1551799	392246	82557	5548609	4139142	5728131	7691568
049	SAMPLE	195391-007	1720372	3885391	136608	1548705	379504	77408	5286006	3839964	5690331	7462441
053	CCV		2043754	3868296	139786	1531840	388002	81337	5509337	4038008	5722437	7591993
055	CCB		2114883	3843749	141979	1523556	392544	83125	5658695	4248671	5688898	7681604
058	SAMPLE	195391-008	1853981	3745183	132807	1511211	377654	77107	5331026	4037408	5528009	7452393
059	SAMPLE	195391-009	1006779	3362773	118400	1471053	357201	71910	4951350	3588694	5277920	7012801
060	SAMPLE	195391-010	1508189	3789618	127173	1496908	369420	74774	5362214	4063947	5660593	7710014
061	SAMPLE	195391-011	1514177	3877000	133666	1552350	368699	75144	5189037	3570484	5561449	7262321
062	SAMPLE	195391-012	1516698	3921155	131471	1542883	377003	76559	5588467	4193565	5753287	7896349
063	SAMPLE	195404-002	1753811	4034084	138491	1573034	384711	80046	5604488	4073436	5817748	7936672
066	SAMPLE	195303-011	1903772	4058123	142237	1535538	386009	82659	5723761	4265149	5994311	7860133
067	SAMPLE	195390-002	1333070	3794495	142853	1537188	344594	73788	4254154	2204588	4940573	5166549
069	MSS	195373-006	2026764	3886059	141014	1534858	394239	83100	5613190	4121016	5717747	7636768
070	SER	QC392988	2028105	3857370	141723	1666352	416294	83970	5679726	4172735	5733593	7606478
074	CCV		1985367	3886231	136862	1476714	375546	79754	5511817	4028254	5733122	7583193
076	CCB		2086049	3949884	142656	1529560	392473	83221	5746234	4183149	5812486	7670403
079	MS	QC392986	2015819	3858123	140395	1528788	389262	82432	5469673	4013302	5599589	7429348
080	MSD	QC392987	2027621	3833735	139732	1514761	385980	81739	5527493	4062263	5643127	7455703
081	PDS	QC392989	1966073	3903216	139063	1545246	387809	80515	5431957	3934688	5706388	7509433
082	SAMPLE	195391-007	2062398	4035709	144540	1543042	397208	84854	5766074	4079600	5906703	7627355
086	CCV		1987665	3898550	140184	1535489	386976	81628	5468566	3938628	5710803	7483143
089	CCB		2029970	3849543	141502	1518649	391363	82902	5589064	4128047	5684472	7499583
091	ICSA		1244193	3499495	125859	1500201	352313	71883	4655090	3027489	5153583	6506393
092	ICSAB		961301	3381789	117232	1491448	342600	67024	4644029	3146212	5096496	6692991

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67248763 Instrument: MET06 Agilent ICP-MS MET06 Begun: 21-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK uL	Stds Used	>LR
001	f21s0001	TUN				21-JUN-2007 18:03	1.0	1.0			1	
002	f21s0002	X	RINSE			21-JUN-2007 18:11	1.0				2	
003	f21s0003	X	RINSE			21-JUN-2007 18:17	1.0				2	
004	f21s0004	ICALBLK	CALBLANK			21-JUN-2007 18:23	1.0	1.0			2	
005	f21s0005	ICAL				21-JUN-2007 18:29	1.0	1.0			3	
006	f21s0006	ICAL				21-JUN-2007 18:35	1.0	1.0			4	
007	f21s0007	ICAL				21-JUN-2007 18:41	1.0	1.0			5	
008	f21s0008	ICAL				21-JUN-2007 18:47	1.0	1.0			6	
009	f21s0009	ICAL				21-JUN-2007 18:52	1.0	1.0			7	
010	f21s0010	ICAL				21-JUN-2007 18:59	1.0	1.0			8	
011	f21s0011	X	RINSE			21-JUN-2007 19:09	1.0				2	
012	f21s0012	ICV				21-JUN-2007 19:14	1.0	1.0		1	9 2	
013	f21s0013	X	RINSE			21-JUN-2007 19:21	1.0				2	
014	f21s0014	X				21-JUN-2007 19:27	1.0				2	
015	f21s0015	ICB				21-JUN-2007 19:32	1.0	1.0		1	2	
016	f21s0016	X				21-JUN-2007 19:38	1.0				2	
017	f21s0017	ICSA				21-JUN-2007 19:44	1.0	1.0		1	10 2	7:CA=295800
018	f21s0018	ICSAB				21-JUN-2007 19:51	1.0	1.0		1	11 2	13:CA=314700
019	f21s0019	X	RINSE			21-JUN-2007 19:57	1.0				2	
020	f21s0020	X	RINSE			21-JUN-2007 20:02	1.0				2	
021	f21s0021	X	RINSE			21-JUN-2007 20:08	1.0				2	
022	f21s0022	X	RINSE			21-JUN-2007 20:14	1.0				2	
023	f21s0023	BLANK	QC392983	126468	Filtra	21-JUN-2007 20:20	1.0	1.0		1	2	
024	f21s0024	BS	QC392984	126468	Filtra	21-JUN-2007 20:26	1.0	1.0		1	2	
025	f21s0025	BSD	QC392985	126468	Filtra	21-JUN-2007 20:34	1.0	1.0		1	2	
026	f21s0026	X				21-JUN-2007 20:43	1.0				2	
027	f21s0027	MSS	195373-006	126468	Filtra	21-JUN-2007 20:48	5.0	1.0	4	1	2	4:CA=61760.0
028	f21s0028	SER	QC392988	126468	Filtra	21-JUN-2007 20:54	25.0	1.0		1	2	
029	f21s0029	MS	QC392986	126468	Filtra	21-JUN-2007 21:00	5.0	1.0		1	2	4:CA=62700.0
030	f21s0030	MSD	QC392987	126468	Filtra	21-JUN-2007 21:06	5.0	1.0		1	2	4:CA=66700.0
031	f21s0031	PDS	QC392989	126468	Filtra	21-JUN-2007 21:12	5.0	1.0	2	1	12 13 2	6:CA=69820.(

Stds used: 1=S6413 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6223 14=S6420

Analyst: [signature] Date: 6/22/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67248763 Instrument: MET06 Agilent ICP-MS MET06 Begun: 21-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
032	f21s0032	X	RINSE			21-JUN-2007 21:19	1.0					2	
033	f21s0033	X	RINSE			21-JUN-2007 21:25	1.0					2	
034	f21s0034	X	RINSE			21-JUN-2007 21:31	1.0					2	
035	f21s0035	CCV				21-JUN-2007 21:36	1.0	1.0			1	14 2	
036	f21s0036	X	RINSE			21-JUN-2007 21:44	1.0					2	
037	f21s0037	CCB				21-JUN-2007 21:50	1.0	1.0			1	2	
038	f21s0038	X				21-JUN-2007 21:56	1.0					2	
039	f21s0039	X				21-JUN-2007 22:02	1.0					2	
040	f21s0040	SAMPLE	195303-026	126468	Water	21-JUN-2007 22:07	5.0	1.0			1	2	1:NA=23680.0
041	f21s0041	SAMPLE	195373-007	126468	Filtra	21-JUN-2007 22:13	5.0	1.0			1	2	4:CA=64860.0
042	f21s0042	SAMPLE	195373-011	126468	Filtra	21-JUN-2007 22:19	5.0	1.0			1	2	4:CA=67980.0
043	f21s0043	SAMPLE	195373-012	126468	Filtra	21-JUN-2007 22:25	5.0	1.0			1	2	3:NA=62920.0
044	f21s0044	SAMPLE	195391-002	126468	Filtra	21-JUN-2007 22:31	5.0	1.0			1	2	
045	f21s0045	SAMPLE	195391-003	126468	Filtra	21-JUN-2007 22:37	5.0	1.0			1	2	2:NA=49140.0
046	f21s0046	SAMPLE	195391-004	126468	Filtra	21-JUN-2007 22:43	5.0	1.0			1	2	3:NA=72520.0
047	f21s0047	SAMPLE	195391-005	126468	Filtra	21-JUN-2007 22:49	5.0	1.0			1	2	1:NA=24720.0
048	f21s0048	SAMPLE	195391-006	126468	Filtra	21-JUN-2007 22:55	5.0	1.0			1	2	1:NA=24720.0
049	f21s0049	SAMPLE	195391-007	126468	Filtra	21-JUN-2007 23:00	5.0	1.0			1	2	5:CA=93820.0
050	f21s0050	X	RINSE			21-JUN-2007 23:06	1.0					2	
051	f21s0051	X	RINSE			21-JUN-2007 23:12	1.0					2	
052	f21s0052	X	RINSE			21-JUN-2007 23:18	1.0					2	
053	f21s0053	CCV				21-JUN-2007 23:24	1.0	1.0			1	14 2	
054	f21s0054	X	RINSE			21-JUN-2007 23:31	1.0					2	
055	f21s0055	CCB				21-JUN-2007 23:37	1.0	1.0			1	2	
056	f21s0056	X				21-JUN-2007 23:43	1.0					2	
057	f21s0057	X				21-JUN-2007 23:49	1.0					2	
058	f21s0058	SAMPLE	195391-008	126468	Filtra	21-JUN-2007 23:55	5.0	1.0	1		1	2	3:CA=104960
059	f21s0059	SAMPLE	195391-009	126468	Filtra	22-JUN-2007 00:01	5.0	1.0	1		1	2	5:NA=142260
060	f21s0060	SAMPLE	195391-010	126468	Filtra	22-JUN-2007 00:07	5.0	1.0	1		1	2	6:NA=90820.0
061	f21s0061	SAMPLE	195391-011	126468	Filtra	22-JUN-2007 00:13	5.0	1.0	1		1	2	5:NA=333400
062	f21s0062	SAMPLE	195391-012	126468	Filtra	22-JUN-2007 00:19	5.0	1.0	1		1	2	6:CA=110520

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6223 14=S6420

Analyst: RAA Date: 6/22/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 67248763 Instrument: MET06 Agilent ICP-MS MET06 Begun: 21-JUN-2007
Analytical Method: EPA 6020 SOP Version: 6020_rv3

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
063	f21s0063	SAMPLE	195404-002	126468	Filtra	22-JUN-2007 00:24	5.0	1.0			1	2	3:NA=58020.0
064	f21s0064	X	RINSE			22-JUN-2007 00:30	1.0					2	
065	f21s0065	X	RINSE			22-JUN-2007 00:36	1.0					2	
066	f21s0066	SAMPLE	195303-011	126311	Water	22-JUN-2007 00:42	100.0	1.0	1		1	2	
067	f21s0067	SAMPLE	195390-002	126355	Water	22-JUN-2007 00:48	10.0	1.0			1	2	3:NA=1477000
068	f21s0068	X	RINSE			22-JUN-2007 00:54	1.0					2	
069	f21s0069	MSS	195373-006	126468	Filtra	22-JUN-2007 01:00	50.0	1.0	2		1	2	
070	f21s0070	SER	QC392988	126468	Filtra	22-JUN-2007 01:06	250.0	1.0	1		1	2	
071	f21s0071	X	RINSE			22-JUN-2007 01:12	1.0					2	
072	f21s0072	X	RINSE			22-JUN-2007 01:18	1.0					2	
073	f21s0073	X	RINSE			22-JUN-2007 01:24	1.0					2	
074	f21s0074	CCV				22-JUN-2007 01:30	1.0	1.0			1	14 2	
075	f21s0075	X	RINSE			22-JUN-2007 01:36	1.0					2	
076	f21s0076	CCB				22-JUN-2007 01:42	1.0	1.0	2		1	2	
077	f21s0077	X				22-JUN-2007 01:48	1.0					2	
078	f21s0078	X				22-JUN-2007 01:54	1.0					2	
079	f21s0079	MS	QC392986	126468	Filtra	22-JUN-2007 02:00	50.0	1.0	1		1	2	
080	f21s0080	MSD	QC392987	126468	Filtra	22-JUN-2007 02:06	50.0	1.0	1	1	1	2	
081	f21s0081	PDS	QC392989	126468	Filtra	22-JUN-2007 02:12	50.0	1.0			1	12 13 2	
082	f21s0082	SAMPLE	195391-007	126468	Filtra	22-JUN-2007 02:18	50.0	1.0	4		1	2	1:MN=562.400
083	f21s0083	X	RINSE			22-JUN-2007 02:24	1.0					2	
084	f21s0084	X	RINSE			22-JUN-2007 02:30	1.0					2	
085	f21s0085	X	RINSE			22-JUN-2007 02:36	1.0					2	
086	f21s0086	CCV				22-JUN-2007 02:42	1.0	1.0			1	14 2	
087	f21s0087	X	RINSE			22-JUN-2007 02:50	1.0					2	
088	f21s0088	X				22-JUN-2007 02:56	1.0					2	
089	f21s0089	CCB				22-JUN-2007 03:02	1.0	1.0			1	2	
090	f21s0090	X				22-JUN-2007 03:08	1.0					2	
091	f21s0091	ICSA				22-JUN-2007 03:14	1.0	1.0			1	10 2	7:CA=293100
092	f21s0092	ICSAB				22-JUN-2007 03:20	1.0	1.0			1	11 2	13:CA=318600

Stds used: 1=S6411 2=S6035 3=S6414 4=S6416 5=S6417 6=S6418 7=S6412 8=S6413 9=S6419 10=S6421 11=S6422 12=S6222 13=S6223 14=S6420

Analyst: _____ Date: 6/22/07

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	AS	CD	CR	CU	FE	PB	MN	HG	NI	AG	ZN
195303-011	MET06	06/19/07 02:29	5.0		+										
195303-011	MET16	06/20/07 23:39	5.0												
195303-011	MET06	06/21/07 00:36	50.0	+											
195303-011	MET06	06/22/07 00:42	100.0						+		+				
195303-026	MET14	06/20/07 15:29	1.0									+			
195303-026	MET06	06/21/07 22:07	5.0		+	+	+	+		+			+	+	+
QC392332	MET06	06/19/07 00:48	1.0												
QC392332	MET16	06/20/07 21:46	1.0	+	+	+	+	+	+	+	+		+	+	+
QC392333	MET06	06/19/07 00:54	1.0	+	+	+		+	+	+	+		+	+	+
QC392333	MET16	06/20/07 21:52	1.0				+								
QC392334	MET06	06/19/07 00:59	1.0	+	+	+		+	+	+	+		+	+	+
QC392334	MET16	06/20/07 22:01	1.0				+								
QC392335	MET06	06/19/07 01:23	5.0						+						
QC392335	MET16	06/20/07 22:29	5.0	+	+	+	+	+		+	+		+	+	+
QC392336	MET06	06/19/07 01:29	5.0						+						
QC392336	MET16	06/20/07 22:35	5.0	+	+	+	+	+		+	+		+	+	+
QC392337	MET06	06/19/07 01:17	25.0		+						+				
QC392337	MET16	06/20/07 22:23	25.0	+		+	+	+	+	+			+	+	+
QC392338	MET06	06/19/07 01:35	5.0	+	+	+		+	+	+			+	+	+
QC392338	MET16	06/20/07 22:42	5.0				+								
QC392338	MET06	06/21/07 02:31	10.0								+				
QC392983	MET06	06/21/07 14:55	1.0	+	+	+	+	+	+	+	+		+	+	+
QC392983	MET06	06/21/07 20:20	1.0						+		+				
QC392984	MET06	06/21/07 15:01	1.0	+	+	+	+	+		+			+	+	+
QC392984	MET06	06/21/07 20:26	1.0						+		+				
QC392985	MET06	06/21/07 15:07	1.0	+	+	+	+	+	+	+	+		+	+	+
QC392985	MET06	06/21/07 20:34	1.0						+		+				
QC392986	MET06	06/21/07 21:00	5.0	+	+	+	+	+		+			+	+	+
QC392986	MET06	06/22/07 02:00	50.0						+		+				
QC392987	MET06	06/21/07 21:06	5.0	+	+	+	+	+	+	+	+		+	+	+
QC392987	MET06	06/22/07 02:06	50.0						+		+				
QC392988	MET06	06/21/07 20:54	25.0	+	+	+	+	+	+	+			+	+	+
QC392988	MET06	06/22/07 01:06	250.0						+		+				

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	AS	CD	CR	CU	FE	PB	MN	HG	NI	AG	ZN	
QC392989	MET06	06/21/07 21:12	5.0	+	+	+	+	+	+	+			+	+	+	
QC392989	MET06	06/22/07 02:12	50.0						+		+					
QC393049	MET14	06/20/07 15:22	1.0									+				
QC393050	MET14	06/20/07 15:24	1.0									+				
QC393051	MET14	06/20/07 15:27	1.0									+				
QC393052	MET14	06/20/07 15:31	5.0									+				
QC393053	MET14	06/20/07 15:33	1.0									+				
QC393054	MET14	06/20/07 15:36	1.0									+				

: 88592

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
195303-001	MET06	06/19/07 05:12	5.0										+													
195303-001	MET06	06/20/07 22:47	50.0													+							+			
195303-001	MET16	06/21/07 03:36	5.0	+	+	+	+	+	+	+	+	+		+	+		+		+	+	+	+		+	+	+
195303-002	MET06	06/19/07 06:30	5.0										+													
195303-002	MET06	06/21/07 01:00	10.0														+									
195303-002	MET16	06/21/07 05:01	5.0	+		+			+	+	+			+	+	+			+	+			+			+
195303-003	MET06	06/19/07 06:36	5.0										+													
195303-003	MET06	06/20/07 23:18	50.0																				+			
195303-003	MET16	06/21/07 05:06	5.0	+		+			+	+	+			+	+	+	+		+	+						+
195303-004	MET06	06/19/07 06:42	5.0										+													
195303-004	MET06	06/21/07 01:06	10.0														+									
195303-004	MET16	06/21/07 05:12	5.0	+		+			+	+	+			+	+	+			+	+			+			+
195303-005	MET06	06/19/07 06:48	5.0										+													
195303-005	MET06	06/21/07 01:12	10.0														+									
195303-005	MET16	06/21/07 05:18	5.0	+		+			+	+	+			+	+	+			+	+			+			+
195303-006	MET06	06/19/07 06:55	5.0										+													
195303-006	MET06	06/21/07 01:18	10.0														+									
195303-006	MET16	06/21/07 05:24	5.0	+		+			+	+	+			+	+	+			+	+			+			+
195303-008	MET06	06/19/07 07:01	5.0																							
195303-008	MET06	06/21/07 01:24	10.0																							
195303-008	MET16	06/21/07 05:30	5.0	+		+								+			+									
195303-009	MET06	06/19/07 07:07	5.0																							
195303-009	MET06	06/21/07 02:19	10.0																							
195303-009	MET16	06/21/07 05:36	5.0	+		+								+												
195303-009	MET06	06/21/07 15:24	10.0														+									
195303-010	MET06	06/19/07 07:13	5.0																							
195303-010	MET06	06/20/07 23:24	50.0																							
195303-010	MET16	06/21/07 05:41	5.0	+		+								+												
195303-010	MET06	06/21/07 15:30	50.0														+									
195303-011	MET06	06/19/07 07:19	5.0																							
195303-011	MET06	06/20/07 23:30	50.0																							
195303-011	MET16	06/21/07 05:47	5.0	+		+								+			+									
195303-012	MET06	06/19/07 07:25	5.0										+													
195303-012	MET06	06/21/07 00:25	50.0														+									
195303-012	MET16	06/21/07 06:06	5.0	+		+			+	+	+			+	+	+			+	+			+			+
195303-013	MET06	06/19/07 08:20	5.0							+			+													
195303-013	MET06	06/21/07 00:30	50.0														+									

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALS	BA	BE	CDA	CRO	CU	FEB	PBG	MN	HG	NI	K	SE	AG	NAL	TL	V	ZN
195303-013	MET16	06/21/07 07:02	5.0	+		+		+		+	+	+			+	+			+			+
195303-015	MET06	06/19/07 08:39	5.0								+											
195303-015	MET16	06/21/07 07:08	5.0	+		+			+	+	+			+	+	+	+					+
195303-016	MET06	06/19/07 08:45	5.0								+											
195303-016	MET16	06/21/07 07:13	5.0	+		+			+	+	+			+	+	+	+					+
195303-017	MET06	06/19/07 08:51	5.0	+		+			+	+	+		+		+	+	+					+
195303-017	MET16	06/21/07 07:19	5.0										+									
195303-018	MET06	06/19/07 01:11	5.0							+			+	+		+	+			+			+			
195303-018	MET16	06/20/07 22:18	5.0	+	+	+	+	+	+		+	+			+				+		+	+		+	+	+
195303-018	MET06	06/21/07 02:25	10.0																							
195303-019	MET06	06/19/07 02:35	5.0								+															
195303-019	MET16	06/20/07 23:45	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-020	MET06	06/19/07 02:41	5.0								+															
195303-020	MET16	06/20/07 23:51	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-020	MET06	06/21/07 00:42	50.0												+					+						
195303-021	MET06	06/19/07 02:47	5.0								+															
195303-021	MET16	06/20/07 23:57	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-021	MET06	06/21/07 00:48	50.0												+											
195303-022	MET06	06/19/07 02:53	5.0																							
195303-022	MET16	06/21/07 00:03	5.0	+		+			+	+	+		+	+	+	+	+			+			+			+
195303-024	MET06	06/19/07 02:59	5.0								+															
195303-024	MET16	06/21/07 00:08	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-025	MET06	06/19/07 03:05	5.0								+															
195303-025	MET16	06/21/07 00:14	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-027	MET06	06/19/07 03:11	5.0								+															
195303-027	MET16	06/21/07 00:20	5.0	+		+			+	+	+			+	+	+	+					+			+
195303-027	MET06	06/21/07 02:39	10.0																	+						
195303-030	MET14	06/18/07 14:22	1.0											+												
195303-030	MET06	06/19/07 03:17	5.0								+															
195303-030	MET16	06/21/07 00:26	5.0	+	+	+	+	+	+	+	+			+	+	+	+			+	+	+	+	+	+	+
QC392325	MET06	06/19/07 04:48	1.0																							
QC392325	MET16	06/21/07 03:05	1.0	+	+	+	+	+	+	+	+			+	+	+	+			+	+	+	+	+	+	+
QC392325	MET06	06/21/07 14:49	1.0								+															
QC392326	MET06	06/19/07 04:54	1.0																							

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
QC392326	MET16	06/21/07 03:11	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392327	MET06	06/19/07 05:00	1.0																							
QC392327	MET16	06/21/07 03:20	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392328	MET06	06/19/07 05:24	5.0										+													
QC392328	MET06	06/20/07 22:59	50.0																							
QC392328	MET16	06/21/07 03:48	5.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC392329	MET06	06/19/07 05:30	5.0										+													
QC392329	MET06	06/20/07 23:05	50.0																							
QC392329	MET16	06/21/07 03:54	5.0	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+	+	+	+	+	+
QC392330	MET06	06/19/07 05:18	25.0										+													
QC392330	MET06	06/20/07 22:53	250.0													+							+			
QC392330	MET16	06/21/07 03:42	25.0	+	+	+	+	+	+	+	+	+		+	+		+		+	+	+	+		+	+	+
QC392331	MET06	06/19/07 05:36	5.0	+	+	+	+	+	+	+		+	+		+		+		+	+		+				+
QC392331	MET06	06/20/07 23:11	50.0													+							+			
QC392331	MET16	06/21/07 04:01	5.0								+			+							+			+	+	
QC392332	MET06	06/19/07 00:48	1.0																							
QC392332	MET16	06/20/07 21:46	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC392333	MET06	06/19/07 00:54	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+		+	+			+
QC392333	MET16	06/20/07 21:52	1.0								+										+			+	+	
QC392334	MET06	06/19/07 00:59	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+		+	+		+	+			+
QC392334	MET16	06/20/07 22:01	1.0								+										+			+	+	
QC392335	MET06	06/19/07 01:23	5.0							+				+												
QC392335	MET16	06/20/07 22:29	5.0	+	+	+	+	+	+		+	+	+		+	+	+		+	+	+	+	+	+	+	+
QC392336	MET06	06/19/07 01:29	5.0							+				+												
QC392336	MET16	06/20/07 22:35	5.0	+	+	+	+	+	+		+	+	+		+	+	+		+	+	+	+	+	+	+	+
QC392337	MET06	06/19/07 01:17	25.0			+				+						+	+			+			+			
QC392337	MET16	06/20/07 22:23	25.0	+	+		+	+	+		+	+	+	+	+				+		+	+		+	+	+
QC392338	MET06	06/19/07 01:35	5.0	+		+	+	+	+	+		+	+	+	+	+			+	+		+				+
QC392338	MET16	06/20/07 22:42	5.0		+						+										+			+	+	
QC392338	MET06	06/21/07 02:31	10.0														+						+			
QC392634	MET14	06/18/07 14:06	1.0															+								
QC392635	MET14	06/18/07 14:08	1.0															+								
QC392636	MET14	06/18/07 14:10	1.0															+								

Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 195303 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	ALS	BAS	BEA	CDA	CAR	COU	FEB	PBG	MN	HGI	NI	KE	SEG	ANA	TL	VN	ZN
QC392637	MET14	06/18/07 14:14	5.0										+							
QC392638	MET14	06/18/07 14:17	1.0										+							
QC392639	MET14	06/18/07 14:19	1.0										+							
QC392641	MET14	06/18/07 15:49	1.0										+							

Curtis & Tompkins Laboratories **Sample Preparation Summary** **14-JUN-2007 12:54**

Batch Number : 126310
Date Extracted: 14-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195303-001			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
195303-002			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-003			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-004			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-005			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-006			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-008			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					AL, AS, FE, MN		
195303-009			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					AL, AS, FE, MN		
195303-010			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					AL, AS, FE, MN		
195303-011			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					AL, AS, FE, MN		
195303-012			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-013			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-015			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-016			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-017			Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
QC392325	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC392326	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392327	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392328	MS	of 195303-001		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392329	MSD	of 195303-001		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392330	SER	of 195303-001		Filtrate	50	mL	50	1.000000	1					ICAP		
QC392331	PDS	of 195303-001		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: 6/14/07 Reviewed By: Date: 6/16/07

Relinquished By: 6/14/07 Received By: Date: 6/14/07

Water Digestion for ICP Curtis & Tompkins, Ltd.

LIMS Batch #: 126310
Date Digested: 6/14/07
Digested by: KLA

Digestion Method
☐ EPA 3010a for ICP
☐ EPA 200.7
☒ 200.8

BK 2503
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
B1L	50	50	N	
B3				
B3D				
MS-01A				FILTRATE F/F
MSD-01				
195303-01				
-02H				
-03				
-04				
-05				
-06				
-08				
-09				
-10				
-11I				
-12H				
-13G				
-15H				
-16				
-17				

	Reagent ID or LIMS #	Initials / Date
digestion temperature (90-95 degrees C)	95	KLA 6/14
.5 mL of spike solution was added to all spikes	562227	
	562223	
☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples	R020213 BALLAR	
1:1 HCl added to all samples	C49029	
☐ filtered thru' Whatman # 541		
Relinquished to ICP group		

Prep Chemist Signature / Date 6/14/07

Reviewer Signature / Date 6/14/07

Curtis & Tompkins Laboratories Sample Preparation Summary 14-JUN-2007 12:58

Batch Number : 126311
Date Extracted: 14-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195303-011		Treadwell & Rollo	Water	50	mL	50	1.000000	1					AL, AS, FE, MN		
195303-018		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-019		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-020		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-021		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-022		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-024		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-025		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-027		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
195303-030		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC392332	BLANK		Filtrate	50	mL	50	1.000000	1					ICAP		
QC392333	BS		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392334	BSD		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392335	MS	of 195303-018	Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392336	MSD	of 195303-018	Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392337	SER	of 195303-018	Filtrate	50	mL	50	1.000000	1					ICAP		
QC392338	PDS	of 195303-018	Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [signature] 6/14/07 Reviewed By: [signature] Date: 6/18/07

Relinquished By: [signature] 6/14/07 Received By: [signature] Date: 6/14/07

1. **Water Digestion for ICP** Curtis & Tompkins, Ltd.

LIMS Batch #: 126311
Date Digested: 6/14/07
Digested by: [illegible]

Digestion Method
☐ EPA 3010a for ICP
☐ EPA 200.7
☒ 200.8

BK 2503
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50	N	
BS				
BSD				
MS -18H				FIELD FILTERED
MSD 18				
195303-18				
- 19				
- 20				
- 21				
- 22				
- 24				
- 25				
- 27				
- 30K				
- 11 H				TOTALS

5 digestion temperature (90-95 degrees C)
5 mL of spike solution was added to all spikes

☐ 1:1 HNO3, ☐ concentrated HNO3, added to all samples
1:1 HCl added to all samples
☐ filtered thru' Whatman # 541
Relinquished to ICP group

Reagent ID or LIMS #	Initials / Date
95	[illegible] 6/14
86222	
56223	
R07023 BATCH	
C49025	

Prep Chemist Signature / Date

Reviewer Signature / Date 6/14/07

Curtis & Tompkins Laboratories **Sample Preparation Summary** **20-JUN-2007 09:28**

Batch Number : 126468
Date Extracted: 20-JUN-2007
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S6222
Spike #2 ID : S6223
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195303-026			Treadwell & Rollo	Water	50	mL	50	1.000000	1					AG, AS, CD, (more)		
195373-006			Arcadis G&M	Filtrate	50	mL	50	1.000000	1					T26/ICP		
195373-007			Arcadis G&M	Filtrate	50	mL	50	1.000000	1					T26/ICP		
195373-011			Arcadis G&M	Filtrate	50	mL	50	1.000000	1					T26/ICP		
195373-012			Arcadis G&M	Filtrate	50	mL	50	1.000000	1					T26/ICP		
195391-002			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-003			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-004			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-005			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-006			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-007			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-008			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-009			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-010			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-011			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195391-012			MWH	Filtrate	50	mL	50	1.000000	1					AL, T26/ICP		
195404-002			Arcadis G&M	Filtrate	50	mL	50	1.000000	1					T26/ICP		
QC392983	BLANK			Filtrate	50	mL	50	1.000000	1					ICAP		
QC392984	BS			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392985	BSD			Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392986	MS	of 195373-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392987	MSD	of 195373-006		Filtrate	50	mL	50	1.000000	1		.5	.5		ICAP		
QC392988	SER	of 195373-006		Filtrate	50	mL	50	1.000000	1					ICAP		
QC392989	PDS	of 195373-006		Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist: [illegible] 6/20/07 Reviewed By: [illegible] Date: 6/20/07

Relinquished By: [illegible] 6/20/07 Received By: [illegible] Date: 6/20/07

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 126HLS
Date Digested: 6/20/07
Digested by: Kell

Digestion Method
☑ EPA 200.8 for ICP-MS
☐ _____

BK 2479
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK	50	50		
B3				
B3D				
MS -06H				FIELD FILTERED
MSD-06				
195373-06				
-07				
-11				
-12				
464-026				
391-02				
-03				
-04				
-05				
-06				
-07				
-08				
-09				
-10				
-11				
-12				
303-24				TOTAL

	Reagent ID or LIMS #	Initials / Date
95 digestion temperature (90-95 degrees C)	95	Kell 6/20/07
.5 mL of spike solution was added to all spikes	56223	
	56223	
concentrated HCl	KD2023 BAKER	
concentrated HNO3	CH2023	
☐ filtered thru' Whatman # 541	N/A	
Relinquished to ICP group		

Prep Chemist Signature / Date

Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847244147001
Units : ug/L

Date : 18-JUN-2007 13:39
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	126388	847244147013	STD02REP1	18-JUN-2007 13:41	S6498 (500X)
L2	126388	847244147014	STD03REP1	18-JUN-2007 13:43	S6498 (200X)
L3	126388	847244147015	STD04REP1	18-JUN-2007 13:45	S6498 (50X)
L4	126388	847244147016	STD05REP1	18-JUN-2007 13:47	S6498 (20X)
L5	126388	847244147017	STD06REP1	18-JUN-2007 13:50	S6498 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	1755.0	1732.0	1670.5	1775.8	1739.7	LINR	-0.0174	5.74E-4		1734.6	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-8	0.500	-4	2.000	-5	5.000	2	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

WinHg Database 1.5

File Utility Help

RN⇩ RN⇧ ?

Protocol hgppb | BUSY | Dataset/Proto 061807 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 5.74483e-4

C -1.73970e-2

Rho .999850

Type Linear

☑ Calibrated

☑ Accepted

Accept

µ Abs. 17397

Accepted

New

Include S3 Rep 1☑ 2☐ 3☐ 4☐ 5☐

18-Jun-07 14:00 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.073	.073	158	1	158		
02	.20000	.184	-.016	352	0%	351		
03	.50000	.480	-.020	867	0%	866		
04	2.0000	1.90	-.098	3341	0%	3341		
05	5.0000	5.08	.083	8879	0%	8879		
06	10.000	9.98	-.023	17397	0%	17397		

Ready NUM SCRL

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 5 Rep: 1				Seq: 10		13:29:02 18 Jun 07	HG	
Hg	5.00	ppb	8967					
		Bkgd 1	16408301					
*** Standard: 6 Rep: 1				Seq: 11		13:31:27 18 Jun 07	HG	
Hg	10.0	ppb	17624					
		Bkgd 1	16401621					
*** Standard: 1 Rep: 1				Seq: 12		13:39:21 18 Jun 07	HG	
Hg	.000	ppb	158					
		Bkgd 1	16385602					
*** Standard: 2 Rep: 1				Seq: 13		13:41:25 18 Jun 07	HG	
Hg	.200	ppb	351					
		Bkgd 1	16383822					
*** Standard: 3 Rep: 1				Seq: 14		13:43:33 18 Jun 07	HG	
Hg	.500	ppb	866					
		Bkgd 1	16382362					
*** Standard: 4 Rep: 1				Seq: 15		13:45:39 18 Jun 07	HG	
Hg	2.00	ppb	3341					
		Bkgd 1	16383306					
*** Standard: 5 Rep: 1				Seq: 16		13:47:44 18 Jun 07	HG	
Hg	5.00	ppb	8879					
		Bkgd 1	16379677					
*** Standard: 6 Rep: 1				Seq: 17		13:50:02 18 Jun 07	HG	
Hg	10.0	ppb	17397					
		Bkgd 1	16374510					
*** Check Standard: 2			Ck2S6500	Seq: 18		14:02:05 18 Jun 07	HG	
Line	Flag		Intensities					
Hg			8676					
		Bkgd 1	16380716					

6/18/07

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847244147 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 18-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	126388	X					18-JUN-2007 13:07	1.0										
002	126388	X					18-JUN-2007 13:09	1.0										
003	126388	X					18-JUN-2007 13:11	1.0										
004	126388	X					18-JUN-2007 13:13	1.0										
005	126388	X					18-JUN-2007 13:16	1.0										
006	126388	X					18-JUN-2007 13:20	1.0										
007	126388	X					18-JUN-2007 13:22	1.0										
008	126388	X					18-JUN-2007 13:24	1.0										
009	126388	X					18-JUN-2007 13:26	1.0										
010	126388	X					18-JUN-2007 13:29	1.0										
011	126388	X					18-JUN-2007 13:31	1.0										
012	126388	ICALBLK	STD01REP1				18-JUN-2007 13:39	1.0	1.0									
013	126388	ICAL	STD02REP1				18-JUN-2007 13:41	1.0	1.0									
014	126388	ICAL	STD03REP1				18-JUN-2007 13:43	1.0	1.0									
015	126388	ICAL	STD04REP1				18-JUN-2007 13:45	1.0	1.0									
016	126388	ICAL	STD05REP1				18-JUN-2007 13:47	1.0	1.0									
017	126388	ICAL	STD06REP1				18-JUN-2007 13:50	1.0	1.0									
018	126388	ICV					18-JUN-2007 14:02	1.0	1.0	2	5.000	847244147001	4.970		ug/L	99		
019	126388	ICB					18-JUN-2007 14:04	1.0	1.0			847244147001	ND	0.20	ug/L			
020	126388	BLANK	QC392634		126388	Water	18-JUN-2007 14:06	1.0	1.0			847244147001	ND	0.20	ug/L			u
021	126388	BS	QC392635		126388	Water	18-JUN-2007 14:08	1.0	1.0		5.000	847244147001	5.040	0.20	ug/L	101		u
022	126388	BSD	QC392636		126388	Water	18-JUN-2007 14:10	1.0	1.0		5.000	847244147001	4.840	0.20	ug/L	97	4	u
023	126388	MSS	195374-002		126388	WET Le	18-JUN-2007 14:12	1.0	5.0			847244147001	2.8	2.0	ug/L			u
024	126388	SER	QC392637	195374-002	126388	WET Le	18-JUN-2007 14:14	5.0	5.0			847244147001	4.9 J	5.0	ug/L		--	u
025	126388	MS	QC392638	195374-002	126388	WET Le	18-JUN-2007 14:17	1.0	5.0		25.00	847244147001	23.80	1.0	ug/L	84		u
026	126388	MSD	QC392639	195374-002	126388	WET Le	18-JUN-2007 14:19	1.0	5.0		25.00	847244147001	26.60	1.0	ug/L	95	11	u
027	126388	SAMPLE	195303-030		126388	Filtra	18-JUN-2007 14:22	1.0	1.0			847244147001	ND	0.20	ug/L			u
028	126388	SAMPLE	195369-001		126388	Filtra	18-JUN-2007 14:24	1.0	1.0			847244147001	ND	0.20	ug/L			u
029	126388	SAMPLE	195373-006		126388	Filtra	18-JUN-2007 14:26	1.0	1.0			847244147001	ND	0.20	ug/L			u
030	126388	CCV					18-JUN-2007 14:28	1.0	1.0	3	2.500	847244147001	2.590		ug/L	104		
031	126388	CCB					18-JUN-2007 14:30	1.0	1.0			847244147001	[0.04400]	0.20	ug/L			!ib
032	126388	SAMPLE	195373-007		126388	Filtra	18-JUN-2007 14:33	1.0	1.0			847244147001	ND	0.20	ug/L			u
033	126388	SAMPLE	195373-011		126388	Filtra	18-JUN-2007 14:35	1.0	1.0			847244147001	ND	0.20	ug/L			u
034	126388	SAMPLE	195373-012		126388	Filtra	18-JUN-2007 14:37	1.0	1.0			847244147001	ND	0.20	ug/L			u
035	126388	SAMPLE	195374-003		126388	WET Le	18-JUN-2007 14:40	1.0	5.0			847244147001	2.3	2.0	ug/L			u
036	126388	SAMPLE	195382-021		126388	Filtra	18-JUN-2007 14:42	1.0	1.0			847244147001	ND	0.20	ug/L			u
037	126388	SAMPLE	195382-022		126388	Filtra	18-JUN-2007 14:44	1.0	1.0			847244147001	ND	0.20	ug/L			u
038	126388	SAMPLE	195382-023		126388	Filtra	18-JUN-2007 14:46	1.0	1.0			847244147001	ND	0.20	ug/L			u
039	126388	SAMPLE	195382-024		126388	Filtra	18-JUN-2007 14:48	1.0	1.0			847244147001	ND	0.20	ug/L			u
040	126388	SAMPLE	195382-025		126388	Filtra	18-JUN-2007 14:50	1.0	1.0			847244147001	9.7	0.20	ug/L			u
041	126388	SAMPLE	195390-001		126388	Water	18-JUN-2007 14:53	1.0	1.0			847244147001	ND	0.20	ug/L			u
042	126388	CCV					18-JUN-2007 14:55	1.0	1.0	4	5.000	847244147001	5.280		ug/L	106		
043	126388	CCB					18-JUN-2007 14:57	1.0	1.0			847244147001	[0.04900]	0.20	ug/L			!ib

Stds used: 1=S6498 2=S6500 3=S6501 4=S6502
Flags used: !=warning ib=instrument blank u=use

Analyst: _____ Date: 6/18/07

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
Calnum : 847247136001
Units : ug/L

Date : 20-JUN-2007 14:56
X Axis : R

Reviewer : ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	126486	847247136002	STD02REP1	20-JUN-2007 14:58	S6515 (500X)
L2	126486	847247136003	STD03REP1	20-JUN-2007 15:00	S6515 (200X)
L3	126486	847247136004	STD04REP1	20-JUN-2007 15:02	S6515 (50X)
L4	126486	847247136005	STD05REP1	20-JUN-2007 15:04	S6515 (20X)
L5	126486	847247136006	STD06REP1	20-JUN-2007 15:07	S6515 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Mercury	1210.0	1834.0	1737.5	1648.2	1626.4	LINR	-0.0343	6.15E-4		1611.2	1.000	.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Mercury	0.200	-43	0.500	6	2.000	5	5.000	1	10.00	0

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

847247136001

WinHg Database 1.5

File Utility Help

Protocol: hgppb

Dataset/Proto: 062007b /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 6.14639e-4

C 3.42751e-2

Rho .999855

Type Linear

☑ Calibrated

☑ Accepted

Accept

µ Abs 16264

Accepted

New

Include S3 Rep 1☑ 2☐ 3☐ 4☐ 5☐

20-Jun-07 15:13 Conc. 10.0

S	Conc.	Calc	Dev	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.039	-.039	-7	1	-7		
02	.20000	.114	-.086	243	0%	242		
03	.50000	.529	.029	917	0%	917		
04	2.0000	2.10	.102	3475	0%	3475		
05	5.0000	5.03	.031	8242	0%	8241		
06	10.000	9.96	-.038	16265	0%	16264		

Ready NUM SCRL

```
Line    Conc.  Units      SD/RSD        1        2        3        4        5
-----------------------------------------------------------------------------------

*** Standard: 1 Rep: 1                Seq:  1        14:56:24 20 Jun 07    HG

Hg     .000    ppb        -7
               Bkgd 1     16393753                                                =
                                                                                   =
*** Standard: 2 Rep: 1                Seq:  2        14:58:40 20 Jun 07    HG

Hg     .200    ppb        242
               Bkgd 1     16398494                                                =
                                                                                   =
*** Standard: 3 Rep: 1                Seq:  3        15:00:43 20 Jun 07    HG

Hg     .500    ppb        917
               Bkgd 1     16403386                                                =
                                                                                   =
*** Standard: 4 Rep: 1                Seq:  4        15:02:49 20 Jun 07    HG

Hg    2.00     ppb        3475
               Bkgd 1     16391823                                                =
                                                                                   =
*** Standard: 5 Rep: 1                Seq:  5        15:04:56 20 Jun 07    HG

Hg    5.00     ppb        8241
               Bkgd 1     16381699                                                =
                                                                                   =
*** Standard: 6 Rep: 1                Seq:  6        15:07:14 20 Jun 07    HG

Hg    10.0     ppb        16264
               Bkgd 1     16380369                                                =
                                                                                   =
*** Check Standard: 2     Ck2S6516    Seq:  8        15:18:37 20 Jun 07    HG
Line  Flag                Intensities
Hg                        8542
               Bkgd 1     16352729                                                =
                                                                                   =
*** Check Standard: 1     Ck1ICB      Seq:  9        15:20:42 20 Jun 07    HG
Line  Flag                Intensities
Hg                        -46
               Bkgd 1     16348316                                                =
                                                                                   =
*** Sample ID: qc393049    126486      Seq:  10       15:22:50 20 Jun 07    HG
                             126486,1
Hg    -.071    ppb        -59
               Bkgd 1     16358632                                                =
                                                                                   =
===================================================================================
```

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 847247136 Instrument: MET14 HydraAA HG Analyzer MET14 Begun: 20-JUN-2007
Analytical Method: EPA 7470A SOP Version: HG_water_rv7
Analyte: Mercury

#	Filename	Type	Samplenum	Subj Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	126486	ICALBLK	STD01REP1		126485		20-JUN-2007 14:56	1.0	1.0									
002	126486	ICAL	STD02REP1		126485		20-JUN-2007 14:58	1.0	1.0									
003	126486	ICAL	STD03REP1		126485		20-JUN-2007 15:00	1.0	1.0									
004	126486	ICAL	STD04REP1		126485		20-JUN-2007 15:02	1.0	1.0									
005	126486	ICAL	STD05REP1		126485		20-JUN-2007 15:04	1.0	1.0									
006	126486	ICAL	STD06REP1		126485		20-JUN-2007 15:07	1.0	1.0									
007	126486	ICV					20-JUN-2007 15:18	1.0	1.0	2	5.000	847247136001	5.220		ug/L	104		
008	126486	ICB					20-JUN-2007 15:20	1.0	1.0			847247136001	ND	0.20	ug/L			
009	126486	BLANK	QC393049		126485	Water	20-JUN-2007 15:22	1.0	1.0			847247136001	ND	0.20	ug/L			u
010	126486	BS	QC393050		126485	Water	20-JUN-2007 15:24	1.0	1.0		5.000	847247136001	5.600	0.20	ug/L	112		u
011	126486	BSD	QC393051		126485	Water	20-JUN-2007 15:27	1.0	1.0		5.000	847247136001	4.950	0.20	ug/L	99	12	u
012	126486	MSS	195303-026		126485	Water	20-JUN-2007 15:29	1.0	1.0			847247136001	ND	0.20	ug/L			u
013	126486	SER	QC393052	195303-026	126485	Water	20-JUN-2007 15:31	5.0	5.0			847247136001	ND	5.0	ug/L		--	u
014	126486	MS	QC393053	195303-026	126485	Water	20-JUN-2007 15:33	1.0	1.0		5.000	847247136001	5.030	0.20	ug/L	98		u
015	126486	MSD	QC393054	195303-026	126485	Water	20-JUN-2007 15:36	1.0	1.0		5.000	847247136001	5.090	0.20	ug/L	99	1	u
016	126486	SAMPLE	195337-001		126485	Filtra	20-JUN-2007 15:38	1.0	1.0			847247136001	ND	0.20	ug/L			
017	126486	SAMPLE	195337-002		126485	Filtra	20-JUN-2007 15:40	1.0	1.0			847247136001	0.031 J	0.20	ug/L			
018	126486	SAMPLE	195337-003		126485	Filtra	20-JUN-2007 15:42	1.0	1.0			847247136001	0.064 J	0.20	ug/L			
019	126486	CCV					20-JUN-2007 15:45	1.0	1.0	3	2.500	847247136001	2.730		ug/L	109		
020	126486	CCB					20-JUN-2007 15:47	1.0	1.0			847247136001	[0.04000]	0.20	ug/L			!ib
021	126486	SAMPLE	195480-001		126485	Filtra	20-JUN-2007 15:50	1.0	1.0			847247136001	ND	0.20	ug/L			u
022	126486	SAMPLE	195480-002		126485	Filtra	20-JUN-2007 15:52	1.0	1.0			847247136001	ND	0.20	ug/L			u
023	126486	SAMPLE	195480-003		126485	Filtra	20-JUN-2007 15:55	1.0	1.0			847247136001	ND	0.20	ug/L			u
024	126486	SAMPLE	195480-004		126485	Filtra	20-JUN-2007 15:57	1.0	1.0			847247136001	ND	0.20	ug/L			u
025	126486	SAMPLE	195480-005		126485	Filtra	20-JUN-2007 15:59	1.0	1.0			847247136001	ND	0.20	ug/L			u
026	126486	SAMPLE	195480-006		126485	Filtra	20-JUN-2007 16:02	1.0	1.0			847247136001	ND	0.20	ug/L			u
027	126486	SAMPLE	195488-002		126485	Filtra	20-JUN-2007 16:04	1.0	1.0			847247136001	0.090 J	0.20	ug/L			u
028	126486	SAMPLE	195488-003		126485	Filtra	20-JUN-2007 16:06	1.0	1.0			847247136001	ND	0.20	ug/L			u
029	126486	SAMPLE	195488-004		126485	Filtra	20-JUN-2007 16:08	1.0	1.0			847247136001	0.081 J	0.20	ug/L			u
030	126486	SAMPLE	195488-005		126485	Filtra	20-JUN-2007 16:11	1.0	1.0			847247136001	0.10 J	0.20	ug/L			u
031	126486	CCV					20-JUN-2007 16:13	1.0	1.0	4	5.000	847247136001	5.270		ug/L	105		
032	126486	CCB					20-JUN-2007 16:16	1.0	1.0			847247136001	[0.003000]	0.20	ug/L			

Stds used: 1=S6515 2=S6516 3=S6517 4=S6518
Flags used: !=warning ib=instrument blank u=use

Analyst: _____ Date: 6/20/07

Curtis & Tompkins Laboratories Sample Preparation Summary 18-JUN-2007 10:11

Batch Number : 126388
Date Extracted: 18-JUN-2007
Extracted by : Michael Wales
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S6498
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH D.F.	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195303-030		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
195369-001		Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1				TAL/HG		
195373-006		Arcadis G&M	Filtrate	50	mL	50	1.000000	1				T26/HG		
195373-007		Arcadis G&M	Filtrate	50	mL	50	1.000000	1				T26/HG		
195373-011		Arcadis G&M	Filtrate	50	mL	50	1.000000	1				T26/HG		
195373-012		Arcadis G&M	Filtrate	50	mL	50	1.000000	1				T26/HG		
195374-002		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1				HG		
195374-003		Blasland, Bouck & Lee	WET Leacha	10	mL	50	5.000000	1				HG		
195382-021		CH2M Hill	Filtrate	50	mL	50	1.000000	1				T26/HG		
195382-022		CH2M Hill	Filtrate	50	mL	50	1.000000	1				T26/HG		
195382-023		CH2M Hill	Filtrate	50	mL	50	1.000000	1				T26/HG		
195382-024		CH2M Hill	Filtrate	50	mL	50	1.000000	1				T26/HG		
195382-025		CH2M Hill	Filtrate	50	mL	50	1.000000	1				T26/HG		
195390-001		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-002		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-003		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-004		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-005		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-006		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
195390-007		Montezuma Wetlands LLC	Water	50	mL	50	1.000000	1				ZUMA/HG		
QC392634	BLANK		Water	50	mL	50	1.000000	1				HG		
QC392635	BS		Water	50	mL	50	1.000000	1	2.5			HG		
QC392636	BSD		Water	50	mL	50	1.000000	1	2.5			HG		
QC392637	SER of 195374-002		WET Leacha	10	mL	50	5.000000	1				HG		
QC392638	MS of 195374-002		WET Leacha	10	mL	50	5.000000	1	2.5			HG		
QC392639	MSD of 195374-002		WET Leacha	10	mL	50	5.000000	1	2.5			HG		
QC392640	PDS of 195374-002		WET Leacha	10	mL	50	5.000000	1				HG		
QC392641	PREPBLK		WET Leacha		mL		0.000000	1				HG		

Prep Chemist: 6/18/07 Reviewed By: Date: 6/18/07

Relinquished By: 6/18/07 Received By: Date: 6/18/07

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 126388
Date Digested: 06/18/07
Digested by: MDW/JXM

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐ _____

BK 2512
Page 28

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
195303-030	50	50	N	Filtrate (F.F.)
195369-001				
195373-006				
007				
011				
012				
195374-002 MSS	10			wet leachate aliquot → 195303-006
-003	10			wet leachate ↓ ↓ -007
195382-021	50			Filtrate (F.F.)
022				
023				
024				
025				
195390-001				H_2O
002				
003				
004				
005				
006				
007				
MB				H_2O
BS				H_2O
BSD				H_2O
MS 195374-002	10			wet leachate
MSD	10			wet leachate
prep BLK	10	50		wet leachate

2.5 mL of spike solution was added to all spikes

	Reagent ID/ LIMS# / Time	Initials / Date
	S6498	6/18/07
ICAL Source WS#	S6498	
ICV / CCV WS#	S6500/01/02/03	
Digestion of Samples & Standards: Time ON / Temperature ON	10:00 / 95°C	
Time OFF/ Temperature OFF	12:00 / 95°C	
concentrated H_2SO_4	E08036	
concentrated HNO_3	E11023	
5% $KMnO_4$	K061307	
5% $K_2S_2O_8$	K060607	
NaCl.hydroxylamine hydrochloride	Hy061107	
Stannous Chloride	$SnCl_2$ 061307	
☒ filtered thru' 0.45 um syringe filter	RBAN47872	

6/18/07
Prep Chemist / Date

Continued from page _____
Continued on page _____

6/16/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Preparation Summary 20-JUN-2007 12:43

Batch Number : 126485
Date Extracted: 20-JUN-2007
Extracted by : Jon Marshall
Prep Method : METHOD

Analysis : T26/HG
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S6514
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type		Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
195303-026			Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		MSS
195337-001			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195337-002			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195337-003			Innovative Technical Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195480-001			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195480-002			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195480-003			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195480-004			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195480-005			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195480-006			Baseline Environmental	Filtrate	50	mL	50	1.000000	1					T26/HG		
195488-002			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195488-003			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195488-004			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
195488-005			Weston Solutions	Filtrate	50	mL	50	1.000000	1					TAL/HG		
QC393049	BLANK			Water	50	mL	50	1.000000	1					HG		
QC393050	BS			Water	50	mL	50	1.000000	1		2.5			HG		
QC393051	BSD			Water	50	mL	50	1.000000	1		2.5			HG		
QC393052	SER	of 195303-026		Water	50	mL	50	5.000000	5					HG		
QC393053	MS	of 195303-026		Water	50	mL	50	1.000000	1		2.5			HG		
QC393054	MSD	of 195303-026		Water	50	mL	50	1.000000	1		2.5			HG		

Prep Chemist: _____ Reviewed By: _____ Date: 6/20/07

Relinquished By: _____ Received By: _____ Date: 6/20/07

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 126485

Date Digested: 6/20/07

Digested by: JXM

Digestion Method

☒ EPA 7470A/ EPA 245.1

☐ _____

BK 2512

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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
195303-026B	50	50	N	MBS
195337-001 A				filtrate
02				
03				
195480-001 D				filtrate (L.F.)
02 G				
03				
04 D				
05 G				
06				
195488-002 G				filtrate (F.F.)
03				
04				
05				
MB QC 393049				
BS 50				
BSD 51				
MS 53				
MSD 54				

JXM 6/20/07

	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	S6514	JXM 6/20/07
ICAL Source WS#		
ICV / CCV WS#	S6516/17/18/19	
Digestion of Samples & Standards: Time ON / Temperature ON	11:00 / 95°C	
Time OFF/ Temperature OFF	1:00 / 95°C	
concentrated H_2SO_4	JTB E080036	
concentrated HNO_3	JTB E110223	
5% $KMnO_4$	K 061307	
5% $K_2S_2O_8$	K_2 060607	
NaCl.hydroxylamine hydrochloride	Hy 061107	
Stannous Chloride	$SnCl_2$ 062007	
☐ filtered thru' 0.45 um syringe filter	N/A	

6/20/07

Prep Chemist / Date

Continued from page _____

Continued on page _____

6/20/07

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 06/28/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05	MET16 A	MET16 E	MET16 H
Aluminum	ug/L	0.80			9.6	0.74		
Antimony	ug/L	0.012			0.062	0.014		
Arsenic	ug/L		0.025		0.34		0.022	
Barium	ug/L	0.017			0.13	0.014		
Beryllium	ug/L	0.014			0.12	0.011		
Cadmium	ug/L	0.014			0.17	0.0082		
Calcium	ug/L	1.2			15	1.7		
Chromium	ug/L		0.020		0.18		0.022	
Cobalt	ug/L		0.0065		0.069		0.0066	
Copper	ug/L		0.077		0.24		0.036	
Iron	ug/L			0.47	16			2.3
Lead	ug/L	0.010			0.088	0.015		
Magnesium	ug/L	0.72			11	2.1		
Manganese	ug/L		0.029		0.050		0.020	
Molybdenum	ug/L	0.018			0.24	0.035		
Nickel	ug/L		0.024		0.21		0.033	
Potassium	ug/L	3.8			8.7	3.3		
Selenium	ug/L			0.031	0.43			0.015
Silver	ug/L	0.0066			0.068	0.0055		
Sodium	ug/L		2.6		14		4.0	
Thallium	ug/L	0.0099			0.030	0.0039		
Vanadium	ug/L		0.021		0.24		0.014	
Zinc	ug/L		0.13		0.23		0.32	

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 06/28/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.059	0.021

Anions by IC

: 88517

Curtis & Tompkins, Ltd.

Chloride

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water	Received:	06/08/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
HWGW100	SAMPLE	195303-001	960	20	100.0	126098	06/07/07 08:20	06/08/07 19:12
231GW10	SAMPLE	195303-002	48	5.0	25.00	126098	06/07/07 09:10	06/09/07 01:59
231GW16	SAMPLE	195303-003	360	10	50.00	126098	06/07/07 09:45	06/08/07 23:05
231GW30	SAMPLE	195303-004	46	5.0	25.00	126098	06/07/07 10:50	06/09/07 02:17
231GW21	SAMPLE	195303-005	37	2.0	10.00	126098	06/07/07 11:25	06/09/07 03:44
231GW22	SAMPLE	195303-006	54	10	50.00	126098	06/07/07 12:05	06/08/07 23:22
1065MW103A	SAMPLE	195303-008	180	10	50.00	126083	06/07/07 09:05	06/08/07 22:45
600GW106	SAMPLE	195303-009	61	2.0	10.00	126098	06/07/07 09:40	06/09/07 04:01
610GW103	SAMPLE	195303-010	48	2.0	10.00	126083	06/07/07 10:35	06/08/07 23:55
610SP01	SAMPLE	195303-011	280	10	50.00	126098	06/07/07 10:45	06/08/07 23:40
231PZ04	SAMPLE	195303-012	31	5.0	25.00	126098	06/07/07 12:32	06/09/07 02:34
231PZ03	SAMPLE	195303-013	33	5.0	25.00	126098	06/07/07 14:10	06/09/07 02:51
231GW17	SAMPLE	195303-015	32	2.0	10.00	126083	06/07/07 15:00	06/09/07 00:30
231GW18	SAMPLE	195303-016	52	2.0	10.00	126083	06/07/07 14:00	06/09/07 02:15
231GW24	SAMPLE	195303-017	38	2.0	10.00	126083	06/07/07 13:20	06/09/07 02:32
231GW19	SAMPLE	195303-018	31	2.0	10.00	126083	06/07/07 11:50	06/09/07 02:50
231GW15	SAMPLE	195303-019	59	2.0	10.00	126083	06/07/07 11:15	06/09/07 00:12
231GW25	SAMPLE	195303-020	51	10	50.00	126098	06/07/07 10:35	06/08/07 23:57
231GW23	SAMPLE	195303-021	59	5.0	25.00	126098	06/07/07 09:40	06/09/07 03:09
231GW11	SAMPLE	195303-022	52	2.0	10.00	126083	06/07/07 08:55	06/08/07 23:02
231GW26	SAMPLE	195303-024	36	2.0	10.00	126083	06/08/07 08:25	06/08/07 23:20
231GW27	SAMPLE	195303-025	57	2.0	10.00	126083	06/08/07 09:15	06/08/07 23:37
207GW03	SAMPLE	195303-027	160	5.0	25.00	126098	06/08/07 08:50	06/09/07 03:26
DW060807B	SAMPLE	195303-030	ND	0.20	1.000	126083	06/08/07 10:05	06/09/07 03:42
	BLANK	QC391417	ND	0.20	1.000	126083		06/08/07 09:58
	BLANK	QC391488	ND	0.20	1.000	126098		06/08/07 13:07

ND= Not Detected
RL= Reporting Limit

47.0

195018

Curtis & Tompkins, Ltd.

Fluoride

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	06/08/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
HWGW100	SAMPLE	195303-001	ND	0.20	2.000	126358	06/07/07 08:20	06/15/07 15:47
231GW10	SAMPLE	195303-002	0.40	0.10	1.000	126358	06/07/07 09:10	06/15/07 17:32
231GW16	SAMPLE	195303-003	0.37	0.10	1.000	126358	06/07/07 09:45	06/15/07 16:22
231GW30	SAMPLE	195303-004	0.38	0.10	1.000	126358	06/07/07 10:50	06/15/07 18:07
231GW21	SAMPLE	195303-005	0.19	0.10	1.000	126358	06/07/07 11:25	06/15/07 16:57
231GW22	SAMPLE	195303-006	0.28	0.10	1.000	126358	06/07/07 12:05	06/15/07 23:44
1065MW103A	SAMPLE	195303-008	0.23	0.10	1.000	126083	06/07/07 09:05	06/09/07 06:02
600GW106	SAMPLE	195303-009	0.16	0.10	1.000	126358	06/07/07 09:40	06/15/07 19:39
610GW103	SAMPLE	195303-010	0.20	0.10	1.000	126083	06/07/07 10:35	06/09/07 09:32
610SP01	SAMPLE	195303-011	0.30	0.10	1.000	126358	06/07/07 10:45	06/15/07 20:14
231PZ04	SAMPLE	195303-012	0.28	0.10	1.000	126358	06/07/07 12:32	06/15/07 20:49
231PZ03	SAMPLE	195303-013	0.27	0.10	1.000	126358	06/07/07 14:10	06/15/07 21:24
231GW17	SAMPLE	195303-015	ND	0.10	1.000	126083	06/07/07 15:00	06/09/07 08:22
231GW18	SAMPLE	195303-016	ND	0.10	1.000	126083	06/07/07 14:00	06/09/07 04:17
231GW24	SAMPLE	195303-017	ND	0.10	1.000	126083	06/07/07 13:20	06/09/07 04:52
231GW19	SAMPLE	195303-018	0.22	0.10	1.000	126083	06/07/07 11:50	06/09/07 05:27
231GW15	SAMPLE	195303-019	0.12	0.10	1.000	126083	06/07/07 11:15	06/09/07 03:07
231GW25	SAMPLE	195303-020	0.43	0.10	1.000	126358	06/07/07 10:35	06/15/07 21:59
231GW23	SAMPLE	195303-021	0.37	0.10	1.000	126358	06/07/07 09:40	06/15/07 22:34
231GW11	SAMPLE	195303-022	0.11	0.10	1.000	126083	06/07/07 08:55	06/09/07 06:37
231GW26	SAMPLE	195303-024	ND	0.10	1.000	126083	06/08/07 08:25	06/09/07 08:57
231GW27	SAMPLE	195303-025	ND	0.10	1.000	126083	06/08/07 09:15	06/09/07 10:07
207GW03	SAMPLE	195303-027	0.30	0.10	1.000	126358	06/08/07 08:50	06/15/07 23:09
DW060807B	SAMPLE	195303-030	ND	0.10	1.000	126083	06/08/07 10:05	06/09/07 03:42
	BLANK	QC391417	ND	0.10	1.000	126083		06/08/07 09:58
	BLANK	QC392543	ND	0.10	1.000	126358		06/15/07 10:31

ND= Not Detected
RL= Reporting Limit

49.0

: 88019

Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water	Received:	06/08/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
HWGW100	SAMPLE	195303-001	0.17	0.10	2.000	126098	06/07/07 08:20	06/09/07 11:34
231GW10	SAMPLE	195303-002	ND	0.05	1.000	126098	06/07/07 09:10	06/09/07 08:40
231GW16	SAMPLE	195303-003	ND	0.05	1.000	126098	06/07/07 09:45	06/09/07 04:18
231GW30	SAMPLE	195303-004	0.05	0.05	1.000	126098	06/07/07 10:50	06/09/07 10:24
231GW21	SAMPLE	195303-005	ND	0.05	1.000	126098	06/07/07 11:25	06/09/07 06:55
231GW22	SAMPLE	195303-006	ND	0.05	1.000	126098	06/07/07 12:05	06/09/07 07:30
1065MW103A	SAMPLE	195303-008	ND	0.05	1.000	126083	06/07/07 09:05	06/09/07 06:02
600GW106	SAMPLE	195303-009	7.9	0.50	10.00	126098	06/07/07 09:40	06/09/07 04:01
610GW103	SAMPLE	195303-010	ND	0.05	1.000	126083	06/07/07 10:35	06/09/07 09:32
610SP01	SAMPLE	195303-011	ND	0.05	1.000	126098	06/07/07 10:45	06/09/07 08:05
231PZ04	SAMPLE	195303-012	ND	0.05	1.000	126098	06/07/07 12:32	06/09/07 09:14
231PZ03	SAMPLE	195303-013	ND	0.05	1.000	126098	06/07/07 14:10	06/09/07 09:49
231GW17	SAMPLE	195303-015	8.8	0.50	10.00	126083	06/07/07 15:00	06/09/07 00:30
231GW18	SAMPLE	195303-016	5.2	0.50	10.00	126083	06/07/07 14:00	06/09/07 02:15
231GW24	SAMPLE	195303-017	ND	0.05	1.000	126083	06/07/07 13:20	06/09/07 04:52
231GW19	SAMPLE	195303-018	ND	0.05	1.000	126083	06/07/07 11:50	06/09/07 05:27
231GW15	SAMPLE	195303-019	0.14	0.05	1.000	126083	06/07/07 11:15	06/09/07 03:07
231GW25	SAMPLE	195303-020	ND	0.05	1.000	126098	06/07/07 10:35	06/09/07 00:15
231GW23	SAMPLE	195303-021	ND	0.05	1.000	126098	06/07/07 09:40	06/09/07 10:59
231GW11	SAMPLE	195303-022	ND	0.05	1.000	126083	06/07/07 08:55	06/09/07 06:37
231GW26	SAMPLE	195303-024	6.6	0.50	10.00	126083	06/08/07 08:25	06/08/07 23:20
231GW27	SAMPLE	195303-025	5.0	0.50	10.00	126083	06/08/07 09:15	06/08/07 23:37
207GW03	SAMPLE	195303-027	ND	0.05	1.000	126098	06/08/07 08:50	06/09/07 06:20
DW060807B	SAMPLE	195303-030	ND	0.05	1.000	126083	06/08/07 10:05	06/09/07 03:42
	BLANK	QC391417	ND	0.05	1.000	126083		06/08/07 09:58
	BLANK	QC391488	ND	0.05	1.000	126098		06/08/07 13:07

ND= Not Detected
RL= Reporting Limit

51.0

Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water	Received:	06/08/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
HWGW100	SAMPLE	195303-001	ND	0.10	2.000	126098	06/07/07 08:20	06/09/07 11:34
231GW10	SAMPLE	195303-002	ND	0.05	1.000	126098	06/07/07 09:10	06/09/07 08:40
231GW16	SAMPLE	195303-003	ND	0.05	1.000	126098	06/07/07 09:45	06/09/07 04:18
231GW30	SAMPLE	195303-004	ND	0.05	1.000	126098	06/07/07 10:50	06/09/07 10:24
231GW21	SAMPLE	195303-005	ND	0.05	1.000	126098	06/07/07 11:25	06/09/07 06:55
231GW22	SAMPLE	195303-006	ND	0.05	1.000	126098	06/07/07 12:05	06/09/07 07:30
1065MW103A	SAMPLE	195303-008	0.29	0.05	1.000	126083	06/07/07 09:05	06/09/07 06:02
600GW106	SAMPLE	195303-009	ND	0.05	1.000	126098	06/07/07 09:40	06/09/07 04:36
610GW103	SAMPLE	195303-010	ND	0.05	1.000	126083	06/07/07 10:35	06/09/07 09:32
610SP01	SAMPLE	195303-011	ND	0.05	1.000	126098	06/07/07 10:45	06/09/07 08:05
231PZ04	SAMPLE	195303-012	ND	0.05	1.000	126098	06/07/07 12:32	06/09/07 09:14
231PZ03	SAMPLE	195303-013	ND	0.05	1.000	126098	06/07/07 14:10	06/09/07 09:49
231GW17	SAMPLE	195303-015	ND	0.05	1.000	126083	06/07/07 15:00	06/09/07 08:22
231GW18	SAMPLE	195303-016	ND	0.05	1.000	126083	06/07/07 14:00	06/09/07 04:17
231GW24	SAMPLE	195303-017	ND	0.05	1.000	126083	06/07/07 13:20	06/09/07 04:52
231GW19	SAMPLE	195303-018	ND	0.05	1.000	126083	06/07/07 11:50	06/09/07 05:27
231GW15	SAMPLE	195303-019	0.15	0.05	1.000	126083	06/07/07 11:15	06/09/07 03:07
231GW25	SAMPLE	195303-020	ND	0.05	1.000	126098	06/07/07 10:35	06/09/07 00:15
231GW23	SAMPLE	195303-021	ND	0.05	1.000	126098	06/07/07 09:40	06/09/07 10:59
231GW11	SAMPLE	195303-022	0.08	0.05	1.000	126083	06/07/07 08:55	06/09/07 06:37
231GW26	SAMPLE	195303-024	ND	0.05	1.000	126083	06/08/07 08:25	06/09/07 08:57
231GW27	SAMPLE	195303-025	ND	0.05	1.000	126083	06/08/07 09:15	06/09/07 10:07
207GW03	SAMPLE	195303-027	ND	0.05	1.000	126098	06/08/07 08:50	06/09/07 06:20
DW060807B	SAMPLE	195303-030	ND	0.05	1.000	126083	06/08/07 10:05	06/09/07 03:42
	BLANK	QC391417	ND	0.05	1.000	126083		06/08/07 09:58
	BLANK	QC391488	ND	0.05	1.000	126098		06/08/07 13:07

ND= Not Detected
RL= Reporting Limit

53.0

Curtis & Tompkins, Ltd.

Sulfate

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water	Received:	06/08/07

Field ID	Type	Lab ID	Result	RL	Diln Fac	Batch#	Sampled	Analyzed
HWGW100	SAMPLE	195303-001	1,100	50	100.0	126098	06/07/07 08:20	06/08/07 19:12
231GW10	SAMPLE	195303-002	ND	0.50	1.000	126098	06/07/07 09:10	06/09/07 08:40
231GW16	SAMPLE	195303-003	28	0.50	1.000	126098	06/07/07 09:45	06/09/07 04:18
231GW30	SAMPLE	195303-004	3.8	0.50	1.000	126098	06/07/07 10:50	06/09/07 10:24
231GW21	SAMPLE	195303-005	0.50	0.50	1.000	126098	06/07/07 11:25	06/09/07 06:55
231GW22	SAMPLE	195303-006	ND	0.50	1.000	126098	06/07/07 12:05	06/09/07 07:30
1065MW103A	SAMPLE	195303-008	47	0.50	1.000	126083	06/07/07 09:05	06/09/07 06:02
600GW106	SAMPLE	195303-009	110	5.0	10.00	126098	06/07/07 09:40	06/09/07 04:01
610GW103	SAMPLE	195303-010	0.80	0.50	1.000	126083	06/07/07 10:35	06/09/07 09:32
610SP01	SAMPLE	195303-011	28	0.50	1.000	126098	06/07/07 10:45	06/09/07 08:05
231PZ04	SAMPLE	195303-012	ND	0.50	1.000	126098	06/07/07 12:32	06/09/07 09:14
231PZ03	SAMPLE	195303-013	ND	0.50	1.000	126098	06/07/07 14:10	06/09/07 09:49
231GW17	SAMPLE	195303-015	39	0.50	1.000	126083	06/07/07 15:00	06/09/07 08:22
231GW18	SAMPLE	195303-016	64	5.0	10.00	126083	06/07/07 14:00	06/09/07 02:15
231GW24	SAMPLE	195303-017	26	0.50	1.000	126083	06/07/07 13:20	06/09/07 04:52
231GW19	SAMPLE	195303-018	20	0.50	1.000	126083	06/07/07 11:50	06/09/07 05:27
231GW15	SAMPLE	195303-019	24	0.50	1.000	126083	06/07/07 11:15	06/09/07 03:07
231GW25	SAMPLE	195303-020	ND	0.50	1.000	126098	06/07/07 10:35	06/09/07 00:15
231GW23	SAMPLE	195303-021	ND	0.50	1.000	126098	06/07/07 09:40	06/09/07 10:59
231GW11	SAMPLE	195303-022	2.3	0.50	1.000	126083	06/07/07 08:55	06/09/07 06:37
231GW26	SAMPLE	195303-024	49	0.50	1.000	126083	06/08/07 08:25	06/09/07 08:57
231GW27	SAMPLE	195303-025	70	5.0	10.00	126083	06/08/07 09:15	06/08/07 23:37
207GW03	SAMPLE	195303-027	1.9	0.50	1.000	126098	06/08/07 08:50	06/09/07 06:20
DW060807B	SAMPLE	195303-030	ND	0.50	1.000	126083	06/08/07 10:05	06/09/07 03:42
	BLANK	QC391417	ND	0.50	1.000	126083		06/08/07 09:58
	BLANK	QC391488	ND	0.50	1.000	126098		06/08/07 13:07

ND= Not Detected
RL= Reporting Limit

55.0

Batch QC Report

Chloride

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391418		4.000	4.315	108	80-120			1.000	126083			06/08/07 10:16
	BSD		QC391419		4.000	4.089	102	80-120	5	20	1.000	126083			06/08/07 10:33
DW060707A	MS	195279-001	QC391692	0.01506	2.040	1.985	97	80-120			1.020	126083	06/07/07 12:30	06/07/07	06/08/07 21:52
DW060707A	MSD	195279-001	QC391693		2.040	2.052	100	80-120	3	25	1.020	126083	06/07/07 12:30	06/07/07	06/08/07 22:10
	BS		QC391489		4.000	4.300	108	80-120			1.000	126098			06/08/07 13:25
	BSD		QC391490		4.000	4.265	107	80-120	1	20	1.000	126098			06/08/07 13:42
ZZZZZZZZZZ	MS	195189-001	QC391663	129.8	20.00	137.1	37 NM	80-120			10.00	126098	06/05/07	06/05/07	06/08/07 21:21
ZZZZZZZZZZ	MSD	195189-001	QC391664		20.00	138.3	42 NM	80-120	1	25	10.00	126098	06/05/07	06/05/07	06/08/07 21:38

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

48.0

Curtis & Tompkins, Ltd.

Batch QC Report

Fluoride

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391418		2.000	2.143	107	80-120			1.000	126083			06/08/07 10:16
	BSD		QC391419		2.000	2.054	103	80-120	4	20	1.000	126083			06/08/07 10:33
DW060707A	MS	195279-001	QC391692	<0.009179	1.020	0.9917	97	78-120			1.020	126083	06/07/07 12:30	06/07/07	06/08/07 21:52
DW060707A	MSD	195279-001	QC391693		1.020	1.022	100	78-120	3	20	1.020	126083	06/07/07 12:30	06/07/07	06/08/07 22:10
	BS		QC392544		2.000	1.973	99	80-120			1.000	126358			06/15/07 12:11
	BSD		QC392545		2.000	1.974	99	80-120	0	20	1.000	126358			06/15/07 12:28
231GW21	MS	195303-005	QC392681	0.1949	10.00	9.385	92	78-120			10.00	126358	06/07/07 11:25	06/08/07	06/16/07 02:39
231GW21	MSD	195303-005	QC392682		10.00	9.597	94	78-120	2	20	10.00	126358	06/07/07 11:25	06/08/07	06/16/07 02:57

RPD= Relative Percent Difference

50.0

Curtis & Tompkins, Ltd.

Batch QC Report

Nitrate Nitrogen

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391418		1.000	1.133	113	80-120			1.000	126083			06/08/07 10:16
	BSD		QC391419		1.000	1.085	109	80-120	4	20	1.000	126083			06/08/07 10:33
DW060707A	MS	195279-001	QC391692	<0.008046	0.5100	0.4892	96	80-120			1.020	126083	06/07/07 12:30	06/07/07	06/08/07 21:52
DW060707A	MSD	195279-001	QC391693		0.5100	0.5396	106	80-120	10	25	1.020	126083	06/07/07 12:30	06/07/07	06/08/07 22:10
	BS		QC391489		1.000	1.104	110	80-120			1.000	126098			06/08/07 13:25
	BSD		QC391490		1.000	1.114	111	80-120	1	20	1.000	126098			06/08/07 13:42
ZZZZZZZZZZ	MS	195189-001	QC391663	5.941	5.000	10.68	95	80-120			10.00	126098	06/05/07	06/05/07	06/08/07 21:21
ZZZZZZZZZZ	MSD	195189-001	QC391664		5.000	10.82	98	80-120	1	25	10.00	126098	06/05/07	06/05/07	06/08/07 21:38

RPD= Relative Percent Difference

52.0

Curtis & Tompkins, Ltd.

00225

Batch QC Report

Nitrite Nitrogen

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391418		1.000	1.096	110	80-120			1.000	126083			06/08/07 10:16
	BSD		QC391419		1.000	1.055	105	80-120	4	20	1.000	126083			06/08/07 10:33
DW060707A	MS	195279-001	QC391692	<0.008079	0.5100	0.4793	94	80-120			1.020	126083	06/07/07 12:30	06/07/07	06/08/07 21:52
DW060707A	MSD	195279-001	QC391693		0.5100	0.5331	105	80-120	11	25	1.020	126083	06/07/07 12:30	06/07/07	06/08/07 22:10
	BS		QC391489		1.000	1.029	103	80-120			1.000	126098			06/08/07 13:25
	BSD		QC391490		1.000	1.023	102	80-120	1	20	1.000	126098			06/08/07 13:42
ZZZZZZZZZZ	MS	195189-001	QC391663	<0.1089	5.000	5.343	107	80-120			10.00	126098	06/05/07	06/05/07	06/08/07 21:21
ZZZZZZZZZZ	MSD	195189-001	QC391664		5.000	5.680	114	80-120	6	25	10.00	126098	06/05/07	06/05/07	06/08/07 21:38

RPD= Relative Percent Difference

54.0

Curtis & Tompkins, Ltd.

00525

Batch QC Report

Sulfate

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Batch#	Sampled	Received	Analyzed
	BS		QC391418		10.00	11.27	113	80-120			1.000	126083			06/08/07 10:16
	BSD		QC391419		10.00	10.59	106	80-120	6	20	1.000	126083			06/08/07 10:33
DW060707A	MS	195279-001	QC391692	<0.04691	5.100	5.066	99	80-120			1.020	126083	06/07/07 12:30	06/07/07	06/08/07 21:52
DW060707A	MSD	195279-001	QC391693		5.100	5.277	103	80-120	4	25	1.020	126083	06/07/07 12:30	06/07/07	06/08/07 22:10
	BS		QC391489		10.00	10.81	108	80-120			1.000	126098			06/08/07 13:25
	BSD		QC391490		10.00	10.80	108	80-120	0	20	1.000	126098			06/08/07 13:42
ZZZZZZZZZZ	MS	195189-001	QC391663	260.7	50.00	286.3	51 NM	80-120			10.00	126098	06/05/07	06/05/07	06/08/07 21:21
ZZZZZZZZZZ	MSD	195189-001	QC391664		50.00	286.9	52 NM	80-120	0	25	10.00	126098	06/05/07	06/05/07	06/08/07 21:38

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

56.0

Curtis & Tompkins, Ltd.

12888

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 IC Water: EPA 300.0

Inst : IC01
Calnum : 607218822002
Units : mg/L

Name : GC01_152
Date : 01-JUN-2007 21:06
X Axis : A

Reviewer : CW
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_69	607218822069	L1	01-JUN-2007 21:06	S6107 (500X)
L2	152_70	607218822070	L2	01-JUN-2007 21:24	S6107 (100X)
L3	152_71	607218822071	L3	01-JUN-2007 21:41	S6107 (25X)
L4	152_72	607218822072	L4	01-JUN-2007 21:59	S6107 (10X)
L5	152_73	607218822073	L5	01-JUN-2007 22:16	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.2358	0.2360	0.2626	0.2717	0.2808	QORG		0.26047	0.002039	0.2574	1.000	0.990	
Chloride	0.1502	0.1679	0.1761	0.1837	0.1969	QORG		0.17048	0.001322	0.1750	1.000	0.990	
Nitrogen, Nitrite	0.4018	0.3741	0.3793	0.3874	0.3939	QORG		0.37916	0.002954	0.3873	1.000	0.990	
Nitrogen, Nitrate	0.4456	0.4294	0.4379	0.4384	0.4647	QORG		0.41818	0.009248	0.4432	1.000	0.990	
Sulfate	0.1448	0.1304	0.1333	0.1337	0.1426	QORG		0.12666	3.176E-4	0.1369	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-10	0.500	-10	2.000	-1	5.000	0	10.00	0
Chloride	0.200	-12	1.000	-2	4.000	0	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	6	0.250	-2	1.000	-1	2.500	0	5.000	0
Nitrogen, Nitrate	0.050	6	0.250	2	1.000	2	2.500	-1	5.000	0
Sulfate	0.500	14	2.500	2	10.00	3	25.00	-1	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 IC Water
EPA 300.0

Inst : IC01 Name : GC01_152
Calnum : 607218822002 Cal Date : 01-JUN-2007

ICV 607218822075 (152_75 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2574	0.2418	1.000	0.9215	mg/L	-8	10	
Chloride	0.1750	0.1726	2.000	1.994	mg/L	0	10	
Nitrogen, Nitrite	0.3873	0.3865	0.5000	0.5077	mg/L	2	10	
Nitrogen, Nitrate	0.4432	0.4153	0.5000	0.4913	mg/L	-2	10	
Sulfate	0.1369	0.1305	5.000	5.088	mg/L	2	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 195303 IC Water: EPA 300.0

Inst : IC03
Calnum : 627218791001
Units : mg/L

Date : 31-MAY-2007 22:31
X Axis : A

Reviewer : RH
Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	152_3	627218791003	L1	31-MAY-2007 22:31	S6107 (500X)
L2	152_4	627218791004	L2	31-MAY-2007 22:49	S6107 (100X)
L3	152_5	627218791005	L3	31-MAY-2007 23:06	S6107 (25X)
L4	152_6	627218791006	L4	31-MAY-2007 23:24	S6107 (10X)
L5	152_7	627218791007	L5	31-MAY-2007 23:41	S6107 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Fluoride	0.1297	0.1872	0.1952	0.2113	0.2177	QORG		0.19988	0.001803	0.1882	1.000	0.990	
Chloride	0.1393	0.1328	0.1406	0.1501	0.1616	QORG		0.13746	0.001210	0.1449	1.000	0.990	
Nitrogen, Nitrite	0.3375	0.3005	0.2902	0.3084	0.3151	QORG		0.29647	0.003762	0.3103	1.000	0.990	
Nitrogen, Nitrate	0.3082	0.3189	0.3329	0.3458	0.3609	QORG		0.32886	0.006433	0.3333	1.000	0.990	
Sulfate	0.1108	0.1023	0.1034	0.1095	0.1158	QORG		0.10232	2.707E-4	0.1084	1.000	0.990	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Fluoride	0.100	-35	0.500	-7	2.000	-4	5.000	1	10.00	0
Chloride	0.200	1	1.000	-4	4.000	-1	10.00	0	20.00	0
Nitrogen, Nitrite	0.050	14	0.250	1	1.000	-3	2.500	1	5.000	0
Nitrogen, Nitrate	0.050	-6	0.250	-3	1.000	-1	2.500	0	5.000	0
Sulfate	0.500	8	2.500	-1	10.00	-2	25.00	0	50.00	0

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 195303 IC Water
EPA 300.0

Inst : IC03
Calnum : 627218791001 Cal Date : 31-MAY-2007

ICV 627218791009 (152_9 01-JUN-2007) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1882	0.1903	1.000	0.9439	mg/L	-6	10	
Chloride	0.1449	0.1360	2.000	1.945	mg/L	-3	10	
Nitrogen, Nitrite	0.3103	0.2924	0.5000	0.4900	mg/L	-2	10	
Nitrogen, Nitrate	0.3333	0.3204	0.5000	0.4825	mg/L	-3	10	
Sulfate	0.1084	0.1028	5.000	4.961	mg/L	-1	10	

CONTINUING CALIBRATION SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607229541007	08-JUN-2007 09:41	607218822002	01-JUN-2007	0.2574	0.2688	0.5000	0.5140	mg/L	3	10	
IC01	P	607229541018	08-JUN-2007 17:33	607218822002	01-JUN-2007	0.2574	0.2740	2.0000	2.0703	mg/L	4	10	
IC01	P	607229541033	09-JUN-2007 01:05	607218822002	01-JUN-2007	0.2574	0.2663	5.0000	4.9217	mg/L	-2	10	
IC01	P	607229541054	09-JUN-2007 07:12	607218822002	01-JUN-2007	0.2574	0.2567	2.0000	1.9415	mg/L	-3	10	
IC01	P	607229541066	09-JUN-2007 10:42	607218822002	01-JUN-2007	0.2574	0.2691	5.0000	4.9719	mg/L	-1	10	
IC01	P	607239654007	15-JUN-2007 10:14	607218822002	01-JUN-2007	0.2574	0.2359	0.5000	0.4513	mg/L	-10	10	
IC01	P	607239654024	15-JUN-2007 18:42	607218822002	01-JUN-2007	0.2574	0.2532	2.0000	1.9155	mg/L	-4	10	
IC01	P	607239654046	16-JUN-2007 01:29	607218822002	01-JUN-2007	0.2574	0.2608	5.0000	4.8245	mg/L	-4	10	
IC01	P	607239654055	16-JUN-2007 04:07	607218822002	01-JUN-2007	0.2574	0.2517	2.0000	1.9043	mg/L	-5	10	
IC03	P	627229727009	08-JUN-2007 12:47	627218791001	31-MAY-2007	0.1882	0.1779	0.5000	0.4433	mg/L	**-11**	10	c- ***
IC03	P	627229727021	08-JUN-2007 17:32	627218791001	31-MAY-2007	0.1882	0.2036	2.0000	2.0009	mg/L	0	10	NA
IC03	P	627229727037	09-JUN-2007 00:49	627218791001	31-MAY-2007	0.1882	0.2169	5.0000	5.1836	mg/L	4	10	

CW 6/20/07

-=low bias c=CCV

CONTINUING CALIBRATION SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607229541007	08-JUN-2007 09:41	607218822002	01-JUN-2007	0.1750	0.1767	1.0000	1.0281	mg/L	3	10	
IC01	P	607229541018	08-JUN-2007 17:33	607218822002	01-JUN-2007	0.1750	0.1825	4.0000	4.1479	mg/L	4	10	
IC01	P	607229541033	09-JUN-2007 01:05	607218822002	01-JUN-2007	0.1750	0.1805	10.000	9.8391	mg/L	-2	10	
IC01	P	607229541054	09-JUN-2007 07:12	607218822002	01-JUN-2007	0.1750	0.1721	4.0000	3.9191	mg/L	-2	10	
IC01	P	607239654007	15-JUN-2007 10:14	607218822002	01-JUN-2007	0.1750	0.1734	1.0000	1.0091	mg/L	1	10	
IC01	P	607239654024	15-JUN-2007 18:42	607218822002	01-JUN-2007	0.1750	0.1719	4.0000	3.9152	mg/L	-2	10	
IC01	P	607239654046	16-JUN-2007 01:29	607218822002	01-JUN-2007	0.1750	0.1783	10.000	9.7232	mg/L	-3	10	
IC01	P	607239654055	16-JUN-2007 04:07	607218822002	01-JUN-2007	0.1750	0.1702	4.0000	3.8759	mg/L	-3	10	
IC03	P	627229727009	08-JUN-2007 12:47	627218791001	31-MAY-2007	0.1449	0.1428	1.0000	1.0294	mg/L	3	10	
IC03	P	627229727021	08-JUN-2007 17:32	627218791001	31-MAY-2007	0.1449	0.1494	4.0000	4.1924	mg/L	5	10	
IC03	P	627229727037	09-JUN-2007 00:49	627218791001	31-MAY-2007	0.1449	0.1659	10.000	11.000	mg/L	10	10	
IC03	P	627229727052	09-JUN-2007 05:11	627218791001	31-MAY-2007	0.1449	0.1527	4.0000	4.2810	mg/L	7	10	

CONTINUING CALIBRATION SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607229541007	08-JUN-2007 09:41	607218822002	01-JUN-2007	0.3873	0.4117	0.2500	0.2709	mg/L	8	10	
IC01	P	607229541018	08-JUN-2007 17:33	607218822002	01-JUN-2007	0.3873	0.4090	1.0000	1.0699	mg/L	7	10	
IC01	P	607229541033	09-JUN-2007 01:05	607218822002	01-JUN-2007	0.3873	0.3810	2.5000	2.4650	mg/L	-1	10	
IC01	P	607229541054	09-JUN-2007 07:12	607218822002	01-JUN-2007	0.3873	0.3715	1.0000	0.9724	mg/L	-3	10	
IC01	P	607229541066	09-JUN-2007 10:42	607218822002	01-JUN-2007	0.3873	0.3797	2.5000	2.4563	mg/L	-2	10	
IC01	P	607239654007	15-JUN-2007 10:14	607218822002	01-JUN-2007	0.3873	0.3773	0.2500	0.2483	mg/L	-1	10	
IC01	P	607239654024	15-JUN-2007 18:42	607218822002	01-JUN-2007	0.3873	0.3727	1.0000	0.9755	mg/L	-2	10	
IC01	P	607239654046	16-JUN-2007 01:29	607218822002	01-JUN-2007	0.3873	0.3709	2.5000	2.4007	mg/L	-4	10	
IC01	P	607239654055	16-JUN-2007 04:07	607218822002	01-JUN-2007	0.3873	0.3594	1.0000	0.9410	mg/L	-6	10	
IC03	P	627229727009	08-JUN-2007 12:47	627218791001	31-MAY-2007	0.3103	0.3136	0.2500	0.2636	mg/L	5	10	
IC03	P	627229727021	08-JUN-2007 17:32	627218791001	31-MAY-2007	0.3103	0.3207	1.0000	1.0673	mg/L	7	10	
IC03	P	627229727037	09-JUN-2007 00:49	627218791001	31-MAY-2007	0.3103	0.3336	2.5000	2.7189	mg/L	9	10	
IC03	P	627229727052	09-JUN-2007 05:11	627218791001	31-MAY-2007	0.3103	0.3158	1.0000	1.0511	mg/L	5	10	
IC03	P	627229727076	09-JUN-2007 12:08	627218791001	31-MAY-2007	0.3103	0.3269	2.5000	2.6660	mg/L	7	10	

CONTINUING CALIBRATION SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607229541007	08-JUN-2007 09:41	607218822002	01-JUN-2007	0.4432	0.4163	0.2500	0.2475	mg/L	-1	10	
IC01	P	607229541018	08-JUN-2007 17:33	607218822002	01-JUN-2007	0.4432	0.4720	1.0000	1.1018	mg/L	10	10	
IC01	P	607229541033	09-JUN-2007 01:05	607218822002	01-JUN-2007	0.4432	0.4387	2.5000	2.4861	mg/L	-1	10	
IC01	P	607229541054	09-JUN-2007 07:12	607218822002	01-JUN-2007	0.4432	0.4218	1.0000	0.9872	mg/L	-1	10	
IC01	P	607229541066	09-JUN-2007 10:42	607218822002	01-JUN-2007	0.4432	0.4343	2.5000	2.4621	mg/L	-2	10	
IC01	P	607239654007	15-JUN-2007 10:14	607218822002	01-JUN-2007	0.4432	0.4092	0.2500	0.2433	mg/L	-3	10	
IC01	P	607239654024	15-JUN-2007 18:42	607218822002	01-JUN-2007	0.4432	0.4242	1.0000	0.9926	mg/L	-1	10	
IC01	P	607239654046	16-JUN-2007 01:29	607218822002	01-JUN-2007	0.4432	0.4384	2.5000	2.4846	mg/L	-1	10	
IC01	P	607239654055	16-JUN-2007 04:07	607218822002	01-JUN-2007	0.4432	0.4269	1.0000	0.9987	mg/L	0	10	
IC03	P	627229727009	08-JUN-2007 12:47	627218791001	31-MAY-2007	0.3333	0.3462	0.2500	0.2618	mg/L	5	10	
IC03	P	627229727021	08-JUN-2007 17:32	627218791001	31-MAY-2007	0.3333	0.3623	1.0000	1.0790	mg/L	8	10	
IC03	P	627229727037	09-JUN-2007 00:49	627218791001	31-MAY-2007	0.3333	0.3809	2.5000	2.7477	mg/L	10	10	
IC03	P	627229727052	09-JUN-2007 05:11	627218791001	31-MAY-2007	0.3333	0.3690	1.0000	1.0985	mg/L	10	10	
IC03	P	627229727076	09-JUN-2007 12:08	627218791001	31-MAY-2007	0.3333	0.3798	2.5000	2.7402	mg/L	10	10	

CONTINUING CALIBRATION SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D	Max %D	Flags
IC01	P	607229541007	08-JUN-2007 09:41	607218822002	01-JUN-2007	0.1369	0.1356	2.5000	2.6581	mg/L	6	10	
IC01	P	607229541018	08-JUN-2007 17:33	607218822002	01-JUN-2007	0.1369	0.1421	10.000	10.923	mg/L	9	10	
IC01	P	607229541033	09-JUN-2007 01:05	607218822002	01-JUN-2007	0.1369	0.1363	25.000	25.292	mg/L	1	10	
IC01	P	607229541054	09-JUN-2007 07:12	607218822002	01-JUN-2007	0.1369	0.1327	10.000	10.217	mg/L	2	10	
IC01	P	607229541066	09-JUN-2007 10:42	607218822002	01-JUN-2007	0.1369	0.1352	25.000	25.098	mg/L	0	10	
IC01	P	607239654007	15-JUN-2007 10:14	607218822002	01-JUN-2007	0.1369	0.1208	2.5000	2.3702	mg/L	-5	10	
IC01	P	607239654024	15-JUN-2007 18:42	607218822002	01-JUN-2007	0.1369	0.1267	10.000	9.7648	mg/L	-2	10	
IC01	P	607239654046	16-JUN-2007 01:29	607218822002	01-JUN-2007	0.1369	0.1346	25.000	24.992	mg/L	0	10	
IC01	P	607239654055	16-JUN-2007 04:07	607218822002	01-JUN-2007	0.1369	0.1304	10.000	10.043	mg/L	0	10	
IC03	P	627229727009	08-JUN-2007 12:47	627218791001	31-MAY-2007	0.1084	0.1093	2.5000	2.6513	mg/L	6	10	
IC03	P	627229727021	08-JUN-2007 17:32	627218791001	31-MAY-2007	0.1084	0.1109	10.000	10.549	mg/L	5	10	
IC03	P	627229727037	09-JUN-2007 00:49	627218791001	31-MAY-2007	0.1084	0.1199	25.000	27.312	mg/L	9	10	
IC03	P	627229727052	09-JUN-2007 05:11	627218791001	31-MAY-2007	0.1084	0.1139	10.000	10.821	mg/L	8	10	
IC03	P	627229727076	09-JUN-2007 12:08	627218791001	31-MAY-2007	0.1084	0.1205	25.000	27.457	mg/L	10	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541019 File : 160_19 Time : 08-JUN-2007 17:50
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541034 File : 160_34 Time : 09-JUN-2007 01:22
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541055 File : 160_55 Time : 09-JUN-2007 07:30
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607229541067 File : 160_67 Time : 09-JUN-2007 11:00
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607239654025 File : 166_25 Time : 15-JUN-2007 18:59
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607239654045 File : 166_45 Time : 16-JUN-2007 01:11
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02334]	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC01 IDF : 1.0
Seqnum : 607239654056 File : 166_56 Time : 16-JUN-2007 04:24
Cal : 607218822002 Caldate : 01-JUN-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009179	mg/L	
Chloride	ND	0.2000	0.006069	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.008079	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008046	mg/L	
Sulfate	ND	0.5000	0.04691	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627229727022 File : 159_22 Time : 08-JUN-2007 17:50
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627229727038 File : 159_38 Time : 09-JUN-2007 01:07
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627229727053 File : 159_53 Time : 09-JUN-2007 05:28
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 195303 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 627229727077 File : 159_77 Time : 09-JUN-2007 12:26
Cal : 627218791001 Caldate : 31-MAY-2007

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01147	mg/L	
Chloride	ND	0.2000	0.05005	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01089	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01169	mg/L	
Sulfate	ND	0.5000	0.08799	mg/L	

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:44	1.0			25				
003	152_3	ICAL	L1			31-MAY-2007 23:02	1.0						1	
004	152_4	ICAL	L2			31-MAY-2007 23:19	1.0						1	
005	152_5	ICAL	L3			31-MAY-2007 23:37	1.0						1	
006	152_6	ICAL	L4			31-MAY-2007 23:54	1.0						1	
007	152_7	ICAL	L5			01-JUN-2007 00:12	1.0						1	
008	152_8	CCB				01-JUN-2007 00:29	1.0	1		25				
009	152_9	ICV				01-JUN-2007 00:47	1.0			25			2	
011	152_11	CCB/MB	QC390408	125836	Water	01-JUN-2007 01:22	1.0			25				
012	152_12	BS	QC390409	125836	Water	01-JUN-2007 01:39	1.0			25			1	
013	152_13	BSD	QC390410	125836	Water	01-JUN-2007 01:57	1.0			25			1	
014	152_14	SAMPLE	195112-003	125836	Water	01-JUN-2007 02:14	1.0	1		25				2:SO4=80.8141
015	152_15	SAMPLE	195112-002	125836	Water	01-JUN-2007 02:32	1.0	1		25				2:SO4=61.0646
016	152_16	SAMPLE	195088-004	125836	Water	01-JUN-2007 02:49	1.0	1		25				2:SO4=122.819
018	152_18	SAMPLE	195088-007	125836	Water	01-JUN-2007 03:24	1.0	2		25				3:SO4=221.785
020	152_20	SAMPLE	195084-002	125836	Water	01-JUN-2007 03:59	100.0			25				
021	152_21	SAMPLE	195084-002	125836	Water	01-JUN-2007 04:17	10.0	1		25				1:NO3N=35.2019
023	152_23	SAMPLE	195088-002	125836	Water	01-JUN-2007 04:52	1.0	1		25				1:SO4=91.1227
025	152_25	CCV	M	125836		01-JUN-2007 05:27	1.0			25			1	
026	152_26	CCB		125836		01-JUN-2007 05:44	1.0			25				
029	152_29	MSS	195106-002	125836	Water	01-JUN-2007 06:37	25.0			25				
030	152_30	MSS	195106-002	125836	Water	01-JUN-2007 06:54	1.0	2		25				2:SO4=157.096
031	152_31	SAMPLE	195091-001	125836	Water	01-JUN-2007 07:12	1.0	2		25				2:SO4=436.768
032	152_32	SAMPLE	195091-002	125836	Water	01-JUN-2007 07:29	1.0	2		25				2:SO4=788.434
034	152_34	SAMPLE	195088-006	125836	Water	01-JUN-2007 08:04	1.0			25				1:CL=121.002
036	152_36	SAMPLE	195088-005	125836	Water	01-JUN-2007 08:39	1.0	1		25				2:SO4=81.0736
037	152_37	SAMPLE	195088-001	125836	Water	01-JUN-2007 08:57	1.0	1		25				2:CL=212.189
039	152_39	SAMPLE	195088-003	125836	Water	01-JUN-2007 09:32	1.0			25				1:CL=169.398
040	152_40	SAMPLE	195088-007	125836	Water	01-JUN-2007 09:49	2.0	1		25				2:SO4=119.507
041	152_41	SAMPLE	195092-004	125836	Water	01-JUN-2007 10:07	1.0	1		25				1:SO4=437.772
043	152_43	CCV	H	125836		01-JUN-2007 10:42	1.0			25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
044	152_44	CCB		125836		01-JUN-2007 10:59	1.0			25				
045	152_45	SAMPLE	195106-003	125836	Water	01-JUN-2007 11:17	1.0	1		25				2:CL=144.119
046	152_46	SAMPLE	195092-006	125836	Water	01-JUN-2007 11:34	1.0	2		25				2:SO4=232.061
047	152_47	SAMPLE	195106-004	125836	Water	01-JUN-2007 11:52	1.0	1		25				2:CL=195.128
048	152_48	SAMPLE	195091-003	125836	Water	01-JUN-2007 12:10	1.0	2		25				2:SO4=590.575
050	152_50	SAMPLE	195106-005	125836	Water	01-JUN-2007 12:45	1.0			25				
052	152_52	MS	QC390411	125836	Water	01-JUN-2007 13:20	50.0			25			1	
053	152_53	MSD	QC390412	125836	Water	01-JUN-2007 13:37	50.0		1	25			1	
054	152_54	CCB		125836		01-JUN-2007 13:55	1.0			25				
055	152_55	CCV	H	125836		01-JUN-2007 14:12	1.0			25			1	
059	152_59	X	QC390475	125851	Water	01-JUN-2007 15:38	1.0			25				
060	152_60	X	QC390476	125851	Water	01-JUN-2007 15:56	1.0			25			1	
061	152_61	X	QC390477	125851	Water	01-JUN-2007 16:13	1.0			25			1	
062	152_62	X	195130-001	125851	Water	01-JUN-2007 17:11	100.0	2		25				2:SO4=79.1091
063	152_63	X	195130-002	125851	Water	01-JUN-2007 17:39	100.0			25				
064	152_64	X	195123-003	125851	Water	01-JUN-2007 18:10	10.0			25				
065	152_65	X	195123-002	125851	Water	01-JUN-2007 18:53	20.0	1		25				1:SO4=76.1120
066	152_66	X	194123-004	125851		01-JUN-2007 19:10	20.0							
067	152_67	X	M	125851		01-JUN-2007 19:32	1.0	7		25			1	
068	152_68	X		125851		01-JUN-2007 19:50	1.0			25				
069	152_69	ICAL	L1			01-JUN-2007 21:06	1.0						1	
070	152_70	ICAL	L2			01-JUN-2007 21:24	1.0						1	
071	152_71	ICAL	L3			01-JUN-2007 21:41	1.0						1	
072	152_72	ICAL	L4			01-JUN-2007 21:59	1.0						1	
073	152_73	ICAL	L5			01-JUN-2007 22:16	1.0						1	
074	152_74	CCB		125851		01-JUN-2007 22:34	1.0	1		25				
075	152_75	ICV/CCV		125851		01-JUN-2007 22:51	1.0			25			2	
077	152_77	CCB/MB	QC390475	125851	Water	01-JUN-2007 23:26	1.0			25				
078	152_78	BS	QC390476	125851	Water	01-JUN-2007 23:44	1.0	1		25			1	
079	152_79	BSD	QC390477	125851	Water	02-JUN-2007 00:01	1.0	1		25			1	
080	152_80	SAMPLE	195130-001	125851	Water	02-JUN-2007 00:19	500.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607218822 Instrument: IC01 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
081	152_81	SAMPLE	195130-002	125851	Water	02-JUN-2007 00:36	100.0			25				
082	152_82	SAMPLE	195123-002	125851	Water	02-JUN-2007 00:54	50.0			25				
083	152_83	SAMPLE	195123-004	125851	Water	02-JUN-2007 01:11	25.0			25				
084	152_84	SAMPLE	195123-002	125851	Water	02-JUN-2007 01:29	20.0	1		25				1:SO4=70.2511
085	152_85	SAMPLE	195123-003	125851	Water	02-JUN-2007 01:46	10.0	1		25				1:CL=21.9692
087	152_87	CCV	H	125851		02-JUN-2007 02:22	1.0			25			1	
088	152_88	CCB		125851		02-JUN-2007 02:39	1.0	1		25				
091	152_91	SAMPLE	195123-004	125851	Water	02-JUN-2007 03:32	50.0			25				
092	152_92	SAMPLE	195130-001	125851	Water	02-JUN-2007 03:49	20.0	2		25				2:SO4=92.8936
094	152_94	SAMPLE	195130-002	125851	Water	02-JUN-2007 04:24	5.0	2		25				2:SO4=199.862
096	152_96	SAMPLE	195123-002	125851	Water	02-JUN-2007 04:59	2.0	2		25				2:SO4=495.199
098	152_98	MSS	195123-003	125851	Water	02-JUN-2007 05:34	1.0	2		25				1:CL=102.468
100	152_100	SAMPLE	195123-004	125851	Water	02-JUN-2007 06:09	2.0	2		25				2:SO4=399.807
102	152_102	MS	QC390660	125851	Water	02-JUN-2007 06:44	10.0	1		25			1	
103	152_103	MSD	QC390661	125851	Water	02-JUN-2007 07:02	10.0	1		25			1	
105	152_105	CCV	M	125851		02-JUN-2007 07:37	1.0			25			1	
106	152_106	CCB		125851		02-JUN-2007 07:54	1.0			25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
002	152_2	CCB				31-MAY-2007 22:14	1.0		25				
003	152_3	ICAL	L1			31-MAY-2007 22:31	1.0					1	
004	152_4	ICAL	L2			31-MAY-2007 22:49	1.0					1	
005	152_5	ICAL	L3			31-MAY-2007 23:06	1.0					1	
006	152_6	ICAL	L4			31-MAY-2007 23:24	1.0					1	
007	152_7	ICAL	L5			31-MAY-2007 23:41	1.0					1	
008	152_8	CCB				31-MAY-2007 23:58	1.0	1	25				
009	152_9	ICV				01-JUN-2007 00:16	1.0		25			2	
011	152_11	CCB/MB	QC390419	125840	Water	01-JUN-2007 00:51	1.0		25				
012	152_12	BS	QC390420	125840	Water	01-JUN-2007 01:08	1.0		25			1	
013	152_13	BSD	QC390421	125840	Water	01-JUN-2007 01:25	1.0		25			1	
014	152_14	SAMPLE	195096-001	125840	Water	01-JUN-2007 01:43	1.0	1	25				1:SO4=556.718
016	152_16	SAMPLE	195096-002	125840	Water	01-JUN-2007 02:18	2.0	1	25				2:SO4=598.434
018	152_18	SAMPLE	195096-003	125840	Water	01-JUN-2007 02:53	1.0	1	25				2:SO4=557.907
019	152_19	SAMPLE	195096-004	125840	Water	01-JUN-2007 03:10	1.0	1	25				2:SO4=559.245
021	152_21	SAMPLE	195089-002	125840	Water	01-JUN-2007 03:45	5.0	1	25				2:SO4=140.384
022	152_22	SAMPLE	195089-002	125840	Water	01-JUN-2007 04:02	1.0	2	25				3:SO4=490.019
024	152_24	SAMPLE	195089-004	125840	Water	01-JUN-2007 04:37	1.0	2	25				3:SO4=427.003
026	152_26	CCV	M	125840		01-JUN-2007 05:12	1.0		25			1	
027	152_27	CCB		125840		01-JUN-2007 05:29	1.0		25				
030	152_30	SAMPLE	195089-005	125840	Water	01-JUN-2007 06:21	1.0	1	25				2:SO4=489.308
031	152_31	SAMPLE	195089-006	125840	Water	01-JUN-2007 06:39	1.0	1	25				2:SO4=517.275
032	152_32	SAMPLE	195089-003	125840	Water	01-JUN-2007 06:56	1.0	1	25				2:SO4=373.460
034	152_34	SAMPLE	195096-005	125840	Water	01-JUN-2007 07:31	1.0	1	25				2:SO4=409.844
035	152_35	SAMPLE	195096-006	125840	Water	01-JUN-2007 07:48	1.0	1	25				2:SO4=144.475
037	152_37	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:23	10.0	1	25				1:SO4=195.820
038	152_38	SAMPLE	195089-001	125840	Water	01-JUN-2007 08:41	5.0	1	25				2:SO4=339.862
039	152_39	SAMPLE	195089-007	125840	Water	01-JUN-2007 08:58	1.0	2	25				3:SO4=481.654
041	152_41	SAMPLE	195092-002	125840	Water	01-JUN-2007 09:33	1.0	2	25				2:SO4=430.097
042	152_42	SAMPLE	195092-003	125840	Water	01-JUN-2007 09:50	1.0	2	25				2:SO4=430.821
044	152_44	CCV	H	125840		01-JUN-2007 10:25	1.0		25			1	

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 627218791 Instrument: IC03 Ion Chromatograph Begun: 31-MAY-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
045	152_45	CCB		125840		01-JUN-2007 10:43	1.0	1		25				
046	152_46	SAMPLE	195089-004	125840	Water	01-JUN-2007 11:00	5.0	1		25				2:SO4=117.984
047	152_47	SAMPLE	195112-001	125840	Water	01-JUN-2007 11:17	1.0			25				
048	152_48	MSS	195112-004	125840	Water	01-JUN-2007 11:35	1.0	2		25				1:CL=27.8197
050	152_50	SAMPLE	195089-007	125840	Water	01-JUN-2007 12:10	10.0	1		25				1:SO4=70.8983
051	152_51	MS	QC390422	125840	Water	01-JUN-2007 12:27	2.0	1		25			1	
052	152_52	MSD	QC390423	125840	Water	01-JUN-2007 12:44	2.0	1		25			1	
054	152_54	CCV	M	125840		01-JUN-2007 13:19	1.0			25			1	
055	152_55	CCB		125840		01-JUN-2007 13:37	1.0			25				
057	152_57	BLANK	QC390472	125850	Water	01-JUN-2007 15:12	1.0	1		25				
058	152_58	BS	QC390473	125850	Water	01-JUN-2007 15:29	1.0	1		25			1	
059	152_59	BSD	QC390474	125850	Water	01-JUN-2007 15:47	1.0	1		25			1	
060	152_60	SAMPLE	195127-003	125850	Water	01-JUN-2007 16:27	500.0			25				1:CL=25.2331
061	152_61	SAMPLE	195127-001	125850	Water	01-JUN-2007 16:54	20.0			25				2:CL=355.264
062	152_62	SAMPLE	195127-004	125850	Water	01-JUN-2007 17:11	20.0			25				2:CL=357.783
063	152_63	SAMPLE	195127-002	125850	Water	01-JUN-2007 17:28	20.0			25				2:CL=341.082
064	152_64	SAMPLE	195127-003	125850	Water	01-JUN-2007 18:03	20.0			25				2:CL=364.164
066	152_66	CCV	H	125850		01-JUN-2007 18:44	1.0			25			1	
067	152_67	CCB		125850		01-JUN-2007 19:01	20.0	1		25				
068	152_68	MSS	195123-005	125850	Water	01-JUN-2007 21:08	1.0	1		25				
070	152_70	MS	QC390480	125850	Water	01-JUN-2007 21:43	1.02	1		25			1	
071	152_71	MSD	QC390481	125850	Water	01-JUN-2007 22:00	1.02	1		25			1	
073	152_73	CCV	M	125850		01-JUN-2007 22:35	1.0			25			1	
074	152_74	CCB		125850		01-JUN-2007 22:52	1.0	1		25				

Stds used: 1=S6107 2=S3859

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607229541 Instrument: IC01 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	160_7	CCV	L			08-JUN-2007 09:41	1.0	1		25			1	
008	160_8	CCB/MB	QC391417	126083	Water	08-JUN-2007 09:58	1.0			25				
009	160_9	BS	QC391418	126083	Water	08-JUN-2007 10:16	1.0			25			1	
010	160_10	BSD	QC391419	126083	Water	08-JUN-2007 10:33	1.0			25			1	
011	160_11	SAMPLE	195285-007	126083	Water	08-JUN-2007 11:09	1.0	1		25				1:CL=96.7730
013	160_13	SAMPLE	195285-006	126083	Water	08-JUN-2007 12:05	1.0			25				
014	160_14	SAMPLE	195285-007	126083	Water	08-JUN-2007 14:13	2.0	1		25				1:CL=54.2856
016	160_16	MSS	195279-001	126083	Water	08-JUN-2007 14:49	1.0			25				
017	160_17	SAMPLE	195285-007	126083	Water	08-JUN-2007 15:06	10.0			25				
018	160_18	CCV	M	126083		08-JUN-2007 17:33	1.0			25			1	
019	160_19	CCB		126083		08-JUN-2007 17:50	1.0			25				
020	160_20	SAMPLE	195307-003	126083	Water	08-JUN-2007 19:24	1.0			25				1:CL=89.9481
022	160_22	MS	QC391692	126083	Water	08-JUN-2007 21:52	1.02			25			1	
023	160_23	MSD	QC391693	126083	Water	08-JUN-2007 22:10	1.02			25			1	
025	160_25	SAMPLE	195303-008	126083	Water	08-JUN-2007 22:45	50.0			25				
026	160_26	SAMPLE	195303-022	126083	Water	08-JUN-2007 23:02	10.0			25				
027	160_27	SAMPLE	195303-024	126083	Water	08-JUN-2007 23:20	10.0			25				
028	160_28	SAMPLE	195303-025	126083	Water	08-JUN-2007 23:37	10.0			25				
029	160_29	SAMPLE	195303-010	126083	Water	08-JUN-2007 23:55	10.0			25				
030	160_30	SAMPLE	195303-019	126083	Water	09-JUN-2007 00:12	10.0			25				
031	160_31	SAMPLE	195303-015	126083	Water	09-JUN-2007 00:30	10.0			25				
033	160_33	CCV	H	126083		09-JUN-2007 01:05	1.0			25			1	
034	160_34	CCB		126083		09-JUN-2007 01:22	1.0			25				
037	160_37	SAMPLE	195303-016	126083	Water	09-JUN-2007 02:15	10.0			25				
038	160_38	SAMPLE	195303-017	126083	Water	09-JUN-2007 02:32	10.0			25				
039	160_39	SAMPLE	195303-018	126083	Water	09-JUN-2007 02:50	10.0			25				
040	160_40	SAMPLE	195303-019	126083	Water	09-JUN-2007 03:07	1.0	1		25				1:CL=55.4192
042	160_42	SAMPLE	195303-030	126083	Water	09-JUN-2007 03:42	1.0			25				
044	160_44	SAMPLE	195303-016	126083	Water	09-JUN-2007 04:17	1.0	3		25				3:SO4=65.0646
046	160_46	SAMPLE	195303-017	126083	Water	09-JUN-2007 04:52	1.0	1		25				1:CL=37.5251
048	160_48	SAMPLE	195303-018	126083	Water	09-JUN-2007 05:27	1.0	1		25				1:CL=30.7758

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607229541 Instrument: IC01 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
050	160_50	SAMPLE	195303-008	126083	Water	09-JUN-2007 06:02	1.0	1	25				1:CL=131.384
052	160_52	SAMPLE	195303-022	126083	Water	09-JUN-2007 06:37	1.0	1	25				1:CL=48.2716
054	160_54	CCV	M	126083		09-JUN-2007 07:12	1.0		25			1	
055	160_55	CCB		126083		09-JUN-2007 07:30	1.0		25				
058	160_58	SAMPLE	195303-015	126083	Water	09-JUN-2007 08:22	1.0	2	25				2:CL=31.6735
060	160_60	SAMPLE	195303-024	126083	Water	09-JUN-2007 08:57	1.0	2	25				2:CL=35.0225
062	160_62	SAMPLE	195303-010	126083	Water	09-JUN-2007 09:32	1.0	1	25				1:CL=45.6776
064	160_64	SAMPLE	195303-025	126083	Water	09-JUN-2007 10:07	1.0	3	25				3:SO4=69.0396
066	160_66	CCV	H	126083		09-JUN-2007 10:42	1.0		25			1	
067	160_67	CCB		126083		09-JUN-2007 11:00	1.0	1	25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 627229727 Instrument: IC03 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
009	159_9	CCV	L	126098		08-JUN-2007 12:47	1.0	2	25			1	
010	159_10	CCB/MB	QC391488	126098	Water	08-JUN-2007 13:07	1.0	1	25				
011	159_11	BS	QC391489	126098	Water	08-JUN-2007 13:25	1.0	1	25			1	
012	159_12	BSD	QC391490	126098	Water	08-JUN-2007 13:42	1.0	1	25			1	
013	159_13	MSS	195189-001	126098	Water	08-JUN-2007 14:41	10.0	1	25				
014	159_14	SAMPLE	195189-002	126098	Water	08-JUN-2007 14:59	10.0		25				
016	159_16	PREPBLK	QC391499	126098	SPLP L	08-JUN-2007 15:40	1.0	1	25				
017	159_17	SAMPLE	194918-002	126098	SPLP L	08-JUN-2007 15:58	2.0	1	25				
018	159_18	SAMPLE	194939-003	126098	SPLP L	08-JUN-2007 16:15	2.0	1	25				
019	159_19	SAMPLE	195286-007	126098	Water	08-JUN-2007 16:33	2.0		25				
021	159_21	CCV	M	126098		08-JUN-2007 17:32	1.0		25			1	
022	159_22	CCB		126098		08-JUN-2007 17:50	1.0		25				
023	159_23	SAMPLE	195303-001	126098	Water	08-JUN-2007 19:12	100.0		25				
025	159_25	MS	QC391663	126098	Water	08-JUN-2007 21:21	10.0		25			1	
026	159_26	MSD	QC391664	126098	Water	08-JUN-2007 21:38	10.0		25			1	
028	159_28	MS	QC391663	126098	Water	08-JUN-2007 22:13	10.0		25			1	
029	159_29	MSD	QC391664	126098	Water	08-JUN-2007 22:30	10.0		25			1	
031	159_31	SAMPLE	195303-003	126098	Water	08-JUN-2007 23:05	50.0		25				
032	159_32	SAMPLE	195303-006	126098	Water	08-JUN-2007 23:22	50.0		25				
033	159_33	SAMPLE	195303-011	126098	Water	08-JUN-2007 23:40	50.0		25				
034	159_34	SAMPLE	195303-020	126098	Water	08-JUN-2007 23:57	50.0		25				
035	159_35	SAMPLE	195303-020	126098	Water	09-JUN-2007 00:15	1.0	1	25				1:CL=50.9929
037	159_37	CCV	H	126098		09-JUN-2007 00:49	1.0		25			1	
038	159_38	CCB		126098		09-JUN-2007 01:07	1.0	1	25				
041	159_41	SAMPLE	195303-002	126098	Water	09-JUN-2007 01:59	25.0		25				
042	159_42	SAMPLE	195303-004	126098	Water	09-JUN-2007 02:17	25.0		25				
043	159_43	SAMPLE	195303-012	126098	Water	09-JUN-2007 02:34	25.0		25				
044	159_44	SAMPLE	195303-013	126098	Water	09-JUN-2007 02:51	25.0		25				
045	159_45	SAMPLE	195303-021	126098	Water	09-JUN-2007 03:09	25.0		25				
046	159_46	SAMPLE	195303-027	126098	Water	09-JUN-2007 03:26	25.0		25				
047	159_47	SAMPLE	195303-005	126098	Water	09-JUN-2007 03:44	10.0		25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 627229727 Instrument: IC03 Ion Chromatograph Begun: 08-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
048	159_48	SAMPLE	195303-009	126098	Water	09-JUN-2007 04:01	10.0			25				
049	159_49	SAMPLE	195303-003	126098	Water	09-JUN-2007 04:18	1.0	1		25				1:CL=123.665
050	159_50	SAMPLE	195303-009	126098	Water	09-JUN-2007 04:36	1.0	3		25				3:SO4=111.623
052	159_52	CCV	M	126098		09-JUN-2007 05:11	1.0			25			1	
053	159_53	CCB		126098		09-JUN-2007 05:28	1.0			25				
056	159_56	SAMPLE	195303-027	126098	Water	09-JUN-2007 06:20	1.0	1		25				1:CL=117.673
058	159_58	SAMPLE	195303-005	126098	Water	09-JUN-2007 06:55	1.0	1		25				1:CL=36.7733
060	159_60	SAMPLE	195303-006	126098	Water	09-JUN-2007 07:30	1.0	1		25				1:CL=53.1571
062	159_62	SAMPLE	195303-011	126098	Water	09-JUN-2007 08:05	1.0	1		25				1:CL=153.281
064	159_64	SAMPLE	195303-002	126098	Water	09-JUN-2007 08:40	1.0	1		25				1:CL=46.6947
066	159_66	SAMPLE	195303-012	126098	Water	09-JUN-2007 09:14	1.0	1		25				1:CL=31.0051
068	159_68	SAMPLE	195303-013	126098	Water	09-JUN-2007 09:49	1.0	1		25				1:CL=32.6270
070	159_70	SAMPLE	195303-004	126098	Water	09-JUN-2007 10:24	1.0	1		25				1:CL=44.0536
072	159_72	SAMPLE	195303-021	126098	Water	09-JUN-2007 10:59	1.0	1		25				1:CL=54.1342
074	159_74	SAMPLE	195303-001	126098	Water	09-JUN-2007 11:34	2.0	2		25				2:SO4=151.210
076	159_76	CCV	H	126098		09-JUN-2007 12:08	1.0			25			1	
077	159_77	CCB		126098		09-JUN-2007 12:26	1.0			25				

Stds used: 1=S6107

SEQUENCE SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Sequence: 607239654 Instrument: IC01 Ion Chromatograph Begun: 15-JUN-2007
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK uL	VL	pH	Stds Used	>LR
007	166_7	CCV	L			15-JUN-2007 10:14	1.0		25			1	
008	166_8	CCB/MB	QC392543	126358	Water	15-JUN-2007 10:31	1.0		25				
012	166_12	BS	QC392544	126358	Water	15-JUN-2007 12:11	1.0		25			1	
013	166_13	BSD	QC392545	126358	Water	15-JUN-2007 12:28	1.0		25			1	
014	166_14	SAMPLE	195303-001	126358	Water	15-JUN-2007 15:47	2.0	4	25				2:SO4=139.858
016	166_16	SAMPLE	195303-003	126358	Water	15-JUN-2007 16:22	1.0	3	25				1:CL=206.060
018	166_18	MSS	195303-005	126358	Water	15-JUN-2007 16:57	1.0	3	25				1:CL=35.5672
020	166_20	SAMPLE	195303-002	126358	Water	15-JUN-2007 17:32	1.0	3	25				1:CL=45.8182
022	166_22	SAMPLE	195303-004	126358	Water	15-JUN-2007 18:07	1.0	3	25				1:CL=42.7347
024	166_24	CCV	M	126358		15-JUN-2007 18:42	1.0		25			1	
025	166_25	CCB		126358		15-JUN-2007 18:59	1.0		25				
026	166_26	SAMPLE	195303-009	126358	Water	15-JUN-2007 19:39	1.0	4	25				3:SO4=102.029
028	166_28	SAMPLE	195303-011	126358	Water	15-JUN-2007 20:14	1.0	4	25				2:CL=176.695
030	166_30	SAMPLE	195303-012	126358	Water	15-JUN-2007 20:49	1.0	3	25				1:CL=29.9260
032	166_32	SAMPLE	195303-013	126358	Water	15-JUN-2007 21:24	1.0	3	25				1:CL=31.6707
034	166_34	SAMPLE	195303-020	126358	Water	15-JUN-2007 21:59	1.0	3	25				1:CL=49.1723
036	166_36	SAMPLE	195303-021	126358	Water	15-JUN-2007 22:34	1.0	3	25				1:CL=53.4955
038	166_38	SAMPLE	195303-027	126358	Water	15-JUN-2007 23:09	1.0	3	25				1:CL=117.138
040	166_40	SAMPLE	195303-006	126358	Water	15-JUN-2007 23:44	1.0	3	25				1:CL=51.7112
042	166_42	SAMPLE	195422-011	126358	Water	16-JUN-2007 00:19	2.0		25				1:CL=361.691
044	166_44	X	H	126358		16-JUN-2007 00:54	1.0	1	25			1	
045	166_45	CCB		126358		16-JUN-2007 01:11	1.0		25				
046	166_46	CCV	H	126358		16-JUN-2007 01:29	1.0		25			1	
048	166_48	MSS	195303-005	126358	Water	16-JUN-2007 02:04	10.0	2	25				
050	166_50	MS	QC392681	126358	Water	16-JUN-2007 02:39	10.0		25			1	
051	166_51	MSD	QC392682	126358	Water	16-JUN-2007 02:57	10.0		25			1	
053	166_53	MS	QC392681	126358	Water	16-JUN-2007 03:32	10.0		25			1	
054	166_54	MSD	QC392682	126358	Water	16-JUN-2007 03:49	10.0		25			1	
055	166_55	CCV	M	126358		16-JUN-2007 04:07	1.0		25			1	
056	166_56	CCB		126358		16-JUN-2007 04:24	1.0		25				

Stds used: 1=S6107

REPORTING SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195303-001	IC03	06/08/07 19:12	100.0		+			+
195303-001	IC03	06/09/07 11:34	2.0			+	+	
195303-001	IC01	06/15/07 15:47	2.0	+				
195303-002	IC03	06/09/07 01:59	25.0		+			
195303-002	IC03	06/09/07 08:40	1.0			+	+	+
195303-002	IC01	06/15/07 17:32	1.0	+				
195303-003	IC03	06/08/07 23:05	50.0		+			
195303-003	IC03	06/09/07 04:18	1.0			+	+	+
195303-003	IC01	06/15/07 16:22	1.0	+				
195303-004	IC03	06/09/07 02:17	25.0		+			
195303-004	IC03	06/09/07 10:24	1.0			+	+	+
195303-004	IC01	06/15/07 18:07	1.0	+				
195303-005	IC03	06/09/07 03:44	10.0		+			
195303-005	IC03	06/09/07 06:55	1.0			+	+	+
195303-005	IC01	06/15/07 16:57	1.0	+				
195303-005	IC01	06/16/07 02:04	10.0					
195303-006	IC03	06/08/07 23:22	50.0		+			
195303-006	IC03	06/09/07 07:30	1.0			+	+	+
195303-006	IC01	06/15/07 23:44	1.0	+				
195303-008	IC01	06/08/07 22:45	50.0		+			
195303-008	IC01	06/09/07 06:02	1.0	+		+	+	+
195303-009	IC03	06/09/07 04:01	10.0		+		+	+
195303-009	IC03	06/09/07 04:36	1.0			+		
195303-009	IC01	06/15/07 19:39	1.0	+				
195303-010	IC01	06/08/07 23:55	10.0		+			
195303-010	IC01	06/09/07 09:32	1.0	+		+	+	+
195303-011	IC03	06/08/07 23:40	50.0		+			
195303-011	IC03	06/09/07 08:05	1.0			+	+	+
195303-011	IC01	06/15/07 20:14	1.0	+				
195303-012	IC03	06/09/07 02:34	25.0		+			
195303-012	IC03	06/09/07 09:14	1.0			+	+	+
195303-012	IC01	06/15/07 20:49	1.0	+				
195303-013	IC03	06/09/07 02:51	25.0		+			
195303-013	IC03	06/09/07 09:49	1.0			+	+	+
195303-013	IC01	06/15/07 21:24	1.0	+				
195303-015	IC01	06/09/07 00:30	10.0		+		+	
195303-015	IC01	06/09/07 08:22	1.0	+		+		+
195303-016	IC01	06/09/07 02:15	10.0		+		+	+

REPORTING SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4
195303-016	IC01	06/09/07 04:17	1.0	+		+		
195303-017	IC01	06/09/07 02:32	10.0		+			
195303-017	IC01	06/09/07 04:52	1.0	+		+	+	+
195303-018	IC01	06/09/07 02:50	10.0		+			
195303-018	IC01	06/09/07 05:27	1.0	+		+	+	+
195303-019	IC01	06/09/07 00:12	10.0		+			
195303-019	IC01	06/09/07 03:07	1.0	+		+	+	+
195303-020	IC03	06/08/07 23:57	50.0		+			
195303-020	IC03	06/09/07 00:15	1.0			+	+	+
195303-020	IC01	06/15/07 21:59	1.0	+				
195303-021	IC03	06/09/07 03:09	25.0		+			
195303-021	IC03	06/09/07 10:59	1.0			+	+	+
195303-021	IC01	06/15/07 22:34	1.0	+				
195303-022	IC01	06/08/07 23:02	10.0		+			
195303-022	IC01	06/09/07 06:37	1.0	+		+	+	+
195303-024	IC01	06/08/07 23:20	10.0		+		+	
195303-024	IC01	06/09/07 08:57	1.0	+		+		+
195303-025	IC01	06/08/07 23:37	10.0		+		+	+
195303-025	IC01	06/09/07 10:07	1.0	+		+		
195303-027	IC03	06/09/07 03:26	25.0		+			
195303-027	IC03	06/09/07 06:20	1.0			+	+	+
195303-027	IC01	06/15/07 23:09	1.0	+				
195303-030	IC01	06/09/07 03:42	1.0	+	+	+	+	+
QC391417	IC01	06/08/07 09:58	1.0	+	+	+	+	+
QC391418	IC01	06/08/07 10:16	1.0	+	+	+	+	+
QC391419	IC01	06/08/07 10:33	1.0	+	+	+	+	+
QC391692	IC01	06/08/07 21:52	1.02	+	+	+	+	+
QC391693	IC01	06/08/07 22:10	1.02	+	+	+	+	+
QC391488	IC03	06/08/07 13:07	1.0	+	+	+	+	+
QC391489	IC03	06/08/07 13:25	1.0	+	+	+	+	+
QC391490	IC03	06/08/07 13:42	1.0	+	+	+	+	+
QC391499	IC03	06/08/07 15:40	1.0					

REPORTING SUMMARY FOR 195303 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	CL	NO2N	NO3N	SO4	
QC391663	IC03	06/08/07 21:21	10.0	+	+	+	+	+	
QC391663	IC03	06/08/07 22:13	10.0						
QC391664	IC03	06/08/07 21:38	10.0	+	+	+	+	+	
QC391664	IC03	06/08/07 22:30	10.0						
QC392543	IC01	06/15/07 10:31	1.0	+	+	+	+	+	
QC392544	IC01	06/15/07 12:11	1.0	+	+	+	+	+	
QC392545	IC01	06/15/07 12:28	1.0	+	+	+	+	+	
QC392681	IC01	06/16/07 02:39	10.0	+	+	+	+	+	
QC392681	IC01	06/16/07 03:32	10.0						
QC392682	IC01	06/16/07 02:57	10.0	+	+	+	+	+	
QC392682	IC01	06/16/07 03:49	10.0						

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126083
Date Started: 08-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195279-001			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-JUN-2007
195285-006			U.S. Army Corps of	Water	CHLORIDE, NITRATE, SULFATE	19-JUN-2007
195285-007			U.S. Army Corps of	Water	CHLORIDE, NITRATE, SULFATE	19-JUN-2007
195303-008			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-010			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-015			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-016			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-017			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-018			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-019			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-022			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-024			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-025			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-030			Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195307-003			Matheson-Tri Gas	Water	NITRATE, NITRITE	14-JUN-2007
QC391417	BLANK			Water		
QC391418	BS			Water		
QC391419	BSD			Water		
QC391692	MS	of 195279-001		Water		
QC391693	MSD	of 195279-001		Water		

: 28551

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126083
Date Started: 6/6/07
Prep Chemist: MSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195279-001 I	.01	1x	S	MSS
2	195285-006 A	.15	1x	↓	
3	↓ -007 A	.52	1x/10x		
4	195303-008 G	1.31	50x/1x		
5	-010	.95	10x/1x		
6	-015	.66	10x/1x		
7	-016	.78	10x/1x		
8	-017	.70	10x/1x		
9	-018	.71	10x/1x		
10	-019	.78	10x/1x		
11	-022	.88	10x/1x		
12	-024	.70	10x/1x		
13	-025	.81	10x/1x		
14	↓ -030 ↓	.06	1x		
15	195307-003 A	.50	1x	↓	
16	Blank 391417	N/A	1x	N/A	
17	BS 391418	↓	↓	↓	
18	BSD 391419	↓		↓	
19	MS C92	.01		S	
20	MSD ↓ C93	.01	↓	↓	

CP 6/12/07

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	10x2 MDW 4/9/07	MSB 6/11/07
BS/BSD Spiked with .2 mL of :	SG107	↓
MS/MSD Spiked with .1 mL of :	SG107	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na	↓	
P: OnGuard II P		
RP: OnGuard II RP	↓	
S: 0.20um/0.45um	Acrodisc #106505	↓

MSB 6/11/07
Extraction Chemist / Date

Continued from page ___
Continued on page ___

CP 6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126098
Date Started: 08-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
195189-001		Reed International	Water	CHLORIDE, SULFATE	12-JUN-2007
195189-002		Reed International	Water	CHLORIDE, SULFATE	12-JUN-2007
195286-007		U.S. Army Corps of	Water	CHLORIDE	19-JUN-2007
195303-001		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-002		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-003		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-004		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-005		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-006		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-009		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-011		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-012		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-013		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-020		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-021		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
195303-027		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	20-JUN-2007
QC391488	BLANK		Water		
QC391489	BS		Water		
QC391490	BSD		Water		
QC391499	PREPBLK		SPLP Leachate		
QC391663	MS of 195189-001		Water		
QC391664	MSD of 195189-001		Water		

Curtis & Tompkins, Ltd. **Water Prep Log** Ion Chromatography

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 126099
Date Started: 6/8/07
Prep Chemist: KSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	194919-002	N/A	2x	N/A	leachate
2	194934-003	N/A	2x	↓	↓
3	195189-001 B	1.27	10x	S	MSS
4	195247-001 A				Taken Out of Batch
5	195266-007	.17	2x		leachate
6	195303-001 G	2.72	100x/2x		
7	-002	1.28	25x/1x		
8	-003	1.90	50x/1x		
9	-004	1.04	25x/1x		
10	-005	.93	10x/1x		
11	-006	1.38	50x/1x		
12	-009	.94	10x/1x		
13	-011	1.75	50x/1x		
14	-012	1.11	25x/1x		
15	-013	1.10	25x/1x		
16	-020	1.49	50x/1x		
17	-021	1.18	25x/1x		
18	-027	1.27	25x/1x		
19	Blank 391488		1x	N/A	
20	BS 489		1x		
	BSD 490		1x		
	ProBlk 499		1x	↓	
	MS 603		10x	S	
	MSD 604		10x		
	195189-001 B	1.30	10x	↓	

	Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID	10ex MDW 4/9/07	KSB 6/11/07
BS/BSD Spiked with .2 mL of :	5/6/07	
MS/MSD Spiked with .1 mL of :	5/6/07	
Filters Used: Ag: OnGuard II Ag	N/A	
Na: OnGuard II Na		
P: OnGuard II P		
RP: OnGuard II RP	↓	
S: 0.20um/0.45um	Acrodisc # 10650522	↓

KSB 6/11/07
Extraction Chemist / Date

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CR 6/12/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126358
Date Started: 15-JUN-2007
Batched by : Matthew J. Bacinskas

Analysis : N/A
Bgroup : IC
Department : GC Organics

Sample	Type		Client	Matrix	Analyses	Due Date
195303-001			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-002			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-003			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-004			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-005			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-006			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-009			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-011			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-012			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-013			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-020			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-021			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195303-027			Treadwell & Rollo	Water	FLUORIDE	20-JUN-2007
195422-011			Union Sanitary Dis	Water	FLUORIDE	20-JUN-2007
QC392543	BLANK			Water		
QC392544	BS			Water		
QC392545	BSD			Water		
QC392681	MS	of 195303-005		Water		
QC392682	MSD	of 195303-005		Water		

Curtis & Tompkins, Ltd.

Water Prep Log

Ion Chromatography

Analysis: ☑ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO_4) EPA 314
☐ Cr6+ EPA 7199

Batch#: 196358
Date Started: 6/15/07
Prep Chemist: KSB

BK 2488
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	195303-001 B	2.72	2x	S	
2	-002 G	1.28	1x		
3	-003	1.90			
4	-004	1.04			
5	-005	.93	1/10x		NCS
6	-006	1.38			
7	-009	.94			
8	-011	1.75			
9	-012	1.11			
10	-013	1.10			
11	-020	1.49			
12	-021	1.18			
13	-027	1.27			
14	195422-011 C	5.27	2x		
15	Blank 392543	N/A	1x	N/A	
16	BS 392544				
17	BSD 392545				
18	MS 392681	.93	10x	S	
19	MSD 392682	.93	10x	S	
20					
					KSB 6/18/07

		Mfg & Lot # / Time / Program	Initials / Date
Eluent Reagent ID		100x ADW 4/9/07	KSB 6/18/07
BS/BSD Spiked with	~2 mL of :	5G107	
MS/MSD Spiked with	.1 mL of :	5G107	
Filters Used:	Ag: OnGuard II Ag	N/A	
	Na: OnGuard II Na		
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc #10654522	

KSB 6/18/07
Extraction Chemist / Date

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Continued on page ___

CR 6/18/07
Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 06/28/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.011	0.0092
Chloride	mg/L	0.050	0.0061
Nitrogen, Nitrite	mg/L	0.011	0.0081
Bromide	mg/L	0.054	0.036
Nitrogen, Nitrate	mg/L	0.012	0.0080
Orthophosphate (as P)	mg/L	0.037	
Sulfate	mg/L	0.088	0.047

CYANIDE

Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	126241
Field ID:	WT060807	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/13/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	195303-026	0.03	0.01
BLANK	QC392050	ND	0.01

ND= Not Detected
RL= Reporting Limit

2.0

Curtis & Tompkins, Ltd.

Batch QC Report

Total Cyanide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	WT060807	Batch#:	126241
MSS Lab ID:	195303-026	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/13/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392051	0.02700	0.2000	0.2071	104	65-135		
MSD	QC392052		0.2000	0.2025	101	65-135	2	20
LCS	QC392053		0.2000	0.1942	97	75-125		

RPD= Relative Percent Difference

3.0

195678

Analysis:	**Cyanide**	Analyst:	DM
Method:	SMWW 4500CN-E	Prep Date:	**6/13/2007**
Instrument:	Perkin Elmer LAMBDA 25	Analysis Date:	**6/13/2007**
Wavelength:	578 nm	Batch:	126241
SOP#:	CN_335_rv8.doc	Matrix:	WATER

INITIAL CALIBRATION DATA

Calibration Date: 5/31/07

Conc (mg/L)	ABS	RF
0.0000	0.0000	
0.0100	0.0169	1.6900
0.0200	0.0305	1.5250
0.0400	0.0617	1.5425
0.0800	0.1263	1.5788
0.1200	0.1971	1.6425
0.2000	0.3191	1.5955
0.3000	0.4858	1.6193

Correlation Coefficient (r):	0.9999
Avg Rf:	1.599083
%RSD:	3.6

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.3106	0.1942	0.2000	97%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.3061	0.1914	0.2000	96%	90 - 110%
CCB	0.0015	0.0009	0.0000		
CCV	0.3016	0.1886	0.2000	94%	90 - 110%
CCB	0.0015	0.0009	0.0000		

Analysis: **Cyanide**
Method: **EPA 335.2** / SMWW 4500CN-E
Instrument: Perkin Elmer LAMBDA 25
Wavelength: 578 nm

Analyst: DM
Prep Date: **6/13/2007**
Analysis Date: **6/13/2007**
Batch: 126241
Matrix: WATER

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Distilled	Final Distill Vol (mL)	Distillate Colored (mL)	Instrument Dilution	ABS	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	50.0	50.0	10.0	1.00	0.0156	**ND**	0.010					
LCS	50.0	50.0	10.0	1.00	0.3162	**0.1977**	0.010	0.5	20.0	0.200	**99**	
195303-26	50.0	50.0	10.0	1.00	0.0432	**0.0270**	0.010					
195303-26m	50.0	50.0	10.0	1.00	0.3311	**0.2071**	0.010	0.5	20.0	0.200	**104**	
195303-26m	50.0	50.0	10.0	1.00	0.3238	**0.2025**	0.010	0.5	20.0	0.200	**101**	
195265-1	50.0	50.0	10.0	1.00	0.0062	**ND**	0.010					
195265-2	50.0	50.0	10.0	1.00	0.0079	**ND**	0.010					
195265-3	50.0	50.0	10.0	1.00	0.0133	**ND**	0.010					
195265-4	50.0	50.0	10.0	1.00	0.1671	**0.1045**	0.010					
195265-5	50.0	50.0	10.0	1.00	0.2457	**0.1537**	0.010					
195265-6	50.0	50.0	10.0	1.00	0.3303	**0.2066**	0.010					
195265-7	50.0	50.0	10.0	1.00	0.0052	**ND**	0.010					
195265-8	50.0	50.0	10.0	1.00	0.0050	**ND**	0.010					
195342-2	50.0	50.0	10.0	1.00	0.0076	**ND**	0.010					

2.2 cm
6-13-07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	77 - 120
MS/ MSD	20	66 - 120

Reviewed by/ Date: 6.14.07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126241
Date Started: 13-JUN-2007
Batched by : Dennis McCanna

Analysis : CYANIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195265-001			MWH	Water	CYANIDE	13-JUN-2007
195265-002			MWH	Water	CYANIDE	13-JUN-2007
195265-003			MWH	Water	CYANIDE	13-JUN-2007
195265-004			MWH	Water	CYANIDE	13-JUN-2007
195265-005			MWH	Water	CYANIDE	13-JUN-2007
195265-006			MWH	Water	CYANIDE	13-JUN-2007
195265-007			MWH	Water	CYANIDE	13-JUN-2007
195265-008			MWH	Water	CYANIDE	13-JUN-2007
195303-026			Treadwell & Rollo	Water	CYANIDE	20-JUN-2007
195342-002			Bay Area Rapid Tra	Water	CYANIDE	15-JUN-2007
QC392050	BLANK			Water	CYANIDE	
QC392051	MS	of 195303-026		Water	CYANIDE	
QC392052	MSD	of 195303-026		Water	CYANIDE	
QC392053	LCS			Water	CYANIDE	

: 92673

DATE 195342
TREADWELL 195303
PROJECT MWH 195265

LOGBOOK NO Bk 2506

CN SMWW 20: 4500CN MOD B126241

Sample	Vol (ml)	Final Vol (ml)	Vol (ml) colored	ABS
195265-1D	50	50	10	.0062
-2				.0079
-3				.0133
-4				.1671
-5				.2457
-6				.3303
-7				.0052
-8				.0050
195303-26C				.0432
-26MS	+.5ml (20ug/ml dilno FS5846 1ml – 50ml)			.3311
-26MSD	same as MS			.3238
195342-2A				.0076
LCS	same as MS			.3162
MB				.0156
ICB				-.000
ICV 0.5ml (20ug/ml dilno FS5846)	-50		10	.3106
CCV				.3061
CCB				.0015
CCV				.3016
CCB				.0015

Tests for Cl^- & $S^=$ negative
pH all >12
Sulfamic acid added to all samples

Dw - 6-13-07 DMB 6/13/07

Method Detection Limit Study

Analysis: **Cyanide**
Method: SMWW 20:4500-CN mod
Instrument: Perkin Elmer Lambda 25
* using the midi-distillation apparatus

Matrix: **Water**
Analysis Date: 6/12/2007
Analyst: DMB

Concentration:	0.0100	mg/L
1	0.0114	
2	0.0144	
3	0.0122	
4	0.0128	
5	0.0140	
6	0.0125	
7	0.0116	
8	0.0133	
Average	0.0128	
STDEVP	0.000998	
Student's t	2.998	

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.00299**	mg/L
Reporting Limit:	0.0100	mg/L
Status:	PASS	

Curtis & Tompkins, Ltd.

TOTAL OIL AND GREASE DATA

: 88676

Curtis & Tompkins, Ltd.

Total Oil & Grease (HEM)

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	126490
Field ID:	WT060807	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	195303-026	ND	4.70	0.9400
BLANK	QC393070	ND	5.00	1.000

ND= Not Detected
RL= Reporting Limit

99.0

: 00577

Curtis & Tompkins, Ltd.

Batch QC Report

Total Oil & Grease (HEM)

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	126490
Units:	mg/L	Analyzed:	06/20/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC393071	40.00	37.10	93	78-114		
BSD	QC393072	40.00	42.20	105	78-114	13	18

RPD= Relative Percent Difference

100.0

: 88578

Analysis:	**Hexane Extractable Material (Total)**	Analyst:	PAP
Method:	**EPA 1664A**	Prep Date:	**20-Jun-07**
Matrix:	Water	Analysis Date:	**20-Jun-07**
Silica Gel:	No	Batch #:	**126490**
SOP#:	1664_rv4.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Beaker Mass (g)	Total Mass (g)	Residue Mass (g)	**Report** (mg/L)	Reporting Limit (mg/L)	Spike Used (g)	**Recovery,%**	**RPD,%**
MB	1000	1.00	2.5361	2.5378	0.0017	1.700 **J**	5.00			
BS	1000	1.00	2.5254	2.5625	0.0371	37.100	5.00	0.0400	93 *	
BSD	1000	1.00	2.5221	2.5643	0.0422	42.200	5.00	0.0400	105 *	13 *

SAMPLE DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report** (mg/L)	Reporting Limit (mg/L)	IDF (1000/Vs)
195303-26	1060	0.94	2.5251	2.5281	0.0030	ND	4.72	0.943
195357-1	1030	0.97	2.4891	2.4931	0.0040	ND	4.85	0.971
195357-2	1030	0.97	2.5362	2.5394	0.0032	ND	4.85	0.971
195357-3	1030	0.97	2.5275	2.5312	0.0037	ND	4.85	0.971
195357-4	1030	0.97	2.5171	2.5201	0.0030	ND	4.85	0.971
195422-11	980	1.02	2.5280	2.5294	0.0014	ND	5.10	1.020

Note: RPD calculation includes correction for different spiking levels.

QC Limits	RPD	Recovery
LCS/ BS/ BSD	18	78 - 114
MS/ MSD	28	68 - 124

Reviewed by/ Date: 6/20/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126490
Date Started: 20-JUN-2007
Batched by : Patrick Perin

Analysis : 1664T
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
195303-026		Treadwell & Rollo	Water	1664T	20-JUN-2007
195357-001		Polymatrix	Water	1664T	22-JUN-2007
195357-002		Polymatrix	Water	1664T	22-JUN-2007
195357-003		Polymatrix	Water	1664T	22-JUN-2007
195357-004		Polymatrix	Water	1664T	22-JUN-2007
195422-011		Union Sanitary Dis	Water	1664T	20-JUN-2007
QC393070	BLANK		Water	1664T	
QC393071	BS		Water	1664T	
QC393072	BSD		Water	1664T	

Oil Grease (H.E.M.) Benchbook EPA 1664A Curtis & Tompkins, Ltd.

LIMS Batch #: ~~24~~ 126490 Date: 6/20/07 Benchbook#: **BK2436**

Matrix: Water Time: 12:00 Page: **95**

Spike SS#: S6403 Hexane Manufacturer & Lot# E11E38

Spike SS Conc (mg/L): 8000 Extraction Disc Lot#: 450358

Into Final Vol (mL): 1000 Silica Gel Cleanup Used (Y / N): N

Spike Conc (mg/L): 1280 Silica Gel Manufacturer & Lot# N/A

	Sample # / Letter	pH	Sample Vol (mL)	Mass (g)	Mass (g)*	Mass (g)*	Comments
1	MB	2	1000	2.5361	2.5379	2.5378	
	BS			2.4992	2.5065	2.5064	Machine malfunction, resan PAR 6/20/07
	BSD			2.5221	2.5642	2.5643	
	195303-026		1060	2.5251	2.5280	2.5281	
5	195357-001		1030	2.4891	2.4929	2.4931	
	-002			2.5362	2.5393	2.5394	
	-003			2.5275	2.5312	2.5312	
	-004			2.5171	2.5201	2.5200	
	195422-011		980	2.5280	2.5294	2.5295	
10	~~BSD~~ BS		1000	2.5254	2.5624	2.5625	
	(*) Machine did not rinse bottle properly. White chunks left in bottle 6/20/07						
15							
20							

* Constant weight must be within ± 0.0005g from previous reading.

Weight Set Number: HEM2/1907

	Openning Wt.	Ending Wt.	Limits
2 mg	0.0019	0.0019	(0.0018 to 0.0022 g)
1 g	0.9999	0.9998	(0.9950 to 1.0050 g)
5 g	4.9998	4.9998	(4.9750 to 5.0250 g)

6/20/07

Analyst / Date

6/20/07

Reviewed by / Date

Hexane Extractable Material
EPA 1664
Method Detection Limit Study

Method Detection Limit Study

Analysis: Oil & Grease
Method: **EPA 1664** w/o silica gel
Matrix: Water

Prep Date: 4-Jun-07
Analysis Date: 6/4/2007
Analyst: PAP

Conc. (mg/L)	2.0
1	4.1
2	3.0
3	3.1
4	3.0
5	3.6
6	2.6
7	3.5

STDEVP	0.458925
Student-T value	3.143

(Student-T value for 7 replicates = 3.143)
(Student-T value for 8 replicates = 2.998)

MDL (mg/L)	**1.4**
RL (mg/L)	5.0
Status	**PASS**

DMB
6/4/07

Curtis & Tompkins, Ltd.

Phenolic Compounds
EPA 420.1

Curtis & Tompkins, Ltd.

Phenolic Compounds

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Batch#:	126402
Field ID:	WT060807	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Prepared:	06/18/07
Diln Fac:	1.000	Analyzed:	06/19/07

Type	Lab ID	Result	RL
SAMPLE	195303-026	ND	0.050
BLANK	QC392701	ND	0.050

ND= Not Detected
RL= Reporting Limit

93.0

Curtis & Tompkins, Ltd.

Batch QC Report

Phenolic Compounds

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Batch#:	126402
Field ID:	WT060807	Sampled:	06/08/07
MSS Lab ID:	195303-026	Received:	06/08/07
Matrix:	Water	Prepared:	06/18/07
Units:	mg/L	Analyzed:	06/19/07
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC392702		0.2500	0.2245		90	80-120		
SDUP	QC392703	<0.05000		<0.05000	0.05000			NC	30

NC= Not Calculated
RL= Reporting Limit
RPD= Relative Percent Difference

94.0

Analysis:	**Phenolic Compounds**	Analyst:	DMB
Method:	**EPA 420.1**	Prep Date:	6/18/07
Instrument:	Perkin Elmer Lambda 25	Analysis Date:	6/19/07
Wavelength:	510 nm	Batch:	126402
SOP#:	phenols_rv 7.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 1/17/07

Conc (mg/L)	ABS	RF
0.0000	0.0000	
0.0500	0.0070	0.1400
0.1000	0.0125	0.1250
0.2000	0.0264	0.1320
0.5000	0.0654	0.1308
0.8000	0.1006	0.1258
1.0000	0.1290	0.1290
1.5000	0.1963	0.1309

Correlation Coefficient (r):	0.9998
Avg Rf:	0.1305
%RSD:	3.8

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1266	0.9702	1.0000	97%	90 - 110%
ICB	0.0003	0.0023	0.0000		
CCV	0.1238	0.9487	1.0000	95%	90 - 110%
CCB	-0.0010	-0.0077	0.0000		

Analysis: **Phenolic Compounds**
Method: **EPA 420.1**
Instrument: Perkin Elmer Lambda 25
Wavelength: 510 nm

Analyst: DMB
Prep Date: 6/18/07
Analysis Date: 6/19/07
Batch: 126402
Matrix: Water

SAMPLE & BATCH QC DATA

Sample ID	Initial Volume (mL)	Distilled to (mL)	Distillate Colored (mL)	IDF	Sample ABS	Color Blk Abs	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Spike Std. Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	200	200	50.0	1.0	0.0000		**ND**	0.050					
LCS	200	200	50.0	1.0	0.0293		**0.22454**	0.050	5.0	10.0	0.2500	**90**	
195303-026	200	200	50.0	1.0	0.0010		**ND**	0.050					
SDUP	200	200	50.0	1.0	0.0036		**ND**	0.050					**NC**
195346-001	200	200	0.5	1.0	0.0872		**66.82602**	5.000					
195346-002	200	200	0.5	1.0	0.0857		**65.67649**	5.000					
195346-003	200	200	0.5	1.0	0.0572		**43.83542**	5.000					
195346-004	200	200	5.0	1.0	0.0360		**2.75887**	0.500					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	80 - 120
MS/ MSD	30	70 - 130

Reviewed by/ Date: SY 6/19/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126402
Date Started: 18-JUN-2007
Batched by : David Bowden

Analysis : PHENOL/WET
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
195303-026		Treadwell & Rollo	Water	PHENOL/WET	20-JUN-2007
195346-001		Applied Process Te	Water	PHENOL/WET	18-JUN-2007
195346-002		Applied Process Te	Water	PHENOL/WET	18-JUN-2007
195346-003		Applied Process Te	Water	PHENOL/WET	18-JUN-2007
195346-004		Applied Process Te	Water	PHENOL/WET	18-JUN-2007
QC392701	BLANK		Water	PHENOL/WET	
QC392702	LCS		Water	PHENOL/WET	
QC392703	SDUP of 195303-026		Water	PHENOL/WET	

Phenol / WET Batch 126402

Sample	Vol distilled	Vol colored	ABS
MB	200 ml	50	0.0000
☆ LCS	↓	↓	0.0293
195303-026			0.0010
SDUP-026			0.0036
195346-001		0.5	0.0872
-002		0.5	0.0857
-003		0.5	0.0582
-004	↓	5.0	0.0360
ICB	—	50	0.0003
✱ ICV	—	↓	0.1266
CCB	—		-0.001
✱ CCV	—		0.1238

☆ Plus 5.0 ml of 10 mg/L standard (dilution of S6334). TV = 0.25 mg/L
✱ Plus 5.0 ml of 10 mg/L standard (dilution of S6334). TV = 1.0 mg/L

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[illegible]	6/18/07	[illegible]	6/19/07

Analysis:	PHENOLIC COMPOUNDS	Analysis Date:	1/23/2007
Method:	EPA 420.1	Analyst:	SY
Instrument:	PE Lambda 25		
Wavelength:	510 nm		

Concentration:	0.200
Units:	mg/L
1	0.2000
2	0.1947
3	0.1962
4	0.1916
5	0.1916
6	0.1916
7	0.2077

Average:	0.196 mg/L
Std Deviation:	0.0059501
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0187** mg/L
Reporting Limit:	0.05 mg/L
Status:	>1/3 RL

ALKALINITY

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID: HWGW100 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-001

Analyte	Result	RL
Alkalinity, Bicarbonate	980	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	980	10

Field ID: 231GW10 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-002

Analyte	Result	RL
Alkalinity, Bicarbonate	630	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	630	10

Field ID: 231GW16 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-003

Analyte	Result	RL
Alkalinity, Bicarbonate	480	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	480	10

Field ID: 231GW30 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-004

Analyte	Result	RL
Alkalinity, Bicarbonate	510	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	510	10

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID: 231GW21 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-005

Analyte	Result	RL
Alkalinity, Bicarbonate	450	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	450	10

Field ID: 231GW22 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-006

Analyte	Result	RL
Alkalinity, Bicarbonate	750	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	750	10

Field ID: 1065MW103A Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-008

Analyte	Result	RL
Alkalinity, Bicarbonate	370	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	370	10

Field ID: 600GW106 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-009

Analyte	Result	RL
Alkalinity, Bicarbonate	290	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	290	10

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID: 610GW103 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-010

Analyte	Result	RL
Alkalinity, Bicarbonate	480	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	480	10

Field ID: 610SP01 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-011

Analyte	Result	RL
Alkalinity, Bicarbonate	1,000	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	1,000	10

Field ID: 231PZ04 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-012

Analyte	Result	RL
Alkalinity, Bicarbonate	610	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	610	10

Field ID: 231PZ03 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-013

Analyte	Result	RL
Alkalinity, Bicarbonate	580	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	580	10

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID:	231GW17	Batch#:	126478
Type:	SAMPLE	Sampled:	06/07/07
Lab ID:	195303-015		

Analyte	Result	RL
Alkalinity, Bicarbonate	230	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	230	10

Field ID:	231GW18	Batch#:	126478
Type:	SAMPLE	Sampled:	06/07/07
Lab ID:	195303-016		

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID:	231GW24	Batch#:	126478
Type:	SAMPLE	Sampled:	06/07/07
Lab ID:	195303-017		

Analyte	Result	RL
Alkalinity, Bicarbonate	320	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	320	10

Field ID:	231GW19	Batch#:	126478
Type:	SAMPLE	Sampled:	06/07/07
Lab ID:	195303-018		

Analyte	Result	RL
Alkalinity, Bicarbonate	320	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	320	10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID: 231GW15 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-019

Analyte	Result	RL
Alkalinity, Bicarbonate	330	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	330	10

Field ID: 231GW25 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-020

Analyte	Result	RL
Alkalinity, Bicarbonate	830	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	830	10

Field ID: 231GW23 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-021

Analyte	Result	RL
Alkalinity, Bicarbonate	580	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	580	10

Field ID: 231GW11 Batch#: 126478
Type: SAMPLE Sampled: 06/07/07
Lab ID: 195303-022

Analyte	Result	RL
Alkalinity, Bicarbonate	400	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	400	10

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Field ID: 231GW26 Batch#: 126495
Type: SAMPLE Sampled: 06/08/07
Lab ID: 195303-024

Analyte	Result	RL
Alkalinity, Bicarbonate	250	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	250	10

Field ID: 231GW27 Batch#: 126495
Type: SAMPLE Sampled: 06/08/07
Lab ID: 195303-025

Analyte	Result	RL
Alkalinity, Bicarbonate	270	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	270	10

Field ID: 207GW03 Batch#: 126495
Type: SAMPLE Sampled: 06/08/07
Lab ID: 195303-027

Analyte	Result	RL
Alkalinity, Bicarbonate	460	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO3	460	10

Field ID: DW060807B Batch#: 126495
Type: SAMPLE Sampled: 06/08/07
Lab ID: 195303-030

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07
Diln Fac:	1.000		

Type: BLANK Batch#: 126478
Lab ID: QC393018

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

Type: BLANK Batch#: 126495
Lab ID: QC393087

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO3	ND	1.0

ND= Not Detected
RL= Reporting Limit

101.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC393019	Batch#:	126478
Matrix:	Water	Analyzed:	06/20/07

Spiked	Result	%REC	Limits
200.0	195.6	98	90-110

102.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	610SP01	Batch#:	126478
MSS Lab ID:	195303-011	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC393020	997.0	500.0	1,359	72	69-112		
MSD	QC393021		500.0	1,361	73	69-112	0	25

RPD= Relative Percent Difference

103.0

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC393088	Batch#:	126495
Matrix:	Water	Analyzed:	06/20/07

Spiked	Result	%REC	Limits
200.0	195.6	98	90-110

104.0

88781

Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	231GW26	Batch#:	126495
MSS Lab ID:	195303-024	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/20/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC393089	250.0	500.0	730.0	96	69-112		
MSD	QC393090		500.0	720.0	94	69-112	1	25

RPD= Relative Percent Difference

105.0

188782

Analysis: **Alkalinity** Analyst: SJ

Method: **EPA 310.1 /** SMWW 2320B Analysis Date: **06/20/07** H_2SO_4 Normality = **0.02**

SOP#: Alkalinity_rv 7.doc Batch No: **126478** conc.(mg/L) Na_2CO_3 for QC = **200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.1	100	0.00	0.00	ND			1.0		
LCS	10.1	25	2.38	4.89	195.60			4.0	98	
195303-011	7.3	10	0.00	9.97	997.00		n/a	10.0		
MS	9.3	10	1.54	13.59	1359.00			10.0	72 *	
MSD	9.3	10	1.49	13.61	1361.00			10.0	73 *	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195303-001	7.6	10	0.00	9.79	979.00		n/a	10.0
195303-002	7.3	10	0.00	6.34	634.00		n/a	10.0
195303-003	7.6	10	0.00	4.75	475.00		n/a	10.0
195303-004	7.5	10	0.00	5.13	513.00		n/a	10.0
195303-005	7.0	10	0.00	4.54	454.00		n/a	10.0
195303-006	7.2	10	0.00	7.47	747.00		n/a	10.0
195303-008	7.1	10	0.00	3.68	368.00		n/a	10.0
195303-009	7.1	10	0.00	2.89	289.00		n/a	10.0
195303-010	7.5	10	0.00	4.75	475.00		n/a	10.0
195303-011	7.3	10	0.00	9.97	997.00		n/a	10.0
195303-012	7.3	10	0.00	6.12	612.00		n/a	10.0
195303-013	7.3	10	0.00	5.82	582.00		n/a	10.0
195303-015	7.2	10	0.00	2.26	226.00		n/a	10.0
195303-016	7.1	10	0.00	2.52	252.00		n/a	10.0
195303-017	7.3	10	0.00	3.19	319.00		n/a	10.0
195303-018	7.2	10	0.00	3.21	321.00		n/a	10.0
195303-019	7.9	10	0.00	3.29	329.00		n/a	10.0
195303-020	7.5	10	0.00	8.30	830.00		n/a	10.0
195303-021	7.2	10	0.00	5.80	580.00		n/a	10.0
195303-022	7.5	10	0.00	4.04	404.00		n/a	10.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/20/07
Batch No: 126478

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195303-001	0.0	979.0	979	979.000	0.000	0.000
195303-002	0.0	634.00	634.000	634.000	0.000	0.000
195303-003	0.0	475.00	475.000	475.000	0.000	0.000
195303-004	0.0	513.00	513.000	513.000	0.000	0.000
195303-005	0.0	454.00	454.000	454.000	0.000	0.000
195303-006	0.0	747.00	747.000	747.000	0.000	0.000
195303-008	0.0	368.00	368.000	368.000	0.000	0.000
195303-009	0.0	289.00	289.000	289.000	0.000	0.000
195303-010	0.0	475.00	475.000	475.000	0.000	0.000
195303-011	0.0	997.00	997.000	997.000	0.000	0.000
195303-012	0.0	612.00	612.000	612.000	0.000	0.000
195303-013	0.0	582.00	582.000	582.000	0.000	0.000
195303-015	0.0	226.00	226.000	226.000	0.000	0.000
195303-016	0.0	252.00	252.000	252.000	0.000	0.000
195303-017	0.0	319.00	319.000	319.000	0.000	0.000
195303-018	0.0	321.00	321.000	321.000	0.000	0.000
195303-019	0.0	329.00	329.000	329.000	0.000	0.000
195303-020	0.0	830.00	830.000	830.000	0.000	0.000
195303-021	0.0	580.00	580.000	580.000	0.000	0.000
195303-022	0.0	404.00	404.000	404.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 06/20/07 H_2SO_4 Normality = 0.02
Method: **EPA 310.1** Batch No: 126478 Analyst: SJ

SAMPLE	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity as HCO_3^- (mg/L)	Carbonate Alkalinity as CO_3^{2-} (mg/L)	Hydroxide Alkalinity as OH^- (mg/L)
195303-001	979.000	1193.643	0.000	0.000
195303-002	634.000	773.003	0.000	0.000
195303-003	475.000	579.142	0.000	0.000
195303-004	513.000	625.474	0.000	0.000
195303-005	454.000	553.538	0.000	0.000
195303-006	747.000	910.778	0.000	0.000
195303-008	368.000	448.683	0.000	0.000
195303-009	289.000	352.362	0.000	0.000
195303-010	475.000	579.142	0.000	0.000
195303-011	997.000	1215.589	0.000	0.000
195303-012	612.000	746.179	0.000	0.000
195303-013	582.000	709.602	0.000	0.000
195303-015	226.000	275.550	0.000	0.000
195303-016	252.000	307.250	0.000	0.000
195303-017	319.000	388.940	0.000	0.000
195303-018	321.000	391.378	0.000	0.000
195303-019	329.000	401.132	0.000	0.000
195303-020	830.000	1011.975	0.000	0.000
195303-021	580.000	707.163	0.000	0.000
195303-022	404.000	492.576	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Analysis:	**Alkalinity**	Analyst:	SJ		
Method:	**EPA 310.1 /** SMWW 2320B	Analysis Date:	**06/20/07**	H_2SO_4 Normality =	**0.02**
SOP#:	Alkalinity_rv 7.doc	Batch No:	**126495**	conc.(mg/L) Na_2CO_3 for QC =	**200**

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinty** as $CaCO_3$ (mg/L)	Low Alk Vol (mL)	**Low Alk** as $CaCO_3$ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.1	100	0.00	0.00	ND			1.0		
LCS	10.1	25	2.38	4.89	195.60			4.0	98	
195303-024	7.4	10	0.00	2.50	250.00		n/a	10.0		
MS	9.6	10	2.01	7.30	730.00			10.0	96	
MSD	9.6	10	2.02	7.20	720.00			10.0	94	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	**Alkalinity** as $CaCO_3$ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	**Low Alkalinity** as $CaCO_3$ (mg/L)	Reporting Limit (mg/L)
195303-024	7.4	10	0.00	2.50	250.00		n/a	10.0
195303-025	7.1	10	0.00	2.74	274.00		n/a	10.0
195303-027	8.0	10	0.00	4.59	459.00		n/a	10.0
195303-030	5.3	100	0.00	0.09	rpt low alk	0.19	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: DMB 6/20/07

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: **Alkalinity**
Method: **EPA 310.1**

Analyst: SJ
Analysis Date: 06/20/07
Batch No: 126495

H_2SO_4 Normality = 0.02

SAMPLE	(P)	(T-P)	Total Alkalinity as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
				as $CaCO_3$ (mg/L)		
195303-024	0.0	250.0	250	250.000	0.000	0.000
195303-025	0.0	274.00	274.000	274.000	0.000	0.000
195303-027	0.0	459.00	459.000	459.000	0.000	0.000
195303-030	0.0	#VALUE!	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: **Alkalinity** Analysis Date: 06/20/07 H_2SO_4 Normality = 0.02

Method: **EPA 310.1** Batch No: 126495 Analyst: SJ

SAMPLE	**Total Alkalinity** as $CaCO_3$ (mg/L)	Bicarbonate Alkalinity **as HCO_3^- (mg/L)**	Carbonate Alkalinity **as CO_3^{2-} (mg/L)**	Hydroxide Alkalinity **as OH^- (mg/L)**
195303-024	250.000	304.812	0.000	0.000
195303-025	274.000	334.074	0.000	0.000
195303-027	459.000	559.634	0.000	0.000
195303-030	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126478
Date Started: 20-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195303-001			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-002			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-003			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-004			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-005			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-006			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-008			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-009			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-010			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-011			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-012			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-013			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-015			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-016			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-017			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-018			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-019			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-020			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-021			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-022			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
QC393018	BLANK			Water	ALKALINITY	
QC393019	LCS			Water	ALKALINITY	
QC393020	MS	of 195303-011		Water	ALKALINITY	
QC393021	MSD	of 195303-011		Water	ALKALINITY	

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: 126478 Date: 6/20/07 Benchbook#: **BK2508**
Matrix: water Time: 8:20 Page: **19**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55862
Slope: 100.8
(slope limits: 92 - 102)

$NaCO_3$ Vol (mgL) Spiked: 5
$NaCO_3$ Conc (mg/L): 1000
$NaCO_3$ WS#: 56014
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR 3229-4
lot #632 Exp. 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	5.1	100	—	<0.05		
LCS	10.1	25	2.38	4.89		
195303-1 B	7.6	10	—	9.79		
-2 G	7.3	10	—	6.34		
-3	7.6	10	—	4.75		
-4	7.5	10	—	5.13		
-5	7.0	10	—	7.54		
-6	7.2	10	—	~~7.47~~ 4/19		
4/19 -~~8~~8	7.1	10	—	3.68 ~~7.47~~ 4/19		
-9	7.1	10	—	2.89		
-10	7.5	10	—	4.75		
-11	7.3	10	—	~~9.97~~ 9.97		
MS-11	9.3	10	1.54	13.59		
MSD-11	9.3	10	1.49	13.61		
-12	7.3	10	—	6.12		
-13 F	7.3	10	—	5.82		
-15 G	7.2	10	—	2.26		
-16	7.1	10	—	2.52		
-17	7.3	10	—	3.19		
-18	7.2	10	—	3.21		
-19	7.9	10	—	3.29		
-20	7.5	10	—	8.30		
-21	7.2	10	—	5.80		
-22	7.5	10	—	4.04		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/20/07
Analyst / Date

6/20/07
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126495
Date Started: 20-JUN-2007
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195303-024			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-025			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-027			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
195303-030			Treadwell & Rollo	Water	ALKALINITY	20-JUN-2007
QC393087	BLANK			Water	ALKALINITY	
QC393088	LCS			Water	ALKALINITY	
QC393089	MS	of 195303-024		Water	ALKALINITY	
QC393090	MSD	of 195303-024		Water	ALKALINITY	

Alkalinity Benchbook EPA 310.1 / SMWW 2320B Curtis & Tompkins, Ltd.

LIMS Batch #: ~~126492~~ 126495 Date: 6/20/07 Benchbook#: **BK2508**
Matrix: Water Time: 13:45 Page: **20**

CAL-ph 4.0: SS#: 5749
CAL-ph 7.0: SS#: 51291
CAL-ph 10.0: SS#: 55862
Slope: 100.8
(slope limits: 92 - 102)

NaCO3 Vol (mgL) Spiked: 5
NaCO3 Conc (mg/L): 1000
NaCO3 WS#: 5609
H_2SO_4 Normality: 0.02
H_2SO_4 Reagent ID: VWR ~~6352~~ 3229-4
Lot #6352 Exp 31-Dec-07

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H_2SO_4 Vol (mL) to pH 8.3	H_2SO_4 Vol (mL) to pH 4.5 *	Low Alk TotalVol (mL)	Comments
MB	4.8	100	—	<0.05		
LCS	10.0	25	2.42	4.79		
195300-24G	7.4	10	—	2.50		
-25	7.1	10	—	2.74		
-27	8.0	10	—	4.59		
-30	5.6	25	—	~~4.89~~		
-30	5.3	100	—	0.09	0.19	
MS - 24G	9.6	10	~~2.01~~	~~2.01~~		
MSD-24	9.6	10	2.02	7.20		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

6/20/07
Analyst / Date

6/20/07
Reviewed by / Date

Sulfide

98713

Curtis & Tompkins, Ltd.

Sulfide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled
231GW10	SAMPLE	195303-002	ND	0.04	126293	06/07/07
231GW16	SAMPLE	195303-003	0.07	0.04	126293	06/07/07
231GW30	SAMPLE	195303-004	0.04	0.04	126293	06/07/07
231GW21	SAMPLE	195303-005	ND	0.04	126293	06/07/07
231GW22	SAMPLE	195303-006	ND	0.04	126293	06/07/07
1065MW103A	SAMPLE	195303-008	ND	0.04	126293	06/07/07
231PZ04	SAMPLE	195303-012	0.07	0.04	126293	06/07/07
231PZ03	SAMPLE	195303-013	ND	0.04	126293	06/07/07
231GW17	SAMPLE	195303-015	ND	0.04	126293	06/07/07
231GW18	SAMPLE	195303-016	ND	0.04	126293	06/07/07
231GW24	SAMPLE	195303-017	ND	0.04	126299	06/07/07
231GW19	SAMPLE	195303-018	ND	0.04	126299	06/07/07
231GW15	SAMPLE	195303-019	ND	0.04	126299	06/07/07
231GW25	SAMPLE	195303-020	ND	0.04	126299	06/07/07
231GW23	SAMPLE	195303-021	ND	0.04	126299	06/07/07
231GW11	SAMPLE	195303-022	ND	0.04	126299	06/07/07
231GW26	SAMPLE	195303-024	ND	0.04	126299	06/08/07
231GW27	SAMPLE	195303-025	ND	0.04	126299	06/08/07
207GW03	SAMPLE	195303-027	2.2	0.04	126299	06/08/07
DW060807B	SAMPLE	195303-030	ND	0.04	126299	06/08/07
	BLANK	QC392268	ND	0.04	126293	
	BLANK	QC392288	ND	0.04	126299	

ND= Not Detected
RL= Reporting Limit

4.0

00714

Curtis & Tompkins, Ltd.

Dissolved Sulfide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Batch#:	126299
Field ID:	WT060807	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	195303-026	ND	0.04
BLANK	QC392288	ND	0.04

ND= Not Detected
RL= Reporting Limit

6.0

Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC		Limits	RPD	Lim	Batch#	Sampled
	LCS		QC392269		0.5760	0.5417	94		75-125			126293	
231GW18	MS	195303-016	QC392270	<0.04000	0.1920	0.1236	64	*	75-125			126293	06/07/07
231GW18	MSD	195303-016	QC392271		0.1920	0.1364	71	*	75-125	10	20	126293	06/07/07
WT060807	MS	195303-026	QC392289	<0.04000	0.2400	0.2281	95		75-125			126299	06/08/07
WT060807	MSD	195303-026	QC392290		0.2400	0.2352	98		75-125	3	20	126299	06/08/07
	LCS		QC392291		0.2400	0.2367	99		75-125			126299	

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

5.1

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Sulfide

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Diln Fac:	1.000
Field ID:	WT060807	Batch#:	126299
MSS Lab ID:	195303-026	Sampled:	06/08/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC392289	<0.04000	0.2400	0.2281	95	34-127		
MSD	QC392290		0.2400	0.2352	98	34-127	3	20
LCS	QC392291		0.2400	0.2367	99	90-110		

RPD= Relative Percent Difference

188747

Analysis:	**SULFIDE**	Analyst:	DMB
Method:	EPA 376.2	Prep Date:	**06/14/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/14/07**
Wavelength:	626 nm	Batch:	**126293**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV/LCS	0.3296	0.5417	0.5760	94.1%	90 - 110%
ICB/MB	0.0001	0.0002	0.0000		
CCV	0.3329	0.5472	0.5760	95.0%	90 - 110%
CCB	0.0000	0.0000	0.0000		
CCV	0.3288	0.5404	0.5760	94%	90 - 110%
CCB	0.0050	0.0082	0.0000		

Analysis:	**SULFIDE**	Batch:	126293
Method:	**EPA 376.2**	Prep Date:	06/14/07
Instrument:	HP UV-VIS Spectrometer	Analysis Date:	06/14/07
Wavelength:	626 nm	Analyst:	DMB
Matrix:	Water		

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report** mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000									
LCS	7.5000	1.0000	look above								
195303-16	7.5000	1.0000	0.0064		**ND**	0.040					
195303-16ms	7.5000	1.0000	0.0752		**0.12360**	0.040	0.0500	28.8000	0.1920	**64**	
195303-16ms	7.5000	1.0000	0.0830		**0.13642**	0.040	0.0500	28.8000	0.1920	**71**	**10**
195303-2	7.5000	1.0000	0.0108		**ND**	0.040					
195303-3	7.5000	1.0000	0.0413		**0.06788**	0.040					
195303-4	7.5000	1.0000	0.0249		**0.04093**	0.040					
195303-5	7.5000	1.0000	0.0073		**ND**	0.040					
195303-6	7.5000	1.0000	0.0066		**ND**	0.040					
195303-8	7.5000	1.0000	-0.0010		**ND**	0.040					
195303-12	7.5000	1.0000	0.0397		**0.06525**	0.040					
195303-13	7.5000	1.0000	0.0138		**ND**	0.040					
195303-15	7.5000	1.0000	0.0067		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

Reviewed by/ Date: _____

Normality = [((Vi * Ni)-(Vna * Nna))*16000]/Vs

Vi	5.00		
Ni	0.0250		
Vna	3.20		
Nna	0.025		
Vs	1.00		
Conc	**720**	mg/L	28.8

Vi , Ni are the volume and normality of the iodine solution
Vna, Nna are the volume and normality of the sodium thiosulfate solution
Vs is the volume of the sulfide standard (1.0mL)

Analysis:	**SULFIDE**	Analyst:	dm
Method:	EPA 376.2	Prep Date:	**06/14/07**
Instrument:	**Perkin-Elmer Spectrometer**	Analysis Date:	**06/14/07**
Wavelength:	626 nm	Batch:	**126299**
SOP#:	sulfide_376_rv 4.doc	Matrix:	Water

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0150	0.5556
0.055	0.0301	0.5473
0.218	0.1302	0.5972
0.437	0.2716	0.6215
0.873	0.5861	0.6714
1.529	1.0054	0.6576

Correlation Coefficient (r):	0.9997
Avg Rf:	0.6084
%RSD:	8.4

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1440	0.2367	0.2400	99%	90 - 110%
ICB	0.0000	0.0000	0.0000		
CCV	0.1420	0.2334	0.2400	97%	90 - 110%
CCB	0.0000	0.0000	0.0000		
CCV	0.1412	0.2321	0.2400	97%	90 - 110%
CCB	0.0015	0.0025	0.0000		

Analysis: **SULFIDE**
Method: **EPA 376.2**
Instrument: HP UV-VIS Spectrometer
Wavelength: 626 nm
Matrix: Water

Batch: 126299
Prep Date: 06/14/07
Analysis Date: 06/14/07
Analyst: dm

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	**Report mg/L**	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	**% Rec**	**% RPD**
MB	7.5000	1.0000	0.0000		**ND**	0.040					
LCS	7.5000	1.0000	0.1440		**0.23668**	0.040	0.0500	36.0000	0.2400	**99**	
195303-26	7.5000	1.0000	0.0058		**ND**	0.040					
195303-26m	7.5000	1.0000	0.1388		**0.22813**	0.040	0.0500	36.0000	0.2400	**95**	
195303-26m	7.5000	1.0000	0.1431		**0.23520**	0.040	0.0500	36.0000	0.2400	**98**	**3**
195303-17	7.5000	1.0000	0.0010		**ND**	0.040					
195303-18	7.5000	1.0000	0.0214		**ND**	0.040					
195303-19	7.5000	1.0000	0.0083		**ND**	0.040					
195303-20	7.5000	1.0000	0.0077		**ND**	0.040					
195303-21	7.5000	1.0000	0.0035		**ND**	0.040					
195303-22	7.5000	1.0000	0.0033		**ND**	0.040					
195303-24	7.5000	1.0000	0.0042		**ND**	0.040					
195303-25	7.5000	1.0000	0.0102		**ND**	0.040					
195303-27	7.5000	2.0000	0.6619		**2.17581**	0.080					
195303-30	7.5000	1.0000	0.0004		**ND**	0.040					
195279-1	7.5000	1.0000	0.0074		**ND**	0.040					

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	20	46 - 121

Reviewed by/ Date: [illegible] 6/20/07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126293
Date Started: 14-JUN-2007
Batched by : Sunitha Yerragodula

Analysis : SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195303-002			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-003			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-004			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-005			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-006			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-008			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-012			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-013			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-015			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-016			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
QC392268	BLANK			Water	SULFIDE	
QC392269	LCS			Water	SULFIDE	
QC392270	MS	of 195303-016		Water	SULFIDE	
QC392271	MSD	of 195303-016		Water	SULFIDE	

002723

BATCH # 126293

icv/LCS :-

S^- Std :- 1ml S^-, 3.2 ml S_2O_3 (0.025N), 5ml I^- (0.025N) used

Na_2S con → 720 mg/l

1:25 dilu → 28.8 mg/L

1 ml of ↓ → 50 ml → 0.5760 mg/L → icv/LCS

50 µl of 28.8 mg/L in 7.5ml → 0.1920 mg/L → MS & MSD

Sample ID	Initial vol ml	Final vol ml	ABS
ICB/MB	7.5	7.5	-0.000
Icv/LCS			0.3296
195303-16			0.0064
-16 ms			0.0752
-16 msD			0.0830
-2			0.0108
-3			0.0413
-4			0.0249
-5			0.0073
-6			0.0066
ccv			0.3329
ccb			0.0026
195303-12			0.0397
-13			0.0138
-15			0.0067
-8			-0.001
ccv			0.3288
ccB			0.0030

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[illegible]	6/14/07	[illegible]	6.14.07

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126299
Date Started: 14-JUN-2007
Batched by : Dennis McCanna

Analysis : DISS SULFIDE
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195279-001			Treadwell & Rollo	Water	SULFIDE	19-JUN-2007
195303-017			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-018			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-019			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-020			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-021			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-022			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-024			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-025			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-026			Treadwell & Rollo	Water	DISS SULFIDE	20-JUN-2007
195303-027			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
195303-030			Treadwell & Rollo	Water	SULFIDE	20-JUN-2007
QC392288	BLANK			Water	DISS SULFIDE	
QC392289	MS	of 195303-026		Water	DISS SULFIDE	
QC392290	MSD	of 195303-026		Water	DISS SULFIDE	
QC392291	LCS			Water	DISS SULFIDE	

PROJECT Treadwell 195303, 195279

Continued From Page

Dis sulfide / Sulfide EPA 376.2 B126299

Sample	Vol (ml)	Final Vol (ml)	ABS
195303-17I	7.5	7.5	.0010
-18			.0214
-19			.0083
-20			.0077
-21			.0035
-22			.0033
-24			.0042
-25			.0002
-27			.0019 x 2
-30L			.0009
* 195303-26L			.0056
-26MS	+.05ml (36mg/L S= from OAS5292)		.1388
-26MSD	same as MS		.1431
195279-1H			.0074
ICB/MB			-.000
ICV/LCS	same as MS		.1440
CCV			.1420
CCB			-.000
CCV			.412
CCB			.0015

Std on pg 2 BK2521

* filter thru Whatman .45µ filter lot F785

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
Dm	6.14.07	DMB	6/19/07

Curtis & Tompkins, Ltd.

Analysis:	Sulfide	Analysis Date:	1/24/2007
Method:	EPA 376.2	Analyst:	SY
Instrument:	**Perkin-Elmer Spectrometer**		
Wavelength:	626 nm		

Instrument Calibrated to report sample results in concentration: mg/L

Concentration:	0.0821
Units:	mg/L
1	0.06624
2	0.06476
3	0.06180
4	0.06328
5	0.05769
6	0.06295
7	0.05670
Average:	0.062
Std Deviation:	0.0035307
Student T:	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	**0.0111** mg/L
Reporting Limit:	0.04 mg/L
Status:	PASS

✓ RCW 2/28/07

TOTAL DISSOLVED SOLIDS

Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	06/07/07
Matrix:	Water	Received:	06/08/07
Units:	mg/L	Analyzed:	06/14/07
Batch#:	126321		

Field ID	Type	Lab ID	Result	RL	Diln Fac
231GW10	SAMPLE	195303-002	710	10	1.000
231GW16	SAMPLE	195303-003	1,130	10	1.000
231GW30	SAMPLE	195303-004	610	10	1.000
231GW21	SAMPLE	195303-005	550	10	1.000
231GW22	SAMPLE	195303-006	830	10	1.000
1065MW103A	SAMPLE	195303-008	820	10	1.000
600GW106	SAMPLE	195303-009	590	10	1.000
610GW103	SAMPLE	195303-010	590	10	1.000
610SP01	SAMPLE	195303-011	890	50	5.000
231PZ04	SAMPLE	195303-012	670	10	1.000
231PZ03	SAMPLE	195303-013	670	10	1.000
231GW17	SAMPLE	195303-015	410	10	1.000
231GW18	SAMPLE	195303-016	490	10	1.000
231GW24	SAMPLE	195303-017	430	13	1.250
231GW19	SAMPLE	195303-018	430	10	1.000
231GW15	SAMPLE	195303-019	470	10	1.000
231GW25	SAMPLE	195303-020	880	10	1.000
231GW23	SAMPLE	195303-021	660	10	1.000
231GW11	SAMPLE	195303-022	510	10	1.000
	BLANK	QC392383	ND	10	1.000

ND= Not Detected
RL= Reporting Limit

106.1

08729

Curtis & Tompkins, Ltd.

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	126321
MSS Lab ID:	195385-002	Sampled:	06/13/07
Matrix:	Water	Received:	06/13/07
Units:	mg/L	Analyzed:	06/14/07

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC392384		100.0	124.0		124	75-126		
BSD	QC392385		100.0	124.0		124	75-126	0	21
SDUP	QC392386	16,640		17,260	10.00			4	24

RL= Reporting Limit
RPD= Relative Percent Difference

107.0

Analysis:	**Total Dissolved Solids**	Analyst:	SJ
Method:	**EPA160.1** / SMWW 2540c	Analysis Date:	**14-Jun-07**
Matrix:	Water	Batch #:	**126321**
SOP#:	tds_rv 9.doc		

BATCH QC DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol.Used (mL)	Spiking Level (mg/L)	**Recovery,%**	**RPD,%**
MB	50	1	50.3544	50.3540	-0.0004	ND	10					
BS	50	1	48.5023	48.5085	0.0062	124.0	10	1,000	5	100	**124**	
BSD	50	1	51.7192	51.7254	0.0062	124.0	10	1,000	5	100	**124**	**0.00**
195385-002	5	10	26.5931	26.6763	0.0832	16,640.0	100					
SDUP	5	10	27.1576	27.2439	0.0863	17,260.0	100					**3.66**

QC Limits	RPD	Recovery
LCS/ BS/ BSD	21	75 - 126
MS/ MSD/SDUP	24	65 - 136

SAMPLE DATA

Sample	Sample Vol (mL)	DF 50/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	**Report (mg/L)**	Reporting Limit (mg/L)
195303-002	50	1	47.2341	47.2698	0.0357	714.0	10
195303-003	50	1	41.6268	41.6835	0.0567	1,134.0	10
195303-004	50	1	52.1151	52.1454	0.0303	606.0	10
195303-005	50	1	47.2617	47.2893	0.0276	552.0	10
195303-006	50	1	49.1295	49.1708	0.0413	826.0	10
195303-008	50	1	47.2886	47.3295	0.0409	818.0	10
195303-009	50	1	48.5310	48.5605	0.0295	590.0	10
195303-010	50	1	48.6393	48.6689	0.0296	592.0	10
195303-011	10	5	50.6578	50.6667	0.0089	890.0	50
195303-012	50	1	45.2434	45.2769	0.0335	670.0	10
195303-013	50	1	42.8797	42.9131	0.0334	668.0	10
195303-015	50	1	44.5573	44.5777	0.0204	408.0	10
195303-016	50	1	48.9313	48.9556	0.0243	486.0	10
195303-017	40	1.25	44.1158	44.1328	0.0170	425.0	13
195303-018	50	1	44.1410	44.1626	0.0216	432.0	10
195303-019	50	1	45.9217	45.9454	0.0237	474.0	10
195303-020	50	1	47.3797	47.4236	0.0439	878.0	10
195303-021	50	1	50.5547	50.5879	0.0332	664.0	10
195303-022	50	1	44.2027	44.2284	0.0257	514.0	10
195385-002	5	10	26.5931	26.6763	0.0832	16,640.0	100

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: _____

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126321
Date Started: 14-JUN-2007
Batched by : Stephanie Jim

Analysis : TDS
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
195303-002		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-003		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-004		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-005		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-006		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-008		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-009		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-010		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-011		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-012		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-013		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-015		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-016		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-017		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-018		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-019		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-020		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-021		Treadwell & Rollo	Water	TDS	20-JUN-2007
195303-022		Treadwell & Rollo	Water	TDS	20-JUN-2007
195385-002		Acme Fill Corp.	Water	TDS	25-JUN-2007
QC392383	BLANK		Water	TDS	
QC392384	BS		Water	TDS	
QC392385	BSD		Water	TDS	
QC392386	SDUP of 195385-002		Water	TDS	

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 126321

Prep Date: 6/14/07
Prep Time: 14:00

Benchbook#: **BK 2421**
Page: **62**

Filter Mfg/ Lot#: Env. Exp. 658758
Spike WS#: 5560

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	6/14/07	6/18/07	6/18/07	6/18/07	6/18/07	6/19/07
Time:	14:45	9:00	11:00	12:00	13:30	7:30
Temp (C):	90	180	180	180	180	180

In-4 6/19/07 9:00 180.
Out-4 6/19/07 10:00 180

	Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1	~~195~~ MB		50	50.3544	50	50.3540	50.3540	X
	135			GED	48.5023	48.5080	48.5092	48.5085
	BSD			IHU	51.7192	51.7251	51.7272	51.7258
	195385-2	1000	50	14	47.2341	47.2701	47.2698	X
5	-3	1750		BAN	41.6268	41.6836	41.6835	X
	-4	878		10	52.1151	52.1457	52.1454	X
	-5	799		2	47.2617	47.2894	47.2893	X
	-6	1270		4	49.1295	49.1712	49.1708	X
	-8	1235		2a	47.2886	47.3297	47.3295	X
10	-9	834		5	48.5310	48.5605	48.5605	X
	-10	868		3	48.6393	48.6690	48.6689	X
	-11	1578	10	M	50.6578	50.6676	50.6667	50.6667
	-12	1000	50	51	45.2434	45.2773	45.2769	X
	-13	1003		L	42.8500	42.8934	42.9131	X
15	-15	578		56	44.5573	44.5782	44.5777	X
	-16	724		N	48.9313	48.9559	48.9556	X
	-17	647	40	BMW	44.1158	44.1327	44.1328	X
	-18	674	50	S	44.1410	44.1628	44.1626	X
	-19	1238 ~~660~~		3	45.9217	45.9454	45.9454	X
20	-20	155 ~~1238~~		7	47.3797	47.4237	47.4236	X
	-21	754 ~~953~~		P	50.5547	50.5876	50.5879	X
	-22	1093		3	44.2027	44.2287	44.2284	X
	195385-2	22,800	5	7	26.5931	26.6758	26.6763	X
	SDUP-2			J	27.1576	27.2434	27.2439	X

* Constant weight must be within 0.0005 from previous reading.

GED 4th 48.5085 X
IHU 51.7254 X

6/14/07
Analyst / Date

6/19/07
Reviewed by / Date

Curtis & Tompkins, Ltd.

pH

Curtis & Tompkins, Ltd.

pH

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Diln Fac:	1.000
Field ID:	WT061307	Batch#:	126266
Lab ID:	195303-031	Sampled:	06/13/07 07:50
Matrix:	Water	Received:	06/13/07
Units:	SU	Analyzed:	06/13/07 12:45

Result	RL
7.7	1.0

RL= Reporting Limit

96.0

Curtis & Tompkins, Ltd.

Batch QC Report

pH

Lab #:	195303	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Units:	SU
Field ID:	WT061307	Diln Fac:	1.000
Type:	SDUP	Batch#:	126266
MSS Lab ID:	195303-031	Sampled:	06/13/07 07:50
Lab ID:	QC392154	Received:	06/13/07
Matrix:	Water	Analyzed:	06/13/07 12:45

MSS Result	Result	RL	RPD	Lim
7.730	7.810	1.000	1	20

RL= Reporting Limit
RPD= Relative Percent Difference

97.0

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 126266
Date Started: 13-JUN-2007
Batched by : Stephanie Jim

Analysis : PH
Bgroup : N/A
Department : Wet Chemistry

Sample	Type		Client	Matrix	Analyses	Due Date
195303-031			Treadwell & Rollo	Water	PH	20-JUN-2007
QC392154	SDUP	of 195303-031		Water	PH	

pH Analysis Benchbook **Curtis & Tompkins, Ltd.**

LIMS Batch #: 126266 Date: 6/13/07 Benchbook#: **BK 2443**
Matrix: water Time: 12:45 Page: **66**

Method (check one): ☒ Water (EPA 9040b/ 150.1) ☐ Soil (EPA 9045c)

Cal Std-1 ph: 4 SS#: 5749 Slope: 97.1
Cal Std-2 ph: 7 SS#: 81291 (slope limits: 92 - 102)
Cal Std-3 ph: 10 SS#: 55862

Run	Sample # / Letter	pH (S.U.)	2nd Reading* (water only)	Soil Prep Wt(g)/Vol(mL)	Comments
1	ICV	7.04			ICV => 56145
	195303-31 A	7.73	7.76		CCV => 51291
	SDUP-31 ↓	7.81	7.82		RPD => 1.029%
	CCV	7.01			
5					
10					
15					
20					
25					

* 2nd aliquot must be within 0.1 SU

6/13/07
Analyst / Date

DMB 6/14/07
Reviewed by / Date

APPENDIX F

CAS Analytical Data Reports

First Quarter 2007

Table F-1
Columbia Analytical Services
Sample Delivery Group Index List
First Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
LF6GW105CL	2/27/2007	K0701568
231GW09CL	2/27/2007	K0701568
1047MW101CL	3/1/2007	K0701647
1349MW01CL	3/1/2007	K0701647
DAEGW104CL	3/2/2007	K0701703
979GW115CL	3/6/2007	K0701816
NKGW02CL	3/6/2007	K0701816
Trip Blanks		
TB0301072ACL	3/1/2007	K0701647
TB030207CL2A	3/2/2007	K0701703
TB0306072A	3/6/2007	K0701816

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

RECEIVED
MAR 2 7 2007
TREADWELL & ROLLO

March 21, 2007 Analytical Report for Service Request No: **K0701568**

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RE: Presidio of San Francisco/2893

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on February 28, 2007. For your reference, these analyses have been assigned our service request number K0701568.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata, Ph.D.
Project Chemist

GS/lmb

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

(One Negative)

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Treadwell & Rollo, Inc.	**Service Request No.:**	K0701568
Project:	Presidio of San Francisco/2893	**Date Received:**	02/28/07
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 02/28/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Total Sulfide by EPA Method 376.2:
The matrix spike recovery of Total Sulfide for sample 231GW09CL was outside control criteria. A duplicate matrix spike was analyzed with a similar recovery. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Total Metals

Matrix Spike Recovery Exceptions:
The matrix spike recovery of Selenium for sample LF6GW105CL was outside control limits. No target analytes were detected in the unspiked sample. The error associated with elevated recoveries equates to a high bias, thus the elevated recovery likely has no significance to the sample results. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was taken

No other anomalies associated with the analysis of these samples were observed.

Approved by Gregory Salatto **Date** 3/26/07

Chain of Custody Documentation

Treadwell&Rollo 527006cf

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

h07015168

COC No. OP 2178
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Rayna
Recorder (signature required):
Sent to Laboratory (Name): CAS Kelso

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Water	Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Sulfide	COMMENTS / NOTES
6E6GW105CL	2/27/07	1035			X				1		2					X		X		X		X	
231GW09CL	↓	1435			X				1		2					X		X		X		X	
												•			•								

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY:	DATE: 2/27/07	RECEIVED BY: P. Bins CAS	DATE: 2/27/07
PRINT NAME: Devin Rayna FIRM: BTS	TIME: 1525	PRINT NAME: FIRM:	TIME: 1525
RELINQUISHED BY: P. Bins CAS	DATE: 2/27/07	RECEIVED BY: A. Gull CAS	DATE: 2/28/07 1100
PRINT NAME: FIRM:	TIME: 1805	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

8

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC GREG

Project/Client T & R Service Request K07 1568

Cooler received on 2/28/07 and opened on 2/28/07 by A. Jurell

1.	Were custody seals on outside of coolers?	Y	(N)
	If yes, how many and where?		
2.	Were custody seals intact?	~~Y~~	~~N~~
3.	Were signature and date present on the custody seals?	~~Y~~	~~N~~
4.	Is the shipper's airbill available and filed? If no, record airbill number: 835815450831	Y	N
5.	COC#		
	Temperature of cooler(s) upon receipt: (°C) -0.5		
	Temperature Blank: (°C) na		
	Were samples hand delivered on the same day as collection?	Y	(N)
6.	Were custody papers properly filled out (ink, signed, etc.)?	(Y)	N
7.	Type of packing material present bwrap, ice, bags		
8.	**Did all bottles arrive in good condition (unbroken)?**	(Y)	N
9.	Were all bottle labels complete (i.e analysis, preservation, etc.)?	(Y)	N
10.	Did all bottle labels and tags agree with custody papers?	(Y)	N
11.	**Were the correct types of bottles used for the tests indicated?**	(Y)	N
12.	Were all of the preserved bottles received at the lab with the appropriate pH?	(Y)	N
13.	Were VOA vials checked for absence of air bubbles, and if present, noted below?	~~Y~~	~~N~~
14.	Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below?	~~Y~~	~~N~~
15.	Did the bottles originate from CAS/K or a branch laboratory?	Y	(N)
16.	**Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?**	~~Y~~	~~N~~
17.	Was C12/Res negative?	~~Y~~	~~N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Alkalinity as CaCO3, Total

Prep Method : NONE
Analysis Method : 310.1
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	2	1	NA	03/09/07	288	
231GW09CL	K0701568-002	2	1	NA	03/09/07	227	
Method Blank	K0701568-MB	2	1	NA	03/09/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/09/07

Duplicate Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001DUP	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	NONE	310.1	2	288	288	288	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/09/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	310.1	89	87	98	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Chloride

Units : mg/L
Analysis Method : 300.0
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	4.0	20	02/28/07	80.0	
231GW09CL	K0701568-002	1.0	5	02/28/07	36.8	
Method Blank	K0701568-MB	0.2	1	02/28/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Duplicate Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	4.0	80.0	79.0	79.5	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 2/27/2007
Date Received : 2/28/2007
Date Prepared : NA
Date Analyzed : 02/28/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : LF6GW105CL
Lab Code : K0701568-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	300.0	4.0	40.0	80.0	120	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.0	4.8	96	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701568
Date Collected : NA
Date Received : NA

Chloride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	2/27/2007	5.0	4.9	98
CCV3 Result	2/28/2000	5.0	4.9	98
CCV2 Result	2/28/2007	5.0	5.0	100
CCV4 Result	2/28/2007	5.0	4.8	96

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	2/28/2007	0.2	ND
CCB2 Result	2/28/2007	0.2	ND
CCB3 Result	2/28/2007	0.2	ND
CCB4 Result	2/28/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Fluoride

Units : mg/L
Analysis Method : 300.0
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	0.2	2	02/28/07	ND	
231GW09CL	K0701568-002	0.2	2	02/28/07	ND	
Method Blank	K0701568-MB	0.2	1	02/28/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Duplicate Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	0.2	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	300.0	0.2	4.0	ND	4.1	103	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	17.5	18.0	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701568
Date Collected : NA
Date Received : NA

Fluoride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	2/28/2007	5.0	5.4	108
CCV2 Result	2/28/2007	5.0	5.3	106
CCV3 Result	2/28/2007	5.0	5.3	106
CCV4 Result	2/28/2007	5.0	5.2	104

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	2/28/2007	0.2	ND
CCB2 Result	2/28/2007	0.2	ND
CCB3 Result	2/28/2007	0.2	ND
CCB4 Result	2/28/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Nitrite as Nitrogen

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	0.1	2	02/28/07 14:18	ND	
231GW09CL	K0701568-002	0.1	2	02/28/07 17:19	ND	
Method Blank	K0701568-MB	0.1	1	02/28/07 09:57	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Duplicate Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	300.0	0.1	ND	ND	ND	-	

Report By: CSKILLERN

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	300.0	0.1	4.0	ND	3.8	95	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	300.0	100	99.4	99	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701568
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	2/28/2007	2.0	2.0	100
CCV2 Result	2/28/2007	2.0	2.1	105
CCV3 Result	2/28/2007	2.0	2.0	100
CCV4 Result	2/28/2007	2.0	2.0	100

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	2/28/2007	0.1	ND
CCB2 Result	2/28/2007	0.1	ND
CCB3 Result	2/28/2007	0.1	ND
CCB4 Result	2/28/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Nitrate as Nitrogen

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	0.1	2	02/28/07 14:18	4.7	
231GW09CL	K0701568-002	0.1	5	02/28/07 14:30	15.5	
Method Blank	K0701568-MB	0.1	1	02/28/07 09:57	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Duplicate Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	300.0	0.1	4.7	4.7	4.7	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	LF6GW105CL	Units :	mg/L
Lab Code :	K0701568-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	300.0	0.1	4.0	4.7	9.2	113	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	02/28/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	300.0	4.5	4.7	104	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701568
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	2/28/2007	2.0	1.9	95
CCV2 Result	2/28/2007	2.0	1.9	95
CCV3 Result	2/28/2007	2.0	1.9	95
CCV4 Result	2/28/2007	2.0	1.9	95

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	2/28/2007	0.1	ND
CCB2 Result	2/28/2007	0.1	ND
CCB3 Result	2/28/2007	0.1	ND
CCB4 Result	2/28/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Sulfide, Total

Analysis Method : 376.2
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	0.4	1	03/02/07	ND	
231GW09CL	K0701568-002	0.4	1	03/02/07	ND	
Method Blank	K0701568-MB	0.4	1	03/02/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name :	231GW09CL	Units :	mg/L
Lab Code :	K0701568-002DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.4	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	2/27/2007
Project Number :	2893	**Date Received :**	2/28/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	231GW09CL		Units :	mg/L
Lab Code :	K0701568-002MS	K0701568-002DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Sulfide, Total	NONE	376.2	0.4	0.21	0.21	ND	0.1	0.1	48	48	75-125	<1	*

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	NONE	376.2	0.21	0.2	95	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : 2893
Sample Matrix : Water

Service Request : K0701568
Date Collected : 02/27/07
Date Received : 02/28/07

Solids, Total Dissolved (TDS)

Analysis Method : 160.1
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
LF6GW105CL	K0701568-001	5	1	03/13/07	610	
231GW09CL	K0701568-002	5	1	03/13/07	500	
Method Blank	K0701568-MB	5	1	03/13/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/13/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0701645-002DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	160.1	5	732	756	744	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701568
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	2893	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/13/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701568-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved (TDS)	NONE	160.1	664	716	108	85-115	

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Work Request #	Original (K1666)	K1761	K1768	K1647	K1794	K1599
Tier:	E	III	III	III	III	III
Date Analyzed:	3/9/07	K1742	K1675	K1644	K1814	
Analyst:	lzr for NB	III	III	III	II	
Analysis:	SM 2320B - EPA 310.1	K1898 III	K1879 II			

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

K1644 is rush

Final Approved by: [signature] Date: 3/15/07

DQREPORT

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB	LCS	diss 1600-1	diss 1600-2	diss 1600-3	1761-7	1761-7d
pH 12.63	Initial pH	7.26	9.11	6.64	6.63	6.39	6.66	6.61
	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.04	4.37	10.51	14.10	3.36	11.00	11.17
10.01	Titrant used to pH 4.2	0.07						
pH 7.00	Sample Volume	50	50	50	50	50	50	50
6.99	Alkalinity	<2	87	210	282	67	220	223
pH 4.00	Bicarbonate							
4.00	Carbonate							
pH 4.00 Chk.	Hydroxide							
4.04								

Sample #	1761-45	1761-46	1761-47	BC	1761-48	1761-49	1568-1	1568-1d
Initial pH	6.69	6.69	6.62	3.97	6.41	6.51	6.81	6.79
Titrant used to pH 8.3								
Titrant used to pH 4.5	15.01	15.39	12.41		11.63	11.47	14.38	14.39
Titrant used to pH 4.2								
Sample Volume	50	50	52		50	50	50	50
Alkalinity	300	308	239		233	229	288	288
Bicarbonate							288	288
Carbonate							<2	<2
Hydroxide								

LCS : ERA **Lot # =** 5118-698 **True Value =** 89.3 **% Rec. =** 97, 101, 99

Titrant: Manf: VWR **Lot # =** 6296 **Concentration:** 0.02N / 0.1N (Circle one)

Calculations : **Alkalinity =** $\frac{\text{A x N x 50,000}}{\text{Volume (mls)}}$ **A =** mls standard titrant used **N =** Normality of standard acid

Comments: 1761-7/7d $\bar{x}$ = 222 RPD = 1
1568-1/1d $\bar{x}$ = 288 RPD = <1

Analyzed By: nb	Date: 3.9.07
Reveiwed By:	Date: 3/15/07

Alk_CO_3_HCO_3 Benchsheet

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	[redacted]	1647-1	1647-1d	1647-2	1794-2	1794-3	BC	1794-5
Initial pH	6.76	6.80	6.76	6.43	6.63	6.51	3.98	6.51
Titrant used to pH 8.3								
Titrant used to pH 4.5	11.78	2.30	1.89	13.02	10.82	7.33		2.65
Titrant used to pH 4.2								
Sample Volume	52	60	50	50	51	50		50
Alkalinity	[redacted]	38	38	260				
Bicarbonate	[redacted]	38	38	260	212	147		53
Carbonate	[redacted]	<2	<2	<2	<2	<2		<2
Hydroxide					<2	<2		<2

Sample #	1794-6	1794-7	1794-8	1794-9	1794-10	1794-10d	1794-11	1794-12
Initial pH	6.58	6.51	6.49	6.92	6.24	6.33	6.31	6.82
Titrant used to pH 8.3								
Titrant used to pH 4.5	26.03	2.03	2.28	3.24	0.89	0.90	0.96	9.69
Titrant used to pH 4.2					1.01	1.02	1.07	
Sample Volume	50	50	50	50	50	50	50	50
Alkalinity								
Bicarbonate	521	41	46	65	15	16	17	194
Carbonate	<2	<2	<2	<2	<2	<2	<2	<2
Hydroxide	<2	<2	<2	<2	<2	<2	<2	<2

Sample #	1794-14	BC	1794-15	1794-16	1794-17	1794-18	1794-19	1794-20
Initial pH	6.65	3.99	6.79	6.77	7.04	6.73	6.94	6.68
Titrant used to pH 8.3								
Titrant used to pH 4.5	2.94		3.52	12.47	3.14	31.50	2.51	25.61
Titrant used to pH 4.2								
Sample Volume	50		50	50	50	50	50	50
Alkalinity								
Bicarbonate	58		70	449	63	630	50	512
Carbonate	<2		<2	<2	<2	<2	<2	<2
Hydroxide	<2		<2	<2	<2	<2	<2	<2

Comments: 1647-1/1d $\bar{x}$ = 38 RPD = <1

1794-10/10d $\bar{x}$ = 16 RPD = 6

Analyzed By: nb	Date: 3.9.07
Reveiwed By: [signature]	Date: 3/16/07

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	MB2	LCS2	1599-3	1599-14	BC	1742-2	1742-3	1742-4
Initial pH	6.26	9.10	8.23	7.91	3.99	7.34	6.89	7.43
Titrant used to pH 8.3								
Titrant used to pH 4.5	0.01	4.50	7.19	4.73		5.18	4.43	4.12
Titrant used to pH 4.2	0.02							
Sample Volume	50	50	54	50		50	50	50
Alkalinity	<2	90	133	95		104	89	82
Bicarbonate								
Carbonate								
Hydroxide								

Sample #	1742-5	1675-3	1675-11	1644-2	1644-3	1644-3d	1644-4	BC
Initial pH	8.42	7.94	7.74	6.33	7.37	7.43	7.35	3.98
Titrant used to pH 8.3								
Titrant used to pH 4.5	5.06	6.02	5.62	0.03	20.81	20.95	20.97	
Titrant used to pH 4.2				0.04				
Sample Volume	50	50	50	50	50	50	50	
Alkalinity	101	120	112	<2	416	419	419	
Bicarbonate				<2	416	419	419	
Carbonate				<2	<2	<2	<2	
Hydroxide				<2	<2	<2	<2	

Sample #	1644-5	1644-6	1644-7	1814-1	1898-4	1898-5	1898-6	1879-1
Initial pH	7.33	7.32	5.78	4.85	7.11	6.62	6.40	6.94
Titrant used to pH 8.3								
Titrant used to pH 4.5	20.29	7.31	0.08	~~4.62~~ 3.62	9.04	6.88	3.42	5.46
Titrant used to pH 4.2			0.22					
Sample Volume	50	50	50	50	50	50	50	50
Alkalinity	406	146	<2		181	138	68	109
Bicarbonate	406	146	<2	72				109
Carbonate	<2	<2	<2					
Hydroxide	<2	<2	<2					

Comments: nb 3.9.07

1644-2, 3, 6, 7 ID#: 10 1644-3/3d $\bar{x}$ = 418 RPD = 1

1644-4 ID#: 25

1644-5 ID#: 10

Analyzed By: nb	Date: 3.9.07
Reveiwed By:	Date: 3/15/07

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	1879-2	1879-3	BC	1879-4	1879-5	1879-5d	MB	LCS
Initial pH	7.03	6.97	4.01	6.61	6.74	6.78	6.77	9.08
Titrant used to pH 8.3								
Titrant used to pH 4.5	5.61	4.68		4.04	3.30	3.32	0.02	4.38
Titrant used to pH 4.2							0.05	
Sample Volume	50	50		50	50	50	50	50
Alkalinity	112	94		81	66	66	02	88
Bicarbonate	112	94		81	66	66		
Carbonate								
Hydroxide								

Sample #	BC							
Initial pH	4.01							
Titrant used to pH 8.3								
Titrant used to pH 4.5								
Titrant used to pH 4.2								
Sample Volume								
Alkalinity								
Bicarbonate								
Carbonate								
Hydroxide								

Sample #								
Initial pH								
Titrant used to pH 8.3								
Titrant used to pH 4.5								
Titrant used to pH 4.2								
Sample Volume								
Alkalinity								
Bicarbonate								
Carbonate								
Hydroxide								

Comments:

1879-5/5d $\bar{x}$ = 66 RPD = <1

Analyzed By: nb	Date: 3.9.07
Reveiwed By:	Date: 3/15/07

Work Request # Original [redacted]

Tier: III

Date Analyzed: 3/2/07

Analyst: S. Hopkins

Analysis: 376.2 LL

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [illegible] Date: 3/5/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

79223

Work Order #.: K1568 Method: 376.2L.L.

Analysis: Analysis for Total Sulfide

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6					(R) =	0.9998
Conc. (mg/L)	0.000	0.052	0.104	0.156	0.208	0.260					Slope =	0.7170
Absorbance	0.000	0.039	0.078	0.112	0.151	0.187					Y Int. =	0.0013

Date Prep'd	Sample #	Dil. Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
3/2/2007	ICV	1	0.169	0.2339	0.2339	40	40	0.23		0.23		
3/2/2007	ICB	1	0.000	-0.0018	<0.05	40	40	<0.05		<0.05		
3/2/2007	CCV	1	0.152	0.2102	0.2102	40	40	0.21		0.21		
3/2/2007	CCB	1	0.001	-0.0004	<0.05	40	40	<0.05		<0.05		
3/2/2007	MB	1	0.005	0.0052	<0.05	20	20	<0.05		<0.05		
3/2/2007	LCS	1	0.148	0.2046	0.2046	20	20	0.20		0.20		
3/2/2007	K[redacted]8-1	1	-0.001	-0.0032	<0.05	20	20	<0.05		[redacted]05		
3/2/2007	15[redacted]D	1	-0.001	-0.0032	<0.05	20	20	<0.05		[redacted]05		
3/2/2007	156[redacted]MS	1	0.099	0.1363	0.1363	20	20	0.14		[redacted]		
3/2/2007	1568[redacted]MSD	1	0.105	0.1446	0.1446	20	20	0.14		[redacted]		
3/2/2007	15[redacted]2	1	-0.003	-0.0060	<0.05	20	20	<0.05		[redacted]5		
3/2/2007	MDL-1	1	0.004	0.0038	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-2	1	0.011	0.0135	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-3	1	0.004	0.0038	<0.05	20	20	<0.05		<0.05		
3/2/2007	CCV2	1	0.151	0.2088	0.2088	40	40	0.21		0.21		
3/2/2007	CCB2	1	0.000	-0.0018	<0.05	40	40	<0.05		<0.05		
3/2/2007	MDL-4	1	0.005	0.0052	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-5	1	0.004	0.0038	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-6	1	0.003	0.0024	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-7	1	0.004	0.0038	<0.05	20	20	<0.05		<0.05		
3/2/2007	MDL-8	1	0.005	0.0052	<0.05	20	20	<0.05		<0.05		
3/2/2007	CCV3	1	0.149	0.2060	0.2060	40	40	0.21		0.21		
3/2/2007	CCB3	1	-0.001	-0.0032	<0.05	40	40	<0.05		<0.05		

CCV =0.20ml*41.6mg/l/40ml=0.21mg/l %REC = 100, 100, 100

LCS =0.1ml*41.6mg/l/20ml = 0.21mg/l %REC = 95

ICV = 0.22ml*41.6mg/L/40ml = 0.23mg/L %REC = 100

MS/MSD = 0.1ml*41.6mg/L/20ml = 0.21mg/L %REC = 67, 67

K1568-1/1d x = ND RPD = --

STD ID# s2/2-1-G CONC. = 4160

Distilled by:	N/A	Date Distilled:	N/A
Analyzed By:	SAN	Date Analyzed:	3/2/07 1300
Reviewed By:	[illegible]	Date Reviewed:	3/5/07

3-2-07LL

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Analysis: Analysis for Total Sulfide

Method: 376.2 L.L.

Prep Date : 3/2/2007

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6						
Conc. (mg/L)	0.000	0.052	0.104	0.156	0.208	0.260						
Absorbance	0.000	0.039	0.078	0.112	0.151	0.187						

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
ICV	40	1	0.169		
ICB	40	1	0.000		
CCV	40	1	0.152		
CCB	40	1	0.001		
MB	20	1	0.005		
LCS	20	1	0.148		
K1568-1	20	1	-0.001		
1568-1D	20	1	-0.001		
1568-1MS	20	1	0.099		
1568-1MSD	20	1	0.105		
1568-2	20	1	-0.003		
MDL-1	20	1	0.004		
MDL-2	20	1	0.011		
MDL-3	20	1	0.004		
CCV2	40	1	0.151		
CCB2	40	1	0.000		
MDL-4	20	1	0.005		
MDL-5	20	1	0.004		
MDL-6	20	1	0.003		
MDL-7	20	1	0.004		
MDL-8	20	1	0.005		
CCV3	40	1	0.149		
CCB3	40	1	-0.001		

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
		1			
		1			
		1			

376.2 LL

K07015168

3/2/07

DU520 S/N: 0112U2001732 1.03
02-MAR-07 13:59:02 SCA
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0014 b: 0.7168

r2=1.000 Var=0.0000

mg/L	Net A
0.0000	0.000
0.0520	0.039
0.1040	0.078
0.1560	0.112
0.2080	0.151
0.2600	0.187

SAB
3/2/07

ebr 3/5/07

DU520 S/N: 0112U2001732 1.03
02-MAR-07 13:59:50 SCA Group 2857
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0014 b: 0.7168

Sample		Net A	Dil X	mg/L
0001	ICB	0.000	1.0000	-0.00
0002	ICV	0.169	1.0000	0.23
0003	CCV	0.152	1.0000	0.21
0004	CCB	0.001	1.0000	-0.00
0005	MB	0.005	1.0000	0.00
~~0006~~		~~0.288~~	~~1.0000~~	~~0.40~~
0007	LCS	0.148	1.0000	0.20
0008	K1568-1	-0.001	1.0000	-0.00
0009	-1d	-0.001	1.0000	-0.00
0010	-1ms	0.099	1.0000	0.14
0011	-1msd	0.105	1.0000	0.14
0012	-2	-0.003	1.0000	-0.01
0013	MDL-1	0.004	1.0000	0.00
0014	-2	0.011	1.0000	0.01
0015	-3	0.004	1.0000	0.00
0016	CCV2	0.151	1.0000	0.21
0017	CCB2	0.000	1.0000	-0.00
0018	MDL-4	0.005	1.0000	0.01
0019	-5	0.004	1.0000	0.00
0020	-6	0.003	1.0000	0.00
0021	-7	0.004	1.0000	0.00
0022	-8	0.005	1.0000	0.00
0023	CCV3	0.149	1.0000	0.21
0024	CCB3	0.001	1.0000	-0.00

SAN 3/2/07

SAN 3/2/07

3/5/07

Work Request # (Original 1528) 1644, 1645, 1568

Tier: V V V III

Date Analyzed: 3/5/07

Analyst: RMcKee

Analysis: TDS

79354

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 3/14/07

DQREPORT

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703405

Matrix: WATER

PrepID: KWG0703404

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
MB		200	106.4208	106.4208	0.0000	0.000	NA	581557
LCS		50	73.5654	73.5296	0.0358	716.000	NA	581556
K0701528-001		100	69.8781	69.8283	0.0498	498.000	817	581539
K0701528-002		100	69.4972	69.4460	0.0512	512.000	794	581540
K0701528-003		75	65.2130	65.1380	0.0750	1000.000	1600	581541
K0701528-004		75	68.1876	68.0841	0.1035	1380.000	2511	581542
K0701644-002		100	76.258	76.2567	0.0013	13.000	203	581543
K0701644-003		25	65.3061	64.9452	0.3609	14436.000	14800	581544
K0701644-003DUP		25	73.4274	73.0643	0.3631	14524.000	14800	581554
K0701644-004		25	76.1903	75.8430	0.3473	13892.000	14500	581545
K0701644-005		25	64.9588	64.4905	0.4683	18732.000	19000	581546
K0701644-006		50	73.3999	73.2712	0.1287	2574.000	3611	581547
K0701644-007		200	70.3996	70.3977	0.0019	9.500	4	581538
K0701645-001		100	65.873	65.8577	0.0153	153.000	268	581549
K0701645-002		75	74.7951	74.7402	0.0549	732.000	1320	581550
K0701645-002DUP		75	63.5855	63.5288	0.0567	756.000	1320	581555
K0701645-003		100	77.2847	77.2546	0.0301	301.000	576	581551
K0701645-004		75	65.334	65.2820	0.0520	693.333	1260	581552
K0701568-001		100	66.1944	66.1334	0.0610	610.000	970	581553
K0701568-002		100	76.7224	76.6724	0.0500	500.000	799	581548

LCS: TV = 664 ppm APG 4033 Lot # 112099 Reference # TDS/1-18-P

LCS-2=~~99%~~ ~~107%~~ 108 (RM) 03/14/07

Comments:

1644-3 x = 14500 RPD = <1

1645-2 x = 744 RPD = 3%

Analyst: R McKee Date: 3/13/07

Approved By: Date: 3/14/07

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

79354

Sample Number	Blank	LCS	1528-1	1528-2	1528-3	1528-4	1644-2
Crucible Number	Jaybo	20	27	Cooter	ASSC	614	54A
Conductivity	—	—	817.1 U	793.9 U	1.595 m	2.51 m	2.034 U
Sample Volume (mL)	200	50	100	100	75	75	100
Wt. Cru. + Dry Sample (1)	106.4208	73.5654	69.8781	69.4972	65.2130	68.1876	76.2580
Wt. Cru. + Dry Sample (2)	106.4208	73.5654	69.8781	69.4972	65.2130	68.1877	76.2583
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	106.4208	73.5296	69.8283	69.4460	65.1380	68.0841	76.2567
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1644-3	1644-3d	1644-4	1644-5	1644-6	1644-7	1645-1
Crucible Number	BV	11	16	19A	50	-1	PG
Conductivity	14.76 m	14.76 m	14.45 m	19.06 m	3.611 m	4.423 U	268.30
Sample Volume (mL)	25	25	25	25	50	200	100
Wt. Cru. + Dry Sample (1)	~~65.3107~~	73.4274	76.1903	~~64.9624~~	73.3999	70.3996	65.8730
Wt. Cru. + Dry Sample (2)	65.3061	73.4274	76.1900	64.9588	73.3999	70.3996	65.8732
Wt. Cru. + Dry Sample (3)	65.3061			64.9590			
Wt. Crucible. (g)	64.9452	73.0643	75.8430	64.4905	73.2712	70.3977	65.8577
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #: 4033 Lot #: ID#: TDS T.V. = ~~932~~ % Rec = 108%

Comments: 112099 1-18-P 1664

105 time Start	1710 3/5/07
Stop	0800 3/6/07
105 temp Start	105°C
Stop	105°C
Wt (1) Start	0800 3/6/07
Stop	0700 3/8/07
Wt(1) Start Temp	180°C
Stop	180°C
Wt (2) Start	0915 3/8/07
Stop	
Wt(2) Start Temp	180°C
Stop	180°C
Wt (3) Start	
Stop	
Wt(3) Start Temp	
Stop	

Balance #

Analyzed By:	RMcKee	Date Prepared:	3/5/07
Reviewed By:		Date Reviewed:	3/14/07

 (R) RMcKee 3/6/07 TDS.BCH

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	1645-2	1645-2d	1645-3	1645-4	1568-1	1568-2	
Crucible Number	Rod	B8	24A	EC	Tube	29	
Conductivity	1.323m	1.323m	57620	1.258m	969.90	798.70	
Sample Volume (mL)	75	75	100	75	100	100	
Wt. Cru. + Dry Sample (1)	74.7951	63.5855	77.2847	65.3340	66.1944	76.7224	
Wt. Cru. + Dry Sample (2)	74.7950	63.5855	77.2845	65.3342	66.1945	76.7226	
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	74.7402	63.5288	77.2546	65.2820	66.1334	76.6724	
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number							
Crucible Number							
Conductivity							
Sample Volume (mL)							
Wt. Cru. + Dry Sample (1)							
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)							
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number							
Crucible Number							
Conductivity							
Sample Volume (mL)							
Wt. Cru. + Dry Sample (1)							
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)							
Wt. Dry Sample (g)							
Total Solids (mg/L)							

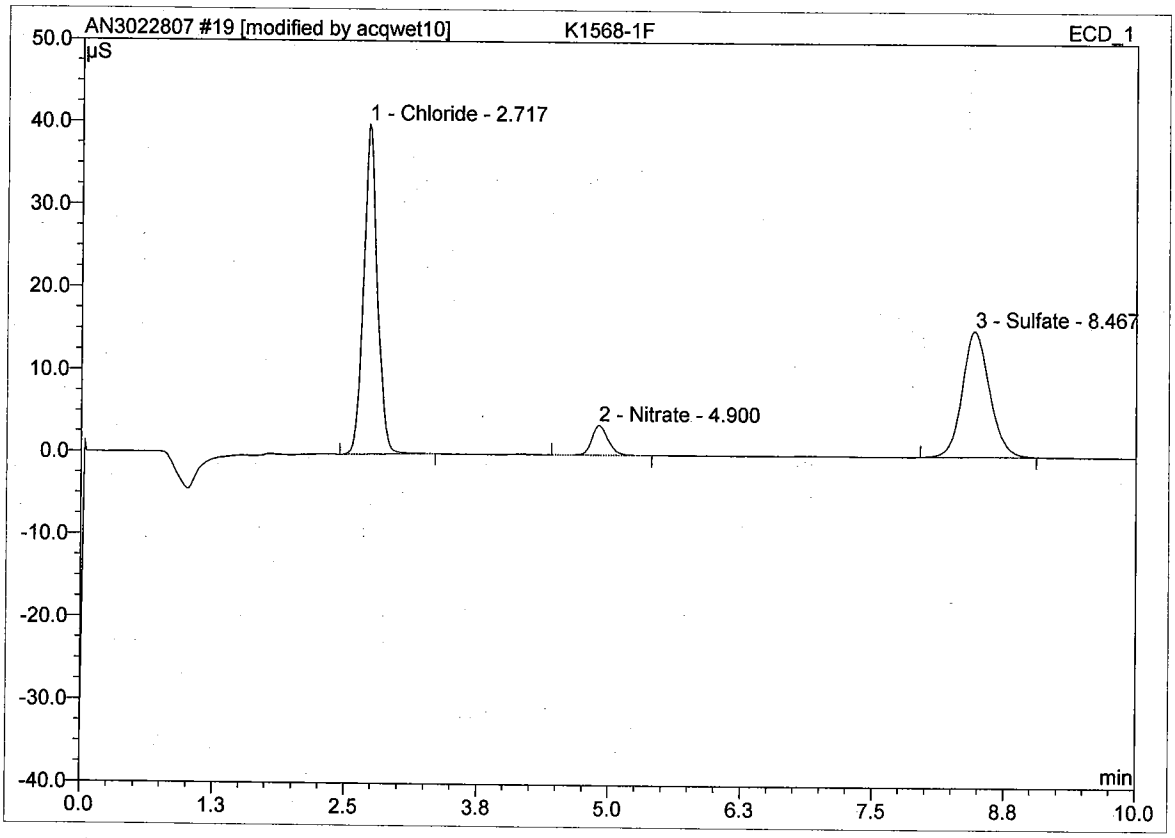
Analyzed By:	RMcKee	Date Prepared:	3/5/07
Reviewed By:	RM	Date Reviewed:	3/14/07

(RW) R McKee 3/13/07

Columbia Analytical Services, Inc.

19 K1568-1F

Sample Name:	**K1568-1F**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 13:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride X̄=79.5 RPD=1	39.944	6.001	53.37	79.992	BMB
2	4.90	Nitrate	3.629	0.654	5.82	3.700	BMB
3	8.47	Sulfate X̄=99.2 RPD=1	15.234	4.589	40.81	99.747	BMB*
Total:			58.808	11.245	100.00	183.438	

RAH 3/2/07

After Initials JS

MAR 01 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

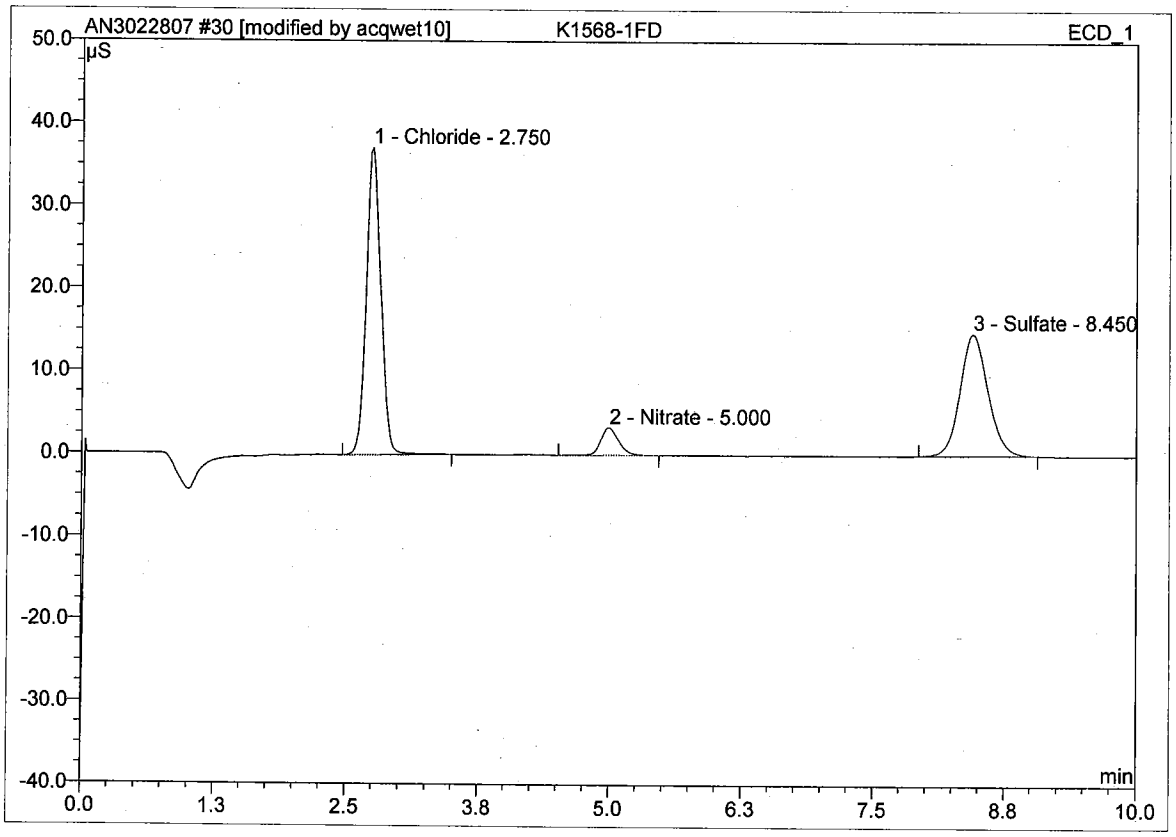
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

30 K1568-1FD

Sample Name:	**K1568-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 16:41**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	37.158	5.928	53.33	79.016	BMB
2	5.00	Nitrate	3.282	0.645	5.80	3.645	BMB
3	8.45	Sulfate	14.736	4.544	40.87	98.748	BMB*
Total:			55.177	11.116	100.00	181.409	

After
Initials JS

MAR 01 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

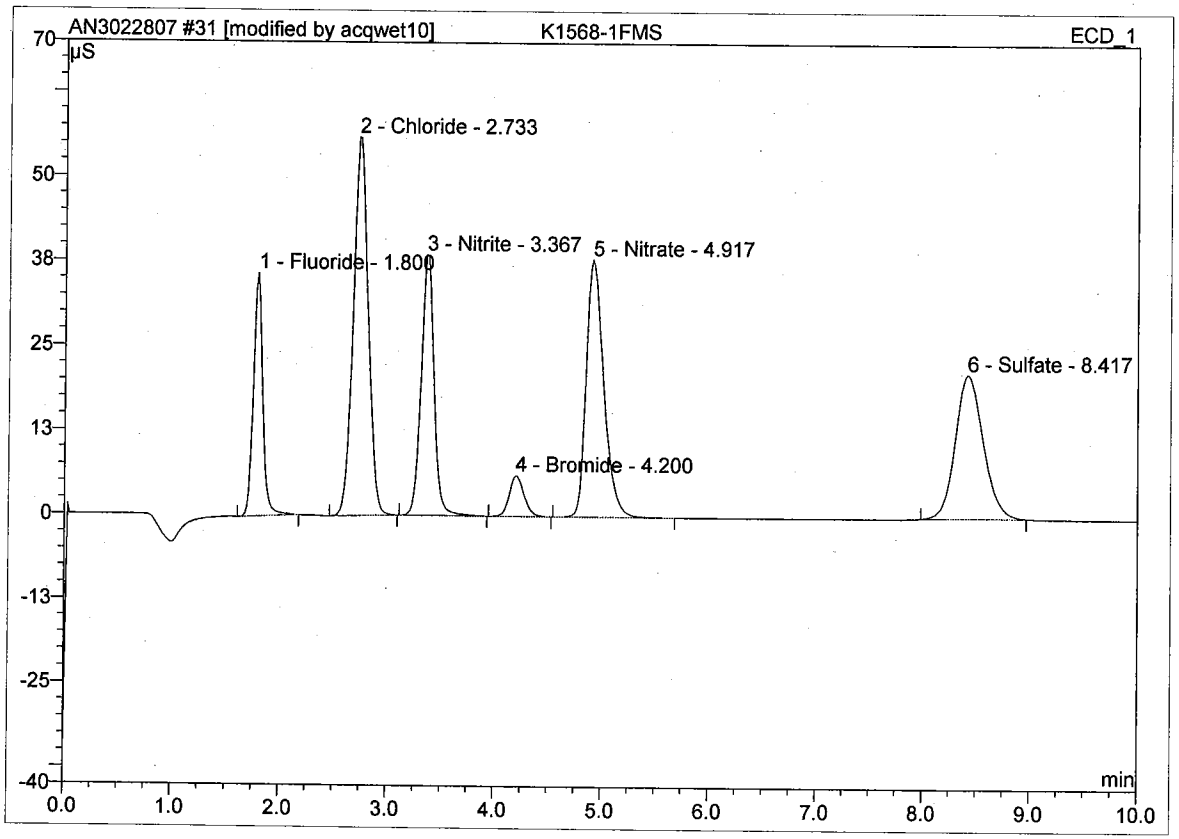
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

31 K1568-1FMS

Sample Name:	**K1568-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 16:54**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	35.942	3.592	11.03	41.283	BMB
2	2.73	Chloride %rec=99	55.912	8.980	27.56	119.700	BMB*
3	3.37	Nitrite	38.490	5.357	16.44	38.738	BMB*
4	4.20	Bromide	6.034	0.952	2.92	36.622	BMB
5	4.92	Nitrate	37.968	7.250	22.25	40.996	BMB
6	8.42	Sulfate %rec=101	21.243	6.449	19.79	140.151	BMB*
Total:			195.589	32.579	100.00	417.490	

SPK lvl
40 ppm

After Initials JS

default_letter/Integration

MAR 01 2007

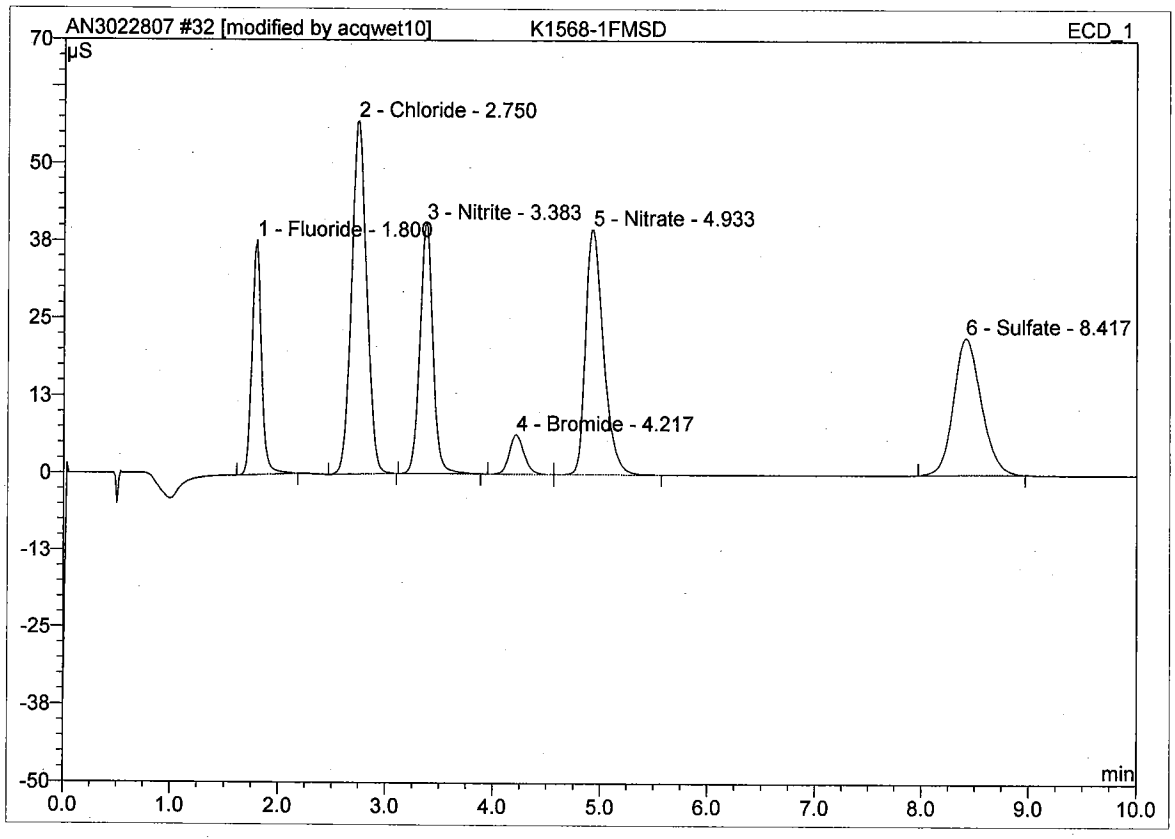
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

32 K1568-1FMSD

Sample Name:	**K1568-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 17:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	37.852	3.841	11.24	44.142	BMB
2	2.75	Chloride %rec=109	56.927	9.266	27.10	123.517	BMB*
3	3.38	Nitrite	40.363	5.697	16.67	41.201	BMB*
4	4.22	Bromide	6.361	1.008	2.95	38.806	BMb
5	4.93	Nitrate	39.515	7.688	22.49	43.472	bMB
6	8.42	Sulfate %rec=114	22.044	6.686	19.56	145.317	BMB*
Total:			203.061	34.187	100.00	436.456	

SPK lvl
40 ppm

After
Initials JS

default_letter/Integration

MAR 01 2007

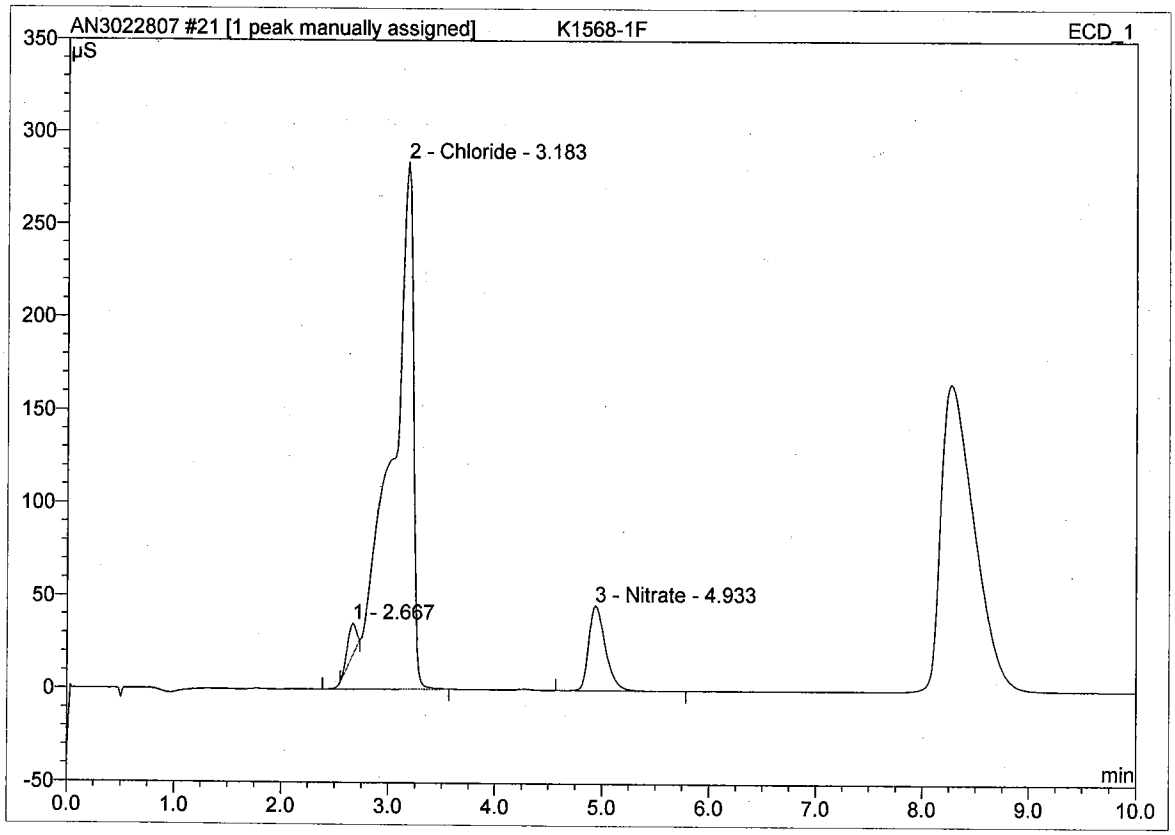
☐ Wrong Peak/Peak not found
☐ Baseline/shoulder Incorrect

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

21 K1568-1F

Sample Name:	**K1568-1F**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 14:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.67	n.a.	17.154	1.616	2.04	n.a.	Ru
2	3.18	Chloride	283.789	69.490	87.50	92.627	BMB^
3	4.93	Nitrate $\bar{x}$=4.7 RPD=<1	45.664	8.306	10.46	4.697	BMB
Total:			346.608	79.413	100.00	97.324	

Fluoride <0.2 $\bar{x}$=ND RPD=—

Nitrite <0.1 $\bar{x}$=ND RPD=— After Initials JS

LAR 3/2/07

MAR 01 2007

default_letter/Integration

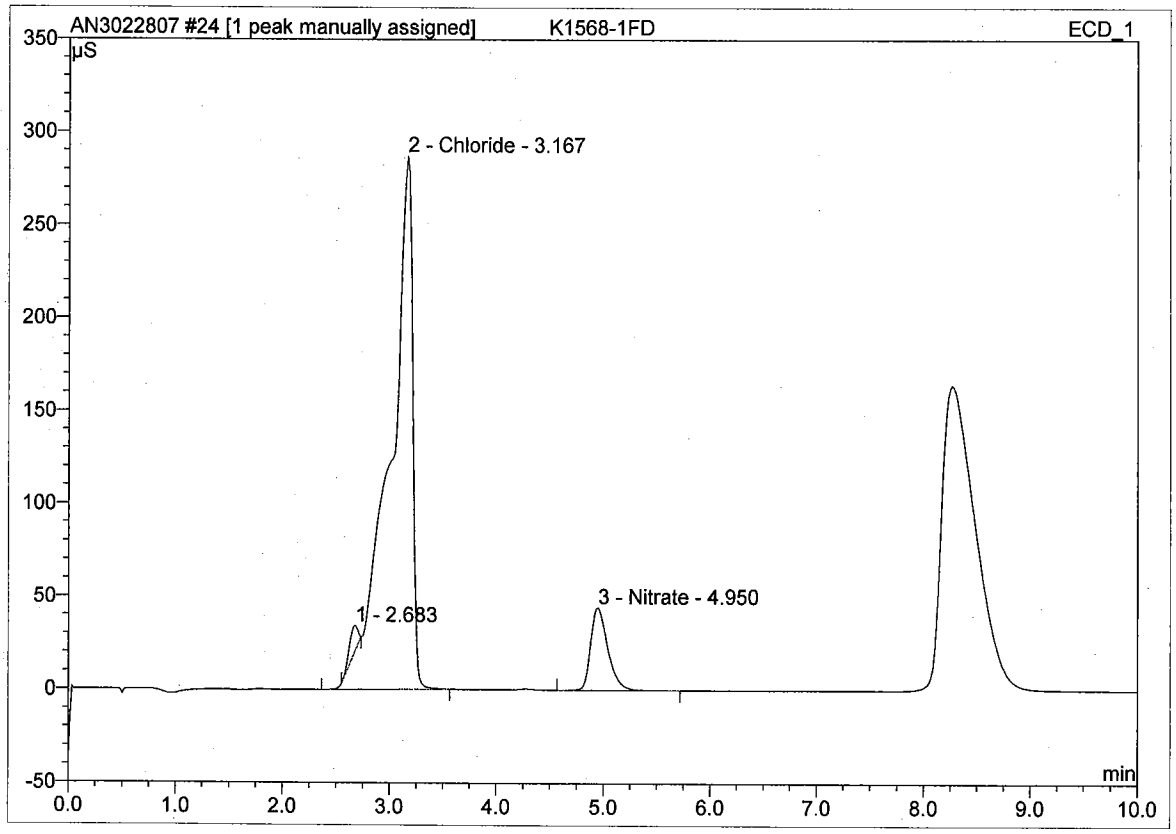
☒ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

24 K1568-1FD

Sample Name:	**K1568-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:26**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	n.a.	12.935	1.340	1.69	n.a.	Ru
2	3.17	Chloride	286.779	69.744	87.92	92.965	BMB^
3	4.95	Nitrate	44.213	8.240	10.39	4.660	BMB
Total:			343.927	79.324	100.00	97.625	

Fluoride <0.2
Nitrite <0.1

After Initials JS

MAR 01 2007

default_letter/Integration

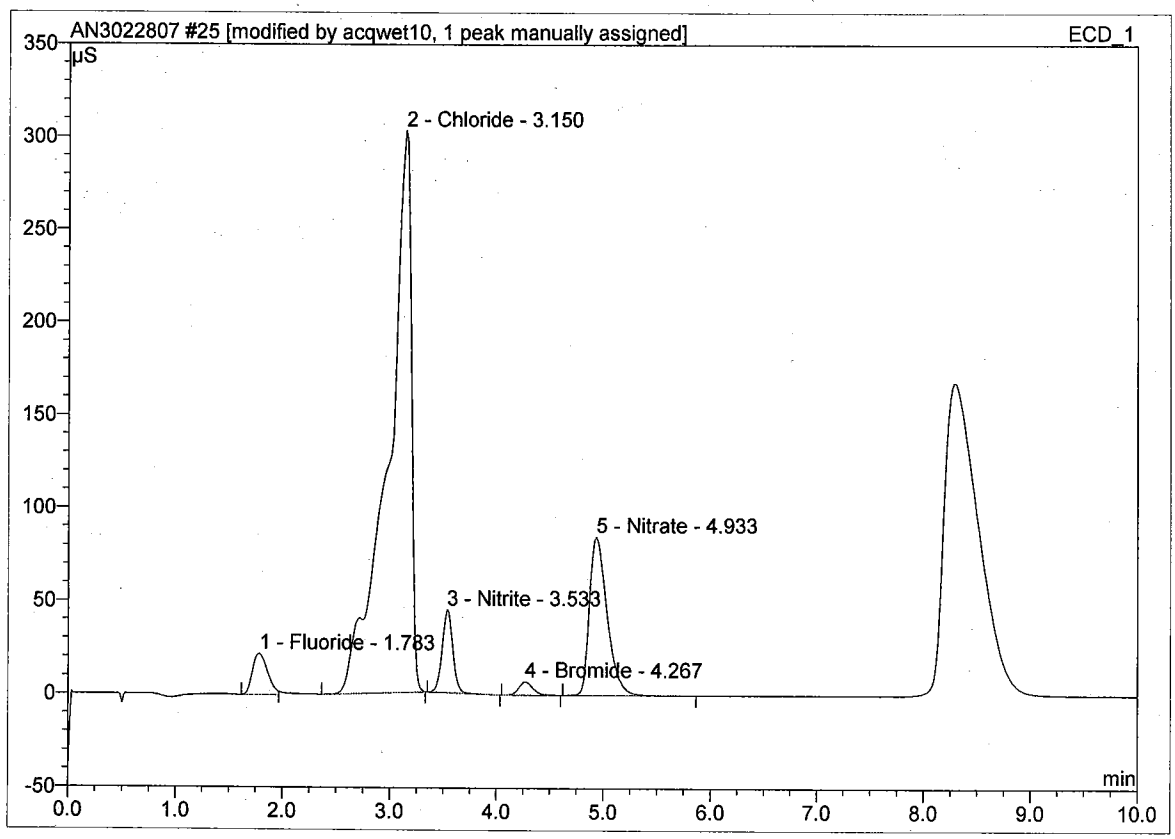
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

25 K1568-1FMS

Sample Name:	**K1568-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:39**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride %rec=103	22.027	3.599	3.60	4.136	BM *
2	3.15	Chloride	302.391	73.838	73.86	98.423	BMB*^
3	3.53	Nitrite %rec=95	44.435	5.206	5.21	3.765	BMB*
4	4.27	Bromide	7.091	1.060	1.06	4.079	BMB*
5	4.93	Nitrate %rec=113	84.870	16.262	16.27	9.196	BMB*
Total:			460.814	99.965	100.00	119.599	

Spk lvl
4ppm

After
Initials JS

MAR 01 2007

default_letter/Integration

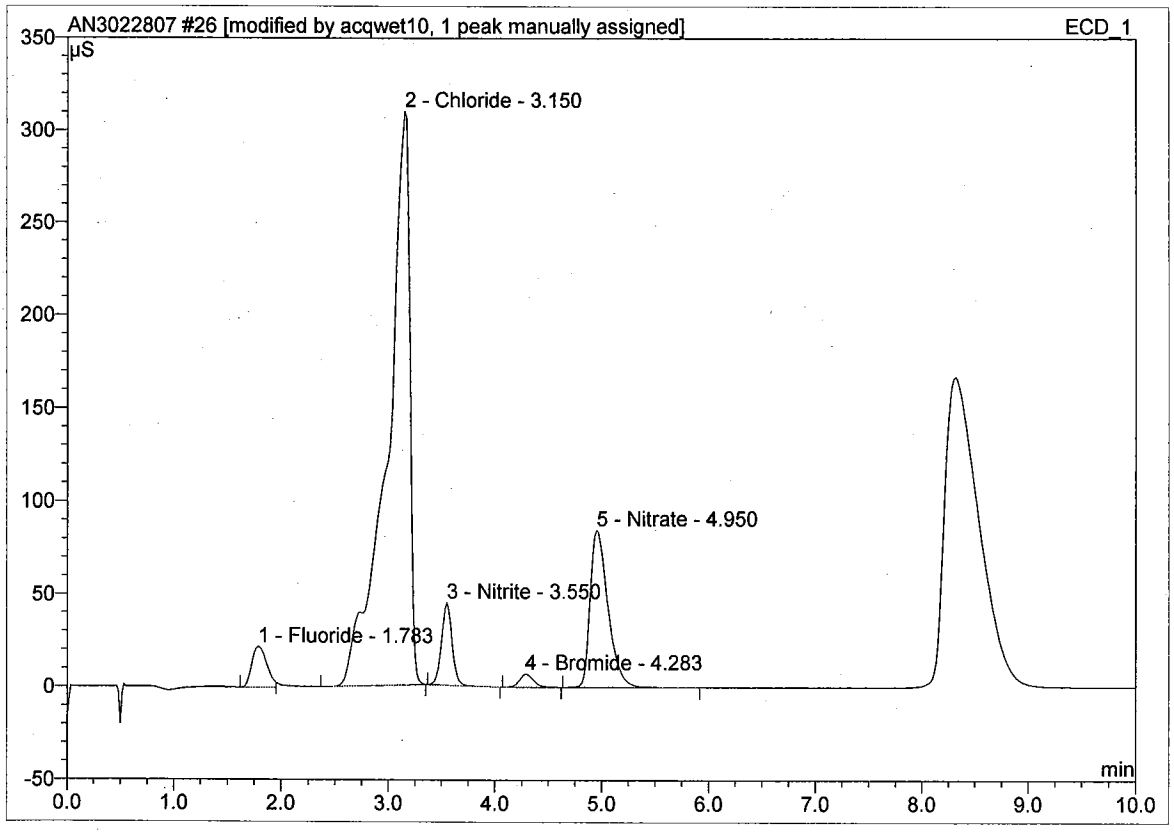
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

26 K1568-1FMSD

Sample Name:	**K1568-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride %rec=103	21.987	3.553	3.54	4.083	BM *
2	3.15	Chloride	309.300	74.190	73.97	98.892	BMB*^
3	3.55	Nitrite %rec=95	44.481	5.187	5.17	3.751	BMB*
4	4.28	Bromide	6.995	1.057	1.05	4.069	BMB*
5	4.95	Nitrate %rec=113	84.714	16.314	16.27	9.226	BMB*
Total:			467.477	100.302	100.00	120.021	

SPK lvl 4ppm

After Initials JS

MAR 01 2007

default_letter/Integration

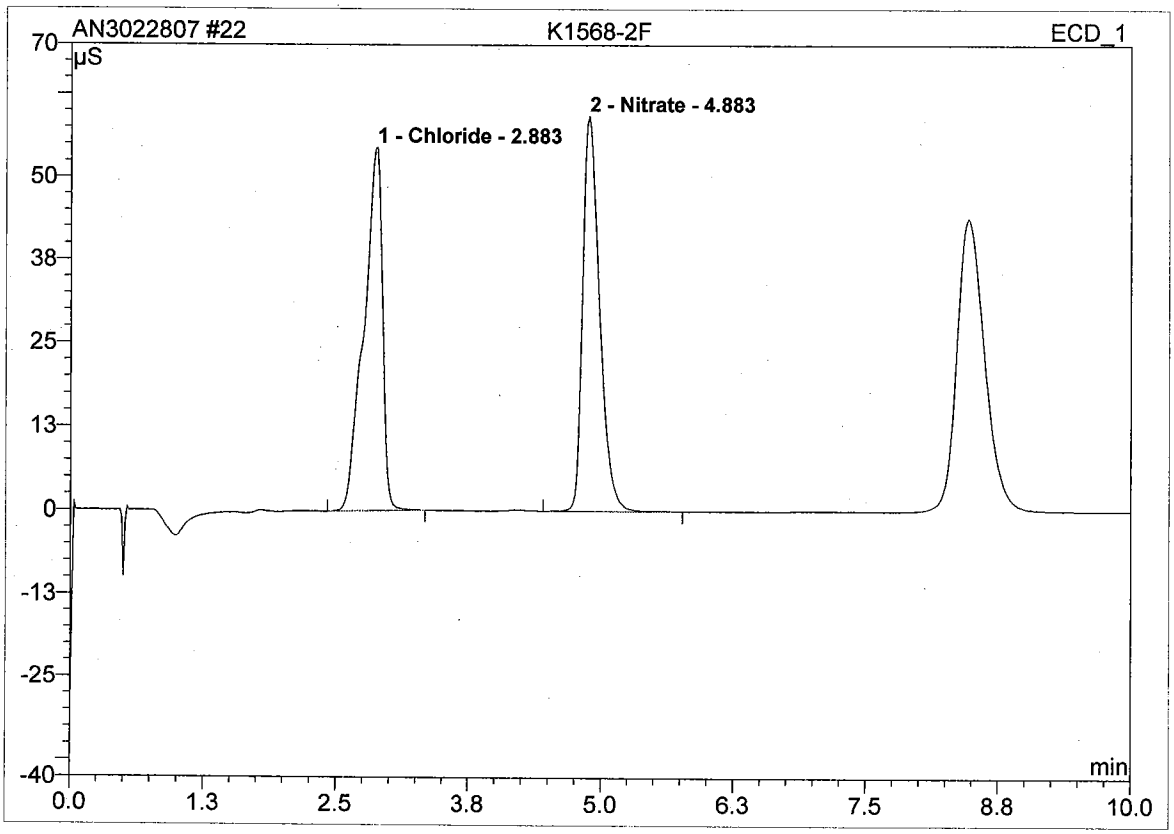
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☑ Other deleted Nit Peak

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

22 K1568-2F

Sample Name:	**K1568-2F**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**2/28/2007 14:30**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.88	Chloride	54.507	11.031	50.22	36.759	BMB
2	4.88	Nitrate	59.272	10.936	49.78	15.460	BMB
Total:			113.780	21.966	100.00	52.219	

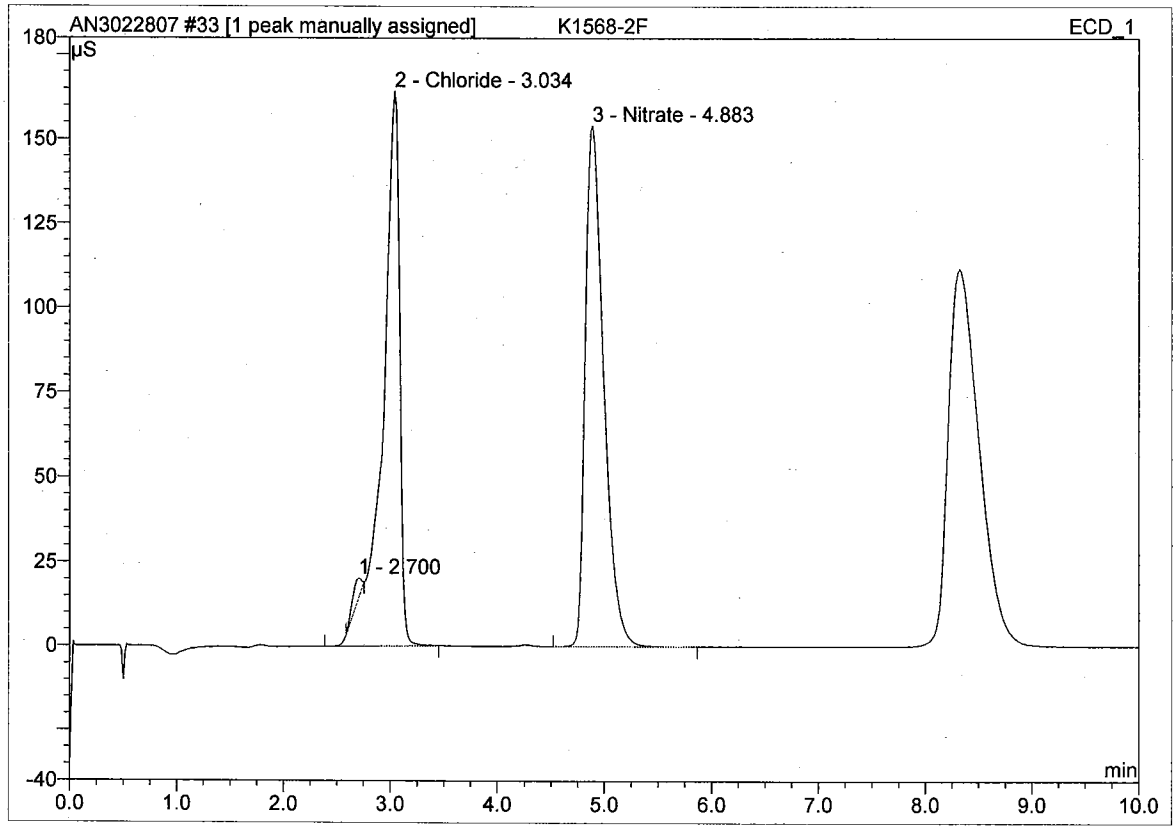
~~Nitrate < 0.5~~ JS 2/28/07

DAR 3/2/07

Columbia Analytical Services, Inc.

33 K1568-2F

Sample Name:	**K1568-2F**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 17:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.70	n.a.	5.867	0.617	1.01	n.a.	Ru
2	3.03	Chloride	164.154	29.860	48.71	39.802	BMB^
3	4.88	Nitrate	154.057	30.823	50.28	17.430	BMB
Total:			324.078	61.300	100.00	57.232	

RAR 3/2/07

Fluoride <0.2

Nitrite <0.1

After Initials JS

MAR 02 2007

default_letter/Integration

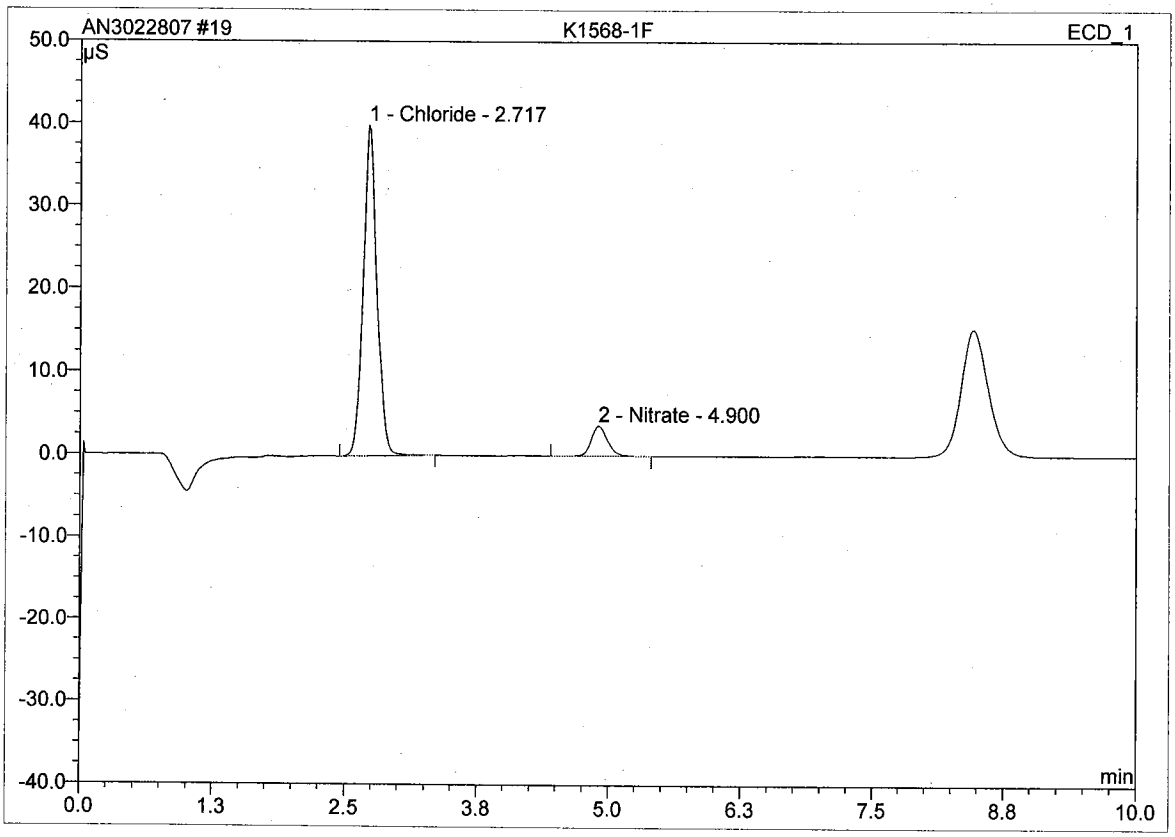
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

19 K1568-1F

Sample Name:	**K1568-1F**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 13:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride	39.944	6.001	90.17	79.992	BMB
2	4.90	Nitrate	3.629	0.654	9.83	3.700	BMB
Total:			43.573	6.655	100.00	83.692	

Before

MAR 0 1 2007

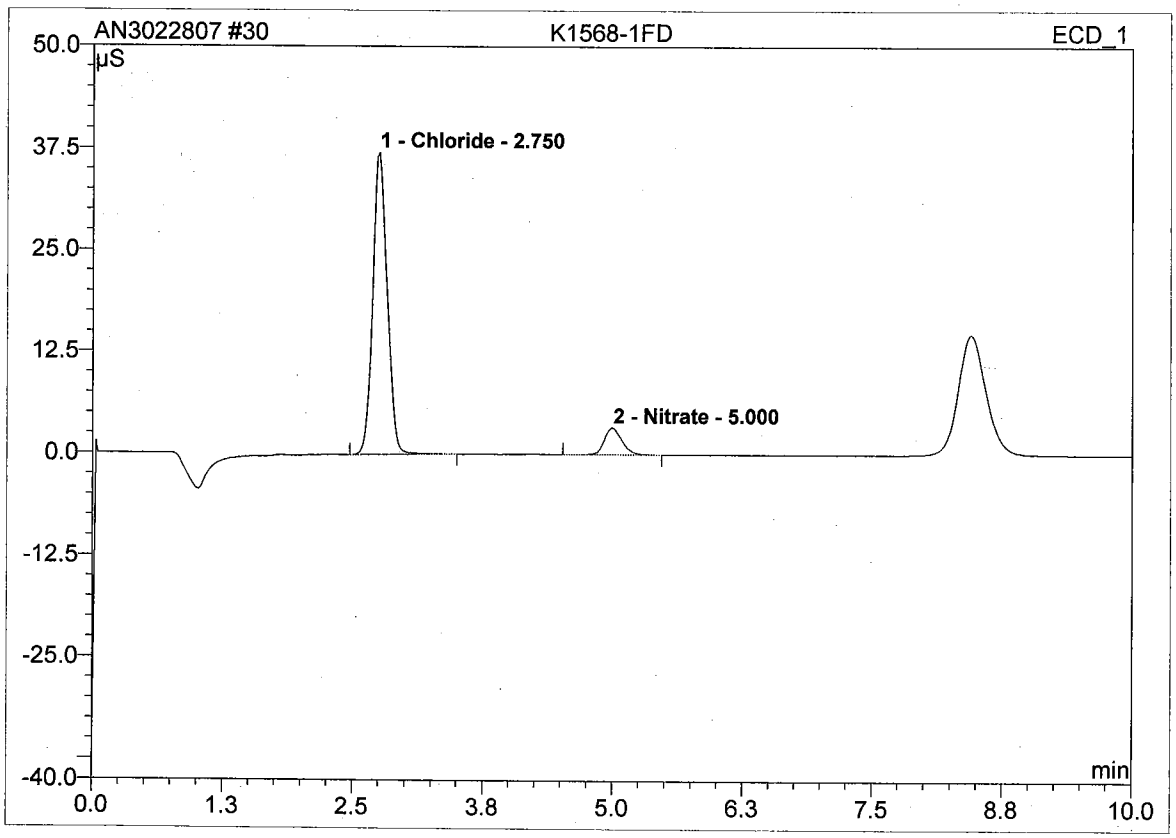
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

30 K1568-1FD

Sample Name:	**K1568-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 16:41**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	37.158	5.928	90.19	79.016	BMB
2	5.00	Nitrate	3.282	0.645	9.81	3.645	BMB
Total:			40.440	6.573	100.00	82.661	

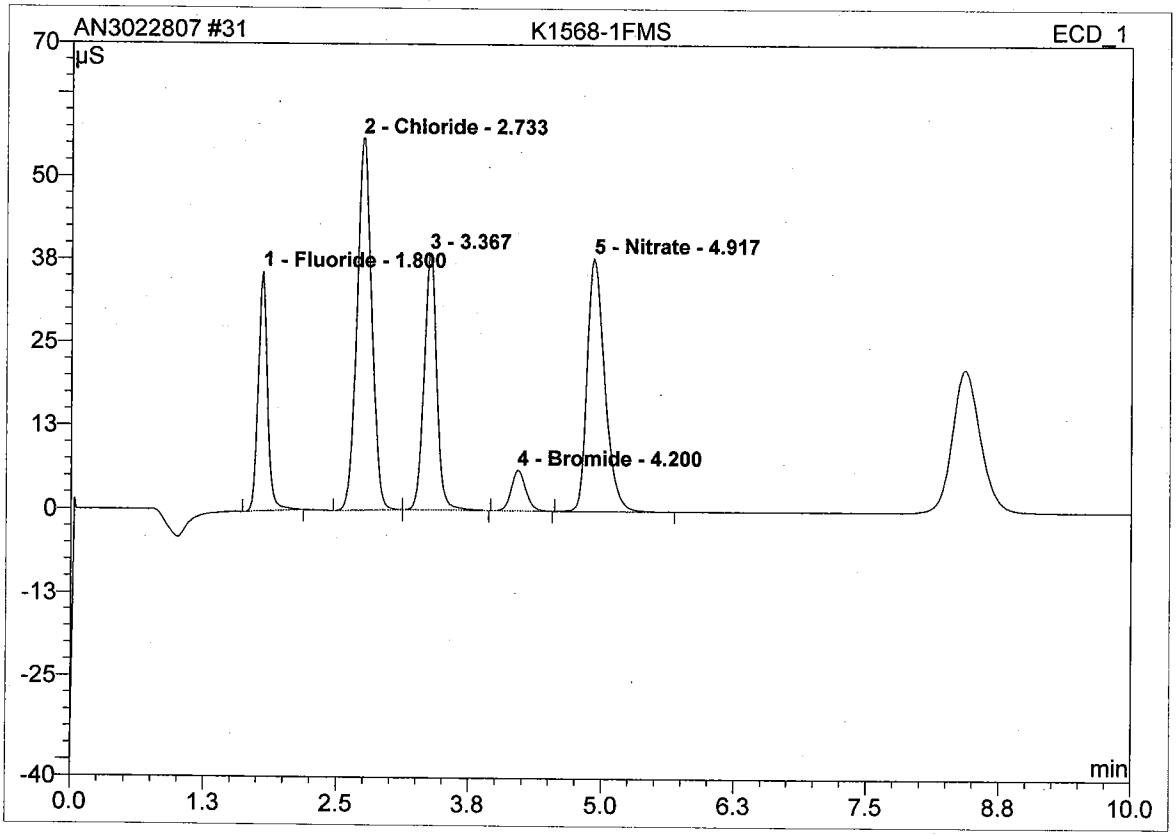
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

31 K1568-1FMS

Sample Name:	**K1568-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 16:54**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	35.942	3.592	13.75	41.283	BMB
2	2.73	Chloride	55.918	8.984	34.38	119.755	BMb
3	3.37	n.a.	38.490	5.357	20.50	n.a.	bMB
4	4.20	Bromide	6.034	0.952	3.64	36.622	BMB
5	4.92	Nitrate	37.968	7.250	27.74	40.996	BMB
Total:			174.352	26.135	100.00	238.656	

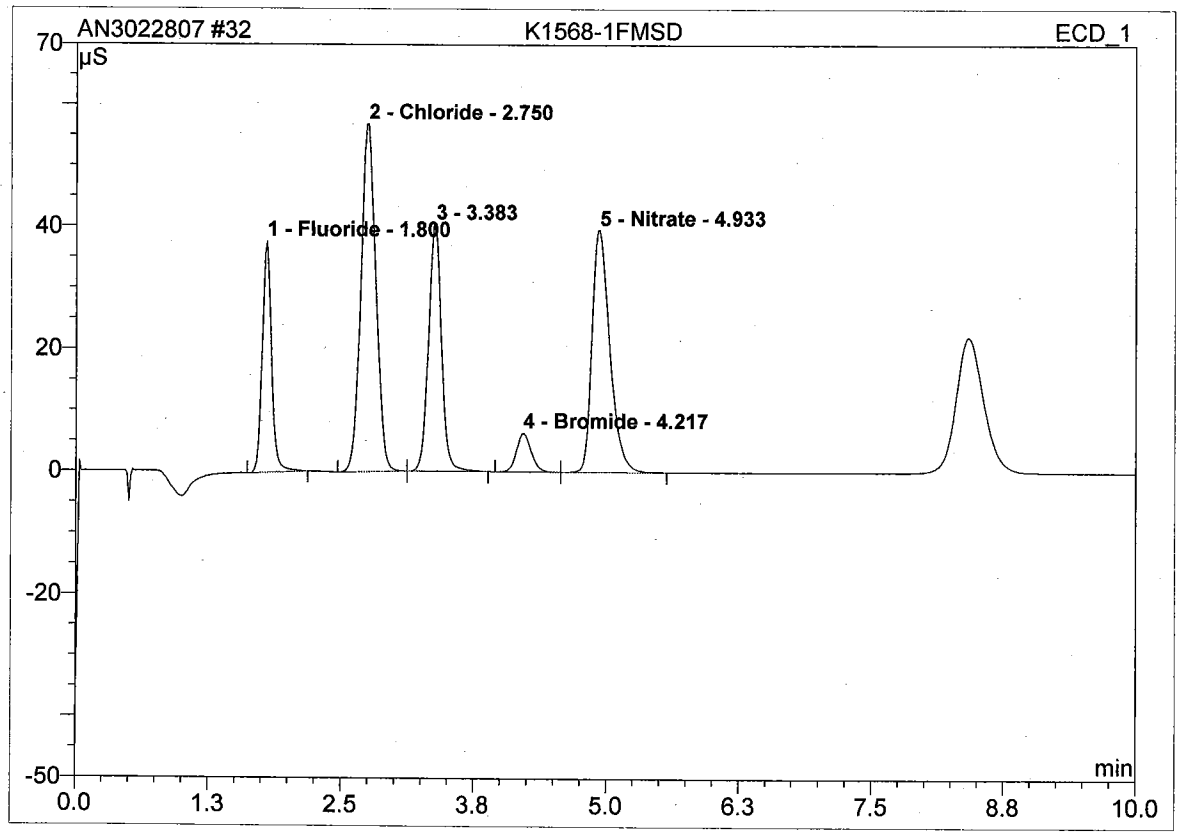
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

32 K1568-1FMSD

Sample Name:	**K1568-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 17:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	37.852	3.841	13.97	44.142	BMB
2	2.75	Chloride	56.934	9.271	33.71	123.582	BMb
3	3.38	n.a.	40.363	5.697	20.71	n.a.	bMB
4	4.22	Bromide	6.361	1.008	3.67	38.806	BMb
5	4.93	Nitrate	39.515	7.688	27.95	43.472	bMB
Total:			181.024	27.506	100.00	250.003	

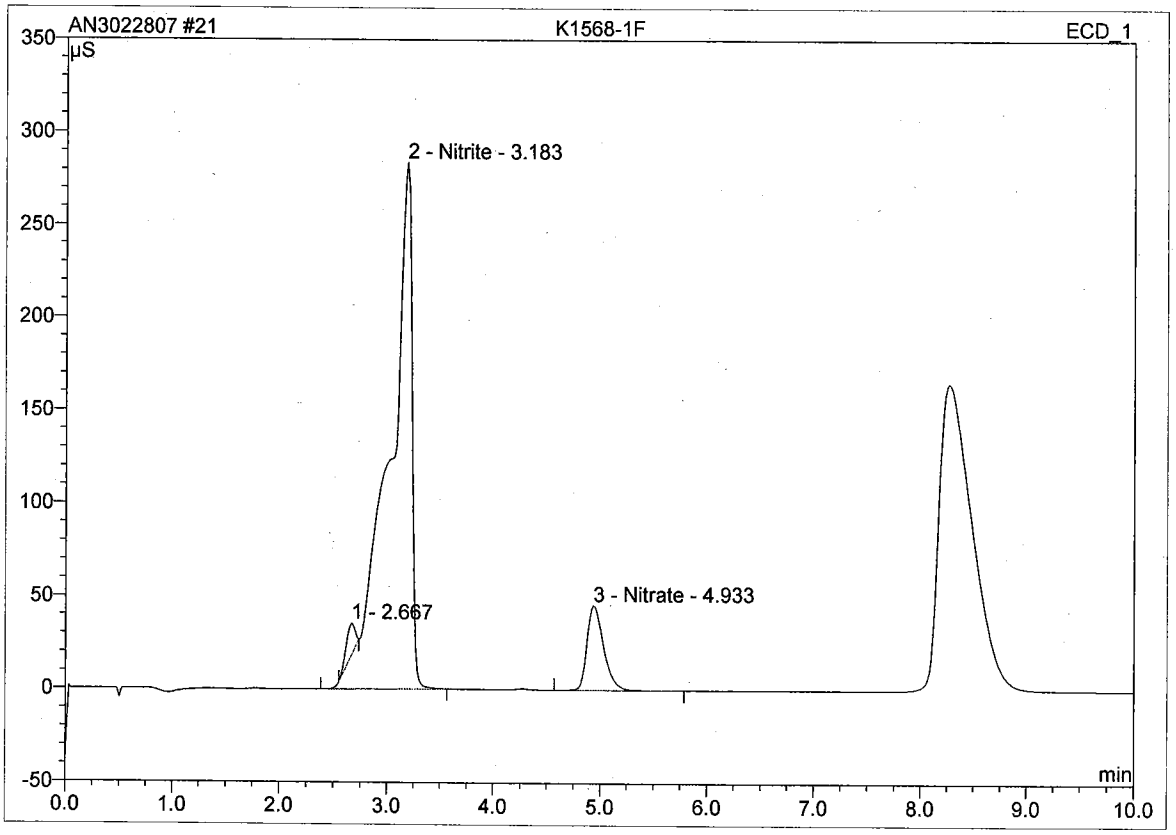
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

21 K1568-1F

Sample Name:	**K1568-1F**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 14:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.67	n.a.	17.154	1.616	2.04	n.a.	Ru
2	3.18	Nitrite	283.789	69.490	87.50	50.252	BMB
3	4.93	Nitrate	45.664	8.306	10.46	4.697	BMB
Total:			346.608	79.413	100.00	54.949	

Before

MAR 0 1 2007

After
Initials JS 3/1/07

MAR 0 1 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

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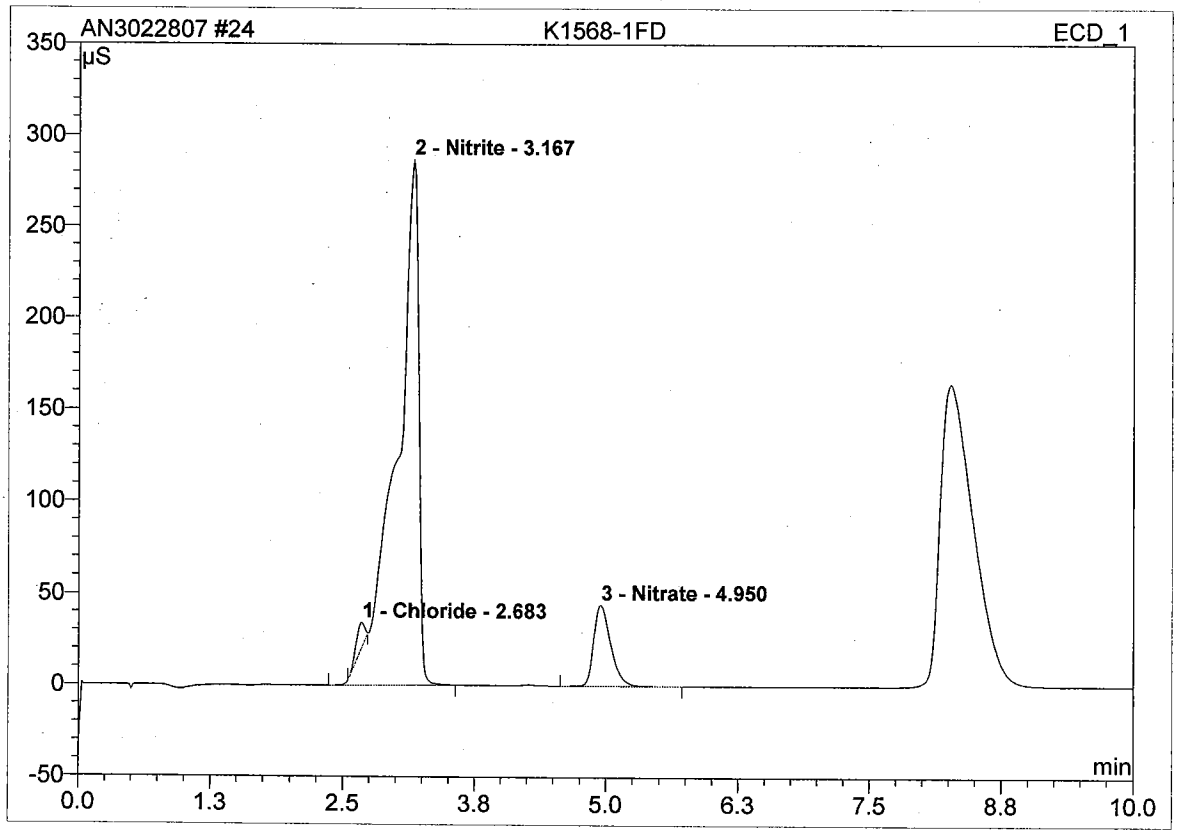
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

24 K1568-1FD

Sample Name:	**K1568-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:26**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	12.935	1.340	1.69	1.786	Ru
2	3.17	Nitrite	286.779	69.744	87.92	50.436	BMB
3	4.95	Nitrate	44.213	8.240	10.39	4.660	BMB
Total:			343.927	79.324	100.00	56.881	

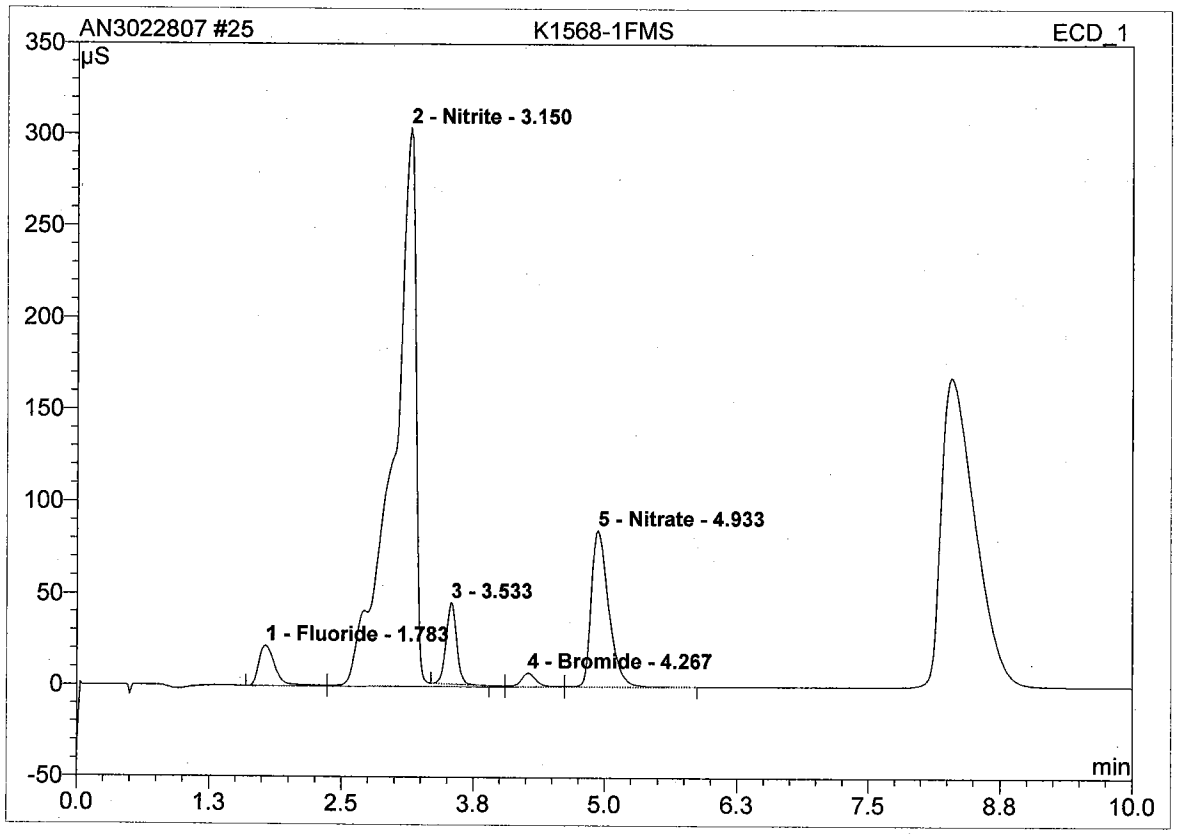
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

25 K1568-1FMS

Sample Name:	**K1568-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:39**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride	22.012	3.841	3.75	4.414	BM
2	3.15	Nitrite	303.972	75.616	73.90	54.682	M
3	3.53	n.a.	44.469	5.244	5.12	n.a.	Rd
4	4.27	Bromide	7.404	1.225	1.20	4.716	M
5	4.93	Nitrate	85.024	16.390	16.02	9.268	MB
Total:			462.880	102.316	100.00	73.080	

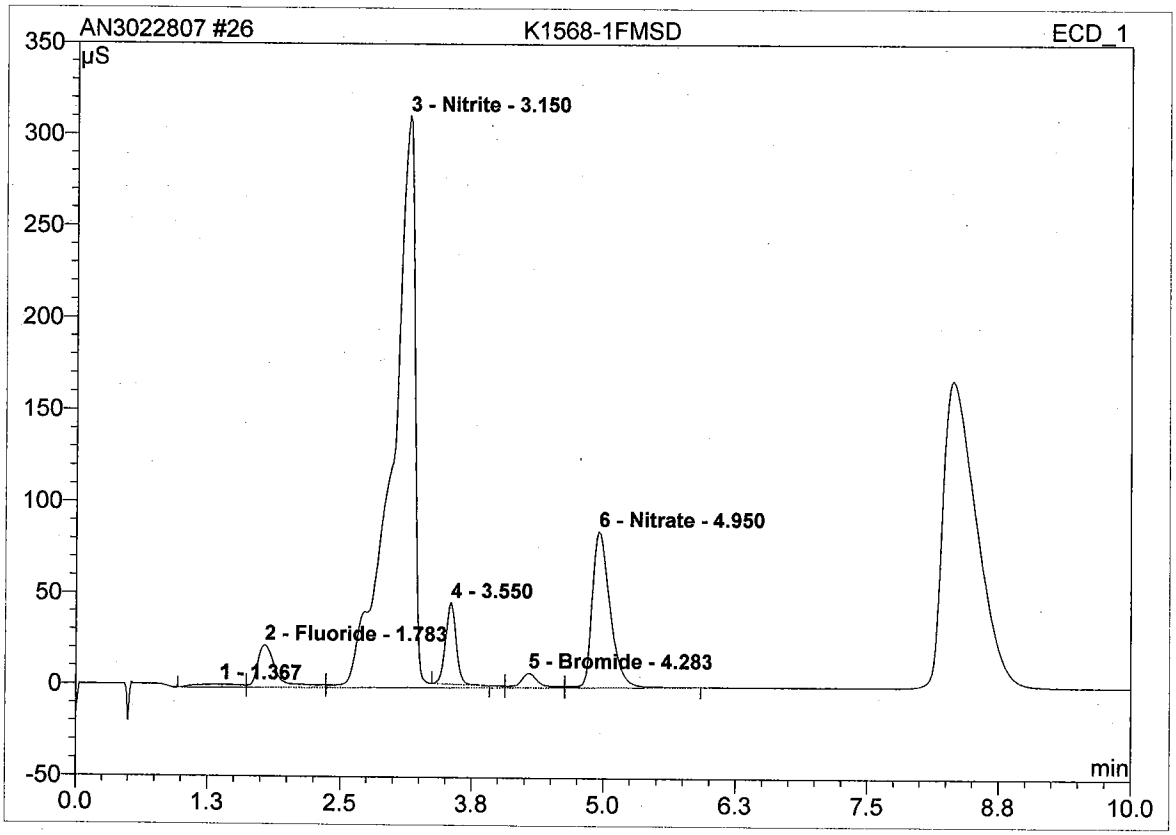
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

26 K1568-1FMSD

Sample Name:	**K1568-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 15:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.37	n.a.	1.636	0.832	0.78	n.a.	BM
2	1.78	Fluoride	23.172	4.706	4.43	5.408	M
3	3.15	Nitrite	311.541	77.228	72.75	55.848	M
4	3.55	n.a.	44.509	5.218	4.92	n.a.	Rd
5	4.28	Bromide	7.780	1.480	1.39	5.695	M
6	4.95	Nitrate	85.152	16.688	15.72	9.437	MB
Total:			473.790	106.152	100.00	76.388	

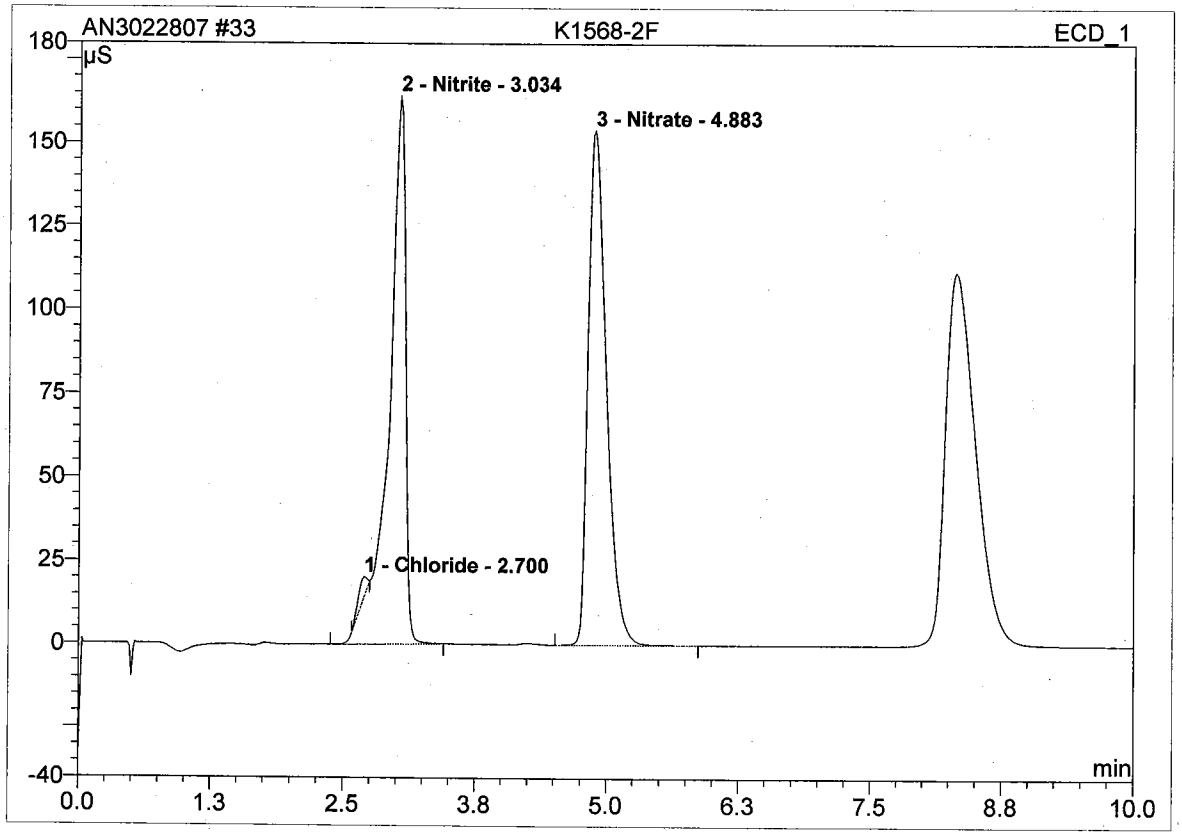
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

33 K1568-2F

Sample Name:	**K1568-2F**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 17:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.70	Chloride	5.867	0.617	1.01	0.822	Ru
2	3.03	Nitrite	164.154	29.860	48.71	21.593	BMB
3	4.88	Nitrate	154.057	30.823	50.28	17.430	BMB
Total:			324.078	61.300	100.00	39.846	

Fluoride <0.2
Nitrite <0.1

Before

MAR 0 2 2007

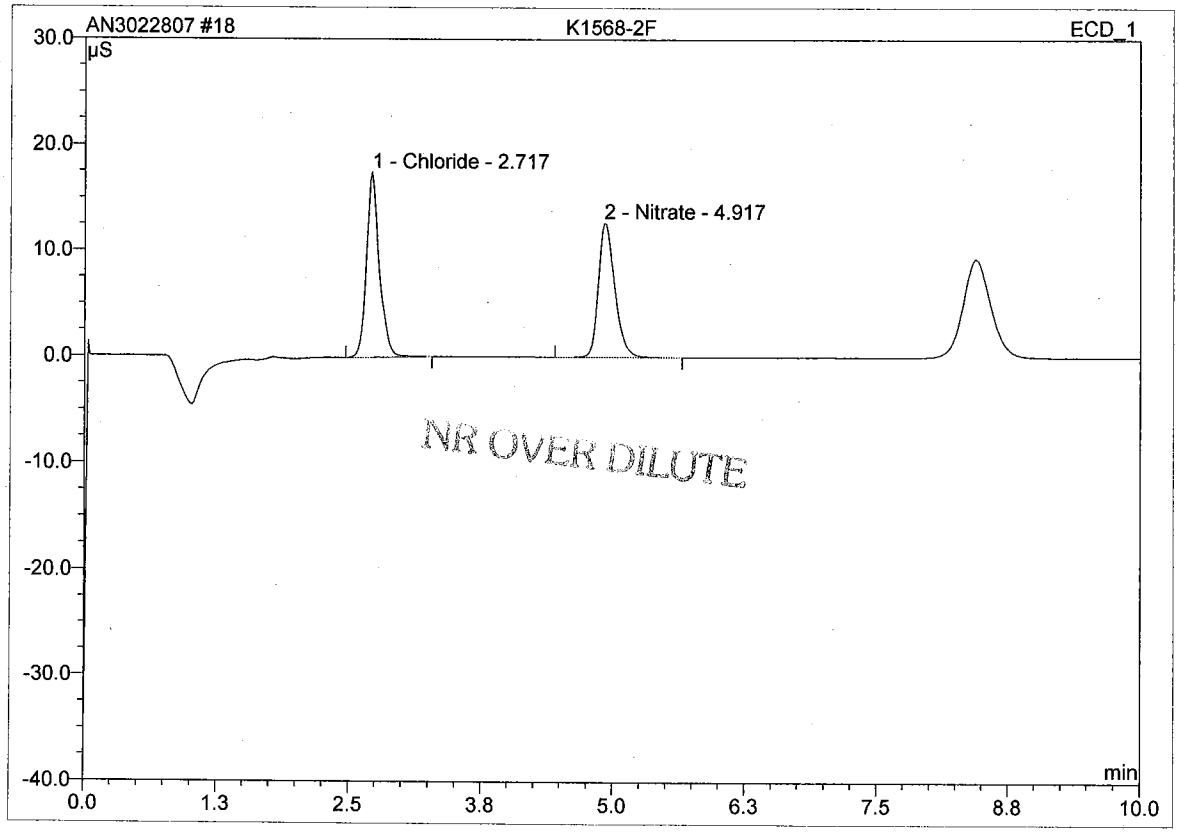
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

18 K1568-2F

Sample Name:	**K1568-2F**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**2/28/2007 13:07**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride	17.520	2.459	51.65	32.777	BMB
2	4.92	Nitrate	12.707	2.302	48.35	13.016	BMB
Total:			30.228	4.761	100.00	45.792	

79128

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value =17.5 ppm	CAS ID # = AN1-18-X	Expires: 4/12/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 5/1/07
Nitrite	True Value = 100 ppm	CAS ID # = AN0-4-B	Expires: 2/28/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-V	Expires: 4/20/07
Nitrate	True Value = 4.5 ppm	CAS ID # = AN1-18-V	Expires: 4/1/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 5/1/07

CCV CAS ID # = AN10-36-FF Expires 2/28/07

Fluoride	True Value = 5.0 ppm
Chloride	True Value = 5.0 ppm
Nitrite	True Value = 2.0 ppm
Bromide	True Value = 2.0 ppm
Nitrate	True Value = 2.0 ppm
Sulfate	True Value = 5.0 ppm

Spike
2.0ppm X dilution fact CAS ID# = AN10-66-M Expires 2/28/07

Analyst: JS Date: 2/28/07

First Review: JS Date: JS 3/1/07

Final Review: lt2 Date: 3/2/07

t:\wet\ic\icdqs.xls

Sequence: AN3022807
Operator: acqwet10
Printed: 3/1/2007 12:21:17 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 2/28/2007 8:49:08 AM by acqwet10
Last Update: 2/28/2007 5:53:17 PM by acqwet10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	1/22/2007 4:09:03 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	1/22/2007 4:25:31 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	1/22/2007 4:41:58 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	1/22/2007 4:58:26 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	1/22/2007 5:14:54 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:31:22 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:47:50 PM
8	CCV1 AN10-36-FF	Unknown	26	200.0	epa300	epa300	Finished	2/28/2007 9:19:57 AM
9	CCB1	Unknown	27	200.0	epa300	epa300	Finished	2/28/2007 9:32:26 AM
10	AN10-4-B(NO2)	Unknown	28	200.0	epa300	epa300	Finished	2/28/2007 9:44:53 AM
11	MB1	Unknown	32	200.0	epa300	epa300	Finished	2/28/2007 9:57:22 AM
12	AN1-18-V(NO3)1	Unknown	29	200.0	epa300	epa300	Finished	2/28/2007 10:09:51 AM
13	ERA#092(CLSO4)1	Unknown	32	200.0	epa300	epa300	Finished	2/28/2007 10:22:18 AM
14	AN1-18-X(F)1	Unknown	33	200.0	epa300	epa300	Finished	2/28/2007 10:34:46 AM
15	SPK CHK AN10-66-M	Unknown	34	200.0	epa300	epa300	Finished	2/28/2007 10:47:15 AM
16	CCV2 AN10-36-FF	Unknown	32	200.0	epa300	epa300	Finished	2/28/2007 10:59:42 AM
17	CCB2	Unknown	30	200.0	epa300	epa300	Finished	2/28/2007 11:12:10 AM
18	K1568-2F	Unknown	31	200.0	epa300	epa300	Finished	2/28/2007 1:07:05 PM
19	K1568-1F	Unknown	32	200.0	epa300	epa300	Finished	2/28/2007 1:19:33 PM
20	K1564-1	Unknown	33	200.0	epa300	epa300	Finished	2/28/2007 1:32:01 PM
21	K1568-1F	Unknown	34	200.0	epa300	epa300	Finished	2/28/2007 2:18:13 PM
22	K1568-2F	Unknown	35	200.0	epa300	epa300	Finished	2/28/2007 2:30:40 PM
23	K1564-1	Unknown	36	200.0	epa300	epa300	Finished	2/28/2007 2:43:08 PM
24	K1568-1FD	Unknown	37	200.0	epa300	epa300	Finished	2/28/2007 3:26:56 PM
25	K1568-1FMS	Unknown	38	200.0	epa300	epa300	Finished	2/28/2007 3:39:23 PM
26	K1568-1FMSD	Unknown	39	200.0	epa300	epa300	Finished	2/28/2007 3:51:51 PM
27	RB	Unknown	40	200.0	epa300	epa300	Finished	2/28/2007 4:04:19 PM
28	CCV3	Unknown	41	200.0	epa300	epa300	Finished	2/28/2007 4:16:47 PM
29	CCB3	Unknown	42	200.0	epa300	epa300	Finished	2/28/2007 4:29:15 PM
30	K1568-1FD	Unknown	43	200.0	epa300	epa300	Finished	2/28/2007 4:41:44 PM
31	K1568-1FMS	Unknown	44	200.0	epa300	epa300	Finished	2/28/2007 4:54:11 PM
32	K1568-1FMSD	Unknown	45	200.0	epa300	epa300	Finished	2/28/2007 5:06:39 PM
33	K1568-2F	Unknown	46	200.0	epa300	epa300	Finished	2/28/2007 5:19:07 PM
34	K1599-14	Unknown	47	200.0	epa300	epa300	Finished	2/28/2007 5:31:35 PM
35	K1599-3	Unknown	48	200.0	epa300	epa300	Finished	2/28/2007 5:44:02 PM
36	K1354-3	Unknown	49	200.0	epa300	epa300	Finished	2/28/2007 5:56:30 PM
37	K1354-4	Unknown	50	200.0	epa300	epa300	Finished	2/28/2007 6:08:57 PM
38	K1354-5	Unknown	51	200.0	epa300	epa300	Finished	2/28/2007 6:21:27 PM
39	RB	Unknown	52	200.0	epa300	epa300	Finished	2/28/2007 6:33:55 PM
40	CCV4	Unknown	53	200.0	epa300	epa300	Finished	2/28/2007 6:46:23 PM
41	CCB4	Unknown	54	200.0	epa300	epa300	Finished	2/28/2007 6:58:51 PM
42	K1354-6	Unknown	55	200.0	epa300	epa300	Finished	2/28/2007 7:11:19 PM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51
Created: 2/28/2007 8:49:08 AM by acqwet10
Last Update: 2/28/2007 5:53:17 PM by acqwet10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	std2/lvl2	1.0000	1.0000	1.0000		03	
2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-36-FF	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-4-B(NO2)	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-V(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA#092(CLSO4)1	1.0000	1.0000	1.0000		08	
14	AN1-18-X(F)1	1.0000	5.0000	1.0000		08	
15	SPK CHK AN10-66-M	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-36-FF	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	K1568-2F	1.0000	20.0000	1.0000		08	
19	K1568-1F	1.0000	20.0000	1.0000		08	
20	K1564-1	1.0000	2.0000	1.0000		08	
21	K1568-1F	1.0000	2.0000	1.0000		08	
22	K1568-2F	1.0000	5.0000	1.0000		08	
23	K1564-1	1.0000	5.0000	1.0000		08	
24	K1568-1FD	1.0000	2.0000	1.0000		08	
25	K1568-1FMS	1.0000	2.0000	1.0000		08	
26	K1568-1FMSD	1.0000	2.0000	1.0000		08	
27	RB	1.0000	1.0000	1.0000		08	
28	CCV3	1.0000	1.0000	1.0000		08	
29	CCB3	1.0000	1.0000	1.0000		08	
30	K1568-1FD	1.0000	20.0000	1.0000		08	
31	K1568-1FMS	1.0000	20.0000	1.0000		08	
32	K1568-1FMSD	1.0000	20.0000	1.0000		08	
33	K1568-2F	1.0000	2.0000	1.0000		08	
34	K1599-14	1.0000	2.0000	1.0000		08	
35	K1599-3	1.0000	2.0000	1.0000		08	
36	K1354-3	1.0000	20.0000	1.0000		08	
37	K1354-4	1.0000	20.0000	1.0000		08	
38	K1354-5	1.0000	20.0000	1.0000		08	
39	RB	1.0000	1.0000	1.0000		08	
40	CCV4	1.0000	1.0000	1.0000		08	
41	CCB4	1.0000	1.0000	1.0000		08	
42	K1354-6	1.0000	20.0000	1.0000		08	

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Sequence: AN3022807
Operator: acqwet10
Printed: 3/1/2007 12:21:17 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 2/28/2007 8:49:08 AM by acqwet10
Last Update: 2/28/2007 5:53:17 PM by acqwet10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1354-7F	Unknown	56	200.0	epa300	epa300	Finished	2/28/2007 7:23:47 PM
44	K1354-8F	Unknown	57	200.0	epa300	epa300	Finished	2/28/2007 7:36:14 PM
45	K1354-9F	Unknown	58	200.0	epa300	epa300	Finished	2/28/2007 7:48:42 PM
46	K1412-1	Unknown	59	200.0	epa300	epa300	Finished	2/28/2007 8:01:10 PM
47	K1412-2	Unknown	60	200.0	epa300	epa300	Finished	2/28/2007 8:13:39 PM
48	K1412-3	Unknown	61	200.0	epa300	epa300	Finished	2/28/2007 8:26:06 PM
49	RB	Unknown	62	200.0	epa300	epa300	Finished	2/28/2007 8:38:34 PM
50	CCV5	Unknown	63	200.0	epa300	epa300	Finished	2/28/2007 8:51:02 PM
51	CCB5	Unknown	64	200.0	epa300	epa300	Finished	2/28/2007 9:03:29 PM

Chromeleon © Dionex Corporation, Version 6.50 SP1 Build 956

Sequence: AN3022807
Operator: acqwet10
Printed: 3/1/2007 12:21:17 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 2/28/2007 8:49:08 AM by acqwet10
Last Update: 2/28/2007 5:53:17 PM by acqwet10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	K1354-7F	1.0000	20.0000	1.0000		08	
44	K1354-8F	1.0000	20.0000	1.0000		08	
45	K1354-9F	1.0000	20.0000	1.0000		08	
46	K1412-1	1.0000	20.0000	1.0000		08	
47	K1412-2	1.0000	20.0000	1.0000		08	
48	K1412-3	1.0000	20.0000	1.0000		08	
49	RB	1.0000	1.0000	1.0000		08	
50	CCV5	1.0000	1.0000	1.0000		08	
51	CCB5	1.0000	1.0000	1.0000		08	

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ANSUCCOUT

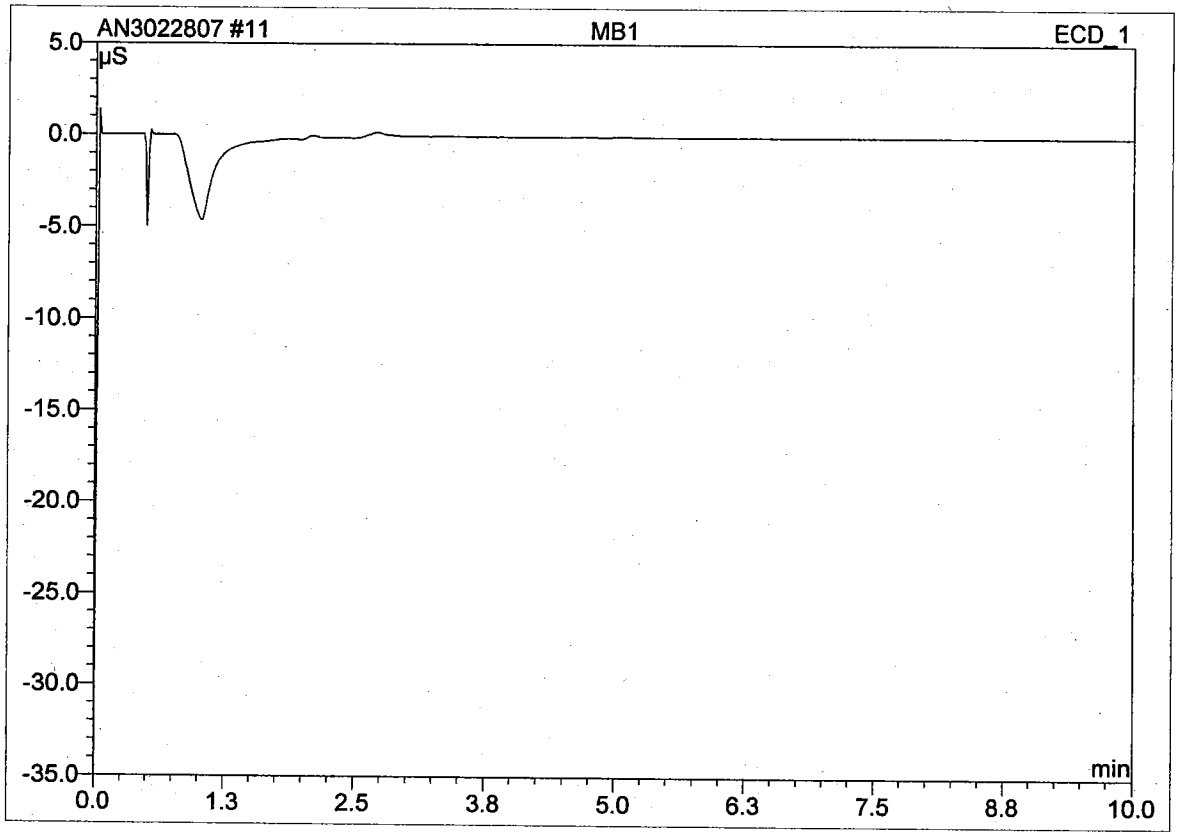
Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K1568 -1F	III	X	21 3/1 2/20/07	3/17	F	.25/5	~~1/5~~ 2.5/5	✓
					Cl			✓
Treadwell		dup ms msd 2.5/5 and .25/5			NO2		~~2.5/5~~	✓
					Br			
					NO3	.25/5	1/5 2.5/5	✓
					SO4			✓
-2					F	.25/5	~~2.5/5~~ 1/5 2.5/5	✓
					Cl			✓
					NO2		~~2.5/5~~ 1/5 2.5/5	✓
					Br			
					NO3	.25/5	~~2.5/5~~ 1/5	✓
					SO4			
K1564-1	I			3/17	F			
Wheelabrator					Cl	2.5/5	1/5	✓
					NO2			
					Br			
					NO3			
					SO4			
K1354-3				3/10	F			
Prowell					Cl	.25/5		✓
					NO2			
					Br			2x
					NO3			
					SO4	.25/5		✓
-4					F			
					Cl			✓
					NO2			
					Br			5x
					NO3			
					SO4			✓
-5					F			
					Cl			✓
					NO2			
					Br			5x
					NO3			
					SO4			✓
-6					F			
					Cl			✓
					NO2			
					Br			2x
					NO3			
					SO4			✓
-7					F			
					Cl			✓ ✓ DM
					NO2			
					Br			2x
					NO3			
					SO4			✓
-8					F			
					Cl			✓ 5x
					NO2			
					Br			
					NO3			
					SO4			✓ 2x
-9					F			
					Cl			✓ 5x
					NO2			
					Br			
					NO3			
					SO4			✓ 2x

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1412 - 1				3/11	F				
					Cl	.25/5			✓
Prowell					NO2	•			
					Br				
					NO3				2x
					SO4	.25/5			✓
-2					F				
					Cl	.25/5			✓
					NO2				
					Br	•			
					NO3				2x
					SO4	.25/5			✓
-3					F				
					Cl	.25/5			✓
					NO2				
					Br	•			
					NO3				2x
					SO4	.25/5			✓
K1599 - 3	III		past hold		F				
					Cl	2.5/5		✓	
CH2M Hill					NO2	•			
					Br				
					NO3	2.5/5		✓	
					SO4	✓			✓ 20x
-14			3/1	3/17	F				
					Cl	2.5/5		✓	
					NO2				
					Br	•			
					NO3	2.5/5		✓	
					SO4	✓		✓	
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Columbia Analytical Services, Inc.

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 9:57**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



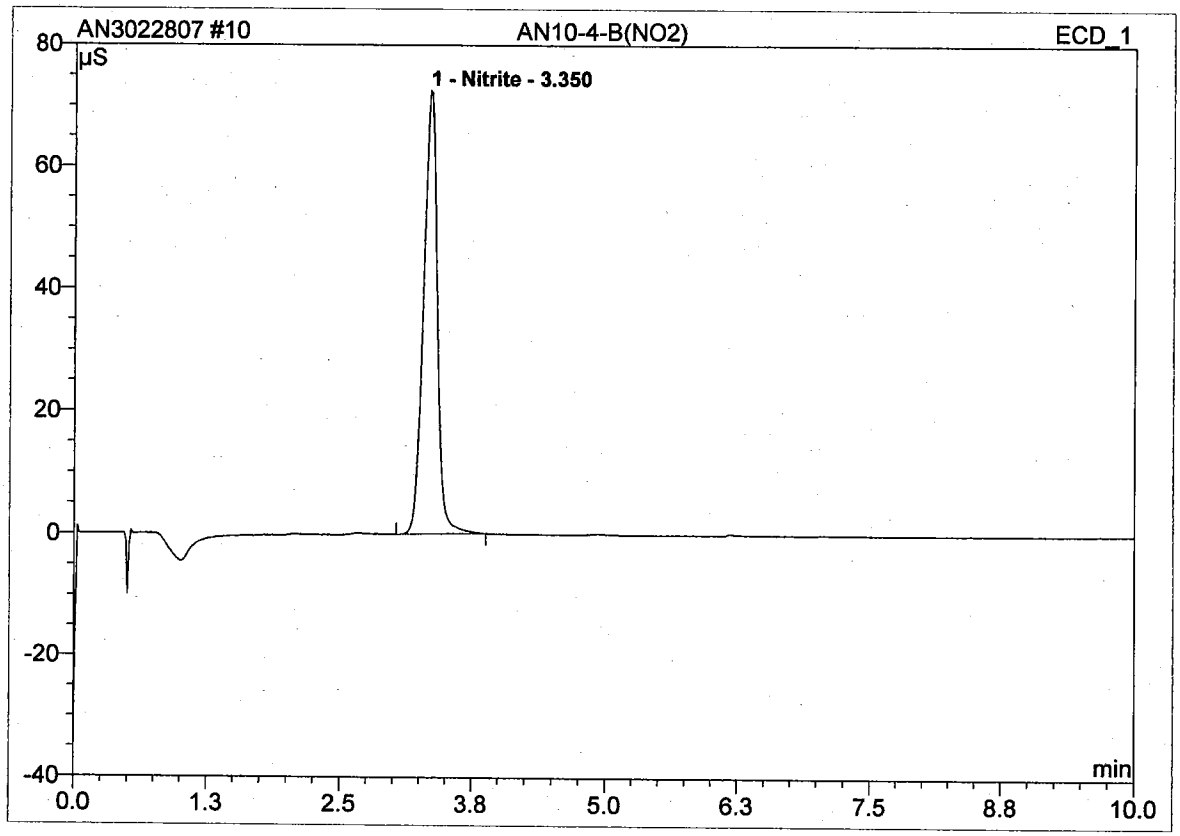
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

lar 3/2/07

Columbia Analytical Services, Inc.

10 AN10-4-B(NO2)

Sample Name:	**AN10-4-B(NO2)**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**2/28/2007 9:44**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



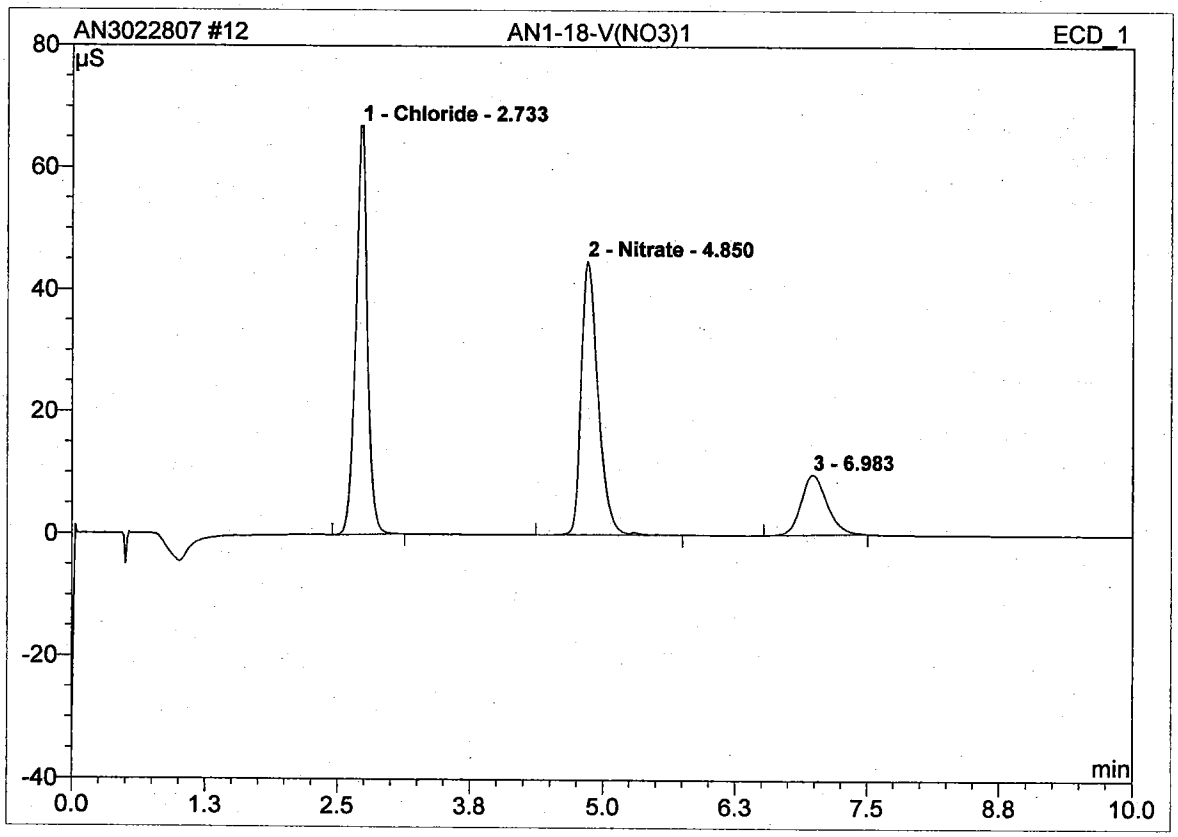
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.35	Nitrite	72.448	10.993	100.00	99% 99.375	BMB
Total:			72.448	10.993	100.00	99.375	

LAR 3/2/07

Columbia Analytical Services, Inc.

12 AN1-18-V(NO3)1

Sample Name:	**AN1-18-V(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**2/28/2007 10:09**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



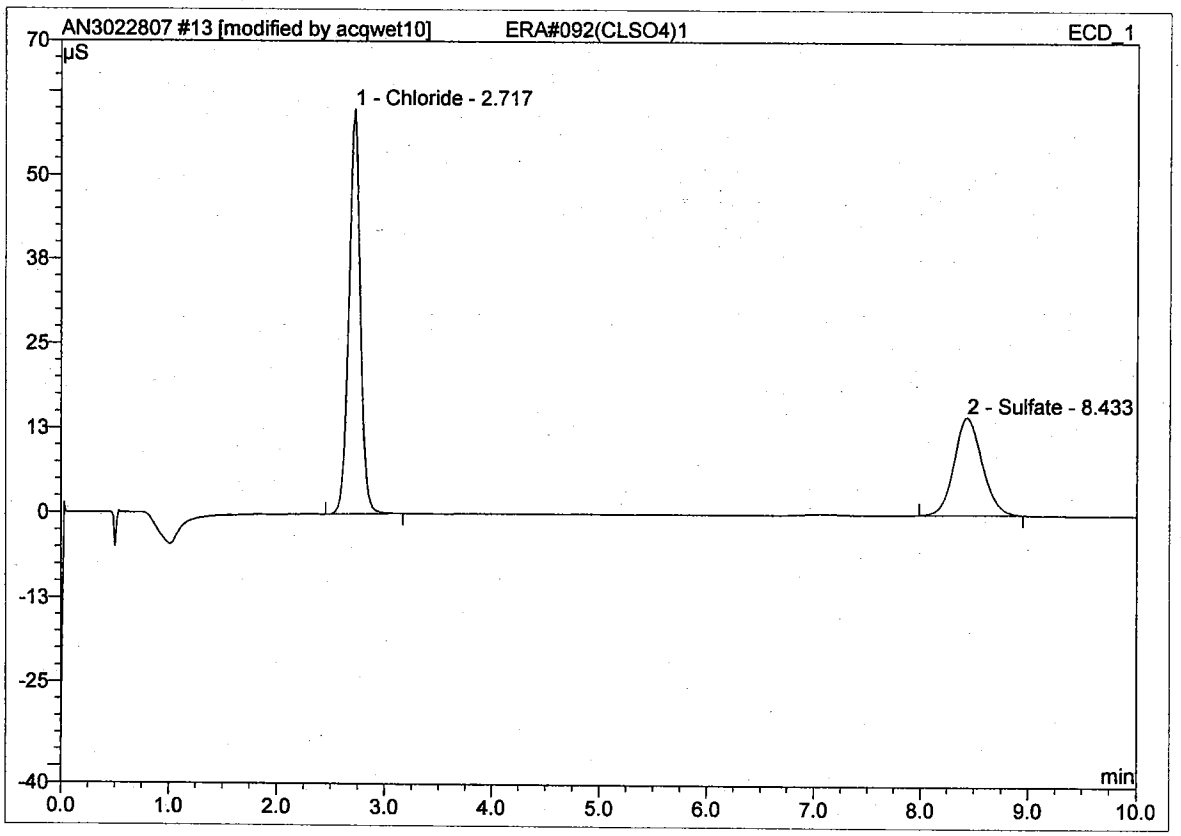
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.73	Chloride	67.007	8.524	43.54	11.362	BMB
2	4.85	Nitrate	44.869	8.245	42.12	104 4.662	BMB
3	6.98	n.a.	9.834	2.808	14.34	n.a.	BMB
Total:			121.711	19.576	100.00	16.024	

Ltr 3/2/07

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:22**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride	60.026	7.192	62.19	96% 4.793	BMB
2	8.43	Sulfate	14.398	4.372	37.81	96% 4.751	BMB*
Total:			74.425	11.563	100.00	9.544	

RAA 3/2/07

After Initials JS

FEB 28 2007

default_letter/Integration

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

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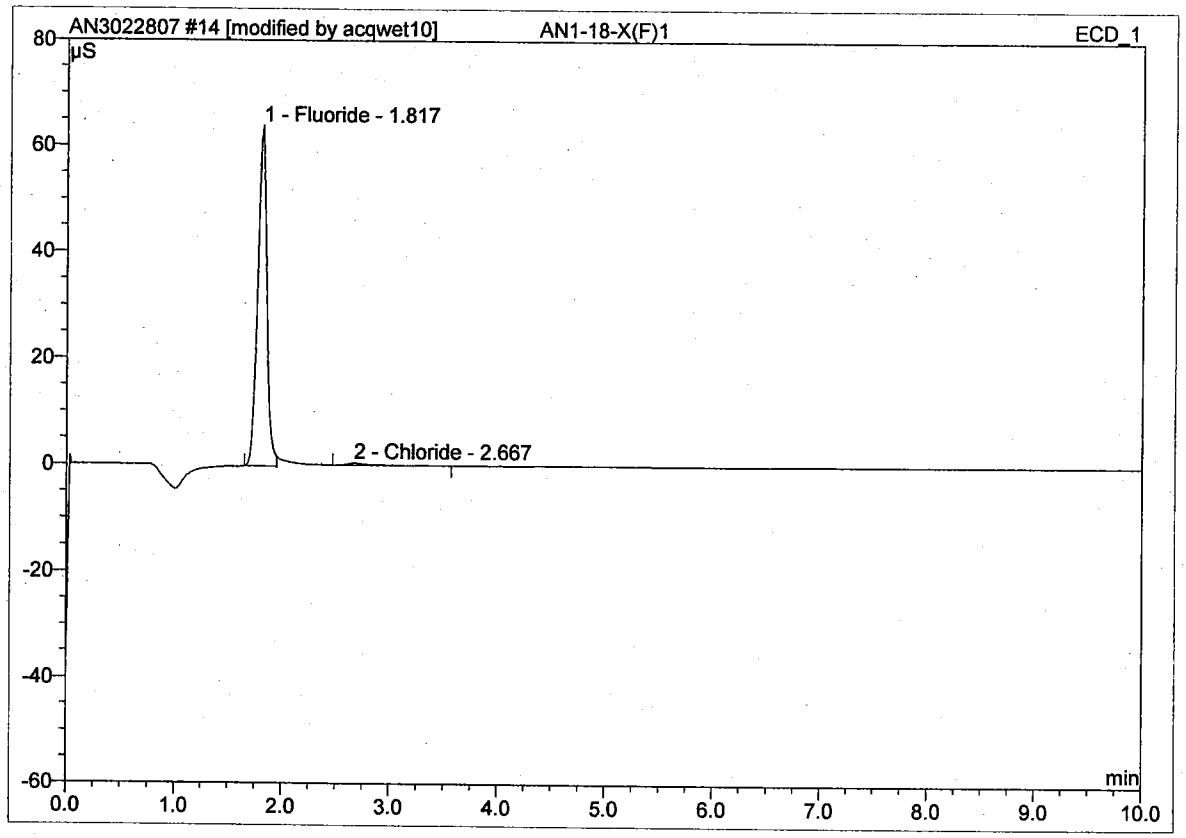
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**2/28/2007 10:34**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	64.114	6.262	98.56	103% 17.990	BM *
2	2.67	Chloride	0.448	0.092	1.44	0.305	BMB*
Total:			64.562	6.353	100.00	18.295	

DR 3/2/07

After Initials JS

FEB 28 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

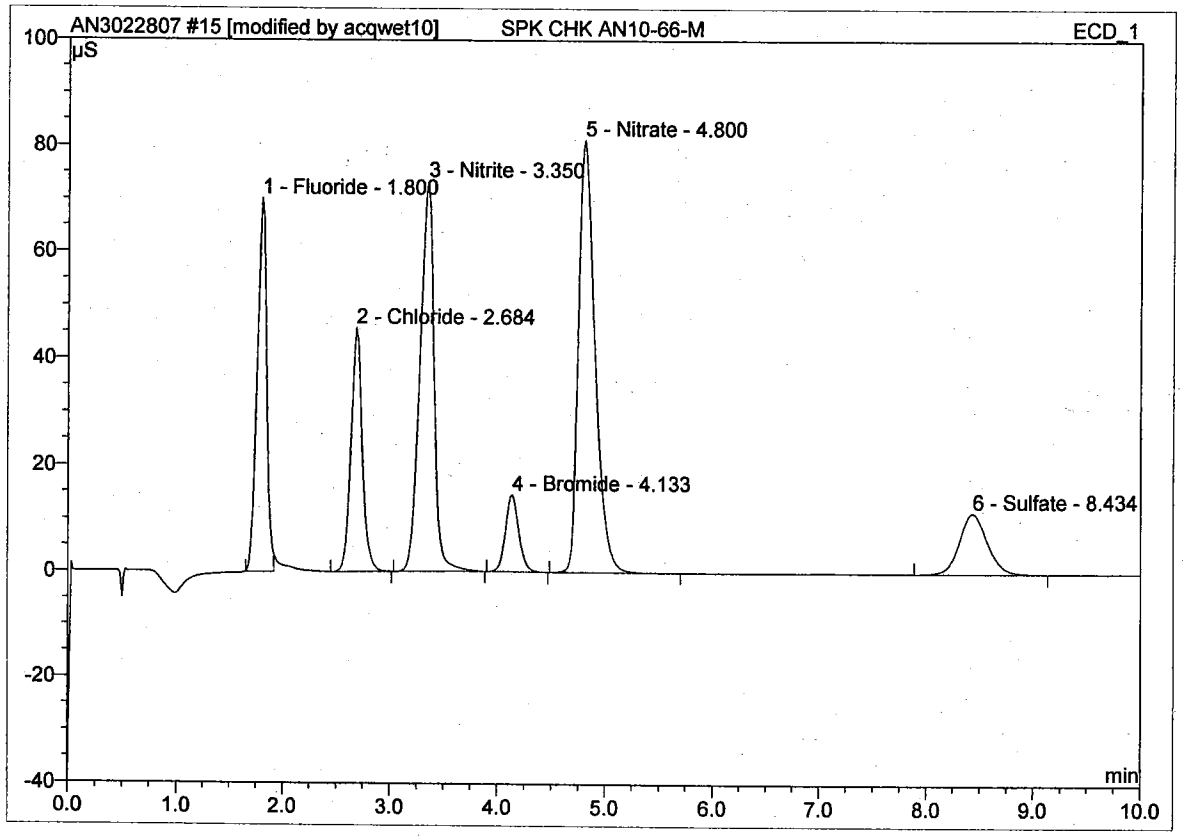
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-M

Sample Name:	**SPK CHK AN10-66-M**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:47**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride % rec=103	70.153	7.220	16.40	4.149	BM *
2	2.68	Chloride % rec=93	45.781	5.541	12.58	3.693	BMB*
3	3.35	Nitrite % rec=100	73.264	11.097	25.20	4.012	BMB*
4	4.13	Bromide % rec=100	14.500	2.084	4.73	4.011	BMB*
5	4.80	Nitrate % rec=103	81.154	14.626	33.22	4.136	BMB*
6	8.43	Sulfate % rec=95	11.432	3.458	7.85	3.758	BMB*
Total:			296.285	44.026	100.00	23.758	

After
Initials JS

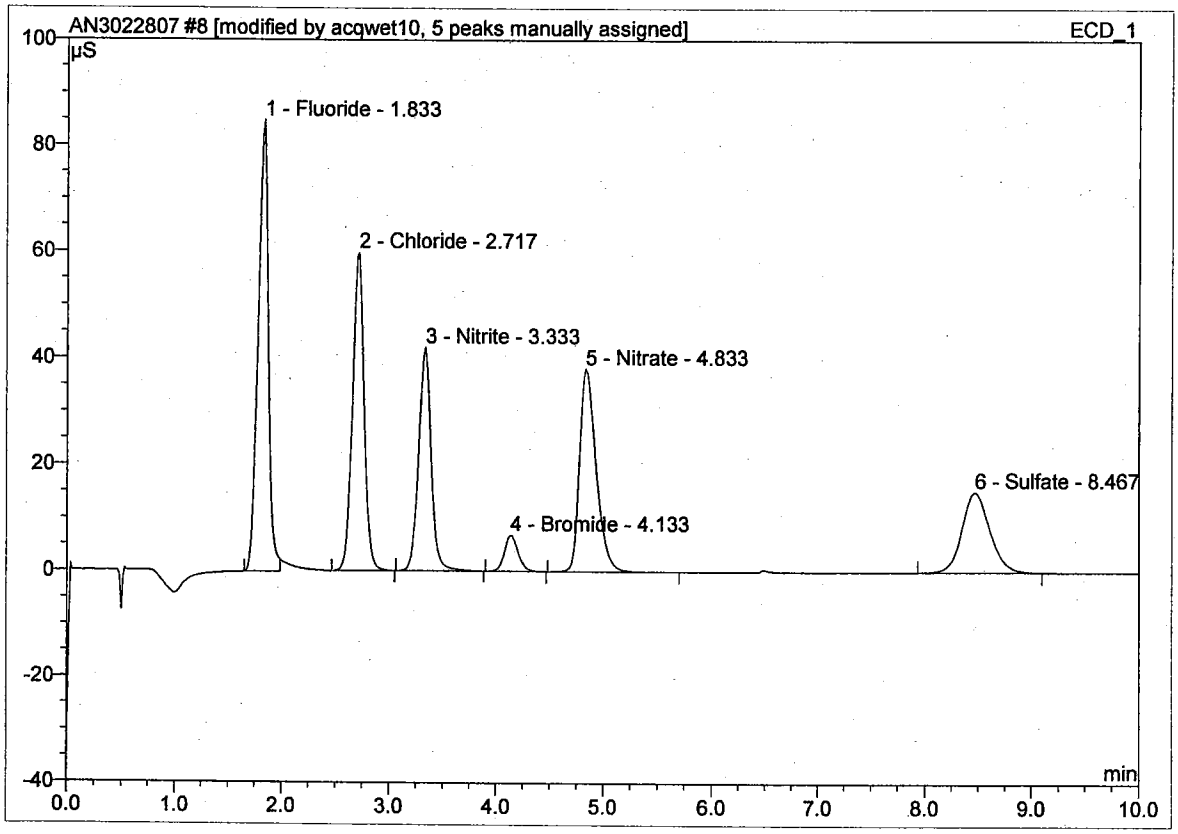
FEB 28 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

8 CCV1 AN10-36-FF

Sample Name:	**CCV1 AN10-36-FF**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 9:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.975	9.326	26.79	108% 5.358	BM *
2	2.72	Chloride	59.852	7.400	21.26	98% 4.932	BMB*^
3	3.33	Nitrite	41.963	5.668	16.28	100% 2.049	BMB*^
4	4.13	Bromide	6.783	1.000	2.87	95% 1.925	BMB*^
5	4.83	Nitrate	38.114	6.837	19.64	95% 1.933	BMB*^
6	8.47	Sulfate	15.074	4.573	13.14	100% 4.970	BMB*^
Total:			246.761	34.805	100.00	21.168	

LRR 3/2/07

After Initials JS

FEB 28 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

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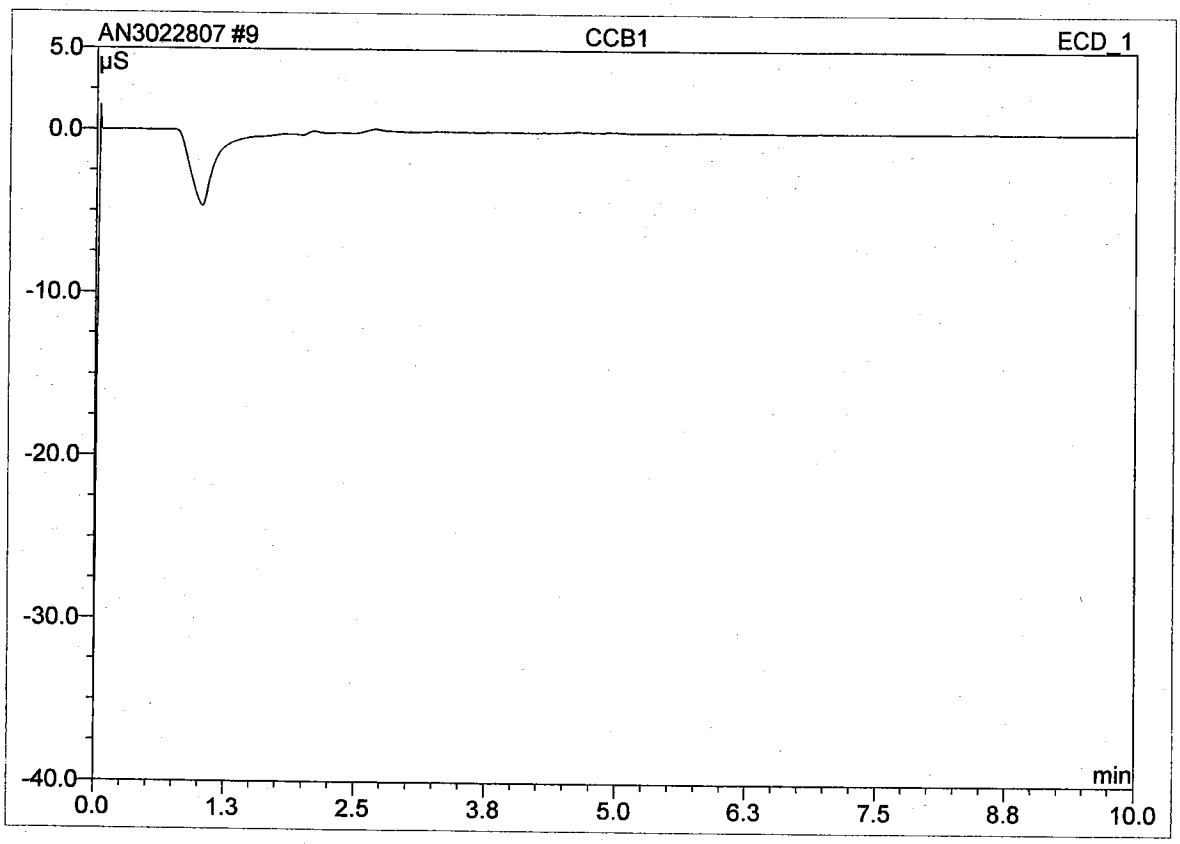
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 9:32**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



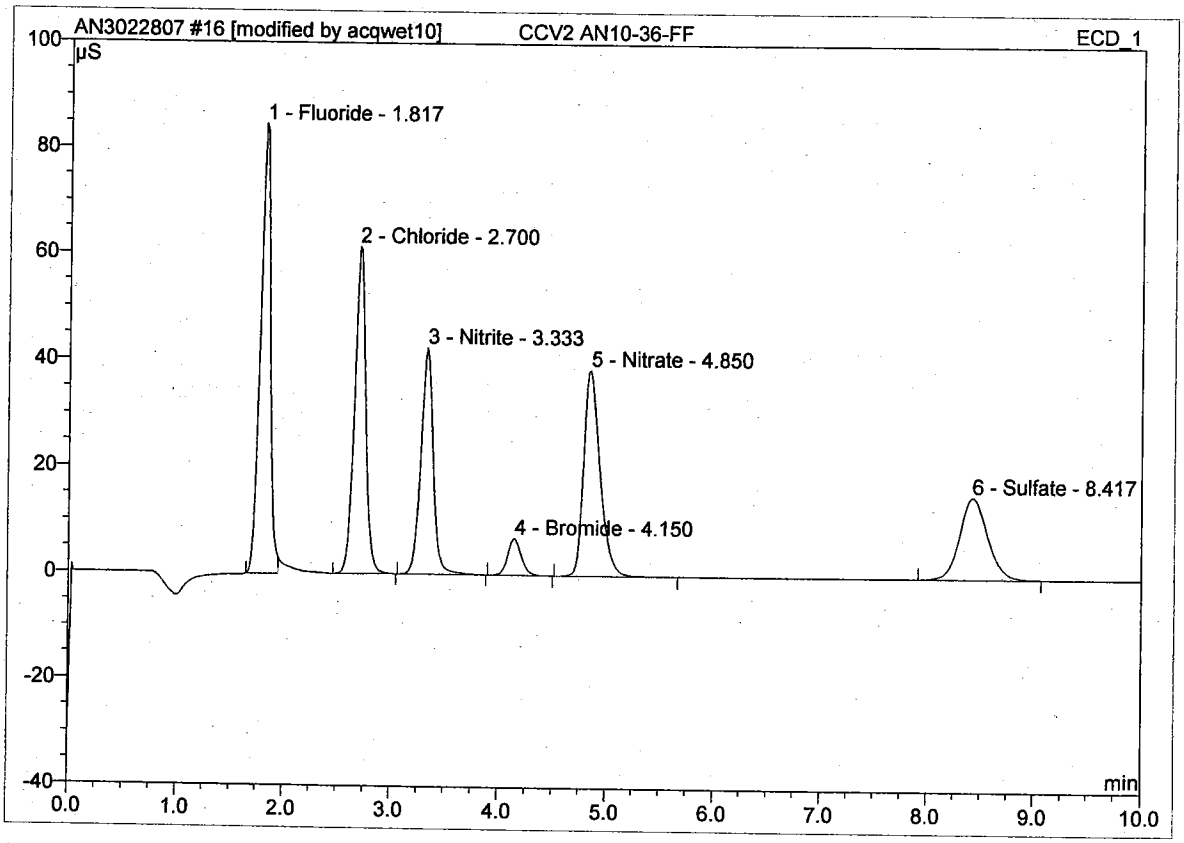
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

lbr 3/2/07

Columbia Analytical Services, Inc.

16 CCV2 AN10-36-FF

Sample Name:	**CCV2 AN10-36-FF**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:59**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	84.739	9.309	26.65	106% 5.349	BM *
2	2.70	Chloride	61.417	7.436	21.29	100% 4.956	BMB*
3	3.33	Nitrite	42.439	5.696	16.31	105% ~~100~~ JS 2/28/07 2.060	BMB*
4	4.15	Bromide	6.857	1.006	2.88	95% 1.935	BMB*
5	4.85	Nitrate	38.574	6.854	19.62	95% 1.938	BMB*
6	8.42	Sulfate	15.327	4.631	13.26	100% 5.032	BMB*
Total:			249.353	34.932	100.00	21.270	

AN 3/2/07

After Initials JS

default_letter/Integration

FEB 28 2007

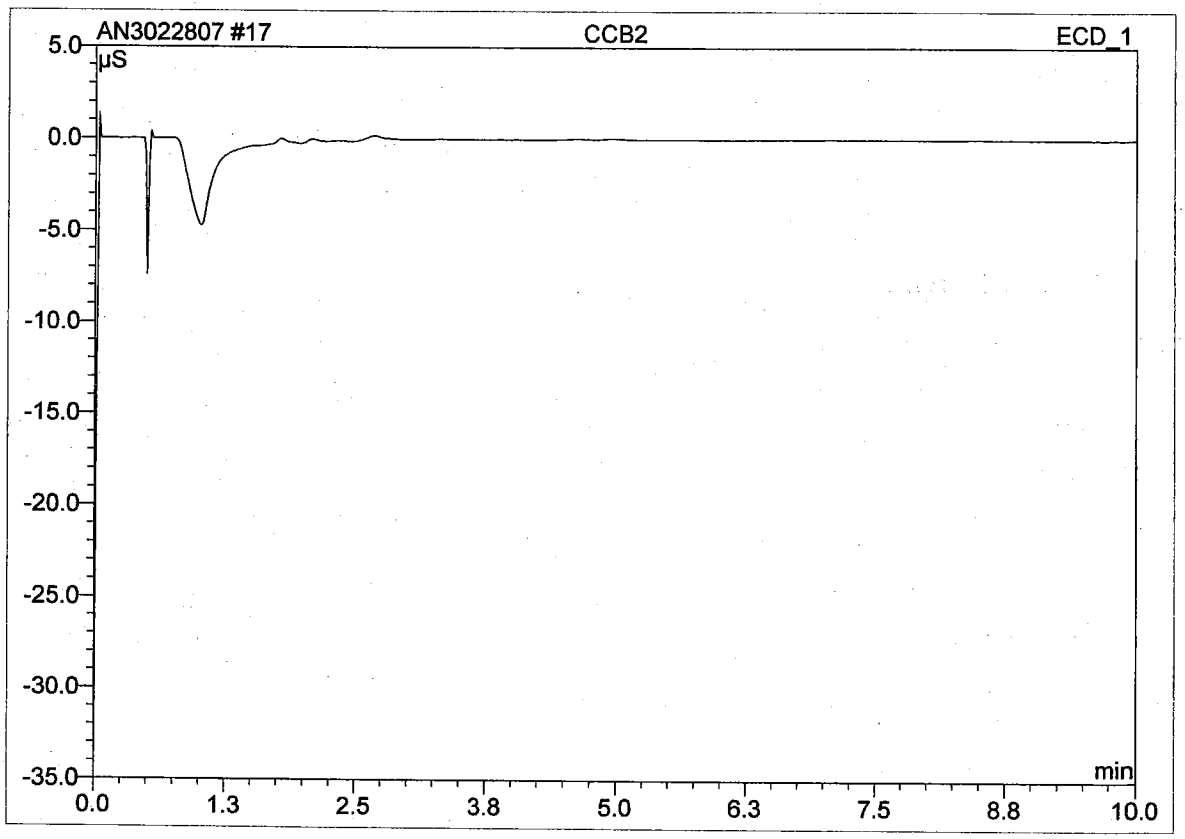
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 11:12**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



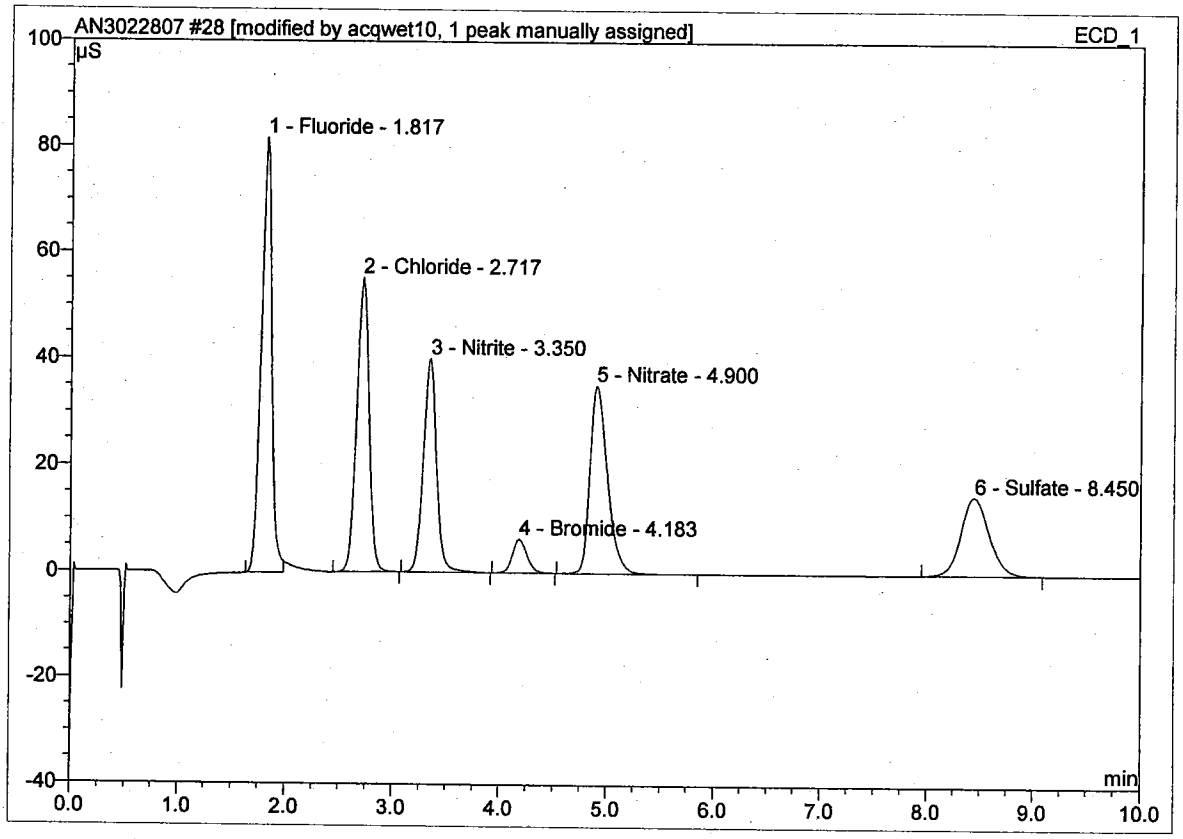
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

LAL 3/2/07

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 16:16**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	81.828	9.232	26.84	106% 5.304	BM *
2	2.72	Chloride	55.277	7.306	21.24	98% 4.870	BMB*^
3	3.35	Nitrite	40.024	5.634	16.38	100% 2.037	BMB*
4	4.18	Bromide	6.320	0.989	2.87	95% 1.902	BMB*
5	4.90	Nitrate	35.218	6.720	19.54	95% 1.900	BMB*
6	8.45	Sulfate	14.652	4.519	13.14	98% 4.911	BMB*
Total:			233.319	34.399	100.00	20.924	

RAZ 3/2/07

After Initials JS

MAR 01 2007

default_letter/Integration

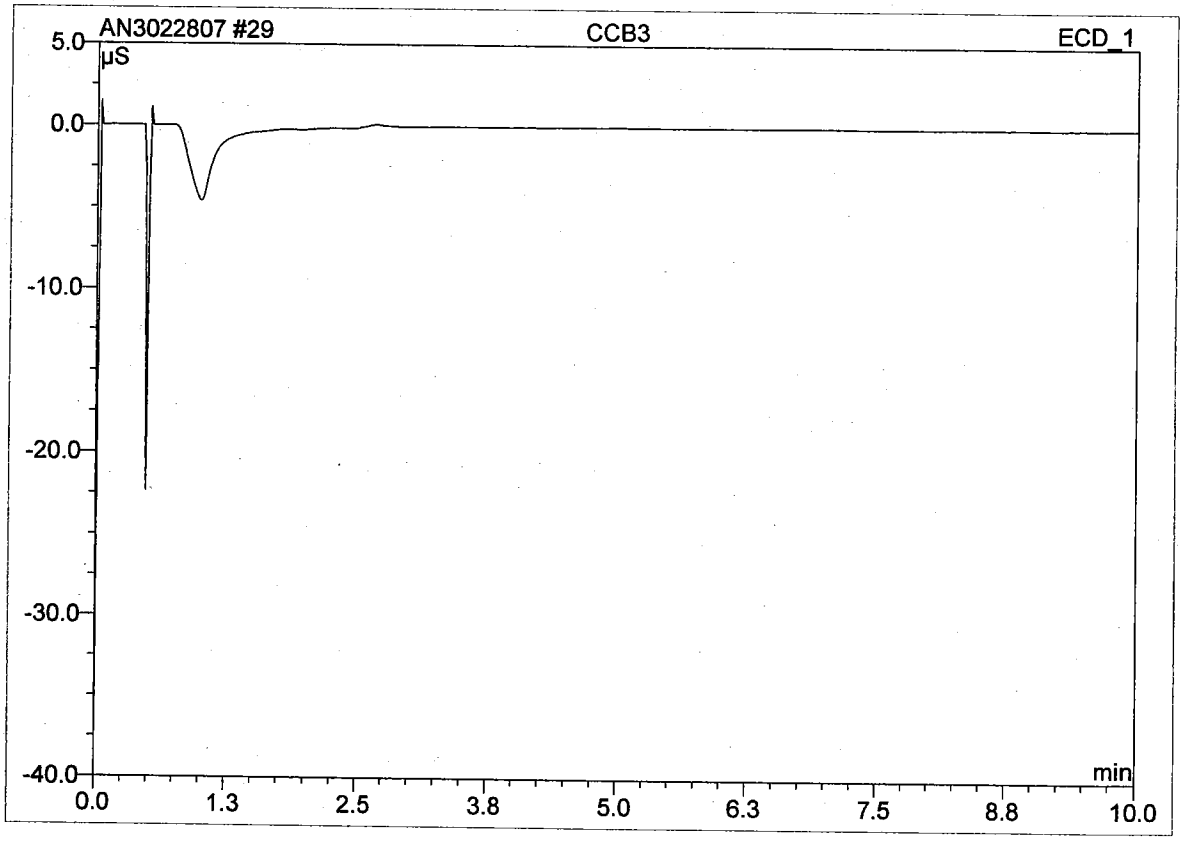
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

29 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 16:29**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



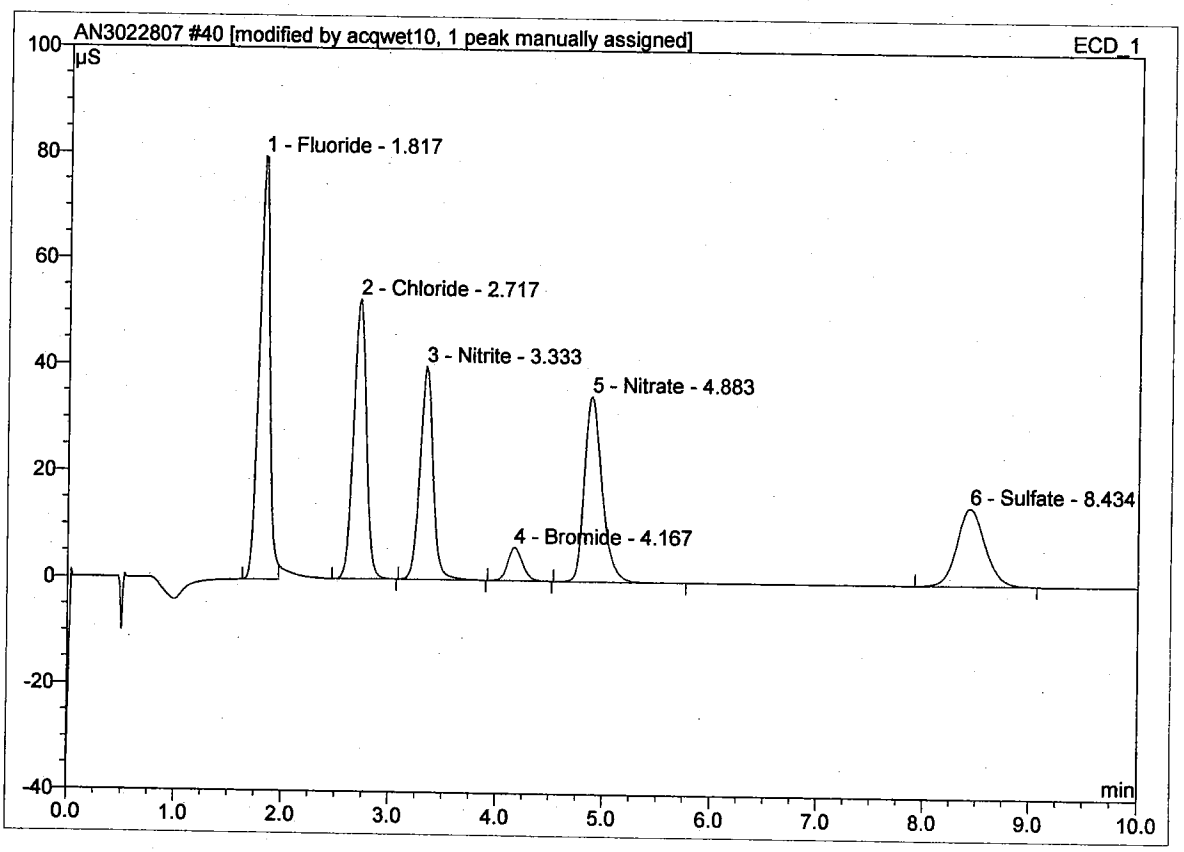
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

LDR 3/12/07

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 18:46**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	79.675	9.127	26.73	104% 5.244	BM *
2	2.72	Chloride	52.575	7.226	21.16	96% 4.816	BMB*
3	3.33	Nitrite	39.969	5.617	16.45	100% 2.031	BMB*^
4	4.17	Bromide	6.222	0.981	2.87	95% 1.887	BMB*
5	4.88	Nitrate	34.725	6.674	19.55	95% 1.887	BMB*
6	8.43	Sulfate	14.599	4.522	13.24	98% 4.914	BMB*
Total:			227.765	34.146	100.00	20.779	

RA2 3/2/07

After Initials JS

default_letter/Integration

MAR 01 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

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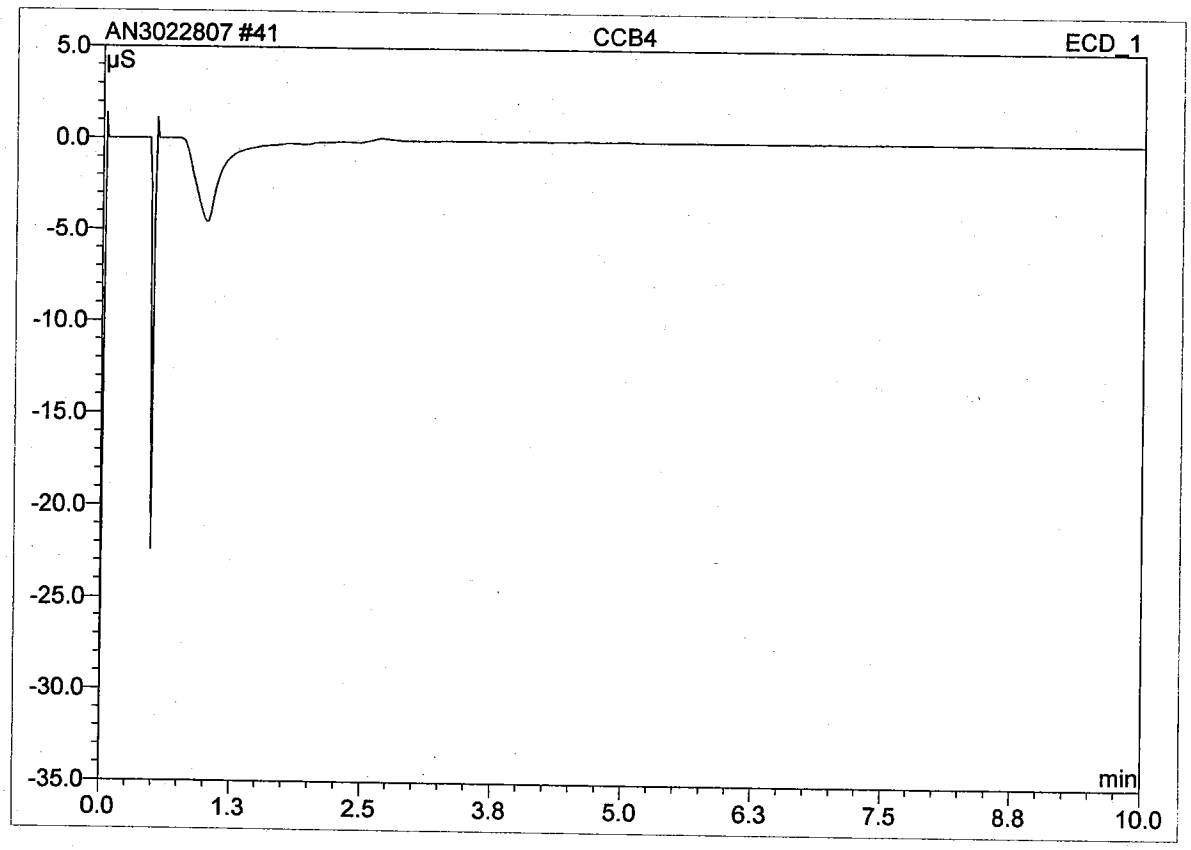
Columbia Analytical Services, Inc.

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**54**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 18:58**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



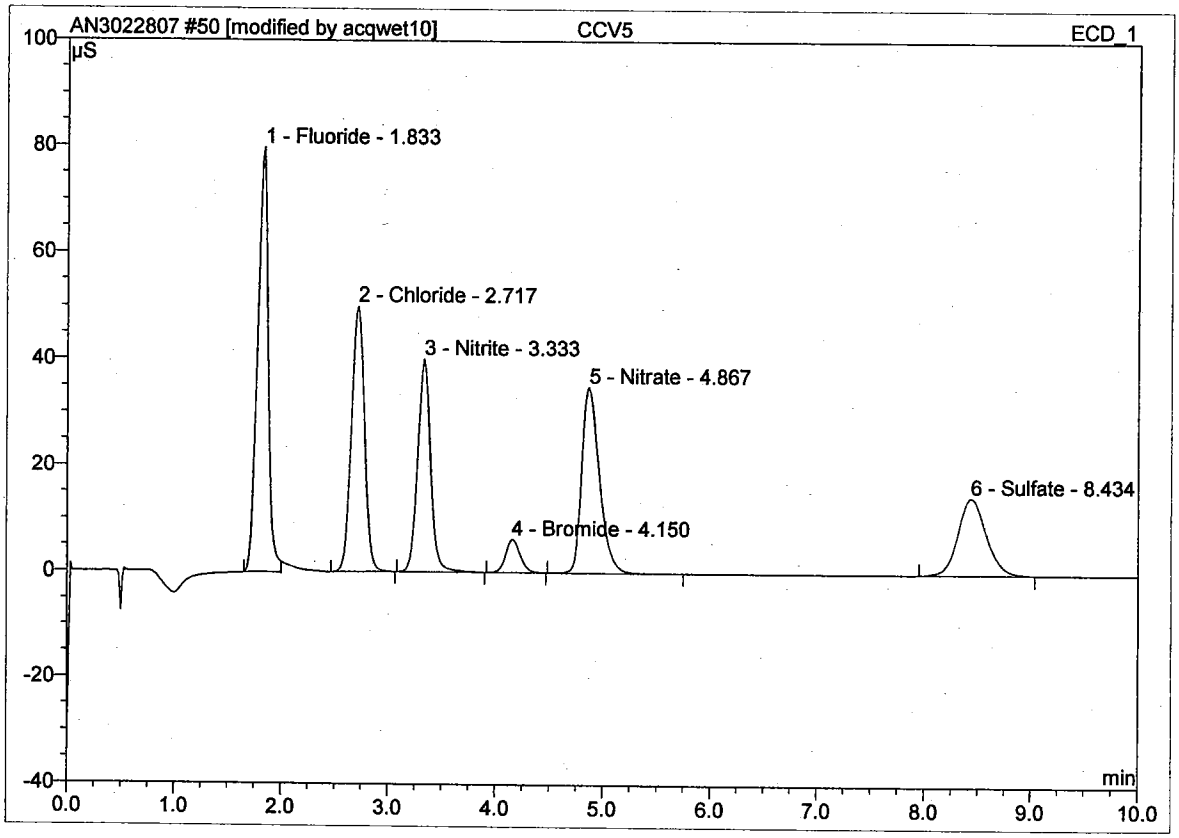
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

lAr 3/2/07

Columbia Analytical Services, Inc.

50 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 20:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount JS 3/1/07	Type
1	1.83	Fluoride	79.826	9.088	26.80	~~106~~ 104% 5.222	BM *
2	2.72	Chloride	50.041	7.159	21.11	96% 4.771	BMB*
3	3.33	Nitrite	40.019	5.567	16.42	100% 2.013	BMB*
4	4.15	Bromide	6.204	0.974	2.87	95% 1.874	BMB*
5	4.87	Nitrate	35.011	6.648	19.61	95% 1.880	BMB*
6	8.43	Sulfate	14.509	4.472	13.19	98% 4.860	BMB*
Total:			225.609	33.908	100.00	20.619	

RAZ 3/2/07

After Initials JS

default_letter/Integration

MAR 01 2007

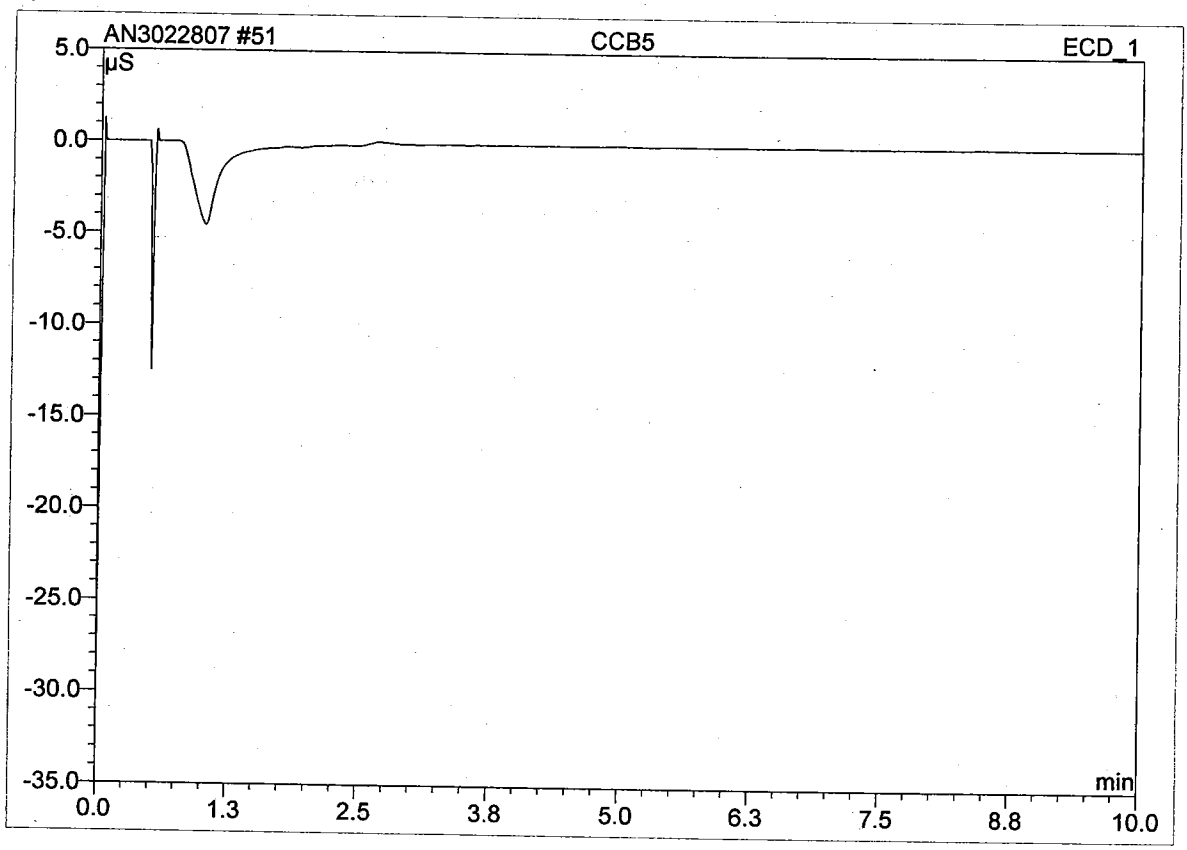
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

Columbia Analytical Services, Inc.

51 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**64**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 21:03**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



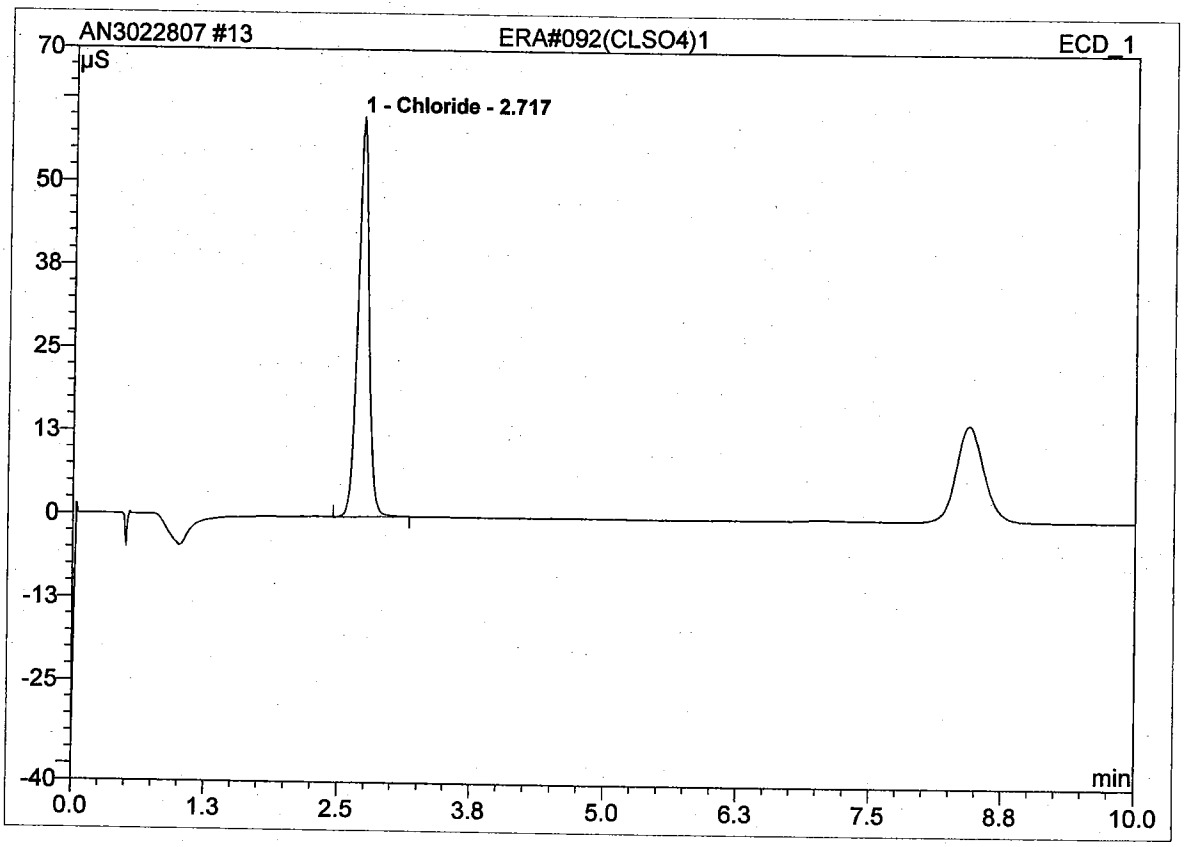
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

lal 3/2/07

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:22**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride	60.026	7.192	100.00	4.793	BMB
Total:			60.026	7.192	100.00	4.793	

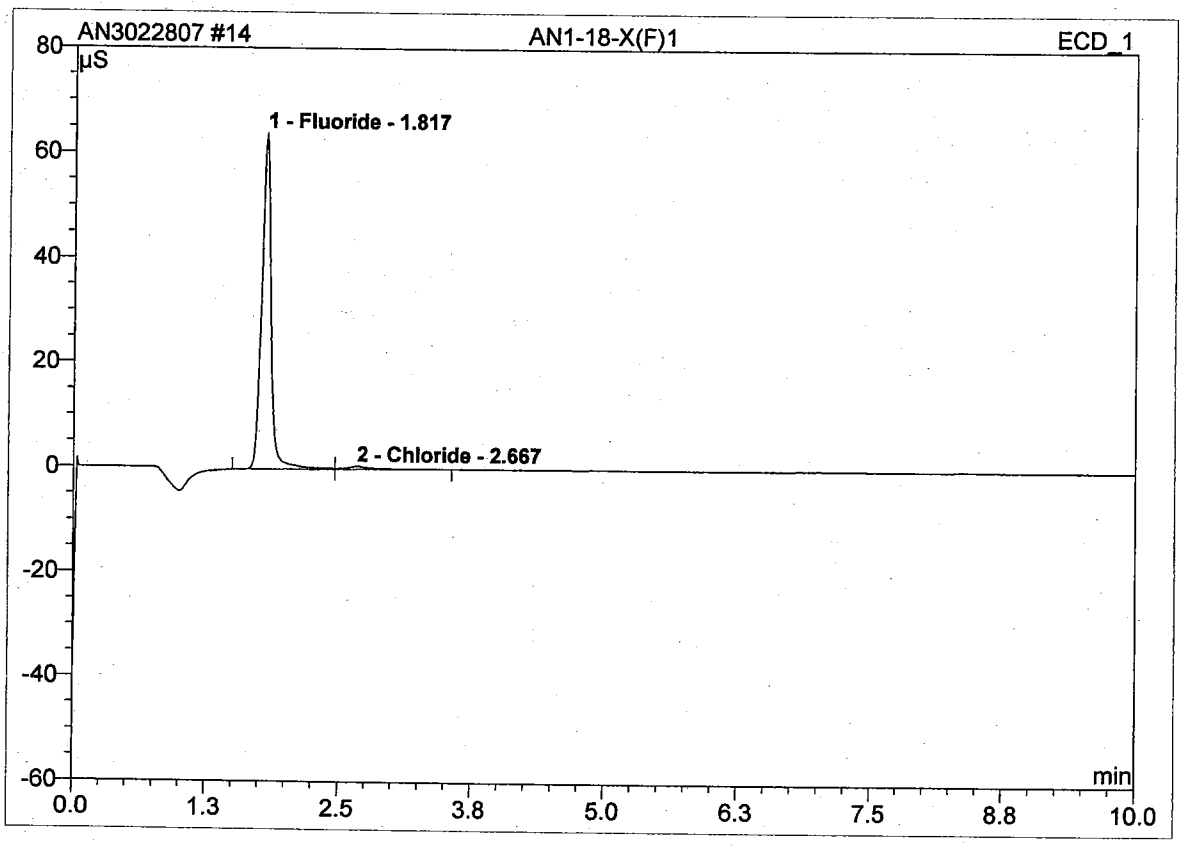
Before

FEB 28 2007

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**2/28/2007 10:34**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	64.136	6.562	97.28	18.853	BM
2	2.67	Chloride	0.585	0.183	2.72	0.611	MB
Total:			64.720	6.746	100.00	19.464	

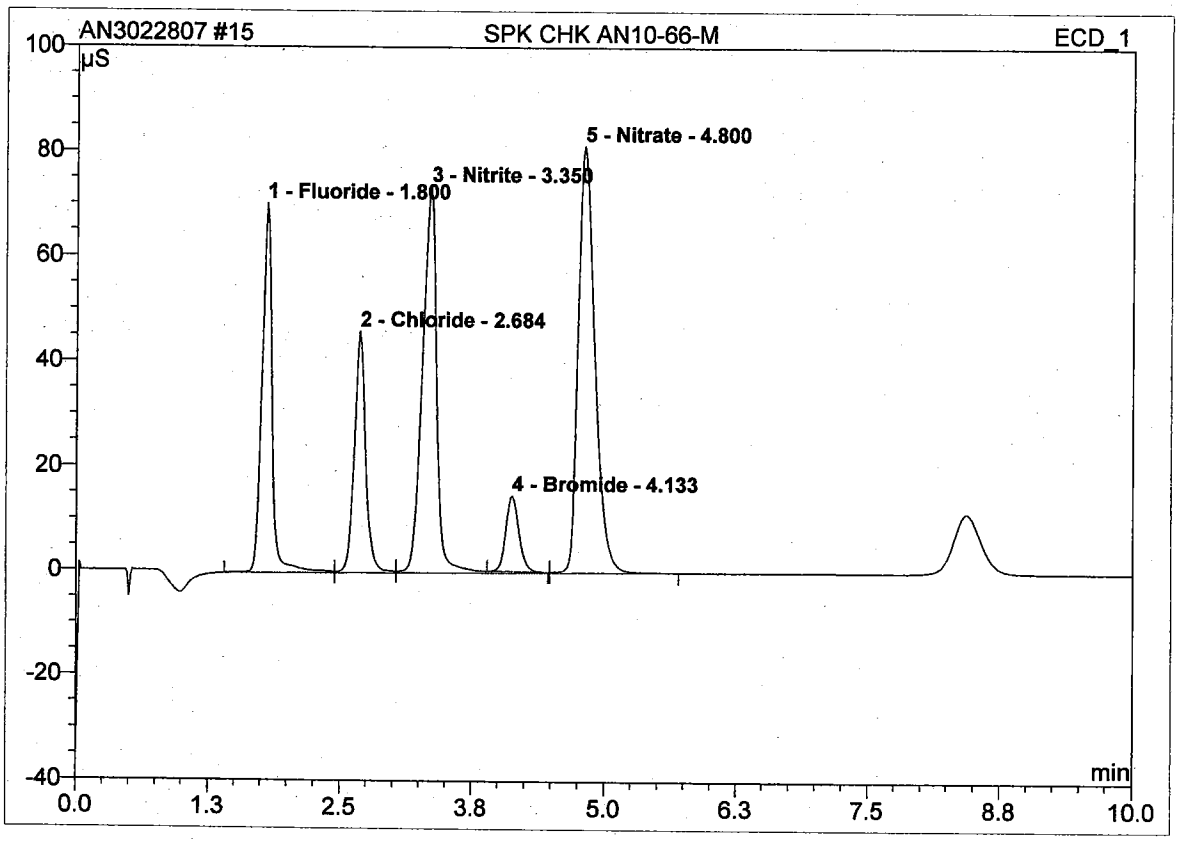
Before

FEB 2 8 2007

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-M

Sample Name:	**SPK CHK AN10-66-M**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:47**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	70.487	7.823	18.64	4.495	BM
2	2.68	Chloride	46.082	5.723	13.64	3.814	M
3	3.35	Nitrite	73.634	11.588	27.61	4.190	M
4	4.13	Bromide	14.500	2.084	4.97	4.011	Rd
5	4.80	Nitrate	81.303	14.749	35.14	4.170	MB
Total:			286.007	41.967	100.00	20.680	

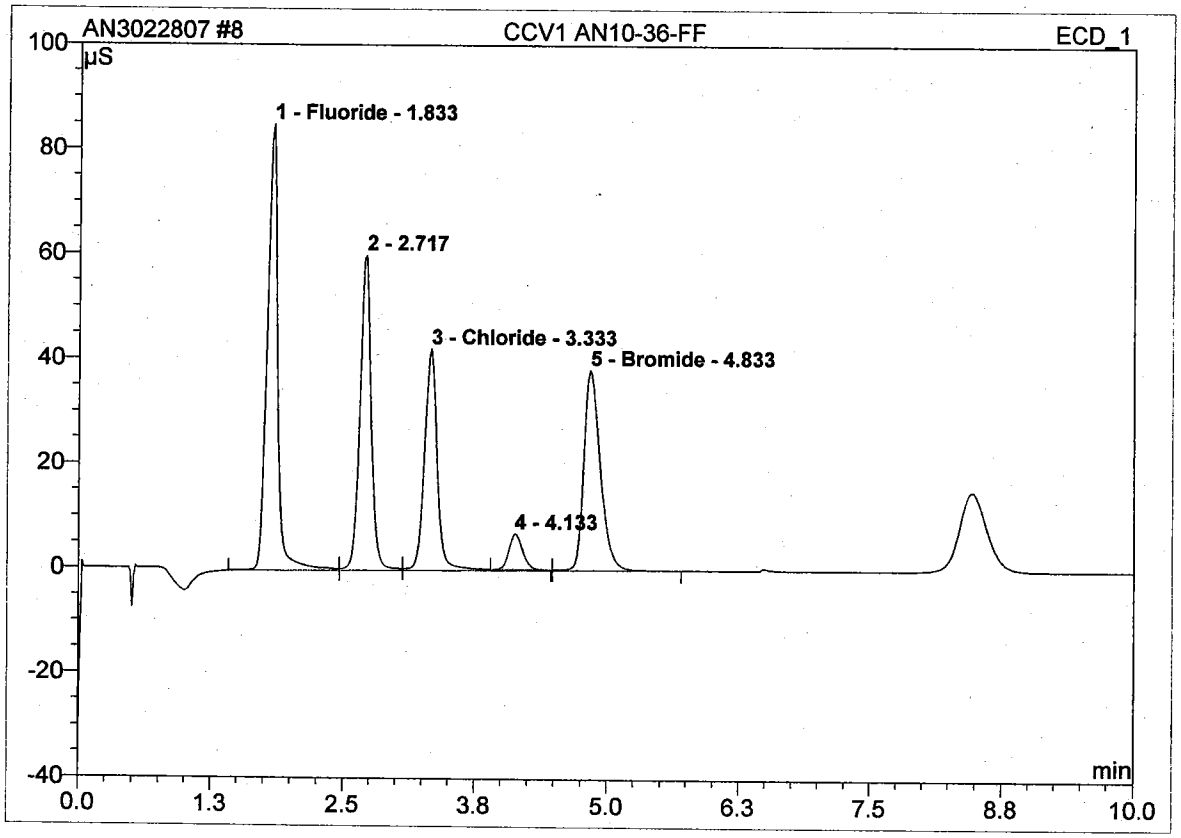
Before

FEB 2 8 2007

Columbia Analytical Services, Inc.

8 CCV1 AN10-36-FF

Sample Name:	**CCV1 AN10-36-FF**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 9:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.166	9.846	31.30	5.657	BM
2	2.72	n.a.	60.186	7.604	24.17	n.a.	M
3	3.33	Chloride	42.303	6.068	19.29	4.044	M
4	4.13	n.a.	6.783	1.000	3.18	n.a.	Rd
5	4.83	Bromide	38.237	6.942	22.07	13.358	MB
Total:			232.675	31.461	100.00	23.059	

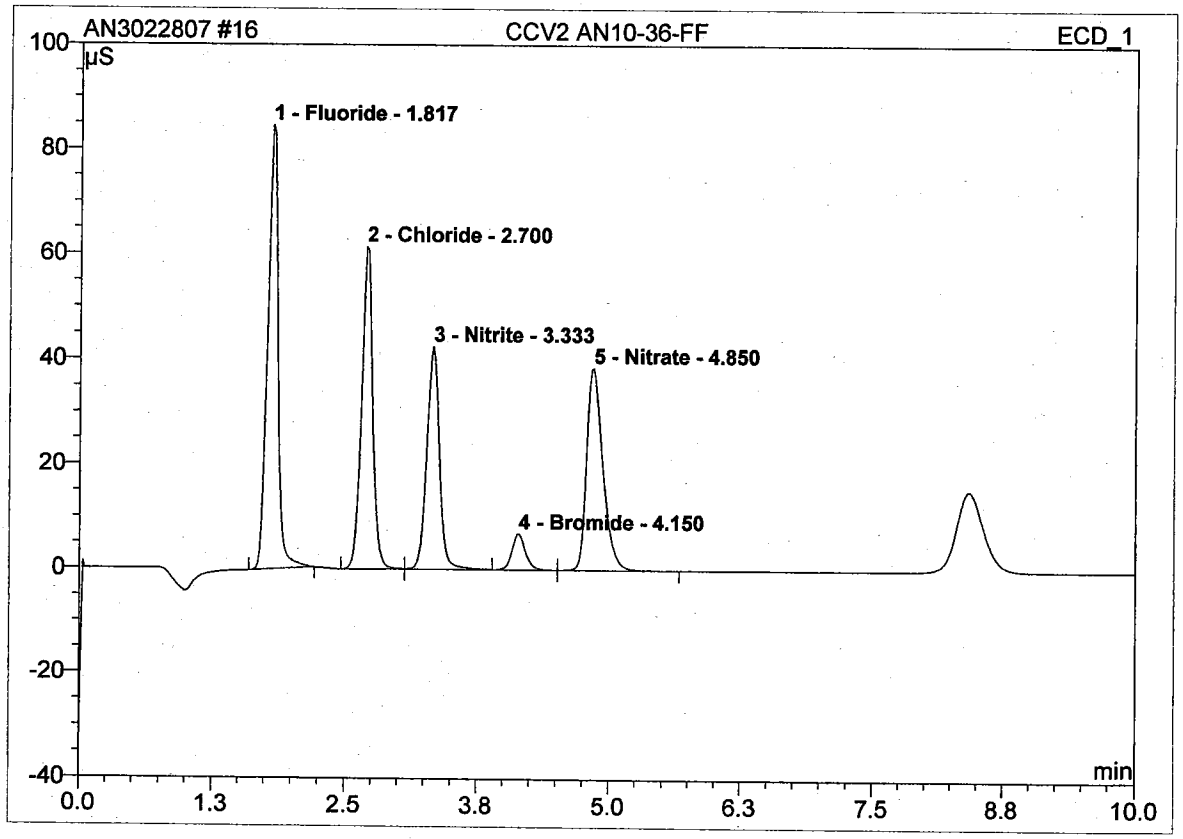
Before

FEB 2 8 2007

Columbia Analytical Services, Inc.

16 CCV2 AN10-36-FF

Sample Name:	**CCV2 AN10-36-FF**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 10:59**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	84.664	9.536	31.04	5.479	BMB
2	2.70	Chloride	61.466	7.474	24.33	4.981	BM
3	3.33	Nitrite	42.554	5.834	18.99	2.109	M
4	4.15	Bromide	6.857	1.006	3.27	1.935	Rd
5	4.85	Nitrate	38.599	6.875	22.38	1.944	MB
Total:			234.140	30.724	100.00	16.449	

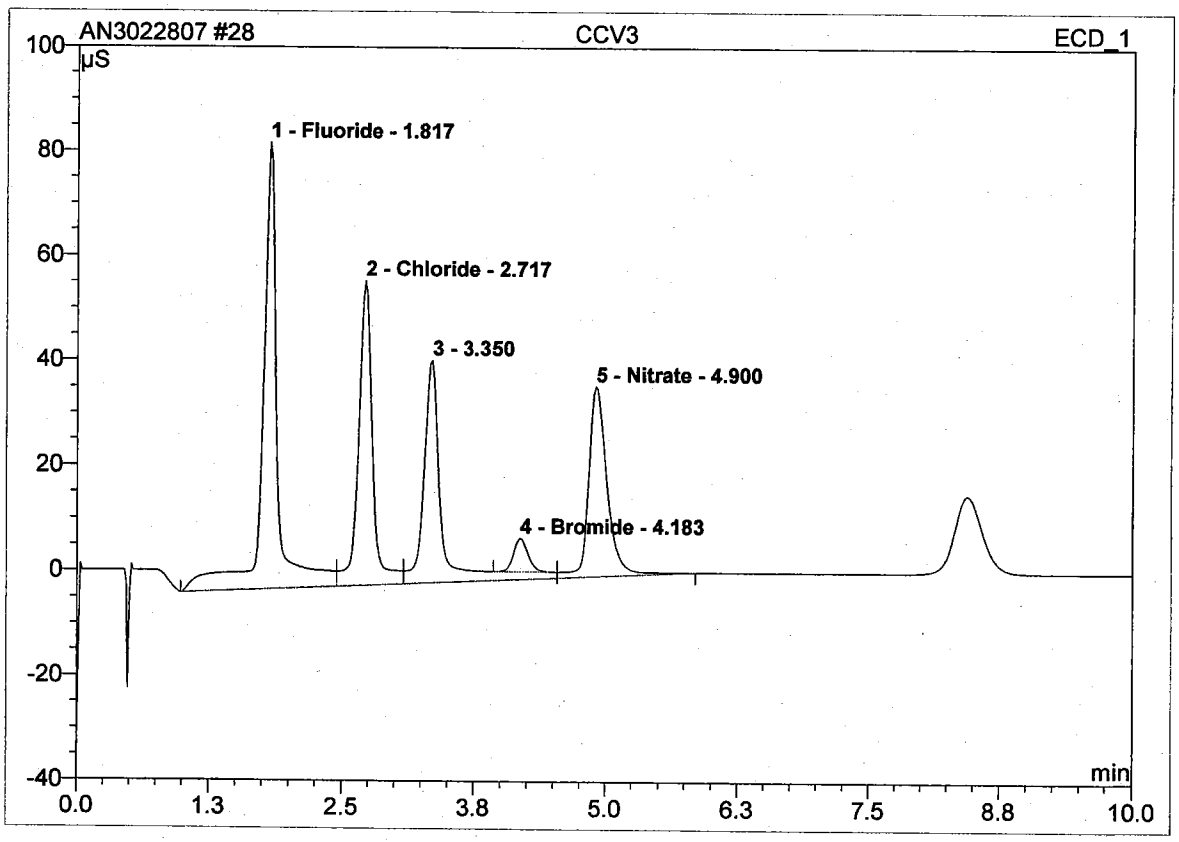
Before

FEB 28 2007

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 16:16**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	85.093	13.934	35.07	8.006	BM
2	2.72	Chloride	58.000	9.011	22.68	6.006	M
3	3.35	n.a.	42.275	8.299	20.89	n.a.	M
4	4.18	Bromide	6.320	0.989	2.49	1.903	Rd
5	4.90	Nitrate	36.067	7.495	18.87	2.119	MB
Total:			227.756	39.728	100.00	18.034	

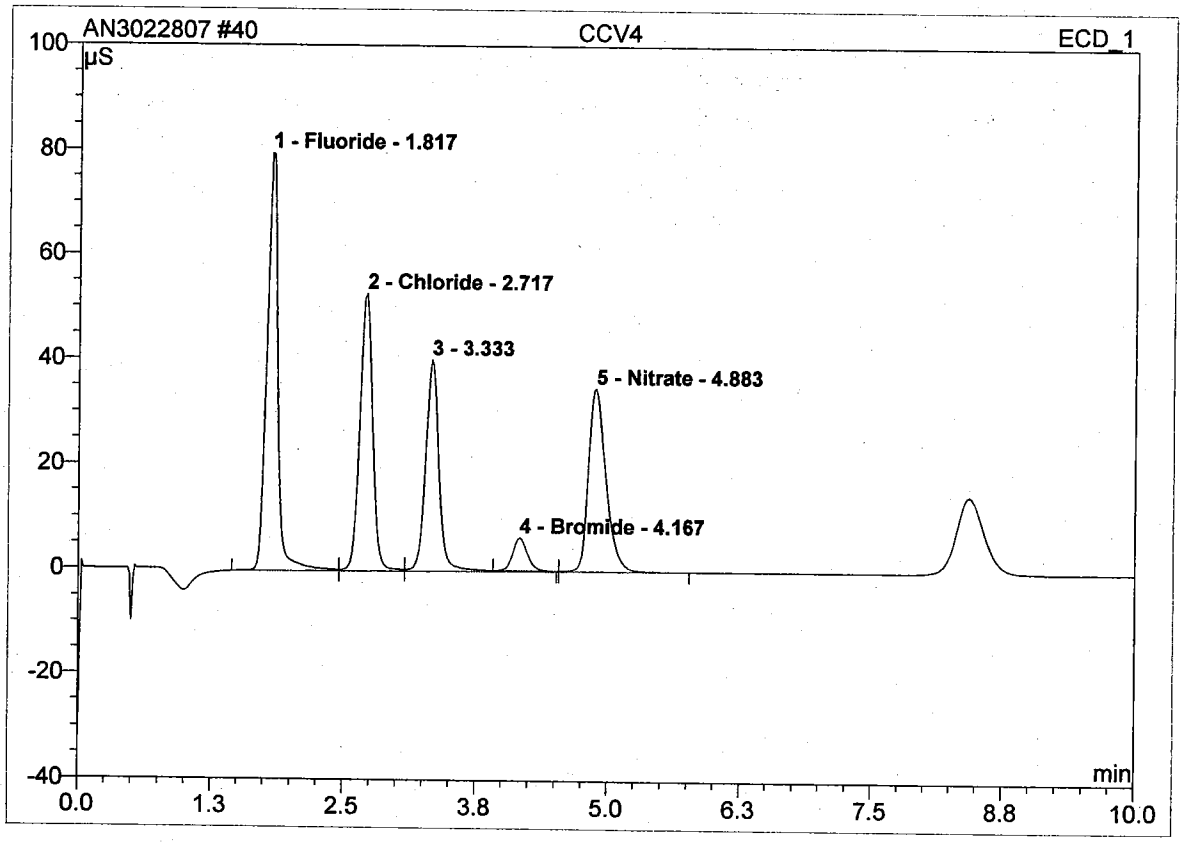
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 18:46**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	79.811	9.642	31.31	5.540	BM
2	2.72	Chloride	52.874	7.415	24.08	4.942	M
3	3.33	n.a.	40.285	5.990	19.45	n.a.	M
4	4.17	Bromide	6.222	0.981	3.18	1.887	Rd
5	4.88	Nitrate	34.837	6.770	21.98	1.914	MB
Total:			214.030	30.797	100.00	14.284	

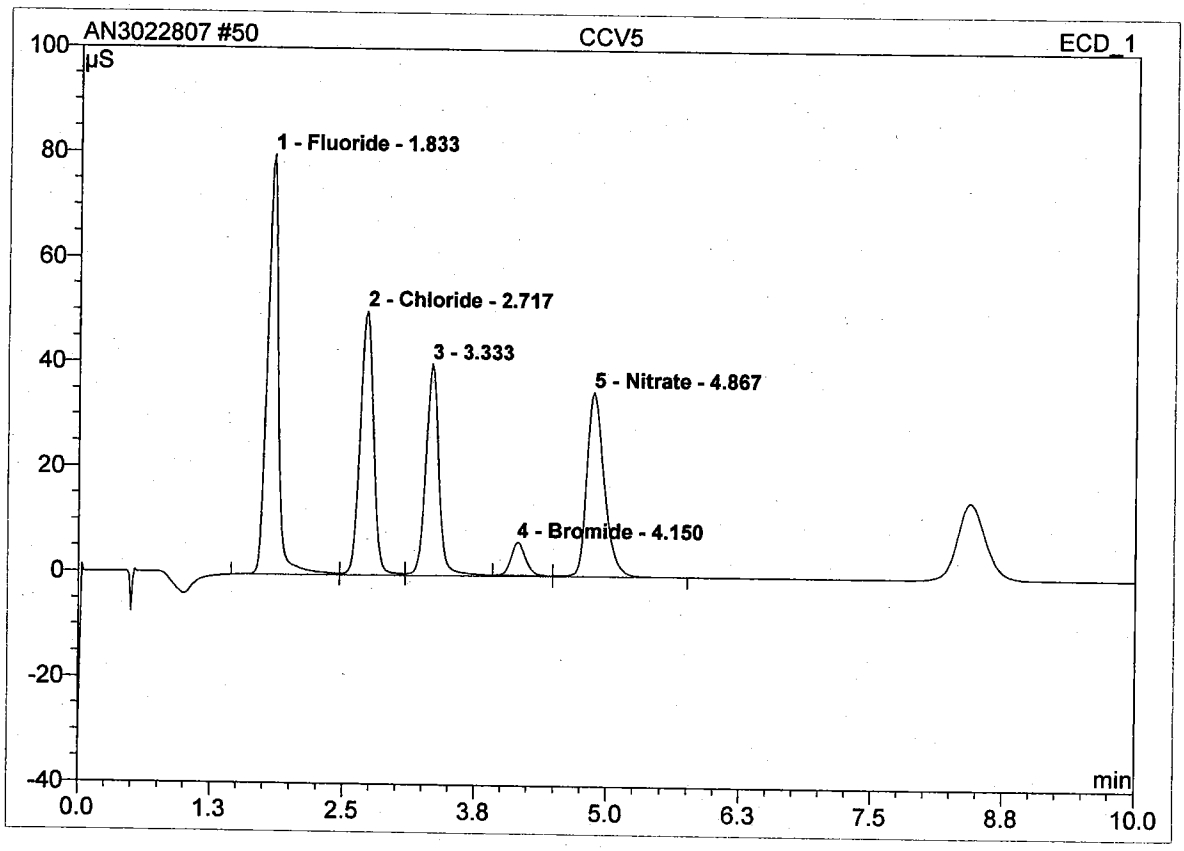
Before

MAR 0 1 2007

Columbia Analytical Services, Inc.

50 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**2/28/2007 20:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	80.034	9.564	31.28	5.495	BM
2	2.72	Chloride	50.343	7.350	24.04	4.899	M
3	3.33	n.a.	40.338	5.935	19.41	n.a.	M
4	4.15	Bromide	6.204	0.974	3.19	1.874	Rd
5	4.87	Nitrate	35.128	6.754	22.09	1.910	MB
Total:			212.047	30.577	100.00	14.178	

Before

MAR 0 1 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-85-A

Sequence: AN3012207 **Date: 01/22/07**

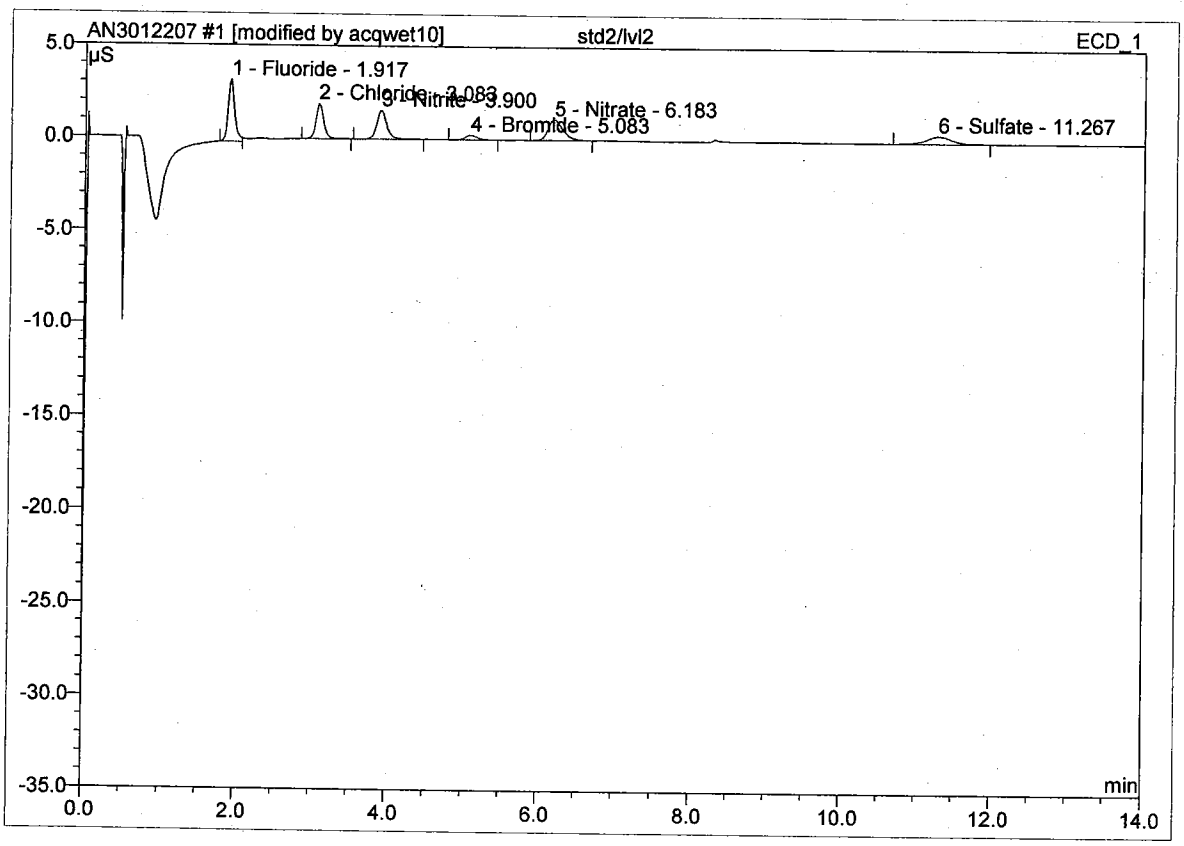
Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9777	1.7441
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9577	1.5000
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9950	2.7656
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9220	0.5197
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8492	3.5368
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9540	0.9202

All calibration standard concentrations are in mg/L unless otherwise noted.

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.335	0.329	26.26	0.189	BM *
2	3.08	Chloride	1.891	0.226	18.02	0.151	BMB*
3	3.90	Nitrite	1.545	0.238	19.01	0.086	BMB*
4	5.08	Bromide	0.242	0.046	3.63	0.088	BMB*
5	6.18	Nitrate	1.101	0.258	20.55	0.073	BMB
6	11.27	Sulfate	0.402	0.157	12.52	0.171	BMB
Total:			8.515	1.253	100.00	0.756	

After Initials BM

JAN 2 3 2007

01/26/07

default_letter/Integration

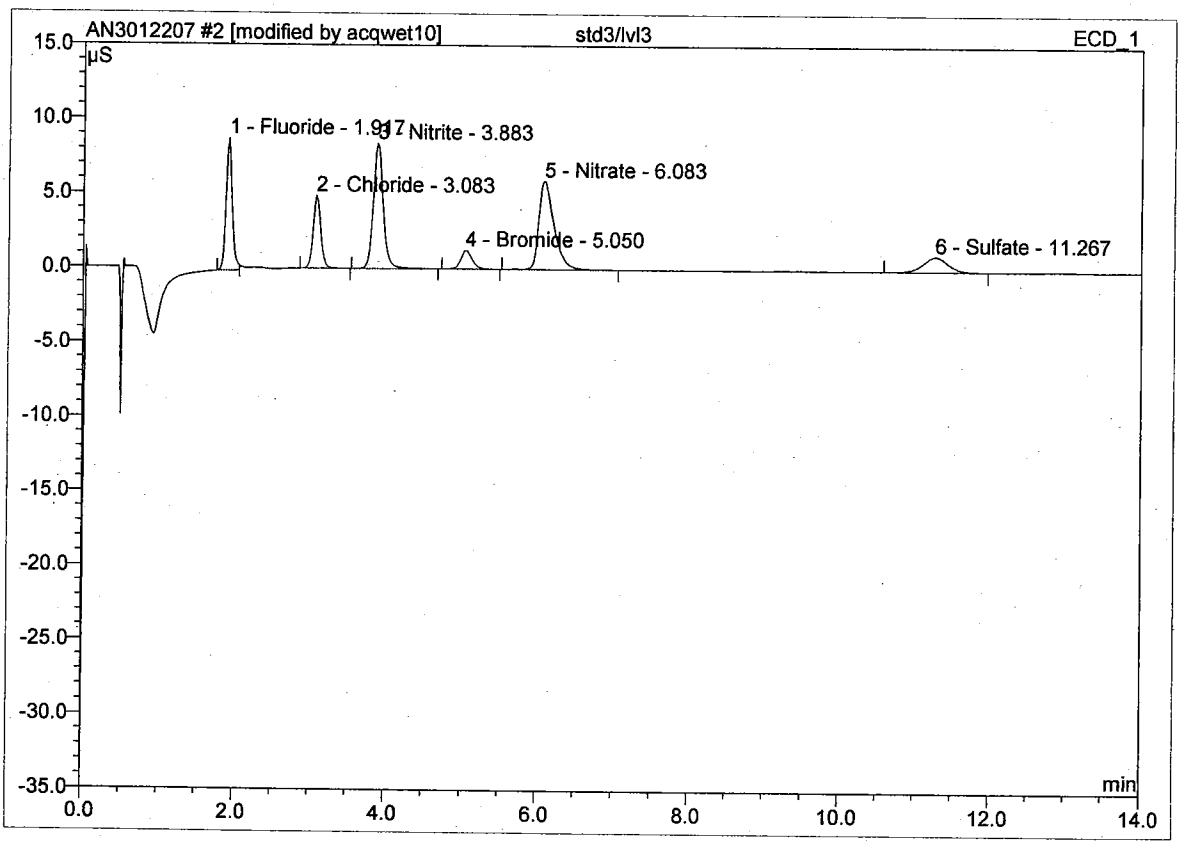
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.892	0.838	17.98	0.480	BM *
2	3.08	Chloride	4.882	0.570	12.23	0.380	BMB*
3	3.88	Nitrite	8.409	1.254	26.92	0.454	BMB*
4	5.05	Bromide	1.245	0.229	4.91	0.440	BMB*
5	6.08	Nitrate	5.914	1.374	29.48	0.388	BMB*
6	11.27	Sulfate	1.009	0.396	8.49	0.430	BMB
Total:			30.349	4.660	100.00	2.572	

After
Initials BM

JAN 2 3 2007

BM 1/26/07

default_letter/Integration

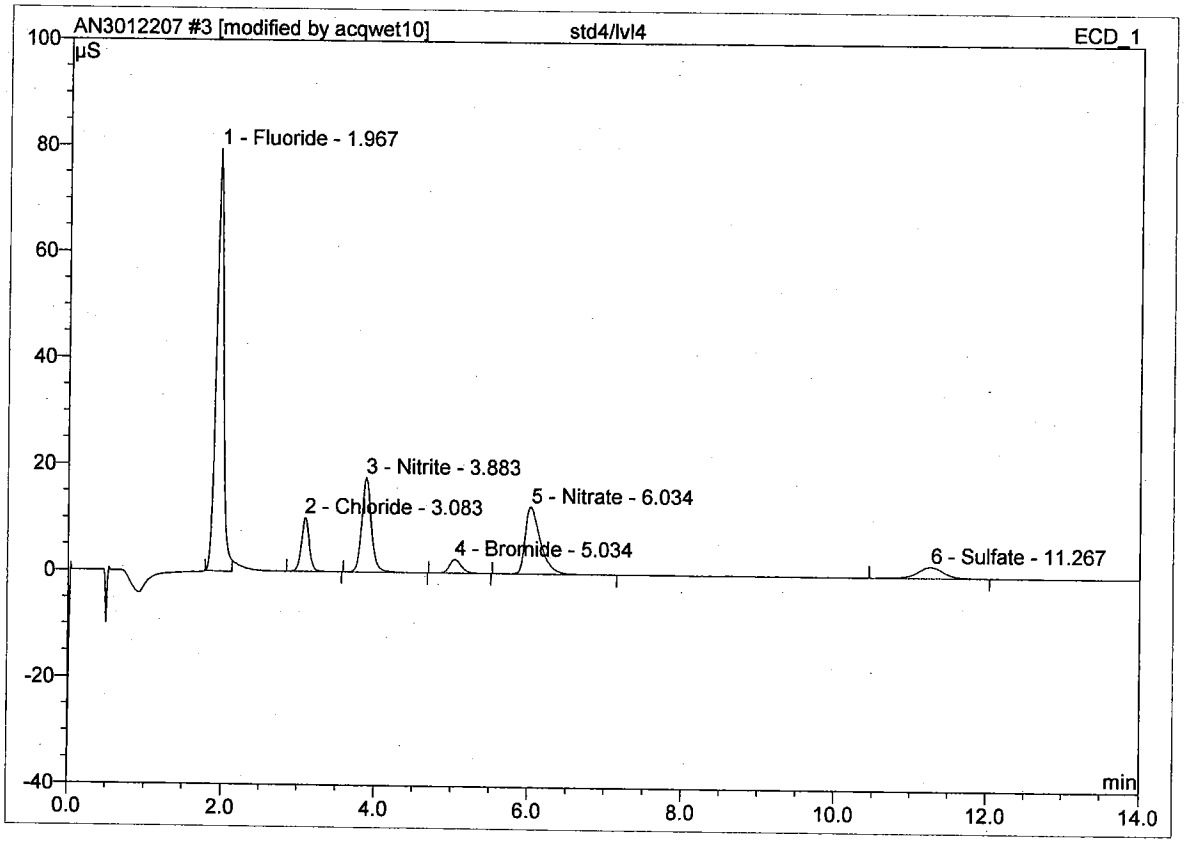
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.616	8.962	53.03	5.139	BM *
2	3.08	Chloride	10.128	1.166	6.90	0.777	BMB*
3	3.88	Nitrite	17.784	2.613	15.46	0.945	BMB*
4	5.03	Bromide	2.578	0.466	2.76	0.897	BMB*
5	6.03	Nitrate	12.589	2.891	17.10	0.817	BMB*
6	11.27	Sulfate	2.053	0.803	4.75	0.873	BMB
Total:			124.747	16.901	100.00	9.448	

After Initials TM

JAN 2 3 2007

JM 1/26/07

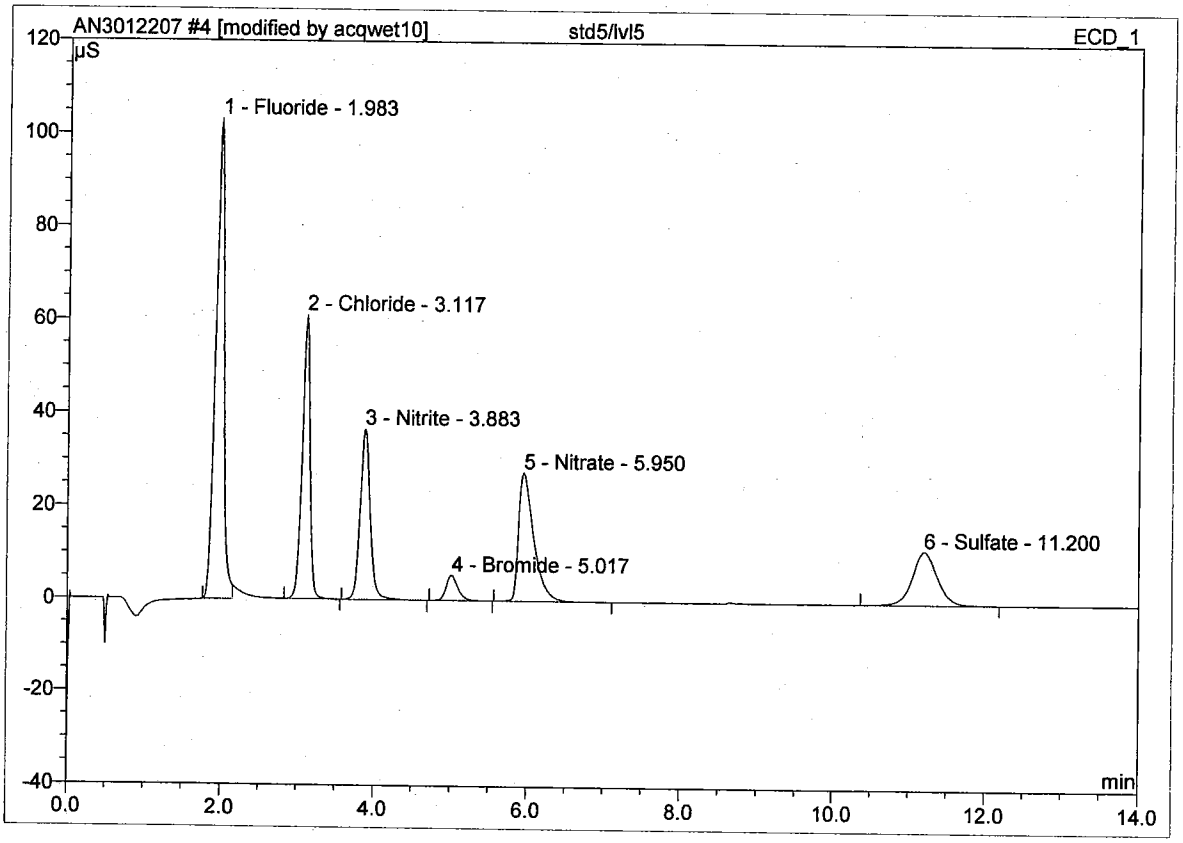
default_letter/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 109

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.196	13.173	35.29	7.553	BM *
2	3.12	Chloride	61.012	7.119	19.07	4.746	BMB*
3	3.88	Nitrite	36.628	5.460	14.63	1.974	BMB*
4	5.02	Bromide	5.419	0.955	2.56	1.838	BMB*
5	5.95	Nitrate	27.578	6.278	16.82	1.775	BMB*
6	11.20	Sulfate	11.462	4.347	11.64	4.724	BMB
Total:			245.295	37.332	100.00	22.610	

After Initials EM

01/26/07

JAN 2 3 2007

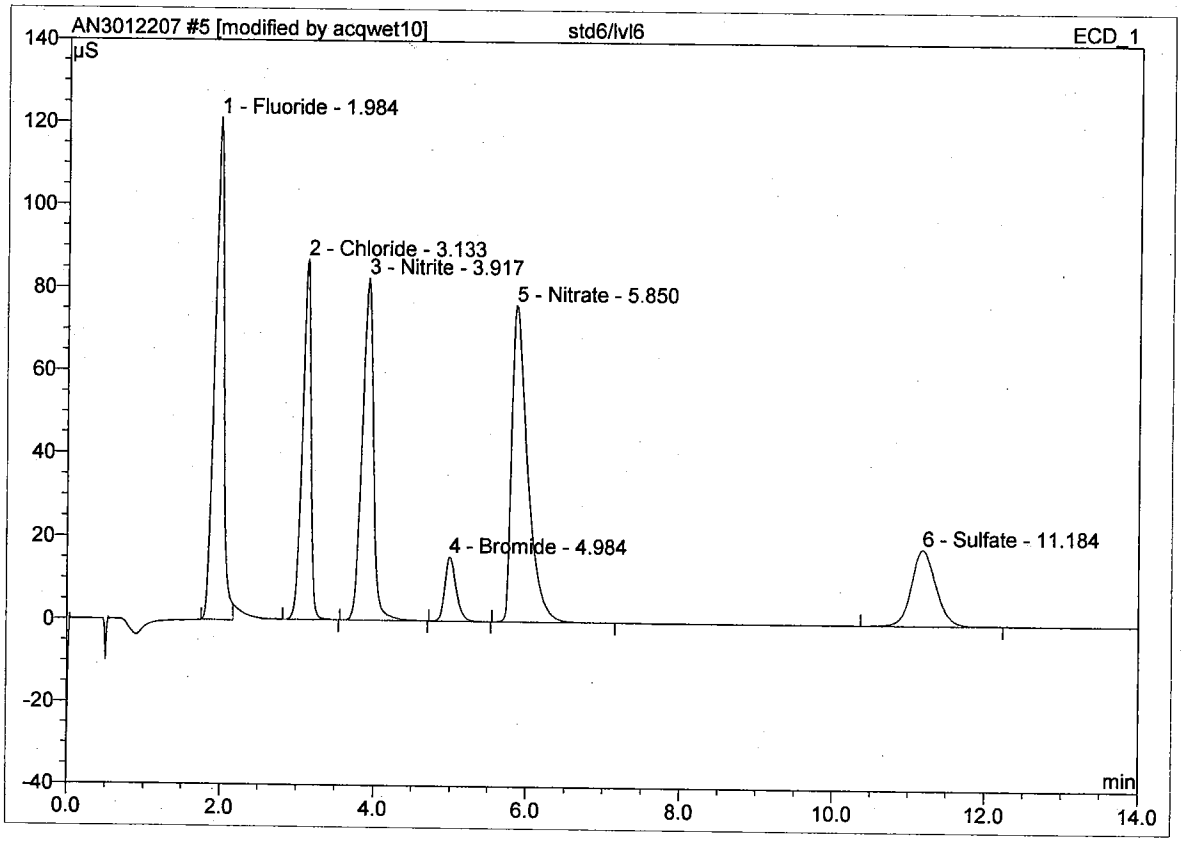
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 110

default_letter/Integration

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.268	17.253	24.62	9.892	BM *
2	3.13	Chloride	86.820	11.203	15.99	7.469	BMB*
3	3.92	Nitrite	82.496	13.901	19.84	5.026	BMB*
4	4.98	Bromide	15.460	2.646	3.78	5.092	BMB*
5	5.85	Nitrate	76.285	18.173	25.94	5.138	BMB*
6	11.18	Sulfate	18.331	6.892	9.84	7.489	BMB
Total:			400.660	70.068	100.00	40.107	

After
Initials BM

JAN 2 3 2007

1/26/07

default_letter/Integration

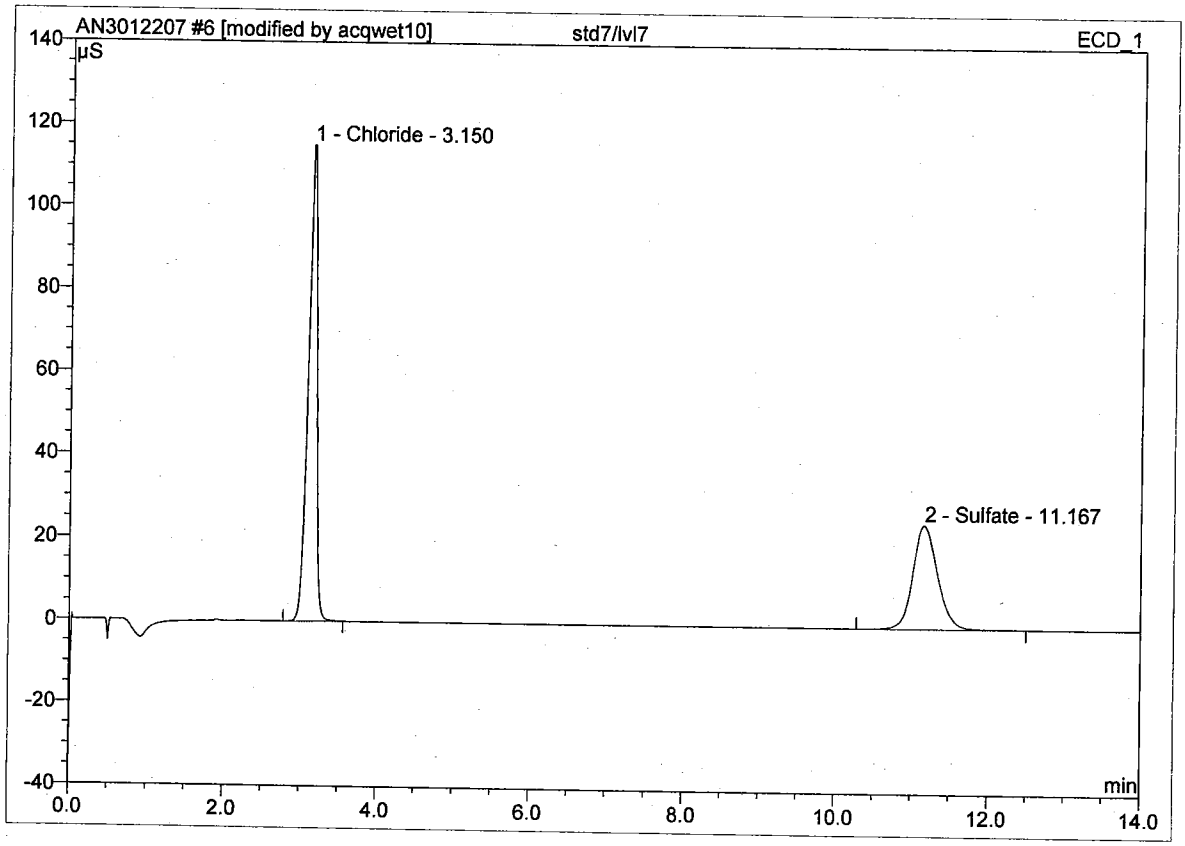
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.038	15.269	62.02	10.179	BMB*
2	11.17	Sulfate	24.940	9.352	37.98	10.163	BMB
Total:			139.978	24.621	100.00	20.342	

After Initials EM 01/26/07

JAN 23 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

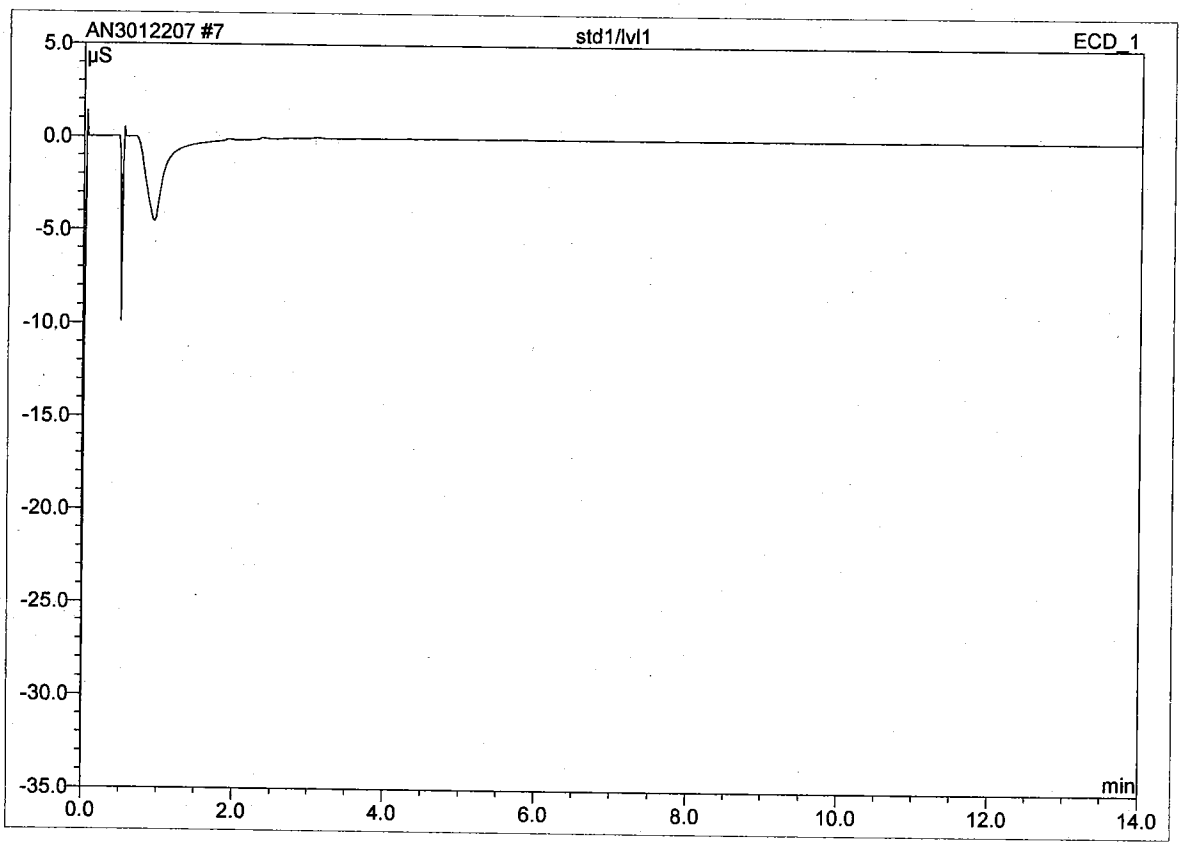
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:47**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



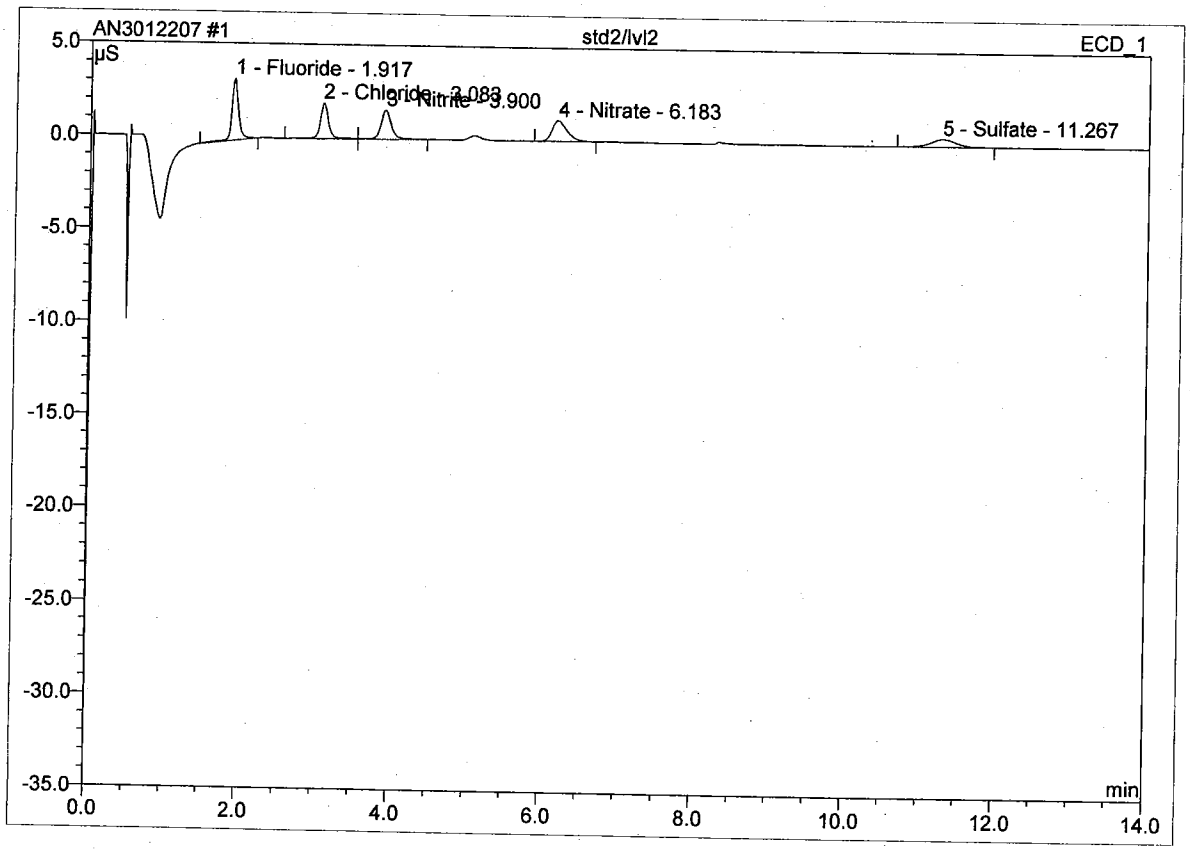
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

BR 1/26/07

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.312	0.338	26.94	0.194	BMB
2	3.08	Chloride	1.924	0.253	20.19	0.169	BM
3	3.90	Nitrite	1.558	0.249	19.83	0.090	MB
4	6.18	Nitrate	1.101	0.258	20.53	0.073	BMB
5	11.27	Sulfate	0.402	0.157	12.51	0.171	BMB
Total:			8.297	1.254	100.00	0.696	

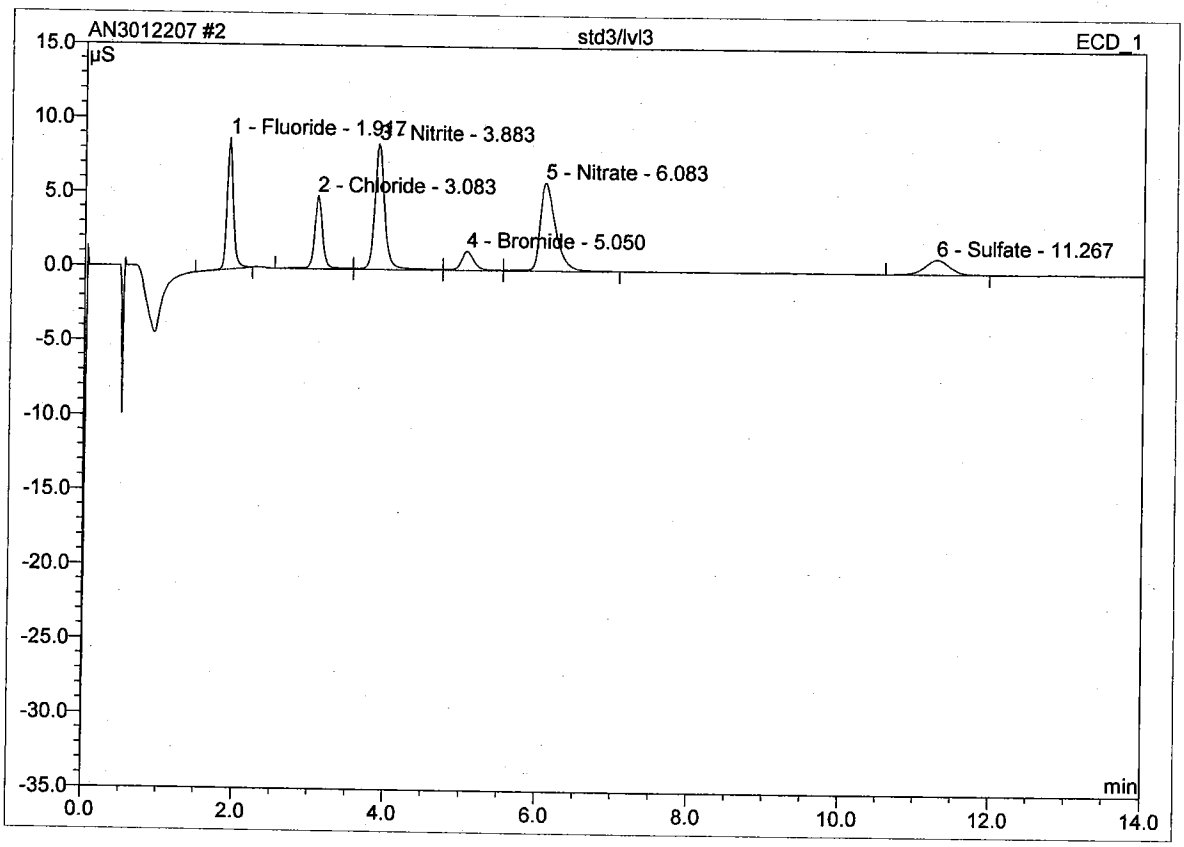
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.842	0.838	17.49	0.481	BMB
2	3.08	Chloride	4.926	0.607	12.67	0.405	BM
3	3.88	Nitrite	8.448	1.300	27.14	0.470	M
4	5.05	Bromide	1.278	0.255	5.32	0.490	M
5	6.08	Nitrate	5.932	1.395	29.12	0.394	MB
6	11.27	Sulfate	1.009	0.396	8.26	0.430	BMB
Total:			30.434	4.792	100.00	2.670	

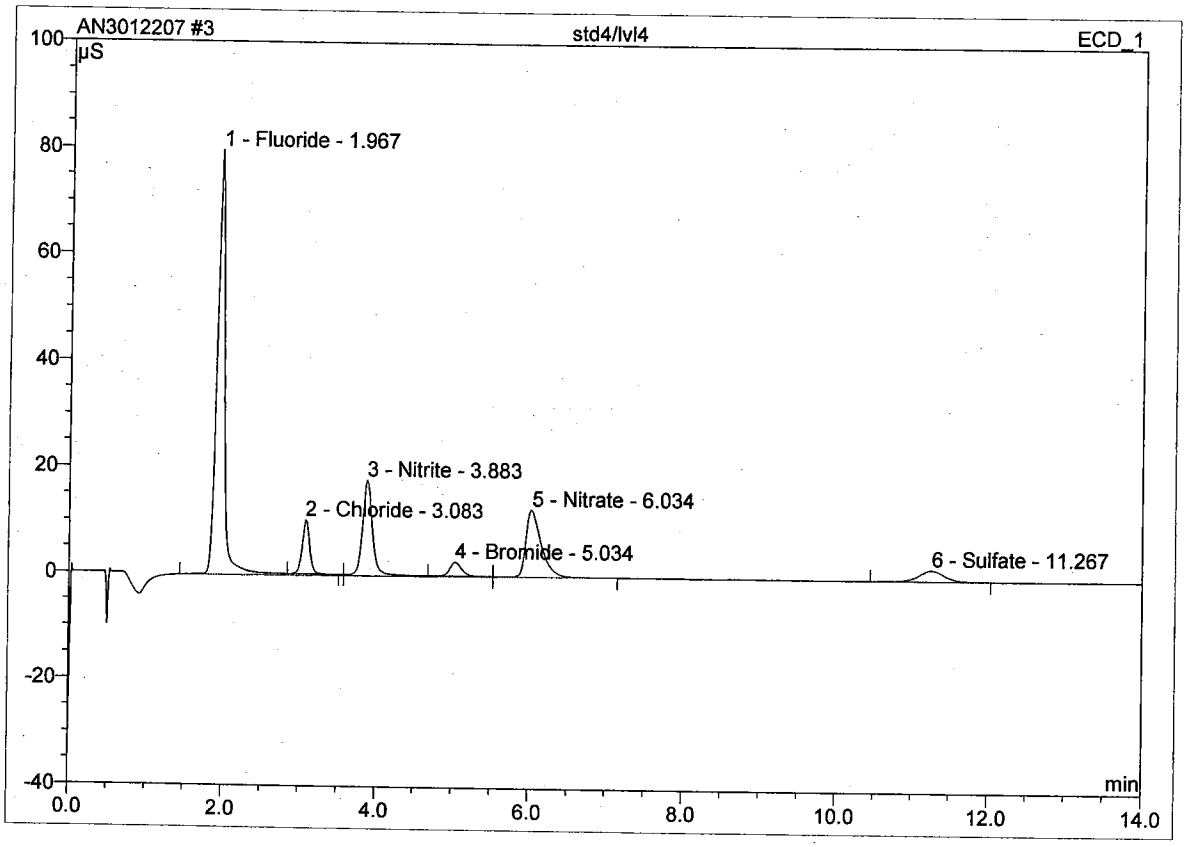
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



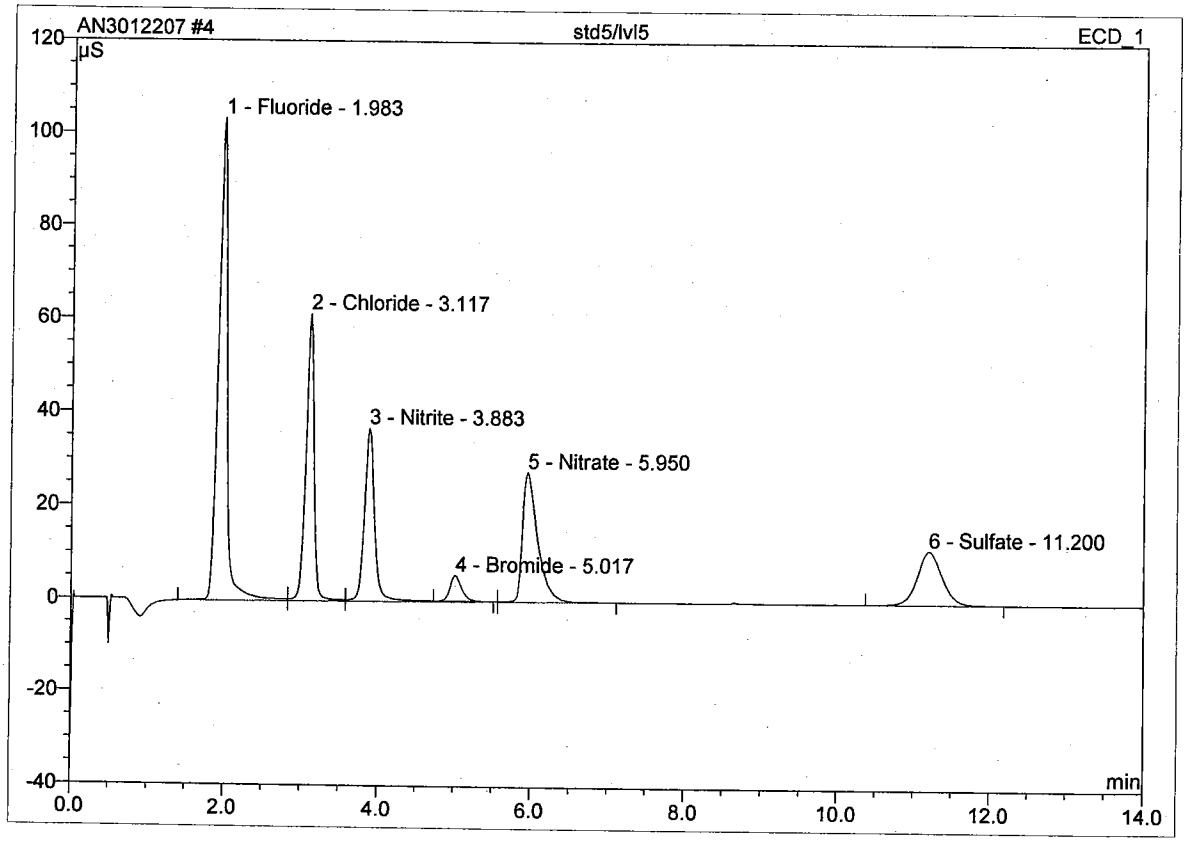
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.838	9.798	53.87	5.545	BM
2	3.08	Chloride	10.128	1.166	6.41	0.777	Rd
3	3.88	Nitrite	18.016	2.972	16.34	1.070	M
4	5.03	Bromide	2.578	0.467	2.57	0.898	Rd
5	6.03	Nitrate	12.669	2.984	16.41	0.843	MB
6	11.27	Sulfate	2.053	0.803	4.42	0.873	BMB
Total:			125.281	18.189	100.00	10.006	

Before

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.493	14.021	35.96	7.881	BM
2	3.12	Chloride	61.387	7.391	18.96	4.903	M
3	3.88	Nitrite	36.911	5.893	15.12	2.109	M
4	5.02	Bromide	5.419	0.955	2.45	1.838	Rd
5	5.95	Nitrate	27.675	6.378	16.36	1.800	MB
6	11.20	Sulfate	11.462	4.347	11.15	4.724	BMB
Total:			246.347	38.985	100.00	23.255	

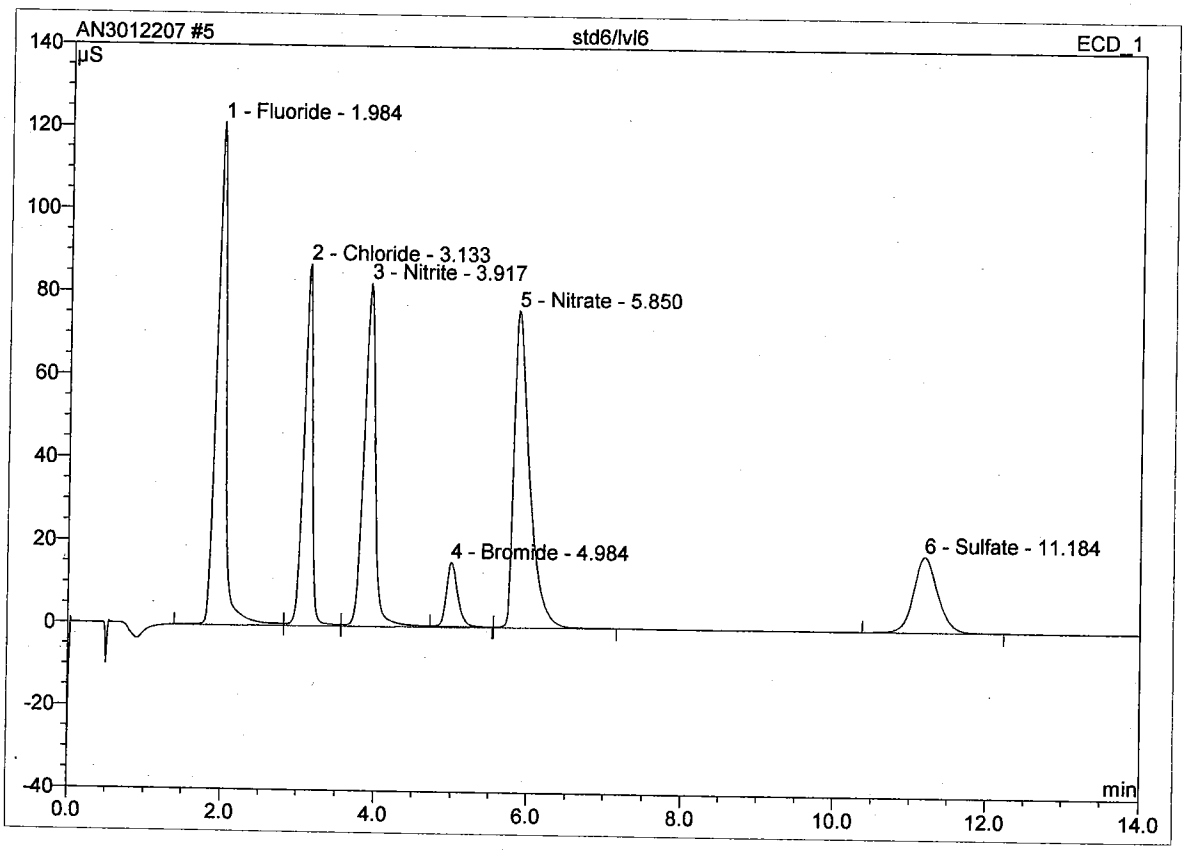
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.469	18.190	25.30	10.130	BM
2	3.13	Chloride	87.201	11.483	15.97	7.597	M
3	3.92	Nitrite	82.798	14.402	20.03	5.056	M
4	4.98	Bromide	15.460	2.646	3.68	5.092	Rd
5	5.85	Nitrate	76.399	18.285	25.43	5.143	MB
6	11.18	Sulfate	18.331	6.892	9.59	7.489	BMB
Total:			401.659	71.898	100.00	40.507	

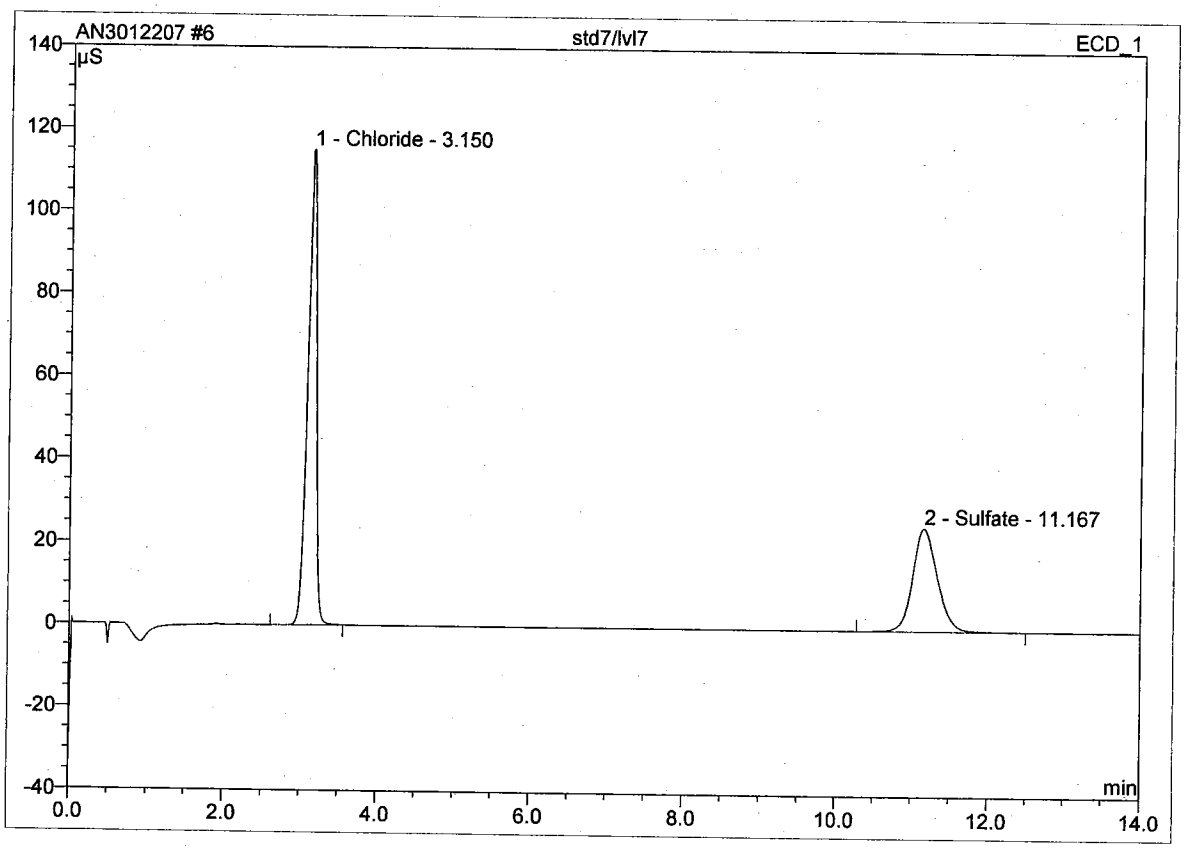
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.046	15.276	62.03	10.181	BMB
2	11.17	Sulfate	24.940	9.352	37.97	10.163	BMB
Total:			139.986	24.628	100.00	20.344	

Before

JAN 2 3 2007

DISSOLVED METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Francisco

Sample No.	Lab Sample ID.
LF6GW105CL	K0701568-001 DISS
LF6GW105CLD	K0701568-001D DISS
LF6GW105CLS	K0701568-001S DISS
231GW09CL	K0701568-002 DISS
Method Blank	K0701568-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Signature: [signature]

Date: 03/21/07

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701568
Project No.:	2893	Date Collected:	02/27/07
Project Name:	Presidio of San Franciscc	Date Received:	02/28/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: LF6GW105CL Lab Code: K0701568-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/9/07	3/12/07	50	U	
Antimony	6020	0.05	1	3/9/07	3/12/07	0.05	U	
Arsenic	6020	0.5	1	3/9/07	3/12/07	7.0		
Barium	6010B	5.0	1	3/9/07	3/12/07	48.7		
Beryllium	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Cadmium	6020	0.02	1	3/9/07	3/12/07	0.02		
Calcium	6010B	50	1	3/9/07	3/12/07	36900		
Chromium	6010B	5.0	1	3/9/07	3/12/07	30.6		
Cobalt	6020	0.02	1	3/9/07	3/12/07	0.59		
Copper	6020	0.1	1	3/9/07	3/12/07	1.3		
Iron	6010B	20	1	3/9/07	3/12/07	20	U	
Lead	6020	0.02	1	3/9/07	3/12/07	0.04		
Magnesium	6010B	20	1	3/9/07	3/12/07	60500		
Manganese	6010B	5.0	1	3/9/07	3/12/07	5.0	U	
Nickel	6020	0.3	1	3/9/07	3/12/07	7.9		
Potassium	6010B	2000	1	3/9/07	3/12/07	2000	U	
Selenium	6020	3.0	1	3/9/07	3/12/07	3.0	U	N
Silver	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Sodium	6010B	100	1	3/9/07	3/12/07	81300		
Thallium	6020	0.03	1	3/9/07	3/12/07	0.03	U	
Vanadium	6010B	10	1	3/9/07	3/12/07	10	U	
Zinc	6010B	10	1	3/9/07	3/12/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701568
Project No.:	2893	Date Collected:	02/27/07
Project Name:	Presidio of San Franciscc	Date Received:	02/28/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: 231GW09CL Lab Code: K0701568-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/9/07	3/12/07	50	U	
Antimony	6020	0.05	1	3/9/07	3/12/07	0.05	U	
Arsenic	6020	0.5	1	3/9/07	3/12/07	4.7		
Barium	6010B	5.0	1	3/9/07	3/12/07	55.5		
Beryllium	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Cadmium	6020	0.02	1	3/9/07	3/12/07	0.09		
Calcium	6010B	50	1	3/9/07	3/12/07	26200		
Chromium	6010B	5.0	1	3/9/07	3/12/07	23.0		
Cobalt	6020	0.02	1	3/9/07	3/12/07	0.39		
Copper	6020	0.1	1	3/9/07	3/12/07	1.0		
Iron	6010B	20	1	3/9/07	3/12/07	20	U	
Lead	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Magnesium	6010B	20	1	3/9/07	3/12/07	45200		
Manganese	6010B	5.0	1	3/9/07	3/12/07	5.0	U	
Nickel	6020	0.3	1	3/9/07	3/12/07	17.4		
Potassium	6010B	2000	1	3/9/07	3/12/07	2000	U	
Selenium	6020	3.0	1	3/9/07	3/12/07	3.0	U	N
Silver	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Sodium	6010B	100	1	3/9/07	3/12/07	73300		
Thallium	6020	0.03	1	3/9/07	3/12/07	0.03	U	
Vanadium	6010B	10	1	3/9/07	3/12/07	10	U	
Zinc	6010B	10	1	3/9/07	3/12/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Treadwell and Rollo, Inc.
Project No.: 2893
Project Name: Presidio of San Francisco
Matrix: WATER

Service Request: K0701568
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K0701568-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/9/07	3/12/07	50	U	
Antimony	6020	0.05	1	3/9/07	3/12/07	0.05	U	
Arsenic	6020	0.5	1	3/9/07	3/12/07	0.5	U	
Barium	6010B	5.0	1	3/9/07	3/12/07	5.0	U	
Beryllium	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Cadmium	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Calcium	6010B	50	1	3/9/07	3/12/07	50	U	
Chromium	6010B	5.0	1	3/9/07	3/12/07	5.0	U	
Cobalt	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Copper	6020	0.1	1	3/9/07	3/12/07	0.1	U	
Iron	6010B	20	1	3/9/07	3/12/07	20	U	
Lead	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Magnesium	6010B	20	1	3/9/07	3/12/07	20	U	
Manganese	6010B	5.0	1	3/9/07	3/12/07	5.0	U	
Nickel	6020	0.3	1	3/9/07	3/12/07	0.3	U	
Potassium	6010B	2000	1	3/9/07	3/12/07	2000	U	
Selenium	6020	3.0	1	3/9/07	3/12/07	3.0	U	N
Silver	6020	0.02	1	3/9/07	3/12/07	0.02	U	
Sodium	6010B	100	1	3/9/07	3/12/07	100	U	
Thallium	6020	0.03	1	3/9/07	3/12/07	0.03	U	
Vanadium	6010B	10	1	3/9/07	3/12/07	10	U	
Zinc	6010B	10	1	3/9/07	3/12/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4780	96	5000	4820	96	4830	97	6010B
Antimony	25.0	25.3	101	25.0	25.4	102	25.1	100	6020
Arsenic	25.0	25.9	104	25.0	25.4	102	25.5	102	6020
Barium	5000	4980	100	500	501	100	504	101	6010B
Beryllium	2.5	2.58	103	25.0	25.0	100	25.2	101	6020
Cadmium	12.5	12.9	103	25.0	25.5	102	25.2	101	6020
Calcium	12500	12000	96	5000	4850	97	4860	97	6010B
Chromium	500	505	101	5000	5140	103	5150	103	6010B
Cobalt	25.0	25.8	103	25.0	25.3	101	25.7	103	6020
Copper	12.5	12.4	99	25.0	25.1	100	25.6	102	6020
Iron	2500	2390	96	5000	4860	97	4860	97	6010B
Lead	25.0	26.0	104	25.0	25.9	104	26.2	105	6020
Magnesium	12500	11900	95	5000	4880	98	4870	97	6010B
Magnesium	12500	12000	96	5000	4740	95	4880	98	6010B
Manganese	1250	1200	96	500	482	96	483	96	6010B
Nickel	25.0	25.0	100	25.0	25.5	102	25.5	102	6020
Potassium	12500	12000	96	25000	25300	101	25400	102	6010B
Selenium	25.0	26.2	105	25.0	25.6	102	25.5	102	6020
Silver	12.5	11.5	92	25.0	24.9	100	24.7	99	6020
Sodium	12500	12800	102	25000	25500	102	25700	102	6010B
Thallium	25.0	25.9	104	25.0	25.7	103	26.1	104	6020
Vanadium	1250	1190	95	500	481	96	483	97	6010B
Zinc	1250	1200	96	2500	2400	96	2410	96	6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Francisco

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4800	96	4940	99	6010B
Antimony				25.0	24.5	98	24.7	98	6020
Arsenic				25.0	25.9	104	25.8	103	6020
Barium				500	496	99	514	103	6010B
Beryllium				25.0	25.3	101	25.6	102	6020
Cadmium				25.0	25.1	100	25.1	100	6020
Calcium				5000	4830	97	4910	98	6010B
Chromium				5000	5100	102	5270	105	6010B
Cobalt				25.0	25.3	101	26.0	104	6020
Copper				25.0	25.7	103	26.6	106	6020
Iron				5000	4800	96	4950	99	6010B
Lead				25.0	26.9	108	27.2	109	6020
Magnesium				5000	4830	97	4930	99	6010B
Magnesium				5000	4840	97	4800	96	6010B
Manganese				500	477	95	492	98	6010B
Nickel				25.0	26.2	105	26.3	105	6020
Potassium				25000	25500	102	26100	104	6010B
Selenium				25.0	26.0	104	25.5	102	6020
Silver				25.0	24.8	99	24.8	99	6020
Sodium				25000	25400	102	26400	106	6010B
Thallium				25.0	27.0	108	27.5	110	6020
Vanadium				500	477	95	488	98	6010B
Zinc				2500	2390	96	2450	98	6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4910	98			6010B
Barium				500	505	101			6010B
Calcium				5000	4960	99			6010B
Chromium				5000	5290	106			6010B
Iron				5000	4960	99			6010B
Magnesium				5000	4940	99			6010B
Magnesium				5000	4850	97			6010B
Manganese				500	494	99			6010B
Potassium				25000	25200	101			6010B
Sodium				25000	26100	104			6010B
Vanadium				500	487	97			6010B
Zinc				2500	2460	98			6010B

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	30.6	61		
Antimony				0.05	0.05	100		
Arsenic				0.50	0.61	123		
Barium				5.0	4.63	93		
Beryllium				0.02	0.02	110		
Cadmium				0.02	0.02	106		
Calcium				50	52.3	104		
Chromium				5.0	4.25	85		
Cobalt				0.02	0.02	105		
Copper				0.10	0.1	73		
Iron				20	21.8	109		
Lead				0.02	0.02	108		
Magnesium				20	20.9	104		
Manganese				5.0	4.57	91		
Nickel				0.20	0.22	110		
Potassium				2000	1440	72		
Selenium				1.0	0.43	43		
Silver				0.02	0.03	158		
Sodium				100	104	104		
Thallium				0.02	0.02	80		
Vanadium				10	8.08	81		
Zinc				10	9.57	96		

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	50	U	50	U	50	U	50	U					6010B
Antimony	0.05	U	0.05	U	0.05	U	0.05	U					6020
Arsenic	0.5	U	0.5	U	0.5	U	0.5	U					6020
Barium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Beryllium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Cadmium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Calcium	50	U	50	U	50	U	50	U					6010B
Chromium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Cobalt	0.02	U	0.02	U	0.02	U	0.02	U					6020
Copper	0.1	U	0.1	U	0.1	U	0.1	U					6020
Iron	20	U	20	U	20	U	20	U					6010B
Lead	0.02	U	0.02	U	0.02	U	0.02	U					6020
Magnesium	20	U	20	U	20	U	20	U					6010B
Manganese	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Nickel	0.3	U	0.3	U	0.3	U	0.3	U					6020
Potassium	2000	U	2000	U	2000	U	2000	U					6010B
Selenium	3.0	U	3.0	U	3.0	U	3.0	U					6020
Silver	0.02	U	0.02	U	0.02	U	0.02	U					6020
Sodium	100	U	100	U	100	U	100	U					6010B
Thallium	0.03	U	0.03	U	0.03	U	0.03	U					6020
Vanadium	10	U	10	U	10	U	10	U					6010B
Zinc	10	U	10	U	10	U	10	U					6010B

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum			50	U	50	U								6010B
Antimony			0.05	U										6020
Arsenic			0.5	U										6020
Barium			5.0	U	5.0	U								6010B
Beryllium			0.02	U										6020
Cadmium			0.02	U										6020
Calcium			50	U	50	U								6010B
Chromium			5.0	U	5.0	U								6010B
Cobalt			0.02	U										6020
Copper			0.1	U										6020
Iron			20	U	20	U								6010B
Lead			0.02	U										6020
Magnesium			20	U	20	U								6010B
Manganese			5.0	U	5.0	U								6010B
Nickel			0.3	U										6020
Potassium			2000	U	2000	U								6010B
Selenium			3.0	U										6020
Silver			0.02	U										6020
Sodium			100	U	100	U								6010B
Thallium			0.03	U										6020
Vanadium			10	U	10	U								6010B
Zinc			10	U	10	U								6010B

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: PQ-S

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony			0.02	0.02				
Arsenic		20	0.0	19.3	97			
Beryllium			0.00	0.00				
Cadmium		20	1.20	22.5	113			
Cobalt		20	0.09	20.5	103			
Copper		20	0.6	20.5	103			
Lead			0.60	0.34				
Nickel		20	5.2	25.9	130			
Selenium			0.0	-0.2				
Silver		20	-0.01	19.0	95			
Thallium			0.00	-0.01				

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	478000	478000	96			
Barium		500	0.4	476	95			
Calcium	500000	500000	454000	454000	91			
Chromium		500	-0.3	456	91			
Iron	200000	200000	168000	168000	84			
Magnesium	500000	500000	470000	471000	94			
Manganese		500	-5.2	431	86			
Potassium			-973	-1044				
Sodium			-33	-25				
Vanadium		500	-4	435	87			
Zinc		1000	10	920	92			

DISSOLVED METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Project No.: 2893
Project Name: Presidio of San Franciscc
Matrix: WATER

Service Request: K0701568
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: LF6GW105CLS
Lab Code: K0701568-001S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	75 - 125	1890		50.0	U	2000	95		6010B
Antimony	75 - 125	21.6		0.05	U	20.0	108		6020
Arsenic	75 - 125	31.2		7.0		20.0	121		6020
Barium	75 - 125	2020		48.7		2000	99		6010B
Beryllium	75 - 125	18.0		0.02	U	20.0	90		6020
Cadmium	75 - 125	21.2		0.02		20.0	106		6020
Chromium	75 - 125	233		30.6		200	101		6010B
Cobalt	75 - 125	21.8		0.59		20.0	106		6020
Copper	75 - 125	20.7		1.3		20.0	97		6020
Iron	75 - 125	942		20.0	U	1000	94		6010B
Lead	75 - 125	17.3		0.04		20.0	86		6020
Manganese	75 - 125	478		5.0	U	500	96		6010B
Nickel	75 - 125	27.4		7.9		20.0	97		6020
Selenium	75 - 125	26.2		3.0	U	20.0	131	N	6020
Silver	75 - 125	18.5		0.02	U	20.0	93		6020
Thallium	75 - 125	17.6		0.03	U	20.0	88		6020
Vanadium	75 - 125	475		10.0	U	500	95		6010B
Zinc	75 - 125	476		10.0	U	500	95		6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701568
Project No.: 2893
Units: ug/L
Project Name: Presidio of San Francisco
Matrix: WATER

Sample Name: Batch QCA
Lab Code: K0701566-006A

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75-125	21.3		0.63		20.0	103		MS
Arsenic	75-125	27.0		3.26		20.0	119		MS
Beryllium	75-125	18.4		0.02	U	20.0	92		MS
Cadmium	75-125	20.8		0.23		20.0	103		MS
Cobalt	75-125	21.8		1.61		20.0	101		MS
Copper	75-125	21.5		2.82		20.0	93		MS
Lead	75-125	18.0		0.65		20.0	87		MS
Nickel	75-125	21.3		2.74		20.0	93		MS
Selenium	75-125	24.4		3.00	U	20.0	122		MS
Silver	75-125	18.5		0.04		20.0	92		MS
Thallium	75-125	18.0		0.03	U	20.0	90		MS

Comments:

DISSOLVED METALS

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DUPLICATES

Client: Treadwell and Rollo, Inc.
Project No.: 2893
Project Name: Presidio of San Franciscc
Matrix: WATER

Service Request: K0701568
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: LF6GW105CLD
Lab Code: K0701568-001D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		50	U	50	U			6010B
Antimony		0.05	U	0.05	U			6020
Arsenic	20	7.0		6.3		10		6020
Barium	20	48.7		49.9		2		6010B
Beryllium		0.02	U	0.02	U			6020
Cadmium		0.02		0.03		22		6020
Calcium	20	36900		37900		3		6010B
Chromium	20	30.6		31.3		2		6010B
Cobalt	20	0.59		0.58		3		6020
Copper	20	1.3		1.3		5		6020
Iron		20	U	20	U			6010B
Lead		0.04		0.02		48		6020
Magnesium	20	60500		62100		3		6010B
Manganese		5.0	U	5.0	U			6010B
Nickel	20	7.9		7.8		2		6020
Potassium		2000	U	2000	U			6010B
Selenium		3.0	U	3.0	U			6020
Silver		0.02	U	0.02	U			6020
Sodium	20	81300		83500		3		6010B
Thallium		0.03	U	0.03	U			6020
Vanadium		10	U	10	U			6010B
Zinc		10	U	10	U			6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Aluminum	5000	4780	96					
Antimony	20.0	20.0	100					
Arsenic	20.0	20.0	100					
Barium	5000	5000	100					
Beryllium	20.0	20.5	103					
Cadmium	20.0	19.9	100					
Calcium	12500	12000	96					
Chromium	500	506	101					
Cobalt	20.0	19.5	98					
Copper	20.0	20.2	101					
Iron	2500	2360	94					
Lead	20.0	20.7	104					
Magnesium	12500	11800	94					
Manganese	1250	1200	96					
Nickel	20.0	19.5	98					
Potassium	12500	12300	98					
Selenium	20.0	19.6	98					
Silver	20.0	19.0	95					
Sodium	12500	13000	104					
Thallium	20.0	20.4	102					
Vanadium	1250	1190	95					
Zinc	1250	1200	96					

DISSOLVED METALS

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ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893 Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: Batch QCL Lab Code: K0701566-006L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.63		0.67		5		6020
Arsenic	3.26		4.97		52		6020
Beryllium	0.02	U	0.10	U			6020
Cadmium	0.23		0.23		0		6020
Cobalt	1.61		1.54		4		6020
Copper	2.82		2.89		2		6020
Lead	0.65		0.70		8		6020
Nickel	2.74		3.18		16		6020
Selenium	3.00	U	15.0	U			6020
Silver	0.04		0.10	U			6020
Thallium	0.03	U	0.15	U			6020

DISSOLVED METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: LF6GW105CLL

Lab Code: K0701568-001L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	50.0	U	250	U			6010B
Barium	48.7		52.8		8		6010B
Calcium	36900		38800		5		6010B
Chromium	30.6		26.8		12		6010B
Iron	20.0	U	100	U			6010B
Magnesium	60500		62200		3		6010B
Manganese	5.00	U	25.0	U			6010B
Potassium	2000	U	10000	U			6010B
Sodium	81300		84600		4		6010B
Vanadium	10.0	U	50.0	U			6010B
Zinc	10.0	U	50.0	U			6010B

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)		Method
Antimony	123		0.05		6020
Arsenic	75		0.5		6020
Beryllium	9		0.02		6020
Cadmium	111		0.02		6020
Cobalt	59		0.02		6020
Copper	65		0.1		6020
Lead	208		0.02		6020
Nickel	62		0.3		6020
Selenium	78		3.0		6020
Silver	107		0.02		6020
Thallium	205		0.03		6020

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: TJA ICP-OES 6.2

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Aluminum	308.20		50.0		6010B
Barium	493.60		5.0		6010B
Calcium	317.90		50.0		6010B
Chromium	267.70		5.0		6010B
Iron	259.90		20.0		6010B
Magnesium	279.50		20.0		6010B
Manganese	257.60		5.0		6010B
Potassium	766.50		2000		6010B
Sodium	588.90		100		6010B
Vanadium	292.40		10.0		6010B
Zinc	213.80		10.0		6010B

Comments:

DISSOLVED METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.6	0.0052543	0.0000000	0.0003900	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0000000	0.0000000	0.0003945	0.0002503	0.0000000
Cadmium	228.8	0.0000000	0.0000000	-0.0000763	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000163	0.0000098	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000231	0.0000000	0.0170608
Copper	324.7	0.0000000	0.0000000	-0.0000278	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0011214	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000204	0.0000000	-0.0001831	0.0000226	0.0000000
Molybdenum	202	0.0000000	0.0000000	-0.0000939	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0005306	0.0000000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	-0.0013060	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0002185	0.0000000
Silver	328.0	0.0000000	0.0000000	-0.0002271	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0002680	0.0000000	0.0048362	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	-0.0002370	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000276	0.0001569

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.2	-0.0175424	0.0000000	0.0000000	0.0194632	0.0000000
Antimony	206.8	-0.0023048	0.0181871	0.0000000	0.0071351	0.0048131
Arsenic	193.6	0.0000000	0.0015165	0.0000000	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0018818	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.8	-0.0059801	0.0000000	0.0000000	0.0000000	0.0006989
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0002071	0.0003558	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0002395	0.0010048
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0003061	0.0000000
Iron	259.9	0.0000000	0.0000000	-0.0057095	0.0005288	0.0000000
Lead	220.3	-0.0136843	-0.0006403	0.0000000	0.0006789	0.0007454
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0039260	0.0000000
Molybdenum	202	0.0003104	0.0000000	0.0000000	0.0000000	0.0001848
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0045715	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0001381	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0040902	0.0000000	-0.0078044	0.0042117	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0002816	0.0000000	0.0003479	0.0000000
Vanadium	292.4	0.0000000	-0.0048333	-0.0001333	0.0246421	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0003936	0.0041984

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Sn	Ti	V		
Aluminum	308.2	0.0000000	-0.0005811	-0.0139644		
Antimony	206.8	0.0013252	0.0017210	-0.0080346		
Arsenic	193.6	0.0000000	0.0000000	0.0153511		
Barium	493.4	0.0000000	0.0000000	0.0000000		
Beryllium	313.0	0.0000000	0.0000000	0.0027493		
Boron	249.6	0.0000000	0.0000000	0.0000000		
Cadmium	228.8	0.0000000	0.0000000	0.0006840		
Calcium	317.9	0.0000000	0.0000000	0.0000000		
Chromium	267.7	0.0000000	0.0000000	0.0005697		
Cobalt	228.6	-0.0043106	0.0015561	0.0000000		
Copper	324.7	0.0000000	-0.0008431	-0.0001893		
Iron	259.9	0.0000000	-0.0009295	0.0000000		
Lead	220.3	0.0000000	0.0005080	0.0000000		
Magnesium	383.2	0.0000000	0.0000000	0.0000000		
Manganese	257.6	0.0000000	0.0000000	-0.0000791		
Molybdenum	202	0.0000000	0.0000000	0.0000000		
Nickel	231.6	0.0000000	0.0000000	0.0000000		
Phosphorus	214.9	0.0000000	0.0000000	-0.0018977		
Potassium	766.5	0.0000000	0.0000000	0.0000000		
Selenium	196.0	0.0000000	0.0000000	0.0000000		
Silicon	288.1	0.0000000	0.0000000	0.0000000		
Silver	328.0	0.0000000	-0.0001051	-0.0089511		
Sodium	588.9	0.0000000	0.0000000	0.0000000		
Strontium	421.5	0.0000000	0.0000000	0.0000000		
Thallium	190.8	0.0000000	0.0000000	0.0024657		
Tin	189.9	0.0000000	0.0461050	0.0000000		
Titanium	334.9	0.0000000	0.0000000	0.0000000		
Vanadium	292.4	0.0000000	0.0002860	0.0000000		
Zinc	213.8	0.0000000	0.0000000	0.0000000		

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	6020
Arsenic	15.00	1000.0	6020
Beryllium	15.00	200.0	6020
Cadmium	15.00	1000.0	6020
Cobalt	15.00	200.0	6020
Copper	15.00	500.0	6020
Lead	15.00	1000.0	6020
Nickel	15.00	1000.0	6020
Selenium	15.00	1000.0	6020
Silver	15.00	300.0	6020
Thallium	15.00	500.0	6020

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	900000.0	6010B
Barium	5.00	180000.0	6010B
Calcium	5.00	450000.0	6010B
Chromium	5.00	180000.0	6010B
Iron	5.00	450000.0	6010B
Magnesium	5.00	27000.0	6010B
Magnesium	5.00	720000.0	6010B
Manganese	5.00	4500.0	6010B
Potassium	5.00	450000.0	6010B
Sodium	5.00	900000.0	6010B
Vanadium	5.00	90000.0	6010B
Zinc	5.00	180000.0	6010B

Comments: _____

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701568-002 DI	3/9/07	CLAA	50	50
LCSW	3/9/07	CLAA	50	50
K0701568-001 DI	3/9/07	CLAA	50	50
K0701568-001D D	3/9/07	CLAA	50	50
K0701568-001S D	3/9/07	CLAA	50	50
K0701568-MB	3/9/07	CLAA	50	50

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc.

Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701568-002 DI	3/9/07	CLFAA	50	50
LCSW	3/9/07	CLFAA	50	50
K0701568-001 DI	3/9/07	CLFAA	50	50
K0701568-001D D	3/9/07	CLFAA	50	50
K0701568-001S D	3/9/07	CLFAA	50	50
K0701568-MB	3/9/07	CLFAA	50	50

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/12/07 End Date: 3/12/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	12:36		X			X			X	X			X		X	X			X			X		X	X	
CAL-STD3	1.00	12:38		X						X				X		X	X								X	X	
CAL-STD2	1.00	12:40					X				X									X			X				
ICV	1.00	12:47		X			X			X	X			X		X	X			X			X		X	X	
ICV	1.00	12:52																									
ICB	1.00	12:54		X			X			X	X			X		X	X			X			X		X	X	
CCV1	1.00	13:00		X			X			X	X			X		X	X			X			X		X	X	
CCB1	1.00	13:05		X			X			X	X			X		X	X			X			X		X	X	
CRI	1.00	13:08		X			X			X	X			X		X	X			X			X		X	X	
ICSA	1.00	13:10		X			X			X	X			X		X	X			X			X		X	X	
ICSAB	1.00	13:12		X			X			X	X			X		X	X			X			X		X	X	
CCV2	1.00	13:17		X			X			X	X			X		X	X			X			X		X	X	
CCB2	1.00	13:19		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	13:24																									
ZZZZZZ	1.00	13:26																									
ZZZZZZ	1.00	13:28																									
ZZZZZZ	1.00	13:31																									
ZZZZZZ	1.00	13:33																									
ZZZZZZ	1.00	13:36																									
ZZZZZZ	1.00	13:38																									
ZZZZZZ	1.00	13:40																									
CCV3	1.00	13:43		X			X			X	X			X		X	X			X			X		X	X	
CCB3	1.00	13:45		X			X			X	X			X		X	X			X			X		X	X	
K0701568-MB	1.00	13:57		X			X			X	X			X		X	X			X			X		X	X	
LCSW	1.00	13:59		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	14:03																									
ZZZZZZ	1.00	14:04																									
ZZZZZZ	1.00	14:06																									
ZZZZZZ	1.00	14:08																									
ZZZZZZ	1.00	14:10																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/12/07 End Date: 3/12/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	14:12																									
ZZZZZZ	1.00	14:14																									
ZZZZZZ	1.00	14:16																									
CCV4	1.00	14:18		X			X			X	X			X		X	X			X			X		X	X	
CCB4	1.00	14:20		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	5.00	14:22																									
ZZZZZZ	1.00	14:25																									
ZZZZZZ	1.00	14:28																									
ZZZZZZ	1.00	14:29																									
ZZZZZZ	1.00	14:31																									
K0701568-001 DISS	1.00	14:33		X			X			X	X			X		X	X			X			X		X	X	
K0701568-001D DISS	1.00	14:35		X			X			X	X			X		X	X			X			X		X	X	
K0701568-001S DISS	1.00	14:37		X			X				X			X			X								X	X	
K0701568-002 DISS	1.00	14:39		X			X			X	X			X		X	X			X			X		X	X	
K0701568-001L DISS	5.00	14:41		X			X			X	X			X		X	X			X			X		X	X	
CCV5	1.00	14:43		X			X			X	X			X		X	X			X			X		X	X	
CCB5	1.00	14:45		X			X			X	X			X		X	X			X			X		X	X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Instrument ID Number: PQ-S Method: MS

Start Date: 3/12/07 End Date: 3/12/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	09:32			X	X		X	X			X	X		X				X		X	X		X			
CALIBRATION STANDARD	1.00	09:34			X	X		X	X			X	X		X				X		X	X		X			
ICV	1.00	09:38			X	X		X	X			X	X		X				X		X	X		X			
CCV1	1.00	09:41			X	X		X	X			X	X		X				X		X	X		X			
ICB	1.00	09:45			X	X		X	X			X	X		X				X		X			X			
ICB	1.00	09:48																				X					
CCB1	1.00	09:51			X	X		X	X			X	X		X				X		X	X		X			
CRA	1.00	09:54			X	X		X	X			X	X		X				X		X	X		X			
ICSA	1.00	09:56			X	X		X	X			X	X		X				X		X	X		X			
ICSAB	1.00	09:59			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	10:04																									
K0701568-MB	1.00	10:11			X	X		X	X			X	X		X				X		X	X		X			
LCSW	1.00	10:13			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	10:18																									
ZZZZZZ	1.00	10:21																									
K0701566-006L	5.00	10:23			X	X		X	X			X	X		X				X		X	X		X			
K0701566-006A	1.00	10:26			X	X		X	X			X	X		X				X		X	X		X			
CCV2	1.00	10:30			X	X		X	X			X	X		X				X		X	X		X			
CCB2	1.00	10:37			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	10:41																									
ZZZZZZ	1.00	10:45																									
ZZZZZZ	1.00	10:48																									
ZZZZZZ	1.00	10:51																									
ZZZZZZ	1.00	10:54																									
ZZZZZZ	1.00	10:56																									
ZZZZZZ	1.00	11:03																									
ZZZZZZ	1.00	11:06																									
ZZZZZZ	1.00	11:09																									
ZZZZZZ	1.00	11:12																									
CCV3	1.00	11:15			X	X		X	X			X	X		X				X		X	X		X			

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701568

Project No.: 2893

Project Name: Presidio of San Franciscc

Instrument ID Number: PQ-S Method: MS

Start Date: 3/12/07 End Date: 3/12/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:19																									
CCB3	1.00	11:25			X	X		X	X			X	X						X		X	X		X			
CCB3	1.00	11:30													X												
K0701568-001 DISS	1.00	11:33			X	X		X	X			X	X		X				X		X	X		X			
K0701568-001D DISS	1.00	11:36			X	X		X	X			X	X		X				X		X	X		X			
K0701568-001S DISS	1.00	11:39			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	11:42																									
K0701568-002 DISS	1.00	11:45			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	11:48																									
CCV4	1.00	11:51			X	X		X	X			X	X						X		X	X		X			
CCV4	1.00	11:57													X												
CCB4	1.00	12:02			X	X		X	X			X	X		X				X		X			X			
CCB4	1.00	12:06																				X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K07015566, K07016645, K07015168
Star Lims Run No.: 45975

Method : CLP 3010A 3020A
3005A 3050B (CLP Hot Block) Other- _____

Analysis for : (ICP) ICP-MS GFAA
Flame AA Other _____

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K07015566 K07015168 K07016645 Blank			X	50	50	12 HNO3 5 HCl
LCSW						
K07015566-1 MS 318017						
-2						
-3						
-4						
-6						
-60						
-65						
K07016645-1						
-2						
-3						
-4						
K07015168-1						
-10						
-15						
-2						
K07015166-5						
					MS 3/9/07	

Time Digestion Started: _____

Lot # Acids Used: HNO3 47031 **HCl** 46332 **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other: _____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, 0.25 mls. added
QCP CICV-2, MET1-51-T, 0.25 mls. added
QCP CICV-3, ~~MET1-51-U~~ MS 318017 met1-54-P 0.25 mls. added
SS6, MET1-55-A, 0.5 mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, 0.5 mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, 0.5 mls added 200.8 1000ppb Stock (MS9-85-A) _____ mls added
SS6-MET1-55-A, 0.5 mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes: _____

Comments: K07015566-5 :09 preserved w/ H_2SO_4 used for digestion

Analyst Mulmsall Sr **Date** 3/9/07
Reviewer _____ **Date** 3/12/02

metdig.xls

METALS SPIKE FORM

Service Request # K07015566, K07016645, K07015568
Q.C. Sample # 15566-6, 15568-1

Circle type of digest: GFAA (ICP) FAA ICP-MS Other:_____ Initials / Date: MS /3/9/07
Circle type of sample: Soil (Water) Misc. Sludge Oil Other:_____

Solution Name	Element	mls of 1000ppm Solution	Final Volume	Source	Lot#	Exp. Date	Solution Conc. mg/L	Enter mls Added	
SS1-MET1-52-Z	HNO3	50.0	1000ml	JT Baker	C28025	-	-	0.5	Expires:7/1/07
	Al	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Ag	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Ba	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Be	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Cd	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Co	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Cr	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	20		
	Cu	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	25		
	Fe	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	100		
	Pb	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Mn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Ni	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Sb	50*	1000ml	MET1-50-J	Z-SB02097	7/1/2007	50		
	V	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Zn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
SS4-MET1-52-T	HNO3	25.0	500ml	JT BAKER	A48046	-	-		Expires:7/11/07
	As	2.0	500ml	MET1-47-I	529701	7/11/2007	4		
	Cd	2.0	500ml	MET1-49-L	605906	12/15/2007	4		
	Pb	2.0	500ml	MET1-50-C	611804	12/15/2007	4		
	Se	2.0	500ml	MET1-49-M	616579	12/15/2007	4		
	Tl	2.0	500ml	MET1-49-O	616317	12/15/2007	4		
	Cu	2.0	500ml	MET1-50-E	611815	12/15/2007	4		
SS5-MET1-54-G	HNO3	25.0	500ml	JT BAKER	B41068	-	-	0.5	Expires:7/1107
	As	50.0	500ml	MET1-47-I	529701	7/11/2007	100		
	Se	50.0	500ml	MET1-49-M	616519	12/15/2007	100		
	Tl	50.0	500ml	MET1-49-O	616317	12/15/2007	100		
SS6-MET1-54-E	HNO3	25	500ml	JT BAKER	C28025	-	-	0.5	Expires: 7/01/07
	B	50	500ml	MET1-51-C	Z-QB02041	7/1/2007	100		
	Mo	50	500ml	MET1-54-K	Z-MO02012	2/1/2008	100		

GFLCSW (MET1-52-W)	HNO3	10.0	1000ml	JT BAKER	C28025	-	-	0.25	Expires: 8/1/07
	As, Pb, Se, Tl	5.0	1000ml	QCP-CICV-3	Y-MEB194030	8/1/2007	2.5		
	Cd	-	-	QCP-CICV-3	Y-MEB194030	8/1/2007	1.25		
	Cu	2.5	1000ml	MET1-50-E	611815	12/15/2007	2.5		
CLP-CV-1 (MET1-52-I)	Ca, Mg, Na, K	no dilution	-	HP	620009	9/1/2007	2500		Expires:9/1/07
	Al, Ba	no dilution	-	HP	620009	9/1/2007	1000		
	Fe	no dilution	-	HP	620009	9/1/2007	500		
	Co, Mn, Ni, V, Zn	no dilution	-	HP	620009	9/1/2007	250		
	Cu, Ag	no dilution	-	HP	620009	9/1/2007	125		
	Cr	no dilution	-	HP	620009	9/1/2007	100		
	Be	no dilution	-	HP	620009	9/1/2007	25		
QCP-CICV-2 (MET1-51-T)	Sb	no dilution	-	IV	Y- MEB194029	8/1/2007	500	0.25	Expires: 08/1/07
QCP-CICV-3 (MET1-51-U) 5ml 3/9/07	As, Pb, Se, Tl	no dilution	-	IV	Y- MEB194030	8/1/2007	500	0.25	Expires: 08/01/07
	Cd	no dilution	-	IV	Y- MEB194030	8/1/2007	250		

* Denotes volume of 1000 ppm stock standard.

Element	mls of	ppm	Source	Lot# / Lab Code	Exp. Date

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701566, K0701645, K0701546, K0701568
Star Lims Run No.: 459976

Method : CLP 3010A 3020A
3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA
Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701566 K0701645 K0701568 K0701546 Blank			x	50	50	1% HNO3
LCSW						
K0701566-1						
-2						
-3						
-4						
-6						
-6D						
-6S						
K0701645-1						
-2						
-3						
-4						
K0701568-1						
-1D						
-1S						
-2						
K0701546-1						
					MS 3/9/07	

Time Digestion Started:_____

Lot # Acids Used: HNO3 MS9-50-C **HCl** _____ **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:_____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added
QCP CICV-2, MET1-51-T, _____ mls. added
QCP CICV-3, MET1-51-U, _____ mls. added
SS6, MET1-55-A, _____ mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z,_____ mls added SS4-MET1-48-A,_____ mls added
SS5-MET1-54-G,_____ mls added 200.8 1000ppb Stock (MS9-85-A) 1.0 mls added
SS6-MET1-55-A,_____ mls added Ag 1000ppb Stock (MS10-10-A) 1.0 mls added

Additional spikes:_____

Comments:_____

Analyst [signature] **Date** 3/9/07
Reviewer [signature] **Date** 3/12/07

metdig.xls

Service Request # K0701568
Instrument ID# K-ICP-AES-01

ICP-OES Data Review Form

	Yes	No
1. Standardization completed	✓	
2. ICV within 10 % of true value	✓	
3. ICB below MRL	✓	
4. CRI standard analyzed.	✓	
5. ICS standards within 20% of true value	✓	
6. All preceding CCVs within 10 % of true value	✓	
7. Following CCV within 10 % of true value	✓	
8. Bracketing CCBs below MRL	✓	
9. Method Blank below MRL	✓	
10. MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11. All analytes within instrument linear range	✓	
12. Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments
Do not report Pb or Mg by 200.7. Do not report Tl or Sn.

Primary Review by [illegible] Date 3/12/07

Secondary Review by [illegible] Date 3/20/07

Method: 20071 Standard: STD1-Blank
Run Time: 03/12/07 12:36:34

T1822B

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Avge	.0127	.0003	-.0022	.0001	.0014	.0166	.0002
#1	.0117	-.0006	-.0003	.0001	.0013	.0169	.0001
#2	.0137	.0011	-.0041	.0001	.0014	.0163	.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Avge	.0052	.0029	.0007	.0011	.0027	.0068	.0016
#1	.0044	.0013	.0009	.0011	.0026	.0063	.0016
#2	.0061	.0044	.0006	.0011	.0027	.0073	.0016

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Avge	.0039	.0011	.0006	.0006	.0210	.0080	-.0009
#1	.0011	.0011	.0006	.0003	.0181	.0091	-.0009
#2	.0066	.0011	.0006	.0010	.0239	.0069	-.0009

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Avge	.1594	.0007	.0014	.0002	-.0006	.0121	.0029
#1	.1580	.0020	.0009	.0003	-.0017	.0119	.0026
#2	.1609	-.0006	.0020	.0001	.0005	.0124	.0031

Elem	Tl1908	Li6707	Sr4215
Avge	-.0038	.0006	.0001
#1	-.0046	.0005	.0000
#2	-.0030	.0007	.0001

LMMR
3/12/07

Standardization Rpt. 03/12/07 12:40:24 PM page 1

Method: 20071 Standard: STD3
Run Time: 03/12/07 12:38:37 ICP3-99-H

79822B

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	2.092	.7773	1.412	7.250	.3899	.3081	7.050
#1	2.099	.7793	1.420	7.271	.3904	.3089	7.075
#2	2.086	.7753	1.404	7.229	.3893	.3074	7.025

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.350	7.737	.3991	3.124	.2206	.7047	.5433
#1	3.358	7.768	.4017	3.133	.2210	.7067	.5454
#2	3.342	7.706	.3966	3.116	.2203	.7027	.5411

Elem	Zn2138	Ti3349
Avge	1.330	.6621
#1	1.335	.6657
#2	1.324	.6584

Method: 20071 Standard: STD2
Run Time: 03/12/07 12:40:36 ICP3-99-G 7822B

Elem	Sb2068	Ba4934	B_2496	Cd2288	Cr2677	Ni2316	K_7665
Avge	1.598	.3009	1.112	.2009	8.568	1.796	.8265
#1	1.595	.3009	1.108	.2001	8.555	1.790	.8235
#2	1.601	.3008	1.116	.2016	8.581	1.801	.8296

Elem	Ag3280	Na5889	Sn1899	P_2149	Si2881	Tl1908	Li6707
Avge	.3112	12.96	4.476	3.091	4.107	.4772	.6626
#1	.3109	12.96	4.461	3.079	4.101	.4751	.6630
#2	.3116	12.96	4.491	3.102	4.112	.4793	.6623

Elem	Sr4215
Avge	.5845
#1	.5846
#2	.5844

Analysis Report QC Standard 03/12/07 12:50:44 PM page 1

Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/12/07 12:47:16
Comment: ICP3-96-D 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.783	2.516	2.417	4.984	.1215	.0166	1.281
#1	4.807	2.535	2.447	5.003	.1219	.0199	1.283
#2	4.760	2.496	2.388	4.965	.1212	.0134	1.279

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.97	.5055	1.201	.6061	2.391	Q2.374	11.93
#1	11.99	.5065	1.203	.6080	2.397	2.376	11.96
#2	11.94	.5045	1.199	.6043	2.384	Q2.371	11.91

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.98	1.197	1.940	1.272	12.02	2.429	.6285
#1	12.03	1.201	1.945	1.275	12.50	2.452	.6320
#2	11.93	1.193	1.935	1.269	Q11.55	2.407	.6251

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.79	-.0118	1.191	1.197	-.1338	-.0104	1.954
#1	12.87	-.0113	1.195	1.201	-.1367	-.0062	1.962
#2	12.70	-.0122	Q1.187	1.193	-.1309	-.0147	1.947

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.579	-.0040	.0005
#1	2.612	-.0035	.0006
#2	2.546	-.0046	.0004

Analysis Report QC Standard 03/12/07 12:54:44 PM page 1

Method: 20071 Sample Name: ICV STD 4 Operator: MMR
Run Time: 03/12/07 12:52:55
Comment: ICP3-99-F 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0103	-.0027	-.0036	.0002	-.0001	5.097	-.0010
#1	-.0075	-.0041	.0139	.0005	-.0000	5.077	.0001
#2	-.0130	-.0013	-.0212	-.0000	-.0001	5.117	-.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0032	-.0031	-.0000	-.0019	.0032	-.0209	.0030
#1	.0056	-.0017	.0013	-.0014	.0026	-.0194	.0031
#2	.0008	-.0045	-.0013	-.0023	.0038	-.0224	.0030

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0816	-.0002	-.0026	-.0032	-1.137	.0928	-.0032
#1	-.0109	-.0002	-.0019	-.0028	-1.064	.0948	-.0018
#2	-.1524	-.0002	-.0032	-.0036	-1.210	.0907	-.0046

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.26	5.160	-.0021	.0003	4.810	5.057	-.0006
#1	14.21	5.163	-.0019	.0003	4.805	5.066	-.0009
#2	14.32	5.157	-.0024	.0003	4.814	5.048	-.0004

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0490	4.944	1.031
#1	.0579	4.929	1.030
#2	.0401	4.958	1.033

Analysis Report QC Standard 03/12/07 12:56:36 PM page 1

Method: 20071 Sample Name: ICB Operator: MMR
Run Time: 03/12/07 12:54:50
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0064	-.0018	.0000	-.0001	.0163	-.0003
#1	.0150	.0118	-.0049	.0002	-.0001	.0209	-.0003
#2	-.0144	.0010	.0013	-.0002	-.0000	.0118	-.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0023	-.0033	-.0011	-.0005	-.0001	-.0141	.0002
#1	-.0018	-.0023	-.0008	.0005	.0012	-.0118	.0002
#2	-.0028	-.0043	-.0015	-.0014	-.0014	-.0165	.0002

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0762	-.0001	-.0003	-.0052	-.6983	.0347	-.0000
#1	-.0653	.0001	.0013	-.0036	-.1951	.0433	.0018
#2	-.0871	-.0003	-.0019	-.0068	-1.202	.0262	-.0019

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	-.0085	-.0026	.0000	.0416	.0050	-.0004
#1	.0245	-.0038	-.0018	.0003	.0757	.0066	.0002
#2	-.0117	-.0131	-.0034	-.0002	.0075	.0035	-.0011

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0386	-.0049	.0002
#1	.0253	-.0030	.0004
#2	.0520	-.0067	.0001

Analysis Report QC Standard 03/12/07 01:05:27 PM page 1

Method: 20071 Sample Name: CCV1 Operator: MMR
Run Time: 03/12/07 13:00:52
Comment: ICP3-100-F 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.817	5.103	1.934	.5012	.4865	5.072	.5183
#1	4.811	5.086	1.939	.5018	.4860	5.078	.5199
#2	4.848	5.110	1.947	.5018	.4888	5.087	.5170
#3	4.817	5.139	Q1.899	.5027	.4871	5.072	.5178
#4	4.793	5.077	1.952	.4987	.4840	5.049	.5183

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.854	5.144	.4882	.4762	4.859	4.788	4.883
#1	4.842	5.133	.4888	.4770	4.844	4.786	4.874
#2	4.891	5.182	.4915	.4784	4.893	4.836	4.915
#3	4.855	5.146	.4884	.4751	4.865	4.778	4.888
#4	4.826	5.115	.4841	Q.4742	4.833	4.752	4.855

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q4.740	.4824	.4794	5.163	25.35	1.908	.5101
#1	4.799	.4811	.4839	5.151	25.42	1.909	.5103
#2	Q4.748	.4862	.4774	5.194	25.35	1.948	.5131
#3	Q4.625	.4827	.4787	5.161	25.85	Q1.897	.5121
#4	4.788	.4797	.4774	5.148	24.78	Q1.878	.5048

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.45	5.243	.4807	2.399	24.82	5.130	.4829
#1	25.37	5.243	.4806	2.401	25.16	5.118	.4822
#2	25.45	Q5.254	.4837	2.404	23.98	5.164	.4840
#3	25.61	5.223	.4792	2.402	25.11	5.142	.4840
#4	25.37	Q5.253	.4793	2.390	25.04	5.098	.4814

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	Q3.406	2.518	.5043
#1	Q4.487	2.505	.5042
#2	Q1.681	2.520	.5049
#3	Q3.483	2.528	.5054
#4	Q3.971	2.520	.5029

Method: 20071 Sample Name: CCB1 Operator: MMR
Run Time: 03/12/07 13:05:45
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0399	-.0100	-.0027	-.0005	.0001	.0209	-.0003
#1	-.0296	-.0046	.0028	-.0002	.0002	.0287	-.0004
#2	Q-.0502	-.0154	-.0083	-.0007	-.0000	.0131	-.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0025	-.0014	-.0034	-.0044	.0003	-.0143	.0016
#1	-.0008	-.0005	-.0022	-.0037	.0020	-.0169	.0026
#2	-.0043	-.0023	-.0045	-.0051	-.0015	-.0117	.0006

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1469	-.0004	-.0013	-.0060	-1.190	.0053	-.0064
#1	-.1633	-.0002	-.0013	-.0044	-.9577	.0164	-.0041
#2	-.1306	-.0006	-.0013	-.0076	-1.423	-.0057	-.0087

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0165	-.0110	-.0025	.0006	-.0144	-.0161	-.0009
#1	-.0000	-.0067	-.0026	.0014	.0133	-.0111	-.0009
#2	-.0329	-.0153	-.0024	-.0002	-.0422	-.0211	-.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0119	-.0062	-.0001
#1	.0401	-.0040	.0001
#2	-.0163	-.0084	-.0004

Analysis Report QC Standard 03/12/07 01:10:04 PM page 1

Method: 20071 Sample Name: CRI Operator: MMR
Run Time: 03/12/07 13:08:04
Comment: ICP3-98-B 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0306	.0544	.1027	.0046	.0048	.0619	.0054
#1	.0275	.0490	.1053	.0045	.0047	.0600	.0064
#2	.0337	.0598	.1001	.0047	.0048	.0639	.0044

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0523	.0043	.0087	.0095	.0218	.0321	.0209
#1	.0511	.0040	.0068	.0079	.0208	.0315	.0209
#2	.0535	.0045	.0106	.0112	.0228	.0328	.0209

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0291	.0046	.0091	.0199	1.443	.1014	.0097
#1	.0108	.0044	.0091	.0187	1.170	.1022	.0074
#2	Q-.0690	.0047	.0091	.0211	1.716	.1006	.0120

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1038	.0534	.0081	.0096	.1865	.0518	.0094
#1	.1038	.0456	.0082	.0098	.1623	.0437	.0091
#2	.1038	.0612	.0080	.0093	.2108	.0600	.0098

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0905	.0035	.0101
#1	.1143	.0008	.0101
#2	.0667	.0062	.0101

Analysis Report QC Standard 03/12/07 01:12:00 PM page 1

Method: 20071 Sample Name: ICSA Operator: MMR
Run Time: 03/12/07 13:10:14
Comment: ICP3-100-E 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	478.0	.0490	-.0482	.0004	.0000	.0279	.0019
#1	478.0	.0191	-.1668	.0005	-.0000	.0298	.0039
#2	478.0	.0789	.0705	.0002	.0001	.0259	-.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	453.7	-.0003	-.0109	-.0043	168.3	.0414	209.3
#1	451.5	-.0014	-.0107	-.0023	167.8	.0323	208.3
#2	456.0	.0009	-.0112	-.0064	168.7	.0506	210.3

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	470.2	-.0052	-.0014	-.0076	-.9732	.2107	-.0097
#1	470.9	-.0062	-.0030	-.0076	-.5409	.0622	-.0077
#2	469.4	-.0042	.0003	-.0076	-1.405	.3593	-.0116

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0332	-.0537	-.0036	.0099	-.2325	-.0135	.0049
#1	-.0156	-.0442	-.0042	.0110	-.2918	-.0121	.0045
#2	-.0508	-.0631	-.0031	.0088	-.1733	-.0149	.0052

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.1742	-.0022	.0050
#1	.1408	-.0030	.0053
#2	.2077	-.0013	.0048

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Method: 20071 Sample Name: ICSAB Operator: MMR
Run Time: 03/12/07 13:12:12
Comment: ICP3-83-E 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	478.5	1.035	-.0814	.4760	.4508	.0276	.9777
#1	477.1	1.018	-.1340	.4749	.4496	.0307	.9708
#2	479.8	1.053	-.0289	.4771	.4520	.0245	.9847

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	454.4	.4556	.4187	.4539	168.1	.8763	209.1
#1	454.2	.4537	.4186	.4529	167.8	.8799	209.3
#2	454.6	.4576	.4188	.4548	168.4	.8726	208.9

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	471.0	.4306	.0020	.8949	-1.044	.0838	.9669
#1	469.5	.4299	.0023	.8901	-.6872	.0736	.9657
#2	472.6	.4313	.0017	.8997	-1.401	.0940	.9681

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0254	-.0469	.4349	.9196	-.2663	-.0054	.0072
#1	-.0089	-.0343	.4323	.9192	-.2355	-.0045	.0101
#2	-.0418	-.0594	.4375	.9201	-.2970	-.0062	.0044

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.1966	-.0070	.0051
#1	.1888	-.0051	.0053
#2	.2044	-.0089	.0050

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Method: 20071 Sample Name: CCV2 Operator: JC
Run Time: 03/12/07 13:17:30
Comment: ICP3-110-F 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.827	5.128	1.954	.5038	.4876	5.085	.5204
#1	4.842	5.151	1.951	.5037	.4881	5.109	.5226
#2	4.812	5.105	1.958	.5039	.4870	5.060	.5183

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.859	5.153	.4881	.4765	4.863	4.800	4.871
#1	4.867	5.160	.4884	.4765	4.868	4.817	4.877
#2	4.851	5.145	.4878	.4765	4.858	4.782	4.866

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.881	.4826	.4836	5.217	25.44	1.920	.5122
#1	4.901	.4831	.4826	5.216	25.66	1.918	.5131
#2	4.861	.4820	.4846	5.218	25.23	1.923	.5112

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.65	5.270	.4832	2.413	25.61	5.140	.4843
#1	25.68	5.292	.4840	2.413	25.61	5.143	.4857
#2	25.63	5.247	.4824	2.412	25.61	5.137	.4829

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.044	2.540	.5065
#1	5.066	2.540	.5068
#2	5.022	2.540	.5061

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Method: 20071 Sample Name: CCB2 Operator: JC
Run Time: 03/12/07 13:19:59
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0083	.0000	.0016	-.0005	-.0001	.0118	-.0008
#1	-.0021	.0091	.0049	-.0005	-.0001	.0144	-.0005
#2	-.0144	-.0091	-.0018	-.0005	-.0000	.0091	-.0010

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	-.0016	-.0028	-.0012	-.0006	-.0169	.0009
#1	-.0026	-.0025	-.0026	-.0005	-.0010	-.0250	.0011
#2	.0010	-.0007	-.0030	-.0019	-.0003	-.0088	.0007

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1088	-.0002	-.0010	-.0044	-.7914	-.0045	-.0018
#1	-.1850	-.0003	-.0006	-.0068	-1.073	-.0065	-.0019
#2	-.0326	-.0001	-.0013	-.0020	-.5099	-.0025	-.0018

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	-.0120	-.0020	.0003	.0087	-.0048	-.0006
#1	-.0095	-.0153	-.0034	.0003	.0202	-.0021	-.0011
#2	.0089	-.0086	-.0005	.0003	-.0029	-.0076	-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0089	-.0057	-.0001
#1	.0134	-.0094	-.0001
#2	-.0312	-.0019	-.0001

Method: 20071 Sample Name: 3010A IPR-1 Operator: JC
Run Time: 03/12/07 13:24:16
Comment: MMR 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.906	2.561	2.465	5.201	.1227	1.057	1.299
#1	4.924	2.576	2.469	5.209	.1226	1.050	1.305
#2	4.888	2.547	2.460	5.193	.1227	1.064	1.294

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.28	.5194	1.233	.6197	2.457	2.428	12.22
#1	12.30	.5215	1.233	.6215	2.460	2.425	12.23
#2	12.27	.5173	1.233	.6178	2.453	2.432	12.22

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.19	1.237	1.007	1.313	11.69	2.452	L.3421
#1	12.25	1.238	1.007	1.309	12.18	2.469	L.3456
#2	12.14	1.237	1.006	1.316	11.21	2.436	L.3387

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.34	-.0272	1.228	1.208	-.1959	.0409	-.0010
#1	13.41	-.0310	1.229	1.208	-.1670	.0509	-.0009
#2	13.27	-.0234	1.227	1.208	-.2248	.0308	-.0011

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.639	-.0086	-.0001
#1	2.628	-.0073	.0001
#2	2.649	-.0100	-.0004

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Method: 20071 Sample Name: 3010A IPR-2 Operator: JC
Run Time: 03/12/07 13:26:33
Comment: MMR 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.831	2.514	2.401	5.098	.1214	1.031	1.261
#1	4.801	2.509	2.394	5.057	.1205	1.021	1.256
#2	4.861	2.520	2.408	5.140	.1222	1.041	1.266

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.06	.5130	1.212	.6099	2.408	2.374	11.99
#1	12.02	.5108	1.206	.6057	2.397	2.373	11.93
#2	12.10	.5151	1.219	.6141	2.420	2.376	12.05

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.16	1.214	.9823	1.279	12.16	2.390	.6246
#1	12.11	1.207	.9778	1.278	12.61	2.375	.6213
#2	12.21	1.220	.9869	1.280	11.71	2.405	.6279

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.97	-.0127	1.207	1.180	-.1034	.0581	.0001
#1	12.87	-.0122	1.199	1.174	-.0826	.0646	.0004
#2	13.06	-.0132	1.215	1.186	-.1242	.0515	-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.600	-.0019	.0001
#1	2.587	-.0008	.0001
#2	2.613	-.0030	.0001

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Method: 20071 Sample Name: 3010A IPR-3 Operator: JC
Run Time: 03/12/07 13:28:53
Comment: MMR 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.859	2.523	2.421	5.118	.1220	1.044	1.275
#1	4.846	2.542	2.405	5.116	.1220	1.040	1.274
#2	4.872	2.504	2.438	5.121	.1219	1.049	1.276

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.15	.5156	1.220	.6108	2.427	2.401	12.07
#1	12.17	.5170	1.219	.6104	2.426	2.400	12.08
#2	12.13	.5143	1.221	.6113	2.427	2.402	12.06

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.26	1.222	.9879	1.292	12.17	2.446	.6279
#1	12.28	1.222	.9882	1.294	12.09	2.449	.6251
#2	12.25	1.221	.9875	1.289	12.25	2.443	.6306

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.10	-.0216	1.216	1.189	-.1392	.0501	-.0008
#1	13.06	-.0211	1.217	1.192	-.1577	.0481	-.0002
#2	13.13	-.0221	1.215	1.186	-.1208	.0522	-.0013

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.625	-.0073	.0001
#1	2.610	-.0111	.0001
#2	2.640	-.0035	.0001

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Method: 20071 Sample Name: 3010A IPR-4 Operator: JC
Run Time: 03/12/07 13:31:00
Comment: MMR 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.925	2.582	2.493	5.132	.1225	1.038	1.309
#1	4.966	2.602	2.499	5.153	.1231	1.043	1.319
#2	4.885	2.562	2.488	5.112	.1219	1.033	1.299

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.43	.5258	1.243	.6210	2.466	2.482	12.29
#1	12.51	.5295	1.253	.6229	2.480	2.511	12.35
#2	12.35	.5221	1.234	.6192	2.452	2.454	12.22

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.45	1.243	1.007	1.322	12.98	2.461	L.0799
#1	12.58	1.250	1.011	1.328	13.45	2.472	L.0820
#2	12.33	1.236	1.004	1.317	12.50	2.450	L.0777

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.25	-.0119	1.233	1.224	-.1434	.0643	.0002
#1	13.30	-.0125	1.241	1.229	-.1878	.0710	.0006
#2	13.19	-.0112	1.224	1.219	-.0989	.0575	-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.647	-.0019	.0002
#1	2.658	-.0003	.0001
#2	2.637	-.0035	.0004

Method: 20071 Sample Name: 3050B IPR-1 Operator: JC
Run Time: 03/12/07 13:33:47
Comment: MMR 5/10 DIL. 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.15	.3999	.7123	1.850	.3115	.5167	.4824
#1	31.14	.3812	.7001	1.851	.3114	.5109	.4837
#2	31.17	.4185	.7245	1.849	.3116	.5225	.4812

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.22	.9305	.2914	.3415	62.24	.3401	10.64
#1	19.18	.9282	.2899	.3401	62.16	.3307	10.63
#2	19.25	.9327	.2928	.3429	62.33	.3495	10.65

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.62	1.027	.1376	.4444	11.31	.3915	.4932
#1	10.55	1.026	.1382	.4365	10.84	.3845	.4911
#2	10.69	1.028	.1369	.4524	11.79	.3986	.4953

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.587	.5306	.7140	2.013	3.745	15.61	1.450
#1	3.566	.5383	.7128	2.011	3.731	15.60	1.449
#2	3.609	.5230	.7151	2.015	3.760	15.63	1.450

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.4792	.0192	.1788
#1	H.5108	.0181	.1788
#2	.4476	.0202	.1788

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Method: 20071 Sample Name: 3050B IPR-2 Operator: JC
Run Time: 03/12/07 13:36:02
Comment: MMR 5/10 DIL. 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.29	.4187	.7367	1.810	.3069	.5115	.4756
#1	30.33	.4531	.7431	1.810	.3074	.5121	.4780
#2	30.25	.3843	.7303	1.809	.3063	.5109	.4732

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.87	.9104	.2878	.3368	62.33	.3246	10.34
#1	18.96	.9147	.2920	.3396	62.44	.3308	10.37
#2	18.78	.9060	.2836	.3341	62.22	.3184	10.31

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.42	1.009	.1379	.4373	11.59	.3696	.4833
#1	10.45	1.011	.1408	.4365	12.62	.3832	.4893
#2	10.39	1.007	.1350	.4381	10.56	.3559	.4773

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.523	.5192	.7096	1.971	3.725	15.03	1.466
#1	3.561	.5172	.7123	1.976	3.763	15.09	1.468
#2	3.486	.5213	.7070	1.967	3.687	14.98	1.464

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.4369	.0243	.1729
#1	.3903	.0289	.1732
#2	.4835	.0197	.1727

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Method: 20071 Sample Name: 3050B IPR-3 Operator: JC
Run Time: 03/12/07 13:38:26
Comment: MMR 5/10 DIL. 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	30.88	.4138	.7075	1.807	.3040	.5017	.4747
#1	30.71	.4161	.7041	1.791	.3020	.5044	.4744
#2	31.05	.4115	.7109	1.822	.3059	.4989	.4750

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.88	.9030	.2820	.3341	62.52	.3196	10.39
#1	18.84	.9009	.2823	.3336	62.22	.3196	10.35
#2	18.92	.9052	.2816	.3345	62.82	.3196	10.44

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.47	1.003	.1347	.4293	11.76	.3678	.4826
#1	10.42	.9979	.1343	.4293	12.33	.3764	.4814
#2	10.52	1.008	.1350	.4293	11.19	.3592	.4839

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.484	.4932	.7028	1.953	3.799	14.79	1.473
#1	3.471	.4910	.6997	1.946	3.833	14.73	1.464
#2	3.498	.4955	.7059	1.959	3.766	14.85	1.482

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.4302	.0248	.1744
#1	.4241	.0256	.1732
#2	.4362	.0240	.1756

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Method: 20071 Sample Name: 3050B IPR-4 Operator: JC
Run Time: 03/12/07 13:40:34
Comment: MMR 5/10 DIL. 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	33.91	.3927	.7294	1.860	.3160	.5237	.4904
#1	33.63	.3856	.7453	1.844	.3140	.5199	.4862
#2	34.19	.3999	.7136	1.875	.3180	.5274	.4946

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.81	.9464	.2922	.3465	69.01	.3319	11.02
#1	19.74	.9428	.2920	.3432	68.64	.3403	10.97
#2	19.87	.9500	.2924	.3497	69.39	.3234	11.08

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.16	1.061	.1379	.4480	11.69	.3975	.4904
#1	11.17	1.056	.1362	.4500	11.86	.3929	.4873
#2	11.16	1.067	.1396	.4460	11.53	.4021	.4935

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.626	.5211	.7419	2.024	3.920	15.55	1.612
#1	3.609	.5164	.7396	2.013	3.868	15.45	1.601
#2	3.643	.5258	.7443	2.035	3.972	15.65	1.623

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.4133	.0235	.1831
#1	.3942	.0229	.1815
#2	.4324	.0240	.1847

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Method: 20071 Sample Name: CCV3 Operator: JC
Run Time: 03/12/07 13:43:10
Comment: ICP3-100-F 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.801	5.101	1.906	.4960	.4807	4.990	.5159
#1	4.801	5.105	1.931	.4963	.4811	4.992	.5194
#2	4.801	5.097	1.881	.4956	.4802	4.988	.5124

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.827	5.096	.4852	.4730	4.804	4.792	4.829
#1	4.833	5.101	.4853	.4732	4.809	4.795	4.834
#2	4.822	5.091	.4852	.4728	4.800	4.789	4.823

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.837	.4772	.4810	5.172	25.45	1.895	.5105
#1	4.861	.4773	.4807	5.186	25.48	1.914	.5094
#2	4.814	.4771	.4813	5.158	25.42	1.876	.5116

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.39	5.256	.4771	2.387	25.41	5.109	.4784
#1	25.42	5.260	.4788	2.388	25.38	5.114	.4786
#2	25.36	5.252	.4754	2.385	25.44	5.103	.4781

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.077	2.498	.4993
#1	5.055	2.501	.5002
#2	5.099	2.495	.4983

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Method: 20071 Sample Name: CCB3 Operator: JC
Run Time: 03/12/07 13:45:43
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	-.0004	.0049	.0000	.0000	.0124	-.0001
#1	.0192	.0009	.0279	.0005	.0001	.0143	-.0015
#2	-.0172	-.0018	-.0182	-.0005	-.0000	.0104	.0014

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0006	-.0000	.0002	.0002	-.0028	.0007
#1	.0014	.0002	.0007	.0019	.0014	.0028	.0007
#2	-.0009	-.0013	-.0008	-.0014	-.0011	-.0083	.0007

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0254	.0000	-.0003	-.0024	-.4190	-.0069	.0002
#1	-.0181	.0005	-.0006	.0020	.0842	-.0090	.0027
#2	-.0326	-.0004	-.0000	-.0068	-.9222	-.0049	-.0023

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0131	-.0107	-.0009	.0005	.0168	-.0016	.0004
#1	.0262	-.0077	-.0010	.0013	.0329	.0059	.0004
#2	-.0000	-.0137	-.0008	-.0002	.0006	-.0090	.0004

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0104	-.0027	.0000
#1	-.0163	.0003	.0001
#2	-.0045	-.0057	-.0001

Method: 20071 Sample Name: PBW Operator: MMR
Run Time: 03/12/07 13:57:39
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0075	L.0041	L.0056	L-.0002	L-.0000	L.0026	L-.0012
#1	L-.0007	L-.0008	L.0012	L-.0002	L-.0000	L.0026	L.0003
#2	L.0158	L.0091	L.0100	L-.0002	L-.0000	L.0026	L-.0026

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0004	L-.0022	L-.0004	L.0007	L-.0006	L-.0148	L-.0004
#1	L.0008	L-.0020	L-.0004	L-.0000	L-.0004	L-.0092	L-.0002
#2	L.0001	L-.0023	L-.0004	L.0014	L-.0009	L-.0203	L-.0006

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0671	L-.0001	L-.0013	L.0000	L-.1507	L-.0020	L.0007
#1	-.0798	L-.0003	L-.0026	L.0004	L-.1995	L.0090	L-.0005
#2	-.0544	L.0000	L-.0000	L-.0004	L-.1020	L-.0131	L.0018

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0259	L-.0086	L-.0020	L.0011	-.0347	-.0035	L-.0009
#1	L.0262	L-.0137	L-.0024	L.0008	-.0271	-.0052	L-.0015
#2	L.0257	L-.0035	L-.0016	L.0013	-.0422	-.0017	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0149	-.0054	L.0000
#1	L.0104	-.0046	L-.0001
#2	L.0193	-.0062	L.0001

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Method: 20071 Sample Name: LCSW Operator: MMR
Run Time: 03/12/07 13:59:55
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.784	2.555	2.382	5.002	.1201	1.025	1.282
#1	4.762	2.550	2.362	4.983	.1198	1.020	1.279
#2	4.805	2.560	2.403	5.022	.1205	1.029	1.285

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.03	.5064	1.203	.6034	2.364	2.383	11.84
#1	11.99	.5048	1.197	.6015	2.354	2.382	11.80
#2	12.06	.5080	1.208	.6052	2.375	2.383	11.88

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.15	1.201	.9544	1.277	12.26	2.416	.6290
#1	12.06	1.196	.9525	1.271	11.92	2.390	.6276
#2	12.24	1.205	.9564	1.283	12.60	2.443	.6304

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.98	-.0152	1.192	1.204	-.1582	-.0088	-.0000
#1	12.87	-.0221	1.188	1.200	-.1703	-.0038	-.0002
#2	13.08	-.0084	1.196	1.208	-.1460	-.0138	.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.557	-.0051	.0001
#1	2.542	-.0030	.0001
#2	2.572	-.0073	.0001

Method: 20071 Sample Name: K0701566-006 Operator: MMR
Run Time: 03/12/07 14:03:01
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2462	L.0000	L-.0190	.4184	L-.0001	.0543	L-.0004
#1	.2331	L-.0018	L-.0294	.4201	L-.0001	.0530	L-.0013
#2	.2593	L.0018	L-.0087	.4168	L-.0001	.0556	L.0005

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.51	L-.0014	L-.0011	L.0005	.4535	L-.0202	16.34
#1	42.60	L-.0029	L-.0037	L-.0014	.4553	L-.0210	16.39
#2	42.42	L.0001	L.0015	.0023	.4517	L-.0193	16.29

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.89	.5292	L.0039	L.0000	14.76	L-.0006	L-.0018
#1	16.90	.5304	.0052	L.0012	14.31	L.0096	L-.0045
#2	16.87	.5279	L.0026	L-.0012	15.21	L-.0109	L.0010

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.58	L-.0034	L.0012	.0173	L.0182	3.970	.0050
#1	43.63	L-.0092	L.0004	.0170	L.0315	3.972	.0050
#2	43.53	L.0023	L.0019	.0175	L.0050	3.968	.0050

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0099	L-.0016	.2842
#1	L-.0410	L-.0051	.2854
#2	L.0213	L.0019	.2829

Method: 20071 Sample Name: K0701566-006D Operator: MMR
Run Time: 03/12/07 14:04:53
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2645	L.0009	L.0055	.4226	L-.0001	.0562	L.0003
#1	.2435	L-.0009	L-.0034	.4203	L-.0001	.0556	L-.0003
#2	.2854	L.0027	L.0143	.4248	L-.0001	.0568	L.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.85	L-.0018	L.0011	.0033	.4729	L-.0108	16.47
#1	42.65	L-.0016	L-.0005	L.0014	.4693	L-.0107	16.40
#2	43.06	L-.0019	L.0026	.0051	.4765	L-.0108	16.55

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.10	.5345	L.0026	L-.0016	15.20	L-.0018	L-.0006
#1	16.95	.5316	L.0020	L-.0004	14.63	L-.0084	L-.0032
#2	17.25	.5374	L.0033	L-.0028	15.78	L.0047	L.0019

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.08	L-.0073	L.0018	.0181	L.0315	4.029	.0057
#1	43.82	L-.0152	L.0017	.0175	L.0269	4.007	.0056
#2	44.35	L.0007	L.0019	.0186	L.0361	4.052	.0059

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0307	.0022	.2868
#1	L-.0233	.0024	.2851
#2	L-.0381	L.0019	.2886

Method: 20071 Sample Name: K0701566-006S Operator: MMR
Run Time: 03/12/07 14:06:46
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.137	.5060	.9378	2.362	.0468	1.042	.0494
#1	2.136	.5159	.9266	2.358	.0468	1.043	.0500
#2	2.137	.4960	.9491	2.366	.0468	1.041	.0489

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.22	.1964	.4681	.2355	1.381	.4671	16.60
#1	43.25	.1975	.4679	.2365	1.379	.4814	16.60
#2	43.18	.1952	.4683	.2346	1.382	.4528	16.60

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.23	1.007	.9403	.4929	15.88	.9170	.0501
#1	17.24	1.006	.9412	.4913	15.73	.9207	.0506
#2	17.23	1.007	.9393	.4945	16.04	.9133	.0496

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.48	L-.0106	.4651	.4802	L-.0504	4.074	.0057
#1	44.39	L-.0131	.4666	.4800	L-.0706	4.067	.0061
#2	44.57	L-.0080	.4635	.4805	L-.0301	4.081	.0053

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	1.005	L-.0005	.2892
#1	1.038	L.0003	.2888
#2	.9723	L-.0013	.2895

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Method: 20071 Sample Name: K0701566-001 Operator: MMR
Run Time: 03/12/07 14:08:47
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2981	L-.0032	L.0140	.2497	L-.0001	.0466	L-.0016
#1	.3046	L.0054	L.0054	.2491	L-.0001	.0499	L-.0019
#2	.2916	L-.0117	L.0226	.2503	L-.0001	.0434	L-.0014

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	37.14	L-.0020	L-.0010	.0028	.2220	L-.0123	8.620
#1	37.08	L-.0001	L-.0015	.0023	.2222	L-.0095	8.603
#2	37.19	L-.0039	L-.0005	.0033	.2218	L-.0151	8.638

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.847	.0740	L.0007	L-.0048	3.868	L-.0079	L-.0013
#1	8.876	.0738	L.0026	L-.0060	4.145	L-.0308	L-.0013
#2	8.818	.0741	L-.0013	L-.0036	3.591	L.0150	L-.0013

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	80.89	L-.0094	L.0008	.0103	L.0617	1.202	.0068
#1	80.60	L.0007	L.0016	.0103	.0963	1.201	.0071
#2	81.17	L-.0194	L-.0000	.0102	L.0270	1.204	.0065

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0064	L-.0043	.1897
#1	L.0011	L-.0057	.1891
#2	L-.0138	L-.0030	.1903

Method: 20071 Sample Name: K0701566-002 Operator: MMR
Run Time: 03/12/07 14:10:35
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3207	L.0054	L.0023	.2548	L-.0001	.0459	L-.0018
#1	.3232	L.0054	L-.0052	.2541	L-.0001	.0459	L-.0010
#2	.3183	L.0054	L.0098	.2555	L-.0000	.0459	L-.0026

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	37.74	L-.0018	L.0005	.0037	.2363	L-.0134	8.756
#1	37.67	L-.0019	L.0011	.0037	.2358	L-.0044	8.738
#2	37.80	L-.0016	L-.0001	.0037	.2368	L-.0224	8.774

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.969	.0802	L.0007	L-.0060	3.824	L-.0075	L.0014
#1	8.949	.0799	L.0013	L-.0060	3.906	L-.0095	L.0019
#2	8.989	.0806	L.0000	L-.0060	3.742	L-.0054	L.0010

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	81.97	L-.0049	L.0000	.0127	L.0784	1.244	.0066
#1	81.82	L.0010	L.0008	.0124	.1148	1.252	.0069
#2	82.12	L-.0108	L-.0008	.0129	L.0420	1.236	.0063

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0055	L-.0005	.1925
#1	L.0159	L-.0008	.1920
#2	L-.0049	L-.0003	.1930

Method: 20071 Sample Name: K0701566-003 Operator: MMR
Run Time: 03/12/07 14:12:56
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3156	L.0132	L.0064	.3981	L-.0000	.0733	L-.0004
#1	.3039	L.0163	L-.0088	.3982	L-.0000	.0708	L.0005
#2	.3273	L.0100	L.0216	.3980	L-.0001	.0759	L-.0014

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.74	L-.0029	L-.0008	L.0019	.3588	L-.0217	18.30
#1	45.67	L-.0032	L-.0011	L.0019	.3593	L-.0266	18.29
#2	45.81	L-.0027	L-.0004	L.0019	.3582	L-.0168	18.30

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.01	.1984	L-.0006	L-.0028	5.083	L-.0183	L-.0002
#1	18.93	.1983	L-.0013	L-.0060	4.997	L-.0322	L-.0013
#2	19.09	.1985	L.0000	L.0004	5.170	L-.0044	L.0010

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	81.07	L-.0041	L-.0004	.0081	L.0622	2.610	.0068
#1	81.21	L-.0028	L-.0026	.0073	L.0593	2.612	.0063
#2	80.93	L-.0054	L.0018	.0089	L.0651	2.609	.0074

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0073	L.0011	.3957
#1	L.0222	L-.0024	.3959
#2	L-.0075	.0046	.3956

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Method: 20071 Sample Name: K0701566-004 Operator: MMR
Run Time: 03/12/07 14:14:49
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0946	L.0036	L-.0077	.2742	L-.0001	.0739	L-.0009
#1	.0981	L-.0055	L.0057	.2726	L-.0001	.0693	L-.0019
#2	.0911	L.0127	L-.0211	.2757	L-.0000	.0784	L.0000

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.26	L-.0018	L-.0015	L.0009	.1936	L-.0170	19.02
#1	49.16	L-.0003	L-.0019	L.0000	.1920	L-.0200	18.97
#2	49.36	L-.0032	L-.0011	L.0019	.1951	L-.0140	19.07

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.85	.1875	L.0026	L-.0044	4.496	L-.0104	L-.0018
#1	19.73	.1869	L.0013	L-.0036	4.607	L-.0047	L-.0013
#2	19.97	.1881	L.0039	L-.0052	4.385	L-.0161	L-.0023

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	75.42	L-.0078	L.0007	.0153	L.0247	2.073	.0031
#1	75.05	L-.0080	L.0019	.0159	L.0247	2.070	.0037
#2	75.78	L-.0076	L-.0004	.0148	L.0247	2.077	.0026

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0069	.0027	.2741
#1	L-.0009	.0024	.2729
#2	L-.0128	.0030	.2754

Method: 20071 Sample Name: K0701566-005 Operator: MMR
Run Time: 03/12/07 14:16:40
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0240	L.0018	L.0038	.3101	L-.0001	.0737	L-.0018
#1	.0522	L.0164	L.0164	.3109	L.0000	.0750	L-.0027
#2	L-.0041	L-.0127	L-.0087	.3094	L-.0002	.0724	L-.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.81	L-.0005	L-.0007	L-.0007	.2359	L-.0139	22.12
#1	52.49	L-.0001	L.0019	.0023	.2368	L-.0122	22.02
#2	53.14	L-.0010	L-.0033	L-.0037	.2350	L-.0156	22.22

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.97	.0888	L.0013	L-.0016	3.890	L.0183	L-.0034
#1	22.96	.0888	L.0007	L.0004	4.190	L.0167	L.0010
#2	22.97	.0887	L.0020	L-.0036	3.591	L.0199	L-.0077

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	143.9	L.0080	.0045	.0047	L.0420	2.647	.0020
#1	144.3	L.0064	.0039	.0050	L.0467	2.659	.0011
#2	143.5	L.0096	.0052	.0045	L.0374	2.636	.0028

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0322	.0030	.2761
#1	L.0426	.0024	.2766
#2	L.0218	.0035	.2756

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Method: 20071 Sample Name: CCV4 Operator: MMR
Run Time: 03/12/07 14:18:37
Comment: ICP4-2-B 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.935	5.264	1.967	.5140	.4969	5.167	.5324
#1	4.949	5.277	1.983	.5151	.4981	5.175	.5314
#2	4.921	5.252	1.950	.5129	.4957	5.160	.5334

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.915	5.266	.4985	.4856	4.950	4.896	4.935
#1	4.925	5.274	.4982	.4858	4.957	4.903	4.947
#2	4.905	5.259	.4987	.4854	4.943	4.890	4.923

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.797	.4922	.4917	5.374	26.12	1.949	.5264
#1	4.781	.4926	.4918	5.384	25.51	1.934	.5269
#2	4.813	.4918	.4917	5.363	26.73	1.964	.5260

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.43	Q5.514	.4883	2.452	26.48	5.268	.4956
#1	26.44	Q5.501	.4889	2.460	26.40	5.269	.4963
#2	26.42	Q5.527	.4878	2.445	26.56	5.267	.4950

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.371	2.590	.5172
#1	5.387	2.597	.5186
#2	5.354	2.583	.5159

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Method: 20071 Sample Name: CCB4 Operator: MMR
Run Time: 03/12/07 14:20:35
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0196	-.0109	-.0081	-.0002	-.0001	.0124	-.0027
#1	-.0296	-.0227	.0051	-.0002	-.0000	.0144	-.0019
#2	-.0096	.0009	-.0212	-.0002	-.0001	.0105	-.0035

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0027	-.0029	-.0028	-.0019	-.0002	-.0171	.0011
#1	-.0035	-.0033	-.0034	-.0023	-.0003	-.0122	.0013
#2	-.0019	-.0025	-.0022	-.0014	-.0002	-.0220	.0009

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1687	-.0004	-.0023	-.0060	-.8069	.0037	-.0028
#1	Q-.2032	-.0005	-.0019	-.0060	-.9266	.0074	-.0046
#2	-.1342	-.0002	-.0026	-.0060	-.6872	-.0000	-.0009

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0078	-.0073	-.0028	.0003	.0133	-.0073	.0002
#1	-.0402	-.0153	-.0032	.0003	-.0271	-.0170	-.0004
#2	.0245	.0006	-.0024	.0003	.0537	.0024	.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0252	-.0043	-.0002
#1	-.0312	-.0062	-.0004
#2	-.0193	-.0024	-.0001

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Method: 20071 Sample Name: K0701566-005L Operator: MMR
Run Time: 03/12/07 14:22:56
Comment: K0701566 1645 1568 1/5 DILUTION 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0076	L-.0036	L.0074	.0652	L-.0000	.0236	L-.0026
#1	L.0048	L-.0018	L.0198	.0653	L-.0000	.0236	L-.0028
#2	L.0103	L-.0054	L-.0049	.0651	L-.0000	.0236	L-.0024

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.99	L-.0025	L-.0018	L-.0009	.0498	L-.0227	4.775
#1	11.02	L-.0033	L-.0019	L-.0014	.0499	L-.0250	4.793
#2	10.95	L-.0016	L-.0018	L-.0005	.0498	L-.0203	4.757

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.700	.0182	L-.0029	L-.0056	.8202	L.0152	L-.0016
#1	4.647	.0182	L-.0039	L-.0076	.7980	L.0189	L-.0028
#2	4.752	.0183	L-.0019	L-.0036	.8424	L.0115	L-.0005

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.87	L.0021	L-.0012	.0015	L.0063	.5452	L.0005
#1	29.97	L-.0032	L-.0019	.0012	L.0341	.5480	L.0004
#2	29.77	L.0074	L-.0006	.0018	L-.0214	.5424	L.0006

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0162	L-.0022	.0577
#1	L.0162	L-.0008	.0581
#2	L.0162	L-.0035	.0573

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Method: 20071 Sample Name: K0701645-001 Operator: MMR
Run Time: 03/12/07 14:25:16
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4350	L.0109	L-.0100	.1693	L-.0001	.0291	L.0016
#1	.4268	L.0027	L-.0125	.1686	L-.0002	.0285	L.0013
#2	.4432	L.0190	L-.0074	.1700	L-.0001	.0298	L.0019

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.30	L.0016	L-.0025	.0075	.4837	L-.0159	5.423
#1	26.14	L.0002	L-.0019	.0075	.4829	L-.0225	5.393
#2	26.45	.0031	L-.0030	.0075	.4845	L-.0093	5.453

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.326	.0447	L.0007	L-.0024	1.884	L-.0145	L-.0022
#1	5.208	.0443	L-.0013	L-.0012	1.326	L-.0092	L-.0036
#2	5.443	.0451	L.0026	L-.0036	2.443	L-.0198	L-.0008

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.00	L-.0103	L.0018	.0305	L.0569	1.647	.0084
#1	16.88	L-.0127	L.0005	.0297	L.0315	1.654	.0087
#2	17.12	L-.0079	.0032	.0313	.0823	1.641	.0082

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0034	L-.0011	.1283
#1	L-.0123	L-.0030	.1275
#2	L.0056	L.0008	.1292

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Method: 20071 Sample Name: K0701645-002 Operator: MMR
Run Time: 03/12/07 14:28:00
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3616	L.0042	L-.0148	.1868	L-.0000	.1702	L.0010
#1	.3739	L.0209	L-.0242	.1893	L.0000	.1694	L.0022
#2	.3493	L-.0126	L-.0054	.1843	L-.0001	.1710	L-.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	81.68	L-.0030	L-.0013	L-.0009	.3168	L.0023	H46.59
#1	82.83	L-.0023	L-.0011	L-.0004	.3199	L.0156	H47.15
#2	80.54	L-.0037	L-.0015	L-.0014	.3137	L-.0109	H46.04

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.63	.0666	L.0026	L.0004	3.651	L-.0127	L-.0022
#1	52.34	.0675	L.0039	L.0028	3.822	L-.0069	L-.0017
#2	50.92	.0657	L.0013	L-.0020	3.480	L-.0184	L-.0026

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	112.3	L.0005	.0065	.0265	L-.0083	5.174	.0069
#1	113.7	L-.0028	.0073	.0268	L-.0100	5.239	.0072
#2	110.9	L.0039	.0057	.0263	L-.0065	5.108	.0067

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0392	L-.0046	1.122
#1	.0600	L-.0046	1.137
#2	L.0184	L-.0046	1.107

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Method: 20071 Sample Name: K0701645-003 Operator: MMR
Run Time: 03/12/07 14:29:52
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4515	L.0036	L-.0048	.3408	L.0000	.0757	L.0015
#1	.4521	L-.0054	L-.0037	.3420	L.0000	.0783	L.0025
#2	.4508	L.0127	L-.0059	.3396	L.0000	.0731	L.0005

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.61	L-.0016	L-.0006	.0033	.3881	L-.0140	14.41
#1	39.73	L-.0032	L-.0015	.0023	.3921	L-.0251	14.47
#2	39.49	L-.0001	L.0003	.0042	.3841	L-.0028	14.36

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.83	.1885	L.0004	L-.0099	3.166	L-.0032	L-.0013
#1	14.88	.1890	L-.0006	L-.0107	2.900	L-.0052	L-.0018
#2	14.77	.1879	L.0013	L-.0092	3.432	L-.0011	L-.0008

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.96	L-.0055	L.0013	.0090	.1032	2.500	.0070
#1	51.10	L-.0105	L.0008	.0085	L.0651	2.515	.0069
#2	50.83	L-.0006	L.0019	.0096	.1413	2.484	.0071

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0042	.0024	.3530
#1	L-.0077	.0078	.3546
#2	L.0161	L-.0030	.3514

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Method: 20071 Sample Name: K0701645-004 Operator: MMR
Run Time: 03/12/07 14:31:40
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1338	L-.0004	L-.0196	.4803	L-.0001	.1595	L.0011
#1	.1503	L.0046	L-.0148	.4773	L-.0002	.1628	L-.0001
#2	.1173	L-.0053	L-.0243	.4833	L-.0001	.1561	L.0022

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.02	L-.0036	L-.0017	L.0000	.3943	L-.0055	H47.56
#1	66.89	L-.0035	L-.0004	L.0014	.3932	L-.0106	H47.42
#2	67.15	L-.0037	L-.0030	L-.0014	.3953	L-.0004	H47.70

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.66	.0971	L.0000	L-.0008	1.164	L-.0130	L-.0026
#1	52.36	.0971	L.0000	L-.0028	1.428	L-.0011	L-.0008
#2	52.96	.0971	L.0000	L.0012	.9000	L-.0248	L-.0045

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	123.2	L-.0101	.0031	.0483	L.0229	5.225	.0026
#1	122.2	L-.0053	.0033	.0488	L-.0031	5.206	.0033
#2	124.2	L-.0149	L.0028	.0477	L.0489	5.244	.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0546	L.0003	.8774
#1	L-.0590	L.0013	.8723
#2	L-.0501	L-.0008	.8825

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Method: 20071 Sample Name: K0701568-001 Operator: MMR
Run Time: 03/12/07 14:33:33
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0006	L.0022	L-.0210	.0487	L-.0000	.0918	L-.0000
#1	L.0001	L.0059	L-.0236	.0489	L-.0001	.0891	L.0015
#2	L-.0013	L-.0015	L-.0184	.0484	L.0000	.0945	L-.0015

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	36.95	.0306	L-.0019	L-.0009	L-.0000	L-.0047	H54.45
#1	37.03	.0290	L-.0008	L-.0005	L-.0005	L-.0045	H54.63
#2	36.86	.0323	L-.0030	L-.0014	L.0004	L-.0049	H54.27

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.52	L-.0001	L-.0019	L.0016	L.1419	L-.0045	L-.0022
#1	60.89	L.0001	L-.0026	L.0068	L.0000	L-.0000	L-.0018
#2	60.16	L-.0002	L-.0013	L-.0036	L.2838	L-.0090	L-.0027

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	81.29	L-.0096	.0050	.0010	L.0560	24.30	L.0002
#1	81.88	L-.0112	.0042	L.0007	L.0249	24.43	L-.0002
#2	80.70	L-.0080	.0058	.0013	.0872	24.17	L.0006

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0193	L-.0022	.2382
#1	L-.0015	L-.0030	.2399
#2	L.0401	L-.0013	.2365

Method: 20071 Sample Name: K0701568-001D Operator: MMR
Run Time: 03/12/07 14:35:24
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0031	L.0054	L-.0076	.0499	L-.0001	.0927	L-.0009
#1	L-.0144	L.0059	L-.0399	.0494	L-.0002	.0954	L.0010
#2	.0206	L.0049	L.0248	.0503	L-.0001	.0900	L-.0029

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	37.86	.0313	L-.0013	L-.0007	L-.0015	L-.0058	H55.67
#1	37.62	.0298	L-.0019	L-.0019	L-.0016	L-.0092	H55.36
#2	38.11	.0328	L-.0007	L.0005	L-.0014	L-.0024	H55.99

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	62.07	L-.0002	L-.0003	L-.0008	L.0621	L-.0176	L.0000
#1	61.55	L-.0003	L-.0000	L-.0012	L.0576	L-.0221	L-.0018
#2	62.60	L-.0001	L-.0006	L-.0004	L.0665	L-.0131	L.0019

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	83.46	L-.0101	.0039	.0012	.0838	24.99	L.0001
#1	82.94	L-.0182	.0035	L.0007	.0930	24.82	L.0009
#2	83.98	L-.0019	.0043	.0018	L.0745	25.16	L-.0007

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0134	L-.0019	.2446
#1	L-.0193	L-.0035	.2426
#2	L-.0074	L-.0003	.2465

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Method: 20071 Sample Name: K0701568-001S Operator: MMR
Run Time: 03/12/07 14:37:16
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.895	.5239	.9667	2.020	.0479	1.095	.0514
#1	1.901	.5190	.9763	2.031	.0481	1.103	.0499
#2	1.888	.5289	.9570	2.009	.0477	1.088	.0530

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	38.42	.2333	.4715	.2320	.9419	.4753	H56.48
#1	38.54	.2330	.4739	.2336	.9464	.4805	H56.66
#2	38.30	.2336	.4691	.2304	.9373	.4702	H56.31

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	63.27	.4778	.9594	.5116	L.1773	.9773	.0454
#1	63.55	.4802	.9626	.5168	L.1685	.9700	.0456
#2	63.00	.4754	.9561	.5065	L.1862	.9847	.0451

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	84.67	L-.0070	.4753	.4757	L.0295	25.38	L.0001
#1	85.18	L.0025	.4763	.4786	L-.0034	25.50	L.0003
#2	84.17	L-.0164	.4743	.4727	L.0625	25.26	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.9911	L-.0013	.2488
#1	1.021	L-.0057	.2502
#2	.9614	.0030	.2475

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Method: 20071 Sample Name: K0701568-002 Operator: MMR
Run Time: 03/12/07 14:39:08
Comment: K0701566 1645 1568 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0209	L.0033	L.0034	.0555	L-.0001	.1191	L-.0004
#1	L-.0302	L.0042	L.0057	.0556	L-.0001	.1204	L-.0005
#2	L-.0116	L.0024	L.0011	.0553	L-.0001	.1178	L-.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.23	.0230	L-.0033	L-.0026	L-.0003	L-.0079	H41.65
#1	26.17	.0235	L-.0044	L-.0037	L-.0009	L-.0131	H41.58
#2	26.30	.0225	L-.0022	L-.0014	L.0002	L-.0028	H41.72

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.19	L-.0014	L-.0003	.0139	L-.4367	L-.0029	L-.0041
#1	45.07	L-.0014	L.0007	.0155	L-.6739	L-.0229	L-.0059
#2	45.31	L-.0013	L-.0013	.0123	L-.1995	L.0172	L-.0023

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	73.33	L-.0054	L.0028	.0016	L-.0225	27.44	L-.0000
#1	73.17	L-.0077	L.0024	.0016	L.0630	27.39	L-.0000
#2	73.49	L-.0032	.0032	.0017	L-.1080	27.49	L-.0000

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0089	L-.0032	.1699
#1	L.0015	L-.0084	.1695
#2	L-.0193	L.0019	.1703

Analysis Report 03/12/07 02:43:13 PM page 1

Method: 20071 Sample Name: K0701568-001L Operator: MMR
Run Time: 03/12/07 14:41:23
Comment: K0701566 1645 1568 1/5 DILUTION 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0104	L.0054	L-.0057	.0106	L-.0001	.0275	L.0001
#1	.0303	L.0163	L.0062	.0109	L-.0001	.0255	L.0003
#2	L-.0095	L-.0055	L-.0175	.0102	L-.0000	.0295	L-.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.767	.0054	L.0009	L.0009	L.0024	L.0041	12.43
#1	7.799	.0056	L.0014	.0033	.0034	L.0023	12.47
#2	7.735	.0051	L.0003	L-.0014	L.0015	L.0058	12.40

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.58	L.0002	L-.0029	L-.0044	L.3347	L.0008	L.0030
#1	12.60	.0004	L-.0019	L-.0012	L.6650	L.0008	.0050
#2	12.57	L.0000	L-.0039	L-.0076	L.0044	L.0008	L.0009

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.91	L-.0042	L-.0000	.0010	L-.0029	5.045	L.0003
#1	16.90	L-.0048	L.0010	L.0010	L.0064	5.067	.0015
#2	16.92	L-.0035	L-.0011	.0010	L-.0121	5.022	L-.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0505	L.0013	.0501
#1	L-.0401	L.0013	.0502
#2	L-.0609	L.0013	.0500

Analysis Report QC Standard 03/12/07 02:45:13 PM page 1

Method: 20071 Sample Name: CCV5 Operator: MMR
Run Time: 03/12/07 14:43:22
Comment: ICP4-2-B 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.908	5.262	1.971	.5047	.4951	5.124	.5331
#1	4.947	5.302	1.987	.5118	.5006	5.172	.5372
#2	4.869	5.223	1.955	.4977	.4896	5.077	.5291

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.961	5.286	.5008	.4788	4.963	4.980	4.943
#1	4.991	5.325	.5024	.4835	5.000	4.996	4.985
#2	4.932	5.247	.4992	.4742	4.926	4.964	4.900

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.848	.4936	.4953	5.459	25.20	1.975	.5207
#1	4.813	.4979	.5009	Q5.519	24.87	1.989	.5237
#2	4.882	.4894	.4898	5.398	25.52	1.960	.5177

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.06	Q5.647	.4874	2.464	26.71	5.263	.4927
#1	26.31	Q5.668	.4909	2.483	27.02	5.312	.4976
#2	25.80	Q5.625	.4838	2.446	26.40	5.213	.4878

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.421	2.529	.5090
#1	5.434	2.566	.5154
#2	5.408	2.492	.5027

Analysis Report QC Standard 03/12/07 02:47:09 PM page 1

Method: 20071 Sample Name: CCB5 Operator: MMR
Run Time: 03/12/07 14:45:19
Comment: 79822B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0055	.0009	-.0082	.0000	.0000	.0183	.0005
#1	-.0027	-.0027	-.0175	-.0002	-.0000	.0196	.0006
#2	.0138	.0045	.0010	.0002	.0001	.0170	.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	-.0016	-.0009	-.0009	.0004	-.0096	.0013
#1	.0000	-.0033	-.0011	-.0014	.0006	-.0190	.0017
#2	.0014	.0002	-.0008	-.0005	.0003	-.0002	.0009

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0726	-.0002	-.0026	-.0032	-.4057	-.0065	-.0014
#1	-.1524	-.0002	-.0026	-.0020	-.6961	-.0139	-.0023
#2	.0073	-.0003	-.0026	-.0044	-.1153	.0008	-.0005

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0379	-.0026	-.0012	.0006	.0006	-.0022	-.0008
#1	.0273	-.0022	-.0024	.0008	-.0352	-.0055	-.0009
#2	.0485	-.0029	-.0001	.0003	.0364	.0010	-.0007

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0163	-.0035	-.0001
#1	.0104	-.0040	-.0001
#2	.0223	-.0030	-.0001

Service Request # K0701568_____
Calibration _____031207A_____
QC in calibration__031207A_____
QC Service Request # K0701568_____
PQS - Sample Position Method Blank # 10____
PQS – Sample Position LCSW _____# 11____
STARLIMS run # 79802

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL		X	
13. CRA run	X		
14. ICSA and ICSAB in control	X		
15. Serial dilution run	X		
16. Post spike in control	X		

Comments: Report Se-78 use MRL=2ppb. Report Ni-62.

Primary Review by _____ Date 3/12/07
Secondary Review by _____ Date 3/12/07
R:\icp\misc\data review forms\icpms review form

PLASMAQUAD INSTRUMENT LOG

PQ-5 Sen # 971119

Date: 3/12/07

Operator: [illegible]

Pressures

(i) Pumping state

Anal(3):

(ii) Operate state

Expn (2): 2.2×10^{0} Inter(1): 1.0×10^{-4} Anal(3): 1.0×10^{-6}

Ion lens settings

EXTR: 1.90 L1: 8.02 L3: 5.16

COLL: 7.68 L2: 4.18 L4: 3.80 Pole Bias: 2.50

SX300 quadrupole

Max mass >280 amu? Y / N

ICP generator parameters at normal forward power (1350 W)

Refl.pwr: <5 Plate current: N.A. Grid Current:

PA Voltage:

PA Fillament:

Multiplier high voltage settings

HT1 (ext. dyn. range only): 0.00 HT2: 1.80

Scans on performance monitoring solution

Full range?: (Y) / N Low mass?: Y / N High mass?: Y / N

Water/Gas

Water Temp: 15°c Water Level: full 3/12/07

Gas flows

Neb: 1.098 Aux: 2.0 Cool: 14.5 Neb back pressure:

Other comments: (Changes to instrument/faults noted/service work carried out etc.):

25ppb In → 4.0×10^{5}

Filename: PLASQUAD/09-18-91

Integrals for : MASS CALIB STD 1

Peak	Be 7	Mg 24	Co 59	In 115	Pb 208	Bi 209	U 238
CPS	658285	1369564	496894	223816	49890	75920	40031

MASS CALIBRATION DATA
Mon Mar 12 2007
08:29:24

Actual Mass	Found DAC	Calculated DAC	Calculated Mass
9.01218E+0	1887	1887	9.01101E+0
2.39850E+1	5181	5179	2.39927E+1
5.89332E+1	12858	12862	5.89131E+1
1.14904E+2	25170	25164	1.14929E+2
2.07977E+2	45609	45614	2.07952E+2
2.08980E+2	45834	45835	2.08977E+2
2.38051E+2	52224	52220	2.38068E+2

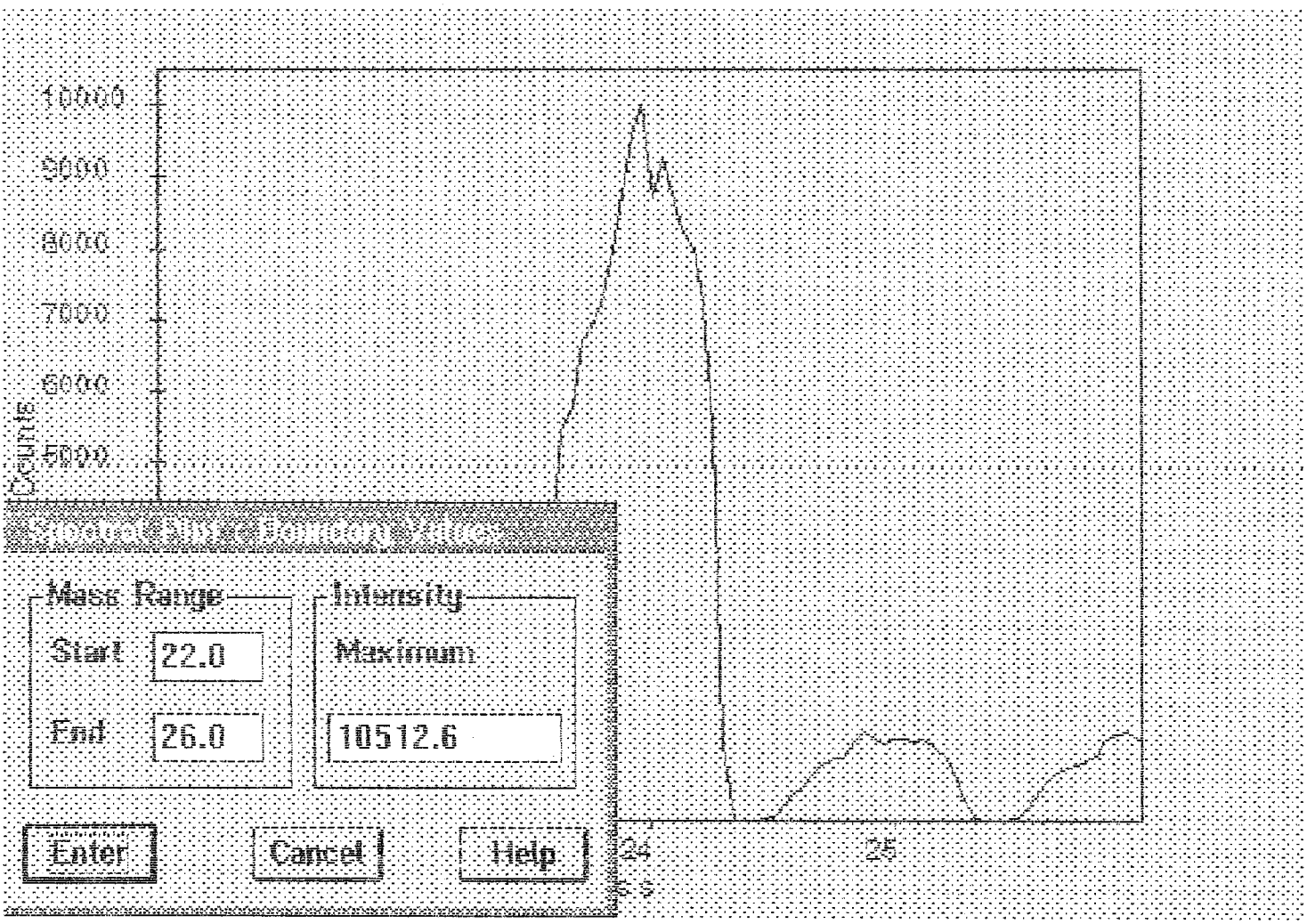
New Mass calibration coeffs
y = a + bx + cx^2 + dx^3
4.29091E-1 4.54783E-3 4.87012E-11 0.00000E+0
Regression coeff = 1.0000E+0

Mass Calibration Calculation

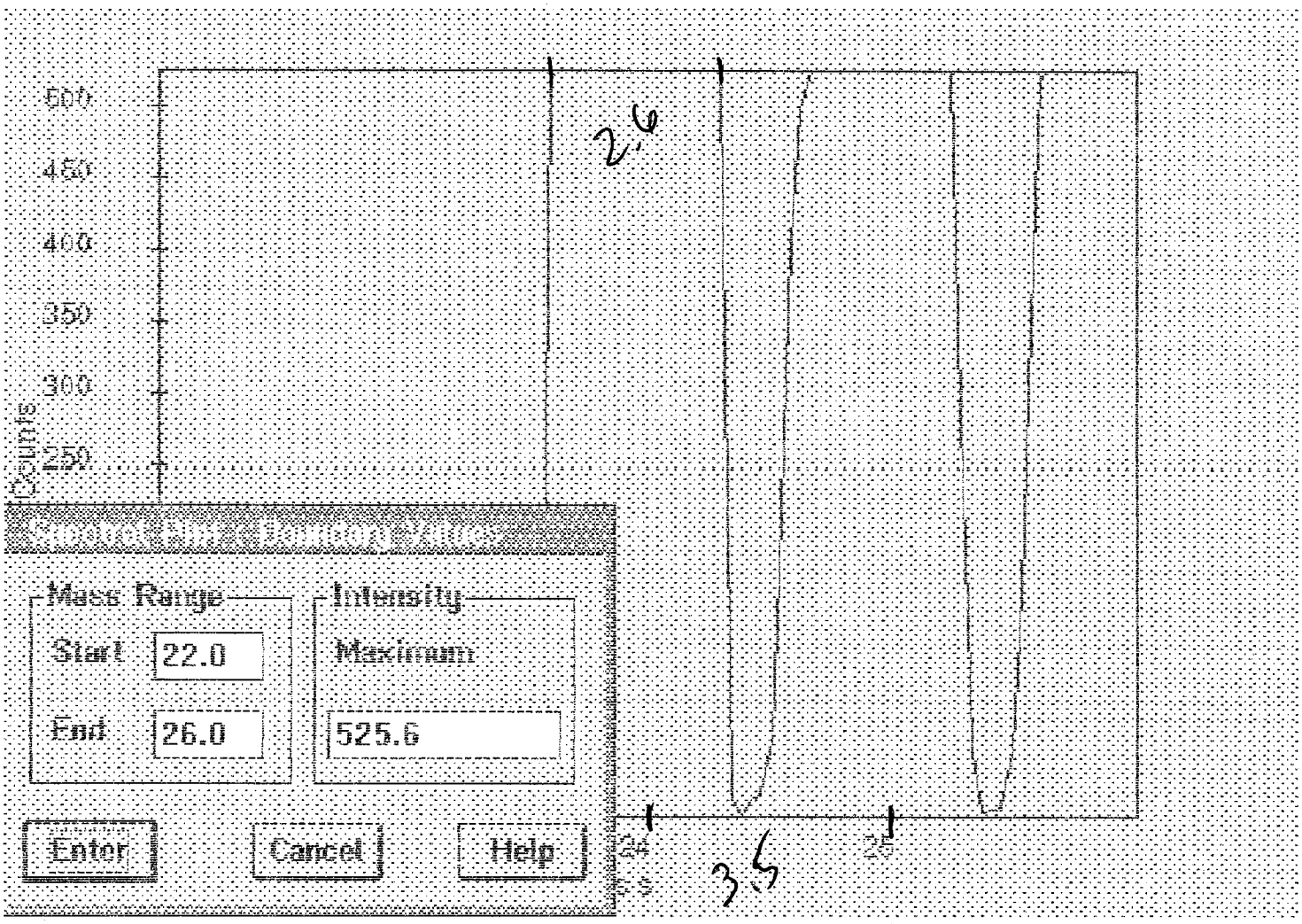
Actual Mass	Calculated Mass	Difference
9.01218	9.01101	0.00117
23.98500	23.9927	-0.0077
58.93320	58.9131	0.0201
114.90400	114.929	-0.025
207.97700	207.952	0.025
208.98000	208.977	0.003
238.05100	238.068	-0.017

3/12/07

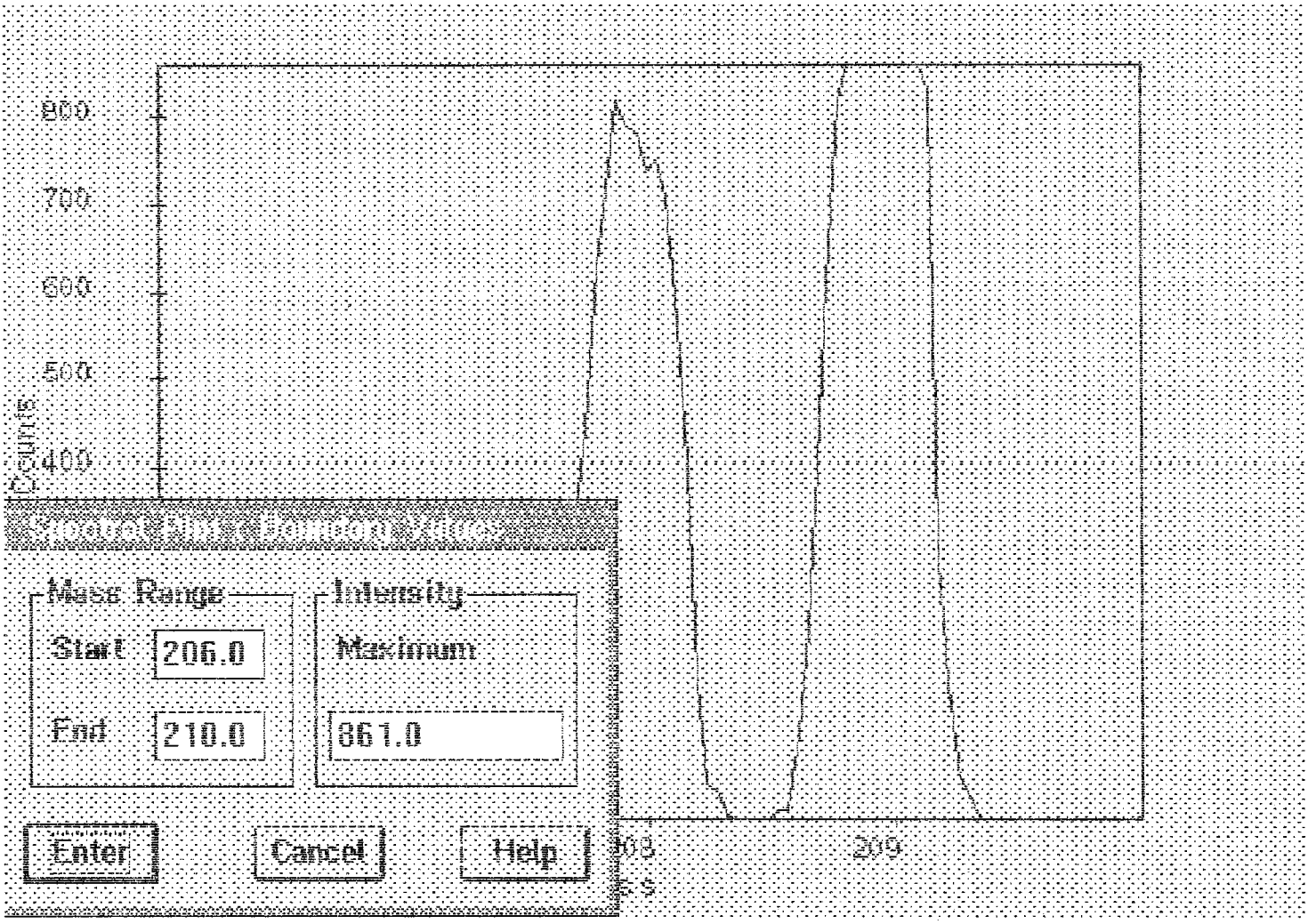
Peak Height
3/12/07



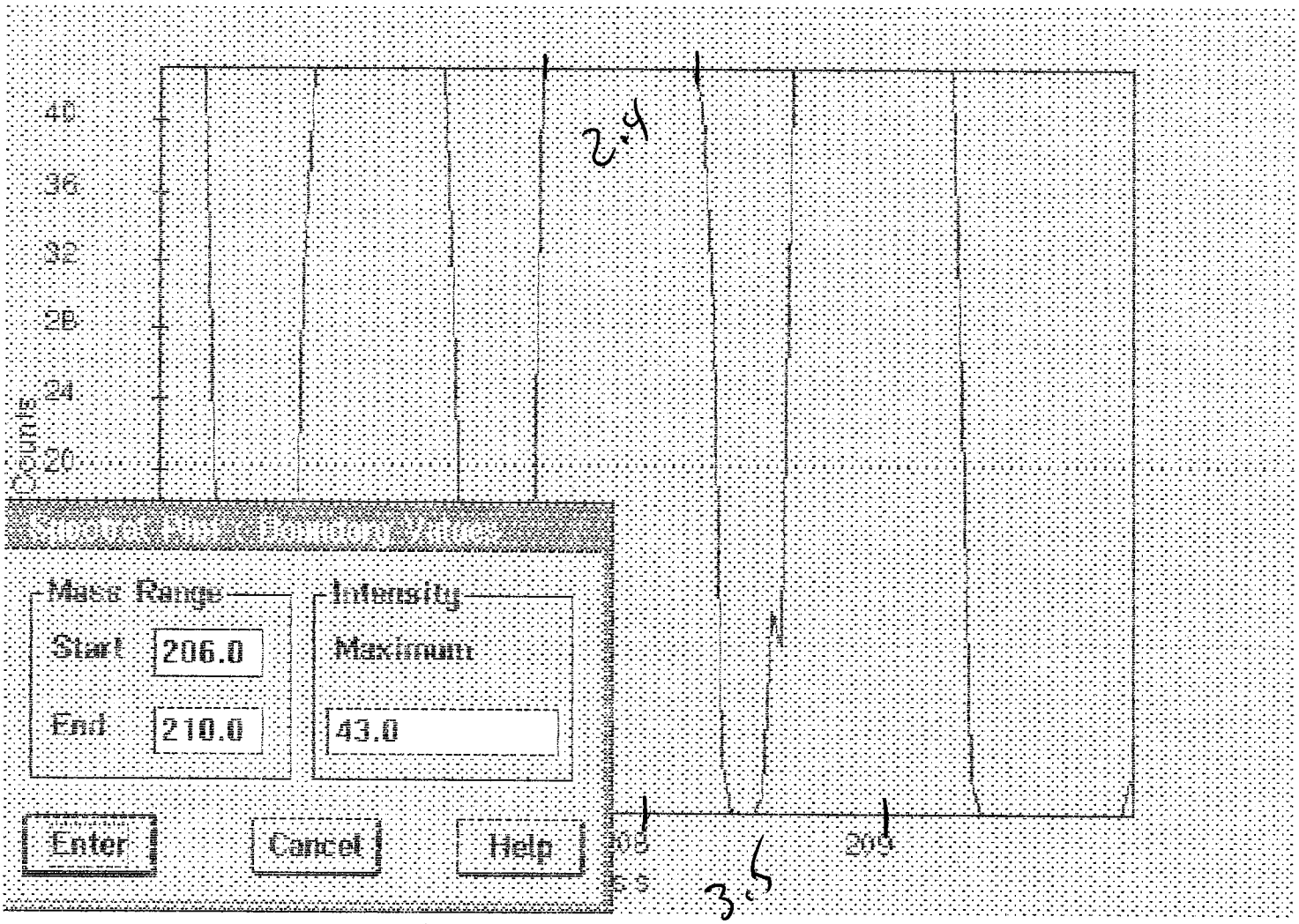
590 peak HELIAC
3/12/07
RES = 2.6 / 3.5 = 0.74



Peak Height
3/12/07



590 PEAK HEIGHT
3/12/07
RES = 2.4 / 3.5 = 0.69



PQ-S #971114 Operator: Greg Jasper

Multi-Element Calibration Mon Mar 12 2007
Calibration graph coefficients for selected isotopes.
User Name : MANAGER
Experiment name : CALIB
Analysis procedure : SHORT TERM STABILITY PROC
Introduction method : DEFAULT
First sample started at : Mon Mar 12 2007 08:33:57
Last sample started at : **********

Polynomial fit : y = a0 + a1.x + a2.x^2
Units of response : y = counts per second
Units of concentration : x = ppb

Element	Symbol	Mass	a0	a1	a2	regression
Beryllium	Be	9	0.0	35371	0.0	1.0000
Magnesium	Mg	24	0.0	62744	0.0	1.0000
Cobalt	Co	59	0.0	32362	0.0	1.0000
Indium	In	115	0.0	17164	0.0	1.0000
Lead	Pb	208	0.0	6131	0.0	1.0000
Bismuth	Bi	209	0.0	9186	0.0	1.0000
Uranium	U	238	0.0	6176	0.0	1.0000

K-ICP-MS-01 Greg Jasper STARLIMS #79702

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : CALIB
Analysis procedure : SHORT TERM STABILITY PROC
Sample name : 25 ppb Tuning Standard
First repeat started at : Mon Mar 12 2007 08:33:57
Last repeat started at : Mon Mar 12 2007 08:33:57
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Magnesium	Cobalt	Indium	Lead	Bismuth	Uranium
Isotope	Be 9	Mg 24	Co 59	In 115	Pb 208	Bi 209	U 238
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Mean	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : CALIB
Analysis procedure : SHORT TERM STABILITY PROC
Sample name : Short Term Stability
First repeat started at : Mon Mar 12 2007 08:35:03
Last repeat started at : Mon Mar 12 2007 08:38:54
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Magnesium	Cobalt	Indium	Lead	Bismuth	Uranium
Isotope	Be 9	Mg 24	Co 59	In 115	Pb 208	Bi 209	U 238
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	24.58	24.74	24.90	25.19	25.08	25.12	24.77
Run 2	25.01	24.82	24.91	24.93	25.01	25.21	25.02
Run 3	24.67	24.85	24.66	24.96	24.97	25.18	25.38
Run 4	24.60	24.60	24.67	24.68	24.98	25.21	24.71
Run 5	24.57	23.66	23.75	24.26	24.97	25.04	25.65
Mean	24.69	24.53	24.58	24.80	25.00	25.15	25.11
Std Dev	0.1866	0.4952	0.4800	0.3510	0.0464	0.0728	0.4026
%SD	0.7556	2.018	1.953	1.415	0.1855	0.2893	1.603

Multi-Element Concentrations Mon Mar 12 2007

Concentration summary for samples.

User Name : MANAGER
Experiment name : CALIB
Analysis procedure : SHORT TERM STABILITY PROC

Introduction method : DEFAULT
First sample started at : Mon Mar 12 2007 08:33:57
Last sample started at : Mon Mar 12 2007 08:35:03
Interference Equations : DEFAULT

Concentration units : ppb

Sample Name	25 ppb Tuning Standard	Short Term Stability
Dilution Factor	1.0000	1.0000

Element	Isotope	Concentration	Concentration
Beryllium	Be 9	25.00	24.69
Magnesium	Mg 24	25.00	24.53
Cobalt	Co 59	25.00	24.58
Indium	In 115	25.00	24.80
Lead	Pb 208	25.00	25.00
Bismuth	Bi 209	25.00	25.15
Uranium	U 238	25.00	25.11

PQ-S #971114 Operator: Greg Jasper

Multi-Element Calibration Mon Mar 12 2007

Calibration graph coefficients for selected isotopes.

User Name : GREG
Experiment name : 031207A
Analysis procedure : EPA Method 6020
Introduction method : DEFAULT
First sample started at : Mon Mar 12 2007 09:32:01
Last sample started at : **********
Internal standards : Li 6 Ga 71 In 115 Lu 175 (Interpolating)
Polynomial fit : y = a0 + a1.x + a2.x^2
Units of response : y = counts per second
Units of concentration : x = ppb

BZ

Element	Symbol	Mass	a0	a1	a2	regression
Beryllium	Be	9	102.0	13376	0.0	1.0000
Chromium	Cr	52	9419	15858	0.0	1.0000
Chromium	Cr	53	1522	1877	0.0	1.0000
Manganese	Mn	55	2488	19292	0.0	1.0000
Cobalt	Co	59	296.6	19007	0.0	1.0000
Nickel	Ni	60	563.3	4490	0.0	1.0000
Nickel	Ni	61	56741	256.5	0.0	1.0000
Nickel	Ni	62	654.3	610.2	0.0	1.0000
Copper	Cu	63	588.8	10638	0.0	1.0000
Copper	Cu	65	443.0	4784	0.0	1.0000
Zinc	Zn	66	225.2	1613	0.0	1.0000
Zinc	Zn	67	67.65	300.1	0.0	1.0000
Zinc	Zn	68	204.3	1097	0.0	1.0000
Arsenic	As	75	90.37	1319	0.0	1.0000
Selenium	Se	77	152.0	94.66	0.0	1.0000
Selenium	Se	78	1633	282.6	0.0	1.0000
Selenium	Se	82	15.98	111.9	0.0	1.0000
Molybdenum	Mo	95	36.35	1137	0.0	1.0000
Molybdenum	Mo	97	40.90	686.3	0.0	1.0000
Molybdenum	Mo	98	73.45	1769	0.0	1.0000
Silver	Ag	107	388.1	5791	0.0	1.0000
Silver	Ag	109	111.8	5338	0.0	1.0000
Cadmium	Cd	111	11.69	720.2	0.0	1.0000
Cadmium	Cd	112	14.61	1358	0.0	1.0000
Cadmium	Cd	114	10.20	1651	0.0	1.0000
Antimony	Sb	121	23.68	1535	0.0	1.0000
Antimony	Sb	123	21.72	1137	0.0	1.0000
Thallium	Tl	203	72.19	1859	0.0	1.0000
Thallium	Tl	205	150.0	4439	0.0	1.0000
Lead	Pb	206	40.31	1564	0.0	1.0000
Lead	Pb	207	40.87	1177	0.0	1.0000
Lead	Pb	208	168.6	5711	0.0	1.0000

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Calibration Blank
First repeat started at : Mon Mar 12 2007 09:32:01
Last repeat started at : Mon Mar 12 2007 09:33:35
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0000	-0.0335	-0.0406	-0.0003	-0.0016	-0.0087	24.61
Run 2	0.0002	-0.0073	-0.0273	0.0083	0.0040	0.0008	-4.690
Run 3	-0.0002	0.0408	0.0680	-0.0081	-0.0024	0.0079	-19.92
Mean	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Std Dev	0.0002	0.0377	0.0592	0.0082	0.0035	0.0083	22.63
%SD	10467	204660000	2551700	490750	242340	755960	74393000

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1223	0.0032	-0.0402	0.0027	0.0124	0.0089
Run 2	0.0121	0.0008	0.0813	-0.0077	-0.0127	0.0024
Run 3	-0.1344	-0.0040	-0.0411	0.0051	0.0004	-0.0113
Mean	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Std Dev	0.1288	0.0037	0.0704	0.0068	0.0125	0.0103
%SD	43522000	155640	4064700	203610	647920	369540

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0392	0.2502	-0.1909	0.2732	0.0003	-0.0004
Run 2	-0.0097	-0.1773	0.3154	-0.1894	-0.0049	0.0132
Run 3	-0.0295	-0.0729	-0.1245	-0.0838	0.0046	-0.0128
Mean	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000
Std Dev	0.0354	0.2229	0.2752	0.2424	0.0048	0.0130
%SD	2330600	10383000	21169000	17291000	493830	1541900

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0055	0.0018	0.0012	-0.0019	-0.0051	-0.0027
Run 2	-0.0024	-0.0025	0.0024	0.0006	-0.0037	0.0031
Run 3	-0.0030	0.0007	-0.0036	0.0013	0.0088	-0.0004
Mean	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000
Std Dev	0.0048	0.0023	0.0031	0.0017	0.0076	0.0029
%SD	1434100	239000	248920	67936	439930	400180

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0048	0.0014	0.0042	0.0000	0.0054	0.0051
Run 2	0.0020	0.0011	-0.0025	-0.0003	-0.0011	-0.0052
Run 3	-0.0068	-0.0025	-0.0017	0.0003	-0.0043	0.0002
Mean	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Std Dev	0.0060	0.0021	0.0036	0.0003	0.0049	0.0051
%SD	526300	13665000	350050	59690	362140	216520

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0033
Run 2	-0.0018
Run 3	-0.0014
Mean	0.0000
Std Dev	0.0028
%SD	110250

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	99.57	99.26	98.85	98.17
Run 2	98.87	98.99	100.2	99.22
Run 3	101.6	101.8	101.0	102.6
Mean	100.00	100.00	100.00	100.00
Std Dev	1.396	1.519	1.071	2.318

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Calibration Standard
First repeat started at : Mon Mar 12 2007 09:34:50
Last repeat started at : Mon Mar 12 2007 09:36:24
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	24.79	24.94	24.88	24.99	25.68	24.88	35.95
Run 2	25.04	24.33	24.90	25.87	24.52	24.98	8.731
Run 3	25.17	25.73	25.23	24.14	24.80	25.14	30.32
Mean	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.1953	0.7035	0.1981	0.8693	0.6055	0.1293	14.37
%SD	0.7813	2.814	0.7922	3.477	2.422	0.5172	57.47

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.36	25.22	25.08	24.32	23.95	25.48
Run 2	25.43	25.15	24.95	25.33	25.94	25.12
Run 3	24.21	24.62	24.97	25.35	25.11	24.40
Mean	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.6828	0.3277	0.0684	0.5913	1.001	0.5492
%SD	2.731	1.311	0.2737	2.365	4.004	2.197

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.97	24.67	25.23	24.50	25.41	24.83
Run 2	24.53	25.60	25.41	24.88	25.21	25.60
Run 3	25.50	24.73	24.36	25.62	24.37	24.57
Mean	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.4823	0.5224	0.5616	0.5666	0.5527	0.5364
%SD	1.929	2.089	2.247	2.266	2.211	2.145

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.11	24.68	24.49	24.71	24.76	24.48
Run 2	25.05	25.39	25.89	25.36	25.44	25.64
Run 3	24.84	24.93	24.62	24.93	24.80	24.87
Mean	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.1421	0.3621	0.7715	0.3265	0.3783	0.5913
%SD	0.5682	1.448	3.086	1.306	1.513	2.365

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

MS16-43-C

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.67	24.44	24.72	25.01	25.08	24.78
Run 2	25.51	25.30	25.79	25.45	25.62	25.33
Run 3	24.82	25.26	24.48	24.54	24.30	24.89
Mean	25.00	25.00	25.00	25.00	25.00	25.00
Std Dev	0.4461	0.4863	0.6982	0.4559	0.6633	0.2911
%SD	1.784	1.945	2.793	1.823	2.653	1.164

CLV
ws 10-43-C

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	24.83
Run 2	25.71
Run 3	24.45
Mean	25.00
Std Dev	0.6440
%SD	2.576

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.8	100.0	100.2	100.0
Run 2	100.4	98.14	99.23	97.83
Run 3	101.8	102.8	103.0	104.0
Mean	101.0	100.3	100.8	100.6
Std Dev	0.6979	2.318	1.954	3.107

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #1
First repeat started at : Mon Mar 12 2007 09:38:04
Last repeat started at : Mon Mar 12 2007 09:39:38
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	2.625	9.993	9.563	25.43	26.29	24.69	50.30
Run 2	2.577	9.662	9.647	26.06	25.49	24.58	29.23
Run 3	2.548	9.474	9.246	25.08	25.65	24.08	33.58
Mean	2.584	9.709	9.486	25.52	25.81	24.45	37.70
Std Dev	0.0390	0.2629	0.2118	0.4956	0.4208	0.3283	11.12
%SD	1.510	2.707	2.233	1.942	1.630	1.342	29.50

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.97	12.80	12.66	25.64	28.53	28.94
Run 2	25.31	12.88	12.60	25.42	28.65	28.10
Run 3	24.80	12.15	12.07	25.98	27.26	27.83
Mean	25.03	12.61	12.44	25.68	28.14	28.29
Std Dev	0.2592	0.4015	0.3251	0.2808	0.7696	0.5797
%SD	1.036	3.184	2.613	1.094	2.734	2.049

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.66	24.94	26.94	27.57	25.81	25.89
Run 2	26.23	25.07	26.55	25.08	26.22	25.00
Run 3	24.91	25.10	25.00	24.45	26.41	25.13
Mean	25.93	25.04	26.16	25.70	26.15	25.34
Std Dev	0.9139	0.0816	1.025	1.649	0.3025	0.4810
%SD	3.524	0.3259	3.919	6.416	1.157	1.898

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.41	11.53	11.79	13.03	13.08	12.79
Run 2	25.88	11.80	11.76	12.96	13.02	13.00
Run 3	24.88	11.27	11.85	12.64	12.87	13.00
Mean	25.39	11.53	11.80	12.88	12.99	12.93
Std Dev	0.4968	0.2622	0.0417	0.2061	0.1090	0.1199
%SD	1.957	2.274	0.3530	1.601	0.8389	0.9275

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

IEV
ms10-41-F

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.79	25.59	26.14	26.01	24.95	26.56
Run 2	24.39	25.20	25.91	25.85	25.42	26.27
Run 3	24.66	25.24	25.54	25.74	24.99	25.94
Mean	24.61	25.34	25.86	25.86	25.12	26.26
Std Dev	0.2034	0.2115	0.2990	0.1353	0.2599	0.3105
%SD	0.8263	0.8346	1.156	0.5231	1.034	1.182

ICV ~510-41-F

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	26.13
Run 2	26.09
Run 3	25.85
Mean	26.02
Std Dev	0.1523
%SD	0.5851

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	98.64	97.04	99.53	95.57
Run 2	99.12	98.54	99.49	96.83
Run 3	99.66	100.4	99.84	97.19
Mean	99.14	98.65	99.62	96.53
Std Dev	0.5105	1.666	0.1937	0.8496

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #2
First repeat started at : Mon Mar 12 2007 09:41:40
Last repeat started at : Mon Mar 12 2007 09:43:15
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	24.95	25.87	24.20	24.85	25.87	25.53	44.85
Run 2	25.19	25.16	23.98	24.81	24.95	24.19	36.45
Run 3	24.73	24.75	25.41	25.44	25.00	24.66	37.08
Mean	24.96	25.26	24.53	25.03	25.27	24.80	39.46
Std Dev	0.2281	0.5702	0.7683	0.3552	0.5187	0.6816	4.681
%SD	0.9141	2.257	3.132	1.419	2.052	2.749	11.86

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.70	25.71	25.39	25.23	25.11	25.49
Run 2	25.37	24.37	24.42	24.66	25.44	25.25
Run 3	25.38	25.20	25.38	25.46	26.38	24.90
Mean	25.48	25.09	25.06	25.12	25.64	25.21
Std Dev	0.1867	0.6774	0.5585	0.4158	0.6574	0.2932
%SD	0.7327	2.700	2.228	1.655	2.564	1.163

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.79	26.83	26.22	26.14	26.16	26.24
Run 2	25.02	23.98	25.22	25.10	24.26	24.36
Run 3	25.35	25.95	25.27	25.28	26.16	24.75
Mean	25.39	25.59	25.57	25.51	25.53	25.12
Std Dev	0.3881	1.462	0.5618	0.5525	1.094	0.9890
%SD	1.528	5.716	2.197	2.166	4.285	3.938

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.70	24.61	25.54	25.41	25.96	25.37
Run 2	24.64	24.77	25.41	25.32	25.77	25.59
Run 3	24.99	25.21	25.79	25.82	25.69	25.71
Mean	24.78	24.86	25.58	25.51	25.81	25.56
Std Dev	0.1844	0.3104	0.1923	0.2671	0.1385	0.1719
%SD	0.7440	1.249	0.7518	1.047	0.5365	0.6724

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

CLV
WS10.43.c

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.01	25.98	25.75	25.87	26.27	26.46
Run 2	24.73	24.80	25.25	25.50	25.51	25.38
Run 3	25.17	25.30	25.15	25.61	26.26	25.73
Mean	24.97	25.36	25.38	25.66	26.01	25.86
Std Dev	0.2224	0.5919	0.3221	0.1930	0.4342	0.5513
%SD	0.8906	2.334	1.269	0.7521	1.669	2.132

CLV
WS10.43-C

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	26.49
Run 2	25.44
Run 3	25.85
Mean	25.93
Std Dev	0.5297
%SD	2.043

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.1	96.83	97.20	94.17
Run 2	99.55	100.0	97.63	96.95
Run 3	101.0	97.06	95.38	95.50
Mean	100.2	97.97	96.74	95.54
Std Dev	0.7346	1.794	1.198	1.390

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #3
First repeat started at : Mon Mar 12 2007 09:45:58
Last repeat started at : Mon Mar 12 2007 09:47:34
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0008	-0.0131	-0.0238	0.0193	-0.0000	0.0040	31.73
Run 2	0.0011	0.0246	0.0361	0.0233	-0.0020	0.0236	5.405
Run 3	0.0015	0.0077	0.0218	0.0287	0.0001	0.0147	37.03
Mean	0.0011	0.0064	0.0114	0.0238	-0.0006	0.0141	24.72
Std Dev	0.0003	0.0189	0.0313	0.0047	0.0012	0.0098	16.94
%SD	30.64	294.2	275.7	19.85	189.8	69.54	68.51

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1366	0.0035	-0.0275	0.0227	0.0078	0.0618
Run 2	-0.1173	0.0065	-0.0328	0.0093	0.0036	0.0794
Run 3	-0.0856	0.0040	-0.0194	0.0066	-0.0065	0.0292
Mean	-0.0221	0.0047	-0.0265	0.0129	0.0016	0.0568
Std Dev	0.1384	0.0016	0.0067	0.0086	0.0074	0.0255
%SD	626.5	33.99	25.33	67.02	453.8	44.86

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0013	0.1555	-0.5465	0.1556	0.0071	-0.0007
Run 2	-0.0279	0.0921	-0.5449	0.0938	0.0111	-0.0239
Run 3	-0.0470	0.1519	-0.5067	-0.1264	0.0072	-0.0213
Mean	-0.0254	0.1332	-0.5327	0.0410	0.0085	-0.0153
Std Dev	0.0230	0.0356	0.0225	0.1482	0.0023	0.0127
%SD	90.48	26.73	4.225	361.3	26.89	83.07

ICB

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0061	0.0296	0.0254	-0.0004	-0.0003	-0.0013
Run 2	-0.0034	0.0213	0.0124	-0.0023	0.0058	0.0062
Run 3	-0.0049	0.0173	0.0099	-0.0014	-0.0019	-0.0001
Mean	-0.0048	0.0227	0.0159	-0.0013	0.0012	0.0016
Std Dev	0.0013	0.0063	0.0083	0.0009	0.0041	0.0040
%SD	27.96	27.65	52.42	70.49	339.0	249.5

See memo
BW 3/12/07

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

ICB

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0217	0.0346	0.0143	0.0024	-0.0021	0.0055
Run 2	0.0060	0.0098	-0.0020	0.0111	0.0074	-0.0083
Run 3	0.0210	0.0090	0.0043	0.0041	-0.0078	0.0147
Mean	0.0162	0.0178	0.0055	0.0059	-0.0008	0.0040
Std Dev	0.0089	0.0146	0.0082	0.0046	0.0077	0.0115
%SD	54.78	81.79	148.6	78.23	917.0	290.8

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0032
Run 2	-0.0030
Run 3	-0.0053
Mean	-0.0038
Std Dev	0.0013
%SD	33.38

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	99.43	95.52	94.23	92.97
Run 2	102.3	94.26	93.40	92.27
Run 3	100.5	92.83	95.92	95.55
Mean	100.8	94.21	94.51	93.60
Std Dev	1.476	1.346	1.285	1.727

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #4
First repeat started at : Mon Mar 12 2007 09:48:31
Last repeat started at : Mon Mar 12 2007 09:50:06
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0001	0.0286	0.0821	0.0165	-0.0002	0.0292	21.12
Run 2	0.0015	0.0372	0.0038	0.0359	-0.0001	0.0116	-1.032
Run 3	0.0005	0.0132	0.0242	0.0252	-0.0017	0.0378	9.356
Mean	0.0007	0.0264	0.0367	0.0259	-0.0007	0.0262	9.814
Std Dev	0.0008	0.0122	0.0406	0.0097	0.0009	0.0133	11.08
%SD	105.2	46.31	110.6	37.67	132.6	50.89	112.9

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0245	0.0025	-0.0370	0.0067	-0.0303	0.0679
Run 2	-0.0150	0.0091	-0.0441	0.0081	-0.0031	0.0204
Run 3	0.1850	0.0060	-0.0361	-0.0009	0.0257	0.0387
Mean	0.0485	0.0059	-0.0391	0.0046	-0.0026	0.0423
Std Dev	0.1183	0.0033	0.0044	0.0048	0.0280	0.0240
%SD	243.9	56.18	11.24	104.6	1080	56.72

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0855	0.7119	-0.4864	0.1483	0.0004	-0.0327
Run 2	0.0218	0.3276	-0.7921	0.1791	-0.0194	-0.0209
Run 3	-0.0556	0.3426	-0.8042	0.0038	0.0132	-0.0177
Mean	-0.0398	0.4607	-0.6942	0.1104	-0.0019	-0.0238
Std Dev	0.0554	0.2177	0.1801	0.0936	0.0164	0.0079
%SD	139.3	47.25	25.94	84.76	854.2	33.32

ICB
Rerun

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0230	0.0222	0.0068	-0.0048	0.0014	0.0013
Run 2	-0.0196	0.0110	0.0036	0.0024	-0.0062	-0.0025
Run 3	-0.0148	0.0073	-0.0001	0.0002	0.0075	0.0013
Mean	-0.0191	0.0135	0.0034	-0.0008	0.0009	0.0001
Std Dev	0.0041	0.0077	0.0035	0.0037	0.0069	0.0022
%SD	21.53	57.46	101.1	490.3	794.3	3645

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0209	0.0045	-0.0100	-0.0045	0.0072	0.0003
Run 2	0.0181	0.0099	-0.0019	-0.0023	0.0099	0.0036
Run 3	0.0154	0.0080	-0.0019	0.0021	-0.0129	-0.0056
Mean	0.0181	0.0075	-0.0046	-0.0016	0.0014	-0.0006
Std Dev	0.0027	0.0027	0.0047	0.0034	0.0124	0.0047
%SD	15.13	36.66	102.0	214.4	885.3	831.3

ICB mean

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0010
Run 2	0.0043
Run 3	-0.0087
Mean	-0.0018
Std Dev	0.0065
%SD	363.8

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.00	94.52	92.75	92.93
Run 2	102.0	94.28	93.57	89.14
Run 3	101.6	93.55	92.88	94.90
Mean	101.2	94.12	93.07	92.32
Std Dev	1.069	0.5049	0.4421	2.926

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #5
First repeat started at : Mon Mar 12 2007 09:51:05
Last repeat started at : Mon Mar 12 2007 09:52:40
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0001	0.0168	0.0038	0.0353	-0.0010	0.0286	36.18
Run 2	0.0012	0.0471	-0.0051	0.0418	-0.0013	0.0258	16.57
Run 3	0.0010	-0.0020	-0.0527	0.0369	-0.0031	0.0321	-29.37
Mean	0.0008	0.0206	-0.0180	0.0380	-0.0018	0.0288	7.793
Std Dev	0.0006	0.0248	0.0304	0.0034	0.0011	0.0031	33.64
%SD	74.17	120.4	168.5	8.952	62.53	10.92	431.7

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1701	0.0070	-0.0286	-0.0058	-0.0032	0.0683
Run 2	-0.0989	0.0019	-0.0390	0.0108	-0.0164	0.0113
Run 3	-0.0387	0.0092	-0.0317	0.0052	-0.0130	0.0692
Mean	0.0108	0.0060	-0.0331	0.0034	-0.0109	0.0496
Std Dev	0.1411	0.0038	0.0053	0.0084	0.0068	0.0332
%SD	1302	62.63	16.14	247.9	62.82	66.89

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0292	-0.0636	-0.6454	0.0578	-0.0072	-0.0157
Run 2	-0.1273	0.6988	-1.015	0.1349	-0.0157	-0.0296
Run 3	-0.0243	-0.1221	-0.5754	0.2152	-0.0039	-0.0304
Mean	-0.0603	0.1710	-0.7453	0.1360	-0.0089	-0.0252
Std Dev	0.0581	0.4580	0.2362	0.0787	0.0061	0.0082
%SD	96.43	267.8	31.70	57.87	68.18	32.69

CLB

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0154	0.0127	-0.0052	0.0002	-0.0005	0.0095
Run 2	-0.0217	0.0035	0.0004	0.0021	-0.0046	-0.0024
Run 3	-0.0177	-0.0019	-0.0049	-0.0038	-0.0047	0.0000
Mean	-0.0183	0.0048	-0.0032	-0.0005	-0.0033	0.0024
Std Dev	0.0032	0.0073	0.0032	0.0030	0.0024	0.0063
%SD	17.35	154.0	98.37	608.2	73.75	264.6

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0209	0.0247	-0.0128	-0.0092	0.0091	-0.0090
Run 2	0.0198	-0.0045	0.0048	-0.0038	-0.0032	0.0006
Run 3	0.0152	0.0258	-0.0185	-0.0100	-0.0003	0.0059
Mean	0.0186	0.0154	-0.0088	-0.0077	0.0019	-0.0008
Std Dev	0.0030	0.0172	0.0121	0.0034	0.0064	0.0075
%SD	16.28	111.8	137.5	43.96	344.3	906.0

CB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0012
Run 2	-0.0015
Run 3	-0.0016
Mean	-0.0006
Std Dev	0.0016
%SD	252.3

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	104.4	94.19	94.23	94.87
Run 2	100.8	94.25	91.99	92.09
Run 3	101.1	98.99	93.41	96.15
Mean	102.1	95.81	93.88	94.37
Std Dev	1.970	2.754	2.163	2.074

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #6
First repeat started at : Mon Mar 12 2007 09:54:00
Last repeat started at : Mon Mar 12 2007 09:55:34
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0214	0.2367	0.2423	0.0950	0.0192	0.2421	37.67
Run 2	0.0229	0.1883	0.2073	0.1016	0.0226	0.1892	35.86
Run 3	0.0218	0.2501	0.2306	0.1005	0.0210	0.2152	4.688
Mean	0.0220	0.2251	0.2267	0.0990	0.0210	0.2155	26.07
Std Dev	0.0008	0.0325	0.0178	0.0035	0.0017	0.0264	18.54
%SD	3.431	14.44	7.865	3.568	8.179	12.27	71.11

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.2800	0.1291	0.0702	0.5395	0.5053	0.6072
Run 2	0.2878	0.1299	0.0833	0.5789	0.3367	0.6027
Run 3	0.0930	0.1127	0.0656	0.5974	0.5173	0.6652
Mean	0.2202	0.1239	0.0730	0.5719	0.4531	0.6250
Std Dev	0.1103	0.0097	0.0092	0.0296	0.1010	0.0349
%SD	50.08	7.829	12.55	5.171	22.29	5.582

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.4455	1.288	0.2987	0.8621	0.0585	0.0304
Run 2	0.6880	1.122	0.3731	1.128	0.0386	0.0243
Run 3	0.7070	1.302	0.6298	1.645	0.0688	0.0000
Mean	0.6135	1.237	0.4338	1.212	0.0553	0.0182
Std Dev	0.1458	0.1002	0.1737	0.3983	0.0154	0.0161
%SD	23.76	8.103	40.05	32.87	27.82	88.05

Water
CRA
WS10-43-E

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0527	0.0321	0.0184	0.0265	0.0211	0.0237
Run 2	0.0282	0.0332	0.0221	0.0214	0.0194	0.0335
Run 3	0.0163	0.0293	0.0196	0.0160	0.0328	0.0309
Mean	0.0324	0.0315	0.0200	0.0213	0.0244	0.0294
Std Dev	0.0186	0.0020	0.0019	0.0053	0.0073	0.0051
%SD	57.33	6.472	9.399	24.70	29.92	17.23

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

water
CRA
MS10.43.E

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0556	0.0425	0.0024	0.0199	0.0272	0.0216
Run 2	0.0581	0.0604	0.0232	0.0144	0.0091	0.0348
Run 3	0.0658	0.0474	0.0025	0.0135	0.0314	0.0395
Mean	0.0598	0.0501	0.0094	0.0159	0.0226	0.0320
Std Dev	0.0053	0.0092	0.0120	0.0034	0.0118	0.0093
%SD	8.816	18.46	127.8	21.51	52.49	29.06

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0230
Run 2	0.0182
Run 3	0.0233
Mean	0.0215
Std Dev	0.0028
%SD	13.21

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.9	92.97	93.07	92.48
Run 2	101.1	92.59	93.54	91.26
Run 3	101.9	93.13	93.91	92.10
Mean	101.3	92.90	93.51	91.95
Std Dev	0.5698	0.2775	0.4167	0.6225

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #7
First repeat started at : Mon Mar 12 2007 09:56:56
Last repeat started at : Mon Mar 12 2007 09:58:30
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0013	0.2727	8.021	0.2121	0.1013	2.127	7.048
Run 2	0.0001	0.2570	8.200	0.2011	0.0829	2.066	16.22
Run 3	0.0018	0.2491	8.358	0.2081	0.0878	2.248	21.87
Mean	0.0010	0.2596	8.193	0.2071	0.0907	2.147	15.05
Std Dev	0.0009	0.0120	0.1688	0.0056	0.0095	0.0927	7.481
%SD	81.16	4.618	2.060	2.687	10.48	4.320	49.72

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	5.575	0.3420	0.6237	3.580	2.153	2.020
Run 2	4.676	0.3213	0.5913	3.442	2.232	1.964
Run 3	5.345	0.3566	0.6025	3.471	2.355	2.030
Mean	5.199	0.3400	0.6058	3.497	2.247	2.004
Std Dev	0.4671	0.0177	0.0165	0.0731	0.1016	0.0358
%SD	8.984	5.219	2.716	2.091	4.522	1.787

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0523	2.092	0.5194	0.4043	191.3	195.1
Run 2	0.0928	1.122	-0.1914	0.1570	187.3	195.8
Run 3	0.1055	0.6999	-0.3330	-0.0168	184.8	195.8
Mean	0.0487	1.305	-0.0016	0.1815	187.8	195.6
Std Dev	0.0877	0.7136	0.4568	0.2116	3.277	0.4307
%SD	180.2	54.69	27762	116.6	1.744	0.2202

ICS-A
ws 10-42-J

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	184.3	0.0005	0.0126	1.231	0.7509	0.7760
Run 2	191.4	-0.0030	0.0038	1.157	0.6547	0.7523
Run 3	189.8	-0.0128	-0.0035	1.201	0.5724	0.7353
Mean	188.5	-0.0051	0.0043	1.196	0.6593	0.7545
Std Dev	3.716	0.0069	0.0081	0.0373	0.0893	0.0204
%SD	1.971	135.1	187.0	3.117	13.55	2.710

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

ICS-A
mS 10-42-S

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0194	0.0259	0.0045	-0.0018	0.6151	0.6861
Run 2	0.0113	0.0110	-0.0089	0.0044	0.5857	0.6063
Run 3	0.0231	0.0189	-0.0056	-0.0101	0.5354	0.5188
Mean	0.0180	0.0186	-0.0033	-0.0025	0.5787	0.6038
Std Dev	0.0060	0.0075	0.0070	0.0073	0.0403	0.0837
%SD	33.62	40.09	209.1	291.2	6.967	13.86

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6583
Run 2	0.6056
Run 3	0.5407
Mean	0.6015
Std Dev	0.0589
%SD	9.796

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.3	81.38	82.48	80.82
Run 2	99.70	84.61	84.11	82.51
Run 3	99.39	84.25	84.17	83.79
Mean	99.80	83.41	83.59	82.37
Std Dev	0.4722	1.772	0.9554	1.491

Sample #7 2

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #8
First repeat started at : Mon Mar 12 2007 09:59:31
Last repeat started at : Mon Mar 12 2007 10:01:06
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0007	19.44	26.27	20.69	20.36	22.07	54.14
Run 2	0.0010	19.77	27.42	20.28	21.04	20.76	57.41
Run 3	0.0015	20.27	28.53	20.76	20.10	21.78	22.67
Mean	0.0011	19.83	27.41	20.58	20.50	21.53	44.74
Std Dev	0.0004	0.4201	1.132	0.2617	0.4883	0.6889	19.19
%SD	35.43	2.118	4.130	1.272	2.382	3.199	42.88

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.87	20.43	20.20	25.53	19.43	22.96
Run 2	26.55	21.11	20.81	25.51	19.59	24.62
Run 3	26.36	19.64	20.48	25.65	20.48	23.37
Mean	25.93	20.39	20.50	25.56	19.73	23.45
Std Dev	0.9243	0.7343	0.3090	0.0767	0.6500	0.8645
%SD	3.565	3.601	1.507	0.3002	3.294	3.655

See memo 3/12/07

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	19.55	1.617	-0.0326	0.1517	190.9	189.1
Run 2	18.96	2.077	0.1707	0.2222	196.1	199.9
Run 3	19.31	1.202	-0.6644	0.5012	196.7	194.2
Mean	19.27	1.632	-0.1754	0.2917	194.6	194.4
Std Dev	0.2939	0.4376	0.4355	0.1848	3.185	5.417
%SD	1.525	26.81	248.3	63.36	1.637	2.786

ICS A+B MS10-42-K

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	189.7	18.64	18.99	22.28	21.81	21.38
Run 2	191.8	19.32	18.48	22.75	22.68	22.29
Run 3	195.4	18.90	19.43	22.55	22.37	21.59
Mean	192.3	18.95	18.97	22.53	22.29	21.75
Std Dev	2.857	0.3414	0.4716	0.2348	0.4410	0.4783
%SD	1.486	1.801	2.486	1.042	1.979	2.199

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0111	0.0167	-0.0032	-0.0086	0.3871	0.4190
Run 2	0.0249	0.0253	-0.0164	-0.0104	0.3157	0.3386
Run 3	0.0478	0.0225	-0.0033	-0.0115	0.2883	0.2816
Mean	0.0279	0.0215	-0.0077	-0.0101	0.3304	0.3464
Std Dev	0.0185	0.0044	0.0076	0.0014	0.0510	0.0690
%SD	66.30	20.40	99.40	14.22	15.44	19.93

ICS - A+P 10-42-K

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.3848
Run 2	0.3303
Run 3	0.2971
Mean	0.3374
Std Dev	0.0443
%SD	13.11

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	99.59	82.56	84.74	83.92
Run 2	98.82	81.59	83.49	82.83
Run 3	100.3	83.41	84.64	86.94
Mean	99.57	82.52	84.29	84.57
Std Dev	0.7366	0.9087	0.6946	2.128

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #9
First repeat started at : Mon Mar 12 2007 10:04:51
Last repeat started at : Mon Mar 12 2007 10:06:25
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0000	18.10	24.37	19.14	19.59	20.74	36.98
Run 2	0.0008	18.72	25.97	18.65	19.48	20.93	38.76
Run 3	0.0019	18.70	24.46	18.68	19.83	21.34	-8.528
Mean	0.0009	18.51	24.93	18.83	19.63	21.00	22.40
Std Dev	0.0009	0.3534	0.9020	0.2727	0.1759	0.3090	26.80
%SD	102.4	1.909	3.618	1.448	0.8961	1.471	119.6

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	22.34	18.37	19.04	23.60	17.32	20.69
Run 2	22.97	18.94	19.00	23.91	17.97	21.56
Run 3	24.38	19.18	19.44	23.83	17.73	22.04
Mean	23.23	18.83	19.16	23.78	17.67	21.43
Std Dev	1.046	0.4148	0.2439	0.1628	0.3321	0.6842
%SD	4.504	2.203	1.273	0.6847	1.879	3.192

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	17.25	1.573	0.0324	0.2816	178.1	175.6
Run 2	17.36	1.676	-0.1167	0.1848	175.2	177.1
Run 3	17.35	1.283	0.2605	0.1312	183.2	186.8
Mean	17.32	1.511	0.0587	0.1992	178.8	179.8
Std Dev	0.0633	0.2039	0.1900	0.0762	4.023	6.063
%SD	0.3651	13.50	323.4	38.27	2.249	3.371

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	169.6	17.23	17.71	21.01	20.62	20.54
Run 2	172.8	17.48	17.63	20.83	20.26	20.33
Run 3	181.3	17.09	18.09	21.16	20.83	20.70
Mean	174.6	17.26	17.81	21.00	20.57	20.53
Std Dev	6.020	0.1996	0.2422	0.1650	0.2884	0.1875
%SD	3.448	1.156	1.360	0.7854	1.402	0.9135

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

ICS A+B 5/10-42-K

ICS A+B ns10-42-K

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0258	0.0148	-0.0088	0.0045	0.2228	0.2343
Run 2	0.0152	0.0046	-0.0113	0.0003	0.2436	0.2976
Run 3	0.0148	0.0159	-0.0087	-0.0010	0.2650	0.2661
Mean	0.0186	0.0118	-0.0096	0.0013	0.2438	0.2660
Std Dev	0.0062	0.0062	0.0015	0.0029	0.0211	0.0316
%SD	33.44	53.02	15.34	226.3	8.662	11.89

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.2236
Run 2	0.2508
Run 3	0.2890
Mean	0.2545
Std Dev	0.0329
%SD	12.91

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	97.98	84.61	84.90	82.26
Run 2	97.64	84.96	85.76	82.28
Run 3	99.70	86.88	86.64	85.47
Mean	98.44	85.48	85.77	83.34
Std Dev	1.105	1.223	0.8689	1.849

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #10
First repeat started at : Mon Mar 12 2007 10:11:02
Last repeat started at : Mon Mar 12 2007 10:12:37
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	-0.0008	0.0537	0.1444	0.0219	-0.0030	0.0633	30.90
Run 2	-0.0003	0.1271	0.1716	0.0490	-0.0005	0.0299	9.632
Run 3	-0.0003	0.1243	0.0423	0.0409	-0.0023	0.0519	18.83
Mean	-0.0005	0.1017	0.1194	0.0373	-0.0019	0.0484	19.79
Std Dev	0.0003	0.0416	0.0682	0.0139	0.0013	0.0170	10.67
%SD	65.95	40.92	57.08	37.35	67.35	35.10	53.91

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0071	0.0239	-0.0212	0.1613	0.0723	0.1663
Run 2	0.1565	0.0226	-0.0199	0.1204	0.0648	0.1569
Run 3	-0.0156	0.0210	-0.0212	0.1310	0.0434	0.1333
Mean	0.0494	0.0225	-0.0208	0.1375	0.0601	0.1522
Std Dev	0.0935	0.0015	0.0008	0.0212	0.0150	0.0170
%SD	189.5	6.509	3.672	15.42	24.93	11.17

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.1409	0.3134	-0.9725	-0.1481	0.0201	0.0095
Run 2	-0.0401	-0.0721	-1.169	0.0316	0.0137	0.0133
Run 3	-0.1042	0.5459	-0.8658	-0.0349	0.0292	0.0012
Mean	-0.0951	0.2624	-1.002	-0.0504	0.0210	0.0080
Std Dev	0.0510	0.3121	0.1536	0.0908	0.0078	0.0062
%SD	53.67	118.9	15.33	180.1	36.96	76.94

K1546
K1566
K1568
K1645
MD

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0199	0.0078	-0.0004	0.0016	0.0068	0.0107
Run 2	0.0184	0.0095	-0.0025	-0.0005	0.0070	0.0121
Run 3	0.0203	0.0053	-0.0019	0.0068	0.0157	0.0120
Mean	0.0196	0.0075	-0.0016	0.0026	0.0098	0.0116
Std Dev	0.0010	0.0021	0.0011	0.0037	0.0051	0.0007
%SD	5.094	28.56	65.61	143.2	51.47	6.439

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0049	-0.0031	-0.0250	-0.0207	-0.0079	-0.0092
Run 2	0.0043	0.0075	-0.0245	-0.0245	-0.0140	-0.0033
Run 3	0.0041	0.0038	-0.0233	-0.0255	-0.0100	-0.0208
Mean	0.0012	0.0027	-0.0243	-0.0236	-0.0106	-0.0111
Std Dev	0.0053	0.0054	0.0008	0.0025	0.0031	0.0089
%SD	458.0	198.3	3.423	10.62	28.76	80.07

K1546
K1566
K1568
K1645
MB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0130
Run 2	-0.0141
Run 3	-0.0155
Mean	-0.0142
Std Dev	0.0013
%SD	8.844

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	101.9	98.38	95.94	89.21
Run 2	100.7	96.48	95.22	93.22
Run 3	102.3	97.01	95.86	93.16
Mean	101.6	97.29	95.68	91.87
Std Dev	0.8193	0.9828	0.3925	2.297

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #11
First repeat started at : Mon Mar 12 2007 10:13:46
Last repeat started at : Mon Mar 12 2007 10:15:21
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	20.41	19.65	18.45	19.91	19.54	18.22	49.81
Run 2	20.45	19.54	19.80	20.51	19.87	19.38	49.59
Run 3	20.71	19.60	19.47	19.69	19.03	19.44	55.66
Mean	20.52	19.60	19.24	20.04	19.48	19.02	51.68
Std Dev	0.1642	0.0566	0.7053	0.4225	0.4198	0.6894	3.442
%SD	0.8001	0.2886	3.666	2.108	2.155	3.625	6.659

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	19.20	19.11	20.23	19.45	20.67	20.45
Run 2	19.98	20.94	20.20	20.43	20.65	20.38
Run 3	19.34	19.03	20.09	19.74	19.87	20.53
Mean	19.51	19.69	20.17	19.87	20.40	20.46
Std Dev	0.4174	1.085	0.0725	0.5035	0.4578	0.0731
%SD	2.140	5.507	0.3592	2.533	2.244	0.3575

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	19.73	19.62	19.24	18.67	19.76	19.74
Run 2	19.76	20.99	19.82	19.35	19.35	19.79
Run 3	20.46	19.89	19.61	20.89	19.76	19.58
Mean	19.98	20.17	19.56	19.63	19.63	19.70
Std Dev	0.4098	0.7230	0.2929	1.137	0.2375	0.1123
%SD	2.051	3.585	1.497	5.791	1.210	0.5699

K1546
K1566
K1568
K1645
LCM

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	20.65	19.03	19.06	19.99	20.24	19.22
Run 2	19.82	18.53	18.87	19.67	19.73	18.90
Run 3	20.42	19.46	19.39	19.97	19.89	20.18
Mean	20.30	19.00	19.11	19.88	19.95	19.43
Std Dev	0.4270	0.4659	0.2676	0.1774	0.2610	0.6646
%SD	2.103	2.451	1.401	0.8922	1.308	3.419

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	19.71	19.89	20.66	20.46	21.08	20.55
Run 2	19.48	20.03	20.33	20.38	21.01	20.56
Run 3	19.85	20.23	20.55	20.40	20.14	20.39
Mean	19.68	20.05	20.51	20.41	20.74	20.50
Std Dev	0.1859	0.1703	0.1641	0.0427	0.5255	0.0976
%SD	0.9445	0.8494	0.7998	0.2092	2.533	0.4761

K1546
K1566
K1568
K1645
LCSw

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	20.92
Run 2	20.72
Run 3	20.36
Mean	20.67
Std Dev	0.2829
%SD	1.369

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	101.9	99.02	95.00	91.25
Run 2	102.7	96.03	97.04	92.83
Run 3	99.97	98.39	95.89	94.11
Mean	101.5	97.81	95.98	92.73
Std Dev	1.393	1.576	1.026	1.434

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #12
First repeat started at : Mon Mar 12 2007 10:18:27
Last repeat started at : Mon Mar 12 2007 10:20:01
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

3/14/07

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0172	2.199	6.072	450.8	1.555	15.77	131.3
Run 2	0.0168	2.210	5.241	456.1	1.613	16.09	90.27
Run 3	0.0178	2.200	5.386	466.4	1.651	15.42	127.0
Mean	0.0173	2.203	5.566	457.8	1.606	15.76	116.2
Std Dev	0.0005	0.0061	0.4438	7.932	0.0483	0.3327	22.54
%SD	2.782	0.2789	7.973	1.733	3.008	2.111	19.40

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.539	2.535	2.796	21.43	36.22	35.30
Run 2	2.758	2.631	2.791	20.65	36.86	35.37
Run 3	2.912	2.582	2.884	20.69	38.07	35.90
Mean	2.736	2.583	2.824	20.93	37.05	35.52
Std Dev	0.1873	0.0484	0.0521	0.4394	0.9368	0.3267
%SD	6.845	1.874	1.844	2.100	2.528	0.9198

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.231	2.429	0.7468	5.217	5.480	5.096
Run 2	3.232	2.053	1.155	5.017	5.640	5.333
Run 3	3.304	2.336	1.651	5.022	5.565	5.543
Mean	3.256	2.273	1.184	5.085	5.562	5.324
Std Dev	0.0417	0.1957	0.4531	0.1140	0.0800	0.2236
%SD	1.280	8.612	38.26	2.241	1.438	4.200

K1566-6

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	5.434	0.0414	0.0363	0.2383	0.2169	0.2122
Run 2	5.119	0.0413	0.0347	0.2272	0.2071	0.2057
Run 3	5.332	0.0313	0.0175	0.2244	0.2443	0.2077
Mean	5.295	0.0380	0.0295	0.2300	0.2228	0.2085
Std Dev	0.1605	0.0058	0.0104	0.0073	0.0192	0.0033
%SD	3.030	15.29	35.21	3.187	8.636	1.604

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1566.6

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.6005	0.6397	-0.0161	-0.0074	0.5891	0.6549
Run 2	0.6774	0.5838	-0.0188	-0.0149	0.6729	0.6627
Run 3	0.6479	0.6791	-0.0211	-0.0168	0.5898	0.6174
Mean	0.6419	0.6342	-0.0187	-0.0130	0.6173	0.6450
Std Dev	0.0388	0.0479	0.0025	0.0050	0.0481	0.0242
%SD	6.044	7.554	13.35	38.34	7.800	3.751

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6349
Run 2	0.6584
Run 3	0.6542
Mean	0.6492
Std Dev	0.0125
%SD	1.928

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	92.95	72.63	77.13	81.65
Run 2	93.81	73.61	77.29	82.38
Run 3	93.56	72.40	76.03	81.35
Mean	93.44	72.88	76.82	81.79
Std Dev	0.4397	0.6438	0.6874	0.5266

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #13
First repeat started at : Mon Mar 12 2007 10:21:01
Last repeat started at : Mon Mar 12 2007 10:22:36
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

B311207

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0171	2.139	5.605	459.7	1.552	16.37	132.0
Run 2	0.0148	2.216	6.087	458.1	1.640	14.50	113.4
Run 3	0.0156	2.326	6.116	466.8	1.626	14.59	108.9
Mean	0.0158	2.227	5.936	461.7	1.606	15.15	118.1
Std Dev	0.0012	0.0939	0.2872	4.447	0.0476	1.052	12.24
%SD	7.639	4.217	4.837	0.9632	2.966	6.945	10.36

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.874	2.631	2.878	22.27	36.78	36.90
Run 2	2.853	2.634	2.937	21.96	36.82	36.77
Run 3	2.636	2.464	3.008	21.72	36.80	36.71
Mean	2.788	2.576	2.941	21.98	36.80	36.79
Std Dev	0.1317	0.0974	0.0652	0.2733	0.0210	0.0962
%SD	4.725	3.779	2.215	1.243	0.0570	0.2615

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.661	2.276	1.754	5.900	5.397	5.609
Run 2	3.436	2.062	1.729	5.466	5.347	5.291
Run 3	3.631	1.702	1.357	5.435	5.566	5.367
Mean	3.576	2.013	1.613	5.600	5.437	5.422
Std Dev	0.1221	0.2901	0.2227	0.2600	0.1150	0.1663
%SD	3.415	14.41	13.80	4.643	2.114	3.067

K156-604

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	5.281	0.0247	0.0151	0.2351	0.2386	0.2209
Run 2	5.220	0.0311	0.0089	0.2269	0.2175	0.1961
Run 3	5.573	0.0051	0.0091	0.2188	0.1784	0.2339
Mean	5.358	0.0203	0.0110	0.2269	0.2115	0.2170
Std Dev	0.1892	0.0136	0.0035	0.0081	0.0306	0.0192
%SD	3.531	66.80	32.14	3.589	14.46	8.861

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

F1566.6D-8

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.5882	0.5736	-0.0213	-0.0117	0.6058	0.6067
Run 2	0.5736	0.5569	-0.0156	-0.0149	0.5572	0.6611
Run 3	0.6480	0.6158	-0.0216	-0.0183	0.6266	0.7371
Mean	0.6032	0.5821	-0.0195	-0.0150	0.5965	0.6683
Std Dev	0.0395	0.0303	0.0033	0.0033	0.0356	0.0655
%SD	6.541	5.214	17.16	21.96	5.966	9.798

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6491
Run 2	0.6078
Run 3	0.6926
Mean	0.6499
Std Dev	0.0424
%SD	6.522

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	91.76	72.92	77.22	82.21
Run 2	90.66	74.01	77.50	84.43
Run 3	93.53	74.50	75.38	83.71
Mean	91.98	73.81	76.70	83.45
Std Dev	1.446	0.8070	1.152	1.135

K-ICP-MS-01 Greg Jasper STARLIMS #79920

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #14
First repeat started at : Mon Mar 12 2007 10:23:59
Last repeat started at : Mon Mar 12 2007 10:25:34
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

B310207

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0044	0.4703	1.422	111.0	0.3244	3.088	44.88
Run 2	0.0036	0.5031	1.299	110.4	0.3070	2.852	44.89
Run 3	0.0041	0.4765	1.169	110.6	0.2932	2.765	46.82
Mean	0.0040	0.4833	1.297	110.7	0.3082	2.902	45.53
Std Dev	0.0004	0.0175	0.1264	0.3792	0.0156	0.1673	1.123
%SD	10.24	3.613	9.749	0.3425	5.062	5.766	2.466

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.5664	0.5314	0.5687	4.560	7.090	7.031
Run 2	0.6927	0.5634	0.6172	4.353	6.991	6.856
Run 3	0.6462	0.5423	0.5489	4.611	6.438	6.895
Mean	0.6351	0.5457	0.5783	4.508	6.840	6.927
Std Dev	0.0638	0.0163	0.0352	0.1369	0.3512	0.0916
%SD	10.05	2.988	6.078	3.036	5.135	1.323

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.8949	0.2205	-0.1541	1.937	0.9226	0.9963
Run 2	1.071	0.3261	0.0276	2.557	0.9231	1.020
Run 3	1.014	0.2573	0.1500	2.173	0.9830	1.016
Mean	0.9933	0.2680	0.0079	2.223	0.9429	1.011
Std Dev	0.0897	0.0536	0.1530	0.3132	0.0347	0.0127
%SD	9.035	20.00	1947	14.09	3.683	1.259

K1566-6L
1/5

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.9313	-0.0099	-0.0046	0.0465	0.0332	0.0532
Run 2	0.9182	0.0016	-0.0041	0.0466	0.0490	0.0701
Run 3	0.8713	-0.0020	-0.0055	0.0453	0.0450	0.0174
Mean	0.9070	-0.0034	-0.0047	0.0461	0.0424	0.0469
Std Dev	0.0315	0.0059	0.0007	0.0007	0.0082	0.0269
%SD	3.476	171.0	15.21	1.570	19.37	57.31

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1480	0.1304	-0.0208	-0.0092	0.1205	0.1489
Run 2	0.1345	0.1177	-0.0036	-0.0057	0.1459	0.1342
Run 3	0.1505	0.1516	-0.0050	-0.0059	0.1350	0.1398
Mean	0.1443	0.1332	-0.0098	-0.0069	0.1338	0.1410
Std Dev	0.0086	0.0171	0.0095	0.0020	0.0128	0.0075
%SD	5.965	12.86	97.42	28.26	9.539	5.294

K1566-6L
1/5

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.1395
Run 2	0.1374
Run 3	0.1433
Mean	0.1400
Std Dev	0.0030
%SD	2.112

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	96.22	88.43	89.94	91.26
Run 2	95.74	88.90	89.77	90.57
Run 3	97.39	89.15	88.41	91.40
Mean	96.45	88.83	89.37	91.08
Std Dev	0.8505	0.3673	0.8387	0.4412

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #15
First repeat started at : Mon Mar 12 2007 10:26:50
Last repeat started at : Mon Mar 12 2007 10:28:24
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	18.38	21.04	23.41	45[illegible]	21.60	33.69	129.1
Run 2	18.44	20.77	23.58	443.[illegible]	22.13	33.22	143.3
Run 3	18.33	20.92	24.35	453.[illegible]	21.78	31.16	101.5
Mean	18.38	20.91	23.78	450.3	21.83	32.69	124.6
Std Dev	0.0534	0.1359	0.5016	6.096	0.2684	1.349	21.30
%SD	0.2904	0.6498	2.109	1.354	1.229	4.128	17.09

B 31207

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	21.06	20.72	21.63	41.55	55.98	53.79
Run 2	21.64	20.88	20.98	40.55	54.23	53.77
Run 3	21.31	20.80	21.77	42.16	55.94	53.55
Mean	21.34	20.80	21.46	41.42	55.38	53.70
Std Dev	0.2900	0.0790	0.4190	0.8096	1.001	0.1326
%SD	1.359	0.3800	1.952	1.954	1.808	0.2469

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	27.16	23.97	24.47	28.74	27.43	27.49
Run 2	26.19	24.85	24.72	27.14	26.82	27.74
Run 3	27.54	22.11	24.07	27.18	28.50	28.20
Mean	26.96	23.64	24.42	27.68	27.59	27.81
Std Dev	0.6977	1.399	0.3250	0.9129	0.8500	0.3614
%SD	2.587	5.918	1.331	3.298	3.081	1.300

K1566-6A
+29ppb

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	27.04	18.37	18.33	20.81	20.40	20.39
Run 2	26.99	18.64	18.34	20.92	21.05	20.79
Run 3	27.59	18.41	18.73	20.73	20.45	20.35
Mean	27.21	18.48	18.47	20.82	20.63	20.51
Std Dev	0.3306	0.1419	0.2260	0.0921	0.3654	0.2416
%SD	1.215	0.7680	1.224	0.4424	1.771	1.178

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	20.87	21.51	17.93	17.97	17.94	17.96
Run 2	21.19	21.27	18.33	18.16	18.46	18.25
Run 3	21.05	21.12	17.64	17.78	17.49	17.79
Mean	21.04	21.30	17.97	17.97	17.96	18.00
Std Dev	0.1590	0.1975	0.3458	0.1877	0.4853	0.2322
%SD	0.7560	0.9272	1.924	1.044	2.701	1.290

JC1566-6A
x2ppb

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	18.04
Run 2	18.30
Run 3	17.71
Mean	18.02
Std Dev	0.2953
%SD	1.639

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	92.63	72.60	76.37	82.17
Run 2	92.86	74.11	76.19	82.33
Run 3	93.90	74.50	77.40	84.80
Mean	93.13	73.73	76.65	83.10
Std Dev	0.6765	1.003	0.6502	1.476

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #16
First repeat started at : Mon Mar 12 2007 10:30:44
Last repeat started at : Mon Mar 12 2007 10:32:19
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	25.11	25.63	23.82	26.25	25.55	25.95	65.81
Run 2	25.70	24.95	24.16	25.75	26.19	25.41	59.02
Run 3	24.69	25.81	24.08	24.24	25.47	25.06	47.42
Mean	25.16	25.46	24.02	25.41	25.74	25.47	57.42
Std Dev	0.5060	0.4558	0.1753	1.042	0.3913	0.4483	9.295
%SD	2.011	1.790	0.7300	4.101	1.520	1.760	16.19

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	27.16	25.58	25.62	25.22	26.93	26.28
Run 2	25.24	24.81	25.67	25.70	26.38	25.63
Run 3	24.00	25.05	25.59	25.26	24.12	24.83
Mean	25.47	25.15	25.63	25.39	25.81	25.58
Std Dev	1.588	0.3954	0.0436	0.2693	1.490	0.7285
%SD	6.234	1.572	0.1701	1.060	5.775	2.848

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.92	26.49	26.17	27.35	24.02	24.94
Run 2	25.53	26.26	25.80	23.94	24.56	25.27
Run 3	24.06	24.76	24.58	23.55	25.23	25.61
Mean	25.50	25.84	25.52	24.94	24.60	25.27
Std Dev	1.430	0.9443	0.8331	2.088	0.6069	0.3348
%SD	5.607	3.654	3.265	8.370	2.467	1.325

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.54	24.69	24.80	25.01	25.27	25.34
Run 2	25.31	25.17	25.64	25.56	25.65	25.58
Run 3	24.14	24.30	24.77	25.14	24.89	24.76
Mean	25.00	24.72	25.07	25.24	25.27	25.23
Std Dev	0.7509	0.4375	0.4922	0.2913	0.3835	0.4182
%SD	3.004	1.770	1.963	1.154	1.518	1.657

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

CV
WS10-43-C

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.17	24.99	26.68	26.25	26.76	26.72
Run 2	25.34	25.57	26.03	26.55	26.72	26.28
Run 3	24.24	24.87	25.84	25.40	25.72	25.85
Mean	24.58	25.14	26.18	26.07	26.40	26.28
Std Dev	0.6587	0.3716	0.4391	0.5976	0.5897	0.4360
%SD	2.679	1.478	1.677	2.293	2.234	1.659

CV
WS1047.C

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	26.41
Run 2	26.43
Run 3	25.68
Mean	26.17
Std Dev	0.4290
%SD	1.639

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	98.84	90.83	93.66	89.71
Run 2	96.37	92.08	91.73	90.41
Run 3	102.4	99.59	99.65	97.79
Mean	99.20	94.17	95.01	92.64
Std Dev	3.034	4.739	4.131	4.478

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #17
First repeat started at : Mon Mar 12 2007 10:37:03
Last repeat started at : Mon Mar 12 2007 10:38:37
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0003	0.0122	0.1213	0.0792	0.0013	0.0819	21.51
Run 2	-0.0003	0.0306	0.0873	0.0483	-0.0009	0.0784	29.20
Run 3	-0.0002	0.0321	0.0778	0.0331	-0.0004	0.0666	33.45
Mean	-0.0001	0.0250	0.0955	0.0535	0.0000	0.0756	28.06
Std Dev	0.0003	0.0111	0.0229	0.0235	0.0011	0.0080	6.056
%SD	660.9	44.49	23.97	43.90	14738	10.59	21.59

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1000	0.0341	-0.0188	0.0710	0.0934	0.1379
Run 2	0.0010	0.0293	-0.0195	0.0678	0.0453	0.0801
Run 3	0.1316	0.0373	-0.0198	0.0666	0.0136	0.1738
Mean	0.0775	0.0336	-0.0194	0.0684	0.0508	0.1306
Std Dev	0.0681	0.0040	0.0005	0.0023	0.0402	0.0472
%SD	87.92	11.98	2.727	3.322	79.10	36.18

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0803	0.4173	-0.7671	-0.0399	0.0006	-0.0397
Run 2	-0.0349	-0.0290	-1.033	0.0599	0.0022	-0.0285
Run 3	-0.0209	0.1876	-0.7346	0.0551	-0.0040	-0.0335
Mean	-0.0454	0.1920	-0.8448	0.0251	-0.0004	-0.0339
Std Dev	0.0310	0.2232	0.1636	0.0563	0.0032	0.0056
%SD	68.39	116.3	19.37	224.6	767.9	16.64

CIB

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0261	0.0108	0.0071	-0.0022	-0.0008	0.0020
Run 2	-0.0218	0.0216	0.0060	0.0003	0.0007	0.0009
Run 3	-0.0157	0.0153	0.0047	-0.0041	0.0082	-0.0002
Mean	-0.0212	0.0159	0.0059	-0.0020	0.0027	0.0009
Std Dev	0.0053	0.0054	0.0012	0.0022	0.0048	0.0011
%SD	24.80	34.06	19.85	113.2	177.5	120.4

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0048	-0.0003	0.0075	0.0100	-0.0002	-0.0007
Run 2	0.0061	0.0049	0.0190	0.0146	-0.0008	0.0035
Run 3	0.0040	-0.0051	0.0076	0.0119	-0.0040	0.0028
Mean	0.0050	-0.0002	0.0114	0.0122	-0.0016	0.0019
Std Dev	0.0011	0.0050	0.0066	0.0023	0.0020	0.0022
%SD	21.66	2780	58.02	19.18	124.3	119.6

CB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0032
Run 2	-0.0011
Run 3	-0.0014
Mean	-0.0019
Std Dev	0.0011
%SD	59.08

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.5	97.89	98.75	95.59
Run 2	100.8	98.86	98.50	98.00
Run 3	100.8	95.79	96.59	95.38
Mean	100.7	97.51	97.95	96.32
Std Dev	0.1474	1.570	1.182	1.458

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #18
First repeat started at : Mon Mar 12 2007 10:41:07
Last repeat started at : Mon Mar 12 2007 10:42:41
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

3/12/07

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	19.26	22.17	24.76	489.1	22.51	33.32	90.10
Run 2	18.89	21.80	24.95	472.3	22.39	33.88	101.6
Run 3	18.89	22.85	24.54	478.9	22.84	33.38	104.1
Mean	19.01	22.27	24.75	480.2	22.58	33.53	98.58
Std Dev	0.2167	0.5320	0.2065	8.343	0.2297	0.3074	7.456
%SD	1.139	2.388	0.8342	1.737	1.017	0.9168	7.563

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	22.36	22.13	21.99	41.70	58.08	58.95
Run 2	21.67	21.01	22.10	42.30	54.39	56.38
Run 3	22.40	21.30	22.67	42.83	56.72	56.47
Mean	22.15	21.48	22.25	42.28	56.40	57.27
Std Dev	0.4102	0.5798	0.3609	0.5657	1.866	1.455
%SD	1.852	2.699	1.622	1.338	3.309	2.541

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	27.22	25.65	25.52	26.50	29.33	29.74
Run 2	27.06	24.21	24.57	29.24	28.82	27.56
Run 3	27.99	23.75	24.43	27.38	30.40	30.92
Mean	27.42	24.53	24.84	27.71	29.51	29.41
Std Dev	0.4990	0.9907	0.5938	1.399	0.8053	1.704
%SD	1.819	4.038	2.390	5.050	2.728	5.794

3/12/07
K156-6SPK

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	28.84	18.99	19.13	21.42	21.41	20.98
Run 2	27.17	18.59	18.92	21.62	21.89	21.36
Run 3	29.17	19.38	19.59	21.97	21.98	21.39
Mean	28.39	19.05	19.21	21.67	21.76	21.24
Std Dev	1.074	0.5008	0.3437	0.2802	0.3083	0.2282
%SD	3.784	2.628	1.789	1.293	1.417	1.074

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

F1566-65pc

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	21.70	21.07	18.35	18.25	18.58	18.71
Run 2	21.47	22.25	18.24	18.62	18.58	19.27
Run 3	21.21	22.32	17.44	18.28	18.10	18.51
Mean	21.46	21.88	18.01	18.38	18.42	18.83
Std Dev	0.2406	0.7008	0.4969	0.2032	0.2793	0.3958
%SD	1.121	3.203	2.759	1.105	1.516	2.102

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	18.70
Run 2	18.83
Run 3	18.18
Mean	18.57
Std Dev	0.3468
%SD	1.867

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	92.41	75.09	80.44	88.10
Run 2	93.58	76.53	79.80	86.94
Run 3	94.14	76.51	80.13	90.15
Mean	93.38	76.04	80.13	88.39
Std Dev	0.8827	0.8234	0.3236	1.626

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #19
First repeat started at : Mon Mar 12 2007 10:45:19
Last repeat started at : Mon Mar 12 2007 10:46:54
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0176	1.162	12.19	79.52	0.8598	13.45	111.3
Run 2	0.0196	1.031	11.08	77.32	0.7734	11.53	74.90
Run 3	0.0172	1.019	11.23	74.21	0.7887	10.63	84.64
Mean	0.0181	1.071	11.50	77.02	0.8073	11.87	90.27
Std Dev	0.0013	0.0796	0.6006	2.672	0.0461	1.445	18.82
%SD	7.296	7.438	5.223	3.469	5.713	12.17	20.85

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.444	3.892	4.002	14.31	23.51	23.16
Run 2	2.270	3.837	3.914	13.73	23.36	23.05
Run 3	2.381	3.713	3.718	13.29	22.56	22.49
Mean	2.365	3.814	3.878	13.77	23.14	22.90
Std Dev	0.0883	0.0918	0.1451	0.5102	0.5147	0.3561
%SD	3.735	2.407	3.742	3.704	2.224	1.555

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.957	2.943	1.143	7.025	2.663	2.694
Run 2	3.697	4.595	1.383	6.945	2.660	2.618
Run 3	3.336	3.787	1.338	5.895	2.496	2.801
Mean	3.663	3.775	1.288	6.621	2.607	2.705
Std Dev	0.3122	0.8262	0.1272	0.6305	0.0956	0.0919
%SD	8.522	21.88	9.878	9.523	3.669	3.399

K1566-1

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.477	0.0295	0.0282	0.0650	0.0966	0.0788
Run 2	2.506	0.0160	0.0125	0.0766	0.0841	0.0642
Run 3	2.531	0.0200	0.0127	0.0739	0.1014	0.0931
Mean	2.505	0.0218	0.0178	0.0718	0.0940	0.0787
Std Dev	0.0268	0.0069	0.0090	0.0061	0.0089	0.0144
%SD	1.069	31.73	50.62	8.461	9.486	18.34

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.010	1.100	-0.0137	-0.0043	0.9447	0.9983
Run 2	0.9756	0.9894	-0.0163	-0.0144	0.8109	0.8710
Run 3	1.011	1.089	-0.0191	-0.0188	0.8855	0.8983
Mean	0.9989	1.059	-0.0164	-0.0125	0.8804	0.9226
Std Dev	0.0202	0.0608	0.0027	0.0074	0.0671	0.0670
%SD	2.023	5.742	16.54	59.67	7.616	7.263

K1566-1

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.9438
Run 2	0.8641
Run 3	0.9090
Mean	0.9123
Std Dev	0.0499
%SD	5.473

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	89.18	72.40	76.50	86.17
Run 2	91.81	73.30	79.22	86.78
Run 3	91.34	74.78	79.56	88.95
Mean	90.77	73.49	78.43	87.30
Std Dev	1.401	1.200	1.675	1.461

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #20
First repeat started at : Mon Mar 12 2007 10:48:42
Last repeat started at : Mon Mar 12 2007 10:50:17
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0175	1.016	12.84	83.33	0.8141	11.72	72.15
Run 2	0.0209	1.152	12.36	82.78	0.7630	12.29	113.0
Run 3	0.0196	1.137	12.77	83.82	0.8249	11.94	102.0
Mean	0.0193	1.102	12.66	83.31	0.8007	11.98	95.72
Std Dev	0.0017	0.0747	0.2558	0.5229	0.0331	0.2875	21.15
%SD	8.689	6.779	2.021	0.6277	4.133	2.399	22.09

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.423	3.807	3.816	13.30	23.82	21.85
Run 2	2.206	3.802	3.776	13.37	22.68	23.28
Run 3	2.129	3.920	3.885	13.74	21.90	22.12
Mean	2.253	3.843	3.826	13.47	22.80	22.42
Std Dev	0.1522	0.0667	0.0554	0.2334	0.9670	0.7627
%SD	6.756	1.735	1.448	1.733	4.241	3.402

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.472	4.016	1.716	6.303	2.470	2.844
Run 2	3.814	2.799	1.264	6.809	2.625	2.819
Run 3	3.722	3.206	1.619	6.322	2.743	2.580
Mean	3.669	3.340	1.533	6.478	2.613	2.748
Std Dev	0.1770	0.6195	0.2380	0.2867	0.1369	0.1456
%SD	4.823	18.55	15.52	4.425	5.240	5.300

K1566-2

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.568	0.0233	0.0097	0.0816	0.0930	0.0833
Run 2	2.529	0.0170	0.0045	0.0828	0.0871	0.0784
Run 3	2.743	0.0272	0.0039	0.0846	0.1115	0.0838
Mean	2.613	0.0225	0.0060	0.0830	0.0972	0.0818
Std Dev	0.1138	0.0051	0.0032	0.0015	0.0128	0.0030
%SD	4.353	22.85	52.79	1.821	13.14	3.618

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.034	0.9482	-0.0130	-0.0141	0.8122	0.9382
Run 2	0.9169	1.042	-0.0119	-0.0137	0.8715	0.9026
Run 3	0.9795	0.9863	-0.0167	-0.0182	0.8414	0.9226
Mean	0.9768	0.9920	-0.0139	-0.0153	0.8417	0.9212
Std Dev	0.0585	0.0469	0.0025	0.0025	0.0296	0.0178
%SD	5.993	4.732	18.00	16.08	3.520	1.935

F1566.2

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.9158
Run 2	0.8667
Run 3	0.8820
Mean	0.8882
Std Dev	0.0251
%SD	2.828

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	92.64	74.61	79.21	87.82
Run 2	92.01	74.68	79.63	88.02
Run 3	91.66	74.25	78.74	88.39
Mean	92.10	74.51	79.19	88.08
Std Dev	0.4961	0.2339	0.4466	0.2922

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #21
First repeat started at : Mon Mar 12 2007 10:51:17
Last repeat started at : Mon Mar 12 2007 10:52:51
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0208	1.149	13.25	206.[illegible]	1.111	15.11	96.88
Run 2	0.0214	1.128	12.78	201.[illegible]	1.170	17.39	86.27
Run 3	0.0220	1.153	13.41	206.[illegible]	1.149	13.93	86.64
Mean	0.0214	1.143	13.15	203.0[illegible]	1.143	15.48	89.93
Std Dev	0.0006	0.0134	0.3269	3.031	0.0296	1.761	6.024
%SD	2.849	1.171	2.486	1.493	2.592	11.38	6.699

B 3/12/07

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.598	2.440	2.674	9.688	26.59	24.00
Run 2	2.315	2.571	2.678	9.524	26.59	23.98
Run 3	2.432	2.589	2.815	10.01	26.09	23.47
Mean	2.448	2.533	2.722	9.739	26.43	23.81
Std Dev	0.1423	0.0814	0.0803	0.2452	0.2896	0.3012
%SD	5.811	3.214	2.949	2.518	1.096	1.265

K 1566-3

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.875	3.661	1.376	6.845	2.806	2.713
Run 2	3.846	4.168	1.166	7.185	2.757	2.612
Run 3	4.017	3.646	1.653	6.851	2.498	2.695
Mean	3.912	3.825	1.399	6.960	2.687	2.673
Std Dev	0.0917	0.2972	0.2443	0.1946	0.1657	0.0536
%SD	2.345	7.769	17.46	2.796	6.166	2.004

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.515	0.0087	0.0099	0.0840	0.1080	0.0794
Run 2	2.540	0.0213	0.0086	0.0814	0.0921	0.0842
Run 3	2.699	0.0180	-0.0019	0.0874	0.0819	0.0683
Mean	2.584	0.0160	0.0055	0.0843	0.0940	0.0773
Std Dev	0.1001	0.0066	0.0065	0.0030	0.0132	0.0082
%SD	3.873	40.87	117.0	3.590	14.03	10.58

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.4031	0.4723	-0.0201	-0.0200	0.5874	0.6894
Run 2	0.4614	0.4805	-0.0165	-0.0208	0.6409	0.6636
Run 3	0.4540	0.4935	-0.0071	-0.0169	0.5281	0.6821
Mean	0.4395	0.4821	-0.0146	-0.0193	0.5855	0.6784
Std Dev	0.0317	0.0107	0.0067	0.0021	0.0564	0.0133
%SD	7.223	2.214	45.94	10.69	9.638	1.966

K1566-3

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6237
Run 2	0.6495
Run 3	0.6410
Mean	0.6381
Std Dev	0.0131
%SD	2.059

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	91.28	73.45	78.74	87.87
Run 2	90.41	73.04	77.11	83.20
Run 3	90.38	72.47	78.05	84.45
Mean	90.69	72.99	77.97	85.17
Std Dev	0.5115	0.4946	0.8180	2.417

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #22
First repeat started at : Mon Mar 12 2007 10:54:19
Last repeat started at : Mon Mar 12 2007 10:55:54
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0059	1.171	8.910	191.4	1.070	17.46	158.0
Run 2	0.0070	1.196	10.13	191.[illegible]	0.9587	15.35	92.85
Run 3	0.0056	1.164	10.11	188.[illegible]	1.022	15.39	134.8
Mean	0.0062	1.177	9.718	191.4	1.017	16.07	128.6
Std Dev	0.0007	0.0170	0.6998	2.869	0.0558	1.209	33.03
%SD	12.07	1.440	7.201	1.499	5.488	7.522	25.69

3/12/07

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.207	2.698	3.089	20.70	30.25	30.30
Run 2	1.840	2.767	2.986	20.90	28.07	29.13
Run 3	2.097	2.735	2.977	21.13	30.55	28.54
Mean	2.048	2.733	3.017	20.91	29.62	29.32
Std Dev	0.1888	0.0345	0.0625	0.2142	1.350	0.8959
%SD	9.217	1.261	2.071	1.025	4.559	3.055

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	4.307	3.496	1.471	9.391	4.488	4.481
Run 2	4.541	3.786	1.584	10.09	4.388	4.341
Run 3	4.243	3.446	1.073	9.122	4.386	4.527
Mean	4.364	3.576	1.376	9.536	4.421	4.449
Std Dev	0.1569	0.1835	0.2688	0.5020	0.0584	0.0970
%SD	3.595	5.132	19.53	5.264	1.321	2.180

KLS66-4

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	4.352	0.0372	-0.0056	0.1139	0.1059	0.0925
Run 2	4.227	0.0018	-0.0074	0.1228	0.1361	0.1114
Run 3	4.356	0.0192	-0.0061	0.1250	0.1110	0.1161
Mean	4.311	0.0194	-0.0063	0.1206	0.1177	0.1066
Std Dev	0.0734	0.0177	0.0009	0.0059	0.0162	0.0125
%SD	1.701	91.44	14.57	4.904	13.73	11.70

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.4821	0.4407	-0.0277	-0.0208	0.5023	0.5044
Run 2	0.4450	0.4733	-0.0206	-0.0216	0.4500	0.5707
Run 3	0.5425	0.4416	-0.0245	-0.0188	0.4796	0.5373
Mean	0.4899	0.4519	-0.0243	-0.0204	0.4773	0.5375
Std Dev	0.0492	0.0185	0.0035	0.0014	0.0262	0.0332
%SD	10.04	4.105	14.63	6.919	5.488	6.175

K1566-4

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.5408
Run 2	0.5094
Run 3	0.5182
Mean	0.5228
Std Dev	0.0162
%SD	3.090

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	90.33	72.71	77.71	83.02
Run 2	92.42	73.86	77.04	84.67
Run 3	90.37	73.50	77.91	86.49
Mean	91.04	73.36	77.55	84.72
Std Dev	1.197	0.5923	0.4530	1.738

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #23
First repeat started at : Mon Mar 12 2007 10:56:56
Last repeat started at : Mon Mar 12 2007 10:58:30
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0352	5.597	8.409	44.75	0.7795	10.17	55.56
Run 2	0.0355	5.638	8.348	46.19	0.8369	11.14	114.3
Run 3	0.0333	5.608	8.529	47.33	0.7951	11.40	109.0
Mean	0.0347	5.614	8.429	46.09	0.8038	10.90	92.98
Std Dev	0.0012	0.0209	0.0923	1.294	0.0297	0.6454	32.51
%SD	3.388	0.3730	1.095	2.808	3.694	5.919	34.96

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	4.293	7.774	8.204	32.57	33.27	36.96
Run 2	4.294	8.253	8.325	32.96	34.28	39.57
Run 3	4.475	8.145	8.432	32.56	33.59	37.87
Mean	4.354	8.057	8.320	32.70	33.71	38.14
Std Dev	0.1044	0.2511	0.1142	0.2251	0.5139	1.322
%SD	2.398	3.116	1.372	0.6885	1.524	3.466

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.664	1.434	0.2240	2.486	2.258	2.048
Run 2	1.388	1.510	0.4525	1.658	2.208	2.341
Run 3	1.513	0.8582	0.9240	1.697	2.116	2.277
Mean	1.522	1.267	0.5335	1.947	2.194	2.222
Std Dev	0.1379	0.3564	0.3570	0.4671	0.0722	0.1541
%SD	9.063	28.12	66.91	23.99	3.293	6.935

K1645-1

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.166	0.1010	0.0870	1.336	1.360	1.391
Run 2	2.067	0.1094	0.0900	1.337	1.416	1.346
Run 3	2.067	0.1064	0.0746	1.297	1.318	1.311
Mean	2.100	0.1056	0.0839	1.324	1.365	1.349
Std Dev	0.0568	0.0043	0.0082	0.0227	0.0492	0.0399
%SD	2.706	4.064	9.725	1.712	3.603	2.957

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.115	1.384	-0.0125	-0.0180	3.318	3.802
Run 2	1.187	1.117	-0.0275	-0.0144	3.416	3.640
Run 3	1.181	1.265	-0.0197	-0.0210	3.393	3.759
Mean	1.161	1.255	-0.0199	-0.0178	3.376	3.734
Std Dev	0.0403	0.1337	0.0075	0.0033	0.0509	0.0841
%SD	3.470	10.65	37.83	18.59	1.509	2.253

K1645-1

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	3.543
Run 2	3.556
Run 3	3.597
Mean	3.565
Std Dev	0.0279
%SD	0.7833

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	96.43	88.53	88.35	89.97
Run 2	95.45	85.26	88.72	91.33
Run 3	97.00	85.53	90.83	91.34
Mean	96.29	86.44	89.30	90.88
Std Dev	0.7813	1.812	1.334	0.7916

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #24
First repeat started at : Mon Mar 12 2007 11:03:51
Last repeat started at : Mon Mar 12 2007 11:05:25
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0258	1.070	21.55	71.28	1.432	26.03	209.3
Run 2	0.0249	1.047	22.48	70.39	1.487	25.21	209.6
Run 3	0.0238	1.127	23.43	71.26	1.444	24.63	218.3
Mean	0.0248	1.081	22.49	70.98	1.455	25.29	212.4
Std Dev	0.0010	0.0409	0.9389	0.5116	0.0290	0.6990	5.111
%SD	4.044	3.786	4.175	0.7208	1.993	2.764	2.406

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.521	1.516	2.234	28.37	32.69	33.52
Run 2	3.341	1.500	2.371	27.77	32.19	33.07
Run 3	2.594	1.516	2.192	27.74	33.58	32.29
Mean	2.819	1.511	2.266	27.96	32.82	32.96
Std Dev	0.4537	0.0094	0.0934	0.3522	0.7055	0.6174
%SD	16.09	0.6206	4.122	1.260	2.149	1.873

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	13.00	10.09	4.607	34.42	5.923	6.277
Run 2	14.03	11.26	4.085	38.68	6.142	6.445
Run 3	14.12	11.83	3.946	39.21	5.959	6.119
Mean	13.72	11.06	4.213	37.44	6.008	6.280
Std Dev	0.6202	0.8847	0.3488	2.624	0.1173	0.1632
%SD	4.521	7.999	8.279	7.009	1.953	2.598

K1645-2

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	5.801	0.0158	0.0013	0.0690	0.0900	0.0505
Run 2	6.105	0.0152	0.0018	0.0744	0.0842	0.0555
Run 3	5.816	0.0199	-0.0073	0.0691	0.0526	0.0604
Mean	5.907	0.0170	-0.0014	0.0709	0.0756	0.0555
Std Dev	0.1716	0.0026	0.0051	0.0031	0.0201	0.0050
%SD	2.904	15.10	367.5	4.384	26.64	8.940

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1645-2

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.2264	0.2852	-0.0238	-0.0165	0.2713	0.2713
Run 2	0.2253	0.2536	-0.0201	-0.0207	0.3018	0.2529
Run 3	0.2582	0.2978	-0.0175	-0.0154	0.2927	0.2541
Mean	0.2366	0.2789	-0.0205	-0.0176	0.2886	0.2594
Std Dev	0.0187	0.0228	0.0032	0.0028	0.0156	0.0103
%SD	7.897	8.162	15.42	15.94	5.423	3.968

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.2763
Run 2	0.2862
Run 3	0.2745
Mean	0.2790
Std Dev	0.0063
%SD	2.258

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	86.93	66.01	71.79	82.43
Run 2	88.56	67.38	71.56	82.62
Run 3	87.41	67.37	71.53	82.27
Mean	87.63	66.92	71.63	82.44
Std Dev	0.8380	0.7864	0.1431	0.1733

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #25
First repeat started at : Mon Mar 12 2007 11:06:30
Last repeat started at : Mon Mar 12 2007 11:08:04
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0318	0.9480	8.747	191.8	1.095	14.40	107.3
Run 2	0.0314	0.8922	8.503	183.9	1.122	14.06	99.61
Run 3	0.0308	0.8372	8.103	197.4	1.084	14.78	82.21
Mean	0.0313	0.8925	8.451	191.0	1.100	14.42	96.38
Std Dev	0.0005	0.0554	0.3255	6.773	0.0195	0.3605	12.85
%SD	1.513	6.211	3.852	3.546	1.770	2.500	13.34

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.312	5.205	5.359	9.799	23.83	21.32
Run 2	2.413	5.079	5.193	9.333	22.97	20.87
Run 3	2.264	5.216	5.449	9.840	24.38	21.68
Mean	2.330	5.166	5.334	9.657	23.73	21.29
Std Dev	0.0760	0.0764	0.1297	0.2812	0.7112	0.4083
%SD	3.264	1.478	2.432	2.912	2.997	1.918

K1645-3

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	3.916	3.165	1.120	8.247	3.373	3.120
Run 2	3.352	2.388	1.118	6.844	2.907	2.981
Run 3	3.730	2.511	1.554	7.350	3.223	3.160
Mean	3.666	2.688	1.264	7.480	3.167	3.087
Std Dev	0.2874	0.4179	0.2512	0.7101	0.2381	0.0940
%SD	7.839	15.55	19.87	9.493	7.518	3.047

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.971	0.0214	-0.0064	0.0540	0.0495	0.0433
Run 2	2.830	0.0085	-0.0060	0.0601	0.0442	0.0458
Run 3	3.032	0.0132	-0.0095	0.0505	0.0717	0.0531
Mean	2.945	0.0144	-0.0073	0.0549	0.0552	0.0474
Std Dev	0.1037	0.0066	0.0019	0.0049	0.0146	0.0051
%SD	3.522	45.64	26.04	8.847	26.44	10.69

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.3277	0.3191	-0.0151	-0.0176	0.6722	0.7629
Run 2	0.2873	0.3221	-0.0179	-0.0236	0.6161	0.7025
Run 3	0.3361	0.3308	-0.0251	-0.0204	0.6337	0.6936
Mean	0.3170	0.3240	-0.0194	-0.0205	0.6407	0.7197
Std Dev	0.0261	0.0061	0.0051	0.0030	0.0287	0.0377
%SD	8.224	1.873	26.55	14.51	4.478	5.240

K1645-3

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6936
Run 2	0.6659
Run 3	0.6787
Mean	0.6794
Std Dev	0.0138
%SD	2.036

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	94.09	78.86	82.09	82.63
Run 2	93.97	80.47	84.94	88.52
Run 3	95.51	78.63	82.32	90.05
Mean	94.52	79.32	83.12	87.07
Std Dev	0.8579	1.006	1.580	3.916

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #26
First repeat started at : Mon Mar 12 2007 11:09:22
Last repeat started at : Mon Mar 12 2007 11:10:56
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0080	1.144	19.18	102.5	1.101	19.99	188.5
Run 2	0.0092	1.151	20.32	103.4	1.151	20.25	152.6
Run 3	0.0077	1.156	17.80	103.6	1.144	20.85	161.7
Mean	0.0083	1.150	19.10	103.2	1.132	20.36	167.6
Std Dev	0.0008	0.0059	1.262	0.5834	0.0269	0.4394	18.66
%SD	9.863	0.5159	6.604	0.5655	2.373	2.157	11.14

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.916	1.904	2.214	56.43	71.56	75.39
Run 2	2.219	1.905	2.230	56.72	67.10	74.30
Run 3	1.751	1.938	2.274	58.41	71.07	70.30
Mean	1.962	1.916	2.239	57.19	69.91	73.33
Std Dev	0.2376	0.0188	0.0310	1.073	2.447	2.680
%SD	12.11	0.9826	1.385	1.876	3.500	3.654

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	17.78	7.926	3.316	50.45	3.514	3.750
Run 2	19.57	8.497	3.884	55.74	3.349	3.900
Run 3	20.73	8.291	3.001	58.94	3.356	3.591
Mean	19.36	8.238	3.400	55.04	3.406	3.747
Std Dev	1.485	0.2892	0.4474	4.289	0.0933	0.1545
%SD	7.669	3.510	13.16	7.792	2.740	4.123

K1645-4

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	2.992	-0.0009	-0.0038	0.0605	0.0663	0.0263
Run 2	3.150	0.0060	-0.0058	0.0588	0.0681	0.0601
Run 3	2.991	0.0151	-0.0085	0.0540	0.0514	0.0321
Mean	3.044	0.0067	-0.0061	0.0578	0.0619	0.0395
Std Dev	0.0917	0.0080	0.0024	0.0034	0.0092	0.0181
%SD	3.013	118.4	39.28	5.880	14.90	45.87

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1645-4

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.2064	0.1843	-0.0213	-0.0233	0.6141	0.6175
Run 2	0.1953	0.2134	-0.0239	-0.0182	0.5863	0.6867
Run 3	0.1800	0.1936	-0.0245	-0.0208	0.5231	0.5454
Mean	0.1939	0.1971	-0.0232	-0.0207	0.5745	0.6165
Std Dev	0.0133	0.0149	0.0017	0.0025	0.0467	0.0706
%SD	6.845	7.536	7.412	12.24	8.122	11.45

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.6093
Run 2	0.6481
Run 3	0.5666
Mean	0.6080
Std Dev	0.0408
%SD	6.712

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	87.43	68.34	71.60	82.09
Run 2	86.91	67.75	71.83	83.02
Run 3	86.99	68.75	72.90	86.11
Mean	87.11	68.28	72.11	83.74
Std Dev	0.2802	0.5026	0.6960	2.107

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #27
First repeat started at : Mon Mar 12 2007 11:12:10
Last repeat started at : Mon Mar 12 2007 11:13:44
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

3/12/07

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0034	0.4709	6.407	576.1	2.532	31.24	263.7
Run 2	0.0029	0.3800	6.385	576.7	2.613	34.69	211.6
Run 3	0.0038	0.4051	6.296	576.0	2.530	34.10	184.5
Mean	0.0033	0.4187	6.363	576.3	2.558	33.35	219.9
Std Dev	0.0005	0.0470	0.0598	0.3303	0.0473	1.842	40.25
%SD	14.58	11.22	0.9241	0.0573	1.850	5.524	18.30

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.096	0.4909	1.263	2.375	7.041	7.105
Run 2	6.424	0.4588	1.329	2.342	7.150	6.861
Run 3	6.386	0.4766	1.087	2.302	7.112	7.042
Mean	6.302	0.4754	1.226	2.339	7.101	7.003
Std Dev	0.1794	0.0161	0.1251	0.0365	0.0553	0.1268
%SD	2.846	3.387	10.20	1.561	0.7791	1.810

K1546-1

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	8.975	3.263	1.674	6.048	1.484	1.550
Run 2	7.921	4.789	1.254	4.683	1.422	1.449
Run 3	8.039	3.540	0.7462	3.034	1.498	1.385
Mean	8.312	3.864	1.225	4.588	1.468	1.461
Std Dev	0.5771	0.8129	0.4645	1.509	0.0405	0.0834
%SD	6.944	21.04	37.92	32.89	2.758	5.705

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.395	0.0021	-0.0080	0.0200	0.0313	0.0125
Run 2	1.416	0.0057	-0.0156	0.0162	0.0470	0.0139
Run 3	1.447	-0.0025	-0.0113	0.0173	0.0356	0.0206
Mean	1.419	0.0017	-0.0116	0.0179	0.0380	0.0157
Std Dev	0.0262	0.0041	0.0038	0.0020	0.0081	0.0043
%SD	1.843	238.4	32.92	10.99	21.25	27.55

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1546-1

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.2565	0.2375	-0.0173	-0.0253	0.0566	0.1012
Run 2	0.2480	0.2368	-0.0269	-0.0187	0.0710	0.0636
Run 3	0.2495	0.2365	-0.0247	-0.0175	0.0777	0.0749
Mean	0.2513	0.2369	-0.0230	-0.0205	0.0684	0.0799
Std Dev	0.0045	0.0005	0.0050	0.0042	0.0108	0.0193
%SD	1.799	0.2271	21.78	20.32	15.76	24.11

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0755
Run 2	0.0609
Run 3	0.0754
Mean	0.0706
Std Dev	0.0084
%SD	11.90

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	91.18	76.78	80.68	86.20
Run 2	92.03	76.26	80.96	86.02
Run 3	93.64	78.06	82.37	87.55
Mean	92.29	77.03	81.34	86.59
Std Dev	1.248	0.9247	0.9049	0.8349

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #28
First repeat started at : Mon Mar 12 2007 11:15:29
Last repeat started at : Mon Mar 12 2007 11:17:04
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	24.97	25.13	26.03	26.29	25.47	25.30	89.57
Run 2	25.99	25.86	25.43	26.01	25.07	25.94	88.12
Run 3	24.92	25.03	25.22	27.01	25.34	25.26	15.96
Mean	25.29	25.34	25.56	26.44	25.29	25.50	64.55
Std Dev	0.6031	0.4533	0.4188	0.5159	0.2068	0.3806	42.09
%SD	2.384	1.789	1.638	1.951	0.8177	1.493	65.20

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.18	25.89	26.10	25.52	26.04	25.55
Run 2	26.30	25.32	25.47	25.88	25.66	25.40
Run 3	26.21	26.17	25.61	25.01	26.38	25.76
Mean	26.23	25.79	25.72	25.47	26.03	25.57
Std Dev	0.0632	0.4349	0.3311	0.4374	0.3577	0.1762
%SD	0.2408	1.686	1.287	1.717	1.374	0.6891

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.58	23.40	26.54	26.74	24.21	23.64
Run 2	26.33	23.90	25.90	26.90	23.76	23.09
Run 3	25.82	24.60	25.59	26.77	24.45	25.06
Mean	25.91	23.97	26.01	26.80	24.14	23.93
Std Dev	0.3829	0.6039	0.4853	0.0854	0.3507	1.015
%SD	1.478	2.520	1.866	0.3188	1.453	4.243

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	23.80	24.83	25.21	24.62	24.96	23.74
Run 2	23.67	24.89	25.51	25.53	24.73	24.93
Run 3	24.18	24.76	25.64	25.09	25.63	24.21
Mean	23.88	24.83	25.45	25.08	25.11	24.29
Std Dev	0.2672	0.0643	0.2180	0.4535	0.4682	0.5999
%SD	1.119	0.2588	0.8565	1.808	1.865	2.470

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

CCV
MS10-43-C
3/31/07

CLV 10-93-C

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	23.33	24.04	27.11	27.20	26.56	26.97
Run 2	24.64	24.97	27.26	27.38	27.38	28.30
Run 3	24.38	24.48	26.13	26.35	26.17	26.05
Mean	24.11	24.50	26.84	26.98	26.70	27.11
Std Dev	0.6905	0.4643	0.6132	0.5498	0.6167	1.128
%SD	2.863	1.895	2.285	2.038	2.309	4.162

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	26.56
Run 2	27.94
Run 3	26.19
Mean	26.89
Std Dev	0.9210
%SD	3.424

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.8	100.6	103.8	96.37
Run 2	98.99	101.9	99.91	93.96
Run 3	103.3	104.5	103.8	100.5
Mean	101.0	102.4	102.5	96.93
Std Dev	2.132	1.989	2.256	3.287

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #29
First repeat started at : Mon Mar 12 2007 11:19:42
Last repeat started at : Mon Mar 12 2007 11:21:16
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.1480	0.2261	0.3499	0.2370	0.1499	0.2026	33.49
Run 2	0.1097	0.1748	0.2565	0.1977	0.1024	0.1720	31.85
Run 3	0.0553	0.1327	0.1925	0.1160	0.0564	0.0757	42.01
Mean	0.1043	0.1779	0.2663	0.1835	0.1029	0.1501	42.45
Std Dev	0.0466	0.0468	0.0792	0.0617	0.0467	0.0662	10.83
%SD	44.64	26.29	29.73	33.63	45.40	44.13	25.50

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.4374	0.1871	0.1313	0.2139	0.2746	0.1883
Run 2	0.2884	0.1379	0.0880	0.1711	0.2282	0.1637
Run 3	0.1486	0.0926	0.0465	0.1125	0.1679	0.1502
Mean	0.2915	0.1392	0.0886	0.1658	0.2236	0.1674
Std Dev	0.1444	0.0473	0.0424	0.0509	0.0535	0.0193
%SD	49.55	33.97	47.84	30.70	23.93	11.54

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.4225	0.1790	-0.4917	1.311	0.1548	0.0993
Run 2	0.3562	0.4158	-0.2401	1.166	0.1255	0.0932
Run 3	0.2383	0.6333	-0.2420	1.064	0.0560	0.0367
Mean	0.3390	0.4094	-0.3246	1.180	0.1121	0.0764
Std Dev	0.0933	0.2272	0.1447	0.1237	0.0508	0.0345
%SD	27.51	55.51	44.58	10.47	45.29	45.17

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1700	0.1690	0.1716	0.1546	0.1404	0.1593
Run 2	0.0932	0.1304	0.1289	0.1054	0.0978	0.1006
Run 3	0.0674	0.0806	0.0643	0.0599	0.0549	0.0444
Mean	0.1102	0.1266	0.1216	0.1066	0.0977	0.1014
Std Dev	0.0534	0.0443	0.0540	0.0474	0.0427	0.0574
%SD	48.44	35.00	44.43	44.44	43.73	56.60

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

3/12/07

3/12/07 CCB

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1170	0.1585	0.1843	0.1950	0.1[illegible]1	0.1216
Run 2	0.1136	0.0724	0.1418	0.1225	0.1343	0.1105
Run 3	0.0530	0.0347	0.0800	0.0894	0.0506	0.0462
Mean	0.0945	0.0885	0.1354	0.1290	0.1153	0.0934
Std Dev	0.0360	0.0635	0.0524	0.0631	0.0577	0.0396
%SD	38.11	71.68	38.74	48.93	49.98	42.37

3/12/07

CCB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.1541
Run 2	0.1201
Run 3	0.0843
Mean	0.1095
Std Dev	0.0506
%SD	46.21

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	101.9	102.1	101.6	93.69
Run 2	101.1	101.3	99.92	96.35
Run 3	100.4	102.3	100.8	96.19
Mean	101.1	101.9	100.8	95.41
Std Dev	0.7570	0.5496	0.8683	1.492

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #30
First repeat started at : Mon Mar 12 2007 11:25:46
Last repeat started at : Mon Mar 12 2007 11:27:21
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0165	0.1030	0.4559	0.0484	0.0162	0.1191	39.74
Run 2	0.0135	0.1176	0.2408	0.0526	0.0129	0.0933	43.54
Run 3	0.0079	0.0764	0.1680	0.0398	0.0055	0.0741	24.67
Mean	0.0127	0.0990	0.2882	0.0469	0.0115	0.0955	35.98
Std Dev	0.0044	0.0209	0.1497	0.0065	0.0055	0.0226	9.981
%SD	34.44	21.07	51.94	13.94	47.62	23.63	27.74

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1675	0.0581	0.0104	0.0745	0.0683	0.0514
Run 2	0.1970	0.0436	-0.0005	0.1243	0.0970	0.0716
Run 3	0.2756	0.0407	-0.0045	0.0789	0.0287	0.0702
Mean	0.2134	0.0475	0.0018	0.0926	0.0647	0.0644
Std Dev	0.0559	0.0093	0.0077	0.0276	0.0343	0.0113
%SD	26.20	19.63	429.2	29.77	53.03	17.53

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.6986	0.5547	-0.2272	2.541	0.0386	0.0004
Run 2	0.4429	0.0763	-0.1806	1.713	0.0153	0.0215
Run 3	0.2926	0.3903	-0.7377	1.267	0.0178	0.0070
Mean	0.4780	0.3404	-0.3818	1.841	0.0239	0.0096
Std Dev	0.2053	0.2431	0.3091	0.6466	0.0128	0.0108
%SD	42.95	71.40	80.95	35.13	53.59	112.5

CLB

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0019	0.0146	0.0073	0.0163	0.0324	0.0168
Run 2	0.0088	0.0243	0.0148	0.0123	0.0320	0.0166
Run 3	-0.0012	0.0074	0.0062	0.0031	0.0163	0.0083
Mean	0.0032	0.0154	0.0094	0.0105	0.0269	0.0139
Std Dev	0.0052	0.0085	0.0047	0.0068	0.0092	0.0048
%SD	163.2	54.89	49.41	64.17	34.20	34.85

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0192	0.0127	0.0146	0.0263	0.0265	0.0282
Run 2	0.0128	0.0058	0.0121	0.0306	0.0246	0.0289
Run 3	0.0183	0.0249	0.0157	0.0071	0.0029	0.0084
Mean	0.0168	0.0145	0.0141	0.0213	0.0180	0.0218
Std Dev	0.0034	0.0097	0.0019	0.0125	0.0131	0.0117
%SD	20.54	66.71	13.29	58.73	72.83	53.43

CB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0264
Run 2	0.0257
Run 3	0.0135
Mean	0.0219
Std Dev	0.0073
%SD	33.17

See [illegible] 3/12/07

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	101.7	104.4	101.0	98.29
Run 2	101.6	105.1	102.0	97.15
Run 3	102.9	105.6	104.2	98.17
Mean	102.1	105.0	102.4	97.87
Std Dev	0.7565	0.5961	1.619	0.6286

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #31
First repeat started at : Mon Mar 12 2007 11:30:03
Last repeat started at : Mon Mar 12 2007 11:31:35
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0015	0.1549	0.3661	0.0146	0.0005	0.0776	60.21
Run 2	0.0022	0.3069	0.5917	0.0365	0.0032	0.1358	45.27
Run 3	0.0010	0.1121	0.2760	0.0285	-0.0012	0.0818	69.71
Mean	0.0016	0.1913	0.4113	0.0265	0.0008	0.0984	58.06
Std Dev	0.0006	0.1024	0.1626	0.0111	0.0022	0.0324	11.86
%SD	37.54	53.51	39.54	41.89	261.9	32.98	20.43

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1515	0.0324	-0.0065	0.0684	0.0789	0.0906
Run 2	0.2744	0.0514	-0.0015	0.1307	0.0869	0.1033
Run 3	0.2322	0.0388	-0.0158	0.1108	0.0437	0.0681
Mean	0.2194	0.0408	-0.0079	0.1033	0.0698	0.0873
Std Dev	0.0625	0.0097	0.0073	0.0318	0.0230	0.0178
%SD	28.48	23.67	91.94	30.79	32.87	20.43

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.080	0.1867	-0.0909	3.559	0.0191	0.0114
Run 2	0.8410	0.0900	0.0269	2.979	0.0098	-0.0071
Run 3	0.2367	0.5607	-0.2218	1.238	0.0161	-0.0172
Mean	0.7192	0.2791	-0.0953	2.592	0.0150	-0.0043
Std Dev	0.4346	0.2486	0.1244	1.208	0.0047	0.0145
%SD	60.43	89.05	130.5	46.60	31.67	338.4

CCP
Renun

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0172	0.0150	-0.0079	0.0014	-0.0038	0.0041
Run 2	-0.0061	0.0117	-0.0047	0.0023	-0.0010	0.0007
Run 3	-0.0209	0.0101	-0.0080	0.0028	0.0026	-0.0018
Mean	-0.0147	0.0123	-0.0069	0.0022	-0.0008	0.0010
Std Dev	0.0077	0.0025	0.0019	0.0007	0.0032	0.0029
%SD	52.20	20.55	27.93	33.15	423.6	297.3

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0030	-0.0059	0.0002	0.0038	0.0068	0.0086
Run 2	0.0056	-0.0006	0.0032	0.0032	0.0084	0.0177
Run 3	0.0083	0.0002	0.0129	0.0009	0.0099	0.0045
Mean	0.0057	-0.0021	0.0054	0.0026	0.0084	0.0103
Std Dev	0.0026	0.0032	0.0067	0.0015	0.0015	0.0067
%SD	46.56	155.1	122.3	58.11	18.32	65.46

CCB Rerun

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0110
Run 2	0.0154
Run 3	0.0055
Mean	0.0107
Std Dev	0.0050
%SD	46.68

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	100.8	102.9	101.8	97.60
Run 2	101.3	100.0	101.5	93.19
Run 3	102.6	104.4	105.8	99.50
Mean	101.6	102.4	103.0	96.76
Std Dev	0.9504	2.226	2.375	3.239

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #32
First repeat started at : Mon Mar 12 2007 11:33:24
Last repeat started at : Mon Mar 12 2007 11:34:58
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0025	33.95	42.39	1.367	0.5516	18.49	113.3
Run 2	0.0019	33.11	42.40	1.370	0.6222	18.58	130.7
Run 3	0.0009	33.25	41.34	1.368	0.6024	16.87	104.3
Mean	0.0017	33.44	42.04	1.368	0.5921	17.98	116.1
Std Dev	0.0008	0.4483	0.6081	0.0013	0.0364	0.9597	13.40
%SD	46.16	1.341	1.446	0.0962	6.152	5.337	11.53

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	7.629	0.9254	1.352	6.042	7.472	7.818
Run 2	8.150	0.8607	1.236	5.549	7.885	8.165
Run 3	7.996	0.8811	1.334	5.443	7.396	7.335
Mean	7.925	0.8891	1.308	5.678	7.584	7.772
Std Dev	0.2676	0.0331	0.0625	0.3201	0.2629	0.4164
%SD	3.377	3.719	4.776	5.637	3.466	5.360

See memo 03/12/07

K1568-1

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.612	3.430	1.833	17.81	0.2658	0.3763
Run 2	7.003	3.027	1.418	18.86	0.2447	0.3316
Run 3	7.281	3.324	1.875	19.90	0.2078	0.3148
Mean	6.965	3.260	1.709	18.86	0.2394	0.3409
Std Dev	0.3360	0.2088	0.2529	1.044	0.0294	0.0318
%SD	4.824	6.403	14.80	5.534	12.27	9.329

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1158	0.0002	-0.0080	0.0211	0.0271	0.0263
Run 2	0.1029	0.0020	-0.0071	0.0262	0.0468	0.0278
Run 3	0.1121	0.0000	-0.0056	0.0246	0.0366	0.0327
Mean	0.1102	0.0007	-0.0069	0.0240	0.0369	0.0289
Std Dev	0.0066	0.0011	0.0012	0.0026	0.0099	0.0033
%SD	6.016	147.2	17.68	10.88	26.73	11.57

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0082	0.0276	-0.0180	-0.0092	0.0412	0.0426
Run 2	0.0222	0.0168	-0.0106	-0.0161	0.0357	0.0489
Run 3	0.0243	0.0322	-0.0222	-0.0129	0.0376	0.0458
Mean	0.0182	0.0255	-0.0170	-0.0127	0.0382	0.0458
Std Dev	0.0088	0.0079	0.0059	0.0034	0.0028	0.0031
%SD	48.02	31.07	34.72	27.06	7.218	6.825

K1568-1

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0414
Run 2	0.0390
Run 3	0.0303
Mean	0.0369
Std Dev	0.0059
%SD	15.86

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	91.25	71.39	78.69	84.15
Run 2	92.68	73.06	78.76	87.60
Run 3	91.69	73.77	77.66	86.90
Mean	91.88	72.74	78.37	86.22
Std Dev	0.7352	1.222	0.6171	1.823

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #33
First repeat started at : Mon Mar 12 2007 11:36:15
Last repeat started at : Mon Mar 12 2007 11:37:48
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0014	32.76	42.67	1.364	0.5662	18.02	138.2
Run 2	0.0014	33.97	42.55	1.405	0.5878	18.10	76.72
Run 3	0.0002	33.72	42.37	1.391	0.5699	18.12	102.2
Mean	0.0010	33.48	42.53	1.387	0.5746	18.08	105.7
Std Dev	0.0007	0.6370	0.1534	0.0213	0.0115	0.0524	30.88
%SD	66.90	1.903	0.3608	1.534	2.009	0.2901	29.21

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	7.430	0.8467	1.288	4.205	6.831	6.722
Run 2	8.348	0.8188	1.249	4.010	6.634	6.171
Run 3	7.621	0.8834	1.214	4.165	6.361	6.616
Mean	7.800	0.8496	1.250	4.127	6.609	6.503
Std Dev	0.4843	0.0324	0.0375	0.1029	0.2364	0.2922
%SD	6.209	3.812	2.998	2.494	3.577	4.494

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.339	2.882	1.781	17.31	0.2187	0.2821
Run 2	6.247	2.829	2.167	16.47	0.2227	0.2994
Run 3	6.381	2.686	2.135	16.72	0.2637	0.3306
Mean	6.322	2.799	2.028	16.84	0.2350	0.3040
Std Dev	0.0686	0.1013	0.2139	0.4317	0.0249	0.0246
%SD	1.086	3.618	10.55	2.564	10.60	8.089

K1568-1D8

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1218	-0.0117	-0.0090	0.0217	0.0307	0.0204
Run 2	0.1161	0.0018	-0.0084	0.0385	0.0532	0.0283
Run 3	0.0899	-0.0065	-0.0071	0.0295	0.0560	0.0294
Mean	0.1093	-0.0055	-0.0081	0.0299	0.0466	0.0260
Std Dev	0.0170	0.0068	0.0010	0.0084	0.0139	0.0049
%SD	15.60	125.1	11.71	28.02	29.79	18.76

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0207	0.0190	-0.0281	-0.0183	0.0280	0.0349
Run 2	0.0452	0.0217	-0.0268	-0.0192	0.0397	0.0126
Run 3	0.0207	0.0105	-0.0136	-0.0218	0.0220	0.0251
Mean	0.0289	0.0170	-0.0228	-0.0198	0.0299	0.0242
Std Dev	0.0141	0.0059	0.0080	0.0018	0.0090	0.0112
%SD	48.92	34.40	35.23	9.027	30.15	46.26

K1568-1D-R

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0259
Run 2	0.0215
Run 3	0.0202
Mean	0.0225
Std Dev	0.0030
%SD	13.34

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	93.41	74.27	78.58	86.47
Run 2	92.90	74.41	77.42	86.01
Run 3	94.27	73.88	78.43	89.75
Mean	93.53	74.19	78.14	87.41
Std Dev	0.6902	0.2731	0.6332	2.039

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #34
First repeat started at : Mon Mar 12 2007 11:39:18
Last repeat started at : Mon Mar 12 2007 11:40:51
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	17.86	52.10	60.85	21.11	21.10	36.64	121.8
Run 2	18.13	56.00	60.40	22.01	22.04	37.47	112.5
Run 3	18.13	55.43	63.77	21.33	22.13	38.07	97.03
Mean	18.04	54.51	61.67	21.48	21.76	37.39	110.4
Std Dev	0.1554	2.111	1.827	0.4684	0.5679	0.7174	12.49
%SD	0.8611	3.873	2.962	2.180	2.610	1.919	11.31

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.72	19.46	20.40	25.82	29.88	28.34
Run 2	27.61	20.08	21.04	25.39	28.16	29.48
Run 3	27.81	19.79	20.76	25.85	29.35	29.80
Mean	27.38	19.78	20.73	25.69	29.13	29.21
Std Dev	0.5818	0.3132	0.3249	0.2574	0.8786	0.7645
%SD	2.125	1.584	1.567	1.002	3.016	2.618

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	31.36	24.88	24.47	38.76	23.66	24.25
Run 2	31.12	25.47	26.99	38.28	24.62	24.83
Run 3	31.11	26.91	27.06	40.22	23.89	24.23
Mean	31.20	25.75	26.18	39.09	24.05	24.44
Std Dev	0.1453	1.047	1.474	1.012	0.5004	0.3404
%SD	0.4658	4.067	5.633	2.588	2.080	1.393

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	22.82	18.37	18.58	20.89	20.96	20.31
Run 2	23.99	18.53	18.86	21.44	21.59	21.44
Run 3	23.63	18.65	19.00	21.29	21.56	21.37
Mean	23.48	18.52	18.81	21.20	21.37	21.04
Std Dev	0.6005	0.1425	0.2094	0.2826	0.3554	0.6313
%SD	2.557	0.7696	1.113	1.333	1.663	3.000

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1568-~~250K~~ 150K 3/12/07

K1568-~~2~~ 15 of K 2/3/1/07

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	21.20	21.05	17.13	17.32	17.00	16.77
Run 2	21.47	21.72	17.36	18.04	17.56	17.56
Run 3	21.00	22.00	17.91	17.38	16.85	17.44
Mean	21.23	21.59	17.46	17.58	17.13	17.26
Std Dev	0.2367	0.4917	0.4005	0.4007	0.3728	0.4245
%SD	1.115	2.278	2.293	2.279	2.176	2.460

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	17.07
Run 2	17.60
Run 3	17.28
Mean	17.32
Std Dev	0.2678
%SD	1.547

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	93.80	74.73	77.98	88.54
Run 2	92.79	73.78	76.99	85.96
Run 3	93.03	73.48	77.34	85.79
Mean	93.20	73.99	77.44	86.77
Std Dev	0.5288	0.6547	0.5068	1.539

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #35
First repeat started at : Mon Mar 12 2007 11:42:53
Last repeat started at : Mon Mar 12 2007 11:44:27
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0211	34.39	43.13	1.430	0.6173	19.16	165.3
Run 2	0.0064	31.90	39.35	1.377	0.5974	16.72	107.3
Run 3	0.0036	33.86	41.88	1.343	0.5460	17.46	135.6
Mean	0.0104	33.39	41.45	1.383	0.5869	17.78	136.1
Std Dev	0.0094	1.311	1.925	0.0440	0.0368	1.246	28.97
%SD	90.92	3.927	4.643	3.182	6.272	7.010	21.29

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	8.094	0.9649	1.299	5.799	8.908	7.574
Run 2	7.295	0.8376	1.170	4.687	7.180	6.889
Run 3	7.501	0.8455	1.146	4.658	7.114	7.243
Mean	7.630	0.8827	1.205	5.047	7.734	7.235
Std Dev	0.4148	0.0713	0.0820	0.6514	1.017	0.3427
%SD	5.436	8.083	6.804	12.91	13.15	4.737

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.611	4.214	2.108	17.97	0.3415	0.3353
Run 2	6.835	1.887	1.395	17.91	0.3160	0.3031
Run 3	6.550	4.009	1.525	17.90	0.2309	0.3492
Mean	6.665	3.370	1.676	17.93	0.2962	0.3292
Std Dev	0.1500	1.288	0.3799	0.0378	0.0579	0.0236
%SD	2.250	38.23	22.66	0.2108	19.55	7.176

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1565	0.0437	0.0372	0.0428	0.0540	0.0666
Run 2	0.1288	0.0216	0.0171	0.0311	0.0310	0.0370
Run 3	0.1298	0.0079	0.0102	0.0263	0.0465	0.0287
Mean	0.1384	0.0244	0.0215	0.0334	0.0438	0.0441
Std Dev	0.0157	0.0181	0.0141	0.0085	0.0117	0.0199
%SD	11.36	73.96	65.45	25.44	26.79	45.16

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

031207

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Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0347	0.0549	0.0151	[illegible]	0.0896	0.0643
Run 2	0.0353	0.0364	-0.0302	-0.0163	0.0237	0.0214
Run 3	0.0185	0.0265	-0.0180	-0.0246	0.0179	0.0059
Mean	0.0295	0.0393	-0.0111	-0.0135	0.0371	0.0305
Std Dev	0.0095	0.0144	0.0235	0.0127	0.0283	0.0303
%SD	32.38	36.65	212.0	93.88	76.42	99.13

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0545
Run 2	0.0207
Run 3	0.0163
Mean	0.0305
Std Dev	0.0209
%SD	68.57

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	88.22	70.87	76.68	82.15
Run 2	93.10	73.55	78.07	84.06
Run 3	90.18	73.03	76.58	84.16
Mean	90.50	72.48	77.11	83.45
Std Dev	2.456	1.423	0.8337	1.134

9/12/07

K1564-1

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #36
First repeat started at : Mon Mar 12 2007 11:45:53
Last repeat started at : Mon Mar 12 2007 11:47:27
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0009	26.11	29.93	0.1401	0.3867	23.92	117.1
Run 2	0.0003	25.49	30.05	0.1525	0.3857	23.77	130.1
Run 3	0.0009	25.92	30.31	0.1712	0.3867	23.86	114.3
Mean	0.0007	25.84	30.10	0.1546	0.3864	23.85	120.5
Std Dev	0.0003	0.3188	0.1906	0.0157	0.0006	0.0786	8.419
%SD	45.31	1.234	0.6333	10.14	0.1582	0.3294	6.986

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	18.13	0.8345	1.022	4.635	7.015	7.500
Run 2	16.89	0.8130	1.045	4.454	7.045	7.123
Run 3	17.07	0.7954	0.9988	4.320	7.031	7.572
Mean	17.36	0.8143	1.022	4.470	7.030	7.398
Std Dev	0.6707	0.0196	0.0231	0.1576	0.0148	0.2408
%SD	3.863	2.407	2.263	3.526	0.2103	3.255

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	4.603	1.662	2.525	12.82	1.666	1.892
Run 2	4.719	2.687	2.185	13.05	1.564	1.596
Run 3	4.635	2.249	1.953	13.13	1.634	1.706
Mean	4.652	2.199	2.221	13.00	1.621	1.731
Std Dev	0.0600	0.5143	0.2880	0.1579	0.0519	0.1499
%SD	1.289	23.38	12.97	1.215	3.201	8.659

F1568-2

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.441	0.0058	-0.0003	0.0903	0.0791	0.0897
Run 2	1.456	-0.0033	-0.0071	0.0823	0.0751	0.0901
Run 3	1.492	0.0007	-0.0008	0.0844	0.0822	0.0802
Mean	1.463	0.0010	-0.0027	0.0857	0.0788	0.0867
Std Dev	0.0263	0.0046	0.0038	0.0042	0.0036	0.0056
%SD	1.799	443.3	137.2	4.874	4.508	6.468

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

F1568-2

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0365	0.0127	-0.0242	-0.0216	-0.0070	0.0075
Run 2	0.0260	0.0222	-0.0161	-0.0217	-0.0016	-0.0063
Run 3	0.0414	0.0140	-0.0257	-0.0218	-0.0045	-0.0027
Mean	0.0346	0.0163	-0.0220	-0.0217	-0.0044	-0.0005
Std Dev	0.0079	0.0052	0.0052	0.0001	0.0027	0.0072
%SD	22.76	31.69	23.63	0.5994	62.14	1389

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0006
Run 2	-0.0015
Run 3	-0.0063
Mean	-0.0028
Std Dev	0.0030
%SD	109.3

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	91.63	75.75	78.71	84.71
Run 2	92.67	76.21	80.85	85.98
Run 3	92.78	77.82	80.65	86.50
Mean	92.36	76.59	80.07	85.73
Std Dev	0.6308	1.089	1.184	0.9200

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #37
First repeat started at : Mon Mar 12 2007 11:48:39
Last repeat started at : Mon Mar 12 2007 11:50:14
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0014	33.35	40.94	1.301	0.4423	16.67	102.8
Run 2	0.0014	30.93	40.76	1.413	0.5511	17.54	119.6
Run 3	0.0012	33.43	40.29	1.365	0.5004	18.91	91.07
Mean	0.0013	32.57	40.66	1.360	0.4980	17.71	104.5
Std Dev	0.0001	1.420	0.3351	0.0559	0.0544	1.124	14.32
%SD	5.953	4.360	0.8241	4.114	10.93	6.349	13.70

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.870	0.8044	1.253	4.844	6.676	7.126
Run 2	7.708	0.8376	1.353	4.240	6.862	6.475
Run 3	7.629	0.8547	1.284	4.083	6.242	5.976
Mean	7.402	0.8322	1.297	4.389	6.594	6.526
Std Dev	0.4623	0.0256	0.0516	0.4018	0.3179	0.5766
%SD	6.245	3.077	3.977	9.154	4.821	8.836

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	6.280	2.556	1.951	16.92	0.2114	0.3400
Run 2	6.221	3.568	1.595	16.57	0.2517	0.3421
Run 3	6.008	2.231	1.452	16.02	0.2034	0.3621
Mean	6.169	2.785	1.666	16.50	0.2222	0.3480
Std Dev	0.1429	0.6971	0.2571	0.4547	0.0259	0.0122
%SD	2.317	25.03	15.43	2.755	11.67	3.504

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1134	-0.0069	-0.0030	0.0247	0.0334	0.0257
Run 2	0.1111	-0.0022	-0.0062	0.0255	0.0360	0.0277
Run 3	0.1053	-0.0014	-0.0096	0.0317	0.0339	0.0085
Mean	0.1099	-0.0035	-0.0062	0.0273	0.0344	0.0206
Std Dev	0.0042	0.0030	0.0033	0.0039	0.0014	0.0106
%SD	3.804	84.80	52.74	14.16	3.990	51.15

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

K1568-1

F1568-1

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0203	0.0144	-0.0278	-0.0225	0.0210	0.0177
Run 2	0.0267	0.0208	-0.0225	-0.0265	0.0019	-0.0053
Run 3	0.0281	0.0123	-0.0276	-0.0201	0.0305	0.0347
Mean	0.0250	0.0158	-0.0259	-0.0230	0.0178	0.0157
Std Dev	0.0042	0.0045	0.0030	0.0032	0.0145	0.0201
%SD	16.70	28.14	11.49	13.98	81.68	127.7

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0253
Run 2	0.0080
Run 3	0.0229
Mean	0.0187
Std Dev	0.0093
%SD	49.82

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	93.57	79.11	79.96	83.84
Run 2	92.00	71.38	79.04	88.33
Run 3	94.03	76.65	79.11	91.36
Mean	93.20	75.71	79.37	87.85
Std Dev	1.063	3.949	0.5106	3.783

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #38
First repeat started at : Mon Mar 12 2007 11:51:33
Last repeat started at : Mon Mar 12 2007 11:53:08
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	26.19	27.36	26.24	25.82	26.33	25.63	85.78
Run 2	25.44	25.76	26.05	26.68	25.19	25.68	91.27
Run 3	25.30	25.66	25.78	26.71	26.40	24.52	66.02
Mean	25.64	26.26	26.02	26.41	25.97	25.28	81.02
Std Dev	0.4767	0.9543	0.2301	0.5099	0.6795	0.6583	13.28
%SD	1.859	3.634	0.8843	1.931	2.616	2.604	16.39

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	25.38	25.32	27.28	26.12	26.03	26.51
Run 2	26.33	25.88	26.88	26.13	26.79	24.92
Run 3	27.20	26.61	25.61	25.37	25.38	24.87
Mean	26.30	25.94	26.59	25.87	26.07	25.43
Std Dev	0.9107	0.6481	0.8707	0.4355	0.7068	0.9326
%SD	3.462	2.499	3.275	1.683	2.711	3.667

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.70	26.32	25.63	29.53	25.39	24.58
Run 2	25.16	25.93	25.33	26.72	23.51	24.61
Run 3	25.59	24.34	25.54	26.72	24.04	23.52
Mean	25.81	25.53	25.50	27.65	24.31	24.24
Std Dev	0.7931	1.047	0.1511	1.622	0.9723	0.6162
%SD	3.072	4.103	0.5925	5.864	3.999	2.542

CLV
MS10-43-C

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.23	24.92	25.65	25.33	25.49	25.16
Run 2	23.73	24.76	24.44	25.01	24.90	24.37
Run 3	23.91	24.59	25.20	25.06	24.16	24.01
Mean	23.96	24.76	25.09	25.13	24.85	24.51
Std Dev	0.2522	0.1645	0.6107	0.1704	0.6661	0.5903
%SD	1.053	0.6646	2.434	0.6778	2.681	2.408

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	24.65	25.16	27.98	27.99	28.16	28.20
Run 2	24.68	24.50	28.07	27.62	27.64	27.82
Run 3	23.64	24.32	27.34	26.80	26.92	26.80
Mean	24.32	24.66	27.80	27.47	27.58	27.60
Std Dev	0.5890	0.4432	0.3980	0.6070	0.6218	0.7234
%SD	2.422	1.797	1.432	2.209	2.255	2.620

CLV
ns10-43-C

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	28.23
Run 2	27.93
Run 3	26.92
Mean	27.69
Std Dev	0.6882
%SD	2.485

See screen 8/21/2007

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	98.23	103.0	102.7	94.13
Run 2	100.1	103.6	104.4	94.30
Run 3	101.7	107.8	106.5	98.71
Mean	100.0	104.8	104.5	95.71
Std Dev	1.742	2.592	1.920	2.599

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #39
First repeat started at : Mon Mar 12 2007 11:57:53
Last repeat started at : Mon Mar 12 2007 11:59:27
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	25.24	26.51	25.54	26.75	26.40	26.08	123.2
Run 2	24.98	25.93	25.30	26.81	25.30	25.68	98.73
Run 3	25.00	26.32	24.75	25.61	25.31	24.80	52.68
Mean	25.07	26.26	25.20	26.39	25.67	25.52	91.53
Std Dev	0.1403	0.2941	0.4085	0.6760	0.6311	0.6518	35.79
%SD	0.5594	1.120	1.621	2.562	2.458	2.554	39.10

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.89	26.51	25.79	25.84	26.88	25.81
Run 2	26.23	26.15	25.46	26.14	26.08	25.71
Run 3	26.53	26.20	25.03	25.34	25.14	24.87
Mean	26.55	26.29	25.43	25.77	26.03	25.46
Std Dev	0.3309	0.1956	0.3797	0.4044	0.8752	0.5139
%SD	1.246	0.7442	1.493	1.569	3.362	2.018

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	26.50	25.07	26.48	27.10	23.84	23.38
Run 2	24.83	26.00	25.61	25.49	24.30	23.82
Run 3	24.90	24.97	24.75	25.73	23.41	23.56
Mean	25.41	25.34	25.61	26.11	23.85	23.59
Std Dev	0.9427	0.5694	0.8653	0.8693	0.4455	0.2242
%SD	3.710	2.247	3.378	3.329	1.868	0.9505

CLV
ms10-43-c
Renum

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	23.42	25.22	25.05	24.89	24.99	24.44
Run 2	23.02	24.46	25.23	25.10	25.52	24.45
Run 3	23.89	24.35	24.63	24.94	25.42	24.76
Mean	23.44	24.68	24.97	24.98	25.31	24.55
Std Dev	0.4336	0.4716	0.3052	0.1125	0.2804	0.1807
%SD	1.850	1.911	1.222	0.4502	1.108	0.7362

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	23.93	24.42	27.58	27.60	27.34	27.40
Run 2	24.14	24.52	27.57	27.68	27.87	27.29
Run 3	23.89	24.96	26.63	26.80	26.49	27.30
Mean	23.99	24.63	27.26	27.36	27.23	27.33
Std Dev	0.1345	0.2867	0.5449	0.4863	0.6938	0.0612
%SD	0.5607	1.164	1.999	1.777	2.548	0.2238

CV
Reason
NS10-43-C

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	27.47
Run 2	27.50
Run 3	26.69
Mean	27.22
Std Dev	0.4620
%SD	1.697

Internal Standard Drift% relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	102.2	105.4	107.9	99.31
Run 2	102.8	106.6	107.9	98.82
Run 3	104.4	111.9	109.4	104.2
Mean	103.2	107.9	108.4	100.8
Std Dev	1.163	3.446	0.8589	2.999

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #40
First repeat started at : Mon Mar 12 2007 12:02:04
Last repeat started at : Mon Mar 12 2007 12:03:37
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0001	0.1154	0.1774	0.0258	-0.0023	0.0610	43.81
Run 2	0.0015	0.0523	0.2016	0.0253	-0.0027	0.0645	85.29
Run 3	0.0003	0.0945	0.2050	0.0111	-0.0018	0.0758	67.45
Mean	0.0007	0.0874	0.1946	0.0207	-0.0023	0.0671	65.52
Std Dev	0.0008	0.0322	0.0150	0.0084	0.0005	0.0077	20.81
%SD	115.9	36.79	7.725	40.32	21.09	11.52	31.76

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1970	0.0357	-0.0141	0.0353	0.0837	0.0916
Run 2	0.1586	0.0339	-0.0233	0.0981	0.1027	0.1123
Run 3	0.0425	0.0360	-0.0088	0.0540	0.0800	0.0529
Mean	0.1327	0.0352	-0.0154	0.0625	0.0888	0.0856
Std Dev	0.0804	0.0011	0.0073	0.0322	0.0122	0.0301
%SD	60.60	3.164	47.51	51.60	13.71	35.18

CCB

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.1082	0.2619	-0.7395	0.7061	-0.0002	-0.0068
Run 2	0.0787	0.1386	-0.5802	0.5175	0.0065	-0.0144
Run 3	0.0693	0.2400	-0.8481	0.5033	-0.0068	-0.0256
Mean	0.0854	0.2135	-0.7226	0.5756	-0.0002	-0.0156
Std Dev	0.0203	0.0658	0.1348	0.1132	0.0066	0.0095
%SD	23.75	30.80	18.65	19.66	4168	60.61

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0087	0.0350	0.0160	-0.0014	-0.0027	0.0094
Run 2	-0.0137	0.0223	0.0111	-0.0044	-0.0053	-0.0006
Run 3	-0.0151	0.0213	0.0126	0.0031	-0.0001	0.0015
Mean	-0.0067	0.0276	0.0133	-0.0009	-0.0027	0.0034
Std Dev	0.0133	0.0069	0.0025	0.0038	0.0026	0.0052
%SD	198.9	25.21	18.83	416.3	97.65	152.3

Gel Reason 3/14/07

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0074	0.0037	-0.0059	0.0080	-0.0018	-0.0046
Run 2	0.0173	0.0121	0.0122	0.0059	-0.0005	0.0224
Run 3	-0.0011	-0.0094	-0.0039	-0.0014	0.0019	-0.0063
Mean	0.0079	0.0021	0.0008	0.0042	-0.0001	0.0039
Std Dev	0.0092	0.0108	0.0099	0.0049	0.0019	0.0161
%SD	116.8	506.8	1228	118.4	1540	416.6

CCB

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0005
Run 2	0.0065
Run 3	-0.0030
Mean	0.0010
Std Dev	0.0049
%SD	491.6

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	101.5	107.7	104.4	97.07
Run 2	102.6	107.2	103.5	96.84
Run 3	102.5	109.0	105.3	97.20
Mean	102.2	108.0	104.4	97.04
Std Dev	0.6115	0.9398	0.8943	0.1855

K-ICP-MS-01 Greg Jasper STARLIMS #79820

Multi-Element Concentrations Mon Mar 12 2007

Experiment name : 031207A
Analysis procedure : EPA Method 6020
Sample name : Sample #41
First repeat started at : Mon Mar 12 2007 12:06:18
Last repeat started at : Mon Mar 12 2007 12:07:52
Interference Equations : DEFAULT
Dilution Factor : 1.0000 Concentration units : ppb

Element	Beryllium	Chromium	Chromium	Manganese	Cobalt	Nickel	Nickel
Isotope	Be 9	Cr 52	Cr 53	Mn 55	Co 59	Ni 60	Ni 61
Detector	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0003	0.1061	0.2075	0.0145	-0.0013	0.0576	44.07
Run 2	0.0000	0.1267	0.1635	0.0135	-0.0015	0.0486	54.22
Run 3	-0.0004	0.0573	0.0655	-0.0024	-0.0025	0.0859	66.22
Mean	-0.0000	0.0967	0.1455	0.0085	-0.0018	0.0640	54.84
Std Dev	0.0003	0.0356	0.0727	0.0095	0.0006	0.0195	11.09
%SD	1114	36.82	49.95	110.8	35.83	30.47	20.22

Element	Nickel	Copper	Copper	Zinc	Zinc	Zinc
Isotope	Ni 62	Cu 63	Cu 65	Zn 66	Zn 67	Zn 68
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.3419	0.0471	-0.0155	0.0824	0.0833	0.0836
Run 2	0.1774	0.0369	-0.0149	0.0693	0.0099	0.0910
Run 3	0.2301	0.0354	-0.0028	0.0471	0.1663	0.1075
Mean	0.2498	0.0398	-0.0111	0.0663	0.0865	0.0940
Std Dev	0.0840	0.0064	0.0072	0.0178	0.0782	0.0123
%SD	33.64	15.97	64.84	26.90	90.43	13.04

Element	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0023	0.3510	-0.5865	0.1528	-0.0079	-0.0330
Run 2	0.0781	0.1553	-0.5520	0.5256	-0.0031	-0.0330
Run 3	-0.0165	0.3659	-0.2637	0.2447	-0.0117	-0.0286
Mean	0.0198	0.2908	-0.4674	0.3077	-0.0076	-0.0315
Std Dev	0.0510	0.1175	0.1772	0.1942	0.0043	0.0026
%SD	258.3	40.41	37.92	63.12	56.74	8.183

CCB
Renson

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114
Detector	PC	PC	PC	PC	PC	PC
Run 1	-0.0230	0.0058	-0.0066	-0.0022	0.0013	0.0027
Run 2	-0.0250	0.0060	-0.0086	0.0023	0.0000	0.0016
Run 3	-0.0255	0.0059	-0.0093	-0.0046	-0.0003	0.0035
Mean	-0.0245	0.0059	-0.0082	-0.0015	0.0004	0.0026
Std Dev	0.0013	0.0001	0.0014	0.0035	0.0009	0.0009
%SD	5.404	2.273	17.35	231.1	242.3	36.40

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207

Element	Antimony	Antimony	Thallium	Thallium	Lead	Lead
Isotope	Sb 121	Sb 123	Tl 203	Tl 205	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC
Detector	PC	PC	PC	PC	PC	PC
Run 1	0.0085	0.0068	-0.0068	0.0043	-0.0061	0.0142
Run 2	0.0063	0.0021	-0.0039	-0.0024	0.0119	-0.0013
Run 3	0.0136	0.0014	0.0009	-0.0048	-0.0040	-0.0106
Mean	0.0095	0.0034	-0.0033	-0.0010	0.0006	0.0008
Std Dev	0.0038	0.0029	0.0039	0.0047	0.0099	0.0125
%SD	39.98	86.33	118.2	488.3	1655	1648

CB
renun

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0000
Run 2	0.0035
Run 3	-0.0043
Mean	-0.0003
Std Dev	0.0039
%SD	1494

Internal Standard Drift; % relative to mean of first sample :

Element	Lithium	Gallium	Indium	Lutetium
Isotope	Li 6	Ga 71	In 115	Lu 175
Detector	PC	PC	PC	PC
Run 1	102.8	105.6	104.8	99.76
Run 2	102.7	105.9	104.2	97.44
Run 3	104.3	107.7	108.0	101.1
Mean	103.3	106.4	105.7	99.45
Std Dev	0.9131	1.143	2.025	1.871

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 2, 2007 Analytical Report for Service Request No: K0701647

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RECEIVED
APR 04 2007
TREADWELL & ROLLO

RE: Presidio of San Francisco

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on March 02, 2007. For your reference, these analyses have been assigned our service request number K0701647.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata

Gregory Salata, Ph.D.
Project Chemist

GS/jm

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Treadwell and Rollo, Inc.	**Service Request No.:**	K0701647
Project:	Presidio of San Francisco	**Date Received:**	03/02/07
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 03/02/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Total Sulfide by EPA Method 376.2:
The matrix spike recovery of Total Sulfide for sample 1047MW101CL was outside control criteria due to suspected matrix interferences. A duplicate matrix spike was analyzed with a similar recovery. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No anomalies associated with the analysis of these samples were observed.

Total Metals

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Organochlorine Pesticides by EPA Method 8081A

Second Source Exceptions:
The analysis of Chlorinated Pesticides by EPA 8081 requires the use of dual column confirmation. When the Initial Calibration Verification (ICV) criteria are met for both columns, the higher of the two sample results is generally reported. The primary evaluation criteria were not met on the confirmation column for Toxaphene in CAL 6126. The ICV results are reported from the acceptable column. The data quality is not affected. No further corrective action was necessary.

Continuing Calibration Verification (CCV) Exceptions:
The primary evaluation criterion was exceeded for alpha-BHC, gamma-BHC, Hepachlor, Aldrin, 4,4'-DDE, and Endrin in CCV 0327F027. In accordance with CAS standard operating procedures, the alternative evaluation

Approved by Gregory Salvatore **Date** 4/2/07

specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Matrix Spike Recovery Exceptions:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Initial Calibration (ICAL) Exceptions:
The primary evaluation criterion was exceeded for Acetone, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, and Bromoform in ICAL ID CAL6077. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

The CAS minimum relative response factor criterion for 2-Butanone (MEK) was not met in ICAL ID CAL6077. In accordance with CAS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality is not significantly affected. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8310

Continuing Calibration Verification (CCV) Exceptions:
The primary evaluation criterion was exceeded for the analyte Benzo(g,h,i)perylene in the FLD signals for CCVs KWG0704189-1, KWG0704189-2 and KWG0704189-3. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria with respect to these analytes.

Matrix Spike Recovery Exceptions:
The matrix spike recovery of Dibenz(a,h)anthracene for sample 1349MW01CL was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The sample did not contain the analyte in question. No further corrective action was appropriate.

Sample Confirmation Notes:
The confirmation comparison criteria of 40% difference for Dibenz(a,h)anthracene was exceeded in sample 1349MW01CLMS. The higher of the two values is reported because no evidence of matrix interference was observed.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____**Date**_____

Chain of Custody Documentation

Treadwell&Rollo 5270068

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

1C0701647

COC No. 0P 2185
Page: 1 of 1

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal / B. Summerset
Recorder (signature required): [signature]
Sent to Laboratory (Name): CAS

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) /MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other) (23)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Total Sulfide	TPH 55 (8015M)	Dissolved Metals (23)				COMMENTS / NOTES
1047 MW101CL	3/1/07	930			X		9		1		2	X			X	X		X		X		X	X					2 others are NP/and NaOH+Zn
1349 MW01CL		820			X		6		1		7	X	X	X	X	X	X			X	X			X				
TB030107 2A CL					X		2																					On hold

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -

RELINQUISHED BY: [signature]	DATE: 3/1/07	RECEIVED BY: [signature] P. BINS	DATE: 3/01/07
PRINT NAME: Devin Raynal FIRM: BTS	TIME: 1510	PRINT NAME: P. BINS FIRM: CAS	TIME: 1510
RELINQUISHED BY: [signature] P. BINS	DATE: 3/1/07	RECEIVED BY: [signature] CAS	DATE: 3/2/07
PRINT NAME: P. BINS FIRM: CAS VIA FED-EX	TIME: 1805	PRINT NAME: FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC Lovelly

Project/Client T&R Service Request K07 01647

Cooler received on 3/2/07 and opened on 3/2/07 by A. Juell

1.	Were custody seals on outside of coolers?	Y	N
	If yes, how many and where?		
2.	Were custody seals intact?	~~Y~~	~~N~~
3.	Were signature and date present on the custody seals?	~~Y~~	~~N~~
4.	Is the shipper's airbill available and filed? If no, record airbill number:	Y	N
5.	COC#		
	Temperature of cooler(s) upon receipt: (°C) -0.5		
	Temperature Blank: (°C) na		
	Were samples hand delivered on the same day as collection?	Y	N
6.	Were custody papers properly filled out (ink, signed, etc.)?	Y	N
7.	Type of packing material present bwrap, sleeves		
8.	**Did all bottles arrive in good condition (unbroken)?**	Y	N
9.	Were all bottle labels complete (i.e analysis, preservation, etc.)?	Y	N
10.	Did all bottle labels and tags agree with custody papers?	Y	N
11.	**Were the correct types of bottles used for the tests indicated?**	Y	N
12.	Were all of the preserved bottles received at the lab with the appropriate pH?	Y	N
13.	Were VOA vials checked for absence of air bubbles, and if present, noted below?	Y	N
14.	Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below?	~~Y~~	~~N~~
15.	Did the bottles originate from CAS/K or a branch laboratory?	Y	N
16.	**Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?**	~~Y~~	~~N~~
17.	Was C12/Res negative?	Y	N

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Alkalinity as CaCO3, Total

Units : mg/L
Basis : NA

Analysis Method : 310.1
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	2	1	03/09/07	38	
1349MW01CL	K0701647-002	2	1	03/09/07	260	
Method Blank	K0701647-MB	2	1	03/09/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 3/1/2007
Date Received : 3/2/2007
Date Prepared : NA
Date Analyzed : 03/09/07

Duplicate Summary
Inorganic Parameters

Sample Name : 1047MW101CL
Lab Code : K0701647-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	310.1	2	38	38	38	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Projcct Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/09/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	310.1	89	87	98	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Chloride

Units : mg/L
Analysis Method : 300.0
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.2	2	03/02/07	11.2	
1349MW01CL	K0701647-002	0.2	100	03/06/07	899	
Method Blank	K0701647-MB	0.2	1	03/02/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	0.2	11.2	11.2	11.2	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	300.0	0.2	10.0	11.2	20.0	88	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.0	4.7	94	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701647
Date Collected : NA
Date Received : NA

Chloride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/2/2007	5.0	4.8	96
CCV2 Result	3/2/2007	5.0	4.8	96
CCV3 Result	3/2/2007	5.0	4.8	96

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/2/2007	0.2	ND
CCB2 Result	3/2/2007	0.2	ND
CCB3 Result	3/2/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Fluoride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.2	2	03/02/07	ND	
1349MW01CL	K0701647-002	0.2	2	03/02/07	0.3	
Method Blank	K0701647-MB	0.2	1	03/02/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name : 1047MW101CL
Lab Code : K0701647-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	0.2	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 3/1/2007
Date Received : 3/2/2007
Date Prepared : NA
Date Analyzed : 03/02/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : 1047MW101CL
Lab Code : K0701647-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	300.0	0.2	10.0	ND	10.9	109	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	17.5	18.1	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701647
Date Collected : NA
Date Received : NA

Fluoride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/2/2007	5.0	5.5	110
CCV2 Result	3/2/2007	5.0	5.4	108
CCV3 Result	3/2/2007	5.0	5.4	108

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/2/2007	0.2	ND
CCB2 Result	3/2/2007	0.2	ND
CCB3 Result	3/2/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Nitrite as Nitrogen

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.1	2	03/02/07 11:38	ND	
1349MW01CL	K0701647-002	0.1	100	03/02/07 12:48	ND	
Method Blank	K0701647-MB	0.1	1	03/02/07 09:50	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	300.0	0.1	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	300.0	0.1	10.0	ND	10.3	103	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	300.0	100	101	101	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701647
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/2/2007	2.0	2.1	105
CCV2 Result	3/2/2007	2.0	2.1	105
CCV3 Result	3/2/2007	2.0	2.0	100

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/2/2007	0.1	ND
CCB2 Result	3/2/2007	0.1	ND
CCB3 Result	3/2/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Nitrate as Nitrogen

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.1	2	03/02/07 11:38	0.28	
1349MW01CL	K0701647-002	0.1	2	03/02/07 11:50	1.4	
Method Blank	K0701647-MB	0.1	1	03/02/07 09:50	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 3/1/2007
Date Received : 3/2/2007
Date Prepared : NA
Date Analyzed : 03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name : 1047MW101CL
Lab Code : K0701647-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	300.0	0.1	0.28	0.29	0.29	4	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	300.0	0.1	10.0	0.28	10.1	98	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	300.0	5.0	4.7	94	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701647
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/2/2007	2.0	1.9	95
CCV2 Result	3/2/2007	2.0	1.9	95
CCV3 Result	3/2/2007	2.0	1.9	95

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/2/2007	0.1	ND
CCB2 Result	3/2/2007	0.1	ND
CCB3 Result	3/2/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Sulfate

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.2	2	03/02/07	6.6	
1349MW01CL	K0701647-002	20	100	03/06/07	284	
Method Blank	K0701647-MB	0.2	1	03/02/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Duplicate Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate	300.0	0.2	6.6	6.6	6.6	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	300.0	0.2	10.0	6.6	16.2	96	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/02/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.0	4.9	98	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701647
Date Collected : NA
Date Received : NA

Sulfate
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/2/2007	5.0	5.0	100
CCV2 Result	3/2/2007	5.0	5.0	100
CCV3 Result	3/2/2007	5.0	4.9	98

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/2/2007	0.2	ND
CCB2 Result	3/2/2007	0.2	ND
CCB3 Result	3/2/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Sulfide, Total

Analysis Method : 376.2
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	0.4	1	03/07/07	ND	
Method Blank	K0701647-MB	0.4	1	03/07/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/07/07

Duplicate Summary
Inorganic Parameters

Sample Name :	1047MW101CL	Units :	mg/L
Lab Code :	K0701647-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.4	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.
QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	3/1/2007
Project Number :	NA	**Date Received :**	3/2/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/07/07

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : 1047MW101CL
Lab Code : K0701647-001MS K0701647-001DMS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Sulfide, Total	NONE	376.2	0.4	2.05	2.05	ND	0.7	0.7	34	34	75-125	<1	*

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	NONE	376.2	2.05	2.0	96	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 03/01/07
Date Received : 03/02/07

Solids, Total Dissolved (TDS)

Units : mg/L
Basis : NA

Analysis Method : 160.1
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1047MW101CL	K0701647-001	5	1	03/14/07	52	
1349MW01CL	K0701647-002	5	1	03/14/07	1800	
Method Blank	K0701647-MB	5	1	03/14/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701647
Date Collected : 3/1/2007
Date Received : 3/2/2007
Date Prepared : NA
Date Analyzed : 03/14/07

Duplicate Summary
Inorganic Parameters

Sample Name : 1349MW01CL
Lab Code : K0701647-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	160.1	5	1800	2070	1940	14	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701647
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/14/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701647-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved (TDS)	NONE	160.1	1110	1100	99	85-115	

79823

Work Request #	Original (K1666)	K1761	K1568	K1647	K1794	K1599
Tier:	E	III	III	III	III	III
Date Analyzed:	3/9/07		K1742	K1675	K1644	K1814
Analyst:	lkr for NB		III	III	III	II
Analysis:	SM 2320B Alk - EPA 310.1		K1848 III	K1879 II		

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

K1644 is rush

Final Approved by: [signature] Date: 3/15/07

DQREPORT

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB	LCS	diss 1600-1	diss 1600-2	diss 1600-3	1761-7	1761-7d
pH 12.63	Initial pH	7.26	9.11	6.61	6.63	6.39	6.66	6.61
	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.04	4.37	10.51	14.10	3.36	11.02	11.17
10.01	Titrant used to pH 4.2	0.07						
pH 7.00	Sample Volume	50	50	50	50	50	50	50
6.99	Alkalinity	<2	87	210	282	67	220	223
pH 4.00	Bicarbonate							
4.00	Carbonate							
pH 4.00 Chk.	Hydroxide							
4.04								

Sample #	1761-45	1761-46	1761-47	BC	1761-48	1761-49	1568-1	1568-1d
Initial pH	6.69	6.69	6.62	3.97	6.41	6.51	6.81	6.79
Titrant used to pH 8.3								
Titrant used to pH 4.5	15.01	15.39	12.41		11.63	11.47	14.38	14.39
Titrant used to pH 4.2								
Sample Volume	50	50	52		50	50	50	50
Alkalinity	300	308	239		233	229	288	288
Bicarbonate							288	288
Carbonate							<2	<2
Hydroxide								

LCS : ERA **Lot # =** 5118-698 **True Value =** 89.3 **% Rec. =** 97, 101, 99

Titrant: Manf: VWR **Lot # =** 6296 **Concentration:** **0.02N / 0.1N** (Circle one)

Calculations : **Alkalinity =** $\frac{\text{A x N x 50,000}}{\text{Volume (mls)}}$ **A =** mls standard titrant used **N =** Normality of standard acid

Comments: 1761-7/7d $\bar{x}$ = 222 RPD = 1

1568-1/1d $\bar{x}$ = 288 RPD = <1

Analyzed By: nb		Date: 3.9.07	9
Reveiwed By:		Date: 3/15/07	

Alk_CO_3_HCO_3 Benchsheet

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	1568-2	1647-1	1647-1d	1647-2	1794-2	1794-3	BC	1794-5
Initial pH	6.76	6.80	6.76	6.43	6.63	6.51	3.98	6.51
Titrant used to pH 8.3								
Titrant used to pH 4.5	11.78	2.30	1.89	13.02	10.82	7.33		2.65
Titrant used to pH 4.2								
Sample Volume	52	60	50	50	51	50		50
Alkalinity	227	38	38	260				
Bicarbonate	227	38	38	260	212	147		53
Carbonate	<2	<2	<2	<2	<2	<2		<2
Hydroxide					<2	<2		<2

Sample #	1794-6	1794-7	1794-8	1794-9	1794-10	1794-10d	1794-11	1794-12
Initial pH	6.58	6.51	6.49	6.92	6.24	6.33	6.31	6.82
Titrant used to pH 8.3								
Titrant used to pH 4.5	26.03	2.03	2.28	3.24	0.89	0.90	0.96	9.69
Titrant used to pH 4.2					1.01	1.02	1.07	
Sample Volume	50	50	50	50	50	50	50	50
Alkalinity								
Bicarbonate	521	41	46	65	15	16	17	194
Carbonate	<2	<2	<2	<2	<2	<2	<2	<2
Hydroxide	<2	<2	<2	<2	<2	<2	<2	<2

Sample #	1794-14	BC	1794-15	1794-16	1794-17	1794-18	1794-19	1794-20
Initial pH	6.65	3.99	6.79	6.77	7.04	6.73	6.94	6.68
Titrant used to pH 8.3								
Titrant used to pH 4.5	2.94		3.52	12.47	3.14	31.50	2.51	25.61
Titrant used to pH 4.2								
Sample Volume	50		50	50	50	50	50	50
Alkalinity								
Bicarbonate	59		70	449	63	630	50	512
Carbonate	<2		<2	<2	<2	<2	<2	<2
Hydroxide	<2		<2	<2	<2	<2	<2	<2

Comments: 1647-1/1d $\bar{x}$ = 38 RPD = 21
1794-10/10d $\bar{x}$ = 16 RPD = 6

Analyzed By: nb	Date: 3.9.07
Reveiwed By: M	Date: 3/16/07

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	MB2	LCS2	1599-3	1599-14	BC	1742-2	1742-3	1742-4
Initial pH	6.26	9.10	8.23	7.91	3.99	7.34	6.89	7.43
Titrant used to pH 8.3								
Titrant used to pH 4.5	0.01	4.50	7.19	4.73		5.18	4.43	4.12
Titrant used to pH 4.2	0.02							
Sample Volume	50	50	54	50		50	50	50
Alkalinity	<2	90	133	95		104	89	82
Bicarbonate								
Carbonate								
Hydroxide								

Sample #	1742-5	1675-3	1675-11	1644-2	1644-3	1644-3d	1644-4	BC
Initial pH	8.42	7.94	7.74	6.33	7.37	7.43	7.35	3.98
Titrant used to pH 8.3								
Titrant used to pH 4.5	5.06	6.02	5.62	0.03	20.81	20.95	20.97	
Titrant used to pH 4.2				0.04				
Sample Volume	50	50	50	50	50	50	50	
Alkalinity	101	120	112	<2	416	419	419	
Bicarbonate				<2	416	419	419	
Carbonate				<2	<2	<2	<2	
Hydroxide				<2	<2	<2	<2	

Sample #	1644-5	1644-6	1644-7	1814-1	1898-4	1898-5	1898-6	1879-1
Initial pH	7.33	7.32	5.78	4.85	7.11	6.62	6.40	6.94
Titrant used to pH 8.3								
Titrant used to pH 4.5	20.29	7.31	0.08	~~4.62~~ 3.62	9.04	6.88	3.42	5.46
Titrant used to pH 4.2			0.22					
Sample Volume	50	50	50	50	50	50	50	50
Alkalinity	406	146	<2		181	138	68	109
Bicarbonate	406	146	<2	72				109
Carbonate	<2	<2	<2					
Hydroxide	<2	<2	<2					

Comments: nb 3.9.07

1644-2,3,6,7 ID#:10 1644-3/3d $\bar{x}$=418 RPD=1

1644-4 ID#:25

1644-5 ID#:10

Analyzed By: nb	Date: 3.9.07
Reveiwed By:	Date: 3/15/07

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	1879-2	1879-3	BC	1879-4	1879-5	1879-5d	MB	LCS
Initial pH	7.03	6.97	4.01	6.61	6.74	6.78	6.77	9.08
Titrant used to pH 8.3								
Titrant used to pH 4.5	5.61	4.68		4.04	3.30	3.32	0.02	4.38
Titrant used to pH 4.2							0.05	
Sample Volume	50	50		50	50	50	50	50
Alkalinity	112	94		81	66	66	02	88
Bicarbonate	112	94		81	66	66		
Carbonate								
Hydroxide								

Sample #	BC							
Initial pH	4.01							
Titrant used to pH 8.3								
Titrant used to pH 4.5								
Titrant used to pH 4.2								
Sample Volume								
Alkalinity								
Bicarbonate								
Carbonate								
Hydroxide								

Sample #								
Initial pH								
Titrant used to pH 8.3								
Titrant used to pH 4.5								
Titrant used to pH 4.2								
Sample Volume								
Alkalinity								
Bicarbonate								
Carbonate								
Hydroxide								

Comments:

1879-5/5d $\bar{x}$ = 66 RPD = <1

Analyzed By: nb	Date: 3.9.07
Reveiwed By: [illegible]	Date: 3/15/07

Work Request # (Original) K1644 K1647

Tier: V V

Date Analyzed: 3/7/07

Analyst: S. Hopkins

Analysis: 376.2

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

K1644-3MS/MSD failed at 34% +34%. Matrix interference suspected.

Final Approved by: [signature] Date: 3/7/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

79487

Work Order #: K1644, K1647

Analysis: Analysis for Total Sulfide

Method: 376.2

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
Conc. (mg/L)	0.000	0.051	0.513	1.025	1.538	2.050	2.563				(R) =	0.9989
Absorbance	0.000	0.036	0.387	0.749	1.106	1.427	1.718				Slope =	0.6788
											Y Int. =	0.0242

Date Prep'd	Sample #	Dil. Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
3/7/2007	ICV	1	1.577	2.2877	2.2877	40	40	2.29		2.29		
3/7/2007	ICB	1	0.003	-0.0312	<0.05	40	40	<0.05		<0.05		
3/7/2007	CCV	1	1.430	2.0711	2.0711	40	40	2.07		2.07		
3/7/2007	CCB	1	0.001	-0.0342	<0.05	40	40	<0.05		<0.05		
3/7/2007	MB	1	0.000	-0.0356	<0.05	20	20	<0.05		<0.05		
3/7/2007	LCS	1	1.364	1.9739	1.9739	20	20	1.97		1.97		
3/7/2007	K1644-2 (40)	1	0.001	-0.0342	<0.05	20	20	<0.05		<0.05		
3/7/2007	1644-3 (41)	1	0.000	-0.0356	<0.05	20	20	<0.05		<0.05		
3/7/2007	1644-3d	1	0.005	-0.0283	<0.05	20	20	<0.05		<0.05		
3/7/2007	1644-3ms	1	0.499	0.6995	0.6995	20	20	0.70		0.70		
3/7/2007	1644-3msd	1	0.496	0.6951	0.6951	20	20	0.70		0.70		
3/7/2007	1644-4 (40)	1	0.005	-0.0283	<0.05	20	20	<0.05		<0.05		
3/7/2007	1644-5 (40)	1	0.002	-0.0327	<0.05	20	20	<0.05		<0.05		
3/7/2007	1644-6 (40)	1	0.012	-0.0180	<0.05	20	20	<0.05		<0.05		
3/7/2007	CCV2	1	1.435	2.0785	2.0785	40	40	2.08		2.08		
3/7/2007	CCB2	1	0.000	-0.0356	<0.05	40	40	<0.05		<0.05		
3/7/2007	1644-7 (40)	1	0.001	-0.0342	<0.05	20	20	<0.05		<0.05		
3/7/2007	K1647-1	1	0.016	-0.0121	<0.05	20	20	<0.05		<0.05		
3/7/2007	CCV3	1	1.430	2.0711	2.0711	40	40	2.07		2.07		
3/7/2007	CCB3	1	-0.003	-0.0401	<0.05	40	40	<0.05		<0.05		

CCV =2ml*41.0mg/l/40ml= 2.05mg/l %REC = 101, 101, 101

LCS =1ml*41.0mg/l/20ml = 2.05mg/l %REC = 96

ICV = 2.25ml*41.0mg/L/40ml = 2.31mg/L %REC = 99

MS/MSD = 1ml*41.0mg/L/20ml = 2.05mg/L %REC = 34, 34 Matrix interference suspected.

K1644-3/3d x = ND RPD = --

STD ID# s2/2-1-G CONC. = 4100

Distilled by:	N/A	Date Distilled:	N/A
Analyzed By:	SAN	Date Analyzed:	3/7/07 0800
Reviewed By:		Date Reviewed:	3/7/07

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Analysis: Analysis for Total Sulfide

Method: 376.2

Prep Date : 3/7/2007

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
Conc. (mg/L)	0.000	0.051	0.513	1.025	1.538	2.050	2.563					
Absorbance	0.000	0.036	0.387	0.749	1.106	1.427	1.718					

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
ICV	40	1	1.577		
ICB	40	1	0.003		
CCV	40	1	1.430		
CCB	40	1	0.001		
MB	20	1	0.000		
LCS	20	1	1.364		
K1644-2 (40)	20	1	0.001		
1644-3 (41)	20	1	0.000		
1644-3d	20	1	0.005		
1644-3ms	20	1	0.499		
1644-3msd	20	1	0.496		
1644-4 (40)	20	1	0.005		
1644-5 (40)	20	1	0.002		
1644-6 (40)	20	1	0.012		
CCV2	40	1	1.435		
CCB2	40	1	0.000		
1644-7 (40)	20	1	0.001		
K1647-1	20	1	0.016		
CCV3	40	1	1.430		
CCB3	40	1	-0.003		

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
		1			
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3/7/07

376.2

K0701644, 1647

DU520 S/N: 0112U2001732 1.03
07-MAR-07 09:39:44 SCA
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0243 b: 0.6788

r2=0.998 Var=0.0012

mg/L	Net A
0.0000	0.000
0.0510	0.036
0.5130	0.387
1.0250	0.749
1.5380	1.106
2.0500	1.427
2.5630	1.718

SAH 3/7/07

3/7/07

DU520 S/N: 0112U2001732 1.03
07-MAR-07 09:40:48 SCA Group 2884
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0243 b: 0.6788

Sample		Net A	Dil X	mg/L
~~0001~~		~~1.582~~	~~1.0000~~	~~2.30~~ ①
~~0002~~		~~1.432~~	~~1.0000~~	~~2.07~~ ①
0003	ICB	0.003	1.0000	-0.03
0004	ICV	1.577	1.0000	2.29
0005	CCV	1.430	1.0000	2.07
0006	CCB	0.001	1.0000	-0.03
0007	MB	0.000	1.0000	-0.04
0008	LCS	1.364	1.0000	1.97
0009	K1044-2	0.001 40	1.0000	-0.03
0010	-3	0.000 41	1.0000	-0.04
0011	-3d	0.005	1.0000	-0.03
0012	-3ms	0.499	1.0000	0.70
0013	-3msd	0.496	1.0000	0.70
0014	-4	0.005 40	1.0000	-0.03
0015	-5	0.002 40	1.0000	-0.03
0016	-6	0.012 40	1.0000	-0.02
0017	CCV2	1.435	1.0000	2.08
0018	CCB2	0.000	1.0000	-0.04
0019	K1044-7	0.001 40	1.0000	-0.03
0020	K1047-1	0.016	1.0000	-0.01
0021	CCV3	1.430	1.0000	2.07
0022	CCB3	-0.003	1.0000	-0.04

SAN 3/7/07

3/7/07

① SAN 3/7/07

Work Request #	Original (1664)	1738	1704	1600	1601	1778	1647
Tier:	V	V	II	I	V	II	V

Date Analyzed: 3/13/07

Analyst: RMcKee

Analysis: TDS

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 3/15/07

DQREPORT

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703622

Matrix: WATER

PrepID: KWG0703621

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
MB		200	121.1751	121.1751	0.0000	0.000	NA	583250
LCS		50	66.142	66.0868	0.0552	1104.000	NA	583249
K0701669-001		100	64.1209	64.1167	0.0042	42.000	83	583207
K0701669-002DUP		100	75.0739	75.0708	0.0031	31.000	77	583245
K0701669-002		100	64.5198	64.5161	0.0037	37.000	77	583208
K0701669-003		100	69.9292	69.9242	0.0050	50.000	80	583209
K0701669-004		100	76.4356	76.4309	0.0047	47.000	79	583210
K0701669-005		100	68.2686	68.2642	0.0044	44.000	77	583211
K0701669-006		100	76.8573	76.8528	0.0045	45.000	78	583212
K0701738-001		100	73.5289	73.5256	0.0033	33.000	79	583213
K0701738-002		100	74.7811	74.7786	0.0025	25.000	81	583214
K0701738-003		100	60.3879	60.3815	0.0064	64.000	82	583215
K0701738-004		100	70.7222	70.7192	0.0030	30.000	83	583216
K0701738-005		100	67.5058	67.5006	0.0052	52.000	82	583206
K0701704-002		10	67.9598	67.6030	0.3568	35680.000	39700	583218
K0701704-003		10	65.3845	65.1248	0.2597	25970.000	30170	583219
K0701704-004		100	71.4684	71.4383	0.0301	301.000	482	583220
K0701704-005		200	74.6969	74.6910	0.0059	29.500	3	583221
K0701704-006		200	72.3308	72.3324	-0.0016	-8.000	2	583222
K0701704-007		75	80.9095	80.7784	0.1311	1748.000	2800	583223
K0701704-008		100	79.8654	79.8414	0.0240	240.000	354	583224
K0701704-009		10	69.898	69.3668	0.5312	53120.000	52300	583225
K0701704-010		50	66.626	66.5226	0.1034	2068.000	3420	583226
K0701704-010DUP		50	70.3617	70.2618	0.0999	1998.000	3420	583246
K0701600-001		100	63.4983	63.4645	0.0338	338.000	500	583227
K0701600-002		100	76.5702	76.5288	0.0414	414.000	700	583228
K0701600-003		100	72.8538	72.8383	0.0155	155.000	206	583217
K0701601-001		75	66.1118	66.0500	0.0618	824.000	1390	583230
K0701601-002		100	72.3882	72.3477	0.0405	405.000	636	583231
K0701778-001		100	70.8093	70.7897	0.0196	196.000	251	583232
K0701778-001DUP		100	62.8235	62.8042	0.0193	193.000	251	583247
K0701778-002		100	65.5917	65.5723	0.0194	194.000	228	583233
K0701778-003		100	61.944	61.9280	0.0160	160.000	184	583234
K0701778-004		100	69.273	69.2574	0.0156	156.000	188	583235
K0701778-005		100	77.4035	77.3874	0.0161	161.000	187	583236
K0701778-006		100	65.0886	65.0717	0.0169	169.000	249	583237
K0701778-007		100	70.6267	70.6018	0.0249	249.000	368	583229
K0701778-008		100	60.9053	60.8690	0.0363	363.000	594	583240
K0701778-009		100	72.1468	72.1259	0.0209	209.000	322	583241

Analyst: R McKee Date: 3/13/07

Approved By: Date: 3/15/07

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703622

Matrix: WATER

PrepID: KWG0703621

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
K0701778-010		100	77.8152	77.7959	0.0193	193.000	311	583242
K0701778-011		100	73.5302	73.5157	0.0145	145.000	218	583243
K0701778-012		100	70.1015	70.0777	0.0238	238.000	345	583244
K0701647-001		100	62.204	62.1988	0.0052	52.000	142	583238
K0701647-002		50	74.6041	74.5141	0.0900	1800.000	3330	583239
K0701647-002DUP		50	77.7746	77.6711	0.1035	2070.000	3330	583248
K0701600-001DUP		100	70.292	70.2618	0.0302	302.000	500	583251
LCS		50	64.5887	64.5344	0.0543	1086.000	NA	583249
LCS		50	77.7189	77.6644	0.0545	1090.000	NA	583249
MB		200	124.6875	124.6874	0.0001	0.500	NA	583250
MB		200	109.8846	109.8846	0.0000	0.000	NA	583250
MB		200	123.508	123.5080	0.0000	0.000	NA	583250

LCS: TV = 1110 ppm APG 4033 Lot # 112073 Reference # TDS/1-18-W

LCS-2=~~99%~~ 100 ~~99%~~ 100% 3/15/07

2 = 98%

3 = 98%

Comments:

1669-2 x = 34 RPD = 18%

1704-10 x = 2040 RPD = 3%

1778-1 x = 195 RPD = 2%

1647-2 x = 1940 RPD = 14%

1600-1 x = 320 RPD = 11%

Analyst: RMcKee Date: 3/13/07

Approved By: Date: 3/15/07

COLUMBIA ANALYTICAL SERVICES, INC.

79567

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	Blank	LCS	1669-1	1669-~~1~~ 2d	1669-2	1669-3	1669-4
Crucible Number	R45	49A	16A	-9th	50A	30	43A
Conductivity			83.110	77.470	77.470	79.670	79.20
Sample Volume (mL)	200	50	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	121.1751	66.1420	64.1209	75.0739	~~64.5218~~	69.9292	76.4356
Wt. Cru. + Dry Sample (2)	121.1751	66.1420	64.1210	75.0740	64.5198	69.9295	76.4360
Wt. Cru. + Dry Sample (3)					64.5198		
Wt. Crucible. (g)	121.1751	66.0868	64.1167	75.0708	64.5161	~~69.9285~~ (RW)	76.4309
Wt. Dry Sample (g)						69.9242	
Total Solids (mg/L)							

Sample Number	1669-5	1669-6	1738-1	1738-2	1738-3	1738-4	1738-5
Crucible Number	L:1B:11	1	17	54th	DC	-2	9A
Conductivity	77.260	78.090	78.550	80.63	81.920	82.580	82.310
Sample Volume (mL)	68.2686	76.8573	73.5289	74.7811	60.3879	70.7222	67.5058
Wt. Cru. + Dry Sample (1)	68.2688	76.8575	73.5290	74.7813	60.3876	70.7224	67.5060
Wt. Cru. + ~~Dry Sample (2)~~ Volume	100	100	100	100	100	100	100
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	68.2642	76.8528	73.5256	74.7786	60.3815	70.7192	67.5006
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #: Lot #: ID#: T.V. = 1110 % Rec = 99%

Comments: 112073 118W

105 time	Start	1900 2/7/07
	Stop	0845 2/9/07
105 temp	Start	105°C
	Stop	105°C
Wt (1)	Start	0845 2/9/07
	Stop	1530 2/9/07
Wt(1) Temp	Start	180°C
	Stop	180°C
Wt (2)	Start	1750 2/9/07
	Stop	(RW) ~~180°C~~ 1145 2/10/07
Wt(2) Temp	Start	180°C
	Stop	180°C
Wt (3)	Start	
	Stop	
Wt(3) Temp	Start	
	Stop	

Balance #

Analyzed By:	R McKee	Date Prepared:	3/7/07
Reviewed By:	M	Date Reviewed:	3/15/07

(RW) 3/7/07 R McKee

TDS.BCH

1

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	1704-2*	1704-3	1704-4	1704-5	1704-6	1704-7	1704-8
Crucible Number	T1	25	12	14	-5	27	22
Conductivity	39.73m	30.17m	482.0U	3.369U	1.9570	2.803m	353.6U
Sample Volume (mL)	100pm	10	100	200 ~~500~~	200	75	< 100
Wt. Cru. + Dry Sample (1)	67.9598	65.3845	71.4684	74.6969	72.3308	80.9095	79.8654
Wt. Cru. + Dry Sample (2)	67.9595	65.3842	71.4682	74.6966	72.3308	80.9097	79.8655
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	67.6030	65.1248	71.4383	74.6910	72.3324	80.7784	79.8414
Wt. Dry Sample (g)							
Total Solids (mg/L)							

*Limited Sample Volume

Sample Number	1704-9	1704-10	1704-10d	1600-1	1600-2	1600-3	1601-1
Crucible Number	JJ	12th	18	499.8U 4th	24 53rd	34	Herble
Conductivity	52.29m	3.421m	3.421m	~~1.389m~~ 164	699.8U	205.5U	1.389m
Sample Volume (mL)	10	50	50	100	100	100	75
Wt. Cru. + Dry Sample (1)	69.8980	66.6260	70.3617	63.4983	76.5702	72.8538	66.1118
Wt. Cru. + Dry Sample (2)	69.8978	66.6259	70.3617	63.4986	76.5698	72.8535	66.1118
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	69.3668	66.5226	70.2618	63.4645	76.5288	72.8383	66.0500
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1601-2	1778-1	1778-1d	1778-2	1778-3	1778-4	1778-5
Crucible Number	B2K	D2	Angie	Lisa	JQ	Syd	9
Conductivity	636.3U	250.9U	250.9U	227.6U	183.8U	187.7U	187.1U
Sample Volume (mL)	100	100	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	72.3882	70.8093	62.8235	65.5917	61.9440	69.2730	77.4035
Wt. Cru. + Dry Sample (2)	72.3880	70.8090	62.8233	65.5915	61.9436	69.2727	77.4031
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	72.3477	70.7897	62.8042	65.5723	61.9280	69.2574	77.3874
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Analyzed By:	RMcKee	Date Prepared:	3/7/07
Reviewed By:	M	Date Reviewed:	3/12/07

TDS.BCH

(Rw) RMcKee 3/7/07

2

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	1778-6	1778-7	1778-8	1778-9	1778-10	1778-11	1778-12
Crucible Number	Troc	Onyx	Anna	8th	31A	MJ	Larry
Conductivity	248.8U	368.0U	593.9U	322.3U	311.1U	217.7U	344.5U
Sample Volume (mL)	100	100	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	65.0886	70.6267	60.9053	72.1468	77.8152	73.5302	70.1015
Wt. Cru. + Dry Sample (2)	65.0885	70.6268	60.9053	72.1468	77.8154	73.5302	70.1015
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	65.0717	70.6018	60.8690	72.1259	77.7959	~~73.5241~~ (RW)	70.0777
Wt. Dry Sample (g)						73.5157	
Total Solids (mg/L)							

Sample Number	1647-1	1647-2	1647-2d	1600-1d	LCS-2	LCS-3	MB-2
Crucible Number	18A	IMS	22A	24	32A	6A	DL
Conductivity	(RW) ~~141.9~~ 141.9U	3.327m	3.327m	499.8U	—	—	—
Sample Volume (mL)	100	50	50	100	50	50	200
Wt. Cru. + Dry Sample (1)	62.2040	74.6041	77.7746	70.2920	64.5887	77.7189	124.6875
Wt. Cru. + Dry Sample (2)	62.2039	74.6042	77.7746	70.2918	64.5887	77.7190	124.6876
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	~~62.2074~~ (RW)	74.5141	77.6711	70.2618	64.5344	77.6644	124.6874
Wt. Dry Sample (g)	62.1988						
Total Solids (mg/L)							

Sample Number	MB-3	MB-4					
Crucible Number	1A	R46					
Conductivity	—	—					
Sample Volume (mL)	200	200					
Wt. Cru. + Dry Sample (1)	109.8846	123.5080					
Wt. Cru. + Dry Sample (2)	109.8850	123.5080					
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	~~109.8944~~ (RW)	123.5080					
Wt. Dry Sample (g)	109.8846						
Total Solids (mg/L)							

Analyzed By:	R M Klee	Date Prepared:	3/7/07
Reviewed By:	M	Date Reviewed:	3/15/07

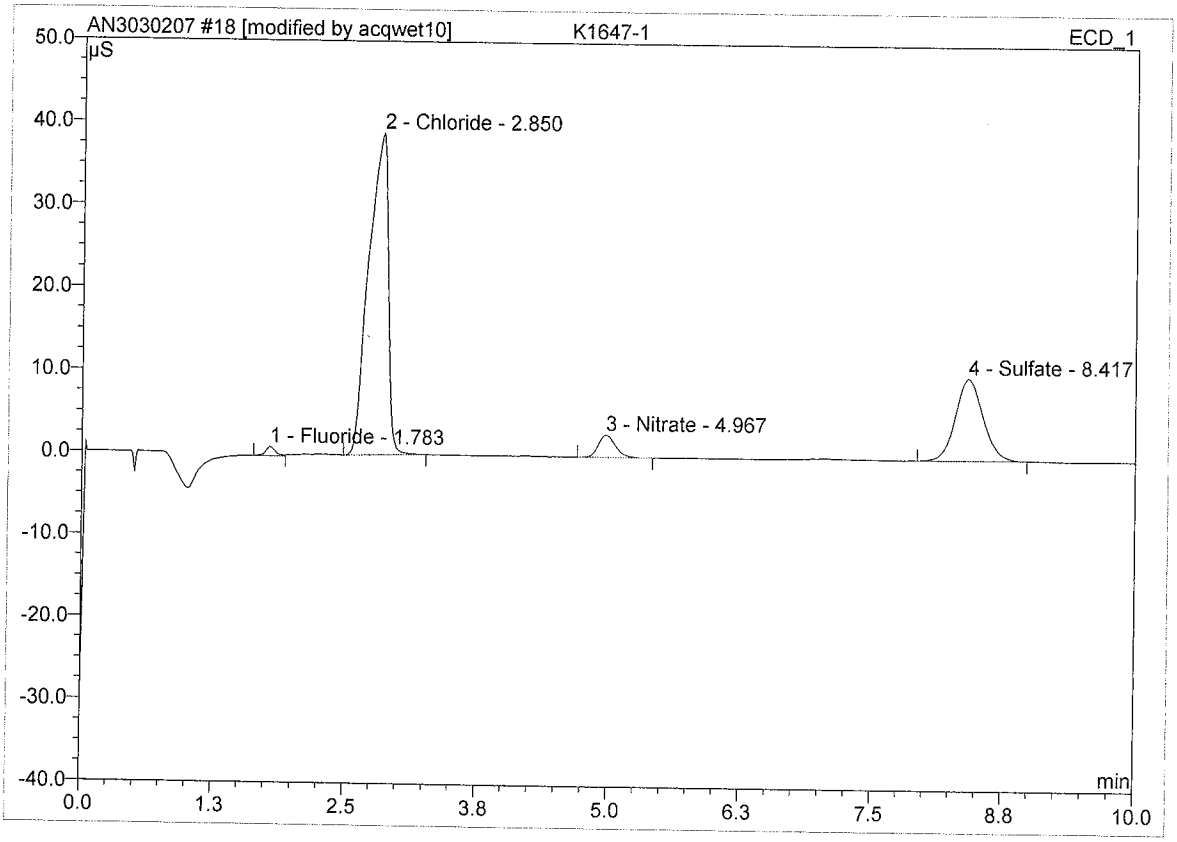
(RW) R M Klee 3/7/07

3

Columbia Analytical Services, Inc.

18 K1647-1

Sample Name:	**K1647-1**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 11:38**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride <0.2 $\bar{x}$=ND RPD=—	1.084	0.108	0.90	0.124	BM *
2	2.85	Chloride $\bar{x}$=11.2 RPD=<1	38.947	8.366	69.58	11.151	BMB
3	4.97	Nitrate $\bar{x}$=.3 RPD=<1	2.705	0.501	4.17	0.283	BMB
4	8.42	Sulfate $\bar{x}$=6.6 RPD=<1	9.903	3.048	25.35	6.625	BMB*
Total:			52.639	12.023	100.00	18.184	

Nitrite <0.1 $\bar{x}$=ND RPD=—

3/6/07

After Initials JS

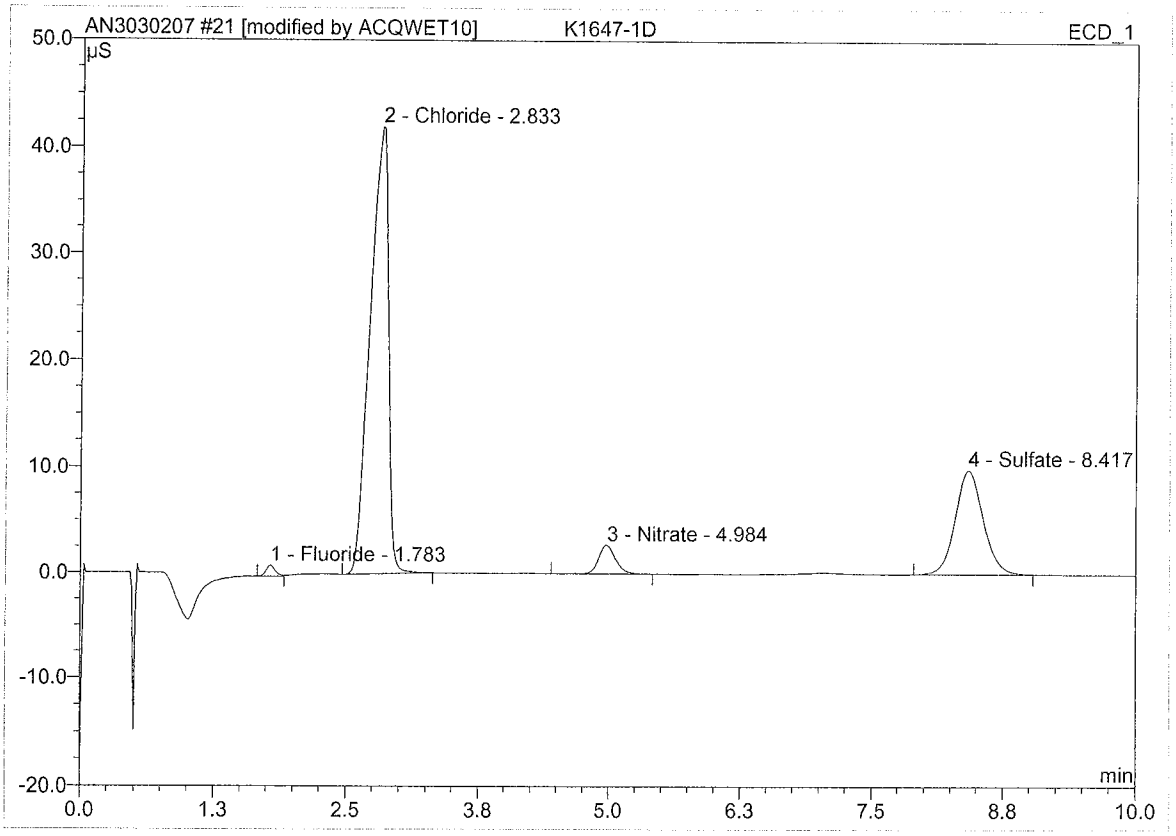
MAR 0 2 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

Columbia Analytical Services, Inc.

21 K1647-1D

Sample Name:	**K1647-1D**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 13:31**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride <0.2	1.018	0.098	0.81	0.112	BM *
2	2.83	Chloride	42.028	8.411	69.68	11.211	BMB
3	4.98	Nitrate	2.726	0.514	4.26	0.291	BMB
4	8.42	Sulfate	9.903	3.049	25.26	6.627	BMB*
Total:			55.675	12.071	100.00	18.240	

Nitrite <0.1

After Initials JS

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

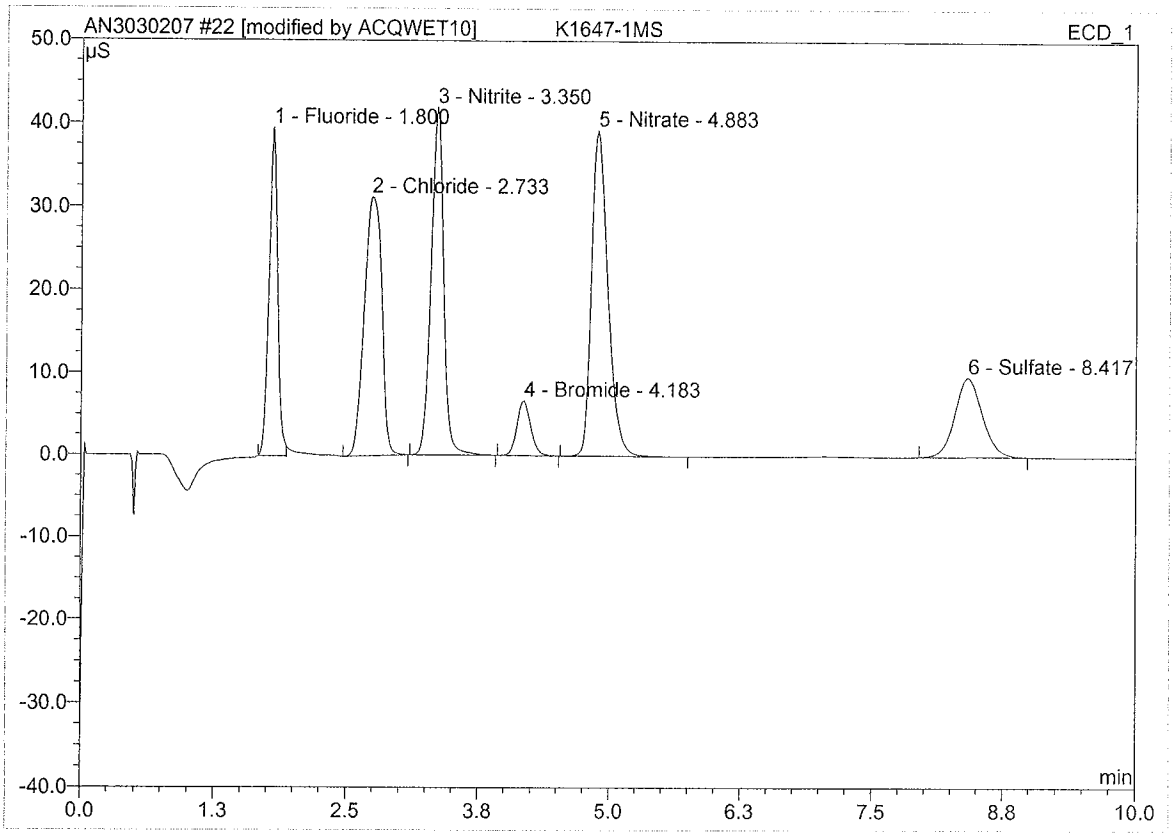
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

default_letter/Integration

Columbia Analytical Services, Inc.

22 K1647-1MS

Sample Name:	**K1647-1MS**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 13:43**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride %rec=108	39.585	3.785	14.22	10.861	BM *
2	2.73	Chloride %rec=88	31.221	6.003	22.55	20.003	BMB*
3	3.35	Nitrite ~~%rec=100~~ ① JS	41.871	5.711	21.46	10.325	BMB*
4	4.18	Bromide 3/3/07	6.680	1.005	3.77	9.666	BMB*
5	4.88	Nitrate %rec=98	39.236	7.135	26.81	10.087	BMB*
6	8.42	Sulfate %rec=96	9.692	2.976	11.18	16.172	BMB*
Total:			168.284	26.615	100.00	77.114	

SPK lvl 10 ppm

① 103

After Initials JS

JR 3/6/07

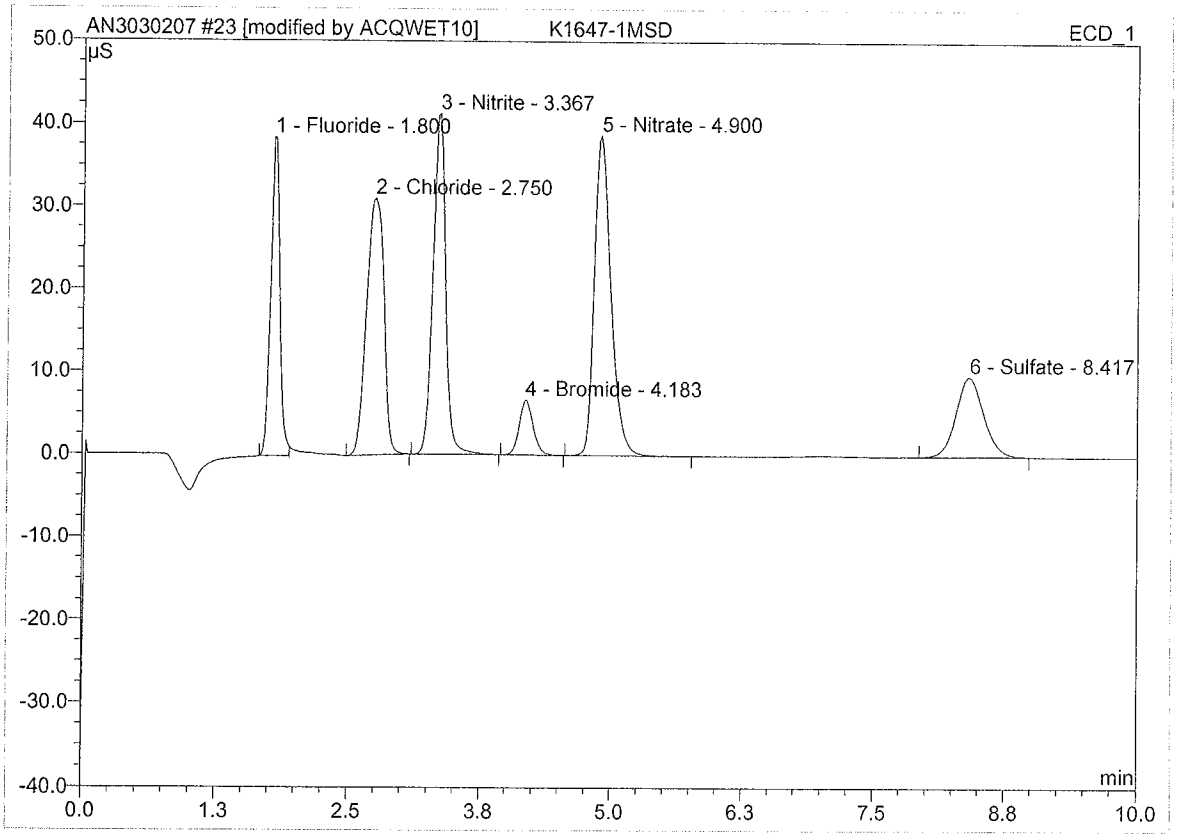
MAR 0 3 2007

Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect
Other

Columbia Analytical Services, Inc.

23 K1647-1MSD

Sample Name:	**K1647-1MSD**	*Injection Volume:*	**200.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 13:56**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride %rec=108	38.584	3.808	14.38	10.927	BM *
2	2.75	Chloride %rec=85	31.077	5.924	22.37	19.742	BMB*
3	3.37	Nitrite %rec=103	41.202	5.717	21.59	10.335	BMB*
4	4.18	Bromide	6.605	0.999	3.77	9.612	BMB*
5	4.90	Nitrate %rec=97	38.741	7.070	26.70	9.994	BMB*
6	8.42	Sulfate %rec=95	9.613	2.962	11.19	16.096	BMB*
Total:			165.823	26.480	100.00	76.707	

5PK lvl
10ppm

After Initials JS

JSW 3/6/07

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder Incorrect
☐ Other

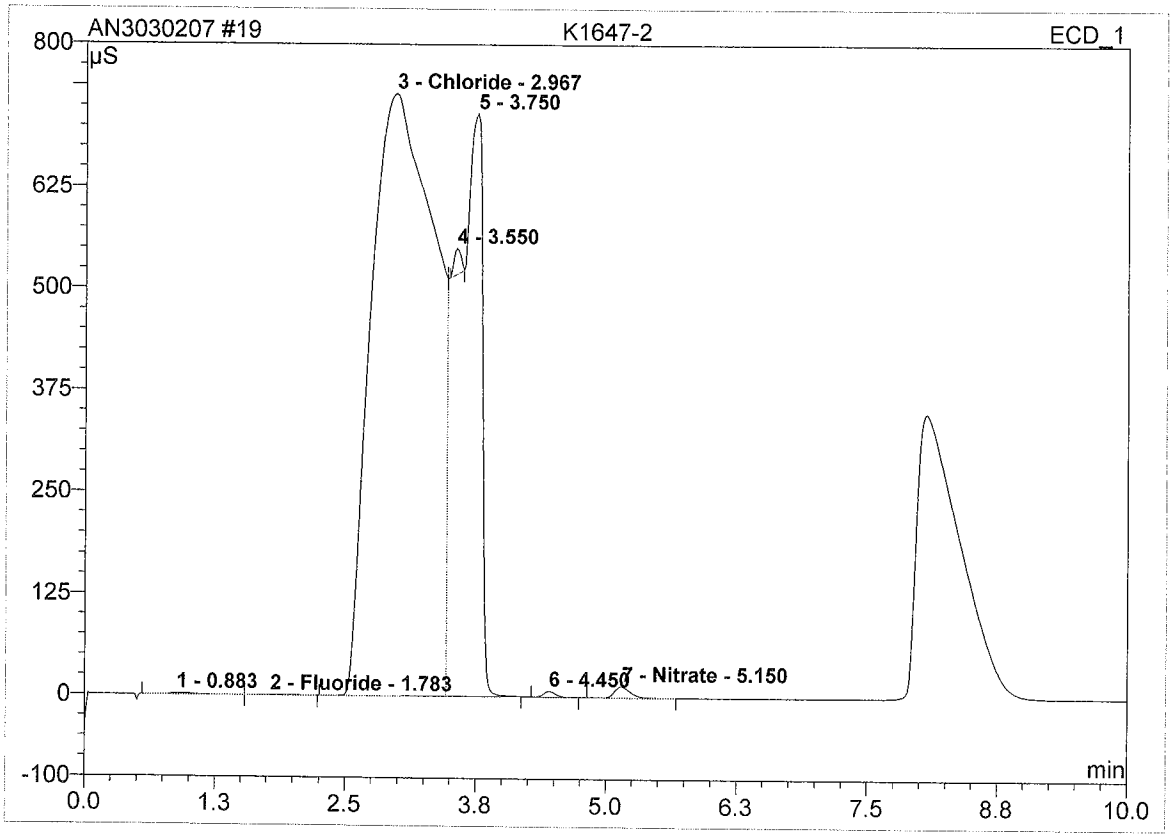
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

19 K1647-2

Sample Name:	**K1647-2**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 11:50**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



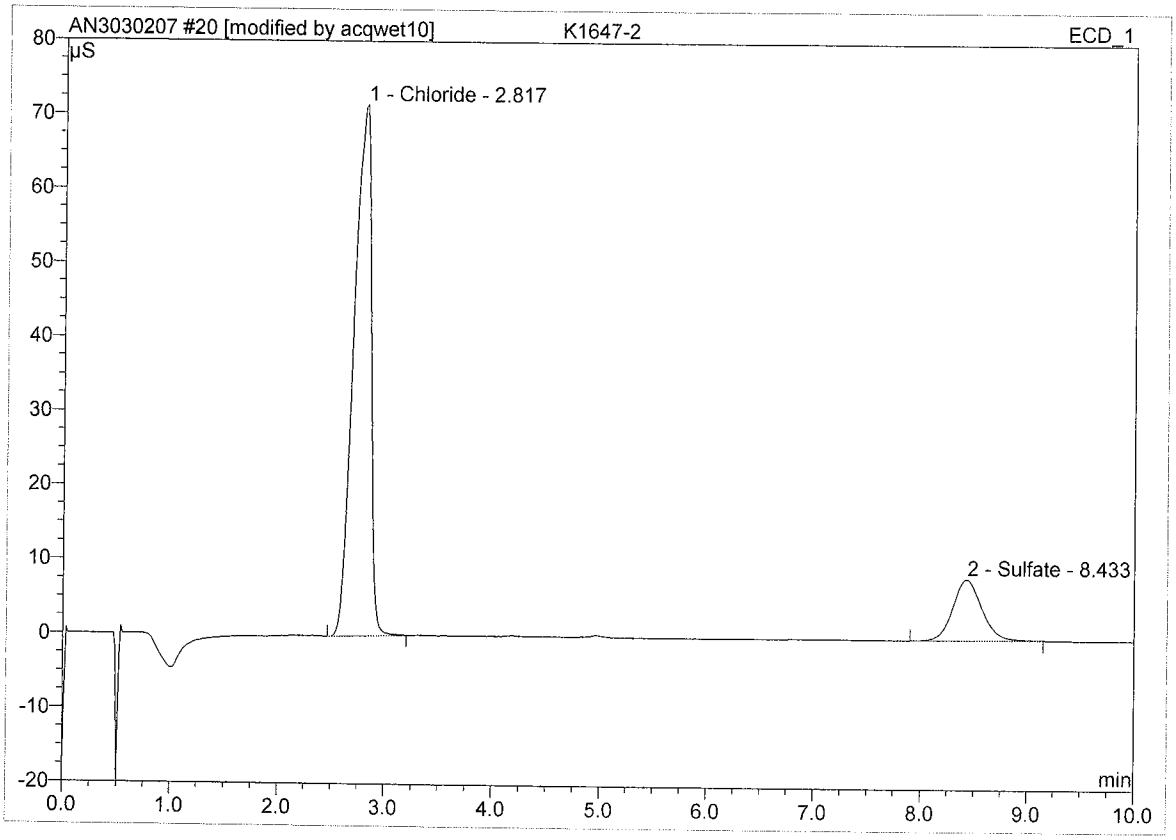
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	0.88	n.a.	1.810	0.465	0.06	n.a.	BMb
2	1.78	Fluoride	0.620	0.236	0.03	0.271	bMB
3	2.97	Chloride	739.849	515.791	71.03	687.528	BM
4	3.55	n.a.	32.012	2.430	0.33	n.a.	Ru
5	3.75	n.a.	715.315	203.750	28.06	n.a.	MB
6	4.45	n.a.	7.180	0.985	0.14	n.a.	BMB
7	5.15	Nitrate	13.911	2.467	0.34	1.395	BMB
Total:			1510.698	726.124	100.00	689.194	

JR 3/6/07

Columbia Analytical Services, Inc.

20 K1647-2

Sample Name:	**K1647-2**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**100.0**
Recording Time:	**3/2/2007 12:48**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride	71.500	13.481	83.77	898.478	BMB
2	8.43	Sulfate	8.152	2.612	16.23	283.880	BMB*
Total:			79.652	16.093	100.00	1182.358	

① Nitrite <10;

② elevated MRL due to high Cl conc.

JR 3/6/07

After Initials JS

MAR 0 2 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

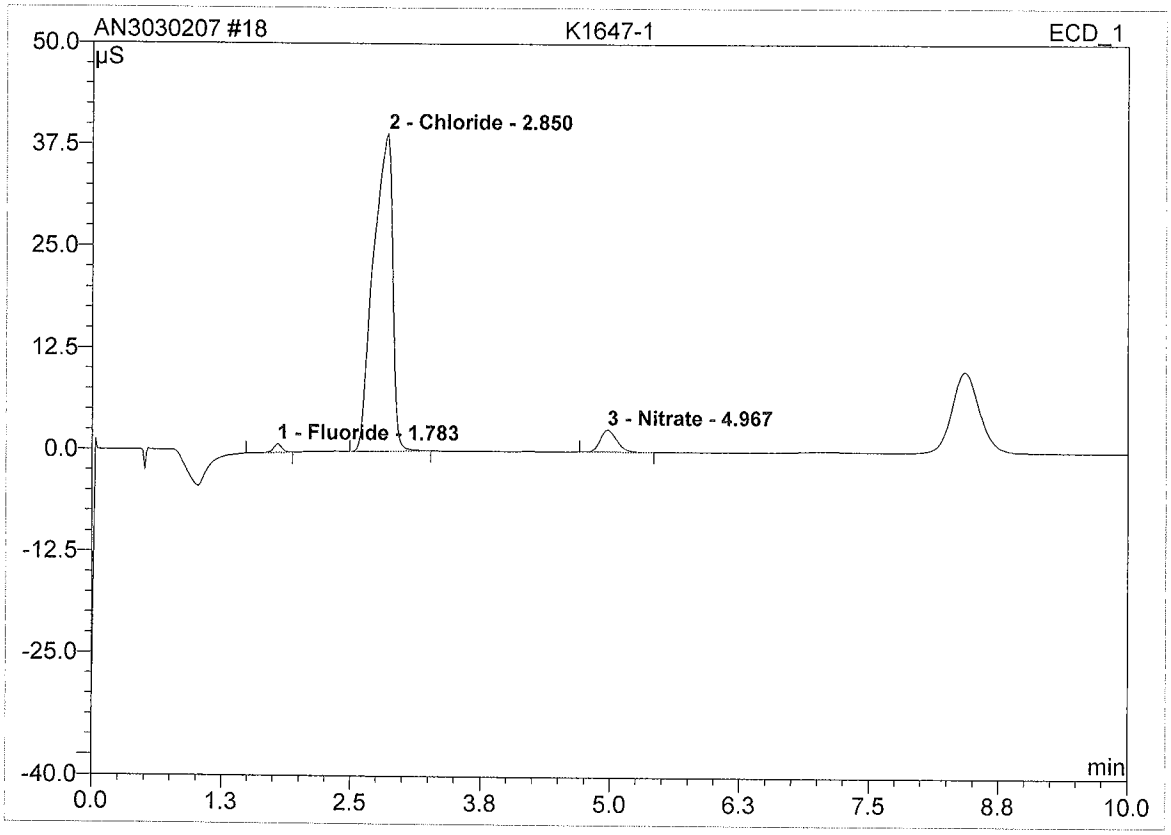
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

18 K1647-1

Sample Name:	**K1647-1**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 11:38**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride	1.053	0.102	1.14	0.117	BMB
2	2.85	Chloride	38.947	8.366	93.28	11.151	BMB
3	4.97	Nitrate	2.705	0.501	5.58	0.283	BMB
Total:			42.705	8.969	100.00	11.552	

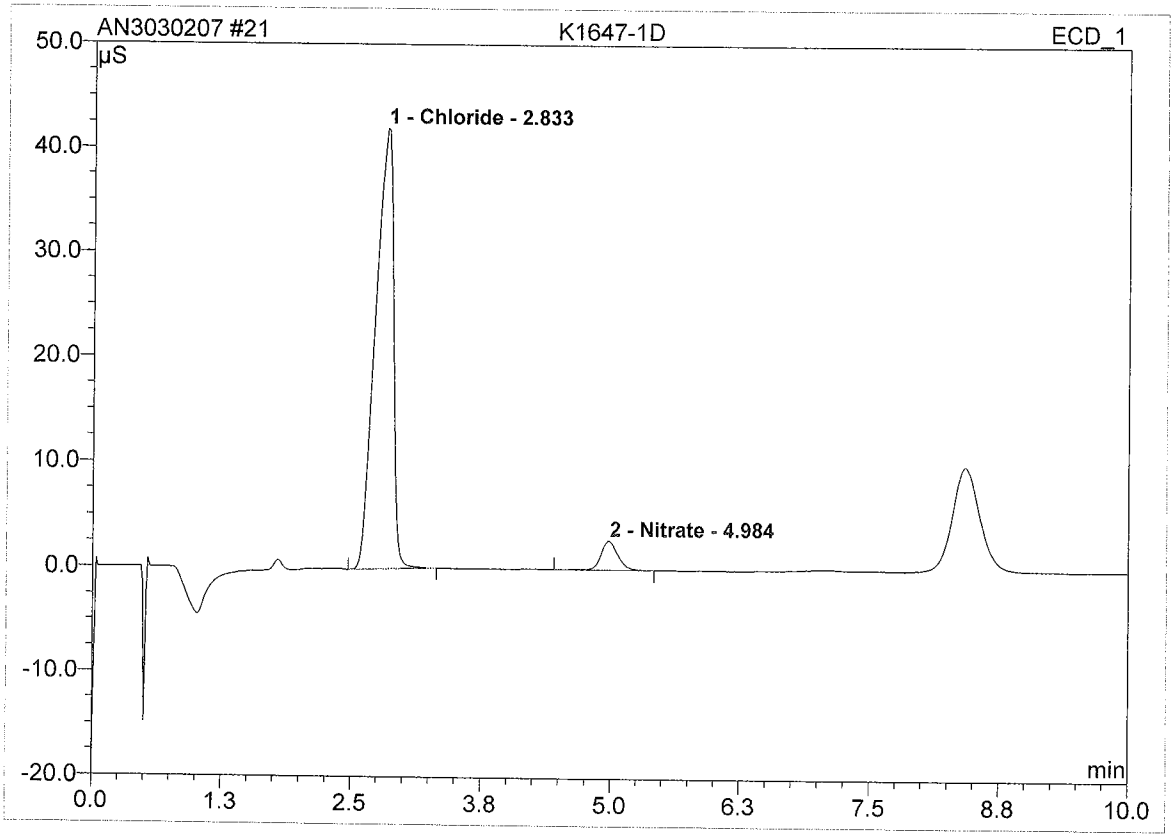
Before

MAR 0 2 2007

Columbia Analytical Services, Inc.

21 K1647-1D

Sample Name:	**K1647-1D**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 13:31**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride	42.028	8.411	94.24	11.211	BMB
2	4.98	Nitrate	2.726	0.514	5.76	0.291	BMB
Total:			44.754	8.925	100.00	11.502	

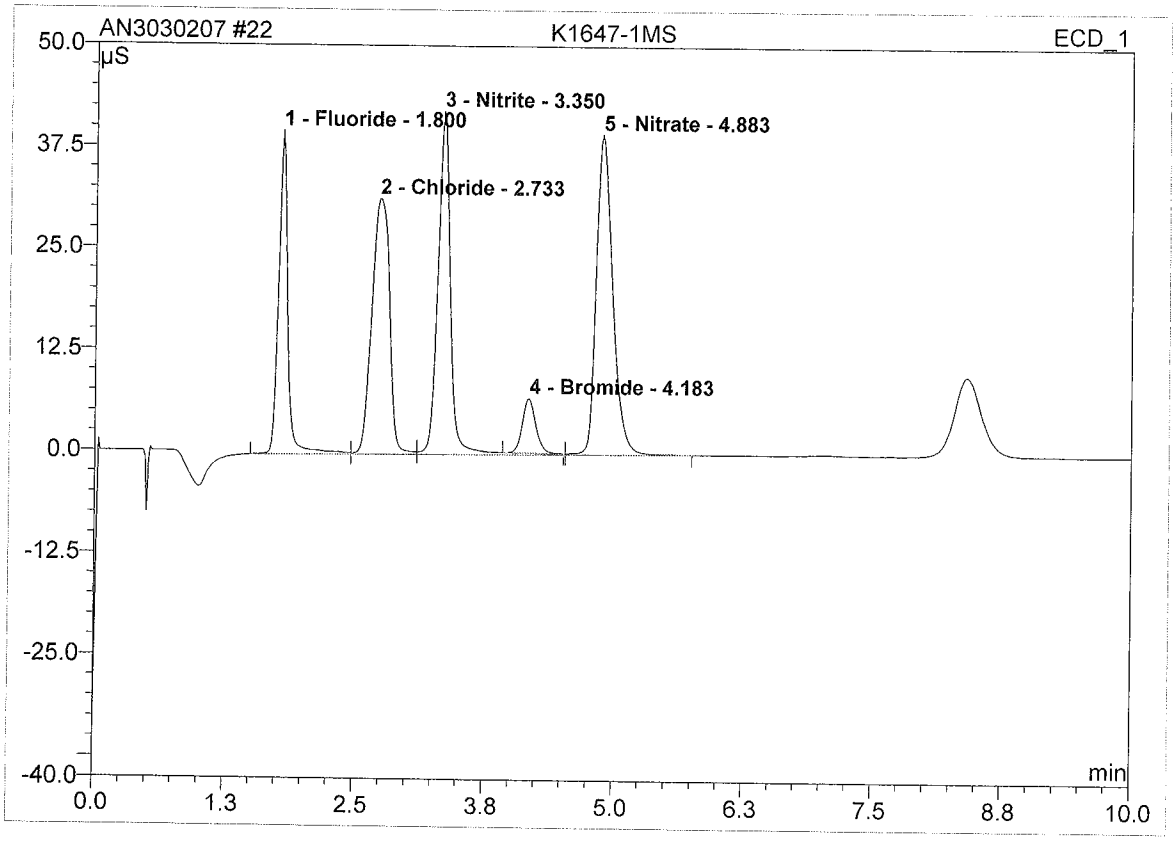
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

22 K1647-1MS

Sample Name:	**K1647-1MS**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 13:43**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	39.824	4.114	16.74	11.805	BM
2	2.73	Chloride	31.451	6.157	25.05	20.518	M
3	3.35	Nitrite	42.172	6.072	24.71	10.977	M
4	4.18	Bromide	6.680	1.005	4.09	9.666	Rd
5	4.88	Nitrate	39.346	7.229	29.41	10.220	MB
Total:			159.473	24.576	100.00	63.186	

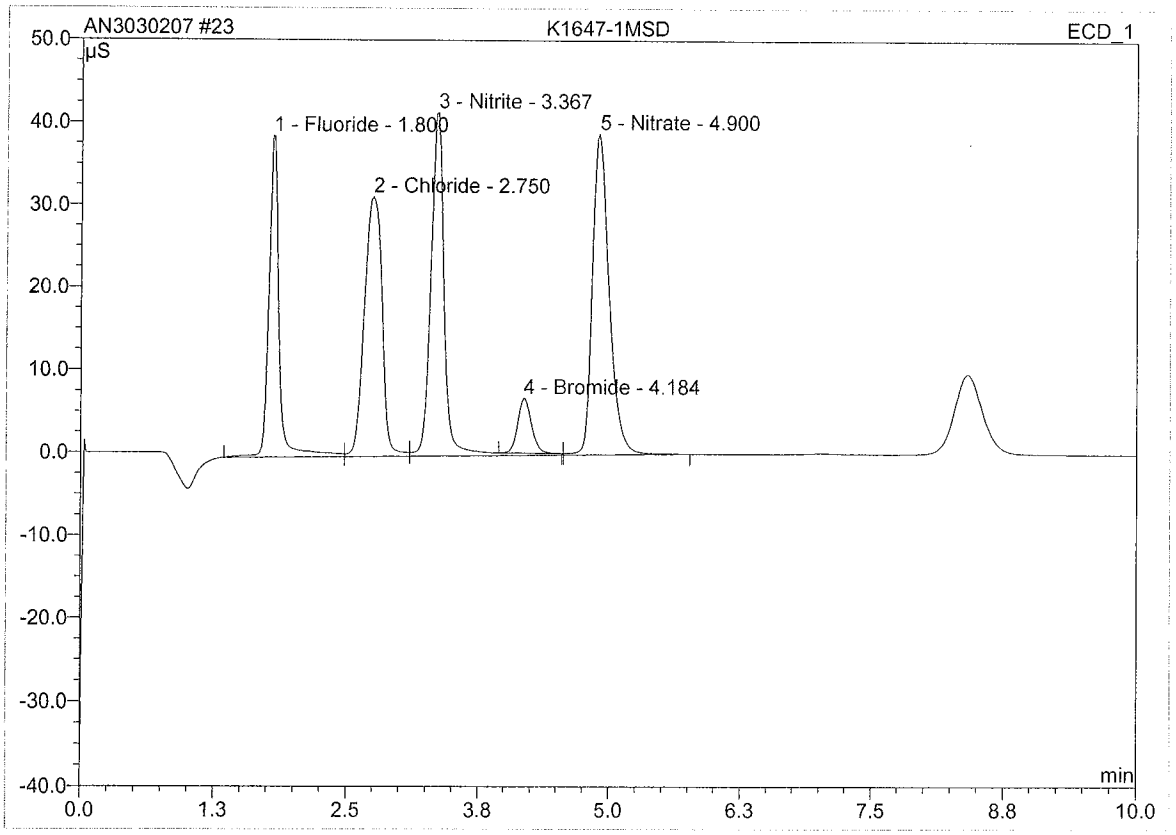
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

23 K1647-1MSD

Sample Name:	**K1647-1MSD**	*Injection Volume:*	**200.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 13:56**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	38.922	4.281	17.25	12.284	BM
2	2.75	Chloride	31.435	6.152	24.79	20.502	M
3	3.37	Nitrite	41.602	6.195	24.96	11.200	M
4	4.18	Bromide	6.605	0.999	4.03	9.612	Rd
5	4.90	Nitrate	38.884	7.188	28.97	10.162	MB
Total:			157.449	24.815	100.00	63.761	

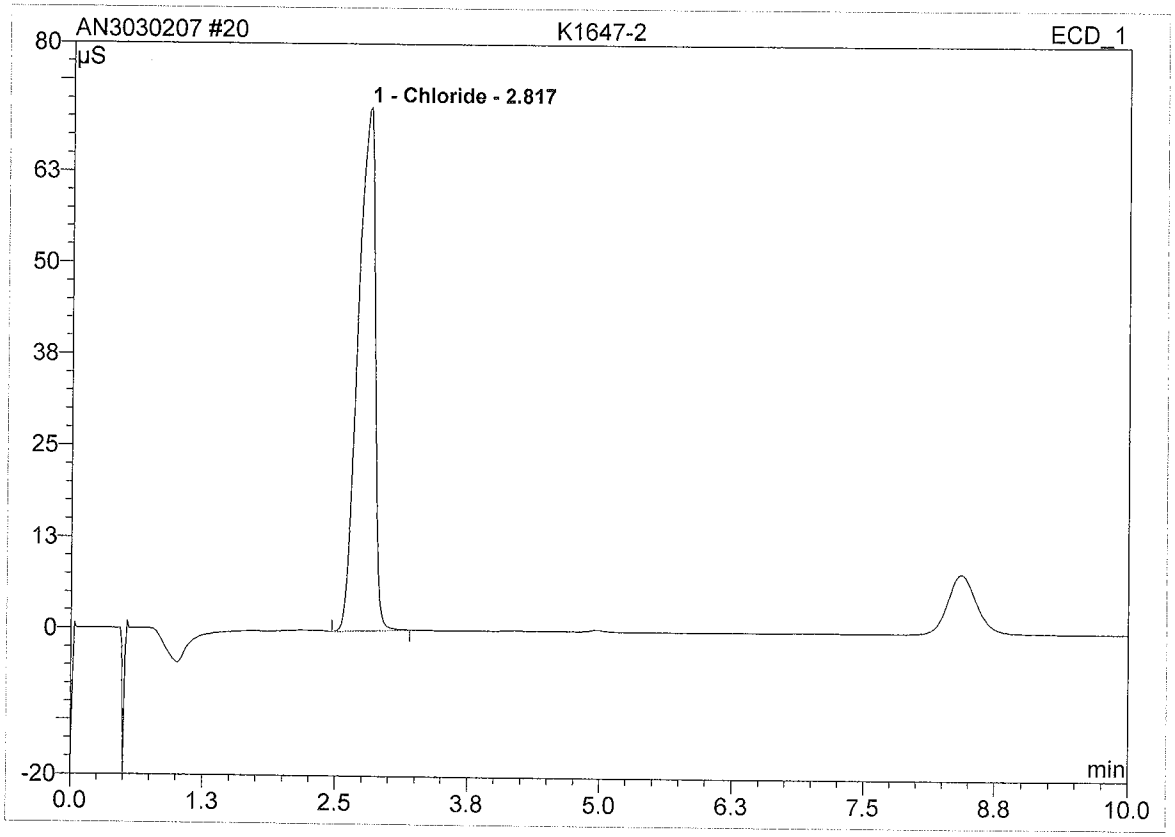
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

20 K1647-2

Sample Name:	**K1647-2**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**100.0**
Recording Time:	**3/2/2007 12:48**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride	71.500	13.481	100.00	898.478	BMB
Total:			71.500	13.481	100.00	898.478	

Before

MAR 0 2 2007

79311

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? ① yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? ① yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA ①
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
I MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value =17.5 ppm	CAS ID # = AN1-18-X	Expires: 4/12/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 5/1/07
Nitrite	True Value = 100 ppm	CAS ID # = AN10-4-0	Expires: 3/2/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-V	Expires: 4/20/07
Nitrate	True Value = 4.5 ppm	CAS ID # = AN1-18-V	Expires: 4/1/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 5/1/07

CCV CAS ID # = AN10-36-HH Expires 3/2/07

Fluoride	True Value = 5.0 ppm
Chloride	True Value = 5.0 ppm
Nitrite	True Value = 2.0 ppm
Bromide	True Value = 2.0 ppm
Nitrate	True Value = 2.0 ppm
Sulfate	True Value = 5.0 ppm

Spike
2.0ppm X dilution facto CAS ID# = AN10-66-0 Expires 3/2/07

Analyst: JS Date: 3/2/07

First Review: JS Date: 3/3/07 ①EM3/5/07

Final Review: [illegible] Date: 3/6/07

K1393, high RPD for Chloride/9056. OK as per PC.

t:\wet\ic\icdqs.xls

Sequence: AN3030207
Operator: ACQWET10
Printed: 3/3/2007 10:35:04 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 74

Created: 3/2/2007 8:56:26 AM by acqwet10
Last Update: 3/2/2007 6:34:54 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	1/22/2007 4:09:03 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	1/22/2007 4:25:31 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	1/22/2007 4:41:58 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	1/22/2007 4:58:26 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	1/22/2007 5:14:54 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:31:22 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:47:50 PM
8	CCV1 AN10-36-HH	Unknown	26	200.0	epa300	epa300	Finished	3/2/2007 9:13:13 AM
9	CCB1	Unknown	27	200.0	epa300	epa300	Finished	3/2/2007 9:25:41 AM
10	AN10-4-D(NO2)	Unknown	28	200.0	epa300	epa300	Finished	3/2/2007 9:38:08 AM
11	MB1	Unknown	32	200.0	epa300	epa300	Finished	3/2/2007 9:50:51 AM
12	AN1-18-V(NO3)1	Unknown	29	200.0	epa300	epa300	Finished	3/2/2007 10:03:19 AM
13	ERA#092(CLSO4)1	Unknown	32	200.0	epa300	epa300	Finished	3/2/2007 10:15:47 AM
14	AN1-18-X(F)1	Unknown	33	200.0	epa300	epa300	Finished	3/2/2007 10:28:15 AM
15	SPK CHK AN10-66-O	Unknown	34	200.0	epa300	epa300	Finished	3/2/2007 10:40:43 AM
16	CCV2 AN10-36-HH	Unknown	32	200.0	epa300	epa300	Finished	3/2/2007 10:53:12 AM
17	CCB2	Unknown	30	200.0	epa300	epa300	Finished	3/2/2007 11:05:40 AM
18	K1647-1	Unknown	31	200.0	epa300	epa300	Finished	3/2/2007 11:38:08 AM
19	K1647-2	Unknown	32	200.0	epa300	epa300	Finished	3/2/2007 11:50:36 AM
20	K1647-2	Unknown	33	200.0	epa300	epa300	Finished	3/2/2007 12:48:35 PM
21	K1647-1D	Unknown	34	200.0	epa300	epa300	Finished	3/2/2007 1:31:24 PM
22	K1647-1MS	Unknown	35	200.0	epa300	epa300	Finished	3/2/2007 1:43:52 PM
23	K1647-1MSD	Unknown	36	200.0	epa300	epa300	Finished	3/2/2007 1:56:19 PM
24	K1689-2F	Unknown	37	200.0	epa300	epa300	Finished	3/2/2007 5:45:28 PM
25	K1675-3	Unknown	38	200.0	epa300	epa300	Finished	3/2/2007 6:29:37 PM
26	K1675-11	Unknown	39	200.0	epa300	epa300	Finished	3/2/2007 6:42:05 PM
27	RB	Unknown	40	200.0	epa300	epa300	Finished	3/2/2007 6:54:43 PM
28	CCV3	Unknown	41	200.0	epa300	epa300	Finished	3/2/2007 7:07:12 PM
29	CCB3	Unknown	42	200.0	epa300	epa300	Finished	3/2/2007 7:19:40 PM
30	K1674-2F	Unknown	43	200.0	epa300	epa300	Finished	3/2/2007 7:32:08 PM
31	K1674-3F	Unknown	44	200.0	epa300	epa300	Finished	3/2/2007 7:44:36 PM
32	K1674-1F	Unknown	45	200.0	epa300	epa300	Finished	3/2/2007 7:57:04 PM
33	RB	Unknown	46	200.0	epa300	epa300	Finished	3/2/2007 8:09:32 PM
34	K1634-1	Unknown	47	200.0	epa300	epa300	Finished	3/2/2007 8:21:59 PM
35	K1627-1	Unknown	48	200.0	epa300	epa300	Finished	3/2/2007 8:34:27 PM
36	K1566-1F	Unknown	49	200.0	epa300	epa300	Finished	3/2/2007 8:46:55 PM
37	K1566-2F	Unknown	50	200.0	epa300	epa300	Finished	3/2/2007 8:59:23 PM
38	K1566-3F	Unknown	51	200.0	epa300	epa300	Finished	3/2/2007 9:11:51 PM
39	RB	Unknown	52	200.0	epa300	epa300	Finished	3/2/2007 9:24:18 PM
40	CCV4	Unknown	53	200.0	epa300	epa300	Finished	3/2/2007 9:36:46 PM
41	CCB4	Unknown	54	200.0	epa300	epa300	Finished	3/2/2007 9:49:13 PM
42	K1566-5	Unknown	55	200.0	epa300	epa300	Finished	3/2/2007 10:01:42 PM

Chromeleon © Dionex Corporation, Version 6.50 SP1 Build 956

Sequence: AN3030207
Operator: ACQWET10

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 74

Created: 3/2/2007 8:56:26 AM by acqwet10
Last Update: 3/2/2007 6:34:54 PM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	std2/lvl2	1.0000	1.0000	1.0000		03	
2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-36-HH	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-4-D(NO2)	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-V(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA#092(CLSO4)1	1.0000	1.0000	1.0000		08	
14	AN1-18-X(F)1	1.0000	5.0000	1.0000		08	
15	SPK CHK AN10-66-O	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-36-HH	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	K1647-1	1.0000	2.0000	1.0000		08	
19	K1647-2	1.0000	2.0000	1.0000		08	
20	K1647-2	1.0000	100.0000	1.0000		08	
21	K1647-1D	1.0000	2.0000	1.0000		08	
22	K1647-1MS	1.0000	5.0000	1.0000		08	
23	K1647-1MSD	1.0000	5.0000	1.0000		08	
24	K1689-2F	1.0000	2.0000	1.0000		08	
25	K1675-3	1.0000	2.0000	1.0000		08	
26	K1675-11	1.0000	2.0000	1.0000		08	
27	RB	1.0000	1.0000	1.0000		08	
28	CCV3	1.0000	1.0000	1.0000		08	
29	CCB3	1.0000	1.0000	1.0000		08	
30	K1674-2F	1.0000	5.0000	1.0000		08	
31	K1674-3F	1.0000	5.0000	1.0000		08	
32	K1674-1F	1.0000	5.0000	1.0000		08	
33	RB	1.0000	1.0000	1.0000		08	
34	K1634-1	1.0000	20.0000	1.0000		08	
35	K1627-1	1.0000	2.0000	1.0000		08	
36	K1566-1F	1.0000	20.0000	1.0000		08	
37	K1566-2F	1.0000	20.0000	1.0000		08	
38	K1566-3F	1.0000	20.0000	1.0000		08	
39	RB	1.0000	1.0000	1.0000		08	
40	CCV4	1.0000	1.0000	1.0000		08	
41	CCB4	1.0000	1.0000	1.0000		08	
42	K1566-5	1.0000	20.0000	1.0000		08	

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Sequence: AN3030207
Operator: ACQWET10
Printed: 3/3/2007 10:35:04 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 74

Created: 3/2/2007 8:56:26 AM by acqwet10
Last Update: 3/2/2007 6:34:54 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1566-6F	Unknown	56	200.0	epa300	epa300	Finished	3/2/2007 10:14:09 PM
44	K1645-2	Unknown	57	200.0	epa300	epa300	Finished	3/2/2007 10:26:37 PM
45	K1645-3	Unknown	58	200.0	epa300	epa300	Finished	3/2/2007 10:39:05 PM
46	K1645-4	Unknown	59	200.0	epa300	epa300	Finished	3/2/2007 10:51:32 PM
47	MB EXT 3/1	Unknown	60	200.0	epa300	epa300	Finished	3/2/2007 11:04:00 PM
48	TCP1	Unknown	61	200.0	epa300	epa300	Finished	3/2/2007 11:16:27 PM
49	TCP2	Unknown	62	200.0	epa300	epa300	Finished	3/2/2007 11:28:55 PM
50	LCS1	Unknown	63	200.0	epa300	epa300	Finished	3/2/2007 11:41:22 PM
51	RB	Unknown	64	200.0	epa300	epa300	Finished	3/2/2007 11:53:50 PM
52	CCV5	Unknown	65	200.0	epa300	epa300	Finished	3/3/2007 12:06:18 AM
53	CCB5	Unknown	66	200.0	epa300	epa300	Finished	3/3/2007 12:18:46 AM
54	LCS2	Unknown	67	200.0	epa300	epa300	Finished	3/3/2007 12:31:13 AM
55	K1393-10 EXT	Unknown	68	200.0	epa300	epa300	Finished	3/3/2007 12:43:41 AM
56	K1393-10D EXT	Unknown	69	200.0	epa300	epa300	Finished	3/3/2007 12:56:09 AM
57	K1393-11 EXT	Unknown	70	200.0	epa300	epa300	Finished	3/3/2007 1:08:36 AM
58	K1393-12 EXT	Unknown	71	200.0	epa300	epa300	Finished	3/3/2007 1:21:04 AM
59	K1393-13 EXT	Unknown	72	200.0	epa300	epa300	Finished	3/3/2007 1:33:31 AM
60	K1393-14 EXT	Unknown	73	200.0	epa300	epa300	Finished	3/3/2007 1:45:59 AM
61	K1393-15 EXT	Unknown	74	200.0	epa300	epa300	Finished	3/3/2007 1:58:27 AM
62	K1393-16 EXT	Unknown	75	200.0	epa300	epa300	Finished	3/3/2007 2:10:54 AM
63	RB	Unknown	76	200.0	epa300	epa300	Finished	3/3/2007 2:23:22 AM
64	CCV6	Unknown	77	200.0	epa300	epa300	Finished	3/3/2007 2:35:49 AM
65	CCB6	Unknown	78	200.0	epa300	epa300	Finished	3/3/2007 2:48:17 AM
66	K1393-17 EXT	Unknown	79	200.0	epa300	epa300	Finished	3/3/2007 3:00:44 AM
67	K1393-18 EXT	Unknown	80	200.0	epa300	epa300	Finished	3/3/2007 3:13:12 AM
68	K1393-19 EXT	Unknown	81	200.0	epa300	epa300	Finished	3/3/2007 3:25:40 AM
69	K1393-20 EXT	Unknown	82	200.0	epa300	epa300	Finished	3/3/2007 3:38:07 AM
70	ERA#092(CLSO4)1	Unknown	83	200.0	epa300	epa300	Finished	3/3/2007 3:50:35 AM
71	MB2	Unknown	84	200.0	epa300	epa300	Finished	3/3/2007 4:03:03 AM
72	RB	Unknown	85	200.0	epa300	epa300	Finished	3/3/2007 4:15:30 AM
73	CCV7	Unknown	86	200.0	epa300	epa300	Finished	3/3/2007 4:27:58 AM
74	CCB7	Unknown	87	200.0	epa300	epa300	Finished	3/3/2007 4:40:25 AM

Sequence: AN3030207
Operator: ACQWET10
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 74

Created: 3/2/2007 8:56:26 AM by acqwet10
Last Update: 3/2/2007 6:34:54 PM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	K1566-6F	1.0000	20.0000	1.0000		08	
44	K1645-2	1.0000	20.0000	1.0000		08	
45	K1645-3	1.0000	20.0000	1.0000		08	
46	K1645-4	1.0000	20.0000	1.0000		08	
47	MB EXT 3/1	1.0000	1.0000	1.0000		08	
48	TCP1	1.0000	50.0000	1.0000		08	
49	TCP2	1.0000	50.0000	1.0000		08	
50	LCS1	1.0000	20.0000	1.0000		08	
51	RB	1.0000	1.0000	1.0000		08	
52	CCV5	1.0000	1.0000	1.0000		08	
53	CCB5	1.0000	1.0000	1.0000		08	
54	LCS2	1.0000	20.0000	1.0000		08	
55	K1393-10 EXT	1.0000	2.0000	1.0000		08	
56	K1393-10D EXT	1.0000	2.0000	1.0000		08	
57	K1393-11 EXT	1.0000	2.0000	1.0000		08	
58	K1393-12 EXT	1.0000	2.0000	1.0000		08	
59	K1393-13 EXT	1.0000	2.0000	1.0000		08	
60	K1393-14 EXT	1.0000	2.0000	1.0000		08	
61	K1393-15 EXT	1.0000	2.0000	1.0000		08	
62	K1393-16 EXT	1.0000	2.0000	1.0000		08	
63	RB	1.0000	1.0000	1.0000		08	
64	CCV6	1.0000	1.0000	1.0000		08	
65	CCB6	1.0000	1.0000	1.0000		08	
66	K1393-17 EXT	1.0000	2.0000	1.0000		08	
67	K1393-18 EXT	1.0000	2.0000	1.0000		08	
68	K1393-19 EXT	1.0000	2.0000	1.0000		08	
69	K1393-20 EXT	1.0000	2.0000	1.0000		08	
70	ERA#092(CLSO4)1	1.0000	1.0000	1.0000		08	
71	MB2	1.0000	1.0000	1.0000		08	
72	RB	1.0000	1.0000	1.0000		08	
73	CCV7	1.0000	1.0000	1.0000		08	
74	CCB7	1.0000	1.0000	1.0000		08	

AN3030207

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K1647-1	III	X	3/3	3/19	F	2.5/5	Q.C.	✓✓✓
Treadwell		dup 2x ms 5x msd			Cl			✓✓✓
					NO2			✓✓✓
					Br			
					NO3	2.5/5	Q.C.	✓✓✓
					SO4			✓✓✓
-2					F	2.5/5		✓
					Cl		(1/100)	✓
					NO2			✓
					Br			
					NO3	2.5/5		✓
					SO4		(1/100)	✓
K1674-2F	I		3/4	3/9	F			
Georgia Pacific					Cl			
					NO2			
					Br			
					NO3	1/5		✓
					SO4			
-3F					F			
					Cl			
					NO2			
					Br			
					NO3	1/5		✓
					SO4			
-1F					F			
					Cl			
					NO2			
					Br			
					NO3	1/5		✓
					SO4			
K1675-3	III		3/3	3/19	F			
CH2M Hill					Cl	2.5/5		✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			✓
-11					F			
					Cl	2.5/5		✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			✓5x
K1689-2F	I		3/4	3/19	F			
Surside					Cl			
					NO2	2.5/5		✓
					Br			
					NO3	2.5/5		✓
					SO4			
K1634-1				3/12	F			
Reynolds					Cl			
					NO2			
					Br			
					NO3			
					SO4	.25/5		✓2x
K1627-1				3/12	F	2.5/5		✓
Kelso					Cl			
					NO2			
					Br			
					NO3			
					SO4			

Cl SO4 2
MB2

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1566-1				3/14	F				
					Cl				
Parsons screen					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
-2					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
-3					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
-5					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
-6					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
K1645-2				3/13	F				
					Cl				
Parsons					NO2				
					Br				
					NO3				
					SO4	.25/5		✓	
-3					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5			✓5X
-4					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	.25/5		✓	
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1393-10ext					F				
					Cl	25/5		✓✓	
10dext					NO2				
					Br				
					NO3				
					SO4	25/5		✓✓	
-11ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-12ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-13ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-14ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-15ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-16ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-17ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
-18ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4				✓5X
-19ext					F				
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4				✓5X

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1393-20ext					F				
					Cl	25/5		✓	
					NO2				
					Br				
					NO3				
					SO4	25/5			✓50x
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
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					Br				
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					SO4				
					F				
					Cl				
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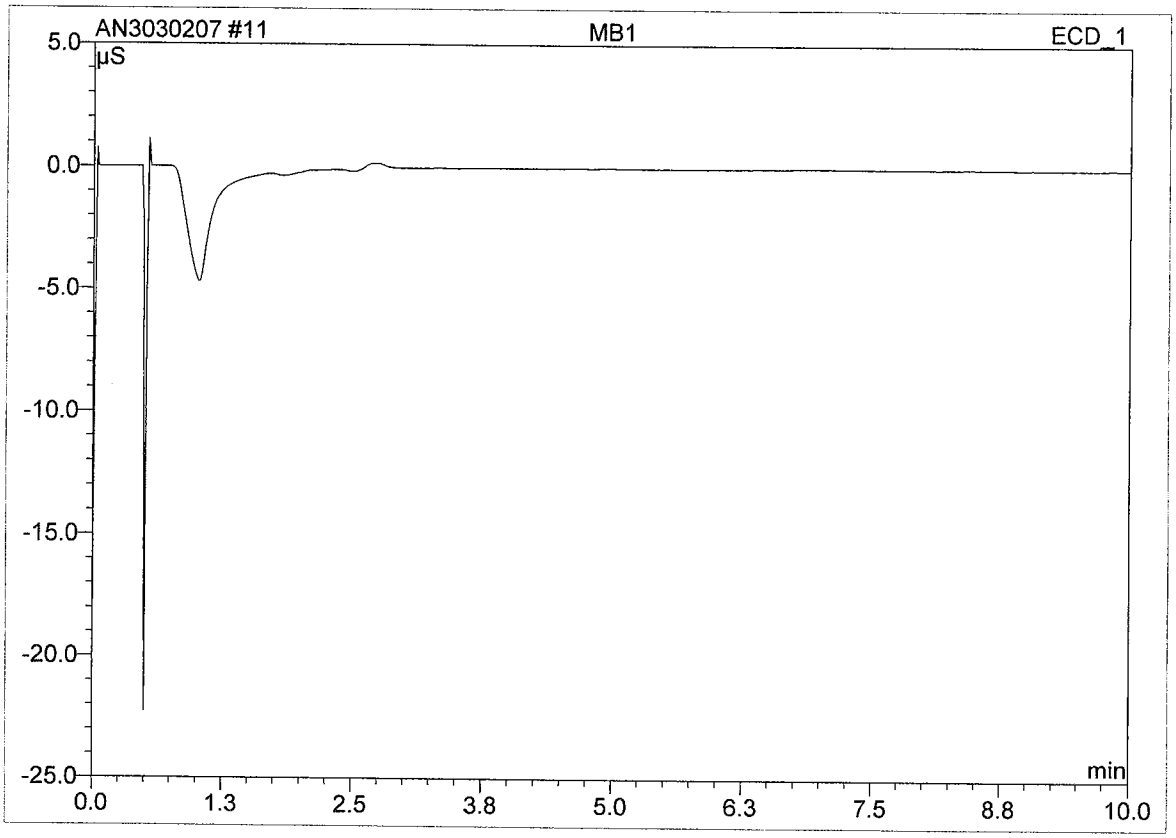
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Columbia Analytical Services, Inc.

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 9:50**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



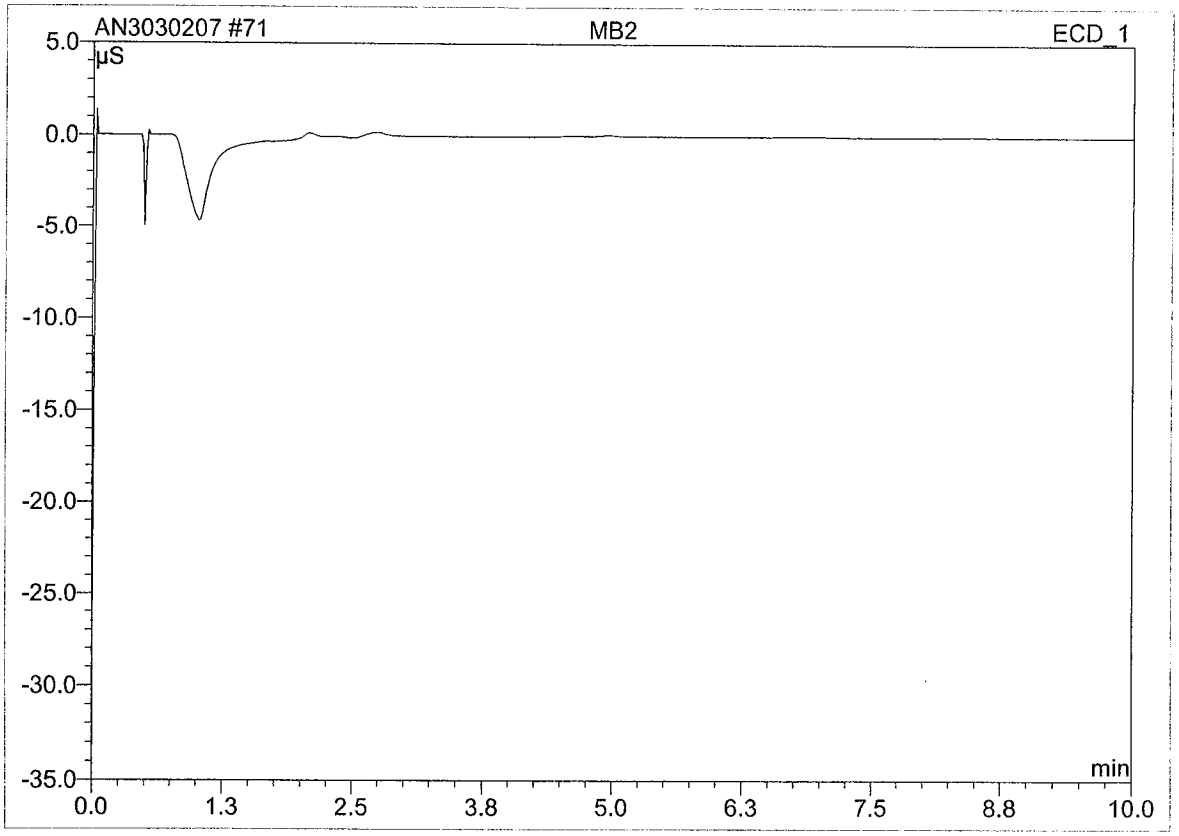
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RZ 3/6/07

Columbia Analytical Services, Inc.

71 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**84**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 4:03**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

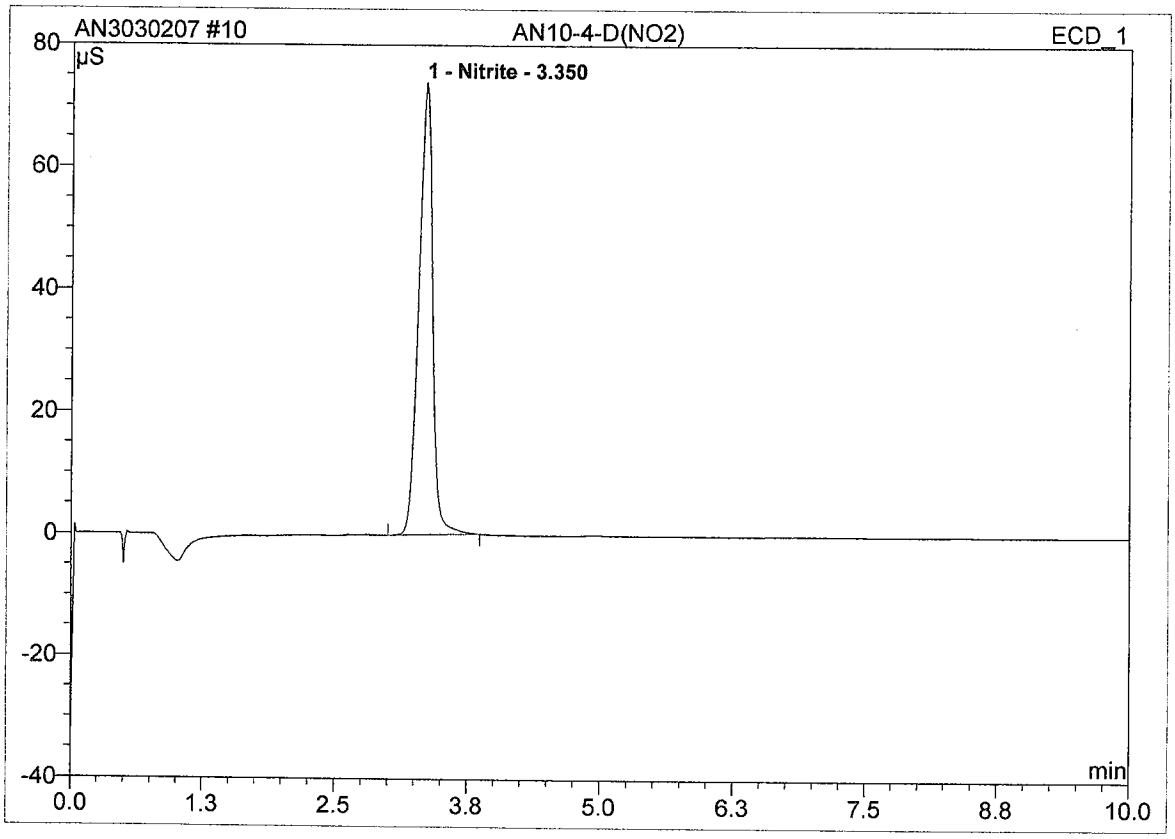


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Columbia Analytical Services, Inc.

10 AN10-4-D(NO2)

Sample Name:	**AN10-4-D(NO2)**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**3/2/2007 9:38**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



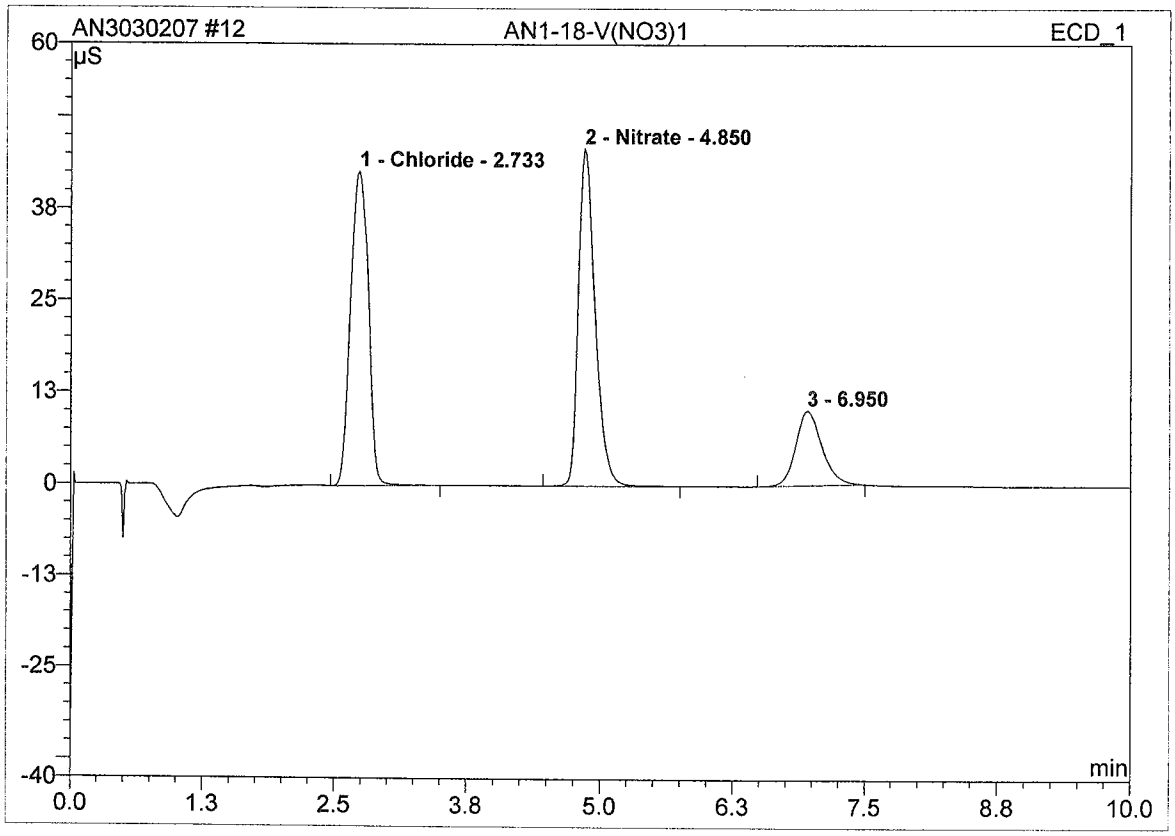
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.35	Nitrite	73.811	11.126	100.00	101% 100.570	BMB
Total:			73.811	11.126	100.00	100.570	

RRS 3/6/07

Columbia Analytical Services, Inc.

12 AN1-18-V(NO3)1

Sample Name:	**AN1-18-V(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/2/2007 10:03**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



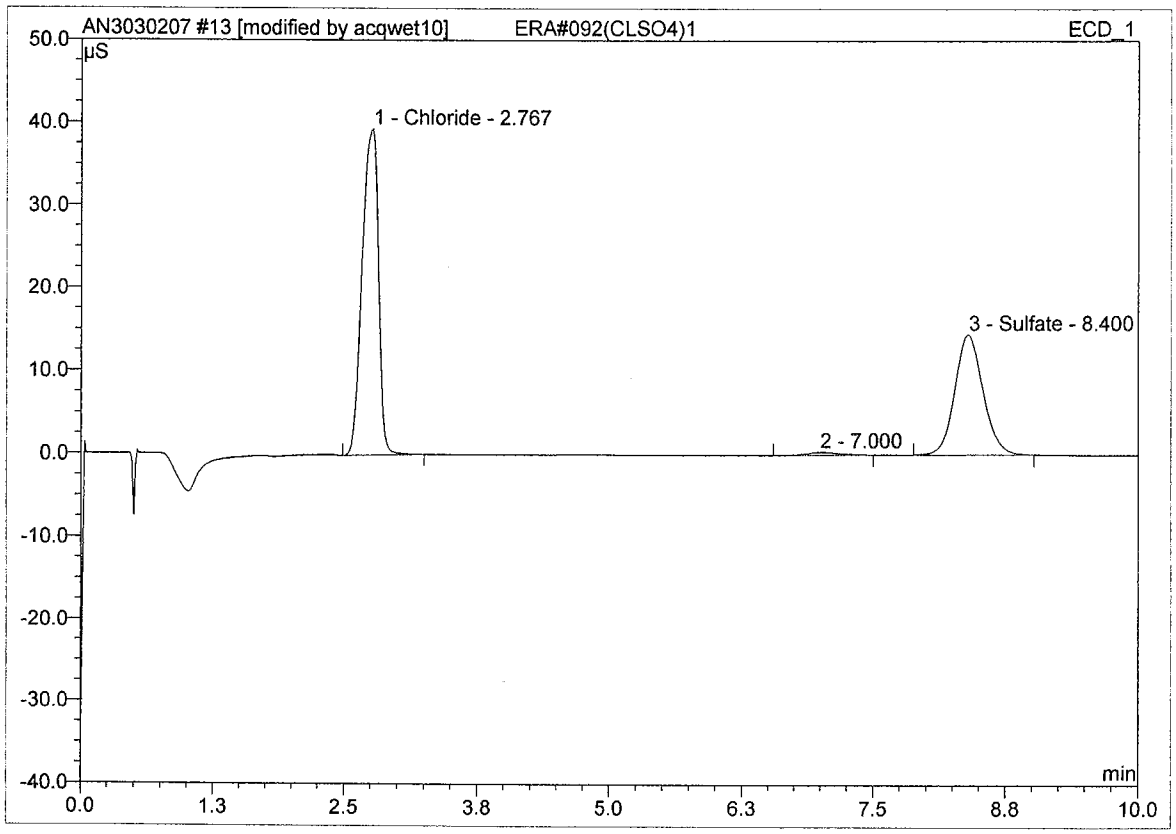
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.73	Chloride	42.812	8.412	42.64	11.212	BMB
2	4.85	Nitrate	45.878	8.352	42.34	104 4.723	BMB
3	6.95	n.a.	10.161	2.965	15.03	n.a.	BMB
Total:			98.851	19.729	100.00	15.935	

ekr 3/6/07

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	39.376	6.997	60.33	94% 4.664	BMB
2	7.00	n.a.	0.338	0.116	1.00	n.a.	BMB
3	8.40	Sulfate	14.439	4.485	38.67	98% 4.874	BMB*
Total:			54.154	11.598	100.00	9.538	

RKR 3/6/07

After
Initials JS

MAR 0 2 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

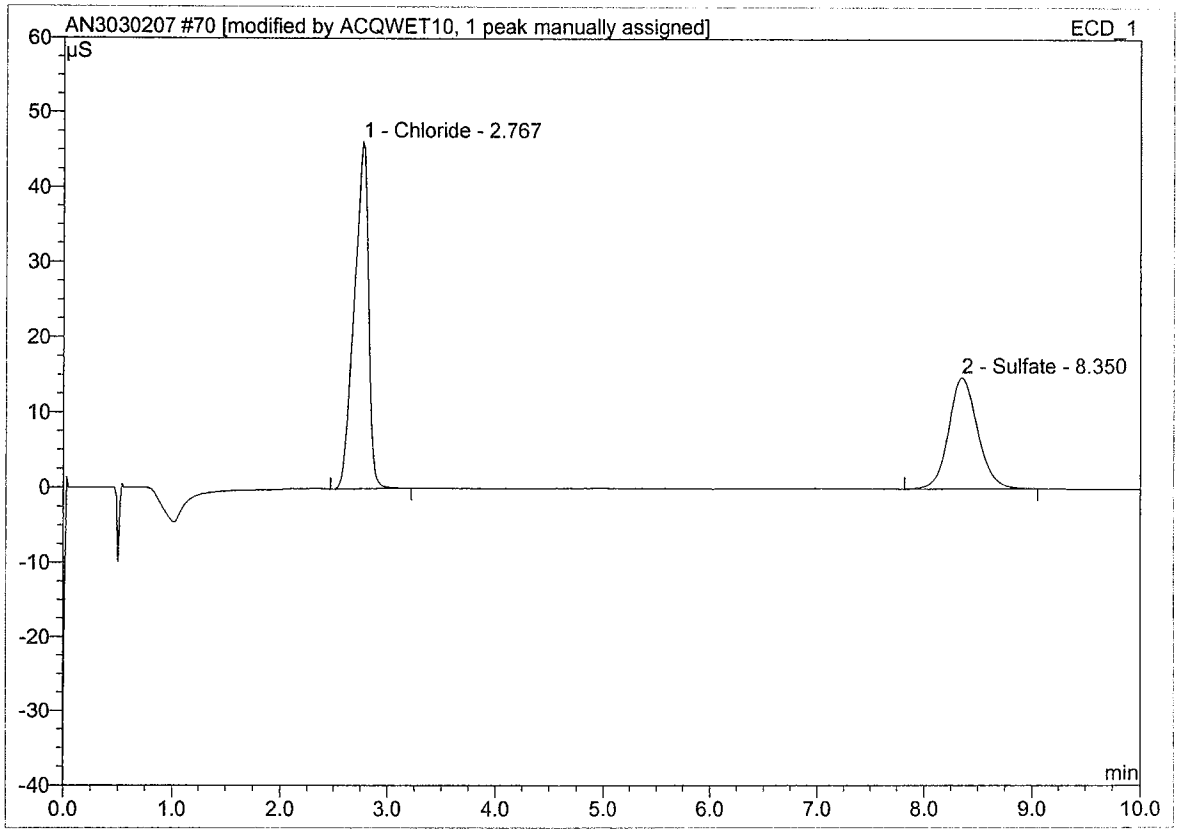
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

70 ERA#092(CLSO4)~~1~~ 2

EM 3/6/07

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**83**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 3:50**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	46.232	7.103	60.67	94% 4.734	BMB
2	8.35	Sulfate	14.800	4.604	39.33	100% 5.003	BMB*^
Total:			61.032	11.707	100.00	9.737	

RR 3/6/07

After Initials JS

MAR 0 3 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

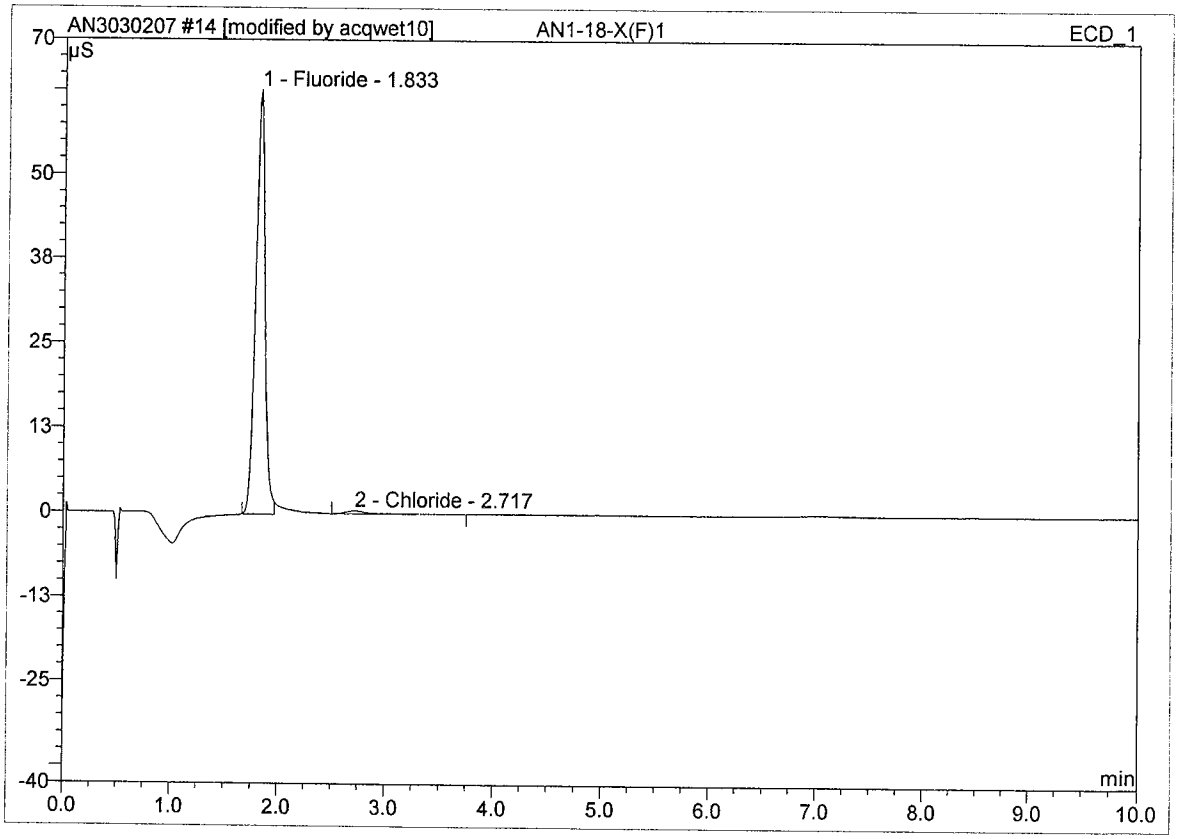
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 10:28**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	62.729	6.323	98.33	103% 18.143	BM *
2	2.72	Chloride	0.438	0.107	1.67	0.357	BMB*
Total:			63.168	6.430	100.00	18.500	

RAW 3/6/07

After
Initials JS

MAR 0 2 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

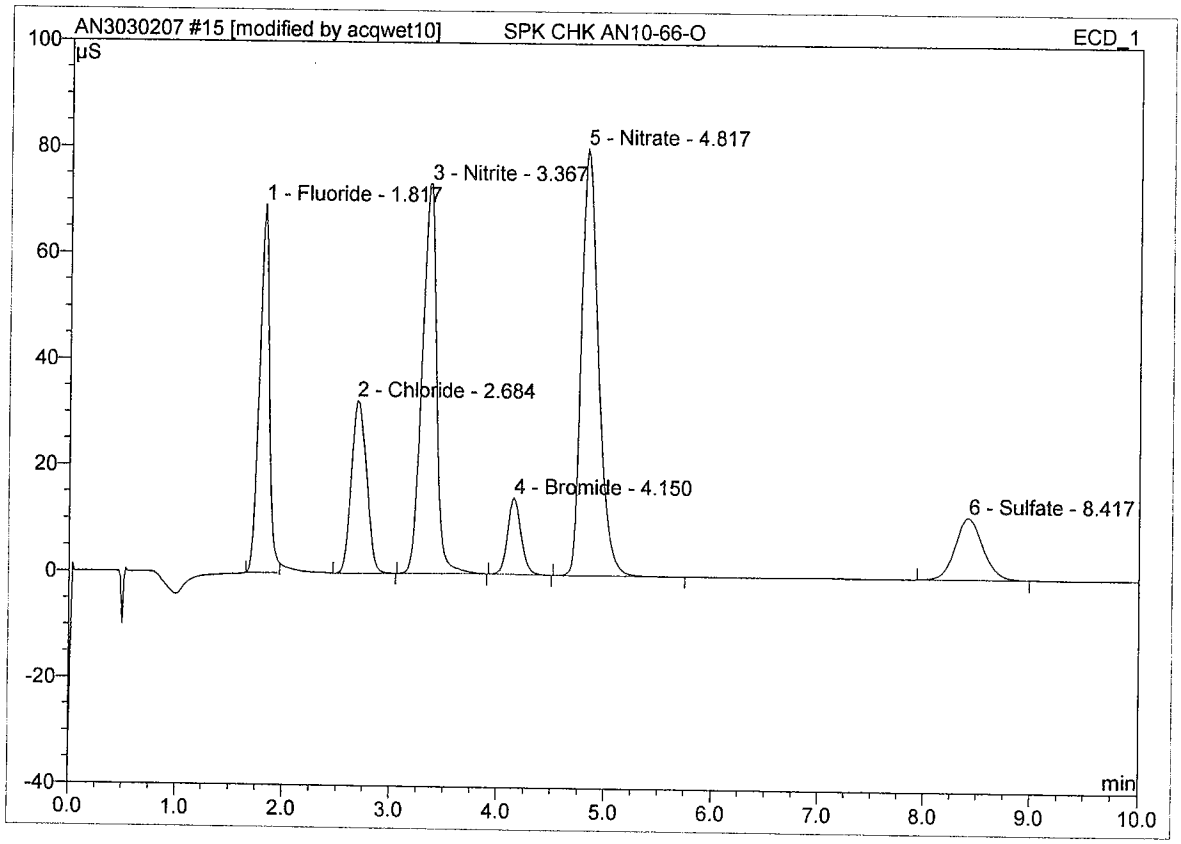
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-O

Sample Name:	**SPK CHK AN10-66-O**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:40**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride %rec=108	69.424	7.448	16.67	4.274	BM *
2	2.68	Chloride %rec=90	32.453	5.350	11.98	3.565	BMB*
3	3.37	Nitrite %rec=103	73.350	11.391	25.50	4.119	BMB*
4	4.15	Bromide %rec=100	14.346	2.100	4.70	4.041	BMB*
5	4.82	Nitrate %rec=105	80.257	14.867	33.28	4.204	BMB*
6	8.42	Sulfate %rec=95	11.541	3.514	7.87	3.819	BMB*
Total:			281.371	44.670	100.00	24.022	

After Initials JS

RLL 3/6/07

default_letter/Integration

MAR 0 2 2007

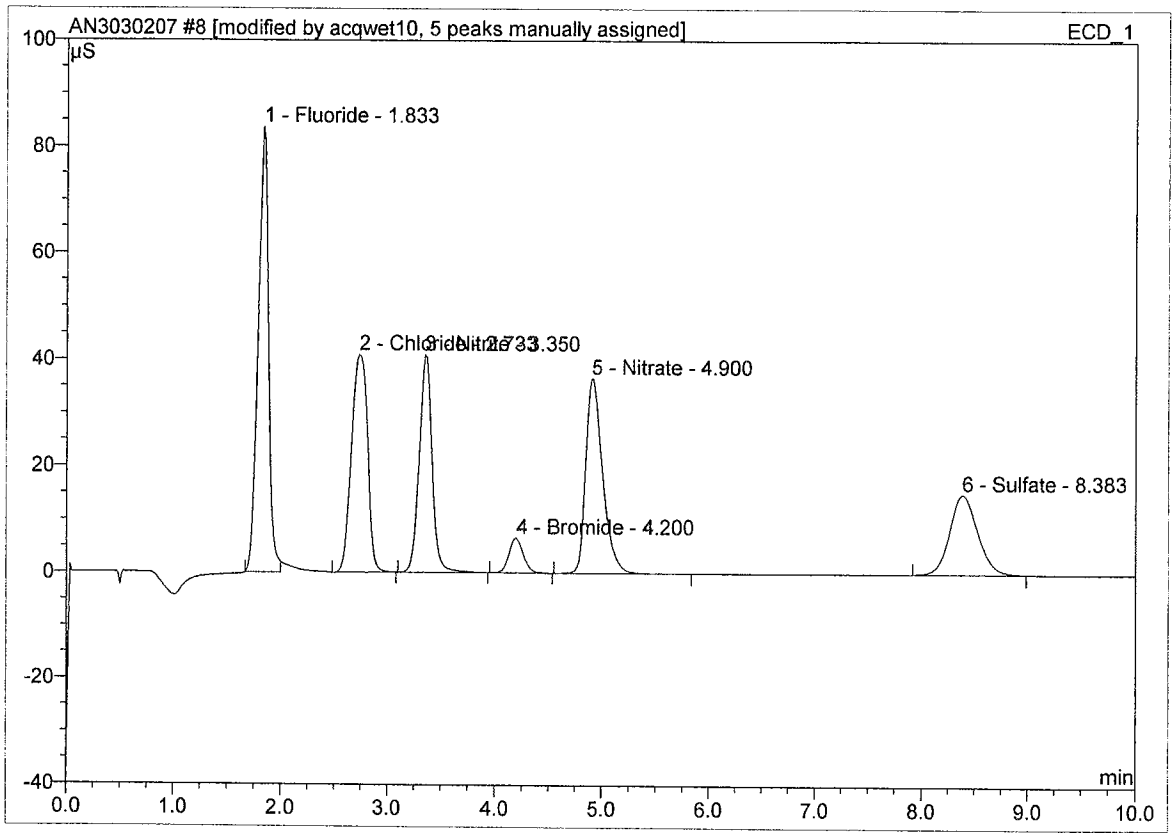
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

Columbia Analytical Services, Inc.

8 CCV1 AN10-36-HH

Sample Name:	**CCV1 AN10-36-HH**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 9:13**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	83.733	9.502	27.31	110% 5.453	BM *
2	2.73	Chloride	40.919	7.224	20.76	96% 4.815	BMB*^
3	3.35	Nitrite	40.853	5.676	16.31	105% 2.052	BMB*^
4	4.20	Bromide	6.556	0.999	2.87	95% 1.922	BMB*^
5	4.90	Nitrate	36.541	6.800	19.54	95% 1.923	BMB*^
6	8.38	Sulfate	14.991	4.592	13.20	100% 4.990	BMB*^
Total:			223.592	34.792	100.00	21.154	

3/6/07

After
Initials JS

default_letter/Integration

MAR 0 2 2007

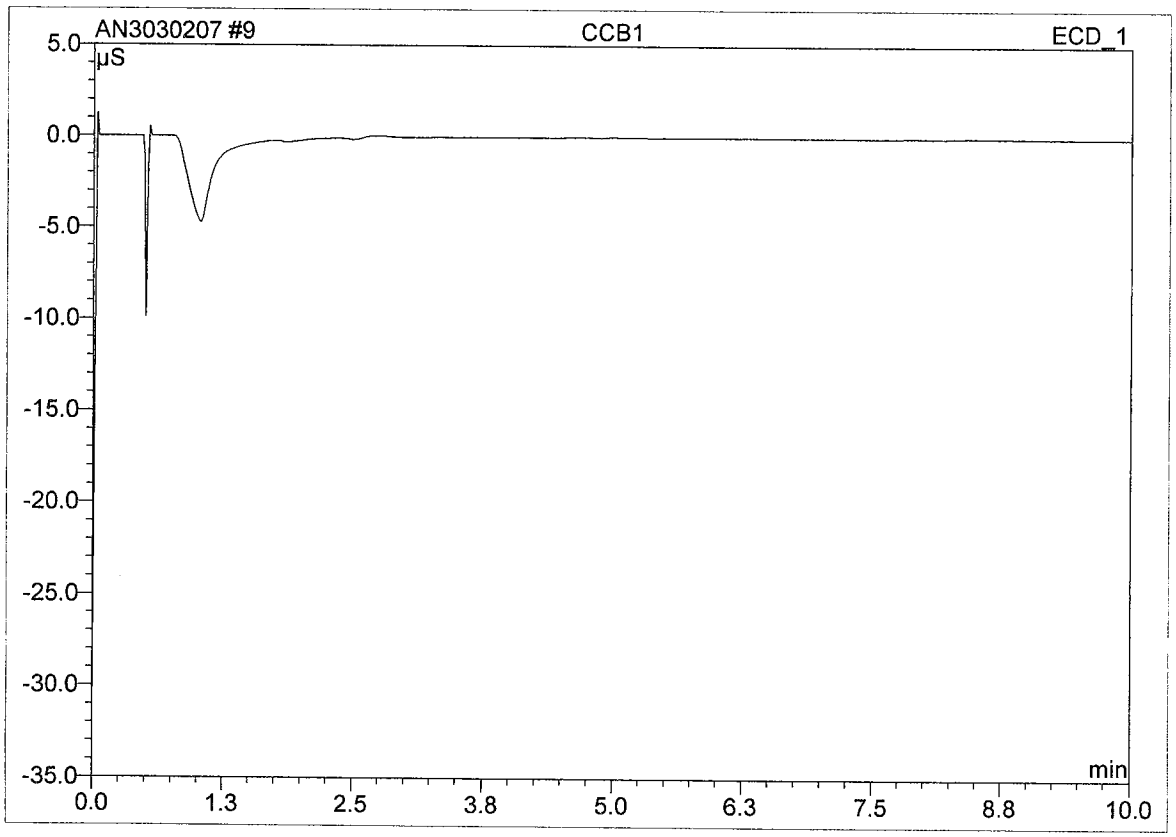
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect

Columbia Analytical Services, Inc.

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 9:25**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



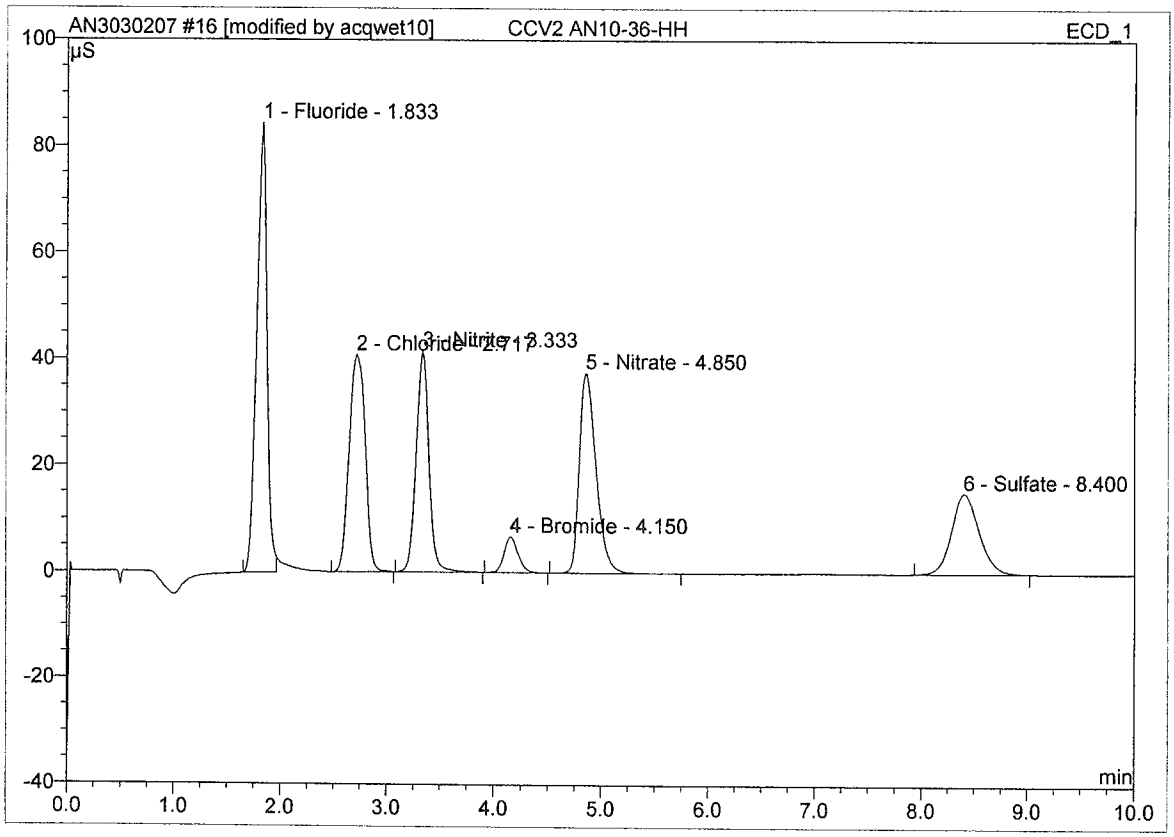
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

KRN 3/6/07

Columbia Analytical Services, Inc.

16 CCV2 AN10-36-HH

Sample Name:	**CCV2 AN10-36-HH**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:53**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.505	9.388	27.15	108% 5.388	BM *
2	2.72	Chloride	40.847	7.156	20.69	96% 4.769	BMB*
3	3.33	Nitrite	41.499	5.670	16.40	105% 2.050	BMB*
4	4.15	Bromide	6.676	0.996	2.88	95% 1.917	BMB*
5	4.85	Nitrate	37.549	6.797	19.65	95% 1.922	BMB*
6	8.40	Sulfate	15.030	4.574	13.23	100% 4.971	BMB*
Total:			226.106	34.581	100.00	21.017	

Alter
Initials JS

lkr 3/6/07

MAR 0 2 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 93

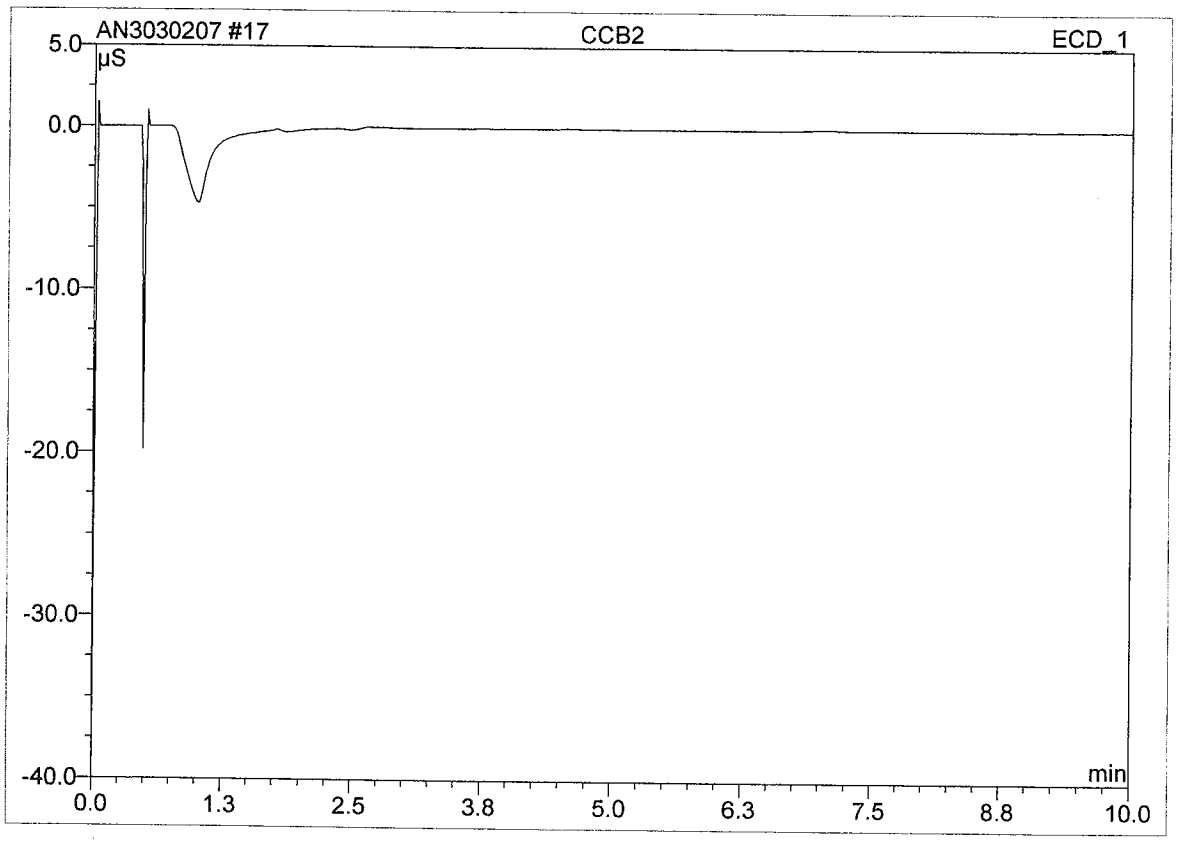
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 11:05**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



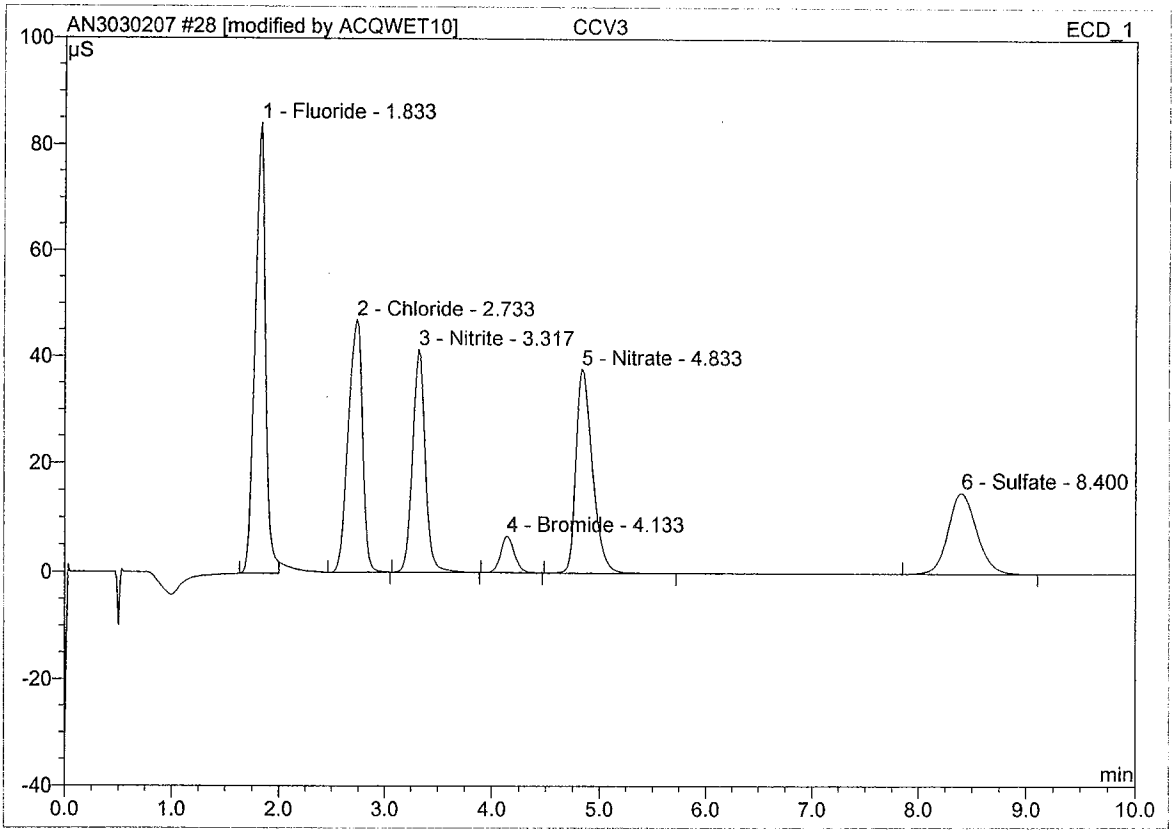
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

ldr 3/6/07

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 19:07**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.341	9.488	27.42	108% 5.445	BM *
2	2.73	Chloride	46.984	7.217	20.85	96% 4.810	BMB*
3	3.32	Nitrite	41.327	5.635	16.28	100% 2.038	BMB*
4	4.13	Bromide	6.713	0.993	2.87	95% 1.910	BMB*
5	4.83	Nitrate	37.827	6.734	19.46	95% 1.904	BMB*
6	8.40	Sulfate	14.912	4.540	13.12	98% 4.934	BMB*
Total:			232.104	34.608	100.00	21.041	

After
Initials JS

MAR 0 3 2007

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

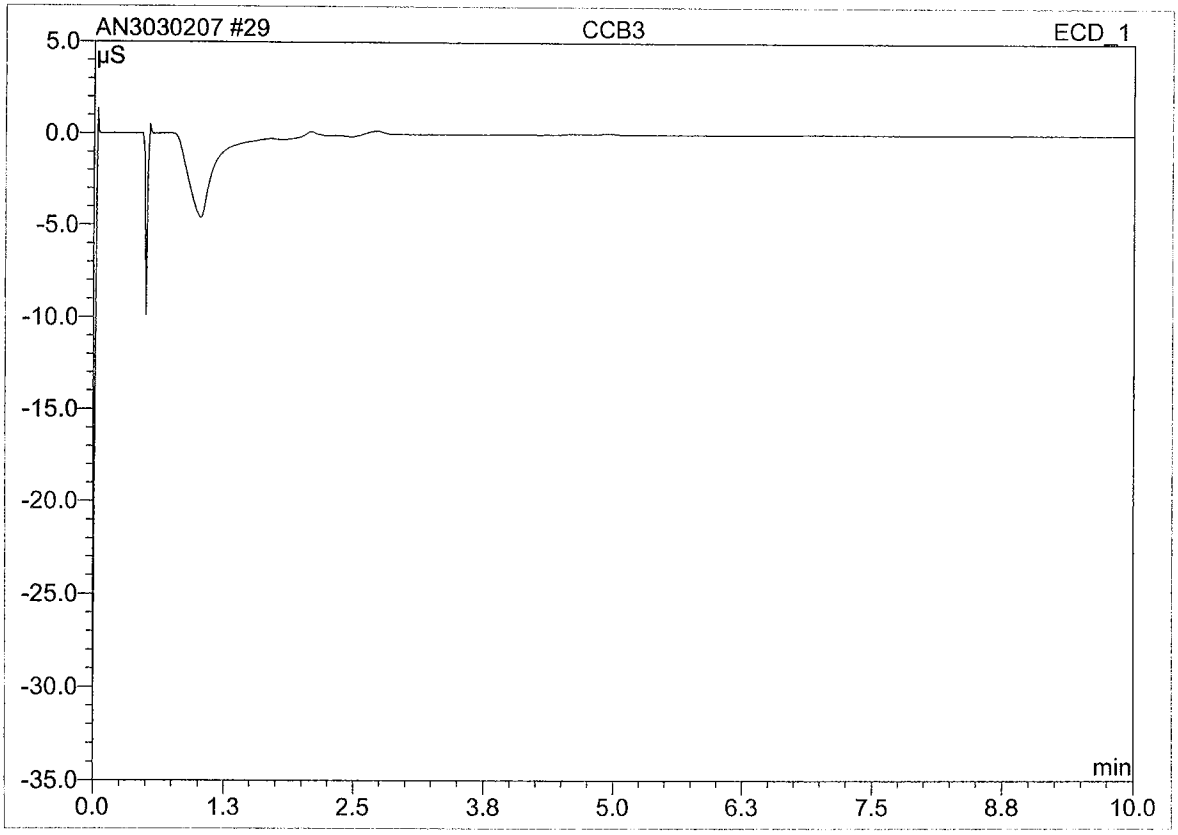
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

29 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 19:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



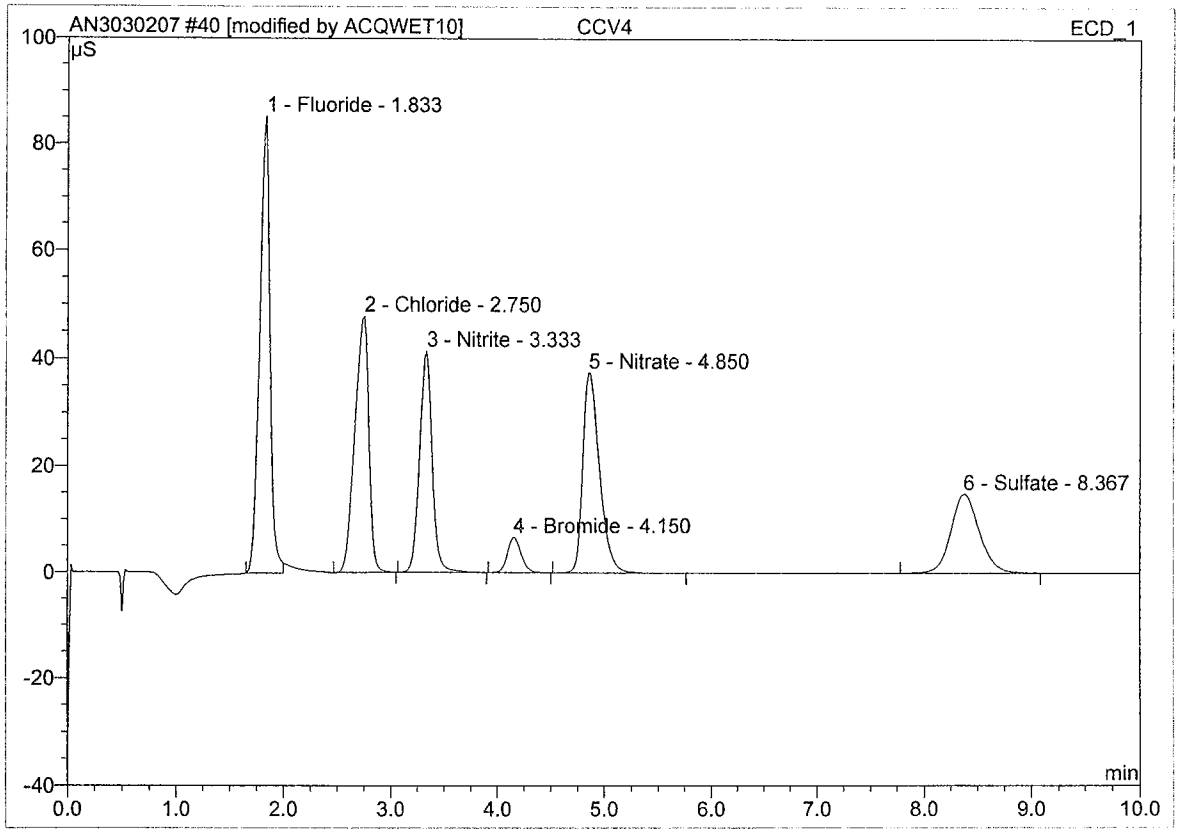
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

JXL 3/6/07

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 21:36**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.414	9.486	27.25	108% 5.444	BM *
2	2.75	Chloride	47.858	7.269	20.88	96% 4.845	BMB*
3	3.33	Nitrite	41.398	5.668	16.28	100% 2.049	BMB*
4	4.15	Bromide	6.698	0.998	2.87	95% 1.920	BMB*
5	4.85	Nitrate	37.525	6.816	19.58	95% 1.927	BMB*
6	8.37	Sulfate	14.926	4.576	13.15	100% 4.973	BMB*
Total:			233.818	34.814	100.00	21.159	

After Initials JS

MAR 0 3 2007

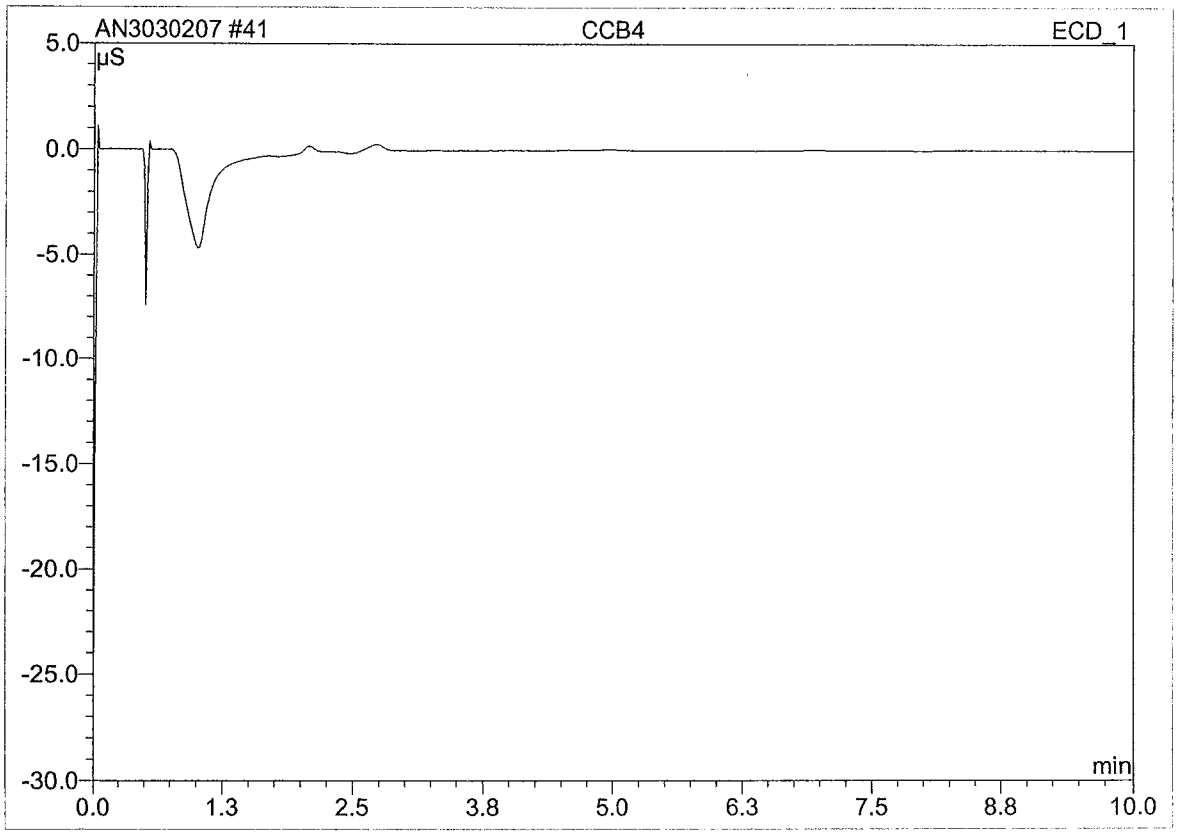
MAR 3/6/07

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**54**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 21:49**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

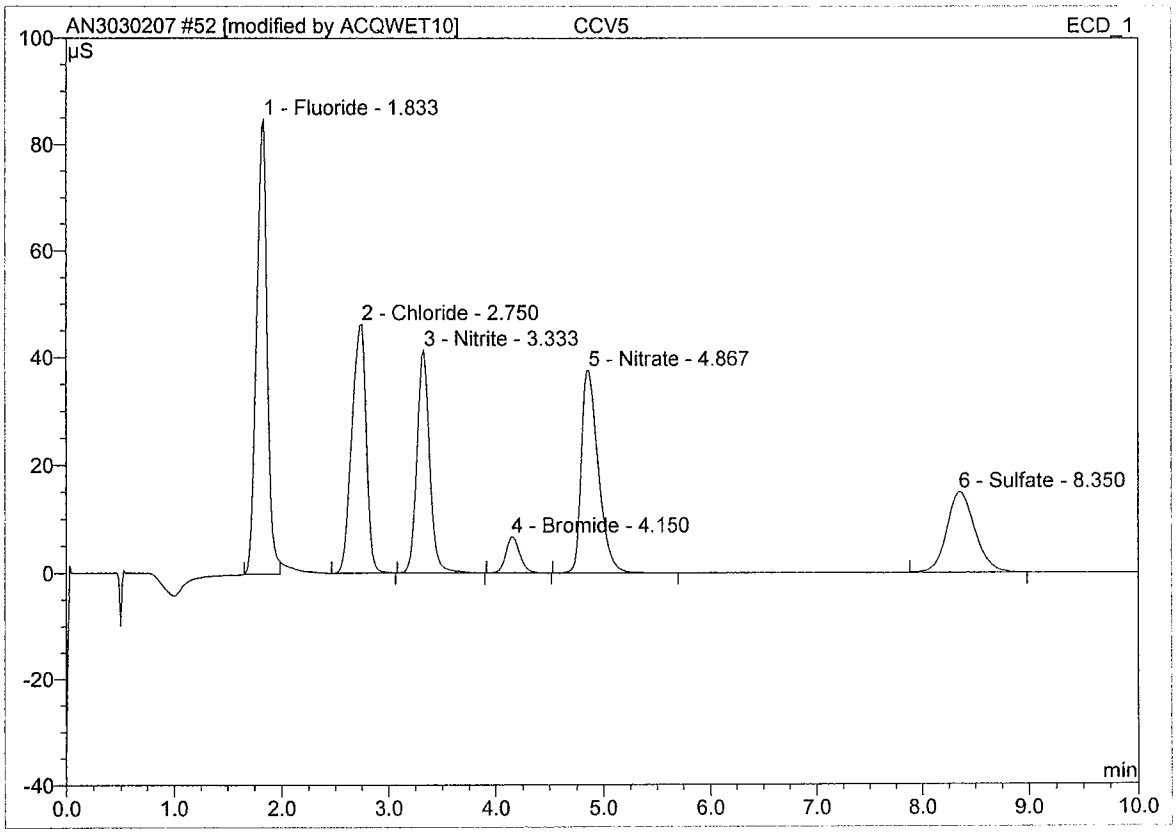


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Columbia Analytical Services, Inc.

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 0:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.908	9.552	27.41	110% 5.482	BM *
2	2.75	Chloride	46.186	7.263	20.84	96% 4.840	BMB*
3	3.33	Nitrite	41.310	5.673	16.28	105% 2.051	BMB*
4	4.15	Bromide	6.676	0.998	2.86	95% 1.921	BMB*
5	4.87	Nitrate	37.579	6.805	19.53	95% 1.924	BMB*
6	8.35	Sulfate	14.931	4.559	13.08	100% 4.954	BMB*
Total:			231.590	34.849	100.00	21.172	

After
Initials JS

MAR 0 3 2007

LDR 3/6/07

default_letter/Integration

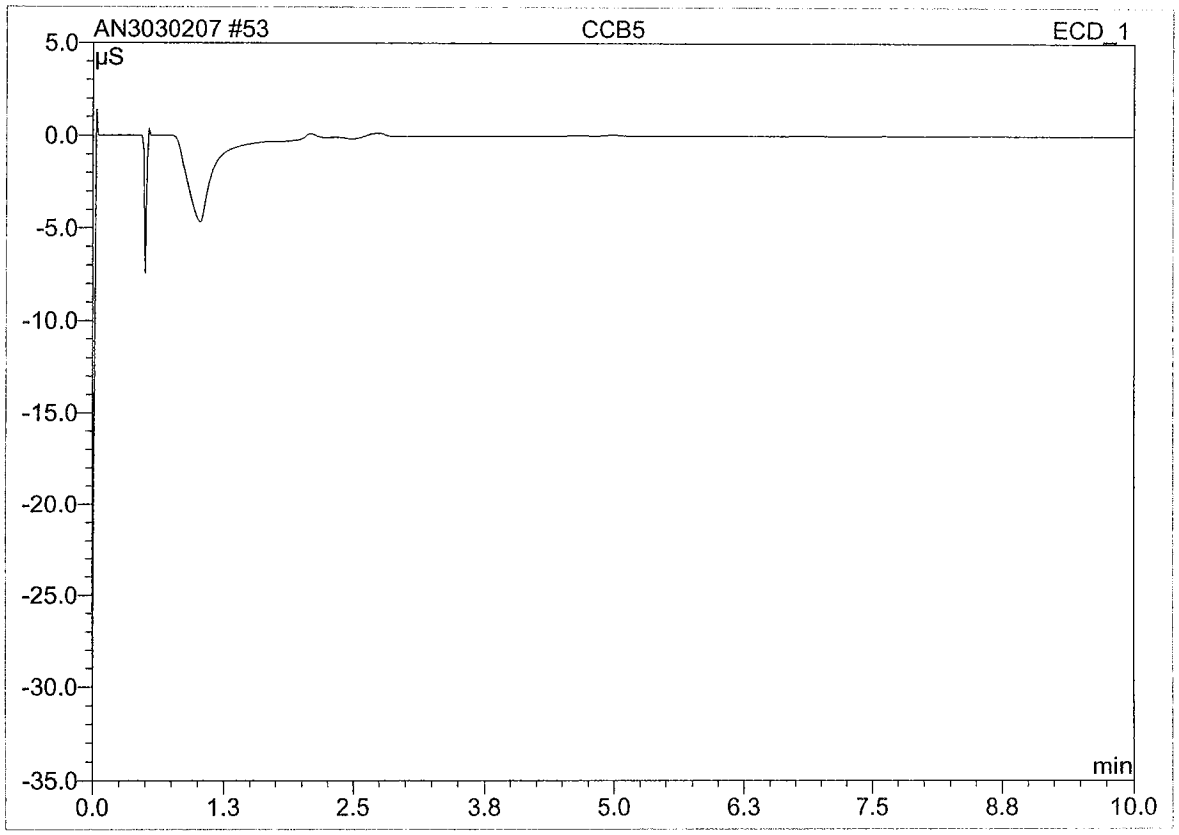
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

Columbia Analytical Services, Inc.

53 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**66**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 0:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



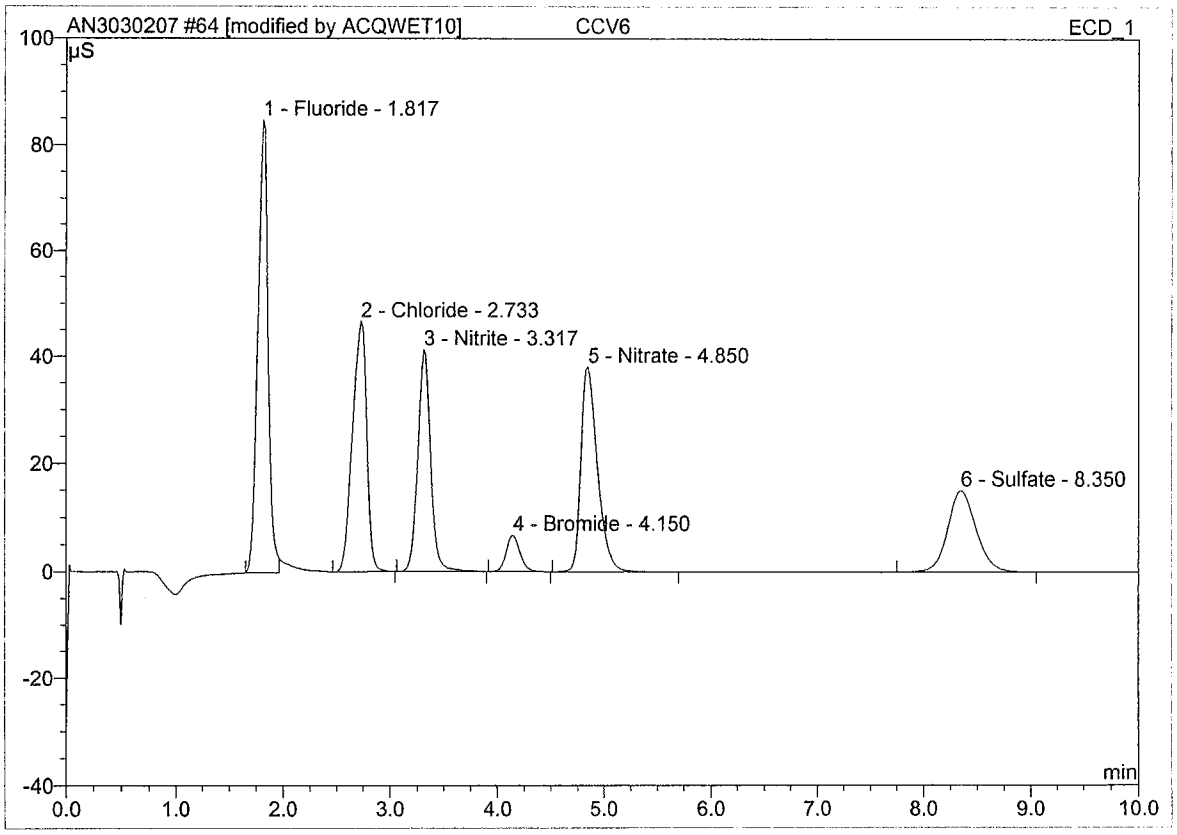
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

JXC 3/6/07

Columbia Analytical Services, Inc.

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**77**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 2:35**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	84.847	9.460	27.14	108% 5.429	BM *
2	2.73	Chloride	46.589	7.281	20.89	98% 4.853	BMB*
3	3.32	Nitrite	41.222	5.676	16.28	105% 2.052	BMB*
4	4.15	Bromide	6.745	1.004	2.88	95% 1.932	BMB*
5	4.85	Nitrate	38.025	6.846	19.64	95% 1.936	BMB*
6	8.35	Sulfate	15.054	4.591	13.17	100% 4.989	BMB*
Total:			232.483	34.858	100.00	21.191	

After
Initials JS

MAR 0 3 2007

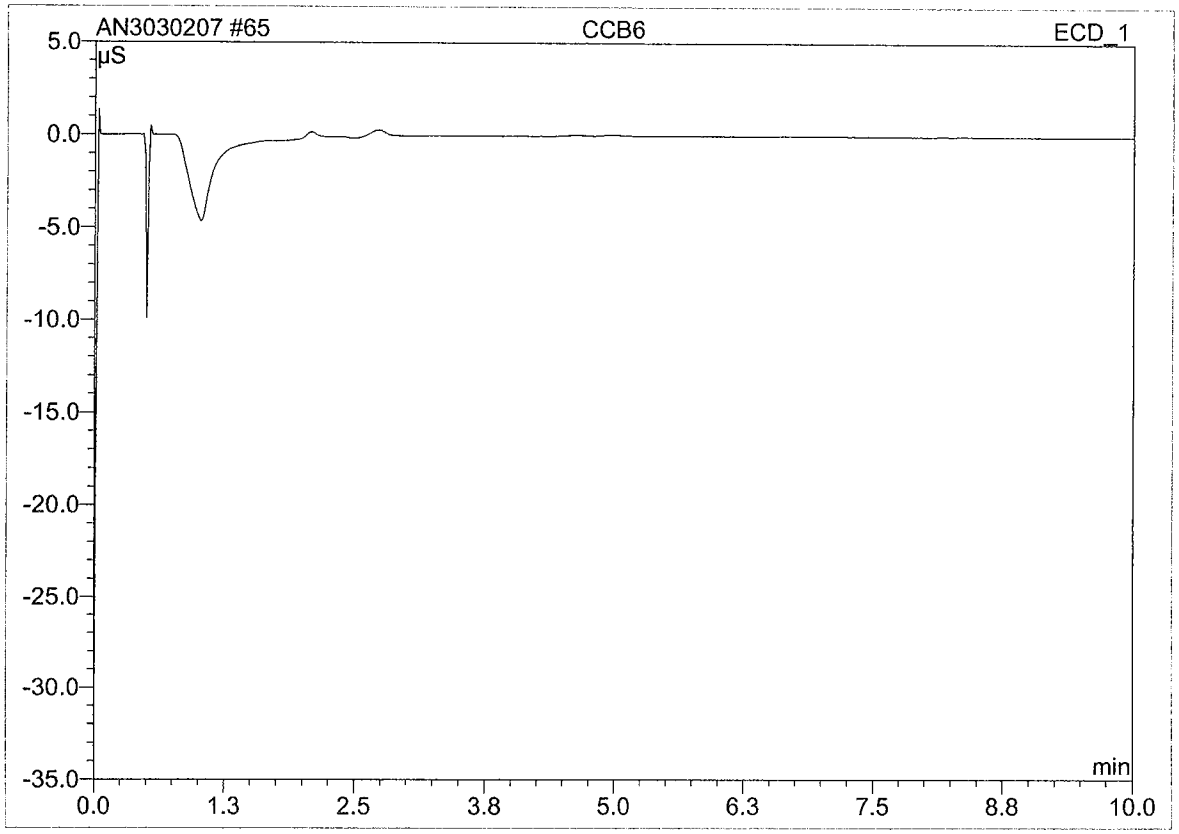
lxr 3/6/07

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

Columbia Analytical Services, Inc.

65 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**78**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 2:48**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



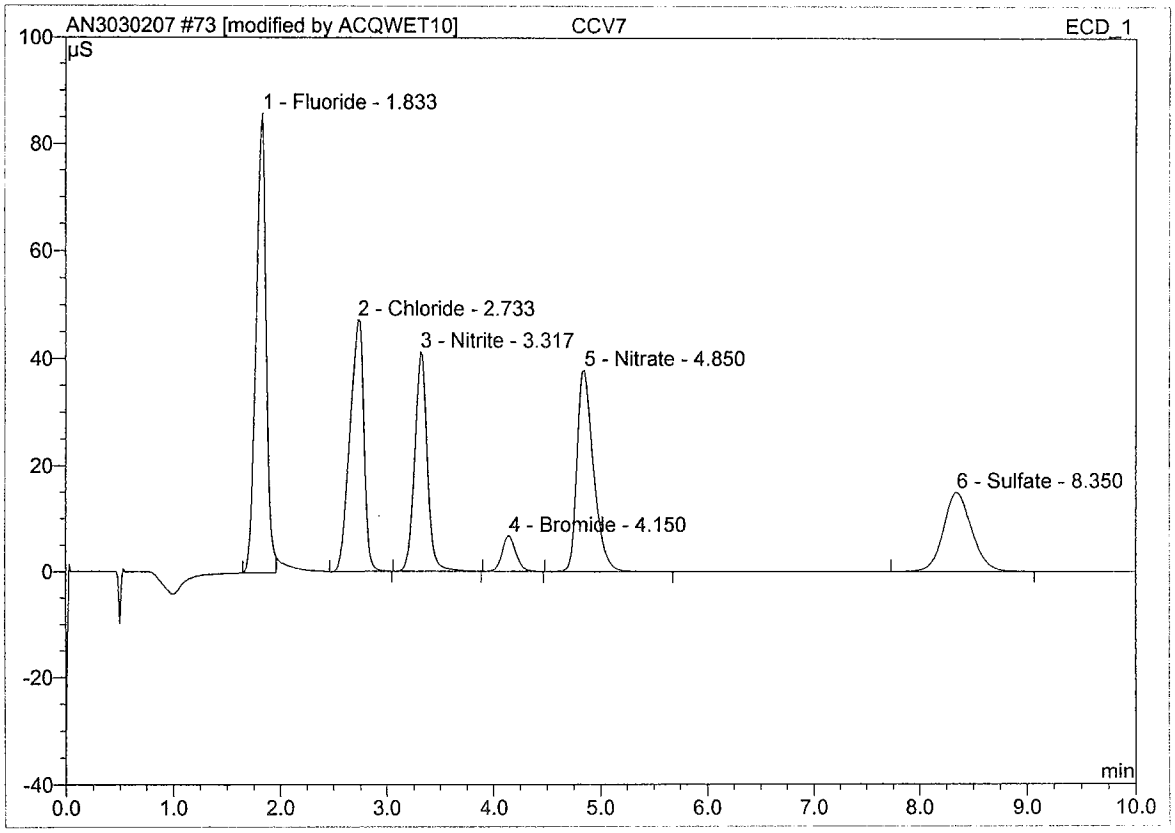
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RR 3/6/07

Columbia Analytical Services, Inc.

73 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**86**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 4:27**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.900	9.505	27.30	110% 5.455	BM *
2	2.73	Chloride	47.234	7.258	20.84	96% 4.837	BMB*
3	3.32	Nitrite	41.235	5.658	16.25	100% 2.046	BMB*
4	4.15	Bromide	6.720	0.997	2.86	95% 1.919	BMB*
5	4.85	Nitrate	37.917	6.815	19.57	95% 1.927	BMB*
6	8.35	Sulfate	15.056	4.588	13.17	100% 4.985	BMB*
Total:			234.061	34.821	100.00	21.169	

After
Initials JS

lkn 3/6/07

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

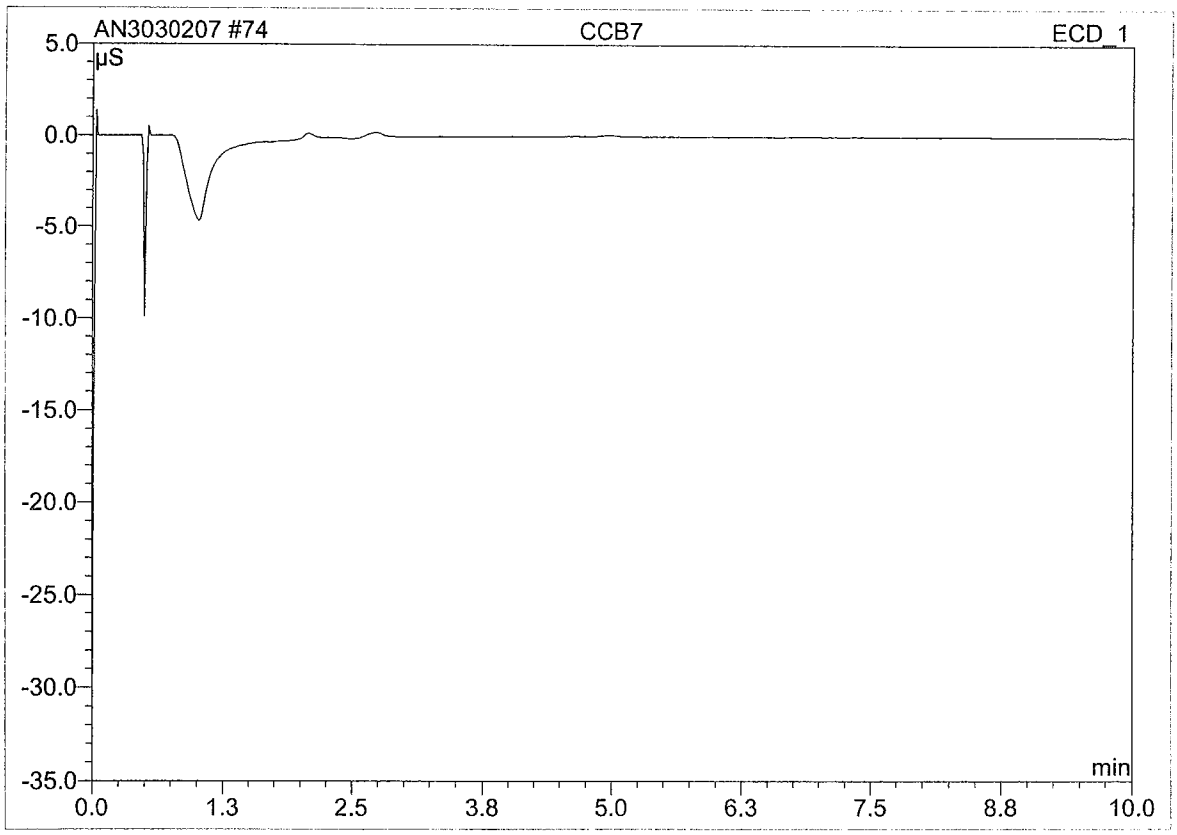
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

74 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**87**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 4:40**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



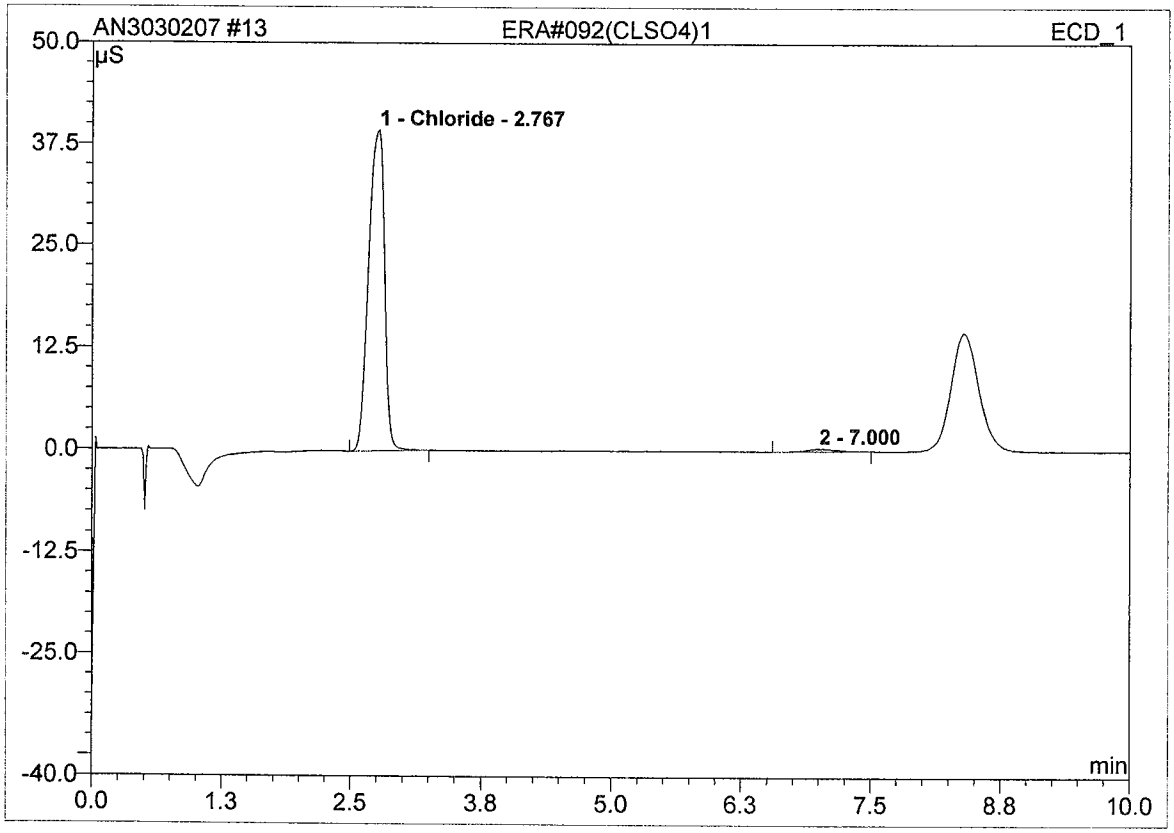
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

3/6/07
LRR

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	39.376	6.997	98.37	4.664	BMB
2	7.00	n.a.	0.338	0.116	1.63	n.a.	BMB
Total:			39.715	7.113	100.00	4.664	

Before

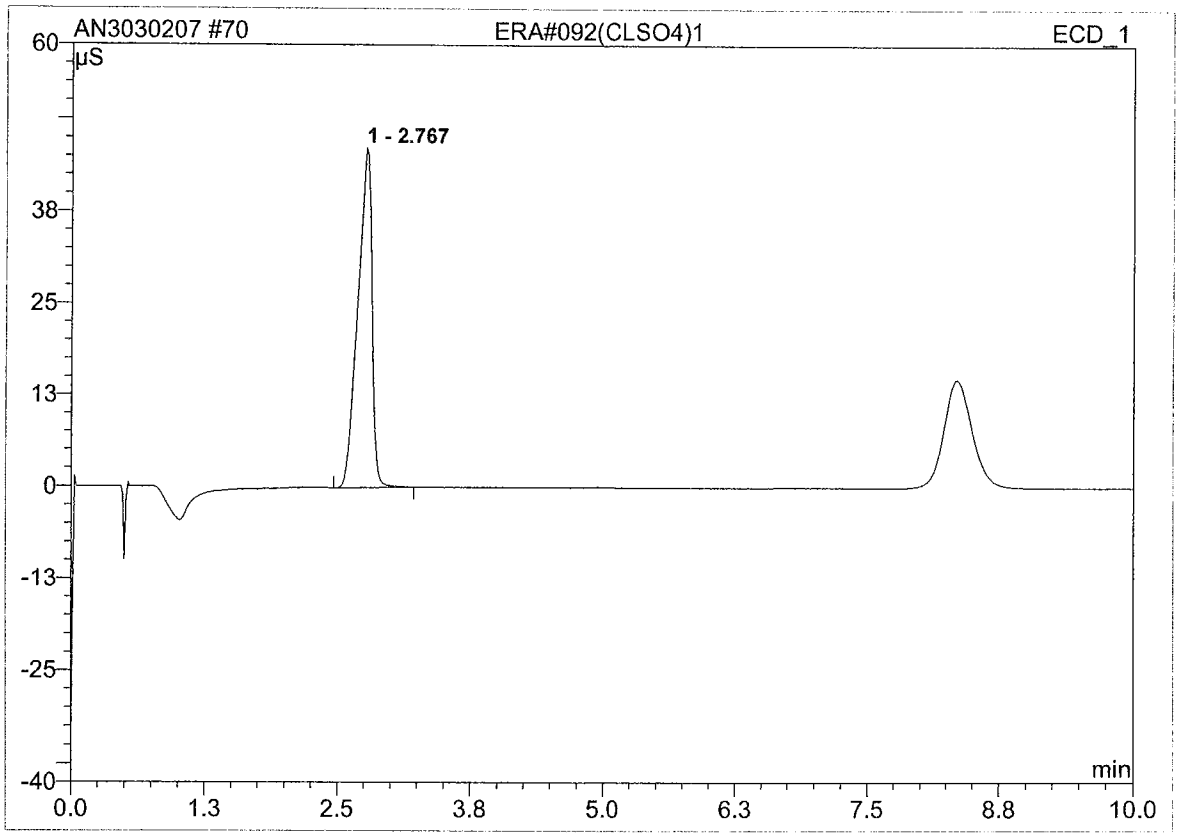
MAR 0 2 2007

Columbia Analytical Services, Inc.

70 ERA#092(CLSO4)~~1~~ 2

BM 3/6/07

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**83**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 3:50**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	n.a.	46.232	7.103	100.00	n.a.	BMB
Total:			46.232	7.103	100.00	0.000	

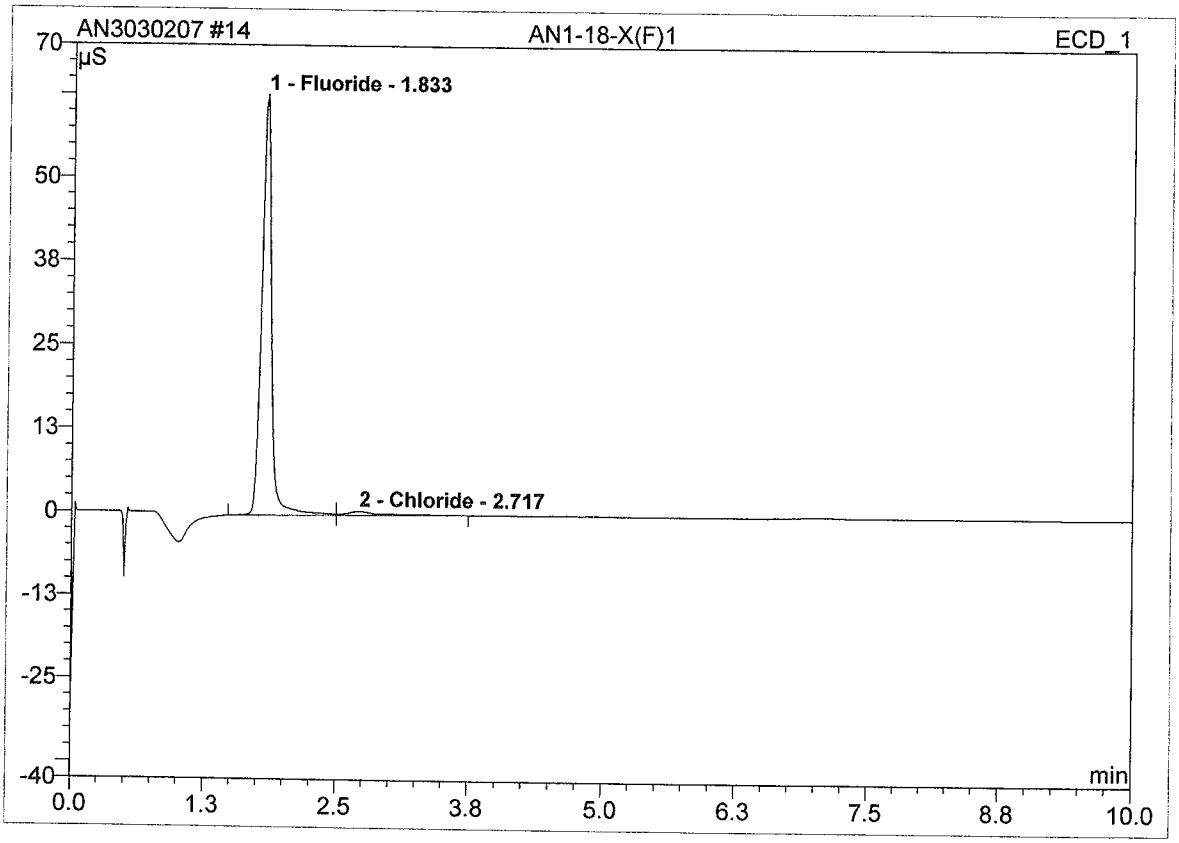
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/2/2007 10:28**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	62.912	6.722	96.78	19.288	BM
2	2.72	Chloride	0.592	0.224	3.22	0.745	MB
Total:			63.504	6.945	100.00	20.033	

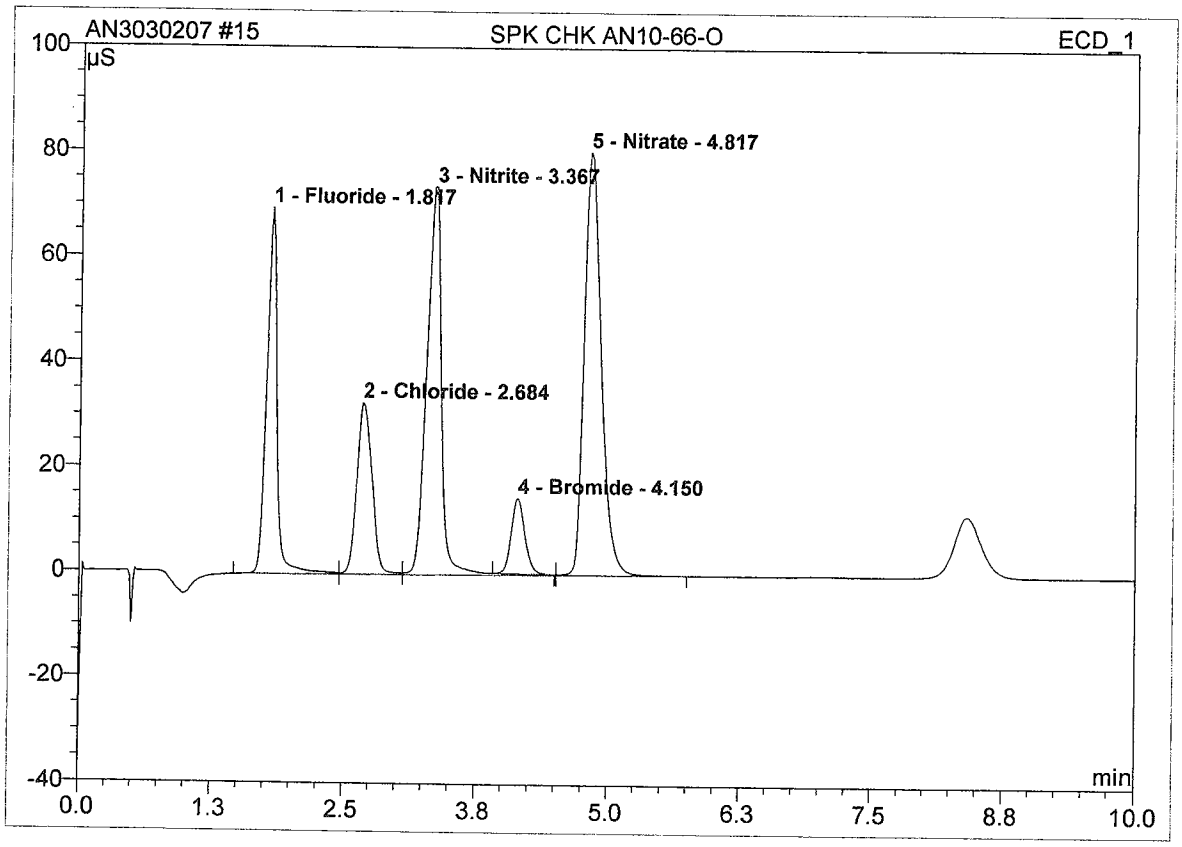
Before

MAR 0 2 2007

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-O

Sample Name:	**SPK CHK AN10-66-O**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:40**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	69.680	7.909	18.67	4.539	BM
2	2.68	Chloride	32.722	5.520	13.03	3.679	M
3	3.37	Nitrite	73.697	11.858	27.99	4.287	M
4	4.15	Bromide	14.346	2.100	4.96	4.041	Rd
5	4.82	Nitrate	80.396	14.980	35.36	4.236	MB
Total:			270.840	42.366	100.00	20.781	

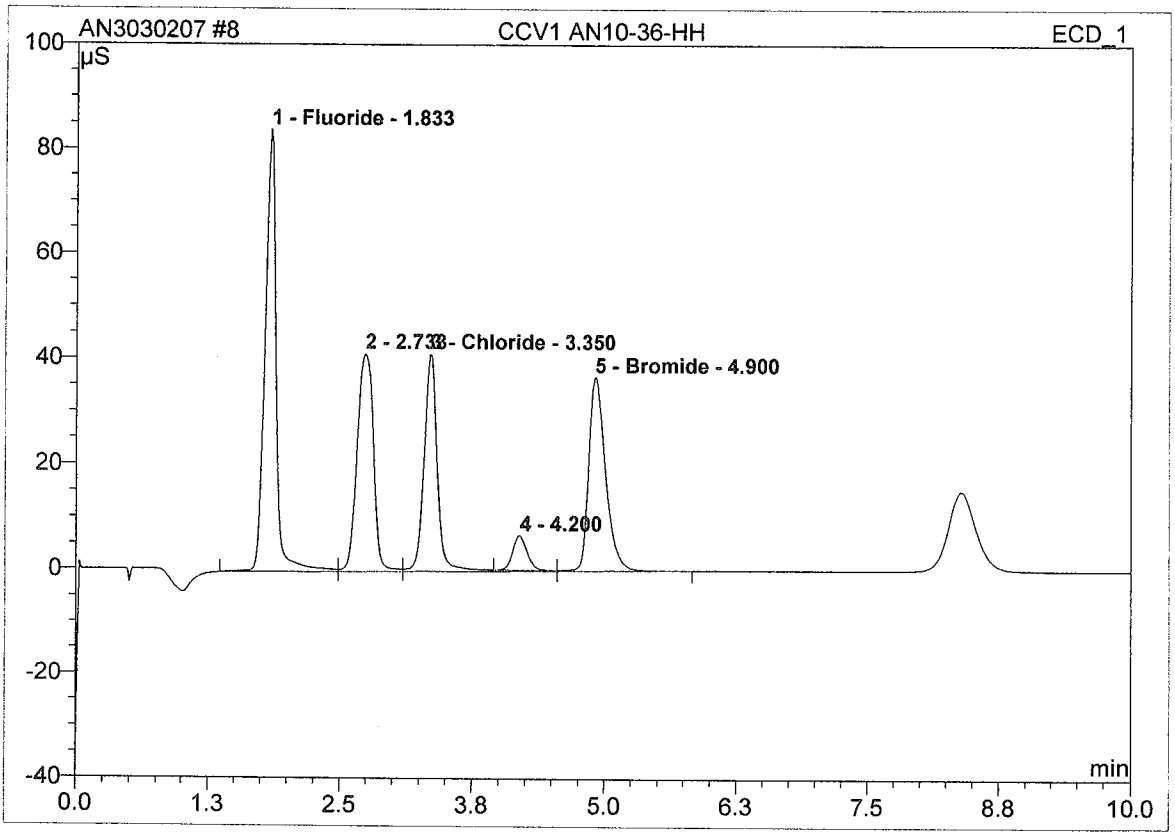
Before

MAR 0 2 2007

Columbia Analytical Services, Inc.

8 CCV1 AN10-36-HH

Sample Name:	**CCV1 AN10-36-HH**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 9:13**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.200	10.195	32.11	5.851	BM
2	2.73	n.a.	41.328	7.480	23.56	n.a.	M
3	3.35	Chloride	41.255	6.147	19.37	4.097	M
4	4.20	n.a.	6.556	0.999	3.15	n.a.	Rd
5	4.90	Bromide	36.681	6.923	21.81	13.322	MB
Total:			210.019	31.744	100.00	23.270	

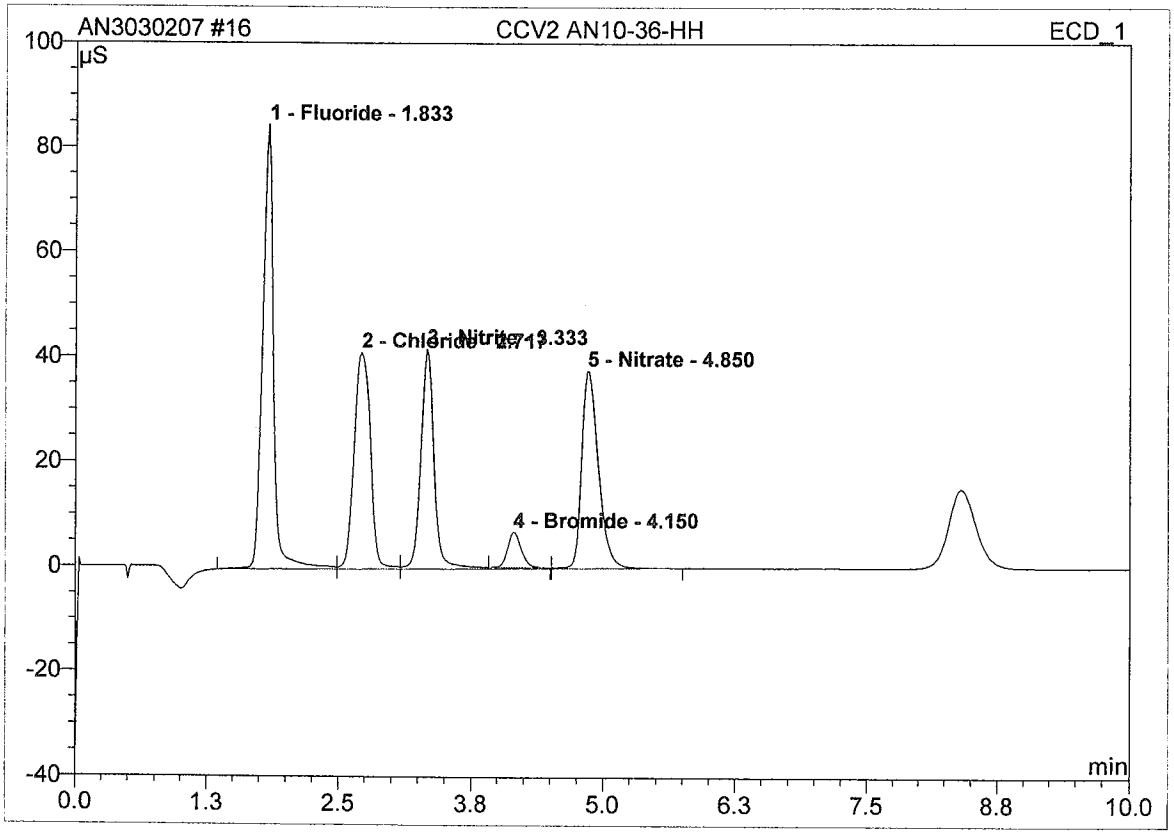
Before

MAR 0 2 2007

Columbia Analytical Services, Inc.

16 CCV2 AN10-36-HH

Sample Name:	**CCV2 AN10-36-HH**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 10:53**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.865	10.108	32.01	5.801	BM
2	2.72	Chloride	41.266	7.412	23.47	4.940	M
3	3.33	Nitrite	41.914	6.150	19.47	2.224	M
4	4.15	Bromide	6.676	0.996	3.15	1.917	Rd
5	4.85	Nitrate	37.688	6.915	21.90	1.955	MB
Total:			212.409	31.582	100.00	16.837	

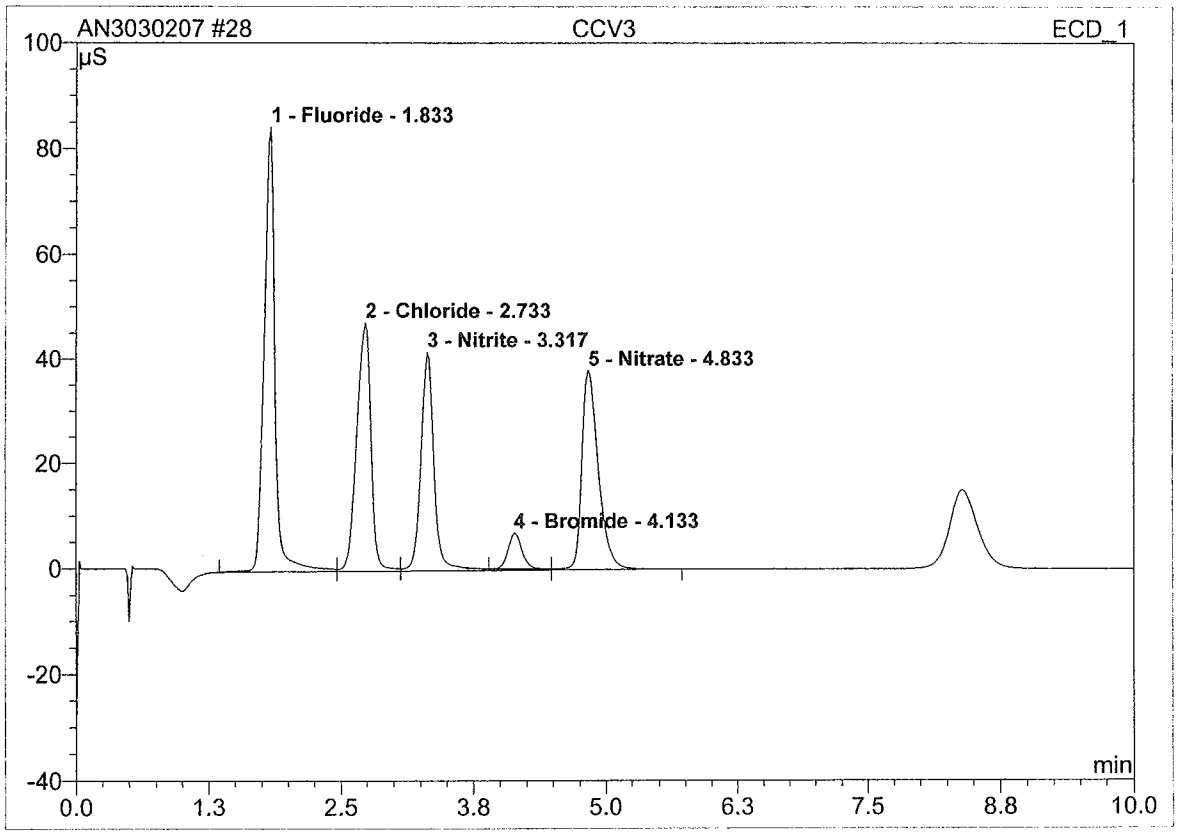
Before

MAR 0 2 2007

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 19:07**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.622	10.088	32.03	5.790	BM
2	2.73	Chloride	47.391	7.464	23.70	4.974	M
3	3.32	Nitrite	41.726	6.093	19.35	2.203	M
4	4.13	Bromide	6.714	0.993	3.15	1.911	Rd
5	4.83	Nitrate	37.969	6.857	21.77	1.939	MB
Total:			218.422	31.494	100.00	16.817	

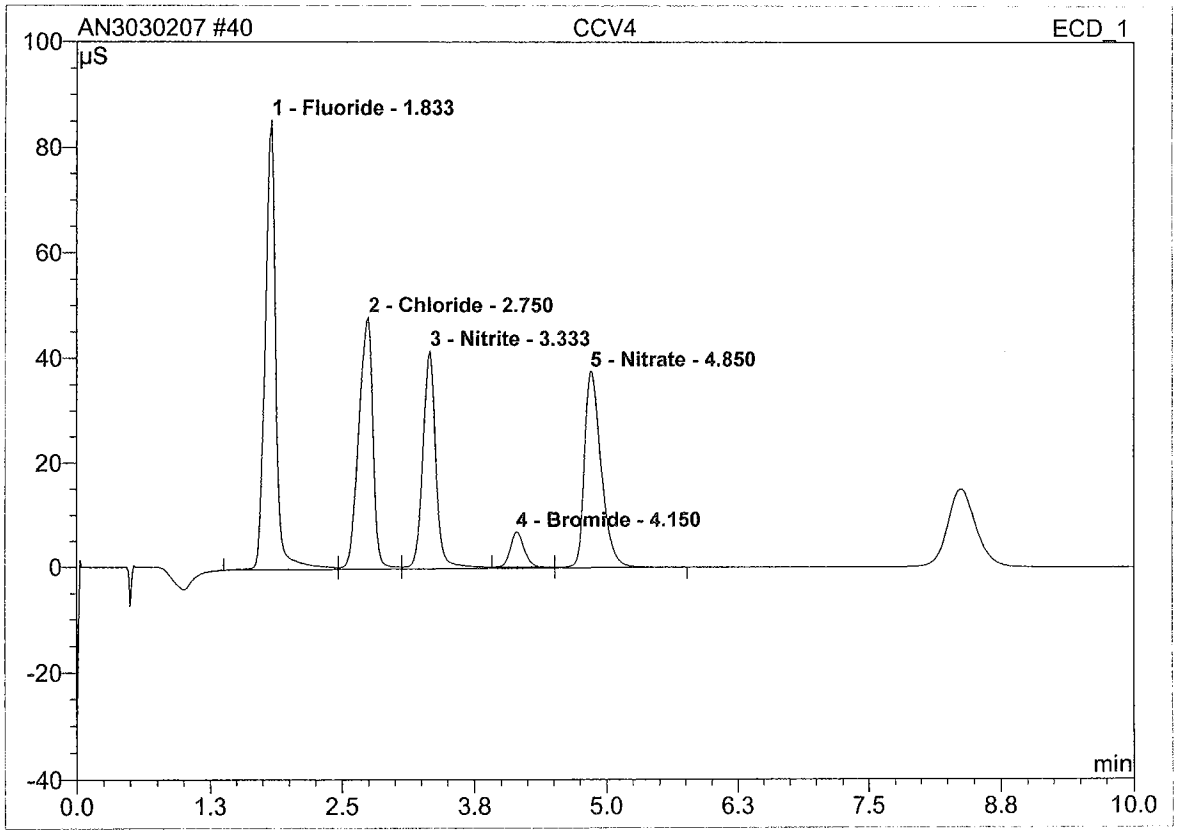
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/2/2007 21:36**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.721	10.069	31.85	5.779	BM
2	2.75	Chloride	48.239	7.500	23.72	4.998	M
3	3.33	Nitrite	41.776	6.114	19.34	2.211	M
4	4.15	Bromide	6.698	0.998	3.16	1.920	Rd
5	4.85	Nitrate	37.659	6.931	21.92	1.960	MB
Total:			220.094	31.611	100.00	16.868	

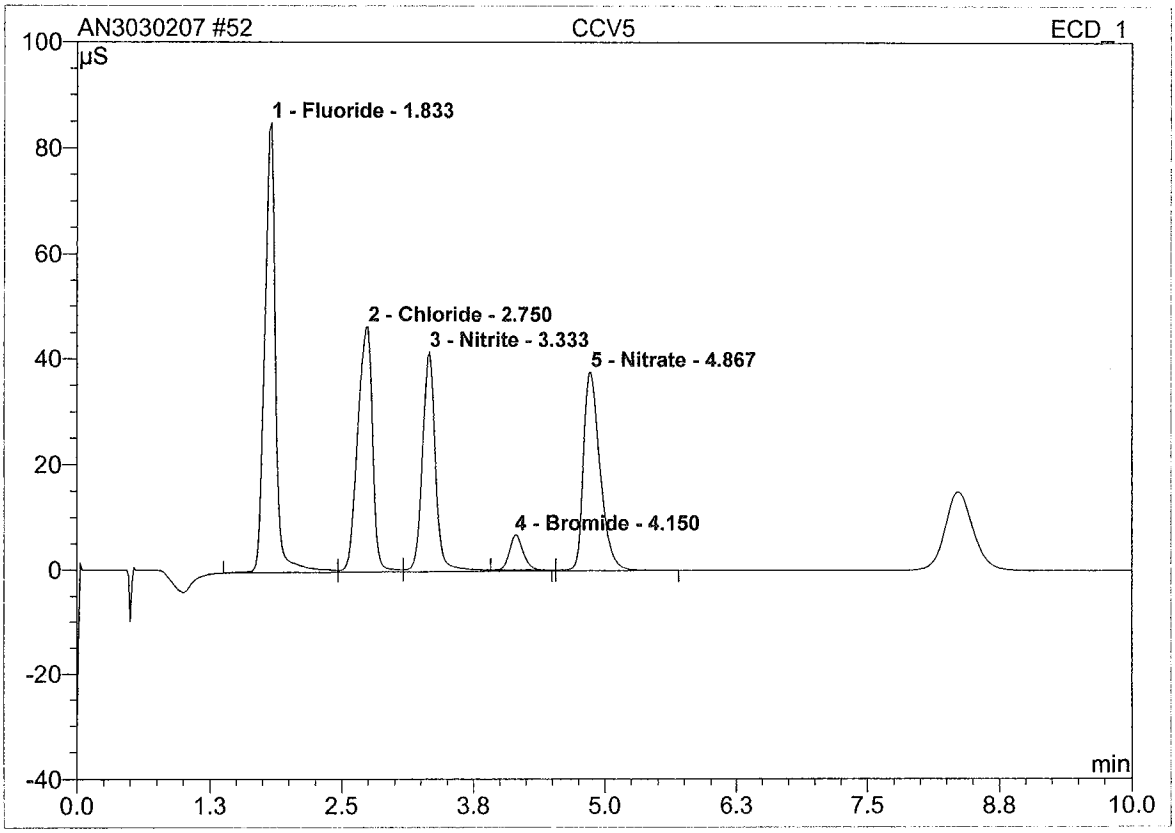
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 0:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.226	10.161	32.11	5.831	BM
2	2.75	Chloride	46.551	7.490	23.66	4.992	M
3	3.33	Nitrite	41.674	6.095	19.26	2.204	M
4	4.15	Bromide	6.676	0.998	3.15	1.921	Rd
5	4.87	Nitrate	37.700	6.904	21.82	1.952	MB
Total:			217.828	31.648	100.00	16.900	

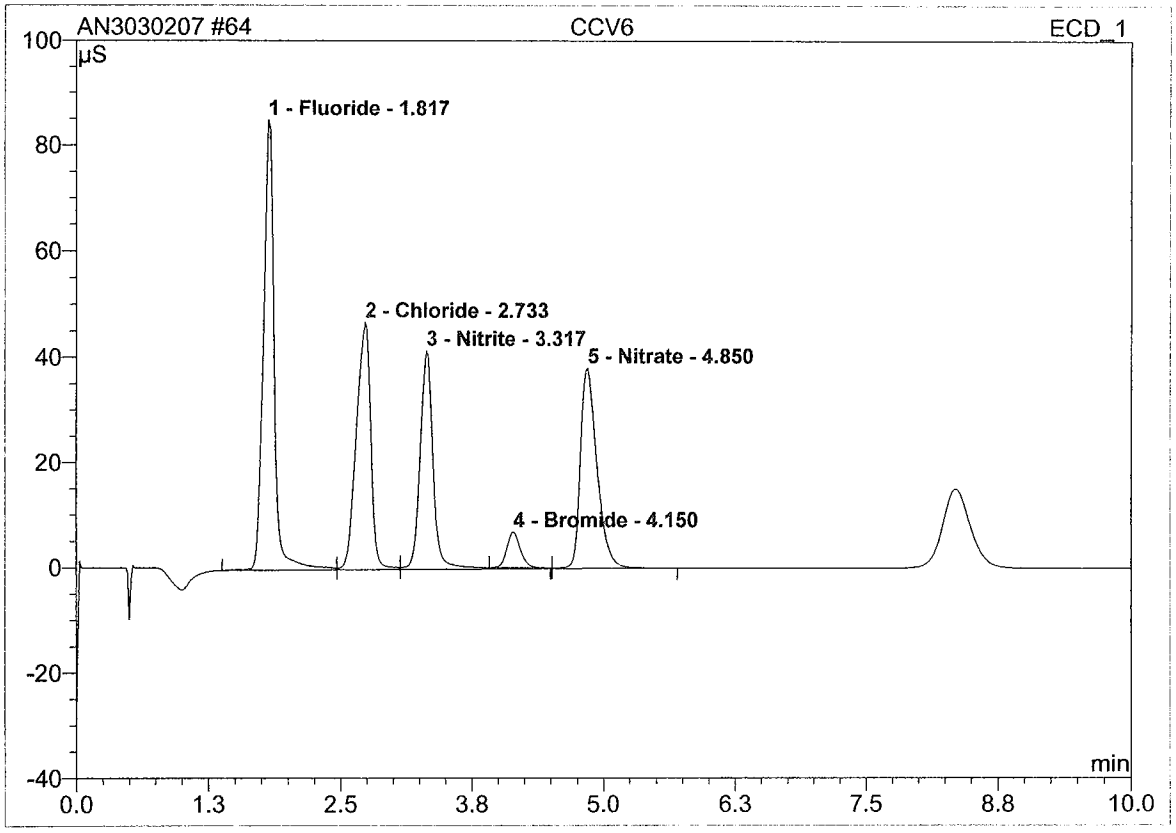
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**77**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 2:35**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	85.184	10.123	31.95	5.810	BM
2	2.73	Chloride	46.970	7.512	23.71	5.006	M
3	3.32	Nitrite	41.593	6.105	19.27	2.207	M
4	4.15	Bromide	6.745	1.004	3.17	1.932	Rd
5	4.85	Nitrate	38.144	6.944	21.91	1.963	MB
Total:			218.636	31.687	100.00	16.919	

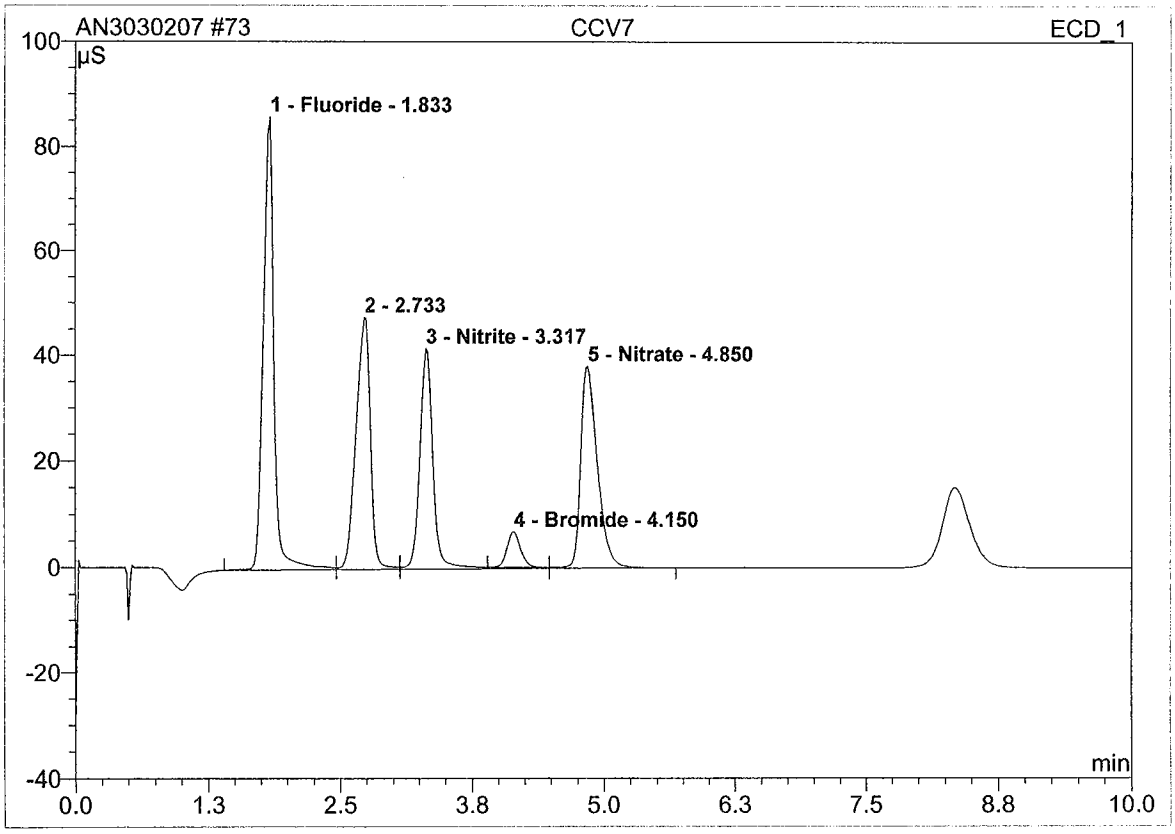
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

73 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**86**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 4:27**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	86.153	10.136	32.05	5.817	BM
2	2.73	n.a.	47.611	7.485	23.66	n.a.	M
3	3.32	Nitrite	41.603	6.086	19.24	2.200	M
4	4.15	Bromide	6.720	0.997	3.15	1.919	Rd
5	4.85	Nitrate	38.045	6.926	21.90	1.958	MB
Total:			220.132	31.631	100.00	11.895	

Before

MAR 0 3 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-85-A

Sequence: AN3012207 **Date: 01/22/07**

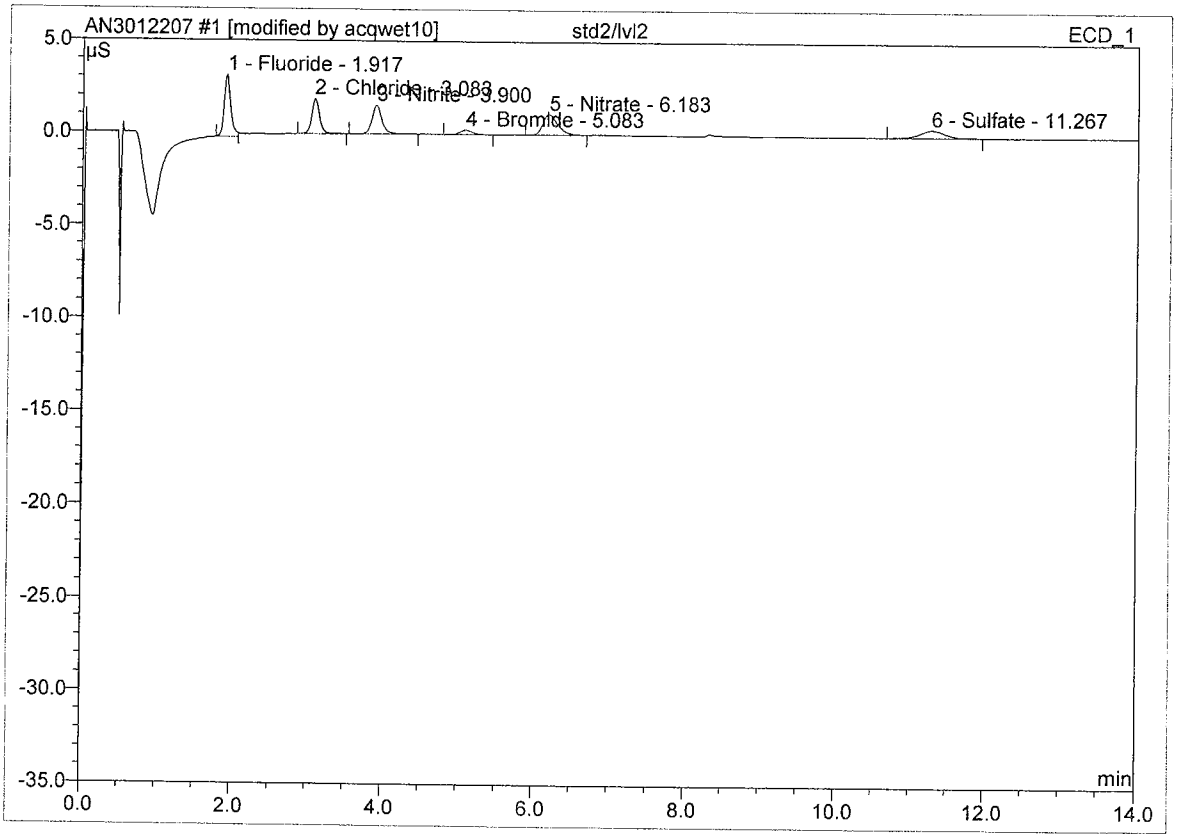
Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9777	1.7441
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9577	1.5000
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9950	2.7656
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9220	0.5197
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8492	3.5368
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9540	0.9202

All calibration standard concentrations are in mg/L unless otherwise noted.

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.335	0.329	26.26	0.189	BM *
2	3.08	Chloride	1.891	0.226	18.02	0.151	BMB*
3	3.90	Nitrite	1.545	0.238	19.01	0.086	BMB*
4	5.08	Bromide	0.242	0.046	3.63	0.088	BMB*
5	6.18	Nitrate	1.101	0.258	20.55	0.073	BMB
6	11.27	Sulfate	0.402	0.157	12.52	0.171	BMB
Total:			8.515	1.253	100.00	0.756	

After Initials BM

JAN 2 3 2007

01/26/07

default_letter/Integration

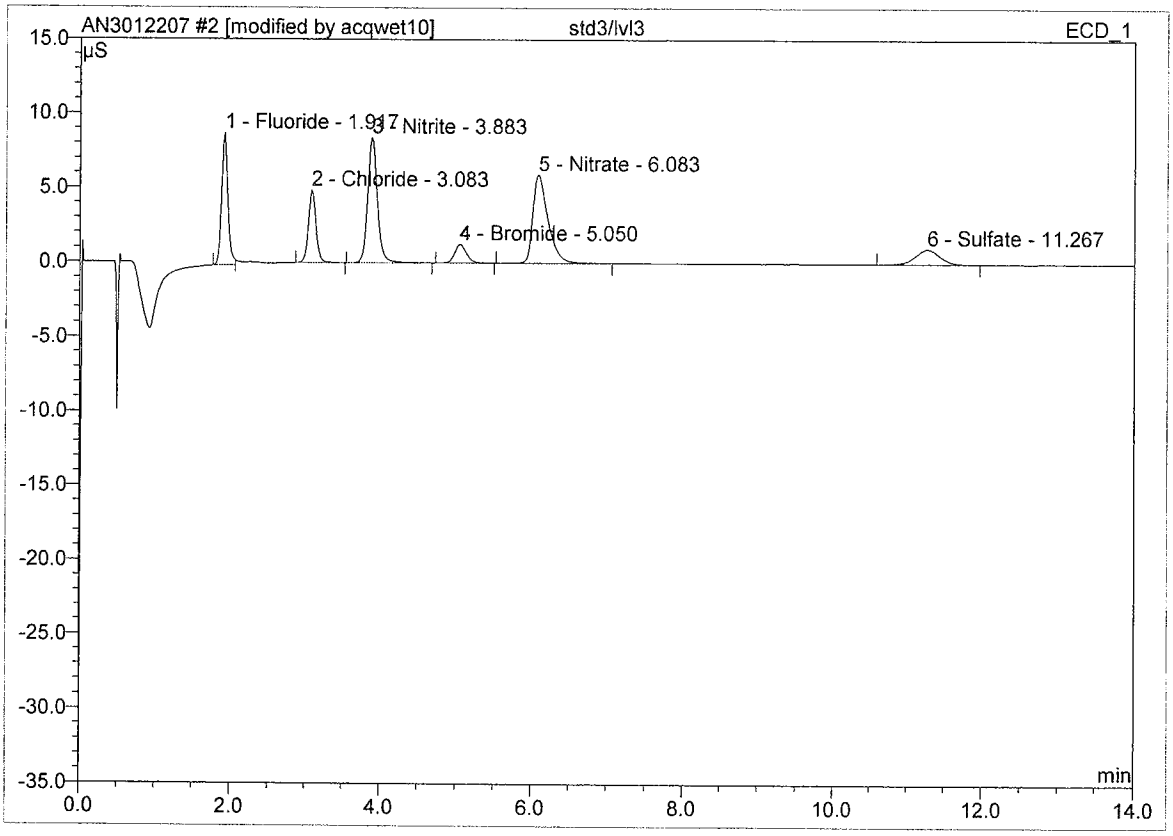
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.892	0.838	17.98	0.480	BM *
2	3.08	Chloride	4.882	0.570	12.23	0.380	BMB*
3	3.88	Nitrite	8.409	1.254	26.92	0.454	BMB*
4	5.05	Bromide	1.245	0.229	4.91	0.440	BMB*
5	6.08	Nitrate	5.914	1.374	29.48	0.388	BMB*
6	11.27	Sulfate	1.009	0.396	8.49	0.430	BMB
Total:			30.349	4.660	100.00	2.572	

Initials BM

JAN 2 3 2007

BM 1/26/07

default_letter/Integration

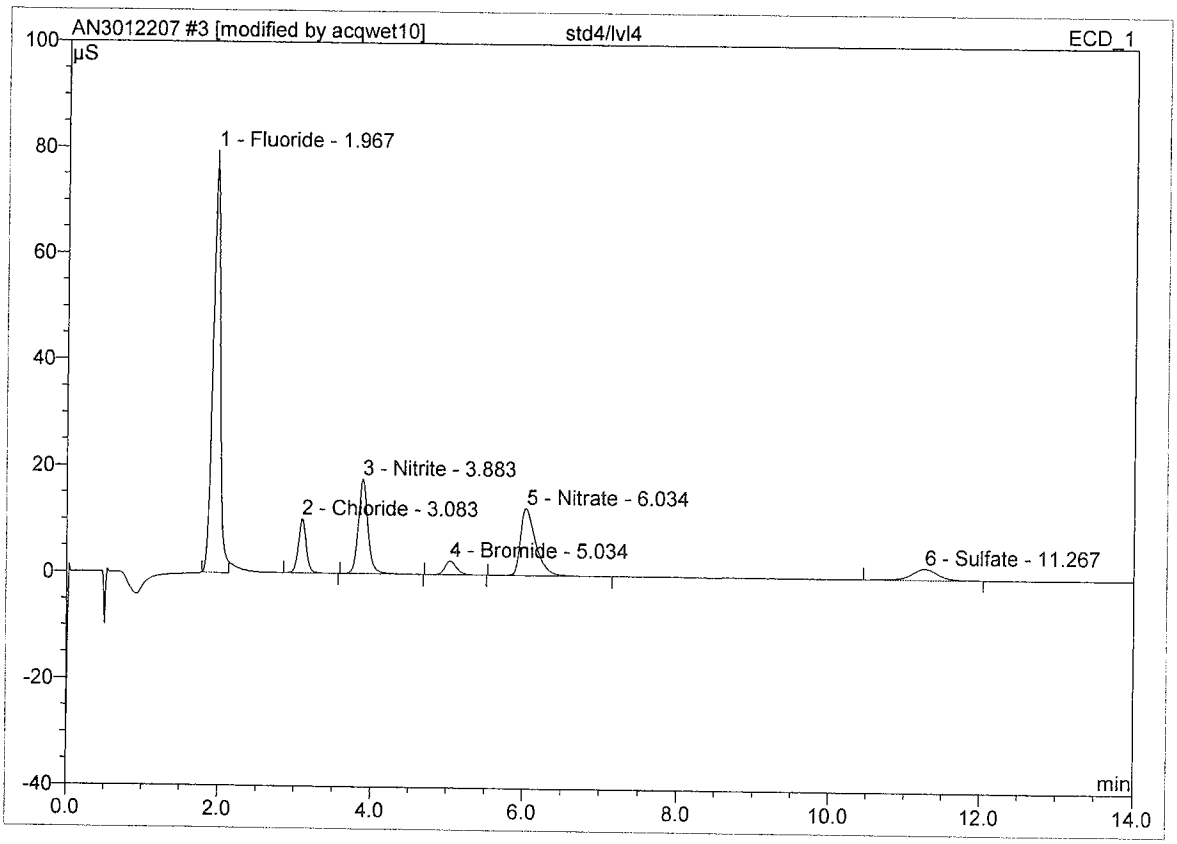
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.616	8.962	53.03	5.139	BM *
2	3.08	Chloride	10.128	1.166	6.90	0.777	BMB*
3	3.88	Nitrite	17.784	2.613	15.46	0.945	BMB*
4	5.03	Bromide	2.578	0.466	2.76	0.897	BMB*
5	6.03	Nitrate	12.589	2.891	17.10	0.817	BMB*
6	11.27	Sulfate	2.053	0.803	4.75	0.873	BMB
Total:			124.747	16.901	100.00	9.448	

After Initials EM

JAN 23 2007

JM 1/26/07

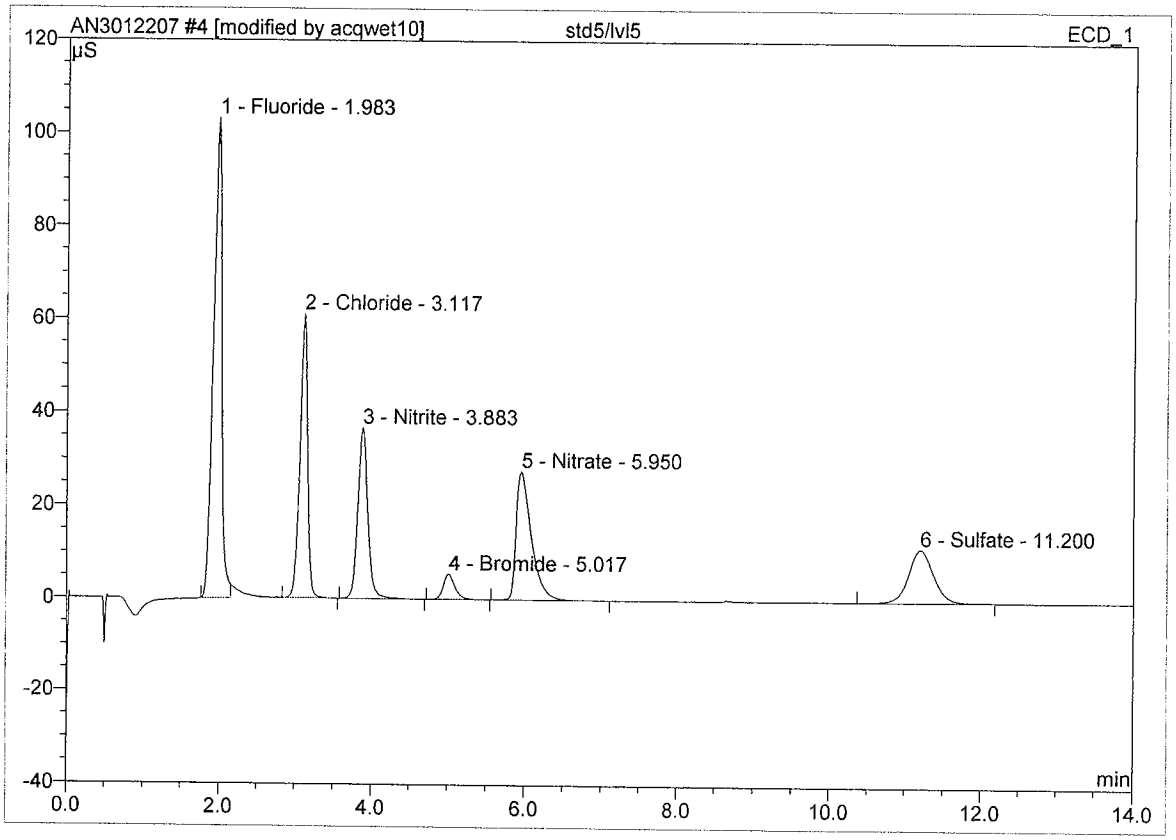
default_letter/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 119

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.196	13.173	35.29	7.553	BM *
2	3.12	Chloride	61.012	7.119	19.07	4.746	BMB*
3	3.88	Nitrite	36.628	5.460	14.63	1.974	BMB*
4	5.02	Bromide	5.419	0.955	2.56	1.838	BMB*
5	5.95	Nitrate	27.578	6.278	16.82	1.775	BMB*
6	11.20	Sulfate	11.462	4.347	11.64	4.724	BMB
Total:			245.295	37.332	100.00	22.610	

After Initials EM

01/26/07

JAN 2 3 2007

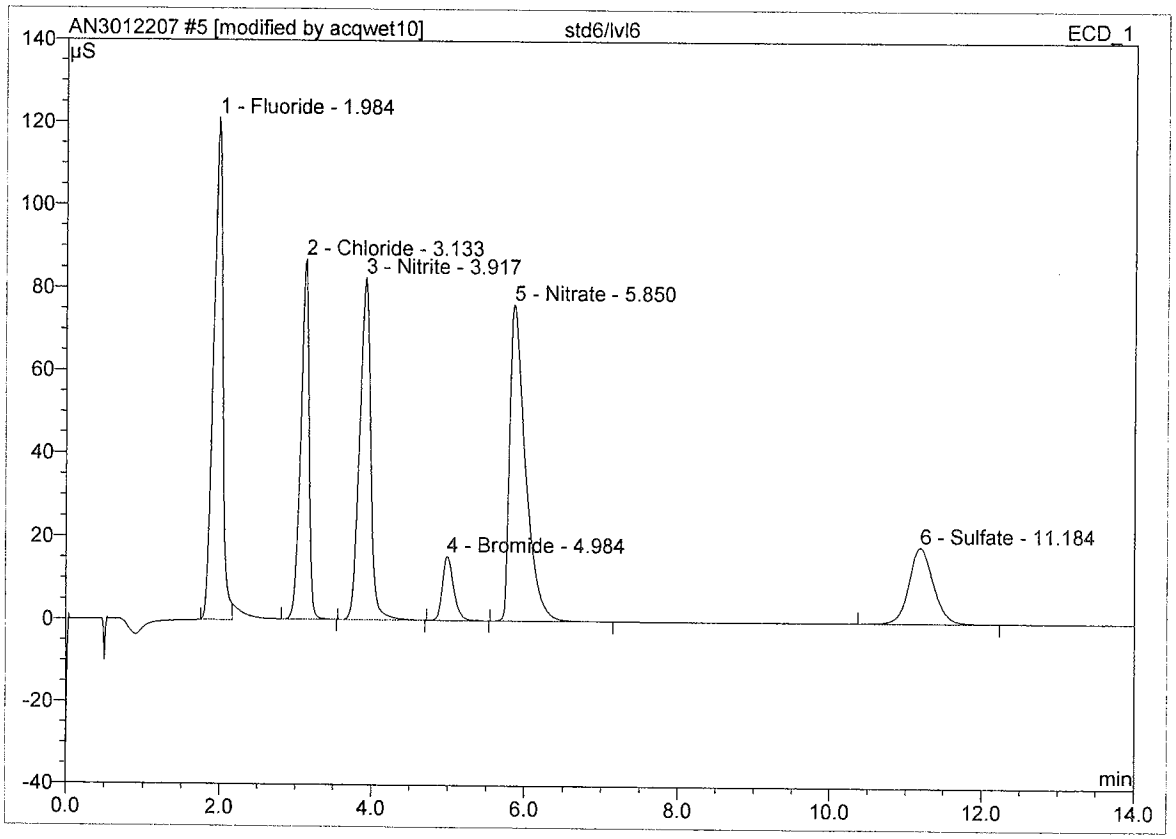
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 120

default_letter/Integration

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.268	17.253	24.62	9.892	BM *
2	3.13	Chloride	86.820	11.203	15.99	7.469	BMB*
3	3.92	Nitrite	82.496	13.901	19.84	5.026	BMB*
4	4.98	Bromide	15.460	2.646	3.78	5.092	BMB*
5	5.85	Nitrate	76.285	18.173	25.94	5.138	BMB*
6	11.18	Sulfate	18.331	6.892	9.84	7.489	BMB
Total:			400.660	70.068	100.00	40.107	

After
Initials EM

JAN 2 3 2007

EM 1/26/07

default_letter/Integration

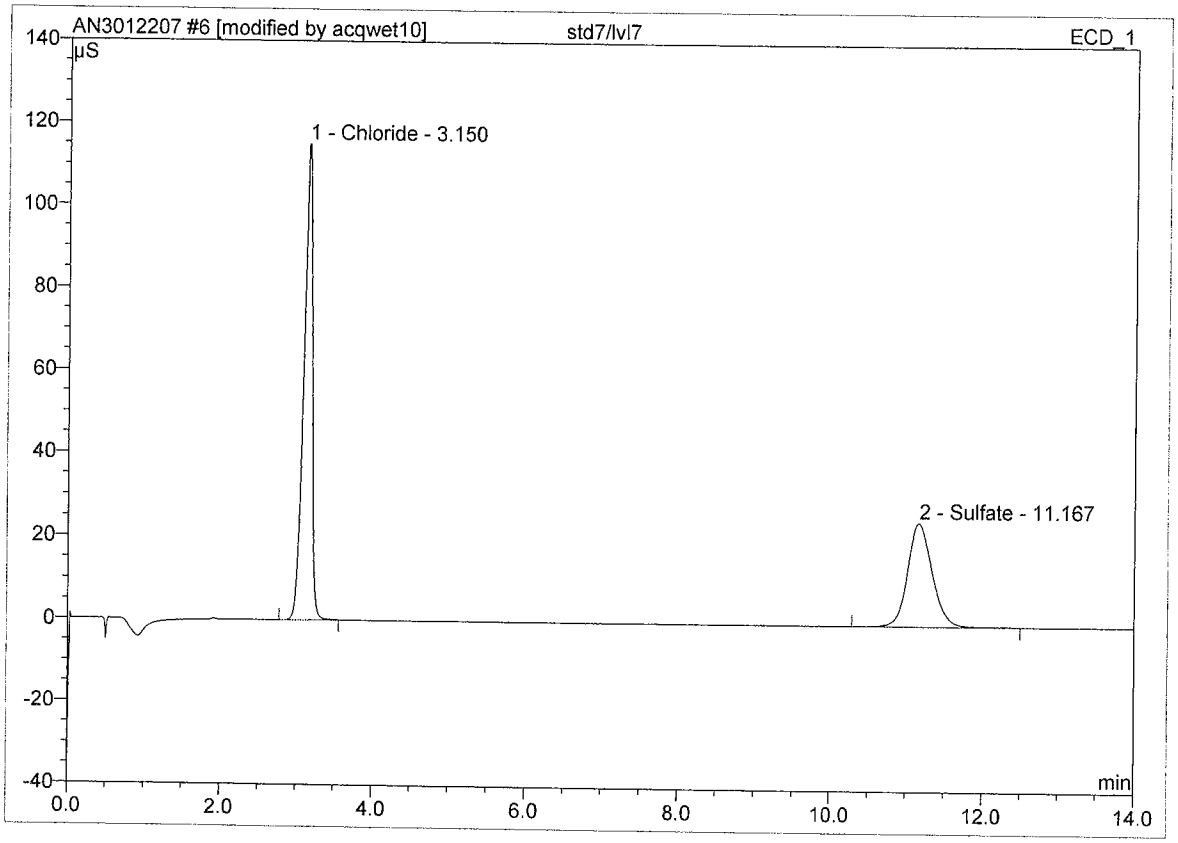
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.038	15.269	62.02	10.179	BMB*
2	11.17	Sulfate	24.940	9.352	37.98	10.163	BMB
Total:			139.978	24.621	100.00	20.342	

After Initials DM 01/26/07

JAN 23 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

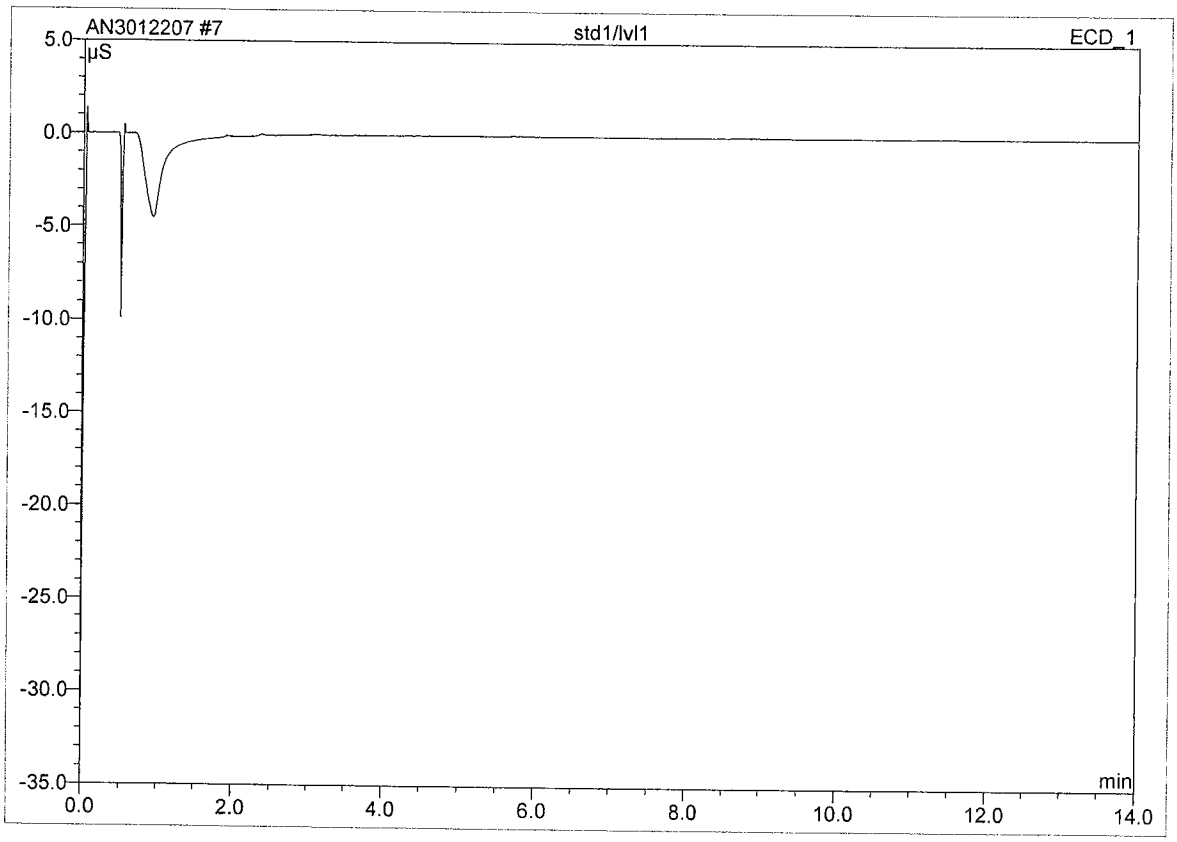
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:47**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



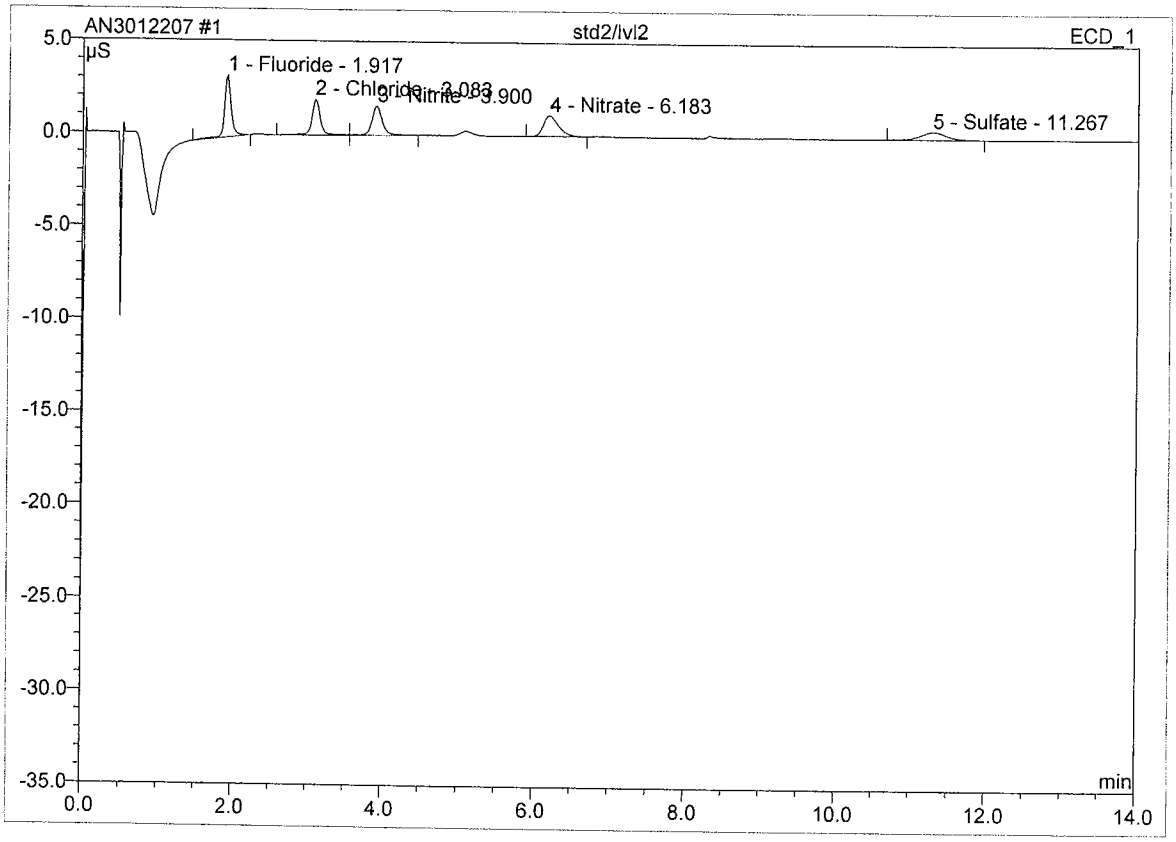
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

BH 1/26/07

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.312	0.338	26.94	0.194	BMB
2	3.08	Chloride	1.924	0.253	20.19	0.169	BM
3	3.90	Nitrite	1.558	0.249	19.83	0.090	MB
4	6.18	Nitrate	1.101	0.258	20.53	0.073	BMB
5	11.27	Sulfate	0.402	0.157	12.51	0.171	BMB
Total:			8.297	1.254	100.00	0.696	

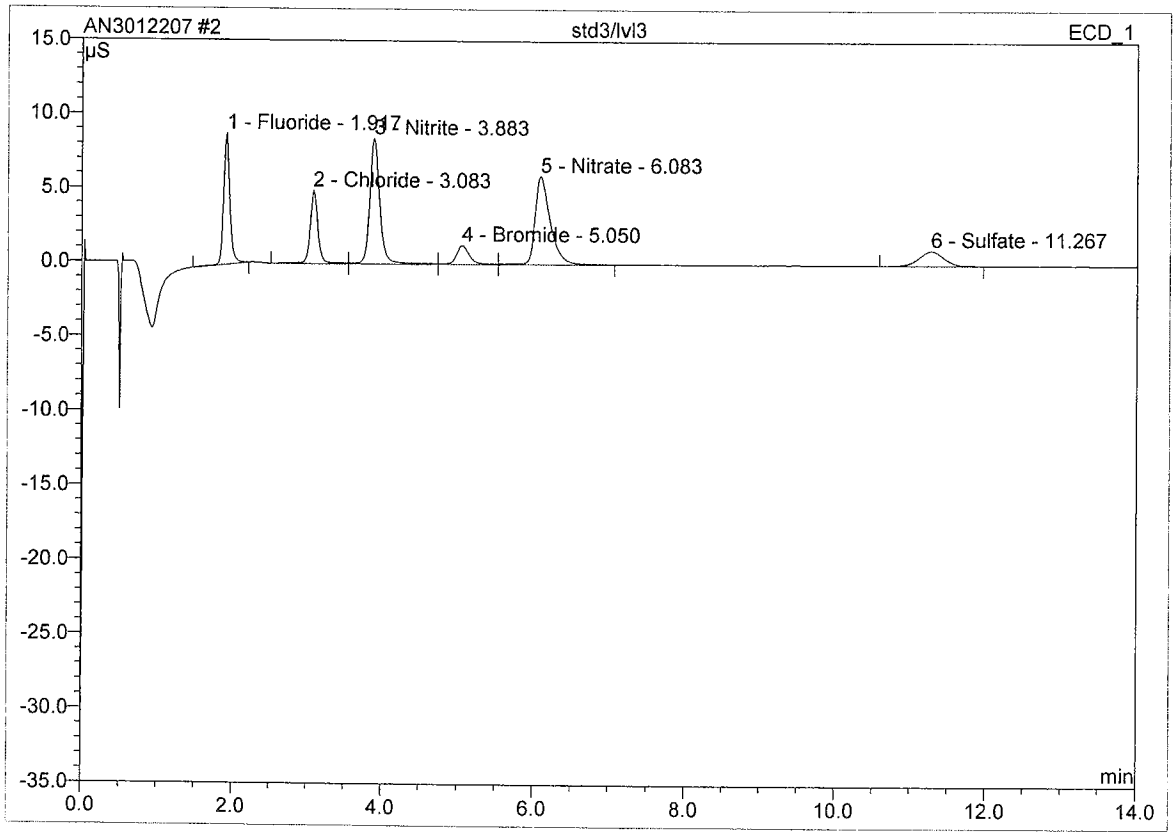
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.842	0.838	17.49	0.481	BMB
2	3.08	Chloride	4.926	0.607	12.67	0.405	BM
3	3.88	Nitrite	8.448	1.300	27.14	0.470	M
4	5.05	Bromide	1.278	0.255	5.32	0.490	M
5	6.08	Nitrate	5.932	1.395	29.12	0.394	MB
6	11.27	Sulfate	1.009	0.396	8.26	0.430	BMB
Total:			30.434	4.792	100.00	2.670	

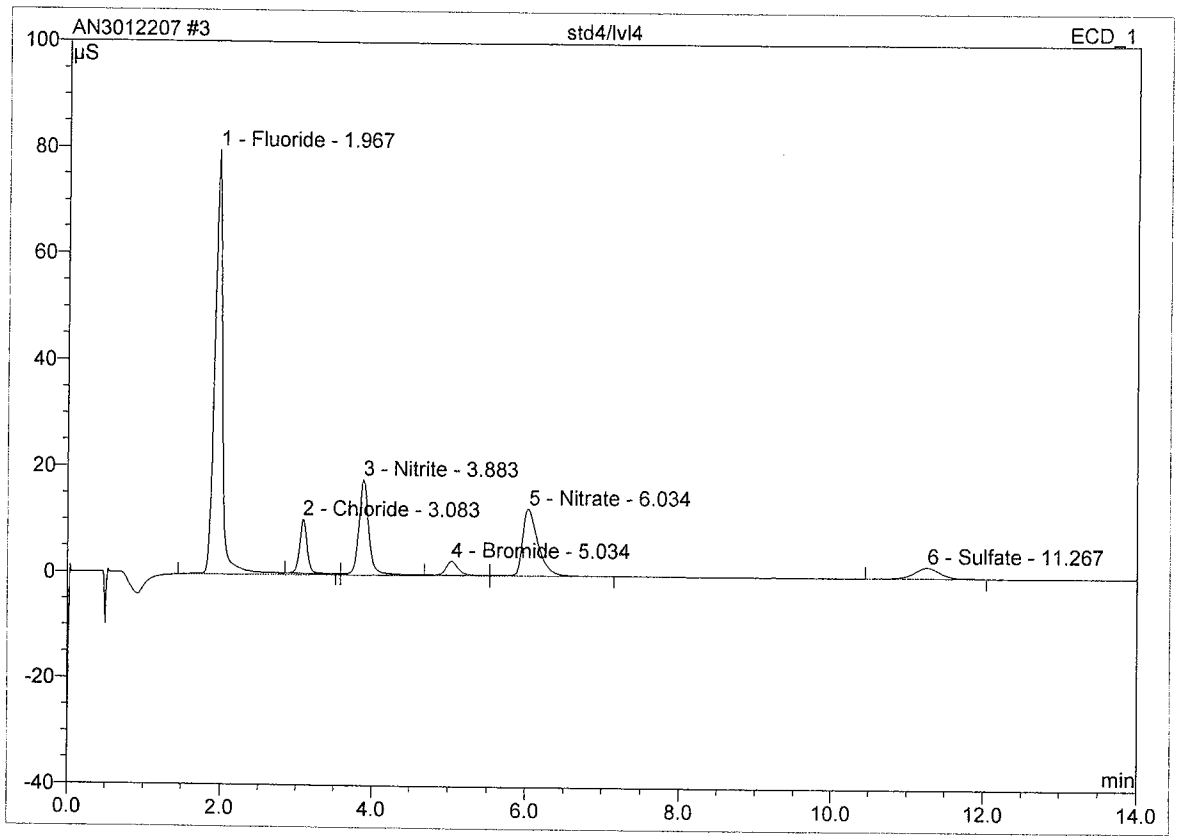
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.838	9.798	53.87	5.545	BM
2	3.08	Chloride	10.128	1.166	6.41	0.777	Rd
3	3.88	Nitrite	18.016	2.972	16.34	1.070	M
4	5.03	Bromide	2.578	0.467	2.57	0.898	Rd
5	6.03	Nitrate	12.669	2.984	16.41	0.843	MB
6	11.27	Sulfate	2.053	0.803	4.42	0.873	BMB
Total:			125.281	18.189	100.00	10.006	

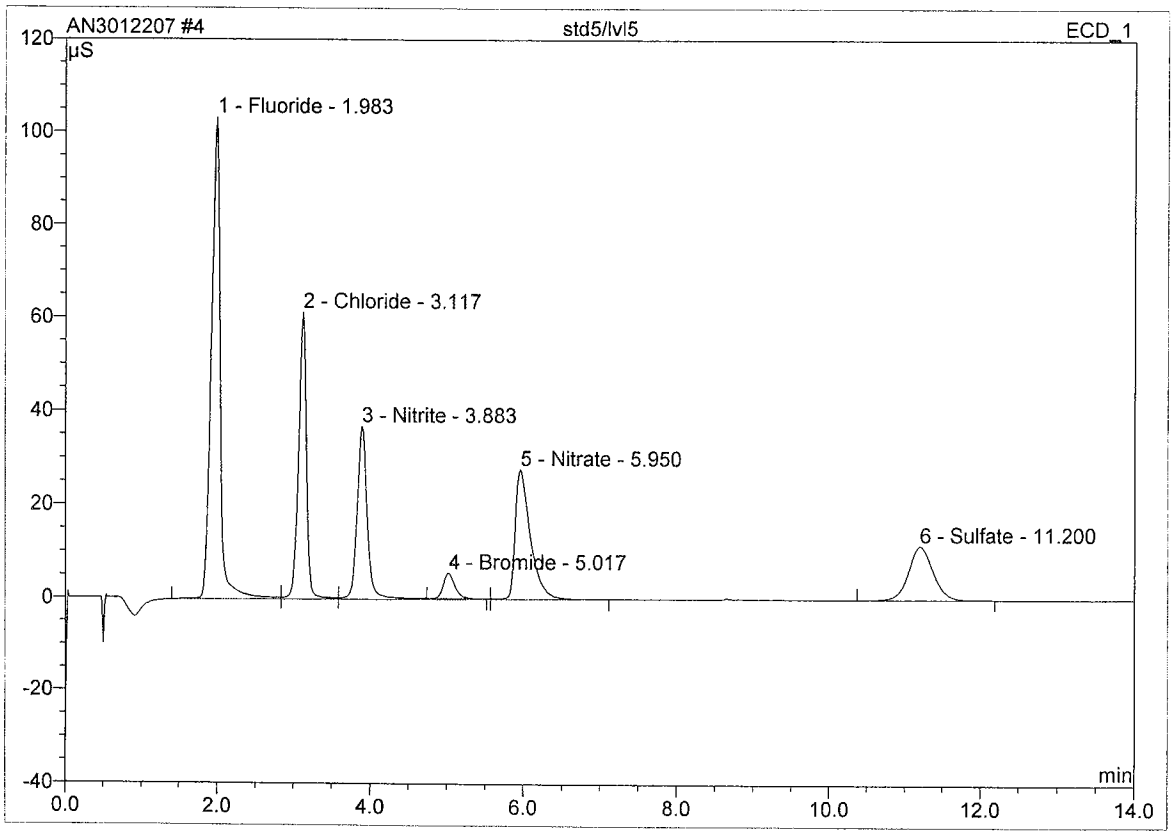
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.493	14.021	35.96	7.881	BM
2	3.12	Chloride	61.387	7.391	18.96	4.903	M
3	3.88	Nitrite	36.911	5.893	15.12	2.109	M
4	5.02	Bromide	5.419	0.955	2.45	1.838	Rd
5	5.95	Nitrate	27.675	6.378	16.36	1.800	MB
6	11.20	Sulfate	11.462	4.347	11.15	4.724	BMB
Total:			246.347	38.985	100.00	23.255	

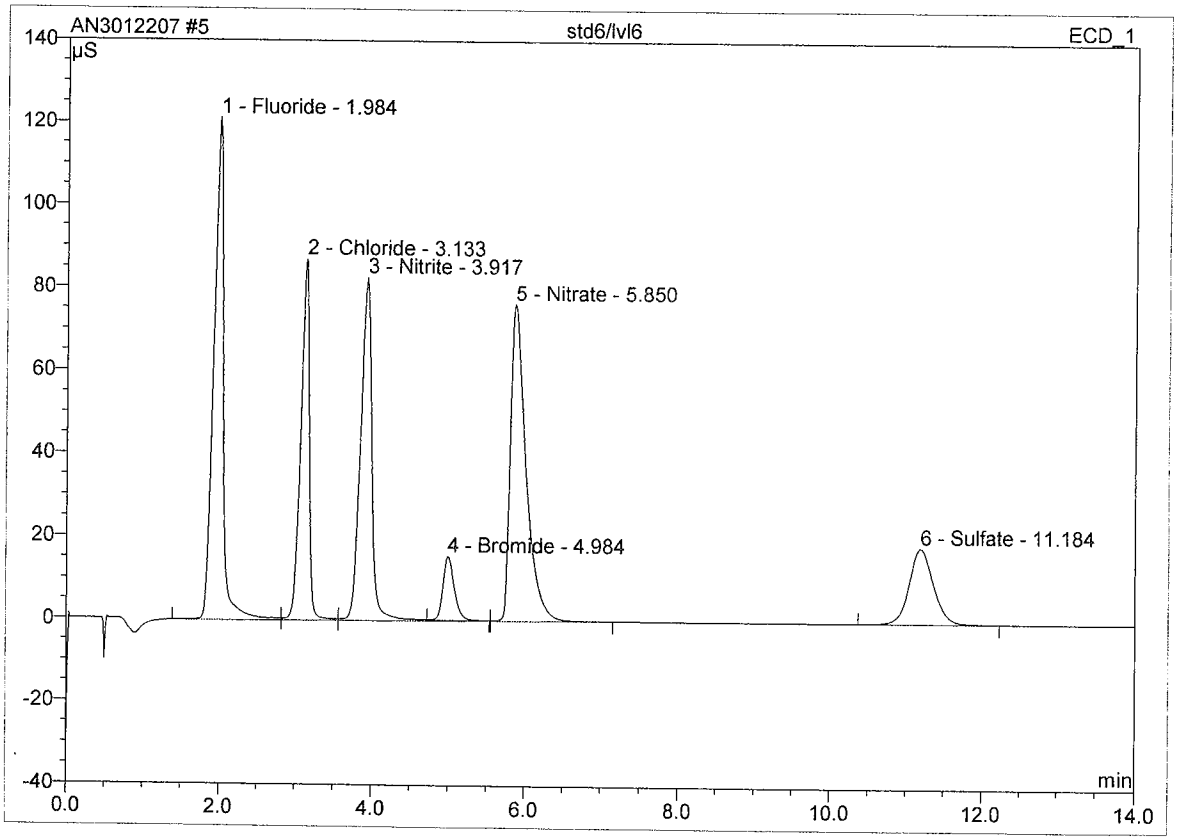
Before

JAN 23 2007

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.469	18.190	25.30	10.130	BM
2	3.13	Chloride	87.201	11.483	15.97	7.597	M
3	3.92	Nitrite	82.798	14.402	20.03	5.056	M
4	4.98	Bromide	15.460	2.646	3.68	5.092	Rd
5	5.85	Nitrate	76.399	18.285	25.43	5.143	MB
6	11.18	Sulfate	18.331	6.892	9.59	7.489	BMB
Total:			401.659	71.898	100.00	40.507	

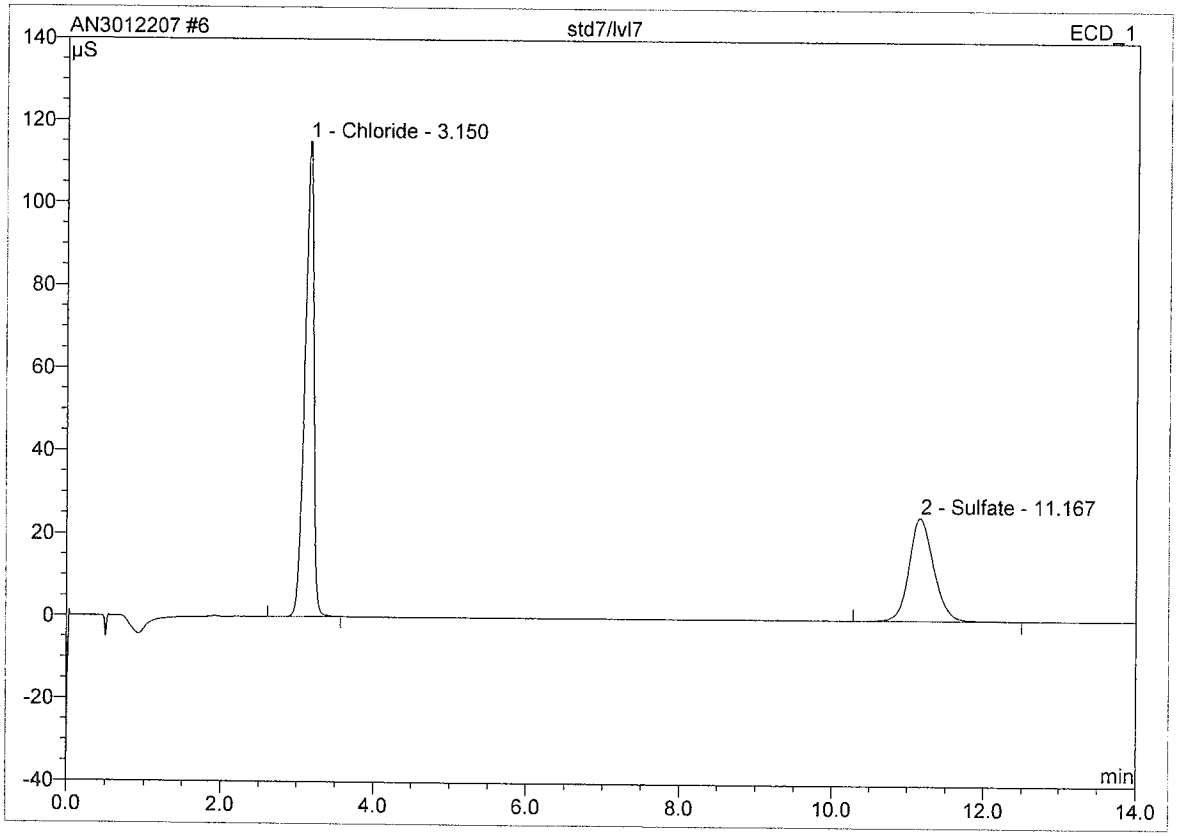
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.046	15.276	62.03	10.181	BMB
2	11.17	Sulfate	24.940	9.352	37.97	10.163	BMB
Total:			139.986	24.628	100.00	20.344	

Before

JAN 2 3 2007

Metals

DISSOLVED METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Sample No.	Lab Sample ID.
1047MW101CL	K0701647-001 DISS
1047MW101CLD	K0701647-001D DISS
1047MW101CLS	K0701647-001S DISS
1349MW01CL	K0701647-002 DISS
Method Blank	K0701647-MB
Batch QCD1	K0701703-001D
Batch QCS1	K0701703-001S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Signature: Date: 03/30/07

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701647
Project No.:	NA	Date Collected:	03/01/07
Project Name:	Presidio of San Francisco	Date Received:	03/02/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: 1047MW101CL Lab Code: K0701647-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/12/07	3/19/07	50	U	
Antimony	6020	0.05	1	3/12/07	3/20/07	0.86		
Arsenic	6020	0.5	1	3/12/07	3/20/07	1.1		
Cadmium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Calcium	6010B	50	1	3/12/07	3/19/07	7340		
Chromium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Copper	6020	0.1	1	3/12/07	3/20/07	1.6		
Iron	6010B	20	1	3/12/07	3/19/07	20	U	
Lead	6020	0.02	1	3/12/07	3/20/07	0.05		
Magnesium	6010B	20	1	3/12/07	3/19/07	6410		
Manganese	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Nickel	6020	0.2	1	3/12/07	3/20/07	1.7		
Potassium	6010B	2000	1	3/12/07	3/19/07	2000	U	
Sodium	6010B	100	1	3/12/07	3/19/07	6970		
Zinc	6010B	10	1	3/12/07	3/19/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701647
Project No.:	NA	Date Collected:	03/01/07
Project Name:	Presidio of San Franciscc	Date Received:	03/02/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: 1349MW01CL Lab Code: K0701647-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/12/07	3/19/07	50	U	
Antimony	6020	0.05	1	3/12/07	3/20/07	0.07		
Arsenic	6020	0.5	1	3/12/07	3/20/07	7.0		
Barium	6010B	5.0	1	3/12/07	3/19/07	29.3		
Beryllium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/12/07	3/20/07	0.82		
Calcium	6010B	50	1	3/12/07	3/19/07	113000		
Chromium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Cobalt	6020	0.02	1	3/12/07	3/20/07	0.43		
Copper	6020	0.1	1	3/12/07	3/20/07	1.4		
Iron	6010B	20	1	3/12/07	3/19/07	20	U	
Lead	6020	0.02	1	3/12/07	3/20/07	0.20		
Magnesium	6010B	20	1	3/12/07	3/19/07	233000		
Manganese	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Mercury	7470A	0.2	1	3/6/07	3/7/07	0.2	U	
Nickel	6020	0.2	1	3/12/07	3/20/07	13.8		
Potassium	6010B	2000	1	3/12/07	3/19/07	2000	U	
Selenium	7740	5.0	1	3/12/07	3/28/07	5.0	U	
Silver	6020	0.02	1	3/12/07	3/20/07	0.13		
Sodium	6010B	100	1	3/12/07	3/19/07	270000		
Thallium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/12/07	3/19/07	10	U	
Zinc	6010B	10	1	3/12/07	3/19/07	689		

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio of San Franciscc
Matrix: WATER

Service Request: K0701647
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K0701647-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/12/07	3/19/07	50	U	
Antimony	6020	0.05	1	3/12/07	3/20/07	0.05	U	
Arsenic	6020	0.5	1	3/12/07	3/20/07	0.5	U	
Barium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Beryllium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Calcium	6010B	50	1	3/12/07	3/19/07	50	U	
Chromium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Cobalt	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Copper	6020	0.1	1	3/12/07	3/20/07	0.1	U	
Iron	6010B	20	1	3/12/07	3/19/07	20	U	
Lead	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Magnesium	6010B	20	1	3/12/07	3/19/07	20	U	
Manganese	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Mercury	7470A	0.2	1	3/6/07	3/7/07	0.2	U	
Nickel	6020	0.2	1	3/12/07	3/20/07	0.2	U	
Potassium	6010B	2000	1	3/12/07	3/19/07	2000	U	
Selenium	7740	5.0	1	3/12/07	3/28/07	5.0	U	
Silver	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Sodium	6010B	100	1	3/12/07	3/19/07	100	U	
Thallium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/12/07	3/19/07	10	U	
Zinc	6010B	10	1	3/12/07	3/19/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4950	99	5000	5160	103	5180	104	6010B
Antimony	25.0	25.4	102	25.0	24.4	98	25.0	100	6020
Arsenic	25.0	26.5	106	25.0	25.4	102	25.9	104	6020
Barium	5000	4930	99	500	512	102	514	103	6010B
Beryllium	2.5	2.65	106	25.0	26.3	105	25.9	104	6020
Cadmium	12.5	13.2	106	25.0	24.9	100	25.3	101	6020
Calcium	12500	12500	100	5000	5090	102	5080	102	6010B
Chromium	500	499	100	5000	5150	103	5170	103	6010B
Cobalt	25.0	24.8	99	25.0	24.9	100	26.3	105	6020
Copper	12.5	12.4	99	25.0	24.4	98	25.2	101	6020
Iron	2500	2440	98	5000	5120	102	5110	102	6010B
Lead	25.0	25.9	104	25.0	24.6	98	24.9	100	6020
Magnesium	12500	12300	98	5000	5110	102	5040	101	6010B
Magnesium	12500	12700	102	5000	5320	106	5170	103	6010B
Manganese	1250	1240	99	500	510	102	512	102	6010B
Mercury	5.0	5.21	104	5.0	4.88	98	4.80	96	7470A
Nickel	25.0	24.4	98	25.0	24.6	98	25.8	103	6020
Potassium	12500	12000	96	25000	25100	100	25300	101	6010B
Selenium	25.0	25.9	104	20.0	20.1	100	19.5	98	7740
Silver	12.5	12.3	98	25.0	24.1	96	25.0	100	6020
Sodium	12500	12700	102	25000	26100	104	26100	104	6010B
Thallium	25.0	25.9	104	25.0	24.9	100	24.8	99	6020
Vanadium	1250	1230	98	500	510	102	510	102	6010B
Zinc	1250	1250	100	2500	2560	102	2570	103	6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Aluminum				5000	5000	100			6010B
Antimony				25.0	24.6	98			6020
Arsenic				25.0	25.5	102			6020
Barium				500	498	100			6010B
Beryllium				25.0	24.1	96			6020
Cadmium				25.0	25.8	103			6020
Calcium				5000	5020	100			6010B
Chromium				5000	5080	102			6010B
Iron				5000	5010	100			6010B
Lead				25.0	24.9	100			6020
Magnesium				5000	4930	99			6010B
Magnesium				5000	5190	104			6010B
Manganese				500	502	100			6010B
Mercury				5.0	4.86	97	4.93	99	7470A
Potassium				25000	24500	98			6010B
Silver				25.0	25.6	102			6020
Sodium				25000	25500	102			6010B
Thallium				25.0	24.9	100			6020
Vanadium				500	499	100			6010B
Zinc				2500	2530	101			6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.98	100	4.90	98	7470A

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cobalt	25.0	24.3	97	25.0	24.5	98	23.9	96	6020
Copper	12.5	12.1	98	25.0	24.4	98	23.6	94	6020
Nickel	25.0	24.1	96	25.0	24.4	98	23.6	94	6020

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	50.5	101		
Antimony				0.05	0.05	95		
Arsenic				0.50	0.58	116		
Barium				5.0	4.44	89		
Beryllium				0.02	0.02	101		
Cadmium				0.02	0.02	105		
Calcium				50	55.8	112		
Chromium				5.0	3.27	65		
Cobalt				0.02	0.02	110		
Copper				0.10	0.10	103		
Iron				20	20.1	101		
Lead				0.02	0.02	89		
Magnesium				20	22.1	111		
Manganese				5.0	5.32	106		
Mercury	0.20	0.2	85					
Nickel				0.20	0.19	95		
Potassium				2000	1020	51		
Selenium	5.0	5.0	101					
Silver				0.02	0.01	71		
Sodium				100	83.4	83		
Thallium				0.02	0.02	111		
Vanadium				10	6.76	68		
Zinc				10	10.5	105		

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Cobalt				0.02	0.02	106		
Copper				0.10	0.1	85		
Nickel				0.20	0.19	94		

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	50	U	50	U	50	U	50	U					6010B
Antimony	0.05	U	0.05	U	0.05	U	0.05	U					6020
Arsenic	0.5	U	0.5	U	0.5	U	0.5	U					6020
Barium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Beryllium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Cadmium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Calcium	50	U	50	U	50	U	50	U					6010B
Chromium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Cobalt	0.02	U	0.02	U	0.02	U							6020
Copper	0.1	U	0.1	U	0.1	U							6020
Iron	20	U	20	U	20	U	20	U					6010B
Lead	0.02	U	0.02	U	0.02	U	0.02	U					6020
Magnesium	20	U	20	U	20	U	20	U					6010B
Manganese	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Mercury	0.2	U	0.2	U	0.2	U	0.2	U					7470A
Nickel	0.2	U	0.2	U	0.2	U							6020
Potassium	2000	U	2000	U	2000	U	2000	U					6010B
Selenium	5.0	U	5.0	U	5.0	U							7740
Silver	0.02	U	0.02	U	0.02	U	0.02	U					6020
Sodium	100	U	100	U	100	U	100	U					6010B
Thallium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Vanadium	10	U	10	U	10	U	10	U					6010B
Zinc	10	U	10	U	10	U	10	U					6010B

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Mercury			0.2	U	0.2	U	0.2	U					7470A

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Cobalt	0.02	U	0.02	U	0.02	U								6020
Copper	0.1	U	0.1	U	0.1	U								6020
Nickel	0.2	U	0.2	U	0.2	U								6020

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

ICP ID Number: Excell ICPMS

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony			0.02	0.02				
Arsenic		20	0.0	20.7	104			
Beryllium			0.00	0.00				
Cadmium		20	0.73	20.4	102			
Cobalt		20	0.03	19.4	97			
Copper		20	0.4	18.7	94			
Lead			0.03	0.03				
Nickel		20	0.6	19.6	98			
Silver		20	0.01	17.9	90			
Thallium			0.00	0.00				

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	512000	503000	101			
Barium		500	0.3	480	96			
Calcium	500000	500000	484000	478000	96			
Chromium		500	1.6	459	92			
Iron	200000	200000	180000	177000	89			
Magnesium	500000	500000	511000	503000	101			
Manganese		500	-6.0	450	90			
Potassium			-662	-775				
Sodium			-29	-15				
Vanadium		500	-2	458	92			
Zinc		1000	10.2	973	97			

DISSOLVED METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701647
Project No.:
Units: µg/L
Project Name: Presidio of San Franciscc
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: 1047MW101CLS
Lab Code: K0701647-001S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	75 - 125	2100		50.0	U	2000	105		6010B
Antimony	75 - 125	21.4		0.86		20.0	103		6020
Arsenic	75 - 125	22.9		1.1		20.0	108		6020
Barium	75 - 125	2110		6.0		2000	105		6010B
Beryllium	75 - 125	20.3		0.02	U	20.0	102		6020
Cadmium	75 - 125	19.7		0.02	U	20.0	99		6020
Chromium	75 - 125	212		5.0	U	200	106		6010B
Cobalt	75 - 125	18.8		0.06		20.0	94		6020
Copper	75 - 125	19.8		1.6		20.0	91		6020
Iron	75 - 125	1030		20.0	U	1000	103		6010B
Lead	75 - 125	19.2		0.05		20.0	96		6020
Manganese	75 - 125	523		5.0	U	500	105		6010B
Nickel	75 - 125	19.9		1.7		20.0	91		6020
Selenium	75 - 125	17.6		5.0	U	20.0	88		7740
Silver	75 - 125	18.5		0.02	U	20.0	93		6020
Thallium	75 - 125	19.0		0.02	U	20.0	95		6020
Vanadium	75 - 125	523		10.0	U	500	105		6010B
Zinc	75 - 125	520		10.0	U	500	104		6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701647
Project No.:
Units: µg/L
Project Name: Presidio of San Francisco
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QCS1
Lab Code: K0701703-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	75 - 125	1.0		0.2	U	1.0	101		7470A

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701647
Project No.:
Units: ug/L
Project Name: Presidio of San Franciscc
Matrix: WATER

Sample Name: 1047MW101CLA
Lab Code: K0701647-001A DISS

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75-125	21.5		0.86		20.0	103		MS
Arsenic	75-125	22.9		1.10		20.0	109		MS
Beryllium	75-125	20.2		0.02	U	20.0	101		MS
Cadmium	75-125	20.7		0.02	U	20.0	104		MS
Cobalt	75-125	19.1		0.02	U	20.0	96		MS
Copper	75-125	20.1		1.64		20.0	92		MS
Lead	75-125	19.6		0.05		20.0	98		MS
Nickel	75-125	20.2		1.73		20.0	92		MS
Silver	75-125	9.40		0.02	U	10.0	94		MS
Thallium	75-125	19.4		0.02	U	20.0	97		MS

Comments:

DISSOLVED METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701647
Project No.:
Units: ug/L
Project Name: Presidio of San Franciscc
Matrix: WATER

Sample Name: Batch QCA2
Lab Code: K0701497-001A

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	75-125	0.9		0.2	U	1.00	92		CV

Comments:

DISSOLVED METALS

- 6 -

DUPLICATES

Client: Treadwell and Rollo, Inc.
Service Request: K0701647
Project No.:
Units: µg/L
Project Name: Presidio of San Franciscc
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: 1047MW101CLD
Lab Code: K0701647-001D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		50	U	50	U			6010B
Antimony	20	0.86		0.86		1		6020
Arsenic		1.1		1.2		7		6020
Barium		6.0		6.4		7		6010B
Beryllium		0.02	U	0.02	U			6020
Cadmium		0.02	U	0.02	U			6020
Calcium	20	7340		7470		2		6010B
Chromium		5.0	U	5.0	U			6010B
Cobalt		0.06		0.06		8		6020
Copper	20	1.6		1.6		0		6020
Iron		20	U	20	U			6010B
Lead		0.05		0.05		10		6020
Magnesium	20	6410		6520		2		6010B
Manganese		5.0	U	5.0	U			6010B
Nickel	20	1.7		1.7		2		6020
Potassium		2000	U	2000	U			6010B
Selenium		5.0	U	5.0	U			7740
Silver		0.02	U	0.02	U			6020
Sodium	20	6970		7070		1		6010B
Thallium		0.02	U	0.02	U			6020
Vanadium		10	U	10	U			6010B
Zinc		10	U	10	U			6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 6 -

DUPLICATES

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701647
Project No.:		Units:	µg/L
Project Name:	Presidio of San Franciscc	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name: Batch QCD1 Lab Code: K0701703-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.2	U	0.2	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Aluminum	5000	5300	106					
Antimony	20.0	20.2	101					
Arsenic	20.0	20.3	102					
Barium	5000	5320	106					
Beryllium	20.0	20.3	102					
Cadmium	20.0	19.5	98					
Calcium	12500	13000	104					
Chromium	500	526	105					
Iron	2500	2570	103					
Lead	20.0	20.0	100					
Magnesium	12500	12700	102					
Manganese	1250	1310	105					
Mercury	5.00	5.05	101					
Potassium	12500	12400	99					
Selenium	20.0	17.8	89					
Silver	20.0	19.0	95					
Sodium	12500	13800	110					
Thallium	20.0	19.5	98					
Vanadium	1250	1310	105					
Zinc	1250	1320	106					

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Cobalt	20.0	18.6	93					
Copper	20.0	18.3	92					
Nickel	20.0	18.1	91					

DISSOLVED METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: K0701647

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: 1047MW101CLL

Lab Code: K0701647-001L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.86		0.88		2		6020
Arsenic	1.10		2.50	U			6020
Beryllium	0.02	U	0.10	U			6020
Cadmium	0.02	U	0.10	U			6020
Cobalt	0.06		0.10	U			6020
Copper	1.64		1.47		10		6020
Lead	0.05		0.10	U			6020
Nickel	1.73		1.49		14		6020
Silver	0.02	U	0.10	U			6020
Thallium	0.02	U	0.10	U			6020

DISSOLVED METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.: Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: 1349MW01CLL Lab Code: K0701647-002L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	50.0	U	250	U			6010B
Barium	29.3		25.7		13		6010B
Calcium	113000		119000		5		6010B
Chromium	5.00	U	25.0	U			6010B
Iron	20.0	U	100	U			6010B
Magnesium	233000		243000		4		6010B
Manganese	5.00	U	25.0	U			6010B
Potassium	2000	U	10000	U			6010B
Sodium	270000		283000		4		6010B
Vanadium	10.0	U	50.0	U			6010B
Zinc	689		718		4		6010B

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Mercury	253.70	BD	0.2		7470A

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)		Method
Antimony	123		0.05		6020
Arsenic	75		0.5		6020
Beryllium	9		0.02		6020
Cadmium	111		0.02		6020
Cobalt	59		0.02		6020
Copper	65		0.1		6020
Lead	208		0.02		6020
Nickel	60		0.2		6020
Silver	107		0.02		6020
Thallium	205		0.02		6020

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: TJA ICP-OES 6.2

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Aluminum	308.20		50.0		6010B
Barium	493.60		5.0		6010B
Calcium	317.90		50.0		6010B
Chromium	267.70		5.0		6010B
Iron	259.90		20.0		6010B
Magnesium	279.50		20.0		6010B
Manganese	257.60		5.0		6010B
Potassium	766.50		2000		6010B
Sodium	588.90		100		6010B
Vanadium	292.40		10.0		6010B
Zinc	213.80		10.0		6010B

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #:

GFAA ID #: Varian-6 (GFAA) AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Selenium	196.00	BZ	5.0		7740

Comments:

DISSOLVED METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.6	0.0052543	0.0000000	0.0003900	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0000000	0.0000000	0.0003945	0.0002503	0.0000000
Cadmium	228.8	0.0000000	0.0000000	-0.0000763	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000163	0.0000098	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000231	0.0000000	0.0170608
Copper	324.7	0.0000000	0.0000000	-0.0000278	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0011214	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000204	0.0000000	-0.0001831	0.0000226	0.0000000
Molybdenum	202	0.0000000	0.0000000	-0.0000939	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0005306	0.0000000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	-0.0013060	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0002185	0.0000000
Silver	328.0	0.0000000	0.0000000	-0.0002271	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0002680	0.0000000	0.0048362	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	-0.0002370	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000276	0.0001569

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.2	-0.0175424	0.0000000	0.0000000	0.0194632	0.0000000
Antimony	206.8	-0.0023048	0.0181871	0.0000000	0.0071351	0.0048131
Arsenic	193.6	0.0000000	0.0015165	0.0000000	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0018818	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.8	-0.0059801	0.0000000	0.0000000	0.0000000	0.0006989
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0002071	0.0003558	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0002395	0.0010048
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0003061	0.0000000
Iron	259.9	0.0000000	0.0000000	-0.0057095	0.0005288	0.0000000
Lead	220.3	-0.0136843	-0.0006403	0.0000000	0.0006789	0.0007454
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0039260	0.0000000
Molybdenum	202	0.0003104	0.0000000	0.0000000	0.0000000	0.0001848
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0045715	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0001381	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0040902	0.0000000	-0.0078044	0.0042117	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0002816	0.0000000	0.0003479	0.0000000
Vanadium	292.4	0.0000000	-0.0048333	-0.0001333	0.0246421	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0003936	0.0041984

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Sn	Ti	V		
Aluminum	308.2	0.0000000	-0.0005811	-0.0139644		
Antimony	206.8	0.0013252	0.0017210	-0.0080346		
Arsenic	193.6	0.0000000	0.0000000	0.0153511		
Barium	493.4	0.0000000	0.0000000	0.0000000		
Beryllium	313.0	0.0000000	0.0000000	0.0027493		
Boron	249.6	0.0000000	0.0000000	0.0000000		
Cadmium	228.8	0.0000000	0.0000000	0.0006840		
Calcium	317.9	0.0000000	0.0000000	0.0000000		
Chromium	267.7	0.0000000	0.0000000	0.0005697		
Cobalt	228.6	-0.0043106	0.0015561	0.0000000		
Copper	324.7	0.0000000	-0.0008431	-0.0001893		
Iron	259.9	0.0000000	-0.0009295	0.0000000		
Lead	220.3	0.0000000	0.0005080	0.0000000		
Magnesium	383.2	0.0000000	0.0000000	0.0000000		
Manganese	257.6	0.0000000	0.0000000	-0.0000791		
Molybdenum	202	0.0000000	0.0000000	0.0000000		
Nickel	231.6	0.0000000	0.0000000	0.0000000		
Phosphorus	214.9	0.0000000	0.0000000	-0.0018977		
Potassium	766.5	0.0000000	0.0000000	0.0000000		
Selenium	196.0	0.0000000	0.0000000	0.0000000		
Silicon	288.1	0.0000000	0.0000000	0.0000000		
Silver	328.0	0.0000000	-0.0001051	-0.0089511		
Sodium	588.9	0.0000000	0.0000000	0.0000000		
Strontium	421.5	0.0000000	0.0000000	0.0000000		
Thallium	190.8	0.0000000	0.0000000	0.0024657		
Tin	189.9	0.0000000	0.0461050	0.0000000		
Titanium	334.9	0.0000000	0.0000000	0.0000000		
Vanadium	292.4	0.0000000	0.0002860	0.0000000		
Zinc	213.8	0.0000000	0.0000000	0.0000000		

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	6020
Arsenic	15.00	1000.0	6020
Beryllium	15.00	1000.0	6020
Cadmium	15.00	1000.0	6020
Cobalt	15.00	500.0	6020
Copper	15.00	1000.0	6020
Lead	15.00	1000.0	6020
Nickel	15.00	1000.0	6020
Silver	15.00	300.0	6020
Thallium	15.00	1000.0	6020

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	900000.0	6010B
Barium	5.00	180000.0	6010B
Calcium	5.00	450000.0	6010B
Chromium	5.00	180000.0	6010B
Iron	5.00	450000.0	6010B
Magnesium	5.00	27000.0	6010B
Magnesium	5.00	720000.0	6010B
Manganese	5.00	4500.0	6010B
Potassium	5.00	450000.0	6010B
Sodium	5.00	900000.0	6010B
Vanadium	5.00	90000.0	6010B
Zinc	5.00	180000.0	6010B

Comments:

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-001 DI	3/12/07	CLAA	50	50
K0701647-001D D	3/12/07	CLAA	50	50
K0701647-001S D	3/12/07	CLAA	50	50
K0701647-002 DI	3/12/07	CLAA	50	50
LCSW	3/12/07	CLAA	50	50
K0701647-MB	3/12/07	CLAA	50	50

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-002 DI	3/6/07	METHOD	20	20
K0701703-001D	3/6/07	METHOD	20	20
K0701703-001S	3/6/07	METHOD	20	20
LCSW	3/6/07	METHOD	20	20
K0701647-MB	3/6/07	METHOD	20	20

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Method: F

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-001D D	3/12/07	CLFAA	50	50
K0701647-001S D	3/12/07	CLFAA	50	50
K0701647-002 DI	3/12/07	CLFAA	50	50
LCSW S	3/12/07	CLFAA	50	50
K0701647-MB	3/12/07	CLFAA	50	50

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-001 DI	3/12/07	CLFAA	50	50
K0701647-001D D	3/12/07	CLFAA	50	50
K0701647-001S D	3/12/07	CLFAA	50	50
K0701647-002 DI	3/12/07	CLFAA	50	50
LCSW	3/12/07	CLFAA	50	50
K0701647-MB	3/12/07	CLFAA	50	50

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	14:20																X									
STANDARD #1	1.00	14:22																X									
STANDARD #2	1.00	14:23																X									
STANDARD #3	1.00	14:25																X									
STANDARD #4	1.00	14:27																X									
STANDARD #5	1.00	14:29																X									
ICV	1.00	14:30																X									
ICB	1.00	14:32																X									
CCV1	1.00	14:34																X									
CCB1	1.00	14:36																X									
ZZZZZZ	1.00	14:37																									
ZZZZZZ	1.00	14:39																									
ZZZZZZ	1.00	14:41																									
ZZZZZZ	1.00	14:43																									
ZZZZZZ	1.00	14:45																									
ZZZZZZ	1.00	14:46																									
ZZZZZZ	1.00	14:48																									
ZZZZZZ	1.00	14:50																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:53																									
CCV2	1.00	14:55																X									
CCB2	1.00	14:57																X									
ZZZZZZ	1.00	14:59																									
ZZZZZZ	1.00	15:01																									
ZZZZZZ	1.00	15:02																									
ZZZZZZ	1.00	15:04																									
ZZZZZZ	1.00	15:06																									
ZZZZZZ	1.00	15:08																									
ZZZZZZ	1.00	15:09																									
ZZZZZZ	1.00	15:11																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:13																									
ZZZZZZ	1.00	15:15																									
CCV3	1.00	15:17																X									
CCB3	1.00	15:18																X									
ZZZZZZ	1.00	15:20																									
ZZZZZZ	1.00	15:22																									
ZZZZZZ	1.00	15:24																									
ZZZZZZ	1.00	15:25																									
ZZZZZZ	1.00	15:27																									
ZZZZZZ	1.00	15:38																									
K0701647-MB	1.00	15:45																X									
LCSW	1.00	15:47																X									
ZZZZZZ	1.00	15:49																									
ZZZZZZ	1.00	15:50																									
CCV4	1.00	15:52																X									
CCB4	1.00	15:54																X									
ZZZZZZ	1.00	15:56																									
K0701497-001A	1.00	15:58	999.9															X									
ZZZZZZ	1.00	15:59																									
ZZZZZZ	1.00	16:01																									
ZZZZZZ	1.00	16:03																									
ZZZZZZ	1.00	16:05																									
ZZZZZZ	1.00	16:07																									
ZZZZZZ	1.00	16:08																									
ZZZZZZ	1.00	16:10																									
ZZZZZZ	1.00	16:12																									
CCV5	1.00	16:14																X									
CCB5	1.00	16:16																X									
ZZZZZZ	1.00	16:17																									
ZZZZZZ	1.00	16:19																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	16:21																									
ZZZZZZ	1.00	16:23																									
K0701647-002 DISS	1.00	16:25																X									
ZZZZZZ	1.00	16:26																									
K0701703-001D	1.00	16:28																X									
K0701703-001S	1.00	16:30																X									
CRA	1.00	16:39																X									
CCV6	1.00	16:41																X									
CCB6	1.00	16:43																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/19/07 End Date: 3/19/07

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	12:54		X			X			X	X			X		X	X			X			X		X	X	
CAL-STD3	1.00	12:56		X						X				X		X	X								X	X	
CAL-STD3	1.00	13:01		X						X				X		X	X								X	X	
CAL-STD2	1.00	13:03					X				X									X			X				
ZZZZZZ	1.00	13:04																									
CAL-STD3	1.00	13:11		X						X				X		X	X								X	X	
ICV STD 4	1.00	13:13																									
ICV	1.00	13:18		X			X			X	X			X		X	X			X			X		X	X	
ICB	1.00	13:25		X			X			X	X			X		X	X			X			X		X	X	
CCV1	1.00	13:35		X			X			X	X			X		X	X			X			X		X	X	
CCB1	1.00	13:42		X			X			X	X			X		X	X			X			X		X	X	
CRI	1.00	13:44		X			X			X	X			X		X	X			X			X		X	X	
ICSA	1.00	13:46		X			X			X	X			X		X	X			X			X		X	X	
ICSAB	1.00	13:48		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	13:51																									
ZZZZZZ	1.00	13:53																									
ZZZZZZ	1.00	13:56																									
ZZZZZZ	1.00	13:59																									
CCV2	1.00	14:02		X			X			X	X			X		X	X			X			X		X	X	
CCB2	1.00	14:04		X			X			X	X			X		X	X			X			X		X	X	
K0701647-MB	1.00	14:06		X			X			X	X			X		X	X			X			X		X	X	
LCSW	1.00	14:08		X			X			X	X			X		X	X			X			X		X	X	
K0701647-001 DISS	1.00	14:11		X						X	X			X		X	X			X			X			X	
K0701647-001D DISS	1.00	14:13		X			X			X	X			X		X	X			X			X		X	X	
K0701647-001S DISS	1.00	14:15		X			X				X			X			X								X	X	
K0701647-002 DISS	1.00	14:17		X			X			X	X			X		X	X			X			X		X	X	
K0701647-002L DISS	5.00	14:19		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	14:21																									
ZZZZZZ	1.00	14:24																									
ZZZZZZ	1.00	14:26																									

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Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/19/07 End Date: 3/19/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	14:28		X			X			X	X			X		X	X			X			X		X	X	
CCB3	1.00	14:30		X			X			X	X			X		X	X			X			X		X	X	

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Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:29			X	X		X	X			X	X		X				X			X		X			
25 PPB STD.	1.00	11:33			X	X		X	X			X	X		X				X			X		X			
ZZZZZZ	1.00	11:36																									
ICV	1.00	11:39			X	X		X	X			X	X		X				X			X		X			
CCV1	1.00	11:43			X	X		X	X			X	X		X				X			X		X			
ICB	1.00	11:50			X	X		X	X			X	X		X				X			X		X			
CCB1	1.00	11:54			X	X		X	X			X	X		X				X			X		X			
CRA WATER	1.00	11:58			X	X		X	X			X	X		X				X			X		X			
ICSA	1.00	12:01			X	X		X	X			X	X		X				X			X		X			
ICSAB	1.00	12:04			X	X		X	X			X	X		X				X			X		X			
ZZZZZZ	1.00	12:19																									
ZZZZZZ	1.00	12:23																									
ZZZZZZ	1.00	12:25																									
ZZZZZZ	1.00	12:34																									
ZZZZZZ	1.00	12:37																									
ZZZZZZ	1.00	12:40																									
ZZZZZZ	1.00	12:43																									
CCV2	1.00	12:47			X	X		X	X			X	X		X				X			X		X			
CCB2	1.00	13:03			X	X		X	X			X	X		X				X			X		X			
K0701647-MB	1.00	13:07			X	X		X	X						X							X		X			
K0701647-001 DISS	1.00	13:10			X	X			X						X												
K0701647-001D DISS	1.00	13:13			X	X		X	X						X							X		X			
K0701647-001L DISS	5.00	13:20			X	X		X	X						X							X		X			
K0701647-001A DISS	1.00	13:23			X	X		X	X						X							X		X			
K0701647-001S DISS	1.00	13:27			X	X		X	X						X							X		X			
LCSW	1.00	13:30			X	X		X	X						X							X		X			
K0701647-002 DISS	1.00	13:38			X	X		X	X						X							X		X			
ZZZZZZ	1.00	13:41																									
ZZZZZZ	1.00	13:45																									
CCV3	1.00	14:08			X	X		X	X						X							X		X			

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DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Francisco

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	14:12																									
CCB3	1.00	14:20																									
CCB3	1.00	14:26			X	X		X	X						X							X		X			

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	15:14										X	X						X								
25 PPB STD.	1.00	15:16										X	X						X								
ICV2	1.00	15:18										X	X						X								
CCV1	1.00	15:20										X	X						X								
ICB2	1.00	15:21										X	X						X								
CCB1	1.00	15:23										X	X						X								
CRA WATER	1.00	15:25										X	X						X								
K0701647-MB	1.00	15:27										X	X						X								
K0701647-001 DISS	1.00	15:29											X						X								
K0701647-001D DISS	1.00	15:31										X	X						X								
K0701647-001L DISS	5.00	15:33										X	X						X								
K0701647-001A DISS	1.00	15:34										X	X						X								
K0701647-001S DISS	1.00	15:36										X	X						X								
LCSW	1.00	15:38										X	X						X								
K0701647-002 DISS	1.00	15:40										X	X						X								
ZZZZZZ	1.00	15:42																									
CCV2	1.00	15:47										X	X						X								
CCB2	1.00	15:49										X	X						X								

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Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701647

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Varian-6 (GFAA) Method: F

Start Date: 3/28/07 End Date: 3/28/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
RSD CHECK	1.00	15:34																			X						
CAL ZERO	1.00	15:41																			X						
STANDARD 1	1.00	15:45																			X						
STANDARD 2	1.00	15:49																			X						
STANDARD 3	1.00	15:54																			X						
STANDARD 4	1.00	15:58																			X						
STANDARD 5	1.00	16:02																			X						
ICV	1.00	16:07																			X						
ICB	1.00	16:11																			X						
CRDL	1.00	16:15																			X						
CCV1	1.00	16:19																			X						
CCB1	1.00	16:24																			X						
K0701647-MB	1.00	16:28																			X						
LCSW S	1.00	16:32																			X						
ZK0701647-001 DISS	1.00	16:37																									
K0701647-001A DISS	1.00	16:41	90.5																		X						
K0701647-001D DISS	1.00	16:45																			X						
K0701647-001DA DISS	1.00	16:50	90.5																		X						
K0701647-001S DISS	1.00	16:54																			X						
K0701647-001SA DISS	1.00	16:58	88.5																		X						
K0701647-002 DISS	1.00	17:03																			X						
ZZZZZZ	1.00	17:07																									
CCV2	1.00	17:11																			X						
CCB2	1.00	17:15																			X						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747

Star Lims Run No.: 46102

Method : CLP 3010A 3020A 3005A 3050B (CLP Hot Block) Other-

Analysis for : (ICP) ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747 Blank			X	50	50	1% HNO3, 5% HCl
-LCS-W						
K0701647-1						
-10						
-1S						
-2						
K0701703-						
K0701681-1						
-10						
-1S						
-2						
K0701682-1						
-2				25		
K0701692-1				25		
-2				50		
-3				25		
K0701740-1				50		
K0701770-1						
-10						
-1S						
K0701747-1						
-10						
-1S						
-2						
-3						
-4						

Time Digestion Started: _____

Lot # Acids Used: HNO3 C47031 **HCl** 46332 **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other: _____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added

ICP LCSW = CLP-CV-1, MET1-52-I, 0.25 mls. added
QCP CICV-2, MET1-51-T, 0.25 mls. added
QCP CICV-3, MET1-54-P, 0.25 mls. added
SS6, MET1-55-A, 0.5 mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, 0.5 mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, 0.5 mls added 200.8 1000ppb Stock (MS9-85-A) _____ mls added
SS6-MET1-55-A, 0.5 mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes: _____

Comments: _____

Analyst Melissa Olson **Date** 3/12/07
Reviewer _____ **Date** 3/13/07

metdig.xls

Digestion Procedures

Method #	GFAA	ICP-OES
CLP Water	Shake sample, Aliquot 50 mls into beaker Add 0.5 mls. HNO3 Add 2 ML 30% H2O2 Cover with ribbed watchglass Heat without boiling for 2 hrs (volume = 0.5x orginal Vol.) Cool sample, Dilute to 50 mls. with DI water	same same Add 2.5 mls Concentrated HCl instead of H2O2 Cover with ribbed watchglass same same
EPA 3010A SW-846 TCLP Ext. USACOE		Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 2.5 mls Concentrated HCl. Cover and reflux for 15 mi Dilute to 50 mls with DI water.
EPA 3020A SW-846 TCLP Ext. USACOE	Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 10 ml DI water, reflux 10-15 min. Dilute to 50 mls with DI water.	
EPA 3050B	Mix sample , weigh out 1.00 g dry weight. * Add spike solution to sample. Add 5 ml DI water and 5 ml HNO3. Reflux 15 min. Cool. Add 5 ml HNO3. Cover. Reflux 30 min. NOTE: *If brown fumes are* generated, repeat the *addition of 5 mls of HNO3 after 30 min of reflux.* Reflux for 2 hrs. or to vol of 5 mls. Cool sample and add 2 mls H20 & 3 mls 30%H2O2 Cover and heat until effervescence subsides Repeat H2O2 adds twice until effervescence is minimal. Don't add > 10 mls. H2O2 **Heat to vol. of 5 mls.** Dilute to 100mls with DI water.	same same same same same same same same same same Add 10 ml of Concentrated HCl, Reflux for 15 min. Dilute to 100 mls. (to 50 mls for Flame)

GFAA NOTE: For SW-846 analysis prepare a digestate from Method 3020B for Pb & Tl analysis & a digestate from the CLFAA for As & Se.

*** Suggested Sample Aliquot Weights**

% Solids	Aliquot Wet Weight Range
>80 %	1.00 g
70-80 %	1.20 g
60-70 %	1.40 g
50-60 %	1.80 g
40-50 %	2.20 g
30-40 %	2.70 g

Spike Solution Chart

GFAA soil - 2mls SS # 4
ICP-OES soil - 2mls SS# 1 & 1 ml SS # 5 & 6
ICP-MS soil - 2mls SS# 1, & 1 ml SS # 5 & 6
ICP-OES water- 0.5mls SS# 1,5,6
GFAA water - 0.5 ml SS # 4
ICP-MS water - 1ml 200.8 stock sol'n & 1 ml Ag sol'n

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s): K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747
Star Lims Run No.: 46102

Method: CLP 3010A 3020A 3005A 3050B (CLP Hot Block) Other-_____

Analysis for: (ICP) ICP-MS GFAA Flame AA Other _____

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701747-5			X	50	50	1% HNO_3, 5% HCl
					MS 3/12/07	

Time Digestion Started:_____

Lot # Acids Used: HNO3 C47031 **HCl** 46332 **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:_____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added
QCP CICV-2, MET1-51-T, _____ mls. added
QCP CICV-3, MET1-54-P, _____ mls. added
SS6, MET1-55-A, _____ mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, _____ mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, _____ mls added 200.8 1000ppb Stock (MS9-85-A) _____ mls added
SS6-MET1-55-A, _____ mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes:_____

Comments: _____

Analyst Melissa [illegible] **Date** 3/12/07
Reviewer [illegible] **Date** 3/13/07

metdig.xls

Digestion Procedures

Method #	GFAA	ICP-OES
CLP Water	Shake sample, Aliquot 50 mls into beaker Add 0.5 mls. HNO3 Add 2 ML 30% H2O2 Cover with ribbed watchglass Heat without boiling for 2 hrs (volume = 0.5x orginal Vol.) Cool sample, Dilute to 50 mls. with DI water	same same Add 2.5 mls Concentrated HCl instead of H2O2 Cover with ribbed watchglass same same
EPA 3010A SW-846 TCLP Ext. USACOE		Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 2.5 mls Concentrated HCl. Cover and reflux for 15 mi Dilute to 50 mls with DI water.
EPA 3020A SW-846 TCLP Ext. USACOE	Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 10 ml DI water, reflux 10-15 min. Dilute to 50 mls with DI water.	
EPA 3050B	Mix sample , weigh out 1.00 g dry weight. * Add spike solution to sample. Add 5 ml DI water and 5 ml HNO3. Reflux 15 min. Cool. Add 5 ml HNO3. Cover. Reflux 30 min. NOTE: *If brown fumes are* generated, repeat the *addition of 5 mls of HNO3 after 30 min of reflux.* Reflux for 2 hrs. or to vol of 5 mls. Cool sample and add 2 mls H20 & 3 mls 30%H2O2 Cover and heat until effervescence subsides Repeat H2O2 adds twice until effervescence is minimal. Don't add > 10 mls. H2O2 **Heat to vol. of 5 mls.** Dilute to 100mls with DI water.	same same same same same same same same same same Add 10 ml of Concentrated HCl, Reflux for 15 min. Dilute to 100 mls. (to 50 mls for Flame)

GFAA NOTE: For SW-846 analysis prepare a digestate from Method 3020B for Pb & Tl analysis & a digestate from the CLFAA for As & Se.

*** Suggested Sample Aliquot Weights**

% Solids	Aliquot Wet Weight Range
>80 %	1.00 g
70-80 %	1.20 g
60-70 %	1.40 g
50-60 %	1.80 g
40-50 %	2.20 g
30-40 %	2.70 g

Spike Solution Chart

GFAA soil - 2mls SS # 4
ICP-OES soil - 2mls SS# 1 & 1 ml SS # 5 & 6
ICP-MS soil - 2mls SS# 1, & 1 ml SS # 5 & 6
ICP-OES water- 0.5mls SS# 1,5,6
GFAA water - 0.5 ml SS # 4
ICP-MS water - 1ml 200.8 stock sol'n & 1 ml Ag sol'n

METALS SPIKE FORM

Service Request # K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770
Q.C. Sample # 1647-1, 1681-1, 1770-1, 1747-1 K0701747

Circle type of digest: GFAA (ICP) FAA ICP-MS Other:_____ Initials / Date: MS 3/12/07
Circle type of sample: Soil (Water) Misc. Sludge Oil Other:_____

Solution Name	Element	mls of 1000ppm Solution	Final Volume	Source	Lot#	Exp. Date	Solution Conc. mg/L	Enter mls Added	
SS1-MET1-52-Z	HNO3	50.0	1000ml	JT Baker	C28025	-	-	0.5	Expires:7/1/07
	Al	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Ag	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Ba	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Be	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Cd	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Co	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Cr	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	20		
	Cu	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	25		
	Fe	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	100		
	Pb	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Mn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Ni	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Sb	50*	1000ml	MET1-50-J	Z-SB02097	7/1/2007	50		
	V	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Zn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
SS4-MET1-52-T	HNO3	25.0	500ml	JT BAKER	A48046	-	-		Expires:7/11/07
	As	2.0	500ml	MET1-47-I	529701	7/11/2007	4		
	Cd	2.0	500ml	MET1-49-L	605906	12/15/2007	4		
	Pb	2.0	500ml	MET1-50-C	611804	12/15/2007	4		
	Se	2.0	500ml	MET1-49-M	616579	12/15/2007	4		
	Tl	2.0	500ml	MET1-49-O	616317	12/15/2007	4		
	Cu	2.0	500ml	MET1-50-E	611815	12/15/2007	4		
SS5-MET1-54-G	HNO3	25.0	500ml	JT BAKER	B41068	-	-	0.5	Expires:7/1107
	As	50.0	500ml	MET1-47-I	529701	7/11/2007	100		
	Se	50.0	500ml	MET1-49-M	616519	12/15/2007	100		
	Tl	50.0	500ml	MET1-49-O	616317	12/15/2007	100		
SS6-MET1-54-E	HNO3	25	500ml	JT BAKER	C28025	-	-	0.5	Expires: 7/01/07
	B	50	500ml	MET1-51-C	Z-QB02041	7/1/2007	100		
	Mo	50	500ml	MET1-54-K	Z-MO02012	2/1/2008	100		

GFLCSW (MET1-52-W)	HNO3	10.0	1000ml	JT BAKER	C28025	-	-		Expires: 8/1/07
	As, Pb, Se, Tl	5.0	1000ml	QCP-CICV-3	Y-MEB194030	8/1/2007	2.5		
	Cd	-	-	QCP-CICV-3	Y-MEB194030	8/1/2007	1.25		
	Cu	2.5	1000ml	MET1-50-E	611815	12/15/2007	2.5		
CLP-CV-1 (MET1-52-I)	Ca, Mg, Na, K	no dilution	-	HP	620009	9/1/2007	2500	0.25	Expires:9/1/07
	Al, Ba	no dilution	-	HP	620009	9/1/2007	1000		
	Fe	no dilution	-	HP	620009	9/1/2007	500		
	Co, Mn, Ni, V, Zn	no dilution	-	HP	620009	9/1/2007	250		
	Cu, Ag	no dilution	-	HP	620009	9/1/2007	125		
	Cr	no dilution	-	HP	620009	9/1/2007	100		
	Be	no dilution	-	HP	620009	9/1/2007	25		
QCP-CICV-2 (MET1-51-T)	Sb	no dilution	-	IV	Y- MEB194029	8/1/2007	500	0.25	Expires: 08/1/07
QCP-CICV-3 (MET1-54-P)	As, Pb, Se, Tl	no dilution	-	IV	Z-CICPI9048	3/1/2008	500	0.25	Expires: 03/01/08
	Cd	no dilution	-	IV	Z-CICPI9048	3/1/2008	250		

* Denotes volume of 1000 ppm stock standard.

Element	mls of	ppm	Source	Lot# / Lab Code	Exp. Date

3-5-07

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701647, K0701703, K0701680
Star Lims Run No.: 46113

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701647 K0701680 K0701703 Blank			*	50	50	1% HNO3
- LCS-W						
K0701647-1						
-1D						
-1S						
-2						
K0701703-1						
K0701680-1 total						
-1D						
-1S						
-3				10		
-4				10		
-1 Dis.				50		
-3						
-4						
					MS 3/12/07	

Time Digestion Started 3/12/07 MS

Lot # Acids Used: HNO3 MS9-50-C **HCl** _____ **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:_____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added
QCP CICV-2, MET1-51-T, _____ mls. added
QCP CICV-3, MET1-54-P, _____mls. added
SS6, MET1-55-A, _____mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____mls. added

SPIKE INFO
SS1-MET1-52-Z,_____mls added SS4-MET1-48-A,_____mls added
SS5-MET1-54-G,_____mls added 200.8 1000ppb Stock (MS9-85-A) 1.0 mls added
SS6-MET1-55-A,_____mls added Ag 1000ppb Stock (MS10-10-A) 1.0 mls added
Additional spikes:_____
Comments: _____

Analyst Melissa Ch **Date** 3/12/07
Reviewer _____ **Date** 3/13/07

metdig.xls

Atomic Absorption Data Review Form

Element: Hg

Analysis Lot #: 79502

Cal. STD/CCV Source: HG1-57-F

Service Request Numbers:

K1303 K1305 K1422 K1432 K1502 K1528
K1497 K1546 K1601 K1647 K1703

	Yes	No	NA
1) Appropriate standardization completed	✓		
2) ICV within 10% of true value	✓		
3) CCVs in control	✓		
4) CCBs and or ICBs below MRL	✓		
5) All reported samples within calibration range	✓		
6) Calculations correct	✓		

Comments:

Primary Reviewed By: Patterson Date: 3-7-07

Secondary Reviewed By: EmA Date: 3/9/07

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
1	ICV	—	—	—	5.21		104%	
2	ICB	—	—	—	-0.01		<0.2	
3	CCV1	—	—	—	4.88		98%	
4	CCB1	—	—	—	-0.01		<0.2	SP 3-7-07
5	CRA	—		—	0.07			Tube empty
6	PBW (45833)	20ml	20ml	—	-0.01		<0.2	Second of run
7	LCSW			—	4.98		5.0	100%
8	K0701303-001			—	-0.02		<0.2	
9	-002			—	-0.01		<0.2	
10	-003			—	-0.00		<0.2	
11	-004			—	-0.01		<0.2	
12	-005			—	-0.01		<0.2	
13	-006			—	0.01		<0.2	
14	-007			—	-0.01		<0.2	
15	CCV2	—	—	—	4.80		96%	
16	CCB2	—	—	—	-0.00		<0.2	
17	K0701303-008	20ml	20ml	—	-0.01		<0.2	
18	K0701305-001			—	0.02		<0.2	
19	K0701422-001			—	-0.01		<0.2	$\bar{X}$=NP
20	-001d			—	-0.01		<0.2	RPD=—
21	-001s			—	1.04		1.04	104%
22	K0701432-001			—	0.00		<0.2	
23	-007			—	-0.01		<0.2	$\bar{X}$=ND
24	-007d			—	0.00		<0.2	RPD=—
25	-007s			—	1.01		1.01	101%

Comments: Reporting Levels:

Waters - 0.2 µg/L — TIME STARTED:

Soil - 0.02 mg/kg

TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L

Soil Spike Level : 5.0 µg/L = mg/kg

TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
LPatterson	3-7-07	1of3

[HGFORM] HG1.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
26	K0701502-001	20ml	20ml	—	0.02		<0.2	
27	CCU3	—	—	—	4.86		97%	
28	CCB3	—	—	—	-0.01		<0.2	
29	K0701502-002	20ml	20ml	—	0.03		<0.2	
30	K0701528-001			—	-0.01		<0.2	
31	-002			—	-0.00		<0.2	
32	-003			—	0.01		<0.2	
33	-004			—	0.03		<0.2	
34	-004A			—	0.93	(93%)		
35	PBW (45834)			—	-0.01		<0.2	
36	LCSW			—	5.05		5.05	101%
37	K0701497-001			—	-0.01		<0.2	$\bar{x}$=ND
38	-001d			—	-0.01		<0.2	RPD=—
39	CCU4	—	—	—	4.93		99%	
40	CCB4	—	—	—	-0.01		<0.2	
41	K0701497-001S	20ml	20ml	—	1.04		1.04	104%
42	-001A			—	0.92	(93%)		
43	-002			—	-0.00		<0.2	
44	-003			—	-0.01		<0.2	
45	-004			—	-0.01		<0.2	
46	K1497Diss-001			—	-0.01		<0.2	
47	-002			—	0.01		<0.2	
48	-003			—	0.00		<0.2	
49	-004			—	0.01		<0.2	
50	K0701546-001			—	0.01		<0.2	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
SPatterson	3-7-07	2of3

[HGFORM] HG2.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
51	CCV5	—	—	—	4.98		100%	
52	CCB5	—	—	—	-0.00		<0.2	
53	K0701546-001d	20ml	20ml	—	0.00		<0.2	X=ND RPD=-
54	↓ 001S			—	0.99		0.99	99%
55	K0701601-001			—	0.01		<0.2	
56	↓ -002			—	-0.01		<0.2	
57	K0701647-001-002			—	0.00		<0.2	
58	K0701703-001			—	-0.01		<0.2	X=ND RPD=-
59	-001d			—	-0.00		<0.2	
60	↓ 001S			—	1.01		1.01	101%
61	CRA	—	—	—	0.17		0.17	85%
62	CCV6	—	—	—	4.90		98%	
63	CCB6	—	—	—	-0.01		<0.2	
64								
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75						3-7-07		

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

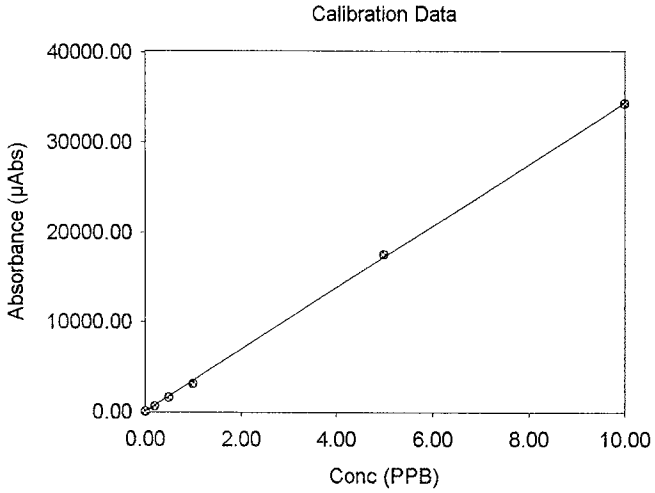
Analyst: Patterson	Date: 3-7-07	Page Number: 3of3

[HGFORM] HG3.XLS

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst S. Patterson
Date Started Wednesday, March 07, 2007, 14:20:15
Worksheet Hg 03/07/07 Run 2
Comment 79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
Calibration Zero	07-Mar-2007, 14:20	0.00	54.50	49.40	84	57	26	31	
Standard #1	07-Mar-2007, 14:22	0.20	1.56	603.00	611	610	591	600	
Standard #2	07-Mar-2007, 14:23	0.50	4.21	1620.00	1546	1591	1651	1702	
Standard #3	07-Mar-2007, 14:25	1.00	2.60	3120.00	3197	3190	3066	3042	
Standard #4	07-Mar-2007, 14:27	5.00	0.52	17500.00	17369	17561	17509	17397	
Standard #5	07-Mar-2007, 14:29	10.00	1.39	34300.00	34630	33834	33867	34713	



Int.	0.000
Slope	3436.218
Correlation	0.99989

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICV	07-Mar-2007, 14:30	5.21	0.82	17900.00	17778	17894	18107	17814	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICB	07-Mar-2007, 14:32	-0.01	10.30	-39.40	-33	-42	-40	-42	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV1	07-Mar-2007, 14:34	4.88	0.88	16800.00	16855	16905	16586	16686	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB1	07-Mar-2007, 14:36	-0.01	23.50	-28.80	-34	-26	-34	-20	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
~~CRA~~	~~07-Mar-2007, 14:37~~	~~0.07~~	~~13.10~~	~~243.00~~	~~284~~	~~250~~	~~210~~	~~229~~	3-7-07
PBW (45833)	07-Mar-2007, 14:39	-0.01	23.70	-40.80	-44	-28	-41	-50	Tube empty
LCSW (45833)	07-Mar-2007, 14:41	4.98	0.88	17100.00	17341	17054	17004	17090	See end of
K0701303-001	07-Mar-2007, 14:43	-0.02	26.50	-68.40	-84	-49	-83	-57	Run
K0701303-002	07-Mar-2007, 14:45	-0.01	44.40	-28.50	-47	-21	-27	-19	
K0701303-003	07-Mar-2007, 14:46	-0.00	114.00	-12.70	-31	-14	-9	4	
K0701303-004	07-Mar-2007, 14:48	-0.01	41.70	-49.60	-75	-31	-58	-35	
K0701303-005	07-Mar-2007, 14:50	-0.01	16.80	-46.50	-52	-43	-37	-54	
K0701303-006	07-Mar-2007, 14:52	0.01	129.00	18.90	13	-11	28	46	
K0701303-007	07-Mar-2007, 14:53	-0.01	27.60	-26.10	-30	-28	-31	-15	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV2	07-Mar-2007, 14:55	4.80	1.22	16500.00	16338	16435	16399	16785	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB2	07-Mar-2007, 14:57	-0.00	133.00	-16.60	14	-23	-38	-19	

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst S. Patterson
Date Started Wednesday, March 07, 2007, 14:59:13
Worksheet Hg 03/07/07 Run 2
Comment 79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701303-008	07-Mar-2007, 14:59	-0.01	67.60	-21.10	-30	-25	-29	0	
K0701305-001	07-Mar-2007, 15:01	0.02	10.90	80.10	80	92	75	73	
K0701422-001	07-Mar-2007, 15:02	-0.01	24.90	-49.90	-39	-67	-49	-44	
K0701422-001D	07-Mar-2007, 15:04	-0.01	28.90	-23.70	-16	-21	-33	-25	
K0701422-001S	07-Mar-2007, 15:06	1.04	1.03	3580.00	3582	3527	3589	3614	
K0701432-001	07-Mar-2007, 15:08	0.00	116.00	17.00	-10	35	28	16	
K0701432-007	07-Mar-2007, 15:09	-0.01	28.30	-24.40	-25	-21	-34	-18	
K0701432-007D	07-Mar-2007, 15:11	0.00	397.00	2.45	10	5	6	-12	
K0701432-007S	07-Mar-2007, 15:13	1.01	1.31	3470.00	3416	3437	3507	3501	
K0701502-001	07-Mar-2007, 15:15	0.02	21.30	68.20	47	76	77	73	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV3	07-Mar-2007, 15:17	4.86	1.28	16700.00	16979	16722	16503	16560	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB3	07-Mar-2007, 15:18	-0.01	60.70	-26.00	-45	-27	-25	-7	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701502-002	07-Mar-2007, 15:20	0.03	24.70	98.70	81	84	95	134	
K0701528-001	07-Mar-2007, 15:22	-0.01	54.00	-28.20	-47	-31	-24	-10	
K0701528-002	07-Mar-2007, 15:24	-0.00	223.00	-4.08	-18	-1	2	1	
K0701558-003	07-Mar-2007, 15:25	0.01	54.30	32.60	14	23	40	54	
K0701558-004	07-Mar-2007, 15:27	0.03	14.20	89.10	76	92	105	83	
K0701558-004A	07-Mar-2007, 15:38	0.93	2.21	3210.00	3119	3185	3281	3246	
PBW (45834)	07-Mar-2007, 15:45	-0.01	20.90	-36.10	-39	-44	-34	-27	
LCSW (45834)	07-Mar-2007, 15:47	5.05	0.84	17400.00	17232	17237	17527	17426	
K0701497-001	07-Mar-2007, 15:49	-0.01	70.30	-31.70	-34	-3	-33	-57	
K0701497-001D	07-Mar-2007, 15:50	-0.01	42.00	-27.60	-11	-28	-35	-36	

83-7-07
K1528

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV4	07-Mar-2007, 15:52	4.93	2.18	17000.00	16638	16781	16921	17482	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB4	07-Mar-2007, 15:54	-0.01	35.10	-24.20	-17	-28	-34	-17	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701497-001S	07-Mar-2007, 15:56	1.04	3.57	3570.00	3392	3599	3694	3600	
K0701497-001A	07-Mar-2007, 15:58	0.92	0.69	3160.00	3139	3190	3152	3169	
K0701497-002	07-Mar-2007, 15:59	-0.00	201.00	-4.63	-12	-10	-5	9	
K0701497-003	07-Mar-2007, 16:01	-0.01	42.80	-31.40	-51	-24	-28	-23	
K0701497-004	07-Mar-2007, 16:03	-0.01	54.60	-25.90	-44	-29	-12	-18	
K0701497-001 DISS	07-Mar-2007, 16:05	-0.01	96.10	-19.60	-29	-41	1	-9	
K0701497-002 DISS	07-Mar-2007, 16:07	0.01	37.10	22.10	11	30	23	25	
K0701497-003 DISS	07-Mar-2007, 16:08	0.00	421.00	4.75	21	-7	-17	23	
K0701497-004 DISS	07-Mar-2007, 16:10	0.01	99.00	21.20	3	29	6	47	
K0701546-001	07-Mar-2007, 16:12	0.01	59.00	21.60	31	34	9	12	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV5	07-Mar-2007, 16:14	4.98	1.83	17100.00	17200	17453	17153	16698	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB5	07-Mar-2007, 16:16	0.00	84.80	-15.60	-18	-26	-22	4	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701546-001D	07-Mar-2007, 16:17	0.00	1080.00	2.62	-27	-11	10	38	
K0701546-001S	07-Mar-2007, 16:19	0.99	1.00	3420.00	3466	3417	3385	3407	
K0701601-001	07-Mar-2007, 16:21	0.01	116.00	18.80	8	-5	26	45	
K0701601-002	07-Mar-2007, 16:23	-0.01	30.10	-37.30	-42	-23	-49	-36	
K0701647-001	07-Mar-2007, 16:25	-0.00	59.00	-10.60	-16	-16	-6	-5	

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst S. Patterson
Date Started Wednesday, March 07, 2007, 16:26:50
Worksheet Hg 03/07/07 Run 2
Comment 79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701703-001	07-Mar-2007, 16:26	-0.01	29.20	-28.40	-28	-27	-39	-19	
K0701703-001D	07-Mar-2007, 16:28	-0.00	1430.00	-1.47	-18	-21	13	20	
K0701703-001S	07-Mar-2007, 16:30	1.01	0.63	3480.00	3480	3506	3460	3460	
CRA	07-Mar-2007, 16:39	0.17	0.74	585.00	585	590	583	580	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV6	07-Mar-2007, 16:41	4.90	0.67	16900.00	16693	16848	16926	16941	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB6	07-Mar-2007, 16:43	-0.01	22.20	-49.40	-42	-52	-40	-64	

Columbia Analytical Services

EPA METHOD 7470A

Prep Run: 45833 | Prep Run: 45834

Service Request Number(s): K1303, K1305, K1422, K1432, K1502, K1528, K1497, K1546, K1601, K1647, K1703

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBW	20ml	20ml	PBW	20ml	20ml
LCSW			LCSW		
K0701303-001			K0701497-001		
-002			-001d		
-003			-001S		
-004			-002		
-005			-003		
-006			-004		
-007			K1497DISS-001		
-008			-002		
K0701305-001			-003		
K0701422-001			-004		
-001d			K0701546-001		
-001S			-001d		
K0701432-001			-001S		
-007			K0701601-001		
-001d			-002		
-001S			K0701647-001-002		
K0701502-001			K0701703-001 (Rm 3k.1.07)		
-002			-001d		
K0701528-001			-001S		
-002					
-003					
-004					
		SP 3-6-07		SP	3-6-07
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

*1:40

Lot # of Reagents Used:

HNO3: C47031 **K2S2O8: T44H13** **NaCl: C14610**

H2SO4: 46137 **KMnO4: C23603** **NH2OH-HCL: C27599**

HCL: 46332 **SnCl2: C28646**

LCSS = **ERA CLP Soil Lot # D045540** **Other:** Waterbath @ 95°C

LCSW= 0.1ml **ICV Intermediate stock solution.**

*** Source Standard:** HG1-57-F **100 ppb**

**** Source Standard: ICV** HG1-56-D **1000 ppb** **TIME STARTED:**

Comments: 0.2ml 100ppb source std to spikes

Analyst: Patterson

Date: 3-6-07

[HGFORM] 7470

Element Analyzed Se Instrument K-GFAA-06
Service Request # K1647, K2176

Batch QC SR's #

Calibration Std. GFI-74-R
Starlims #
Modifier # Pd/mg NO_3 ; GFI-72-E
Analysis Lot #

Analytical Batch
KA0627805

GFAA Data Review Form

		Yes	No	NA
1	ICV within 10% of true Value	✓		
2.	Calibration data included	✓		
3.	CCV's in control	✓		
4.	CCB's and/or ICB's below MRL	✓		
5.	All reported Results within Cal. Range	✓		
6.	All Calculations are Correct	✓		

Comments

Primary Reviewed by RW Date 3-29-07

Secondary Reviewed by EmA Date 3/29/07

COLUMBIA ANALYTICAL SERVICES, INC.
GFAA Run Log

Method: (Circle Method Used) 7060A 7421 7740 7841 200.9 Other:_____ Element: As Pb Se Tl	**Service Request # :** K1647, K2176

SAMPLE NUMBER	Measured (ug/l)	Dilution factor	Recoveries (ICV, CCV, CRA, LCS Post-Spk., Matrix Spk.)	Comments
~ICV	25.9067		104%	
~ICB	0.1778			
~CRDL	5.0326		101%	
~CCV	20.0591		100%	
~CCB	0.0762			
PBW K0701647	-0.1154	-		
LCSW MS	17.7949	-	89%	
K0701647-001	0.0471	-		
K0701647-001A	18.0969	-	91%	
K0701647-001D	0.1077	-		
~~K0701647-001DA~~ RW 3-29-07	~~18.0849~~	-		Not needed
K0701647-001S	17.6414	-	88%	
~~K0701647-001SA~~	~~35.3057~~	-		Not needed
K0701647-002	-0.3167	-		
PBW K0702176	-0.3937	-		
~CCV	19.4826		97%	
~CCB	-0.0993			
LCSW	18.1679	-	91%	
K0702176-001	-0.2191	-		Cx=-0.353ug/l
K0702176-001A	12.4715	-	62%	Single Pt. MSA
K0702176-001D	-0.0312	-		Cx=-0.057ug/l
K0702176-001DA	10.9847	-	55%	Single Pt. MSA
K0702176-001S	10.9429	-	98%	Cx=19.54ug/l
K0702176-001SA	22.1178	-	56%	Single Pt. MSA
K0702176-002	0.0591	-		Cx=0.099ug/l
K0702176-002A	12.0127	-	60%	Single Pt. MSA
K0702176-003	-0.6732	-		Cx=-1.77ug/l
~CCV	18.5659		93%	
~CCB	0.0397			
K0702176-003A	7.6138	-	38%	Single Pt. MSA

True Values/QC Limits:	LCSW	Water Spike	LCSS (ERA D045540)	Soil Spike
Arsenic:	25.0ppb (76-115%)	40.0ppb (62-116%)	146mg/kg (112-180mg/kg)	80ppb (41-133%)
Lead	25.0ppb (77-114%)	40.0ppb (61-133%)	67.5mg/kg (53.1-81.9mg/kg)	80ppb (41-139%)
Selenium	25.0ppb (76-113%)	40.0ppb (37-119%)	70.5mg/kg (53.3-87.7mg/kg)	80ppb (36-134%)
Thallium	25.0ppb (83-114%)	40.0ppb (34-132%)	82.1mg/kg (62.6-102mg/kg)	80ppb (38-134%)

Analyst	**Date:**	**Page Number:**
Robert Nelson	3-29-07	1

COLUMBIA ANALYTICAL SERVICES, INC.
GFAA Run Log

Method: (Circle Method Used) 7060A 7421 7740 7841 200.9 Other:_____ Element: As Pb Se Tl _____	**Service Request # :** K7176

SAMPLE NUMBER	Measured (ug/l)	Dilution factor	Recoveries (ICV, CCV, CRA, LCS Post-Spk., Matrix Spk.)	Comments
K0702176-004	-0.793	-		Cx=-2.27ug/l
K0702176-004A	7.0027	-	35%	Single Pt. MSA
~CRDL	9.4428			
~CCV	18.9364		95%	
~CCB	0.1376			

True Values/QC Limits:	LCSW	Water Spike	LCSS (ERA D045540)	Soil Spike
Arsenic:	25.0ppb (76-115%)	40.0ppb (62-116%)	146mg/kg (112-180mg/kg)	80ppb (41-133%)
Lead	25.0ppb (77-114%)	40.0ppb (61-133%)	67.5mg/kg (53.1-81.9mg/kg)	80ppb (41-139%)
Selenium	25.0ppb (76-113%)	40.0ppb (37-119%)	70.5mg/kg (53.3-87.7mg/kg)	80ppb (36-134%)
Thallium	25.0ppb (83-114%)	40.0ppb (34-132%)	82.1mg/kg (62.6-102mg/kg)	80ppb (38-134%)

Analyst	**Date:**	**Page Number:**
Robert Nowa	3-29-07	2

Analyst rnorris
Date Started 2:26 PM 03/28/2007
Worksheet Se 3-28-07
Comment K-GFAA-06
Methods Se

Varian 6 (K-GFAA-06)
Columbia Analytical Services
1317 S. 13TH Ave.
Kelso, WA 98626

Method: Se (Furnace)

W4502: Sample uncalibrated

Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings			
RSD check	UNCALm	0.9	0.1179	0.0574	0.1186	0.1172	/28/2007	34:44 PM
CAL ZERO	0.00	19.3	-0.0034	0.0451	-0.0030	-0.0039	/28/2007	41:00 PM
STANDARD 1	5.00	9.1	0.0185	0.0485	0.0197	0.0173	/28/2007	45:22 PM
STANDARD 2	10.00	3.7	0.0404	0.0545	0.0414	0.0393	/28/2007	49:44 PM
STANDARD 3	20.00	4.6	0.0950	0.0632	0.0981	0.0919	/28/2007	54:04 PM
STANDARD 4	30.00	2.1	0.1470	0.0670	0.1491	0.1448	/28/2007	58:24 PM
	QC Test: Correlation coefficient 0.9982 within 0.9950 limit							
STANDARD 5	40.00	0.0	0.1960	0.0797	0.1960	0.1960	/28/2007	02:46 PM
	Curve Fit		= Linear Origin					
	Characteristic Conc		= 1.82 µg/L					
	r		= 0.9982					
	Calculated Conc		= -0.71 3.83 8.34 19.62 30.36					
	Residuals		= 0.71 1.17 1.66 0.38 -0.36					
	QC Test: ICV recovery 103.6%R - within limits							
~ICV	25.91	0.9	0.1254	0.0697	0.1262	0.1246	/28/2007	07:04 PM
	QC Test: ICB Concentration 0.18 less than limit							
~ICB	0.18	>100	0.0009	0.0555	0.0017	0.0000	/28/2007	11:16 PM
	QC Test: CRDL recovery 100.7%R - within limits							
~CRDL	5.03	3.1	0.0244	0.0587	0.0249	0.0238	/28/2007	15:38 PM
	QC Test: CCV recovery 100.3%R - within limits							
~CCV	20.06	1.5	0.0971	0.0598	0.0982	0.0961	/28/2007	19:58 PM
	QC Test: CCB Concentration 0.08 less than limit							
~CCB	0.08	30.6	0.0004	0.0429	0.0003	0.0004	/28/2007	24:10 PM
PBW K0701647	-0.12	13.6	-0.0006	0.0508	-0.0005	-0.0006	/28/2007	28:32 PM
LCSW MS	17.79	2.3	0.0861	0.0535	0.0875	0.0848	/28/2007	32:50 PM
K0701647-001	0.05	>100	0.0002	0.0508	-0.0003	0.0008	/28/2007	37:08 PM
K0701647-001A	18.10	0.3	0.0876	0.0682	0.0878	0.0874	/28/2007	41:28 PM
K0701647-001D	0.11	>100	0.0005	0.0555	0.0019	-0.0009	/28/2007	45:46 PM
K0701647-001DA	18.08	2.2	0.0876	0.0743	0.0889	0.0862	/28/2007	50:04 PM
K0701647-001S	17.64	2.6	0.0854	0.0709	0.0869	0.0839	/28/2007	54:24 PM
K0701647-001SA	35.31	3.7	0.1709	0.0747	0.1753	0.1665	/28/2007	58:42 PM
K0701647-002	-0.32	>100	-0.0015	0.1704	0.0003	-0.0034	/28/2007	03:02 PM
PBW K0702176	-0.39	>100	-0.0019	0.0424	-0.0004	-0.0034	/28/2007	07:22 PM
	QC Test: CCV recovery 97.4%R - within limits							
~CCV	19.48	2.2	0.0943	0.0584	0.0929	0.0958	/28/2007	11:44 PM
	QC Test: CCB Concentration -0.10 less than limit							
~CCB	-0.10	>100	-0.0005	0.0445	0.0005	-0.0015	/28/2007	15:56 PM
LCSW	18.17	2.3	0.0880	0.0616	0.0894	0.0865	/28/2007	20:16 PM
K0702176-001	-0.22	26.8	-0.0011	0.0738	-0.0013	-0.0009	/28/2007	24:38 PM
K0702176-001A	12.47	28.6	0.0604	0.0411	0.0726	0.0482	/28/2007	28:58 PM
K0702176-001D	-0.03	>100	-0.0002	0.0546	0.0001	-0.0004	/28/2007	33:22 PM
K0702176-001DA	10.98	2.2	0.0532	0.0744	0.0540	0.0523	/28/2007	37:44 PM
K0702176-001S	10.94	1.9	0.0530	0.0747	0.0523	0.0537	/28/2007	42:06 PM
K0702176-001SA	22.12	2.5	0.1071	0.0816	0.1090	0.1051	/28/2007	46:26 PM

Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings			
K0702176-002	0.06	>100	0.0003	0.0856	0.0007	-0.0001	/28/2007	50:48 PM
K0702176-002A	12.01	5.2	0.0582	0.0968	0.0603	0.0560	/28/2007	55:08 PM
K0702176-003	-0.67	5.7	-0.0033	0.1881	-0.0034	-0.0031	/28/2007	59:30 PM
	QC Test: CCV recovery 92.8%R - w ithin limits							
~CCV	18.57	0.4	0.0899	0.0624	0.0901	0.0896	/28/2007	03:54 PM
	QC Test: CCB Concentration 0.04 less than limit							
~CCB	0.04	>100	0.0002	0.0445	0.0009	-0.0005	/28/2007	08:06 PM
K0702176-003A	7.61	3.9	0.0369	0.1800	0.0379	0.0359	/28/2007	12:26 PM
K0702176-004	-0.79	7.0	-0.0038	0.2065	-0.0036	-0.0040	/28/2007	16:48 PM
K0702176-004A	7.00	1.9	0.0339	0.2026	0.0335	0.0343	/28/2007	21:08 PM
	W0225: CRDL concentration 188.9 > 150.0							
~CRDL	9.44Y	73.7	0.0457	0.0549	0.0695	0.0219	/28/2007	25:26 PM
	QC Test: CCV recovery 94.7%R - w ithin limits							
~CCV	18.94	0.1	0.0917	0.0589	0.0916	0.0917	/28/2007	29:50 PM
	QC Test: CCB Concentration 0.14 less than limit							
~CCB	0.14	11.8	0.0007	0.0444	0.0007	0.0006	/28/2007	34:02 PM

1:1	RSD check	UNCALm	0.3	0.1191	0.0627	0.1194	0.1189
						2:57:44 PM 03/28/2007	

W4502: Sample uncalibrated

1:1	RSD check	UNCALm	5.0	0.1195	0.0617	0.1237	0.1153
						3:02:06 PM 03/28/2007	

W4502: Sample uncalibrated

1:1	RSD check	UNCALm	1.8	0.1191	0.0647	0.1206	0.1176
						3:19:56 PM 03/28/2007	

W4502: Sample uncalibrated

1:1	RSD check	UNCALm	1.3	0.1191	0.0579	0.1202	0.1179
						3:26:28 PM 03/28/2007	

W4502: Sample uncalibrated

1:1	RSD check	UNCALm	0.9	0.1179	0.0574	0.1186	0.1172
						3:34:44 PM 03/28/2007	

W4502: Sample uncalibrated

RSD = 0.51%

Se (Furnace) - analysis time to date: 51minutes
Worksheet Saved

Analyst pressed stop
Worksheet READ mode off 3:36:00 PM 03/28/2007 - analysis time to date: 51 minutes
Worksheet Saved

Analysis started 3:36:36 PM 03/28/2007 (AA Online)

Method: Se (Furnace)

Instrument settings:
Wavelength:196.0 nm, Slit Width:1.0 nm, Lamp Current:15.0 mA, Background Correction:BC On

Measurement settings:
Calibration Mode: Concentration, Measurement Mode: Peak Area, Smoothing: 5 point
Replicates Standard: 2, Replicates Sample: 2

Furnace settings:
Multiple Inject: Off
Hot Inject: On, Hot Inject Temp.: 100 Deg C, Hot Inject Rate: 2
Modifier 1 Co Inject, Modifier 1 Volume: 8 uL
Modifier 2 Co Inject, Modifier 2 Volume: 2 uL
Workhead Height: 0.0 mm, Pre Last Dry Step: 2, Post Last Dry Step: 3

Step No	Temp deg C	Time sec	Gas Flow L/min	Gas Type	Read	Store
1	100	5.0	3.0	Normal	No	No
2	300	40.0	3.0	Normal	No	No
3	600	10.0	3.0	Alternate	No	No
4	900	15.0	3.0	Alternate	No	No
5	890	2.0	3.0	Alternate	No	No
6	890	2.0	0.0	Alternate	No	Yes

Service Request # K0701647
Instrument ID# K-ICP-AES-01

ICP-OES Data Review Form

		Yes	No
1.	Standardization completed	✓	
2.	ICV within 10 % of true value	✓	
3.	ICB below MRL	✓	
4.	CRI standard analyzed.	✓	
5.	ICS standards within 20% of true value	✓	
6.	All preceding CCVs within 10 % of true value	✓	
7.	Following CCV within 10 % of true value	✓	
8.	Bracketing CCBs below MRL	✓	
9.	Method Blank below MRL	✓	
10.	MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11.	All analytes within instrument linear range	✓	
12.	Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments
Do not report Mg 383.2 or Ag by 200.7.

Primary Review by [illegible] Date 3/19/07

Secondary Review by [illegible] Date 3/19/7

Analysis Report 03/19/07 11:45:54 AM page 1

Method: CUMNCD Sample Name: CUMNCD Operator: MMR
Run Time: 03/19/07 11:44:59
Comment: ICP3-96-E
Mode: IR Corr. Factor: 1

Elem	Cd2288	Mn2576
Avge	1090.	8.520
SDev	6.	.015
%RSD	.5905	.1716
#1	1103.	8.536
#2	1087.	8.520
#3	1092.	8.513
#4	1092.	8.526
#5	1090.	8.512
#6	1082.	8.519
#7	1082.	8.520
#8	1095.	8.531
#9	1093.	8.537
#10	1085.	8.486

IntStd	1	2	3	4	5	6	7
Mode	*Counts	None	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Cu	--	--	--	--	--	--
Wavlen	324.754	--	--	--	--	--	--
Avge	1789	1	--	--	--	--	--
SDev	12.04805	.0000000	--	--	--	--	--
%RSD	.6733012	.0000000	--	--	--	--	--
#1	1803	1	--	--	--	--	--
#2	1786	1	--	--	--	--	--
#3	1788	1	--	--	--	--	--
#4	1788	1	--	--	--	--	--
#5	1785	1	--	--	--	--	--
#6	1762	1	--	--	--	--	--
#7	1789	1	--	--	--	--	--
#8	1807	1	--	--	--	--	--
#9	1793	1	--	--	--	--	--
#10	1793	1	--	--	--	--	--

Standardization Rpt. 03/19/07 12:56:21 PM page 1

Method: 20071 Standard: STD1-Blank
Run Time: 03/19/07 12:54:33

80334

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Avge	.0097	-.0001	-.0007	.0002	.0012	.0177	.0001
#1	.0147	.0027	-.0036	.0004	.0013	.0177	-.0003
#2	.0047	-.0030	.0021	.0000	.0011	.0177	.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Avge	.0036	.0006	.0000	.0008	.0053	.0029	.0017
#1	.0060	.0021	.0011	.0016	.0044	.0057	.0017
#2	.0012	-.0009	-.0011	.0000	.0061	.0000	.0017

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Avge	-.0002	.0001	.0003	-.0001	.0231	.0061	-.0022
#1	.0037	.0004	.0004	-.0004	.0360	.0070	-.0010
#2	-.0041	-.0003	.0001	.0003	.0101	.0053	-.0034

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Avge	.1789	.0002	.0004	.0004	-.0016	.0055	.0039
#1	.1839	.0001	.0014	.0006	.0002	.0100	.0044
#2	.1740	.0003	-.0006	.0001	-.0034	.0010	.0033

Elem	Tl1908	Li6707	Sr4215
Avge	-.0039	.0006	-.0001
#1	-.0027	.0004	.0000
#2	-.0050	.0007	-.0001

CMMR
3/19/07

Method: 20071 Standard: STD3
Run Time: 03/19/07 12:56:23

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	.8862	.4280	.1574	8.304	.4396	.1639	1.526
#1	.8877	.4311	.1590	8.335	.4404	.1654	1.536
#2	.8847	.4249	.1559	8.272	.4387	.1623	1.515

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	.7631	8.701	.4155	3.437	.3928	.3962	.5838
#1	.7566	8.766	.4126	3.462	.3949	.3993	.5884
#2	.7696	8.635	.4184	3.412	.3907	.3931	.5791

Elem	Zn2138	Ti3349
Avge	.2962	1.141
#1	.2981	1.153
#2	.2943	1.129

Review
WMK
3/19/07

Standardization Rpt. 03/19/07 01:03:19 PM page 1

Method: 20071 Standard: STD3
Run Time: 03/19/07 13:01:33 ICP3-99-H 80334

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.847	.7124	1.283	6.984	.3670	.2700	6.503
#1	1.845	.7171	1.280	6.988	.3669	.2701	6.490
#2	1.850	.7077	1.286	6.981	.3671	.2699	6.515

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.217	7.370	.3502	2.884	.2027	.6506	.4977
#1	3.226	7.359	.3541	2.882	.2026	.6500	.4970
#2	3.208	7.380	.3463	2.886	.2029	.6513	.4984

Elem	Zn2138	Ti3349
Avge	1.234	.5849
#1	1.233	.5839
#2	1.236	.5859

Method: 20071 Standard: STD2
Run Time: 03/19/07 13:03:25 ICP3-99-G 80334

Elem	Sb2068	Ba4934	B_2496	Cd2288	Cr2677	Ni2316	K_7665
Avge	1.482	.2576	1.007	.1871	8.067	1.662	.7329
#1	1.483	.2593	1.014	.1879	8.088	1.664	.7267
#2	1.481	.2559	1.000	.1864	8.046	1.660	.7391

Elem	Ag3280	Na5889	Sn1899	P_2149	Si2881	Tl1908	Li6707
Avge	.2814	11.23	4.117	2.887	3.795	.4411	.5526
#1	.2817	11.31	4.120	2.897	3.801	.4406	.5593
#2	.2811	11.14	4.114	2.878	3.788	.4417	.5459

Elem	Sr4215
Avge	.5118
#1	.5156
#2	.5080

Analysis Report QC Standard 03/19/07 01:10:57 PM page 1

Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/19/07 13:04:59
Comment: ICP4-2-C 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.752	2.511	2.424	4.924	.1192	.0314	1.266
#1	Q4.732	2.503	2.399	4.886	Q.1185	.0329	1.259
#2	4.773	2.519	2.448	4.963	.1199	.0299	1.273

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.99	.4994	1.205	.6057	Q2.350	2.401	11.84
#1	11.95	.4981	1.201	.6027	Q2.340	2.408	11.79
#2	12.03	.5007	1.209	.6086	Q2.359	2.394	11.89

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q11.81	1.191	1.940	1.247	12.20	2.444	.6237
#1	Q11.74	Q1.184	1.932	1.247	12.46	2.432	.6214
#2	11.88	1.198	1.948	1.247	11.94	2.456	.6260

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.58	.0002	1.195	1.196	-.1068	.0092	1.955
#1	12.52	.0129	1.189	1.192	-.0746	.0154	1.942
#2	12.63	-.0125	1.200	1.200	-.1389	.0029	1.968

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.542	-.0026	.0006
#1	2.574	-.0039	.0007
#2	2.510	-.0013	.0004

Method: 20071 Standard: STD3
Run Time: 03/19/07 13:11:01 ICP4-5-D 80334

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.780	.6885	1.258	6.705	.3517	.2619	6.298
#1	1.781	.6911	1.259	6.720	.3523	.2623	6.299
#2	1.779	.6859	1.257	6.690	.3511	.2614	6.296

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.064	7.113	.3276	2.791	.1964	.6309	.4799
#1	3.072	7.122	.3326	2.792	.1957	.6317	.4813
#2	3.056	7.105	.3227	2.789	.1971	.6301	.4784

Elem	Zn2138	Ti3349
Avge	1.181	.5716
#1	1.182	.5719
#2	1.179	.5713

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Method: 20071 Sample Name: ICV STD 4 Operator: MMR
Run Time: 03/19/07 13:13:07
Comment: ICP3-99-F
Mode: CONC Corr. Factor: 1 80334

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0073	.0064	-.0173	.0000	-.0000	4.925	-.0008
#1	-.0016	.0108	-.0210	-.0004	-.0000	4.906	-.0000
#2	.0162	.0020	-.0135	.0004	-.0000	4.945	-.0016

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0072	-.0027	.0038	.0022	.0063	-.0266	.0077
#1	.0055	-.0020	.0023	.0008	.0050	-.0228	.0078
#2	.0089	-.0033	.0054	.0036	.0075	-.0303	.0076

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2165	.0004	-.0029	-.0030	-1.082	-.0100	.0017
#1	-.1815	.0001	-.0029	-.0047	-1.238	-.0173	-.0013
#2	-.2515	.0006	-.0029	-.0013	-.9258	-.0027	.0047

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.01	5.181	-.0043	.0006	5.020	4.946	-.0019
#1	13.93	5.157	-.0033	.0009	4.954	4.914	-.0013
#2	14.09	5.204	-.0053	.0003	5.086	4.978	-.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0032	4.863	1.006
#1	.0032	4.829	.9990
#2	.0032	4.898	1.013

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Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/19/07 13:18:52
Comment: ICP4-2-C 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.949	2.487	2.523	4.932	.1216	.0188	1.264
#1	4.926	2.485	2.523	4.872	.1206	.0224	1.256
#2	4.972	2.489	2.522	4.991	.1226	.0152	1.272

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.47	.4995	1.260	.6221	2.437	2.521	12.26
#1	12.44	.5005	1.256	.6183	2.422	2.538	12.19
#2	12.50	.4984	1.264	.6259	2.452	2.504	12.32

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.67	1.238	2.004	1.251	11.96	2.489	.6223
#1	12.74	1.230	1.997	1.242	12.79	2.485	.6213
#2	12.60	1.245	2.012	1.261	Q11.13	2.494	.6234

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.73	-.0218	1.234	1.254	-.1404	-.0002	2.020
#1	12.56	-.0102	1.230	1.249	-.1144	.0123	2.002
#2	12.89	-.0333	1.238	1.259	-.1664	-.0126	2.039

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.616	-.0045	.0001
#1	2.597	.0039	.0004
#2	Q2.635	-.0129	-.0001

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Method: 20071 Sample Name: ICB Operator: MMR
Run Time: 03/19/07 13:25:45
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0060	-.0083	-.0009	.0000	.0001	.0058	-.0004
#1	.0323	.0088	.0015	.0004	.0001	.0072	.0011
#2	-.0202	-.0254	-.0032	-.0004	.0001	.0044	-.0019

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0014	.0006	.0003	-.0034	-.0070	.0012
#1	.0041	-.0004	.0032	.0041	-.0021	-.0056	.0020
#2	-.0033	-.0024	-.0020	-.0036	-.0047	-.0084	.0004

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0962	.0003	-.0004	.0004	-.8730	.0077	.0012
#1	-.0022	.0008	.0007	.0013	-.2767	.0264	.0063
#2	-.1902	-.0002	-.0015	-.0004	-1.469	-.0109	-.0038

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0314	-.0036	-.0013	.0003	.0019	.0100	-.0019
#1	.0540	-.0061	.0003	.0003	.0359	.0332	-.0015
#2	.0087	-.0012	-.0030	.0003	-.0321	-.0133	-.0023

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0193	-.0039	.0001
#1	.0514	.0013	.0004
#2	-.0128	-.0091	-.0001

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Method: 20071 Sample Name: CCV1 Operator: MMR
Run Time: 03/19/07 13:35:25
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.164	5.139	2.052	.5120	.5114	5.130	.5192
#1	5.084	5.044	1.992	.5030	.5061	5.046	.5140
#2	5.149	5.128	2.070	.5094	.5092	5.093	.5196
#3	5.159	5.139	2.058	.5124	.5098	5.141	.5153
#4	Q5.264	5.245	2.090	.5232	.5204	5.240	Q.5278

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.094	5.145	.5189	.5111	5.123	5.087	5.107
#1	5.038	5.065	.5105	.5026	5.068	5.024	5.054
#2	5.080	5.125	.5189	.5108	5.102	5.072	5.089
#3	5.085	5.149	.5189	.5092	5.112	5.083	5.093
#4	5.175	5.241	Q.5275	.5217	5.210	5.171	5.191

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q5.318	.5097	.5099	5.166	25.08	2.030	.5183
#1	Q5.323	.5043	.5013	5.086	23.81	1.979	.5060
#2	5.240	.5082	.5122	5.149	25.39	2.038	.5191
#3	5.245	.5083	.5064	5.174	25.48	2.014	.5202
#4	Q5.463	.5182	.5195	Q5.254	25.65	2.089	Q.5279

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.09	Q5.268	.5101	2.562	25.69	5.174	.5114
#1	25.71	5.207	.5053	2.538	25.33	5.084	.5066
#2	25.94	Q5.256	.5065	2.552	25.55	5.176	.5101
#3	26.13	Q5.260	.5070	2.556	25.80	5.173	.5104
#4	Q26.59	Q5.347	.5217	2.603	26.08	Q5.263	.5187

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.186	2.601	.5153
#1	5.100	2.567	.5073
#2	5.174	2.581	.5128
#3	5.199	2.599	.5148
#4	Q5.270	Q2.655	Q.5262

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Method: 20071 Sample Name: CCB1 Operator: MMR
Run Time: 03/19/07 13:42:23
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0044	.0034	-.0202	-.0006	.0003	.0181	-.0012
#1	-.0121	.0048	-.0387	-.0010	.0005	.0217	-.0020
#2	.0032	.0020	-.0017	-.0001	.0002	.0144	-.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0021	-.0008	-.0016	.0002	-.0028	.0039
#1	-.0002	.0015	-.0012	-.0025	.0015	-.0112	.0062
#2	.0027	.0027	-.0005	-.0008	-.0011	.0056	.0016

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1334	.0003	-.0011	.0009	-.9887	-.0041	-.0013
#1	Q-.3652	.0005	-.0029	-.0021	-1.600	-.0255	-.0028
#2	.0984	.0000	.0007	.0039	-.3774	.0173	.0003

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0365	-.0090	-.0010	.0012	.0309	.0017	-.0024
#1	-.0488	.0009	-.0041	.0015	.0074	.0007	-.0040
#2	-.0242	-.0189	.0021	.0009	.0544	.0028	-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0177	-.0019	.0004
#1	-.0321	-.0013	.0004
#2	-.0032	-.0026	.0004

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Method: 20071 Sample Name: CRI Operator: MMR
Run Time: 03/19/07 13:44:18
Comment: ICP3-98-B 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0505	.0455	.1220	.0044	.0051	.0635	.0033
#1	.0597	.0469	.1161	.0046	.0052	.0621	.0045
#2	.0412	.0440	.1279	.0043	.0049	.0650	.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0558	.0033	.0093	.0101	.0201	.0318	.0221
#1	.0550	.0019	.0104	.0107	.0182	.0257	.0223
#2	.0566	.0047	.0083	.0096	.0220	.0379	.0219

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.1182	.0053	.0087	.0185	1.019	.0857	.0104
#1	Q-.1685	.0053	.0080	.0159	1.313	.0793	.0114
#2	Q-.0679	.0053	.0095	.0211	.7245	.0921	.0094

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0834	.0404	.0068	.0105	.2225	.0765	.0081
#1	.0689	.0466	.0060	.0105	.2138	.0733	.0083
#2	.0980	.0342	.0075	.0105	.2311	.0797	.0078

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0818	.0061	.0103
#1	.1251	.0032	.0105
#2	.0385	.0091	.0102

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Method: 20071 Sample Name: ICSA Operator: MMR
Run Time: 03/19/07 13:46:35
Comment: ICP3-100-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	511.7	.0351	-.2015	.0003	.0002	.0314	.0072
#1	510.3	-.0089	-.2641	.0004	.0002	.0355	.0101
#2	513.1	.0791	-.1388	.0001	.0002	.0272	.0042

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.0	.0016	-.0083	-.0018	179.7	.0632	235.9
#1	482.3	.0008	-.0068	-.0007	179.3	.0697	235.7
#2	485.8	.0024	-.0097	-.0029	180.1	.0568	236.2

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	511.5	-.0060	.0063	-.0146	-.6616	.1417	-.0033
#1	509.9	-.0065	.0052	-.0125	-.4579	.1485	-.0014
#2	513.1	-.0055	.0075	-.0168	-.8654	.1349	-.0052

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0294	-.0529	-.0025	.0102	-.1424	.0014	.0050
#1	-.0074	-.0458	-.0019	.0099	-.1941	.0079	.0050
#2	-.0514	-.0599	-.0030	.0104	-.0906	-.0051	.0050

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.1397	-.0058	.0054
#1	.1299	-.0084	.0054
#2	.1496	-.0032	.0054

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Method: 20071 Sample Name: ICSAB Operator: MMR
Run Time: 03/19/07 13:48:41
Comment: ICP3-83-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	503.4	1.004	-.2695	.4800	.4661	.0359	.9821
#1	501.5	1.017	-.2876	.4777	.4640	.0382	.9774
#2	505.2	.9906	-.2513	.4822	.4681	.0336	.9868

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	478.3	.4593	.4441	.4760	177.2	.9708	234.0
#1	476.2	.4567	.4416	.4727	176.4	.9579	233.7
#2	480.3	.4619	.4465	.4793	178.1	.9837	234.4

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	502.6	.4496	.0052	.9079	-.7748	.1248	.9710
#1	500.6	.4473	.0073	.9036	-1.162	.1127	.9650
#2	504.7	.4518	.0031	.9122	-.3874	.1369	.9770

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0145	-.0536	.4576	.9732	-.2997	.0149	.0062
#1	-.0165	-.0622	.4547	.9687	-.2794	.0044	.0067
#2	-.0126	-.0451	.4605	.9777	-.3199	.0253	.0057

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0523	-.0061	.0056
#1	-.0662	-.0045	.0054
#2	-.0383	-.0078	.0057

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Method: 20071 Sample Name: PBE Operator: MMR
Run Time: 03/19/07 13:51:36
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0374	L.0068	L.0179	.0012	.0001	.0057	L.0016
#1	.0742	L.0283	.0383	.0021	.0002	.0086	L.0020
#2	L.0007	L-.0147	L-.0026	L.0004	L.0001	L.0029	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0228	.0032	L.0008	.0033	.0045	L.0105	.0041
#1	.0301	.0038	.0033	.0074	.0063	.0298	.0058
#2	.0155	.0026	L-.0016	L-.0008	L.0028	L-.0089	L.0024

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.1837	.0011	.0044	L.0034	L.0377	L.0119	L.0028
#1	.2952	.0015	.0044	L.0030	1.243	L.0228	.0089
#2	L.0722	.0007	.0044	L.0039	L-1.167	L.0009	L-.0033

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5106.	L.0024	L.0029	.0160	L.0111	.8963	L-.0009
#1	S5105.	L.0026	.0051	.0166	L.0198	.9173	L.0005
#2	S5107.	L.0023	L.0007	.0154	L.0025	.8753	L-.0023

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0128	L-.0016	.0010
#1	L.0128	.0065	.0013
#2	L.0129	L-.0097	.0007

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Method: 20071 Sample Name: LCS Operator: MMR
Run Time: 03/19/07 13:53:39
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.655	2.342	2.405	4.616	.1103	.4675	1.156
#1	4.631	2.324	2.394	4.588	.1097	.4675	1.153
#2	4.679	2.359	2.416	4.644	.1109	.4675	1.160

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.63	.4658	1.157	.5714	2.272	2.272	11.22
#1	11.59	.4656	1.152	.5662	2.262	2.267	11.17
#2	11.66	.4660	1.163	.5766	2.281	2.277	11.27

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.67	1.150	.4661	1.192	11.16	2.548	L.2049
#1	11.67	1.144	.4639	1.178	11.25	2.534	L.2019
#2	11.67	1.155	.4683	1.205	11.07	2.563	L.2080

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5104.	-.0113	1.165	1.174	-.0815	.9195	-.0010
#1	S5105.	-.0069	1.159	1.168	-.0938	.9099	-.0002
#2	S5104.	-.0156	1.170	1.180	-.0691	.9291	-.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.340	-.0084	.0013
#1	2.356	-.0091	.0013
#2	2.324	-.0078	.0013

Method: 20071 Sample Name: K0701891-001 Operator: MMR
Run Time: 03/19/07 13:56:01
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.0763	k.0560	k3.969	.0154	k.0000	k-.3289	k.0811
#1	k.0747	k.0507	k4.002	.0151	k.0000	k-.3312	k.0843
#2	k.0779	k.0614	k3.937	.0157	k.0000	k-.3267	k.0779

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	110.8	k.0362	k.2571	k.0955	S1809.	k.0879	26.23
#1	111.2	k.0347	k.2584	k.0957	S1810.	k.0956	26.32
#2	110.4	k.0376	k.2559	k.0952	S1809.	k.0802	26.15

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k26.24	k4.681	k.1280	k.4133	L.3849	k1.730	k.2125
#1	k26.37	k4.697	k.1302	k.4164	L-.0403	k1.748	k.2125
#2	k26.10	k4.666	k.1258	k.4103	.8101	k1.712	k.2125

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5093.	k.2586	k.0093	k.5765	k-.5496	k14.48	k.0009
#1	S5093.	k.2697	k.0113	k.5795	k-.5453	k14.52	k.0000
#2	S5093.	k.2475	k.0074	k.5735	k-.5539	k14.44	k.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	k-4.845	.0032	.2096
#1	k-4.818	.0032	.2100
#2	k-4.872	.0032	.2092

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Method: 20071 Sample Name: K0701891-001 Operator: MMR
Run Time: 03/19/07 13:59:59
Comment: K0701891 WET 1/10 DILUTION 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0114	L.0027	.4820	.0007	L.0001	.0118	L-.0015
#1	L.0167	L.0042	.4740	L.0001	L.0001	.0090	L-.0032
#2	L.0061	L.0012	.4900	.0012	L.0001	.0146	L.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.62	.0027	.0328	.0071	95.90	L.0048	3.104
#1	12.61	L.0012	.0336	.0084	95.72	L-.0005	3.099
#2	12.64	.0042	.0320	.0057	96.08	L.0102	3.110

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.343	.5068	.0043	.0451	L-1.260	.0692	L-.0005
#1	3.294	.5062	L.0017	.0451	L-1.454	.0703	L.0013
#2	3.393	.5074	.0069	.0451	L-1.067	.0681	L-.0022

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	262.0	L-.0081	L.0008	.0647	L-.0027	1.599	L-.0029
#1	261.5	L-.0153	L.0001	.0647	L-.0347	1.604	L-.0038
#2	262.4	L-.0010	L.0014	.0647	L.0293	1.595	L-.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0266	L-.0087	.0236
#1	L-.0578	L-.0104	.0236
#2	L.0047	L-.0071	.0236

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Method: 20071 Sample Name: CCV2 Operator: MMR
Run Time: 03/19/07 14:02:05
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.181	5.191	2.101	.5135	.5124	5.130	.5173
#1	5.141	5.142	2.107	.5071	.5067	5.046	.5138
#2	5.221	5.239	2.094	.5199	.5180	5.214	.5209

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.079	5.166	.5212	.5138	5.113	5.105	5.037
#1	5.036	5.112	.5160	.5092	5.059	5.071	4.987
#2	5.121	5.220	.5264	.5185	5.166	5.139	5.087

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.175	.5118	.5105	5.333	25.27	2.061	.5227
#1	5.127	.5064	.5043	5.299	25.30	2.019	.5186
#2	5.222	.5172	.5167	5.367	25.24	2.104	.5268

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.14	5.425	.5095	2.566	25.89	5.203	.5149
#1	25.85	5.412	.5030	2.542	25.71	5.155	.5096
#2	26.43	5.439	.5160	2.590	26.08	5.250	.5202

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.296	2.625	.5170
#1	5.254	2.586	.5109
#2	5.337	2.664	.5232

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Method: 20071 Sample Name: CCB2 Operator: MMR
Run Time: 03/19/07 14:04:03
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	.0068	-.0216	-.0003	.0003	.0137	.0004
#1	.0064	.0166	-.0313	-.0004	.0004	.0173	.0017
#2	-.0024	-.0030	-.0119	-.0001	.0003	.0101	-.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0054	.0038	-.0004	-.0008	.0076	.0110	.0041
#1	.0053	.0035	-.0003	-.0008	.0112	.0005	.0056
#2	.0055	.0042	-.0004	-.0008	.0040	.0215	.0026

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0415	.0005	.0004	.0043	-.5711	.0223	.0013
#1	-.0460	.0005	.0007	.0039	-1.112	.0146	.0013
#2	.1290	.0005	.0000	.0047	-.0302	.0301	.0013

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0436	.0080	.0009	.0018	.0569	.0066	-.0015
#1	.0436	.0155	-.0008	.0021	.0494	.0074	-.0020
#2	.0436	.0005	.0026	.0015	.0643	.0058	-.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0466	-.0058	.0006
#1	-.0257	-.0026	.0007
#2	-.0674	-.0091	.0004

Method: 20071 Sample Name: PBW Operator: MMR
Run Time: 03/19/07 14:06:05
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0153	L-.0010	L-.0105	L-.0007	L.0001	L.0029	L.0009
#1	L-.0048	L.0078	L-.0236	L-.0007	L.0001	L.0000	L.0008
#2	L-.0258	L-.0098	L.0027	L-.0007	L.0001	.0058	L.0011

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0005	L-.0001	L-.0007	L-.0011	L-.0023	L-.0114	L-.0010
#1	L-.0001	L-.0010	L.0007	L-.0008	L-.0032	L-.0205	L-.0010
#2	L.0010	L.0008	L-.0021	L-.0014	L-.0014	L-.0023	L-.0010

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0066	L-.0001	L-.0015	L-.0021	L-1.233	L.0137	L-.0008
#1	L-.0197	L.0001	L-.0000	L-.0047	L-1.162	L.0173	L.0002
#2	L.0328	L-.0002	L-.0029	L.0004	L-1.303	L.0100	L-.0018

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0191	L-.0163	L-.0008	L.0000	L-.0161	L.0028	L-.0024
#1	L-.0217	L-.0168	L-.0009	L.0003	L.0111	L.0055	L-.0030
#2	L-.0165	L-.0158	L-.0006	L-.0003	L-.0433	L.0002	L-.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0144	L-.0068	L.0000
#1	L-.0417	L-.0058	.0001
#2	L.0128	L-.0078	L-.0001

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Method: 20071 Sample Name: LCSW Operator: MMR
Run Time: 03/19/07 14:08:06
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.302	2.702	2.627	5.316	.1297	1.058	1.317
#1	5.324	2.721	2.653	5.365	.1307	1.060	1.324
#2	5.279	2.682	2.601	5.267	.1288	1.056	1.309

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.99	.5260	1.316	.6694	2.572	2.599	12.68
#1	13.06	.5308	1.320	.6748	2.586	2.610	12.76
#2	12.93	.5212	1.311	.6639	2.559	2.588	12.61

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.70	1.313	1.035	1.325	12.35	2.612	.6651
#1	13.81	1.320	1.037	1.332	12.06	2.622	.6672
#2	13.60	1.306	1.034	1.318	12.64	2.601	.6630

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.76	-.0304	1.308	1.320	-.1050	.0134	-.0017
#1	13.86	-.0266	1.317	1.328	-.1816	.0110	-.0026
#2	13.66	-.0343	1.299	1.311	-.0283	.0158	-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.716	-.0068	.0006
#1	2.698	-.0065	.0004
#2	2.733	-.0071	.0007

Method: 20071 Sample Name: K0701647-001 Operator: MMR
Run Time: 03/19/07 14:11:43
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0009	L.0074	L-.0157	.0060	L.0001	.0250	L.0010
#1	L-.0185	L.0059	L-.0245	.0062	.0002	.0257	L.0023
#2	.0203	L.0089	L-.0069	.0057	L.0000	.0243	L-.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.335	L.0017	L-.0002	L.0003	L-.0012	L.0056	6.414
#1	7.354	.0033	L-.0017	L-.0008	L-.0012	L.0163	6.430
#2	7.316	L-.0000	L.0012	L.0014	L-.0012	L-.0051	6.398

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.858	.0002	L.0011	L.0060	L.0855	L-.0073	L.0011
#1	7.005	L-.0000	.0044	.0082	L.0201	L.0146	L-.0012
#2	6.712	.0004	L-.0022	L.0039	L.1509	L-.0292	L.0033

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.973	L-.0109	.0053	.0022	.0816	6.566	L-.0015
#1	6.963	L-.0095	.0074	.0019	L.0581	6.572	L-.0013
#2	6.982	L-.0123	.0031	.0025	.1051	6.560	L-.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0016	L-.0032	.0396
#1	L.0032	L-.0006	.0398
#2	L-.0064	L-.0058	.0395

Method: 20071 Sample Name: K0701647-001D Operator: MMR
Run Time: 03/19/07 14:13:37
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0271	L.0201	L-.0163	.0064	.0001	.0235	L.0003
#1	L.0146	L.0050	L-.0364	.0060	L.0000	.0185	L.0002
#2	.0396	.0352	L.0039	.0068	.0002	.0286	L.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.475	.0032	L.0022	.0046	L.0022	L.0065	6.521
#1	7.520	L.0017	L-.0000	L.0014	L.0005	L.0032	6.567
#2	7.429	.0046	.0045	.0079	.0038	L.0098	6.474

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.972	.0005	L.0004	L.0073	1.411	L.0178	L.0033
#1	6.983	L.0001	L-.0007	.0107	.7145	L.0137	L-.0007
#2	6.961	.0008	L.0015	L.0039	2.108	L.0219	.0074

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.074	L-.0049	.0050	.0037	L.0593	6.687	L-.0006
#1	7.081	L-.0130	.0041	.0025	L.0334	6.726	L-.0005
#2	7.067	L.0033	.0059	.0049	.0853	6.647	L-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0064	L-.0010	.0405
#1	L.0160	L-.0071	.0406
#2	L-.0032	.0052	.0403

Method: 20071 Sample Name: K0701647-001S Operator: MMR
Run Time: 03/19/07 14:15:28
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.099	.5386	1.032	2.113	.0514	1.072	.0534
#1	2.068	.5269	1.022	2.090	.0510	1.052	.0540
#2	2.129	.5503	1.043	2.135	.0518	1.091	.0529

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.351	.2120	.5269	.2636	1.027	.5330	6.416
#1	7.307	.2114	.5222	.2592	1.019	.5265	6.372
#2	7.395	.2127	.5316	.2679	1.036	.5396	6.461

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.767	.5234	1.034	.5289	L.4855	1.035	.0534
#1	6.743	.5197	1.026	.5246	.7094	1.041	.0509
#2	6.791	.5270	1.041	.5332	L.2616	1.029	.0560

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.940	L-.0135	.5235	.5205	L.0582	6.571	L-.0016
#1	6.855	L-.0169	.5202	.5169	L.0415	6.517	L-.0010
#2	7.025	L-.0100	.5267	.5241	L.0748	6.625	L-.0022

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	1.062	L.0000	.0398
#1	1.076	.0032	.0392
#2	1.047	L-.0032	.0403

Method: 20071 Sample Name: K0701647-002 Operator: MMR
Run Time: 03/19/07 14:17:19
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0238	L.0191	L-.0520	.0293	.0001	.0616	.0032
#1	.0395	L.0293	L-.0281	.0293	.0002	.0687	.0031
#2	L.0081	L.0089	L-.0760	.0293	L.0001	.0544	.0032

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	112.6	L.0001	L.0008	L.0005	L-.0060	L.0112	H158.2
#1	110.6	L.0009	L.0020	L.0019	L-.0050	.0228	H156.7
#2	114.6	L-.0007	L-.0004	L-.0008	L-.0070	L-.0005	H159.8

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	232.8	.0034	L-.0015	L.0077	.8855	L-.0041	L.0038
#1	227.4	.0033	L-.0007	L-.0013	1.243	L.0128	.0053
#2	238.2	.0034	L-.0022	.0168	L.5283	L-.0210	L.0022

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	269.7	L-.0160	L-.0016	.6890	L.0686	11.59	L-.0015
#1	263.1	L-.0175	L-.0003	.6792	L.0309	11.37	L-.0000
#2	276.3	L-.0144	L-.0030	.6988	.1063	11.82	L-.0030

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0224	.0285	.7064
#1	L-.0288	.0291	.6889
#2	L-.0160	.0278	.7238

Method: 20071 Sample Name: K0701647-002L Operator: MMR
Run Time: 03/19/07 14:19:27
Comment: K0701647 1/5 DILUTION 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0412	L-.0131	L-.0449	.0051	L.0000	.0261	L.0007
#1	L-.0452	L-.0068	L-.0293	.0054	L.0001	.0253	L.0016
#2	L-.0371	L-.0194	L-.0605	.0049	L-.0000	.0269	L-.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.80	L-.0023	L-.0041	L-.0060	L-.0027	L-.0098	H43.61
#1	23.85	L-.0005	L-.0037	L-.0052	L-.0045	L-.0037	H43.72
#2	23.75	L-.0042	L-.0045	L-.0068	L-.0010	L-.0159	H43.49

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.70	.0004	L-.0033	L.0039	L-1.499	L-.0128	L-.0068
#1	48.95	.0005	L-.0000	L.0013	L-.9057	L-.0401	L-.0063
#2	48.44	.0003	L-.0065	L.0064	L-2.093	L.0146	L-.0073

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.51	L-.0088	L-.0033	.1436	L.0328	2.389	L-.0028
#1	56.85	L-.0120	L-.0026	.1442	L.0742	2.402	L-.0028
#2	56.16	L-.0057	L-.0040	.1430	L-.0086	2.376	L-.0028

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0064	L-.0013	.1496
#1	L-.0192	.0026	.1503
#2	L.0064	L-.0052	.1489

Analysis Report 03/19/07 02:24:04 PM page 1

Method: 20071 Sample Name: K0701703-001 Operator: MMR
Run Time: 03/19/07 14:21:54
Comment: K0701703 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0060	L.0010	L-.0338	.0803	L.0001	.0454	L-.0017
#1	L.0016	L-.0117	L-.0279	.0812	L.0001	.0453	L-.0022
#2	L.0104	L.0137	L-.0397	.0795	L.0001	.0455	L-.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.47	L-.0019	L-.0006	L-.0016	L.0013	L-.0089	H48.68
#1	47.72	L-.0016	L-.0024	L-.0025	L.0014	L-.0056	H48.95
#2	47.23	L-.0021	L.0012	L-.0008	L.0011	L-.0121	H48.41

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.10	.5383	L.0000	L.0030	L.1962	L-.0169	L-.0008
#1	55.48	.5417	L-.0029	L.0047	L.6138	L.0027	L-.0013
#2	54.73	.5350	L.0029	L.0013	L-.2214	L-.0365	L-.0003

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.75	L-.0019	L-.0002	.0079	.1014	10.56	L-.0016
#1	45.13	L.0030	L-.0000	.0072	.1236	10.63	L-.0030
#2	44.37	L-.0068	L-.0004	.0085	L.0791	10.49	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0154	.0269	.2890
#1	L.0203	.0278	.2915
#2	L.0106	.0259	.2865

Analysis Report 03/19/07 02:26:00 PM page 1

Method: 20071 Sample Name: K0701681-001 Operator: MMR
Run Time: 03/19/07 14:24:09
Comment: K0701681 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7169	L.0164	L-.0209	.0111	L.0001	.0278	L.0017
#1	.6979	L.0163	L-.0005	.0112	L.0000	.0264	L.0006
#2	.7359	L.0164	L-.0413	.0110	.0001	.0292	L.0028

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.742	.0117	L.0004	.0198	2.306	L-.0018	.6170
#1	7.754	.0113	L-.0014	.0168	2.313	L-.0092	.6191
#2	7.731	.0122	L.0023	.0228	2.298	L.0057	.6149

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6407	.0730	.0049	L-.0009	L.4679	L.0190	L.0014
#1	.5751	.0729	.0060	L-.0030	L.6491	L-.0015	L-.0012
#2	.7064	.0730	L.0039	L.0013	L.2868	L.0395	L.0039

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6909	L-.0050	.0108	.2158	.1131	2.600	.0673
#1	.6799	L-.0065	.0095	.2152	.0927	2.591	.0687
#2	.7019	L-.0034	.0121	.2164	.1335	2.609	.0659

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0168	L-.0032	.0289
#1	L-.0136	L-.0019	.0289
#2	L-.0200	L-.0045	.0289

Method: 20071 Sample Name: K0701681-001D Operator: MMR
Run Time: 03/19/07 14:26:05
Comment: K0701681 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7814	L-.0056	L.0011	.0114	L.0000	.0270	L-.0013
#1	.8052	L.0037	L.0124	.0118	L-.0001	.0307	L-.0011
#2	.7576	L-.0149	L-.0102	.0110	.0001	.0234	L-.0015

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.048	.0094	L.0004	.0204	2.499	L-.0168	.6443
#1	7.984	.0086	L.0022	.0234	2.474	L-.0210	.6386
#2	8.113	.0102	L-.0014	.0174	2.524	L-.0126	.6500

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4825	.0774	L.0024	L.0073	L-.5333	L-.0081	L.0011
#1	.3952	.0768	L.0010	.0099	L.1912	L-.0132	.0049
#2	.5699	.0780	L.0039	L.0047	L-1.258	L-.0031	L-.0026

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7090	L-.0067	.0090	.2260	.1242	2.768	.0728
#1	.7200	L-.0107	.0070	.2242	.1236	2.761	.0724
#2	.6980	L-.0027	.0109	.2279	.1248	2.776	.0732

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0113	L-.0061	.0303
#1	L-.0015	L-.0084	.0303
#2	L-.0210	L-.0039	.0303

Analysis Report QC Standard 03/19/07 02:30:12 PM page 1

Method: 20071 Sample Name: CCV3 Operator: MMR
Run Time: 03/19/07 14:28:12
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.997	5.067	2.036	.4983	.5000	4.963	.5122
#1	4.995	5.061	2.038	.4991	.5003	4.976	.5125
#2	4.999	5.073	2.035	.4974	.4997	4.950	.5118

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.017	5.076	.5116	.4952	5.013	5.079	4.932
#1	5.025	5.081	.5131	.4960	5.017	5.094	4.937
#2	5.009	5.071	.5102	.4944	5.009	5.065	4.927

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.190	.5018	.5060	5.119	24.50	1.979	.5082
#1	5.324	.5020	.5071	5.114	24.65	1.993	.5090
#2	5.057	.5016	.5050	5.124	24.36	1.966	.5075

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.51	5.230	.4990	2.525	25.60	5.076	.5006
#1	25.50	5.242	.5009	2.526	25.49	5.081	.5021
#2	25.51	5.218	.4970	2.524	25.70	5.072	.4991

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.126	2.518	.5010
#1	5.184	2.517	.5017
#2	5.068	2.519	.5003

Analysis Report QC Standard 03/19/07 02:32:12 PM page 1

Method: 20071 Sample Name: CCB3 Operator: MMR
Run Time: 03/19/07 14:30:18
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0065	.0176	.0012	-.0007	.0004	.0166	.0011
#1	.0080	.0312	-.0119	-.0010	.0005	.0187	.0013
#2	.0049	.0039	.0143	-.0004	.0003	.0144	.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0059	.0041	.0004	.0003	-.0015	.0019	.0033
#1	.0063	Q.0063	-.0004	-.0008	-.0010	.0037	.0048
#2	.0055	.0019	.0013	.0014	-.0020	.0000	.0018

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1334	.0009	.0011	.0052	-1.157	.0214	.0018
#1	.1903	.0012	.0029	.0073	-1.872	.0337	.0008
#2	.0766	.0006	-.0007	.0030	-.4428	.0091	.0028

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0430	-.0014	.0014	.0015	-.0291	.0099	-.0020
#1	.0385	-.0088	.0024	.0021	-.0210	.0047	-.0020
#2	.0475	.0061	.0003	.0009	-.0371	.0152	-.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0112	-.0055	.0004
#1	.0321	-.0091	.0004
#2	-.0546	-.0019	.0004

Service Request # _K0701647_____
Calibration _03-20-07C,D_____
QC in calibration__03-20-07C,D_____
QC Service Request #__K0701647_____
Star Lims Run # __80435_____

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL	X		
13. CRA run	X		
14. ICSA and ICSAB in control	X		
15. Serial dilution run	X		
16. Post spike in control	X		

Comments: ~~Report~~ 62 Ni
SC 3/20/07
Report mnse 4 ppb MRL
(#2 being checked by GFAA)

Primary Review by SC Date 3/20/07
Secondary Review by [illegible] Date 3/20/07
R:\icp\misc\data review forms\PQ ExCell review form

Sample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	25 ppb Std. MS10-46-A	Fully Quant Standard	0 kg	0 ml	1.00
3	Hydroshere	Unknown	0 kg	0 ml	1.00
4	ICV MS10-40-H	Unknown	0 kg	0 ml	1.00
5	CCV1 MS10-46-A	Unknown	0 kg	0 ml	1.00
6	ICB	Unknown	0 kg	0 ml	1.00
7	CCB1	Unknown	0 kg	0 ml	1.00
8	CRA WATER MS10-43-F	Unknown	0 kg	0 ml	1.00
9	ICSA MS10-45-C	Unknown	0 kg	0 ml	1.00
10	ICSAB MS10-45-D	Unknown	0 kg	0 ml	1.00
11	PBW K0701816	Unknown	0 kg	0 ml	1.00
12	K0701816-002	Unknown	0 kg	0 ml	1.00
13	K0701816-002D	Unknown	0 kg	0 ml	1.00
14	K0701816-002L 1/5	Unknown	0 kg	0 ml	1.00
15	K0701816-002A +20 +10Ag	Unknown	0 kg	0 ml	1.00
16	K0701816-002S	Unknown	0 kg	0 ml	1.00
17	LCSW K0701816	Unknown	0 kg	0 ml	1.00
18	CCV2 MS10-46-A	Unknown	0 kg	0 ml	1.00
19	CCB2	Unknown	0 kg	0 ml	1.00
20	PBW K0701647	Unknown	0 kg	0 ml	1.00
21	K0701647-001	Unknown	0 kg	0 ml	1.00
22	K0701647-001D	Unknown	0 kg	0 ml	1.00
23	K0701647-001L 1/5	Unknown	0 kg	0 ml	1.00
24	K0701647-001A +20 +10Ag	Unknown	0 kg	0 ml	1.00
25	K0701647-001S	Unknown	0 kg	0 ml	1.00
26	LCSW K0701647	Unknown	0 kg	0 ml	1.00
27	K0701647-002	Unknown	0 kg	0 ml	1.00
28	K0701703-001	Unknown	0 kg	0 ml	1.00
29	K0701680-001	Unknown	0 kg	0 ml	1.00
30	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
31	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
32	CCB3	Unknown	0 kg	0 ml	1.00
33	CCB3	Unknown	0 kg	0 ml	1.00
34	K0701680-001D	Unknown	0 kg	0 ml	1.00
35	K0701680-001S	Unknown	0 kg	0 ml	1.00
36	K0701680-003	Unknown	0 kg	0 ml	1.00
37	K0701680-004	Unknown	0 kg	0 ml	1.00
38	K0701680-001 DISS.	Unknown	0 kg	0 ml	1.00
39	K0701680-003 DISS.	Unknown	0 kg	0 ml	1.00
40	K0701680-004 DISS.	Unknown	0 kg	0 ml	1.00
41	CCV4 MS10-46-A	Unknown	0 kg	0 ml	1.00
42	CCB4	Unknown	0 kg	0 ml	1.00

Instrument Setup - Sample Configuration

Sample	Configuration	Date
All Samples	acqmet11	7:08:03 3/20/07

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,380.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-35.10
Focus	11.30

ExCell Mass Calibration **Date: 3/20/2007**

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include
7.016	1583	0.665	-0.01	TRUE
9.012	2097	0.614	0.017	TRUE
23.985	5905	0.665	0.031	TRUE
26.982	6659	0.665	0.001	TRUE
43.956	10970	0.716	-0.014	TRUE
45.953	11490	0.614	0.034	TRUE
51.94	13004	0.767	0.001	TRUE
53.949	13511	0.767	-0.014	TRUE
55.935	14018	0.767	-0.006	TRUE
56.935	14278	0.767	0.016	TRUE
57.934	14525	0.767	-0.012	TRUE
58.933	14779	0.716	-0.012	TRUE
59.931	15032	0.767	-0.015	TRUE
62.93	15799	0.767	0.002	TRUE
63.929	16053	0.716	0.001	TRUE
64.928	16306	0.767	-0.003	TRUE
65.926	16553	0.767	-0.03	TRUE
67.925	17067	0.818	-0.008	TRUE
75.92	19101	0.766	-0.009	TRUE
114.904	29022	0.817	-0.014	TRUE
137.906	34891	0.765	0.026	TRUE
139.905	35398	0.765	0.017	TRUE
202.972	51473	0.713	0.001	TRUE
204.972	51986	0.764	0.012	TRUE
205.974	52240	0.713	0.005	TRUE
206.976	52500	0.713	0.023	TRUE
207.977	52747	0.713	-0.01	TRUE
208.98	53007	0.713	0.005	TRUE
238.051	60417	0.713	-0.034	TRUE

Excluded In Calib | Excluded In Results | [illegible] | Multi Element | Semi Quant | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	6Bkg	7Li	9Be	59Co	115In	208Pb
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)0.167	(P)21350.948	(P)5750.825	(P)30694.610	(P)32603.668	(P)12538.834
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)0.000	(P)23330.374	(P)5988.090	(P)31290.104	(P)31843.289	(P)12783.884
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)0.333	(P)23550.916	(P)5964.912	(P)30817.758	(P)31738.225	(P)12556.183
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)0.667	(P)22317.941	(P)5669.459	(P)30611.670	(P)31083.469	(P)12130.815
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)0.333	(P)21663.935	(P)5484.887	(P)30996.655	(P)30882.533	(P)11586.364
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)0.300	(P)22442.823	(P)5771.635	(P)30882.160	(P)31630.237	(P)12319.216
	SD of Stability 3/20/07		(P)0.247	(P)978.528	(P)210.539	(P)270.192	(P)682.392	(P)472.459
	%RSD of Stability 3/		(P)82.402	(P)4.360	(P)3.648	(P)0.875	(P)2.157	(P)3.835

Run	Label	TimeStamp	209Bi	220Bkg	238U
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)17470.344	(P)0.000	(P)18429.714
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)17480.522	(P)0.000	(P)17702.296
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)17357.373	(P)0.000	(P)17693.618
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)16671.889	(P)0.000	(P)17172.816
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)15802.736	(P)0.167	(P)16404.247
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)16956.573	(P)0.033	(P)17480.538
	SD of Stability 3/20/07		(P)726.551	(P)0.075	(P)749.768
	%RSD of Stability 3/		(P)4.285	(P)223.607	(P)4.289

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:29**					
Antimony	121	-0.0006	-0.0004	0.001	**0**	0.0009	0
Antimony	123	-0.0027	0.0004	0.0023	**0**	0.0025	0
Arsenic	75	-0.0051	-0.0656	0.0707	**0**	0.0683	0
Beryllium	9	0.0005	-0.0005	0	**0**	0.0005	0
Cadmium	111	-0.0022	-0.0007	0.0029	**0**	0.0026	0
Cadmium	114	-0.0023	0.0035	-0.0012	**0**	0.0031	0
Chromium	52	0.0182	-0.0037	-0.0145	**0**	0.0167	0
Chromium	53	-0.001	0.0082	-0.0073	**0**	0.0078	0
Cobalt	59	-0.0004	-0.0006	0.001	**0**	0.0008	0
Copper	63	0.0069	0.0019	-0.0088	**0**	0.008	0
Copper	65	-0.0025	0.0006	0.0019	**0**	0.0023	0
Lead	206	-0.0027	0.0047	-0.002	**0**	0.0041	0
Lead	207	-0.0019	0.0023	-0.0004	**0**	0.0022	0
Lead	208	0.0002	0.0013	-0.0016	**0**	0.0015	0
Molybdenum	95	-0.0019	0.0005	0.0014	**0**	0.0017	0
Molybdenum	97	-0.0005	-0.001	0.0015	**0**	0.0013	0
Molybdenum	98	0.0007	-0.0013	0.0006	**0**	0.0011	0
Nickel	60	0.0197	0.0268	-0.0466	**0**	0.0405	0
Nickel	62	0.0339	0.029	-0.063	**0**	0.0546	0
Selenium	77	-0.0218	0.1121	-0.0904	**0**	0.103	0
Selenium	78	-0.324	0.0639	0.2601	**0**	0.2973	0
Selenium	82	-0.0533	-0.1206	0.174	**0**	0.1544	0
Silver	107	0.0014	0.0019	-0.0033	**0**	0.0029	0
Silver	109	0.0023	-0.0017	-0.0006	**0**	0.0021	0
Thallium	203	0	0.0007	-0.0007	**0**	0.0007	0
Thallium	205	-0.0004	-0.0005	0.0009	**0**	0.0008	0
Zinc	66	-0.0228	0.0178	0.005	**0**	0.0207	0
Zinc	67	0.0939	-0.0912	-0.0027	**0**	0.0926	0
Zinc	68	-0.0357	0.0116	0.0242	**0**	0.0316	0

3/20/07

Internal Standard Factors:

Lithium	6	1.028	0.98	0.993	**1.028**	n/a	n/a
Gallium	71	0.994	1.038	0.97	**0.994**	n/a	n/a
Indium	115	0.941	1.031	1.034	**0.941**	n/a	n/a
Lutetium	175	0.959	1.03	1.014	**0.959**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**25 ppb Std. MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:33**					
Antimony	121	25.22	24.9	24.87	**25**	0.1918	0.7671
Antimony	123	25.2	25.08	24.72	**25**	0.2524	1.01
Arsenic	75	24.85	24.85	25.3	**25**	0.2604	1.042
Beryllium	9	24.58	25.78	24.64	**25**	0.6731	2.692
Cadmium	111	26.02	24.46	24.53	**25**	0.8799	3.52
Cadmium	114	25.35	25.08	24.57	**25**	0.3942	1.577
Chromium	52	25.13	24.76	25.11	**25**	0.2084	0.8334
Chromium	53	25.69	24.91	24.4	**25**	0.6466	2.586
Cobalt	59	26.28	24.7	24.02	**25**	1.158	4.634
Copper	63	26.42	24.33	24.25	**25**	1.233	4.934
Copper	65	26.2	24.38	24.42	**25**	1.04	4.158
Lead	206	24.99	25.09	24.92	**25**	0.0836	0.3344
Lead	207	26.15	24.25	24.6	**25**	1.01	4.039
Lead	208	25.29	24.9	24.81	**25**	0.2582	1.033
Molybdenum	95	25.78	24.89	24.33	**25**	0.7345	2.938
Molybdenum	97	26.46	24.87	23.67	**25**	1.395	5.581
Molybdenum	98	25.81	24.8	24.39	**25**	0.7352	2.941
Nickel	60	26.37	24.49	24.14	**25**	1.203	4.811
Nickel	62	26.49	24.08	24.43	**25**	1.3	5.201
Selenium	77	25.11	24.64	25.25	**25**	0.3218	1.287
Selenium	78	24.46	25.24	25.3	**25**	0.4666	1.867
Selenium	82	24.48	24.51	26.01	**25**	0.8721	3.489
Silver	107	25.97	24.28	24.74	**25**	0.8747	3.499
Silver	109	25.89	24.05	25.06	**25**	0.9251	3.7
Thallium	203	25.67	24.72	24.61	**25**	0.5847	2.339
Thallium	205	25.18	25.23	24.59	**25**	0.358	1.432
Zinc	66	26.04	24.82	24.13	**25**	0.9672	3.869
Zinc	67	25.6	25.33	24.06	**25**	0.8216	3.286
Zinc	68	25.83	24.49	24.68	**25**	0.7268	2.907

Internal Standard Factors:

Lithium	6	0.979	0.984	1.003	**0.979**	n/a	n/a
Gallium	71	1.009	0.963	0.954	**1.009**	n/a	n/a
Indium	115	1	0.998	0.996	**1**	n/a	n/a
Lutetium	175	0.98	0.989	0.977	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		Hydroshere			Mean	SD	%RSD
TimeStamp		3/20/07 11:36					
Antimony	121	0.0036	0.0053	0.0033	**0.0041**	0.0011	27.11
Antimony	123	0.0009	0.0031	-0.0002	**0.0013**	0.0017	134.8
Arsenic	75	0.0115	0.0646	-0.0028	**0.0244**	0.0355	145.6
Beryllium	9	0.0031	0.0004	0.001	**0.0015**	0.0014	97.04
Cadmium	111	0.0015	-0.0021	-0.0014	**-0.0007**	0.0019	287.1
Cadmium	114	0.0011	0.001	0.0032	**0.0018**	0.0013	70.63
Chromium	52	-0.0192	-0.0038	-0.0896	**-0.0375**	0.0457	121.9
Chromium	53	-0.002	0.0141	0.004	**0.0054**	0.0082	151.6
Cobalt	59	-0.0005	0.0009	-0.0015	**-0.0004**	0.0012	315.8
Copper	63	0.0348	0.0242	0.0254	**0.0282**	0.0058	20.67
Copper	65	0.0416	0.0296	0.0284	**0.0332**	0.0073	21.96
Lead	206	-0.0071	-0.005	0.0015	**-0.0036**	0.0045	125.9
Lead	207	-0.0045	-0.0011	-0.0065	**-0.004**	0.0027	67.79
Lead	208	-0.0052	-0.0025	-0.0032	**-0.0036**	0.0014	39.39
Molybdenum	95	0.0283	0.0206	0.0127	**0.0206**	0.0078	37.85
Molybdenum	97	0.023	0.0166	0.016	**0.0185**	0.0039	20.79
Molybdenum	98	0.0232	0.0188	0.0066	**0.0162**	0.0086	53.05
Nickel	60	-0.0271	-0.013	-0.0977	**-0.0459**	0.0454	98.87
Nickel	62	-0.0116	-0.0111	-0.1265	**-0.0497**	0.0664	133.6
Selenium	77	0.1775	0.1239	0.0559	**0.1191**	0.0609	51.17
Selenium	78	0.2506	-0.13	-0.134	**-0.0045**	0.2209	4953
Selenium	82	0.1741	0.3263	0.0273	**0.1759**	0.1495	85
Silver	107	0.0787	0.0419	0.0302	**0.0503**	0.0253	50.35
Silver	109	0.0835	0.0436	0.0261	**0.0511**	0.0294	57.63
Thallium	203	0.0042	0.0022	0.0018	**0.0027**	0.0013	48.64
Thallium	205	0.0004	0.0018	0.0006	**0.0009**	0.0008	80.84
Zinc	66	0.1356	0.1555	0.126	**0.1391**	0.015	10.81
Zinc	67	0.0533	0.2041	0.2038	**0.1538**	0.087	56.6
Zinc	68	0.1659	0.1555	0.1165	**0.146**	0.026	17.82

Internal Standard Factors:

Lithium	6	0.932	0.947	0.826	**0.932**	n/a	n/a
Gallium	71	0.984	0.967	0.808	**0.984**	n/a	n/a
Indium	115	1.001	0.987	0.888	**1.001**	n/a	n/a
Lutetium	175	0.975	0.98	0.891	**0.975**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		ICV MS10-40-H			Mean	SD	%RSD
TimeStamp		3/20/07 11:39					
Antimony	121	26.44	25.79	25.65	**25.96**	0.4182	1.611
Antimony	123	24.93	25.75	25.49	**25.39**	0.4196	1.653
Arsenic	75	26.18	26.39	26.88	**26.48**	0.3623	1.368
Beryllium	9	2.546	2.692	2.711	**2.65**	0.0902	3.403
Cadmium	111	13.16	13.22	13.12	**13.17**	0.0493	0.3742
Cadmium	114	13.22	13.4	12.81	**13.14**	0.3061	2.329
Chromium	52	9.778	9.989	10.14	**9.969**	0.1819	1.825
Chromium	53	9.813	10.15	10.06	**10.01**	0.1735	1.734
Cobalt	59	24.84	24.68	24.8	**24.78**	0.0856	0.3455
Copper	63	12.31	12.08	12.37	**12.25**	0.1513	1.234
Copper	65	12.36	12.2	12.5	**12.36**	0.1527	1.236
Lead	206	25.01	25.24	24.47	**24.9**	0.3964	1.592
Lead	207	26.92	26.68	25.7	**26.43**	0.6457	2.443
Lead	208	26.4	25.98	25.26	**25.88**	0.5754	2.224
Molybdenum	95	26.43	26.19	26.07	**26.23**	0.1815	0.692
Molybdenum	97	26.02	25.94	26.19	**26.05**	0.1315	0.505
Molybdenum	98	25.37	25.79	25.7	**25.62**	0.2209	0.8622
Nickel	60	24.27	24.14	24.73	**24.38**	0.307	1.259
Nickel	62	24.78	24.4	24.15	**24.45**	0.317	1.297
Selenium	77	25.4	25.99	25.97	**25.79**	0.3353	1.3
Selenium	78	26.67	26.92	27.77	**27.12**	0.5766	2.126
Selenium	82	25.69	26.67	27.04	**26.47**	0.6978	2.637
Silver	107	12.31	12.49	12.18	**12.33**	0.155	1.257
Silver	109	12.38	12.46	12.38	**12.4**	0.0462	0.3728
Thallium	203	25.91	24.99	25.82	**25.57**	0.5085	1.988
Thallium	205	26.54	25.42	25.63	**25.86**	0.5949	2.3
Zinc	66	25.19	24.71	25.22	**25.04**	0.2831	1.131
Zinc	67	30.89	32.09	31.48	**31.49**	0.5989	1.902
Zinc	68	30.93	29.93	30.38	**30.41**	0.5034	1.655

Internal Standard Factors:

Lithium	6	0.911	0.952	0.929	**0.911**	n/a	n/a
Gallium	71	0.924	0.939	0.957	**0.924**	n/a	n/a
Indium	115	0.954	1.009	0.975	**0.954**	n/a	n/a
Lutetium	175	0.969	0.982	0.977	**0.969**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV1 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:43**					
Antimony	121	24.82	25.89	25.64	**25.45**	0.5597	2.199
Antimony	123	23.92	24.91	24.25	**24.36**	0.4997	2.051
Arsenic	75	24.94	25.02	26.12	**25.36**	0.6562	2.587
Beryllium	9	26.96	26.14	25.69	**26.26**	0.6417	2.444
Cadmium	111	24.63	25.11	25.05	**24.93**	0.2627	1.054
Cadmium	114	25.46	25.26	25.13	**25.28**	0.1655	0.6544
Chromium	52	25.64	24.21	25.04	**24.97**	0.7185	2.878
Chromium	53	26.11	24.86	24.97	**25.31**	0.6922	2.735
Cobalt	59	26.3	23.98	24.39	**24.89**	1.238	4.974
Copper	63	25.74	23.84	23.98	**24.52**	1.059	4.319
Copper	65	25.75	23.51	23.98	**24.41**	1.183	4.846
Lead	206	25.43	25.55	23.77	**24.92**	0.9931	3.986
Lead	207	24.2	24.48	23.52	**24.07**	0.4938	2.052
Lead	208	24.68	25.2	23.99	**24.62**	0.6085	2.472
Molybdenum	95	25.14	24.35	24.41	**24.63**	0.4405	1.788
Molybdenum	97	25.38	24.06	24.02	**24.49**	0.7701	3.145
Molybdenum	98	24.94	23.3	23.88	**24.04**	0.8342	3.47
Nickel	60	26.35	23.71	23.86	**24.64**	1.486	6.031
Nickel	62	26.15	23.34	24.55	**24.68**	1.409	5.71
Selenium	77	25.18	24.08	25.67	**24.97**	0.8129	3.255
Selenium	78	25.09	24.04	26.02	**25.05**	0.9874	3.942
Selenium	82	23.94	24.44	26.45	**24.94**	1.325	5.312
Silver	107	24.76	23.73	23.87	**24.12**	0.561	2.326
Silver	109	24.64	24.39	23.86	**24.29**	0.3942	1.623
Thallium	203	24.77	25.45	24.46	**24.89**	0.5068	2.036
Thallium	205	25.32	25.24	24.2	**24.92**	0.6244	2.506
Zinc	66	25.23	23.14	24.27	**24.21**	1.047	4.323
Zinc	67	26.01	23.58	24.46	**24.68**	1.229	4.981
Zinc	68	26.32	24.15	24.22	**24.9**	1.23	4.941

Internal Standard Factors:

Lithium	6	1.001	0.955	0.923	**1.001**	n/a	n/a
Gallium	71	0.995	0.934	0.959	**0.995**	n/a	n/a
Indium	115	0.958	0.979	0.966	**0.958**	n/a	n/a
Lutetium	175	0.979	0.996	0.972	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:50**					
Antimony	121	0.0079	0.0124	0.005	**0.0084**	0.0037	44.33
Antimony	123	0.0053	0.0062	0.0067	**0.006**	0.0007	11.52
Arsenic	75	0.0334	0.0374	0.0398	**0.0368**	0.0032	8.747
Beryllium	9	0.0075	0.0028	0.0022	**0.0042**	0.0029	70.02
Cadmium	111	-0.0009	-0.0032	0.0026	**-0.0005**	0.0029	570.3
Cadmium	114	-0.0011	-0.0044	0.0021	**-0.0012**	0.0033	281.5
Chromium	52	0.0354	0.0083	0.0118	**0.0185**	0.0147	79.71
Chromium	53	0.007	-0.0125	0.0039	**-0.0006**	0.0105	1893
Cobalt	59	0.0003	-0.0005	-0.0013	**-0.0005**	0.0008	164.5
Copper	63	0.0067	-0.0055	-0.0097	**-0.0028**	0.0085	300.1
Copper	65	0.0037	0.0082	-0.0126	**-0.0002**	0.0109	4414
Lead	206	-0.0048	-0.0072	0.0022	**-0.0032**	0.0049	149.8
Lead	207	-0.0027	0.0001	-0.0062	**-0.0029**	0.0032	107.6
Lead	208	-0.002	-0.0035	-0.0022	**-0.0026**	0.0008	30.94
Molybdenum	95	0.007	0.005	0.0068	**0.0063**	0.0011	17.46
Molybdenum	97	0.0099	0.0075	0.0038	**0.0071**	0.0031	43.42
Molybdenum	98	0.0052	0.0081	0.0021	**0.0051**	0.003	58.21
Nickel	60	0.078	-0.0056	-0.0312	**0.0137**	0.0571	416.3
Nickel	62	0.1161	0.0628	-0.0857	**0.0311**	0.1046	336.8
Selenium	77	0.2703	-0.0677	0.0147	**0.0725**	0.1763	243.3
Selenium	78	-0.4074	0.2272	0.3143	**0.0447**	0.3939	881.2
Selenium	82	0.3229	0.0733	0.1103	**0.1688**	0.1347	79.79
Silver	107	0.0186	0.0183	0.0089	**0.0152**	0.0055	36.33
Silver	109	0.0218	0.0167	0.011	**0.0165**	0.0054	32.81
Thallium	203	0.0008	0.0001	0.0027	**0.0012**	0.0013	109.2
Thallium	205	0.0004	-0.0001	0.0001	**0.0002**	0.0003	168.3
Zinc	66	0.0906	-0.0333	-0.0447	**0.0042**	0.075	1771
Zinc	67	0.1283	-0.0888	0.0115	**0.017**	0.1087	640.8
Zinc	68	-0.0068	-0.0508	0.002	**-0.0185**	0.0283	152.6

Internal Standard Factors:

Lithium	6	0.995	1.004	0.958	**0.995**	n/a	n/a
Gallium	71	1.006	0.99	0.952	**1.006**	n/a	n/a
Indium	115	0.976	1.005	0.994	**0.976**	n/a	n/a
Lutetium	175	0.955	0.993	1.002	**0.955**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB1**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:54**					
Antimony	121	0.0034	0.0068	0.003	**0.0044**	0.0021	47.4
Antimony	123	-0.0015	0.0078	0.0024	**0.0029**	0.0047	162.1
Arsenic	75	0.0281	-0.0502	0.054	**0.0106**	0.0543	510
Beryllium	9	-0.0017	0.0015	-0.0018	**-0.0007**	0.0019	279.2
Cadmium	111	-0.0021	-0.0009	0.0001	**-0.001**	0.0011	115.5
Cadmium	114	-0.0021	0.0006	0.0003	**-0.0004**	0.0015	348.1
Chromium	52	-0.0072	-0.0003	0.0191	**0.0039**	0.0136	353
Chromium	53	-0.0132	-0.002	0.0103	**-0.0016**	0.0117	719.6
Cobalt	59	0.0004	-0.0005	0.0019	**0.0006**	0.0012	198.6
Copper	63	0.0018	-0.0085	-0.0159	**-0.0075**	0.0089	118.2
Copper	65	-0.0068	-0.008	0.0114	**-0.0012**	0.0109	927.4
Lead	206	-0.0024	0.0054	0.0072	**0.0034**	0.0051	150.3
Lead	207	-0.017	-0.0043	-0.0076	**-0.0096**	0.0066	68.09
Lead	208	-0.0044	-0.0003	0.0005	**-0.0014**	0.0026	192.6
Molybdenum	95	0.0051	0.0052	0.0034	**0.0046**	0.001	21.86
Molybdenum	97	0.0079	0.0047	0.0011	**0.0046**	0.0034	74.84
Molybdenum	98	0.0033	-0.0006	0.0041	**0.0023**	0.0025	109.6
Nickel	60	0.0118	-0.0353	-0.0683	**-0.0306**	0.0403	131.6
Nickel	62	0.0309	0.1124	-0.0525	**0.0303**	0.0824	272.4
Selenium	77	-0.0404	0.1698	-0.0455	**0.028**	0.1229	439.4
Selenium	78	0.0508	0.5696	0.3007	**0.307**	0.2594	84.51
Selenium	82	0.021	-0.0409	0.1364	**0.0389**	0.09	231.6
Silver	107	0.0102	0.0016	0.0026	**0.0048**	0.0047	98.9
Silver	109	0.0074	0.0054	0.0031	**0.0053**	0.0021	40.49
Thallium	203	-0.0007	0.0001	0.0017	**0.0004**	0.0012	343.9
Thallium	205	-0.0001	0	0	**0**	0	285.3
Zinc	66	-0.0174	-0.0702	-0.062	**-0.0499**	0.0284	56.94
Zinc	67	0.0346	0.0298	-0.1136	**-0.0164**	0.0842	513.5
Zinc	68	-0.0181	-0.0384	-0.0822	**-0.0463**	0.0328	70.79

Internal Standard Factors:

Lithium	6	0.949	0.94	0.901	**0.949**	n/a	n/a
Gallium	71	0.964	0.949	0.925	**0.964**	n/a	n/a
Indium	115	0.965	0.995	0.966	**0.965**	n/a	n/a
Lutetium	175	1.001	0.98	0.963	**1.001**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		CRA WATER MS10-43-E			Mean	SD	%RSD
TimeStamp		3/20/07 11:58					
Antimony	121	0.0454	0.0499	0.0481	**0.0478**	0.0023	4.715
Antimony	123	0.0398	0.0444	0.059	**0.0477**	0.01	20.97
Arsenic	75	0.5679	0.556	0.6236	**0.5825**	0.0361	6.194
Beryllium	9	0.0226	0.014	0.0236	**0.0201**	0.0053	26.43
Cadmium	111	0.02	0.0189	0.0244	**0.0211**	0.0029	13.77
Cadmium	114	0.0237	0.0228	0.021	**0.0225**	0.0014	6.269
Chromium	52	0.2071	0.2095	0.2226	**0.2131**	0.0083	3.905
Chromium	53	0.1962	0.1925	0.18	**0.1896**	0.0085	4.472
Cobalt	59	0.0228	0.021	0.022	**0.0219**	0.0009	4.116
Copper	63	0.1203	0.0922	0.0968	**0.1031**	0.0151	14.63
Copper	65	0.0921	0.1049	0.113	**0.1033**	0.0105	10.2
Lead	206	0.0202	0.0222	0.0203	**0.0209**	0.0011	5.422
Lead	207	0.018	0.0223	0.0251	**0.0218**	0.0035	16.22
Lead	208	0.0196	0.0178	0.0158	**0.0177**	0.0019	10.54
Molybdenum	95	0.0565	0.0572	0.0597	**0.0578**	0.0017	2.897
Molybdenum	97	0.0682	0.0585	0.0478	**0.0582**	0.0102	17.6
Molybdenum	98	0.0537	0.0611	0.0592	**0.058**	0.0039	6.649
Nickel	60	0.2431	0.1811	0.1428	**0.189**	0.0506	26.79
Nickel	62	0.3089	0.1331	0.1846	**0.2089**	0.0904	43.25
Selenium	77	1.129	1.153	0.9198	**1.067**	0.1285	12.04
Selenium	78	1.307	1.015	1.449	**1.257**	0.221	17.58
Selenium	82	1.265	1.145	1.28	**1.23**	0.0741	6.025
Silver	107	0.0174	0.0128	0.0123	**0.0141**	0.0028	19.79
Silver	109	0.0163	0.0135	0.0126	**0.0141**	0.0019	13.6
Thallium	203	0.0201	0.0254	0.0223	**0.0226**	0.0026	11.71
Thallium	205	0.0225	0.02	0.0237	**0.0221**	0.0019	8.487
Zinc	66	0.4535	0.4279	0.3865	**0.4226**	0.0338	8.008
Zinc	67	0.589	0.4094	0.5002	**0.4996**	0.0898	17.97
Zinc	68	0.4652	0.4909	0.4534	**0.4698**	0.0192	4.089

Internal Standard Factors:

Lithium	6	0.938	0.972	0.942	**0.938**	n/a	n/a
Gallium	71	0.979	0.965	0.958	**0.979**	n/a	n/a
Indium	115	0.994	0.996	0.985	**0.994**	n/a	n/a
Lutetium	175	1.016	0.988	0.999	**1.016**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICSA MS10-45-C**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:01**					
Antimony	121	0.0284	0.0177	0.0211	**0.0224**	0.0054	24.3
Antimony	123	0.0246	0.0135	0.0205	**0.0195**	0.0056	28.88
Arsenic	75	0.0401	-0.0688	0.0358	**0.0024**	0.0617	2609
Beryllium	9	-0.0004	-0.0005	0.0006	**-0.0001**	0.0006	554
Cadmium	111	0.7021	0.7911	0.6994	**0.7309**	0.0521	7.134
Cadmium	114	0.5295	0.5345	0.5134	**0.5258**	0.011	2.093
Chromium	52	0.2032	0.1663	0.1784	**0.1826**	0.0188	10.31
Chromium	53	3.165	3.15	3.146	**3.153**	0.0099	0.3152
Cobalt	59	0.0284	0.0281	0.0233	**0.0266**	0.0029	10.76
Copper	63	0.3256	0.322	0.3069	**0.3182**	0.0099	3.106
Copper	65	0.4054	0.4197	0.3835	**0.4029**	0.0182	4.53
Lead	206	0.0292	0.033	0.0338	**0.032**	0.0024	7.63
Lead	207	0.0375	0.0219	0.0352	**0.0315**	0.0084	26.72
Lead	208	0.0326	0.031	0.0396	**0.0344**	0.0046	13.31
Molybdenum	95	175.3	172.3	168.3	**172**	3.511	2.041
Molybdenum	97	172.6	172.7	171	**172.1**	0.9585	0.557
Molybdenum	98	174.2	167.6	164.3	**168.7**	5.035	2.984
Nickel	60	0.6187	0.5941	0.5391	**0.584**	0.0407	6.976
Nickel	62	1.201	1.382	1.317	**1.3**	0.0917	7.057
Selenium	77	0.7779	1.095	0.7095	**0.861**	0.206	23.92
Selenium	78	1.473	1.813	1.338	**1.542**	0.2446	15.86
Selenium	82	0.1596	0.1601	0.1192	**0.1463**	0.0234	16.03
Silver	107	0.0124	0.0126	0.005	**0.01**	0.0043	43.18
Silver	109	0.0126	0.013	0.0141	**0.0132**	0.0008	6.186
Thallium	203	0.0028	0.003	0.0046	**0.0035**	0.001	28.33
Thallium	205	0.0011	0.0007	0.0015	**0.0011**	0.0004	35.45
Zinc	66	2.57	2.605	2.721	**2.632**	0.0789	2.997
Zinc	67	3.454	3.9	3.806	**3.72**	0.2353	6.325
Zinc	68	2.175	2.466	2.194	**2.278**	0.1627	7.143

Internal Standard Factors:

Lithium	6	1.118	1.061	1.079	**1.118**	n/a	n/a
Gallium	71	1.087	1.104	1.09	**1.087**	n/a	n/a
Indium	115	1.088	1.096	1.071	**1.088**	n/a	n/a
Lutetium	175	1.021	1.058	1.028	**1.021**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		ICSAB MS10-45-D			Mean	SD	%RSD
TimeStamp		3/20/07 12:04					
Antimony	121	0.021	0.0209	0.0183	**0.0201**	0.0015	7.694
Antimony	123	0.0203	0.0176	0.0146	**0.0175**	0.0029	16.45
Arsenic	75	20.5	20.94	20.78	**20.74**	0.2192	1.057
Beryllium	9	0.0011	0.0022	0.0015	**0.0016**	0.0006	36.03
Cadmium	111	19.92	20.76	20.59	**20.42**	0.446	2.184
Cadmium	114	20.49	20.18	20.57	**20.42**	0.2055	1.007
Chromium	52	20.43	19.96	19.98	**20.12**	0.2689	1.336
Chromium	53	23.73	23.05	22.89	**23.22**	0.4436	1.91
Cobalt	59	20.26	19.07	18.92	**19.42**	0.7368	3.794
Copper	63	19.38	18.55	17.95	**18.62**	0.7186	3.858
Copper	65	19.31	18.46	18.39	**18.72**	0.5117	2.734
Lead	206	0.0324	0.0274	0.029	**0.0296**	0.0025	8.516
Lead	207	0.0246	0.0385	0.029	**0.0307**	0.0071	23.17
Lead	208	0.0308	0.0316	0.031	**0.0312**	0.0004	1.379
Molybdenum	95	179.1	176.2	170.6	**175.3**	4.326	2.468
Molybdenum	97	176.9	173.5	169.5	**173.3**	3.699	2.135
Molybdenum	98	172.7	169.1	165.8	**169.2**	3.438	2.032
Nickel	60	20.49	19.4	18.99	**19.62**	0.7755	3.952
Nickel	62	21.43	20.39	19.95	**20.59**	0.7619	3.7
Selenium	77	0.7581	0.8372	0.8434	**0.8129**	0.0476	5.849
Selenium	78	1.239	1.388	1.071	**1.233**	0.1588	12.88
Selenium	82	0.1499	0.3776	0.2943	**0.2739**	0.1152	42.06
Silver	107	18.19	17.84	17.78	**17.94**	0.2188	1.22
Silver	109	18.39	18.39	18.08	**18.29**	0.1779	0.9726
Thallium	203	0.0012	0.002	0.005	**0.0027**	0.002	73.96
Thallium	205	0.0026	0.0019	0.0009	**0.0018**	0.0008	47.11
Zinc	66	22.35	21.21	21.36	**21.64**	0.6166	2.85
Zinc	67	20.25	19.62	19.25	**19.71**	0.5072	2.574
Zinc	68	21.17	20.73	19.73	**20.54**	0.7392	3.598

Internal Standard Factors:

Lithium	6	1.122	1.097	1.077	**1.122**	n/a	n/a
Gallium	71	1.115	1.071	1.051	**1.115**	n/a	n/a
Indium	115	1.088	1.082	1.05	**1.088**	n/a	n/a
Lutetium	175	1.055	1.026	1.018	**1.055**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701816**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:19**					
Antimony	121	0.0004	0.0011	0.0016	**0.001**	0.0006	56.51
Antimony	123	-0.0009	0.0012	0.0011	**0.0005**	0.0012	244.7
Arsenic	75	0.1153	-0.0419	0.0435	**0.0389**	0.0787	202.1
Beryllium	9	-0.0026	-0.0023	-0.0012	**-0.002**	0.0007	36.94
Cadmium	111	-0.002	0.002	-0.0006	**-0.0002**	0.002	957.4
Cadmium	114	-0.0009	0.0023	0.0016	**0.001**	0.0017	172.8
Chromium	52	0.1	0.1208	0.1171	**0.1126**	0.0111	9.879
Chromium	53	0.0359	0.023	0.0218	**0.0269**	0.0078	29.06
Cobalt	59	-0.0003	-0.0008	-0.0017	**-0.0009**	0.0007	73.2
Copper	63	0.0093	0.0086	0	**0.006**	0.0052	87.37
Copper	65	0.0155	0.0065	0.0196	**0.0138**	0.0067	48.49
Lead	206	0.0011	0.0003	0.0057	**0.0023**	0.0029	123.6
Lead	207	0.0109	0.0026	0.0031	**0.0055**	0.0046	84.02
Lead	208	0.0052	0.0008	0.002	**0.0027**	0.0023	84.53
Molybdenum	95	0.0101	0.0063	0.0111	**0.0092**	0.0025	27.38
Molybdenum	97	0.0131	0.0112	0.0037	**0.0093**	0.005	53.54
Molybdenum	98	0.0107	0.0076	0.0096	**0.0093**	0.0016	17.05
Nickel	60	0.0177	-0.0021	-0.0467	**-0.0104**	0.033	318.5
Nickel	62	0.0064	0.0257	0.1246	**0.0522**	0.0634	121.4
Selenium	77	-0.2246	0.2548	0.0211	**0.0171**	0.2397	1400
Selenium	78	0.0656	0.5831	0.6953	**0.448**	0.3359	74.98
Selenium	82	0.1867	0.0499	0.1681	**0.1349**	0.0742	54.99
Silver	107	0.0045	-0.0004	-0.0001	**0.0013**	0.0028	207.2
Silver	109	0.0044	-0.0007	-0.0007	**0.001**	0.003	289.6
Thallium	203	0.0017	0.0024	-0.0003	**0.0013**	0.0014	109.2
Thallium	205	-0.0014	-0.0011	-0.0024	**-0.0016**	0.0007	42.23
Zinc	66	0.2848	0.1834	0.2374	**0.2352**	0.0507	21.56
Zinc	67	0.3803	0.1409	0.2077	**0.243**	0.1235	50.83
Zinc	68	0.3148	0.284	0.246	**0.2816**	0.0345	12.25

Internal Standard Factors:

Lithium	6	1.102	1.139	1.046	**1.102**	n/a	n/a
Gallium	71	1.053	1.075	1.054	**1.053**	n/a	n/a
Indium	115	0.995	1.066	1.055	**0.995**	n/a	n/a
Lutetium	175	0.971	1.021	1	**0.971**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:23**					
Antimony	121	0.0621	0.056	0.0656	**0.0612**	0.0049	7.94
Antimony	123	0.0584	0.0586	0.0649	**0.0606**	0.0037	6.09
Arsenic	75	0.2755	0.3562	0.3035	**0.3117**	0.041	13.15
Beryllium	9	0.0003	0.0047	0.0028	**0.0026**	0.0022	84.18
Cadmium	111	0.0535	0.0347	0.064	**0.0507**	0.0148	29.25
Cadmium	114	0.0466	0.0338	0.0604	**0.0469**	0.0133	28.35
Chromium	52	4.437	4.369	4.445	**4.417**	0.042	0.9507
Chromium	53	6.426	6.587	6.312	**6.442**	0.138	2.142
Cobalt	59	0.1138	0.1066	0.1018	**0.1074**	0.0061	5.642
Copper	63	0.9695	0.9451	0.9163	**0.9436**	0.0266	2.823
Copper	65	0.5335	0.5275	0.5209	**0.5273**	0.0063	1.194
Lead	206	0.0058	0.0078	0.0018	**0.0051**	0.0031	59.98
Lead	207	0.0114	-0.0005	0.0032	**0.0047**	0.0061	128.7
Lead	208	0.0063	0.0077	0.0079	**0.0073**	0.0009	12.41
Molybdenum	95	0.1282	0.098	0.0986	**0.1082**	0.0173	15.94
Molybdenum	97	0.1198	0.1228	0.1006	**0.1144**	0.012	10.51
Molybdenum	98	0.1054	0.1003	0.0895	**0.0984**	0.0081	8.249
Nickel	60	6.481	6.313	6.146	**6.313**	0.1672	2.648
Nickel	62	5.97	5.439	5.473	**5.627**	0.2973	5.283
Selenium	77	2.723	3.011	2.873	**2.869**	0.1441	5.022
Selenium	78	3.673	4.365	4.171	**4.07**	0.3571	8.774
Selenium	82	2.485	3.071	2.805	**2.787**	0.2931	10.52
Silver	107	-0.0078	-0.0092	-0.0109	**-0.0093**	0.0016	16.65
Silver	109	-0.012	-0.0105	-0.0117	**-0.0114**	0.0008	6.826
Thallium	203	0.002	0.0036	0.0021	**0.0026**	0.0009	34.68
Thallium	205	0.0001	-0.0009	0.0024	**0.0005**	0.0017	320.4
Zinc	66	5.252	5.177	4.978	**5.136**	0.1419	2.762
Zinc	67	8.378	7.76	7.77	**7.969**	0.3537	4.438
Zinc	68	7.59	7.903	7.649	**7.714**	0.1662	2.154

Internal Standard Factors:

Lithium	6	1.144	1.098	1.135	**1.144**	n/a	n/a
Gallium	71	1.168	1.171	1.143	**1.168**	n/a	n/a
Indium	115	1.146	1.144	1.143	**1.146**	n/a	n/a
Lutetium	175	1.046	1.084	1.051	**1.046**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:25**					
Antimony	121	0.0622	0.0578	0.0644	**0.0615**	0.0034	5.452
Antimony	123	0.0552	0.0463	0.0658	**0.0558**	0.0098	17.51
Arsenic	75	0.4382	0.4726	0.2387	**0.3831**	0.1263	32.96
Beryllium	9	-0.0022	-0.0044	0.0015	**-0.0017**	0.0029	172.3
Cadmium	111	0.0549	0.0469	0.0492	**0.0503**	0.0041	8.111
Cadmium	114	0.0443	0.0413	0.0445	**0.0434**	0.0018	4.093
Chromium	52	4.688	4.474	4.553	**4.572**	0.1083	2.369
Chromium	53	6.702	6.405	6.589	**6.565**	0.15	2.285
Cobalt	59	0.1101	0.1061	0.1024	**0.1062**	0.0038	3.619
Copper	63	0.9504	0.8843	0.8677	**0.9008**	0.0438	4.86
Copper	65	0.5206	0.5019	0.4628	**0.4951**	0.0295	5.956
Lead	206	0.0081	0.0003	0.0104	**0.0063**	0.0053	84.11
Lead	207	-0.0041	0.0041	0.0084	**0.0028**	0.0063	226.8
Lead	208	0.0065	-0.0005	0.0033	**0.0031**	0.0035	113.4
Molybdenum	95	0.1069	0.1053	0.1137	**0.1086**	0.0045	4.108
Molybdenum	97	0.1146	0.1078	0.1214	**0.1146**	0.0068	5.949
Molybdenum	98	0.1068	0.0938	0.0941	**0.0983**	0.0074	7.55
Nickel	60	6.622	5.982	6.031	**6.212**	0.3561	5.732
Nickel	62	6.053	5.315	5.599	**5.656**	0.3724	6.584
Selenium	77	2.801	2.666	3.363	**2.944**	0.3694	12.55
Selenium	78	4.179	4.19	4.183	**4.184**	0.0055	0.1308
Selenium	82	3.177	3.295	3.069	**3.18**	0.1128	3.548
Silver	107	-0.0107	-0.0129	-0.0116	**-0.0117**	0.0011	9.798
Silver	109	-0.011	-0.0091	-0.0101	**-0.0101**	0.001	9.462
Thallium	203	0.0012	0.0011	0.0051	**0.0025**	0.0023	91.97
Thallium	205	0.0013	0.0021	0.0001	**0.0012**	0.001	87.13
Zinc	66	5.125	4.806	4.855	**4.929**	0.172	3.489
Zinc	67	8.022	7.521	7.781	**7.774**	0.2506	3.224
Zinc	68	8.034	7.806	7.816	**7.886**	0.129	1.635

Internal Standard Factors:

Lithium	6	1.139	1.118	1.069	**1.139**	n/a	n/a
Gallium	71	1.164	1.102	1.12	**1.164**	n/a	n/a
Indium	115	1.146	1.093	1.114	**1.146**	n/a	n/a
Lutetium	175	1.063	1.039	1.041	**1.063**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701816-002L 1/5			Mean	SD	%RSD
TimeStamp		3/20/07 12:34					
Antimony	121	0.0109	0.0108	0.014	**0.0119**	0.0018	15.15
Antimony	123	0.0052	0.0098	0.0054	**0.0068**	0.0026	38.21
Arsenic	75	0.1313	0.1429	0.0874	**0.1205**	0.0293	24.31
Beryllium	9	-0.0029	-0.0025	-0.0047	**-0.0034**	0.0012	34.63
Cadmium	111	0.0067	0.0082	0.0043	**0.0064**	0.002	30.85
Cadmium	114	0.0088	0.0141	0.0095	**0.0108**	0.0029	26.42
Chromium	52	0.9351	0.7835	0.7463	**0.8216**	0.1	12.17
Chromium	53	1.308	1.088	1.152	**1.183**	0.1131	9.564
Cobalt	59	0.0229	0.0191	0.0125	**0.0182**	0.0052	28.85
Copper	63	0.2227	0.1836	0.1521	**0.1861**	0.0354	19
Copper	65	0.1296	0.0937	0.0932	**0.1055**	0.0209	19.79
Lead	206	0.0061	0.013	0.0073	**0.0088**	0.0037	41.96
Lead	207	-0.0007	0.0066	0.0024	**0.0028**	0.0037	132.7
Lead	208	0.0044	0.0055	0.0024	**0.0041**	0.0016	39.06
Molybdenum	95	0.0312	0.0241	0.0216	**0.0256**	0.005	19.41
Molybdenum	97	0.0303	0.0213	0.0215	**0.0244**	0.0052	21.23
Molybdenum	98	0.0154	0.0148	0.015	**0.015**	0.0003	2.038
Nickel	60	1.454	1.062	0.9736	**1.163**	0.2559	21.99
Nickel	62	1.294	1.067	1.091	**1.151**	0.1244	10.81
Selenium	77	0.4971	0.312	0.4868	**0.432**	0.104	24.08
Selenium	78	1.647	1.831	1.505	**1.661**	0.1634	9.839
Selenium	82	0.7871	0.6509	0.613	**0.6837**	0.0916	13.39
Silver	107	-0.0091	-0.0115	-0.0126	**-0.0111**	0.0018	16.26
Silver	109	-0.0089	-0.0093	-0.0115	**-0.0099**	0.0014	13.8
Thallium	203	0.0005	0.0019	0.0002	**0.0009**	0.0009	107.7
Thallium	205	0.0002	0.0013	0.0022	**0.0012**	0.001	82.56
Zinc	66	1.215	0.9338	0.761	**0.97**	0.2293	23.64
Zinc	67	1.609	1.451	1.306	**1.455**	0.1517	10.43
Zinc	68	1.633	1.404	1.425	**1.487**	0.1264	8.502

Internal Standard Factors:

Lithium	6	1.123	1.046	1.071	**1.123**	n/a	n/a
Gallium	71	1.09	1.064	1.018	**1.09**	n/a	n/a
Indium	115	1.038	1.064	1.05	**1.038**	n/a	n/a
Lutetium	175	0.973	1.017	1.016	**0.973**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002A +20,+10Ag**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:37**					
Antimony	121	20.49	20.95	21.39	**20.94**	0.4482	2.14
Antimony	123	20.56	19.72	20.78	**20.35**	0.5594	2.749
Arsenic	75	21.67	21.57	22.74	**21.99**	0.6473	2.944
Beryllium	9	19.19	18.39	18.29	**18.62**	0.4948	2.657
Cadmium	111	20.62	19.48	19.82	**19.97**	0.588	2.944
Cadmium	114	20.87	19.95	20.03	**20.29**	0.5117	2.522
Chromium	52	24.98	25.24	25.5	**25.24**	0.2565	1.016
Chromium	53	27.51	27.79	27.7	**27.67**	0.1413	0.5108
Cobalt	59	21.32	20.58	20.38	**20.76**	0.4941	2.38
Copper	63	20.52	19.73	19.39	**19.88**	0.5794	2.914
Copper	65	20.11	19.54	18.75	**19.47**	0.6786	3.486
Lead	206	18.38	17.84	18.36	**18.2**	0.3091	1.698
Lead	207	18.43	18.42	17.7	**18.18**	0.4207	2.314
Lead	208	18.56	18.04	18.27	**18.29**	0.2645	1.446
Molybdenum	95	22.04	21.07	21.34	**21.48**	0.4983	2.319
Molybdenum	97	21.99	21	21.48	**21.49**	0.4935	2.296
Molybdenum	98	21.58	20.52	20.65	**20.92**	0.5793	2.77
Nickel	60	26.25	25.28	25.17	**25.57**	0.5932	2.32
Nickel	62	25.18	24.35	24.12	**24.55**	0.557	2.269
Selenium	77	22.07	23.33	22.76	**22.72**	0.6309	2.777
Selenium	78	24.57	25.18	24.94	**24.9**	0.3071	1.233
Selenium	82	23.34	23.67	24.61	**23.87**	0.6567	2.751
Silver	107	8.627	8.864	8.493	**8.661**	0.1879	2.17
Silver	109	8.757	8.697	8.184	**8.546**	0.3151	3.688
Thallium	203	18.91	18.38	18.45	**18.58**	0.2893	1.557
Thallium	205	18.48	17.9	18.58	**18.32**	0.3634	1.984
Zinc	66	24.54	24.58	24.25	**24.46**	0.1763	0.7208
Zinc	67	27.07	27.4	27.99	**27.49**	0.4661	1.696
Zinc	68	27.49	27.06	27.68	**27.41**	0.3186	1.162

Internal Standard Factors:

Lithium	6	1.105	1.066	1.153	**1.105**	n/a	n/a
Gallium	71	1.127	1.132	1.104	**1.127**	n/a	n/a
Indium	115	1.125	1.091	1.117	**1.125**	n/a	n/a
Lutetium	175	1.049	1.03	1.032	**1.049**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:40**					
Antimony	121	21.34	21.15	21.62	**21.37**	0.2383	1.115
Antimony	123	20.26	20.61	20.33	**20.4**	0.1853	0.908
Arsenic	75	22.12	22.74	22.14	**22.33**	0.3511	1.572
Beryllium	9	21.19	18.5	18.91	**19.53**	1.451	7.427
Cadmium	111	20.46	19.64	20	**20.04**	0.4101	2.047
Cadmium	114	20.4	19.85	20.32	**20.19**	0.2979	1.476
Chromium	52	26.8	25.85	26.17	**26.27**	0.4821	1.835
Chromium	53	29.23	28.35	29.04	**28.87**	0.4627	1.603
Cobalt	59	22.33	20.9	20.65	**21.29**	0.908	4.265
Copper	63	21.18	19.94	19.36	**20.16**	0.932	4.623
Copper	65	20.93	19.62	19.02	**19.86**	0.9761	4.916
Lead	206	19.53	18.4	18.89	**18.94**	0.5629	2.972
Lead	207	18.64	18.54	18.93	**18.7**	0.2009	1.074
Lead	208	19.04	18.26	18.72	**18.67**	0.3904	2.091
Molybdenum	95	22.66	21.47	21.77	**21.96**	0.6187	2.817
Molybdenum	97	22.65	21.14	21.38	**21.72**	0.81	3.729
Molybdenum	98	22.01	21.32	20.64	**21.32**	0.6806	3.192
Nickel	60	27.34	25.61	25.27	**26.07**	1.114	4.272
Nickel	62	26.64	24.63	24.71	**25.33**	1.141	4.506
Selenium	77	23.68	25.13	25.34	**24.72**	0.9058	3.665
Selenium	78	25.12	25.75	25.68	**25.52**	0.345	1.352
Selenium	82	24.59	26.08	25.13	**25.26**	0.7523	2.978
Silver	107	19.46	18.72	19.26	**19.15**	0.3827	1.999
Silver	109	19.03	18.82	19.1	**18.99**	0.145	0.7639
Thallium	203	19.44	18.76	18.17	**18.79**	0.6362	3.386
Thallium	205	19.6	18.94	18.78	**19.11**	0.4339	2.271
Zinc	66	25.61	24.21	24.25	**24.69**	0.798	3.232
Zinc	67	29.13	26.72	27.76	**27.87**	1.207	4.332
Zinc	68	28.82	28.2	27.63	**28.21**	0.592	2.098

Internal Standard Factors:

Lithium	6	1.139	1.083	1.122	**1.139**	n/a	n/a
Gallium	71	1.168	1.151	1.11	**1.168**	n/a	n/a
Indium	115	1.104	1.121	1.095	**1.104**	n/a	n/a
Lutetium	175	1.068	1.059	1.041	**1.068**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701816**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:43**					
Antimony	121	20.12	20.19	20.75	**20.36**	0.3453	1.696
Antimony	123	20.33	19.9	19.75	**19.99**	0.3004	1.502
Arsenic	75	19.93	20.25	20.21	**20.13**	0.1732	0.8602
Beryllium	9	21.33	19.69	19.48	**20.17**	1.01	5.006
Cadmium	111	20.31	19.73	20.17	**20.07**	0.2993	1.491
Cadmium	114	20.49	19.92	19.75	**20.05**	0.3879	1.934
Chromium	52	21.62	21.07	21.36	**21.35**	0.2759	1.292
Chromium	53	21.88	21.22	21.54	**21.55**	0.3287	1.525
Cobalt	59	21.17	20.59	20.58	**20.78**	0.336	1.617
Copper	63	20.27	19.48	19.61	**19.79**	0.4248	2.146
Copper	65	19.79	19.24	19.36	**19.47**	0.2891	1.485
Lead	206	20.31	19.59	19.27	**19.72**	0.5308	2.691
Lead	207	20.49	19.49	19.48	**19.82**	0.578	2.916
Lead	208	20.36	19.52	19.53	**19.81**	0.4824	2.436
Molybdenum	95	20.55	20.24	20.12	**20.3**	0.2213	1.09
Molybdenum	97	20.34	20.15	19.78	**20.09**	0.284	1.414
Molybdenum	98	20.1	19.22	20.03	**19.78**	0.4897	2.476
Nickel	60	20.54	19.7	20.01	**20.08**	0.4237	2.11
Nickel	62	20.61	19.6	19.7	**19.97**	0.5601	2.805
Selenium	77	19.86	20.35	21.19	**20.47**	0.6719	3.283
Selenium	78	21.51	22.48	22	**22**	0.488	2.219
Selenium	82	21.38	20.52	21.44	**21.11**	0.5168	2.448
Silver	107	20.92	19.85	20.39	**20.39**	0.5362	2.63
Silver	109	21.03	20.22	20.17	**20.47**	0.4831	2.36
Thallium	203	19.82	20.13	19.6	**19.85**	0.2654	1.337
Thallium	205	19.97	19.26	19.32	**19.52**	0.3947	2.022
Zinc	66	19.67	19.87	19.08	**19.54**	0.4073	2.085
Zinc	67	20.08	20.14	19.89	**20.04**	0.1292	0.6446
Zinc	68	20.07	20.07	20.36	**20.17**	0.17	0.8428

Internal Standard Factors:

Lithium	6	1.079	1.049	1.104	**1.079**	n/a	n/a
Gallium	71	1.006	1.013	1.02	**1.006**	n/a	n/a
Indium	115	1.023	1.024	1.027	**1.023**	n/a	n/a
Lutetium	175	1.002	0.994	1.007	**1.002**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV2 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:47**					
Antimony	121	25.83	25.15	25.52	**25.5**	0.3363	1.319
Antimony	123	26.22	24.19	24.51	**24.98**	1.092	4.374
Arsenic	75	26.25	25.95	25.44	**25.88**	0.4068	1.572
Beryllium	9	25.77	26.54	25.3	**25.87**	0.6268	2.423
Cadmium	111	26.22	24.04	25.68	**25.32**	1.135	4.482
Cadmium	114	26.09	24.44	24.96	**25.16**	0.8409	3.342
Chromium	52	26.89	26.75	26.43	**26.69**	0.2355	0.8823
Chromium	53	26.77	26.72	26.82	**26.77**	0.0517	0.193
Cobalt	59	27.1	25.94	25.98	**26.34**	0.6592	2.503
Copper	63	26.52	25.1	24.6	**25.41**	0.9969	3.923
Copper	65	26.04	24.92	24.58	**25.18**	0.7658	3.041
Lead	206	25.82	24.72	24.67	**25.07**	0.6508	2.596
Lead	207	25.61	23.91	24.42	**24.65**	0.8711	3.534
Lead	208	25.6	24.65	24.42	**24.89**	0.6236	2.505
Molybdenum	95	25.85	24.54	25.19	**25.19**	0.6509	2.584
Molybdenum	97	25.77	24.92	25.06	**25.25**	0.4574	1.811
Molybdenum	98	25.71	24.58	24.73	**25**	0.6125	2.45
Nickel	60	26.61	25.45	25.19	**25.75**	0.7555	2.934
Nickel	62	26.45	24.75	24.73	**25.31**	0.9867	3.899
Selenium	77	25.82	25.44	26.68	**25.98**	0.6334	2.438
Selenium	78	26.53	27.21	27.27	**27.01**	0.4119	1.525
Selenium	82	26.65	25.97	26.61	**26.41**	0.3836	1.452
Silver	107	25.61	24.28	25.02	**24.97**	0.6648	2.663
Silver	109	25.93	23.89	25.21	**25.01**	1.031	4.121
Thallium	203	25.41	24.67	24.74	**24.94**	0.4066	1.63
Thallium	205	25.21	24.33	24.95	**24.83**	0.452	1.821
Zinc	66	25.43	25.24	24.34	**25**	0.5843	2.337
Zinc	67	25.68	25.52	24.29	**25.16**	0.7635	3.034
Zinc	68	25.92	25.87	25.1	**25.63**	0.4599	1.794

Internal Standard Factors:

Lithium	6	1.072	1.069	1.099	**1.072**	n/a	n/a
Gallium	71	1.025	1.029	1.015	**1.025**	n/a	n/a
Indium	115	1.041	1.012	1.053	**1.041**	n/a	n/a
Lutetium	175	1.014	1	1.003	**1.014**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:03**					
Antimony	121	0.0004	0.0002	0.0044	**0.0016**	0.0024	144.6
Antimony	123	-0.0015	-0.0013	0.0023	**-0.0001**	0.0021	1464
Arsenic	75	0.0777	0.0491	0.115	**0.0806**	0.033	40.96
Beryllium	9	-0.0023	0.0005	0.0002	**-0.0005**	0.0016	296.2
Cadmium	111	0.0014	0.0032	-0.0031	**0.0005**	0.0032	662
Cadmium	114	-0.0005	-0.0005	0.0005	**-0.0002**	0.0006	305.9
Chromium	52	-0.0102	-0.0273	-0.0188	**-0.0187**	0.0086	45.8
Chromium	53	0.0095	0.0023	0.0082	**0.0067**	0.0038	57.34
Cobalt	59	-0.002	0.0008	-0.0031	**-0.0014**	0.002	139.1
Copper	63	0.0087	-0.0073	0.0001	**0.0005**	0.008	1651
Copper	65	0.011	-0.0063	0.0027	**0.0025**	0.0086	349.6
Lead	206	-0.0031	0.0027	0.0002	**0**	0.0029	5847
Lead	207	-0.0031	-0.008	0.004	**-0.0024**	0.006	253.8
Lead	208	-0.0031	0.0031	0.0002	**0.0001**	0.0031	3653
Molybdenum	95	0.007	0.0027	0.0011	**0.0036**	0.0031	85.45
Molybdenum	97	0.0022	0.0053	0.0026	**0.0034**	0.0017	50.34
Molybdenum	98	0.0025	0.0005	0.0029	**0.002**	0.0013	64.82
Nickel	60	-0.0486	-0.0832	-0.0638	**-0.0652**	0.0174	26.62
Nickel	62	0.0864	0.0612	0.4753	**0.2076**	0.2322	111.8
Selenium	77	-0.1485	-0.0899	-0.0716	**-0.1033**	0.0402	38.88
Selenium	78	0.9226	1.095	1.184	**1.067**	0.1327	12.44
Selenium	82	0.1378	0.1004	0.3182	**0.1854**	0.1164	62.79
Silver	107	0.0123	0.0081	0.0071	**0.0091**	0.0028	30.35
Silver	109	0.0105	0.0087	0.0094	**0.0095**	0.0009	9.411
Thallium	203	-0.0003	0.0002	0.0011	**0.0003**	0.0007	222
Thallium	205	-0.0015	-0.0005	-0.0011	**-0.001**	0.0005	50.17
Zinc	66	-0.0071	-0.083	-0.0355	**-0.0419**	0.0384	91.61
Zinc	67	0.0157	0.0485	-0.0597	**0.0015**	0.0555	3739
Zinc	68	0.1048	0.0452	0.0832	**0.0778**	0.0302	38.82

Internal Standard Factors:

Lithium	6	1.021	0.993	1.008	**1.021**	n/a	n/a
Gallium	71	1.006	1.004	1.016	**1.006**	n/a	n/a
Indium	115	0.981	1.066	1.045	**0.981**	n/a	n/a
Lutetium	175	0.979	1.031	1.02	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:07**					
Antimony	121	0.0024	0.0047	-0.0018	**0.0018**	0.0033	188.3
Antimony	123	-0.002	0.0028	0.0021	**0.001**	0.0026	262.6
Arsenic	75	0.0636	0.0648	0.118	**0.0822**	0.0311	37.79
Beryllium	9	0.0007	0.0007	0.0002	**0.0005**	0.0003	50.43
Cadmium	111	0.0029	-0.0019	0.0028	**0.0013**	0.0028	220.1
Cadmium	114	0.0014	0.0076	0.0013	**0.0034**	0.0036	105.9
~~Chromium~~	~~52~~	~~0.0718~~	~~0.022~~	~~0.0409~~	~~**0.0449**~~	~~0.0251~~	~~56.04~~
Chromium	53	-0.0028	0.0095	0.0058	**0.0042**	0.0063	151.8
~~Cobalt~~	~~59~~	~~-0.0009~~	~~-0.0025~~	~~-0.0021~~	~~**-0.0018**~~	~~0.0008~~	~~45.96~~
Copper	63	0.0055	-0.0058	0.0017	**0.0005**	0.0057	1234
~~Copper~~	~~65~~	~~0.0028~~	~~-0.0001~~	~~0.0118~~	~~**0.0048**~~	~~0.0062~~	~~129.2~~
Lead	206	0.0011	0.0011	0.0067	**0.003**	0.0032	107
Lead	207	0.0044	0.0038	-0.0032	**0.0017**	0.0043	256
Lead	208	0.0029	-0.0029	0.0013	**0.0004**	0.003	713.3
Molybdenum	95	0.0052	-0.0001	0.0009	**0.002**	0.0028	143.1
Molybdenum	97	0.0033	0.0016	0.0058	**0.0036**	0.0022	60.15
Molybdenum	98	0.0045	-0.001	0.003	**0.0022**	0.0029	132.4
~~Nickel~~	~~60~~	~~-0.0599~~	~~-0.0634~~	~~-0.0906~~	~~**-0.0713**~~	~~0.0168~~	~~23.61~~
Nickel	62	0.0864	-0.0166	-0.0635	**0.0021**	0.0767	3627
Selenium	77	-0.0324	-0.1342	-0.0686	**-0.0784**	0.0516	65.85
Selenium	78	0.6664	1.062	0.839	**0.8558**	0.1984	23.18
Selenium	82	0.1752	0.082	0.3404	**0.1992**	0.1308	65.66
Silver	107	0.0068	0.006	0.0022	**0.005**	0.0025	49.51
Silver	109	0.005	0.0039	-0.0016	**0.0024**	0.0035	144.6
Thallium	203	0.0017	-0.0003	-0.0003	**0.0004**	0.0012	332.6
Thallium	205	0.0007	-0.0001	-0.0009	**-0.0001**	0.0008	863.4
~~Zinc~~	~~66~~	~~0.1052~~	~~0.082~~	~~0.082~~	~~**0.0898**~~	~~0.0134~~	~~14.94~~
Zinc	67	0.0874	0.062	0.0143	**0.0546**	0.0371	67.95
Zinc	68	0.1585	0.1028	0.1191	**0.1268**	0.0286	22.59

*See recalibration CCV/CCB out JC 3/20/07

Internal Standard Factors:

Lithium	6	1.009	0.976	1.008	**1.009**	n/a	n/a
Gallium	71	1.001	1.001	0.987	**1.001**	n/a	n/a
Indium	115	1.03	1.026	1.017	**1.03**	n/a	n/a
Lutetium	175	0.972	0.986	0.975	**0.972**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**K0701647-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:10**					
Antimony	121	0.9035	0.8981	0.8999	**0.9005**	0.0028	0.3071
Antimony	123	0.8365	0.8884	0.8591	**0.8614**	0.0261	3.024
Arsenic	75	1.049	1.075	1.177	**1.1**	0.0678	6.159
Beryllium	9	0.0005	-0.0015	-0.002	**-0.001**	0.0013	136
Cadmium	111	-0.0006	0.0069	0.0029	**0.0031**	0.0038	121.7
Cadmium	114	0.0011	0.0082	0.005	**0.0048**	0.0036	74.25
~~Chromium~~	~~52~~	~~1.148~~	~~1.031~~	~~1.064~~	~~**1.081**~~	~~0.0603~~	~~5.576~~
Chromium	53	1.502	1.489	1.456	**1.482**	0.0236	1.592
~~Cobalt~~	~~59~~	~~0.0644~~	~~0.0592~~	~~0.059~~	~~**0.0609**~~	~~0.0031~~	~~5.089~~
Copper	63	1.876	1.705	1.734	**1.772**	0.0913	5.153
~~Copper~~	~~65~~	~~1.816~~	~~1.632~~	~~1.67~~	~~**1.706**~~	~~0.097~~	~~5.685~~
Lead	206	0.0474	0.051	0.0488	**0.0491**	0.0018	3.657
Lead	207	0.0643	0.0628	0.052	**0.0597**	0.0067	11.17
Lead	208	0.0524	0.0538	0.0469	**0.051**	0.0037	7.215
Molybdenum	95	0.4423	0.454	0.4517	**0.4493**	0.0062	1.382
Molybdenum	97	0.4333	0.4803	0.411	**0.4415**	0.0354	8.01
Molybdenum	98	0.44	0.4277	0.4205	**0.4294**	0.0098	2.294
~~Nickel~~	~~60~~	~~1.902~~	~~1.718~~	~~1.729~~	~~**1.783**~~	~~0.103~~	~~5.778~~
Nickel	62	1.458	1.396	1.31	**1.388**	0.0739	5.326
Selenium	77	0.3138	0.0459	0.0309	**0.1302**	0.1592	122.3
Selenium	78	2.029	1.492	1.876	**1.799**	0.2767	15.38
Selenium	82	-0.0858	-0.0447	0.2963	**0.0553**	0.2097	379.3
Silver	107	-0.0009	-0.0003	-0.0037	**-0.0016**	0.0018	108.3
Silver	109	-0.002	-0.0007	-0.003	**-0.0019**	0.0011	58.88
Thallium	203	0.0014	0.002	0.0001	**0.0012**	0.0009	79.35
Thallium	205	0.0008	0	-0.0001	**0.0003**	0.0005	178.9
~~Zinc~~	~~66~~	~~4.432~~	~~4.045~~	~~3.892~~	~~**4.123**~~	~~0.2784~~	~~6.752~~
Zinc	67	4.211	4.469	4.297	**4.326**	0.1315	3.041
Zinc	68	4.656	4.513	4.688	**4.619**	0.0934	2.021

*Std Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.074	1.012	1.009	**1.074**	n/a	n/a
Gallium	71	1.052	1.031	1	**1.052**	n/a	n/a
Indium	115	1.061	1.07	1.028	**1.061**	n/a	n/a
Lutetium	175	1.003	1.028	1.002	**1.003**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:13**					
Antimony	121	0.9389	0.8212	0.843	**0.8677**	0.0626	7.217
Antimony	123	0.8821	0.8256	0.8571	**0.8549**	0.0283	3.314
Arsenic	75	1.13	1.169	1.243	**1.181**	0.0576	4.876
Beryllium	9	-0.0057	-0.0023	0.0029	**-0.0017**	0.0043	255.5
Cadmium	111	0.0031	0.012	0.0095	**0.0082**	0.0046	56.24
Cadmium	114	0.0037	0.0023	-0.0015	**0.0015**	0.0027	175.8
~~Chromium~~	~~52~~	~~0.9646~~	~~1.046~~	~~0.987~~	~~**0.9992**~~	~~0.0422~~	~~4.22~~
Chromium	53	1.502	1.432	1.496	**1.477**	0.0388	2.625
~~Cobalt~~	~~59~~	~~0.0595~~	~~0.0589~~	~~0.0614~~	~~**0.0599**~~	~~0.0013~~	~~2.164~~
Copper	63	1.736	1.71	1.707	**1.718**	0.0162	0.9434
~~Copper~~	~~65~~	~~1.765~~	~~1.552~~	~~1.578~~	~~**1.632**~~	~~0.1161~~	~~7.117~~
Lead	206	0.0461	0.042	0.048	**0.0454**	0.0031	6.85
Lead	207	0.0515	0.0325	0.0328	**0.0389**	0.0109	28
Lead	208	0.0524	0.0424	0.0436	**0.0462**	0.0055	11.83
Molybdenum	95	0.4678	0.4341	0.4587	**0.4535**	0.0174	3.843
Molybdenum	97	0.4397	0.4219	0.4251	**0.4289**	0.0095	2.218
Molybdenum	98	0.4556	0.4171	0.4129	**0.4286**	0.0236	5.494
~~Nickel~~	~~60~~	~~1.761~~	~~1.778~~	~~1.65~~	~~**1.73**~~	~~0.0694~~	~~4.01~~
Nickel	62	1.352	1.269	1.258	**1.293**	0.0517	3.994
Selenium	77	0.1428	0.1208	0.1061	**0.1233**	0.0185	14.98
Selenium	78	1.845	1.967	2.049	**1.954**	0.1029	5.269
Selenium	82	0.2242	0.2921	0.3111	**0.2758**	0.0457	16.57
Silver	107	-0.0034	-0.0076	-0.0008	**-0.0039**	0.0034	87.31
Silver	109	-0.0018	-0.0033	-0.0069	**-0.004**	0.0026	65.34
Thallium	203	0.0006	0.0025	0.0009	**0.0014**	0.001	73.05
Thallium	205	-0.0002	-0.0003	0.0018	**0.0005**	0.0012	249.1
~~Zinc~~	~~66~~	~~3.499~~	~~3.435~~	~~3.534~~	~~**3.489**~~	~~0.05~~	~~1.432~~
Zinc	67	3.993	4.078	3.994	**4.022**	0.0488	1.213
Zinc	68	3.985	4.044	4.033	**4.02**	0.0317	0.7891

X see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	0.982	1.019	1.042	**0.982**	n/a	n/a
Gallium	71	1.024	1.026	1.023	**1.024**	n/a	n/a
Indium	115	1.051	1.074	1.078	**1.051**	n/a	n/a
Lutetium	175	1.026	1.048	0.986	**1.026**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001L 1/5**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:20**					
Antimony	121	0.1964	0.1883	0.1686	**0.1844**	0.0143	7.774
Antimony	123	0.1768	0.1716	0.1775	**0.1753**	0.0032	1.846
Arsenic	75	0.3009	0.2344	0.325	**0.2867**	0.0469	16.36
Beryllium	9	-0.0004	-0.0038	-0.0008	**-0.0016**	0.0018	112.2
Cadmium	111	0.004	-0.0006	-0.0006	**0.0009**	0.0027	287.7
Cadmium	114	0.0013	-0.0006	0.0043	**0.0017**	0.0025	149.2
~~Chromium~~	~~52~~	~~0.244~~	~~0.2412~~	~~0.2107~~	~~**0.232**~~	~~0.0185~~	~~7.972~~
Chromium	53	0.3352	0.3156	0.3039	**0.3182**	0.0158	4.965
~~Cobalt~~	~~59~~	~~0.0172~~	~~0.0089~~	~~0.012~~	~~**0.0127**~~	~~0.0042~~	~~32.74~~
Copper	63	0.4248	0.3461	0.3418	**0.3709**	0.0468	12.61
~~Copper~~	~~65~~	~~0.3873~~	~~0.3773~~	~~0.3364~~	~~**0.367**~~	~~0.027~~	~~7.344~~
Lead	206	0.0108	0.0185	0.0179	**0.0157**	0.0043	27.23
Lead	207	0.0113	0.0039	0.0145	**0.0099**	0.0054	54.66
Lead	208	0.0115	0.0133	0.0132	**0.0127**	0.001	7.898
Molybdenum	95	0.1064	0.0809	0.0942	**0.0938**	0.0127	13.58
Molybdenum	97	0.1207	0.0888	0.0918	**0.1004**	0.0176	17.53
Molybdenum	98	0.1078	0.0813	0.084	**0.091**	0.0146	16.01
~~Nickel~~	~~60~~	~~0.4848~~	~~0.3393~~	~~0.3111~~	~~**0.3784**~~	~~0.0932~~	~~24.64~~
Nickel	62	0.5136	0.2224	0.3531	**0.363**	0.1458	40.17
Selenium	77	0.0034	-0.0666	0.0419	**-0.0071**	0.055	773
Selenium	78	1.124	1.689	1.396	**1.403**	0.2827	20.16
Selenium	82	0.303	-0.0451	0.4315	**0.2298**	0.2466	107.3
Silver	107	-0.0048	-0.0051	-0.0071	**-0.0056**	0.0012	22.14
Silver	109	-0.0024	-0.0038	-0.0055	**-0.0039**	0.0015	39.3
Thallium	203	0.0022	0.0019	-0.0003	**0.0013**	0.0014	107
Thallium	205	-0.0013	-0.0006	-0.0004	**-0.0008**	0.0005	62.84
~~Zinc~~	~~66~~	~~1.03~~	~~0.8257~~	~~0.8247~~	~~**0.8935**~~	~~0.1183~~	~~13.24~~
Zinc	67	1.083	0.8753	0.894	**0.9508**	0.115	12.1
Zinc	68	1.092	1.113	1.046	**1.084**	0.0344	3.173

*see recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.031	1.007	1.087	**1.031**	n/a	n/a
Gallium	71	1.054	1.044	1.01	**1.054**	n/a	n/a
Indium	115	1.015	1.045	1.057	**1.015**	n/a	n/a
Lutetium	175	0.99	1.004	1.001	**0.99**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001A +20,+10Ag**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:23**					
Antimony	121	21.77	21.63	21.79	**21.73**	0.0849	0.3909
Antimony	123	21.88	21.61	21	**21.5**	0.4499	2.093
Arsenic	75	22.84	22.29	23.66	**22.93**	0.6875	2.998
Beryllium	9	19.81	20.18	20.65	**20.21**	0.4197	2.077
Cadmium	111	21.07	20.6	20.44	**20.7**	0.3302	1.595
Cadmium	114	21.13	20.46	20.46	**20.68**	0.39	1.886
~~Chromium~~	~~52~~	~~22.42~~	~~22.74~~	~~22.72~~	~~**22.63**~~	~~0.1768~~	~~0.7815~~ X
Chromium	53	23.49	23.3	22.89	**23.22**	0.3045	1.311
~~Cobalt~~	~~59~~	~~21.73~~	~~20.66~~	~~20.56~~	~~**20.98**~~	~~0.6478~~	~~3.087~~ X
Copper	63	22.33	21.11	20.73	**21.39**	0.8363	3.91
~~Copper~~	~~65~~	~~22.14~~	~~20.6~~	~~20.87~~	~~**21.2**~~	~~0.8247~~	~~3.89~~ X
Lead	206	19.9	19.56	19.26	**19.57**	0.3212	1.641
Lead	207	19.69	19.46	19.75	**19.63**	0.1509	0.7687
Lead	208	19.9	19.46	19.46	**19.61**	0.2539	1.295
Molybdenum	95	21.36	21.33	20.49	**21.06**	0.4917	2.335
Molybdenum	97	21.6	20.46	20.88	**20.98**	0.577	2.75
Molybdenum	98	21.21	20.28	20.18	**20.56**	0.5655	2.751
~~Nickel~~	~~60~~	~~22.7~~	~~22.04~~	~~21.41~~	~~**22.05**~~	~~0.6429~~	~~2.915~~ X
Nickel	62	22.24	21.28	20.98	**21.5**	0.6581	3.061
Selenium	77	20.96	21.43	20.71	**21.03**	0.3636	1.729
Selenium	78	23.04	23.26	24.08	**23.46**	0.5481	2.336
Selenium	82	21.85	21.84	23.23	**22.3**	0.8012	3.592
Silver	107	9.489	9.378	9.345	**9.404**	0.0754	0.8018
Silver	109	9.441	9.604	9.296	**9.447**	0.1541	1.631
Thallium	203	19.71	19.7	19.41	**19.61**	0.1718	0.8761
Thallium	205	19.26	19.3	19.61	**19.39**	0.1915	0.9872
~~Zinc~~	~~66~~	~~24.61~~	~~23.55~~	~~23.7~~	~~**23.95**~~	~~0.5769~~	~~2.409~~ X
Zinc	67	25.25	24.94	24.12	**24.77**	0.5845	2.36
Zinc	68	25.75	24.43	25.14	**25.11**	0.6579	2.62

* see Recalibration SC 3/20/07

Internal Standard Factors:

Lithium	6	1.035	1.091	1.049	**1.035**	n/a	n/a
Gallium	71	1.075	1.04	1.015	**1.075**	n/a	n/a
Indium	115	1.053	1.051	1.018	**1.053**	n/a	n/a
Lutetium	175	1.027	1.024	1.012	**1.027**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001S**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 13:27**						
Antimony	121	21.24	21.52	21.62	**21.46**	0.1992	0.9282	
Antimony	123	21.32	21.79	21.07	**21.39**	0.3622	1.693	
Arsenic	75	22.91	23.44	22.2	**22.85**	0.6224	2.723	
Beryllium	9	20.21	19.21	21.38	**20.27**	1.086	5.361	
Cadmium	111	20.03	19.6	19.4	**19.68**	0.324	1.646	
Cadmium	114	20.41	19.9	19.95	**20.09**	0.2786	1.387	
~~Chromium~~	~~52~~	~~22.81~~	~~22.15~~	~~23.2~~	~~**22.72**~~	~~0.5318~~	~~2.34~~	*
Chromium	53	24	22.94	23.66	**23.53**	0.5401	2.295	
~~Cobalt~~	~~59~~	~~21.87~~	~~20~~	~~20.67~~	~~**20.85**~~	~~0.949~~	~~4.552~~	*
Copper	63	21.85	20.49	20.69	**21.01**	0.7358	3.502	
Copper	65	21.59	20.76	20.65	**21**	0.5128	2.442	
Lead	206	18.74	19.74	18.82	**19.1**	0.557	2.916	
Lead	207	19	19.54	18.9	**19.15**	0.3457	1.806	
Lead	208	18.92	19.57	18.99	**19.16**	0.3592	1.874	
Molybdenum	95	22.23	21.01	21.13	**21.45**	0.6738	3.141	
Molybdenum	97	21.3	20.59	20.89	**20.93**	0.3554	1.698	
Molybdenum	98	20.78	19.86	20.32	**20.32**	0.4571	2.25	
~~Nickel~~	~~60~~	~~22.29~~	~~20.75~~	~~21.41~~	~~**21.48**~~	~~0.7752~~	~~3.609~~	*
Nickel	62	21.5	20.38	20.63	**20.84**	0.585	2.808	
Selenium	77	20.84	20.11	22.44	**21.13**	1.189	5.629	
Selenium	78	22.4	22.99	23.5	**22.96**	0.5511	2.4	
Selenium	82	20.59	22.6	20.99	**21.39**	1.066	4.981	
Silver	107	18.93	18.27	18.39	**18.53**	0.3508	1.894	
Silver	109	19.13	18.82	19.03	**18.99**	0.1595	0.8398	
Thallium	203	18.73	19.49	19.06	**19.09**	0.3804	1.992	
Thallium	205	18.36	19.56	19.01	**18.98**	0.5975	3.149	
~~Zinc~~	~~66~~	~~23.62~~	~~23.14~~	~~23.46~~	~~**23.41**~~	~~0.2417~~	~~1.033~~	*
Zinc	67	25.19	24.02	23.66	**24.29**	0.8011	3.298	
Zinc	68	25.27	24.48	23.97	**24.57**	0.6572	2.674	

*See Recalibration 3c 3/20/07

Internal Standard Factors:

Lithium	6	1.073	1.007	1.142	**1.073**	n/a	n/a
Gallium	71	1.058	1.033	1.04	**1.058**	n/a	n/a
Indium	115	1.038	1.032	1.031	**1.038**	n/a	n/a
Lutetium	175	0.974	1.025	1.013	**0.974**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:30**					
Antimony	121	20.28	20.35	21.05	**20.56**	0.4258	2.071
Antimony	123	20.18	20.15	20.21	**20.18**	0.0343	0.1697
Arsenic	75	20.36	20.2	20.29	**20.28**	0.0758	0.3736
Beryllium	9	19.63	21.15	20.16	**20.31**	0.7706	3.794
Cadmium	111	19.7	19.79	18.95	**19.48**	0.4633	2.378
Cadmium	114	20.07	19.69	19.25	**19.67**	0.4073	2.07
~~Chromium~~	~~52~~	~~21.54~~	~~21.36~~	~~21.26~~	~~**21.39**~~	~~0.1447~~	~~0.6767~~
Chromium	53	22.18	21.35	21.64	**21.72**	0.4212	1.939
~~Cobalt~~	~~59~~	~~21.01~~	~~20.23~~	~~19.7~~	~~**20.31**~~	~~0.6597~~	~~3.247~~
Copper	63	20.11	19.18	18.89	**19.4**	0.6377	3.288
~~Copper~~	~~65~~	~~19.95~~	~~19.12~~	~~18.81~~	~~**19.29**~~	~~0.5901~~	~~3.058~~
Lead	206	20.5	19.46	19.77	**19.91**	0.5323	2.673
Lead	207	19.75	20.02	19.94	**19.9**	0.139	0.6984
Lead	208	20.33	19.79	19.84	**19.99**	0.2987	1.494
Molybdenum	95	20.46	19.95	20.05	**20.15**	0.27	1.34
Molybdenum	97	20.74	20.07	19.46	**20.09**	0.6404	3.187
Molybdenum	98	20.35	19.7	19.57	**19.87**	0.4217	2.122
~~Nickel~~	~~60~~	~~20.27~~	~~19.6~~	~~19.13~~	~~**19.67**~~	~~0.5758~~	~~2.927~~
Nickel	62	20.28	18.92	18.53	**19.25**	0.9191	4.775
Selenium	77	20.61	19.74	20.38	**20.24**	0.4523	2.234
Selenium	78	22.24	22.19	21.59	**22.01**	0.3597	1.634
Selenium	82	20.79	21.42	20.99	**21.07**	0.3236	1.536
Silver	107	19.57	18.93	18.62	**19.04**	0.4841	2.543
Silver	109	19.46	18.64	18.82	**18.97**	0.4355	2.295
Thallium	203	20.03	19.61	19.98	**19.87**	0.2301	1.158
Thallium	205	19.91	18.96	19.65	**19.51**	0.4895	2.509
~~Zinc~~	~~66~~	~~19.94~~	~~19.69~~	~~18.82~~	~~**19.48**~~	~~0.5864~~	~~3.009~~
Zinc	67	20.75	19.92	19.69	**20.12**	0.5551	2.759
Zinc	68	20.66	19.99	19.09	**19.91**	0.7896	3.965

*see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.051	1.094	1.038	**1.051**	n/a	n/a
Gallium	71	1.019	1	1.006	**1.019**	n/a	n/a
Indium	115	1.013	1.015	0.994	**1.013**	n/a	n/a
Lutetium	175	1.03	1.003	1.022	**1.03**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:38**					
Antimony	121	0.0633	0.0745	0.0607	**0.0662**	0.0073	11.06
Antimony	123	0.0598	0.0684	0.0698	**0.066**	0.0054	8.218
Arsenic	75	7.087	6.96	6.936	**6.994**	0.081	1.158
Beryllium	9	-0.0017	0.0068	0.0041	**0.0031**	0.0043	140.8
Cadmium	111	0.815	0.79	0.8429	**0.816**	0.0265	3.243
Cadmium	114	0.8159	0.7599	0.749	**0.775**	0.0359	4.633
~~Chromium~~	~~52~~	~~0.7575~~	~~0.7668~~	~~0.7939~~	**0.7727**	0.0189	2.445
Chromium	53	33.06	32.55	33.57	**33.06**	0.5109	1.545
~~Cobalt~~	~~59~~	~~0.4955~~	~~0.4626~~	~~0.4682~~	**0.4754**	0.0176	3.705
Copper	63	4.217	3.667	3.636	**3.84**	0.3271	8.52
~~Copper~~	~~65~~	~~1.481~~	~~1.353~~	~~1.358~~	**1.397**	0.0727	5.2
Lead	206	0.1875	0.2008	0.1859	**0.1914**	0.0082	4.271
Lead	207	0.2098	0.1989	0.2036	**0.2041**	0.0055	2.7
Lead	208	0.1907	0.1979	0.203	**0.1972**	0.0062	3.131
Molybdenum	95	0.3181	0.2839	0.3181	**0.3067**	0.0197	6.429
Molybdenum	97	0.4629	0.4624	0.4278	**0.451**	0.0202	4.468
Molybdenum	98	0.0668	0.0771	0.0578	**0.0672**	0.0097	14.37
~~Nickel~~	~~60~~	~~16.42~~	~~14.68~~	~~14.61~~	**15.23**	~~1.027~~	~~6.743~~
Nickel	62	10.21	9.294	9.114	**9.538**	0.5851	6.135
Selenium	77	11.32	11.29	12.43	**11.68**	0.6491	5.558
Selenium	78	3.841	3.893	4.535	**4.09**	0.3865	9.451
Selenium	82	24.67	24.62	25.27	**24.85**	0.3607	1.451
Silver	107	0.1457	0.1297	0.1259	**0.1338**	0.0105	7.864
Silver	109	0.1231	0.1396	0.1412	**0.1346**	0.01	7.442
Thallium	203	0.021	0.0156	0.0234	**0.02**	0.004	19.99
Thallium	205	0.0165	0.0191	0.0196	**0.0184**	0.0017	9.069
~~Zinc~~	~~66~~	~~634.1~~	~~582.2~~	~~580.6~~	**599**	~~30.45~~	~~5.083~~
Zinc	67	561.2	517.8	518.6	**532.5**	24.83	4.663
Zinc	68	617.9	572.5	564.4	**584.9**	28.85	4.932

see recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.416	1.392	1.432	**1.416**	n/a	n/a
Gallium	71	1.702	1.666	1.627	**1.702**	n/a	n/a
Indium	115	1.556	1.628	1.572	**1.556**	n/a	n/a
Lutetium	175	1.336	1.407	1.408	**1.336**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701703-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:41**					
Antimony	121	0.0325	0.0227	0.0251	**0.0268**	0.0051	19.03
Antimony	123	0.026	0.0179	0.0218	**0.0219**	0.004	18.37
Arsenic	75	0.9639	1.04	0.9697	**0.9912**	0.0423	4.272
Beryllium	9	0.0004	-0.0034	0.0018	**-0.0004**	0.0027	680.6
Cadmium	111	0.0284	0.0256	0.0132	**0.0224**	0.0081	36.2
Cadmium	114	0.026	0.0196	0.025	**0.0235**	0.0035	14.67
~~Chromium~~	~~52~~	~~0.4433~~	~~0.4932~~	~~0.4596~~	~~**0.4654**~~	~~0.0254~~	~~5.462~~
Chromium	53	7.194	7.133	6.392	**6.907**	0.4466	6.466
~~Cobalt~~	~~59~~	~~0.3647~~	~~0.3704~~	~~0.3417~~	~~**0.3589**~~	~~0.0152~~	~~4.221~~
Copper	63	0.74	0.6983	0.6478	**0.6954**	0.0462	6.643
~~Copper~~	~~65~~	~~0.463~~	~~0.4327~~	~~0.4195~~	~~**0.4384**~~	~~0.0223~~	~~5.083~~
Lead	206	0.0095	0.0086	0.0164	**0.0115**	0.0043	37.21
Lead	207	0.0083	0.0095	0.002	**0.0066**	0.004	60.53
Lead	208	0.0108	0.0071	0.0097	**0.0092**	0.0019	20.63
Molybdenum	95	2.43	2.402	2.364	**2.399**	0.0331	1.379
Molybdenum	97	2.443	2.376	2.184	**2.334**	0.1342	5.75
Molybdenum	98	2.415	2.319	2.296	**2.343**	0.0629	2.685
~~Nickel~~	~~60~~	~~3.562~~	~~3.684~~	~~3.393~~	~~**3.546**~~	~~0.1461~~	~~4.119~~
Nickel	62	0.9965	0.7972	0.6862	**0.8266**	0.1573	19.02
Selenium	77	1.435	1.302	1.21	**1.316**	0.1132	8.603
Selenium	78	3.779	3.518	3.643	**3.647**	0.1307	3.585
Selenium	82	1.867	2.062	1.643	**1.857**	0.2093	11.27
Silver	107	-0.0028	0.0002	-0.0034	**-0.002**	0.0019	94.62
Silver	109	-0.0004	-0.0047	-0.0062	**-0.0038**	0.003	80.41
Thallium	203	0.0033	0.0013	0.003	**0.0025**	0.001	41.05
Thallium	205	0.0035	0.0009	0.0034	**0.0026**	0.0015	56.63
~~Zinc~~	~~66~~	~~9.633~~	~~9.233~~	~~9.016~~	~~**9.294**~~	~~0.3129~~	~~3.366~~
Zinc	67	15.8	15.98	15.59	**15.79**	0.1958	1.24
Zinc	68	14.37	14.11	13.72	**14.07**	0.3292	2.34

*See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.25	1.26	1.225	**1.25**	n/a	n/a
Gallium	71	1.361	1.375	1.357	**1.361**	n/a	n/a
Indium	115	1.313	1.326	1.329	**1.313**	n/a	n/a
Lutetium	175	1.211	1.259	1.264	**1.211**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 13:45**						
Antimony	121	0.1522	0.1789	0.1746	**0.1686**	0.0143	8.497	
Antimony	123	0.1629	0.1488	0.1475	**0.1531**	0.0086	5.59	
Arsenic	75	8.293	8.279	8.478	**8.35**	0.1111	1.33	
Beryllium	9	0.132	0.1424	0.1371	**0.1372**	0.0052	3.792	
Cadmium	111	0.0438	0.072	0.0513	**0.0557**	0.0146	26.3	
Cadmium	114	0.0553	0.0664	0.0565	**0.0594**	0.0061	10.25	
~~Chromium~~	~~52~~	~~4.203~~	~~4.246~~	~~4.234~~	~~**4.228**~~	~~0.0226~~	~~0.5334~~	✓
Chromium	53	6.784	6.499	6.379	**6.554**	0.2079	3.172	
~~Cobalt~~	~~59~~	~~2.204~~	~~2.113~~	~~2.128~~	~~**2.148**~~	~~0.0491~~	~~2.287~~	✓
Copper	63	7.789	7.301	7.38	**7.49**	0.2621	3.499	
~~Copper~~	~~65~~	~~6.806~~	~~6.57~~	~~6.443~~	~~**6.606**~~	~~0.1844~~	~~2.792~~	✓
Lead	206	1.211	1.228	1.2	**1.213**	0.0143	1.18	
Lead	207	1.374	1.339	1.35	**1.354**	0.0181	1.335	
Lead	208	1.329	1.282	1.302	**1.304**	0.0233	1.783	
Molybdenum	95	6.185	6.163	6.001	**6.116**	0.1005	1.643	
Molybdenum	97	5.957	6.231	6.021	**6.07**	0.1433	2.36	
Molybdenum	98	6.063	5.994	5.787	**5.948**	0.1435	2.413	
~~Nickel~~	~~60~~	~~3.821~~	~~3.618~~	~~3.65~~	~~**3.696**~~	~~0.1093~~	~~2.956~~	✓
Nickel	62	4.907	4.707	4.757	**4.79**	0.1044	2.18	
Selenium	77	1.183	0.9907	1.07	**1.081**	0.0965	8.927	
Selenium	78	1.768	2.229	1.789	**1.929**	0.26	13.48	
Selenium	82	0.8331	0.849	0.9898	**0.8906**	0.0862	9.682	
Silver	107	0.0398	0.0445	0.0396	**0.0413**	0.0028	6.782	
Silver	109	0.0329	0.036	0.0284	**0.0324**	0.0038	11.76	
Thallium	203	0.016	0.0182	0.0195	**0.0179**	0.0018	10.1	
Thallium	205	0.017	0.0117	0.0126	**0.0138**	0.0028	20.37	
~~Zinc~~	~~66~~	~~7.971~~	~~7.61~~	~~7.71~~	~~**7.764**~~	~~0.1866~~	~~2.404~~	✓
Zinc	67	12.07	11.11	11.98	**11.72**	0.5294	4.517	
Zinc	68	9.152	9.131	8.916	**9.066**	0.1309	1.444	

✓ see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.336	1.371	1.334	**1.336**	n/a	n/a
Gallium	71	1.32	1.351	1.33	**1.32**	n/a	n/a
Indium	115	1.272	1.384	1.31	**1.272**	n/a	n/a
Lutetium	175	1.163	1.207	1.196	**1.163**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:08**					
Antimony	121	25.46	25.5	24.84	**25.27**	0.37	1.464
Antimony	123	24.42	24.79	24.64	**24.62**	0.1838	0.7465
Arsenic	75	24.81	25.45	26.27	**25.51**	0.7317	2.868
Beryllium	9	24.25	23.34	24.61	**24.07**	0.6526	2.712
Cadmium	111	25.77	25.65	25.82	**25.75**	0.0893	0.347
Cadmium	114	25.18	25.12	25.62	**25.31**	0.2761	1.091
Chromium	52	28.25	28.32	29.33	**28.63**	0.6028	2.105
Chromium	53	30.19	30.15	30.86	**30.4**	0.4	1.316
Cobalt	59	30.2	28.66	28.91	**29.26**	0.8304	2.838
Copper	63	27.97	26.53	26.44	**26.98**	0.8602	3.188
Copper	65	27.05	25.87	25.39	**26.1**	0.8537	3.271
Lead	206	23.98	25.11	24.86	**24.65**	0.594	2.41
Lead	207	24.63	25.33	24.85	**24.94**	0.3608	1.447
Lead	208	24.54	25.04	25.21	**24.93**	0.3516	1.41
Molybdenum	95	26.4	26.09	26.98	**26.49**	0.4531	1.711
Molybdenum	97	26.87	26.6	26.09	**26.52**	0.3951	1.49
Molybdenum	98	26.22	26.23	25.78	**26.08**	0.2609	1
Nickel	60	29.72	27.87	27.56	**28.38**	1.169	4.12
Nickel	62	28.79	27.21	27.04	**27.68**	0.9662	3.491
Selenium	77	24.84	24.66	25.66	**25.05**	0.5308	2.118
Selenium	78	24.99	25.89	27.87	**26.25**	1.474	5.614
Selenium	82	24.25	26.34	27.22	**25.94**	1.529	5.895
Silver	107	25.92	25.71	25.2	**25.61**	0.3744	1.462
Silver	109	25.43	25.64	24.95	**25.34**	0.3552	1.402
Thallium	203	24.68	24.83	24.82	**24.78**	0.08	0.3229
Thallium	205	25.04	25.17	24.61	**24.94**	0.2949	1.183
Zinc	66	26.39	25.68	25.32	**25.8**	0.5464	2.118
Zinc	67	26.98	25.6	25.59	**26.06**	0.8007	3.072
Zinc	68	26.02	25.62	25.49	**25.71**	0.2748	1.069

Internal Standard Factors:

Lithium	6	1.283	1.235	1.205	**1.283**	n/a	n/a
Gallium	71	1.186	1.187	1.185	**1.186**	n/a	n/a
Indium	115	1.135	1.178	1.158	**1.135**	n/a	n/a
Lutetium	175	1.054	1.096	1.089	**1.054**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:12**					
Antimony	121	24.4	25.76	25.32	**25.16**	0.6935	2.756
Antimony	123	23.9	25.26	25.44	**24.87**	0.843	3.39
Arsenic	75	25.76	25.6	26.17	**25.85**	0.2921	1.13
Beryllium	9	24.43	25.55	24.79	**24.92**	0.5686	2.282
Cadmium	111	25.55	25.79	25.75	**25.7**	0.1284	0.4999
Cadmium	114	25.47	25.62	25.64	**25.58**	0.0907	0.3547
Chromium	52	28.67	29.49	29.45	**29.2**	0.4603	1.576
Chromium	53	30.72	31.13	30.59	**30.82**	0.2825	0.9168
Cobalt	59	31.02	29.61	29.26	**29.96**	0.9316	3.109
Copper	63	28.48	27.49	26.77	**27.58**	0.8577	3.11
Copper	65	27.06	26.38	25.79	**26.39**	0.6395	2.423
Lead	206	25.16	25.84	25.26	**25.42**	0.3693	1.453
Lead	207	25.18	25.75	24.88	**25.27**	0.4432	1.754
Lead	208	24.99	25.59	24.85	**25.14**	0.3929	1.563
Molybdenum	95	26.97	26.83	27.28	**27.03**	0.2282	0.8443
Molybdenum	97	26.85	26.64	27.02	**26.84**	0.1881	0.7011
Molybdenum	98	26.79	26.27	26.04	**26.37**	0.3823	1.45
Nickel	60	30.1	29.14	28.48	**29.24**	0.8118	2.776
Nickel	62	29.37	27.33	27.28	**27.99**	1.192	4.259
Selenium	77	23.75	25.21	26.57	**25.18**	1.409	5.597
Selenium	78	25.35	26.62	26.27	**26.08**	0.6527	2.503
Selenium	82	25.62	26.88	27.23	**26.57**	0.8438	3.175
Silver	107	26.59	25.74	25.27	**25.86**	0.6702	2.591
Silver	109	26.09	25.8	25.18	**25.69**	0.4661	1.814
Thallium	203	24.64	25.48	25.15	**25.09**	0.4235	1.688
Thallium	205	25.08	25.31	25.38	**25.26**	0.1566	0.62
Zinc	66	27.34	26.7	26.16	**26.73**	0.589	2.203
Zinc	67	27.02	26.88	26.49	**26.8**	0.2757	1.029
Zinc	68	26.82	26.03	26.46	**26.43**	0.3951	1.495

Not needed
JC
3/20/07

Internal Standard Factors:

Lithium	6	1.253	1.321	1.261	**1.253**	n/a	n/a
Gallium	71	1.165	1.191	1.187	**1.165**	n/a	n/a
Indium	115	1.118	1.169	1.164	**1.118**	n/a	n/a
Lutetium	175	1.052	1.1	1.097	**1.052**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:20**					
Antimony	121	0.0009	0.0011	-0.0006	**0.0005**	0.0009	191
Antimony	123	0.0022	0.0046	0.0051	**0.004**	0.0016	39.87
Arsenic	75	0.0638	0.0508	-0.0034	**0.037**	0.0357	96.27
Beryllium	9	0.0091	0.0083	0.0032	**0.0069**	0.0032	46.95
Cadmium	111	-0.0015	0.0001	0.0027	**0.0004**	0.0021	530.9
Cadmium	114	0.0046	-0.0007	0.0015	**0.0018**	0.0027	151.5
Chromium	52	0.0754	0.0952	0.0645	**0.0784**	0.0156	19.85
Chromium	53	0.0977	0.125	0.0788	**0.1005**	0.0232	23.09
Cobalt	59	0.003	0.0042	0.0037	**0.0036**	0.0006	15.57
Copper	63	0.0891	0.0848	0.0659	**0.0799**	0.0123	15.44
Copper	65	0.0811	0.0649	0.0699	**0.072**	0.0083	11.54
Lead	206	0.0062	0.0137	0.0079	**0.0092**	0.0039	42.24
Lead	207	0.0069	0.0152	0.0112	**0.0111**	0.0042	37.41
Lead	208	0.0063	0.0108	0.0077	**0.0082**	0.0023	28.28
Molybdenum	95	0.0086	0.0127	0.0046	**0.0086**	0.0041	47.44
Molybdenum	97	0.0096	0.0069	0.013	**0.0098**	0.003	30.84
Molybdenum	98	0.0111	0.0084	0.0062	**0.0086**	0.0024	28.29
Nickel	60	0.0631	0.0291	0.0318	**0.0413**	0.0189	45.67
Nickel	62	0.068	0.1286	0.2177	**0.1381**	0.0753	54.5
Selenium	77	0.0434	-0.0779	-0.0282	**-0.0209**	0.061	291.8
Selenium	78	-0.3431	0.1214	0.4682	**0.0822**	0.4071	495.3
Selenium	82	0.2725	0.0972	-0.0575	**0.104**	0.1651	158.7
Silver	107	0.0427	0.0339	0.0294	**0.0353**	0.0068	19.16
Silver	109	0.0399	0.0273	0.0216	**0.0296**	0.0094	31.8
Thallium	203	0.0026	-0.0001	0.0028	**0.0018**	0.0016	91.15
Thallium	205	-0.0006	-0.0003	0.0002	**-0.0002**	0.0004	162.4
Zinc	66	0.7394	0.5353	0.6368	**0.6372**	0.102	16.01
Zinc	67	0.8343	0.5703	0.7231	**0.7092**	0.1326	18.69
Zinc	68	0.6448	0.573	0.5162	**0.578**	0.0644	11.15

See Rerun
Not needed
JC
3/20/07

Internal Standard Factors:

Lithium	6	1.249	1.268	1.211	**1.249**	n/a	n/a
Gallium	71	1.202	1.19	1.201	**1.202**	n/a	n/a
Indium	115	1.125	1.194	1.167	**1.125**	n/a	n/a
Lutetium	175	1.071	1.093	1.117	**1.071**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:26**					
Antimony	121	0.0024	0.0021	0	**0.0015**	0.0013	89.44
Antimony	123	-0.0018	-0.0009	0.001	**-0.0006**	0.0014	258
Arsenic	75	-0.0441	0.0429	0.0801	**0.0263**	0.0638	242.4
Beryllium	9	0.0075	0.001	-0.0005	**0.0027**	0.0042	159.7
Cadmium	111	-0.0002	0	-0.0028	**-0.001**	0.0015	153
Cadmium	114	0.0045	0.001	0.0003	**0.0019**	0.0023	119.4
Chromium	52	0.0896	0.0601	0.1233	**0.091**	0.0316	34.78
Chromium	53	0.0936	0.1005	0.0412	**0.0784**	0.0324	41.31
Cobalt	59	0.0027	0.0007	-0.0005	**0.001**	0.0016	167.8
Copper	63	0.079	0.072	0.0669	**0.0726**	0.0061	8.387
Copper	65	0.0884	0.0546	0.0523	**0.0651**	0.0202	31.03
Lead	206	0.0097	0.0106	0.0006	**0.007**	0.0055	78.89
Lead	207	0.0087	0.0057	0.0039	**0.0061**	0.0025	40.5
Lead	208	0.0015	0.0056	0.0021	**0.0031**	0.0022	70.38
Molybdenum	95	0.0031	0.0041	0.0033	**0.0035**	0.0005	14.39
Molybdenum	97	0.0085	0.0101	0.0078	**0.0088**	0.0012	13.29
Molybdenum	98	0.0052	0.0023	0.0014	**0.003**	0.002	66.47
Nickel	60	0.0286	0.0161	-0.0391	**0.0018**	0.036	1959
Nickel	62	0.1933	0.2161	0.0475	**0.1523**	0.0915	60.06
Selenium	77	0.0614	0.0782	-0.198	**-0.0194**	0.1548	796
Selenium	78	-0.2649	0.1909	0.3306	**0.0856**	0.3114	364
Selenium	82	-0.1223	0.2201	0.1081	**0.0687**	0.1746	254.3
Silver	107	0.0149	0.0095	0.0054	**0.01**	0.0048	48
Silver	109	0.0095	0.0102	0.005	**0.0082**	0.0028	34.39
Thallium	203	0.0012	0.0009	-0.001	**0.0004**	0.0012	317.7
Thallium	205	0.0017	0.001	-0.0007	**0.0007**	0.0012	178.5
Zinc	66	0.5966	0.5634	0.5471	**0.569**	0.0252	4.434
Zinc	67	0.8098	0.3381	0.6657	**0.6045**	0.2417	39.99
Zinc	68	0.556	0.5044	0.6258	**0.5621**	0.0609	10.84

Internal Standard Factors:

Lithium	6	1.287	1.206	1.216	**1.287**	n/a	n/a
Gallium	71	1.207	1.223	1.195	**1.207**	n/a	n/a
Indium	115	1.119	1.178	1.165	**1.119**	n/a	n/a
Lutetium	175	1.064	1.127	1.101	**1.064**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001D**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 14:33**						
Antimony	121	0.1731	0.1698	0.1713	**0.1714**	0.0017	0.9808	
Antimony	123	0.1647	0.1858	0.167	**0.1725**	0.0116	6.703	
Arsenic	75	8.049	8.44	8.344	**8.277**	0.2039	2.463	
Beryllium	9	0.1255	0.1367	0.1388	**0.1337**	0.0071	5.347	
Cadmium	111	0.0558	0.0779	0.0735	**0.069**	0.0117	16.96	
Cadmium	114	0.0505	0.0613	0.057	**0.0562**	0.0054	9.688	
~~Chromium~~	~~52~~	~~4.095~~	~~4.312~~	~~4.09~~	~~**4.166**~~	~~0.1268~~	~~3.044~~	*
Chromium	53	4.466	4.61	4.624	**4.567**	0.0875	1.916	
~~Cobalt~~	~~59~~	~~2.257~~	~~2.193~~	~~2.09~~	~~**2.18**~~	~~0.0845~~	~~3.876~~	*
Copper	63	8.161	7.662	7.18	**7.668**	0.4905	6.397	
~~Copper~~	~~65~~	~~6.969~~	~~6.798~~	~~6.353~~	~~**6.707**~~	~~0.3181~~	~~4.743~~	*
Lead	206	1.31	1.29	1.195	**1.265**	0.0613	4.846	
Lead	207	1.486	1.379	1.379	**1.415**	0.0617	4.363	
Lead	208	1.428	1.354	1.295	**1.359**	0.0667	4.907	
Molybdenum	95	6.198	6.358	6.178	**6.245**	0.0986	1.579	
Molybdenum	97	6.554	6.215	5.979	**6.25**	0.2891	4.625	
Molybdenum	98	6.284	6.166	5.995	**6.148**	0.1455	2.367	
~~Nickel~~	~~60~~	~~4.289~~	~~4.053~~	~~3.795~~	~~**4.046**~~	~~0.2471~~	~~6.108~~	*
Nickel	62	5.393	5.343	4.897	**5.211**	0.2731	5.241	
Selenium	77	0.7744	0.9209	0.8853	**0.8602**	0.0764	8.883	
Selenium	78	0.6711	1.487	1.54	**1.232**	0.4869	39.51	
Selenium	82	0.8036	0.7341	1.069	**0.8688**	0.1765	20.32	
Silver	107	0.0316	0.0424	0.0404	**0.0381**	0.0058	15.09	
Silver	109	0.0213	0.0301	0.0286	**0.0267**	0.0047	17.67	
Thallium	203	0.027	0.0126	0.0179	**0.0192**	0.0073	37.89	
Thallium	205	0.0143	0.0157	0.0149	**0.015**	0.0007	4.558	
~~Zinc~~	~~66~~	~~8.83~~	~~8.644~~	~~8.268~~	~~**8.581**~~	~~0.2864~~	~~3.338~~	*
Zinc	67	12.13	11.57	11.82	**11.84**	0.2829	2.389	
Zinc	68	10.21	9.812	9.319	**9.78**	0.4459	4.559	

* See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.347	1.396	1.29	**1.347**	n/a	n/a
Gallium	71	1.348	1.409	1.359	**1.348**	n/a	n/a
Indium	115	1.237	1.312	1.321	**1.237**	n/a	n/a
Lutetium	175	1.129	1.174	1.162	**1.129**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:36**					
Antimony	121	19.54	17.63	17.46	**18.21**	1.156	6.346
Antimony	123	19.86	16.95	17.12	**17.98**	1.628	9.058
Arsenic	75	31.74	29.66	30.73	**30.71**	1.042	3.394
Beryllium	9	21.66	18.44	19.7	**19.93**	1.619	8.124
Cadmium	111	22.38	20.33	20.32	**21.01**	1.186	5.644
Cadmium	114	22.31	20.68	19.99	**20.99**	1.191	5.673
~~Chromium~~	~~52~~	~~30.69~~	~~28.22~~	~~28.24~~	**29.05**	1.42	4.89 *
Chromium	53	32.74	29.82	29.87	**30.81**	1.673	5.431
~~Cobalt~~	~~59~~	~~28.91~~	~~25.85~~	~~25.74~~	**26.84**	1.8	6.707 *
Copper	63	31.14	27.62	26.92	**28.56**	2.265	7.933
~~Copper~~	~~65~~	~~29.85~~	~~26.28~~	~~25.56~~	**27.06**	2.009	7.425 *
Lead	206	21.58	20.07	19.6	**20.42**	1.035	5.07
Lead	207	21.14	20.24	19.8	**20.39**	0.6832	3.35
Lead	208	21.38	19.9	19.55	**20.28**	0.9714	4.791
Molybdenum	95	30.49	27.15	26.36	**28**	2.193	7.83
Molybdenum	97	30.3	27.48	26.53	**28.1**	1.959	6.97
Molybdenum	98	30.11	26.68	26.63	**27.81**	1.995	7.176
~~Nickel~~	~~60~~	~~28.67~~	~~25.74~~	~~25.46~~	**26.62**	1.777	6.675 *
Nickel	62	29.2	25.91	25.97	**27.03**	1.883	6.968
Selenium	77	21.76	20.45	20.21	**20.81**	0.8334	4.006
Selenium	78	22.25	22.7	22.43	**22.46**	0.2258	1.005
Selenium	82	22.15	21.41	22.42	**21.99**	0.5231	2.379
Silver	107	21.56	19.57	18.98	**20.04**	1.354	6.758
Silver	109	20.91	19.54	19.23	**19.89**	0.8966	4.507
Thallium	203	19.17	18.48	18.58	**18.74**	0.3736	1.993
Thallium	205	19.28	18.2	18.33	**18.6**	0.5896	3.169
~~Zinc~~	~~66~~	~~33.94~~	~~30.83~~	~~30.24~~	**31.67**	1.989	6.282 *
Zinc	67	38.33	33.5	33.71	**35.18**	2.73	7.76
Zinc	68	35.08	31.65	32.41	**33.05**	1.801	5.449

*see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.447	1.373	1.348	**1.447**	n/a	n/a
Gallium	71	1.42	1.345	1.32	**1.42**	n/a	n/a
Indium	115	1.377	1.309	1.259	**1.377**	n/a	n/a
Lutetium	175	1.167	1.16	1.131	**1.167**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-003**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 14:39**						
Antimony	121	0.0637	0.0669	0.0675	**0.0661**	0.0021	3.113	
Antimony	123	0.0605	0.0711	0.0676	**0.0664**	0.0054	8.156	
Arsenic	75	2.012	2.031	2.133	**2.059**	0.065	3.157	
Beryllium	9	0.1403	0.1427	0.1633	**0.1488**	0.0126	8.482	
Cadmium	111	0.0944	0.099	0.0913	**0.0949**	0.0039	4.084	
Cadmium	114	0.1091	0.0925	0.0821	**0.0946**	0.0136	14.37	
~~Chromium~~	~~52~~	~~6.583~~	~~6.567~~	~~6.637~~	~~**6.596**~~	~~0.0367~~	~~0.5559~~	✓
Chromium	53	7.544	7.107	7.066	**7.239**	0.2652	3.664	
~~Cobalt~~	~~59~~	~~2.394~~	~~2.302~~	~~2.297~~	~~**2.331**~~	~~0.0549~~	~~2.354~~	✓
Copper	63	5.057	4.866	4.833	**4.919**	0.121	2.459	
~~Copper~~	~~65~~	~~4.707~~	~~4.623~~	~~4.729~~	~~**4.686**~~	~~0.0559~~	~~1.193~~	✓
Lead	206	2.364	2.368	2.472	**2.401**	0.0613	2.554	
Lead	207	2.539	2.68	2.619	**2.613**	0.0707	2.706	
Lead	208	2.486	2.535	2.594	**2.538**	0.0539	2.126	
Molybdenum	95	2.434	2.322	2.352	**2.369**	0.0581	2.451	
Molybdenum	97	2.391	2.434	2.363	**2.396**	0.0354	1.478	
Molybdenum	98	2.39	2.328	2.309	**2.343**	0.0423	1.807	
~~Nickel~~	~~60~~	~~3.789~~	~~3.54~~	~~3.65~~	~~**3.66**~~	~~0.1249~~	~~3.414~~	✓
Nickel	62	4.855	4.883	4.815	**4.851**	0.0344	0.7099	
Selenium	77	0.44	0.5916	0.4653	**0.499**	0.0812	16.28	
Selenium	78	0.4244	0.5671	0.8443	**0.6119**	0.2135	34.89	
Selenium	82	0.454	1.028	0.7957	**0.7592**	0.2887	38.02	
Silver	107	0.1763	0.124	0.0894	**0.1299**	0.0437	33.65	
Silver	109	0.1709	0.1153	0.0856	**0.124**	0.0433	34.94	
Thallium	203	0.0248	0.0244	0.0247	**0.0246**	0.0002	0.8944	
Thallium	205	0.0253	0.0258	0.0188	**0.0233**	0.0039	16.6	
~~Zinc~~	~~66~~	~~13.57~~	~~12.82~~	~~12.96~~	~~**13.12**~~	~~0.396~~	~~3.018~~	✓
Zinc	67	14.98	14.35	13.63	**14.32**	0.6724	4.696	
Zinc	68	13.73	13.48	13.42	**13.54**	0.1606	1.186	

✓ See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.27	1.249	1.262	**1.27**	n/a	n/a
Gallium	71	1.213	1.193	1.219	**1.213**	n/a	n/a
Indium	115	1.183	1.209	1.218	**1.183**	n/a	n/a
Lutetium	175	1.08	1.12	1.154	**1.08**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:42**					
Antimony	121	0.1044	0.1045	0.1008	**0.1033**	0.0021	2.063
Antimony	123	0.0879	0.0944	0.0975	**0.0933**	0.0049	5.267
Arsenic	75	14.01	14.07	13.94	**14.01**	0.0677	0.4833
Beryllium	9	1.998	1.931	2.129	**2.019**	0.1011	5.008
Cadmium	111	0.9227	0.9895	0.8342	**0.9155**	0.0779	8.51
Cadmium	114	0.9014	0.9117	0.8568	**0.89**	0.0292	3.28
~~Chromium~~	~~52~~	~~62.61~~	~~63.64~~	~~64.92~~	~~**63.73**~~	~~1.158~~	~~1.818~~
Chromium	53	66.84	69.33	70.41	**68.86**	1.829	2.655
~~Cobalt~~	~~59~~	~~18.26~~	~~18.43~~	~~18.14~~	~~**18.28**~~	~~0.1489~~	~~0.8148~~
Copper	63	38.38	38.43	37.69	**38.17**	0.4141	1.085
~~Copper~~	~~65~~	~~37.28~~	~~37.64~~	~~37.33~~	~~**37.42**~~	~~0.1933~~	~~0.5165~~
Lead	206	30.05	30.71	31.2	**30.65**	0.5817	1.898
Lead	207	33.48	34.29	34.12	**33.96**	0.4289	1.263
Lead	208	32.69	33.27	33.1	**33.02**	0.2956	0.8953
Molybdenum	95	3.953	3.906	3.803	**3.887**	0.0771	1.982
Molybdenum	97	3.857	4.011	3.695	**3.854**	0.158	4.099
Molybdenum	98	3.896	3.828	3.657	**3.794**	0.1228	3.236
~~Nickel~~	~~60~~	~~27.73~~	~~28.15~~	~~27.9~~	~~**27.93**~~	~~0.2108~~	~~0.7548~~
Nickel	62	36.26	36.97	35.54	**36.26**	0.7154	1.973
Selenium	77	5.437	5.27	5.068	**5.258**	0.1848	3.514
Selenium	78	0.0413	0.4056	0.1218	**0.1896**	0.1913	100.9
Selenium	82	1.883	1.782	1.677	**1.781**	0.1031	5.789
Silver	107	0.1695	0.1834	0.1721	**0.175**	0.0074	4.209
Silver	109	0.1537	0.1538	0.1502	**0.1526**	0.002	1.329
Thallium	203	0.2965	0.2663	0.2738	**0.2789**	0.0157	5.634
Thallium	205	0.2933	0.2878	0.2913	**0.2908**	0.0028	0.9501
~~Zinc~~	~~66~~	~~96.19~~	~~97.2~~	~~97.37~~	~~**96.92**~~	~~0.6366~~	~~0.6568~~
Zinc	67	103	106.6	105.4	**105**	1.802	1.716
Zinc	68	98	97.7	97.71	**97.8**	0.168	0.1718

*STD Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.287	1.367	1.481	**1.287**	n/a	n/a
Gallium	71	0.973	0.999	0.981	**0.973**	n/a	n/a
Indium	115	1.32	1.335	1.297	**1.32**	n/a	n/a
Lutetium	175	1.226	1.244	1.273	**1.226**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:45**					
Antimony	121	0.1658	0.146	0.124	**0.1453**	0.0209	14.41
Antimony	123	0.1509	0.1505	0.1454	**0.1489**	0.0031	2.064
Arsenic	75	7.906	7.56	7.739	**7.735**	0.1731	2.238
Beryllium	9	0.0146	0.0096	0.0079	**0.0107**	0.0035	32.36
Cadmium	111	0.0394	0.0523	0.0462	**0.046**	0.0065	14.04
Cadmium	114	0.0416	0.0373	0.0313	**0.0367**	0.0052	14.15
~~Chromium~~	~~52~~	~~0.7168~~	~~0.7169~~	~~0.7431~~	~~**0.7256**~~	~~0.0152~~	~~2.089~~
Chromium	53	0.7387	0.8439	0.846	**0.8095**	0.0614	7.582
~~Cobalt~~	~~59~~	~~0.7658~~	~~0.7486~~	~~0.7451~~	~~**0.7532**~~	~~0.0111~~	~~1.469~~
Copper	63	3.603	3.51	3.541	**3.551**	0.0473	1.332
~~Copper~~	~~65~~	~~2.717~~	~~2.632~~	~~2.651~~	~~**2.667**~~	~~0.0447~~	~~1.675~~
Lead	206	0.037	0.0426	0.0362	**0.0386**	0.0035	8.969
Lead	207	0.0416	0.0312	0.0453	**0.0394**	0.0073	18.57
Lead	208	0.0407	0.0456	0.0405	**0.0423**	0.0029	6.908
Molybdenum	95	7.214	7.37	7.317	**7.3**	0.0791	1.083
Molybdenum	97	7.451	7.329	7.256	**7.345**	0.0985	1.341
Molybdenum	98	7.282	7.143	7.04	**7.155**	0.1218	1.702
~~Nickel~~	~~60~~	~~2.027~~	~~1.987~~	~~1.934~~	~~**1.983**~~	~~0.0466~~	~~2.349~~
Nickel	62	1.983	1.98	2.04	**2.001**	0.0339	1.693
Selenium	77	0.4372	0.5876	0.5832	**0.536**	0.0856	15.97
Selenium	78	1.77	1.454	1.794	**1.672**	0.1898	11.35
Selenium	82	0.5058	0.8315	0.5886	**0.642**	0.1693	26.37
Silver	107	0.0309	0.035	0.0223	**0.0294**	0.0065	22.06
Silver	109	0.0324	0.0178	0.0176	**0.0226**	0.0085	37.63
Thallium	203	0.0042	0.0022	0.0001	**0.0022**	0.002	93.32
Thallium	205	-0.0006	-0.0002	0.0007	**0**	0.0007	1620
~~Zinc~~	~~66~~	~~3.297~~	~~3.16~~	~~3.163~~	~~**3.207**~~	~~0.0781~~	~~2.436~~
Zinc	67	4.924	4.707	4.4	**4.677**	0.2632	5.627
Zinc	68	3.814	3.73	3.696	**3.747**	0.0609	1.625

x see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.39	1.344	1.35	**1.39**	n/a	n/a
Gallium	71	1.356	1.389	1.383	**1.356**	n/a	n/a
Indium	115	1.322	1.332	1.335	**1.322**	n/a	n/a
Lutetium	175	1.189	1.201	1.197	**1.189**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-003 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:48**					
Antimony	121	0.1049	0.1206	0.119	**0.1149**	0.0086	7.513
Antimony	123	0.1088	0.1173	0.121	**0.1157**	0.0063	5.404
Arsenic	75	2.424	2.45	2.436	**2.437**	0.0128	0.5261
Beryllium	9	0.0112	0.0061	0.0082	**0.0085**	0.0026	29.99
Cadmium	111	0.1202	0.1138	0.1343	**0.1228**	0.0105	8.543
Cadmium	114	0.1161	0.0959	0.0968	**0.1029**	0.0114	11.11
~~Chromium~~	~~52~~	~~0.5156~~	~~0.5465~~	~~0.5639~~	~~**0.542**~~	~~0.0244~~	~~4.509~~
Chromium	53	1.349	1.31	1.263	**1.307**	0.0432	3.308
~~Cobalt~~	~~59~~	~~2.189~~	~~2.126~~	~~2.082~~	~~**2.132**~~	~~0.0539~~	~~2.526~~
Copper	63	3.698	3.509	3.433	**3.547**	0.1363	3.844
~~Copper~~	~~65~~	~~2.449~~	~~2.352~~	~~2.353~~	~~**2.384**~~	~~0.0556~~	~~2.334~~
Lead	206	0.0061	0.0031	0.01	**0.0064**	0.0034	53.88
Lead	207	0.0136	0.0064	0.0129	**0.011**	0.004	36.23
Lead	208	0.0077	0.0069	0.0121	**0.0089**	0.0028	31.05
Molybdenum	95	12	12.18	12.1	**12.09**	0.0877	0.7249
Molybdenum	97	11.77	12.04	12.07	**11.96**	0.1648	1.378
Molybdenum	98	11.59	11.81	11.43	**11.61**	0.1899	1.636
~~Nickel~~	~~60~~	~~3.982~~	~~3.734~~	~~3.703~~	~~**3.806**~~	~~0.1529~~	~~4.018~~
Nickel	62	3.198	2.716	2.888	**2.934**	0.2442	8.325
Selenium	77	0.0876	0.417	0.4234	**0.3093**	0.1921	62.09
Selenium	78	2.487	2.681	2.443	**2.537**	0.1265	4.984
Selenium	82	1.253	1.065	1.241	**1.186**	0.1054	8.887
Silver	107	0.0052	-0.0031	0.0034	**0.0018**	0.0044	239.3
Silver	109	0.0031	0.0021	0.0017	**0.0023**	0.0007	31.36
Thallium	203	0.0054	0.0045	0.0073	**0.0057**	0.0014	24.86
Thallium	205	0.0058	0.002	0.0043	**0.004**	0.0019	47.8
~~Zinc~~	~~66~~	~~3.026~~	~~2.918~~	~~2.932~~	~~**2.959**~~	~~0.0591~~	~~1.996~~
Zinc	67	3.759	3.456	4.143	**3.786**	0.3445	9.098
Zinc	68	4.239	4.224	3.829	**4.097**	0.2323	5.668

✓ see recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.37	1.349	1.329	**1.37**	n/a	n/a
Gallium	71	1.432	1.454	1.44	**1.432**	n/a	n/a
Indium	115	1.335	1.392	1.386	**1.335**	n/a	n/a
Lutetium	175	1.219	1.245	1.261	**1.219**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:51**					
Antimony	121	0.1684	0.1641	0.1789	**0.1705**	0.0076	4.447
Antimony	123	0.1819	0.1668	0.165	**0.1712**	0.0093	5.444
Arsenic	75	2.294	2.116	2.139	**2.183**	0.0967	4.431
Beryllium	9	0.0189	0.0169	0.019	**0.0183**	0.0012	6.67
Cadmium	111	0.1689	0.1507	0.145	**0.1549**	0.0125	8.043
Cadmium	114	0.1449	0.1398	0.1483	**0.1443**	0.0043	2.995
~~Chromium~~	~~52~~	~~0.9101~~	~~0.9417~~	~~0.9229~~	~~**0.9249**~~	~~0.0159~~	~~1.722~~
Chromium	53	3.144	3.153	3.277	**3.192**	0.0744	2.332
~~Cobalt~~	~~59~~	~~2.237~~	~~2.145~~	~~2.122~~	~~**2.168**~~	~~0.0612~~	~~2.821~~
Copper	63	5.862	5.501	5.36	**5.574**	0.2587	4.642
~~Copper~~	~~65~~	~~4.395~~	~~4.084~~	~~4.129~~	~~**4.202**~~	~~0.1683~~	~~4.004~~
Lead	206	0.2198	0.2094	0.2302	**0.2198**	0.0104	4.739
Lead	207	0.2414	0.2194	0.2433	**0.2347**	0.0133	5.665
Lead	208	0.2323	0.2176	0.2327	**0.2275**	0.0086	3.767
Molybdenum	95	15.41	14.67	14.3	**14.8**	0.5644	3.814
Molybdenum	97	14.97	14.29	14.44	**14.57**	0.3601	2.472
Molybdenum	98	15.02	14.05	14	**14.36**	0.5781	4.026
~~Nickel~~	~~60~~	~~3.841~~	~~3.591~~	~~3.471~~	~~**3.635**~~	~~0.189~~	~~5.2~~
Nickel	62	3.132	3.049	2.646	**2.942**	0.2602	8.843
Selenium	77	0.644	1.157	0.9583	**0.9196**	0.2585	28.11
Selenium	78	2.693	2.981	2.759	**2.811**	0.1508	5.366
Selenium	82	1.15	1.384	1.472	**1.335**	0.1668	12.49
Silver	107	0.0102	0.0054	0.0035	**0.0064**	0.0034	53.53
Silver	109	-0.0031	-0.0048	-0.0035	**-0.0038**	0.0009	24.17
Thallium	203	0.0116	0.0056	0.0064	**0.0079**	0.0033	41.71
Thallium	205	0.0058	0.0058	0.0061	**0.0059**	0.0002	3.318
~~Zinc~~	~~66~~	~~4.677~~	~~4.353~~	~~4.317~~	~~**4.449**~~	~~0.1983~~	~~4.458~~
Zinc	67	5.813	5.723	5.485	**5.674**	0.1698	2.993
Zinc	68	5.668	5.281	5.408	**5.452**	0.1976	3.624

* see Recalibration Jc 3/20/07

Internal Standard Factors:

Lithium	6	1.388	1.475	1.455	**1.388**	n/a	n/a
Gallium	71	1.461	1.467	1.447	**1.461**	n/a	n/a
Indium	115	1.401	1.353	1.394	**1.401**	n/a	n/a
Lutetium	175	1.217	1.253	1.209	**1.217**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV4 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:55**					
Antimony	121	25.52	25.75	26.09	**25.79**	0.2877	1.116
Antimony	123	25.09	25.11	25.47	**25.22**	0.2174	0.8619
Arsenic	75	24.9	25.82	26.28	**25.67**	0.7019	2.735
Beryllium	9	22.28	23.99	25.78	**24.02**	1.749	7.281
Cadmium	111	26.01	26.1	25.12	**25.74**	0.5404	2.099
Cadmium	114	25.17	25.37	25.29	**25.28**	0.1008	0.3988
Chromium	52	29	29.19	29.18	**29.12**	0.1059	0.3636
Chromium	53	30.95	31.34	30.84	**31.04**	0.2602	0.838
Cobalt	59	30.88	29.79	29.37	**30.01**	0.779	2.595
Copper	63	28.84	27.38	26.23	**27.49**	1.31	4.765
Copper	65	27.27	26.47	25.3	**26.35**	0.9896	3.756
Lead	206	25.22	24.34	25.59	**25.05**	0.6387	2.55
Lead	207	24.86	23.98	25.17	**24.67**	0.6199	2.513
Lead	208	25.5	24.42	25.76	**25.23**	0.7087	2.809
Molybdenum	95	26.6	26.06	25.47	**26.04**	0.5646	2.168
Molybdenum	97	26.71	26.5	25.55	**26.25**	0.6169	2.35
Molybdenum	98	25.81	26.02	25.34	**25.72**	0.3511	1.365
Nickel	60	30.67	29.25	27.78	**29.23**	1.448	4.954
Nickel	62	29	27.99	26.86	**27.95**	1.075	3.847
Selenium	77	24.86	25.4	24.58	**24.95**	0.4144	1.661
Selenium	78	26.57	27.49	26.14	**26.73**	0.6883	2.575
Selenium	82	25.65	25.97	26.61	**26.08**	0.488	1.872
Silver	107	25.2	25.18	24.8	**25.06**	0.2266	0.9045
Silver	109	25.43	24.83	24.83	**25.03**	0.3455	1.381
Thallium	203	25.42	25.55	25.1	**25.36**	0.2318	0.9142
Thallium	205	24.93	25.23	25.28	**25.15**	0.1884	0.7492
Zinc	66	27.99	27.24	25.76	**27**	1.133	4.196
Zinc	67	27.2	26.18	26.29	**26.55**	0.5589	2.105
Zinc	68	26.86	26.21	25.36	**26.14**	0.7531	2.881

Internal Standard Factors:

Lithium	6	1.358	1.311	1.322	**1.358**	n/a	n/a
Gallium	71	1.174	1.207	1.166	**1.174**	n/a	n/a
Indium	115	1.136	1.184	1.156	**1.136**	n/a	n/a
Lutetium	175	1.095	1.118	1.138	**1.095**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB4**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:03**					
Antimony	121	0.0019	0.0021	0	**0.0013**	0.0011	86.06
Antimony	123	0.0028	0.0004	0.0004	**0.0012**	0.0014	115.1
Arsenic	75	0.0737	0.0775	0.0535	**0.0682**	0.0129	18.87
Beryllium	9	0.0009	0.0051	-0.0019	**0.0014**	0.0035	250.9
Cadmium	111	0.0024	0.004	-0.0014	**0.0017**	0.0028	163.3
Cadmium	114	0.0011	0.0008	0.0004	**0.0008**	0.0004	47.03
Chromium	52	0.0365	0.0859	0.071	**0.0644**	0.0253	39.28
Chromium	53	0.1108	0.0738	0.0656	**0.0834**	0.0241	28.85
Cobalt	59	0.0002	0.0008	-0.003	**-0.0007**	0.0021	300.7
Copper	63	0.085	0.0845	0.0839	**0.0845**	0.0006	0.6781
Copper	65	0.0582	0.0641	0.0666	**0.063**	0.0043	6.847
Lead	206	0.0163	0.0026	0.0058	**0.0082**	0.0072	87.61
Lead	207	0.0154	0.0153	0.0046	**0.0118**	0.0062	52.92
Lead	208	0.0102	0.0072	0.0031	**0.0068**	0.0035	51.77
Molybdenum	95	0.0133	0.0059	0.0103	**0.0098**	0.0037	37.89
Molybdenum	97	0.0045	0.0058	0.008	**0.0061**	0.0018	29.31
Molybdenum	98	0.0039	0.0075	0.008	**0.0065**	0.0022	34.55
Nickel	60	0.0814	0.036	-0.0026	**0.0382**	0.0421	110
Nickel	62	0.0031	0.1297	0.1982	**0.1103**	0.099	89.69
Selenium	77	-0.1201	-0.2305	-0.233	**-0.1945**	0.0645	33.14
Selenium	78	0.3442	0.4134	0.4343	**0.3973**	0.0472	11.88
Selenium	82	0.1302	0.0745	-0.004	**0.0669**	0.0674	100.7
Silver	107	0.0237	0.02	0.0153	**0.0196**	0.0042	21.55
Silver	109	0.0202	0.0169	0.0114	**0.0162**	0.0045	27.52
Thallium	203	-0.0006	0.0014	0	**0.0003**	0.001	404.2
Thallium	205	-0.0012	-0.0022	-0.001	**-0.0015**	0.0007	46.32
Zinc	66	0.6875	0.5601	0.5389	**0.5955**	0.0804	13.5
Zinc	67	0.4186	0.5491	0.3605	**0.4427**	0.0966	21.82
Zinc	68	0.5589	0.5569	0.3819	**0.4992**	0.1016	20.36

Internal Standard Factors:

Lithium	6	1.315	1.372	1.328	**1.315**	n/a	n/a
Gallium	71	1.178	1.225	1.216	**1.178**	n/a	n/a
Indium	115	1.125	1.163	1.183	**1.125**	n/a	n/a
Lutetium	175	1.056	1.109	1.138	**1.056**	n/a	n/a

Sample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	25 ppb Std. MS10-46-A	Fully Quant Standard	0 kg	0 ml	1.00
3	ICV MS10-40-H	Unknown	0 kg	0 ml	1.00
4	CCV1 MS10-46-A	Unknown	0 kg	0 ml	1.00
5	ICB	Unknown	0 kg	0 ml	1.00
6	CCB1	Unknown	0 kg	0 ml	1.00
7	CRA WATER MS10-43-E	Unknown	0 kg	0 ml	1.00
8	PBW K0701647	Unknown	0 kg	0 ml	1.00
9	K0701647-001	Unknown	0 kg	0 ml	1.00
10	K0701647-001D	Unknown	0 kg	0 ml	1.00
11	K0701647-001L 1/5	Unknown	0 kg	0 ml	1.00
12	K0701647-001A +20	Unknown	0 kg	0 ml	1.00
13	K0701647-001S	Unknown	0 kg	0 ml	1.00
14	LCSW K0701647	Unknown	0 kg	0 ml	1.00
15	K0701647-002	Unknown	0 kg	0 ml	1.00
16	K0701703-001	Unknown	0 kg	0 ml	1.00
17	CCV2 MS10-46-A	Unknown	0 kg	0 ml	1.00
18	CCB2	Unknown	0 kg	0 ml	1.00
19	K0701680-001	Unknown	0 kg	0 ml	1.00
20	K0701680-001D	Unknown	0 kg	0 ml	1.00
21	K0701680-001S	Unknown	0 kg	0 ml	1.00
22	K0701680-003	Unknown	0 kg	0 ml	1.00
23	K0701680-004	Unknown	0 kg	0 ml	1.00
24	K0701680-001 DISS.	Unknown	0 kg	0 ml	1.00
25	K0701680-003 DISS.	Unknown	0 kg	0 ml	1.00
26	K0701680-004 DISS.	Unknown	0 kg	0 ml	1.00
27	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
28	CCB3	Unknown	0 kg	0 ml	1.00

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,380.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-35.10
Focus	11.30

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Polc Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:14**					
Chromium	52	-0.0278	0.0229	0.0048	**0**	0.0257	0
Chromium	53	-0.0137	0.0049	0.0088	**0**	0.012	0
Cobalt	59	0.0001	-0.0017	0.0016	**0**	0.0016	0
Copper	63	-0.0061	0.0021	0.004	**0**	0.0054	0
Copper	65	-0.008	-0.0025	0.0105	**0**	0.0095	0
Nickel	60	-0.0263	0.0018	0.0245	**0**	0.0254	0
Nickel	62	-0.0025	0.0015	0.001	**0**	0.0022	0
Zinc	66	-0.0702	0.0555	0.0147	**0**	0.0641	0
Zinc	67	0.0724	0.0609	-0.1333	**0**	0.1156	0
Zinc	68	-0.0523	0.0786	-0.0263	**0**	0.0693	0

3/20/07

Internal Standard Factors:

Gallium	71	0.929	1.024	1.057	**0.929**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**25 ppb Std. MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:16**					
Chromium	52	25.28	25.76	23.96	**25**	0.9283	3.713
Chromium	53	25.36	25.56	24.07	**25**	0.808	3.232
Cobalt	59	25.73	25.68	23.58	**25**	1.228	4.914
Copper	63	25.77	25.74	23.48	**25**	1.315	5.262
Copper	65	25.83	25.61	23.56	**25**	1.249	4.995
Nickel	60	26.14	25.24	23.62	**25**	1.28	5.12
Nickel	62	26.08	25.71	23.21	**25**	1.561	6.243
Zinc	66	25.92	25.24	23.84	**25**	1.062	4.249
Zinc	67	25.54	25.07	24.39	**25**	0.5781	2.312
Zinc	68	25.71	25.39	23.9	**25**	0.9627	3.851

Internal Standard Factors:

Gallium	71	1.007	1.074	1.039	**1.007**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICV MS10-40-H**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:18**					
Chromium	52	10.32	9.887	9.689	**9.964**	0.3204	3.216
Chromium	53	10.33	10.07	9.766	**10.06**	0.2834	2.818
Cobalt	59	25.56	24.29	23.18	**24.34**	1.191	4.891
Copper	63	12.51	12.14	11.63	**12.09**	0.4448	3.678
Copper	65	12.66	12.18	11.59	**12.15**	0.5363	4.416
Nickel	60	25.03	24.29	22.92	**24.08**	1.067	4.43
Nickel	62	24.77	24.39	23.07	**24.08**	0.8889	3.692
Zinc	66	25.75	24.63	23.83	**24.74**	0.9609	3.884
Zinc	67	31.93	31.24	30.32	**31.17**	0.8111	2.603
Zinc	68	29.94	30.24	28.56	**29.58**	0.8946	3.024

Internal Standard Factors:

Gallium	71	1.008	1.055	1.036	**1.008**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV1 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:20**					
Chromium	52	28.13	24.7	23.97	**25.6**	2.219	8.667
Chromium	53	27.98	24.52	23.6	**25.37**	2.305	9.088
Cobalt	59	27.16	23.9	22.36	**24.47**	2.447	9.999
Copper	63	27.2	23.49	22.52	**24.4**	2.47	10.12
Copper	65	26.93	23.48	22.82	**24.41**	2.21	9.053
Nickel	60	27.42	23.53	22.37	**24.44**	2.644	10.82
Nickel	62	27.08	23.51	22.13	**24.24**	2.552	10.52
Zinc	66	27.74	24.28	23.22	**25.08**	2.365	9.431
Zinc	67	27.36	23.85	23.77	**24.99**	2.048	8.195
Zinc	68	28.28	24.47	23.59	**25.45**	2.492	9.79

Internal Standard Factors:

Gallium	71	1.054	1.048	1.017	**1.054**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07D | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:21**					
Chromium	52	0.0883	0.032	0.0051	**0.0418**	0.0425	101.6
Chromium	53	0.0336	0.006	-0.0021	**0.0125**	0.0187	149.9
Cobalt	59	0.0014	0.0015	-0.0011	**0.0006**	0.0015	237.1
Copper	63	-0.0218	-0.017	-0.0228	**-0.0205**	0.0031	15.2
Copper	65	-0.0041	-0.0077	-0.0083	**-0.0067**	0.0023	34.24
Nickel	60	-0.0182	-0.0088	-0.0485	**-0.0252**	0.0208	82.62
Nickel	62	-0.0121	0.0491	-0.1612	**-0.0414**	0.1082	261.1
Zinc	66	-0.0651	-0.1177	0.0214	**-0.0538**	0.0703	130.6
Zinc	67	0.0256	0.1171	-0.0991	**0.0145**	0.1085	747.4
Zinc	68	-0.0106	0.0362	0.0204	**0.0154**	0.0238	155

Internal Standard Factors:

Gallium	71	1.082	1.065	1.068	**1.082**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB1**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:23**					
Chromium	52	-0.0027	0.0055	0.0232	**0.0087**	0.0132	152.5
Chromium	53	0.0031	0.007	0.0148	**0.0083**	0.006	72.26
Cobalt	59	-0.0003	-0.0003	-0.0003	**-0.0003**	0	10.57
Copper	63	-0.0061	-0.0235	-0.0047	**-0.0115**	0.0105	91.57
Copper	65	-0.0078	0.0004	-0.0222	**-0.0099**	0.0114	115.5
Nickel	60	-0.0561	-0.0198	-0.0303	**-0.0354**	0.0187	52.77
Nickel	62	-0.0693	-0.2107	-0.1768	**-0.1523**	0.0738	48.47
Zinc	66	-0.0312	-0.0714	-0.0127	**-0.0384**	0.03	78.11
Zinc	67	-0.0069	0.0227	-0.1466	**-0.0436**	0.0904	207.4
Zinc	68	-0.1555	-0.1183	-0.1067	**-0.1268**	0.0255	20.1

Internal Standard Factors:

Gallium	71	0.979	1.042	1.076	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CRA WATER MS10-43-E**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:25**					
Chromium	52	0.2703	0.2275	0.1756	**0.2245**	0.0475	21.14
Chromium	53	0.2046	0.2657	0.2128	**0.2277**	0.0331	14.55
Cobalt	59	0.0246	0.0202	0.0189	**0.0212**	0.003	14.21
Copper	63	0.1006	0.0956	0.0854	**0.0939**	0.0077	8.235
Copper	65	0.1016	0.0741	0.0792	**0.0849**	0.0147	17.26
Nickel	60	0.2062	0.1914	0.1644	**0.1873**	0.0212	11.32
Nickel	62	0.1685	0.175	0.0359	**0.1265**	0.0785	62.08
Zinc	66	0.5392	0.4031	0.3079	**0.4167**	0.1163	27.9
Zinc	67	0.5209	0.4271	0.3838	**0.444**	0.0701	15.78
Zinc	68	0.439	0.4007	0.3863	**0.4087**	0.0272	6.663

Internal Standard Factors:

Gallium	71	1.022	1.059	1.034	**1.022**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:27**					
Chromium	52	0.1605	0.0937	0.0174	**0.0905**	0.0716	79.1
Chromium	53	0.025	0.0234	-0.004	**0.0148**	0.0163	110.4
Cobalt	59	0.0016	-0.0012	0	**0.0001**	0.0014	1219
Copper	63	-0.0015	-0.0143	-0.0232	**-0.013**	0.0109	84.1
Copper	65	-0.0021	0.0003	-0.0021	**-0.0013**	0.0014	109.8
Nickel	60	0.0432	-0.0159	-0.0376	**-0.0034**	0.0419	1216
Nickel	62	0.018	-0.0133	-0.0575	**-0.0176**	0.038	215.9
Zinc	66	0.1282	0.0939	-0.0407	**0.0605**	0.0893	147.6
Zinc	67	0.1377	-0.0601	-0.1678	**-0.0301**	0.1549	515.7
Zinc	68	0.1217	0.0214	-0.0123	**0.0436**	0.0697	159.8

Internal Standard Factors:

Gallium	71	1.075	1.077	1.033	**1.075**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:29**					
Chromium	52	1.104	0.9272	0.9746	**1.002**	0.0915	9.136
Chromium	53	1.428	1.316	1.326	**1.357**	0.0619	4.561
Cobalt	59	0.0668	0.0623	0.0563	**0.0618**	0.0053	8.54
Copper	63	1.755	1.615	1.578	**1.649**	0.0931	5.642
Copper	65	1.731	1.607	1.573	**1.637**	0.0831	5.079
Nickel	60	1.83	1.673	1.693	**1.732**	0.0853	4.926
Nickel	62	1.552	1.283	1.107	**1.314**	0.2241	17.05
Zinc	66	4.221	3.868	3.883	**3.991**	0.1992	4.991
Zinc	67	4.831	4.151	4.599	**4.527**	0.3458	7.639
Zinc	68	4.742	4.418	4.429	**4.529**	0.1841	4.064

Internal Standard Factors:

Gallium	71	1.052	1.054	1.075	**1.052**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:31**					
Chromium	52	1.109	0.9909	0.9374	**1.012**	0.0878	8.675
Chromium	53	1.449	1.342	1.345	**1.379**	0.0608	4.408
Cobalt	59	0.0614	0.055	0.0551	**0.0572**	0.0037	6.388
Copper	63	1.816	1.609	1.527	**1.65**	0.1492	9.037
Copper	65	1.798	1.609	1.518	**1.641**	0.1428	8.7
Nickel	60	1.872	1.662	1.578	**1.704**	0.1515	8.889
Nickel	62	1.503	1.341	1.268	**1.371**	0.1207	8.806
Zinc	66	3.772	3.547	3.325	**3.548**	0.2231	6.289
Zinc	67	3.936	3.976	3.298	**3.737**	0.3805	10.18
Zinc	68	4.233	3.868	3.706	**3.936**	0.2697	6.853

Internal Standard Factors:

Gallium	71	1.064	1.084	1.074	**1.064**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001L 1/5**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:33**					
Chromium	52	0.204	0.2323	0.2141	**0.2168**	0.0143	6.609
Chromium	53	0.2775	0.2992	0.3122	**0.2963**	0.0175	5.91
Cobalt	59	0.0115	0.0104	0.0114	**0.0111**	0.0006	5.544
Copper	63	0.2978	0.2998	0.2849	**0.2942**	0.0081	2.752
Copper	65	0.2875	0.3146	0.2782	**0.2935**	0.0189	6.452
Nickel	60	0.262	0.3287	0.3041	**0.2983**	0.0338	11.32
Nickel	62	0.2859	0.1896	0.157	**0.2109**	0.067	31.78
Zinc	66	0.686	0.6842	0.6409	**0.6703**	0.0255	3.808
Zinc	67	0.6339	0.8118	0.7467	**0.7308**	0.09	12.32
Zinc	68	0.8627	0.7542	0.7679	**0.7949**	0.0591	7.43

Internal Standard Factors:

Gallium	71	0.98	1.034	1.003	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001A +20**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:34**					
Chromium	52	22.42	21.31	19.76	**21.16**	1.334	6.305
Chromium	53	22.84	21.34	20.23	**21.47**	1.309	6.096
Cobalt	59	20.4	19.04	18.02	**19.15**	1.194	6.232
Copper	63	21.2	19.96	18.66	**19.94**	1.269	6.363
Copper	65	21.34	20.16	18.79	**20.1**	1.273	6.334
Nickel	60	21.51	20.02	18.96	**20.16**	1.28	6.347
Nickel	62	21	19.21	18.74	**19.65**	1.194	6.076
Zinc	66	24.18	23	21.46	**22.88**	1.368	5.977
Zinc	67	25.24	23.35	22.77	**23.79**	1.293	5.434
Zinc	68	25.58	24.25	22.76	**24.2**	1.411	5.833

Internal Standard Factors:

Gallium	71	1.046	1.055	1.04	**1.046**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701647-001S			Mean	SD	%RSD
TimeStamp		3/20/07 15:36					
Chromium	52	21.69	20.92	20.52	**21.04**	0.5989	2.846
Chromium	53	22.08	21.33	21.09	**21.5**	0.5195	2.416
Cobalt	59	19.53	18.53	18.41	**18.82**	0.6115	3.249
Copper	63	20.43	19.65	18.96	**19.68**	0.7325	3.722
Copper	65	20.08	20.12	19.15	**19.79**	0.5502	2.781
Nickel	60	20.84	19.63	19.23	**19.9**	0.8398	4.22
Nickel	62	19.67	19.42	18.81	**19.3**	0.4403	2.282
Zinc	66	22.79	22.37	21.68	**22.28**	0.56	2.514
Zinc	67	24.26	22.61	22.61	**23.16**	0.9566	4.13
Zinc	68	23.62	23.37	22.96	**23.32**	0.3336	1.431

Internal Standard Factors:

Gallium	71	1.03	1.07	1.066	**1.03**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:38**					
Chromium	52	20.26	19.43	19.37	**19.69**	0.5007	2.543
Chromium	53	19.92	19.34	19.43	**19.56**	0.3098	1.583
Cobalt	59	19.34	18.37	18.11	**18.61**	0.6504	3.495
Copper	63	18.8	18.2	17.69	**18.23**	0.5567	3.053
Copper	65	18.8	18.1	18	**18.3**	0.4378	2.392
Nickel	60	18.88	17.77	17.71	**18.12**	0.6564	3.623
Nickel	62	19.21	17.88	17.52	**18.2**	0.8862	4.868
Zinc	66	18.87	18.64	18.02	**18.51**	0.4384	2.368
Zinc	67	18.7	19.43	18.45	**18.86**	0.5107	2.708
Zinc	68	19.03	18.78	18.55	**18.79**	0.2419	1.288

Internal Standard Factors:

Gallium	71	0.999	1.03	1.043	**0.999**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:40**					
Chromium	52	0.6621	0.7696	0.8119	**0.7479**	0.0772	10.33
Chromium	53	29.52	32.2	32.93	**31.55**	1.792	5.68
Cobalt	59	0.4097	0.4227	0.4489	**0.4271**	0.02	4.676
Copper	63	3.449	3.669	3.781	**3.633**	0.1691	4.653
Copper	65	1.286	1.378	1.491	**1.385**	0.1029	7.428
Nickel	60	13.16	13.84	14.44	**13.82**	0.6419	4.646
Nickel	62	8.172	9.015	9.191	**8.793**	0.5448	6.196
Zinc	66	556.9	620.1	647.4	**608.1**	46.37	7.625
Zinc	67	479.2	540.6	561.6	**527.1**	42.8	8.119
Zinc	68	545.3	610	621.6	**592.3**	41.14	6.945

Internal Standard Factors:

Gallium	71	1.459	1.636	1.69	**1.459**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701703-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:42**					
Chromium	52	0.3657	0.3427	0.3336	**0.3473**	0.0165	4.754
Chromium	53	5.686	5.158	5.038	**5.294**	0.3446	6.509
Cobalt	59	0.3066	0.286	0.2732	**0.2886**	0.0169	5.851
Copper	63	0.5971	0.5297	0.5149	**0.5473**	0.0438	8.006
Copper	65	0.3841	0.3751	0.3814	**0.3802**	0.0046	1.212
Nickel	60	2.976	2.749	2.799	**2.841**	0.119	4.188
Nickel	62	0.9339	0.6652	0.6632	**0.7541**	0.1557	20.65
Zinc	66	8.626	7.931	7.873	**8.143**	0.4193	5.148
Zinc	67	14.09	13.48	13.69	**13.75**	0.3098	2.252
Zinc	68	13.05	12.35	12.39	**12.6**	0.3966	3.148

Internal Standard Factors:

Gallium	71	1.179	1.193	1.183	**1.179**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV2 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:47**					
Chromium	52	24.55	24.13	23.8	**24.16**	0.3755	1.554
Chromium	53	25.42	24.71	24.67	**24.93**	0.423	1.696
Cobalt	59	24.25	24.11	23.34	**23.9**	0.4919	2.058
Copper	63	24.06	24.2	23.03	**23.76**	0.6372	2.681
Copper	65	23.78	24.03	23.06	**23.62**	0.5025	2.127
Nickel	60	23.84	24.09	22.95	**23.63**	0.6013	2.545
Nickel	62	24.13	24.51	23.01	**23.88**	0.7835	3.281
Zinc	66	23.53	24.02	23.19	**23.58**	0.4167	1.767
Zinc	67	24.41	24.86	24.06	**24.44**	0.4005	1.639
Zinc	68	24.72	23.96	23.45	**24.04**	0.6403	2.663

Internal Standard Factors:

Gallium	71	0.92	1.006	1.01	**0.92**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:49**					
Chromium	52	0.0372	0.0055	0.0408	**0.0279**	0.0194	69.74
Chromium	53	0.6042	0.6101	0.5588	**0.591**	0.0281	4.751
Cobalt	59	0.001	0.0015	0.0003	**0.001**	0.0006	64.52
Copper	63	-0.0015	-0.0073	-0.0065	**-0.0051**	0.0031	61.26
Copper	65	-0.0033	0.0023	-0.0056	**-0.0022**	0.0041	185
Nickel	60	-0.0492	-0.0891	-0.0943	**-0.0775**	0.0247	31.8
Nickel	62	-0.0958	-0.0683	-0.1543	**-0.1061**	0.0439	41.38
Zinc	66	-0.073	-0.0363	-0.081	**-0.0634**	0.0238	37.6
Zinc	67	0.2411	0.4646	0.3188	**0.3415**	0.1135	33.23
Zinc	68	-0.0161	0.0378	-0.0084	**0.0044**	0.0291	657.6

Internal Standard Factors:

Gallium	71	0.983	1.017	1.023	**0.983**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:52**					
Chromium	52	3.935	3.649	3.338	**3.641**	0.2988	8.207
Chromium	53	4.506	4.101	3.821	**4.143**	0.3443	8.312
Cobalt	59	1.867	1.704	1.602	**1.724**	0.1335	7.741
Copper	63	7.109	6.524	6.249	**6.628**	0.4389	6.623
Copper	65	6.587	6.019	5.608	**6.071**	0.4915	8.096
Nickel	60	3.421	3.158	2.861	**3.147**	0.2803	8.907
Nickel	62	4.248	4.043	3.916	**4.069**	0.1674	4.115
Zinc	66	7.957	7.197	6.674	**7.276**	0.6452	8.867
Zinc	67	11.06	10.17	9.608	**10.28**	0.7301	7.103
Zinc	68	9.348	8.795	8.159	**8.768**	0.5948	6.784

Internal Standard Factors:

Gallium	71	1.171	1.199	1.175	**1.171**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:54**					
Chromium	52	4.104	3.573	3.408	**3.695**	0.3634	9.834
Chromium	53	4.53	4.096	3.879	**4.168**	0.3317	7.959
Cobalt	59	1.962	1.697	1.592	**1.75**	0.1905	10.89
Copper	63	7.198	6.265	6.028	**6.497**	0.6183	9.516
Copper	65	6.498	5.795	5.457	**5.917**	0.531	8.975
Nickel	60	3.607	3.021	2.88	**3.169**	0.3854	12.16
Nickel	62	4.772	3.839	3.718	**4.11**	0.5771	14.04
Zinc	66	8	6.943	6.702	**7.215**	0.6903	9.567
Zinc	67	12.22	10.25	9.297	**10.59**	1.49	14.07
Zinc	68	9.344	8.516	8.27	**8.71**	0.5624	6.458

Internal Standard Factors:

Gallium	71	1.22	1.207	1.195	**1.22**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:55**					
Chromium	52	24.03	22.36	21.81	**22.73**	1.154	5.078
Chromium	53	24.6	22.93	22.4	**23.31**	1.147	4.921
Cobalt	59	21.19	19.49	18.82	**19.84**	1.222	6.158
Copper	63	24.45	22.46	21.45	**22.78**	1.527	6.703
Copper	65	23.91	22.4	21.54	**22.62**	1.199	5.3
Nickel	60	21.63	19.87	18.86	**20.12**	1.399	6.956
Nickel	62	22.57	20.71	19.72	**21**	1.444	6.877
Zinc	66	28.38	26.43	26.14	**26.99**	1.22	4.521
Zinc	67	30.99	29.76	29.36	**30.04**	0.8523	2.838
Zinc	68	30.11	28.33	27.88	**28.77**	1.18	4.103

Internal Standard Factors:

Gallium	71	1.157	1.172	1.159	**1.157**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701680-003			Mean	SD	%RSD
TimeStamp		3/20/07 15:57					
Chromium	52	6.303	5.607	5.322	**5.744**	0.5047	8.786
Chromium	53	6.704	6.113	5.608	**6.142**	0.5483	8.928
Cobalt	59	2.124	1.872	1.753	**1.916**	0.1896	9.893
Copper	63	4.742	4.273	3.942	**4.319**	0.402	9.309
Copper	65	4.692	4.292	3.956	**4.313**	0.3682	8.536
Nickel	60	3.363	2.854	2.773	**2.997**	0.3199	10.67
Nickel	62	4.868	4.312	3.996	**4.392**	0.4414	10.05
Zinc	66	12.8	11.78	10.94	**11.84**	0.931	7.864
Zinc	67	14.18	13.92	12.29	**13.46**	1.025	7.612
Zinc	68	13.5	12.08	11.8	**12.46**	0.9151	7.343

Internal Standard Factors:

Gallium	71	1.132	1.136	1.109	**1.132**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:58**					
Chromium	52	52.79	47.68	47.63	**49.37**	2.961	5.997
Chromium	53	53.91	48.68	48.53	**50.37**	3.065	6.085
Cobalt	59	14.2	12.57	12.71	**13.16**	0.9033	6.865
Copper	63	33.24	29.66	30.51	**31.14**	1.874	6.02
Copper	65	34.57	31.16	31.69	**32.48**	1.836	5.655
Nickel	60	22.36	20.04	20.22	**20.87**	1.291	6.184
Nickel	62	30.92	27.4	27.53	**28.62**	1.993	6.964
Zinc	66	91.15	81.26	82.79	**85.06**	5.323	6.258
Zinc	67	102	91.64	92.93	**95.51**	5.624	5.888
Zinc	68	95.44	88.08	89.13	**90.88**	3.984	4.384

Internal Standard Factors:

Gallium	71	0.918	0.885	0.912	**0.918**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:00**					
Chromium	52	0.5365	0.576	0.7023	**0.6049**	0.0866	14.31
Chromium	53	0.7834	0.7797	0.7899	**0.7843**	0.0052	0.6584
Cobalt	59	0.5775	0.5788	0.6674	**0.6079**	0.0515	8.478
Copper	63	2.887	2.937	3.302	**3.042**	0.2269	7.459
Copper	65	2.272	2.328	2.529	**2.376**	0.1353	5.695
Nickel	60	1.503	1.486	1.7	**1.563**	0.1188	7.598
Nickel	62	1.446	1.543	1.741	**1.577**	0.1504	9.54
Zinc	66	2.21	2.192	2.494	**2.299**	0.1695	7.371
Zinc	67	3.628	3.747	3.945	**3.774**	0.1602	4.244
Zinc	68	2.844	3.099	3.371	**3.105**	0.2634	8.484

Internal Standard Factors:

Gallium	71	1.181	1.247	1.342	**1.181**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-003 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:02**					
Chromium	52	0.4581	0.3976	0.3986	**0.4181**	0.0346	8.283
Chromium	53	1.158	1.151	1.168	**1.159**	0.0087	0.7528
Cobalt	59	1.779	1.599	1.572	**1.65**	0.113	6.846
Copper	63	3.131	2.871	2.794	**2.932**	0.1766	6.024
Copper	65	2.115	1.9	1.993	**2.003**	0.1078	5.381
Nickel	60	3.294	2.851	2.817	**2.987**	0.2663	8.916
Nickel	62	2.411	2.344	2.119	**2.291**	0.1531	6.681
Zinc	66	2.116	1.992	2.063	**2.057**	0.0619	3.008
Zinc	67	3.555	2.915	3.272	**3.248**	0.3207	9.876
Zinc	68	3.414	3.06	3.227	**3.234**	0.1769	5.471

Internal Standard Factors:

Gallium	71	1.253	1.269	1.293	**1.253**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:03**					
Chromium	52	0.6438	0.6874	0.6797	**0.6703**	0.0233	3.476
Chromium	53	2.507	2.487	2.444	**2.479**	0.0321	1.295
Cobalt	59	1.591	1.598	1.566	**1.585**	0.0171	1.076
Copper	63	4.412	4.353	4.268	**4.344**	0.0723	1.665
Copper	65	3.445	3.495	3.489	**3.476**	0.0272	0.7823
Nickel	60	2.732	2.655	2.53	**2.639**	0.1021	3.868
Nickel	62	2.405	2.064	1.888	**2.119**	0.2627	12.4
Zinc	66	3.228	3.375	3.234	**3.279**	0.0829	2.529
Zinc	67	4.519	5.013	4.315	**4.616**	0.3587	7.772
Zinc	68	4.159	4.179	4.077	**4.138**	0.054	1.306

Internal Standard Factors:

Gallium	71	1.199	1.276	1.284	**1.199**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:05**					
Chromium	52	24.51	23.86	23.32	**23.9**	0.5954	2.492
Chromium	53	24.52	24.33	23.67	**24.17**	0.4475	1.851
Cobalt	59	23.22	23.03	22.12	**22.79**	0.5916	2.596
Copper	63	23.7	22.98	22.02	**22.9**	0.8411	3.673
Copper	65	23.5	22.79	22.04	**22.78**	0.7323	3.215
Nickel	60	23.29	23.06	21.77	**22.71**	0.8153	3.591
Nickel	62	23.15	22.88	21.75	**22.59**	0.7449	3.297
Zinc	66	23.65	23.24	23	**23.3**	0.3312	1.421
Zinc	67	23.95	24.16	22.61	**23.57**	0.8389	3.559
Zinc	68	24.41	23.7	23.3	**23.81**	0.5641	2.369

Internal Standard Factors:

Gallium	71	1.028	1.08	1.064	**1.028**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:09**					
Chromium	52	0.0161	0.0051	-0.0355	**-0.0047**	0.0272	575
Chromium	53	0.1411	0.1314	0.1161	**0.1296**	0.0126	9.722
Cobalt	59	-0.0006	-0.0006	-0.0006	**-0.0006**	0	5.713
Copper	63	-0.007	-0.0006	-0.0136	**-0.0071**	0.0065	91.34
Copper	65	-0.0105	0.0046	-0.0133	**-0.0064**	0.0096	149.8
Nickel	60	-0.066	-0.0214	-0.0876	**-0.0584**	0.0337	57.83
Nickel	62	-0.0822	-0.0455	-0.087	**-0.0715**	0.0227	31.7
Zinc	66	-0.0296	-0.0312	0.0201	**-0.0136**	0.0292	215.5
Zinc	67	-0.1937	0.008	0.0157	**-0.0567**	0.1188	209.6
Zinc	68	0.0154	0.0095	-0.1729	**-0.0494**	0.107	216.9

Internal Standard Factors:

Gallium	71	0.998	1.074	1.069	**0.998**	n/a	n/a

Diesel & Residual Range Organics

Organic Analysis:
Diesel and Residual Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Cover Page - Organic Analysis Data Package
Diesel and Residual Range Organics

Sample Name	Lab Code	Date Collected	Date Received
1349MW01CL	K0701647-002	03/01/2007	03/02/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Trish Lee

Name: TRISH LEE

Date: 3-22-07

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Diesel and Residual Range Organics

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	65-135	03/20/07	Acceptable
n-Triacontane	101	65-135	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703835-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	97	65-135	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW01CL	K0701647-002	92	101
Method Blank	KWG0703835-3	97	97
Lab Control Sample	KWG0703835-1	102	104
Duplicate Lab Control Sample	KWG0703835-2	97	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703835

	Lab Control Sample KWG0703835-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703835-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1720	1600	107	1650	1600	103	65-135	4	35
C24 - C36 RRO	1000	800	125	966	800	121	65-135	4	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:38

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\032007.TAR\0320W010.D
Lab Code:	KWG0703835-3	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW01CL	K0701647-002	J:\GC21\DATA\032007.TAR\0320W006.D	03/20/07	12:17
Lab Control Sample	KWG0703835-1	J:\GC21\DATA\032007.TAR\0320W008.D	03/20/07	12:58
Duplicate Lab Control Sample	KWG0703835-2	J:\GC21\DATA\032007.TAR\0320W009.D	03/20/07	13:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703835-1	**Lab Code:**	KWG0703835-2
File ID:	J:\GC21\DATA\032007.TAR\0320W008.D	**File ID:**	J:\GC21\DATA\032007.TAR\0320W009.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/06/2007	**Date Extracted:**	03/06/2007
Date Analyzed:	03/20/2007	**Date Analyzed:**	03/20/2007
Time Analyzed:	12:58	**Time Analyzed:**	13:18

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW01CL	K0701647-002	J:\GC21\DATA\032007.TAR\0320W006.D	03/20/07	12:17
Method Blank	KWG0703835-3	J:\GC21\DATA\032007.TAR\0320W010.D	03/20/07	13:38

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Calibration Date:**	01/19/2007
		Date Analyzed:	01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration ID:**	CAL6131
Analysis Method:	8015B	**Units:**	ppm
File ID:	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Analyzed:**	03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration Date:**	01/19/2007
Analysis Method:	8015B	**Calibration ID:**	CAL6131
		Analysis Lot:	KWG0703832
		Units:	ppm
File ID:	J:\GC21\DATA\032007.TAR\0320W003.D J:\GC21\DATA\032007.TAR\0320W004.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1350	-2	NA	± 15 %	AverageRF
n-Triacontane	50	47	1060	1010	-5	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1070	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	490	511	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Analyzed:**	03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration Date:**	01/19/2007
Analysis Method:	8015B	**Calibration ID:**	CAL6131
		Analysis Lot:	KWG0703832
		Units:	ppm
File ID:	J:\GC21\DATA\032007.TAR\0320W016.D J:\GC21\DATA\032007.TAR\0320W017.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1370	1400	2	NA	± 15 %	AverageRF
n-Triacontane	50	51	1060	1090	3	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1110	1110	1	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	521	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Diesel and Residual Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703832
Instrument ID: GC21
Column: ZB-1 15m

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0320W003.D	Continuing Calibration Verification	KWG0703832-1	3/20/2007	11:16		3/20/2007	11:30
0320W004.D	Continuing Calibration Verification	KWG0703832-1	3/20/2007	11:37		3/20/2007	11:51
0320W005.D	Instrument Blank	KWG0703832-3	3/20/2007	11:57		3/20/2007	12:11
0320W006.D	1349MW01CL	K0701647-002	3/20/2007	12:17		3/20/2007	12:31
0320W007.D	ZZZZZZ	ZZZZZZ	3/20/2007	12:37		3/20/2007	12:51
0320W008.D	Lab Control Sample	KWG0703835-1	3/20/2007	12:58		3/20/2007	13:12
0320W009.D	Duplicate Lab Control Sample	KWG0703835-2	3/20/2007	13:18		3/20/2007	13:32
0320W010.D	Method Blank	KWG0703835-3	3/20/2007	13:38		3/20/2007	13:52
0320W016.D	Continuing Calibration Verification	KWG0703832-2	3/20/2007	15:40		3/20/2007	15:54
0320W017.D	Continuing Calibration Verification	KWG0703832-2	3/20/2007	16:00		3/20/2007	16:14
0320W018.D	Instrument Blank	KWG0703832-4	3/20/2007	16:21		3/20/2007	16:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/06/2007

Extraction Prep Log
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: KWG0703835
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW01CL	K0701647-002	03/01/07	03/02/07	1000ml	2ml	NA	
Method Blank	KWG0703835-3	NA	NA	1000ml	2ml	NA	
Lab Control Sample	KWG0703835-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0703835-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW01CL	K0701647-002	92	101
Method Blank	KWG0703835-3	97	97
Lab Control Sample	KWG0703835-1	102	104
Duplicate Lab Control Sample	KWG0703835-2	97	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703835

	Lab Control Sample KWG0703835-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703835-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1720	1600	107	1650	1600	103	65-135	4	35
C24 - C36 RRO	1000	800	125	966	800	121	65-135	4	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:38

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\032007.TAR\0320W010.D
Lab Code:	KWG0703835-3	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW01CL	K0701647-002	J:\GC21\DATA\032007.TAR\0320W006.D	03/20/07	12:17
Lab Control Sample	KWG0703835-1	J:\GC21\DATA\032007.TAR\0320W008.D	03/20/07	12:58
Duplicate Lab Control Sample	KWG0703835-2	J:\GC21\DATA\032007.TAR\0320W009.D	03/20/07	13:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703835-1	**Lab Code:**	KWG0703835-2
File ID:	J:\GC21\DATA\032007.TAR\0320W008.D	**File ID:**	J:\GC21\DATA\032007.TAR\0320W009.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/06/2007	**Date Extracted:**	03/06/2007
Date Analyzed:	03/20/2007	**Date Analyzed:**	03/20/2007
Time Analyzed:	12:58	**Time Analyzed:**	13:18

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW01CL	K0701647-002	J:\GC21\DATA\032007.TAR\0320W006.D	03/20/07	12:17
Method Blank	KWG0703835-3	J:\GC21\DATA\032007.TAR\0320W010.D	03/20/07	13:38

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Diesel and Residual Range Organics

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	92	65-135	03/20/07	Acceptable
n-Triacontane	101	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W006.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/20/2007 12:17
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 032007

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	K0701647
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584805	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\032007.TAR\0320W006.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 12:17	**Quant Date:**	03/20/2007 17:49	**Vial:**	11
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-002			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	31472	22.96	92	65-135	OK
n-Triacontane	7.60	0.00	26814	25.22	101	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	4770	4.31	50	U	
C24 - C36 RRO	6.35	?	30540	62.30	300	U	

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

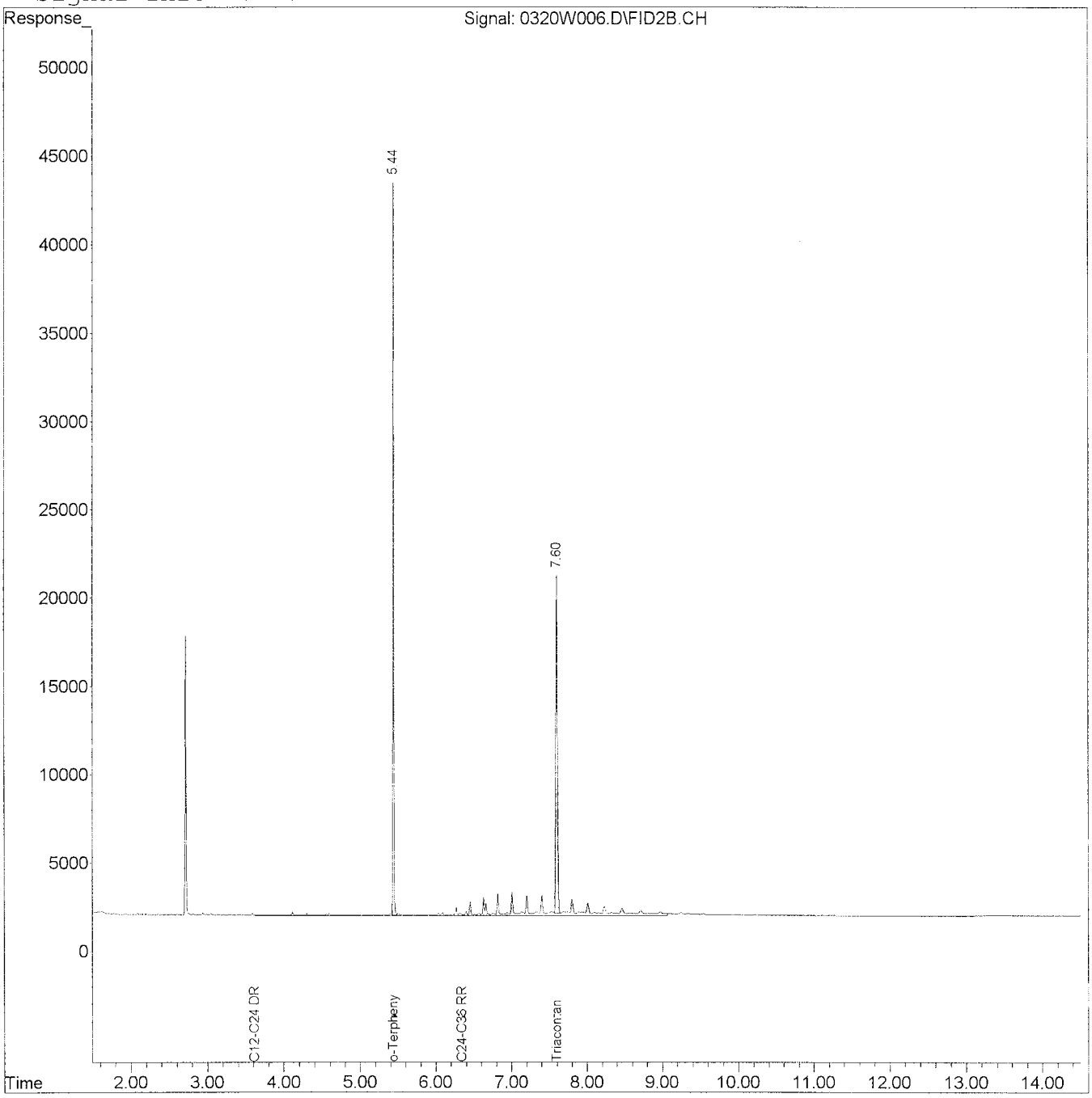
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W006.D Vial: 11
Acq On : 20 Mar 2007 12:17 pm Operator: PMulherin
Sample : k0701647-002 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703835-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	97	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W010.D
Lab ID: KWG0703835-3
RunType: MB
Matrix: WATER

Date Acquired: 03/20/2007 13:38
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MMB 2007

Secondary Review: Gee

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584809	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W010.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 13:38	**Quant Date:**	03/20/2007 17:50	**Vial:**	15
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703835-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	33074	24.13	97	65-135	OK
n-Triacontane	7.60	0.00	25826	24.29	97	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	3031	2.74	50	U	
C24 - C36 RRO	6.35	?	4695	9.58	300	U	

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

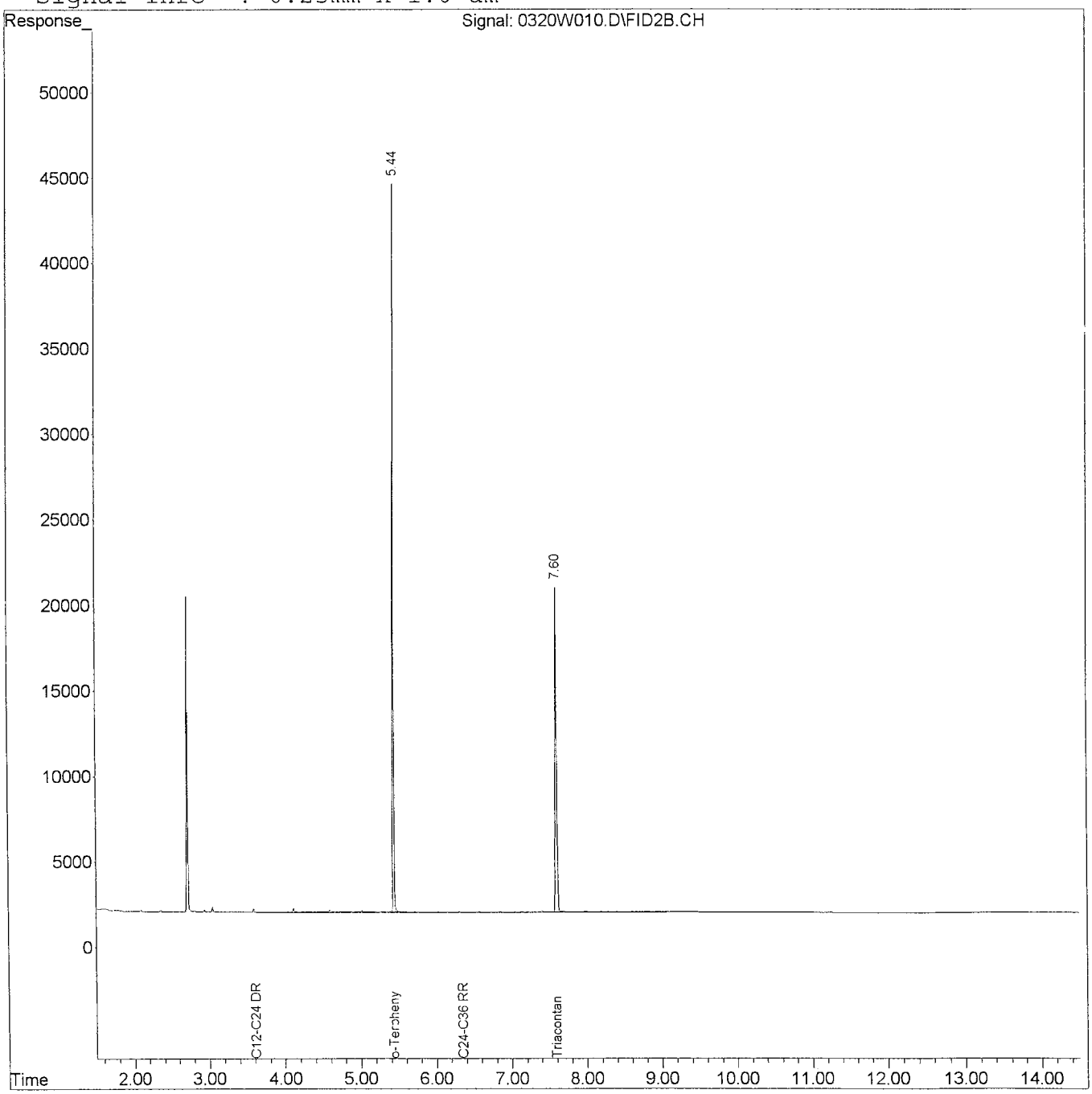
*: Result fails acceptance criteria
#. Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W010.D Vial: 15
Acq On : 20 Mar 2007 1:38 pm Operator: PMulherin
Sample : KWG0703295MB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703835-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1720**		50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	**1000**		300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	102	65-135	03/20/07	Acceptable
n-Triacontane	104	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W008.D
Lab ID: KWG0703835-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/20/2007 12:58
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 03 2007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584807	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W008.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 12:58	**Quant Date:**	03/20/2007 17:49	**Vial:**	13
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703835-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	35017	25.55	102	65-135	OK
n-Triacontane	7.60	0.00	27724	26.08	104	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	950482	858.90	1720		
C24 - C36 RRO	6.35	?	245830	501.45	1000		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

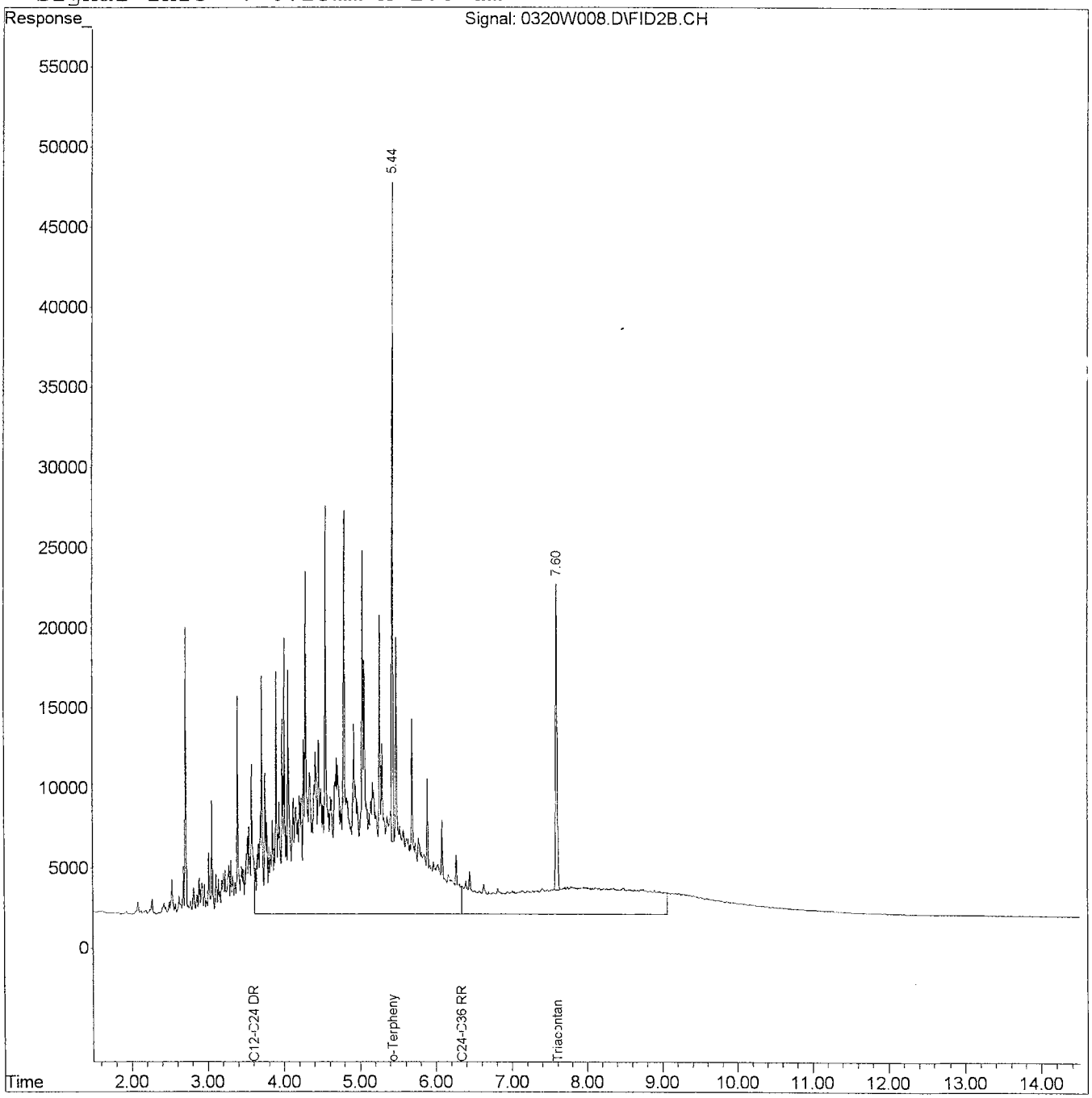
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W008.D
Acq On : 20 Mar 2007 12:58 pm
Sample : KWG0703295LCS
Misc :
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Vial: 13
Operator: PMulherin
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703835-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1650**		50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	**966**		300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	100	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W009.D
Lab ID: KWG0703835-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/20/2007 13:18
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MM 03/2007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584808	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W009.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 13:18	**Quant Date:**	03/20/2007 17:49	**Vial:**	14
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0703835-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	33252	24.26	97	65-135	OK
n-Triacontane	7.60	0.00	26537	24.96	100	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	910289	822.58	1650		
C24 - C36 RRO	6.35	?	236791	483.01	966		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

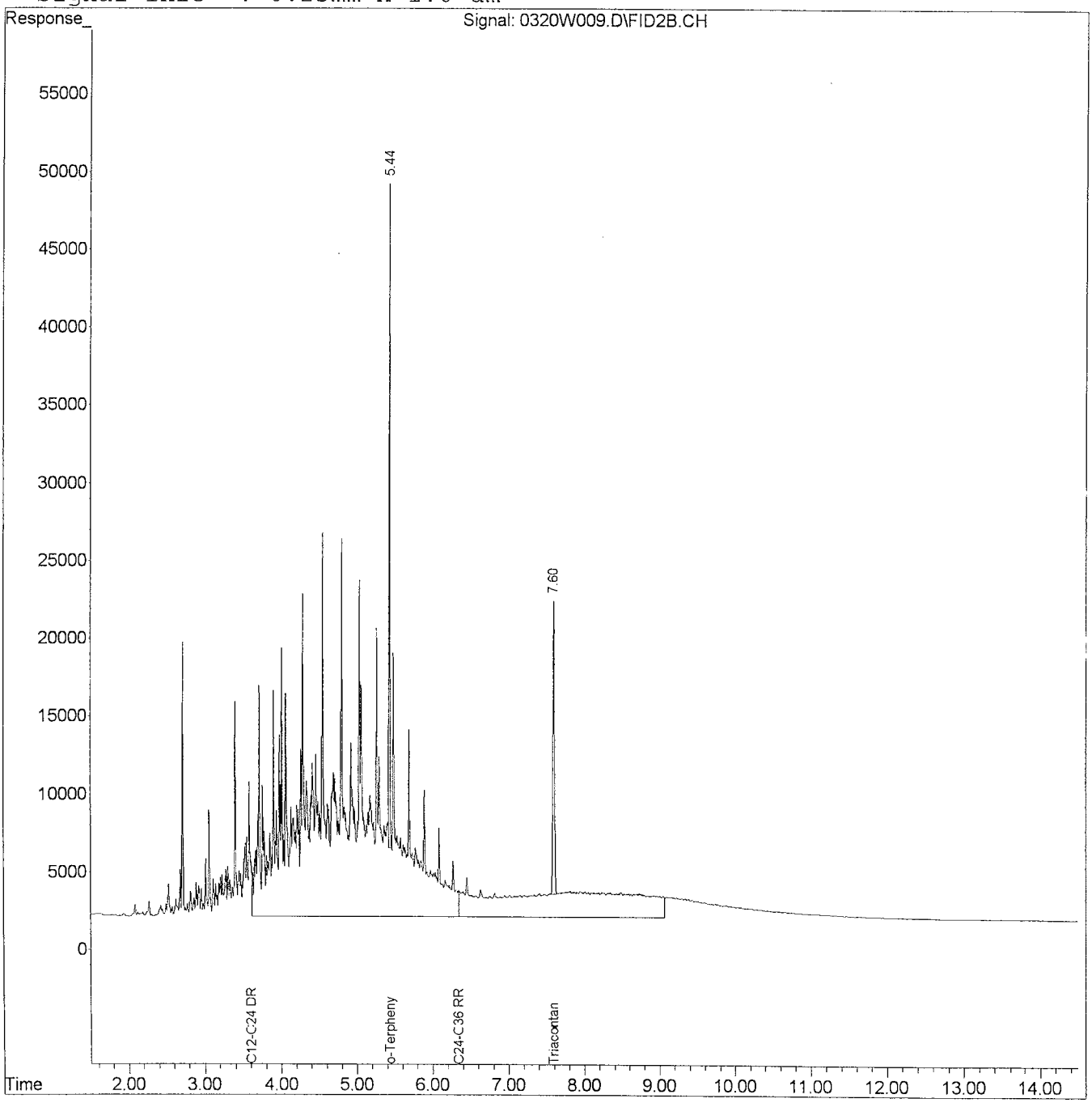
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W009.D
Acq On : 20 Mar 2007 1:18 pm
Sample : KWG0703295DLCS
Misc :
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Vial: 14
Operator: PMulherin
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 01/19/2007
Date Analyzed: 01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6131
Units: ppm

File ID: J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D
J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\GC21\METHODS\0313TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

0313TAR aka CAL6131
Calibration Last Updated: Wed Mar 14 13:57:26 2007

Reference Window: 10.00 Minutes
Non-Reference Window: 5.00 Minutes
Correlation Window: 0.02 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) o-Terphenyl ( )
Ret. Time 5.44 min., Extract & Integrate from 5.39 to 5.49 min.

Lvl ID Conc (ppm) Response

D/S	50.000	-1
G/O	not used for this compound	
1	1.000	1388
2	2.500	3265
3	10.000	12778
4	25.000	35673
5	50.000	67304
6	100.000	137387
7	200.000	295291
8	not used for this compound	

Curve Fit: Avg. RF

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2) Triacontane (C-30) ( )

Ret. Time 7.61 min., Extract & Integrate from 7.56 to 7.66 min.

Lvl ID	Conc (ppm)	Response
D/S	50.000	-1
G/O	not used for this compound	
1	1.000	1040
2	2.500	2511
3	10.000	10075
4	25.000	28327
5	50.000	51518
6	100.000	105399
7	200.000	234677
8	not used for this compound	

Curve Fit: Avg. RF

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3) C12-C24 DRO ( )

Ret. Time 3.62 min., Extract & Integrate from 3.62 to 6.36 min.

Lvl ID	Conc (ppm)	Response
D/S	1000.000	-1
G/O	not used for this compound	
1	20.000	23553
2	50.000	53433
3	200.000	209426
4	500.000	582096
5	1000.000	1095644
6	2000.000	2213286
7	4000.000	4805299
8	20000.000	19835056

MB1607

Curve Fit: Avg. RF

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4) C24-C36 RRO ( )

Ret. Time 6.36 min., Extract & Integrate from 6.36 to 9.09 min.

Lvl ID	Conc (ppm)	Response
D/S	not used for this compound	
G/O	1000.000	-1
1	20.000	-1
2	50.000	24008
3	200.000	96695
4	500.000	243833

5	1000.000	498377
6	2000.000	1013769
7	5000.000	2424406
8	not used for this compound	

Curve Fit: Avg. RF

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5) Ethylbenzene ( )

Ret. Time 2.49 min., Extract & Integrate from 2.44 to 2.54 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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6) p,m-Xylenes ( )

Ret. Time 2.53 min., Extract & Integrate from 2.48 to 2.58 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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Curve Fit: Avg. RF

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7) o-Xylene ( )

Ret. Time 2.62 min., Extract & Integrate from 2.57 to 2.67 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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8) a-Pinene ( )
Ret. Time 2.83 min., Extract & Integrate from 2.78 to 2.88 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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9) b-Pinene ( )
Ret. Time 2.99 min., Extract & Integrate from 2.94 to 3.04 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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10) 1,2,3-Trimethylbenzene ( )
Ret. Time 3.12 min., Extract & Integrate from 3.07 to 3.17 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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Curve Fit: Avg. RF

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11) Fluoranthene ( )
Ret. Time 5.84 min., Extract & Integrate from 5.79 to 5.89 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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12) Pyrene ( )

Ret. Time 5.95 min., Extract & Integrate from 5.90 to 6.00 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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13) Pristane ( )

Ret. Time 5.07 min., Extract & Integrate from 5.02 to 5.12 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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Curve Fit: Avg. RF

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14) Phytane ( )

Ret. Time 5.31 min., Extract & Integrate from 5.26 to 5.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	

4 not used for this compound
5 not used for this compound
6 not used for this compound
7 not used for this compound
8 not used for this compound

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Fri Mar 16 11:13:06 2007

pm03/16/07

Gle

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14:39 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35477	25.882 ppm
Spiked Amount 50.000	Recovery	=	51.76%
2) S Triacontane (C-30)	7.61	57008	53.617 ppm
Spiked Amount 50.000	Recovery	=	107.23%
Target Compounds			
3) H C12-C24 DRO	3.62	454422	410.638 ppm
4) H C24-C36 RRO	6.36	346019	705.815 ppm

pm 031607
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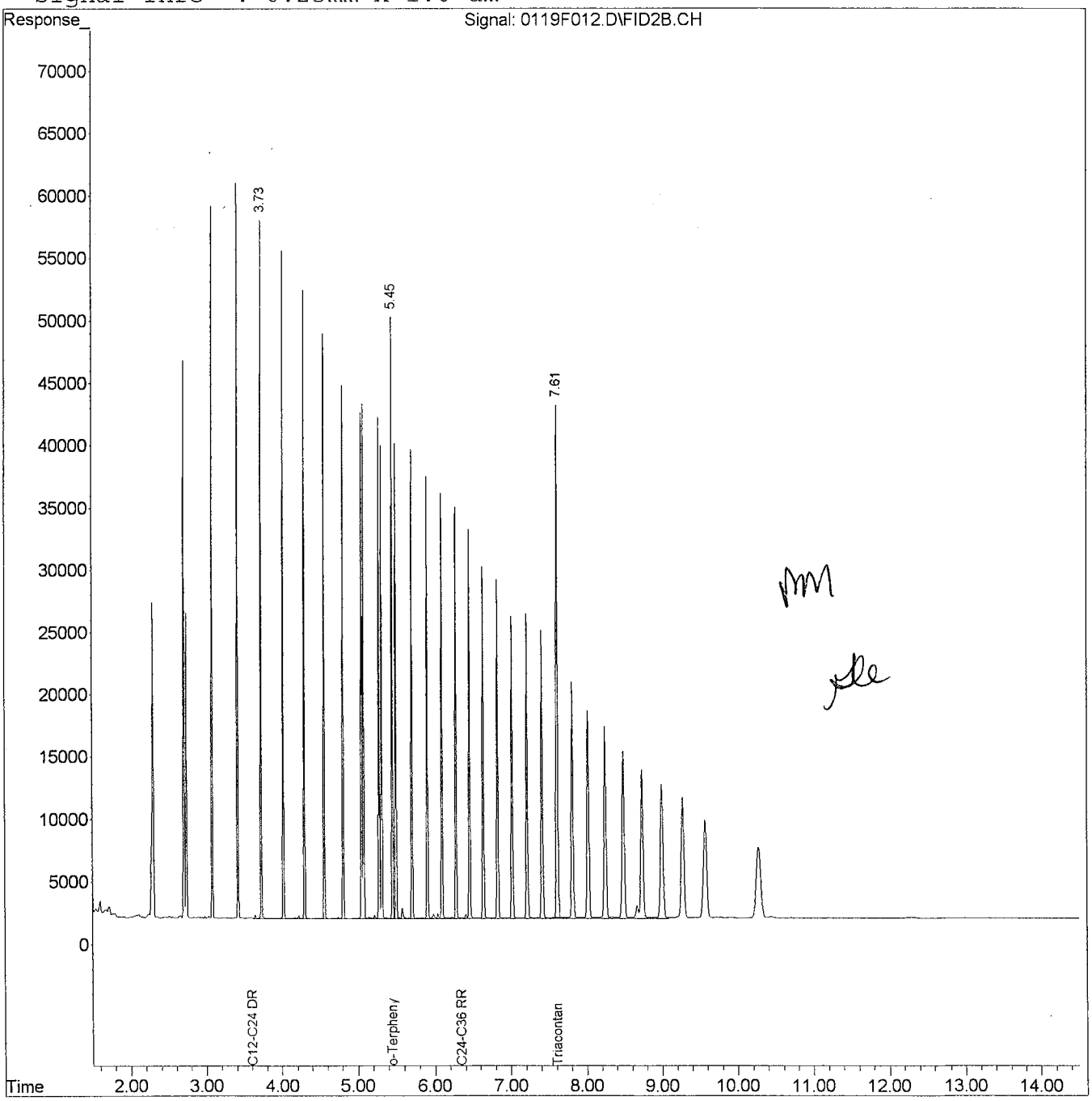
(f)=RT Delta > 1/2 Window (m)=manual int.

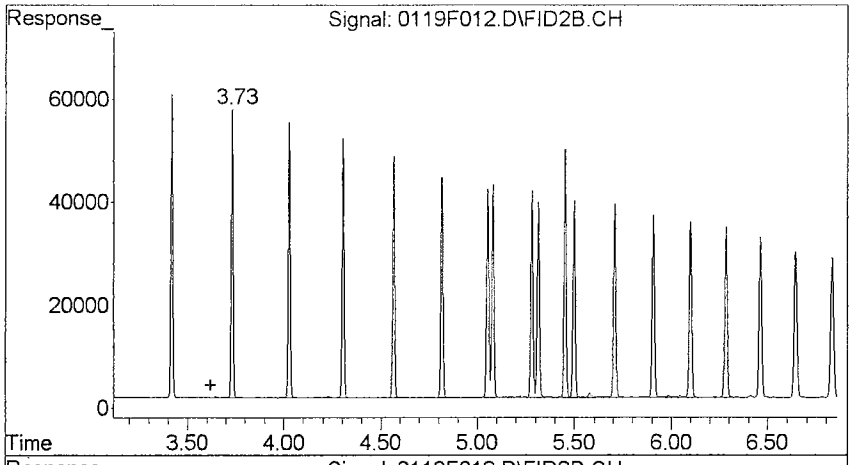
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

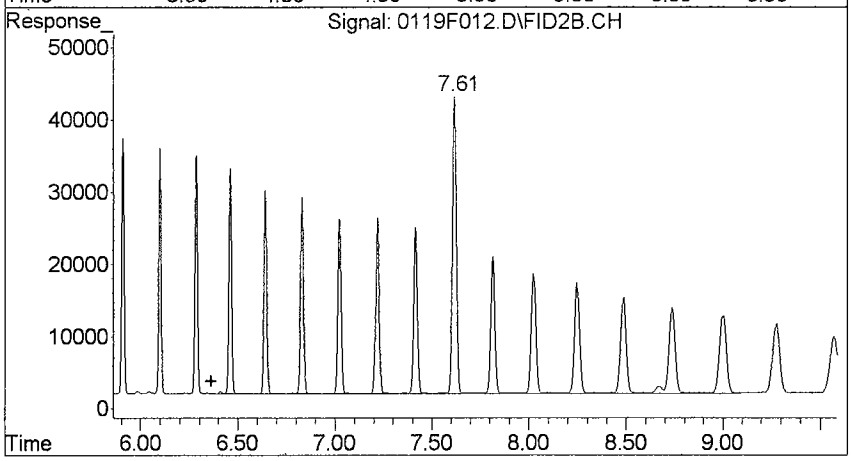
Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um





#3 C12-C24 DRO

R.T.: 3.620 min
Delta R.T.: 0.000 min
Response: 454422
Conc: 410.64 ppm m



#4 C24-C36 RRO

R.T.: 6.360 min
Delta R.T.: 0.000 min
Response: 346019
Conc: 705.81 ppm m

pm

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:06 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	1388	1.031 ppm
Spiked Amount 50.000	Recovery	=	2.06%
2) S Triacontane (C-30)	7.62	1040	1.009 ppm
Spiked Amount 50.000	Recovery	=	2.02%
Target Compounds			
3) H C12-C24 DRO	3.63	23553	21.497 ppm

PM 031607
Ste

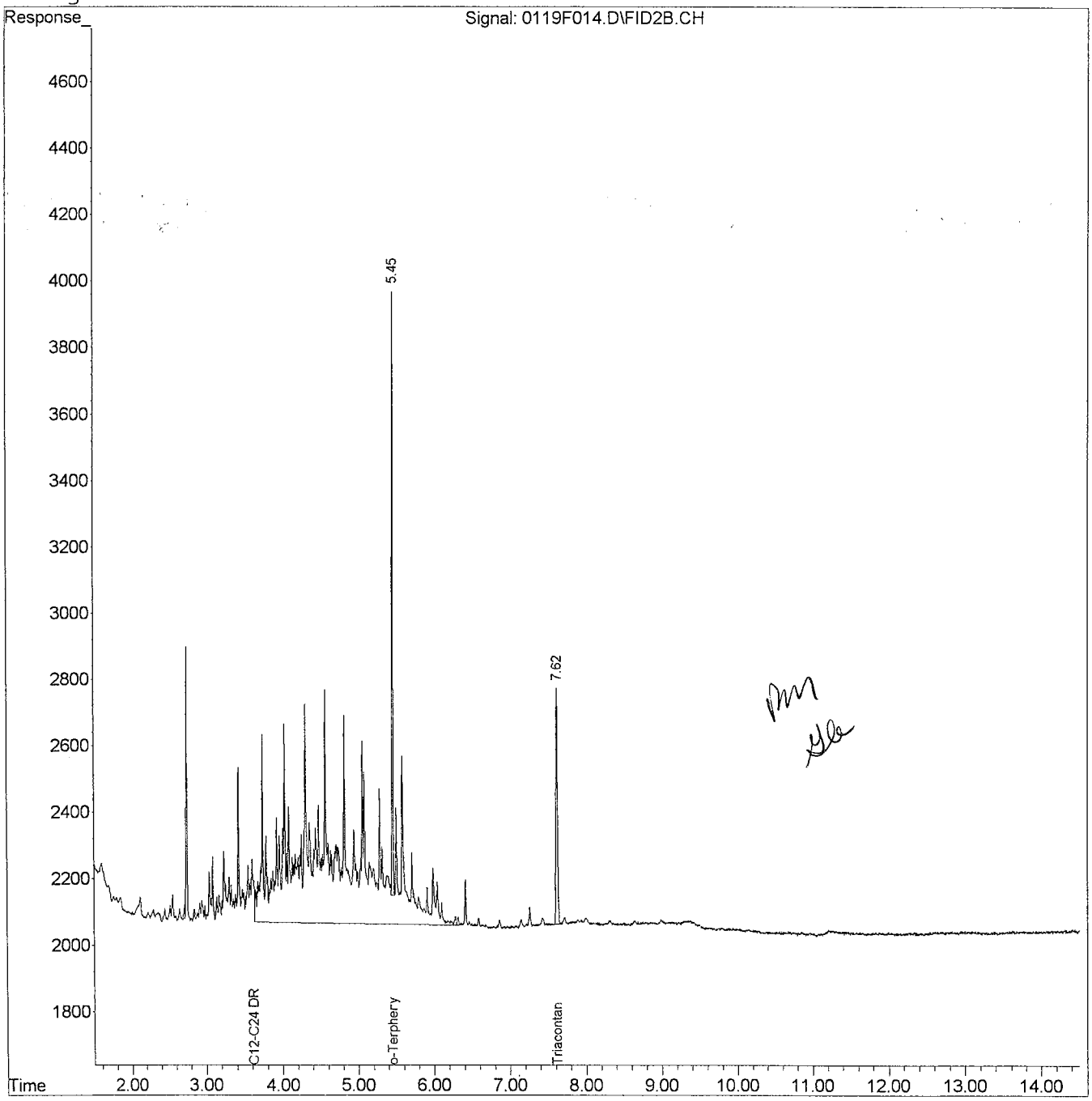
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:11 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	3265	2.426 ppm
Spiked Amount 50.000	Recovery	=	4.85%
2) S Triacontane (C-30)	7.61	2511	2.437 ppm
Spiked Amount 50.000	Recovery	=	4.87%
Target Compounds			
3) H C12-C24 DRO	3.63	53433	48.769 ppm

PM03/16/07

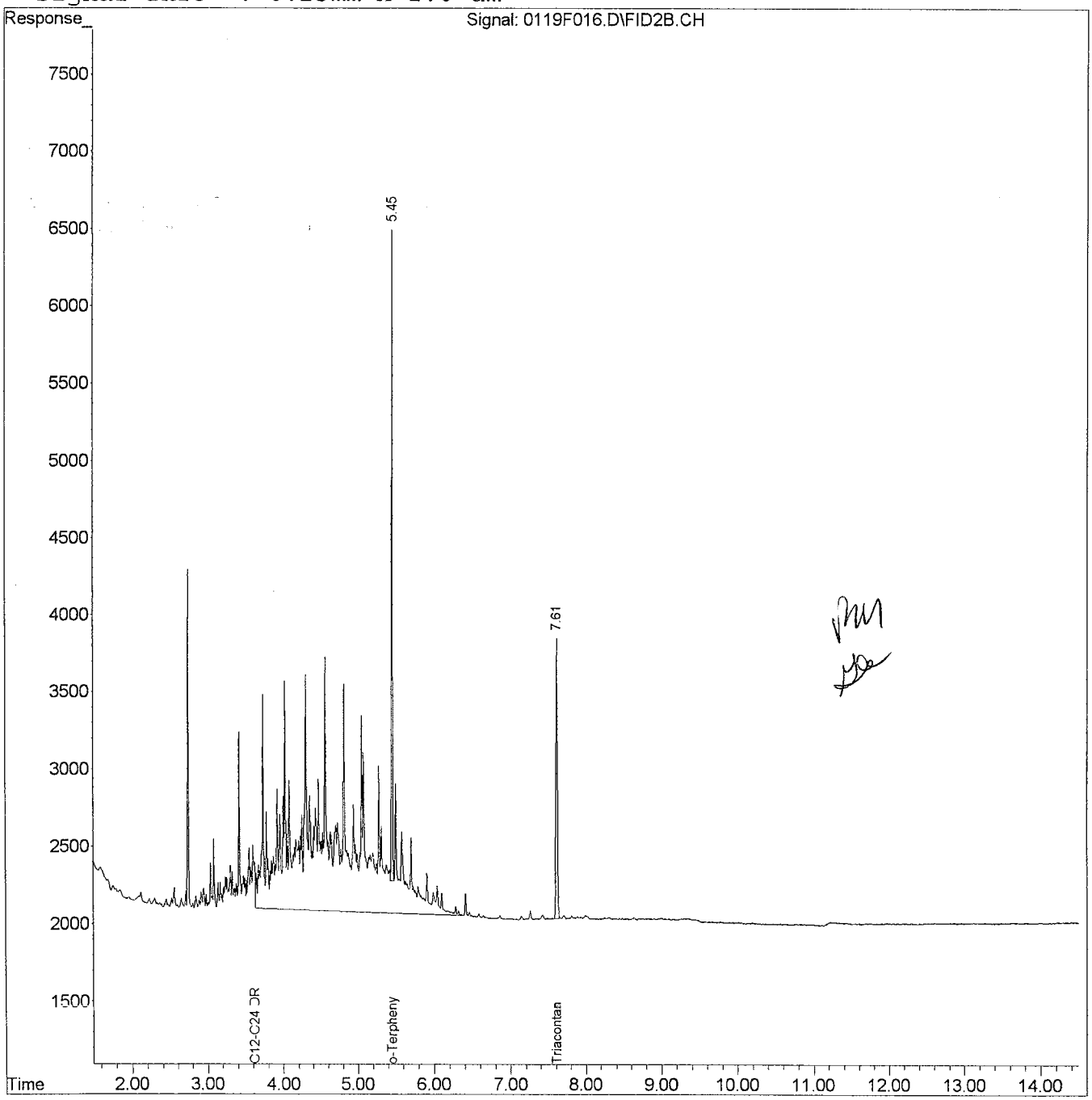
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:12 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	24008	48.172 ppm

PM 03/16/07
KLL

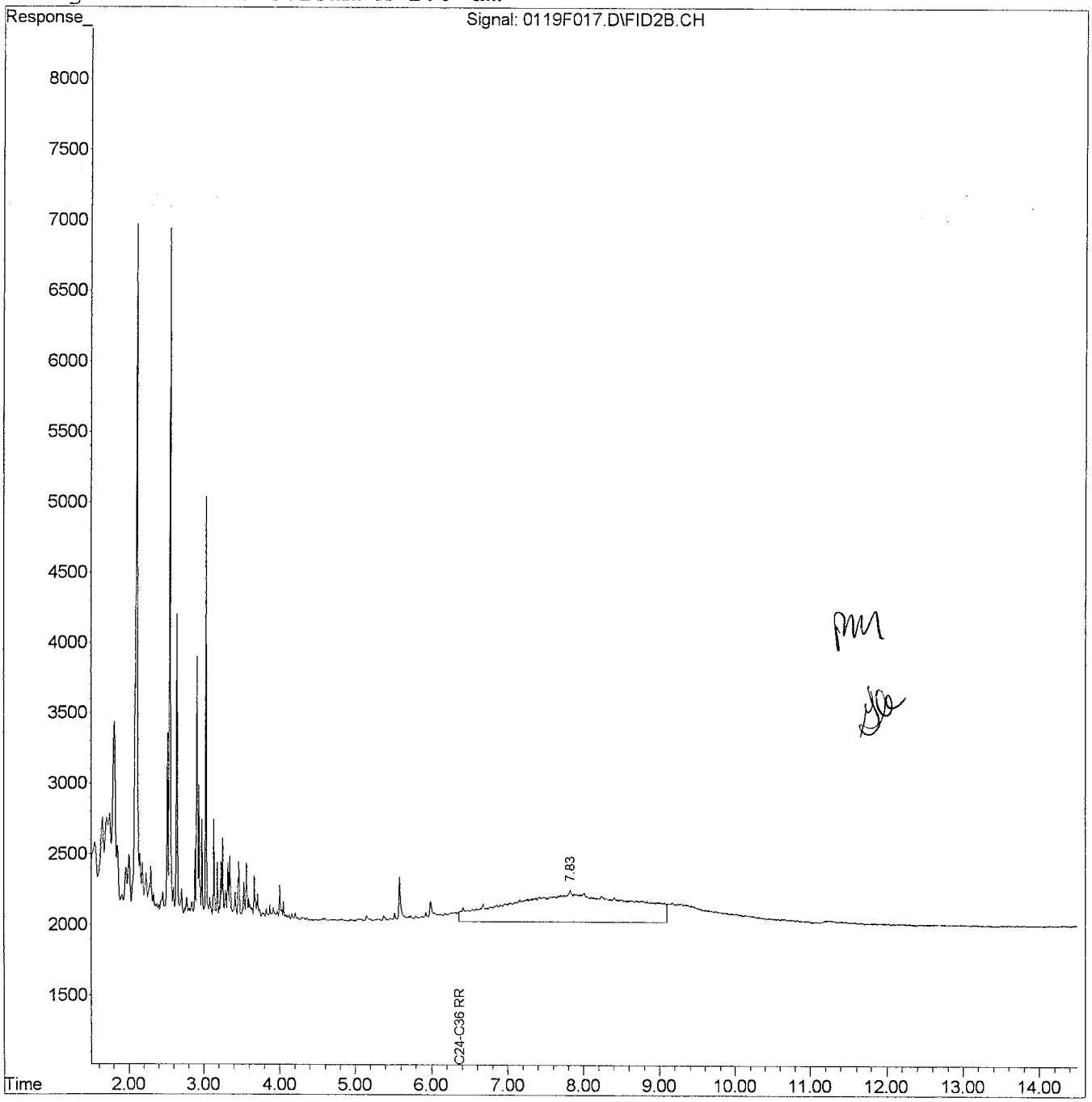
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



pm

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:13 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	12778	9.493 ppm
Spiked Amount 50.000	Recovery	=	18.99%
2) S Triacontane (C-30)	7.61	10075	9.778 ppm
Spiked Amount 50.000	Recovery	=	19.56%
Target Compounds			
3) H C12-C24 DRO	3.63	209426	191.144 ppm

pm 03/16/07
file

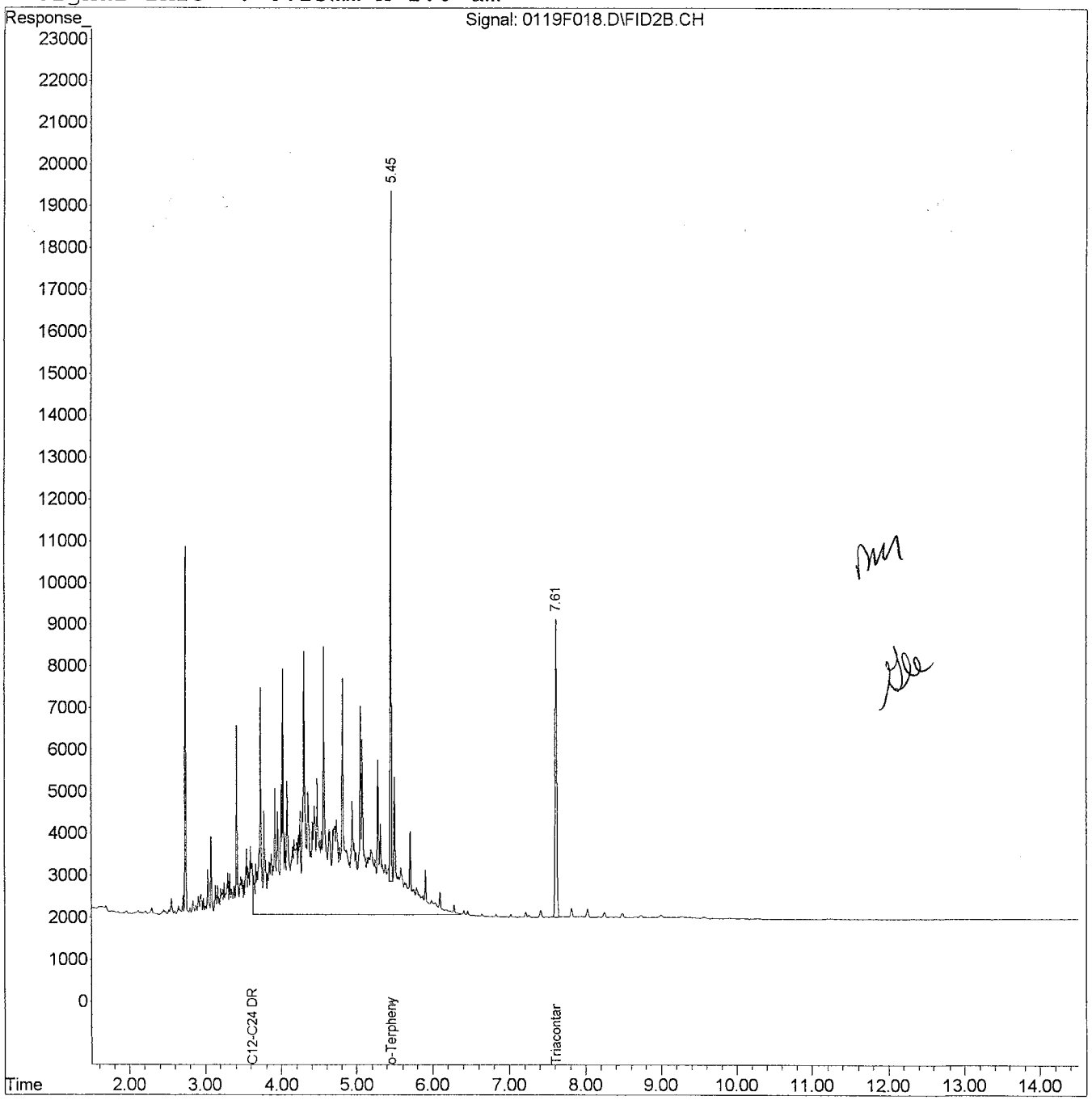
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:15 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	96695	194.020 ppm

PM 03/16/07
pla

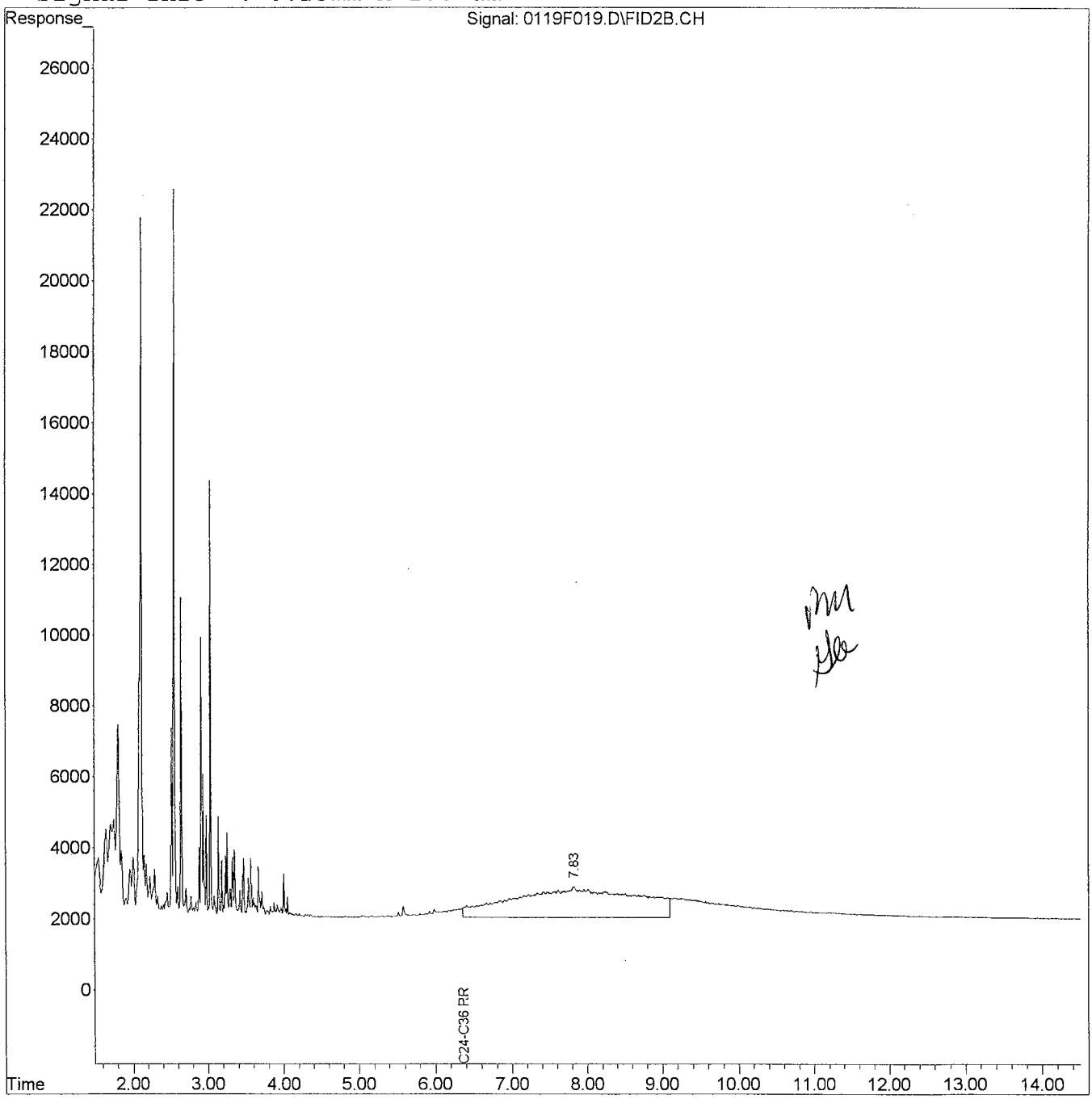
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:16 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35673	26.501 ppm
Spiked Amount 50.000	Recovery	=	53.00%
2) S Triacontane (C-30)	7.61	28327	27.492 ppm
Spiked Amount 50.000	Recovery	=	54.98%
Target Compounds			
3) H C12-C24 DRO	3.63	582096	531.282 ppm

PM03/16/07
gee

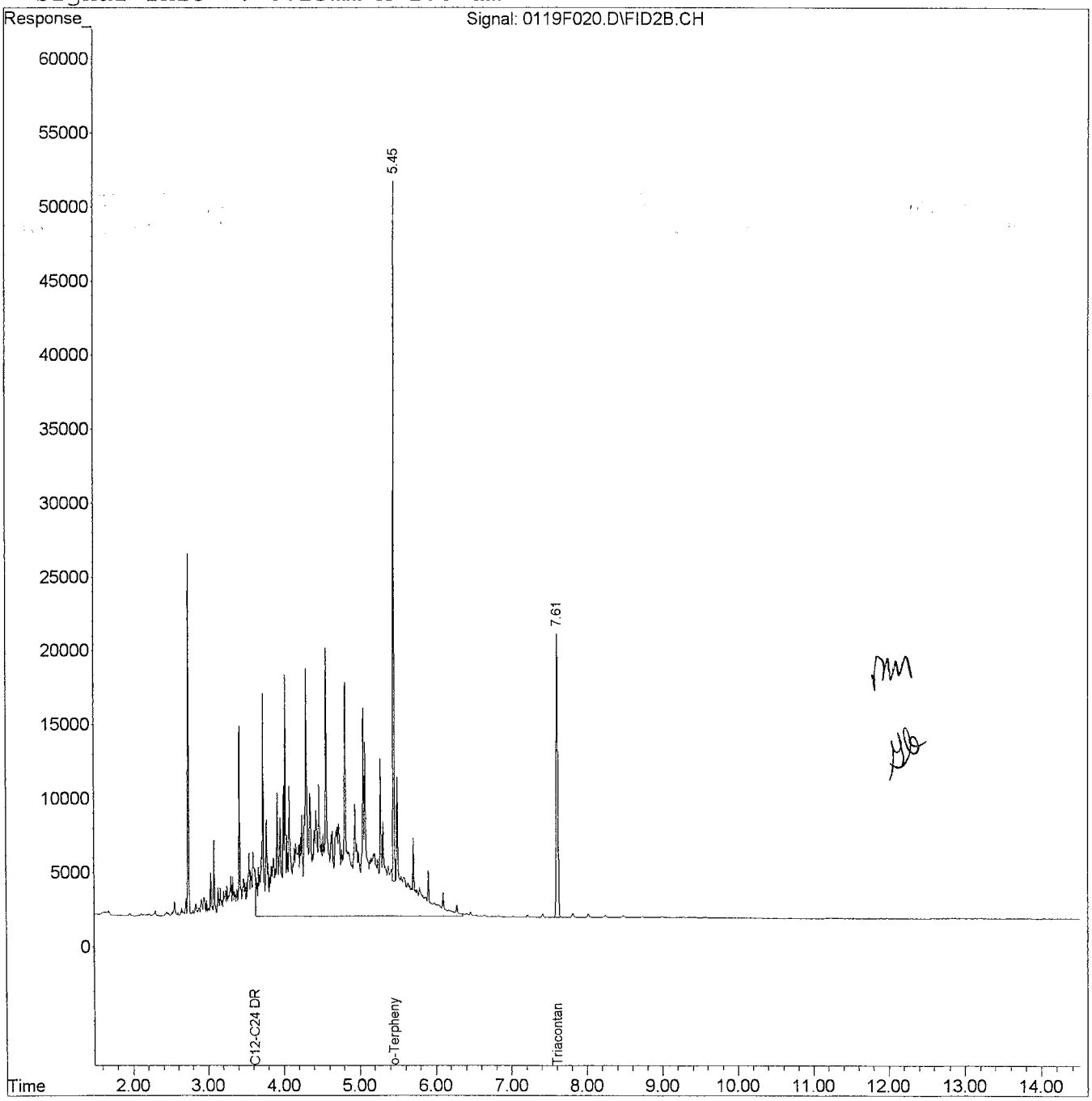
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:17 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	243833	489.254 ppm

pm 03/16/07

pm

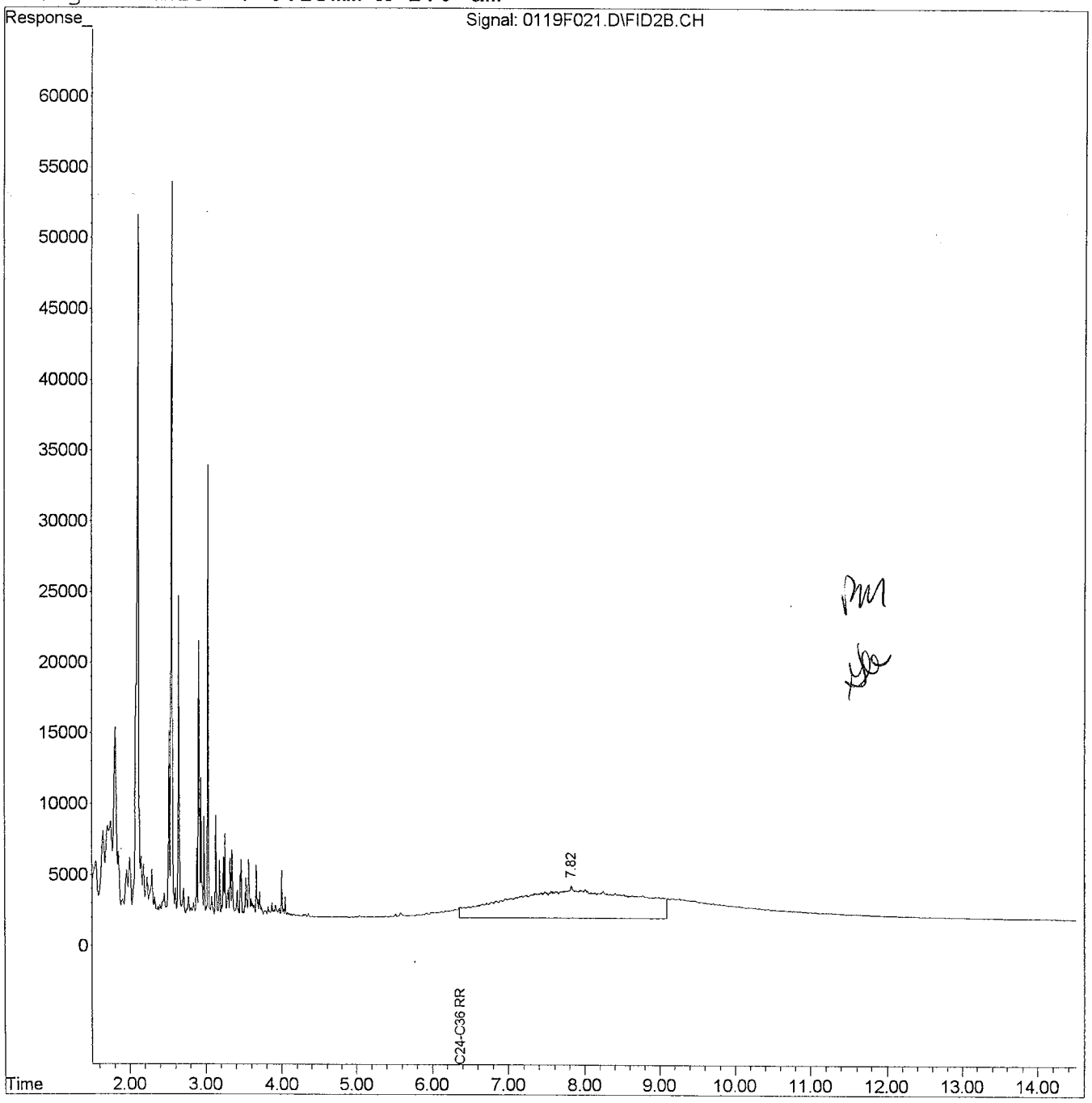
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:18 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	67304	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
2) S Triacontane (C-30)	7.61	51518	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
Target Compounds			
3) H C12-C24 DRO	3.63	1095644	1000.000 ppm

vm03/16/07

pla

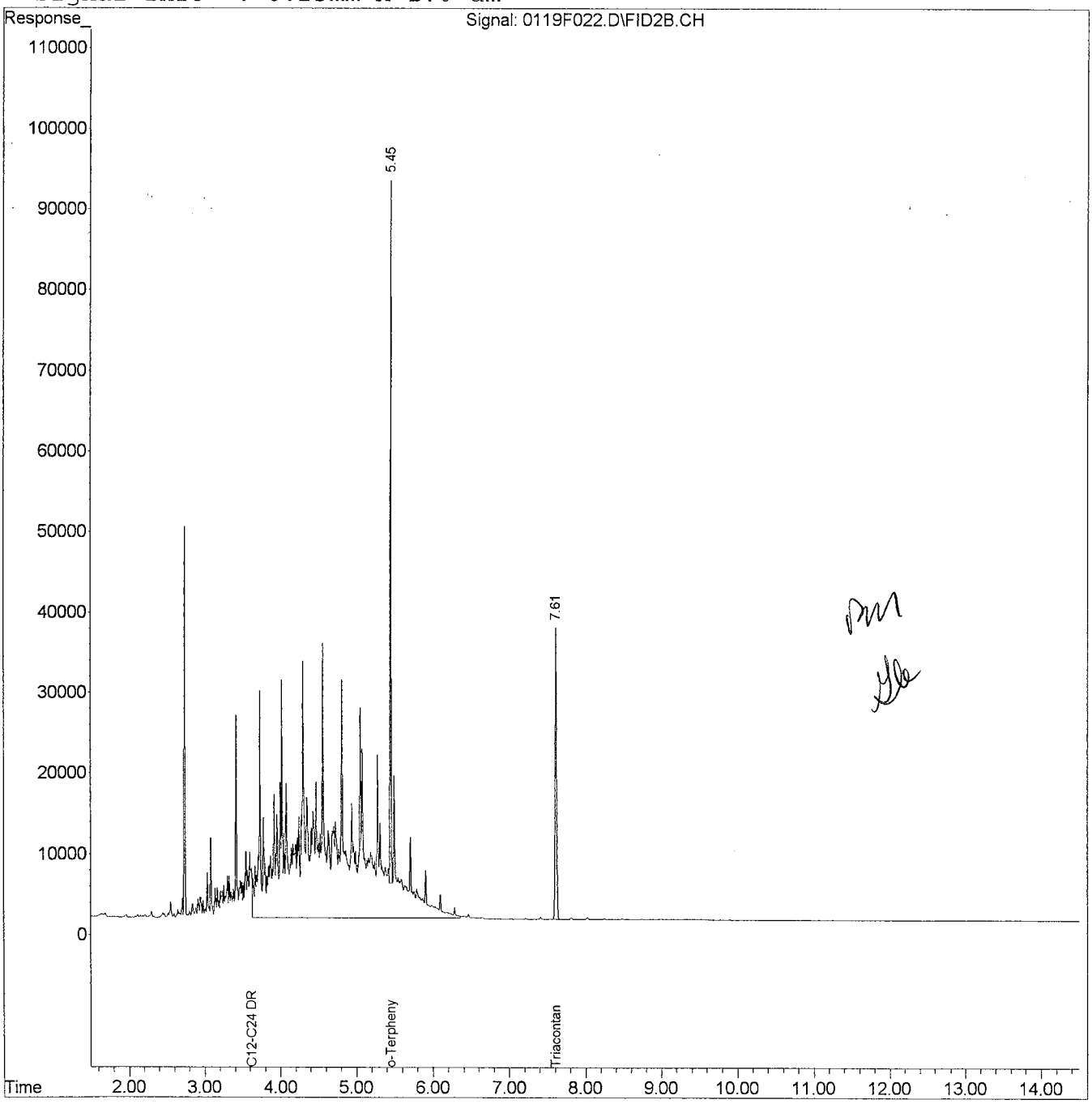
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-10 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:20 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	498377	1000.000	ppm

PM 03/16/07
Ale

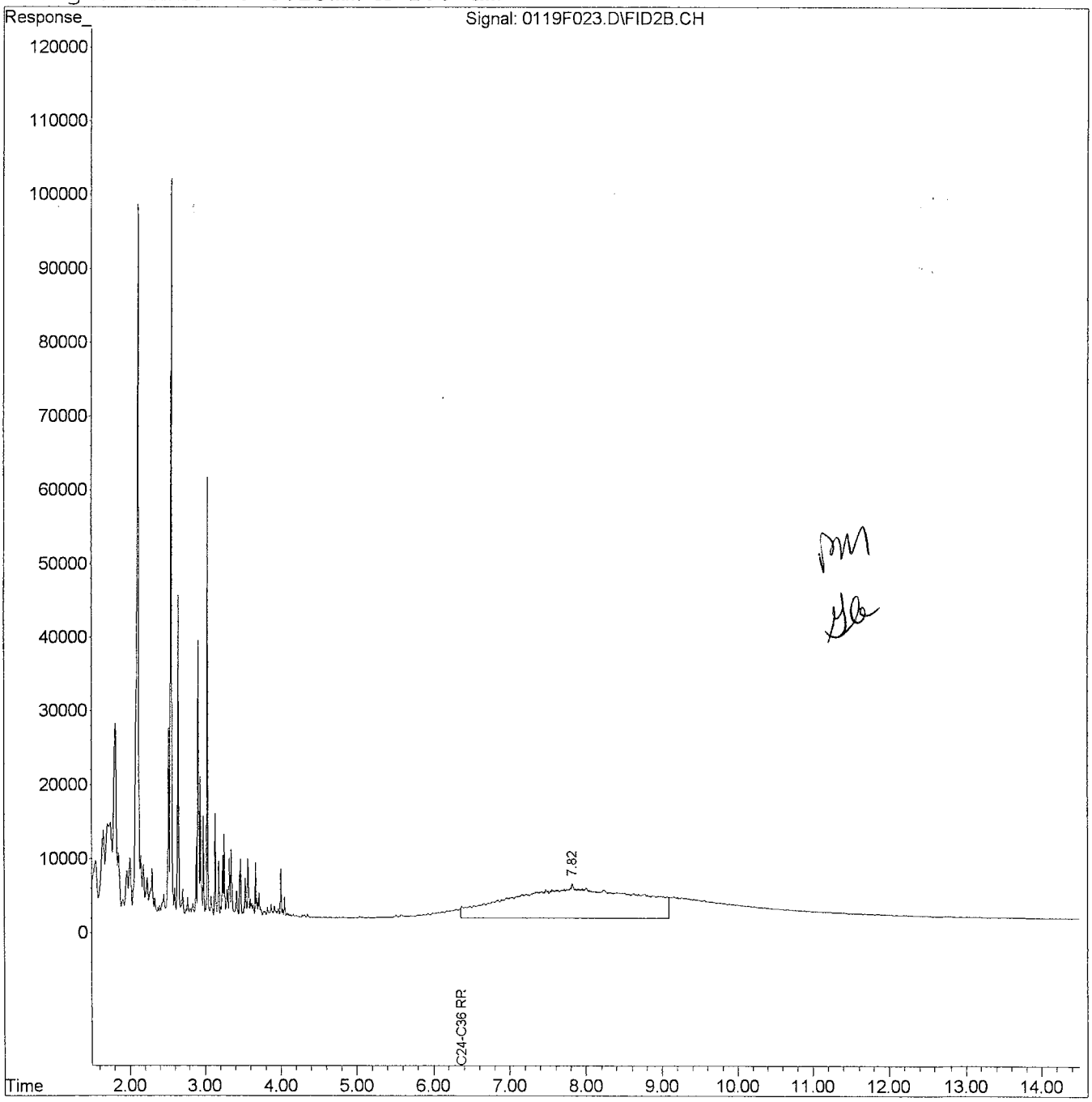
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-1O 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM
GC

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:21 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	137387	102.065 ppm
Spiked Amount 50.000		Recovery =	204.13%
2) S Triacontane (C-30)	7.62	105399	102.293 ppm
Spiked Amount 50.000		Recovery =	204.59%
Target Compounds			
3) H C12-C24 DRO	3.63	2213286	2020.078 ppm

PM 031607
HB

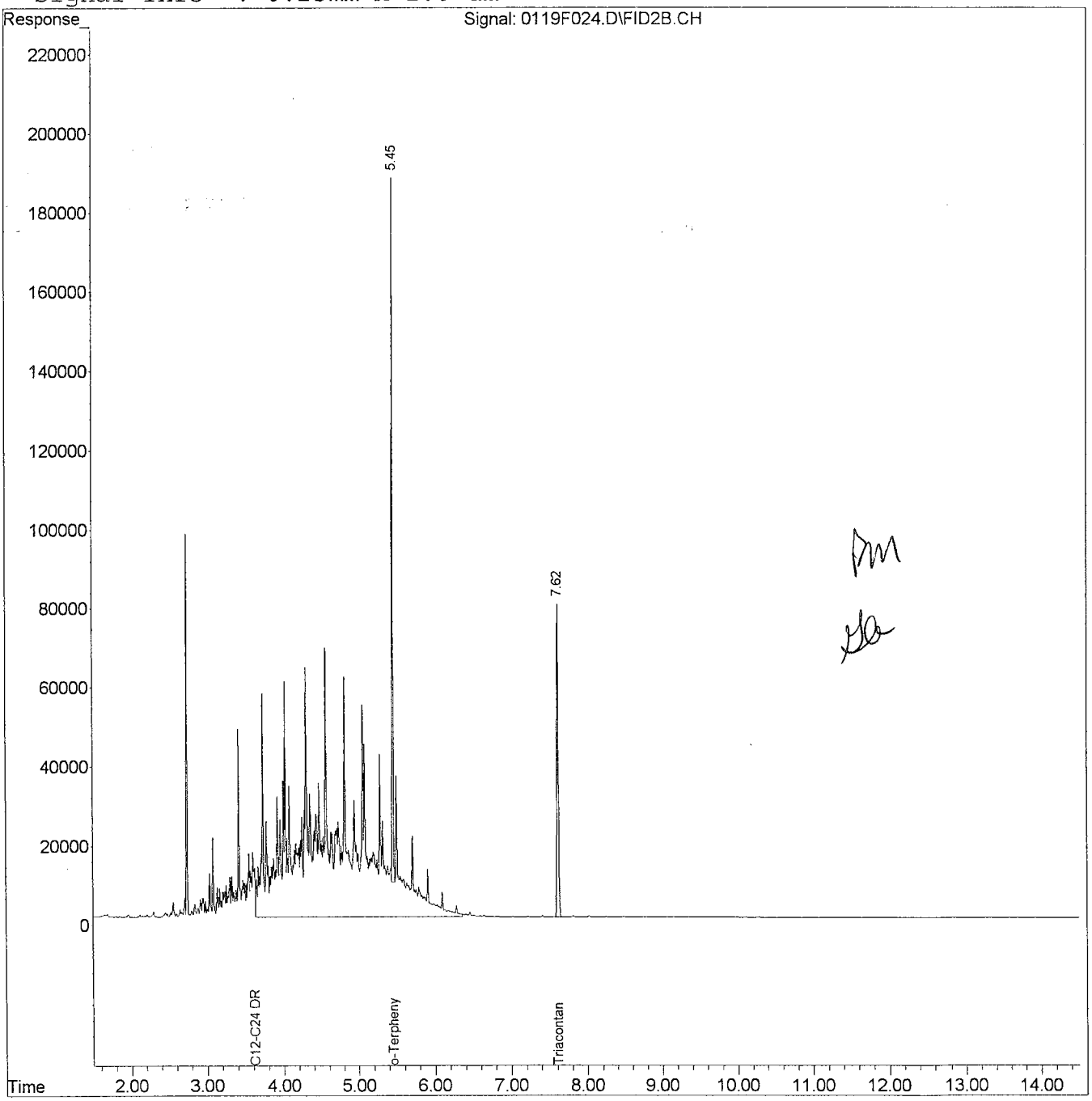
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:22 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	1013769	2034.141	ppm

pm 03/16/07
Ab

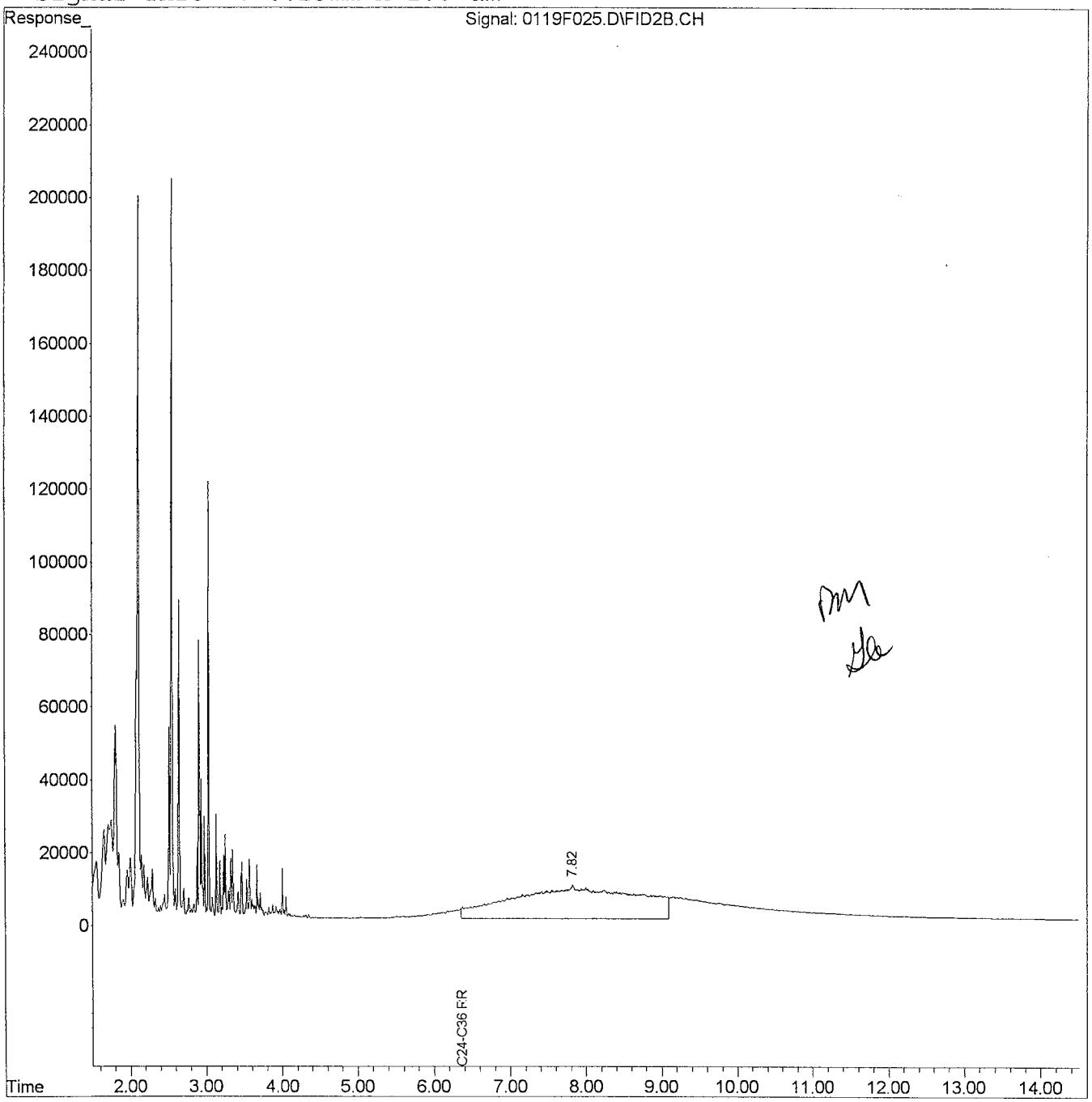
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM
Gla

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:24 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	295291	219.371 ppm
Spiked Amount 50.000		Recovery =	438.74%
2) S Triacontane (C-30)	7.62	234677	227.762 ppm
Spiked Amount 50.000		Recovery =	455.52%
Target Compounds			
3) H C12-C24 DRO	3.63	4805299	4385.821 ppm

PM 03/16/07

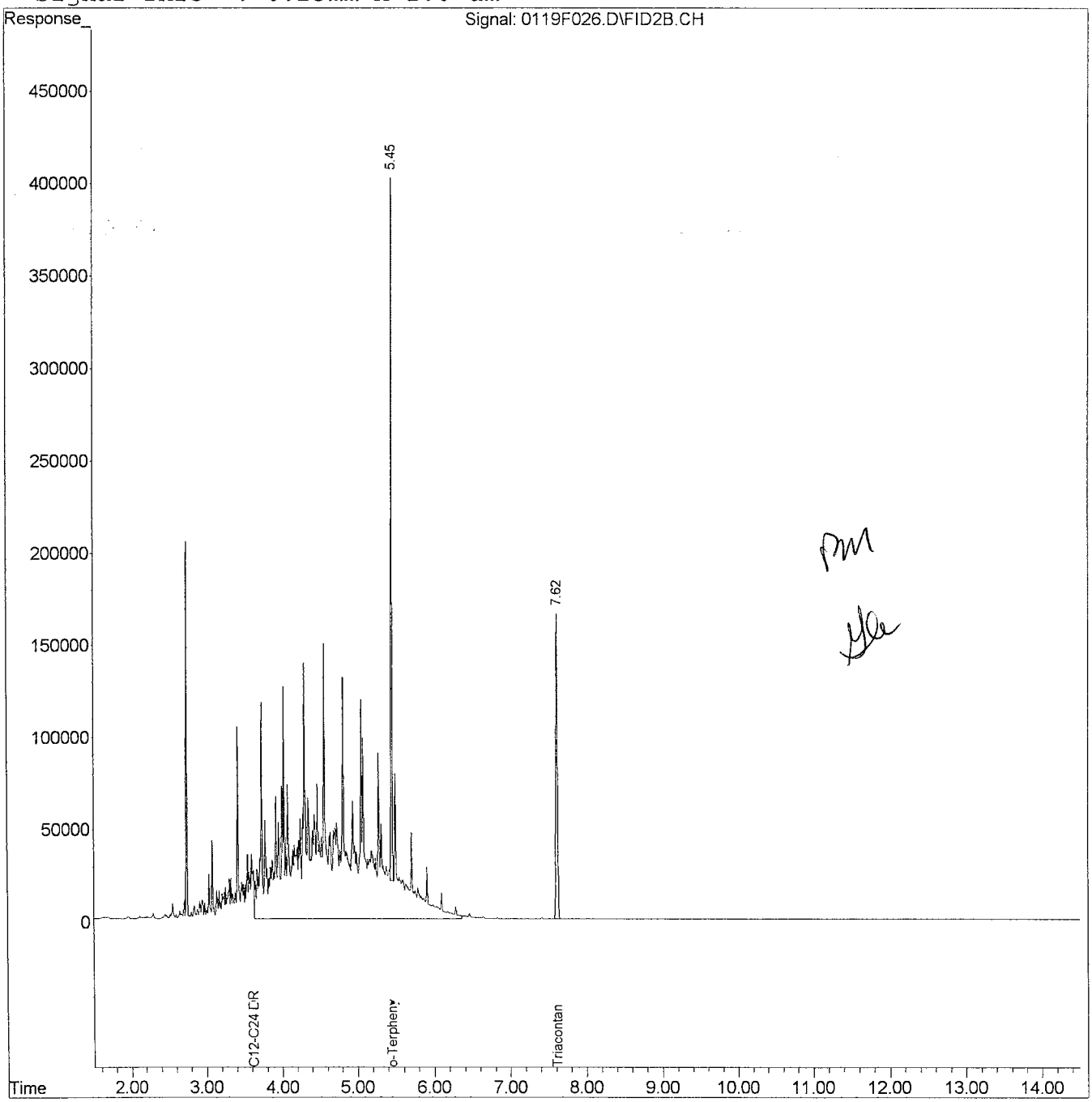
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:25 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	2424406	4864.602	ppm

pm 03/16/07

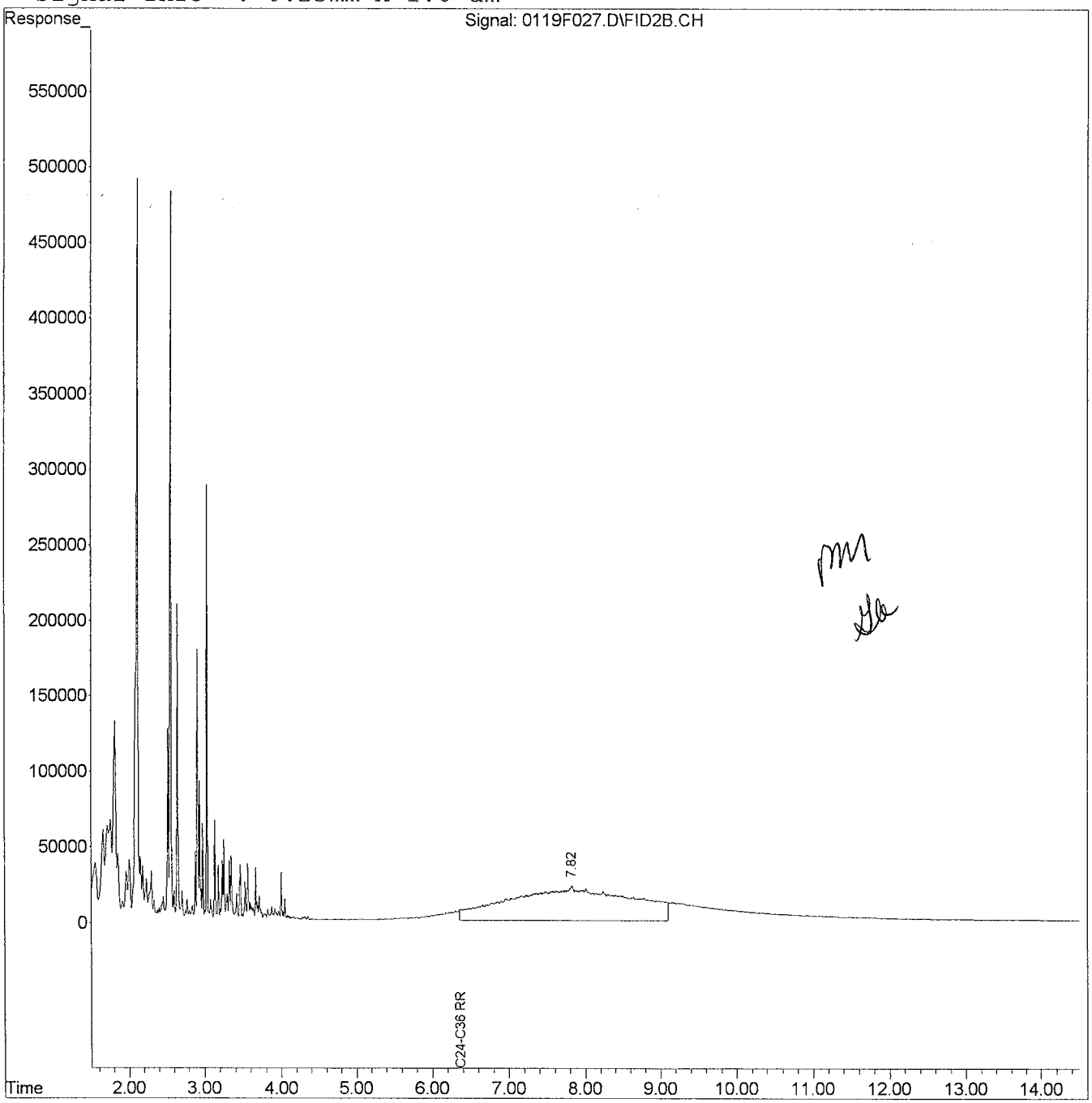
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:26 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
3) H C12-C24 DRO	3.63	19835056	18103.559	ppm

PM 031607
pee

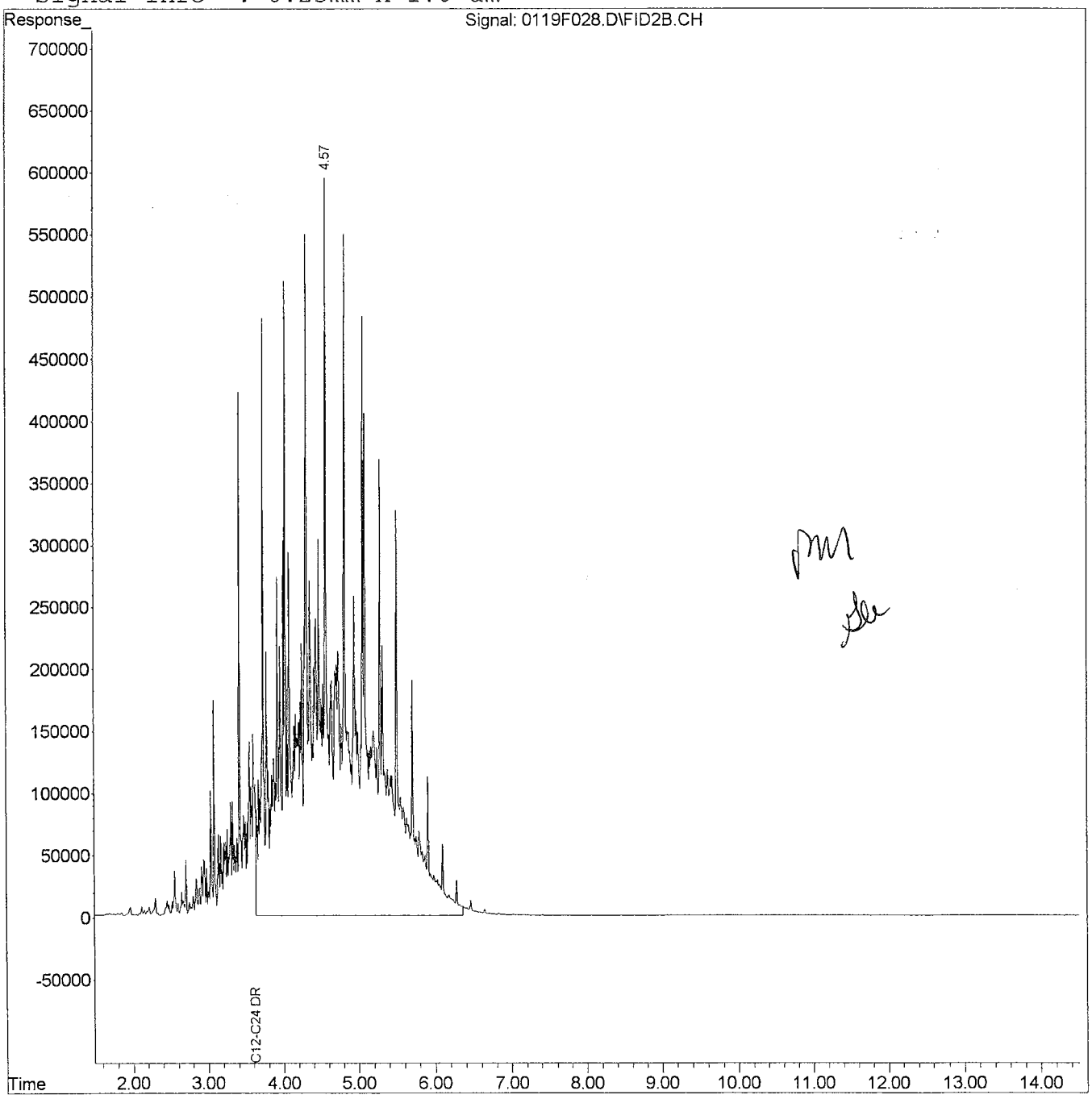
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42:03 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
3) H C12-C24 DRO	3.63	986893	891.805 ppm

PM031607
Gle

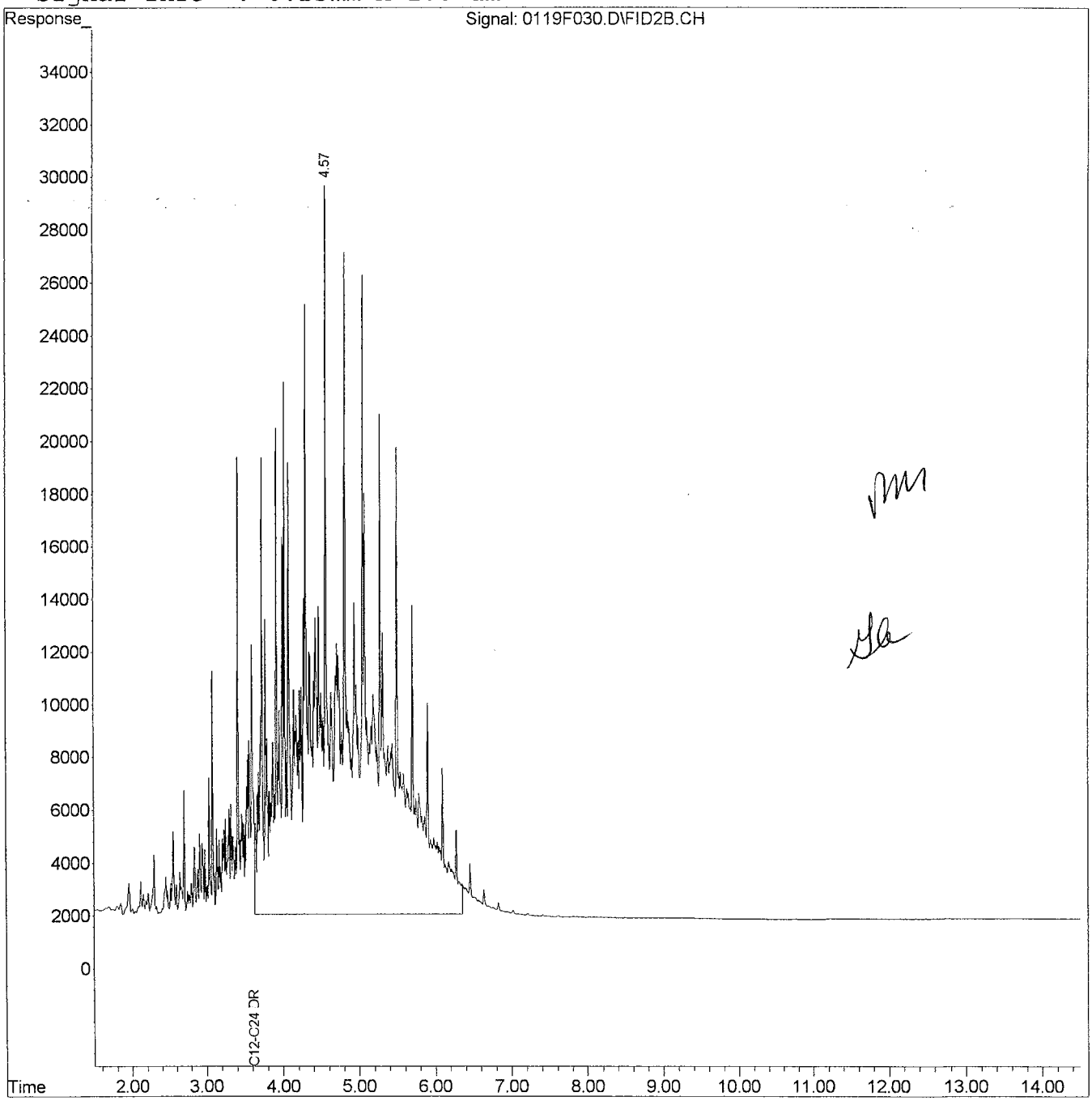
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D Vial: 27
Acq On : 20 Jan 2007 12:09 am Operator: PMulherin
Sample : HCSV8-1K 1000/1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42:04 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	460269	938.863 ppm

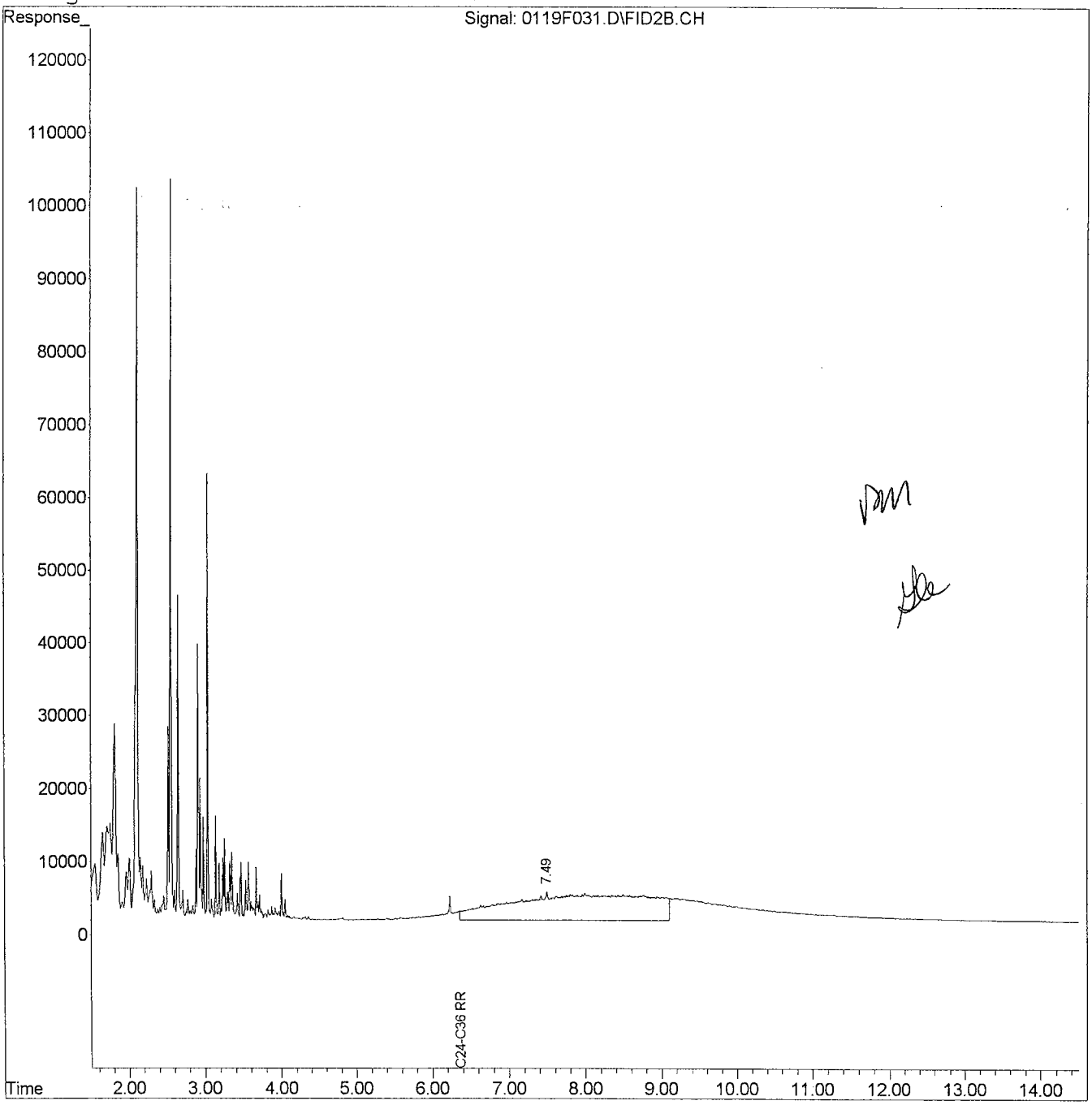
pm 03/16/07
sle

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D Vial: 27
Acq On : 20 Jan 2007 12:09 am Operator: PMulherin
Sample : HCSV8-1K 1000/1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:43 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W003.D
J:\GC21\DATA\032007.TAR\0320W004.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1350	-2	NA	± 15 %	AverageRF
n-Triacontane	50	47	1060	1010	-5	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1070	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	490	511	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W003.D
Lab ID: KWG0703832-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:16
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03 2007

Secondary Review: Gle

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W003.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:16	**Quant Date:**	03/20/2007 17:49	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		67386	49.16		65-135	NA
n-Triacontane	7.60		50389	47.39		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1073999	970.52			
C24 - C36 RRO	6.35	?	7981	16.28			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

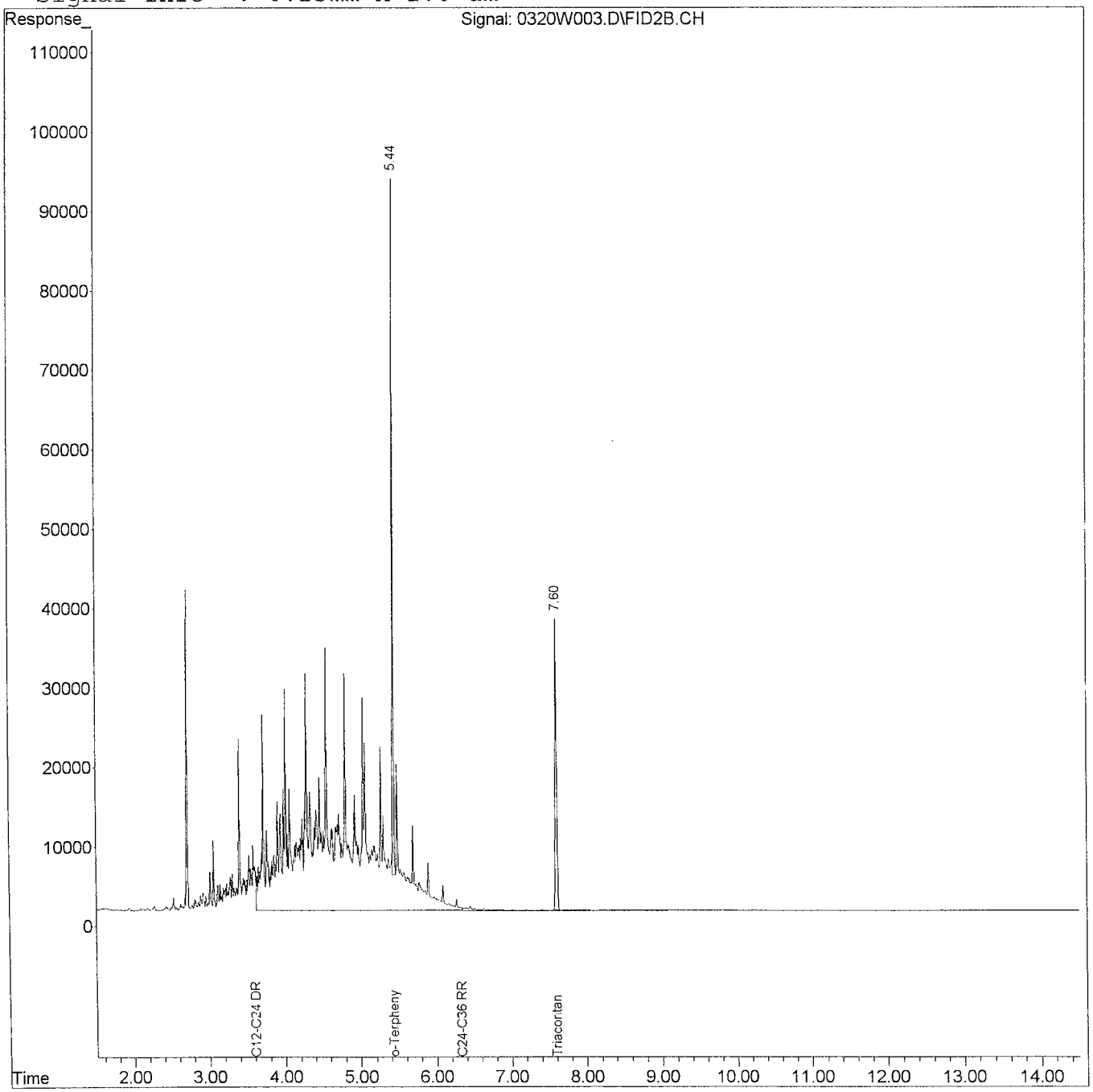
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W003.D Vial: 2
Acq On : 20 Mar 2007 11:16 am Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W004.D
Lab ID: KWG0703832-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:37
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: MB 2007

Secondary Review: GL

Printed: 03/20/2007 18:02:35
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W004.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:37	**Quant Date:**	03/20/2007 17:49	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane			0			65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	49877	45.07			NR
C24 - C36 RRO	6.35	?	511057	1,042			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

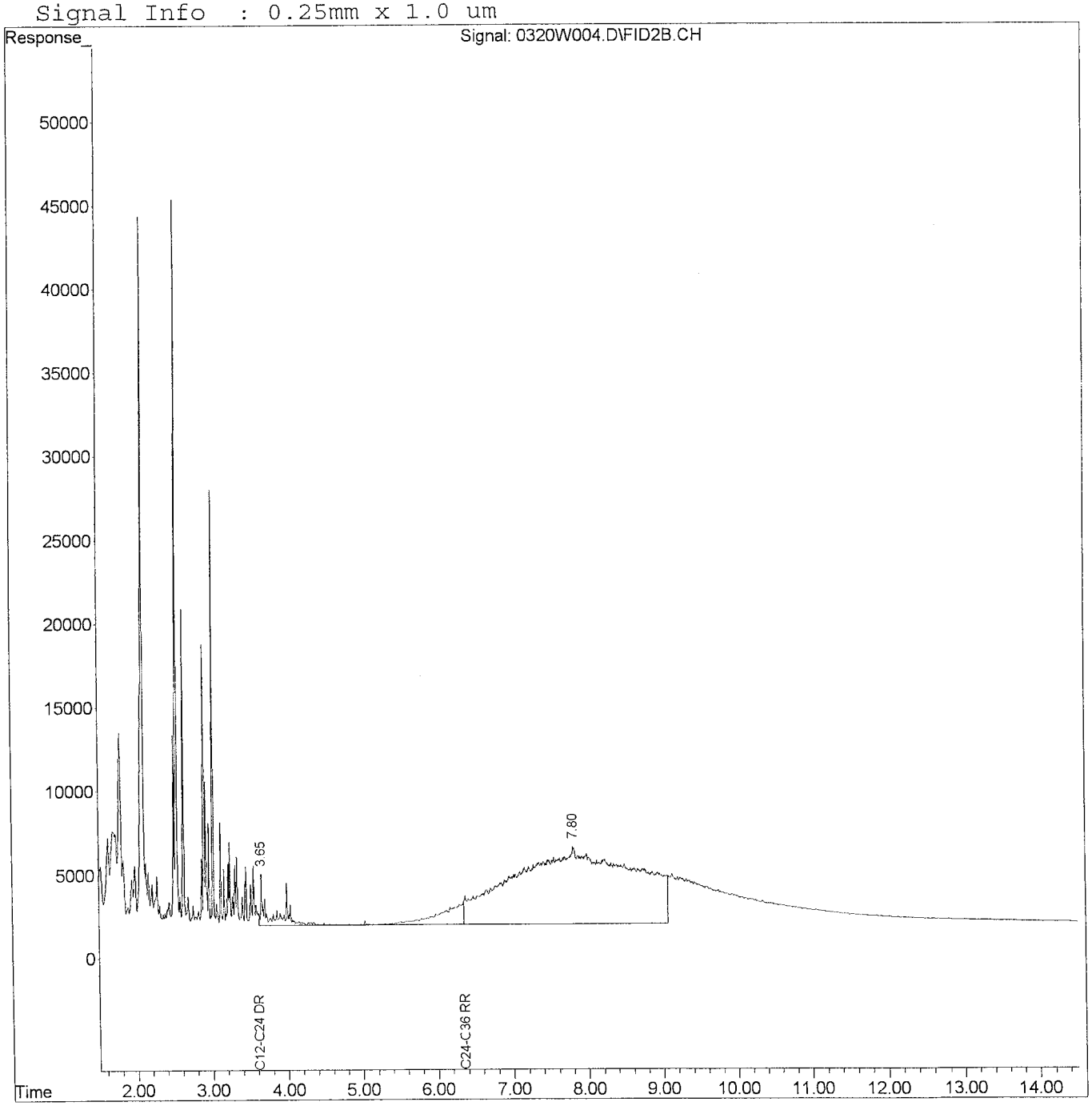
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W004.D
Acq On : 20 Mar 2007 11:37 am
Sample : HCSV8-7O G/O @ 500/1000 ppm
Misc :
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Vial: 3
Operator: PMulherin
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W016.D
J:\GC21\DATA\032007.TAR\0320W017.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1370	1400	2	NA	± 15 %	AverageRF
n-Triacontane	50	51	1060	1090	3	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1110	1110	1	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	521	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W016.D
Lab ID: KWG0703832-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 15:40
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: MB 2007

Secondary Review: Gla

Printed: 03/20/2007 18:02:56
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W016.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 15:40	**Quant Date:**	03/20/2007 17:50	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		69820	50.94		65-135	NA
n-Triacontane	7.60		54747	51.49		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1114161	1,007			
C24 - C36 RRO	6.35	?	8284	16.90			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

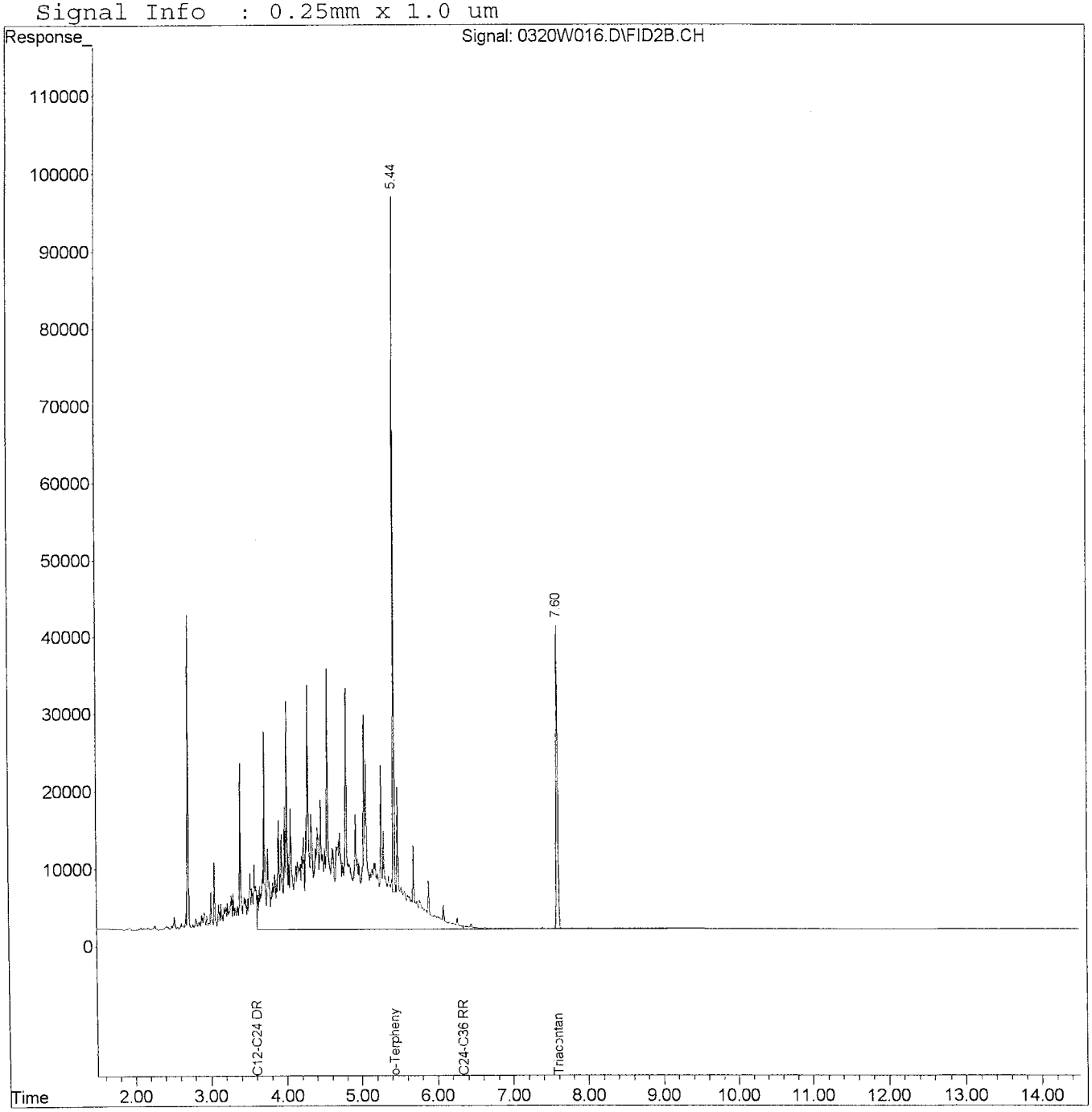
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W016.D Vial: 2
Acq On : 20 Mar 2007 3:40 pm Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W017.D
Lab ID: KWG0703832-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 16:00
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: VM 03 2007

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W017.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 16:00	**Quant Date:**	03/20/2007 17:50	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane			0			65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	51179	46.25			NR
C24 - C36 RRO	6.35	?	521437	1,064			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

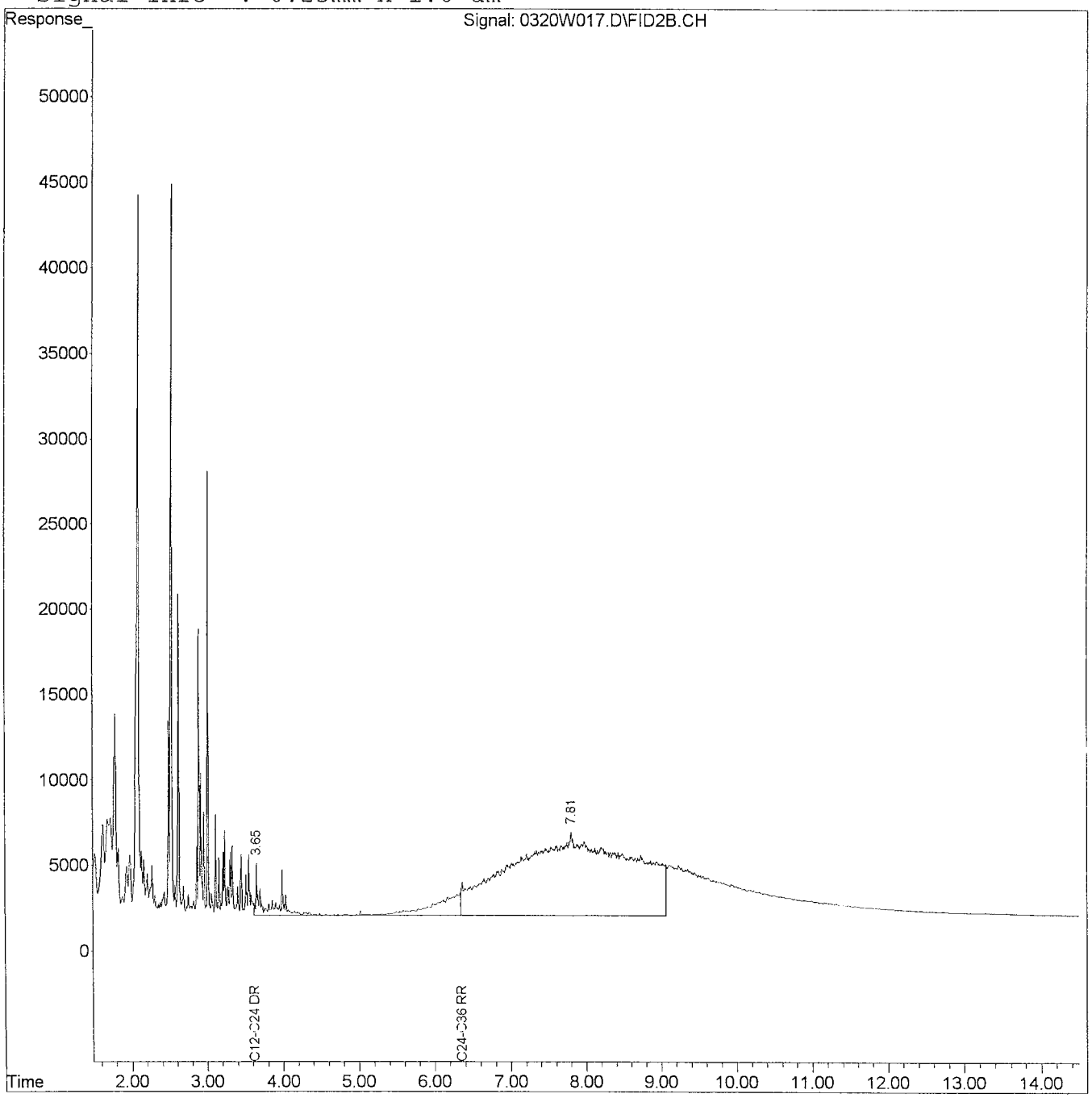
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W017.D Vial: 3
Acq On : 20 Mar 2007 4:00 pm Operator: PMulherin
Sample : HCSV8-7O G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703835	**Prep Method:**	EPA 3510C	**Prep Date:**	03/06/07 00:00
Department:	PETROLEUM H				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8015B DRO_RR	WATER	1000ml	2ml
K0701703-001	DAEGW104C1	8015B DRO_RR	WATER	1020ml	2ml
KWG0703835-1	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2ml
KWG0703835-2	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2ml
KWG0703835-3	Method Blank	8015B DRO_RR	WATER	1000ml	2ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	584805	HCSV8-6L	100uL			KCravey
K0701703-001	584806	HCSV8-6L	100uL			KCravey
KWG0703835-1	584807	HCSV8-6L	100uL	HCSV8-5I	100uL	KCravey
KWG0703835-2	584808	HCSV8-6L	100uL	HCSV8-5I	100uL	KCravey
KWG0703835-3	584809	HCSV8-6L	100uL			KCravey

Comments: PMM 032007 FROM KWG0703295; NECESSARY TO OVERCOME FILE MANAGEMENT SNAFU.

Started By: CRuble Assisted By: _____ Training Yes No

Completed By: CRuble Assisted By: _____ Yes No

Reviewed By: [illegible] Date: 3/21/07 Storage: _____

Chain of Custody

Relinquished By: PM Date: 032007

Received By: PM Date: 032007

Extracts Examined Yes No

Preparation Information

Group ID:	KWG0703295	**Prep Method:**	EPA 3510C	**Prep Date:**	03/06/07 14:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8015B DRO_RR	WATER	1000ml	2ml
K0701703-001	DAEGW104C1	8015B DRO_RR	WATER	1020ml	2ml
KWG0703295-1	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2ml
KWG0703295-2	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2ml
KWG0703295-3	Method Blank	8015B DRO_RR	WATER	1000ml	2ml

Lab Code	Parent Lab Code	Comments
K0701647-002		ACID/SI-GEL CLEAN-UPS DONE ON ALL SAMPLES.

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	580825	HCSV8-6-L	100uL			KCravey K Cravey 3/6/07
K0701703-001	580826	HCSV8-6-L	100uL			KCravey
KWG0703295-1	580827	HCSV8-6-L	100uL	HCSV8-5-I	100uL	KCravey
KWG0703295-2	580828	HCSV8-6-L	100uL	HCSV8-5-I	100uL	KCravey
KWG0703295-3	580829	HCSV8-6-L	100uL			KCravey

Comments:

Started By: CRuble Assisted By: Training Yes No

Completed By: CRuble Assisted By: Yes No

Reviewed By: PM Date: 031707 Storage: Box 4-C

Chain of Custody

Relinquished By: CRW Date: 3/7/07 Extracts Examined

Received By: PM Date: 031707 Yes No

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W005.D
Lab ID: KWG0703832-3
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:57
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03 2007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W005.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:57	**Quant Date:**	03/20/2007 17:49	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703832-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2186	1.98			
C24 - C36 RRO	6.35	?	7192	14.67			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

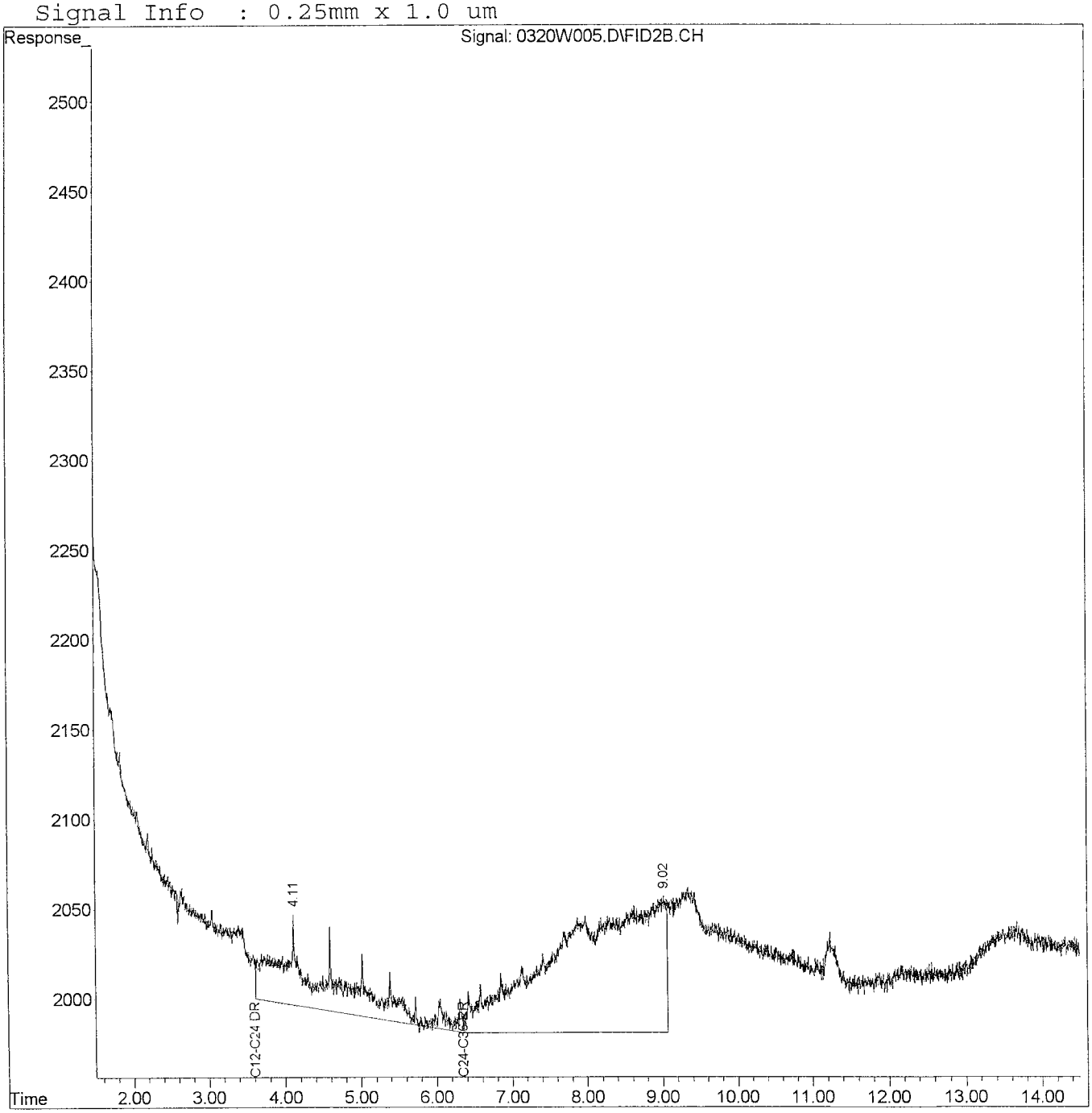
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e. Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W005.D Vial: 1
Acq On : 20 Mar 2007 11:57 am Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W018.D
Lab ID: KWG0703832-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 16:21
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 032007

Secondary Review: GLe

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W018.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 16:21	**Quant Date:**	03/20/2007 17:50	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703832-4			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2076	1.88			
C24 - C36 RRO	6.35	?	5861	11.96			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

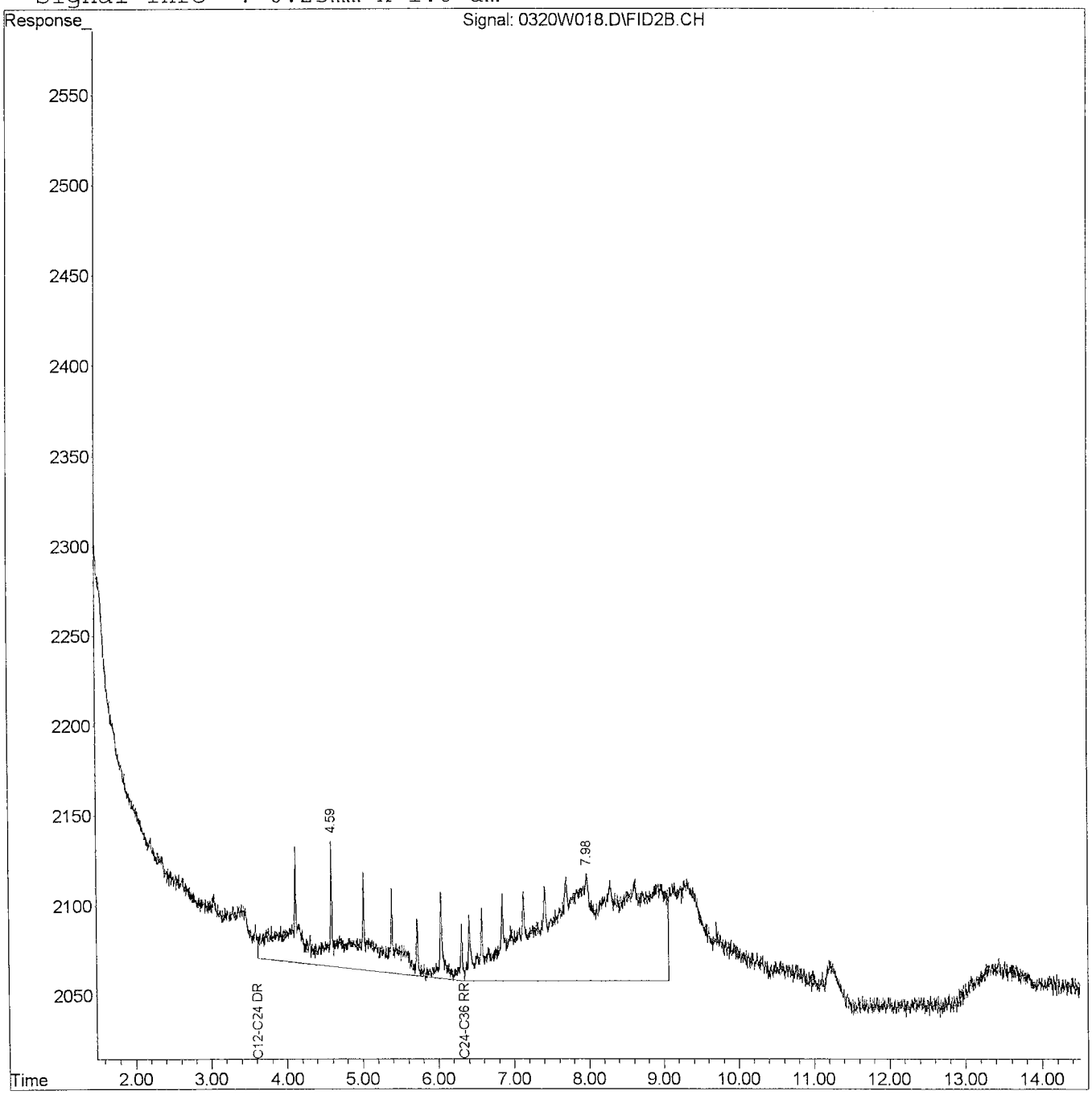
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W018.D Vial: 1
Acq On : 20 Mar 2007 4:21 pm Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Gasoline Range Organics

Organic Analysis:
Gasoline Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Cover Page - Organic Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
1047MW101CL	K0701647-001	03/01/2007	03/02/2007
1349MW01CL	K0701647-002	03/01/2007	03/02/2007
1047MW101CLMS	KWG0703711-1	03/01/2007	03/02/2007
1047MW101CLDMS	KWG0703711-2	03/01/2007	03/02/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: PAUL MULHERIN

Date: 03/20/07

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Gasoline Range Organics

Sample Name: 1047MW101CL
Lab Code: K0701647-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Gasoline Range Organics

Sample Name: 1349MW01CL
Lab Code: K0701647-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Method Blank
Lab Code: KWG0703711-4

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1047MW101CL	K0701647-001	106
1349MW01CL	K0701647-002	105
Method Blank	KWG0703711-4	106
1047MW101CLMS	KWG0703711-1	111
1047MW101CLDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

		1047MW101CLMS KWG0703711-1 Matrix Spike			1047MW101CLDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	15:56

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\031307.FID\0313R010.D
Lab Code:	KWG0703711-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
1047MW101CLMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
1047MW101CLDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
1047MW101CL	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
1349MW01CL	K0701647-002	J:\GC06\DATA\031307.FID\0313R012.D	03/13/07	17:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1047MW101CLMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
1047MW101CLDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
1047MW101CL	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
1349MW01CL	K0701647-002	J:\GC06\DATA\031307.FID\0313R012.D	03/13/07	17:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R017.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Gasoline Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703710
Instrument ID: GC06
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313R004.D	Instrument Blank	KWG0703710-1	3/13/2007	12:06		3/13/2007	12:22
0313R005.D	Continuing Calibration Verification	KWG0703710-3	3/13/2007	12:37		3/13/2007	12:53
0313R006.D	Lab Control Sample	KWG0703711-3	3/13/2007	13:49		3/13/2007	14:05
0313R007.D	1047MW101CLMS	KWG0703711-1	3/13/2007	14:21		3/13/2007	14:37
0313R008.D	1047MW101CLDMS	KWG0703711-2	3/13/2007	14:52		3/13/2007	15:08
0313R010.D	Method Blank	KWG0703711-4	3/13/2007	15:56		3/13/2007	16:12
0313R011.D	1047MW101CL	K0701647-001	3/13/2007	16:28		3/13/2007	16:44
0313R012.D	1349MW01CL	K0701647-002	3/13/2007	17:00		3/13/2007	17:16
0313R013.D	ZZZZZZ	ZZZZZZ	3/13/2007	17:31		3/13/2007	17:47
0313R014.D	ZZZZZZ	ZZZZZZ	3/13/2007	18:03		3/13/2007	18:19
0313R015.D	ZZZZZZ	ZZZZZZ	3/13/2007	18:34		3/13/2007	18:50
0313R016.D	Instrument Blank	KWG0703710-2	3/13/2007	19:06		3/13/2007	19:22
0313R017.D	Continuing Calibration Verification	KWG0703710-4	3/13/2007	19:38		3/13/2007	19:54

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007

Extraction Prep Log
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Extraction Lot: KWG0703711
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1047MW101CL	K0701647-001	03/01/07	03/02/07	10ml	10ml	NA	
1349MW01CL	K0701647-002	03/01/07	03/02/07	10ml	10ml	NA	
Method Blank	KWG0703711-4	NA	NA	10ml	10ml	NA	
1047MW101CLMS	KWG0703711-1	03/01/07	03/02/07	10ml	10ml	NA	
1047MW101CLDMS	KWG0703711-2	03/01/07	03/02/07	10ml	10ml	NA	
Lab Control Sample	KWG0703711-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Gasoline Range Organics

Validation Package

Organic Analysis:
Gasoline Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1047MW101CL	K0701647-001	106
1349MW01CL	K0701647-002	105
Method Blank	KWG0703711-4	106
1047MW101CLMS	KWG0703711-1	111
1047MW101CLDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name: 1047MW101CL
Lab Code: K0701647-001

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA

Level: Low
Extraction Lot: KWG0703711

		1047MW101CLMS KWG0703711-1 Matrix Spike			1047MW101CLDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	15:56

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\031307.FID\0313R010.D
Lab Code:	KWG0703711-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
1047MW101CLMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
1047MW101CLDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
1047MW101CL	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
1349MW01CL	K0701647-002	J:\GC06\DATA\031307.FID\0313R012.D	03/13/07	17:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1047MW101CLMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:24
1047MW101CLDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
1047MW101CL	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
1349MW01CL	K0701647-002	J:\GC06\DATA\031307.FID\0313R012.D	03/13/07	17:00

Organic Analysis:
Gasoline Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Gasoline Range Organics

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R011.D
Lab ID: K0701647-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 16:28
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gee 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701647
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583924	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R011.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 16:28	**Quant Date:**	03/14/2007 08:20	**Vial:**	42
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-001			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1,4-Difluorobenzene	3.41	0.00	1073670	105.92	106	65-135	OK	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	33633	5.61	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

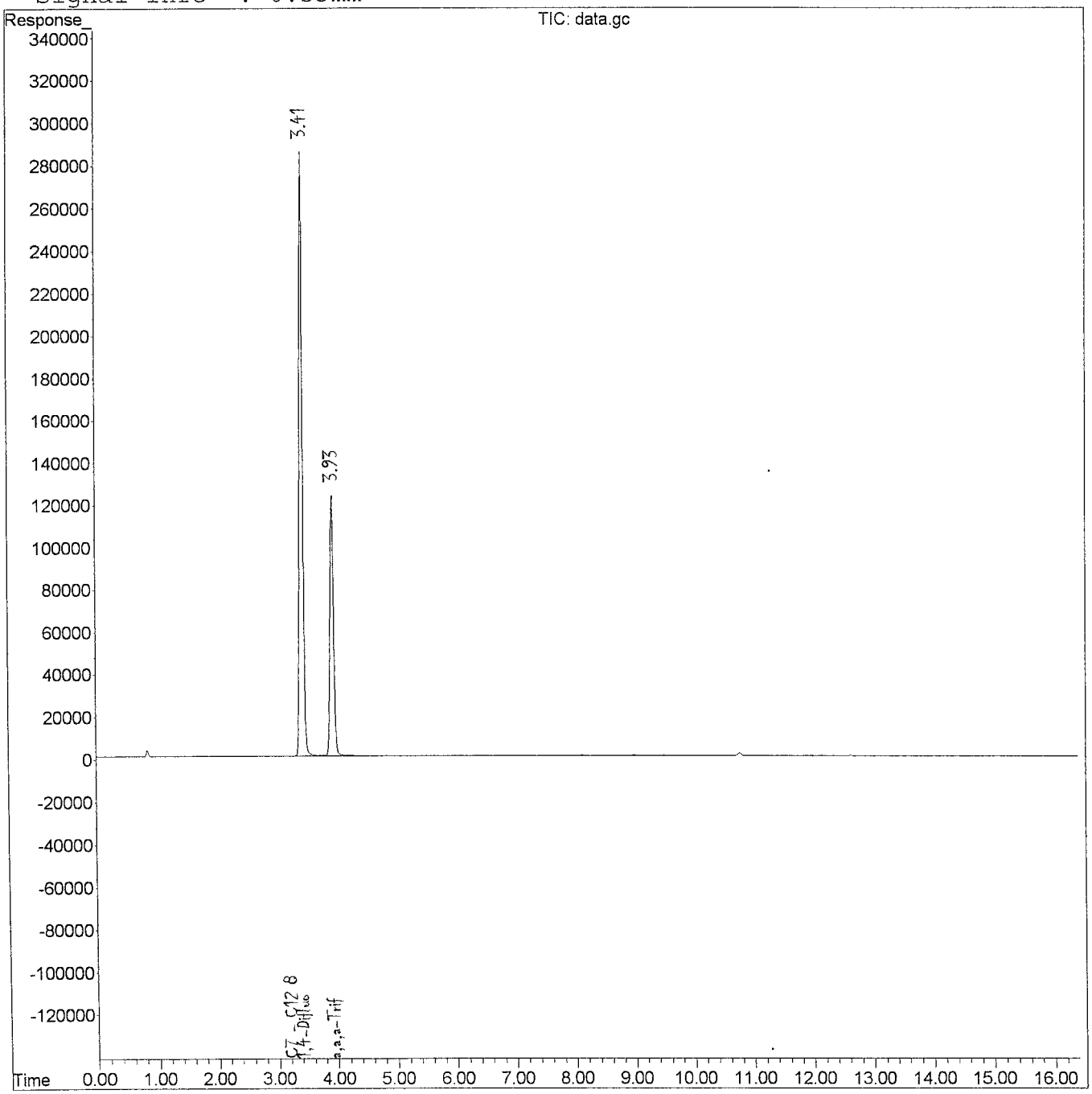
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R011.D Vial: 42
Acq On : 13 Mar 2007 04:28 pm Operator: GR
Sample : k0701647-001 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Gasoline Range Organics

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R012.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 17:00
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Dle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701647
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583925	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R012.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 17:00	**Quant Date:**	03/14/2007 08:20	**Vial:**	43
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-002			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1062585	104.83	105	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	107819	17.97	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

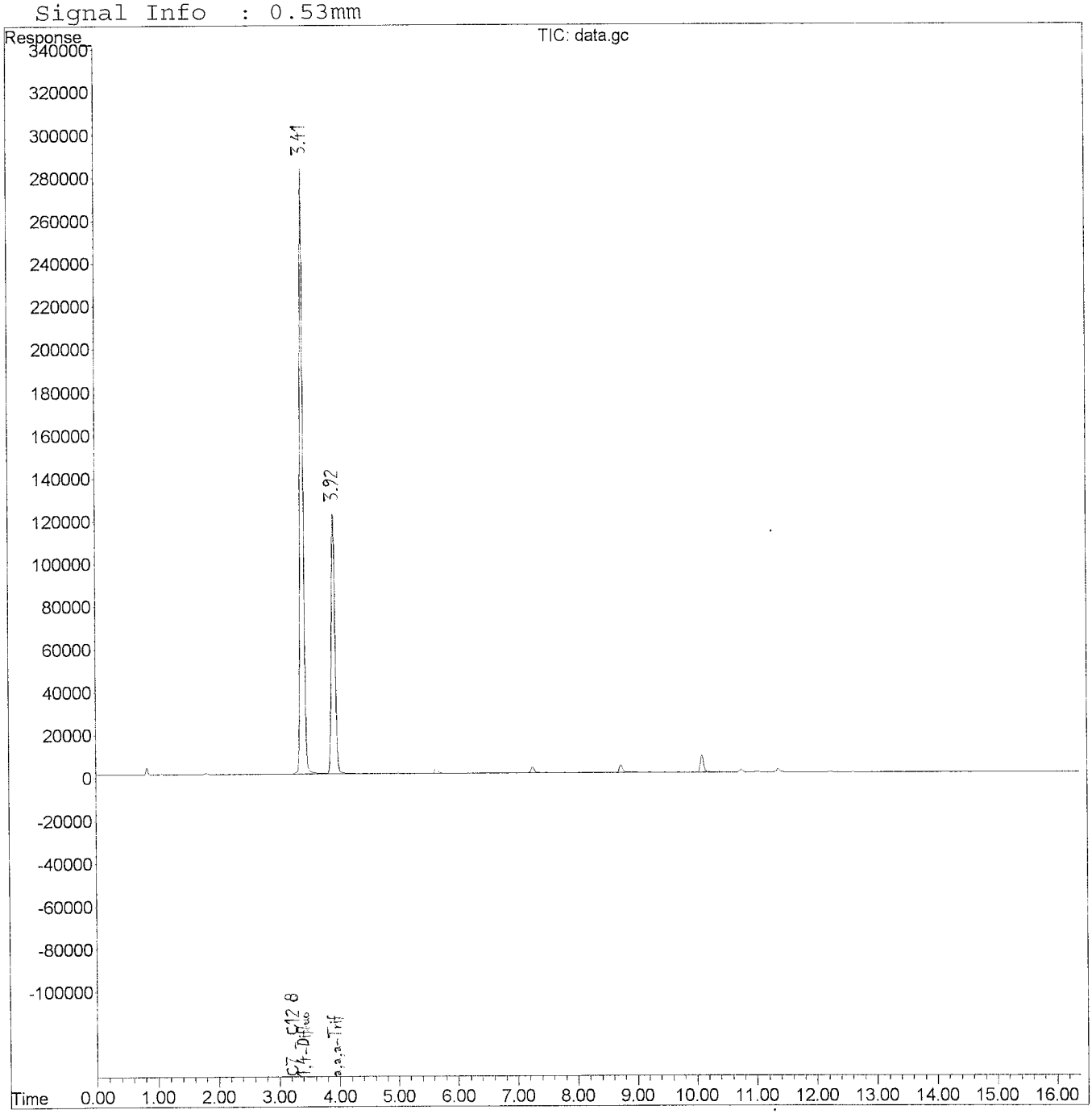
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R012.D Vial: 43
Acq On : 13 Mar 2007 05:00 pm Operator: GR
Sample : k0701647-002 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Method Blank
Lab Code: KWG0703711-4

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R010.D
Lab ID: KWG0703711-4
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 15:56
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Gee 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583932	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R010.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 15:56	**Quant Date:**	03/13/2007 16:35	**Vial:**	41
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703711-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1,4-Difluorobenzene	3.41	0.00	1071904	105.75	106	65-135	OK	
4-Bromofluorobenzene			0		0	70-130	*	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	48585	8.10	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

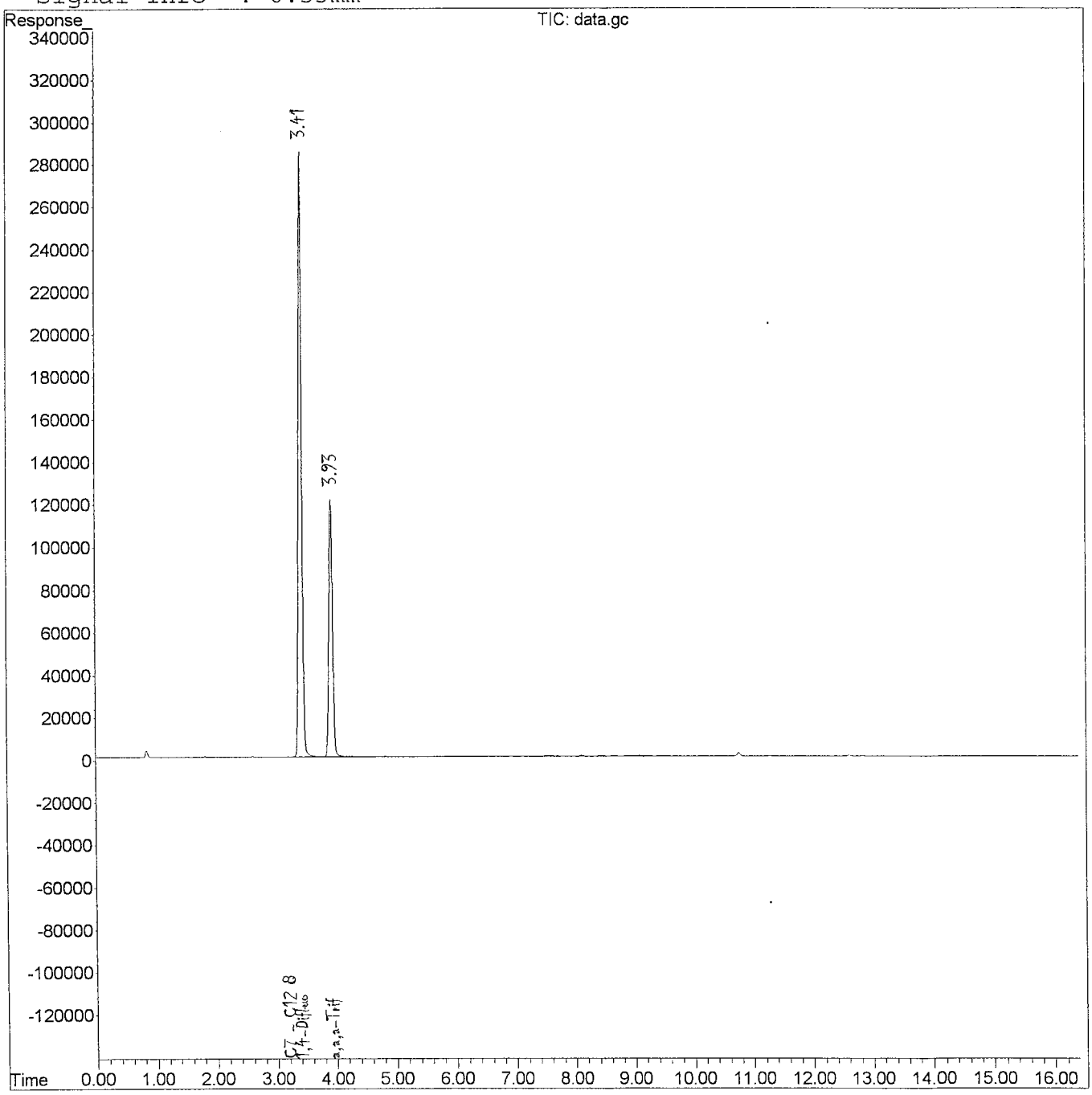
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R010.D Vial: 41
Acq On : 13 Mar 2007 03:56 pm Operator: GR
Sample : mb 1647/703/816 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Gasoline Range Organics

Sample Name: 1047MW101CLMS
Lab Code: KWG0703711-1

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**570**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R007.D
Lab ID: KWG0703711-1 -- K0701647-001MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 14:21
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Ga 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583929	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R007.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:21	**Quant Date:**	03/13/2007 14:46	**Vial:**	39
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703711-1 -- K0701647-001MS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1125947	111.08	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3416625	569.53	570		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

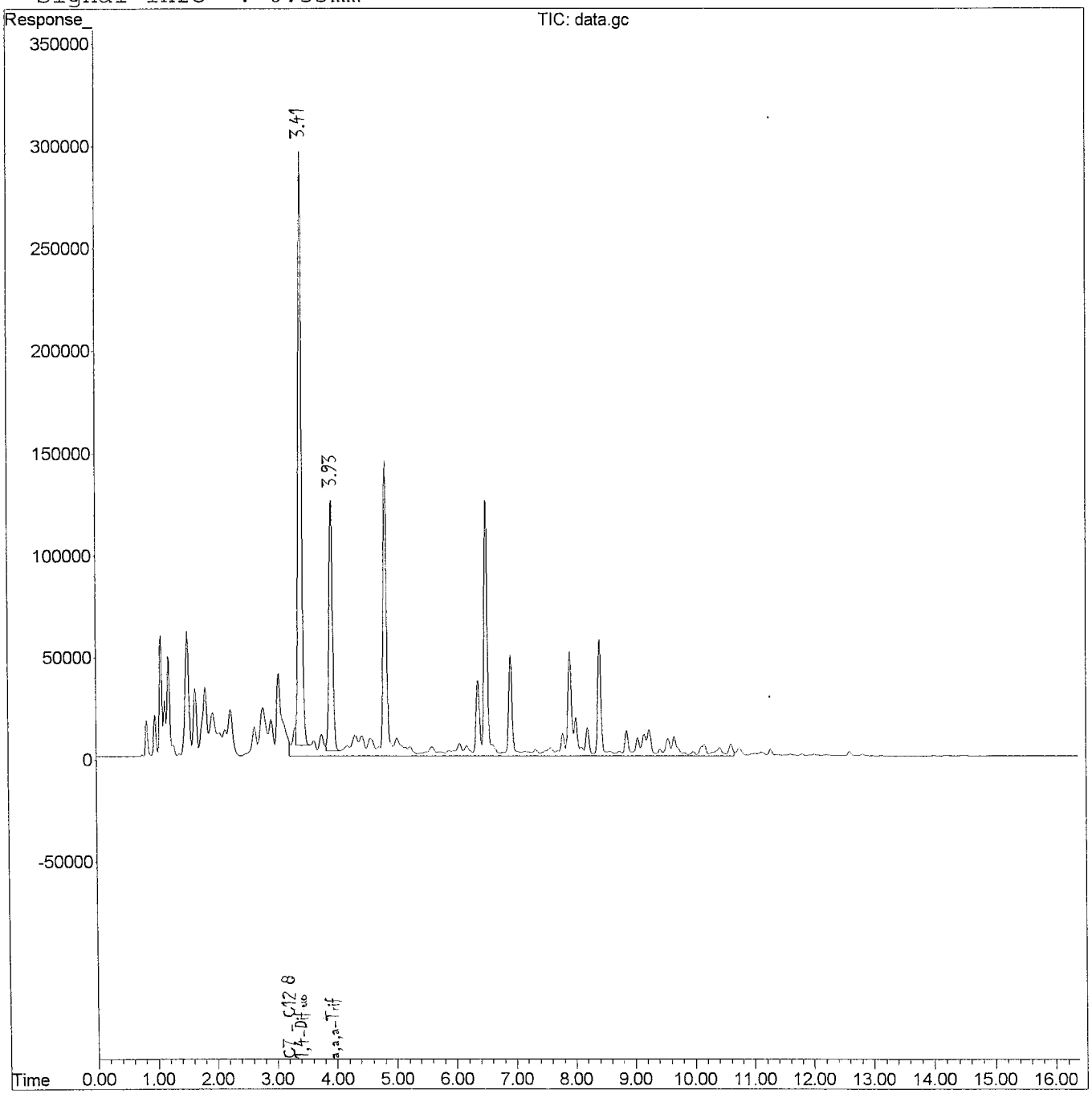
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R007.D Vial: 39
Acq On : 13 Mar 2007 02:21 pm Operator: GR
Sample : k0701647-001ms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Gasoline Range Organics

Sample Name: 1047MW101CLDMS
Lab Code: KWG0703711-2

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**564**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R008.D
Lab ID: KWG0703711-2 -- K0701647-001DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 14:52
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Gle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583930	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R008.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:52	**Quant Date:**	03/13/2007 16:35	**Vial:**	40
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703711-2 -- K0701647-001DMS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1122225	110.71	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3382899	563.91	564		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

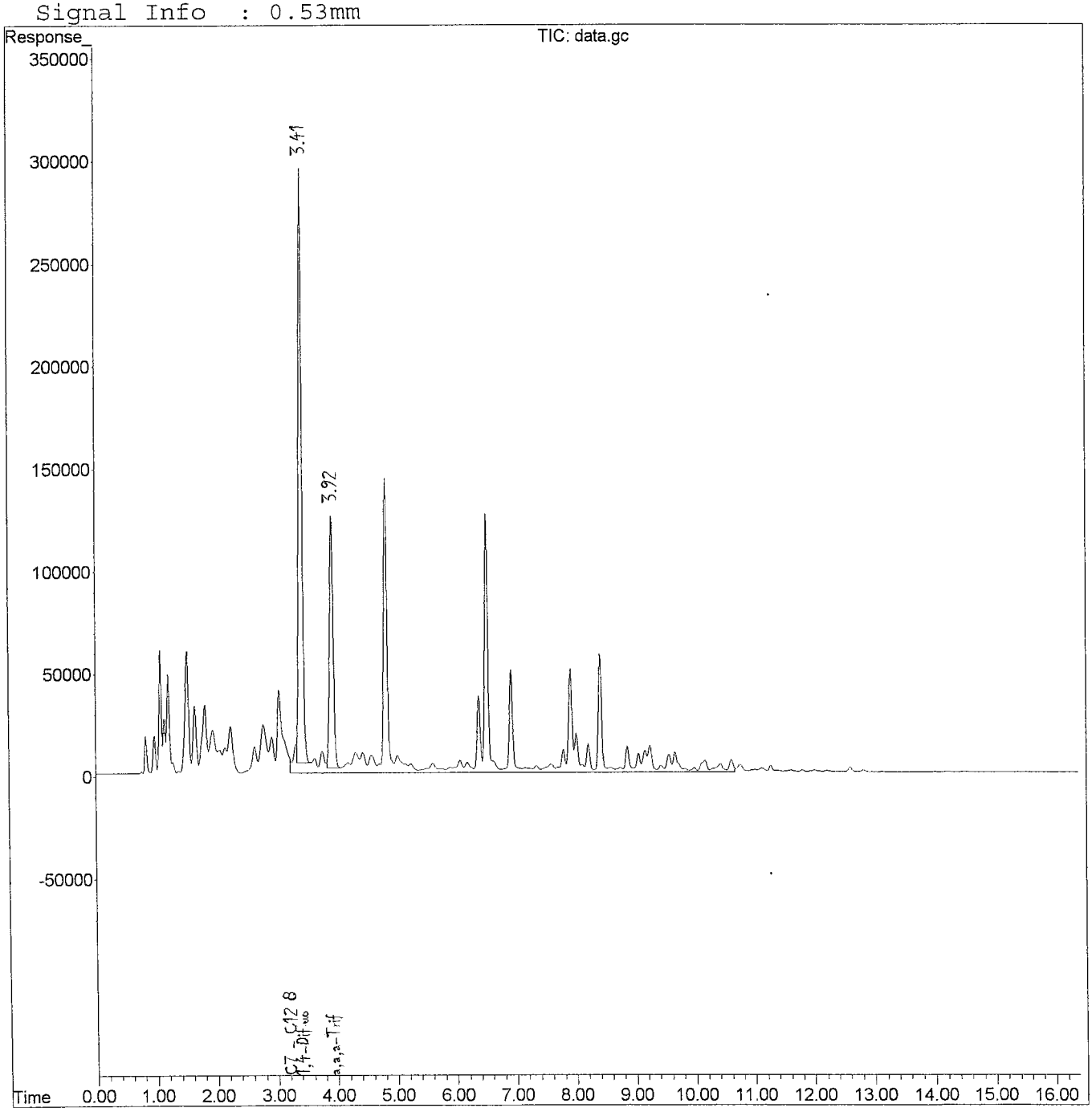
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R008.D Vial: 40
Acq On : 13 Mar 2007 02:52 pm Operator: GR
Sample : k0701647-001dms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Lab Control Sample
Lab Code: KWG0703711-3

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**555**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R006.D
Lab ID: KWG0703711-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 13:49
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Ste 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583931	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R006.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 13:49	**Quant Date:**	03/13/2007 14:46	**Vial:**	38
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703711-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.43	0.02	1129542	111.43	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3328540	554.85	555		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

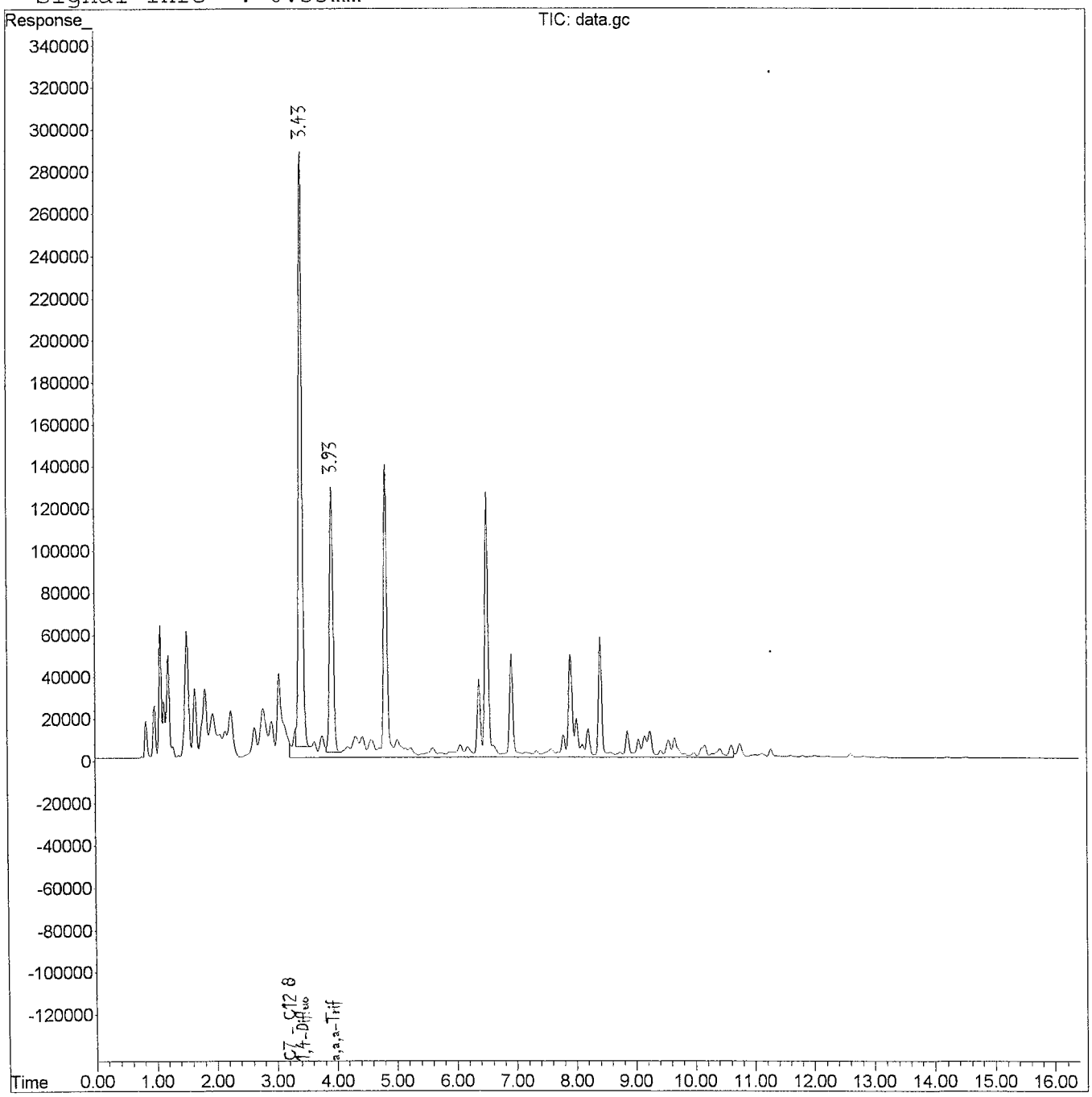
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R006.D Vial: 38
Acq On : 13 Mar 2007 01:49 pm Operator: GR
Sample : lcs 1647/703/816 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

DATA ANALYSIS PARAMETERS

Method Name: J:\GC06\METHODS\091806TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: Yes
Printer: Yes
File: No

Generate Report During Run Method: No

pm031607

CAL 6128 aka 091806tar
Calibration Last Updated: Tue Mar 13 13:10:15 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) a,a,a-Trifluorotoluene ( )

Ret. Time 3.93 min., Extract & Integrate from 3.73 to 4.13 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	533357
2		50.000	535446
3		50.000	534830
4		50.000	547317
5		50.000	560294
6		not used for this compound	
7		not used for this compound	
w_cc		50.000	-1
s_cc		50.000	-1

Curve Fit: Avg. RF

---

2) 1,4-Difluorobenzene ( )
Ret. Time 3.43 min., Extract & Integrate from 3.23 to 3.63 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	207154
2		25.000	250434
3		50.000	458000
4		100.000	1035010
5		150.000	1619666
6		not used for this compound	
7		not used for this compound	
w_cc		100.000	-1
s_cc		not used for this compound	

Curve Fit: Avg. RF

---

3) 4-Bromofluorobenzene ( )
Ret. Time 7.49 min., Extract & Integrate from 7.29 to 7.69 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	129026
2		25.000	154244
3		50.000	297734
4		100.000	650155
5		150.000	961375
6		not used for this compound	
7		not used for this compound	
w_cc		not used for this compound	
s_cc		100.000	-1

jm 03 Ke07

Curve Fit: Avg. RF

---

4) C7 - C12 8015 ( )
Ret. Time 3.22 min., Extract & Integrate from 3.22 to 10.67 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	301387
2		100.000	578840
3		200.000	1183046

4	500.000	2948011
5	1000.000	5926881
6	5000.000	30557187
7	10000.000	63275902
w_cc	500.000	-1
s_cc	500.000	-1

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Wed Mar 14 16:36:04 2007

pm031607

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	533357	49.180 ug/L
2) S 1,4-Difluorobenzene	3.49	207154	20.436 ug/L
3) S 4-Bromofluorobenzene	7.57	129026	20.489 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	301387	44.582 ug/L

3/14/07

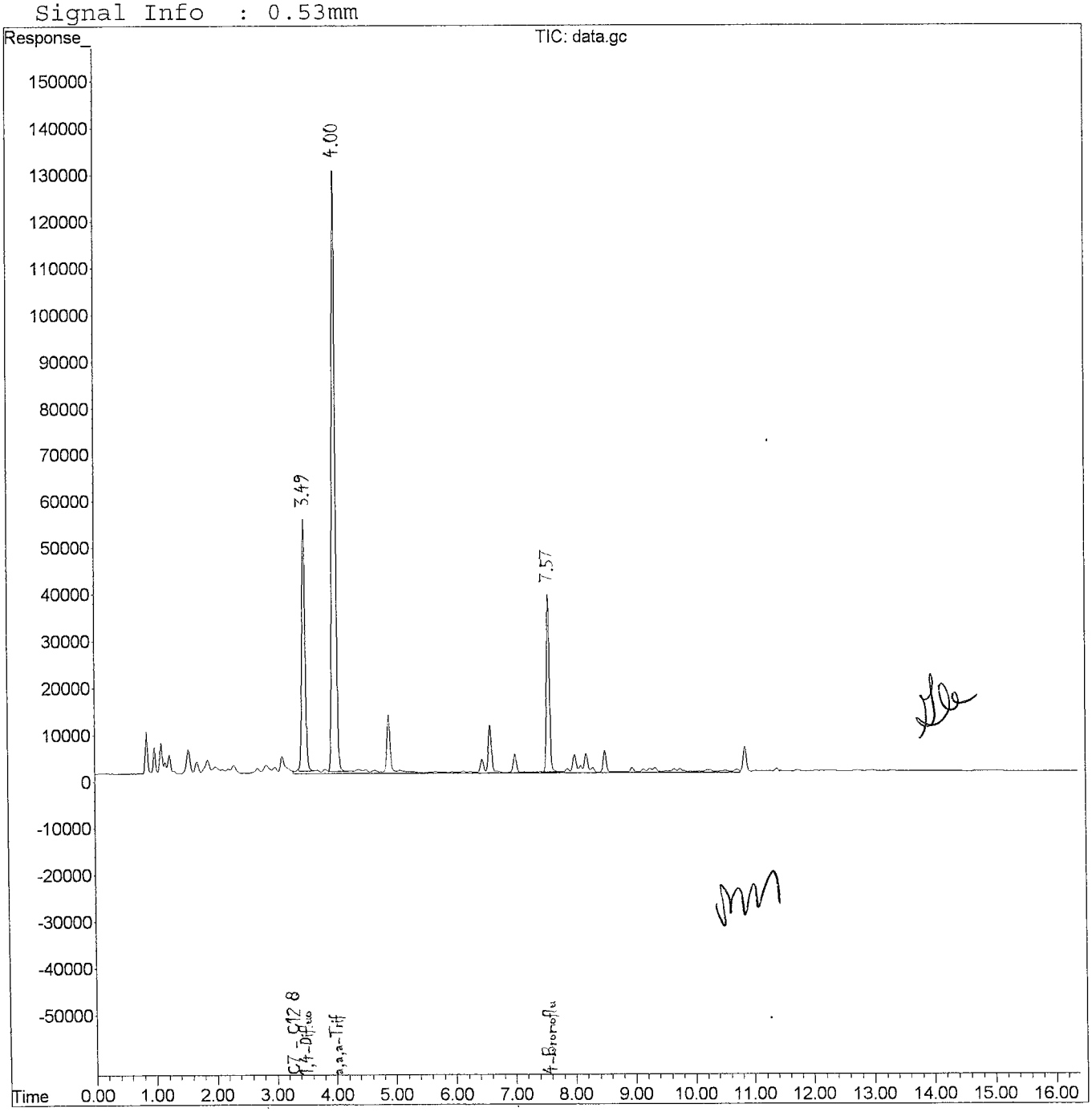
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:59 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	535446	49.373 ug/L
2) S 1,4-Difluorobenzene	3.48	250434	24.706 ug/L
3) S 4-Bromofluorobenzene	7.57	154244	24.494 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	578840	85.623 ug/L

Ale 3/14/07

VM

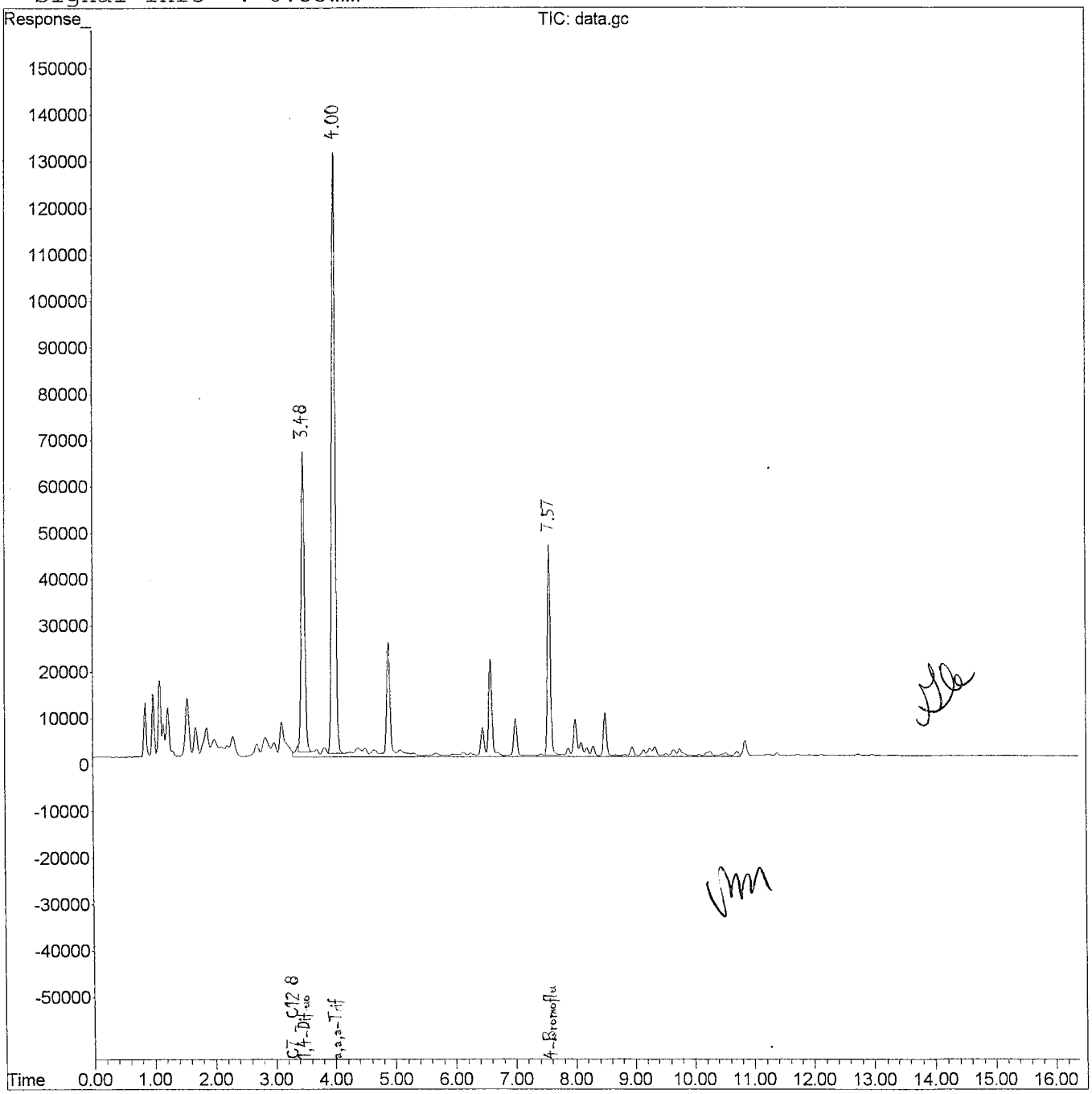
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:01 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	534830	49.316 ug/L
2) S 1,4-Difluorobenzene	3.49	458000	45.183 ug/L
3) S 4-Bromofluorobenzene	7.59	297734	47.280 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	1183046	174.998 ug/L

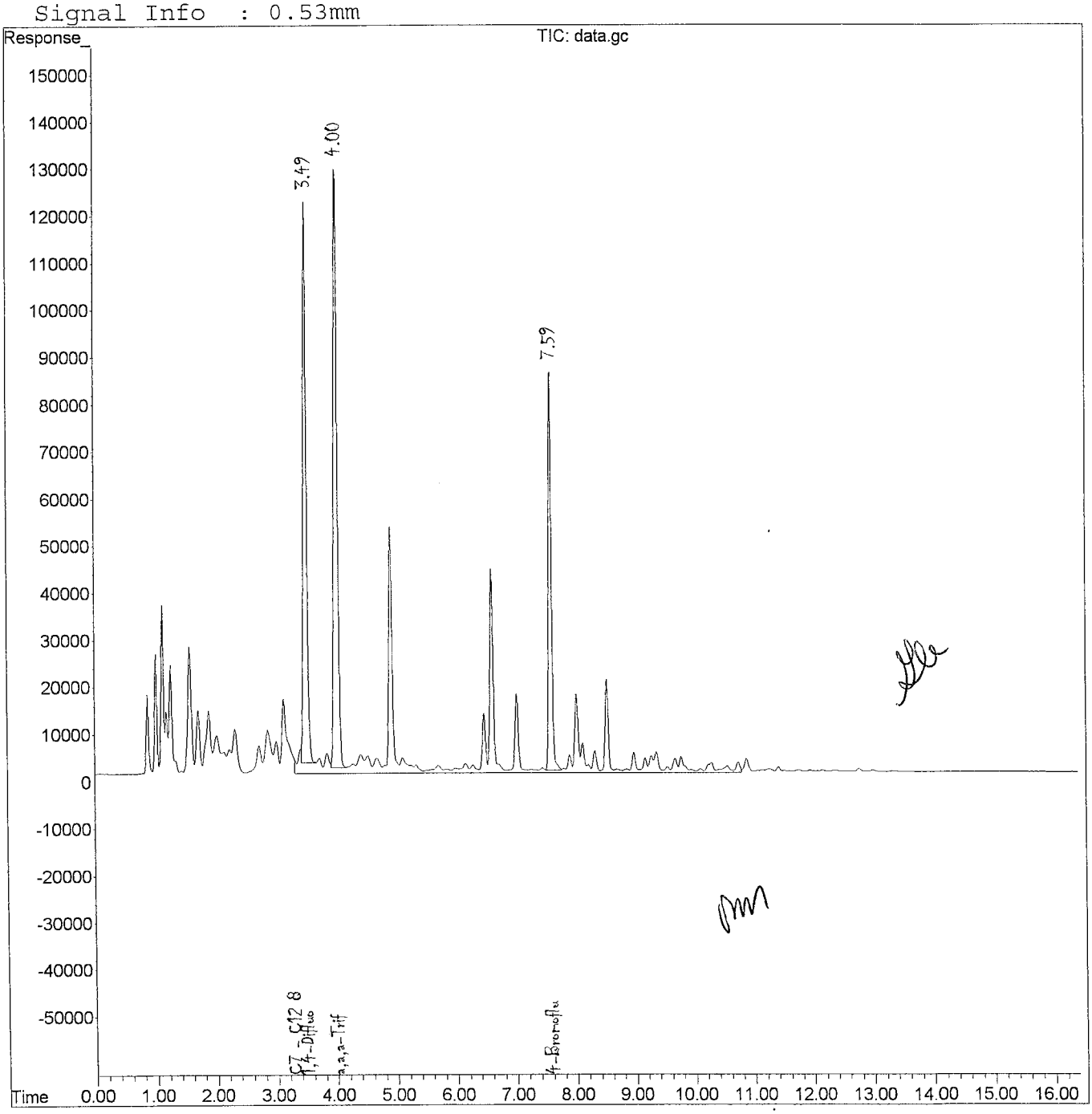
3/14/07

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:02 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	547317	50.467 ug/L
2) S 1,4-Difluorobenzene	3.49	1035010	102.106 ug/L
3) S 4-Bromofluorobenzene	7.59	650155	103.244 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2948011	436.075 ug/L

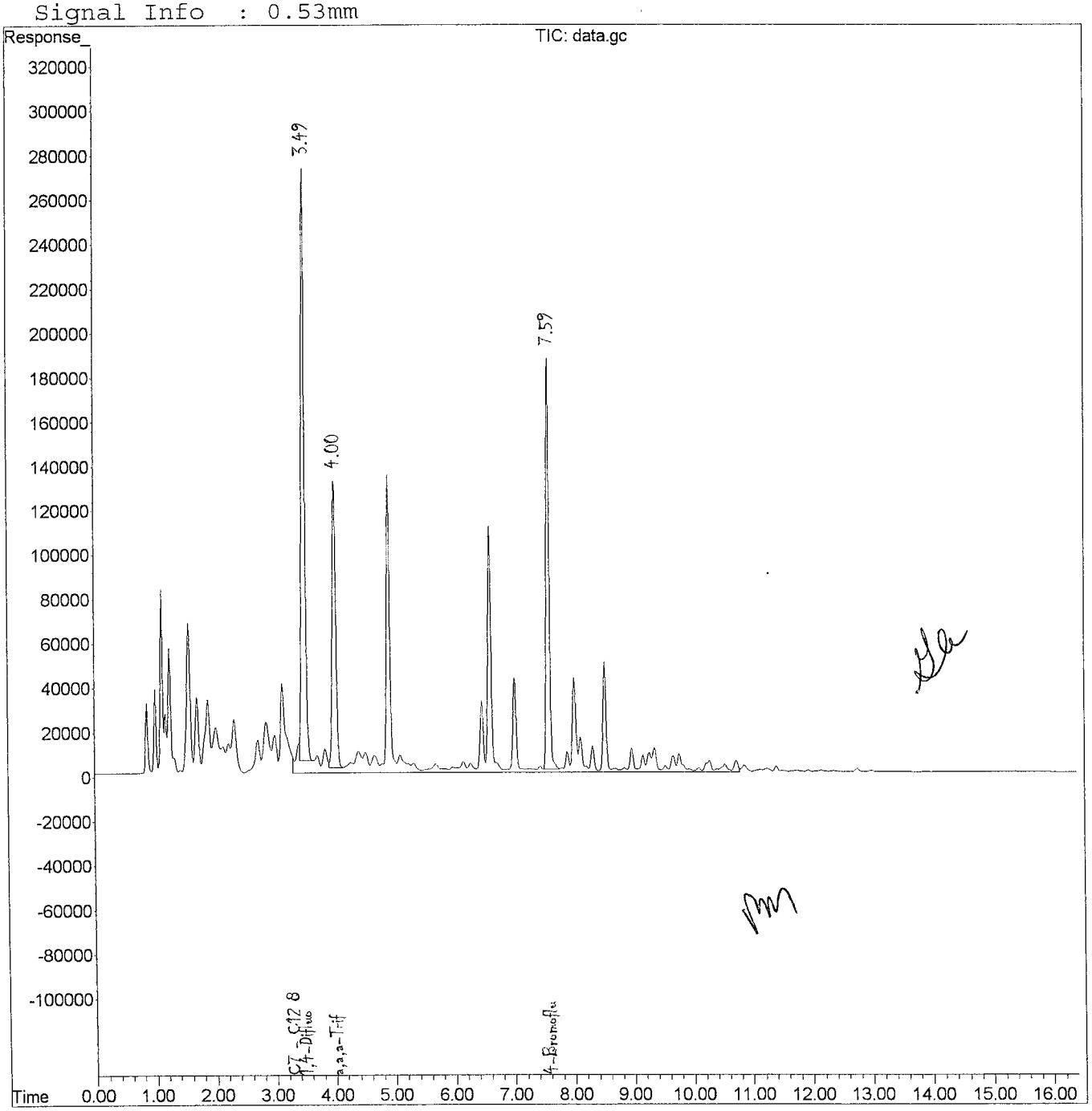
3/14/07

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:04 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	560294	51.664 ug/L
2) S 1,4-Difluorobenzene	3.49	1619666	159.784 ug/L
3) S 4-Bromofluorobenzene	7.59	961375	152.665 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	5926881	876.715 ug/L

3/14/07

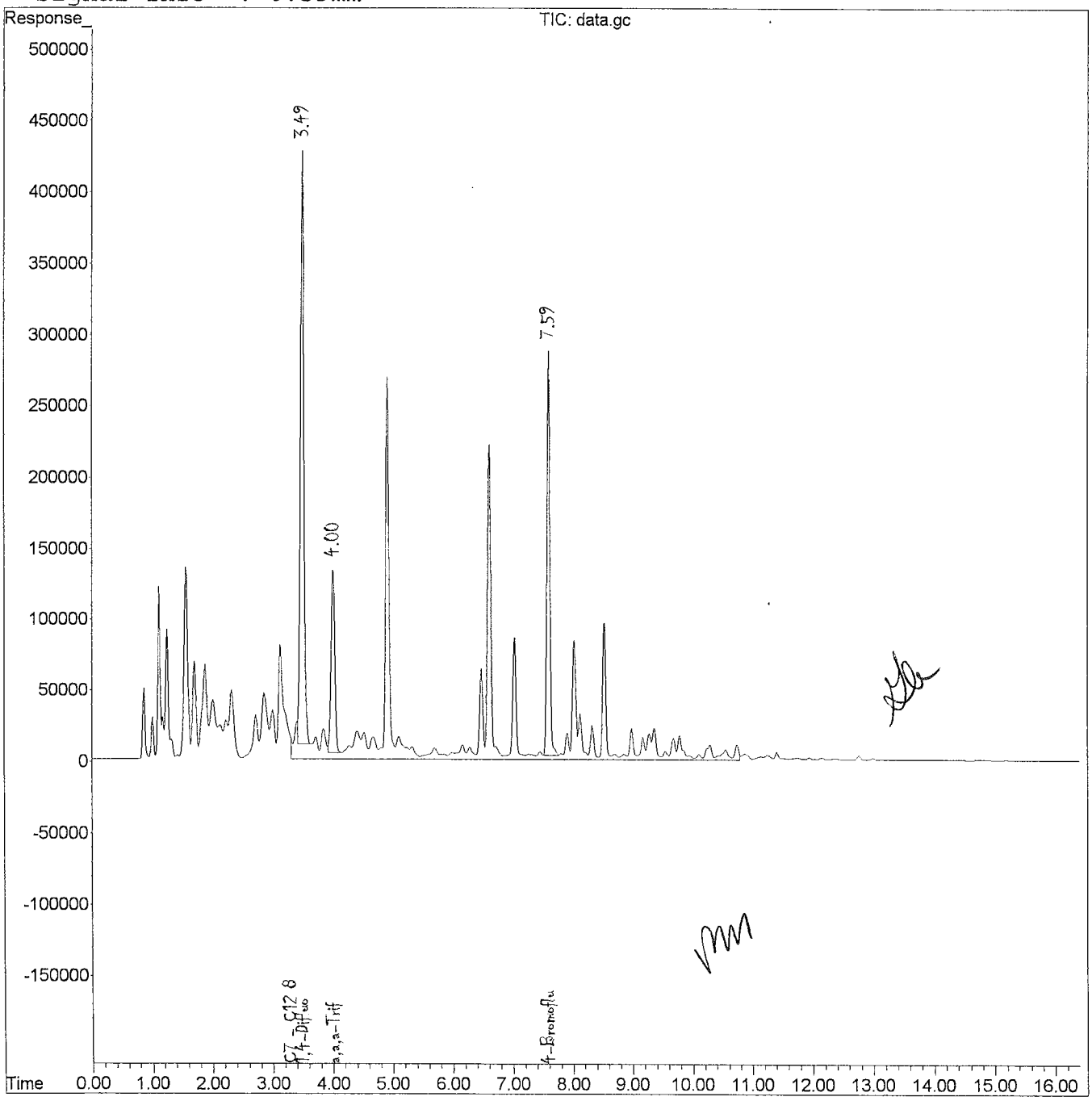
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:05 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	30557187	4520.076	ug/L

3/14/07

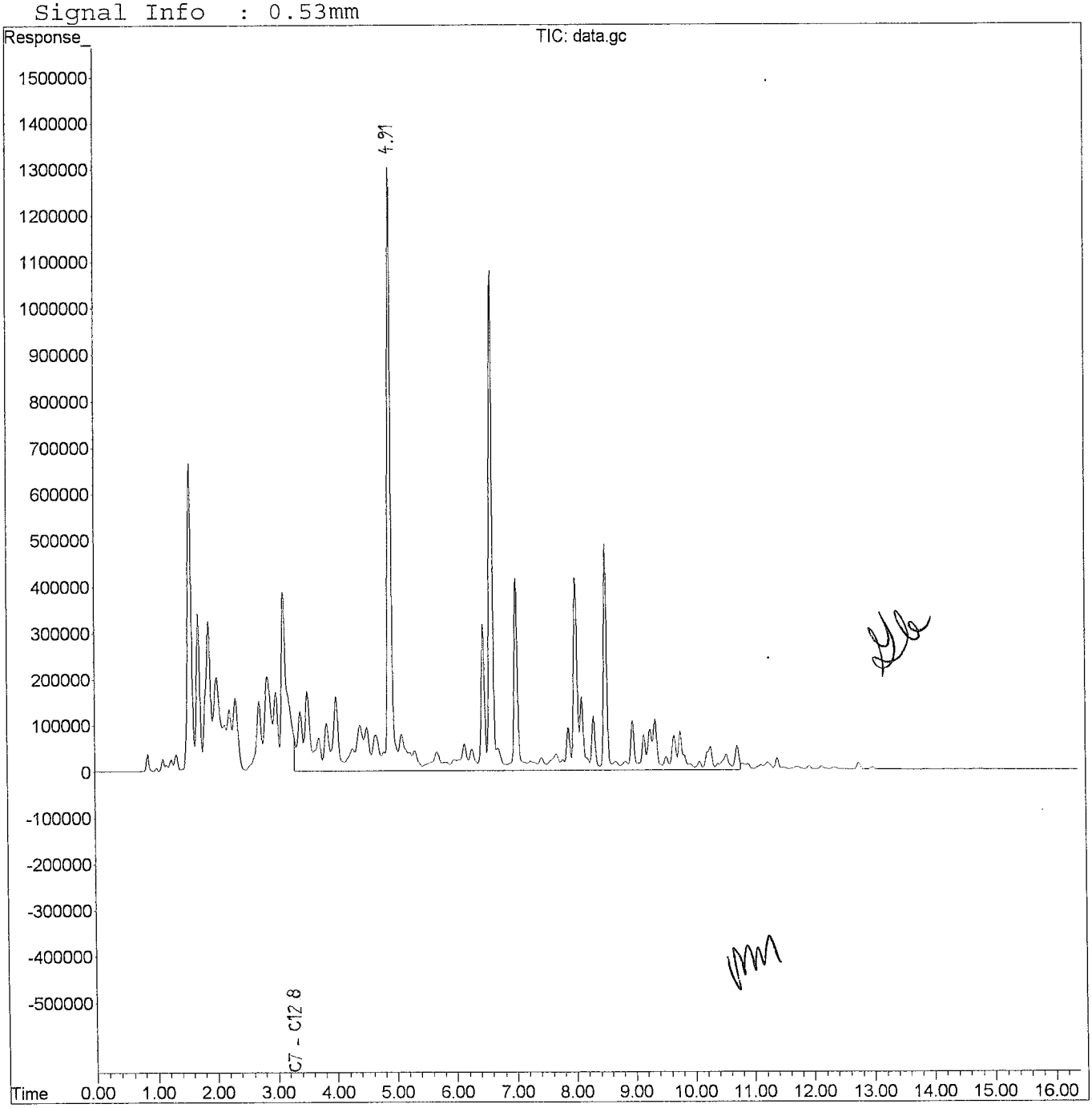
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:06 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	63275902	9359.889	ug/L

3/14/07

pm

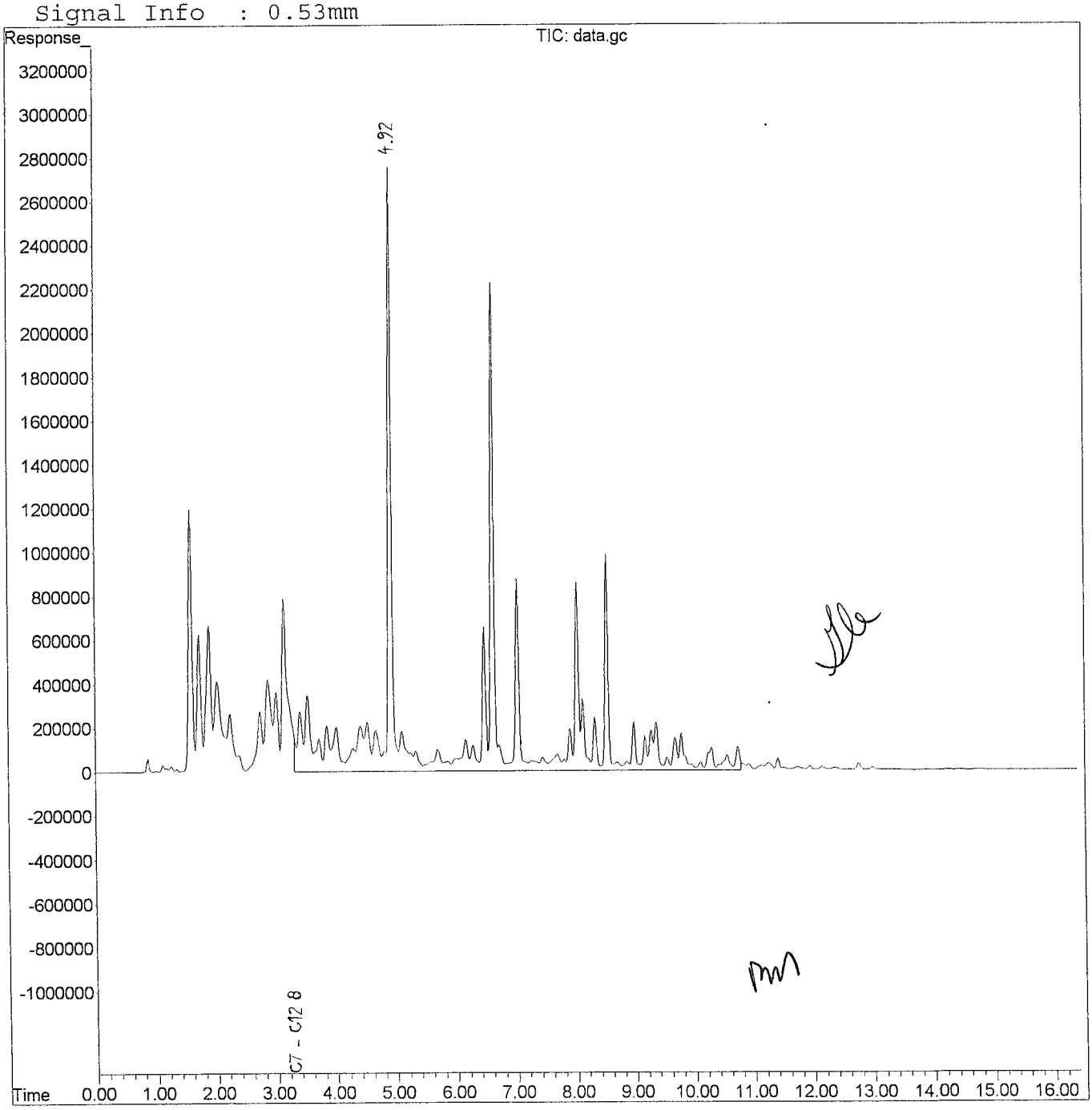
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.01	558695	51.516 ug/L
2) S 1,4-Difluorobenzene	3.49	1001454	98.796 ug/L
3) S 4-Bromofluorobenzene	7.59	628554	99.813 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2898371	483.139 ug/L

3/14/07

MM

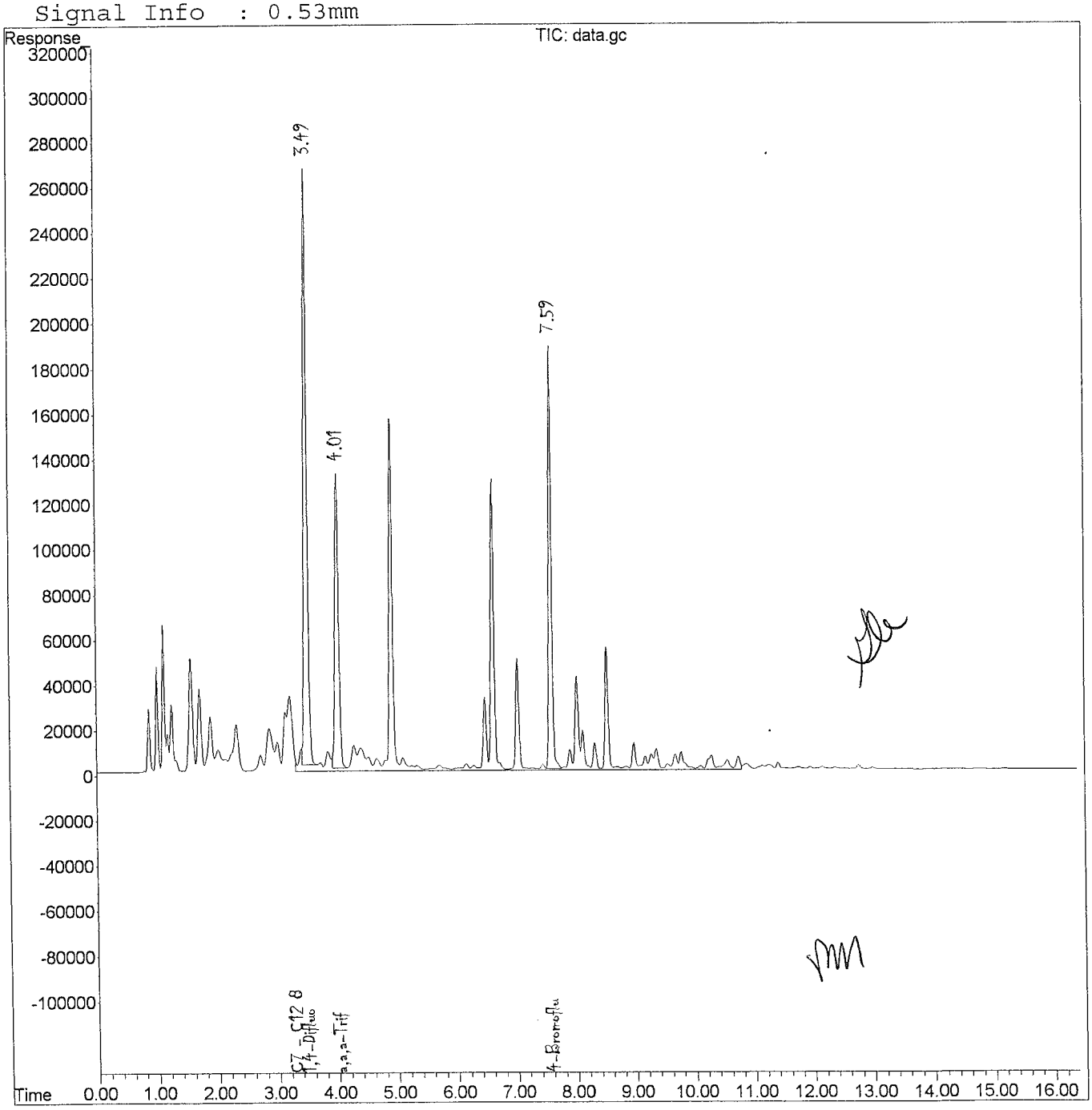
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R005.D
Lab ID: KWG0703710-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 12:37
Date Quantitated: 03/13/2007 13:10
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R005.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:37	**Quant Date:**	03/13/2007 13:10	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1115982	110.09		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3070216	511.78			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

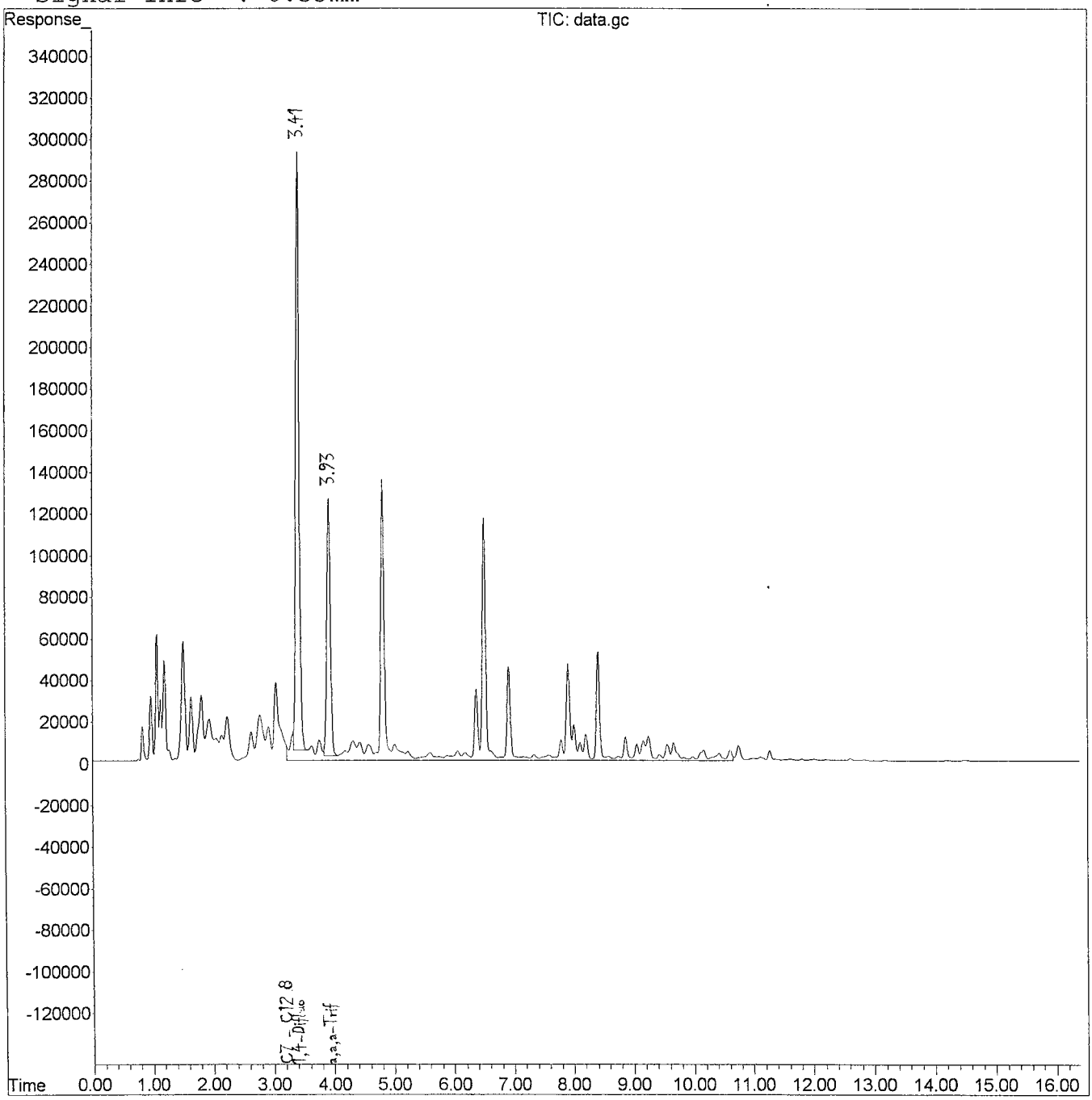
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R005.D Vial: 37
Acq On : 13 Mar 2007 12:37 pm Operator: GR
Sample : gas hcv3-88a Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 13:10 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R017.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R017.D
Lab ID: KWG0703710-4
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:38
Date Quantitated: 03/14/2007 08:19
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R017.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:38	**Quant Date:**	03/14/2007 08:19	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1108088	109.32		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3154619	525.85			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

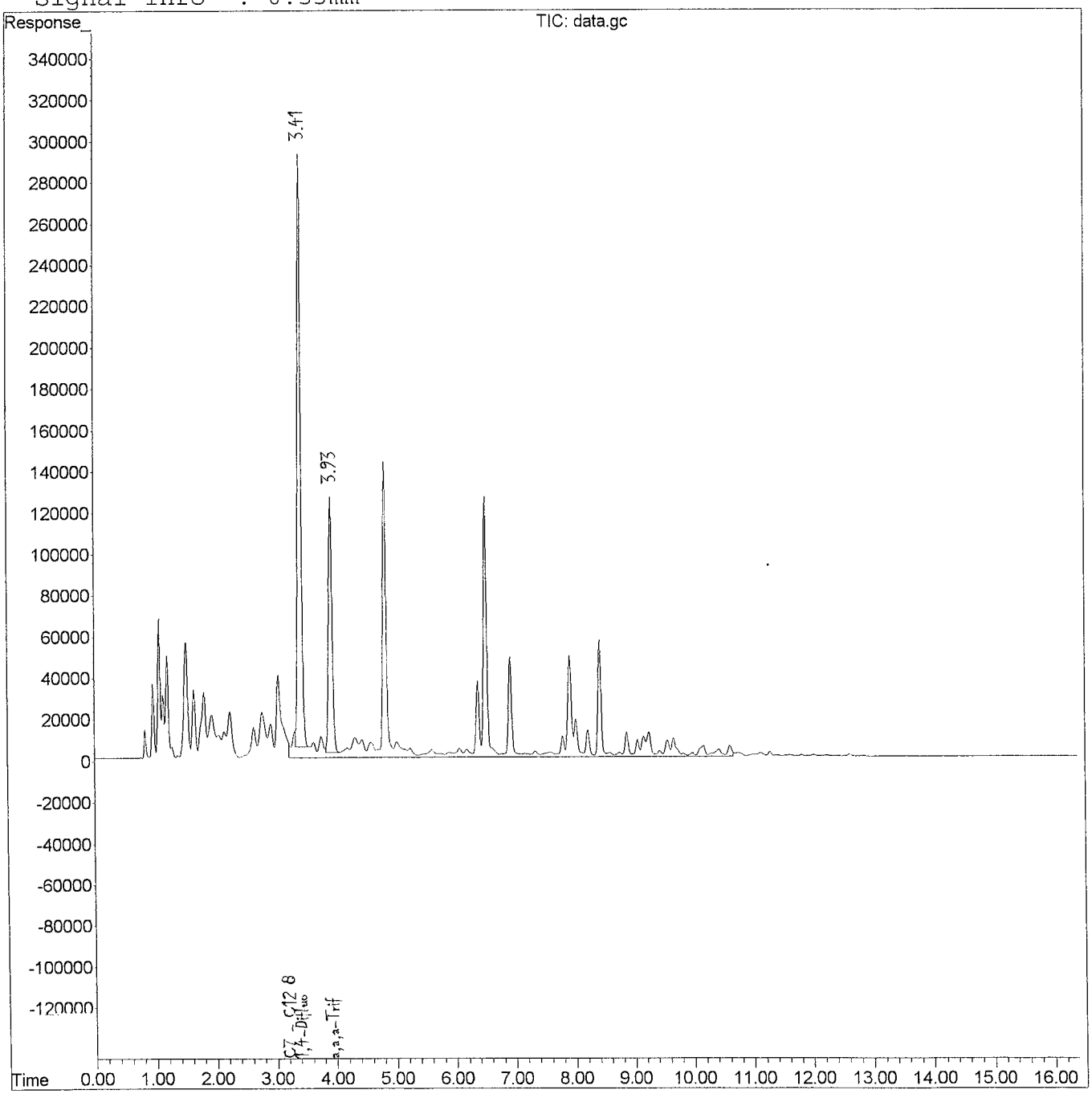
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R017.D Vial: 37
Acq On : 13 Mar 2007 07:38 pm Operator: GR
Sample : gas hcv3-88a Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:19 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703711	**Prep Method:**	EPA 5030B	**Prep Date:**	03/13/07 00:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-001	1047MW101CL	8015B VOC_GR	WATER	10ml	10ml
K0701647-002	1349MW01CL	8015B VOC_GR	WATER	10ml	10ml
K0701703-001	DAEGW104C1	8015B VOC_GR	WATER	10ml	10ml
K0701816-001	979GW115CL	8015B VOC_GR	WATER	10ml	10ml
K0701816-002	NKGW02CL	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-1	Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-2	Duplicate Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-3	Lab Control Sample	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-4	Method Blank	8015B VOC_GR	WATER	10ml	10ml

pH 2

Lab Code	Parent Lab Code	Comments
KWG0703711-1	K0701647-001	
KWG0703711-2	K0701647-001	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-001	583924	HCV3-87R				
K0701647-002	583925	HCV3-87R				
K0701703-001	583926	HCV3-87R				
K0701816-001	583927	HCV3-87R				
K0701816-002	583928	HCV3-87R				
KWG0703711-1	583929	HCV3-87R		HCV3-87J	25uL	
KWG0703711-2	583930	HCV3-87R		HCV3-87J	25uL	
KWG0703711-3	583931	HCV3-87R		HCV3-87J	25uL	
KWG0703711-4	583932	HCV3-87R				

Comments:

Started By: GRoettge Assisted By: Training Yes No

Completed By: GRoettge Assisted By: Yes No

Reviewed By: Date: 03/16/07 Storage:

Chain of Custody

Relinquished By: Date: 3/16/07 Extracts Examined

Received By: Date: Yes No

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R004.D
Lab ID: KWG0703710-1
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 12:06
Date Quantitated: 03/16/2007 08:43
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 3/16/07

Secondary Review: DM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R004.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:06	**Quant Date:**	03/16/2007 08:43	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-1			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1071361	105.69		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	141389	23.57			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

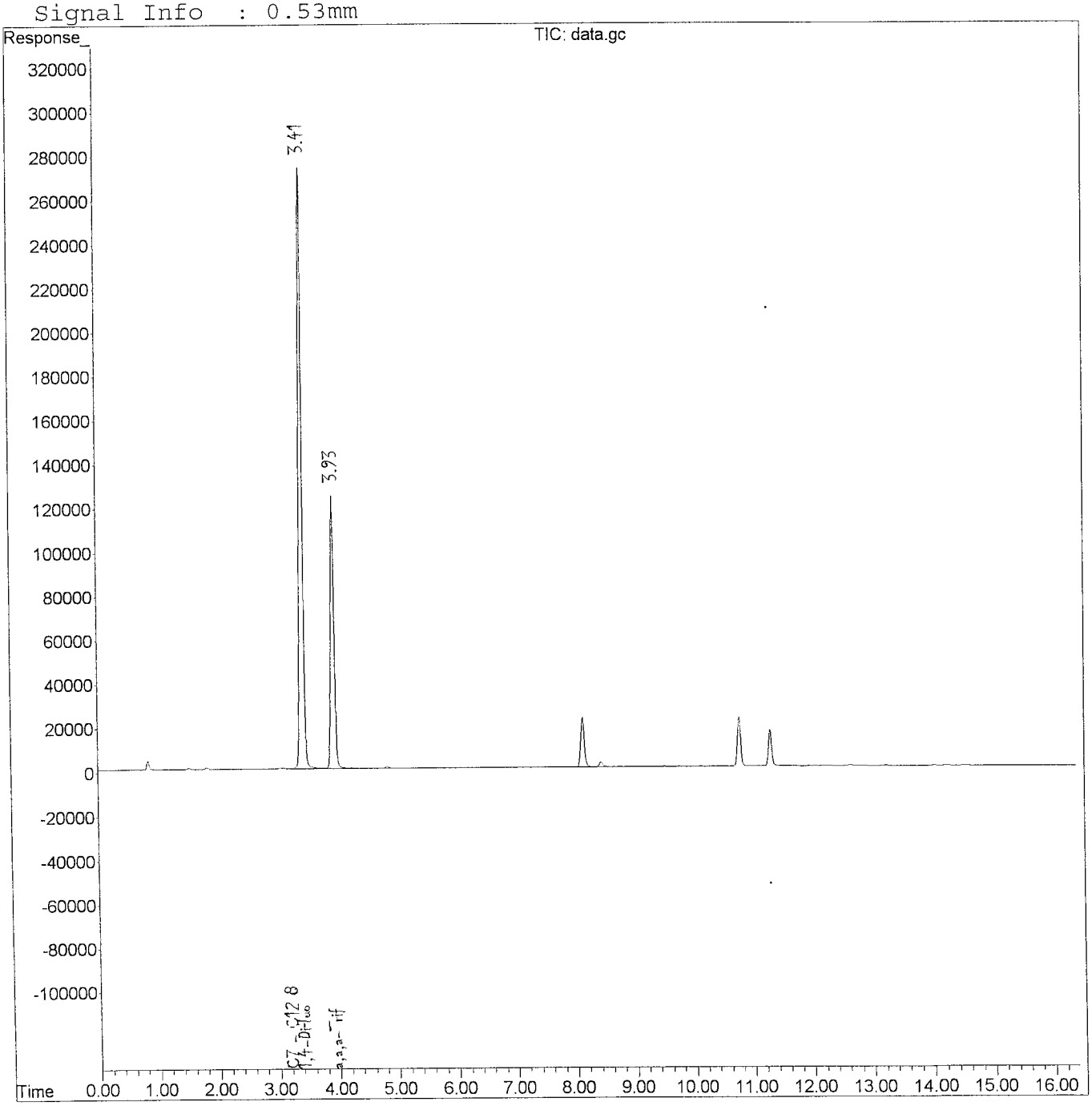
Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R004.D
Acq On : 13 Mar 2007 12:06 pm
Sample : ib
Misc :
IntFile : RTEINT.P
Quant Time: Mar 16 8:43 2007 Quant Results File: 091806TAR.RES

Vial: 6
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R016.D
Lab ID: KWG0703710-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:06
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R016.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:06	**Quant Date:**	03/14/2007 08:20	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-2			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1064325	105.00		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	17847	2.98			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

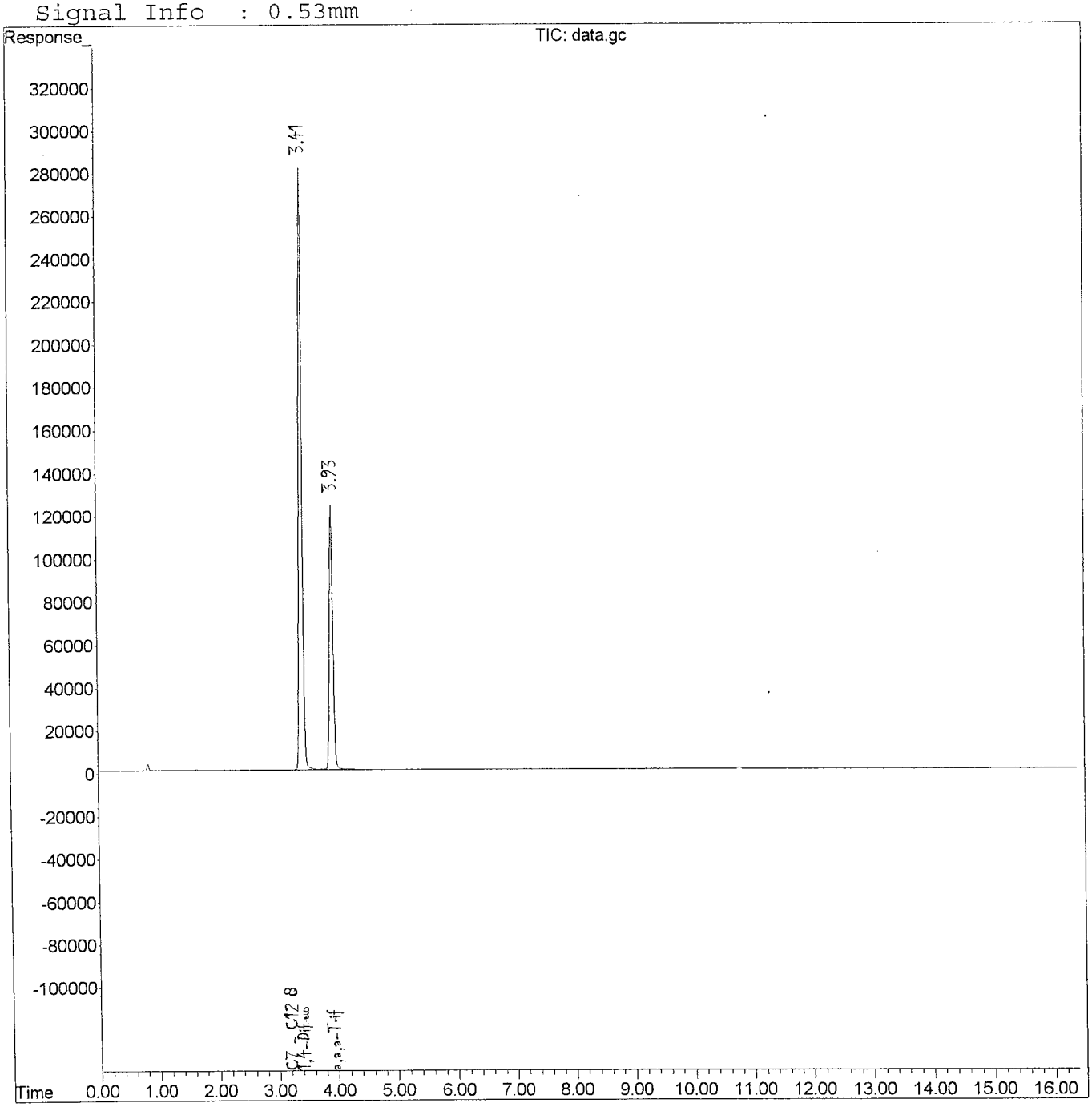
Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R016.D
Acq On : 13 Mar 2007 07:06 pm
Sample : ib
Misc :
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Vial: 6
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organochlorine Pesticides
EPA Method 8081

Organic Analysis:
Organochlorine Pesticides

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Cover Page - Organic Analysis Data Package
Organochlorine Pesticides

Sample Name	Lab Code	Date Collected	Date Received
1349MW01CL	K0701647-002	03/01/2007	03/02/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janet L. Huston

Name: Janet L. Huston

Date: 3-30-07

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Organochlorine Pesticides

Sample Name: 1349MW01CL
Lab Code: K0701647-002

Units: ug/L
Basis: NA

Extraction Method: EPA 3535
Analysis Method: 8081A

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	18-125	03/26/07	Acceptable
Decachlorobiphenyl	71	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Organochlorine Pesticides

Sample Name: Method Blank
Lab Code: KWG0703392-3

Units: ug/L
Basis: NA

Extraction Method: EPA 3535
Analysis Method: 8081A

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	55	18-125	03/26/07	Acceptable
Decachlorobiphenyl	73	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW01CL	K0701647-002	69	71
Method Blank	KWG0703392-3	55	73
Lab Control Sample	KWG0703392-1	58	77
Duplicate Lab Control Sample	KWG0703392-2	50	79

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	18-125
Sur2 =	Decachlorobiphenyl	10-145

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007
Date Analyzed: 03/26/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703392

	Lab Control Sample KWG0703392-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703392-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.172	0.200	86	0.188	0.200	94	40-131	9	30
beta-BHC	0.184	0.200	92	0.199	0.200	100	38-134	8	30
gamma-BHC (Lindane)	0.172	0.200	86	0.188	0.200	94	39-130	9	30
delta-BHC	0.210	0.200	105	0.231	0.200	116	41-147	10	30
Heptachlor	0.152	0.200	76	0.141	0.200	71	35-126	7	30
Aldrin	0.119	0.200	60	0.104	0.200	52	24-123	13	30
Heptachlor Epoxide	0.177	0.200	88	0.190	0.200	95	43-124	7	30
gamma-Chlordane	0.176	0.200	88	0.189	0.200	94	42-121	7	30
Endosulfan I	0.147	0.200	74	0.158	0.200	79	30-115	7	30
alpha-Chlordane	0.178	0.200	89	0.189	0.200	95	44-123	6	30
Dieldrin	0.182	0.200	91	0.196	0.200	98	42-125	8	30
4,4'-DDE	0.180	0.200	90	0.180	0.200	90	31-143	0	30
Endrin	0.186	0.200	93	0.204	0.200	102	45-130	9	30
Endosulfan II	0.157	0.200	79	0.172	0.200	86	35-121	9	30
4,4'-DDD	0.189	0.200	94	0.199	0.200	99	34-142	5	30
Endrin Aldehyde	0.146	0.200	73	0.135	0.200	67	23-133	8	30
Endosulfan Sulfate	0.172	0.200	86	0.185	0.200	93	39-129	8	30
4,4'-DDT	0.196	0.200	98	0.204	0.200	102	32-149	4	30
Endrin Ketone	0.178	0.200	89	0.194	0.200	97	47-126	9	30
Methoxychlor	0.207	0.200	103	0.205	0.200	102	32-151	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/26/2007
		Time Analyzed:	15:35

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\032707\0327F018.D
Lab Code:	KWG0703392-3	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703392

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703392-1	J:\GC23\DATA\032707\0327F019.D	03/26/07	16:02
Duplicate Lab Control Sample	KWG0703392-2	J:\GC23\DATA\032707\0327F020.D	03/26/07	16:28
1349MW01CL	K0701647-002	J:\GC23\DATA\032707\0327F021.D	03/26/07	16:55

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703392-1	**Lab Code:**	KWG0703392-2
File ID:	J:\GC23\DATA\032707\0327F019.D	**File ID:**	J:\GC23\DATA\032707\0327F020.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/26/2007	**Date Analyzed:**	03/26/2007
Time Analyzed:	16:02	**Time Analyzed:**	16:28

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703392

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703392-3	J:\GC23\DATA\032707\0327F018.D	03/26/07	15:35
1349MW01CL	K0701647-002	J:\GC23\DATA\032707\0327F021.D	03/26/07	16:55

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D	P	J:\GC23\DATA\030907\0309F075.D
B	J:\GC23\DATA\030907\0309F045.D	Q	J:\GC23\DATA\030907\0309F076.D
C	J:\GC23\DATA\030907\0309F046.D	R	J:\GC23\DATA\030907\0309F077.D
D	J:\GC23\DATA\030907\0309F047.D	S	J:\GC23\DATA\031207\0312F004.D
E	J:\GC23\DATA\030907\0309F048.D	T	J:\GC23\DATA\031207\0312F005.D
F	J:\GC23\DATA\030907\0309F049.D	U	J:\GC23\DATA\031207\0312F006.D
G	J:\GC23\DATA\030907\0309F058.D	V	J:\GC23\DATA\031207\0312F007.D
H	J:\GC23\DATA\030907\0309F059.D	W	J:\GC23\DATA\031207\0312F008.D
I	J:\GC23\DATA\030907\0309F060.D	X	J:\GC23\DATA\031207\0312F009.D
J	J:\GC23\DATA\030907\0309F061.D	Y	J:\GC23\DATA\031207\0312F011.D
K	J:\GC23\DATA\030907\0309F062.D	Z	J:\GC23\DATA\031207\0312F012.D
L	J:\GC23\DATA\030907\0309F063.D	AA	J:\GC23\DATA\031207\0312F013.D
M	J:\GC23\DATA\030907\0309F072.D	AB	J:\GC23\DATA\031207\0312F014.D
N	J:\GC23\DATA\030907\0309F073.D	AC	J:\GC23\DATA\031207\0312F015.D
O	J:\GC23\DATA\030907\0309F074.D	AD	J:\GC23\DATA\031207\0312F016.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	4.07E+5	B	5.0	3.75E+5	C	20	3.54E+5	D	50	3.71E+5	E	100	3.55E+5
	F	200	3.55E+5												
Decachlorobiphenyl	A	2.0	3.67E+5	B	5.0	3.38E+5	C	20	3.03E+5	D	50	2.98E+5	E	100	2.69E+5
	F	200	2.53E+5												
alpha-BHC	A	2.0	4.61E+5	B	5.0	4.29E+5	C	20	4.39E+5	D	50	4.89E+5	E	100	5.03E+5
	F	200	5.24E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.47E+5	B	5.0	2.21E+5	C	20	2.07E+5	D	50	2.13E+5	E	100	2.00E+5
	F	200	1.97E+5												
gamma-BHC (Lindane)	A	2.0	4.38E+5	B	5.0	4.17E+5	C	20	4.15E+5	D	50	4.59E+5	E	100	4.58E+5
	F	200	4.72E+5												
delta-BHC	A	2.0	4.09E+5	B	5.0	3.80E+5	C	20	3.84E+5	D	50	3.67E+5	E	100	4.36E+5
	F	200	4.54E+5												
Heptachlor	A	2.0	4.79E+5	B	5.0	4.38E+5	C	20	4.16E+5	D	50	4.43E+5	E	100	4.21E+5
	F	200	4.22E+5												
Aldrin	A	2.0	3.98E+5	B	5.0	3.71E+5	C	20	3.59E+5	D	50	3.96E+5	E	100	3.83E+5
	F	200	3.90E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.17E+5	B	5.0	3.88E+5	C	20	3.59E+5	D	50	3.81E+5	E	100	3.58E+5
	F	200	3.53E+5												
gamma-Chlordane	A	2.0	4.05E+5	B	5.0	3.78E+5	C	20	3.52E+5	D	50	3.78E+5	E	100	3.59E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.72E+5	B	5.0	3.47E+5	C	20	3.19E+5	D	50	3.03E+5	E	100	3.18E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.04E+5	B	5.0	3.74E+5	C	20	3.47E+5	D	50	3.66E+5	E	100	3.45E+5
	F	200	3.43E+5												
Dieldrin	A	2.0	3.65E+5	B	5.0	3.40E+5	C	20	3.28E+5	D	50	3.59E+5	E	100	3.44E+5
	F	200	3.48E+5												

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.42E+5	B	5.0	3.23E+5	C	20	3.12E+5	D	50	3.46E+5	E	100	3.33E+5
	F	200	3.38E+5												
Endrin	A	2.0	3.06E+5	B	5.0	2.89E+5	C	20	2.77E+5	D	50	3.02E+5	E	100	2.89E+5
	F	200	2.95E+5												
Endosulfan II	A	2.0	3.33E+5	B	5.0	3.22E+5	C	20	2.99E+5	D	50	2.96E+5	E	100	2.94E+5
	F	200	2.66E+5												
4,4'-DDD	A	2.0	2.57E+5	B	5.0	2.50E+5	C	20	2.53E+5	D	50	2.80E+5	E	100	2.68E+5
	F	200	2.74E+5												
Endrin Aldehyde	A	2.0	2.96E+5	B	5.0	2.80E+5	C	20	2.57E+5	D	50	2.65E+5	E	100	2.47E+5
	F	200	2.40E+5												

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Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.26E+5	B	5.0	3.01E+5	C	20	2.83E+5	D	50	2.96E+5	E	100	2.77E+5
	F	200	2.73E+5												
4,4'-DDT	A	2.0	2.87E+5	B	5.0	2.67E+5	C	20	2.61E+5	D	50	2.86E+5	E	100	2.76E+5
	F	200	2.80E+5												
Endrin Ketone	A	2.0	3.50E+5	B	5.0	3.28E+5	C	20	3.19E+5	D	50	3.36E+5	E	100	3.18E+5
	F	200	3.13E+5												
Methoxychlor	A	2.0	1.70E+5	B	5.0	1.57E+5	C	20	1.49E+5	D	50	1.58E+5	E	100	1.46E+5
	F	200	1.43E+5												
Toxaphene {1}															
													Y	100	2870
	Z	250	2830	AA	500	2550	AB	1000	2530	AC	2000	2470	AD	5000	2490

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	2050
	Z	250	2300	AA	500	2100	AB	1000	2030	AC	2000	2010	AD	5000	1940
Toxaphene {3}															
													Y	100	3370
	Z	250	3440	AA	500	3350	AB	1000	3090	AC	2000	3210	AD	5000	3240
Toxaphene {4}															
													Y	100	3880
	Z	250	4360	AA	500	4110	AB	1000	3930	AC	2000	3890	AD	5000	3870
Toxaphene {5}															
													Y	100	2270
	Z	250	2170	AA	500	2070	AB	1000	1940	AC	2000	1930	AD	5000	1860
Toxaphene {6}															
													Y	100	2110
	Z	250	2340	AA	500	2300	AB	1000	2160	AC	2000	2190	AD	5000	2120

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Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	13.9		≤ 20
alpha-BHC	MS	AverageRF	% RSD	7.9		≤ 20
beta-BHC	MS	AverageRF	% RSD	8.5		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	5.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	5.4		≤ 20
Aldrin	MS	AverageRF	% RSD	4.0		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	6.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	7.8		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.5		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.8		≤ 20
Endrin	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan II	MS	AverageRF	% RSD	7.8		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.6		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	8.0		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	6.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.8		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	4.2		≤ 20
Methoxychlor	MS	AverageRF	% RSD	6.3		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	5.9		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	3.9		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.8		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	7.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.2		≤ 20

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D
J:\GC23\DATA\030907\0309F064.D
J:\GC23\DATA\030907\0309F078.D
J:\GC23\DATA\031207\0312F010.D
J:\GC23\DATA\031207\0312F017.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	474000	458000	-3	NA	± 15 %	AverageRF
beta-BHC	40	38	214000	202000	-6	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	38	443000	426000	-4	NA	± 15 %	AverageRF
delta-BHC	40	42	405000	420000	4	NA	± 15 %	AverageRF
Heptachlor	40	38	436000	412000	-6	NA	± 15 %	AverageRF
Aldrin	40	38	383000	365000	-5	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	38	376000	353000	-6	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	372000	349000	-6	NA	± 15 %	AverageRF
Endosulfan I	40	39	329000	318000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	37	363000	338000	-7	NA	± 15 %	AverageRF
Dieldrin	40	37	348000	321000	-8	NA	± 15 %	AverageRF
4,4'-DDE	40	38	332000	317000	-5	NA	± 15 %	AverageRF
Endrin	40	39	293000	283000	-3	NA	± 15 %	AverageRF
Endosulfan II	40	39	302000	294000	-2	NA	± 15 %	AverageRF
4,4'-DDD	40	38	264000	252000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	38	264000	254000	-4	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	38	293000	276000	-6	NA	± 15 %	AverageRF
4,4'-DDT	40	39	276000	268000	-3	NA	± 15 %	AverageRF
Endrin Ketone	40	40	327000	324000	-1	NA	± 15 %	AverageRF
Methoxychlor	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	900	2620	2350	-10	NA	± 100 %	AverageRF
Toxaphene {2}	1000	900	2070	1860	-10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	870	3280	2850	-13	NA	± 100 %	AverageRF
Toxaphene {4}	1000	890	4000	3560	-11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	790	2040	1600	-21	NA	± 100 %	AverageRF
Toxaphene {6}	1000	890	2200	1960	-11	NA	± 100 %	AverageRF
Toxaphene	1000	870	NA	NA	NA	13	± 15 %	NA

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† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D\0309F044c.d	P	J:\GC23\DATA\030907\0309F075.D\0309F075c.d
B	J:\GC23\DATA\030907\0309F045.D\0309F045c.d	Q	J:\GC23\DATA\030907\0309F076.D\0309F076c.d
C	J:\GC23\DATA\030907\0309F046.D\0309F046c.d	R	J:\GC23\DATA\030907\0309F077.D\0309F077c.d
D	J:\GC23\DATA\030907\0309F047.D\0309F047c.d	S	J:\GC23\DATA\031207\0312F004.D\0312F004c.d
E	J:\GC23\DATA\030907\0309F048.D\0309F048c.d	T	J:\GC23\DATA\031207\0312F005.D\0312F005c.d
F	J:\GC23\DATA\030907\0309F049.D\0309F049c.d	U	J:\GC23\DATA\031207\0312F006.D\0312F006c.d
G	J:\GC23\DATA\030907\0309F058.D\0309F058c.d	V	J:\GC23\DATA\031207\0312F007.D\0312F007c.d
H	J:\GC23\DATA\030907\0309F059.D\0309F059c.d	W	J:\GC23\DATA\031207\0312F008.D\0312F008c.d
I	J:\GC23\DATA\030907\0309F060.D\0309F060c.d	X	J:\GC23\DATA\031207\0312F009.D\0312F009c.d
J	J:\GC23\DATA\030907\0309F061.D\0309F061c.d	Y	J:\GC23\DATA\031207\0312F011.D\0312F011c.d
K	J:\GC23\DATA\030907\0309F062.D\0309F062c.d	Z	J:\GC23\DATA\031207\0312F012.D\0312F012c.d
L	J:\GC23\DATA\030907\0309F063.D\0309F063c.d	AA	J:\GC23\DATA\031207\0312F013.D\0312F013c.d
M	J:\GC23\DATA\030907\0309F072.D\0309F072c.d	AB	J:\GC23\DATA\031207\0312F014.D\0312F014c.d
N	J:\GC23\DATA\030907\0309F073.D\0309F073c.d	AC	J:\GC23\DATA\031207\0312F015.D\0312F015c.d
O	J:\GC23\DATA\030907\0309F074.D\0309F074c.d	AD	J:\GC23\DATA\031207\0312F016.D\0312F016c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	3.62E+5	B	5.0	3.43E+5	C	20	3.26E+5	D	50	3.27E+5	E	100	3.15E+5
	F	200	3.14E+5												
Decachlorobiphenyl	A	2.0	4.66E+5	B	5.0	4.21E+5	C	20	3.80E+5	D	50	3.53E+5	E	100	3.26E+5
	F	200	3.10E+5												
alpha-BHC	A	2.0	4.30E+5	B	5.0	4.12E+5	C	20	4.22E+5	D	50	4.51E+5	E	100	4.68E+5
	F	200	4.84E+5												

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.30E+5	B	5.0	2.16E+5	C	20	2.02E+5	D	50	2.13E+5	E	100	1.85E+5
	F	200	1.82E+5												
gamma-BHC (Lindane)	A	2.0	4.23E+5	B	5.0	4.09E+5	C	20	4.03E+5	D	50	4.27E+5	E	100	4.29E+5
	F	200	4.39E+5												
delta-BHC	A	2.0	3.88E+5	B	5.0	3.64E+5	C	20	3.76E+5	D	50	3.44E+5	E	100	4.12E+5
	F	200	4.27E+5												
Heptachlor	A	2.0	4.58E+5	B	5.0	4.29E+5	C	20	4.13E+5	D	50	4.25E+5	E	100	4.09E+5
	F	200	4.06E+5												
Aldrin	A	2.0	3.96E+5	B	5.0	3.76E+5	C	20	3.68E+5	D	50	3.86E+5	E	100	3.74E+5
	F	200	3.76E+5												

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COLUMBIA ANALYTICAL SERVICES, INC.

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Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.18E+5	B	5.0	3.88E+5	C	20	3.66E+5	D	50	3.72E+5	E	100	3.51E+5
	F	200	3.45E+5												
gamma-Chlordane	A	2.0	4.04E+5	B	5.0	3.86E+5	C	20	3.67E+5	D	50	3.75E+5	E	100	3.60E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.76E+5	B	5.0	3.57E+5	C	20	3.37E+5	D	50	3.05E+5	E	100	3.21E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.09E+5	B	5.0	3.84E+5	C	20	3.62E+5	D	50	3.67E+5	E	100	3.48E+5
	F	200	3.46E+5												
Dieldrin	A	2.0	3.90E+5	B	5.0	3.67E+5	C	20	3.55E+5	D	50	3.69E+5	E	100	3.56E+5
	F	200	3.56E+5												

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Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.60E+5	B	5.0	3.40E+5	C	20	3.37E+5	D	50	3.56E+5	E	100	3.45E+5
	F	200	3.47E+5												
Endrin	A	2.0	3.41E+5	B	5.0	3.18E+5	C	20	3.15E+5	D	50	3.25E+5	E	100	3.13E+5
	F	200	3.14E+5												
Endosulfan II	A	2.0	3.67E+5	B	5.0	3.51E+5	C	20	3.31E+5	D	50	3.11E+5	E	100	3.10E+5
	F	200	2.77E+5												
4,4'-DDD	A	2.0	3.13E+5	B	5.0	2.86E+5	C	20	2.80E+5	D	50	2.96E+5	E	100	2.84E+5
	F	200	2.87E+5												
Endrin Aldehyde	A	2.0	3.27E+5	B	5.0	3.09E+5	C	20	2.88E+5	D	50	2.82E+5	E	100	2.63E+5
	F	200	2.52E+5												

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

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Service Request: K0701647
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Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.85E+5	B	5.0	3.58E+5	C	20	3.35E+5	D	50	3.31E+5	E	100	3.11E+5
	F	200	3.01E+5												
4,4'-DDT	A	2.0	3.38E+5	B	5.0	3.18E+5	C	20	3.07E+5	D	50	3.19E+5	E	100	3.07E+5
	F	200	3.08E+5												
Endrin Ketone	A	2.0	4.35E+5	B	5.0	4.10E+5	C	20	3.91E+5	D	50	3.90E+5	E	100	3.66E+5
	F	200	3.53E+5												
Methoxychlor	A	2.0	2.07E+5	B	5.0	1.94E+5	C	20	1.78E+5	D	50	1.75E+5	E	100	1.61E+5
	F	200	1.54E+5												
Toxaphene {1}															
													Y	100	7580
	Z	250	7950	AA	500	7510	AB	1000	7200	AC	2000	7220	AD	5000	7380

Results flagged with an asterisk (*) indicate values outside control criteria.

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Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	5840
	Z	250	5790	AA	500	5400	AB	1000	5210	AC	2000	5450	AD	5000	5390
Toxaphene {3}															
													Y	100	3090
	Z	250	3260	AA	500	3030	AB	1000	2850	AC	2000	2720	AD	5000	2750
Toxaphene {4}															
													Y	100	3700
	Z	250	3980	AA	500	3560	AB	1000	3850	AC	2000	3770	AD	5000	4030
Toxaphene {5}															
													Y	100	3310
	Z	250	3460	AA	500	3390	AB	1000	3100	AC	2000	3150	AD	5000	3170
Toxaphene {6}															
													Y	100	8040
	Z	250	8860	AA	500	8380	AB	1000	8010	AC	2000	8070	AD	5000	8520

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.7		≤ 20
alpha-BHC	MS	AverageRF	% RSD	6.3		≤ 20
beta-BHC	MS	AverageRF	% RSD	9.1		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	3.2		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.0		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.5		≤ 20
Aldrin	MS	AverageRF	% RSD	2.6		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	7.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	4.5		≤ 20
Endosulfan I	MS	AverageRF	% RSD	8.3		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.4		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.7		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	2.6		≤ 20
Endrin	MS	AverageRF	% RSD	3.3		≤ 20
Endosulfan II	MS	AverageRF	% RSD	10.0		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.1		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	9.7		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	9.2		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.9		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	7.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	11.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	3.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	7.1		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.6		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D\0309F050c.d
J:\GC23\DATA\030907\0309F064.D\0309F064c.d
J:\GC23\DATA\030907\0309F078.D\0309F078c.d
J:\GC23\DATA\031207\0312F010.D\0312F010c.d
J:\GC23\DATA\031207\0312F017.D\0312F017c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift		Criteria	Curve Fit
alpha-BHC	40	38	444000	419000	-6	NA		± 15 %	AverageRF
beta-BHC	40	36	205000	184000	-10	NA		± 15 %	AverageRF
gamma-BHC (Lindane)	40	37	422000	393000	-7	NA		± 15 %	AverageRF
delta-BHC	40	41	385000	392000	2	NA		± 15 %	AverageRF
Heptachlor	40	37	423000	391000	-8	NA		± 15 %	AverageRF
Aldrin	40	38	379000	356000	-6	NA		± 15 %	AverageRF
Heptachlor Epoxide	40	36	373000	340000	-9	NA		± 15 %	AverageRF
gamma-Chlordane	40	37	376000	344000	-8	NA		± 15 %	AverageRF
Endosulfan I	40	38	335000	315000	-6	NA		± 15 %	AverageRF
alpha-Chlordane	40	36	369000	336000	-9	NA		± 15 %	AverageRF
Dieldrin	40	36	365000	327000	-11	NA		± 15 %	AverageRF
4,4'-DDE	40	37	347000	322000	-7	NA		± 15 %	AverageRF
Endrin	40	38	321000	303000	-6	NA		± 15 %	AverageRF
Endosulfan II	40	38	324000	307000	-6	NA		± 15 %	AverageRF
4,4'-DDD	40	36	291000	263000	-10	NA		± 15 %	AverageRF
Endrin Aldehyde	40	37	287000	266000	-7	NA		± 15 %	AverageRF
Endosulfan Sulfate	40	36	337000	305000	-9	NA		± 15 %	AverageRF
4,4'-DDT	40	37	316000	294000	-7	NA		± 15 %	AverageRF
Endrin Ketone	40	38	391000	372000	-5	NA		± 15 %	AverageRF
Methoxychlor	40	38	178000	168000	-6	NA		± 15 %	AverageRF
Toxaphene {1}	1000	870	7470	6510	-13	NA		± 100 %	AverageRF
Toxaphene {2}	1000	830	5510	4580	-17	NA		± 100 %	AverageRF
Toxaphene {3}	1000	750	2950	2210	-25	NA		± 100 %	AverageRF
Toxaphene {4}	1000	740	3810	2810	-26	NA		± 100 %	AverageRF
Toxaphene {5}	1000	820	3260	2690	-18	NA		± 100 %	AverageRF
Toxaphene {6}	1000	840	8310	6980	-16	NA		± 100 %	AverageRF
Toxaphene	1000	810	NA	NA	NA	19	*	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F004.D
J:\GC23\DATA\032707\0327F005.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	51	370000	380000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	305000	300000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	474000	504000	6	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	218000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	443000	473000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	380000	-6	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	460000	5	NA	± 15 %	AverageRF
Aldrin	50	53	383000	405000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	388000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	372000	385000	3	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	308000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	363000	374000	3	NA	± 15 %	AverageRF
Dieldrin	50	53	348000	366000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	53	332000	352000	6	NA	± 15 %	AverageRF
Endrin	50	54	293000	318000	8	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	303000	0	NA	± 15 %	AverageRF
4,4'-DDD	50	54	264000	285000	8	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	264000	267000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	293000	299000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	53	276000	296000	7	NA	± 15 %	AverageRF
Endrin Ketone	50	52	327000	340000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	168000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	2620	2980	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2230	8	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	3280	3590	9	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4270	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2100	3	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	2200	2340	6	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	8	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F004.D\0327F004C.D
J:\GC23\DATA\032707\0327F005.D\0327F005C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	55	331000	361000	9	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	51	376000	387000	3	NA	± 15 %	AverageRF
alpha-BHC	50	57	444000	502000	13	NA	± 15 %	AverageRF
beta-BHC	50	56	205000	231000	13	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	56	422000	475000	13	NA	± 15 %	AverageRF
delta-BHC	50	50	385000	382000	-1	NA	± 15 %	AverageRF
Heptachlor	50	57	423000	483000	14	NA	± 15 %	AverageRF
Aldrin	50	57	379000	430000	13	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	55	373000	414000	11	NA	± 15 %	AverageRF
gamma-Chlordane	50	56	376000	419000	12	NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	339000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	55	369000	408000	11	NA	± 15 %	AverageRF
Dieldrin	50	56	365000	409000	12	NA	± 15 %	AverageRF
4,4'-DDE	50	57	347000	397000	14	NA	± 15 %	AverageRF
Endrin	50	57	321000	369000	15	NA	± 15 %	AverageRF
Endosulfan II	50	53	324000	346000	7	NA	± 15 %	AverageRF
4,4'-DDD	50	56	291000	326000	12	NA	± 15 %	AverageRF
Endrin Aldehyde	50	53	287000	306000	7	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	54	337000	365000	8	NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	352000	11	NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	421000	8	NA	± 15 %	AverageRF
Methoxychlor	50	56	178000	200000	12	NA	± 15 %	AverageRF
Toxaphene {1}	1000	990	7470	7410	-1	NA	± 100 %	AverageRF
Toxaphene {2}	1000	970	5510	5330	-3	NA	± 100 %	AverageRF
Toxaphene {3}	1000	990	2950	2930	-1	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3860	1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	980	3260	3210	-2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8390	1	NA	± 100 %	AverageRF
Toxaphene	1000	990	NA	NA	NA	-1	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F025.D
J:\GC23\DATA\032707\0327F026.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	370000	382000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	50	305000	303000	-1	NA	± 15 %	AverageRF
alpha-BHC	50	54	474000	510000	8	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	219000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	443000	478000	8	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	384000	-5	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	465000	6	NA	± 15 %	AverageRF
Aldrin	50	53	383000	406000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	390000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	372000	386000	4	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	311000	-5	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	363000	375000	3	NA	± 15 %	AverageRF
Dieldrin	50	53	348000	368000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	53	332000	353000	6	NA	± 15 %	AverageRF
Endrin	50	55	293000	323000	10	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	304000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	54	264000	282000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	264000	267000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	293000	302000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	276000	297000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	327000	340000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	171000	11	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	2620	2730	4	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2190	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	3280	3380	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4290	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2090	2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2270	3	NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA	4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F025.D\0327F025C.D
J:\GC23\DATA\032707\0327F026.D\0327F026C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	56	331000	369000	12		NA	± 15 %	AverageRF
Decachlorobiphenyl	50	52	376000	389000	3		NA	± 15 %	AverageRF
alpha-BHC	50	58	444000	515000	16	*	NA	± 15 %	AverageRF
beta-BHC	50	57	205000	232000	13		NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	58	422000	485000	15	*	NA	± 15 %	AverageRF
delta-BHC	50	51	385000	393000	2		NA	± 15 %	AverageRF
Heptachlor	50	58	423000	493000	16	*	NA	± 15 %	AverageRF
Aldrin	50	58	379000	436000	15	*	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	56	373000	420000	12		NA	± 15 %	AverageRF
gamma-Chlordane	50	56	376000	423000	13		NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	344000	3		NA	± 15 %	AverageRF
alpha-Chlordane	50	56	369000	414000	12		NA	± 15 %	AverageRF
Dieldrin	50	57	365000	414000	13		NA	± 15 %	AverageRF
4,4'-DDE	50	58	347000	400000	15	*	NA	± 15 %	AverageRF
Endrin	50	59	321000	378000	18	*	NA	± 15 %	AverageRF
Endosulfan II	50	54	324000	349000	8		NA	± 15 %	AverageRF
4,4'-DDD	50	57	291000	330000	14		NA	± 15 %	AverageRF
Endrin Aldehyde	50	54	287000	308000	7		NA	± 15 %	AverageRF
Endosulfan Sulfate	50	55	337000	369000	10		NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	356000	13		NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	419000	7		NA	± 15 %	AverageRF
Methoxychlor	50	57	178000	204000	15		NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	7470	7600	2		NA	± 100 %	AverageRF
Toxaphene {2}	1000	1000	5510	5700	3		NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	2970	1		NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3890	2		NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	3260	3320	2		NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8380	1		NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA		2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A

Analysis Lot: KWG0703981
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F002.D	Instrument Blank	KWG0703981-1	3/26/2007	08:29		3/26/2007	08:48
0327F003.D	Performance Evaluation Mixture	KWG0703981-2	3/26/2007	08:56		3/26/2007	09:15
0327F004.D	Continuing Calibration Verification	KWG0703981-3	3/26/2007	09:22		3/26/2007	09:41
0327F005.D	Continuing Calibration Verification	KWG0703981-3	3/26/2007	09:49		3/26/2007	10:08
0327F006.D	Continuing Calibration Verification	KWG0703981-3	3/26/2007	10:15		3/26/2007	10:34
0327F007.D	Continuing Calibration Verification	KWG0703981-3	3/26/2007	10:42		3/26/2007	11:01
0327F008.D	ZZZZZZ	ZZZZZZ	3/26/2007	11:08		3/26/2007	11:27
0327F009.D	ZZZZZZ	ZZZZZZ	3/26/2007	11:35		3/26/2007	11:54
0327F010.D	ZZZZZZ	ZZZZZZ	3/26/2007	12:02		3/26/2007	12:21
0327F011.D	ZZZZZZ	ZZZZZZ	3/26/2007	12:28		3/26/2007	12:47
0327F012.D	ZZZZZZ	ZZZZZZ	3/26/2007	12:55		3/26/2007	13:14
0327F013.D	ZZZZZZ	ZZZZZZ	3/26/2007	13:22		3/26/2007	13:41
0327F014.D	ZZZZZZ	ZZZZZZ	3/26/2007	13:48		3/26/2007	14:07
0327F015.D	ZZZZZZ	ZZZZZZ	3/26/2007	14:15		3/26/2007	14:34
0327F016.D	ZZZZZZ	ZZZZZZ	3/26/2007	14:42		3/26/2007	15:02
0327F017.D	ZZZZZZ	ZZZZZZ	3/26/2007	15:09		3/26/2007	15:28
0327F018.D	Method Blank	KWG0703392-3	3/26/2007	15:35		3/26/2007	15:54
0327F019.D	Lab Control Sample	KWG0703392-1	3/26/2007	16:02		3/26/2007	16:21
0327F020.D	Duplicate Lab Control Sample	KWG0703392-2	3/26/2007	16:28		3/26/2007	16:47
0327F021.D	1349MW01CL	K0701647-002	3/26/2007	16:55		3/26/2007	17:15
0327F023.D	Instrument Blank	KWG0703981-4	3/26/2007	17:47		3/26/2007	18:07
0327F024.D	Performance Evaluation Mixture	KWG0703981-5	3/26/2007	18:13		3/26/2007	18:32
0327F025.D	Continuing Calibration Verification	KWG0703981-6	3/26/2007	18:40		3/26/2007	18:59
0327F026.D	Continuing Calibration Verification	KWG0703981-6	3/26/2007	19:06		3/26/2007	19:25
0327F027.D	Continuing Calibration Verification	KWG0703981-6	3/26/2007	19:33		3/26/2007	19:52
0327F028.D	Continuing Calibration Verification	KWG0703981-6	3/26/2007	19:59		3/26/2007	20:19
0327F029.D	ZZZZZZ	ZZZZZZ	3/26/2007	20:26		3/26/2007	20:46
0327F030.D	ZZZZZZ	ZZZZZZ	3/26/2007	20:52		3/26/2007	21:11
0327F031.D	ZZZZZZ	ZZZZZZ	3/26/2007	21:19		3/26/2007	21:39
0327F032.D	ZZZZZZ	ZZZZZZ	3/26/2007	21:45		3/26/2007	22:05
0327F033.D	ZZZZZZ	ZZZZZZ	3/26/2007	22:12		3/26/2007	22:31
0327F034.D	ZZZZZZ	ZZZZZZ	3/26/2007	22:38		3/26/2007	22:57
0327F035.D	ZZZZZZ	ZZZZZZ	3/26/2007	23:05		3/26/2007	23:24
0327F036.D	ZZZZZZ	ZZZZZZ	3/26/2007	23:31		3/26/2007	23:50

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A

Analysis Lot: KWG0703981
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0327F037.D	ZZZZZZ	ZZZZZZ	3/26/2007	23:58		3/27/2007	00:17
0327F038.D	ZZZZZZ	ZZZZZZ	3/27/2007	00:24		3/27/2007	00:43
0327F039.D	ZZZZZZ	ZZZZZZ	3/27/2007	00:50		3/27/2007	01:09
0327F040.D	ZZZZZZ	ZZZZZZ	3/27/2007	01:17		3/27/2007	01:37
0327F041.D	ZZZZZZ	ZZZZZZ	3/27/2007	01:43		3/27/2007	02:02
0327F042.D	ZZZZZZ	ZZZZZZ	3/27/2007	02:09		3/27/2007	02:28
0327F044.D	Instrument Blank	KWG0703981-7	3/27/2007	03:01		3/27/2007	03:20
0327F045.D	Performance Evaluation Mixture	KWG0703981-8	3/27/2007	03:27		3/27/2007	03:46
0327F046.D	Continuing Calibration Verification	KWG0703981-9	3/27/2007	03:53		3/27/2007	04:12
0327F047.D	Continuing Calibration Verification	KWG0703981-9	3/27/2007	04:20		3/27/2007	04:39
0327F048.D	Continuing Calibration Verification	KWG0703981-9	3/27/2007	04:46		3/27/2007	05:05
0327F049.D	ZZZZZZ	ZZZZZZ	3/27/2007	05:12		3/27/2007	05:31
0327F050.D	ZZZZZZ	ZZZZZZ	3/27/2007	05:39		3/27/2007	05:58
0327F051.D	ZZZZZZ	ZZZZZZ	3/27/2007	06:05		3/27/2007	06:24
0327F052.D	ZZZZZZ	ZZZZZZ	3/27/2007	06:31		3/27/2007	06:51
0327F053.D	ZZZZZZ	ZZZZZZ	3/27/2007	06:58		3/27/2007	07:17
0327F054.D	ZZZZZZ	ZZZZZZ	3/27/2007	07:24		3/27/2007	07:44
0327F055.D	ZZZZZZ	ZZZZZZ	3/27/2007	07:51		3/27/2007	08:10
0327F056.D	ZZZZZZ	ZZZZZZ	3/27/2007	08:17		3/27/2007	08:36
0327F057.D	ZZZZZZ	ZZZZZZ	3/27/2007	08:44		3/27/2007	09:04
0327F058.D	ZZZZZZ	ZZZZZZ	3/27/2007	09:10		3/27/2007	09:29
0327F059.D	ZZZZZZ	ZZZZZZ	3/27/2007	09:37		3/27/2007	09:56
0327F060.D	ZZZZZZ	ZZZZZZ	3/27/2007	10:03		3/27/2007	10:22
0327F062.D	Instrument Blank	KWG0703981-10	3/27/2007	11:21		3/27/2007	11:40
0327F063.D	Performance Evaluation Mixture	KWG0703981-11	3/27/2007	11:48		3/27/2007	12:07
0327F064.D	Continuing Calibration Verification	KWG0703981-12	3/27/2007	12:14		3/27/2007	12:34
0327F065.D	Continuing Calibration Verification	KWG0703981-12	3/27/2007	12:41		3/27/2007	13:00
0327F066.D	Continuing Calibration Verification	KWG0703981-12	3/27/2007	13:07		3/27/2007	13:26
0327F067.D	Continuing Calibration Verification	KWG0703981-12	3/27/2007	13:34		3/27/2007	13:54
0327F068.D	Continuing Calibration Verification	KWG0703981-12	3/27/2007	14:01		3/27/2007	14:20

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007

Extraction Prep Log
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Extraction Lot: KWG0703392
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW01CL	K0701647-002	03/01/07	03/02/07	1000ml	2ml	NA	
Method Blank	KWG0703392-3	NA	NA	1000ml	2ml	NA	
Lab Control Sample	KWG0703392-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0703392-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Organochlorine Pesticides

Validation Package

Organic Analysis:
Organochlorine Pesticides

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW01CL	K0701647-002	69	71
Method Blank	KWG0703392-3	55	73
Lab Control Sample	KWG0703392-1	58	77
Duplicate Lab Control Sample	KWG0703392-2	50	79

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	18-125
Sur2 =	Decachlorobiphenyl	10-145

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007
Date Analyzed: 03/26/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703392

	Lab Control Sample KWG0703392-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703392-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.172	0.200	86	0.188	0.200	94	40-131	9	30
beta-BHC	0.184	0.200	92	0.199	0.200	100	38-134	8	30
gamma-BHC (Lindane)	0.172	0.200	86	0.188	0.200	94	39-130	9	30
delta-BHC	0.210	0.200	105	0.231	0.200	116	41-147	10	30
Heptachlor	0.152	0.200	76	0.141	0.200	71	35-126	7	30
Aldrin	0.119	0.200	60	0.104	0.200	52	24-123	13	30
Heptachlor Epoxide	0.177	0.200	88	0.190	0.200	95	43-124	7	30
gamma-Chlordane	0.176	0.200	88	0.189	0.200	94	42-121	7	30
Endosulfan I	0.147	0.200	74	0.158	0.200	79	30-115	7	30
alpha-Chlordane	0.178	0.200	89	0.189	0.200	95	44-123	6	30
Dieldrin	0.182	0.200	91	0.196	0.200	98	42-125	8	30
4,4'-DDE	0.180	0.200	90	0.180	0.200	90	31-143	0	30
Endrin	0.186	0.200	93	0.204	0.200	102	45-130	9	30
Endosulfan II	0.157	0.200	79	0.172	0.200	86	35-121	9	30
4,4'-DDD	0.189	0.200	94	0.199	0.200	99	34-142	5	30
Endrin Aldehyde	0.146	0.200	73	0.135	0.200	67	23-133	8	30
Endosulfan Sulfate	0.172	0.200	86	0.185	0.200	93	39-129	8	30
4,4'-DDT	0.196	0.200	98	0.204	0.200	102	32-149	4	30
Endrin Ketone	0.178	0.200	89	0.194	0.200	97	47-126	9	30
Methoxychlor	0.207	0.200	103	0.205	0.200	102	32-151	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/26/2007
		Time Analyzed:	15:35

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\032707\0327F018.D
Lab Code:	KWG0703392-3	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703392

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703392-1	J:\GC23\DATA\032707\0327F019.D	03/26/07	16:02
Duplicate Lab Control Sample	KWG0703392-2	J:\GC23\DATA\032707\0327F020.D	03/26/07	16:28
1349MW01CL	K0701647-002	J:\GC23\DATA\032707\0327F021.D	03/26/07	16:55

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703392-1	**Lab Code:**	KWG0703392-2
File ID:	J:\GC23\DATA\032707\0327F019.D	**File ID:**	J:\GC23\DATA\032707\0327F020.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/26/2007	**Date Analyzed:**	03/26/2007
Time Analyzed:	16:02	**Time Analyzed:**	16:28

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703392

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703392-3	J:\GC23\DATA\032707\0327F018.D	03/26/07	15:35
1349MW01CL	K0701647-002	J:\GC23\DATA\032707\0327F021.D	03/26/07	16:55

Organic Analysis:
Organochlorine Pesticides

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Organochlorine Pesticides

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	69	18-125	03/26/07	Acceptable
Decachlorobiphenyl	71	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File:	J:\GC23\DATA\032707\0327F021.D	**Date Acquired:**	03/26/2007 16:55
Lab ID:	K0701647-002	**Date Quantitated:**	03/29/2007 19:03
RunType:	SMPL	**Batch ID:**	KWG0703981
Matrix:	WATER	**Analysis Method:**	8081A
		MethodJoinID:	MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Analyte Co-elution	Endrin	13.18	NA	NA	Cfrd
	Toxaphene {3}	13.18	NA	NA	

Primary Review: LC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F021.D\0327F021C.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/26/2007 16:55
Date Quantitated: 03/29/2007 19:03
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	IW
Analyte Co-elution	4,4'-DDD	12.35	NA	NA	Gmd
	Toxaphene {1}	12.35	NA	NA	

Primary Review: LL 3/30/07

Secondary Review: 3-30-07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703981	**Prep Lot:**	KWG0703392	**Report Group:**	K0701647
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	581406	**Prep Date:**	03/08/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:	J:\GC23\DATA\032707\0327F018.D	**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032707\0327F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F021.D\0327F021c.d			**Vial:**	21
Acqu Date:	03/26/2007 16:55	**Quant Date:**	03/29/2007 19:03	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0701647-002				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.36	+0.01	7.11		23936947	22694641	64.75	68.55			69OK
					%Recovery =		65OK	69OK	Limits =	18-125	
Decachlorobiphenyl	16.91		15.66		21585518	23696890	70.83	63.03			71OK
					%Recovery =		71OK	63OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC					0	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
beta-BHC	10.07	+0.01	9.19	+0.04	311596m	298611m	1.45	1.46	0.0029J	0.0029J	**0.0029**J
gamma-BHC (Lindane)	9.58	-0.01	8.74		188757	34186	0.4260	0.0810	0.00085J	0.00044U	0.00044U
delta-BHC	10.45	-0.02	9.60	+0.01	147956	77834	0.3650	0.2020	0.00073J	0.00057U	0.00057U
Heptachlor					0	0d	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Aldrin	11.05	-0.02	9.78	-0.01	50115	50241	0.1310	0.1320	0.00040U	0.00040U	0.00040U
Heptachlor Epoxide	11.75	-0.02	10.61	-0.03	197296m	56509	0.5250	0.1510	0.0011J	0.00032U	0.00032U
gamma-Chlordane	12.26		11.04	+0.04	31455	235598m	0.0850	0.6270	0.00032U	0.0013J	0.00032U
Endosulfan I	12.40	+0.01	11.23	+0.01	41555	113732	0.1260	0.3400	0.00044U	0.00068J	0.00044U
alpha-Chlordane					0d	0	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin	12.81	+0.02	11.68	+0.02	28270	1162038	0.0810	3.18	0.00035U	0.0064J	0.00035U
4,4'-DDE	12.59	+0.01	11.48	+0.01	91790	31848	0.2760	0.0920	0.00055J	0.00036U	0.00036U
Endrin	13.18	+0.04c	12.12	-0.01	60885	30301m	0.2080	0.0940	0.00068U	0.00068U	0.00068U
Endosulfan II	13.60	+0.06	12.57	+0.04	185985	134548	0.6170	0.4150	0.0012J	0.00083J	**0.0012**J
4,4'-DDD	13.37	+0.01	12.35	+0.01c	124250m	177621	0.4710	0.6100	0.0015U	0.0015U	0.0015U
Endrin Aldehyde	13.71		12.88		51686	37363m	0.1960	0.1300	0.00046U	0.00046U	0.00046U
Endosulfan Sulfate					0d	0	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT	13.81	-0.01	12.75	+0.01	63188	195787m	0.2290	0.6200	0.00058U	0.0012J	0.00058U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F021.D\0327F021c.d			**Vial:**	21
Acqu Date:	03/26/2007 16:55	**Quant Date:**	03/29/2007 19:03	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0701647-002				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endrin Ketone	14.75	14.07 +0.01	87413	93147	0.2670	0.2380	0.00066U	0.00066U	0.00066U
Methoxychlor			0	0d	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	16.08	22.04	0.032J	0.044J	**0.044J**
Toxaphene {1}	12.95 -0.03	12.35 -0.03 c	29902	177621	11.40	23.77	0.028U	0.048J	
Toxaphene {2}	13.00 -0.05	12.47 +0.02	56044	132563	27.06	24.04	0.054J	0.048J	
Toxaphene {3}	13.18 -0.02 c	12.67 +0.02	60885	53650	18.55	18.20	0.037J	0.036J	
Toxaphene {4}	13.90 +0.03	12.96 -0.04	29268	153123	7.31	40.14	0.028U	0.080J	
Toxaphene {5}			0	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}		13.55 -0.03	0d	33518	0.0000	4.03	0.028U	0.028U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:27 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.36	7.11	23936947	22694641	64.748	68.552
24)	s	Decachlorobiphen	16.91	15.66	21585518	23696890	70.830	63.027
		Target Compounds						
4)		beta-BHC	10.07	9.19f	311596	298611	1.454m	1.458m
5)		gamma-BHC (Linda	9.58	8.74	188757	34186	0.426	0.081 #
6)		delta-BHC	10.45f	9.60	147956	77834	0.365	0.202 #
8)		Aldrin	11.05f	9.78	50115	50241	0.131	0.132
10)		Heptachlor Epoxi	11.75f	10.61f	197296	56509	0.525m	0.151 #
11)		gamma-Chlordane	12.26	11.04f	31455	235598	0.085	0.627m#
12)		Endosulfan I	12.40	11.23	41555	113732	0.126	0.340 #
14)		Dieldrin	12.81	11.68	28270	1162038	0.081	3.180 #
15)		4,4'-DDE	12.59	11.48	91790	31848	0.276	0.092 #
16)		Endrin	13.18f	12.12	60885	30301	0.208	0.094m#
17)		Endosulfan II	13.60f	12.57f	185985	134548	0.617	0.415 #
18)		4,4'-DDD	13.37	12.35	124250	177621	0.471m	0.610 #
19)		Endrin Aldehyde	13.71	12.88	51686	37363	0.196	0.130m#
21)		4,4'-DDT	13.81	12.75	63188	195787	0.229	0.620m#
22)		Endrin Ketone	14.75	14.07	87413	93147	0.267	0.238
25)		Toxaphene	12.95	12.35	29902	177621	11.398	23.765 #
26)		Toxaphene {2}	13.00f	12.47f	56044	132563	27.056	24.041
27)		Toxaphene {3}	13.18	12.67f	60885	53650	18.546	18.198
28)		Toxaphene {4}	13.90f	12.96f	29268	153123	7.308	40.144 #
30)		Toxaphene {6}	0.00	13.55	0	33518	N.D. d	4.032

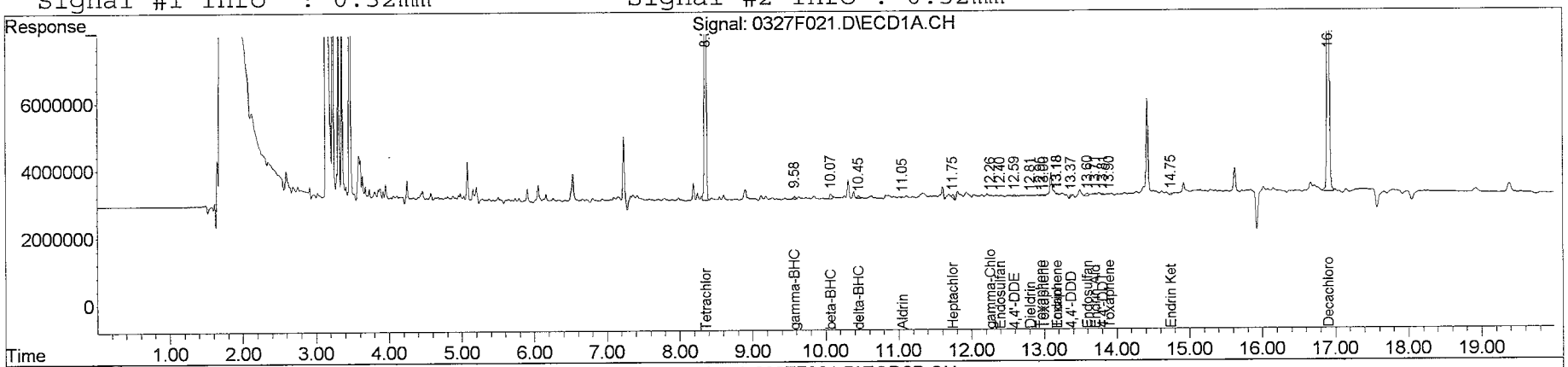
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

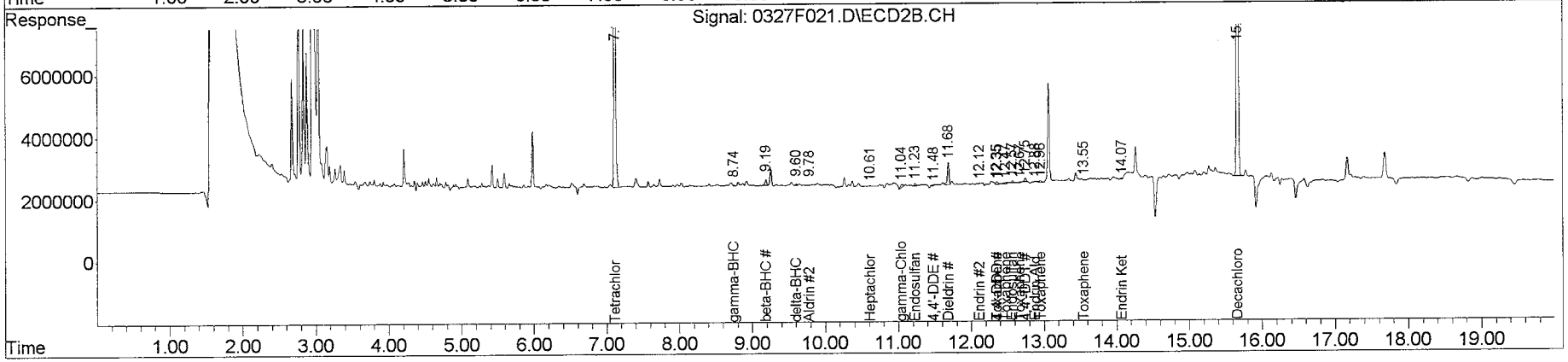
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 19:03 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

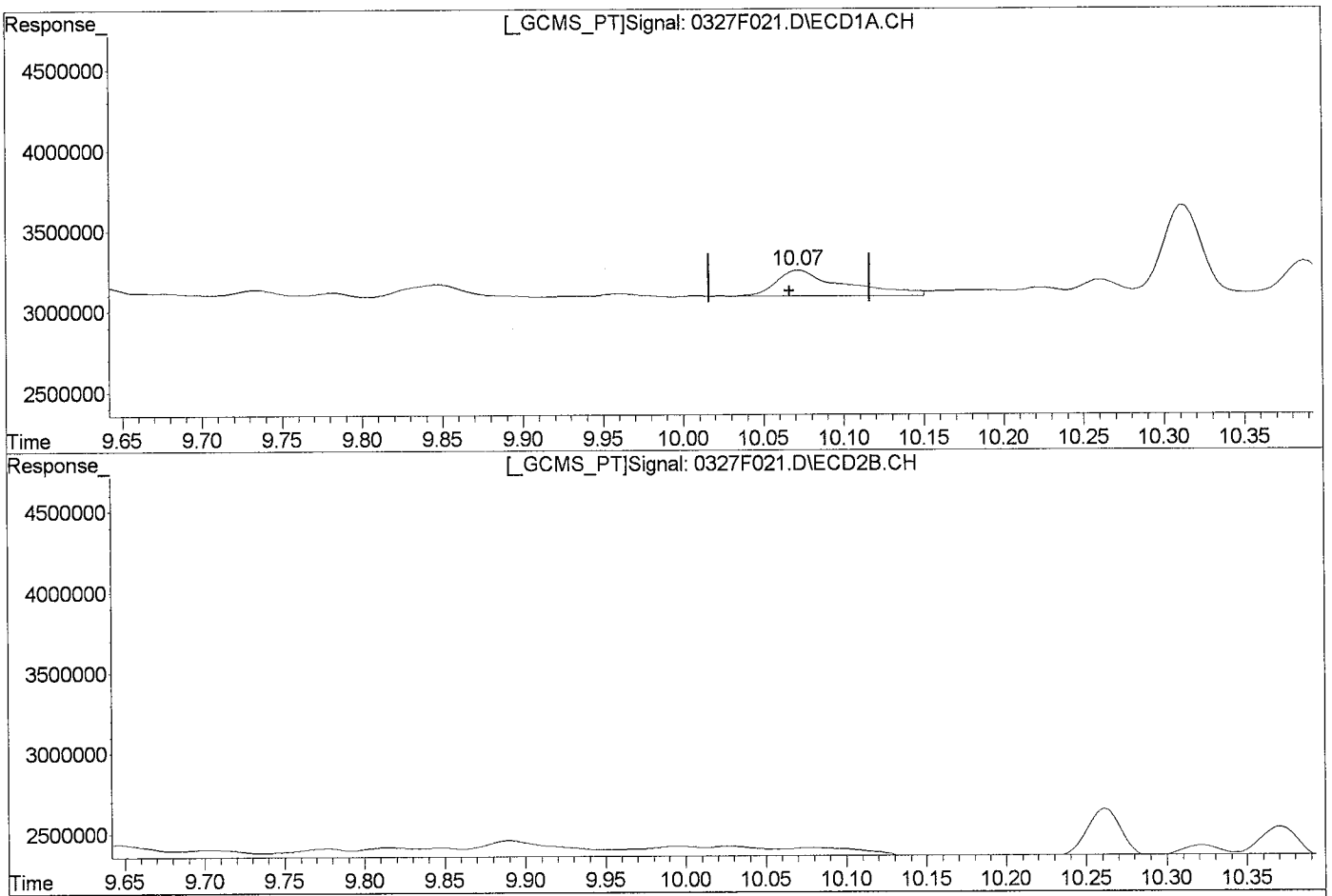




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(4) beta-BHC

10.07min 2.156ug/L

response 461864

(4) beta-BHC #2

9.19min 1.976ug/L

response 404634

MAR 30 2007

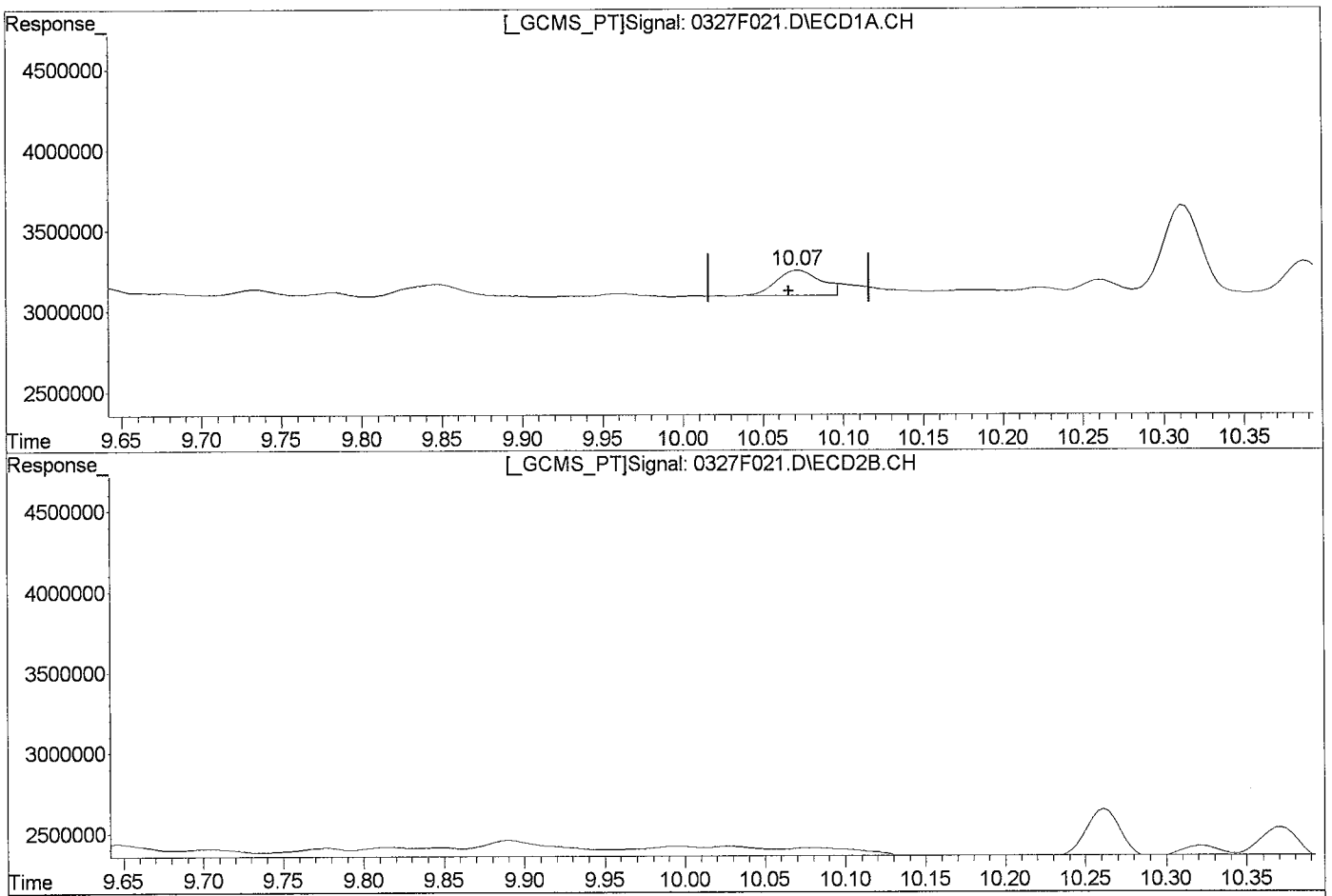
(+) = Expected Retention Time

0327F021.D 031207-8081.M Thu Mar 29 18:59:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(4) beta-BHC

10.07min 1.454ug/L m

response 311596

(4) beta-BHC #2

9.19min 1.976ug/L

response 404634

After
Initials CL
MAR 30 2007

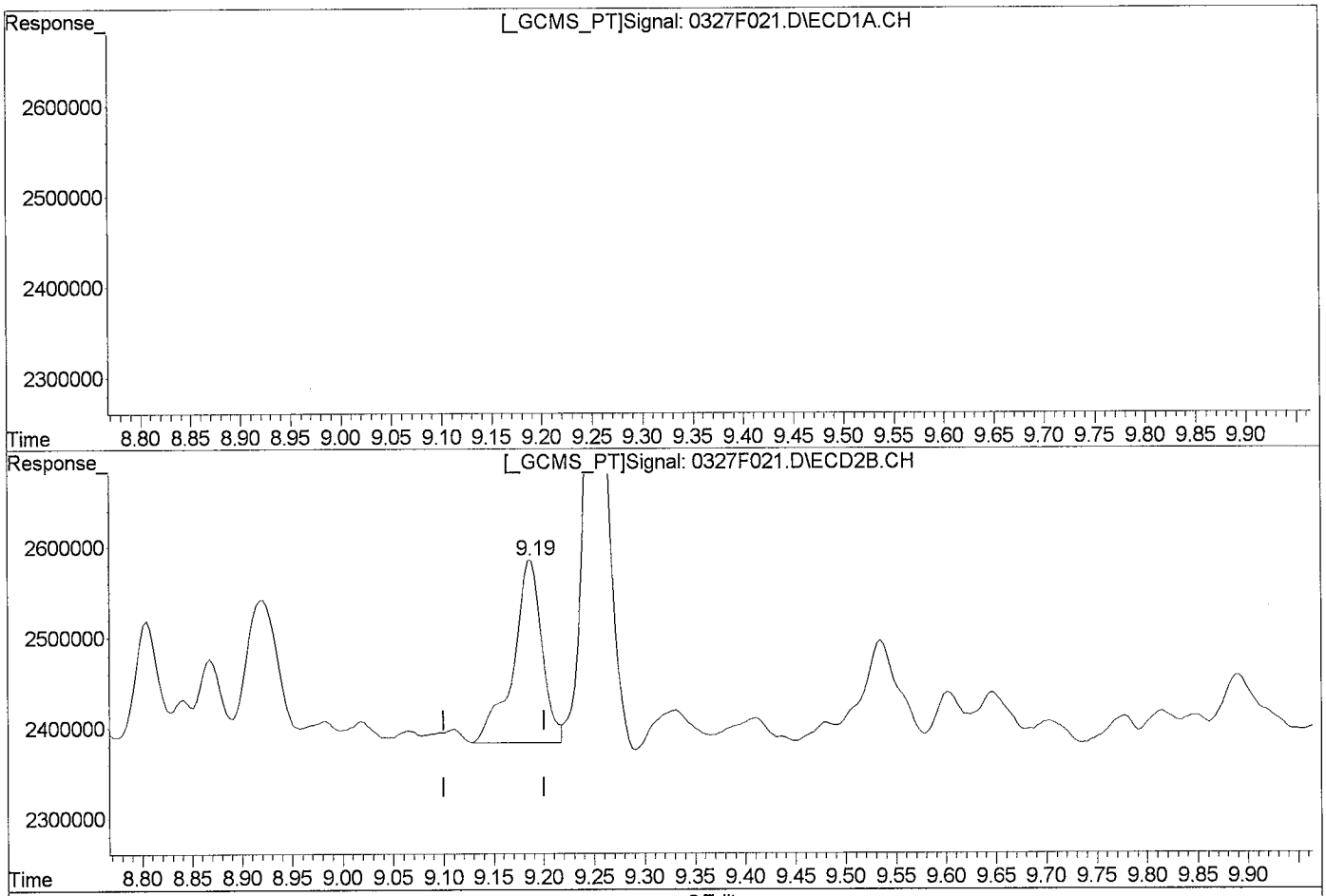
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 18:59:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(4) beta-BHC

10.07min 1.454ug/L m

response 311596

(4) beta-BHC #2

9.19min 1.976ug/L

response 404634

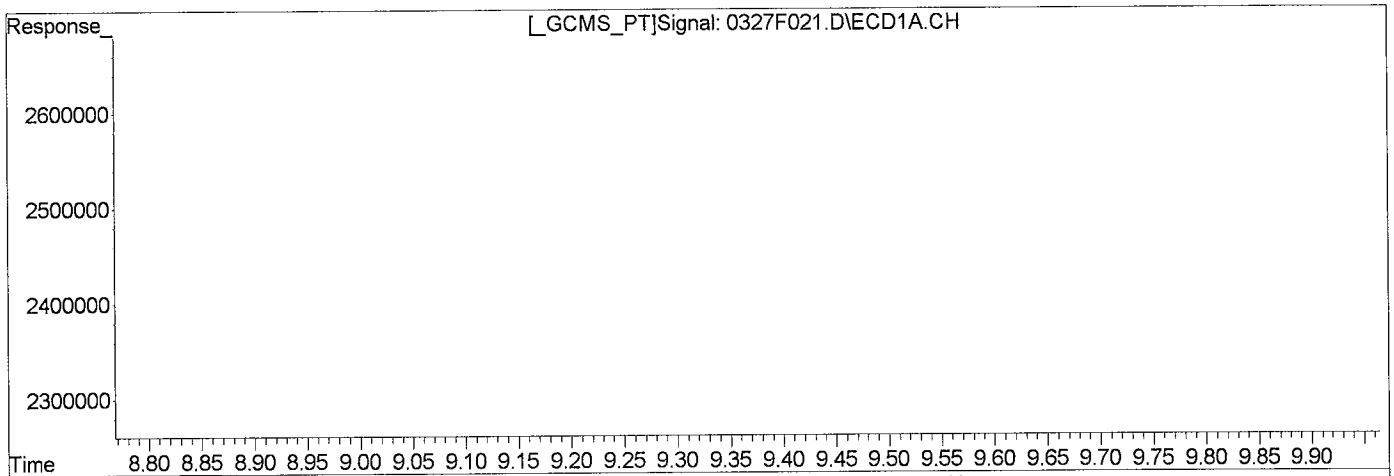
MAR 30 2007

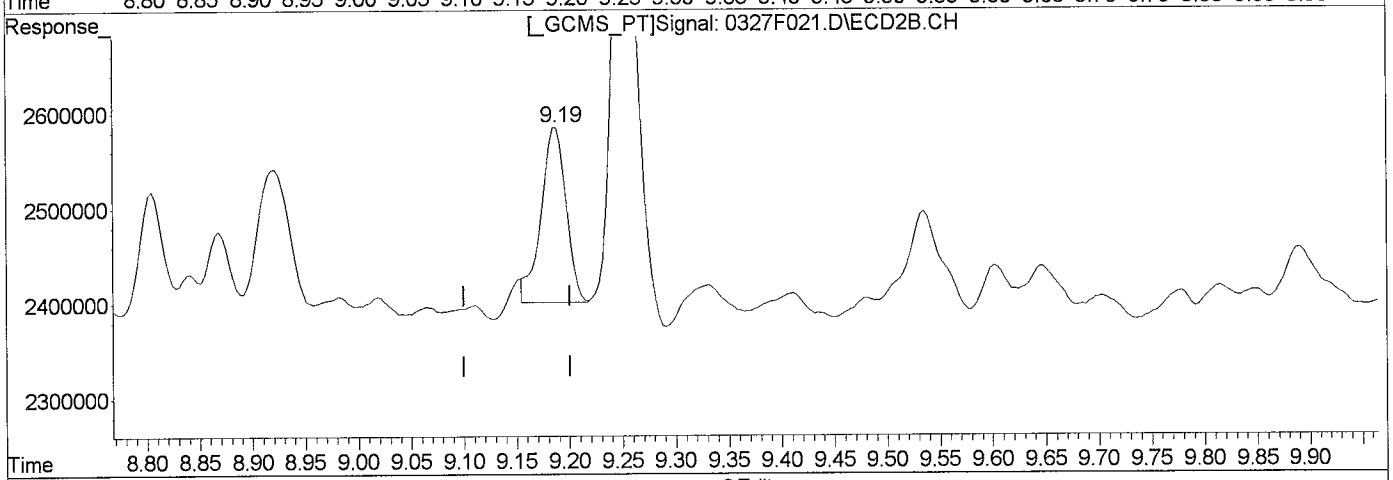
(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 18:59:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(4) beta-BHC

10.07min 1.454ug/L m

response 311596

(4) beta-BHC #2

9.19min 1.458ug/L m

response 298611

After
Initials CL

MAR 30 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

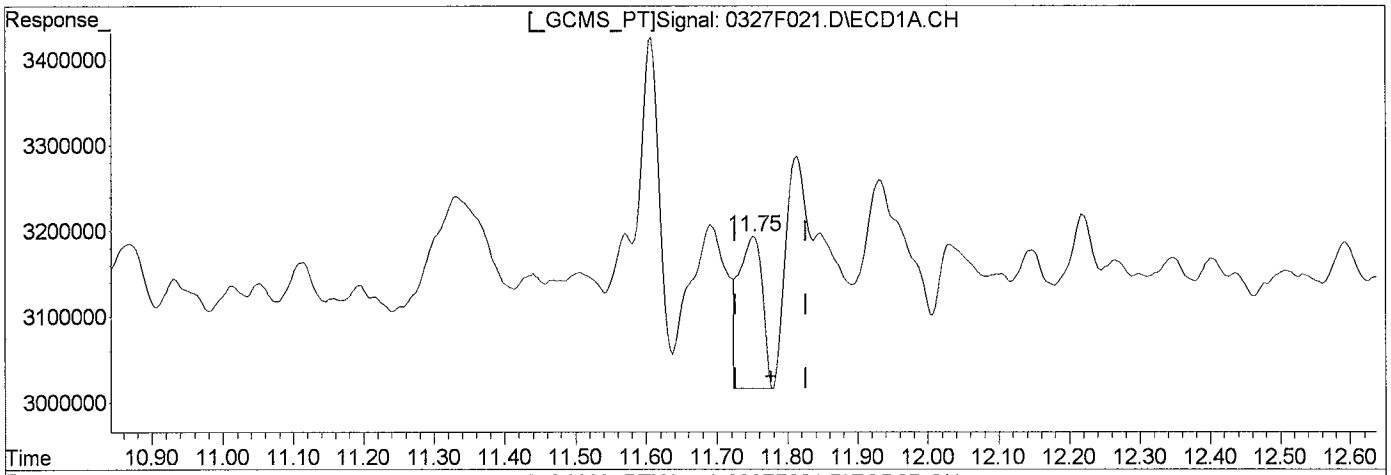
Apr 3 2007

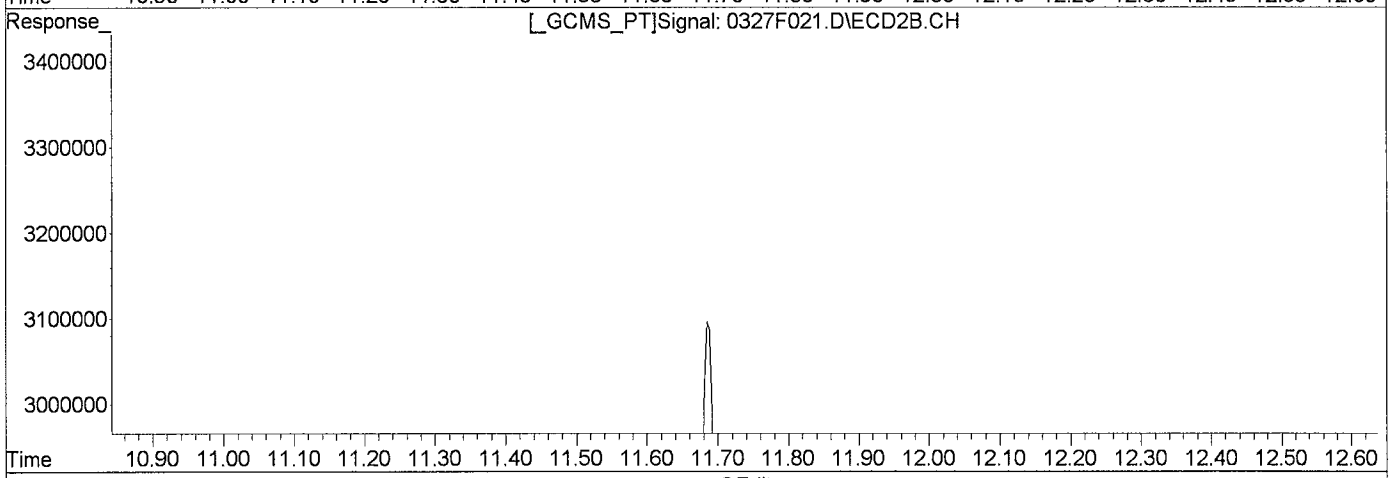
(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 18:59:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(10) Heptachlor Epoxide

11.75min 1.061ug/L

response 398816

(10) Heptachlor Epoxide #2

10.61min 0.151ug/L

response 56509

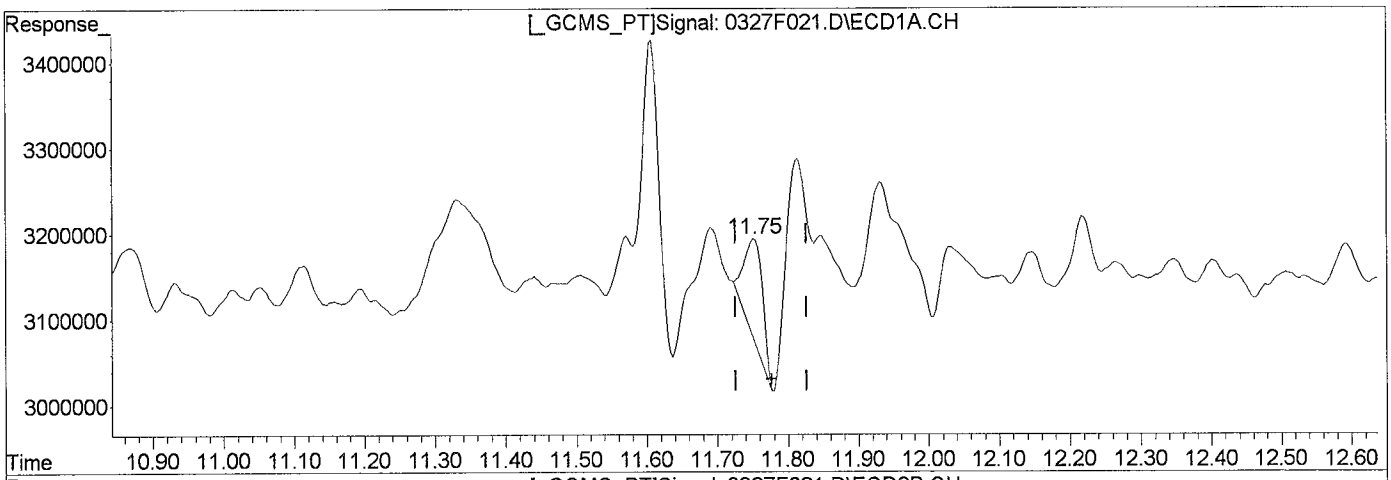
(+) = Expected Retention Time

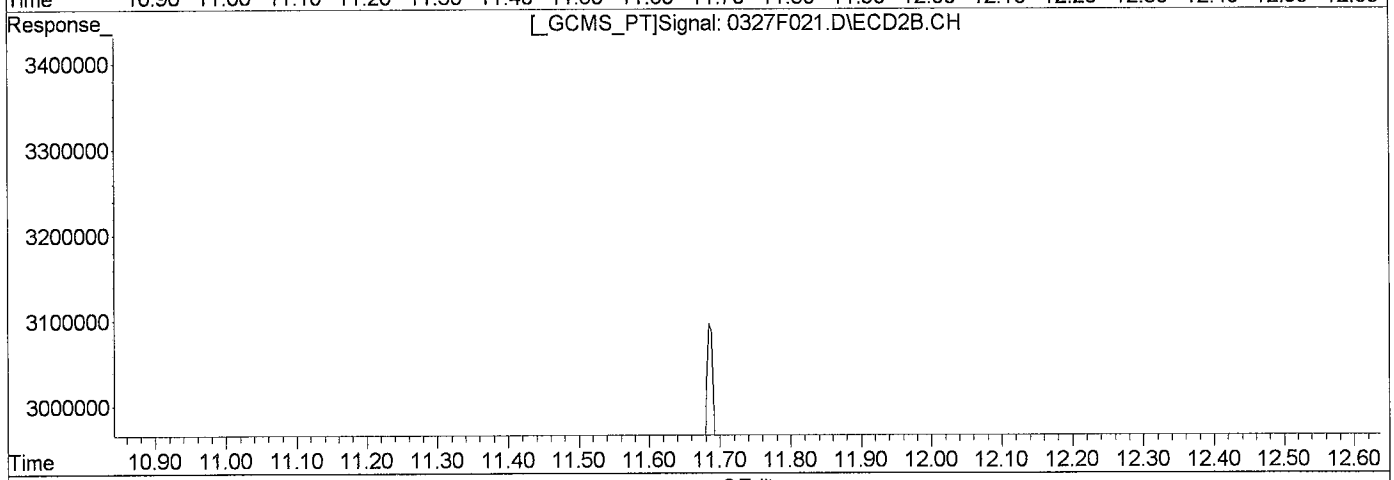
0327F021.D 031207-8081.M Thu Mar 29 19:00:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(10) Heptachlor Epoxide

11.75min 0.525ug/L m

response 197296

(10) Heptachlor Epoxide #2

10.61min 0.151ug/L

response 56509

After
Initials CL
MAR 30 2007

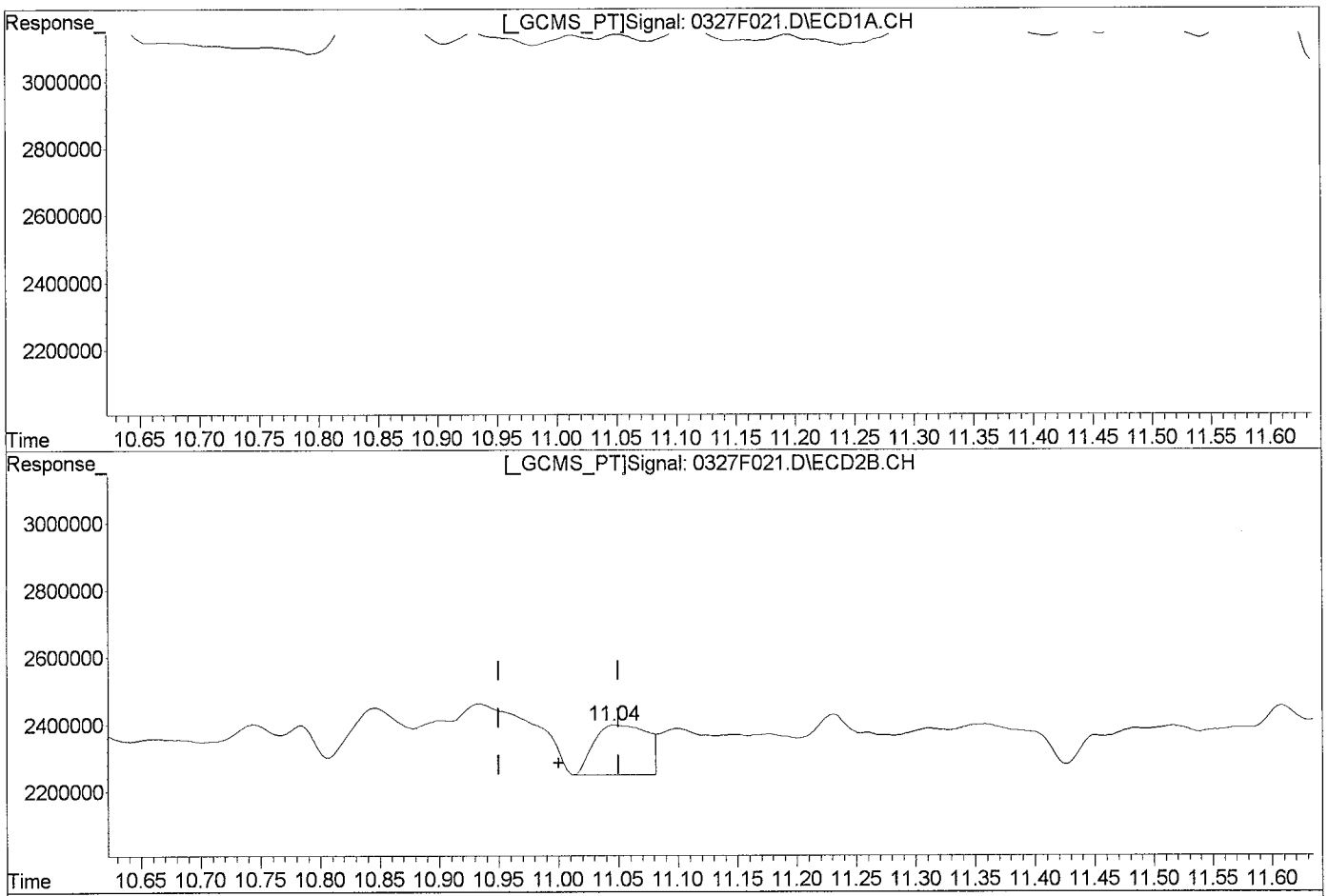
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:00:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(11) gamma-Chlordane

12.26min 0.085ug/L

response 31455

(11) gamma-Chlordane #2

11.04min 1.259ug/L

response 472890

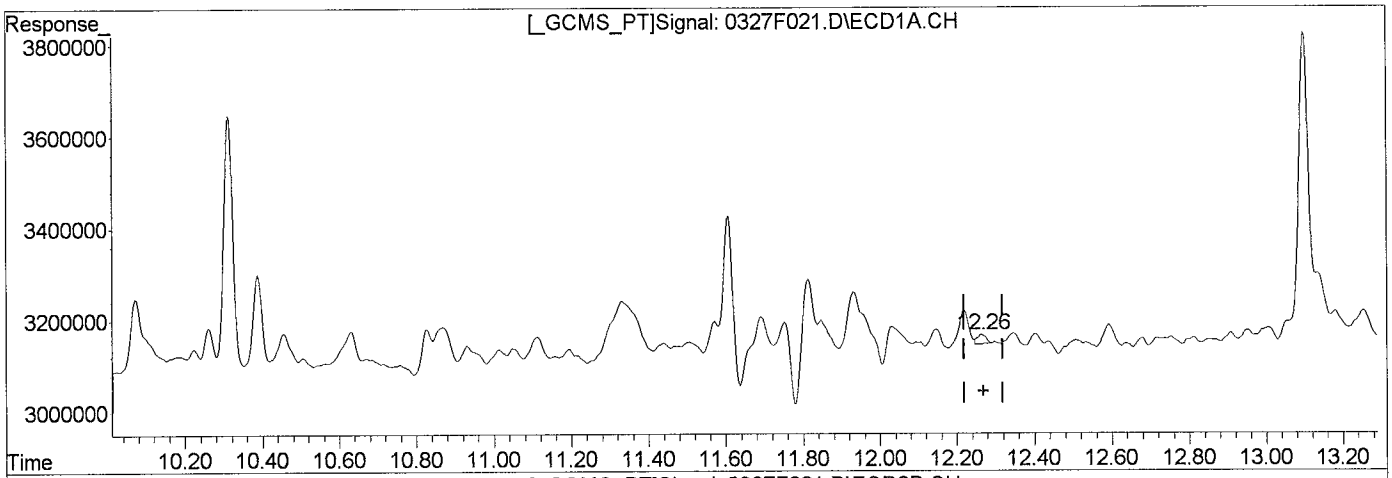
MAR 30 2007

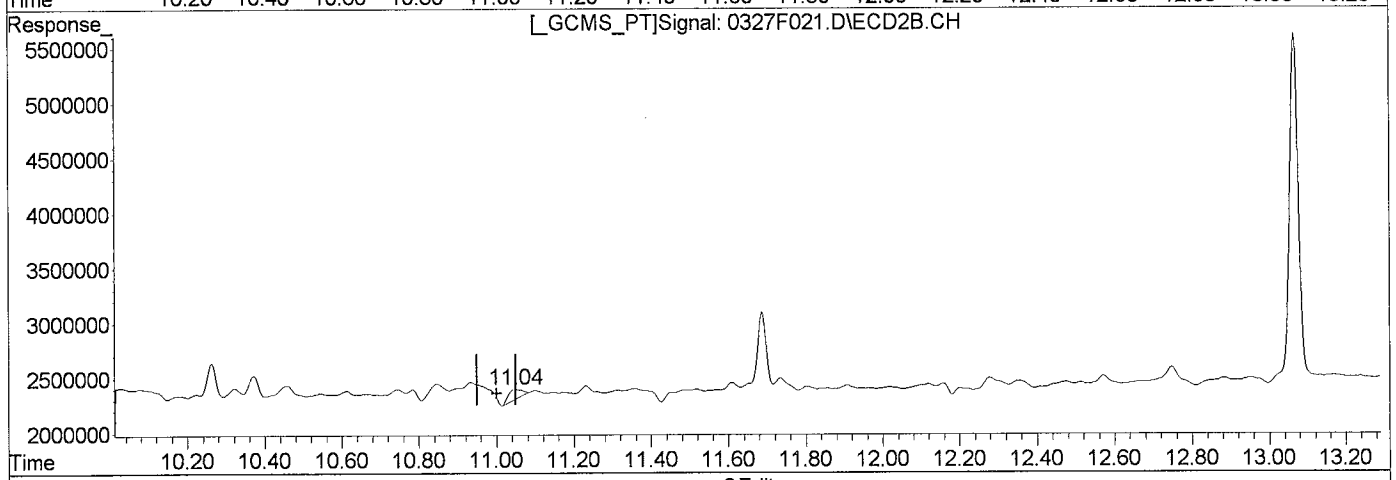
(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:00:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(11) gamma-Chlordane

12.26min 0.085ug/L

response 31455

(11) gamma-Chlordane #2

11.04min 0.627ug/L m

response 235598

After
Initials CL

MAR 3 0 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

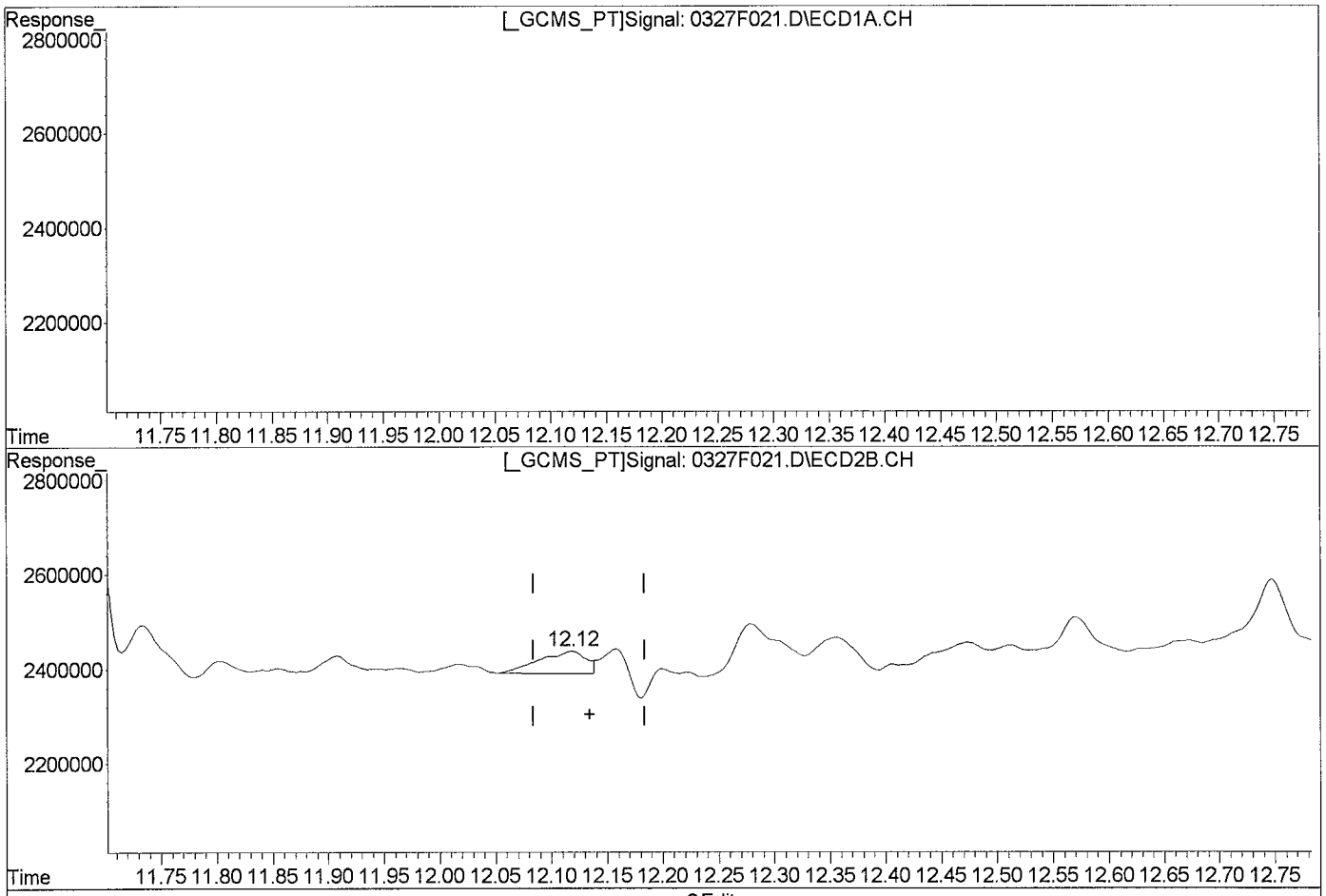
4/13/2007

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:01:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(16) Endrin

13.18min 0.208ug/L

response 60885

(16) Endrin #2

12.12min 0.435ug/L

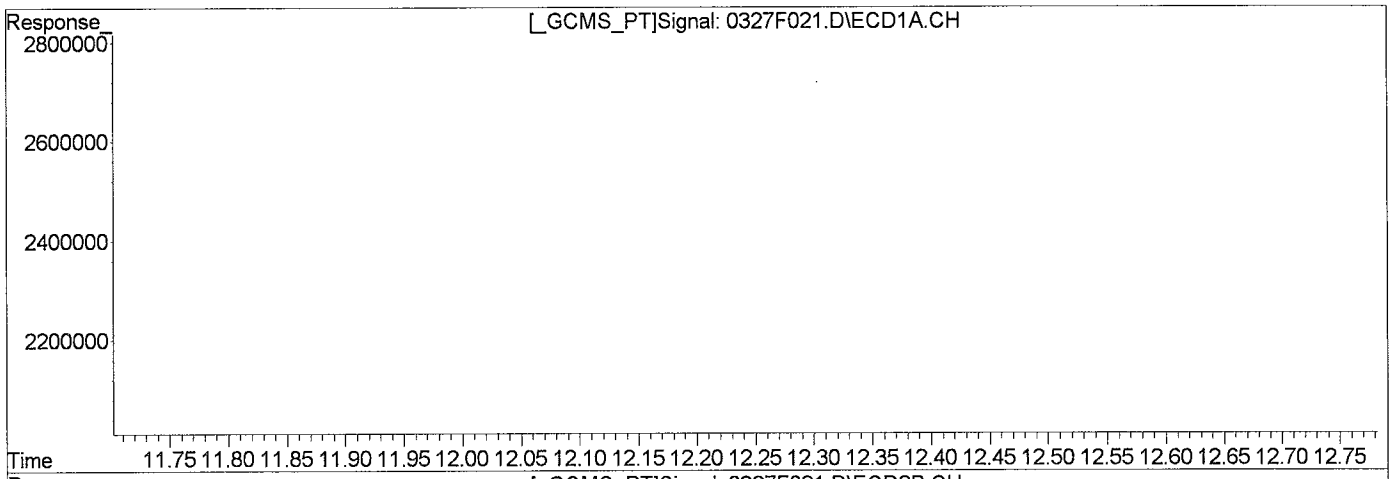
response 139747

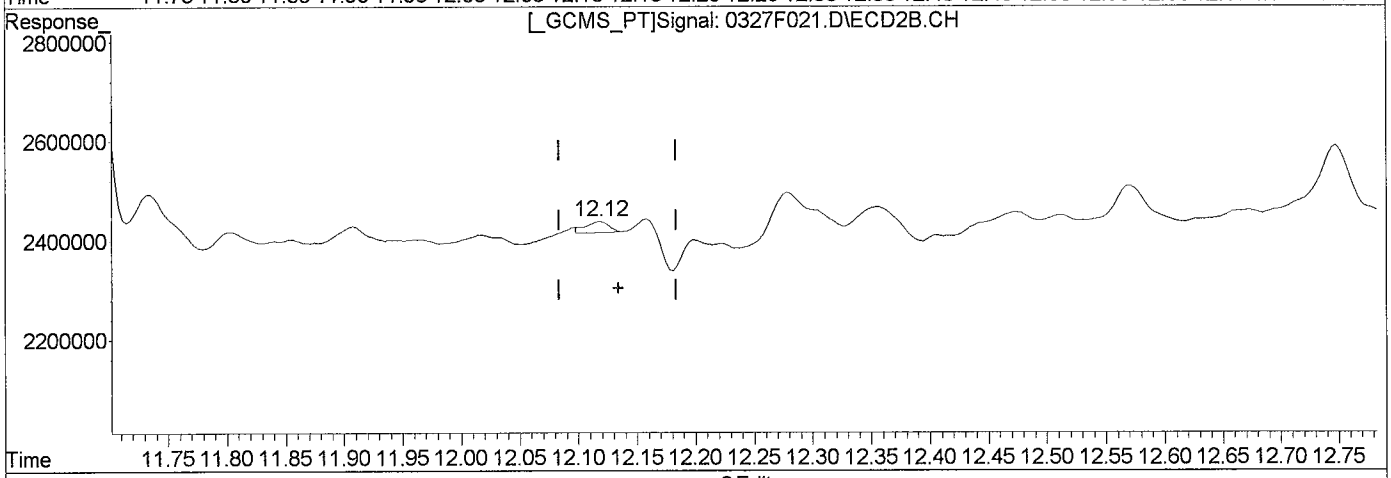
(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:01:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.18min 0.208ug/L

response 60885

(16) Endrin #2

12.12min 0.094ug/L m

response 30301

After
Initials
MAR 30 2007

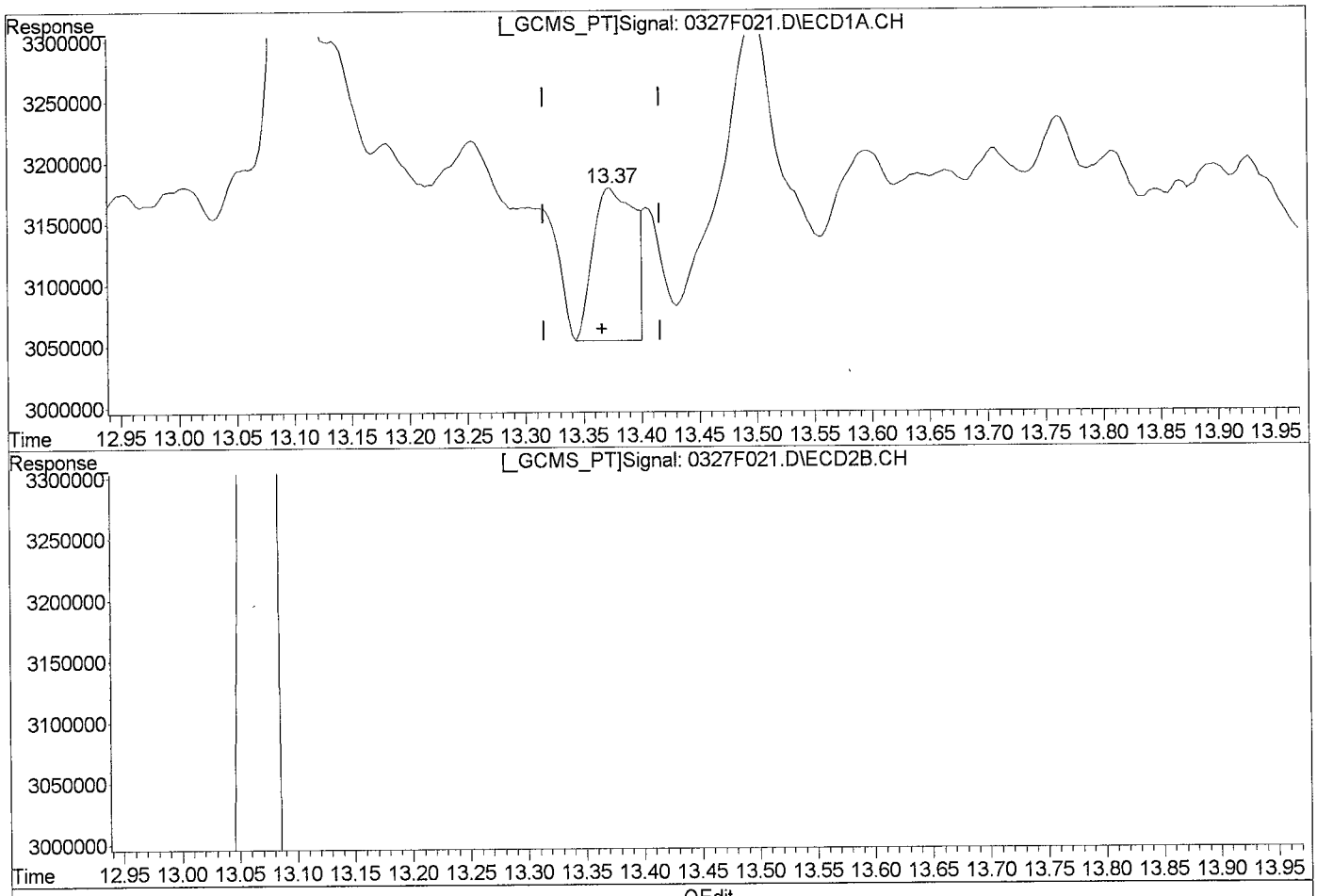
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:01:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.37min 1.202ug/L

response 316955

(18) 4,4'-DDD #2

12.35min 0.610ug/L

response 177621

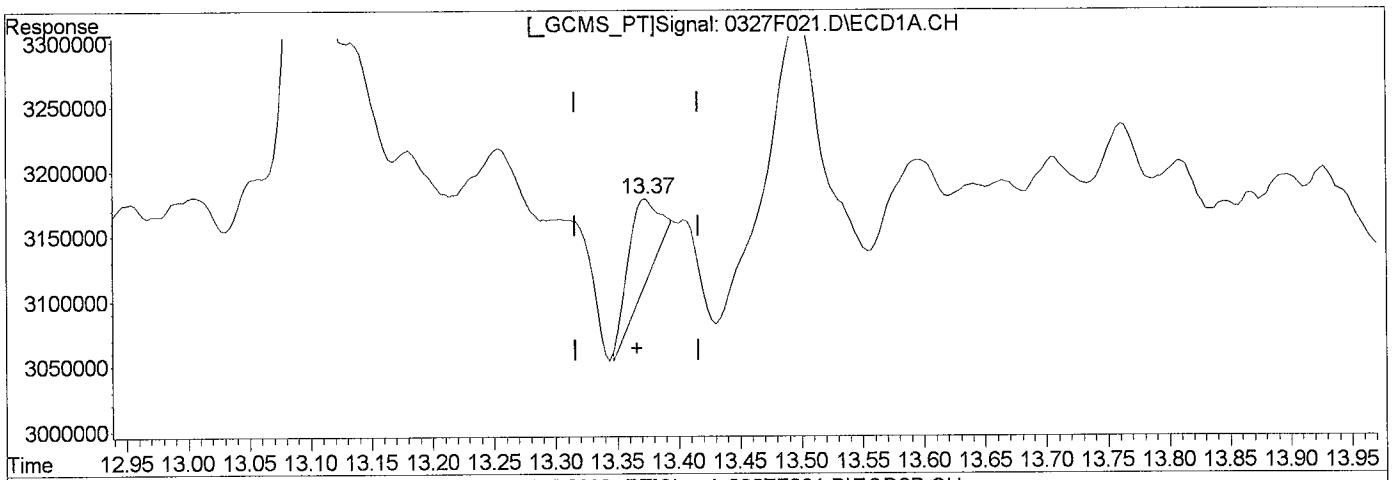
(+) = Expected Retention Time

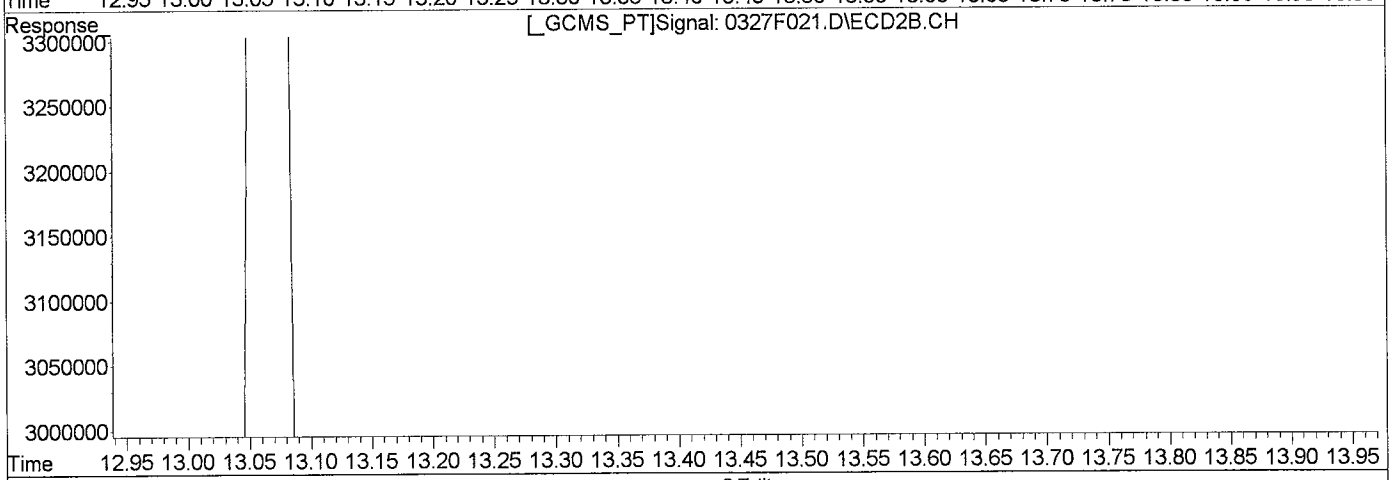
0327F021.D 031207-8081.M Thu Mar 29 19:02:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.37min 0.471ug/L m

response 124250

(18) 4,4'-DDD #2

12.35min 0.610ug/L

response 177621

After
Initials AL

MAR 30 2007

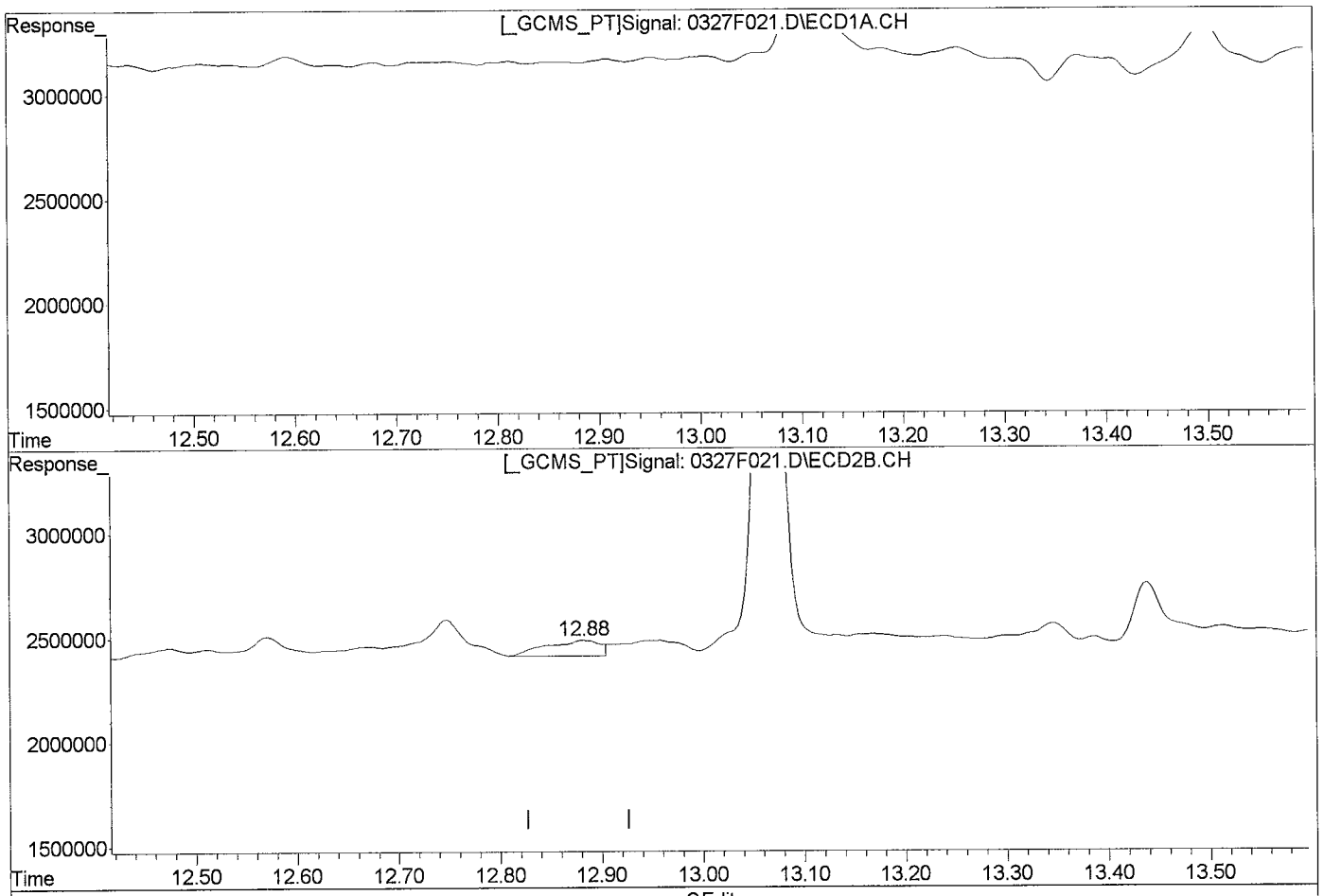
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:02:13 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(19) Endrin Aldehyde

13.71min 0.196ug/L

response 51686

(19) Endrin Aldehyde #2

12.88min 0.971ug/L

response 278326

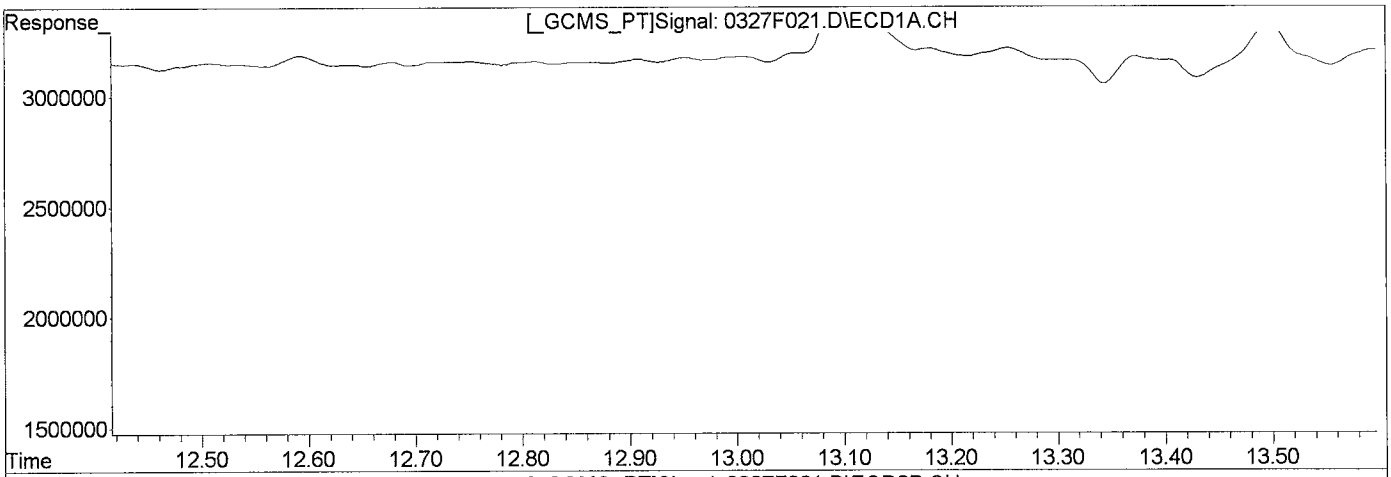
(+) = Expected Retention Time

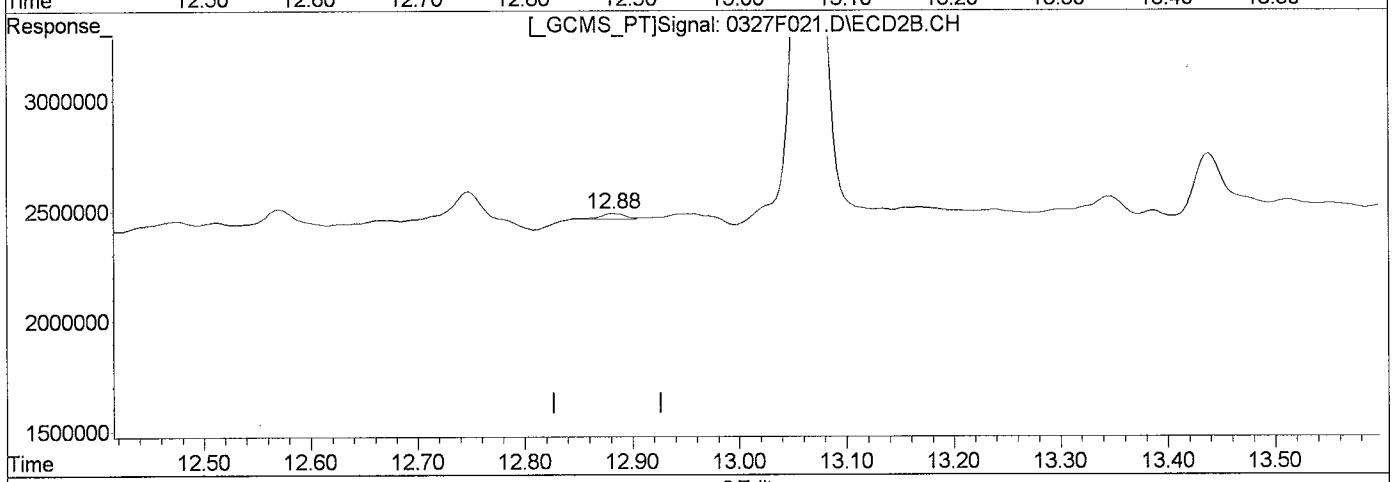
0327F021.D 031207-8081.M Thu Mar 29 19:02:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.71min 0.196ug/L

response 51686

(19) Endrin Aldehyde #2

12.88min 0.130ug/L m

response 37363

After
Initials CL

MAR 30 2007

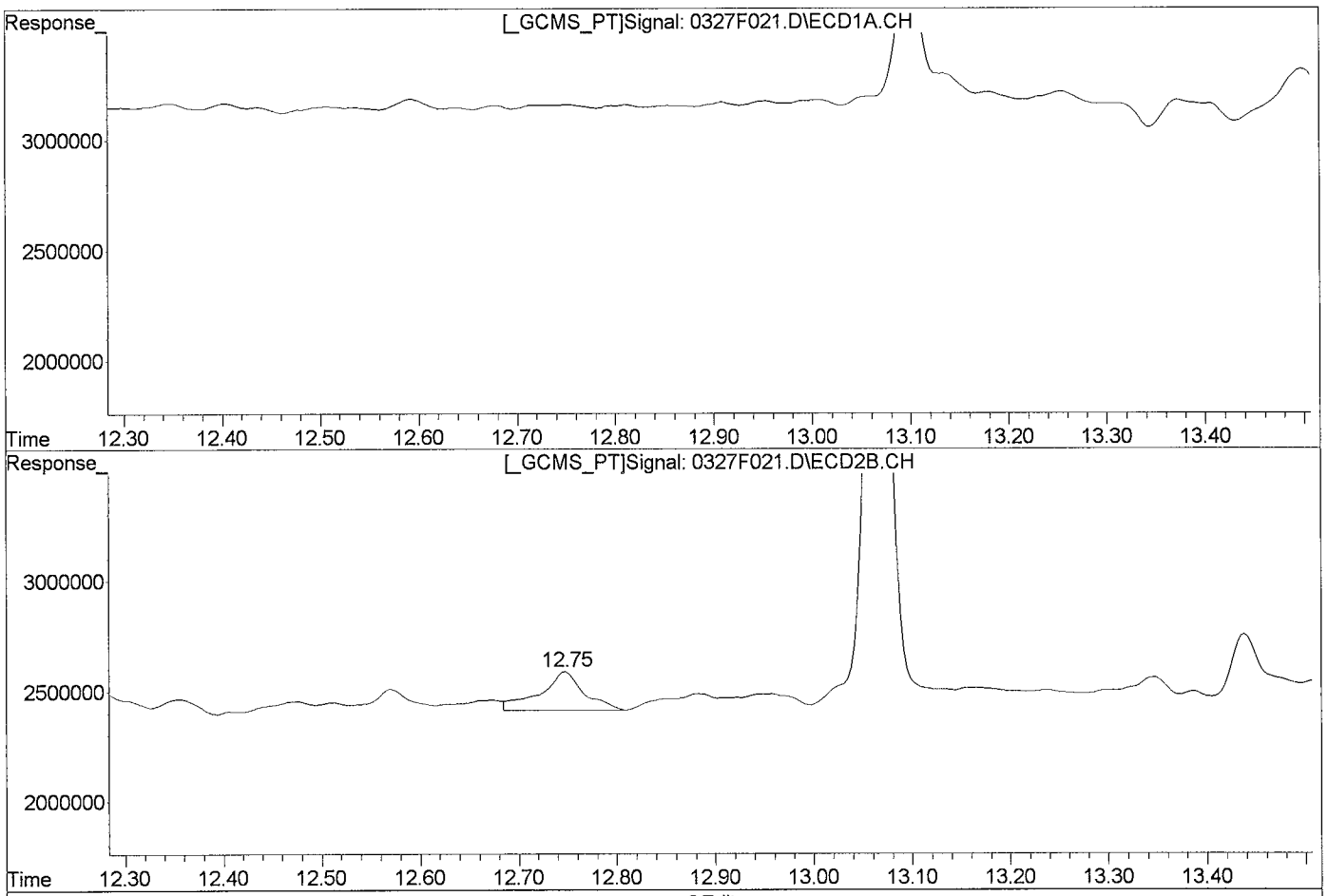
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:02:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(21) 4,4'-DDT

13.81min 0.229ug/L

response 63188

(21) 4,4'-DDT #2

12.75min 1.708ug/L

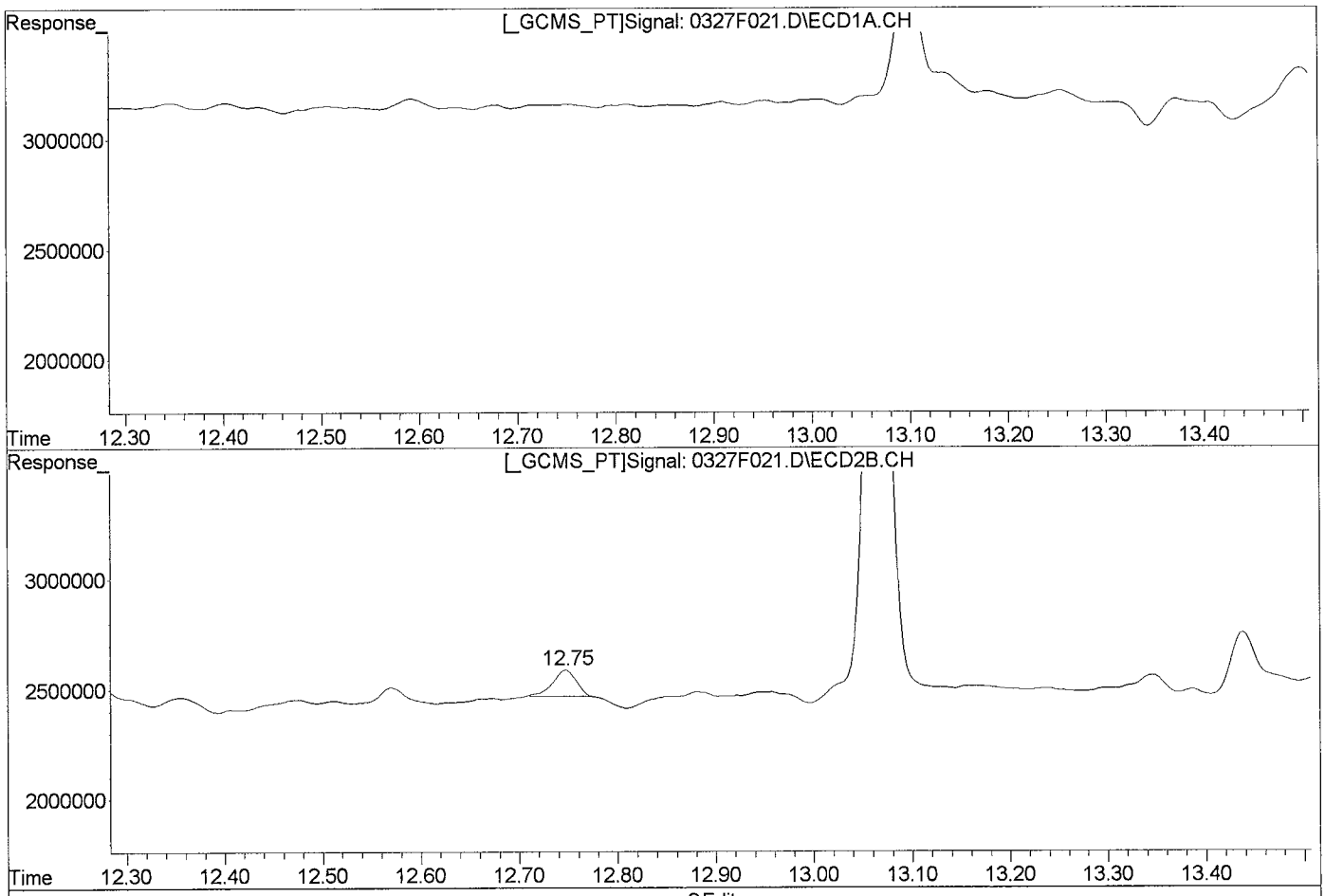
response 539683

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:02:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\032707\0327F021.D\ECD2B.CH
Acq On : 26 Mar 2007 4:55 pm Operator: AKamawal
Sample : K0701647-002 | 1349MW01CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01647002. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(21) 4,4'-DDT

13.81min 0.229ug/L

response 63188

(21) 4,4'-DDT #2

12.75min 0.620ug/L m

response 195787

After
Initials CC

MAR 3 0 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F021.D 031207-8081.M Thu Mar 29 19:02:47 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703392-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	ND	U	0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	55	18-125	03/26/07	Acceptable
Decachlorobiphenyl	73	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032707\0327F018.D
Lab ID: KWG0703392-3
RunType: MB
Matrix: WATER

Date Acquired: 03/26/2007 15:35
Date Quantitated: 03/29/2007 18:55
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	SCV

Primary Review: LC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F018.D\0327F018C.D
Lab ID: KWG0703392-3
RunType: MB
Matrix: WATER

Date Acquired: 03/26/2007 15:35
Date Quantitated: 03/29/2007 18:55
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	
Continuing Calibration Recovery (Closing)	gamma-BHC (Lindane)	15.1	NA	15	
	4,4'-DDE	15.2	NA	15	

Primary Review: 3/30/07

Secondary Review: 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/09/2007

Analysis Lot:	KWG0703981	**Prep Lot:**	KWG0703392	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	581409	**Prep Date:**	03/08/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F018.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F018.D\0327F018c.d			**Vial:**	18
Acqu Date:	03/26/2007 15:35	**Quant Date:**	03/29/2007 18:55	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35	7.10 -0.01	19558726	18261642	52.91	55.16			55OK
			%Recovery =		53OK	55OK	Limits =	18-125	
Decachlorobiphenyl	16.90 -0.01	15.66	22069241	27564216	72.42	73.31			73OK
			%Recovery =		72OK	73OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC			0	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
gamma-BHC (Lindane)	9.59	8.74	141393	226659	0.3190	0.5380CCV	0.000638J	0.00108J	**0.00108**JP
delta-BHC			0	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
Heptachlor			0d	0d	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Aldrin			0	0d	0.0000	0.0000	0.00040U	0.00040U	0.00040U
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide			0d	0	0.0000	0.0000	0.00032U	0.00032U	0.00032U
gamma-Chlordane			0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
Endosulfan I			0d	0	0.0000	0.0000	0.00044U	0.00044U	0.00044U
alpha-Chlordane			0d	0	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin			0d	0d	0.0000	0.0000	0.00035U	0.00035U	0.00035U
4,4'-DDE	12.58	11.46 -0.01	108794	751248m	0.3270	2.16CCV	0.000654J	0.00432J	0.0048Ui
Endrin			0	0d	0.0000	0.0000	0.00068U	0.00068U	0.00068U
Endosulfan II			0	0d	0.0000	0.0000	0.00040U	0.00040U	0.00040U
4,4'-DDD	13.38 +0.02	12.34	1013267m	113156m	3.84	0.3890	0.00768J	0.0015U	0.0015U
Endrin Aldehyde			0	0d	0.0000	0.0000	0.00046U	0.00046U	0.00046U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F018.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F018.D\0327F018c.d			**Vial:**	18
Acqu Date:	03/26/2007 15:35	**Quant Date:**	03/29/2007 18:55	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT			0	0d	0.0000	0.0000	0.00058U	0.00058U	0.00058U
Endrin Ketone			0d	0	0.0000	0.0000	0.00066U	0.00066U	0.00066U
Methoxychlor			0d	0	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:23 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.10	19558726	18261642	52.905	55.162
24)	s	Decachlorobiphen	16.90	15.66	22069241	27564216	72.417	73.313
		Target Compounds						
5)		gamma-BHC (Linda	9.59	8.74	141393	226659	0.319	0.538 #
15)		4,4'-DDE	12.58	11.46	108794	751248	0.327	2.162m#
18)		4,4'-DDD	13.38	12.34	1013267	113156	3.842m	0.389m#

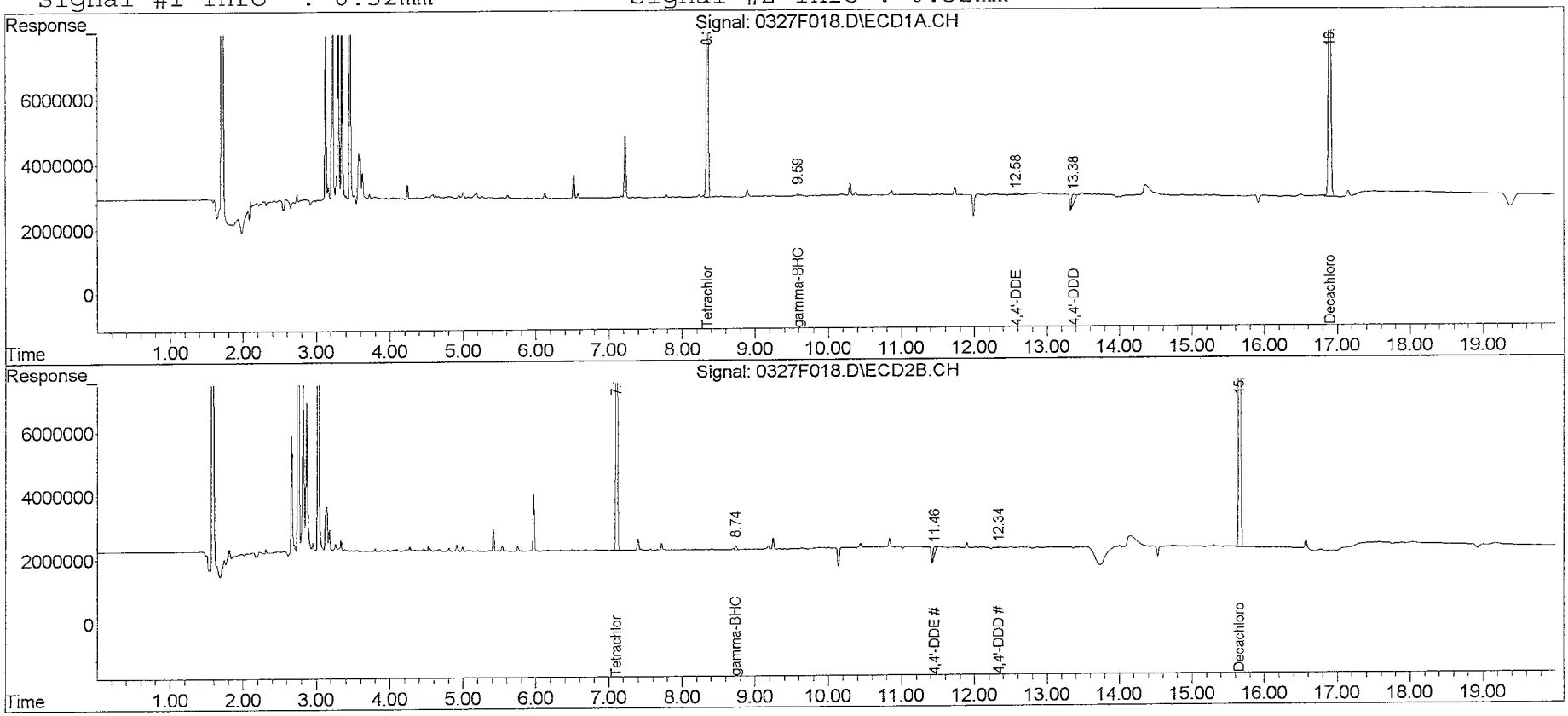
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 18:55 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

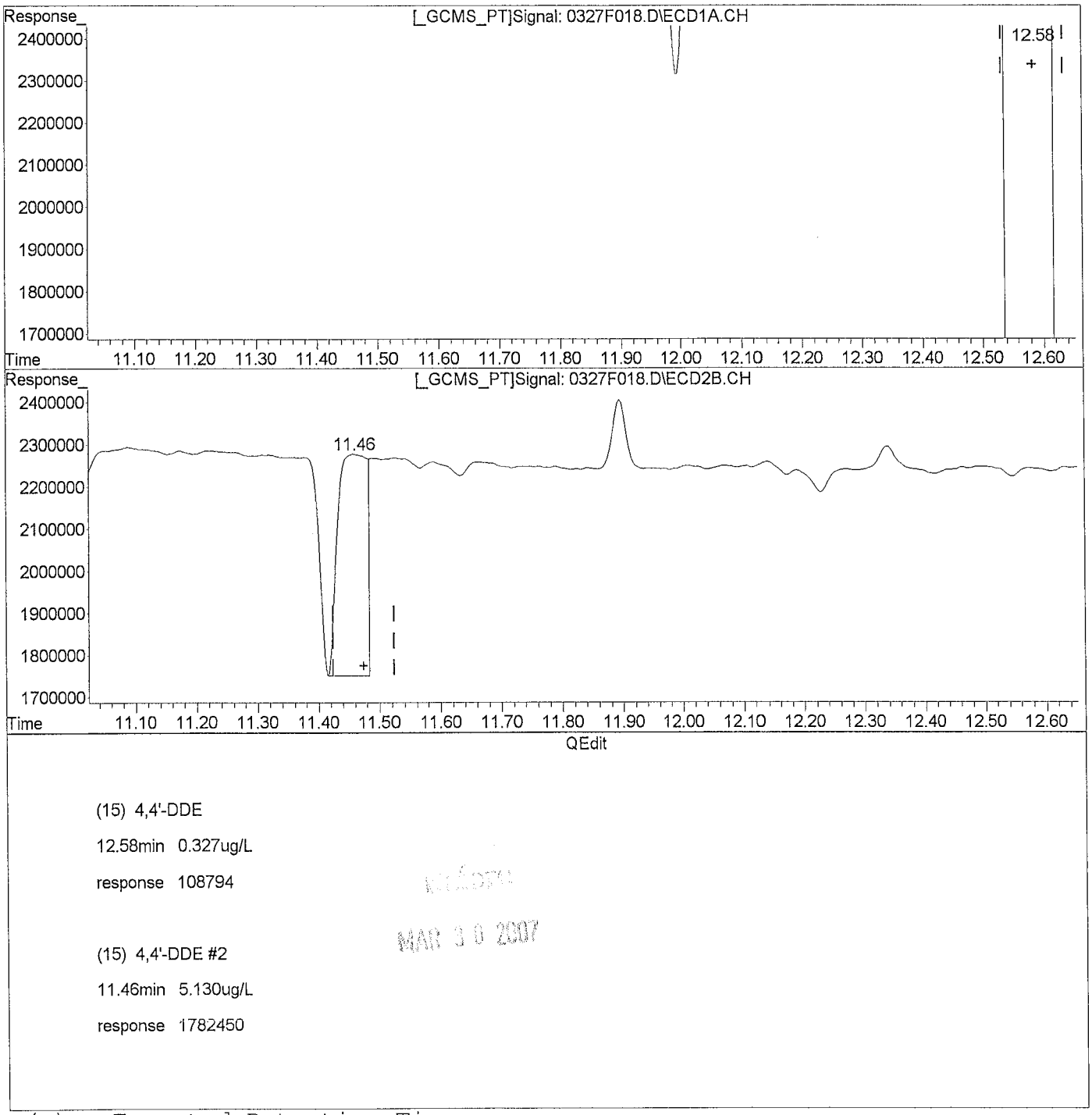
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 0.327ug/L

response 108794

(15) 4,4'-DDE #2

11.46min 5.130ug/L

response 1782450

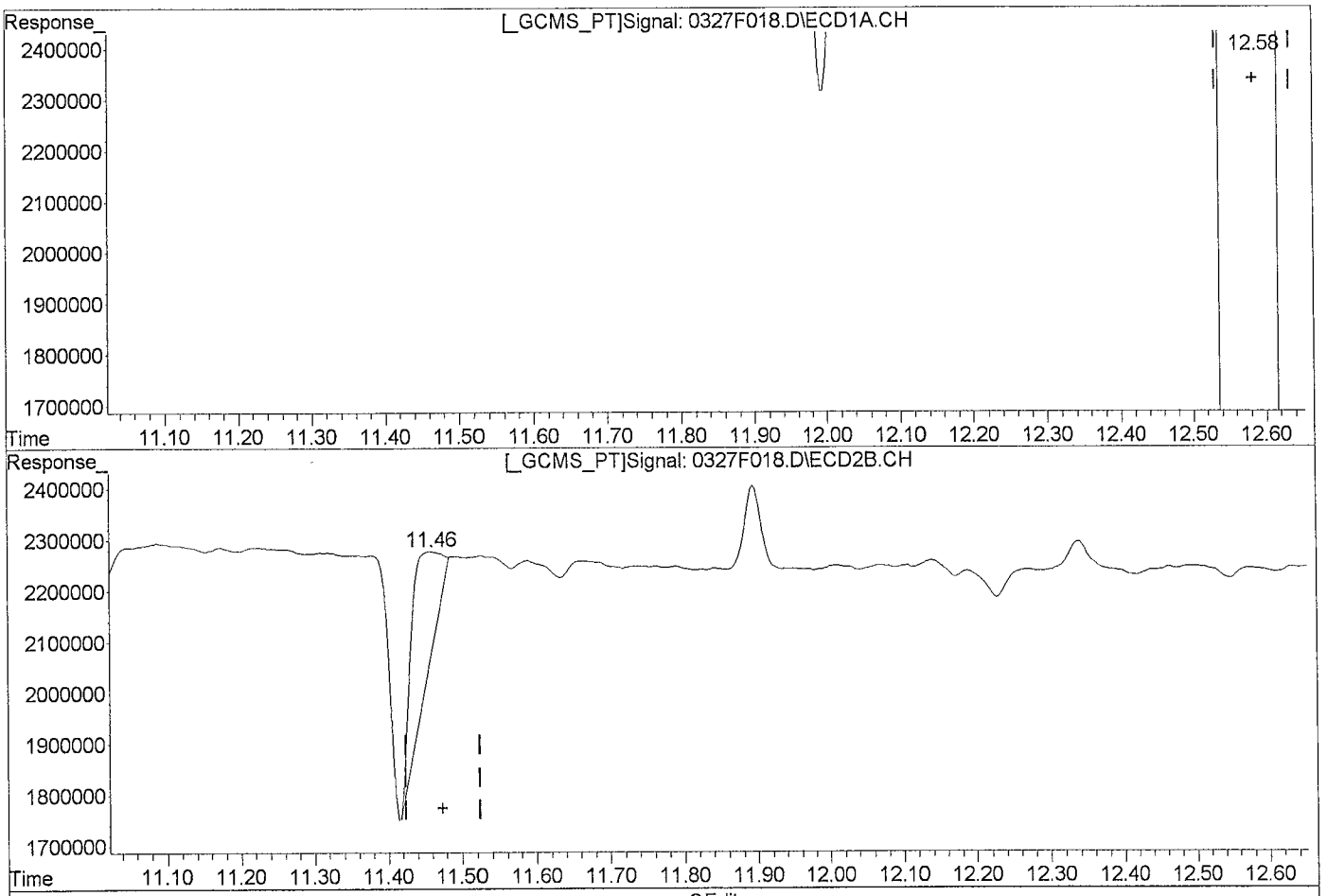
(+) = Expected Retention Time

0327F018.D 031207-8081.M Thu Mar 29 18:54:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE
12.58min 0.327ug/L
response 108794

(15) 4,4'-DDE #2
11.46min 2.162ug/L m
response 751248

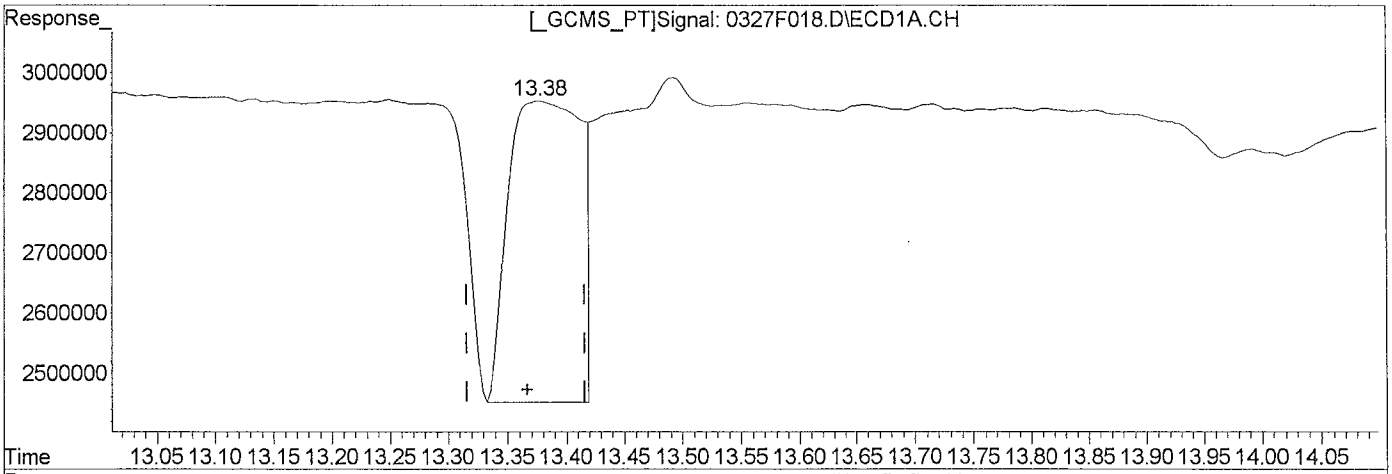
After
Initials CL
MAR 30 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

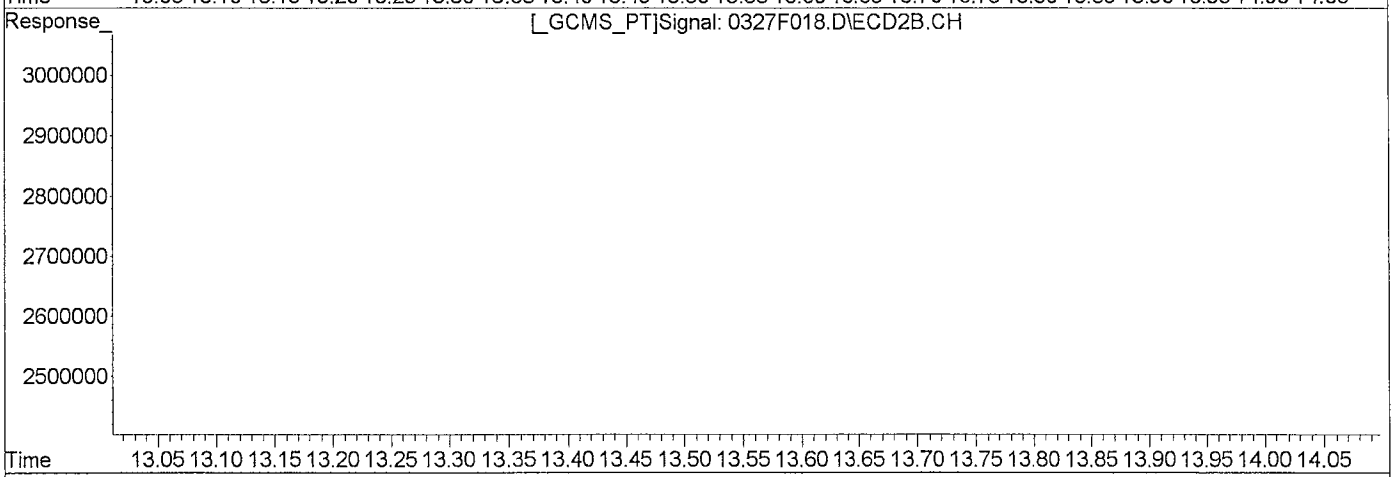
(+) = Expected Retention Time
0327F018.D 031207-8081.M Thu Mar 29 18:54:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.38min 8.273ug/L

response 2182072

(18) 4,4'-DDD #2

12.34min 0.582ug/L

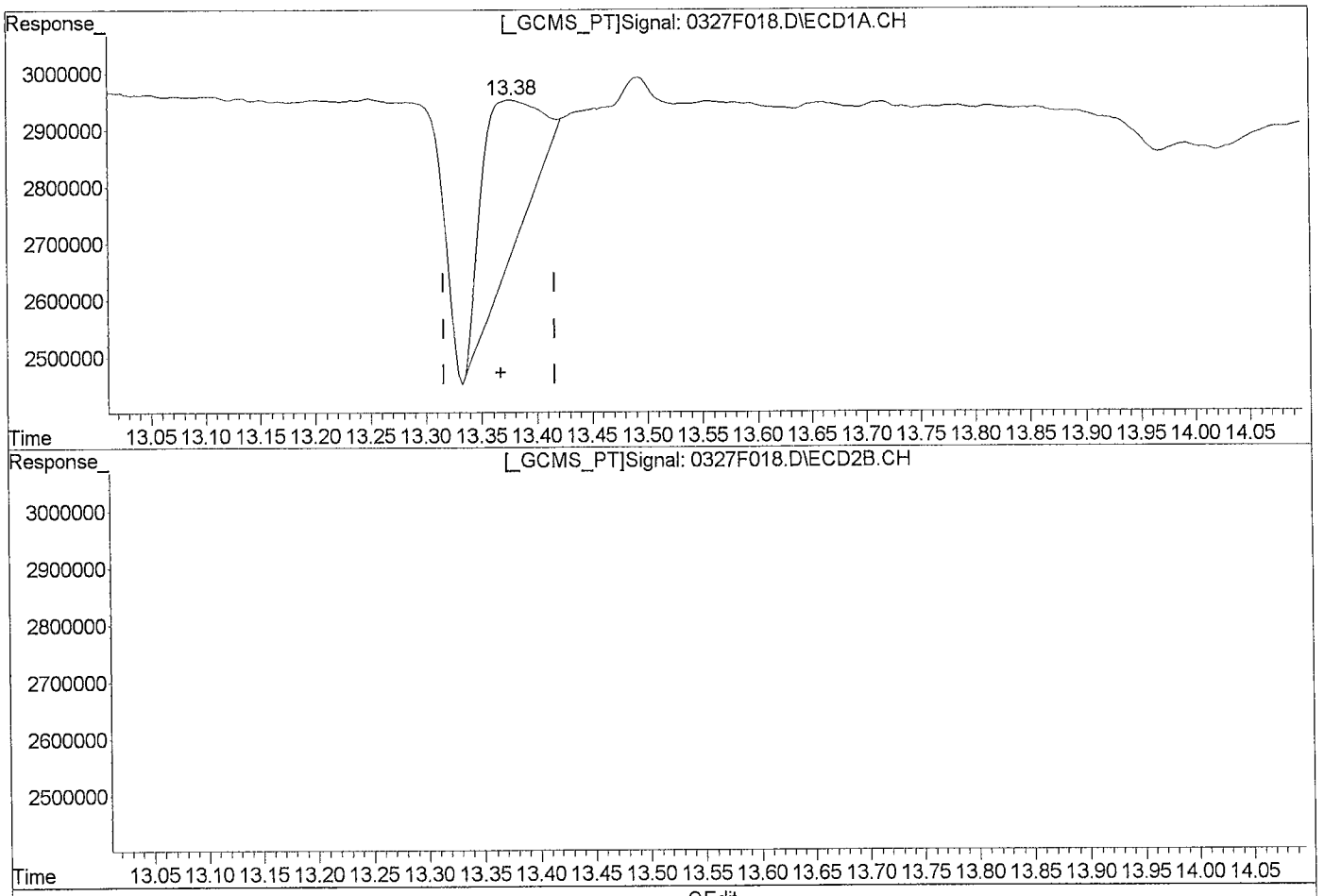
response 169271

(+) = Expected Retention Time
0327F018.D 031207-8081.M Thu Mar 29 18:54:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.38min 3.842ug/L m

response 1013267

(18) 4,4'-DDD #2

12.34min 0.582ug/L

response 169271

After
Initials
MAR 30 2007

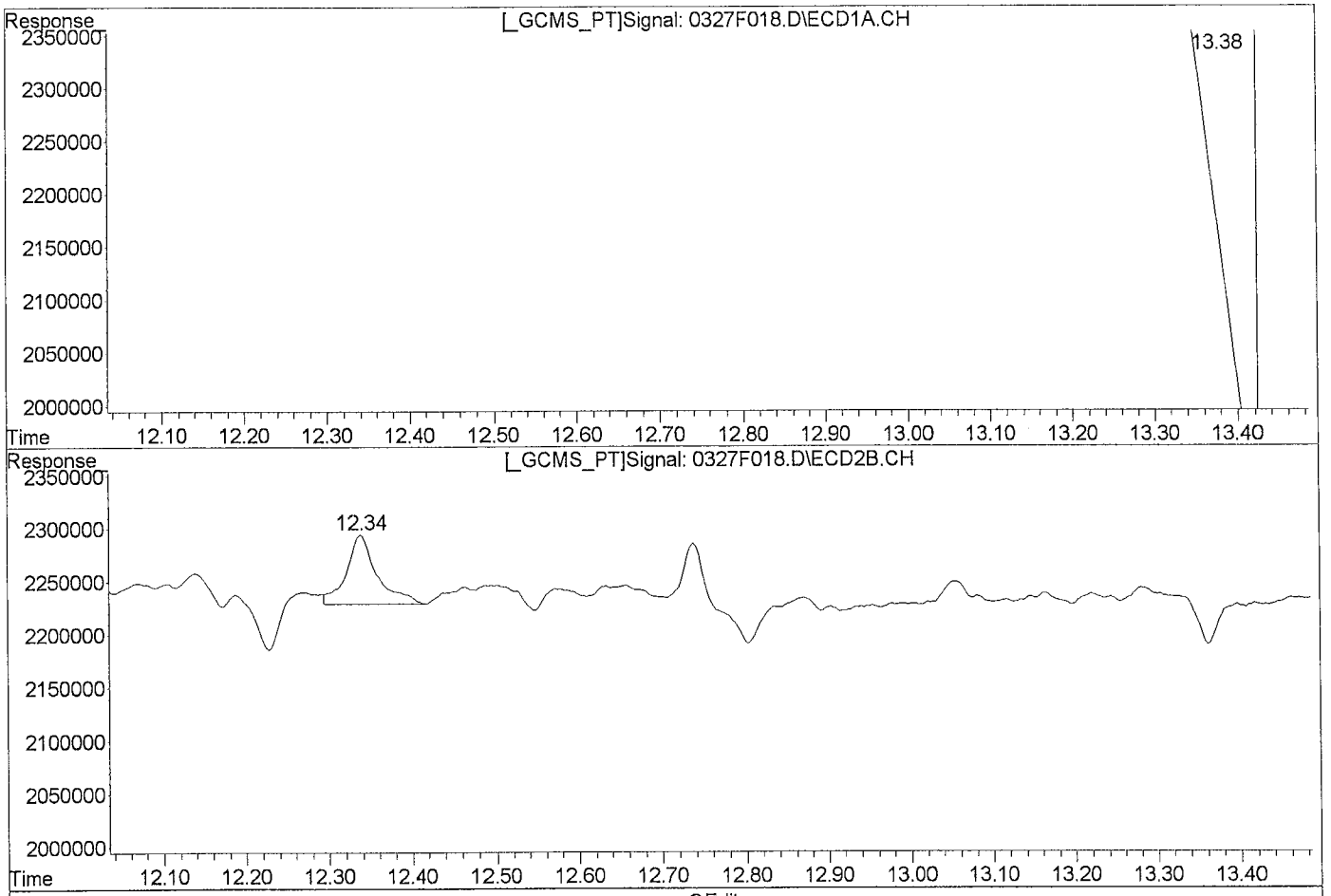
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F018.D 031207-8081.M Thu Mar 29 18:54:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.38min 3.842ug/L m

response 1013267

(18) 4,4'-DDD #2

12.34min 0.582ug/L

response 169271

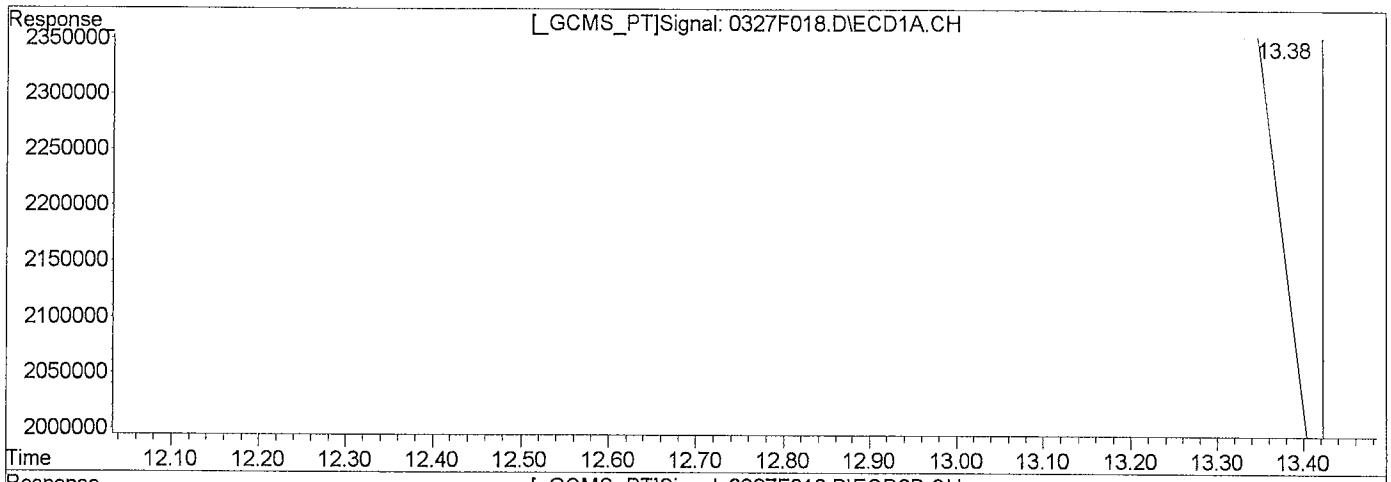
(+) = Expected Retention Time

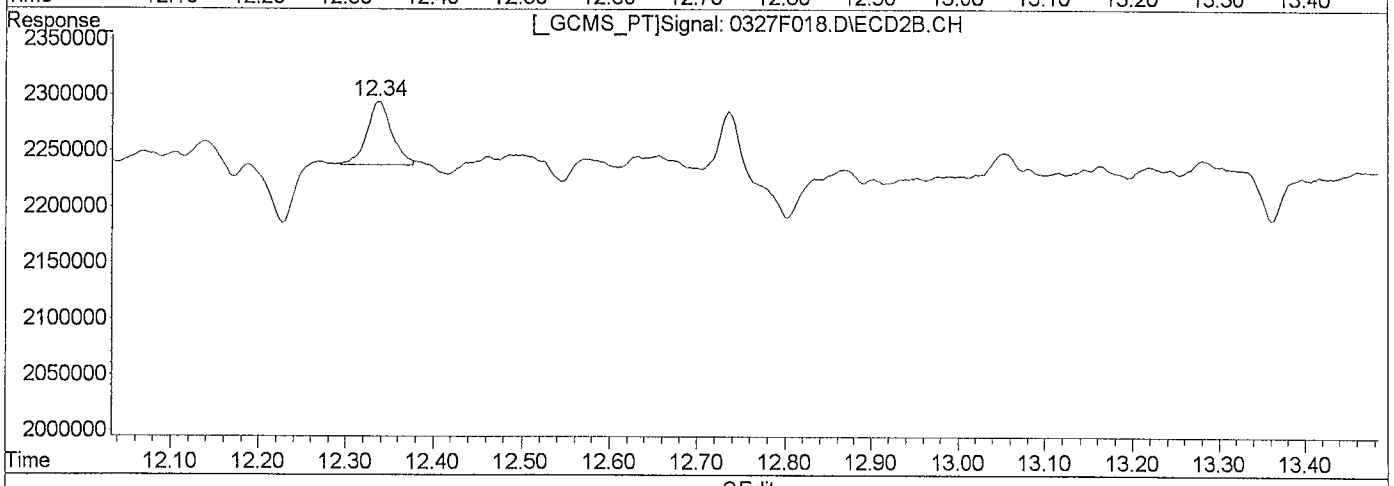
0327F018.D 031207-8081.M Thu Mar 29 18:54:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\032707\0327F018.D\ECD2B.CH
Acq On : 26 Mar 2007 3:35 pm Operator: AKamawal
Sample : KWG0703392-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703392\3-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.38min 3.842ug/L m

response 1013267

(18) 4,4'-DDD #2

12.34min 0.389ug/L m

response 113156

After
Initials LV

MAR 30 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F018.D 031207-8081.M Thu Mar 29 18:54:48 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703392-1	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.172**		0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	**0.184**		0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	**0.172**		0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	**0.210**		0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	**0.152**		0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	**0.119**		0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	**0.177**		0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	**0.176**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	**0.147**		0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	**0.178**		0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	**0.182**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	**0.180**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	**0.186**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	**0.157**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	**0.189**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	**0.146**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	**0.172**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	**0.196**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	**0.178**		0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	**0.207**		0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	58	18-125	03/26/07	Acceptable
Decachlorobiphenyl	77	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032707\0327F019.D
Lab ID: KWG0703392-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/26/2007 16:02
Date Quantitated: 03/29/2007 18:57
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	JW

Primary Review: CC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F019.D\0327F019C.D
Lab ID: KWG0703392-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/26/2007 16:02
Date Quantitated: 03/29/2007 18:57
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	
Continuing Calibration Recovery (Closing)	Aldrin	15.0	NA	15	
	alpha-BHC	15.8	NA	15	
	gamma-BHC (Lindane)	15.1	NA	15	
	Endrin	17.7	NA	15	
	4,4'-DDE	15.2	NA	15	
	Heptachlor	16.4	NA	15	

Primary Review: 3/30/07

Secondary Review: 3/30/07

Printed: 03/30/2007 15:23:33
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/09/2007

Analysis Lot:	KWG0703981	**Prep Lot:**	KWG0703392	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	581407	**Prep Date:**	03/08/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:	J:\GC23\DATA\032707\0327F018.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F019.D\0327F019c.d			**Vial:**	19
Acqu Date:	03/26/2007 16:02	**Quant Date:**	03/29/2007 18:57	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.36 +0.01	7.11	20177033	19128865	54.58	57.78			58OK
				%Recovery =	55OK	58OK	Limits =	18-125	
Decachlorobiphenyl	16.91	15.67 +0.01	22162650	28781378	72.72	76.55			77OK
				%Recovery =	73OK	77OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.05	8.14 +0.01	40795521	40291453	86.05	90.65 CCV	0.172	0.181	0.181
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC	10.07 +0.01	9.15	17023917	18803396	79.46	91.81	0.159	0.184	0.184
gamma-BHC (Lindane)	9.60 +0.01	8.75 +0.01	38108196	37943617	86.00	89.99 CCV	0.172	0.180	0.180
delta-BHC	10.48 +0.01	9.59	40090295	40462207	98.97	105.07	0.198	0.210	0.210
Heptachlor	10.56	9.31 +0.01	33117368	34080203	75.87	80.50 CCV	0.152	0.161	0.161
Aldrin	11.08 +0.01	9.79	22843361	24143126	59.66	63.66 CCV	0.119	0.127	0.127
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide	11.77	10.65 +0.01	32464864	32973545	86.35	88.32	0.173	0.177	0.177
gamma-Chlordane	12.27 +0.01	11.01 +0.01	32270117	33110840	86.70	88.17	0.173	0.176	0.176
Endosulfan I	12.40 +0.01	11.23 +0.01	22987224	24638986	69.96	73.64	0.140	0.147	0.147
alpha-Chlordane	12.34	11.15	30963025	32836821	85.27	88.89	0.171	0.178	0.178
Dieldrin	12.79	11.66	30397048	33181545m	87.45	90.82	0.175	0.182	0.182
4,4'-DDE	12.58	11.48 +0.01	29859147	33897384m	89.83	97.56 CCV	0.180	0.195	0.195
Endrin	13.14	12.14 +0.01	27289548	31989732	93.11	99.64 CCV	0.186	0.199	0.199
Endosulfan II	13.55 +0.01	12.54 +0.01	23131626m	25542390m	76.72	78.73	0.153	0.157	0.157
4,4'-DDD	13.37 +0.01	12.34	22202028m	27447567	84.18	94.30	0.168	0.189	0.189
Endrin Aldehyde	13.71	12.88	18939641	20936804	71.72	73.02	0.143	0.146	0.146

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F019.D\0327F019c.d			**Vial:**	19
Acqu Date:	03/26/2007 16:02	**Quant Date:**	03/29/2007 18:57	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.14 +0.01	13.18	24574931	28950801	83.98	85.99	0.168	0.172	**0.172**
4,4'-DDT	13.82	12.75 +0.01	25838942	31031618	93.50	98.20	0.187	0.196	**0.196**
Endrin Ketone	14.76 +0.01	14.06	28354806	34775044	86.62	88.96	0.173	0.178	**0.178**
Methoxychlor	14.47	13.76 +0.01	15890671	16815697	103.30	94.31	0.207	0.189	**0.207**
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:24 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.36	7.11	20177033	19128865	54.578	57.781
24)	s	Decachlorobiphen	16.91	15.67	22162650	28781378	72.724	76.550
		Target Compounds						
2)		alpha-BHC	9.05	8.14	40795521	40291453	86.045	90.654
4)		beta-BHC	10.07	9.15	17023917	18803396	79.457	91.812
5)		gamma-BHC (Linda	9.60	8.75	38108196	37943617	86.000	89.988
6)		delta-BHC	10.48	9.59	40090295	40462207	98.974	105.072
7)		Heptachlor	10.56	9.31	33117368	34080203	75.872	80.499
8)		Aldrin	11.08	9.79	22843361	24143126	59.657	63.660
10)		Heptachlor Epoxi	11.77	10.65	32464864	32973545	86.352	88.318
11)		gamma-Chlordane	12.27	11.01	32270117	33110840	86.701	88.167
12)		Endosulfan I	12.40	11.23	22987224	24638986	69.955	73.636
13)		alpha-Chlordane	12.34	11.15	30963025	32836821	85.270	88.885
14)		Dieldrin	12.79	11.66	30397048	33181545	87.449	90.815m
15)		4,4'-DDE	12.58	11.48	29859147	33897384	89.830	97.557m
16)		Endrin	13.14	12.14	27289548	31989732	93.106	99.639
17)		Endosulfan II	13.55	12.54	23131626	25542390	76.715m	78.731m
18)		4,4'-DDD	13.37	12.34	22202028	27447567	84.175m	94.302
19)		Endrin Aldehyde	13.71	12.88	18939641	20936804	71.718	73.015
20)		Endosulfan Sulfa	14.14	13.18	24574931	28950801	83.975	85.986
21)		4,4'-DDT	13.82	12.75	25838942	31031618	93.497	98.195
22)		Endrin Ketone	14.76	14.06	28354806	34775044	86.623	88.958
23)		Methoxychlor	14.47	13.76	15890671	16815697	103.300	94.314

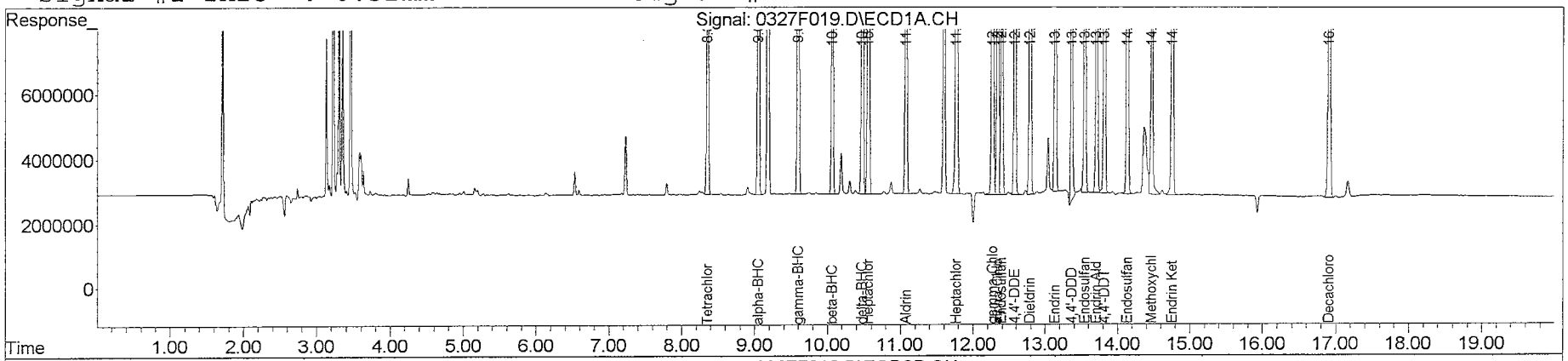
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

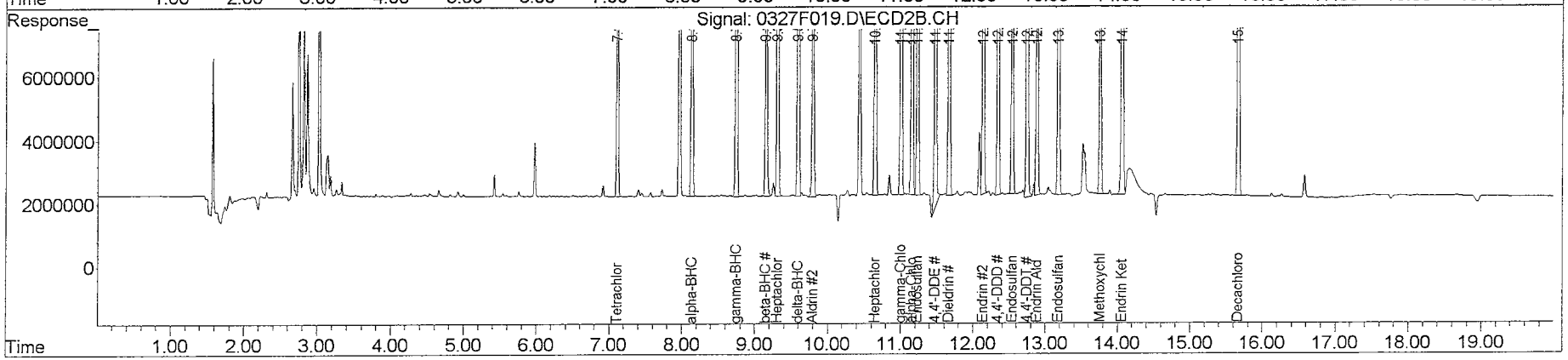
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 18:57 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

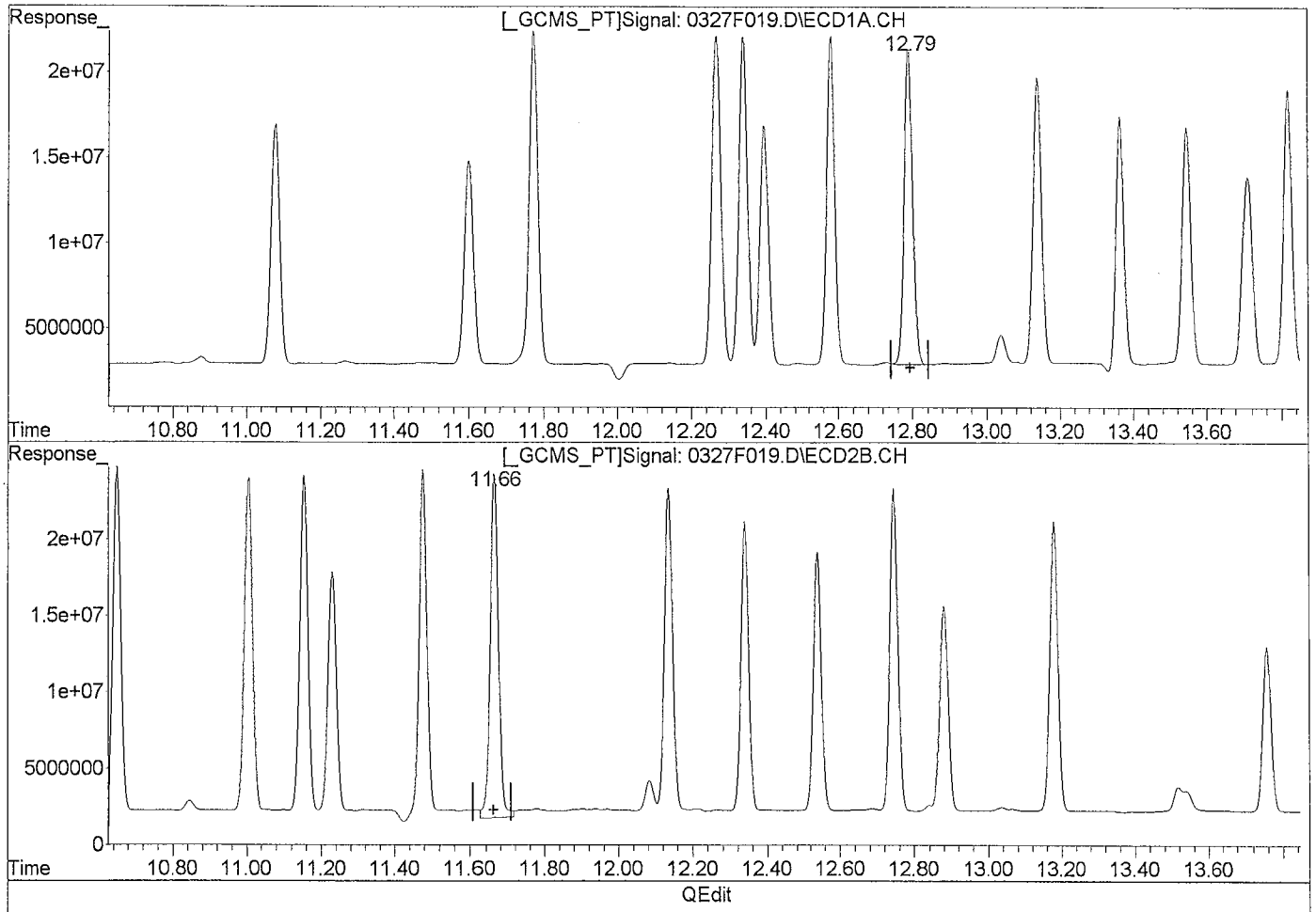




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(14) Dieldrin

12.79min 87.449ug/L

response 30397048

(14) Dieldrin #2

11.66min 97.238ug/L

response 35528422

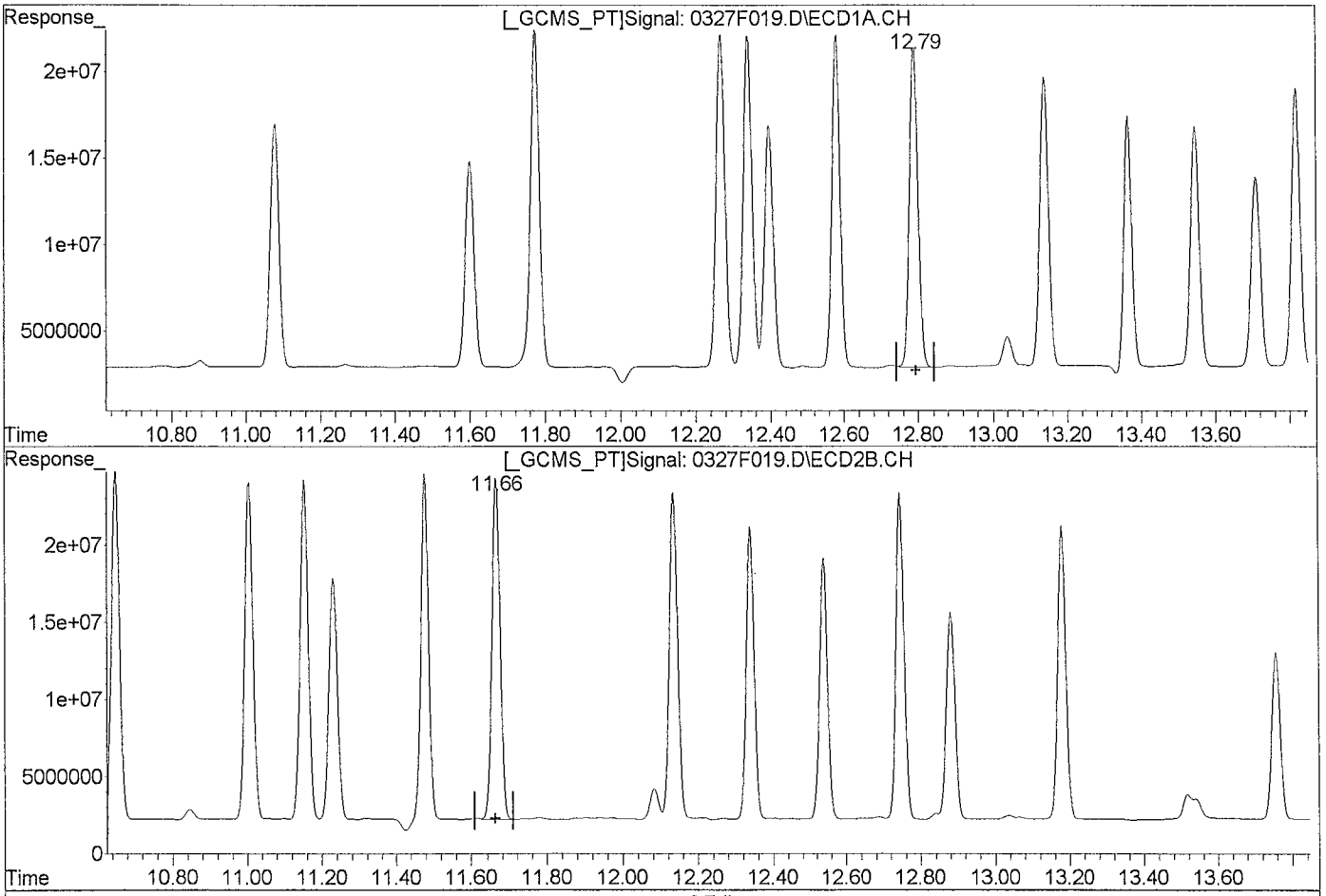
MAR 3 0 2007

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:56:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(14) Dieldrin

12.79min 87.449ug/L

response 30397048

(14) Dieldrin #2

11.66min 90.815ug/L m

response 33181545

After
Initials LL

MAR 30 2007

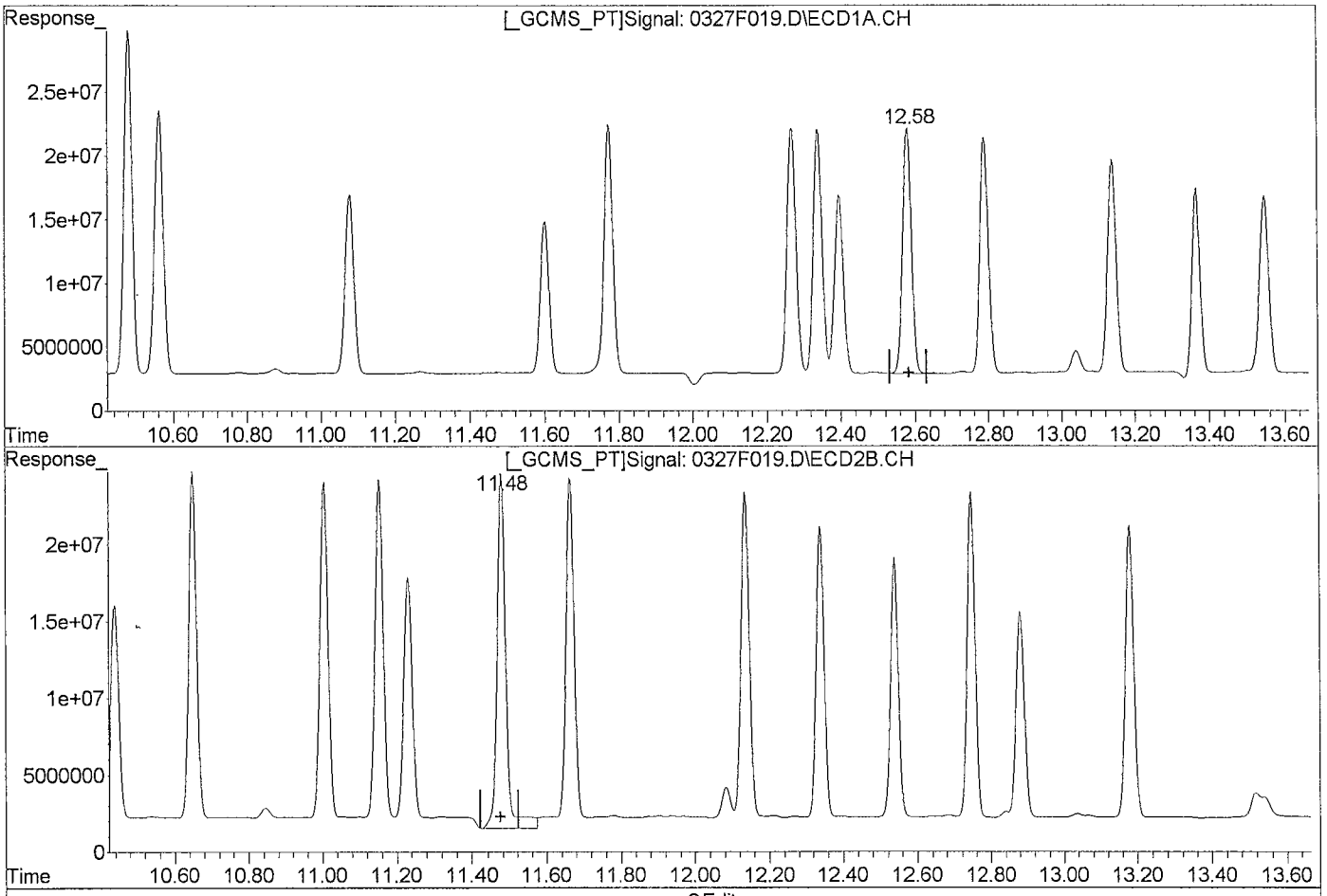
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:56:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.58min 89.830ug/L

response 29859147

(15) 4,4'-DDE #2

11.48min 108.742ug/L

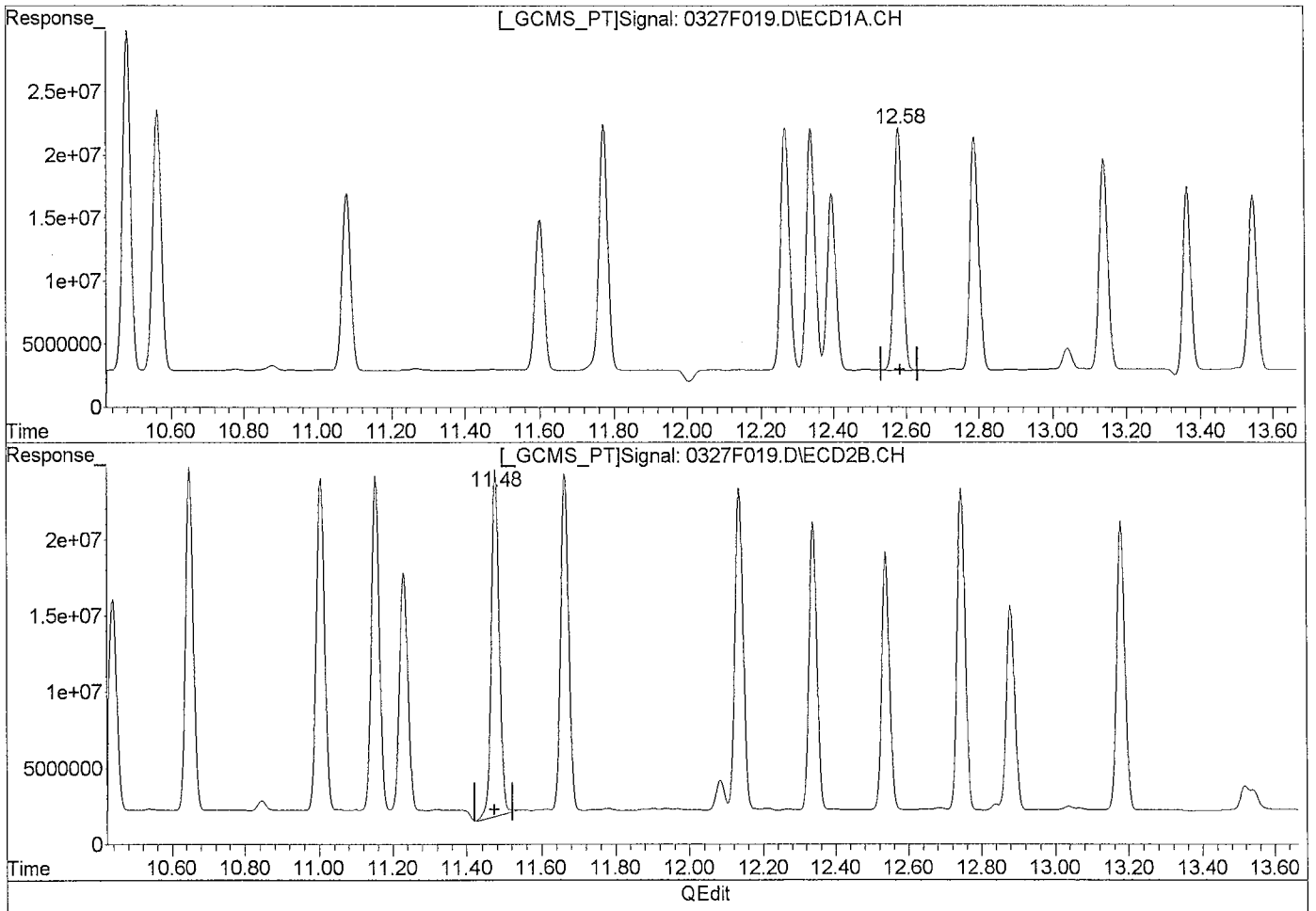
response 37784023

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:56:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 89.830ug/L

response 29859147

(15) 4,4'-DDE #2

11.48min 97.557ug/L m

response 33897384

After
Initials CL
MAR 30 2007

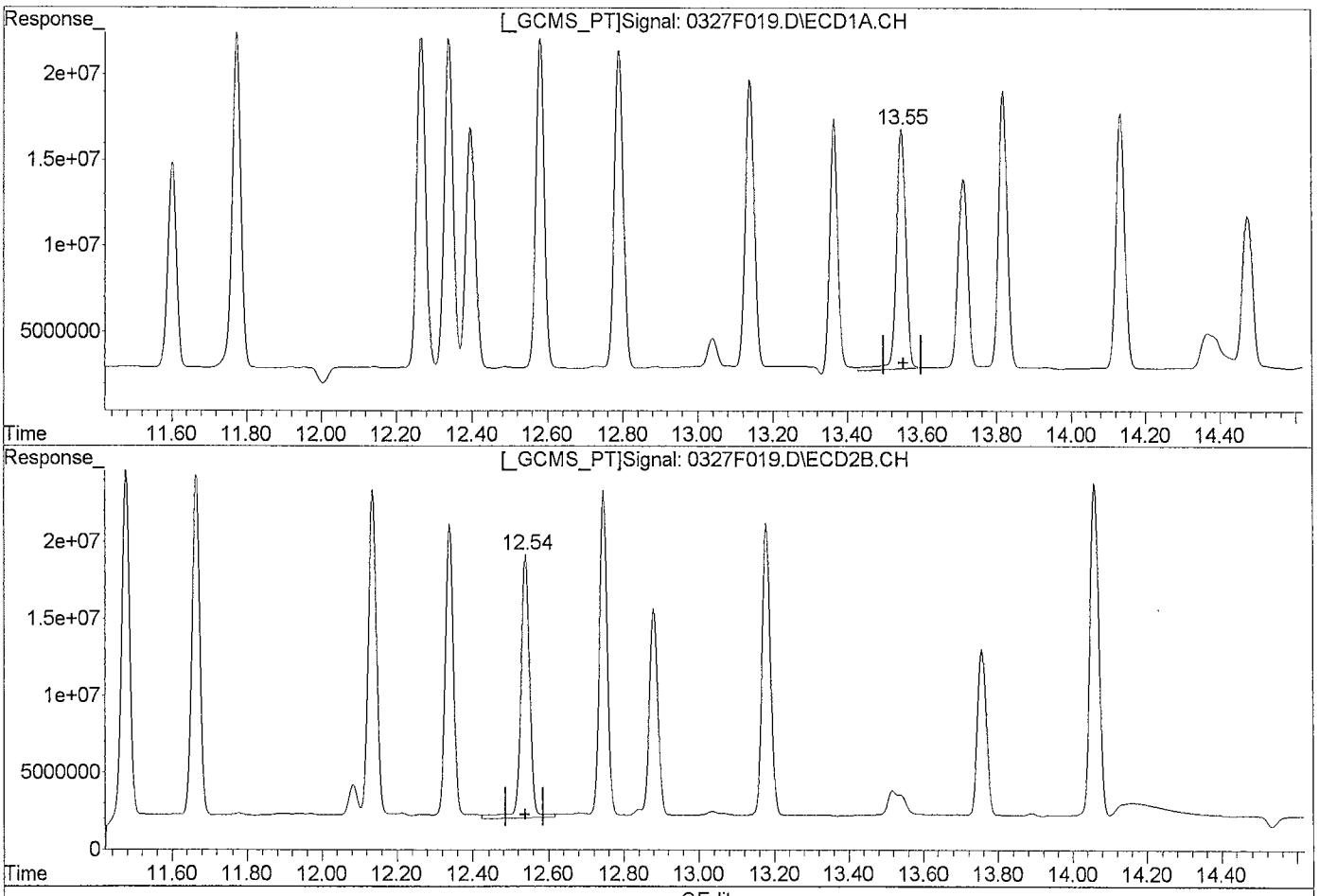
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:56:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(17) Endosulfan II

13.55min 81.139ug/L

response 24465492

(17) Endosulfan II #2

12.54min 86.539ug/L

response 28075377

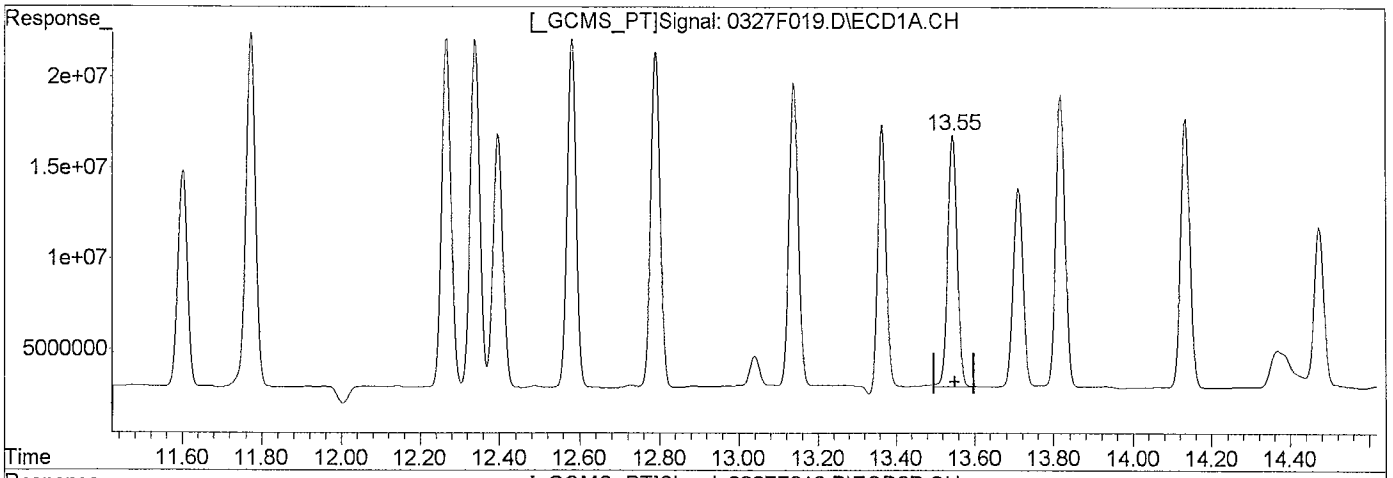
MAR 30 2007

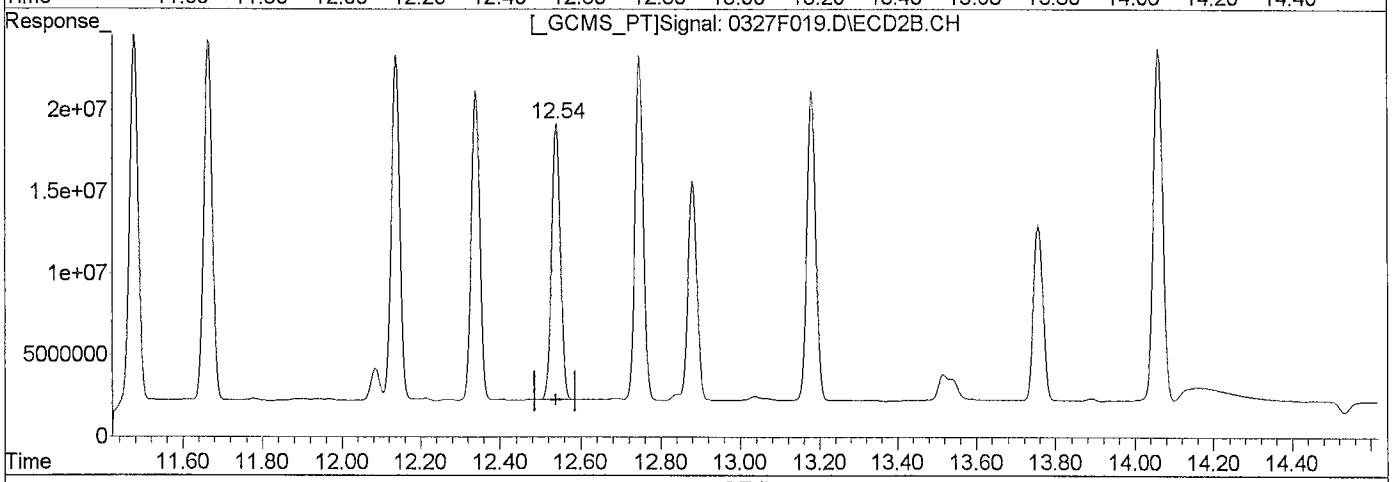
(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:56:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.55min 76.715ug/L m

response 23131626

After
Initials CL

MAR 30 2007

(17) Endosulfan II #2

12.54min 78.731ug/L m

response 25542390

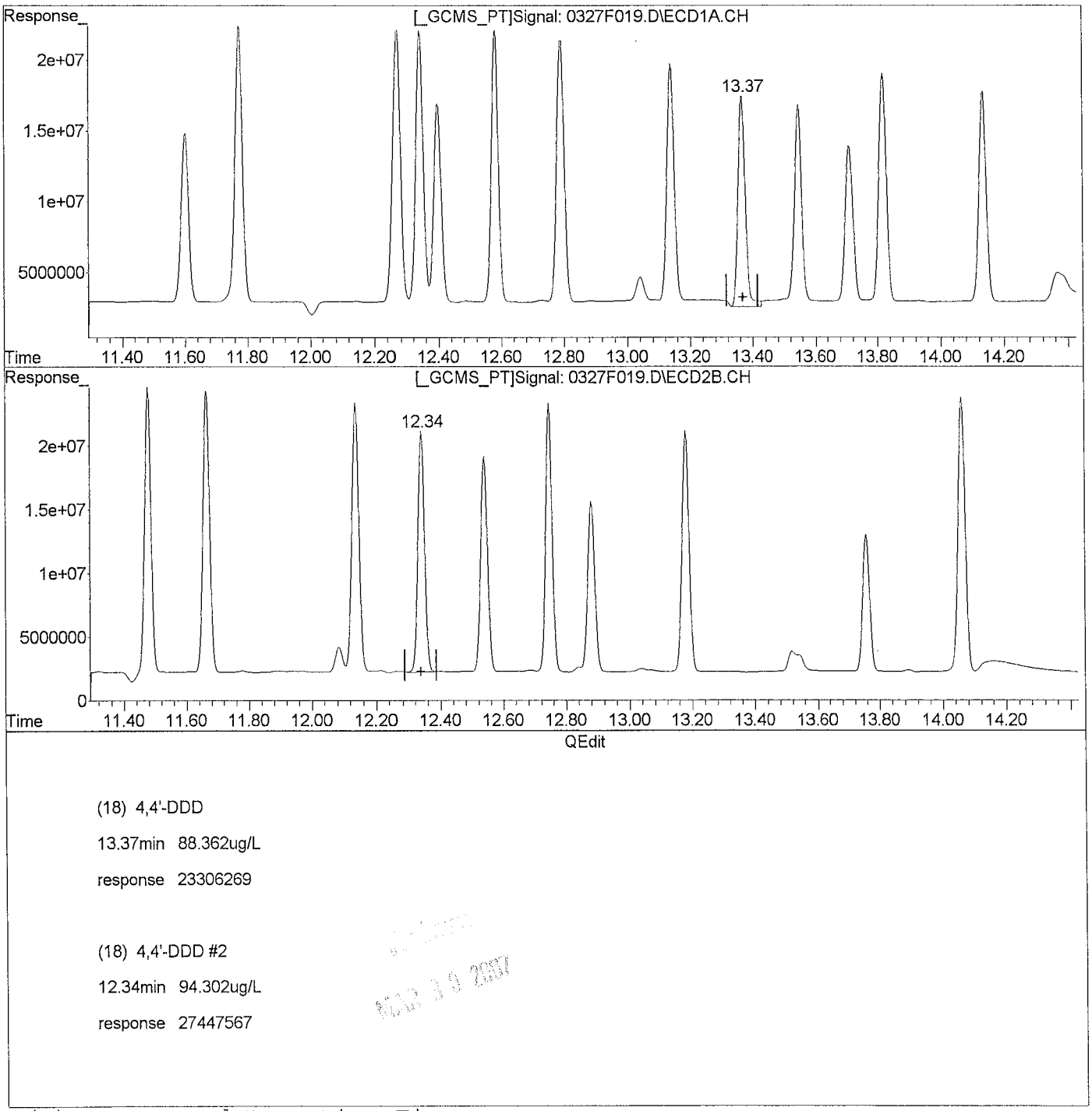
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:57:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.37min 88.362ug/L

response 23306269

(18) 4,4'-DDD #2

12.34min 94.302ug/L

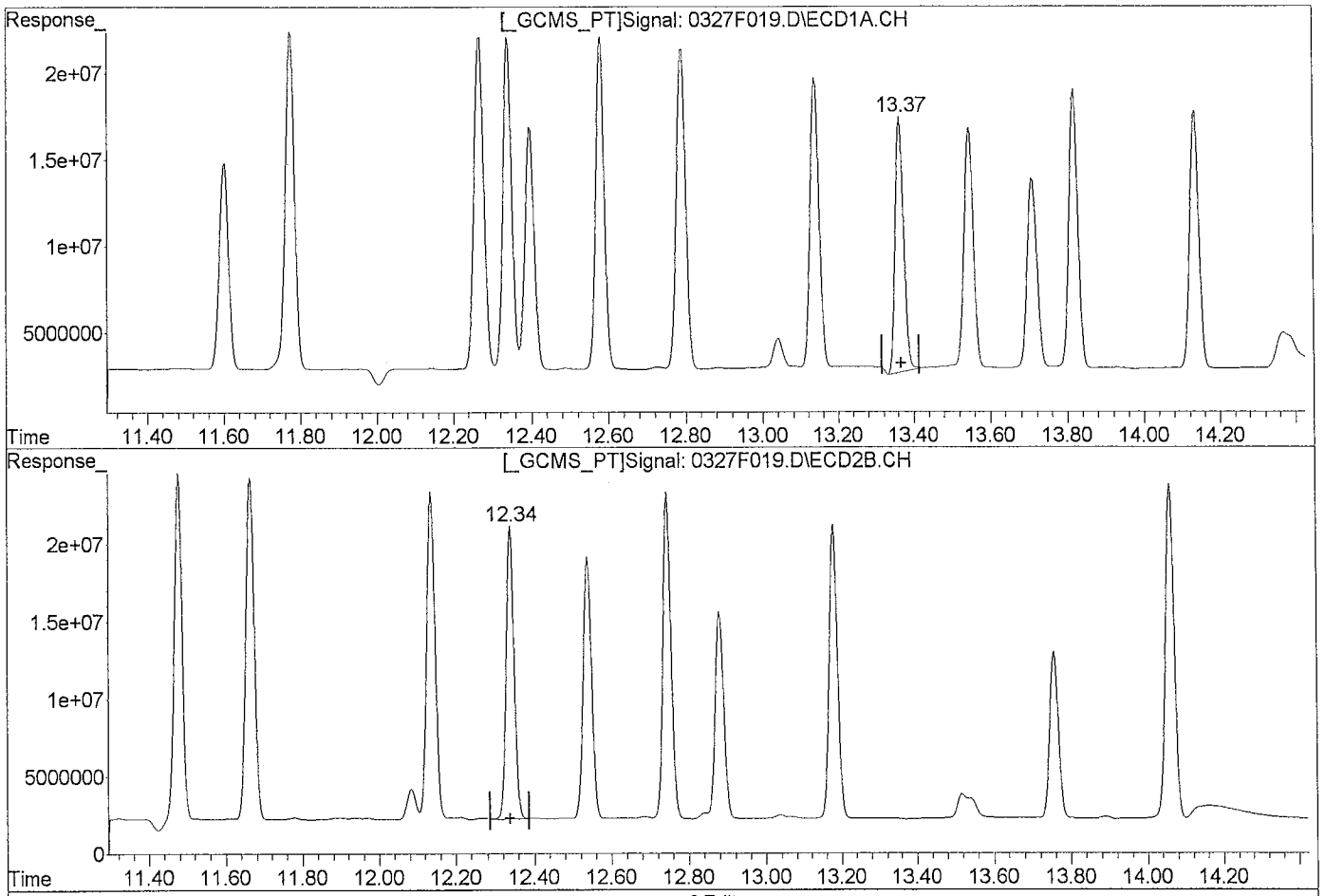
response 27447567

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:57:10 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\032707\0327F019.D\ECD2B.CH
Acq On : 26 Mar 2007 4:02 pm Operator: AKamawal
Sample : KWG0703392-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703392\1-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.37min 84.175ug/L m

response 22202028

(18) 4,4'-DDD #2

12.34min 94.302ug/L

response 27447567

After
Initials CL

MAR 3 0 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0327F019.D 031207-8081.M Thu Mar 29 18:57:18 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703392-2	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.188**		0.010	1	03/08/07	03/26/07	KWG0703392	
beta-BHC	**0.199**		0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-BHC (Lindane)	**0.188**		0.010	1	03/08/07	03/26/07	KWG0703392	
delta-BHC	**0.231**		0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor	**0.141**		0.010	1	03/08/07	03/26/07	KWG0703392	
Aldrin	**0.104**		0.010	1	03/08/07	03/26/07	KWG0703392	
Heptachlor Epoxide	**0.190**		0.010	1	03/08/07	03/26/07	KWG0703392	
gamma-Chlordane†	**0.189**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan I	**0.158**		0.010	1	03/08/07	03/26/07	KWG0703392	
alpha-Chlordane	**0.189**		0.010	1	03/08/07	03/26/07	KWG0703392	
Dieldrin	**0.196**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDE	**0.180**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin	**0.204**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan II	**0.172**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDD	**0.199**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Aldehyde	**0.135**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endosulfan Sulfate	**0.185**		0.010	1	03/08/07	03/26/07	KWG0703392	
4,4'-DDT	**0.204**		0.010	1	03/08/07	03/26/07	KWG0703392	
Endrin Ketone	**0.194**		0.010	1	03/08/07	03/26/07	KWG0703392	
Methoxychlor	**0.205**		0.010	1	03/08/07	03/26/07	KWG0703392	
Toxaphene	ND	U	0.50	1	03/08/07	03/26/07	KWG0703392	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	50	18-125	03/26/07	Acceptable
Decachlorobiphenyl	79	10-145	03/26/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032707\0327F020.D
Lab ID: KWG0703392-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/26/2007 16:28
Date Quantitated: 03/29/2007 18:58
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	

Primary Review: CL 3/30/07

Secondary Review: [illegible]

Exception Report

Data File:	J:\GC23\DATA\032707\0327F020.D\0327F020C.D	**Date Acquired:**	03/26/2007 16:28
Lab ID:	KWG0703392-2	**Date Quantitated:**	03/29/2007 18:58
RunType:	DLCS	**Batch ID:**	KWG0703981
Matrix:	WATER	**Analysis Method:**	8081A
		MethodJoinID:	MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	ICV
Continuing Calibration Recovery (Closing)	Aldrin	15.0	NA	15	CCV
	alpha-BHC	15.8	NA	15	
	gamma-BHC (Lindane)	15.1	NA	15	
	Endrin	17.7	NA	15	
	4,4'-DDE	15.2	NA	15	
	Heptachlor	16.4	NA	15	

Primary Review: 3/30/07

Secondary Review: 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/09/2007

Analysis Lot:	KWG0703981	**Prep Lot:**	KWG0703392	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	581408	**Prep Date:**	03/08/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:	J:\GC23\DATA\032707\0327F018.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F020.D\0327F020c.d			**Vial:**	20
Acqu Date:	03/26/2007 16:28	**Quant Date:**	03/29/2007 18:58	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35	7.11	17557653	16457289	47.49	49.71			50OK
				%Recovery =	47OK	50OK	Limits =	18-125	
Decachlorobiphenyl	16.91	15.66	23146369	29540037	75.95	78.57			79OK
				%Recovery =	76OK	79OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.05	8.13	44602664	43760965	94.08	98.46 CCV	0.188	0.197	**0.197**
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC	10.06	9.15	18623910	20412617	86.93	99.67	0.174	0.199	**0.199**
gamma-BHC (Lindane)	9.59	8.74	41699225	41336182	94.10	98.03 CCV	0.188	0.196	**0.196**
delta-BHC	10.47	9.59	44337616	44543800	109.46	115.67	0.219	0.231	**0.231**
Heptachlor	10.56	9.31 +0.01	30775160	31069065	70.51	73.39 CCV	0.141	0.147	**0.147**
Aldrin	11.07	9.79	19955812	21012222	52.12	55.40 CCV	0.104	0.111	**0.111**
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide	11.77	10.65 +0.01	34616223	35407650	92.07	94.84	0.184	0.190	**0.190**
gamma-Chlordane	12.26	11.00	33900301	35427483	91.08	94.34	0.182	0.189	**0.189**
Endosulfan I	12.39	11.23 +0.01	24795974	26419576	75.46	78.96	0.151	0.158	**0.158**
alpha-Chlordane	12.33 -0.01	11.15	32816836	34940474	90.38	94.58	0.181	0.189	**0.189**
Dieldrin	12.79	11.66	32987156	35804420	94.90	97.99	0.190	0.196	**0.196**
4,4'-DDE	12.57 -0.01	11.47	29977792	33560615m	90.19	96.59 CCV	0.180	0.193	**0.193**
Endrin	13.13 -0.01	12.13	29936574	34506731	102.14	107.48 CCV	0.204	0.215	**0.215**
Endosulfan II	13.54	12.54 +0.01	25691512	27911009	85.21	86.03	0.170	0.172	**0.172**
4,4'-DDD	13.36	12.34	24642473	28905906	93.43	99.31	0.187	0.199	**0.199**
Endrin Aldehyde	13.71	12.88	17441547	19325876	66.05	67.40	0.132	0.135	**0.135**

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F020.D\0327F020c.d			**Vial:**	20
Acqu Date:	03/26/2007 16:28	**Quant Date:**	03/29/2007 18:58	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703392-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.13	13.18	26513305	31226512	90.60	92.75	0.181	0.185	**0.185**
4,4'-DDT	13.81 -0.01	12.74	27671152	32274457	100.13	102.13	0.200	0.204	**0.204**
Endrin Ketone	14.75	14.06	31119885	37948906	95.07	97.08	0.190	0.194	**0.194**
Methoxychlor	14.47	13.76 +0.01	15730555	17964069	102.26	100.76	0.205	0.202	**0.205**
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Signal #1 : J:\GC23\DATA\032707\0327F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\032707\0327F020.D\ECD2B.CH
Acq On : 26 Mar 2007 4:28 pm Operator: AKamawal
Sample : KWG0703392-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703392\2-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:26 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	17557653	16457289	47.492	49.712
24)	s	Decachlorobiphen	16.91	15.66	23146369	29540037	75.952	78.568
		Target Compounds						
2)		alpha-BHC	9.05	8.13	44602664	43760965	94.075	98.461
4)		beta-BHC	10.06	9.15	18623910	20412617	86.925	99.669
5)		gamma-BHC (Linda	9.59	8.74	41699225	41336182	94.104	98.033
6)		delta-BHC	10.47	9.59	44337616	44543800	109.460	115.671
7)		Heptachlor	10.56	9.31	30775160	31069065	70.506	73.386
8)		Aldrin	11.07	9.79	19955812	21012222	52.116	55.404
10)		Heptachlor Epoxi	11.77	10.65	34616223	35407650	92.074	94.837
11)		gamma-Chlordane	12.26	11.00	33900301	35427483	91.081	94.335
12)		Endosulfan I	12.39	11.23	24795974	26419576	75.460	78.958
13)		alpha-Chlordane	12.33	11.15	32816836	34940474	90.375	94.579
14)		Dieldrin	12.79	11.66	32987156	35804420	94.901	97.994
15)		4,4'-DDE	12.57	11.47	29977792	33560615	90.187	96.587m
16)		Endrin	13.13	12.13	29936574	34506731	102.137	107.479
17)		Endosulfan II	13.54	12.54	25691512	27911009	85.205	86.032
18)		4,4'-DDD	13.36	12.34	24642473	28905906	93.428	99.312
19)		Endrin Aldehyde	13.71	12.88	17441547	19325876	66.045	67.397
20)		Endosulfan Sulfa	14.13	13.18	26513305	31226512	90.599	92.745
21)		4,4'-DDT	13.81	12.74	27671152	32274457	100.127	102.127
22)		Endrin Ketone	14.75	14.06	31119885	37948906	95.071	97.077
23)		Methoxychlor	14.47	13.76	15730555	17964069	102.259	100.755

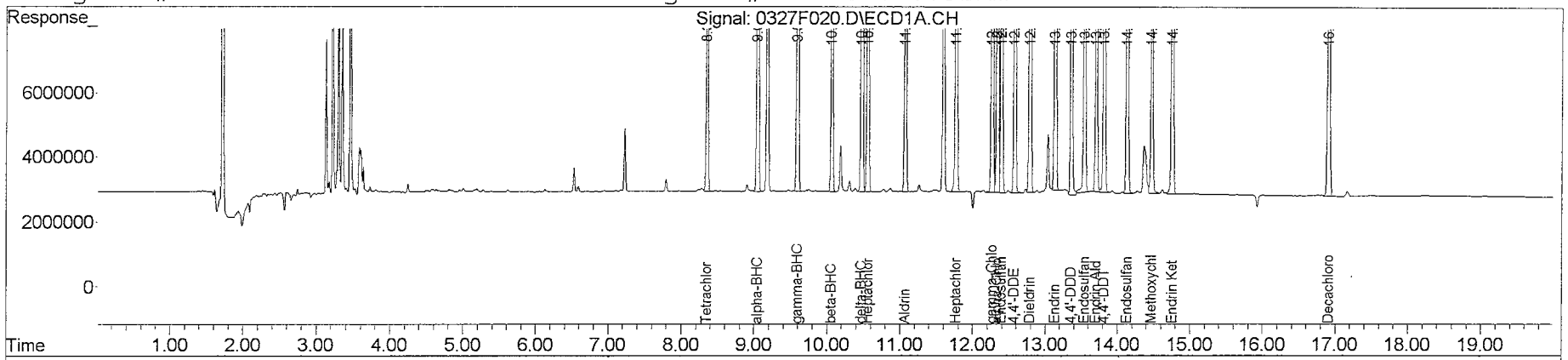
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

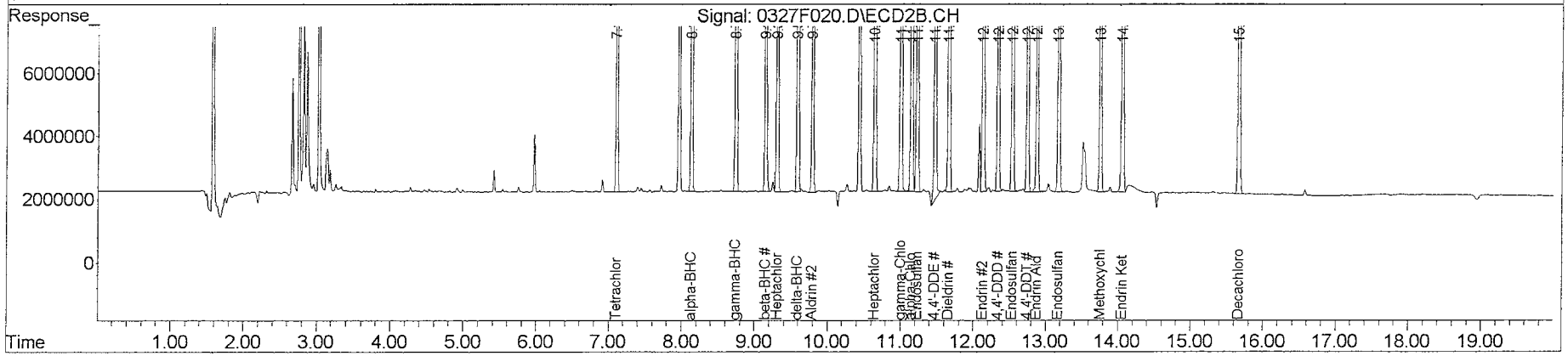
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\032707\0327F020.D\ECD2B.CH
Acq On : 26 Mar 2007 4:28 pm Operator: AKamawal
Sample : KWG0703392-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703392\2-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 18:58 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

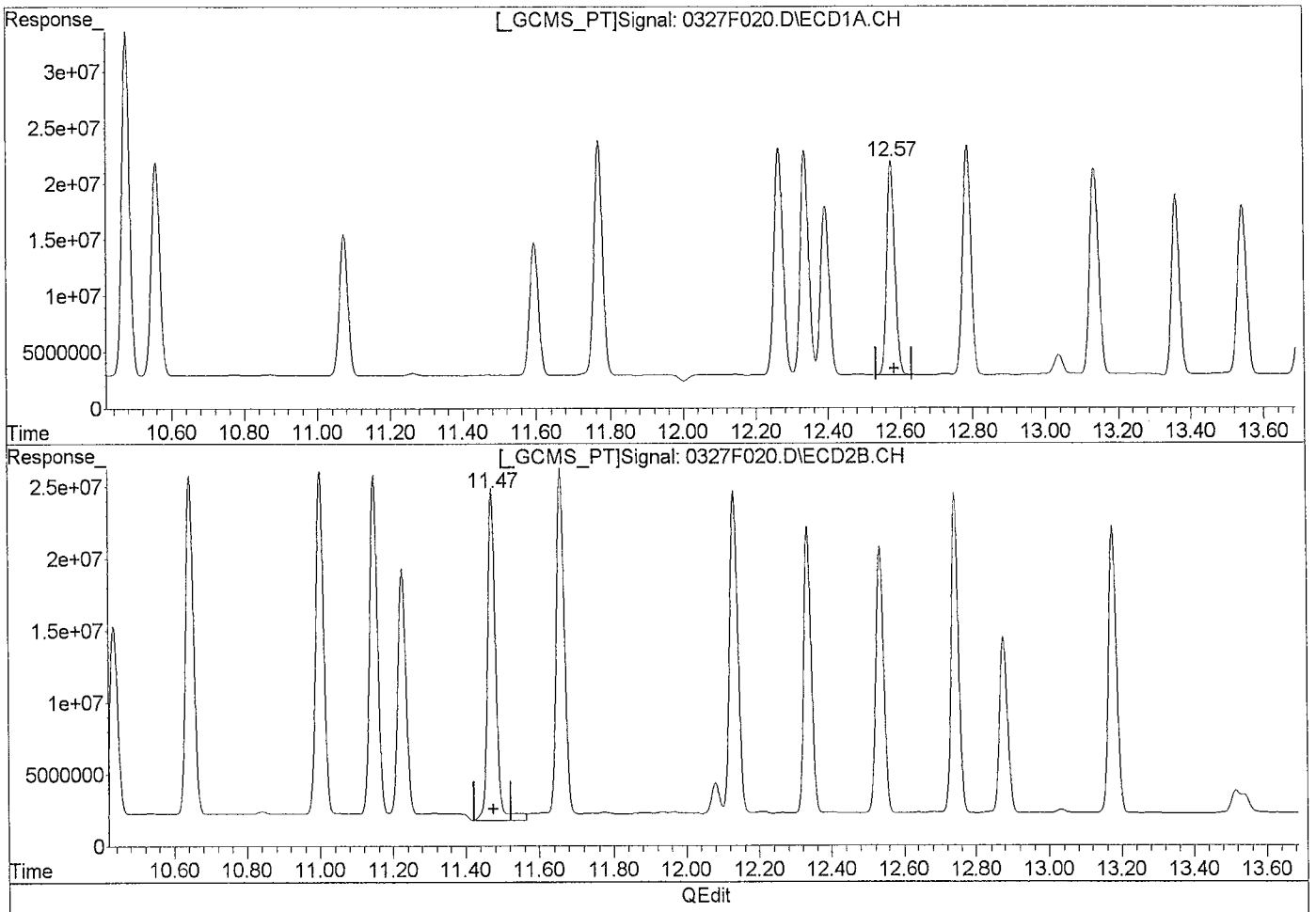




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\032707\0327F020.D\ECD2B.CH
Acq On : 26 Mar 2007 4:28 pm Operator: AKamawal
Sample : KWG0703392-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703392\2-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 90.187ug/L

response 29977792

(15) 4,4'-DDE #2

11.47min 103.138ug/L

response 35836892

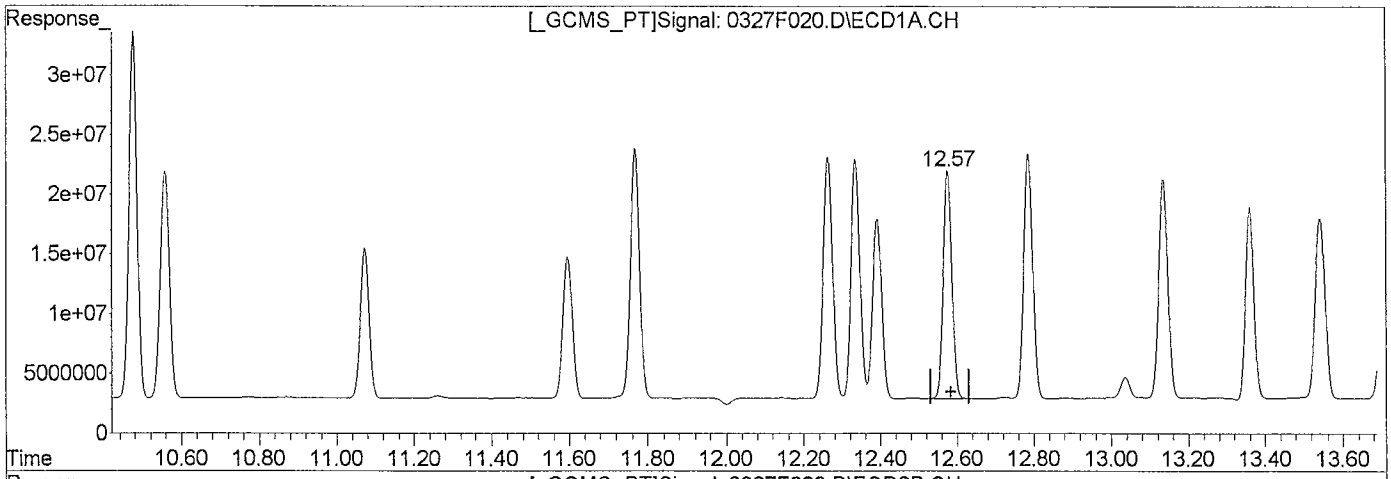
(+) = Expected Retention Time

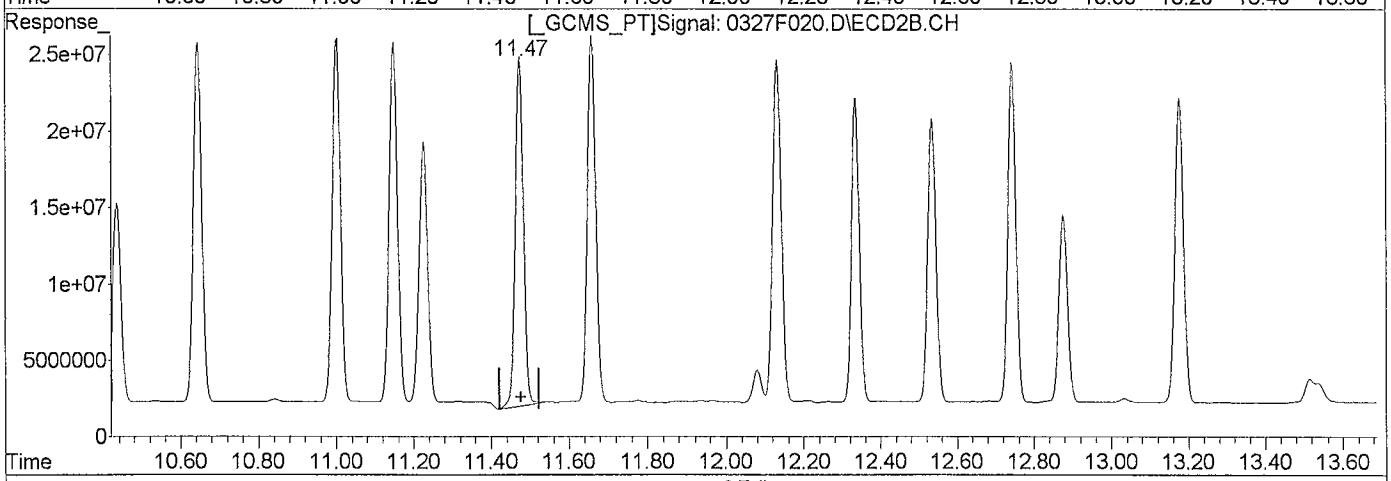
0327F020.D 031207-8081.M Thu Mar 29 18:58:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\032707\0327F020.D\ECD2B.CH
Acq On : 26 Mar 2007 4:28 pm Operator: AKamawal
Sample : KWG0703392-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703392\2-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Wed Mar 28 10:21:56 2007
Response via : Multiple Level Calibration





QEdit

After
Initials CL
MAR 30 2007

(15) 4,4'-DDE

12.57min 90.187ug/L

response 29977792

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(15) 4,4'-DDE #2

11.47min 96.587ug/L m

response 33560615

(+) = Expected Retention Time
0327F020.D 031207-8081.M Thu Mar 29 18:58:34 2007

Organic Analysis:
Organochlorine Pesticides

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D	P	J:\GC23\DATA\030907\0309F075.D
B	J:\GC23\DATA\030907\0309F045.D	Q	J:\GC23\DATA\030907\0309F076.D
C	J:\GC23\DATA\030907\0309F046.D	R	J:\GC23\DATA\030907\0309F077.D
D	J:\GC23\DATA\030907\0309F047.D	S	J:\GC23\DATA\031207\0312F004.D
E	J:\GC23\DATA\030907\0309F048.D	T	J:\GC23\DATA\031207\0312F005.D
F	J:\GC23\DATA\030907\0309F049.D	U	J:\GC23\DATA\031207\0312F006.D
G	J:\GC23\DATA\030907\0309F058.D	V	J:\GC23\DATA\031207\0312F007.D
H	J:\GC23\DATA\030907\0309F059.D	W	J:\GC23\DATA\031207\0312F008.D
I	J:\GC23\DATA\030907\0309F060.D	X	J:\GC23\DATA\031207\0312F009.D
J	J:\GC23\DATA\030907\0309F061.D	Y	J:\GC23\DATA\031207\0312F011.D
K	J:\GC23\DATA\030907\0309F062.D	Z	J:\GC23\DATA\031207\0312F012.D
L	J:\GC23\DATA\030907\0309F063.D	AA	J:\GC23\DATA\031207\0312F013.D
M	J:\GC23\DATA\030907\0309F072.D	AB	J:\GC23\DATA\031207\0312F014.D
N	J:\GC23\DATA\030907\0309F073.D	AC	J:\GC23\DATA\031207\0312F015.D
O	J:\GC23\DATA\030907\0309F074.D	AD	J:\GC23\DATA\031207\0312F016.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	4.07E+5	B	5.0	3.75E+5	C	20	3.54E+5	D	50	3.71E+5	E	100	3.55E+5
	F	200	3.55E+5												
Decachlorobiphenyl	A	2.0	3.67E+5	B	5.0	3.38E+5	C	20	3.03E+5	D	50	2.98E+5	E	100	2.69E+5
	F	200	2.53E+5												
alpha-BHC	A	2.0	4.61E+5	B	5.0	4.29E+5	C	20	4.39E+5	D	50	4.89E+5	E	100	5.03E+5
	F	200	5.24E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

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Initial Calibration Summary
Organochlorine Pesticides

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Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.47E+5	B	5.0	2.21E+5	C	20	2.07E+5	D	50	2.13E+5	E	100	2.00E+5
	F	200	1.97E+5												
gamma-BHC (Lindane)	A	2.0	4.38E+5	B	5.0	4.17E+5	C	20	4.15E+5	D	50	4.59E+5	E	100	4.58E+5
	F	200	4.72E+5												
delta-BHC	A	2.0	4.09E+5	B	5.0	3.80E+5	C	20	3.84E+5	D	50	3.67E+5	E	100	4.36E+5
	F	200	4.54E+5												
Heptachlor	A	2.0	4.79E+5	B	5.0	4.38E+5	C	20	4.16E+5	D	50	4.43E+5	E	100	4.21E+5
	F	200	4.22E+5												
Aldrin	A	2.0	3.98E+5	B	5.0	3.71E+5	C	20	3.59E+5	D	50	3.96E+5	E	100	3.83E+5
	F	200	3.90E+5												

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Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.17E+5	B	5.0	3.88E+5	C	20	3.59E+5	D	50	3.81E+5	E	100	3.58E+5
	F	200	3.53E+5												
gamma-Chlordane	A	2.0	4.05E+5	B	5.0	3.78E+5	C	20	3.52E+5	D	50	3.78E+5	E	100	3.59E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.72E+5	B	5.0	3.47E+5	C	20	3.19E+5	D	50	3.03E+5	E	100	3.18E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.04E+5	B	5.0	3.74E+5	C	20	3.47E+5	D	50	3.66E+5	E	100	3.45E+5
	F	200	3.43E+5												
Dieldrin	A	2.0	3.65E+5	B	5.0	3.40E+5	C	20	3.28E+5	D	50	3.59E+5	E	100	3.44E+5
	F	200	3.48E+5												

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Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.42E+5	B	5.0	3.23E+5	C	20	3.12E+5	D	50	3.46E+5	E	100	3.33E+5
	F	200	3.38E+5												
Endrin	A	2.0	3.06E+5	B	5.0	2.89E+5	C	20	2.77E+5	D	50	3.02E+5	E	100	2.89E+5
	F	200	2.95E+5												
Endosulfan II	A	2.0	3.33E+5	B	5.0	3.22E+5	C	20	2.99E+5	D	50	2.96E+5	E	100	2.94E+5
	F	200	2.66E+5												
4,4'-DDD	A	2.0	2.57E+5	B	5.0	2.50E+5	C	20	2.53E+5	D	50	2.80E+5	E	100	2.68E+5
	F	200	2.74E+5												
Endrin Aldehyde	A	2.0	2.96E+5	B	5.0	2.80E+5	C	20	2.57E+5	D	50	2.65E+5	E	100	2.47E+5
	F	200	2.40E+5												

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Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.26E+5	B	5.0	3.01E+5	C	20	2.83E+5	D	50	2.96E+5	E	100	2.77E+5
	F	200	2.73E+5												
4,4'-DDT	A	2.0	2.87E+5	B	5.0	2.67E+5	C	20	2.61E+5	D	50	2.86E+5	E	100	2.76E+5
	F	200	2.80E+5												
Endrin Ketone	A	2.0	3.50E+5	B	5.0	3.28E+5	C	20	3.19E+5	D	50	3.36E+5	E	100	3.18E+5
	F	200	3.13E+5												
Methoxychlor	A	2.0	1.70E+5	B	5.0	1.57E+5	C	20	1.49E+5	D	50	1.58E+5	E	100	1.46E+5
	F	200	1.43E+5												
Toxaphene {1}															
													Y	100	2870
	Z	250	2830	AA	500	2550	AB	1000	2530	AC	2000	2470	AD	5000	2490

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Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	2050
	Z	250	2300	AA	500	2100	AB	1000	2030	AC	2000	2010	AD	5000	1940
Toxaphene {3}															
													Y	100	3370
	Z	250	3440	AA	500	3350	AB	1000	3090	AC	2000	3210	AD	5000	3240
Toxaphene {4}															
													Y	100	3880
	Z	250	4360	AA	500	4110	AB	1000	3930	AC	2000	3890	AD	5000	3870
Toxaphene {5}															
													Y	100	2270
	Z	250	2170	AA	500	2070	AB	1000	1940	AC	2000	1930	AD	5000	1860
Toxaphene {6}															
													Y	100	2110
	Z	250	2340	AA	500	2300	AB	1000	2160	AC	2000	2190	AD	5000	2120

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Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	13.9		≤ 20
alpha-BHC	MS	AverageRF	% RSD	7.9		≤ 20
beta-BHC	MS	AverageRF	% RSD	8.5		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	5.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	5.4		≤ 20
Aldrin	MS	AverageRF	% RSD	4.0		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	6.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	7.8		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.5		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.8		≤ 20
Endrin	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan II	MS	AverageRF	% RSD	7.8		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.6		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	8.0		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	6.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.8		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	4.2		≤ 20
Methoxychlor	MS	AverageRF	% RSD	6.3		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	5.9		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	3.9		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.8		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	7.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.2		≤ 20

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QA/QC Results

Client: Treadwell and Rollo, Inc.
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Service Request: K0701647
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D
J:\GC23\DATA\030907\0309F064.D
J:\GC23\DATA\030907\0309F078.D
J:\GC23\DATA\031207\0312F010.D
J:\GC23\DATA\031207\0312F017.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	474000	458000	-3	NA	± 15 %	AverageRF
beta-BHC	40	38	214000	202000	-6	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	38	443000	426000	-4	NA	± 15 %	AverageRF
delta-BHC	40	42	405000	420000	4	NA	± 15 %	AverageRF
Heptachlor	40	38	436000	412000	-6	NA	± 15 %	AverageRF
Aldrin	40	38	383000	365000	-5	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	38	376000	353000	-6	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	372000	349000	-6	NA	± 15 %	AverageRF
Endosulfan I	40	39	329000	318000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	37	363000	338000	-7	NA	± 15 %	AverageRF
Dieldrin	40	37	348000	321000	-8	NA	± 15 %	AverageRF
4,4'-DDE	40	38	332000	317000	-5	NA	± 15 %	AverageRF
Endrin	40	39	293000	283000	-3	NA	± 15 %	AverageRF
Endosulfan II	40	39	302000	294000	-2	NA	± 15 %	AverageRF
4,4'-DDD	40	38	264000	252000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	38	264000	254000	-4	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	38	293000	276000	-6	NA	± 15 %	AverageRF
4,4'-DDT	40	39	276000	268000	-3	NA	± 15 %	AverageRF
Endrin Ketone	40	40	327000	324000	-1	NA	± 15 %	AverageRF
Methoxychlor	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	900	2620	2350	-10	NA	± 100 %	AverageRF
Toxaphene {2}	1000	900	2070	1860	-10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	870	3280	2850	-13	NA	± 100 %	AverageRF
Toxaphene {4}	1000	890	4000	3560	-11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	790	2040	1600	-21	NA	± 100 %	AverageRF
Toxaphene {6}	1000	890	2200	1960	-11	NA	± 100 %	AverageRF
Toxaphene	1000	870	NA	NA	NA	13	± 15 %	NA

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† **SPCC Compound** ‡ **CCC Compound**

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Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D\0309F044c.d	P	J:\GC23\DATA\030907\0309F075.D\0309F075c.d
B	J:\GC23\DATA\030907\0309F045.D\0309F045c.d	Q	J:\GC23\DATA\030907\0309F076.D\0309F076c.d
C	J:\GC23\DATA\030907\0309F046.D\0309F046c.d	R	J:\GC23\DATA\030907\0309F077.D\0309F077c.d
D	J:\GC23\DATA\030907\0309F047.D\0309F047c.d	S	J:\GC23\DATA\031207\0312F004.D\0312F004c.d
E	J:\GC23\DATA\030907\0309F048.D\0309F048c.d	T	J:\GC23\DATA\031207\0312F005.D\0312F005c.d
F	J:\GC23\DATA\030907\0309F049.D\0309F049c.d	U	J:\GC23\DATA\031207\0312F006.D\0312F006c.d
G	J:\GC23\DATA\030907\0309F058.D\0309F058c.d	V	J:\GC23\DATA\031207\0312F007.D\0312F007c.d
H	J:\GC23\DATA\030907\0309F059.D\0309F059c.d	W	J:\GC23\DATA\031207\0312F008.D\0312F008c.d
I	J:\GC23\DATA\030907\0309F060.D\0309F060c.d	X	J:\GC23\DATA\031207\0312F009.D\0312F009c.d
J	J:\GC23\DATA\030907\0309F061.D\0309F061c.d	Y	J:\GC23\DATA\031207\0312F011.D\0312F011c.d
K	J:\GC23\DATA\030907\0309F062.D\0309F062c.d	Z	J:\GC23\DATA\031207\0312F012.D\0312F012c.d
L	J:\GC23\DATA\030907\0309F063.D\0309F063c.d	AA	J:\GC23\DATA\031207\0312F013.D\0312F013c.d
M	J:\GC23\DATA\030907\0309F072.D\0309F072c.d	AB	J:\GC23\DATA\031207\0312F014.D\0312F014c.d
N	J:\GC23\DATA\030907\0309F073.D\0309F073c.d	AC	J:\GC23\DATA\031207\0312F015.D\0312F015c.d
O	J:\GC23\DATA\030907\0309F074.D\0309F074c.d	AD	J:\GC23\DATA\031207\0312F016.D\0312F016c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	3.62E+5	B	5.0	3.43E+5	C	20	3.26E+5	D	50	3.27E+5	E	100	3.15E+5
	F	200	3.14E+5												
Decachlorobiphenyl	A	2.0	4.66E+5	B	5.0	4.21E+5	C	20	3.80E+5	D	50	3.53E+5	E	100	3.26E+5
	F	200	3.10E+5												
alpha-BHC	A	2.0	4.30E+5	B	5.0	4.12E+5	C	20	4.22E+5	D	50	4.51E+5	E	100	4.68E+5
	F	200	4.84E+5												

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Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.30E+5	B	5.0	2.16E+5	C	20	2.02E+5	D	50	2.13E+5	E	100	1.85E+5
	F	200	1.82E+5												
gamma-BHC (Lindane)	A	2.0	4.23E+5	B	5.0	4.09E+5	C	20	4.03E+5	D	50	4.27E+5	E	100	4.29E+5
	F	200	4.39E+5												
delta-BHC	A	2.0	3.88E+5	B	5.0	3.64E+5	C	20	3.76E+5	D	50	3.44E+5	E	100	4.12E+5
	F	200	4.27E+5												
Heptachlor	A	2.0	4.58E+5	B	5.0	4.29E+5	C	20	4.13E+5	D	50	4.25E+5	E	100	4.09E+5
	F	200	4.06E+5												
Aldrin	A	2.0	3.96E+5	B	5.0	3.76E+5	C	20	3.68E+5	D	50	3.86E+5	E	100	3.74E+5
	F	200	3.76E+5												

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Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.18E+5	B	5.0	3.88E+5	C	20	3.66E+5	D	50	3.72E+5	E	100	3.51E+5
	F	200	3.45E+5												
gamma-Chlordane	A	2.0	4.04E+5	B	5.0	3.86E+5	C	20	3.67E+5	D	50	3.75E+5	E	100	3.60E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.76E+5	B	5.0	3.57E+5	C	20	3.37E+5	D	50	3.05E+5	E	100	3.21E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.09E+5	B	5.0	3.84E+5	C	20	3.62E+5	D	50	3.67E+5	E	100	3.48E+5
	F	200	3.46E+5												
Dieldrin	A	2.0	3.90E+5	B	5.0	3.67E+5	C	20	3.55E+5	D	50	3.69E+5	E	100	3.56E+5
	F	200	3.56E+5												

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Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.60E+5	B	5.0	3.40E+5	C	20	3.37E+5	D	50	3.56E+5	E	100	3.45E+5
	F	200	3.47E+5												
Endrin	A	2.0	3.41E+5	B	5.0	3.18E+5	C	20	3.15E+5	D	50	3.25E+5	E	100	3.13E+5
	F	200	3.14E+5												
Endosulfan II	A	2.0	3.67E+5	B	5.0	3.51E+5	C	20	3.31E+5	D	50	3.11E+5	E	100	3.10E+5
	F	200	2.77E+5												
4,4'-DDD	A	2.0	3.13E+5	B	5.0	2.86E+5	C	20	2.80E+5	D	50	2.96E+5	E	100	2.84E+5
	F	200	2.87E+5												
Endrin Aldehyde	A	2.0	3.27E+5	B	5.0	3.09E+5	C	20	2.88E+5	D	50	2.82E+5	E	100	2.63E+5
	F	200	2.52E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.85E+5	B	5.0	3.58E+5	C	20	3.35E+5	D	50	3.31E+5	E	100	3.11E+5
	F	200	3.01E+5												
4,4'-DDT	A	2.0	3.38E+5	B	5.0	3.18E+5	C	20	3.07E+5	D	50	3.19E+5	E	100	3.07E+5
	F	200	3.08E+5												
Endrin Ketone	A	2.0	4.35E+5	B	5.0	4.10E+5	C	20	3.91E+5	D	50	3.90E+5	E	100	3.66E+5
	F	200	3.53E+5												
Methoxychlor	A	2.0	2.07E+5	B	5.0	1.94E+5	C	20	1.78E+5	D	50	1.75E+5	E	100	1.61E+5
	F	200	1.54E+5												
Toxaphene {1}															
													Y	100	7580
	Z	250	7950	AA	500	7510	AB	1000	7200	AC	2000	7220	AD	5000	7380

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	5840
	Z	250	5790	AA	500	5400	AB	1000	5210	AC	2000	5450	AD	5000	5390
Toxaphene {3}															
													Y	100	3090
	Z	250	3260	AA	500	3030	AB	1000	2850	AC	2000	2720	AD	5000	2750
Toxaphene {4}															
													Y	100	3700
	Z	250	3980	AA	500	3560	AB	1000	3850	AC	2000	3770	AD	5000	4030
Toxaphene {5}															
													Y	100	3310
	Z	250	3460	AA	500	3390	AB	1000	3100	AC	2000	3150	AD	5000	3170
Toxaphene {6}															
													Y	100	8040
	Z	250	8860	AA	500	8380	AB	1000	8010	AC	2000	8070	AD	5000	8520

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.7		≤ 20
alpha-BHC	MS	AverageRF	% RSD	6.3		≤ 20
beta-BHC	MS	AverageRF	% RSD	9.1		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	3.2		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.0		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.5		≤ 20
Aldrin	MS	AverageRF	% RSD	2.6		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	7.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	4.5		≤ 20
Endosulfan I	MS	AverageRF	% RSD	8.3		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.4		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.7		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	2.6		≤ 20
Endrin	MS	AverageRF	% RSD	3.3		≤ 20
Endosulfan II	MS	AverageRF	% RSD	10.0		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.1		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	9.7		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	9.2		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.9		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	7.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	11.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	3.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	7.1		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.6		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D\0309F050c.d
J:\GC23\DATA\030907\0309F064.D\0309F064c.d
J:\GC23\DATA\030907\0309F078.D\0309F078c.d
J:\GC23\DATA\031207\0312F010.D\0312F010c.d
J:\GC23\DATA\031207\0312F017.D\0312F017c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	38	444000	419000	-6	NA	± 15 %	AverageRF
beta-BHC	40	36	205000	184000	-10	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	37	422000	393000	-7	NA	± 15 %	AverageRF
delta-BHC	40	41	385000	392000	2	NA	± 15 %	AverageRF
Heptachlor	40	37	423000	391000	-8	NA	± 15 %	AverageRF
Aldrin	40	38	379000	356000	-6	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	36	373000	340000	-9	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	376000	344000	-8	NA	± 15 %	AverageRF
Endosulfan I	40	38	335000	315000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	40	36	369000	336000	-9	NA	± 15 %	AverageRF
Dieldrin	40	36	365000	327000	-11	NA	± 15 %	AverageRF
4,4'-DDE	40	37	347000	322000	-7	NA	± 15 %	AverageRF
Endrin	40	38	321000	303000	-6	NA	± 15 %	AverageRF
Endosulfan II	40	38	324000	307000	-6	NA	± 15 %	AverageRF
4,4'-DDD	40	36	291000	263000	-10	NA	± 15 %	AverageRF
Endrin Aldehyde	40	37	287000	266000	-7	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	36	337000	305000	-9	NA	± 15 %	AverageRF
4,4'-DDT	40	37	316000	294000	-7	NA	± 15 %	AverageRF
Endrin Ketone	40	38	391000	372000	-5	NA	± 15 %	AverageRF
Methoxychlor	40	38	178000	168000	-6	NA	± 15 %	AverageRF
Toxaphene {1}	1000	870	7470	6510	-13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	830	5510	4580	-17	NA	± 100 %	AverageRF
Toxaphene {3}	1000	750	2950	2210	-25	NA	± 100 %	AverageRF
Toxaphene {4}	1000	740	3810	2810	-26	NA	± 100 %	AverageRF
Toxaphene {5}	1000	820	3260	2690	-18	NA	± 100 %	AverageRF
Toxaphene {6}	1000	840	8310	6980	-16	NA	± 100 %	AverageRF
Toxaphene	1000	810	NA	NA	NA	19 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Sequence Name: C:\GC23\SEQUENCE\030907.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\030907\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	100	0309F001	PESTA	PRIMER
3	IB	100	0309F002	PESTA	PRIMER
4	IB	100	0309F003	PESTA	PRIMER
5	IB	100	0309F004	PESTA	PRIMER
6	IB	100	0309F005	PESTA	PRIMER
7	IB	100	0309F006	PESTA	PRIMER
8	IB	100	0309F007	PESTA	PRIMER
9	IB	100	0309F008	PESTA	PRIMER
10	IB	100	0309F009	PESTA	PRIMER
11	IB	100	0309F010	PESTA	PRIMER
12	IB	100	0309F011	PESTA	PRIMER
13	IB	100	0309F012	PESTA	PRIMER
14	IB	100	0309F013	PESTA	PRIMER
15	IB	100	0309F014	PESTA	PRIMER
16	IB	100	0309F015	PESTA	PRIMER
17	IB	100	0309F016	PESTA	PRIMER
18	IB	100	0309F017	PESTA	PRIMER
19	IB	100	0309F018	PESTA	PRIMER
20	IB	100	0309F019	PESTA	PRIMER
21	IB	100	0309F020	PESTA	PRIMER
22	IB	100	0309F021	PESTA	PRIMER
23	IB	100	0309F022	PESTA	PRIMER
24	IB	100	0309F023	PESTA	PRIMER
25	IB	100	0309F024	PESTA	PRIMER
26	IB	100	0309F025	PESTA	PRIMER
27	IB	1	0309F026	PESTA	PRIMER
28	IB	1	0309F027	PESTA	PRIMER
29	IB	1	0309F028	PESTA	PRIMER
30	IB	1	0309F029	PESTA	PRIMER
31	IB	1	0309F030	PESTA	PRIMER
32	IB	1	0309F031	PESTA	PRIMER
33	IB	1	0309F032	PESTA	PRIMER
34	IB	1	0309F033	PESTA	PRIMER
35	IB	1	0309F034	PESTA	PRIMER
36	IB	1	0309F035	PESTA	PRIMER
37	IB	1	0309F036	PESTA	PRIMER
38	IB	1	0309F037	PESTA	PRIMER
39	IB	1	0309F038	PESTA	PRIMER
40	IB	1	0309F039	PESTA	PRIMER
41	IB	1	0309F040	PESTA	HEX
42	IB	1	0309F041	PESTA	HEX
43	IB	2	0309F042	PESTA	HEX

Sequence Name: C:\GC23\SEQUENCE\030907.S

Line	Type	Vial	DataFile	Method	Sample Name
44	PEM	3	0309F043	PESTA	PEM @ 50-100ppb GCPS5-82D
45	ICAL	4	0309F044	PESTA	8081 @ 2ppb GCPS5-81E
46	ICAL	5	0309F045	PESTA	8081 @ 5ppb GCPS5-81E
47	ICAL	6	0309F046	PESTA	8081 @ 20ppb GCPS5-81E
48	ICAL	7	0309F047	PESTA	8081 @ 50ppb GCPS5-88A
49	ICAL	8	0309F048	PESTA	8081 @ 100ppb GCPS5-81E
50	ICAL	9	0309F049	PESTA	8081 @ 200ppb GCPS5-81E
51	ICV	10	0309F050	PESTA	8081 ICV @ 40ppb GCPS5-88K
52	ICAL	11	0309F051	PESTA	TOX @ 100ppb GCPS5-79e NR
53	ICAL	12	0309F052	PESTA	TOX @ 250ppb GCPS5-79e
54	ICAL	13	0309F053	PESTA	TOX @ 500ppb GCPS5-79e
55	ICAL	14	0309F054	PESTA	TOX @ 1000ppb GCPS5-83G
56	ICAL	15	0309F055	PESTA	TOX @ 2000ppb GCPS5-79e
57	ICAL	16	0309F056	PESTA	TOX @ 5000ppb GCPS5-79e
58	ICV	17	0309F057	PESTA	TOX ICV @ 1000ppb GCPS5-79b NR
59	ICAL	18	0309F058	PESTA	CHLOR@ 25PPB GCPS5-86F
60	ICAL	19	0309F059	PESTA	CHLOR@ 50PPB GCPS5-86F
61	ICAL	20	0309F060	PESTA	CHLOR@ 100PPB GCPS5-86F
62	ICAL	21	0309F061	PESTA	CHLOR@ 500PPB GCPS5-86F
63	ICAL	22	0309F062	PESTA	CHLOR@ 1000PPB GCPS5-86F
64	ICAL	23	0309F063	PESTA	CHLOR@ 2000PPB GCPS5-86F
65	ICV	24	0309F064	PESTA	CHLOR ICV @ 800ppb GCPS5-76H
66	ICAL	25	0309F065	PESTA	MISC @ 2ppb GCPS5-88M NR
67	ICAL	26	0309F066	PESTA	MISC @ 5ppb GCPS5-88M
68	ICAL	27	0309F067	PESTA	MISC @ 20ppb GCPS5-88M
69	ICAL	28	0309F068	PESTA	MISC @ 50ppb GCPS5-88M
70	ICAL	29	0309F069	PESTA	MISC @ 100ppb GCPS5-88M
71	ICAL	30	0309F070	PESTA	MISC @ 200ppb GCPS5-88M
72	ICV	31	0309F071	PESTA	MISC ICV @ 40ppb GCPS5-80P NR
73	ICAL	32	0309F072	PESTA	2,4'-DDx @ 2ppb GCPS5-82I
74	ICAL	33	0309F073	PESTA	2,4'-DDx @ 5ppb GCPS5-82I
75	ICAL	34	0309F074	PESTA	2,4'-DDx @ 20ppb GCPS5-82I
76	ICAL	35	0309F075	PESTA	2,4'-DDx @ 50ppb GCPS5-82E
77	ICAL	36	0309F076	PESTA	2,4'-DDx @ 100ppb GCPS5-82I
78	ICAL	37	0309F077	PESTA	2,4'-DDx @ 200ppb GCPS5-82I
79	ICV	38	0309F078	PESTA	2,4DDx ICV @ 40ppb GCPS5-85P
80	ICV	17	0309F079	PESTA	TOX ICV @ 1000ppb GCPS5-79b NR
81					

Sequence Name: C:\GC23\SEQUENCE\031207.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\030907\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6/26

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	2	0312F002	PESTA	HEX
3	PEM	3	0312F003	PESTA	PEM @ 50-100ppb GCPS5-82D
4	ICAL	4	0312F004	PESTA	MISC @ 2ppb GCPS5-88M
5	ICAL	5	0312F005	PESTA	MISC @ 5ppb GCPS5-88M
6	ICAL	6	0312F006	PESTA	MISC @ 20ppb GCPS5-88M
7	ICAL	7	0312F007	PESTA	MISC @ 50ppb GCPS5-88M
8	ICAL	8	0312F008	PESTA	MISC @ 100ppb GCPS5-88M
9	ICAL	9	0312F009	PESTA	MISC @ 200ppb GCPS5-88M
10	ICV	10	0312F010	PESTA	MISC ICV @ 40ppb GCPS5-80P
11	ICAL	11	0312F011	PESTA	TOX @ 100ppb GCPS5-87E
12	ICAL	12	0312F012	PESTA	TOX @ 250ppb GCPS5-87E
13	ICAL	13	0312F013	PESTA	TOX @ 500ppb GCPS5-87E
14	ICAL	14	0312F014	PESTA	TOX @ 1000ppb GCPS5-89E
15	ICAL	15	0312F015	PESTA	TOX @ 2000ppb GCPS5-89E
16	ICAL	16	0312F016	PESTA	TOX @ 5000ppb GCPS5-89E
17	ICV	17	0312F017	PESTA	TOX @ 1000ppb GCPS5-89D

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F042.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\030907\0309F042.D\ECD2B.CH
Acq On : 10 Mar 2007 11:07 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

3/12/07

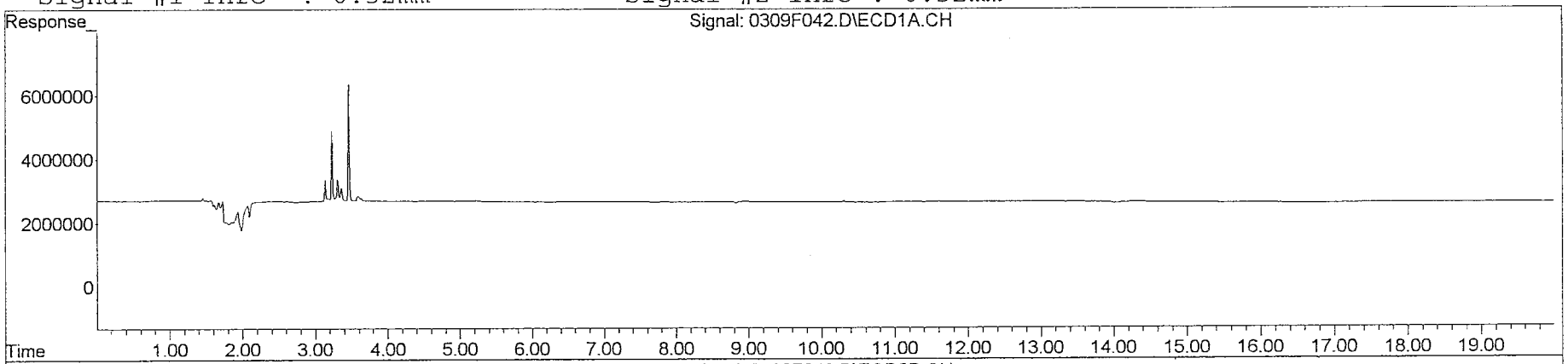
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

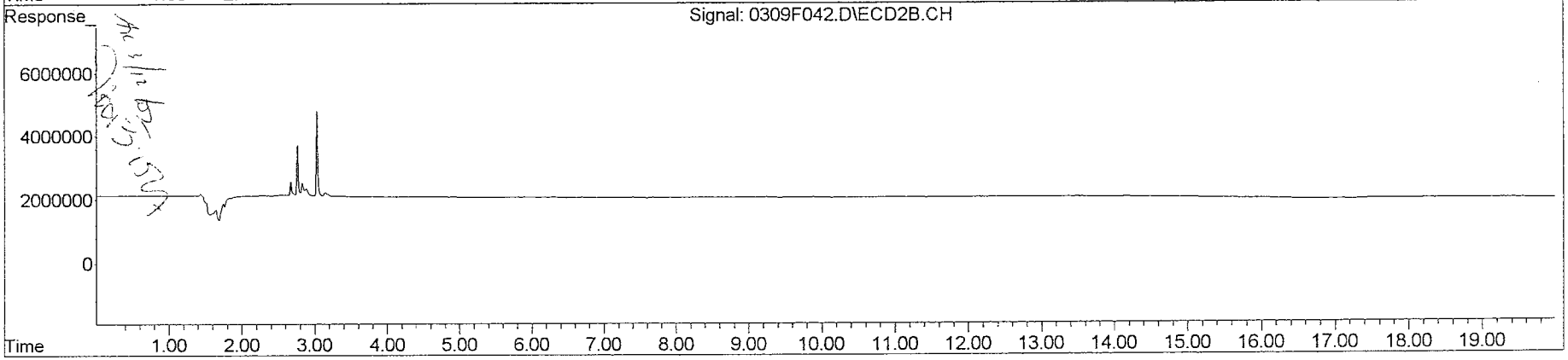
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F042.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\030907\0309F042.D\ECD2B.CH
Acq On : 10 Mar 2007 11:07 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F043.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\030907\0309F043.D\ECD2B.CH
Acq On : 10 Mar 2007 11:33 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18:10 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.58	11.48	366424	543054	1.102	1.563	#
16)	Endrin	13.14	12.13	14384020	16468108	49.075	51.294	
18)	4,4'-DDD	13.36	12.34	313058	324213	1.187	1.114	
19)	Endrin Aldehyde	13.71	12.88	358948	374478	1.359	1.306	
21)	4,4'-DDT	13.82	12.75	27232747	32418784	98.541	102.584	
22)	Endrin Ketone	14.75	14.06	485472	742601	1.483	1.900	#

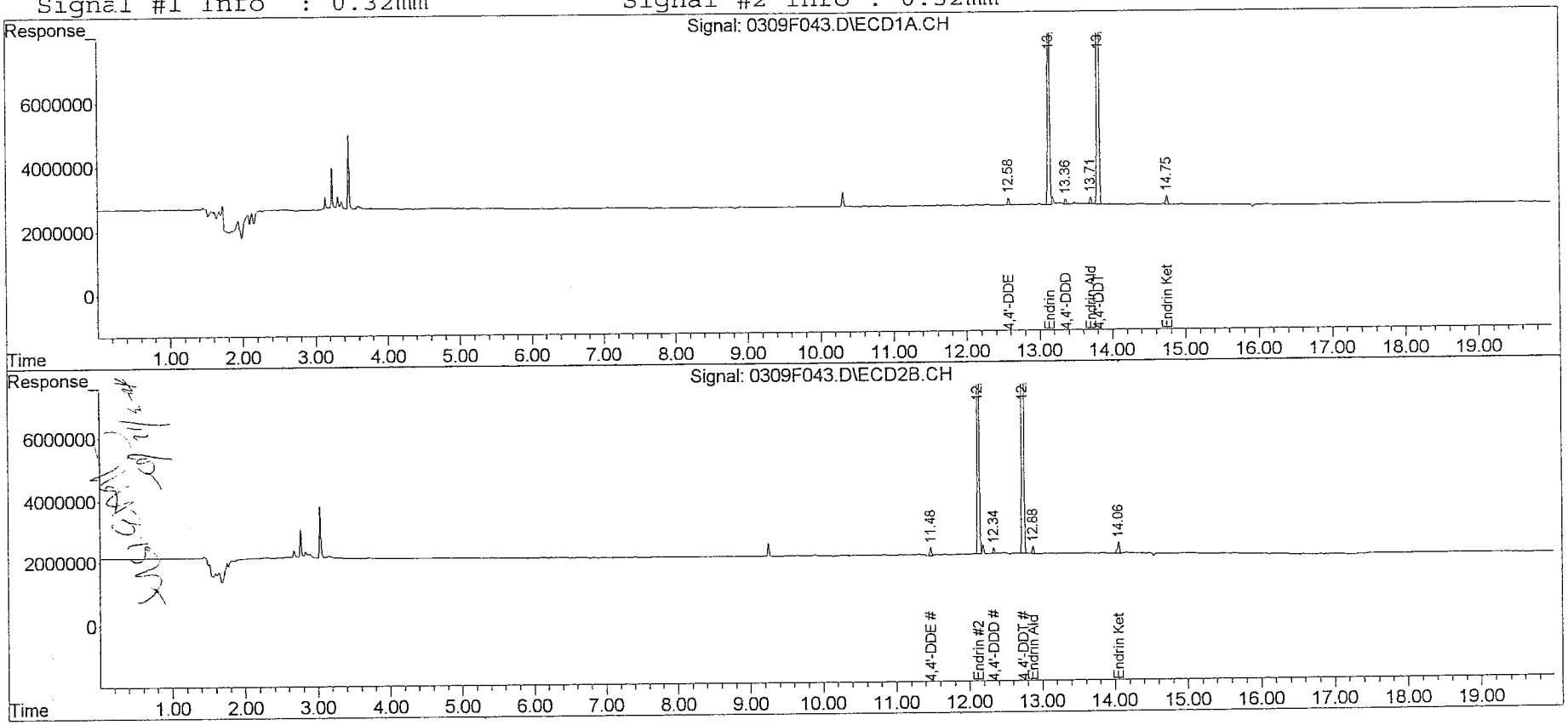
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F043.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\030907\0309F043.D\ECD2B.CH
Acq On : 10 Mar 2007 11:33 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Respcnse via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:50:58 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	814464	723999	2.125	2.094
24)	s	Decachlorobiphen	16.91	15.66	733894	931092	2.372	2.416
		Target Compounds						
2)		alpha-BHC	9.05	8.13	922387	860177	1.875	1.864
3)		Hexachlorobenzen	9.18	7.96	980068	908146	2.250	2.255
4)		beta-BHC	10.06	9.15	493663	460330	2.218	2.122
5)		gamma-BHC (Linda	9.59	8.74	875490	845169	1.891	1.933m
6)		delta-BHC	10.47	9.59	818616	775004	1.967	1.943
7)		Heptachlor	10.56	9.30	957818	915694	2.100m	2.067
8)		Aldrin	11.07	9.79	796491	791227	1.998	2.004
9)		Isodrin	11.60	10.43	734106	707889	2.208	2.121
10)		Heptachlor Epoxi	11.77	10.64	834482	836952	2.139	2.161
11)		gamma-Chlordane	12.26	11.00	809533	807143	2.094m	2.070m
12)		Endosulfan I	12.39	11.22	743786	752576	2.187m	2.160
13)		alpha-Chlordane	12.34	11.15	807651	818525	2.148	2.139
14)		Dieldrin	12.79	11.66	730933	779390	2.023	2.041
15)		4,4'-DDE	12.58	11.47	683252	720556	1.967	1.979m
16)		Endrin	13.14	12.13	612263	682174	1.974	2.005
17)		Endosulfan II	13.54	12.53	665695	733990	2.143m	2.182
18)		4,4'-DDD	13.36	12.33	514741	626011	1.870m	2.078
19)		Endrin Aldehyde	13.71	12.88	592370	653890	2.202	2.210m
20)		Endosulfan Sulfa	14.13	13.18	651770	770457	2.176	2.213
21)		4,4'-DDT	13.81	12.74	574153	676680	2.016	2.060
22)		Endrin Ketone	14.75	14.06	700562	870564	2.118	2.168
23)		Methoxychlor	14.47	13.75	339162	414559	2.091	2.201

AK 3/12/07
W0315VX

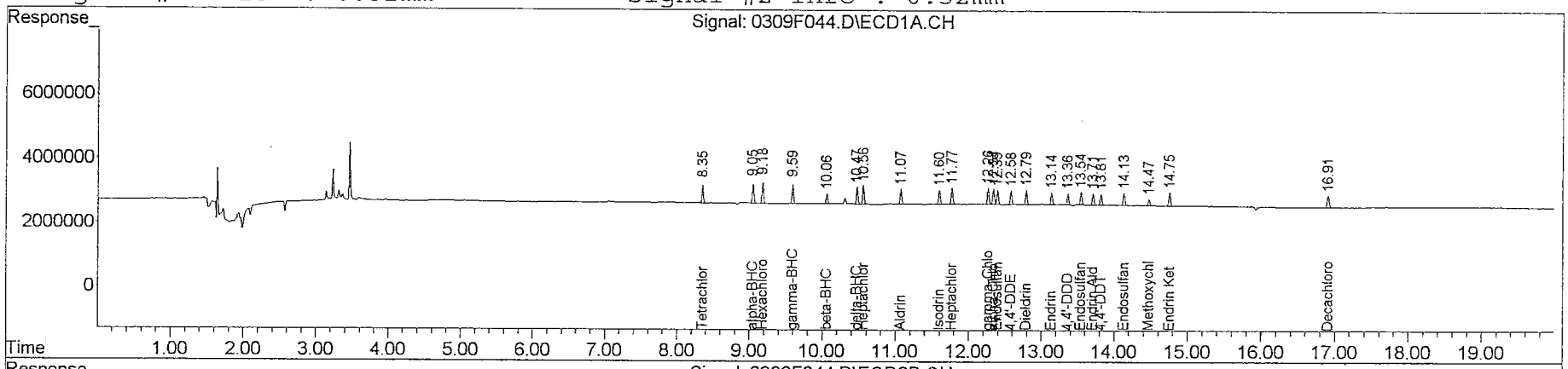
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

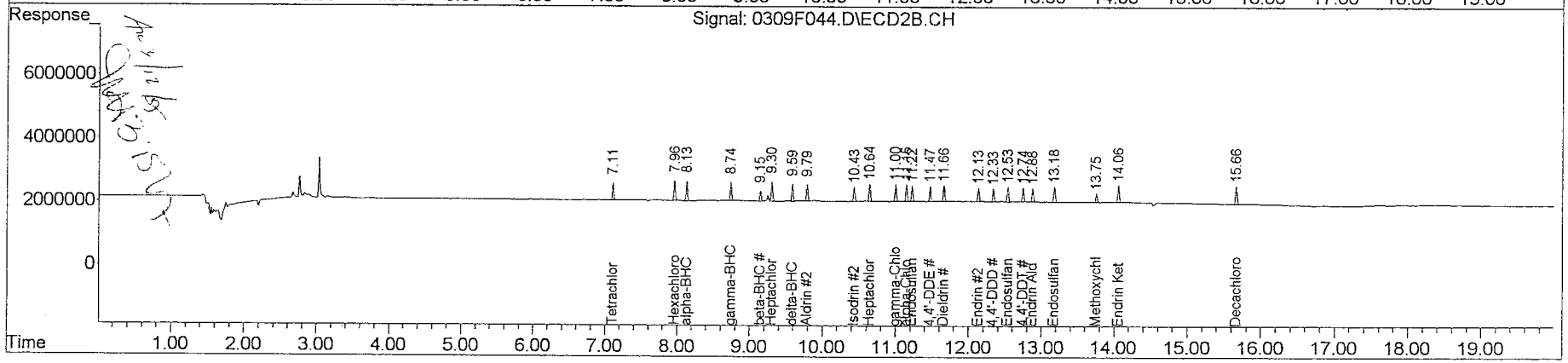
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:57 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



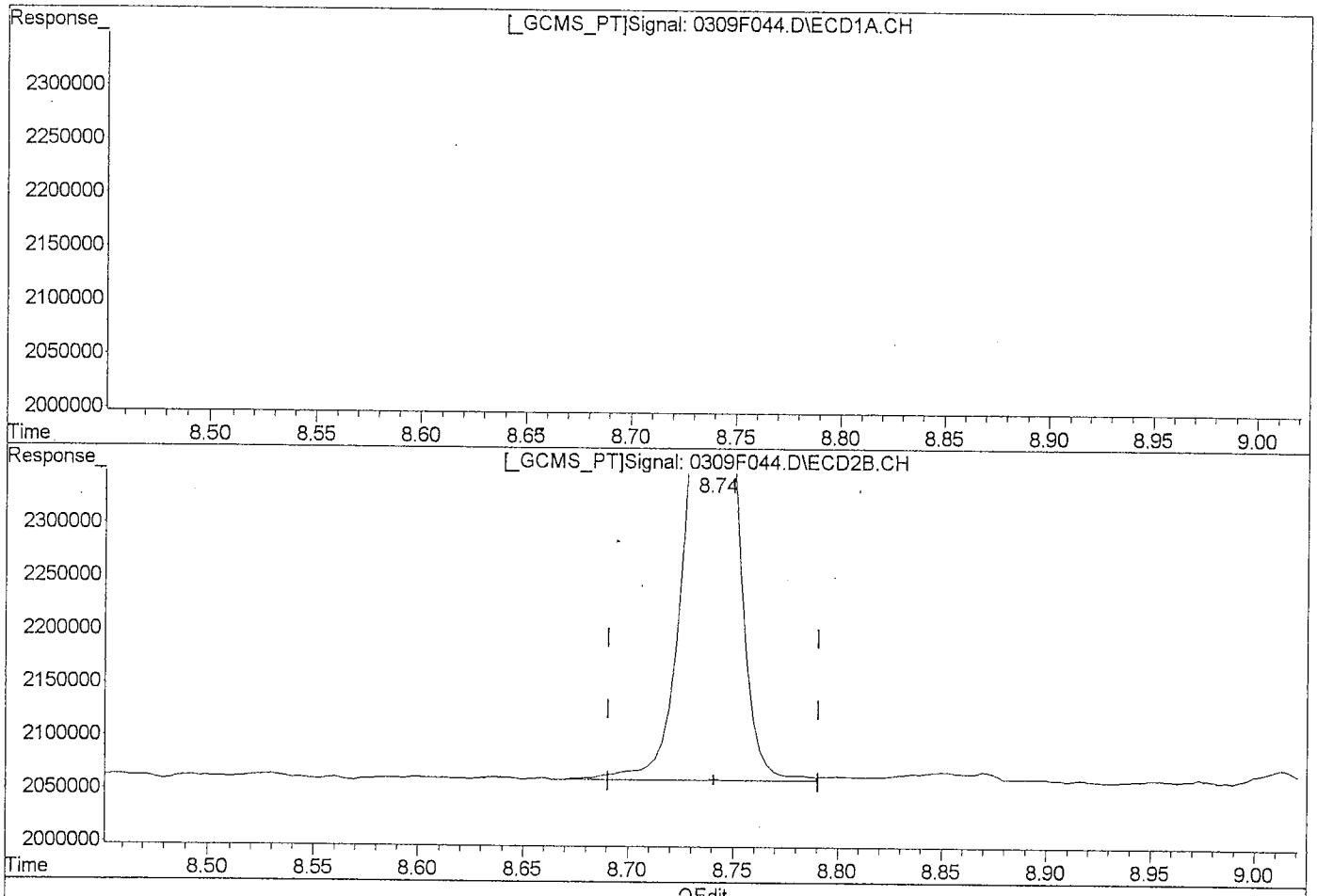


627

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(5) gamma-BHC (Lindane)

9.59min 1.891ug/L

response 875490

(5) gamma-BHC (Lindane) #2

8.74min 1.996ug/L

response 872771

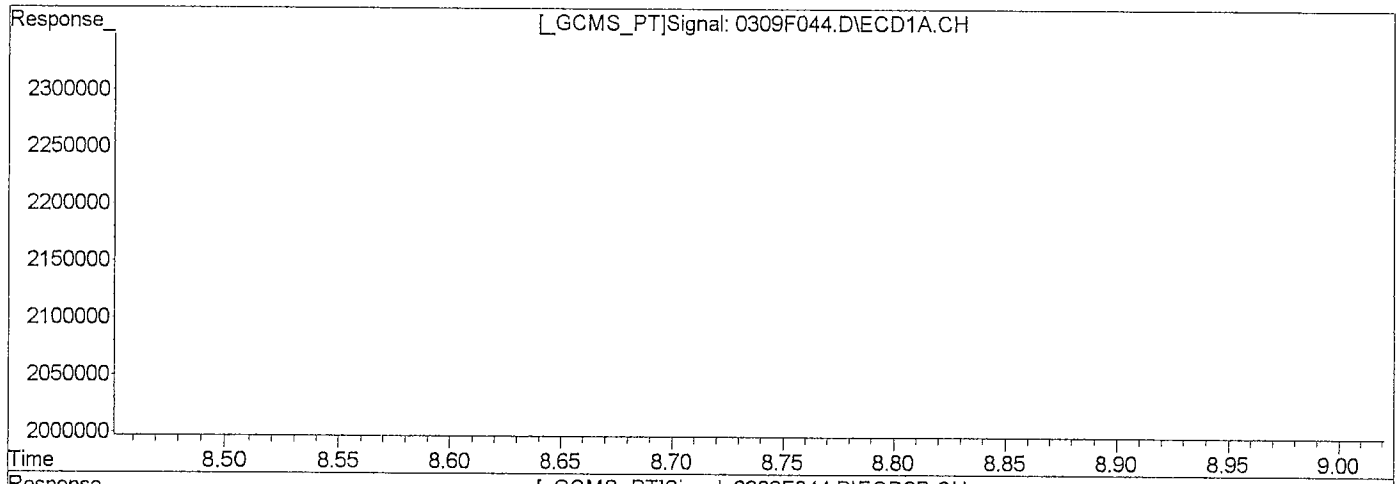
(+) = Expected Retention Time

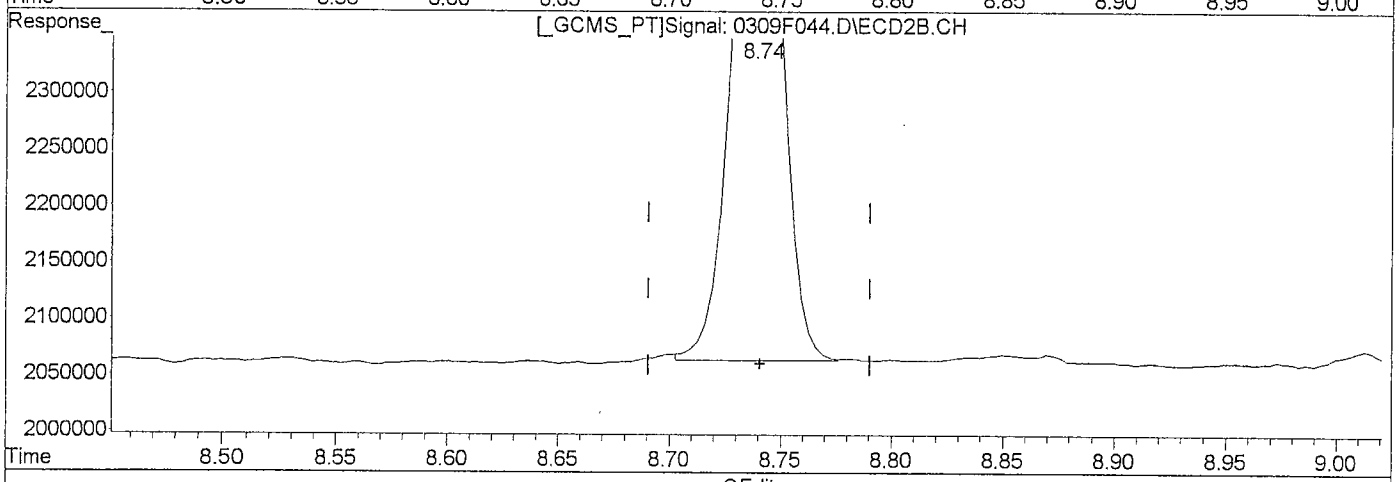
0309F044.D 030907-8081.M Mon Mar 12 07:54:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





(5) gamma-BHC (Lindane)

9.59min 1.891ug/L

response 875490

(5) gamma-BHC (Lindane) #2

8.74min 1.933ug/L m

response 845169

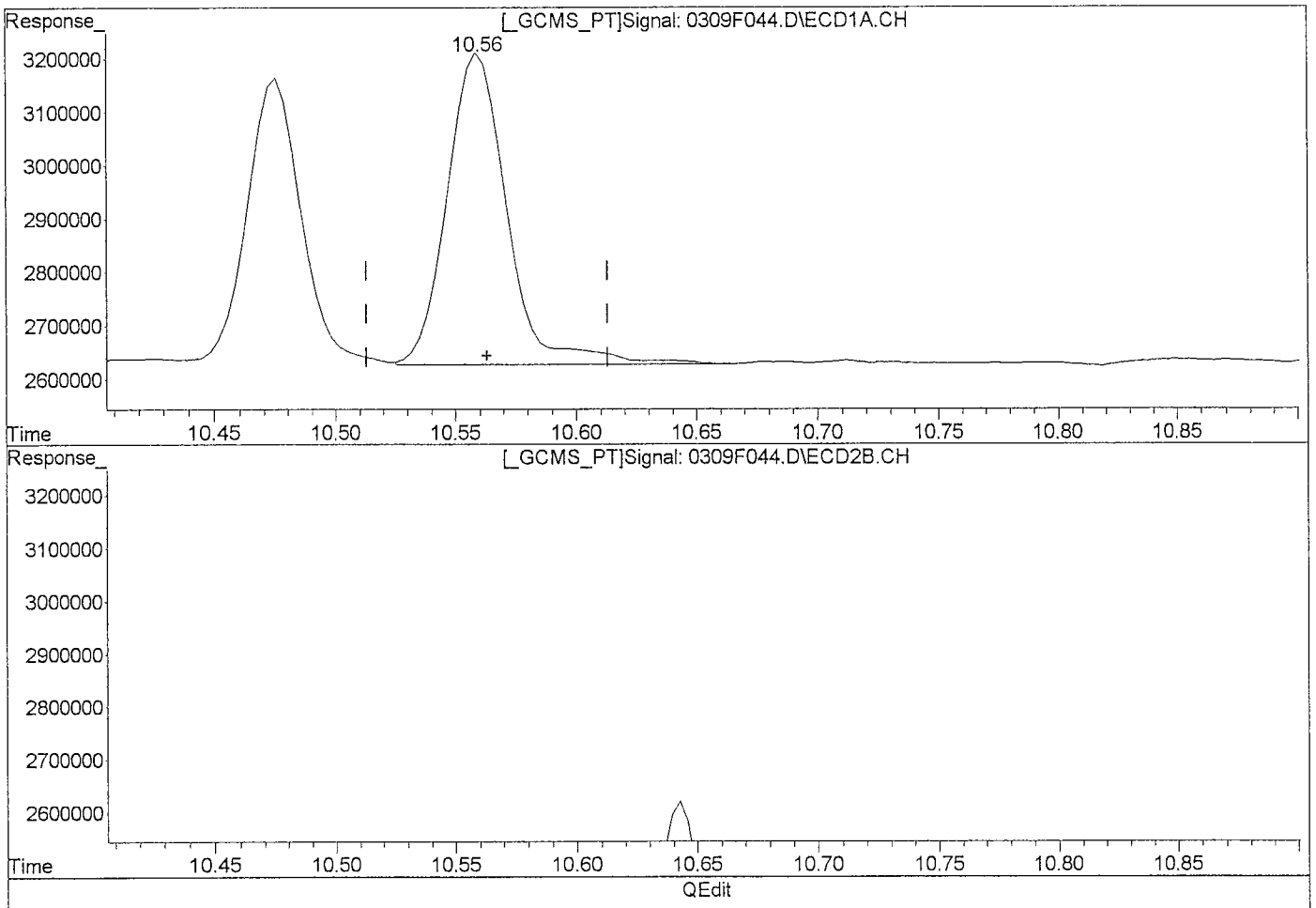
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:55:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(7) Heptachlor

10.56min 2.205ug/L

response 1005697

(7) Heptachlor #2

9.30min 2.067ug/L

response 915694

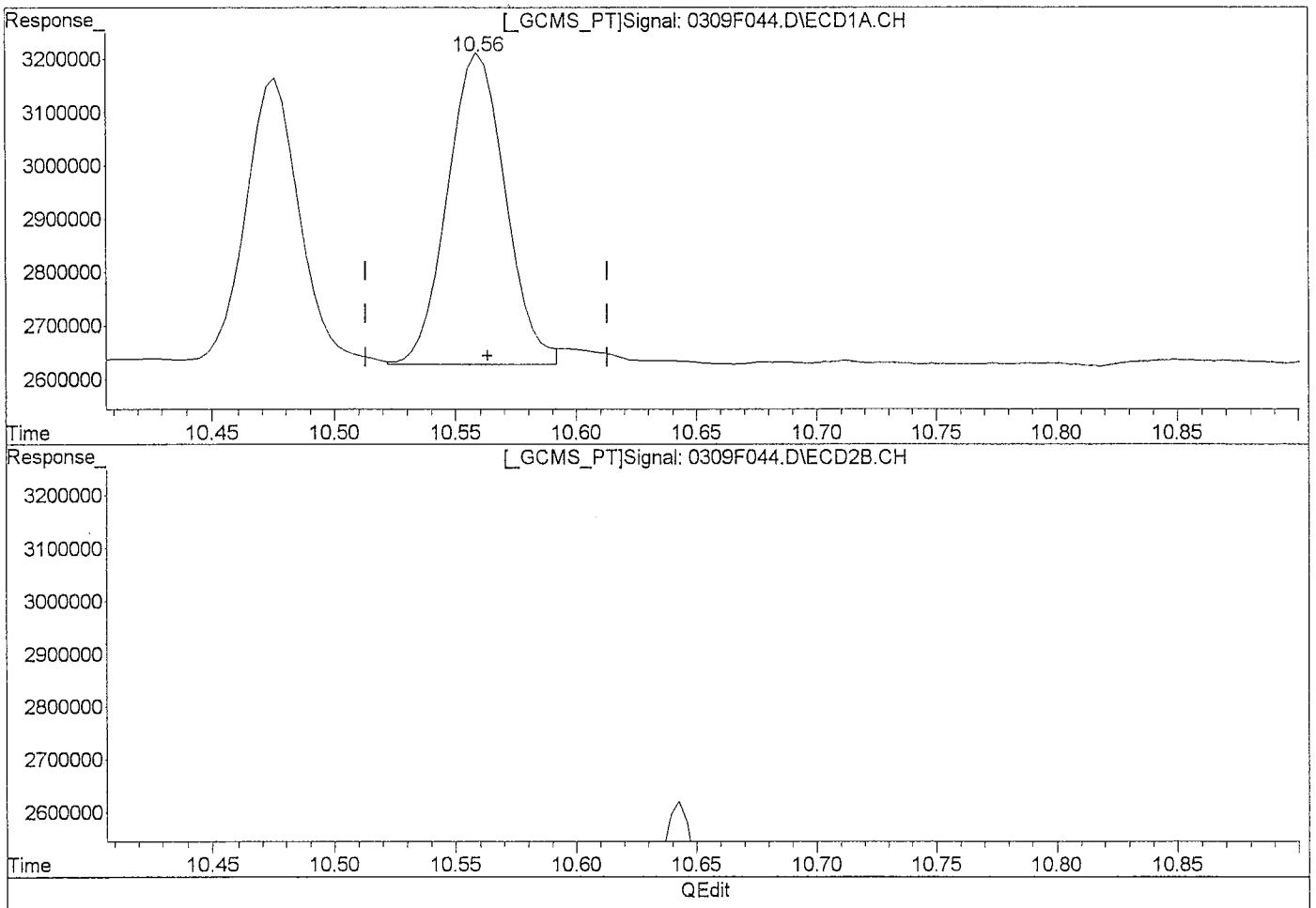
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:55:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(7) Heptachlor

10.56min 2.100ug/L m

response 957818

(7) Heptachlor #2

9.30min 2.067ug/L

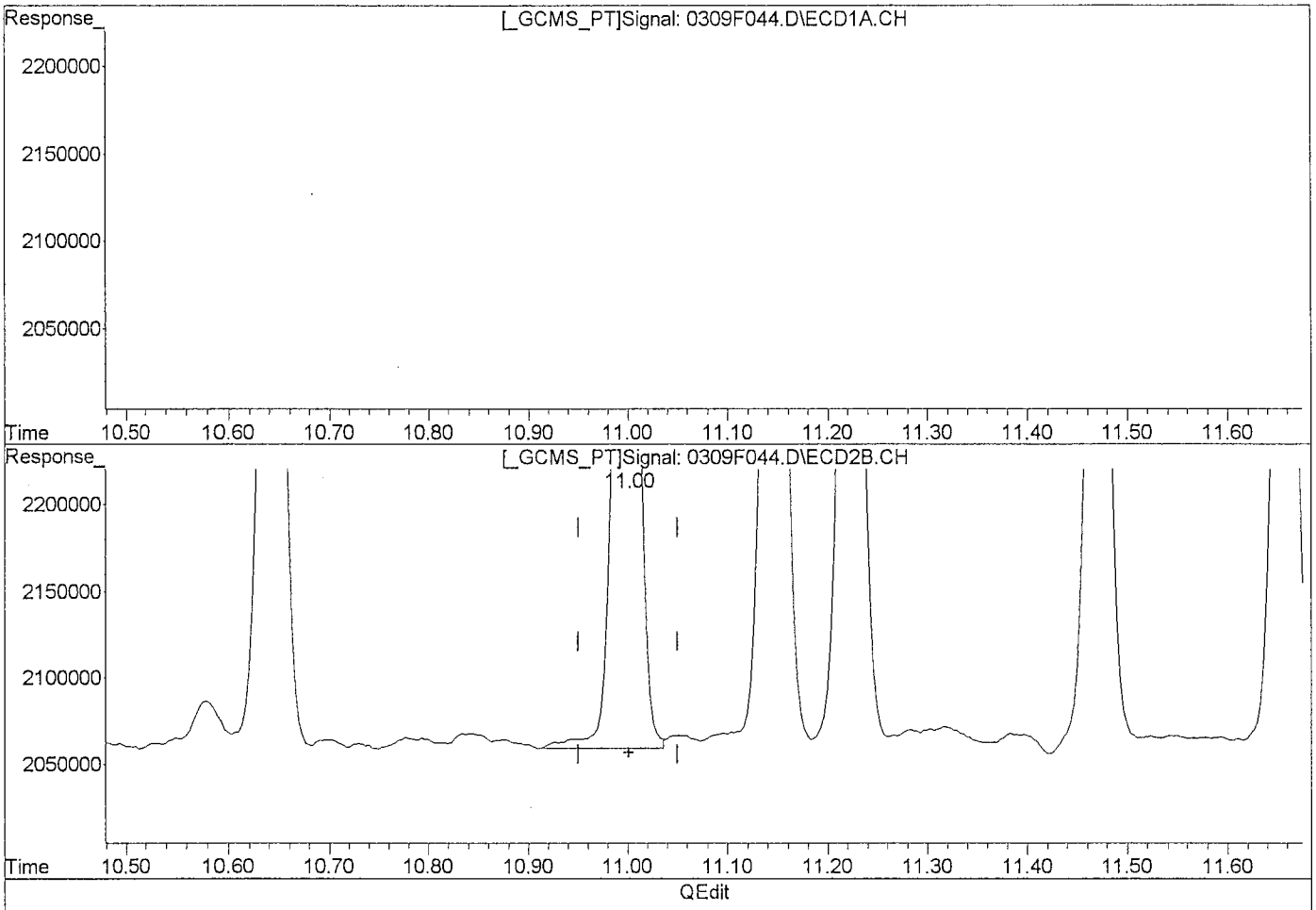
response 915694

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:55:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.151ug/L

response 838787

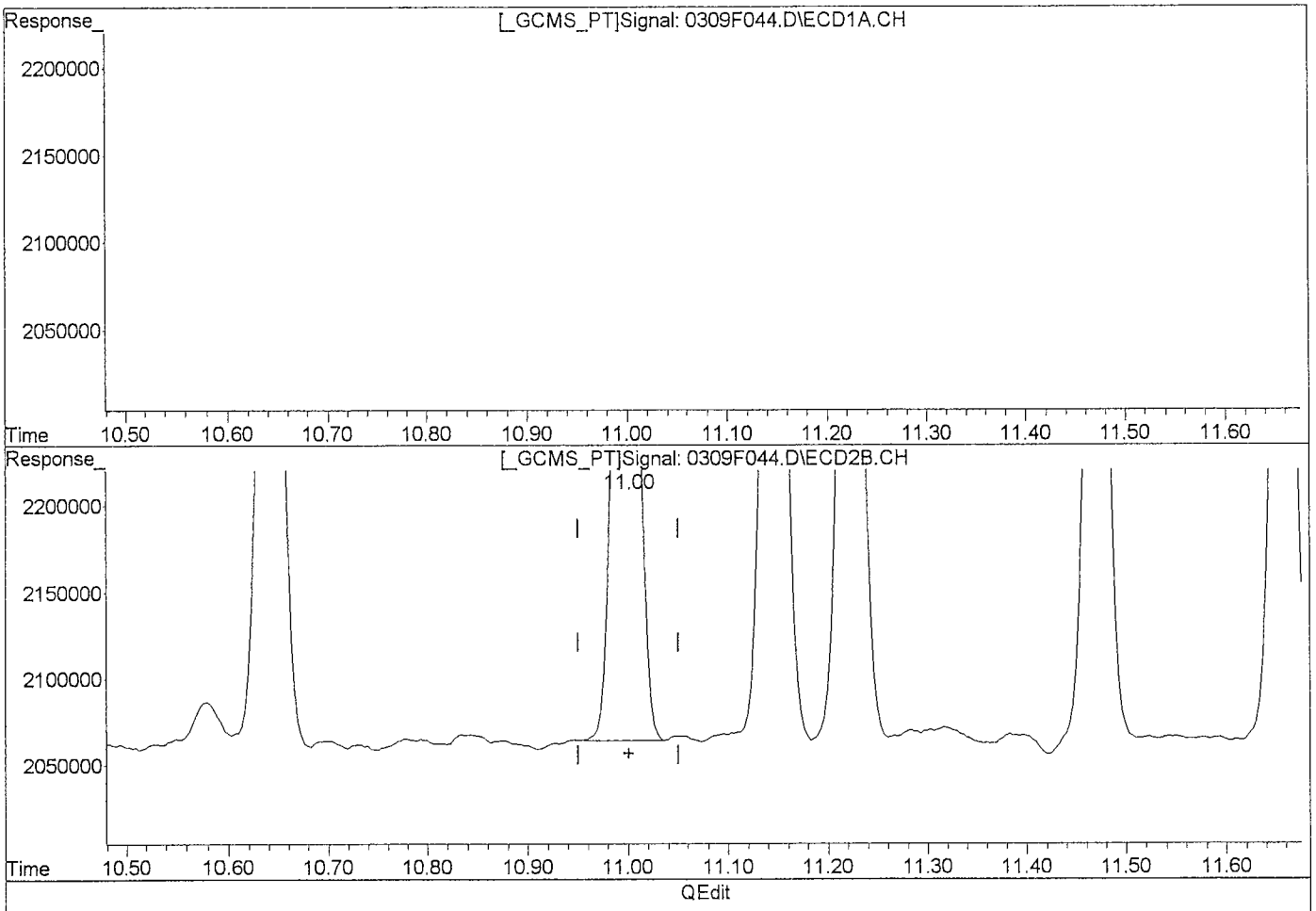
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:55:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

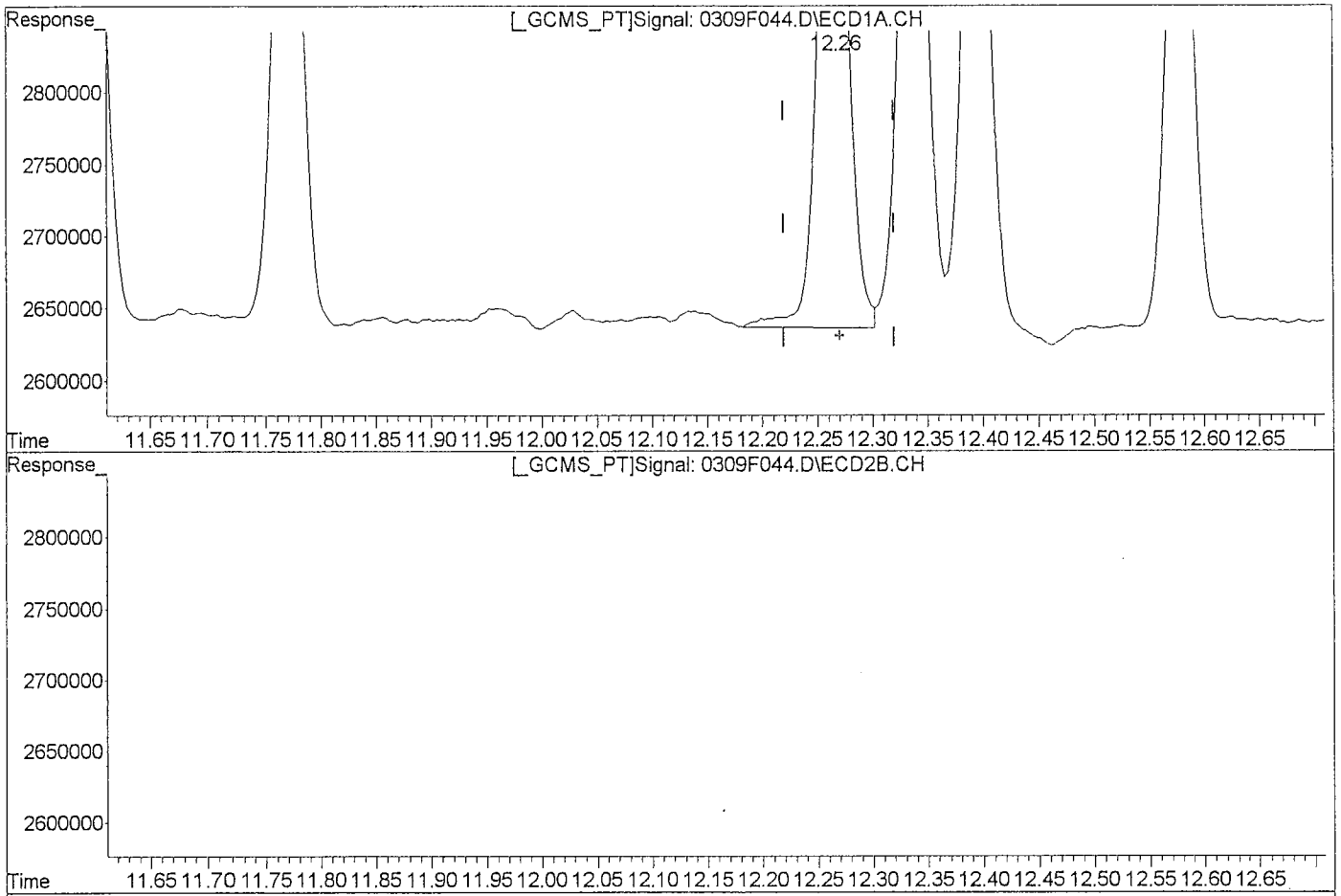
response 807143

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

response 807143

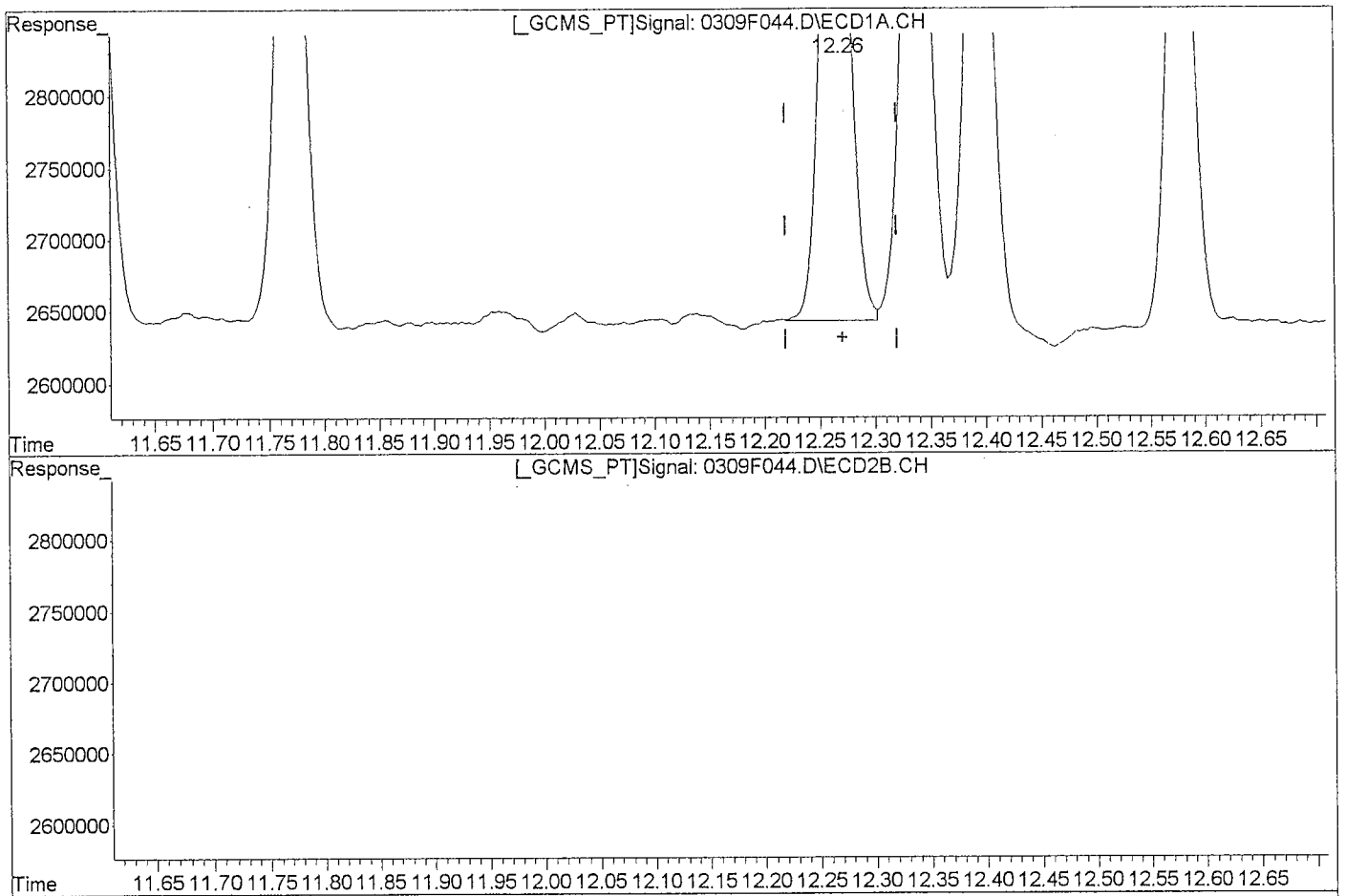
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:56:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(11) gamma-Chlordane

12.26min 2.094ug/L m

response 809533

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

response 807143

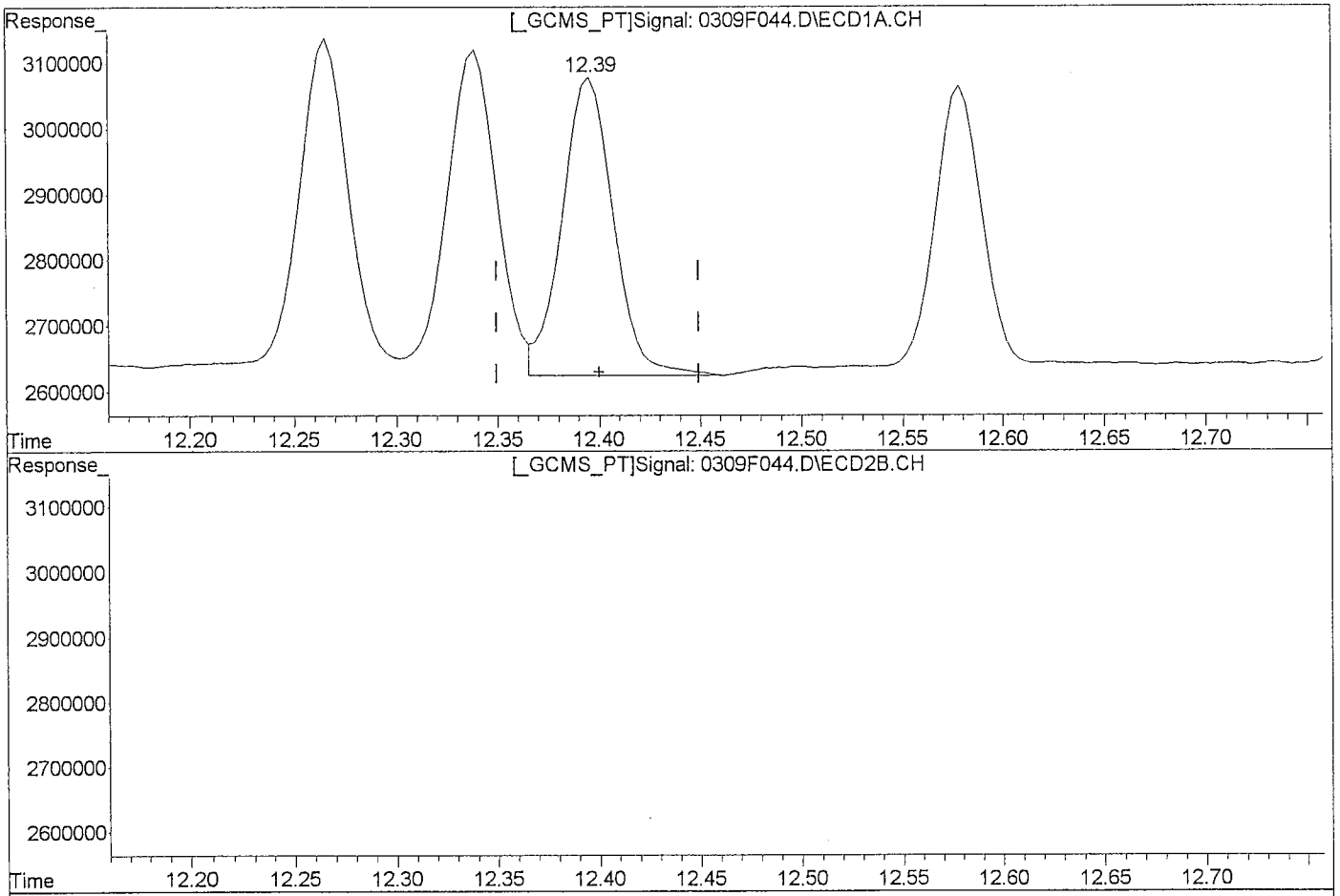
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:56:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(12) Endosulfan I

12.39min 2.327ug/L

response 791437

(12) Endosulfan I #2

11.22min 2.160ug/L

response 752576

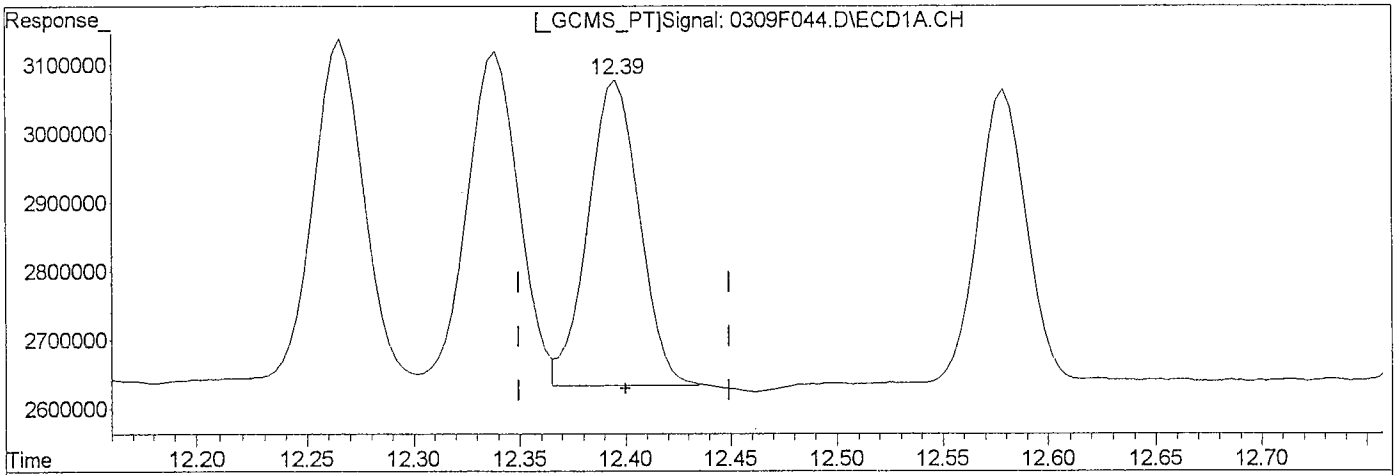
(+) = Expected Retention Time

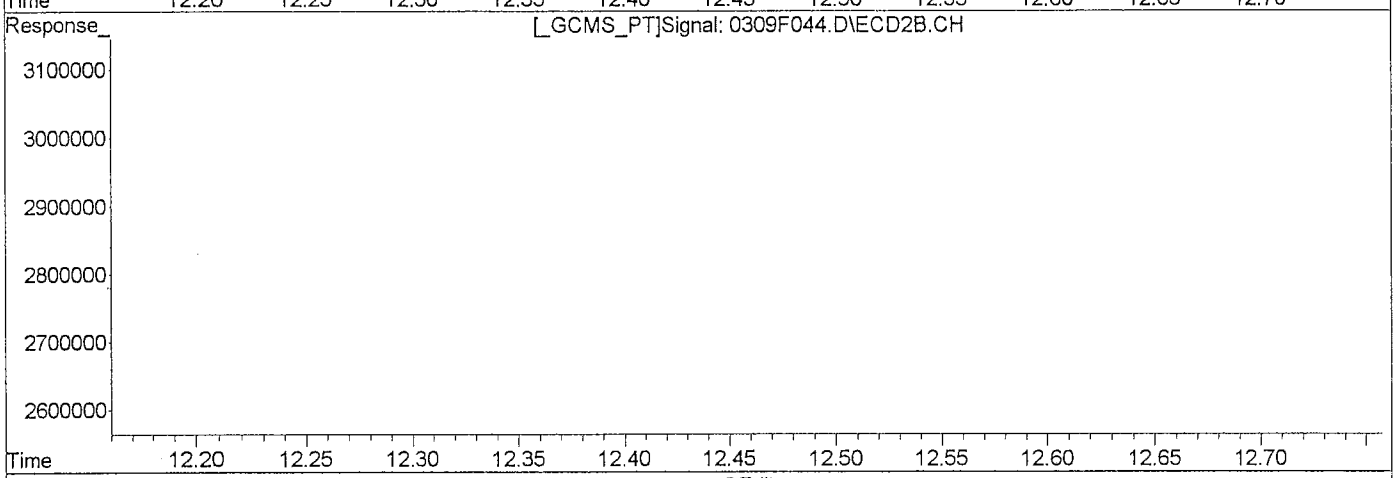
0309F044.D 030907-8081.M Mon Mar 12 07:56:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(12) Endosulfan I

12.39min 2.187ug/L m

response 743786

(12) Endosulfan I #2

11.22min 2.160ug/L

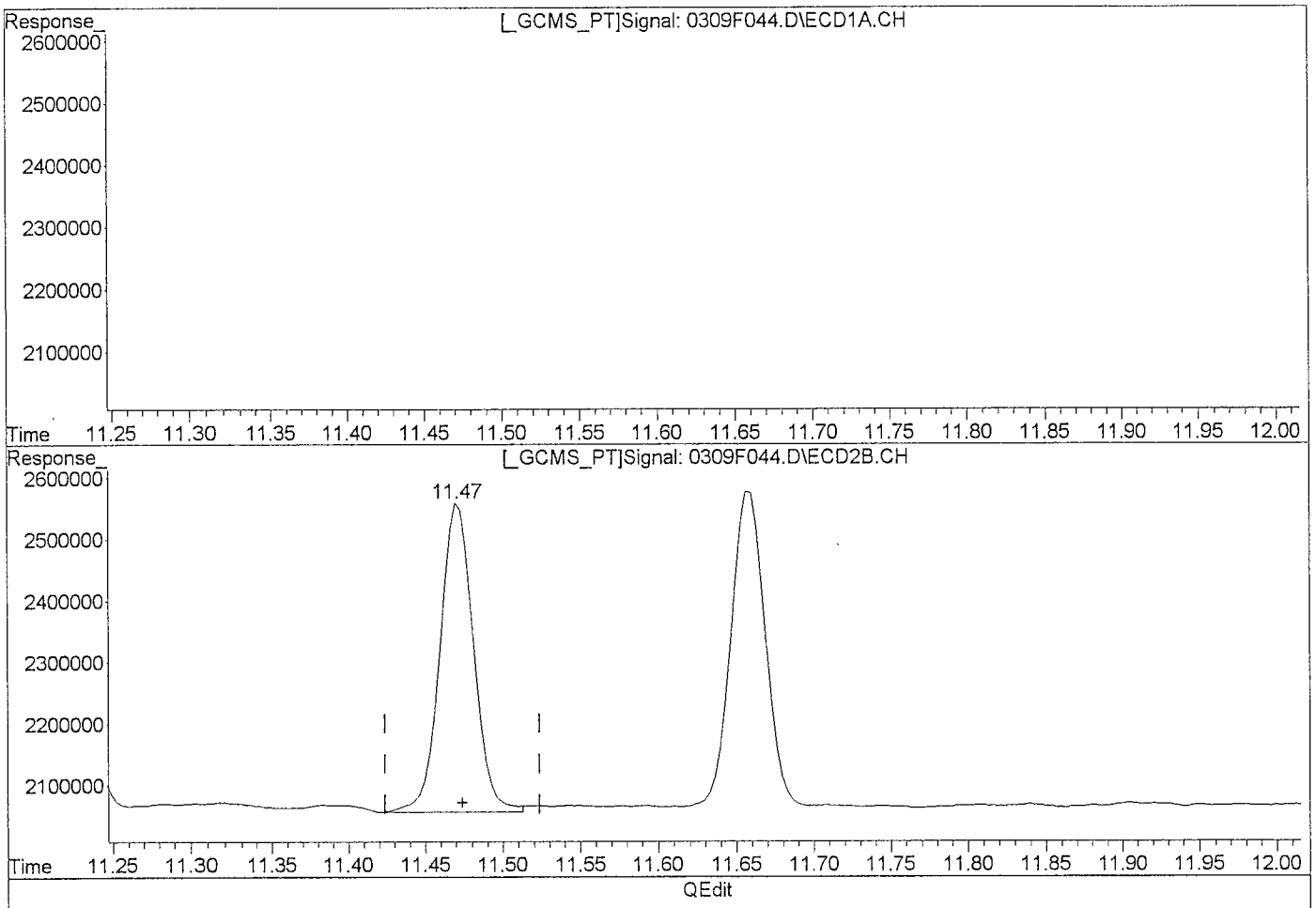
response 752576

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 1.967ug/L

response 683252

(15) 4,4'-DDE #2

11.47min 2.095ug/L

response 762620

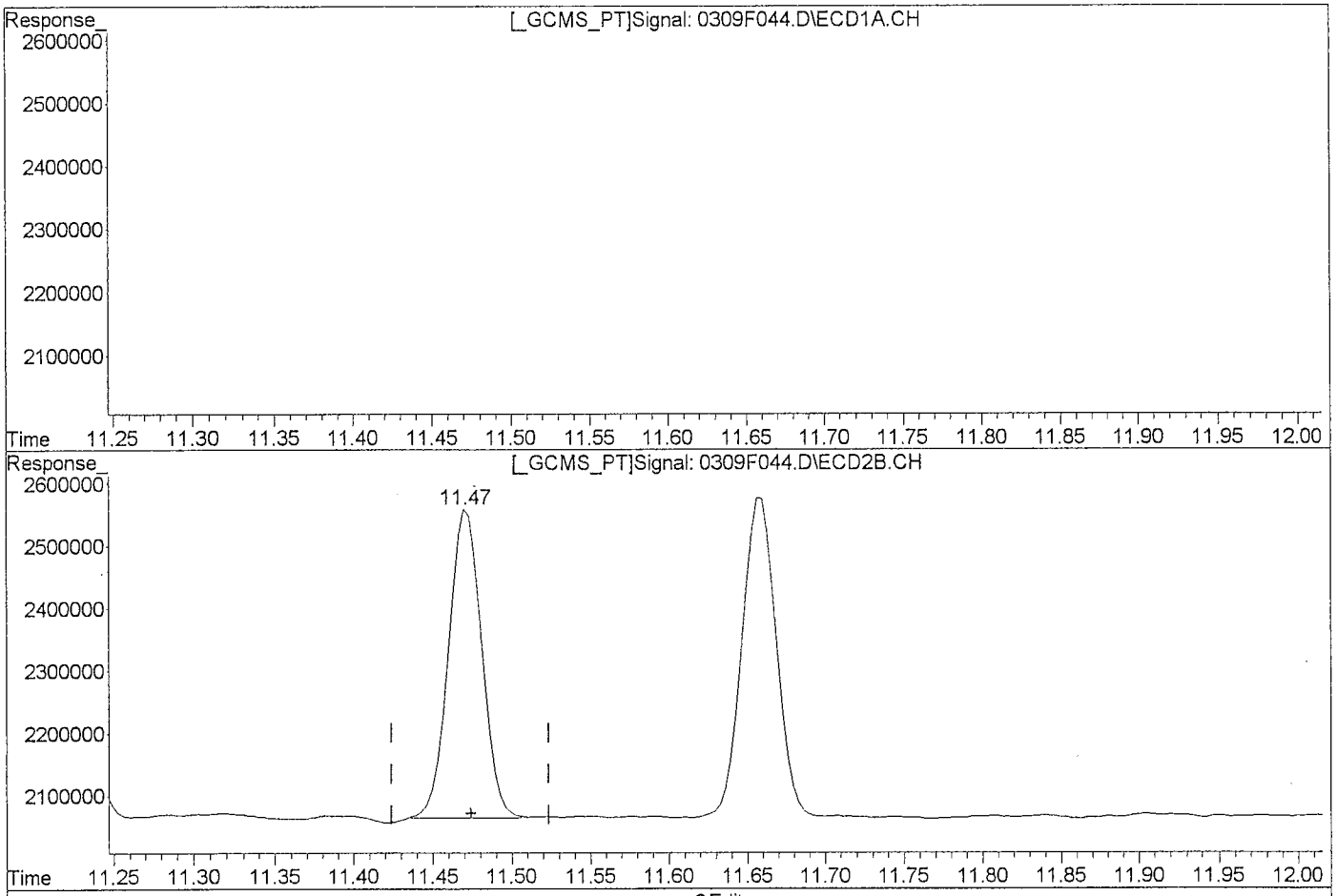
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:56:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 1.967ug/L

response 683252

(15) 4,4'-DDE #2

11.47min 1.979ug/L m

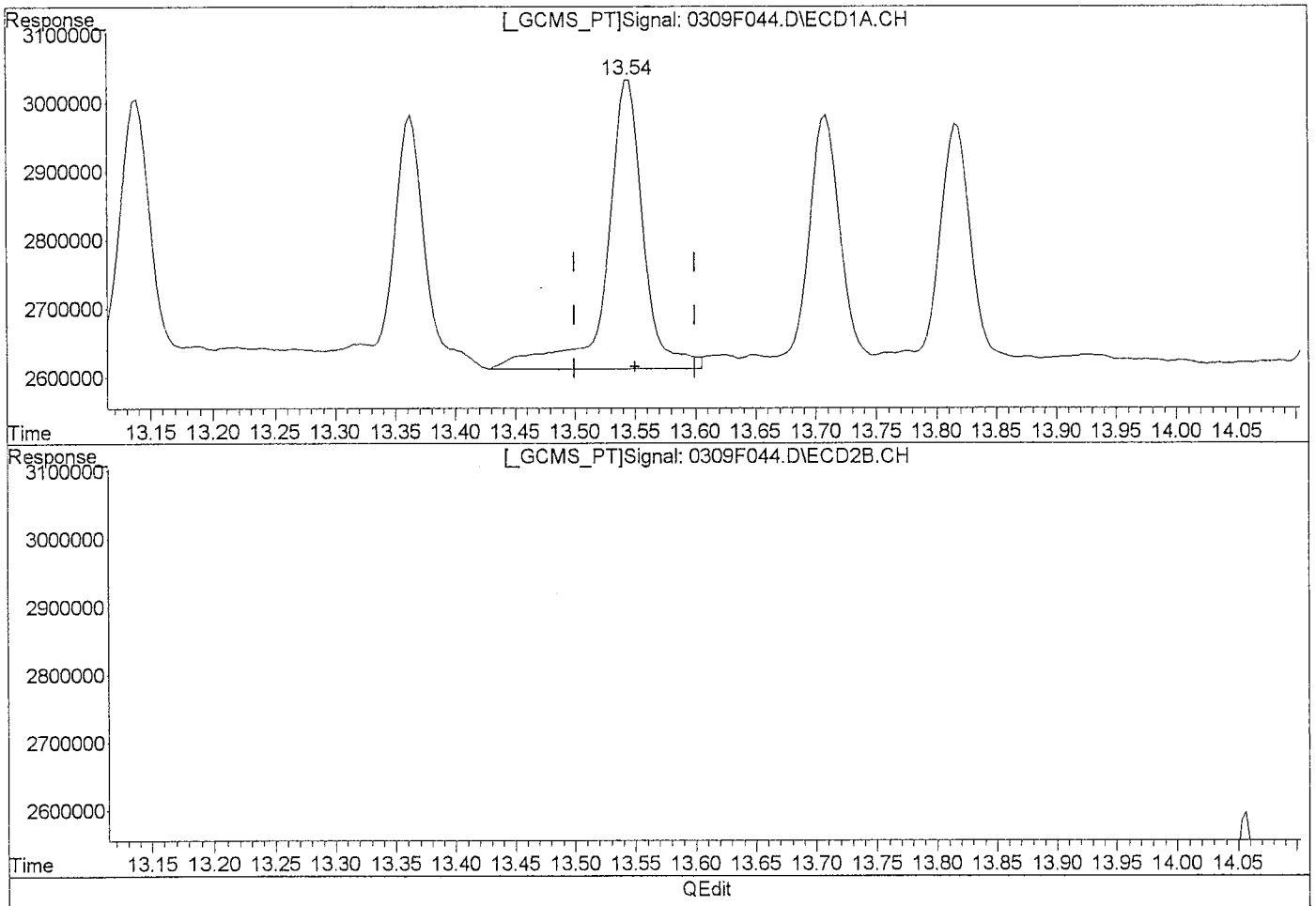
response 720556

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:55 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(17) Endosulfan II

13.54min 2.885ug/L

response 896471

(17) Endosulfan II #2

12.53min 2.182ug/L

response 733990

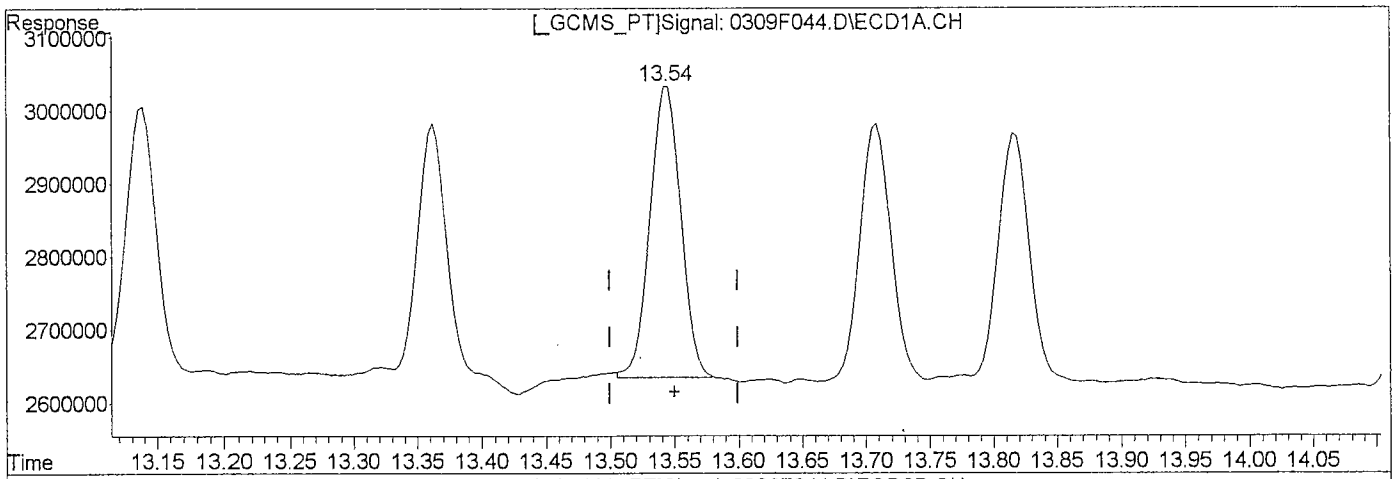
(+) = Expected Retention Time

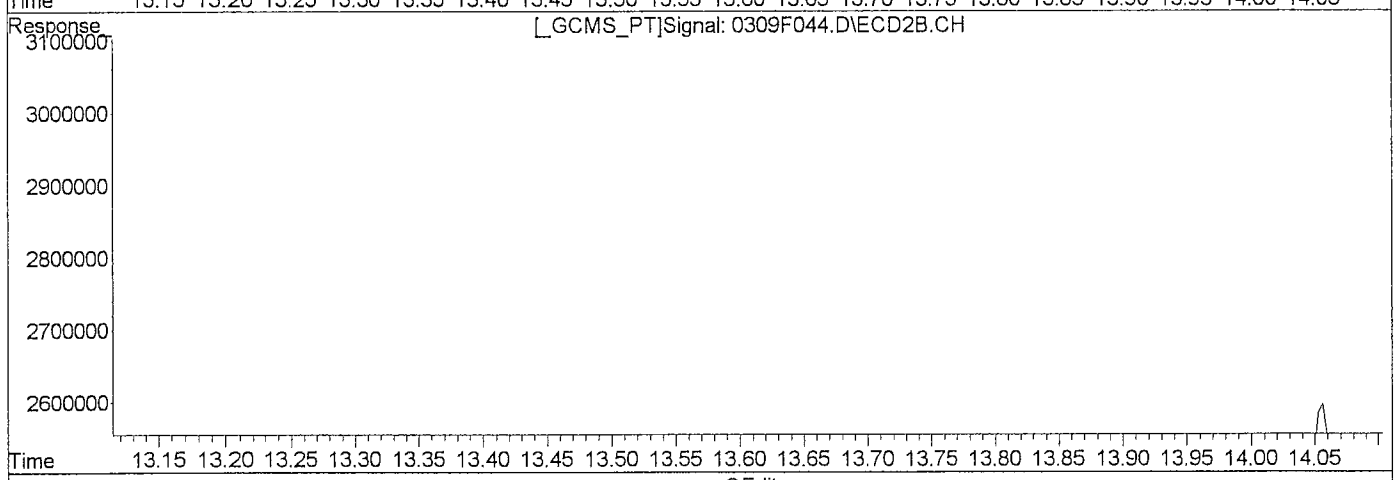
0309F044.D 030907-8081.M Mon Mar 12 07:57:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.54min 2.143ug/L m

response 665695

(17) Endosulfan II #2

12.53min 2.182ug/L

response 733990

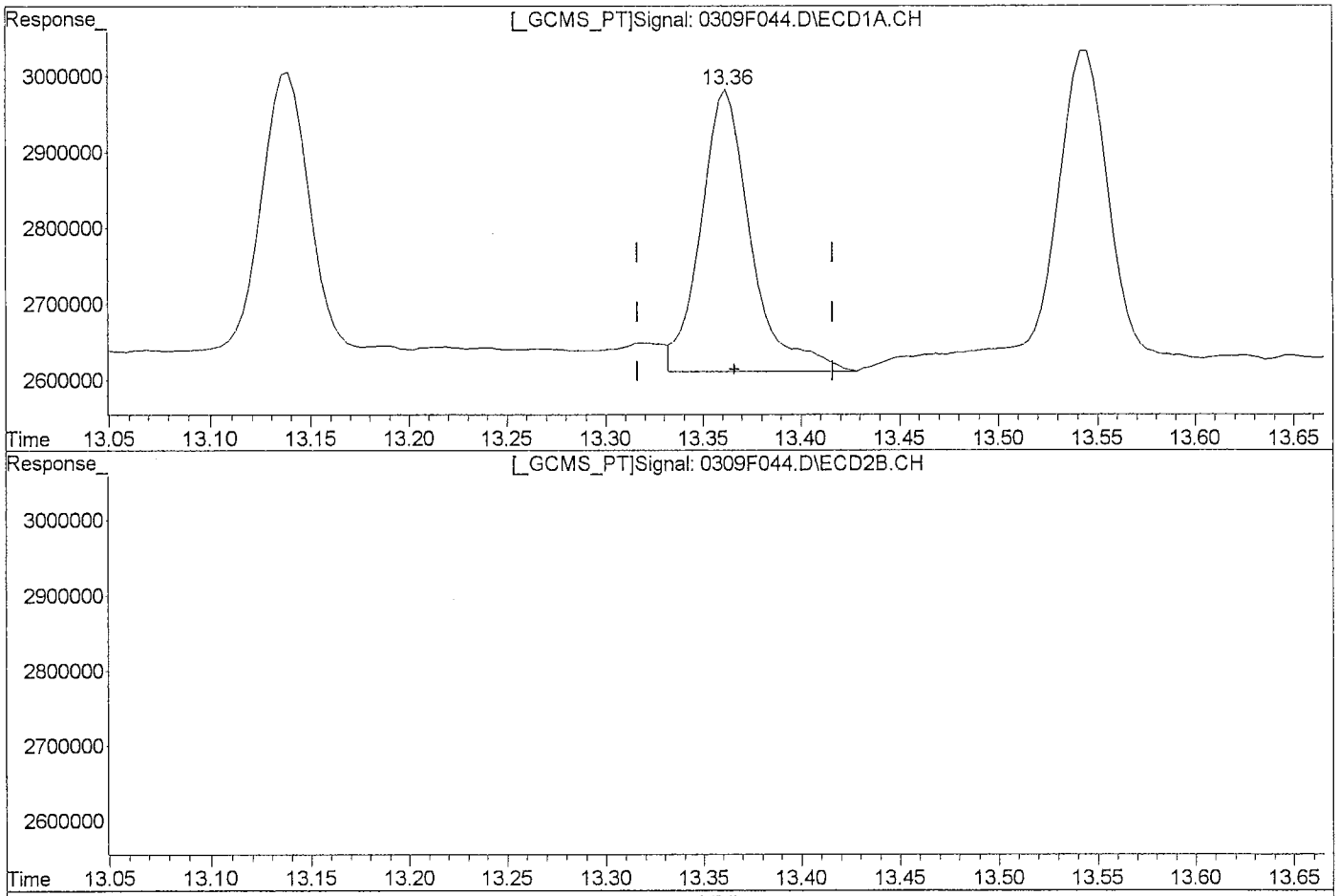
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:57:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.36min 2.386ug/L

response 656862

(18) 4,4'-DDD #2

12.33min 2.078ug/L

response 626011

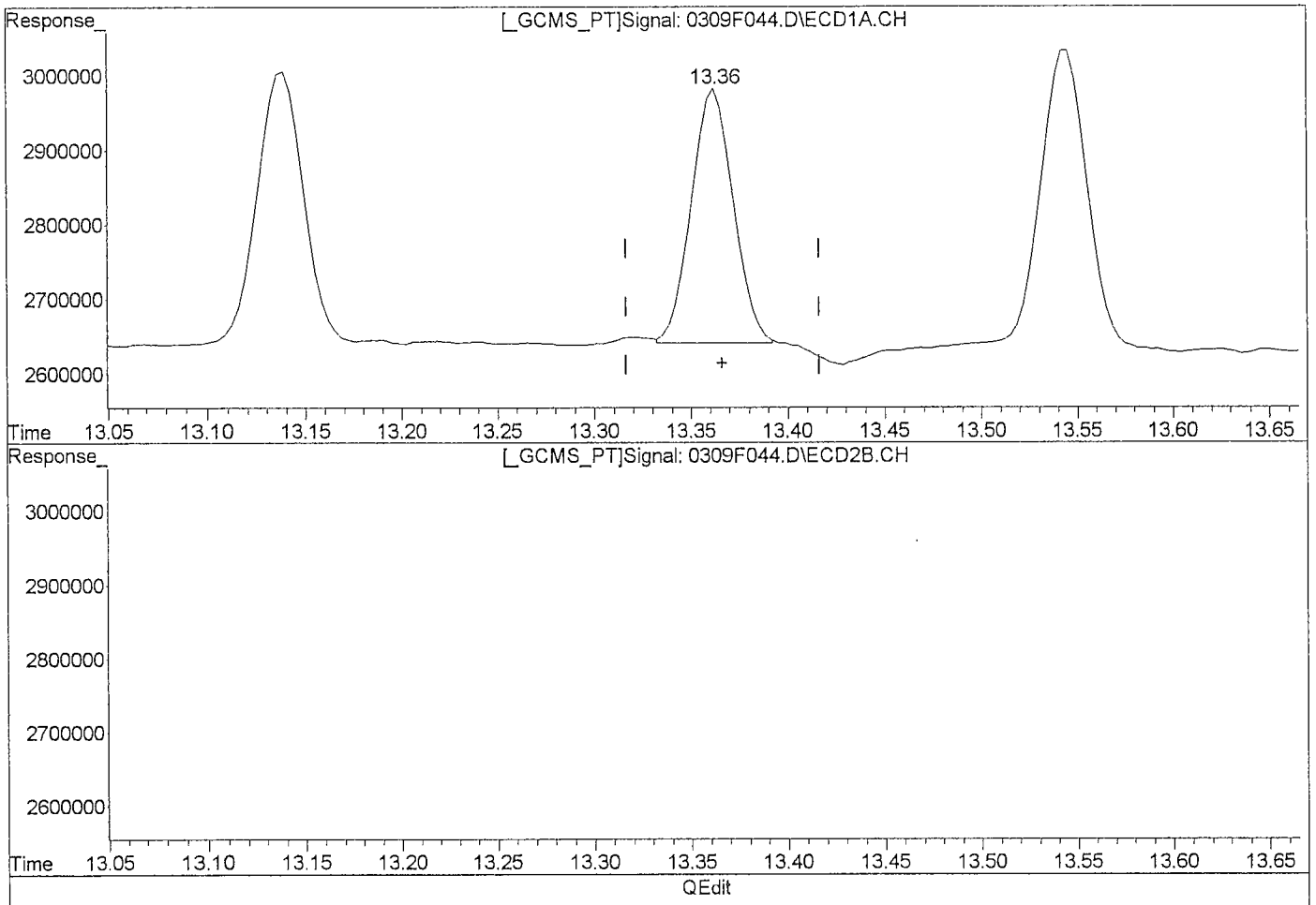
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:57:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.36min 1.870ug/L m

response 514741

(18) 4,4'-DDD #2

12.33min 2.078ug/L

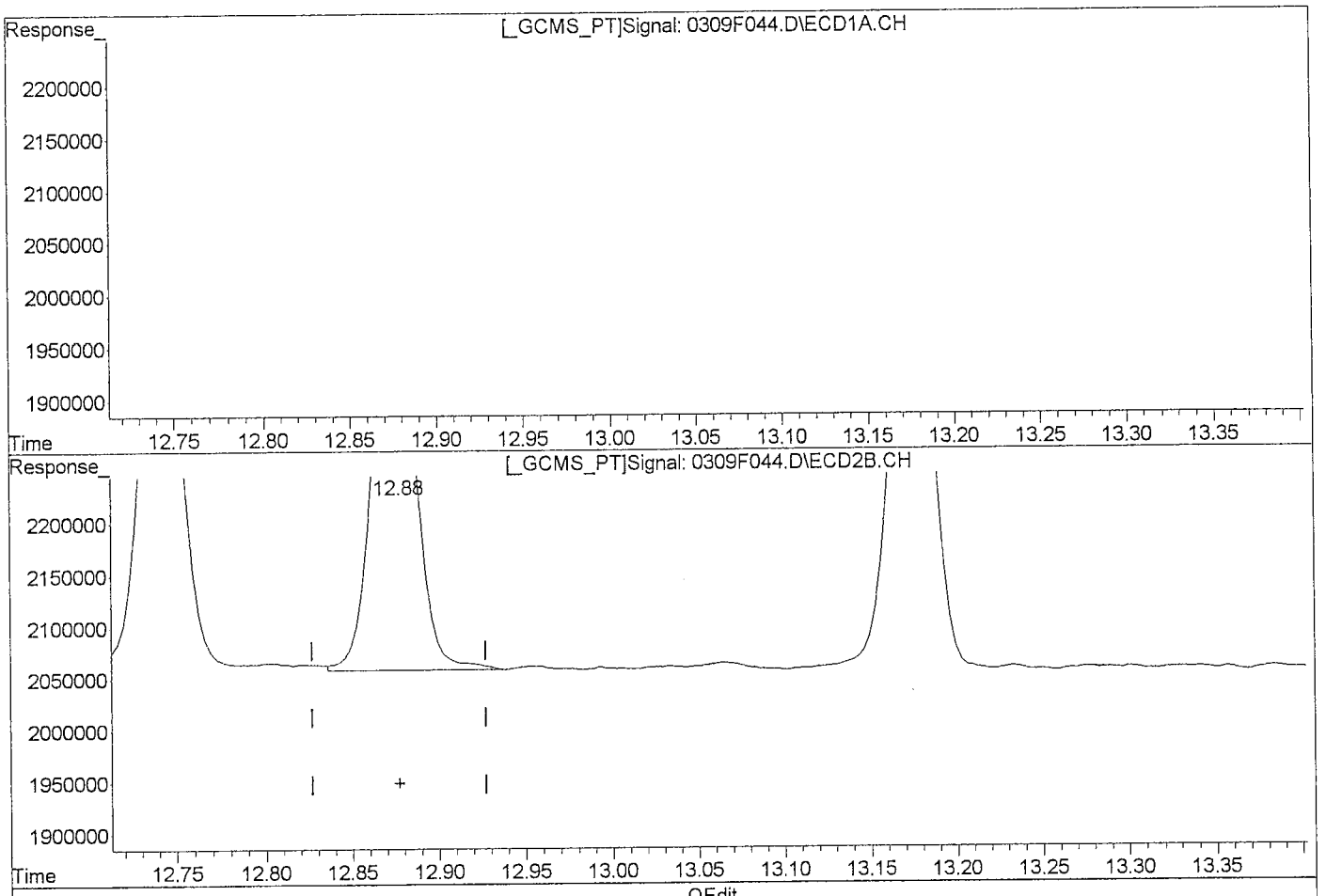
response 626011

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:57:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(19) Endrin Aldehyde

13.71min 2.202ug/L

response 592370

(19) Endrin Aldehyde #2

12.88min 2.288ug/L

response 676893

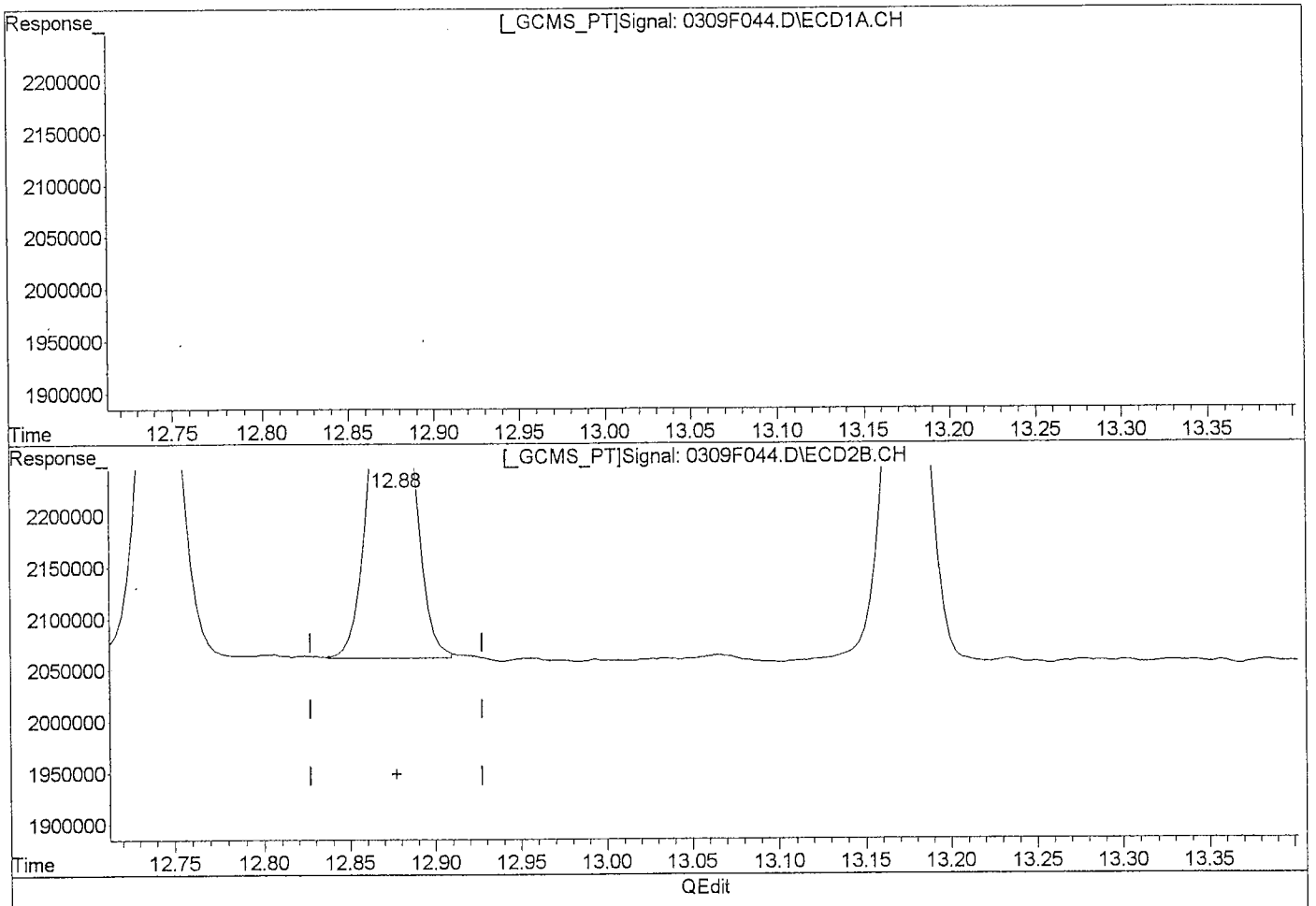
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:57:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(19) Endrin Aldehyde

13.71min 2.202ug/L

response 592370

(19) Endrin Aldehyde #2

12.88min 2.210ug/L m

response 653890

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:57:54 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:00 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	1876920	1713914	4.897	4.956
24)	s	Decachlorobiphen	16.91	15.66	1691694	2104972	5.468	5.461m
		Target Compounds						
2)		alpha-BHC	9.05	8.13	2144038	2058696	4.359	4.460
3)		Hexachlorobenzen	9.18	7.96	2232946	2124900	5.127	5.276
4)		beta-BHC	10.06	9.15	1107251	1082276	4.975m	4.989
5)		gamma-BHC (Linda	9.59	8.74	2083603	2044081	4.500	4.674
6)		delta-BHC	10.47	9.59	1898453	1820603	4.562	4.564
7)		Heptachlor	10.56	9.30	2189895	2145049	4.801	4.843
8)		Aldrin	11.07	9.79	1855560	1879317	4.655	4.761
9)		Isodrin	11.60	10.43	1594584	1658788	4.797	4.971
10)		Heptachlor Epoxi	11.77	10.64	1937854	1938697	4.968	5.006
11)		gamma-Chlordane	12.26	11.00	1890837	1931501	4.891	4.953
12)		Endosulfan I	12.39	11.22	1732781	1784011	5.096	5.120
13)		alpha-Chlordane	12.34	11.15	1869074	1919418	4.971	5.017
14)		Dieldrin	12.79	11.66	1702353	1835639	4.711	4.807
15)		4,4'-DDE	12.58	11.47	1615817	1700377	4.652	4.671m
16)		Endrin	13.14	12.13	1444252	1591086	4.656	4.677
17)		Endosulfan II	13.54	12.54	1609233	1754425	5.180	5.215
18)		4,4'-DDD	13.36	12.34	1249629	1430974	4.539m	4.750
19)		Endrin Aldehyde	13.71	12.88	1398613	1544623	5.198	5.221
20)		Endosulfan Sulfa	14.13	13.18	1505405	1790423	5.026	5.142
21)		4,4'-DDT	13.82	12.74	1335813	1589008	4.692m	4.837
22)		Endrin Ketone	14.75	14.06	1638116	2050196	4.952m	5.105
23)		Methoxychlor	14.47	13.75	783574	970612	4.832m	5.152

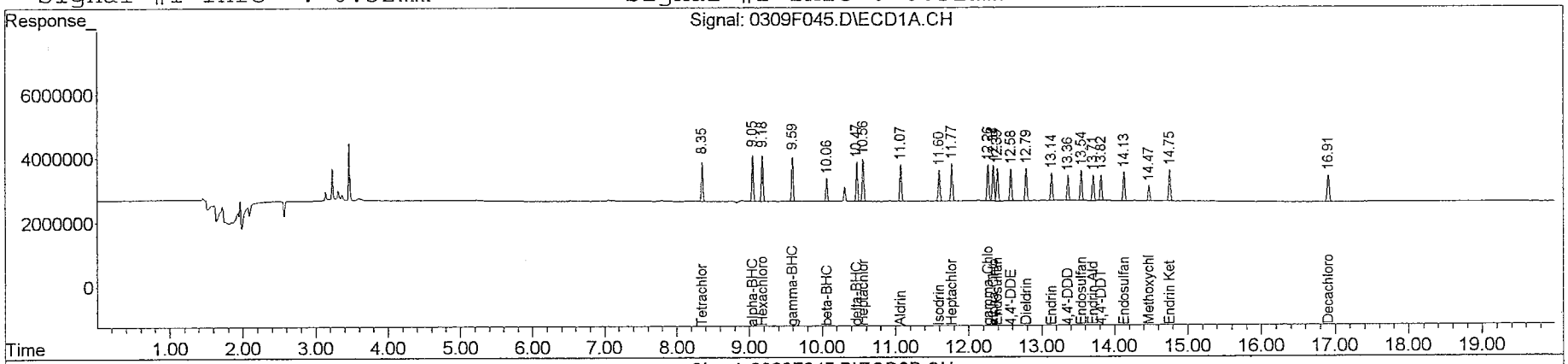
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

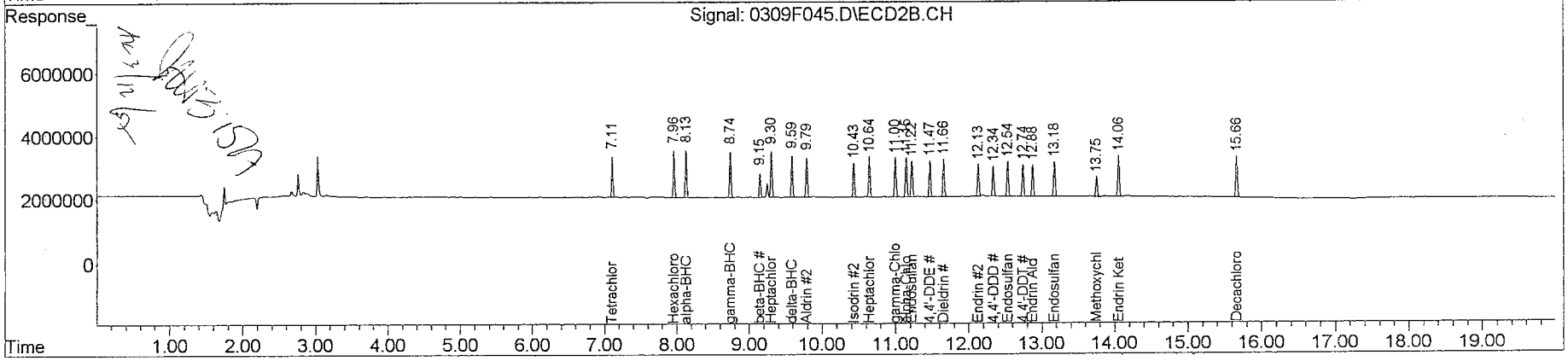
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:01 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

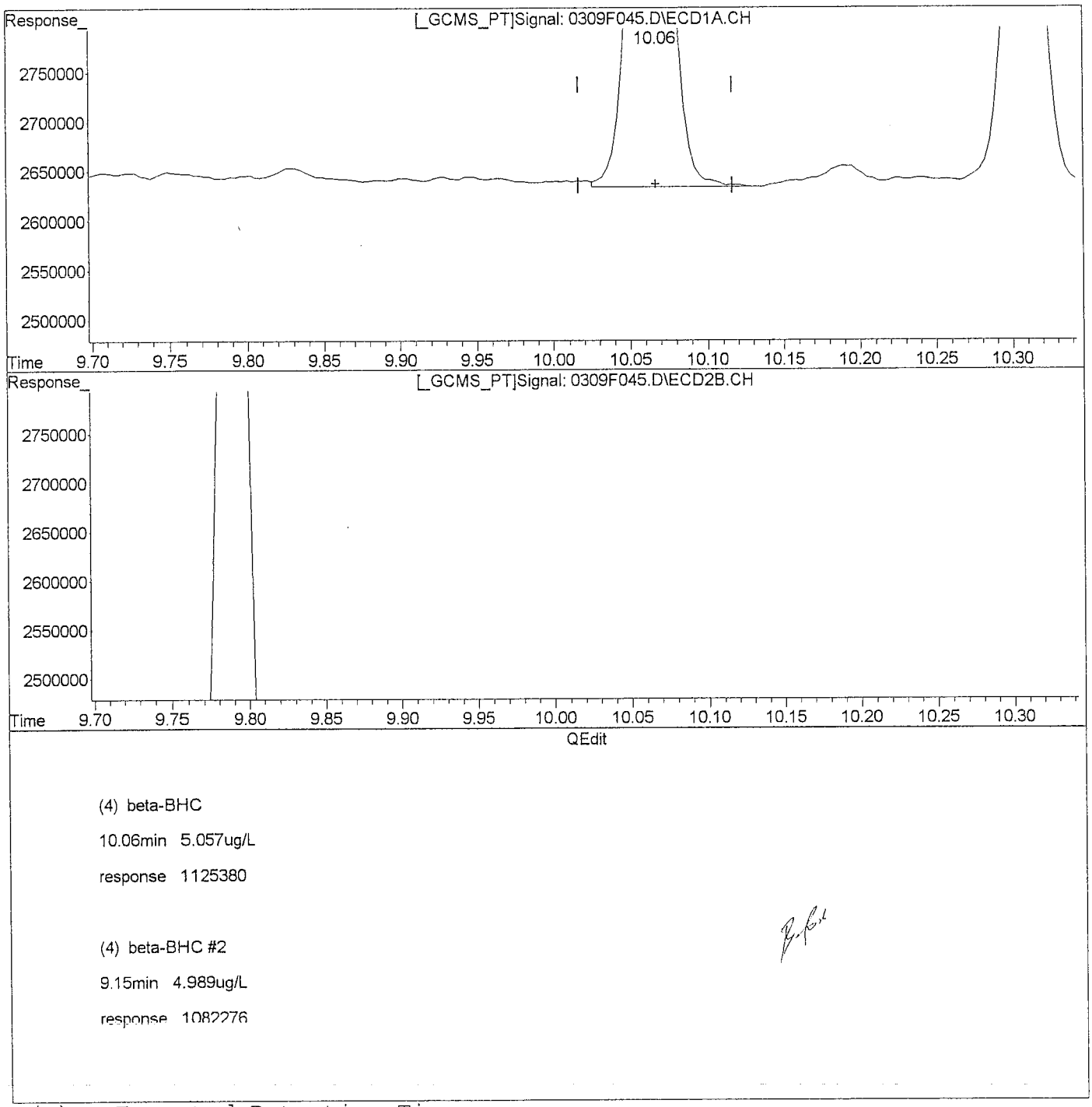




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(4) beta-BHC

10.06min 5.057ug/L

response 1125380

(4) beta-BHC #2

9.15min 4.989ug/L

response 1082276

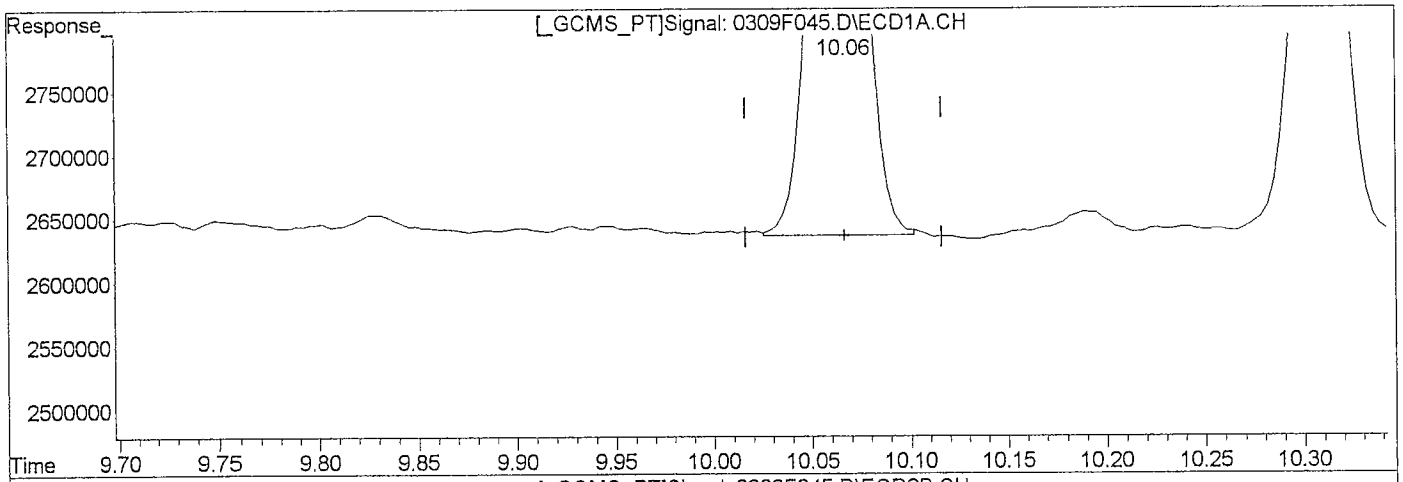
(+) = Expected Retention Time

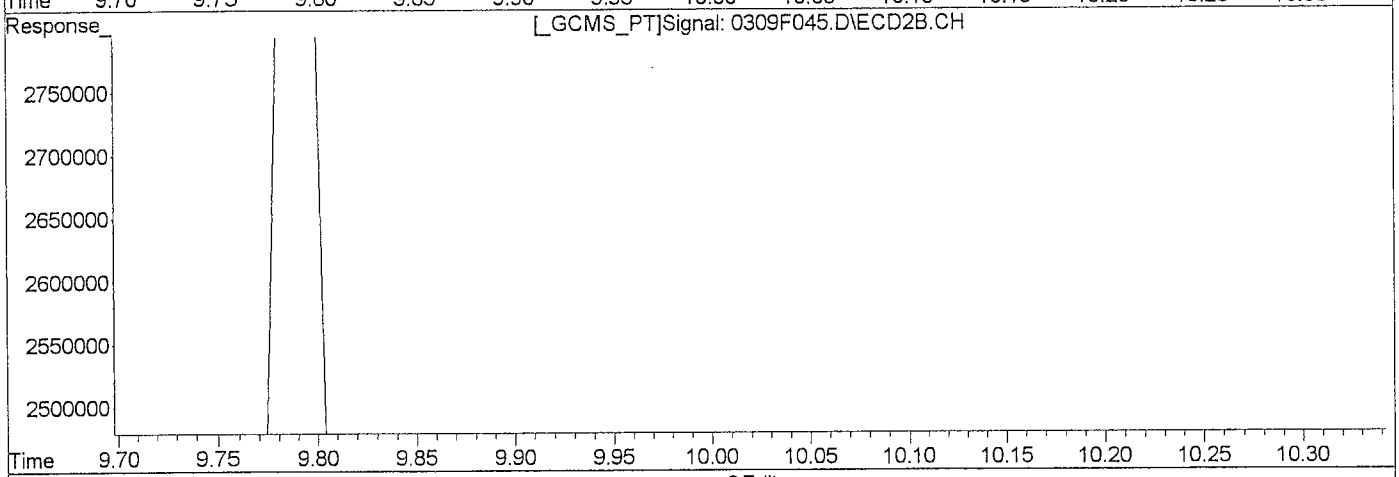
0309F045.D 030907-8081.M Mon Mar 12 07:58:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(4) beta-BHC

10.06min 4.975ug/L m

response 1107251

(4) beta-BHC #2

9.15min 4.989ug/L

response 1082276

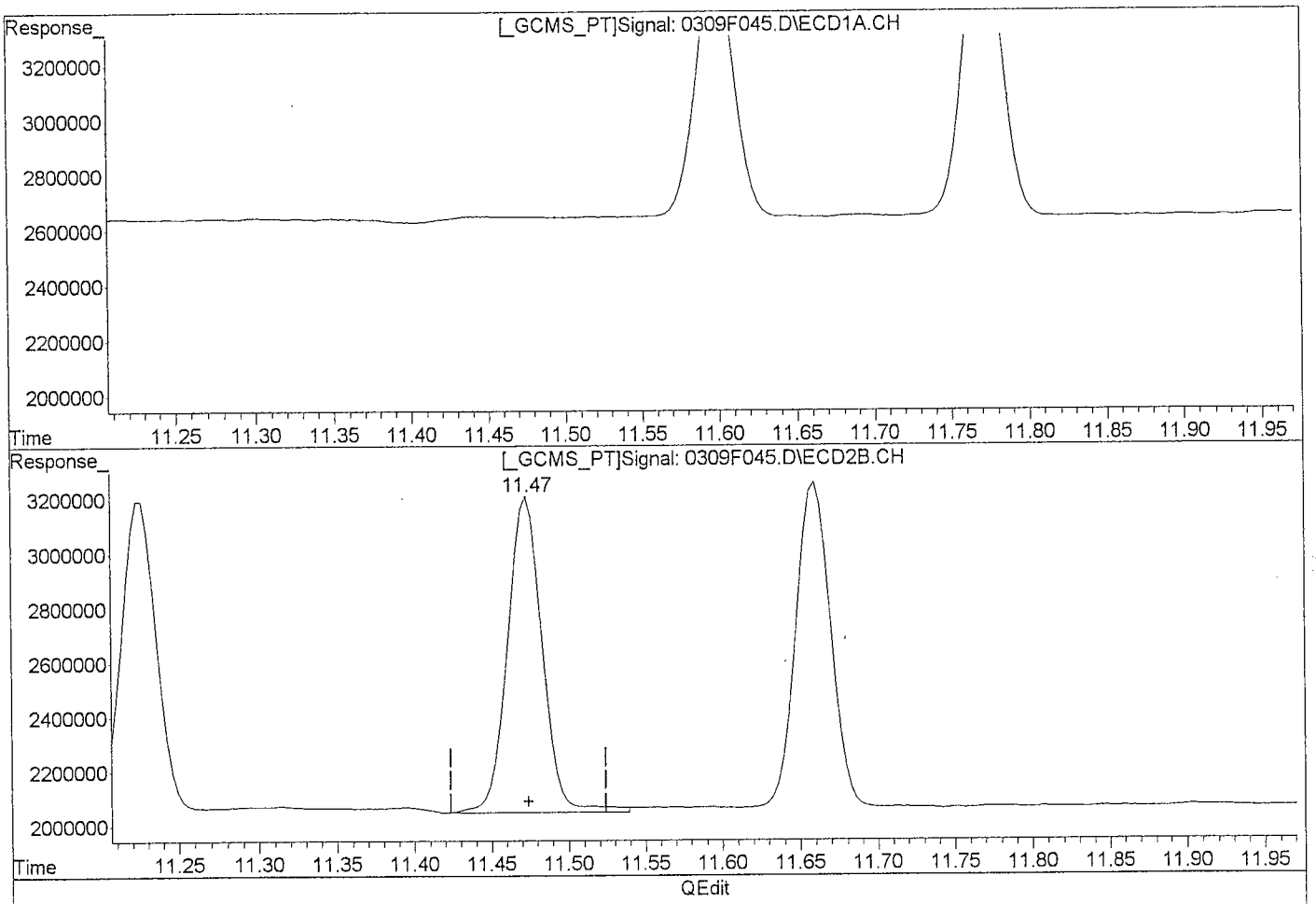
baseline AH 3/12/07

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 07:58:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 4.652ug/L

response 1615817

(15) 4,4'-DDE #2

11.47min 5.020ug/L

response 1827482

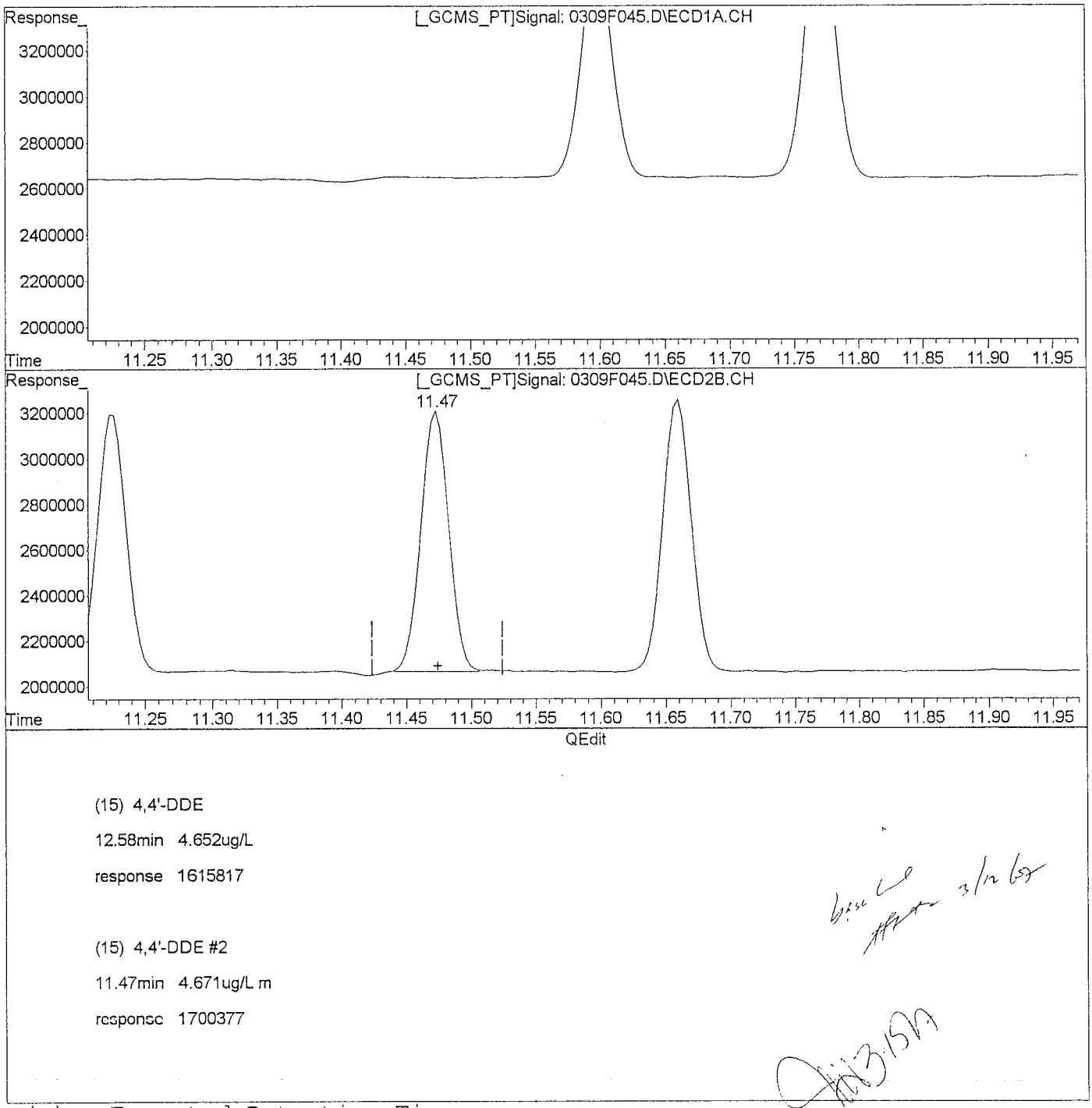
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 07:59:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 4.652ug/L

response 1615817

(15) 4,4'-DDE #2

11.47min 4.671ug/L m

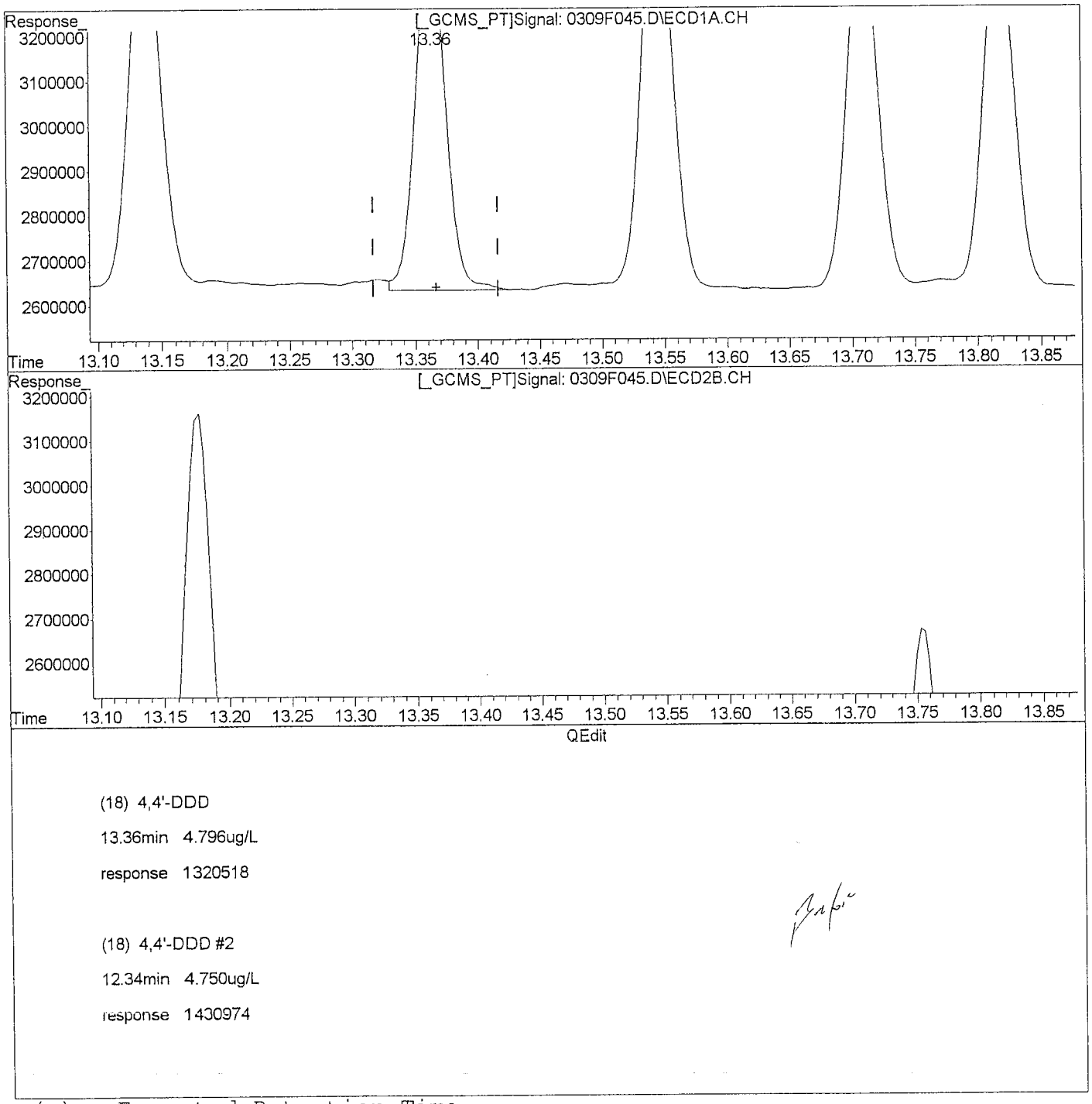
response 1700377

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 07:59:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.36min 4.796ug/L

response 1320518

(18) 4,4'-DDD #2

12.34min 4.750ug/L

response 1430974

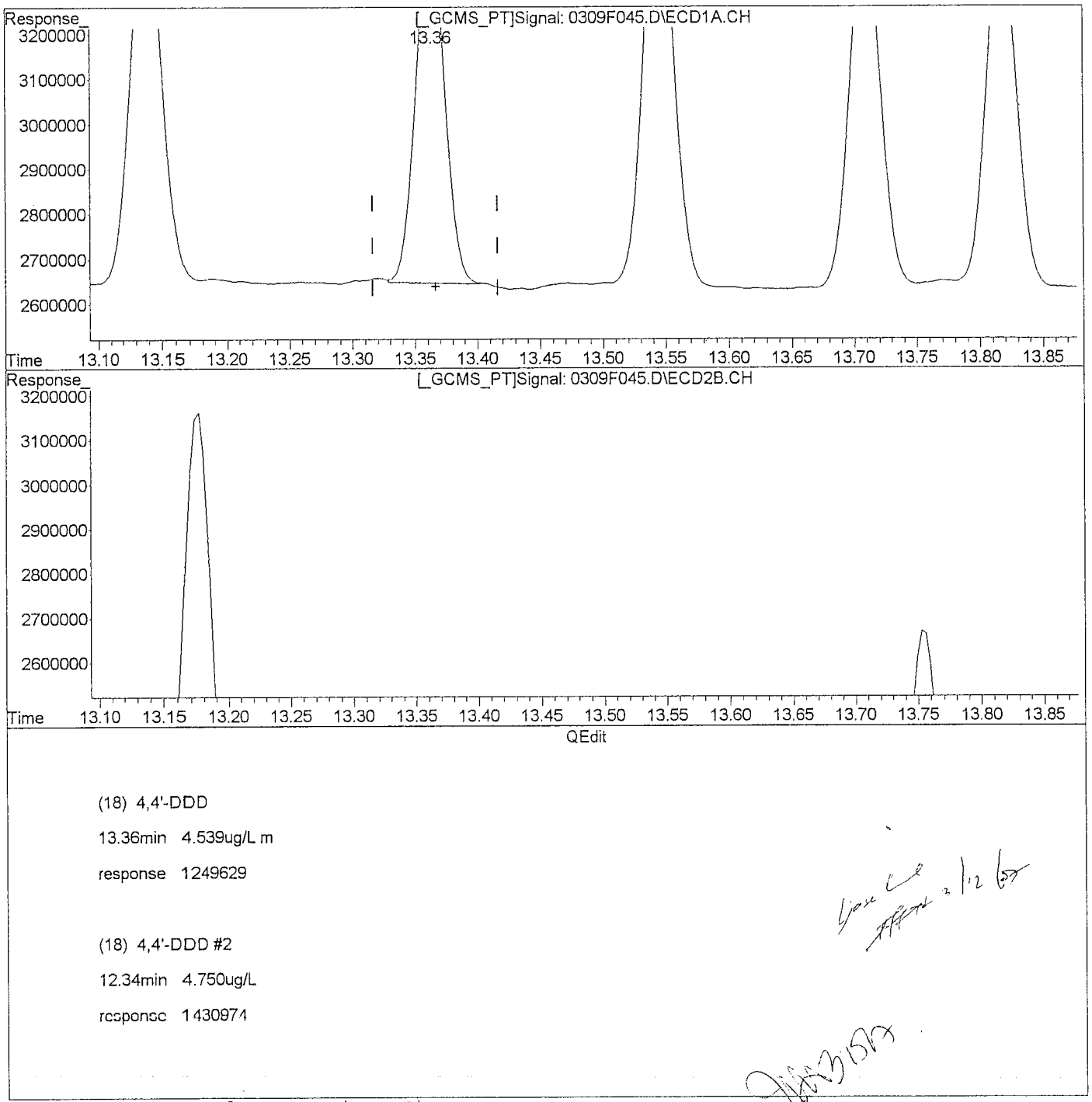
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:00:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.36min 4.539ug/L m

response 1249629

(18) 4,4'-DDD #2

12.34min 4.750ug/L

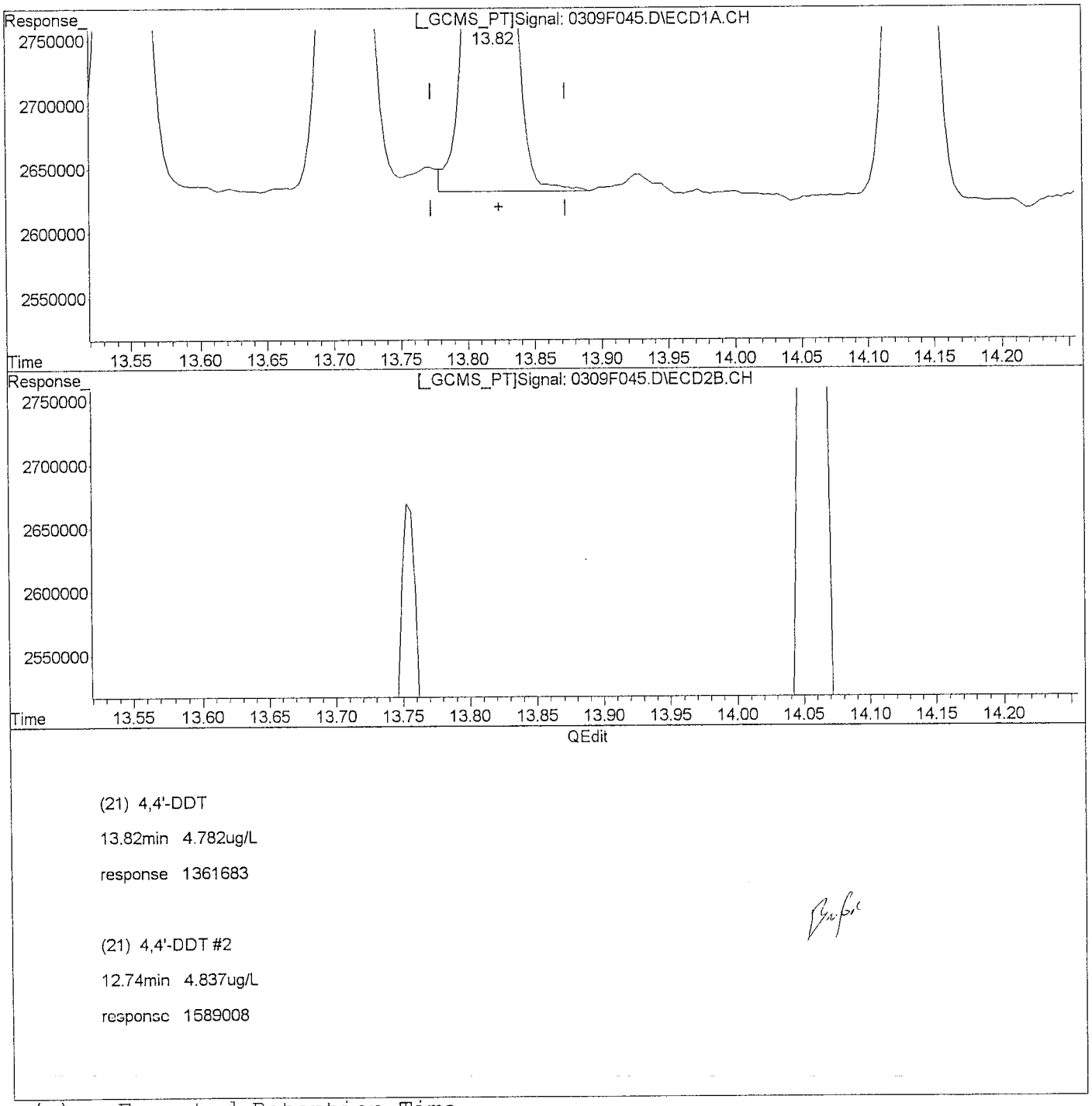
response 1430974

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:00:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(21) 4,4'-DDT

13.82min 4.782ug/L

response 1361683

(21) 4,4'-DDT #2

12.74min 4.837ug/L

response 1589008

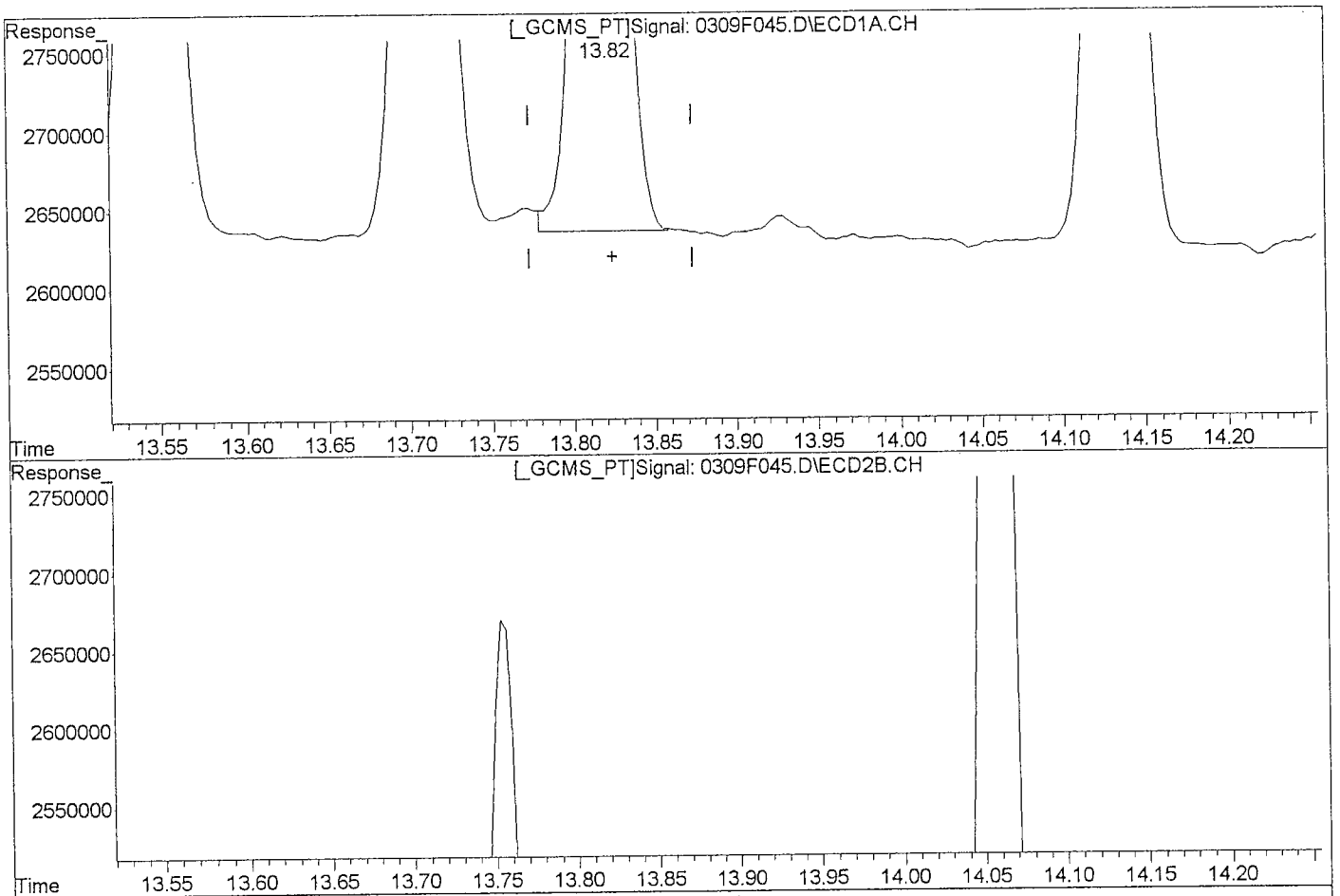
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:00:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(21) 4,4'-DDT

13.82min 4.692ug/L m

response 1335813

(21) 4,4'-DDT #2

12.74min 4.837ug/L

response 1580008

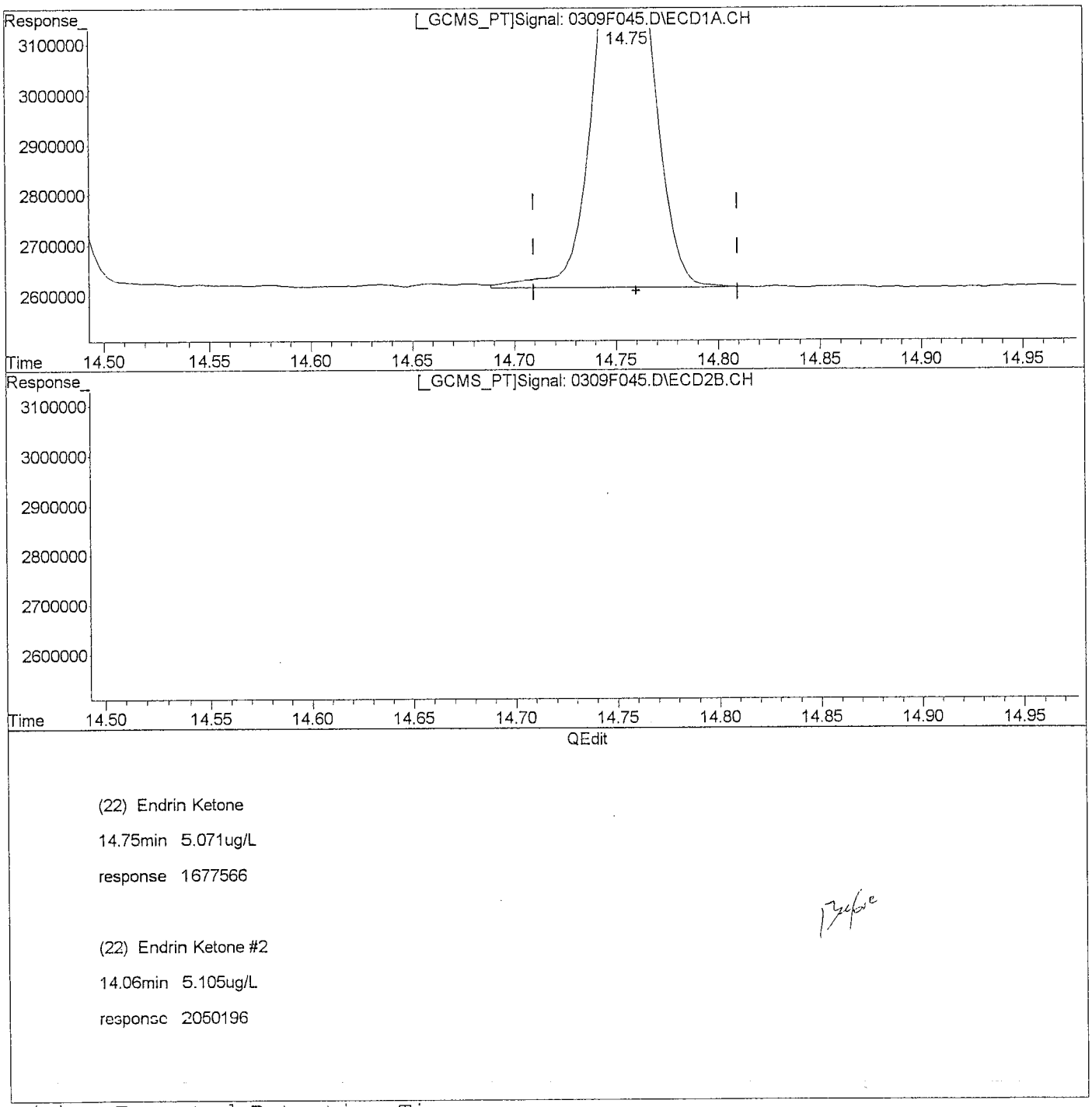
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:00:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(22) Endrin Ketone

14.75min 5.071ug/L

response 1677566

(22) Endrin Ketone #2

14.06min 5.105ug/L

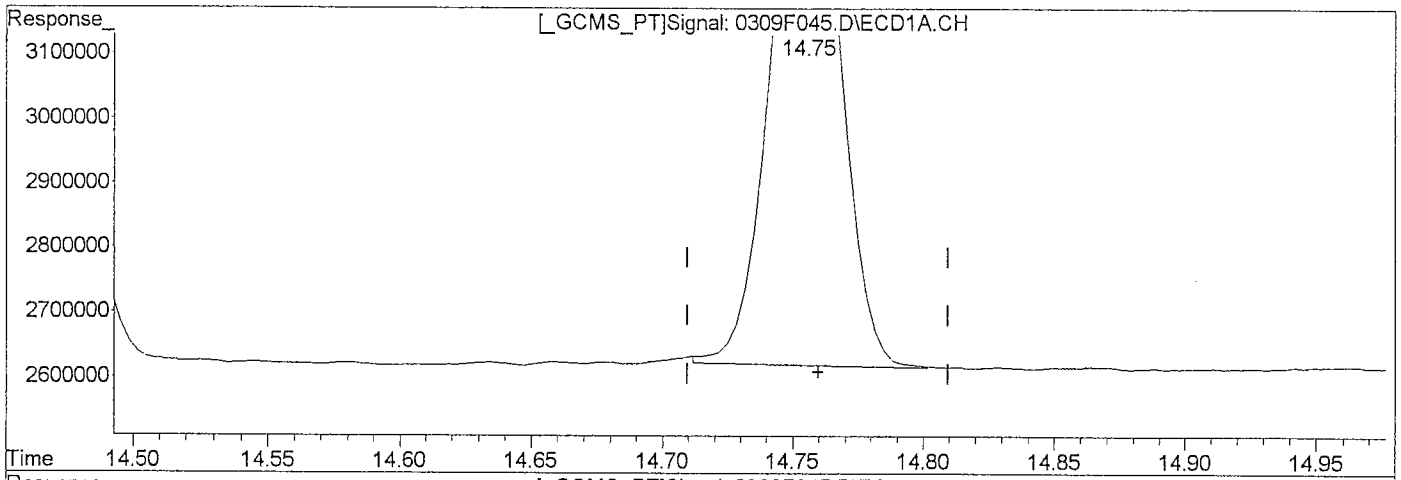
response 2050196

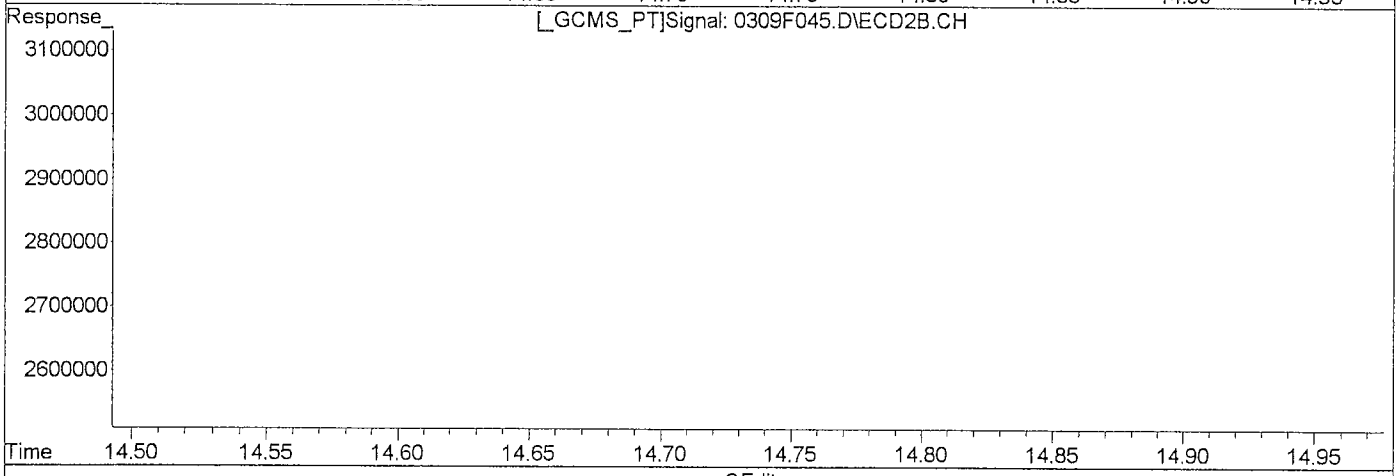
(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone

14.75min 4.952ug/L m

response 1638116

(22) Endrin Ketone #2

14.06min 5.105ug/L

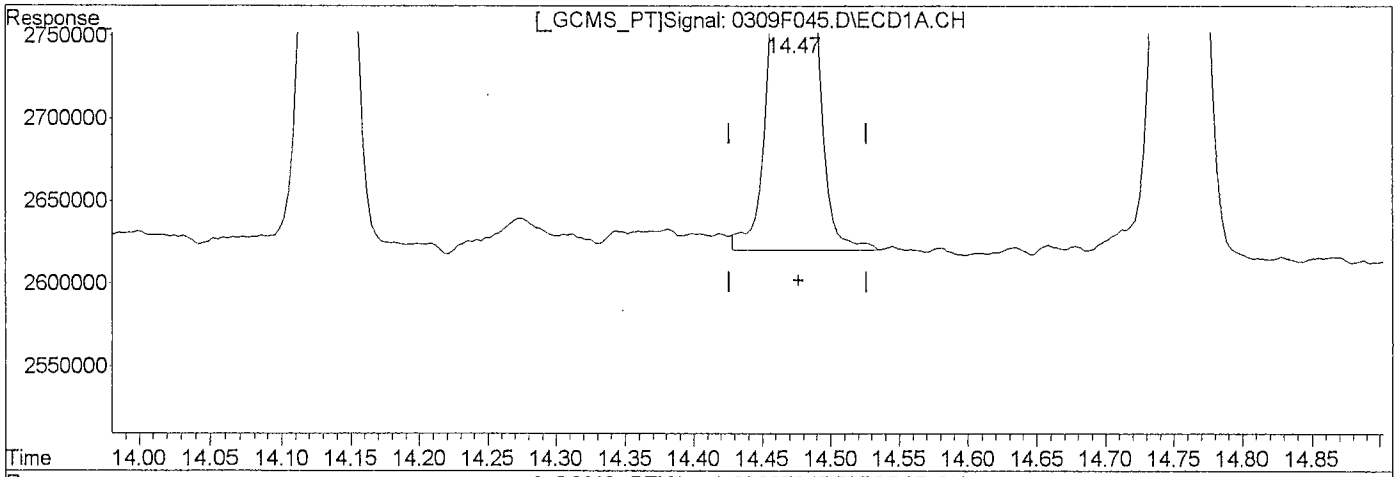
response 2050196

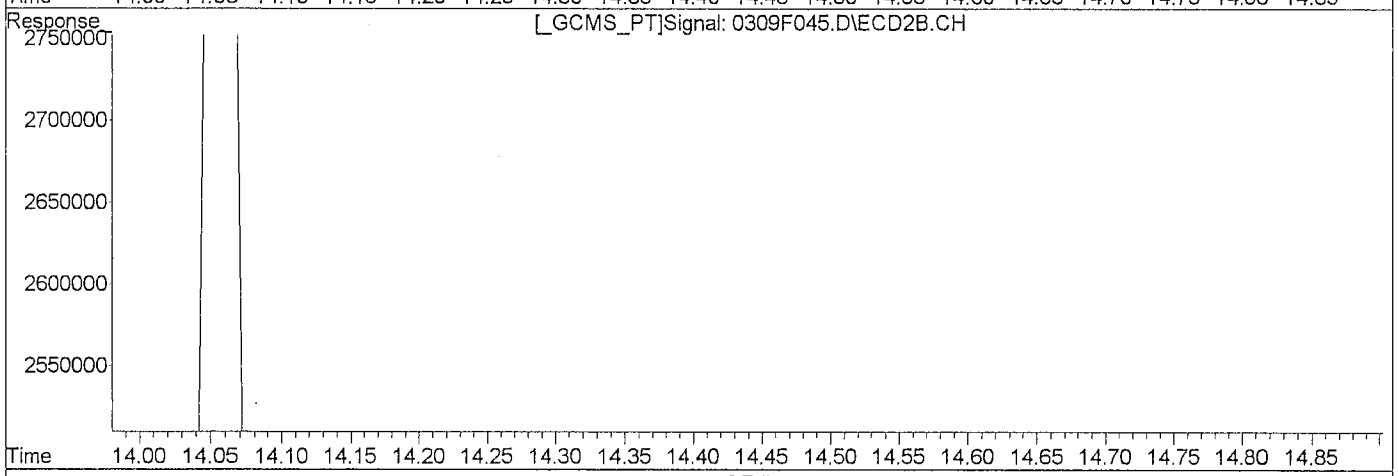
(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:08 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.47min 5.042ug/L

response 817577

(23) Methoxychlor #2

13.75min 5.152ug/L

response 970612

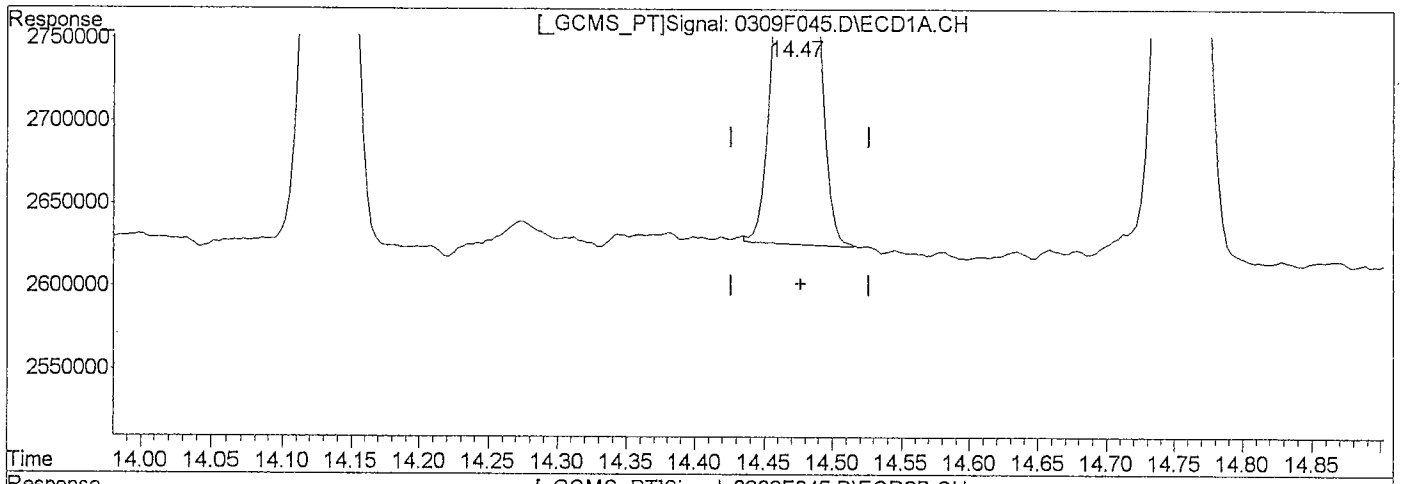
(+) = Expected Retention Time

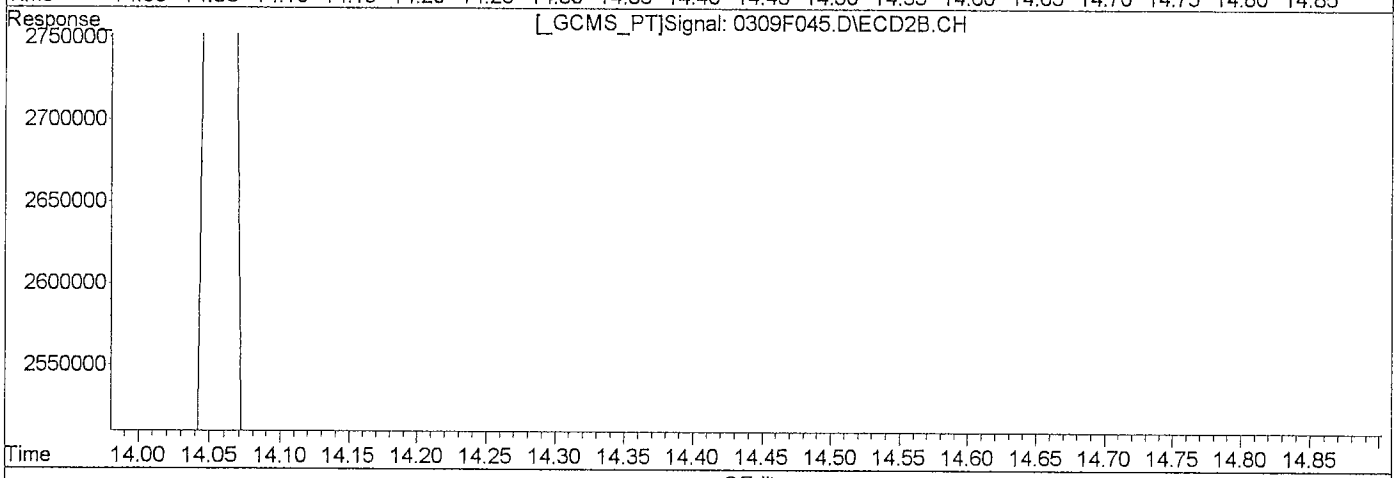
0309F045.D 030907-8081.M Mon Mar 12 08:01:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.47min 4.832ug/L m

response 783574

(23) Methoxychlor #2

13.75min 5.152ug/L

response 970612

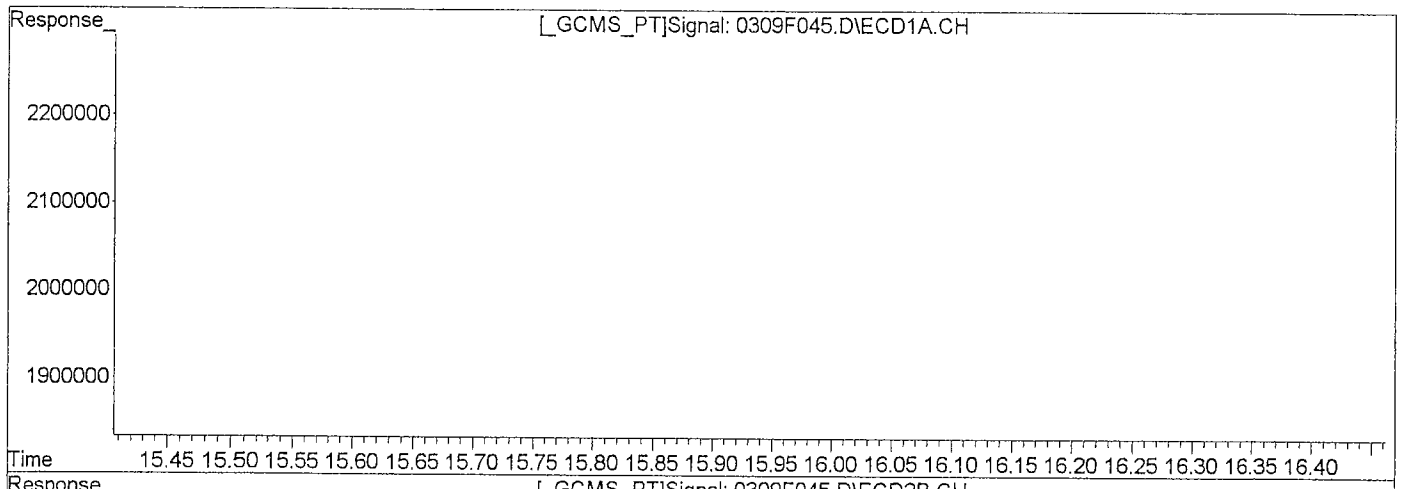
(+) = Expected Retention Time

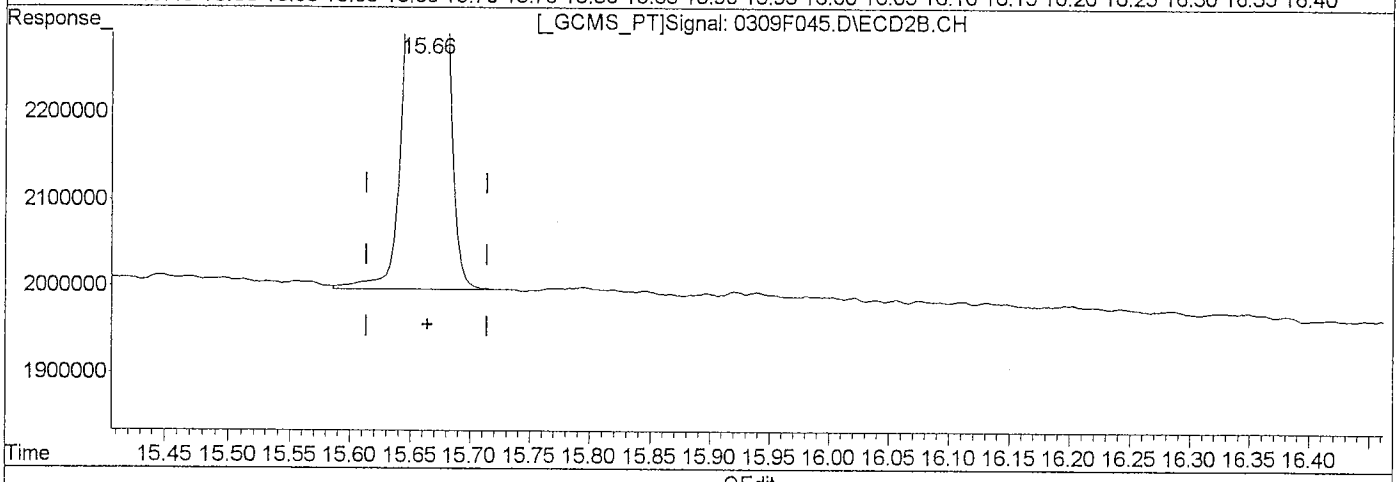
0309F045.D 030907-8081.M Mon Mar 12 08:01:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(24) Decachlorobiphenyl (s)

16.91min 5.468ug/L

response 1691694

(24) Decachlorobiphenyl #2 (s)

15.66min 5.565ug/L

response 2145164

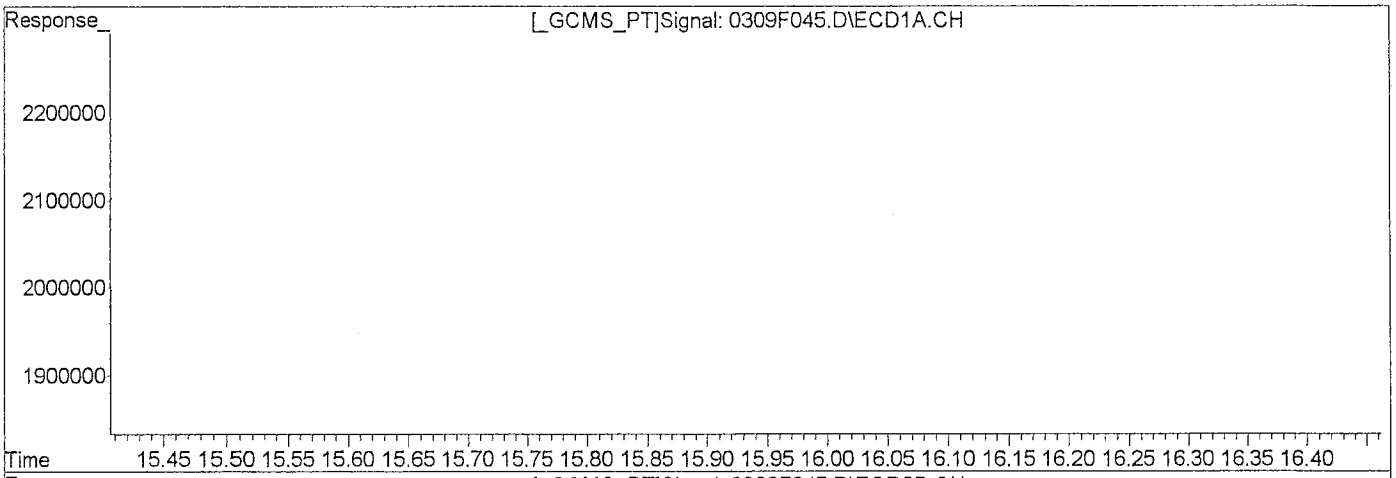
(+) = Expected Retention Time

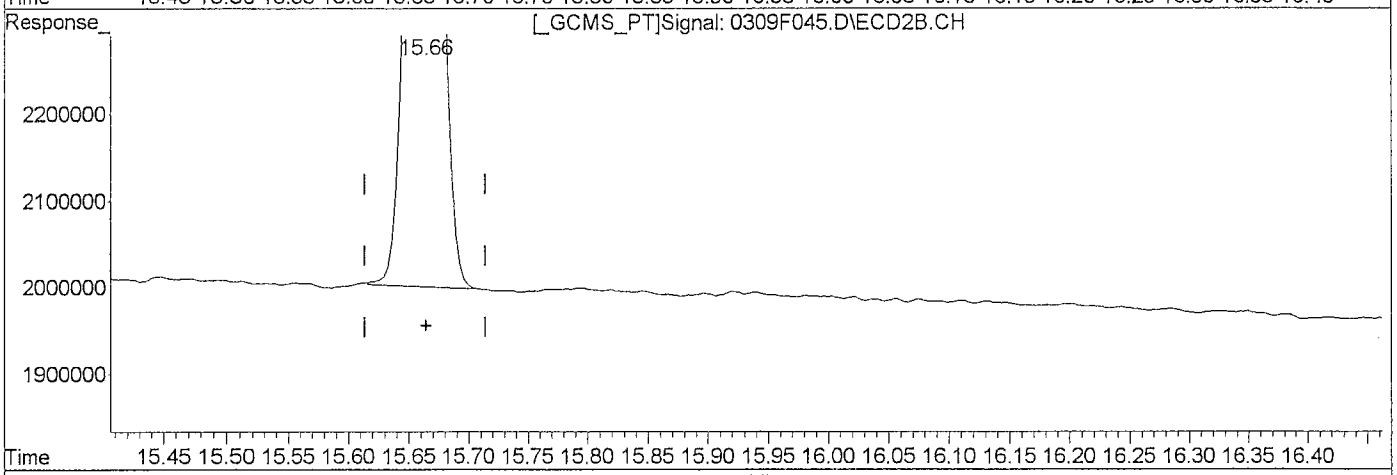
0309F045.D 030907-8081.M Mon Mar 12 08:01:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(24) Decachlorobiphenyl (s)

16.91min 5.468ug/L

response 1691694

(24) Decachlorobiphenyl #2 (s)

15.66min 5.461ug/L m

response 2104972

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:40 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:01 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.10	7079111	6514173	18.471	18.837
24)	s	Decachlorobiphen	16.90	15.66	6067149	7594676	19.609	19.703
		Target Compounds						
2)		alpha-BHC	9.05	8.12	8775110	8441959	17.841	18.290
3)		Hexachlorobenzen	9.18	7.96	8065238	7679834	18.519	19.068m
4)		beta-BHC	10.06	9.14	4144186	4033443	18.621	18.594
5)		gamma-BHC (Linda	9.59	8.73	8305715	8064160	17.939	18.441
6)		delta-BHC	10.47	9.58	7685578	7512923	18.468	18.832
7)		Heptachlor	10.56	9.30	8310944	8268825	18.219	18.668
8)		Aldrin	11.07	9.78	7188210	7362197	18.033	18.650
9)		Isodrin	11.59	10.43	6088917	6292053	18.316	18.856
10)		Heptachlor Epoxi	11.77	10.64	7184256	7326227	18.418	18.919
11)		gamma-Chlordane	12.26	10.99	7042921	7338147	18.219	18.819
12)		Endosulfan I	12.39	11.22	6386177	6730853	18.781	19.316
13)		alpha-Chlordane	12.33	11.14	6941161	7243800	18.461	18.933
14)		Dieldrin	12.78	11.65	6567021	7094605	18.171	18.581
15)		4,4'-DDE	12.57	11.47	6248775	6730163	17.991	18.488m
16)		Endrin	13.13	12.13	5546970	6309096	17.884	18.546
17)		Endosulfan II	13.54	12.53	5985661	6618369	19.266	19.674
18)		4,4'-DDD	13.36	12.33	5061387	5603770	18.384	18.602
19)		Endrin Aldehyde	13.70	12.87	5134207	5752070	19.083	19.442
20)		Endosulfan Sulfa	14.13	13.17	5656108	6692518	18.884	19.219
21)		4,4'-DDT	13.81	12.74	5224539	6134802	18.349	18.674
22)		Endrin Ketone	14.75	14.05	6384717	7819038	19.300	19.470
23)		Methoxychlor	14.47	13.75	2989328	3565827	18.434m	18.928

Aw 3/12/07

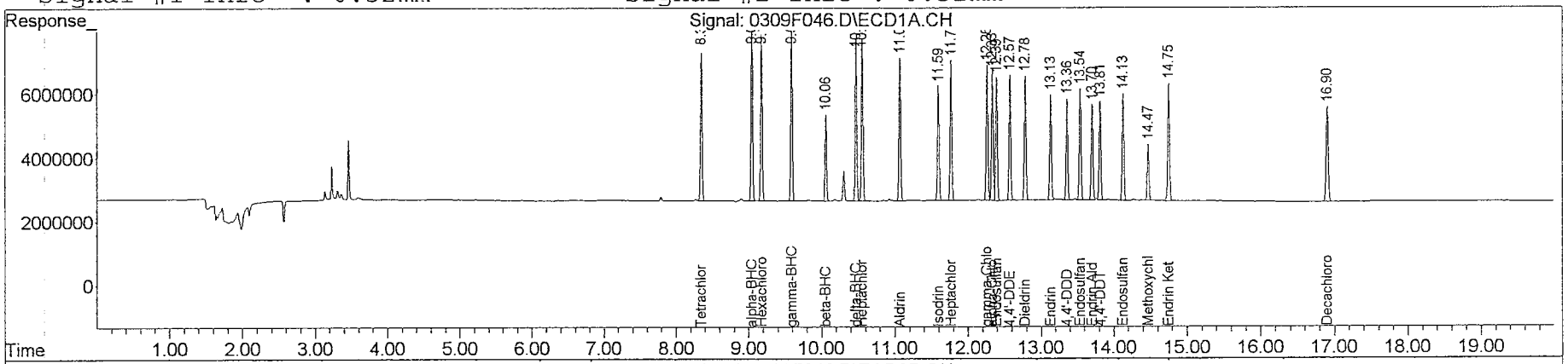
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

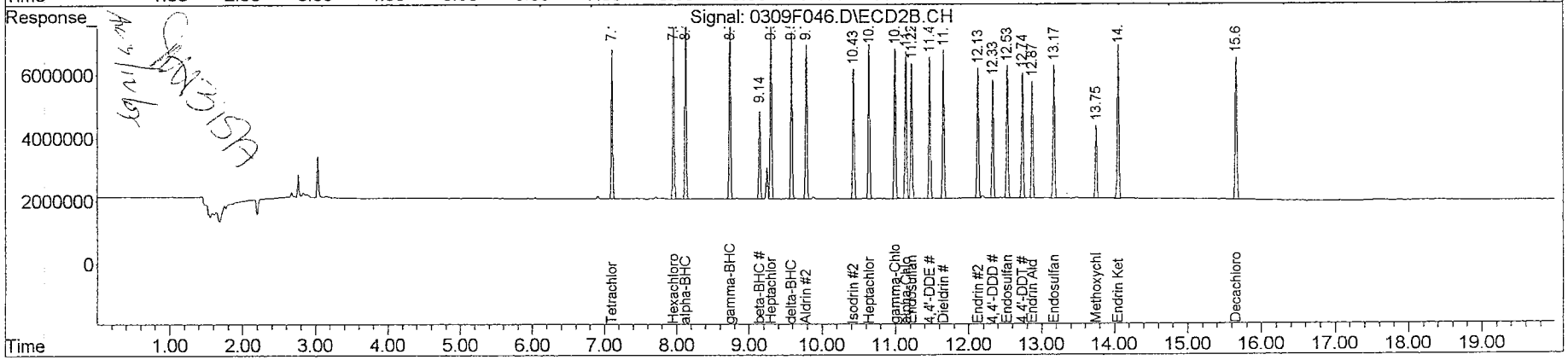
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

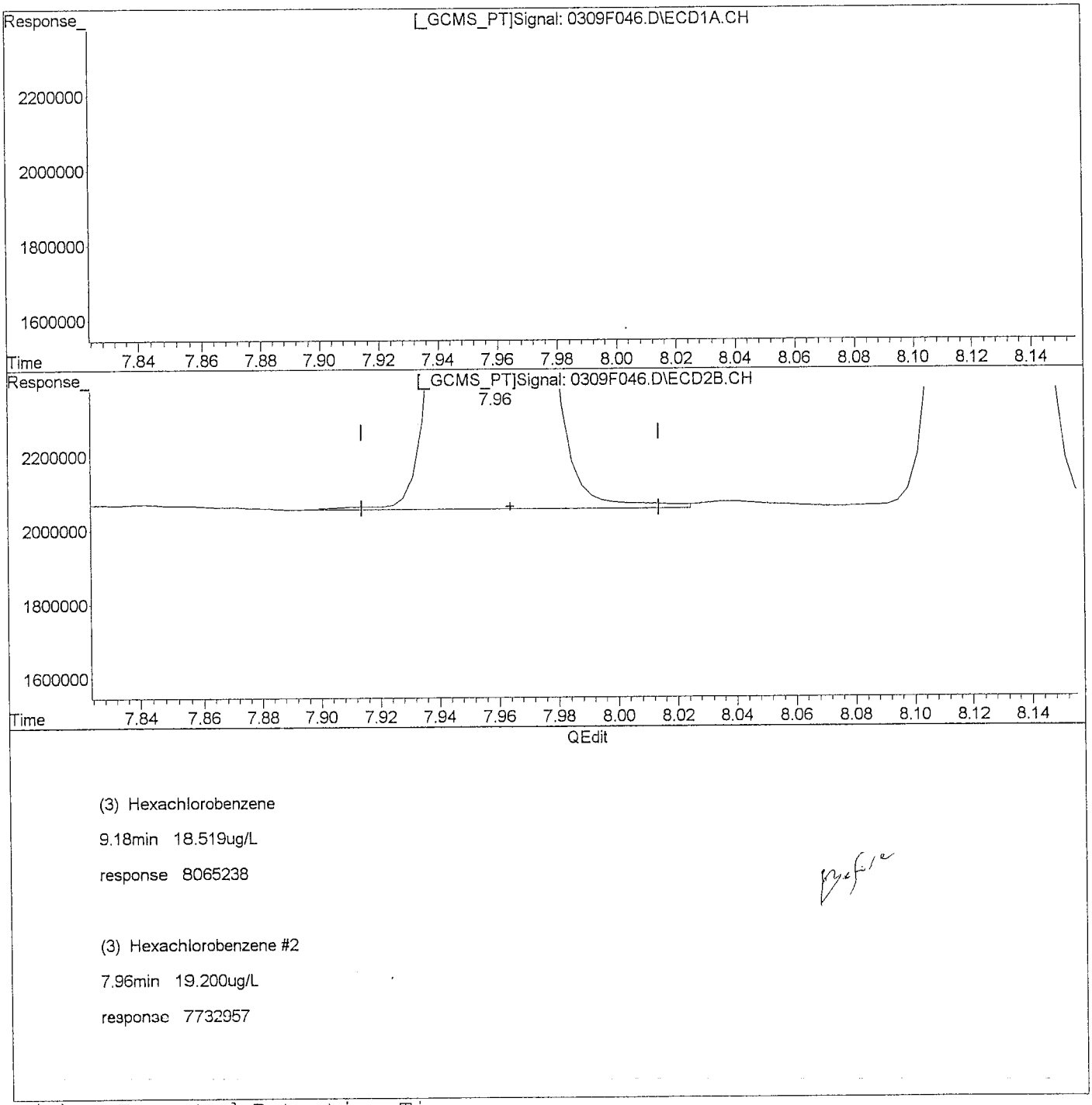




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.18min 18.519ug/L

response 8065238

(3) Hexachlorobenzene #2

7.96min 19.200ug/L

response 7732957

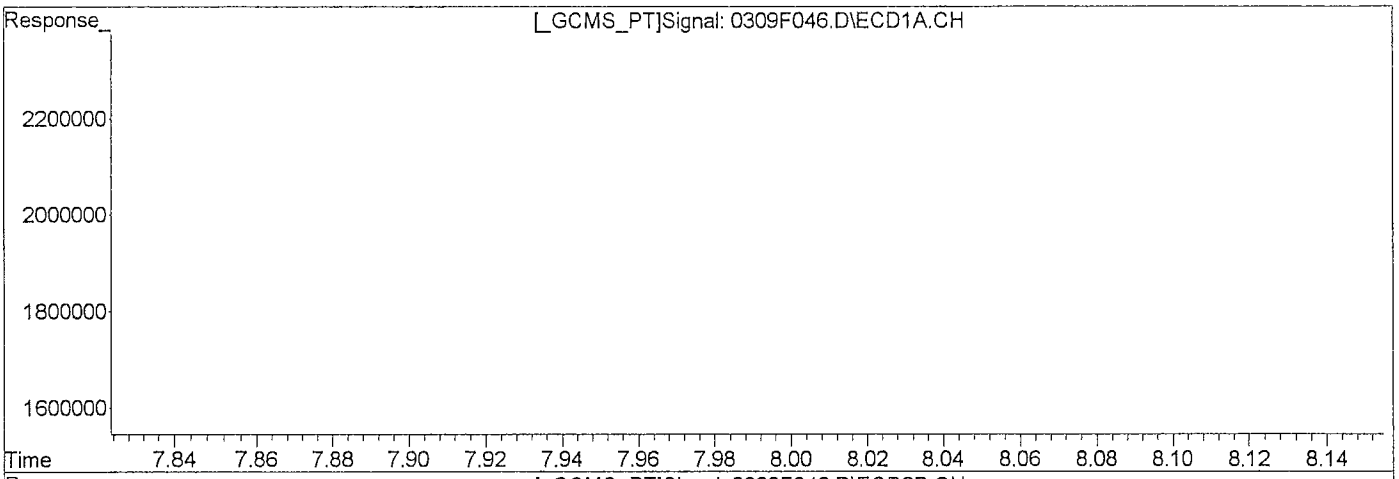
(+) = Expected Retention Time

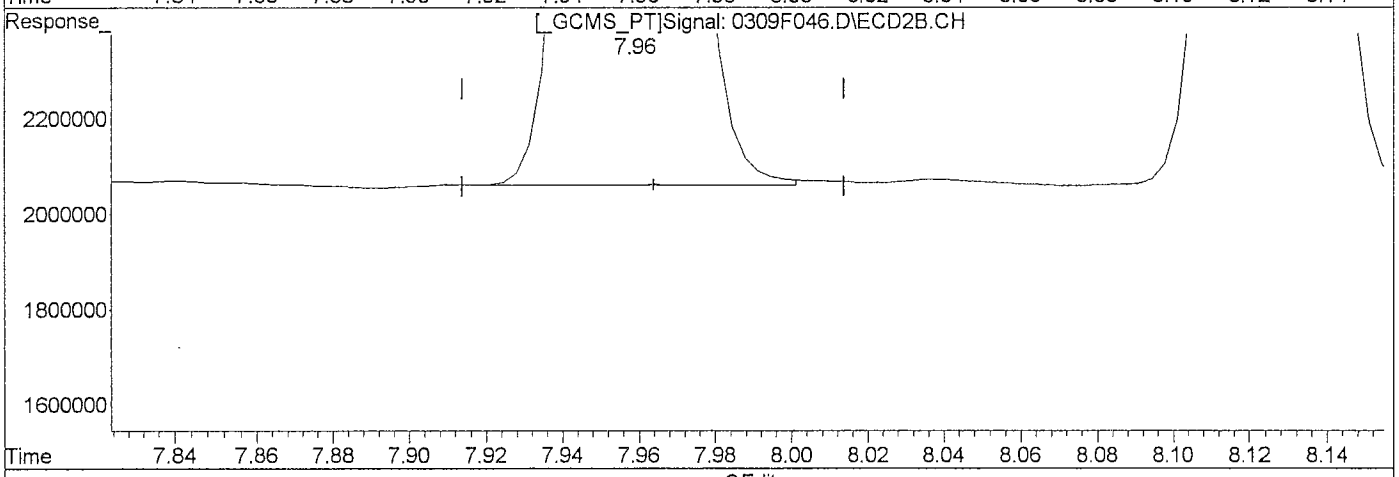
0309F046.D 030907-8081.M Mon Mar 12 08:02:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(3) Hexachlorobenzene

9.18min 18.519ug/L

response 8065238

(3) Hexachlorobenzene #2

7.96min 19.068ug/L m

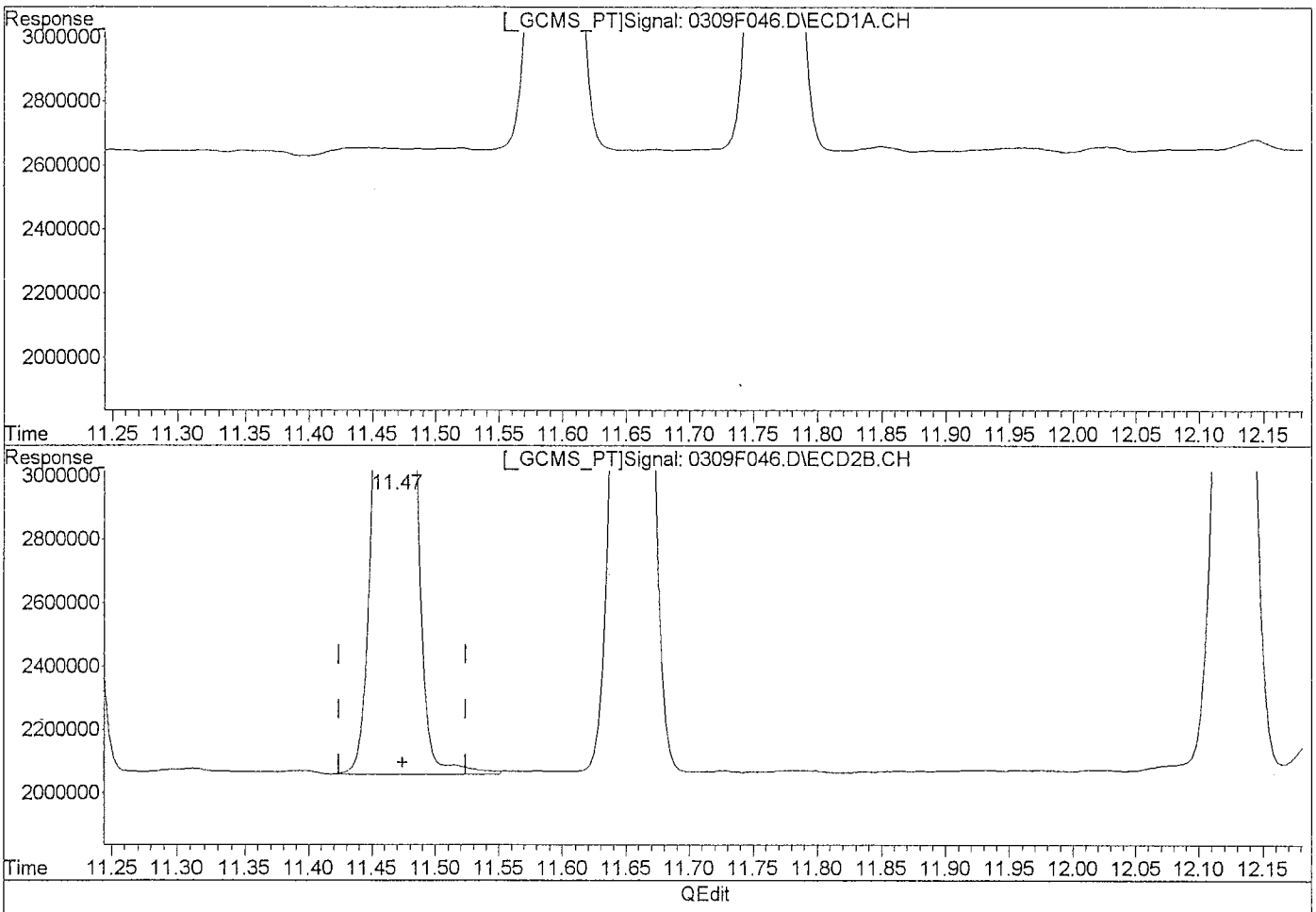
response 7679834

(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:02:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.57min 17.991ug/L

response 6248775

(15) 4,4'-DDE #2

11.47min 18.608ug/L

response 6773847

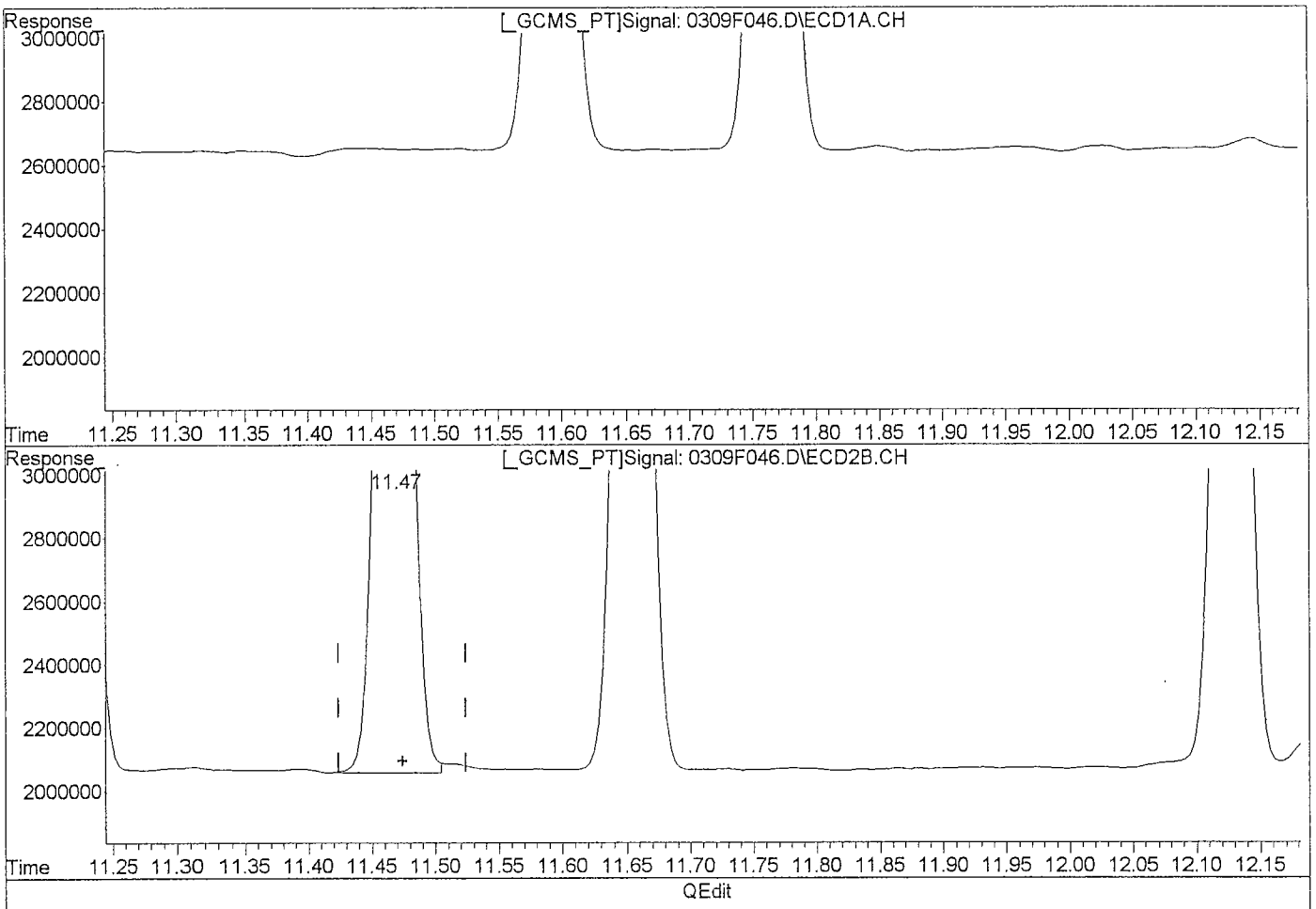
(+) = Expected Retention Time

0309F046.D 030907-8081.M Mon Mar 12 08:03:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.57min 17.991ug/L

response 6248775

(15) 4,4'-DDE #2

11.47min 18.488ug/L m

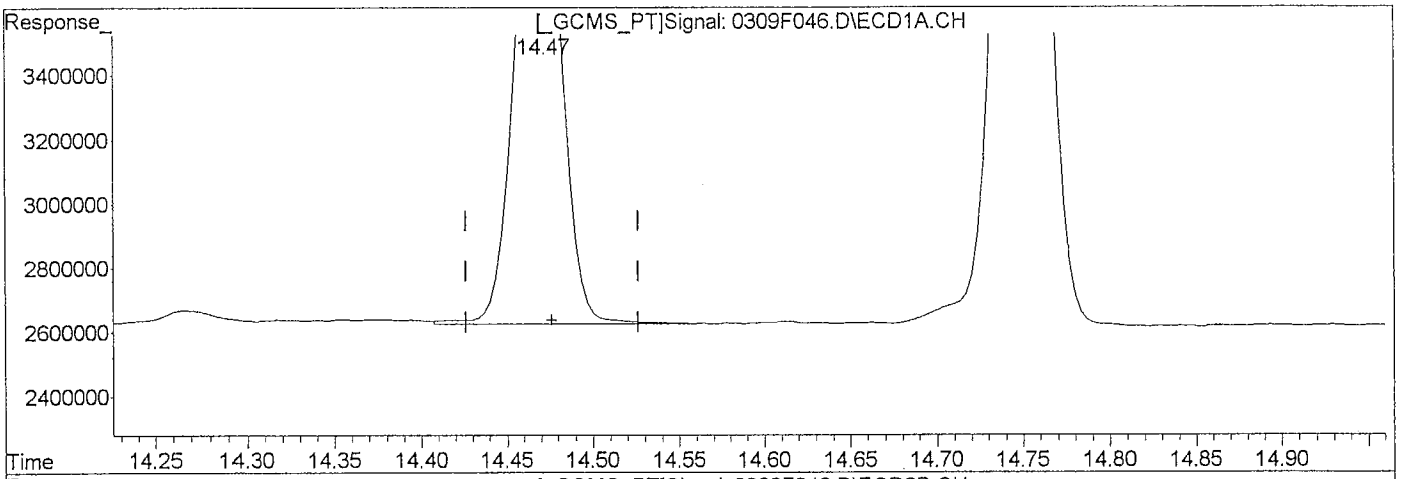
response 6730163

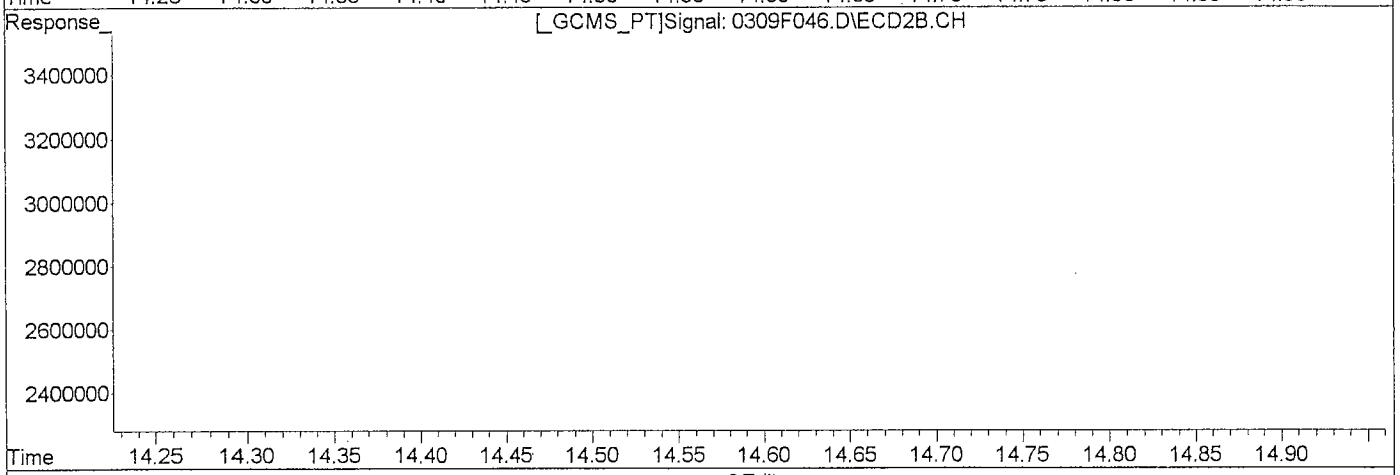
(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:03:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.47min 18.784ug/L

response 3046130

(23) Methoxychlor #2

13.75min 18.928ug/L

response 3565827

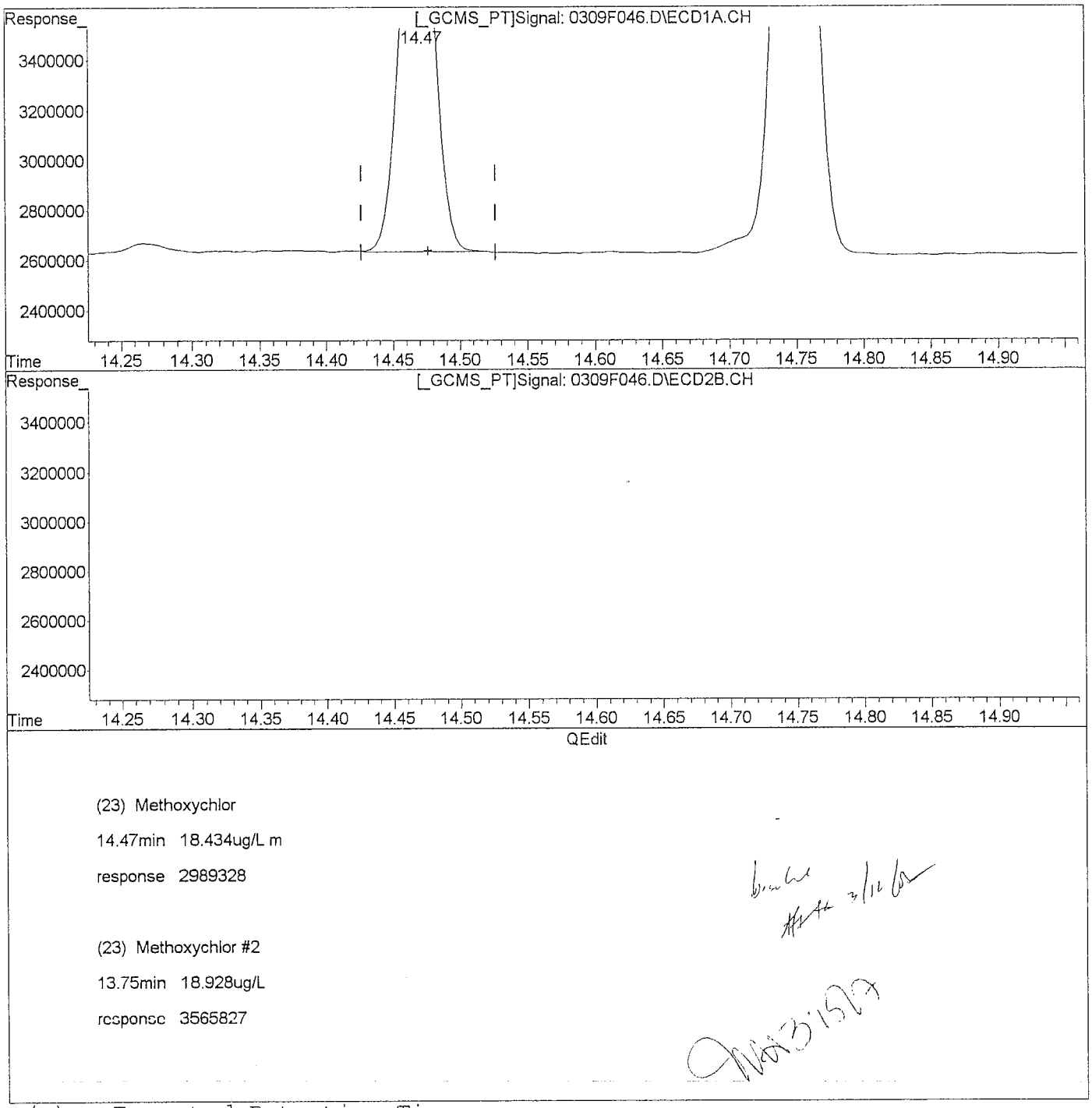
(+) = Expected Retention Time

0309F046.D 030907-8081.M Mon Mar 12 08:04:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(23) Methoxychlor

14.47min 18.434ug/L m

response 2989328

(23) Methoxychlor #2

13.75min 18.928ug/L

response 3565827

(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:04:42 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:03 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	18562663	16343657	48.434	47.260
24)	s	Decachlorobiphen	16.91	15.66	14876934	17669639	48.083	45.840
		Target Compounds						
2)		alpha-BHC	9.05	8.13	24450030	22563954	49.711	48.887
3)		Hexachlorobenzen	9.18	7.96	20343445	18509553	46.711	45.957
4)		beta-BHC	10.07	9.15	10653153	10640354	47.866	49.051
5)		gamma-BHC (Linda	9.60	8.74	22966171	21373388	49.604	48.875
6)		delta-BHC	10.48	9.59	18370545	17183414	44.143	43.073
7)		Heptachlor	10.56	9.30	22170369	21248962	48.601	47.972
8)		Aldrin	11.08	9.79	19813668	19284462	49.707	48.852
9)		Isodrin	11.60	10.43	16347885	16041936	49.177	48.074
10)		Heptachlor Epoxi	11.77	10.65	19040611	18577427	48.813	47.973
11)		gamma-Chlordane	12.27	11.00	18909034	18771947	48.914	48.141
12)		Endosulfan I	12.40	11.23	15166940	15250873	44.603	43.767
13)		alpha-Chlordane	12.34	11.15	18300170	18325792	48.672	47.897
14)		Dieldrin	12.79	11.66	17956176	18471948	49.686	48.378
15)		4,4'-DDE	12.58	11.47	17323274	17795727	49.875	48.886m
16)		Endrin	13.14	12.13	15109869	16245537	48.716	47.756
17)		Endosulfan II	13.55	12.54	14799507	15530221	47.635	46.166
18)		4,4'-DDD	13.37	12.34	14014961	14786667	50.904	49.086
19)		Endrin Aldehyde	13.71	12.88	13258739	14095959	49.280	47.644
20)		Endosulfan Sulfa	14.14	13.18	14780041	16533521	49.345	47.479
21)		4,4'-DDT	13.82	12.75	14313890	15926384	50.272	48.479
22)		Endrin Ketone	14.76	14.06	16801211	19497321	50.788	48.550
23)		Methoxychlor	14.48	13.76	7895633	8750612	48.689	46.450

AK 3/12/07

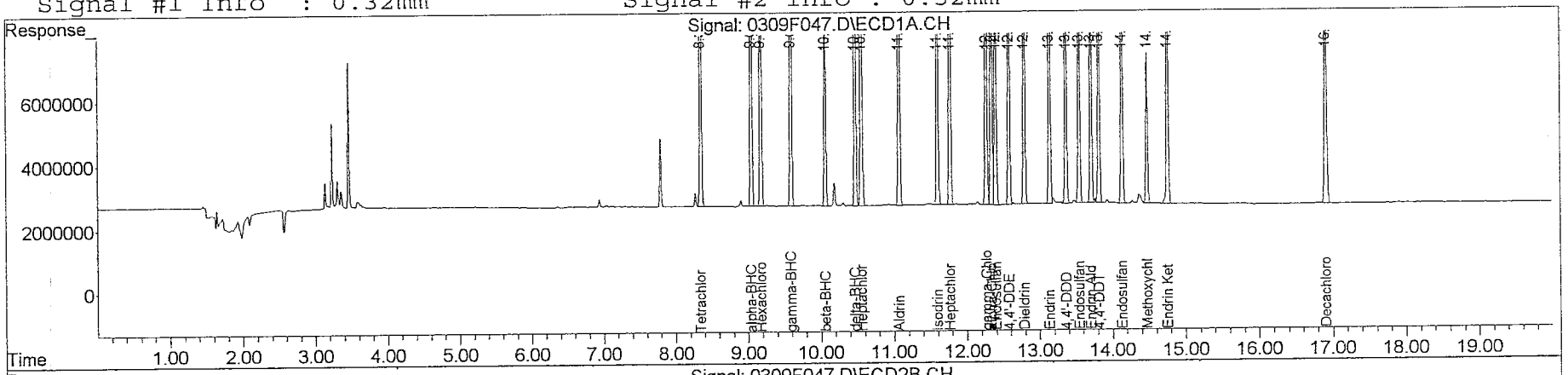
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

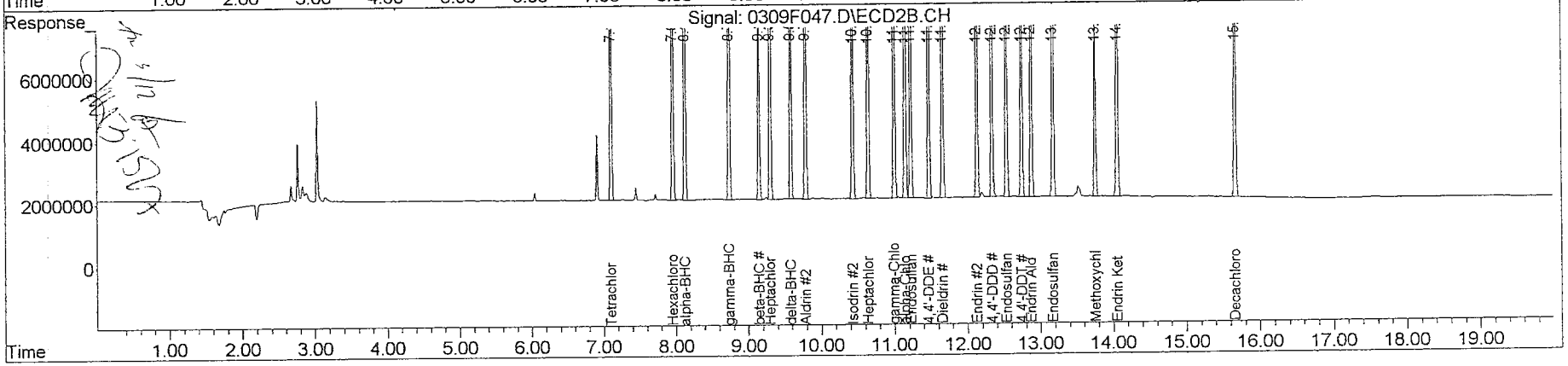
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:07 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Respcnse via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

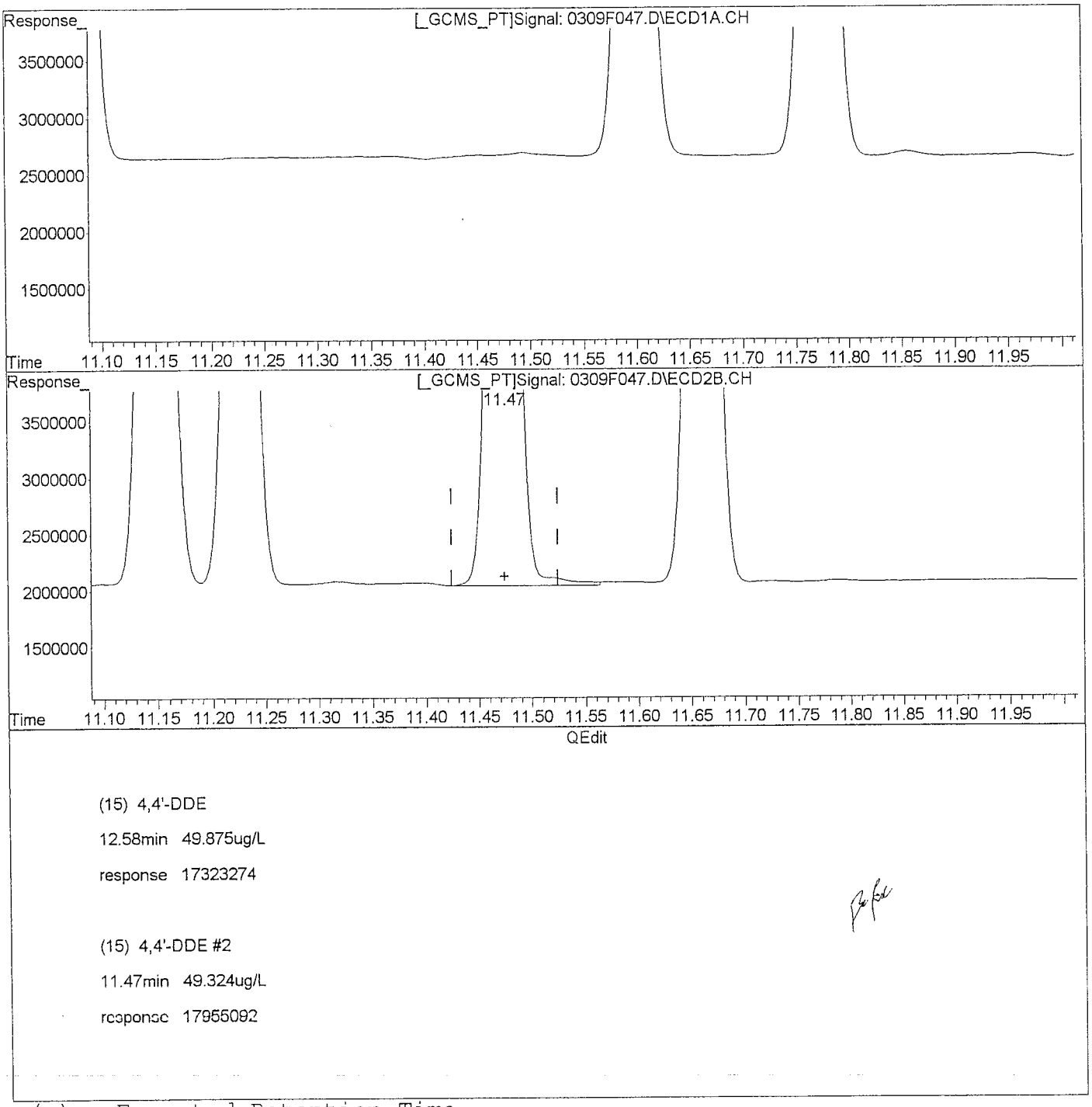




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 49.875ug/L

response 17323274

(15) 4,4'-DDE #2

11.47min 49.324ug/L

response 17955092

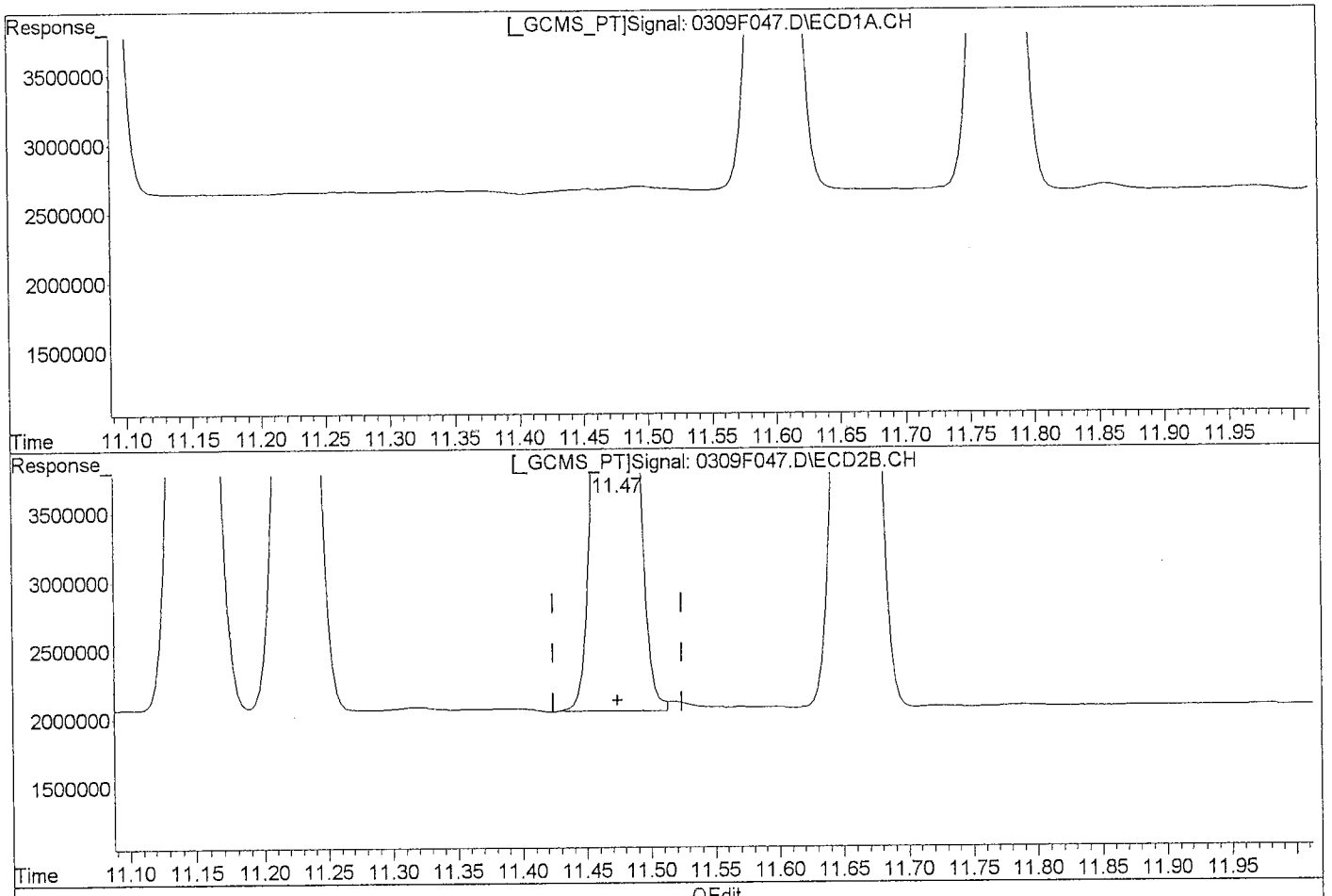
(+) = Expected Retention Time

0309F047.D 030907-8081.M Mon Mar 12 08:07:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 49.875ug/L

response 17323274

(15) 4,4'-DDE #2

11.47min 48.886ug/L m

response 17795727

shoulder

(+) = Expected Retention Time

0309F047.D 030907-8081.M Mon Mar 12 08:07:31 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F048.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\030907\0309F048.D\ECD2B.CH
Acq On : 10 Mar 2007 1:46 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	35501930	31480395	92.632	91.031
24)	s	Decachlorobiphen	16.91	15.66	26949276	32611604	87.101	84.603
		Target Compounds						
2)		alpha-BHC	9.05	8.13	50309272	46757425	102.288	101.304
3)		Hexachlorobenzen	9.18	7.96	38001227	34807061	87.256	86.421
4)		beta-BHC	10.06	9.15	19984362	18530476	89.793	85.423
5)		gamma-BHC (Linda	9.59	8.74	45771960	42850816	98.862	97.988
6)		delta-BHC	10.48	9.59	43557732	41222759	104.665	103.332
7)		Heptachlor	10.56	9.31	42141405	40883320	92.380	92.299
8)		Aldrin	11.07	9.79	38287231	37448723	96.053	94.867
9)		Isodrin	11.60	10.43	30736472	30444350	92.460	91.234
10)		Heptachlor Epoxi	11.77	10.65	35782209	35091770	91.732	90.618
11)		gamma-Chlordane	12.26	11.00	35908510	36002952	92.889	92.331
12)		Endosulfan I	12.39	11.23	31809046	32128528	93.545	92.202
13)		alpha-Chlordane	12.34	11.15	34454603	34827343	91.638	91.026
14)		Dieldrin	12.79	11.66	34447269	35574211	95.318	93.168
15)		4,4'-DDE	12.58	11.47	33271099	34516904	95.790	94.820
16)		Endrin	13.13	12.13	28946785	31299043	93.328	92.007
17)		Endosulfan II	13.54	12.53	29362157	31049815	94.508	92.301
18)		4,4'-DDD	13.36	12.34	26784917	28394312	97.287	94.258
19)		Endrin Aldehyde	13.71	12.88	24651240	26278631	91.623	88.821
20)		Endosulfan Sulfa	14.13	13.17	27722392	31075830	92.555	89.241
21)		4,4'-DDT	13.81	12.74	27621975	30689645	97.011	93.418
22)		Endrin Ketone	14.75	14.05	31804096	36634133	96.139	91.222
23)		Methoxychlor	14.47	13.75	14611082	16110117	90.100	85.516

AK 3/12/07

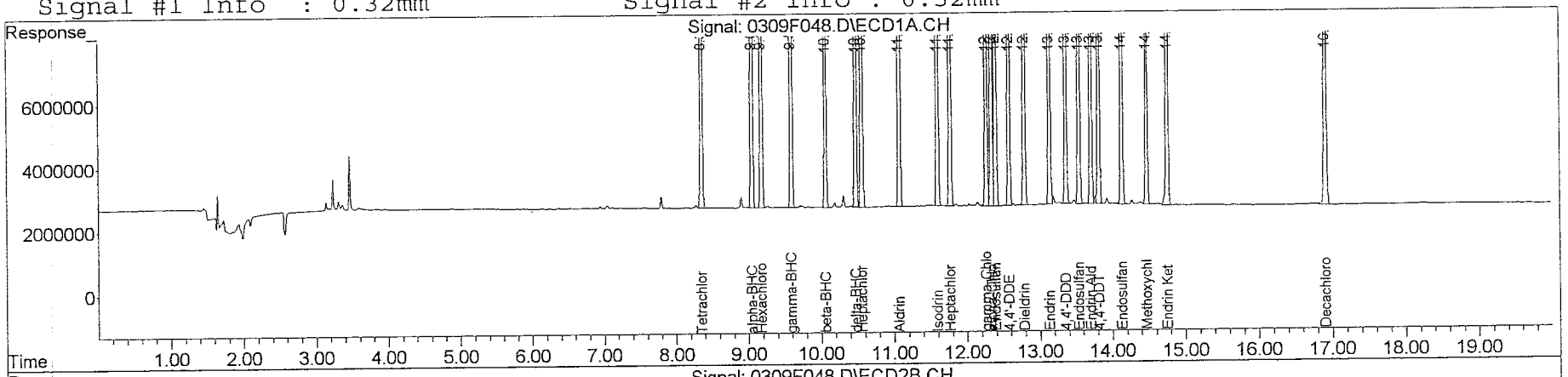
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

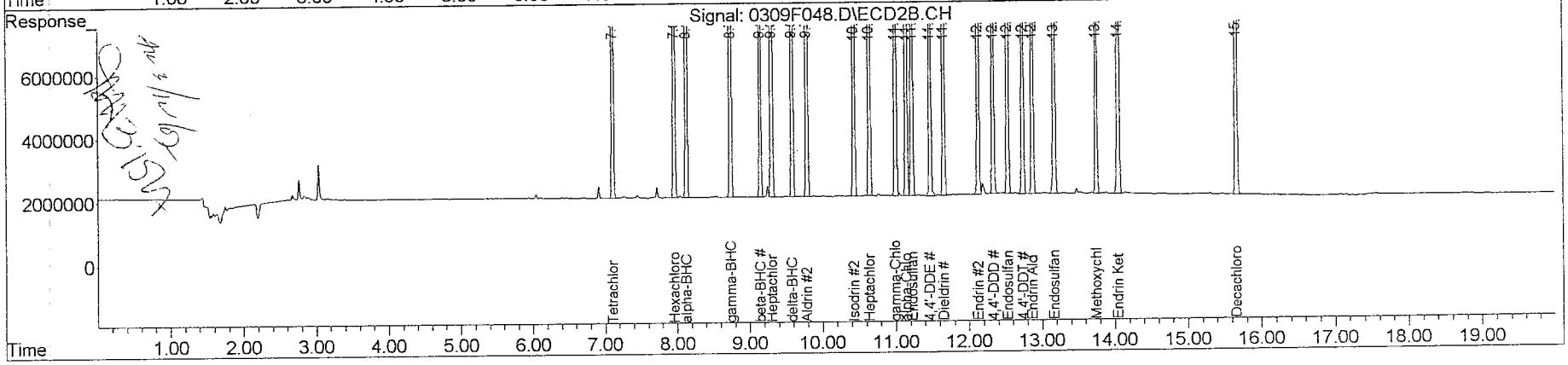
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F048.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\030907\0309F048.D\ECD2B.CH
Acq On : 10 Mar 2007 1:46 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:08 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





675

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F049.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\030907\0309F049.D\ECD2B.CH
Acq On : 10 Mar 2007 2:13 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:06 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.36	7.11	71064675	62833162	185.423	181.692
24)	s	Decachlorobiphen	16.91	15.66	50566754	62019142	163.434	160.894
		Target Compounds						
2)		alpha-BHC	9.05	8.13	104.8E6	96785558	213.019	209.695
3)		Hexachlorobenzen	9.18	7.96	74477183	68304219	171.009	169.590
4)		beta-BHC	10.07	9.15	39423037	36483631	177.135	168.184
5)		gamma-BHC (Linda	9.60	8.74	94383746	87867571	203.858	200.930
6)		delta-BHC	10.48	9.59	90815343	85474576	218.220	214.256
7)		Heptachlor	10.56	9.31	84334111	81214850	184.872	183.353
8)		Aldrin	11.08	9.79	77911886	75151088	195.461	190.376
9)		Isodrin	11.60	10.43	61160938	60033879	183.980	179.907
10)		Heptachlor Epoxi	11.77	10.65	70620001	69022668	181.043	178.238
11)		gamma-Chlordane	12.27	11.00	72171993	72209072	186.696	185.183
12)		Endosulfan I	12.40	11.23	62480751	62337731	183.746	178.897
13)		alpha-Chlordane	12.34	11.15	68690647	69291241	182.694	181.102
14)		Dieldrin	12.79	11.66	69537949	71102560	192.417	186.216
15)		4,4'-DDE	12.58	11.47	67593385	69367509	194.606	190.556
16)		Endrin	13.14	12.13	58924384	62734262	189.979	184.415
17)		Endosulfan II	13.55	12.54	53112436	55329916	170.954	164.477
18)		4,4'-DDD	13.37	12.34	54807969	57459275	199.070	190.743
19)		Endrin Aldehyde	13.71	12.88	48041576	50462301	178.559	170.561
20)		Endosulfan Sulfa	14.14	13.18	54653798	60158208	182.469	172.757
21)		4,4'-DDT	13.82	12.75	56039529	61564374	196.817	187.400
22)		Endrin Ketone	14.76	14.06	62560263	70587971	189.110	175.769
23)		Methoxychlor	14.48	13.76	28638789	30791512	176.603	163.449

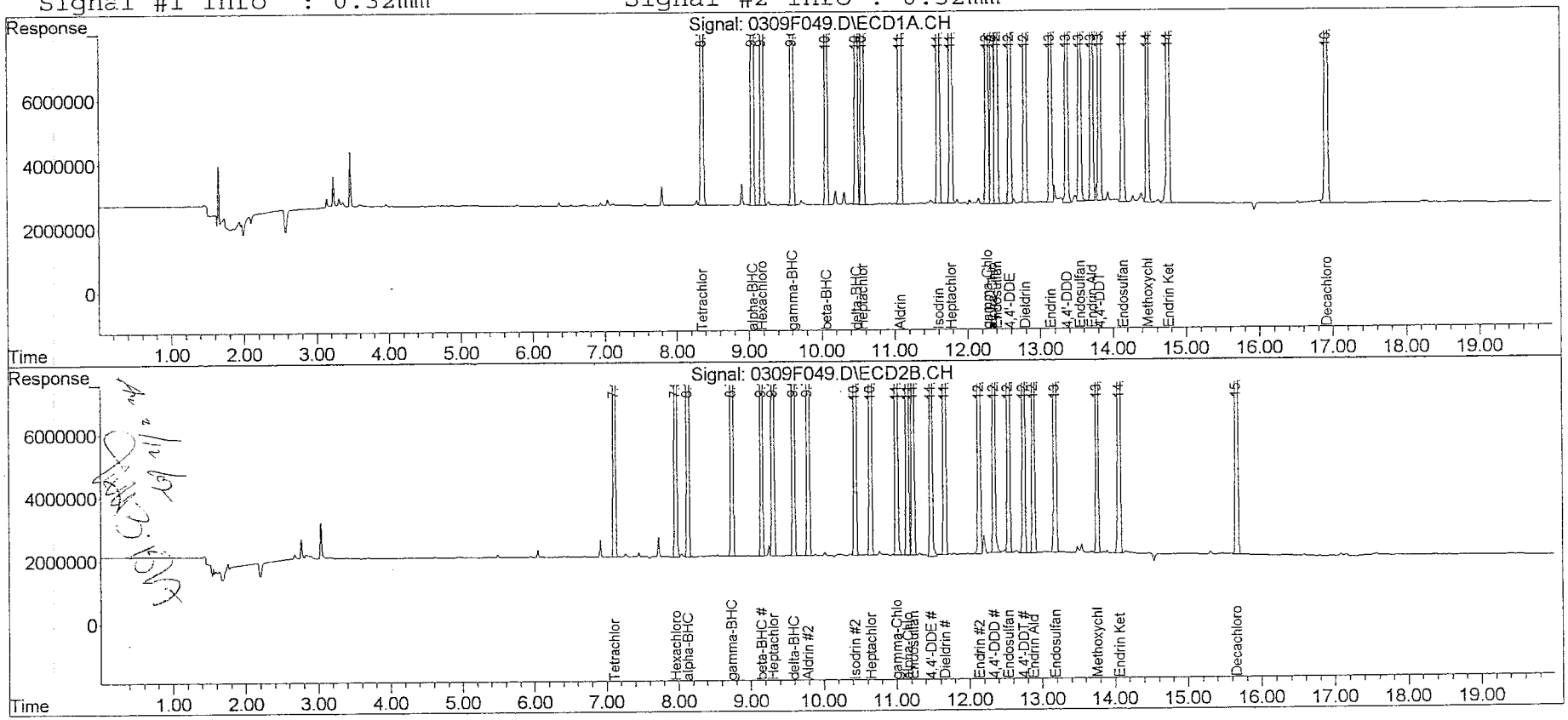
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F049.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\030907\0309F049.D\ECD2B.CH
Acq On : 10 Mar 2007 2:13 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:09 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



677

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F050.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\030907\0309F050.D\ECD2B.CH
Acq On : 10 Mar 2007 2:39 pm Operator: AKamawal
Sample : 8081 ICV @ 40ppb GCPS5-88K Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 08:12:25 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:11:24 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
2)	alpha-BHC	9.06	8.14	18319459	16741144	38.639	37.667
3)	Hexachlorobenzen	9.19	7.97	15618263	14137729	37.497	36.519
4)	beta-BHC	10.07	9.15	8062269	7371828	37.630	35.995
5)	gamma-BHC (Linda	9.60	8.75	17042326	15718594	38.460	37.278
6)	delta-BHC	10.48	9.59	16814933	15662393	41.513	40.672
7)	Heptachlor	10.57	9.31	16495590	15652345	37.792	36.971
8)	Aldrin	11.08	9.80	14606697	14227771	38.146	37.515
9)	Isodrin	11.60	10.44	12866912	12590335	39.990	39.227
10)	Heptachlor Epoxi	11.78	10.65	14125626	13617044	37.572	36.472
11)	gamma-Chlordane	12.27	11.01	13941806	13755093	37.458	36.627
12)	Endosulfan I	12.40	11.23	12714472	12612720	38.693	37.694
13)	alpha-Chlordane	12.35	11.15	13515486	13448363	37.221	36.403
14)	Dieldrin	12.80	11.66	12843150	13066333	36.949	35.761
15)	4,4'-DDE	12.58	11.48	12662550	12860908	38.095	37.014
16)	Endrin	13.15	12.14	11315187	12125795	38.605	37.769
17)	Endosulfan II	13.55	12.54	11772094	12260453	39.042	37.791
18)	4,4'-DDD	13.37	12.34	10079862	10522739	38.216	36.153
19)	Endrin Aldehyde	13.71	12.88	10163945	10623278	38.487	37.047
20)	Endosulfan Sulfa	14.14	13.18	11057238	12198494	37.784	36.230
21)	4,4'-DDT	13.82	12.75	10705468	11743140	38.737	37.159
22)	Endrin Ketone	14.76	14.06	12965859	14896703	39.610	38.107
23)	Methoxychlor	14.48	13.76	6094633	6700691	39.619	37.582

AK 3/12/07

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F050.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\030907\0309F050.D\ECD2B.CH
Acq On : 10 Mar 2007 2:39 pm
Sample : 8081 ICV @ 40ppb GCPS5-88K
Misc : SVG\W0308345\3-ICV.H

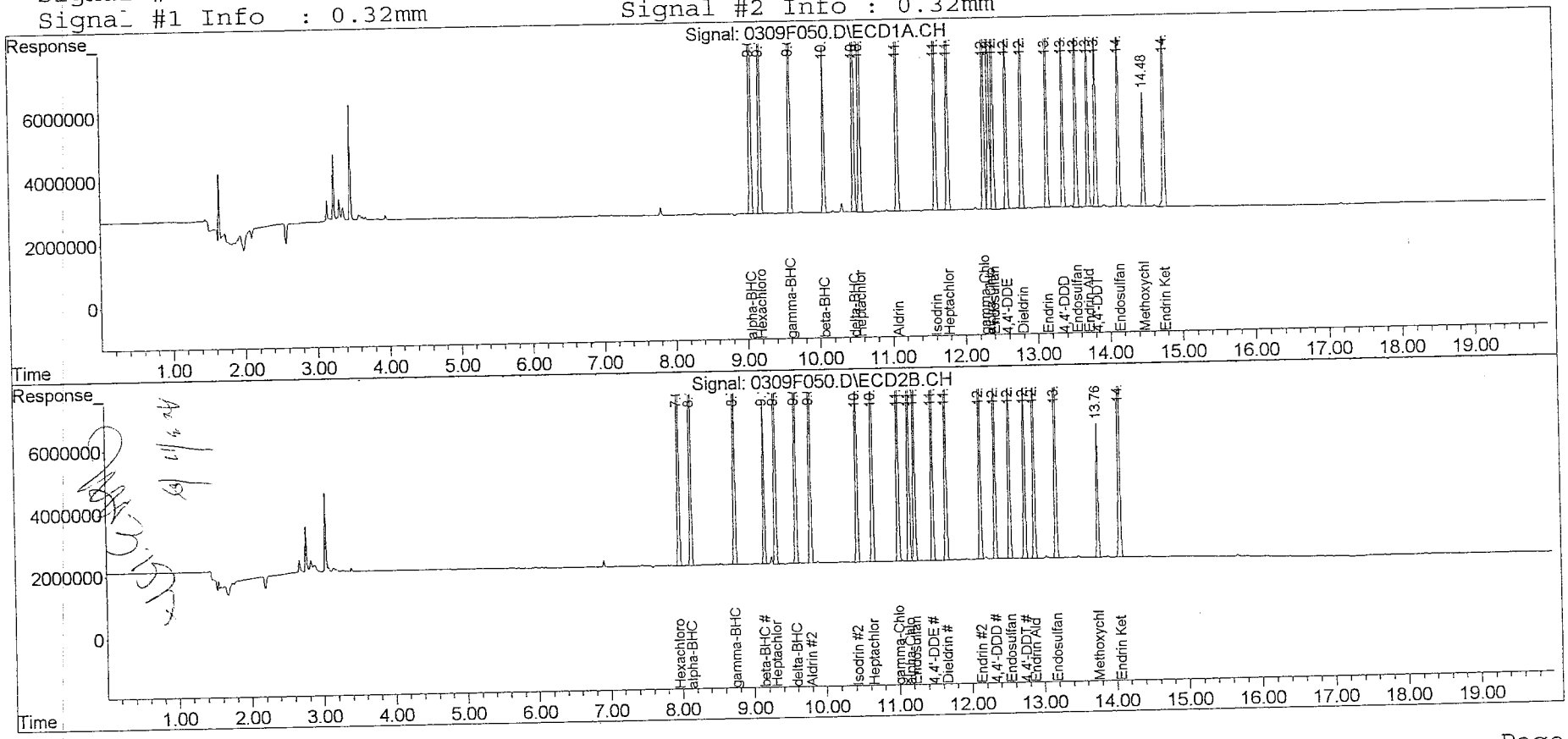
Vial: 10
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:12 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:11:24 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB
Signal #1 Info : 0.32mm

Signal #2 Phase: DB-35MS
Signal #2 Info : 0.32mm



679

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:19 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.30	669948	576374	25.084	22.994
32)	Chlordane {2}	11.84	11.00	304003	902906	24.275	22.257
33)	Chlordane {3}	12.27	11.04	1098937	551037	24.748	23.649
34)	Chlordane {4}	12.34	11.09	786479	262560	25.233	21.308
35)	Chlordane {5}	12.41	11.15	649877	706830	27.037	22.760
36)	Chlordane {6}	13.38	12.57	227844	378251	32.968m	22.470 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

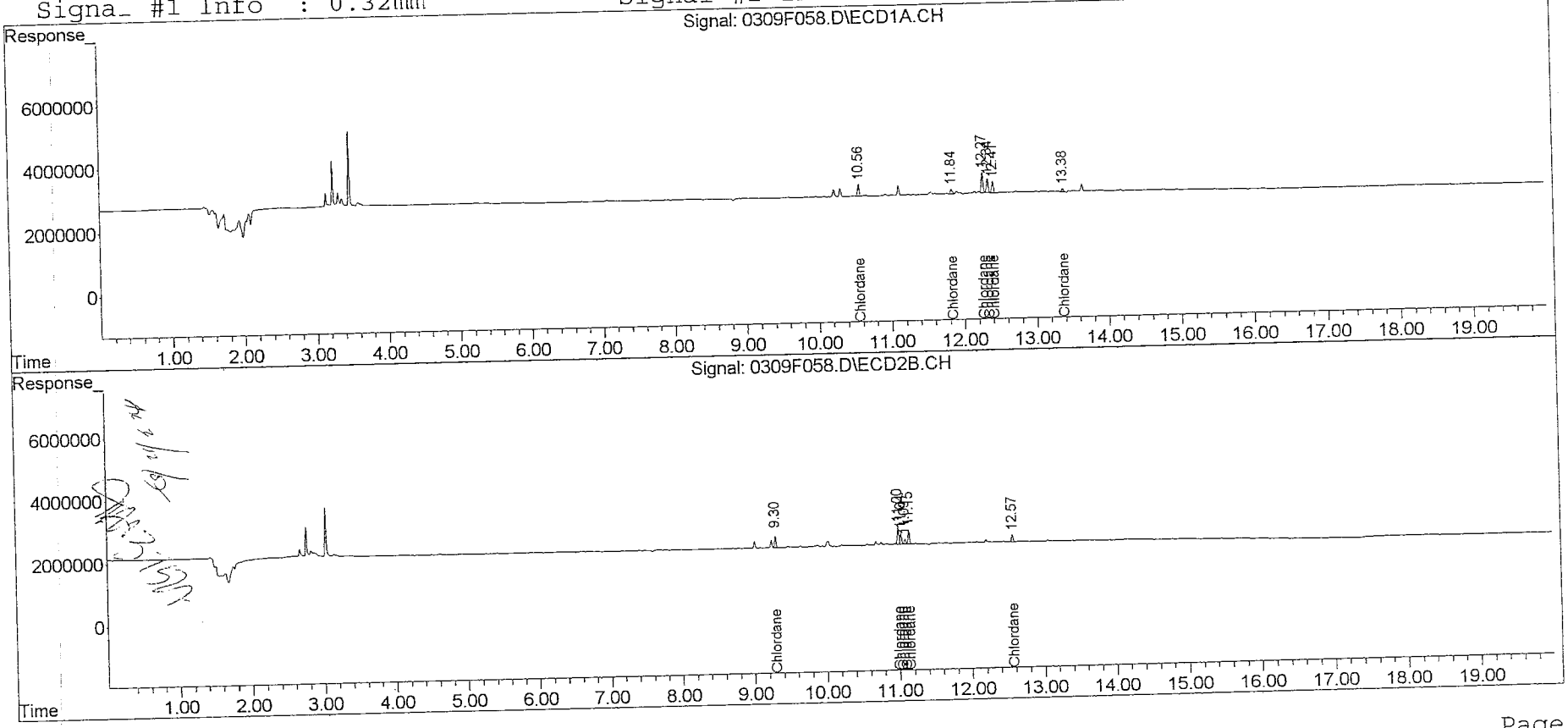
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm
Sample : CHLOR@ 25PPB GCPS5-86F
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:40 2007 Quant Results File: 030907-8081.RES

Vial: 18
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB
Signal #1 Info : 0.32mm
Signal #2 Phase: DB-35MS
Signal #2 Info : 0.32mm

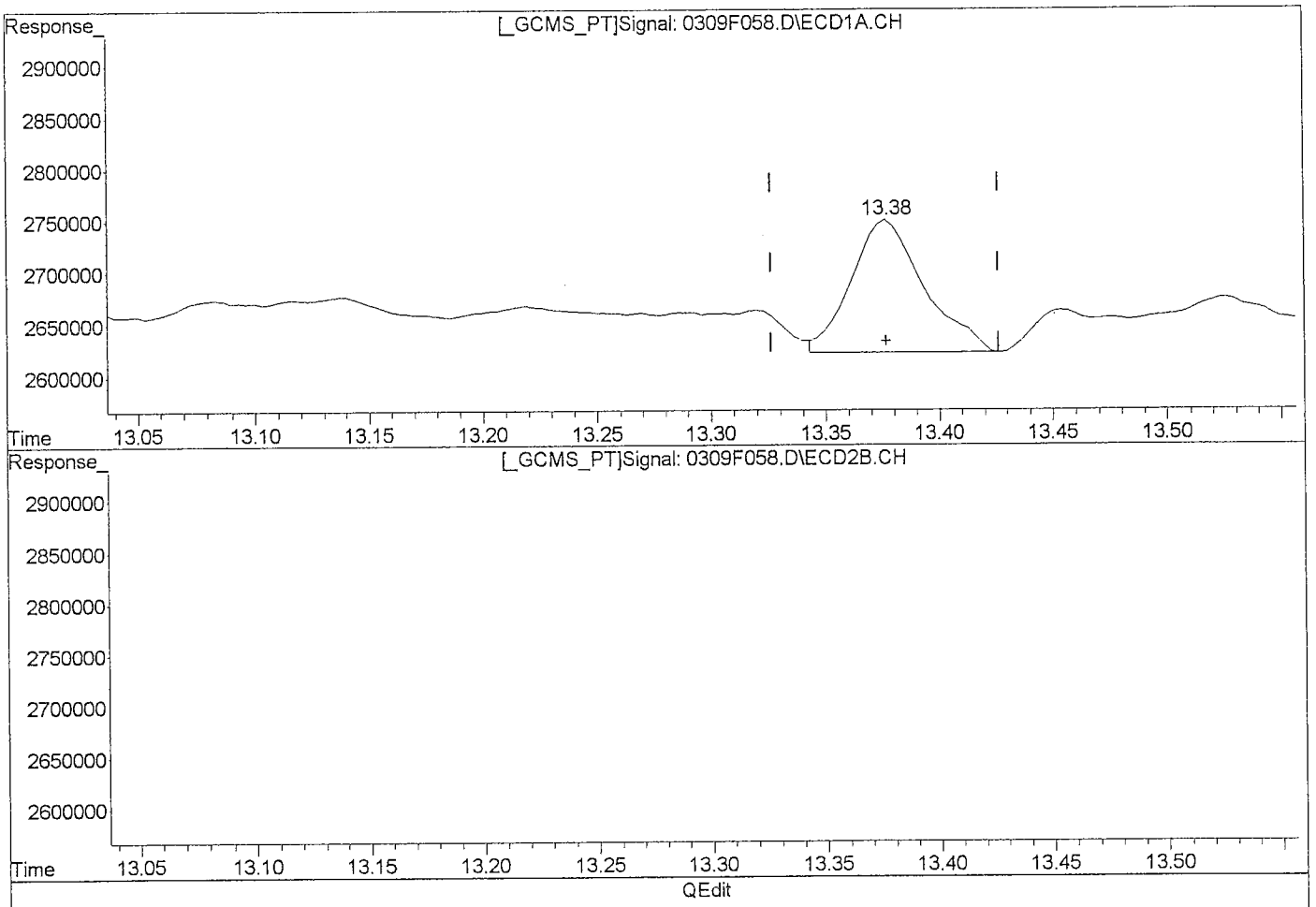


0309F058.D 030907-8081.M Mon Mar 12 11:19:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration



(36) Chlordane {6}

13.38min 40.670ug/L

response 281072

(36) Chlordane {6} #2

12.57min 22.470ug/L

response 378251

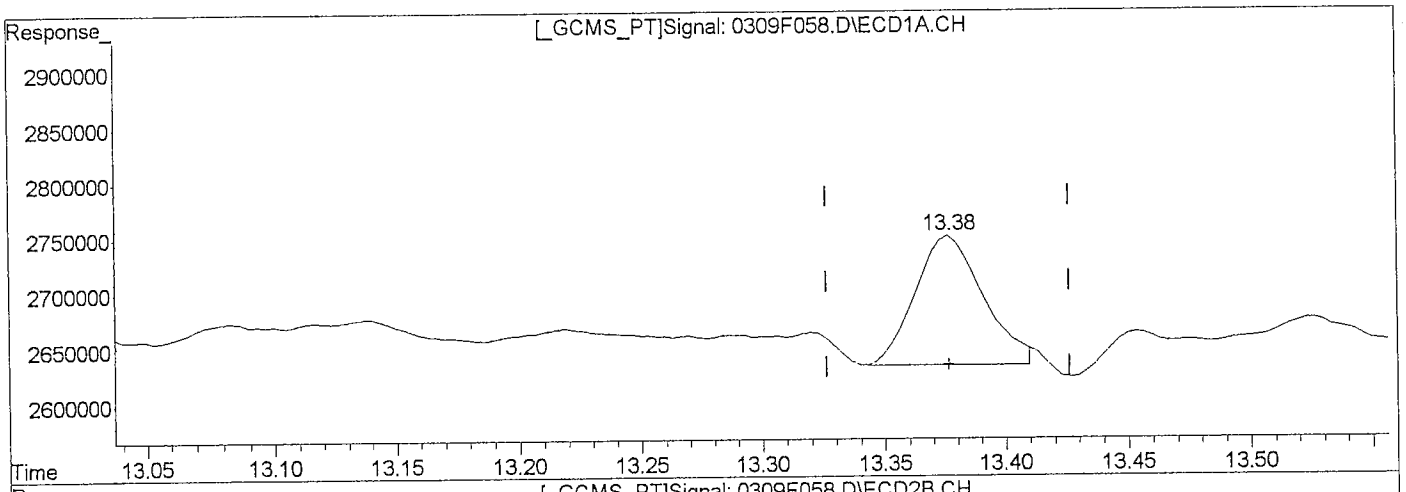
(+) = Expected Retention Time

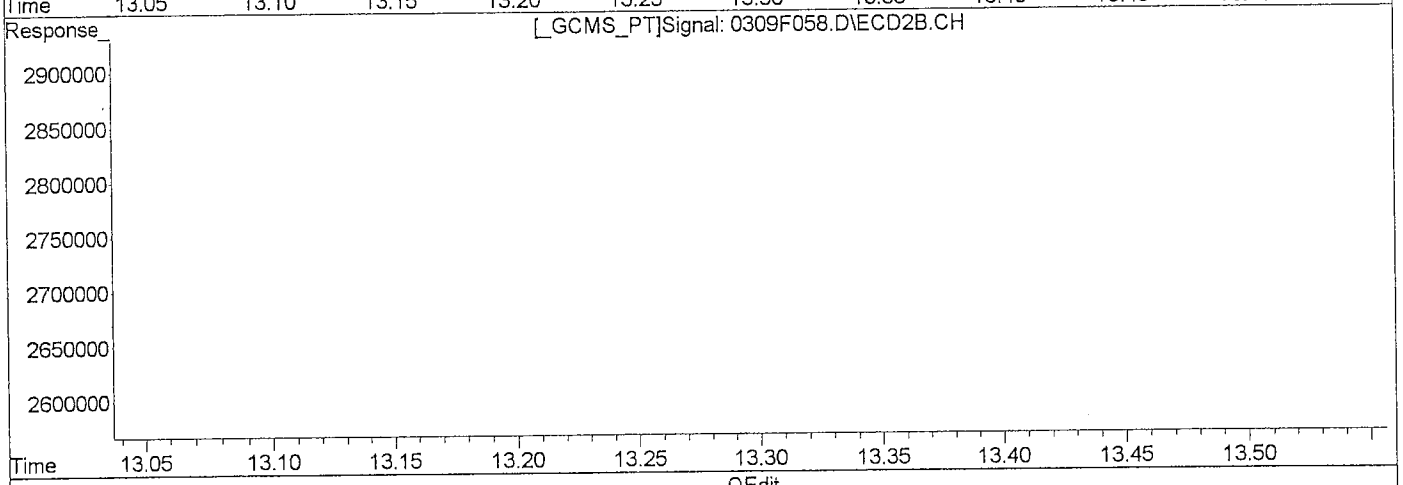
0309F058.D 030907-8081.M Mon Mar 12 08:40:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration





QEdit

(36) Chlordane {6}

13.38min 32.968ug/L m

response 227844

(36) Chlordane {6} #2

12.57min 22.470ug/L

response 378251

Before

MAR 12 2007

After

(+) = Expected Retention Time

0309F058.D 030907-8081.M Mon Mar 12 08:41:01 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:21 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.31	1403706	1192212	52.557	47.562
32)	Chlordane {2}	11.84	11.00	637233	1890864	50.883	46.612
33)	Chlordane {3}	12.27	11.04	2253165	1132832	50.742	48.617
34)	Chlordane {4}	12.34	11.10	1616648	574041	51.867	46.587
35)	Chlordane {5}	12.41	11.15	1292242	1474102	53.761	47.467
36)	Chlordane {6}	13.37	12.58	374639	763583	54.208m	45.360

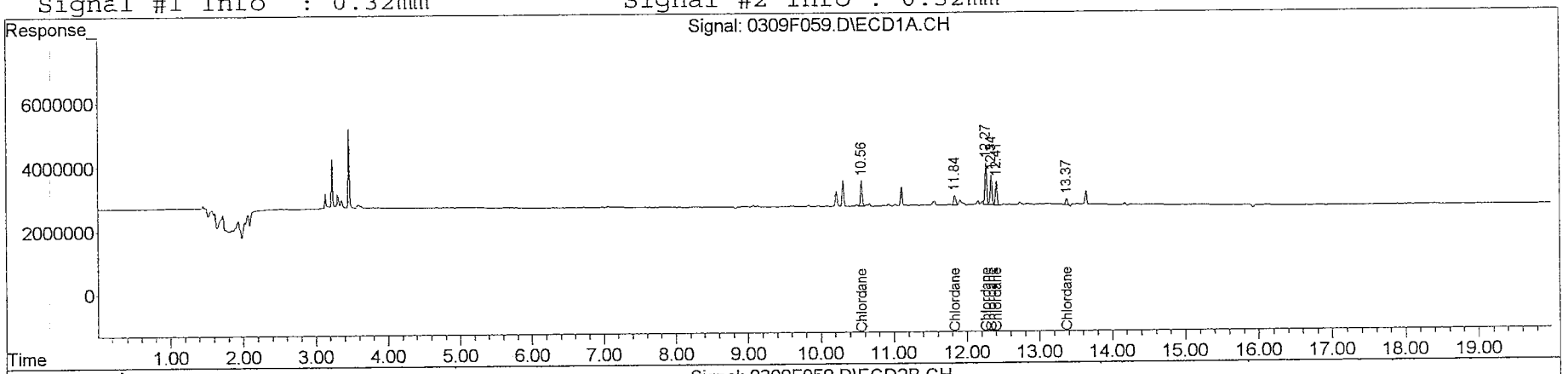
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

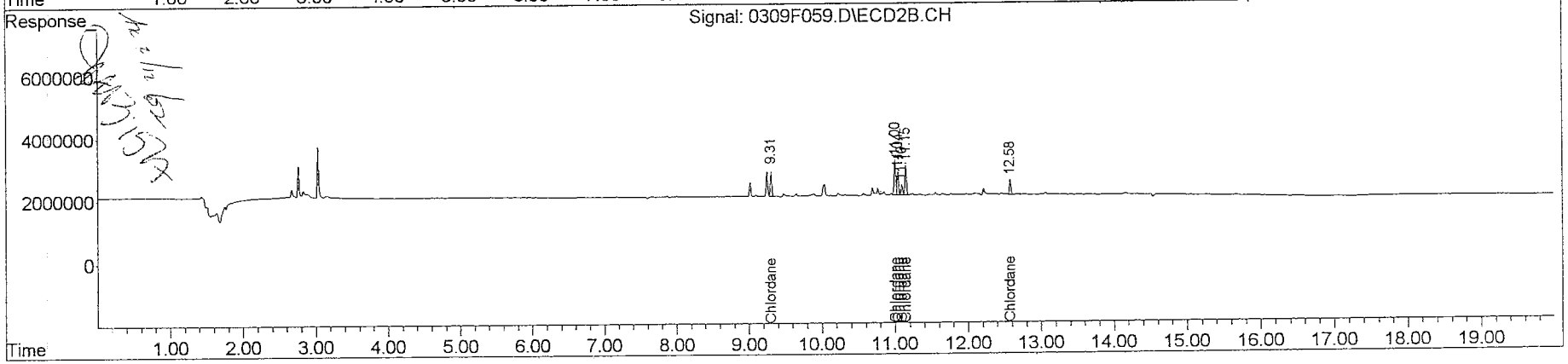
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:41 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

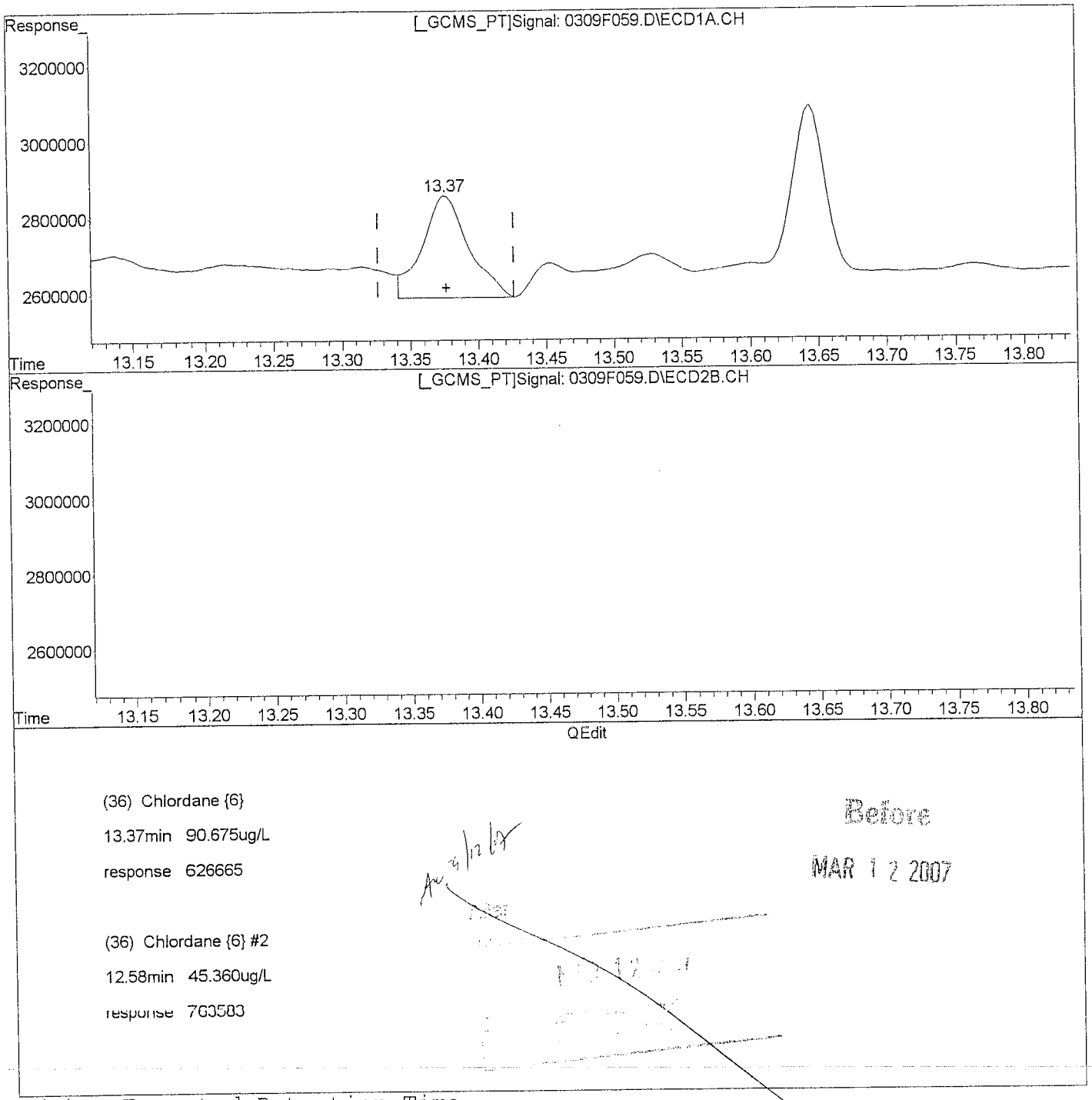




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration



(36) Chlordane {6}
13.37min 90.675ug/L
response 626665

(36) Chlordane {6} #2
12.58min 45.360ug/L
response 763583

Before
MAR 12 2007

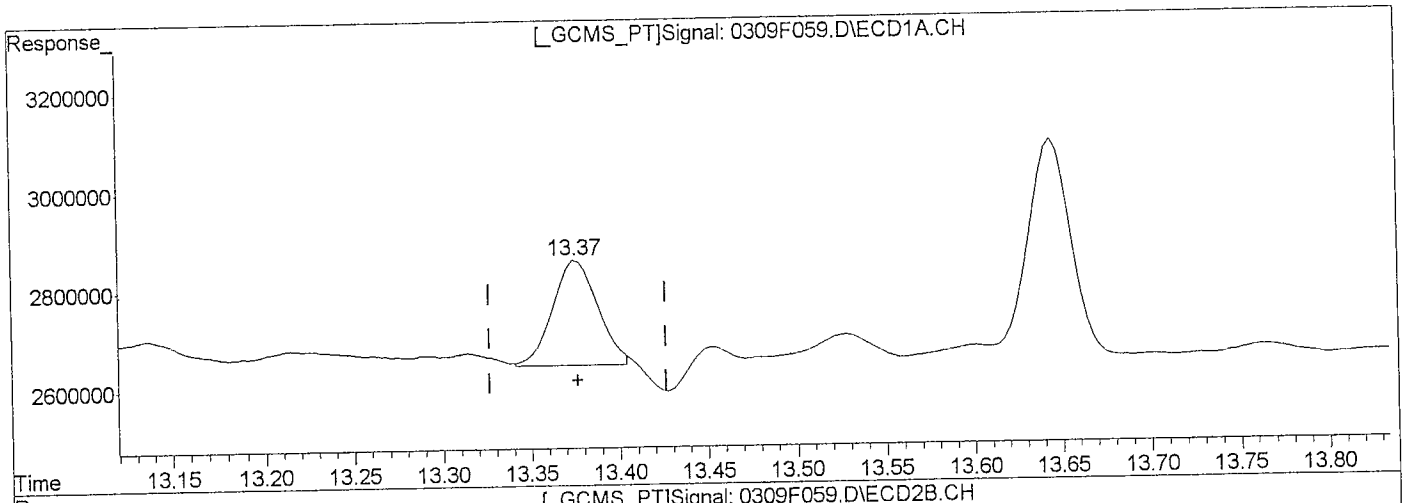
(+) = Expected Retention Time
0309F059.D 030907-8081.M Mon Mar 12 08:41:29 2007

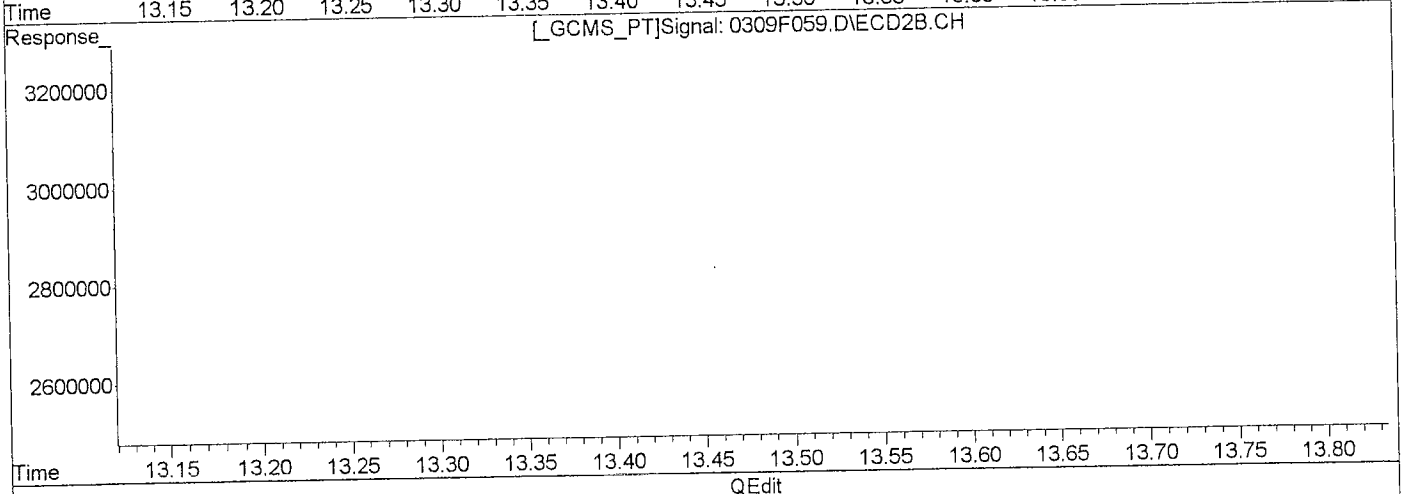
Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm
Sample : CHLOR@ 50PPB GCPS5-86F
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Vial: 19
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration





QEdit

(36) Chlordane {6}
13.37min 54.208ug/L m
response 374639

(36) Chlordane {6} #2
12.58min 45.360ug/L
response 763583

Before
MAR 12 2007

(+) = Expected Retention Time
0309F059.D 030907-8081.M Mon Mar 12 08:41:38 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F060.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\030907\0309F060.D\ECD2B.CH
Acq On : 10 Mar 2007 7:05 pm Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:22 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.30	2552280	2246611	95.562	89.625
32)	Chlordane {2}	11.84	11.00	1181222	3579786	94.321	88.245
33)	Chlordane {3}	12.27	11.04	4184969	2128559	94.246	91.350
34)	Chlordane {4}	12.34	11.09	2974003	1117446	95.415	90.688
35)	Chlordane {5}	12.41	11.15	2334376	2764118	97.117	89.005
36)	Chlordane {6}	13.37	12.57	723722	1542913	104.719	91.656

AC 3/12/07

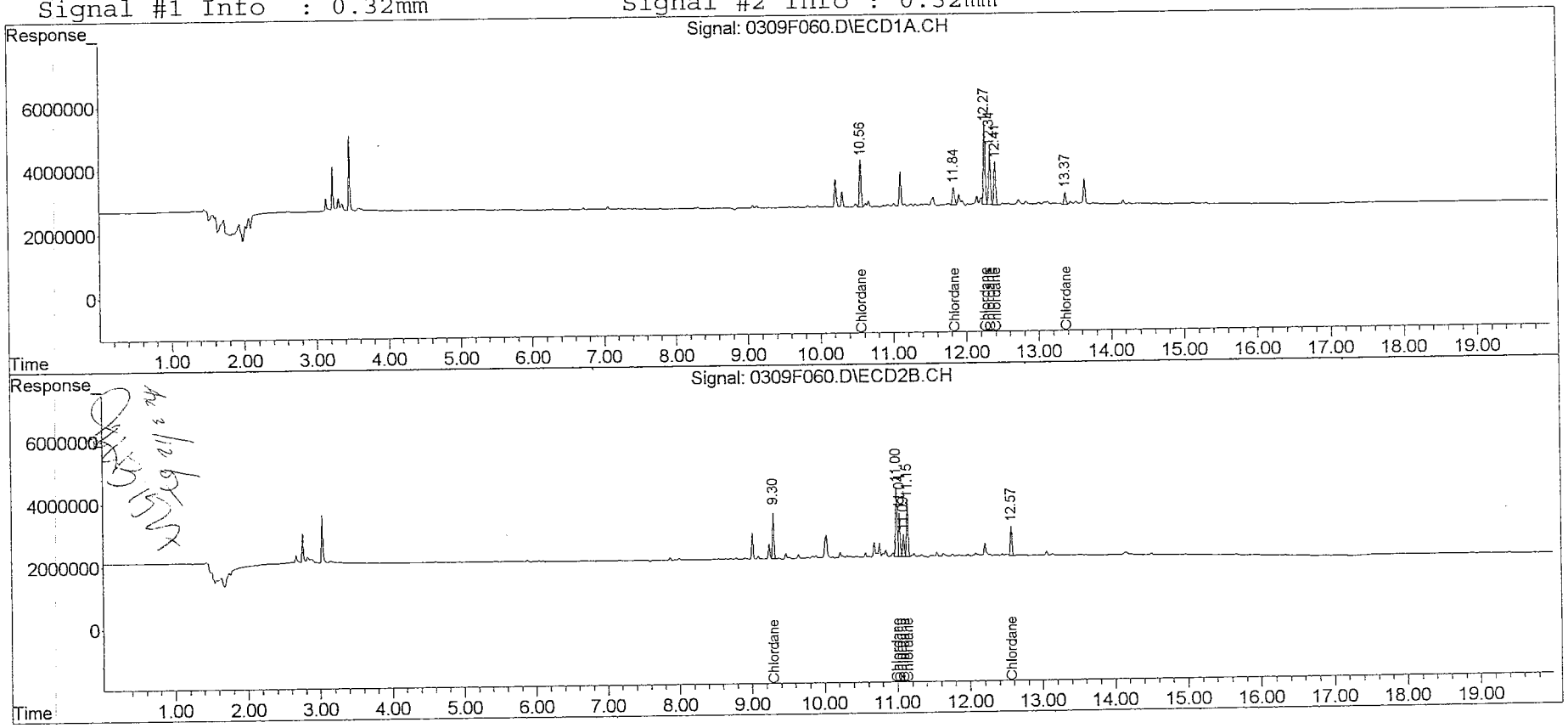
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F060.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\030907\0309F060.D\ECD2B.CH
Acq On : 10 Mar 2007 7:05 pm Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



689

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F061.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\030907\0309F061.D\ECD2B.CH
Acq On : 10 Mar 2007 7:32 pm Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:23 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.31	13104081	10816408	490.639	431.505
32)	Chlordane {2}	11.84	11.00	6233997	17695490	497.788	436.210
33)	Chlordane {3}	12.27	11.04	22051871	9891144	496.613	424.493
34)	Chlordane {4}	12.34	11.10	15239945	5287398	488.945	429.106
35)	Chlordane {5}	12.41	11.15	11437581	13337876	475.837	429.484
36)	Chlordane {6}	13.37	12.58	3154715	7305222	456.471	433.961

Am 3/12/07

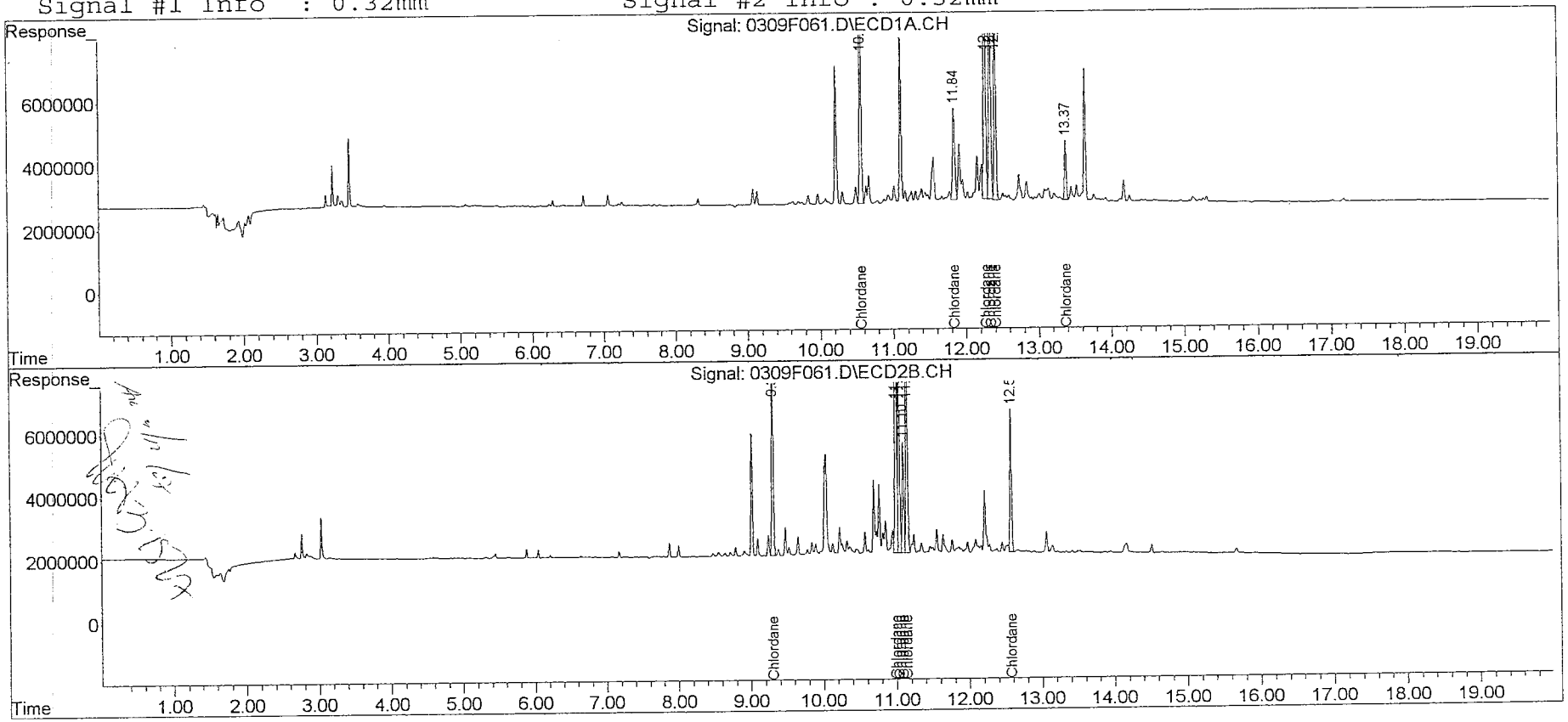
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F061.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\030907\0309F061.D\ECD2B.CH
Acq On : 10 Mar 2007 7:32 pm Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



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Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F062.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\030907\0309F062.D\ECD2B.CH
Acq On : 10 Mar 2007 7:58 pm Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:25 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.57	9.31	25210406	21656417	943.920	863.952
32)	Chlordane {2}	11.84	11.00	12400904	35363798	990.218	871.750
33)	Chlordane {3}	12.27	11.04	43497848	19350408	979.581	830.451
34)	Chlordane {4}	12.34	11.10	29791942	10539358	955.819	855.336
35)	Chlordane {5}	12.42	11.15	22079183	26439763	918.559	851.368
36)	Chlordane {6}	13.38	12.58	6004594	14370132	868.834	853.647

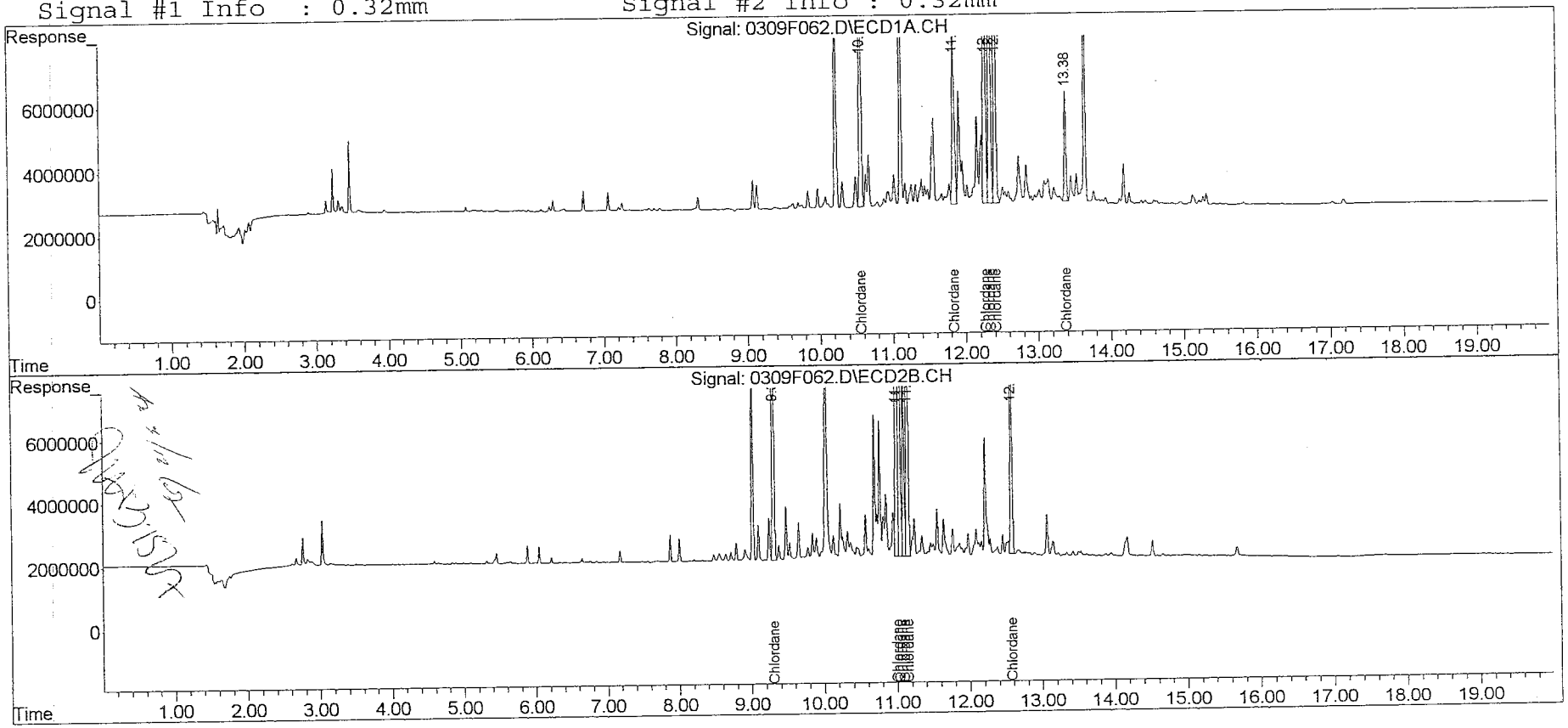
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F062.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\030907\0309F062.D\ECD2B.CH
Acq On : 10 Mar 2007 7:58 pm Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F063.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\030907\0309F063.D\ECD2B.CH
Acq On : 10 Mar 2007 8:25 pm Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:26 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.57	9.31	48878643	38181570	1830.098	1523.200
32)	Chlordane {2}	11.85	11.01	22745029	62572057	1816.201	1542.458
33)	Chlordane {3}	12.28	11.05	84529100	33349093	1903.613	1431.225
34)	Chlordane {4}	12.35	11.10	56984681	18424294	1828.247	1495.248
35)	Chlordane {5}	12.42	11.16	41449254	46198676	1724.411	1487.611
36)	Chlordane {6}	13.39	12.58	11328774	25345988	1639.216	1505.660

AK 3/12/07

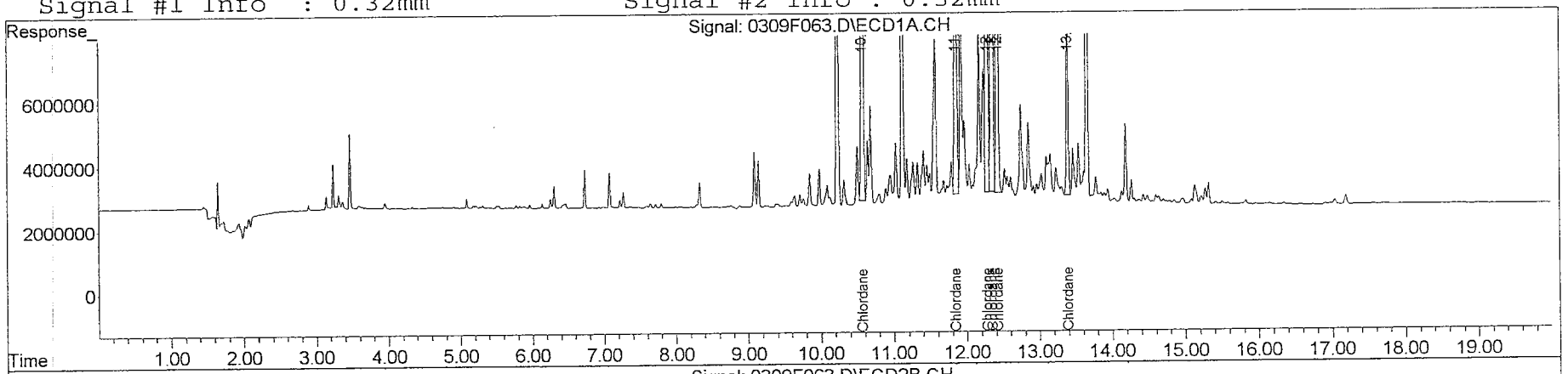
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

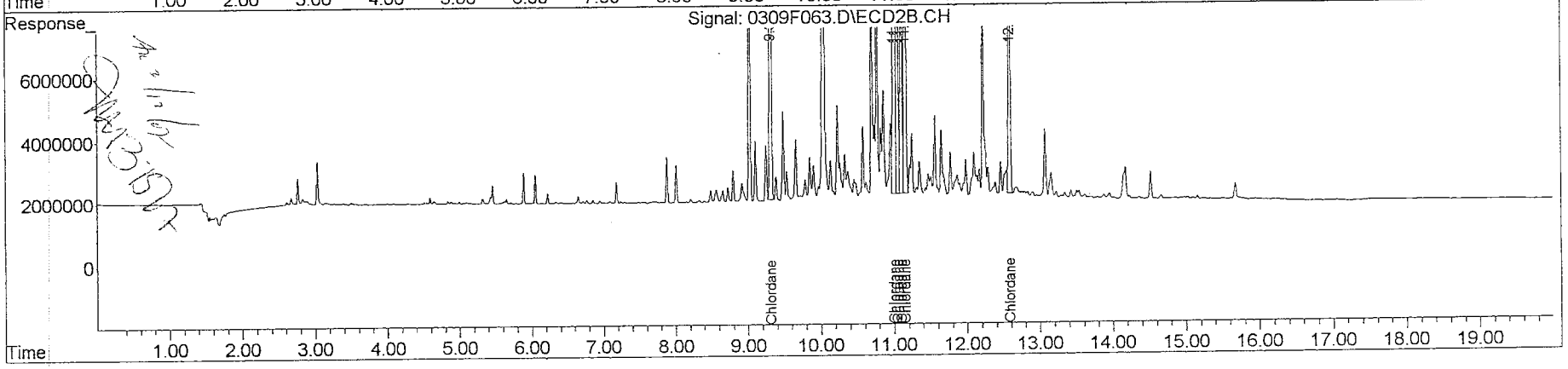
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F063.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\030907\0309F063.D\ECD2B.CH
Acq On : 10 Mar 2007 8:25 pm Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:43 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F064.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\030907\0309F064.D\ECD2B.CH
Acq On : 10 Mar 2007 8:51 pm Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 08:45:21 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.56	9.31	18290049	13976096	702.326	636.505	
32)	Chlordane {2}	11.84	11.00	8541447	25502424	702.437	722.543	
33)	Chlordane {3}	12.27	11.04	37516849	19130787	863.328	942.473	
34)	Chlordane {4}	12.34	11.10	23935174	8316450	787.789	786.005	
35)	Chlordane {5}	12.41	11.15	23943814	18628701	1019.879	691.611	#
36)	Chlordane {6}	13.38	12.58	6593038	7759589	945.867	532.181	#

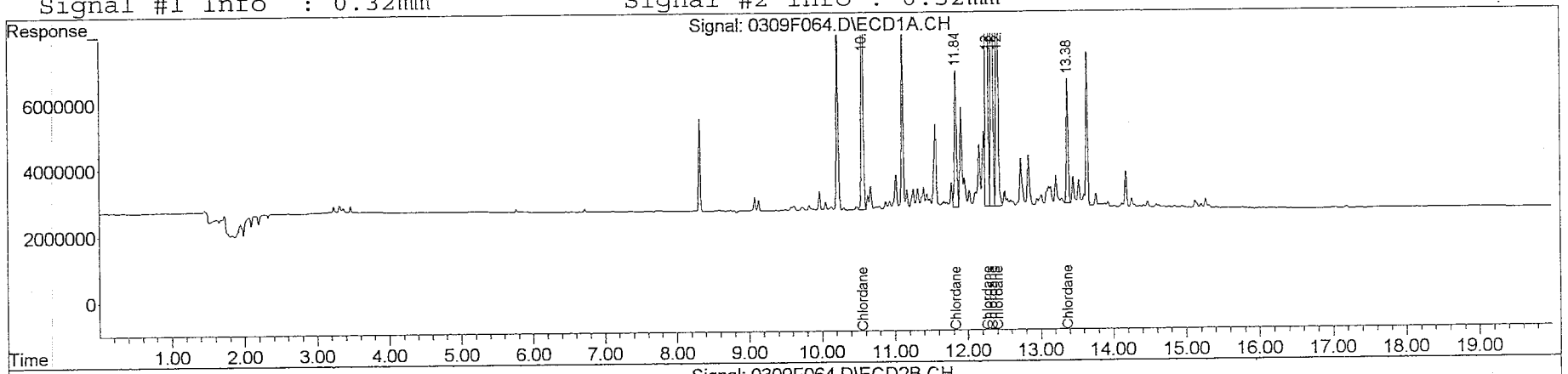
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

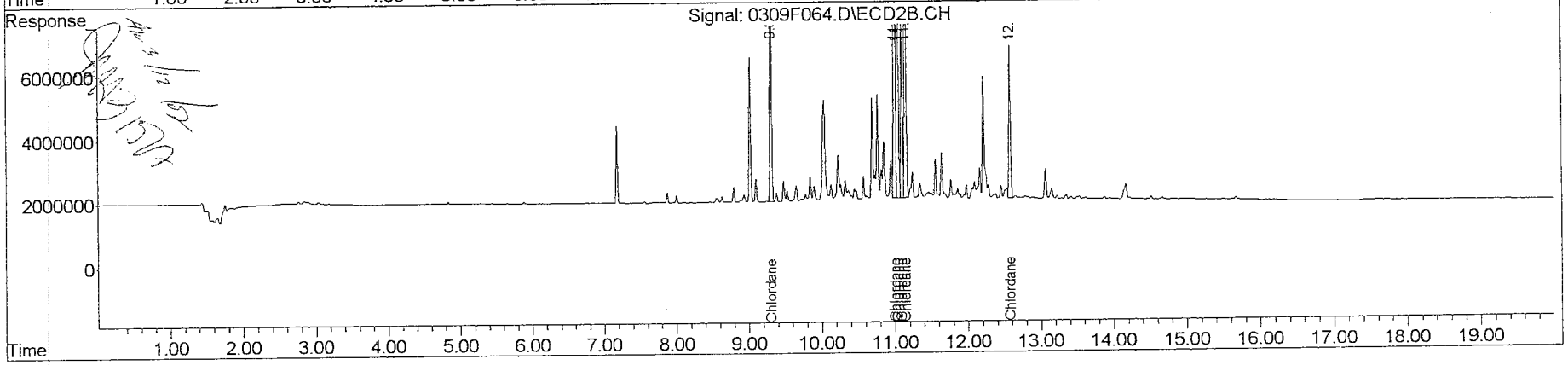
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F064.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\030907\0309F064.D\ECD2B.CH
Acq On : 10 Mar 2007 8:51 pm Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:45 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Respcnse via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





697

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:39 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	570015	530488	2.108m	1.923
41)	2,4'-DDD	12.73	11.78	490429	488517	2.040	1.945
43)	2,4'-DDT	13.19	12.20	570517	627485	2.016	2.029

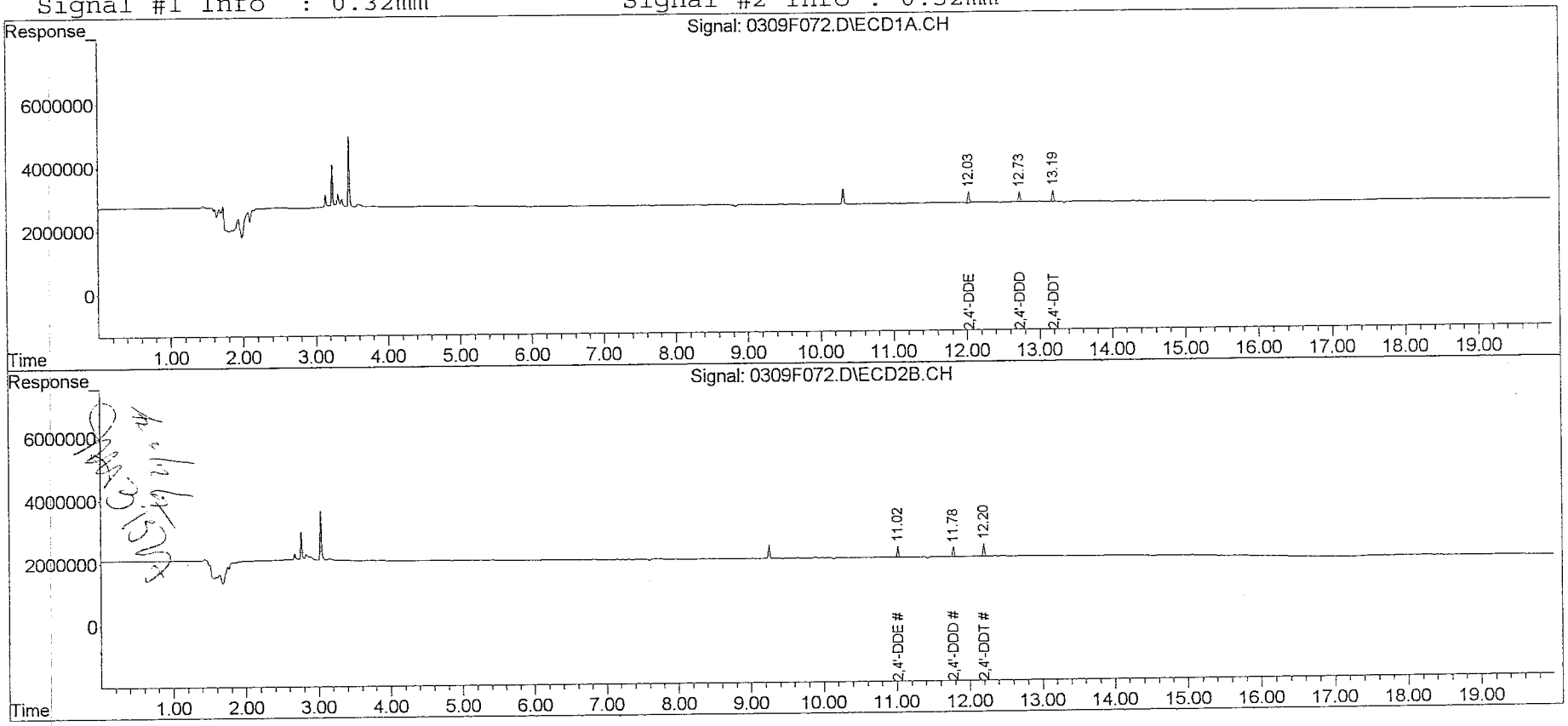
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq Cn : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:27 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

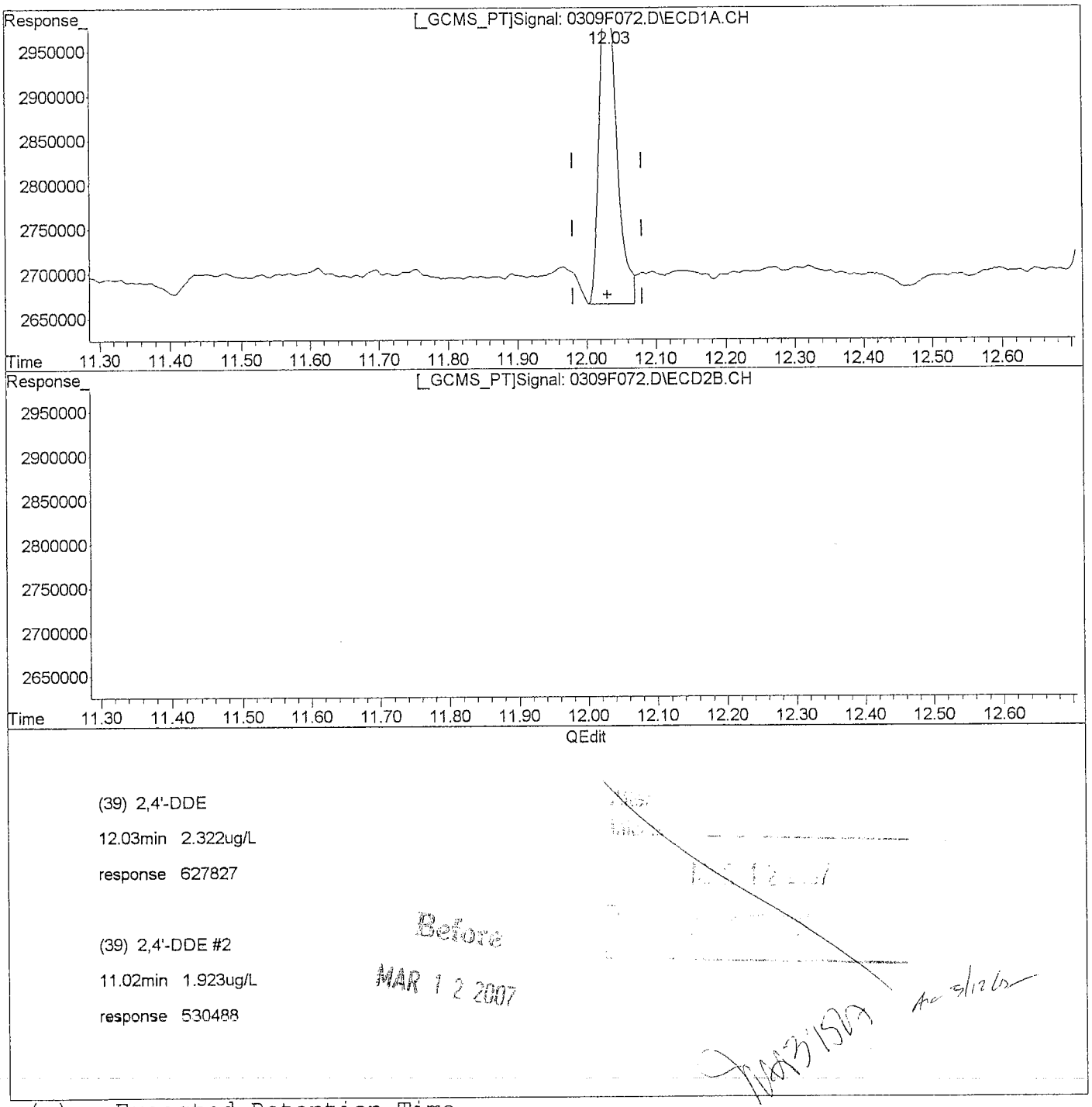
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration

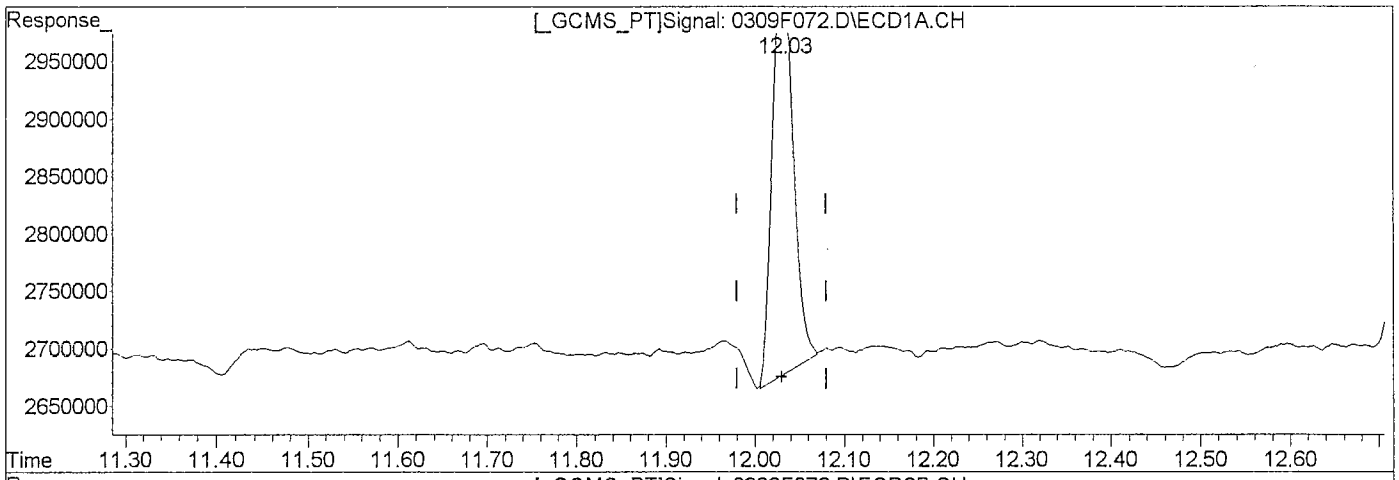


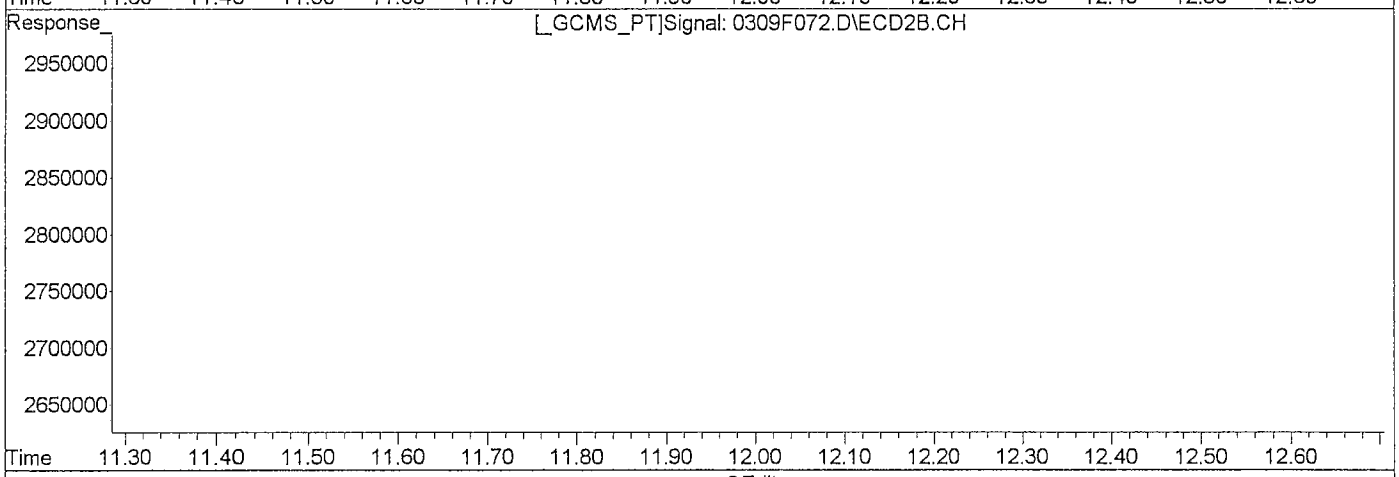
(+) = Expected Retention Time
0309F072.D 030907-8081.M Mon Mar 12 09:27:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE
12.03min 2.108ug/L m
response 570015

(39) 2,4'-DDE #2
11.02min 1.923ug/L
response 530488

MAR 12 2007

Before
MAR 12 2007

(+) = Expected Retention Time
0309F072.D 030907-8081.M Mon Mar 12 09:27:09 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:40 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	1317518	1352095	4.872m	4.902
41)	2,4'-DDD	12.73	11.78	1180251	1238146	4.909	4.930
43)	2,4'-DDT	13.19	12.20	1388825	1541807	4.907	4.984

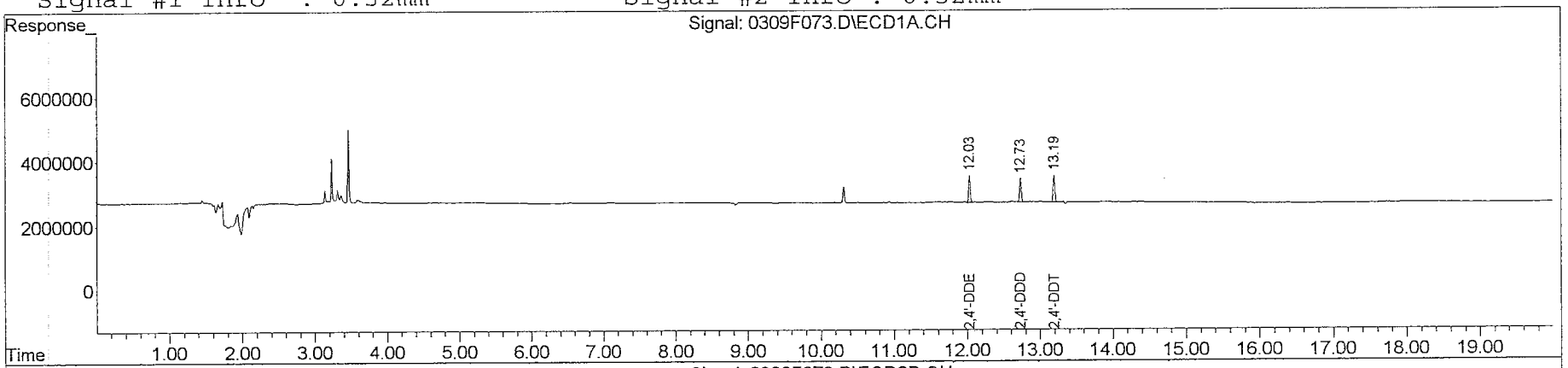
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

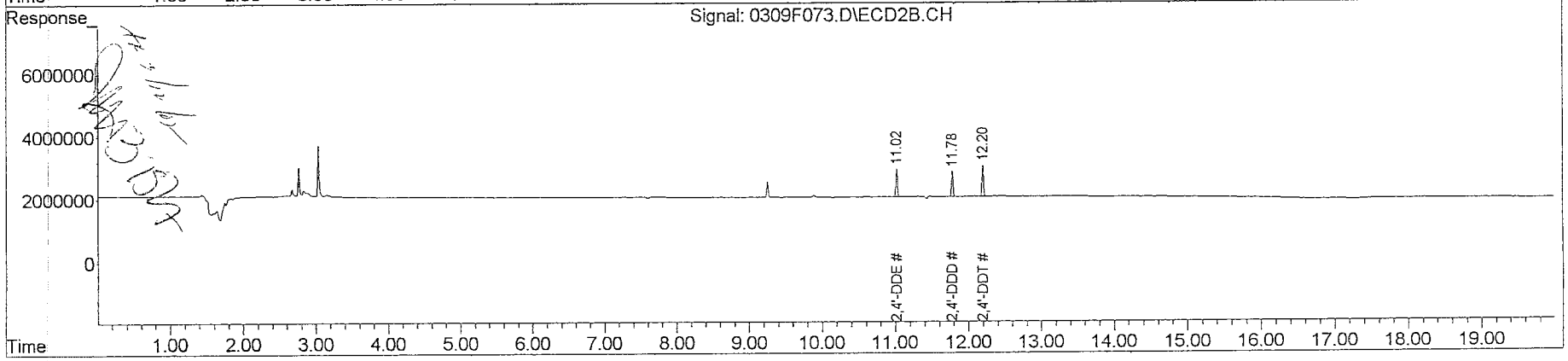
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:27 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



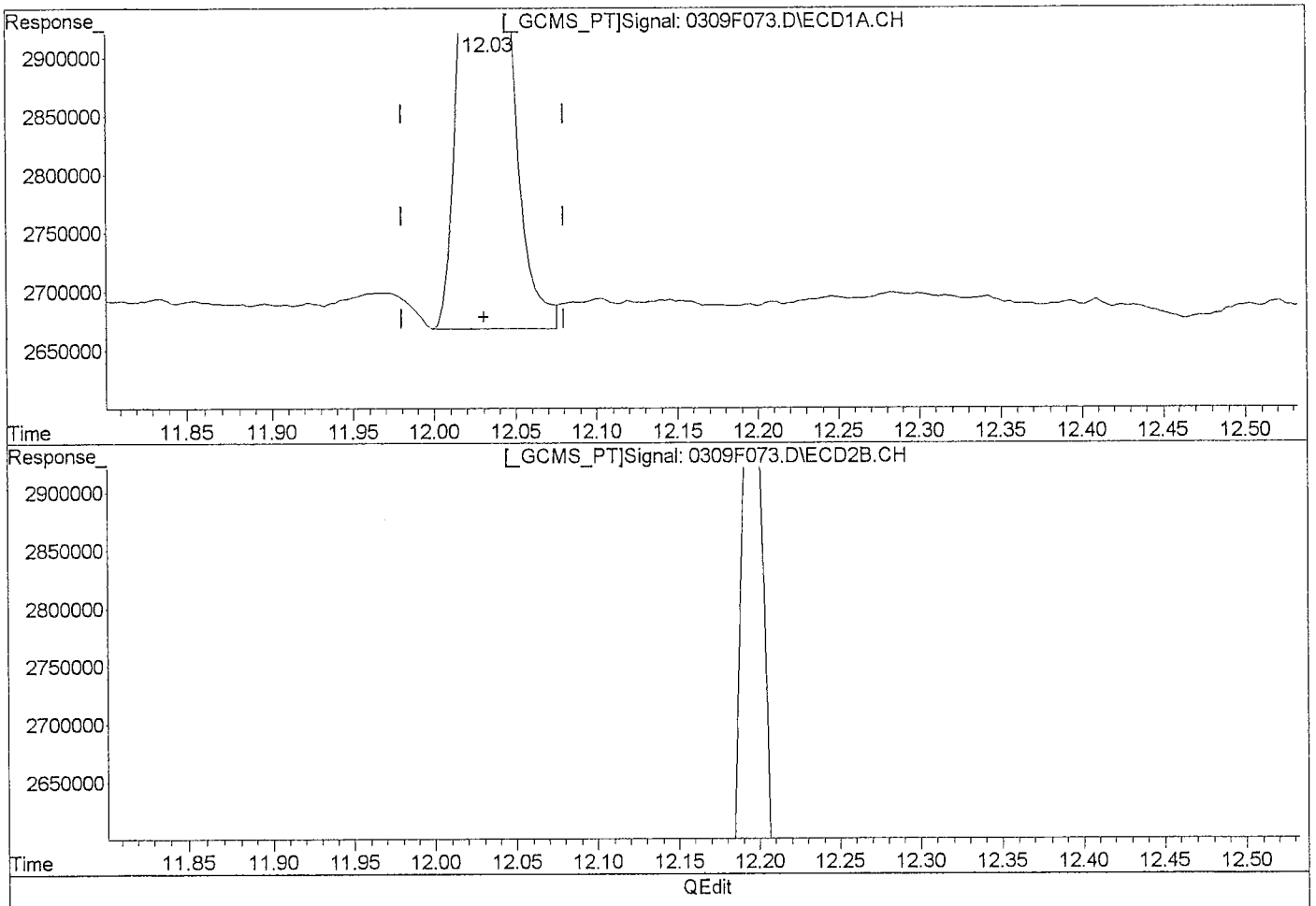


703

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration



(39) 2,4'-DDE

12.03min 5.035ug/L

response 1361448

Before

MAR 1 2 2007

(39) 2,4'-DDE #2

11.02min 4.902ug/L

response 1352095

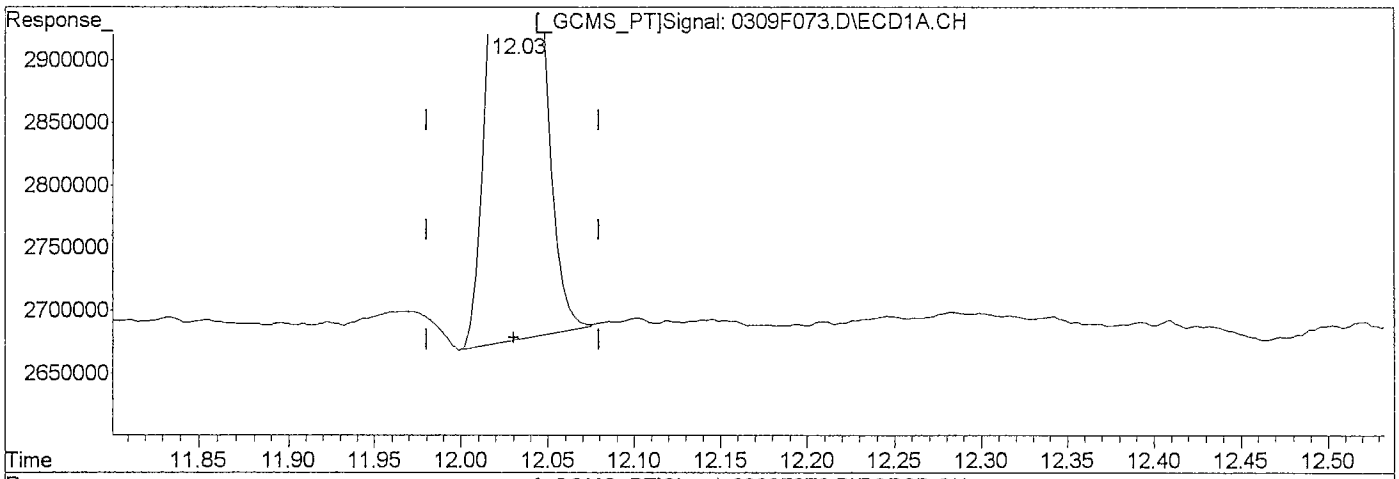
(+) = Expected Retention Time

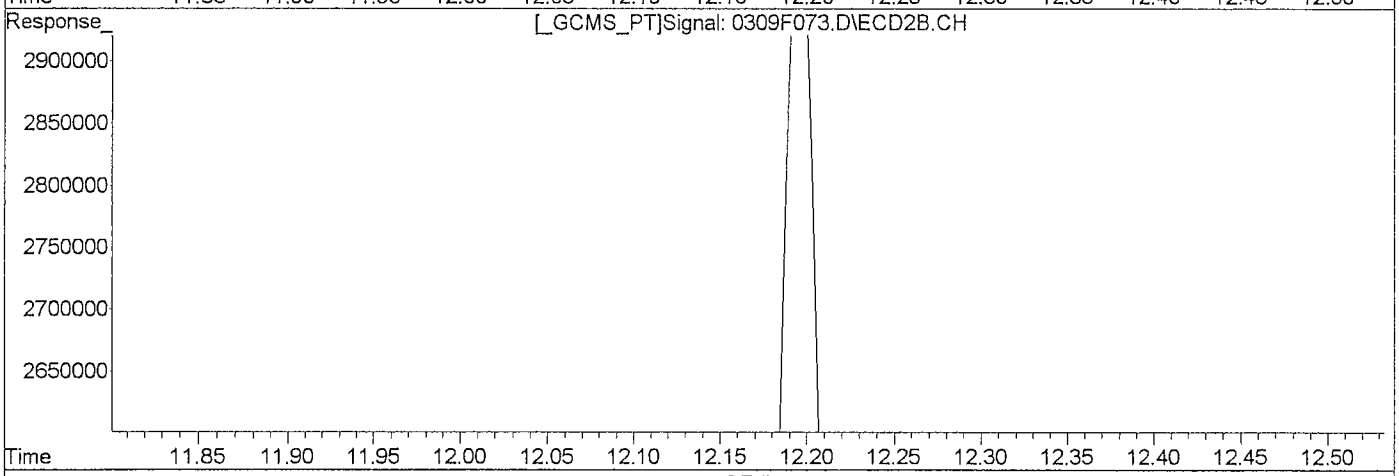
0309F073.D 030907-8081.M Mon Mar 12 09:27:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE

12.03min 4.872ug/L m

response 1317518

(39) 2,4'-DDE #2

11.02min 4.902ug/L

response 1352095

(+) = Expected Retention Time

0309F073.D 030907-8081.M Mon Mar 12 09:27:40 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F074.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\030907\0309F074.D\ECD2B.CH
Acq On : 11 Mar 2007 1:17 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	5001079	5178653	18.494	18.774
41)	2,4'-DDD	12.73	11.78	4490518	4745938	18.676	18.898
43)	2,4'-DDT	13.19	12.19	5312062	5770869	18.770	18.656

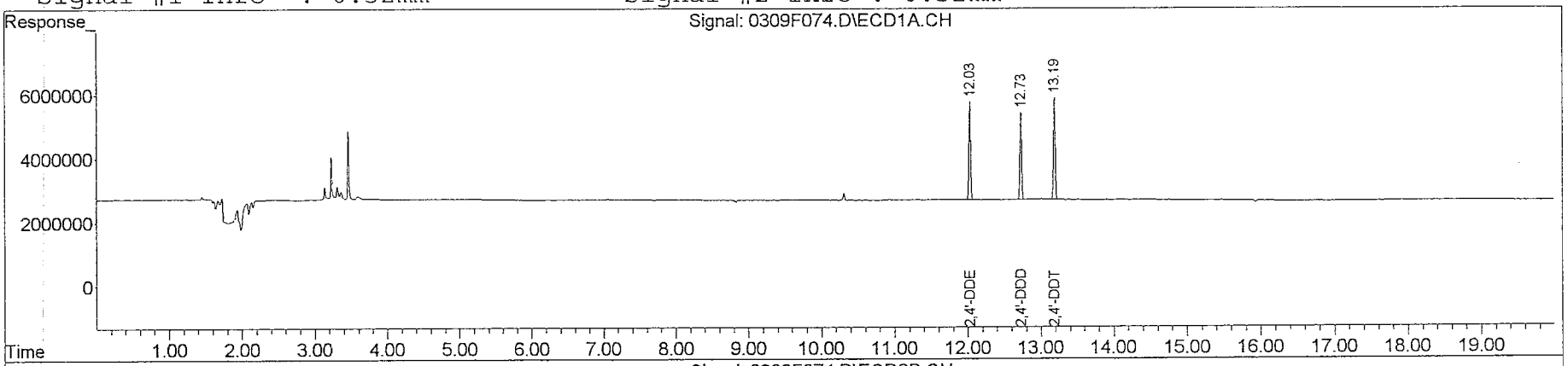
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

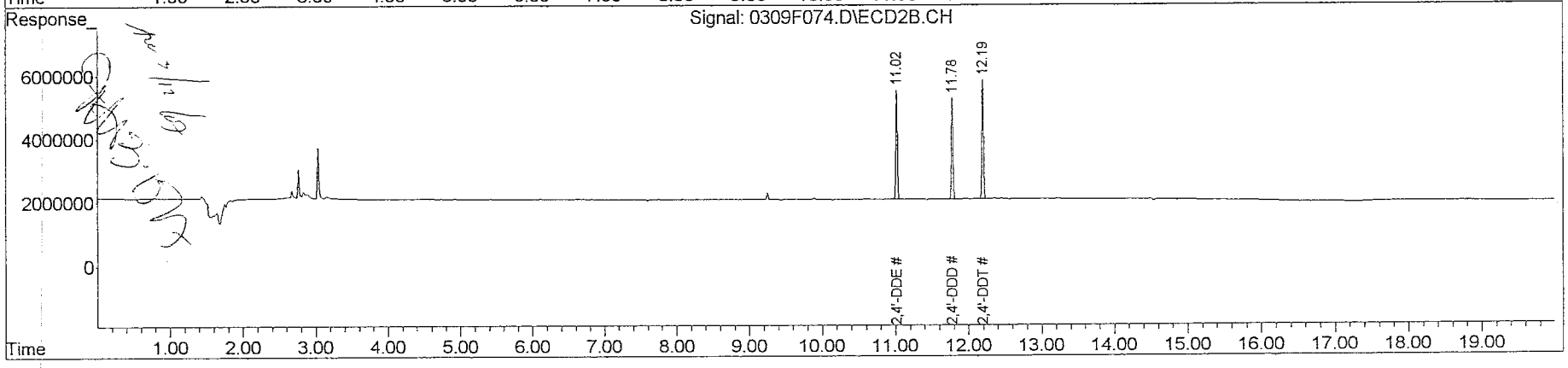
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F074.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\030907\0309F074.D\ECD2B.CH
Acq On : 11 Mar 2007 1:17 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





707

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F075.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\030907\0309F075.D\ECD2B.CH
Acq On : 11 Mar 2007 1:44 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-82E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:43 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	12573539	13475701	46.496	48.852
41)	2,4'-DDD	12.73	11.78	11230236	12268968	46.706	48.854
43)	2,4'-DDT	13.19	12.20	13337357	15068790	47.127	48.715

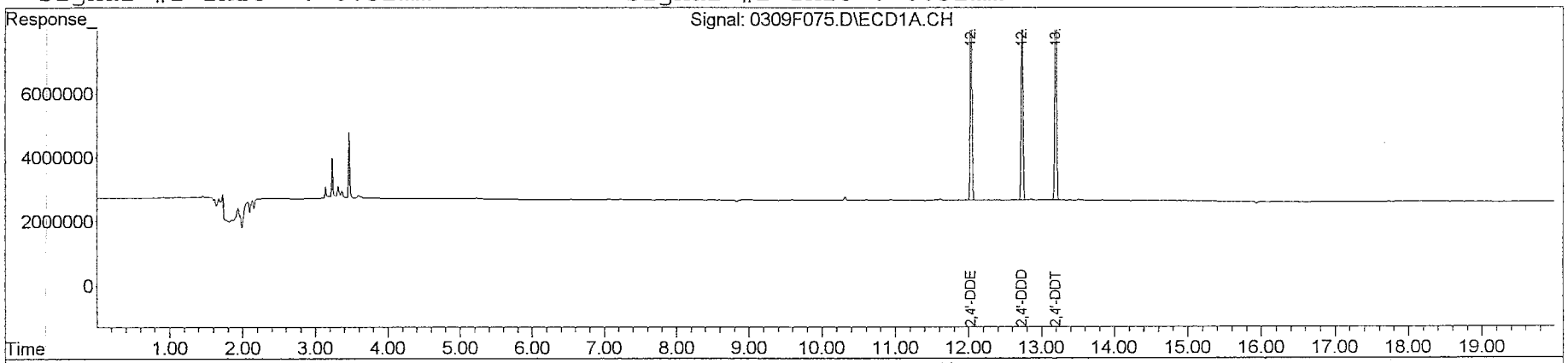
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

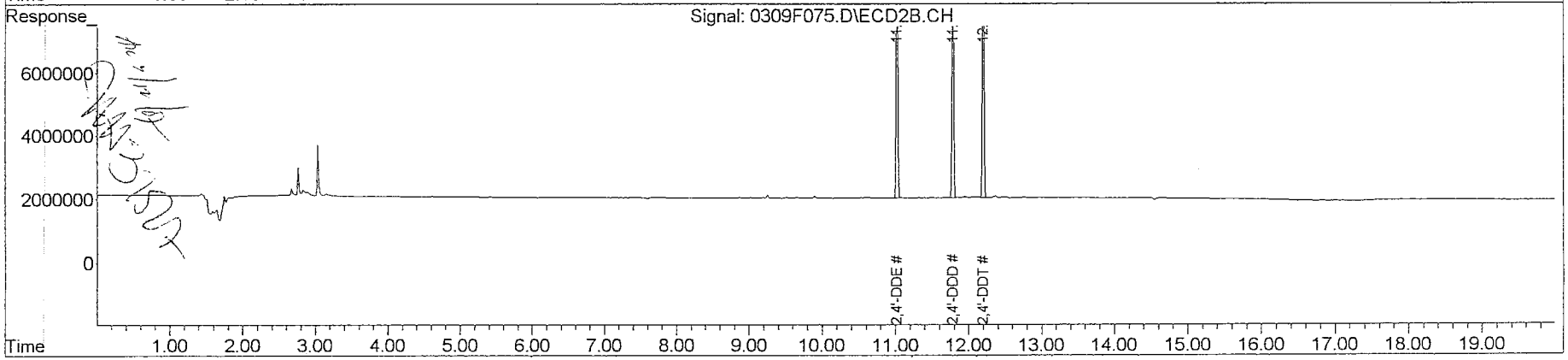
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F075.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\030907\0309F075.D\ECD2B.CH
Acq On : 11 Mar 2007 1:44 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-82E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





709

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F076.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\030907\0309F076.D\ECD2B.CH
Acq On : 11 Mar 2007 2:11 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:44 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	24574291	26717621	90.874	96.856
41)	2,4'-DDD	12.73	11.78	22005946	24299053	91.521	96.757
43)	2,4'-DDT	13.19	12.20	26255453	30060602	92.772	97.181

AK 3/12/07

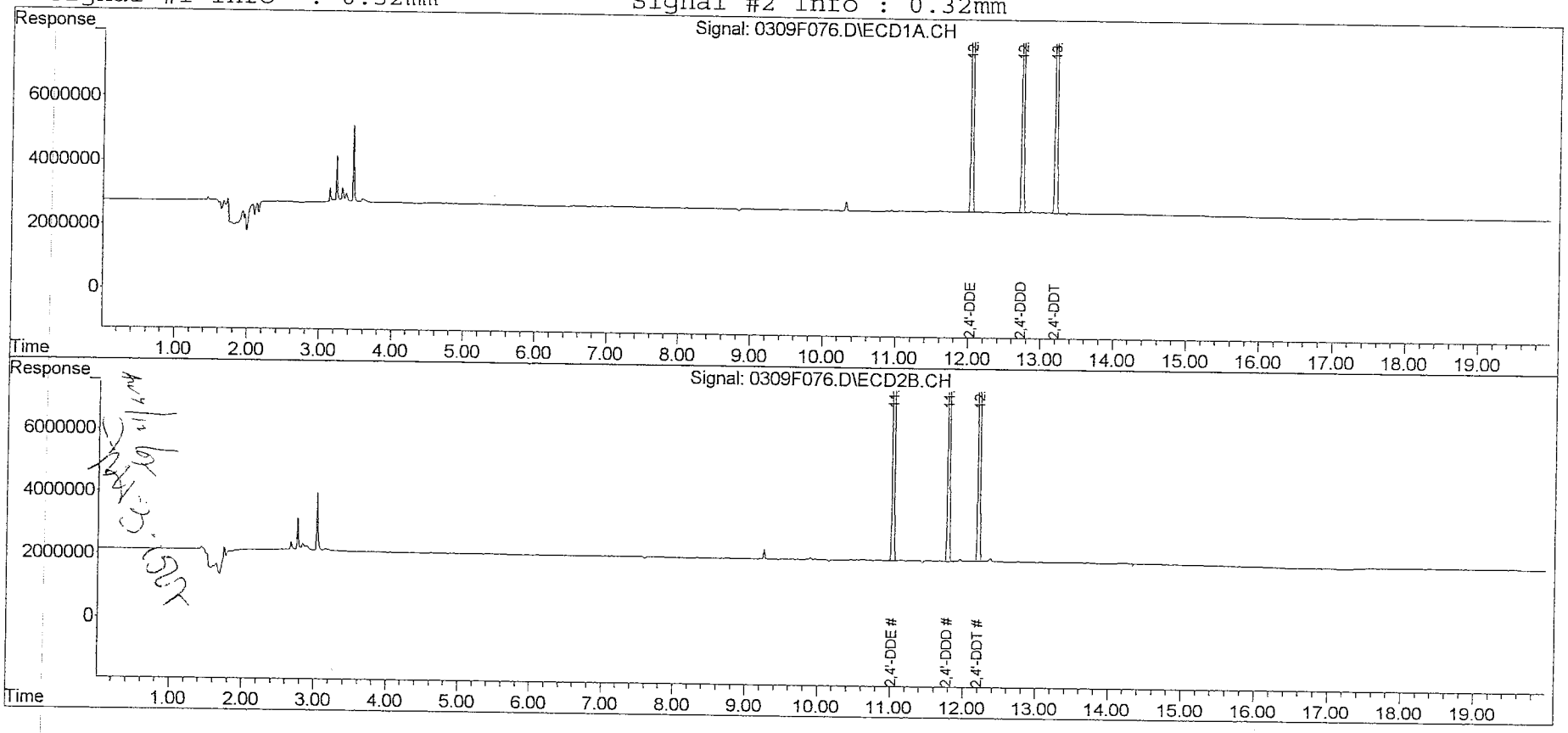
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F076.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\030907\0309F076.D\ECD2B.CH
Acq On : 11 Mar 2007 2:11 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F077.D\ECD1A.CH Vial: 37
Signal #2 : J:\GC23\DATA\030907\0309F077.D\ECD2B.CH
Acq On : 11 Mar 2007 2:37 am Operator: AKamawal
Sample : 2,4'-DDx @ 200ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:46 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	48852544	53515150	180.652	194.002
41)	2,4'-DDD	12.73	11.78	43410266	48300100	180.540	192.327
43)	2,4'-DDT	13.19	12.19	52212615	60339826	184.491	195.069

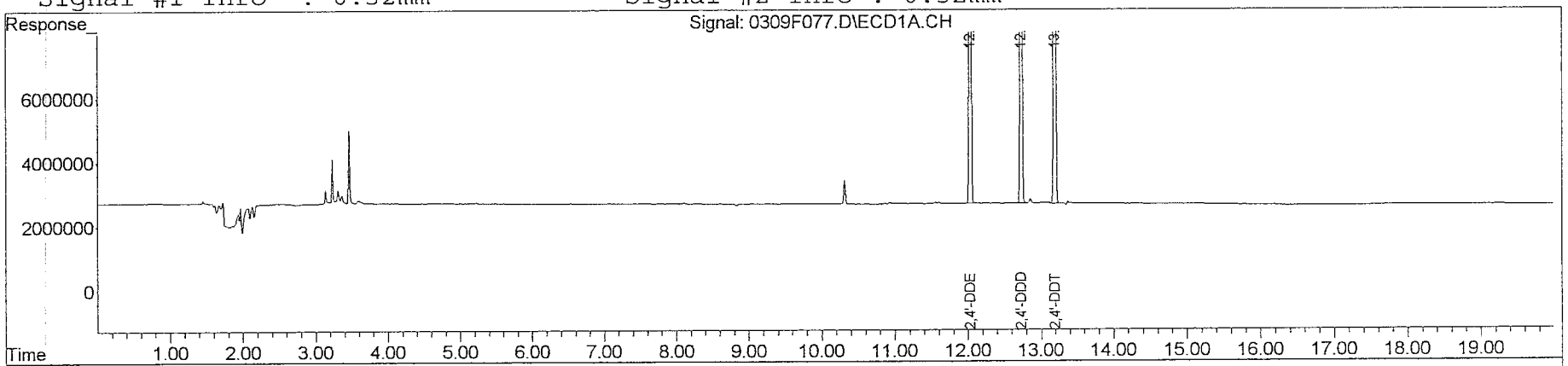
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

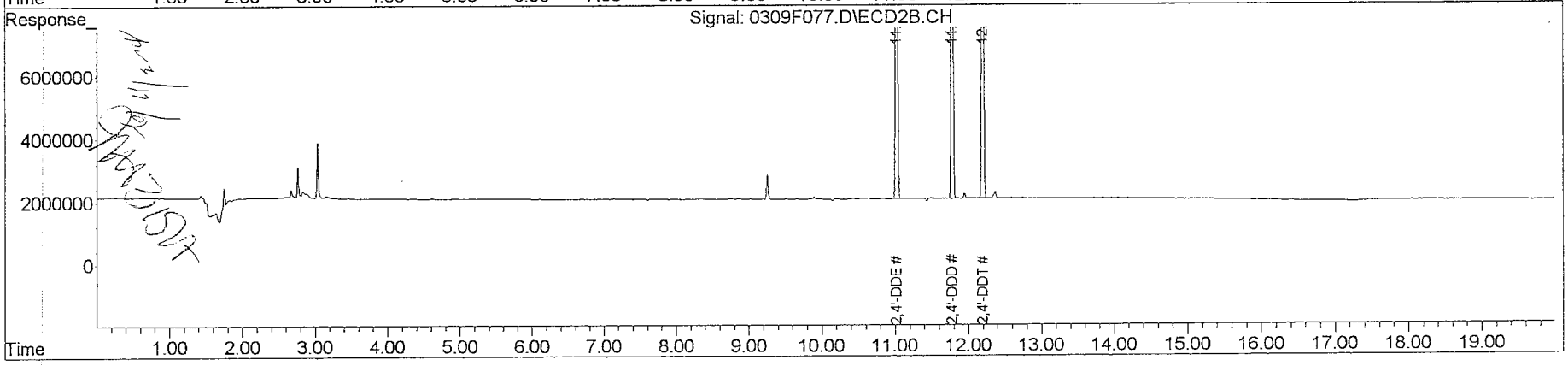
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F077.D\ECD1A.CH Vial: 37
Signal #2 : J:\GC23\DATA\030907\0309F077.D\ECD2B.CH
Acq On : 11 Mar 2007 2:37 am Operator: AKamawal
Sample : 2,4'-DDx @ 200ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:29 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F078.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\030907\0309F078.D\ECD2B.CH
Acq On : 11 Mar 2007 3:04 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 18:37:59 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	8699169	9404735	33.892	35.293
41)	2,4'-DDD	12.73	11.78	7809698	8638128	34.265	35.522
43)	2,4'-DDT	13.19	12.20	9229503	10620865	34.205	35.123

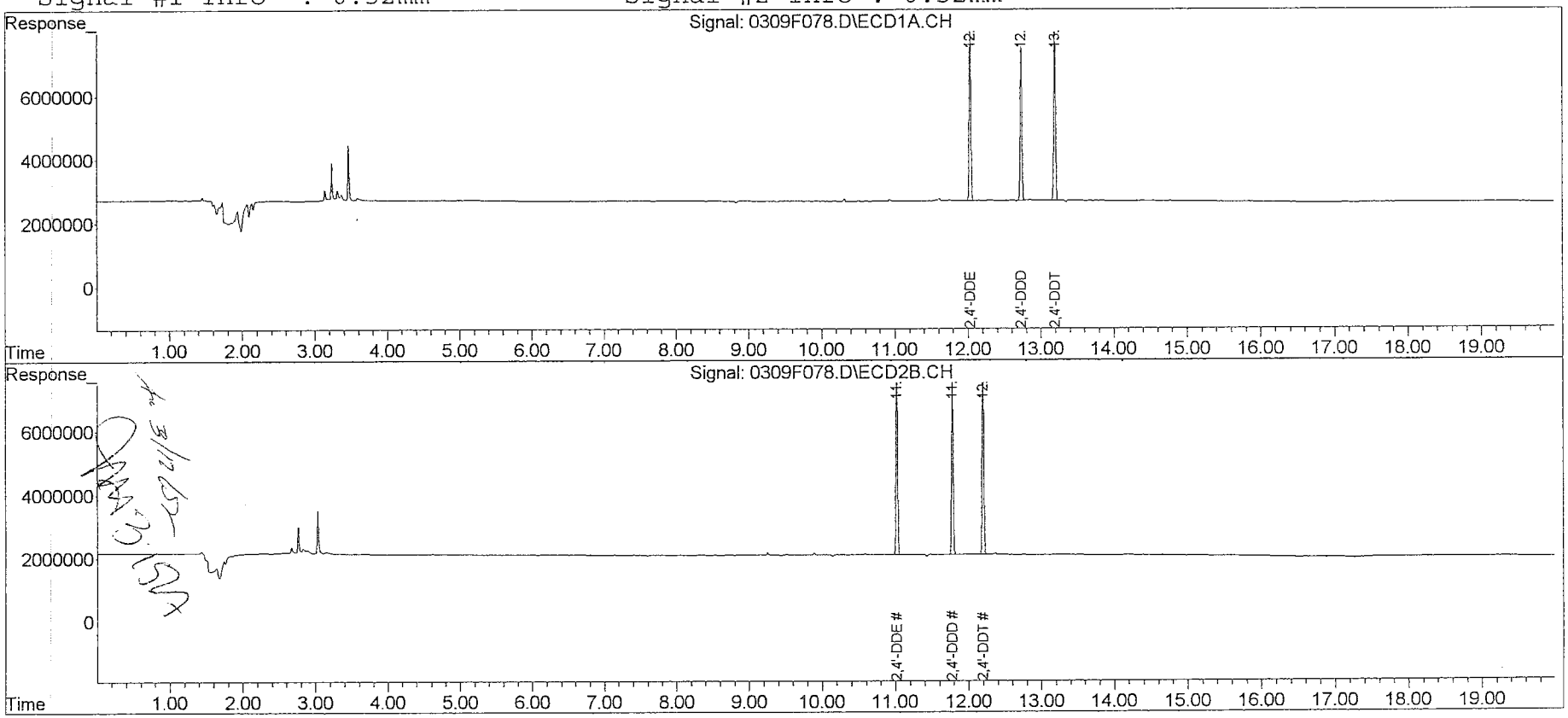
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F078.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\030907\0309F078.D\ECD2B.CH
Acq On : 11 Mar 2007 3:04 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 18:38 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



715

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\031207\0312F002.D\ECD2B.CH
Acq On : 12 Mar 2007 8:04 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:50:18 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

A 3/12/07

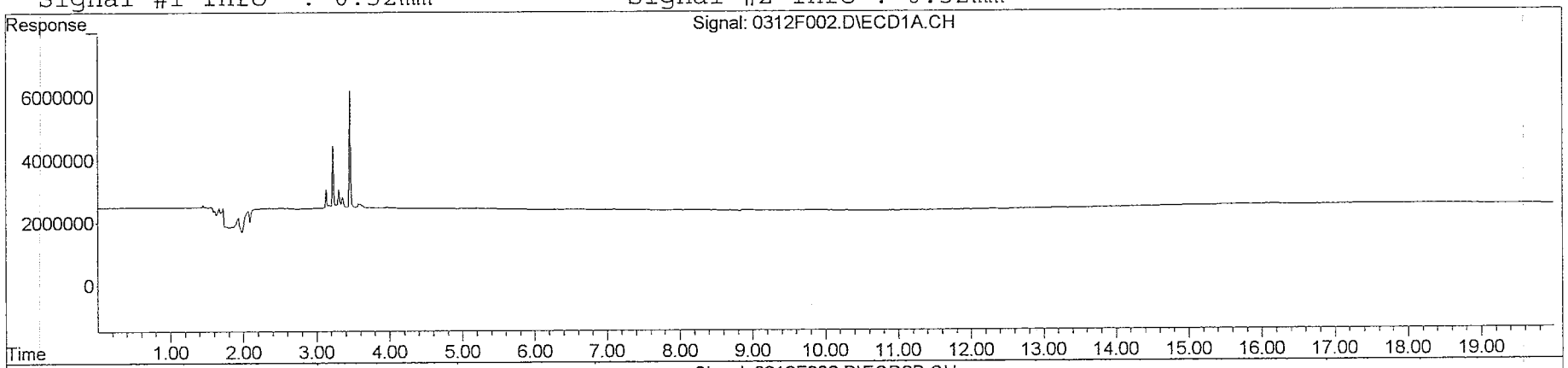
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

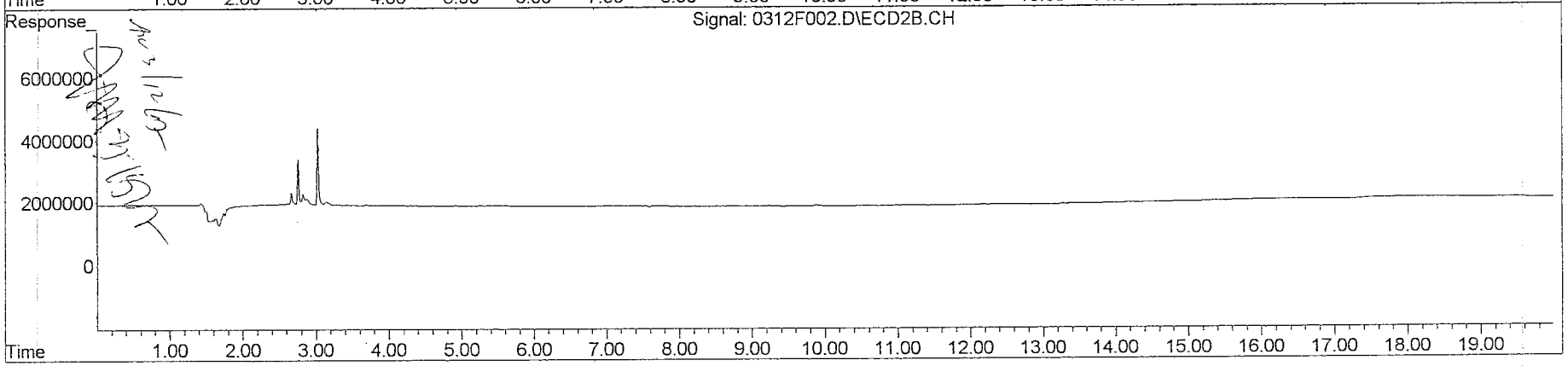
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\031207\0312F002.D\ECD2B.CH
Acq On : 12 Mar 2007 8:04 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:51 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





717

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\031207\0312F003.D\ECD2B.CH
Acq On : 12 Mar 2007 8:30 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:50:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.58	11.47	397642	418389	1.196	1.204
16)	Endrin	13.13	12.13	13225183	15742786	45.121	49.035
18)	4,4'-DDD	13.36	12.33	284455	314947	1.078	1.082
19)	Endrin Aldehyde	13.71	12.87	347246	365056	1.315	1.273
21)	4,4'-DDT	13.81	12.74	25027252	31062967	90.560	98.294
22)	Endrin Ketone	14.75	14.05	449967	654602	1.375	1.675

Ar 3/12/07

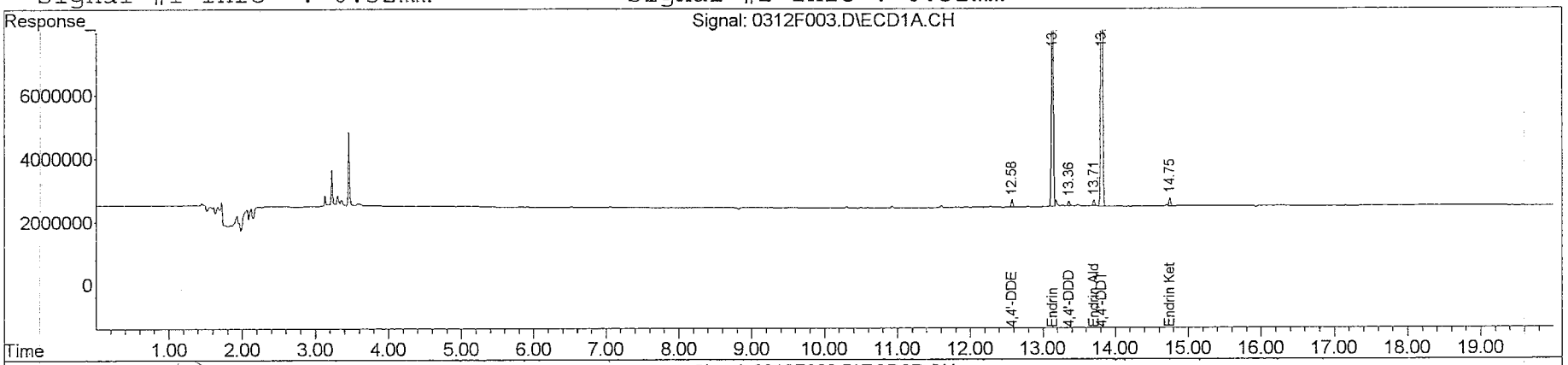
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

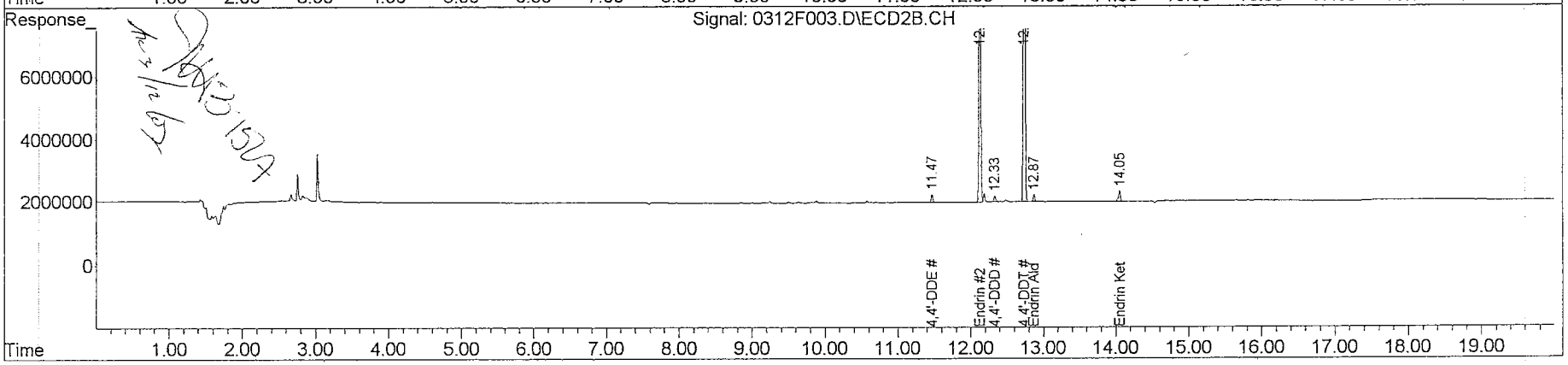
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\031207\0312F003.D\ECD2B.CH
Acq On : 12 Mar 2007 8:30 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:51 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.94	10.01	453901	409344	1788.502	1.953 #
38)	Oxychlordane	11.72	10.46	686129	697057	1.999	1.945
40)	cis-Nonachlor	13.36	12.20	703016	775796	1.943	1.890
42)	trans-Nonachlor	12.39	11.03	714098	750999	1.958m	1.904
44)	Mirex	15.48	14.23	535481	717001	2.219	2.113
46)	HCE	4.14	3.56	1280624	1216897	1.632	1.689
47)	HCBD	4.87	4.12	1092064	1018417	1.808	1.836

AK 3/12/07

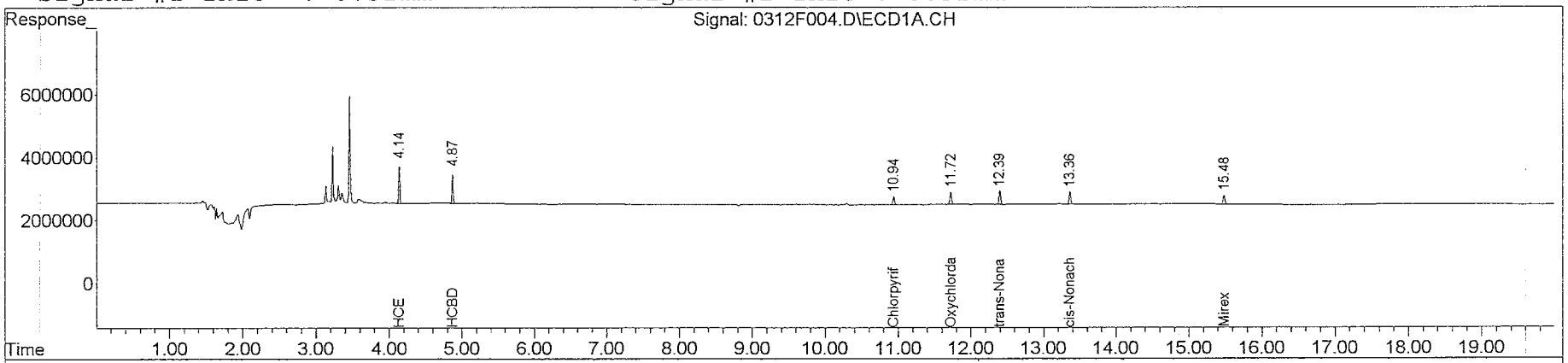
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

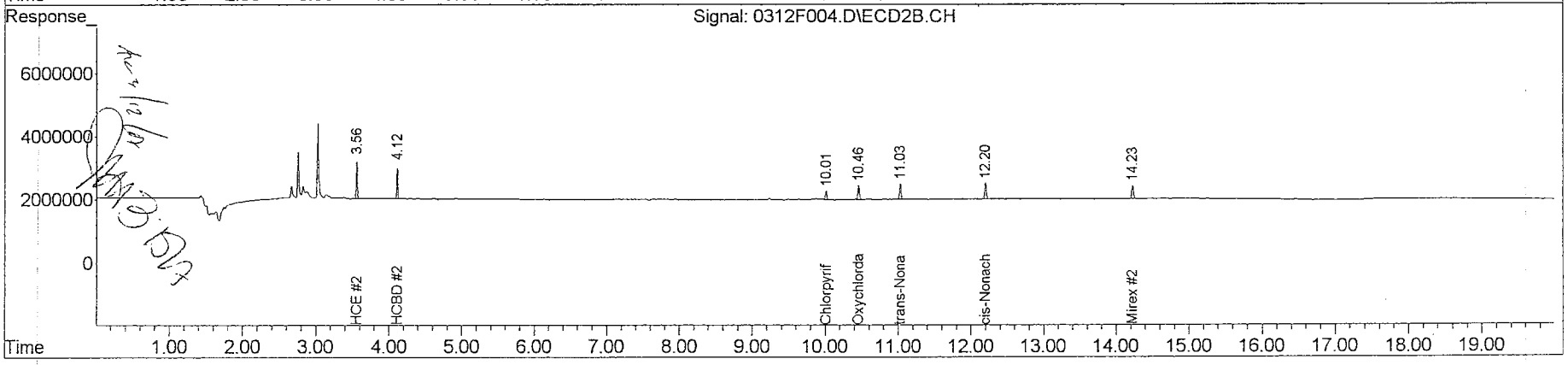
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

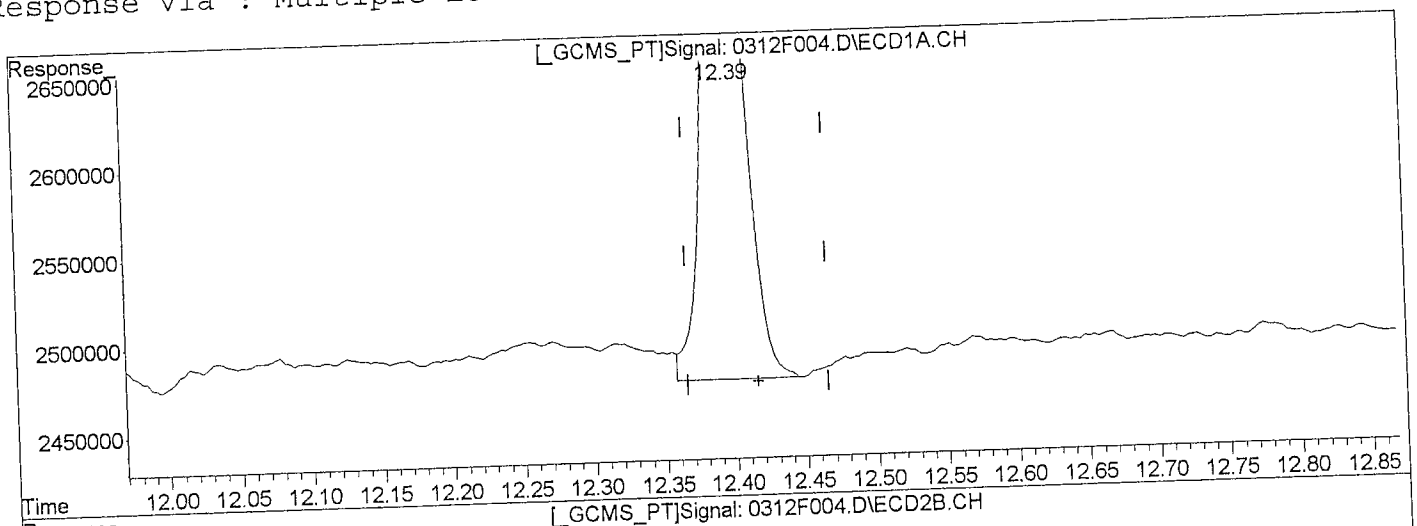
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

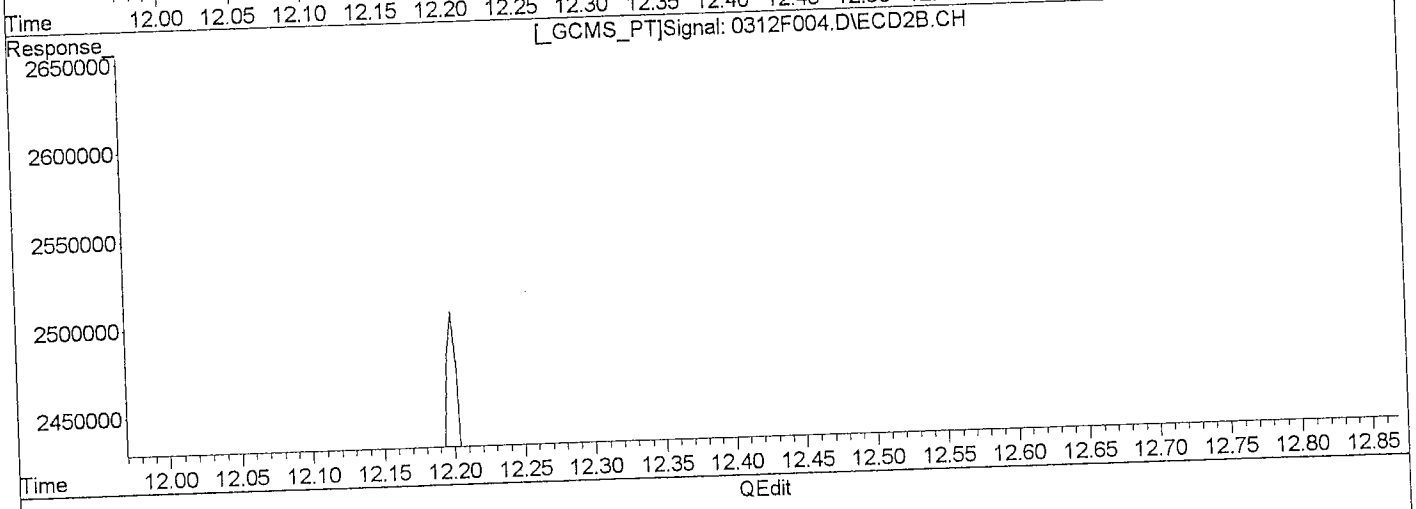




Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





(42) trans-Nonachlor

12.39min 2.079ug/L

response 758107

(42) trans-Nonachlor #2

11.03min 1.904ug/L

response 750999

Before

MAR 1 2 2007

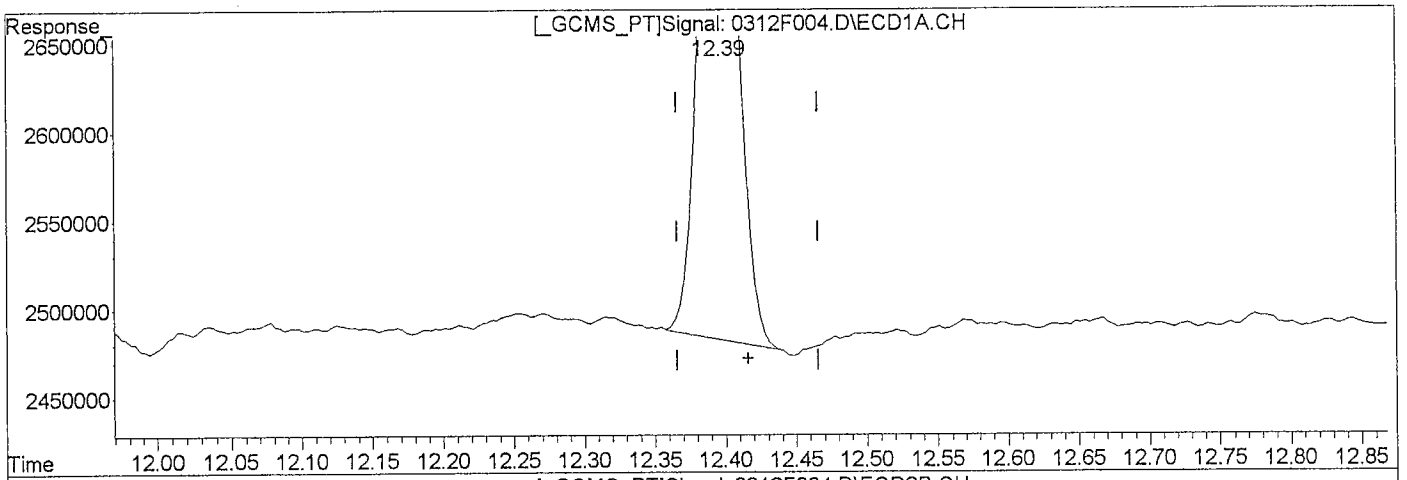
(+) = Expected Retention Time

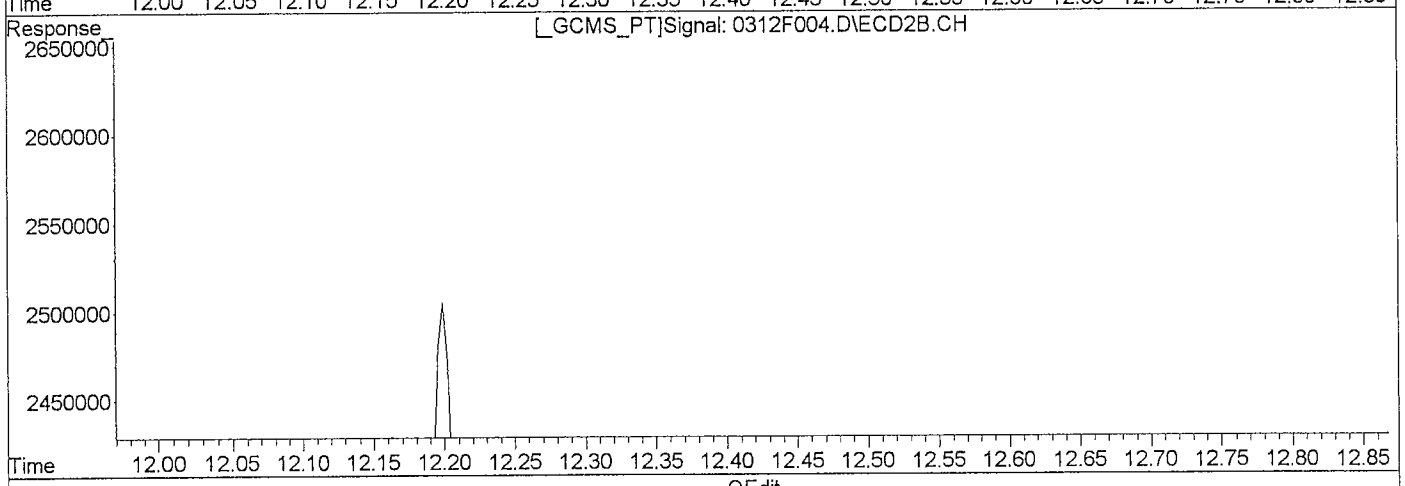
0312F004.D 031207-8081.M Mon Mar 12 12:20:11 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor

12.39min 1.958ug/L m

response 714098

(42) trans-Nonachlor #2

11.03min 1.904ug/L

response 750999

(+) = Expected Retention Time

0312F004.D 031207-8081.M Mon Mar 12 12:20:16 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	1013657	995964	2.835	4.751 #
38)	Oxychlordane	11.73	10.47	1551870	1685181	4.521	4.703
40)	cis-Nonachlor	13.37	12.21	1629327	1878518	4.504	4.576
42)	trans-Nonachlor	12.40	11.04	1671224	1841353	4.584m	4.668
44)	Mirex	15.49	14.24	1230516	1692000	5.098	4.986
46)	HCE	4.14	3.56	3043261	2956794	3.878	4.104
47)	HCBD	4.88	4.12	2514114	2444880	4.162	4.408

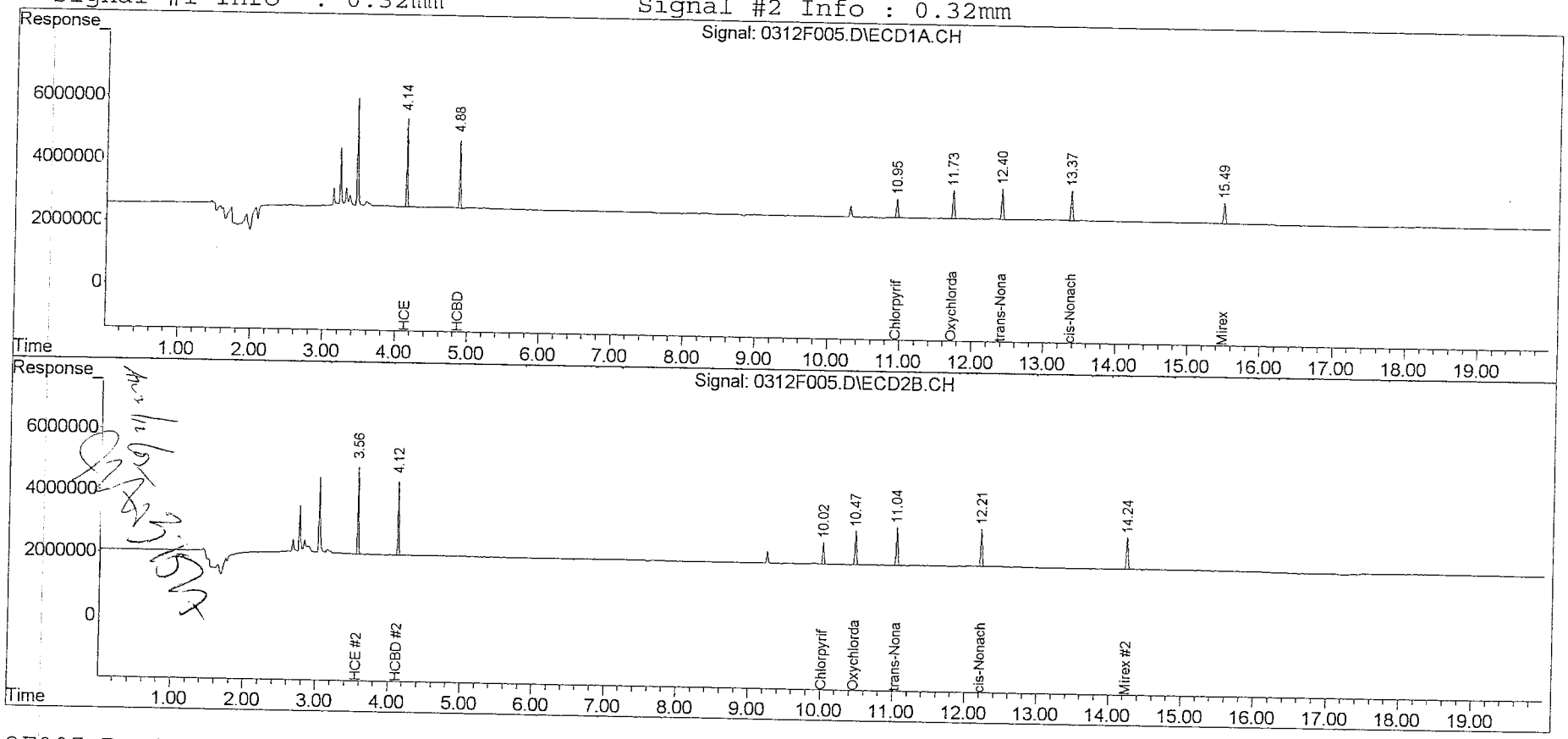
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

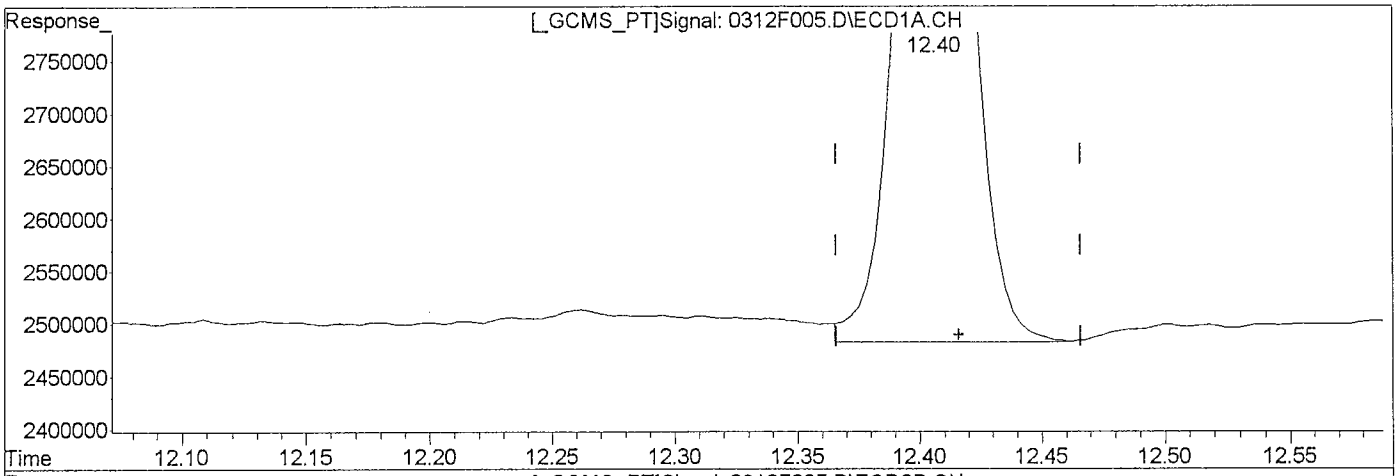
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

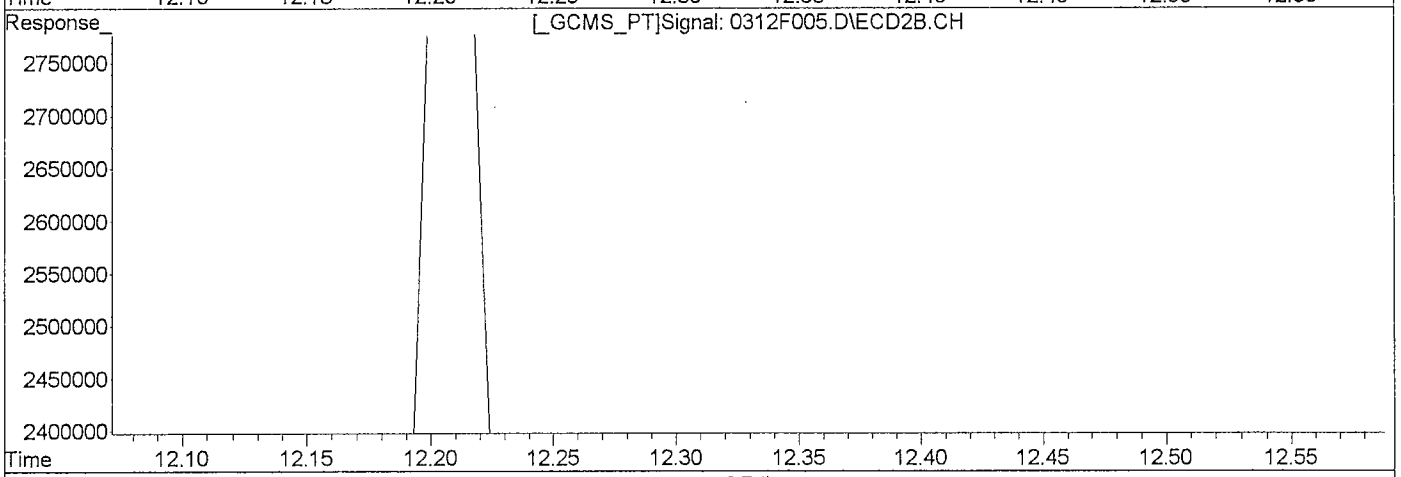


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor

12.40min 4.719ug/L

response 1720596

(42) trans-Nonachlor #2

11.04min 4.668ug/L

response 1841353

Before

MAR 1 2 2007

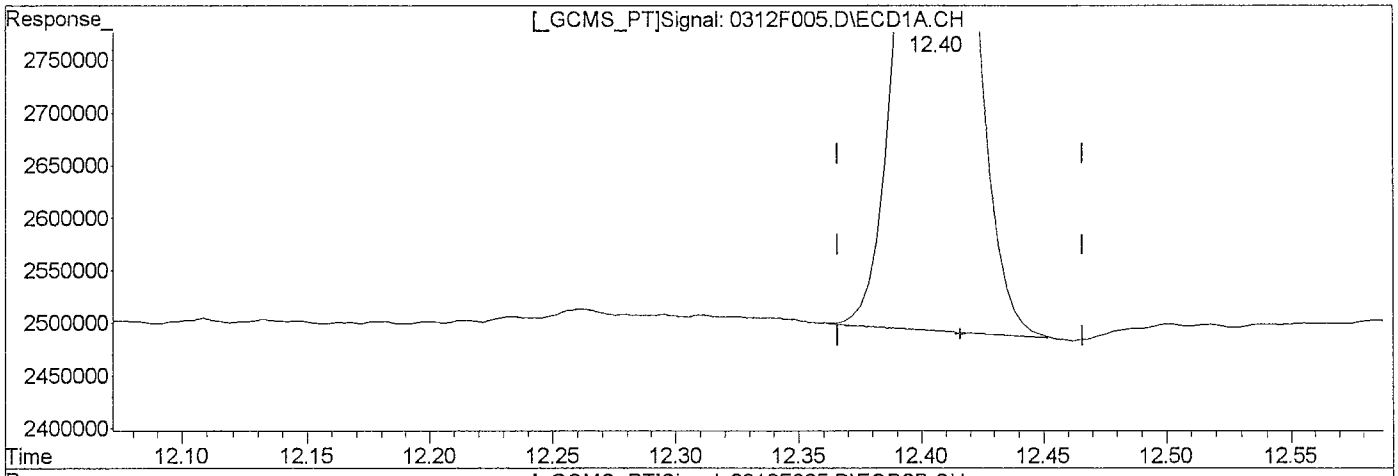
(+) = Expected Retention Time

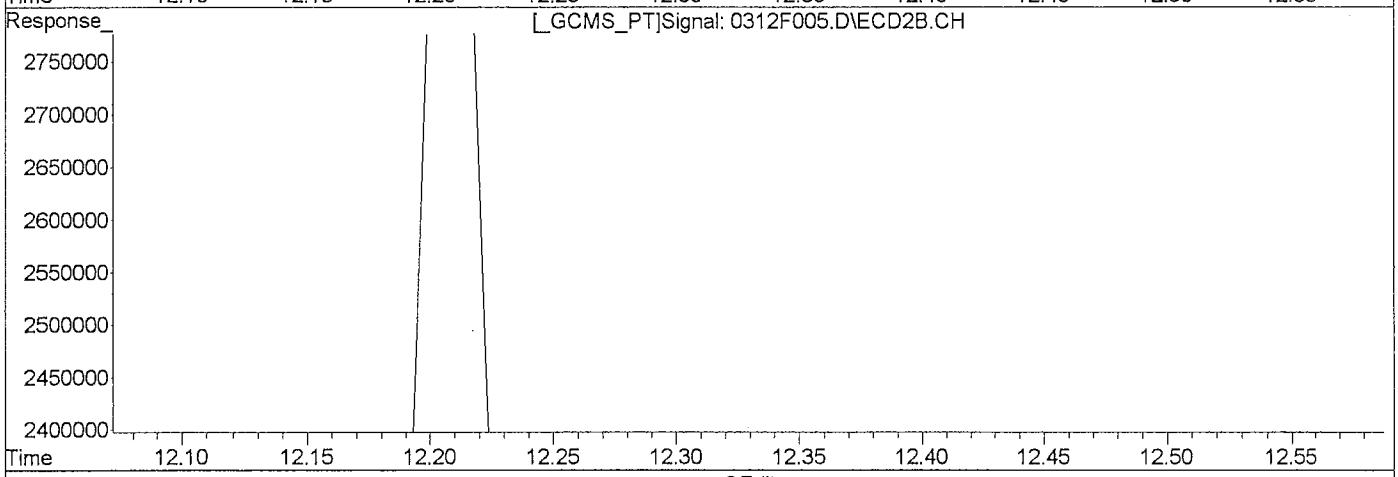
0312F005.D 031207-8081.M Mon Mar 12 12:20:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor

12.40min 4.584ug/L m

response 1671224

(42) trans-Nonachlor #2

11.04min 4.668ug/L

response 1841353

(+) = Expected Retention Time
0312F005.D 031207-8081.M Mon Mar 12 12:20:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\031207\0312F006.D\ECD2B.CH
Acq On : 12 Mar 2007 9:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	4066572	4178288	18.831	19.930
38)	Oxychlordane	11.73	10.47	6452335	7027250	18.799	19.613
40)	cis-Nonachlor	13.37	12.21	6851081	8028052	18.938	19.557
42)	trans-Nonachlor	12.41	11.04	6992064	7817712	19.176	19.818
44)	Mirex	15.49	14.24	4867600	6846190	20.167	20.176
46)	HCE	4.14	3.56	14225788	14087108	18.128	19.550
47)	HCBD	4.88	4.12	11101869	11007186	18.379	19.845

AC 3/12/07

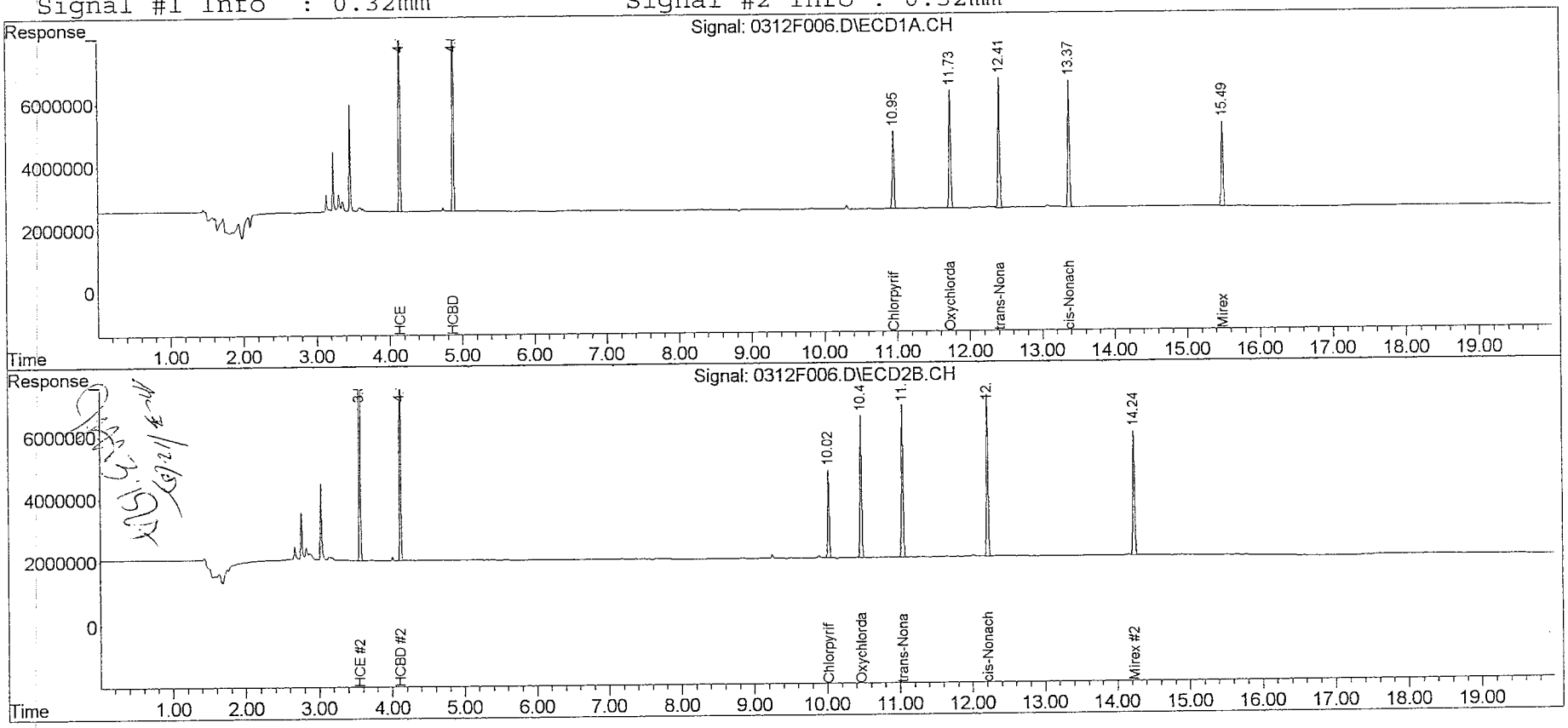
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\031207\0312F006.D\ECD2B.CH
Acq On : 12 Mar 2007 9:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F007.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\031207\0312F007.D\ECD2B.CH
Acq On : 12 Mar 2007 10:16 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:56:40 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.03	8709736	9229781	43.735	44.025
38)	Oxychlordane	11.74	10.47	14455688	16040578	42.117	44.769
40)	cis-Nonachlor	13.38	12.21	15516604	18731989	42.891	45.633
42)	trans-Nonachlor	12.41	11.04	15696286	18023150	43.049	45.688
44)	Mirex	15.50	14.24	10463381	14895899	43.351	43.898
46)	HCE	4.15	3.56	35079832	35048822	44.703	48.642
47)	HCBD	4.89	4.12	26078181	26246644	43.171	47.320

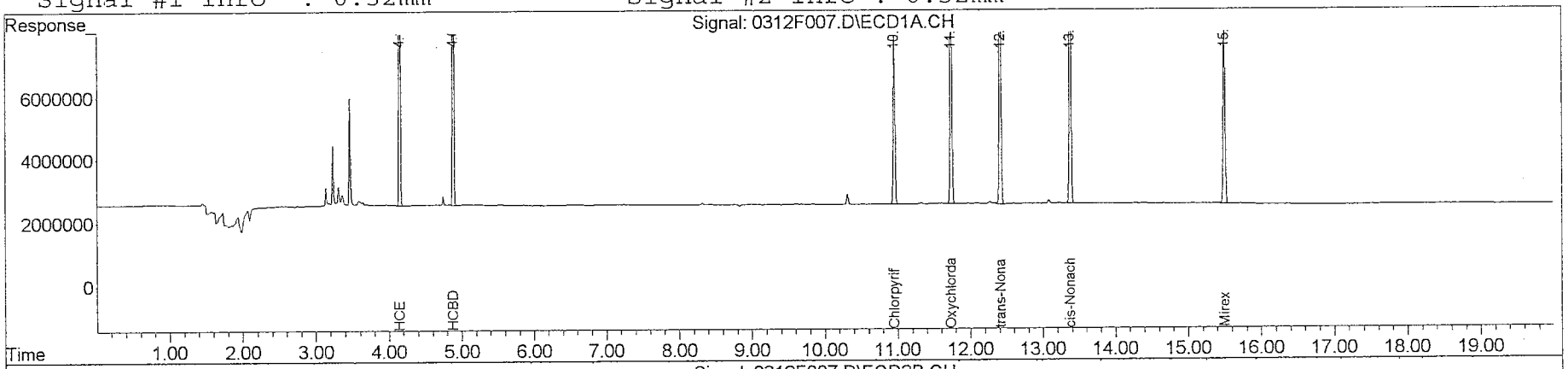
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

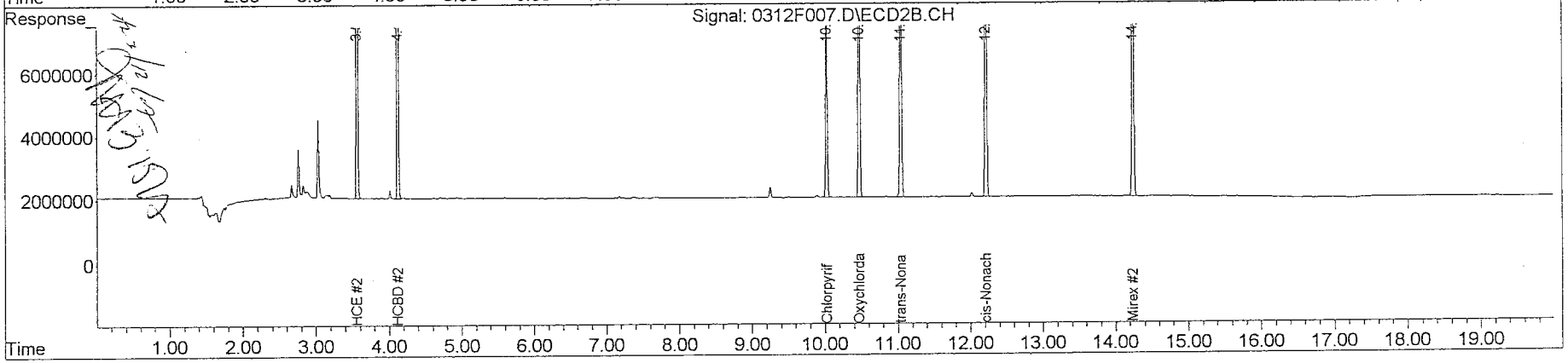
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F007.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\031207\0312F007.D\ECD2B.CH
Acq On : 12 Mar 2007 10:16 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:22 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F008.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\031207\0312F008.D\ECD2B.CH
Acq On : 12 Mar 2007 10:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:19:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	15951228	17099997	84.102	81.565
38)	Oxychlordane	11.73	10.47	27410986	30586750	79.862	85.366
40)	cis-Nonachlor	13.37	12.21	30034044	36430508	83.020	88.748
42)	trans-Nonachlor	12.41	11.04	30022449	34928371	82.340	88.542
44)	Mirex	15.49	14.24	19155830	27387201	79.364	80.710
46)	HCE	4.14	3.56	70515542	70407678	89.859	97.714
47)	HCBD	4.88	4.12	51132422	51326196	84.648	92.535

2/12/07

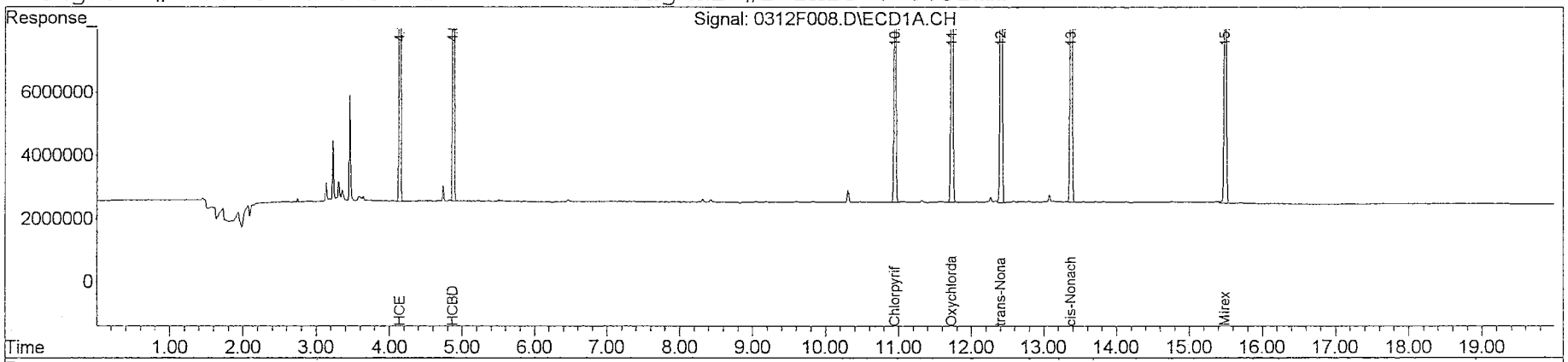
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

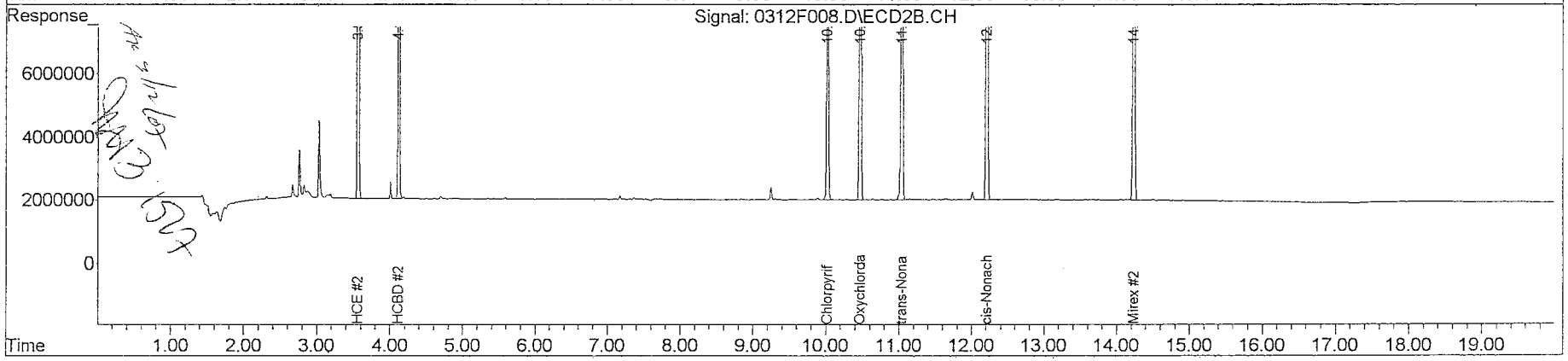
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F008.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\031207\0312F008.D\ECD2B.CH
Acq On : 12 Mar 2007 10:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:22 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\031207\0312F009.D\ECD2B.CH
Acq On : 12 Mar 2007 11:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:49:00 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.94	10.01	30384197	33132459	171.250	158.037
38)	Oxychlordane	11.72	10.46	54625896	61863565	159.152	172.658
40)	cis-Nonachlor	13.37	12.20	60710074	75348480	167.815	183.555
42)	trans-Nonachlor	12.40	11.03	60486013	71428312	165.889	181.069
44)	Mirex	15.48	14.23	36402832	53429663	150.820	157.456
46)	HCE	4.14	3.56	146.3E6	149.3E6	186.413	207.269
47)	HCBD	4.87	4.11	104.0E6	106.8E6	172.122	192.507

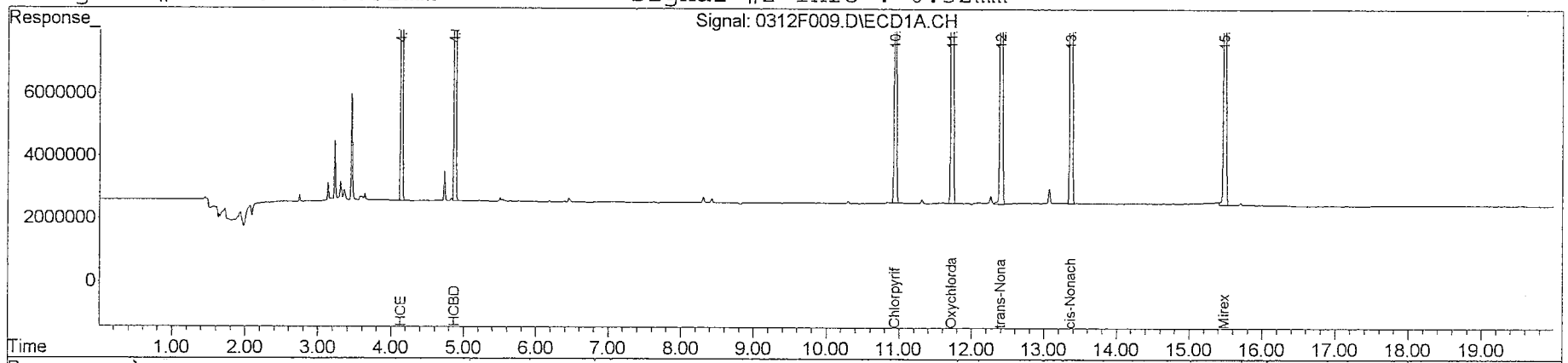
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

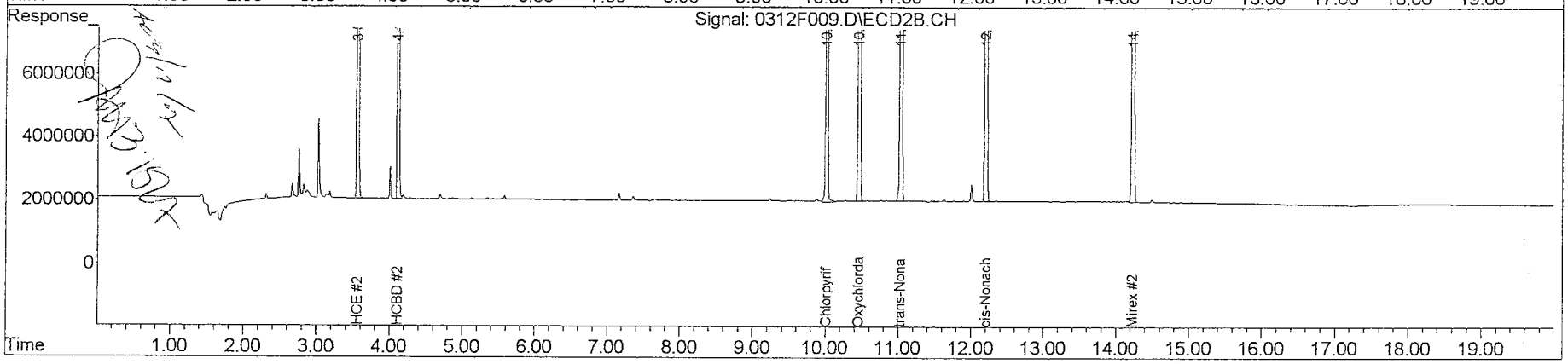
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\031207\0312F009.D\ECD2B.CH
Acq On : 12 Mar 2007 11:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:49 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F010.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\031207\0312F010.D\ECD2B.CH
Acq On : 12 Mar 2007 11:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:57:44 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 12:51:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	7272851	7748210	39.009	40.994
38)	Oxychlordane	11.73	10.47	10978651	12211847	36.345	37.138
40)	cis-Nonachlor	13.37	12.21	12222590	14648333	37.916	38.537
42)	trans-Nonachlor	12.41	11.04	12305870	14052642	37.720	38.299
44)	Mirex	15.49	14.23	8364773	11771786	37.452	37.607
46)	HCE	4.14	3.56	26147136	26008542	38.279	38.475
47)	HCBD	4.88	4.12	19210436	19308082	36.514	37.124

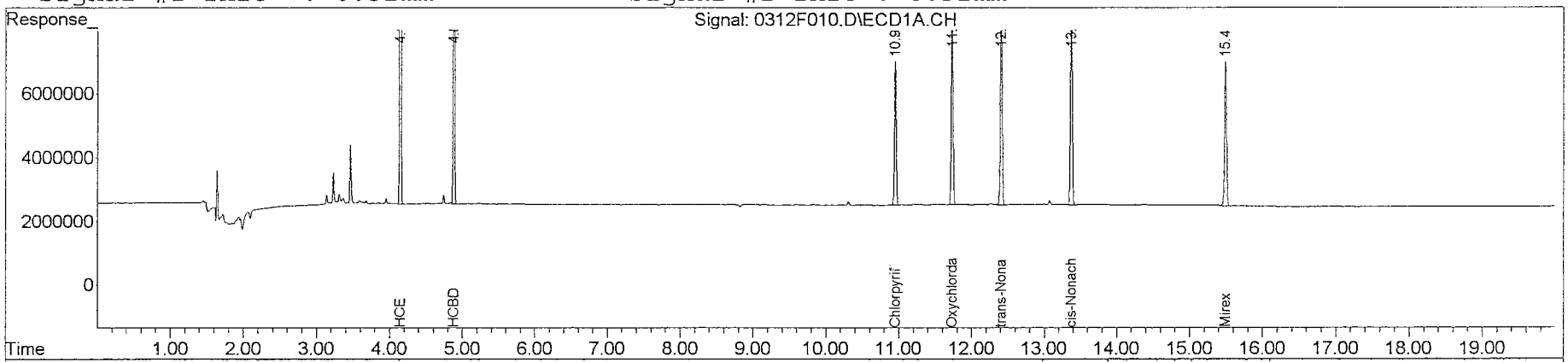
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

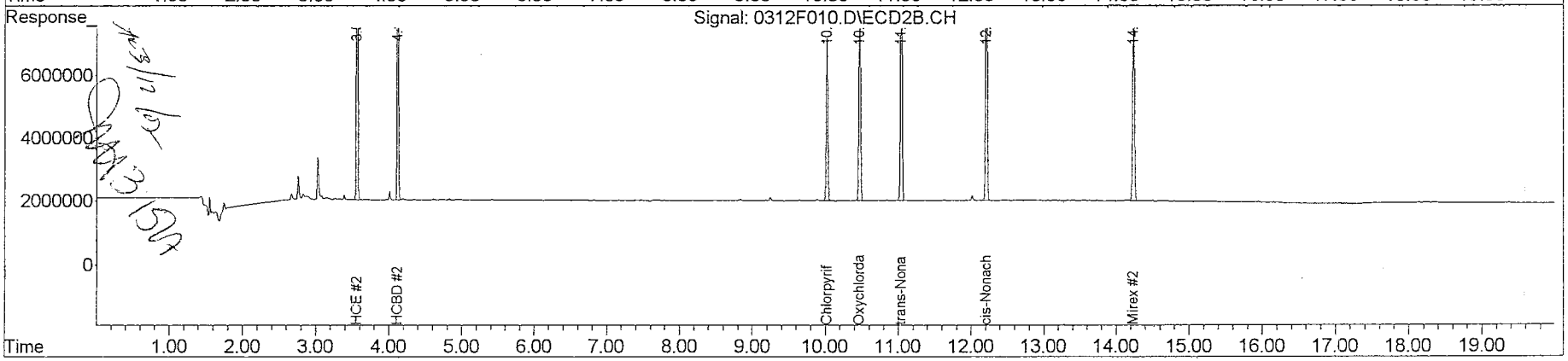
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F010.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\031207\0312F010.D\ECD2B.CH
Acq On : 12 Mar 2007 11:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:58 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 12:51:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:01 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	286904	758456	108.637	101.139
26)	Toxaphene {2}	13.05	12.45	204607	583653	45.975m	105.398m#
27)	Toxaphene {3}	13.20	12.64	336953	308888	84.223m	94.127
28)	Toxaphene {4}	13.87	13.00	387878	370340	68.394	81.908m
29)	Toxaphene {5}	14.18	13.09	227240	330865	110.883	39.900m#
30)	Toxaphene {6}	14.71	13.57	211428	803930	28.622	81.132 #

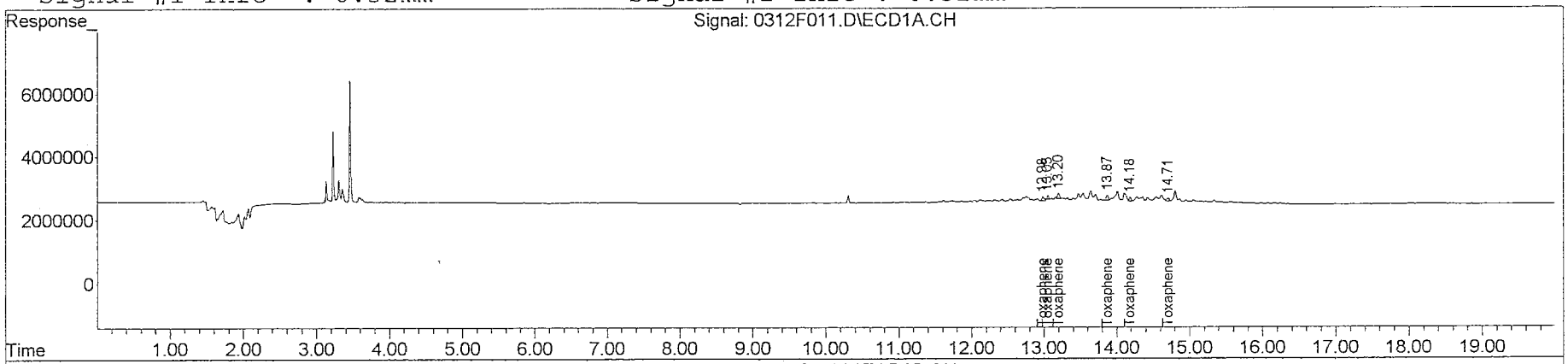
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

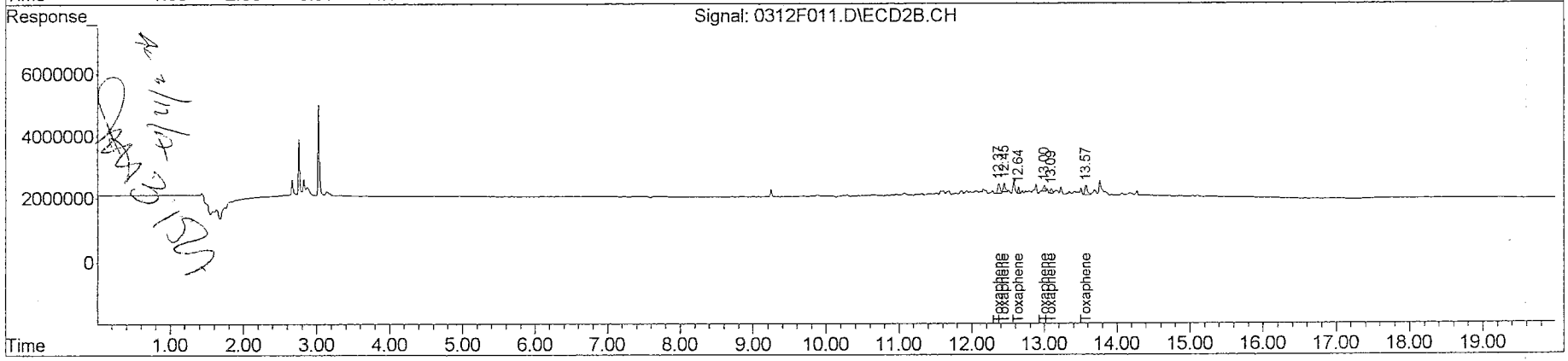
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:14 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



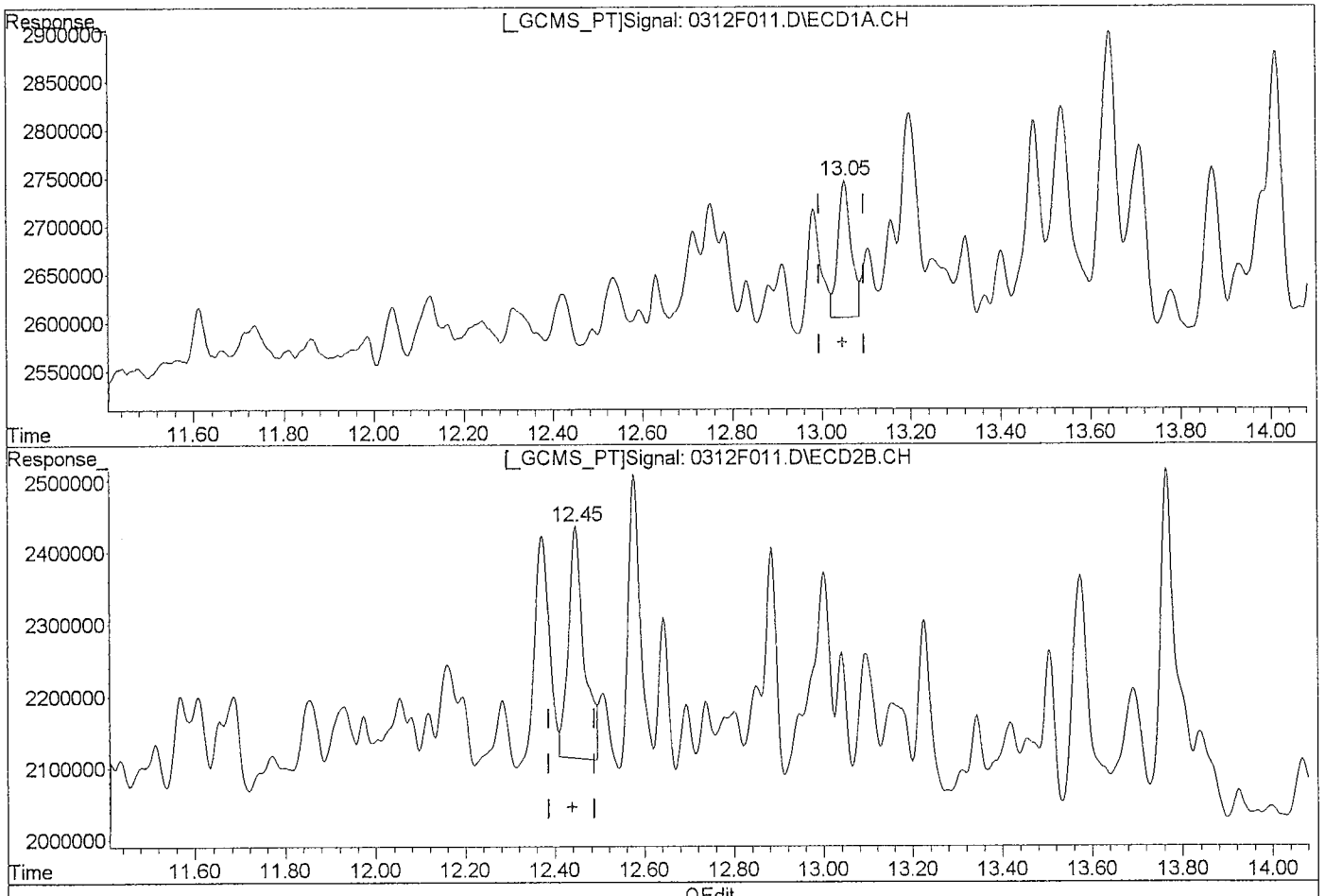


739

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 66.296ug/L

response 295047

(26) Toxaphene {2} #2

12.45min 138.280ug/L

response 765740

Before

MAR 1 2 2007

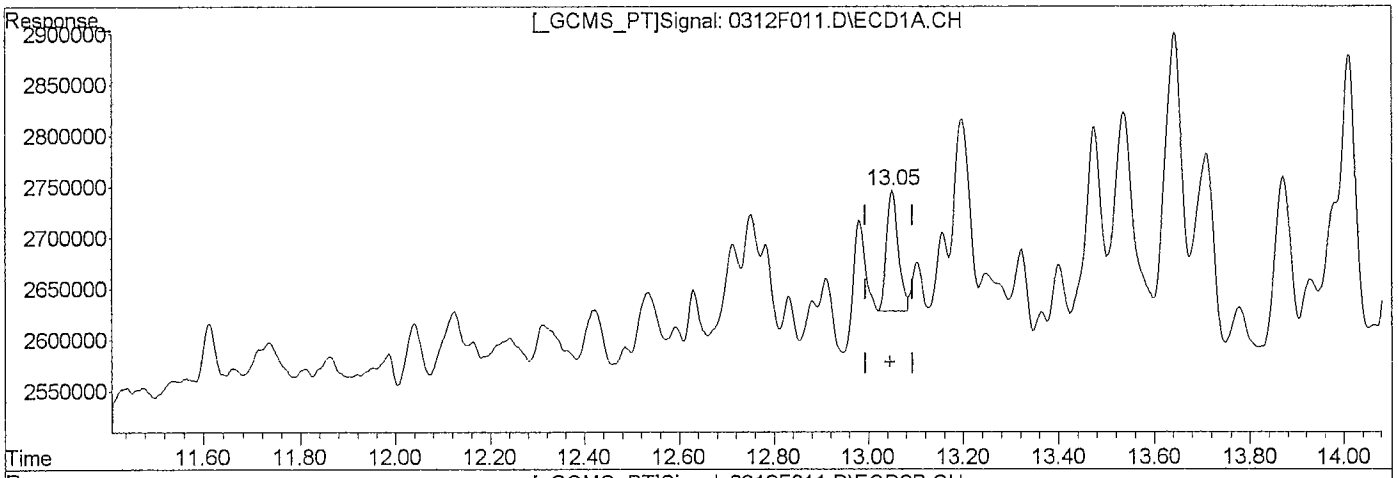
(+) = Expected Retention Time

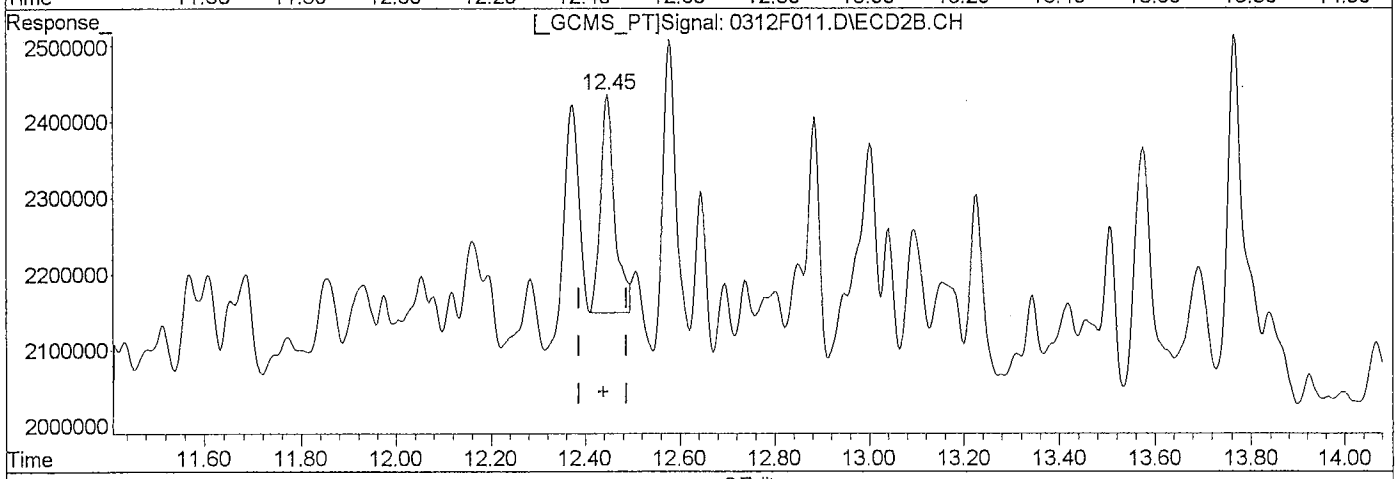
0312F011.D 031207-8081.M Mon Mar 12 17:11:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 45.975ug/L m

response 204607

(26) Toxaphene {2} #2

12.45min 105.398ug/L m

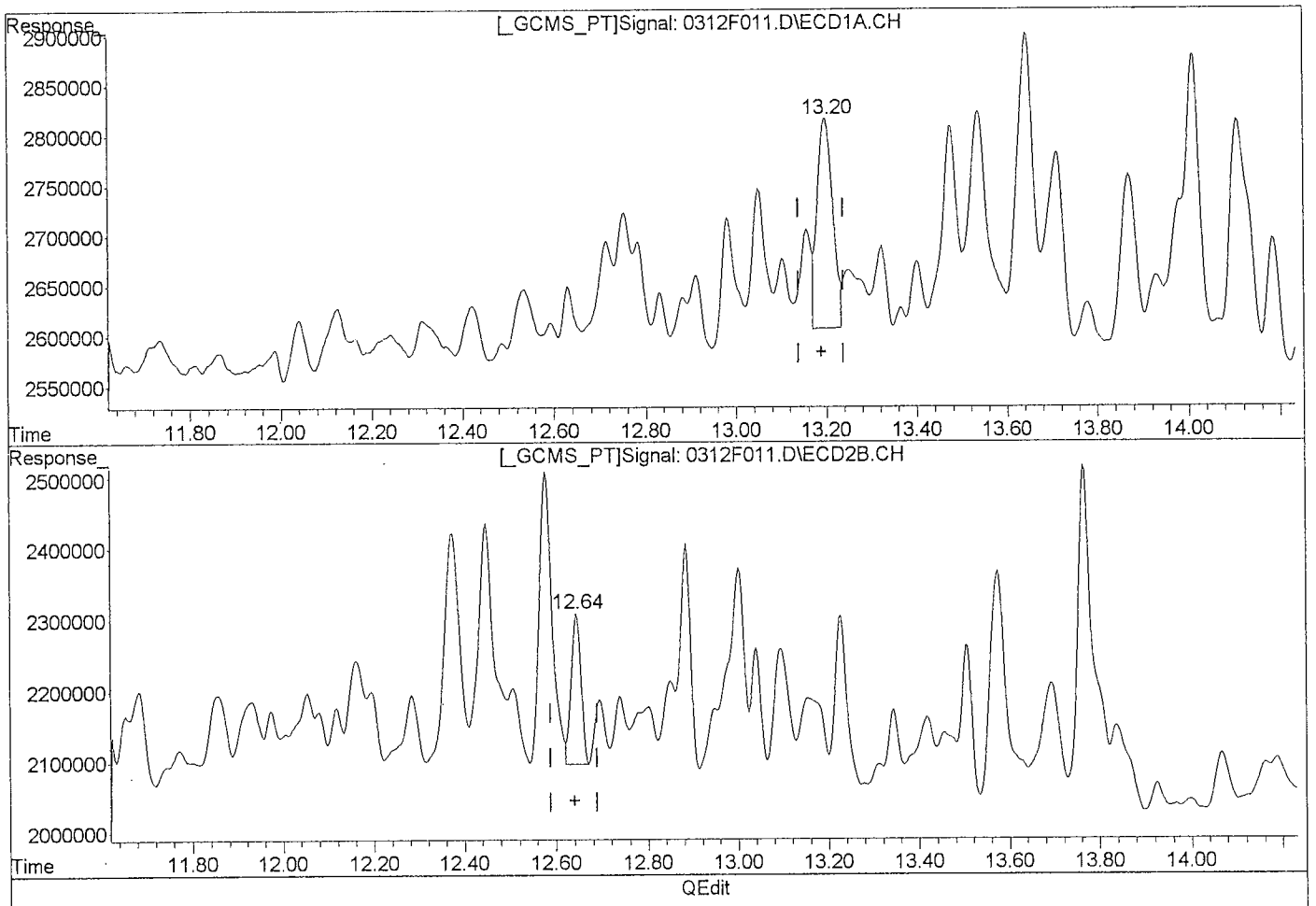
response 583653

(+) = Expected Retention Time
0312F011.D 031207-8081.M Mon Mar 12 17:12:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 125.823ug/L

response 503383

(27) Toxaphene {3} #2

12.64min 94.127ug/L

response 308888

Before

MAR 1 2 2007

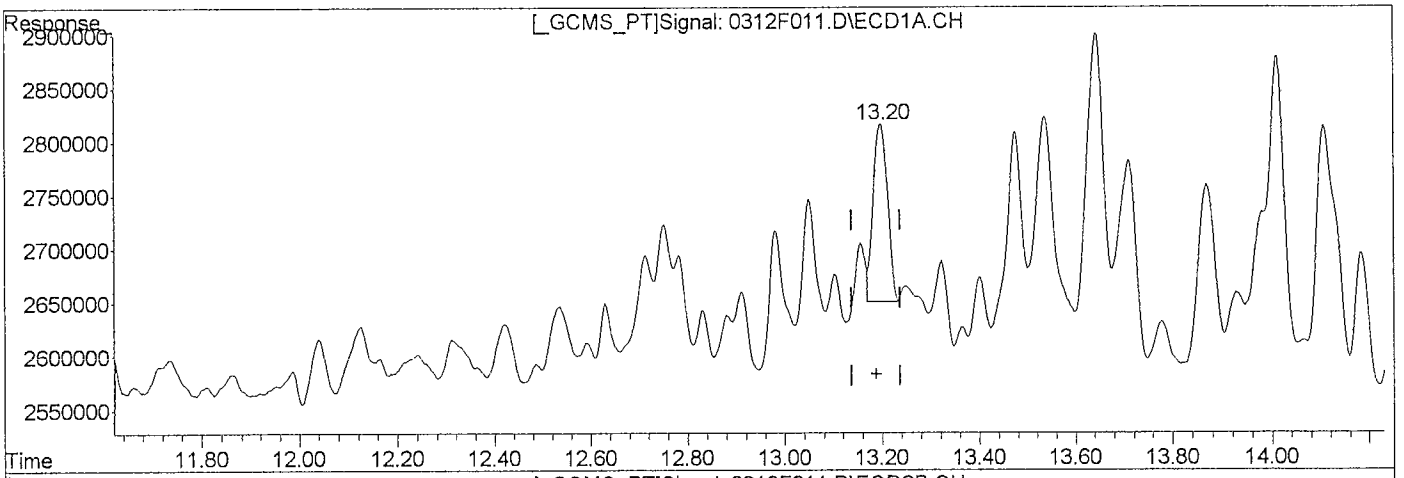
(+) = Expected Retention Time

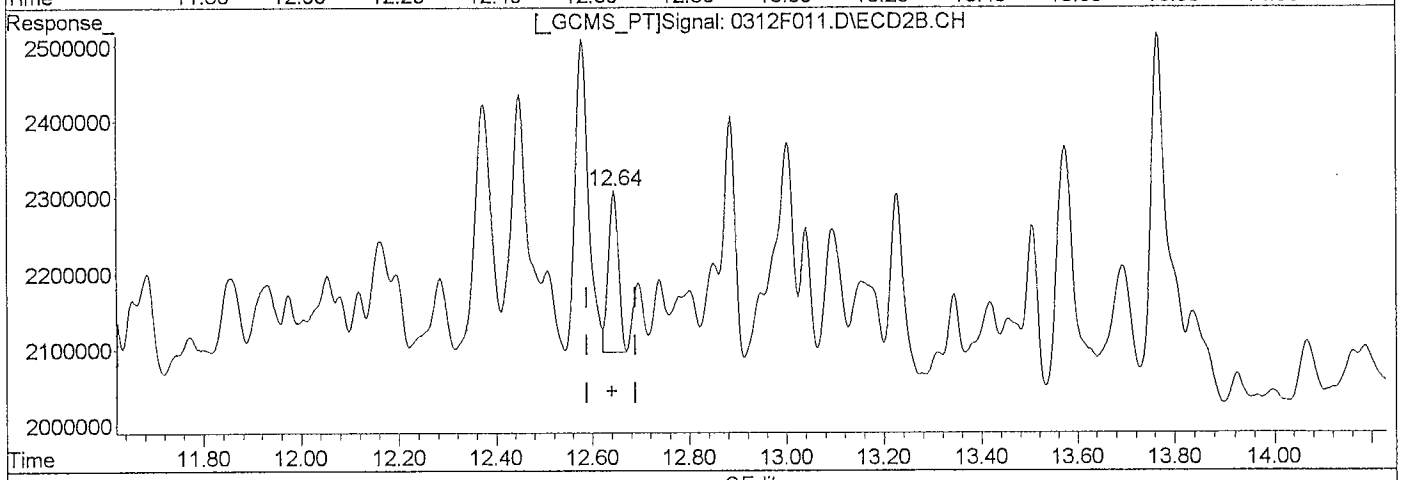
0312F011.D 031207-8081.M Mon Mar 12 17:14:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 84.223ug/L m

response 336953

(27) Toxaphene {3} #2

12.64min 94.127ug/L

response 308888

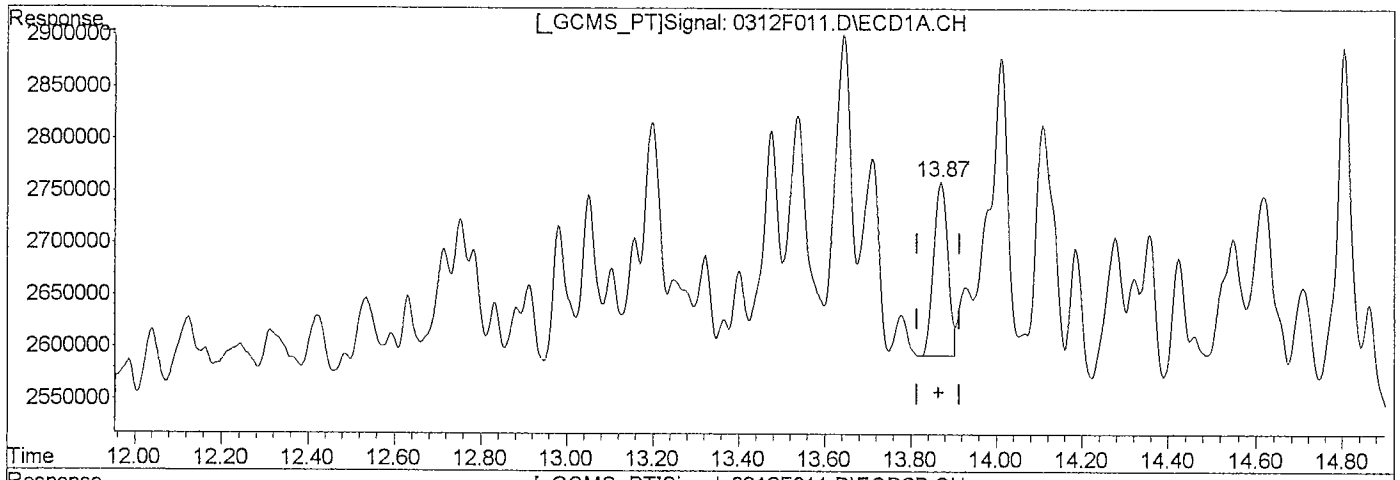
(+) = Expected Retention Time

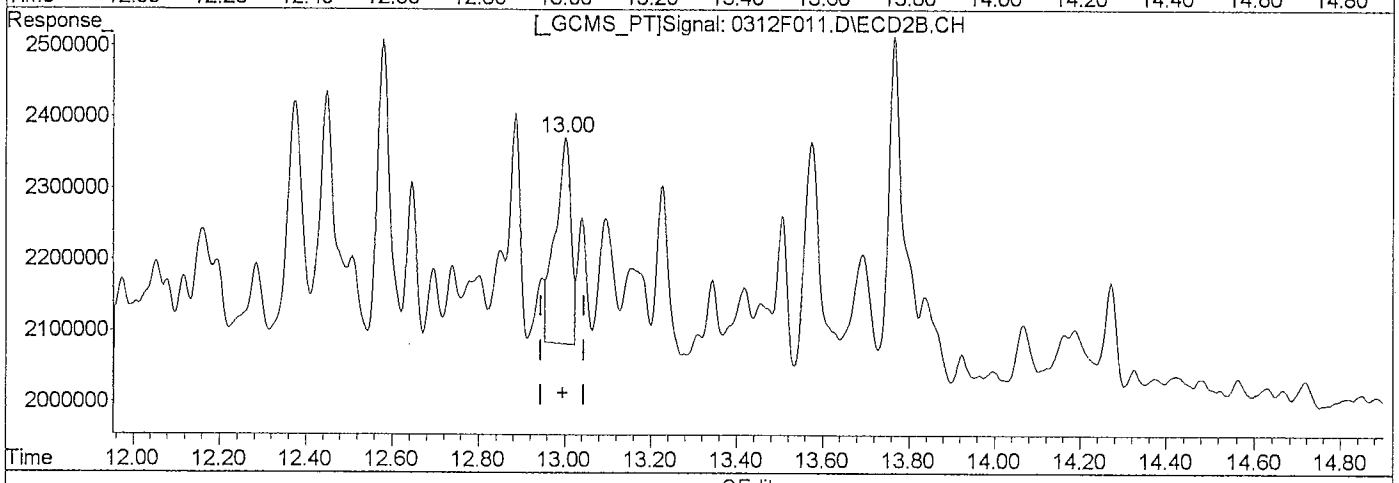
0312F011.D 031207-8081.M Mon Mar 12 17:14:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 68.394ug/L

response 387878

Before

MAR 1 2 2007

(28) Toxaphene {4} #2

13.00min 162.538ug/L

response 734898

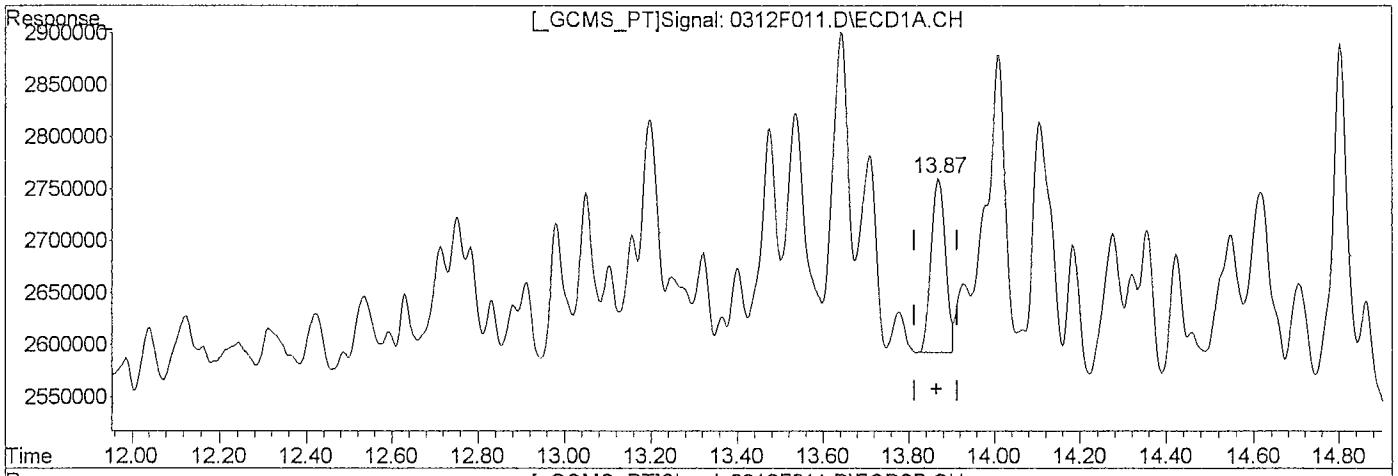
(+) = Expected Retention Time

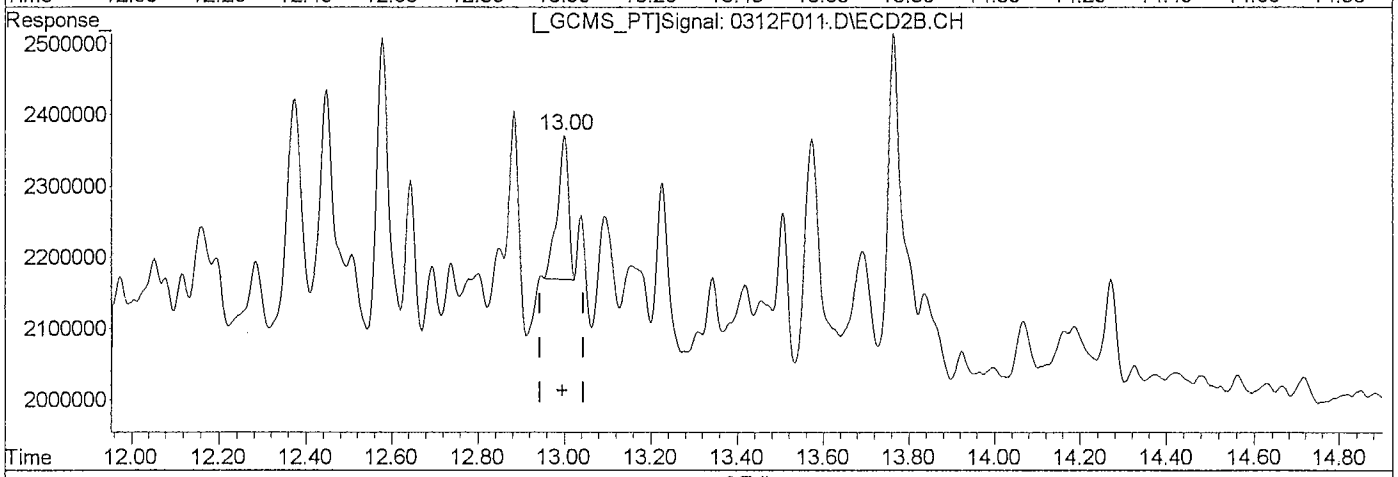
0312F011.D 031207-8081.M Mon Mar 12 17:14:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 68.394ug/L

response 387878

(28) Toxaphene {4} #2

13.00min 81.908ug/L m

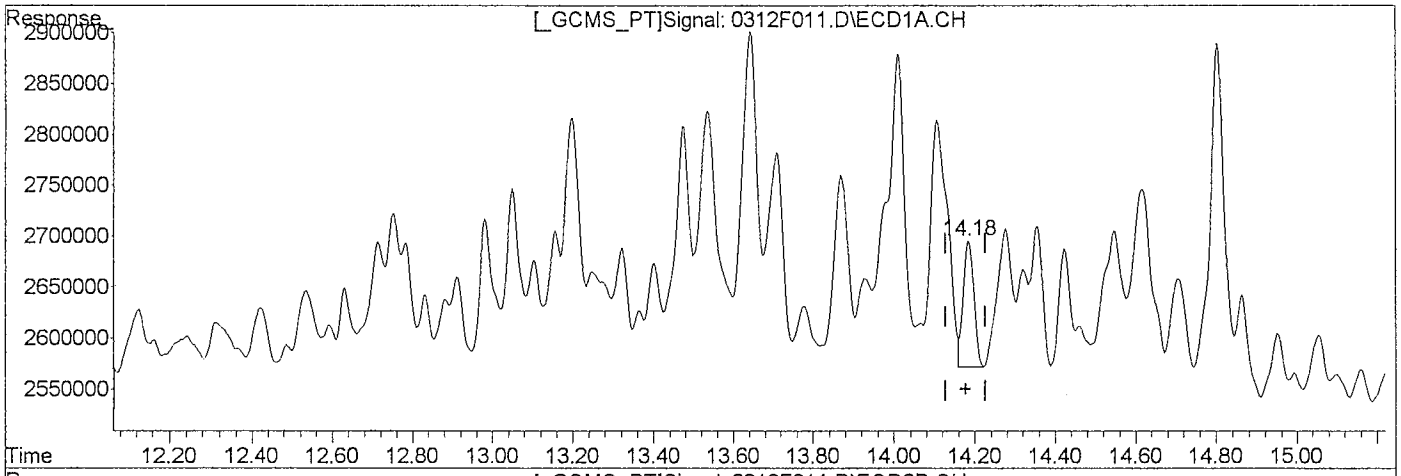
response 370340

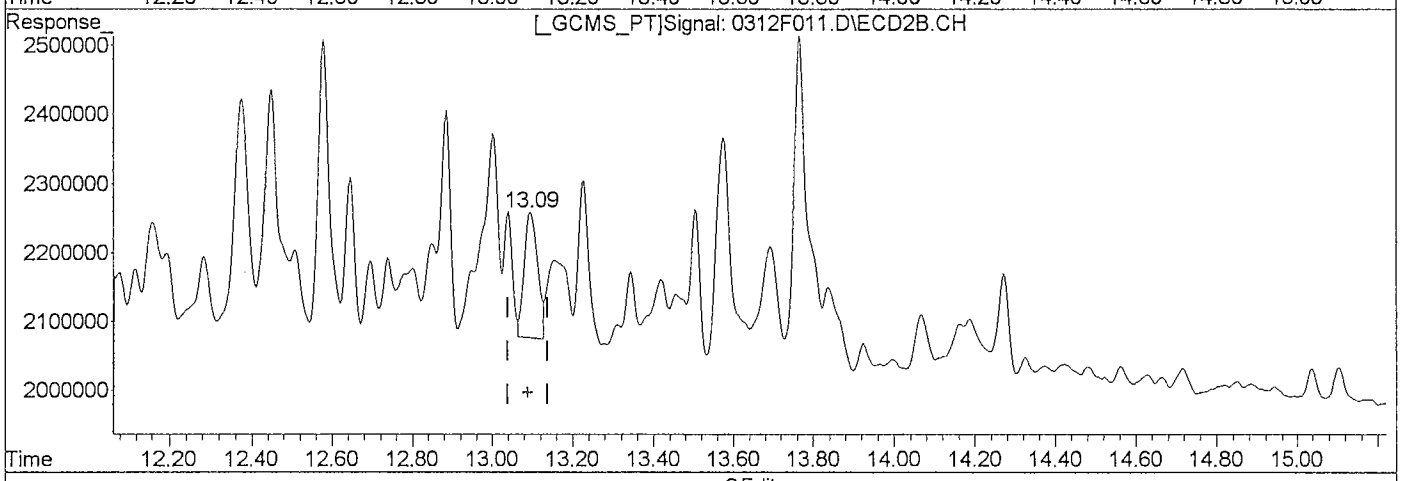
(+) = Expected Retention Time
0312F011.D 031207-8081.M Mon Mar 12 17:14:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 110.883ug/L

response 227240

Before

MAR 1 2 2007

(29) Toxaphene {5} #2

13.09min 51.127ug/L

response 423967

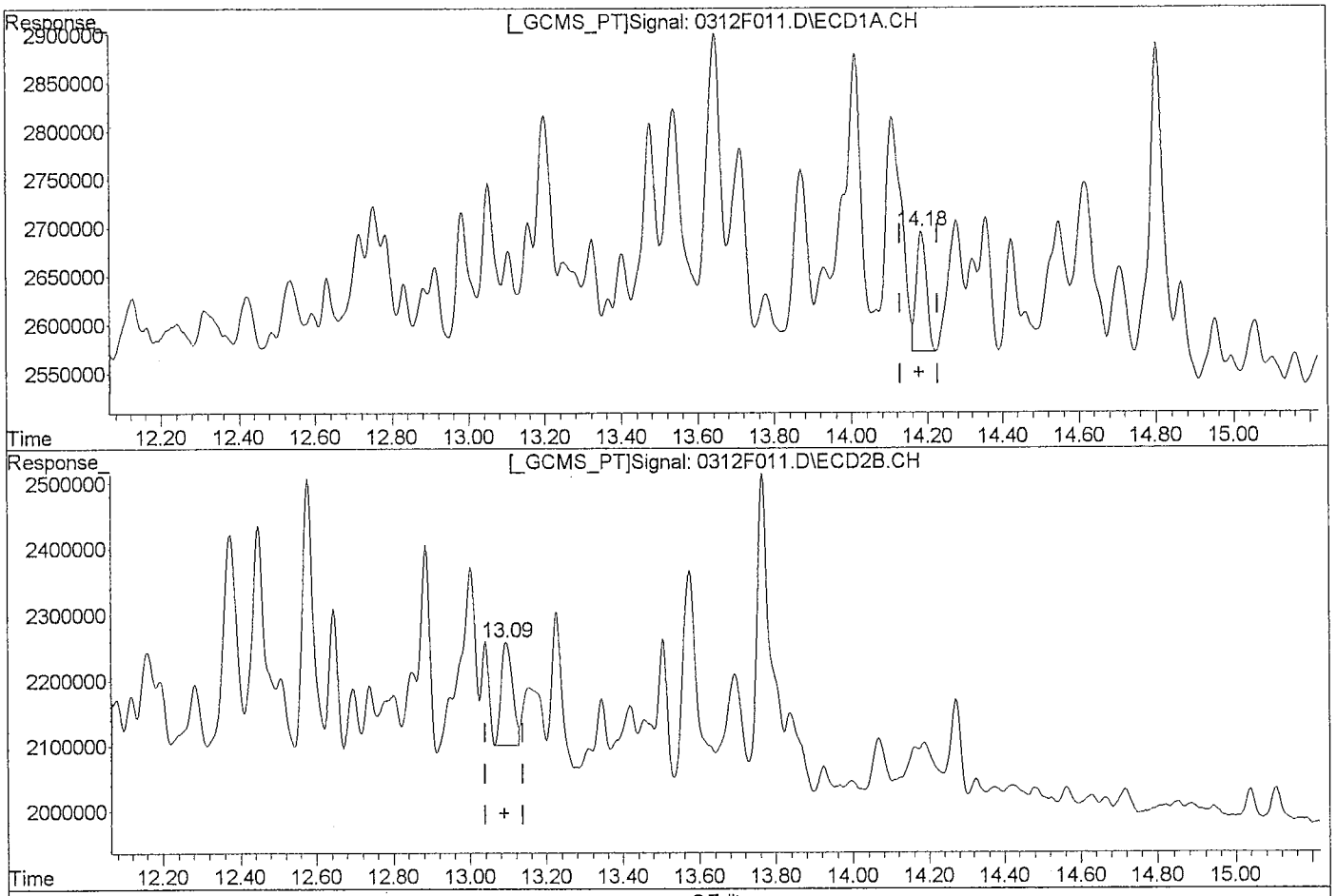
(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:14:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 110.883ug/L

response 227240

(29) Toxaphene {5} #2

13.09min 39.900ug/L m

response 330865

(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:15:01 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:02 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	708662	1986384	268.337	264.881
26)	Toxaphene {2}	13.05	12.44	574141	1447500	129.008m	261.395m#
27)	Toxaphene {3}	13.19	12.64	859427	813783	214.817m	247.983m
28)	Toxaphene {4}	13.87	13.00	1089341	994565	192.082	219.968m
29)	Toxaphene {5}	14.18	13.09	542758	865162	264.841m	104.332m#
30)	Toxaphene {6}	14.70	13.57	583992	2215628	79.056m	223.599 #

AK 3/12

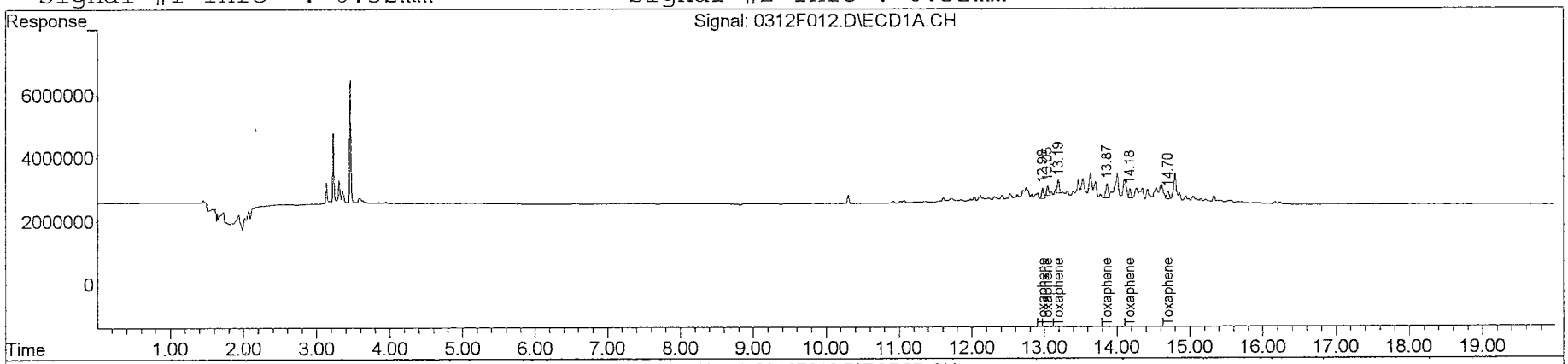
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

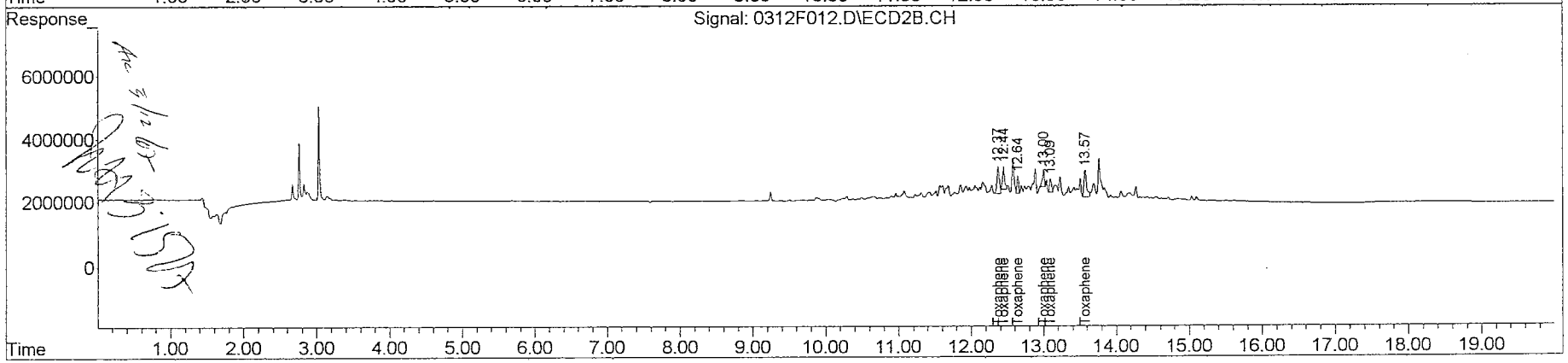
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:34 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

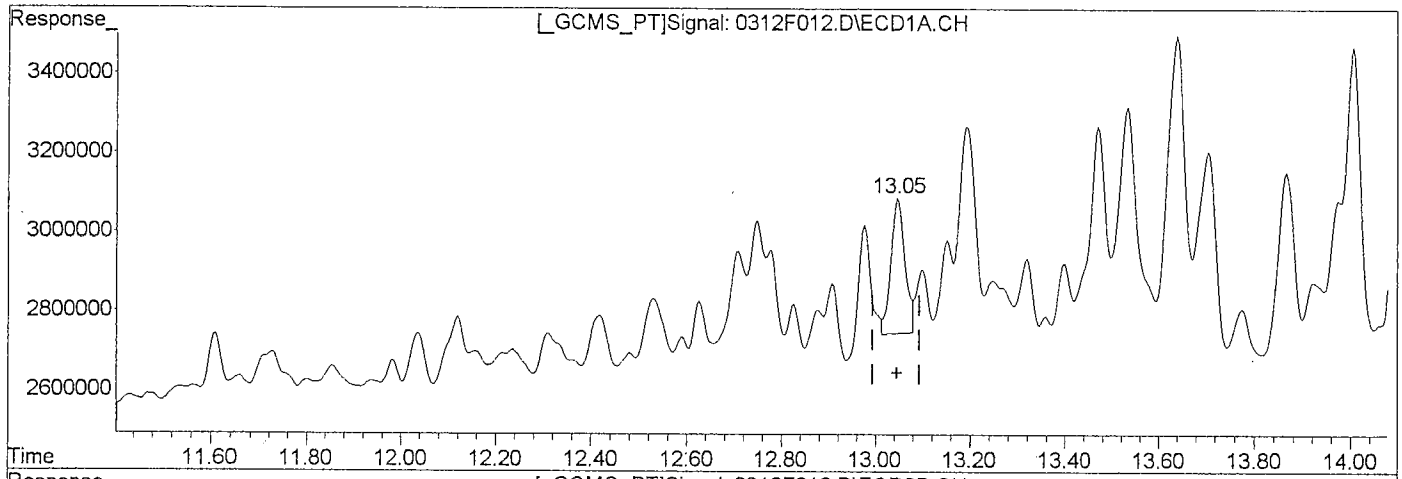


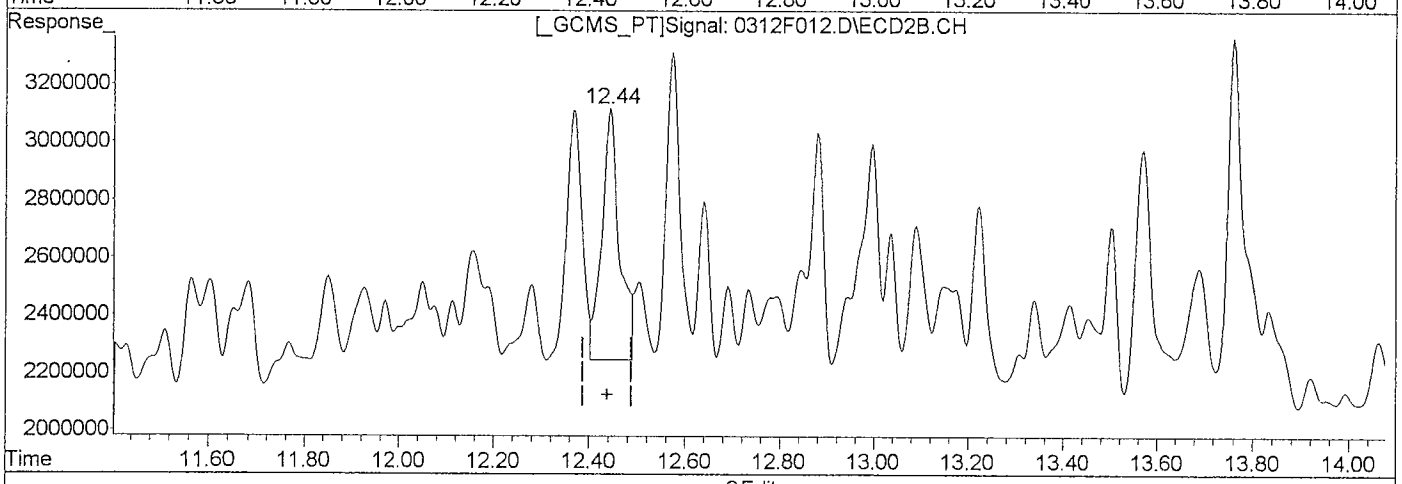


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 159.130ug/L

response 708197

(26) Toxaphene {2} #2

12.44min 395.785ug/L

response 2191697

Before

MAR 1 2 2007

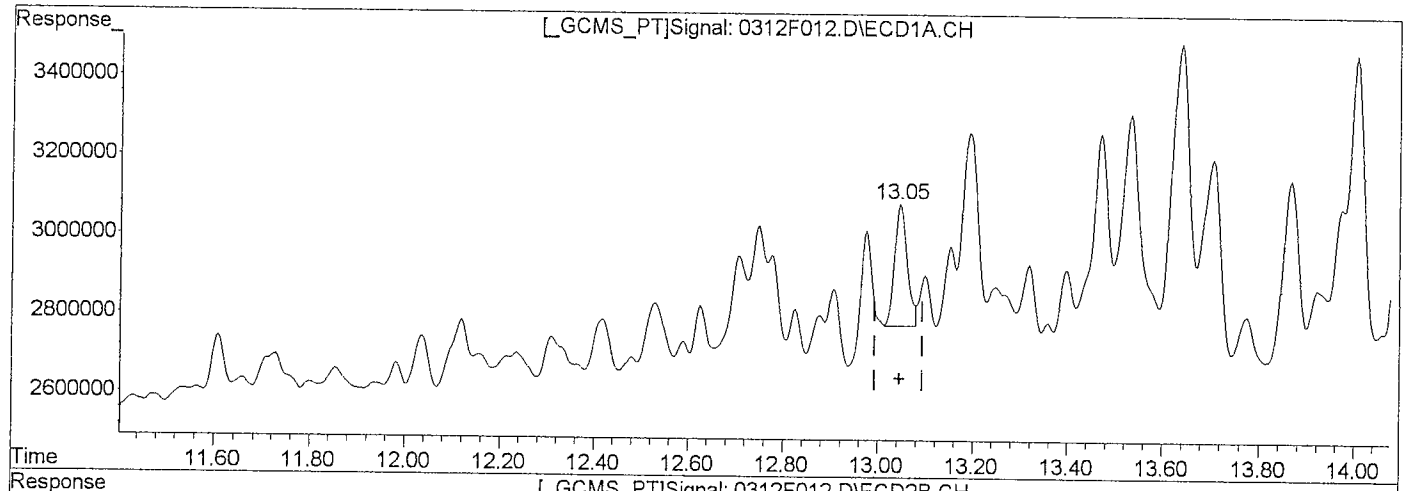
(+) = Expected Retention Time

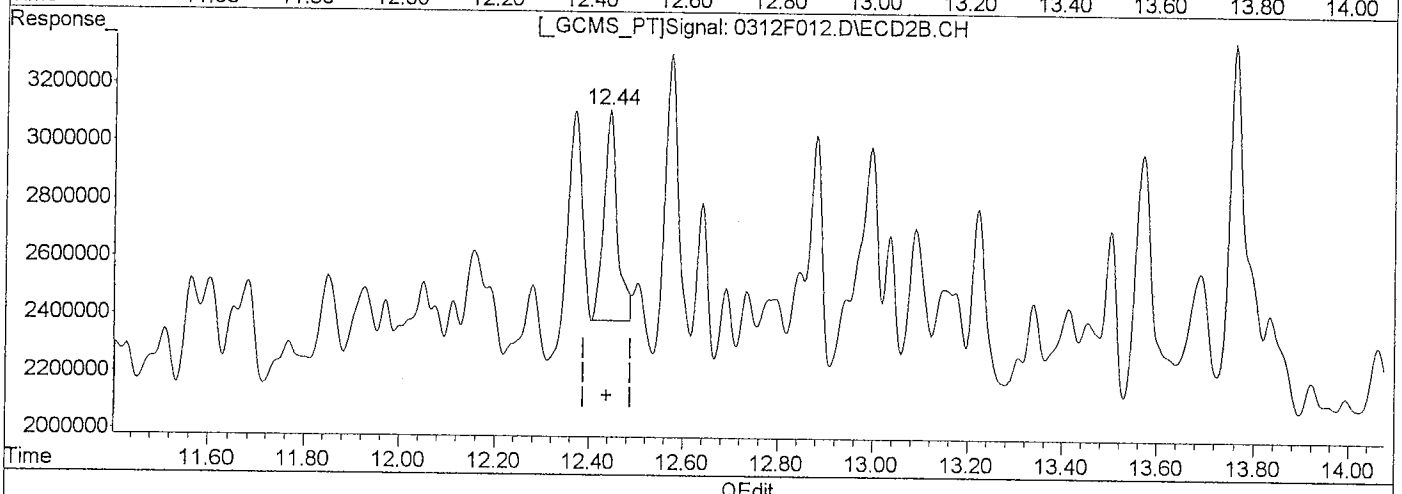
0312F012.D 031207-8081.M Mon Mar 12 17:32:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 129.008ug/L m

response 574141

(26) Toxaphene {2} #2

12.44min 261.395ug/L m

response 1447500

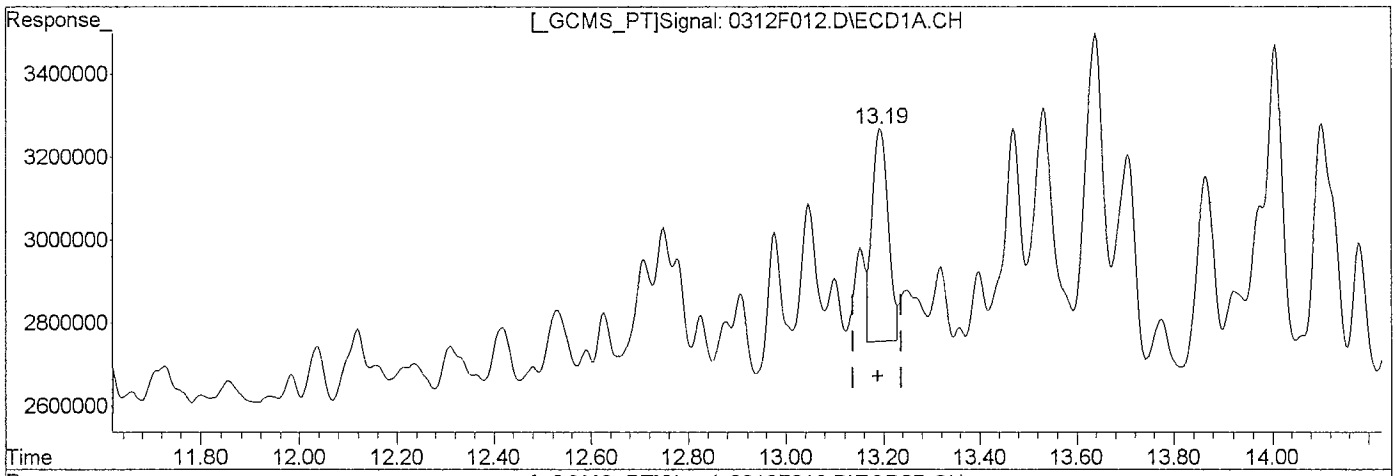
(+) = Expected Retention Time

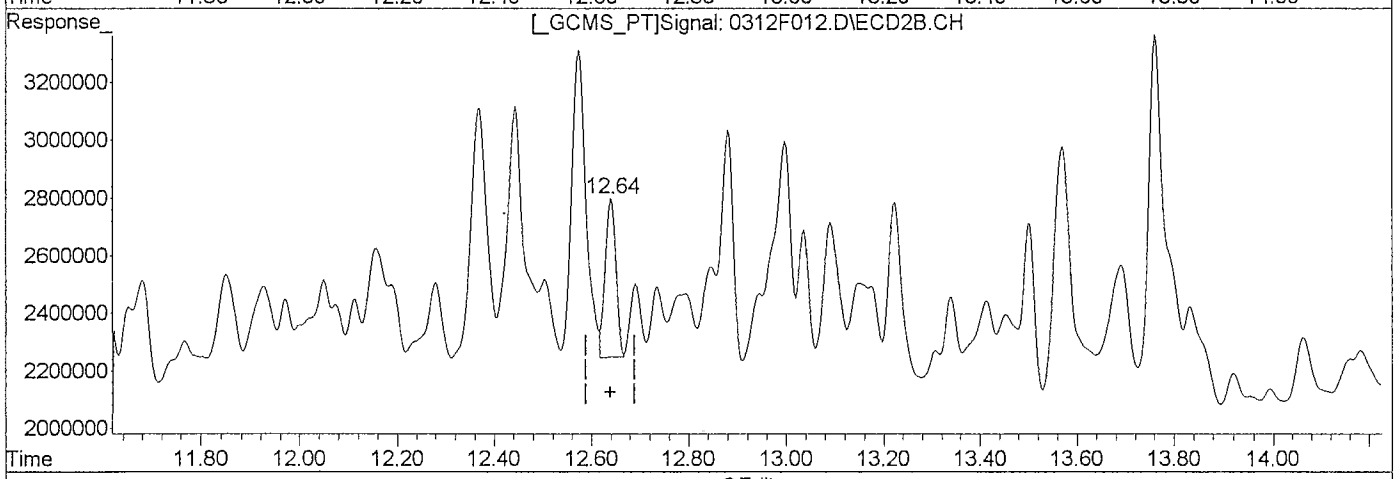
0312F012.D 031207-8081.M Mon Mar 12 17:32:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 296.859ug/L

response 1187655

(27) Toxaphene {3} #2

12.64min 255.098ug/L

response 837133

Before

MAR 1 2 2007

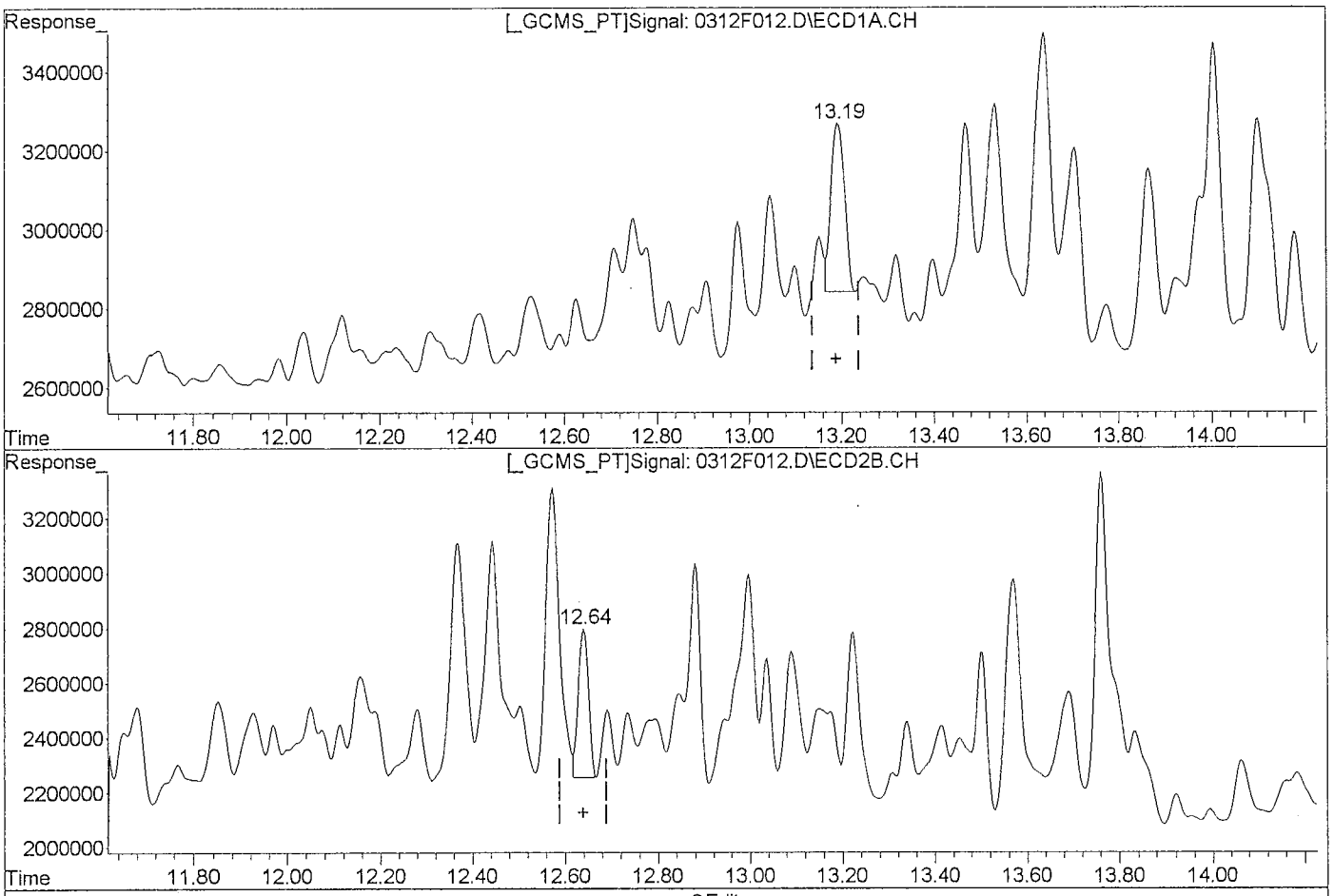
(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:32:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 214.817ug/L m

response 859427

(27) Toxaphene {3} #2

12.64min 247.983ug/L m

response 813783

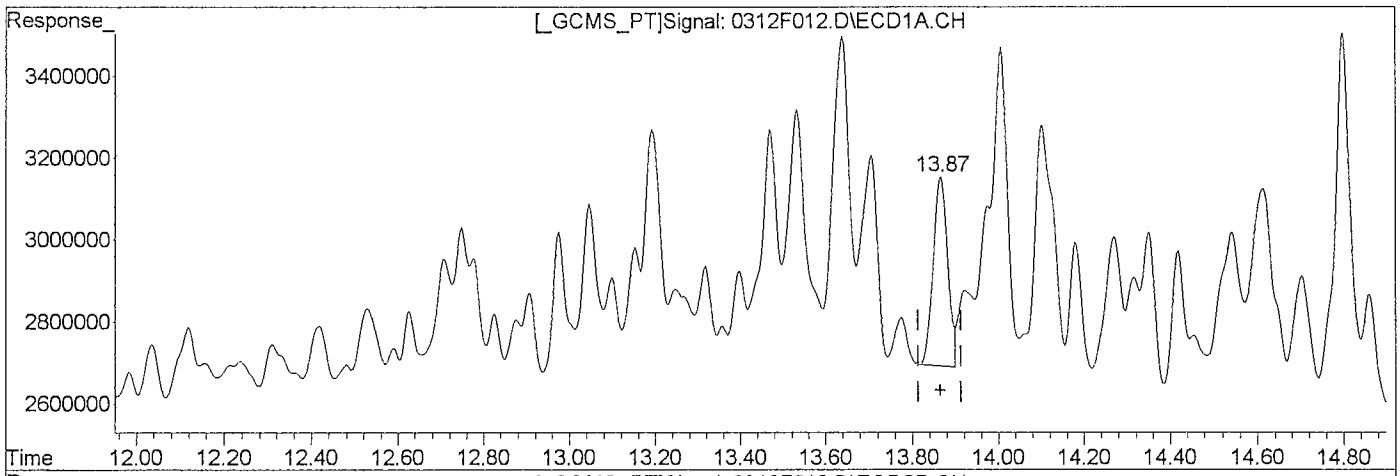
(+) = Expected Retention Time

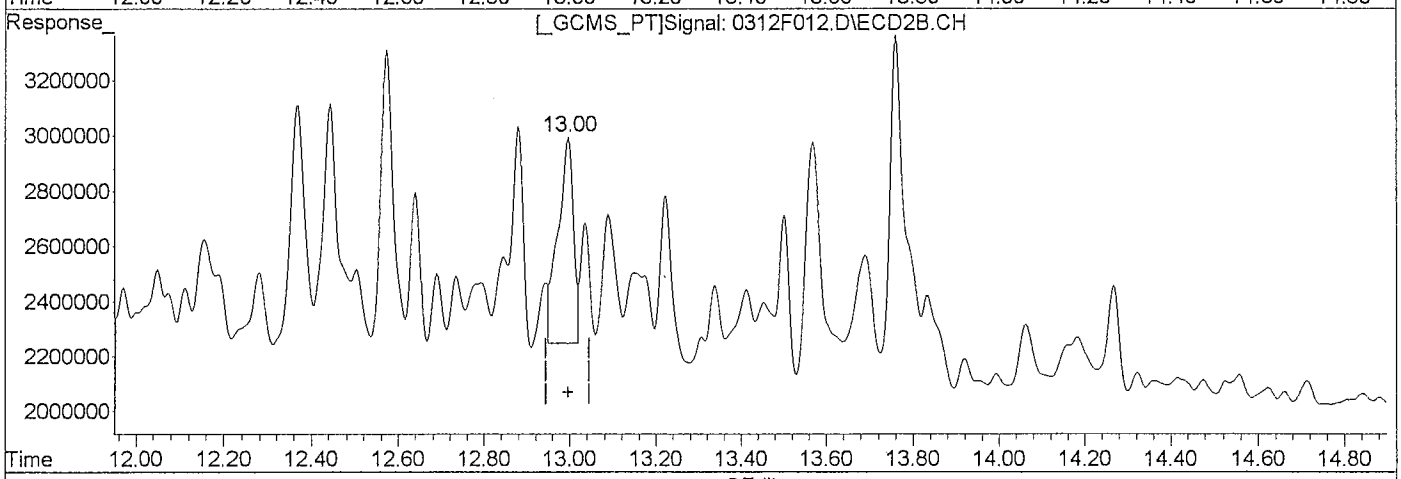
0312F012.D 031207-8081.M Mon Mar 12 17:32:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 192.082ug/L

response 1089341

(28) Toxaphene {4} #2

13.00min 411.367ug/L

response 1859956

Before

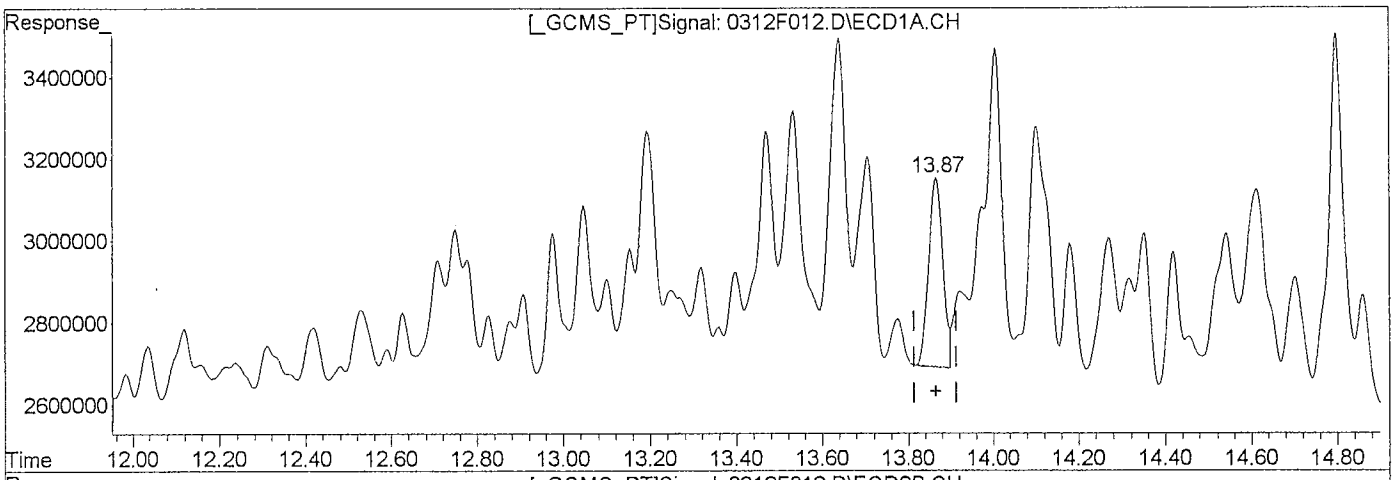
MAR 1 7 2007

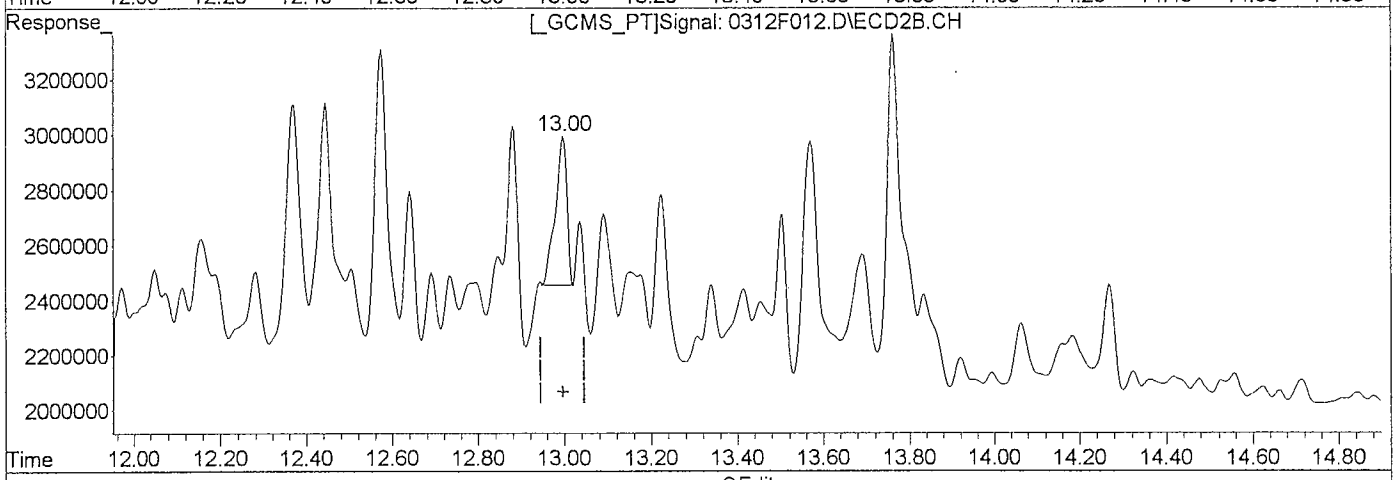
(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:32:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 192.082ug/L

response 1089341

(28) Toxaphene {4} #2

13.00min 219.968ug/L m

response 994565

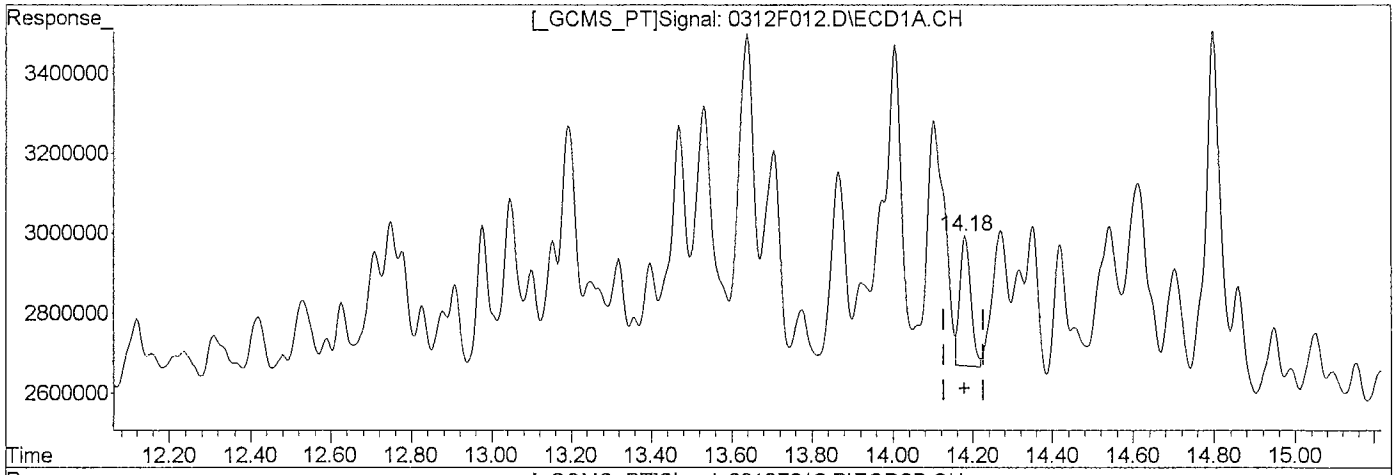
(+) = Expected Retention Time

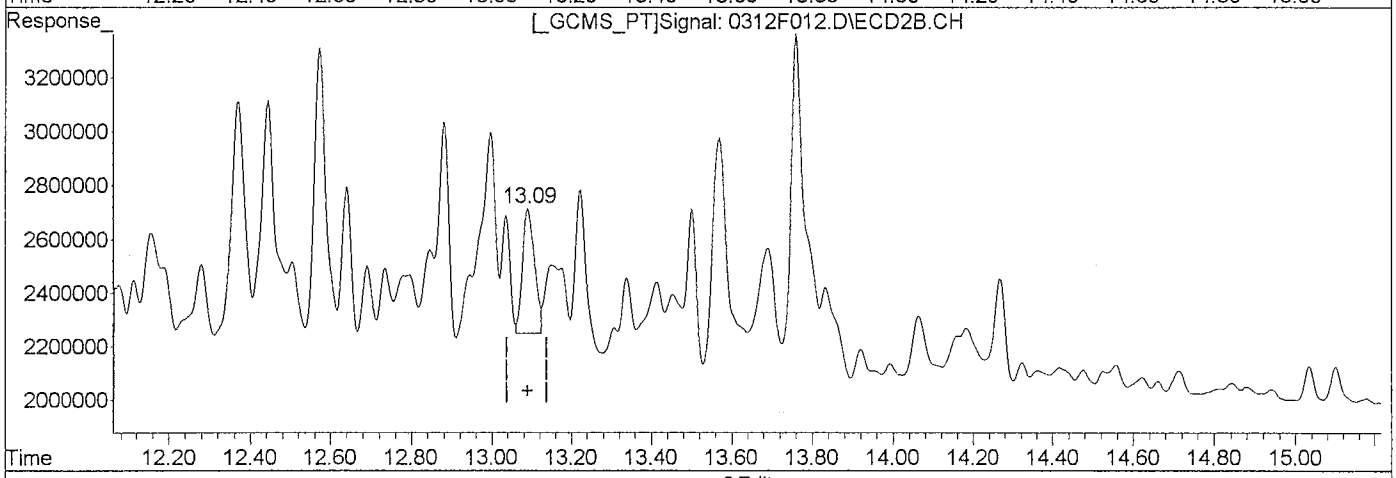
0312F012.D 031207-8081.M Mon Mar 12 17:33:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 299.887ug/L

response 614580

(29) Toxaphene {5} #2

13.09min 117.368ug/L

response 973260

Before

MAR 12 2007

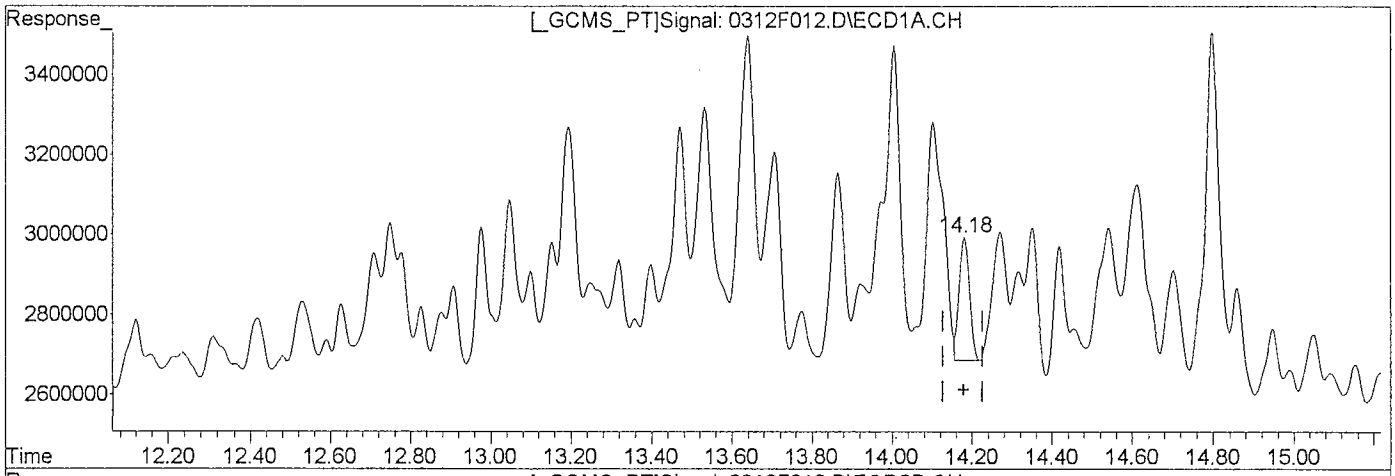
(+) = Expected Retention Time

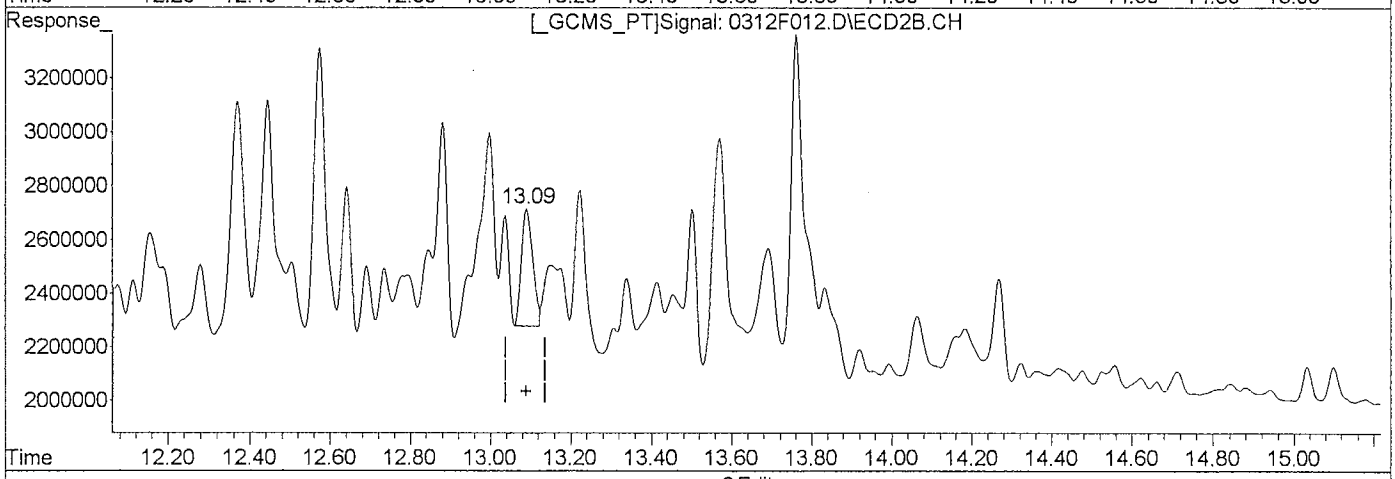
0312F012.D 031207-8081.M Mon Mar 12 17:33:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 264.841ug/L m

response 542758

(29) Toxaphene {5} #2

13.09min 104.332ug/L m

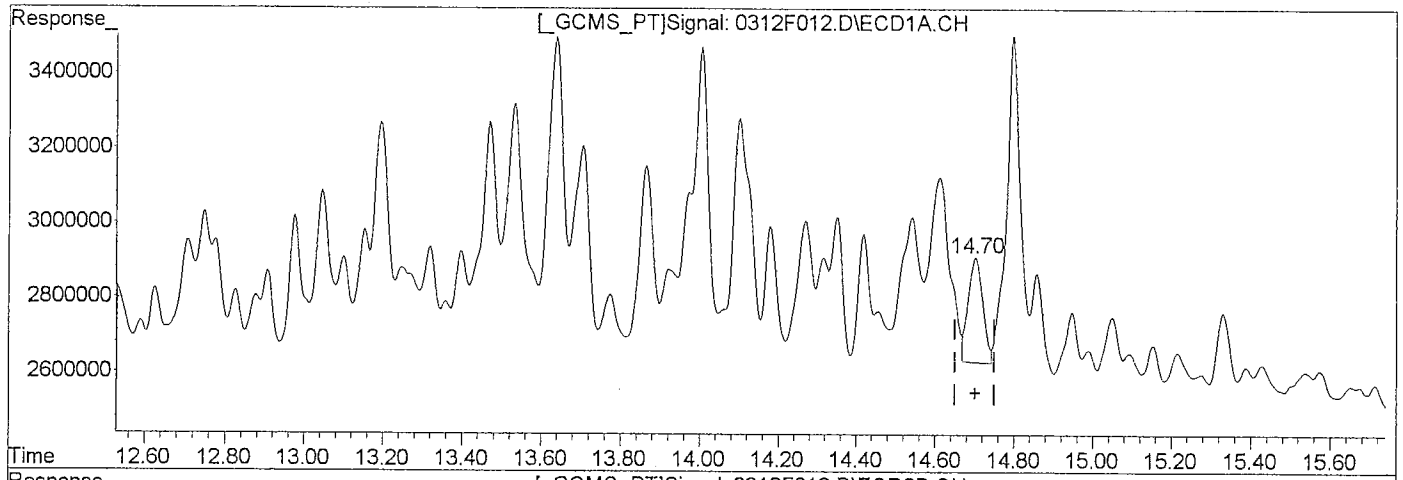
response 865162

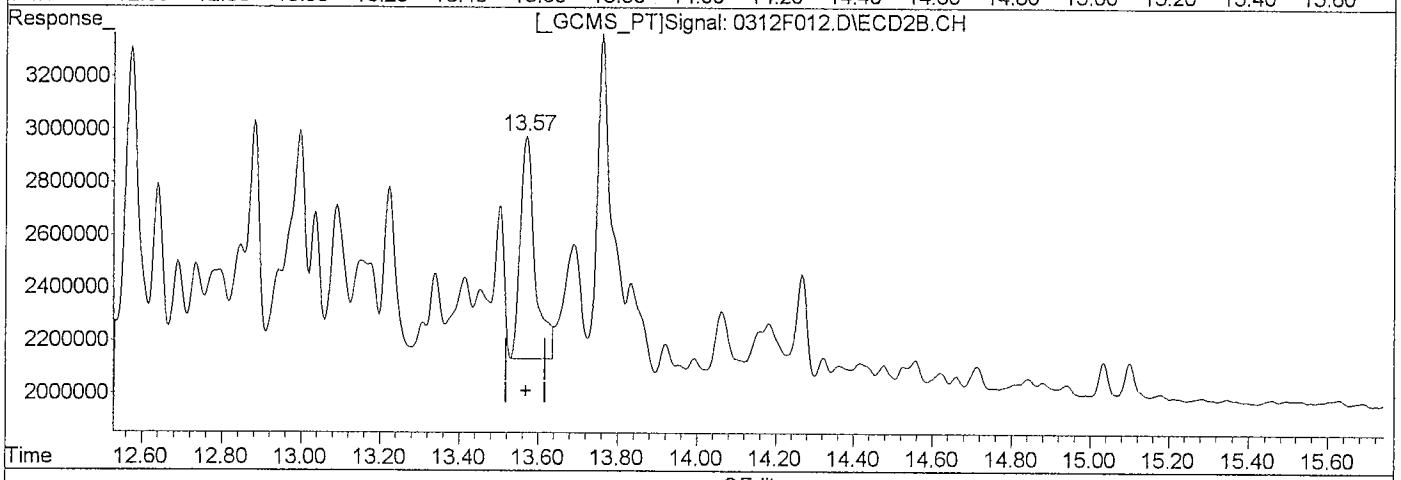
(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:33:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 98.128ug/L

response 724873

(30) Toxaphene {6} #2

13.57min 223.599ug/L

response 2215628

Before

MAR 12 2007

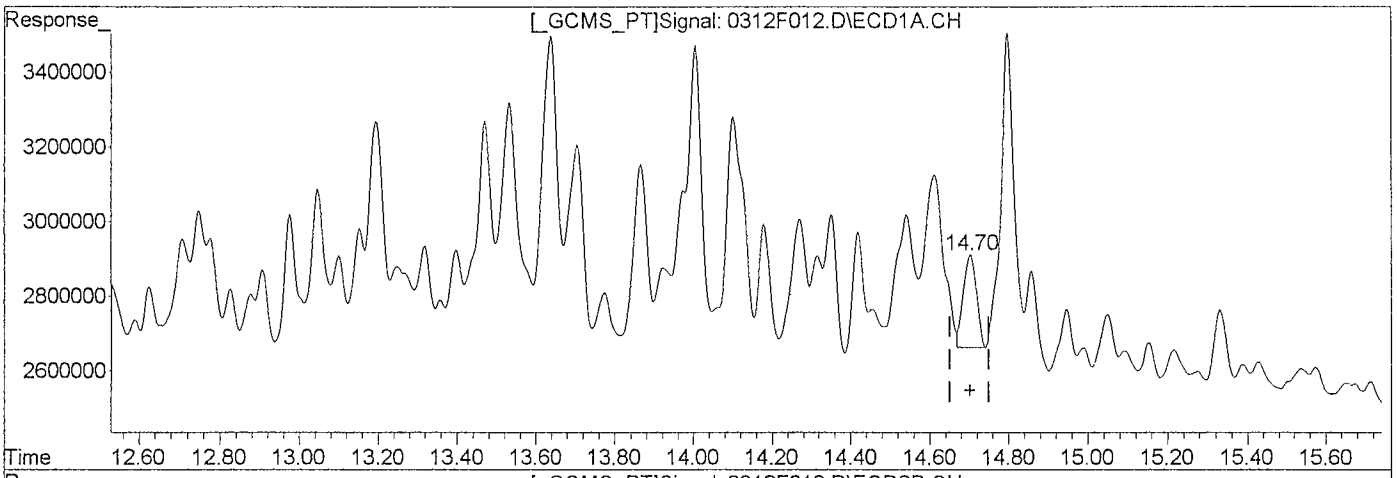
(+) = Expected Retention Time

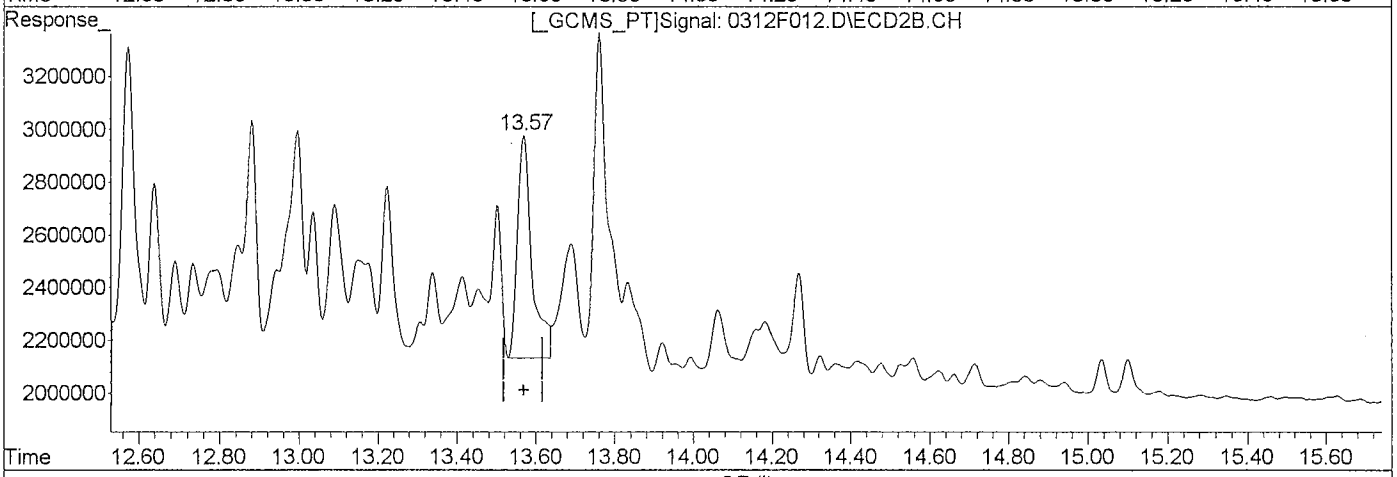
0312F012.D 031207-8081.M Mon Mar 12 17:33:57 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 79.056ug/L m

response 583992

(30) Toxaphene {6} #2

13.57min 223.599ug/L

response 2215628

(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:34:06 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:03 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	1273468	3753261	482.203	500.492
26)	Toxaphene {2}	13.05	12.45	1048026	2701329	235.489m	487.816m#
27)	Toxaphene {3}	13.20	12.64	1677312	1514247	419.251m	461.434
28)	Toxaphene {4}	13.87	13.00	2053301	1777600	362.056m	393.152m
29)	Toxaphene {5}	14.19	13.10	1036996	1696721	506.006m	204.612m#
30)	Toxaphene {6}	14.71	13.57	1150293	4188382	155.718m	422.688 #

AK 3/12/07

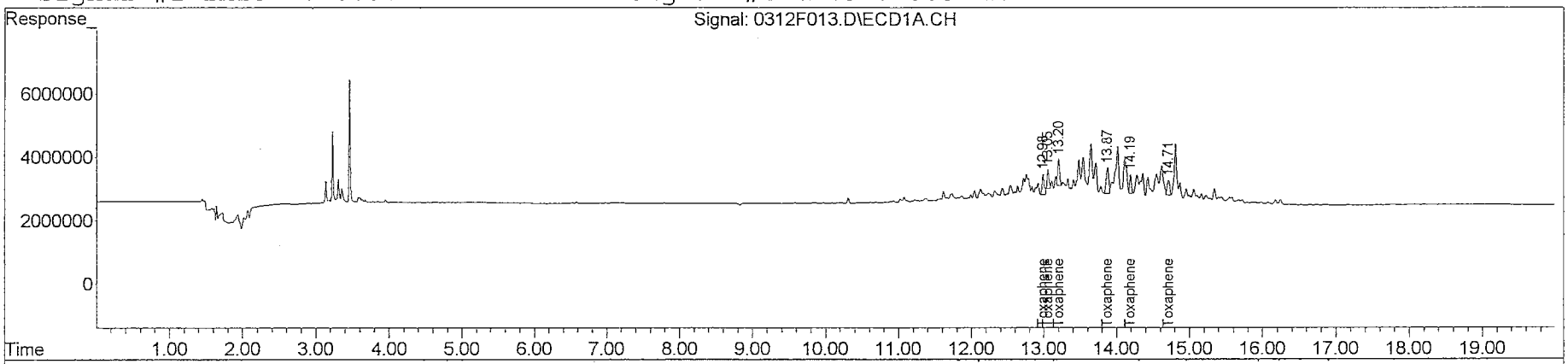
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

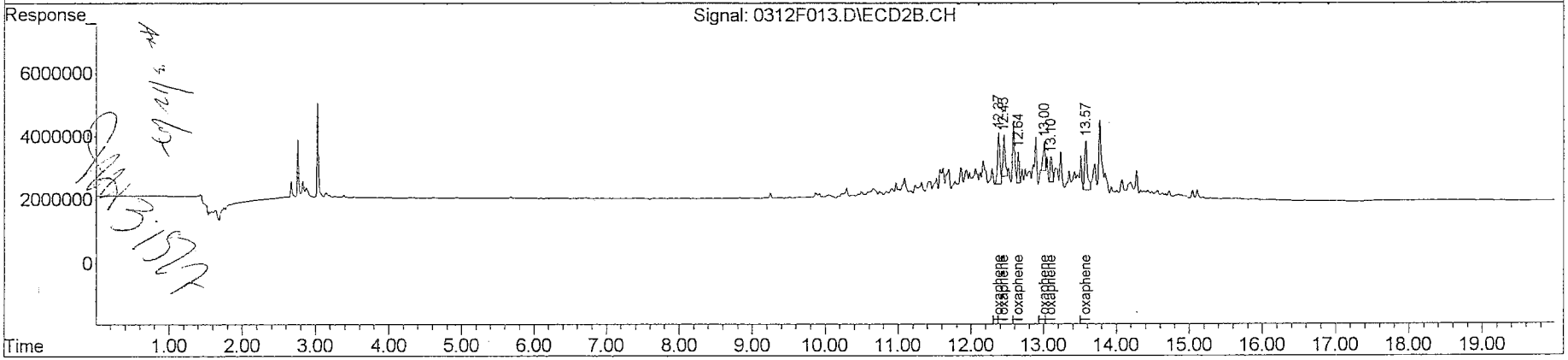
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:35 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



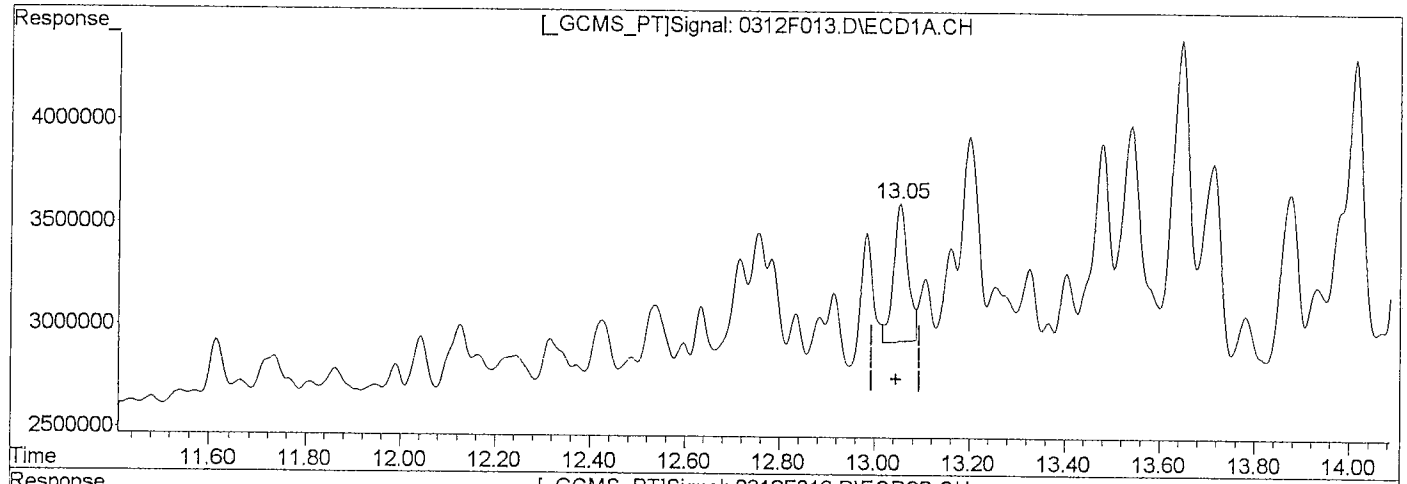


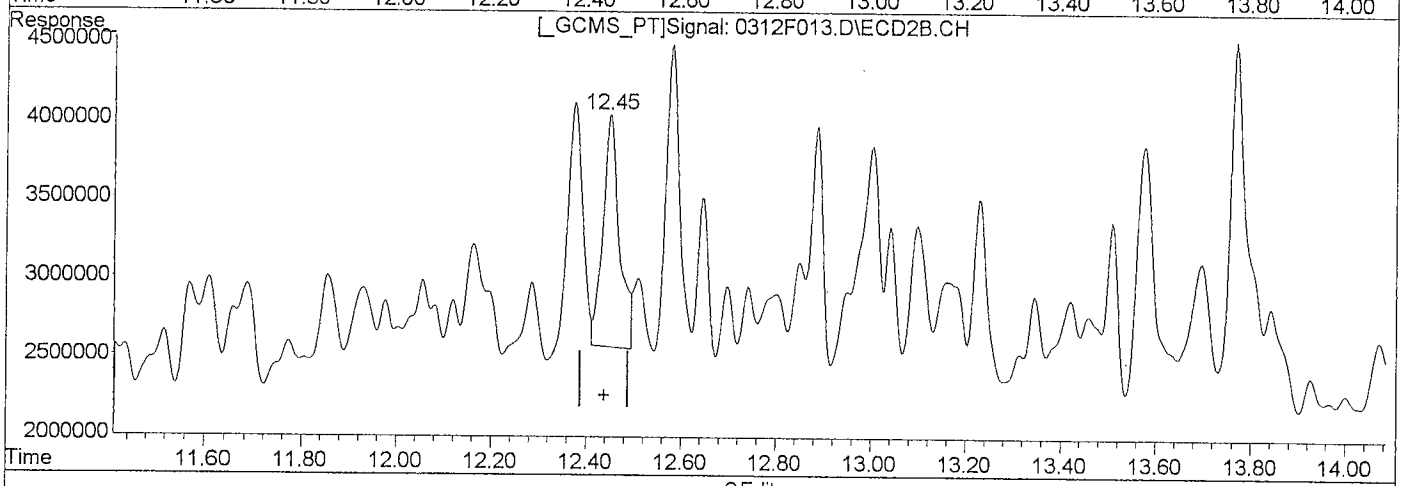
761

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





(26) Toxaphene {2}

13.05min 312.104ug/L

response 1388992

(26) Toxaphene {2} #2

12.45min 645.590ug/L

response 3575020

Before

MAR 1 2 2007

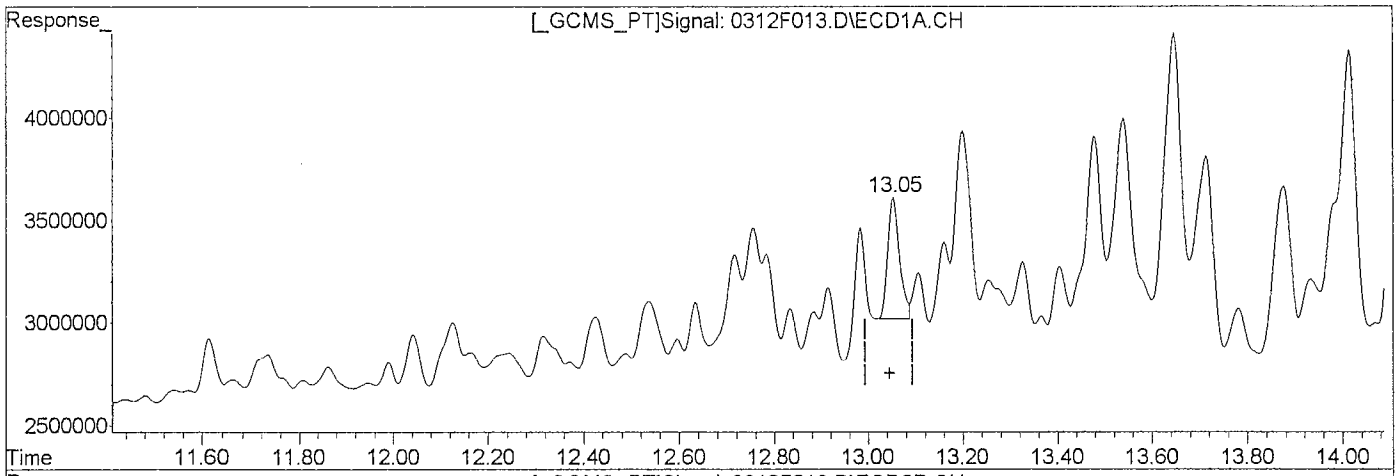
(+) = Expected Retention Time

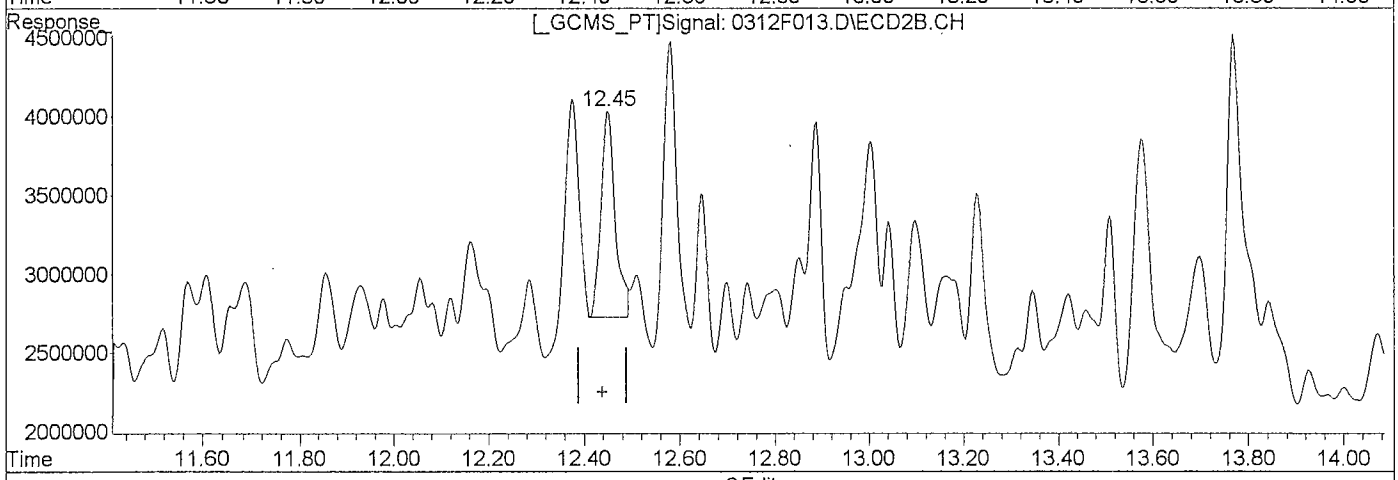
0312F013.D 031207-8081.M Mon Mar 12 17:34:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 235.489ug/L m

response 1048026

(26) Toxaphene {2} #2

12.45min 487.816ug/L m

response 2701329

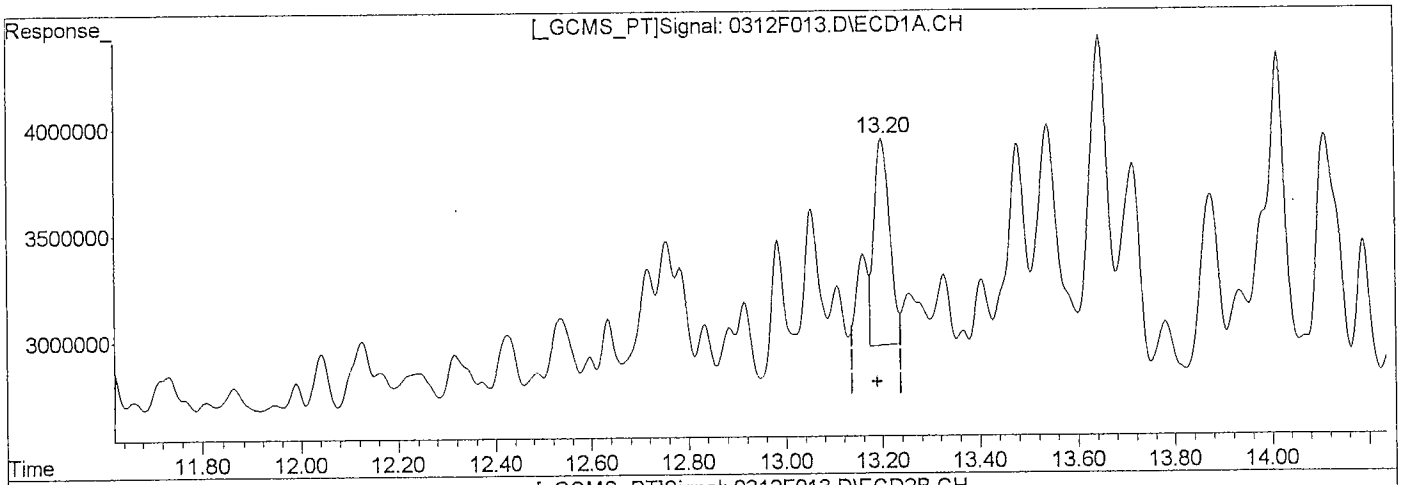
(+) = Expected Retention Time

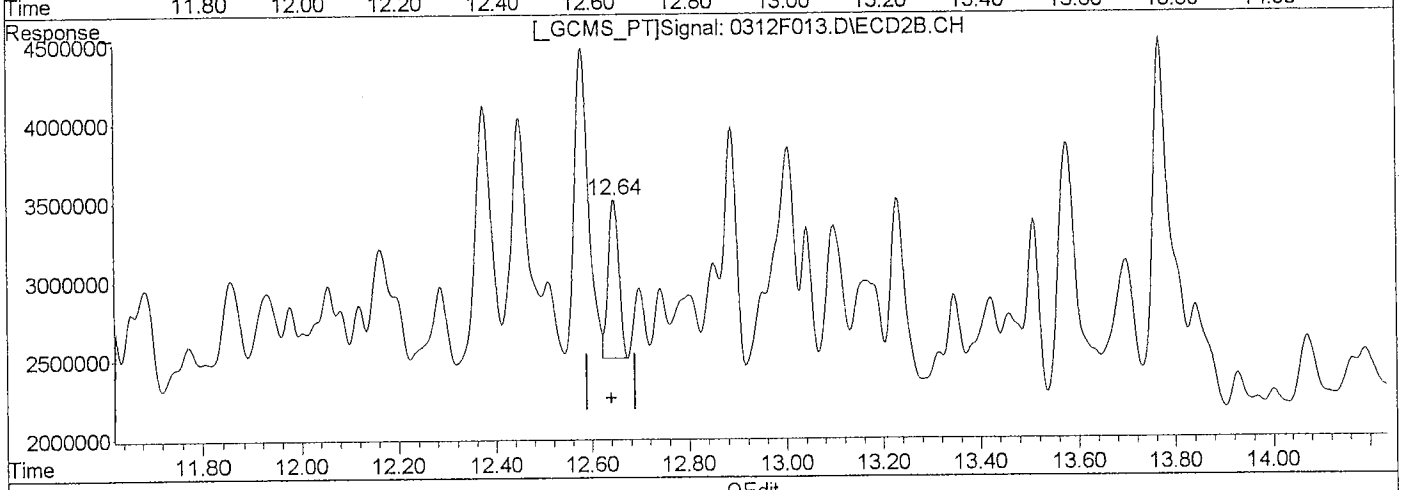
0312F013.D 031207-8081.M Mon Mar 12 17:34:43 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 550.889ug/L

response 2203961

(27) Toxaphene {3} #2

12.64min 461.434ug/L

response 1514247

Before

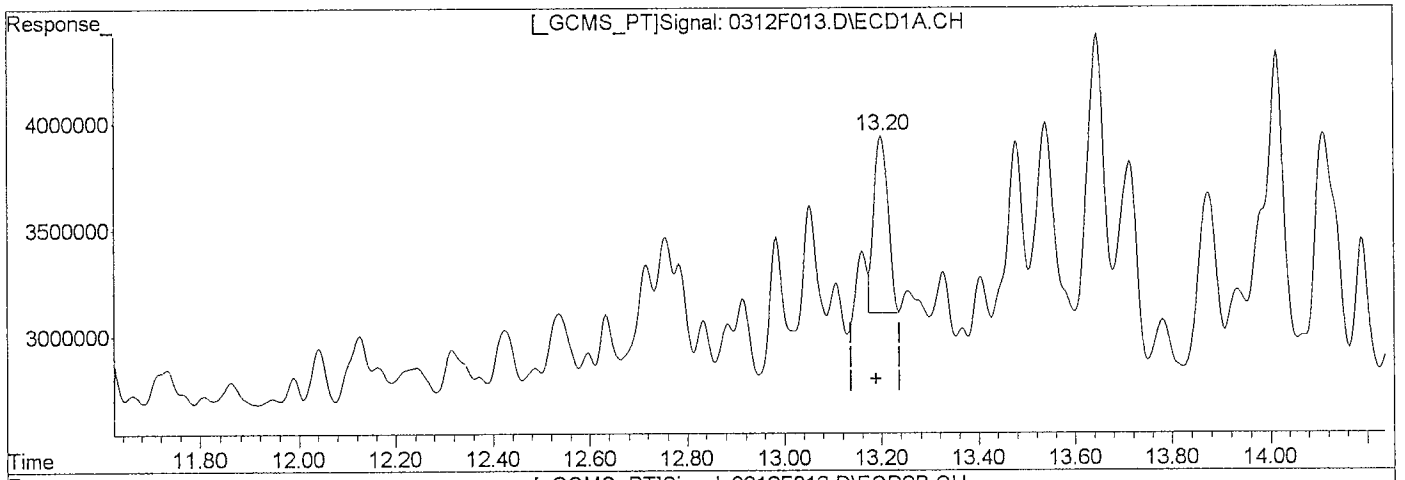
MAR 17 2007

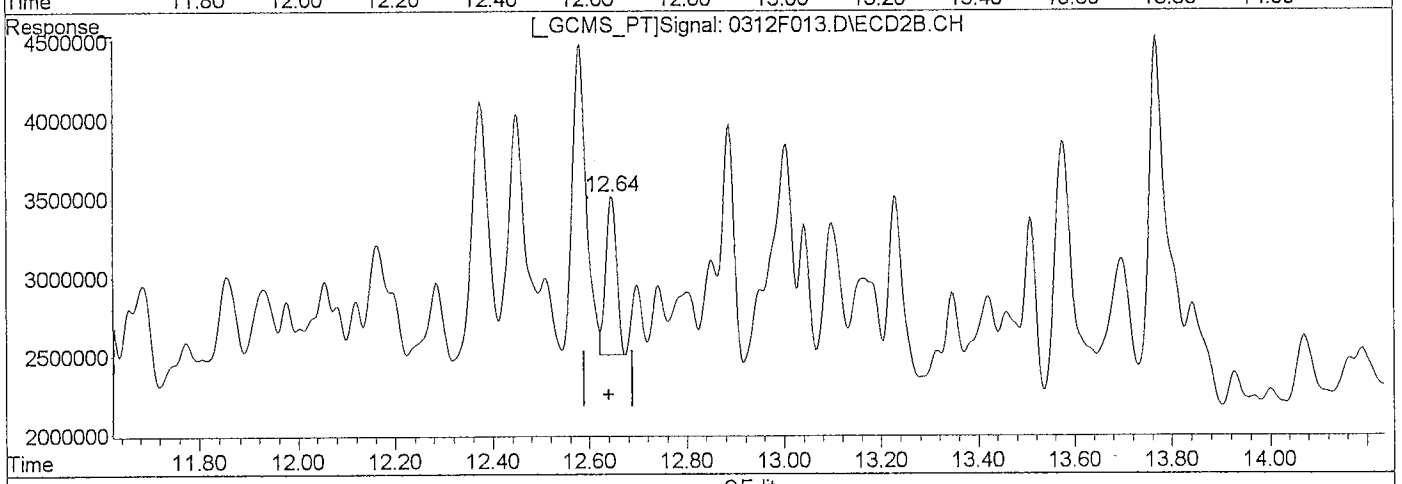
(+) = Expected Retention Time
0312F013.D 031207-8081.M Mon Mar 12 17:34:47 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 419.251ug/L m

response 1677312

(27) Toxaphene {3} #2

12.64min 461.434ug/L

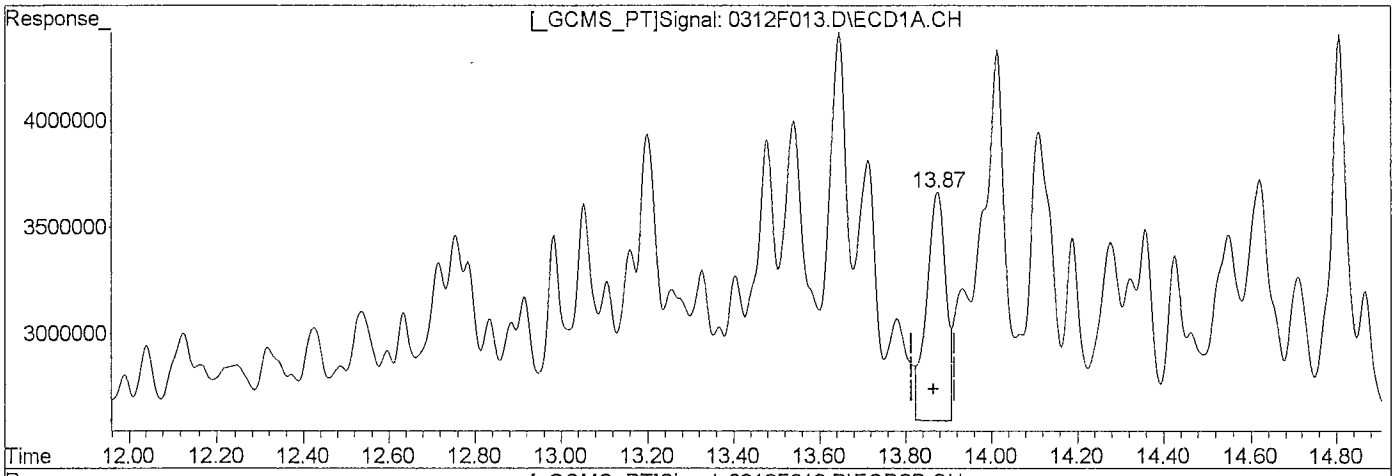
response 1514247

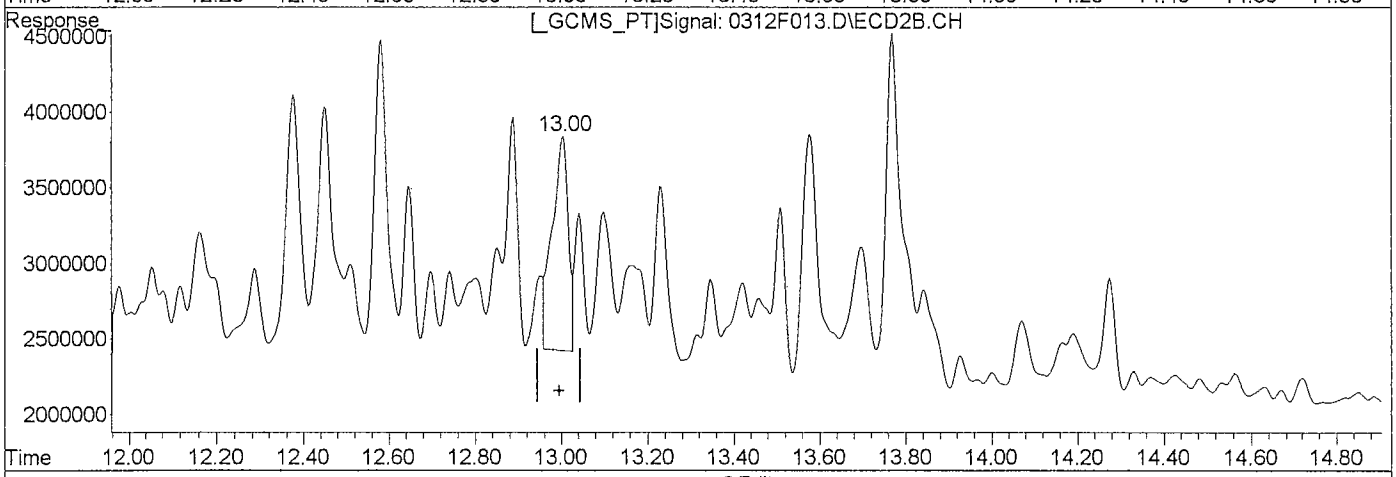
(+) = Expected Retention Time
0312F013.D 031207-8081.M Mon Mar 12 17:34:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 585.755ug/L

response 3321946

Before

MAR 1 2 2007

(28) Toxaphene {4} #2

13.00min 838.194ug/L

response 3789813

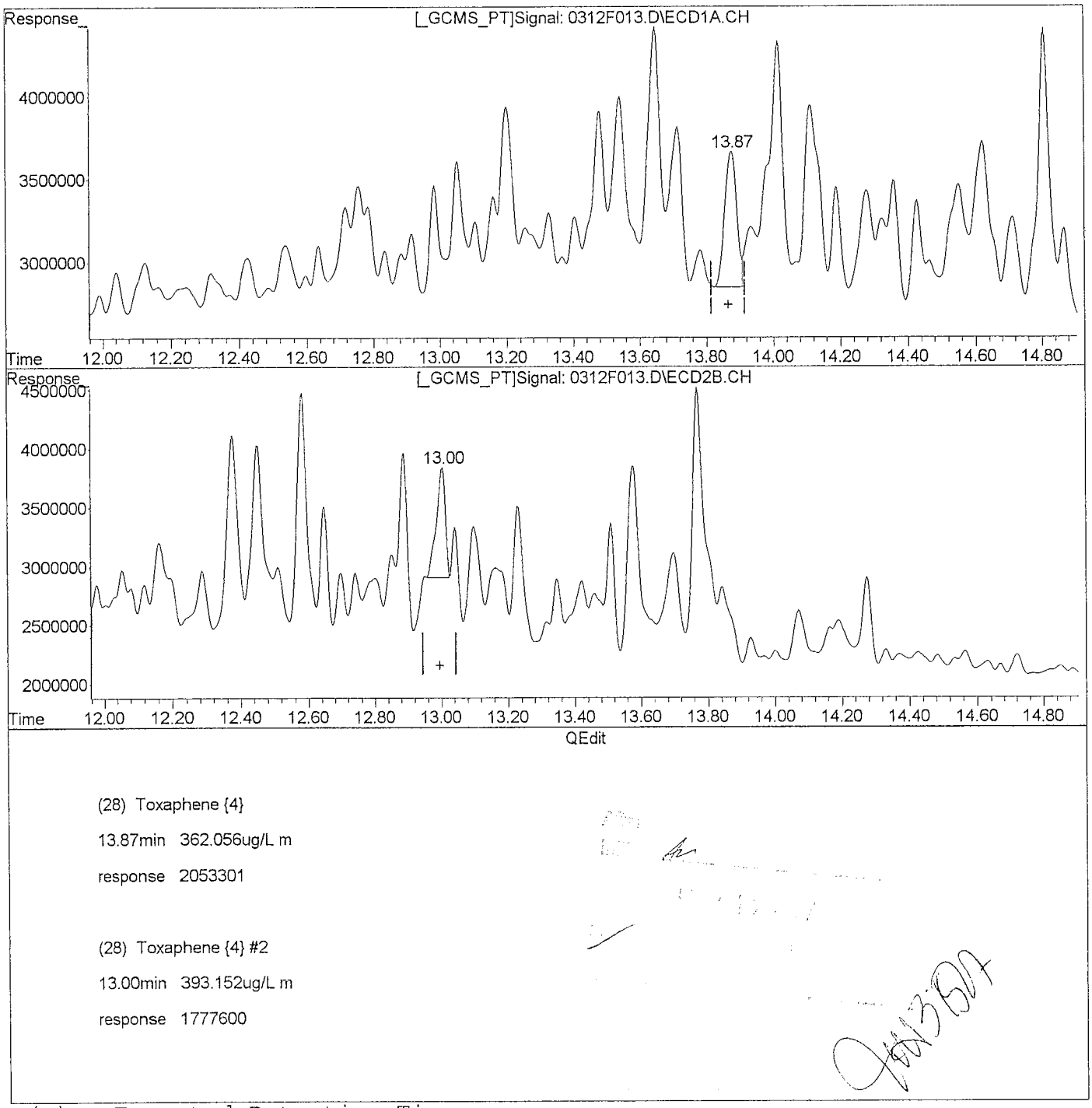
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:34:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 362.056ug/L m

response 2053301

(28) Toxaphene {4} #2

13.00min 393.152ug/L m

response 1777600

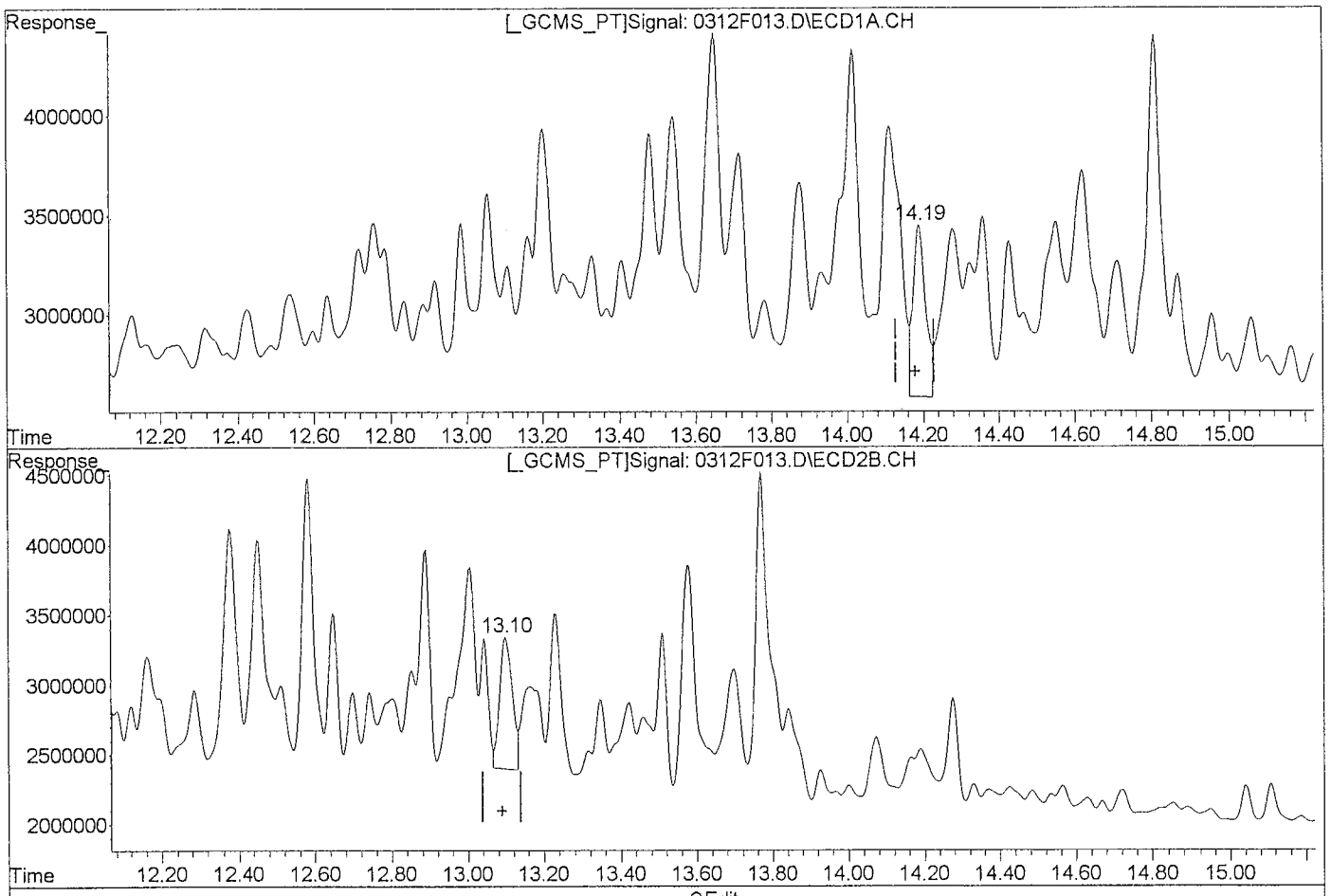
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:35:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.19min 953.296ug/L

response 1953662

Before

MAR 1 2 2007

(29) Toxaphene {5} #2

13.10min 268.946ug/L

response 2230211

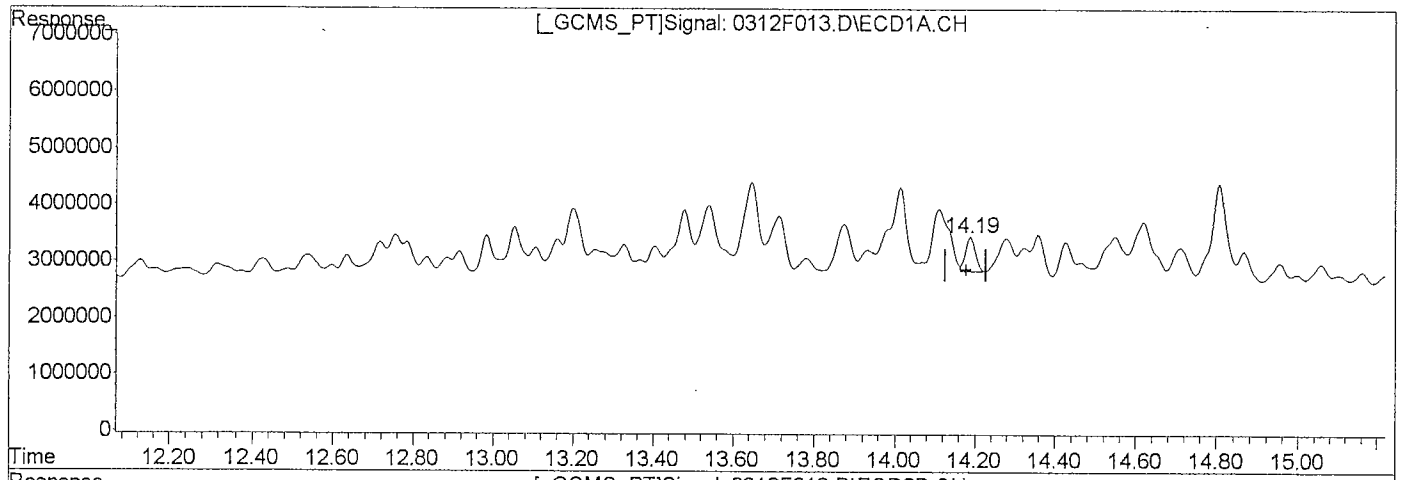
(+) = Expected Retention Time

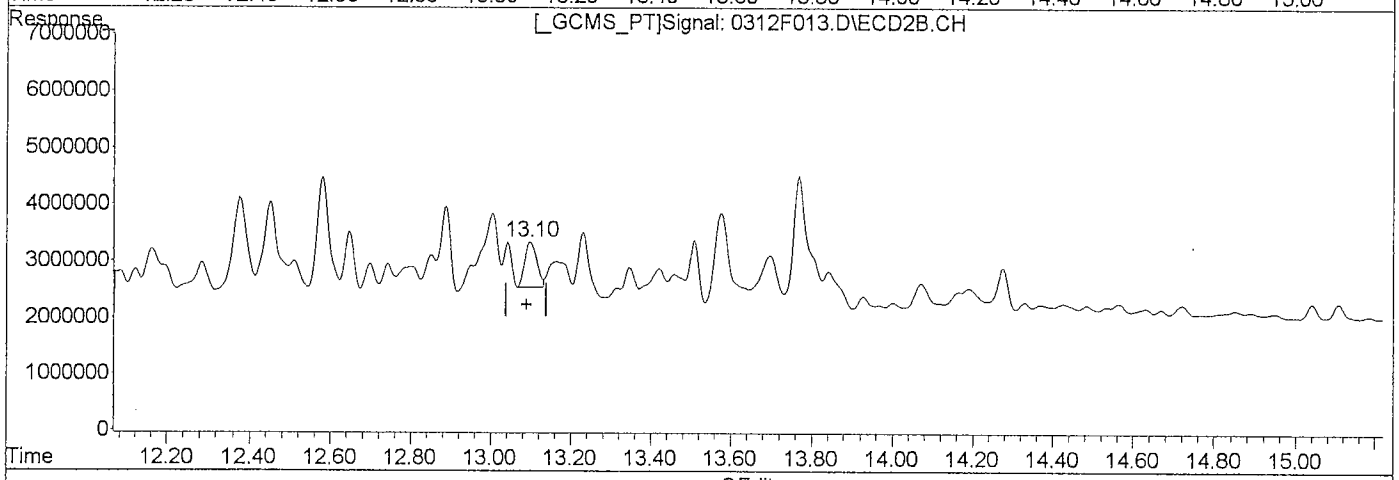
0312F013.D 031207-8081.M Mon Mar 12 17:35:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 506.006ug/L m

response 1036996

(29) Toxaphene {5} #2

13.10min 204.612ug/L m

response 1696721

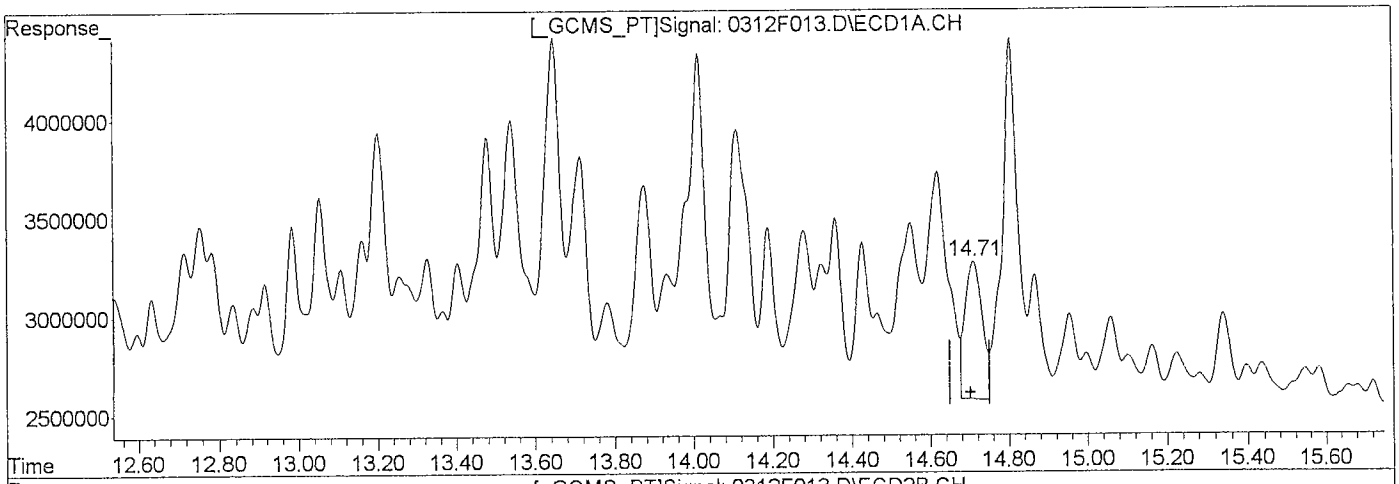
(+) = Expected Retention Time

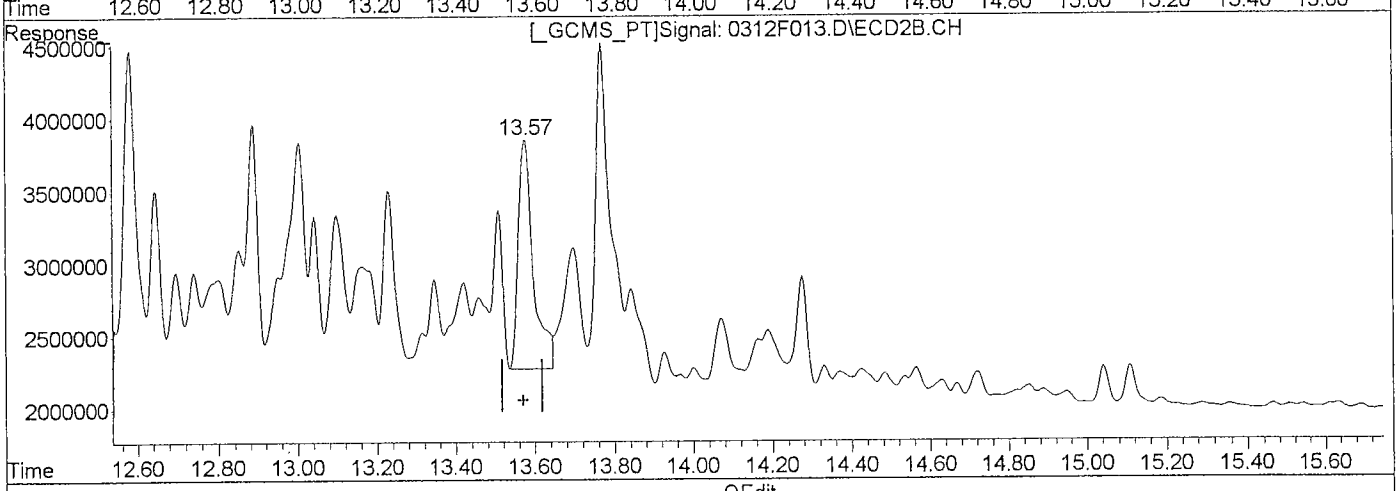
0312F013.D 031207-8081.M Mon Mar 12 17:35:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





(30) Toxaphene {6}

14.71min 290.334ug/L

response 2144701

(30) Toxaphene {6} #2

13.57min 422.688ug/L

response 4188382

Before

MAR 12 2007

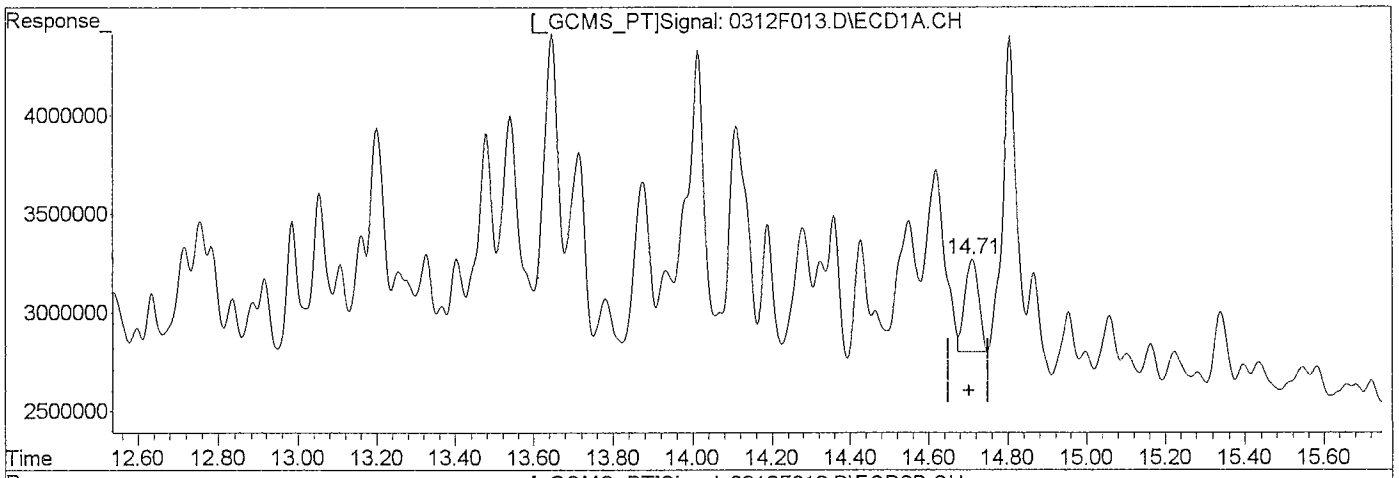
(+) = Expected Retention Time

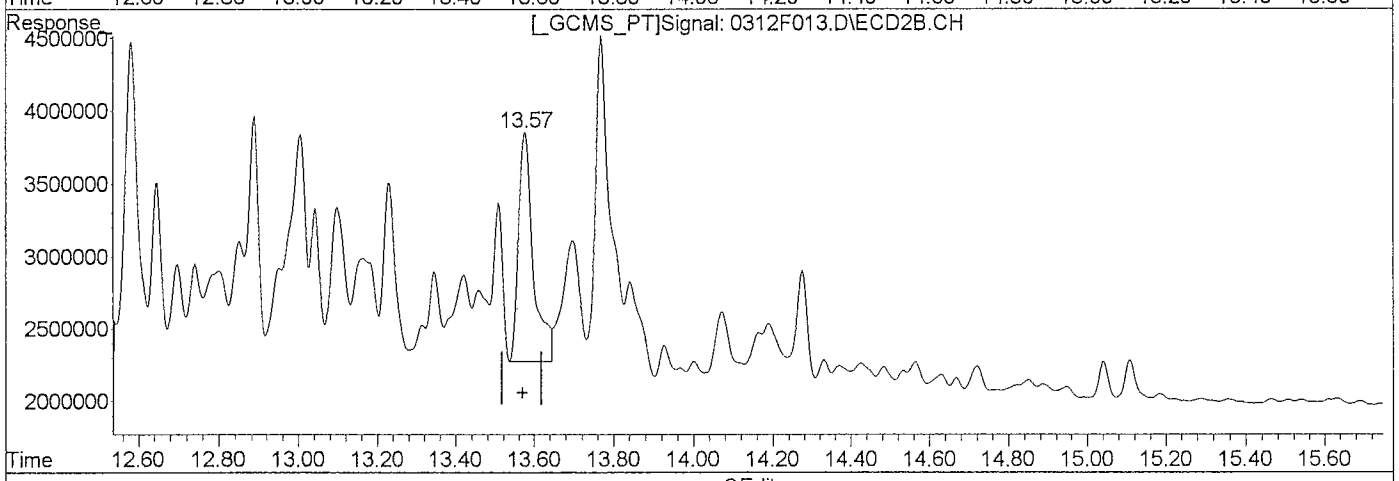
0312F013.D 031207-8081.M Mon Mar 12 17:35:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 155.718ug/L m

response 1150293

(30) Toxaphene {6} #2

13.57min 422.688ug/L

response 4188382

(+) = Expected Retention Time
0312F013.D 031207-8081.M Mon Mar 12 17:35:48 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:04 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2533524	7200906	959.328m	960.230m
26)	Toxaphene {2}	13.04	12.44	2034790	5211519	457.213m	941.115m#
27)	Toxaphene {3}	13.19	12.64	3086542	2845572	771.494m	867.126m
28)	Toxaphene {4}	13.86	13.00	3926567	3847131	692.367m	850.871m
29)	Toxaphene {5}	14.18	13.09	1935048	3098863	944.214m	373.699m#
30)	Toxaphene {6}	14.70	13.57	2162905	8014328	292.798m	808.799m#

AK 3/12 6x
3/13/07

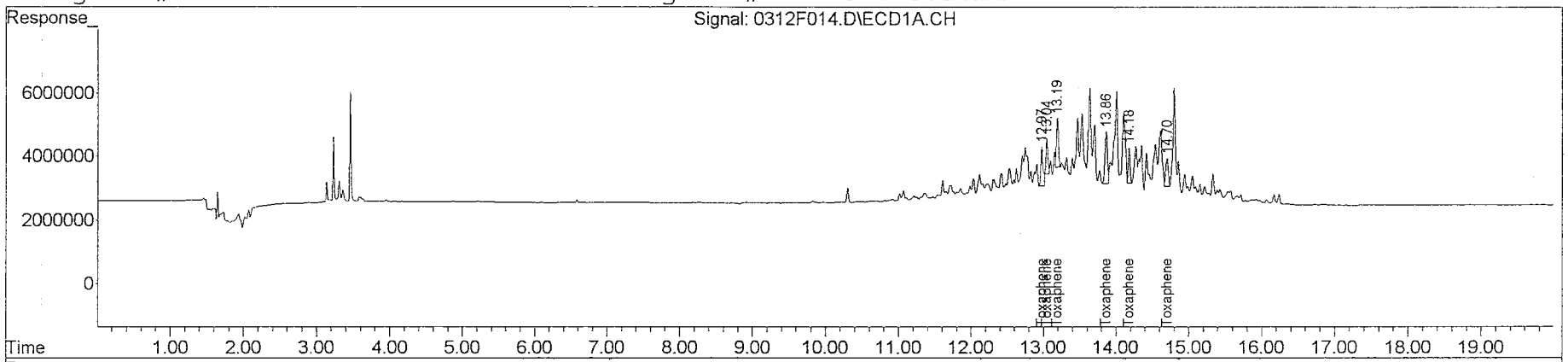
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

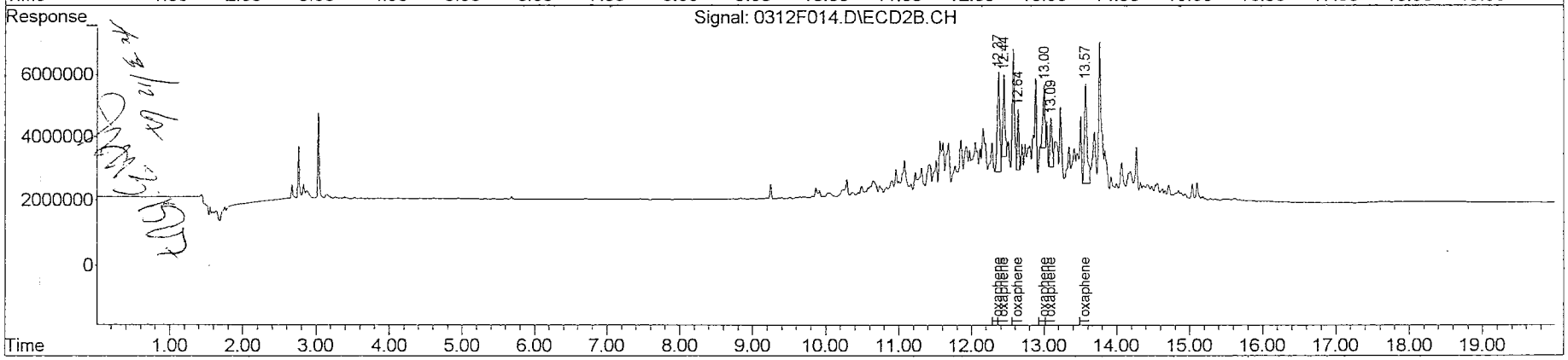
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:39 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

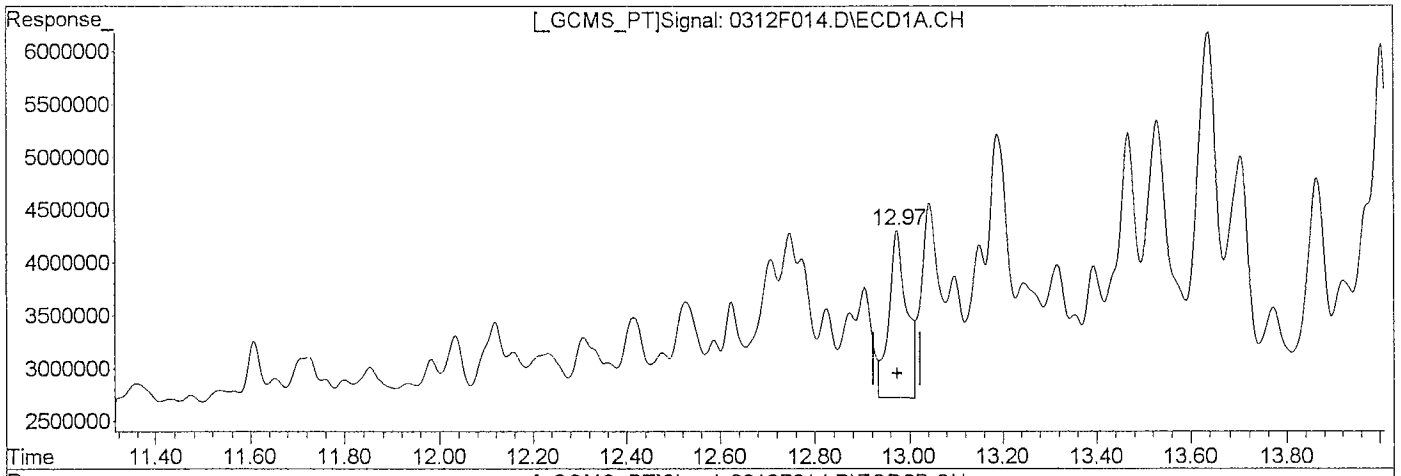


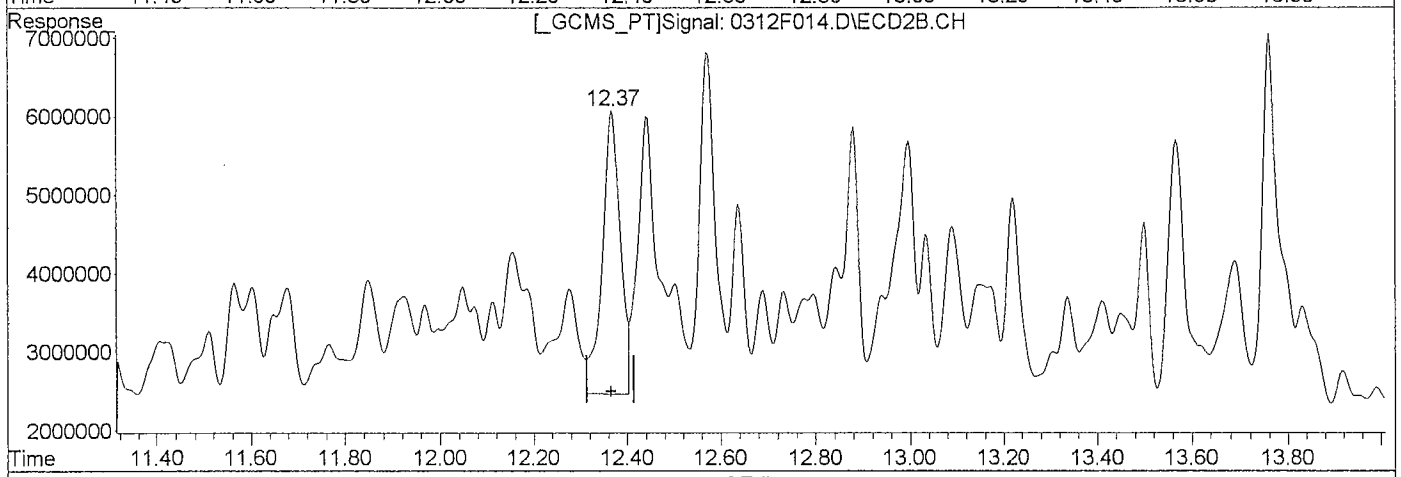


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 1573.281ug/L

response 4154936

(25) Toxaphene #2

12.37min 1276.665ug/L

response 9573895

Before

MAR 1 2 2007

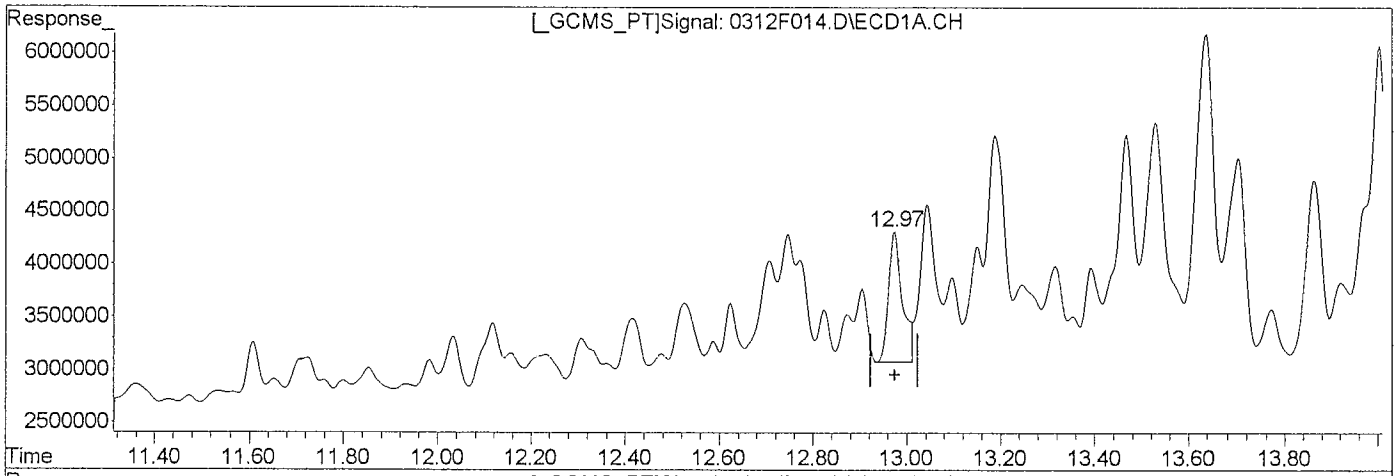
(+) = Expected Retention Time

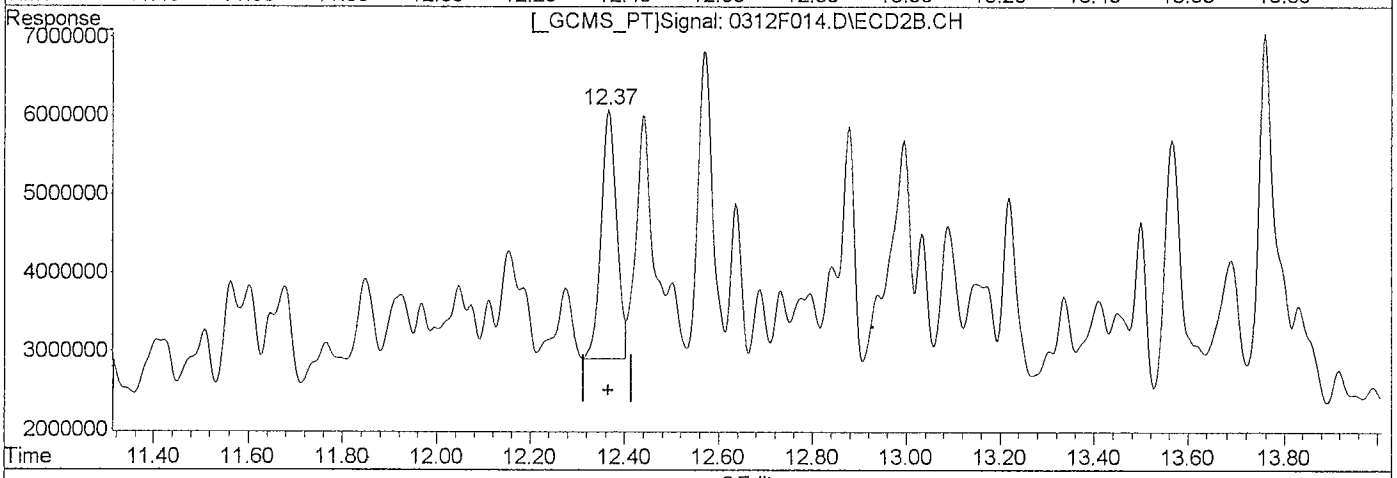
0312F014.D 031207-8081.M Mon Mar 12 17:36:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 959.328ug/L m

response 2533524

(25) Toxaphene #2

12.37min 960.230ug/L m

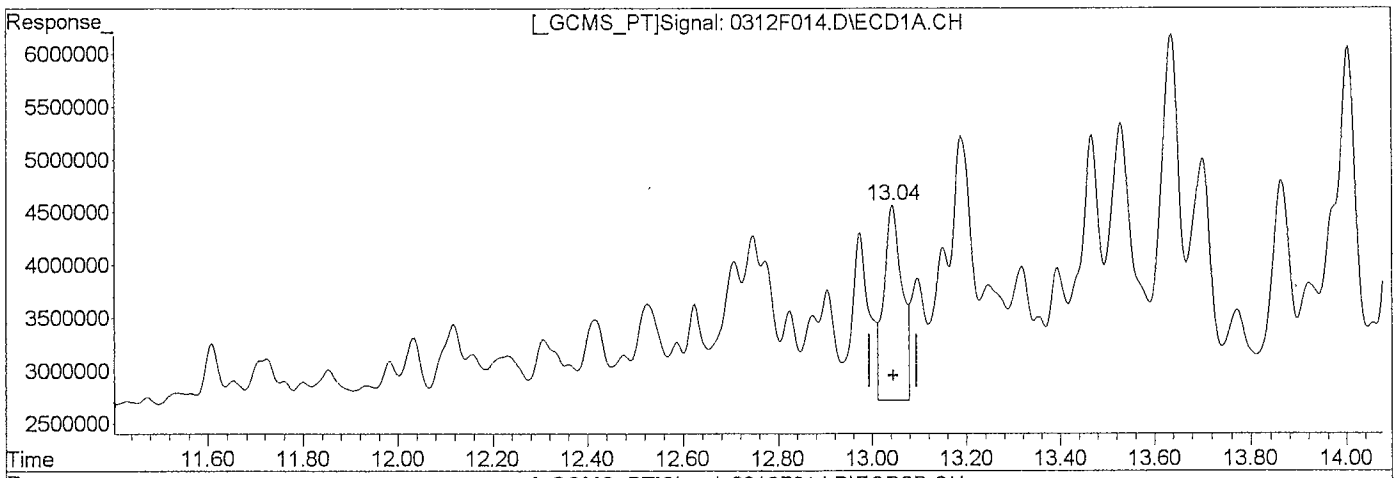
response 7200906

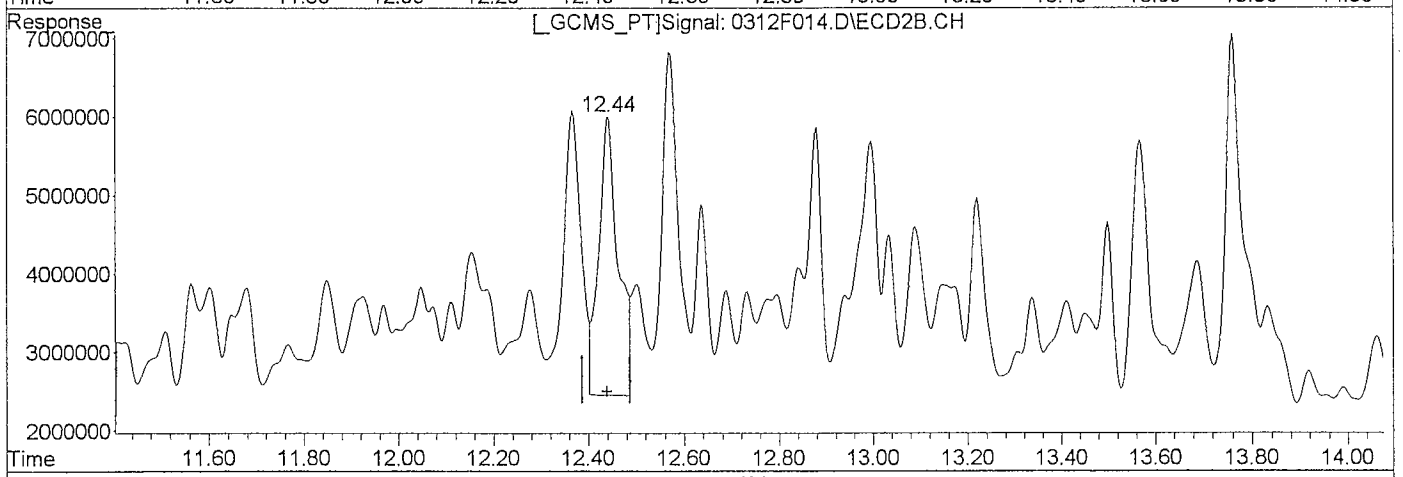
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:36:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 1111.922ug/L

response 4948516

(26) Toxaphene {2} #2

12.44min 1797.722ug/L

response 9955066

Before

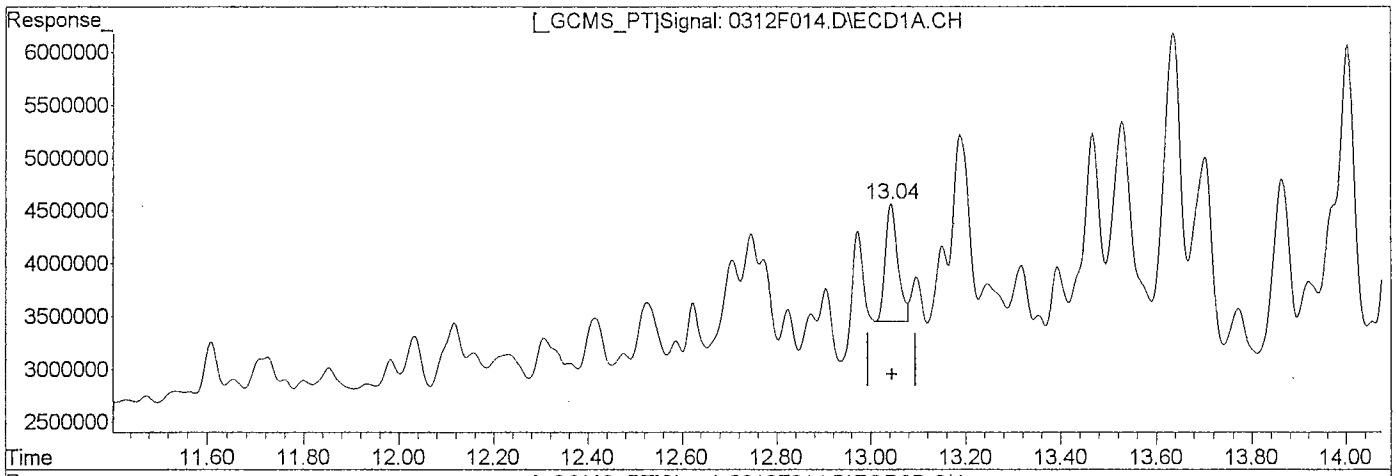
MAR 1 2 2007

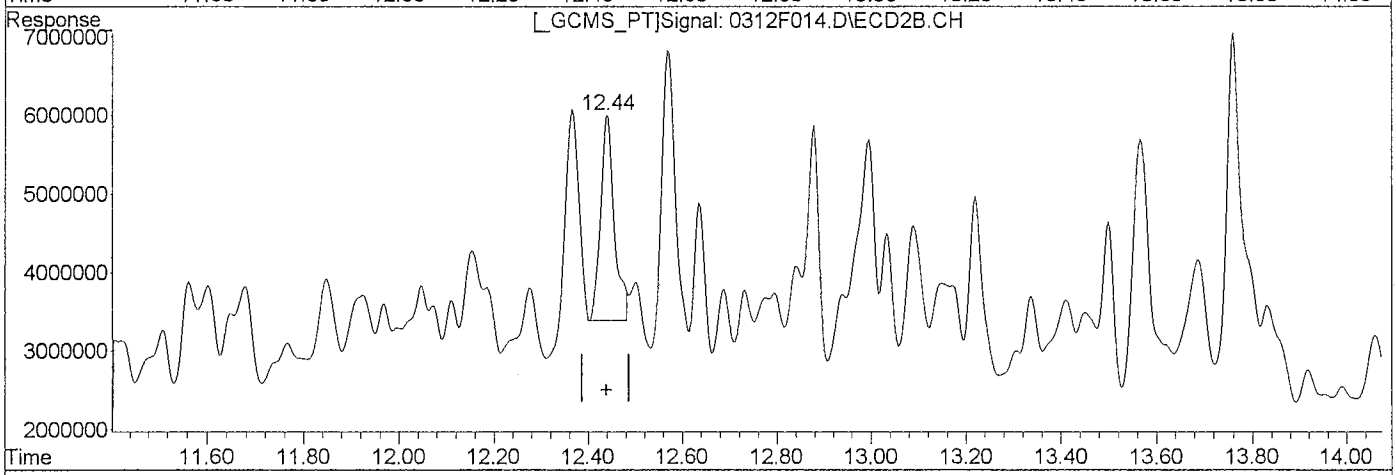
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:36:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 457.213ug/L m

response 2034790

(26) Toxaphene {2} #2

12.44min 941.115ug/L m

response 5211519

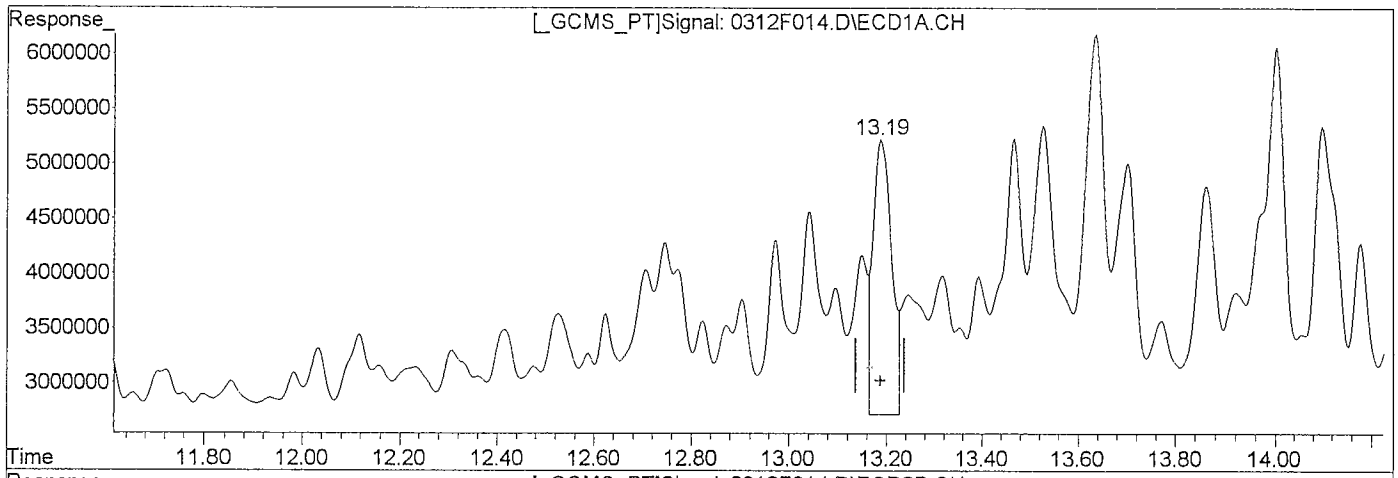
(+) = Expected Retention Time

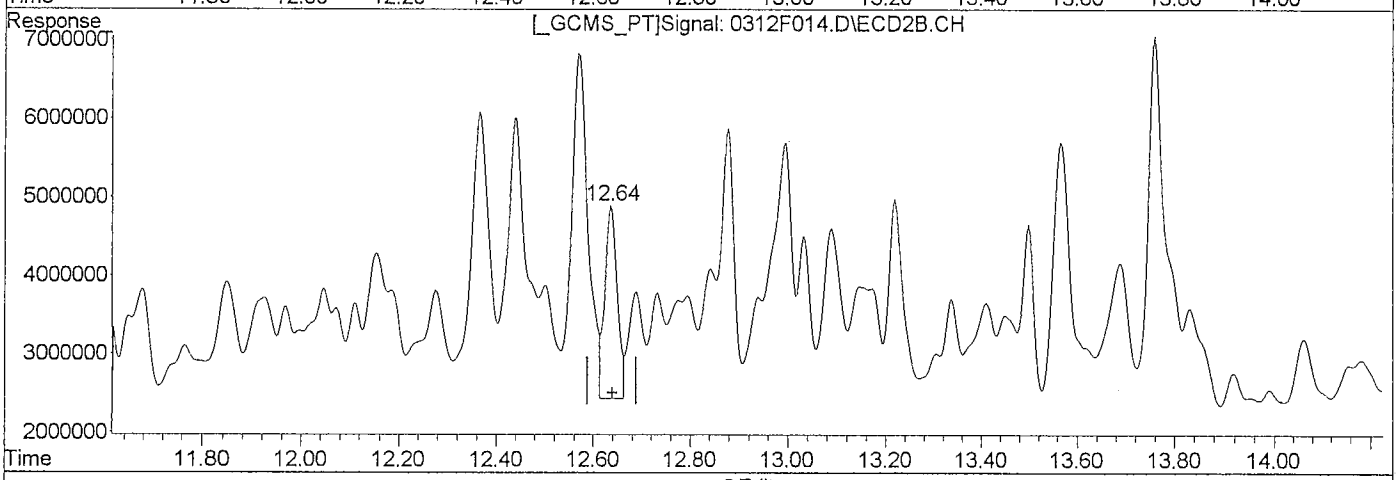
0312F014.D 031207-8081.M Mon Mar 12 17:36:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 1678.822ug/L

response 6716521

(27) Toxaphene {3} #2

12.64min 1353.698ug/L

response 4442313

Scan

MAR 1 2 2007

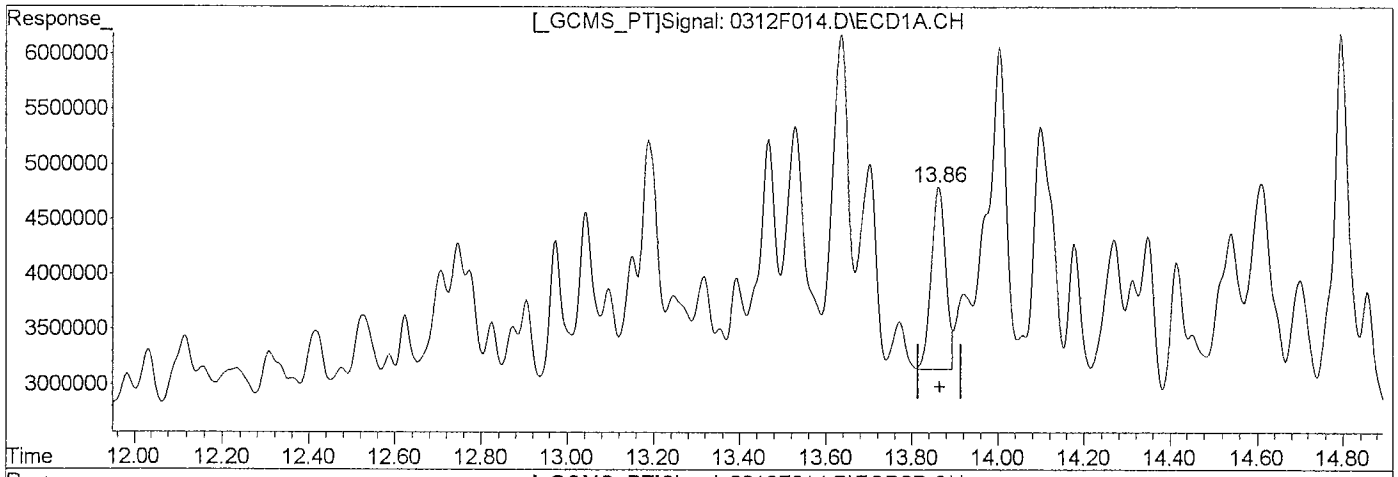
(+) = Expected Retention Time

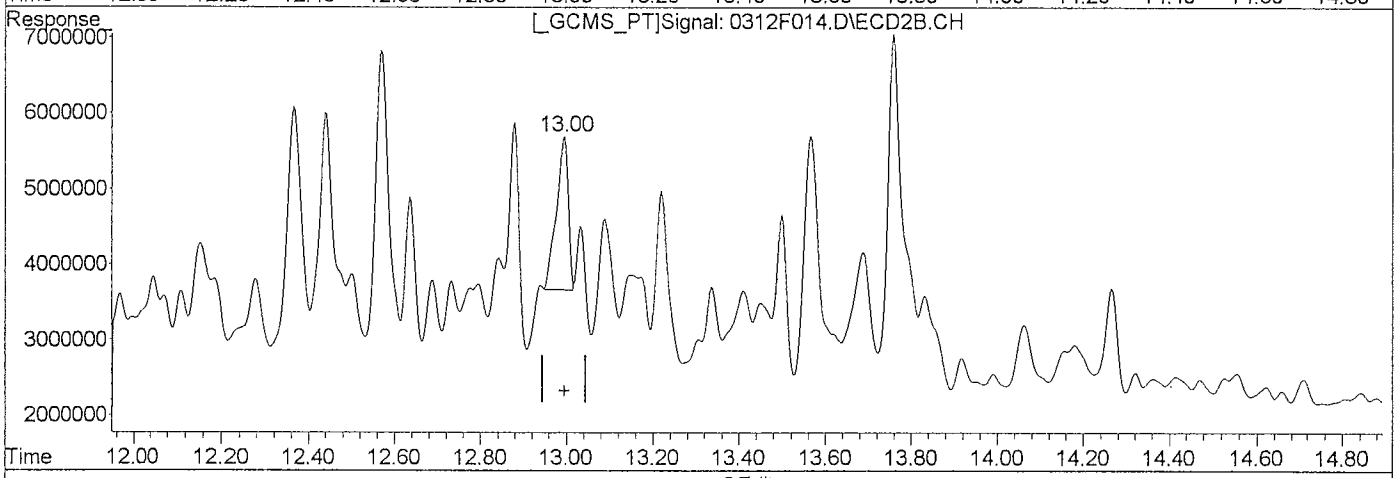
0312F014.D 031207-8081.M Mon Mar 12 17:36:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 692.367ug/L m

response 3926567

(28) Toxaphene {4} #2

13.00min 850.871ug/L m

response 3847131

Before

MAR 1 7 2007

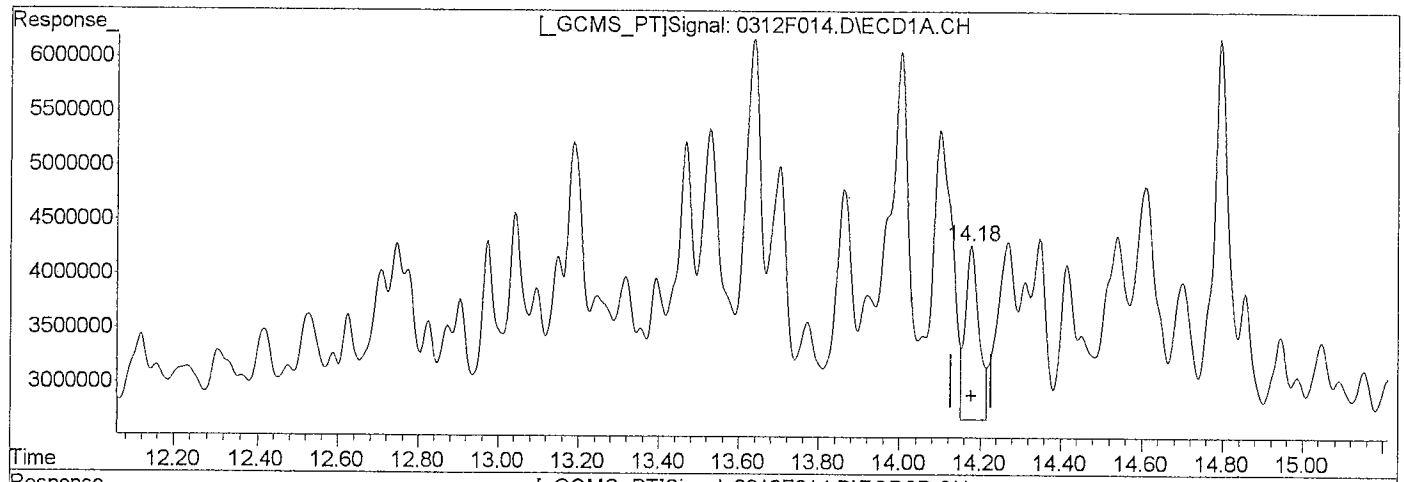
(+) = Expected Retention Time

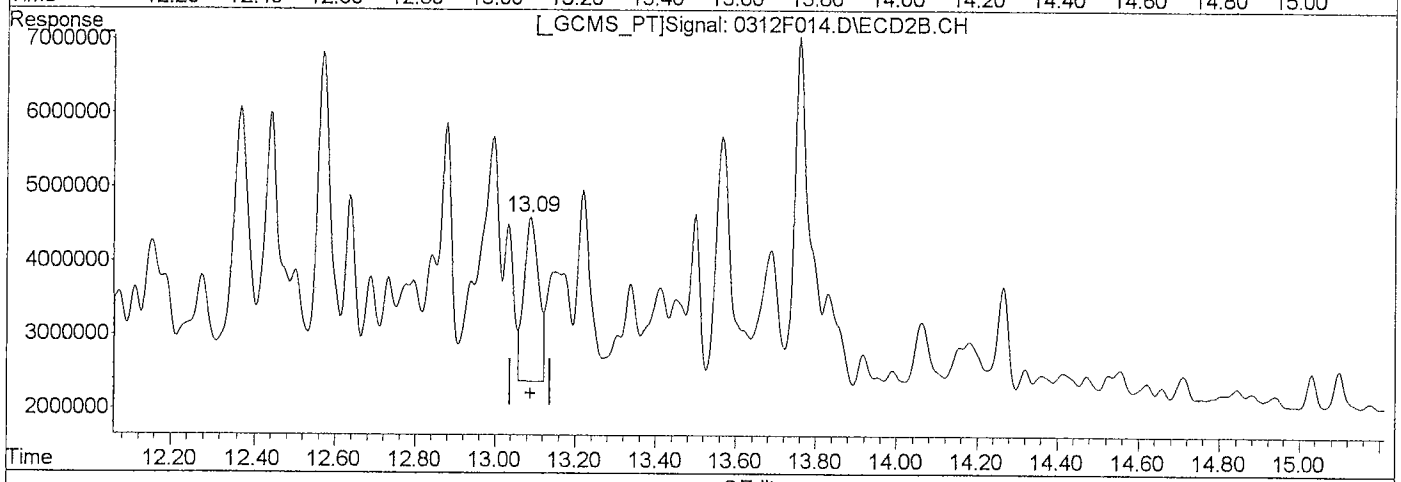
0312F014.D 031207-8081.M Mon Mar 12 17:39:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 1832.067ug/L

response 3754592

(29) Toxaphene {5} #2

13.09min 691.388ug/L

response 5733268

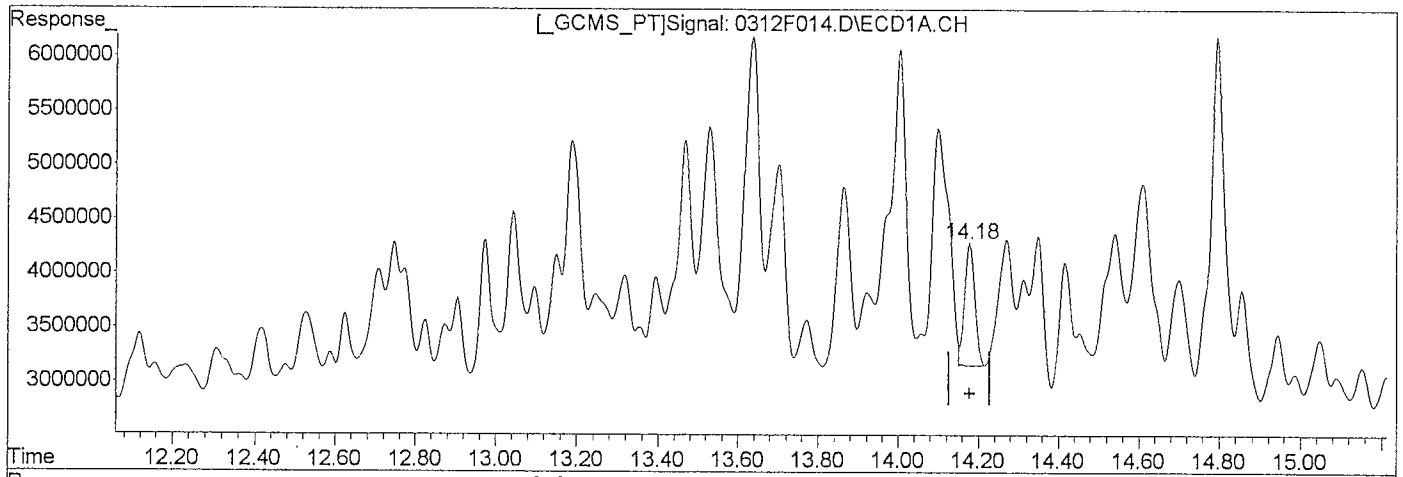
Before
MAR 12 2007

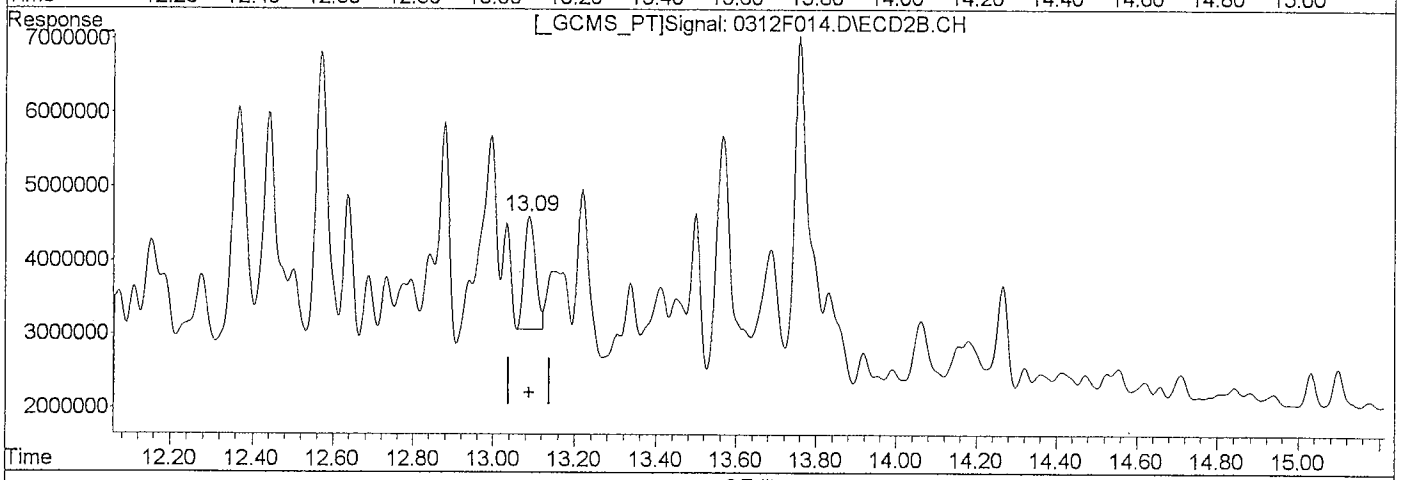
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:39:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 944.214ug/L m

response 1935048

(29) Toxaphene {5} #2

13.09min 373.699ug/L m

response 3098863

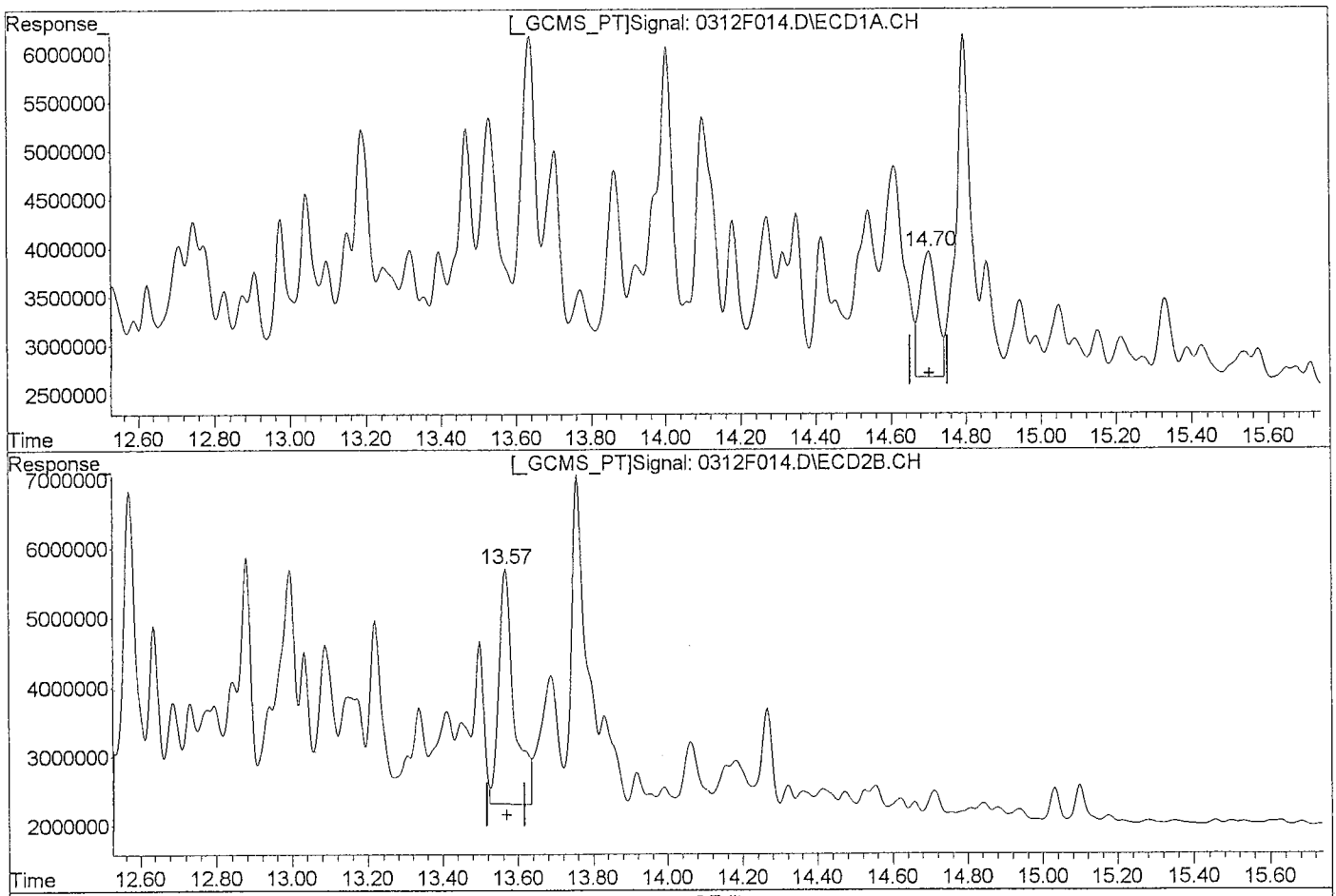
(+) = Expected Retention Time

0312F014.D 031207-8081.M Mon Mar 12 17:39:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.70min 547.705ug/L

response 4045909

(30) Toxaphene {6} #2

13.57min 976.719ug/L

response 9678236

Before

MAR 1 1 2007

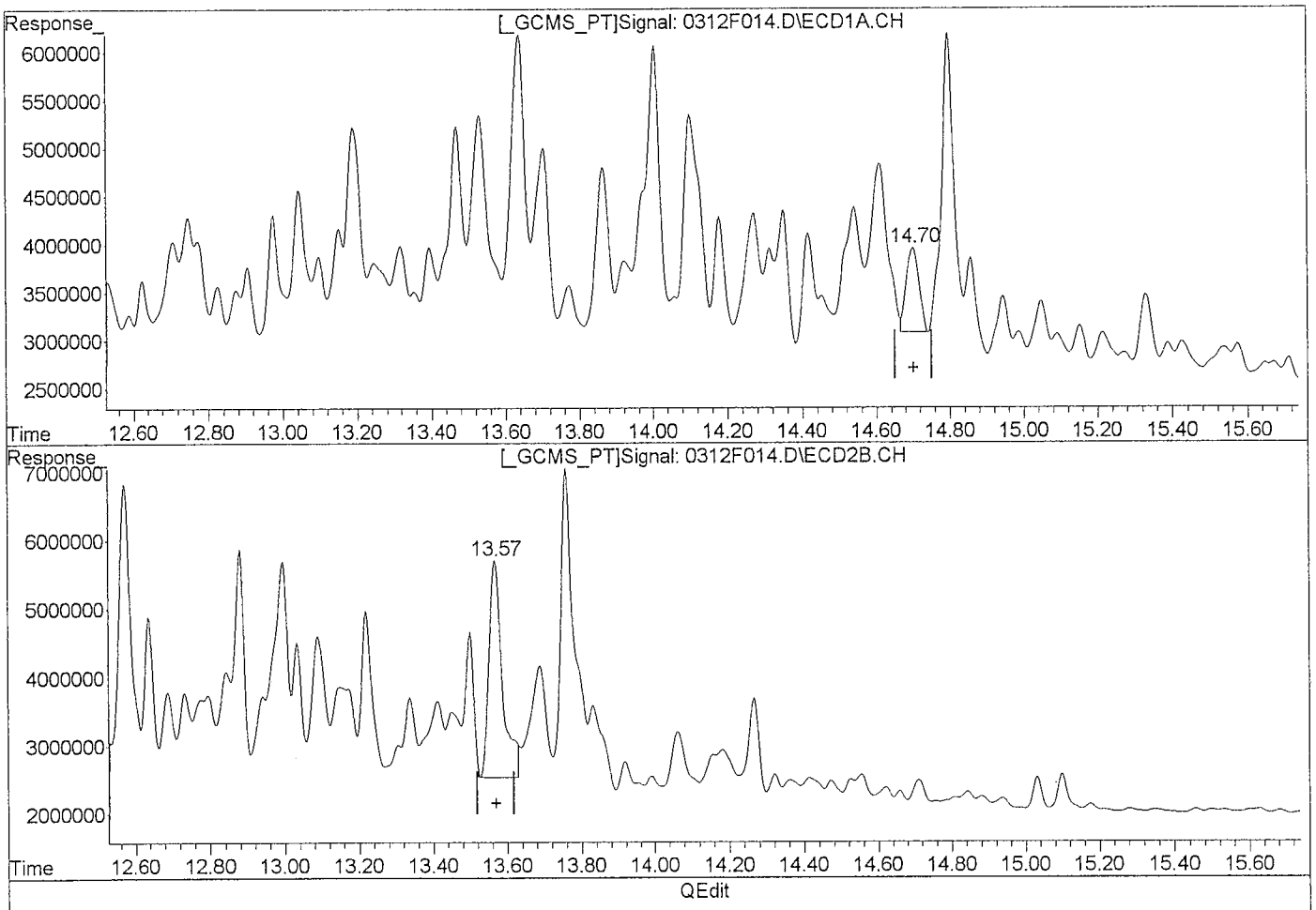
(+) = Expected Retention Time

0312F014.D 031207-8081.M Mon Mar 12 17:39:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(30) Toxaphene {6}

14.70min 292.798ug/L m

response 2162905

(30) Toxaphene {6} #2

13.57min 808.799ug/L m

response 8014328

(+) = Expected Retention Time

0312F014.D 031207-8081.M Mon Mar 12 17:39:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	4937653	14447184	1869.660m	1926.511m
26)	Toxaphene {2}	13.05	12.45	4028150	10898041	905.117m	1968.008m#
27)	Toxaphene {3}	13.20	12.64	6413209	5445539	1603.008m	1659.409m
28)	Toxaphene {4}	13.87	13.00	7778089	7542971	1371.501m	1668.282m
29)	Toxaphene {5}	14.19	13.09	3865631	6290492	1886.249m	758.585m#
30)	Toxaphene {6}	14.71	13.57	4374094	16142423	592.132m	1629.080m#

AK 3/12/07

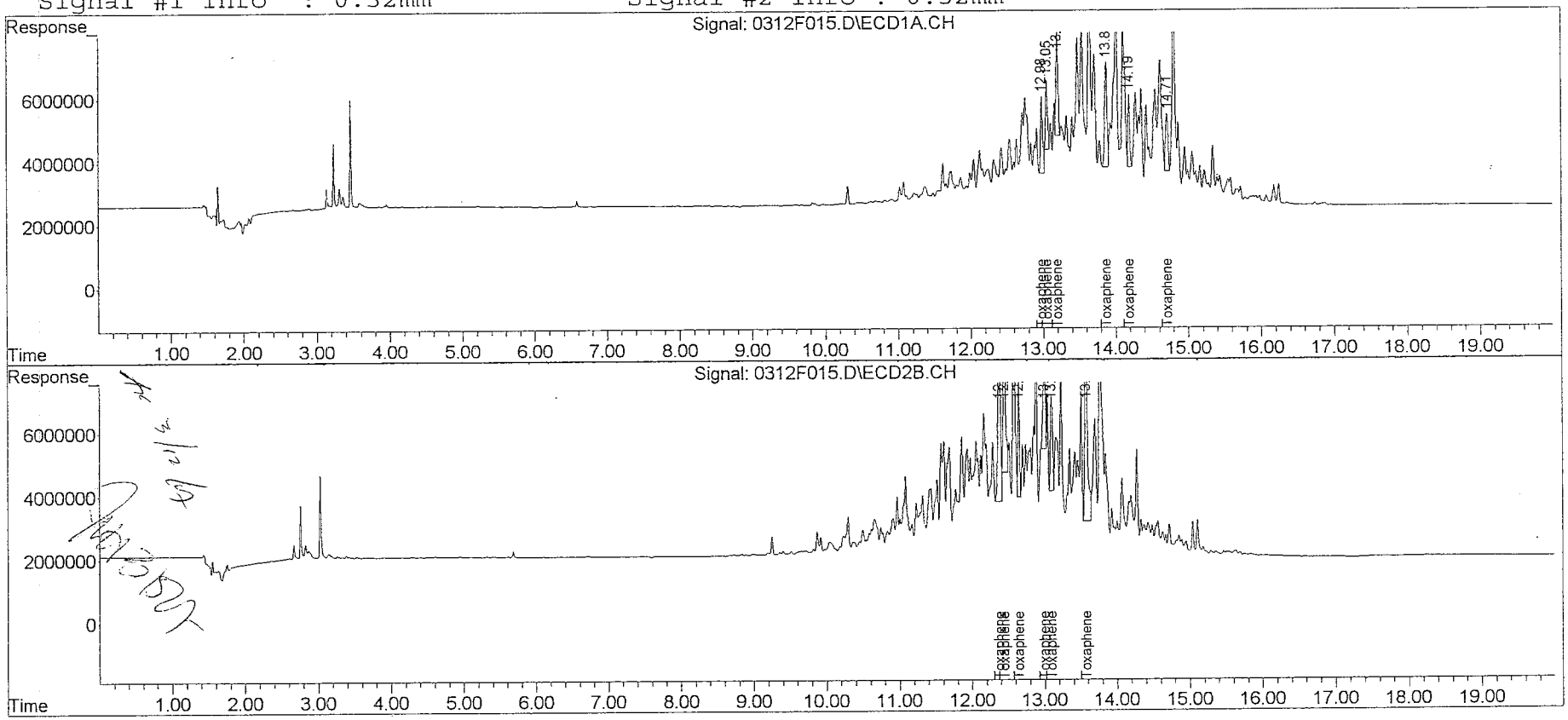
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:42 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

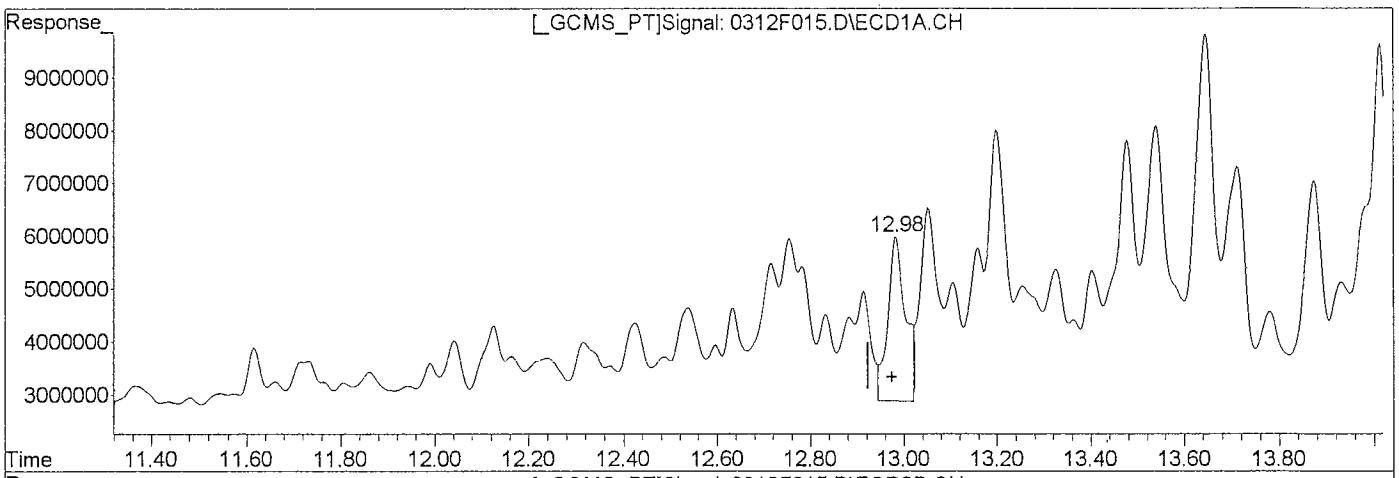
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

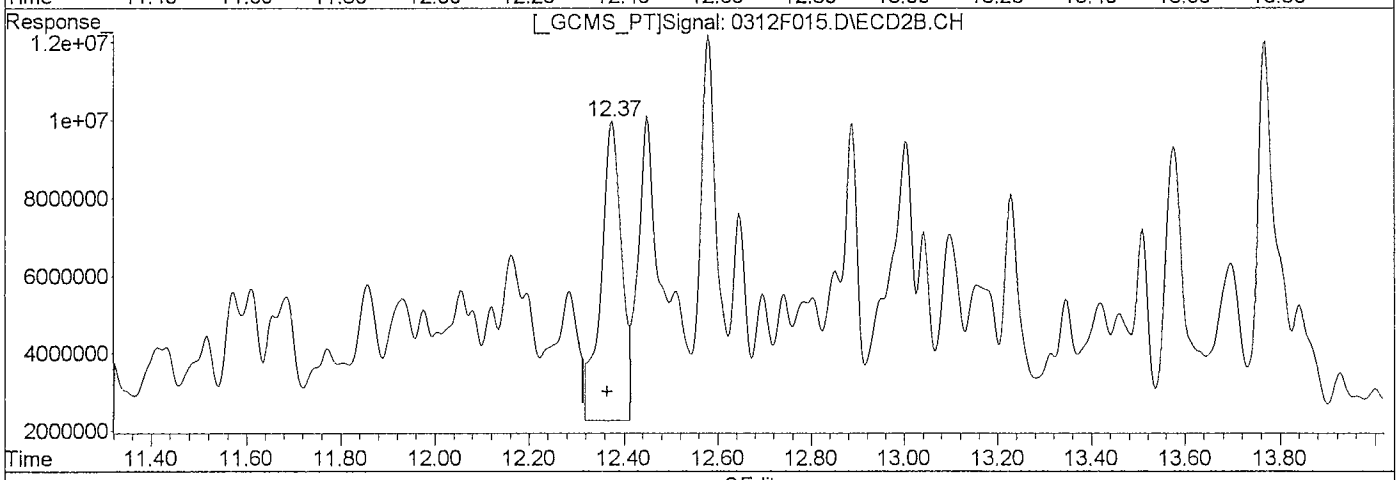


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 3094.633ug/L

response 8172728

(25) Toxaphene #2

12.37min 3053.634ug/L

response 22899647

Before

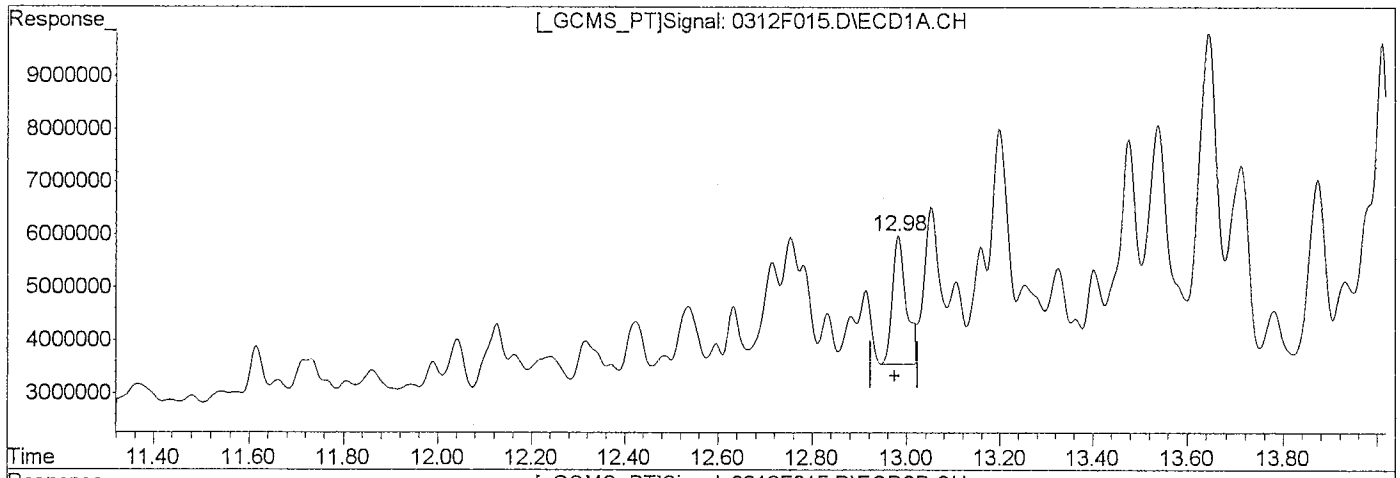
MAR 1 2 2007

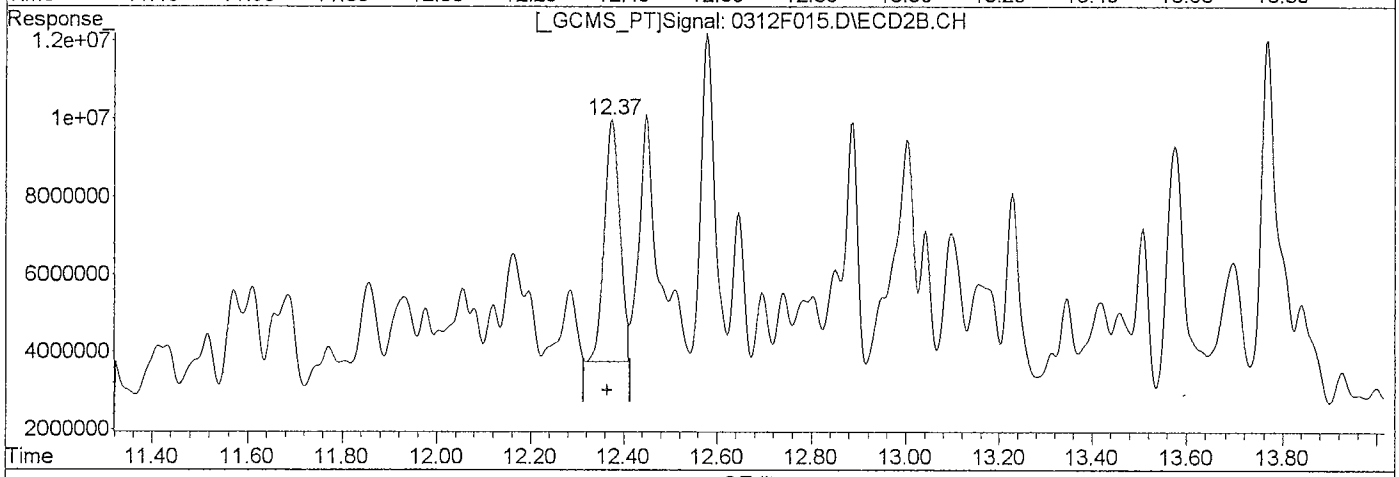
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:40:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 1869.660ug/L m

response 4937653

(25) Toxaphene #2

12.37min 1926.511ug/L m

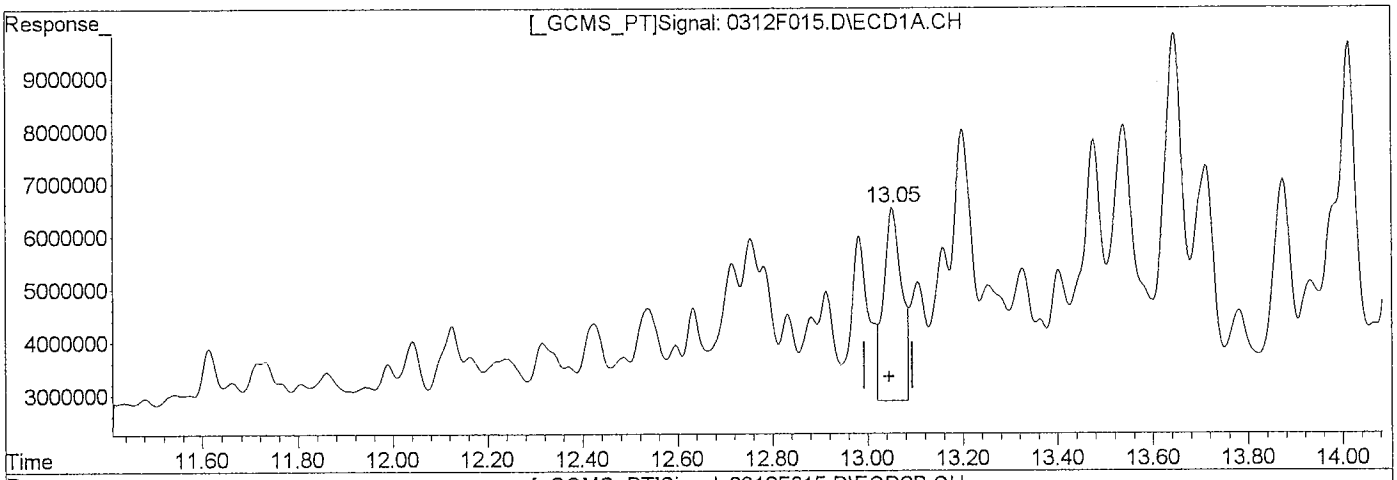
response 14447184

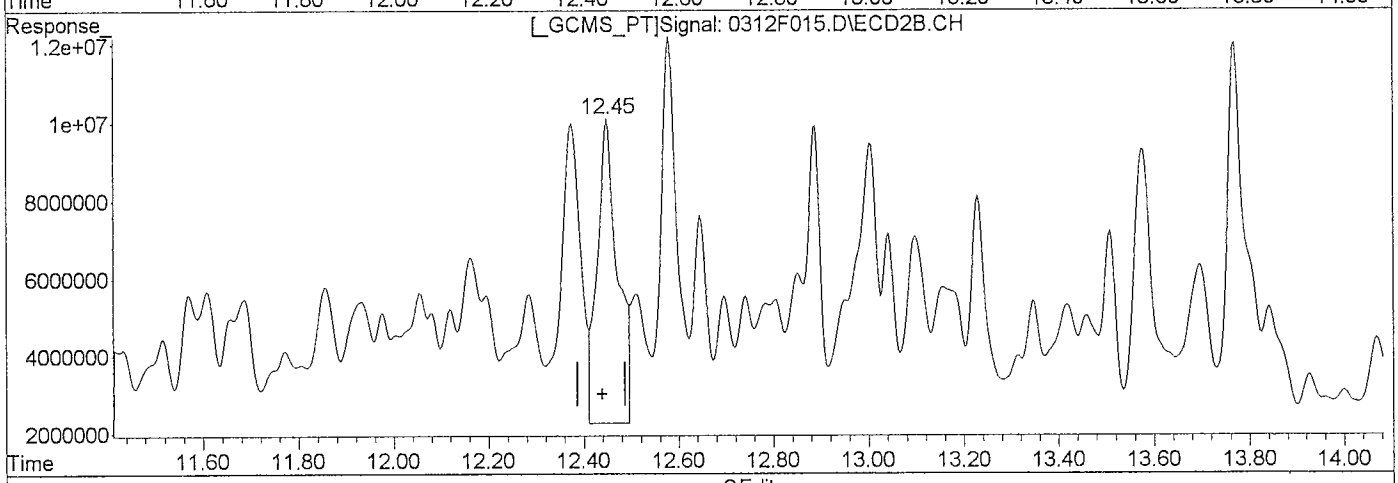
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:40:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 2123.169ug/L

response 9448989

(26) Toxaphene {2} #2

12.45min 4136.288ug/L

response 22905111

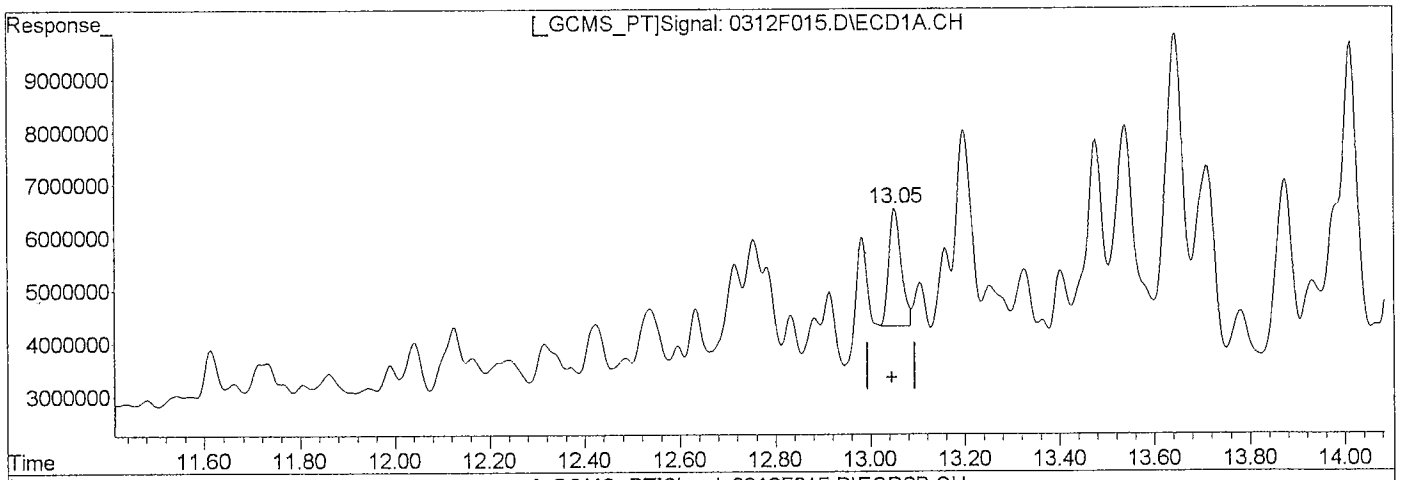
Before
MAR 1 7 2007

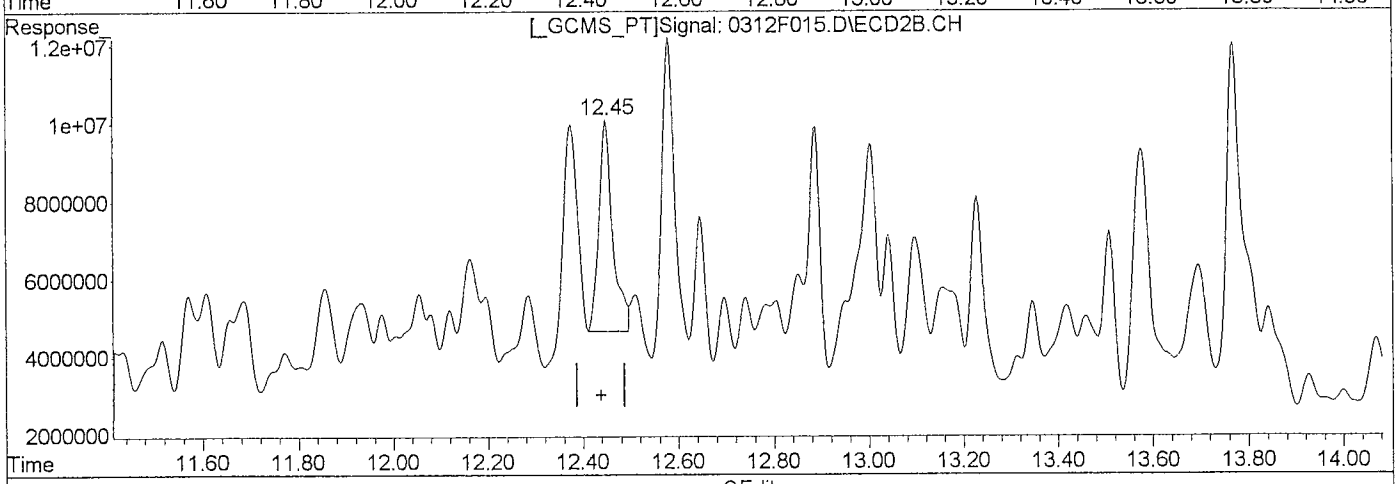
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:41:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 905.117ug/L m

response 4028150

(26) Toxaphene {2} #2

12.45min 1968.008ug/L m

response 10898041

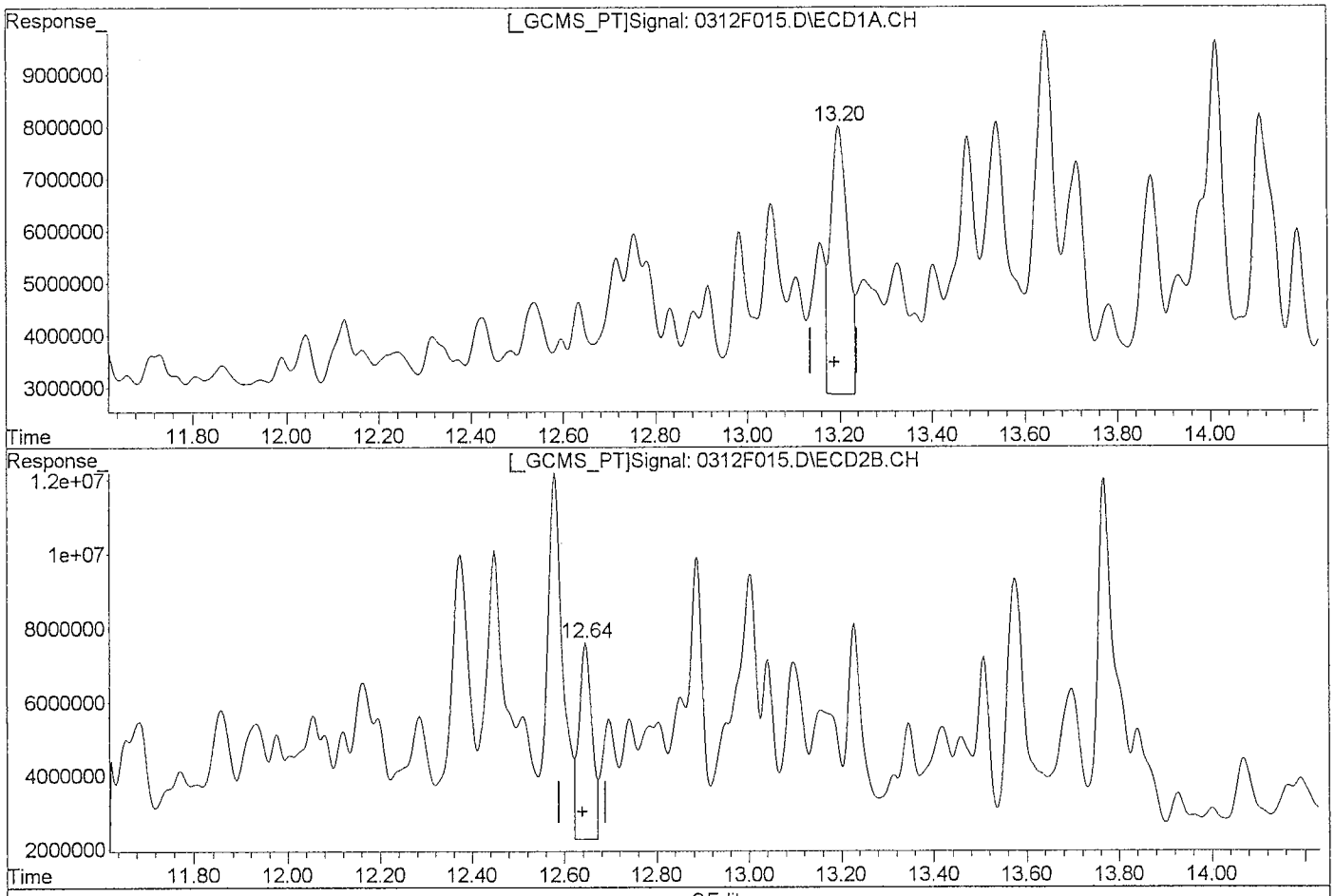
(+) = Expected Retention Time

0312F015.D 031207-8081.M Mon Mar 12 17:41:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 3374.154ug/L

response 13499090

(27) Toxaphene {3} #2

12.64min 3166.331ug/L

response 10390674

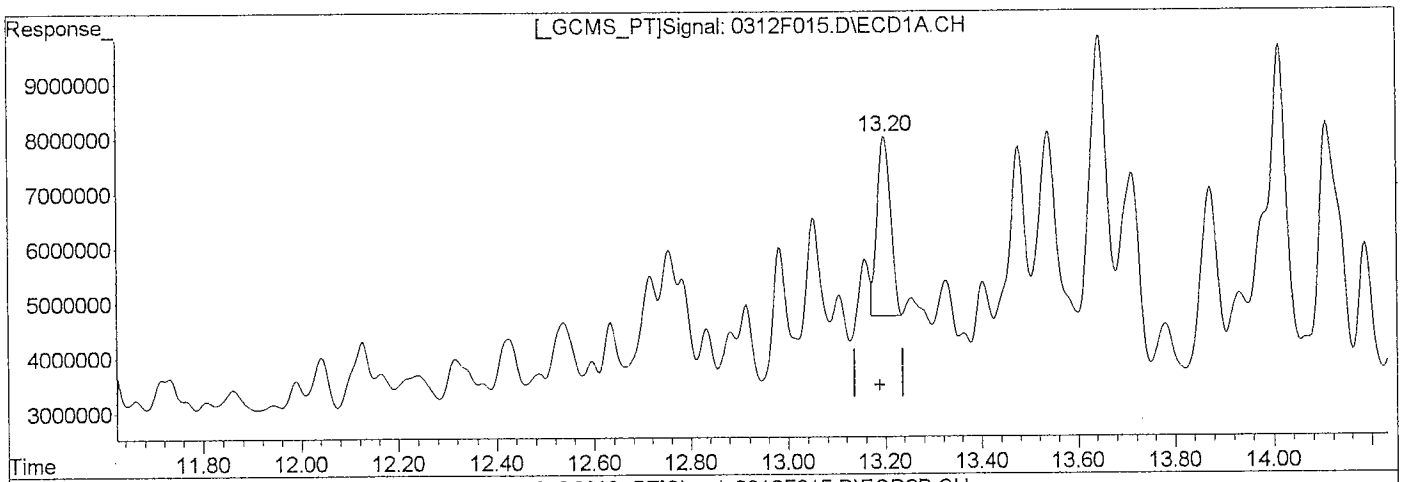
MAR 1 2 2007

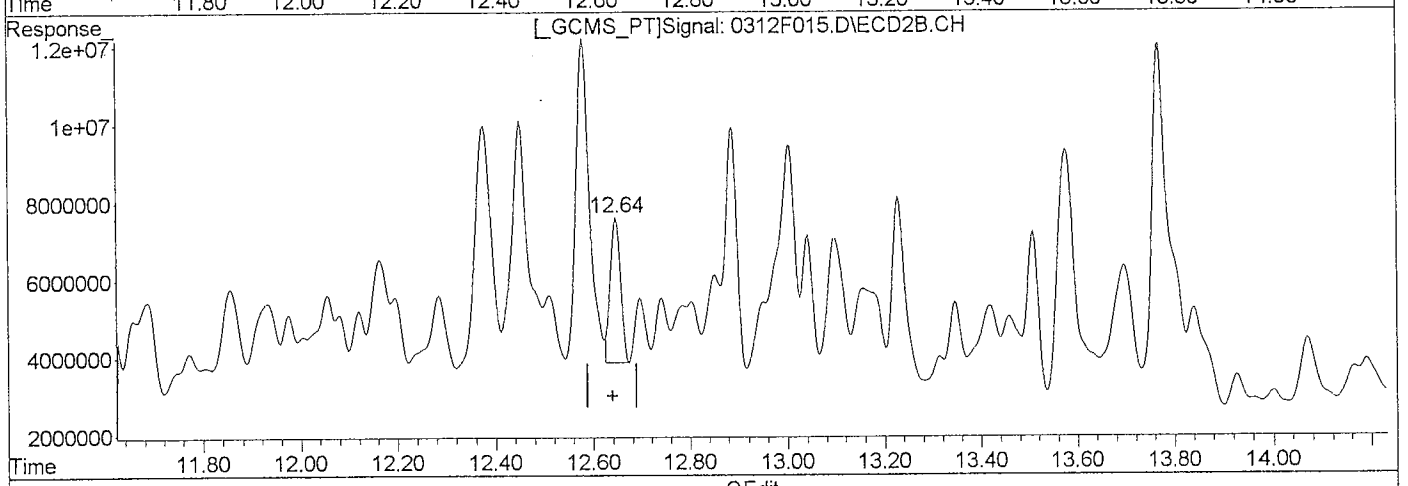
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:41:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 1603.008ug/L m

response 6413209

(27) Toxaphene {3} #2

12.64min 1659.409ug/L m

response 5445539

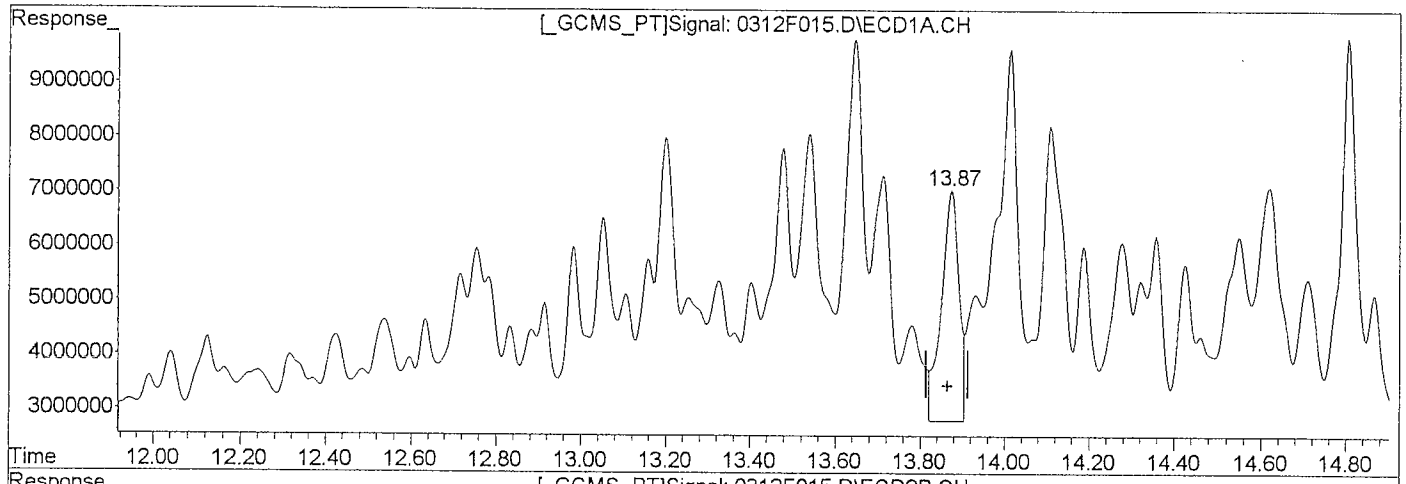
(+) = Expected Retention Time

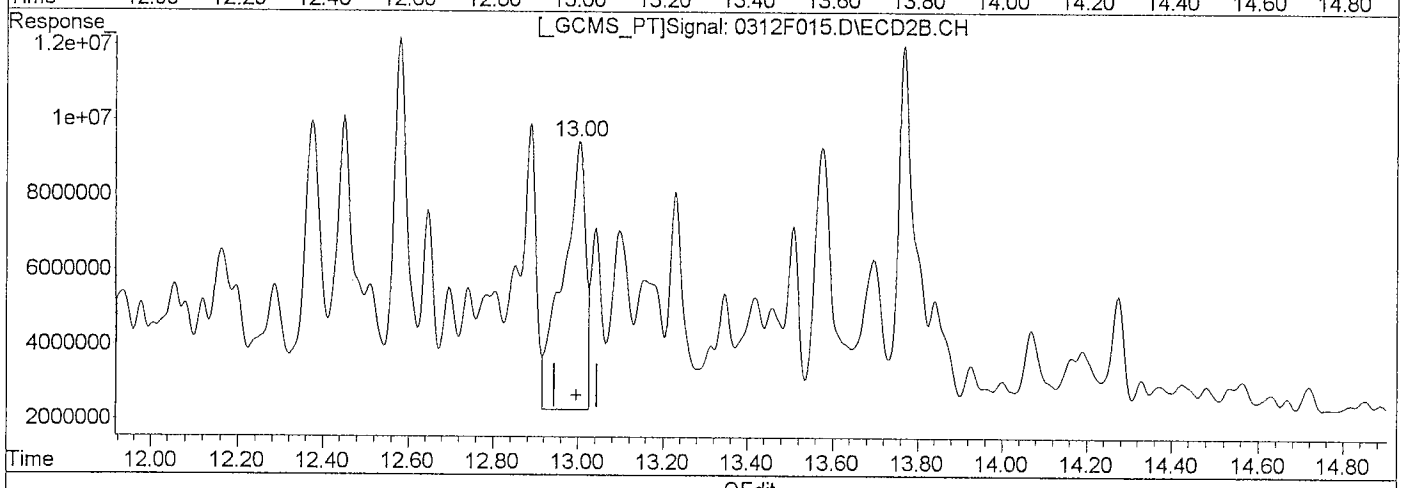
0312F015.D 031207-8081.M Mon Mar 12 17:41:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 2178.968ug/L

response 12357419

(28) Toxaphene {4} #2

13.00min 5863.283ug/L

response 26510254

Before

MAR 1 7 2007

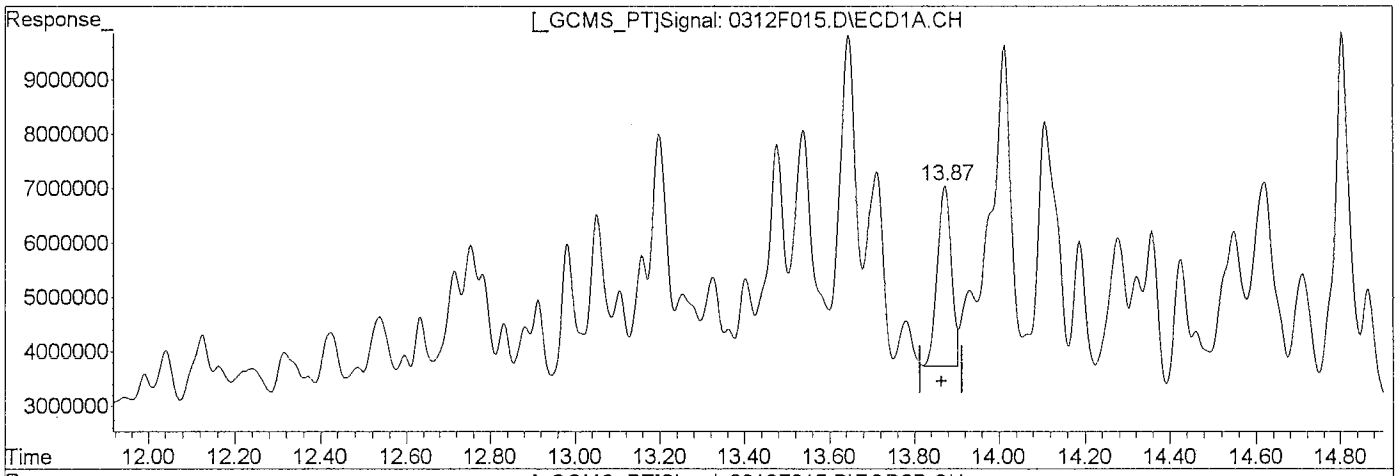
(+) = Expected Retention Time

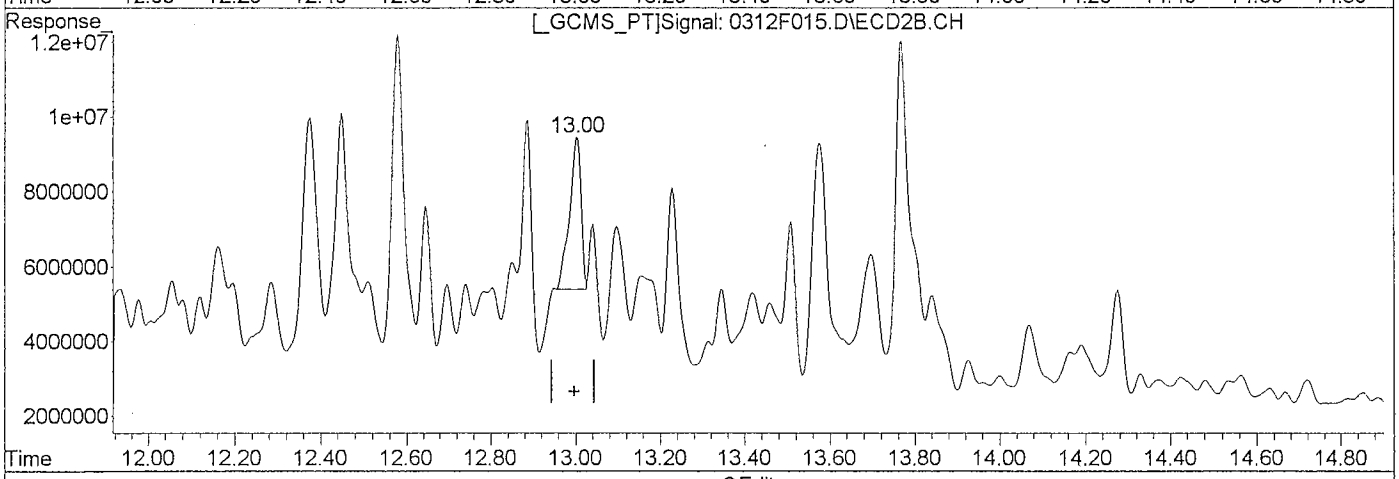
0312F015.D 031207-8081.M Mon Mar 12 17:41:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 1371.501ug/L m

response 7778089

(28) Toxaphene {4} #2

13.00min 1668.282ug/L m

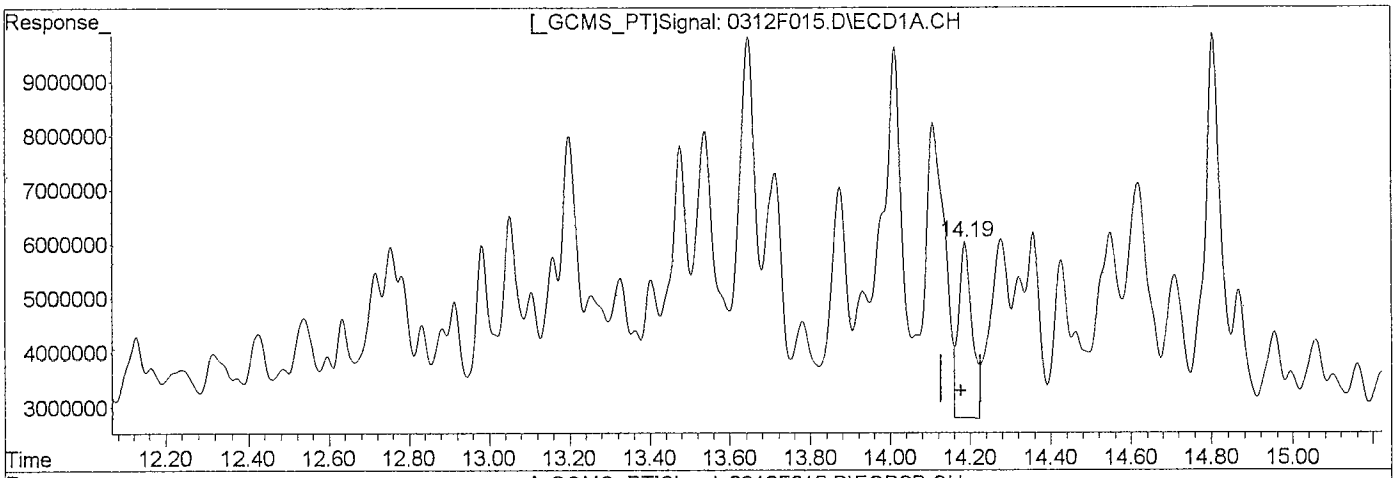
response 7542971

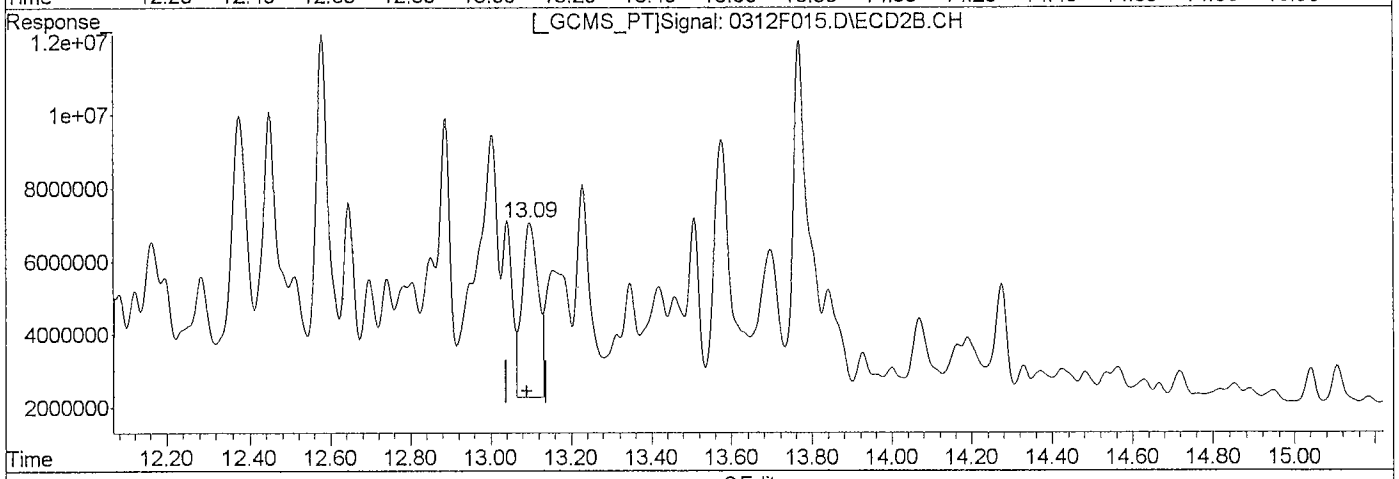
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 3693.143ug/L

response 7568636

(29) Toxaphene {5} #2

13.09min 1629.456ug/L

response 13512097

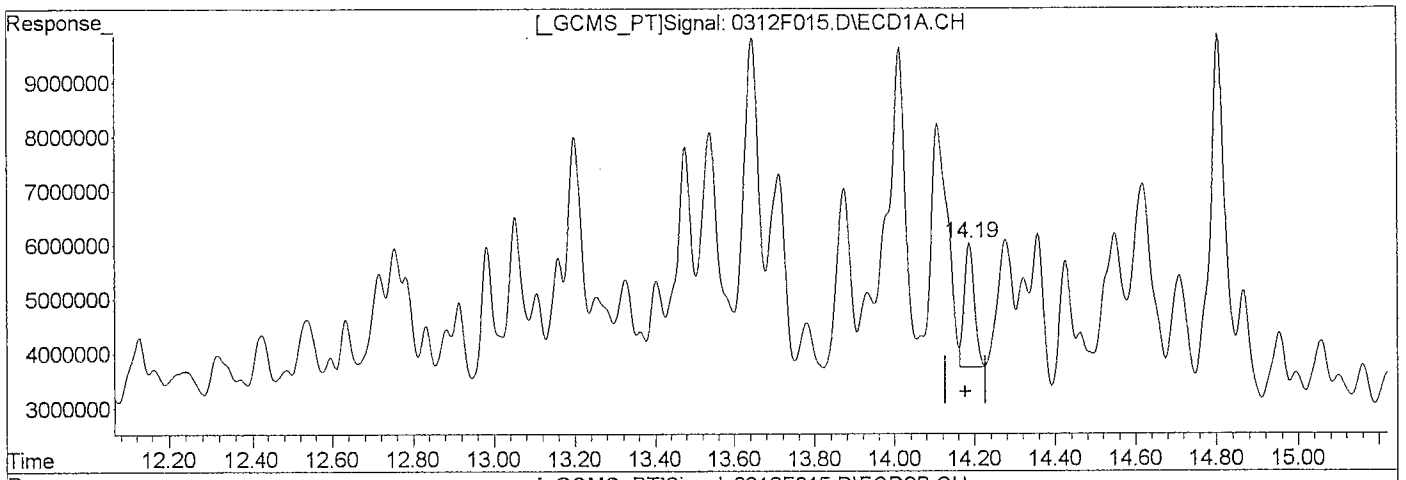
Before
MAR 1 7 2007

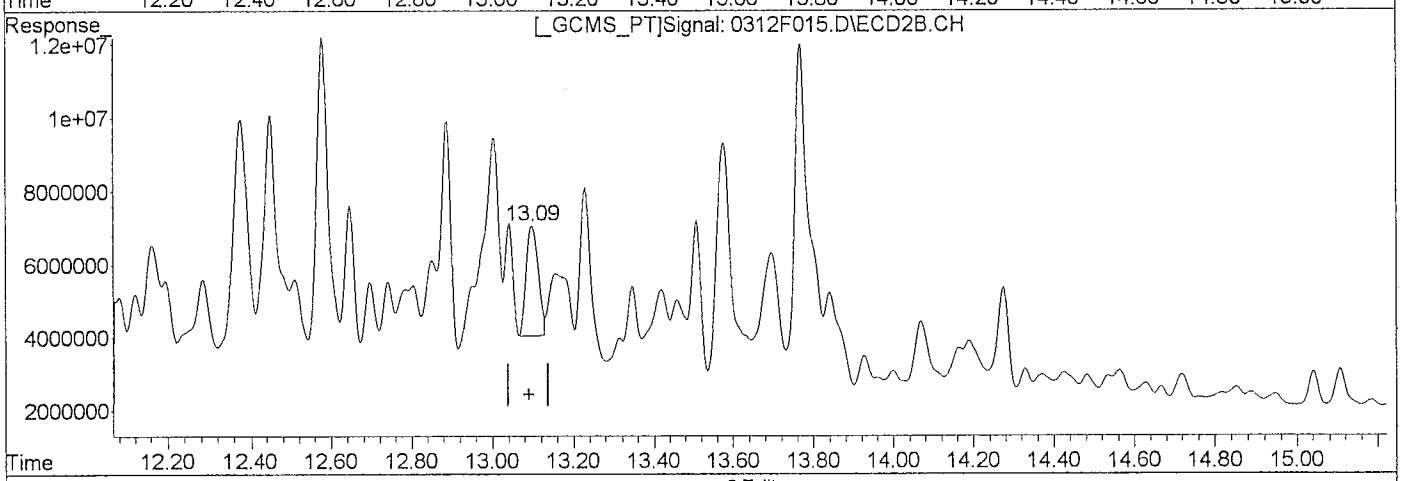
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 1886.249ug/L m

response 3865631

(29) Toxaphene {5} #2

13.09min 758.585ug/L m

response 6290492

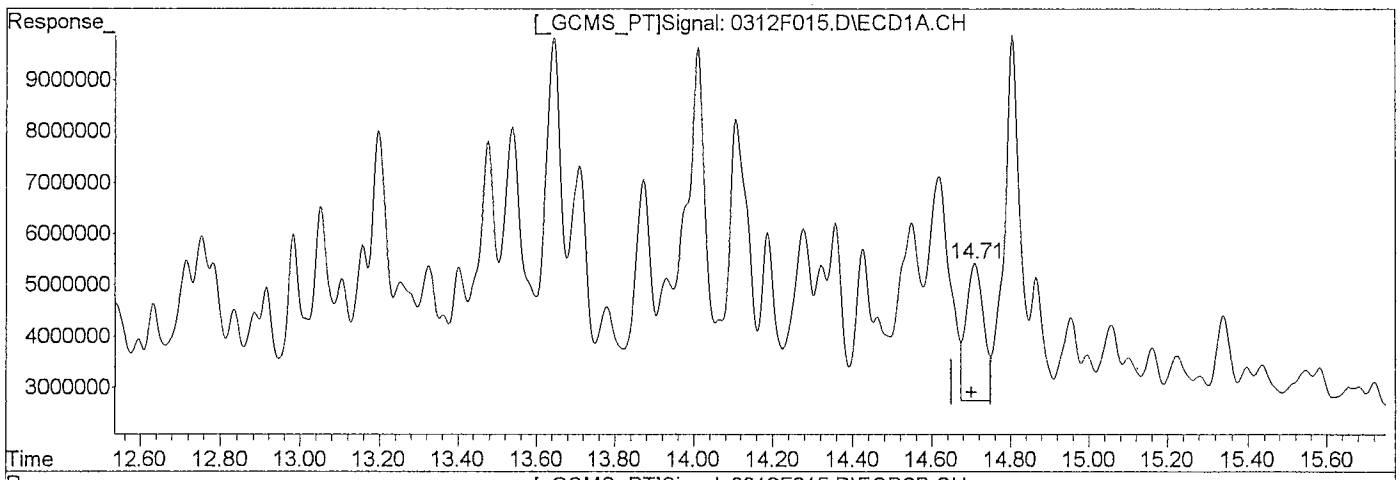
(+) = Expected Retention Time

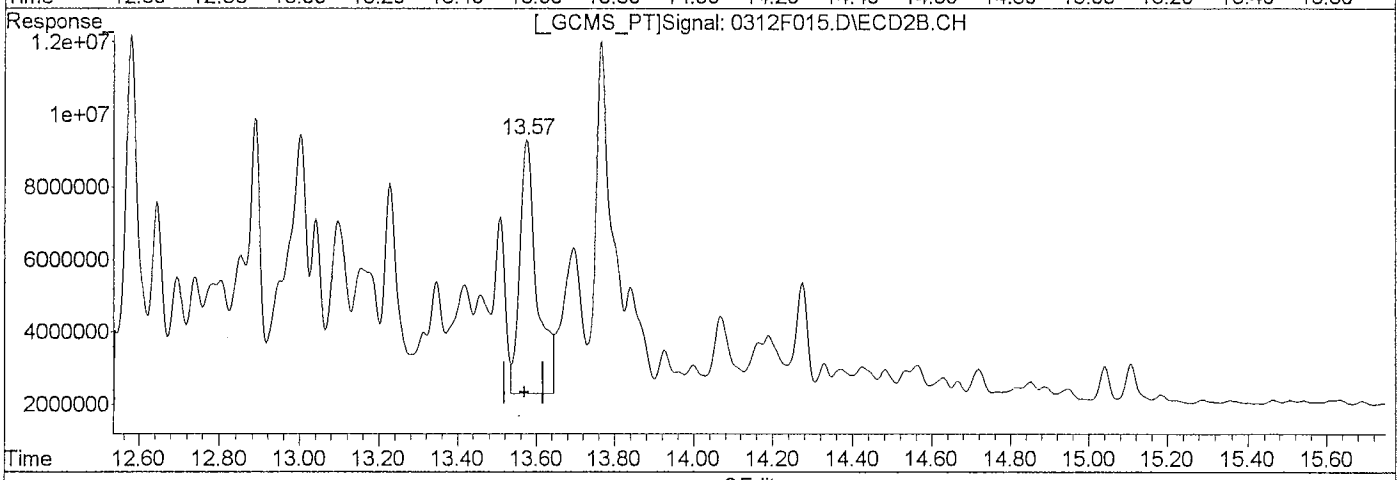
0312F015.D 031207-8081.M Mon Mar 12 17:42:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 1125.128ug/L

response 8311345

(30) Toxaphene {6} #2

13.57min 2180.229ug/L

response 21603722

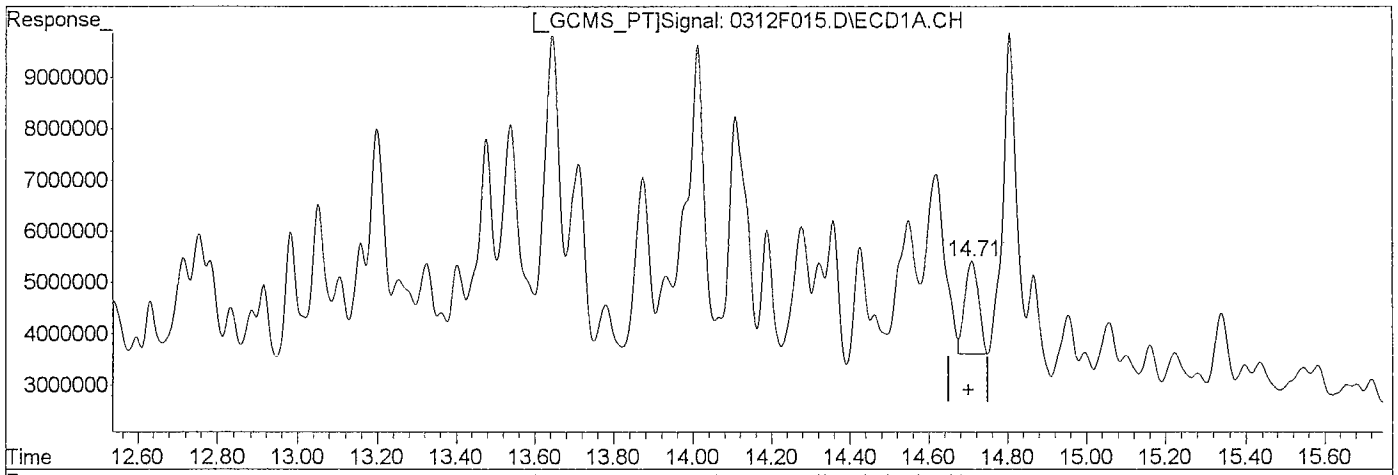
Release
MAR 1 7 2007

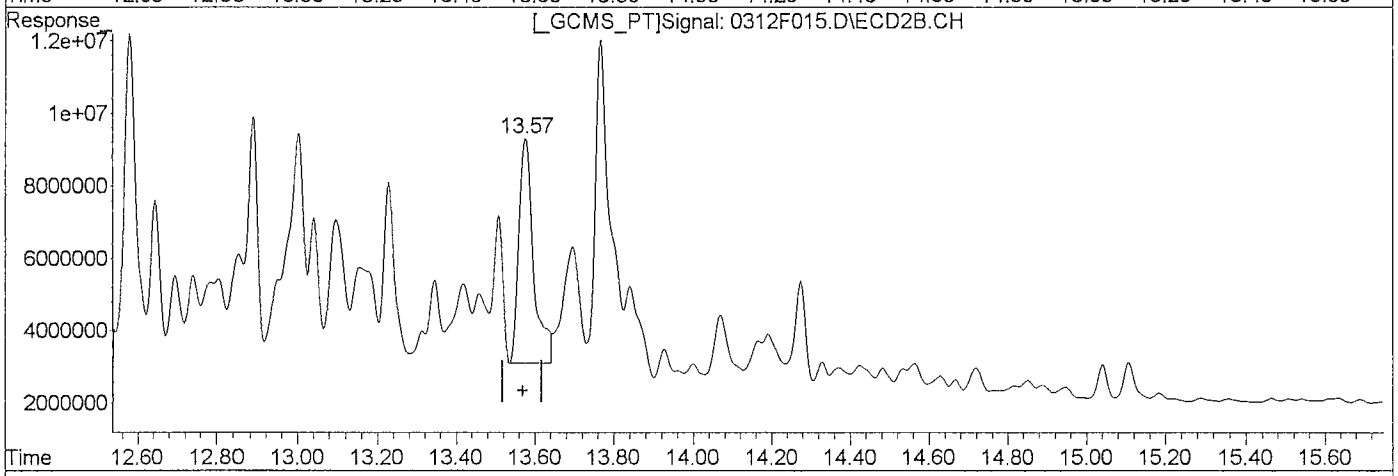
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 592.132ug/L m

response 4374094

(30) Toxaphene {6} #2

13.57min 1629.080ug/L m

response 16142423

(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:41 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	12440165	36911983	4710.513m	4922.159m
26)	Toxaphene {2}	13.05	12.44	9703898	26973550	2180.447m	4870.982m#
27)	Toxaphene {3}	13.19	12.64	16213354	13738876	4052.595m	4186.623m
28)	Toxaphene {4}	13.87	13.00	19351940	20152244	3412.303m	4457.079m#
29)	Toxaphene {5}	14.18	13.09	9296961	15847341	4536.486m	1911.068m#
30)	Toxaphene {6}	14.70	13.57	10609209	42598153	1436.196m	4298.970m#

AK 3/12/07

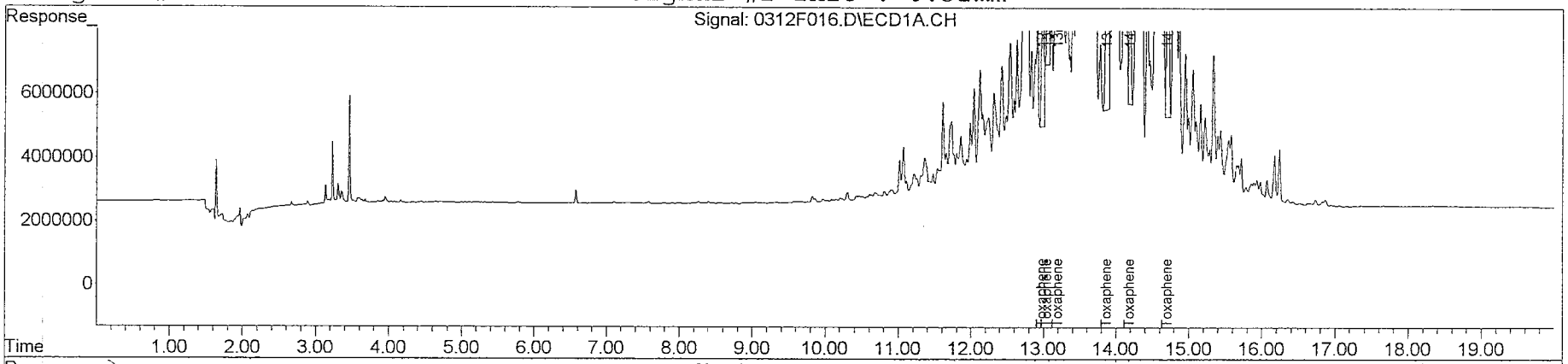
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

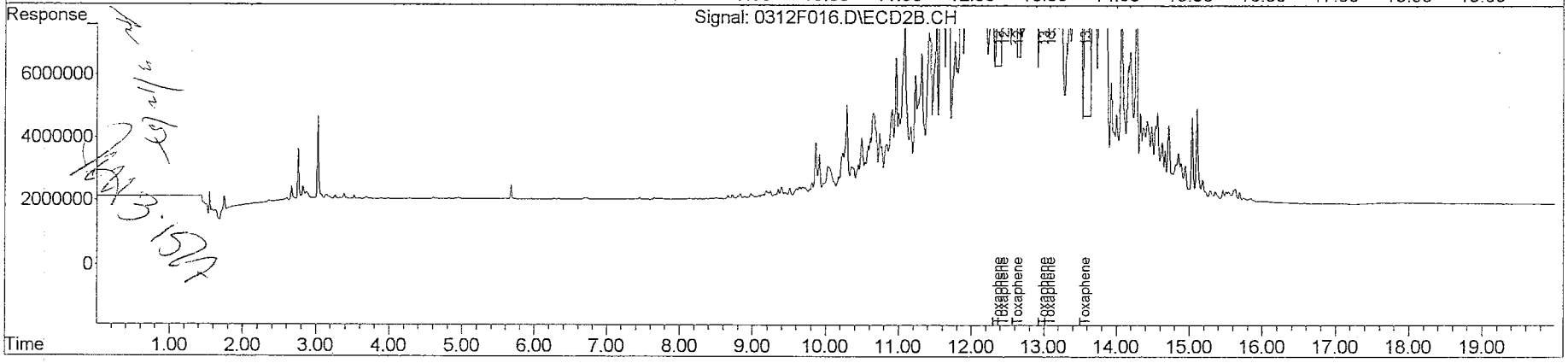
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:44 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



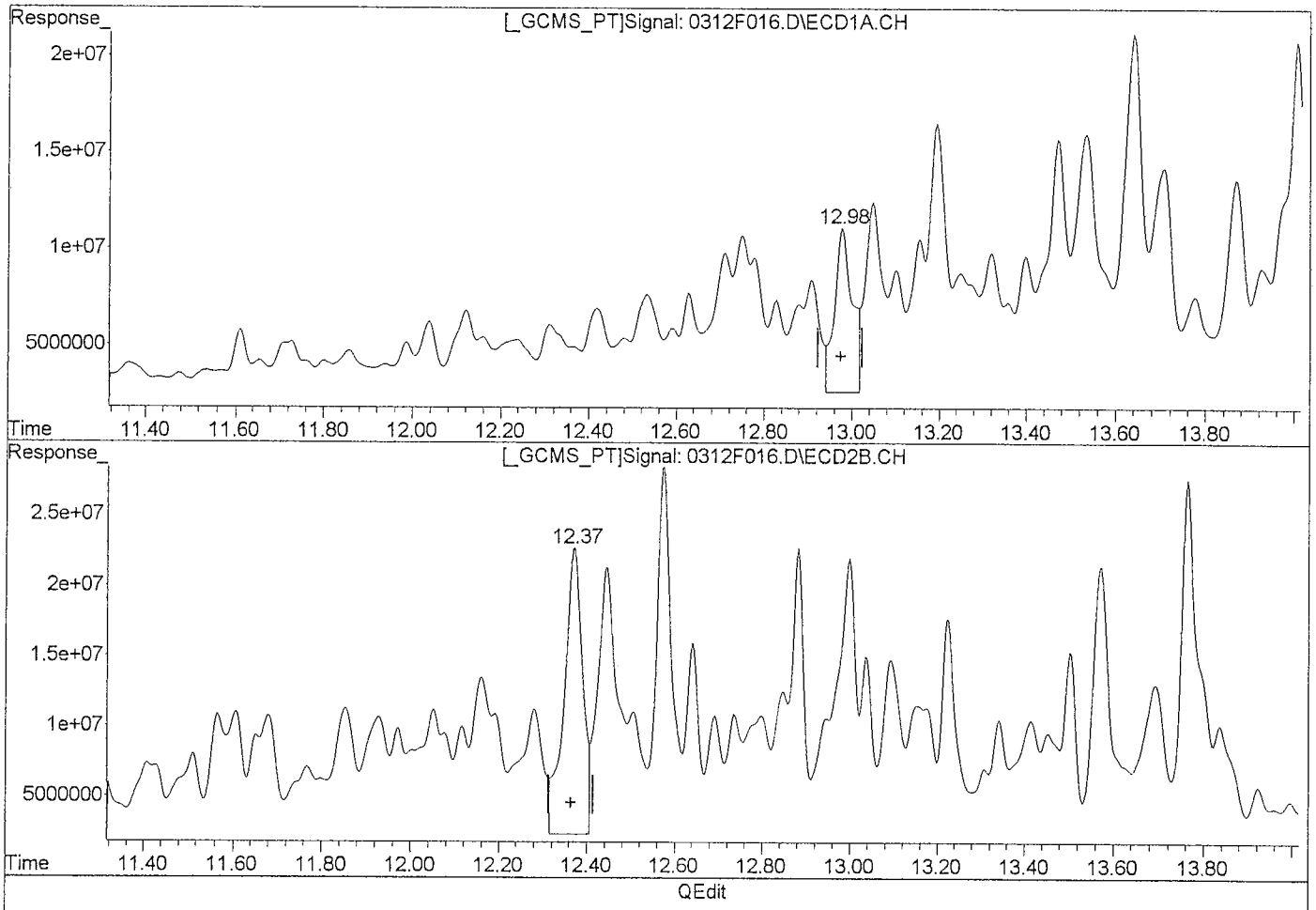


799

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(25) Toxaphene

12.98min 9038.775ug/L

response 23870828

(25) Toxaphene #2

12.37min 7798.360ug/L

response 58481030

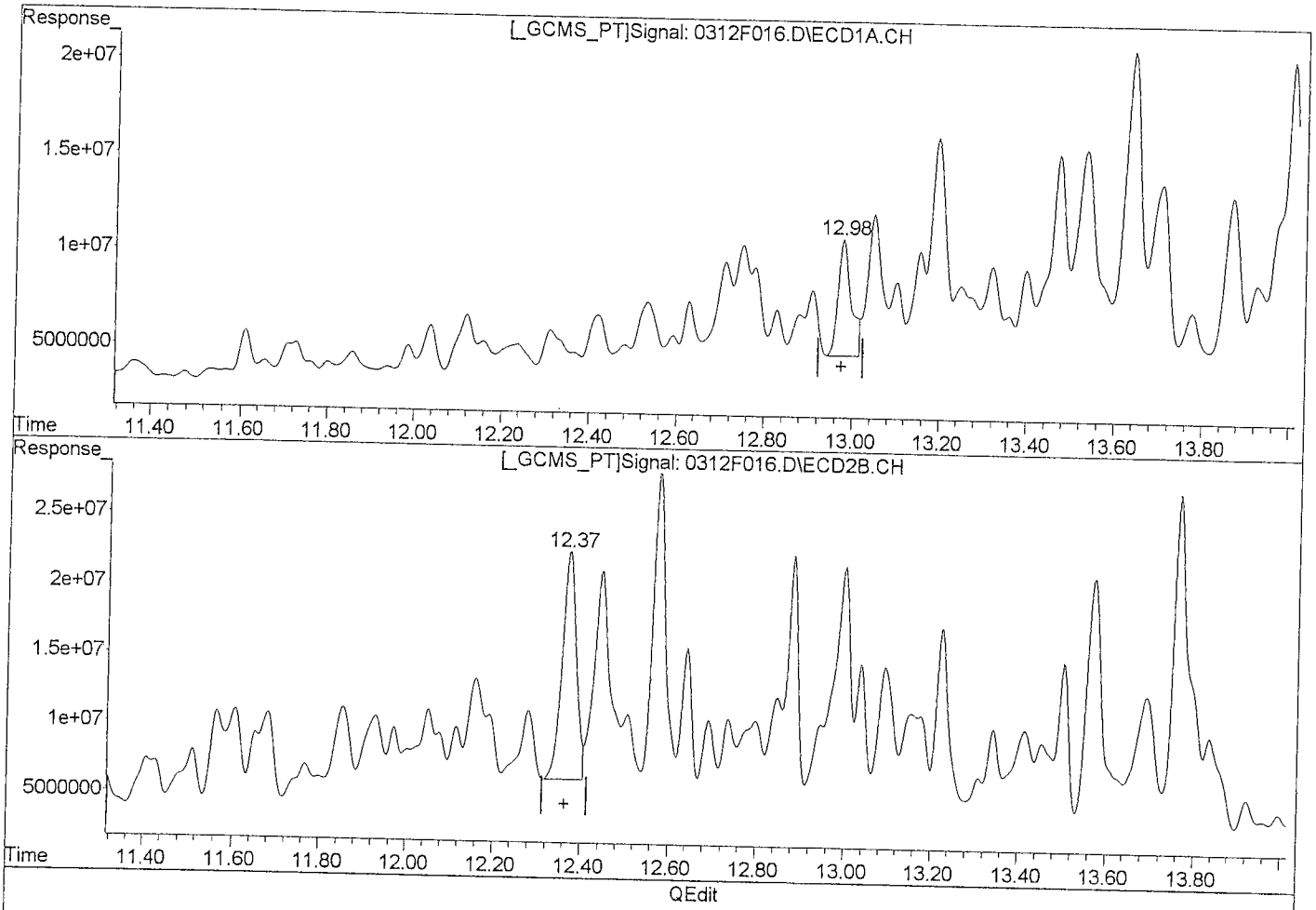
Osborne
MAR 1 7 2007

(+) = Expected Retention Time
0312F016.D 031207-8081.M Mon Mar 12 17:43:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.98min 4710.513ug/L m

response 12440165

(25) Toxaphene #2

12.37min 4922.159ug/L m

response 36911983

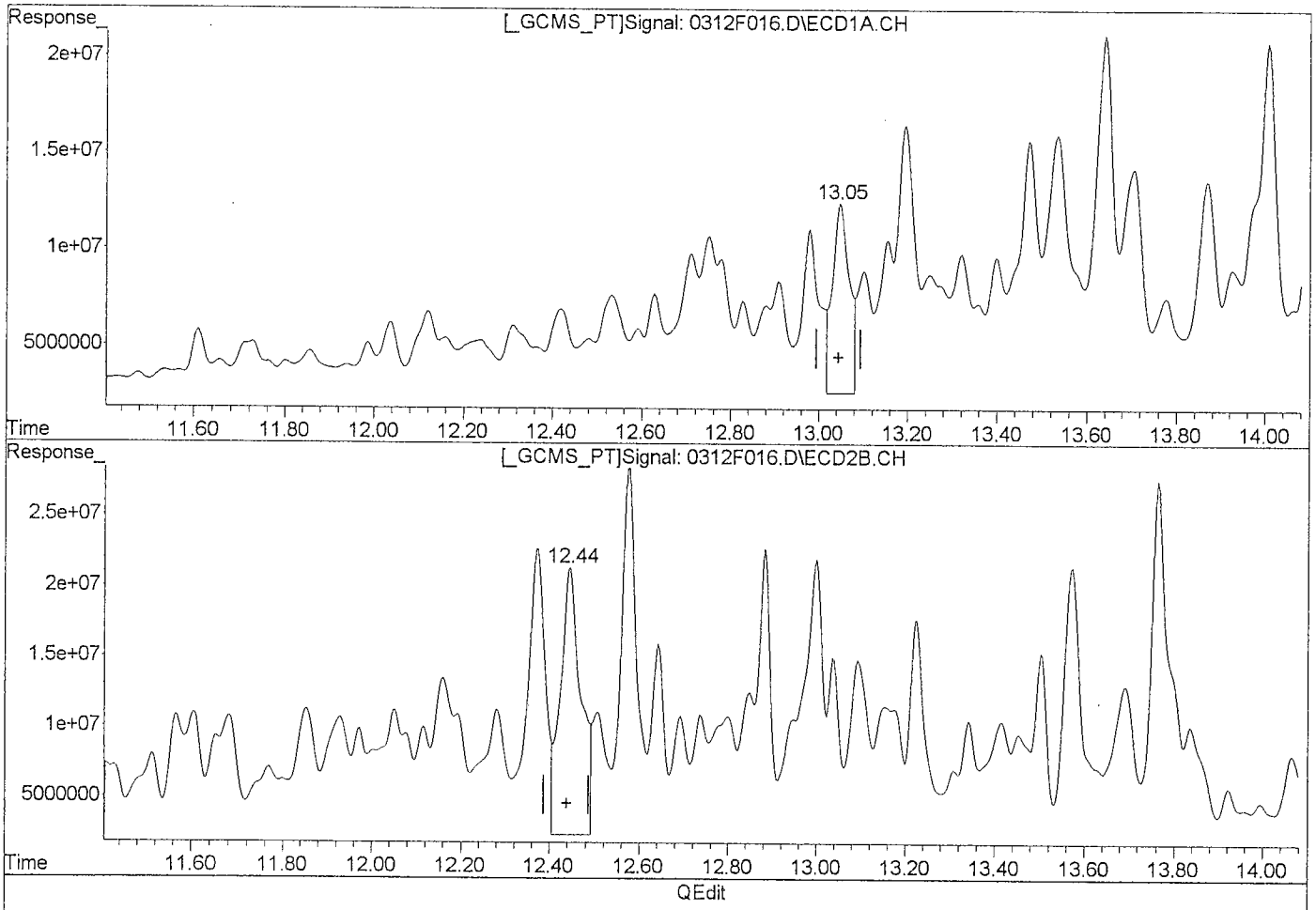
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 5883.245ug/L

response 26182896

(26) Toxaphene {2} #2

12.44min 10904.956ug/L

response 60387288

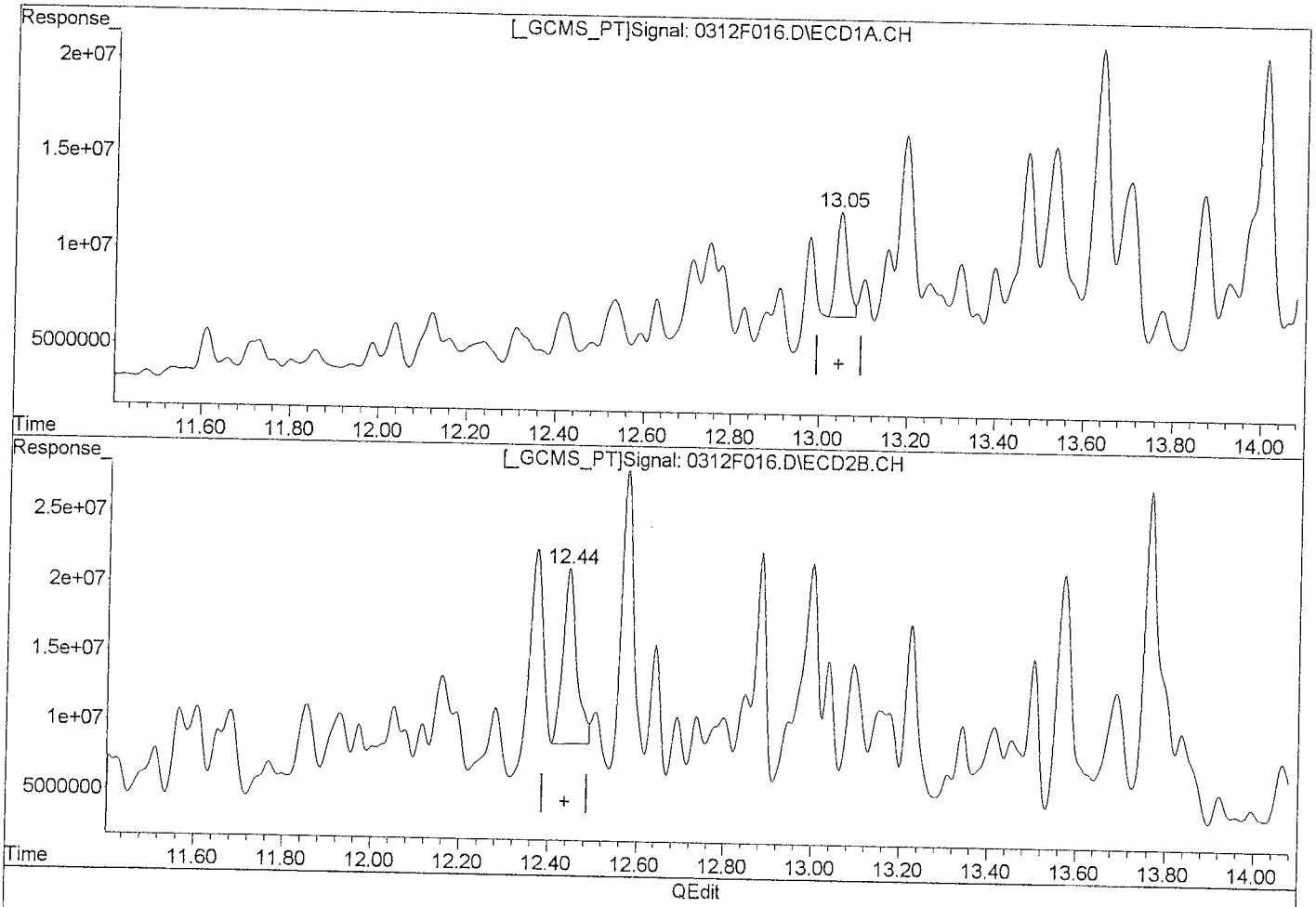
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 2180.447ug/L m

response 9703898

(26) Toxaphene {2} #2

12.44min 4870.982ug/L m

response 26973550

(+) = Expected Retention Time

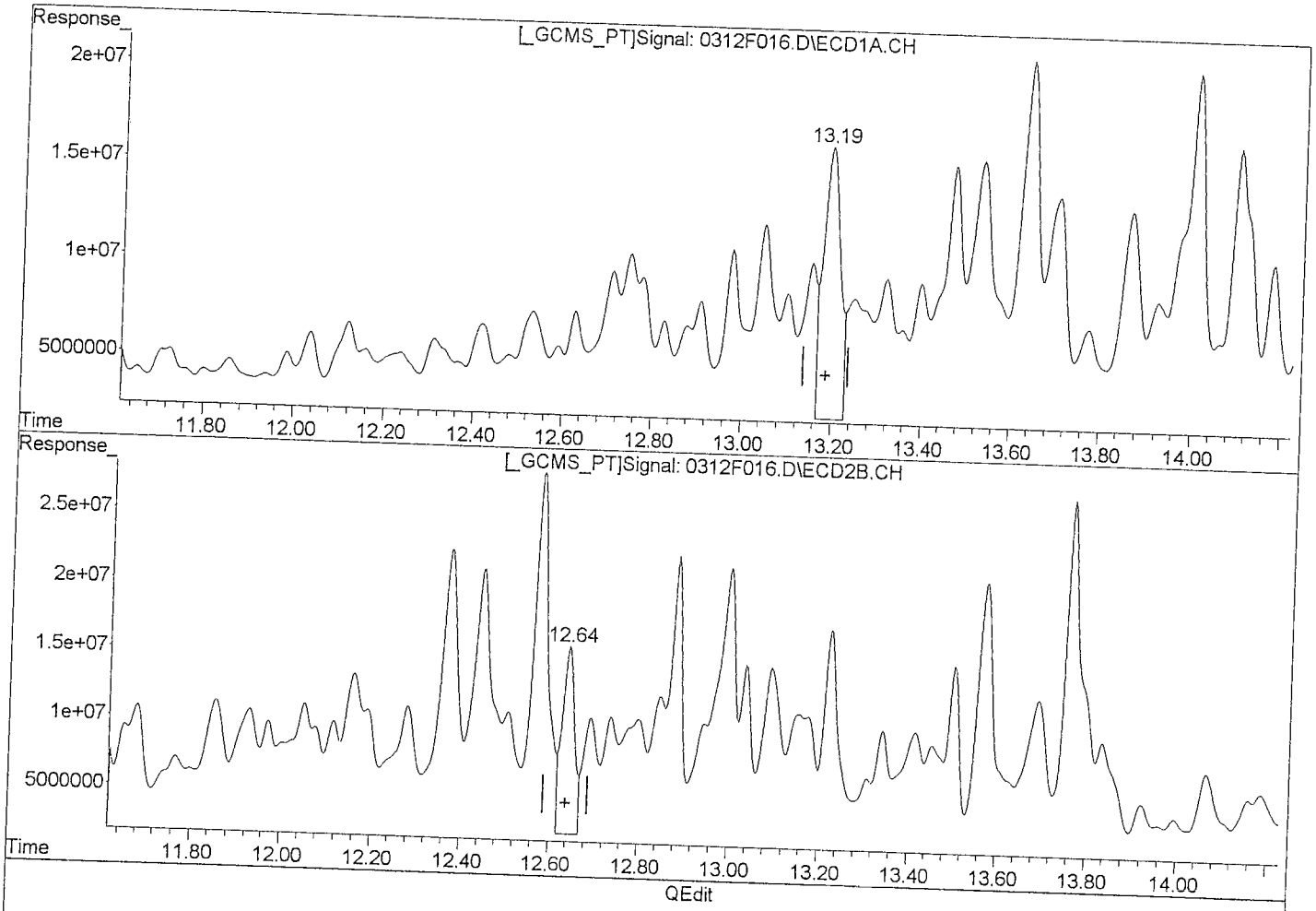
0312F016.D 031207-8081.M Mon Mar 12 17:43:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm
Sample : TOX @ 5000ppb GCPS5-89E
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Vial: 16
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 9166.274ug/L

response 36671819

(27) Toxaphene {3} #2

12.64min 8102.401ug/L

response 26588943

Data
MAR 1 7 2007

(+) = Expected Retention Time

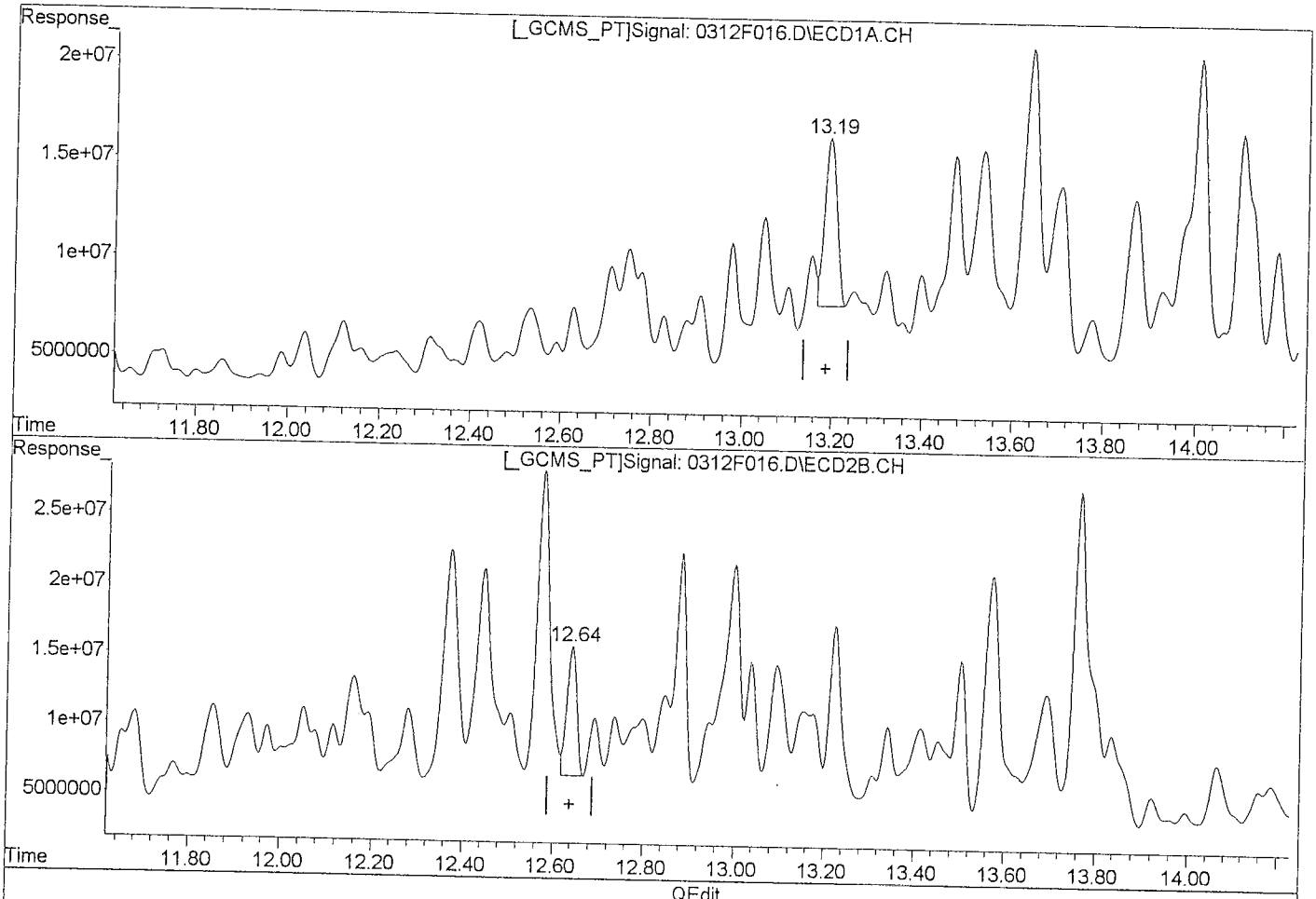
0312F016.D 031207-8081.M Mon Mar 12 17:43:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm
Sample : TOX @ 5000ppb GCPS5-89E
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Vial: 16
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 4052.595ug/L m

response 16213354

(27) Toxaphene {3} #2

12.64min 4186.623ug/L m

response 13738876

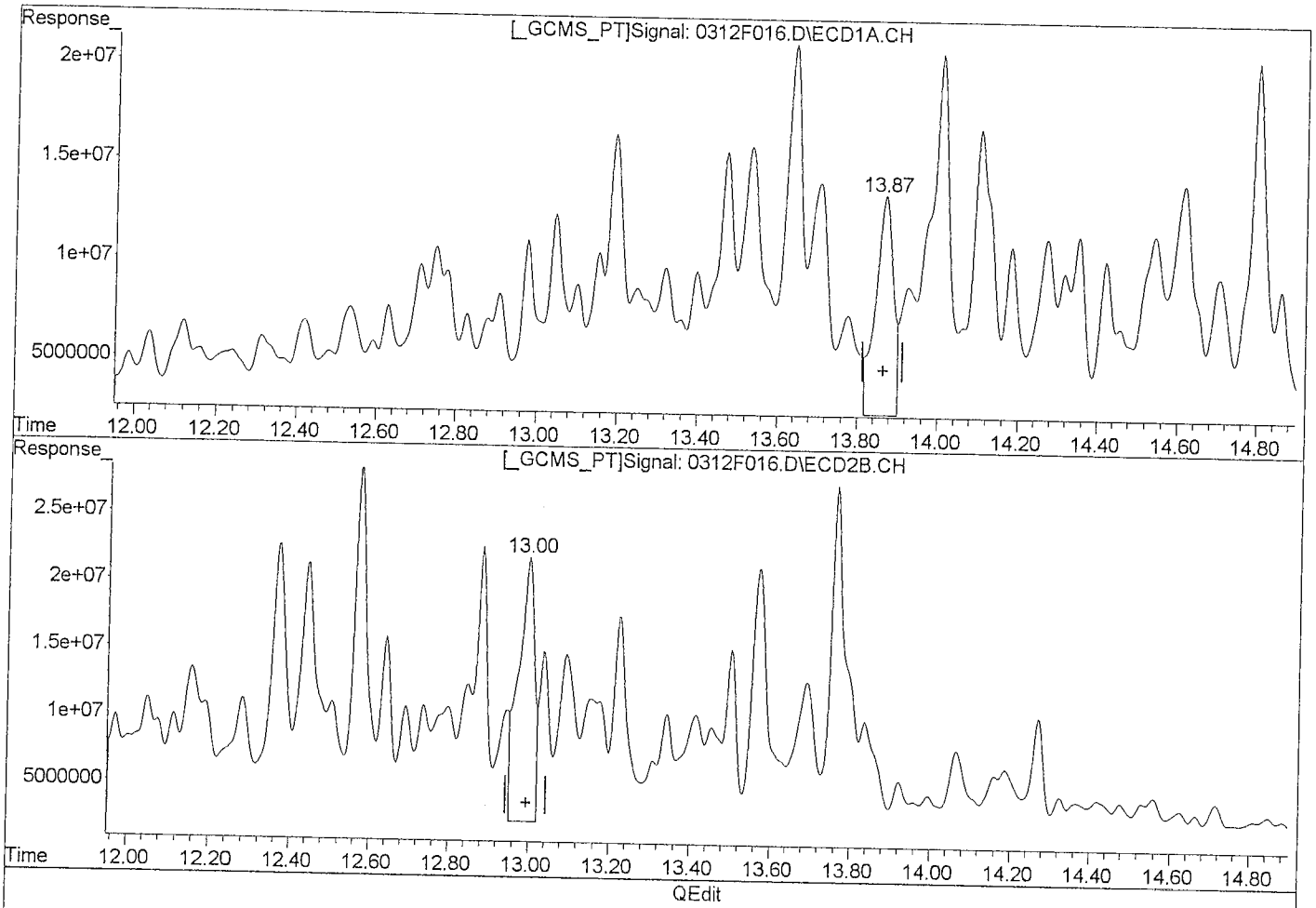
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 6000.139ug/L

response 34028135

(28) Toxaphene {4} #2

13.00min 12095.153ug/L

response 54687039

Reviewed

MAR 12 2007

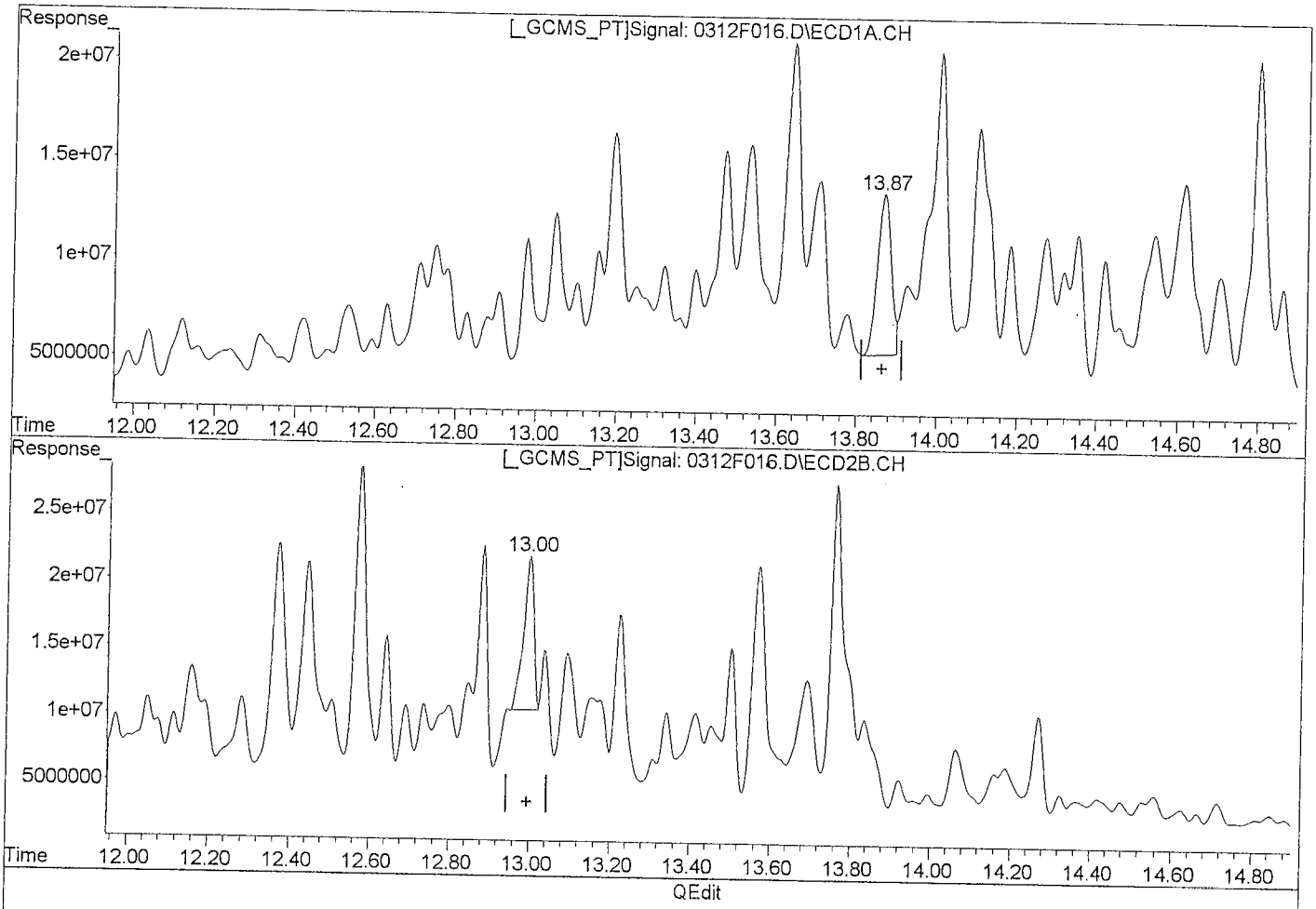
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 3412.303ug/L m

response 19351940

(28) Toxaphene {4} #2

13.00min 4457.079ug/L m

response 20152244

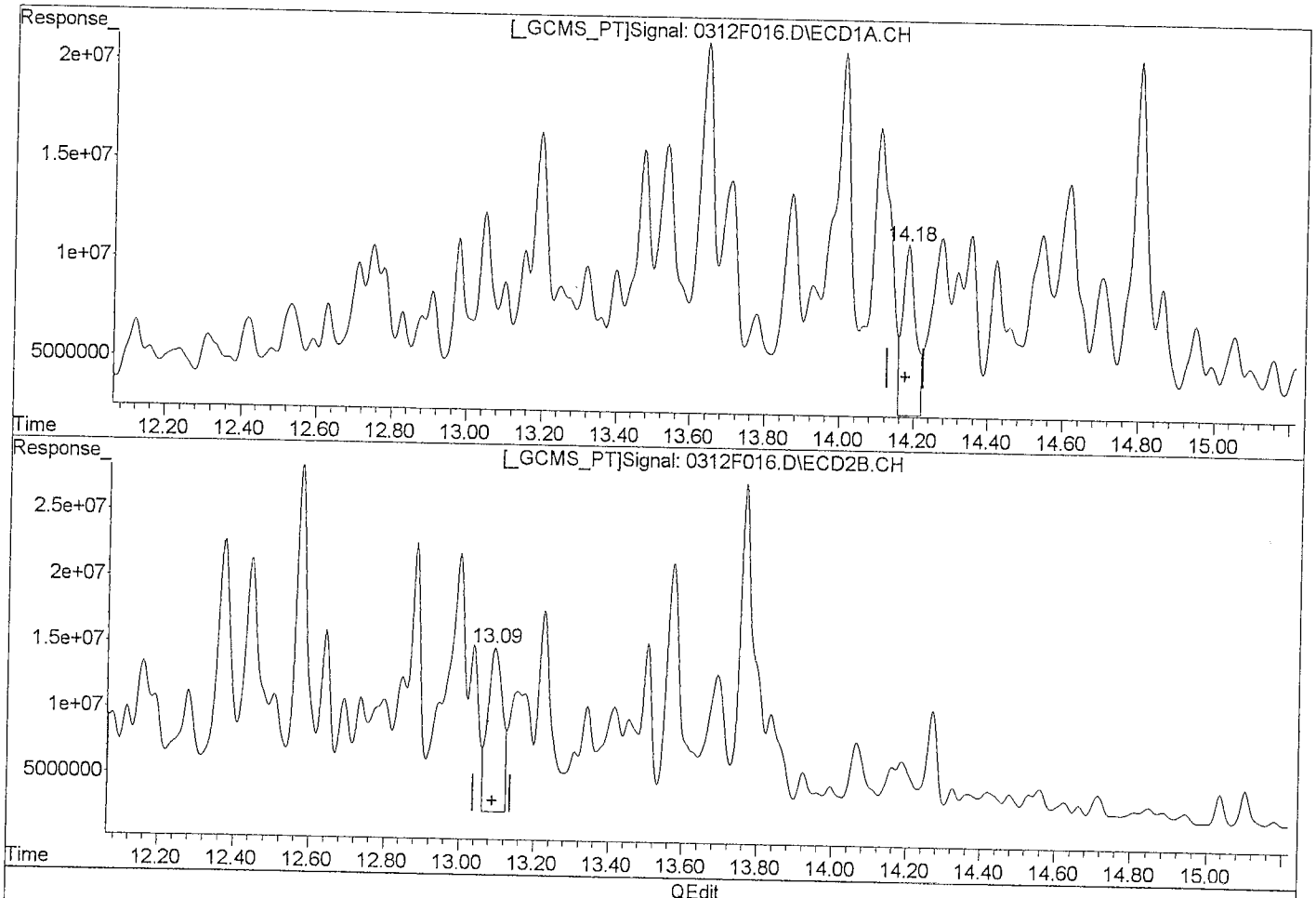
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:44:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 10302.933ug/L

response 21114574

(29) Toxaphene {5} #2

13.09min 4144.397ug/L

response 34366996

Before

MAR 1 2 2007

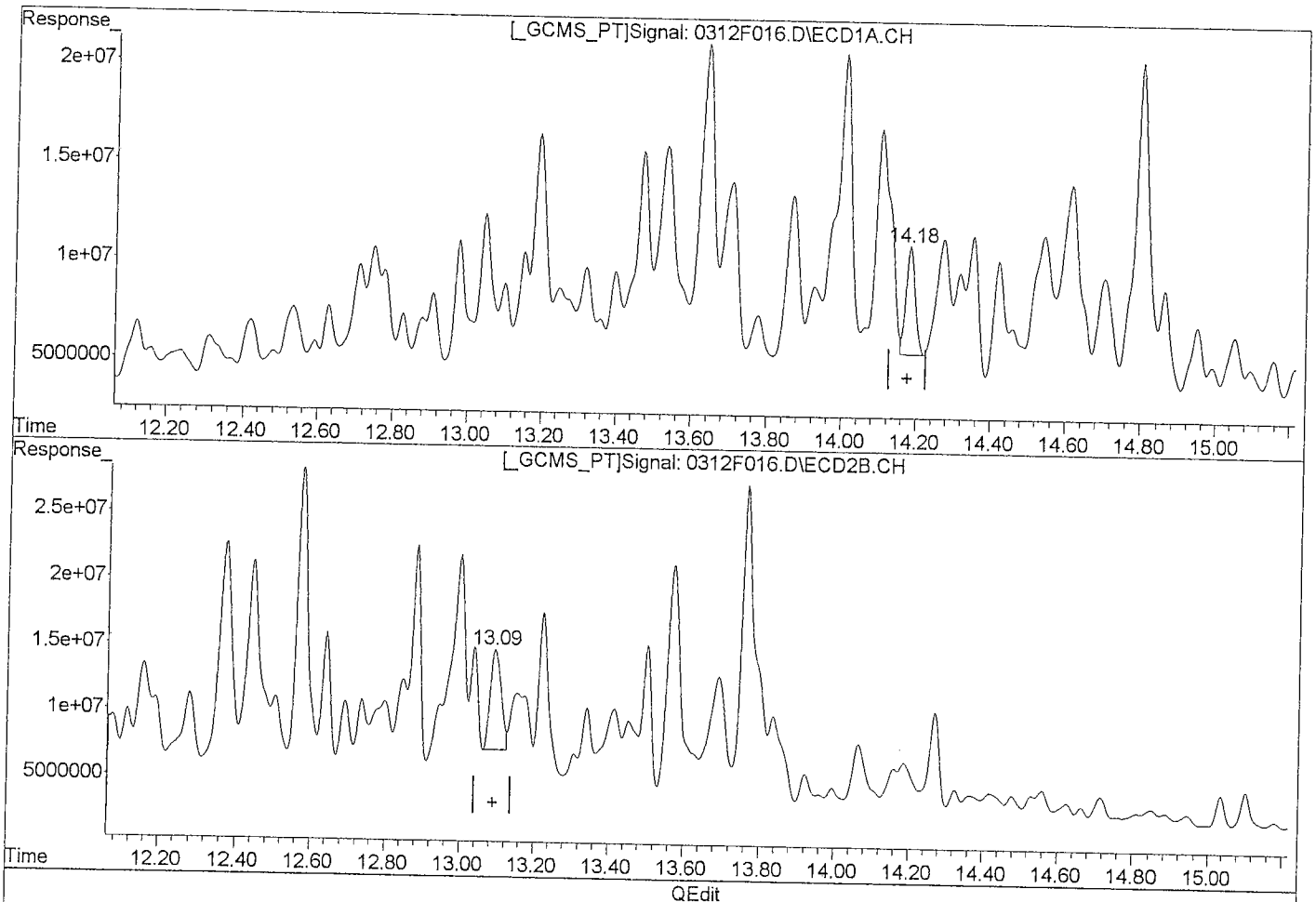
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:44:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 4536.486ug/L m

response 9296961

(29) Toxaphene {5} #2

13.09min 1911.068ug/L m

response 15847341

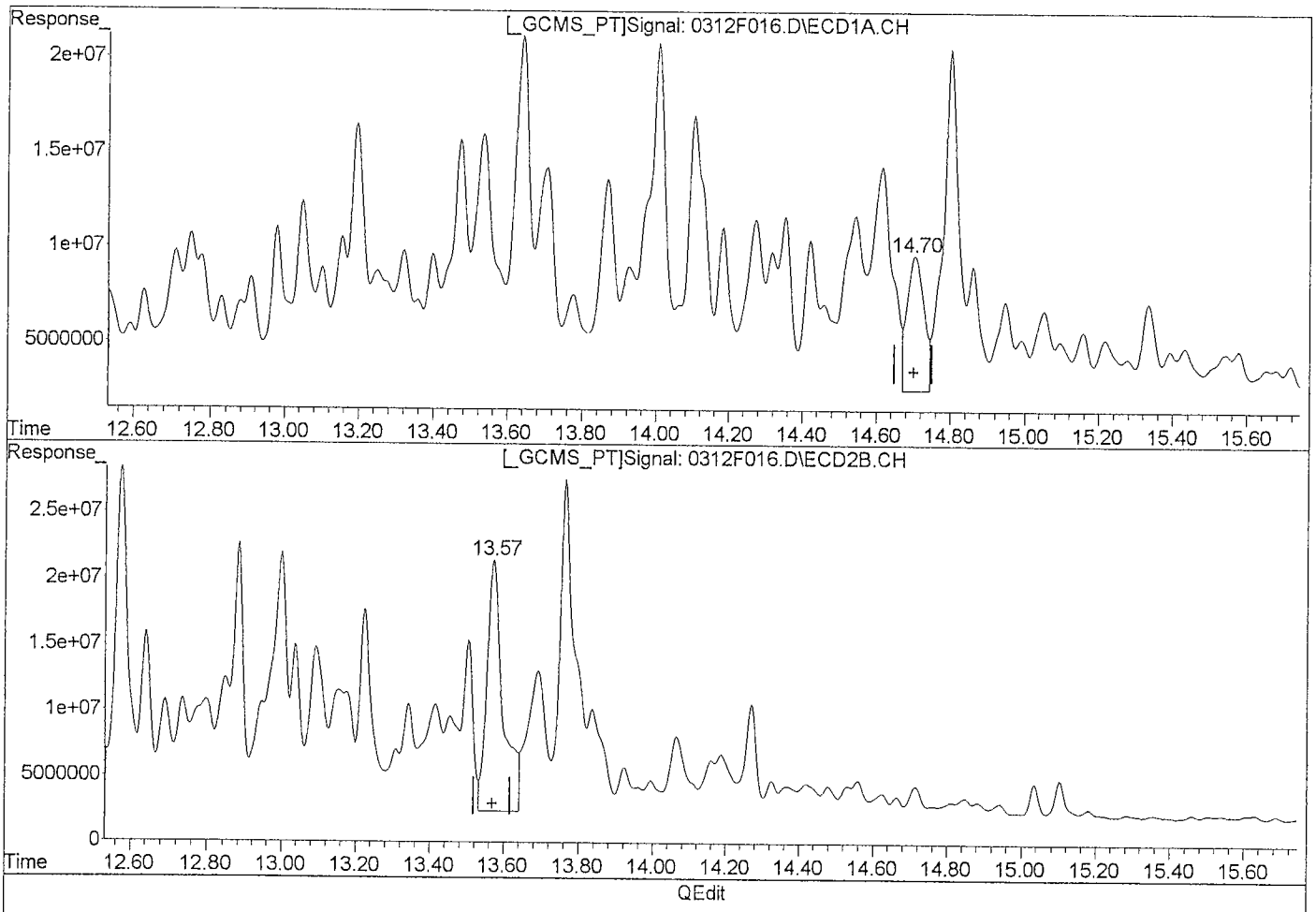
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:44:16 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.70min 3054.099ug/L

response 22560692

(30) Toxaphene {6} #2

13.57min 5884.529ug/L

response 58309338

MAR 1 2 2007

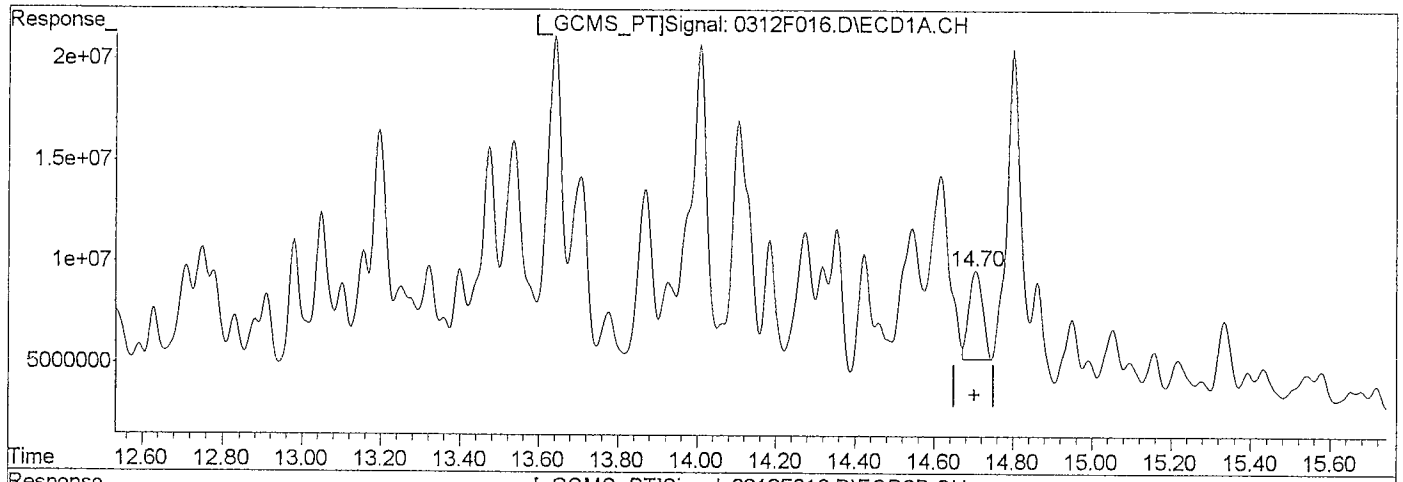
(+) = Expected Retention Time

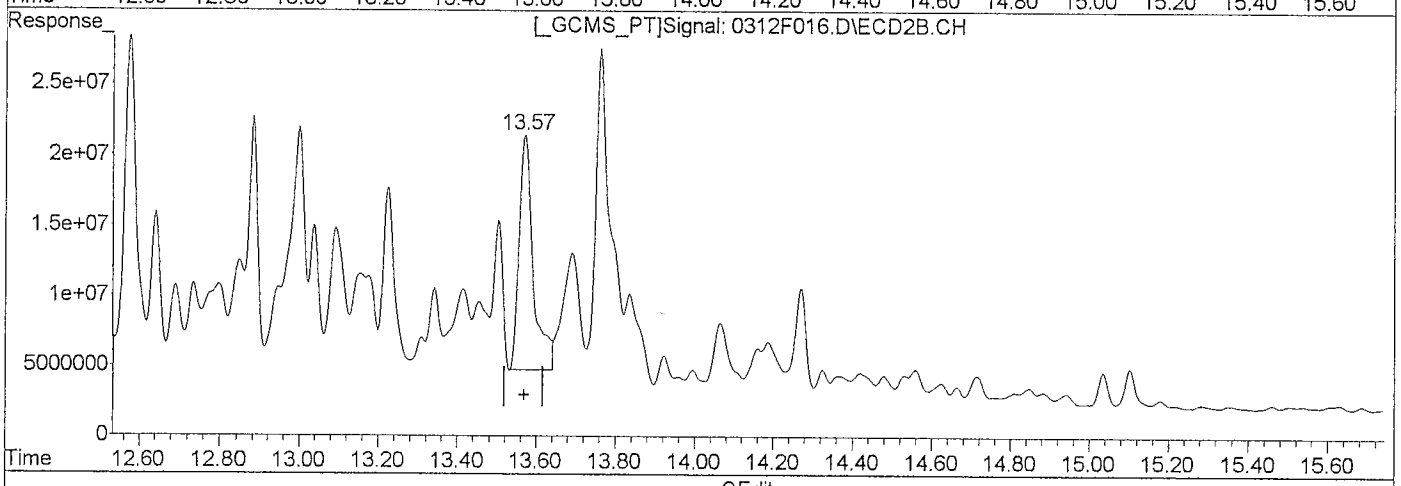
0312F016.D 031207-8081.M Mon Mar 12 17:44:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1436.196ug/L m

response 10609209

(30) Toxaphene {6} #2

13.57min 4298.970ug/L m

response 42598153

(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:44:29 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2349582	6505177	895.590m	870.384m
26)	Toxaphene {2}	13.04	12.44	1864817	4583212	900.274m	831.185m
27)	Toxaphene {3}	13.19	12.64	2854270	2213978	869.423m	750.984m
28)	Toxaphene {4}	13.86	13.00	3556751	2805613	888.124m	735.547m
29)	Toxaphene {5}	14.18	13.09	1602441	2691306	785.210m	824.866m
30)	Toxaphene {6}	14.70	13.57	1964360	6977726	891.363m	839.279

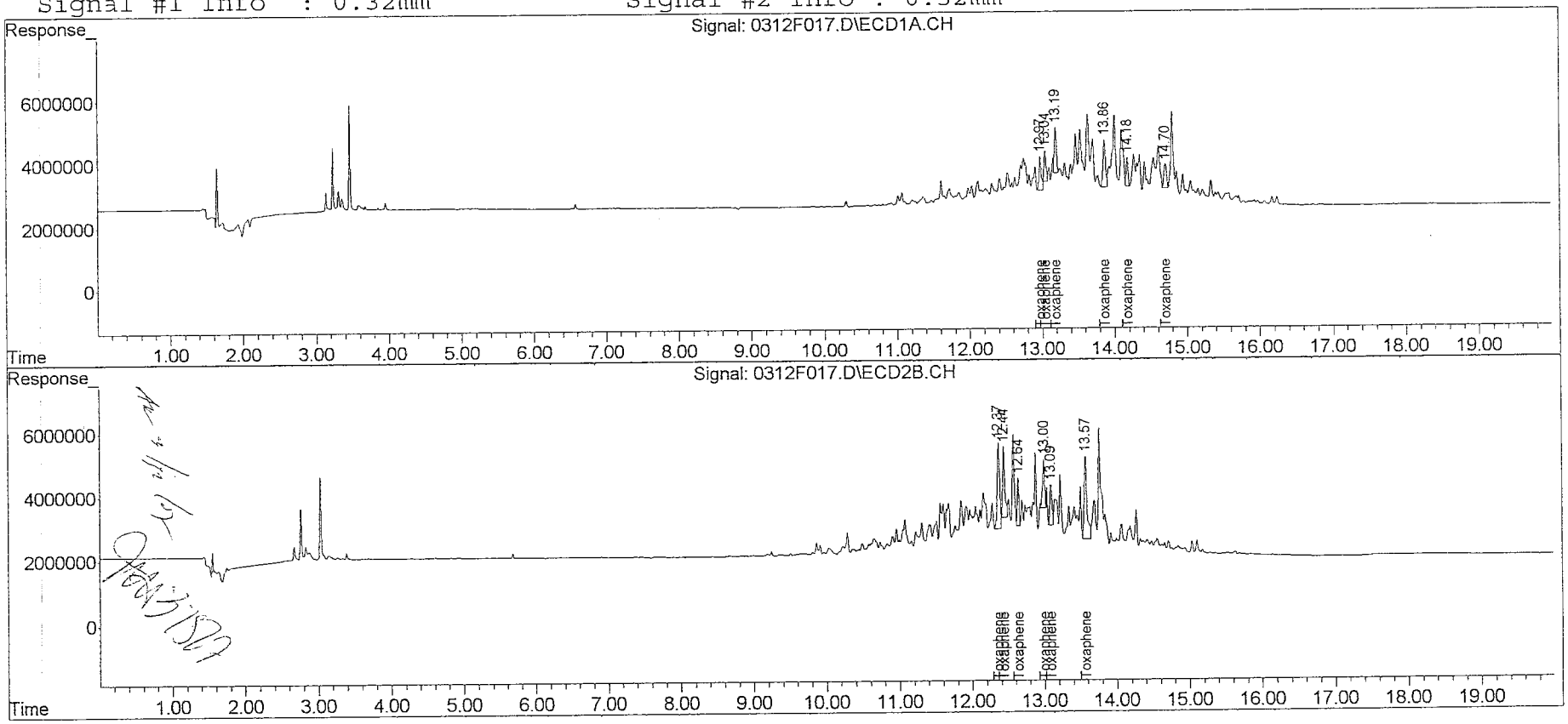
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:49 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

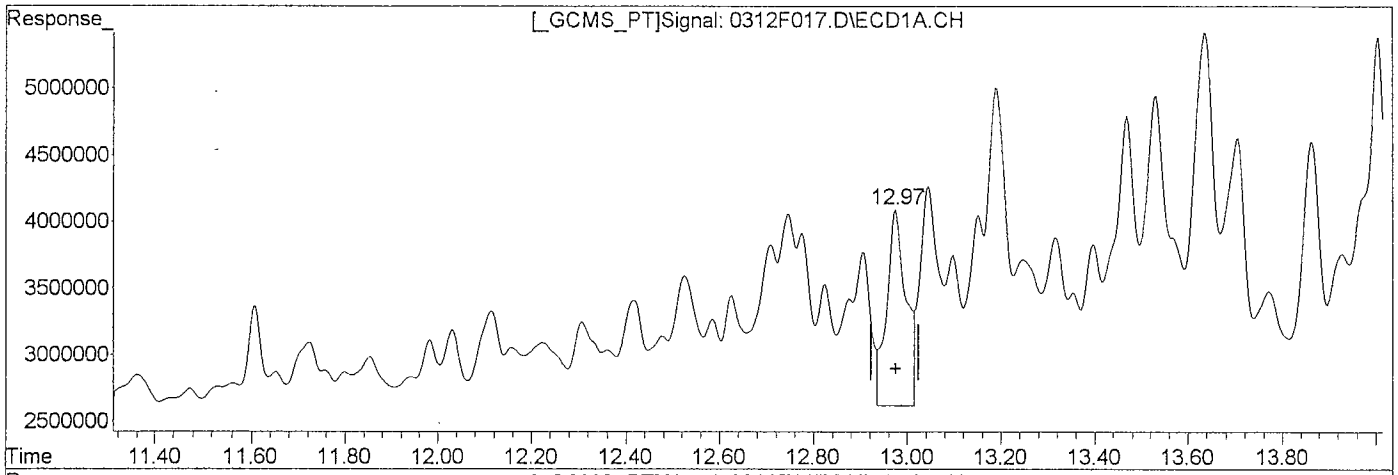
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

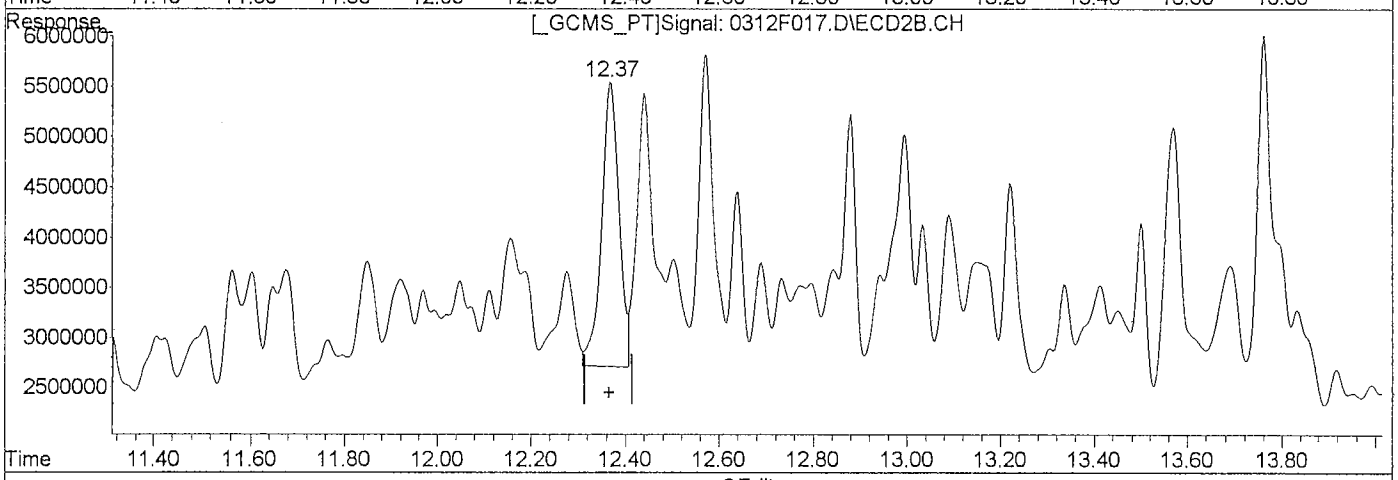


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 1617.266ug/L

response 4242900

(25) Toxaphene #2

12.37min 971.393ug/L

response 7260109

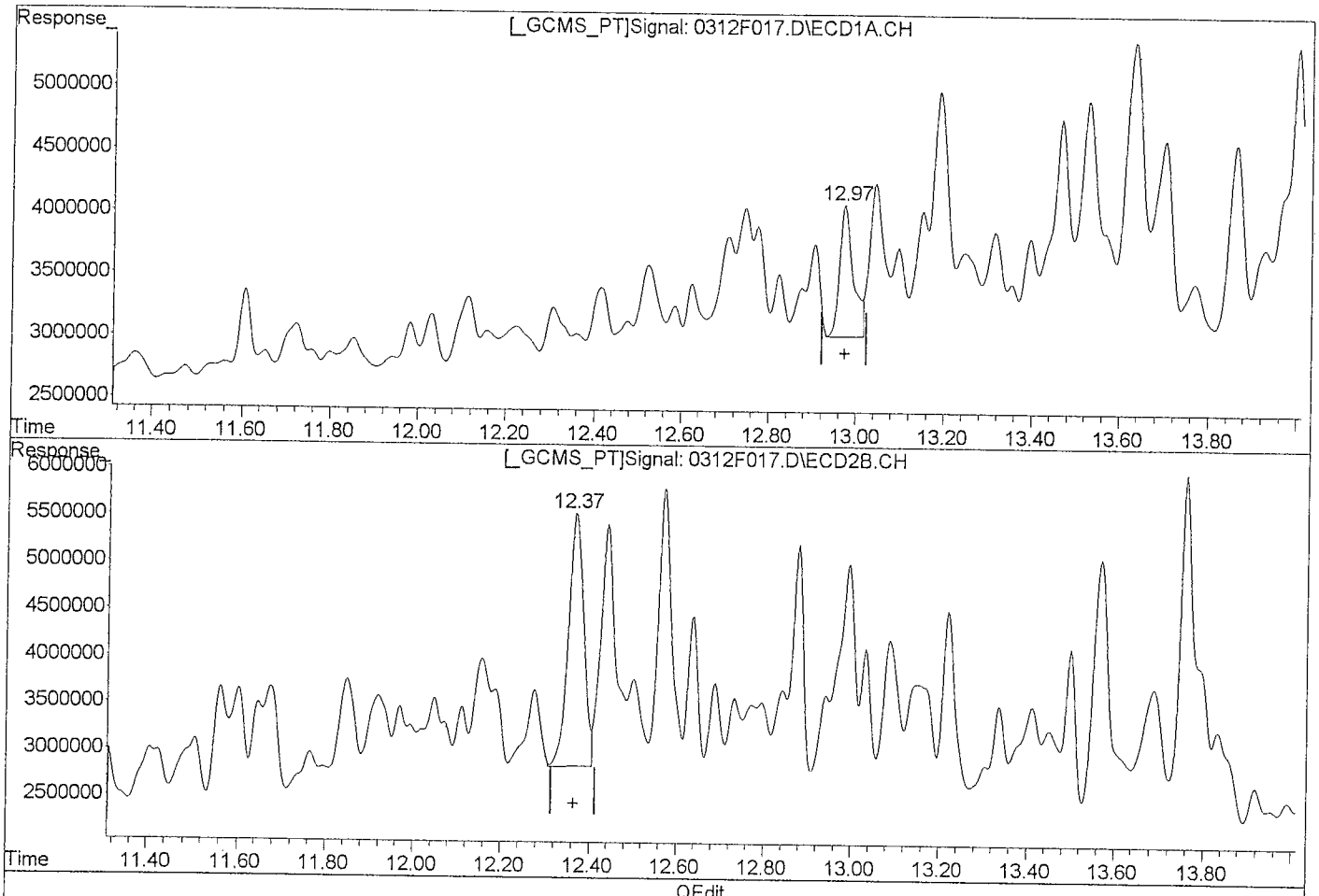
MAR 12 2007

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration



(25) Toxaphene
12.97min 895.590ug/L m
response 2349582

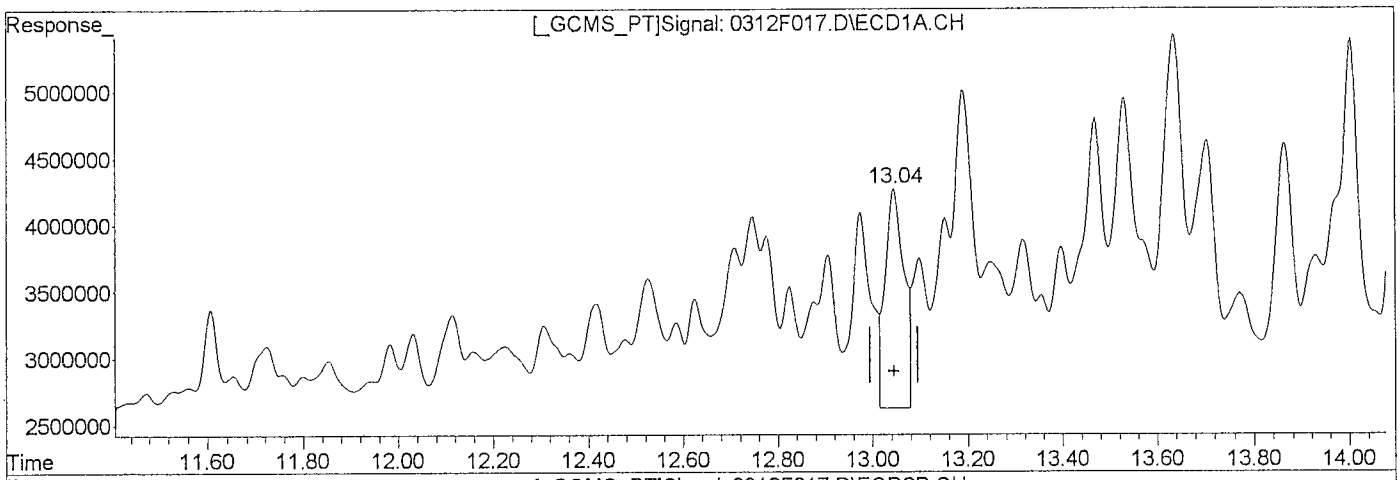
(25) Toxaphene #2
12.37min 870.384ug/L m
response 6505177

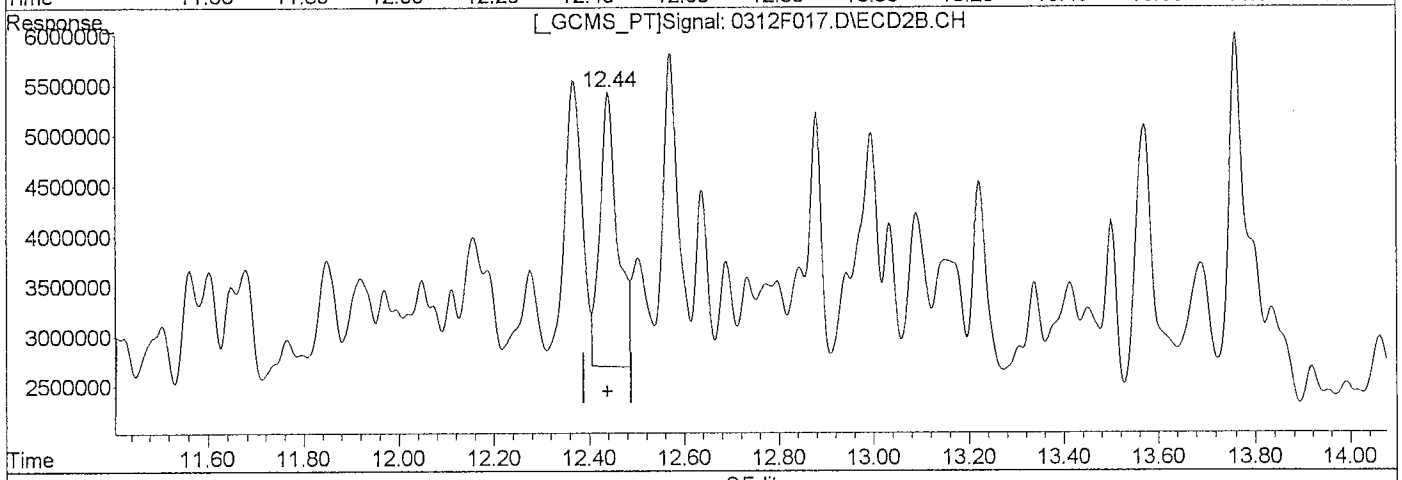
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 2157.099ug/L

response 4468189

(26) Toxaphene {2} #2

12.44min 1279.766ug/L

response 7056722

Before

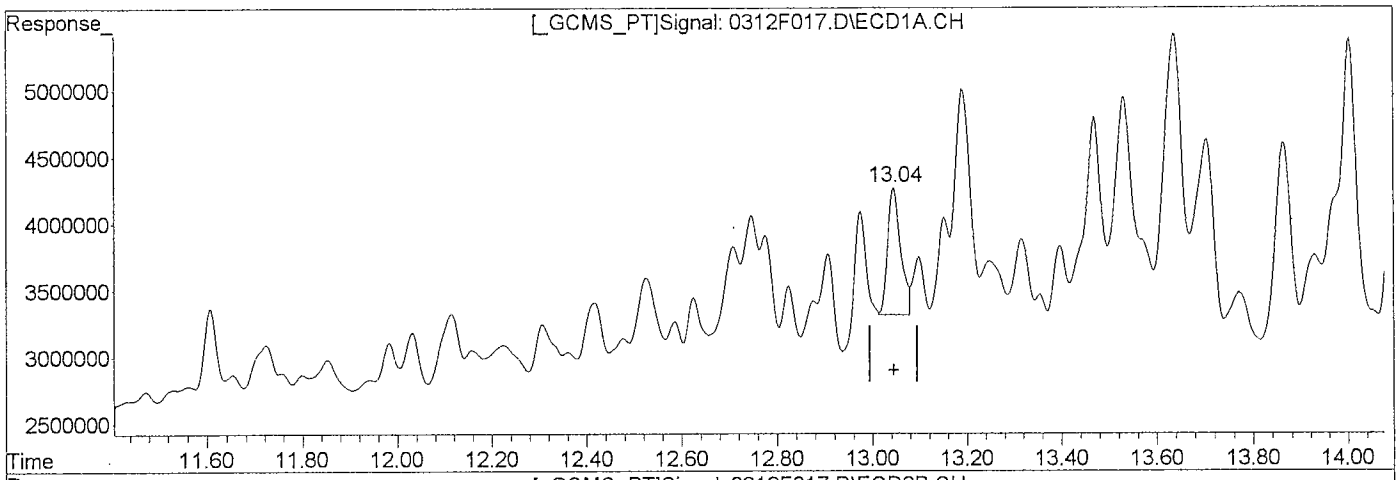
MAR 1 1 2007

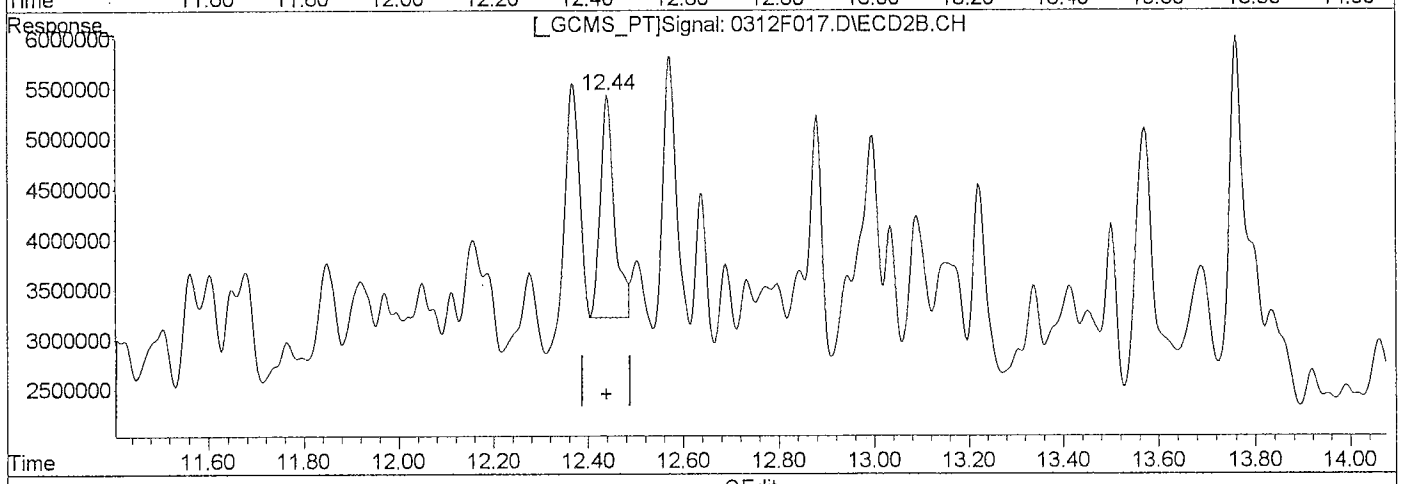
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 900.274ug/L m

response 1864817

(26) Toxaphene {2} #2

12.44min 831.185ug/L m

response 4583212

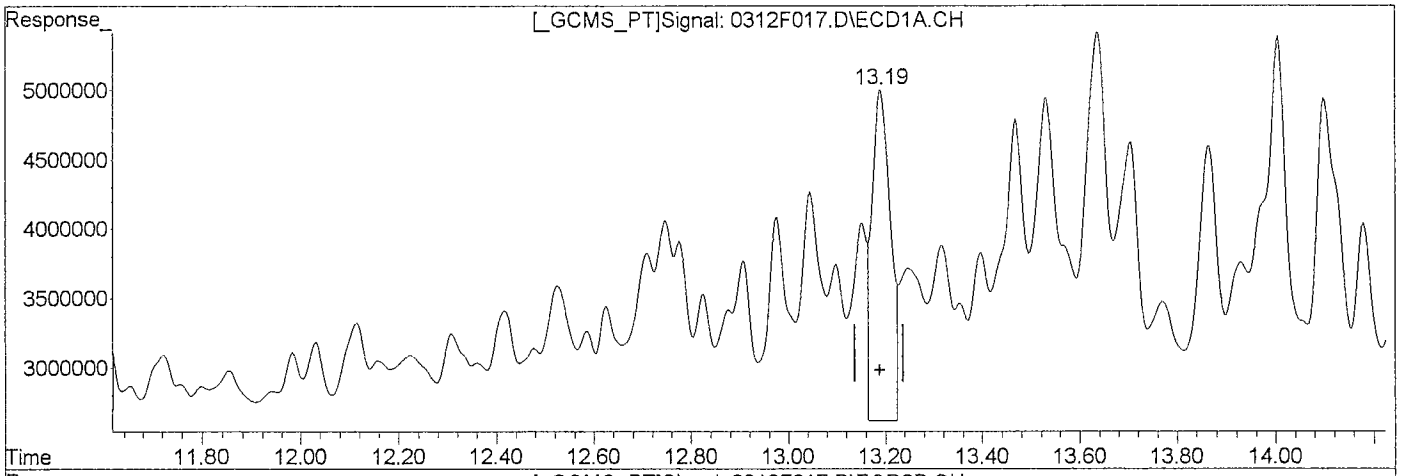
(+) = Expected Retention Time

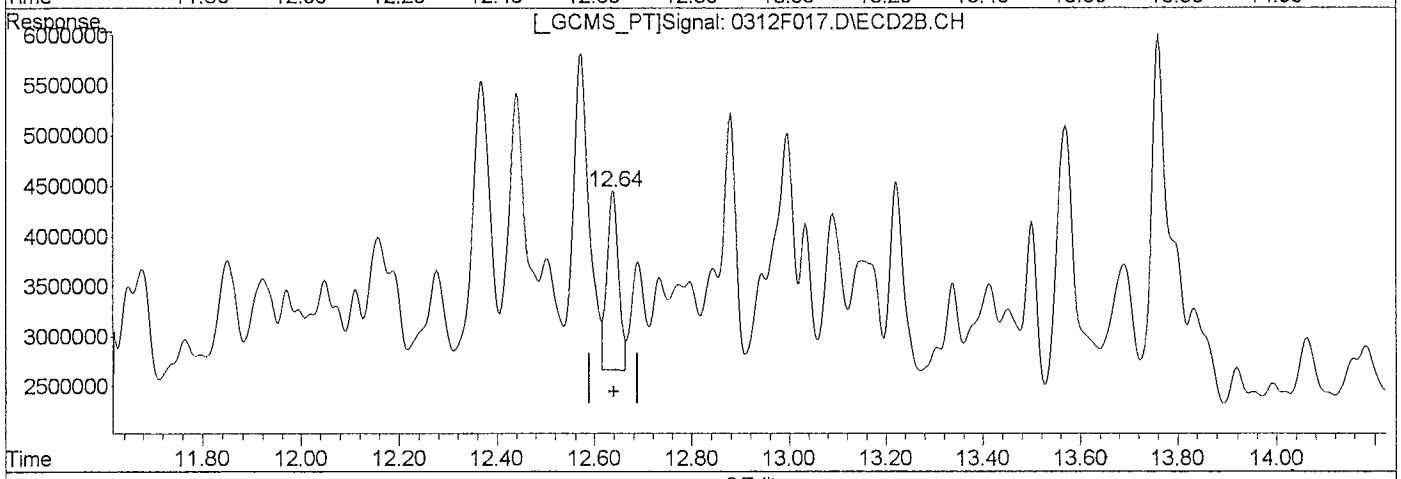
0312F017.D 031207-8081.M Mon Mar 12 17:47:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 1889.765ug/L

response 6203996

(27) Toxaphene {3} #2

12.64min 1004.981ug/L

response 2962789

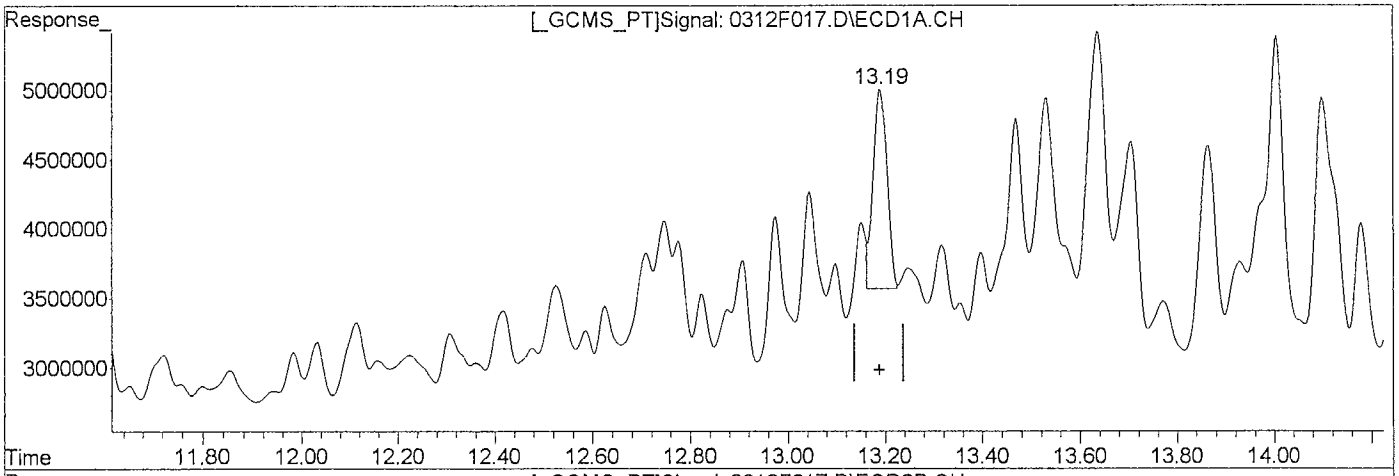
MAR 1 2 2007

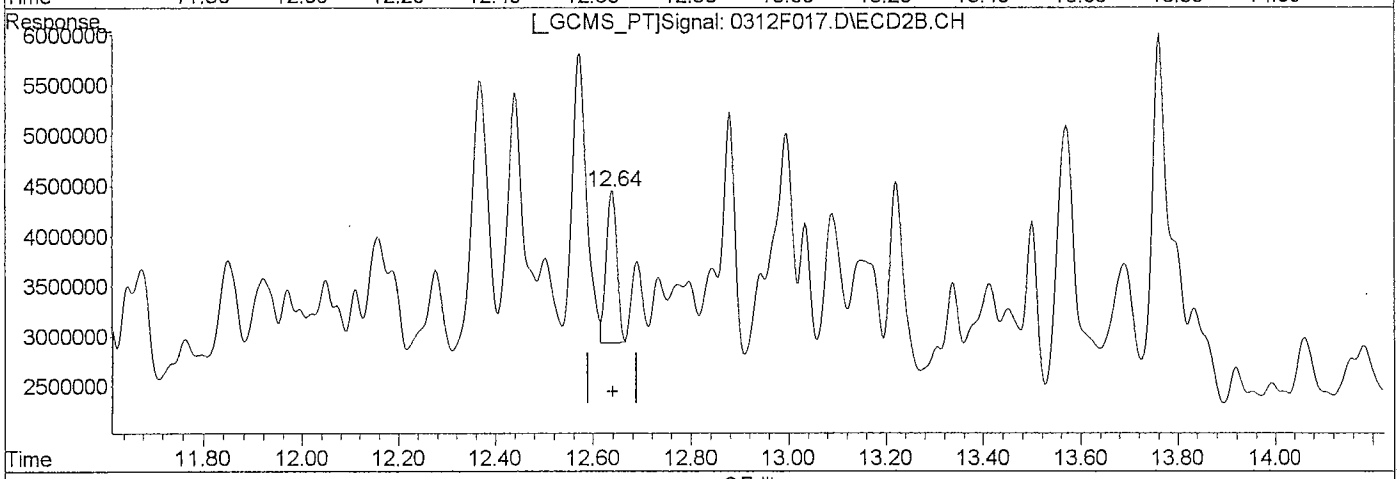
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 869.423ug/L m

response 2854270

(27) Toxaphene {3} #2

12.64min 750.984ug/L m

response 2213978

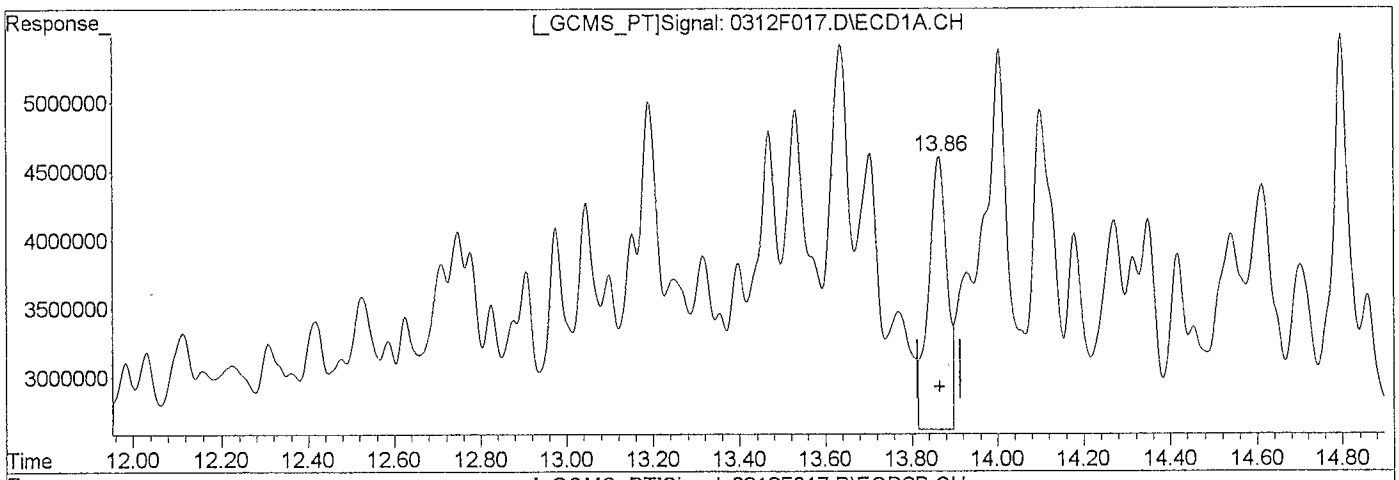
(+) = Expected Retention Time

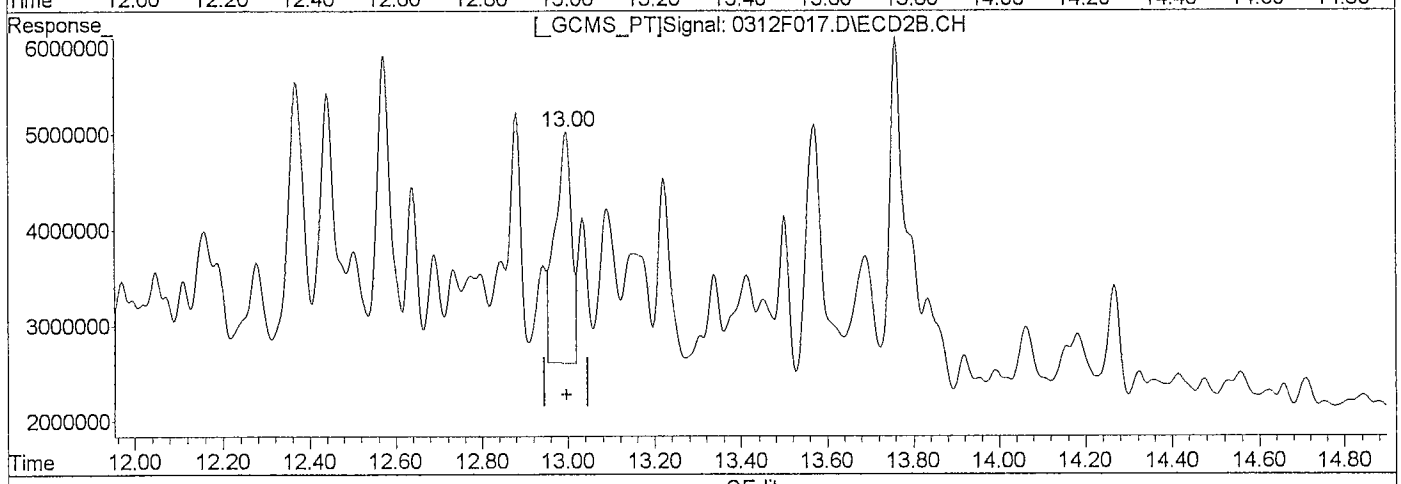
0312F017.D 031207-8081.M Mon Mar 12 17:48:13 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 1483.355ug/L

response 5940525

(28) Toxaphene {4} #2

13.00min 1663.580ug/L

response 6345429

Before

MAR 1 2 2007

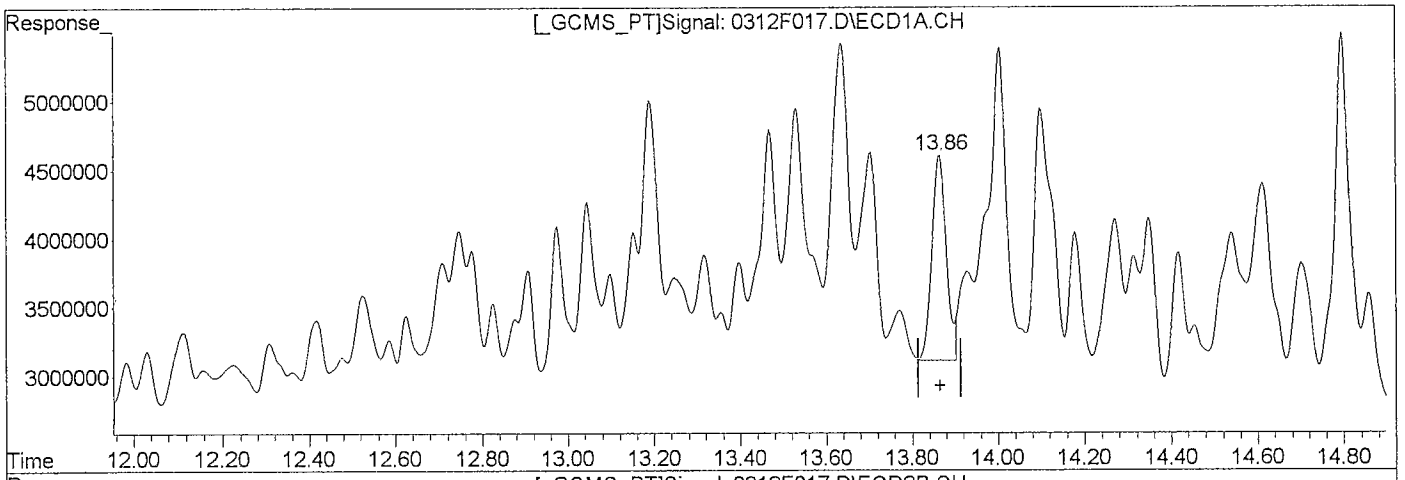
(+) = Expected Retention Time

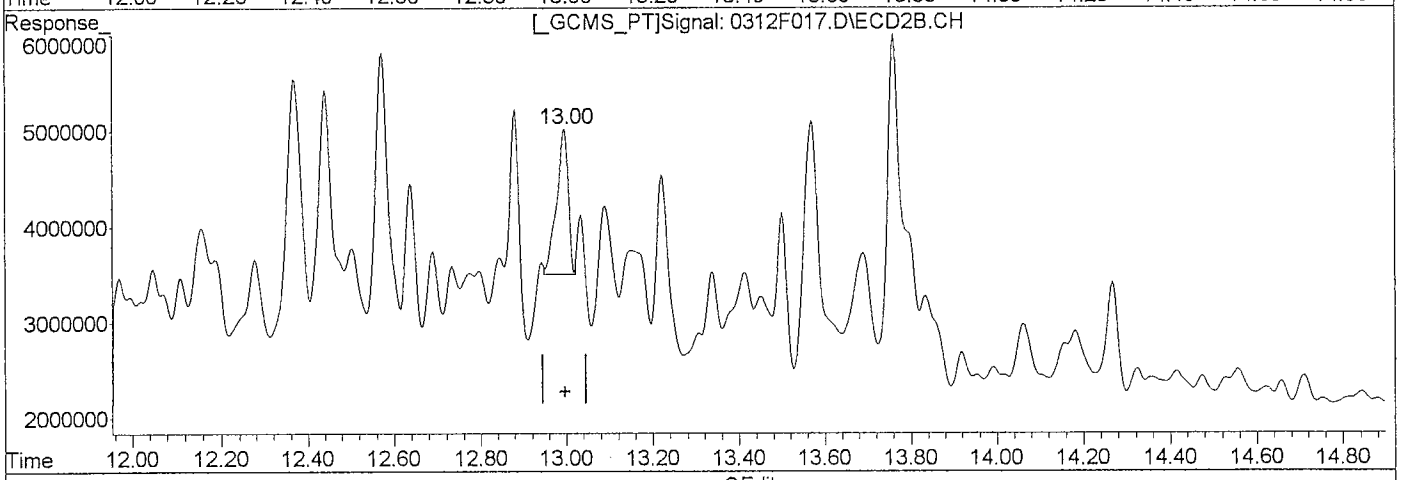
0312F017.D 031207-8081.M Mon Mar 12 17:48:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 888.124ug/L m

response 3556751

(28) Toxaphene {4} #2

13.00min 735.547ug/L m

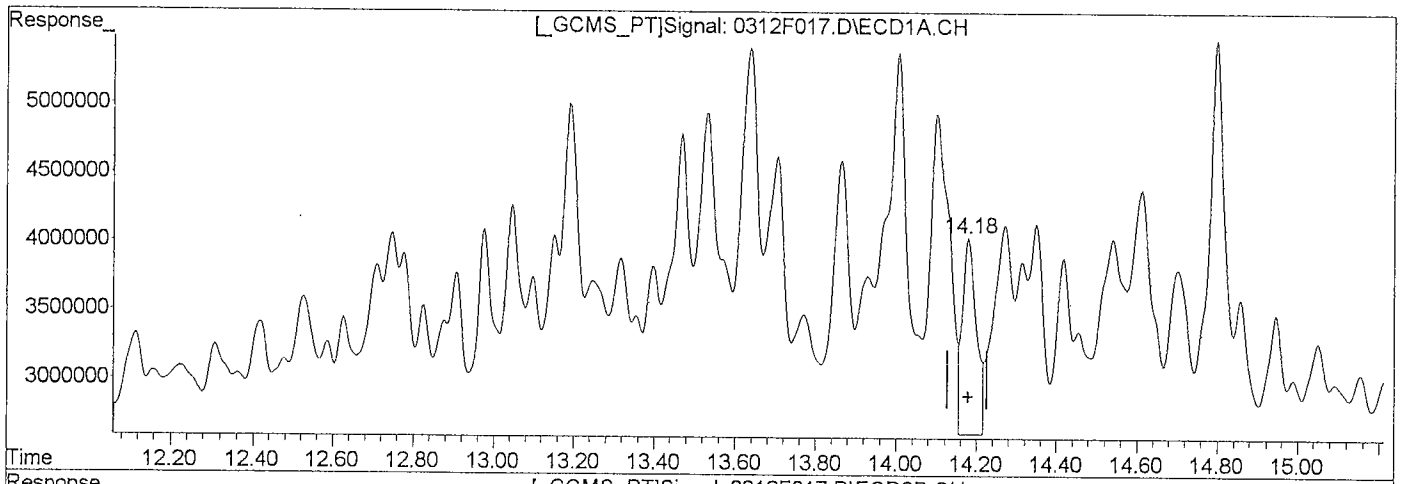
response 2805613

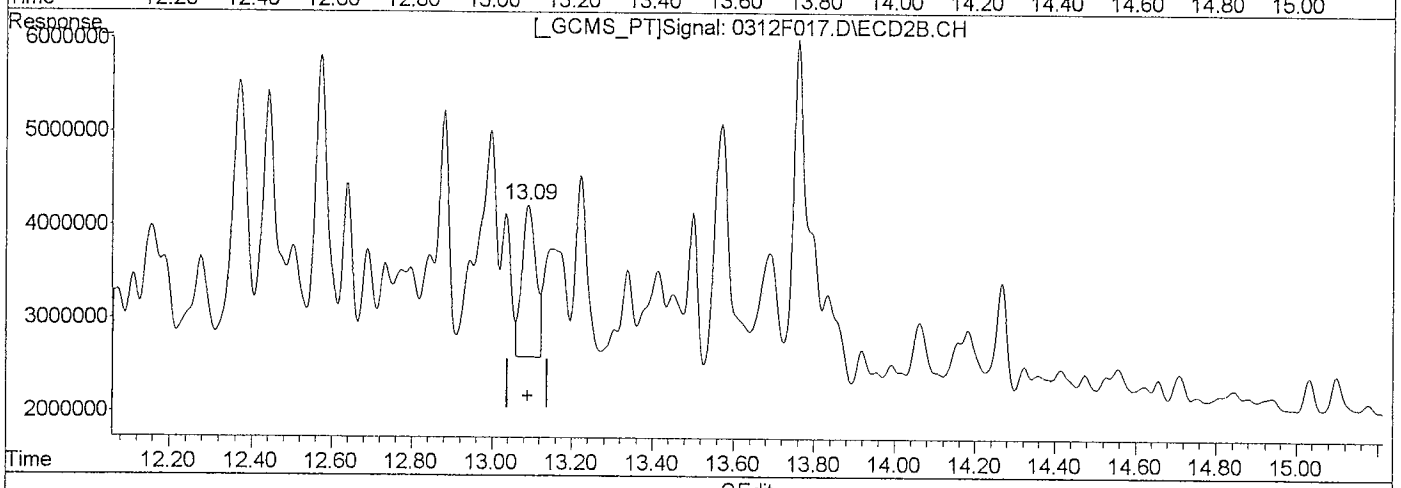
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 1683.989ug/L

response 3436651

(29) Toxaphene {5} #2

13.09min 1244.745ug/L

response 4061253

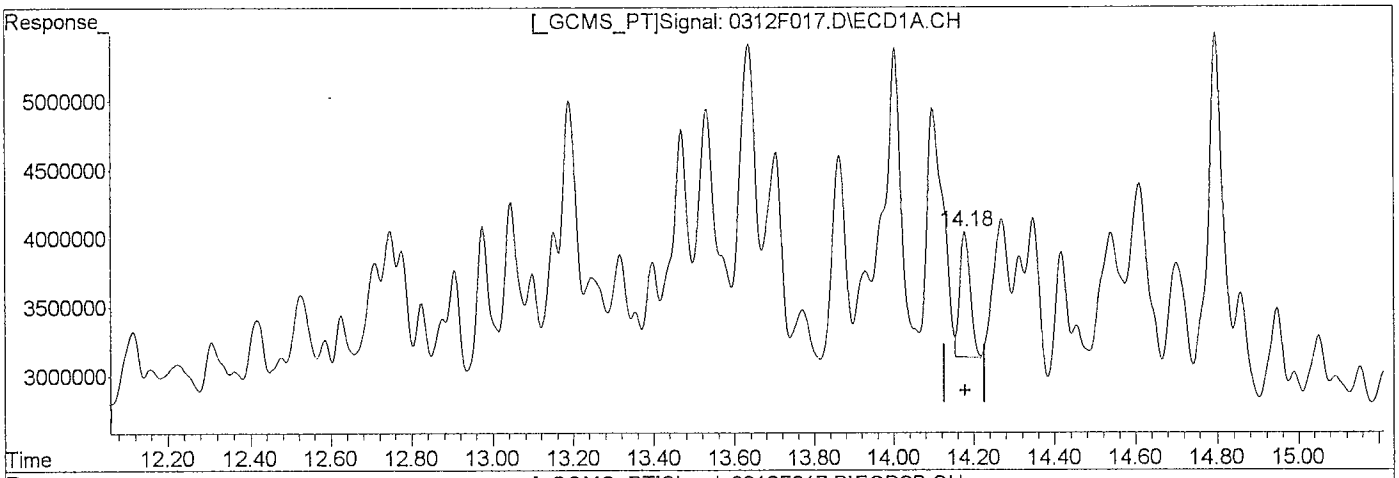
Reviewed
MAR 1 2 2007

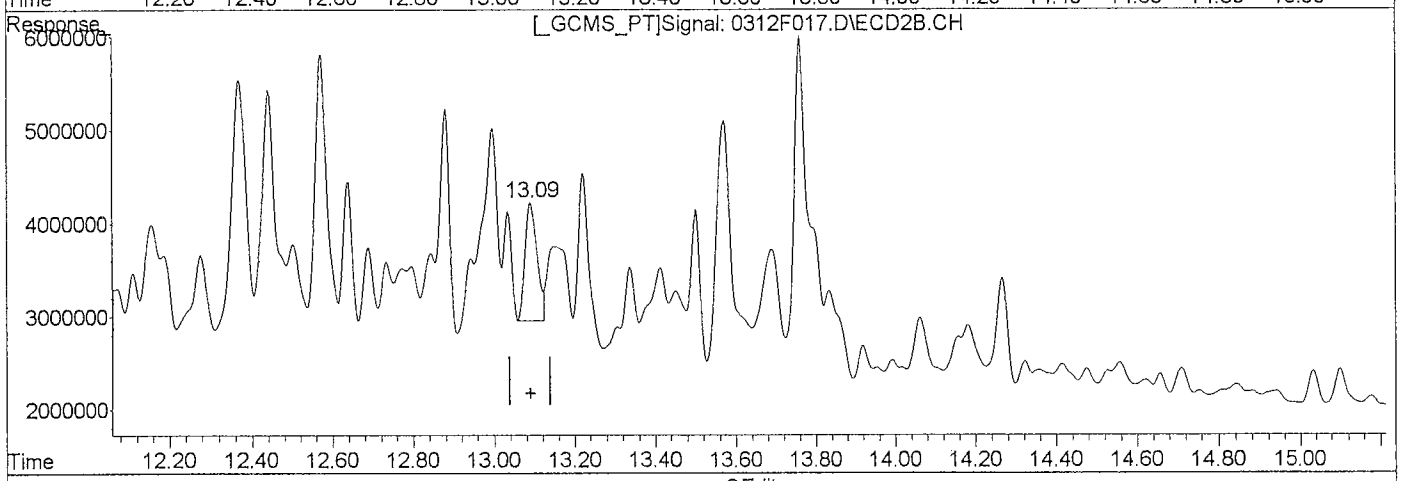
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 785.210ug/L m

response 1602441

(29) Toxaphene {5} #2

13.09min 824.866ug/L m

response 2691306

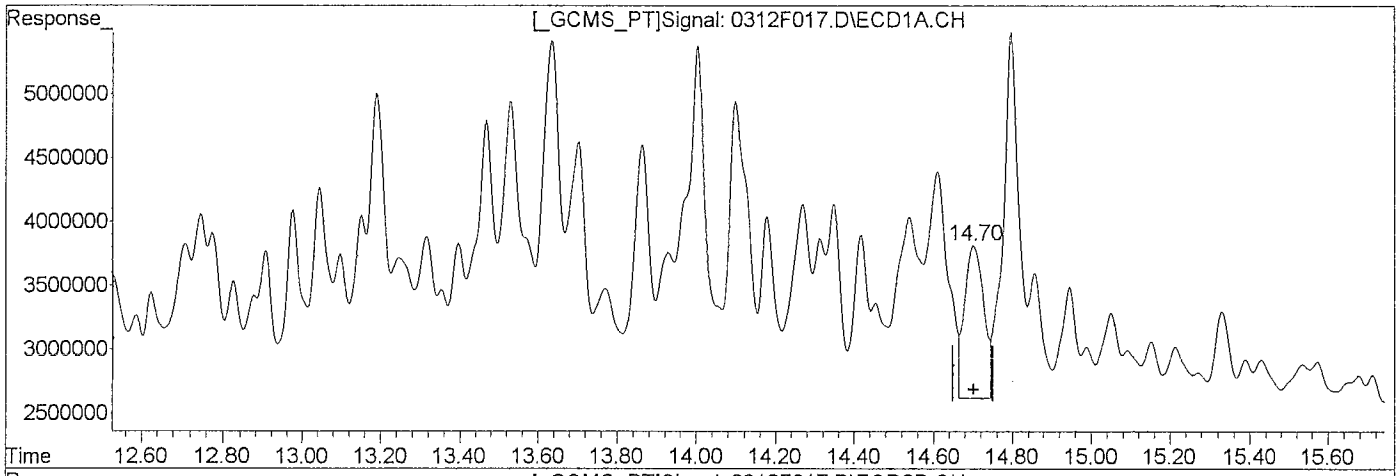
(+) = Expected Retention Time

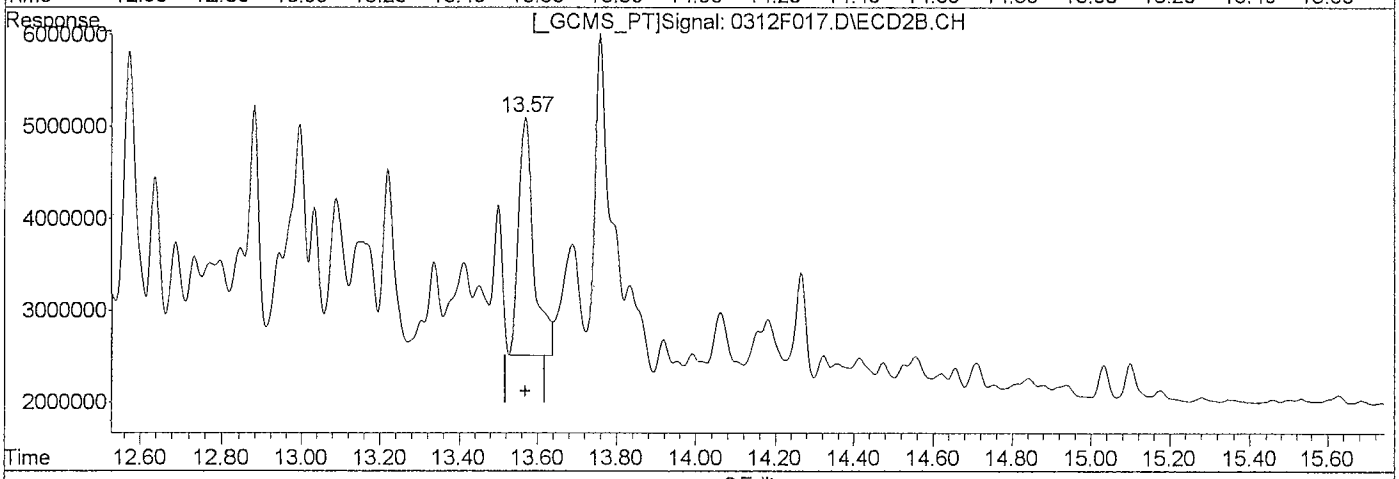
0312F017.D 031207-8081.M Mon Mar 12 17:49:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1838.734ug/L

response 4052149

(30) Toxaphene {6} #2

13.57min 839.279ug/L

response 6977726

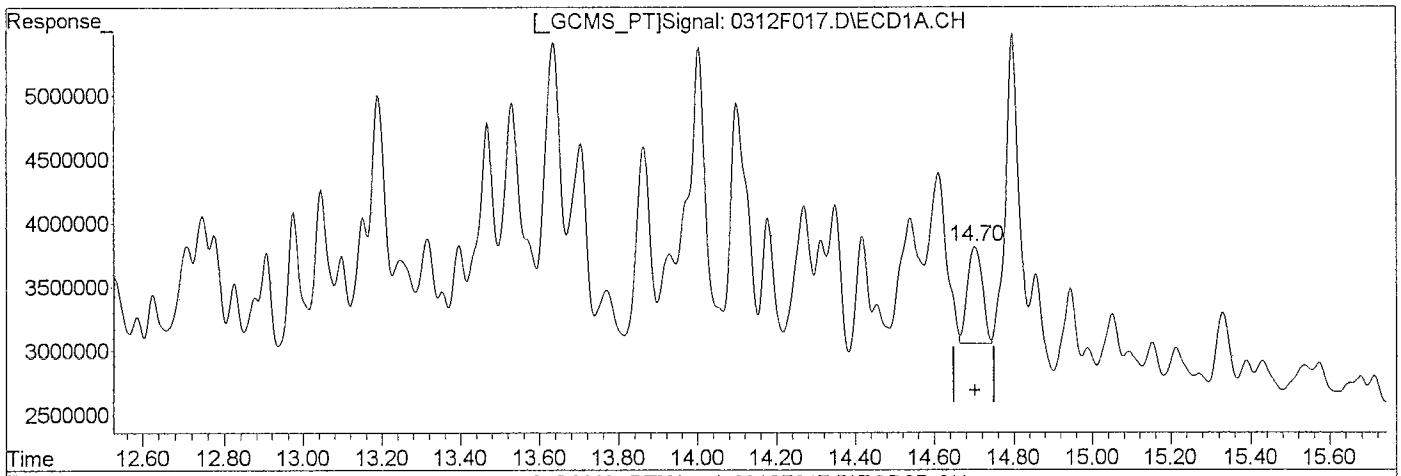
Data
MAR 1 7 2007

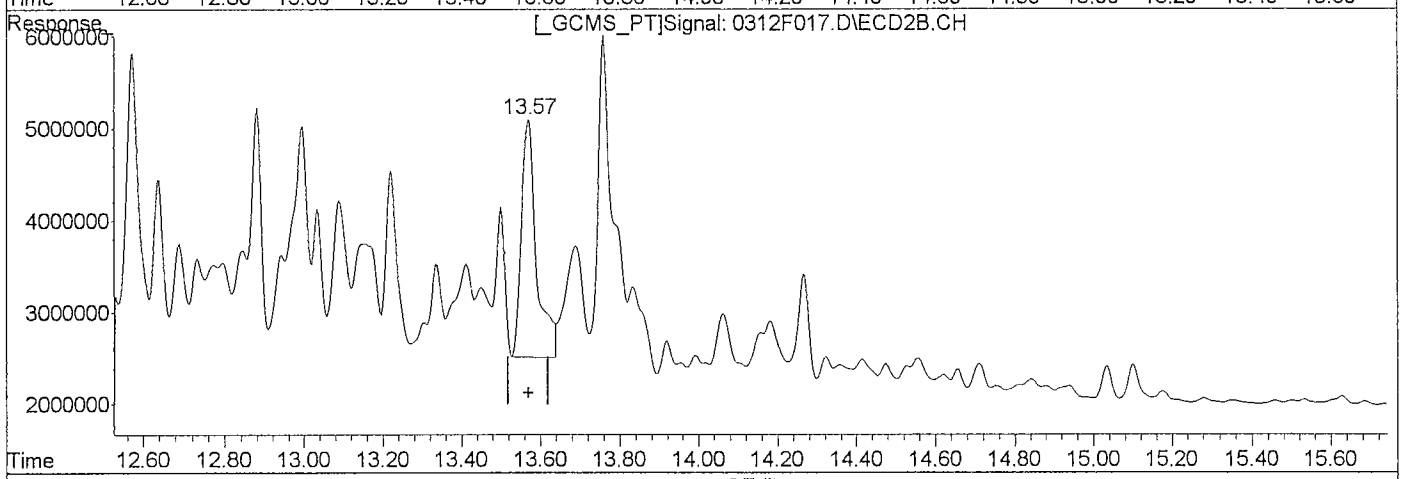
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:49:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 891.363ug/L m

response 1964360

(30) Toxaphene {6} #2

13.57min 839.279ug/L

response 6977726

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:49:11 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F004.D
J:\GC23\DATA\032707\0327F005.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	51	370000	380000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	305000	300000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	474000	504000	6	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	218000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	443000	473000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	380000	-6	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	460000	5	NA	± 15 %	AverageRF
Aldrin	50	53	383000	405000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	388000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	372000	385000	3	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	308000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	363000	374000	3	NA	± 15 %	AverageRF
Dieldrin	50	53	348000	366000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	53	332000	352000	6	NA	± 15 %	AverageRF
Endrin	50	54	293000	318000	8	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	303000	0	NA	± 15 %	AverageRF
4,4'-DDD	50	54	264000	285000	8	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	264000	267000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	293000	299000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	53	276000	296000	7	NA	± 15 %	AverageRF
Endrin Ketone	50	52	327000	340000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	168000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	2620	2980	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2230	8	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	3280	3590	9	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4270	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2100	3	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	2200	2340	6	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	8	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F004.D\0327F004C.D
J:\GC23\DATA\032707\0327F005.D\0327F005C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	55	331000	361000	9	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	51	376000	387000	3	NA	± 15 %	AverageRF
alpha-BHC	50	57	444000	502000	13	NA	± 15 %	AverageRF
beta-BHC	50	56	205000	231000	13	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	56	422000	475000	13	NA	± 15 %	AverageRF
delta-BHC	50	50	385000	382000	-1	NA	± 15 %	AverageRF
Heptachlor	50	57	423000	483000	14	NA	± 15 %	AverageRF
Aldrin	50	57	379000	430000	13	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	55	373000	414000	11	NA	± 15 %	AverageRF
gamma-Chlordane	50	56	376000	419000	12	NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	339000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	55	369000	408000	11	NA	± 15 %	AverageRF
Dieldrin	50	56	365000	409000	12	NA	± 15 %	AverageRF
4,4'-DDE	50	57	347000	397000	14	NA	± 15 %	AverageRF
Endrin	50	57	321000	369000	15	NA	± 15 %	AverageRF
Endosulfan II	50	53	324000	346000	7	NA	± 15 %	AverageRF
4,4'-DDD	50	56	291000	326000	12	NA	± 15 %	AverageRF
Endrin Aldehyde	50	53	287000	306000	7	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	54	337000	365000	8	NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	352000	11	NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	421000	8	NA	± 15 %	AverageRF
Methoxychlor	50	56	178000	200000	12	NA	± 15 %	AverageRF
Toxaphene {1}	1000	990	7470	7410	-1	NA	± 100 %	AverageRF
Toxaphene {2}	1000	970	5510	5330	-3	NA	± 100 %	AverageRF
Toxaphene {3}	1000	990	2950	2930	-1	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3860	1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	980	3260	3210	-2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8390	1	NA	± 100 %	AverageRF
Toxaphene	1000	990	NA	NA	NA	-1	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\032707\0327F004.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 09:22
Date Quantitated: 03/27/2007 09:01
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	JW

Primary Review: LC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F004.D\0327F004C.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 09:22
Date Quantitated: 03/27/2007 09:01
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	[illegible]

Primary Review: [illegible] 3/30/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F004.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F004.D\0327F004c.d			**Vial:**	83
Acqu Date:	03/26/2007 09:22	**Quant Date:**	03/27/2007 09:01	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35	7.11	18980757	18064273	51.34	54.57			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	16.91	15.66	14978284	19337923	49.15	51.43			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC	9.05	8.13	25204076	25121652	53.16	56.52			
Hexachlorobenzene	9.18	7.96	20686198	20707222	49.66	53.49			
beta-BHC	10.06	9.15	10918723	11538278	50.96	56.34			
gamma-BHC (Lindane)	9.59	8.74	23673259	23746087	53.42	56.32			
delta-BHC	10.47	9.59	19018552	19122193	46.95	49.66			
Heptachlor	10.56	9.30	23024454	24173357	52.75	57.10			
Aldrin	11.07	9.79	20259902	21475593	52.91	56.63			
Isodrin	11.60	10.43	16640946	17799038	51.72	55.46			
Heptachlor Epoxide	11.77	10.64	19390184	20682974	51.58	55.40			
gamma-Chlordane	12.26	11.00	19243481	20937890	51.70	55.75			
Endosulfan I	12.39	11.22	15417400	16965046	46.92	50.70			
alpha-Chlordane	12.34	11.15	18689080	20420050	51.47	55.27			
Dieldrin	12.79	11.66	18297384	20463479	52.64	56.01			
4,4'-DDE	12.58	11.47	17611663	19829774	52.98	57.07			
Endrin	13.14	12.13	15897609	18454371	54.24	57.48			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F004.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F004.D\0327F004c.d			**Vial:**	83
Acqu Date:	03/26/2007 09:22	**Quant Date:**	03/27/2007 09:01	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II	13.54	12.53	15143978	17294687	50.23	53.31			
4,4'-DDD	13.36	12.34	14259603	16277625	54.06	55.93			
Endrin Aldehyde	13.71	12.88	13328783	15287470	50.47	53.31			
Endosulfan Sulfate	14.13	13.18	14974816	18263909	51.17	54.25			
4,4'-DDT	13.82	12.74	14778367	17579639	53.48	55.63			
Endrin Ketone	14.75	14.06	17007167	21054426	51.96	53.86			
Methoxychlor	14.47	13.75	8395885	9992137	54.58	56.04			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F004.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.7E+5	3.8E+5	2.7			
alpha-BHC		MS	AverageRF	15		4.7E+5	5.0E+5	6.3			
Hexachlorobenzene		MS	AverageRF	15		4.2E+5	4.1E+5	-0.7			
gamma-BHC (Lindane)		MS	AverageRF	15		4.4E+5	4.7E+5	6.8			
beta-BHC		MS	AverageRF	15		2.1E+5	2.2E+5	1.9			
delta-BHC		MS	AverageRF	15		4.1E+5	3.8E+5	-6.1			
Heptachlor		MS	AverageRF	15		4.4E+5	4.6E+5	5.5			
Aldrin		MS	AverageRF	15		3.8E+5	4.1E+5	5.8			
Isodrin		MS	AverageRF	15		3.2E+5	3.3E+5	3.4			
Heptachlor Epoxide		MS	AverageRF	15		3.8E+5	3.9E+5	3.2			
gamma-Chlordane		MS	AverageRF	15		3.7E+5	3.8E+5	3.4			
alpha-Chlordane		MS	AverageRF	15		3.6E+5	3.7E+5	2.9			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.1E+5	-6.2			
4,4'-DDE		MS	AverageRF	15		3.3E+5	3.5E+5	6.0			
Dieldrin		MS	AverageRF	15		3.5E+5	3.7E+5	5.3			
Endrin		MS	AverageRF	15		2.9E+5	3.2E+5	8.5			
4,4'-DDD		MS	AverageRF	15		2.6E+5	2.9E+5	8.1			
Endosulfan II		MS	AverageRF	15		3.0E+5	3.0E+5	0.4			
Endrin Aldehyde		MS	AverageRF	15		2.6E+5	2.7E+5	0.9			
4,4'-DDT		MS	AverageRF	15		2.8E+5	3.0E+5	7.0			
Endosulfan Sulfate		MS	AverageRF	15		2.9E+5	3.0E+5	2.3			
Methoxychlor		MS	AverageRF	15		1.5E+5	1.7E+5	9.2			
Endrin Ketone		MS	AverageRF	15		3.3E+5	3.4E+5	3.9			
Decachlorobiphenyl		SURR	AverageRF	15		3.0E+5	3.0E+5	-1.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.5

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F004.D\0327F004C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.3E+5	3.6E+5	9.1			
Hexachlorobenzene		MS	AverageRF	15		3.9E+5	4.1E+5	7.0			
alpha-BHC		MS	AverageRF	15		4.4E+5	5.0E+5	13.0			
gamma-BHC (Lindane)		MS	AverageRF	15		4.2E+5	4.7E+5	12.6			
beta-BHC		MS	AverageRF	15		2.0E+5	2.3E+5	12.7			
Heptachlor		MS	AverageRF	15		4.2E+5	4.8E+5	14.2			
delta-BHC		MS	AverageRF	15		3.9E+5	3.8E+5	-0.7			
Aldrin		MS	AverageRF	15		3.8E+5	4.3E+5	13.3			
Isodrin		MS	AverageRF	15		3.2E+5	3.6E+5	10.9			
Heptachlor Epoxide		MS	AverageRF	15		3.7E+5	4.1E+5	10.8			
gamma-Chlordane		MS	AverageRF	15		3.8E+5	4.2E+5	11.5			
alpha-Chlordane		MS	AverageRF	15		3.7E+5	4.1E+5	10.5			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.4E+5	1.4			
4,4'-DDE		MS	AverageRF	15		3.5E+5	4.0E+5	14.1			
Dieldrin		MS	AverageRF	15		3.7E+5	4.1E+5	12.0			
Endrin		MS	AverageRF	15		3.2E+5	3.7E+5	15.0			
4,4'-DDD		MS	AverageRF	15		2.9E+5	3.3E+5	11.9			
Endosulfan II		MS	AverageRF	15		3.2E+5	3.5E+5	6.6			
4,4'-DDT		MS	AverageRF	15		3.2E+5	3.5E+5	11.3			
Endrin Aldehyde		MS	AverageRF	15		2.9E+5	3.1E+5	6.6			
Endosulfan Sulfate		MS	AverageRF	15		3.4E+5	3.7E+5	8.5			
Methoxychlor		MS	AverageRF	15		1.8E+5	2.0E+5	12.1			
Endrin Ketone		MS	AverageRF	15		3.9E+5	4.2E+5	7.7			
Decachlorobiphenyl		SURR	AverageRF	15		3.8E+5	3.9E+5	2.9			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	9.8

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F004.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F004.D\ECD2B.CH
Acq On : 26 Mar 2007 9:22 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:08 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	18980757	18064273	51.342	54.566
24)	s	Decachlorobiphen	16.91	15.66	14978284	19337923	49.149	51.433
		Target Compounds						
2)		alpha-BHC	9.05	8.13	25204076	25121652	53.160	56.523
3)		Hexachlorobenzen	9.18	7.96	20686198	20707222	49.664	53.488
4)		beta-BHC	10.06	9.15	10918723	11538278	50.962	56.338
5)		gamma-BHC (Linda	9.59	8.74	23673259	23746087	53.424	56.317
6)		delta-BHC	10.47	9.59	19018552	19122193	46.953	49.656
7)		Heptachlor	10.56	9.30	23024454	24173357	52.749	57.098
8)		Aldrin	11.07	9.79	20259902	21475593	52.910	56.626
9)		Isodrin	11.60	10.43	16640946	17799038	51.719	55.456
10)		Heptachlor Epoxi	11.77	10.64	19390184	20682974	51.575	55.398
11)		gamma-Chlordane	12.26	11.00	19243481	20937890	51.702	55.753
12)		Endosulfan I	12.39	11.22	15417400	16965046	46.919	50.702
13)		alpha-Chlordane	12.34	11.15	18689080	20420050	51.469	55.274
14)		Dieldrin	12.79	11.66	18297384	20463479	52.640	56.007
15)		4,4'-DDE	12.58	11.47	17611663	19829774	52.984	57.070
16)		Endrin	13.14	12.13	15897609	18454371	54.239	57.480
17)		Endosulfan II	13.54	12.53	15143978	17294687	50.225	53.309
18)		4,4'-DDD	13.36	12.34	14259603	16277625	54.063	55.925
19)		Endrin Aldehyde	13.71	12.88	13328783	15287470	50.471	53.313
20)		Endosulfan Sulfa	14.13	13.18	14974816	18263909	51.171	54.245
21)		4,4'-DDT	13.82	12.74	14778367	17579639	53.475	55.628
22)		Endrin Ketone	14.75	14.06	17007167	21054426	51.957	53.859
23)		Methoxychlor	14.47	13.75	8395885	9992137	54.579	56.043

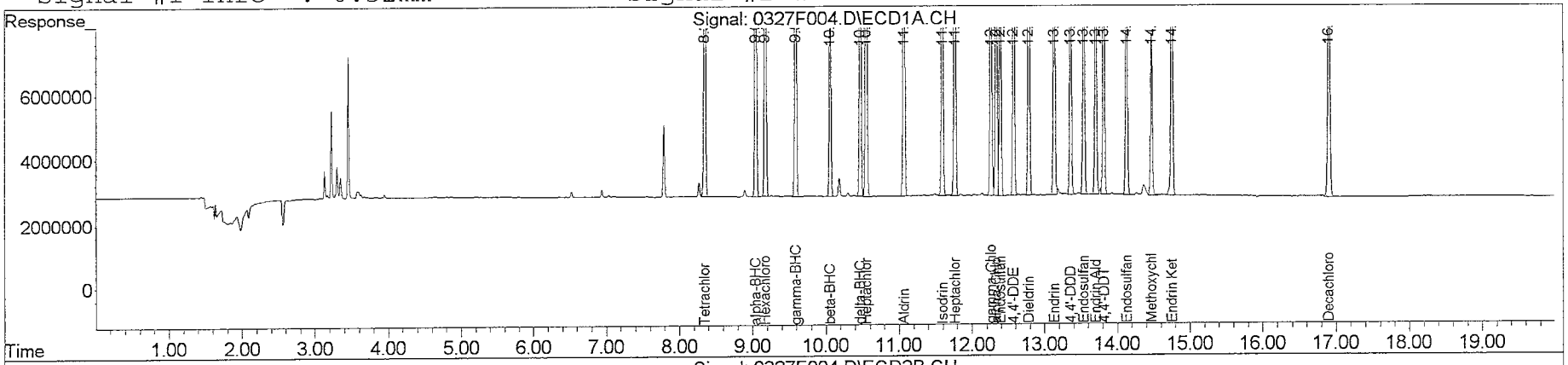
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

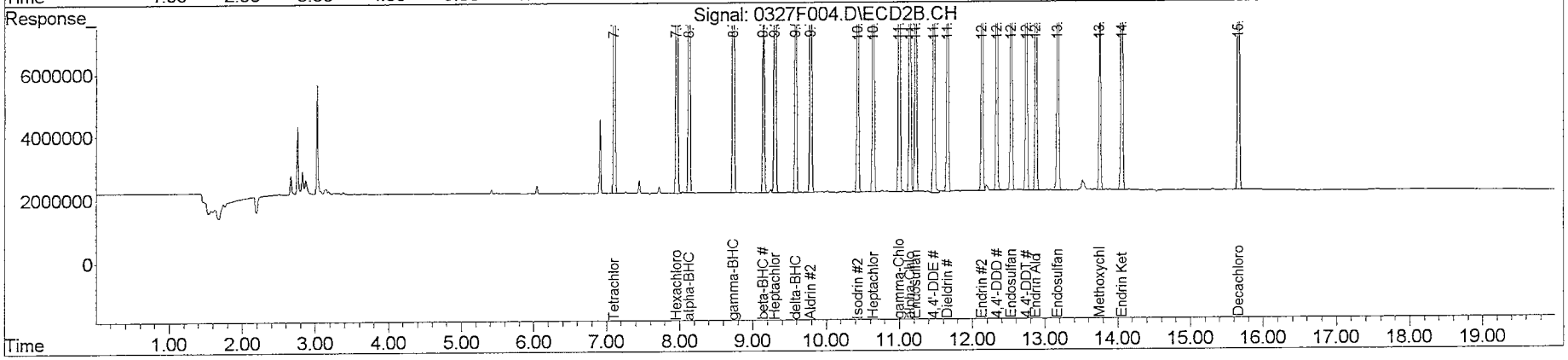
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F004.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F004.D\ECD2B.CH
Acq On : 26 Mar 2007 9:22 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:01 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File:	J:\GC23\DATA\032707\0327F005.D	**Date Acquired:**	03/26/2007 09:49
Lab ID:	KWG0703981-3	**Date Quantitated:**	03/27/2007 09:04
RunType:	CCV	**Batch ID:**	KWG0703981
Matrix:	MISC	**Analysis Method:**	8081A
		MethodJoinID:	MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	JW

Primary Review: LL 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F005.D\0327F005C.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 09:49
Date Quantitated: 03/27/2007 09:04
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	AW

Primary Review: LL 3/30/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F005.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F005.D\0327F005c.d			**Vial:**	84
Acqu Date:	03/26/2007 09:49	**Quant Date:**	03/27/2007 09:04	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F005.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F005.D\0327F005c.d			**Vial:**	84
Acqu Date:	03/26/2007 09:49	**Quant Date:**	03/27/2007 09:04	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,077	993.00			
Toxaphene {1}	12.98	12.38	2983235m	7406820m	1,137	991.02			
Toxaphene {2}	13.05	12.45	2228274m	5325794m	1,076	965.86			
Toxaphene {3}	13.20	12.65	3585381m	2932965m	1,092	994.87			
Toxaphene {4}	13.87	13.00	4266996m	3864333m	1,065	1,013			
Toxaphene {5}	14.19	13.10	2097541m	3211517m	1,028	984.31			
Toxaphene {6}	14.71	13.58	2344594m	8387452m	1,064	1,009			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F005.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,077	1,000	7.7
Toxaphene {1}		MULTI	AverageRF	100		2.6E+3	3.0E+3	13.7			
Toxaphene {2}		MULTI	AverageRF	100		2.1E+3	2.2E+3	7.6			
Toxaphene {3}		MULTI	AverageRF	100		3.3E+3	3.6E+3	9.2			
Toxaphene {4}		MULTI	AverageRF	100		4.0E+3	4.3E+3	6.5			
Toxaphene {5}		MULTI	AverageRF	100		2.0E+3	2.1E+3	2.8			
Toxaphene {6}		MULTI	AverageRF	100		2.2E+3	2.3E+3	6.4			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	7.7

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F005.D\0327F005C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					993.0	1,000	-0.7
Toxaphene {1}		MULTI	AverageRF	100		7.5E+3	7.4E+3	-0.9			
Toxaphene {2}		MULTI	AverageRF	100		5.5E+3	5.3E+3	-3.4			
Toxaphene {3}		MULTI	AverageRF	100		2.9E+3	2.9E+3	-0.5			
Toxaphene {4}		MULTI	AverageRF	100		3.8E+3	3.9E+3	1.3			
Toxaphene {5}		MULTI	AverageRF	100		3.3E+3	3.2E+3	-1.6			
Toxaphene {6}		MULTI	AverageRF	100		8.3E+3	8.4E+3	0.9			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	1.4

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:09 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

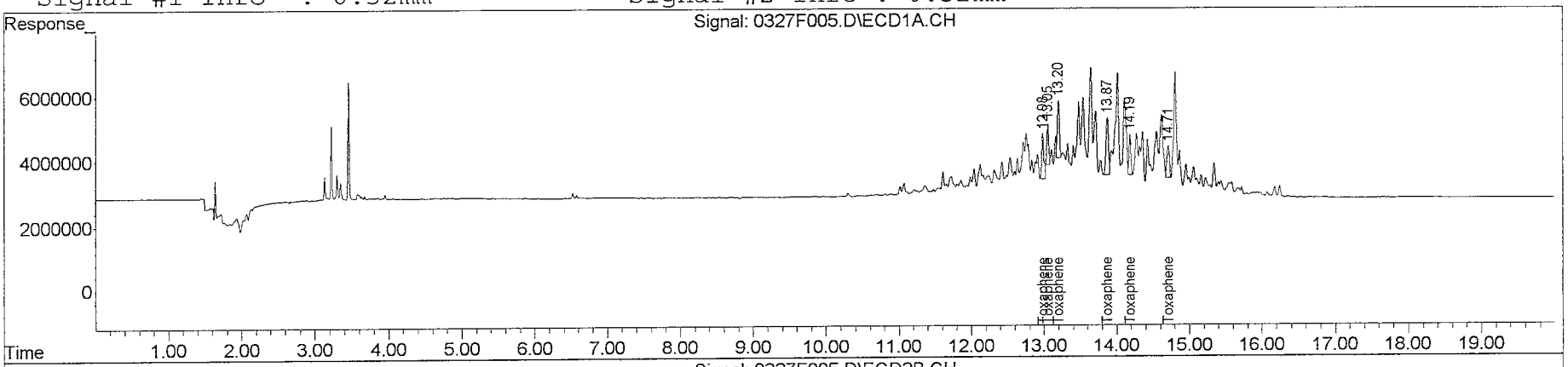
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.38	2983235	7406820	1137.120m	991.022m
26)	Toxaphene {2}	13.05	12.45	2228274	5325794	1075.739m	965.855m
27)	Toxaphene {3}	13.20	12.65	3585381	2932965	1092.123m	994.865m
28)	Toxaphene {4}	13.87	13.00	4266996	3864333	1065.473m	1013.112m
29)	Toxaphene {5}	14.19	13.10	2097541	3211517	1027.813m	984.307m
30)	Toxaphene {6}	14.71	13.58	2344594	8387452	1063.901m	1008.840m

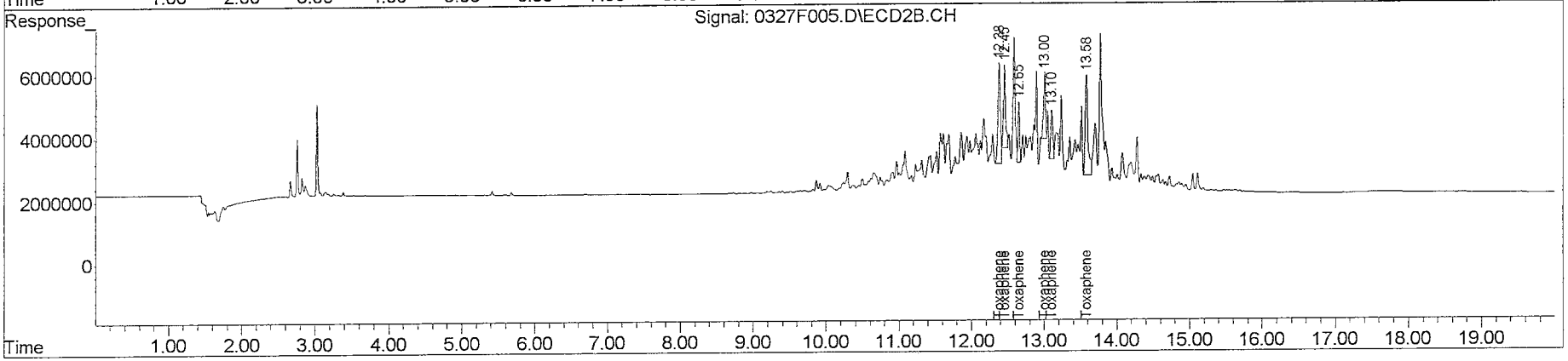
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:04 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

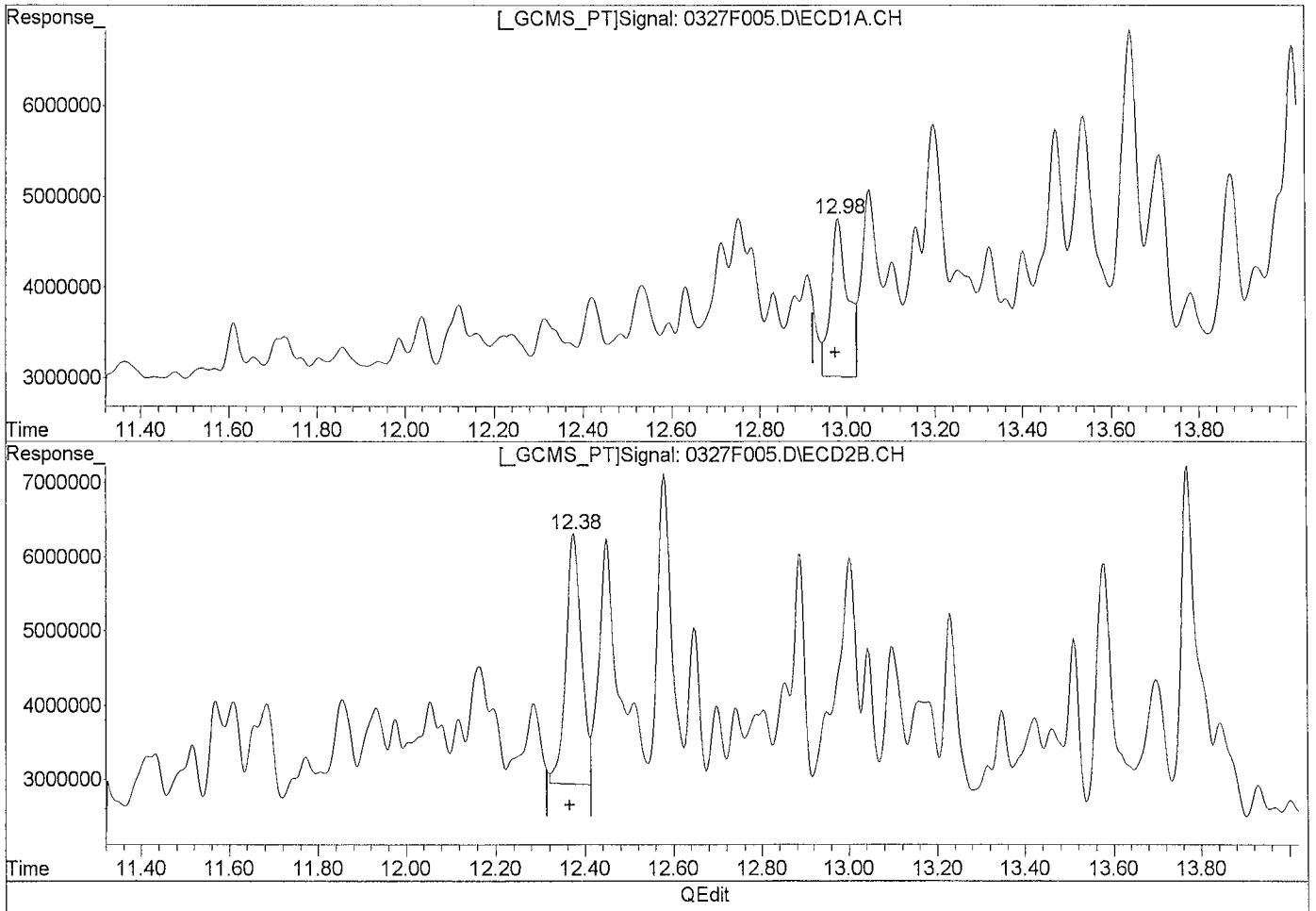




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.98min 1772.795ug/L

response 4650929

(25) Toxaphene #2

12.38min 1089.136ug/L

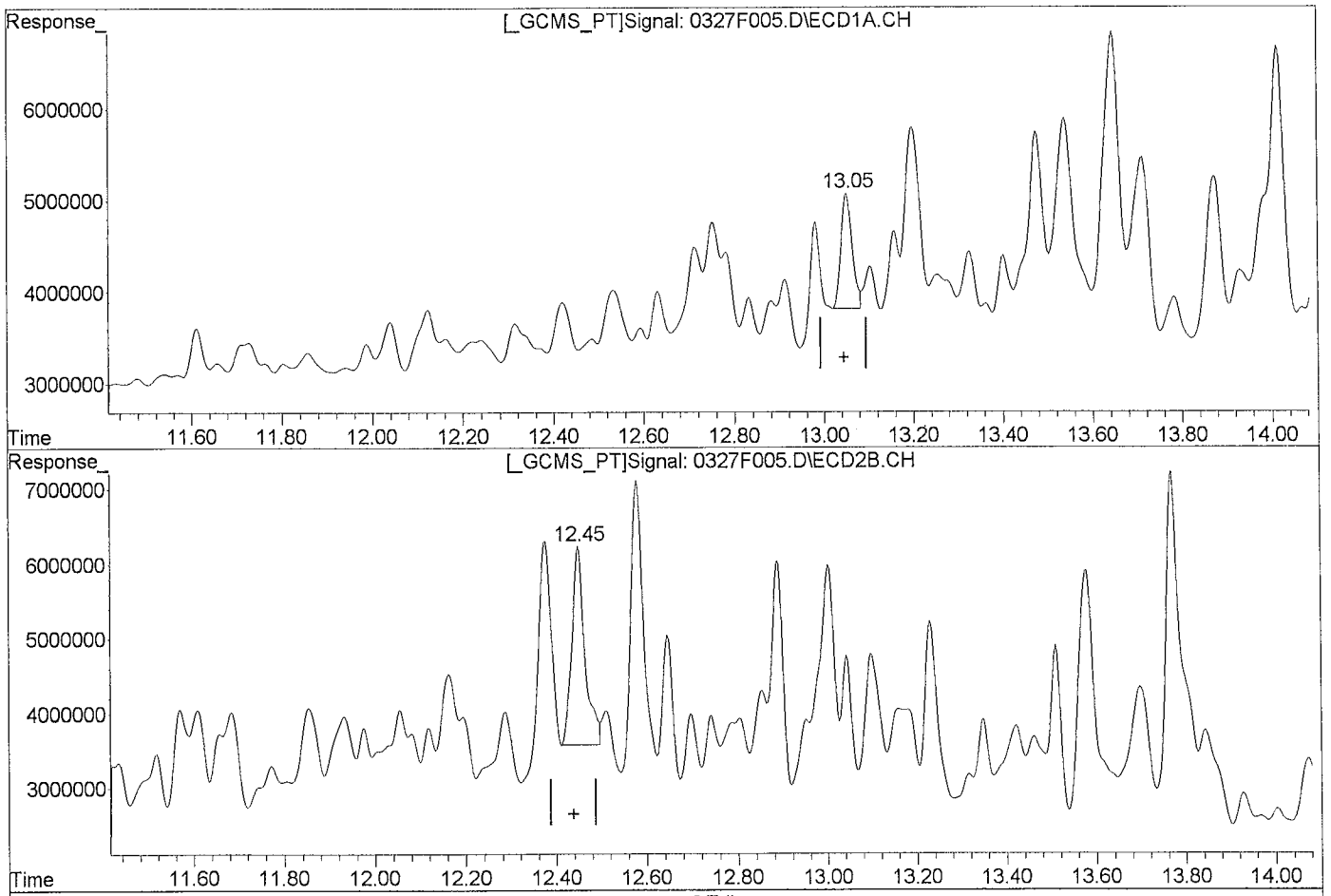
response 8140117

(+) = Expected Retention Time
0327F005.D 031207-8081.M Tue Mar 27 09:02:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 1075.739ug/L m

response 2228274

(26) Toxaphene {2} #2

12.45min 965.855ug/L m

response 5325794

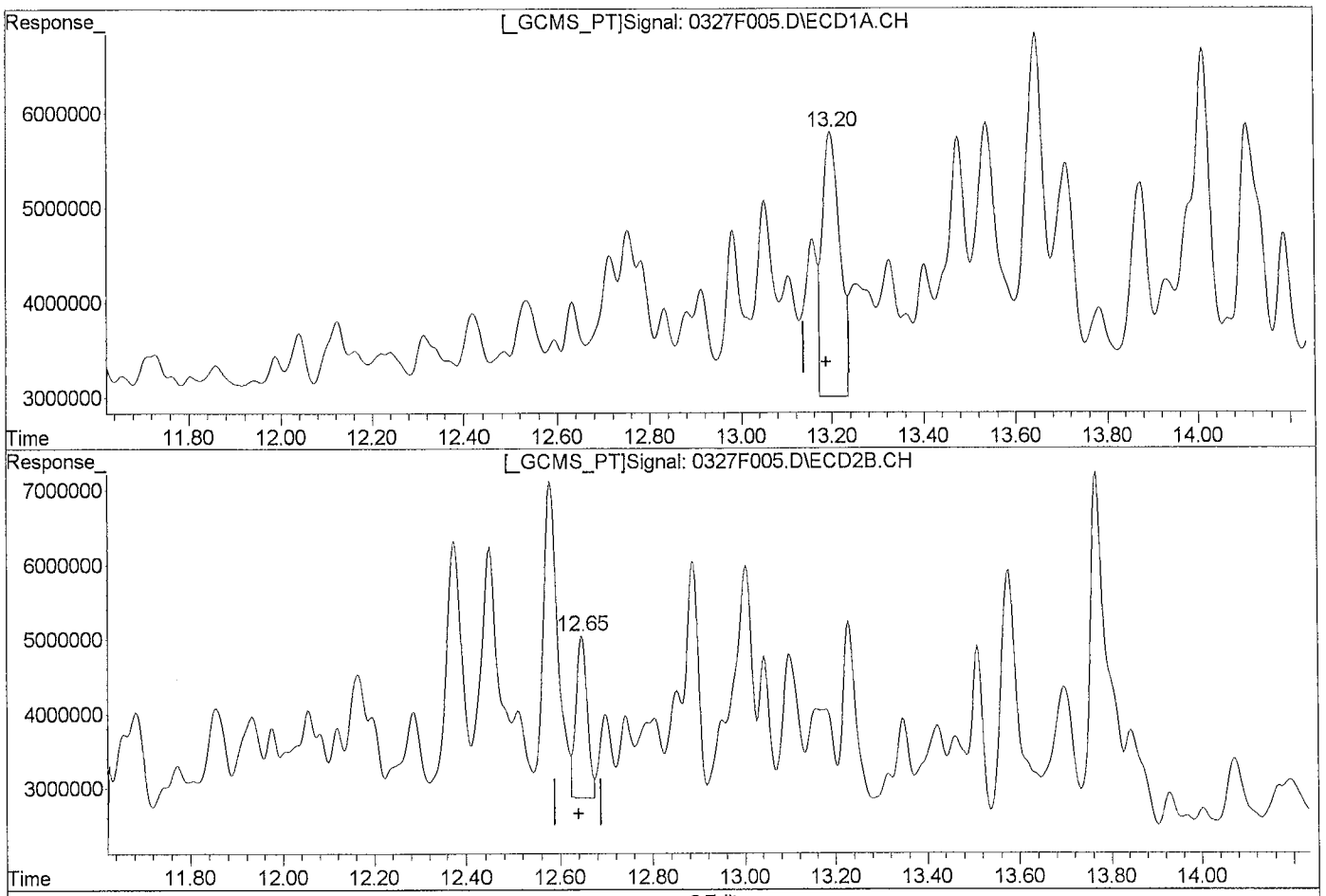
baseline after 3 hr 47

(+) = Expected Retention Time
0327F005.D 031207-8081.M Tue Mar 27 09:03:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 2269.458ug/L

response 7450508

(27) Toxaphene {3} #2

12.65min 1245.241ug/L

response 3671099

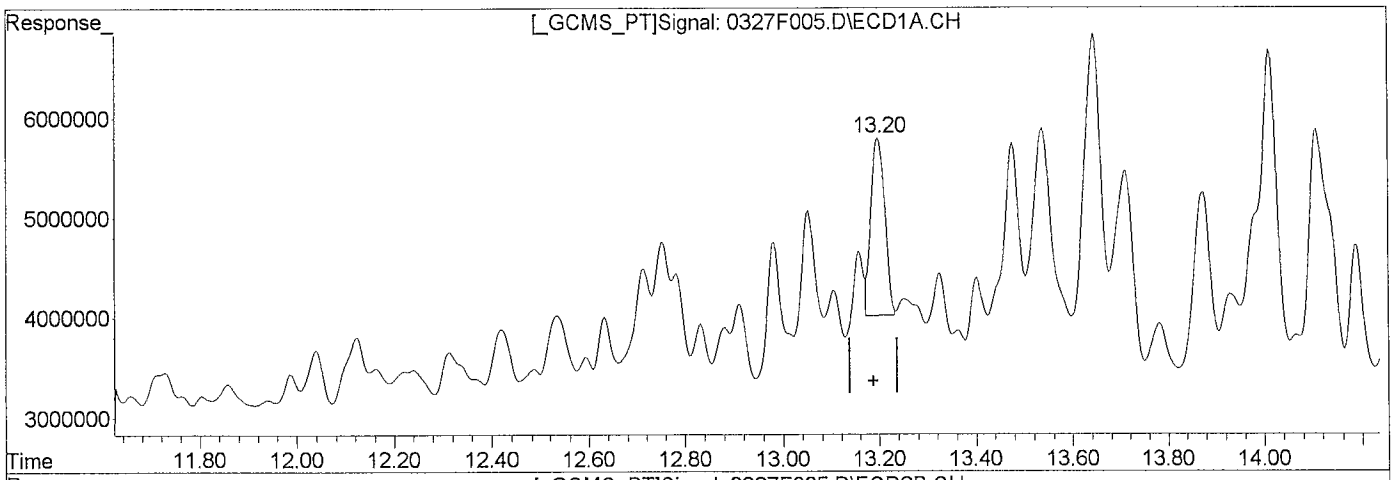
(+) = Expected Retention Time

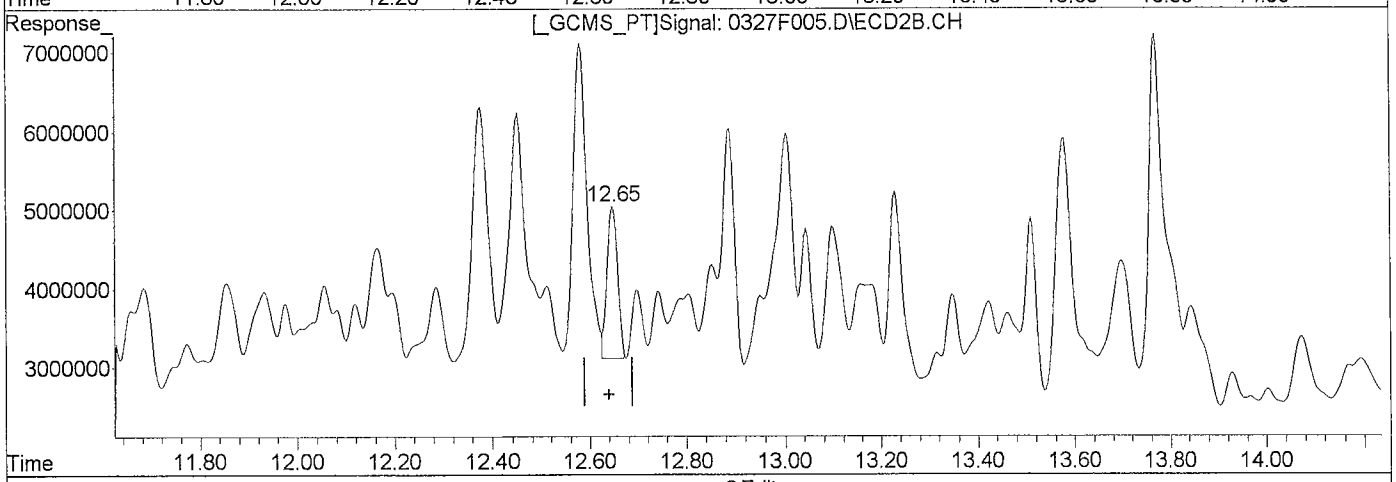
0327F005.D 031207-8081.M Tue Mar 27 09:03:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 1092.123ug/L m

response 3585381

(27) Toxaphene {3} #2

12.65min 994.865ug/L m

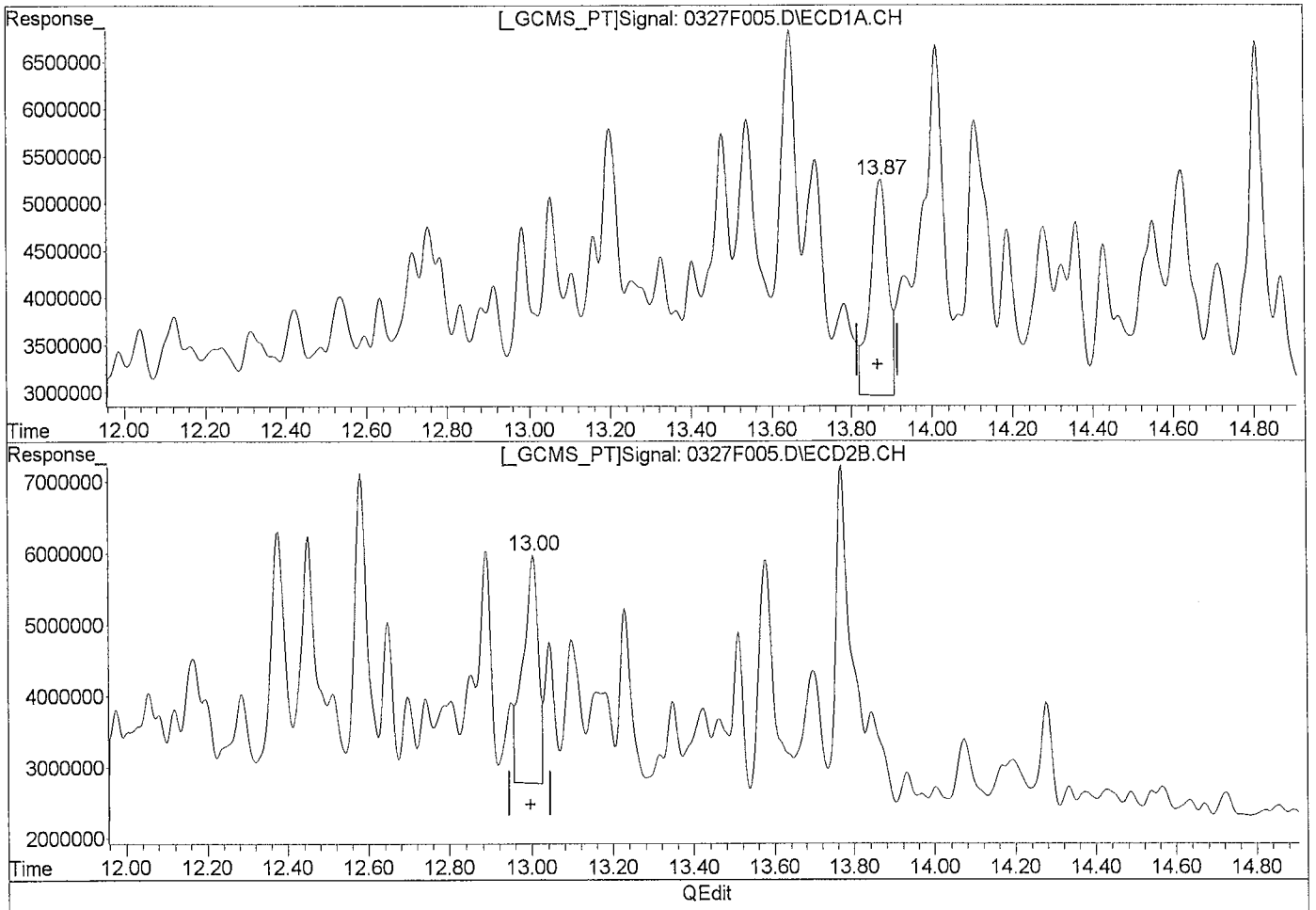
response 2932965

(+) = Expected Retention Time
0327F005.D 031207-8081.M Tue Mar 27 09:03:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 1740.389ug/L

response 6969894

(28) Toxaphene {4} #2

13.00min 2197.172ug/L

response 8380719

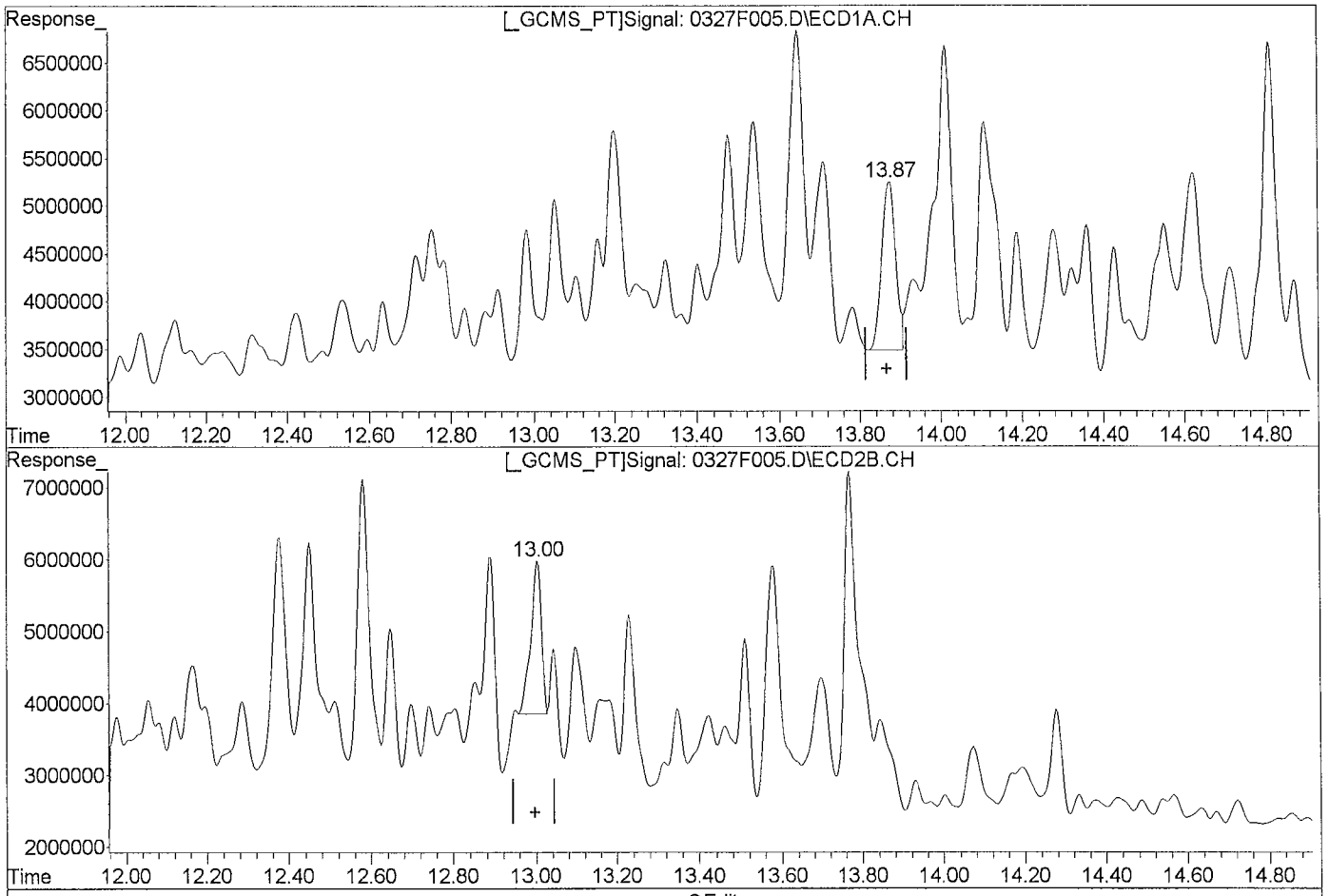
(+) = Expected Retention Time

0327F005.D 031207-8081.M Tue Mar 27 09:03:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 1065.473ug/L m

response 4266996

(28) Toxaphene {4} #2

13.00min 1013.112ug/L m

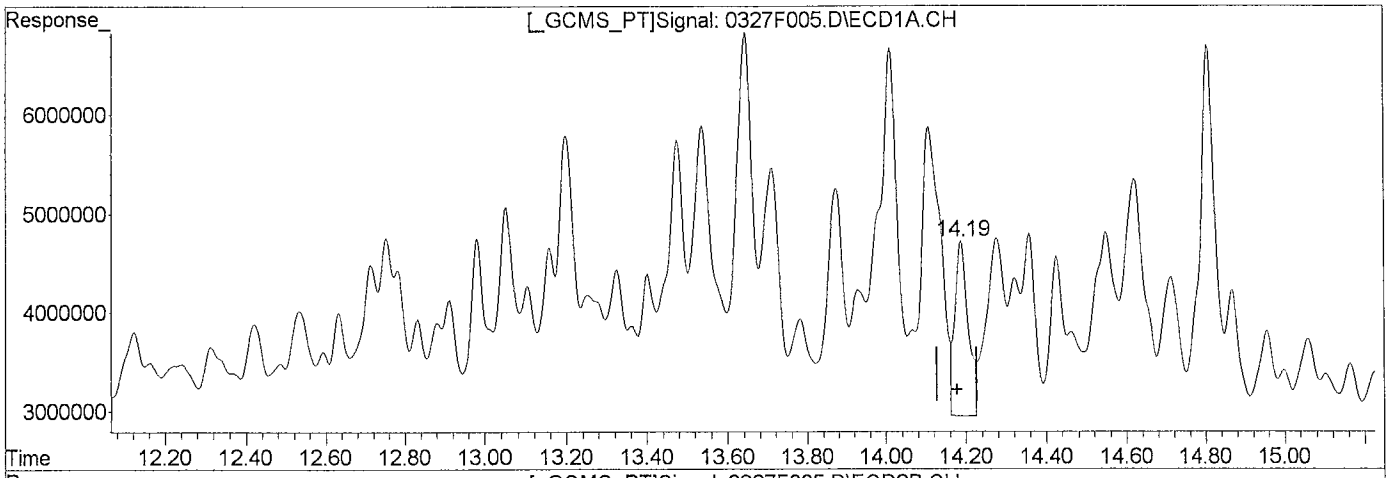
response 3864333

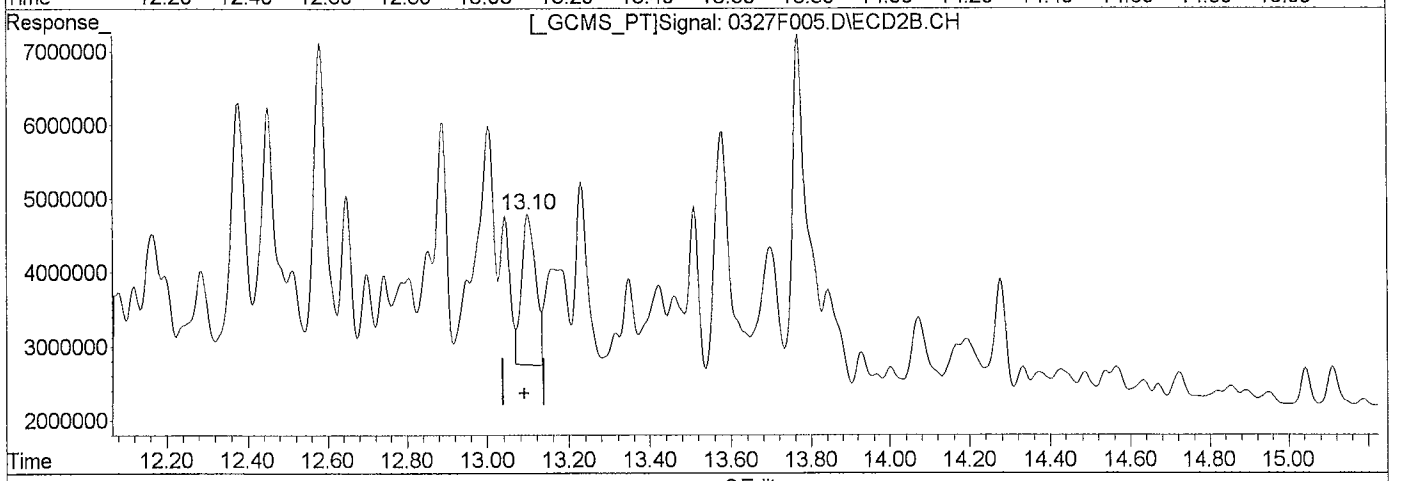
(+) = Expected Retention Time
0327F005.D 031207-8081.M Tue Mar 27 09:04:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 2040.712ug/L

response 4164644

(29) Toxaphene {5} #2

13.10min 1556.632ug/L

response 5078855

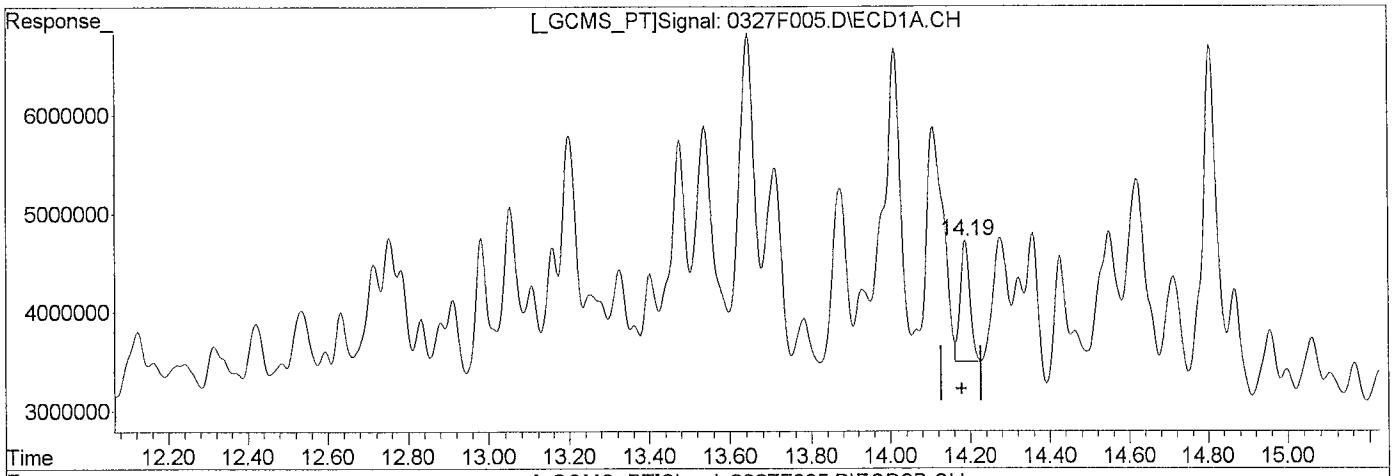
(+) = Expected Retention Time

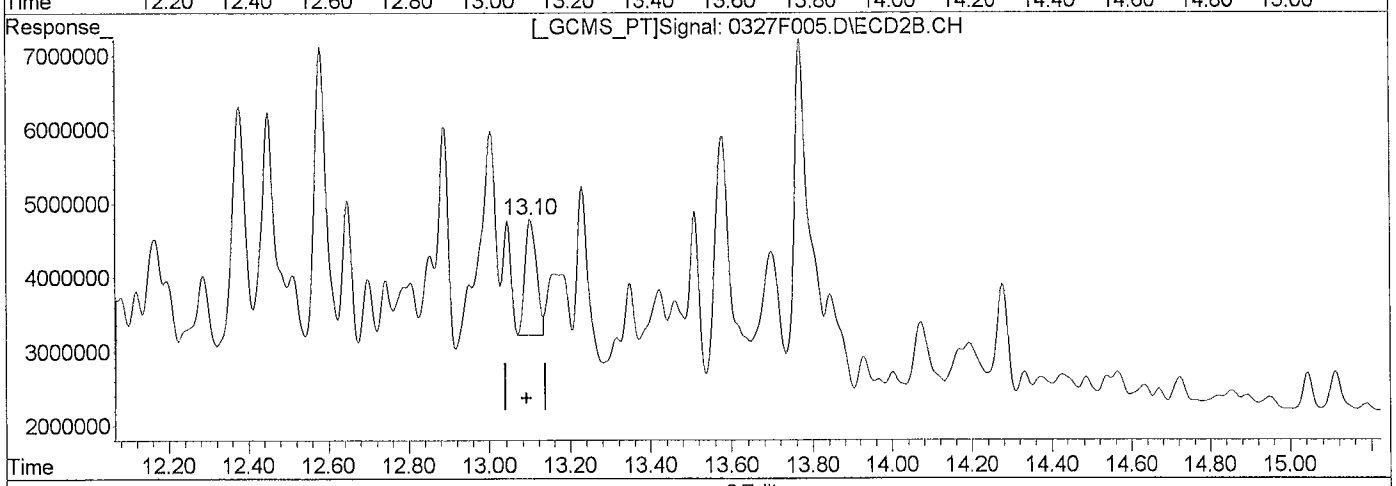
0327F005.D 031207-8081.M Tue Mar 27 09:04:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 1027.813ug/L m

response 2097541

(29) Toxaphene {5} #2

13.10min 984.307ug/L m

response 3211517

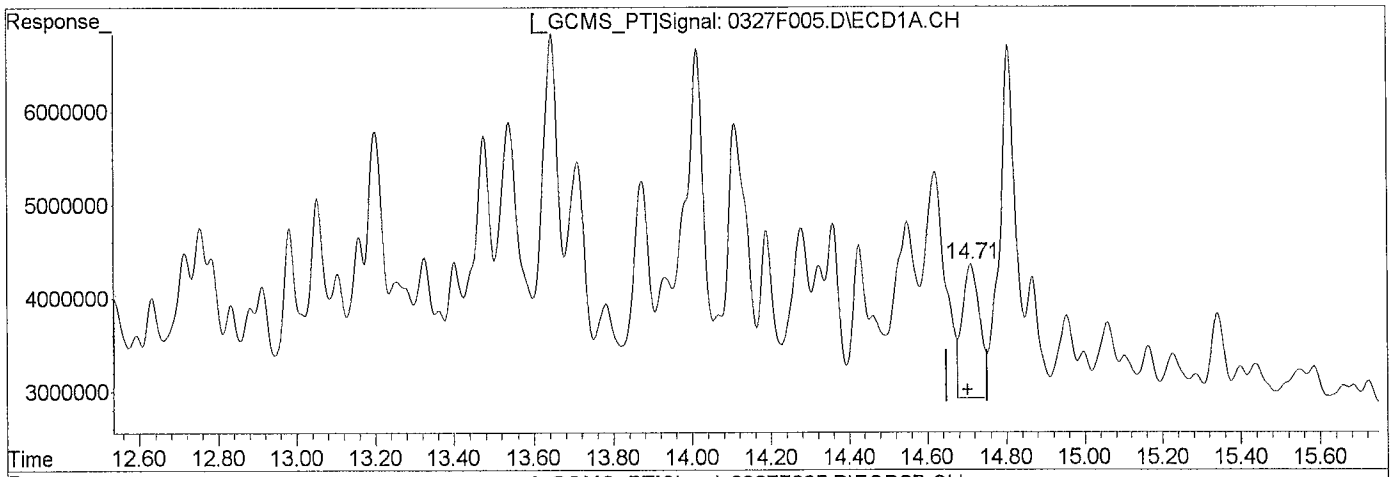
(+) = Expected Retention Time

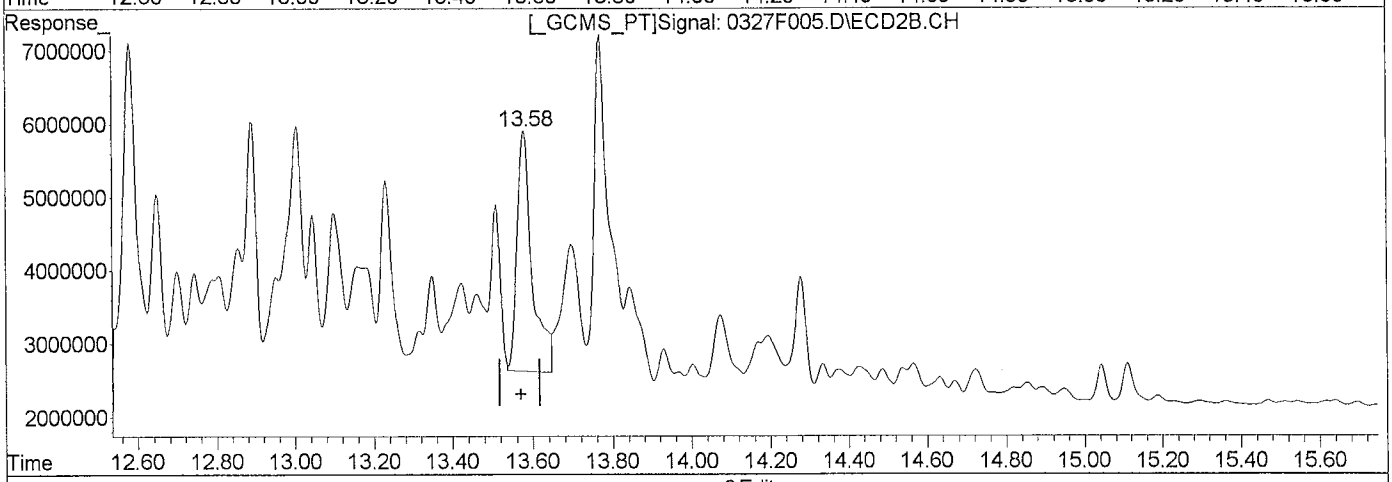
0327F005.D 031207-8081.M Tue Mar 27 09:04:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 1997.273ug/L

response 4401534

(30) Toxaphene {6} #2

13.58min 1057.689ug/L

response 8793583

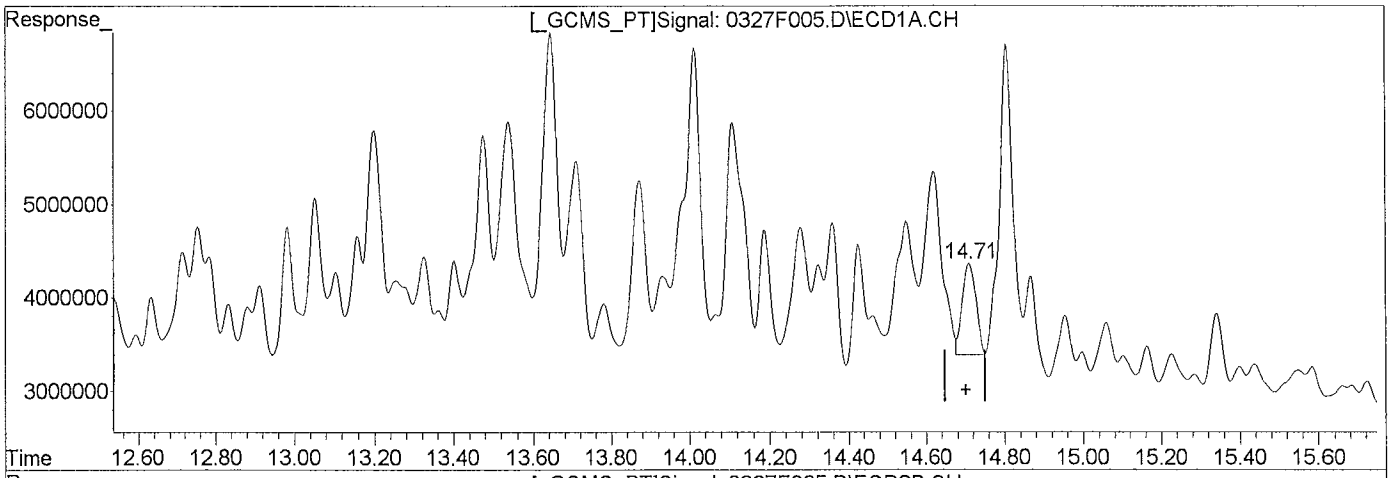
(+) = Expected Retention Time

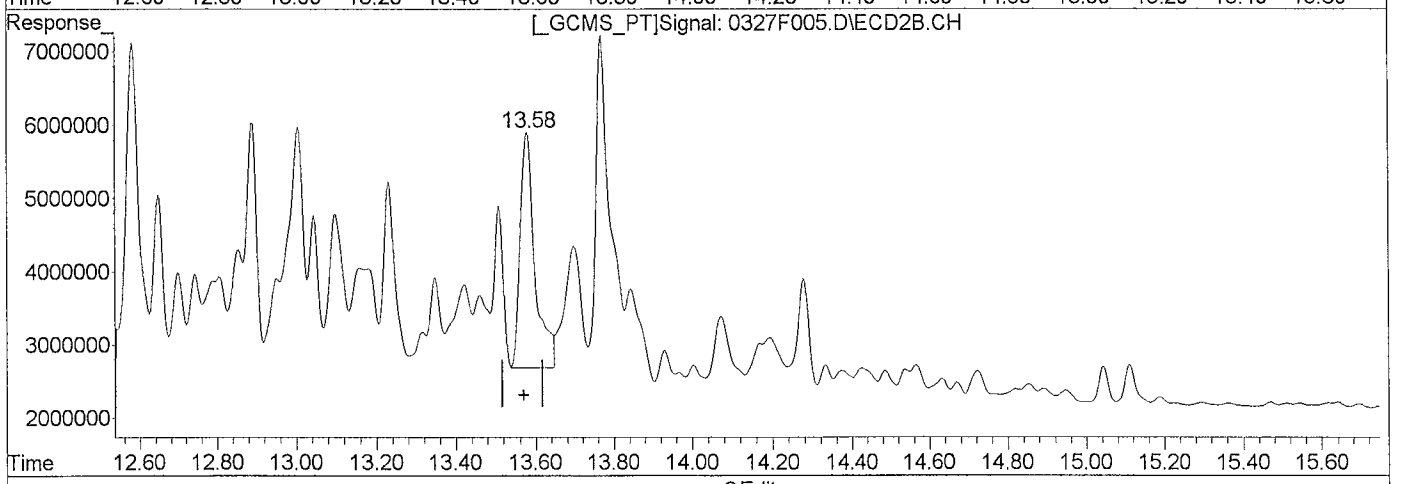
0327F005.D 031207-8081.M Tue Mar 27 09:04:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F005.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F005.D\ECD2B.CH
Acq On : 26 Mar 2007 9:49 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 1063.901ug/L m

response 2344594

(30) Toxaphene {6} #2

13.58min 1008.840ug/L m

response 8387452

(+) = Expected Retention Time
0327F005.D 031207-8081.M Tue Mar 27 09:04:41 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F025.D
J:\GC23\DATA\032707\0327F026.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	370000	382000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	50	305000	303000	-1	NA	± 15 %	AverageRF
alpha-BHC	50	54	474000	510000	8	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	219000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	443000	478000	8	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	384000	-5	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	465000	6	NA	± 15 %	AverageRF
Aldrin	50	53	383000	406000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	390000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	372000	386000	4	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	311000	-5	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	363000	375000	3	NA	± 15 %	AverageRF
Dieldrin	50	53	348000	368000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	53	332000	353000	6	NA	± 15 %	AverageRF
Endrin	50	55	293000	323000	10	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	304000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	54	264000	282000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	264000	267000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	293000	302000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	276000	297000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	327000	340000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	171000	11	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	2620	2730	4	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2190	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	3280	3380	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4290	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2090	2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2270	3	NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA	4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/26/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703981
Units: ug/L

File ID: J:\GC23\DATA\032707\0327F025.D\0327F025C.D
J:\GC23\DATA\032707\0327F026.D\0327F026C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	56	331000	369000	12		NA	± 15 %	AverageRF
Decachlorobiphenyl	50	52	376000	389000	3		NA	± 15 %	AverageRF
alpha-BHC	50	58	444000	515000	16	*	NA	± 15 %	AverageRF
beta-BHC	50	57	205000	232000	13		NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	58	422000	485000	15	*	NA	± 15 %	AverageRF
delta-BHC	50	51	385000	393000	2		NA	± 15 %	AverageRF
Heptachlor	50	58	423000	493000	16	*	NA	± 15 %	AverageRF
Aldrin	50	58	379000	436000	15	*	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	56	373000	420000	12		NA	± 15 %	AverageRF
gamma-Chlordane	50	56	376000	423000	13		NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	344000	3		NA	± 15 %	AverageRF
alpha-Chlordane	50	56	369000	414000	12		NA	± 15 %	AverageRF
Dieldrin	50	57	365000	414000	13		NA	± 15 %	AverageRF
4,4'-DDE	50	58	347000	400000	15	*	NA	± 15 %	AverageRF
Endrin	50	59	321000	378000	18	*	NA	± 15 %	AverageRF
Endosulfan II	50	54	324000	349000	8		NA	± 15 %	AverageRF
4,4'-DDD	50	57	291000	330000	14		NA	± 15 %	AverageRF
Endrin Aldehyde	50	54	287000	308000	7		NA	± 15 %	AverageRF
Endosulfan Sulfate	50	55	337000	369000	10		NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	356000	13		NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	419000	7		NA	± 15 %	AverageRF
Methoxychlor	50	57	178000	204000	15		NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	7470	7600	2		NA	± 100 %	AverageRF
Toxaphene {2}	1000	1000	5510	5700	3		NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	2970	1		NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3890	2		NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	3260	3320	2		NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8380	1		NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA		2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\032707\0327F025.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 18:40
Date Quantitated: 03/27/2007 09:08
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	FLV

Primary Review: LL 3/30/07

Secondary Review: [illegible] 3/30/07

Exception Report

Data File: J:\GC23\DATA\032707\0327F025.D\0327F025C.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 18:40
Date Quantitated: 03/27/2007 09:08
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	JLN

Primary Review: LC 3/30/07

Secondary Review: [illegible] 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F025.D\0327F025c.d			**Vial:**	83
Acqu Date:	03/26/2007 18:40	**Quant Date:**	03/27/2007 09:08	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.34	7.10	19108583	18456788	51.69	55.75			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	16.90	15.66	15158670	19437238	49.74	51.70			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC	9.04	8.12	25487772	25737979	53.76	57.91			
Hexachlorobenzene	9.17	7.95	20978200	21202299	50.37	54.77			
beta-BHC	10.06	9.14	10956935	11603073	51.14	56.66			
gamma-BHC (Lindane)	9.59	8.73	23903443	24269165	53.94	57.56			
delta-BHC	10.47	9.58	19194467	19673050	47.39	51.09			
Heptachlor	10.55	9.30	23227676	24638275	53.22	58.20			
Aldrin	11.07	9.78	20320517	21808724	53.07	57.50			
Isodrin	11.59	10.43	16674400	18093352	51.82	56.37			
Heptachlor Epoxide	11.76	10.64	19489730	20978826	51.84	56.19			
gamma-Chlordane	12.26	10.99	19277742	21173466	51.79	56.38			
Endosulfan I	12.39	11.22	15530748	17181978	47.26	51.35			
alpha-Chlordane	12.33	11.14	18747937	20676570	51.63	55.97			
Dieldrin	12.78	11.65	18392570	20717906	52.91	56.70			
4,4'-DDE	12.57	11.47	17672440	20010934m	53.17	57.59			
Endrin	13.13	12.13	16148782	18894367	55.10	58.85			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F025.D\0327F025c.d			**Vial:**	83
Acqu Date:	03/26/2007 18:40	**Quant Date:**	03/27/2007 09:08	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II	13.54	12.53	15216053	17458159	50.46	53.81			
4,4'-DDD	13.36	12.33	14119756	16522598	53.53	56.77			
Endrin Aldehyde	13.70	12.87	13351709	15402792	50.56	53.72			
Endosulfan Sulfate	14.13	13.17	15097789	18448350	51.59	54.79			
4,4'-DDT	13.81	12.74	14862596	17792441	53.78	56.30			
Endrin Ketone	14.75	14.05	16985411	20930633	51.89	53.54			
Methoxychlor	14.47	13.75	8534521	10217071	55.48	57.31			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F025.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.7E+5	3.8E+5	3.4			
alpha-BHC		MS	AverageRF	15		4.7E+5	5.1E+5	7.5			
Hexachlorobenzene		MS	AverageRF	15		4.2E+5	4.2E+5	0.7			
gamma-BHC (Lindane)		MS	AverageRF	15		4.4E+5	4.8E+5	7.9			
beta-BHC		MS	AverageRF	15		2.1E+5	2.2E+5	2.3			
delta-BHC		MS	AverageRF	15		4.1E+5	3.8E+5	-5.2			
Heptachlor		MS	AverageRF	15		4.4E+5	4.6E+5	6.4			
Aldrin		MS	AverageRF	15		3.8E+5	4.1E+5	6.1			
Isodrin		MS	AverageRF	15		3.2E+5	3.3E+5	3.6			
Heptachlor Epoxide		MS	AverageRF	15		3.8E+5	3.9E+5	3.7			
gamma-Chlordane		MS	AverageRF	15		3.7E+5	3.9E+5	3.6			
alpha-Chlordane		MS	AverageRF	15		3.6E+5	3.7E+5	3.3			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.1E+5	-5.5			
4,4'-DDE		MS	AverageRF	15		3.3E+5	3.5E+5	6.3			
Dieldrin		MS	AverageRF	15		3.5E+5	3.7E+5	5.8			
Endrin		MS	AverageRF	15		2.9E+5	3.2E+5	10.2			
4,4'-DDD		MS	AverageRF	15		2.6E+5	2.8E+5	7.1			
Endosulfan II		MS	AverageRF	15		3.0E+5	3.0E+5	0.9			
Endrin Aldehyde		MS	AverageRF	15		2.6E+5	2.7E+5	1.1			
4,4'-DDT		MS	AverageRF	15		2.8E+5	3.0E+5	7.6			
Endosulfan Sulfate		MS	AverageRF	15		2.9E+5	3.0E+5	3.2			
Methoxychlor		MS	AverageRF	15		1.5E+5	1.7E+5	11.0			
Endrin Ketone		MS	AverageRF	15		3.3E+5	3.4E+5	3.8			
Decachlorobiphenyl		SURR	AverageRF	15		3.0E+5	3.0E+5	-0.5			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.9

5.5
CC 3/30/07

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F025.D\0327F025C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.3E+5	3.7E+5	11.5			
Hexachlorobenzene		MS	AverageRF	15		3.9E+5	4.2E+5	9.5			
alpha-BHC		MS	AverageRF	15		4.4E+5	5.1E+5	15.8 *			
gamma-BHC (Lindane)		MS	AverageRF	15		4.2E+5	4.9E+5	15.1 *			
beta-BHC		MS	AverageRF	15		2.0E+5	2.3E+5	13.3			
Heptachlor		MS	AverageRF	15		4.2E+5	4.9E+5	16.4 *			
delta-BHC		MS	AverageRF	15		3.9E+5	3.9E+5	2.2			
Aldrin		MS	AverageRF	15		3.8E+5	4.4E+5	15.0 *			
Isodrin		MS	AverageRF	15		3.2E+5	3.6E+5	12.7			
Heptachlor Epoxide		MS	AverageRF	15		3.7E+5	4.2E+5	12.4			
gamma-Chlordane		MS	AverageRF	15		3.8E+5	4.2E+5	12.8			
alpha-Chlordane		MS	AverageRF	15		3.7E+5	4.1E+5	11.9			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.4E+5	2.7			
4,4'-DDE		MS	AverageRF	15		3.5E+5	4.0E+5	15.2 *			
Dieldrin		MS	AverageRF	15		3.7E+5	4.1E+5	13.4			
Endrin		MS	AverageRF	15		3.2E+5	3.8E+5	17.7 *			
4,4'-DDD		MS	AverageRF	15		2.9E+5	3.3E+5	13.5			
Endosulfan II		MS	AverageRF	15		3.2E+5	3.5E+5	7.6			
4,4'-DDT		MS	AverageRF	15		3.2E+5	3.6E+5	12.6			
Endrin Aldehyde		MS	AverageRF	15		2.9E+5	3.1E+5	7.4			
Endosulfan Sulfate		MS	AverageRF	15		3.4E+5	3.7E+5	9.6			
Methoxychlor		MS	AverageRF	15		1.8E+5	2.0E+5	14.6			
Endrin Ketone		MS	AverageRF	15		3.9E+5	4.2E+5	7.1			
Decachlorobiphenyl		SURR	AverageRF	15		3.8E+5	3.9E+5	3.4			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~11.4~~

9.5
CC 3/30/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F025.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F025.D\ECD2B.CH
Acq On : 26 Mar 2007 6:40 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:31 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.34	7.10	19108583	18456788	51.687	55.751
24)	s	Decachlorobiphen	16.90	15.66	15158670	19437238	49.741	51.698
		Target Compounds						
2)		alpha-BHC	9.04	8.12	25487772	25737979	53.758	57.910
3)		Hexachlorobenzen	9.17	7.95	20978200	21202299	50.365	54.767
4)		beta-BHC	10.06	9.14	10956935	11603073	51.140	56.655
5)		gamma-BHC (Linda	9.59	8.73	23903443	24269165	53.944	57.557
6)		delta-BHC	10.47	9.58	19194467	19673050	47.387	51.087
7)		Heptachlor	10.55	9.30	23227676	24638275	53.215	58.196
8)		Aldrin	11.07	9.78	20320517	21808724	53.068	57.504
9)		Isodrin	11.59	10.43	16674400	18093352	51.823	56.373
10)		Heptachlor Epoxi	11.76	10.64	19489730	20978826	51.840	56.191
11)		gamma-Chlordane	12.26	10.99	19277742	21173466	51.794	56.380
12)		Endosulfan I	12.39	11.22	15530748	17181978	47.264	51.350
13)		alpha-Chlordane	12.33	11.14	18747937	20676570	51.631	55.969
14)		Dieldrin	12.78	11.65	18392570	20717906	52.914	56.703
15)		4,4'-DDE	12.57	11.47	17672440	20010934	53.167	57.591m
16)		Endrin	13.13	12.13	16148782	18894367	55.096	58.851
17)		Endosulfan II	13.54	12.53	15216053	17458159	50.464	53.813
18)		4,4'-DDD	13.36	12.33	14119756	16522598	53.533	56.767
19)		Endrin Aldehyde	13.70	12.87	13351709	15402792	50.558	53.715
20)		Endosulfan Sulfa	14.13	13.17	15097789	18448350	51.591	54.793
21)		4,4'-DDT	13.81	12.74	14862596	17792441	53.780	56.301
22)		Endrin Ketone	14.75	14.05	16985411	20930633	51.890	53.542
23)		Methoxychlor	14.47	13.75	8534521	10217071	55.480	57.305

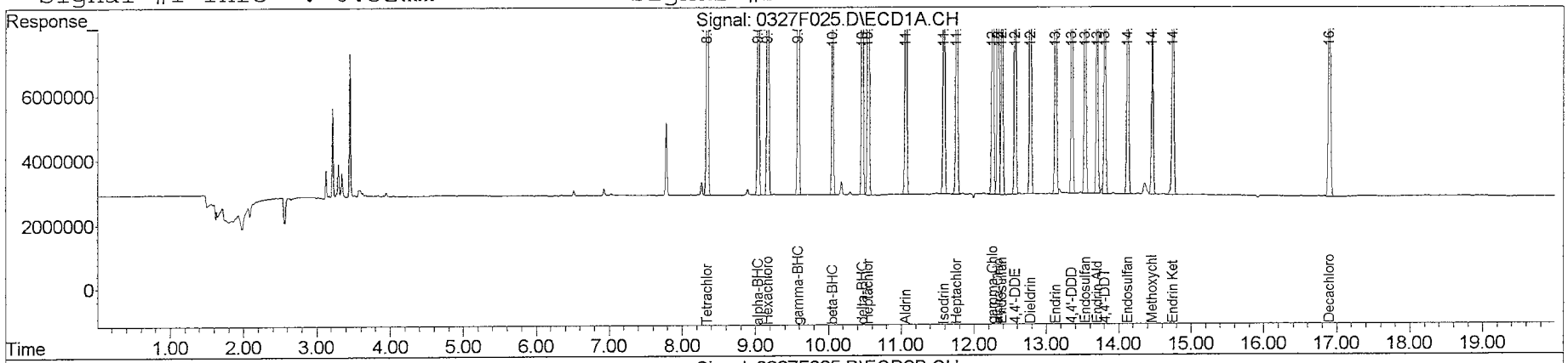
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

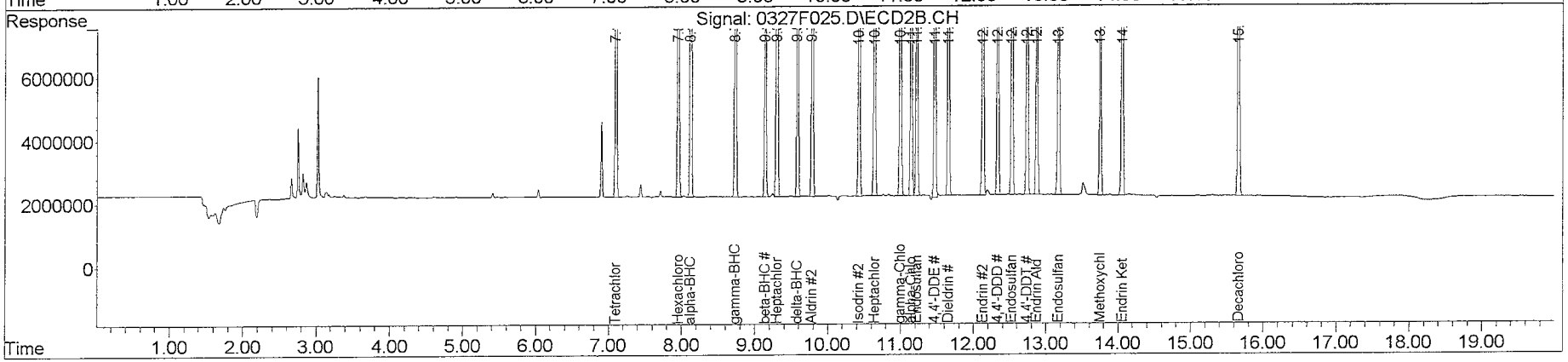
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F025.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F025.D\ECD2B.CH
Acq On : 26 Mar 2007 6:40 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:08 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

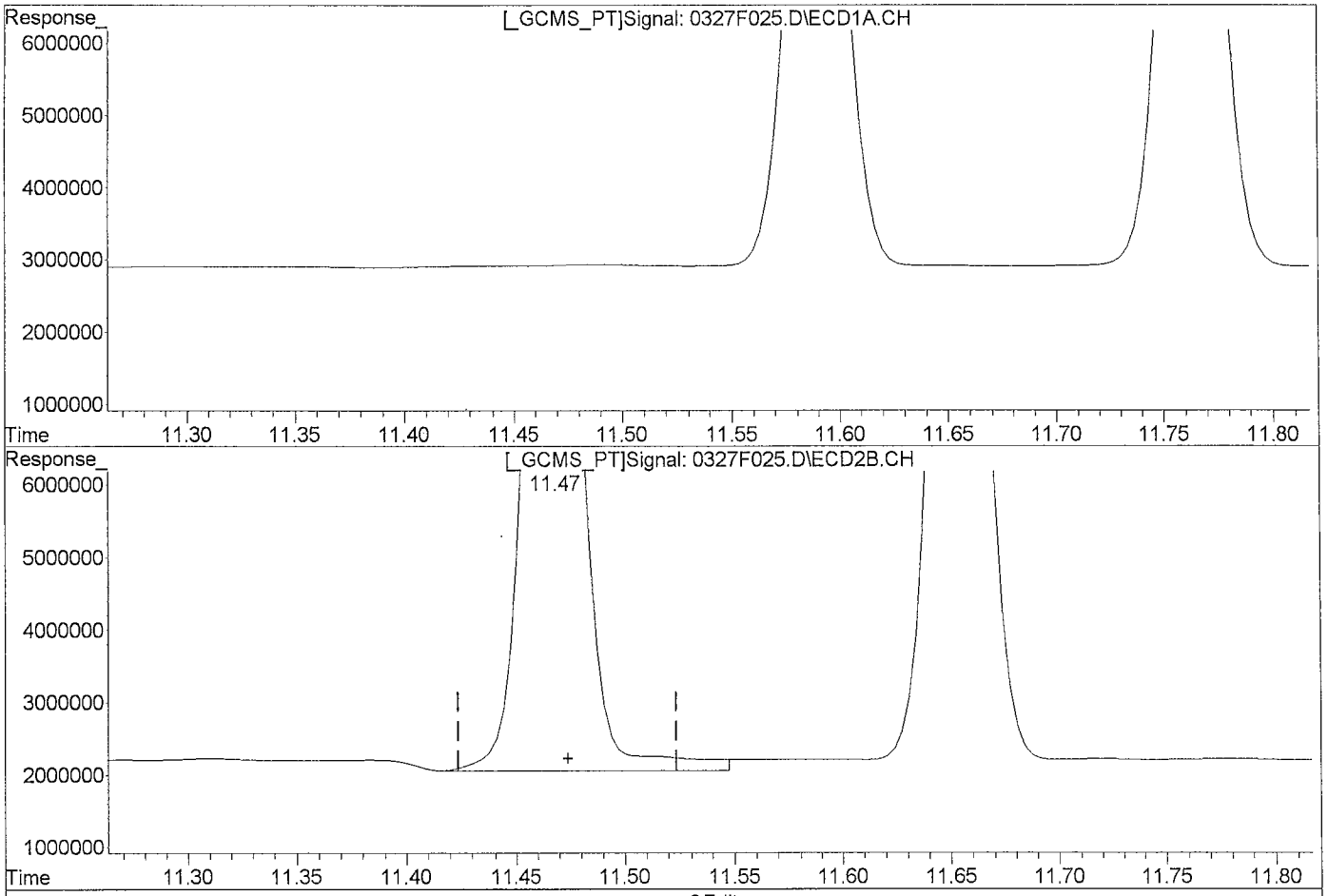




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F025.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F025.D\ECD2B.CH
Acq On : 26 Mar 2007 6:40 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 53.167ug/L

response 17672440

(15) 4,4'-DDE #2

11.47min 60.041ug/L

response 20861962

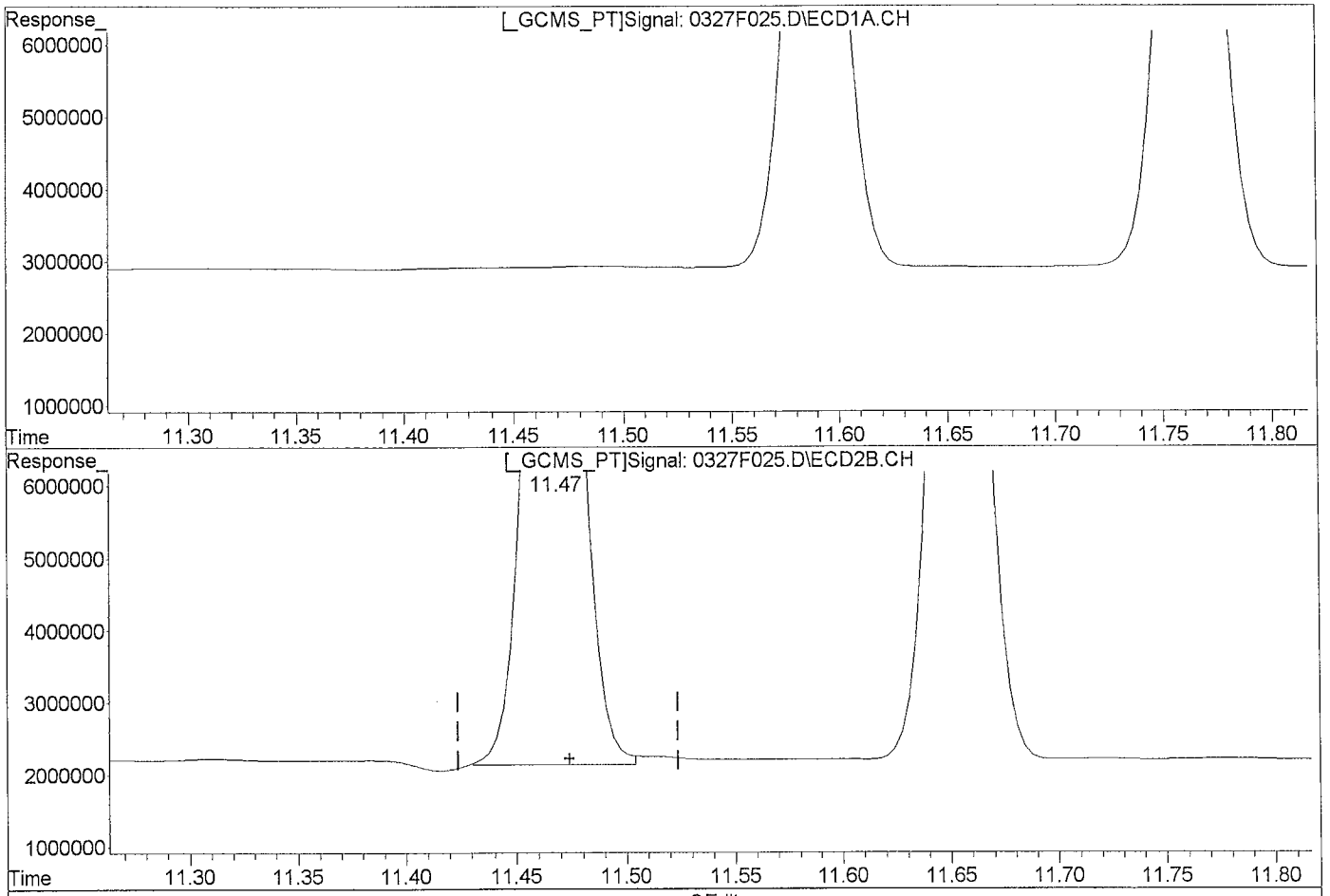
(+) = Expected Retention Time

0327F025.D 031207-8081.M Tue Mar 27 09:08:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F025.D\ECD1A.CH Vial: 83
Signal #2 : J:\GC23\DATA\032707\0327F025.D\ECD2B.CH
Acq On : 26 Mar 2007 6:40 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 53.167ug/L

response 17672440

(15) 4,4'-DDE #2

11.47min 57.591ug/L m

response 20010934

(+) = Expected Retention Time

0327F025.D 031207-8081.M Tue Mar 27 09:08:59 2007

Exception Report

Data File:	J:\GC23\DATA\032707\0327F026.D	**Date Acquired:**	03/26/2007 19:06
Lab ID:	KWG0703981-6	**Date Quantitated:**	03/27/2007 09:12
RunType:	CCV	**Batch ID:**	KWG0703981
Matrix:	MISC	**Analysis Method:**	8081A
		MethodJoinID:	MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	

Primary Review: LL 3/30/07

Secondary Review: 3-30-07

Exception Report

Data File: J:\GC23\DATA\032707\0327F026.D\0327F026C.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 19:06
Date Quantitated: 03/27/2007 09:12
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	

Primary Review: LC 3/30/07

Secondary Review: [illegible] 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F026.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F026.D\0327F026c.d			**Vial:**	84
Acqu Date:	03/26/2007 19:06	**Quant Date:**	03/27/2007 09:12	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F026.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F026.D\0327F026c.d			**Vial:**	84
Acqu Date:	03/26/2007 19:06	**Quant Date:**	03/27/2007 09:12	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,042	1,017			
Toxaphene {1}	12.98	12.37	2729772m	7599841	1,041	1,017			
Toxaphene {2}	13.05	12.45	2193931m	5701997m	1,059	1,034			
Toxaphene {3}	13.20	12.64	3384007m	2971108	1,031	1,008			
Toxaphene {4}	13.87	13.00	4291978m	3887033m	1,072	1,019			
Toxaphene {5}	14.19	13.09	2087095m	3318054	1,023	1,017			
Toxaphene {6}	14.71	13.57	2269242m	8375267m	1,030	1,007			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F026.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,042	1,000	4.2
Toxaphene {1}		MULTI	AverageRF	100		2.6E+3	2.7E+3	4.1			
Toxaphene {2}		MULTI	AverageRF	100		2.1E+3	2.2E+3	5.9			
Toxaphene {3}		MULTI	AverageRF	100		3.3E+3	3.4E+3	3.1			
Toxaphene {4}		MULTI	AverageRF	100		4.0E+3	4.3E+3	7.2			
Toxaphene {5}		MULTI	AverageRF	100		2.0E+3	2.1E+3	2.3			
Toxaphene {6}		MULTI	AverageRF	100		2.2E+3	2.3E+3	3.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~4.2~~ 5.5

CC 3/30/07

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F026.D\0327F026C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,017	1,000	1.7
Toxaphene {1}		MULTI	AverageRF	100		7.5E+3	7.6E+3	1.7			
Toxaphene {2}		MULTI	AverageRF	100		5.5E+3	5.7E+3	3.4			
Toxaphene {3}		MULTI	AverageRF	100		2.9E+3	3.0E+3	0.8			
Toxaphene {4}		MULTI	AverageRF	100		3.8E+3	3.9E+3	1.9			
Toxaphene {5}		MULTI	AverageRF	100		3.3E+3	3.3E+3	1.7			
Toxaphene {6}		MULTI	AverageRF	100		8.3E+3	8.4E+3	0.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~1.7~~

9.5
CC 3/30/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:33 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	2729772	7599841	1040.507m	1016.848
26)	Toxaphene {2}	13.05	12.45	2193931	5701997	1059.160m	1034.081m
27)	Toxaphene {3}	13.20	12.64	3384007	2971108	1030.783m	1007.803
28)	Toxaphene {4}	13.87	13.00	4291978	3887033	1071.711m	1019.063m
29)	Toxaphene {5}	14.19	13.09	2087095	3318054	1022.695m	1016.960
30)	Toxaphene {6}	14.71	13.57	2269242	8375267	1029.708m	1007.374m

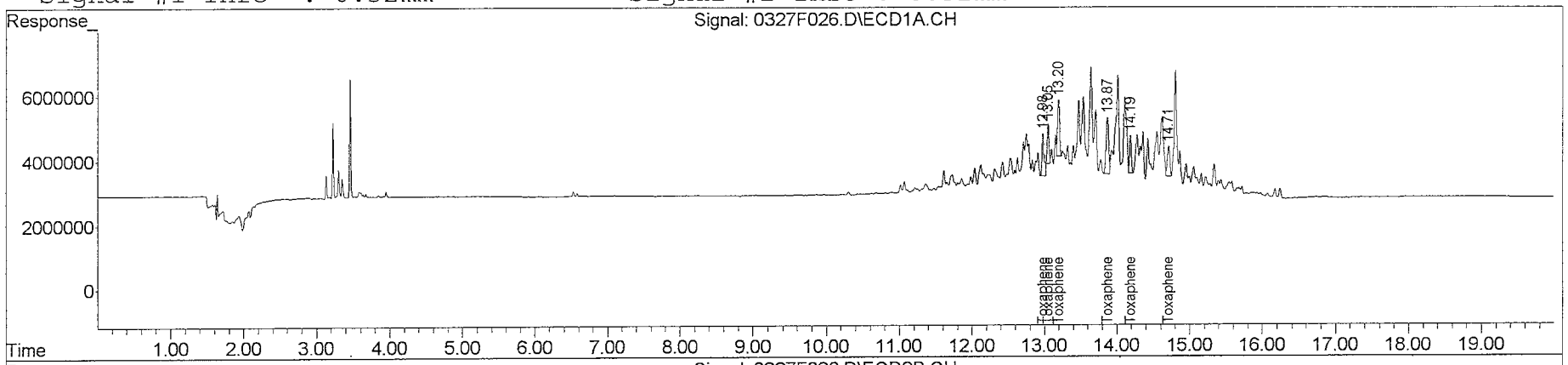
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

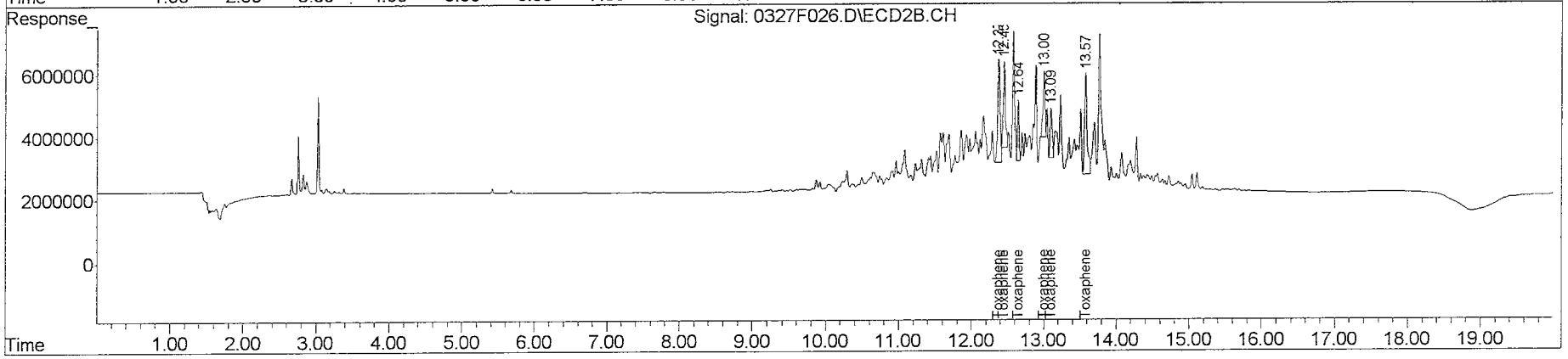
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:12 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

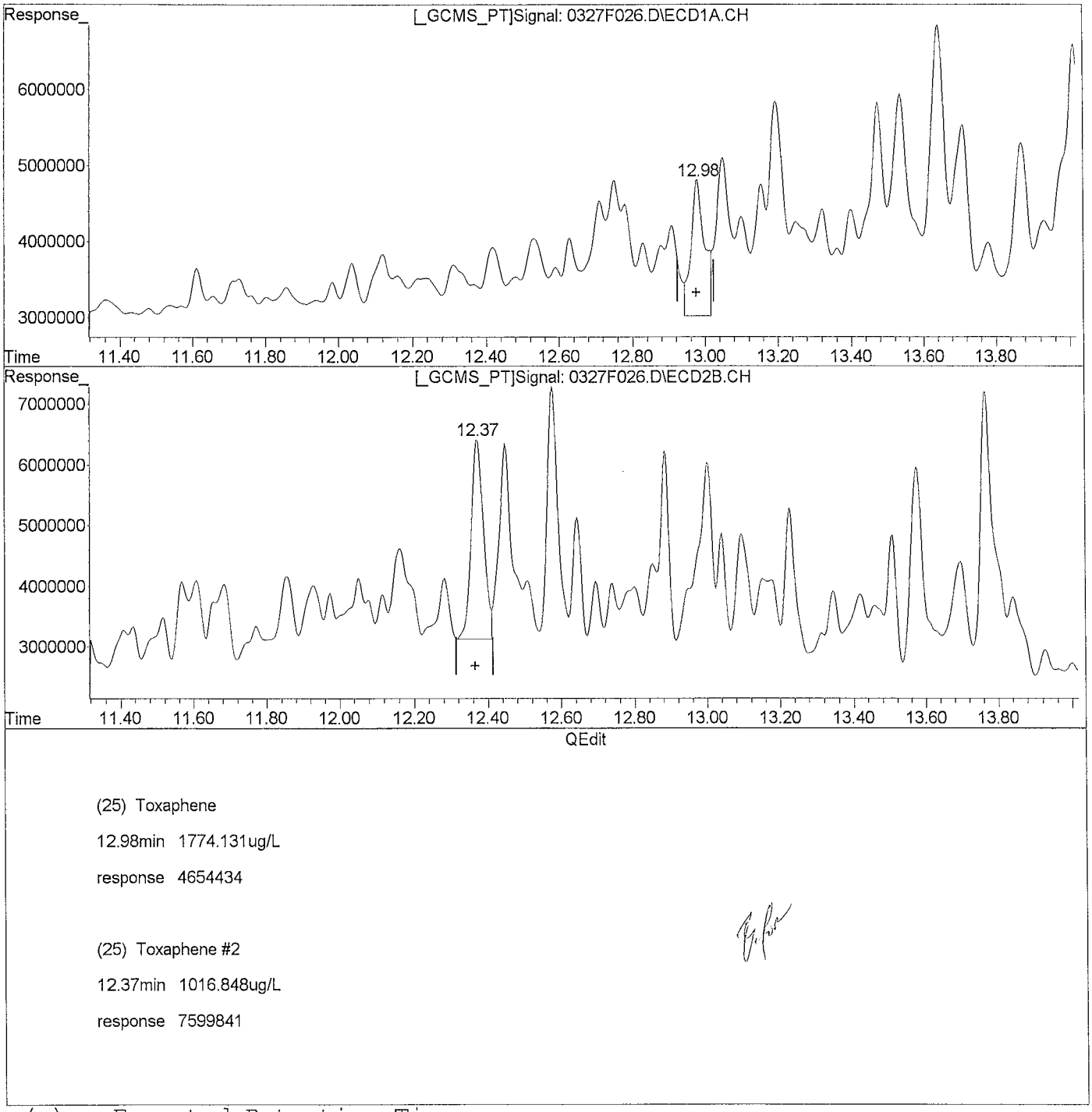




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.98min 1774.131ug/L

response 4654434

(25) Toxaphene #2

12.37min 1016.848ug/L

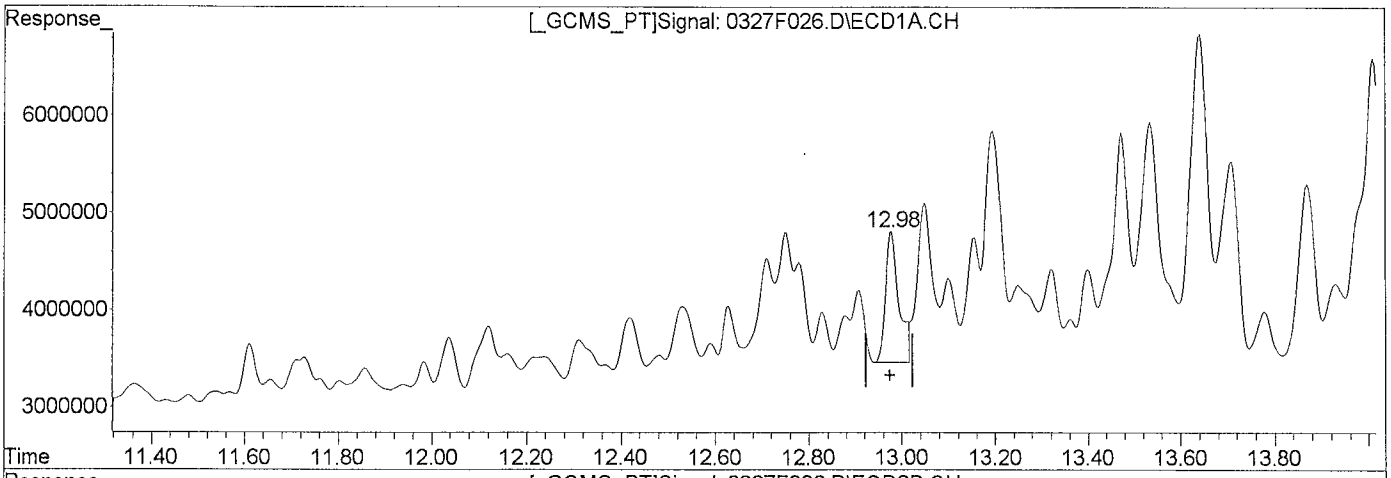
response 7599841

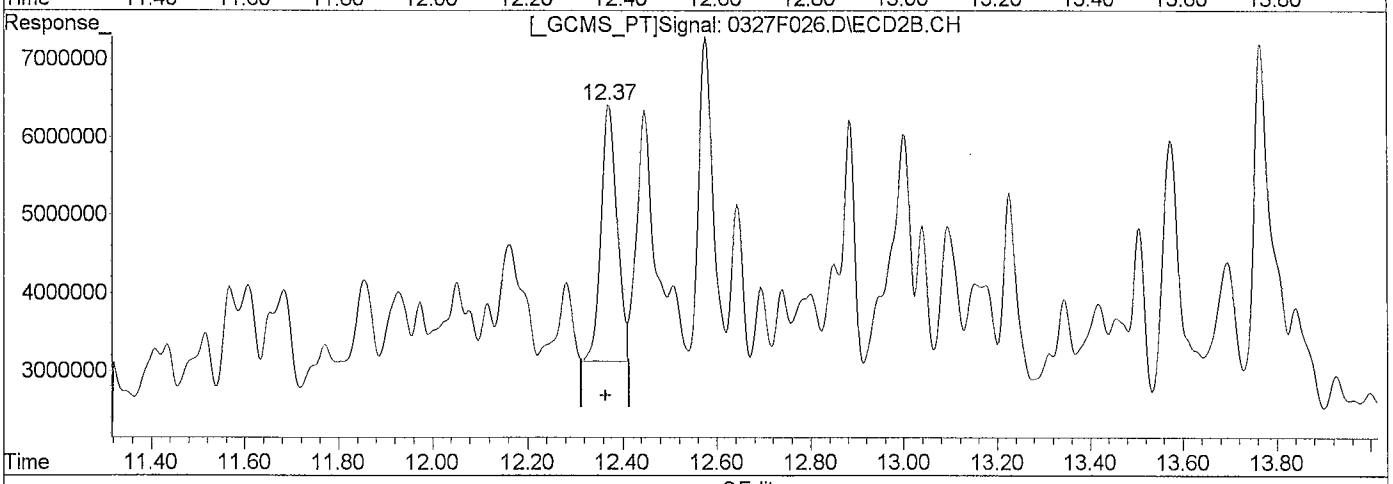
(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:09:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 1040.507ug/L m

response 2729772

(25) Toxaphene #2

12.37min 1016.848ug/L

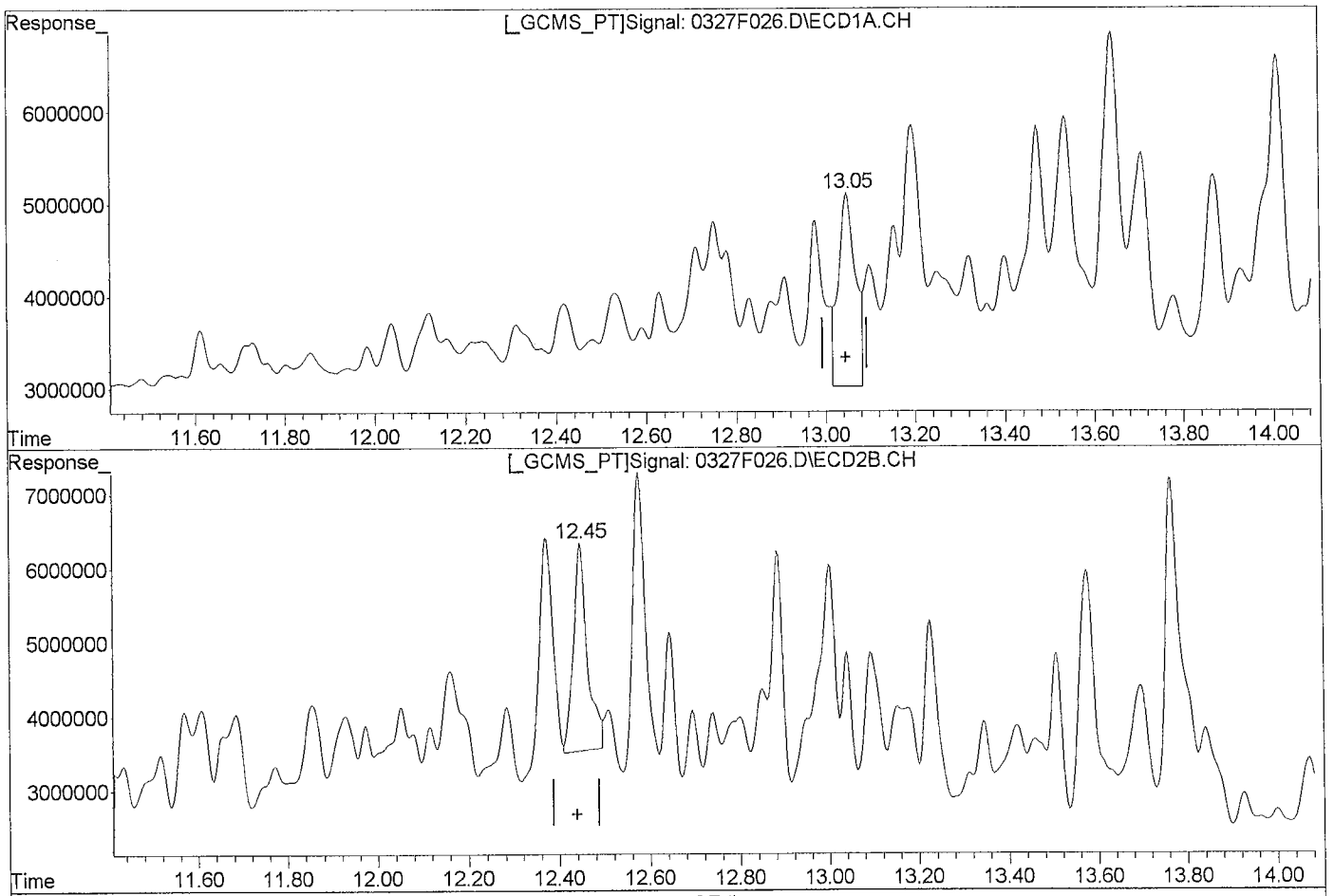
response 7599841

(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:09:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 2723.172ug/L

response 5640747

(26) Toxaphene {2} #2

12.45min 1090.479ug/L

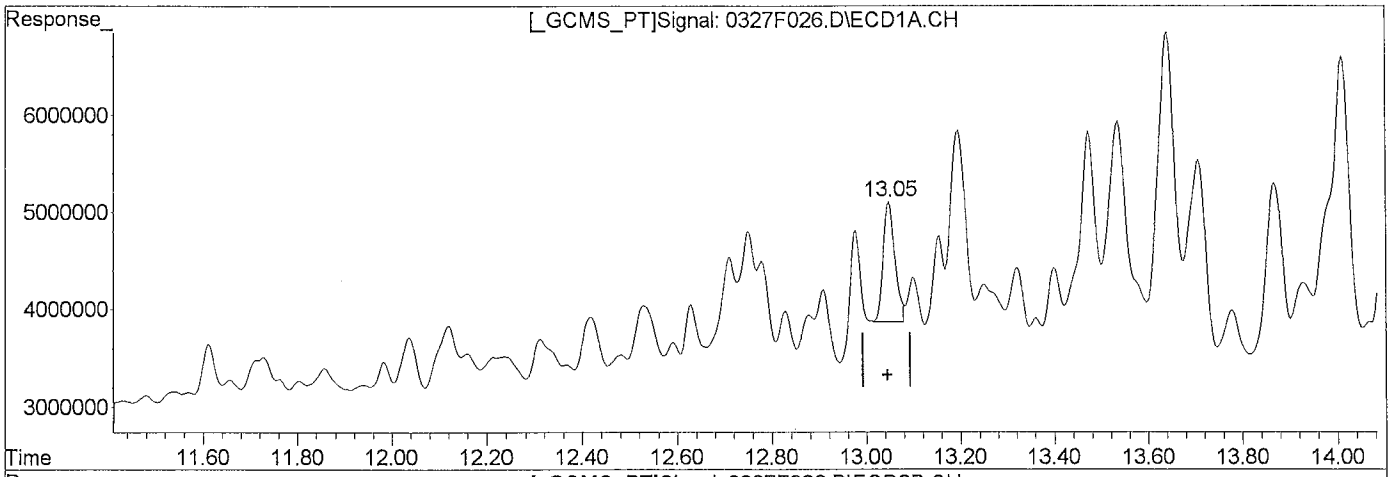
response 6012980

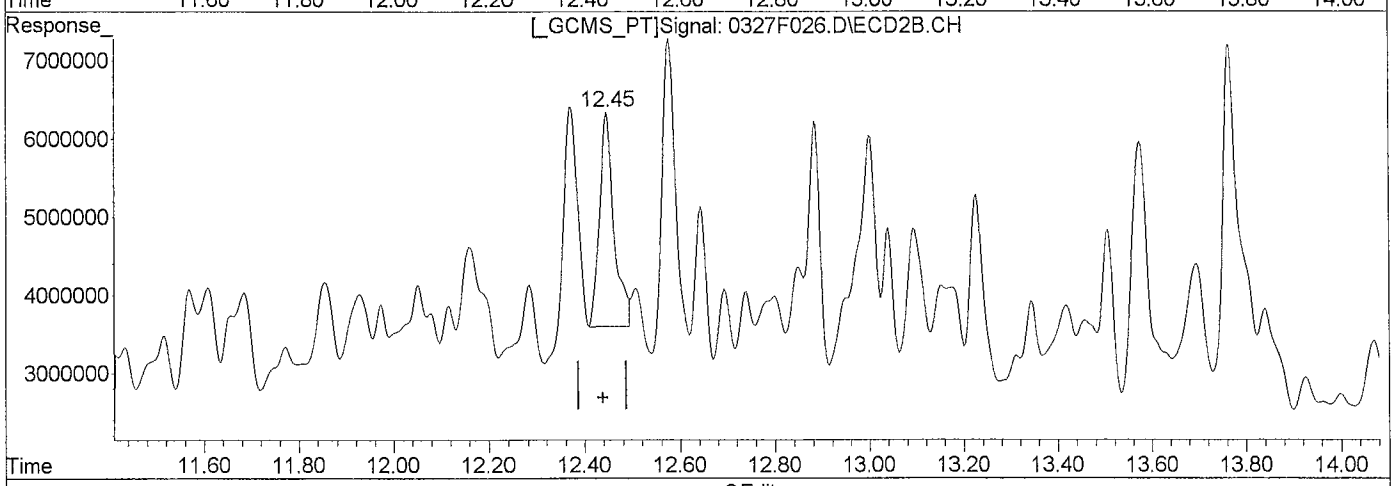
(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:10:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 1059.160ug/L m

response 2193931

(26) Toxaphene {2} #2

12.45min 1034.081ug/L m

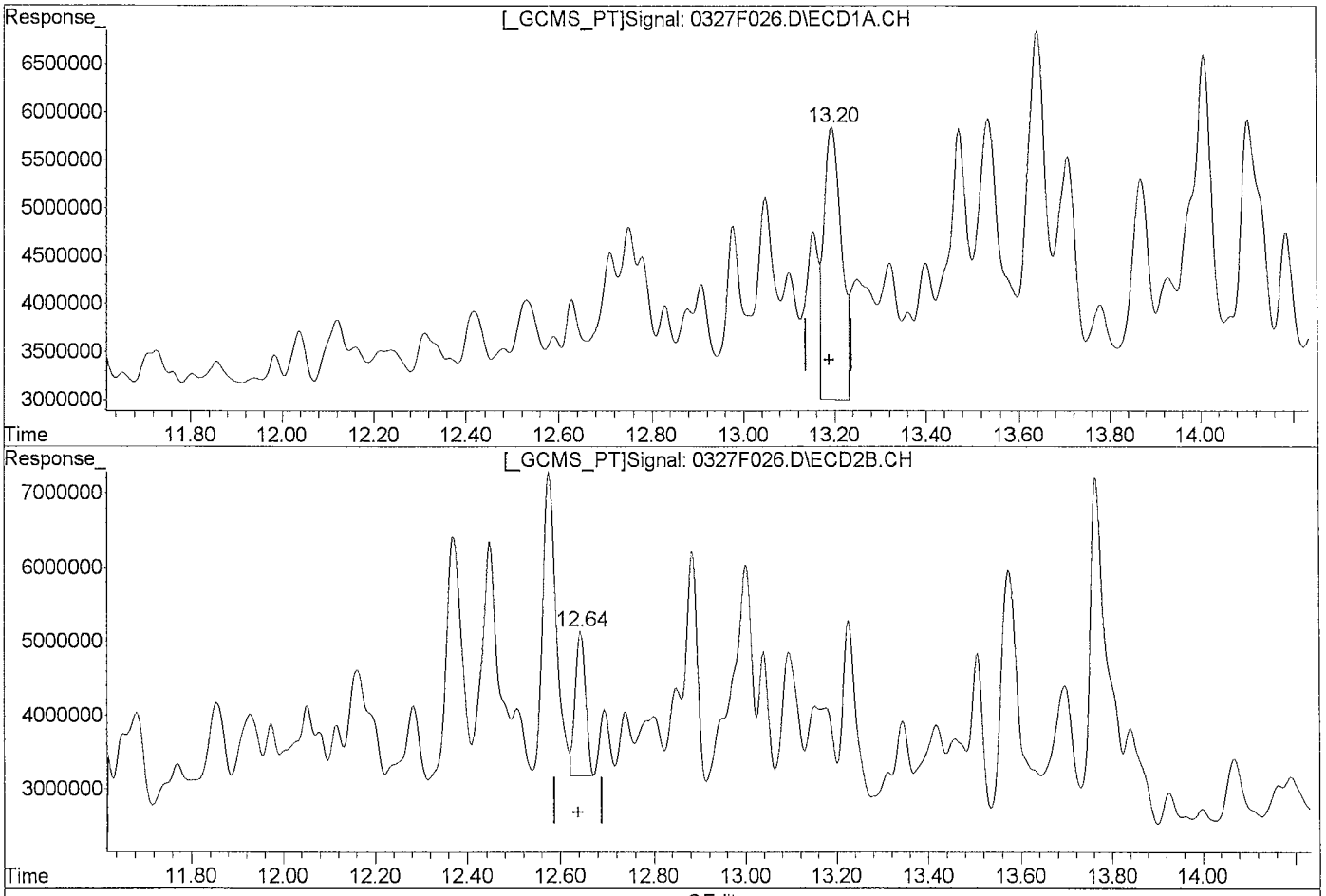
response 5701997

(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:10:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 2304.639ug/L

response 7566006

(27) Toxaphene {3} #2

12.64min 1007.803ug/L

response 2971108

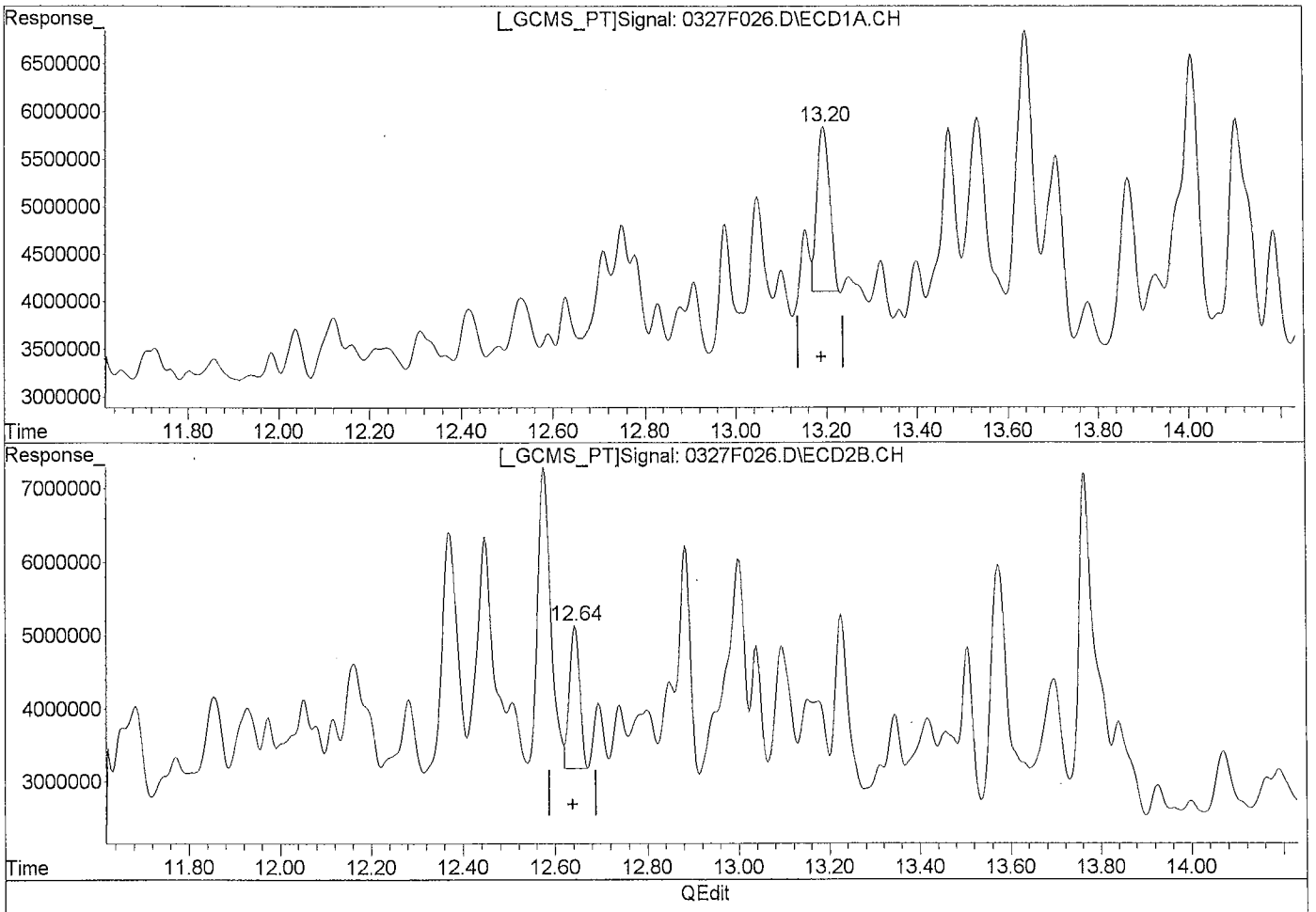
(+) = Expected Retention Time

0327F026.D 031207-8081.M Tue Mar 27 09:10:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 1030.783ug/L m

response 3384007

(27) Toxaphene {3} #2

12.64min 1007.803ug/L

response 2971108

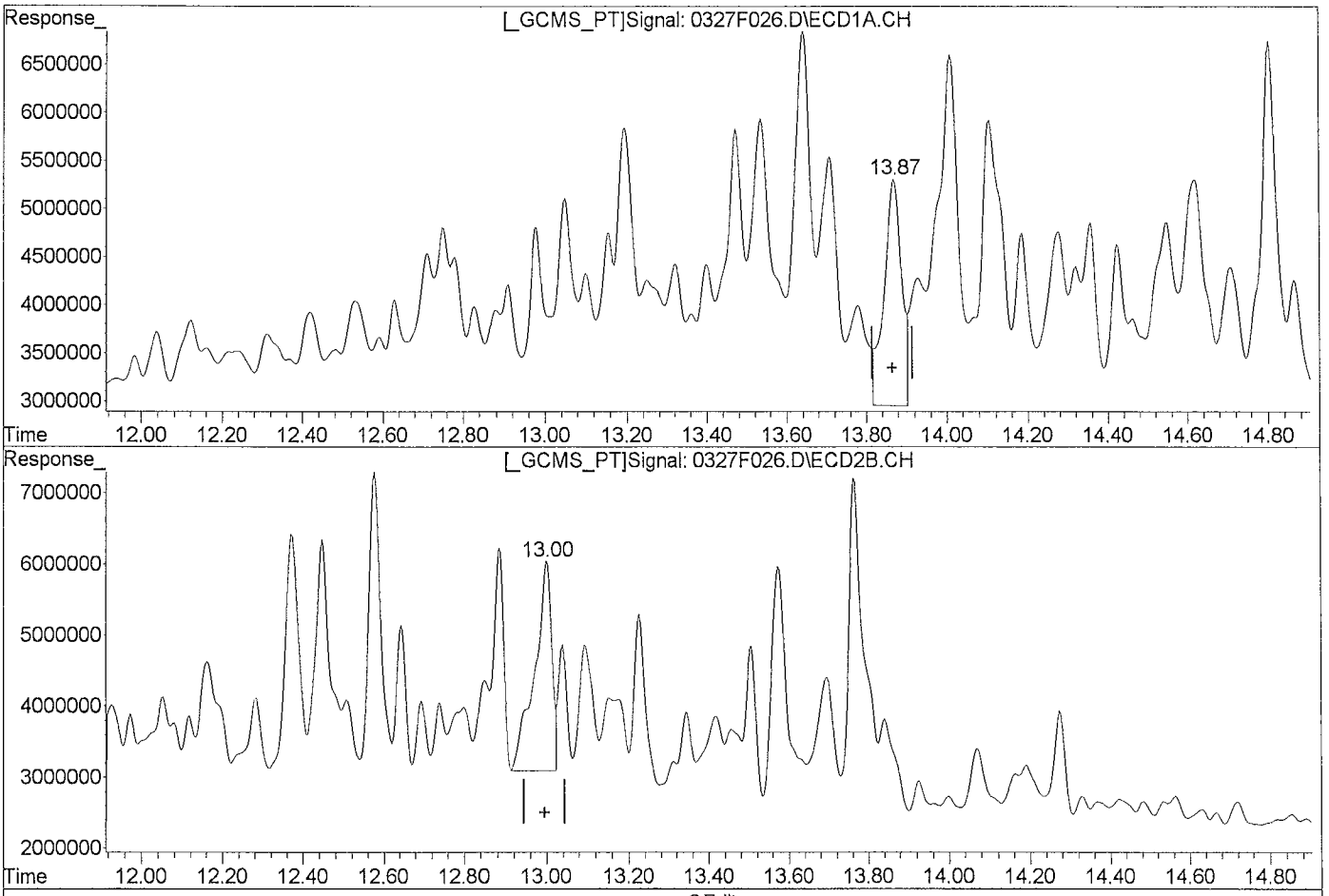
(+) = Expected Retention Time

0327F026.D 031207-8081.M Tue Mar 27 09:11:13 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 1819.610ug/L

response 7287158

(28) Toxaphene {4} #2

13.00min 2260.753ug/L

response 8623237

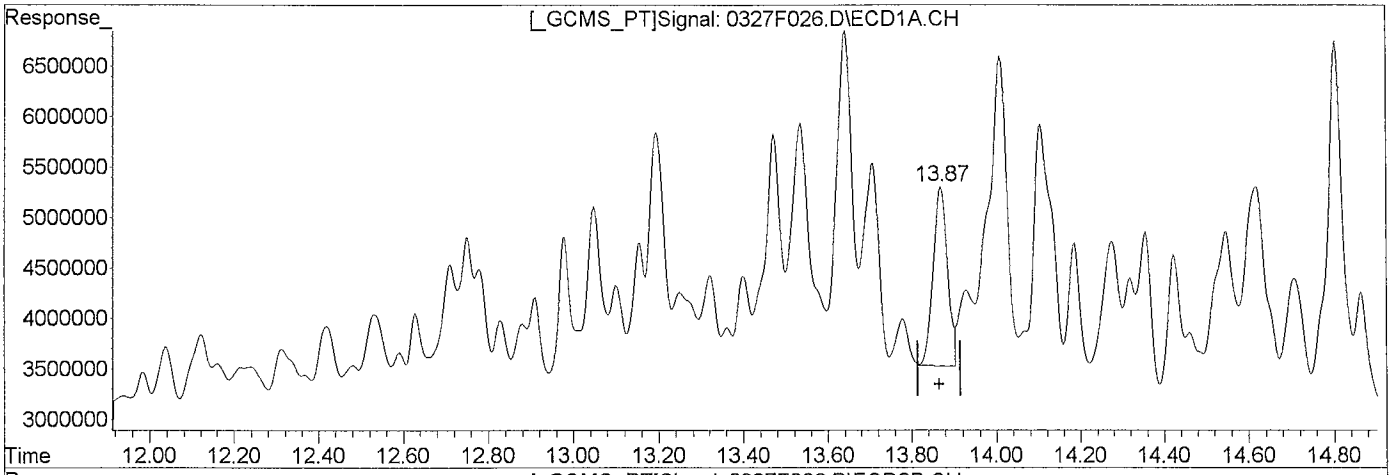
(+) = Expected Retention Time

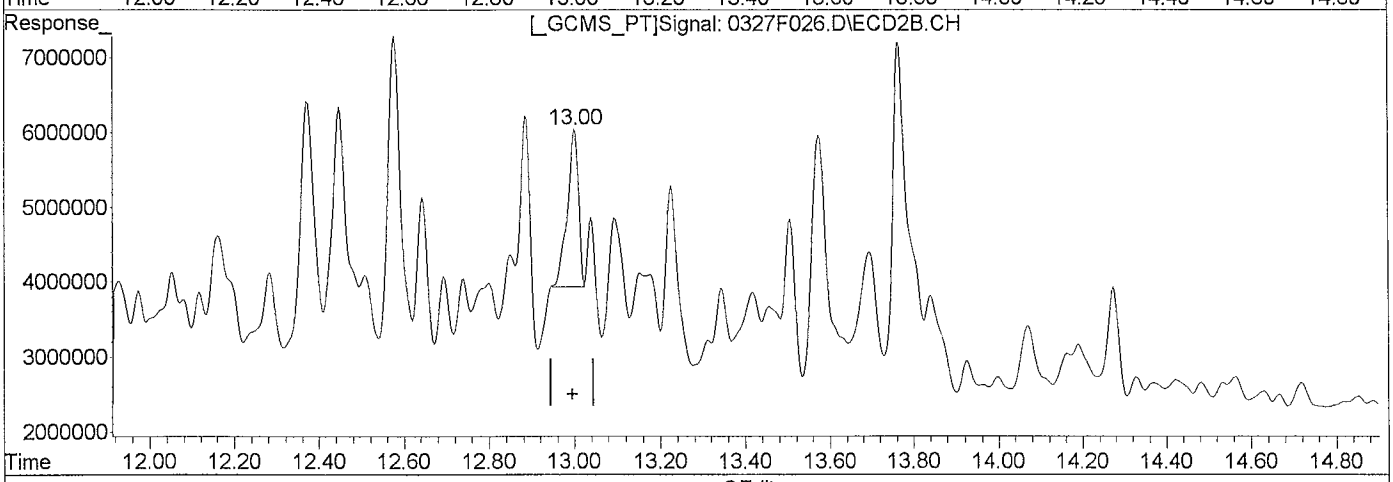
0327F026.D 031207-8081.M Tue Mar 27 09:11:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 1071.711ug/L m

response 4291978

(28) Toxaphene {4} #2

13.00min 1019.063ug/L m

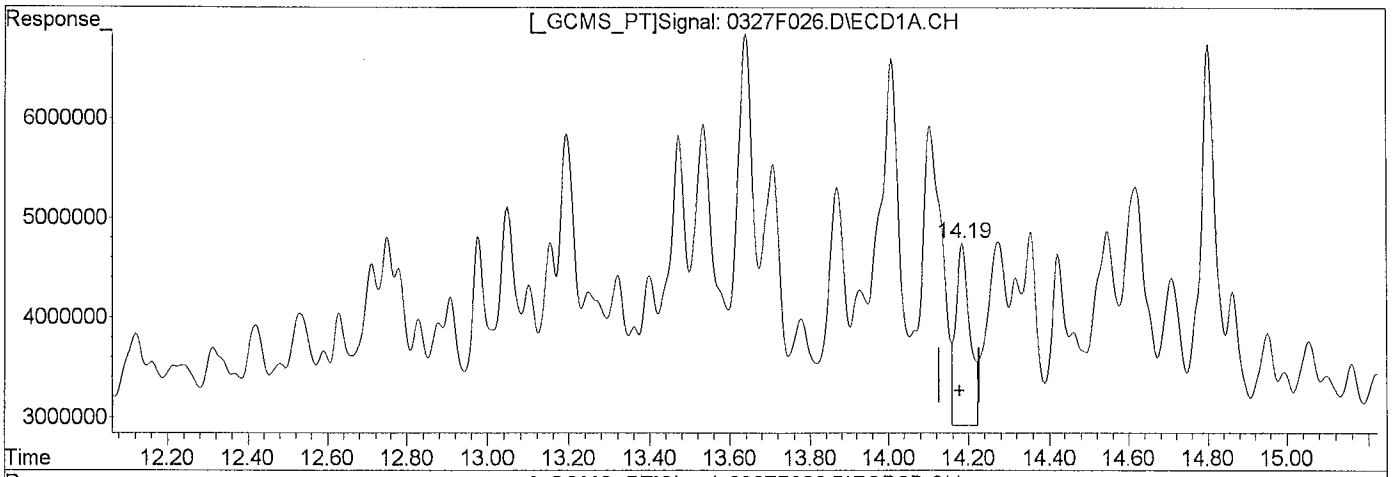
response 3887033

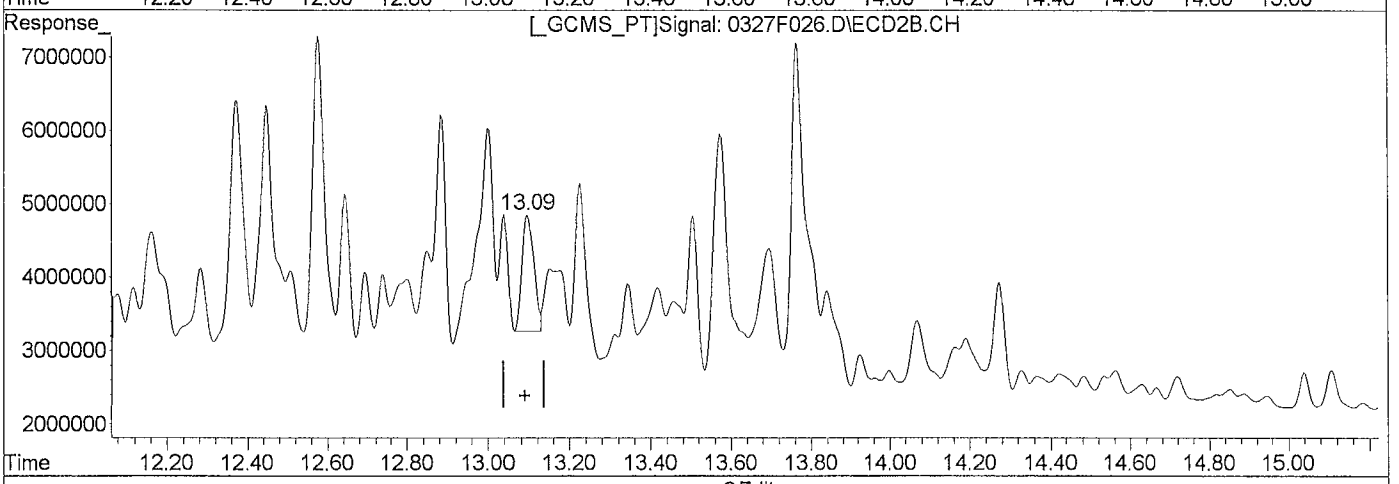
(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:11:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 2177.136ug/L

response 4443056

(29) Toxaphene {5} #2

13.09min 1016.960ug/L

response 3318054

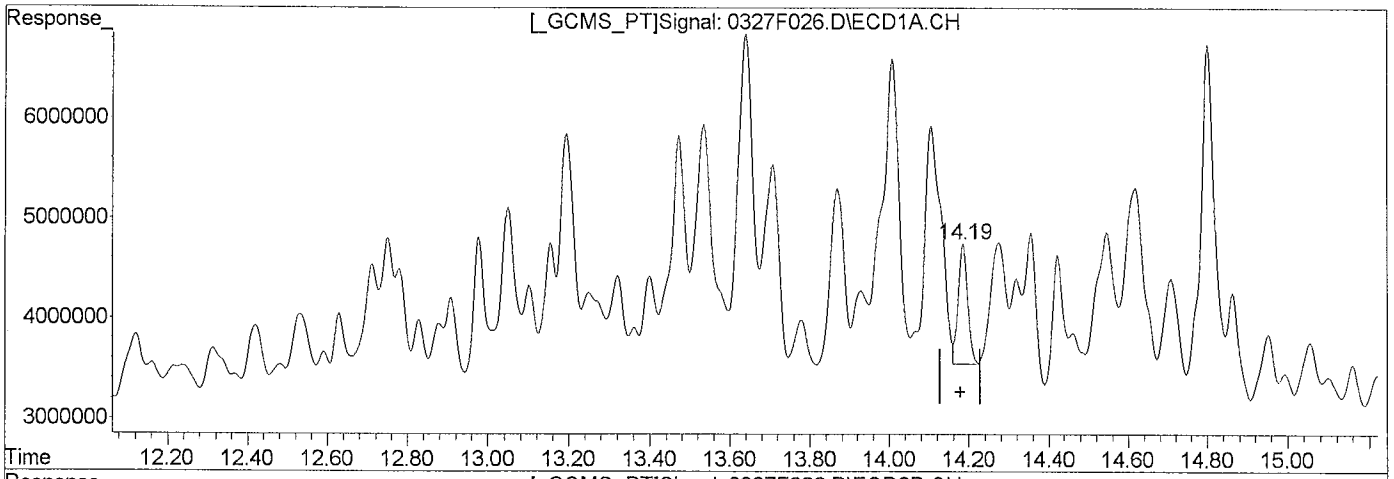
(+) = Expected Retention Time

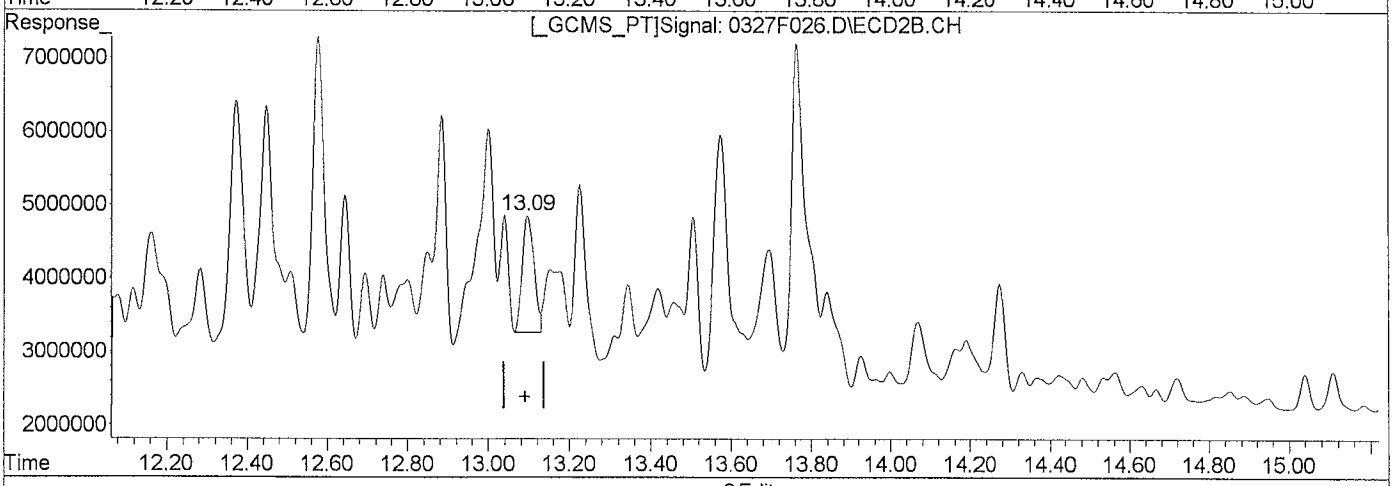
0327F026.D 031207-8081.M Tue Mar 27 09:11:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(29) Toxaphene {5}

14.19min 1022.695ug/L m

response 2087095

(29) Toxaphene {5} #2

13.09min 1016.960ug/L

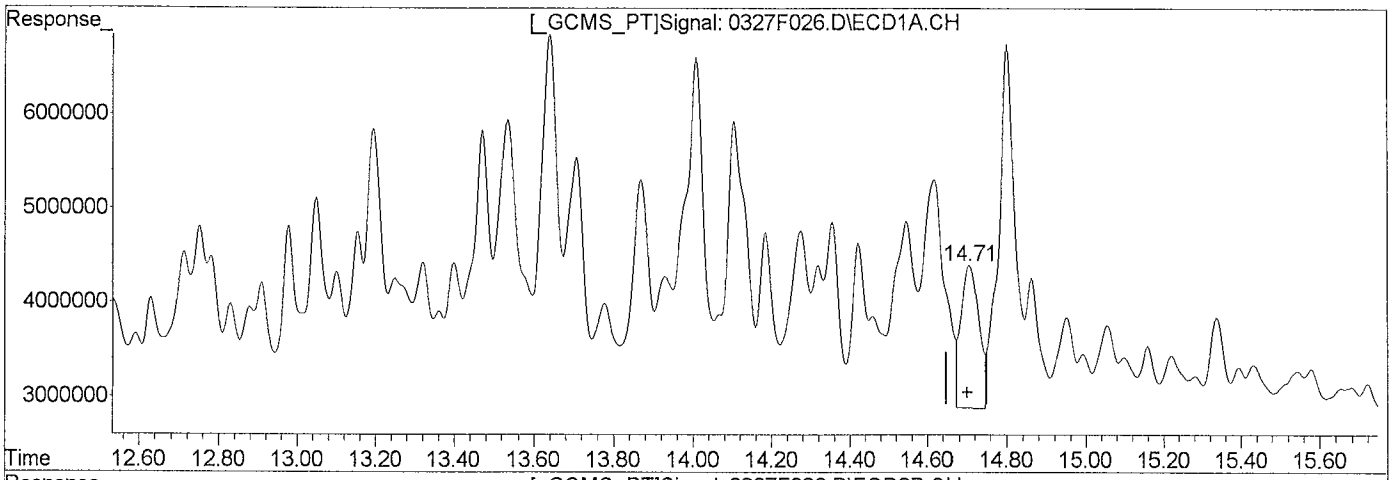
response 3318054

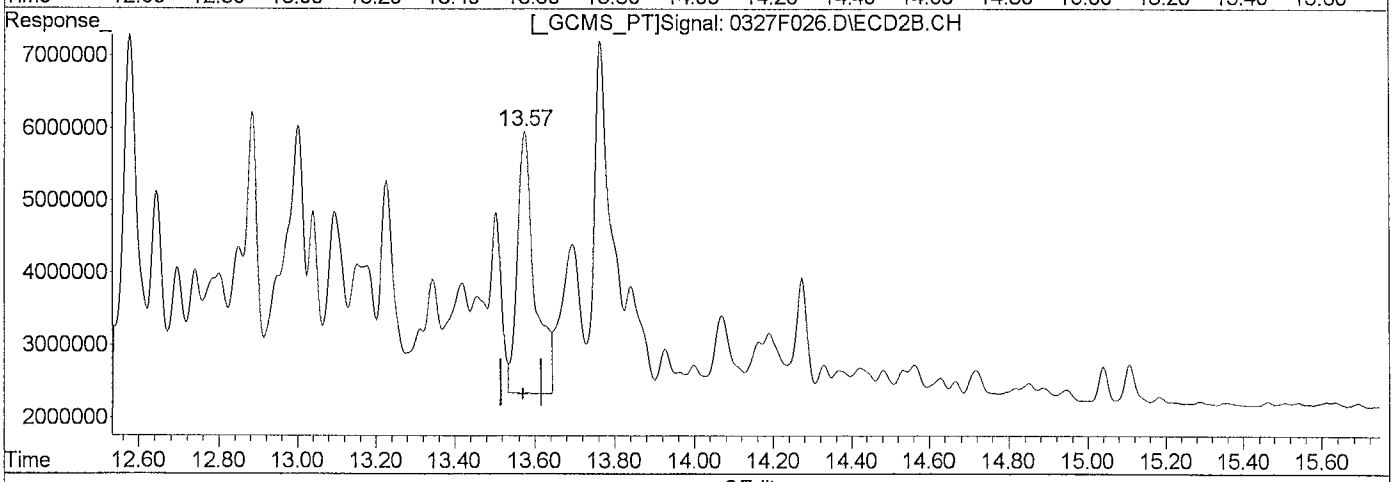
(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:12:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(30) Toxaphene {6}

14.71min 2164.480ug/L

response 4770018

(30) Toxaphene {6} #2

13.57min 1325.861ug/L

response 11023150

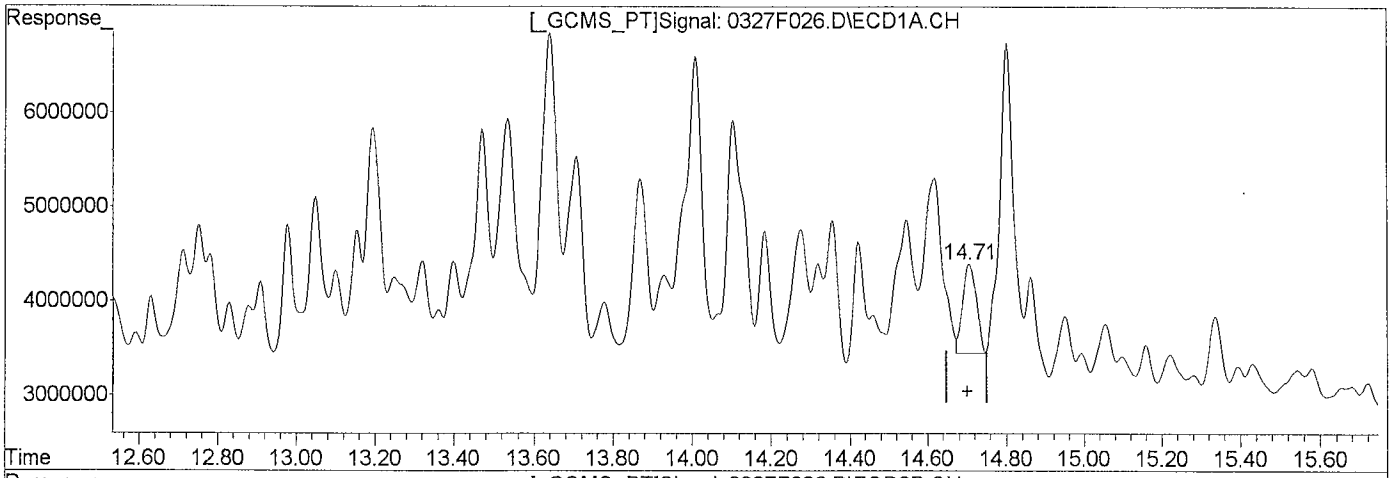
(+) = Expected Retention Time

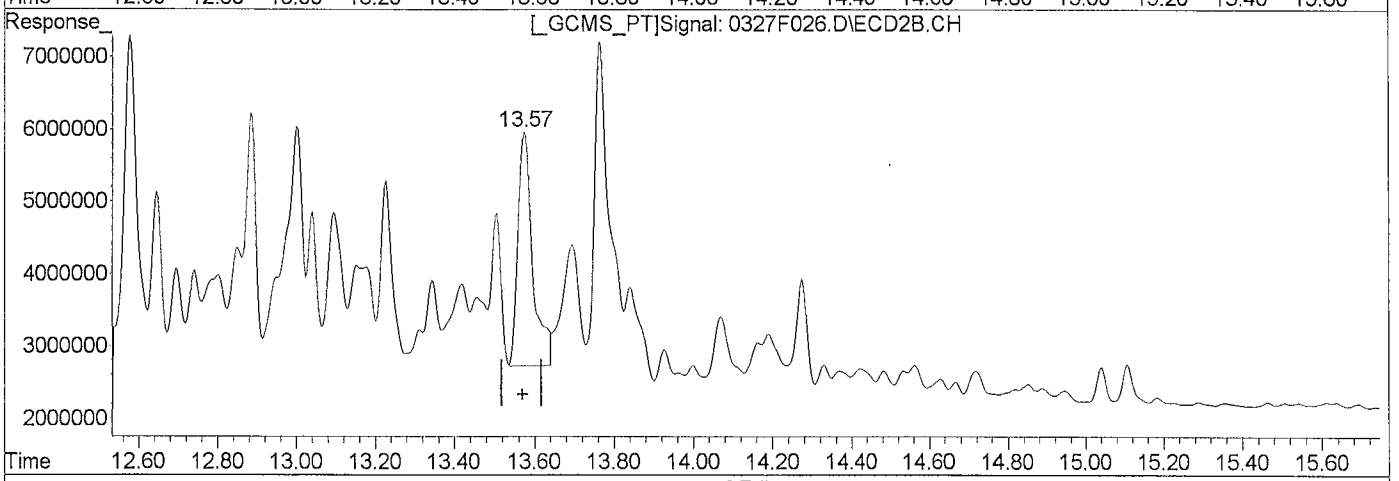
0327F026.D 031207-8081.M Tue Mar 27 09:12:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F026.D\ECD1A.CH Vial: 84
Signal #2 : J:\GC23\DATA\032707\0327F026.D\ECD2B.CH
Acq On : 26 Mar 2007 7:06 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(30) Toxaphene {6}

14.71min 1029.708ug/L m

response 2269242

(30) Toxaphene {6} #2

13.57min 1007.374ug/L m

response 8375267

(+) = Expected Retention Time
0327F026.D 031207-8081.M Tue Mar 27 09:12:33 2007

Organic Analysis:
Organochlorine Pesticides

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703392	**Prep Method:**	EPA 3535	**Prep Date:**	03/08/07 00:00
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8081A PEST_OC	WATER	1000ml	2ml
KWG0703392-1	Lab Control Sample	8081A PEST_OC	WATER	1000ml	2ml
KWG0703392-2	Duplicate Lab Control Sampl	8081A PEST_OC	WATER	1000ml	2ml
KWG0703392-3	Method Blank	8081A PEST_OC	WATER	1000ml	2ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	581406	GCPS5-88-B	100uL			ABradbur
KWG0703392-1	581407	GCPS5-88-B	100uL	GCPS5-87-J	50uL	ABradbur
KWG0703392-2	581408	GCPS5-88-B	100uL	GCPS5-87-J	50uL	ABradbur
KWG0703392-3	581409	GCPS5-88-B	100uL			ABradbur

Comments:

Started By: ALundqui Assisted By: Training Yes No

Completed By: ALundqui Assisted By: Yes No

Reviewed By: MT Date: 3-20-07 Storage:

Chain of Custody

Relinquished By: ALundquist Date: 03-09-07

Received By: Date: 3/23/07 Extracts Examined Yes No

Preparation Information

Group ID:	KWG0703392	**Prep Method:**	EPA 3535	**Prep Date:**	03/08/07 00:00
Department:	Semivoa GC				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext.	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701647-002	1349MW01CL	NA	✓	8081A PEST_OC	WATER	1000 mL	7	NA	2mL	100ul	
2	KWG0703392-1	Lab Control Sample		✓	8081A PEST_OC	WATER						
3	KWG0703392-2	Duplicate Lab Control Sample		✓	8081A PEST_OC	WATER						
4	KWG0703392-3	Method Blank		✓	8081A PEST_OC	WATER						

Comments: #459560

Surrogate ID: GCPS5-88-B 2ppm 100ul Saturn exp: 08-22-07

Spike ID: GCPS5-87-J 4ppm 50ul MicroSyringe # 97862 exp: 03-08-07

Witness: Adam Bradburn 3-8-07

Started By: ALundqui Assisted By:

Completed By: ALundquist Assisted By:

Additional Prep Information For Pest/PCB Water by 3535

Service Request # K0701047 Work Group # Pest: KWG0703392

PCB: NA

Solvents/Reagents used:

Acetone Lot # 461446 Hexane Lot # 461467

H_2O-Phobic DVB extraction Disk Lot # 605021-PL

Extraction Program # 8081.6 Initial Purge Program # 8081.4

Start (Time/Date/Initial): 1:45 pm 03-08-07 AL

Stop (Time/Date/Initial): 4:30 p.m 03-08-07

Cleanups:

Sulfuric Acid Clean-up (3665): NA (PCB aliquots only)

Clean-up #2: NA ☐ all samples ☐ some samples: —

Clean-up #3: NA ☐ all samples ☐ some samples: —

Pest Vial: yellow Vial Storage: Smk I7-10

PCB Vial: NA Vial Storage:

Archived Extract Storage: NA

Comments/Observations:

Bench Sheet Review Check List
☑ Hold Times Met (if no, Reason:)
☑ Prep date, dept, method, product code correct in stealth
☑ Spike Information correct
☑ Weights/Volumes and units correct on raw and final bench sheets
☑ Sample IDs have been checked—Bottle numbers appended if required
☑ Names present for: Started by, Completed by, relinquished by, and witnessed by.
☑ Training has been circled
☑ Extract Storage recorded
☑ Additional Prep Sheet completely filled out (NA or line out Blanks)
☑ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

C:\Documents and Settings\mblack\Local Settings\Temporary Internet Files\OLK2D3\Additional Prep InformationPestPCBWater3535.doc

Columbia Analytical Services, Inc.

Appendix from EXT-3535
For Extracting 8081/8082 Compounds in water by
EPA Method 3535A

1. Mark the level of the sample on the sample container for determination of sample volume.
2. Adjust pH of the sample to 2 using H2SO4. Be careful not to go below 2, as this will cause breakdown of the extraction disk.
3. Add between 2mL and 5mL of methanol to each sample, and shake well.
4. Add 100uL of 8081/8082 surrogate to all samples and 50uL of 8081 spike to Pest QC and 50uL of 8082 spike to PCB QC.
5. Shake sample to mix.
6. Prepare sample bottles with Horizon cap adapters and verify seal
7. Run purge method 8081.4 on extractors 2 times.
8. Assemble extractors using UCT brand C18 cartridges.
9. Load extraction program 8081.6 on the Horizon control box.
10. Load samples onto Horizon extractors and slowly turn clockwise until sample seal is broken. (Glug effect)
11. Start extraction program.
12. Run purge method 8081.8 on extractors between samples.
13. Take VOA vial extract to Dry Disk station. Place dry disk in vacuum system and rinse once with DCM, then condition with one Hexane rinse. Place turbovap tube into place for collection. Pour sample onto the Dry Disk and rinse VOA vial 2 times with Hexane. After sample has been vacuumed from water, agitate water with one more Hexane rinse.
14. Place sample into tubovap and concentrate with a nitrogen flow just strong enough to create a vortex.
15. Concentrate Hexane and take to a 2mL final volume in Hexane. Split, if necessary, pesticide from PCB portion using a 1mL pipette and placing pesticide aliquot in a yellow autosampler vial. After remaining PCB aliquot has had an Acid clean-up, hexane portion is removed and then placed in a green autosampler vial.

Sequence Name: C:\GC23\SEQUENCE\032707.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\032707\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6/26

Run # 80986

Line	Type	Vial	DataFile	Method	Sample Name	
1	DeleteGC					
2	MaskName - ----R---					
3	IB	80	0327F001	PESTA	KWG0703981-1 | IB | 8081A	
4	IB	81	0327F002	PESTA	KWG0703981-1 | IB | 8081A	
5	PEM	82	0327F003	PESTA	PEM @ 50-100ppb | gcps5-89f |	
6	CCV	83	0327F004	PESTA	8081 @ 50ppb | gcps5-88a | KW	
7	CCV	84	0327F005	PESTA	tox @ 1000ppb | gcps5-89e | K	
8	CCV	86	0327F006	PESTA	misc @ 50ppb | gcps5-88m | KW	
9	CCV	87	0327F007	PESTA	2,4-DDs @ 50ppb | gcps5-82i |	
10	MB	8	0327F008	PESTA	KWG0703464-9 | MB | 8081A PES	
11	LCS	9	0327F009	PESTA	KWG0703464-1 | LCS | 8081A PE	8081
12	DLCS	10	0327F010	PESTA	KWG0703464-2 | DLCS | 8081A P	
13	LCS	11	0327F011	PESTA	KWG0703464-3 | LCS | 8081A PE	2,4d
14	DLCS	12	0327F012	PESTA	KWG0703464-4 | DLCS | 8081A P	
15	LCS	13	0327F013	PESTA	KWG0703464-5 | LCS | 8081A PE	tox
16	DLCS	14	0327F014	PESTA	KWG0703464-6 | DLCS | 8081A P	
17	LCS	15	0327F015	PESTA	KWG0703464-7 | LCS | 8081A PE	misc
18	DLCS	16	0327F016	PESTA	KWG0703464-8 | DLCS | 8081A P	
19	SMPL	17	0327F017	PESTA	K0701078-019 | LW3-UC08-D	
20	MB	18	0327F018	PESTA	KWG0703392-3 | MB | 8081A PES	
21	LCS	19	0327F019	PESTA	KWG0703392-1 | LCS | 8081A PE	8081
22	DLCS	20	0327F020	PESTA	KWG0703392-2 | DLCS | 8081A P	
23	SMPL	21	0327F021	PESTA	K0701647-002 | 1349MW01CL	
24	IB	80	0327F022	BAKE	KWG0703981-4 | IB | 8081A	
25	IB	81	0327F023	PESTA	KWG0703981-4 | IB | 8081A	
26	PEM	82	0327F024	PESTA	PEM @ 50-100ppb | gcps5-89f |	
27	CCV	83	0327F025	PESTA	8081 @ 50ppb | gcps5-88a | KW	
28	CCV	84	0327F026	PESTA	tox @ 1000ppb | gcps5-89e | K	
29	CCV	86	0327F027	PESTA	misc @ 50ppb | gcps5-88m | KW	
30	CCV	87	0327F028	PESTA	2,4-DDs @ 50ppb | gcps5-82i |	
31	MB	22	0327F029	PESTA	KWG0702992-4 | MB | 8081A PES	
32	LCS	23	0327F030	PESTA	KWG0702992-12 | LCS | 8081A P	8081
33	DLCS	24	0327F031	PESTA	KWG0702992-13 | DLCS | 8081A	
34	LCS	25	0327F032	PESTA	KWG0702992-15 | LCS | 8081A P	misc.
35	DLCS	26	0327F033	PESTA	KWG0702992-16 | DLCS | 8081A	
36	SMPL	27	0327F034	PESTA	K0700705-008 | Composite	
37	SMPL	28	0327F035	PESTA	K0700750-008 | Composite	
38	SMPL	29	0327F036	PESTA	K0700751-008 | Composite	
39	SMPL	30	0327F037	PESTA	K0700802-008 | Composite	
40	SMPL	31	0327F038	PESTA	K0700803-008 | Composite	
41	SMPL	32	0327F039	PESTA	K0701111-008 | Composite	
42	MS	33	0327F040	PESTA	KWG0702992-11 | K0701111-008M	8081
43	MS	34	0327F041	PESTA	~~KWG0702992-14~~ | ~~K0701113-008M~~	~~misc.~~

K070113-8 composite sample?
cc 3/30/07

Last Modified: Mon Mar 26 07:56:46 2007 Page: 1

Sequence Name: C:\GC23\SEQUENCE\032707.S

LC 3/30/07

Line	Type	Vial	DataFile	Method	Sample Name
					~~K0702492-14~~ K0701113-8 MS
44	SMPL	35	0327F042	PESTA	~~K0701113-008~~ | Composite → misc MS?
45	IB	93	0327F043	BAKE	KWG0703981-7 | IB | 8081A
46	IB	94	0327F044	PESTA	KWG0703981-7 | IB | 8081A
47	PEM	95	0327F045	PESTA	PEM @ 50-100ppb | gcps5-89f |
48	CCV	96	0327F046	PESTA	8081 @ 50ppb | gcps5-88a | KW
49	CCV	97	0327F047	PESTA	tox @ 1000ppb | gcps5-89e | K
50	CCV	99	0327F048	PESTA	misc @ 50ppb | gcps5-88m | KW
51	MB	36	0327F049	PESTA	KWG0703400-4 | MB | 8081A PES
52	LCS	37	0327F050	PESTA	KWG0703400-2 | LCS | 8081A PE → 8081
53	DLCS	38	0327F051	PESTA	KWG0703400-3 | DLCS | 8081A P
54	LCS	39	0327F052	PESTA	KWG0703400-6 | LCS | 8081A PE → misc.
55	DLCS	40	0327F053	PESTA	KWG0703400-7 | DLCS | 8081A P
56	SMPL	41	0327F054	PESTA	K0701523-008 | Composite
57	MS	42	0327F055	PESTA	KWG0703400-1 | K0701523-008MS → 8081
58	SMPL	43	0327F056	PESTA	K0701540-001 | De Pere 09922
59	SMPL	44	0327F057	PESTA	K0701604-008 | Composite
60	SMPL	45	0327F058	PESTA	K0701661-008 | Composite
61	MS	46	0327F059	PESTA	KWG0703400-5 | K0701661-008MS → misc.
62	SMPL	47	0327F060	PESTA	K0701717-008 | Composite
63	IB	93	0327F061	BAKE	KWG0703981-10 | IB | 8081A
64	IB	94	0327F062	PESTA	KWG0703981-10 | IB | 8081A
65	PEM	95	0327F063	PESTA	PEM @ 50-100ppb | gcps5-89f |
66	CCV	96	0327F064	PESTA	8081 @ 50ppb | gcps5-88a | KW
67	CCV	97	0327F065	PESTA	tox @ 1000ppb | gcps5-89e | K
68	CCV	98	0327F066	PESTA	chlor @ 500ppb | gcps5-86f |
69	CCV	99	0327F067	PESTA	misc @ 50ppb | gcps5-88m | KW
70	CCV	100	0327F068	PESTA	2,4-DDs @ 50ppb | gcps5-82i |

Exception Report

Data File: J:\GC23\DATA\032707\0327F002.D
Lab ID: KWG0703981-1
RunType: IB
Matrix: MISC

Date Acquired: 03/26/2007 08:29
Date Quantitated: 03/27/2007 08:58
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	CN

Primary Review: LC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F002.D\0327F002C.D
Lab ID: KWG0703981-1
RunType: IB
Matrix: MISC

Date Acquired: 03/26/2007 08:29
Date Quantitated: 03/27/2007 08:58
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	RIN

Primary Review: CL 3/30/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F002.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F002.D\0327F002c.d			**Vial:**	81
Acqu Date:	03/26/2007 08:29	**Quant Date:**	03/27/2007 08:58	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0	0.0000	0.0000			
Heptachlor Epoxide			0	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0	0d	0.0000	0.0000			
Endrin			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F002.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F002.D\0327F002c.d			**Vial:**	81
Acqu Date:	03/26/2007 08:29	**Quant Date:**	03/27/2007 08:58	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0	0d	0.0000	0.0000			
4,4'-DDD			0d	0	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0	0.0000	0.0000			
Toxaphene {2}			0	0	0.0000	0.0000			
Toxaphene {3}			0d	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0d	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0	0	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0d	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0d	0	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

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J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F002.D\ECD1A.CH Vial: 81
Signal #2 : J:\GC23\DATA\032707\0327F002.D\ECD2B.CH
Acq On : 26 Mar 2007 8:29 am Operator: AKamawal
Sample : KWG0703981-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703981\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

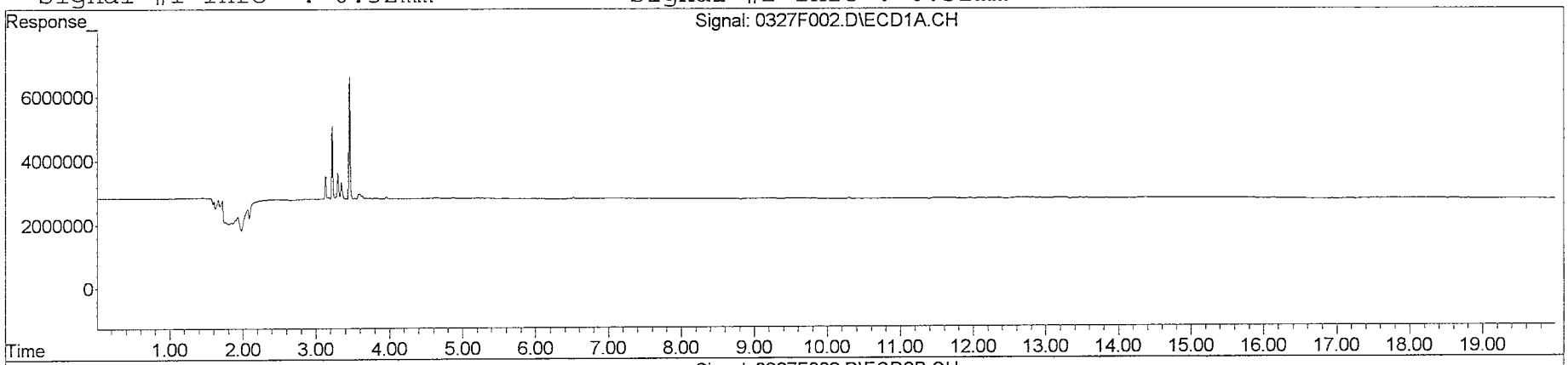
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

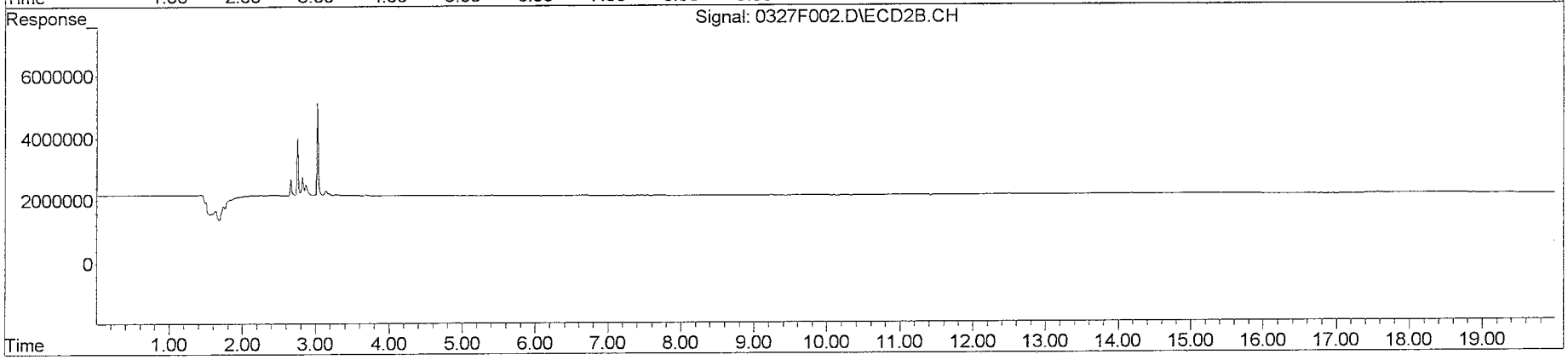
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F002.D\ECD1A.CH Vial: 81
Signal #2 : J:\GC23\DATA\032707\0327F002.D\ECD2B.CH
Acq On : 26 Mar 2007 8:29 am Operator: AKamawal
Sample : KWG0703981-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703981\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:58 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032707\0327F003.D
Lab ID: KWG0703981-2
RunType: PEM
Matrix: MISC

Date Acquired: 03/26/2007 08:56
Date Quantitated: 03/27/2007 09:00
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: CC 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F003.D\0327F003C.D
Lab ID: KWG0703981-2
RunType: PEM
Matrix: MISC

Date Acquired: 03/26/2007 08:56
Date Quantitated: 03/27/2007 09:00
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	tw

Primary Review: 3/30/07

Secondary Review: 3-30-07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032707\0327F003.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F003.D\0327F003c.d			**Vial:**	82
Acqu Date:	03/26/2007 08:56	**Quant Date:**	03/27/2007 09:00	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	279465	269909m		
Endrin	15262598	17565994	2.9	3.5
Endosulfan II	0d	0d		
4,4'-DDD	399649m	329572		
Endrin Aldehyde	169079	181495		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	28248226	33690894	2.3	1.7
Endrin Ketone	288857	447005		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F003.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F003.D\0327F003c.d			**Vial:**	82
Acqu Date:	03/26/2007 08:56	**Quant Date:**	03/27/2007 09:00	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:07 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.57	11.47	279465	269909	0.841	0.777m	
16)	Endrin	13.13	12.13	15262598	17565994	52.072	54.713	
18)	4,4'-DDD	13.36	12.33	399649	329572	1.515m	1.132	#
19)	Endrin Aldehyde	13.70	12.87	169079	181495	0.640	0.633	
21)	4,4'-DDT	13.81	12.74	28248226	33690894	102.215	106.610	
22)	Endrin Ketone	14.75	14.05	288857	447005	0.882	1.143	#

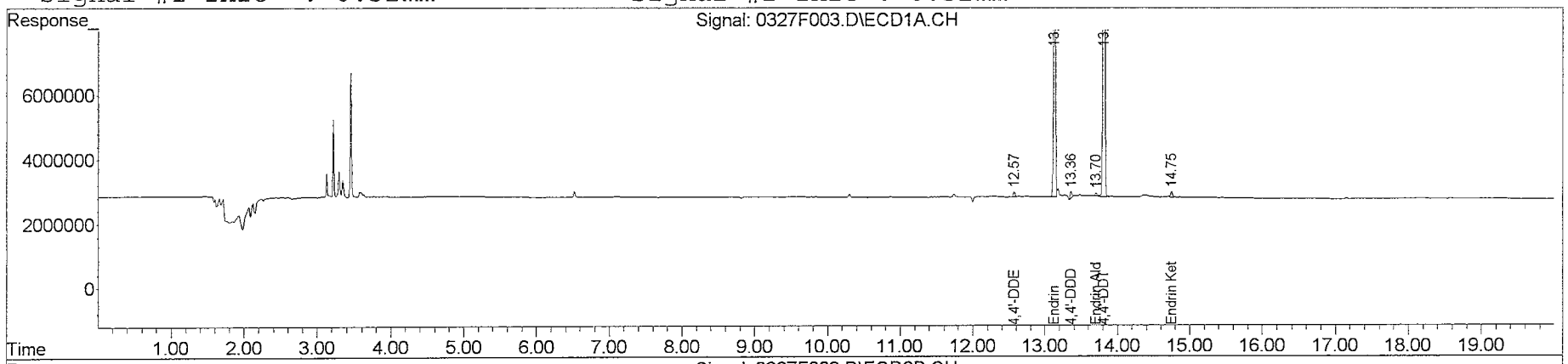
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

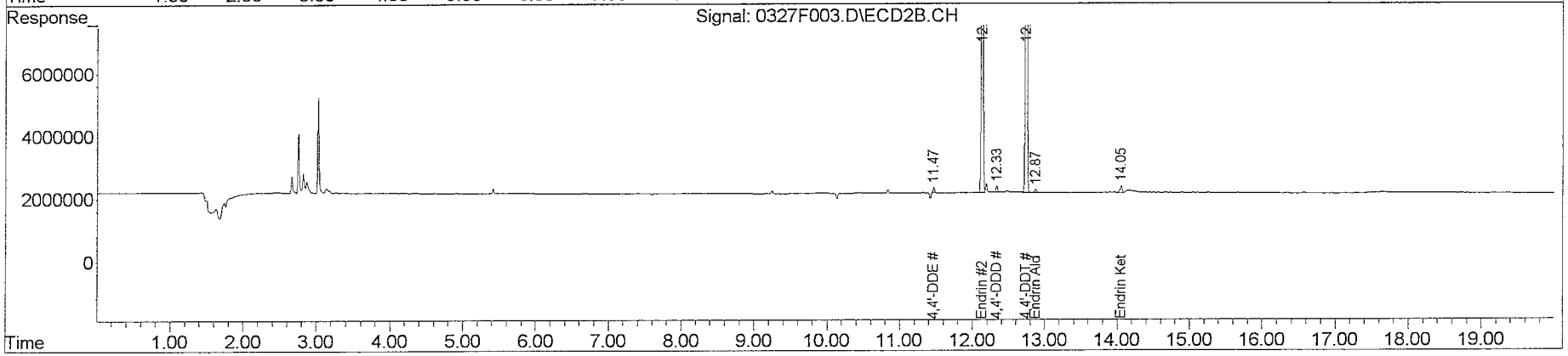
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:00 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

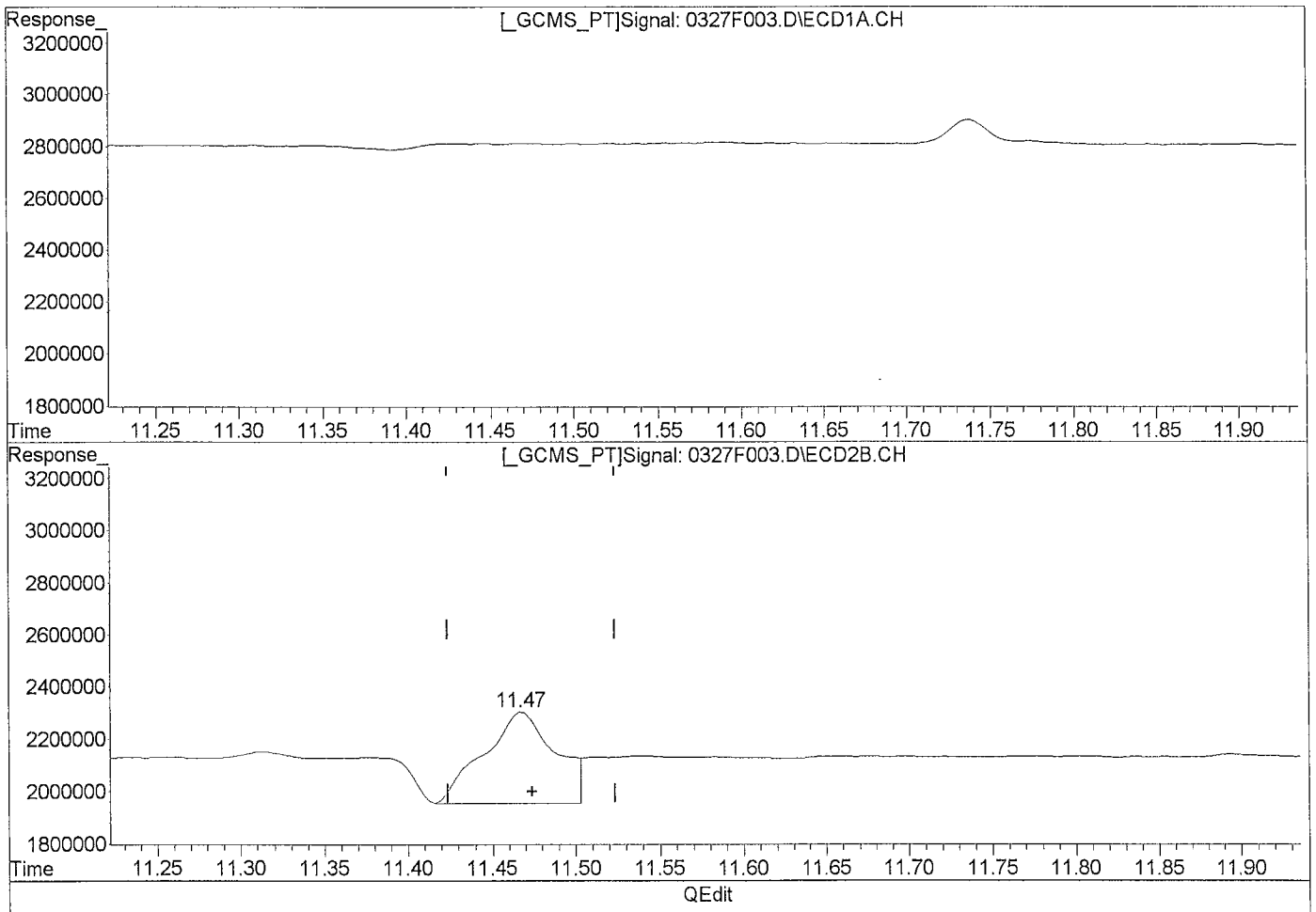




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 0.841ug/L

response 279465

(15) 4,4'-DDE #2

11.47min 3.014ug/L

response 1047376

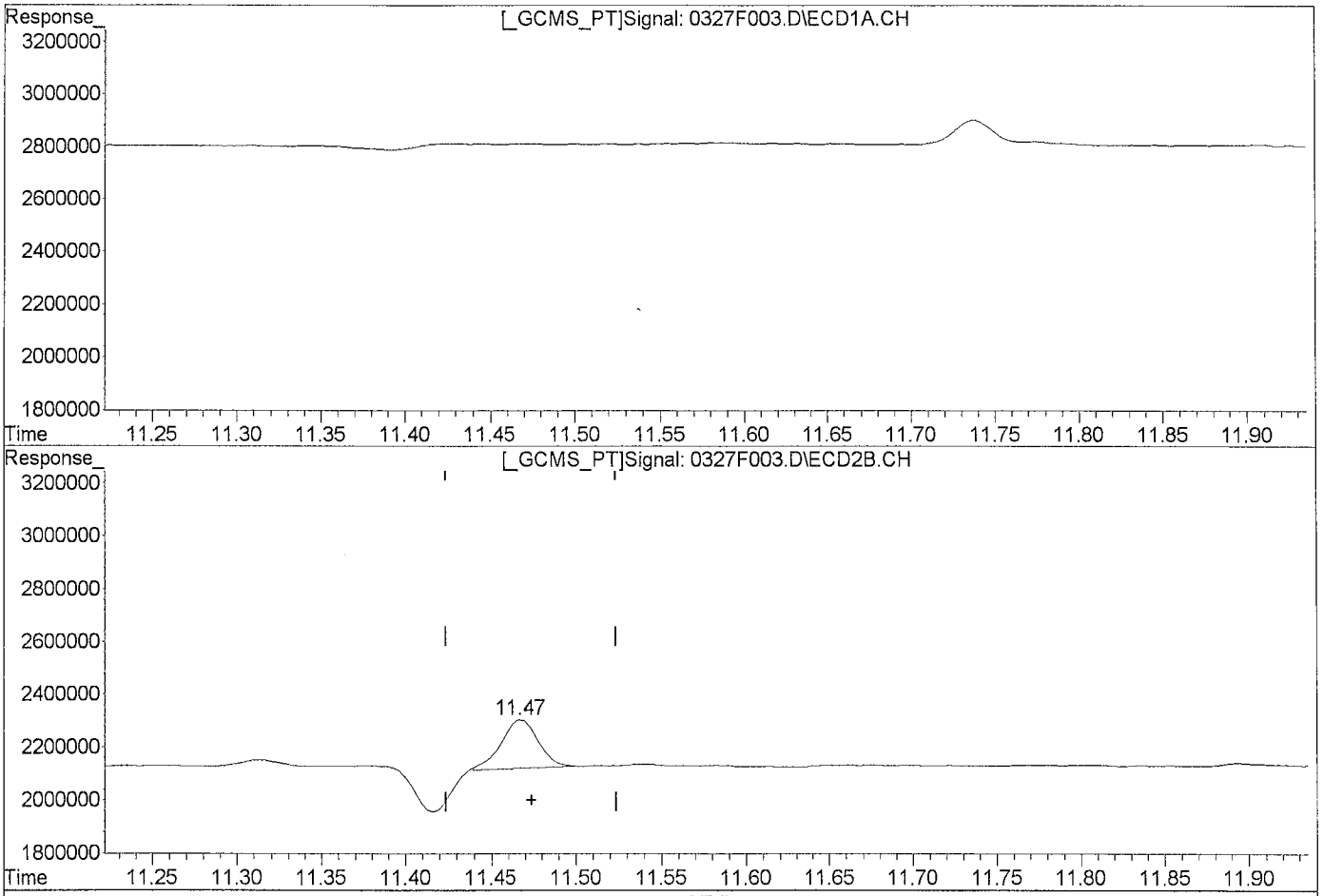
(+) = Expected Retention Time

0327F003.D 031207-8081.M Tue Mar 27 08:59:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 0.841ug/L

response 279465

(15) 4,4'-DDE #2

11.47min 0.806ug/L m

response 280185

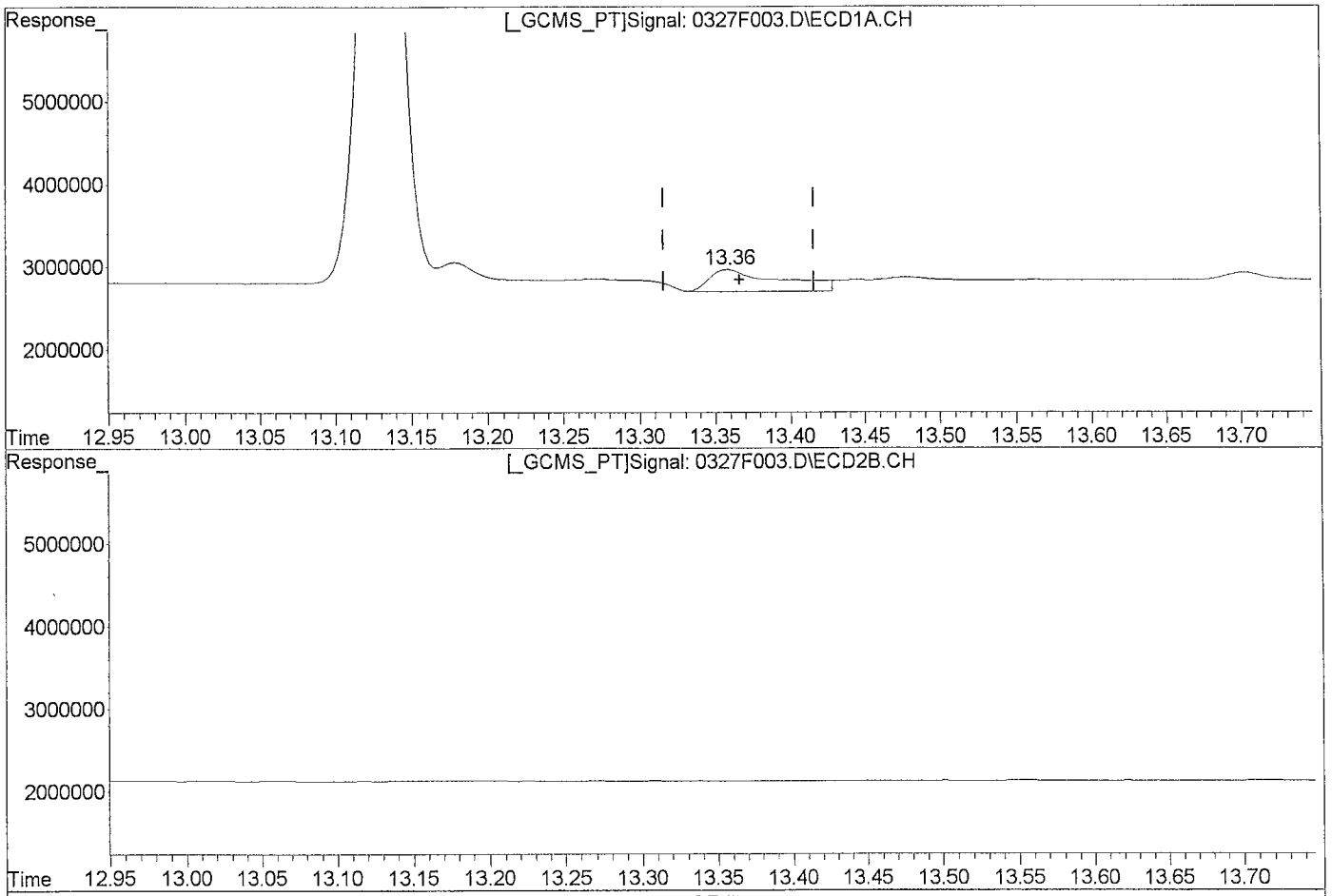
(+) = Expected Retention Time

0327F003.D 031207-8081.M Tue Mar 27 08:59:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.36min 3.398ug/L

response 896309

(18) 4,4'-DDD #2

12.33min 1.132ug/L

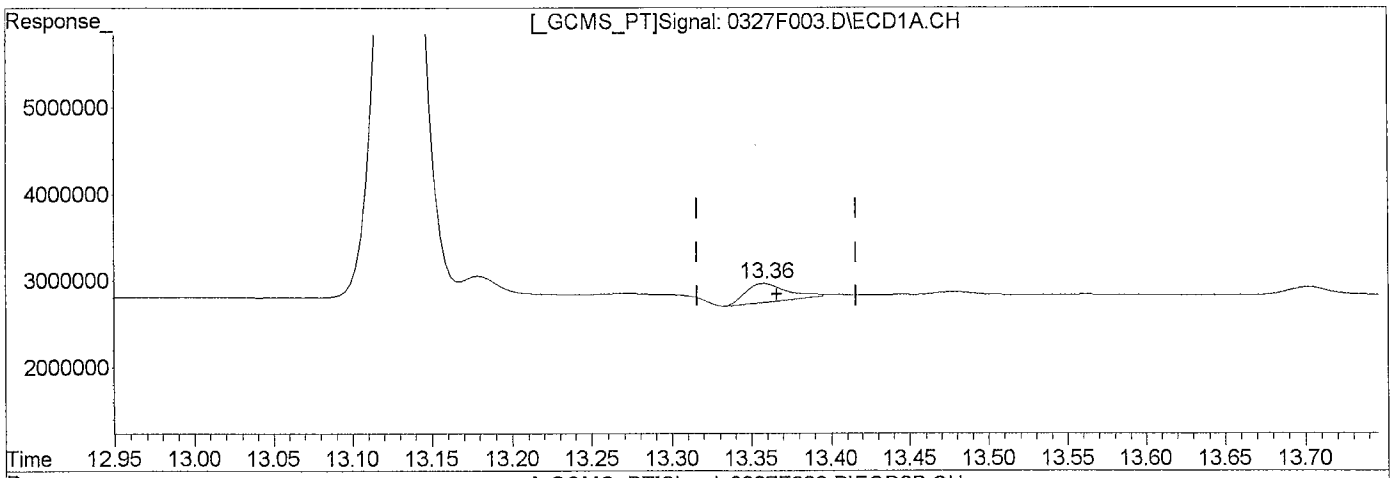
response 329572

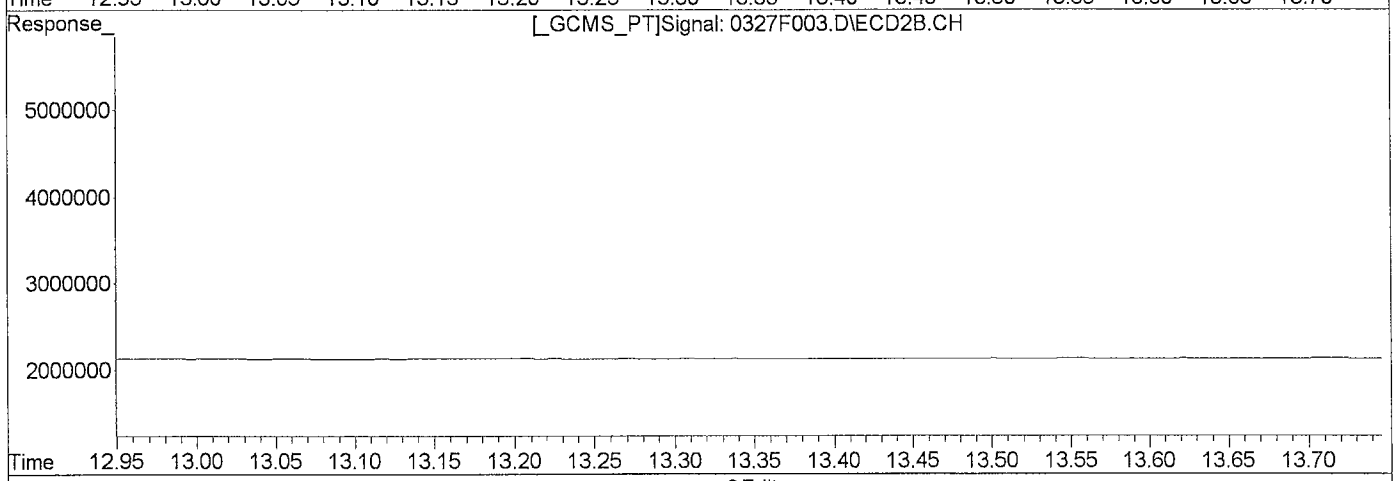
(+) = Expected Retention Time
0327F003.D 031207-8081.M Tue Mar 27 08:59:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 1.563ug/L m

response 412286

(18) 4,4'-DDD #2

12.33min 1.132ug/L

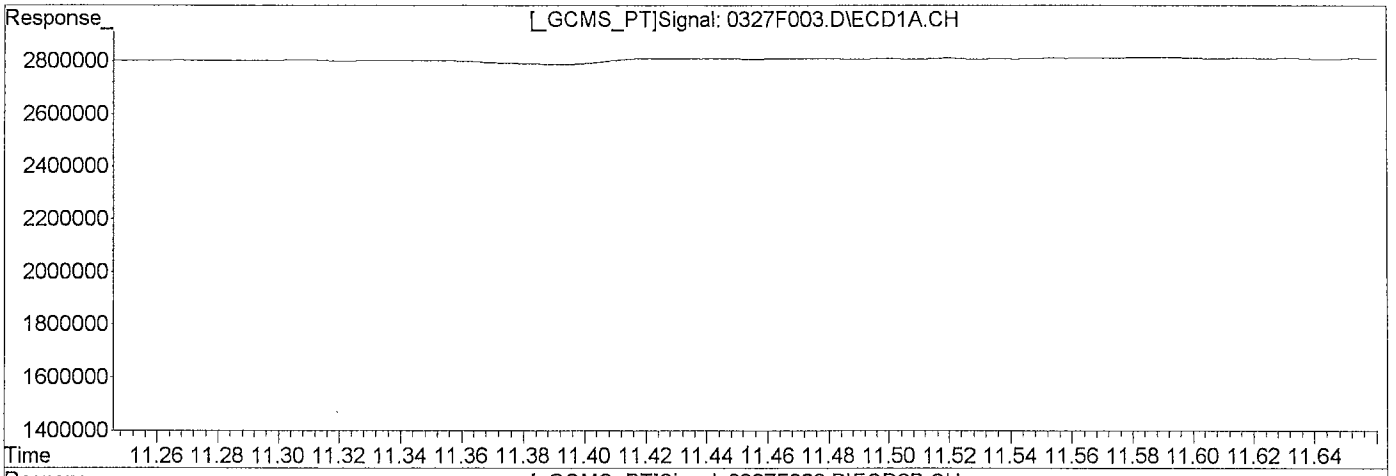
response 329572

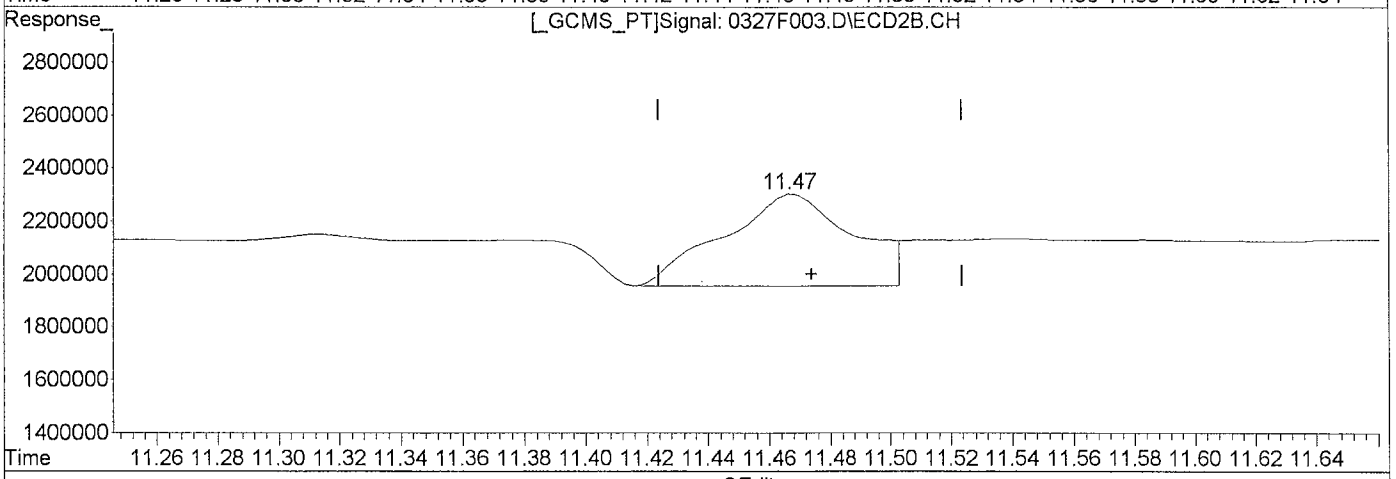
(+) = Expected Retention Time
0327F003.D 031207-8081.M Tue Mar 27 08:59:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.57min 0.841ug/L

response 279465

(15) 4,4'-DDE #2

11.47min 3.014ug/L

response 1047376

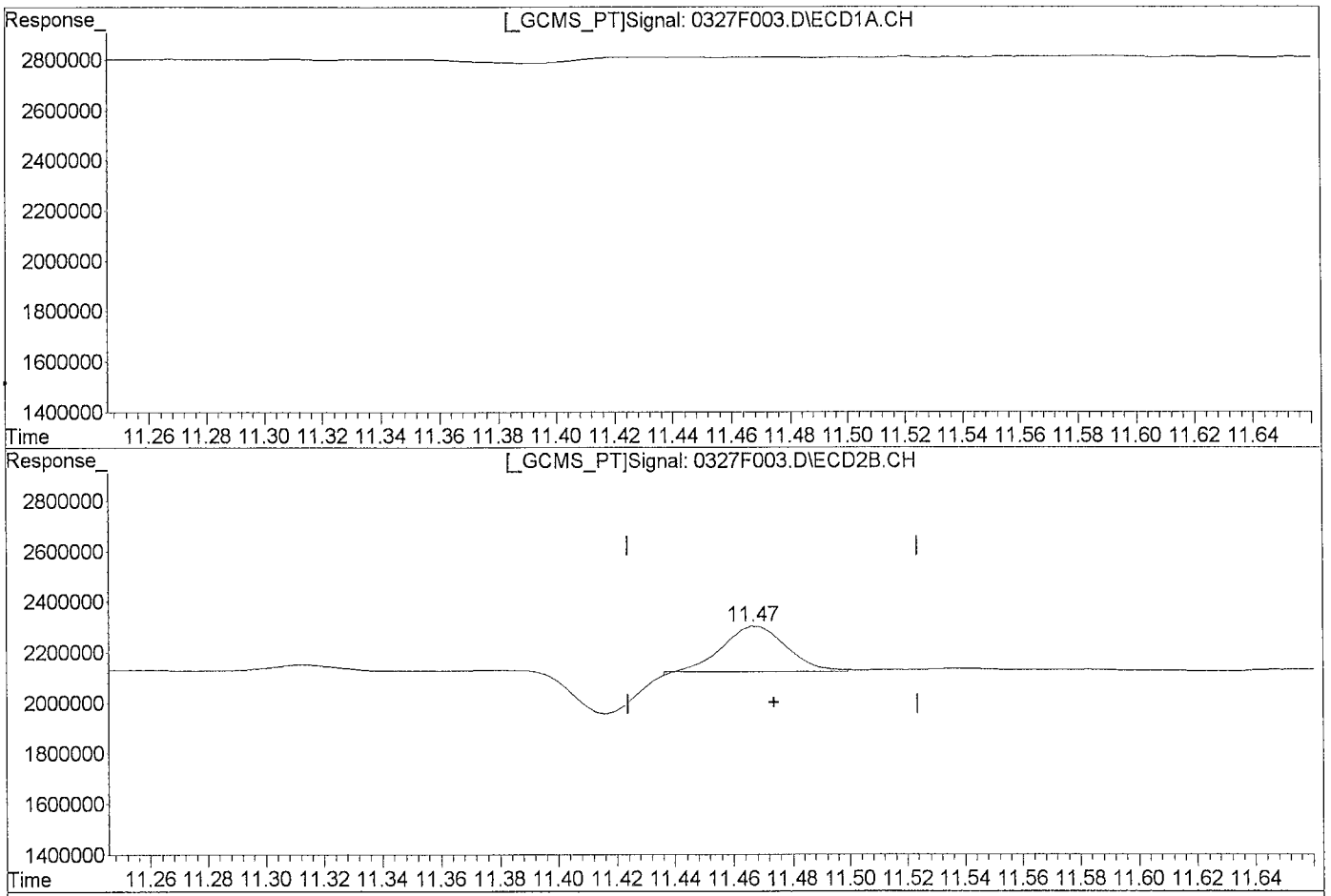
(+) = Expected Retention Time

0327F003.D 031207-8081.M Tue Mar 27 09:00:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.57min 0.841ug/L

response 279465

(15) 4,4'-DDE #2

11.47min 0.777ug/L m

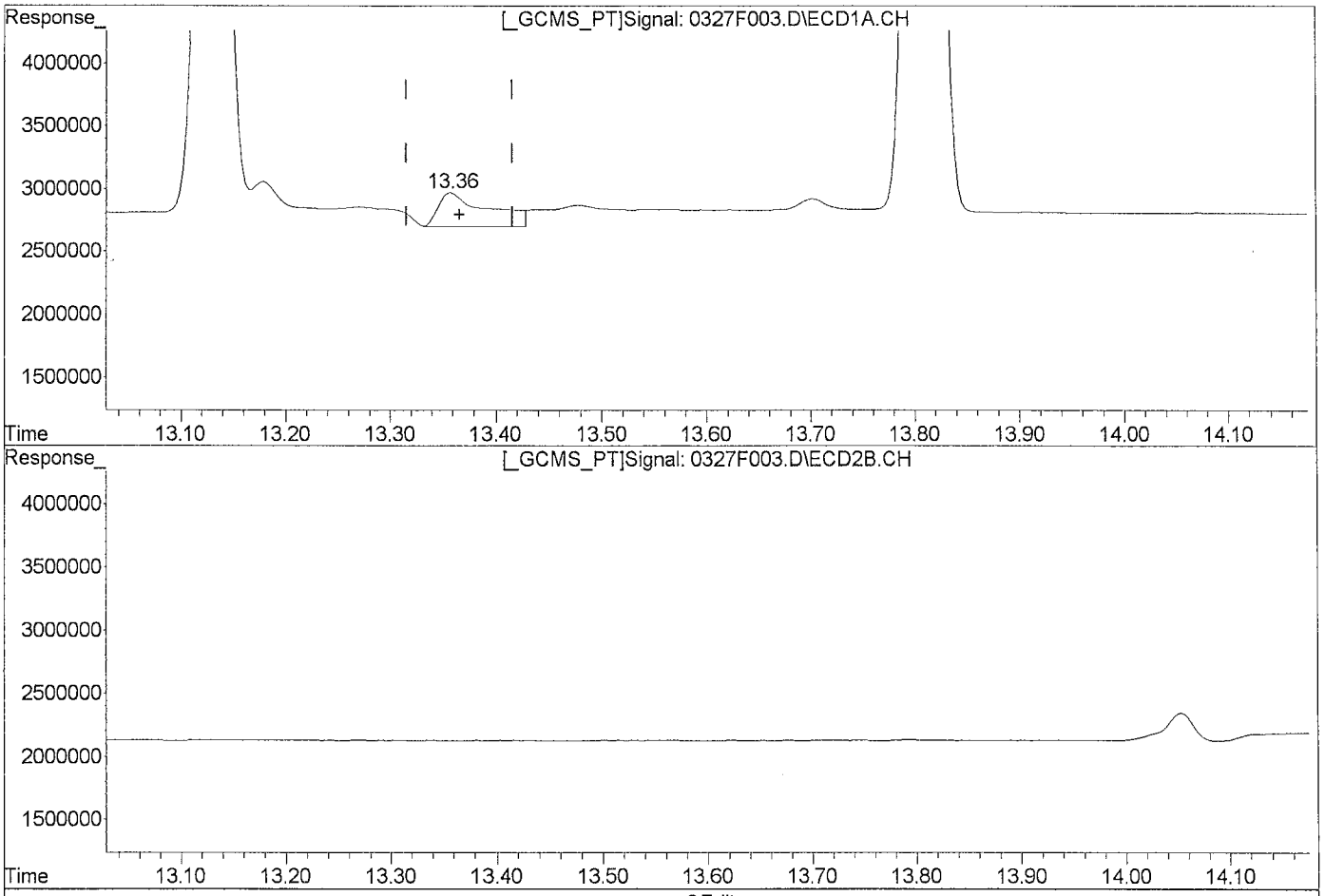
response 269909

(+) = Expected Retention Time
0327F003.D 031207-8081.M Tue Mar 27 09:00:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.36min 3.398ug/L

response 896309

(18) 4,4'-DDD #2

12.33min 1.132ug/L

response 329572

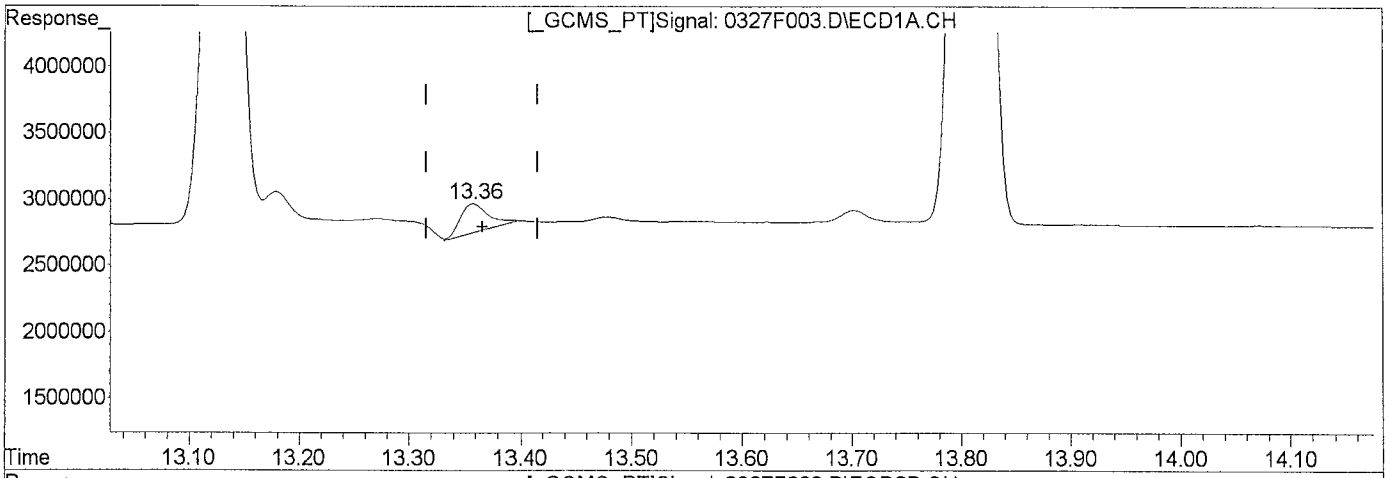
(+) = Expected Retention Time

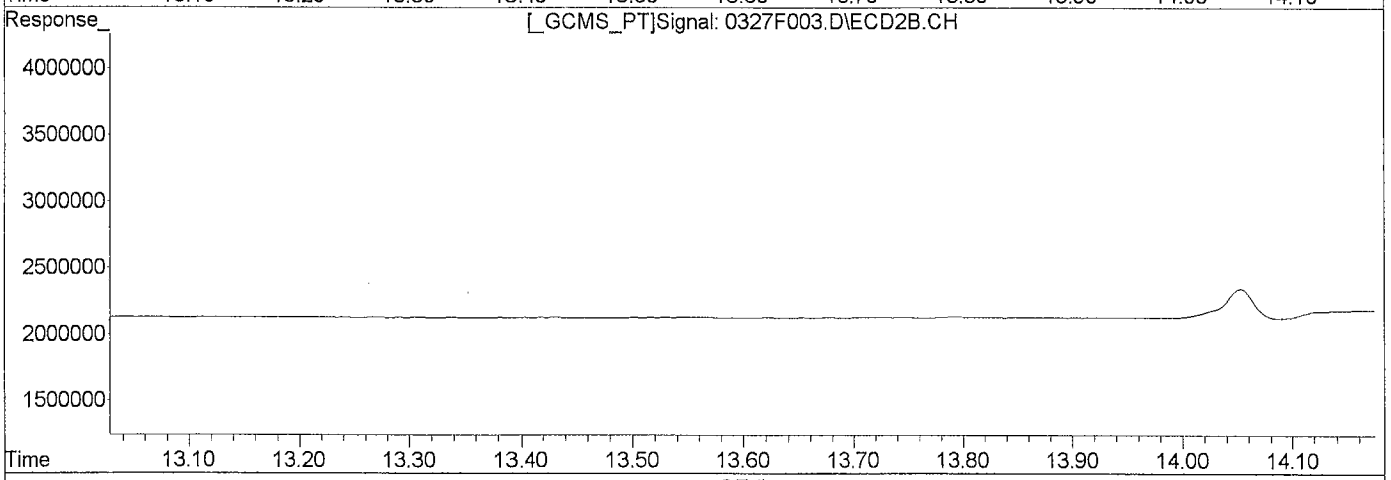
0327F003.D 031207-8081.M Tue Mar 27 09:00:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F003.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F003.D\ECD2B.CH
Acq On : 26 Mar 2007 8:56 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 1.515ug/L m

response 399649

(18) 4,4'-DDD #2

12.33min 1.132ug/L

response 329572

(+) = Expected Retention Time

0327F003.D 031207-8081.M Tue Mar 27 09:00:47 2007

Exception Report

Data File:	J:\GC23\DATA\032707\0327F006.D	**Date Acquired:**	03/26/2007 10:15
Lab ID:	KWG0703981-3	**Date Quantitated:**	03/27/2007 09:06
RunType:	CCV	**Batch ID:**	KWG0703981
Matrix:	MISC	**Analysis Method:**	8081A
		MethodJoinID:	MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	

Primary Review: 3/30/07

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\032707\0327F006.D\0327F006C.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 10:15
Date Quantitated: 03/27/2007 09:06
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	JW

Primary Review: LC 7/30/07

Secondary Review: MO 3-30-07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F006.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F006.D\0327F006c.d			**Vial:**	86
Acqu Date:	03/26/2007 10:15	**Quant Date:**	03/27/2007 09:06	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F006.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F006.D\0327F006c.d			**Vial:**	86
Acqu Date:	03/26/2007 10:15	**Quant Date:**	03/27/2007 09:06	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos	10.95	10.02	10063009	9968543	53.98	52.74			
Oxychlordane	11.73	10.47	16077717	16486220	53.23	50.14			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor	13.37	12.21	17271482	19101343	53.58	50.25			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor	12.41	11.04	17389720	18405683	53.30	50.16			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex	15.49	14.24	10584004m	15020636	47.39	47.99			
Hexachloroethane	4.14	3.56	38284411	36080155	56.05	53.37			
Hexachlorobutadiene	4.87	4.12	28687730	27079495	54.53	52.07			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F006.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Hexachloroethane		MS	AverageRF	15		6.8E+5	7.7E+5	12.1			
Hexachlorobutadiene		MS	AverageRF	15		5.3E+5	5.7E+5	9.1			
Chlorpyrifos		MS	AverageRF	15		1.9E+5	2.0E+5	7.9			
Oxychlordane		MS	AverageRF	15		3.0E+5	3.2E+5	6.5			
trans-Nonachlor		MS	AverageRF	15		3.3E+5	3.5E+5	6.6			
cis-Nonachlor		MS	AverageRF	15		3.2E+5	3.5E+5	7.2			
Mirex		MS	AverageRF	15		2.2E+5	2.1E+5	-5.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	7.8

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F006.D\0327F006C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Hexachloroethane		MS	AverageRF	15		6.8E+5	7.2E+5	6.7			
Hexachlorobutadiene		MS	AverageRF	15		5.2E+5	5.4E+5	4.1			
Chlorpyrifos		MS	AverageRF	15		1.9E+5	2.0E+5	5.5			
Oxychlordane		MS	AverageRF	15		3.3E+5	3.3E+5	0.3			
trans-Nonachlor		MS	AverageRF	15		3.7E+5	3.7E+5	0.3			
cis-Nonachlor		MS	AverageRF	15		3.8E+5	3.8E+5	0.5			
Mirex		MS	AverageRF	15		3.1E+5	3.0E+5	-4.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	3.1

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F006.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F006.D\ECD2B.CH
Acq On : 26 Mar 2007 10:15 am Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:10 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	10063009	9968543	53.975	52.742
38)	Oxychlordane	11.73	10.47	16077717	16486220	53.225	50.137
40)	cis-Nonachlor	13.37	12.21	17271482	19101343	53.579	50.251
42)	trans-Nonachlor	12.41	11.04	17389720	18405683	53.302	50.162
44)	Mirex	15.49	14.24	10584004	15020636	47.389m	47.985
46)	HCE	4.14	3.56	38284411	36080155	56.047	53.374
47)	HCBD	4.87	4.12	28687730	27079495	54.527	52.066

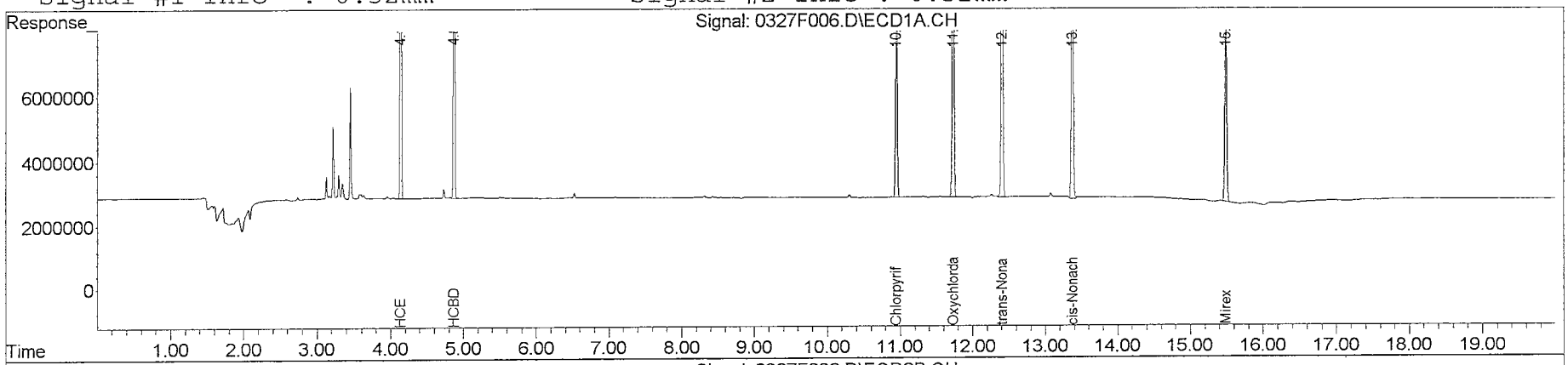
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

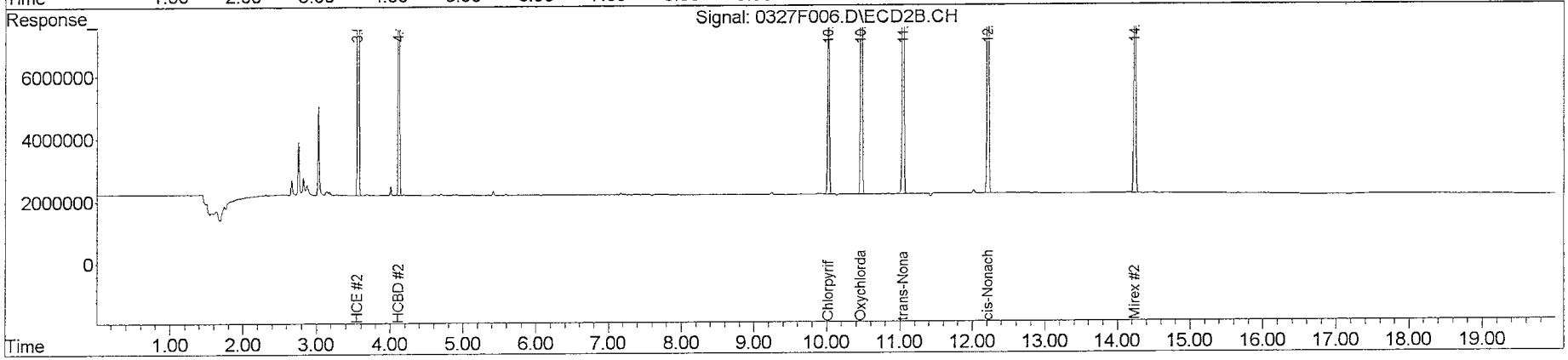
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F006.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F006.D\ECD2B.CH
Acq On : 26 Mar 2007 10:15 am Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

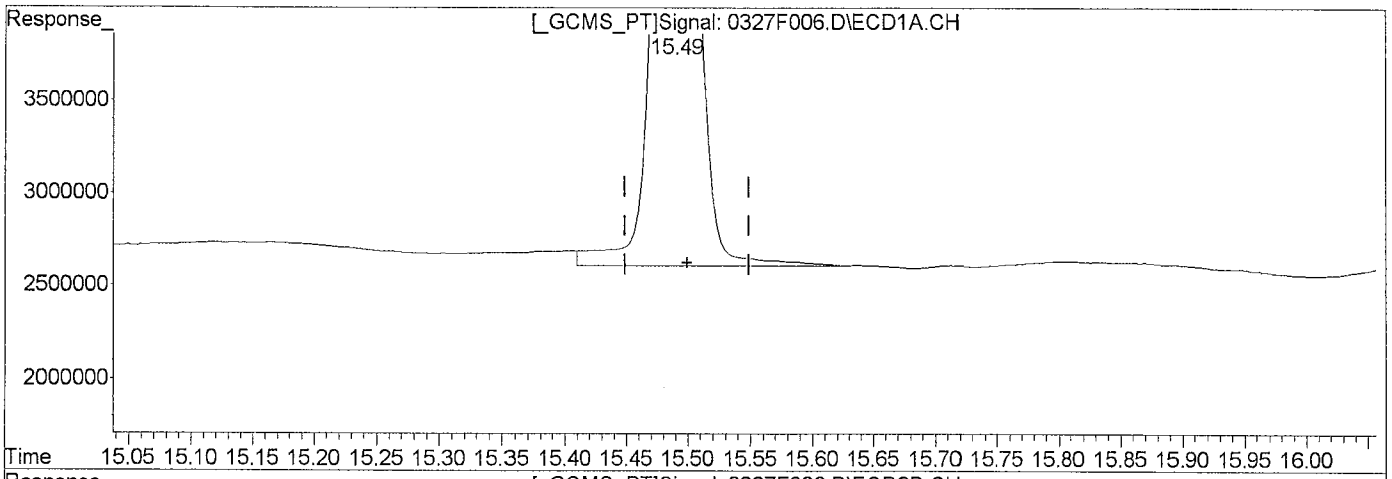


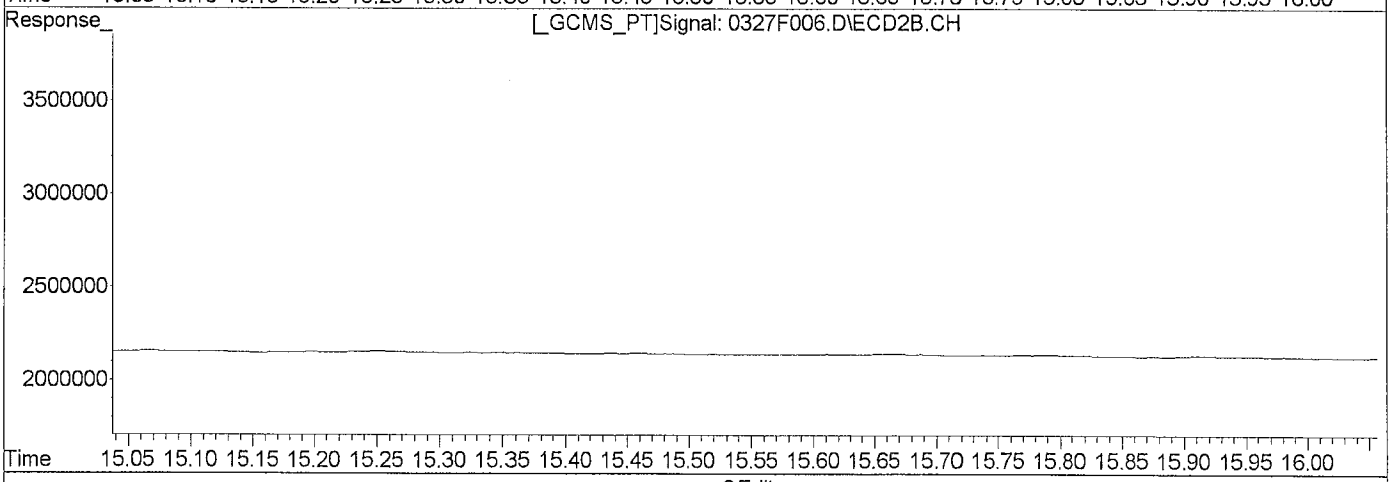


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F006.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F006.D\ECD2B.CH
Acq On : 26 Mar 2007 10:15 am Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(44) Mirex

15.49min 49.937ug/L

response 11153094

(44) Mirex #2

14.24min 47.985ug/L

response 15020636

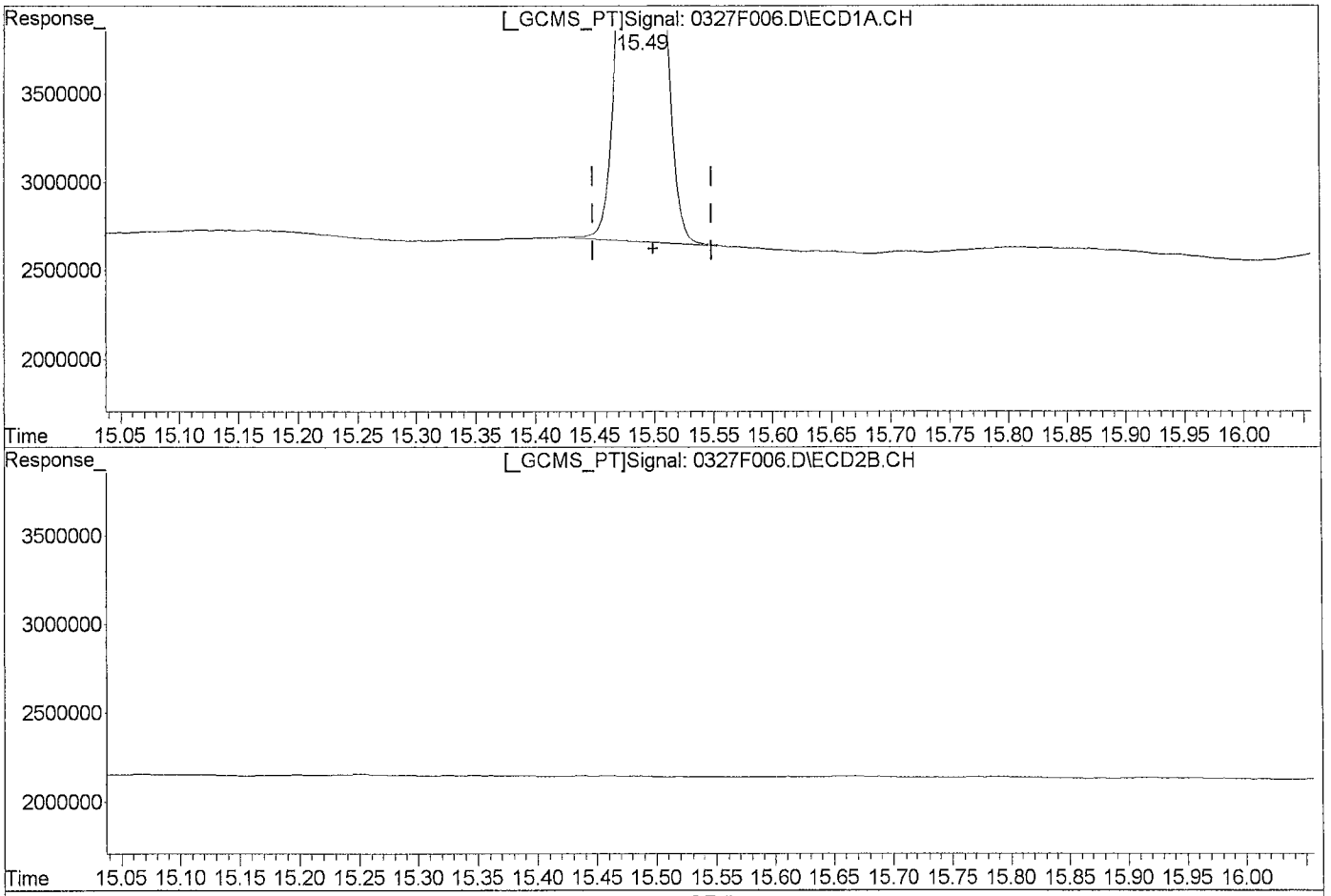
(+) = Expected Retention Time

0327F006.D 031207-8081.M Tue Mar 27 09:06:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F006.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F006.D\ECD2B.CH
Acq On : 26 Mar 2007 10:15 am Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-3 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(44) Mirex

15.49min 47.389ug/L m

response 10584004

(44) Mirex #2

14.24min 47.985ug/L

response 15020636

(+) = Expected Retention Time
0327F006.D 031207-8081.M Tue Mar 27 09:06:07 2007

Exception Report

Data File: J:\GC23\DATA\032707\0327F007.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 10:42
Date Quantitated: 03/27/2007 09:06
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	JW

Primary Review: LC 3/30/07

Secondary Review: [illegible] 3/30/07

Exception Report

Data File: J:\GC23\DATA\032707\0327F007.D\0327F007C.D
Lab ID: KWG0703981-3
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 10:42
Date Quantitated: 03/27/2007 09:06
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	

Primary Review: 3/30/07

Secondary Review: 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F007.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F007.D\0327F007c.d			**Vial:**	87
Acqu Date:	03/26/2007 10:42	**Quant Date:**	03/27/2007 09:06	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F007.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F007.D\0327F007c.d			**Vial:**	87
Acqu Date:	03/26/2007 10:42	**Quant Date:**	03/27/2007 09:06	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE	12.03	11.02	12546135	13177658	48.88	49.45			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD	12.72	11.77	11265523	12081156	49.43	49.68			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT	13.19	12.19	13360363	14806221	49.51	48.96			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F007.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
2,4'-DDE		MS	AverageRF	15		2.6E+5	2.5E+5	-2.2			
2,4'-DDD		MS	AverageRF	15		2.3E+5	2.3E+5	-1.1			
2,4'-DDT		MS	AverageRF	15		2.7E+5	2.7E+5	-1.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	1.5

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109

DataFile: J:\GC23\DATA\032707\0327F007.D\0327F007C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
2,4'-DDE		MS	AverageRF	15		2.7E+5	2.6E+5	-1.1			
2,4'-DDD		MS	AverageRF	15		2.4E+5	2.4E+5	-0.6			
2,4'-DDT		MS	AverageRF	15		3.0E+5	3.0E+5	-2.1			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	1.3

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F007.D\ECD1A.CH Vial: 87
Signal #2 : J:\GC23\DATA\032707\0327F007.D\ECD2B.CH
Acq On : 26 Mar 2007 10:42 am Operator: AKamawal
Sample : 2,4-DDs @ 50ppb | gcps5-82i | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:11 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	12546135	13177658	48.880	49.451
41)	2,4'-DDD	12.72	11.77	11265523	12081156	49.428	49.681
43)	2,4'-DDT	13.19	12.19	13360363	14806221	49.514	48.964

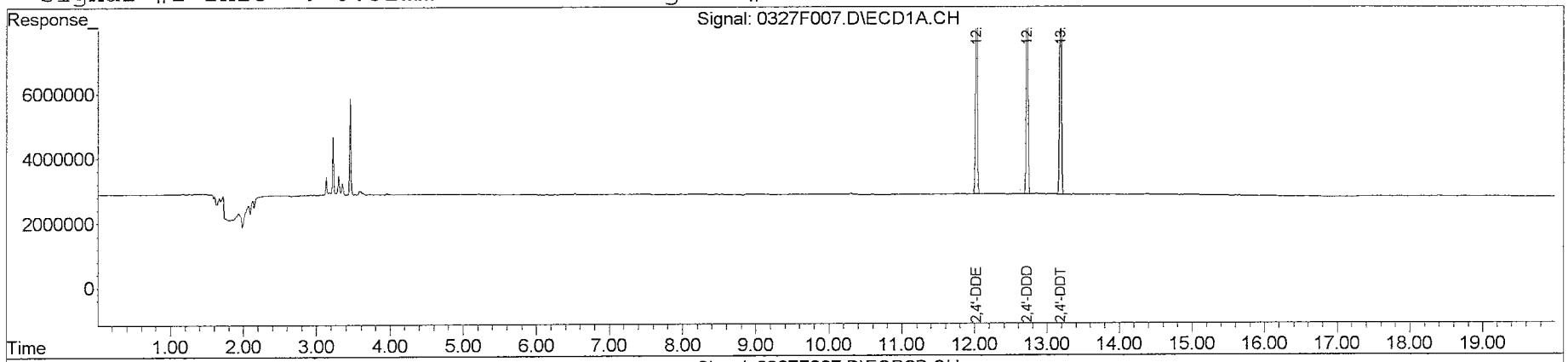
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

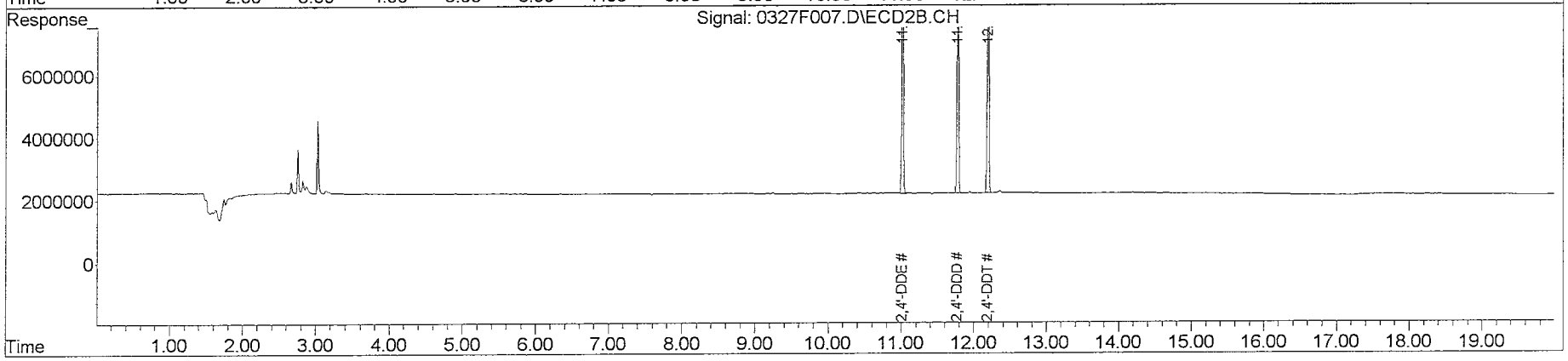
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F007.D\ECD1A.CH Vial: 87
Signal #2 : J:\GC23\DATA\032707\0327F007.D\ECD2B.CH
Acq On : 26 Mar 2007 10:42 am Operator: AKamawal
Sample : 2,4-DDs @ 50ppb | gcps5-82i | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032707\0327F023.D
Lab ID: KWG0703981-4
RunType: IB
Matrix: MISC

Date Acquired: 03/26/2007 17:47
Date Quantitated: 03/27/2007 09:07
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	IW

Primary Review: LL 3/30/07

Secondary Review: [illegible] 3/30/07

Exception Report

Data File: J:\GC23\DATA\032707\0327F023.D\0327F023C.D
Lab ID: KWG0703981-4
RunType: IB
Matrix: MISC

Date Acquired: 03/26/2007 17:47
Date Quantitated: 03/27/2007 09:07
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	

Primary Review: 3/30/07

Secondary Review: 3/30/2007

Printed: 03/30/2007 15:23:53
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F023.D\0327F023c.d			**Vial:**	81
Acqu Date:	03/26/2007 17:47	**Quant Date:**	03/27/2007 09:07	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00	16.35	0	25087		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0	0d	0.0000	0.0000			
Endrin			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F023.D\0327F023c.d			**Vial:**	81
Acqu Date:	03/26/2007 17:47	**Quant Date:**	03/27/2007 09:07	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0	0	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0d	0.0000	0.0000			
Toxaphene {2}			0	0	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0d	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane	11.75	10.45	144787	41745	0.4790	0.1270			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0d	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0	0	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F023.D\ECD1A.CH Vial: 81
Signal #2 : J:\GC23\DATA\032707\0327F023.D\ECD2B.CH
Acq On : 26 Mar 2007 5:47 pm Operator: AKamawal
Sample : KWG0703981-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703981\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:29 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
38)	Oxychlordane	11.75	10.45f	144787	41745	0.479	0.127 #

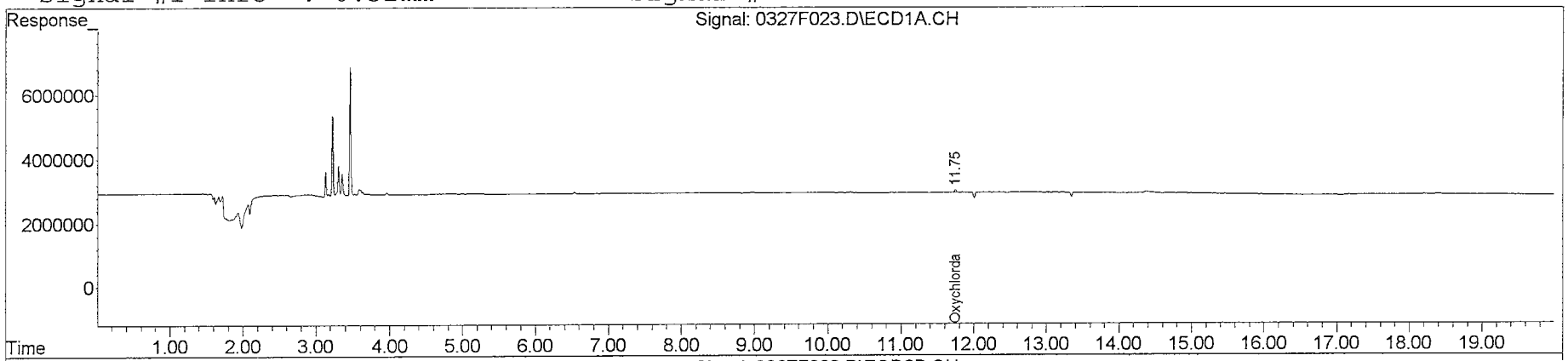
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

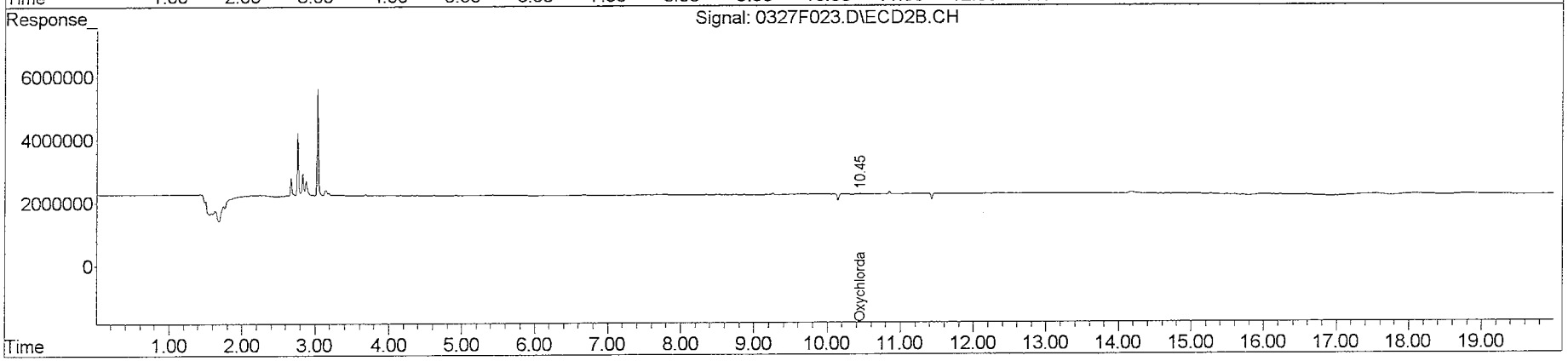
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F023.D\ECD1A.CH Vial: 81
Signal #2 : J:\GC23\DATA\032707\0327F023.D\ECD2B.CH
Acq On : 26 Mar 2007 5:47 pm Operator: AKamawal
Sample : KWG0703981-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703981\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:07 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032707\0327F024.D
Lab ID: KWG0703981-5
RunType: PEM
Matrix: MISC

Date Acquired: 03/26/2007 18:13
Date Quantitated: 03/27/2007 09:07
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: L 3/30/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032707\0327F024.D\0327F024C.D
Lab ID: KWG0703981-5
RunType: PEM
Matrix: MISC

Date Acquired: 03/26/2007 18:13
Date Quantitated: 03/27/2007 09:07
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	DW

Primary Review: 3/30/07

Secondary Review: 3/30/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032707\0327F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F024.D\0327F024c.d			**Vial:**	82
Acqu Date:	03/26/2007 18:13	**Quant Date:**	03/27/2007 09:07	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	196863	242665m		
Endrin	15174025	17721696	2.2	2.7
Endosulfan II	0d	0d		
4,4'-DDD	368180m	338308		
Endrin Aldehyde	110949	139255		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	27736911	33573885	2.0	1.7
Endrin Ketone	227919	360233		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F024.D\0327F024c.d			**Vial:**	82
Acqu Date:	03/26/2007 18:13	**Quant Date:**	03/27/2007 09:07	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:30 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.58	11.47	196863	242665	0.592	0.698m
16)	Endrin	13.14	12.13	15174025	17721696	51.770	55.198
18)	4,4'-DDD	13.36	12.34	368180	338308	1.396m	1.162
19)	Endrin Aldehyde	13.71	12.88	110949	139255	0.420	0.486
21)	4,4'-DDT	13.81	12.75	27736911	33573885	100.365	106.239
22)	Endrin Ketone	14.75	14.06	227919	360233	0.696	0.922 #

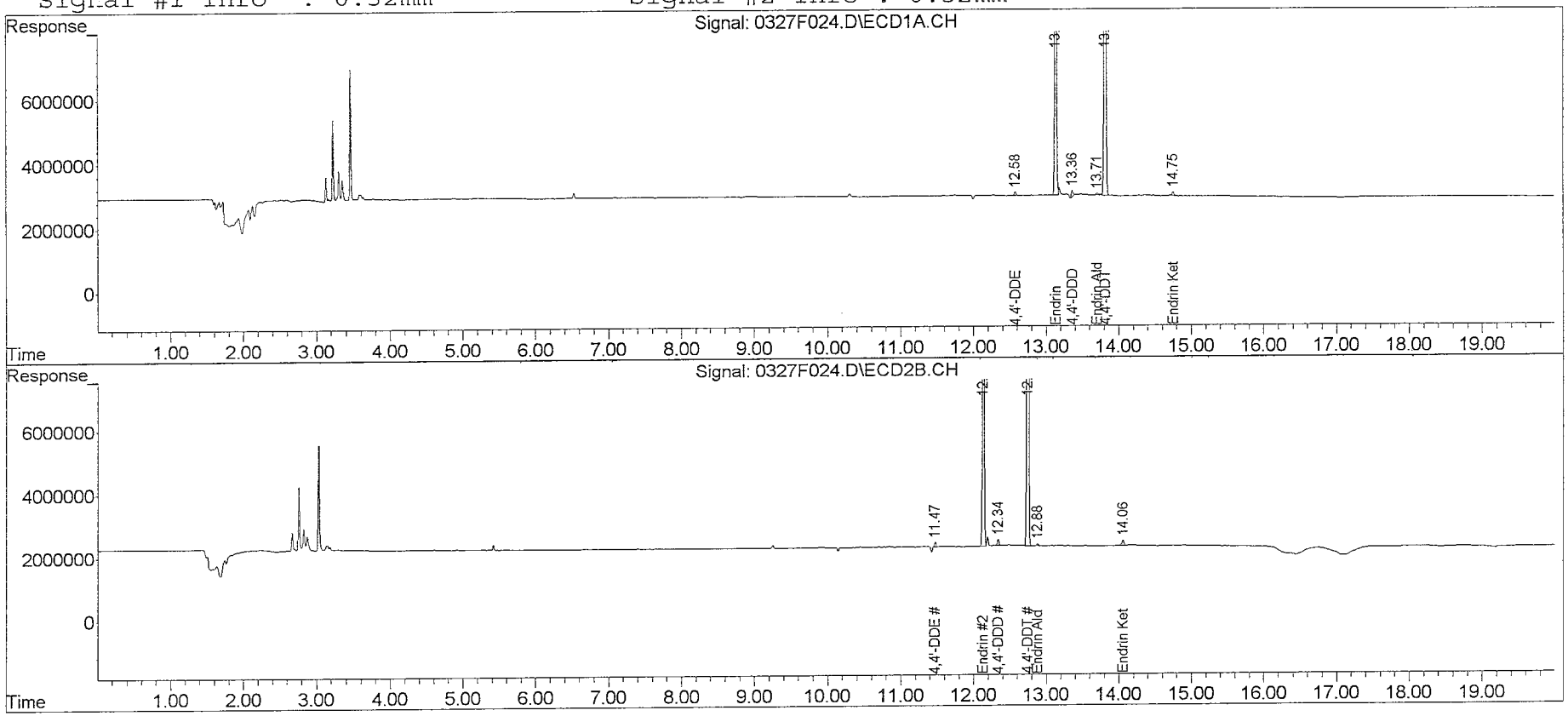
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:07 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

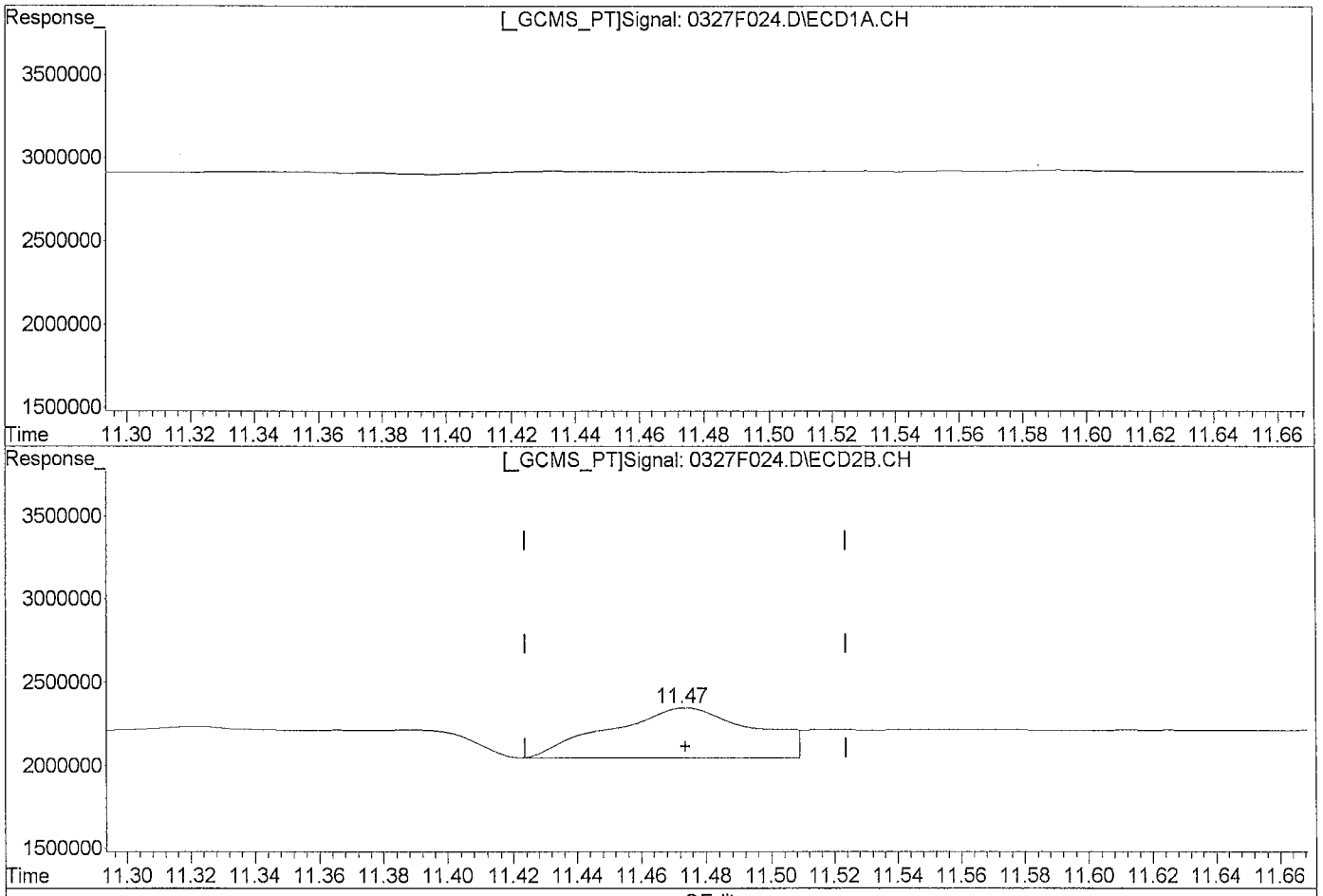
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.58min 0.592ug/L

response 196863

(15) 4,4'-DDE #2

11.47min 2.753ug/L

response 956446

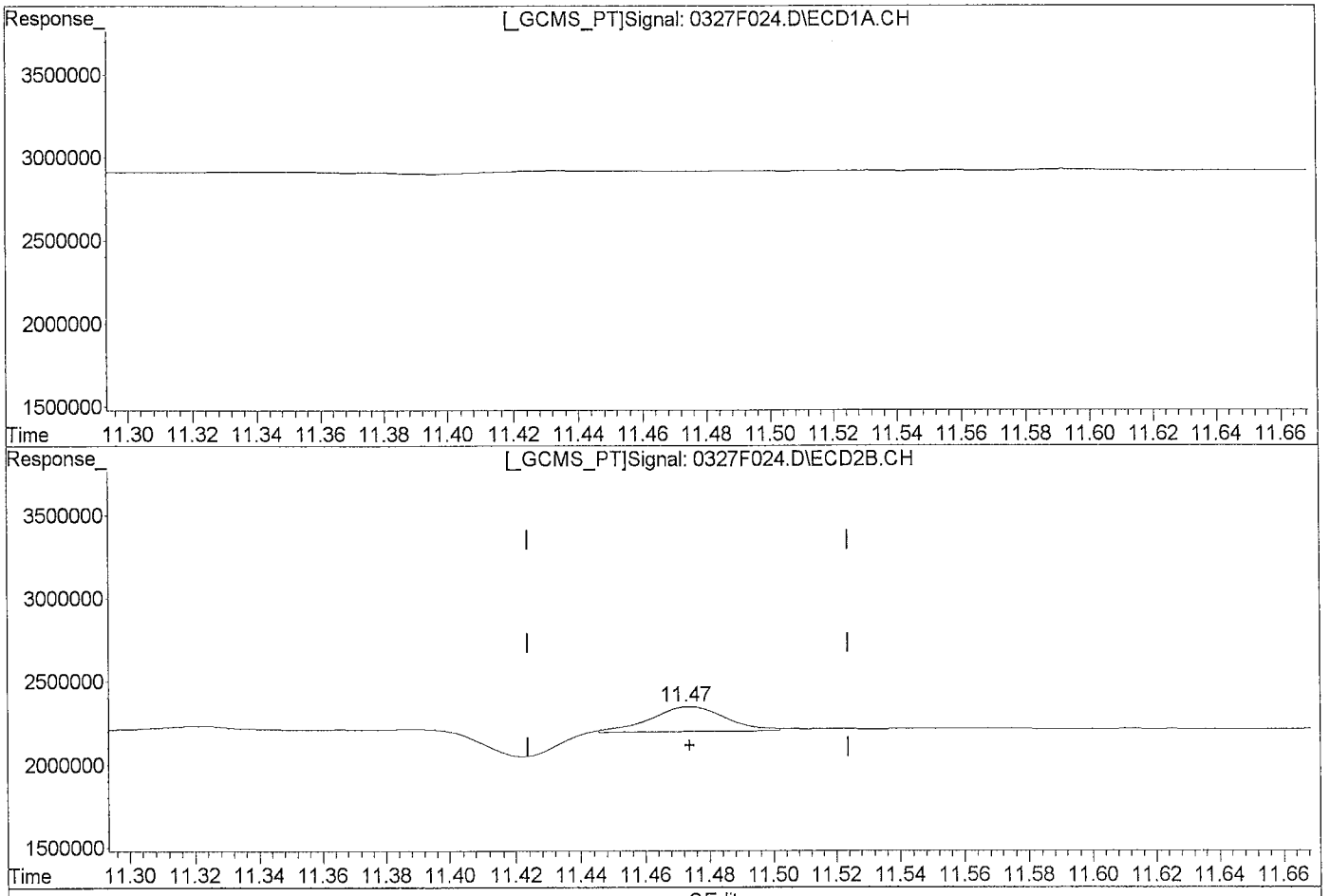
(+) = Expected Retention Time

0327F024.D 031207-8081.M Tue Mar 27 09:07:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.58min 0.592ug/L

response 196863

(15) 4,4'-DDE #2

11.47min 0.698ug/L m

response 242665

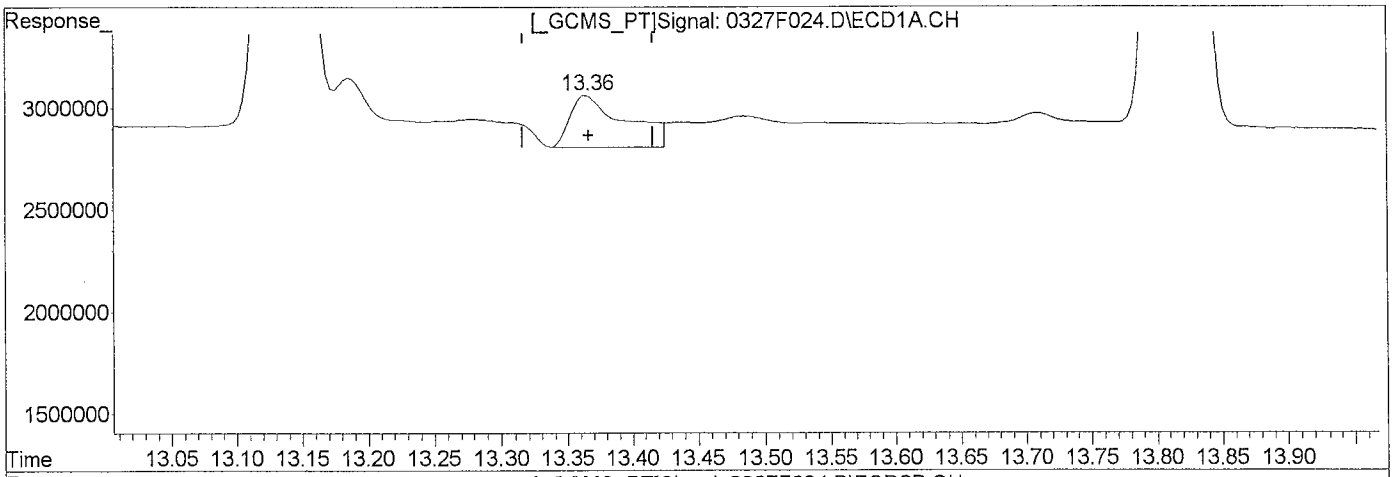
(+) = Expected Retention Time

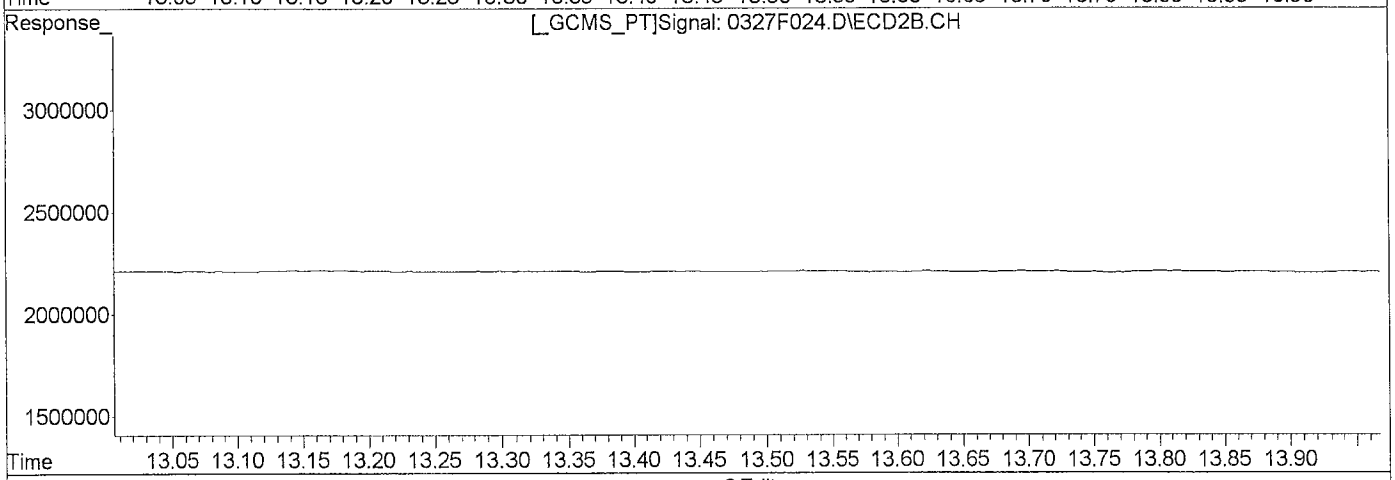
0327F024.D 031207-8081.M Tue Mar 27 09:07:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 2.910ug/L

response 767632

(18) 4,4'-DDD #2

12.34min 1.162ug/L

response 338308

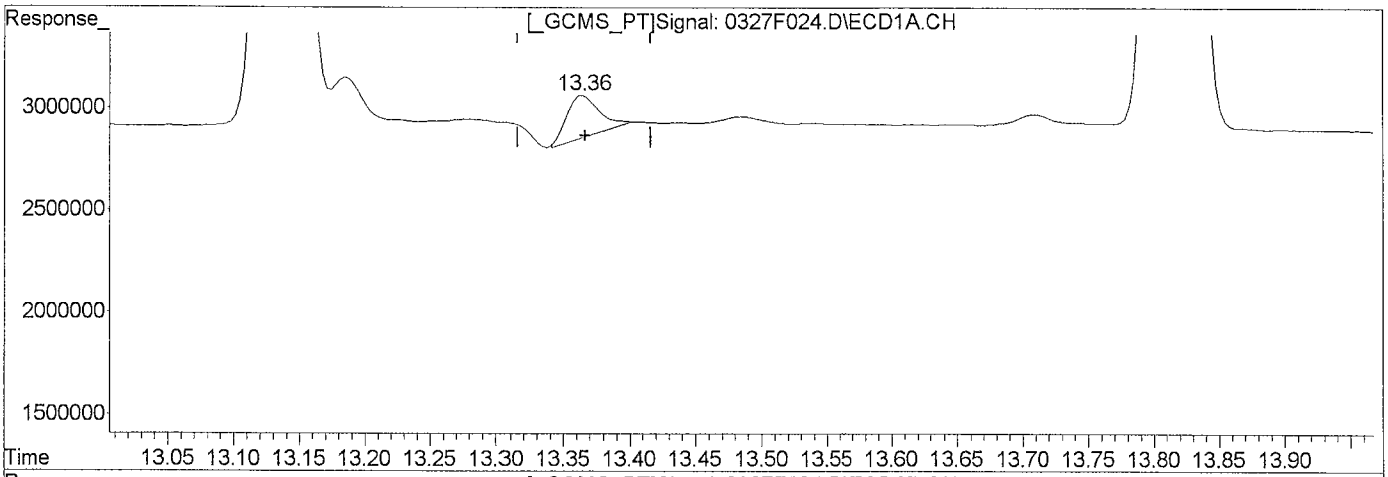
(+) = Expected Retention Time

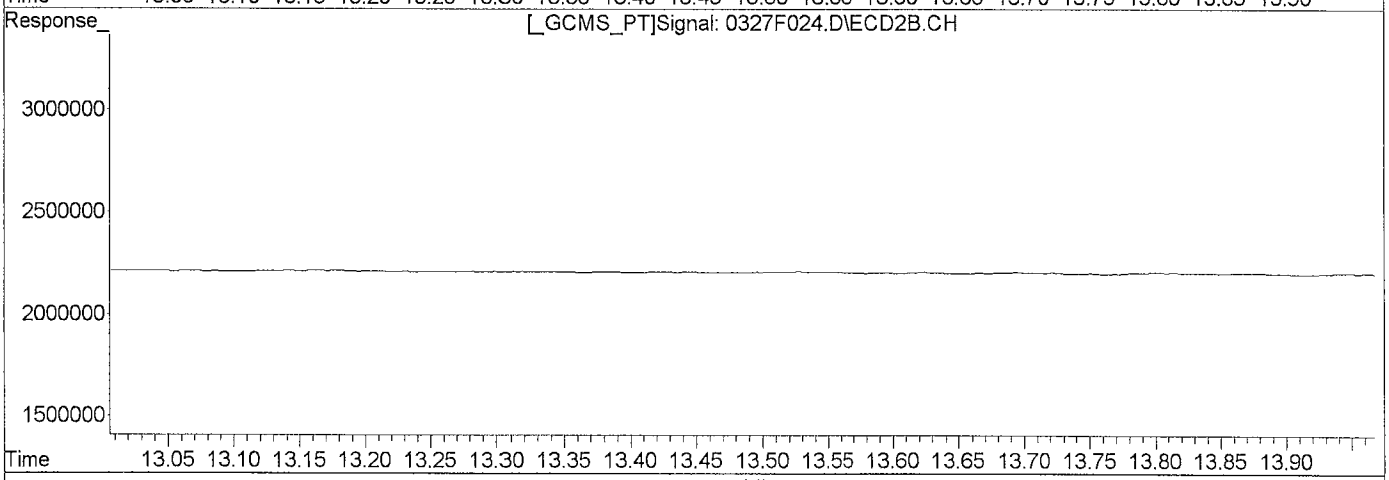
0327F024.D 031207-8081.M Tue Mar 27 09:07:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032707\0327F024.D\ECD1A.CH Vial: 82
Signal #2 : J:\GC23\DATA\032707\0327F024.D\ECD2B.CH
Acq On : 26 Mar 2007 6:13 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 8:56 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 1.396ug/L m

response 368180

(18) 4,4'-DDD #2

12.34min 1.162ug/L

response 338308

(+) = Expected Retention Time
0327F024.D 031207-8081.M Tue Mar 27 09:07:54 2007

Exception Report

Data File: J:\GC23\DATA\032707\0327F027.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 19:33
Date Quantitated: 03/27/2007 09:15
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	IW

Primary Review: 3/30/07

Secondary Review: 3-30-07

Printed: 03/30/2007 15:24:15
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\GC23\DATA\032707\0327F027.D\0327F027C.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 19:33
Date Quantitated: 03/27/2007 09:15
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	IW

Primary Review: 4/2/07

Secondary Review: 4/3/07

Printed: 03/30/2007 15:24:18
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F027.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F027.D\0327F027c.d			**Vial:**	86
Acqu Date:	03/26/2007 19:33	**Quant Date:**	03/27/2007 09:15	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F027.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F027.D\0327F027c.d			**Vial:**	86
Acqu Date:	03/26/2007 19:33	**Quant Date:**	03/27/2007 09:15	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos	10.95	10.03	10467769	10827025	56.15	57.28			
Oxychlordane	11.74	10.47	16367751	17438429	54.19	53.03			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor	13.38	12.22	18098915	19985148	56.15	52.58			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor	12.41	11.04	17593387	19457935	53.93	53.03			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex	15.50	14.24	11399147	15250997	51.04	48.72			
Hexachloroethane	4.14	3.56	38785505	37434657	56.78	55.38			
Hexachlorobutadiene	4.88	4.12	29073895	28237355	55.26	54.29			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F027.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Hexachloroethane		MS	AverageRF	15		6.8E+5	7.8E+5	13.6			
Hexachlorobutadiene		MS	AverageRF	15		5.3E+5	5.8E+5	10.5			
Chlorpyrifos		MS	AverageRF	15		1.9E+5	2.1E+5	12.3			
Oxychlordane		MS	AverageRF	15		3.0E+5	3.3E+5	8.4			
trans-Nonachlor		MS	AverageRF	15		3.3E+5	3.5E+5	7.9			
cis-Nonachlor		MS	AverageRF	15		3.2E+5	3.6E+5	12.3			
Mirex		MS	AverageRF	15		2.2E+5	2.3E+5	2.1			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~9.6~~

5.5

CC 3/30/07

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F027.D\0327F027C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Hexachloroethane		MS	AverageRF	15		6.8E+5	7.5E+5	10.8			
Hexachlorobutadiene		MS	AverageRF	15		5.2E+5	5.6E+5	8.6			
Chlorpyrifos		MS	AverageRF	15		1.9E+5	2.2E+5	14.6			
Oxychlordane		MS	AverageRF	15		3.3E+5	3.5E+5	6.1			
trans-Nonachlor		MS	AverageRF	15		3.7E+5	3.9E+5	6.1			
cis-Nonachlor		MS	AverageRF	15		3.8E+5	4.0E+5	5.2			
Mirex		MS	AverageRF	15		3.1E+5	3.1E+5	-2.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~7.7~~ 9.5

CC 3/30/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F027.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F027.D\ECD2B.CH
Acq On : 26 Mar 2007 7:33 pm Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:34 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.03	10467769	10827025	56.146	57.284
38)	Oxychlordane	11.74	10.47	16367751	17438429	54.186	53.033
40)	cis-Nonachlor	13.38	12.22	18098915	19985148	56.145	52.577
42)	trans-Nonachlor	12.41	11.04	17593387	19457935	53.927	53.030
44)	Mirex	15.50	14.24	11399147	15250997	51.039	48.721
46)	HCE	4.14	3.56	38785505	37434657	56.781	55.377
47)	HCBD	4.88	4.12	29073895	28237355	55.261	54.292

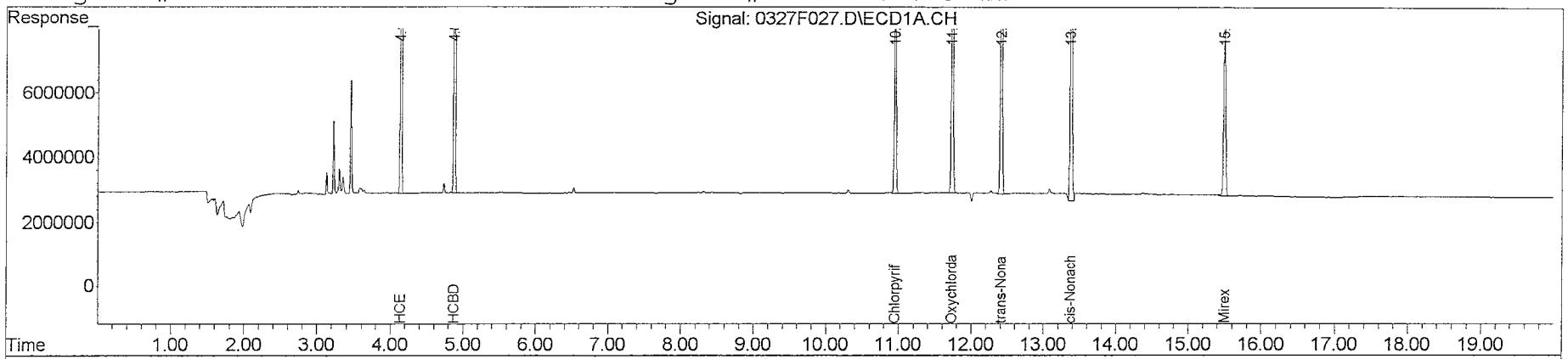
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

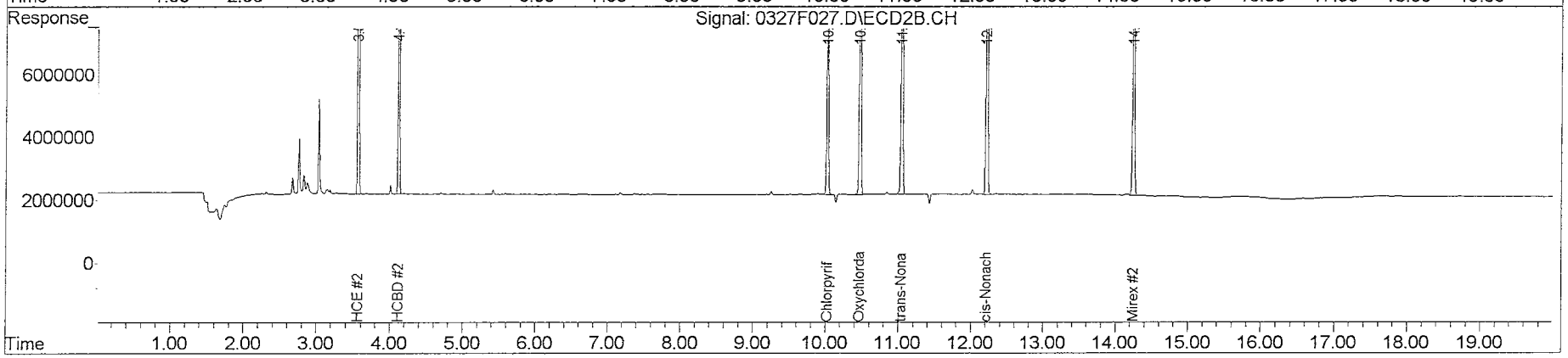
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F027.D\ECD1A.CH Vial: 86
Signal #2 : J:\GC23\DATA\032707\0327F027.D\ECD2B.CH
Acq On : 26 Mar 2007 7:33 pm Operator: AKamawal
Sample : misc @ 50ppb | gcps5-88m | KWG0703981-6 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:15 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032707\0327F028.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 19:59
Date Quantitated: 03/27/2007 09:21
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	

Primary Review: 3/30/07

Secondary Review: 3-30-07

Exception Report

Data File: J:\GC23\DATA\032707\0327F028.D\0327F028C.D
Lab ID: KWG0703981-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/26/2007 19:59
Date Quantitated: 03/27/2007 09:21
Batch ID: KWG0703981
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	Ical

Primary Review: 3/30/07

Secondary Review: 3-30-07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/23/2007

Analysis Lot:	KWG0703981	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032707\0327F028.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F028.D\0327F028c.d			**Vial:**	87
Acqu Date:	03/26/2007 19:59	**Quant Date:**	03/27/2007 09:21	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032707\0327F028.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032707\0327F028.D\0327F028c.d			**Vial:**	87
Acqu Date:	03/26/2007 19:59	**Quant Date:**	03/27/2007 09:21	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703981-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE	12.02	11.01	12503832	13482088	48.72	50.59			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD	12.72	11.77	11245835	12330945	49.34	50.71			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT	13.18	12.19	13408034	15163078	49.69	50.14			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F028.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
2,4'-DDE		MS	AverageRF	15		2.6E+5	2.5E+5	-2.6			
2,4'-DDD		MS	AverageRF	15		2.3E+5	2.2E+5	-1.3			
2,4'-DDT		MS	AverageRF	15		2.7E+5	2.7E+5	-0.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~1.5~~ 5.5

LC 3/30/07

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ109
DataFile: J:\GC23\DATA\032707\0327F028.D\0327F028C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
2,4'-DDE		MS	AverageRF	15		2.7E+5	2.7E+5	1.2			
2,4'-DDD		MS	AverageRF	15		2.4E+5	2.5E+5	1.4			
2,4'-DDT		MS	AverageRF	15		3.0E+5	3.0E+5	0.3			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	1.0

9.5

CC 3/30/07

Signal #1 : J:\GC23\DATA\032707\0327F028.D\ECD1A.CH Vial: 87
Signal #2 : J:\GC23\DATA\032707\0327F028.D\ECD2B.CH
Acq On : 26 Mar 2007 7:59 pm Operator: AKamawal
Sample : 2,4-DDs @ 50ppb | gcps5-82i | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 08:56:35 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.02	11.01	12503832	13482088	48.715	50.594
41)	2,4'-DDD	12.72	11.77	11245835	12330945	49.342	50.708
43)	2,4'-DDT	13.18	12.19	13408034	15163078	49.690	50.144

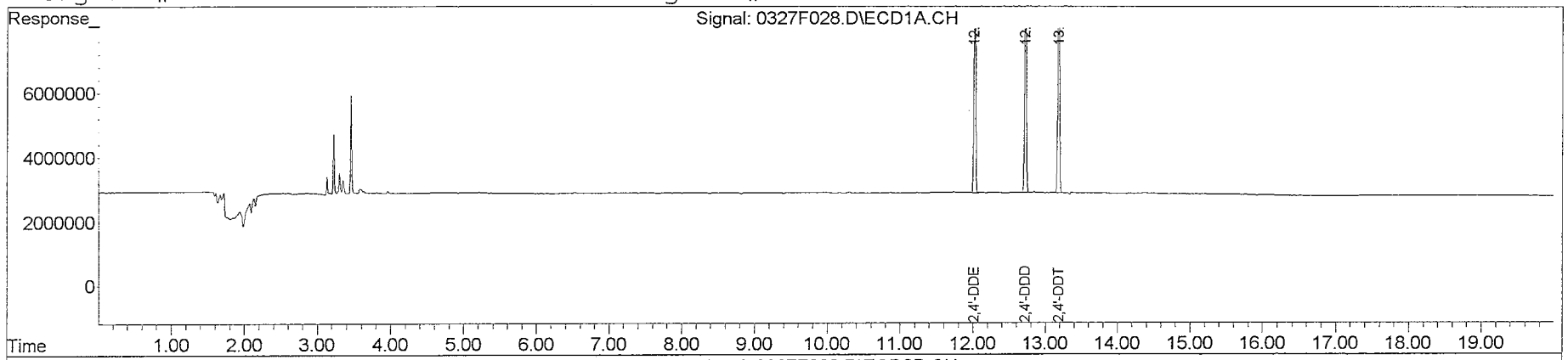
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

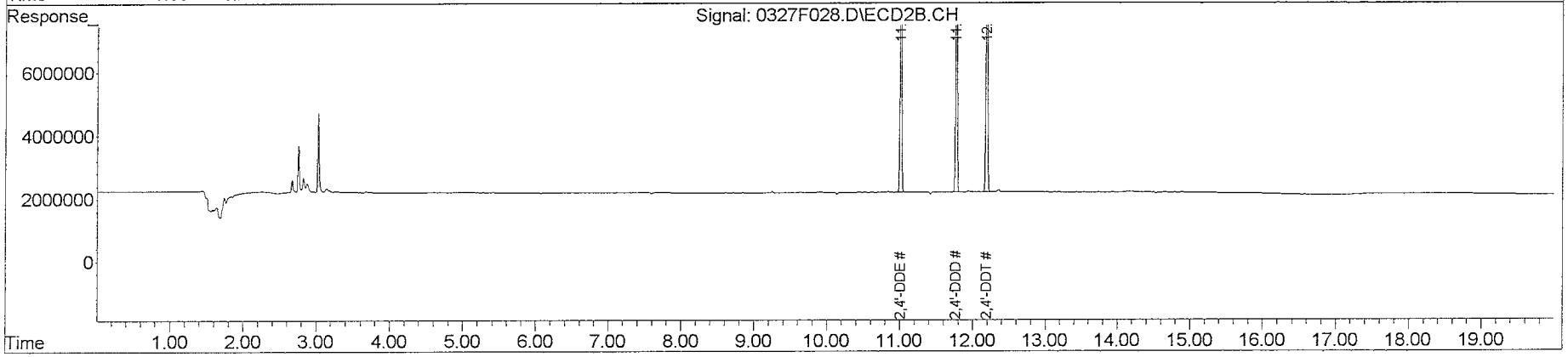
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032707\0327F028.D\ECD1A.CH Vial: 87
Signal #2 : J:\GC23\DATA\032707\0327F028.D\ECD2B.CH
Acq On : 26 Mar 2007 7:59 pm Operator: AKamawal
Sample : 2,4-DDs @ 50ppb | gcps5-82i | KWG0703981 Inst : GC23
Misc : SEMIVOA GC\W0703981\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 27 9:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Volatile Organic Compounds
EPA Method 8260B

Organic Analysis:
Volatile Organic Compounds

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
1047MW101CL	K0701647-001	03/01/2007	03/02/2007
1349MW01CL	K0701647-002	03/01/2007	03/02/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [illegible] Name: [illegible]

Date: 3/20/07 Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	94	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	94	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0703590-6

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703590-6	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	97	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
1047MW101CL	K0701647-001	86	110	94
1349MW01CL	K0701647-002	89	108	94
Method Blank	KWG0703590-6	91	110	97
Batch QC	K0702006-003	105	109	99
Batch QCMS	KWG0703590-1	102	110	101
Batch QCDMS	KWG0703590-2	104	110	101
Lab Control Sample	KWG0703590-5	81	108	92

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F003.D	**Lab Code:**	KWG0703563-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703563
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	402,584	5.62	180,989	9.07	163,576	11.49
	Upper Limit ==>	805,168	6.12	361,978	9.57	327,152	11.99
	Lower Limit ==>	201,292	5.12	90,495	8.57	81,788	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703590-5	410,000	5.62	177,755	9.07	161,244	11.49
Batch QCMS	KWG0703590-1	415,453	5.62	197,367	9.07	193,579	11.49
Batch QCDMS	KWG0703590-2	413,056	5.62	199,776	9.08	197,260	11.49
Method Blank	KWG0703590-6	393,497	5.62	177,163	9.08	164,037	11.49
1047MW101CL	K0701647-001	392,618	5.62	177,285	9.07	158,751	11.49
1349MW01CL	K0701647-002	401,171	5.62	181,970	9.07	164,867	11.49
Batch QC	K0702006-003	398,540	5.62	191,622	9.08	186,069	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

		Batch QCMS KWG0703590-1 Matrix Spike			Batch QCDMS KWG0703590-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	10.9	10.0	109	10.4	10.0	104	65-135	5	35
Benzene	ND	10.5	10.0	105	10.1	10.0	101	65-135	3	35
Trichloroethene (TCE)	ND	10.3	10.0	103	10.0	10.0	100	65-135	3	35
Toluene	ND	10.6	10.0	106	10.3	10.0	103	65-135	3	35
Chlorobenzene	ND	8.36	10.0	84	7.98	10.0	80	65-135	5	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	8.55	10.0	86	57-134
Vinyl Acetate	46.9	50.0	94	10-202
2-Chloroethyl Vinyl Ether	9.14	10.0	91	10-180
Chloromethane	9.64	10.0	96	39-134
Vinyl Chloride	10.5	10.0	105	60-125
Bromomethane	8.94	10.0	89	25-163
Chloroethane	9.32	10.0	93	61-126
Acetone	37.6	50.0	75	65-136
1,1-Dichloroethene	10.4	10.0	104	65-135
Carbon Disulfide	22.0	20.0	110	59-130
Methylene Chloride	11.7	10.0	117	62-122
trans-1,2-Dichloroethene	9.75	10.0	98	72-119
1,1-Dichloroethane	10.3	10.0	103	66-126
2-Butanone (MEK)	44.4	50.0	89	60-143
cis-1,2-Dichloroethene	9.99	10.0	100	74-119
Chloroform	9.32	10.0	93	70-121
1,1,1-Trichloroethane (TCA)	10.2	10.0	102	68-133
Carbon Tetrachloride	9.88	10.0	99	59-147
1,2-Dichloroethane (EDC)	9.41	10.0	94	70-129
Benzene	9.91	10.0	99	65-135
Trichloroethene (TCE)	9.84	10.0	98	65-135
1,2-Dichloropropane	10.0	10.0	100	68-122
Bromodichloromethane	9.87	10.0	99	77-129
2-Hexanone	33.7	50.0	67	58-129
cis-1,3-Dichloropropene	9.55	10.0	96	70-129
Toluene	9.96	10.0	100	65-135
trans-1,3-Dichloropropene	7.64	10.0	76	62-123
1,1,2-Trichloroethane	8.11	10.0	81	76-118
4-Methyl-2-pentanone (MIBK)	39.9	50.0	80	62-131
Tetrachloroethene (PCE)	7.98	10.0	80	71-117
Dibromochloromethane	7.55	10.0	76	71-129
Chlorobenzene	8.23	10.0	82	65-135
Ethylbenzene	8.38	10.0	84	75-118
Xylenes, Total	25.4	30.0	85	70-130
Styrene	8.70	10.0	87	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	6.75	10.0	68	61-141
1,1,2,2-Tetrachloroethane	8.02	10.0	80	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	12:12

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F011.D
Lab Code:	KWG0703590-6	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/07	09:55
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/07	13:49
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/07	14:10
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:55

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F100.D
Lab Code:	KWG0703590-5	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/07	12:12
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/07	13:49
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/07	14:10
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007
Time Analyzed: 08:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F002.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703563

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703563-2	J:\MS18\DATA\031307\0313F003.D	03/13/2007	09:02	
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/2007	09:55	
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/2007	10:15	
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/2007	10:34	
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/2007	12:12	
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/2007	13:49	
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/2007	14:10	
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/2007	15:08	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

File ID: J:\MS18\DATA\031307\0313F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	21	0.01	0.448	0.466	4	NA	± 30 %	AverageRF
Vinyl Acetate	20	21	0.01	0.0285	0.0298	4	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.5	0.01	0.213	0.182	-15	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	10	0.01	0.0853	0.0873	2	NA	± 40 %	AverageRF
† Chloromethane	10	9.9	0.10	0.355	0.351	-1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.326	0.329	1	NA	± 20 %	AverageRF
Bromomethane	10	7.7	0.01	0.157	0.120	-23	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	200	0.01	0.0283	0.0287	1	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.01	0.242	0.256	6	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.872	11	NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.259	0.257	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.301	6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.545	10	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.306	6	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.510	4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.443	8	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.364	0.385	6	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.281	6	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.24	5	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.304	7	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.268	9	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.281	5	NA	± 30 %	AverageRF
2-Hexanone	200	190	0.01	0.0294	0.0278	-5	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.310	3	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.792	9	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.6	0.01	0.532	0.455	-15	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.1	0.01	0.318	0.290	-9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0370	0.0413	12	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.1	0.01	0.723	0.584	-19	NA	± 30 %	AverageRF
Dibromochloromethane	10	7.9	0.01	0.427	0.337	-21	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.78	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	8.9	0.01	1.18	1.05	-11	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.30	-11	NA	± 30 %	AverageRF
o-Xylene	10	8.8	0.01	1.35	1.19	-12	NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.945	1.01	7	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.157	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.8	0.30	0.370	0.328	-12	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.05	9	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.5	0.01	0.877	0.835	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260B

Analysis Lot: KWG0703563
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313F002.D	GC/MS Tuning - Bromofluorobenzene	KWG0703563-1	03/13/2007	08:42		03/13/2007	08:57
0313F003.D	Continuing Calibration Verification	KWG0703563-2	03/13/2007	09:02		03/13/2007	09:17
0313F100.D	Lab Control Sample	KWG0703590-5	03/13/2007	09:55		03/13/2007	10:10
0313F005.D	Batch QCMS	KWG0703590-1	03/13/2007	10:15		03/13/2007	10:30
0313F006.D	Batch QCDMS	KWG0703590-2	03/13/2007	10:34		03/13/2007	10:49
0313F007.D	ZZZZZZ	ZZZZZZ	03/13/2007	10:54		03/13/2007	11:09
0313F008.D	ZZZZZZ	ZZZZZZ	03/13/2007	11:13		03/13/2007	11:28
0313F011.D	Method Blank	KWG0703590-6	03/13/2007	12:12		03/13/2007	12:27
0313F012.D	ZZZZZZ	ZZZZZZ	03/13/2007	12:31		03/13/2007	12:46
0313F013.D	ZZZZZZ	ZZZZZZ	03/13/2007	12:51		03/13/2007	13:06
0313F014.D	ZZZZZZ	ZZZZZZ	03/13/2007	13:10		03/13/2007	13:25
0313F015.D	ZZZZZZ	ZZZZZZ	03/13/2007	13:30		03/13/2007	13:45
0313F016.D	1047MW101CL	K0701647-001	03/13/2007	13:49		03/13/2007	14:04
0313F017.D	1349MW01CL	K0701647-002	03/13/2007	14:10		03/13/2007	14:25
0313F018.D	ZZZZZZ	ZZZZZZ	03/13/2007	14:29		03/13/2007	14:44
0313F019.D	ZZZZZZ	ZZZZZZ	03/13/2007	14:49		03/13/2007	15:04
0313F020.D	Batch QC	K0702006-003	03/13/2007	15:08		03/13/2007	15:23
0313F021.D	ZZZZZZ	ZZZZZZ	03/13/2007	15:28		03/13/2007	15:43
0313F022.D	ZZZZZZ	ZZZZZZ	03/13/2007	15:47		03/13/2007	16:02
0313F023.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:07		03/13/2007	16:22
0313F024.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:26		03/13/2007	16:41
0313F025.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:46		03/13/2007	17:01
0313F026.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:06		03/13/2007	17:21
0313F027.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:25		03/13/2007	17:40
0313F028.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:47		03/13/2007	18:02
0313F029.D	ZZZZZZ	ZZZZZZ	03/13/2007	18:06		03/13/2007	18:21
0313F030.D	ZZZZZZ	ZZZZZZ	03/13/2007	18:26		03/13/2007	18:41
0313F034.D	ZZZZZZ	ZZZZZZ	03/13/2007	19:44		03/13/2007	19:59
0313F035.D	ZZZZZZ	ZZZZZZ	03/13/2007	20:03		03/13/2007	20:18

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/13/2007

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: KWG0703590
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1047MW101CL	K0701647-001	03/01/07	03/02/07	10ml	10ml	NA	
1349MW01CL	K0701647-002	03/01/07	03/02/07	10ml	10ml	NA	
Method Blank	KWG0703590-6	NA	NA	10ml	10ml	NA	
Batch QC	K0702006-003	NA	NA	10ml	10ml	NA	
Batch QCMS	KWG0703590-1	NA	NA	10ml	10ml	NA	
Batch QCDMS	KWG0703590-2	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG0703590-5	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Volatile Organic Compounds

Validation Package

Organic Analysis:
Volatile Organic Compounds

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
1047MW101CL	K0701647-001	86	110	94
1349MW01CL	K0701647-002	89	108	94
Method Blank	KWG0703590-6	91	110	97
Batch QC	K0702006-003	105	109	99
Batch QCMS	KWG0703590-1	102	110	101
Batch QCDMS	KWG0703590-2	104	110	101
Lab Control Sample	KWG0703590-5	81	108	92

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F003.D	**Lab Code:**	KWG0703563-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703563
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	402,584	5.62	180,989	9.07	163,576	11.49
	Upper Limit ==>	805,168	6.12	361,978	9.57	327,152	11.99
	Lower Limit ==>	201,292	5.12	90,495	8.57	81,788	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703590-5	410,000	5.62	177,755	9.07	161,244	11.49
Batch QCMS	KWG0703590-1	415,453	5.62	197,367	9.07	193,579	11.49
Batch QCDMS	KWG0703590-2	413,056	5.62	199,776	9.08	197,260	11.49
Method Blank	KWG0703590-6	393,497	5.62	177,163	9.08	164,037	11.49
1047MW101CL	K0701647-001	392,618	5.62	177,285	9.07	158,751	11.49
1349MW01CL	K0701647-002	401,171	5.62	181,970	9.07	164,867	11.49
Batch QC	K0702006-003	398,540	5.62	191,622	9.08	186,069	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

		Batch QCMS KWG0703590-1 Matrix Spike			Batch QCDMS KWG0703590-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	10.9	10.0	109	10.4	10.0	104	65-135	5	35
Benzene	ND	10.5	10.0	105	10.1	10.0	101	65-135	3	35
Trichloroethene (TCE)	ND	10.3	10.0	103	10.0	10.0	100	65-135	3	35
Toluene	ND	10.6	10.0	106	10.3	10.0	103	65-135	3	35
Chlorobenzene	ND	8.36	10.0	84	7.98	10.0	80	65-135	5	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	8.55	10.0	86	57-134
Vinyl Acetate	46.9	50.0	94	10-202
2-Chloroethyl Vinyl Ether	9.14	10.0	91	10-180
Chloromethane	9.64	10.0	96	39-134
Vinyl Chloride	10.5	10.0	105	60-125
Bromomethane	8.94	10.0	89	25-163
Chloroethane	9.32	10.0	93	61-126
Acetone	37.6	50.0	75	65-136
1,1-Dichloroethene	10.4	10.0	104	65-135
Carbon Disulfide	22.0	20.0	110	59-130
Methylene Chloride	11.7	10.0	117	62-122
trans-1,2-Dichloroethene	9.75	10.0	98	72-119
1,1-Dichloroethane	10.3	10.0	103	66-126
2-Butanone (MEK)	44.4	50.0	89	60-143
cis-1,2-Dichloroethene	9.99	10.0	100	74-119
Chloroform	9.32	10.0	93	70-121
1,1,1-Trichloroethane (TCA)	10.2	10.0	102	68-133
Carbon Tetrachloride	9.88	10.0	99	59-147
1,2-Dichloroethane (EDC)	9.41	10.0	94	70-129
Benzene	9.91	10.0	99	65-135
Trichloroethene (TCE)	9.84	10.0	98	65-135
1,2-Dichloropropane	10.0	10.0	100	68-122
Bromodichloromethane	9.87	10.0	99	77-129
2-Hexanone	33.7	50.0	67	58-129
cis-1,3-Dichloropropene	9.55	10.0	96	70-129
Toluene	9.96	10.0	100	65-135
trans-1,3-Dichloropropene	7.64	10.0	76	62-123
1,1,2-Trichloroethane	8.11	10.0	81	76-118
4-Methyl-2-pentanone (MIBK)	39.9	50.0	80	62-131
Tetrachloroethene (PCE)	7.98	10.0	80	71-117
Dibromochloromethane	7.55	10.0	76	71-129
Chlorobenzene	8.23	10.0	82	65-135
Ethylbenzene	8.38	10.0	84	75-118
Xylenes, Total	25.4	30.0	85	70-130
Styrene	8.70	10.0	87	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	6.75	10.0	68	61-141
1,1,2,2-Tetrachloroethane	8.02	10.0	80	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	12:12

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F011.D
Lab Code:	KWG0703590-6	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/07	09:55
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/07	13:49
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/07	14:10
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:55

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F100.D
Lab Code:	KWG0703590-5	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/07	12:12
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/07	13:49
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/07	14:10
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

Organic Analysis:
Volatile Organic Compounds

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1047MW101CL	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	94	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F016.D
Lab ID: K0701647-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 13:49
Date Quantitated: 03/14/2007 11:39
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MRL check

F.A.h. 3/15/7

Primary Review: 3/15/7

Secondary Review: F.A.h. 3/15/7

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0701647
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582906	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F016.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 13:49	**Quant Date:**	03/14/2007 11:39	**Vial:**	14
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-001			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	392618	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	177285	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	158751	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	72431	8.64	86	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	418798	10.99	110	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	145894	9.39	94	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40		0.00	43	1278	1.15	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride	2.78		0.00	84	23572	2.32	2.3	J	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform	4.55		0.00	83	5620	0.2900	0.29	J	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F016.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 13:49	**Quant Date:**	03/14/2007 11:39	**Vial:**	14
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-001			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0**d**		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene				92	0**d**		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

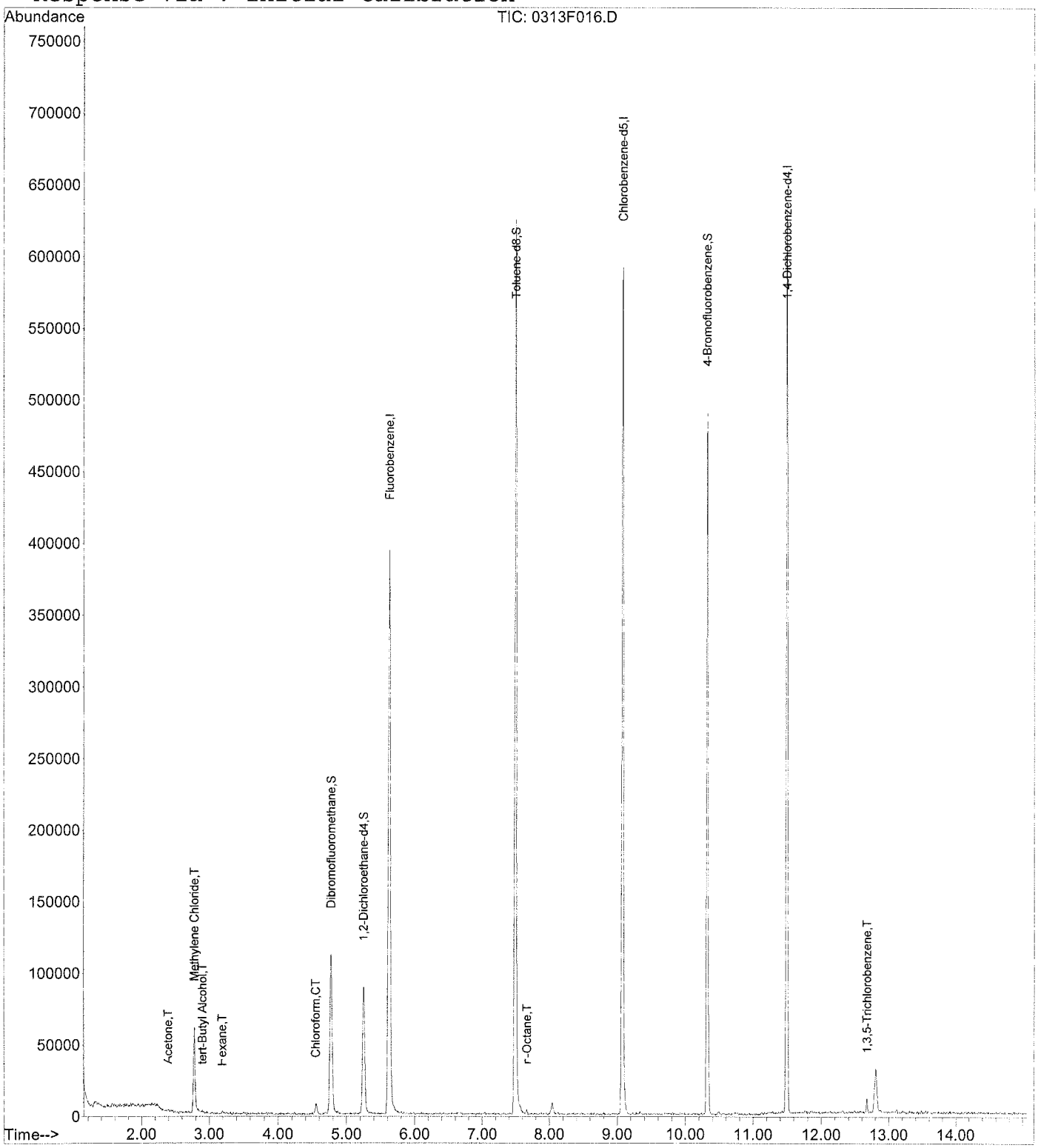
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

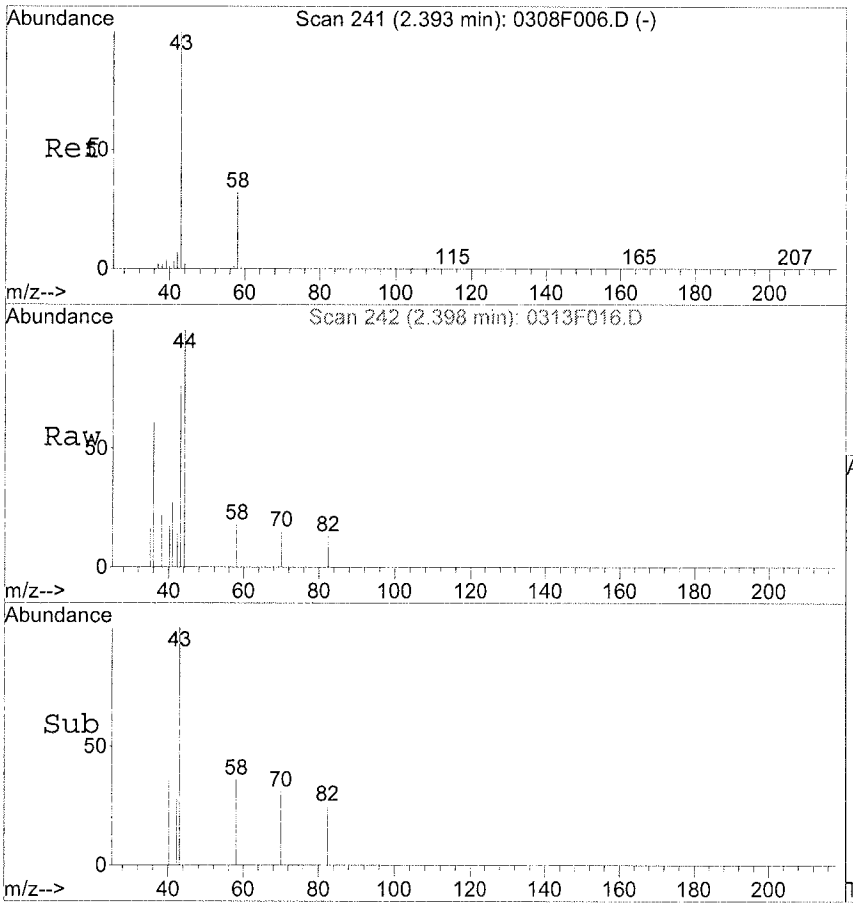
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F016.D Vial: 14
Acq On : 13 Mar 2007 1:49 pm Operator:
Sample : K1647-001 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:39 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

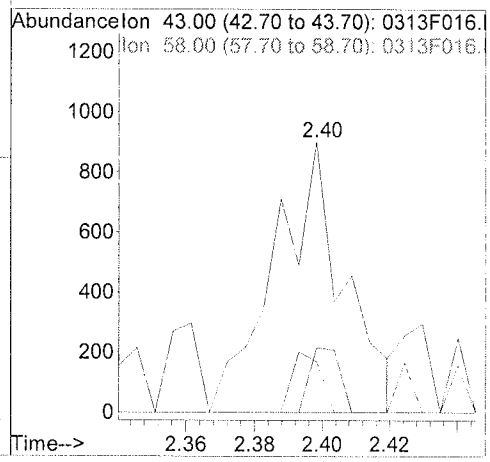


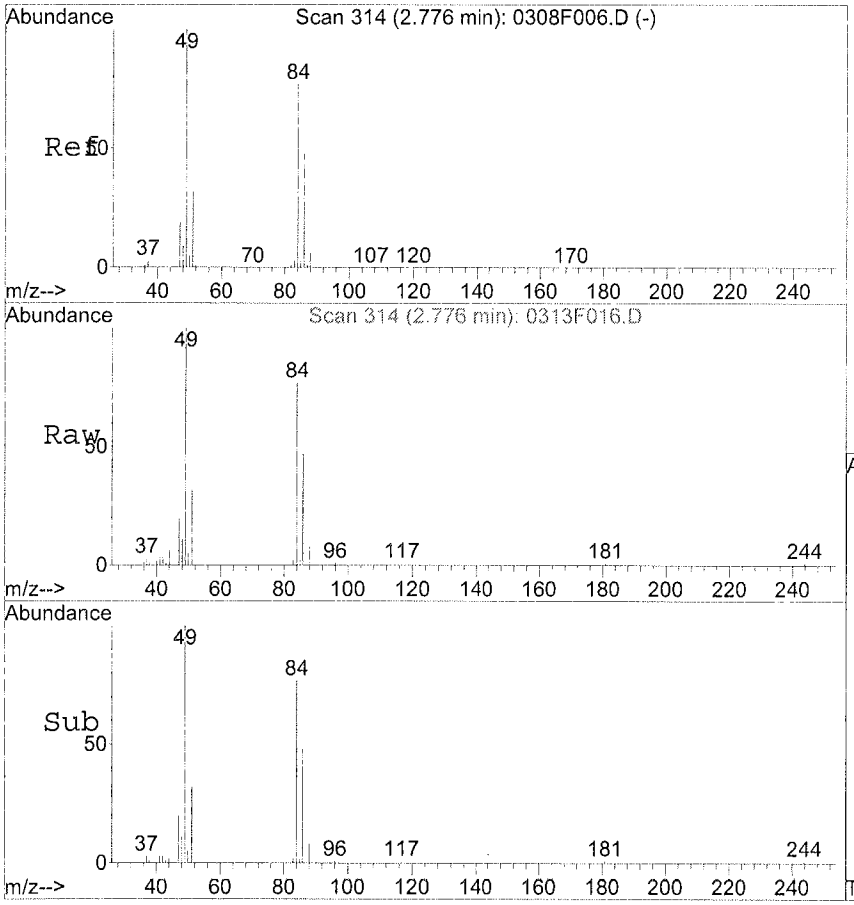


#13
Acetone
Concen: 1.15 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 43 Resp: 1278

Ion	Ratio	Lower	Upper
43	100		
58	23.9	1.7	61.7
42	18.8	0.0	36.8

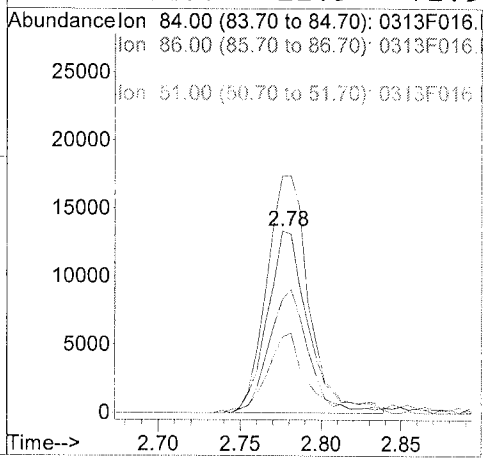


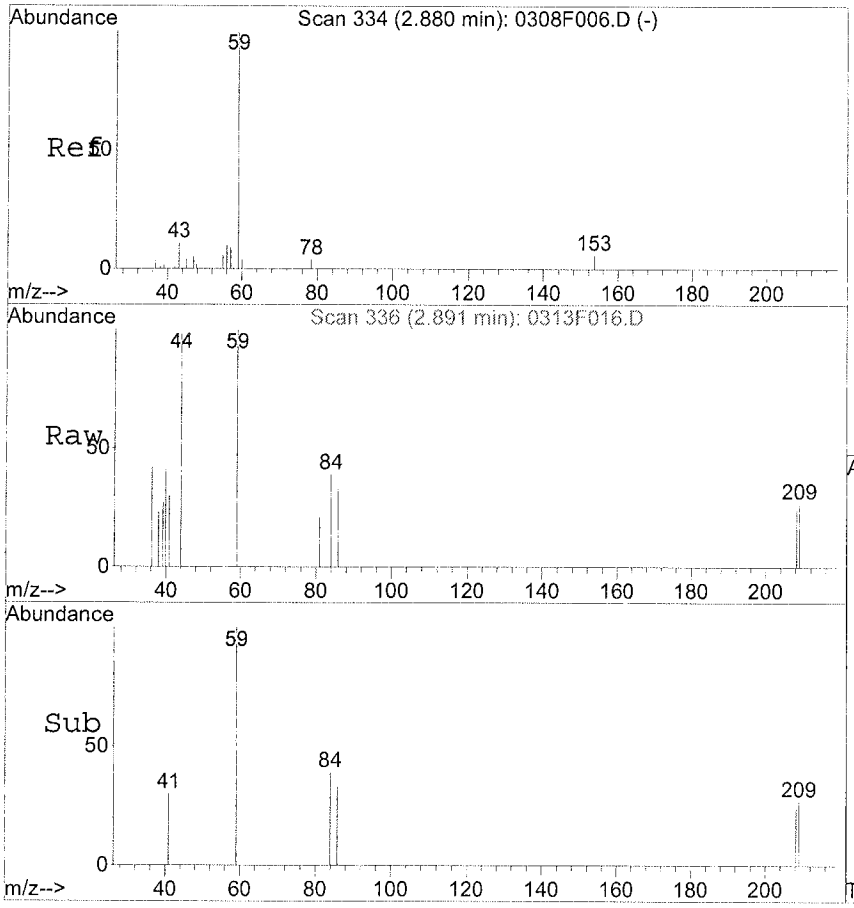


#18
Methylene Chloride
Concen: 2.32 PPB
RT: 2.78 min Scan# 314
Delta R.T. 0.00 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 84 Resp: 23572

Ion	Ratio	Lower	Upper
84	100		
86	62.3	32.9	92.9
49	130.5	99.7	159.7
51	41.7	11.9	71.9

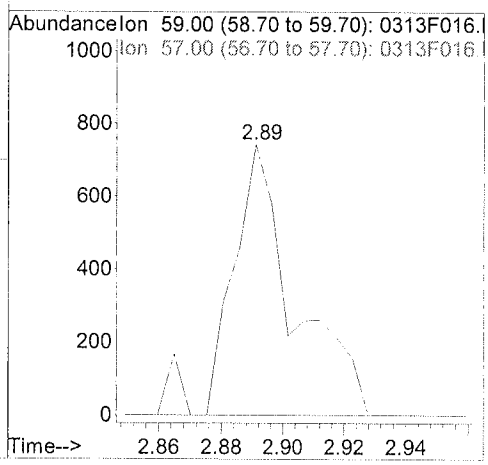


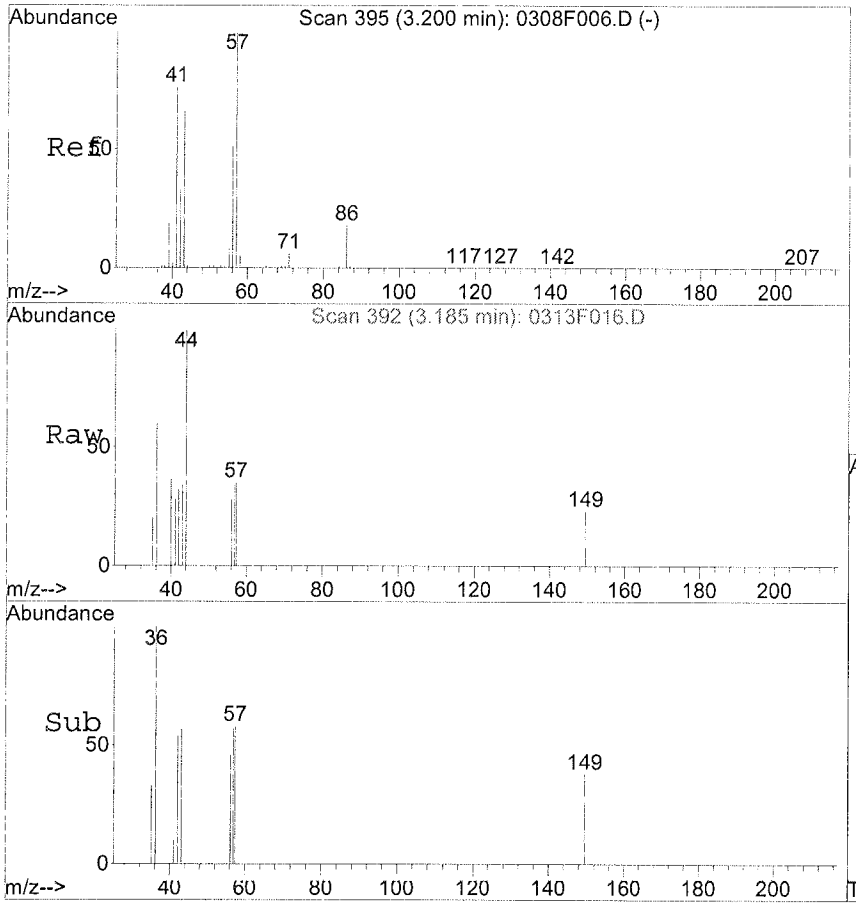


#19
tert-Butyl Alcohol
Concen: 4.54 PPB
RT: 2.89 min Scan# 336
Delta R.T. 0.01 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 59 Resp: 1007

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	38.5
60	0.0	0.0	33.5

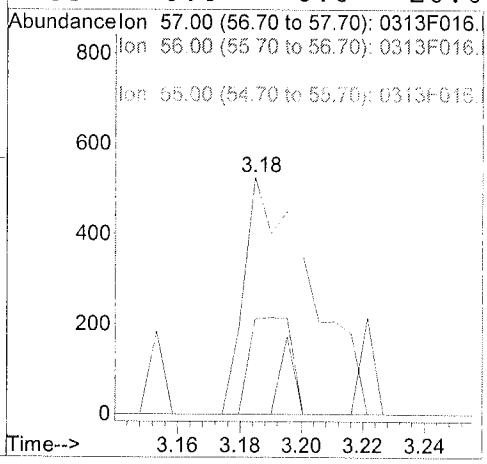


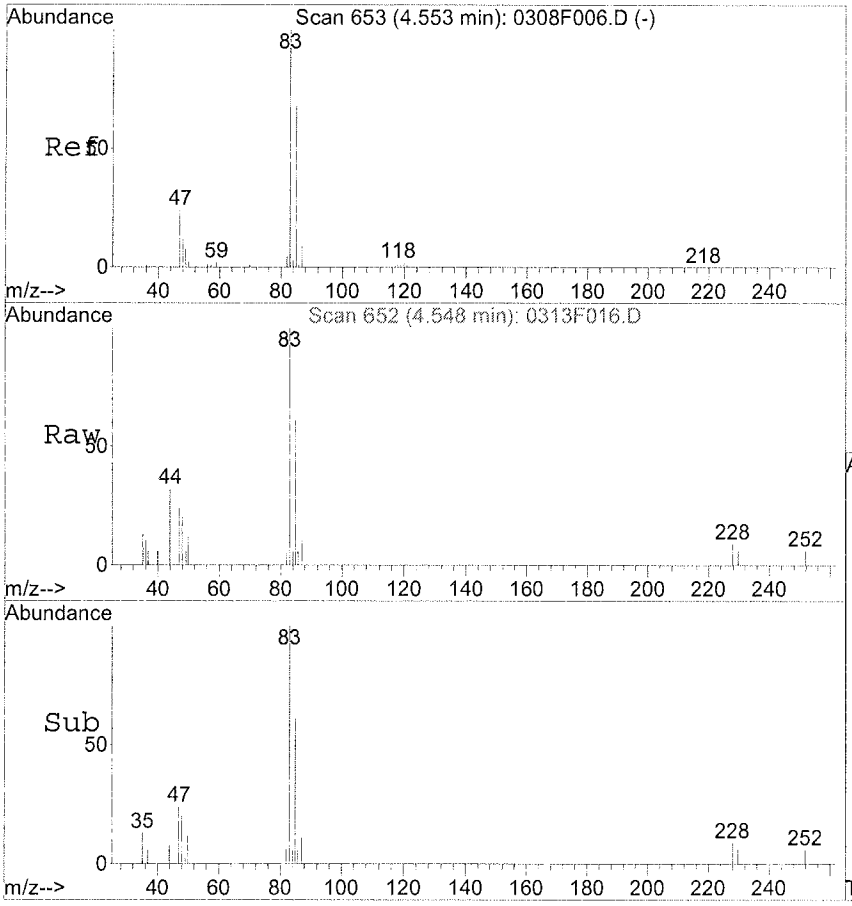


#23
Hexane
Concen: 0.07 PPB
RT: 3.18 min Scan# 392
Delta R.T. -0.02 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 57 Resp: 789

Ion	Ratio	Lower	Upper
57	100		
56	40.3	21.1	81.1
71	0.0	0.0	35.9
55	0.0	0.0	20.0

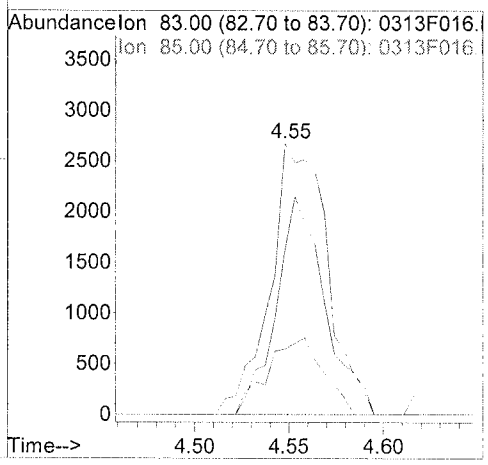


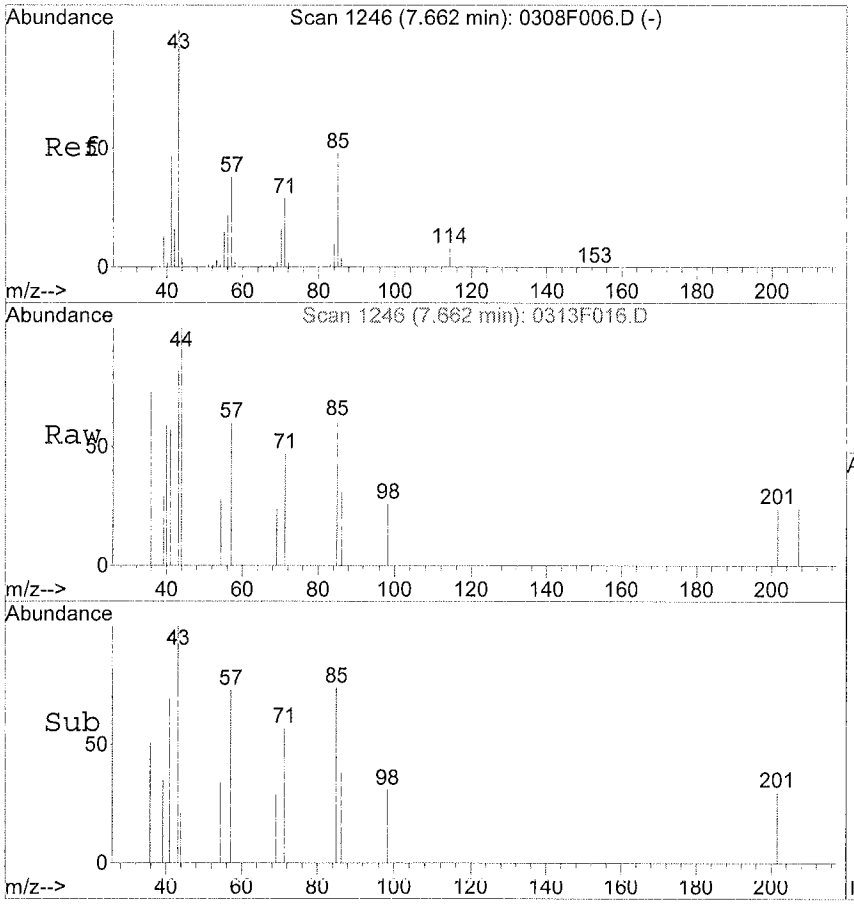


#37
Chloroform
Concen: 0.29 PPB
RT: 4.55 min Scan# 652
Delta R.T. -0.00 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 83 Resp: 5620

Ion	Ratio	Lower	Upper
83	100		
85	67.0	37.7	97.7
47	24.1	0.0	53.9

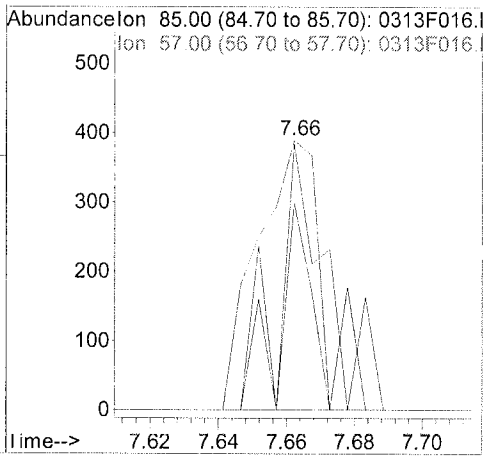


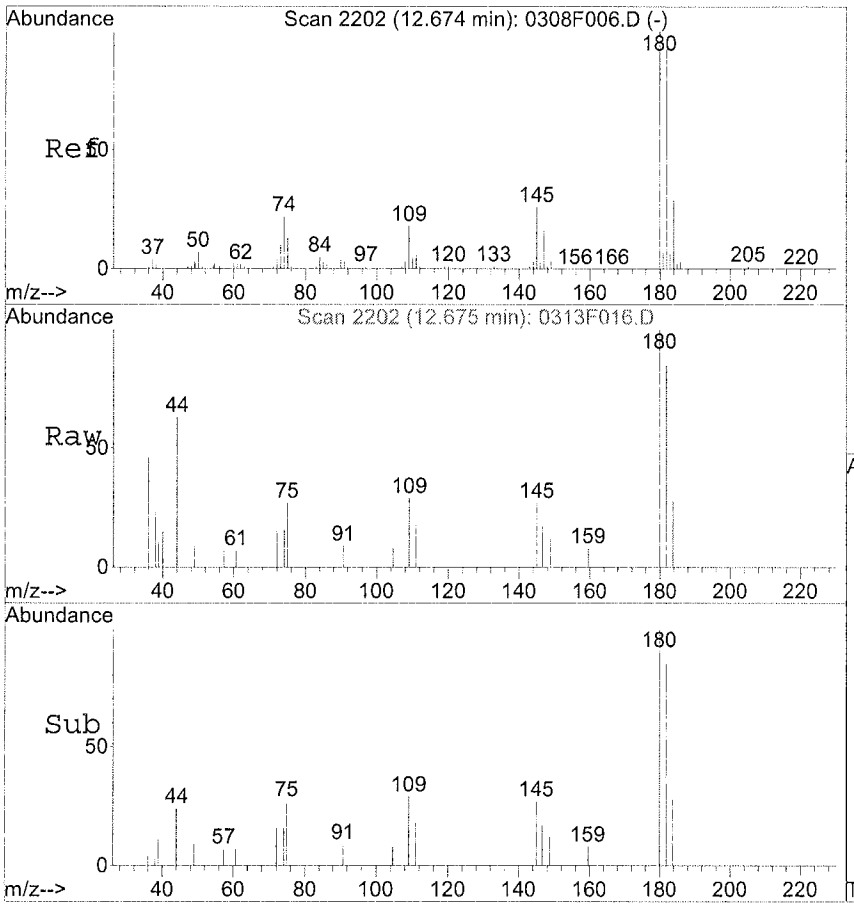


#61
n-Octane
Concen: 0.12 PPB
RT: 7.66 min Scan# 1246
Delta R.T. 0.00 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion: 85 Resp: 522

Ion	Ratio	Lower	Upper
85	100		
57	98.7	47.9	107.9
71	76.9	31.3	91.3

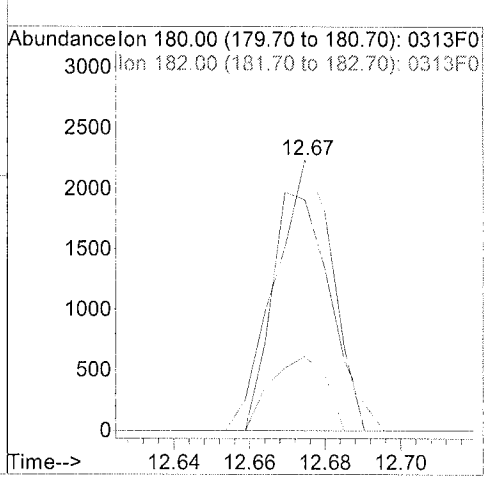




#99
1,3,5-Trichlorobenzene
Concen: 0.10 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F016.D
Acq: 13 Mar 2007 1:49 pm

Tgt Ion:180 Resp: 2359

Ion	Ratio	Lower	Upper
180	100		
182	85.3	64.4	124.4
145	27.4	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: 03/01/2007
Date Received: 03/02/2007

Volatile Organic Compounds

Sample Name: 1349MW01CL
Lab Code: K0701647-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Volatile Organic Compounds

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	94	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F017.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 14:10
Date Quantitated: 03/14/2007 11:40
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	per

Primary Review: KA 3/14/07

Secondary Review: EAh 3/15/7

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0701647
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582901	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F017.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 14:10	**Quant Date:**	03/14/2007 11:40	**Vial:**	15
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	401171	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	181970	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	164867	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	76210	8.90	89	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	422033	10.84	108	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	149261	9.36	94	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0d		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.39	-0.01	0.00	43	1149	1.01	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride	2.78		0.00	84	855	0.0800	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F017.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 14:10	**Quant Date:**	03/14/2007 11:40	**Vial:**	15
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0**d**		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

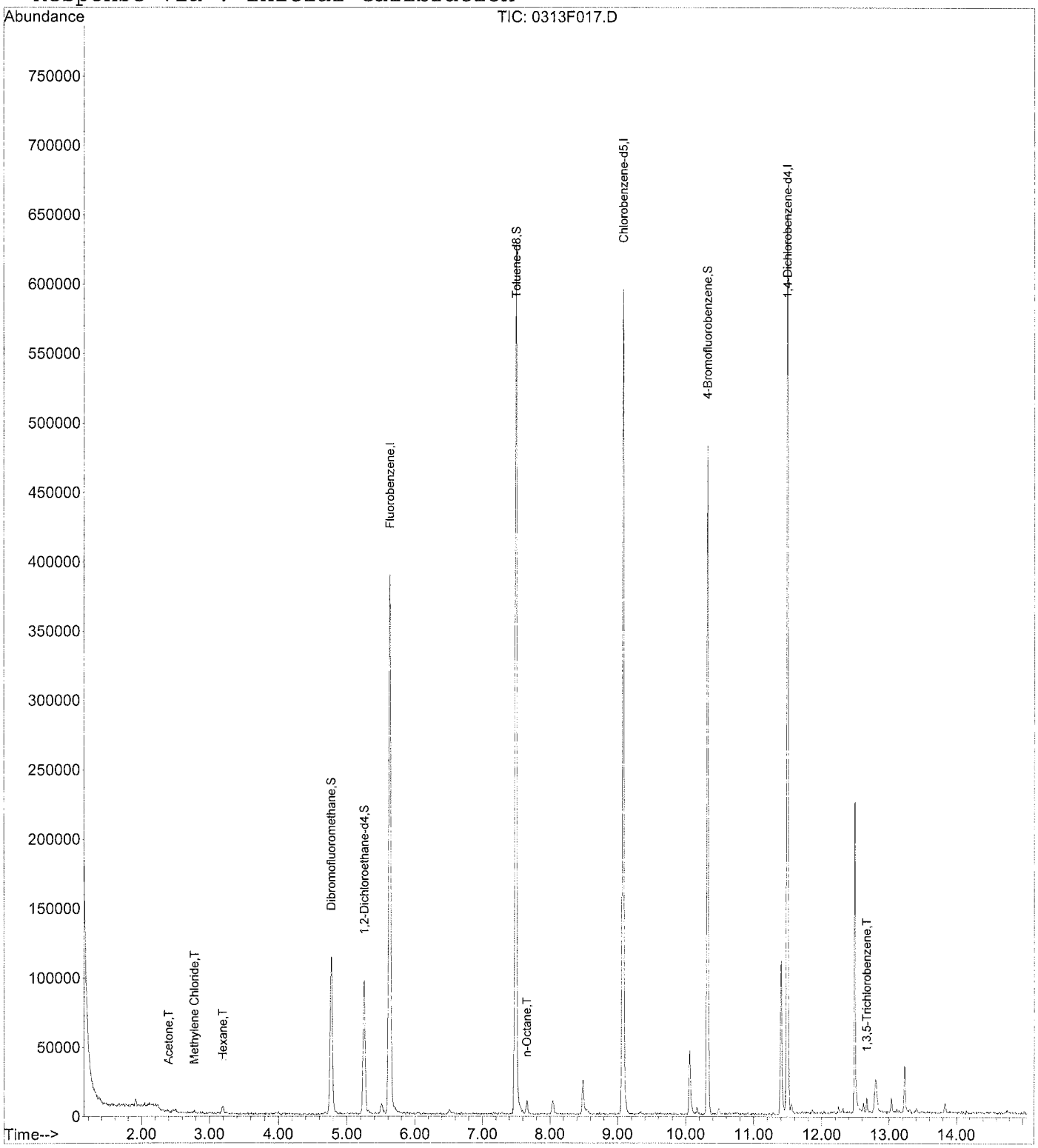
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

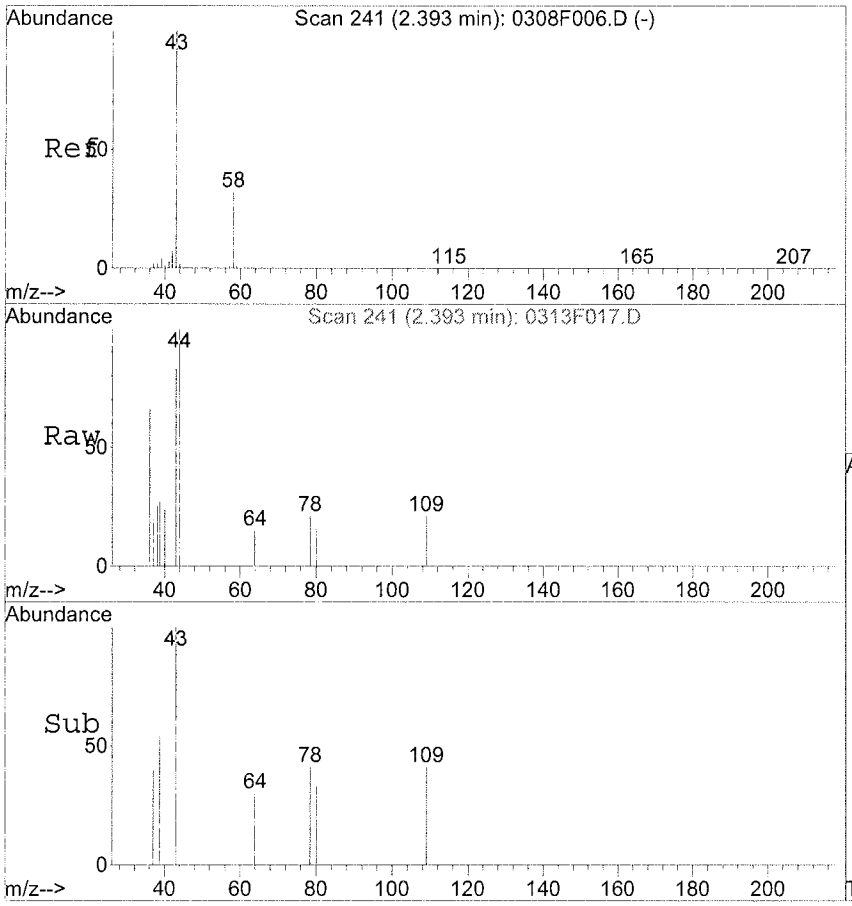
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F017.D Vial: 15
Acq On : 13 Mar 2007 2:10 pm Operator:
Sample : K1647-002 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:40 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

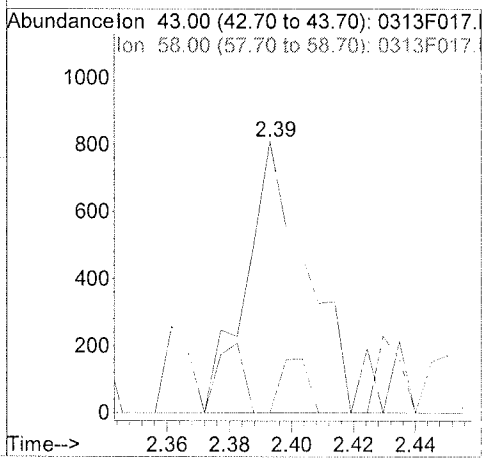


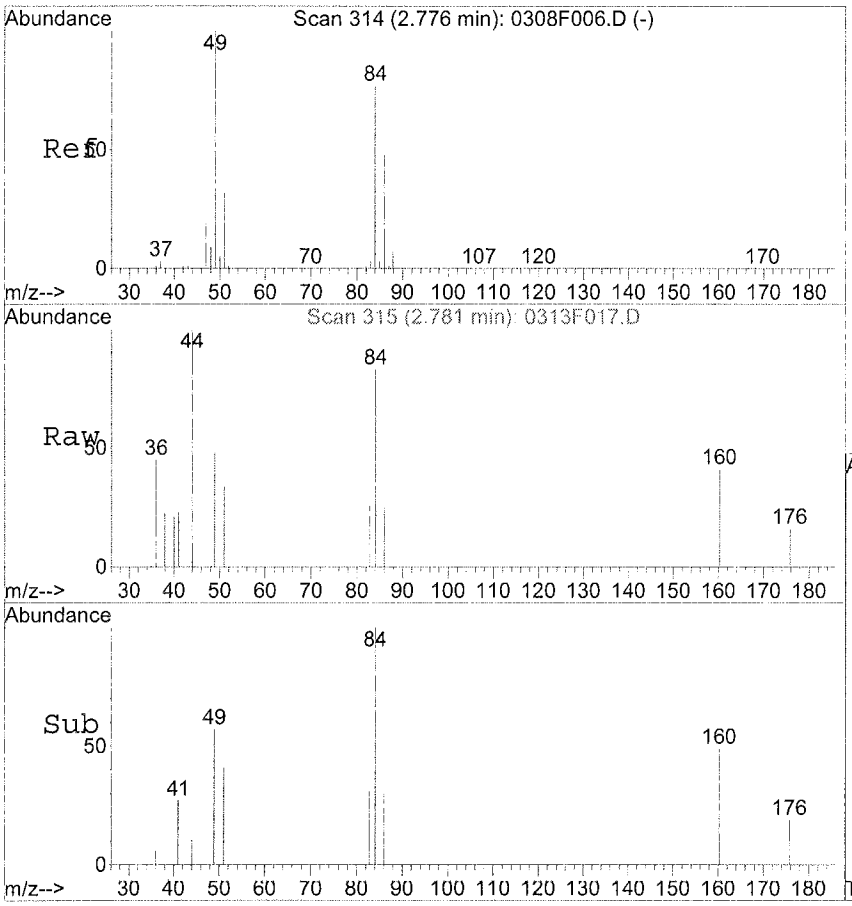


#13
Acetone
Concen: 1.01 PPB
RT: 2.39 min Scan# 241
Delta R.T. 0.00 min
Lab File: 0313F017.D
Acq: 13 Mar 2007 2:10 pm

Tgt Ion: 43 Resp: 1149

Ion	Ratio	Lower	Upper
43	100		
58	0.0	1.7	61.7#
42	0.0	0.0	36.8

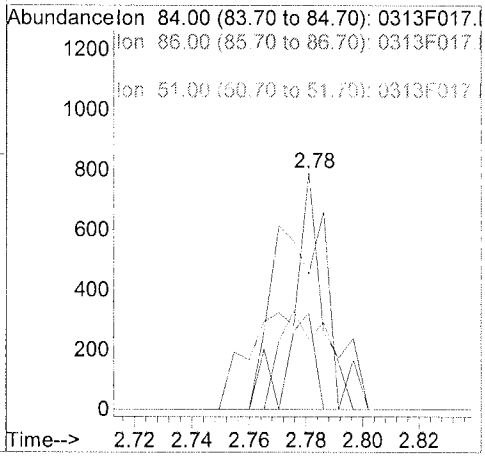


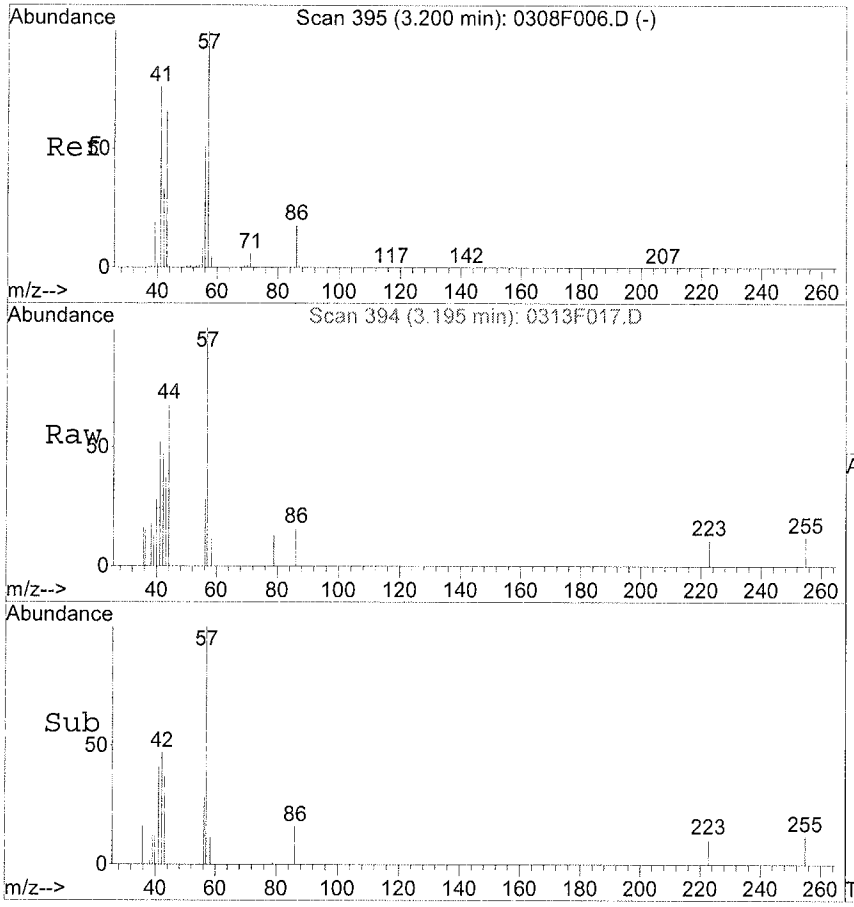


#18
Methylene Chloride
Concen: 0.08 PPB
RT: 2.78 min Scan# 315
Delta R.T. 0.01 min
Lab File: 0313F017.D
Acq: 13 Mar 2007 2:10 pm

Tgt Ion: 84 Resp: 855

Ion	Ratio	Lower	Upper
84	100		
86	29.9	32.9	92.9#
49	57.3	99.7	159.7#
51	41.0	11.9	71.9

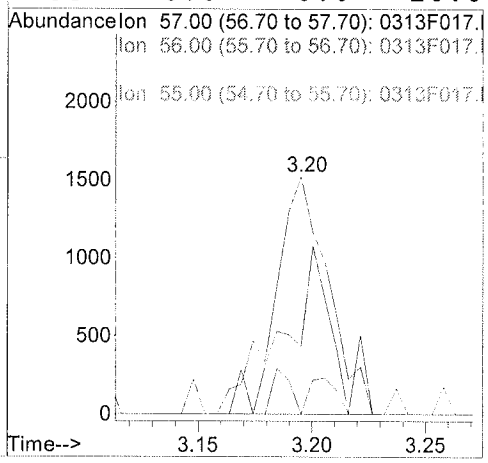


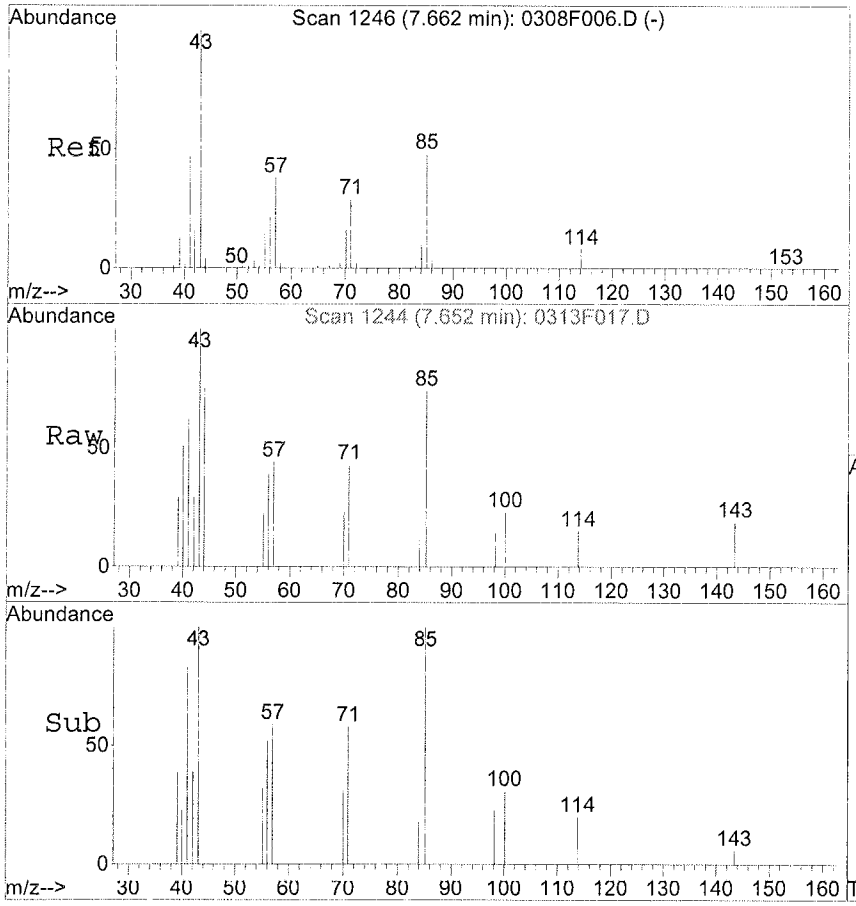


#23
Hexane
Concen: 0.22 PPB
RT: 3.20 min Scan# 394
Delta R.T. -0.01 min
Lab File: 0313F017.D
Acq: 13 Mar 2007 2:10 pm

Tgt Ion: 57 Resp: 2547

Ion	Ratio	Lower	Upper
57	100		
56	28.5	21.1	81.1
71	0.0	0.0	35.9
55	0.0	0.0	20.0

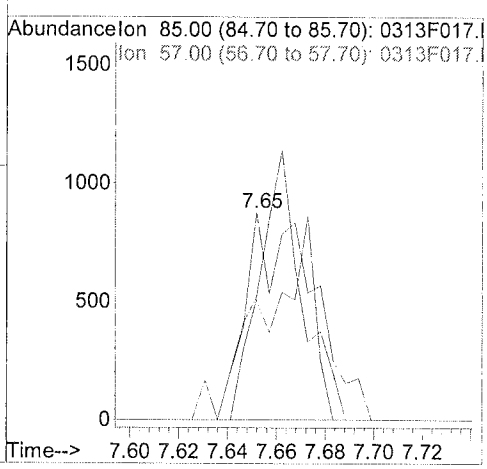


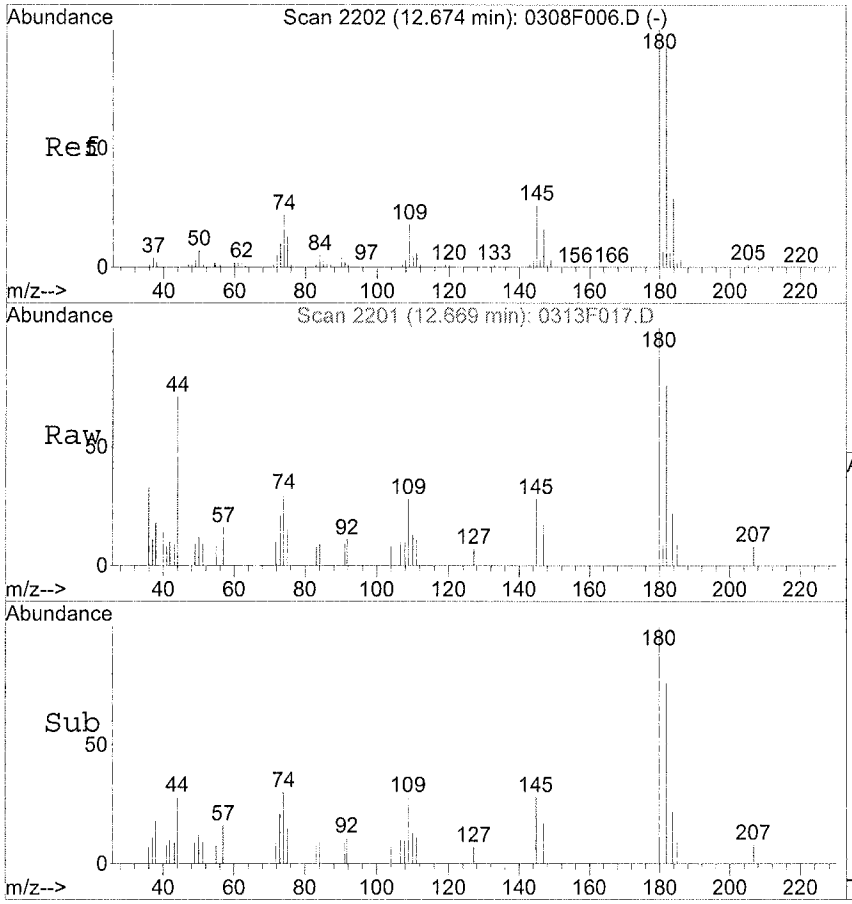


#61
n-Octane
Concen: 0.36 PPB
RT: 7.65 min Scan# 1244
Delta R.T. -0.01 min
Lab File: 0313F017.D
Acq: 13 Mar 2007 2:10 pm

Tgt Ion: 85 Resp: 1669

Ion	Ratio	Lower	Upper
85	100		
57	59.1	47.9	107.9
71	58.1	31.3	91.3

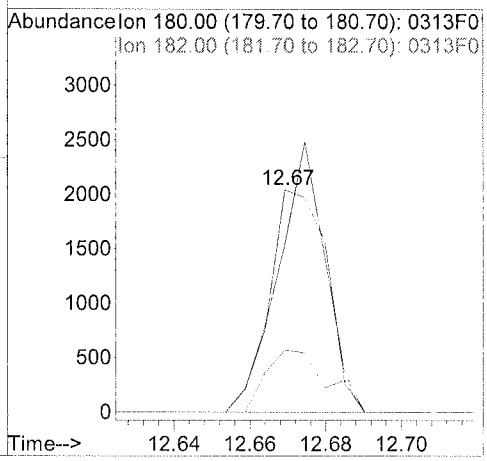




#99
1,3,5-Trichlorobenzene
Concen: 0.09 PPB
RT: 12.67 min Scan# 2201
Delta R.T. -0.01 min
Lab File: 0313F017.D
Acq: 13 Mar 2007 2:10 pm

Tgt Ion:180 Resp: 2146

Ion	Ratio	Lower	Upper
180	100		
182	75.7	64.4	124.4
145	27.9	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0703590-6

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703590-6	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	97	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F011.D
Lab ID: KWG0703590-6
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 12:12
Date Quantitated: 03/13/2007 14:13
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MEK
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NL
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KL 3/13/07

Secondary Review: F.Ah 3/15/7

Printed: 03/13/2007 14:23:54
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582925	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	393497	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	177163	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	164037	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	77464	9.31	93	80-120 OK	
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	76471	9.11	91	70-124 OK	
1	Toluene-d8	7.49	0.00	0.00	98	419881	11.00	110	80-122 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	149913	9.65	97	73-116 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.17	U	
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	Dichlorofluoromethane (CFC 21				67	0		0.40	U	
1	Trichlorofluoromethane				101	0		0.14	U	
1	Ethyl Ether				59	0		0.058	U	
1	Acrolein				56	0d		6.7	U	
1	Trichlorotrifluoroethane				151	0		0.14	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40		0.00	43	1122	1.01	4.1	U	
1	Iodomethane	2.43	-0.01	0.00	142	1152	0.1000	0.38	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	3-Chloro-1-propene				76	0d		0.16	U	

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J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile				40	0d		7.5	U	
1	Methylene Chloride	2.77	-0.01	0.00	84	1118	0.1100	0.20	U	
1	tert-Butyl Alcohol				59	0		1.1	U	
1	Acrylonitrile				53	0		0.54	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	n-Hexane	3.20		0.00	57	2075	0.1900	0.190	J	
1	Diisopropyl Ether				45	0		0.25	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	Chloroprene				53	0		0.35	U	
1	tert-Butyl Ethyl Ether				59	0		0.075	U	
1	2,2-Dichloropropane				77	0		0.18	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Propionitrile				54	0		1.3	U	
1	Ethyl Acetate				61	0		0.62	U	
1	Methacrylonitrile				67	0		0.45	U	
1	Bromochloromethane				128	0		0.17	U	
1	Tetrahydrofuran				71	0		0.84	U	
1	Chloroform				83	0d		0.14	U	
1	tert-Butyl Formate				59	0		0.18	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	1,1-Dichloropropene				75	0		0.15	U	
1	Isobutyl Alcohol				43	0		7.8	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	tert-Amyl Methyl Ether				55	0		0.15	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Dibromomethane				93	0		0.12	U	
1	Methyl Methacrylate				69	0		0.36	U	
1	1,4-Dioxane				88	0		26	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Nitropropane				43	0d		2.0	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene				92	0d		0.11	U	
2	n-Octane	7.66		0.00	85	1139	0.2500	0.29	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	Ethyl Methacrylate				69	0		0.12	U	

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e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	1,3-Dichloropropane				76	0		0.15	U	
2	Dibromochloromethane				129	0		0.11	U	
2	1,2-Dibromoethane (EDB)				107	0		0.099	U	
2	1-Chlorohexane				91	0d		0.13	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	1,1,1,2-Tetrachloroethane				131	0		0.12	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
2	Isopropylbenzene				105	0d		0.11	U	
2	cis-1,4-Dichloro-2-butene				89	0		0.60	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	
3	trans-1,4-Dichloro-2-butene				53	0		0.60	U	
3	Bromobenzene				156	0		0.18	U	
3	n-Propylbenzene				91	0d		0.098	U	
3	1,2,3-Trichloropropane				110	0		0.22	U	
3	2-Chlorotoluene				91	0d		0.12	U	
3	1,3,5-Trimethylbenzene				105	0d		0.13	U	
3	4-Chlorotoluene				91	0d		0.12	U	
3	tert-Butylbenzene				119	0		0.13	U	
3	1,2,4-Trimethylbenzene				105	0d		0.15	U	
3	sec-Butylbenzene				105	0d		0.13	U	
3	4-Isopropyltoluene				119	0d		0.13	U	
3	1,3-Dichlorobenzene	11.42		0.00	146	1429	0.0500	0.11	U	
3	1,4-Dichlorobenzene	11.51	-0.01	0.00	146	1293	0.0500	0.12	U	
3	n-Butylbenzene	11.86		0.00	91	2568	0.0500	0.23	U	
3	1,2-Dichlorobenzene				146	0d		0.12	U	
3	1,2-Dibromo-3-chloropropane				155	0		1.0	U	
3	1,3,5-Trichlorobenzene	12.67		0.00	180	6502	0.2800	0.35	U	
3	1,2,4-Trichlorobenzene	13.11		0.00	180	1447	0.0800	0.22	U	
3	Hexachlorobutadiene	13.21		0.00	225	945	0.0900	0.28	U	
3	Naphthalene	13.30		0.00	128	2019	0.0900	0.29	U	
3	1,2,3-Trichlorobenzene	13.49		0.00	180	1523	0.1000	0.33	U	
	1,1,2-Trifluoroethane				0	0		1.0	U	NR
	1,1-Dichloropropane				0	0		1.0	U	NR

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e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

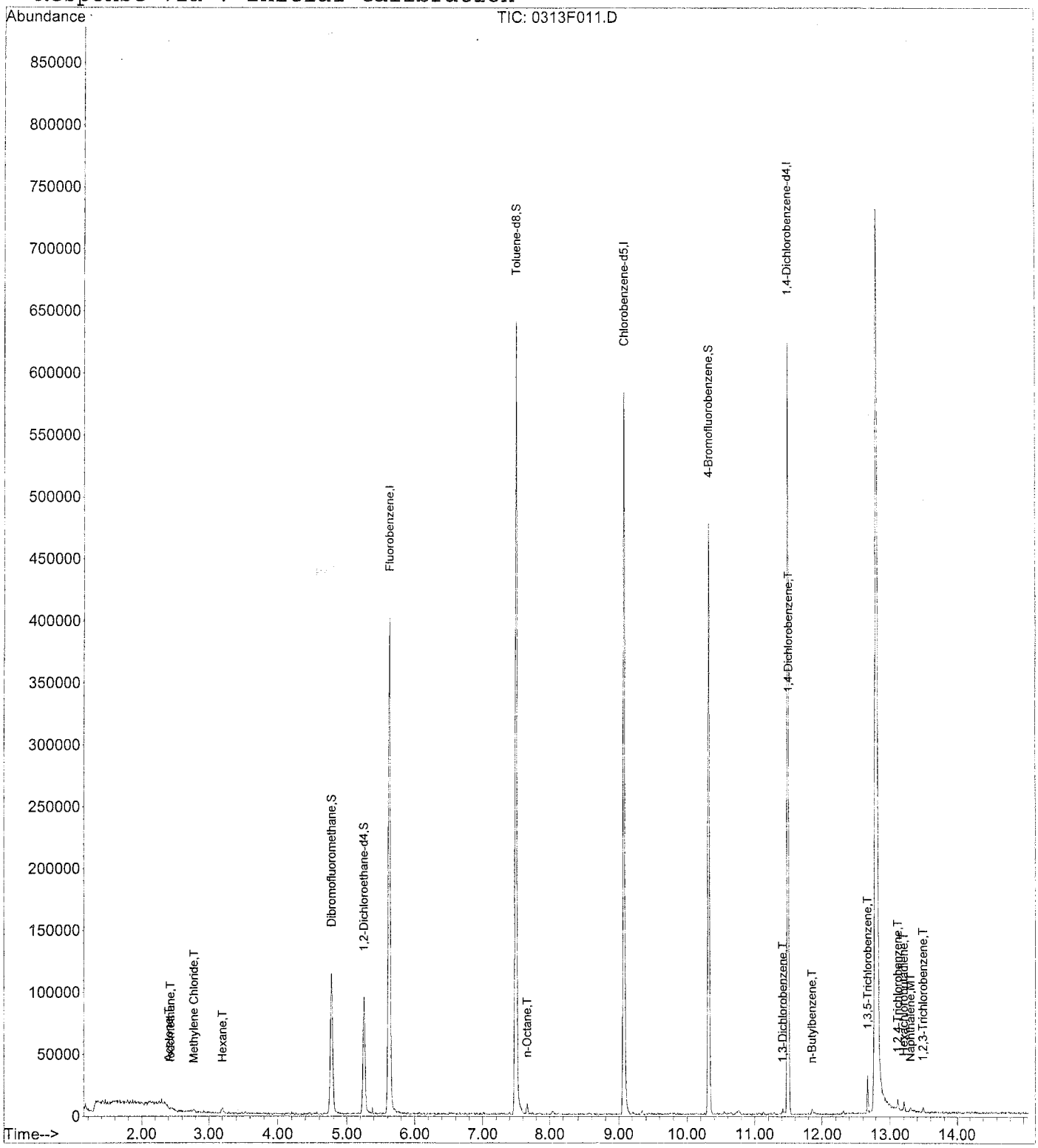
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

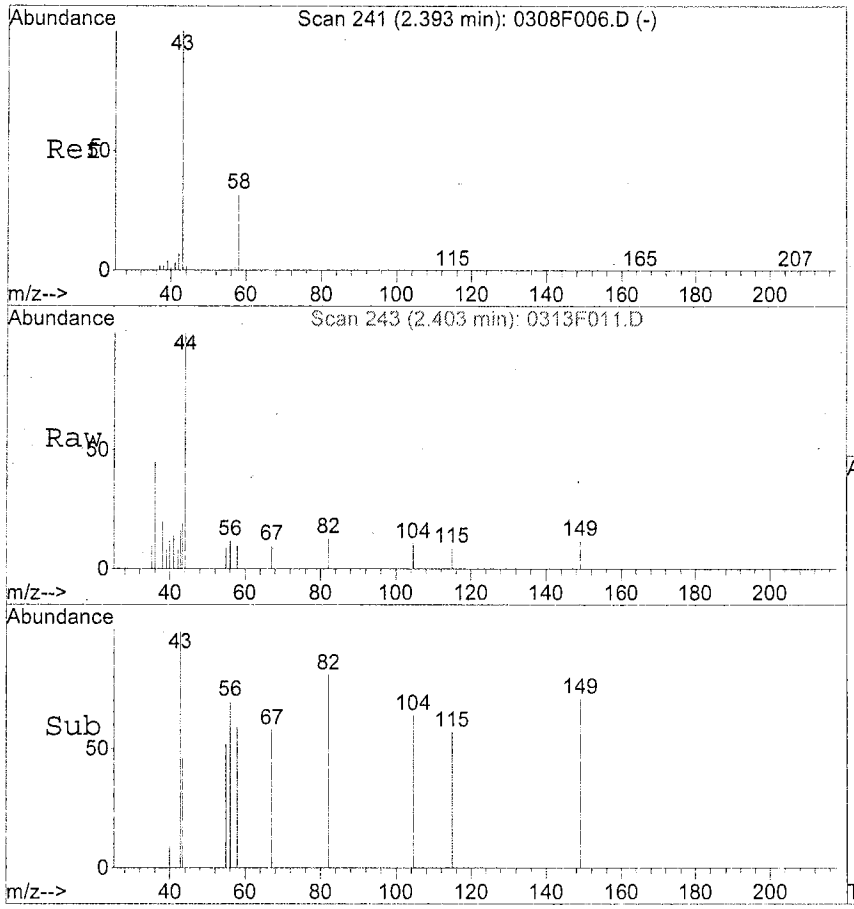
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F011.D Vial: 9
Acq On : 13 Mar 2007 12:12 pm Operator:
Sample : MB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:13 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

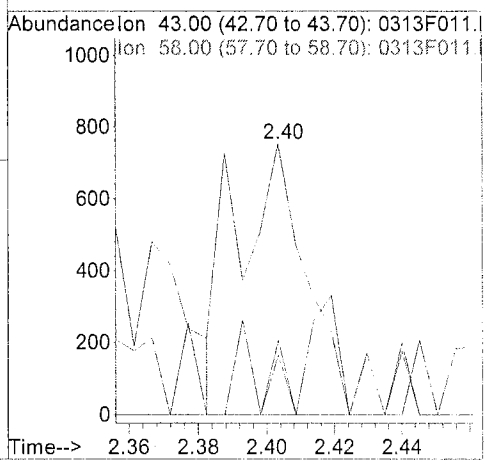


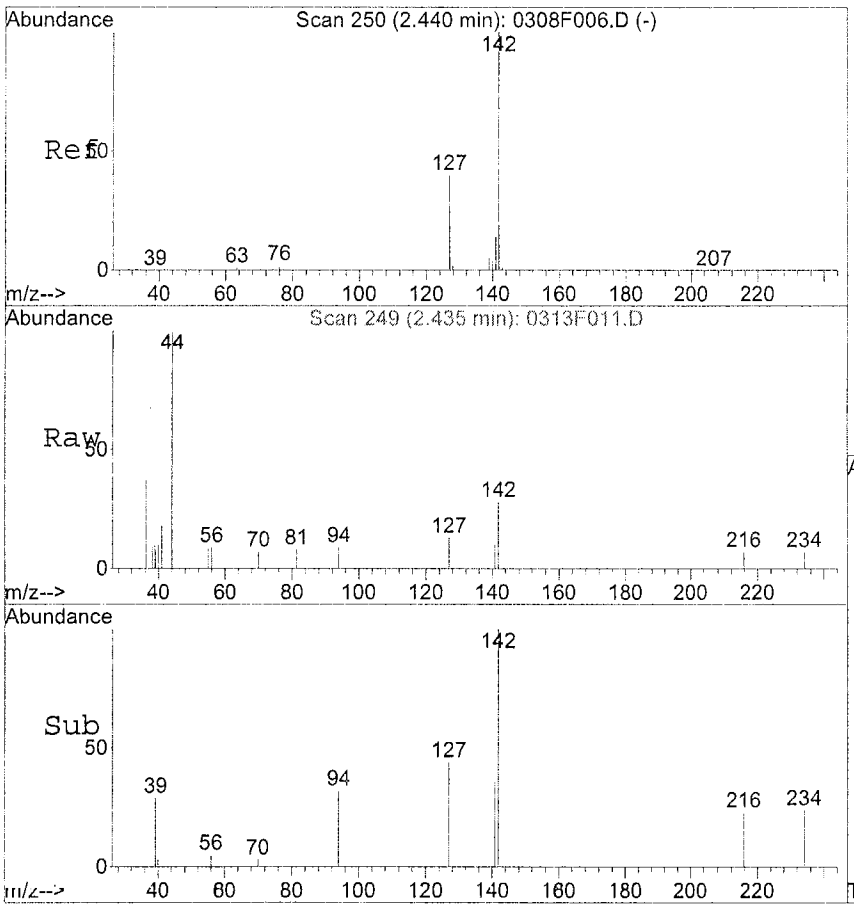


#13
Acetone
Concen: 1.01 PPB
RT: 2.40 min Scan# 243
Delta R.T. 0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 43 Resp: 1122

Ion	Ratio	Lower	Upper
43	100		
58	27.4	1.7	61.7
42	22.0	0.0	36.8

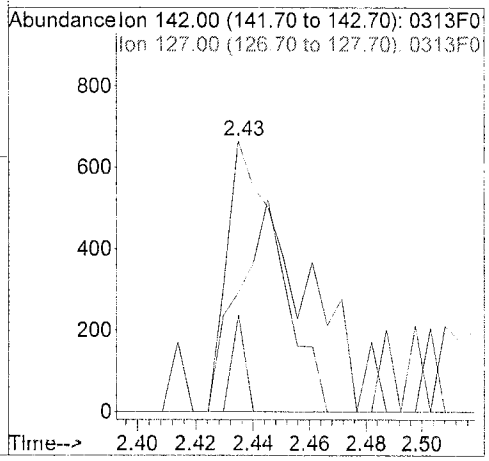


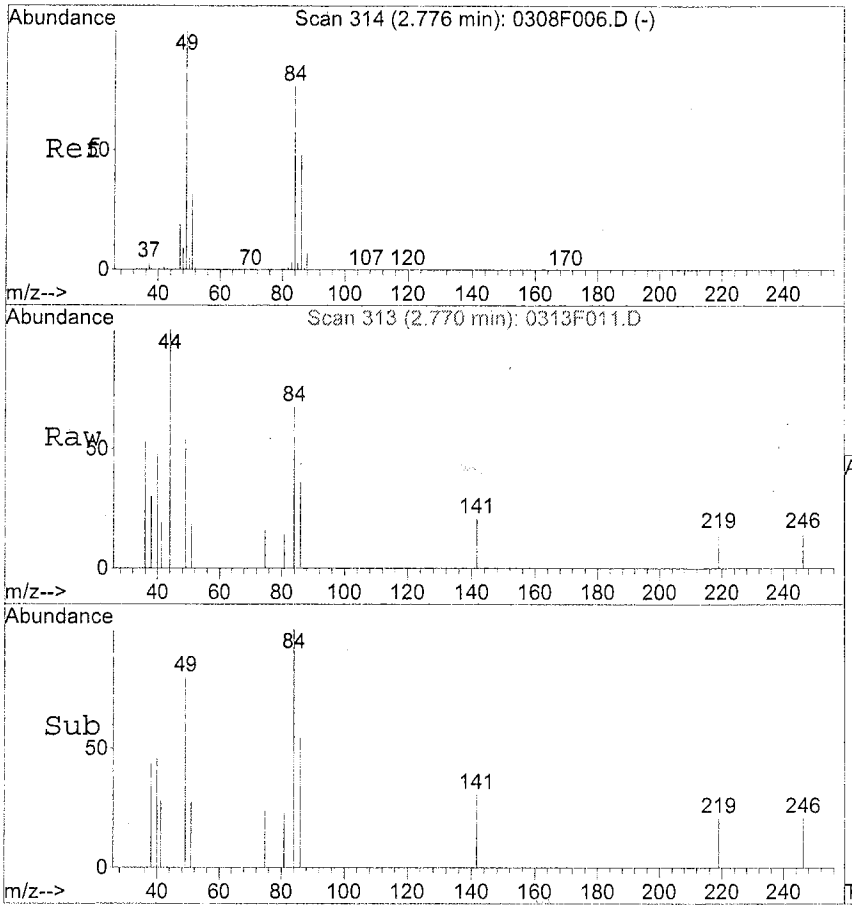


#14
Iodomethane
Concen: 0.10 PPB
RT: 2.43 min Scan# 249
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:142 Resp: 1152

Ion	Ratio	Lower	Upper
142	100		
127	44.1	9.7	69.7
141	35.8	0.0	44.1

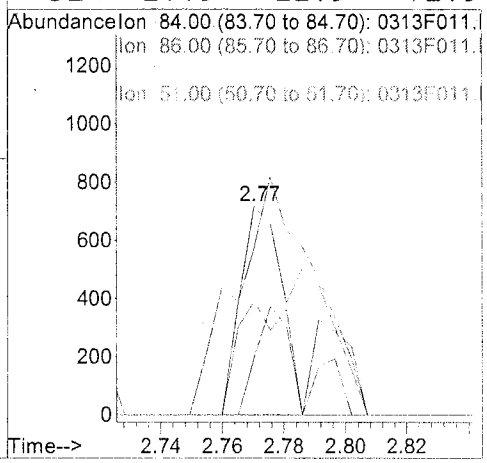


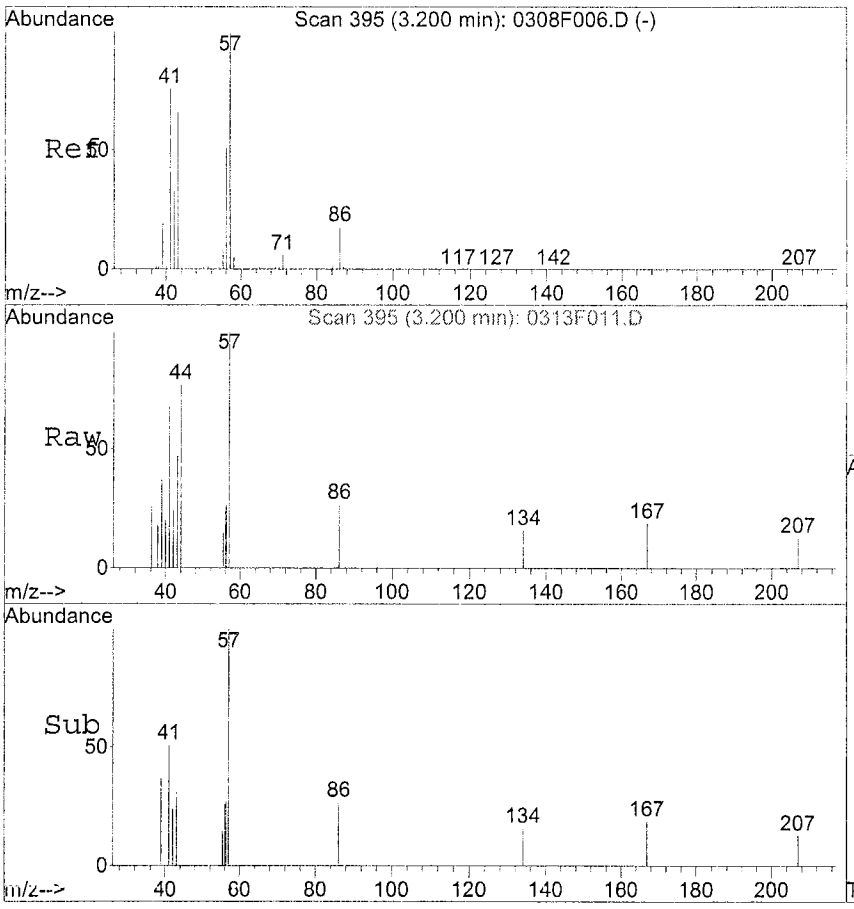


#18
Methylene Chloride
Concen: 0.11 PPB
RT: 2.77 min Scan# 313
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 84 Resp: 1118

Ion	Ratio	Lower	Upper
84	100		
86	54.7	32.9	92.9
49	79.9	99.7	159.7#
51	27.9	11.9	71.9

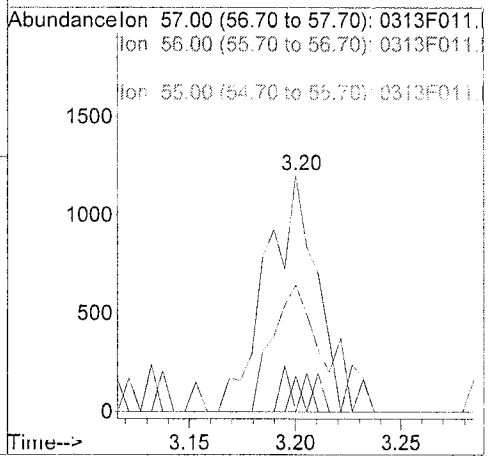


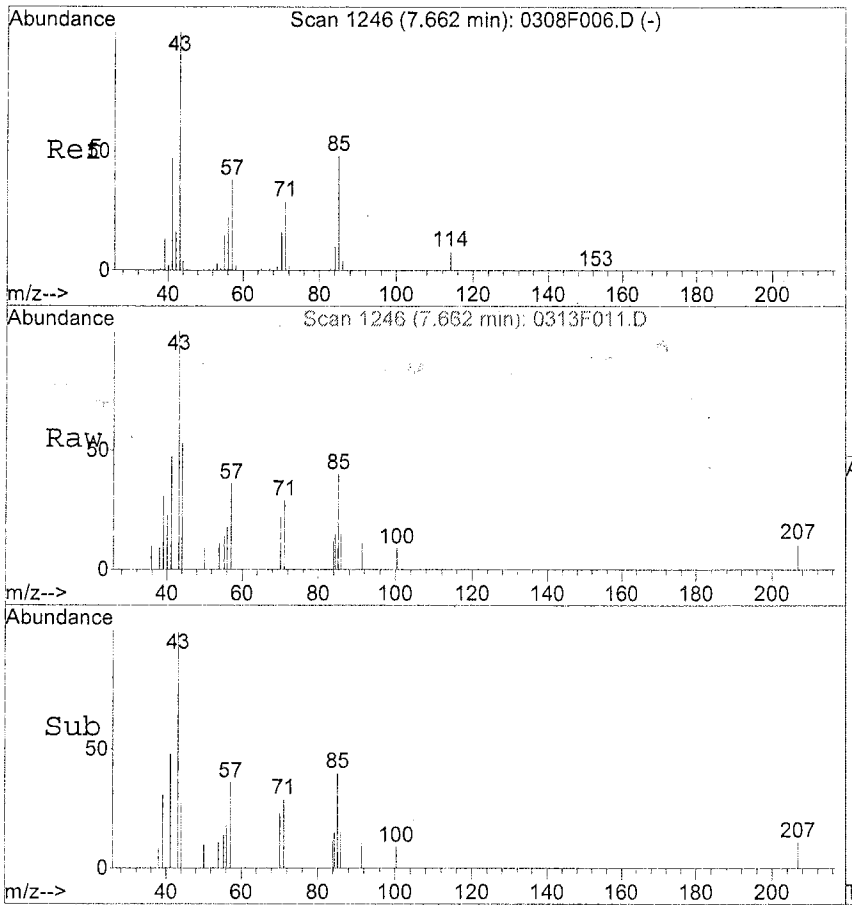


#23
Hexane
Concen: 0.19 PPB
RT: 3.20 min Scan# 395
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 57 Resp: 2075

Ion	Ratio	Lower	Upper
57	100		
56	53.5	21.1	81.1
71	0.0	0.0	35.9
55	15.1	0.0	20.0

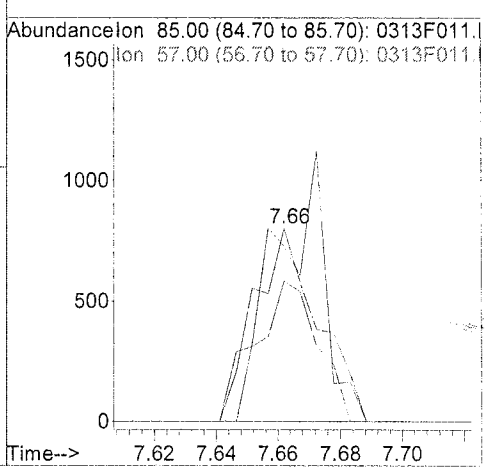


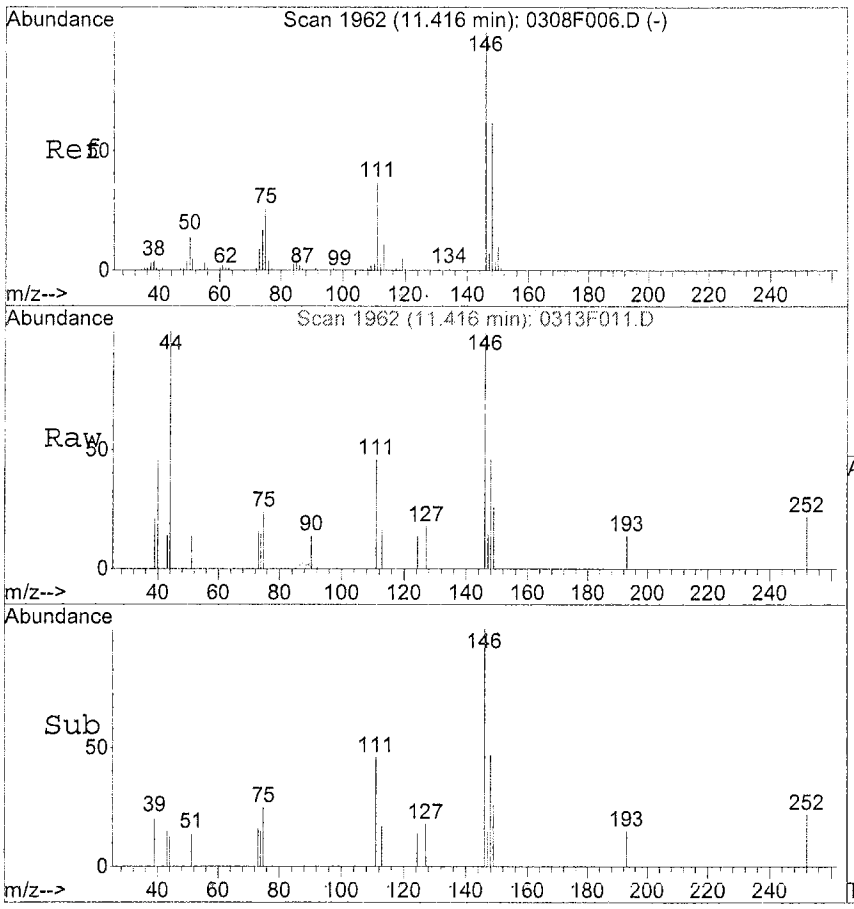


#61
n-Octane
Concen: 0.25 PPB
RT: 7.66 min Scan# 1246
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 85 Resp: 1139

Ion	Ratio	Lower	Upper
85	100		
57	90.8	47.9	107.9
71	72.9	31.3	91.3

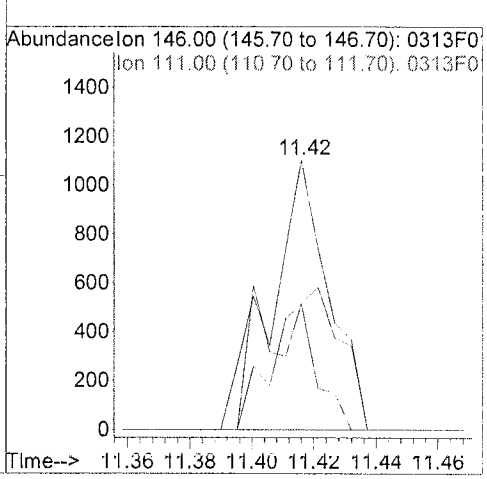


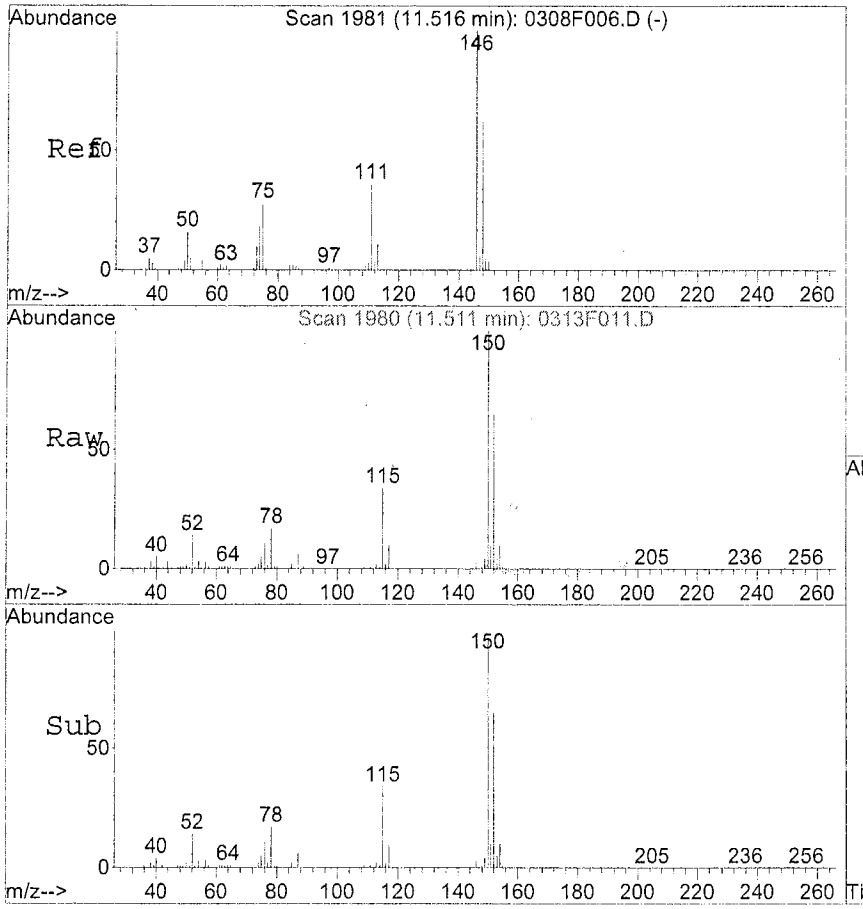


#94
1,3-Dichlorobenzene
Concen: 0.05 PPB
RT: 11.42 min Scan# 1962
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:146 Resp: 1429

Ion	Ratio	Lower	Upper
146	100		
111	46.5	6.9	66.9
148	46.9	32.2	92.2

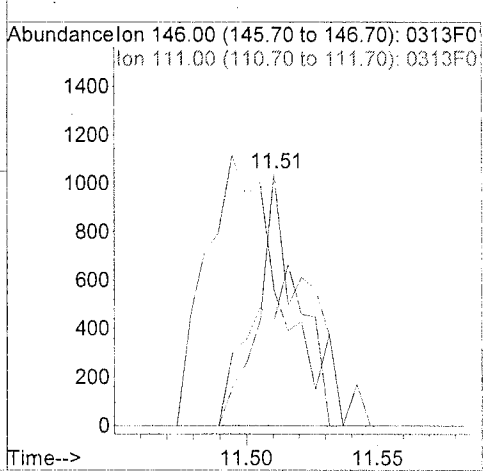


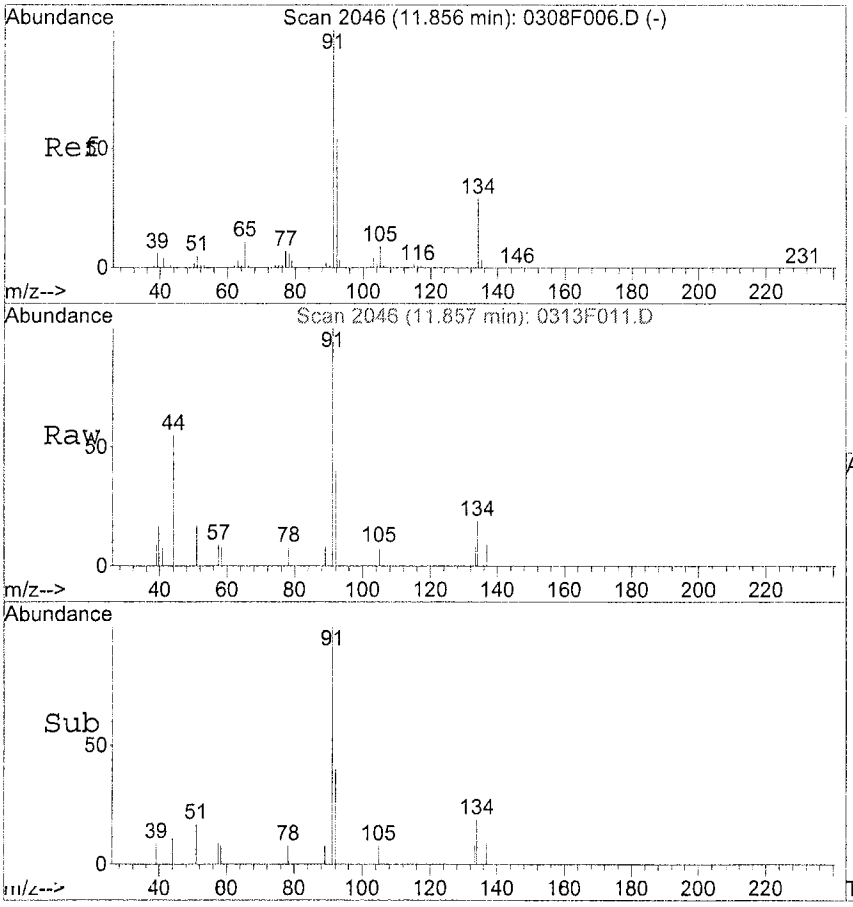


#95
1,4-Dichlorobenzene
Concen: 0.05 PPB
RT: 11.51 min Scan# 1980
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:146 Resp: 1293

Ion	Ratio	Lower	Upper
146	100		
111	53.4	5.6	65.6
148	41.9	32.4	92.4

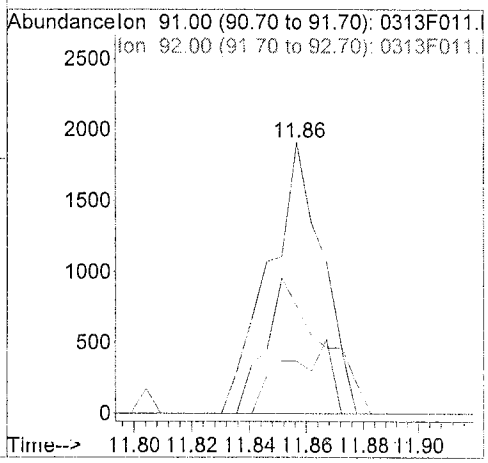


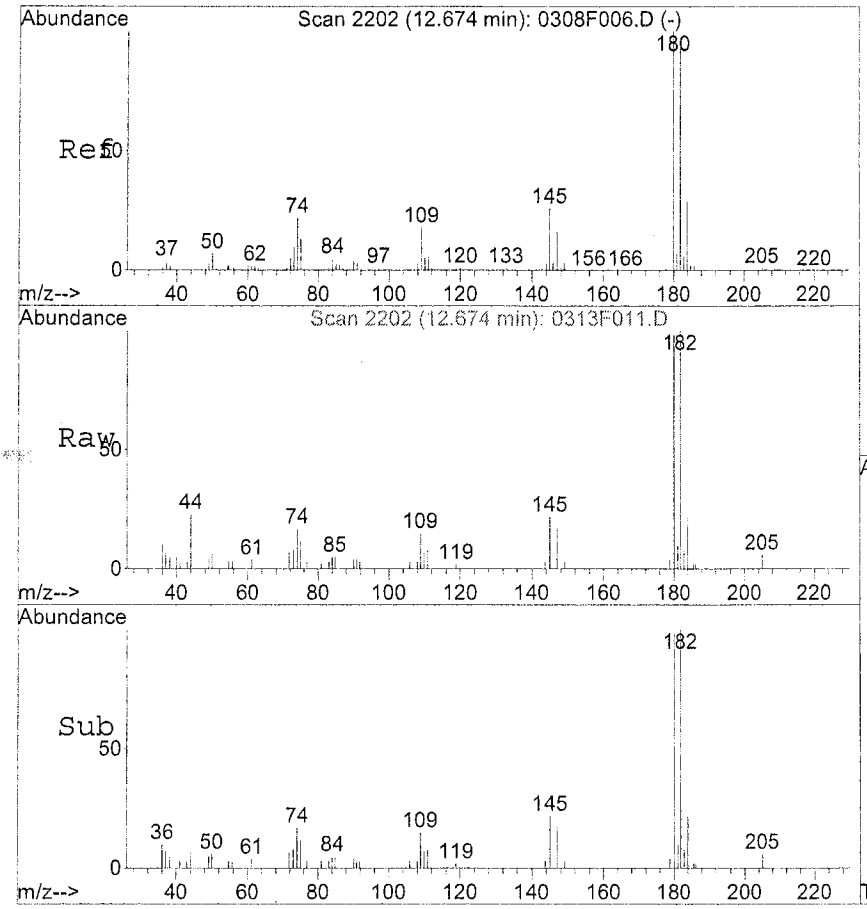


#96
n-Butylbenzene
Concen: 0.05 PPB
RT: 11.86 min Scan# 2046
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
92	39.6	23.7	83.7
134	19.3	0.0	59.0

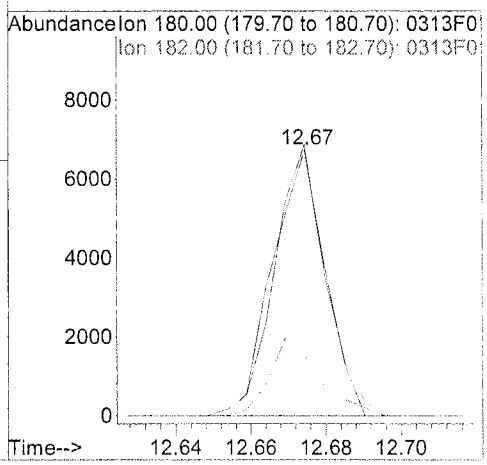


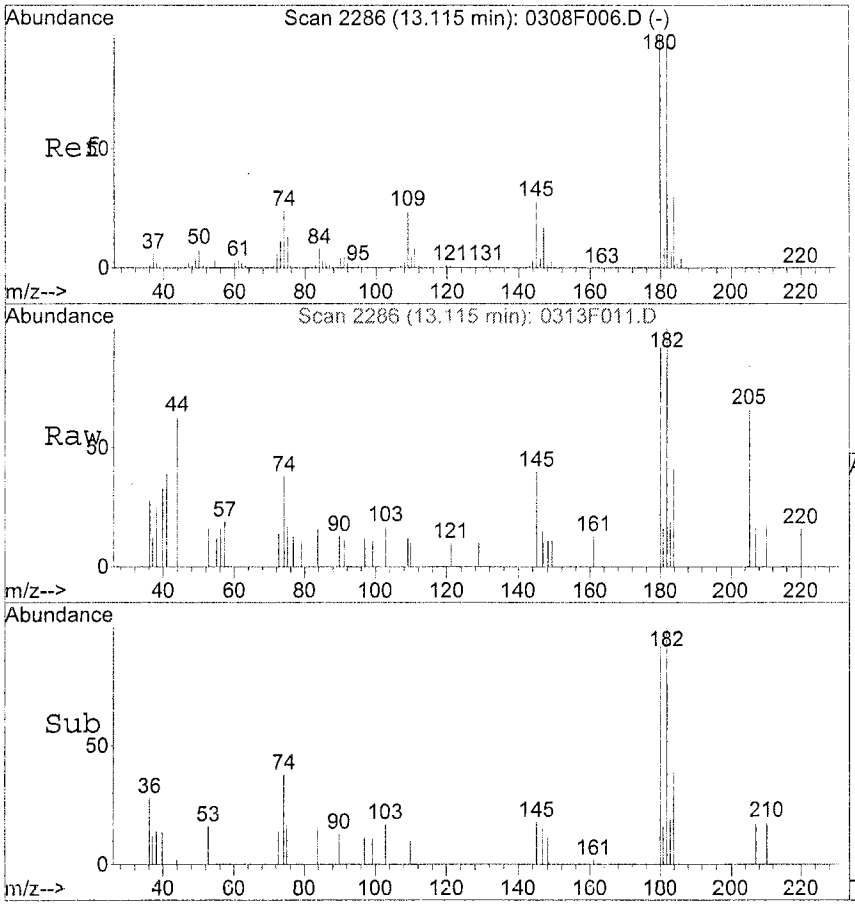


#99
1,3,5-Trichlorobenzene
Concen: 0.28 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 6502

Ion	Ratio	Lower	Upper
180	100		
182	102.0	64.4	124.4
145	22.4	0.0	55.5

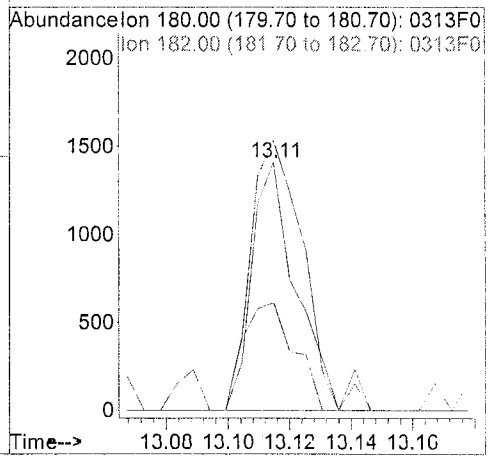


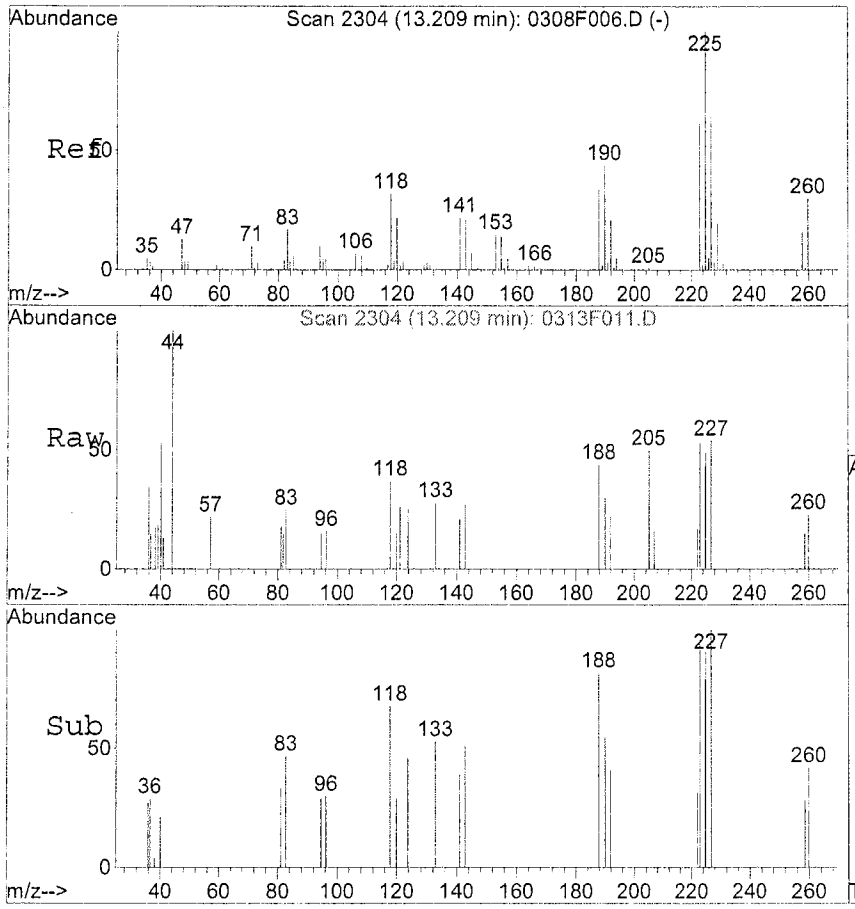


#100
1,2,4-Trichlorobenzene
Concen: 0.08 PPB
RT: 13.11 min Scan# 2286
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 1447

Ion	Ratio	Lower	Upper
180	100		
182	108.9	66.5	126.5
145	43.4	0.0	58.1

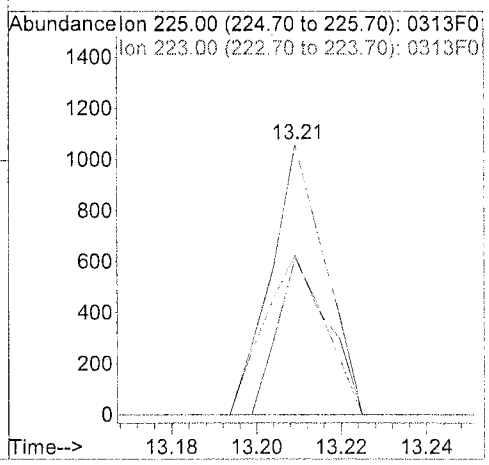


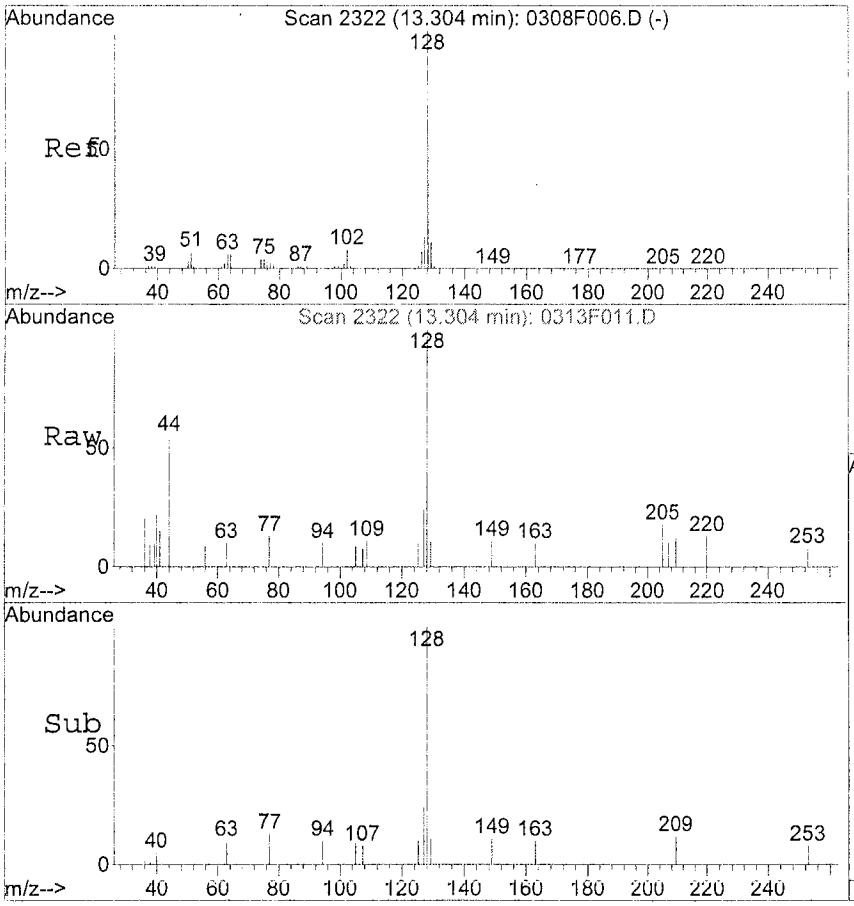


#101
Hexachlorobutadiene
Concen: 0.09 PPB
RT: 13.21 min Scan# 2304
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:225 Resp: 945

Ion	Ratio	Lower	Upper
225	100		
223	58.0	32.1	92.1
227	59.1	35.1	95.1

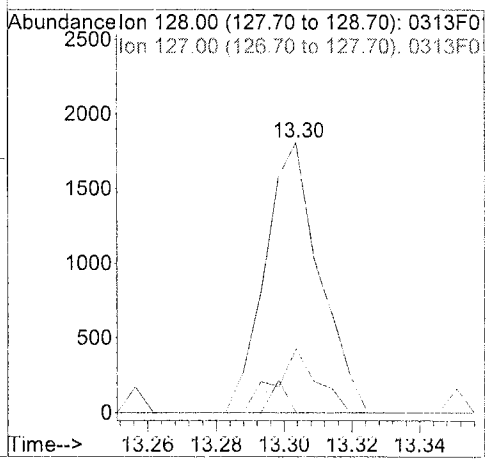


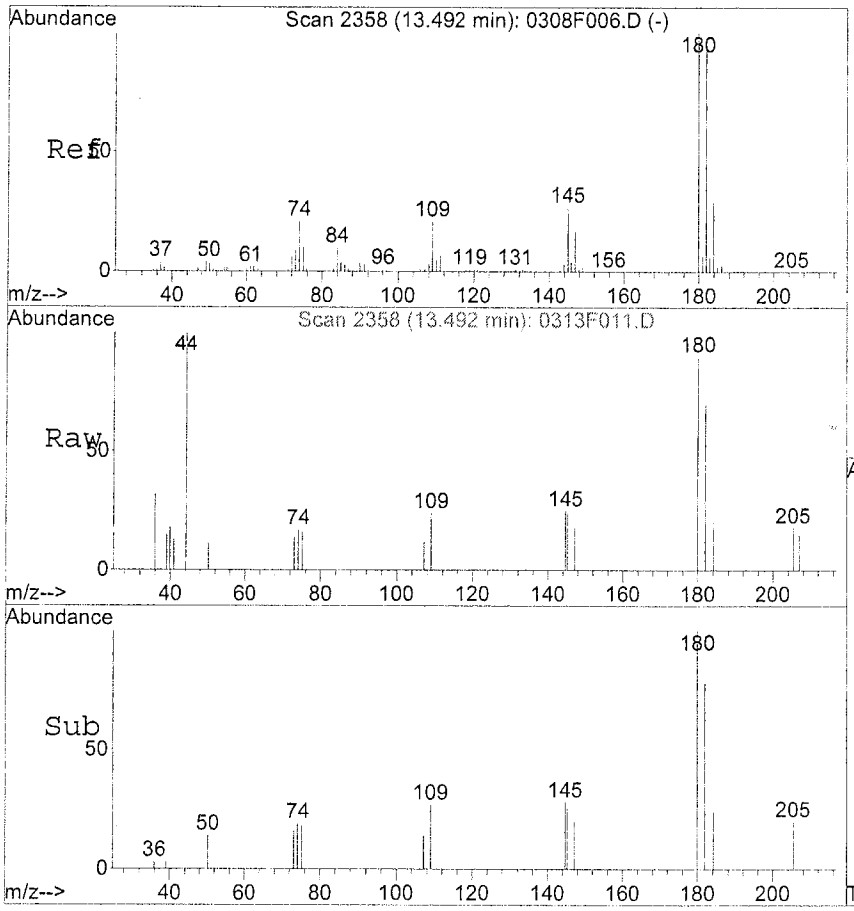


#102
Naphthalene
Concen: 0.09 PPB
RT: 13.30 min Scan# 2322
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:128 Resp: 2019

Ion	Ratio	Lower	Upper
128	100		
127	23.7	0.0	42.7
102	0.0	0.0	38.4

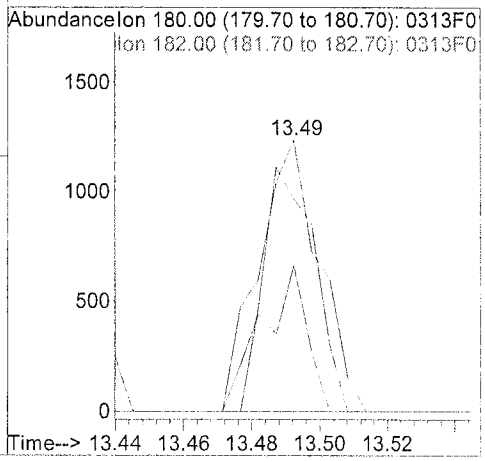




#103
1,2,3-Trichlorobenzene
Concen: 0.10 PPB
RT: 13.49 min Scan# 2358
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 1523

Ion	Ratio	Lower	Upper
180	100		
182	78.2	66.6	126.6
145	53.8	0.0	57.7



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K0702006-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	105	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	99	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F020.D
Lab ID: K0702006-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 15:08
Date Quantitated: 03/14/2007 11:45
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ800

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MAV

Primary Review: [illegible]

Secondary Review: F-Ah-3/15/7

Quantitation Report

Bottle ID:		**Tier:**	III	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/05/2007	**Receive Date:**	03/10/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0702006
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582919	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F020.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 15:08	**Quant Date:**	03/14/2007 11:45	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0702006-003			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	398540	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	191622	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	186069	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.26	0.01	0.00	65	89266	10.50	105	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	420023	10.86	109	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	166061	9.89	99	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.31		0.00	50	1627	0.1200	0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0**d**		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.39	-0.01	0.00	43	1436	1.27	4.1	U	
1	Carbon Disulfide				76	0**d**		0.16	U	
1	Methylene Chloride	2.78		0.00	84	603	0.0600	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F020.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 15:08	**Quant Date:**	03/14/2007 11:45	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0702006-003			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene	7.56	-0.01	0.00	92	8625	0.3000	0.30	J	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0d		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N. Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

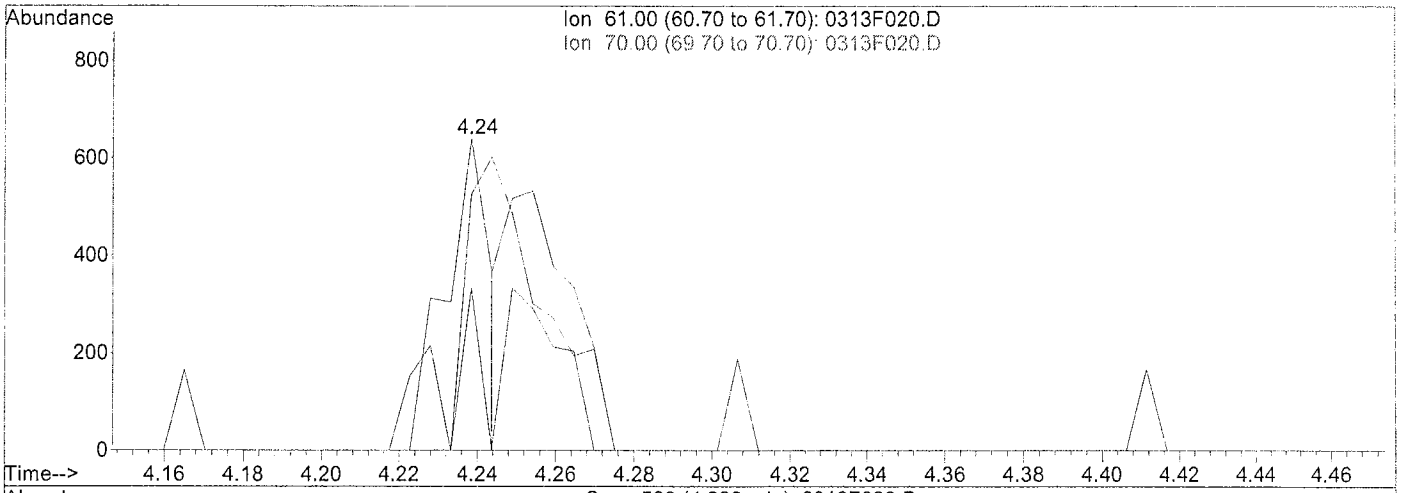
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

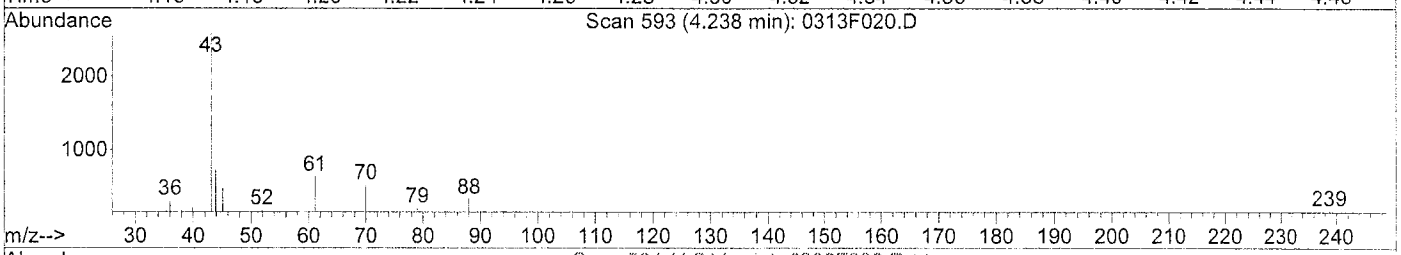
Quantitation Report (Qedit)

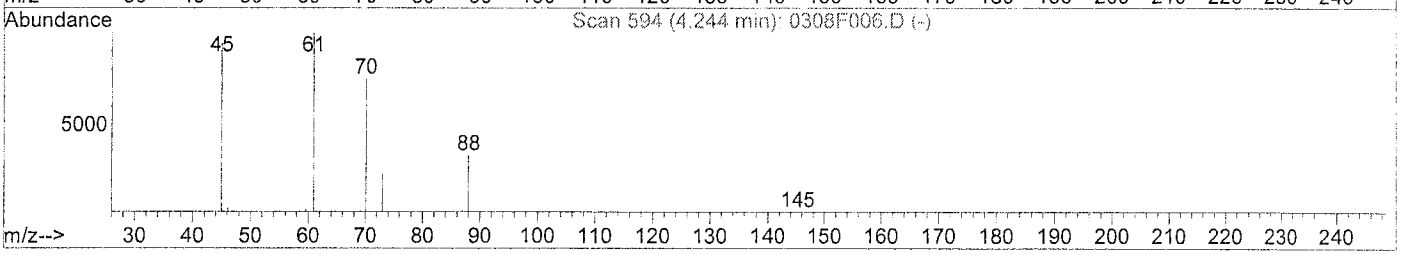
Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : ~~K1703-003~~ K1006-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:44 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration







TIC: 0313F020.D

(33) Ethyl Acetate (T)

4.24min 1.02PPB

response 510

Ion	Exp%	Act%
61.00	100	100
70.00	67.10	82.32
88.00	29.30	52.11
0.00	0.00	0.00

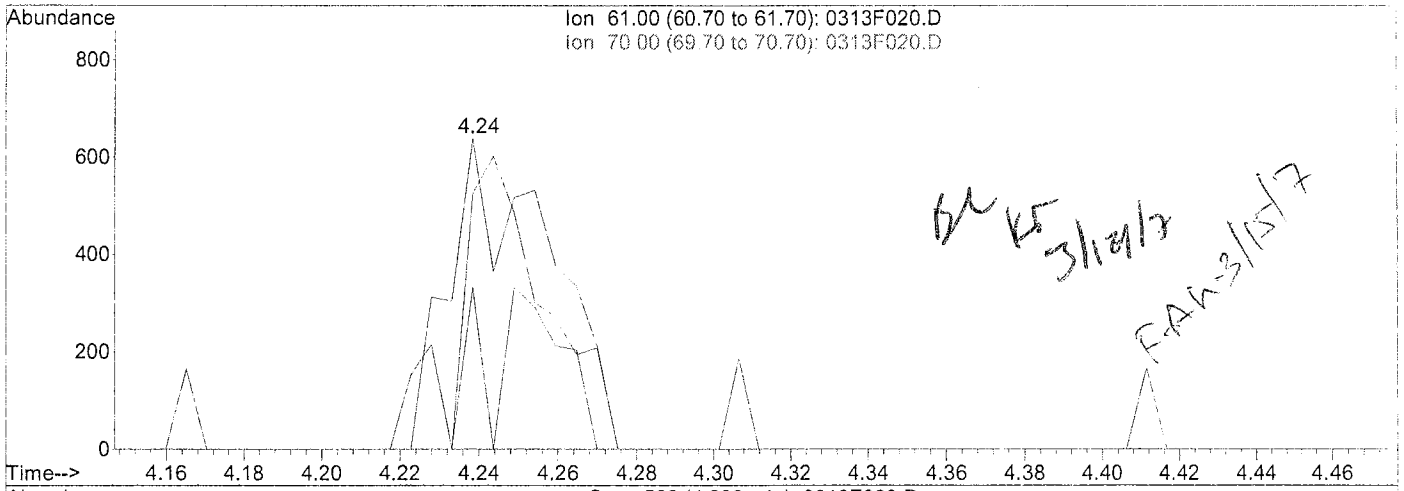
0313F020.D 022607.M Wed Mar 14 11:44:28 2007

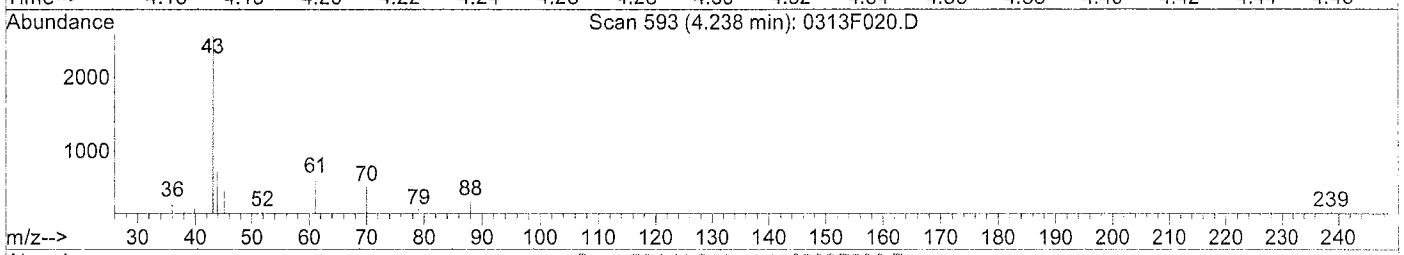
Quantitation Report (Qedit)

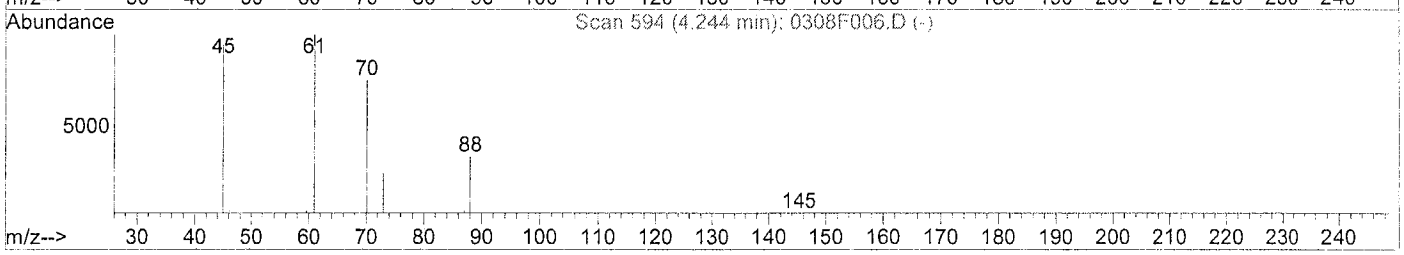
Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : K1703-003 K100-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:44 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration







TIC: 0313F020.D

(33) Ethyl Acetate (T)

4.24min 2.26PPB m

response 1130

Ion	Exp%	Act%
61.00	100	100
70.00	67.10	82.32
88.00	29.30	52.11
0.00	0.00	0.00

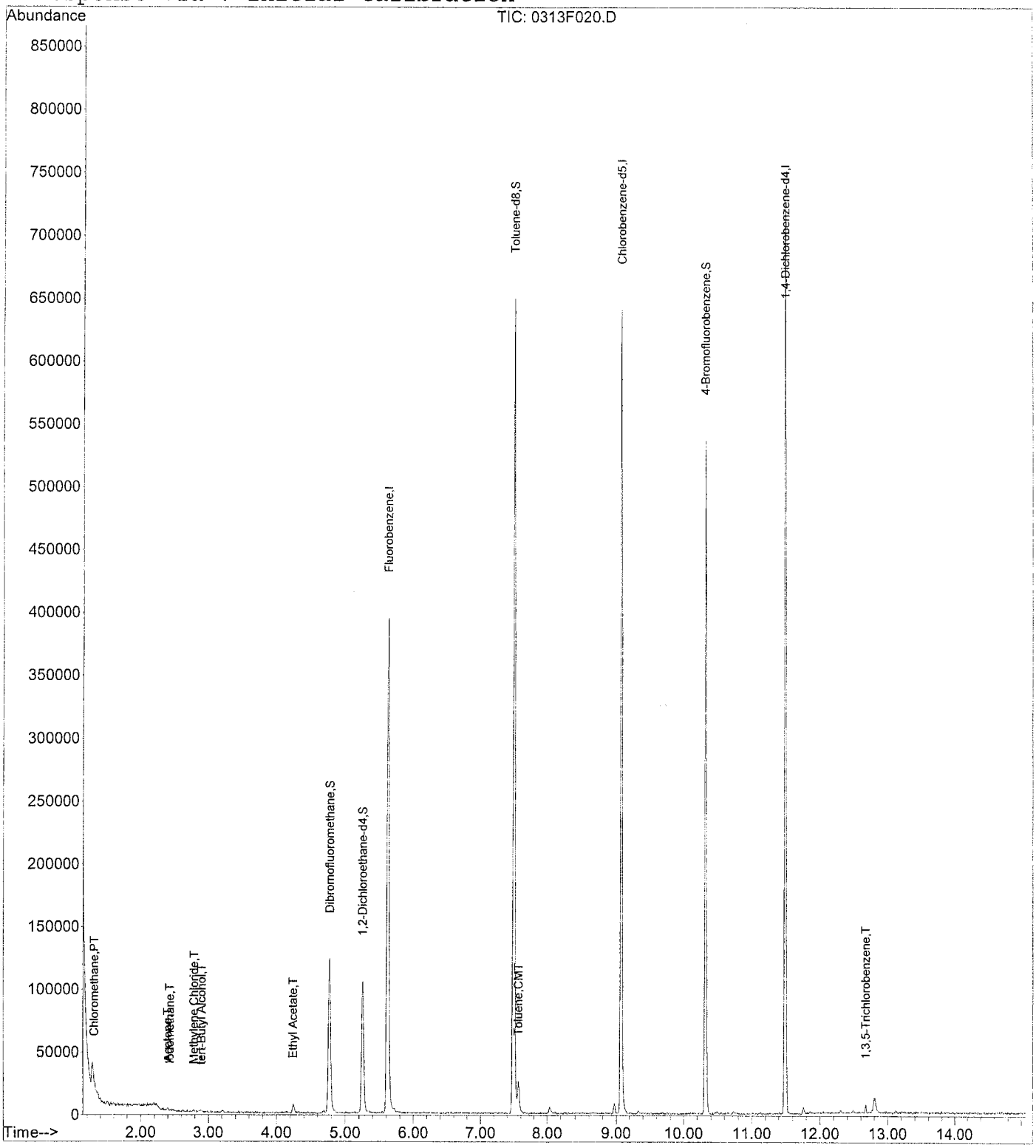
0313F020.D 022607.M Wed Mar 14 11:44:33 2007

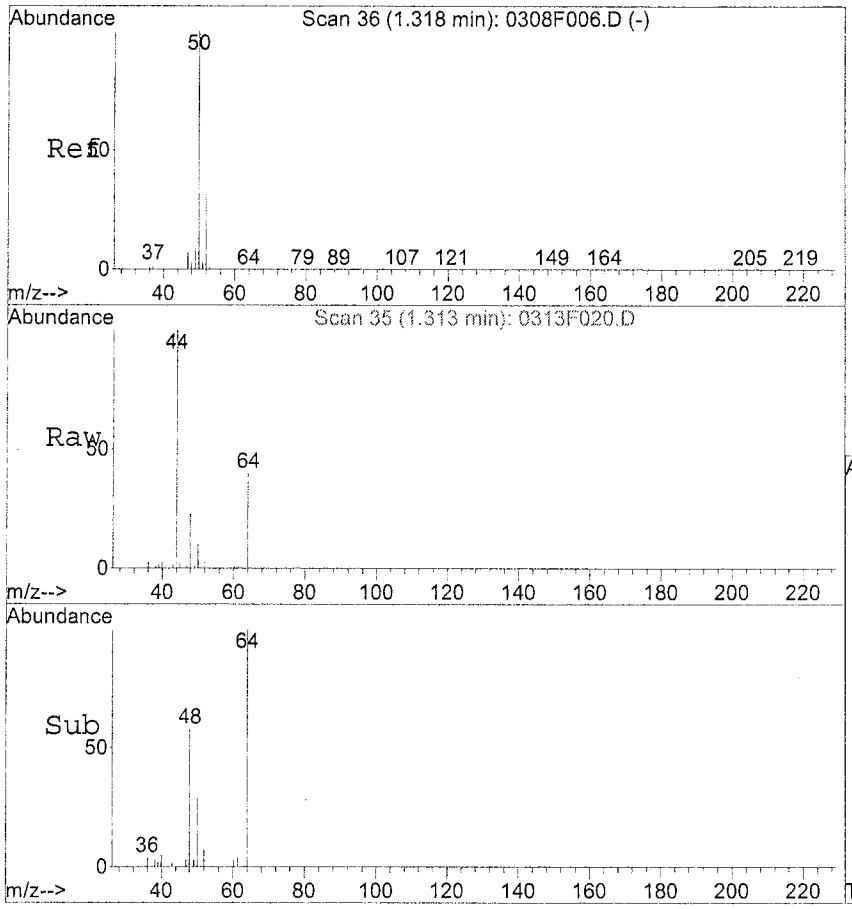
Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : ~~K1703-003~~ K 20a-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:45 2007 KM 3/14/07

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

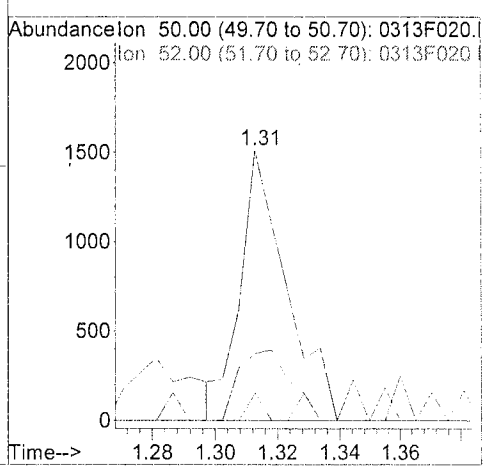


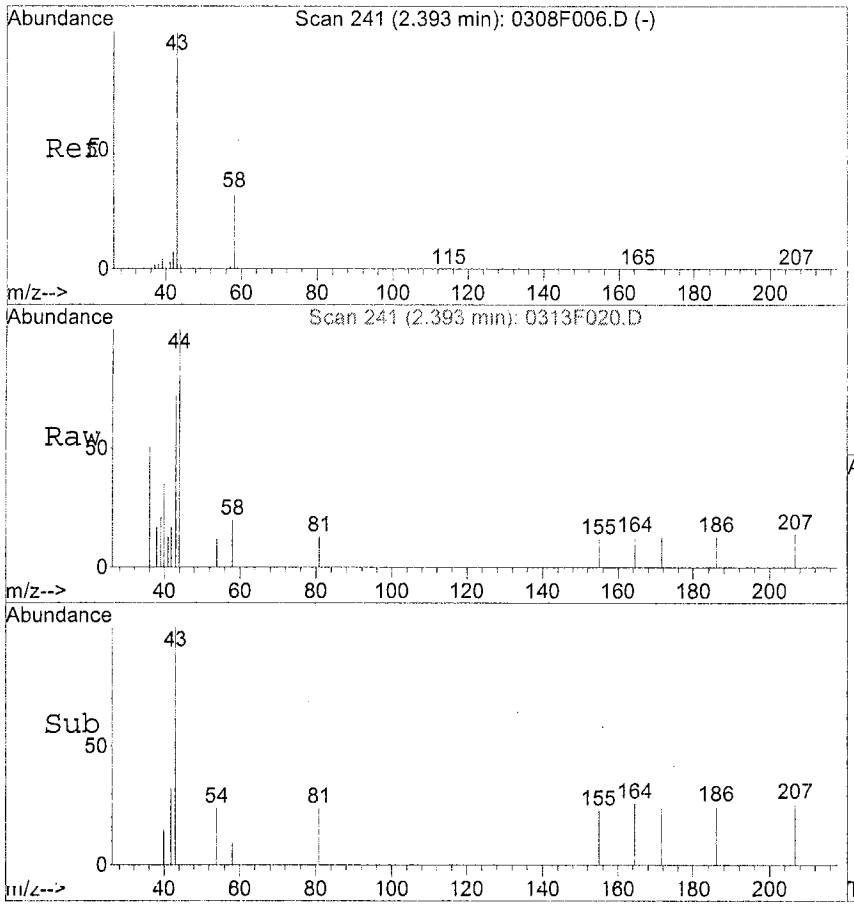


#3
Chloromethane
Concen: 0.12 PPB
RT: 1.31 min Scan# 35
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 50 Resp: 1627

Ion	Ratio	Lower	Upper
50	100		
52	24.7	1.8	61.8
49	10.2	0.0	38.7

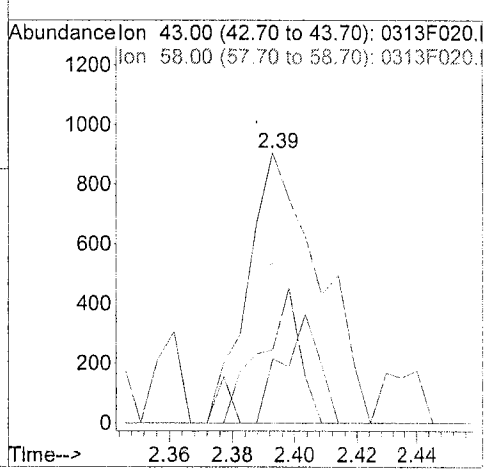


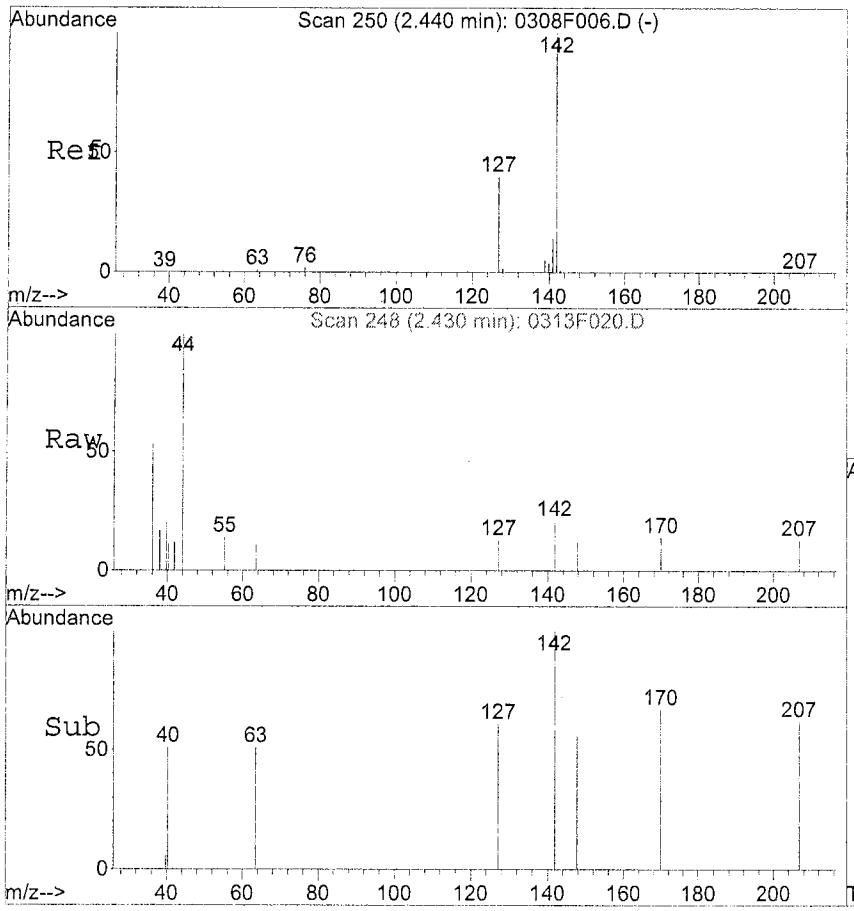


#13
Acetone
Concen: 1.27 PPB
RT: 2.39 min Scan# 241
Delta R.T. 0.00 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 43 Resp: 1436

Ion	Ratio	Lower	Upper
43	100		
58	27.1	1.7	61.7
42	23.8	0.0	36.8

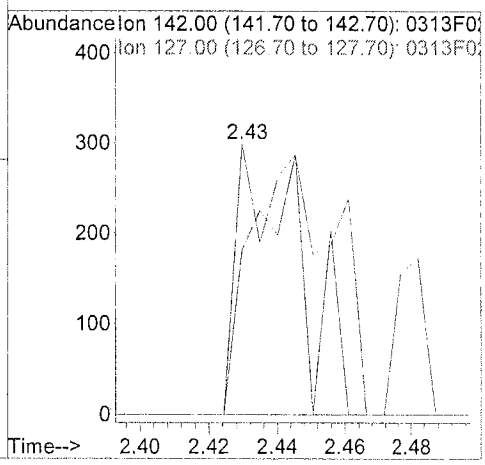


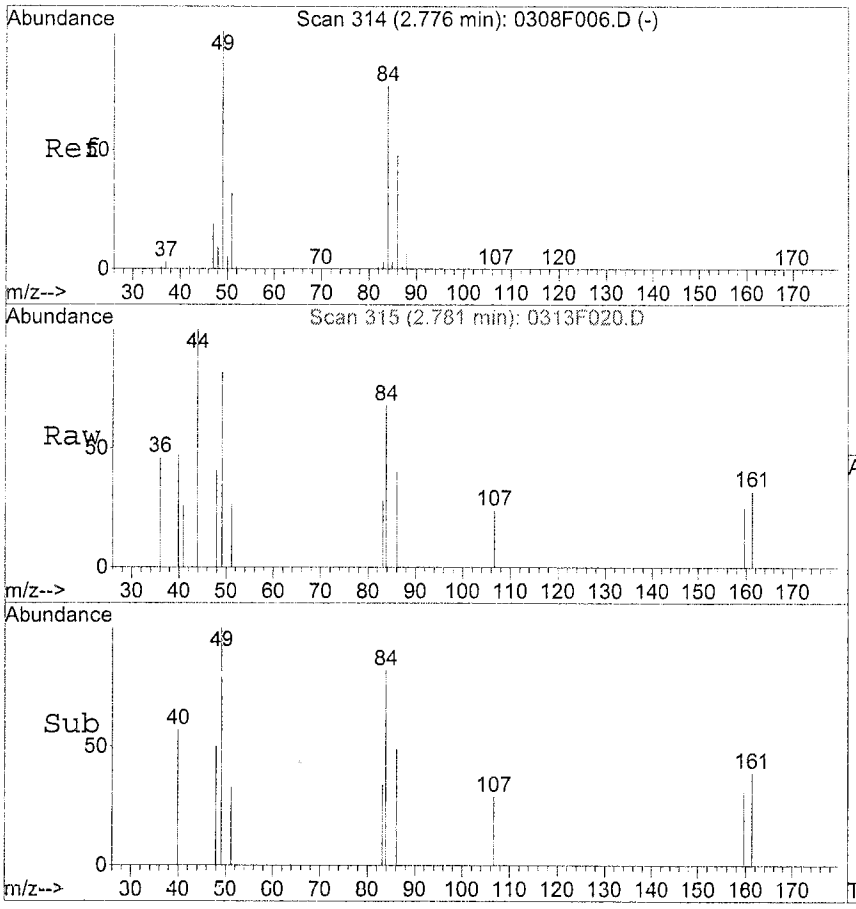


#14
Iodomethane
Concen: 0.05 PPB
RT: 2.43 min Scan# 248
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion:142 Resp: 516

Ion	Ratio	Lower	Upper
142	100		
127	60.9	9.7	69.7
141	0.0	0.0	44.1

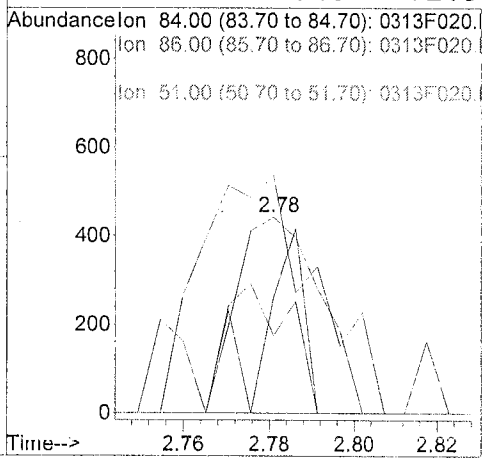


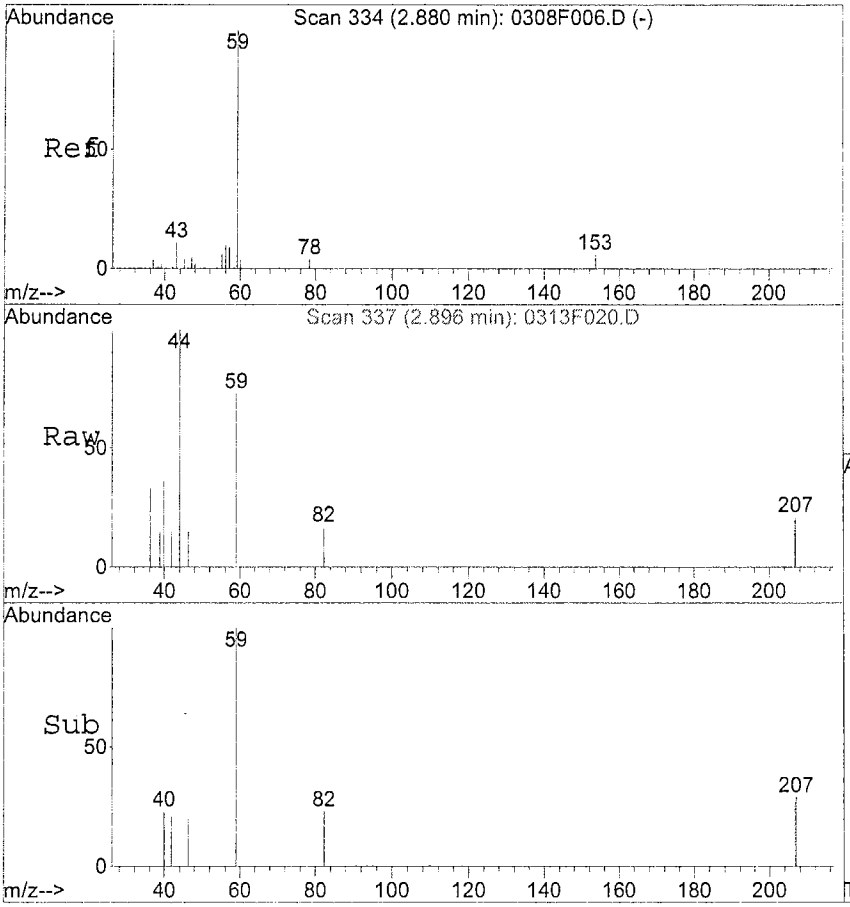


#18
Methylene Chloride
Concen: 0.06 PPB
RT: 2.78 min Scan# 315
Delta R.T. 0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 84 Resp: 603

Ion	Ratio	Lower	Upper
84	100		
86	59.0	32.9	92.9
49	121.3	99.7	159.7
51	39.6	11.9	71.9

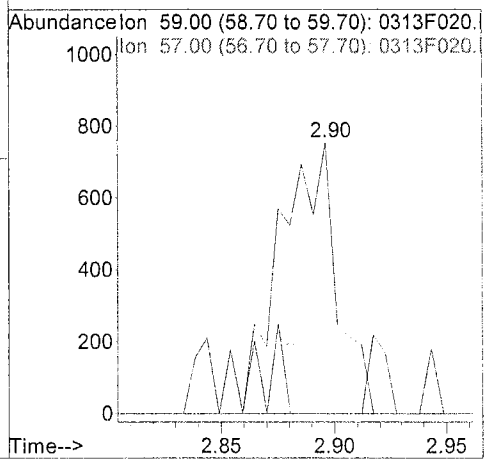


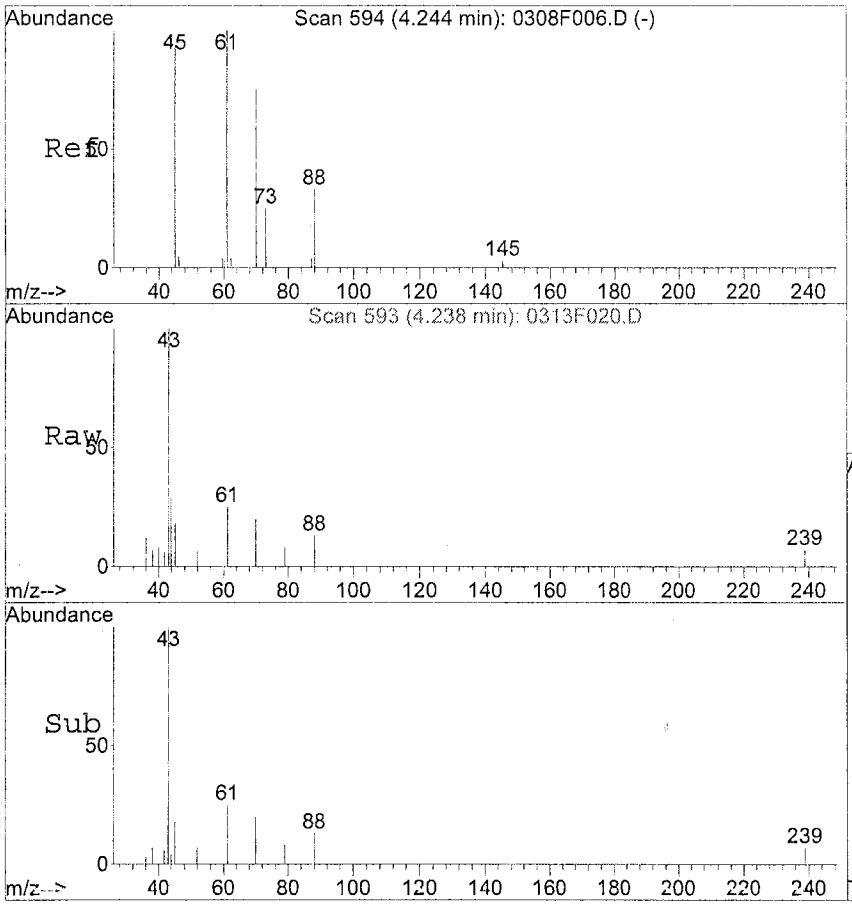


#19
tert-Butyl Alcohol
Concen: 6.10 PPB
RT: 2.90 min Scan# 337
Delta R.T. 0.02 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 59 Resp: 1373

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	38.5
60	0.0	0.0	33.5

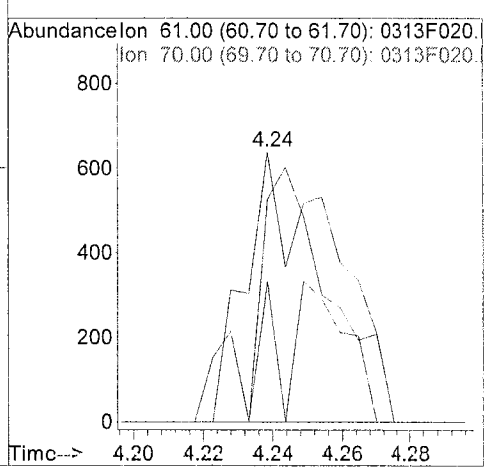


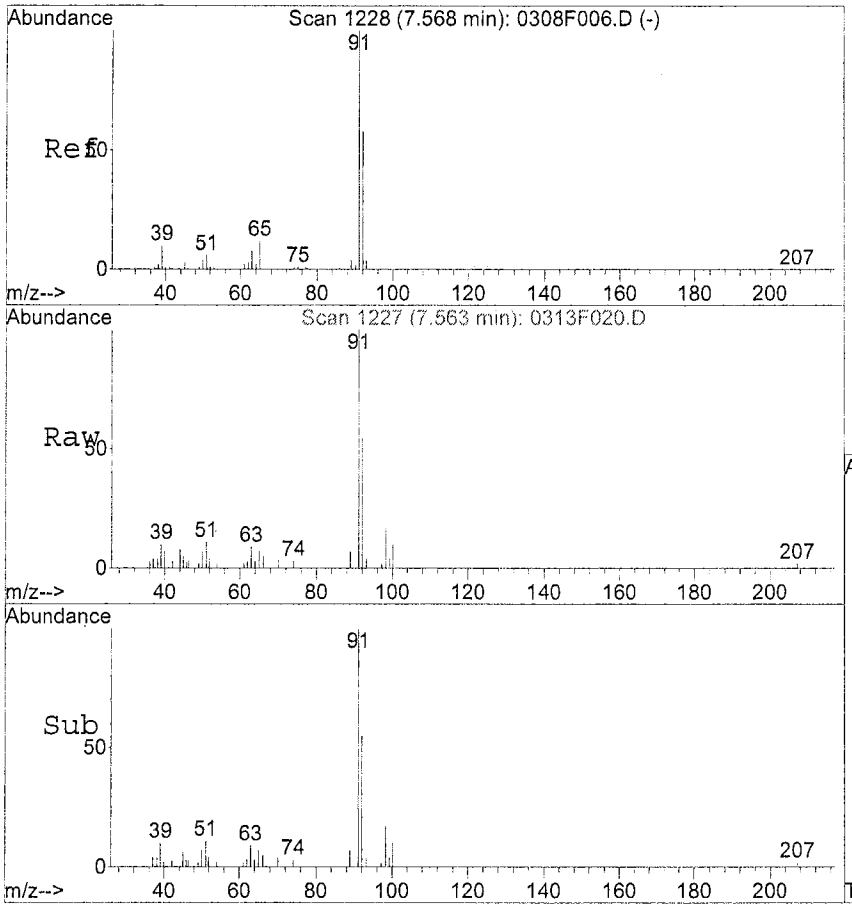


#33
Ethyl Acetate
Concen: 2.26 PPB m
RT: 4.24 min Scan# 593
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 61 Resp: 1130

Ion	Ratio	Lower	Upper
61	100		
70	82.3	37.1	97.1
88	52.1	0.0	59.3

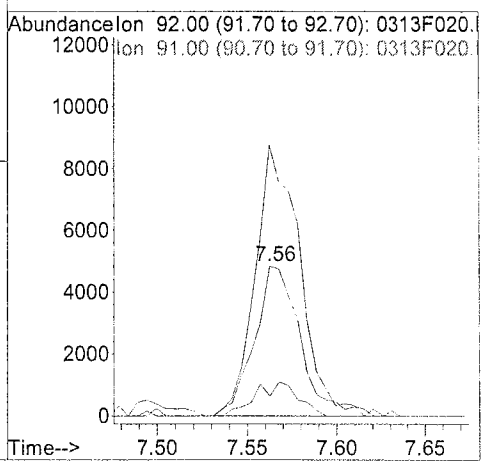


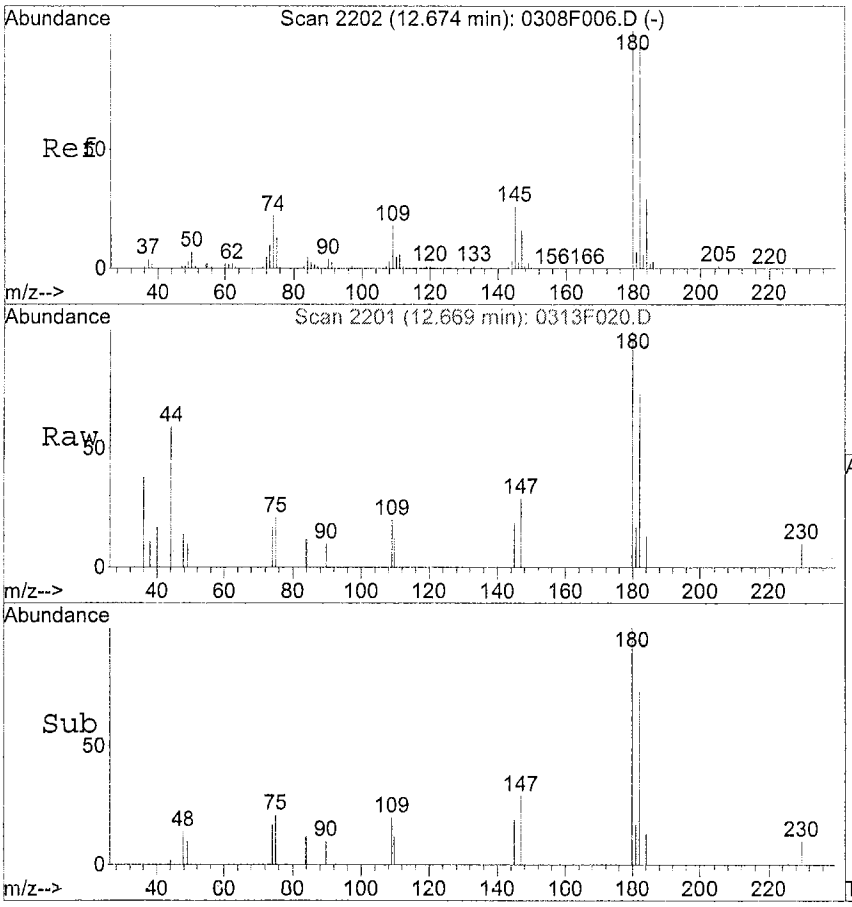


#59
Toluene
Concen: 0.30 PPB
RT: 7.56 min Scan# 1227
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 92 Resp: 8625

Ion	Ratio	Lower	Upper
92	100		
91	181.2	141.7	201.7
65	13.1	0.0	50.4

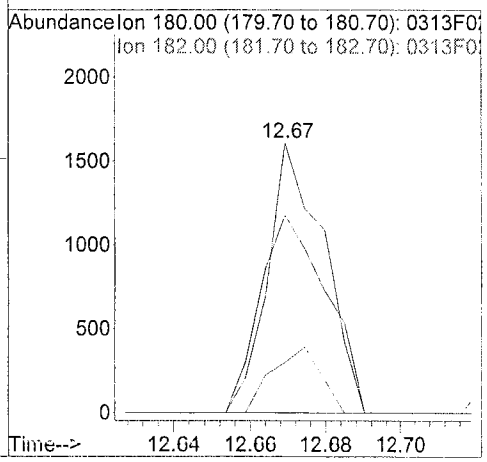




#99
1,3,5-Trichlorobenzene
Concen: 0.06 PPB
RT: 12.67 min Scan# 2201
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion:180 Resp: 1646

Ion	Ratio	Lower	Upper
180	100		
182	73.2	64.4	124.4
145	18.6	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QCMS
Lab Code: KWG0703590-1

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**13.6**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**69.2**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**0.200**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**10.5**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**9.33**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.24**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**51.6**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.9**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**12.9**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**67.2**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**66.4**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**10.6**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**9.29**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**10.1**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**83.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**7.00**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**9.16**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**8.36**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**8.19**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0703590-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**24.6**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**6.34**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**9.45**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	101	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F005.D
Lab ID: KWG0703590-1 -- K0702006-003MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 10:15
Date Quantitated: 03/13/2007 14:09
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MPL
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NC
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KA 3/13/07

Secondary Review: F-A h 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582920	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	415453	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	197367	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	193579	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	96101	10.94	109	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	90019	10.15	102	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	443876	11.01	110	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	174045	10.06	101	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	96351	7.64	7.64		
1	Chloromethane	1.32	0.01	0.00	50	153924	10.45	10.5		
1	Vinyl Chloride	1.39		0.00	62	147954	10.92	10.9		
1	Bromomethane	1.63		0.00	96	60921	9.33	9.33		
1	Chloroethane	1.70	-0.01	0.00	64	84504	9.24	9.24		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	230784	10.50	10.5		
1	Trichlorofluoromethane	1.87		0.00	101	178614	9.64	9.64		
1	Ethyl Ether	2.10		0.00	59	83303	14.09	14.1		
1	Acrolein	2.27		0.00	56	62430	289.98	290		
1	Trichlorotrifluoroethane	2.27		0.00	151	82620	9.65	9.65		
1	1,1-Dichloroethene	2.29		0.00	96	109716	10.91	10.9		
1	Acetone	2.39	-0.01	0.00	43	60627	51.55	51.6		
1	Iodomethane	2.44		0.00	142	369478	31.70	31.7		
1	Carbon Disulfide	2.47		0.00	76	750902	22.93	22.9		
1	3-Chloro-1-propene	2.64		0.00	76	217656	39.75	39.8		

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m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	111388	415.07	415		
1	Methylene Chloride	2.78		0.00	84	138073	12.85	12.9		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	47872	204.07	204		
1	Acrylonitrile	3.08	-0.01	0.00	53	84589	55.36	55.4		
1	Methyl tert-Butyl Ether	2.97		0.00	73	253836	13.64	13.6		
1	trans-1,2-Dichloroethene	3.00		0.00	96	119241	10.15	10.2		
1	n-Hexane	3.20		0.00	57	383808	32.47	32.5		
1	Diisopropyl Ether	3.48		0.00	45	1005562	29.93	29.9		
1	1,1-Dichloroethane	3.48		0.00	63	225506	10.93	10.9		
1	Vinyl Acetate	3.54	0.01	0.00	86	81907	69.20	69.2		
1	Chloroprene	3.53	-0.01	0.00	53	735019	32.93	32.9		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	754472	31.17	31.2		
1	2,2-Dichloropropane	4.11		0.00	77	140727	10.16	10.2		
1	cis-1,2-Dichloroethene	4.15		0.00	96	129564	10.84	10.8		
1	2-Butanone (MEK)	4.20		0.00	72	26510	67.21	67.2		
1	Propionitrile	4.37		0.00	54	21933	41.81	41.8		
1	Ethyl Acetate	4.25	0.01	0.00	61	30037	57.70	57.7		
1	Methacrylonitrile	4.52		0.00	67	81134	44.08	44.1		
1	Bromochloromethane	4.45		0.00	128	47840	10.92	10.9		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	11199	26.27	26.3		
1	Chloroform	4.56	0.01	0.00	83	209058	10.23	10.2		
1	tert-Butyl Formate	4.58		0.00	59	22569	9.12	9.12		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	181210	10.67	10.7		
1	Carbon Tetrachloride	4.88		0.00	117	161386	10.68	10.7		
1	1,1-Dichloropropene	4.95		0.00	75	167631	10.20	10.2		
1	Isobutyl Alcohol	5.26		0.00	43	47984	436.79	437		
1	Benzene	5.21		0.00	78	514298	10.49	10.5		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	130319	11.80	11.8		
1	tert-Amyl Methyl Ether	5.36	-0.01	0.00	55	178348	31.22	31.2		
1	Trichloroethene (TCE)	6.06		0.00	95	121373	10.29	10.3		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	120046	11.81	11.8		
1	Dibromomethane	6.53		0.00	93	47266	11.77	11.8		
1	Methyl Methacrylate	6.56		0.00	69	169269	53.07	53.1		
1	1,4-Dioxane	6.55	-0.01	0.00	88	15199	408.41	408		
1	Bromodichloromethane	6.73		0.00	83	130770	11.79	11.8		
1	2-Nitropropane	7.10		0.00	43	41305	39.85	39.9		
1	2-Chloroethyl Vinyl Ether	7.26	0.12	0.02	63	703	0.2000	0.200	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	145885	11.65	11.7		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	129069	83.93	83.9		
1	Toluene	7.57		0.00	92	318877	10.55	10.6		
2	n-Octane	7.66		0.00	85	78503	15.68	15.7		
2	trans-1,3-Dichloropropene	7.93	0.01	0.00	75	97550	9.29	9.29		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	425272	52.17	52.2		

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e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	63224	10.06	10.1		
2	Tetrachloroethene (PCE)	8.13		0.00	164	99872	7.00	7.00		
2	2-Hexanone	8.39		0.00	57	38479	66.41	66.4		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	141131	9.77	9.77		
2	Dibromochloromethane	8.49		0.00	129	77165	9.16	9.16		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	66339	9.75	9.75		
2	1-Chlorohexane	9.10		0.00	91	162990	7.89	7.89		
2	Chlorobenzene	9.10		0.00	112	339891	8.36	8.36		
2	Ethylbenzene	9.21	0.01	0.00	106	190615	8.19	8.19		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	106276	8.95	8.95		
2	m,p-Xylenes	9.34		0.00	106	465868	16.16	16.2		
2	o-Xylene	9.75		0.00	106	224703	8.41	8.41		
2	Styrene	9.78		0.00	103	118310m	6.34	6.34		
2	Bromoform	9.98		0.00	173	39762	9.45	9.45		
2	Isopropylbenzene	10.13		0.00	105	523037	7.15	7.15		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	25331	35.83	35.8		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	80943	11.29	11.3		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	77113	49.60	49.6		
3	Bromobenzene	10.45		0.00	156	135144	8.24	8.24		
3	n-Propylbenzene	10.55		0.00	91	670500	7.75	7.75		
3	1,2,3-Trichloropropane	10.56	-0.01	0.00	110	25481	11.19	11.2		
3	2-Chlorotoluene	10.65		0.00	91	406455	8.01	8.01		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	461477	7.73	7.73		
3	4-Chlorotoluene	10.77		0.00	91	464397	7.99	7.99		
3	tert-Butylbenzene	11.06		0.00	119	423920	7.56	7.56		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	473913	7.87	7.87		
3	sec-Butylbenzene	11.28	-0.01	0.00	105	589760	7.88	7.88		
3	4-Isopropyltoluene	11.44		0.00	119	470283	6.97	6.97		
3	1,3-Dichlorobenzene	11.42		0.00	146	258623	7.74	7.74		
3	1,4-Dichlorobenzene	11.52		0.00	146	258142	7.83	7.83		
3	n-Butylbenzene	11.86		0.00	91	400075	6.86	6.86		
3	1,2-Dichlorobenzene	11.89		0.00	146	235106	8.05	8.05		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	8423	8.91	8.91		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	811218	29.10	29.1		
3	1,2,4-Trichlorobenzene	13.11		0.00	180	164931	7.62	7.62		
3	Hexachlorobutadiene	13.21		0.00	225	76694	5.95	5.95		
3	Naphthalene	13.30		0.00	128	313340	11.50	11.5		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	144885	8.16	8.16		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

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c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

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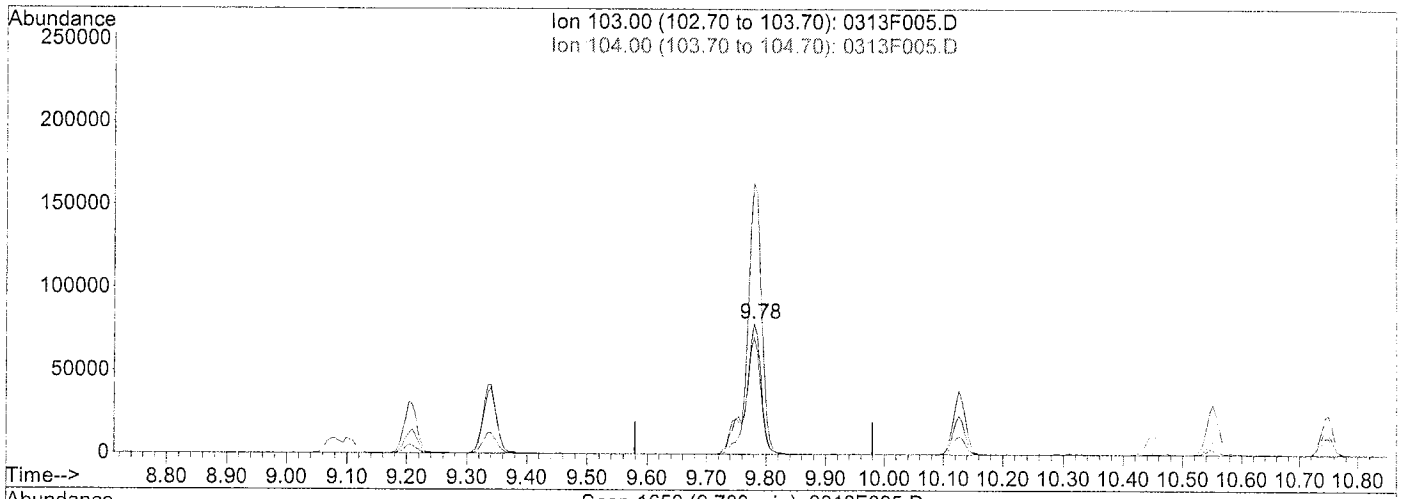
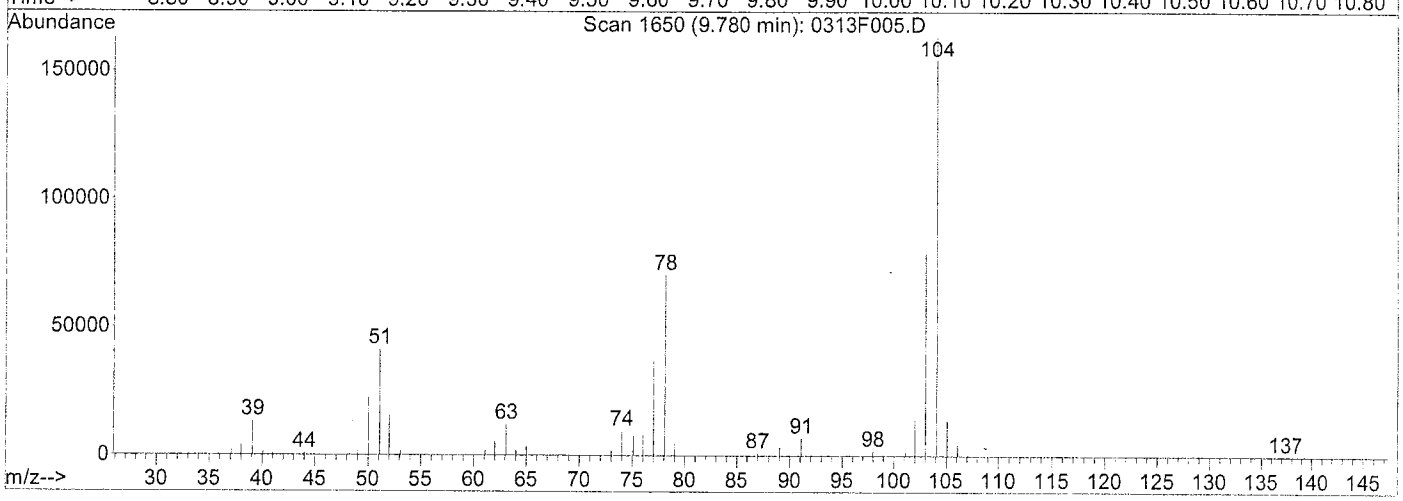
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F005.D
Acq On : 13 Mar 2007 10:15 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007

Vial: 5
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F005.D

(76) Styrene (T)

9.78min 7.88PPB

response 146892

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.26
78.00	89.70	89.33
0.00	0.00	0.00

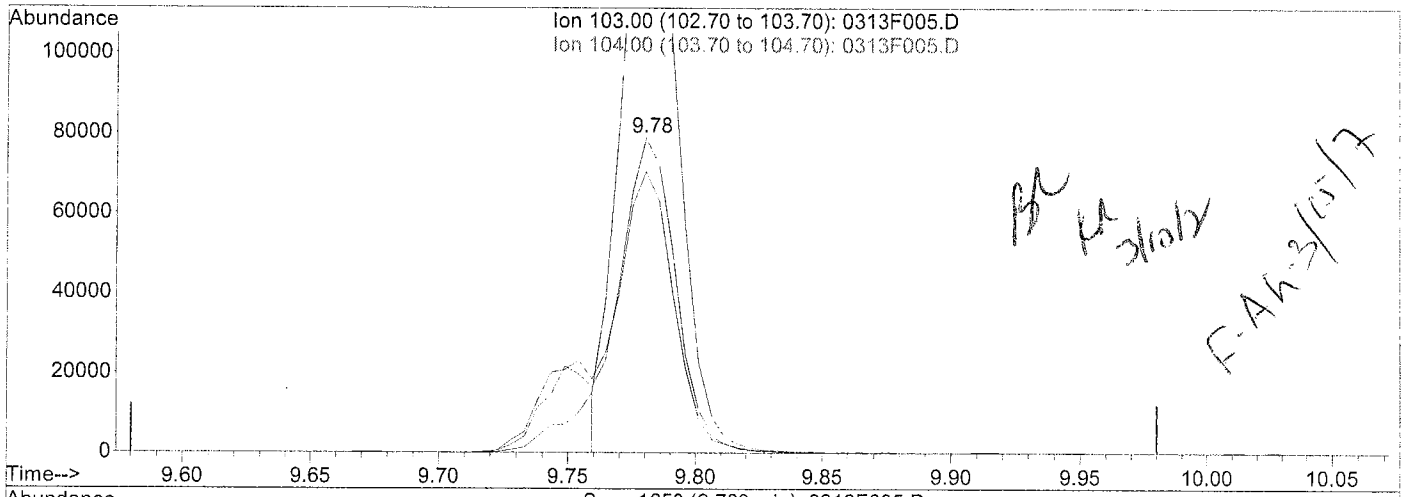
0313F005.D 022607.M Tue Mar 13 14:09:02 2007

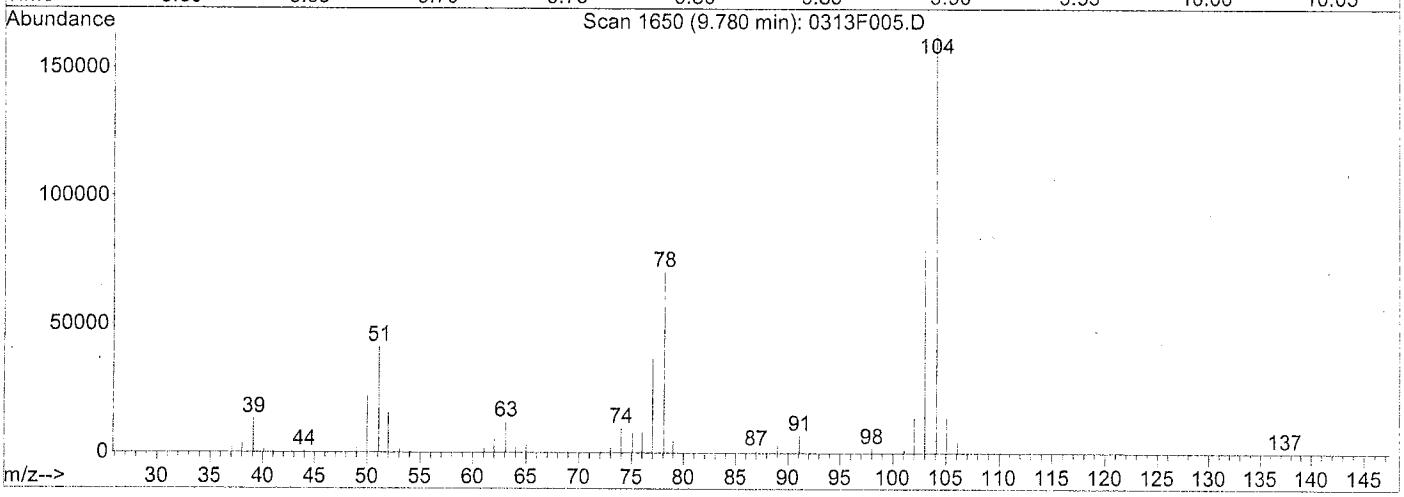
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F005.D
Acq On : 13 Mar 2007 10:15 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007

Vial: 5
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F005.D

(76) Styrene (T)

9.78min 6.34PPB m

response 118310

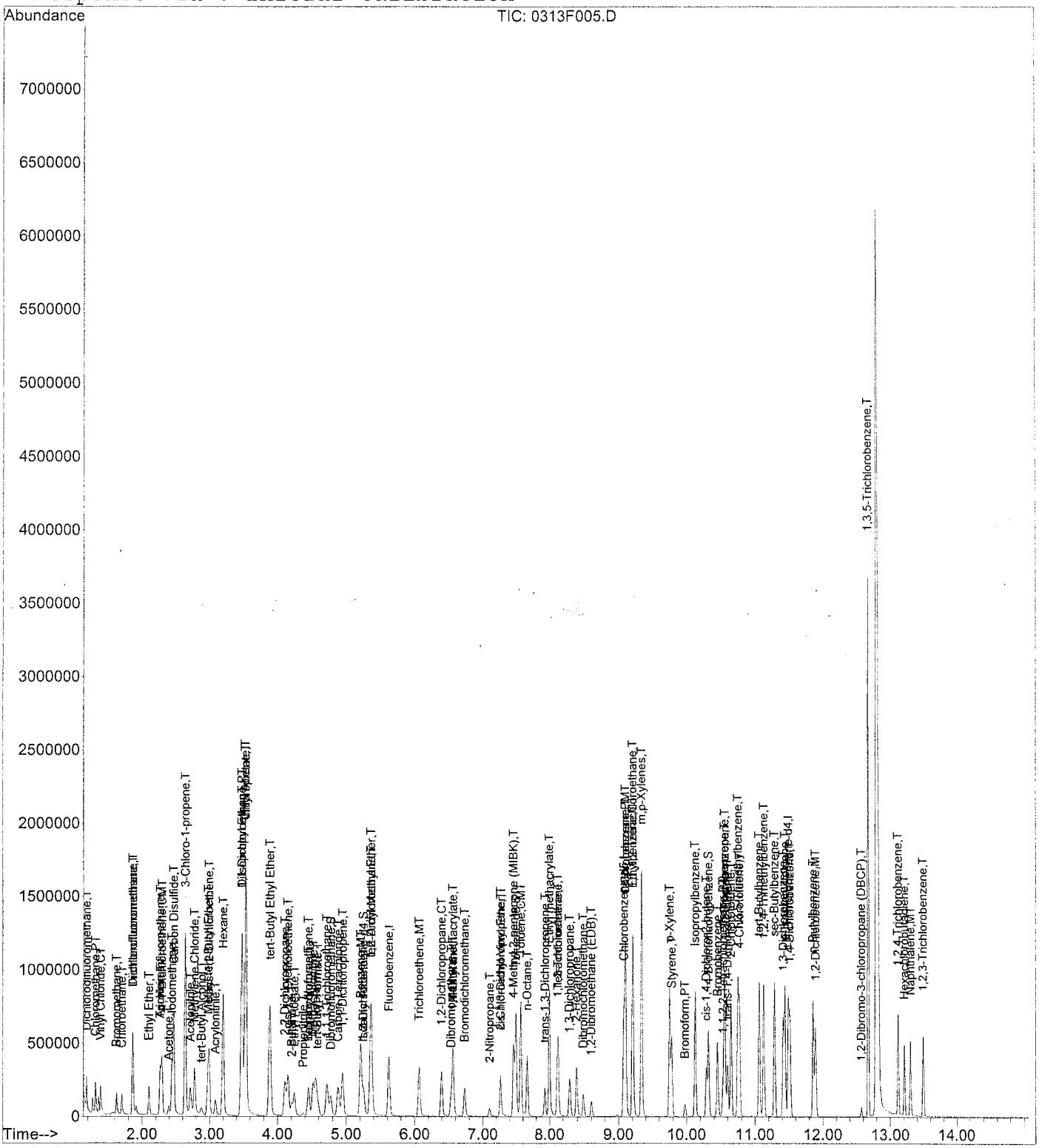
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.26
78.00	89.70	89.33
0.00	0.00	0.00

0313F005.D 022607.M Tue Mar 13 14:09:08 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F005.D Vial: 5
Acq On : 13 Mar 2007 10:15 am Operator:
Sample : K2006-003MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703590-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**13.2**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**66.7**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**0.220**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**9.88**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**10.2**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.00**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**54.5**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.6**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**12.1**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**59.5**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**10.1**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**11.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**11.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**65.9**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**11.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**8.89**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**9.42**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**83.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**6.70**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**8.64**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**7.98**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**7.72**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703590-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**23.6**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**6.07**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**8.70**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**10.6**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	101	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F006.D
Lab ID: KWG0703590-2 -- K0702006-003DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 10:34
Date Quantitated: 03/13/2007 14:09
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MW
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NL
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KN 3/15/07

Secondary Review: F-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582921	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	413056	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	199776	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	197260	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	95848	10.97	110	80-120	OK	
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	91603	10.39	104	70-124	OK	
1	Toluene-d8	7.49	0.00	0.00	98	441206	11.01	110	80-122	OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	176163	10.06	101	73-116	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	90188	7.19	7.19		
1	Chloromethane	1.31		0.00	50	144761	9.88	9.88		
1	Vinyl Chloride	1.39		0.00	62	144220	10.71	10.7		
1	Bromomethane	1.63		0.00	96	66201	10.20	10.2		
1	Chloroethane	1.70	-0.01	0.00	64	81845	9.00	9.00		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	220838	10.11	10.1		
1	Trichlorofluoromethane	1.87		0.00	101	172217	9.35	9.35		
1	Ethyl Ether	2.10		0.00	59	77847	13.24	13.2		
1	Acrolein	2.27		0.00	56	59337	277.21	277		
1	Trichlorotrifluoroethane	2.27		0.00	151	82456	9.68	9.68		
1	1,1-Dichloroethene	2.29		0.00	96	103481	10.35	10.4		
1	Acetone	2.39	-0.01	0.00	43	63756	54.52	54.5		
1	Iodomethane	2.44		0.00	142	382540	33.01	33.0		
1	Carbon Disulfide	2.47		0.00	76	735750	22.59	22.6		
1	3-Chloro-1-propene	2.64		0.00	76	228409	41.95	42.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	111644	418.44	418		
1	Methylene Chloride	2.78		0.00	84	129141	12.08	12.1		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	48013	205.86	206		
1	Acrylonitrile	3.09		0.00	53	79354	52.24	52.2		
1	Methyl tert-Butyl Ether	2.97		0.00	73	244450	13.21	13.2		
1	trans-1,2-Dichloroethene	3.00		0.00	96	117166	10.03	10.0		
1	n-Hexane	3.20		0.00	57	380876	32.41	32.4		
1	Diisopropyl Ether	3.48		0.00	45	968962	29.01	29.0		
1	1,1-Dichloroethane	3.48		0.00	63	219585	10.70	10.7		
1	Vinyl Acetate	3.53		0.00	86	78461	66.67	66.7		
1	Chloroprene	3.54		0.00	53	714098	32.18	32.2		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	738085	30.67	30.7		
1	2,2-Dichloropropane	4.11		0.00	77	136937	9.94	9.94		
1	cis-1,2-Dichloroethene	4.15		0.00	96	128273	10.79	10.8		
1	2-Butanone (MEK)	4.21	0.01	0.00	72	23351	59.54	59.5		
1	Propionitrile	4.37		0.00	54	21117	40.49	40.5		
1	Ethyl Acetate	4.25	0.01	0.00	61	30844	59.59	59.6		
1	Methacrylonitrile	4.52		0.00	67	81151	44.34	44.3		
1	Bromochloromethane	4.45		0.00	128	46470	10.66	10.7		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	10483	24.73	24.7		
1	Chloroform	4.55		0.00	83	203952	10.03	10.0		
1	tert-Butyl Formate	4.58		0.00	59	18554	7.54	7.54		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	175272	10.38	10.4		
1	Carbon Tetrachloride	4.88		0.00	117	152754	10.16	10.2		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	161461	9.88	9.88		
1	Isobutyl Alcohol	5.26		0.00	43	46780	428.30	428		
1	Benzene	5.21		0.00	78	493609	10.13	10.1		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	124110	11.31	11.3		
1	tert-Amyl Methyl Ether	5.37		0.00	55	173203	30.50	30.5		
1	Trichloroethene (TCE)	6.06		0.00	95	117615	10.03	10.0		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	116315	11.51	11.5		
1	Dibromomethane	6.53		0.00	93	43791	10.97	11.0		
1	Methyl Methacrylate	6.56		0.00	69	161734	51.00	51.0		
1	1,4-Dioxane	6.55	-0.01	0.00	88	14047	379.65	380		
1	Bromodichloromethane	6.73		0.00	83	127277	11.54	11.5		
1	2-Nitropropane	7.10		0.00	43	39543	38.37	38.4		
1	2-Chloroethyl Vinyl Ether	7.27	0.13	0.02	63	761	0.2200	0.220	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	139353	11.20	11.2		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	128317	83.93	83.9		
1	Toluene	7.57		0.00	92	308393	10.26	10.3		
2	n-Octane	7.66		0.00	85	80167	15.82	15.8		
2	trans-1,3-Dichloropropene	7.92		0.00	75	94467	8.89	8.89		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	411854	49.92	49.9		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	59933	9.42	9.42		
2	Tetrachloroethene (PCE)	8.13		0.00	164	96779	6.70	6.70		
2	2-Hexanone	8.39		0.00	57	38626	65.86	65.9		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	134808	9.22	9.22		
2	Dibromochloromethane	8.49		0.00	129	73749	8.64	8.64		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	63104	9.17	9.17		
2	1-Chlorohexane	9.10		0.00	91	155799	7.45	7.45		
2	Chlorobenzene	9.10		0.00	112	328562	7.98	7.98		
2	Ethylbenzene	9.20		0.00	106	181991	7.72	7.72		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	102928	8.57	8.57		
2	m,p-Xylenes	9.34		0.00	106	448957	15.39	15.4		
2	o-Xylene	9.75		0.00	106	221119	8.17	8.17		
2	Styrene	9.78		0.00	103	114589m	6.07	6.07		
2	Bromoform	9.98		0.00	173	37070	8.70	8.70		
2	Isopropylbenzene	10.13		0.00	105	505792	6.83	6.83		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	23969	33.50	33.5		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	77763	10.64	10.6		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	74870	47.26	47.3		
3	Bromobenzene	10.45		0.00	156	129773	7.76	7.76		
3	n-Propylbenzene	10.55		0.00	91	639974	7.26	7.26		
3	1,2,3-Trichloropropane	10.57		0.00	110	23828	10.27	10.3		
3	2-Chlorotoluene	10.65		0.00	91	397268	7.68	7.68		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	449011	7.38	7.38		
3	4-Chlorotoluene	10.77		0.00	91	448226	7.57	7.57		
3	tert-Butylbenzene	11.06		0.00	119	409053	7.16	7.16		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	455072	7.42	7.42		
3	sec-Butylbenzene	11.29		0.00	105	570255	7.48	7.48		
3	4-Isopropyltoluene	11.44		0.00	119	457275	6.65	6.65		
3	1,3-Dichlorobenzene	11.42		0.00	146	253246	7.44	7.44		
3	1,4-Dichlorobenzene	11.52		0.00	146	250856	7.47	7.47		
3	n-Butylbenzene	11.86		0.00	91	383650	6.46	6.46		
3	1,2-Dichlorobenzene	11.89		0.00	146	228329	7.67	7.67		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	8238	8.55	8.55		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	785241	27.64	27.6		
3	1,2,4-Trichlorobenzene	13.11		0.00	180	157990	7.16	7.16		
3	Hexachlorobutadiene	13.21		0.00	225	73315	5.58	5.58		
3	Naphthalene	13.30		0.00	128	311054	11.20	11.2		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	141631	7.83	7.83		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

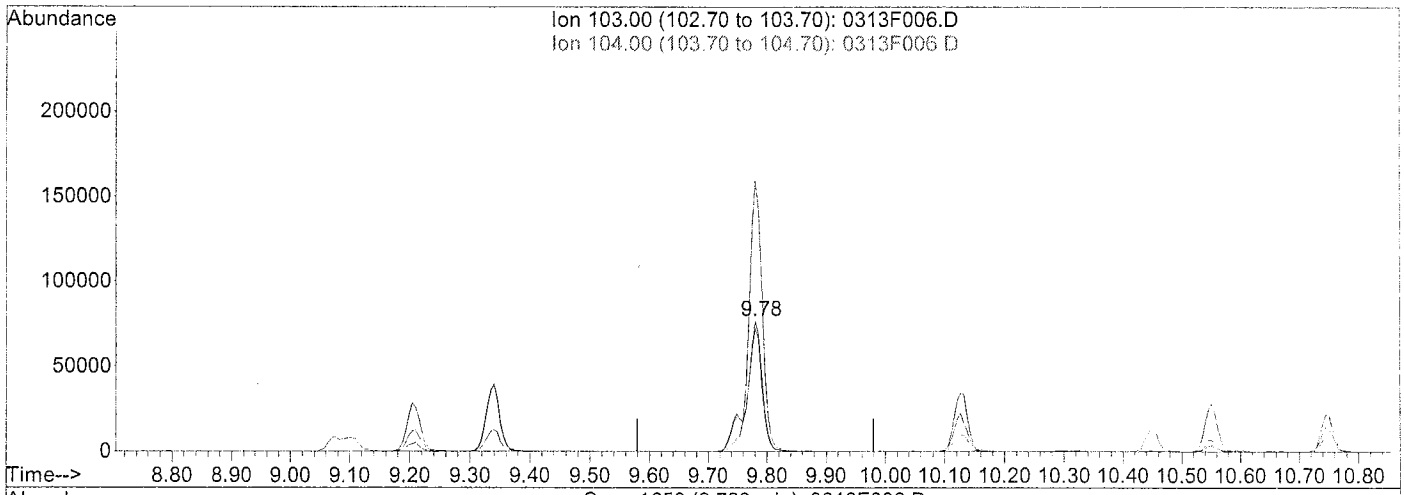
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

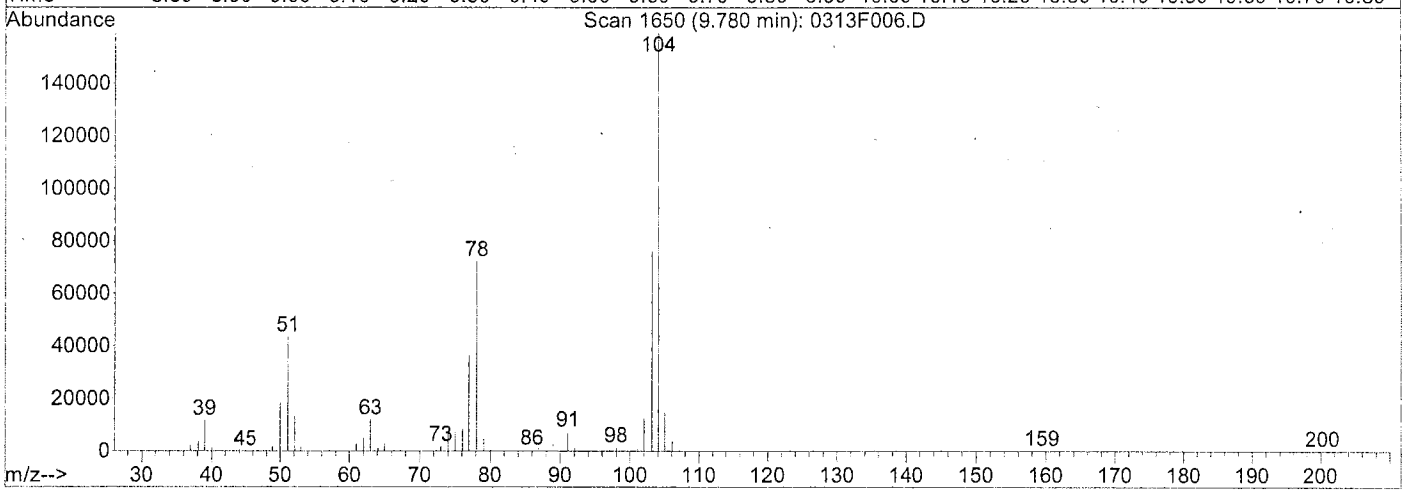
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F006.D
Acq On : 13 Mar 2007 10:34 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007

Vial: 6
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F006.D

(76) Styrene (T)

9.78min 7.63PPB

response 144069

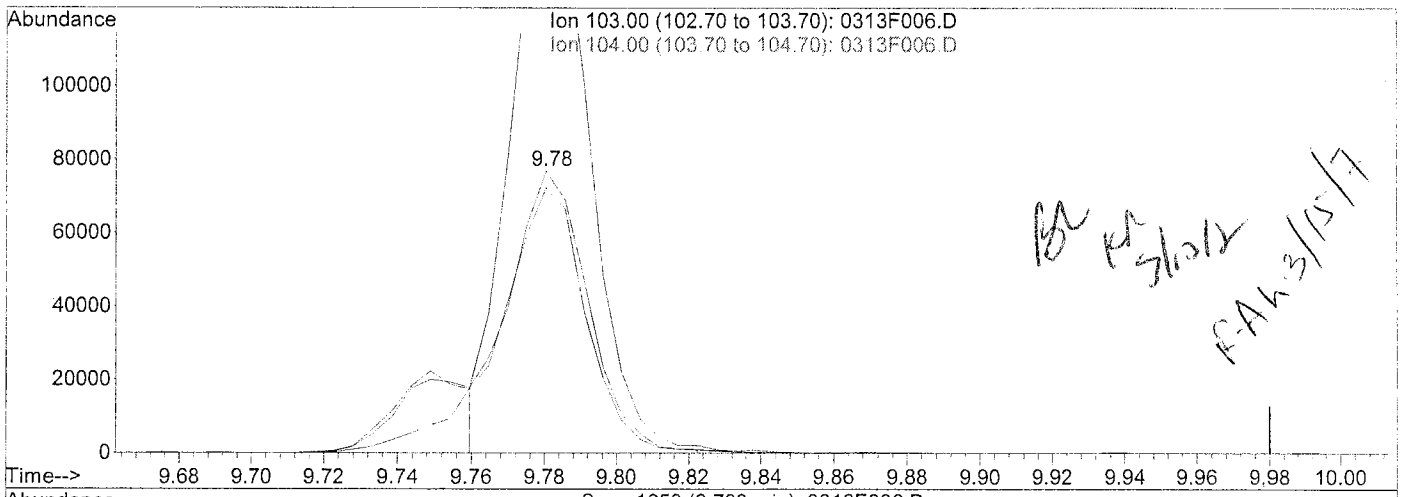
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.67
78.00	89.70	94.05
0.00	0.00	0.00

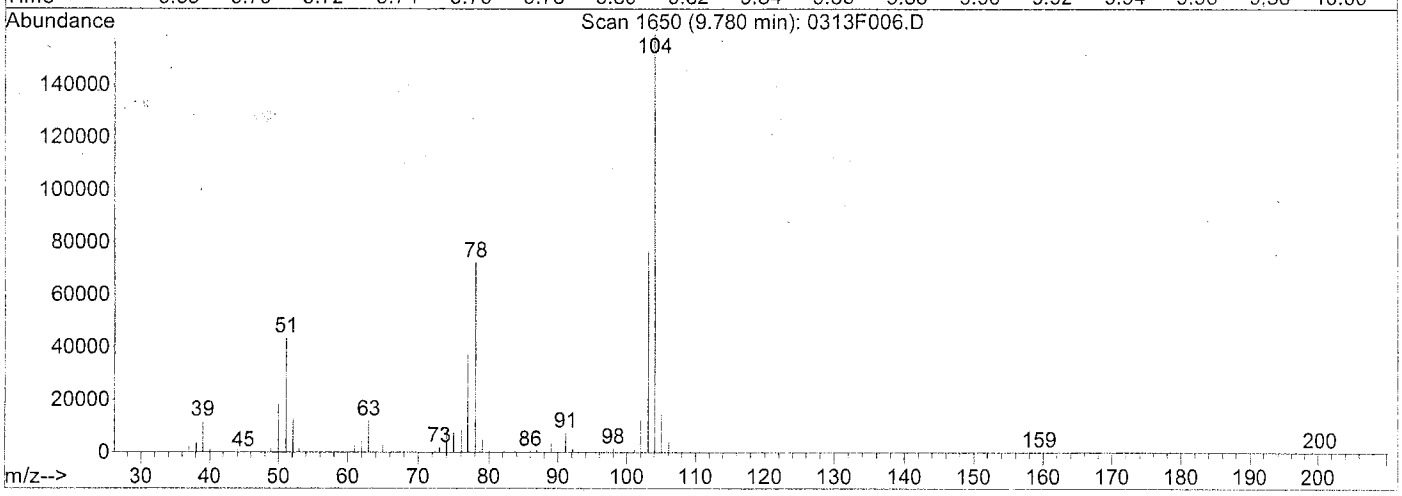
0313F006.D 022607.M Tue Mar 13 14:09:51 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F006.D Vial: 6
Acq On : 13 Mar 2007 10:34 am Operator:
Sample : K2006-003MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F006.D

(76) Styrene (T)

9.78min 6.07PPB m

response 114589

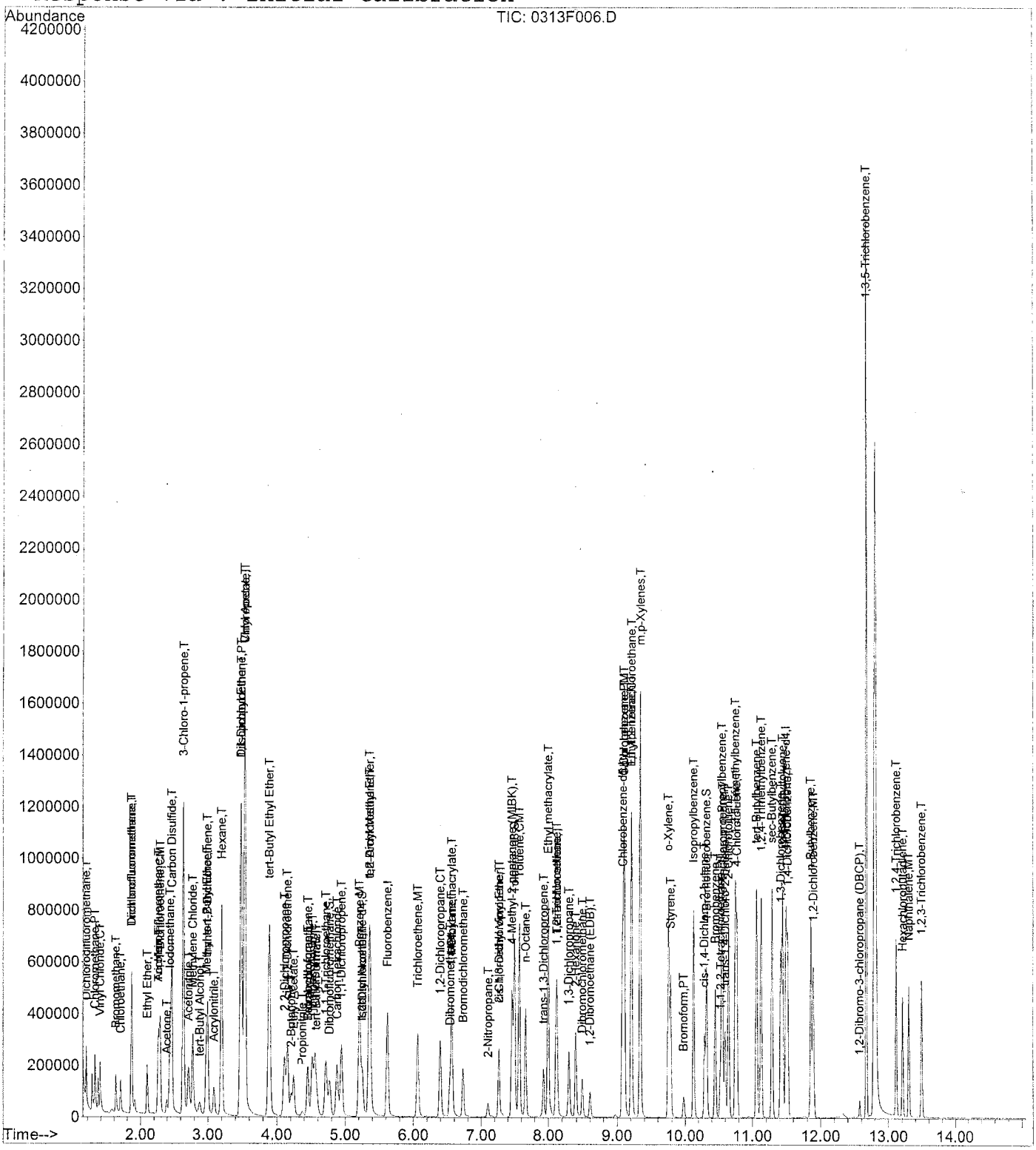
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.67
78.00	89.70	94.05
0.00	0.00	0.00

0313F006.D 022607.M Tue Mar 13 14:09:56 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F006.D Vial: 6
Acq On : 13 Mar 2007 10:34 am Operator:
Sample : K2006-003MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703590-5	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**8.55**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**46.9**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**9.14**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**9.64**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**8.94**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.32**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**37.6**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.0**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**11.7**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**9.75**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**44.4**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**9.99**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**9.32**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**9.88**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**9.41**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**9.91**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**9.84**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**9.87**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**33.7**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**9.55**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**9.96**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**7.64**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**8.11**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**39.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**7.98**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**7.55**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**8.23**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**8.38**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Lab Control Sample
Lab Code: KWG0703590-5

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**25.4**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**8.70**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**6.75**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**8.02**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F100.D
Lab ID: KWG0703590-5
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 09:55
Date Quantitated: 03/13/2007 14:08
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MW
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NL
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KW 3/15/07

Secondary Review: R-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582924	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	410000	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	177755	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	161244	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	84742	9.77	98	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	70735	8.08	81	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	428420	10.77	108	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	143522	9.21	92	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	,Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	94930	7.63	7.63		
1	Chloromethane	1.31		0.00	50	140124	9.64	9.64		
1	Vinyl Chloride	1.39		0.00	62	139760	10.45	10.5		
1	Bromomethane	1.63		0.00	96	57589	8.94	8.94		
1	Chloroethane	1.70	-0.01	0.00	64	84087	9.32	9.32		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	264341	12.19	12.2		
1	Trichlorofluoromethane	1.86	-0.01	0.00	101	174130	9.52	9.52		
1	Ethyl Ether	2.10		0.00	59	58169	9.97	9.97		
1	Acrolein	2.26	-0.01	0.00	56	50827	239.23	239		
1	Trichlorotrifluoroethane	2.27		0.00	151	86107	10.19	10.2		
1	1,1-Dichloroethene	2.29		0.00	96	103356	10.41	10.4		
1	Acetone	2.39	-0.01	0.00	43	43648	37.61	37.6		
1	Iodomethane	2.43	-0.01	0.00	142	348297	30.28	30.3		
1	Carbon Disulfide	2.46	-0.01	0.00	76	712038	22.03	22.0		
1	3-Chloro-1-propene	2.63	-0.01	0.00	76	189188	35.01	35.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	78600	296.79	297		
1	Methylene Chloride	2.78		0.00	84	124122	11.70	11.7		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	21540	93.04	93.0		
1	Acrylonitrile	3.09		0.00	53	55226	36.63	36.6		
1	Methyl tert-Butyl Ether	2.97		0.00	73	156958	8.55	8.55		
1	trans-1,2-Dichloroethene	2.99	-0.01	0.00	96	113085	9.75	9.75		
1	n-Hexane	3.20		0.00	57	398973	34.20	34.2		
1	Diisopropyl Ether	3.47	-0.01	0.00	45	728657	21.98	22.0		
1	1,1-Dichloroethane	3.47	-0.01	0.00	63	209292	10.28	10.3		
1	Vinyl Acetate	3.53		0.00	86	54734	46.86	46.9		
1	Chloroprene	3.53	-0.01	0.00	53	615401	27.94	27.9		
1	tert-Butyl Ethyl Ether	3.88	-0.01	0.00	59	486889	20.38	20.4		
1	2,2-Dichloropropane	4.11		0.00	77	129409	9.46	9.46		
1	cis-1,2-Dichloroethene	4.15		0.00	96	117863	9.99	9.99		
1	2-Butanone (MEK)	4.20		0.00	72	17292	44.42	44.4		
1	Propionitrile	4.37		0.00	54	13003	25.12	25.1		
1	Ethyl Acetate	4.24		0.00	61	16323	31.77	31.8		
1	Methacrylonitrile	4.51	-0.01	0.00	67	45393	24.99	25.0		
1	Bromochloromethane	4.45		0.00	128	41071	9.50	9.50		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	6893	16.38	16.4		
1	Chloroform	4.55		0.00	83	188017	9.32	9.32		
1	tert-Butyl Formate	4.58		0.00	59	39752	16.27	16.3		
1	1,1,1-Trichloroethane (TCA)	4.71	-0.01	0.00	97	171627	10.24	10.2		
1	Carbon Tetrachloride	4.87	-0.01	0.00	117	147326	9.88	9.88		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	164216	10.13	10.1		
1	Isobutyl Alcohol	5.25	-0.01	0.00	43	25231	232.73	233		
1	Benzene	5.21		0.00	78	479290	9.91	9.91		
1	1,2-Dichloroethane (EDC)	5.35	-0.01	0.00	62	102534	9.41	9.41		
1	tert-Amyl Methyl Ether	5.36	-0.01	0.00	55	108627	19.27	19.3		
1	Trichloroethene (TCE)	6.06		0.00	95	114462	9.84	9.84		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	100291	10.00	10.0		
1	Dibromomethane	6.53		0.00	93	34989	8.83	8.83		
1	Methyl Methacrylate	6.56		0.00	69	83634	26.57	26.6		
1	1,4-Dioxane	6.54	-0.02	0.00	88	8905	242.47	242		
1	Bromodichloromethane	6.73		0.00	83	108011	9.87	9.87		
1	2-Nitropropane	7.10		0.00	43	18476	18.06	18.1		
1	2-Chloroethyl Vinyl Ether	7.13	-0.01	0.00	63	31962	9.14	9.14		
1	cis-1,3-Dichloropropene	7.26		0.00	75	117912	9.55	9.55		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	60555	39.90	39.9		
1	Toluene	7.56	-0.01	0.00	92	296921	9.96	9.96		
2	n-Octane	7.66		0.00	85	93077	20.64	20.6		
2	trans-1,3-Dichloropropene	7.92		0.00	75	72236	7.64	7.64		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	175142	23.86	23.9		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	45901	8.11	8.11		
2	Tetrachloroethene (PCE)	8.12	-0.01	0.00	164	102653	7.98	7.98		
2	2-Hexanone	8.39		0.00	57	17595	33.72	33.7		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	103814	7.98	7.98		
2	Dibromochloromethane	8.49		0.00	129	57277	7.55	7.55		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	47298	7.72	7.72		
2	1-Chlorohexane	9.10		0.00	91	156039	8.39	8.39		
2	Chlorobenzene	9.10		0.00	112	301380	8.23	8.23		
2	Ethylbenzene	9.21	0.01	0.00	106	175722	8.38	8.38		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	87574	8.19	8.19		
2	m,p-Xylenes	9.33	-0.01	0.00	106	442385	17.04	17.0		
2	o-Xylene	9.75		0.00	106	200830	8.34	8.34		
2	Styrene	9.78		0.00	103	146047m	8.70	8.70		
2	Bromoform	9.97	-0.01	0.00	173	25584	6.75	6.75		
2	Isopropylbenzene	10.13		0.00	105	504792	7.67	7.67		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	11437	17.96	18.0		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	47922	8.02	8.02		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	34425	26.58	26.6		
3	Bromobenzene	10.45		0.00	156	107664	7.88	7.88		
3	n-Propylbenzene	10.55		0.00	91	662799	9.20	9.20		
3	1,2,3-Trichloropropane	10.57		0.00	110	15291	8.06	8.06		
3	2-Chlorotoluene	10.65		0.00	91	375111	8.87	8.87		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	451255	9.07	9.07		
3	4-Chlorotoluene	10.77		0.00	91	425954	8.80	8.80		
3	tert-Butylbenzene	11.06		0.00	119	411620	8.81	8.81		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	444203	8.86	8.86		
3	sec-Butylbenzene	11.29		0.00	105	596551	9.57	9.57		
3	4-Isopropyltoluene	11.44		0.00	119	486351	8.65	8.65		
3	1,3-Dichlorobenzene	11.42		0.00	146	227613	8.18	8.18		
3	1,4-Dichlorobenzene	11.52		0.00	146	220569	8.03	8.03		
3	n-Butylbenzene	11.86		0.00	91	424141	8.73	8.73		
3	1,2-Dichlorobenzene	11.89		0.00	146	187803	7.72	7.72		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	5259	6.68	6.68		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	690988	29.76	29.8		
3	1,2,4-Trichlorobenzene	13.12	0.01	0.00	180	129780	7.20	7.20		
3	Hexachlorobutadiene	13.21		0.00	225	84879	7.90	7.90		
3	Naphthalene	13.30		0.00	128	185187	8.16	8.16		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	105527	7.14	7.14		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

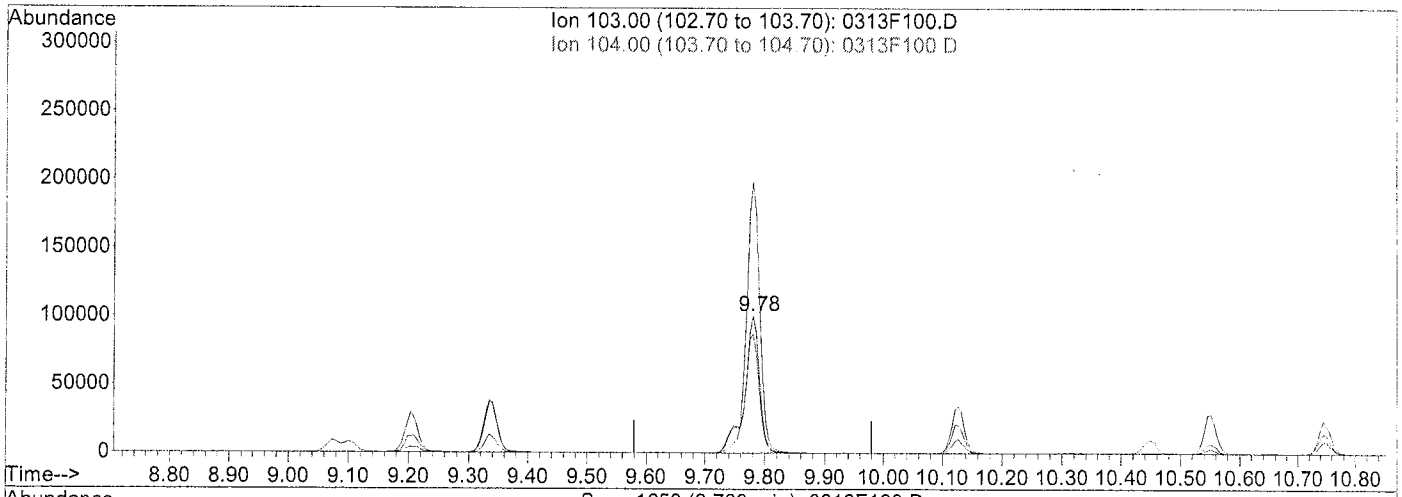
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F100.D
Acq On : 13 Mar 2007 9:55 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 10:19 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F100.D

(76) Styrene (T)

9.78min 10.44PPB

response 175273

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	197.83
78.00	89.70	87.05
0.00	0.00	0.00

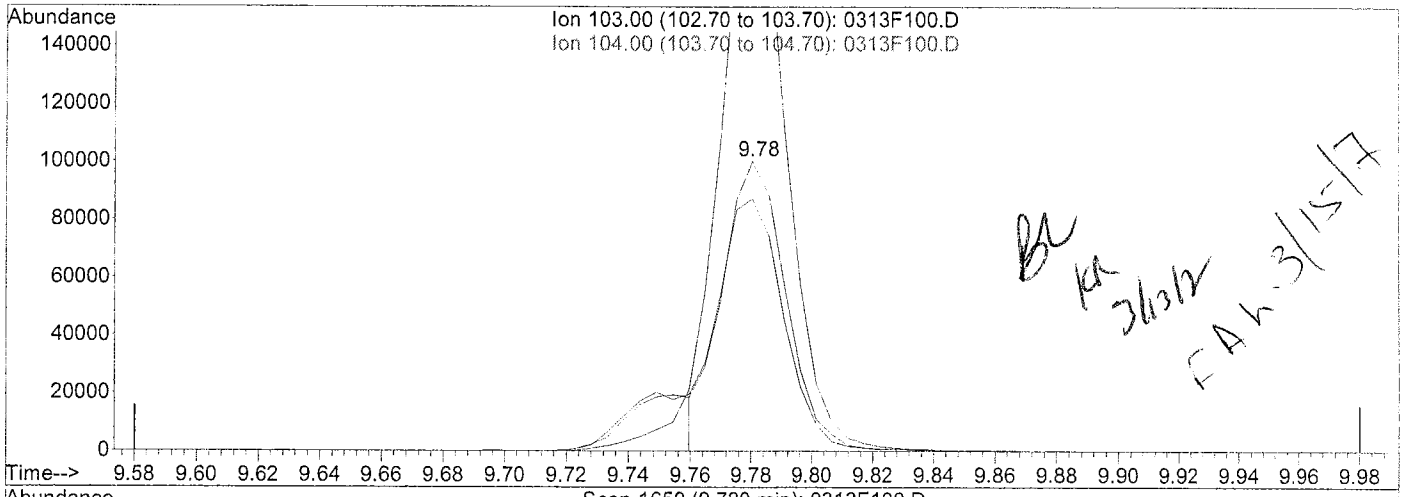
0313F100.D 022607.M Tue Mar 13 14:08:02 2007

Quantitation Report (Qedit)

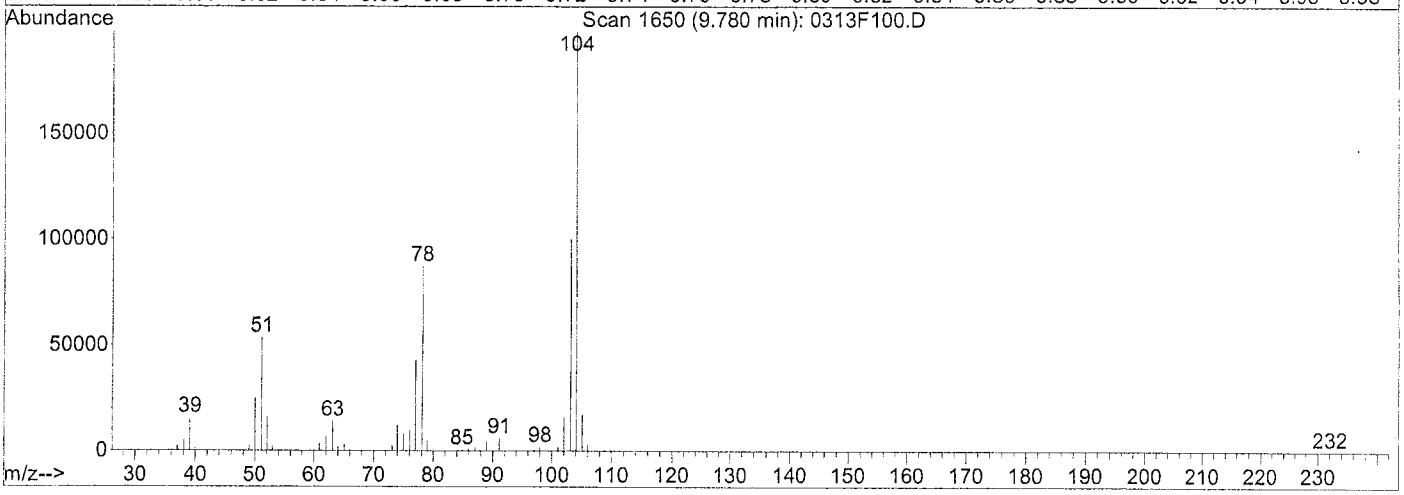
Data File : J:\MS18\DATA\031307\0313F100.D
Acq On : 13 Mar 2007 9:55 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



BL KA 3/13/07 FAh 3/15/07



TIC: 0313F100.D

(76) Styrene (T)

9.78min 8.70PPB m

response 146047

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	197.83
78.00	89.70	87.05
0.00	0.00	0.00

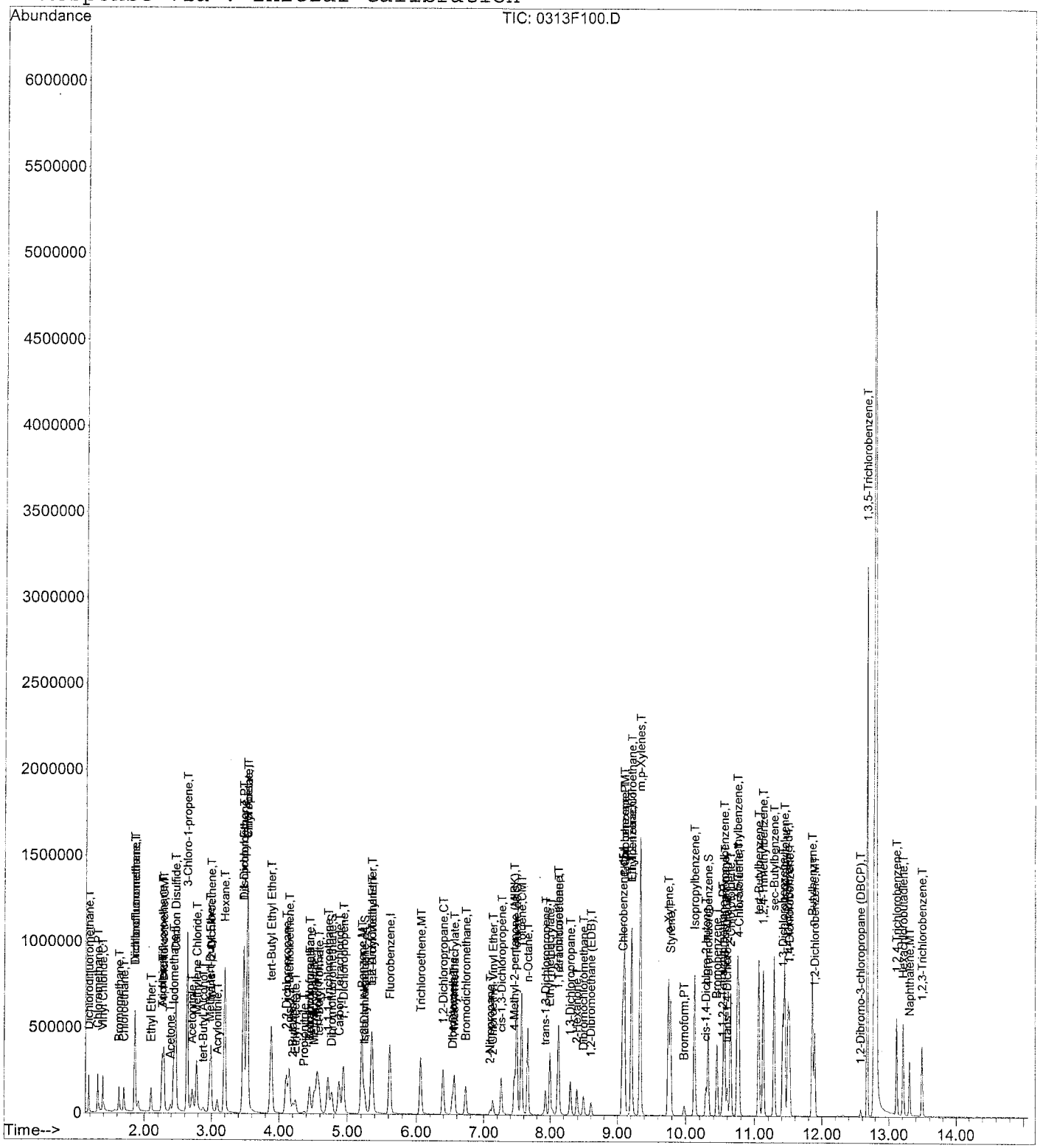
0313F100.D 022607.M Tue Mar 13 14:08:07 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F100.D
Acq On : 13 Mar 2007 9:55 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007
Time Analyzed: 08:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F002.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703563

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703563-2	J:\MS18\DATA\031307\0313F003.D	03/13/2007	09:02	
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/2007	09:55	
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/2007	10:15	
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/2007	10:34	
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/2007	12:12	
1047MW101CL	K0701647-001	J:\MS18\DATA\031307\0313F016.D	03/13/2007	13:49	
1349MW01CL	K0701647-002	J:\MS18\DATA\031307\0313F017.D	03/13/2007	14:10	
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/2007	15:08	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS18\DATA\031307\0313F002.D
Lab ID: KWG0703563-1
RunType: BFB
Matrix: WATER

Date Acquired: 03/13/2007 08:42
Date Quantitated:
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: KV 3/13/07

Secondary Review: F-A h 3/15/7

Printed: 03/13/2007 14:23:27
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F002.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 08:42	**Quant Date:**		**Vial:**	2
Run Type:	BFB			**Dilution:**	1.0
Lab ID:	KWG0703563-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	Pass
75	95	30	60	48.8	20501	Pass
95	95	100	100	100.0	41997	Pass
96	95	5	9	6.7	2823	Pass
173	174	0	2	0.2	72	Pass
174	95	50	120	82.0	34458	Pass
175	174	5	9	7.8	2685	Pass
176	174	95	101	98.3	33858	Pass
177	176	5	9	7.1	2403	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

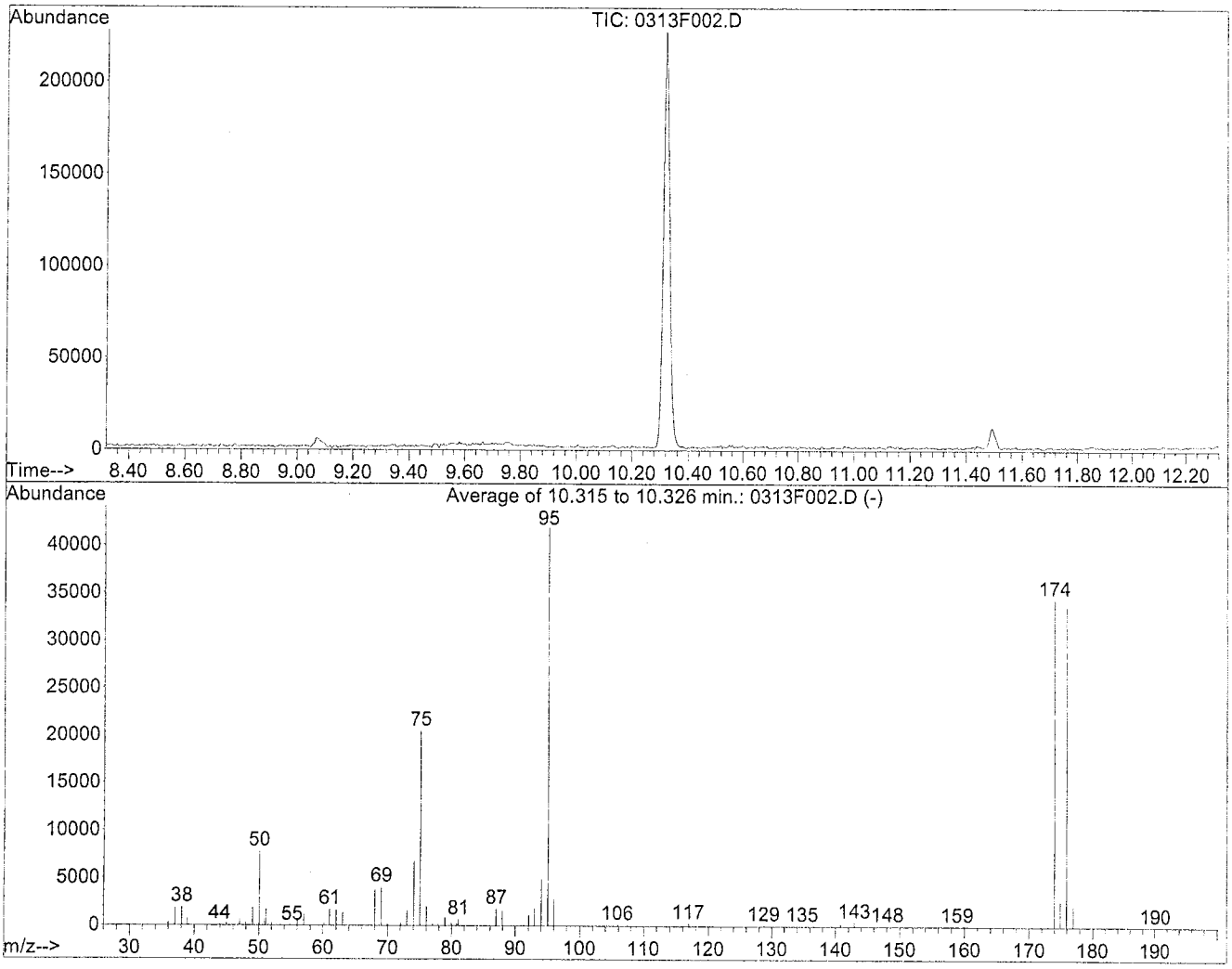
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

BFB

Data File : J:\MS18\DATA\031307\0313F002.D
Acq On : 13 Mar 2007 8:42 am
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 2
Operator:
Inst : GC-MS 18
Multiplr: 1.00



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0.00	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

0313F002.D 022607.M Tue Mar 13 14:06:37 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc. **Service Request:** K0701647
Project: Presidio of San Francisco **Calibration Date:** 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077 **Column:** MS
Instrument ID: GC-MS 18

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

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† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

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† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Date: 2/26/07

By: Kleessner

IS/SS Std. ID: 45VOA - 54C

CCV Std ID: 45WA 55B/55A/49C/54B

LCS/ICV Std ID: 45WA-54A/55C/52P/53A/51A/52B

BFB Std. ID: 45WA - 49F

Columbia Analytical Services, Inc.
Injection Log
MS18 - Agilent 5973

Tune File: BFB4

New Tune: yes

ICAL Date: 2/26/07 Cal 6077

Second RV: 2/27/7

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	BFB	0226F016	8260.M	5µl-50ml			
2	IB	0226F061					
3	8260 Ical 0.1ppb	62					
4	0.2ppb	63					
5	0.5ppb	64					
6	1ppb	65					
7	2ppb	66					
8	5ppb	67					
9	10ppb	68					
10	20ppb	69					
11	40ppb	70					
12	60ppb	71					
13	IB	72					
14	IB	73					
15	ICV	74					
16	ICV						
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

INTIAL CALIBRATION CURVE

Date 2/26/7 Analysis: 8260/624

Prepared By KR Instrument: MS18

Matrix: Water

Stock Solution #1 45W4-54C Analytes: Surrogate Init. Concentration: 100ppm

Stock Solution #2 45W4 55B Analytes: Low 8260 Init. Concentration: 5/10/20/100/200ppm

Stock Solution #3 45W4 55A Analytes: 8260 Init. Concentration: 50/100/200/1000/2000p

Stock Solution #4 45W4-48C Analytes: Ketones Init. Concentration: 2000ppm

Stock Solution #5 45W4 54B Analytes: Low Ketones Init. Concentration: 200ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Aliquot of Stock Solution #4 (µL)	Final Conc. of #4 (µg/L)	Aliquot of Stock Solution #5 (µL)	Final Conc. of #5 (µg/L)
		1	0.1					1	4
2.0	4	2	0.2					2.5	10
2.5	5	5.0	0.5					5	20
3.0	6	10	1					10	40
3.5	7			2.0	2	2	80		
4.0	8			5.0	5	2.5	100		
5.0	10			10	10	5.0	200		
10	20			20	20	10	400		
20	40			40	40	20	800		
25	50			60	60	40	1600		

8260 ICV: 10uL of 50/250ppm Accustd ICV (45W4-54A) + 50uL of 100ppm Acrolein (45W4-55C) +
5uL of 100ppm Dichlorofluoromethane (45W4 52F) + 5uL of 200ppm n-Octane/TBF/Tetrahydrafuran (45W4 52A

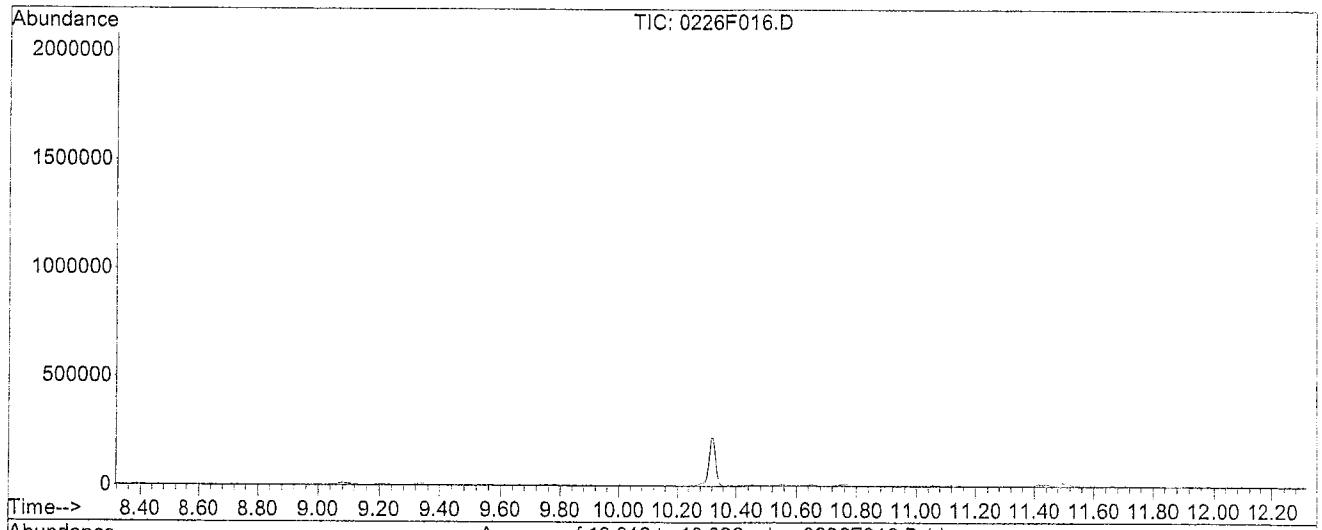
Oxygenat 45W4-51A 5µl Agp 45W4-52B 7.5µl

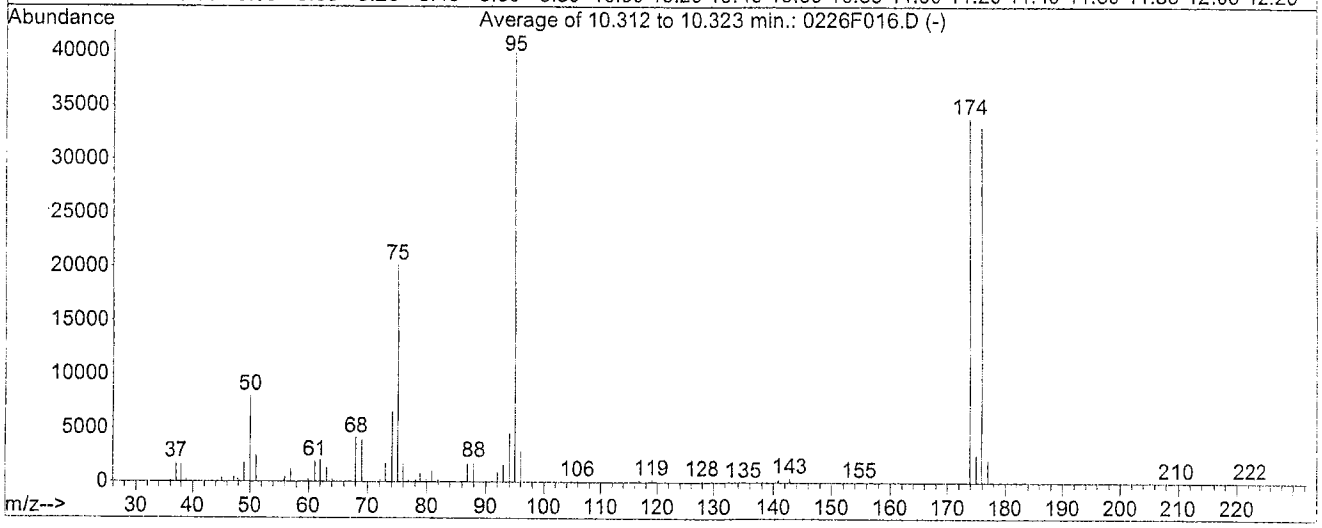
1085

BFB

Data File : J:\MS18\DATA\022607\0226F016.D
Acq On : 26 Feb 2007 2:18 pm
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\021607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00





AutoFind: Scans 1761, 1762, 1763; Background Corrected with Scan 1754

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	8012	PASS
75	95	30	60	50.5	20137	PASS
95	95	100	100	100.0	39856	PASS
96	95	5	9	7.4	2934	PASS
173	174	0.00	2	0.2	60	PASS
174	95	50	120	84.9	33840	PASS
175	174	5	9	7.6	2560	PASS
176	174	95	101	97.9	33136	PASS
177	176	5	9	6.4	2111	PASS

KC 2/27/7

0226F016.D 021607.M Mon Feb 26 14:50:53 2007

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\022607A\0226F061.D
Acq On : 26 Feb 2007 7:11 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	408646	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	149796	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	143736	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
58) Toluene-d8	7.49	98	2392	0.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.60%	
80) 4-Bromofluorobenzene	10.32	95	1356	0.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.90%	

Target Compounds							Qvalue
6) Chloroethane	1.72	64	576	0.07	PPB	#	48
10) Acrolein	2.28	56	1719	4.50	PPB		81
13) Acetone	2.41	43	2448	2.31	PPB		88
14) Iodomethane	2.44	142	1911	0.16	PPB		75
15) Carbon Disulfide	2.48	76	693	0.02	PPB		62
16) 3-Chloro-1-propene	2.48	76	693	0.13	PPB	#	1
18) Methylene Chloride	2.78	84	827	0.08	PPB	#	80
23) Hexane	3.19	57	691	0.06	PPB		90
37) Chloroform	4.57	83	867	0.05	PPB	#	54
45) Benzene	5.22	78	978	0.02	PPB		62
59) Toluene	7.56	92	582	0.02	PPB	#	10
61) n-Octane	7.65	85	840	0.20	PPB	#	72
70) 1-Chlorohexane	9.21	91	808	0.05	PPB		82
74) m,p-Xylenes	9.34	106	663	0.03	PPB		85
78) Isopropylbenzene	10.13	105	617	0.01	PPB		65
85) n-Propylbenzene	10.55	91	1624	0.02	PPB		83
87) 2-Chlorotoluene	10.65	91	772	0.02	PPB	#	10
88) 1,3,5-Trimethylbenzene	10.75	105	701	0.02	PPB	#	19
89) 4-Chlorotoluene	10.77	91	1404	0.03	PPB		73
91) 1,2,4-Trimethylbenzene	11.13	105	1093	0.03	PPB		70
92) sec-Butylbenzene	11.29	105	1135	0.02	PPB		47
93) p-Isopropyltoluene	11.44	119	1697	0.04	PPB		75
94) 1,3-Dichlorobenzene	11.42	146	1269	0.05	PPB		81
95) 1,4-Dichlorobenzene	11.52	146	1679	0.07	PPB		88
96) n-Butylbenzene	11.85	91	2428	0.06	PPB		84
97) 1,2-Dichlorobenzene	11.89	146	782	0.04	PPB	#	63
99) 1,3,5-Trichlorobenzene	12.68	180	3548	0.18	PPB		97
100) 1,2,4-Trichlorobenzene	13.12	180	1931	0.14	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

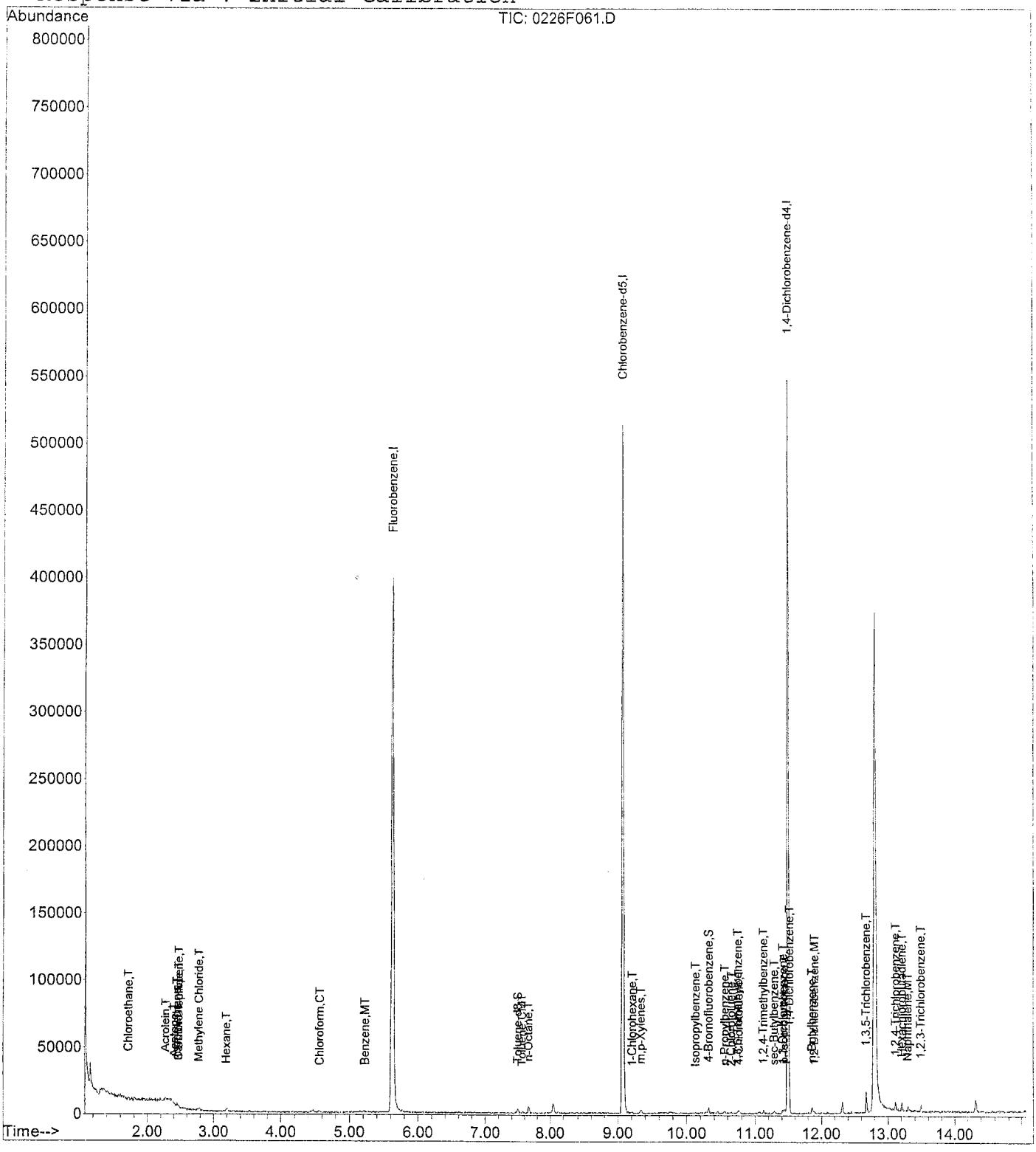
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
101)	Hexachlorobutadiene	13.21	225	700	0.07 PPB	73
102)	Naphthalene	13.30	128	1855	0.11 PPB	83
103)	1,2,3-Trichlorobenzene	13.49	180	1413	0.12 PPB	82

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F061.D
Acq On : 26 Feb 2007 7:11 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/27/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	404707	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	149144	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	138643	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
58) Toluene-d8	0.00	98	0d	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
80) 4-Bromofluorobenzene	0.00	95	0d	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	1486	0.13	PPB		91
3) Chloromethane	1.32	50	1681	0.11	PPB		85
4) Vinyl Chloride	1.39	62	1409	0.11	PPB		87
5) Bromomethane	1.64	96	716	0.09	PPB		90
6) Chloroethane	1.71	64	1156	0.13	PPB		89
7) Dichlorofluoromethane	1.87	67	2701	0.12	PPB		95
8) Trichlorofluoromethane	1.87	101	1797	0.10	PPB		87
9) Ethyl Ether	2.11	59	647	0.12	PPB	#	66
10) Acrolein	2.27	56	2025	5.35	PPB		72
11) Trichlorotrifluoroethane	2.27	151	773	0.09	PPB		79
12) 1,1-Dichloroethene	2.30	96	1009	0.10	PPB		88
13) Acetone	2.41	43	5625	5.37	PPB		92
14) Iodomethane	2.44	142	5044	0.41	PPB		91
15) Carbon Disulfide	2.47	76	3650	0.12	PPB		97
16) 3-Chloro-1-propene	2.47	76	3650	0.67	PPB	#	1
18) Methylene Chloride	2.78	84	4181	0.43	PPB		91
21) Methyl tert-Butyl Ether	2.98	73	4141	0.25	PPB		75
22) trans-1,2-Dichloroethene	3.00	96	1200	0.11	PPB		77
23) Hexane	3.20	57	1759	0.15	PPB		67
24) Diisopropyl Ether	3.49	45	3087	0.10	PPB		83
25) 1,1-Dichloroethane	3.48	63	1970	0.10	PPB		89
27) Chloroprene	3.54	53	7634	0.34	PPB		83
28) tert-Butyl Ethyl Ether	3.89	59	2188	0.10	PPB		78
29) 2,2-Dichloropropane	4.12	77	1119	0.08	PPB	#	50
30) cis-1,2-Dichloroethene	4.15	96	1439	0.13	PPB	#	40
31) 2-Butanone	4.22	72	1434	3.96	PPB	#	69
34) Methacrylonitrile	4.52	67	842	0.49	PPB	#	48
37) Chloroform	4.56	83	2994	0.16	PPB		92

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
39)	1,1,1-Trichloroethane	4.72	97	1489	0.09	PPB	#	53
42)	1,1-Dichloropropene	4.95	75	1634	0.11	PPB		92
45)	Benzene	5.22	78	5633	0.13	PPB		93
46)	1,2-Dichloroethane	5.37	62	958	0.10	PPB	#	69
48)	Trichloroethene	6.07	95	1014	0.09	PPB	#	82
49)	1,2-Dichloropropane	6.40	63	933	0.10	PPB	#	70
53)	Bromodichloromethane	6.73	83	986	0.10	PPB		86
56)	cis-1,3-Dichloropropene	7.26	75	843	0.07	PPB		65
57)	4-Methyl-2-pentanone (MIBK	7.46	58	5331	3.80	PPB		89
59)	Toluene	7.56	92	2864	0.10	PPB		96
61)	n-Octane	7.67	85	806	0.19	PPB		83
62)	trans-1,3-Dichloropropene	7.93	75	611	0.08	PPB		90
63)	Ethyl methacrylate	8.00	69	619	0.10	PPB		81
65)	Tetrachloroethene	8.12	164	1259	0.13	PPB	#	71
66)	2-Hexanone	8.39	57	1458	3.51	PPB	#	67
67)	1,3-Dichloropropane	8.29	76	998	0.10	PPB		55
69)	1,2-Dibromoethane (EDB)	8.60	107	522	0.11	PPB		76
70)	1-Chlorohexane	9.10	91	2176	0.14	PPB		96
71)	Chlorobenzene	9.10	112	3379	0.12	PPB	#	67
72)	Ethylbenzene	9.21	106	1567	0.09	PPB		86
73)	1,1,1,2-Tetrachloroethane	9.22	131	981	0.12	PPB		83
74)	m,p-Xylenes	9.34	106	4477	0.22	PPB		93
75)	o-Xylene	9.75	106	2120	0.11	PPB	#	71
76)	Styrene	9.79	103	1872	0.14	PPB		95
78)	Isopropylbenzene	10.13	105	5625	0.11	PPB		95
79)	cis-1,4-Dichloro-2-butene	10.65	89	719	1.32	PPB	#	1
82)	1,1,2,2-Tetrachloroethane	10.52	83	651	0.13	PPB		82
84)	Bromobenzene	10.45	156	1387	0.13	PPB	#	67
85)	n-Propylbenzene	10.55	91	5803	0.09	PPB		87
87)	2-Chlorotoluene	10.65	91	3881	0.11	PPB		93
88)	1,3,5-Trimethylbenzene	10.75	105	3570	0.08	PPB		89
89)	4-Chlorotoluene	10.77	91	5046	0.12	PPB		82
90)	tert-Butylbenzene	11.07	119	4119	0.10	PPB		80
91)	1,2,4-Trimethylbenzene	11.12	105	4597	0.11	PPB		90
92)	sec-Butylbenzene	11.29	105	5344	0.10	PPB		88
93)	p-Isopropyltoluene	11.44	119	4930	0.11	PPB		79
94)	1,3-Dichlorobenzene	11.41	146	3435	0.15	PPB		91
95)	1,4-Dichlorobenzene	11.51	146	3508	0.15	PPB		91
96)	n-Butylbenzene	11.86	91	5380	0.14	PPB		91
97)	1,2-Dichlorobenzene	11.90	146	2536	0.13	PPB		91
99)	1,3,5-Trichlorobenzene	12.68	180	4101	0.21	PPB		92
100)	1,2,4-Trichlorobenzene	13.12	180	2726	0.20	PPB		80

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

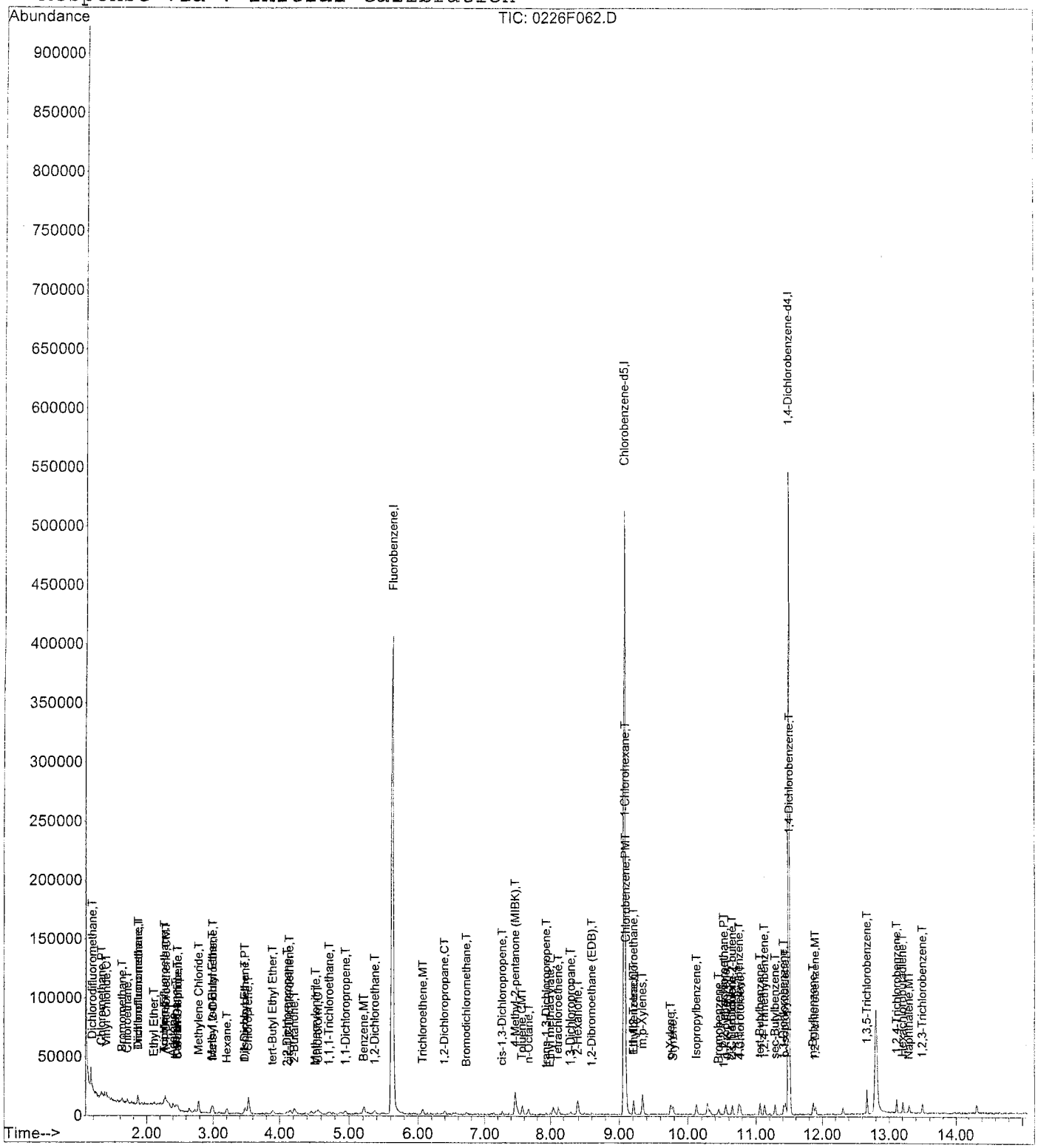
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101) Hexachlorobutadiene	13.21	225	1633	0.17	PPB	92
102) Naphthalene	13.31	128	3166	0.20	PPB	89
103) 1,2,3-Trichlorobenzene	13.49	180	1994	0.18	PPB	96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:30 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	402827	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	150028	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140162	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	33005	4.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	41.80%	
44) 1,2-Dichloroethane-d4	5.25	65	34661	4.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	45.20%	
58) Toluene-d8	7.50	98	149658	3.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	39.10%	
80) 4-Bromofluorobenzene	10.32	95	51100	3.56	PPB	0.00
Spiked Amount 10.000			Recovery	=	35.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	2529	0.23	PPB		89
3) Chloromethane	1.32	50	2899	0.19	PPB		91
4) Vinyl Chloride	1.39	62	2415	0.19	PPB		89
5) Bromomethane	1.64	96	1220	0.15	PPB		87
6) Chloroethane	1.70	64	1483	0.17	PPB		89
7) Dichlorofluoromethane	1.86	67	4813	0.22	PPB		87
8) Trichlorofluoromethane	1.87	101	3253	0.17	PPB		83
9) Ethyl Ether	2.10	59	1198	0.22	PPB	#	67
10) Acrolein	2.27	56	2649m	7.03	PPB		
11) Trichlorotrifluoroethane	2.27	151	1558	0.18	PPB	#	71
12) 1,1-Dichloroethene	2.30	96	2090	0.21	PPB		82
13) Acetone	2.41	43	12279	11.77	PPB		92
14) Iodomethane	2.44	142	8758	0.72	PPB		98
15) Carbon Disulfide	2.47	76	6600	0.22	PPB		90
16) 3-Chloro-1-propene	2.64	76	1038	0.19	PPB	#	52
17) Acetonitrile	2.73	40	2947	11.78	PPB		87
18) Methylene Chloride	2.78	84	4917	0.51	PPB		91
20) Acrylonitrile	3.09	53	1459	1.09	PPB		88
21) Methyl tert-Butyl Ether	2.98	73	7168	0.44	PPB		93
22) trans-1,2-Dichloroethene	2.99	96	2163	0.19	PPB		86
23) Hexane	3.20	57	2801	0.23	PPB		97
24) Diisopropyl Ether	3.48	45	6699	0.22	PPB		88
25) 1,1-Dichloroethane	3.48	63	3991	0.21	PPB		97
27) Chloroprene	3.53	53	16214	0.73	PPB		86
28) tert-Butyl Ethyl Ether	3.89	59	4484	0.20	PPB		83
29) 2,2-Dichloropropane	4.11	77	2137	0.15	PPB		83
30) cis-1,2-Dichloroethene	4.16	96	2492	0.23	PPB		83
31) 2-Butanone	4.22	72	3652	10.14	PPB		89

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	Methacrylonitrile	4.52	67	1368	0.80	PPB		88
35)	Bromochloromethane	4.46	128	776	0.20	PPB	#	71
37)	Chloroform	4.56	83	4439	0.23	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	2952	0.19	PPB		97
41)	Carbon Tetrachloride	4.89	117	2613	0.18	PPB		80
42)	1,1-Dichloropropene	4.94	75	2915	0.19	PPB		90
45)	Benzene	5.22	78	9393	0.22	PPB		72
46)	1,2-Dichloroethane	5.37	62	2173	0.22	PPB		86
47)	tert-Amyl Methyl Ether	5.37	55	1127	0.20	PPB	#	1
48)	Trichloroethene	6.07	95	2293	0.20	PPB		84
49)	1,2-Dichloropropane	6.40	63	2072	0.23	PPB		79
50)	Dibromomethane	6.54	93	786	0.22	PPB		89
53)	Bromodichloromethane	6.73	83	1596	0.16	PPB		86
55)	2-Chloroethyl Vinyl Ether	7.14	63	677	0.20	PPB	#	57
56)	cis-1,3-Dichloropropene	7.27	75	1931	0.17	PPB		84
57)	4-Methyl-2-pentanone (MIBK	7.46	58	15185	10.86	PPB		94
59)	Toluene	7.57	92	5988	0.21	PPB		90
61)	n-Octane	7.67	85	1467	0.34	PPB		76
62)	trans-1,3-Dichloropropene	7.94	75	1364	0.17	PPB		72
63)	Ethyl methacrylate	7.99	69	1260	0.21	PPB		79
64)	1,1,2-Trichloroethane	8.11	83	802	0.18	PPB	#	32
65)	Tetrachloroethene	8.13	164	2422	0.24	PPB		93
66)	2-Hexanone	8.39	57	4246	10.15	PPB	#	81
67)	1,3-Dichloropropane	8.29	76	2426	0.25	PPB		84
68)	Dibromochloromethane	8.48	129	930	0.16	PPB		67
69)	1,2-Dibromoethane (EDB)	8.60	107	936	0.20	PPB		85
70)	1-Chlorohexane	9.10	91	3666	0.24	PPB		69
71)	Chlorobenzene	9.10	112	6576	0.23	PPB		91
72)	Ethylbenzene	9.21	106	3650	0.21	PPB	#	77
73)	1,1,1,2-Tetrachloroethane	9.21	131	1499	0.18	PPB		91
74)	m,p-Xylenes	9.34	106	8837	0.42	PPB		91
75)	o-Xylene	9.75	106	3939	0.21	PPB		96
76)	Styrene	9.78	103	2771	0.21	PPB		91
78)	Isopropylbenzene	10.13	105	11039	0.21	PPB		90
82)	1,1,2,2-Tetrachloroethane	10.52	83	1113	0.22	PPB		71
84)	Bromobenzene	10.45	156	2517	0.23	PPB		90
85)	n-Propylbenzene	10.55	91	12117	0.19	PPB		96
87)	2-Chlorotoluene	10.65	91	7585	0.21	PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	8305	0.19	PPB		98
89)	4-Chlorotoluene	10.77	91	9009	0.22	PPB		94
90)	tert-Butylbenzene	11.06	119	8581	0.21	PPB		94
91)	1,2,4-Trimethylbenzene	11.12	105	8799	0.22	PPB		91

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
92)	sec-Butylbenzene	11.29	105	10728	0.20	PPB		92
93)	p-Isopropyltoluene	11.44	119	9536	0.20	PPB		93
94)	1,3-Dichlorobenzene	11.42	146	5521	0.24	PPB		96
95)	1,4-Dichlorobenzene	11.52	146	5691	0.25	PPB		87
96)	n-Butylbenzene	11.85	91	8534	0.22	PPB		92
97)	1,2-Dichlorobenzene	11.90	146	4687	0.24	PPB		93
99)	1,3,5-Trichlorobenzene	12.67	180	5402	0.28	PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	4009	0.30	PPB		84
101)	Hexachlorobutadiene	13.21	225	2468	0.25	PPB	#	51
102)	Naphthalene	13.30	128	4343	0.27	PPB		97
103)	1,2,3-Trichlorobenzene	13.49	180	3209	0.28	PPB		87

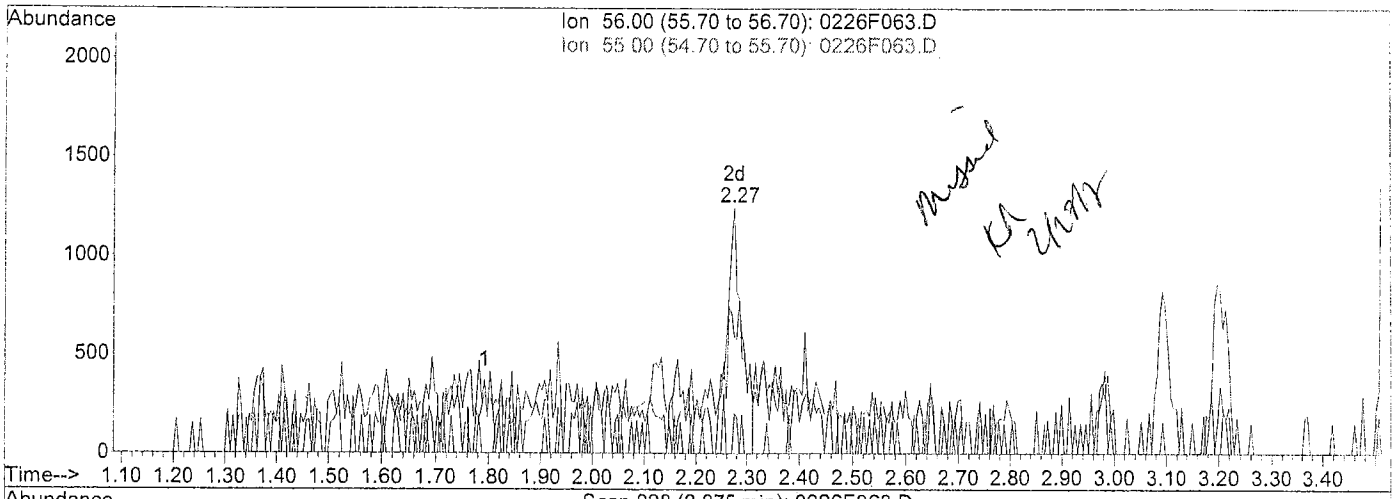
(#) = qualifier out of range (m) = manual integration

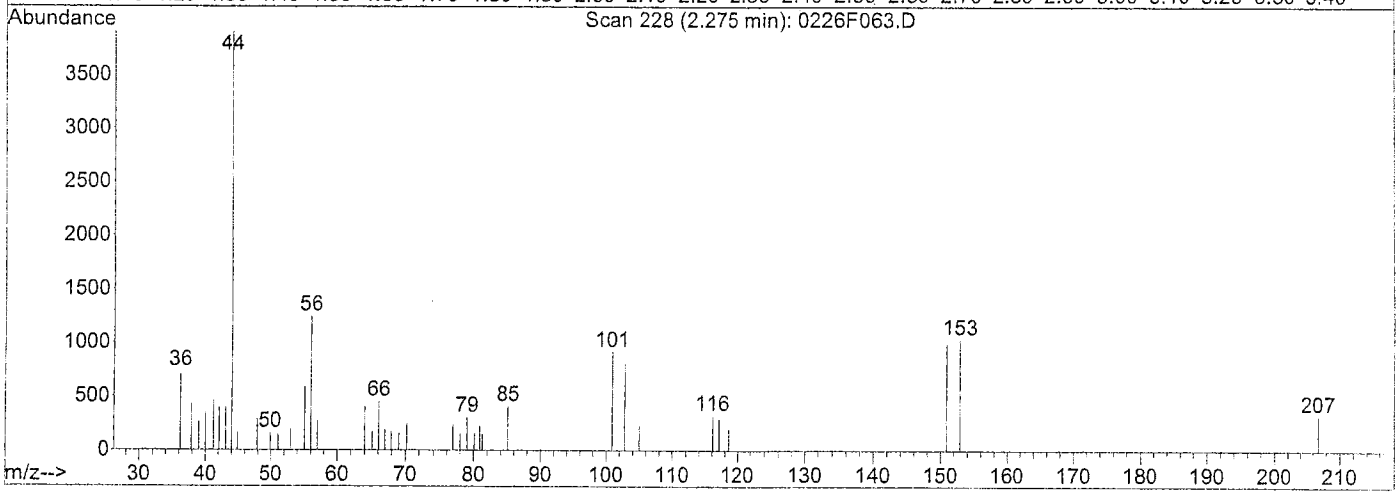
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:33 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F063.D

(10) Acrolein (T)

2.27min 7.03PPB m

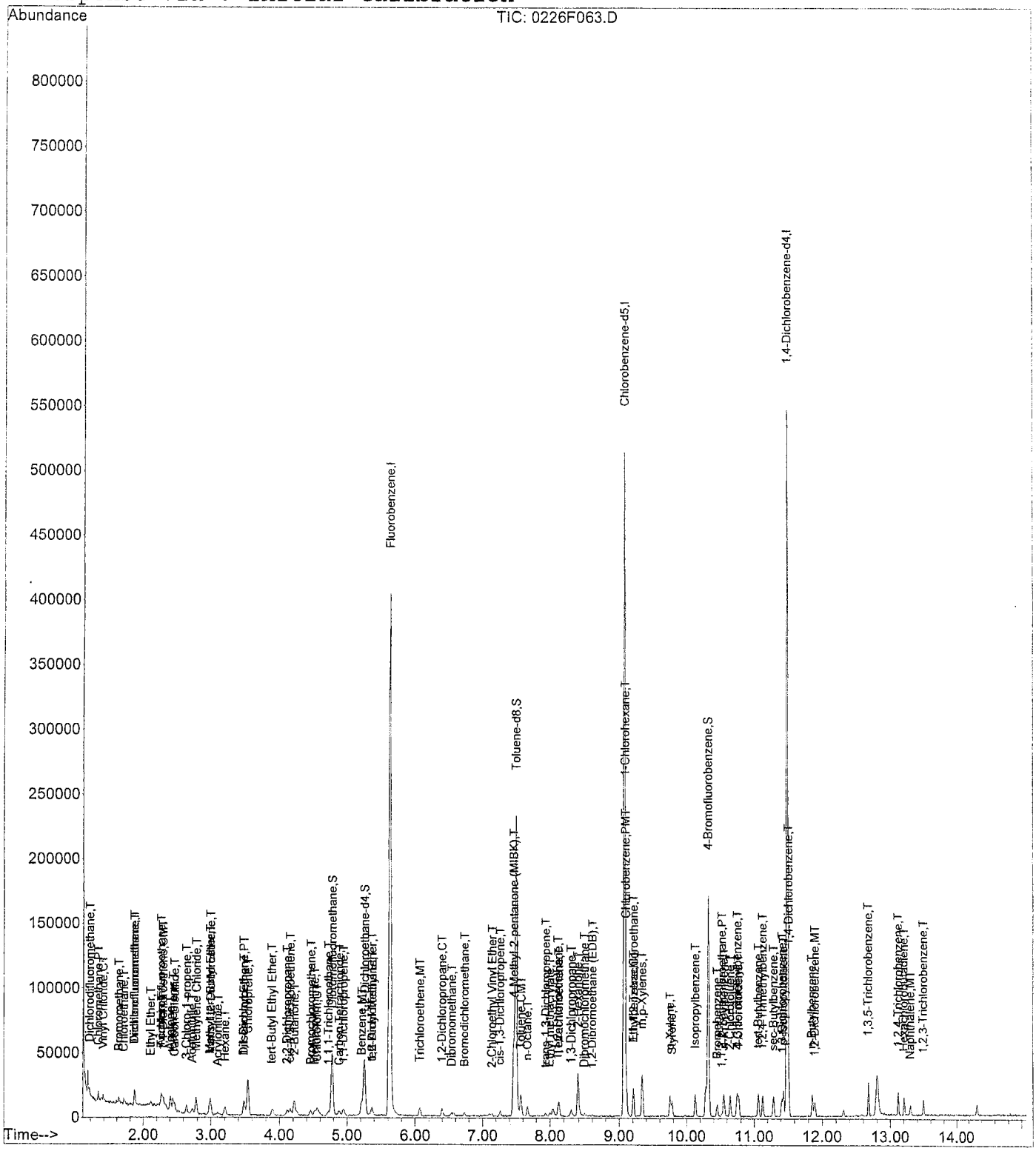
response 2649

Ion	Exp%	Act%
56.00	100	100
55.00	69.40	47.07
53.00	8.30	16.36
0.00	0.00	0.00

0226F063.D 022607.M Tue Feb 27 06:33:24 2007

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	407863	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145744	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140151	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	43506	5.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.40%	
44) 1,2-Dichloroethane-d4	5.26	65	42922	5.53	PPB	0.00
Spiked Amount 10.000			Recovery	=	55.30%	
58) Toluene-d8	7.50	98	196664	5.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.70%	
80) 4-Bromofluorobenzene	10.32	95	64515	4.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	46.20%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	5278	0.47	PPB	95
3) Chloromethane	1.32	50	6609	0.44	PPB	92
4) Vinyl Chloride	1.39	62	5880	0.46	PPB	98
5) Bromomethane	1.63	96	3223	0.39	PPB	95
6) Chloroethane	1.71	64	5033	0.58	PPB	97
7) Dichlorofluoromethane	1.87	67	9909	0.45	PPB	94
8) Trichlorofluoromethane	1.87	101	8561	0.45	PPB	88
9) Ethyl Ether	2.11	59	2620	0.47	PPB	94
10) Acrolein	2.27	56	2456	6.44	PPB	94
11) Trichlorotrifluoroethane	2.27	151	4093	0.46	PPB	97
12) 1,1-Dichloroethene	2.30	96	4494	0.44	PPB	91
13) Acetone	2.40	43	20231	19.16	PPB	95
14) Iodomethane	2.44	142	20153	1.64	PPB	95
15) Carbon Disulfide	2.47	76	14583	0.48	PPB	98
16) 3-Chloro-1-propene	2.65	76	2163	0.40	PPB	95
17) Acetonitrile	2.72	40	4251	16.78	PPB	89
18) Methylene Chloride	2.78	84	7631	0.77	PPB	90
19) tert-Butyl Alcohol	2.89	59	567	2.21	PPB	78
20) Acrylonitrile	3.08	53	2841	2.10	PPB	76
21) Methyl tert-Butyl Ether	2.98	73	15341	0.92	PPB	96
22) trans-1,2-Dichloroethene	3.00	96	5452	0.48	PPB	98
23) Hexane	3.20	57	5640	0.46	PPB	81
24) Diisopropyl Ether	3.49	45	15292	0.49	PPB	92
25) 1,1-Dichloroethane	3.49	63	9162	0.48	PPB	88
26) Vinyl Acetate	3.53	86	1102	1.02	PPB #	40
27) Chloroprene	3.54	53	37853	1.67	PPB	91
28) tert-Butyl Ethyl Ether	3.89	59	10463	0.47	PPB	94
29) 2,2-Dichloropropane	4.12	77	6271	0.45	PPB	90

(#) = qualifier out of range (m) = manual integration
0226F064.D 022607.M Tue Feb 27 06:38:43 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	5464	0.50	PPB		87
31)	2-Butanone	4.21	72	6794	18,63	PPB		92
33)	Ethyl Acetate	4.24	61	963	1.95	PPB	#	34
34)	Methacrylonitrile	4.52	67	3325	1.91	PPB	#	81
35)	Bromochloromethane	4.47	128	2132	0.55	PPB	#	45
37)	Chloroform	4.56	83	8989	0.47	PPB		88
38)	tert-Butyl Formate	4.58	59	1070	0.50	PPB		72
39)	1,1,1-Trichloroethane	4.72	97	7434	0.47	PPB		92
41)	Carbon Tetrachloride	4.89	117	6529	0.46	PPB		92
42)	1,1-Dichloropropene	4.94	75	8043	0.53	PPB		91
43)	Isobutyl Alcohol	5.27	43	2115	20.03	PPB		77
45)	Benzene	5.22	78	22228	0.51	PPB		94
46)	1,2-Dichloroethane	5.36	62	5131	0.51	PPB		87
47)	tert-Amyl Methyl Ether	5.37	55	2884	0.51	PPB	#	31
48)	Trichloroethene	6.07	95	5447	0.47	PPB		92
49)	1,2-Dichloropropane	6.40	63	4215	0.47	PPB		96
50)	Dibromomethane	6.54	93	1586	0.44	PPB		93
51)	Methyl methacrylate	6.57	69	1372	0.45	PPB		67
53)	Bromodichloromethane	6.73	83	4906	0.47	PPB		82
54)	2-Nitropropane	7.11	43	1899	1.97	PPB		76
55)	2-Chloroethyl Vinyl Ether	7.14	63	1215	0.36	PPB		84
56)	cis-1,3-Dichloropropene	7.26	75	4548	0.40	PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.47	58	24845	17.55	PPB		95
59)	Toluene	7.57	92	14022	0.48	PPB		85
61)	n-Octane	7.67	85	2166	0.52	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	2900	0.38	PPB		93
63)	Ethyl methacrylate	8.00	69	2396	0.41	PPB		98
64)	1,1,2-Trichloroethane	8.12	83	2368	0.54	PPB		84
65)	Tetrachloroethene	8.13	164	5698	0.58	PPB		94
66)	2-Hexanone	8.39	57	6875	16.92	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	4998	0.53	PPB		96
68)	Dibromochloromethane	8.49	129	2698	0.47	PPB		83
69)	1,2-Dibromoethane (EDB)	8.60	107	2149	0.46	PPB		92
70)	1-Chlorohexane	9.10	91	7325	0.49	PPB		82
71)	Chlorobenzene	9.10	112	14139	0.51	PPB		98
72)	Ethylbenzene	9.21	106	8631	0.52	PPB	#	78
73)	1,1,1,2-Tetrachloroethane	9.21	131	3600	0.45	PPB		96
74)	m,p-Xylenes	9.34	106	19892	0.98	PPB		94
75)	o-Xylene	9.75	106	9204	0.50	PPB		93
76)	Styrene	9.78	103	6435m	0.49	PPB		
77)	Bromoform	9.98	173	1203	0.41	PPB		92
78)	Isopropylbenzene	10.13	105	25318	0.49	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

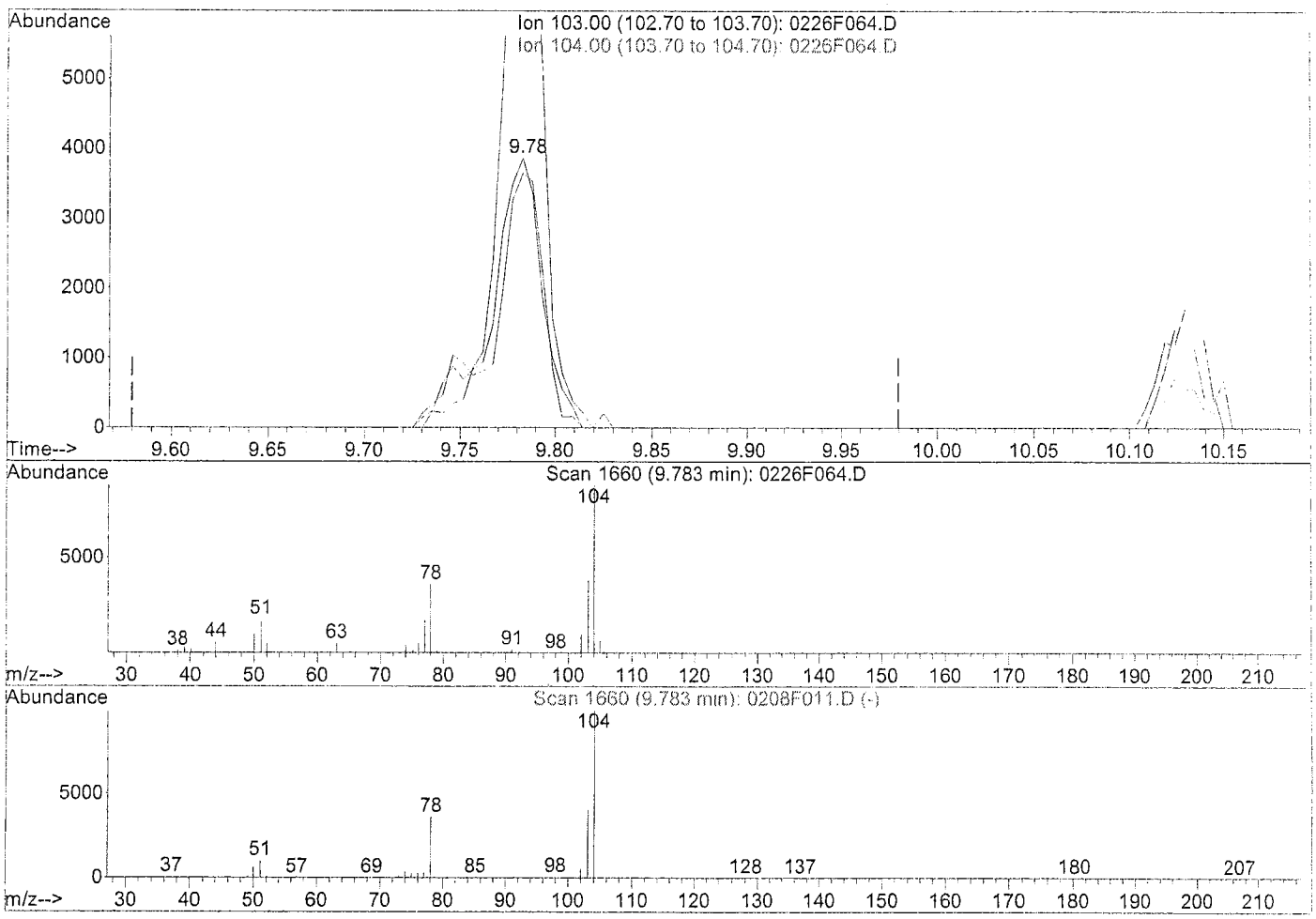
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.28	89	401m	0.75 PPB		
82)	1,1,2,2-Tetrachloroethane	10.52	83	2287	0.45 PPB		76
84)	Bromobenzene	10.45	156	5729	0.51 PPB		95
85)	n-Propylbenzene	10.55	91	29499	0.46 PPB		94
86)	1,2,3-Trichloropropane	10.57	110	795	0.48 PPB	#	31
87)	2-Chlorotoluene	10.65	91	18037	0.49 PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	19845	0.46 PPB		92
89)	4-Chlorotoluene	10.77	91	20353	0.49 PPB		93
90)	tert-Butylbenzene	11.06	119	18687	0.46 PPB		98
91)	1,2,4-Trimethylbenzene	11.13	105	19360	0.47 PPB		93
92)	sec-Butylbenzene	11.29	105	23947	0.45 PPB		92
93)	p-Isopropyltoluene	11.44	119	20958	0.44 PPB		99
94)	1,3-Dichlorobenzene	11.42	146	11414	0.49 PPB		93
95)	1,4-Dichlorobenzene	11.52	146	11852	0.52 PPB		97
96)	n-Butylbenzene	11.86	91	18986	0.48 PPB		95
97)	1,2-Dichlorobenzene	11.89	146	9824	0.50 PPB		91
98)	1,2-Dibromo-3-chloropropan	12.57	155	217m	0.34 PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	9975	0.51 PPB		93
100)	1,2,4-Trichlorobenzene	13.12	180	7755	0.57 PPB		92
101)	Hexachlorobutadiene	13.21	225	4438	0.46 PPB		96
102)	Naphthalene	13.31	128	8881	0.56 PPB		95
103)	1,2,3-Trichlorobenzene	13.49	180	6349	0.56 PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.55PPB

response 7208

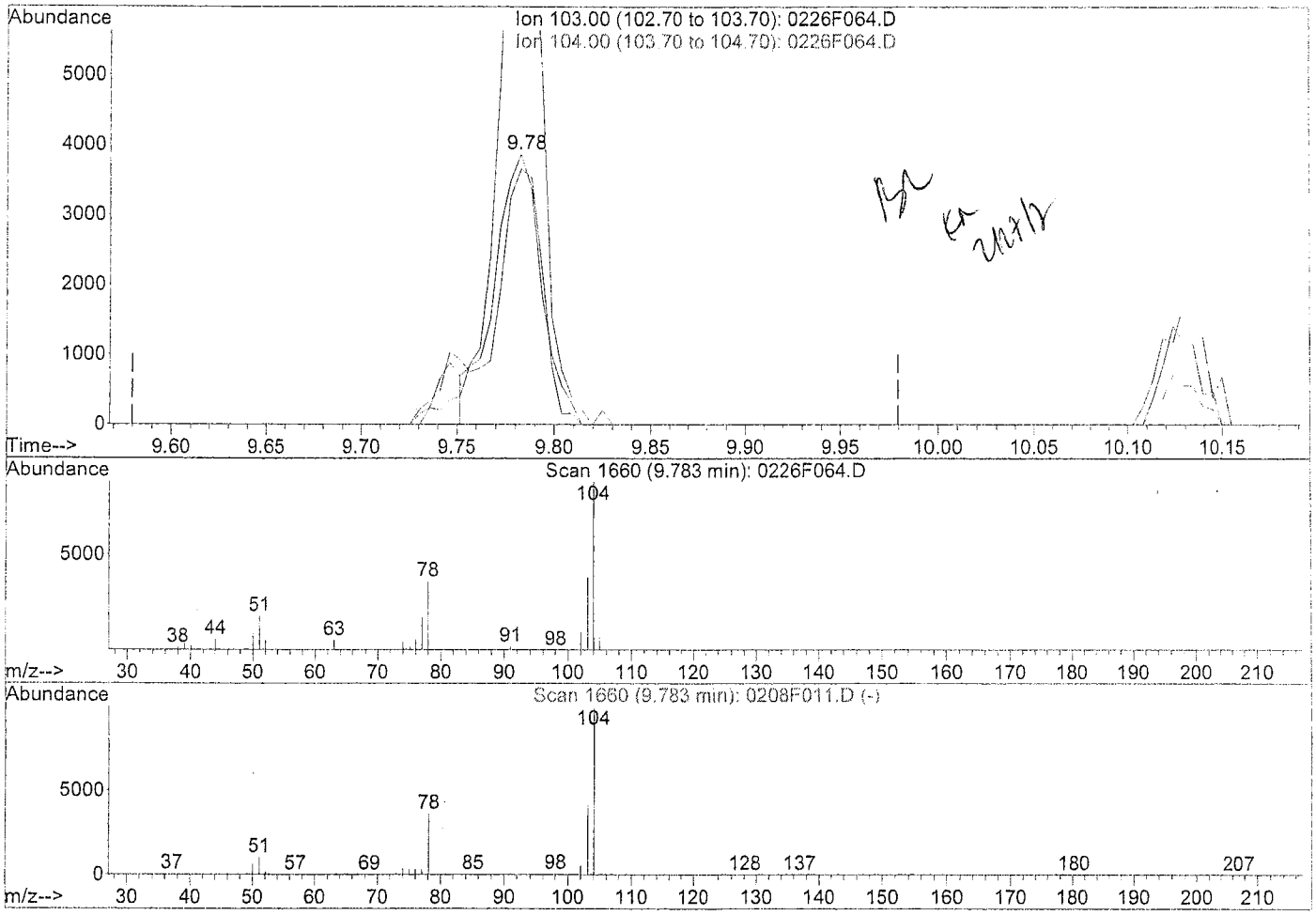
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:37:19 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.49PPB m

response 6435

ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

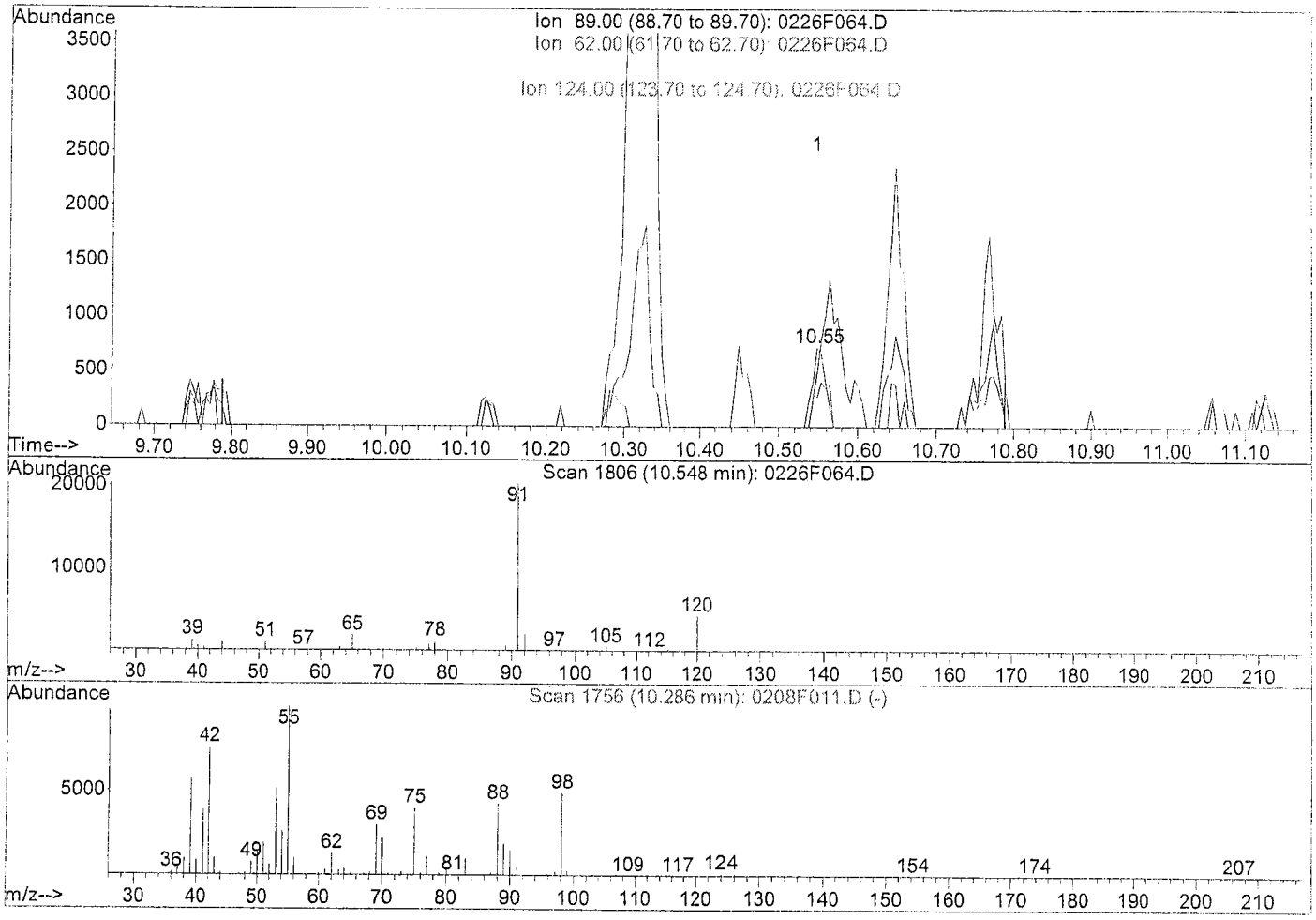
0226F064.D 022607.M Tue Feb 27 06:37:28 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.55min 1.54PPB

response 820

Ion	Exp%	Act%
89.00	100	100
62.00	69.80	36.84#
75.00	225.00	67.59#
124.00	9.50	0.00

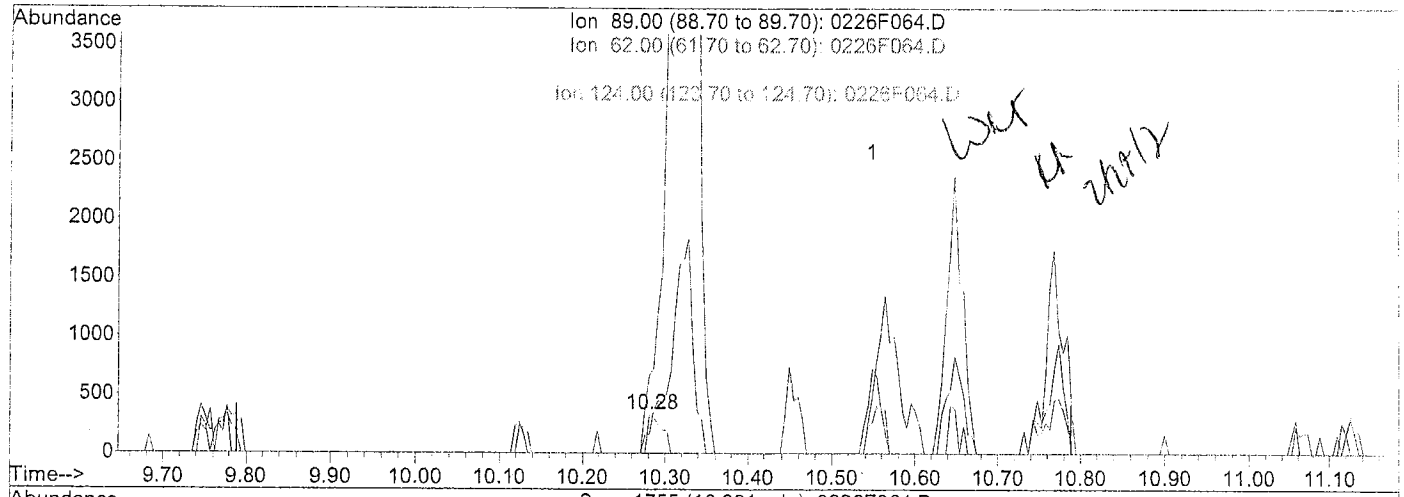
0226F064.D 022607.M Tue Feb 27 06:37:42 2007

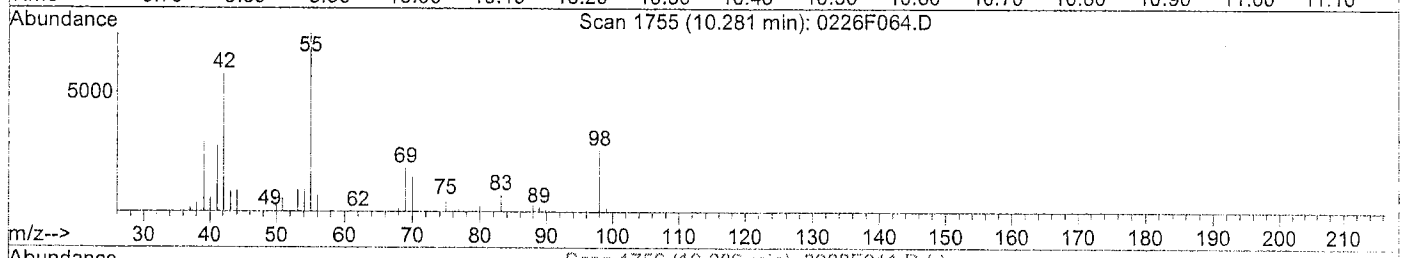
Quantitation Report (Qedit)

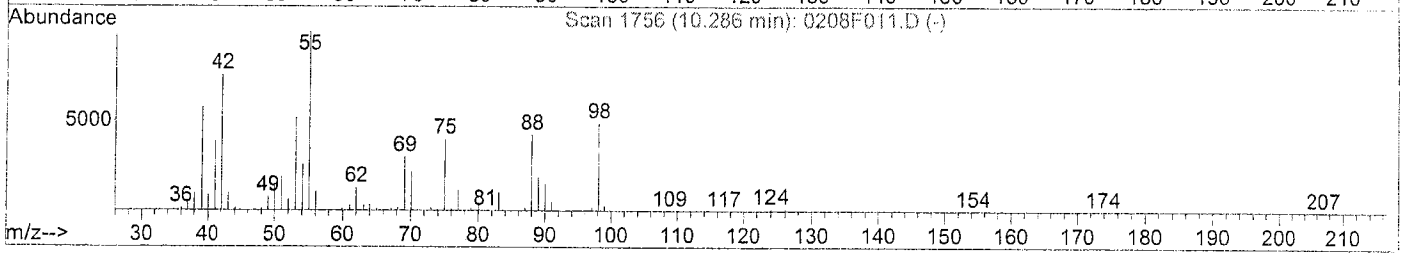
Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration







TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.28min 0.75PPB m

response 401

Ion	Exp%	Act%
89.00	100	100
62.00	69.80	49.40
75.00	225.00	201.20
124.00	9.50	0.00

2/27/7

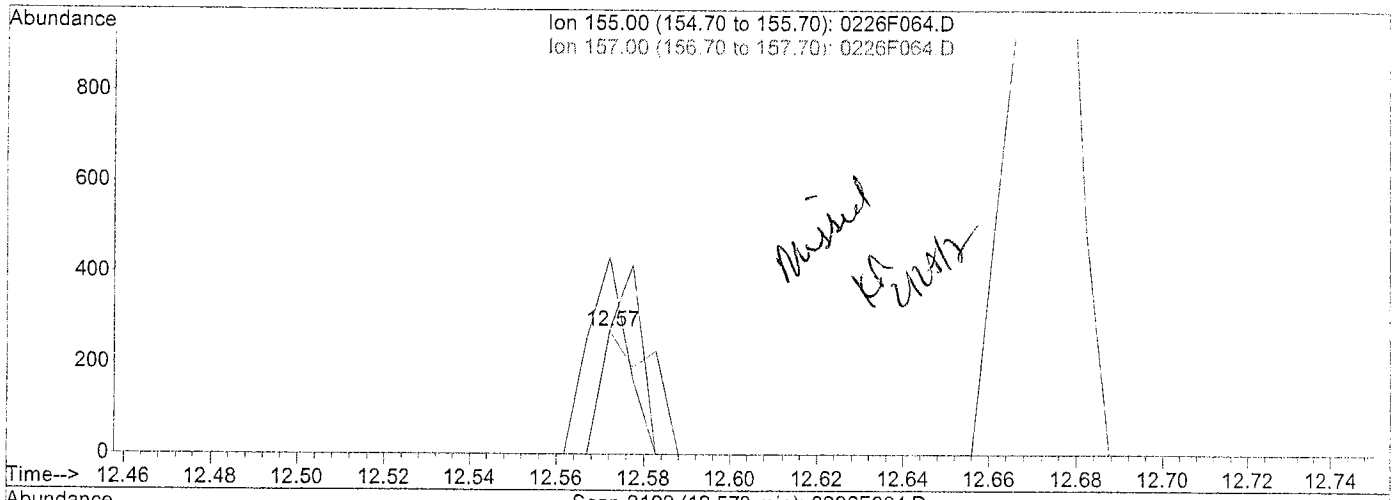
0226F064.D 022607.M Tue Feb 27 06:37:50 2007

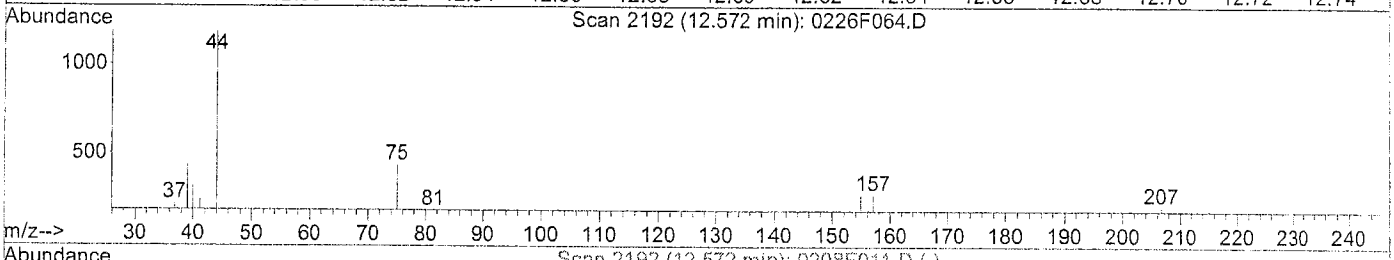
Quantitation Report (Qedit)

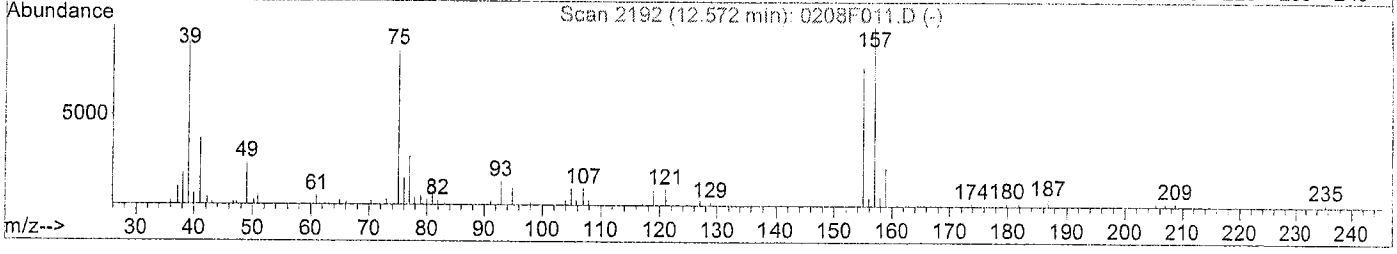
Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration







TIC: 0226F064.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.57min 0.34PPB m

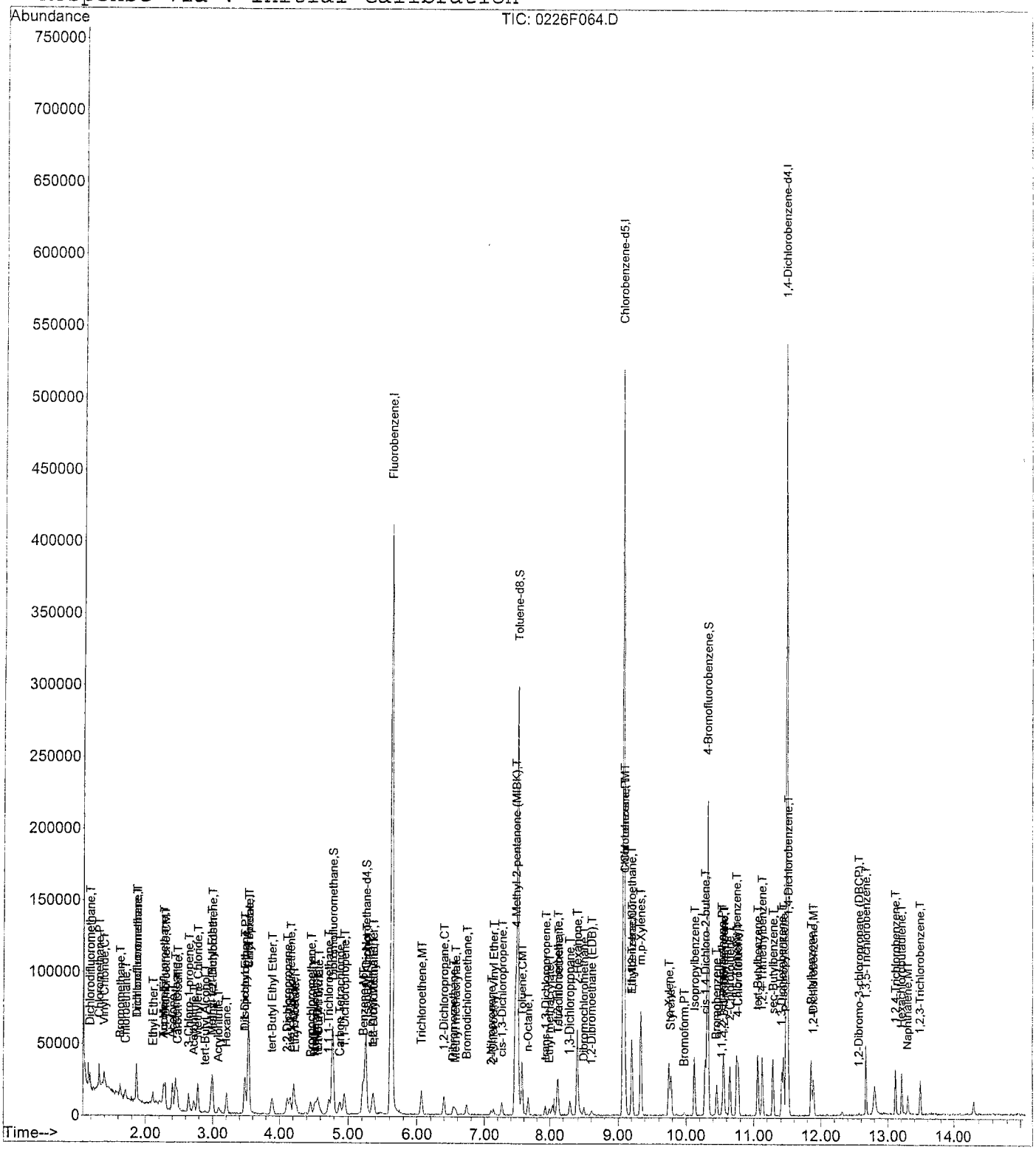
response 217

Ion	Exp%	Act%
155.00	100	100
157.00	130.70	100.37#
75.00	95.90	160.15#
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:38:33 2007

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

14 unit

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398164	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	148958	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140278	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	45979	5.89	PPB	0.00
Spiked Amount 10.000			Recovery	=	58.90%	
44) 1,2-Dichloroethane-d4	5.25	65	48590	6.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	64.20%	
58) Toluene-d8	7.49	98	206319	5.45	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.50%	
80) 4-Bromofluorobenzene	10.32	95	72161	5.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	11097	1.00	PPB		97
3) Chloromethane	1.32	50	14619	0.99	PPB		97
4) Vinyl Chloride	1.39	62	12652	1.01	PPB		97
5) Bromomethane	1.63	96	6375	0.79	PPB		77
6) Chloroethane	1.71	64	9558	1.13	PPB		95
7) Dichlorofluoromethane	1.87	67	20051	0.93	PPB		95
8) Trichlorofluoromethane	1.87	101	17404	0.95	PPB		94
9) Ethyl Ether	2.11	59	5602	1.04	PPB		86
10) Acrolein	2.27	56	4248	11.41	PPB		84
11) Trichlorotrifluoroethane	2.27	151	8260	0.94	PPB		92
12) 1,1-Dichloroethene	2.30	96	9433	0.95	PPB		98
13) Acetone	2.40	43	44115	42.79	PPB		98
14) Iodomethane	2.44	142	41401	3.45	PPB		99
15) Carbon Disulfide	2.47	76	29280	0.98	PPB		92
16) 3-Chloro-1-propene	2.64	76	5368	1.01	PPB	#	70
17) Acetonitrile	2.72	40	10067	40.71	PPB		97
18) Methylene Chloride	2.78	84	12100	1.26	PPB		92
19) tert-Butyl Alcohol	2.89	59	1140	4.56	PPB		64
20) Acrylonitrile	3.09	53	5690	4.30	PPB		89
21) Methyl tert-Butyl Ether	2.98	73	36213	2.22	PPB		97
22) trans-1,2-Dichloroethene	2.99	96	11154	1.01	PPB		83
23) Hexane	3.20	57	11608	0.97	PPB		95
24) Diisopropyl Ether	3.48	45	30731	1.00	PPB		89
25) 1,1-Dichloroethane	3.48	63	19195	1.04	PPB		97
26) Vinyl Acetate	3.53	86	2192	2.07	PPB	#	61
27) Chloroprene	3.54	53	82999	3.76	PPB		91
28) tert-Butyl Ethyl Ether	3.89	59	23285	1.07	PPB		89
29) 2,2-Dichloropropane	4.11	77	12098	0.89	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	10839	1.02	PPB		87
31)	2-Butanone	4.21	72	14882	41.81	PPB	#	85
32)	Propionitrile	4.38	54	2026	4.44	PPB		80
33)	Ethyl Acetate	4.25	61	1853	3.85	PPB	#	39
34)	Methacrylonitrile	4.52	67	6658	3.93	PPB		90
35)	Bromochloromethane	4.45	128	4136	1.10	PPB		89
36)	Tetrahydrofuran	4.46	71	638	1.82	PPB		86
37)	Chloroform	4.56	83	18513	0.99	PPB		88
38)	tert-Butyl Formate	4.59	59	2180	1.05	PPB		84
39)	1,1,1-Trichloroethane	4.72	97	15156	0.97	PPB		98
41)	Carbon Tetrachloride	4.88	117	13014	0.93	PPB		95
42)	1,1-Dichloropropene	4.95	75	15772	1.07	PPB		94
43)	Isobutyl Alcohol	5.28	43	3571	34.65	PPB		78
45)	Benzene	5.22	78	46773	1.10	PPB		95
46)	1,2-Dichloroethane	5.35	62	10504	1.08	PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	5677	1.03	PPB	#	36
48)	Trichloroethene	6.07	95	11532	1.03	PPB		83
49)	1,2-Dichloropropane	6.40	63	9878	1.12	PPB		90
50)	Dibromomethane	6.53	93	3562	1.02	PPB		97
51)	Methyl methacrylate	6.57	69	2881	0.96	PPB		87
52)	1,4-Dioxane	6.56	88	1386	42.70	PPB		78
53)	Bromodichloromethane	6.73	83	10281	1.02	PPB		98
54)	2-Nitropropane	7.10	43	4313	4.57	PPB		92
55)	2-Chloroethyl Vinyl Ether	7.14	63	3328	1.01	PPB		95
56)	cis-1,3-Dichloropropene	7.26	75	10021	0.89	PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	56940	41.20	PPB		89
59)	Toluene	7.57	92	27973	0.99	PPB		96
61)	n-Octane	7.66	85	9952	2.35	PPB		85
62)	trans-1,3-Dichloropropene	7.93	75	6317	0.81	PPB		99
63)	Ethyl methacrylate	8.00	69	5479	0.91	PPB		94
64)	1,1,2-Trichloroethane	8.12	83	4747	1.06	PPB		90
65)	Tetrachloroethene	8.13	164	10122	1.01	PPB		92
66)	2-Hexanone	8.39	57	16941	40.80	PPB		98
67)	1,3-Dichloropropane	8.29	76	11084	1.14	PPB		94
68)	Dibromochloromethane	8.48	129	5302	0.90	PPB		93
69)	1,2-Dibromoethane (EDB)	8.60	107	5239	1.10	PPB		93
70)	1-Chlorohexane	9.10	91	15021	0.98	PPB		90
71)	Chlorobenzene	9.11	112	29952	1.06	PPB		99
72)	Ethylbenzene	9.21	106	16774	0.99	PPB		96
73)	1,1,1,2-Tetrachloroethane	9.22	131	8323	1.02	PPB		83
74)	m,p-Xylenes	9.34	106	42311	2.04	PPB		96
75)	o-Xylene	9.75	106	18605	0.99	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	12601m	0.94	PPB		
77)	Bromoform	9.97	173	2579	0.86	PPB		72
78)	Isopropylbenzene	10.13	105	51807	0.99	PPB		97
79)	cis-1,4-Dichloro-2-butene	10.29	89	1315	2.41	PPB		87
82)	1,1,2,2-Tetrachloroethane	10.53	83	4923	0.98	PPB		95
83)	trans-1,4-Dichloro-2-buten	10.60	53	888	0.68	PPB	#	54
84)	Bromobenzene	10.45	156	10980	0.99	PPB		92
85)	n-Propylbenzene	10.55	91	60717	0.94	PPB		95
86)	1,2,3-Trichloropropane	10.56	110	1563	0.95	PPB		98
87)	2-Chlorotoluene	10.65	91	36180	0.98	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	42462	0.98	PPB		98
89)	4-Chlorotoluene	10.77	91	40621	0.97	PPB		95
90)	tert-Butylbenzene	11.06	119	38262	0.94	PPB		91
91)	1,2,4-Trimethylbenzene	11.13	105	41104	1.01	PPB		96
92)	sec-Butylbenzene	11.28	105	51713	0.96	PPB		96
93)	p-Isopropyltoluene	11.44	119	45163	0.96	PPB		93
94)	1,3-Dichlorobenzene	11.41	146	24426	1.04	PPB		90
95)	1,4-Dichlorobenzene	11.52	146	23058	1.00	PPB		98
96)	n-Butylbenzene	11.86	91	39779	1.00	PPB		98
97)	1,2-Dichlorobenzene	11.90	146	20285	1.04	PPB		97
98)	1,2-Dibromo-3-chloropropan	12.58	155	424m	0.66	PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	19525	1.00	PPB		98
100)	1,2,4-Trichlorobenzene	13.12	180	15574	1.15	PPB		99
101)	Hexachlorobutadiene	13.21	225	8917	0.92	PPB		93
102)	Naphthalene	13.30	128	18417	1.16	PPB		89
103)	1,2,3-Trichlorobenzene	13.49	180	11894	1.05	PPB		93

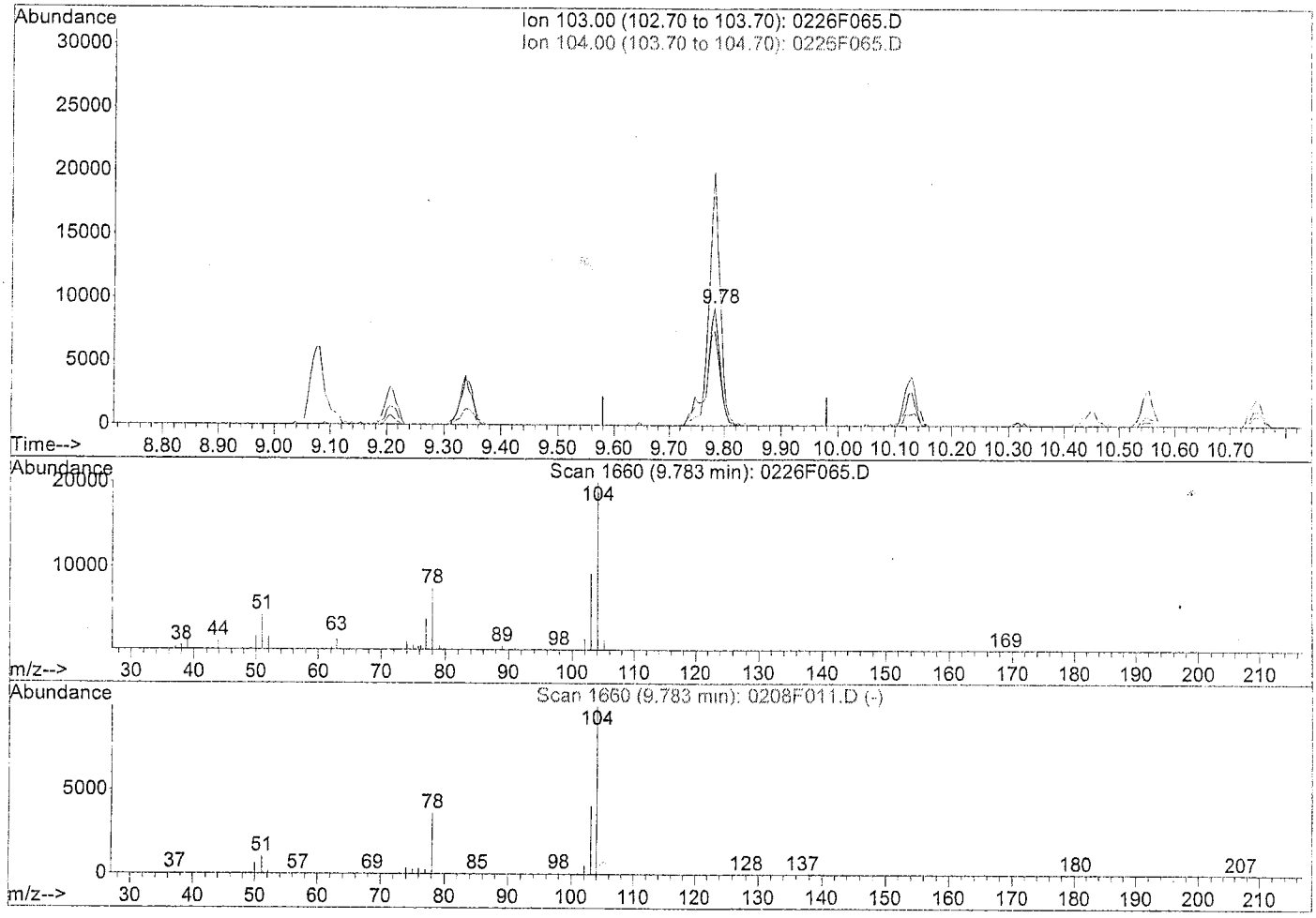
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F065.D

(76) Styrene (T)

9.78min 1.15PPB

response 15467

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

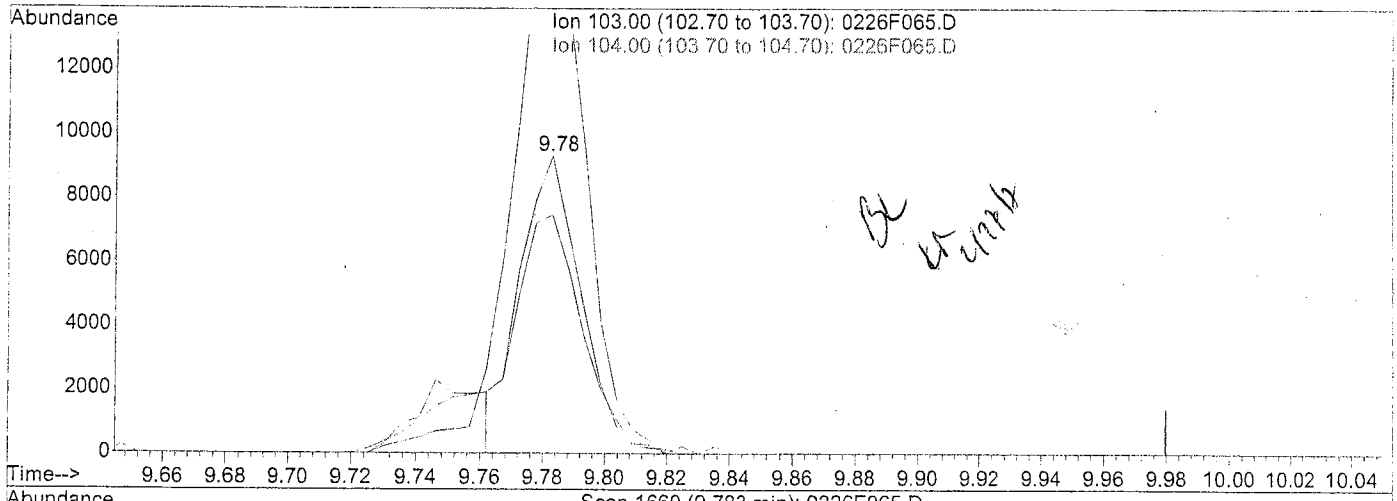
0226F065.D 022607.M Tue Feb 27 06:39:51 2007

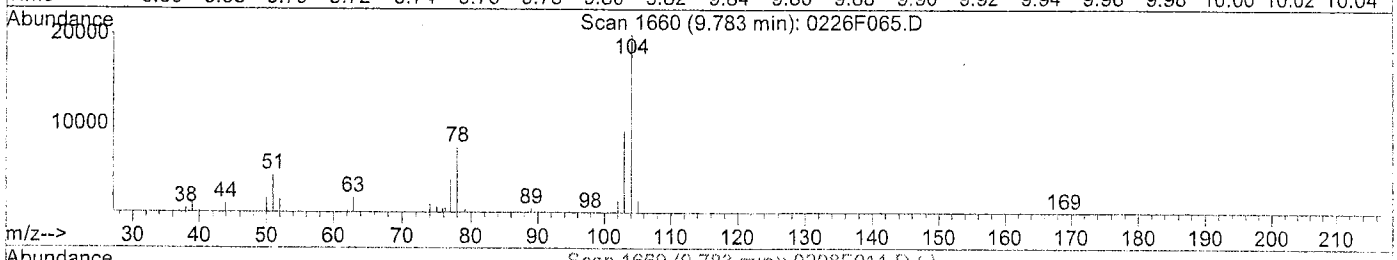
Quantitation Report (Qedit)

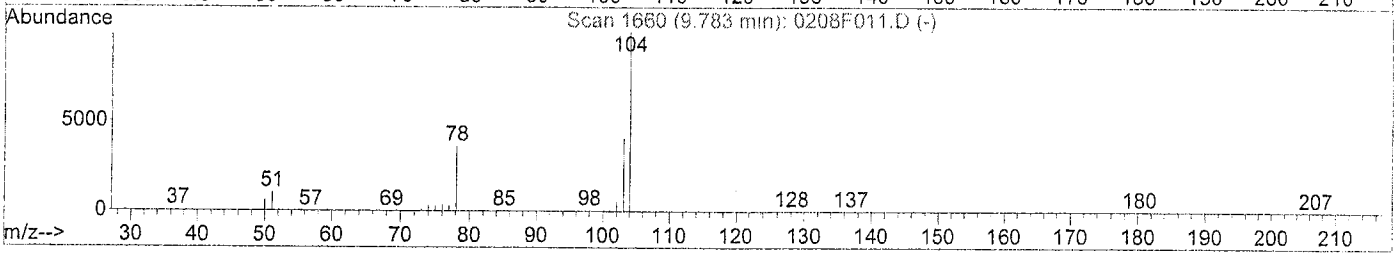
Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:39 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration







TIC: 0226F065.D

(76) Styrene (T)

9.78min 0.94PPB m

response 12601

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

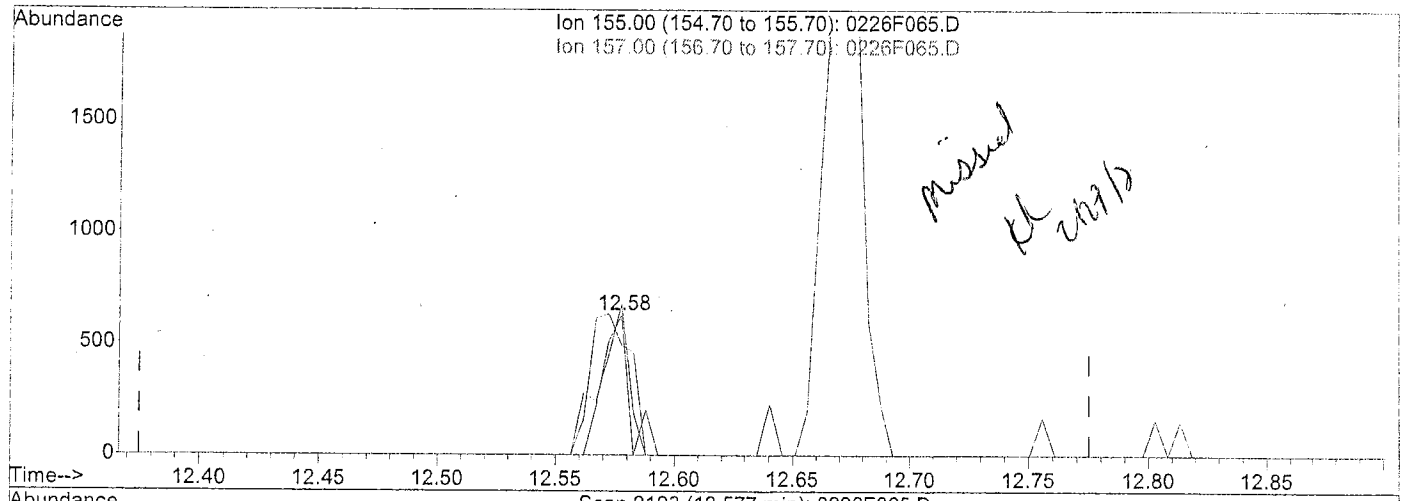
0226F065.D 022607.M Tue Feb 27 06:39:58 2007

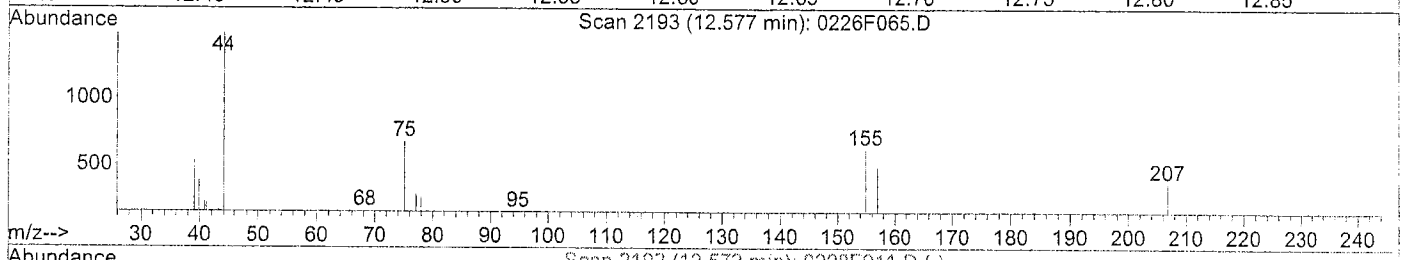
Quantitation Report (Qedit)

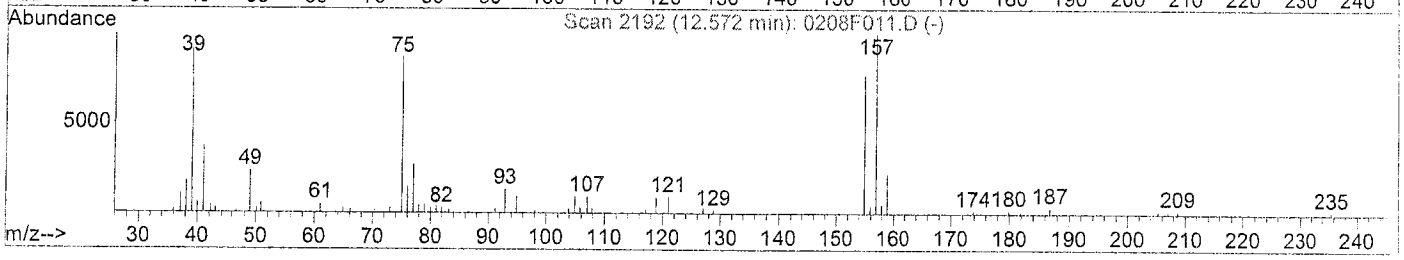
Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration







TIC: 0226F065.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.58min 0.66PPB m

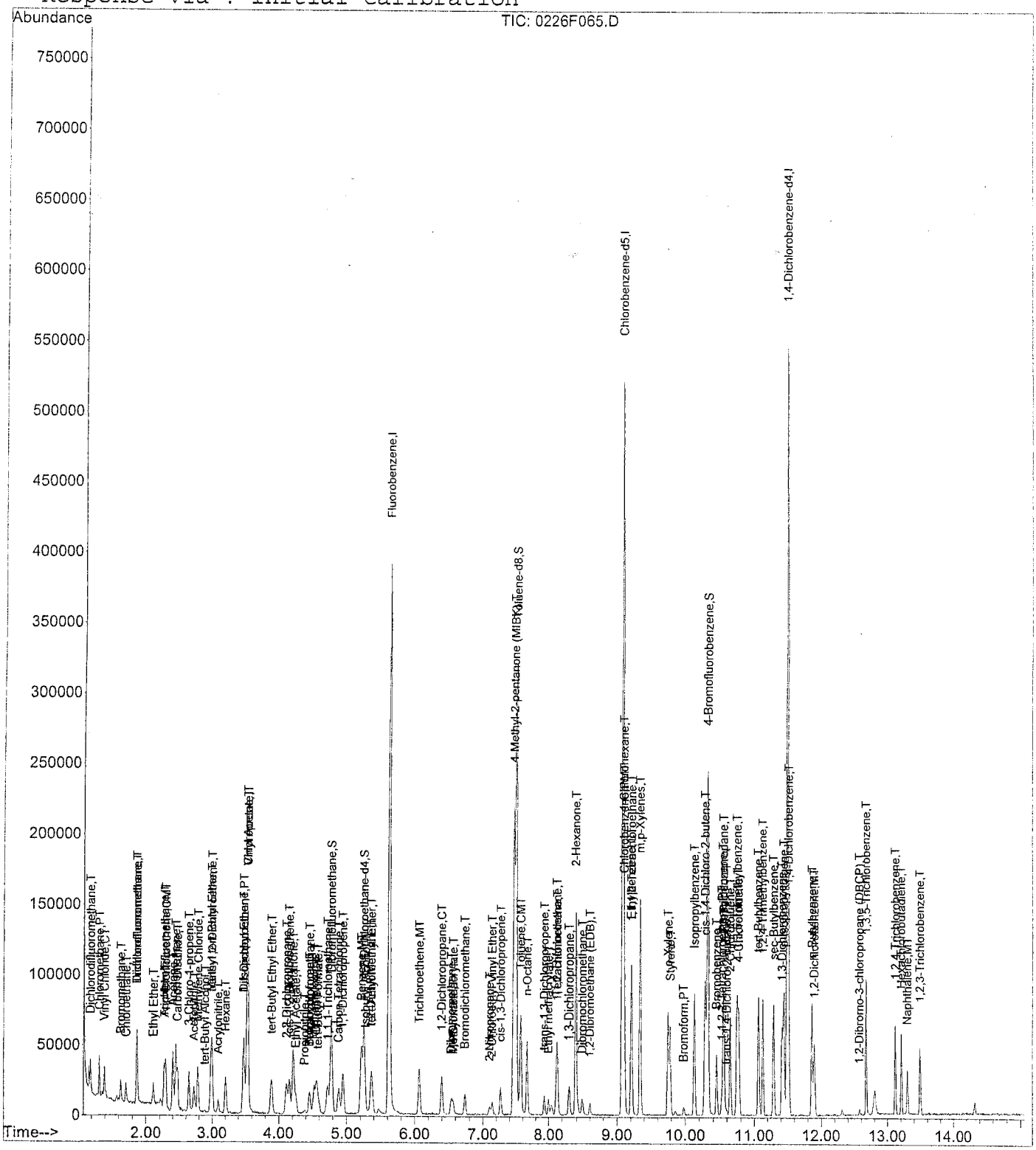
response 424

Ion	Exp%	Act%
155.00	100	100
157.00	130.70	78.75#
75.00	95.90	107.83
0.00	0.00	0.00

0226F065.D 022607.M Tue Feb 27 06:40:21 2007

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	396471	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	150846	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	144820	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	54041	6.95	PPB	0.00
Spiked Amount 10.000			Recovery	=	69.50%	
44) 1,2-Dichloroethane-d4	5.26	65	55372	7.34	PPB	0.00
Spiked Amount 10.000			Recovery	=	73.40%	
58) Toluene-d8	7.50	98	233536	6.19	PPB	0.00
Spiked Amount 10.000			Recovery	=	61.90%	
80) 4-Bromofluorobenzene	10.32	95	84688	5.86	PPB	0.00
Spiked Amount 10.000			Recovery	=	58.60%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	22411	2.04	PPB	94
3) Chloromethane	1.32	50	28870	1.96	PPB	96
4) Vinyl Chloride	1.39	62	25302	2.03	PPB	95
5) Bromomethane	1.63	96	11775	1.46	PPB	94
6) Chloroethane	1.71	64	16043	1.91	PPB	94
7) Dichlorofluoromethane	1.87	67	38501	1.79	PPB	98
8) Trichlorofluoromethane	1.87	101	34095	1.86	PPB	94
9) Ethyl Ether	2.11	59	11073	2.07	PPB	89
10) Acrolein	2.27	56	7124	19.22	PPB	82
11) Trichlorotrifluoroethane	2.27	151	15594	1.78	PPB	87
12) 1,1-Dichloroethene	2.30	96	18502	1.88	PPB	94
13) Acetone	2.40	43	80636	78.55	PPB	99
14) Iodomethane	2.44	142	77598	6.50	PPB	99
15) Carbon Disulfide	2.47	76	59777	2.01	PPB	97
16) 3-Chloro-1-propene	2.64	76	9758	1.84	PPB	87
17) Acetonitrile	2.72	40	19964	81.08	PPB	84
18) Methylene Chloride	2.78	84	21730	2.27	PPB	89
19) tert-Butyl Alcohol	2.89	59	2211	8.88	PPB	82
20) Acrylonitrile	3.09	53	11143	8.46	PPB	87
21) Methyl tert-Butyl Ether	2.98	73	66985	4.13	PPB	99
22) trans-1,2-Dichloroethene	3.00	96	21614	1.96	PPB	96
23) Hexane	3.20	57	21927	1.85	PPB	93
24) Diisopropyl Ether	3.48	45	61770	2.02	PPB	93
25) 1,1-Dichloroethane	3.48	63	38085	2.07	PPB	99
26) Vinyl Acetate	3.54	86	3940	3.74	PPB	94
27) Chloroprene	3.54	53	160844	7.31	PPB	93
28) tert-Butyl Ethyl Ether	3.89	59	45445	2.09	PPB	97
29) 2,2-Dichloropropane	4.11	77	23840	1.75	PPB	95

(#) = qualifier out of range (m) = manual integration
0226F066.D 022607.M Tue Feb 27 06:41:44 2007 Page 1

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30) cis-1,2-Dichloroethene	4.16	96	22937	2.16	PPB		94
31) 2-Butanone	4.21	72	28988	81.78	PPB	#	84
32) Propionitrile	4.38	54	4159	9.15	PPB		92
33) Ethyl Acetate	4.25	61	3956	8.25	PPB		81
34) Methacrylonitrile	4.52	67	13529	8.01	PPB		90
35) Bromochloromethane	4.46	128	8482	2.26	PPB		86
36) Tetrahydrofuran	4.46	71	1157	3.32	PPB	#	79
37) Chloroform	4.56	83	45720	2.46	PPB		94
38) tert-Butyl Formate	4.59	59	3846	1.86	PPB		85
39) 1,1,1-Trichloroethane	4.72	97	30003	1.93	PPB		99
41) Carbon Tetrachloride	4.89	117	25325	1.82	PPB		95
42) 1,1-Dichloropropene	4.94	75	29117	1.98	PPB		96
43) Isobutyl Alcohol	5.27	43	7434	72.43	PPB		81
45) Benzene	5.22	78	88714	2.10	PPB		97
46) 1,2-Dichloroethane	5.36	62	21504	2.21	PPB		95
47) tert-Amyl Methyl Ether	5.37	55	11736	2.13	PPB	#	33
48) Trichloroethene	6.07	95	21446	1.92	PPB		95
49) 1,2-Dichloropropane	6.40	63	18583	2.12	PPB		94
50) Dibromomethane	6.53	93	7716	2.22	PPB		95
51) Methyl methacrylate	6.57	69	5777	1.93	PPB		90
52) 1,4-Dioxane	6.56	88	2890	89.42	PPB		96
53) Bromodichloromethane	6.74	83	19712	1.96	PPB		97
54) 2-Nitropropane	7.10	43	8486	9.04	PPB		94
55) 2-Chloroethyl Vinyl Ether	7.13	63	7116	2.17	PPB		92
56) cis-1,3-Dichloropropene	7.27	75	20481	1.83	PPB		93
57) 4-Methyl-2-pentanone (MIBK	7.46	58	111330	80.90	PPB		92
59) Toluene	7.57	92	55429	1.96	PPB		98
61) n-Octane	7.66	85	7047	1.64	PPB		86
62) trans-1,3-Dichloropropene	7.93	75	13652	1.73	PPB		90
63) Ethyl methacrylate	7.99	69	11494	1.88	PPB		98
64) 1,1,2-Trichloroethane	8.12	83	9383	2.07	PPB		94
65) Tetrachloroethene	8.13	164	19395	1.92	PPB		92
66) 2-Hexanone	8.39	57	33468	79.60	PPB	#	79
67) 1,3-Dichloropropane	8.29	76	21550	2.19	PPB		95
68) Dibromochloromethane	8.49	129	11119	1.87	PPB		98
69) 1,2-Dibromoethane (EDB)	8.60	107	9747	2.03	PPB		91
70) 1-Chlorohexane	9.10	91	27247	1.75	PPB		84
71) Chlorobenzene	9.11	112	57379	2.01	PPB		96
72) Ethylbenzene	9.21	106	32883	1.92	PPB		98
73) 1,1,1,2-Tetrachloroethane	9.22	131	16419	1.99	PPB		95
74) m,p-Xylenes	9.34	106	80873	3.85	PPB		99
75) o-Xylene	9.75	106	38511	2.02	PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D
Acq On : 26 Feb 2007 8:49 pm
Sample : 8260 ICAL 2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007

Vial: 14
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

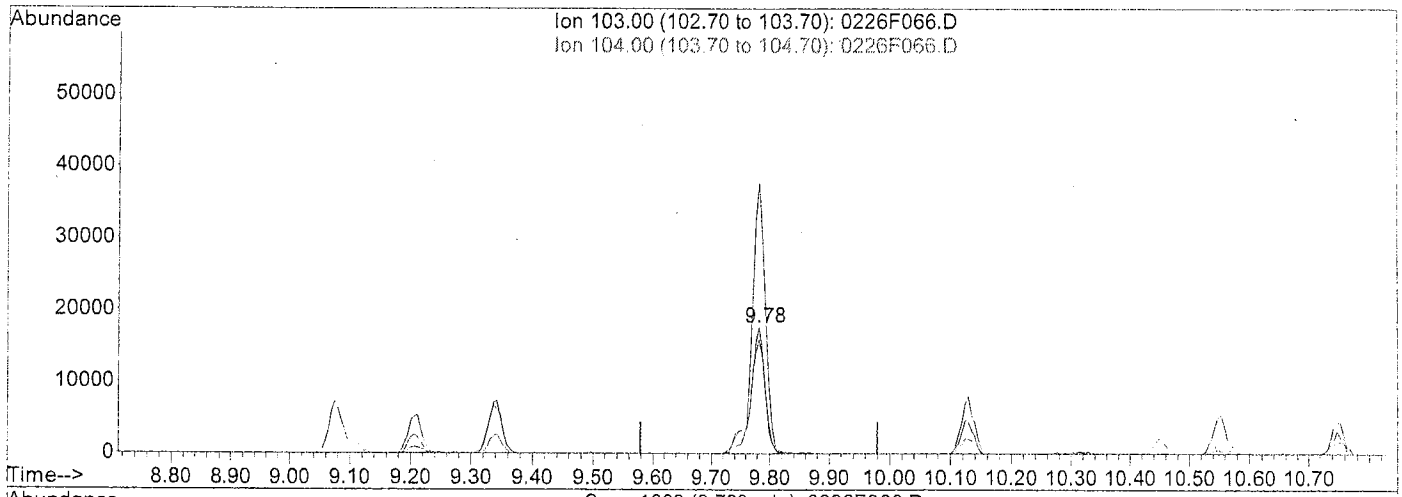
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

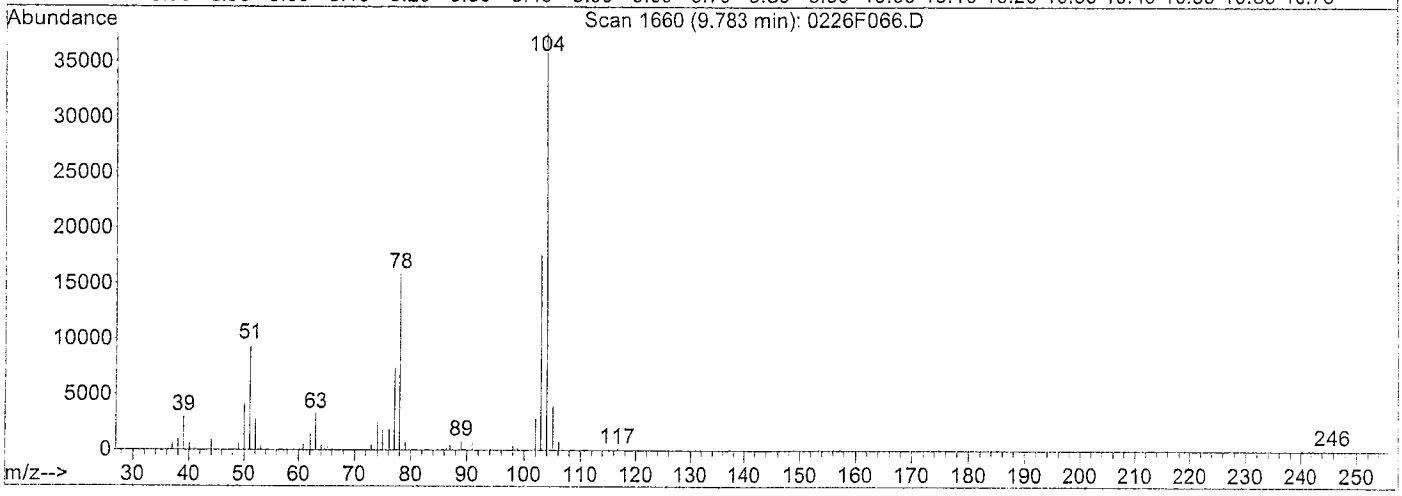
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	25822m	1.90	PPB		
77)	Bromoform	9.98	173	5718	1.89	PPB		87
78)	Isopropylbenzene	10.13	105	103479	1.94	PPB		100
79)	cis-1,4-Dichloro-2-butene	10.29	89	2572	4.65	PPB	#	75
82)	1,1,2,2-Tetrachloroethane	10.52	83	10590	2.03	PPB		87
83)	trans-1,4-Dichloro-2-buten	10.60	53	2081	1.54	PPB		68
84)	Bromobenzene	10.45	156	21998	1.91	PPB		100
85)	n-Propylbenzene	10.55	91	121574	1.83	PPB		98
86)	1,2,3-Trichloropropane	10.56	110	3337	1.97	PPB		96
87)	2-Chlorotoluene	10.65	91	71375	1.87	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	86259	1.92	PPB		92
89)	4-Chlorotoluene	10.77	91	80240	1.86	PPB		93
90)	tert-Butylbenzene	11.06	119	77039	1.84	PPB		90
91)	1,2,4-Trimethylbenzene	11.12	105	81853	1.94	PPB		95
92)	sec-Butylbenzene	11.29	105	104295	1.88	PPB		98
93)	p-Isopropyltoluene	11.44	119	92903	1.91	PPB		98
94)	1,3-Dichlorobenzene	11.41	146	46241	1.91	PPB		94
95)	1,4-Dichlorobenzene	11.52	146	45755	1.93	PPB		98
96)	n-Butylbenzene	11.86	91	79219	1.94	PPB		97
97)	1,2-Dichlorobenzene	11.90	146	40425	2.01	PPB		98
98)	1,2-Dibromo-3-chloropropan	12.58	155	1261	1.90	PPB	#	52
99)	1,3,5-Trichlorobenzene	12.67	180	37725	1.88	PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	29607	2.12	PPB		97
101)	Hexachlorobutadiene	13.21	225	17404	1.73	PPB		93
102)	Naphthalene	13.31	128	36422	2.23	PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	24412	2.10	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F066.D

(76) Styrene (T)

9.78min 2.21PPB

response 29938

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	214.70
78.00	89.30	90.50
0.00	0.00	0.00

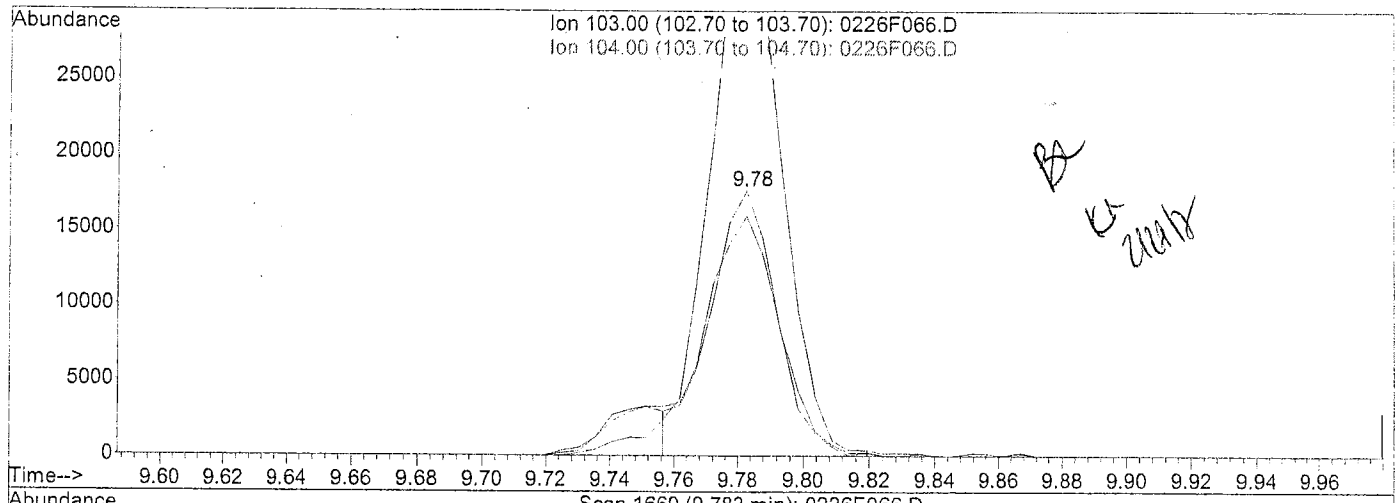
0226F066.D 022607.M Tue Feb 27 06:41:20 2007

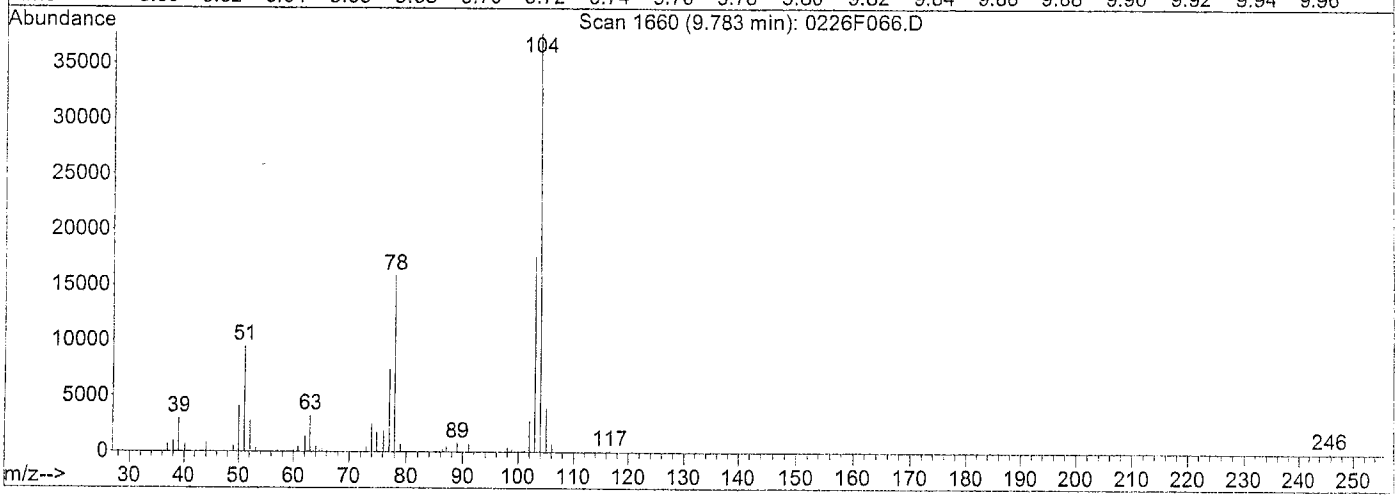
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F066.D
Acq On : 26 Feb 2007 8:49 pm
Sample : 8260 ICAL 2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007

Vial: 14
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F066.D

(76) Styrene (T)

9.78min 1.90PPB m

response 25822

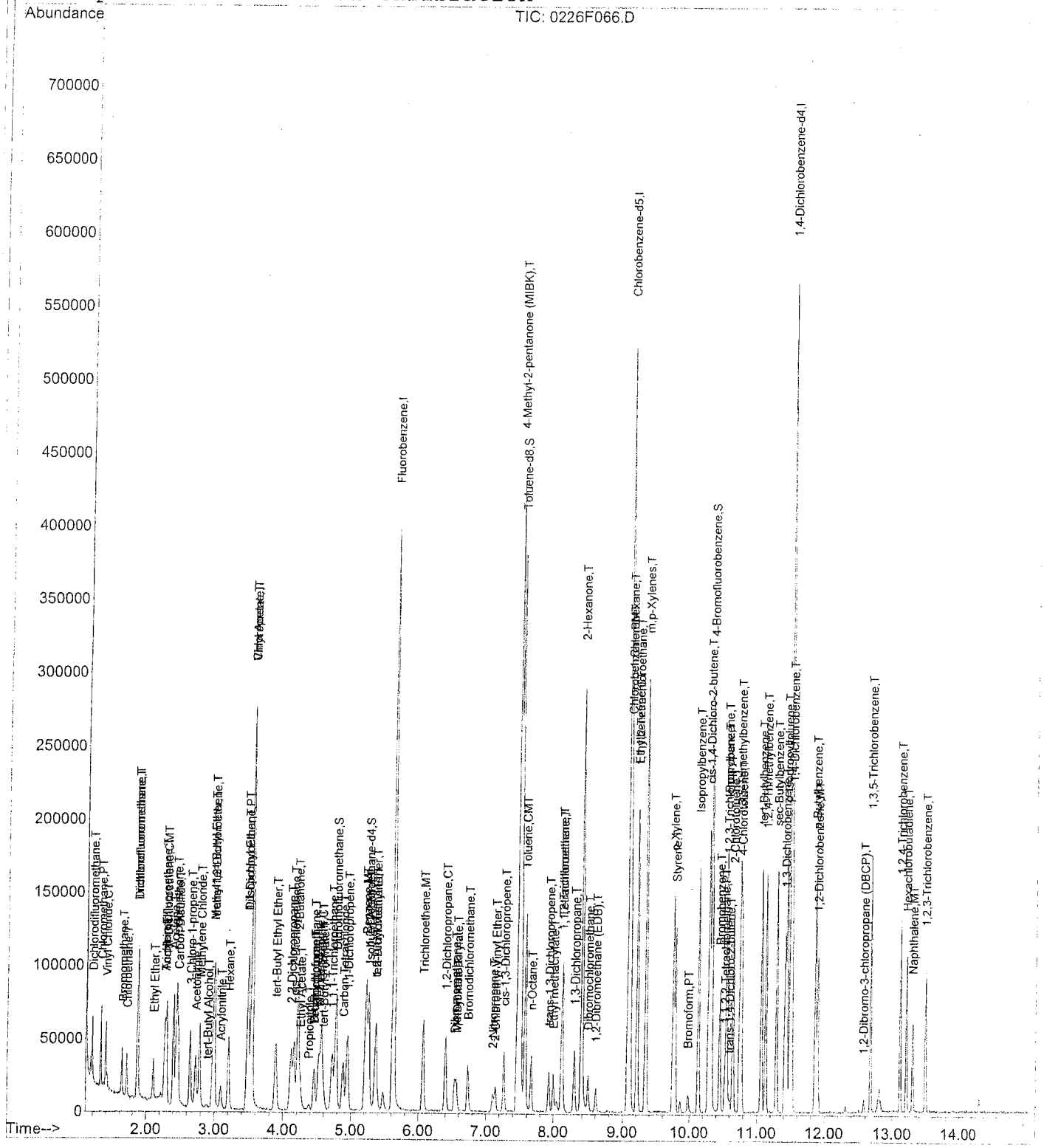
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	214.70
78.00	89.30	90.50
0.00	0.00	0.00

0226F066.D 022607.M Tue Feb 27 06:41:26 2007

Data File : J:\MS18\DATA\022607A\0226F066.D
Acq On : 26 Feb 2007 8:49 pm
Sample : 8260 ICAL 2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007

Vial: 14
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398460	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145687	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	141186	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	68519	8.77	PPB	0.00
Spiked Amount 10.000			Recovery = 87.70%			
44) 1,2-Dichloroethane-d4	5.26	65	67688	8.93	PPB	0.00
Spiked Amount 10.000			Recovery = 89.30%			
58) Toluene-d8	7.50	98	319855	8.44	PPB	0.00
Spiked Amount 10.000			Recovery = 84.40%			
80) 4-Bromofluorobenzene	10.32	95	103733	7.43	PPB	0.00
Spiked Amount 10.000			Recovery = 74.30%			

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	60381	5.46	PPB		97
3) Chloromethane	1.32	50	69513	4.70	PPB		99
4) Vinyl Chloride	1.39	62	66034	5.28	PPB		98
5) Bromomethane	1.64	96	29211	3.61	PPB		98
6) Chloroethane	1.71	64	41374	4.91	PPB		96
7) Dichlorofluoromethane	1.87	67	100416	4.64	PPB		95
8) Trichlorofluoromethane	1.87	101	90199	4.90	PPB		98
9) Ethyl Ether	2.11	59	28350	5.26	PPB		92
10) Acrolein	2.27	56	15730	42.23	PPB		92
11) Trichlorotrifluoroethane	2.27	151	40851	4.65	PPB		94
12) 1,1-Dichloroethene	2.30	96	46986	4.75	PPB		87
13) Acetone	2.40	43	105369	102.13	PPB		97
14) Iodomethane	2.44	142	213329	17.77	PPB		97
15) Carbon Disulfide	2.47	76	152344	5.09	PPB		98
16) 3-Chloro-1-propene	2.64	76	23998	4.50	PPB	#	63
17) Acetonitrile	2.72	40	52684	212.90	PPB		96
18) Methylene Chloride	2.78	84	50670	5.27	PPB		91
19) tert-Butyl Alcohol	2.88	59	5416	21.65	PPB		86
20) Acrylonitrile	3.09	53	28380	21.44	PPB		97
21) Methyl tert-Butyl Ether	2.98	73	178598	10.96	PPB		97
22) trans-1,2-Dichloroethene	3.00	96	56282	5.09	PPB		95
23) Hexane	3.20	57	57189	4.80	PPB		99
24) Diisopropyl Ether	3.48	45	166189	5.41	PPB		93
25) 1,1-Dichloroethane	3.48	63	98976	5.34	PPB		97
26) Vinyl Acetate	3.54	86	11692	11.03	PPB	#	88
27) Chloroprene	3.54	53	427721	19.35	PPB		96
28) tert-Butyl Ethyl Ether	3.89	59	118361	5.42	PPB		98
29) 2,2-Dichloropropane	4.12	77	63108	4.62	PPB		100

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	56845	5.33 PPB		99
31)	2-Butanone	4.21	72	36741	103.14 PPB	#	80
32)	Propionitrile	4.38	54	9709	21.26 PPB		98
33)	Ethyl Acetate	4.25	61	11355	23.55 PPB		97
34)	Methacrylonitrile	4.52	67	36874	21.73 PPB		91
35)	Bromochloromethane	4.46	128	20382	5.40 PPB		89
36)	Tetrahydrofuran	4.46	71	2147	6.13 PPB	#	73
37)	Chloroform	4.56	83	93773	5.02 PPB		98
38)	tert-Butyl Formate	4.59	59	10422	5.00 PPB		86
39)	1,1,1-Trichloroethane	4.72	97	83254	5.33 PPB		95
41)	Carbon Tetrachloride	4.89	117	70450	5.03 PPB		95
42)	1,1-Dichloropropene	4.94	75	76745	5.19 PPB		97
43)	Isobutyl Alcohol	5.26	43	20452	198.27 PPB		86
45)	Benzene	5.22	78	228795	5.40 PPB		99
46)	1,2-Dichloroethane	5.35	62	52993	5.43 PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	28054	5.07 PPB	#	65
48)	Trichloroethene	6.07	95	56955	5.08 PPB		92
49)	1,2-Dichloropropane	6.40	63	49049	5.57 PPB		95
50)	Dibromomethane	6.54	93	19441	5.57 PPB		89
51)	Methyl methacrylate	6.56	69	15596	5.18 PPB		95
52)	1,4-Dioxane	6.56	88	7116	219.09 PPB		98
53)	Bromodichloromethane	6.73	83	53787	5.32 PPB		94
54)	2-Nitropropane	7.10	43	25113	26.62 PPB		97
55)	2-Chloroethyl Vinyl Ether	7.14	63	16670	5.05 PPB		94
56)	cis-1,3-Dichloropropene	7.27	75	59157	5.27 PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.46	58	148514	107.39 PPB		89
59)	Toluene	7.57	92	145312	5.12 PPB		98
61)	n-Octane	7.66	85	19316	4.66 PPB		81
62)	trans-1,3-Dichloropropene	7.93	75	39876	5.24 PPB		98
63)	Ethyl methacrylate	7.99	69	31284	5.29 PPB		89
64)	1,1,2-Trichloroethane	8.12	83	24441	5.57 PPB		98
65)	Tetrachloroethene	8.13	164	51694	5.30 PPB		94
66)	2-Hexanone	8.39	57	43817	107.90 PPB	#	85
67)	1,3-Dichloropropane	8.29	76	56397	5.94 PPB		98
68)	Dibromochloromethane	8.49	129	31402	5.47 PPB		97
69)	1,2-Dibromoethane (EDB)	8.60	107	26040	5.61 PPB		89
70)	1-Chlorohexane	9.10	91	74332	4.95 PPB		89
71)	Chlorobenzene	9.11	112	154591	5.60 PPB		99
72)	Ethylbenzene	9.21	106	88387	5.34 PPB		88
73)	1,1,1,2-Tetrachloroethane	9.21	131	45860	5.74 PPB		94
74)	m,p-Xylenes	9.34	106	216473	10.66 PPB		94
75)	o-Xylene	9.75	106	101783	5.52 PPB		93

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

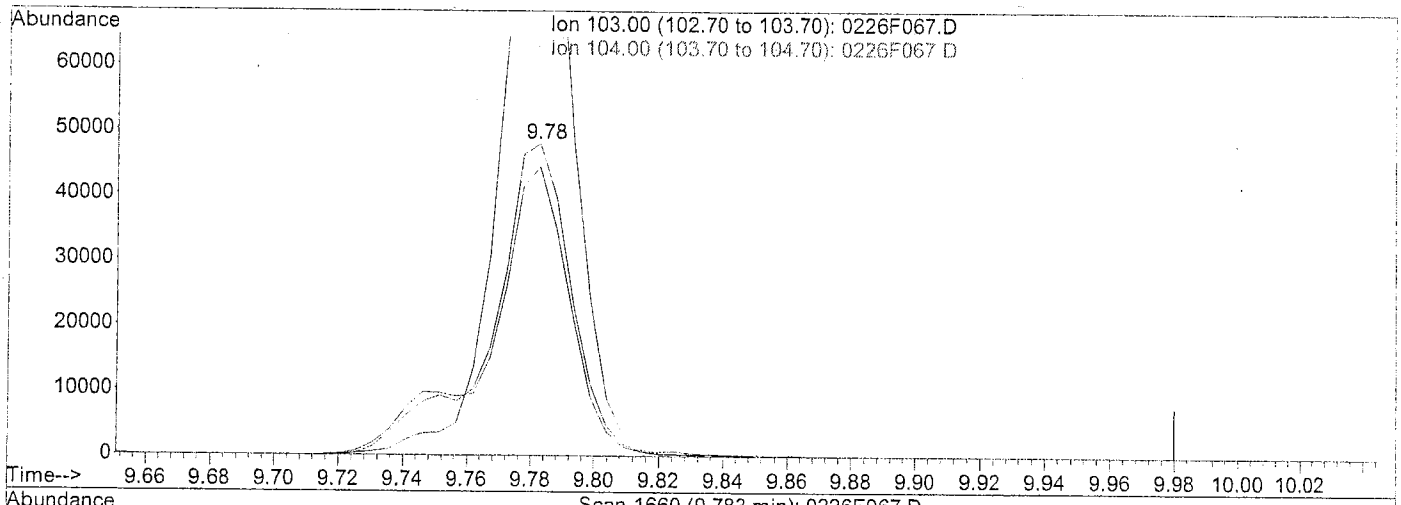
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	72666m	5.54	PPB		
77)	Bromoform	9.98	173	15362	5.25	PPB		97
78)	Isopropylbenzene	10.13	105	275225	5.35	PPB		99
79)	cis-1,4-Dichloro-2-butene	10.29	89	8317	15.58	PPB		89
82)	1,1,2,2-Tetrachloroethane	10.53	83	27223	5.36	PPB		98
83)	trans-1,4-Dichloro-2-buten	10.60	53	5489	4.16	PPB	#	39
84)	Bromobenzene	10.45	156	59285	5.29	PPB		88
85)	n-Propylbenzene	10.55	91	323570	5.00	PPB		96
86)	1,2,3-Trichloropropane	10.56	110	8286	5.01	PPB		86
87)	2-Chlorotoluene	10.65	91	187663	5.05	PPB		100
88)	1,3,5-Trimethylbenzene	10.75	105	226630	5.17	PPB		100
89)	4-Chlorotoluene	10.77	91	217059	5.16	PPB		94
90)	tert-Butylbenzene	11.06	119	206764	5.07	PPB		99
91)	1,2,4-Trimethylbenzene	11.13	105	220843	5.37	PPB		95
92)	sec-Butylbenzene	11.29	105	278078	5.14	PPB		99
93)	p-Isopropyltoluene	11.44	119	251801	5.30	PPB		96
94)	1,3-Dichlorobenzene	11.41	146	119986	5.09	PPB		99
95)	1,4-Dichlorobenzene	11.52	146	119494	5.16	PPB		98
96)	n-Butylbenzene	11.86	91	217963	5.46	PPB		95
97)	1,2-Dichlorobenzene	11.90	146	104640	5.33	PPB		100
98)	1,2-Dibromo-3-chloropropan	12.57	155	3334	5.16	PPB	#	75
99)	1,3,5-Trichlorobenzene	12.67	180	97070	4.96	PPB		99
100)	1,2,4-Trichlorobenzene	13.12	180	76478	5.60	PPB		96
101)	Hexachlorobutadiene	13.21	225	47226	4.82	PPB		94
102)	Naphthalene	13.30	128	99252	6.24	PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	64471	5.68	PPB		98

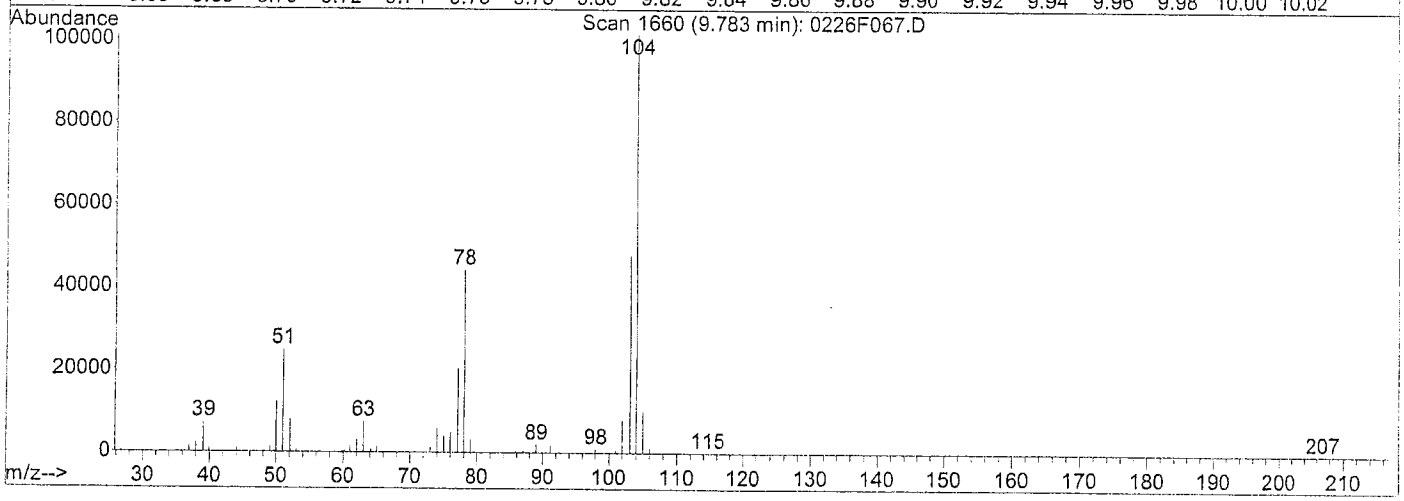
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F067.D

(76) Styrene (T)

9.78min 6.45PPB

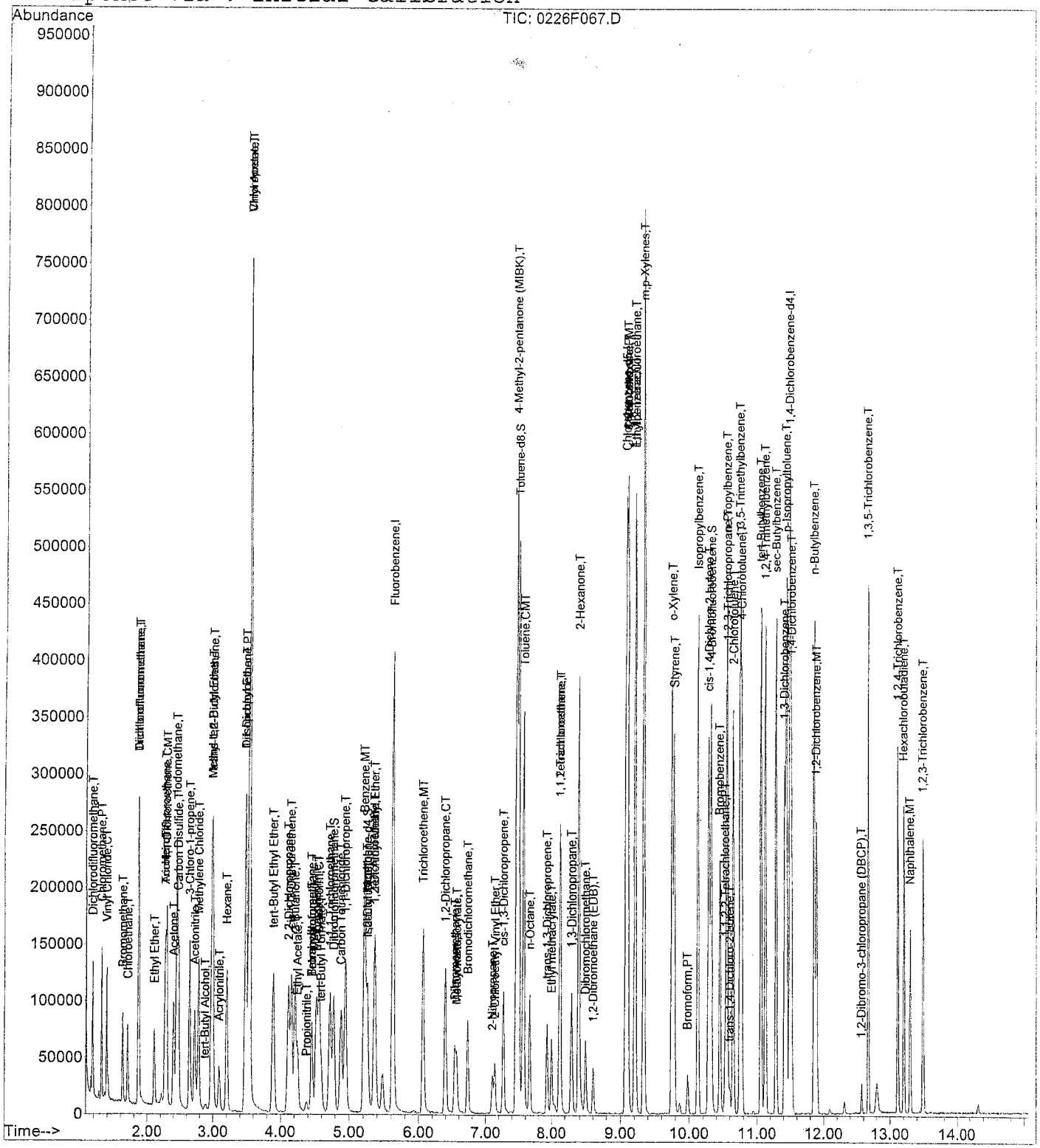
response 84560

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.67
78.00	89.30	92.47
0.00	0.00	0.00

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:42 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration


Abundance
TIC: 0226F067.D
Time-->
Dichlorodifluoromethane,T
Chloromethane,T
Vinyl Chloride,T
Bromomethane,T
Chloroethane,T
Ethyl Ether,T
Acetone,T
Carbon Disulfide,T
Iodomethane,T
Acrylonitrile,T
3-Chloro-1-propene,T
Methylene Chloride,T
tert-Butyl Alcohol,T
Hexane,T
Acrylonitrile,T
tert-Butyl Ethyl Ether,T
Propionitrile,T
Methyl Acrylate,T
Methyl tert-Butyl Ether,T
Carbon Tetrachloride,T
Dichlorodifluoromethane,T
Chloroprene,T
Methyl Acrylate,T
Methyl Methacrylate,T
Vinyl Acetate,T
Bromochloromethane,T
Chloroform

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KT 2/27/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	403812	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	151762	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	144072	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89247	11.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	112.70%	
44) 1,2-Dichloroethane-d4	5.25	65	87121	11.35	PPB	0.00
Spiked Amount 10.000			Recovery	=	113.50%	
58) Toluene-d8	7.50	98	400788	10.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.40%	
80) 4-Bromofluorobenzene	10.32	95	133921	9.21	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.10%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	124571	11.11	PPB	98
3) Chloromethane	1.32	50	140240	9.36	PPB	98
4) Vinyl Chloride	1.39	62	137910	10.88	PPB	97
5) Bromomethane	1.64	96	60979	7.44	PPB	99
6) Chloroethane	1.71	64	84534	9.89	PPB	96
7) Dichlorofluoromethane	1.87	67	204448	9.31	PPB	98
8) Trichlorofluoromethane	1.87	101	184619	9.90	PPB	99
9) Ethyl Ether	2.10	59	55291	10.12	PPB	92
10) Acrolein	2.27	56	31411	83.21	PPB	97
11) Trichlorotrifluoroethane	2.27	151	85831	9.64	PPB	95
12) 1,1-Dichloroethene	2.30	96	97608	9.73	PPB	92
13) Acetone	2.40	43	205485	196.53	PPB	97
14) Iodomethane	2.44	142	467618	38.43	PPB	94
15) Carbon Disulfide	2.47	76	315439	10.40	PPB	99
16) 3-Chloro-1-propene	2.64	76	53781	9.95	PPB #	71
17) Acetonitrile	2.72	40	106655	425.28	PPB	96
18) Methylene Chloride	2.78	84	99156	10.17	PPB	91
19) tert-Butyl Alcohol	2.88	59	11122	43.86	PPB	89
20) Acrylonitrile	3.09	53	56504	42.13	PPB	97
21) Methyl tert-Butyl Ether	2.98	73	358987	21.74	PPB	99
22) trans-1,2-Dichloroethene	3.00	96	115625	10.31	PPB	99
23) Hexane	3.20	57	113550	9.40	PPB	96
24) Diisopropyl Ether	3.48	45	336039	10.80	PPB	94
25) 1,1-Dichloroethane	3.48	63	209736	11.18	PPB	97
26) Vinyl Acetate	3.54	86	21789	20.28	PPB	97
27) Chloroprene	3.54	53	898643	40.12	PPB	95
28) tert-Butyl Ethyl Ether	3.89	59	240064	10.84	PPB	99
29) 2,2-Dichloropropane	4.12	77	137711	9.95	PPB	97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	114712	10.60	PPB		95
31)	2-Butanone	4.21	72	71146	197.07	PPB	#	67
32)	Propionitrile	4.38	54	19596	42.34	PPB		94
33)	Ethyl Acetate	4.25	61	18216	37.28	PPB		99
34)	Methacrylonitrile	4.52	67	70776	41.16	PPB		92
35)	Bromochloromethane	4.46	128	42742	11.17	PPB		93
36)	Tetrahydrofuran	4.46	71	3458	9.74	PPB		93
37)	Chloroform	4.56	83	190349	10.05	PPB		95
38)	tert-Butyl Formate	4.59	59	23013	10.90	PPB		82
39)	1,1,1-Trichloroethane	4.72	97	176036	11.13	PPB		99
41)	Carbon Tetrachloride	4.89	117	156172	11.01	PPB		96
42)	1,1-Dichloropropene	4.95	75	163742	10.92	PPB		99
43)	Isobutyl Alcohol	5.26	43	41145	393.60	PPB		97
45)	Benzene	5.22	78	474612	11.05	PPB		98
46)	1,2-Dichloroethane	5.36	62	108267	10.95	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	55333	9.87	PPB	#	53
48)	Trichloroethene	6.07	95	120226	10.57	PPB		97
49)	1,2-Dichloropropane	6.40	63	100503	11.26	PPB		96
50)	Dibromomethane	6.53	93	40829	11.54	PPB		92
51)	Methyl methacrylate	6.56	69	30518	10.01	PPB		94
52)	1,4-Dioxane	6.55	88	14576	442.82	PPB		99
53)	Bromodichloromethane	6.73	83	113038	11.04	PPB		98
54)	2-Nitropropane	7.10	43	52977	55.41	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	34585	10.35	PPB		97
56)	cis-1,3-Dichloropropene	7.27	75	127486	11.21	PPB		95
57)	4-Methyl-2-pentanone (MIBK	7.46	58	288359	205.74	PPB		94
59)	Toluene	7.57	92	298609	10.38	PPB		96
61)	n-Octane	7.66	85	40171	9.30	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	88093	11.10	PPB		95
63)	Ethyl methacrylate	7.99	69	63914	10.38	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	48667	10.65	PPB		97
65)	Tetrachloroethene	8.13	164	104117	10.25	PPB		90
66)	2-Hexanone	8.39	57	89907	212.53	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	109377	11.07	PPB		99
68)	Dibromochloromethane	8.49	129	66110	11.05	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	52860	10.93	PPB		96
70)	1-Chlorohexane	9.10	91	157908	10.09	PPB		89
71)	Chlorobenzene	9.11	112	306994	10.67	PPB		97
72)	Ethylbenzene	9.21	106	184254	10.69	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	95270	11.45	PPB		97
74)	m,p-Xylenes	9.34	106	447160	21.14	PPB		93
75)	o-Xylene	9.75	106	210813	10.98	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
76)	Styrene	9.78	103	144112m	10.55 PPB		
77)	Bromoform	9.98	173	31459	10.32 PPB		96
78)	Isopropylbenzene	10.13	105	577931	10.79 PPB		98
79)	cis-1,4-Dichloro-2-butene	10.29	89	19460	35.00 PPB		90
82)	1,1,2,2-Tetrachloroethane	10.53	83	52286	10.09 PPB		93
83)	trans-1,4-Dichloro-2-buten	10.60	53	11625	8.63 PPB	#	55
84)	Bromobenzene	10.45	156	119850	10.47 PPB		99
85)	n-Propylbenzene	10.55	91	662757	10.04 PPB		99
86)	1,2,3-Trichloropropane	10.57	110	17336	10.27 PPB		97
87)	2-Chlorotoluene	10.65	91	379164	10.00 PPB		98
88)	1,3,5-Trimethylbenzene	10.75	105	468351	10.47 PPB		97
89)	4-Chlorotoluene	10.77	91	430835	10.04 PPB		98
90)	tert-Butylbenzene	11.06	119	422202	10.15 PPB		96
91)	1,2,4-Trimethylbenzene	11.13	105	459299	10.94 PPB		99
92)	sec-Butylbenzene	11.29	105	579322	10.49 PPB		99
93)	p-Isopropyltoluene	11.44	119	524015	10.81 PPB		100
94)	1,3-Dichlorobenzene	11.42	146	243972	10.13 PPB		96
95)	1,4-Dichlorobenzene	11.52	146	239462	10.14 PPB		98
96)	n-Butylbenzene	11.86	91	444455	10.92 PPB		98
97)	1,2-Dichlorobenzene	11.89	146	209640	10.47 PPB		97
98)	1,2-Dibromo-3-chloropropan	12.57	155	6502	9.86 PPB		85
99)	1,3,5-Trichlorobenzene	12.67	180	197683	9.89 PPB		95
100)	1,2,4-Trichlorobenzene	13.12	180	153394	11.02 PPB		99
101)	Hexachlorobutadiene	13.21	225	90689	9.08 PPB		98
102)	Naphthalene	13.30	128	208325	12.83 PPB		99
103)	1,2,3-Trichlorobenzene	13.49	180	128067	11.05 PPB		98

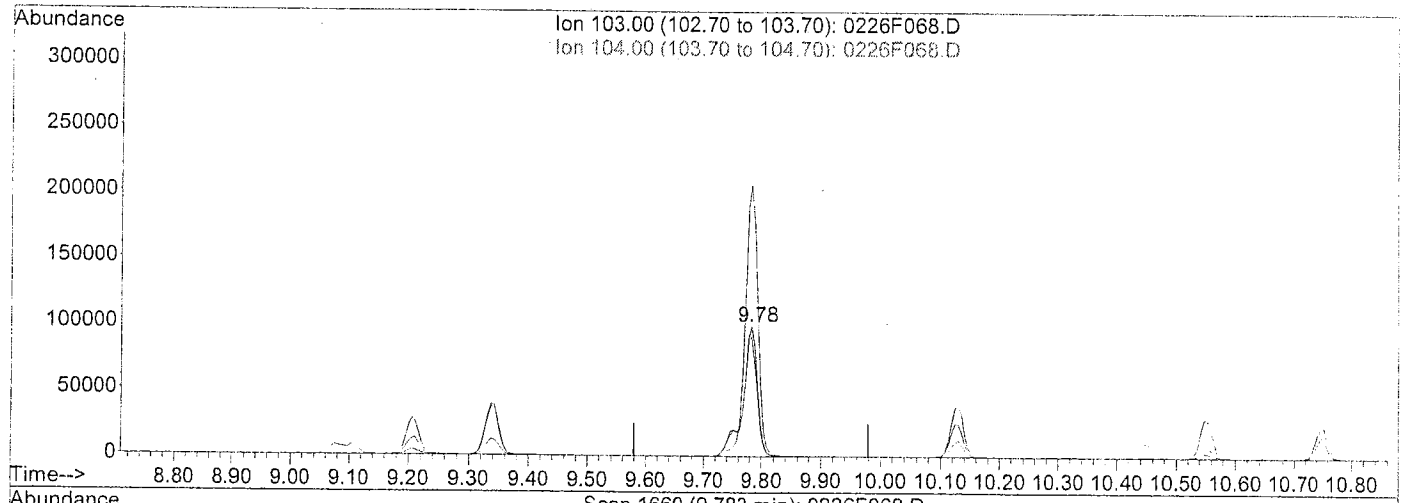
(#) = qualifier out of range (m) = manual integration

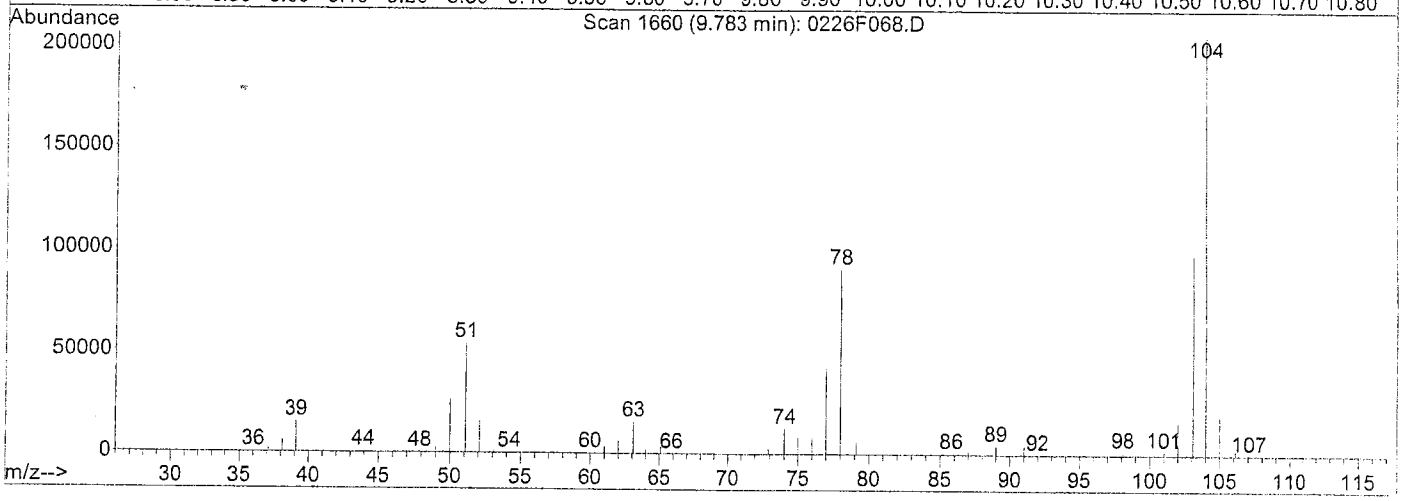
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F068.D

(76) Styrene (T)

9.78min 12.83PPB

response 175178

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

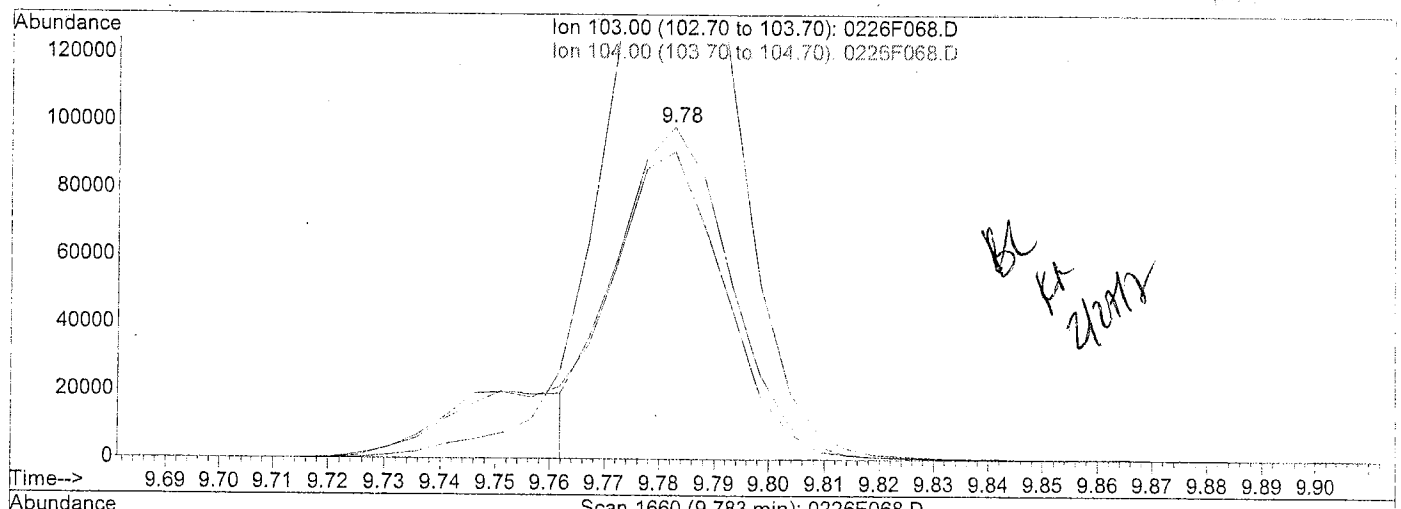
0226F068.D 022607.M Tue Feb 27 06:27:11 2007

Quantitation Report (Qedit)

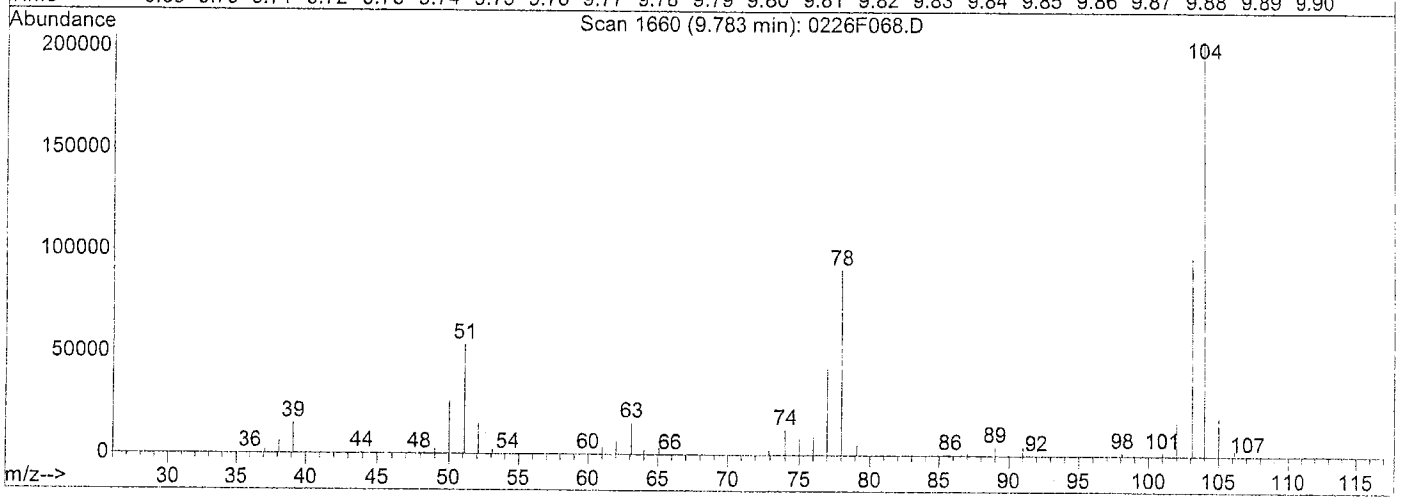
Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



BL
KA
2/28/07



TIC: 0226F068.D

(76) Styrene (T)

9.78min 10.55PPB m

response 144112

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

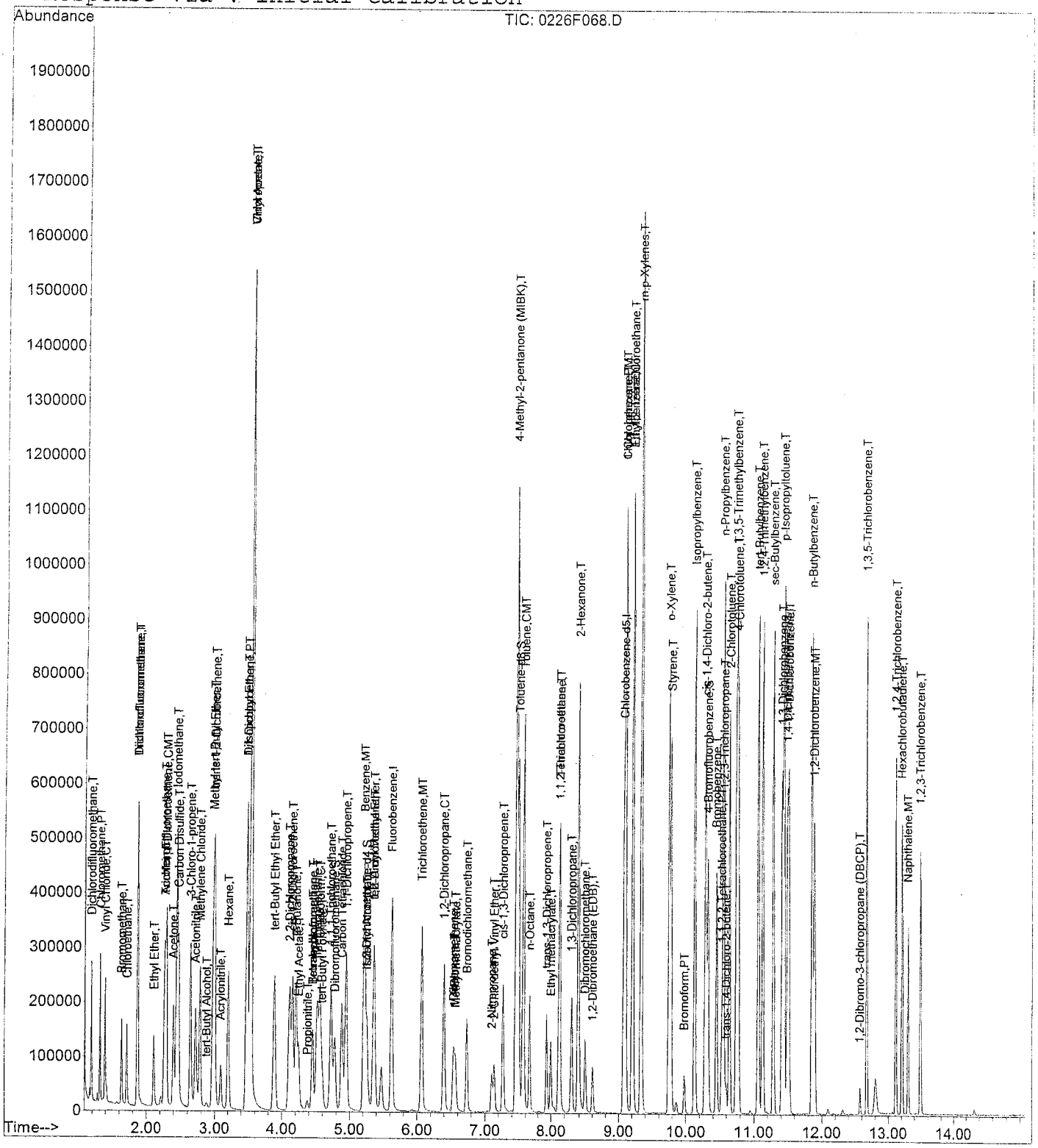
2/27/7

0226F068.D 022607.M Tue Feb 27 06:27:19 2007

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F069.D
Acq On : 26 Feb 2007 9:47 pm
Sample : 8260 ICAL 20
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007

Vial: 17
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KA 2/27/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	404000	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	152766	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	146402	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	188379	23.77	PPB	0.00
Spiked Amount 10.000			Recovery = 237.70%			
44) 1,2-Dichloroethane-d4	5.25	65	179179	23.32	PPB	0.00
Spiked Amount 10.000			Recovery = 233.20%			
58) Toluene-d8	7.50	98	841502	21.90	PPB	0.00
Spiked Amount 10.000			Recovery = 219.00%			
80) 4-Bromofluorobenzene	10.32	95	284208	19.42	PPB	0.00
Spiked Amount 10.000			Recovery = 194.20%			

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	251781	22.44	PPB		98
3) Chloromethane	1.32	50	288850	19.26	PPB		99
4) Vinyl Chloride	1.39	62	273300	21.56	PPB		99
5) Bromomethane	1.64	96	130110	15.88	PPB		100
6) Chloroethane	1.71	64	169615	19.83	PPB		96
7) Dichlorofluoromethane	1.87	67	413532	18.83	PPB		100
8) Trichlorofluoromethane	1.87	101	380748	20.42	PPB		99
9) Ethyl Ether	2.11	59	117224	21.45	PPB		94
10) Acrolein	2.27	56	73144	193.67	PPB		99
11) Trichlorotrifluoroethane	2.27	151	175629	19.71	PPB		98
12) 1,1-Dichloroethene	2.30	96	197800	19.72	PPB		86
13) Acetone	2.40	43	438861	419.54	PPB		97
14) Iodomethane	2.44	142	970573	79.73	PPB		97
15) Carbon Disulfide	2.47	76	643649	21.21	PPB		98
16) 3-Chloro-1-propene	2.64	76	110470	20.43	PPB	#	67
17) Acetonitrile	2.72	40	221617	883.27	PPB		97
18) Methylene Chloride	2.78	84	198973	20.39	PPB		93
19) tert-Butyl Alcohol	2.88	59	22854	90.09	PPB		98
20) Acrylonitrile	3.09	53	119423	89.00	PPB		96
21) Methyl tert-Butyl Ether	2.98	73	745870	45.15	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	235441	20.98	PPB		99
23) Hexane	3.20	57	230837	19.10	PPB		99
24) Diisopropyl Ether	3.48	45	678998	21.81	PPB		95
25) 1,1-Dichloroethane	3.48	63	424269	22.60	PPB		100
26) Vinyl Acetate	3.54	86	49076	45.67	PPB	#	86
27) Chloroprene	3.54	53	1843352	82.26	PPB		96
28) tert-Butyl Ethyl Ether	3.89	59	494037	22.30	PPB		98
29) 2,2-Dichloropropane	4.12	77	300852	21.72	PPB		98

(#) = qualifier out of range (m) = manual integration

2/27/7

Data File : J:\MS18\DATA\022607A\0226F069.D
Acq On : 26 Feb 2007 9:47 pm
Sample : 8260 ICAL 20
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007

Vial: 17
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	239408	22.12	PPB		95
31)	2-Butanone	4.21	72	160136	443.36	PPB		90
32)	Propionitrile	4.38	54	41737	90.13	PPB		97
33)	Ethyl Acetate	4.25	61	39809	81.44	PPB		97
34)	Methacrylonitrile	4.52	67	151813	88.25	PPB		96
35)	Bromochloromethane	4.46	128	89077	23.26	PPB		92
36)	Tetrahydrofuran	4.45	71	7772	21.89	PPB	#	80
37)	Chloroform	4.56	83	395072	20.84	PPB		99
38)	tert-Butyl Formate	4.59	59	53775	25.46	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	369336	23.34	PPB		99
41)	Carbon Tetrachloride	4.88	117	327305	23.06	PPB		99
42)	1,1-Dichloropropene	4.95	75	336645	22.45	PPB		100
43)	Isobutyl Alcohol	5.25	43	91945	879.15	PPB		94
45)	Benzene	5.22	78	958304	22.30	PPB		98
46)	1,2-Dichloroethane	5.36	62	225340	22.77	PPB		97
47)	tert-Amyl Methyl Ether	5.37	55	107401	19.15	PPB	#	66
48)	Trichloroethene	6.07	95	240905	21.18	PPB		96
49)	1,2-Dichloropropane	6.40	63	208455	23.33	PPB		98
50)	Dibromomethane	6.53	93	83298	23.53	PPB		95
51)	Methyl methacrylate	6.56	69	65492	21.47	PPB		94
52)	1,4-Dioxane	6.55	88	29639	900.01	PPB		97
53)	Bromodichloromethane	6.73	83	238884	23.32	PPB		99
54)	2-Nitropropane	7.10	43	122870	128.44	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	74844	22.38	PPB		92
56)	cis-1,3-Dichloropropene	7.27	75	277916	24.43	PPB		97
57)	4-Methyl-2-pentanone (MIBK	7.46	58	630278	449.49	PPB		93
59)	Toluene	7.57	92	613345	21.31	PPB		96
61)	n-Octane	7.66	85	77478	17.81	PPB		95
62)	trans-1,3-Dichloropropene	7.93	75	199775	25.02	PPB		98
63)	Ethyl methacrylate	7.99	69	140803	22.71	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	102351	22.25	PPB		96
65)	Tetrachloroethene	8.13	164	214152	20.94	PPB		96
66)	2-Hexanone	8.39	57	195901	460.05	PPB		92
67)	1,3-Dichloropropane	8.29	76	229985	23.11	PPB		98
68)	Dibromochloromethane	8.49	129	145562	24.18	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	115379	23.70	PPB		99
70)	1-Chlorohexane	9.10	91	323339	20.53	PPB		89
71)	Chlorobenzene	9.11	112	632153	21.83	PPB		98
72)	Ethylbenzene	9.21	106	376732	21.71	PPB		93
73)	1,1,1,2-Tetrachloroethane	9.22	131	201867	24.11	PPB		98
74)	m,p-Xylenes	9.34	106	922761	43.33	PPB		94
75)	o-Xylene	9.75	106	434500	22.49	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

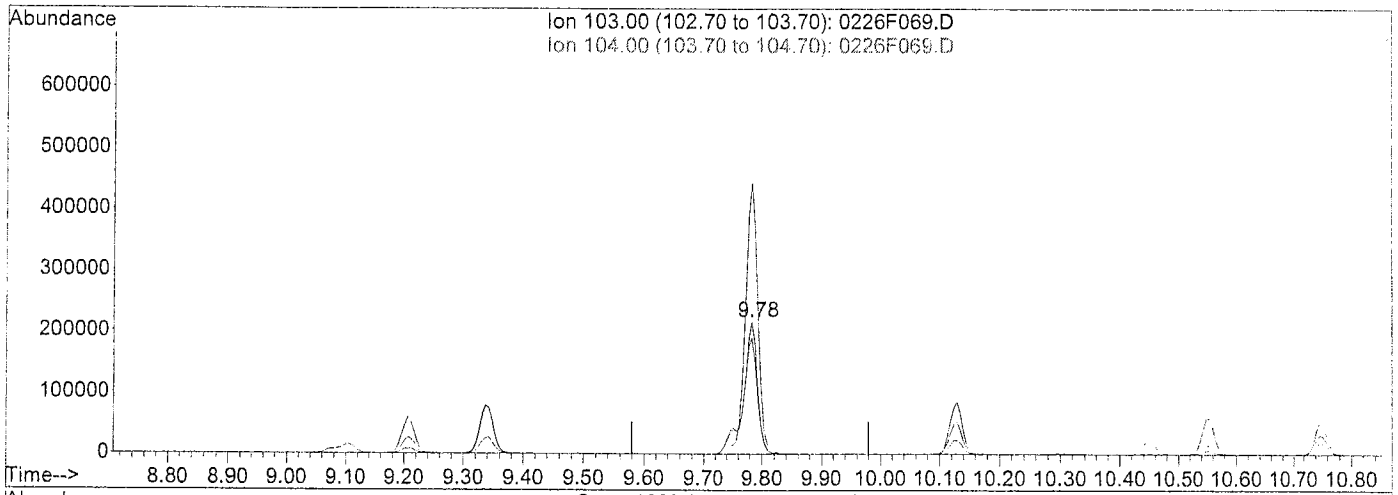
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

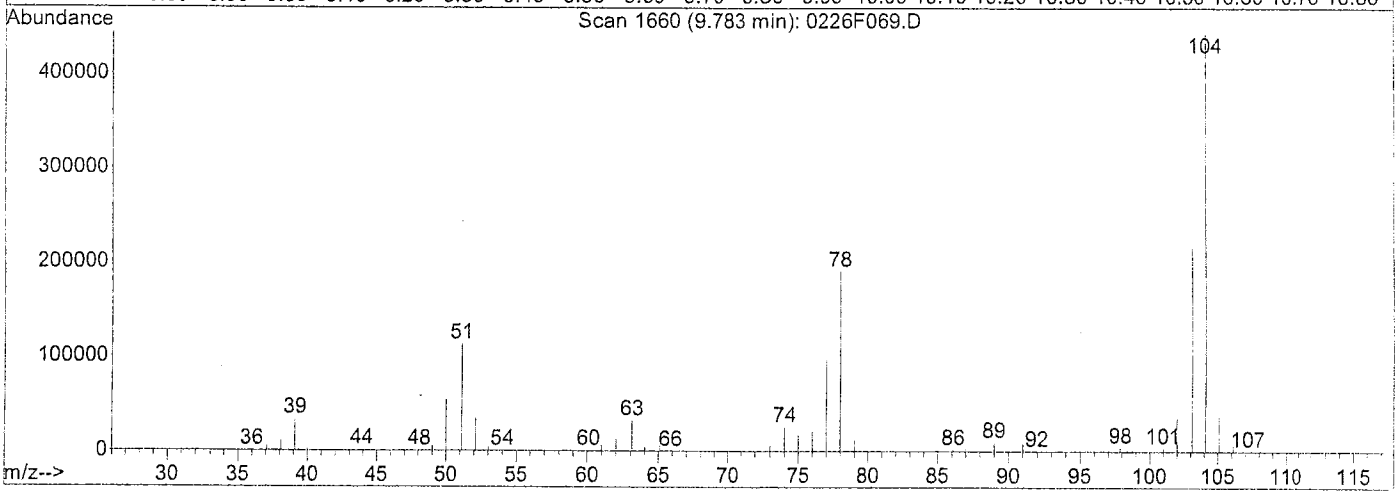
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76)	Styrene	9.78	103	319396m	23.23 PPB	
77)	Bromoform	9.98	173	73841	24.07 PPB	99
78)	Isopropylbenzene	10.13	105	1180375	21.89 PPB	98
79)	cis-1,4-Dichloro-2-butene	10.29	89	48129	86.00 PPB	97
82)	1,1,2,2-Tetrachloroethane	10.53	83	114731	21.78 PPB	99
83)	trans-1,4-Dichloro-2-buten	10.60	53	25259	18.46 PPB	78
84)	Bromobenzene	10.45	156	248622	21.38 PPB	93
85)	n-Propylbenzene	10.55	91	1399366	20.87 PPB	99
86)	1,2,3-Trichloropropane	10.56	110	35736	20.84 PPB	91
87)	2-Chlorotoluene	10.65	91	789652	20.49 PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	980089	21.57 PPB	99
89)	4-Chlorotoluene	10.77	91	901906	20.68 PPB	97
90)	tert-Butylbenzene	11.06	119	882711	20.89 PPB	95
91)	1,2,4-Trimethylbenzene	11.13	105	961827	22.54 PPB	97
92)	sec-Butylbenzene	11.29	105	1200545	21.39 PPB	99
93)	p-Isopropyltoluene	11.44	119	1104810	22.43 PPB	99
94)	1,3-Dichlorobenzene	11.41	146	513687	21.00 PPB	97
95)	1,4-Dichlorobenzene	11.52	146	497315	20.73 PPB	100
96)	n-Butylbenzene	11.86	91	942987	22.80 PPB	99
97)	1,2-Dichlorobenzene	11.90	146	434951	21.38 PPB	98
98)	1,2-Dibromo-3-chloropropan	12.57	155	15260	22.78 PPB	93
99)	1,3,5-Trichlorobenzene	12.67	180	406644	20.02 PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	320907	22.68 PPB	99
101)	Hexachlorobutadiene	13.21	225	190357	18.75 PPB	98
102)	Naphthalene	13.30	128	437530	26.52 PPB	99
103)	1,2,3-Trichlorobenzene	13.49	180	269904	22.92 PPB	98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 26.87PPB

response 369439

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

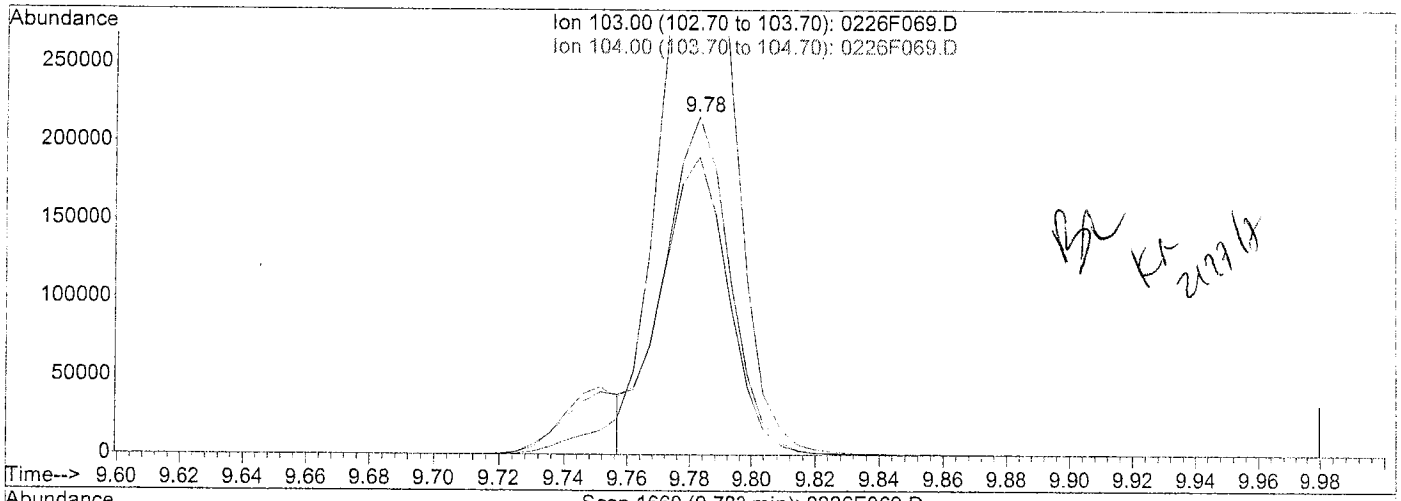
0226F069.D 022607.M Tue Feb 27 06:44:42 2007

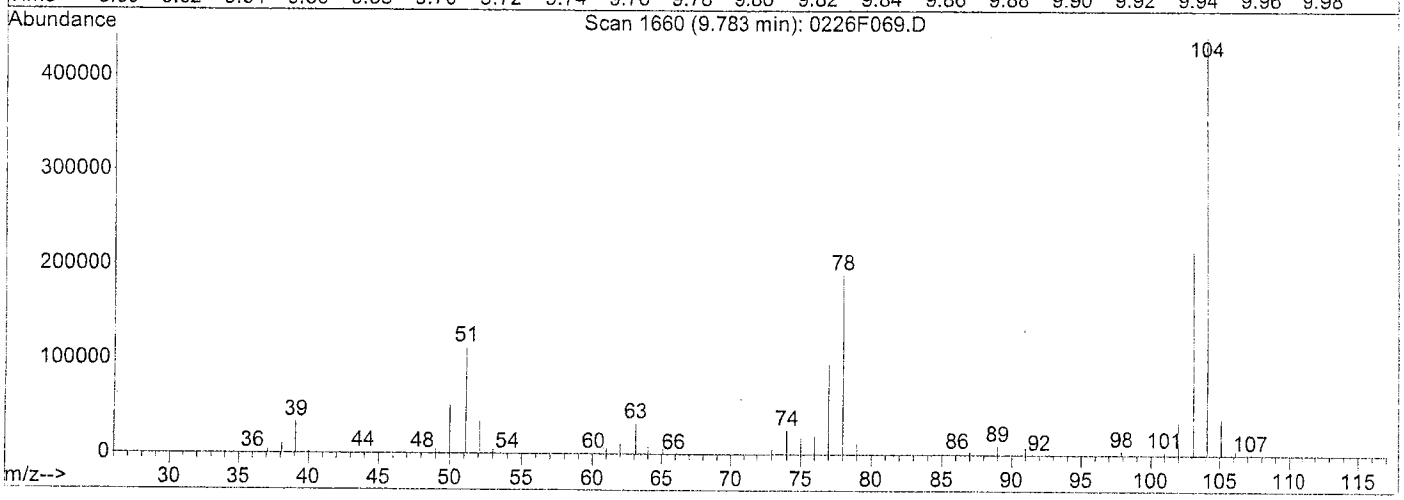
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F069.D
Acq On : 26 Feb 2007 9:47 pm
Sample : 8260 ICAL 20
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007

Vial: 17
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 23.23PPB m

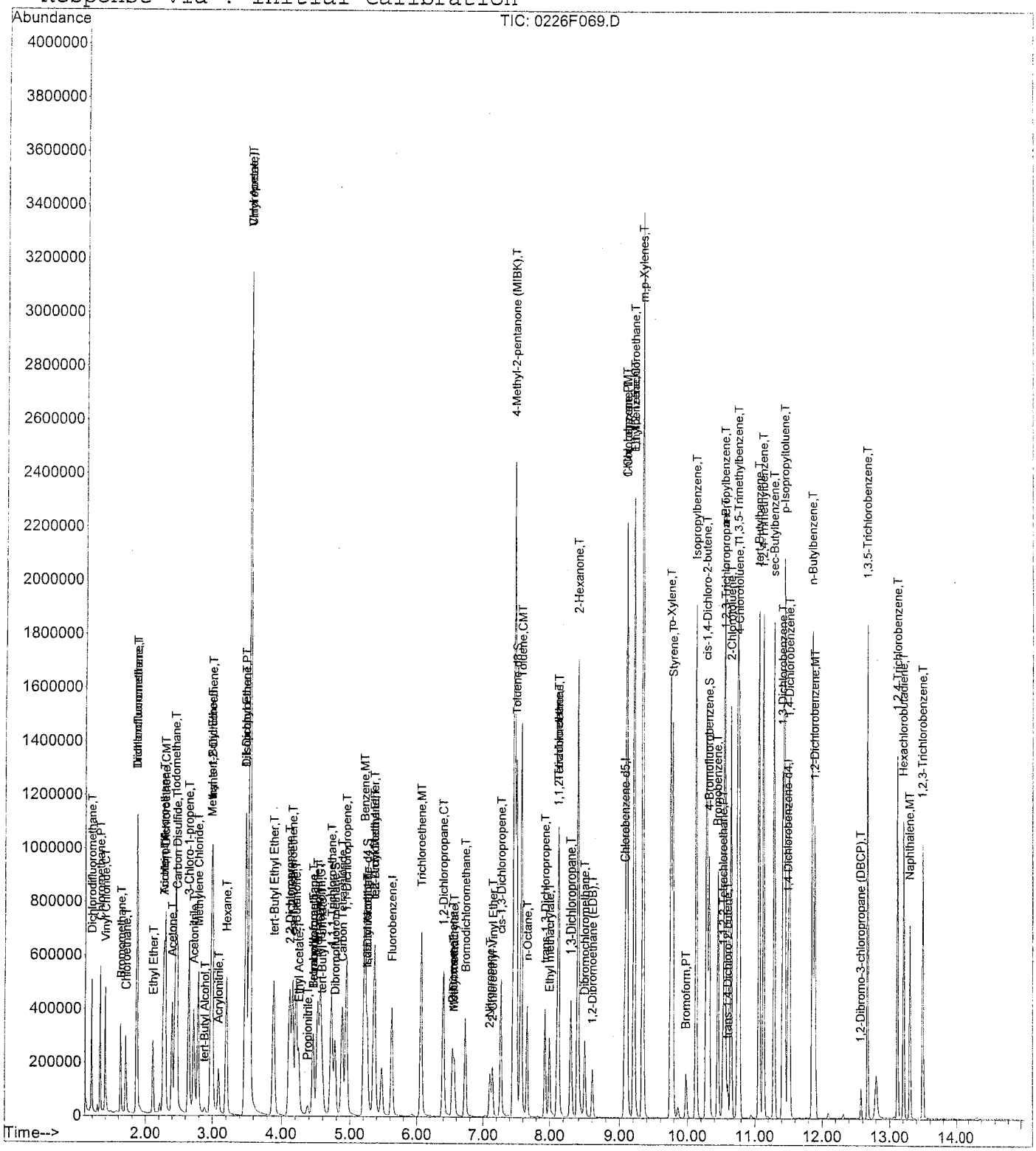
response 319396

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

0226F069.D 022607.M Tue Feb 27 06:44:48 2007

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	408340	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	154956	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	149638	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	383411	47.87	PPB	0.00
Spiked Amount 10.000			Recovery	=	478.70%	
44) 1,2-Dichloroethane-d4	5.25	65	359350	46.28	PPB	0.00
Spiked Amount 10.000			Recovery	=	462.80%	
58) Toluene-d8	7.50	98	1735727	44.70	PPB	0.00
Spiked Amount 10.000			Recovery	=	447.00%	
80) 4-Bromofluorobenzene	10.32	95	576553	38.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	388.40%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	494660	43.62	PPB		97
3) Chloromethane	1.32	50	583158	38.47	PPB		99
4) Vinyl Chloride	1.39	62	547371	42.72	PPB		100
5) Bromomethane	1.63	96	261612	31.59	PPB		99
6) Chloroethane	1.71	64	343613	39.75	PPB		97
7) Dichlorofluoromethane	1.87	67	834811	37.61	PPB		98
8) Trichlorofluoromethane	1.87	101	760627	40.35	PPB		99
9) Ethyl Ether	2.10	59	222343	40.26	PPB		91
10) Acrolein	2.26	56	168883	442.41	PPB		98
11) Trichlorotrifluoroethane	2.27	151	355258	39.45	PPB		98
12) 1,1-Dichloroethene	2.30	96	404508	39.90	PPB		86
13) Acetone	2.40	43	839861	794.36	PPB		98
14) Iodomethane	2.44	142	2090150	169.87	PPB		98
15) Carbon Disulfide	2.47	76	1298763	42.34	PPB		98
16) 3-Chloro-1-propene	2.64	76	245272	44.87	PPB	#	67
17) Acetonitrile	2.72	40	430769	1698.62	PPB		99
18) Methylene Chloride	2.78	84	395964	40.15	PPB		96
19) tert-Butyl Alcohol	2.88	59	45520	177.54	PPB		97
20) Acrylonitrile	3.09	53	229934	169.54	PPB		98
21) Methyl tert-Butyl Ether	2.98	73	1451099	86.91	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	473012	41.71	PPB		99
23) Hexane	3.20	57	462591	37.87	PPB		96
24) Diisopropyl Ether	3.48	45	1354656	43.06	PPB		95
25) 1,1-Dichloroethane	3.48	63	840085	44.27	PPB		99
26) Vinyl Acetate	3.53	86	96291	88.65	PPB		99
27) Chloroprene	3.53	53	3687501	162.81	PPB		95
28) tert-Butyl Ethyl Ether	3.89	59	967085	43.18	PPB		99
29) 2,2-Dichloropropane	4.12	77	633257	45.23	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	472231	43.17	PPB		95
31)	2-Butanone	4.20	72	316468	866.88	PPB	#	78
32)	Propionitrile	4.37	54	79415	169.67	PPB		97
33)	Ethyl Acetate	4.25	61	80083	162.09	PPB		98
34)	Methacrylonitrile	4.52	67	293112	168.58	PPB		90
35)	Bromochloromethane	4.46	128	174712	45.13	PPB		92
36)	Tetrahydrofuran	4.45	71	14144	39.41	PPB	#	77
37)	Chloroform	4.56	83	784363	40.94	PPB		96
38)	tert-Butyl Formate	4.59	59	110313	51.67	PPB		90
39)	1,1,1-Trichloroethane	4.72	97	741046	46.32	PPB		98
41)	Carbon Tetrachloride	4.89	117	677066	47.19	PPB		99
42)	1,1-Dichloropropene	4.95	75	666225	43.95	PPB		98
43)	Isobutyl Alcohol	5.25	43	190308	1800.32	PPB		97
45)	Benzene	5.22	78	1904128	43.84	PPB		98
46)	1,2-Dichloroethane	5.36	62	444170	44.41	PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	206493	36.42	PPB	#	72
48)	Trichloroethene	6.07	95	483438	42.05	PPB		96
49)	1,2-Dichloropropane	6.40	63	417005	46.18	PPB		96
50)	Dibromomethane	6.53	93	164695	46.03	PPB		96
51)	Methyl methacrylate	6.56	69	131319	42.60	PPB		94
52)	1,4-Dioxane	6.55	88	57475	1726.72	PPB		90
53)	Bromodichloromethane	6.73	83	489803	47.31	PPB		100
54)	2-Nitropropane	7.10	43	253942	262.64	PPB		99
55)	2-Chloroethyl Vinyl Ether	7.14	63	149151	44.13	PPB		95
56)	cis-1,3-Dichloropropene	7.27	75	575560	50.06	PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	1210959	854.43	PPB		92
59)	Toluene	7.57	92	1217873	41.87	PPB		94
61)	n-Octane	7.66	85	155800	35.32	PPB		91
62)	trans-1,3-Dichloropropene	7.93	75	423202	52.24	PPB		97
63)	Ethyl methacrylate	7.99	69	275946	43.88	PPB		93
64)	1,1,2-Trichloroethane	8.12	83	200133	42.89	PPB		97
65)	Tetrachloroethene	8.13	164	428462	41.29	PPB		92
66)	2-Hexanone	8.39	57	374270	866.50	PPB	#	85
67)	1,3-Dichloropropane	8.29	76	443110	43.90	PPB		98
68)	Dibromochloromethane	8.49	129	298550	48.89	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	223907	45.34	PPB		94
70)	1-Chlorohexane	9.10	91	661499	41.40	PPB		87
71)	Chlorobenzene	9.11	112	1263933	43.02	PPB		97
72)	Ethylbenzene	9.21	106	763789	43.38	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	414717	48.83	PPB		97
74)	m,p-Xylenes	9.34	106	1877827	86.94	PPB		97
75)	o-Xylene	9.75	106	871078	44.44	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	617063m	44.25	PPB	
77)	Bromoform	9.98	173	153674	49.38	PPB	99
78)	Isopropylbenzene	10.13	105	2400165	43.89	PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	109155	192.29	PPB	100
82)	1,1,2,2-Tetrachloroethane	10.53	83	217182	40.34	PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	51947	37.14	PPB	76
84)	Bromobenzene	10.45	156	505063	42.49	PPB	95
85)	n-Propylbenzene	10.55	91	2821346	41.16	PPB	99
86)	1,2,3-Trichloropropane	10.57	110	69664	39.74	PPB	96
87)	2-Chlorotoluene	10.65	91	1577210	40.04	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	1982759	42.69	PPB	98
89)	4-Chlorotoluene	10.77	91	1819917	40.82	PPB	97
90)	tert-Butylbenzene	11.06	119	1794894	41.56	PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	1940125	44.49	PPB	99
92)	sec-Butylbenzene	11.29	105	2439847	42.53	PPB	98
93)	p-Isopropyltoluene	11.44	119	2236777	44.44	PPB	99
94)	1,3-Dichlorobenzene	11.42	146	1024740	40.98	PPB	97
95)	1,4-Dichlorobenzene	11.52	146	985791	40.19	PPB	97
96)	n-Butylbenzene	11.86	91	1899413	44.93	PPB	99
97)	1,2-Dichlorobenzene	11.90	146	864664	41.57	PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	31100	45.41	PPB	89
99)	1,3,5-Trichlorobenzene	12.68	180	827481	39.85	PPB	100
100)	1,2,4-Trichlorobenzene	13.12	180	638434	44.14	PPB	100
101)	Hexachlorobutadiene	13.21	225	384198	37.03	PPB	98
102)	Naphthalene	13.30	128	867573	51.44	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	524588	43.59	PPB	98

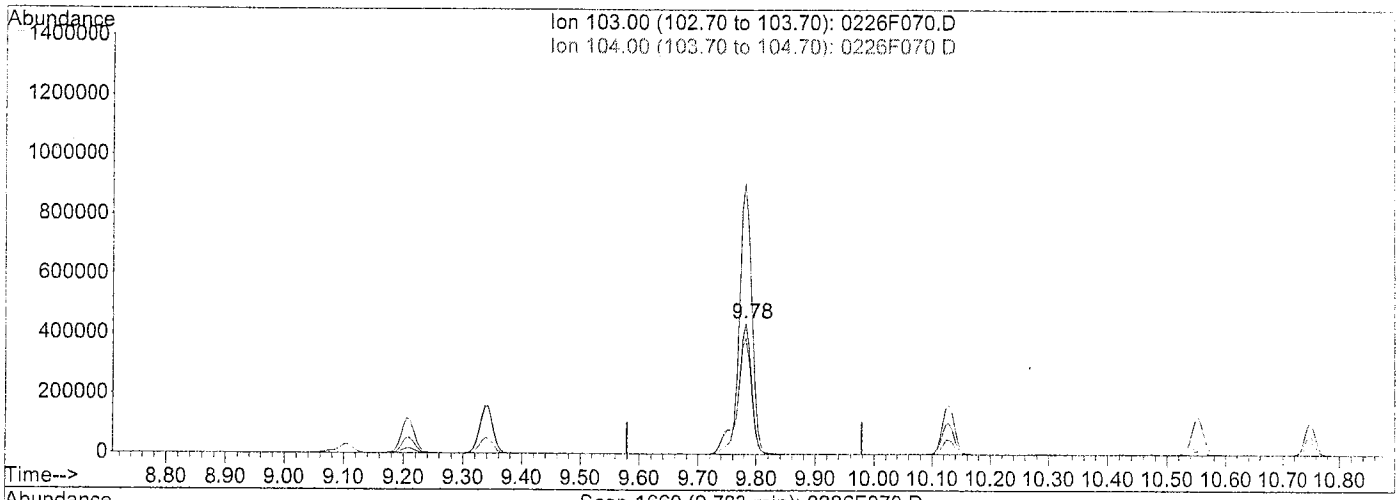
(#) = qualifier out of range (m) = manual integration

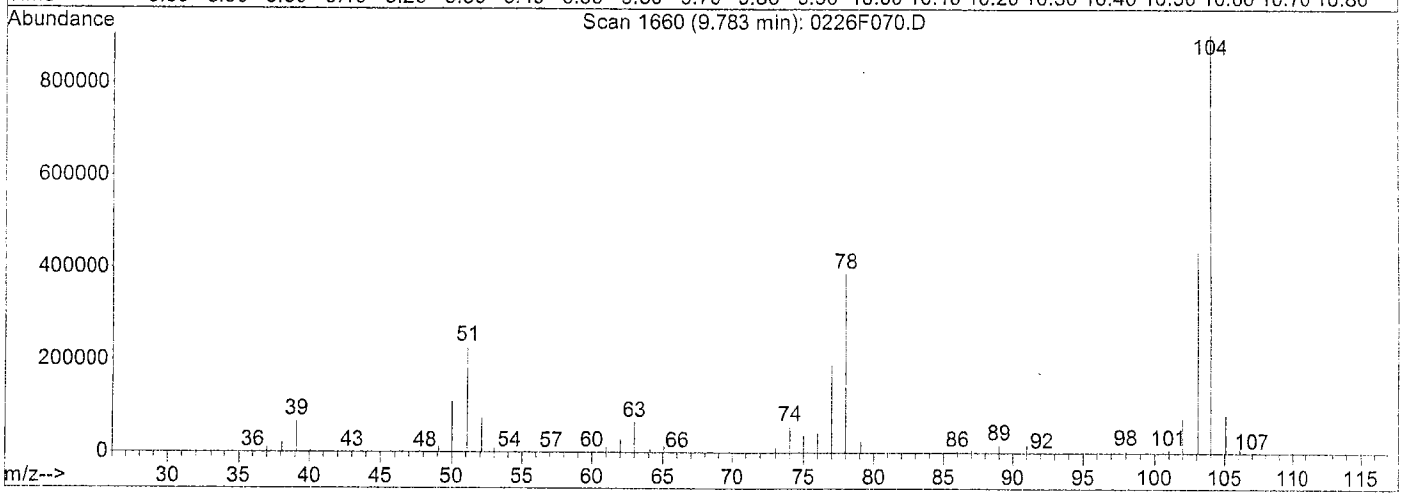
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 53.21PPB

response 741975

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

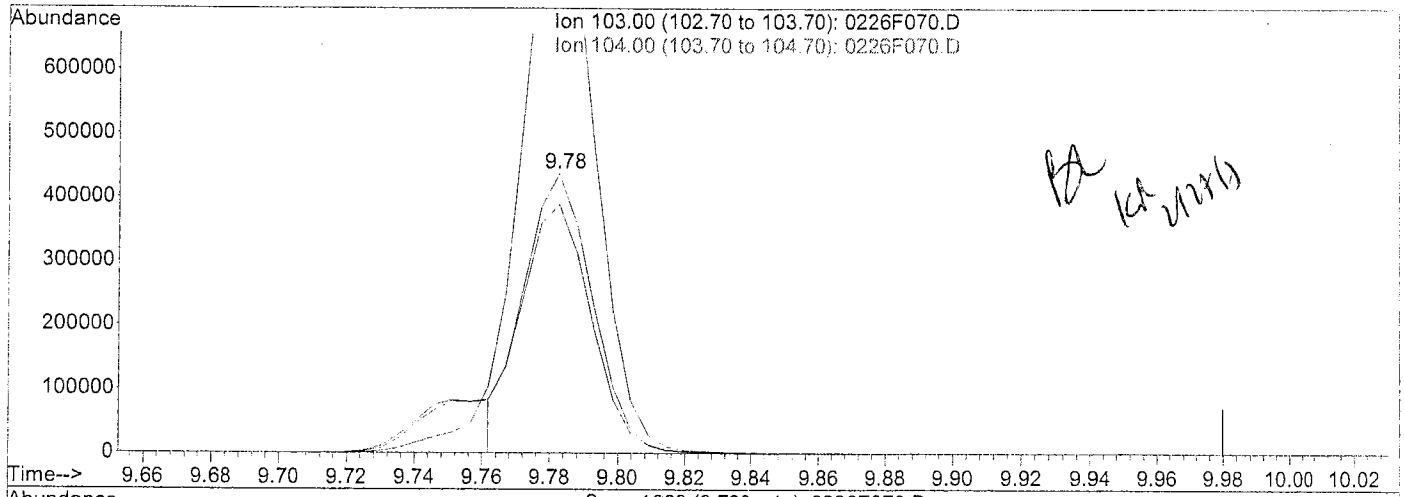
0226F070.D 022607.M Tue Feb 27 06:45:48 2007

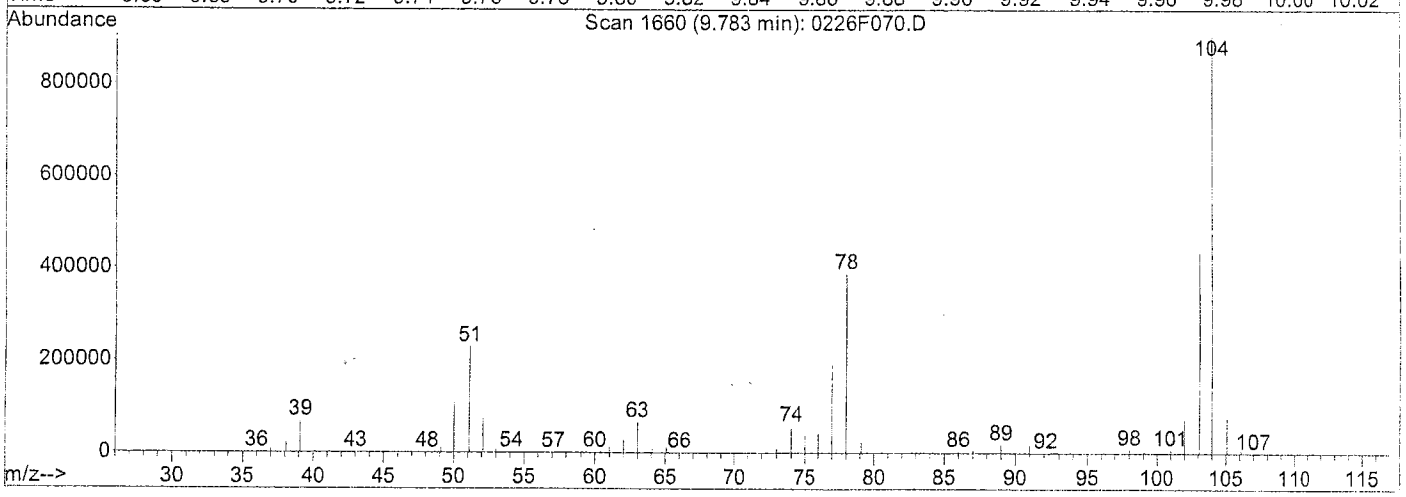
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 44.25PPB m

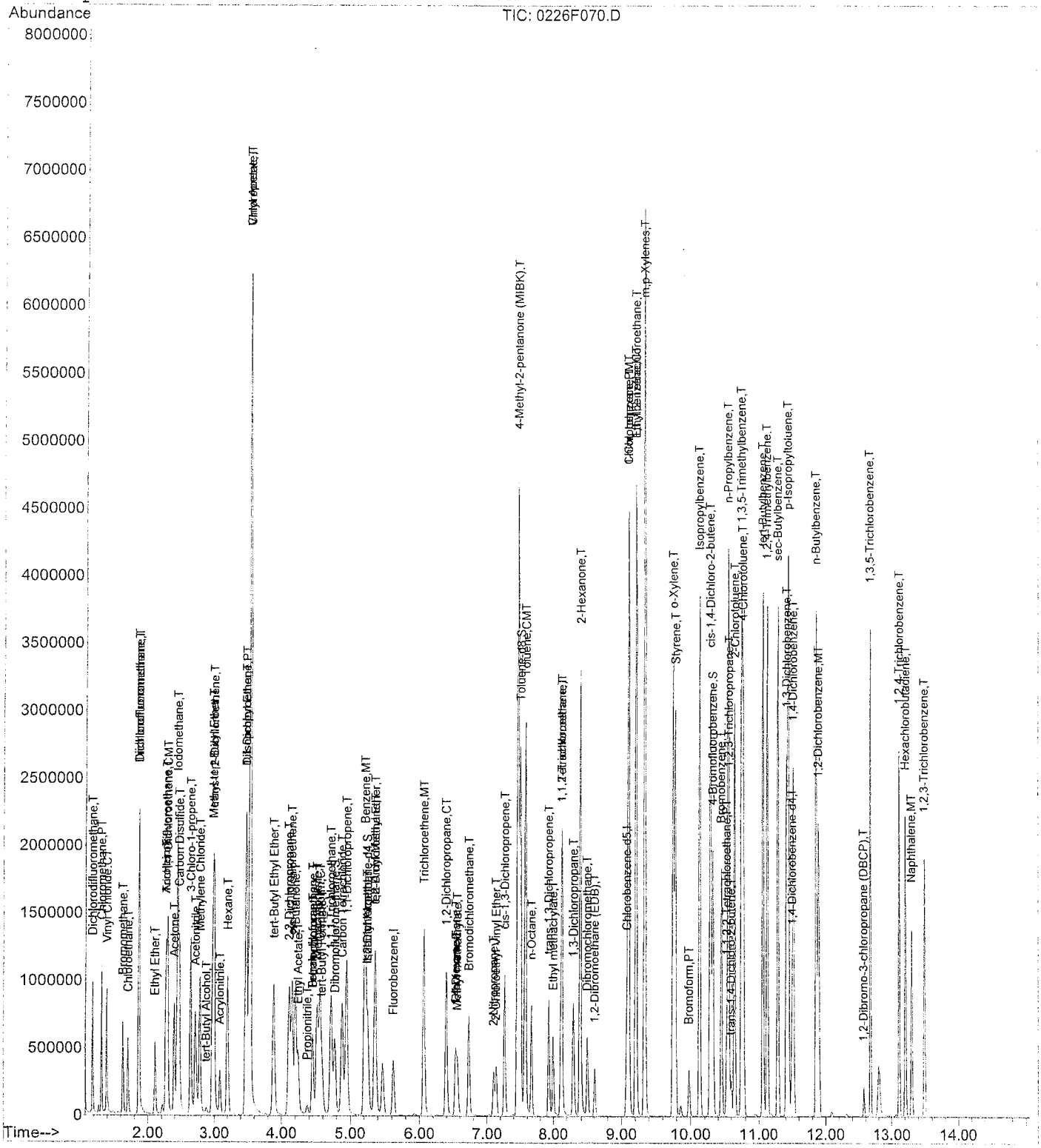
response 617063

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

0226F070.D 022607.M Tue Feb 27 06:45:54 2007

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KA 2/27/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	415821	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	160857	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	154573	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	485455	59.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	595.20%	
44) 1,2-Dichloroethane-d4	5.25	65	462401	58.48	PPB	0.00
Spiked Amount 10.000			Recovery	=	584.80%	
58) Toluene-d8	7.50	98	2150656	54.39	PPB	0.00
Spiked Amount 10.000			Recovery	=	543.90%	
80) 4-Bromofluorobenzene	10.32	95	732272	47.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	475.20%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	771161	66.78	PPB		98
3) Chloromethane	1.32	50	912514	59.11	PPB		99
4) Vinyl Chloride	1.39	62	853270	65.39	PPB		99
5) Bromomethane	1.63	96	391996	46.48	PPB		98
6) Chloroethane	1.71	64	511647	58.13	PPB		97
7) Dichlorofluoromethane	1.87	67	1285506	56.87	PPB		98
8) Trichlorofluoromethane	1.87	101	1192858	62.14	PPB		98
9) Ethyl Ether	2.10	59	362132	64.39	PPB		92
10) Acrolein	2.27	56	402935	1036.55	PPB		97
11) Trichlorotrifluoroethane	2.27	151	548307	59.80	PPB		97
12) 1,1-Dichloroethene	2.30	96	626435	60.67	PPB		87
13) Acetone	2.40	43	1833503	1702.96	PPB		97
14) Iodomethane	2.44	142	3236317	258.29	PPB		97
15) Carbon Disulfide	2.47	76	2047070	65.54	PPB		98
16) 3-Chloro-1-propene	2.64	76	381640	68.56	PPB	#	70
17) Acetonitrile	2.72	40	717032	2776.55	PPB		98
18) Methylene Chloride	2.78	84	610000	60.75	PPB		91
19) tert-Butyl Alcohol	2.88	59	76488	292.95	PPB		97
20) Acrylonitrile	3.09	53	372157	269.47	PPB		97
21) Methyl tert-Butyl Ether	2.98	73	2349933	138.22	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	731872	63.37	PPB		100
23) Hexane	3.20	57	734030	59.01	PPB		98
24) Diisopropyl Ether	3.48	45	2134700	66.63	PPB		95
25) 1,1-Dichloroethane	3.48	63	1289688	66.74	PPB		99
26) Vinyl Acetate	3.54	86	161541	146.04	PPB		94
27) Chloroprene	3.54	53	5767667	250.08	PPB		97
28) tert-Butyl Ethyl Ether	3.89	59	1555832	68.22	PPB		99
29) 2,2-Dichloropropane	4.12	77	1014659	71.16	PPB		98

(#) = qualifier out of range (m) = manual integration

2/27/7

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	739836	66.41	PPB		96
31)	2-Butanone	4.20	72	686351	1846.26	PPB	#	77
32)	Propionitrile	4.38	54	131349	275.58	PPB		97
33)	Ethyl Acetate	4.25	61	134819	267.96	PPB		97
34)	Methacrylonitrile	4.52	67	472009	266.59	PPB		93
35)	Bromochloromethane	4.46	128	280391	71.13	PPB		91
36)	Tetrahydrofuran	4.45	71	23371	63.95	PPB	#	80
37)	Chloroform	4.56	83	1207312	61.89	PPB		98
38)	tert-Butyl Formate	4.59	59	193716	89.10	PPB		90
39)	1,1,1-Trichloroethane	4.72	97	1162545	71.37	PPB		99
41)	Carbon Tetrachloride	4.89	117	1057872	72.40	PPB		97
42)	1,1-Dichloropropene	4.95	75	1040919	67.43	PPB		99
43)	Isobutyl Alcohol	5.25	43	309754	2877.57	PPB		96
45)	Benzene	5.22	78	2953716	66.78	PPB		97
46)	1,2-Dichloroethane	5.36	62	697690	68.50	PPB		97
47)	tert-Amyl Methyl Ether	5.37	55	326295	56.51	PPB	#	78
48)	Trichloroethene	6.07	95	743445	63.50	PPB		96
49)	1,2-Dichloropropane	6.40	63	652453	70.96	PPB		98
50)	Dibromomethane	6.53	93	262921	72.16	PPB		96
51)	Methyl methacrylate	6.56	69	215476	68.64	PPB		90
52)	1,4-Dioxane	6.55	88	89504	2640.59	PPB		92
53)	Bromodichloromethane	6.73	83	777000	73.70	PPB		99
54)	2-Nitropropane	7.10	43	424171	430.81	PPB		100
55)	2-Chloroethyl Vinyl Ether	7.14	63	239992	69.73	PPB		95
56)	cis-1,3-Dichloropropene	7.27	75	918958	78.50	PPB		95
57)	4-Methyl-2-pentanone (MIBK	7.46	58	2643593	1831.71	PPB		91
59)	Toluene	7.57	92	1898584	64.10	PPB		95
61)	n-Octane	7.66	85	244931	53.48	PPB		95
62)	trans-1,3-Dichloropropene	7.93	75	692971	82.41	PPB		97
63)	Ethyl methacrylate	7.99	69	453399	69.46	PPB		90
64)	1,1,2-Trichloroethane	8.12	83	318709	65.80	PPB		98
65)	Tetrachloroethene	8.13	164	665882	61.82	PPB		94
66)	2-Hexanone	8.39	57	824666	1839.21	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	708214	67.60	PPB		99
68)	Dibromochloromethane	8.49	129	479455	75.64	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	361743	70.56	PPB		97
70)	1-Chlorohexane	9.10	91	1052218	63.43	PPB		95
71)	Chlorobenzene	9.11	112	1977099	64.83	PPB		97
72)	Ethylbenzene	9.21	106	1192950	65.27	PPB		98
73)	1,1,1,2-Tetrachloroethane	9.22	131	649223	73.64	PPB		99
74)	m,p-Xylenes	9.34	106	2941646	131.20	PPB		97
75)	o-Xylene	9.75	106	1355348	66.62	PPB		95

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

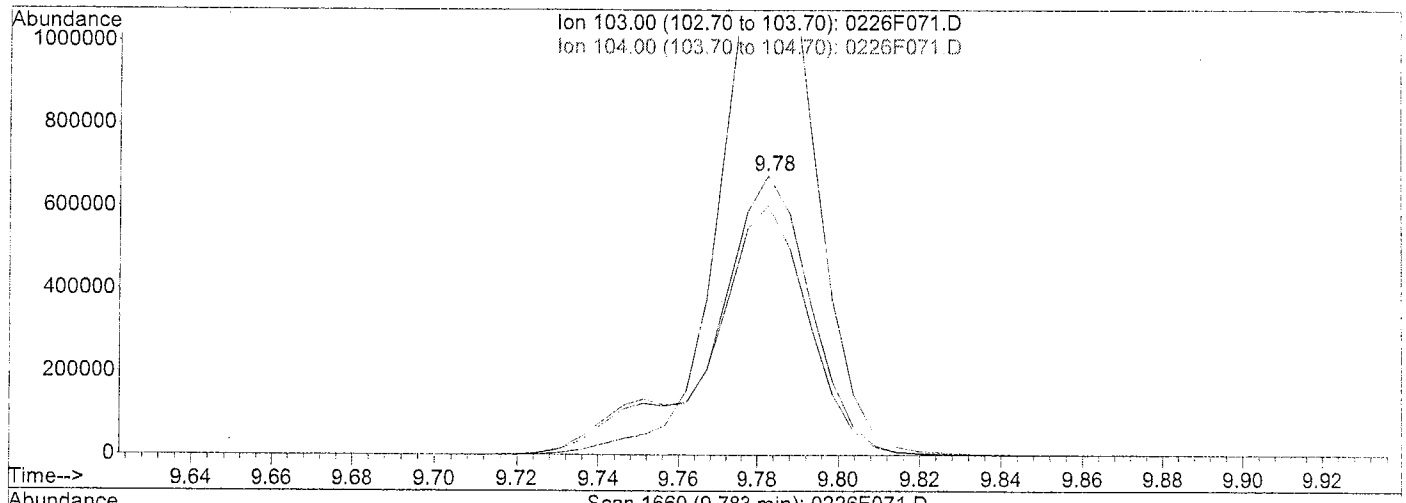
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76)	Styrene	9.78	103	972150m	67.16 PPB	
77)	Bromoform	9.98	173	261396	80.92 PPB	100
78)	Isopropylbenzene	10.13	105	3753846	66.12 PPB	100
79)	cis-1,4-Dichloro-2-butene	10.29	89	191415	324.83 PPB	99
82)	1,1,2,2-Tetrachloroethane	10.53	83	362061	65.10 PPB	97
83)	trans-1,4-Dichloro-2-buten	10.60	53	88579	61.32 PPB	89
84)	Bromobenzene	10.45	156	790183	64.35 PPB	98
85)	n-Propylbenzene	10.55	91	4419561	62.42 PPB	98
86)	1,2,3-Trichloropropane	10.56	110	115913	64.02 PPB	92
87)	2-Chlorotoluene	10.65	91	2466712	60.62 PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	3117383	64.97 PPB	100
89)	4-Chlorotoluene	10.77	91	2836934	61.60 PPB	98
90)	tert-Butylbenzene	11.06	119	2795015	62.64 PPB	97
91)	1,2,4-Trimethylbenzene	11.13	105	3049204	67.69 PPB	98
92)	sec-Butylbenzene	11.29	105	3826843	64.58 PPB	99
93)	p-Isopropyltoluene	11.44	119	3513577	67.57 PPB	100
94)	1,3-Dichlorobenzene	11.42	146	1617764	62.63 PPB	98
95)	1,4-Dichlorobenzene	11.52	146	1564101	61.74 PPB	98
96)	n-Butylbenzene	11.86	91	2985569	68.37 PPB	98
97)	1,2-Dichlorobenzene	11.90	146	1367187	63.64 PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	49279	69.66 PPB	90
99)	1,3,5-Trichlorobenzene	12.67	180	1296708	60.46 PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	1006289	67.35 PPB	100
101)	Hexachlorobutadiene	13.21	225	605137	56.46 PPB	98
102)	Naphthalene	13.30	128	1380704	79.25 PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	843695	67.87 PPB	99

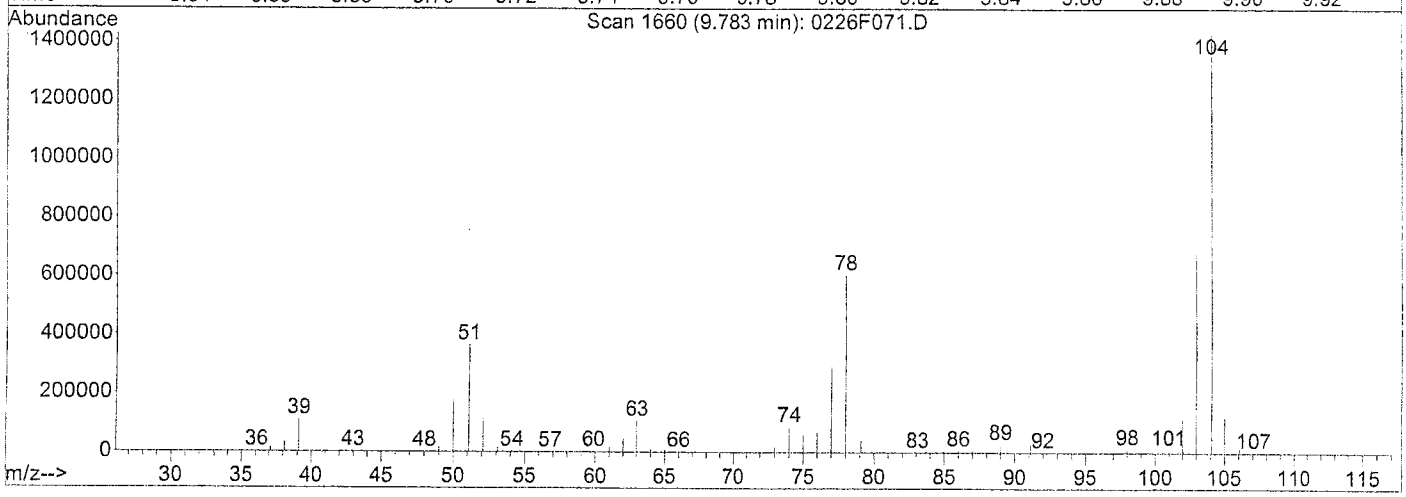
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 80.59PPB

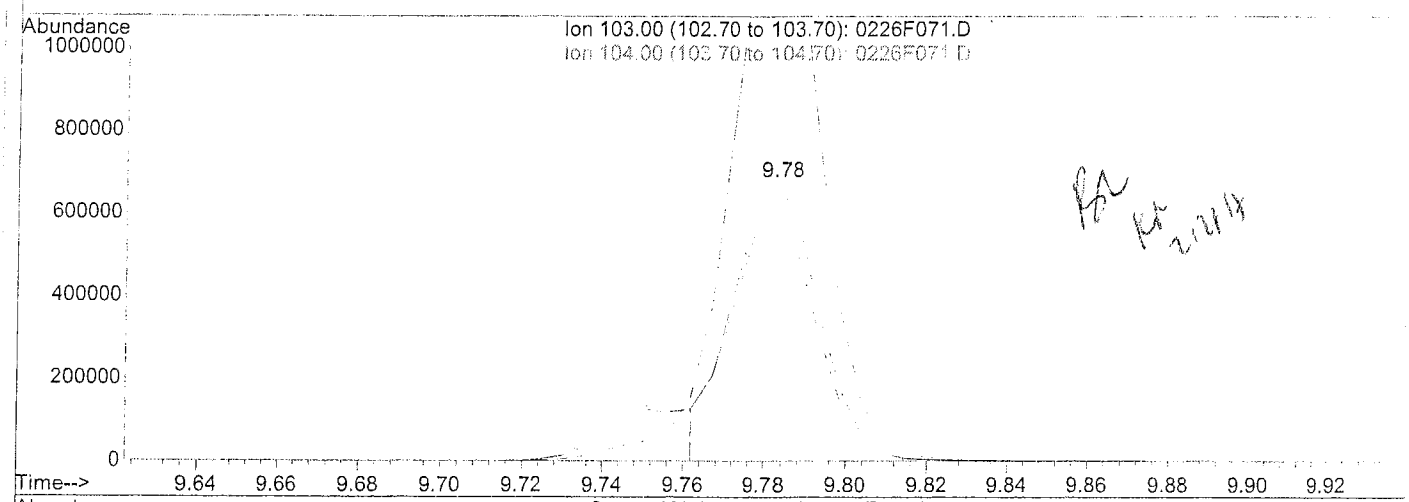
response 1166585

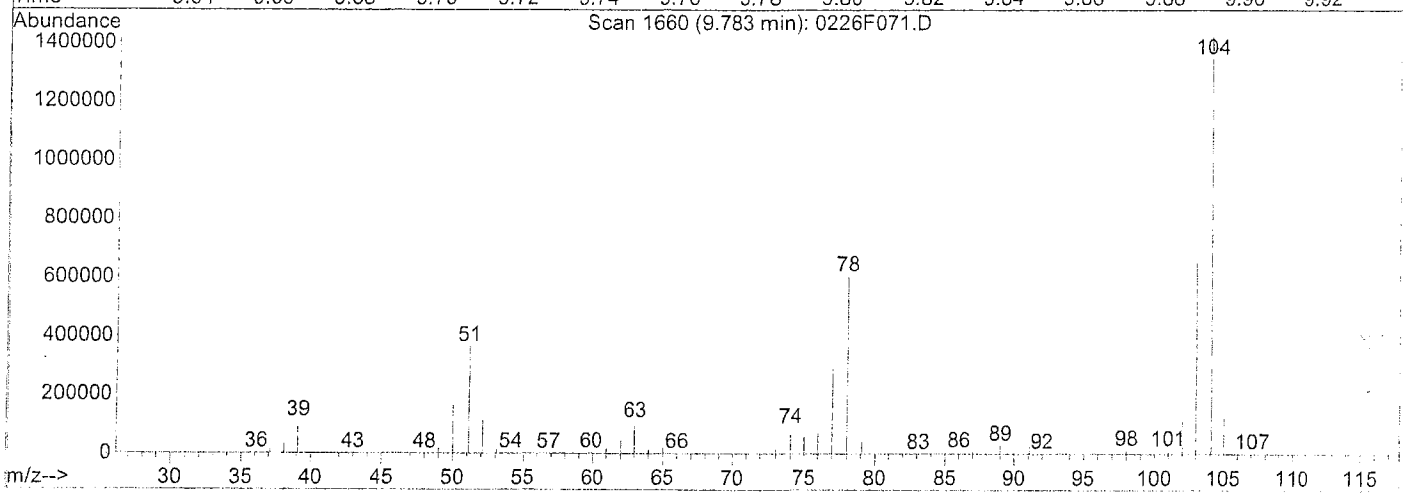
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

Quantification Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 67.16PPB m

response 972150

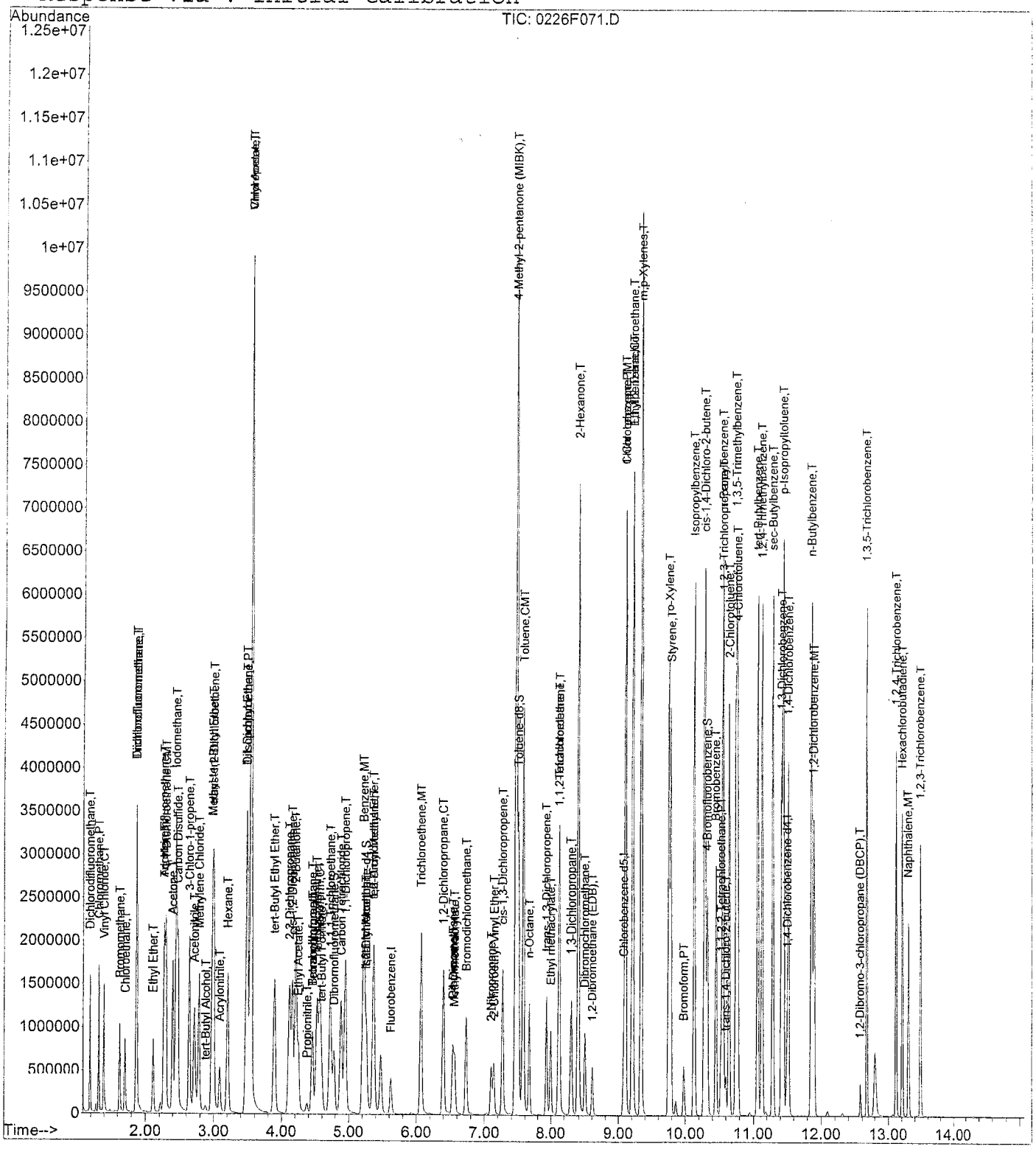
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

0226F071.D 022607.M Tue Feb 27 06:46:59 2007

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KS 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	410307	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	155343	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	148210	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89116	10.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.70%	
44) 1,2-Dichloroethane-d4	5.25	65	86935	9.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
58) Toluene-d8	7.50	98	401532	10.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.90%	
80) 4-Bromofluorobenzene	10.32	95	133839	9.83	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.30%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	122710	9.85	PPB		98
3) Chloromethane	1.32	50	137820	9.47	PPB		98
4) Vinyl Chloride	1.39	62	142259	10.63	PPB		98
5) Bromomethane	1.63	96	65113	10.10	PPB		96
6) Chloroethane	1.71	64	85996	9.52	PPB		99
7) Dichlorofluoromethane	1.87	67	247297	11.40	PPB		98
8) Trichlorofluoromethane	1.87	101	172201	9.41	PPB		98
9) Ethyl Ether	2.10	59	57795	9.90	PPB		91
10) Acrolein	2.26	56	29258	137.61	PPB		96
11) Trichlorotrifluoroethane	2.27	151	87195	10.31	PPB		97
12) 1,1-Dichloroethene	2.30	96	98452	9.91	PPB		81
13) Acetone	2.40	43	48375	41.65	PPB		97
14) Iodomethane	2.44	142	449235	39.02	PPB		98
15) Carbon Disulfide	2.47	76	713104	22.05	PPB		98
16) 3-Chloro-1-propene	2.64	76	187268	34.63	PPB	#	71
17) Acetonitrile	2.72	40	86406	326.02	PPB		96
18) Methylene Chloride	2.78	84	122777	11.57	PPB		98
19) tert-Butyl Alcohol	2.88	59	24669	106.48	PPB		96
20) Acrylonitrile	3.09	53	59864	39.67	PPB		96
21) Methyl tert-Butyl Ether	2.98	73	181364	9.87	PPB		99
22) trans-1,2-Dichloroethene	3.00	96	113433	9.78	PPB		97
23) Hexane	3.20	57	345542	29.60	PPB		99
24) Diisopropyl Ether	3.48	45	682437	20.57	PPB		96
25) 1,1-Dichloroethane	3.48	63	205873	10.10	PPB		99
26) Vinyl Acetate	3.53	86	52728	45.10	PPB	#	74
27) Chloroprene	3.53	53	594936	26.99	PPB		93
28) tert-Butyl Ethyl Ether	3.89	59	496262	20.76	PPB		97
29) 2,2-Dichloropropane	4.11	77	133531	9.76	PPB		99

(#) = qualifier out of range (m) = manual integration
0226F074.D 022607.M Tue Feb 27 07:16:59 2007 Page 1

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) cis-1,2-Dichloroethene	4.16	96	121550	10.29 PPB		99
31) 2-Butanone	4.20	72	18998	48.77 PPB		94
32) Propionitrile	4.38	54	15205	29.35 PPB		91
33) Ethyl Acetate	4.25	61	16433	31.96 PPB		89
34) Methacrylonitrile	4.51	67	54749	30.12 PPB		97
35) Bromochloromethane	4.46	128	42612	9.84 PPB	#	85
36) Tetrahydrofuran	4.46	71	7012	16.65 PPB	#	63
37) Chloroform	4.56	83	194431	9.63 PPB		95
38) tert-Butyl Formate	4.59	59	44560	18.22 PPB		88
39) 1,1,1-Trichloroethane	4.72	97	172247	10.27 PPB		96
41) Carbon Tetrachloride	4.89	117	153126	10.26 PPB		95
42) 1,1-Dichloropropene	4.95	75	159938	9.85 PPB		97
43) Isobutyl Alcohol	5.26	43	31174	287.33 PPB		94
45) Benzene	5.22	78	463767	9.58 PPB		98
46) 1,2-Dichloroethane	5.36	62	113114	10.37 PPB		98
47) tert-Amyl Methyl Ether	5.37	55	107846	19.12 PPB	#	74
48) Trichloroethene	6.07	95	114213	9.81 PPB		98
49) 1,2-Dichloropropane	6.40	63	103777	10.34 PPB		98
50) Dibromomethane	6.54	93	40529	10.22 PPB		95
51) Methyl methacrylate	6.56	69	103223	32.77 PPB		93
52) 1,4-Dioxane	6.56	88	9940	270.45 PPB		99
53) Bromodichloromethane	6.73	83	118043	10.78 PPB		98
54) 2-Nitropropane	7.10	43	29919	29.23 PPB		98
55) 2-Chloroethyl Vinyl Ether	7.13	63	37798	10.80 PPB		85
56) cis-1,3-Dichloropropene	7.27	75	128603	10.40 PPB		97
57) 4-Methyl-2-pentanone (MIBK	7.46	58	70198	46.22 PPB		88
59) Toluene	7.57	92	296954	9.95 PPB		95
61) n-Octane	7.66	85	75941	19.27 PPB		90
62) trans-1,3-Dichloropropene	7.93	75	86090	10.41 PPB		93
63) Ethyl methacrylate	7.99	69	231415	36.07 PPB		91
64) 1,1,2-Trichloroethane	8.12	83	52038	10.52 PPB		96
65) Tetrachloroethene	8.13	164	105028	9.35 PPB		95
66) 2-Hexanone	8.39	57	21544	47.24 PPB		91
67) 1,3-Dichloropropane	8.30	76	114260	10.05 PPB		97
68) Dibromochloromethane	8.49	129	68418	10.31 PPB		99
69) 1,2-Dibromoethane (EDB)	8.60	107	55935	10.45 PPB		99
70) 1-Chlorohexane	9.10	91	159902	9.84 PPB		89
71) Chlorobenzene	9.11	112	308610	9.64 PPB		97
72) Ethylbenzene	9.21	106	181080	9.88 PPB		93
73) 1,1,1,2-Tetrachloroethane	9.22	131	95714	10.24 PPB		95
74) m,p-Xylenes	9.34	106	447979	19.74 PPB		94
75) o-Xylene	9.75	106	212281	10.09 PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	154123m	10.50	PPB	
77)	Bromoform	9.98	173	34687	10.47	PPB	99
78)	Isopropylbenzene	10.13	105	507594	8.82	PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	17551	31.54	PPB	98
82)	1,1,2,2-Tetrachloroethane	10.53	83	57510	10.48	PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	45505	38.23	PPB	86
84)	Bromobenzene	10.45	156	123237	9.81	PPB	98
85)	n-Propylbenzene	10.55	91	662233	10.00	PPB	99
86)	1,2,3-Trichloropropane	10.56	110	19032	10.91	PPB	99
87)	2-Chlorotoluene	10.65	91	386757	9.95	PPB	98
88)	1,3,5-Trimethylbenzene	10.75	105	468167	10.24	PPB	98
89)	4-Chlorotoluene	10.77	91	439077	9.86	PPB	99
90)	tert-Butylbenzene	11.06	119	423884	9.87	PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	466823	10.13	PPB	99
92)	sec-Butylbenzene	11.29	105	610363	10.66	PPB	99
93)	p-Isopropyltoluene	11.44	119	502922	9.73	PPB	99
94)	1,3-Dichlorobenzene	11.42	146	248060	9.69	PPB	98
95)	1,4-Dichlorobenzene	11.52	146	250075	9.90	PPB	98
96)	n-Butylbenzene	11.86	91	437186	9.79	PPB	100
97)	1,2-Dichlorobenzene	11.90	146	217011	9.71	PPB	94
98)	1,2-Dibromo-3-chloropropan	12.58	155	6328	8.74	PPB	97
99)	1,3,5-Trichlorobenzene	12.68	180	829529	38.86	PPB	99
100)	1,2,4-Trichlorobenzene	13.12	180	157556	9.51	PPB	100
101)	Hexachlorobutadiene	13.21	225	95797	9.71	PPB	99
102)	Naphthalene	13.30	128	216028	10.35	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	134149	9.87	PPB	97

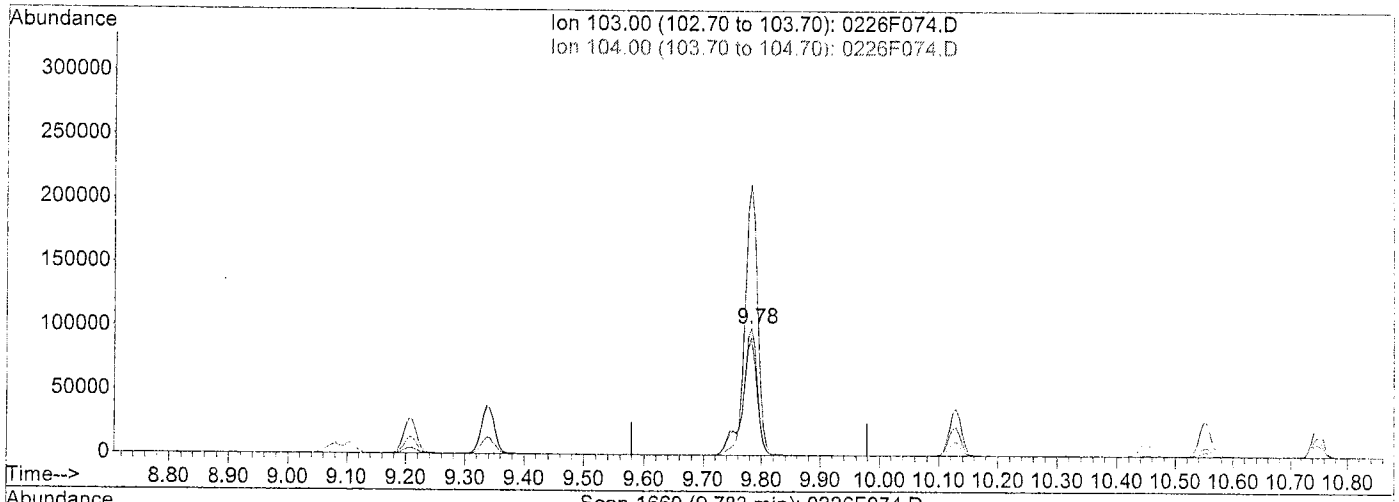
(#) = qualifier out of range (m) = manual integration

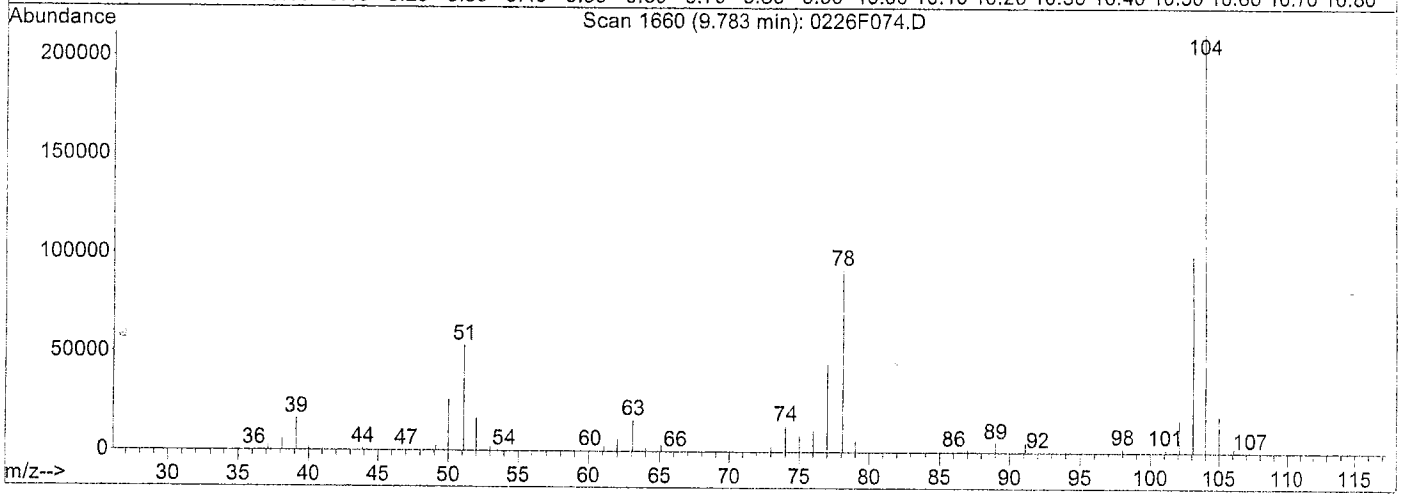
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 12.10PPB

response 177602

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

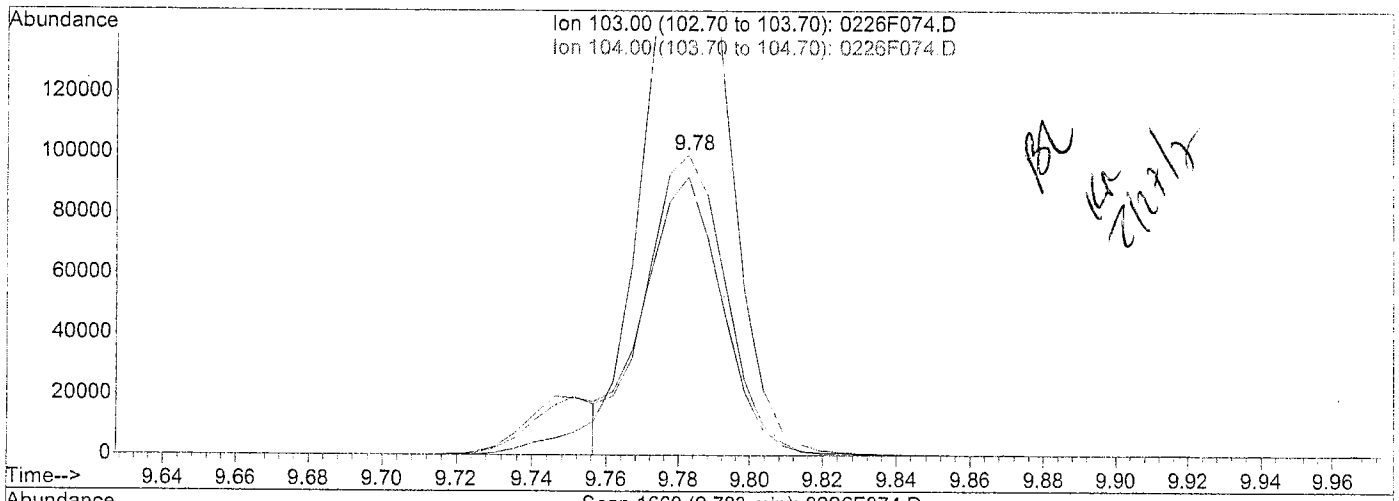
0226F074.D 022607.M Tue Feb 27 07:16:48 2007

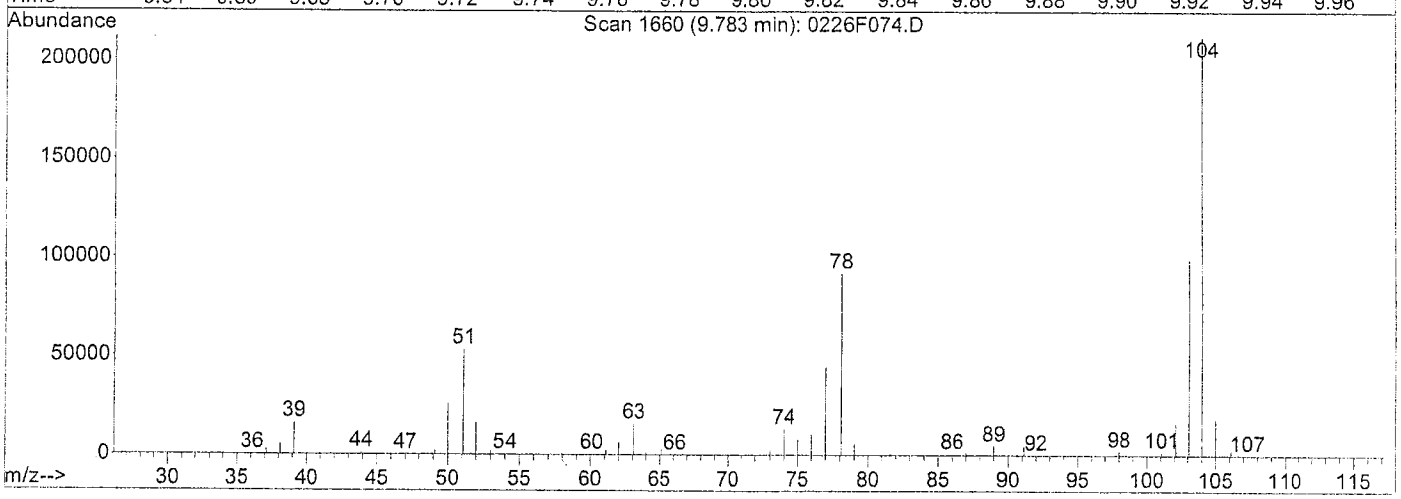
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 10.50PPB m

response 154123

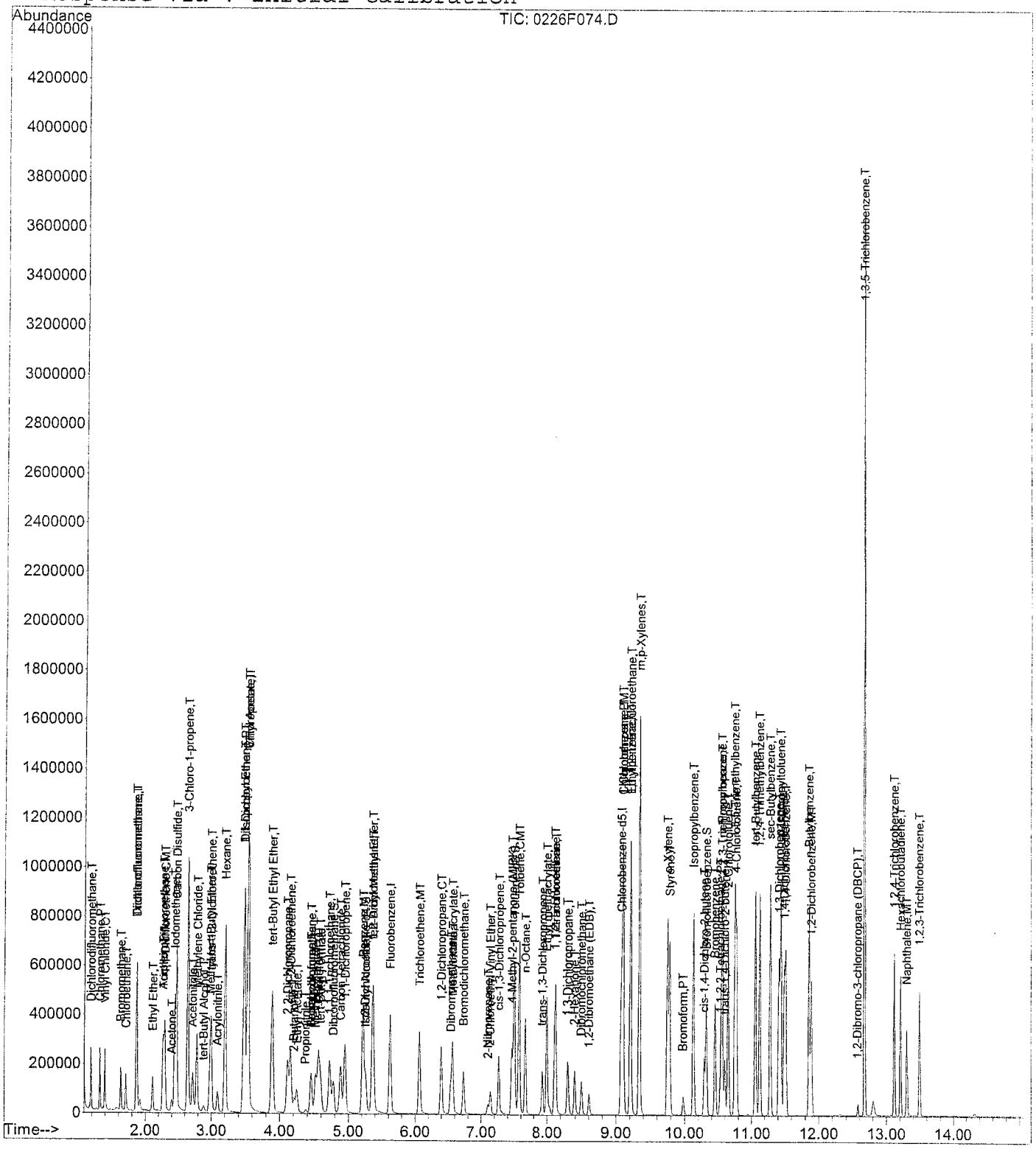
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

0226F074.D 022607.M Tue Feb 27 07:16:54 2007

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration



Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

File ID: J:\MS18\DATA\031307\0313F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	21	0.01	0.448	0.466	4	NA	± 30 %	AverageRF
Vinyl Acetate	20	21	0.01	0.0285	0.0298	4	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.5	0.01	0.213	0.182	-15	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	10	0.01	0.0853	0.0873	2	NA	± 40 %	AverageRF
† Chloromethane	10	9.9	0.10	0.355	0.351	-1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.326	0.329	1	NA	± 20 %	AverageRF
Bromomethane	10	7.7	0.01	0.157	0.120	-23	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	200	0.01	0.0283	0.0287	1	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.01	0.242	0.256	6	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.872	11	NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.259	0.257	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.301	6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.545	10	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.306	6	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.510	4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.443	8	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.364	0.385	6	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.281	6	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.24	5	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.304	7	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.268	9	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.281	5	NA	± 30 %	AverageRF
2-Hexanone	200	190	0.01	0.0294	0.0278	-5	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.310	3	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.792	9	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.6	0.01	0.532	0.455	-15	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.1	0.01	0.318	0.290	-9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0370	0.0413	12	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.1	0.01	0.723	0.584	-19	NA	± 30 %	AverageRF
Dibromochloromethane	10	7.9	0.01	0.427	0.337	-21	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.78	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	8.9	0.01	1.18	1.05	-11	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.30	-11	NA	± 30 %	AverageRF
o-Xylene	10	8.8	0.01	1.35	1.19	-12	NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.945	1.01	7	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.157	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.8	0.30	0.370	0.328	-12	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.05	9	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.5	0.01	0.877	0.835	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Exception Report

Data File: J:\MS18\DATA\031307\0313F003.D
Lab ID: KWG0703563-2
RunType: CCV
Matrix: WATER

Date Acquired: 03/13/2007 09:02
Date Quantitated: 03/13/2007 09:28
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NG
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	

Primary Review: KR 3/13/7
Secondary Review: F-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	-0.01	96	402584	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	180989	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	163576	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77			113	84275	9.90		80-120	NA
1	1,2-Dichloroethane-d4	5.25			65	73172	8.52		70-124	NA
1	Toluene-d8	7.49			98	424311	10.86		80-122	NA
2	4-Bromofluorobenzene	10.32			95	151154	9.53		73-116	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18			85	103429	8.46			
1	Chloromethane	1.31			50	141304	9.90			
1	Vinyl Chloride	1.39			62	132416	10.09			
1	Bromomethane	1.63			96	48511	7.67			
1	Chloroethane	1.71			64	85114	9.60			
1	Dichlorofluoromethane (CFC 21	1.86			67	221976	10.43			
1	Trichlorofluoromethane	1.87			101	189031	10.53			
1	Ethyl Ether	2.10			59	61644	10.76			
1	Acrolein	2.27			56	56584	271.23			
1	Trichlorotrifluoroethane	2.27			151	90392	10.89			
1	1,1-Dichloroethene	2.29			96	103220	10.59			
1	Acetone	2.40			43	231346	203.00			
1	Iodomethane	2.44			142	400058	35.42			
1	Carbon Disulfide	2.47			76	350919	11.06			
1	3-Chloro-1-propene	2.64			76	60904	11.48			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.72			40	104821	403.08			
1	Methylene Chloride	2.78			84	103303	9.92			
1	tert-Butyl Alcohol	2.89			59	10973	48.27			
1	Acrylonitrile	3.09			53	58985	39.84			
1	Methyl tert-Butyl Ether	2.97			73	375077	20.80			
1	trans-1,2-Dichloroethene	3.00			96	121092	10.64			
1	n-Hexane	3.20			57	134471	11.74			
1	Diisopropyl Ether	3.48			45	367112	11.28			
1	1,1-Dichloroethane	3.48			63	219215	10.96			
1	Vinyl Acetate	3.53			86	23957	20.89			
1	Chloroprene	3.54			53	919877	42.53			
1	tert-Butyl Ethyl Ether	3.89			59	247414	10.55			
1	2,2-Dichloropropane	4.11			77	131213	9.77			
1	cis-1,2-Dichloroethene	4.15			96	123027	10.62			
1	2-Butanone (MEK)	4.20			72	87787	229.67			
1	Propionitrile	4.37			54	20743	40.81			
1	Ethyl Acetate	4.24			61	19914	39.47			
1	Methacrylonitrile	4.52			67	72075	40.41			
1	Bromochloromethane	4.45			128	42954	10.11			
1	Tetrahydrofuran	4.46			71	4092	9.90			
1	Chloroform	4.55			83	205357	10.37			
1	tert-Butyl Formate	4.58			59	19551	8.15			
1	1,1,1-Trichloroethane (TCA)	4.72			97	178463	10.84			
1	Carbon Tetrachloride	4.88			117	154922	10.58			
1	1,1-Dichloropropene	4.95			75	171168	10.75			
1	Isobutyl Alcohol	5.26			43	39144	367.71			
1	Benzene	5.21			78	498939	10.50			
1	1,2-Dichloroethane (EDC)	5.36			62	113231	10.58			
1	tert-Amyl Methyl Ether	5.37			55	59871	10.82			
1	Trichloroethene (TCE)	6.06			95	122382	10.71			
1	1,2-Dichloropropane	6.40			63	107835	10.95			
1	Dibromomethane	6.53			93	41324	10.62			
1	Methyl Methacrylate	6.56			69	32170	10.41			
1	1,4-Dioxane	6.56			88	14032	389.11			
1	Bromodichloromethane	6.73			83	113141	10.53			
1	2-Nitropropane	7.10			43	42963	42.77			
1	2-Chloroethyl Vinyl Ether	7.14			63	35133	10.23			
1	cis-1,3-Dichloropropene	7.26			75	124908	10.30			
1	4-Methyl-2-pentanone (MIBK)	7.46			58	332618	223.21			
1	Toluene	7.57			92	318688	10.88			
2	n-Octane	7.66			85	43234	9.42			
2	trans-1,3-Dichloropropene	7.92			75	82323	8.55			
2	Ethyl Methacrylate	8.00			69	67068	8.97			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11			83	52490	9.11			
2	Tetrachloroethene (PCE)	8.13			164	105633	8.07			
2	2-Hexanone	8.39			57	100743	189.61			
2	1,3-Dichloropropane	8.30			76	114907	8.68			
2	Dibromochloromethane	8.49			129	61032	7.90			
2	1,2-Dibromoethane (EDB)	8.60			107	53043	8.51			
2	1-Chlorohexane	9.10			91	160479	8.48			
2	Chlorobenzene	9.10			112	321865	8.63			
2	Ethylbenzene	9.20			106	189500	8.88			
2	1,1,1,2-Tetrachloroethane	9.21			131	92521	8.50			
2	m,p-Xylenes	9.34			106	468963	17.74			
2	o-Xylene	9.75			106	215766	8.80			
2	Styrene	9.78			103	182177	10.65			
2	Bromoform	9.98			173	28500	7.38			
2	Isopropylbenzene	10.13			105	598033	8.92			
2	cis-1,4-Dichloro-2-butene	10.29			89	15549	23.99			
3	1,1,2,2-Tetrachloroethane	10.52			83	53573	8.84			
3	trans-1,4-Dichloro-2-butene	10.60			53	10907	8.30			
3	Bromobenzene	10.45			156	117059	8.44			
3	n-Propylbenzene	10.55			91	706263	9.66			
3	1,2,3-Trichloropropane	10.57			110	17948	9.33			
3	2-Chlorotoluene	10.65			91	391309	9.12			
3	1,3,5-Trimethylbenzene	10.75			105	478736	9.48			
3	4-Chlorotoluene	10.77			91	449414	9.15			
3	tert-Butylbenzene	11.06			119	433432	9.15			
3	1,2,4-Trimethylbenzene	11.13			105	464375	9.13			
3	sec-Butylbenzene	11.29			105	590756	9.34			
3	4-Isopropyltoluene	11.44			119	527482	9.25			
3	1,3-Dichlorobenzene	11.42			146	238508	8.44			
3	1,4-Dichlorobenzene	11.52			146	230979	8.29			
3	n-Butylbenzene	11.86			91	445367	9.04			
3	1,2-Dichlorobenzene	11.89			146	195243	7.91			
3	1,2-Dibromo-3-chloropropane	12.57			155	5735	7.18			
3	1,3,5-Trichlorobenzene	12.67			180	165716	7.03			
3	1,2,4-Trichlorobenzene	13.11			180	133967	7.32			
3	Hexachlorobutadiene	13.21			225	82583	7.58			
3	Naphthalene	13.30			128	188258	8.17			
3	1,2,3-Trichlorobenzene	13.49			180	111567	7.44			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

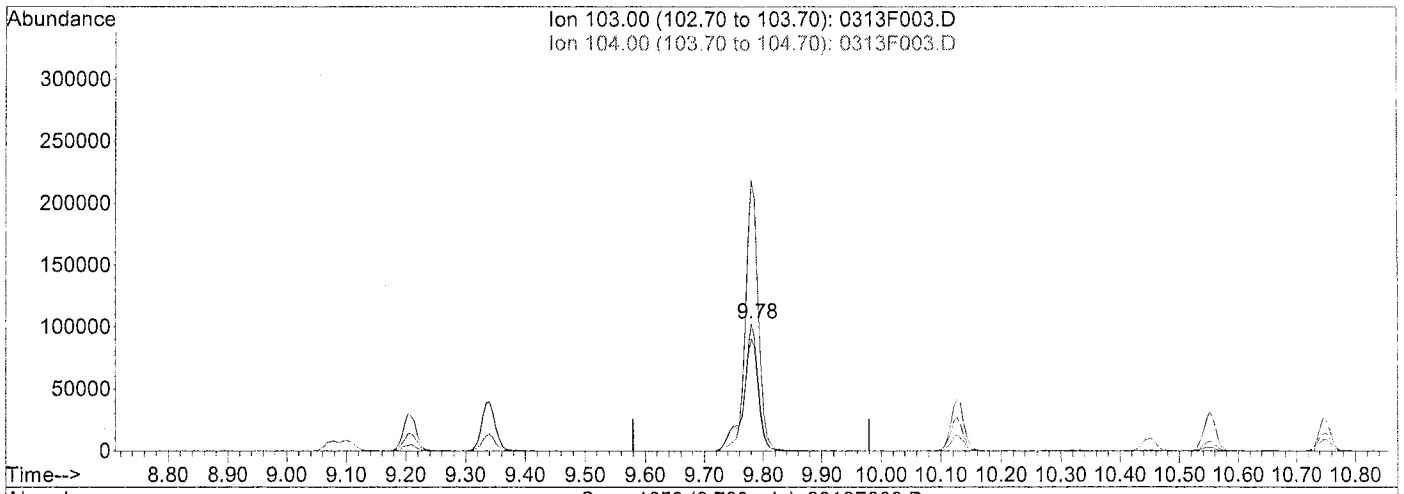
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

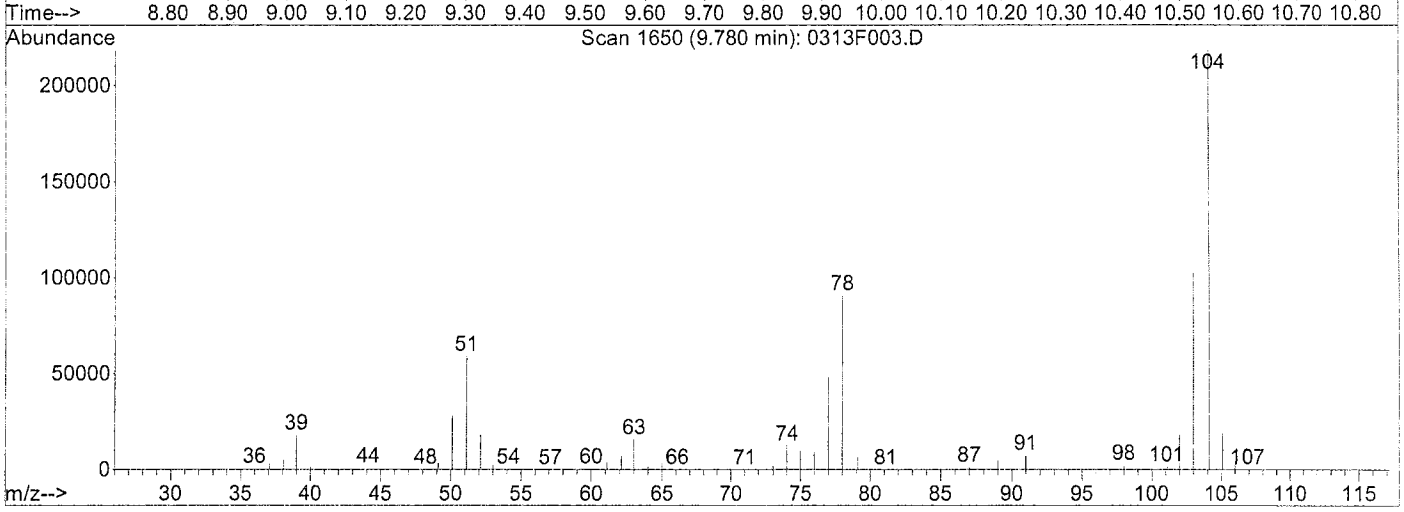
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 9:28 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F003.D

(76) Styrene (T)

9.78min 10.65PPB

response 182177

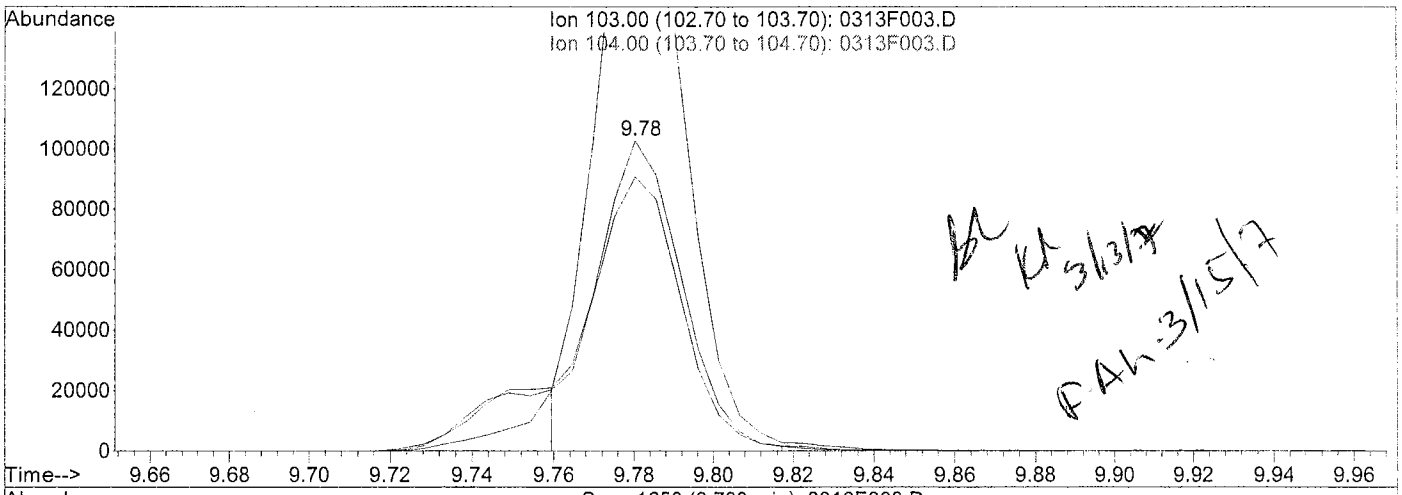
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	212.38
78.00	89.70	88.32
0.00	0.00	0.00

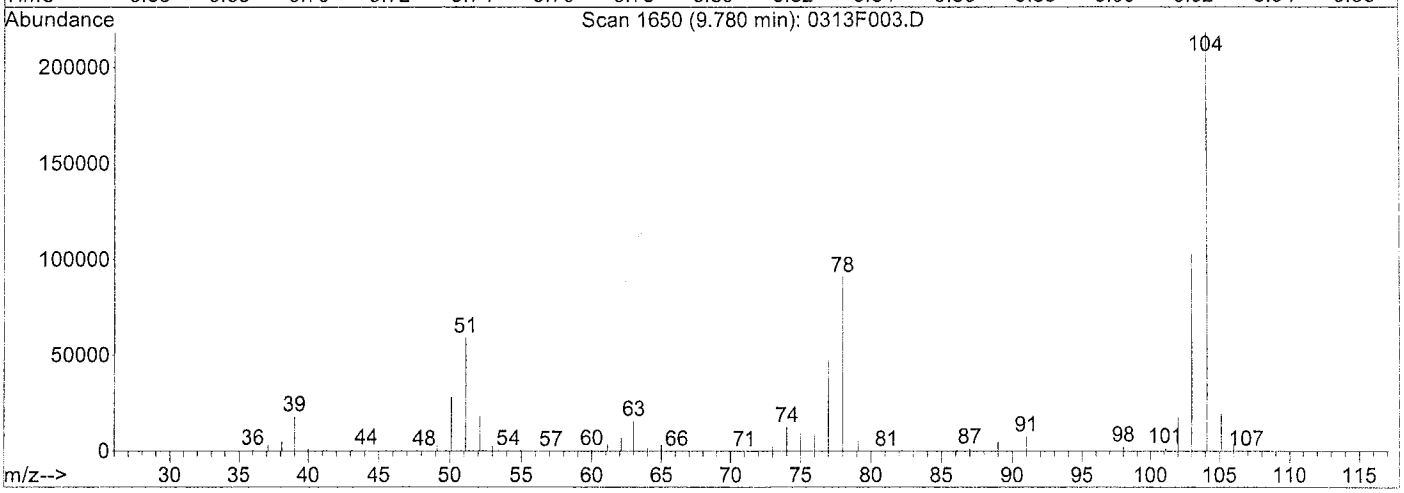
0313F003.D 022607.M Tue Mar 13 14:07:19 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:07 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F003.D

(76) Styrene (T)

9.78min 8.86PPB m

response 151561

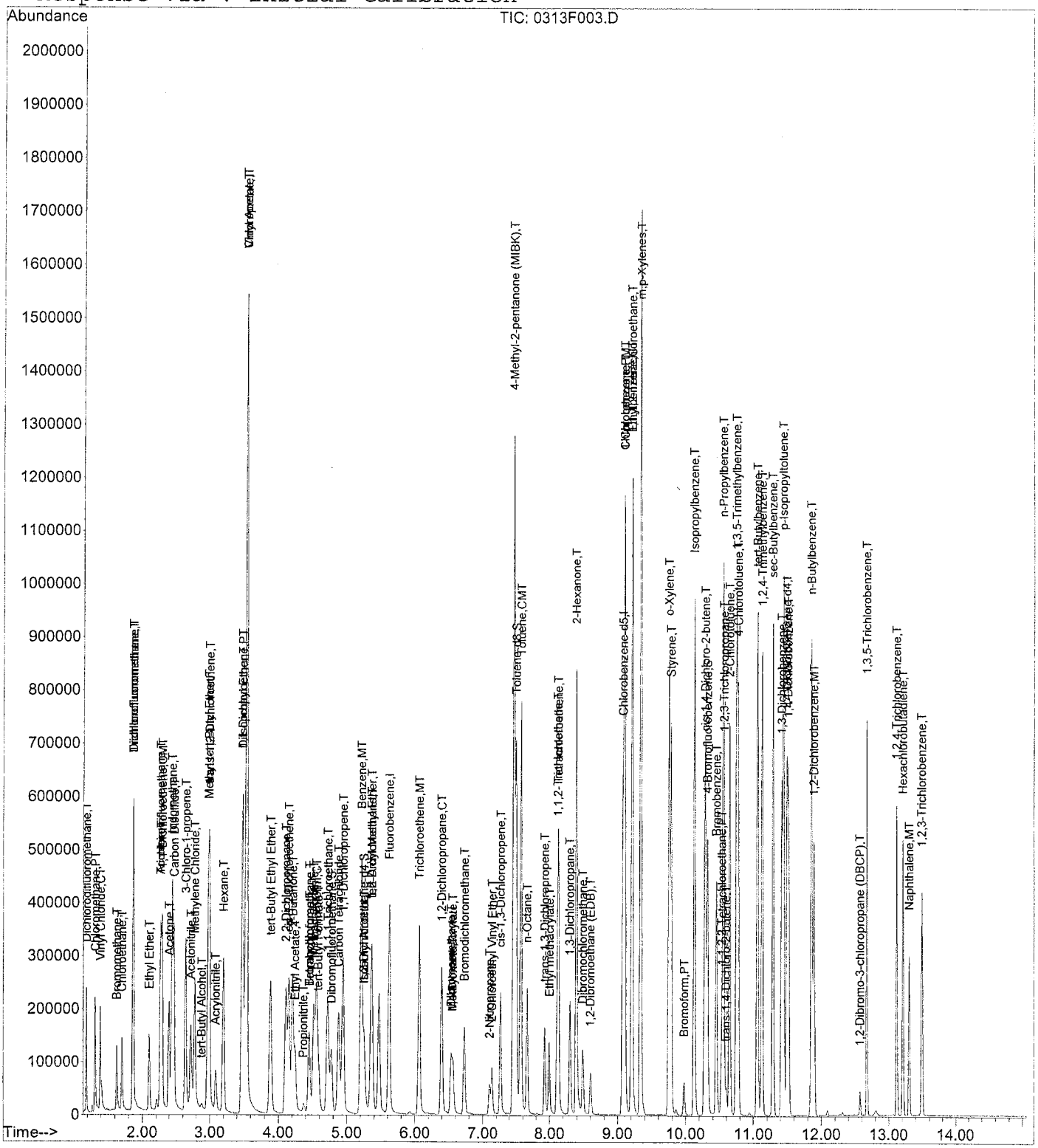
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	212.38
78.00	89.70	88.32
0.00	0.00	0.00

0313F003.D 022607.M Tue Mar 13 14:07:25 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:07 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

1st Window

1/2

Date: 3/13/7

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File: BFB4

By: Klessom

New Tune: NO

IS/SS Std. ID: 45WA SSD

CCV Std ID: 45WA 200/60E

ICAL Date: 2/21/07 Cal 6072

LCS/ICV Std ID: 45WA-6MEK5F/6A/6B/6M 650

Second RV: F-Ah-3/15/7

BFB Std. ID: 45WA-29F

LIMS ID: K6070 3563/3590

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	MBL	0313F001	8260M				
2	BFB	2		5µL → 50mL			
3	CCV	3		5/10µL → 50mL			
4	LCS	100		10/5/5/5/5/5/75µL → 100mL			
5	K2006 - 3 MS	5		80/100/100/100/100/100µL → 200mL	22		
6	↓ 3 DMS	6					
7	K1794 - 10 MS	7					
8	↓ 10 DMS	8					
9	IB	9					
10	MBL	10		0.[illegible]5µL → 50mL			
11	MB	11					
12	K2006 - 1	12			22		TB34413
13	K1703 - 2	13					TB34432
14	K1794 - 1	14					TB34470
15	~~↓ 4~~	15					TB34463
16	K1647 - 1	16					
17	↓ 2	17					
18	K1703 - 1	18					
19	K2006 - 2	19					
20	↓ 3	20					
21	K1852 - 7	21 22					
22	8	22					
23	9	23					
24	10	24					
25	11	25					TB34479
26	K1869 - 1	26					TB34480
27	↓ 2	27					

PSC

2/2

Date: 3/17/7

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File:

New Tune:

By:

IS/SS Std. ID:

CCV Std ID:

ICAL Date:

LCS/ICV Std ID:

Second RV:

BFB Std. ID:

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	K1B69-3	0313F028	8260.m		4		
2	4	29					
3	5	30					
4	IB	31-33					
5	K1B70-1 Dil	34		100x 500ml→50ml			
6	1 Base	35		100x 5ml→50ml			
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 3/13/7 FAK 3/15/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	400017	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	178928	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	162445	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.77	113	82596	9.76	PPB	0.00
Spiked Amount 10.000			Recovery = 97.60%			
44) 1,2-Dichloroethane-d4	5.25	65	73260	8.58	PPB	0.00
Spiked Amount 10.000			Recovery = 85.80%			
58) Toluene-d8	7.49	98	423896	10.92	PPB	0.00
Spiked Amount 10.000			Recovery = 109.20%			
80) 4-Bromofluorobenzene	10.32	95	142102	9.06	PPB	0.00
Spiked Amount 10.000			Recovery = 90.60%			

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	3540	0.29	PPB		86
3) Chloromethane	1.31	50	7083	0.50	PPB		93
4) Vinyl Chloride	1.39	62	6262	0.48	PPB		99
5) Bromomethane	1.63	96	3004	0.48	PPB		94
6) Chloroethane	1.71	64	3404	0.39	PPB		79
7) Dichlorofluoromethane	1.86	67	10072	0.48	PPB		97
8) Trichlorofluoromethane	1.86	101	7771	0.44	PPB		92
9) Ethyl Ether	2.10	59	2573	0.45	PPB		90
10) Acrolein	2.27	56	4193	20.23	PPB		87
11) Trichlorotrifluoroethane	2.27	151	3678	0.45	PPB		99
12) 1,1-Dichloroethene	2.29	96	4191	0.43	PPB		92
13) Acetone	2.40	43	9939	8.78	PPB		85
14) Iodomethane	2.44	142	16539	1.47	PPB		99
15) Carbon Disulfide	2.47	76	15055	0.48	PPB		92
16) 3-Chloro-1-propene	2.64	76	2828	0.54	PPB	#	70
17) Acetonitrile	2.72	40	4909	19.00	PPB	#	77
18) Methylene Chloride	2.78	84	7974	0.77	PPB		98
19) tert-Butyl Alcohol	2.90	59	803	3.56	PPB		60
20) Acrylonitrile	3.09	53	2737	1.86	PPB		94
21) Methyl tert-Butyl Ether	2.97	73	17313	0.97	PPB		96
22) trans-1,2-Dichloroethene	3.00	96	6153	0.54	PPB		91
23) Hexane	3.20	57	7610	0.67	PPB		91
24) Diisopropyl Ether	3.48	45	15511	0.48	PPB		97
25) 1,1-Dichloroethane	3.48	63	9358	0.47	PPB		88
26) Vinyl Acetate	3.54	86	1132	0.99	PPB	#	10
27) Chloroprene	3.53	53	36022	1.68	PPB		93
28) tert-Butyl Ethyl Ether	3.89	59	11631	0.50	PPB		97
29) 2,2-Dichloropropane	4.11	77	5149	0.39	PPB		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	5538	0.48	PPB		88
31)	2-Butanone	4.21	72	3522	9.27	PPB		63
32)	Propionitrile	4.38	54	1144	2.27	PPB		64
33)	Ethyl Acetate	4.25	61	1086	2.17	PPB		78
34)	Methacrylonitrile	4.52	67	3838	2.17	PPB	#	71
35)	Bromochloromethane	4.46	128	2163	0.51	PPB	#	76
37)	Chloroform	4.55	83	9540	0.48	PPB		84
39)	1,1,1-Trichloroethane	4.72	97	6634	0.41	PPB		96
41)	Carbon Tetrachloride	4.88	117	5846	0.40	PPB		93
42)	1,1-Dichloropropene	4.95	75	6891	0.44	PPB		90
43)	Isobutyl Alcohol	5.26	43	1593	15.06	PPB		76
45)	Benzene	5.21	78	21945	0.46	PPB		90
46)	1,2-Dichloroethane	5.36	62	5145	0.48	PPB		91
47)	tert-Amyl Methyl Ether	5.37	55	3106	0.56	PPB	#	30
48)	Trichloroethene	6.06	95	5821	0.51	PPB		84
49)	1,2-Dichloropropane	6.39	63	4893	0.50	PPB	#	63
50)	Dibromomethane	6.54	93	1873	0.48	PPB	#	78
51)	Methyl methacrylate	6.57	69	1729	0.56	PPB		76
53)	Bromodichloromethane	6.73	83	5043	0.47	PPB		92
54)	2-Nitropropane	7.10	43	1758	1.76	PPB		91
55)	2-Chloroethyl Vinyl Ether	7.13	63	1325	0.39	PPB	#	64
56)	cis-1,3-Dichloropropene	7.26	75	4775	0.40	PPB		93
57)	4-Methyl-2-pentanone (MIBK	7.46	58	14141	9.55	PPB	#	83
59)	Toluene	7.57	92	14067	0.48	PPB		95
61)	n-Octane	7.66	85	3280	0.72	PPB		72
62)	trans-1,3-Dichloropropene	7.93	75	3104	0.33	PPB		88
63)	Ethyl methacrylate	7.99	69	2793	0.38	PPB		77
64)	1,1,2-Trichloroethane	8.11	83	2456	0.43	PPB		85
65)	Tetrachloroethene	8.13	164	5002	0.39	PPB		89
66)	2-Hexanone	8.39	57	2831	5.39	PPB	#	85
67)	1,3-Dichloropropane	8.30	76	5102	0.39	PPB		83
68)	Dibromochloromethane	8.49	129	2177	0.28	PPB		80
69)	1,2-Dibromoethane (EDB)	8.61	107	2512	0.41	PPB		99
70)	1-Chlorohexane	9.09	91	7015	0.37	PPB		96
71)	Chlorobenzene	9.10	112	13978	0.38	PPB		96
72)	Ethylbenzene	9.20	106	7908	0.37	PPB		92
73)	1,1,1,2-Tetrachloroethane	9.21	131	3637	0.34	PPB		88
74)	m,p-Xylenes	9.34	106	20201	0.77	PPB		92
75)	o-Xylene	9.75	106	9649	0.40	PPB		98
76)	Styrene	9.78	103	7001	0.41	PPB	#	85
77)	Bromoform	9.97	173	943	0.25	PPB		75
78)	Isopropylbenzene	10.13	105	22567	0.34	PPB		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

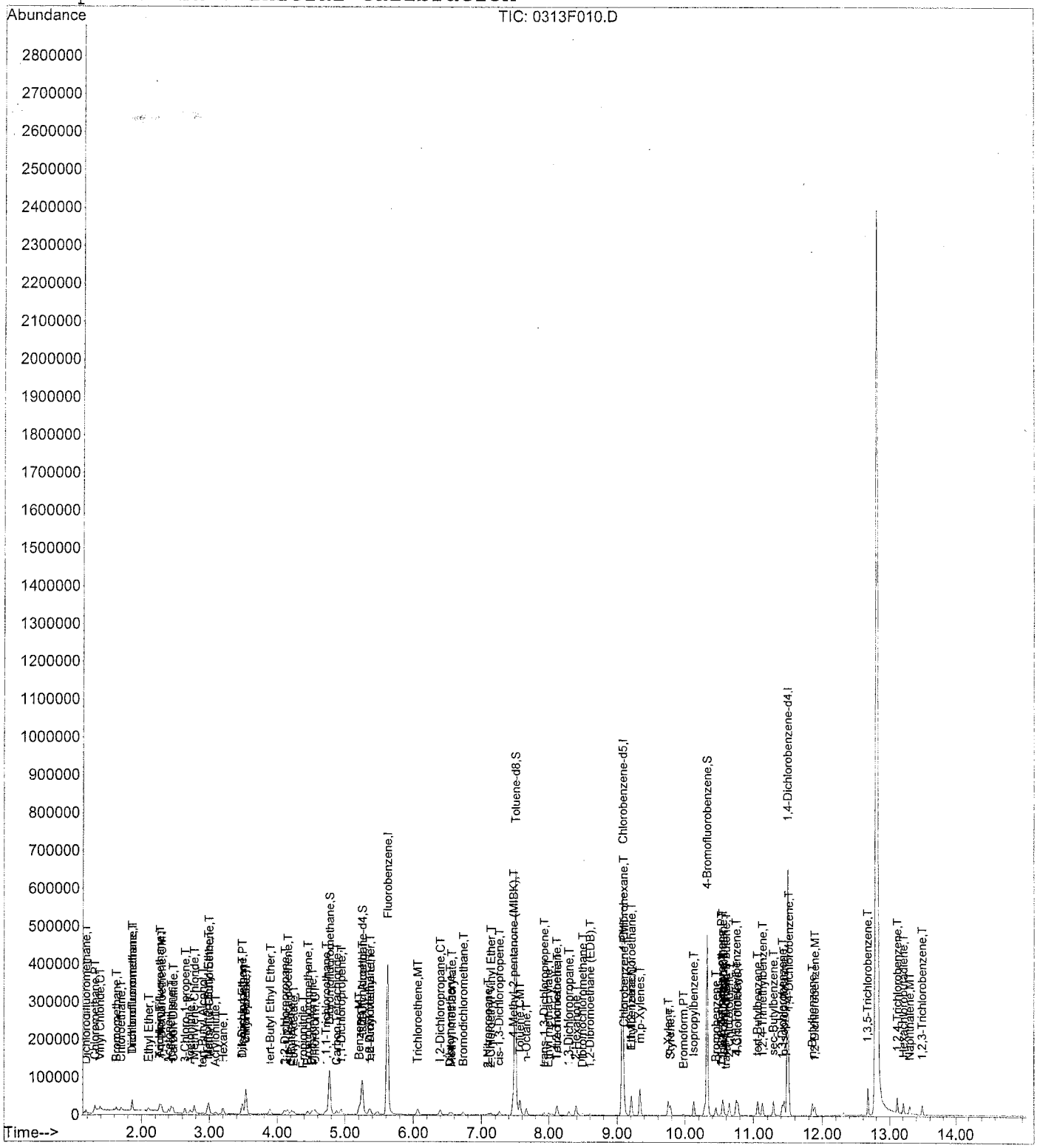
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.55	89	913	1.42	PPB	#	22
82)	1,1,2,2-Tetrachloroethane	10.52	83	2604	0.43	PPB		93
83)	trans-1,4-Dichloro-2-buten	10.60	53	779	0.60	PPB		80
84)	Bromobenzene	10.45	156	5252	0.38	PPB		83
85)	n-Propylbenzene	10.55	91	28659	0.39	PPB		91
86)	1,2,3-Trichloropropane	10.57	110	882	0.46	PPB	#	79
87)	2-Chlorotoluene	10.65	91	16228	0.38	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	18787	0.37	PPB		91
89)	4-Chlorotoluene	10.77	91	20327	0.42	PPB		88
90)	tert-Butylbenzene	11.06	119	16349	0.35	PPB		88
91)	1,2,4-Trimethylbenzene	11.12	105	17843	0.35	PPB		97
92)	sec-Butylbenzene	11.28	105	22076	0.35	PPB		98
93)	p-Isopropyltoluene	11.44	119	19380	0.34	PPB		97
94)	1,3-Dichlorobenzene	11.42	146	11704	0.42	PPB		99
95)	1,4-Dichlorobenzene	11.52	146	11642	0.42	PPB		96
96)	n-Butylbenzene	11.86	91	16870	0.34	PPB		92
97)	1,2-Dichlorobenzene	11.89	146	9121	0.37	PPB		89
99)	1,3,5-Trichlorobenzene	12.67	180	15929	0.68	PPB		95
100)	1,2,4-Trichlorobenzene	13.11	180	8297	0.46	PPB		82
101)	Hexachlorobutadiene	13.21	225	4653	0.43	PPB		91
102)	Naphthalene	13.30	128	11432	0.50	PPB		95
103)	1,2,3-Trichlorobenzene	13.49	180	6652	0.45	PPB		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Polynuclear Aromatic Hydrocarbons

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
1349MW01CL	K0701647-002	03/01/2007	03/02/2007
1349MW01CLMS	KWG0703403-1	03/01/2007	03/02/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [illegible]

Name: Mike Erickson

Date: 4/3/07

Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	79	42-137	03/30/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703403-4	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	81	42-137	03/30/07	Acceptable

Comments:

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1349MW01CL	K0701647-002	79
Method Blank	KWG0703403-4	81
1349MW01CLMS	KWG0703403-1	80
Lab Control Sample	KWG0703403-2	82
Duplicate Lab Control Sample	KWG0703403-3	86

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl 42-137

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007

Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

		1349MW01CLMS KWG0703403-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	ND	6.46	10.0	65	53-109
Acenaphthylene	ND	7.58	10.0	76	41-112
Acenaphthene	ND	7.20	10.0	72	54-105
Fluorene	ND	0.811	1.00	81	36-132
Phenanthrene	ND	0.932	1.00	93	58-116
Anthracene	ND	0.896	1.00	90	61-113
Fluoranthene	ND	0.918	1.00	92	47-135
Pyrene	ND	0.896	1.00	90	34-150
Benz(a)anthracene	ND	0.897	1.00	90	62-119
Chrysene	ND	0.906	1.00	91	55-122
Benzo(b)fluoranthene	ND	0.914	1.00	91	48-135
Benzo(k)fluoranthene	ND	0.896	1.00	90	66-113
Benzo(a)pyrene	ND	0.889	1.00	89	61-116
Dibenz(a,h)anthracene	ND	1.74	1.00	174 *	54-130
Benzo(g,h,i)perylene	ND	1.08	1.00	108	59-121
Indeno(1,2,3-cd)pyrene	ND	0.813	1.00	81	54-116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007
Date Analyzed: 03/30/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703403

	Lab Control Sample KWG0703403-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703403-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	7.97	10.0	80	8.26	10.0	83	65-101	4	30
Acenaphthylene	8.68	10.0	87	8.99	10.0	90	70-96	4	30
Acenaphthene	8.71	10.0	87	9.03	10.0	90	70-100	4	30
Fluorene	0.851	1.00	85	0.885	1.00	89	70-100	4	30
Phenanthrene	0.902	1.00	90	0.934	1.00	93	74-106	3	30
Anthracene	0.893	1.00	89	0.938	1.00	94	74-107	5	30
Fluoranthene	0.857	1.00	86	0.908	1.00	91	74-104	6	30
Pyrene	0.908	1.00	91	0.968	1.00	97	69-117	6	30
Benz(a)anthracene	0.939	1.00	94	0.978	1.00	98	77-109	4	30
Chrysene	0.916	1.00	92	0.983	1.00	98	74-108	7	30
Benzo(b)fluoranthene	0.965	1.00	97	1.02	1.00	102	77-109	5	30
Benzo(k)fluoranthene	0.934	1.00	93	0.992	1.00	99	78-110	6	30
Benzo(a)pyrene	0.908	1.00	91	0.964	1.00	96	73-106	6	30
Dibenz(a,h)anthracene	0.831	1.00	83	0.826	1.00	83	52-129	1	30
Benzo(g,h,i)perylene	1.06	1.00	106	1.09	1.00	109	55-130	3	30
Indeno(1,2,3-cd)pyrene	0.847	1.00	85	0.914	1.00	91	43-137	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007
		Time Analyzed:	02:53

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\032907PA\03290028.D
Lab Code:	KWG0703403-4	**Instrument ID:**	LC06
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703403-2	J:\LC06\DATA\032907PA\03290029.D	03/30/07	03:17
Duplicate Lab Control Sample	KWG0703403-3	J:\LC06\DATA\032907PA\03290030.D	03/30/07	03:41
1349MW01CL	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
1349MW01CLMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703403-2	**Lab Code:**	KWG0703403-3
File ID:	J:\LC06\DATA\032907PA\03290029.D	**File ID:**	J:\LC06\DATA\032907PA\03290030.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/30/2007	**Date Analyzed:**	03/30/2007
Time Analyzed:	03:17	**Time Analyzed:**	03:41

Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703403-4	J:\LC06\DATA\032907PA\03290028.D	03/30/07	02:53
1349MW01CL	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
1349MW01CLMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz(a)anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo(b)fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo(k)fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo(a)pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Benzo(g,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Indeno(1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D\03280030c.d

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Benzo(b)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(k)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D\03290012C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	36800	2	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23600	2	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12700	1	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	164000	1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	374000	2	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	777000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	98200	1	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79500	2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	392000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	275000	1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	169000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	251000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	55700	1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	90700	2	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	216000	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	9.9	2940000	2920000	-1	NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	809000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6400000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9060000	0	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	4750000	4600000	-3	NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24200000	-6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14200000	-1	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9300000	0	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	0.99	3220000	3190000	-1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16300000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.98	5420000	5300000	-2	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20 *	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14100000	0	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D\03290023C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	24200	5	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	7	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	381000	3	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	783000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.1	97500	103000	6	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	81600	5	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.1	244000	258000	6	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	391000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	278000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	171000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.99	55100	54400	-1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	91700	3	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	219000	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0	NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2	NA	± 15 %	AverageRF
Acenaphthene	10	10	816000	814000	0	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6360000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9280000	2	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4480000	-6	NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24400000	-6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	14400000	14300000	0	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	9320000	9270000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	1	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.93	5420000	5050000	-7	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20 *	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14300000	1	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D\03290035C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	119000	2	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23800	3	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12900	3	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	165000	2	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	372000	1	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	778000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	101000	4	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	82300	6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	394000	4	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	279000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	172000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	254000	2	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	54800	0	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	93400	5	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	220000	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1530000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	811000	-1		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	0.98	5320000	5210000	-2		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9190000	1		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.94	4750000	4450000	-6		NA	± 15 %	AverageRF
Pyrene	1.0	0.93	25900000	24000000	-7		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14300000	-1		NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9370000	1		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3240000	1		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16400000	1		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.97	5420000	5270000	-3		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10400000	19	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14200000	1		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8310

Analysis Lot: KWG0704189
Instrument ID: LC06
Column: DAD Vydac C

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
03290011.D	Instrument Blank	KWG0704189-4	3/29/2007	20:08		3/29/2007	20:21
03290012.D	Continuing Calibration Verification	KWG0704189-1	3/29/2007	20:32		3/29/2007	20:45
03290018.D	ZZZZZZ	ZZZZZZ	3/29/2007	22:55		3/29/2007	23:08
03290019.D	ZZZZZZ	ZZZZZZ	3/29/2007	23:19		3/29/2007	23:32
03290020.D	ZZZZZZ	ZZZZZZ	3/29/2007	23:42		3/29/2007	23:55
03290021.D	ZZZZZZ	ZZZZZZ	3/30/2007	00:05		3/30/2007	00:18
03290022.D	ZZZZZZ	ZZZZZZ	3/30/2007	00:30		3/30/2007	00:43
03290023.D	Continuing Calibration Verification	KWG0704189-2	3/30/2007	00:54		3/30/2007	01:07
03290024.D	Instrument Blank	KWG0704189-5	3/30/2007	01:18		3/30/2007	01:31
03290025.D	ZZZZZZ	ZZZZZZ	3/30/2007	01:42		3/30/2007	01:55
03290026.D	ZZZZZZ	ZZZZZZ	3/30/2007	02:06		3/30/2007	02:19
03290027.D	ZZZZZZ	ZZZZZZ	3/30/2007	02:29		3/30/2007	02:42
03290028.D	Method Blank	KWG0703403-4	3/30/2007	02:53		3/30/2007	03:06
03290029.D	Lab Control Sample	KWG0703403-2	3/30/2007	03:17		3/30/2007	03:30
03290030.D	Duplicate Lab Control Sample	KWG0703403-3	3/30/2007	03:41		3/30/2007	03:54
03290031.D	1349MW01CL	K0701647-002	3/30/2007	04:05		3/30/2007	04:18
03290032.D	1349MW01CLMS	KWG0703403-1	3/30/2007	04:29		3/30/2007	04:42
03290033.D	ZZZZZZ	ZZZZZZ	3/30/2007	04:53		3/30/2007	05:06
03290034.D	ZZZZZZ	ZZZZZZ	3/30/2007	05:16		3/30/2007	05:29
03290035.D	Continuing Calibration Verification	KWG0704189-3	3/30/2007	05:39		3/30/2007	05:52
03290036.D	Instrument Blank	KWG0704189-6	3/30/2007	06:04		3/30/2007	06:17

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Extraction Lot: KWG0703403
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW01CL	K0701647-002	03/01/07	03/02/07	1010ml	1.00ml	NA	
Method Blank	KWG0703403-4	NA	NA	1000ml	1.00ml	NA	
1349MW01CLMS	KWG0703403-1	03/01/07	03/02/07	1000ml	1.00ml	NA	
Lab Control Sample	KWG0703403-2	NA	NA	1000ml	1.00ml	NA	
Duplicate Lab Control Sample	KWG0703403-3	NA	NA	1000ml	1.00ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1349MW01CL	K0701647-002	79
Method Blank	KWG0703403-4	81
1349MW01CLMS	KWG0703403-1	80
Lab Control Sample	KWG0703403-2	82
Duplicate Lab Control Sample	KWG0703403-3	86

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl 42-137

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007

Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

		1349MW01CLMS KWG0703403-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	ND	6.46	10.0	65	53-109
Acenaphthylene	ND	7.58	10.0	76	41-112
Acenaphthene	ND	7.20	10.0	72	54-105
Fluorene	ND	0.811	1.00	81	36-132
Phenanthrene	ND	0.932	1.00	93	58-116
Anthracene	ND	0.896	1.00	90	61-113
Fluoranthene	ND	0.918	1.00	92	47-135
Pyrene	ND	0.896	1.00	90	34-150
Benz(a)anthracene	ND	0.897	1.00	90	62-119
Chrysene	ND	0.906	1.00	91	55-122
Benzo(b)fluoranthene	ND	0.914	1.00	91	48-135
Benzo(k)fluoranthene	ND	0.896	1.00	90	66-113
Benzo(a)pyrene	ND	0.889	1.00	89	61-116
Dibenz(a,h)anthracene	ND	1.74	1.00	174 *	54-130
Benzo(g,h,i)perylene	ND	1.08	1.00	108	59-121
Indeno(1,2,3-cd)pyrene	ND	0.813	1.00	81	54-116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647
Date Extracted: 03/08/2007
Date Analyzed: 03/30/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703403

	Lab Control Sample KWG0703403-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703403-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	7.97	10.0	80	8.26	10.0	83	65-101	4	30
Acenaphthylene	8.68	10.0	87	8.99	10.0	90	70-96	4	30
Acenaphthene	8.71	10.0	87	9.03	10.0	90	70-100	4	30
Fluorene	0.851	1.00	85	0.885	1.00	89	70-100	4	30
Phenanthrene	0.902	1.00	90	0.934	1.00	93	74-106	3	30
Anthracene	0.893	1.00	89	0.938	1.00	94	74-107	5	30
Fluoranthene	0.857	1.00	86	0.908	1.00	91	74-104	6	30
Pyrene	0.908	1.00	91	0.968	1.00	97	69-117	6	30
Benz(a)anthracene	0.939	1.00	94	0.978	1.00	98	77-109	4	30
Chrysene	0.916	1.00	92	0.983	1.00	98	74-108	7	30
Benzo(b)fluoranthene	0.965	1.00	97	1.02	1.00	102	77-109	5	30
Benzo(k)fluoranthene	0.934	1.00	93	0.992	1.00	99	78-110	6	30
Benzo(a)pyrene	0.908	1.00	91	0.964	1.00	96	73-106	6	30
Dibenz(a,h)anthracene	0.831	1.00	83	0.826	1.00	83	52-129	1	30
Benzo(g,h,i)perylene	1.06	1.00	106	1.09	1.00	109	55-130	3	30
Indeno(1,2,3-cd)pyrene	0.847	1.00	85	0.914	1.00	91	43-137	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007
		Time Analyzed:	02:53

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\032907PA\03290028.D
Lab Code:	KWG0703403-4	**Instrument ID:**	LC06
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703403-2	J:\LC06\DATA\032907PA\03290029.D	03/30/07	03:17
Duplicate Lab Control Sample	KWG0703403-3	J:\LC06\DATA\032907PA\03290030.D	03/30/07	03:41
1349MW01CL	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
1349MW01CLMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701647

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703403-2	**Lab Code:**	KWG0703403-3
File ID:	J:\LC06\DATA\032907PA\03290029.D	**File ID:**	J:\LC06\DATA\032907PA\03290030.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/30/2007	**Date Analyzed:**	03/30/2007
Time Analyzed:	03:17	**Time Analyzed:**	03:41

Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703403-4	J:\LC06\DATA\032907PA\03290028.D	03/30/07	02:53
1349MW01CL	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
1349MW01CLMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW01CL	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	79	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290031.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:05
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MLh

Exception Report

Data File: J:\LC06\DATA\032907PA\03290031.D\03290031C.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:05
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	K0701647
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581533	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\032907PA\03290031.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290031.D\03290031c.d			**Vial:**	54
Acqu Date:	03/30/2007 04:05	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701647-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.20 -0.01	7.17 -0.01	23015830	924740	7.84	7.95			79OK
			%Recovery =		78OK	79OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
Acenaphthene		3.93 +0.03	0	965	0.0000	0.0770	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene	4.72 -0.05	4.74	30381	6977	0.0060	0.0190	0.013U	0.019J	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene		5.88 +0.03	0	6456	0.0000	0.0660	0.037U	0.065J	0.037U
Pyrene	6.18 -0.03	6.14 -0.01	176369	1059	0.0070	0.0140	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene		8.41 -0.01	0	7647	0.0000	0.0280	0.067U	0.067U	0.067U
Benzo(k)fluoranthene	8.78 +0.01		35649	0	0.0020	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene	9.12 +0.01		35826	0	0.0030	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.65 -0.01	0	45764	0.0000	0.8310	0.035U	0.82	0.035U
Benzo(g,h,i)perylene		10.02 +0.02	0	15836	0.0000	0.1780	0.036U	0.18J	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1010 ml	**Dilution:**	1.0
Prep Final Vol:	1.00 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290031.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290031.D\03290031c.d			**Vial:**	54
Acqu Date:	03/30/2007 04:05	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701647-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

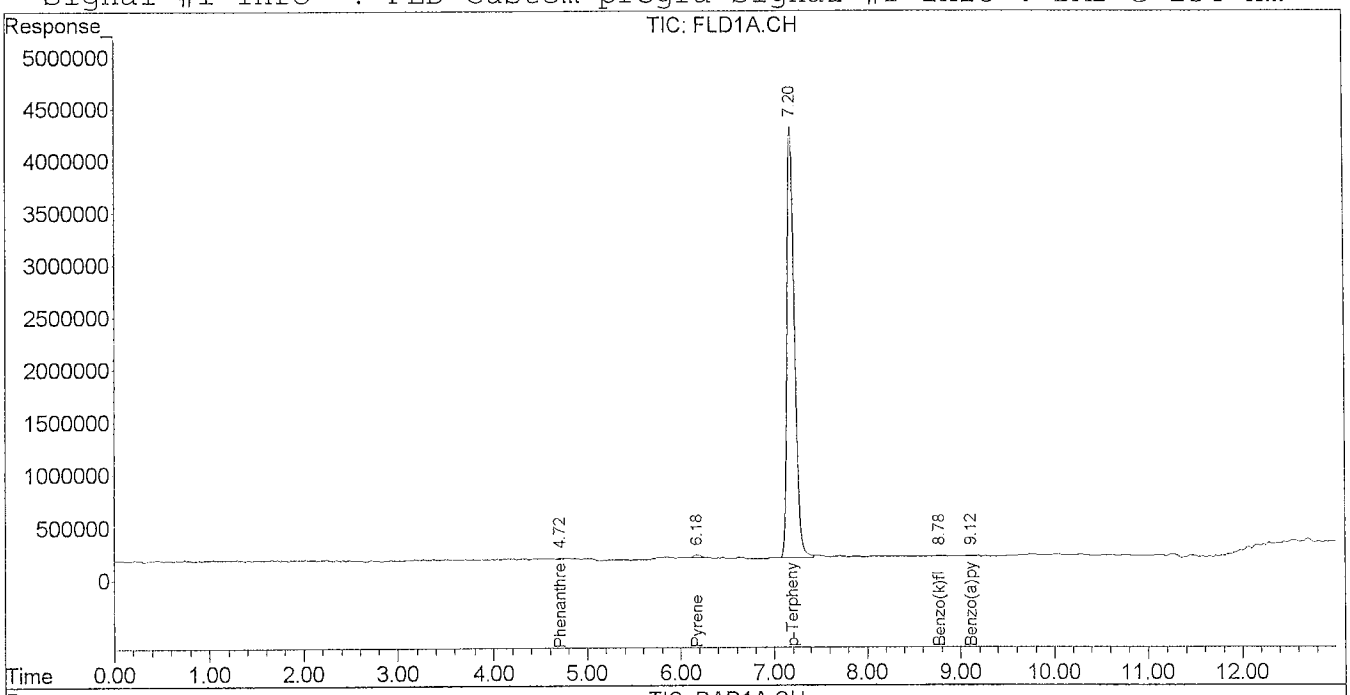
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

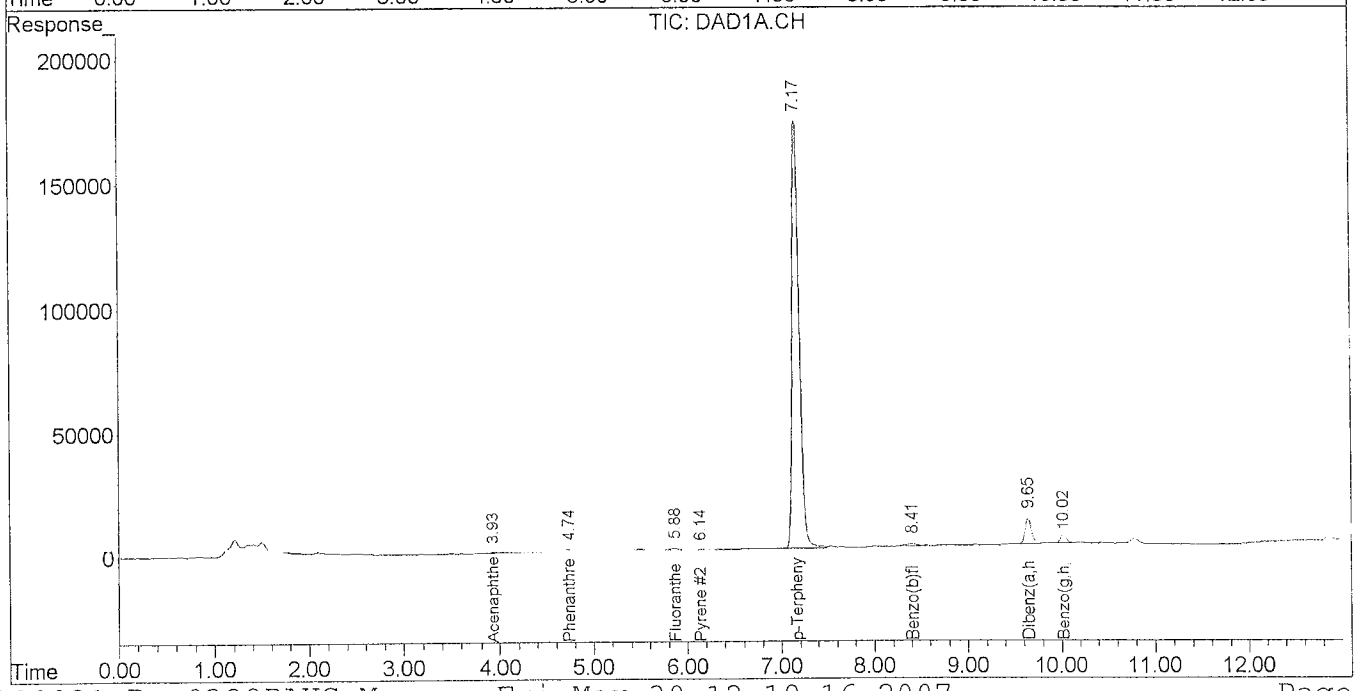
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290031.D\FLD1A.CH Vial: 54
Signal #2 : J:\LC06\DATA\032907PA\03290031.D\DAD1A.CH
Acq On : 30-Mar-2007, 04:05:22 Operator: Paul
Sample : K0701647-002 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703403-4	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	81	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290028.D
Lab ID: KWG0703403-4
RunType: MB
Matrix: WATER

Date Acquired: 03/30/2007 02:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MG

Exception Report

Data File: J:\LC06\DATA\032907PA\03290028.D\03290028C.D
Lab ID: KWG0703403-4
RunType: MB
Matrix: WATER

Date Acquired: 03/30/2007 02:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581537	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290028.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290028.D\03290028c.d			**Vial:**	51
Acqu Date:	03/30/2007 02:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19 -0.02	7.17 -0.01	23522429	944434	8.01	8.12			81OK
				%Recovery =	80OK	81OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57 -0.01		94876	0	0.0610	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000	0.14U	0.14U	0.14U
Acenaphthene			0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene		4.73 -0.01	0	733	0.0000	0.0020	0.013U	0.013U	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene			0	0	0.0000	0.0000	0.037U	0.037U	0.037U
Pyrene		6.17 -0.01	0	1796	0.0000	0.0230	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene		8.38 -0.01	0	5875	0.0000	0.0220	0.067U	0.067U	0.067U
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene			0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.65 -0.01	0	1438	0.0000	0.0260	0.035U	0.035U	0.035U
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290028.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290028.D\03290028c.d			**Vial:**	51
Acqu Date:	03/30/2007 02:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

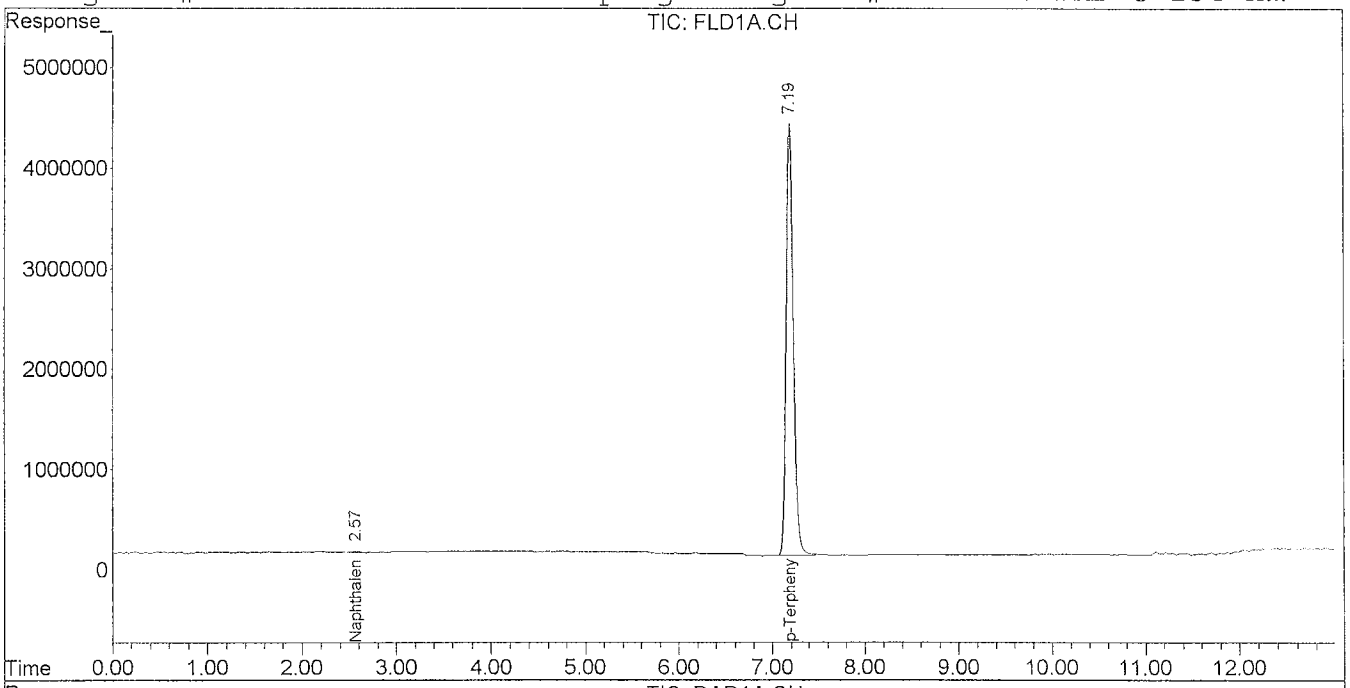
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

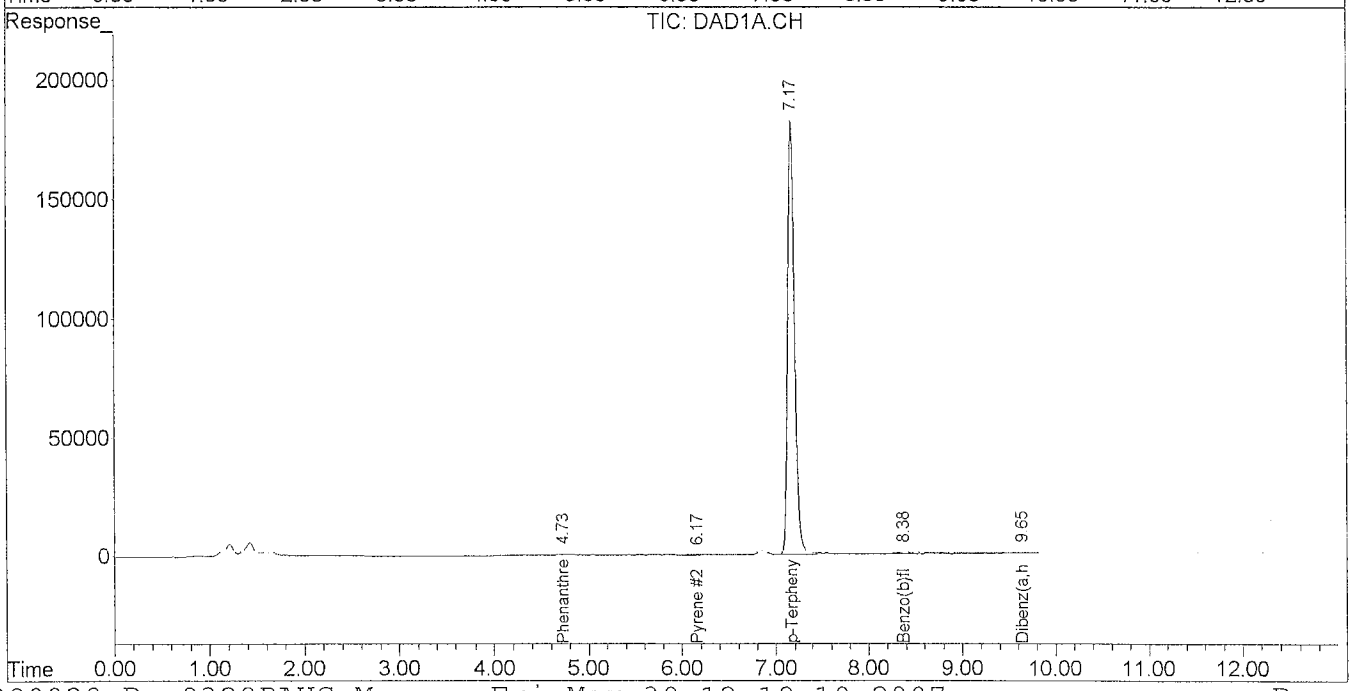
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290028.D\FLD1A.CH Vial: 51
Signal #2 : J:\LC06\DATA\032907PA\03290028.D\DAD1A.CH
Acq On : 30-Mar-2007, 02:53:44 Operator: Paul
Sample : KWG0703403MB Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	03/01/2007
Sample Matrix:	Water	**Date Received:**	03/02/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW01CLMS	**Units:**	ug/L
Lab Code:	KWG0703403-1	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**6.46**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**7.58**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**7.20**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.811**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.932**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.896**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.918**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.896**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.897**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.906**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**0.914**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.896**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.889**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**1.74**	P	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.08**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.813**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	80	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290032.D
Lab ID: KWG0703403-1 -- K0701647-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/30/2007 04:29
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NCMR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290032.D\03290032C.D
Lab ID: KWG0703403-1 -- K0701647-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/30/2007 04:29
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581534	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290032.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290032.D\03290032c.d			**Vial:**	55
Acqu Date:	03/30/2007 04:29	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-1 -- K0701647-002MS				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	-0.02	7.17	-0.01	23144503	930374	7.88	8.00			80OK
						%Recovery =	79OK	80OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	-0.01	2.54	-0.02	10044316	232301	6.46	6.42	6.46	6.42	**6.46**
Acenaphthylene			2.97	-0.01	0	175182	0.0000	7.58		7.58	**7.58**
2-Methylnaphthalene/Dibe	3.61	-0.02	3.58	-0.03	4266418	199357	6.58	6.94	6.58	6.94	**6.94**
Acenaphthene	3.91	-0.02	3.89	-0.01	5878427	81842	7.20	6.53	7.20	6.53	**7.20**
Fluorene	4.19	-0.03	4.17	-0.03	5064201	131514	0.7850	0.8110	0.785	0.811	**0.811**
Phenanthrene	4.74	-0.03	4.72	-0.02	4601387	343100	0.8650	0.9320	0.865	0.932	**0.932**
Anthracene	5.25	-0.03	5.22	-0.04	7779208	672063	0.8550	0.8960	0.855	0.896	**0.896**
Fluoranthene	5.84	-0.03	5.82	-0.03	3842195	89462	0.8100	0.9180	0.810	0.918	**0.918**
Pyrene	6.18	-0.03	6.16	-0.02	21261122	69611	0.8210	0.8960	0.821	0.896	**0.896**
Benz(a)anthracene	7.37	-0.02	7.36	-0.01	12500506	218666	0.8690	0.8970	0.869	0.897	**0.897**
Chrysene	7.55	-0.02	7.53	-0.03	8339546	344524	0.8940	0.9060	0.894	0.906	**0.906**
Benzo(b)fluoranthene	8.43	-0.02	8.41	-0.01	2784233	249035	0.8650	0.9140	0.865	0.914	**0.914**
Benzo(k)fluoranthene	8.75	-0.02	8.73	-0.03	14443438	150960	0.8900	0.8960	0.890	0.896	**0.896**
Benzo(a)pyrene	9.09	-0.02	9.06	-0.03	10455630	221463	0.8750	0.8890	0.875	0.889	**0.889**
Dibenz(a,h)anthracene	9.66	-0.03	9.64	-0.02	5152460	95661	0.9510	1.74	0.951	1.74	**1.74P**
Benzo(g,h,i)perylene	9.99	-0.03	9.98	-0.02	9458996	94270	1.08[CCV]	1.06	1.08	1.06	**1.08**
Indeno(1,2,3-cd)pyrene	10.19	-0.03	10.17	-0.03	11481966	170448	0.8130	0.8050	0.813	0.805	**0.813**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290032.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290032.D\03290032c.d			**Vial:**	55
Acqu Date:	03/30/2007 04:29	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-1 -- K0701647-002MS				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

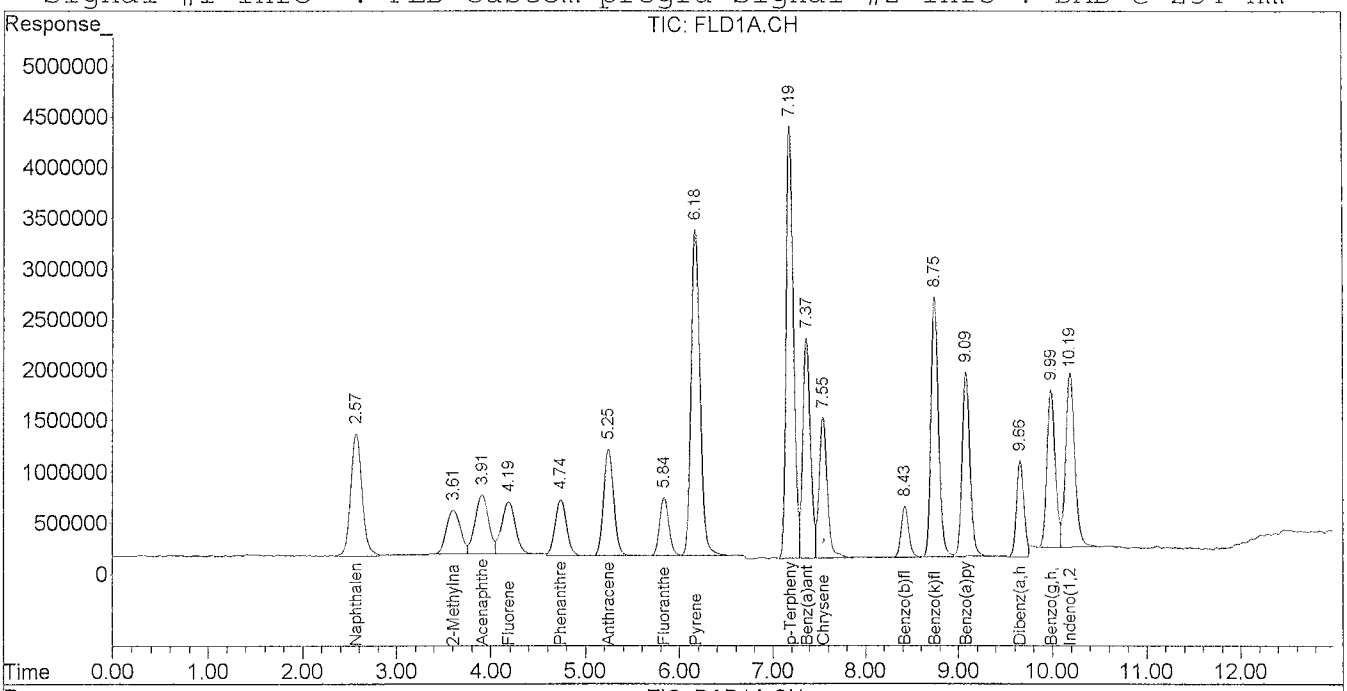
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

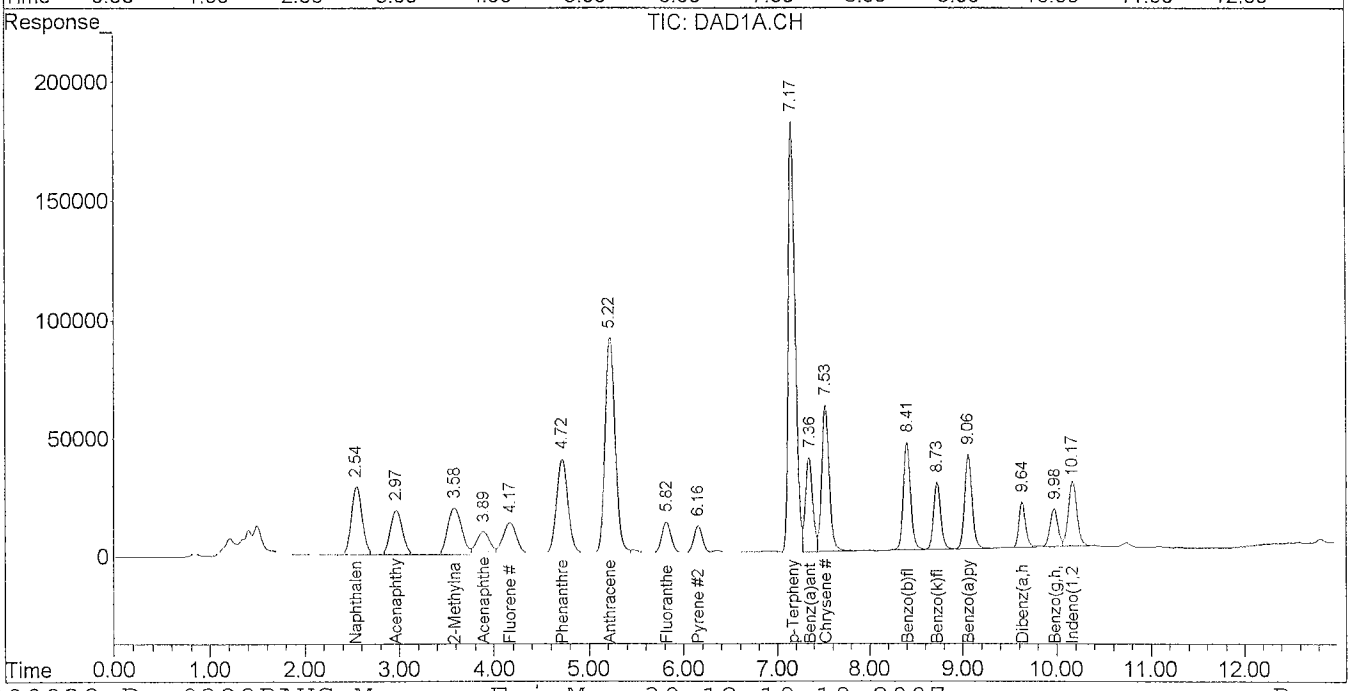
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290032.D\FLD1A.CH Vial: 55
Signal #2 : J:\LC06\DATA\032907PA\03290032.D\DAD1A.CH
Acq On : 30-Mar-2007, 04:29:12 Operator: Paul
Sample : K0701647-002MS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703403-2	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**7.97**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**8.68**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**8.71**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.851**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.902**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.893**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.857**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.908**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.939**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.916**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**0.965**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.934**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.908**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**0.831**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.06**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.847**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	82	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290029.D
Lab ID: KWG0703403-2
RunType: LCS
Matrix: WATER

Date Acquired: 03/30/2007 03:17
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NCMR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290029.D\03290029C.D
Lab ID: KWG0703403-2
RunType: LCS
Matrix: WATER

Date Acquired: 03/30/2007 03:17
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581535	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290029.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290029.D\03290029c.d			**Vial:**	52
Acqu Date:	03/30/2007 03:17	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.20 -0.01	7.18	23726723	949638	8.08	8.16			82OK
			%Recovery =		81OK	82OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57 -0.01	2.55 -0.01	12174086	288457	7.84	7.97	7.84	7.97	**7.97**
Acenaphthylene		2.98	0	200734	0.0000	8.68		8.68	**8.68**
2-Methylnaphthalene/Dibe	3.61 -0.02	3.59 -0.02	5268592	239140	8.12	8.32	8.12	8.32	**8.32**
Acenaphthene	3.91 -0.02	3.90	6706428	109157	8.22	8.71	8.22	8.71	**8.71**
Fluorene	4.20 -0.02	4.18 -0.02	5349542	137996	0.8290	0.8510	0.829	0.851	**0.851**
Phenanthrene	4.75 -0.02	4.73 -0.01	4617531	331974	0.8680	0.9020	0.868	0.902	**0.902**
Anthracene	5.26 -0.02	5.25 -0.01	7960819	669781	0.8750	0.8930	0.875	0.893	**0.893**
Fluoranthene	5.86 -0.01	5.83 -0.02	3807729	83565	0.8020	0.8570	0.802	0.857	**0.857**
Pyrene	6.20 -0.01	6.18	20907925	70489	0.8070	0.9080	0.807	0.908	**0.908**
Benz(a)anthracene	7.39	7.37	12715070	228906	0.8840	0.9390	0.884	0.939	**0.939**
Chrysene	7.57	7.55 -0.01	8373655	348240	0.8980	0.9160	0.898	0.916	**0.916**
Benzo(b)fluoranthene	8.45	8.42	2921190	262841	0.9080	0.9650	0.908	0.965	**0.965**
Benzo(k)fluoranthene	8.77	8.75 -0.01	15037143	157274	0.9260	0.9340	0.926	0.934	**0.934**
Benzo(a)pyrene	9.11	9.09	10777605	226335	0.9020	0.9080	0.902	0.908	**0.908**
Dibenz(a,h)anthracene	9.69	9.67 +0.01	4034153	45759	0.7440	0.8310	0.744	0.831	**0.831**
Benzo(g,h,i)perylene	10.02	10.01 +0.01	9248368	82062	1.06 CCV	0.9200	1.06	0.920	**1.06**
Indeno(1,2,3-cd)pyrene	10.22	10.21 +0.01	11879749	179393	0.8410	0.8470	0.841	0.847	**0.847**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290029.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290029.D\03290029c.d			**Vial:**	52
Acqu Date:	03/30/2007 03:17	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

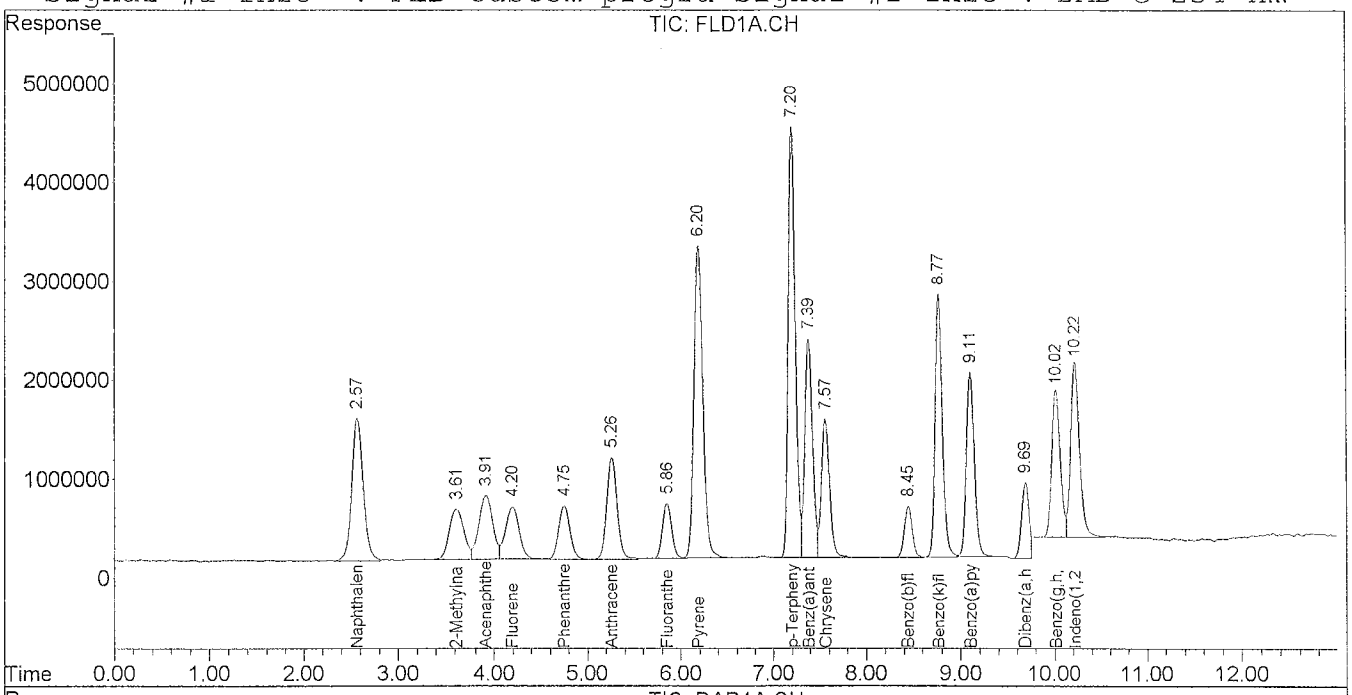
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

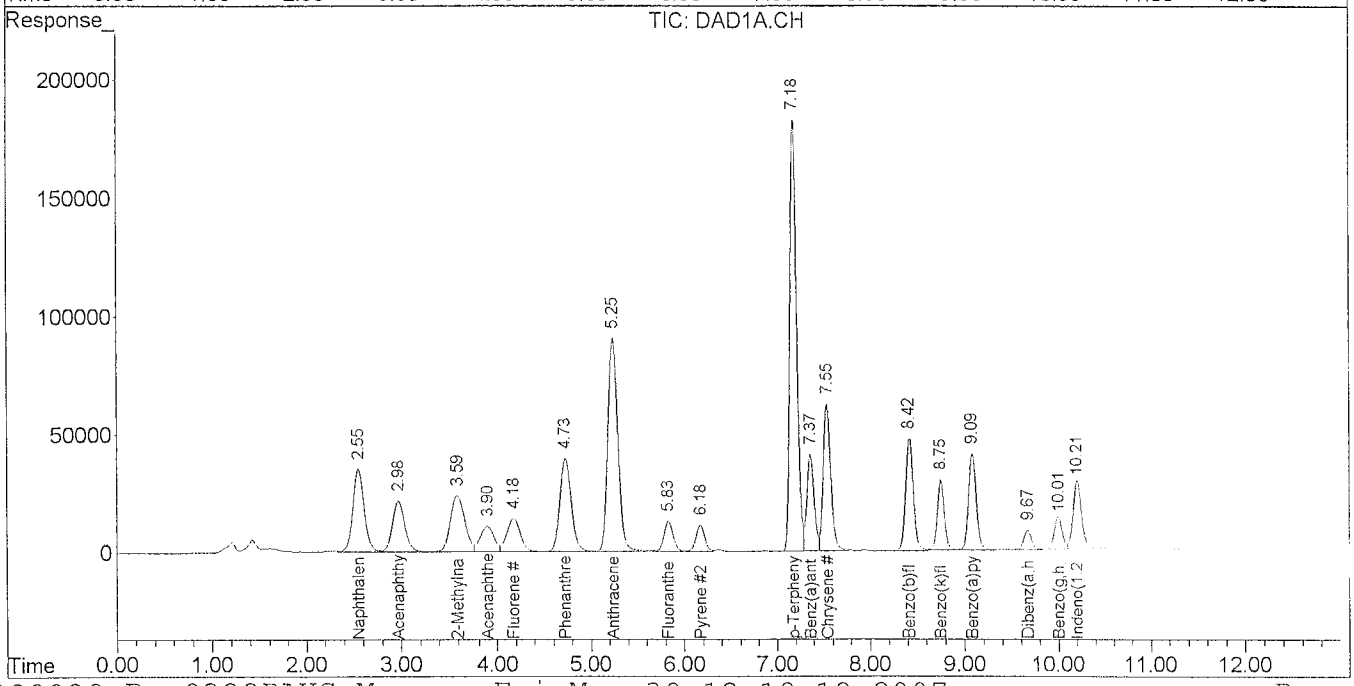
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290029.D\FLD1A.CH Vial: 52
Signal #2 : J:\LC06\DATA\032907PA\03290029.D\DAD1A.CH
Acq On : 30-Mar-2007, 03:17:35 Operator: Paul
Sample : KWG0703403LCS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701647
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703403-3	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**8.26**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**8.99**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**9.03**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.885**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.934**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.938**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.908**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.968**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.978**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.983**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**1.02**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.992**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.964**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**0.826**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.09**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.914**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	86	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290030.D
Lab ID: KWG0703403-3
RunType: DLCS
Matrix: WATER

Date Acquired: 03/30/2007 03:41
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NCAR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	↓

Primary Review: VC 4/2/07

Secondary Review: MM

Printed: 03/30/2007 13:17:34
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\LC06\DATA\032907PA\03290030.D\03290030C.D
Lab ID: KWG0703403-3
RunType: DLCS
Matrix: WATER

Date Acquired: 03/30/2007 03:41
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581536	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290030.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290030.D\03290030c.d			**Vial:**	53
Acqu Date:	03/30/2007 03:41	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.18	-0.03	7.17	-0.01	25108419	1006111	8.55	8.65			86OK
						%Recovery =	85OK	86OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58		2.56		12835860	295344	8.26	8.16	8.26	8.16	**8.26**
Acenaphthylene			2.98		0	207884	0.0000	8.99		8.99	**8.99**
2-Methylnaphthalene/Dibe	3.61	-0.02	3.60	-0.01	5462390	249750	8.42	8.69	8.42	8.69	**8.69**
Acenaphthene	3.91	-0.02	3.89	-0.01	6990202	113151	8.57	9.03	8.57	9.03	**9.03**
Fluorene	4.20	-0.02	4.18	-0.02	5556562	143428	0.8610	0.8850	0.861	0.885	**0.885**
Phenanthrene	4.75	-0.02	4.73	-0.01	4851538	343738	0.9120	0.9340	0.912	0.934	**0.934**
Anthracene	5.26	-0.02	5.24	-0.02	8339740	703630	0.9160	0.9380	0.916	0.938	**0.938**
Fluoranthene	5.84	-0.03	5.82	-0.03	3878515	88489	0.8170	0.9080	0.817	0.908	**0.908**
Pyrene	6.18	-0.03	6.16	-0.02	21871760	75162	0.8450	0.9680	0.845	0.968	**0.968**
Benz(a)anthracene	7.37	-0.02	7.34	-0.03	13485757	238359	0.9370	0.9780	0.937	0.978	**0.978**
Chrysene	7.54	-0.03	7.52	-0.04	8871731	373608	0.9510	0.9830	0.951	0.983	**0.983**
Benzo(b)fluoranthene	8.42	-0.03	8.40	-0.02	3114993	277498	0.9680	1.02	0.968	1.02	**1.02**
Benzo(k)fluoranthene	8.74	-0.03	8.73	-0.03	15915111	167125	0.9800	0.9920	0.980	0.992	**0.992**
Benzo(a)pyrene	9.08	-0.03	9.06	-0.03	11508900	239546	0.9640	0.9610	0.964	0.961	**0.964**
Dibenz(a,h)anthracene	9.66	-0.03	9.64	-0.02	4266312	45458	0.7870	0.8260	0.787	0.826	**0.826**
Benzo(g,h,i)perylene	9.99	-0.03	9.97	-0.03	9536768	84311	1.09[CCV]	0.9450	1.09	0.945	**1.09**
Indeno(1,2,3-cd)pyrene	10.19	-0.03	10.17	-0.03	12669004	193610	0.8970	0.9140	0.897	0.914	**0.914**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290030.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290030.D\03290030c.d			**Vial:**	53
Acqu Date:	03/30/2007 03:41	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

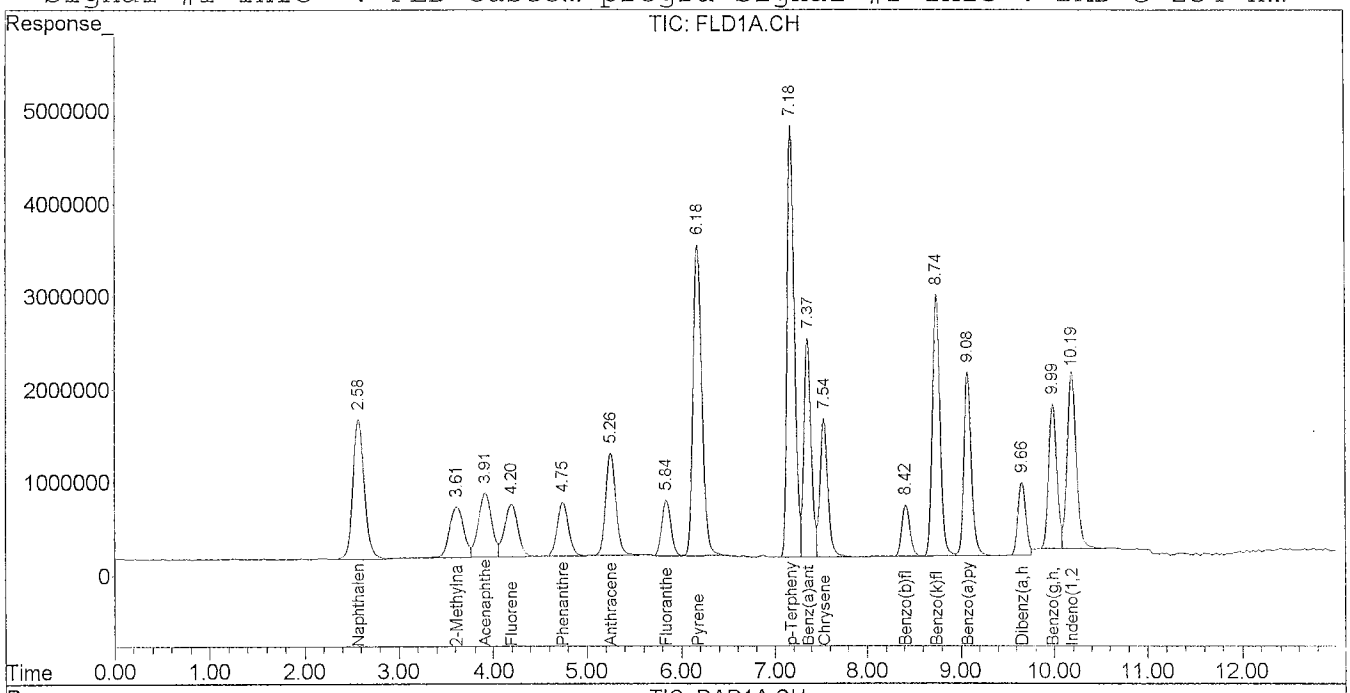
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

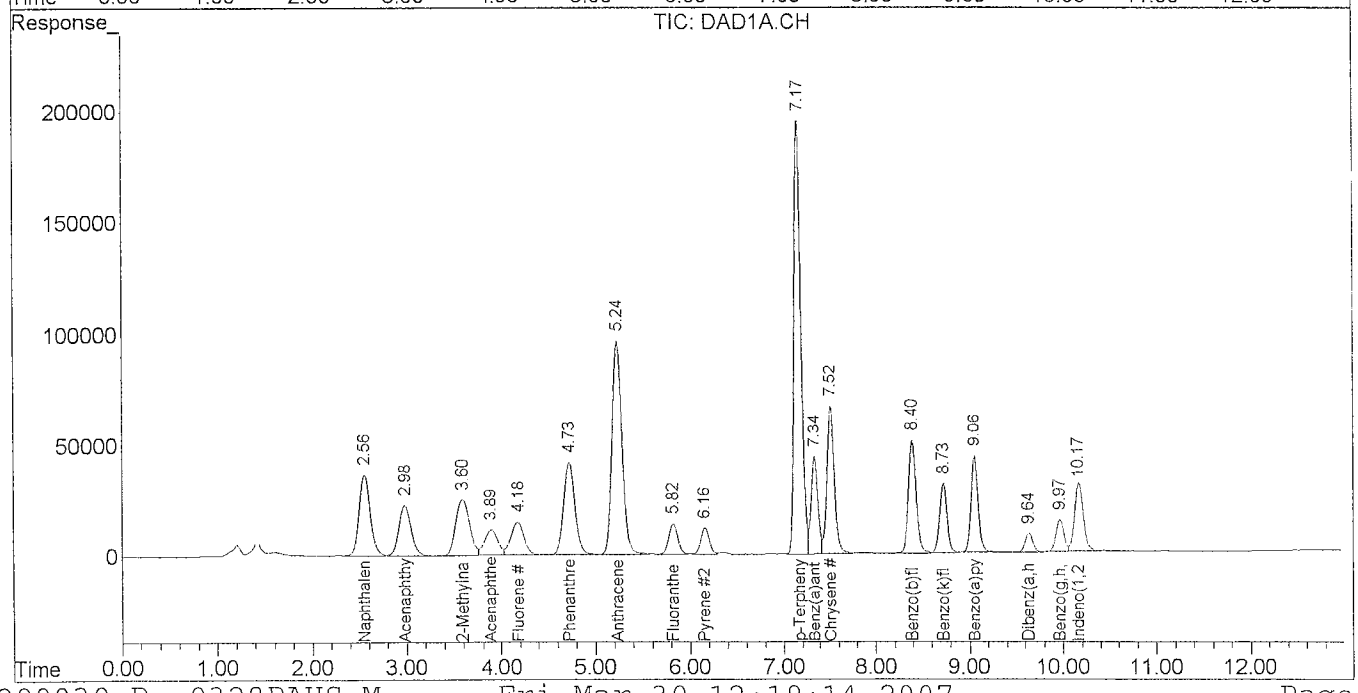
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290030.D\FLD1A.CH Vial: 53
Signal #2 : J:\LC06\DATA\032907PA\03290030.D\DAD1A.CH
Acq On : 30-Mar-2007, 03:41:28 Operator: Paul
Sample : KWG0703403DLCS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz(a)anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo(b)fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo(k)fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo(a)pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Benzo(g,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Indeno(1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D\03280030c.d

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Benzo(b)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(k)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

DATA ANALYSIS PARAMETERS

Method Name: J:\LC06\METHODS\0328PAHS.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

pm032907

0328PAHs aka CAL6170
Calibration Last Updated: Wed Mar 28 22:27:12 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

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1) Naphthalene ( )
Ret. Time 2.58 min., Extract & Integrate from 2.53 to 2.63 min.

Lvl ID Conc (ug/mL) Response

CCV	10.000	-1
1	1.000	1616285
2	2.000	3117249
3	5.000	8051900
4	10.000	15618134
5	20.000	32030393
6	50.000	74936469
7	100.000	142915511

Curve Fit: Avg. RF

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2) Acenaphthylene ( )
Ret. Time 3.16 min., Extract & Integrate from 3.16 to 3.16 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

---

3) 2-Methylnaphthalene ( )
Ret. Time 3.63 min., Extract & Integrate from 3.58 to 3.68 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	675582
2		2.000	1326316
3		5.000	3193656
4		10.000	6393320
5		20.000	13036535
6		50.000	31616711
7		100.000	64106201

pm032407

Curve Fit: Avg. RF

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4) Acenaphthene ( )
Ret. Time 3.93 min., Extract & Integrate from 3.87 to 3.99 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	849080
2		2.000	1645409
3		5.000	4012450
4		10.000	8107649
5		20.000	16380514
6		50.000	40017661
7		100.000	80863233

Curve Fit: Avg. RF

---

5) Fluorene ( )
Ret. Time 4.21 min., Extract & Integrate from 4.16 to 4.26 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	655851
2		0.200	1305788
3		0.500	3165885
4		1.000	6455183
5		2.000	13037373
6		5.000	31796156
7		10.000	64296595

Curve Fit: Avg. RF

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6) Phenanthrene ( )
Ret. Time 4.76 min., Extract & Integrate from 4.71 to 4.81 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	513510
2		0.200	1059577
3		0.500	2662862
4		1.000	5391539
5		2.000	10768593
6		5.000	26562195
7		10.000	54003564

Curve Fit: Avg. RF

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7) Anthracene ( )
Ret. Time 5.27 min., Extract & Integrate from 5.21 to 5.33 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	896935
2		0.200	1904593
3		0.500	4673208
4		1.000	8912960
5		2.000	18057968
6		5.000	44482232
7		10.000	90242988

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Curve Fit: Avg. RF

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8) Fluoranthene ( )
Ret. Time 5.85 min., Extract & Integrate from 5.80 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	498389
2		0.200	1100137
3		0.500	2306705
4		1.000	4619076
5		2.000	8974769
6		5.000	22188195

7	10.000	45749539

Curve Fit: Avg. RF

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9) Pyrene ( )

Ret. Time 6.19 min., Extract & Integrate from 6.14 to 6.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	2561788
2		0.200	5141694
3		0.500	12770395
4		1.000	26079628
5		2.000	52604582
6		5.000	129344510
7		10.000	261327859

Curve Fit: Avg. RF

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10) p-Terphenyl ( )

Ret. Time 7.19 min., Extract & Integrate from 7.13 to 7.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	2971418
2		2.000	6004467
3		5.000	14350937
4		10.000	29220571
5		20.000	58778300
6		50.000	145291735
7		100.000	295250656

Curve Fit: Avg. RF

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11) Benz(a)anthracene ( )

Ret. Time 7.37 min., Extract & Integrate from 7.29 to 7.45 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1453538
2		0.200	2842764
3		0.500	7127365
4		1.000	14376186
5		2.000	28969567
6		5.000	71452786
7		10.000	145456474

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Curve Fit: Avg. RF

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12) Chrysene ( )

Ret. Time 7.55 min., Extract & Integrate from 7.49 to 7.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	890676

2	0.200	1827784
3	0.500	4671564
4	1.000	9470153
5	2.000	18934947
6	5.000	47147677
7	10.000	95127195

Curve Fit: Avg. RF

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13) Benzo(b)fluoranthene ( )
Ret. Time 8.42 min., Extract & Integrate from 8.34 to 8.50 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	329575
2		0.200	656278
3		0.500	1585127
4		1.000	3153643
5		2.000	6444928
6		5.000	15785292
7		10.000	32512842

Curve Fit: Avg. RF

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14) Benzo(k)fluoranthene ( )
Ret. Time 8.74 min., Extract & Integrate from 8.66 to 8.82 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1627349
2		0.200	3275877
3		0.500	8030146
4		1.000	16291932
5		2.000	32802216
6		5.000	80609520
7		10.000	161243738

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Curve Fit: Avg. RF

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15) Benzo(a)pyrene ( )
Ret. Time 9.08 min., Extract & Integrate from 8.99 to 9.17 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1172902
2		0.200	2376819
3		0.500	5951067
4		1.000	12087980
5		2.000	24120811
6		5.000	59849384
7		10.000	119668076

Curve Fit: Avg. RF

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16) Dibenz(a,h)anthracene ( )

Ret. Time 9.65 min., Extract & Integrate from 9.56 to 9.74 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	528930
2		0.200	1070467
3		0.500	2690421
4		1.000	5454531
5		2.000	10970124
6		5.000	27193125
7		10.000	55313300

Curve Fit: Avg. RF

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17) Benzo(g,h,i)perylene ( )
Ret. Time 9.98 min., Extract & Integrate from 9.89 to 10.07 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	774212
2		0.200	1628378
3		0.500	4330750
4		1.000	9022809
5		2.000	19289508
6		5.000	43105690
7		10.000	94801391

Curve Fit: Avg. RF

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18) Indeno(1,2,3-cd)pyrene ( )
Ret. Time 10.18 min., Extract & Integrate from 10.07 to 10.29 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1409282
2		0.200	2839793
3		0.500	6922934
4		1.000	14068661
5		2.000	28429576
6		5.000	70621147
7		10.000	143425917

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Curve Fit: Avg. RF

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19) Signal #2 ( )
Ret. Time 0.00 min., Extract & Integrate from 0.00 to 0.00 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

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20) Naphthalene #2 ( )
Ret. Time 2.56 min., Extract & Integrate from 2.51 to 2.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	35239
2		2.000	73393
3		5.000	175786
4		10.000	362793
5		20.000	733964
6		50.000	1816789
7		100.000	3694782

Curve Fit: Avg. RF

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21) Acenaphthylene #2 ( )
Ret. Time 2.98 min., Extract & Integrate from 2.92 to 3.04 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	21595
2		2.000	44570
3		5.000	115264
4		10.000	233229
5		20.000	478156
6		50.000	1181484
7		100.000	2406259

Curve Fit: Avg. RF

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22) 2-Methylnaphthalene #2 ( )
Ret. Time 3.60 min., Extract & Integrate from 3.54 to 3.66 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	27178
2		2.000	56062
3		5.000	140130
4		10.000	290014
5		20.000	593155
6		50.000	1465419
7		100.000	2994696

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Curve Fit: Avg. RF

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23) Acenaphthene #2 ( )
Ret. Time 3.90 min., Extract & Integrate from 3.85 to 3.95 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	11308
2		2.000	22613
3		5.000	58571

4	10.000	131301
5	20.000	267348
6	50.000	673607
7	100.000	1343628

Curve Fit: Avg. RF

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24) Fluorene #2 ( )
Ret. Time 4.18 min., Extract & Integrate from 4.12 to 4.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	15757
2		0.200	28386
3		0.500	75046
4		1.000	171038
5		2.000	346458
6		5.000	842802
7		10.000	1726074

Curve Fit: Avg. RF

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25) Phenanthrene #2 ( )
Ret. Time 4.74 min., Extract & Integrate from 4.69 to 4.79 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	33664
2		0.200	74146
3		0.500	181890
4		1.000	374224
5		2.000	759025
6		5.000	1868551
7		10.000	3774932

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Curve Fit: Avg. RF

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26) Anthracene #2 ( )
Ret. Time 5.25 min., Extract & Integrate from 5.20 to 5.30 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	76159
2		0.200	152285
3		0.500	380578
4		1.000	774610
5		2.000	1543469
6		5.000	3647690
7		10.000	6894749

Curve Fit: Avg. RF

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27) Fluoranthene #2 ( )
Ret. Time 5.84 min., Extract & Integrate from 5.78 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	9164
2		0.200	17621
3		0.500	46619
4		1.000	99801
5		2.000	207035
6		5.000	510608
7		10.000	1039098

Curve Fit: Avg. RF

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28) Pyrene #2 ( )
Ret. Time 6.17 min., Extract & Integrate from 6.12 to 6.22 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	7014
2		0.200	14671
3		0.500	37542
4		1.000	79224
5		2.000	164170
6		5.000	406326
7		10.000	824890

Curve Fit: Avg. RF

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29) p-Terphenyl #2 ( )
Ret. Time 7.17 min., Extract & Integrate from 7.11 to 7.23 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	114938
2		2.000	237213
3		5.000	573021
4		10.000	1165706
5		20.000	2350454
6		50.000	5768380
7		100.000	11673630

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Curve Fit: Avg. RF

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30) Benz(a)anthracene #2 ( )
Ret. Time 7.36 min., Extract & Integrate from 7.28 to 7.44 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	22458
2		0.200	48797
3		0.500	122386
4		1.000	248426
5		2.000	496343
6		5.000	1238659
7		10.000	2482982

Curve Fit: Avg. RF

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31) Chrysene #2 ( )
Ret. Time 7.53 min., Extract & Integrate from 7.47 to 7.59 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	35394
2		0.200	76066
3		0.500	189443
4		1.000	387238
5		2.000	777432
6		5.000	1930709
7		10.000	3862295

Curve Fit: Avg. RF

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32) Benzo(b)fluoranthene #2 ( )
Ret. Time 8.40 min., Extract & Integrate from 8.31 to 8.49 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	27248
2		0.200	53458
3		0.500	134375
4		1.000	272534
5		2.000	552249
6		5.000	1367885
7		10.000	2767895

Curve Fit: Avg. RF

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33) Benzo(k)fluoranthene #2 ( )
Ret. Time 8.72 min., Extract & Integrate from 8.64 to 8.80 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	16097
2		0.200	32788
3		0.500	83124
4		1.000	171306
5		2.000	345666
6		5.000	855438
7		10.000	1725568

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Curve Fit: Avg. RF

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34) Benzo(a)pyrene #2 ( )
Ret. Time 9.05 min., Extract & Integrate from 8.99 to 9.11 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	24039
2		0.200	48515
3		0.500	125020
4		1.000	251443
5		2.000	509324

6	5.000	1256720
7	10.000	2541208

Curve Fit: Avg. RF

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35) Dibenz(a,h)anthracene #2 ( )
Ret. Time 9.62 min., Extract & Integrate from 9.53 to 9.71 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	5590
2		0.200	11144
3		0.500	27868
4		1.000	54054
5		2.000	110410
6		5.000	270343
7		10.000	547025

Curve Fit: Avg. RF

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36) Benzo(g,h,i)perylene #2 ( )
Ret. Time 9.96 min., Extract & Integrate from 9.87 to 10.05 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	8022
2		0.200	17914
3		0.500	45055
4		1.000	91202
5		2.000	183728
6		5.000	449845
7		10.000	913046

Curve Fit: Avg. RF

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37) Indeno(1,2,3-cd)pyrene #2 ( )
Ret. Time 10.16 min., Extract & Integrate from 10.07 to 10.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	20018
2		0.200	41262
3		0.500	104472
4		1.000	215803
5		2.000	431674
6		5.000	1080621
7		10.000	2189286

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Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Thu Mar 29 11:37:20 2007

pm032907

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:11 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.16	2971418	114938	1.010	0.987	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	1616285	35239	1.017	0.978	
2)	t	Acenaphthylene	0.00	2.98	0	21595	N.D.	0.946	#
3)	t	2-Methylnaphthal	3.62	3.60	675582	27178	1.033	0.958	
4)	t	Acenaphthene	3.92	3.90	849080	11308	1.034	0.930	
5)	t	Fluorene	4.20	4.18	655851	15757	0.101	0.099	
6)	t	Phenanthrene	4.76	4.73	513510	33664	0.097	0.092	
7)	t	Anthracene	5.25	5.24	896935	76159	0.098	0.099	
8)	t	Fluoranthene	5.84	5.82	498389	9164	0.103	0.096	
9)	t	Pyrene	6.18	6.16	2561788	7014	0.099	0.092	
11)	t	Benz(a)anthracen	7.36	7.34	1453538	22458	0.101	0.093	
12)	t	Chrysene	7.53	7.52	890676	35394	0.096	0.094	
13)	t	Benzo(b)fluorant	8.41	8.38	329575	27248	0.102	0.100	
14)	t	Benzo(k)fluorant	8.73	8.70	1627349	16097	0.100	0.096	
15)	t	Benzo(a)pyrene	9.06	9.04	1172902	24039	0.098	0.097	
16)	t	Dibenz(a,h)anthr	9.64	9.61	528930	5590	0.098	0.101	
17)	t	Benzo(g,h,i)pery	9.96	9.94	774212	8022	0.088	0.091	
18)	t	Indeno(1,2,3-cd)	10.16	10.14	1409282	20018	0.100	0.096	

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MK

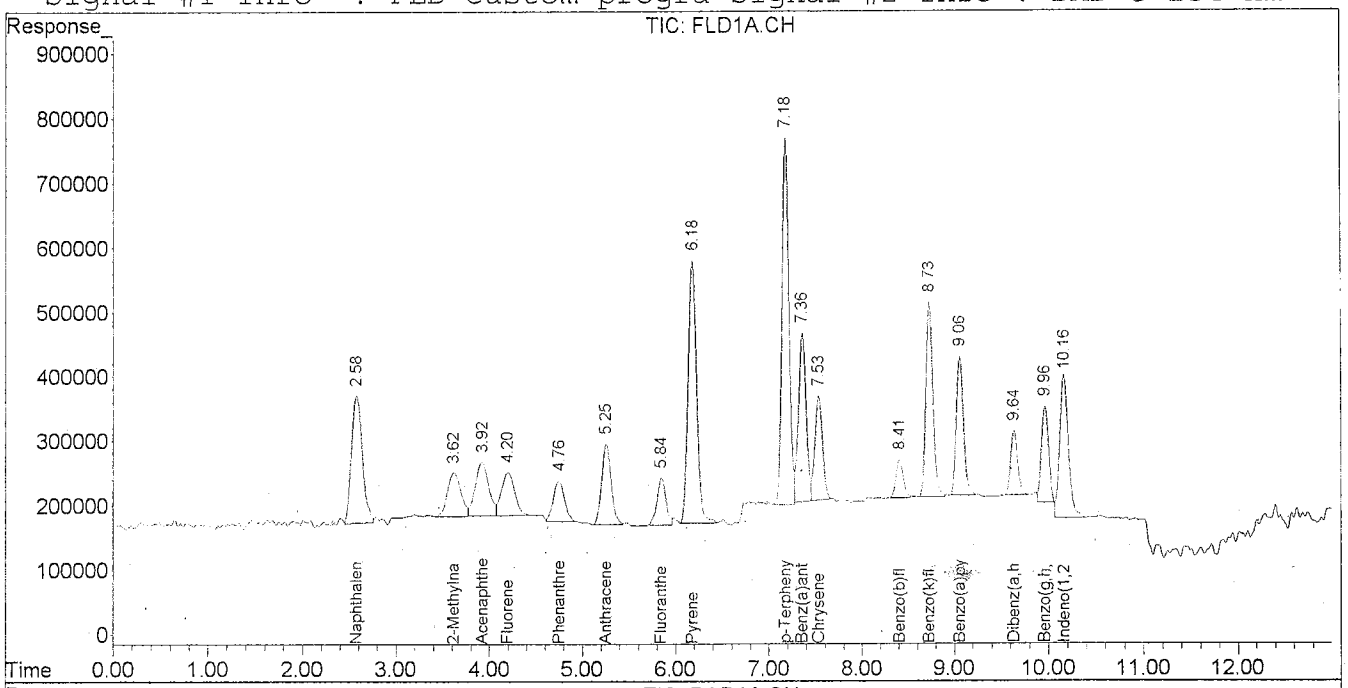
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

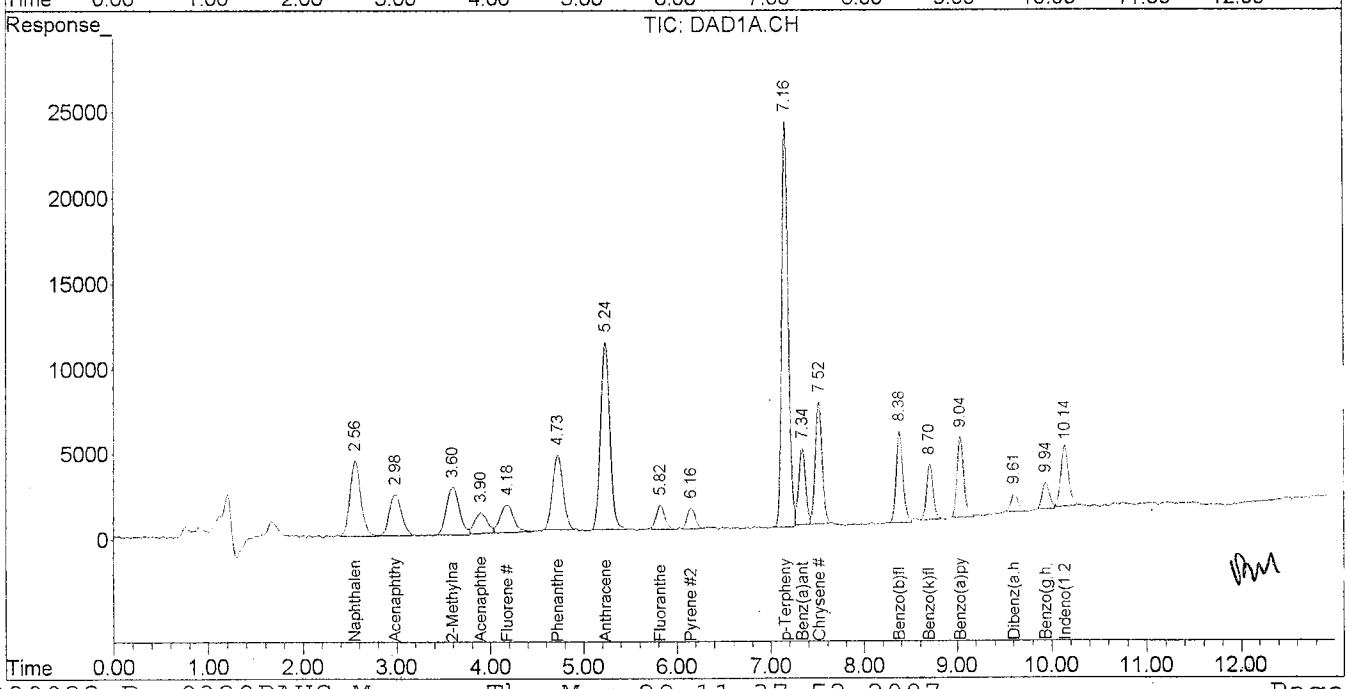
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.16	6004467	237213	2.042	2.037	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	3117249	73393	1.961	2.038	
2)	t	Acenaphthylene	0.00	2.99	0	44570	N.D.	1.952	#
3)	t	2-Methylnaphthal	3.62	3.60	1326316	56062	2.029	1.975	
4)	t	Acenaphthene	3.92	3.91	1645409	22613	2.005	1.859	
5)	t	Fluorene	4.20	4.19	1305788	28386	0.202	0.179	
6)	t	Phenanthrene	4.74	4.73	1059577	74146	0.200	0.203	
7)	t	Anthracene	5.25	5.24	1904593	152285	0.208	0.199	
8)	t	Fluoranthene	5.84	5.83	1100137	17621	0.227	0.185	
9)	t	Pyrene	6.18	6.16	5141694	14671	0.198	0.193	
11)	t	Benz(a)anthracen	7.36	7.35	2842764	48797	0.198	0.202	
12)	t	Chrysene	7.53	7.52	1827784	76066	0.197	0.201	
13)	t	Benzo(b)fluorant	8.41	8.39	656278	53458	0.204	0.197	
14)	t	Benzo(k)fluorant	8.73	8.72	3275877	32788	0.201	0.196	
15)	t	Benzo(a)pyrene	9.06	9.05	2376819	48515	0.199	0.196	
16)	t	Dibenz(a,h)anthr	9.64	9.63	1070467	11144	0.197	0.201	
17)	t	Benzo(g,h,i)pery	9.97	9.96	1628378	17914	0.185	0.202	
18)	t	Indeno(1,2,3-cd)	10.17	10.16	2839793	41262	0.202	0.197	

PM 032907

MA

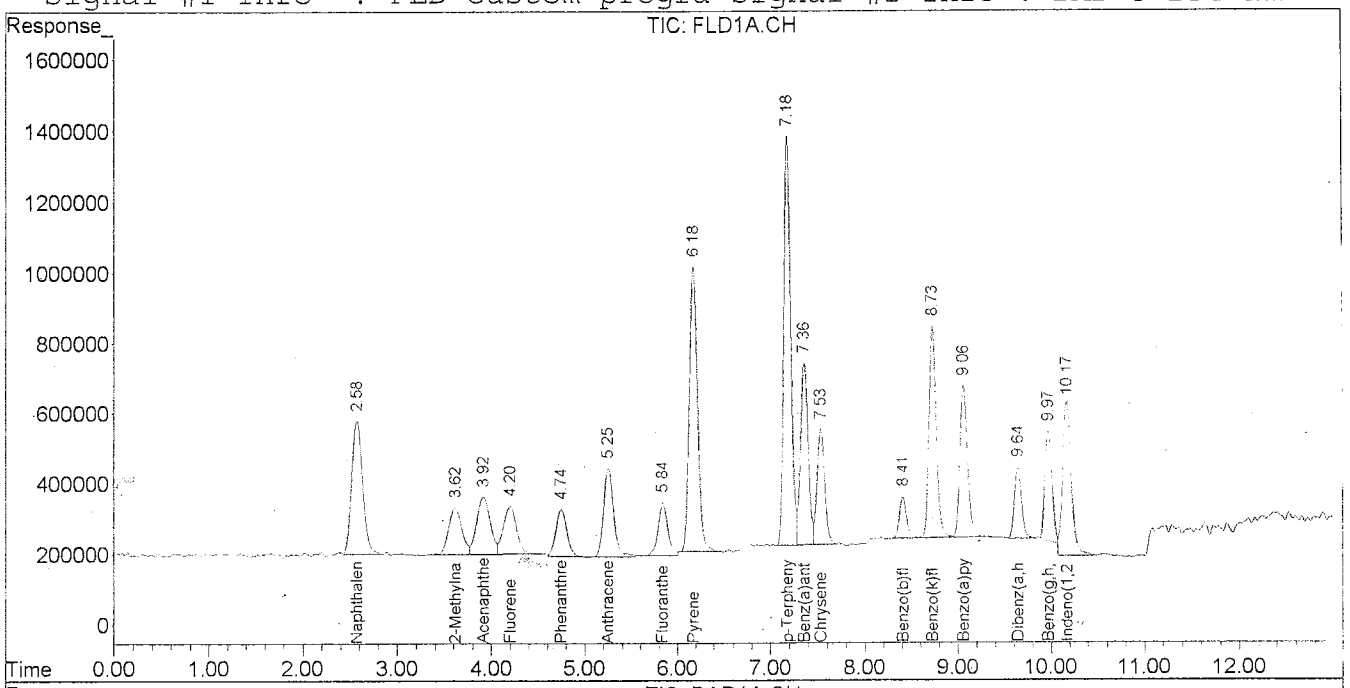
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

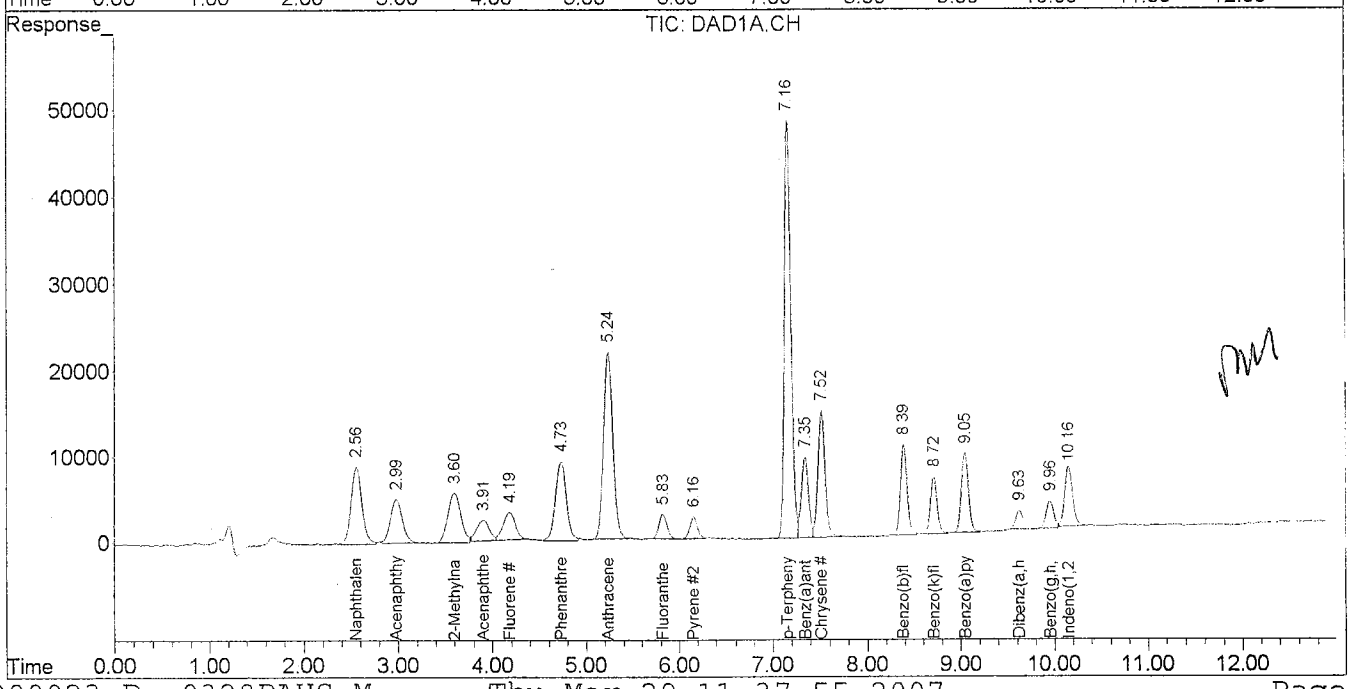
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.16	14350937	573021	4.880	4.921	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	8051900	175786	5.065	4.881	
2)	t	Acenaphthylene	0.00	2.99	0	115264	N.D.	5.048	#
3)	t	2-Methylnaphthal	3.62	3.60	3193656	140130	4.885	4.938	
4)	t	Acenaphthene	3.93	3.91	4012450	58571	4.888	4.815	
5)	t	Fluorene	4.20	4.19	3165885	75046	0.489	0.473	
6)	t	Phenanthrene	4.76	4.74	2662862	181890	0.502	0.498	
7)	t	Anthracene	5.26	5.24	4673208	380578	0.510	0.497	
8)	t	Fluoranthene	5.85	5.83	2306705	46619	0.477	0.489	
9)	t	Pyrene	6.18	6.16	12770395	37542	0.493	0.494	
11)	t	Benz(a)anthracen	7.37	7.35	7127365	122386	0.496	0.506	
12)	t	Chrysene	7.54	7.52	4671564	189443	0.504	0.501	
13)	t	Benzo(b)fluorant	8.41	8.39	1585127	134375	0.492	0.495	
14)	t	Benzo(k)fluorant	8.73	8.71	8030146	83124	0.492	0.498	
15)	t	Benzo(a)pyrene	9.07	9.04	5951067	125020	0.498	0.504	
16)	t	Dibenz(a,h)anthr	9.64	9.63	2690421	27868	0.496	0.504	
17)	t	Benzo(g,h,i)pery	9.98	9.95	4330750	45055	0.493	0.509	
18)	t	Indeno(1,2,3-cd)	10.18	10.15	6922934	104472	0.492	0.499	

PM 032907

MA

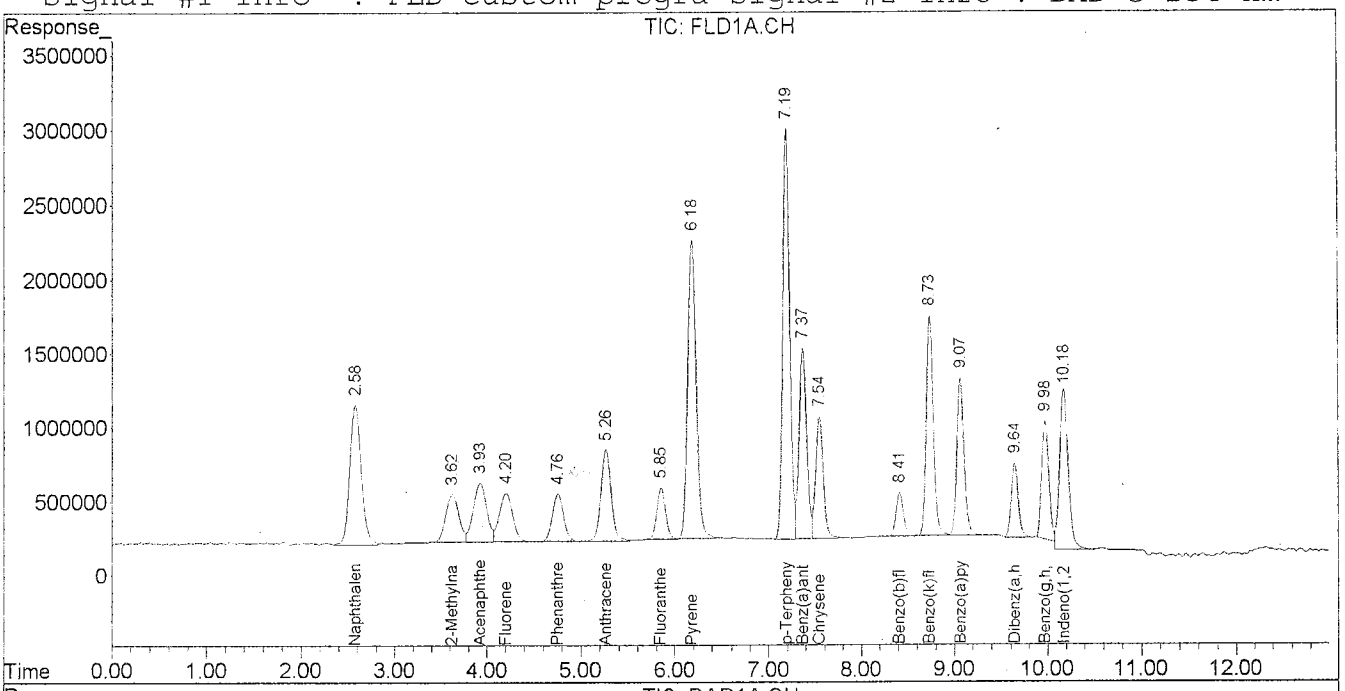
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

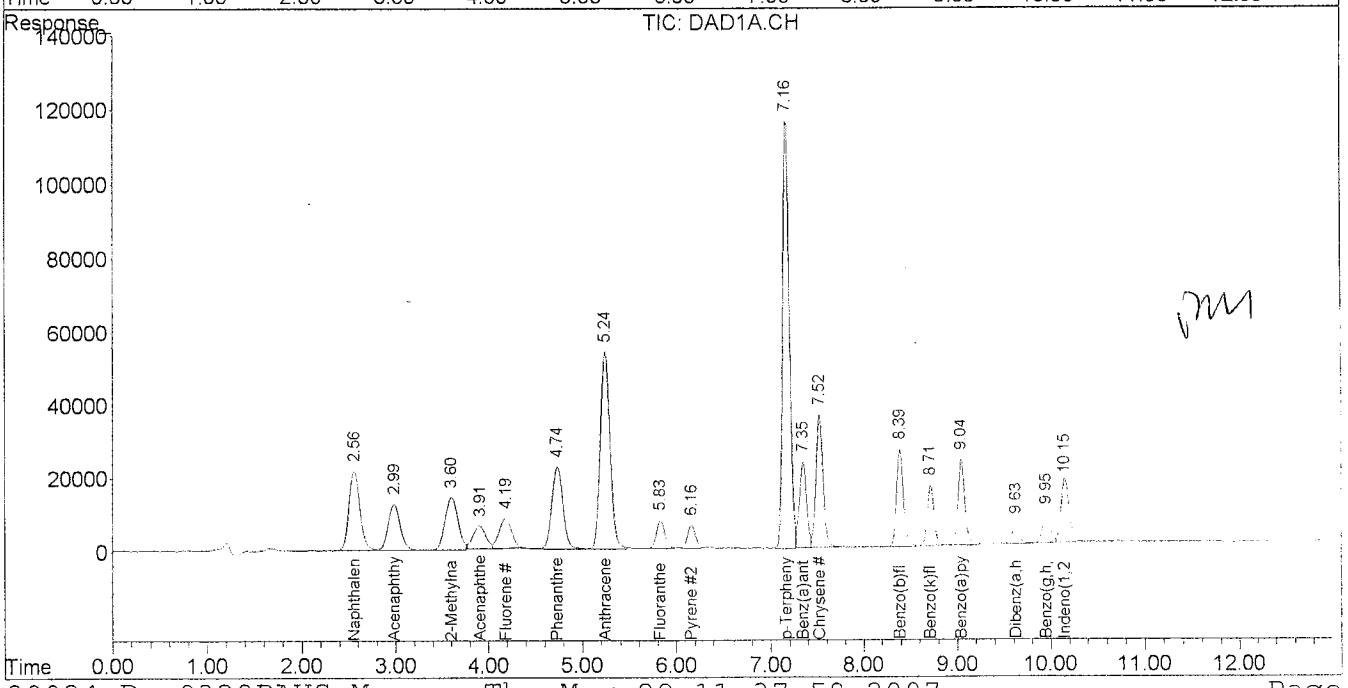
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.17	29220571	1165706	9.936	10.010	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	15618134	362793	9.824	10.074	
2)	t	Acenaphthylene	0.00	2.98	0	233229	N.D.	10.215	#
3)	t	2-Methylnaphthal	3.63	3.60	6393320	290014	9.780	10.219	
4)	t	Acenaphthene	3.93	3.90	8107649	131301	9.878	10.793	
5)	t	Fluorene	4.21	4.18	6455183	171038	0.996	1.077	
6)	t	Phenanthrene	4.76	4.74	5391539	374224	1.016	1.025	
7)	t	Anthracene	5.27	5.25	8912960	774610	0.973	1.011	
8)	t	Fluoranthene	5.85	5.84	4619076	99801	0.954	1.048	
9)	t	Pyrene	6.19	6.17	26079628	79224	1.006	1.043	
11)	t	Benz(a)anthracen	7.37	7.34	14376186	248426	1.000	1.027	
12)	t	Chrysene	7.55	7.53	9470153	387238	1.022	1.025	
13)	t	Benzo(b)fluorant	8.42	8.40	3153643	272534	0.978	1.004	
14)	t	Benzo(k)fluorant	8.74	8.72	16291932	171306	0.998	1.025	
15)	t	Benzo(a)pyrene	9.08	9.05	12087980	251443	1.012	1.015	
16)	t	Dibenz(a,h)anthr	9.65	9.62	5454531	54054	1.006	0.977	
17)	t	Benzo(g,h,i)pery	9.98	9.96	9022809	91202	1.026	1.029	
18)	t	Indeno(1,2,3-cd)	10.18	10.16	14068661	215803	0.999	1.031	

PM 032907

MK

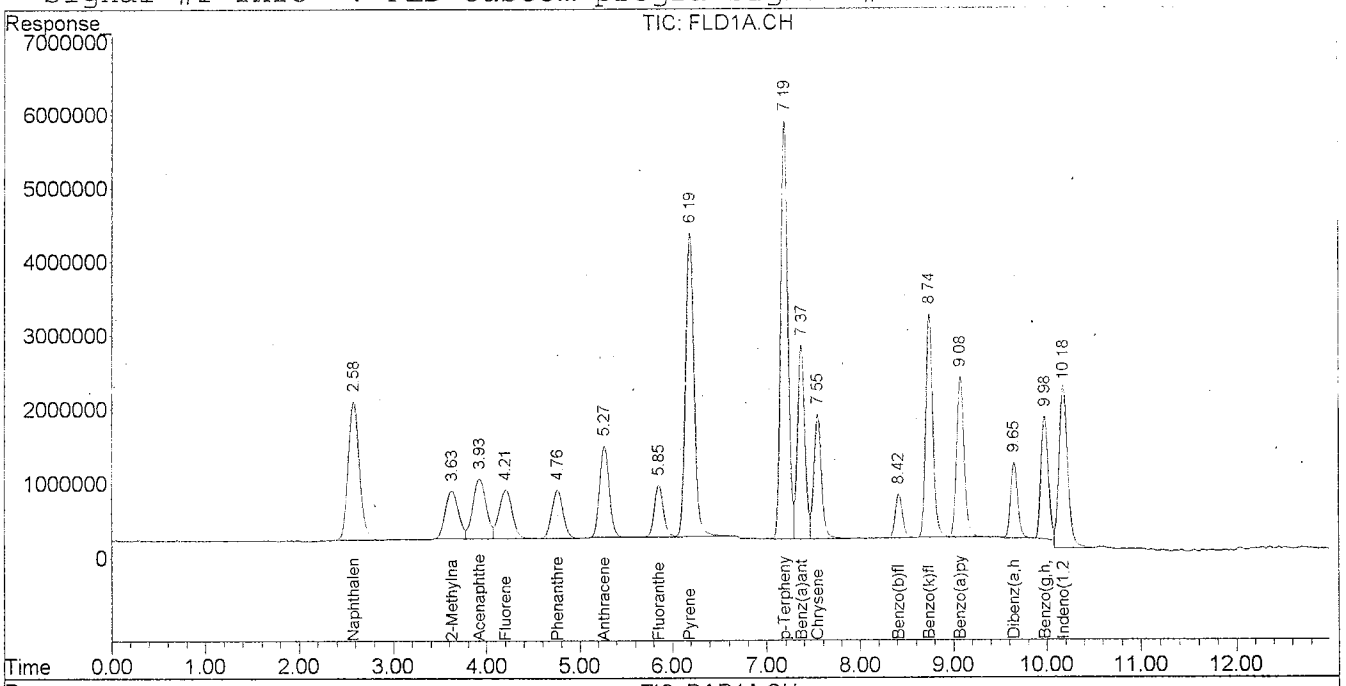
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

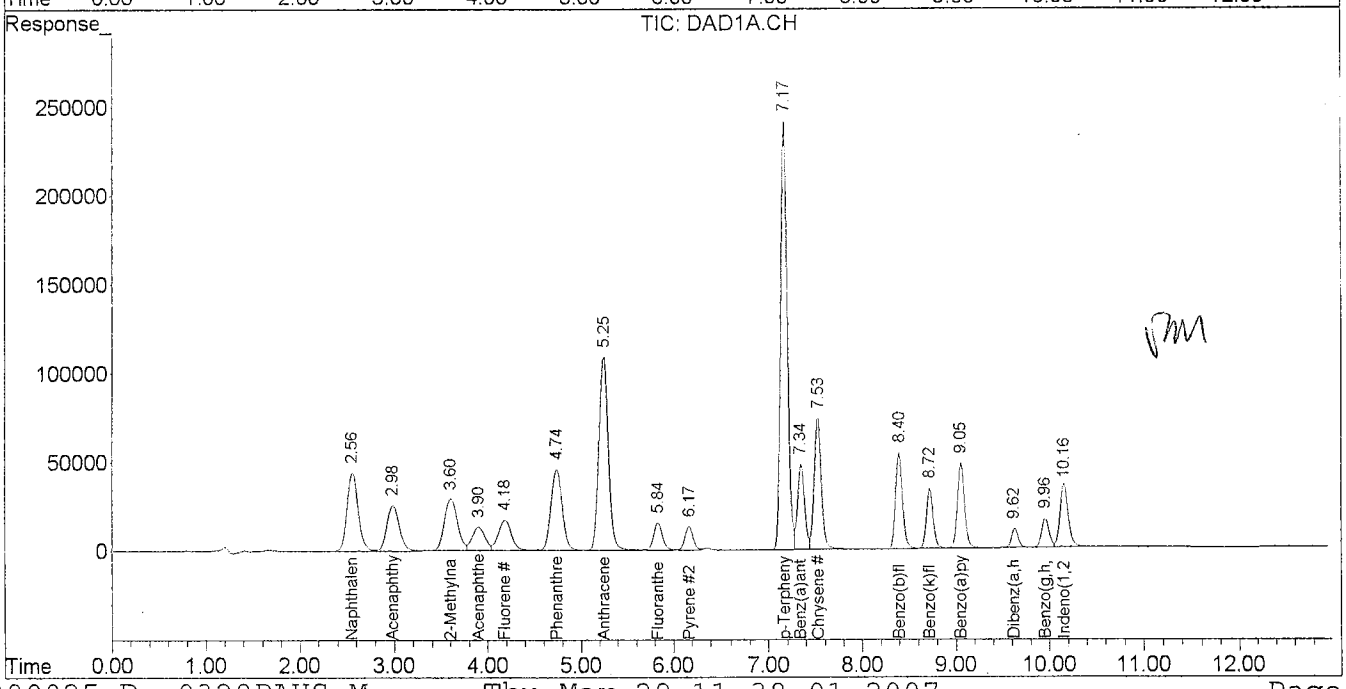
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:14 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
		System Monitoring Compounds						
10)	s	p-Terphenyl	7.19	7.16	58778300	2350454	19.986	20.185
		Target Compounds						
1)	t	Naphthalene	2.57	2.56	32030393	733964	20.148	20.380
2)	t	Acenaphthylene	0.00	2.97	0	478156	N.D.	20.942 #
3)	t	2-Methylnaphthal	3.61	3.59	13036535	593155	19.942	20.901
4)	t	Acenaphthene	3.92	3.89	16380514	267348	19.956	21.976
5)	t	Fluorene	4.20	4.17	13037373	346458	2.012	2.182
6)	t	Phenanthrene	4.75	4.73	10768593	759025	2.029	2.080
7)	t	Anthracene	5.26	5.24	18057968	1543469	1.972	2.015
8)	t	Fluoranthene	5.85	5.83	8974769	207035	1.854	2.173
9)	t	Pyrene	6.18	6.16	52604582	164170	2.030	2.161
11)	t	Benz(a)anthracen	7.37	7.35	28969567	496343	2.016	2.051
12)	t	Chrysene	7.55	7.52	18934947	777432	2.044	2.058
13)	t	Benzo(b)fluorant	8.42	8.40	6444928	552249	1.999	2.035
14)	t	Benzo(k)fluorant	8.75	8.73	32802216	345666	2.010	2.069
15)	t	Benzo(a)pyrene	9.08	9.05	24120811	509324	2.019	2.055
16)	t	Dibenz(a,h)anthr	9.66	9.64	10970124	110410	2.023	1.996
17)	t	Benzo(g,h,i)pery	9.99	9.96	19289508	183728	2.194	2.074
18)	t	Indeno(1,2,3-cd)	10.19	10.16	28429576	431674	2.019	2.061

PM 032907

MK

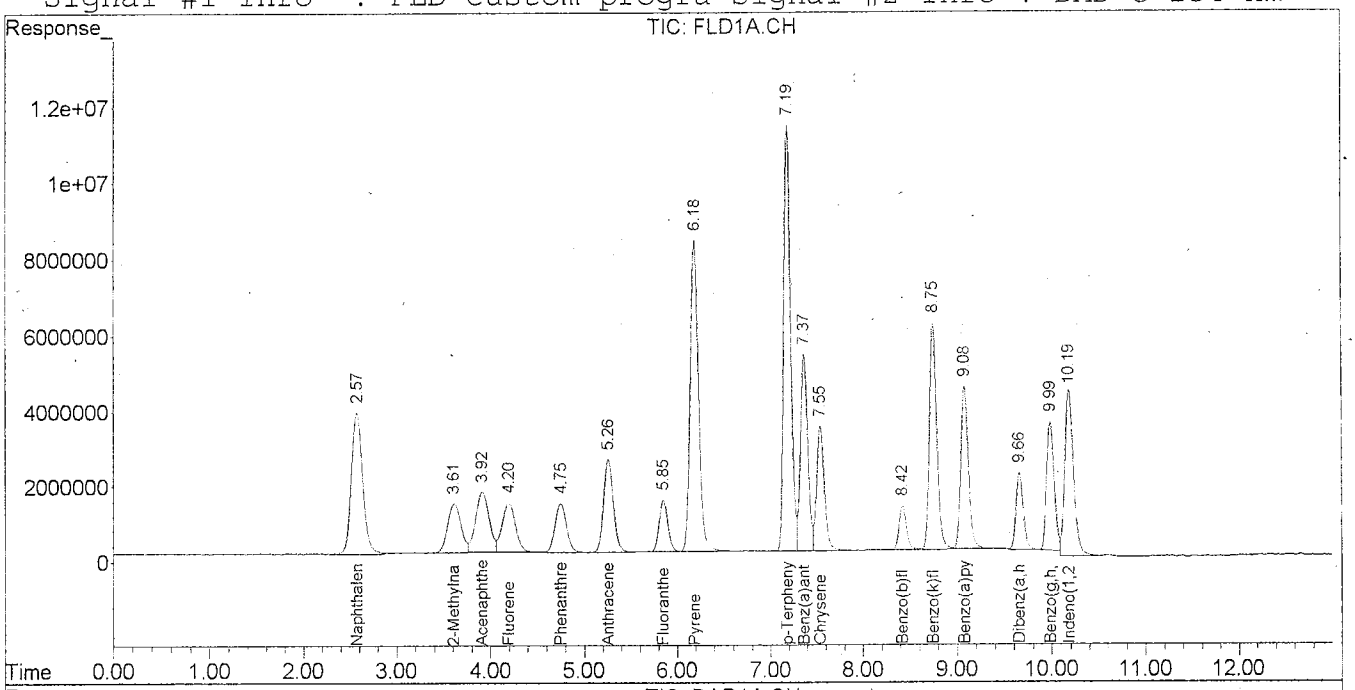
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

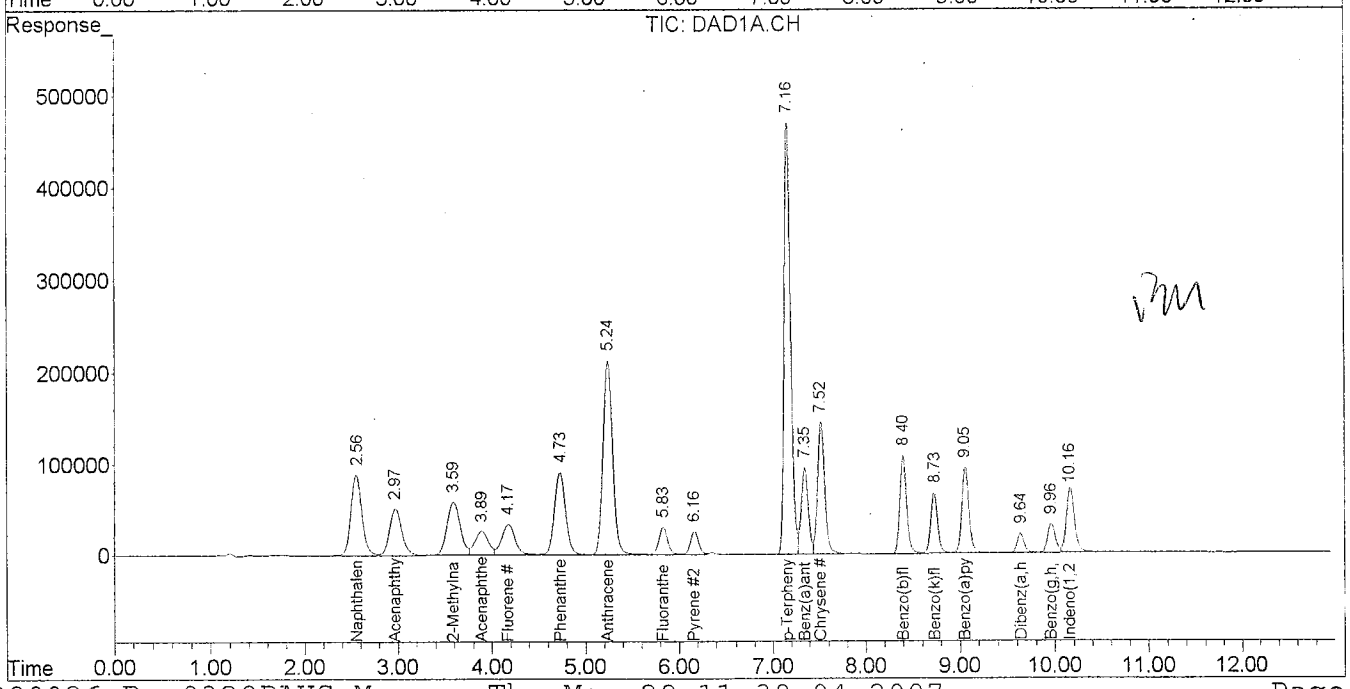
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-8O 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
		System Monitoring Compounds						
10)	s	p-Terphenyl	7.18	7.17	145.3E6	5768380	49.403	49.536
		Target Compounds						
1)	t	Naphthalene	2.58	2.57	74936469	1816789	47.138	50.447
2)	t	Acenaphthylene	0.00	2.99	0	1181484	N.D.	51.745 #
3)	t	2-Methylnaphthal	3.62	3.61	31616711	1465419	48.364	51.638
4)	t	Acenaphthene	3.92	3.90	40017661	673607	48.754	55.371
5)	t	Fluorene	4.20	4.18	31796156	842802	4.908	5.308
6)	t	Phenanthrene	4.76	4.74	26562195	1868551	5.005	5.120
7)	t	Anthracene	5.26	5.25	44482232	3647690	4.858	4.761
8)	t	Fluoranthene	5.85	5.83	22188195	510608	4.583	5.360
9)	t	Pyrene	6.18	6.17	129.3E6	406326	5.004	5.348
11)	t	Benz(a)anthracen	7.37	7.35	71452786	1238659	4.971	5.119
12)	t	Chrysene	7.55	7.53	47147677	1930709	5.089	5.110
13)	t	Benzo(b)fluorant	8.42	8.39	15785292	1367885	4.895	5.039
14)	t	Benzo(k)fluorant	8.74	8.73	80609520	855438	4.951	5.121
15)	t	Benzo(a)pyrene	9.07	9.06	59849384	1256720	5.016	5.071
16)	t	Dibenz(a,h)anthr	9.64	9.63	27193125	270343	5.043	4.887
17)	t	Benzo(g,h,i)pery	9.97	9.95	43105690	449845	4.988	5.078
18)	t	Indeno(1,2,3-cd)	10.17	10.15	70621147	1080621	5.014	5.160

PM 032907

MA

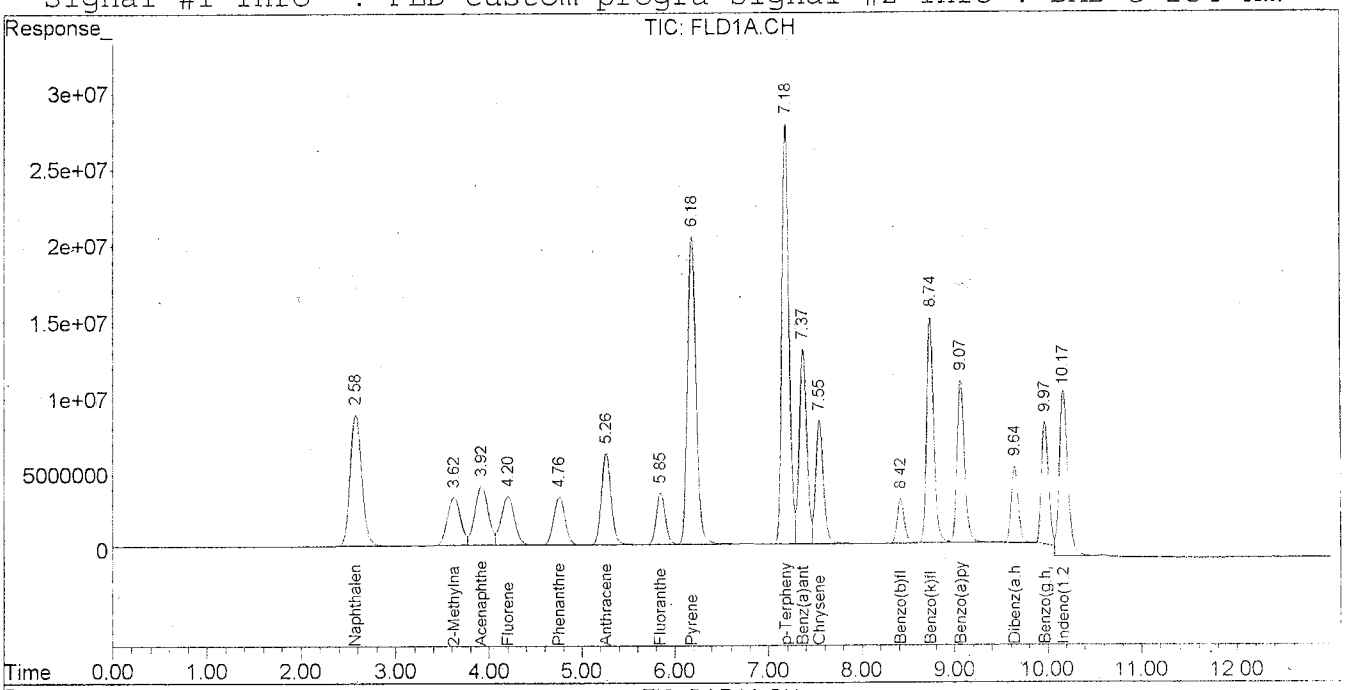
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

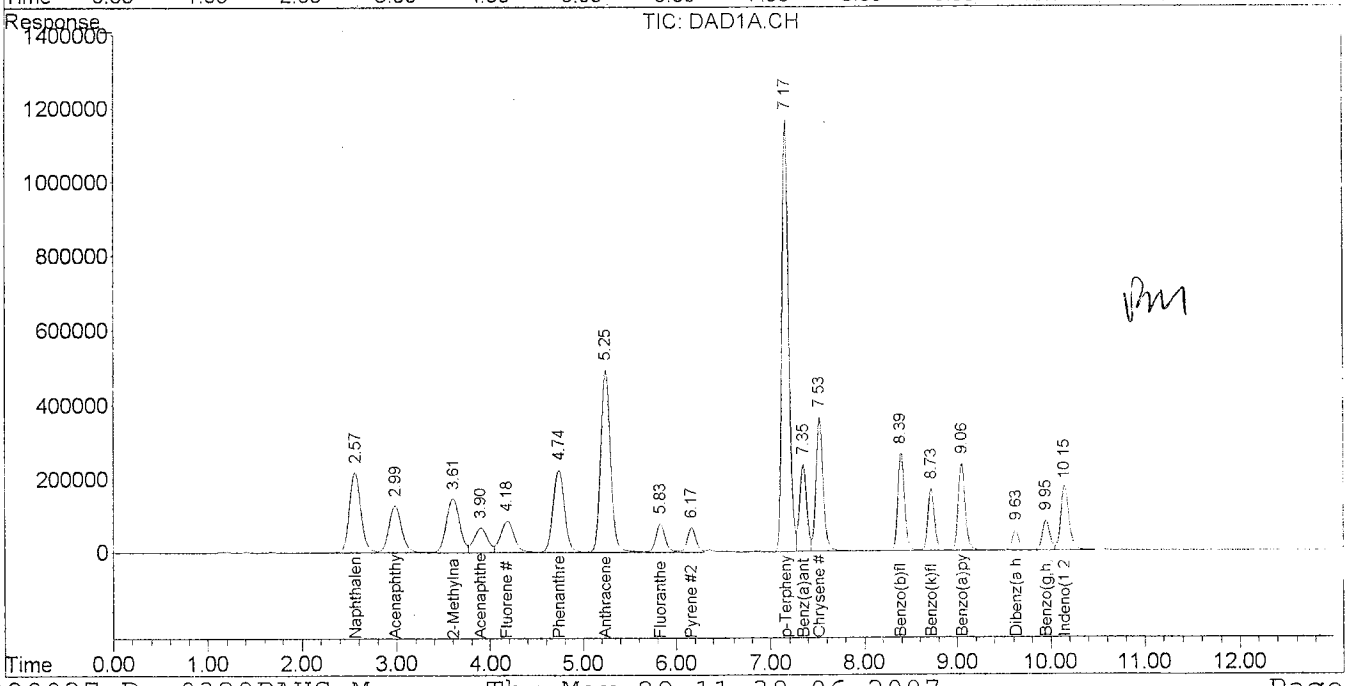
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-8O 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.17	7.16	295.3E6	11673630	100.593	100.403	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	142.9E6	3694782	90.765	102.440	
2)	t	Acenaphthylene	0.00	2.98	0	2406259	N.D.	104.777	#
3)	t	2-Methylnaphthal	3.62	3.60	64106201	2994696	98.601	104.953	
4)	t	Acenaphthene	3.92	3.90	80863233	1343628	98.927	108.505	
5)	t	Fluorene	4.21	4.18	64296595	1726074	9.955	10.761	
6)	t	Phenanthrene	4.76	4.73	54003564	3774932	10.174	10.302	
7)	t	Anthracene	5.26	5.24	90242988	6894749	9.903	9.072	
8)	t	Fluoranthene	5.85	5.82	45749539	1039098	9.584	10.779	
9)	t	Pyrene	6.18	6.17	261.3E6	824890	10.108	10.733	
11)	t	Benz(a)anthracen	7.37	7.34	145.5E6	2482982	10.130	10.220	
12)	t	Chrysene	7.54	7.52	95127195	3862295	10.237	10.185	
13)	t	Benzo(b)fluorant	8.42	8.40	32512842	2767895	10.118	10.184	
14)	t	Benzo(k)fluorant	8.74	8.72	161.2E6	1725568	9.920	10.288	
15)	t	Benzo(a)pyrene	9.08	9.05	119.7E6	2541208	10.023	10.230	
16)	t	Dibenz(a,h)anthr	9.65	9.62	55313300	547025	10.243	9.925	
17)	t	Benzo(g,h,i)pery	9.98	9.96	94801391	913046	10.974	10.279	
18)	t	Indeno(1,2,3-cd)	10.18	10.16	143.4E6	2189286	10.179	10.399	

PM 032907

MMa

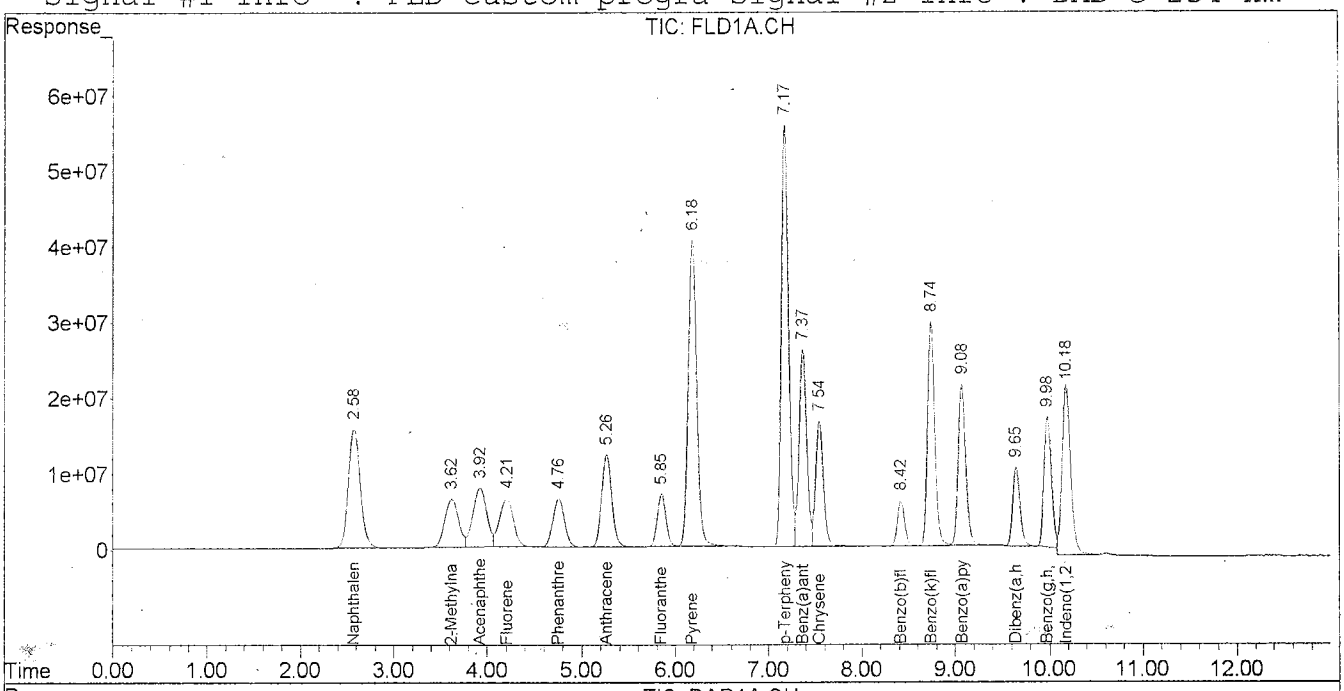
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

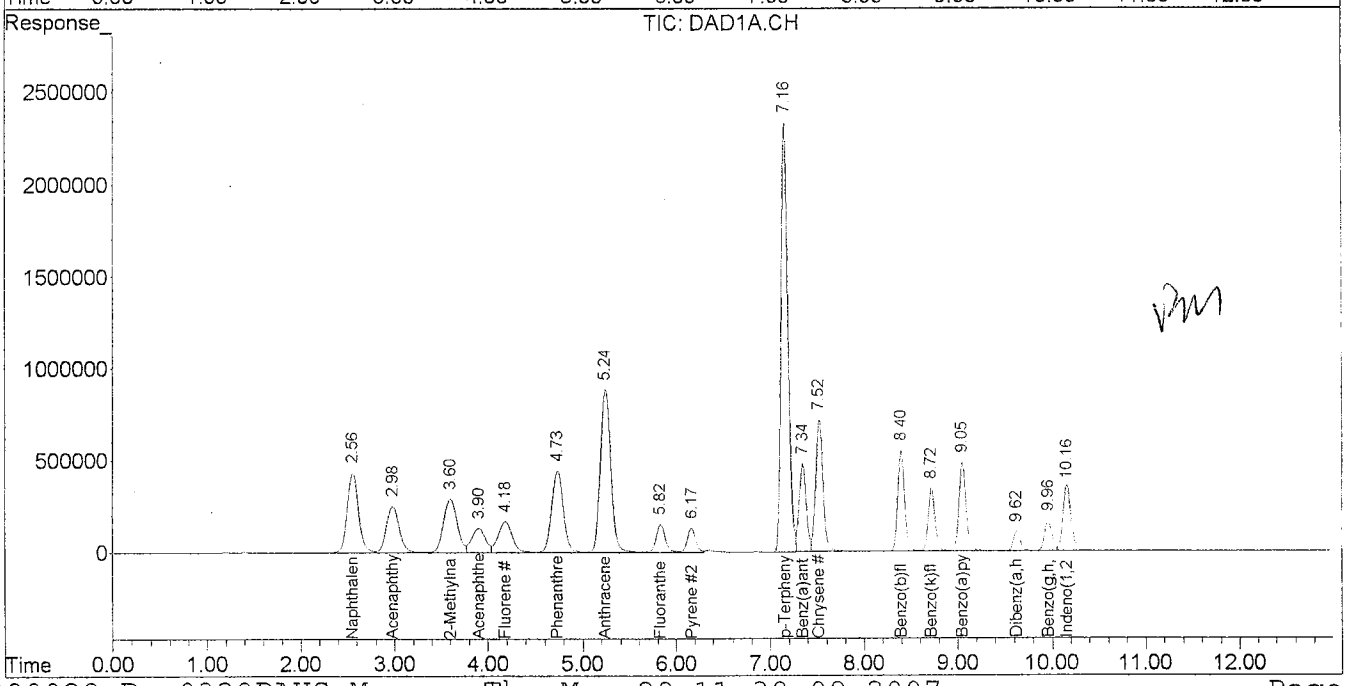
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51:18 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	0.00	0.00	0	0	N.D.	N.D.	
		Target Compounds							
1)	t	Naphthalene	2.57	2.55	15613155	349828	10.048	9.666	
2)	t	Acenaphthylene	0.00	2.98	0	236722	N.D.	10.238	#
3)	t	2-Methylnaphthal	3.62	3.59	6289944	290383	9.694	10.105	
4)	t	Acenaphthene	3.92	3.90	8097489	132922	9.922	10.605	
5)	t	Fluorene	4.20	4.18	6382965	172630	0.989	1.065	
6)	t	Phenanthrene	4.76	4.74	5455013	383185	1.025	1.041	
7)	t	Anthracene	5.27	5.25	9009446	780460	0.990	1.041	
8)	t	Fluoranthene	5.85	5.83	4515083	94550	0.951	0.970	
9)	t	Pyrene	6.19	6.17	25445981	79730	0.983	1.027	
11)	t	Benz(a)anthracen	7.38	7.35	13768617	235418	0.957	0.966	
12)	t	Chrysene	7.55	7.53	9112870	376550	0.977	0.990	
13)	t	Benzo(b)fluorant	8.42	8.41	3222467	277265	1.001	1.017	
14)	t	Benzo(k)fluorant	8.75	8.73	16510612	174111	1.017	1.034	
15)	t	Benzo(a)pyrene	9.08	9.06	11993613	252748	1.004	1.014	
16)	t	Dibenz(a,h)anthr	9.66	9.63	6168325	61443	1.138	1.116	
17)	t	Benzo(g,h,i)pery	9.99	9.97	9917288	95106	1.132	1.066	
18)	t	Indeno(1,2,3-cd)	10.19	10.17	13338604	204710	0.944	0.967	

PM 032907

AMA

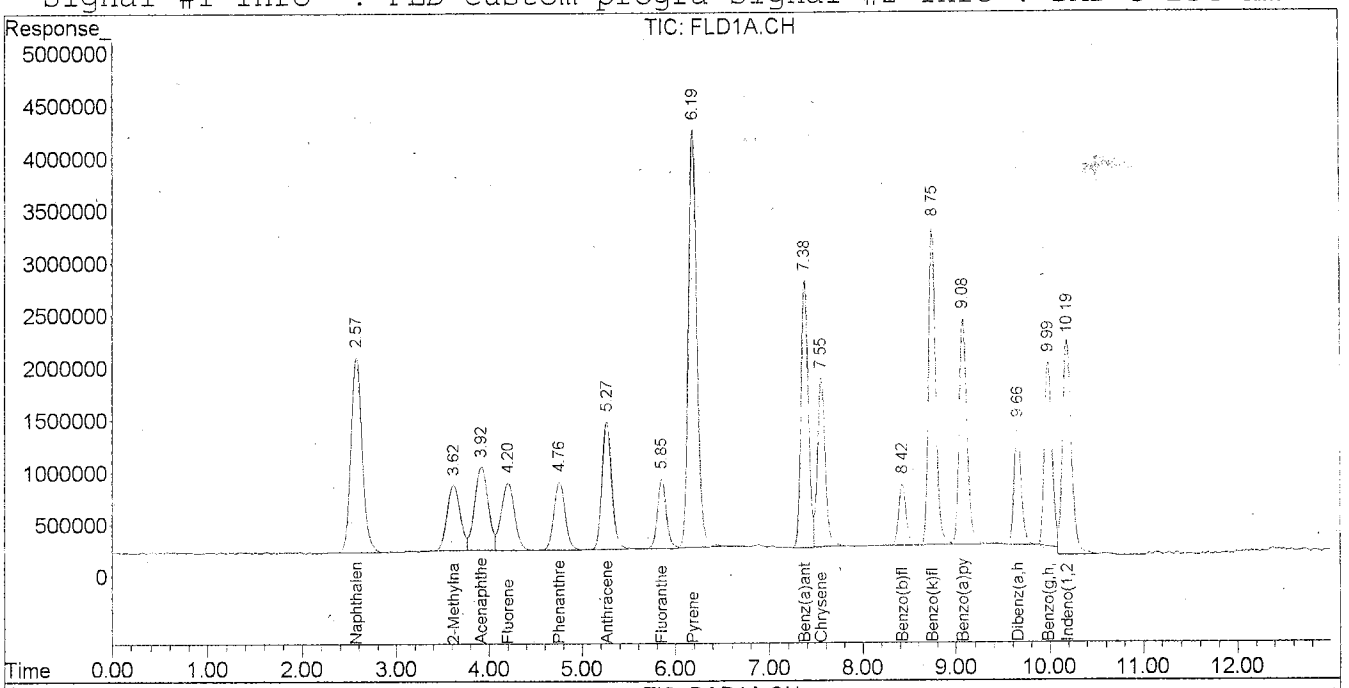
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

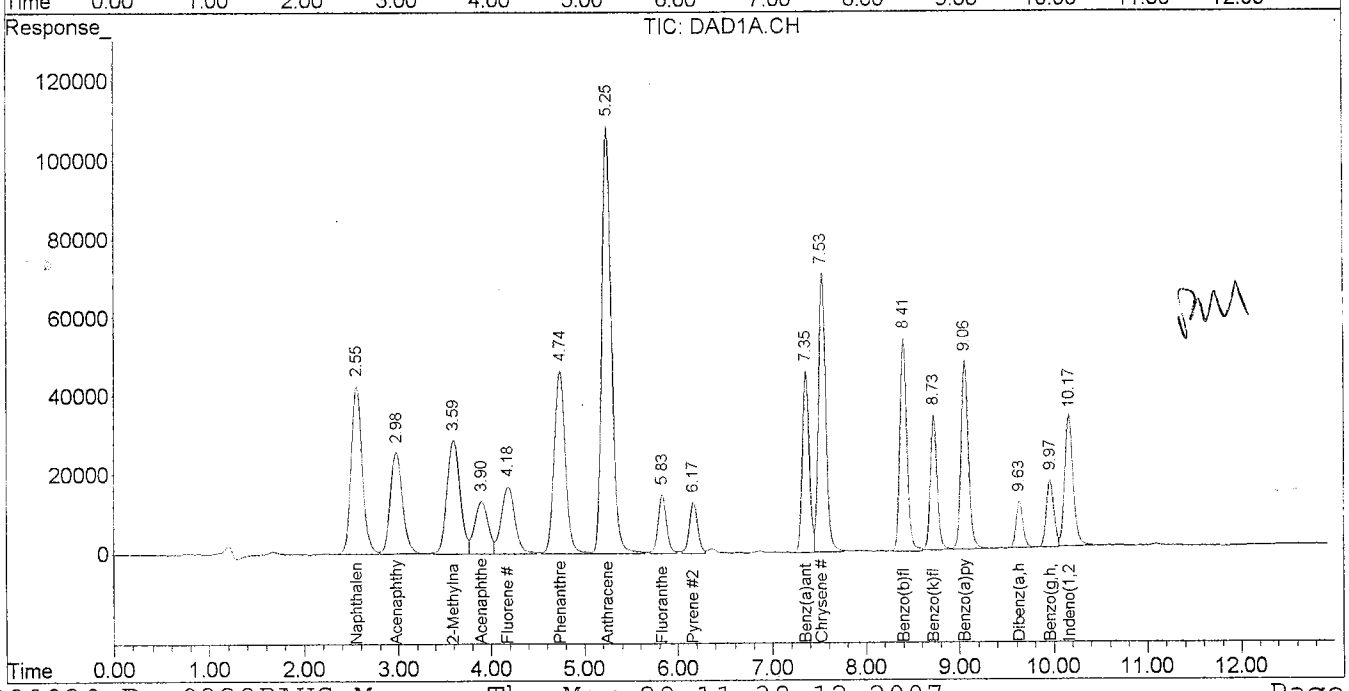
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D\03290012C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	36800	2	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23600	2	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12700	1	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	164000	1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	374000	2	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	777000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	98200	1	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79500	2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	392000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	275000	1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	169000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	251000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	55700	1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	90700	2	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	216000	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	9.9	2940000	2920000	-1		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	809000	-1		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6400000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9060000	0		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	4750000	4600000	-3		NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24200000	-6		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14200000	-1		NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9300000	0		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	0.99	3220000	3190000	-1		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16300000	0		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.98	5420000	5300000	-2		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14100000	0		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\LC06\DATA\032907PA\03290012.D	**Date Acquired:**	03/29/2007 20:32
Lab ID:	KWG0704189-1	**Date Quantitated:**	03/29/2007 21:32
RunType:	CCV	**Batch ID:**	KWG0704189
Matrix:	NOT APPLICABLE	**Analysis Method:**	8310
		MethodJoinID:	MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290012.D\03290012C.D
Lab ID: KWG0704189-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:32
Date Quantitated: 03/29/2007 21:32
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: m 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290012.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290012.D\03290012c.d			**Vial:**	14
Acqu Date:	03/29/2007 20:32	**Quant Date:**	03/29/2007 21:32	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-1				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	7.16	29195279	1176826	9.94	10.12			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.56	15182273	367971	9.77	10.17			
Acenaphthylene		2.99	0	236191	0.0000	10.22			
2-Methylnaphthalene/Dibe	3.63	3.60	6436548	293756	9.92	10.22			
Acenaphthene	3.93	3.91	8094789	126942	9.92	10.13			
Fluorene	4.20	4.19	6398797	163798	0.9910	1.01			
Phenanthrene	4.75	4.74	5312672	374493	0.9980	1.02			
Anthracene	5.26	5.23	9061669	776511	0.9960	1.04			
Fluoranthene	5.85	5.83	4595765	98194	0.9680	1.01			
Pyrene	6.18	6.16	24244367	79452	0.9360	1.02			
Benz(a)anthracene	7.37	7.35	14182834	251153	0.9860	1.03			
Chrysene	7.54	7.52	9304746	391642	0.9980	1.03			
Benzo(b)fluoranthene	8.41	8.39	3193282	274617	0.9920	1.01			
Benzo(k)fluoranthene	8.74	8.71	16269045	169026	1.00	1.00			
Benzo(a)pyrene	9.07	9.04	12106942	251354	1.01	1.01			
Dibenz(a,h)anthracene	9.65	9.63	5303236	55666	0.9790	1.01			
Benzo(g,h,i)perylene	9.98	9.95	10502631	90682	1.20	1.02			
Indeno(1,2,3-cd)pyrene	10.17	10.15	14126031	216352	1.00	1.02			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

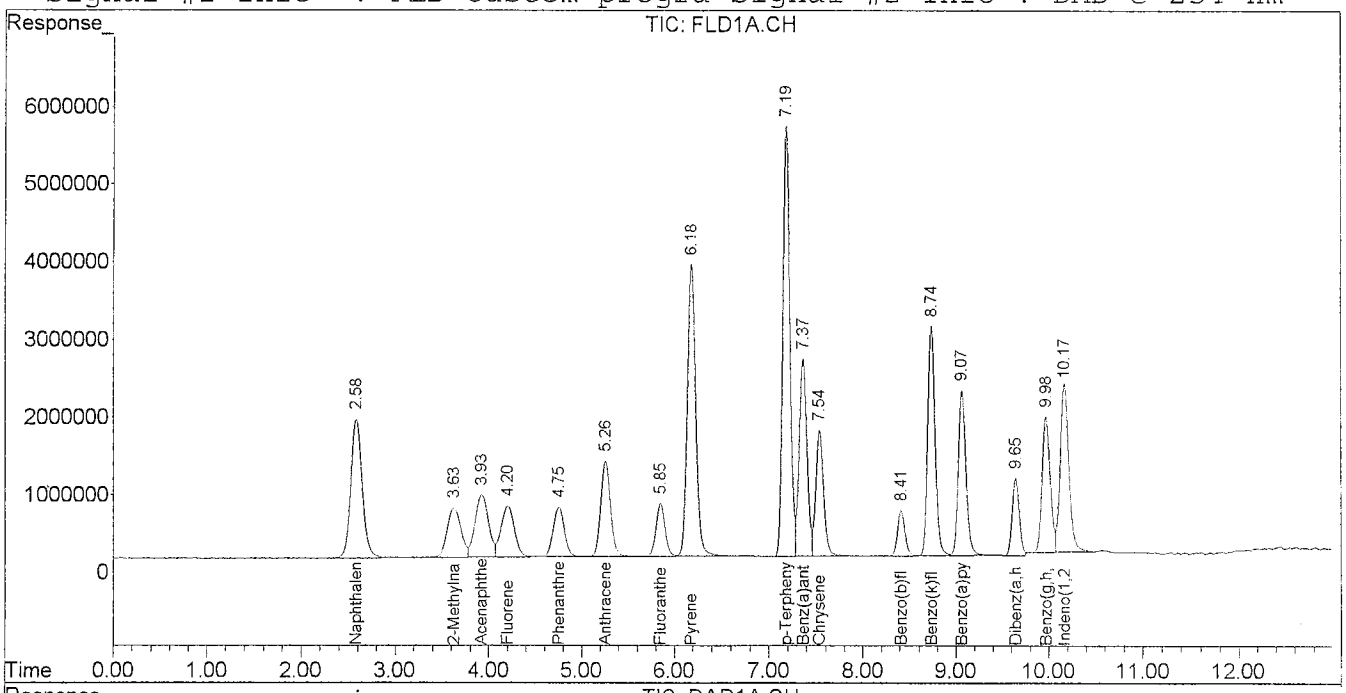
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

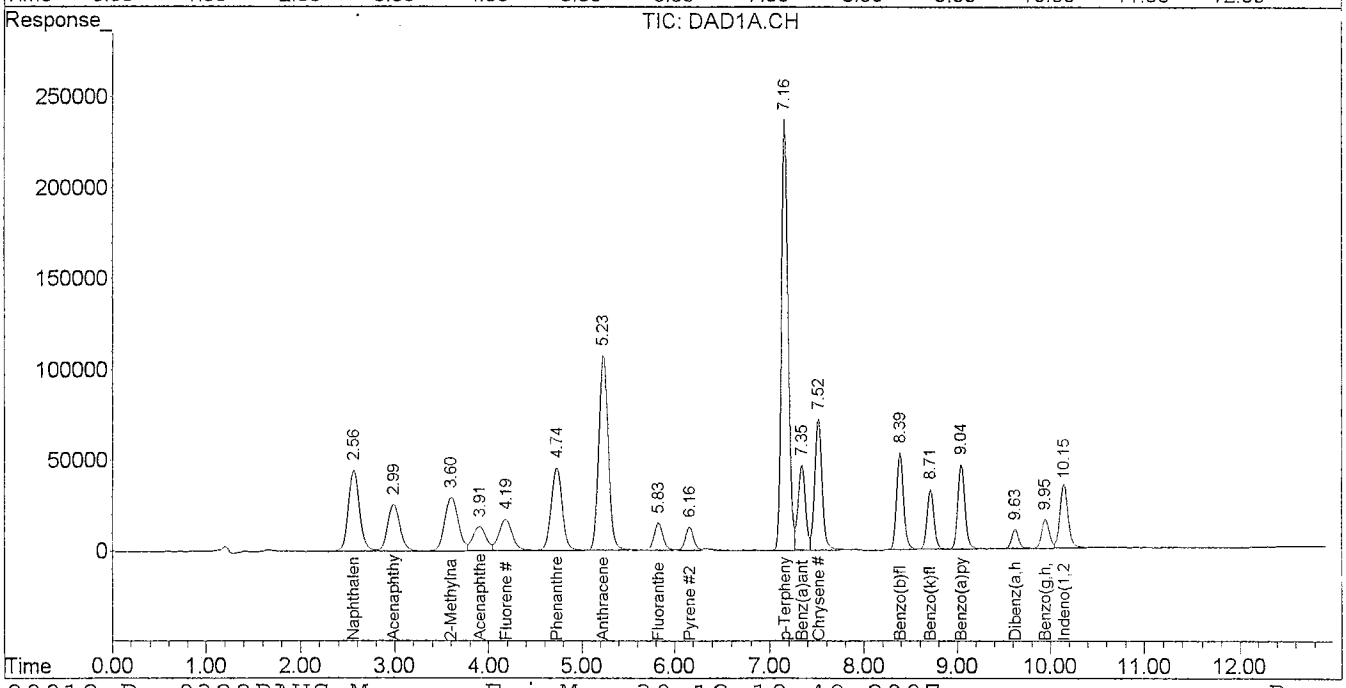
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290012.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290012.D\DAD1A.CH
Acq On : 29-Mar-2007, 20:32:04 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D\03290023C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	24200	5	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	7	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	381000	3	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	783000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.1	97500	103000	6	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	81600	5	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.1	244000	258000	6	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	391000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	278000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	171000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.99	55100	54400	-1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	91700	3	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	219000	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	10	816000	814000	0		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6360000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9280000	2		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4480000	-6		NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24400000	-6		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	14400000	14300000	0		NA	± 15 %	AverageRF
Chrysene	1.0	0.99	9320000	9270000	-1		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	1		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.93	5420000	5050000	-7		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14300000	1		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\032907PA\03290023.D
Lab ID: KWG0704189-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 00:54
Date Quantitated: 03/30/2007 10:49
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290023.D\03290023C.D
Lab ID: KWG0704189-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 00:54
Date Quantitated: 03/30/2007 10:49
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290023.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290023.D\03290023c.d			**Vial:**	14
Acqu Date:	03/30/2007 00:54	**Quant Date:**	03/30/2007 10:49	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.21	7.18	29396298	1179618	10.01	10.14			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.56	15157199	371902	9.76	10.28			
Acenaphthylene		2.98	0	241937	0.0000	10.46			
2-Methylnaphthalene/Dibe	3.63	3.61	6555156	297681	10.10	10.36			
Acenaphthene	3.93	3.90	8140348	136990	9.97	10.93			
Fluorene	4.22	4.20	6358954	173270	0.9850	1.07			
Phenanthrene	4.77	4.74	5310341	380633	0.9980	1.03			
Anthracene	5.28	5.26	9275725	782504	1.02	1.04			
Fluoranthene	5.87	5.85	4483685	102999	0.9450	1.06			
Pyrene	6.21	6.18	24381984	81622	0.9420	1.05			
Benz(a)anthracene	7.39	7.37	14339169	257726	0.9970	1.06			
Chrysene	7.57	7.56	9265377	391428	0.9940	1.03			
Benzo(b)fluoranthene	8.45	8.42	3219237	278102	1.00	1.02			
Benzo(k)fluoranthene	8.77	8.76	16461367	171292	1.01	1.02			
Benzo(a)pyrene	9.11	9.09	12071071	252911	1.01	1.02			
Dibenz(a,h)anthracene	9.69	9.66	5054232	54423	0.9330	0.9890			
Benzo(g,h,i)perylene	10.02	10.00	10507948	91703	1.20	1.03			
Indeno(1,2,3-cd)pyrene	10.22	10.20	14307390	218591	1.01	1.03			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

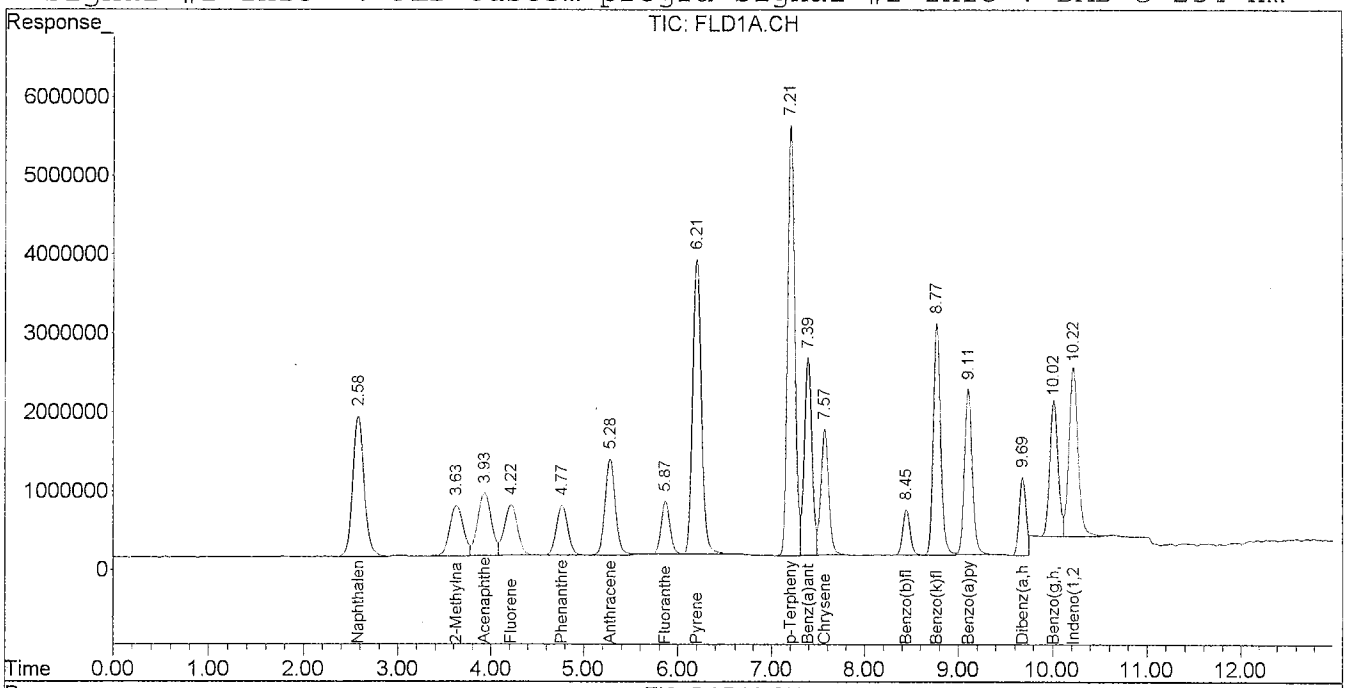
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

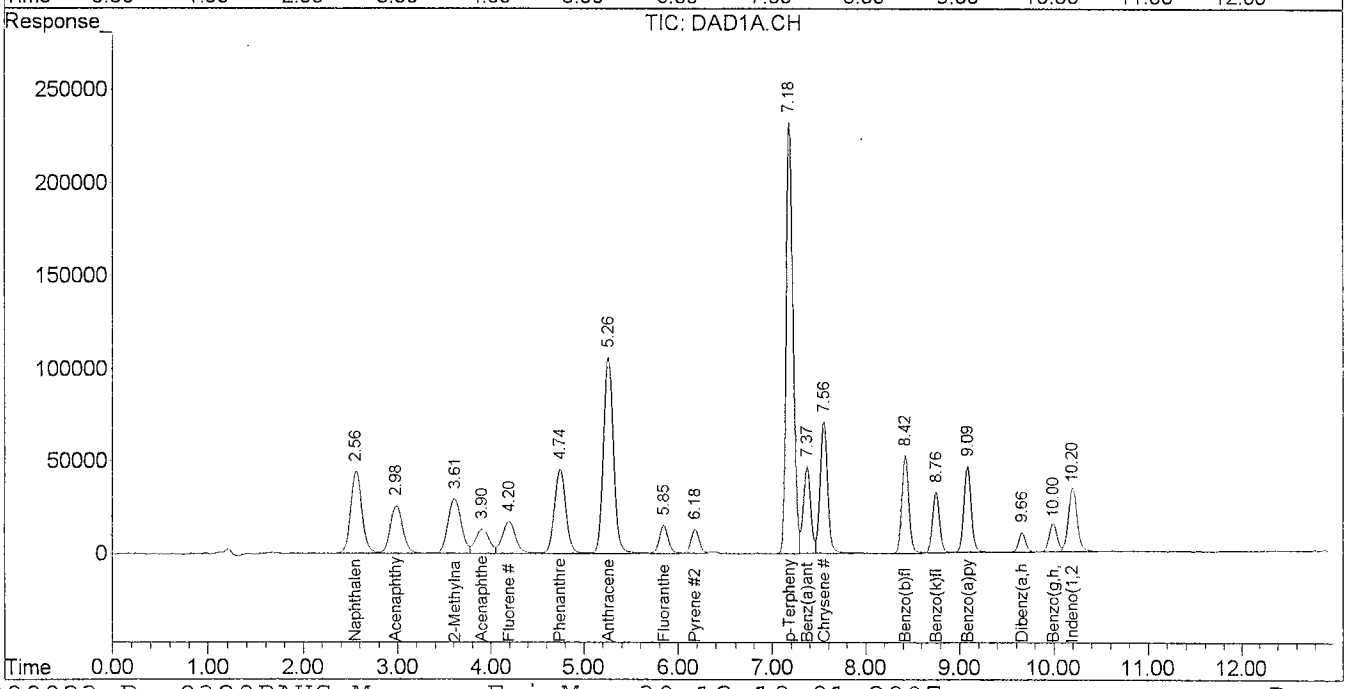
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290023.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290023.D\DAD1A.CH
Acq On : 30-Mar-2007, 00:54:29 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:49 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D\03290035C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	119000	2	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23800	3	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12900	3	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	165000	2	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	372000	1	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	778000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	101000	4	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	82300	6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	394000	4	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	279000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	172000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	254000	2	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	54800	0	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	93400	5	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	220000	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701647
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1530000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	811000	-1		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	0.98	5320000	5210000	-2		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9190000	1		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.94	4750000	4450000	-6		NA	± 15 %	AverageRF
Pyrene	1.0	0.93	25900000	24000000	-7		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14300000	-1		NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9370000	1		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3240000	1		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16400000	1		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.97	5420000	5270000	-3		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10400000	19	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14200000	1		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\LC06\DATA\032907PA\03290035.D	**Date Acquired:**	03/30/2007 05:39
Lab ID:	KWG0704189-3	**Date Quantitated:**	03/30/2007 10:50
RunType:	CCV	**Batch ID:**	KWG0704189
Matrix:	NOT APPLICABLE	**Analysis Method:**	8310
		MethodJoinID:	MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290035.D\03290035C.D
Lab ID: KWG0704189-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 05:39
Date Quantitated: 03/30/2007 10:50
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: DMG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290035.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290035.D\03290035c.d			**Vial:**	14
Acqu Date:	03/30/2007 05:39	**Quant Date:**	03/30/2007 10:50	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	7.17	29372568	1185047	10.00	10.19			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.55	15254191	372202	9.82	10.28			
Acenaphthylene		2.98	0	237559	0.0000	10.27			
2-Methylnaphthalene/Dibe	3.62	3.59	6477319	293750	9.98	10.22			
Acenaphthene	3.92	3.90	8109963	128831	9.94	10.28			
Fluorene	4.20	4.18	6380999	165080	0.9890	1.02			
Phenanthrene	4.75	4.73	5206818	372217	0.9790	1.01			
Anthracene	5.26	5.23	9194140	777826	1.01	1.04			
Fluoranthene	5.85	5.83	4453648	100906	0.9390	1.04			
Pyrene	6.18	6.17	23983766	82299	0.9260	1.06			
Benz(a)anthracene	7.37	7.35	14268369	250906	0.9920	1.03			
Chrysene	7.55	7.53	9371584	393982	1.01	1.04			
Benzo(b)fluoranthene	8.42	8.39	3243138	278530	1.01	1.02			
Benzo(k)fluoranthene	8.75	8.73	16399215	171886	1.01	1.02			
Benzo(a)pyrene	9.08	9.06	12036519	254282	1.01	1.02			
Dibenz(a,h)anthracene	9.66	9.65	5273856	54822	0.9730	0.9960			
Benzo(g,h,i)perylene	9.99	9.97	10440109	93425	1.19	1.05			
Indeno(1,2,3-cd)pyrene	10.19	10.17	14236330	219539	1.01	1.04			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

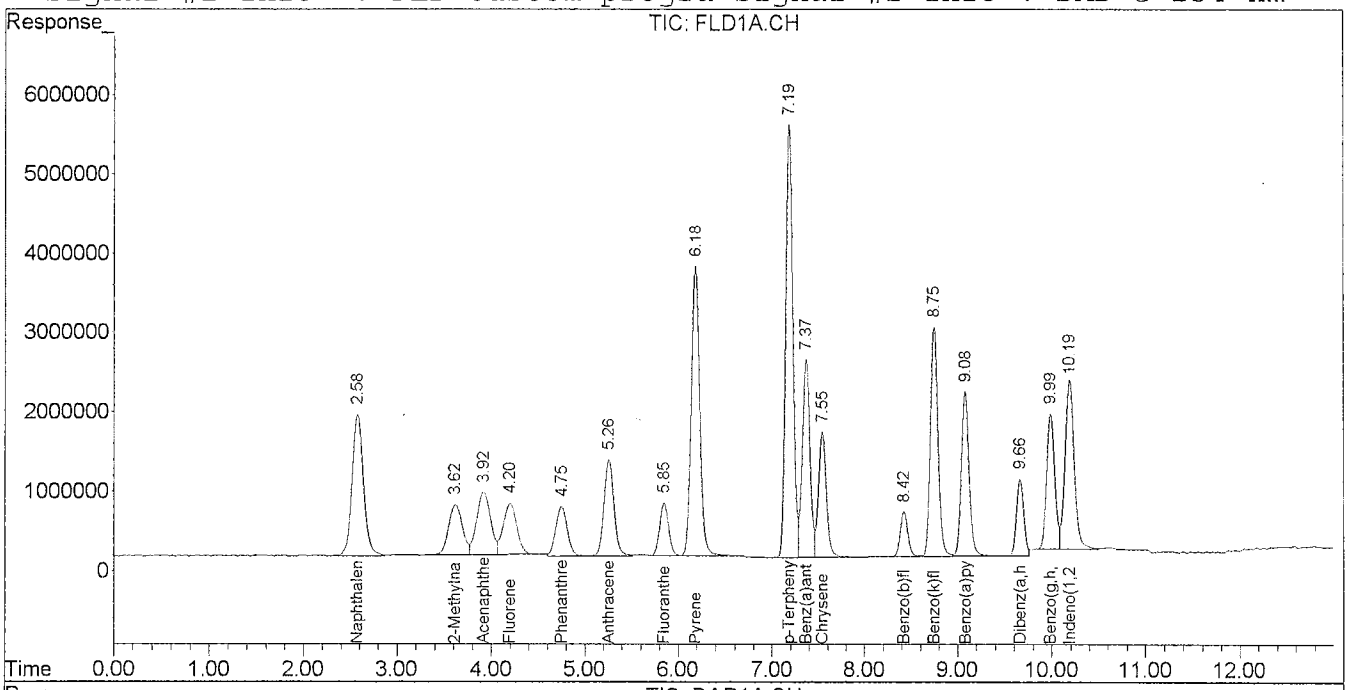
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

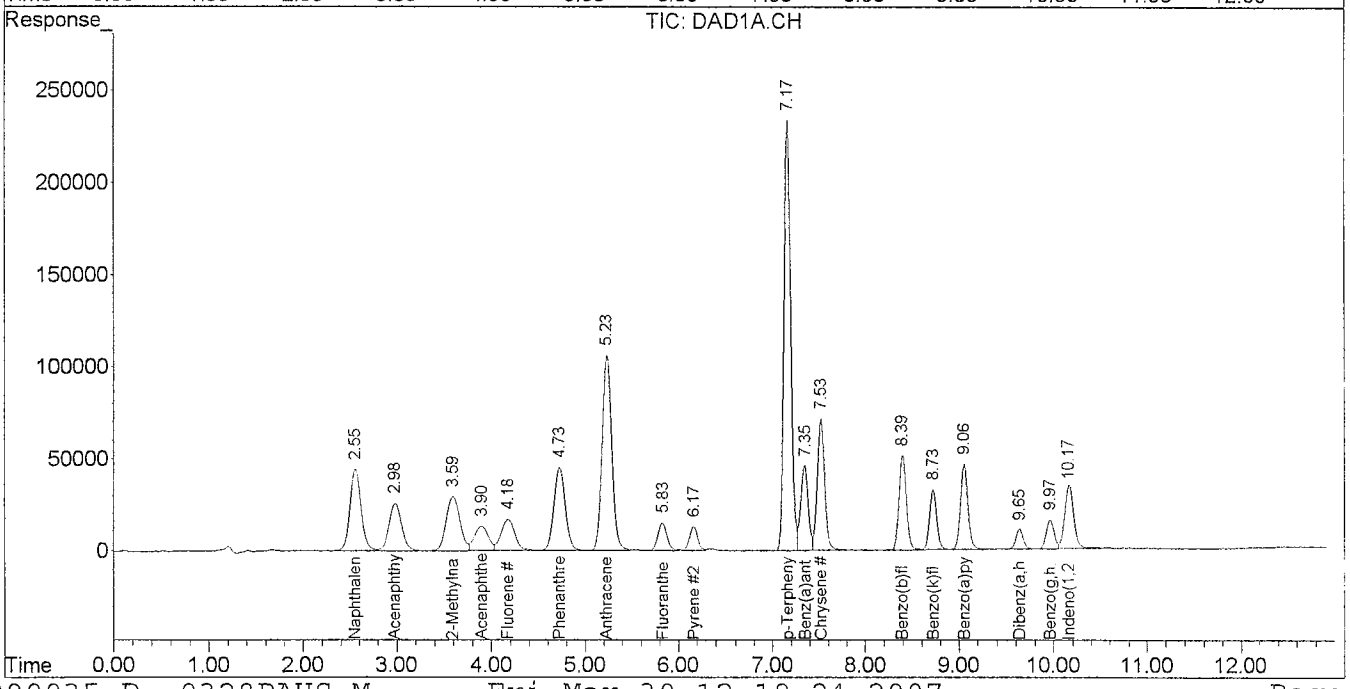
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290035.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290035.D\DAD1A.CH
Acq On : 30-Mar-2007, 05:39:54 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:50 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703403	**Prep Method:**	EPA 3510B	**Prep Date:**	03/08/07 06:30
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8310 PAH	WATER	~~1000ml~~ 1010 ml	1.00ml PM 032707
K0701703-001	DAEGW104CL	8310 PAH	WATER	1000ml	1.00ml
K0701812-001	7D030607G	610 PAH	WATER	~~1010ml~~ 1000 ml	1.00ml PM 032707
KWG0703403-1	Matrix Spike	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-2	Lab Control Sample	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-3	Duplicate Lab Control Sampl	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-4	Method Blank	8310 PAH	WATER	1000ml	1.00ml

Lab Code	Parent Lab Code	Comments
KWG0703403-1	K0701647-002	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	581533	HCSV8-5G	100uL			MThompso
K0701703-001	581532	HCSV8-5G	100uL			MThompso
K0701812-001	581531	HCSV8-5G	100uL			MThompso
KWG0703403-1	581534	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-2	581535	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-3	581536	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-4	581537	HCSV8-5G	100uL			MThompso

Comments:

Started By: SJones Assisted By: Training Yes No

Completed By: SJones Assisted By: Yes No

Reviewed By: PM Date: 032707 Storage: Box 7A

Chain of Custody

Relinquished By: S. Jones Date: 3/9/07

Received By: PM Date: 032707 Extracts Examined Yes No

Preparation Information

Group ID:	KWG0703403	**Prep Method:**	EPA 3510B	**Prep Date:**	03/08/07 06:30
Department:	Petroleum HC				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. ml	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701647-002	1349MW01CL		✓	8310 PAH	WATER	1,010	N/A	N/A	1.0 ml	100 ml	N/A
2	K0701703-001	DAEGW104C1		✓	8310 PAH	WATER	1000	↓	↓	↓	↓	↓
3	K0701812-001	7D030607G		✓	610 PAH	WATER	1000	↓	↓	↓	↓	↓
4	KWG0703403-1	Matrix Spike 1647-2			8310 PAH	WATER	1000	↓	↓	↓	↓	100 ml
5	KWG0703403-2	Lab Control Sample			8310 PAH	WATER	1000	↓	↓	↓	↓	↓
6	KWG0703403-3	Duplicate Lab Control Sample			8310 PAH	WATER	1000	↓	↓	↓	↓	↓
7	KWG0703403-4	Method Blank			8310 PAH	WATER	1000	↓	↓	↓	↓	N/A

DCM Lot # 46347

Glass Wool Lot # GW030207

Na_2SO_4 Lot # 46300651

Sonic Horn Tuned N/A
Initial / Date

Comments: Insufficient sample quantity for proper Q.C.

Surrogate ID: HCSV8-5G

Spike ID: HCSV8-7C

Witness: MT 3/8/07

Started By: SJones Assisted By: —

Completed By: SJones Assisted By: —

Exception Report

Data File: J:\LC06\DATA\032907PA\03290011.D
Lab ID: KWG0704189-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:08
Date Quantitated: 03/30/2007 10:51
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290011.D\03290011C.D
Lab ID: KWG0704189-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:08
Date Quantitated: 03/30/2007 10:51
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290011.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290011.D\03290011c.d			**Vial:**	1
Acqu Date:	03/29/2007 20:08	**Quant Date:**	03/30/2007 10:51	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	0.00	7.19	0	2604		0.0220			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene		2.52	0	696	0.0000	0.0190			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene		5.87	0	2344	0.0000	0.0240			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene		7.53	0	961	0.0000	0.0030			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.73		31418	0	0.0020	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

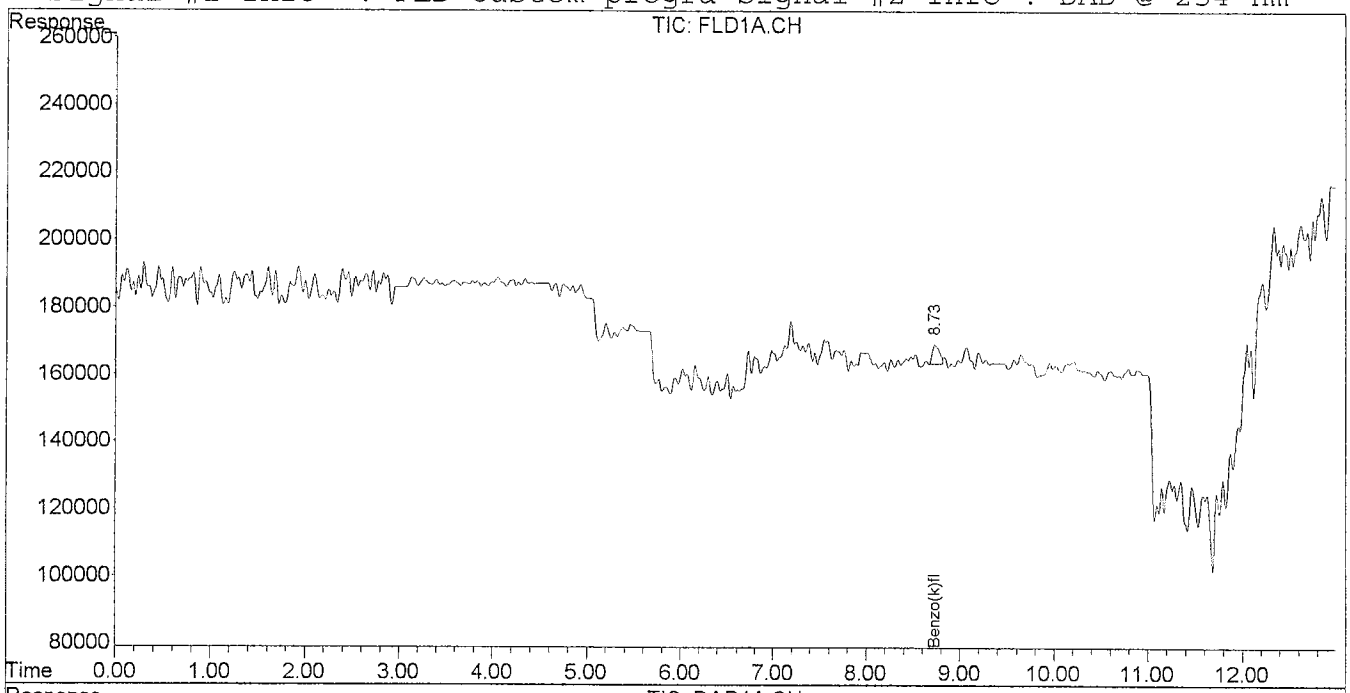
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

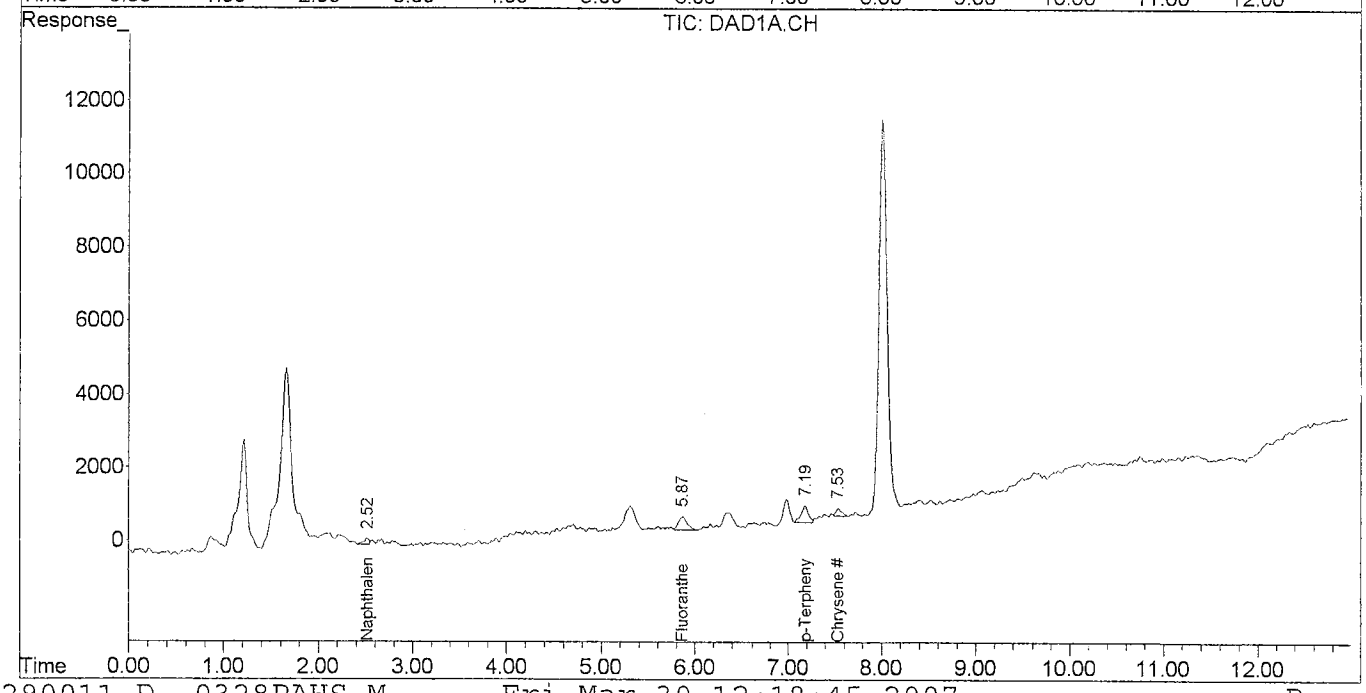
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290011.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290011.D\DAD1A.CH
Acq On : 29-Mar-2007, 20:08:13 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:51 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\032907PA\03290036.D
Lab ID: KWG0704189-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 06:04
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290036.D\03290036C.D
Lab ID: KWG0704189-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 06:04
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290036.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290036.D\03290036c.d			**Vial:**	1
Acqu Date:	03/30/2007 06:04	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-6				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.18	7.17	76647	1590	0.0260	0.0140			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene		5.28	0	4682	0.0000	0.0060			
Fluoranthene		5.84	0	864	0.0000	0.0090			
Pyrene	6.16		37291	0	0.0010	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.74	8.73	37615	702	0.0020	0.0040			
Benzo(a)pyrene		9.04	0	1671	0.0000	0.0070			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene	10.20		68289	0	0.0050	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

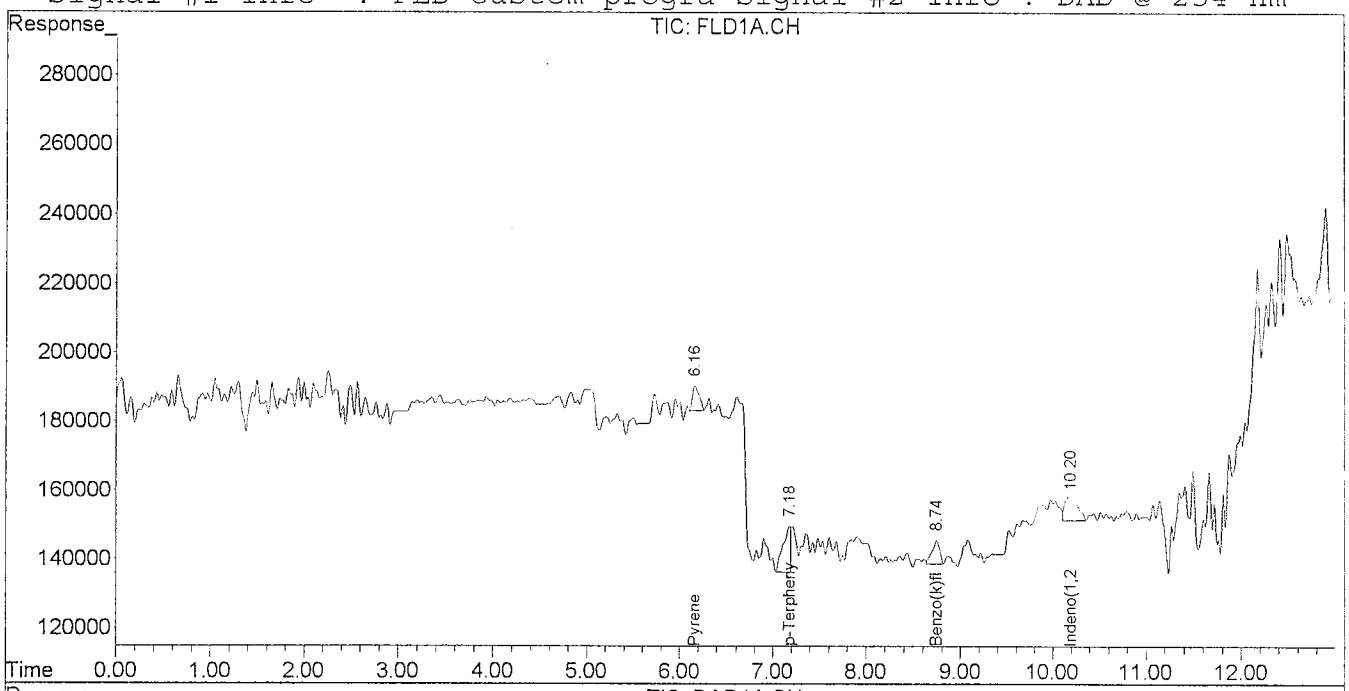
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

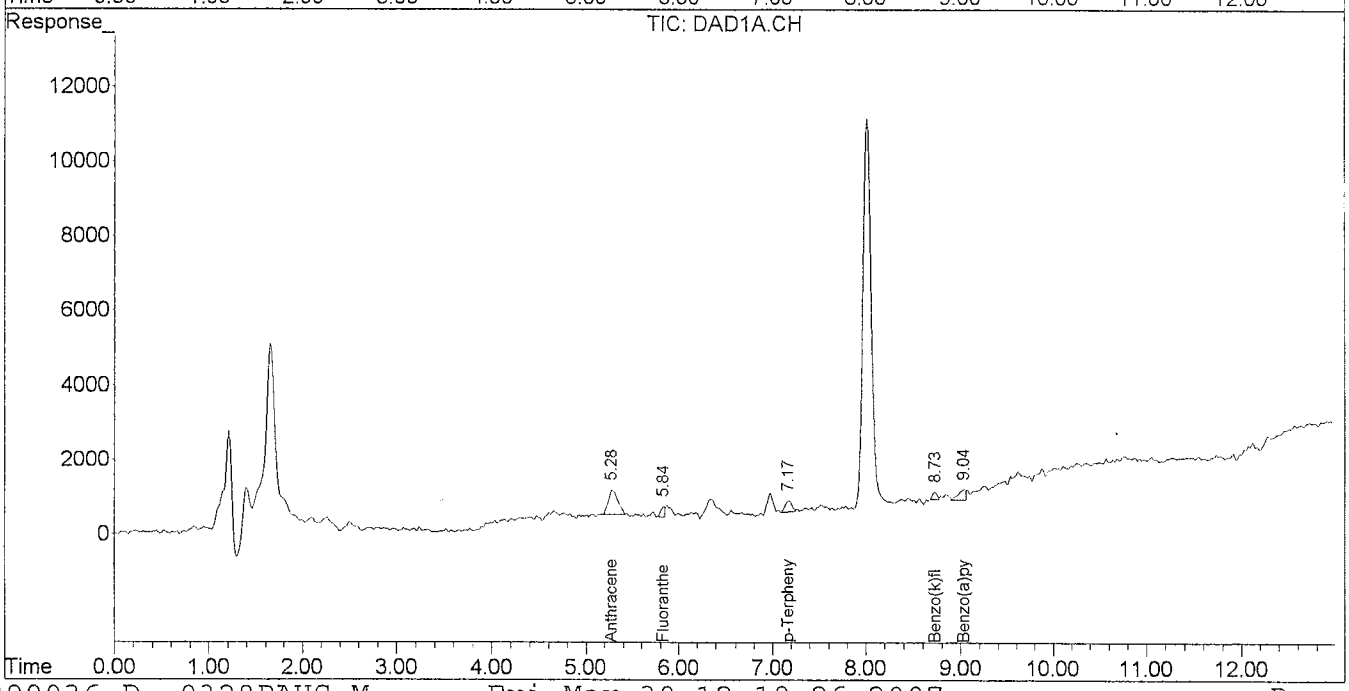
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290036.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290036.D\DAD1A.CH
Acq On : 30-Mar-2007, 06:04:36 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\032907PA\03290024.D
Lab ID: KWG0704189-5
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 01:18
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: AMG

Printed: 03/30/2007 13:16:57
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\LC06\DATA\032907PA\03290024.D\03290024C.D
Lab ID: KWG0704189-5
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 01:18
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: JK 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290024.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290024.D\03290024c.d			**Vial:**	1
Acqu Date:	03/30/2007 01:18	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-5				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.23	7.21	58741	1953	0.0200	0.0170			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene		5.86	0	772	0.0000	0.0080			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.78	8.73	63382	632	0.0040	0.0040			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene	10.02		75550	0	0.0090	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

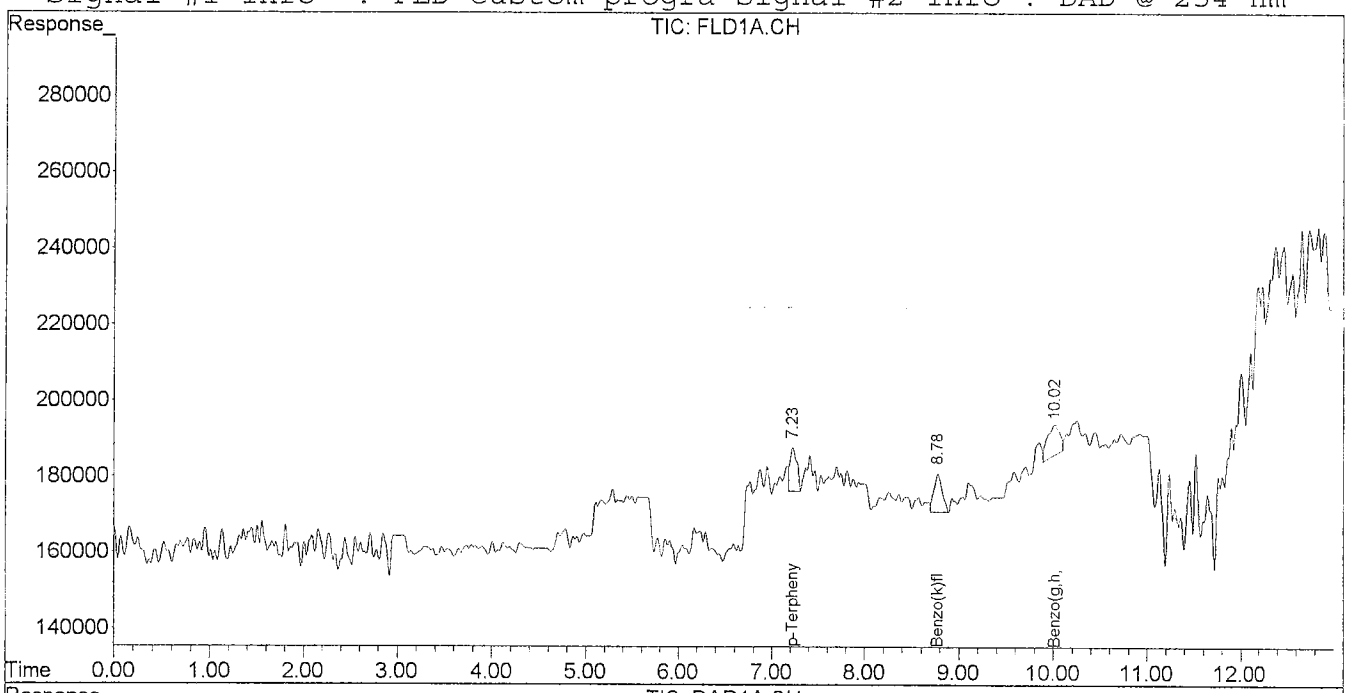
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

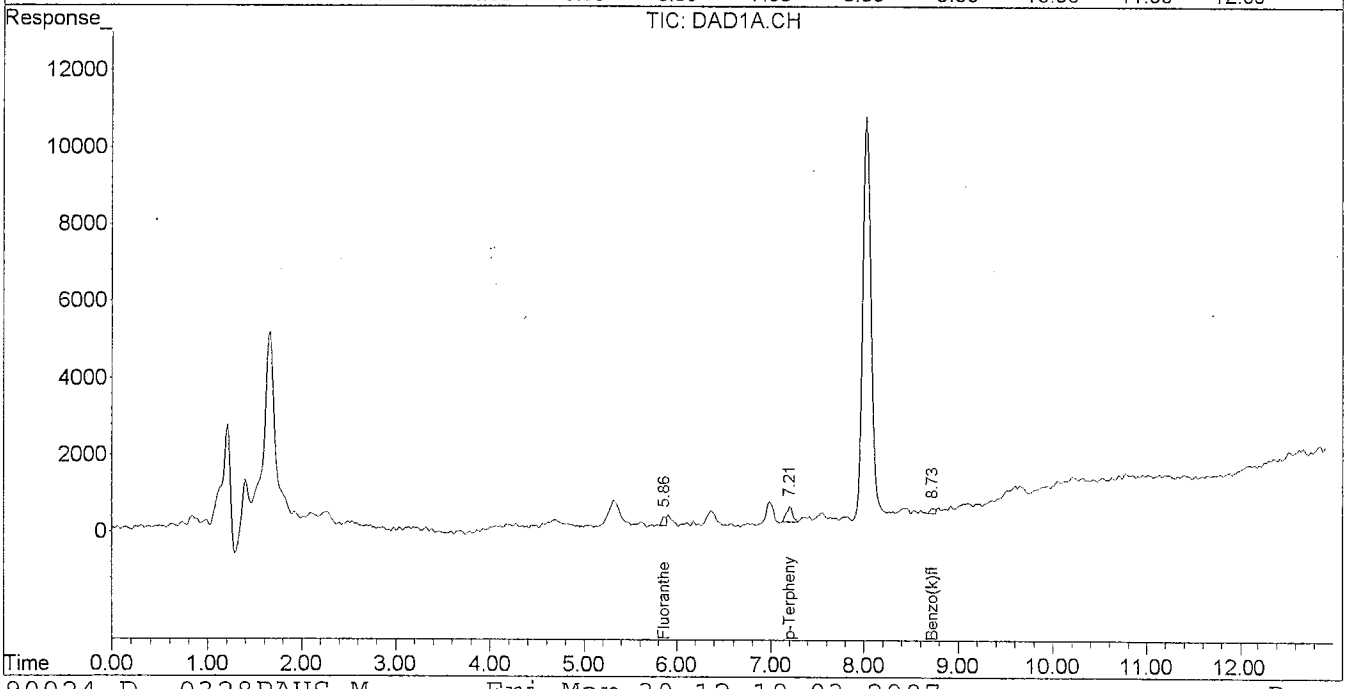
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290024.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290024.D\DAD1A.CH
Acq On : 30-Mar-2007, 01:18:18 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





MDL Studies

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	7470A			Instrument:	K-CVAA-01					
Extr./Dig. Method:	7470A			Analyst(s):	Stephanie Patterson					
Matrix:	Water									
Units:	ug/L									
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9
	Date Analyzed:	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9
Mercury	0.20	0.21	0.22	0.22	0.21	0.21	0.2	0.21	0.20	0.21

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	7470A			Instrument:	K-CVAA-01					
Extr./Dig. Method:	7470A			Analyst(s):	Stephanie Patterson					
Matrix:	Water									
Units:	ug/L									
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9
	Date Analyzed:	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9
Mercury	0.20	0.21	0.22	0.22	0.21	0.21	0.2	0.21	0.20	0.21

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Aluminum	80	73.8	62.4	50.9	50.1	58.9	68.8	66.1
Antimony	120	112.0	114.0	111.0	114.0	105.1	117.9	129.8
Arsenic	120	87.7	99.1	87.0	92.2	86.0	91.2	88.6
Barium	3.6	3.1	3.5	2.9	3.2	3.2	3.2	2.9
Beryllium	0.80	0.6	0.7	0.6	0.6	0.8	0.8	0.8
Boron	24	18.5	21.4	17.1	19.3	18.5	25.0	22.8
Cadmium	12	12.1	11.5	13.3	12.4	12.1	14.0	12.9
Calcium	20	26.9	24.8	20.8	22.4	25.9	24.2	24.4
Chromium	8.0	6.1	6.5	6.1	6.6	8.3	7.5	7.0
Cobalt	12	10.4	11.1	9.1	9.4	10.4	10.0	10.8
Copper	8.0	6.8	6.6	4.5	4.0	5.3	6.6	6.6
Iron	16	15.8	13.9	13.8	14.8	14.0	14.5	14.2
Lead	120	104.4	106.4	100.1	108.1	113.9	114.9	103.4
Lithium	16	14.8	15.7	12.1	10.9	14.2	13.3	13.0
Manganese	1.6	0.9	1.4	1.0	1.1	1.3	1.3	1.3
Molybdenum	16	14.0	13.2	15.1	15.8	15.8	17.3	18.0
Nickel	80	74.0	84.5	81.1	82.4	79.0	82.4	79.0
Phosphorus	280	266.5	274.9	287.8	311.8	218.0	314.3	293.0
Potassium	4000	2599	2473	2007	2012	2569	2634	2361
Selenium	120	80.7	111.6	101.5	103.9	104.9	109.2	114.5
Silicon	80	99.8	102.6	89.7	84.9	93.6	96.3	94.2
Silver	12	9.6	11.1	6.9	6.9	8.9	9.7	9.1
Sodium	280	280.0	274.6	249.3	255.7	272.0	282.9	282.9
Strontium	0.80	0.8	0.7	0.4	0.5	0.4	0.5	0.5
Thallium	200	138.3	163.3	161.7	160.0	180.0	151.7	143.3
Tin	80	78.0	80.6	80.1	79.2	76.1	84.6	73.1
Titanium	12	10.1	10.2	10.0	9.9	10.8	11.0	11.0
Vanadium	20	18.2	18.0	18.0	18.1	19.1	20.0	18.7

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method: 6010C / 200.7
Extr./Dig. Method: CLP
Matrix: WATER
Units: ug/L (ppb)

Sample ID:
Date Analyzed:

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	80	61.571	8.903	3.143	27.983	30	14%	77%	Valid MDL Data
Antimony	120	114.829	7.662	3.143	24.082	30	7%	96%	Valid MDL Data
Arsenic	120	90.257	4.488	3.143	14.107	20	5%	75%	Valid MDL Data
Barium	3.6	3.143	0.207	3.143	0.651	0.7	7%	87%	Valid MDL Data
Beryllium	0.80	0.700	0.100	3.143	0.314	0.4	14%	88%	Valid MDL Data
Boron	24	20.371	2.806	3.143	8.819	9	14%	85%	Valid MDL Data
Cadmium	12	12.614	0.845	3.143	2.657	3	7%	105%	Valid MDL Data
Calcium	20	24.200	2.057	3.143	6.464	7	8%	121%	Valid MDL Data
Chromium	8.0	6.871	0.801	3.143	2.519	3	12%	86%	Valid MDL Data
Cobalt	12	10.171	0.723	3.143	2.272	3	7%	85%	Valid MDL Data
Copper	8.0	5.771	1.161	3.143	3.651	4	20%	72%	Valid MDL Data
Iron	16	14.429	0.699	3.143	2.198	3	5%	90%	Valid MDL Data
Lead	120	107.314	5.450	3.143	17.130	20	5%	89%	Valid MDL Data
Lithium	16	13.429	1.633	3.143	5.132	6	12%	84%	Valid MDL Data
Manganese	1.6	1.186	0.186	3.143	0.586	0.6	16%	74%	Valid MDL Data
Molybdenum	16	15.600	1.698	3.143	5.337	6	11%	98%	Valid MDL Data
Nickel	80	80.343	3.419	3.143	10.747	20	4%	100%	Valid MDL Data
Phosphorus	280	280.900	32.823	3.143	103.163	200	12%	100%	Valid MDL Data
Potassium	4000	2379.286	268.253	3.143	843.119	900	11%	59%	Valid MDL Data
Selenium	120	103.757	11.140	3.143	35.013	40	11%	86%	Valid MDL Data
Silicon	80	94.443	5.958	3.143	18.727	20	6%	118%	Valid MDL Data
Silver	12	8.886	1.528	3.143	4.802	5	17%	74%	Valid MDL Data
Sodium	280	271.057	13.436	3.143	42.229	50	5%	97%	Valid MDL Data
Strontium	0.80	0.543	0.151	3.143	0.475	0.5	28%	68%	Valid MDL Data
Thallium	200	156.900	13.935	3.143	43.799	50	9%	78%	Valid MDL Data
Tin	80	78.814	3.632	3.143	11.415	20	5%	99%	Valid MDL Data
Titanium	12	10.429	0.486	3.143	1.526	2	5%	87%	Valid MDL Data
Vanadium	20	18.586	0.747	3.143	2.348	3	4%	93%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Magnesium	3	1.7	1.5	1.9	1.5	1.5	1.5	2.0

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Magnesium	3	1.657	0.215	3.143	0.675	0.7	13%	55%	Valid MDL Data

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Zinc	5.0	7.9	5.9	5.0	5.6	6.1	6.5	6.7

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	5.0	6.243	0.924	3.143	2.903	3	15%	125%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02				
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan				
Matrix:		Water								
Units:		µg/L								
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Aluminum	27	2.00	2.5040	2.4890	2.4620	2.5550	2.4760	2.5170	2.3800	2.5000
Antimony	121	0.05	0.0576	0.0514	0.0570	0.0535	0.0512	0.0533	0.0504	0.0578
Antimony	123	0.05	0.0527	0.0482	0.0473	0.0495	0.0555	0.0525	0.0502	0.0527
Arsenic	75	0.50	0.5958	0.6457	0.5854	0.5623	0.5879	0.6215	0.6057	0.5972
Barium	135	0.05	0.0589	0.0578	0.0572	0.0594	0.0662	0.0593	0.0503	0.0617
Barium	137	0.05	0.0581	0.0510	0.0480	0.0605	0.0580	0.0569	0.0590	0.0575
Beryllium	9	0.02	0.0326	0.0295	0.0325	0.0300	0.0316	0.0266	0.0266	0.0289
Bismuth	209	0.02	0.0262	0.0276	0.0339	0.0259	0.0268	0.0285	0.0291	0.0274
Boron	10	0.50	0.5487	0.6324	0.5320	0.5301	0.5065	0.5822	0.4802	0.4783
Boron	11	0.50	0.6702	0.6156	0.5880	0.5868	0.5793	0.6853	0.5530	0.6403
Cadmium	114	0.02	0.0204	0.0209	0.0207	0.0167	0.0236	0.0234	0.0244	0.0185
Cobalt	59	0.02	0.0233	0.0246	0.0218	0.0248	0.0237	0.0230	0.0225	0.0218
Copper	63	0.10	0.0864	0.0932	0.0856	0.0874	0.0967	0.0814	0.1005	0.0959
Copper	65	0.10	0.0912	0.0990	0.0951	0.0930	0.1105	0.0920	0.1028	0.0950
Lead	208	0.02	0.0266	0.0219	0.0212	0.0198	0.0191	0.0179	0.0177	0.0189
Manganese	55	0.05	0.0461	0.0634	0.0551	0.0483	0.0553	0.0602	0.0492	0.0455
Molybdenum	95	0.05	0.0621	0.0635	0.0603	0.0590	0.0585	0.0547	0.0636	0.0567
Molybdenum	97	0.05	0.0567	0.0568	0.0545	0.0516	0.0587	0.0529	0.0528	0.0585
Molybdenum	98	0.05	0.0597	0.0597	0.0506	0.0607	0.0661	0.0488	0.0559	0.0523
Nickel	60	0.20	0.2042	0.1871	0.1884	0.1829	0.1951	0.2145	0.2154	0.2091
Nickel	62	0.20	0.2075	0.1138	0.1577	0.2120	0.2305	0.1776	0.1996	0.2680
Selenium	77	1.00	0.6827	0.7298	0.7267	0.9852	1.0390	0.6241	1.0710	1.0110
Selenium	82	1.00	1.1760	1.2980	1.1260	0.9936	1.1420	1.0700	1.2660	1.2370
Thallium	203	0.02	0.0237	0.0250	0.0205	0.0263	0.0207	0.0205	0.0209	0.0243
Thallium	205	0.02	0.0216	0.0230	0.0213	0.0214	0.0226	0.0217	0.0213	0.0210
Tin	118	0.05	0.0544	0.0557	0.0451	0.0495	0.0554	0.0535	0.0483	0.0520
Tin	120	0.05	0.0541	0.0481	0.0468	0.0517	0.0513	0.0522	0.0493	0.0446
Vanadium	51	0.20	0.2053	0.2123	0.1846	0.1611	0.1703	0.1618	0.1566	0.1405

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	27	2.00	2.485	0.051	2.998	0.153	0.2	2%	124%	Valid MDL Data
Antimony	121	0.05	0.054	0.003	2.998	0.009	0.01	6%	108%	Valid MDL Data
Antimony	123	0.05	0.051	0.003	2.998	0.008	0.009	5%	102%	Valid MDL Data
Arsenic	75	0.50	0.600	0.025	2.998	0.075	0.08	4%	120%	Valid MDL Data
Barium	135	0.05	0.059	0.004	2.998	0.013	0.02	8%	118%	Valid MDL Data
Barium	137	0.05	0.056	0.004	2.998	0.013	0.02	8%	112%	Valid MDL Data
Beryllium	9	0.02	0.030	0.002	2.998	0.007	0.008	8%	149%	Valid MDL Data
Bismuth	209	0.02	0.028	0.003	2.998	0.008	0.008	9%	141%	Valid MDL Data
Boron	10	0.50	0.536	0.052	2.998	0.156	0.2	10%	107%	Valid MDL Data
Boron	11	0.50	0.615	0.047	2.998	0.140	0.2	8%	123%	Valid MDL Data
Cadmium	114	0.02	0.021	0.003	2.998	0.008	0.008	13%	105%	Valid MDL Data
Cobalt	59	0.02	0.023	0.001	2.998	0.003	0.004	5%	116%	Valid MDL Data
Copper	63	0.10	0.091	0.007	2.998	0.020	0.02	7%	91%	Valid MDL Data
Copper	65	0.10	0.097	0.007	2.998	0.020	0.02	7%	97%	Valid MDL Data
Lead	208	0.02	0.020	0.003	2.998	0.009	0.009	14%	102%	Valid MDL Data
Manganese	55	0.05	0.053	0.007	2.998	0.020	0.02	13%	106%	Valid MDL Data
Molybdenum	95	0.05	0.060	0.003	2.998	0.010	0.01	5%	120%	Valid MDL Data
Molybdenum	97	0.05	0.055	0.003	2.998	0.008	0.009	5%	111%	Valid MDL Data
Molybdenum	98	0.05	0.057	0.006	2.998	0.018	0.02	10%	113%	Valid MDL Data
Nickel	60	0.20	0.200	0.013	2.998	0.039	0.04	6%	100%	Valid MDL Data
Nickel	62	0.20	0.196	0.047	2.998	0.140	0.2	24%	98%	Valid MDL Data
Selenium	77	1.00	0.859	0.184	2.998	0.551	0.6	21%	86%	Valid MDL Data
Selenium	82	1.00	1.164	0.103	2.998	0.307	0.4	9%	116%	Valid MDL Data
Thallium	203	0.02	0.023	0.002	2.998	0.007	0.008	10%	114%	Valid MDL Data
Thallium	205	0.02	0.022	0.001	2.998	0.002	0.003	3%	109%	Valid MDL Data
Tin	118	0.05	0.052	0.004	2.998	0.011	0.02	7%	103%	Valid MDL Data
Tin	120	0.05	0.050	0.003	2.998	0.009	0.01	6%	100%	Valid MDL Data
Vanadium	51	0.20	0.174	0.025	2.998	0.074	0.08	14%	87%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Zinc	66	0.50	0.4113	0.4695	0.4795	0.4364	0.4888	0.4751	0.5023	0.4445
Zinc	67	0.50	0.3707	0.4172	0.3737	0.3673	0.4494	0.4436	0.3571	0.2864
Zinc	68	0.50	0.4309	0.5022	0.4405	0.4218	0.4711	0.4660	0.4063	0.4136

Supervisor Approval _____

QA/QC Approval _____

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	66	0.50	0.463	0.030	2.998	0.091	0.1	7%	93%	Valid MDL Data
Zinc	67	0.50	0.383	0.053	2.998	0.159	0.2	14%	77%	Valid MDL Data
Zinc	68	0.50	0.444	0.033	2.998	0.099	0.1	7%	89%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02						
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan						
Matrix:		Water										
Units:		µg/L										
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9	MDL-10
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9	Result 10
Cadmium	111	0.02	0.0213	0.0241	0.0210	0.0221	0.0199	0.0204	0.0194	0.0232	0.0226	0.0243
Chromium	52	0.20	0.3890	0.4005	0.4359	0.4374	0.4120	0.4414	0.3894	0.3828	0.4116	0.3878
Silver	107	0.02	0.0203	0.0217	0.0227	0.0219	0.0210	0.0210	0.0213	0.0207	0.0200	0.0181
Silver	109	0.02	0.0223	0.0245	0.0209	0.0206	0.0200	0.0204	0.0205	0.0210	0.0188	0.0211
Uranium	238	0.02	0.0188	0.0211	0.0181	0.0193	0.0208	0.0207	0.0201	0.0213	0.0212	0.0199

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Cadmium	111	0.02	0.022	0.002	2.821	0.005	0.005	8%	109%	Valid MDL Data
Chromium	52	0.20	0.409	0.023	2.821	0.064	0.07	6%	204%	Valid MDL Data
Silver	107	0.02	0.021	0.001	2.821	0.004	0.004	6%	104%	Valid MDL Data
Silver	109	0.02	0.021	0.002	2.821	0.004	0.005	7%	105%	Valid MDL Data
Uranium	238	0.02	0.020	0.001	2.821	0.003	0.004	5%	101%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1768

Analytical Method: 8015B
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: gc21 **Column:** ZB-1 15 m

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	1028F010.D	J:\GC21\DATA\102806\	10/28/2006 17:45	E	1028F014.D	J:\GC21\DATA\102806\	10/28/2006 19:07
B	1028F011.D	J:\GC21\DATA\102806\	10/28/2006 18:06	F	1028F015.D	J:\GC21\DATA\102806\	10/28/2006 19:27
C	1028F012.D	J:\GC21\DATA\102806\	10/28/2006 18:26	G	1028F016.D	J:\GC21\DATA\102806\	10/28/2006 19:48
D	1028F013.D	J:\GC21\DATA\102806\	10/28/2006 18:47				

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C10 - C25 DRO	A	93.7	B	90.2	C	98.7	D	97.2	E	97.6	F	95.8	G	90.7		
Diesel Range Organics	A	136	B	131	C	143	D	139	E	141	F	139	G	131		
Diesel Range Organics (DRO)	A	97.8	B	93.9	C	102	D	101	E	101	F	98.9	G	93.6		
Motor Oil	A	167	B	157	C	170	D	165	E	167	F	167	G	154		
Residual Range Organics (RRO)	A	167	B	157	C	170	D	165	E	167	F	167	G	154		

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C10 - C25 DRO	80.0	94.8	3.40	3.143	11	ug/L	4	119	Valid MDL Data
Diesel Range Organics	80.0	137	4.72	3.143	15	ug/L	3	171	Valid MDL Data
Diesel Range Organics (DRO)	80.0	98.3	3.43	3.143	11	ug/L	3	123	Valid MDL Data
Motor Oil	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)
Residual Range Organics (RRO)	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)

Supervisor Approval: 1/18/07

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8015B/NWTPH-GX/HK101
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC06 **Column:** DB-624

MDL Study ID: MDL1837

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0227R007.D	J:\GC06\DATA\022707.FID\	02/27/2007 12:34	E	0227R011.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:41
B	0227R008.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:06	F	0227R012.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:13
C	0227R009.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:37	G	0227R013.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:44
D	0227R010.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:09	H	0227R014.D	J:\GC06\DATA\022707.FID\	02/27/2007 16:16

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C6 - C10 GRO	A	81.5	B	94.0	C	97.4	D	112	E	110	F	80.8	G	102	H	115
Gasoline Range Organics (GRO)	A	80.0	B	92.2	C	95.6	D	111	E	108	F	78.8	G	101	H	113
Gasoline Range Organics-NWTPH	A	85.1	B	96.1	C	98.5	D	108	E	108	F	87.7	G	99.7	H	108

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C6 - C10 GRO	100	99.1	13.2	2.998	40	ug/L	13	99	Valid MDL Data
Gasoline Range Organics (GRO)	100	97.4	13.2	2.998	40	ug/L	14	97	Valid MDL Data
Gasoline Range Organics-NWTPH	100	98.9	9.06	2.998	27	ug/L	9	99	Valid MDL Data

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Supervisor Approval: 3/23/07 QA/QC Approval:

Printed: 02/28/2007 08:17:45
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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06 **Column:** FLD Vydac C-18 4.6 x 150 mm

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	03130004.D	J:\LC06\DATA\031306PA\	03/13/2006 16:38	E	03130008.D	J:\LC06\DATA\031306PA\	03/13/2006 17:58
B	03130005.D	J:\LC06\DATA\031306PA\	03/13/2006 16:58	F	03130009.D	J:\LC06\DATA\031306PA\	03/13/2006 18:18
C	03130006.D	J:\LC06\DATA\031306PA\	03/13/2006 17:18	G	03130010.D	J:\LC06\DATA\031306PA\	03/13/2006 18:37
D	03130007.D	J:\LC06\DATA\031306PA\	03/13/2006 17:38	H	03130011.D	J:\LC06\DATA\031306PA\	03/13/2006 18:57

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
2-Methylnaphthalene/Dibenzofuran	A	0.681	B	0.708	C	0.615	D	0.702	E	0.684	F	0.593	G	0.672	H	0.607
Acenaphthene	A	0.764	B	0.780	C	0.730	D	0.764	E	0.809	F	0.790	G	0.720	H	0.720
Acenaphthylene																
Anthracene	A	0.0880	B	0.0840	C	0.0810	D	0.0790	E	0.0870	F	0.0840	G	0.0800	H	0.0810
Benz(a)anthracene	A	0.0980	B	0.0980	C	0.0970	D	0.0920	E	0.105	F	0.101	G	0.0980	H	0.0970
Benzo(a)pyrene	A	0.113	B	0.110	C	0.110	D	0.108	E	0.117	F	0.111	G	0.113	H	0.114
Benzo(b)fluoranthene	A	0.0920	B	0.0880	C	0.0920	D	0.0890	E	0.0890	F	0.0920	G	0.0930	H	0.0850
Benzo(g,h,i)perylene	A	0.0810	B	0.0940	C	0.0730	D	0.0680	E	0.0800	F	0.0730	G	0.0700	H	0.0710
Benzo(k)fluoranthene	A	0.0900	B	0.0860	C	0.0860	D	0.0850	E	0.0920	F	0.0860	G	0.0880	H	0.0880
Chrysene	A	0.0830	B	0.0920	C	0.0920	D	0.0900	E	0.103	F	0.101	G	0.0890	H	0.0860
Dibenz(a,h)anthracene	A	0.0810	B	0.0850	C	0.0870	D	0.0800	E	0.0850	F	0.0790	G	0.0890	H	0.0800
Fluoranthene	A	0.0820	B	0.0870	C	0.0730	D	0.0860	E	0.0840	F	0.0750	G	0.0690	H	0.0670
Fluorene	A	0.0780	B	0.0780	C	0.0810	D	0.0790	E	0.0900	F	0.0870	G	0.0700	H	0.0820
Indeno(1,2,3-cd)pyrene	A	0.0810	B	0.0870	C	0.0810	D	0.0720	E	0.0880	F	0.0740	G	0.0790	H	0.0750
Naphthalene	A	0.730	B	0.695	C	0.692	D	0.729	E	0.710	F	0.733	G	0.724	H	0.728
Phenanthrene	A	0.0840	B	0.0890	C	0.0840	D	0.0880	E	0.0890	F	0.0820	G	0.0780	H	0.0870
Pyrene	A	0.0760	B	0.0760	C	0.0760	D	0.0750	E	0.0850	F	0.0810	G	0.0800	H	0.0820

1323

Supervisor Approval: M Gulu 3/28/06

QA/QC Approval:

Printed: 03/14/2006 19:37:49

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06
Column: FLD Vydac C-18 4.6 x 150 mm

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
2-Methylnaphthalene/Dibenzofuran	1.00	0.658	0.0455	2.998	0.14	ug/L	7	66	Valid MDL Data
Acenaphthene	1.00	0.760	0.0334	2.998	0.10	ug/L	4	76	Valid MDL Data
Acenaphthylene				0	0.12	ug/L			
Anthracene	0.100	0.0830	0.00330	2.998	0.0099	ug/L	4	83	Spike level too high (Spike>10*MDL)
Benz(a)anthracene	0.100	0.0983	0.00369	2.998	0.011	ug/L	4	98	Valid MDL Data
Benzo(a)pyrene	0.100	0.112	0.00283	2.998	0.0085	ug/L	3	112	Spike level too high (Spike>10*MDL)
Benzo(b)fluoranthene	0.100	0.0900	0.00273	2.998	0.0082	ug/L	3	90	Spike level too high (Spike>10*MDL)
Benzo(g,h,i)perylene	0.100	0.0763	0.00851	2.998	0.026	ug/L	11	76	Valid MDL Data
Benzo(k)fluoranthene	0.100	0.0876	0.00239	2.998	0.0072	ug/L	3	88	Spike level too high (Spike>10*MDL)
Chrysene	0.100	0.0920	0.00689	2.998	0.021	ug/L	7	92	Valid MDL Data
Dibenz(a,h)anthracene	0.100	0.0833	0.00373	2.998	0.011	ug/L	4	83	Valid MDL Data
Fluoranthene	0.100	0.0779	0.00786	2.998	0.024	ug/L	10	78	Valid MDL Data
Fluorene	0.100	0.0806	0.00609	2.998	0.018	ug/L	8	81	Valid MDL Data
Indeno(1,2,3-cd)pyrene	0.100	0.0796	0.00585	2.998	0.018	ug/L	7	80	Valid MDL Data
Naphthalene	1.00	0.718	0.0164	2.998	0.049	ug/L	2	72	Spike level too high (Spike>10*MDL)
Phenanthrene	0.100	0.0851	0.00387	2.998	0.012	ug/L	5	85	Valid MDL Data
Pyrene	0.100	0.0789	0.00364	2.998	0.011	ug/L	5	79	Valid MDL Data

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Supervisor Approval: 3/28/06

QA/QC Approval:

Printed: 03/14/2006 19:37:49

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06 **Column:** DAD Vydac C-18 4.6 x 150 mm

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	03130004c.d	J:\LC06\DATA\031306PA\03130004.D\	03/13/2006 16:38	E	03130008c.d	J:\LC06\DATA\031306PA\03130008.D\	03/13/2006 17:58
B	03130005c.d	J:\LC06\DATA\031306PA\03130005.D\	03/13/2006 16:58	F	03130009c.d	J:\LC06\DATA\031306PA\03130009.D\	03/13/2006 18:18
C	03130006c.d	J:\LC06\DATA\031306PA\03130006.D\	03/13/2006 17:18	G	03130010c.d	J:\LC06\DATA\031306PA\03130010.D\	03/13/2006 18:37
D	03130007c.d	J:\LC06\DATA\031306PA\03130007.D\	03/13/2006 17:38	H	03130011c.d	J:\LC06\DATA\031306PA\03130011.D\	03/13/2006 18:57

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**
2-Methylnaphthalene/Dibenzofuran	A	0.690	B	0.664	C	0.670	D	0.684	E	0.720	F	0.780	G	0.724	H	0.682
Acenaphthene	A	0.908	B	0.779	C	0.811	D	0.854	E	0.784	F	0.912	G	0.836	H	0.847
Acenaphthylene	A	0.779	B	0.815	C	0.779	D	0.807	E	0.811	F	0.846	G	0.887	H	0.775
Anthracene	A	0.0790	B	0.0770	C	0.0770	D	0.0780	E	0.0830	F	0.0820	G	0.0780	H	0.0790
Benz(a)anthracene	A	0.117	B	0.109	C	0.113	D	0.100	E	0.123	F	0.114	G	0.115	H	0.120
Benzo(a)pyrene	A	0.142	B	0.138	C	0.139	D	0.135	E	0.146	F	0.142	G	0.147	H	0.141
Benzo(b)fluoranthene	A	0.0940	B	0.0920	C	0.0950	D	0.0860	E	0.102	F	0.101	G	0.157	H	0.0950
Benzo(g,h,i)perylene	A	0.0980	B	0.0950	C	0.0890	D	0.102	E	0.122	F	0.111	G	0.120	H	0.0980
Benzo(k)fluoranthene	A	0.0820	B	0.0750	C	0.0830	D	0.0760	E	0.0890	F	0.0840	G	0.110	H	0.0880
Chrysene	A	0.0910	B	0.0920	C	0.0930	D	0.0880	E	0.104	F	0.0940	G	0.0910	H	0.0930
Dibenz(a,h)anthracene	A	0.0690	B	0.0730	C	0.0910	D	0.0870	E	0.103	F	0.0780	G	0.0960	H	0.0870
Fluoranthene	A	0.0750	B	0.0760	C	0.0770	D	0.110	E	0.0950	F	0.0820	G	0.0820	H	0.0950
Fluorene	A	0.0880	B	0.0760	C	0.0830	D	0.0840	E	0.0810	F	0.0960	G	0.0880	H	0.0840
Indeno(1,2,3-cd)pyrene	A	0.0770	B	0.0790	C	0.0770	D	0.0750	E	0.0920	F	0.0740	G	0.106	H	0.0750
Naphthalene	A	0.752	B	0.726	C	0.749	D	0.736	E	0.747	F	0.852	G	0.710	H	0.751
Phenanthrene	A	0.0840	B	0.0880	C	0.0860	D	0.0920	E	0.0930	F	0.0950	G	0.0840	H	0.0860
Pyrene	A	0.0840	B	0.0770	C	0.0790	D	0.0950	E	0.101	F	0.0880	G	0.0860	H	0.0910

1325

Supervisor Approval: M Curlin 3/28/06

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06
Column: DAD Vydac C-18 4.6 x 150 mm

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
2-Methylnaphthalene/Dibenzofuran	1.00	0.702	0.0382	2.998	0.11	ug/L	5	70	Valid MDL Data
Acenaphthene	1.00	0.841	0.0504	2.998	0.15	ug/L	6	84	Valid MDL Data
Acenaphthylene	1.00	0.812	0.0385	2.998	0.12	ug/L	5	81	Valid MDL Data
Anthracene	0.100	0.0791	0.00223	2.998	0.0067	ug/L	3	79	Spike level too high (Spike>10*MDL)
Benz(a)anthracene	0.100	0.114	0.00706	2.998	0.021	ug/L	6	114	Valid MDL Data
Benzo(a)pyrene	0.100	0.141	0.00399	2.998	0.012	ug/L	3	141	Valid MDL Data
Benzo(b)fluoranthene	0.100	0.103	0.0225	2.998	0.067	ug/L	22	103	Valid MDL Data
Benzo(g,h,i)perylene	0.100	0.104	0.0120	2.998	0.036	ug/L	12	104	Valid MDL Data
Benzo(k)fluoranthene	0.100	0.0859	0.0109	2.998	0.033	ug/L	13	86	Valid MDL Data
Chrysene	0.100	0.0933	0.00471	2.998	0.014	ug/L	5	93	Valid MDL Data
Dibenz(a,h)anthracene	0.100	0.0855	0.0116	2.998	0.035	ug/L	14	86	Valid MDL Data
Fluoranthene	0.100	0.0865	0.0124	2.998	0.037	ug/L	14	87	Valid MDL Data
Fluorene	0.100	0.0850	0.00588	2.998	0.018	ug/L	7	85	Valid MDL Data
Indeno(1,2,3-cd)pyrene	0.100	0.0819	0.0113	2.998	0.034	ug/L	14	82	Valid MDL Data
Naphthalene	1.00	0.753	0.0426	2.998	0.13	ug/L	6	75	Valid MDL Data
Phenanthrene	0.100	0.0885	0.00428	2.998	0.013	ug/L	5	89	Valid MDL Data
Pyrene	0.100	0.0876	0.00800	2.998	0.024	ug/L	9	88	Valid MDL Data

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Supervisor Approval: MM Curtis 3/28/06

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047.D	J:\GC23\DATA\092906\	09/30/2006 13:15	E	0929F051.D	J:\GC23\DATA\092906\	09/30/2006 15:00
B	0929F048.D	J:\GC23\DATA\092906\	09/30/2006 13:41	F	0929F052.D	J:\GC23\DATA\092906\	09/30/2006 15:26
C	0929F049.D	J:\GC23\DATA\092906\	09/30/2006 14:07	G	0929F059.D	J:\GC23\DATA\092906\	09/30/2006 18:30
D	0929F050.D	J:\GC23\DATA\092906\	09/30/2006 14:33	H	0929F060.D	J:\GC23\DATA\092906\	09/30/2006 18:56

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0759	B	0.0703	C	0.0773	D	0.0687	E	0.0783	F	0.0773	G	0.0740	H	0.0639
Toxaphene	A	0.179	B	0.175	C	0.169	D	0.178	E	0.188	F	0.178	G	0.165	H	0.166

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0732	0.00510	2.998	0.015	ug/L	7	73	Valid MDL Data
Toxaphene	0.200	0.175	0.00753	2.998	0.023	ug/L	4	87	Valid MDL Data

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Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047c.d	J:\GC23\DATA\092906\0929F047.D\	09/30/2006 13:15	E	0929F051c.d	J:\GC23\DATA\092906\0929F051.D\	09/30/2006 15:00
B	0929F048c.d	J:\GC23\DATA\092906\0929F048.D\	09/30/2006 13:41	F	0929F052c.d	J:\GC23\DATA\092906\0929F052.D\	09/30/2006 15:26
C	0929F049c.d	J:\GC23\DATA\092906\0929F049.D\	09/30/2006 14:07	G	0929F059c.d	J:\GC23\DATA\092906\0929F059.D\	09/30/2006 18:30
D	0929F050c.d	J:\GC23\DATA\092906\0929F050.D\	09/30/2006 14:33	H	0929F060c.d	J:\GC23\DATA\092906\0929F060.D\	09/30/2006 18:56

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0746	B	0.0705	C	0.0732	D	0.0707	E	0.0756	F	0.0743	G	0.0673	H	0.0659
Toxaphene	A	0.141	B	0.142	C	0.137	D	0.132	E	0.160	F	0.154	G	0.147	H	0.140

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0715	0.00354	2.998	0.011	ug/L	5	72	Valid MDL Data
Toxaphene	0.200	0.144	0.00924	2.998	0.028	ug/L	6	72	Valid MDL Data

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Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088.D	J:\GC23\DATA\081006\	08/12/2006 06:05	E	0810F092.D	J:\GC23\DATA\081006\	08/12/2006 07:51
B	0810F089.D	J:\GC23\DATA\081006\	08/12/2006 06:31	F	0810F093.D	J:\GC23\DATA\081006\	08/12/2006 08:17
C	0810F090.D	J:\GC23\DATA\081006\	08/12/2006 06:58	G	0810F094.D	J:\GC23\DATA\081006\	08/12/2006 08:44
D	0810F091.D	J:\GC23\DATA\081006\	08/12/2006 07:24	H	0810F095.D	J:\GC23\DATA\081006\	08/12/2006 09:10

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00192	B	0.00262	C	0.00154	D	0.00318	E	0.00207	F	0.0024	G	0.00233	H	0.00262
4,4'-DDE	A	0.00179	B	0.00157	C	0.00153	D	0.00185	E	0.00182	F	0.0017	G	0.00177	H	0.00168
4,4'-DDT	A	0.00175	B	0.00173	C	0.00169	D	0.00180	E	0.00176	F	0.0019	G	0.00160	H	0.00171
Aldrin	A	0.00091	B	0.00090	C	0.00075	D	0.00078	E	0.00068	F	0.0007	G	0.000616	H	0.00078
alpha-BHC	A	0.00166	B	0.00152	C	0.00136	D	0.00160	E	0.00171	F	0.0016	G	0.00151	H	0.00161
~~alpha-Chlordane~~	~~A~~	~~0.00191~~	~~B~~	~~0.00181~~	~~C~~	~~0.00167~~	~~D~~	~~0.00192~~	~~E~~	~~0.00179~~	~~F~~	~~0.0018~~	~~G~~	~~0.00177~~	~~H~~	~~0.00187~~
beta-BHC	A	0.00216	B	0.00209	C	0.00176	D	0.00183	E	0.00213	F	0.0022	G	0.00186	H	0.00195
delta-BHC	A	0.00194	B	0.00190	C	0.00176	D	0.00187	E	0.00173	F	0.0018	G	0.00162	H	0.00186
Dieldrin	A	0.00203	B	0.00189	C	0.00169	D	0.00191	E	0.00184	F	0.0018	G	0.00166	H	0.00181
Endosulfan I	A	0.00165	B	0.00158	C	0.00146	D	0.00185	E	0.00158	F	0.0018	G	0.00150	H	0.00179
Endosulfan II	A	0.00181	B	0.00175	C	0.00158	D	0.00182	E	0.00204	F	0.0018	G	0.00176	H	0.00167
Endosulfan Sulfate	A	0.00236	B	0.00245	C	0.00215	D	0.00260	E	0.00232	F	0.0025	G	0.00221	H	0.00249
Endrin	A	0.00209	B	0.00198	C	0.00205	D	0.00189	E	0.00189	F	0.0018	G	0.00210	H	0.00181
Endrin Aldehyde	A	0.00191	B	0.00187	C	0.00161	D	0.00178	E	0.00201	F	0.0018	G	0.00211	H	0.00179
Endrin Ketone	A	0.00252	B	0.00231	C	0.00210	D	0.00232	E	0.00225	F	0.0024	G	0.00229	H	0.00283
gamma-BHC (Lindane)	A	0.00167	B	0.00176	C	0.00144	D	0.00179	E	0.00193	F	0.0016	G	0.00158	H	0.00169
gamma-Chlordane	A	0.00208	B	0.00194	C	0.00177	D	0.00187	E	0.00179	F	0.0019	G	0.00176	H	0.00183
Heptachlor	A	0.00167	B	0.00155	C	0.00165	D	0.00181	E	0.00162	F	0.0016	G	0.00173	H	0.00154
Heptachlor Epoxide	A	0.00215	B	0.00198	C	0.00184	D	0.00196	E	0.00186	F	0.0018	G	0.00181	H	0.00191
Hexachlorobenzene	A	0.00172	B	0.00161	C	0.00147	D	0.00159	E	0.00158	F	0.0017	G	0.00165	H	0.00160
Isodrin	A	0.00118	B	0.00095	C	0.00080	D	0.00071	E	0.00067	F	0.0008	G	0.000574	H	0.00082
Methoxychlor	A	0.00271	B	0.00233	C	0.00216	D	0.00222	E	0.00217	F	0.0022	G	0.00230	H	0.00248

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00235	0.000505	2.998	0.0015	ug/L	22	94	Valid MDL Data
4,4'-DDE	0.00250	0.00172	0.000120	2.998	0.00036	ug/L	7	69	Valid MDL Data
4,4'-DDT	0.00250	0.00175	0.000107	2.998	0.00032	ug/L	6	70	Valid MDL Data
Aldrin	0.00250	0.000774	0.000101	2.998	0.00030	ug/L	13	31	Valid MDL Data
alpha-BHC	0.00250	0.00158	0.000112	2.998	0.00033	ug/L	7	63	Valid MDL Data
~~alpha-Chlordane~~	~~0.00250~~	~~0.00182~~	~~0.0000816~~	~~2.998~~	~~0.00024~~	~~ug/L~~	~~4~~	~~73~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00200	0.000182	2.998	0.00054	ug/L	9	80	Valid MDL Data
delta-BHC	0.00250	0.00182	0.000105	2.998	0.00031	ug/L	6	73	Valid MDL Data
Dieldrin	0.00250	0.00183	0.000117	2.998	0.00035	ug/L	6	73	Valid MDL Data
Endosulfan I	0.00250	0.00165	0.000146	2.998	0.00044	ug/L	9	66	Valid MDL Data
Endosulfan II	0.00250	0.00178	0.000133	2.998	0.00040	ug/L	7	71	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00239	0.000157	2.998	0.00047	ug/L	7	96	Valid MDL Data
Endrin	0.00250	0.00196	0.000108	2.998	0.00032	ug/L	5	79	Valid MDL Data
Endrin Aldehyde	0.00250	0.00186	0.000152	2.998	0.00046	ug/L	8	75	Valid MDL Data
Endrin Ketone	0.00250	0.00238	0.000220	2.998	0.00066	ug/L	9	95	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00168	0.000146	2.998	0.00044	ug/L	9	67	Valid MDL Data
gamma-Chlordane	0.00250	0.00187	0.000108	2.998	0.00032	ug/L	6	75	Valid MDL Data
Heptachlor	0.00250	0.00165	0.0000924	2.998	0.00028	ug/L	6	66	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00192	0.000108	2.998	0.00032	ug/L	6	77	Valid MDL Data
Hexachlorobenzene	0.00250	0.00161	0.0000780	2.998	0.00023	ug/L	5	65	Spike level too high (Spike>10*MDL) *
Isodrin	0.00250	0.000815	0.000185	2.998	0.00056	ug/L	23	33	Valid MDL Data
Methoxychlor	0.00250	0.00232	0.000190	2.998	0.00057	ug/L	8	93	Valid MDL Data

* other column OK

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088c.d	J:\GC23\DATA\081006\0810F088.D\	08/12/2006 06:05	E	0810F092c.d	J:\GC23\DATA\081006\0810F092.D\	08/12/2006 07:51
B	0810F089c.d	J:\GC23\DATA\081006\0810F089.D\	08/12/2006 06:31	F	0810F093c.d	J:\GC23\DATA\081006\0810F093.D\	08/12/2006 08:17
C	0810F090c.d	J:\GC23\DATA\081006\0810F090.D\	08/12/2006 06:58	G	0810F094c.d	J:\GC23\DATA\081006\0810F094.D\	08/12/2006 08:44
D	0810F091c.d	J:\GC23\DATA\081006\0810F091.D\	08/12/2006 07:24	H	0810F095c.d	J:\GC23\DATA\081006\0810F095.D\	08/12/2006 09:10

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00234	B	0.00233	C	0.00219	D	0.00218	E	0.00204	F	0.0021	G	0.00218	H	0.00223
4,4'-DDE	A	0.00211	B	0.00210	C	0.00201	D	0.00217	E	0.00211	F	0.0021	G	0.00210	H	0.00191
4,4'-DDT	A	0.00402	B	0.00380	C	0.00375	D	0.00418	E	0.00377	F	0.0041	G	0.00418	H	0.00378
Aldrin	A	0.00122	B	0.00101	C	0.00093	D	0.00103	E	0.00085	F	0.0009	G	0.000778	H	0.00093
alpha-BHC	A	0.00190	B	0.00190	C	0.00166	D	0.00180	E	0.00186	F	0.0018	G	0.00181	H	0.00176
~~alpha-Chlordane~~	~~A~~	~~0.00216~~	~~B~~	~~0.00218~~	~~C~~	~~0.00207~~	~~D~~	~~0.00223~~	~~E~~	~~0.00214~~	~~F~~	~~0.0022~~	~~G~~	~~0.00209~~	~~H~~	~~0.00215~~
beta-BHC	A	0.00323	B	0.00363	C	0.00302	D	0.00354	E	0.00320	F	0.0029	G	0.00309	H	0.00364
delta-BHC	A	0.00209	B	0.00212	C	0.00189	D	0.00245	E	0.00234	F	0.0022	G	0.00242	H	0.00231
Dieldrin	A	0.00221	B	0.00218	C	0.00201	D	0.00204	E	0.00199	F	0.0021	G	0.00191	H	0.00200
Endosulfan I	A	0.00194	B	0.00193	C	0.00181	D	0.00194	E	0.00190	F	0.0018	G	0.00187	H	0.00191
Endosulfan II	A	0.00206	B	0.00201	C	0.00189	D	0.00208	E	0.00226	F	0.0020	G	0.00197	H	0.00207
Endosulfan Sulfate	A	0.00236	B	0.00242	C	0.00219	D	0.00235	E	0.00247	F	0.0022	G	0.00247	H	0.00221
Endrin	A	0.00236	B	0.00275	C	0.00214	D	0.00258	E	0.00247	F	0.0025	G	0.00207	H	0.00231
Endrin Aldehyde	A	0.00198	B	0.00205	C	0.00191	D	0.00190	E	0.00205	F	0.0018	G	0.00190	H	0.00178
Endrin Ketone	A	0.00227	B	0.00222	C	0.00187	D	0.00213	E	0.00224	F	0.0022	G	0.00212	H	0.00232
gamma-BHC (Lindane)	A	0.00209	B	0.00205	C	0.00184	D	0.00201	E	0.00208	F	0.0021	G	0.00195	H	0.00214
gamma-Chlordane	A	0.00223	B	0.00228	C	0.00208	D	0.00225	E	0.00232	F	0.0022	G	0.00233	H	0.00225
Heptachlor	A	0.00203	B	0.00181	C	0.00179	D	0.00194	E	0.00184	F	0.0021	G	0.00181	H	0.00184
Heptachlor Epoxide	A	0.00221	B	0.00229	C	0.00200	D	0.00222	E	0.00225	F	0.0023	G	0.00208	H	0.00218
Hexachlorobenzene	A	0.00215	B	0.00204	C	0.00205	D	0.00200	E	0.00199	F	0.0022	G	0.00196	H	0.00198
Isodrin	A	0.00132	B	0.00104	C	0.00098	D	0.00088	E	0.00086	F	0.0008	G	0.000788	H	0.00087
Methoxychlor	A	0.00268	B	0.00251	C	0.00172	D	0.00216	E	0.00229	F	0.0026	G	0.00220	H	0.00223

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00220	0.0000990	2.998	0.00030	ug/L	4	88	Valid MDL Data
4,4'-DDE	0.00250	0.00208	0.0000836	2.998	0.00025	ug/L	4	83	Valid MDL Data
4,4'-DDT	0.00250	0.00395	0.000194	2.998	0.00058	ug/L	5	158	Valid MDL Data
Aldrin	0.00250	0.000960	0.000134	2.998	0.00040	ug/L	14	38	Valid MDL Data
alpha-BHC	0.00250	0.00181	0.0000789	2.998	0.00024	ug/L	4	72	Spike level too high (Spike>10*MDL) *
~~alpha-Chlordane~~	~~0.00250~~	~~0.00216~~	~~0.0000577~~	~~2.998~~	~~0.00017~~	~~ug/L~~	~~3~~	~~86~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00329	0.000277	2.998	0.00083	ug/L	8	132	Valid MDL Data
delta-BHC	0.00250	0.00223	0.000191	2.998	0.00057	ug/L	9	89	Valid MDL Data
Dieldrin	0.00250	0.00206	0.000101	2.998	0.00030	ug/L	5	82	Valid MDL Data
Endosulfan I	0.00250	0.00190	0.0000436	2.998	0.00013	ug/L	2	76	Spike level too high (Spike>10*MDL) *
Endosulfan II	0.00250	0.00205	0.000108	2.998	0.00032	ug/L	5	82	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00234	0.000113	2.998	0.00034	ug/L	5	94	Valid MDL Data
Endrin	0.00250	0.00240	0.000227	2.998	0.00068	ug/L	9	96	Valid MDL Data
Endrin Aldehyde	0.00250	0.00193	0.0000922	2.998	0.00028	ug/L	5	77	Valid MDL Data
Endrin Ketone	0.00250	0.00218	0.000142	2.998	0.00043	ug/L	7	87	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00204	0.000103	2.998	0.00031	ug/L	5	81	Valid MDL Data
gamma-Chlordane	0.00250	0.00225	0.0000781	2.998	0.00023	ug/L	3	90	Spike level too high (Spike>10*MDL) *
Heptachlor	0.00250	0.00190	0.000122	2.998	0.00036	ug/L	6	76	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00220	0.000105	2.998	0.00031	ug/L	5	88	Valid MDL Data
Hexachlorobenzene	0.00250	0.00205	0.000102	2.998	0.00031	ug/L	5	82	Valid MDL Data
Isodrin	0.00250	0.000955	0.000166	2.998	0.00050	ug/L	17	38	Valid MDL Data
Methoxychlor	0.00250	0.00230	0.000310	2.998	0.00093	ug/L	13	92	Valid MDL Data

* other column ok

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

File ID	Data File	Data Path	AcqDate
A	1205F021.D	J:\MS18\DATA\120506\	12/05/2006 16:49
B	1205F022.D	J:\MS18\DATA\120506\	12/05/2006 17:08
C	1205F023.D	J:\MS18\DATA\120506\	12/05/2006 17:28
D	1205F024.D	J:\MS18\DATA\120506\	12/05/2006 17:48
E	1205F025.D	J:\MS18\DATA\120506\	12/05/2006 18:07
F	1205F026.D	J:\MS18\DATA\120506\	12/05/2006 18:27
G	1205F027.D	J:\MS18\DATA\120506\	12/05/2006 18:47
H	1205F028.D	J:\MS18\DATA\120506\	12/05/2006 19:06
I	1206F011.D	J:\MS18\DATA\120606\	12/06/2006 14:48
J	1206F012.D	J:\MS18\DATA\120606\	12/06/2006 15:07
K	1206F013.D	J:\MS18\DATA\120606\	12/06/2006 15:27
L	1206F014.D	J:\MS18\DATA\120606\	12/06/2006 15:46
M	1206F015.D	J:\MS18\DATA\120606\	12/06/2006 16:06
N	1206F016.D	J:\MS18\DATA\120606\	12/06/2006 16:26
O	1206F017.D	J:\MS18\DATA\120606\	12/06/2006 16:45
P	1206F018.D	J:\MS18\DATA\120606\	12/06/2006 17:05
Q	1206F019.D	J:\MS18\DATA\120606\	12/06/2006 17:25
R	1206F020.D	J:\MS18\DATA\120606\	12/06/2006 17:44
S	1206F021.D	J:\MS18\DATA\120606\	12/06/2006 18:04
T	1206F022.D	J:\MS18\DATA\120606\	12/06/2006 18:24
U	1206F023.D	J:\MS18\DATA\120606\	12/06/2006 18:43
V	1206F024.D	J:\MS18\DATA\120606\	12/06/2006 19:03
W	1206F025.D	J:\MS18\DATA\120606\	12/06/2006 19:22
X	1206F026.D	J:\MS18\DATA\120606\	12/06/2006 19:42
Y	0117F005.D	J:\MS18\DATA\011707\	01/17/2007 15:46
Z	0117F006.D	J:\MS18\DATA\011707\	01/17/2007 16:06
AA	0117F007.D	J:\MS18\DATA\011707\	01/17/2007 16:25
AB	0117F008.D	J:\MS18\DATA\011707\	01/17/2007 16:45
AC	0117F009.D	J:\MS18\DATA\011707\	01/17/2007 17:04
AD	0117F010.D	J:\MS18\DATA\011707\	01/17/2007 17:24
AE	0117F011.D	J:\MS18\DATA\011707\	01/17/2007 17:44

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,1,1,2-Tetrachloroethane	A	0.210	B	0.180	C	0.160	D	0.170	E	0.170	F	0.180	G	0.190	H	0.180
1,1,1-Trichloroethane (TCA)	A	0.210	B	0.200	C	0.200	D	0.200	E	0.150	F	0.190	G	0.200	H	0.220
1,1,2,2-Tetrachloroethane	A	0.210	B	0.220	C	0.160	D	0.160	E	0.160	F	0.210	G	0.220	H	0.220
1,1,2-Trichloroethane	A	0.240	B	0.190	C	0.160	D	0.240	E	0.180	F	0.210	G	0.240	H	0.230
1,1-Dichloroethane	A	0.210	B	0.190	C	0.190	D	0.210	E	0.150	F	0.190	G	0.190	H	0.210
1,1-Dichloroethene	A	0.240	B	0.170	C	0.190	D	0.230	E	0.170	F	0.200	G	0.210	H	0.230
1,1-Dichloropropene	A	0.210	B	0.200	C	0.190	D	0.210	E	0.160	F	0.230	G	0.190	H	0.210
1,2,3-Trichlorobenzene	I	0.510	J	0.520	K	0.540	L	0.510	M	0.480	N	0.490	O	0.450	P	0.520
1,2,3-Trichloropropane	I	0.510	J	0.520	K	0.510	L	0.490	M	0.510	N	0.660	O	0.580	P	0.650
1,2,4-Trichlorobenzene	A	0.410	B	0.310	C	0.300	D	0.290	E	0.220	F	0.270	G	0.250	H	0.240
1,2,4-Trimethylbenzene	A	0.220	B	0.180	C	0.170	D	0.200	E	0.150	F	0.190	G	0.180	H	0.190
1,2-Dibromo-3-chloropropane	I	0.590	J	0.710	L	0.680	M	0.430	N	0.280	O	0.460	P	0.380		

Supervisor Approval: 2/2/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,2-Dibromoethane (EDB)	A	0.210	B	0.230	C	0.210	D	0.180	E	0.190	F	0.150	G	0.190	H	0.200
1,2-Dichlorobenzene	A	0.250	B	0.210	C	0.200	D	0.220	E	0.180	F	0.210	G	0.180	H	0.220
1,2-Dichloroethane (EDC)	A	0.200	B	0.200	C	0.180	D	0.210	E	0.150	F	0.190	G	0.220	H	0.210
1,2-Dichloropropane	A	0.220	B	0.170	C	0.180	D	0.220	E	0.180	F	0.200	G	0.210	H	0.220
1,3,5-Trichlorobenzene	I	0.630	J	0.670	K	0.600	L	0.610	M	0.510	N	0.560	O	0.520	P	0.580
1,3,5-Trimethylbenzene	A	0.220	B	0.200	C	0.170	D	0.200	E	0.150	F	0.190	G	0.170	H	0.190
1,3-Dichlorobenzene	A	0.270	B	0.240	C	0.210	D	0.230	E	0.190	F	0.240	G	0.190	H	0.230
1,3-Dichloropropane	A	0.210	B	0.200	C	0.180	D	0.180	E	0.160	F	0.210	G	0.180	H	0.210
1,4-Dichlorobenzene	A	0.280	B	0.240	C	0.210	D	0.250	E	0.190	F	0.230	G	0.210	H	0.220
1,4-Dioxane	Q	38.2	R	58.5	S	47.5	T	32.2	U	49.0	V	37.5	W	43.9	X	37.9
1-Chlorohexane	A	0.280	B	0.220	C	0.230	D	0.250	E	0.140	F	0.250	G	0.210	H	0.230
2,2-Dichloropropane	A	0.190	B	0.190	C	0.160	D	0.180	E	0.140	F	0.210	G	0.180	H	0.230
2-Butanone (MEK)	A	9.54	B	10.1	C	10.3	D	9.58	E	8.64	F	8.74	G	10.5	H	10.6
2-Chloroethyl Vinyl Ether	I	0.550	J	0.550	K	0.470	L	0.510	M	0.560	N	0.590	O	0.540	P	0.450
2-Chlorotoluene	A	0.240	B	0.190	C	0.190	D	0.220	E	0.170	F	0.200	G	0.170	H	0.230
2-Hexanone	A	9.93	B	8.99	C	10.2	D	8.78	E	9.12	F	8.44	G	7.97	H	10.0
2-Nitropropane	I	2.07	J	1.88	K	1.87	L	2.03	M	2.01	N	2.02	O	2.04	P	2.28
3-Chloro-1-propene	A	0.220	B	0.230	C	0.190	D	0.210	E	0.170	F	0.180	G	0.220	H	0.210
4-Chlorotoluene	A	0.230	B	0.210	C	0.190	D	0.210	E	0.170	F	0.200	G	0.180	H	0.200
4-Isopropyltoluene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.160	F	0.170	G	0.160	H	0.190
4-Methyl-2-pentanone (MIBK)	A	11.2	B	11.6	C	12.0	D	11.1	E	11.8	F	11.2	G	11.3	H	12.5
Acetone	A	10.6	B	10.4	C	12.1	D	9.33	E	9.18	F	9.56	G	11.0	H	11.3
Acetonitrile	A	10.4	B	9.38	C	11.9	D	8.45	E	9.86	F	8.73	G	11.0	H	11.8
Acrolein	I	14.8	J	13.5	K	11.8	L	14.8	M	12.6	N	16.9	O	10.2	P	11.1
Acrylonitrile	A	1.13	B	1.03	C	1.03	D	1.05	E	0.870	F	0.830	G	1.01	H	1.14
Benzene	A	0.220	B	0.190	C	0.180	D	0.200	E	0.160	F	0.210	G	0.200	H	0.220
Bromobenzene	A	0.240	B	0.200	C	0.210	D	0.210	E	0.170	F	0.200	G	0.180	H	0.220
Bromochloromethane	A	0.230	B	0.210	C	0.150	D	0.210	E	0.180	F	0.240	G	0.160	H	0.220
Bromodichloromethane	A	0.200	B	0.160	C	0.170	D	0.180	E	0.140	F	0.170	G	0.190	H	0.180
Bromoform	A	0.220	B	0.120	C	0.160	D	0.160	E	0.130	F	0.130	G	0.140	H	0.180
Bromomethane	A	0.330	B	0.320	C	0.230	D	0.310	E	0.250	F	0.340	G	0.320	H	0.300

Supervisor Approval: 1/24/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Carbon Disulfide	A	0.210	B	0.200	C	0.170	D	0.210	E	0.150	F	0.220	G	0.190	H	0.210
Carbon Tetrachloride	A	0.190	B	0.180	C	0.170	D	0.190	E	0.160	F	0.200	G	0.190	H	0.210
Chlorobenzene	A	0.220	B	0.200	C	0.180	D	0.210	E	0.160	F	0.200	G	0.180	H	0.220
Chloroethane	A	0.310	B	0.190	C	0.190	D	0.230	E	0.210	F	0.280	G	0.250	H	0.230
Chloroform	A	0.240	B	0.200	C	0.160	D	0.220	E	0.170	F	0.180	G	0.200	H	0.220
Chloromethane	A	0.240	B	0.210	C	0.290	D	0.260	E	0.200	F	0.280	G	0.290	H	0.290
Chloroprene	A	0.820	B	0.690	C	0.670	D	0.780	E	0.570	F	0.750	G	0.720	H	0.790
cis-1,2-Dichloroethene	A	0.230	B	0.210	C	0.210	D	0.180	E	0.170	F	0.230	G	0.210	H	0.220
cis-1,3-Dichloropropene	A	0.210	B	0.180	C	0.180	D	0.170	E	0.150	F	0.200	G	0.190	H	0.180
cis-1,4-Dichloro-2-butene	I	1.69	J	1.58	K	1.78	L	1.53	M	1.60	N	1.59	O	1.57	P	1.80
Dibromochloromethane	A	0.180	B	0.160	C	0.170	D	0.180	E	0.140	F	0.220	G	0.170	H	0.150
Dibromomethane	A	0.230	B	0.210	C	0.230	D	0.240	E	0.200	F	0.220	G	0.230	H	0.120
Dichlorodifluoromethane	A	0.240	B	0.190	C	0.180	D	0.240	E	0.190	F	0.220	G	0.190	H	0.230
Dichlorofluoromethane (CFC 21)	A	0.200	B	0.210	C	0.170	D	0.220	E	0.190	F	0.200	G	0.210	H	0.230
Diisopropyl Ether	A	0.210	B	0.180	C	0.180	D	0.210	E	0.160	F	0.200	G	0.190	H	0.210
Ethyl Acetate	I	2.04	J	2.02	K	1.99	L	2.29	M	2.19	N	2.53	O	1.99	P	1.99
Ethyl Ether	A	0.230	B	0.190	C	0.190	D	0.200	E	0.210	F	0.180	G	0.220	H	0.230
Ethyl Methacrylate	A	0.240	B	0.160	C	0.180	D	0.210	E	0.130	F	0.160	G	0.230	H	0.210
Ethylbenzene	A	0.220	B	0.200	C	0.170	D	0.190	E	0.160	F	0.220	G	0.180	H	0.210
Hexachlorobutadiene	A	0.410	B	0.350	C	0.320	D	0.280	E	0.270	F	0.310	G	0.250	H	0.280
Iodomethane	A	0.720	B	0.710	C	0.660	D	0.730	E	0.580	F	0.740	G	0.720	H	0.820
Isobutyl Alcohol	I	24.9	J	27.7	K	21.8	L	20.2	M	23.8	N	27.0	O	22.5	P	23.3
Isopropylbenzene	A	0.210	B	0.190	C	0.170	D	0.210	E	0.140	F	0.200	G	0.170	H	0.210
m,p-Xylenes	A	0.420	B	0.390	C	0.340	D	0.370	E	0.300	F	0.400	G	0.350	H	0.380
Methacrylonitrile	A	1.00	B	0.740	C	0.960	D	0.910	E	0.640	F	0.940	G	0.890	H	0.910
Methyl Methacrylate	A	0.350	B	0.240	C	0.290	D	0.250	E	0.130	F	0.240	G	0.260	H	0.260
Methyl tert-Butyl Ether	A	0.390	B	0.360	C	0.370	D	0.380	E	0.350	F	0.360	G	0.370	H	0.440
Methylene Chloride	A	0.280	B	0.220	C	0.250	D	0.260	E	0.190	F	0.220	G	0.240	H	0.250
Naphthalene	I	0.500	J	0.540	K	0.470	L	0.540	M	0.450	N	0.510	O	0.490	P	0.480
n-Butylbenzene	A	0.260	B	0.220	C	0.210	D	0.210	E	0.160	F	0.200	G	0.190	H	0.200
n-Hexane	I	0.580	J	0.640	K	0.600	L	0.580	M	0.520	N	0.630	O	0.470		

Supervisor Approval: 2/4/07

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
n-Octane	I	0.690	J	0.750	K	0.630	L	0.640	M	0.630	N	0.680	O	0.520	P	0.620
n-Propylbenzene	A	0.220	B	0.190	C	0.180	D	0.210	E	0.160	F	0.190	G	0.180	H	0.210
o-Xylene	A	0.220	B	0.170	C	0.170	D	0.190	E	0.160	F	0.190	G	0.160	H	0.210
Propionitrile	I	2.16	J	2.49	K	3.10	L	2.08	M	1.90	N	2.41	O	2.10	P	2.55
sec-Butylbenzene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.190
Styrene	A	0.220	B	0.180	C	0.190	D	0.170	E	0.140	F	0.170	G	0.210	H	0.200
tert-Amyl Methyl Ether	A	0.300	B	0.260	C	0.240	D	0.270	E	0.240	F	0.310	G	0.270	H	0.250
tert-Butyl Alcohol	I	3.35	J	3.36	K	2.72	L	3.26	M	2.52	N	3.45	O	3.07	P	2.92
tert-Butyl Ethyl Ether	A	0.210	B	0.180	C	0.180	D	0.190	E	0.150	F	0.190	G	0.180	H	0.200
tert-Butyl Formate	I	0.510	J	0.390	K	0.520	L	0.380	N	0.430	O	0.380	P	0.420		
tert-Butylbenzene	A	0.210	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.200
Tetrachloroethene (PCE)	A	0.270	B	0.230	C	0.190	D	0.230	E	0.160	F	0.230	G	0.220	H	0.230
Tetrahydrofuran	Q	1.33	R	1.25	S	1.67	T	0.780	U	1.33	V	1.11	W	1.36	X	0.920
Toluene	A	0.230	B	0.200	C	0.180	D	0.210	E	0.160	F	0.210	G	0.200	H	0.230
trans-1,2-Dichloroethene	A	0.260	B	0.240	C	0.230	D	0.230	E	0.210	F	0.190	G	0.210	H	0.250
trans-1,3-Dichloropropene	A	0.200	B	0.200	C	0.140	D	0.190	E	0.140	F	0.190	G	0.170	H	0.160
trans-1,4-Dichloro-2-butene	A	0.450	B	0.350	C	0.400	D	0.320	E	0.300	F	0.330	G	0.270	H	0.300
Trichloroethene (TCE)	A	0.210	B	0.180	C	0.210	D	0.220	E	0.160	F	0.230	G	0.200	H	0.230
Trichlorofluoromethane	A	0.240	B	0.190	C	0.190	D	0.230	E	0.140	F	0.220	G	0.190	H	0.230
Trichlorotrifluoroethane	A	0.270	B	0.230	C	0.200	D	0.210	E	0.160	F	0.230	G	0.240	H	0.220
Vinyl Acetate	I	1.11	J	1.09	K	0.930	L	0.890	M	0.740	N	0.920	O	0.710	P	0.970
Vinyl Chloride	Y	0.100	Z	0.110	AA	0.110	AB	0.100	AC	0.0900	AD	0.100	AE	0.110		

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Supervisor Approval: 2/2/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
1,1,1,2-Tetrachloroethane	0.200	0.180	0.0151	2.998	0.045	ug/L	8	90	Valid MDL Data
1,1,1-Trichloroethane (TCA)	0.200	0.196	0.0207	2.998	0.062	ug/L	11	98	Valid MDL Data
1,1,2,2-Tetrachloroethane	0.200	0.195	0.0293	2.998	0.088	ug/L	15	98	Valid MDL Data
1,1,2-Trichloroethane	0.200	0.211	0.0314	2.998	0.094	ug/L	15	106	Valid MDL Data
1,1-Dichloroethane	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
1,1-Dichloroethene	0.200	0.205	0.0273	2.998	0.082	ug/L	13	103	Valid MDL Data
1,1-Dichloropropene	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,2,3-Trichlorobenzene	0.500	0.503	0.0282	2.998	0.084	ug/L	6	101	Valid MDL Data
1,2,3-Trichloropropane	0.500	0.554	0.0678	2.998	0.20	ug/L	12	111	Valid MDL Data
1,2,4-Trichlorobenzene	0.200	0.286	0.0588	2.998	0.18	ug/L	21	143	Valid MDL Data
1,2,4-Trimethylbenzene	0.200	0.185	0.0207	2.998	0.062	ug/L	11	93	Valid MDL Data
1,2-Dibromo-3-chloropropane	0.500	0.504	0.160	3.143	0.50	ug/L	32	101	Valid MDL Data
1,2-Dibromoethane (EDB)	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
1,2-Dichlorobenzene	0.200	0.209	0.0230	2.998	0.069	ug/L	11	104	Valid MDL Data
1,2-Dichloroethane (EDC)	0.200	0.195	0.0220	2.998	0.066	ug/L	11	98	Valid MDL Data
1,2-Dichloropropane	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,3,5-Trichlorobenzene	0.500	0.585	0.0542	2.998	0.16	ug/L	9	117	Valid MDL Data
1,3,5-Trimethylbenzene	0.200	0.186	0.0220	2.998	0.066	ug/L	12	93	Valid MDL Data
1,3-Dichlorobenzene	0.200	0.225	0.0273	2.998	0.082	ug/L	12	113	Valid MDL Data
1,3-Dichloropropane	0.200	0.191	0.0189	2.998	0.057	ug/L	10	96	Valid MDL Data
1,4-Dichlorobenzene	0.200	0.229	0.0280	2.998	0.084	ug/L	12	114	Valid MDL Data
1,4-Dioxane	40.0	43.1	8.39	2.998	25	ug/L	19	108	Valid MDL Data
1-Chlorohexane	0.200	0.226	0.0410	2.998	0.12	ug/L	18	113	Valid MDL Data
2,2-Dichloropropane	0.200	0.185	0.0278	2.998	0.083	ug/L	15	93	Valid MDL Data
2-Butanone (MEK)	8.00	9.76	0.767	2.998	2.3	ug/L	8	122	Valid MDL Data
2-Chloroethyl Vinyl Ether	0.500	0.528	0.0474	2.998	0.14	ug/L	9	106	Valid MDL Data
2-Chlorotoluene	0.200	0.201	0.0264	2.998	0.079	ug/L	13	101	Valid MDL Data
2-Hexanone	8.00	9.18	0.806	2.998	2.4	ug/L	9	115	Valid MDL Data
2-Nitropropane	2.50	2.03	0.127	2.998	0.38	ug/L	6	81	Valid MDL Data
3-Chloro-1-propene	0.200	0.204	0.0213	2.998	0.064	ug/L	10	102	Valid MDL Data
4-Chlorotoluene	0.200	0.199	0.0189	2.998	0.057	ug/L	9	99	Valid MDL Data

Supervisor Approval: 1/18/07 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4-Isopropyltoluene	0.200	0.185	0.0233	2.998	0.070	ug/L	13	93	Valid MDL Data
4-Methyl-2-pentanone (MIBK)	8.00	11.6	0.481	2.998	1.4	ug/L	4	145	Valid MDL Data
Acetone	8.00	10.4	1.01	2.998	3.0	ug/L	10	130	Valid MDL Data
Acetonitrile	8.00	10.2	1.32	2.998	4.0	ug/L	13	127	Valid MDL Data
Acrolein	10.0	13.2	2.22	2.998	6.6	ug/L	17	132	Valid MDL Data
Acrylonitrile	0.800	1.01	0.111	2.998	0.33	ug/L	11	126	Valid MDL Data
Benzene	0.200	0.198	0.0205	2.998	0.062	ug/L	10	99	Valid MDL Data
Bromobenzene	0.200	0.204	0.0220	2.998	0.066	ug/L	11	102	Valid MDL Data
Bromochloromethane	0.200	0.200	0.0330	2.998	0.099	ug/L	16	100	Valid MDL Data
Bromodichloromethane	0.200	0.174	0.0185	2.998	0.055	ug/L	11	87	Valid MDL Data
Bromoform	0.200	0.155	0.0330	2.998	0.099	ug/L	21	78	Valid MDL Data
Bromomethane	0.200	0.300	0.0393	2.998	0.12	ug/L	13	150	Valid MDL Data
Carbon Disulfide	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
Carbon Tetrachloride	0.200	0.186	0.0160	2.998	0.048	ug/L	9	93	Valid MDL Data
Chlorobenzene	0.200	0.196	0.0213	2.998	0.064	ug/L	11	98	Valid MDL Data
Chloroethane	0.200	0.236	0.0424	2.998	0.13	ug/L	18	118	Valid MDL Data
Chloroform	0.200	0.199	0.0275	2.998	0.082	ug/L	14	99	Valid MDL Data
Chloromethane	0.200	0.258	0.0369	2.998	0.11	ug/L	14	129	Valid MDL Data
Chloroprene	0.800	0.724	0.0803	2.998	0.24	ug/L	11	90	Valid MDL Data
cis-1,2-Dichloroethene	0.200	0.208	0.0219	2.998	0.066	ug/L	11	104	Valid MDL Data
cis-1,3-Dichloropropene	0.200	0.183	0.0183	2.998	0.055	ug/L	10	91	Valid MDL Data
cis-1,4-Dichloro-2-butene	2.00	1.64	0.102	2.998	0.30	ug/L	6	82	Valid MDL Data
Dibromochloromethane	0.200	0.171	0.0242	2.998	0.072	ug/L	14	86	Valid MDL Data
Dibromomethane	0.200	0.210	0.0385	2.998	0.12	ug/L	18	105	Valid MDL Data
Dichlorodifluoromethane	0.200	0.210	0.0251	2.998	0.075	ug/L	12	105	Valid MDL Data
Dichlorofluoromethane (CFC 21)	0.200	0.204	0.0185	2.998	0.055	ug/L	9	102	Valid MDL Data
Diisopropyl Ether	0.200	0.193	0.0183	2.998	0.055	ug/L	10	96	Valid MDL Data
Ethyl Acetate	2.00	2.13	0.196	2.998	0.59	ug/L	9	107	Valid MDL Data
Ethyl Ether	0.200	0.206	0.0192	2.998	0.058	ug/L	9	103	Valid MDL Data
Ethyl Methacrylate	0.200	0.190	0.0385	2.998	0.12	ug/L	20	95	Valid MDL Data
Ethylbenzene	0.200	0.194	0.0226	2.998	0.068	ug/L	12	97	Valid MDL Data

Supervisor Approval: 2/28/7

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Hexachlorobutadiene	0.200	0.309	0.0517	2.998	0.15	ug/L	17	154	Valid MDL Data
Iodomethane	0.800	0.710	0.0687	2.998	0.21	ug/L	10	89	Valid MDL Data
Isobutyl Alcohol	20.0	23.9	2.58	2.998	7.7	ug/L	11	119	Valid MDL Data
Isopropylbenzene	0.200	0.188	0.0255	2.998	0.076	ug/L	14	94	Valid MDL Data
m,p-Xylenes	0.400	0.369	0.0380	2.998	0.11	ug/L	10	92	Valid MDL Data
Methacrylonitrile	0.800	0.874	0.121	2.998	0.36	ug/L	14	109	Valid MDL Data
Methyl Methacrylate	0.200	0.253	0.0614	2.998	0.18	ug/L	24	126	Valid MDL Data
Methyl tert-Butyl Ether	0.400	0.378	0.0282	2.998	0.084	ug/L	7	94	Valid MDL Data
Methylene Chloride	0.200	0.239	0.0280	2.998	0.084	ug/L	12	119	Valid MDL Data
Naphthalene	0.500	0.498	0.0320	2.998	0.096	ug/L	6	100	Valid MDL Data
n-Butylbenzene	0.200	0.206	0.0283	2.998	0.085	ug/L	14	103	Valid MDL Data
n-Hexane	0.500	0.574	0.0605	3.143	0.19	ug/L	11	115	Valid MDL Data
n-Octane	0.500	0.645	0.0665	2.998	0.20	ug/L	10	129	Valid MDL Data
n-Propylbenzene	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
o-Xylene	0.200	0.184	0.0226	2.998	0.068	ug/L	12	92	Valid MDL Data
Propionitrile	2.00	2.35	0.378	2.998	1.1	ug/L	16	117	Valid MDL Data
sec-Butylbenzene	0.200	0.189	0.0236	2.998	0.071	ug/L	12	94	Valid MDL Data
Styrene	0.200	0.185	0.0256	2.998	0.077	ug/L	14	93	Valid MDL Data
tert-Amyl Methyl Ether	0.200	0.268	0.0260	2.998	0.078	ug/L	10	134	Valid MDL Data
tert-Butyl Alcohol	2.50	3.08	0.336	2.998	1.0	ug/L	11	123	Valid MDL Data
tert-Butyl Ethyl Ether	0.200	0.185	0.0177	2.998	0.053	ug/L	10	93	Valid MDL Data
tert-Butyl Formate	0.500	0.433	0.0594	3.143	0.19	ug/L	14	87	Valid MDL Data
tert-Butylbenzene	0.200	0.188	0.0198	2.998	0.059	ug/L	11	94	Valid MDL Data
Tetrachloroethene (PCE)	0.200	0.220	0.0325	2.998	0.097	ug/L	15	110	Valid MDL Data
Tetrahydrofuran	1.00	1.22	0.278	2.998	0.83	ug/L	23	122	Valid MDL Data
Toluene	0.200	0.203	0.0238	2.998	0.071	ug/L	12	101	Valid MDL Data
trans-1,2-Dichloroethene	0.200	0.228	0.0231	2.998	0.069	ug/L	10	114	Valid MDL Data
trans-1,3-Dichloropropene	0.200	0.174	0.0250	2.998	0.075	ug/L	14	87	Valid MDL Data
trans-1,4-Dichloro-2-butene	0.200	0.340	0.0590	2.998	0.18	ug/L	17	170	Valid MDL Data
Trichloroethene (TCE)	0.200	0.205	0.0245	2.998	0.073	ug/L	12	103	Valid MDL Data
Trichlorofluoromethane	0.200	0.204	0.0329	2.998	0.099	ug/L	16	102	Valid MDL Data

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Trichlorotrifluoroethane	0.200	0.220	0.0321	2.998	0.096	ug/L	15	110	Valid MDL Data
Vinyl Acetate	1.00	0.920	0.144	2.998	0.43	ug/L	16	92	Valid MDL Data
Vinyl Chloride	0.100	0.103	0.00756	3.143	0.024	ug/L	7	103	Valid MDL Data

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Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	300.0			Instrument:	DX-120 (AN3)			
Extr./Dig. Method:	N/A			Analyst(s):	J. Sanderson			
Matrix:	water							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Fluoride	0.050	0.0470	0.046	0.048	0.0470	0.044	0.044	0.046
Chloride	0.050	0.048	0.055	0.049	0.050	0.055	0.052	0.050
Nitrite	0.050	0.040	0.041	0.040	0.040	0.041	0.040	0.040
Bromide	0.050	0.043	0.039	0.041	0.043	0.042	0.043	0.042
Nitrate	0.025	0.025	0.027	0.026	0.025	0.026	0.026	0.026
Sulfate	0.050	0.051	0.055	0.050	0.053	0.054	0.051	0.049

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	300.0
Extr./Dig. Method:	N/A
Matrix:	water
Units:	mg/L
Sample ID:	
Date Analyzed:	

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Fluoride	0.050	0.046	0.002	3.143	0.005	0.005	3%	92%	Invalid --- Spike level >10*MDL
Chloride	0.050	0.051	0.003	3.143	0.009	0.009	5%	103%	Valid MDL Data
Nitrite	0.050	0.040	0.000	3.143	0.002	0.002	1%	81%	Invalid --- Spike level >10*MDL
Bromide	0.050	0.042	0.001	3.143	0.005	0.005	3%	84%	Invalid --- Spike level >10*MDL
Nitrate	0.025	0.026	0.001	3.143	0.002	0.003	3%	103%	Invalid --- Spike level >10*MDL
Sulfate	0.050	0.052	0.002	3.143	0.007	0.007	4%	104%	Valid MDL Data

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	376.2			Instrument:	Spec.				
Extr./Dig. Method:	n/a			Analyst(s):	S.Hopkins				
Matrix:	Water								
Units:	mg/L								
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8
	Date Analyzed:	2/27/2007	2/27/2007	2/27/2007	2/27/2007	2/27/2007	2/27/2007	2/27/2007	2/27/2007
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Total Sulfide	0.0333	0.0308	0.0280	0.0294	0.0294	0.0308	0.0280	0.0294	0.02800

SHH 2/27/07

Supervisor Approval _____

QA/QC Approval _____

QA/QC 2/27/07

Columbia Analytical Services

Method Detection Limit Study

Analytical Method: 376.2
Extr./Dig. Method: n/a
Matrix: Water
Units: mg/L

Sample ID:
Date Analyzed:

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Total Sulfide	0.0333	0.029	0.001	2.998	0.004	0.004	4%	88%	Valid MDL Data
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A

2/27/07

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	EPA 310.1 / SM 2320B			Instrument:	pH meter			
Extr./Dig. Method:	NA			Analyst(s):	J. White			
Matrix:	Water							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	01/13/06	01/18/06	01/18/06	01/18/06	01/18/06	01/18/06	01/18/06
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Alkalinity	2.00	2.20	2.00	2.00	1.60	2.40	2.00	2.00

Supervisor Approval M.P.

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	EPA 310.1 / SM 232								
Extr./Dig. Method:	NA								
Matrix:	Water								
Units:	mg/L								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Alkalinity	2.00	2.029	0.243	3.143	0.764	0.8	12%	101%	Valid MDL Data

Supervisor Approval M.P.

QA/QC Approval

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 2, 2007 Analytical Report for Service Request No: K0701703

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RECEIVED
APR 04 2007
TREADWELL & ROLLO

RE: Presidio of San Francisco

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on March 03, 2007. For your reference, these analyses have been assigned our service request number K0701703.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata, Ph.D.
Project Chemist

GS/lmb

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Treadwell and Rollo, Inc.	**Service Request No.:**	K0701703
Project:	Presidio of San Francisco	**Date Received:**	03/03/07
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 03/03/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Organochlorine Pesticides by EPA Method 8081A

Continuing Calibration Verification (CCV) Exceptions:
The primary evaluation criterion was exceeded for a few analytes in CCV 0321F041. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Matrix Spike Recovery Exceptions:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

Lab Control Sample Exceptions:
The lower client specific control criterion was exceeded for Heptachlor and Aldrin in samples Laboratory Control Sample KWG0703478-1 and Duplicate Laboratory Control Sample KWG0703478-2. However, the analytes in question were within CAS statistically derived limits. The data is flagged to indicate the problem. No further corrective action was necessary.

Approved by _____ **Date** 4/2/07

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for alpha-BHC and Aldrin in the replicate Laboratory Control Sample (LCS) analyses (KWG0703478-1 and KWG0703478-2) was outside control criteria. Note that these analytes were not detected in the associated field sample. The data is flagged to indicate the problem.

No other anomalies associated with the analysis of these samples were observed.

PCB Aroclors by EPA Method 8082

Sample Notes and Discussion
The Laboratory Control Sample KWG0703477-1 was lost during the extraction. A duplicate was also extracted with this batch and shows acceptable recoveries. At the request of the PC sample was not re-extract. Sample is reported with one LCS and no replicate data.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Initial Calibration (ICAL) Exceptions:
The primary evaluation criterion was exceeded for Acetone, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, and Bromoform in ICAL ID CAL6077. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

The CAS minimum relative response factor criterion for 2-Butanone (MEK) was not met in ICAL ID CAL6077. In accordance with CAS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality is not significantly affected. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8310

Continuing Calibration Verification (CCV) Exceptions:
The primary evaluation criterion was exceeded for the analyte Benzo(g,h,i)perylene in the FLD signals for CCVs KWG0704189-1, KWG0704189-2 and KWG0704189-3. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria with respect to these analytes.

Sample Confirmation Notes:
The confirmation comparison criteria of 40% difference for Dibenz(a,h)anthracene was exceeded in sample Batch QC MS. The higher of the two values is reported because no evidence of matrix interference was observed.

Matrix Spike Recovery Exceptions:
The matrix spike recovery of Dibenz(a,h)anthracene for sample Batch QC was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. The sample did not contain the analyte in question. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by Gregory Dalatte **Date** 4/2/07

Chain of Custody Documentation

Treadwell&Rollo S270069

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2192
Page: 1 of 1

1C0701703

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): P. Cornish
Recorder (signature required): P. Cornish
Sent to Laboratory (Name): Columbia

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) MTBE	General Chemistry [2]	OCPs (8081) [2]	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	MBAS	Total Hardness	Molybdenum	PCBs 8082			COMMENTS / NOTES
DAEGW10HCl	3/2/07	930			X		6		2		7	X	X	X	X	X	X	X		X	X	X	X	X	X			
TB0302070121A	↓	—			X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists (23** - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: P. Cornish		DATE: 3/2/07	RECEIVED BY: [signature]		DATE: 3/2/07
PRINT NAME: P. Cornish	FIRM: BTS	TIME: 1530	PRINT NAME: P. BINS	FIRM: CAS	TIME: 1530
RELINQUISHED BY: [signature]		DATE: 3/2/07	RECEIVED BY: [signature]		DATE: 3/3/07
PRINT NAME: P. BINS	FIRM: CAS via UPS	TIME: 1700	PRINT NAME: [signature]	FIRM: CAS	TIME: 0900

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC 2Reg

Project/Client Treadwell Service Request K07 0 1703

Cooler received on 4/3/07 and opened on 3/3/07 by [illegible]

1.	Were custody seals on outside of coolers?	Y	N
	If yes, how many and where?		
2.	Were custody seals intact?	Y	N
3.	Were signature and date present on the custody seals?	Y	N
4.	Is the shipper's airbill available and filed? If no, record airbill number:	Y	N
5.	COC#		
	Temperature of cooler(s) upon receipt: (°C) 0.2		
	Temperature Blank: (°C) 0.9		
	Were samples hand delivered on the same day as collection?	Y	N
6.	Were custody papers properly filled out (ink, signed, etc.)?	Y	N
7.	Type of packing material present ice - bmap		
8.	**Did all bottles arrive in good condition (unbroken)?**	Y	N
9.	Were all bottle labels complete (i.e analysis, preservation, etc.)?	Y	N
10.	Did all bottle labels and tags agree with custody papers?	Y	N
11.	**Were the correct types of bottles used for the tests indicated?**	Y	N
12.	Were all of the preserved bottles received at the lab with the appropriate pH?	Y	N
13.	Were VOA vials checked for absence of air bubbles, and if present, noted below?	Y	N
14.	Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below?	Y	N
15.	Did the bottles originate from CAS/K or a branch laboratory?	Y	N
16.	**Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?**	Y	N
17.	Was C12/Res negative?	Y	N

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Alkalinity as CaCO3, Total

Units : mg/L
Basis : NA

Analysis Method : 310.1
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	2	1	03/14/07	272	
Method Blank	K0701703-MB	2	1	03/14/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/14/07

Duplicate Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	310.1	2	272	280	276	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/14/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	310.1	89	88	99	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Chloride

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	0.2	20	03/06/07	79.0	
Method Blank	K0701703-MB	0.2	1	03/06/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/06/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0701742-005DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	0.2	4.2	4.2	4.2	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 03/06/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0701742-005MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	300.0	0.2	4.0	4.2	7.9	93	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/06/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.0	4.6	92	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Chloride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/6/2007	5.0	4.8	96
CCV2 Result	3/6/2007	5.0	4.8	96
CCV3 Result	3/6/2007	5.0	4.8	96
CCV4 Result	3/6/2007	5.0	4.8	96
CCV5 Result	3/6/2007	5.0	4.8	96
CCV6 Result	3/6/2007	5.0	4.9	98
CCV7 Result	3/7/2007	5.0	4.9	98

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/6/2007	0.2	ND
CCB2 Result	3/6/2007	0.2	ND
CCB3 Result	3/6/2007	0.2	ND
CCB4 Result	3/6/2007	0.2	ND
CCB5 Result	3/6/2007	0.2	ND
CCB6 Result	3/6/2007	0.2	ND
CCB7 Result	3/7/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Fluoride

Units : mg/L
Analysis Method : 300.0
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	1.0	5	03/03/07	0.3	
Method Blank	K0701703-MB	0.2	1	03/03/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Duplicate Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	1.0	0.3	0.3	0.3	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 3/2/2007
Date Received : 3/3/2007
Date Prepared : NA
Date Analyzed : 03/03/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : DAEGW104C1
Lab Code : K0701703-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	300.0	1.0	10.0	0.3	10.6	103	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	17.5	18.0	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Fluoride
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/3/2007	5.0	5.4	108
CCV2 Result	3/3/2007	5.0	5.4	108

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/3/2007	0.2	ND
CCB2 Result	3/3/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Nitrite as Nitrogen

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	0.1	5	03/03/07 11:10	ND	
Method Blank	K0701703-MB	0.1	1	03/03/07 09:28	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Duplicate Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	300.0	0.1	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 3/2/2007
Date Received : 3/3/2007
Date Prepared : NA
Date Analyzed : 03/03/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : DAEGW104C1
Lab Code : K0701703-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	300.0	0.1	10.0	ND	9.7	97	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	300.0	100	94.0	94	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/3/2007	2.0	2.1	105
CCV2 Result	3/3/2007	2.0	2.1	105

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/3/2007	0.1	ND
CCB2 Result	3/3/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Nitrate as Nitrogen

Units : mg/L
Basis : NA

Analysis Method : 300.0
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	0.5	5	03/03/07 11:10	ND	
Method Blank	K0701703-MB	0.1	1	03/03/07 09:28	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Duplicate Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	300.0	0.5	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	300.0	0.5	10.0	ND	9.2	92	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	300.0	4.5	4.7	104	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/3/2007	2.0	1.9	95
CCV2 Result	3/3/2007	2.0	1.9	95

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/3/2007	0.1	ND
CCB2 Result	3/3/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Sulfate

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	1.0	5	03/03/07	14.5	
Method Blank	K0701703-MB	0.2	1	03/03/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 3/2/2007
Date Received : 3/3/2007
Date Prepared : NA
Date Analyzed : 03/03/07

Duplicate Summary
Inorganic Parameters

Sample Name : DAEGW104C1
Lab Code : K0701703-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate	300.0	1.0	14.5	14.3	14.4	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	300.0	1.0	10.0	14.5	21.2	87	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/03/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.0	4.9	98	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Sulfate
EPA 300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/3/2007	5.0	5.0	100
CCV2 Result	3/3/2007	5.0	5.0	100
CCV3 Result	3/3/2007	5.0	4.9	98

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/3/2007	0.2	ND
CCB2 Result	3/3/2007	0.2	ND
CCB3 Result	3/3/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Hardness as CaCO3

Units : mg/L
Basis : NA

Analysis Method : 130.2
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	2	1	03/09/07	348	
Method Blank	K0701703-MB	2	1	03/09/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 3/2/2007
Date Received : 3/3/2007
Date Prepared : NA
Date Analyzed : 03/09/07

Duplicate Summary
Inorganic Parameters

Sample Name : DAEGW104C1
Lab Code : K0701703-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Hardness, Total as CaCO3	130.2	2	348	349	348	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Projcct Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/09/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Hardness, Total as CaCO3	NONE	130.2	107	107	100	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Methylene Blue Active Substances (MBAS)

Units : mg/L
Basis : NA

Analysis Method : 425.1
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	0.25	1	03/03/07	ND	
Initial Calibration Blank	K0701703-ICB	0.05	1	03/03/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	3/2/2007
Project Number :	NA	**Date Received :**	3/3/2007
Sample Matrix :	Water	**Date Prepared :**	03/03/07
		Date Analyzed :	03/03/07

Duplicate Summary
Inorganic Parameters

Sample Name :	DAEGW104C1	Units :	mg/L
Lab Code :	K0701703-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Methylene Blue Active Substances (MBAS)	425.1	0.25	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 3/2/2007
Date Received : 3/3/2007
Date Prepared : 03/03/07
Date Analyzed : 03/03/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : DAEGW104C1
Lab Code : K0701703-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Methylene Blue Active Substances (MBAS)	425.1	0.25	1.50	ND	1.3	87	60-130	

Report By: CSKILLERN

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701703
Date Collected : NA
Date Received : NA

Methylene Blue Active Substances (MBAS)
EPA 425.1
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/3/2007	0.30	0.35	117
CCV2 Result	3/3/2007	0.30	0.36	120

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/3/2007	0.25	ND
CCB2 Result	3/3/2007	0.25	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701703
Date Collected : 03/02/07
Date Received : 03/03/07

Solids, Total Dissolved (TDS)

Units : mg/L
Analysis Method : 160.1
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
DAEGW104C1	K0701703-001	5	1	03/15/07	293	
Method Blank	K0701703-MB	5	1	03/14/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/15/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0701852-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	160.1	5	291	309	300	6	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701703
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/14/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701703-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved (TDS)	NONE	160.1	1160	1100	95	85-115	

Work Request # (Original 1703) 1794 1836 1946 1633 80012

Tier: III III III III I

Date Analyzed: 3.13.07

Analyst: nb

Analysis: alk, bicarb, carb, OH^-

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 3/14/07

DQREPORT

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB	LCS	03-1	1703-1d	1794-23	1794-24	1794-25
pH 12.63	Initial pH	6.26	9.09	7.27	7.28	6.97	6.89	6.66
12.49	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.04	4.40	13.59	11.01	1.03	7.15	3.72
10.01	Titrant used to pH 4.2	0.06						
pH 7.00	Sample Volume	50	50	50	50	50	50	50
7.00	Alkalinity	<2	88	272	280			
pH 4.00	Bicarbonate			272	280	21	143	74
4.00	Carbonate			<2	<2	<2	<2	<2
pH 4.00 Chk.	Hydroxide					<2	<2	<2
4.07								

Sample #	1794-26	1794-27	1794-27d	BC	1794-28	1794-30	1930-2	1930-3
Initial pH	6.67	6.82	6.90	7.96	6.64	6.31	7.11	6.96
Titrant used to pH 8.3								
Titrant used to pH 4.5	2.81	4.16	4.17		4.08	1.93	4.57	4.78
Titrant used to pH 4.2								
Sample Volume	50	50	50		50	50	50	53
Alkalinity							91	98
Bicarbonate	56	83	82		82	39		
Carbonate	<2	<2	<2		<2	<2		
Hydroxide	<2	<2	<2		<2	<2		

LCS : **ERA** **Lot # =** 5118-698 **True Value =** 89.3 **% Rec. =** 99.104

Titrant: Manf: VWR **Lot # =** 6296 **Concentration:** **0.02N / 0.1N** (Circle one)

Calculations : **Alkalinity =** $\frac{\text{A x N x 50,000}}{\text{Volume (mls)}}$ **A =** **mls standard titrant used** **N =** **Normality of standard acid**

Comments: 1703-1/1d $\bar{x}$ = 276 RPD=3

1794-27/27d $\bar{x}$ = 83 RPD=1

Analyzed By: nb	Date: 3.13.07 1025
Reveiwed By: [illegible]	Date: 3/14/07

Alk_CO_3_HCO_3 Benchsheet

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	1930-4	1930-5	1930-6	1930-7	1930-8	1930-9	BC	1946-1
Initial pH	7.04	7.02	7.14	6.68	7.34	7.21	3.97	6.79
Titrant used to pH 8.3								
Titrant used to pH 4.5	8.92	11.73	4.91	3.98	9.36	6.41		15.44
Titrant used to pH 4.2								
Sample Volume	50	50	50	50	50	56		50
Alkalinity	178	235	98	80	187	114		309
Bicarbonate								
Carbonate								
Hydroxide								

Sample #	1946-2	1946-3	1946-4	1946-4d	BC	MB*	LCS*	1633-1*
Initial pH	6.97	6.57	6.48	6.55	4.00	5.93	9.10	11.83
Titrant used to pH 8.3								~~45.82~~ 23.51
Titrant used to pH 4.5	30.60	13.52	22.24	22.71		0.01	0.97	23.61
Titrant used to pH 4.2						0.02	1.01	
Sample Volume	50	50	50	50		50	50	1
Alkalinity	612	270	446	454		<2	92	
Bicarbonate								
Carbonate								35100
Hydroxide								

Sample #	1633-1d*	BC						
Initial pH	11.62	4.00						
Titrant used to pH 8.3	3.11							
Titrant used to pH 4.5	22.91							
Titrant used to pH 4.2								
Sample Volume	1							
Alkalinity								
Bicarbonate								
Carbonate	31100							
Hydroxide								

Comments: nb 3.13.07

1946-2/4/4d $\bar{x}$ = 450 RPD = 2

1633-1/1d $\bar{x}$ = 33100 RPD = 12

Analyzed By: nb	Date: 3.13.07
Reveiwed By: R	Date: 3/14/07

79696

Work Request # (Original 1491) 1644 1703 1857 1851 1845 1848

Tier: III V III I I I II

Date Analyzed: 7.8.07

Analyst: nb

Analysis: hardness

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: LRR Date: 3/19/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

Service Request #:

Analysis For: Hardness Method: EPA Method 130.2

Sample Number	MB	LCS	1491-1	1491-2	1644-2 (.13)	1644-3 (.24)	1644-3d	1644-4 (.13)
Sample Volume (mL)	50	25	25	25	50	1	1	1
Titrant (mL) Start	0.0	0	0	3.00	0.0	0.0	4.0	0.0
Stop	0.0	2.67	2.541	5.51	0.0	3.12	7.11	3.16
Net	<0.05	2.67	2.541	2.51	<0.05	3.12	3.11	3.16
Hardness (mg/L)	<2	107	102	100	<2	3120	3110	3160

Sample Number	1644-5 (.13)	1644-6 (.13)	1644-7 (.13)	1703-1	1703-1d	1857-1	1857-2	1851-1
Sample Volume (mL)	1	1	50	25	25	50	50	10
Titrant (mL) Start	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop	3.841	1.42	0.0	8.71	8.73	4.12	5.81	1.70
Net	3.841	1.42	<0.05	8.71	8.73	4.12	5.81	1.70
Hardness (mg/L)	3840	1420	<2	318	349	82	116	170

Sample Number	1845-1	1848-1						
Sample Volume (mL)	50	50						
Titrant (mL) Start	0.0	0.0						
Stop	2.31	3.13						
Net	2.31	3.13						
Hardness (mg/L)	46	63						

Standardization of 0.02 N EDTA

Hardness as $CaCO_3$ (mg/L) = $\frac{A \times N \times 50{,}000}{\text{mL Sample Used}}$

mL 0.02 N Ca Solution	**mL EDTA Solution**	$\bar{x}$ = 5.08
Trial 1 5.0 mL	5.09 mL	
Trial 2 5.0 mL	5.06 mL	
Trial 3 5.0 mL	5.08 mL	

A = mL of EDTA Titrant Used

APG #: 41053

Lot #: 44692-3

True Value APG = 107

% Recovery = 100

$N_{EDTA} = \frac{\text{mL Ca Solution}}{\text{mL EDTA Solution}} \times (0.02) = N_{EDTA}$ = 0.02

Comments: 1644-3/3d $\bar{x}$=3120 RPD=<1 1644-3 RPD=<1

1703-1/1d $\bar{x}$=3119 RPD=<1

1644-2,4,5,6,7 ID#: 20

Analyst: nb	Date: 3.8.07 1:30 p
Reviewed By: [illegible]	Date: 3/9/07

HARDNESS.BCH

79259

Work Request # (Original 1703)

Tier: III

Date Analyzed: 3.3.07

Analyst: nb

Analysis: MBAS

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: RR Date: 3/5/07

DQREPORT

Work Order #.: _____ Method: EPA 425.1

Analysis: Methylene Blue Active Substances (MBAS)

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9	STD 10	(R) =	0.9967
Conc. (ug LAS)	0.000	5.00	10.00	15.00	25.00	30.00	35.00	40.00	45.00	50.00	Slope =	0.0136
Absorbance	0.000	0.063	0.141	0.204	0.340	0.363	0.511	0.537	0.618	0.678	Y Int. =	-0.0024

Sample Number	ICB	ICV	CCB	CCV	MB	1703-1	1703-1d	1703-1s	1703-1sd
Dilution Factor	1	1	1	1	1	1	1	1	1
Absorbance @ 652 nm	0.037	0.275	0.036	0.476	0.036	0.017	0.023	0.351	0.283
Initial Volume	100	100	100	100	100	50	50	20	20
Final Volume	100	100	100	100	100	100	100	100	100
Concentration from Curve (ug LAS)	2.8904	20.3331	2.8171	35.0642	2.8171	1.4246	1.8643	25.9031	20.9194
Actual Conc. (mg/L)	<0.05	0.20	<0.05	0.35	<0.05	U ~~<0.05~~	U ~~<0.05~~	1.30	1.05

Sample Number	ccv2	ccb2	CCV3	CCB3		<0.1	<0.1		
Dilution Factor	1	1	1	1					
Absorbance @ 652 nm	0.495	0.040							
Initial Volume	100	100							
Final Volume	100	100							
Concentration from Curve (ug LAS)	36.4567	3.1102							
Actual Conc. (mg/L)	0.36	<0.05							

Sample Number									
Dilution Factor									
Absorbance @ 652 nm									
Initial Volume									
Final Volume									
Concentration from Curve (ug LAS)									
Actual Conc. (mg/L)									

ICV = 2 mL x 10 mg/L / 100mL = 0.20mg/L	**CCV** = 3 mL x 10 mg/L / 100 mL = 0.30mg/L	**Spike** = 3 mL x 10 mg/L / 20 mL =1.50 mg/L
% REC. =100	% REC. =117, 120	% REC. =87, 70
ID #: Form/1-57-J	ID #: Form/1-57-I	ID #: Form/1-57-I

Comments:

1703-1/1d U ~~x =.06~~ U ~~RPD = 17~~ U 1d2 <0.1 for 50ml x

X= <0.1 RPD= NC 3/5/07

Analyzed By: AD	Date Analyzed: 3.3.07 Start Time: 8:50
Reviewed By: DZ	Date Reviewed: 3/5/07

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____

Method: SM 5540C, EPA 425.1

Analysis: Methylene Blue Active Substances (MBAS)

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Absorbance @ 652 nm	Final Volume
ICB	100	1	0.037	100.00
ICV	100	1	0.275	100.00
CCB	100	1	0.036	100.00
CCV	100	1	0.476	100.00
MB	100	1	0.036	100.00
1703-1	50	1	0.017	100.00
1703-1d	50	1	0.023	100.00
1703-1s	20	1	0.351	100.00
1703-1sd	20	1	0.283	100.00
ccv2	100	1	0.495	100.00
ccb2	100	1	0.040	100.00

rb 3.3.07

RAZ 3/5/07

DU520 S/N: 0112U2001732 1.03
03-MAR-07 13:05:59 SCA Group 2863 nb 3.3.07
Wavelength: 652.0 nm
Formula: A=a+bC a: -0.0026 b: 0.0136

Sample	Net A	Dil X	ug	
0001	0.037	1.0000	2.89	-CCB1 } l&2 3/5/07
0002	0.036	1.0000	2.86	-ICB
0003	0.036	1.0000	2.86	-MB
0004	0.275	1.0000	20.35	-ICV
0005	0.476	1.0000	35.05	-CCV1
0006	0.017	1.0000	1.41	-1703-1
0007	0.023	1.0000	1.87	-1d
0008	0.351	1.0000	25.92	-1s
~~0009~~	~~0.186~~	~~1.0000~~	~~13.81~~	
0010	0.495	1.0000	36.42	-CCV2
0011	0.040	1.0000	3.15	-CCB2
~~0012~~	~~0.151~~	~~1.0000~~	~~11.26~~	
0013	0.283	1.0000	20.92	-1703-1sd
0014	0.489	1.0000	36.04	-CCV3
0015	0.042	1.0000	3.24	-CCB3

l&2 3/5/07

Work Request # Original (1852) 1703 1798 1823 1737 1747 1749 1780

Tier: II V I II II I V

Date Analyzed: 3/8/07

Analyst: RMcKee

Analysis: TDS

79774

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 3/15/07

DQREPORT

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703664

Matrix: WATER

PrepID: KWG0703663

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
MB		200	130.1235	130.1235	0.0000	0.000	NA	583588
LCS		50	71.2443	71.1914	0.0529	1058.000	NA	583587
K0701852-001		100	84.5025	84.4734	0.0291	291.000	537	583558
K0701852-001DUP		100	64.9742	64.9433	0.0309	309.000	537	583584
K0701852-002		100	71.8367	71.8212	0.0155	155.000	325	583559
K0701852-003		100	71.1879	71.1738	0.0141	141.000	318	583560
K0701852-004		100	71.7442	71.7223	0.0219	219.000	359	583561
K0701852-005		100	74.3146	74.2976	0.0170	170.000	285	583562
K0701852-006		100	71.9282	71.9164	0.0118	118.000	201	583563
K0701852-007		100	69.9814	69.9709	0.0105	105.000	195	583564
K0701852-008		100	61.8665	61.8333	0.0332	332.000	503	583565
K0701852-009		100	76.2824	76.2607	0.0217	217.000	298	583566
K0701852-010		100	64.5042	64.4905	0.0137	137.000	183	583557
K0701703-001		100	73.5739	73.5446	0.0293	293.000	765	583574
K0701798-001		100	76.0718	75.8475	0.2243	2243.000	6930	583570
K0701823-001		100	65.9146	65.9028	0.0118	118.000	155	583571
K0701823-002		100	63.5442	63.5272	0.0170	170.000	205	583572
K0701823-003		100	73.2567	73.~~2445~~ 55	~~0.0122~~ 0.0120	~~122.000~~ 112	156	583573
K0701737-001		100	69.0325	69.0030	0.0295	295.000	385	583567
K0701737-001DUP		100	74.0764	74.0443	0.0321	321.000	385	583585
K0701737-002		100	75.0129	74.9949	0.0180	180.000	235	583568
K0701737-003		100	67.8211	67.7986	0.0225	225.000	477	583569
K0701747-001		50	75.0245	74.9307	0.0938	1876.000	3820	583577
K0701747-001DUP		50	81.7639	81.6643	0.0996	1992.000	3820	583586
K0701747-002		50	71.9724	71.7815	0.1909	3818.000	6410	583578
K0701747-003		50	66.1375	65.8596	0.2779	5558.000	5630	583579
K0701747-004		25	71.8029	71.5927	0.2102	8408.000	14300	583580
K0701747-005		50	81.6574	81.4544	0.2030	4060.000	6550	583581
K0701749-004		100	73.0900	73.0621	0.0279	279.000	360	583582
K0701749-005		100	69.6237	69.6071	0.0166	166.000	266	583583
MB		200	120.3847	120.3847	0.0000	0.000	NA	583588
LCS		50	62.8514	62.7966	0.0548	1096.000	NA	583587
K0701780-001		100	74.2593	74.2518	0.0075	75.000	82	583575
K0701780-002		100	73.8687	73.8667	0.0020	20.000	79	583576
MB		200	111.6956	111.6955	0.0001	0.500	NA	583588

3/15/07

Analyst: RMcKee Date: 3/14/07

Approved By: Date: 3/15/07

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703664

Matrix: WATER

PrepID: KWG0703663

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID

LCS: TV = 664 ppm APG 4033 Lot # 112099 Reference # TDS/1-18-P

~~LCS-2=99%~~

LCS1 = 95%
LCS2 99%

LCS true value questionable based on %R.

Comments:

= 300 RPD = 6%

= 308 RPD = 8%

1747-1 x = 1940 RPD = 6%

Analyst: RMcKee Date: 3/14/07

Approved By: Date: 3/15/07

COLUMBIA ANALYTICAL SERVICES, INC.

79774

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	Blank	LCS	1852-1	1852-1d	1852-2	1852-3	1852-4
Crucible Number	R41	3	Mike	DV	26	Kells	Mona
Conductivity	—		537.1U	537.1U	325.3U	317.6U	358.8U
Sample Volume (mL)	200	50	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	130.1235	71.2443	84.5025	64.9742	71.8367	71.1879	71.7442
Wt. Cru. + Dry Sample (2)	130.1235	71.2443	84.5026	64.9745	71.8370	71.1880	71.7442
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	130.1235	71.1914	84.4734	64.9433	71.8212	71.1738	71.7223
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1852-5	1852-6	1852-7	1852-8	1852-9	1852-10	1703-1
Crucible Number	007	36	-7	39A	54A	19A	20
Conductivity	284.7U	200.9U	1.95.1U	502.8U	298.2U	182.7U	765.0U
Sample Volume (mL)	100	100	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	74.3146	71.9282	69.9814	61.8665	76.2824	64.5042	73.5739
Wt. Cru. + Dry Sample (2)	74.3147	71.9282	69.9814	61.8668	76.2826	64.5043	73.5740
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	74.2976	71.9164	69.9709	61.8333	76.2607	64.4905	73.5446
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #: 4033 Lot #: 1120 ~~97~~ 73 ID#: T.V. = ~~1664~~ 1110 % Rec =

Comments: TDS 1-18 PW

105 time Start	1710 3/8/07
Stop	0705 3/12/07
105 temp Start	105°C
Stop	105°C
Wt (1) Start	0705 3/10/07
Stop	0710 3/12/07
Wt(1) Start Temp	180°C
Stop	180°C
Wt (2) Start	12:15 3/12/07
Stop	14:10 3/12/07
Wt(2) Start Temp	180°C
Stop	180°C
Wt (3) Start	
Stop	
Wt(3) Start Temp	
Stop	

Balance #

Analyzed By:	RMcKee	Date Prepared:	3/8/07
Reviewed By:		Date Reviewed:	3/15/07

GW RMcKee

TDS.BCH

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____

Analysis: Total Dissolved Solids

Method: EPA 160.1

Sample Number	1798-1	1823-1	1823-2	1823-3	1737-1	1737-1d	1737-2
Crucible Number	16	Dish	BP	Jayla	620	15	35
Conductivity	6.933m	154.8U	204.8U	155.6U	384.7U	384.7U	234.6U
Sample Volume (mL)	100	100	100	100	100	100	100
Wt. Cru. + Dry Sample (1)	76.0718	65.9146	63.5442	73.2567	69.0325	74.0564 (RW)	75.0129
Wt. Cru. + Dry Sample (2)	76.0720	65.9146	63.5442	73.2570	69.0325	74.0764	75.0130
Wt. Cru. + Dry Sample (3)						74.0764	
Wt. Crucible. (g)	75.8475	65.9028	63.5272	73.2455	69.0030	74.0443	74.9949
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1737-3	1747-1	1747-1d	1747-2	1747-3	1747-4	1747-5
Crucible Number	Shelly	23	4	Todd 12A	PB ~~Todd~~	~~P6~~ 2nd	Amers
Conductivity	476.7U	3.816m	3.816m	6.408m	5.630m	14.33m	6.550m
Sample Volume (mL)	100	50	50	50	50	(RW) ~~50~~ 25	50
Wt. Cru. + Dry Sample (1)	67.8211	75.0245	81.7639	71.9724	66.1375	71.8029	81.6574
Wt. Cru. + Dry Sample (2)	67.8214	75.0245	81.7640	71.9726	66.1375	71.8030	81.6570
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	67.7986	74.9307	81.6643	71.7815	65.8596	71.5927	81.4544
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1749-4	1749-5	~~LCS-2~~ MB-2	~~MB-2~~ LCS-2 (RW)	1780-1	1780-2	MB-3
Crucible Number	11	15A	ALT	12A	F	5	R43
Conductivity	360.0U	265.6U	—	—	82.16U	79.27U	—
Sample Volume (mL)	100	100	200	50	100	100	200
Wt. Cru. + Dry Sample (1)	73.0900	69.6237	120.3847	62.8514	74.2593	73.8687	111.6956
Wt. Cru. + Dry Sample (2)	73.0899	69.6235	120.3845	62.8514	74.2590	73.8690	111.6960
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	73.0621	69.6071	120.3847	62.7966	74.2518	73.8667	111.6955
Wt. Dry Sample (g)							
Total Solids (mg/L)							

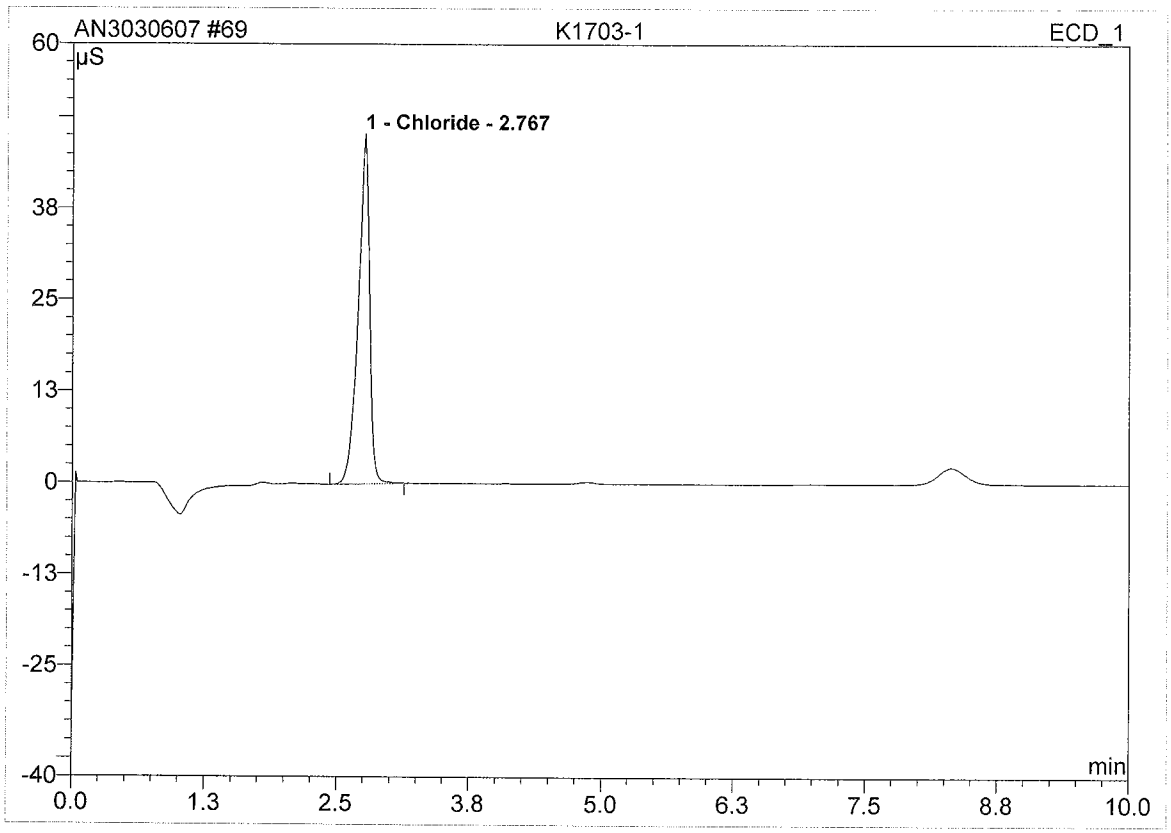
Analyzed By:	RMKee	Date Prepared:	3/8/07
Reviewed By:	RM	Date Reviewed:	3/19/07

TDS.BCH

Columbia Analytical Services, Inc.

69 K1703-1

Sample Name:	**K1703-1**	*Injection Volume:*	**200.0**
Vial Number:	**82**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**3/6/2007 23:21**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



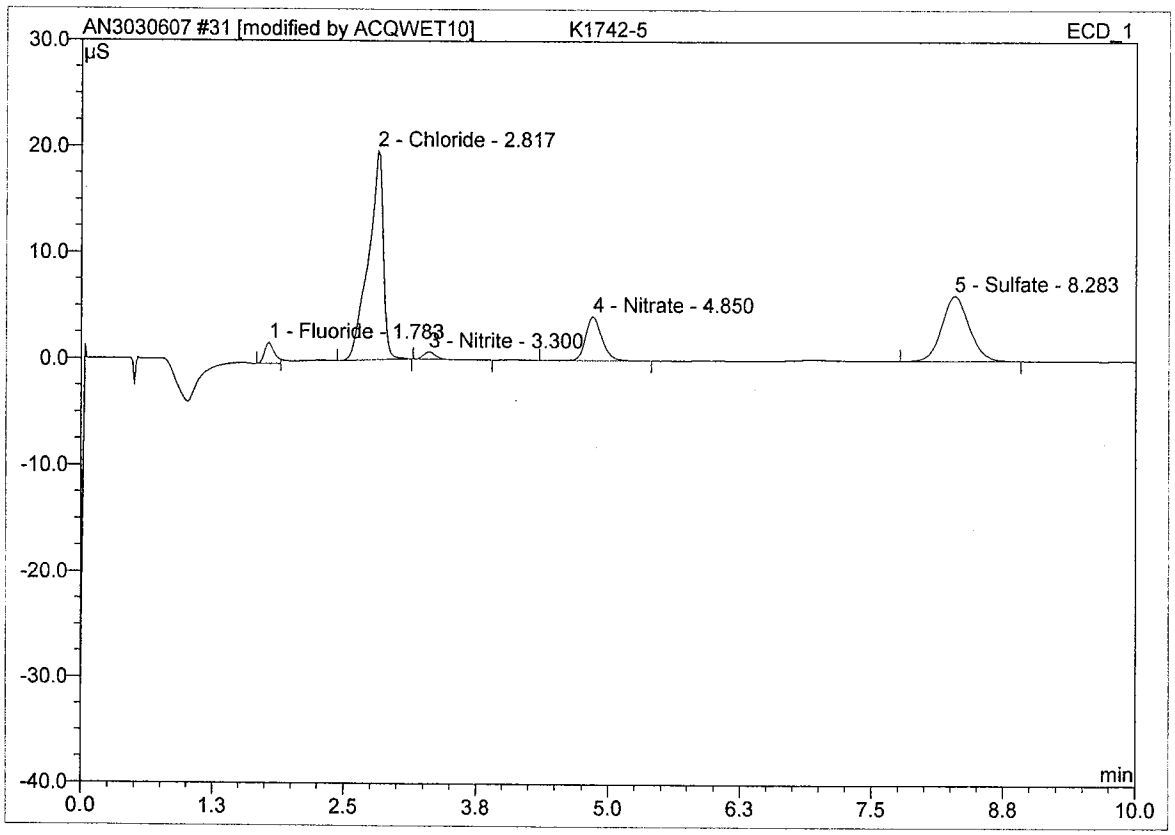
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	47.818	5.924	100.00	78.959	BMB
Total:			47.818	5.924	100.00	78.959	

RJ 3/8/07

Columbia Analytical Services, Inc.

31 K1742-5

Sample Name:	**K1742-5**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/6/2007 14:01**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride $\bar{x}$=0.2 RPD=<1	1.998	0.213	3.51	0.245	BM *
2	2.82	Chloride $\bar{x}$=4.2 RPD=<1	19.673	3.175	52.22	4.232	BMB*
3	3.30	Nitrite <0.1 $\bar{x}$=ND RPD=–	0.686	0.084	1.38	0.060	BMB*
4	4.85	Nitrate $\bar{x}$=.4 RPD=<1	4.121	0.747	12.29	0.423	BMB
5	8.28	Sulfate $\bar{x}$=4.0 RPD=<1	6.133	1.861	30.60	4.044	BMB*
Total:			32.610	6.080	100.00	9.004	

After Initials JS

MAR 07 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

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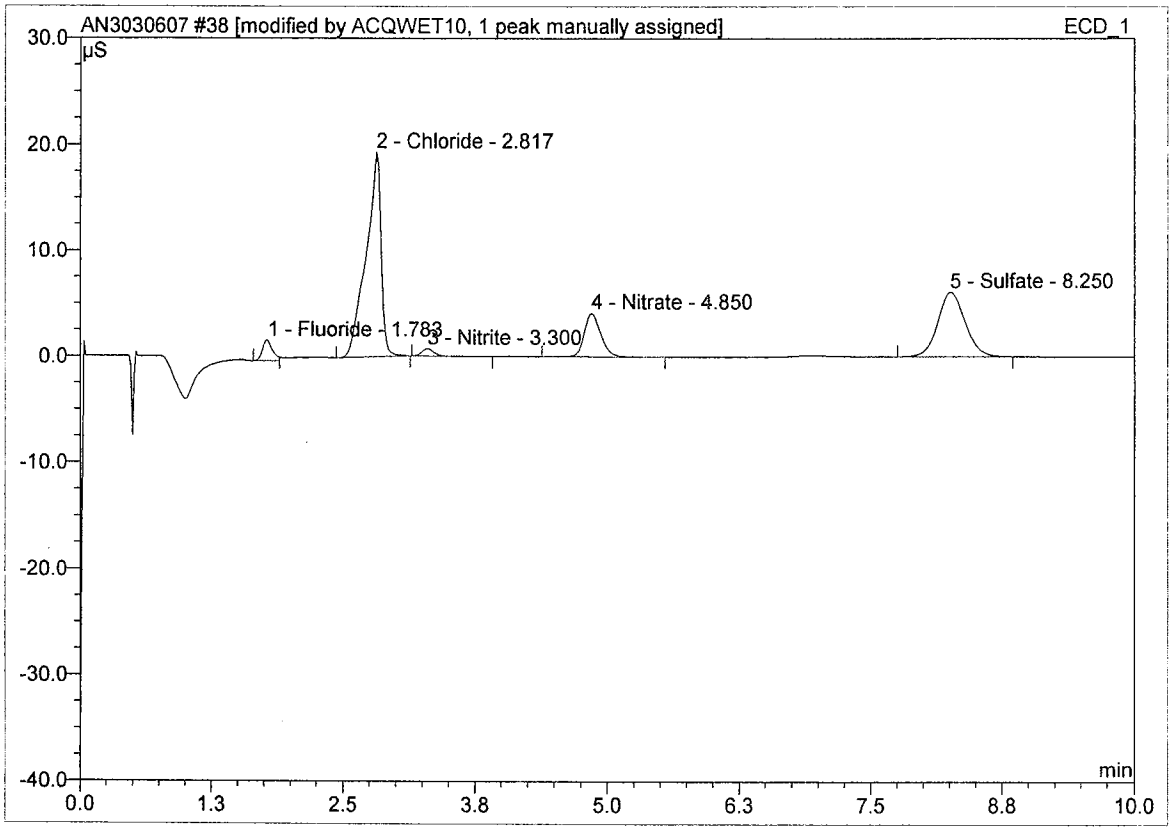
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

38 K1742-5D

Sample Name:	**K1742-5D**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/6/2007 16:55**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride JS 3/7/07	1.954	0.216	3.55	0.248	BM *
2	2.82	Chloride	19.334	3.174	52.21	4.231	BMB*^
3	3.30	Nitrite <0.1	0.682	0.082	1.35	0.060	BMB*
4	4.85	Nitrate	4.134	0.755	12.41	0.427	BMB
5	8.25	Sulfate	6.098	1.853	30.48	4.027	BMB*
Total:			32.202	6.080	100.00	8.993	

After
Initials JS

MAR 0 7 2007

DRZ 3/8/07

default_letter/Integration

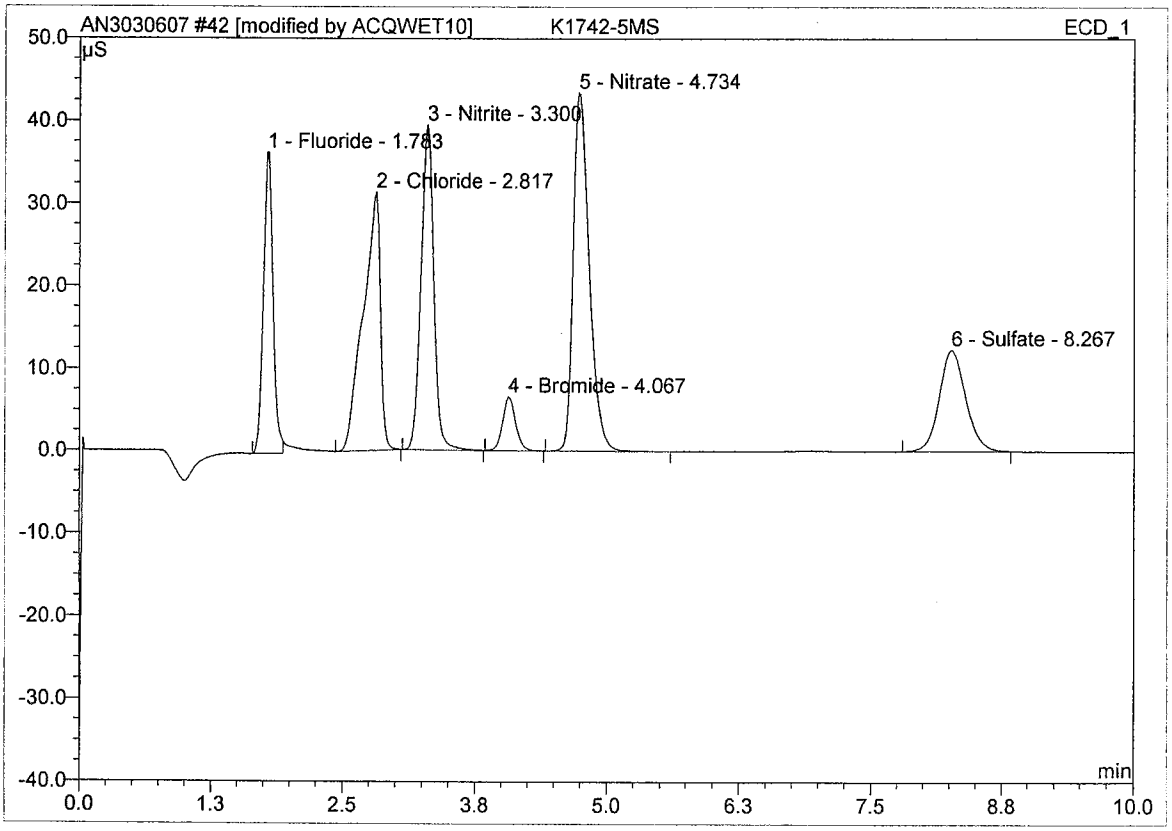
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

42 K1742-5MS

Sample Name:	**K1742-5MS**	*Injection Volume:*	**200.0**
Vial Number:	**55**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/6/2007 17:44**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride %rec=105	36.596	3.815	13.87	4.382	BM *
2	2.82	Chloride %rec=93	31.384	5.909	21.48	7.877	BMB*
3	3.30	Nitrite %rec=100	39.451	5.502	20.00	3.979	BMB*
4	4.07	Bromide	6.563	0.968	3.52	3.727	BMB*
5	4.73	Nitrate %rec=98	43.412	7.662	27.85	4.333	BMB*
6	8.27	Sulfate %rec=98	12.326	3.656	13.29	7.946	BMB*
Total:			169.731	27.513	100.00	32.243	

SPK lvl
4ppm

3/8/07

After Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

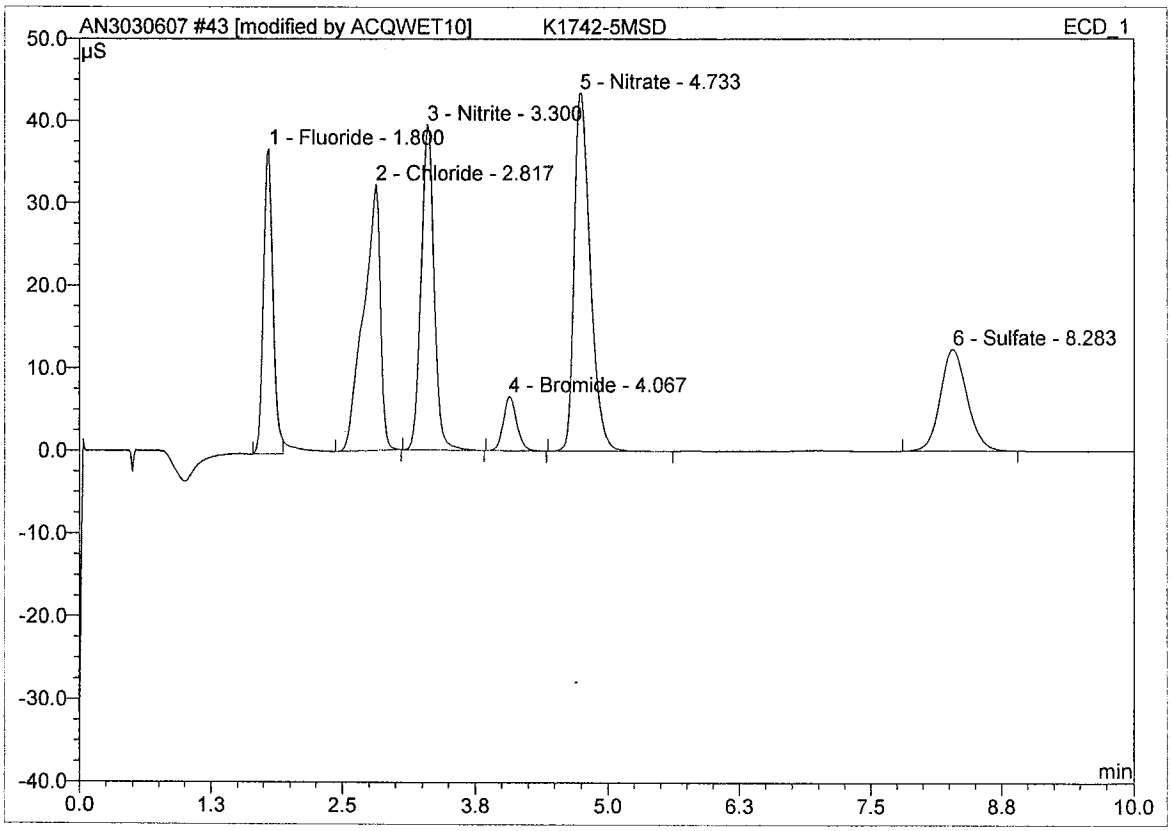
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

43 K1742-5MSD

Sample Name:	**K1742-5MSD**	*Injection Volume:*	**200.0**
Vial Number:	**56**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/6/2007 17:57**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride %rec = 105	36.993	3.838	13.91	4.408	BM *
2	2.82	Chloride %rec = 93	32.257	5.933	21.51	7.908	BMB*
3	3.30	Nitrite %rec = 100	39.451	5.510	19.98	3.985	BMB*
4	4.07	Bromide	6.560	0.974	3.53	3.748	BMB*
5	4.73	Nitrate %rec = 98	43.425	7.659	27.77	4.331	BMB*
6	8.28	Sulfate %rec = 100	12.318	3.668	13.30	7.973	BMB*
Total:			171.005	27.582	100.00	32.353	

SPK lvl
4ppm

After
Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 68

default_letter/Integration

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79521

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS			
Fluoride	True Value =17.5 ppm	CAS ID # = AN1-18-X	Expires: 4/12/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 5/1/07
Nitrite	True Value = 100 ppm	CAS ID # = AN10-4-F	Expires: 3/6/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-V	Expires: 4/20/07
Nitrate	True Value = 4.5 ppm	CAS ID # = AN1-18-V	Expires: 4/1/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 5/1/07

CCV	CAS ID # = AN10-37-B	Expires 3/6/07
Fluoride	True Value = 5.0 ppm	
Chloride	True Value = 5.0 ppm	
Nitrite	True Value = 2.0 ppm	
Bromide	True Value = 2.0 ppm	
Nitrate	True Value = 2.0 ppm	
Sulfate	True Value = 5.0 ppm	

Spike
2.0ppm X dilution fact CAS ID# = AN10-66-Q Expires 3/6/07

Analyst: JS Date: 3/6/07

First Review: JS Date: 3/7/07

Final Review: [illegible] Date: 3/8/07

t:\wet\ic\icdqs.xls

Sequence: AN3030607
Operator: ACQWET10
Printed: 3/7/2007 1:45:26 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 92

Created: 3/6/2007 8:13:48 AM by acqwet10
Last Update: 3/7/2007 10:54:31 AM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	1/22/2007 4:09:03 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	1/22/2007 4:25:31 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	1/22/2007 4:41:58 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	1/22/2007 4:58:26 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	1/22/2007 5:14:54 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:31:22 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:47:50 PM
8	CCV1 AN10-37-B	Unknown	26	200.0	epa300	epa300	Finished	3/6/2007 9:15:17 AM
9	CCB1	Unknown	27	200.0	epa300	epa300	Finished	3/6/2007 9:27:45 AM
10	AN10-4-F(NO2)	Unknown	28	200.0	epa300	epa300	Finished	3/6/2007 9:40:13 AM
11	MB1	Unknown	32	200.0	epa300	epa300	Finished	3/6/2007 9:52:41 AM
12	AN1-18-V(NO3)1	Unknown	29	200.0	epa300	epa300	Finished	3/6/2007 10:05:09 AM
13	ERA#092(CLSO4)1	Unknown	32	200.0	epa300	epa300	Finished	3/6/2007 10:17:37 AM
14	AN1-18-X(F)1	Unknown	33	200.0	epa300	epa300	Finished	3/6/2007 10:30:05 AM
15	SPK CHK AN10-66-Q	Unknown	34	200.0	epa300	epa300	Finished	3/6/2007 10:42:32 AM
16	CCV2 AN10-37-B	Unknown	32	200.0	epa300	epa300	Finished	3/6/2007 10:55:00 AM
17	CCB2	Unknown	30	200.0	epa300	epa300	Finished	3/6/2007 11:07:28 AM
18	K1737-1F	Unknown	31	200.0	epa300	epa300	Finished	3/6/2007 11:19:56 AM
19	K1737-2F	Unknown	32	200.0	epa300	epa300	Finished	3/6/2007 11:32:24 AM
20	K1737-3F	Unknown	33	200.0	epa300	epa300	Finished	3/6/2007 11:44:51 AM
21	K1724-2F	Unknown	34	200.0	epa300	epa300	Finished	3/6/2007 11:57:19 AM
22	K1724-3F	Unknown	35	200.0	epa300	epa300	Finished	3/6/2007 12:09:46 PM
23	K1724-1F	Unknown	36	200.0	epa300	epa300	Finished	3/6/2007 12:22:15 PM
24	RB	Unknown	37	200.0	epa300	epa300	Finished	3/6/2007 12:34:43 PM
25	K1742-2	Unknown	38	200.0	epa300	epa300	Finished	3/6/2007 12:47:10 PM
26	K1742-3	Unknown	39	200.0	epa300	epa300	Finished	3/6/2007 12:59:38 PM
27	RB	Unknown	40	200.0	epa300	epa300	Finished	3/6/2007 1:12:06 PM
28	CCV3	Unknown	41	200.0	epa300	epa300	Finished	3/6/2007 1:24:33 PM
29	CCB3	Unknown	42	200.0	epa300	epa300	Finished	3/6/2007 1:37:02 PM
30	K1742-4	Unknown	43	200.0	epa300	epa300	Finished	3/6/2007 1:49:29 PM
31	K1742-5	Unknown	44	200.0	epa300	epa300	Finished	3/6/2007 2:01:57 PM
32	K1744-1	Unknown	45	200.0	epa300	epa300	Finished	3/6/2007 2:14:25 PM
33	K1747-1F	Unknown	46	200.0	epa300	epa300	Finished	3/6/2007 2:26:52 PM
34	K1747-2F	Unknown	47	200.0	epa300	epa300	Finished	3/6/2007 2:39:20 PM
35	K1747-3F	Unknown	48	200.0	epa300	epa300	Finished	3/6/2007 2:51:48 PM
36	K1747-4F	Unknown	49	200.0	epa300	epa300	Finished	3/6/2007 3:04:16 PM
37	K1747-5F	Unknown	50	200.0	epa300	epa300	Finished	3/6/2007 3:16:44 PM
38	K1742-5D	Unknown	51	200.0	epa300	epa300	Finished	3/6/2007 4:55:08 PM
39	RB	Unknown	52	200.0	epa300	epa300	Finished	3/6/2007 5:07:36 PM
40	CCV4	Unknown	53	200.0	epa300	epa300	Finished	3/6/2007 5:20:04 PM
41	CCB4	Unknown	54	200.0	epa300	epa300	Finished	3/6/2007 5:32:32 PM
42	K1742-5MS	Unknown	55	200.0	epa300	epa300	Finished	3/6/2007 5:44:59 PM

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Sequence: AN3030607
Operator: ACQWET10
Printed: 3/7/2007 1:45:26 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 92

Created: 3/6/2007 8:13:48 AM by acqwet10
Last Update: 3/7/2007 10:54:31 AM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
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2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-37-B	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-4-F(NO2)	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-V(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA#092(CLSO4)1	1.0000	1.0000	1.0000		08	
14	AN1-18-X(F)1	1.0000	5.0000	1.0000		08	
15	SPK CHK AN10-66-Q	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-37-B	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	K1737-1F	1.0000	2.0000	1.0000		08	
19	K1737-2F	1.0000	2.0000	1.0000		08	
20	K1737-3F	1.0000	2.0000	1.0000		08	
21	K1724-2F	1.0000	5.0000	1.0000		08	
22	K1724-3F	1.0000	5.0000	1.0000		08	
23	K1724-1F	1.0000	5.0000	1.0000		08	
24	RB	1.0000	1.0000	1.0000		08	
25	K1742-2	1.0000	20.0000	1.0000		08	
26	K1742-3	1.0000	20.0000	1.0000		08	
27	RB	1.0000	1.0000	1.0000		08	
28	CCV3	1.0000	1.0000	1.0000		08	
29	CCB3	1.0000	1.0000	1.0000		08	
30	K1742-4	1.0000	20.0000	1.0000		08	
31	K1742-5	1.0000	2.0000	1.0000		08	
32	K1744-1	1.0000	2.0000	1.0000		08	
33	K1747-1F	1.0000	20.0000	1.0000		08	
34	K1747-2F	1.0000	20.0000	1.0000		08	
35	K1747-3F	1.0000	20.0000	1.0000		08	
36	K1747-4F	1.0000	20.0000	1.0000		08	
37	K1747-5F	1.0000	20.0000	1.0000		08	
38	K1742-5D	1.0000	2.0000	1.0000		08	
39	RB	1.0000	1.0000	1.0000		08	
40	CCV4	1.0000	1.0000	1.0000		08	
41	CCB4	1.0000	1.0000	1.0000		08	
42	K1742-5MS	1.0000	2.0000	1.0000		08	

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Sequence: AN3030607
Operator: ACQWET10
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 92

Created: 3/6/2007 8:13:48 AM by acqwet10
Last Update: 3/7/2007 10:54:31 AM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1742-5MSD	Unknown	56	200.0	epa300	epa300	Finished	3/6/2007 5:57:27 PM
44	K1778-1	Unknown	57	200.0	epa300	epa300	Finished	3/6/2007 6:09:55 PM
45	K1778-1D	Unknown	58	200.0	epa300	epa300	Finished	3/6/2007 6:22:23 PM
46	K1778-1MS	Unknown	59	200.0	epa300	epa300	Finished	3/6/2007 6:34:51 PM
47	K1778-1MSD	Unknown	60	200.0	epa300	epa300	Finished	3/6/2007 6:47:19 PM
48	K1778-2	Unknown	61	200.0	epa300	epa300	Finished	3/6/2007 6:59:46 PM
49	K1778-3	Unknown	62	200.0	epa300	epa300	Finished	3/6/2007 7:12:14 PM
50	K1778-4	Unknown	63	200.0	epa300	epa300	Finished	3/6/2007 7:24:43 PM
51	RB	Unknown	64	200.0	epa300	epa300	Finished	3/6/2007 7:37:15 PM
52	CCV5	Unknown	65	200.0	epa300	epa300	Finished	3/6/2007 7:49:43 PM
53	CCB5	Unknown	66	200.0	epa300	epa300	Finished	3/6/2007 8:02:11 PM
54	K1778-5	Unknown	67	200.0	epa300	epa300	Finished	3/6/2007 8:14:39 PM
55	K1778-6	Unknown	68	200.0	epa300	epa300	Finished	3/6/2007 8:27:07 PM
56	K1778-7	Unknown	69	200.0	epa300	epa300	Finished	3/6/2007 8:39:35 PM
57	K1778-8	Unknown	70	200.0	epa300	epa300	Finished	3/6/2007 8:52:03 PM
58	K1778-9	Unknown	71	200.0	epa300	epa300	Finished	3/6/2007 9:04:31 PM
59	K1778-10	Unknown	72	200.0	epa300	epa300	Finished	3/6/2007 9:16:59 PM
60	K1778-11	Unknown	73	200.0	epa300	epa300	Finished	3/6/2007 9:29:26 PM
61	K1778-12	Unknown	74	200.0	epa300	epa300	Finished	3/6/2007 9:41:54 PM
62	K1742-2	Unknown	75	200.0	epa300	epa300	Finished	3/6/2007 9:54:22 PM
63	RB	Unknown	76	200.0	epa300	epa300	Finished	3/6/2007 10:06:50 PM
64	CCV6	Unknown	77	200.0	epa300	epa300	Finished	3/6/2007 10:19:17 PM
65	CCB6	Unknown	78	200.0	epa300	epa300	Finished	3/6/2007 10:31:46 PM
66	K1742-3	Unknown	79	200.0	epa300	epa300	Finished	3/6/2007 10:44:14 PM
67	K1742-4	Unknown	80	200.0	epa300	epa300	Finished	3/6/2007 10:56:41 PM
68	K1675-11	Unknown	81	200.0	epa300	epa300	Finished	3/6/2007 11:09:09 PM
69	K1703-1	Unknown	82	200.0	epa300	epa300	Finished	3/6/2007 11:21:36 PM
70	K1782-1	Unknown	83	200.0	epa300	epa300	Finished	3/6/2007 11:34:04 PM
71	K1747-1F	Unknown	84	200.0	epa300	epa300	Finished	3/6/2007 11:46:32 PM
72	K1747-1F	Unknown	85	200.0	epa300	epa300	Finished	3/6/2007 11:58:59 PM
73	K1747-2F	Unknown	86	200.0	epa300	epa300	Finished	3/7/2007 12:11:27 AM
74	K1747-2F	Unknown	87	200.0	epa300	epa300	Finished	3/7/2007 12:23:55 AM
75	RB	Unknown	88	200.0	epa300	epa300	Finished	3/7/2007 12:36:22 AM
76	CCV7	Unknown	89	200.0	epa300	epa300	Finished	3/7/2007 12:48:50 AM
77	CCB7	Unknown	90	200.0	epa300	epa300	Finished	3/7/2007 1:01:17 AM
78	K1747-3F	Unknown	91	200.0	epa300	epa300	Finished	3/7/2007 1:13:45 AM
79	K1747-3F	Unknown	92	200.0	epa300	epa300	Finished	3/7/2007 1:26:13 AM
80	K1747-4F	Unknown	93	200.0	epa300	epa300	Finished	3/7/2007 1:38:41 AM
81	K1747-4F	Unknown	94	200.0	epa300	epa300	Finished	3/7/2007 1:51:09 AM
82	K1747-5F	Unknown	95	200.0	epa300	epa300	Finished	3/7/2007 2:03:36 AM
83	K1747-5F	Unknown	96	200.0	epa300	epa300	Finished	3/7/2007 2:16:04 AM
84	K1749-1	Unknown	97	200.0	epa300	epa300	Finished	3/7/2007 2:28:32 AM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 92
Created: 3/6/2007 8:13:48 AM by acqwet10
Last Update: 3/7/2007 10:54:31 AM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
85	K1749-4	1.0000	20.0000	1.0000		08	
86	K1795-1	1.0000	2.0000	1.0000		08	
87	RB	1.0000	1.0000	1.0000		08	
88	CCV8	1.0000	1.0000	1.0000		08	
89	CCB8	1.0000	1.0000	1.0000		08	
90	MB2	1.0000	1.0000	1.0000		08	
91	AN1-18-V(NO3)2	1.0000	2.0000	1.0000		08	
92	ERA#092(CLSO4)2	1.0000	1.0000	1.0000		08	

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Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K1737-1F	II		3/7	3/17	F			
					Cl	2.5/5		✓
Shaw					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			
-2F					F			
					Cl	2.5/5		✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			
-3F					F			
					Cl	2.5/5		✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			
K1724-1F	I		3/6	3/12	F			
					Cl			
Georgia					NO2			
					Br			
					NO3	1/5		✓
					SO4			
-2F					F			
					Cl			
					NO2			
					Br			
					NO3	1/5		✓
					SO4			
-3F					F			
					Cl			
					NO2			
					Br			
					NO3	1/5		✓
					SO4			
K1742-2	III		past hold	3/23	F			
					Cl	.25/5	2.5/5	✓
CH2M Hill					NO2			
					Br			
					NO3	.25/5	2.5/5	✓
					SO4	↓	↓	✓
-3					F			
					Cl	.25/5	2.5/5	✓
					NO2			
					Br			
					NO3	.25/5	2.5/5	✓
					SO4	↓	↓	✓
-4					F			
					Cl	.25/5	2.5/5	✓
					NO2			
					Br			
					NO3	.25/5	2.5/5	✓
					SO4	↓	↓	✓
-5		X			F			✓✓✓
					Cl	2.5/5	QL.2.5/5	✓✓✓
		dup			NO2			✓✓✓
		ms			Br			
		msd			NO3	2.5/5	QL.2.5/5	✓✓✓
					SO4	↓	↓	✓✓✓
	Cl=27		NO_2=5	Cl SO4 2				
	SO4=11			NO3 2				
	NO_3=29			NO2				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1744-1	I		3/7	3/17	F				
					Cl	2.5/5		✓	
Loran Moe					NO2				
					Br				
					NO3	2.5/5		✓	
					SO4	↓		✓	
K1703-1F	III			3/20	F				
					Cl	.25/5		✓	
					NO2				
					Br				
					NO3				
					SO4				
K1675-11	III			3/19	F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	25/5			✓SX
K1747-1F	II		3/7	3/23	F				
					Cl	25/5	(1/100)	✓	
Klemfelder					NO2	↓		✓	
					Br				
					NO3	.25/5	1/5	✓	
					SO4	↓	1/5	✓	
-2F					F				
					Cl	.25/5	(.5/100)	✓	
					NO2	↓		✓	
					Br				
					NO3	.25/5	1/5	✓	
					SO4	↓	↓	✓	
-3F					F				
					Cl	.25/5	100	✓	
					NO2	↓		✓	
					Br				
					NO3	.25/5	1/5	✓	
					SO4	↓	1/100	✓	
-4F					F				
					Cl	.25/5	(1/100)(1/5)	✓	
					NO2	↓		✓	
					Br				
					NO3	.25/5	.5/5	✓	
					SO4	↓	↓	✓	
~~5F~~ ~~-7F~~ JS					F				
					Cl	.25/5	(.5/100)	✓	
					NO2	↓		✓	
					Br				
					NO3	.25/5	1/5	✓	
					SO4	↓	↓	✓	
K1749-1	I			3/23	F				
					Cl				
Wheelabrator					NO2				
					Br				
					NO3				
					SO4	.25/5			✓2x
-4					F				
					Cl	.25/5			✓SX
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K1778-1	II	X	3/7	3/7	F			
					Cl	2.5/5		✓✓✓✓
Shaw		dup 2x 5x ms 5x msd 5x			NO2			
					Br			
					NO3	2.5/5		✓✓✓✓
					SO4			
-2					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-3					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-4					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-5					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-6					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-7					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-8					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-9					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			
-10					F			
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1778-11	II		3/7	3/7	F				
					Cl	2.5/5		✓	
Shaw					NO2				
					Br				
					NO3	2.5/5		✓	
					SO4				
-12					F				
					Cl	2.5/5		✓	
					NO2				
					Br				
					NO3	2.5/5		✓	
					SO4				
K1782-1	II		3/8	3/17	F				
					Cl				
CCHD					NO2				
					Br				
					NO3	2.5/5		✓	
					SO4				
K1795-1	I			3/7	F	2.5/5		✓	
					Cl				
Saint-Gobain					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

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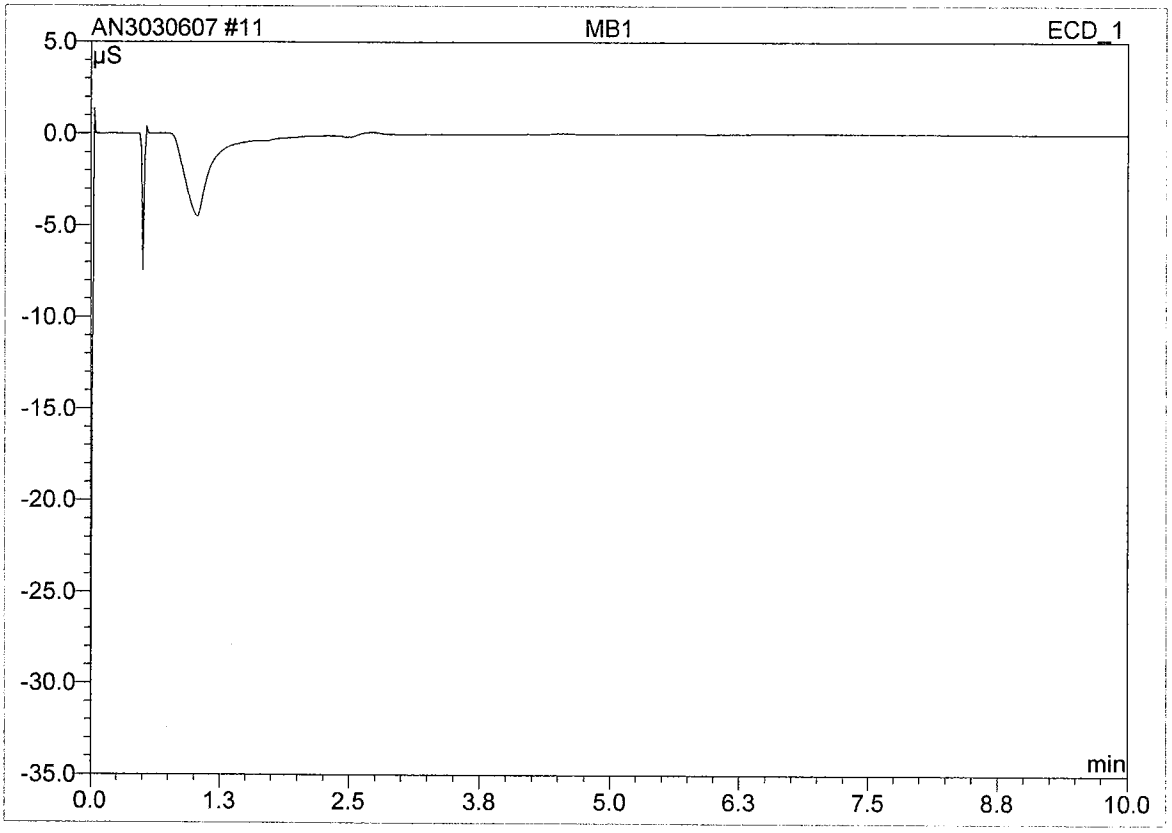
11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 9:52**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

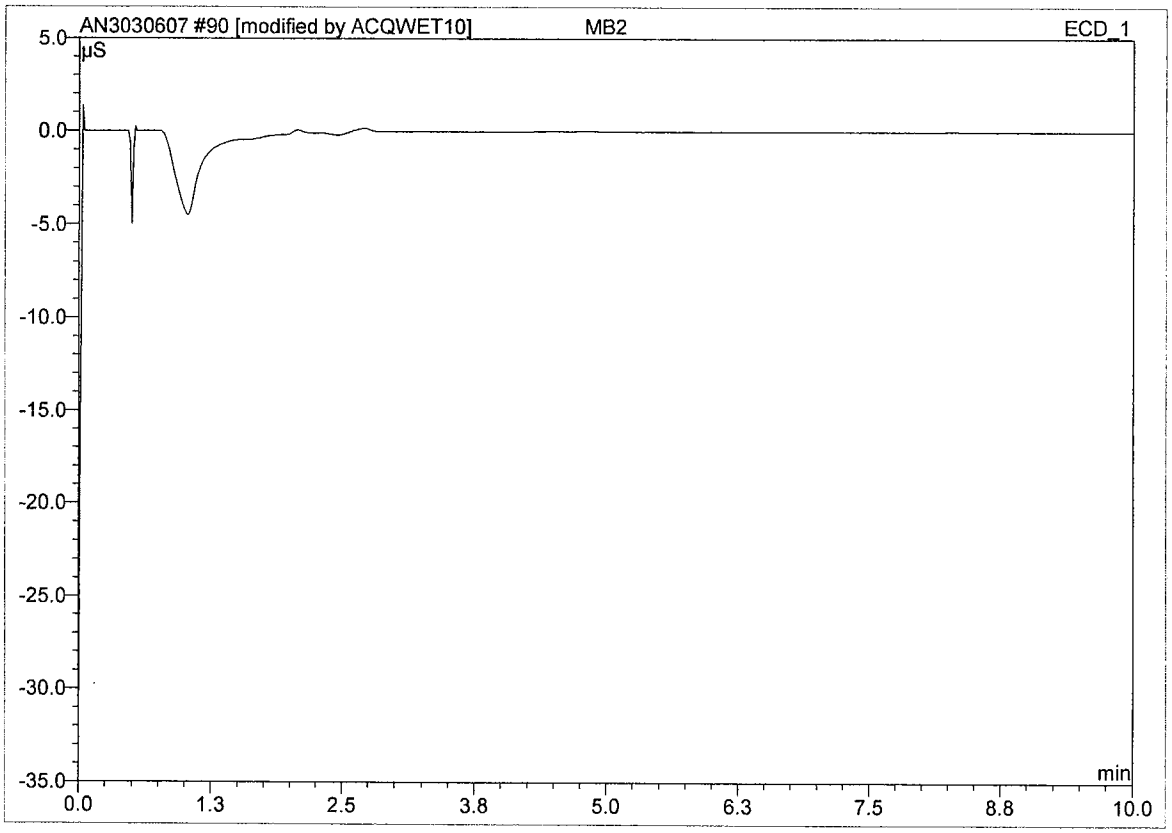


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Columbia Analytical Services, Inc.

90 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**103**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 3:43**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

ldr 3/8/07

After Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☑ Other deleted NA Peak

default_letter/Integration

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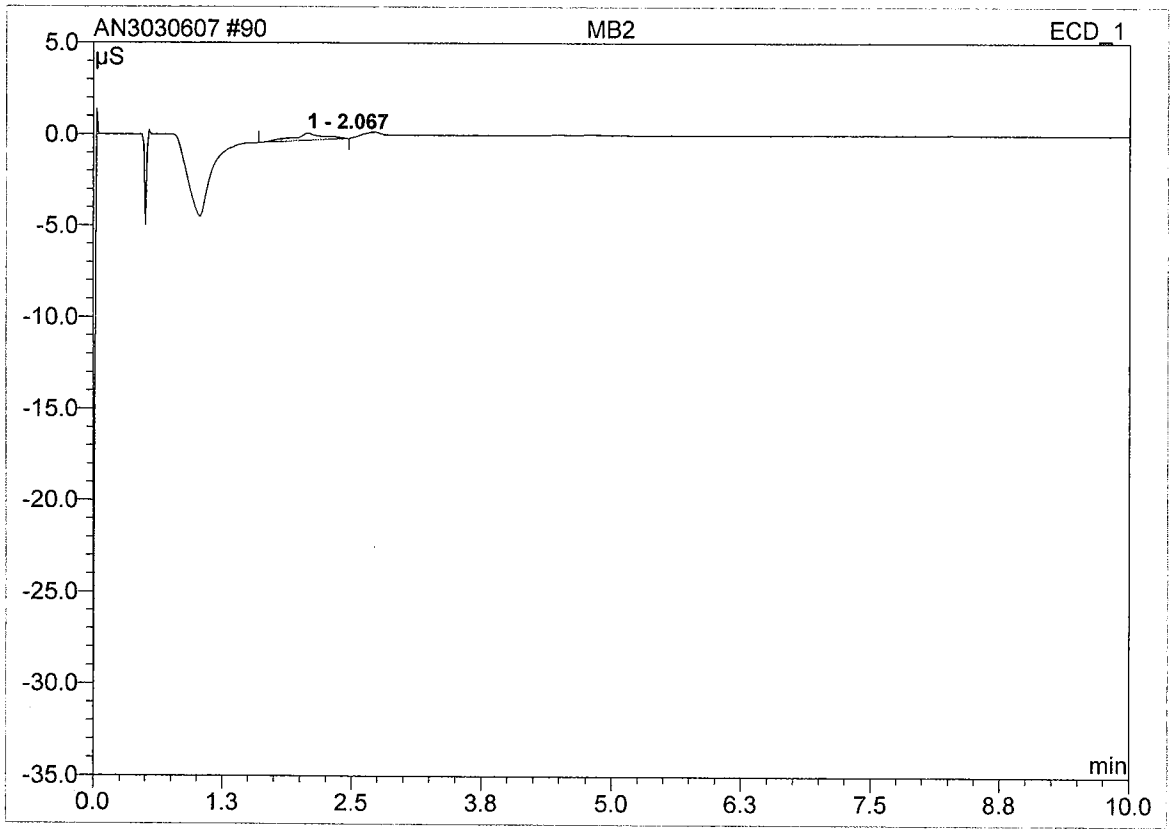
90 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**103**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 3:43**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.07	n.a.	0.382	0.128	100.00	n.a.	BMB
Total:			0.382	0.128	100.00	0.000	

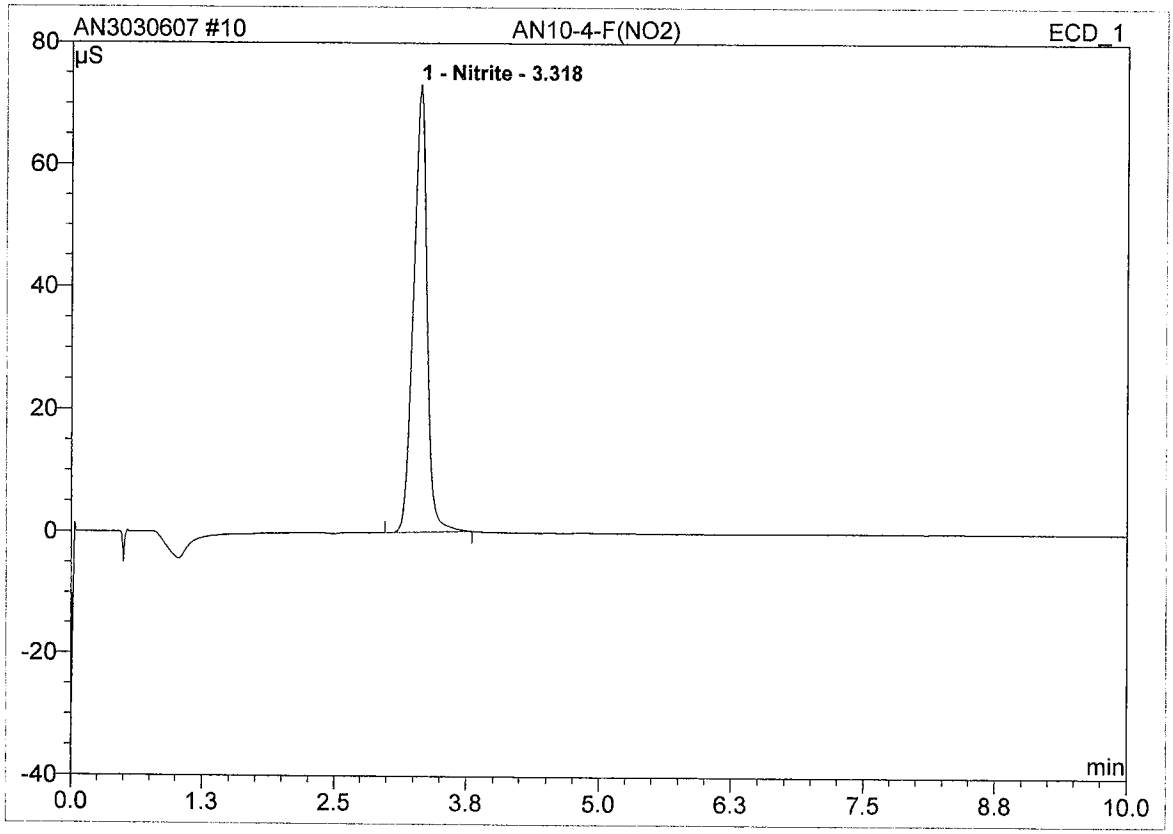
Before

MAR 0 7 2007

Columbia Analytical Services, Inc.

10 AN10-4-F(NO2)

Sample Name:	**AN10-4-F(NO2)**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**3/6/2007 9:40**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



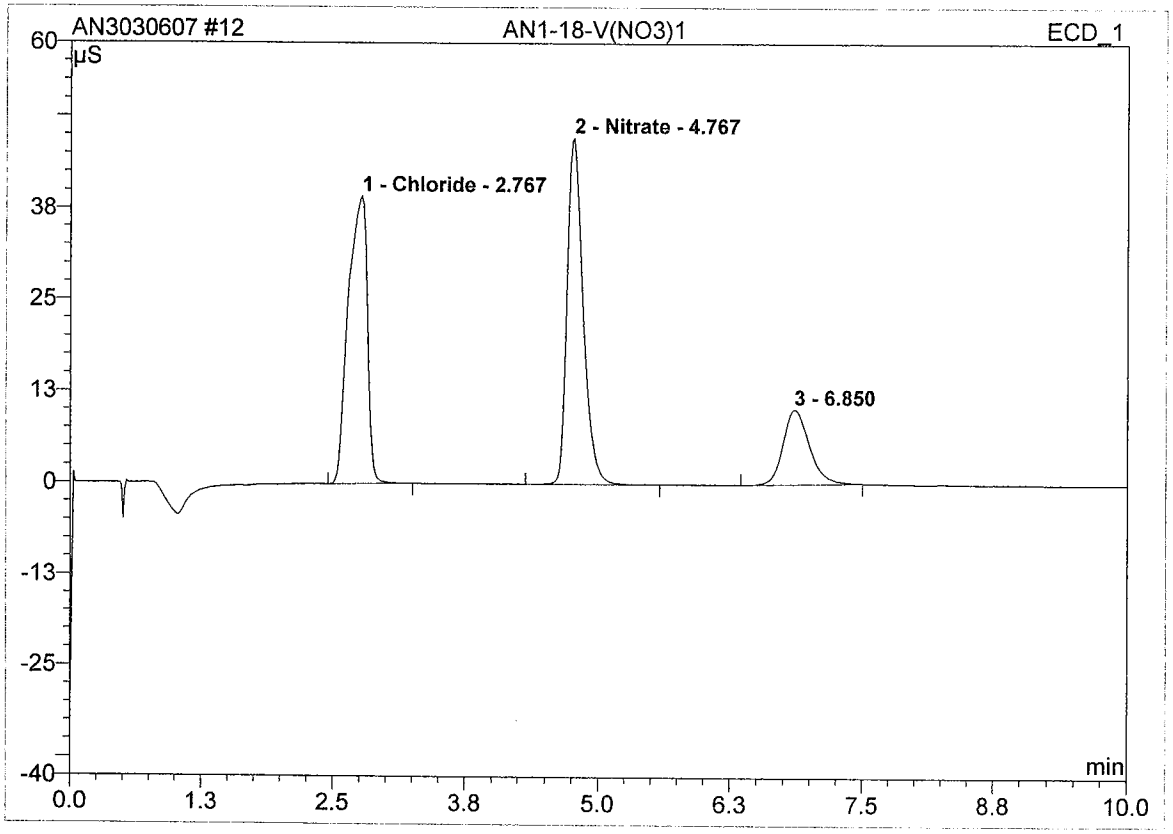
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.32	Nitrite	73.105	10.817	100.00 98%	97.783	BMB
Total:			73.105	10.817	100.00	97.783	

lkr 3/8/07

Columbia Analytical Services, Inc.

12 AN1-18-V(NO3)1

Sample Name:	**AN1-18-V(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/6/2007 10:05**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



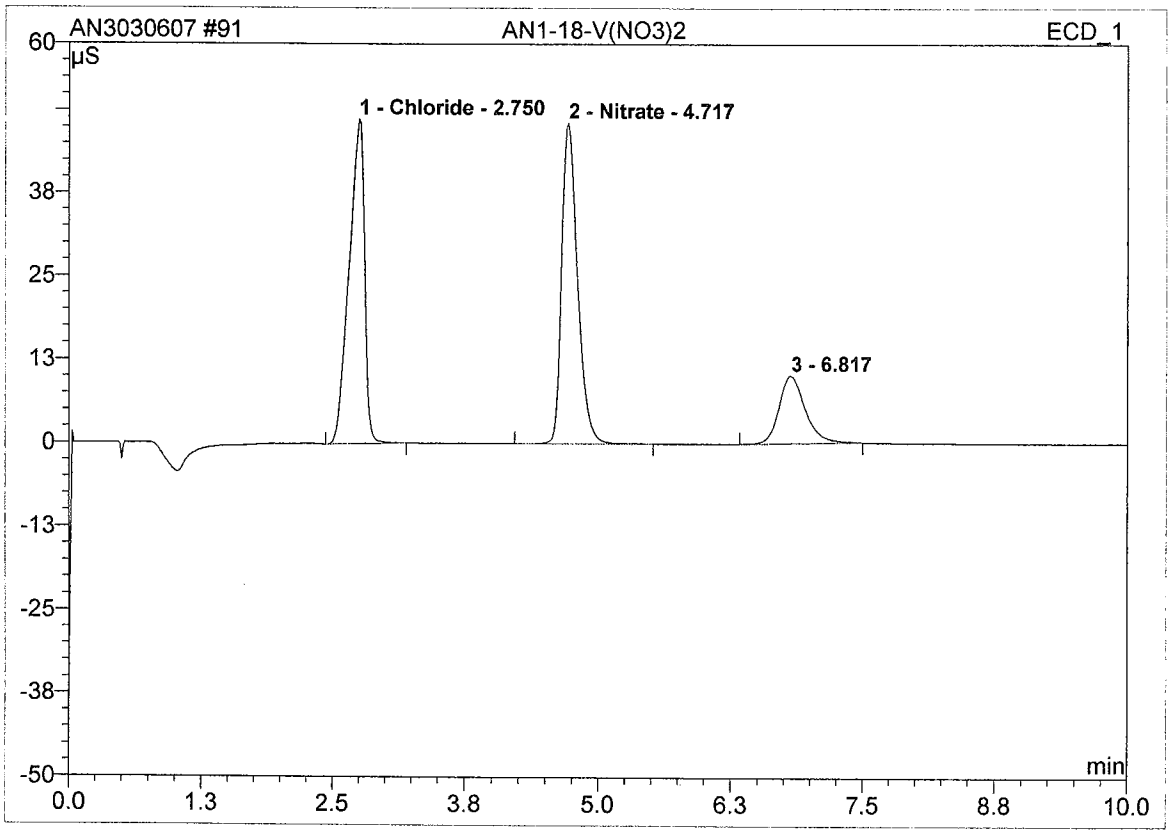
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	39.300	8.183	42.18	10.907	BMB
2	4.77	Nitrate	47.170	8.270	42.63	104% 4.676	BMB
3	6.85	n.a.	10.205	2.945	15.18	n.a.	BMB
Total:			96.675	19.397	100.00	15.584	

3/8/07

Columbia Analytical Services, Inc.

91 AN1-18-V(NO3)2

Sample Name:	**AN1-18-V(NO3)2**	*Injection Volume:*	**200.0**
Vial Number:	**104**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/7/2007 3:55**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	48.787	8.329	42.54	11.102	BMB
2	4.72	Nitrate	48.153	8.322	42.51	104% 4.706	BMB
3	6.82	n.a.	10.128	2.928	14.95	n.a.	BMB
Total:			107.068	19.579	100.00	15.809	

ℓ 3/8/07

default_letter/Integration

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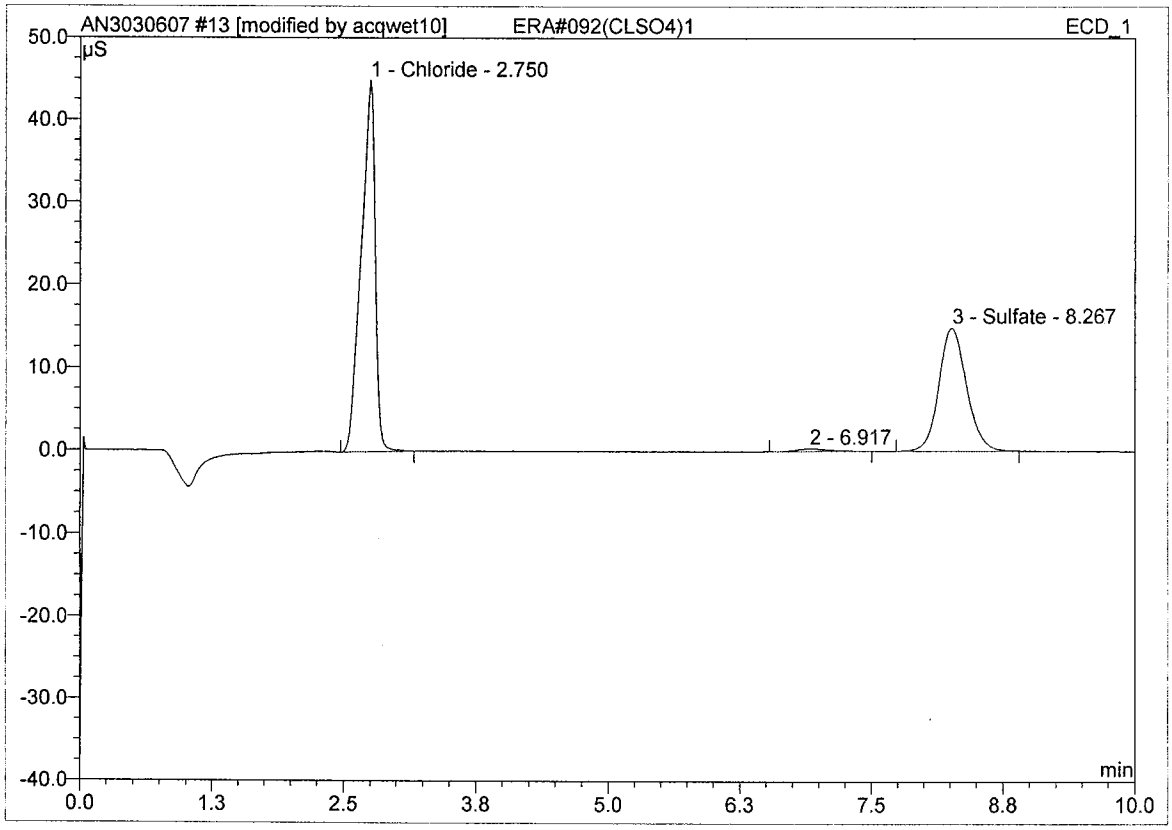
Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:17**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	44.928	6.955	60.11	92% 4.636	BMB
2	6.92	n.a.	0.325	0.114	0.98	n.a.	BMB
3	8.27	Sulfate	14.861	4.502	38.91	98% 4.892	BMB*
Total:			60.114	11.571	100.00	9.528	

12 3/8/07

After
Initials JS

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

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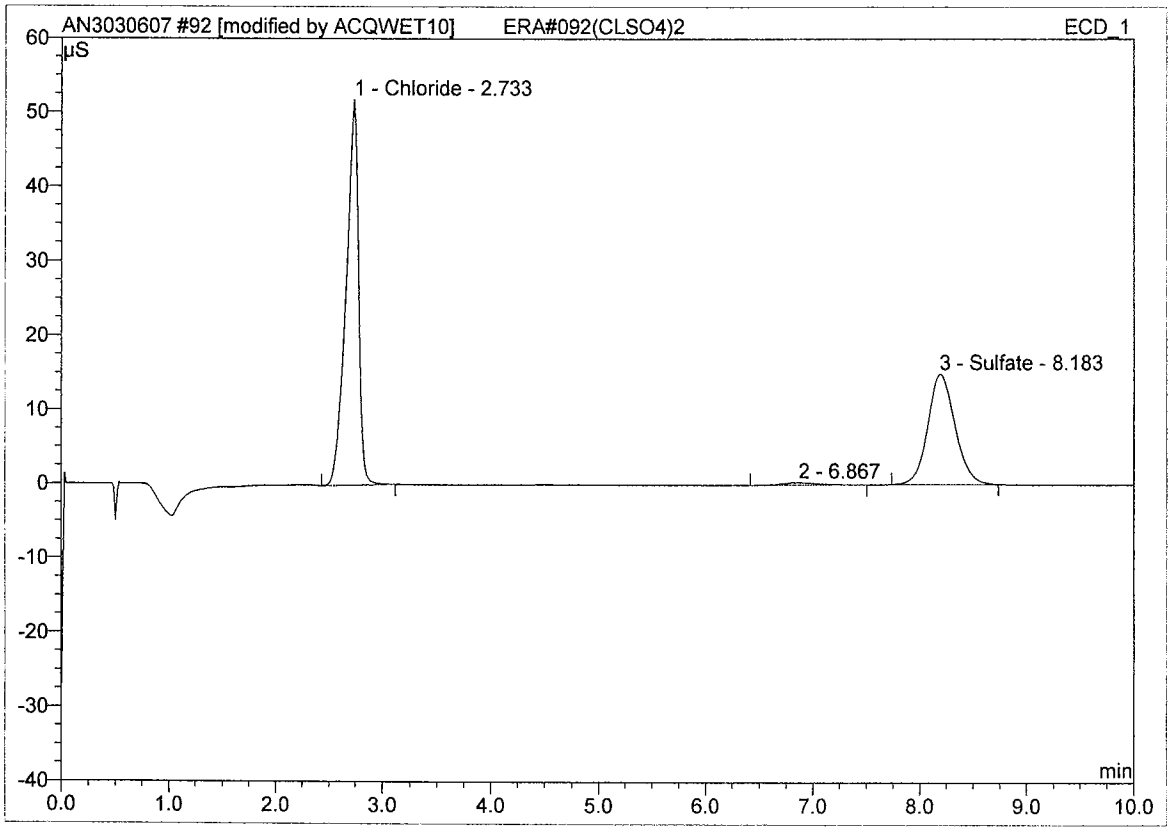
Columbia Analytical Services, Inc.

92 ERA#092(CLSO4)2

Sample Name:	**ERA#092(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 4:08**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.73	Chloride	51.902	7.004	60.65	94% 4.668	BMB
2	6.87	n.a.	0.321	0.117	1.01	n.a.	BMB
3	8.18	Sulfate	14.899	4.427	38.34	96% 4.811	BMB*
Total:			67.122	11.548	100.00	9.479	

lar 3/8/07

After Initials JS

MAR 0 7 2007

default_letter/Integration

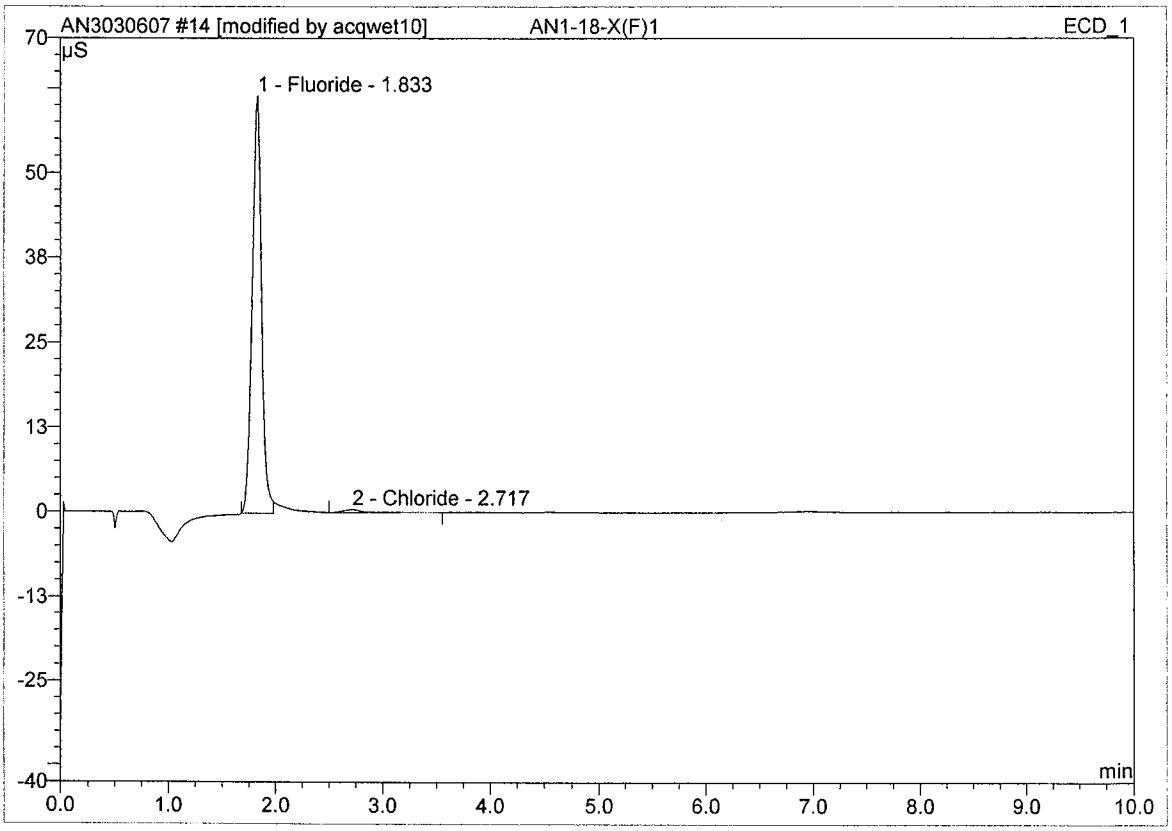
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/6/2007 10:30**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	61.644	6.198	98.45	102% 17.797	BM *
2	2.72	Chloride	0.454	0.098	1.55	0.325	BMB*
Total:			62.097	6.296	100.00	18.122	

LRR 3/8/07

After
Initials JS

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

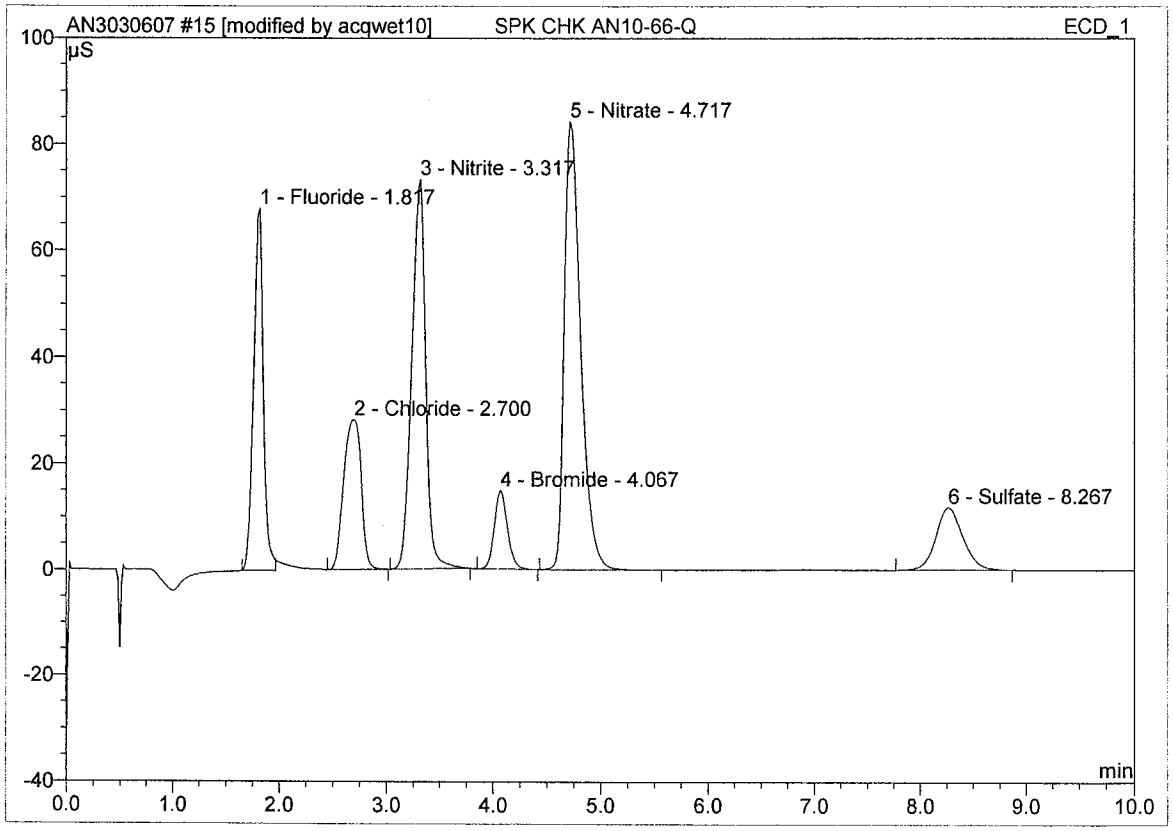
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-Q

Sample Name:	**SPK CHK AN10-66-Q**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:42**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride %rec=102	68.136	7.314	16.53	4.200	BM *
2	2.70	Chloride %rec=90	28.193	5.369	12.13	3.579	BMB*
3	3.32	Nitrite %rec=100	73.213	11.095	25.07	4.012	BMB*
4	4.07	Bromide %rec=100	14.801	2.101	4.75	4.043	BMB
5	4.72	Nitrate %rec=102	84.214	14.887	33.64	4.209	BMB
6	8.27	Sulfate %rec=95	11.745	3.493	7.89	3.796	BMB*
Total:			280.302	44.259	100.00	23.839	

lkr 3/8/07

After
Initials JS

default_letter/Integration

MAR 0 6 2007

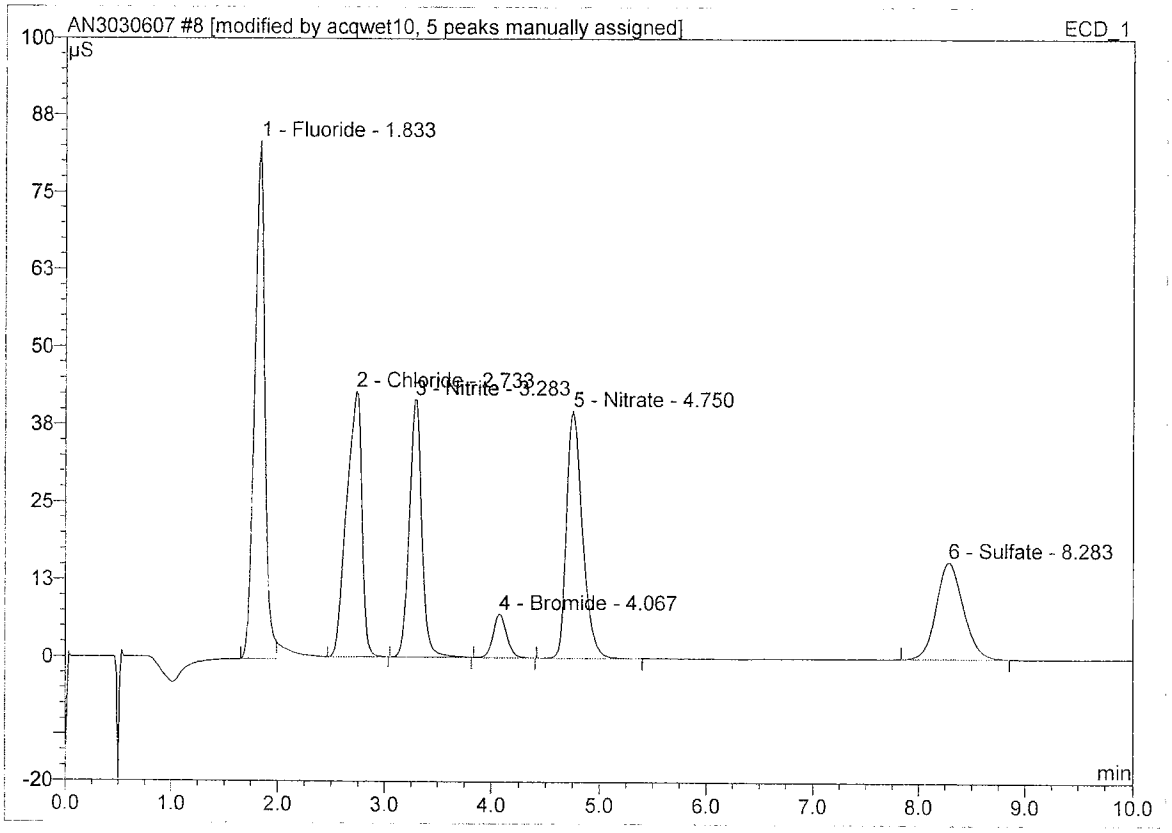
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

8 CCV1 AN10-37-B

Sample Name:	**CCV1 AN10-37-B**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 9:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	83.628	9.272	26.82	106%. 5.325	BM *
2	2.73	Chloride	42.784	7.174	20.75	96%. 4.782	BMB*^
3	3.28	Nitrite	41.503	5.665	16.39	100%. 2.048	BMB*^
4	4.07	Bromide	7.031	1.017	2.94	100%. 1.956	BMB*^
5	4.75	Nitrate	39.849	6.841	19.79	95%. 1.934	BMB*^
6	8.28	Sulfate	15.547	4.599	13.31	100%. 4.998	BMB*^
Total:			230.342	34.568	100.00	21.043	

After
Initials RM

3/9/07

default_letter/Integration

MAR 0 8 2007

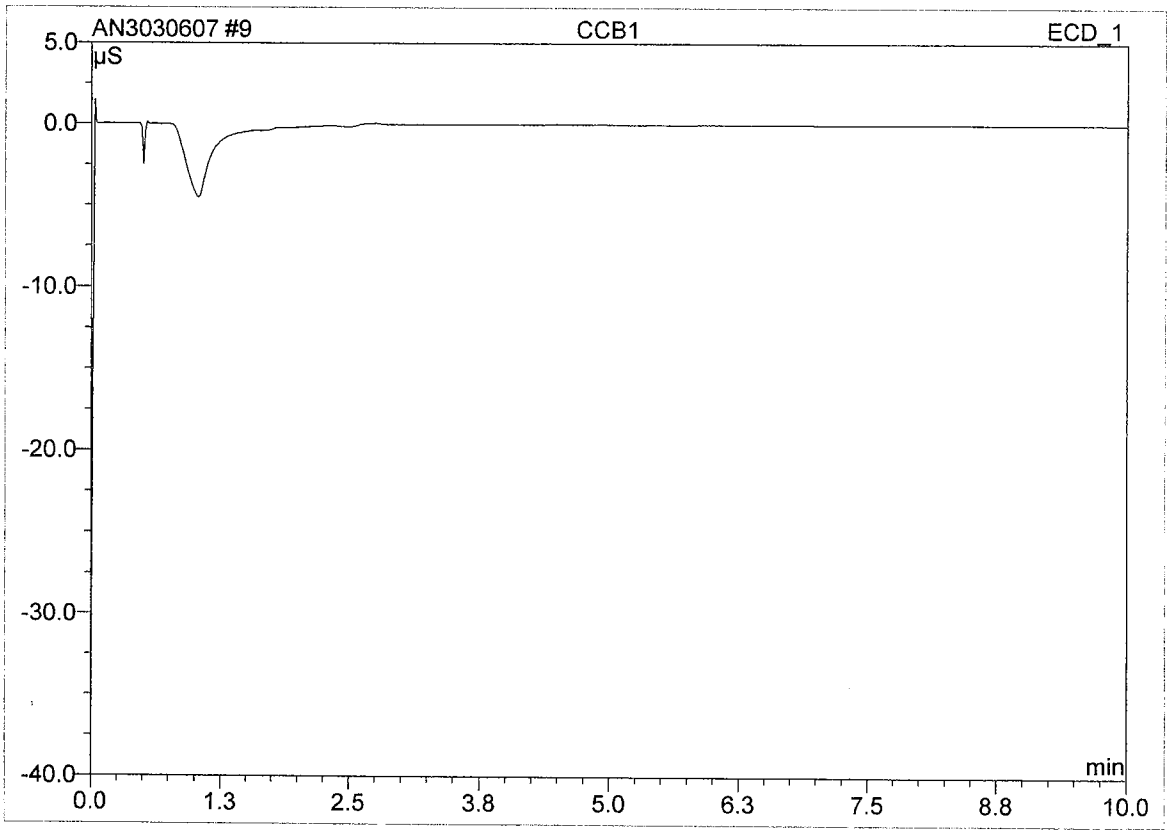
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 9:27**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



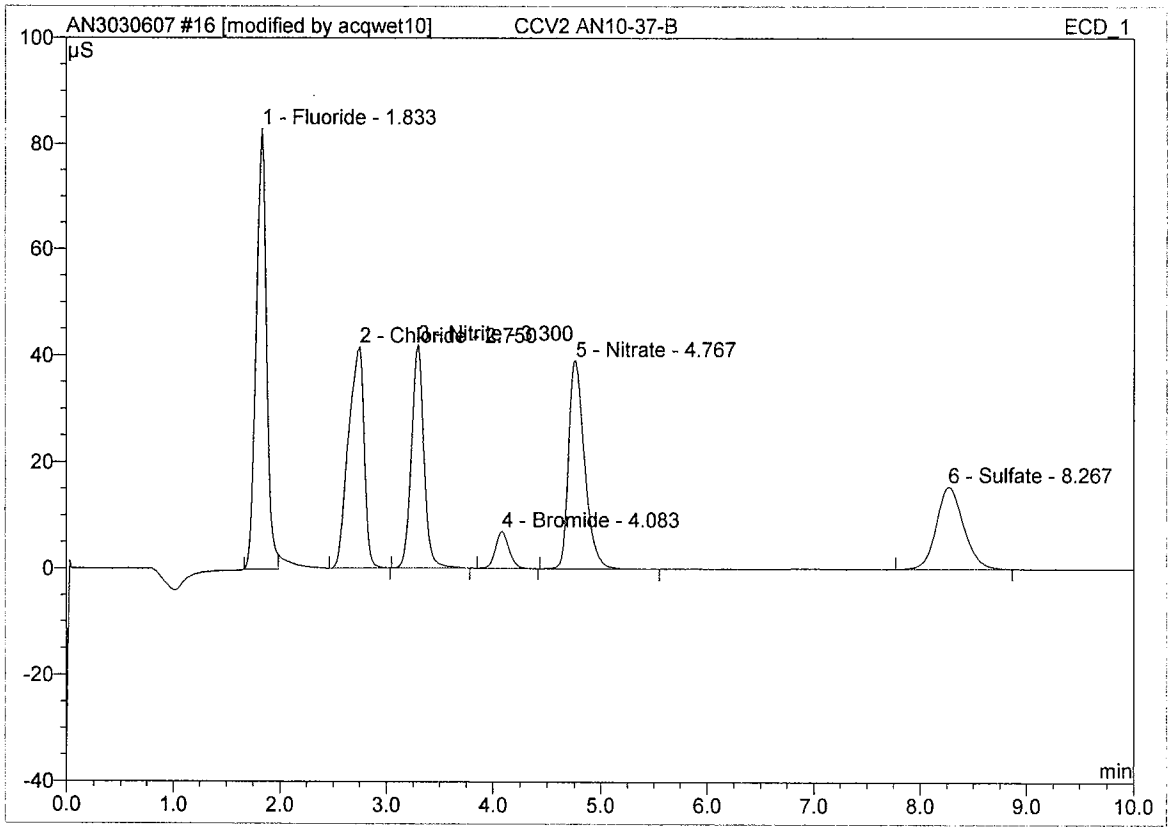
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

LAN 3/8/07

Columbia Analytical Services, Inc.

16 CCV2 AN10-37-B

Sample Name:	**CCV2 AN10-37-B**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:55**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	83.112	9.160	26.67	106% 5.260	BM *
2	2.75	Chloride	41.553	7.134	20.77	96% 4.754	BMB*
3	3.30	Nitrite	41.930	5.660	16.48	100% 2.046	BMB*
4	4.08	Bromide	6.976	1.006	2.93	95% 1.936	BMB
5	4.77	Nitrate	39.006	6.795	19.78	95% 1.921	BMB
6	8.27	Sulfate	15.450	4.594	13.37	100% 4.992	BMB*
Total:			228.027	34.348	100.00	20.911	

RAA 3/8/07

After
Initials JS

MAR 0 6 2007

Long Peak/Peak not Found
Baseline/shoulder Incorrect
Other

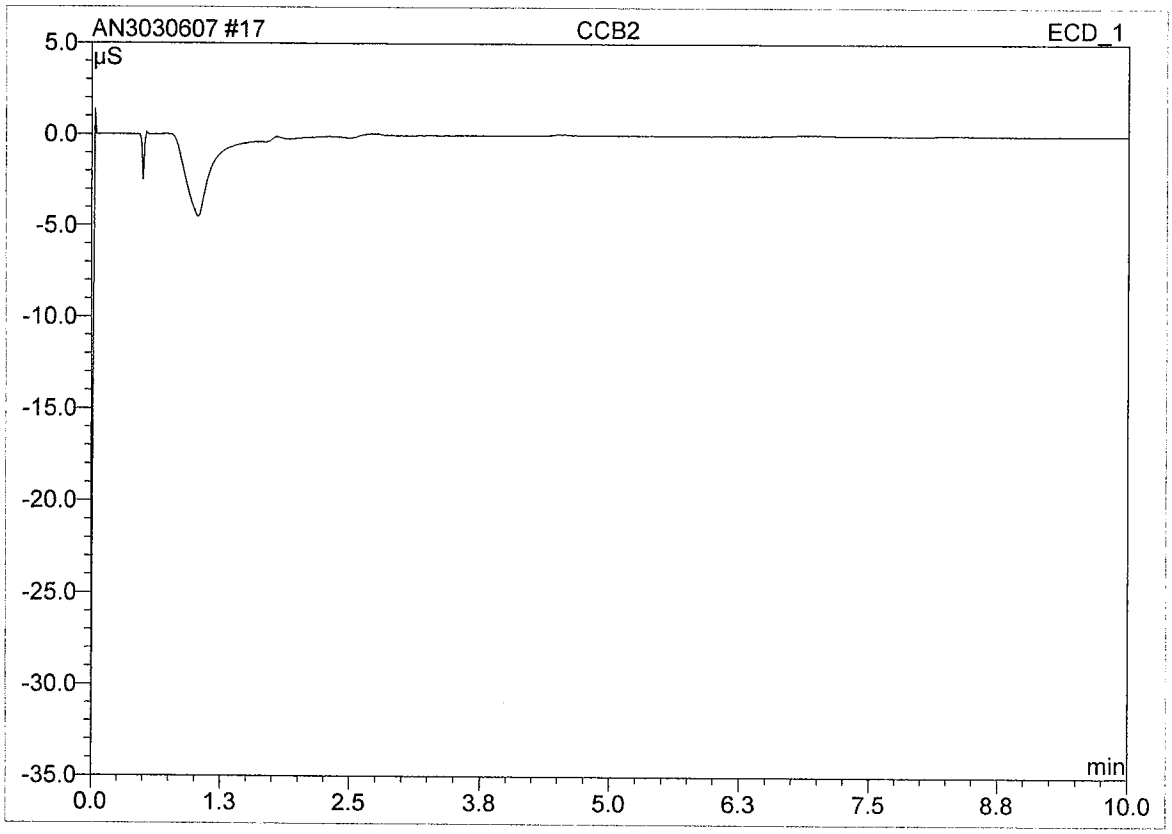
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 11:07**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



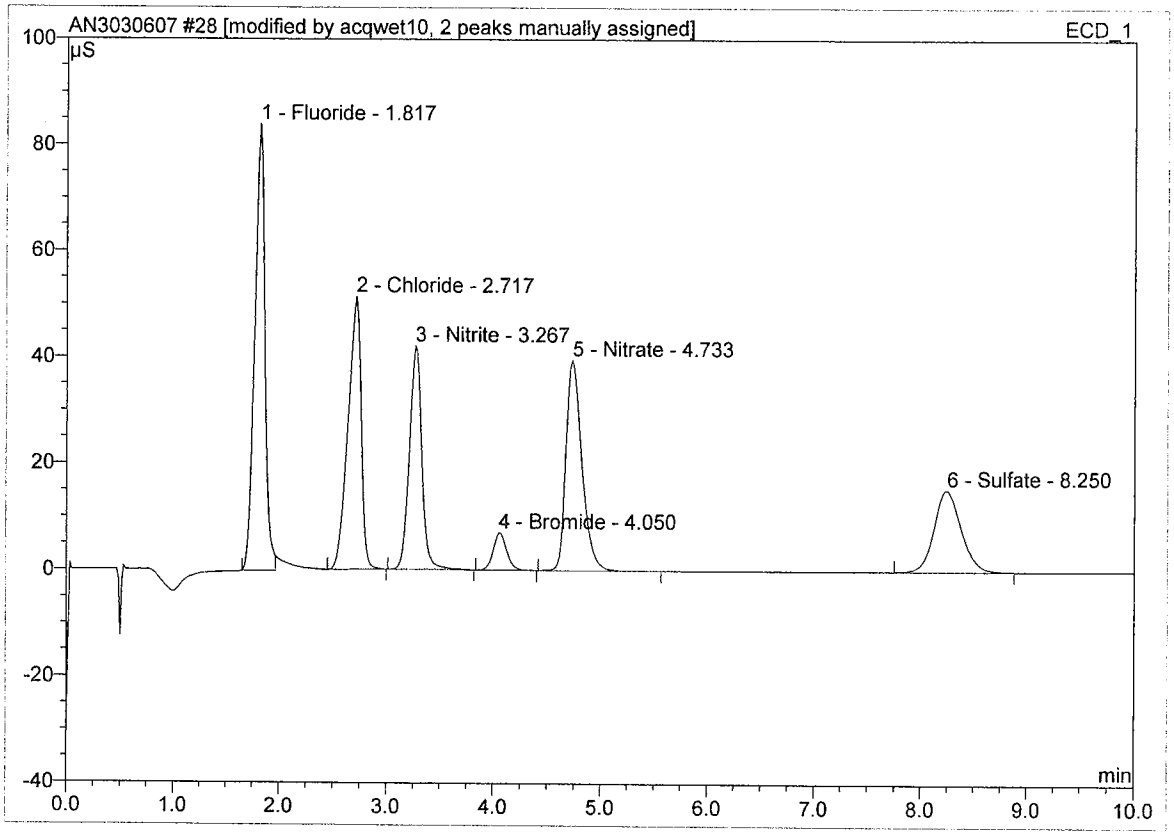
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

LKW 3/8/07

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 13:24**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	84.162	9.224	26.67	106% 5.297	BM *
2	2.72	Chloride	51.369	7.275	21.03	96% 4.849	BMB*^
3	3.27	Nitrite	42.053	5.681	16.42	105% 2.054	BMB*
4	4.05	Bromide	6.956	1.007	2.91	95% 1.938	BMB*
5	4.73	Nitrate	39.557	6.840	19.77	95% 1.934	BMB*^
6	8.25	Sulfate	15.319	4.565	13.20	100% 4.960	BMB*
Total:			239.417	34.593	100.00	21.032	

After Initials JS

MAR 0 6 2007

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect
Other

92

RAR 3/8/07

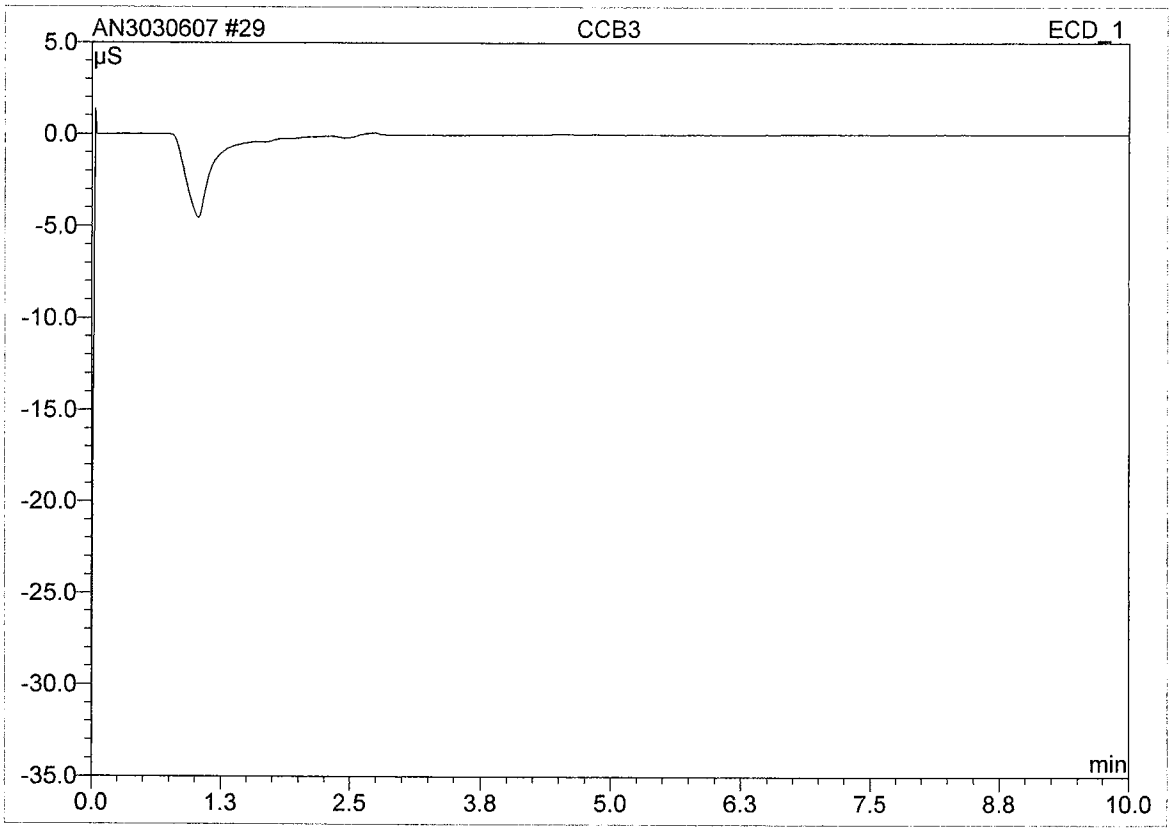
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

29 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 13:37**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



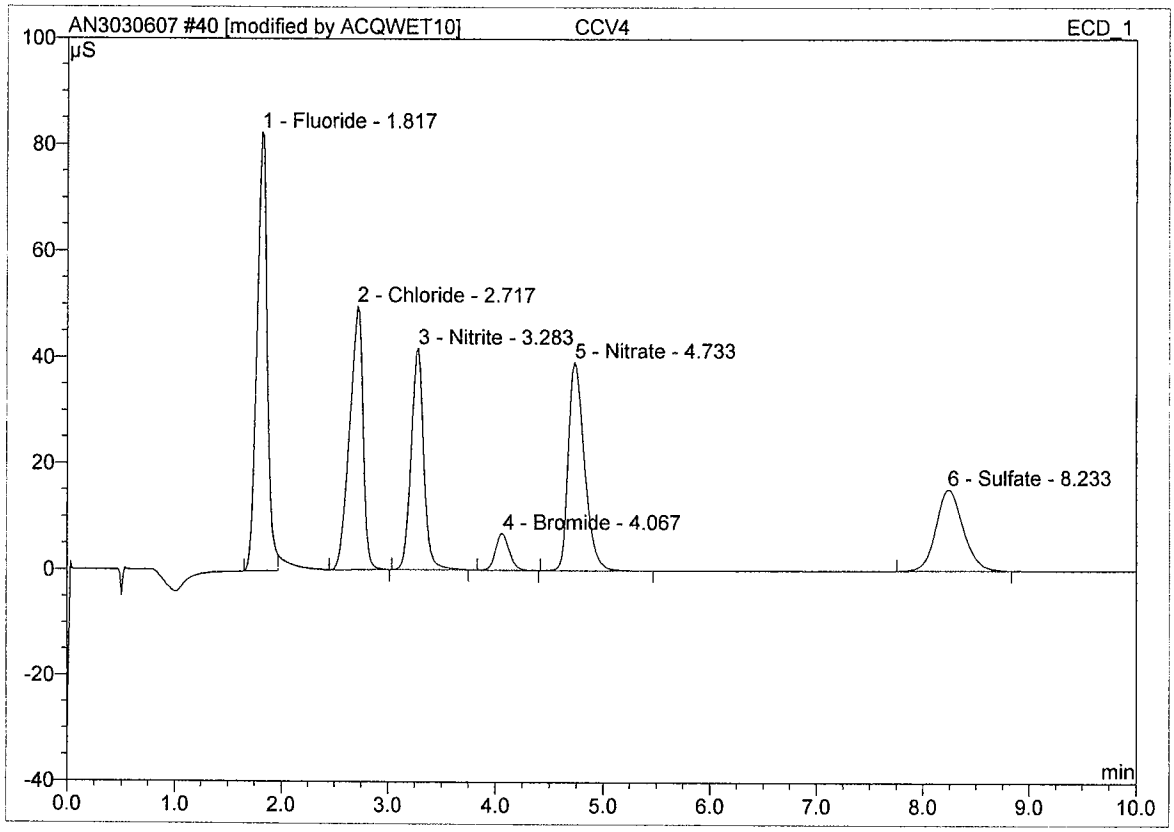
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RR 3/8/07

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 17:20**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	82.555	9.267	26.86	106% 5.322	BM *
2	2.72	Chloride	49.663	7.231	20.96	96% 4.819	BMB*
3	3.28	Nitrite	41.722	5.647	16.37	100% 2.042	BMB*
4	4.07	Bromide	6.877	0.995	2.89	95% 1.915	BMB
5	4.73	Nitrate	39.258	6.792	19.69	95% 1.920	BMB
6	8.23	Sulfate	15.314	4.563	13.23	100% 4.959	BMB*
Total:			235.389	34.495	100.00	20.977	

After
Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

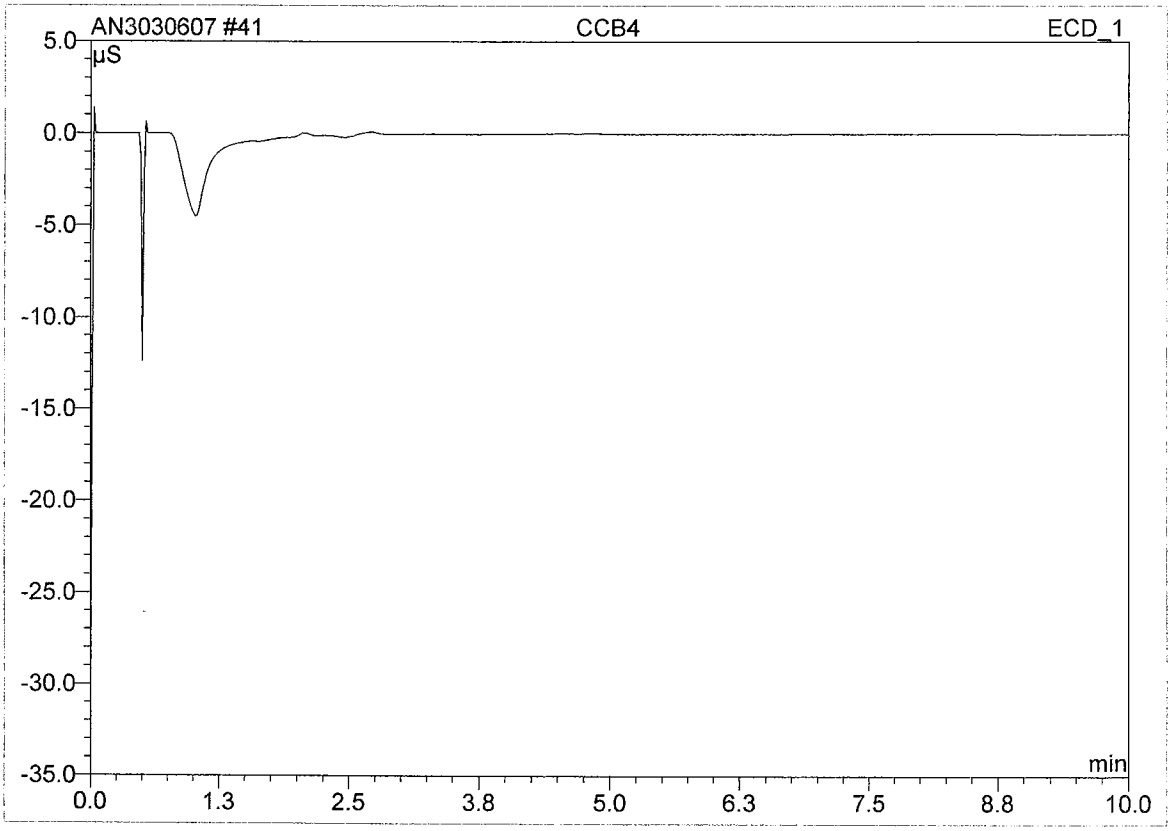
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**54**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 17:32**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



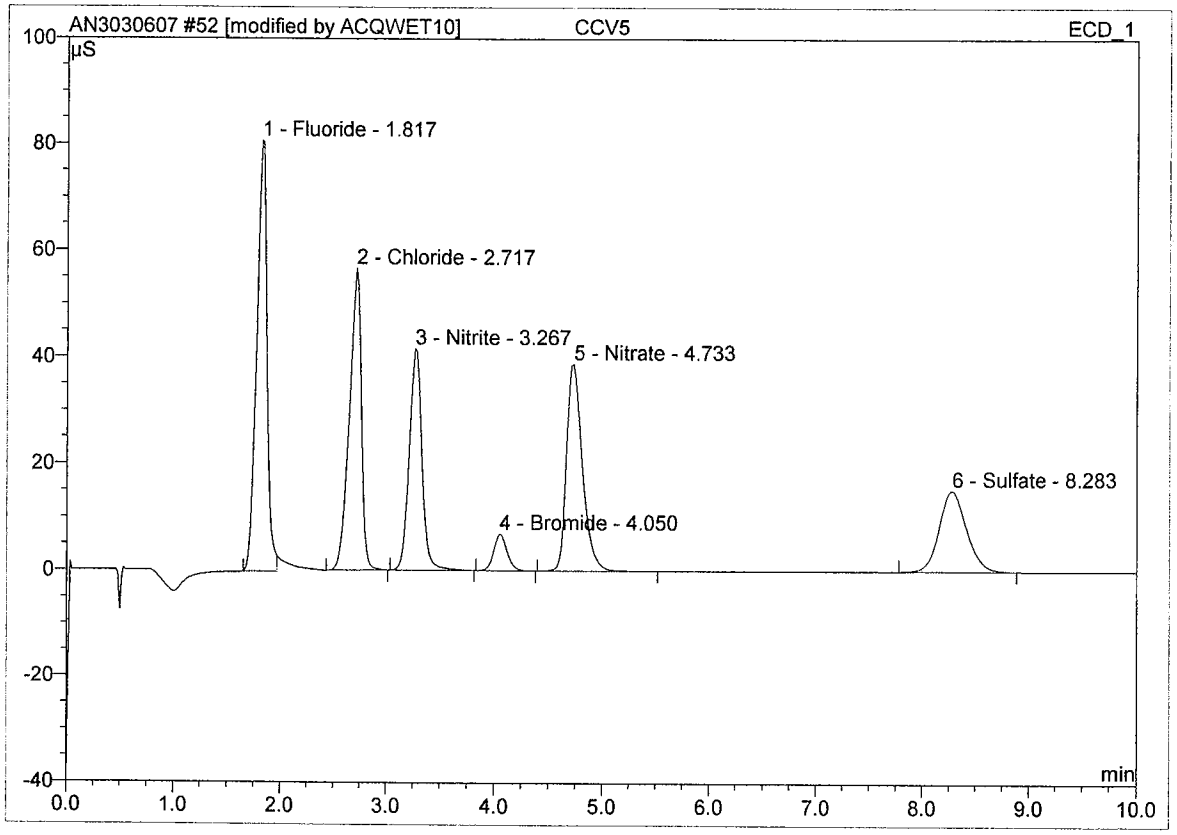
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

dhr 3/8/07

Columbia Analytical Services, Inc.

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 19:49**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	80.869	9.084	26.54	104% 5.217	BM *
2	2.72	Chloride	56.614	7.254	21.19	96% 4.835	BMB*
3	3.27	Nitrite	41.509	5.636	16.47	100% 2.038	BMB*
4	4.05	Bromide	6.857	0.988	2.89	95% 1.900	BMB*
5	4.73	Nitrate	38.782	6.742	19.70	95% 1.906	BMB*
6	8.28	Sulfate	15.141	4.523	13.21	98% 4.915	BMB*
Total:			239.771	34.226	100.00	20.810	

3/6/07

After Initials JS

default_letter/Integration

MAR 0 7 2007

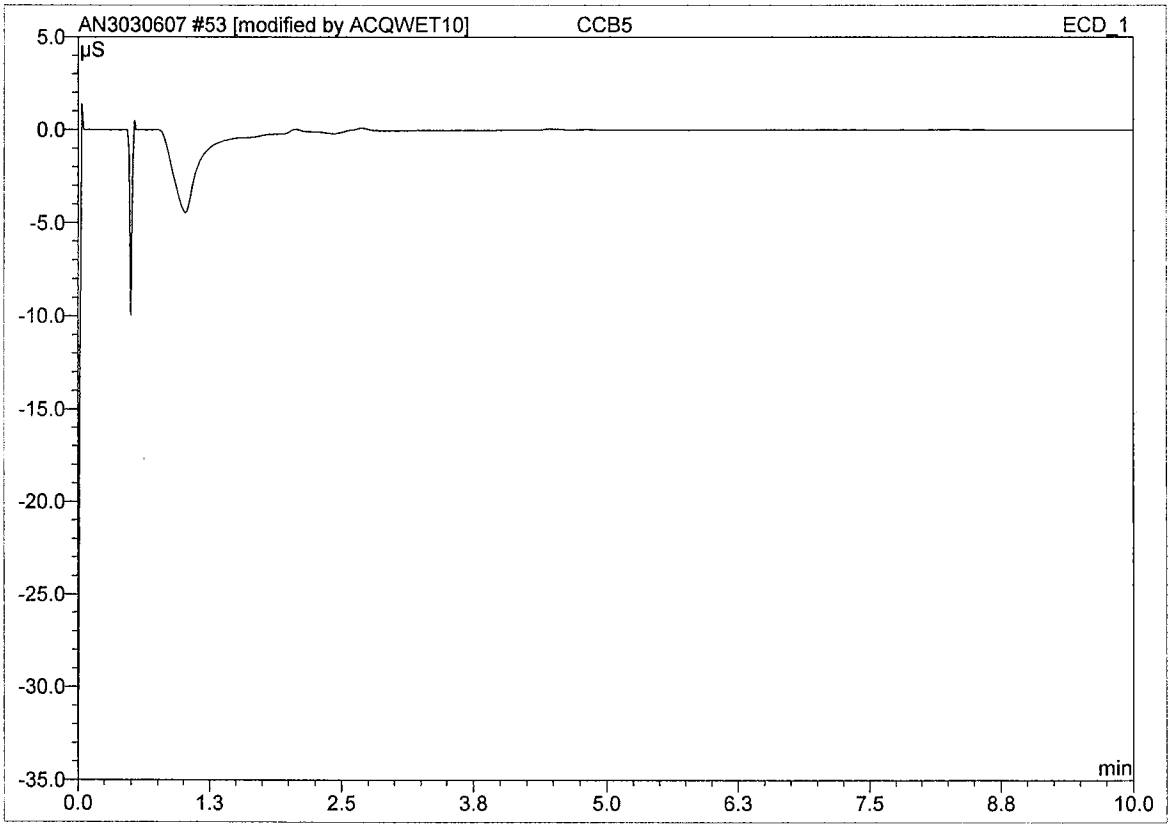
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other: 96

Columbia Analytical Services, Inc.

53 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**66**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 20:02**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After
Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☑ Other deleted NA Peak

KR 3/8/07

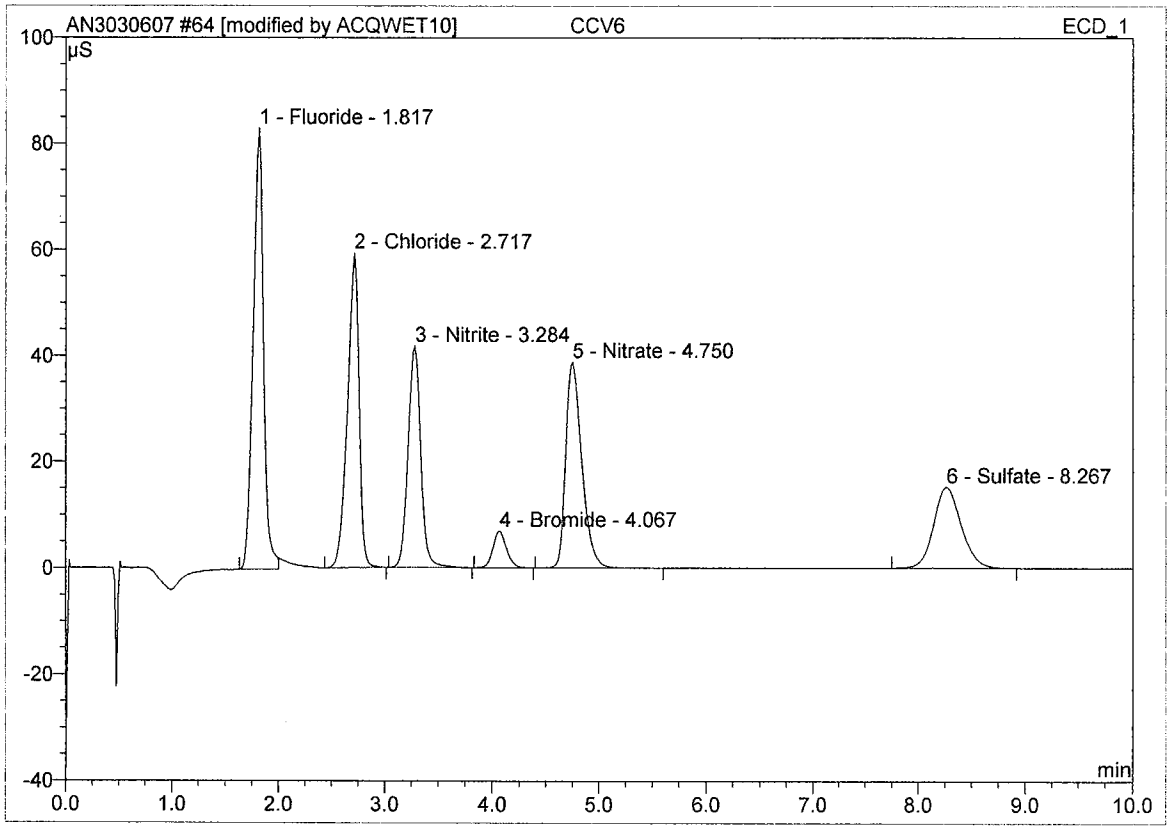
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**77**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 22:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	83.147	9.295	26.82	106% 5.338	BM *
2	2.72	Chloride	59.336	7.368	21.26	98% 4.911	BMB*
3	3.28	Nitrite	41.742	5.638	16.27	100% 2.039	BMB*
4	4.07	Bromide	6.862	0.996	2.87	95% 1.917	BMB*
5	4.75	Nitrate	38.807	6.800	19.62	95% 1.923	BMB*
6	8.27	Sulfate	15.222	4.559	13.16	100% 4.955	BMB*
Total:			245.117	34.657	100.00	21.081	

After Initials JS

RKN 3/8/07

default_letter/Integration

MAR 0 7 2007

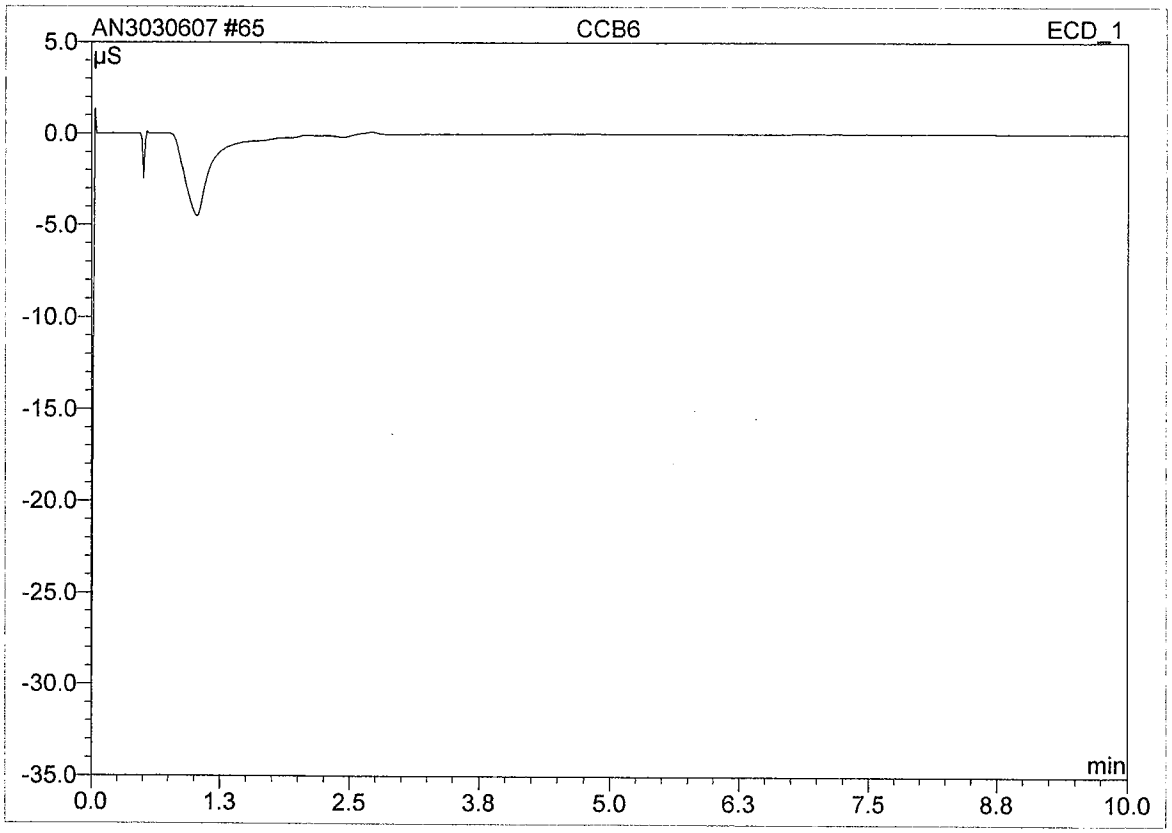
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

65 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**78**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 22:31**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



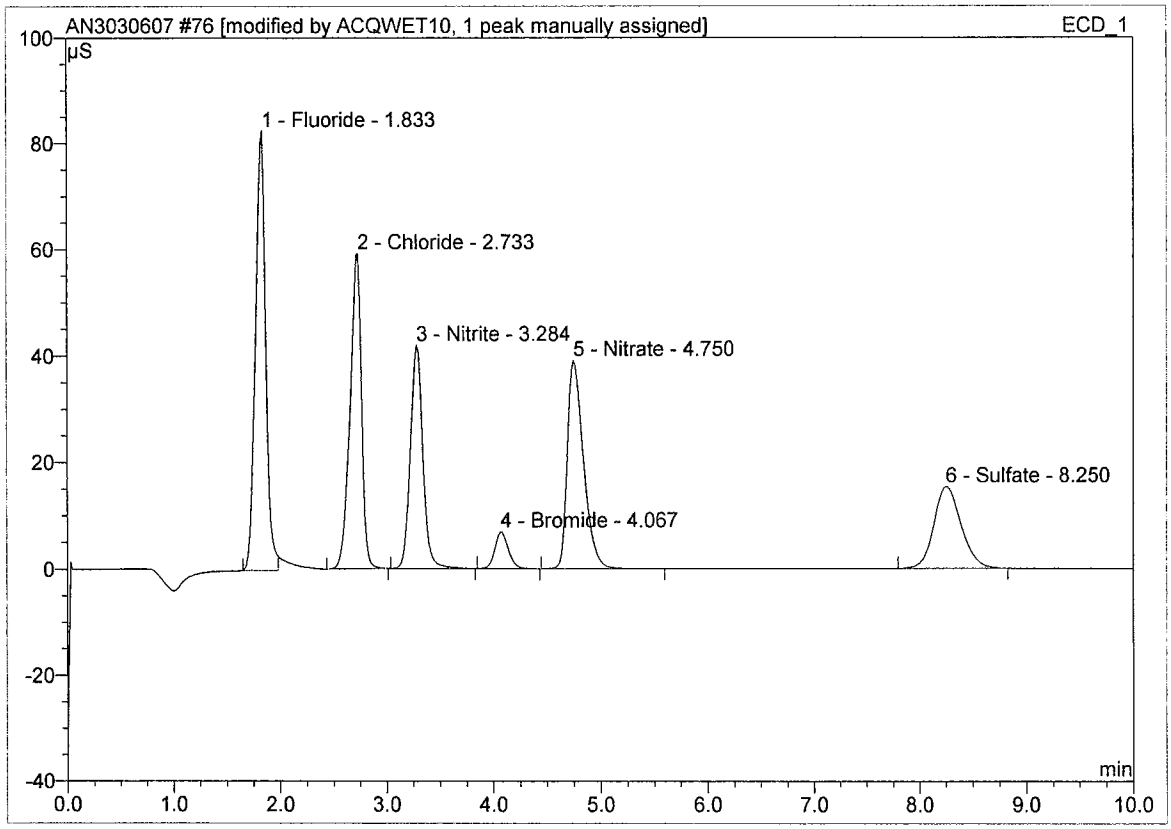
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RR 3/8/07

Columbia Analytical Services, Inc.

76 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**89**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 0:48**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	82.561	9.219	26.66	106% 5.294	BM *
2	2.73	Chloride	59.173	7.388	21.36	98% 4.924	BMB*
3	3.28	Nitrite	41.872	5.662	16.37	100% 2.047	BMB*
4	4.07	Bromide	6.839	0.997	2.88	95% 1.918	BMB*^
5	4.75	Nitrate	39.098	6.786	19.62	95% 1.919	BMB*
6	8.25	Sulfate	15.291	4.535	13.11	98% 4.928	BMB*
Total:			244.832	34.586	100.00	21.030	

After Initials JS

RL 3/8/07

default_letter/Integration

MAR 0 7 2007

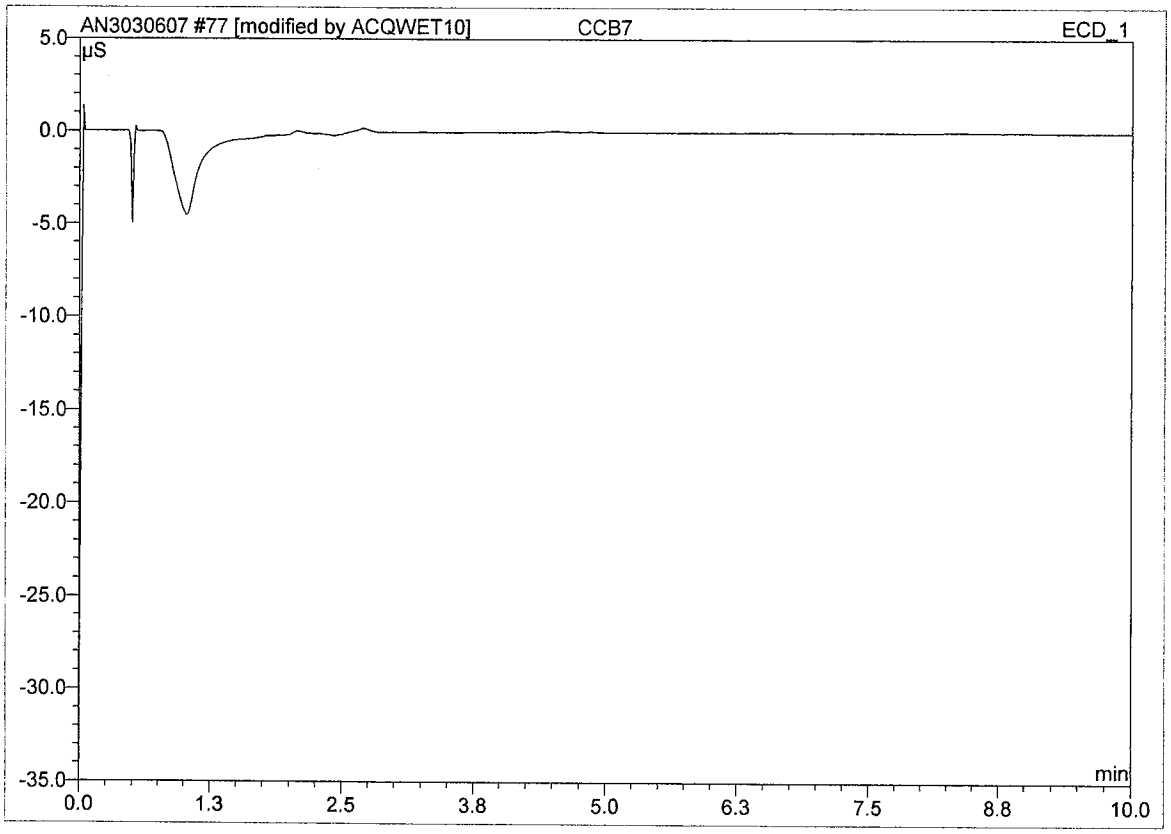
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

77 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**90**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 1:01**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

DKZ 3/8/07

After Initials JS

MAR 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☑ Other deleted NA Peak

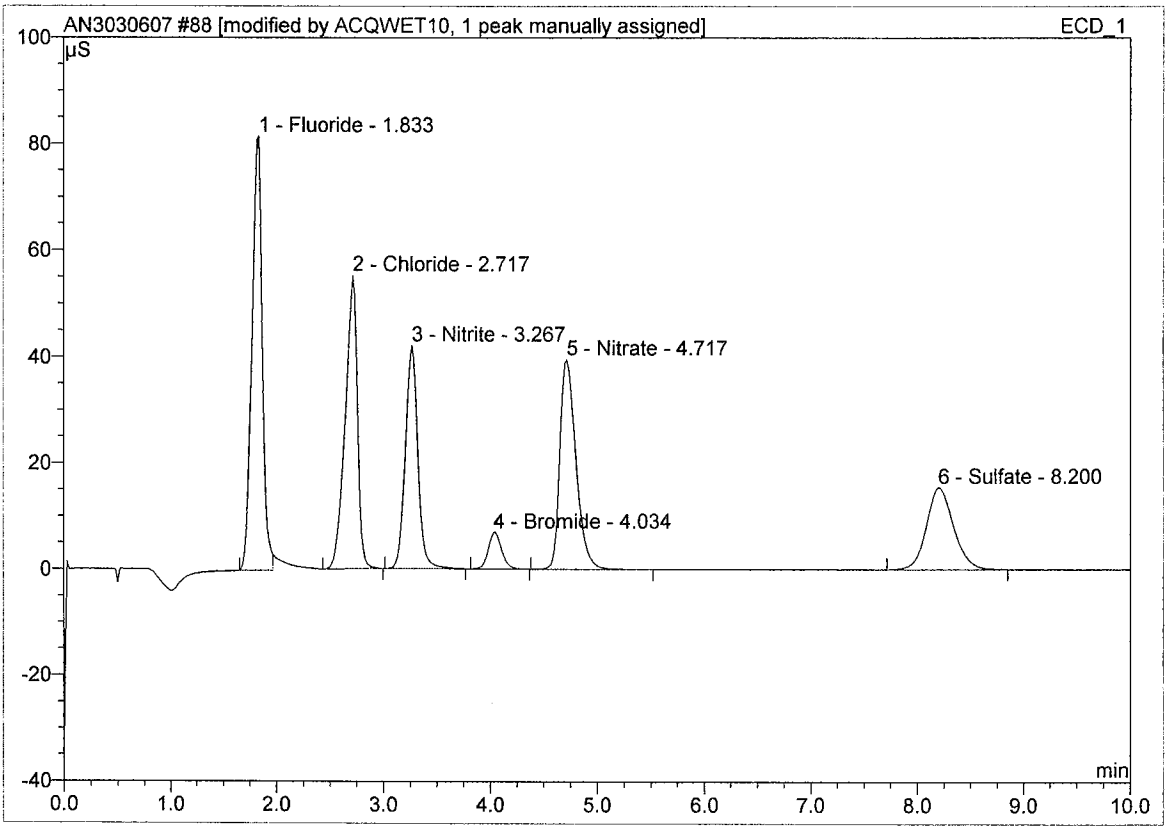
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

88 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**101**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 3:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	81.622	9.155	26.61	106% 5.258	BM *
2	2.72	Chloride	55.216	7.266	21.11	96% 4.842	BMB*
3	3.27	Nitrite	42.001	5.644	16.40	100% 2.041	BMB*
4	4.03	Bromide	6.875	0.998	2.90	95% 1.921	BMB*^
5	4.72	Nitrate	39.513	6.799	19.76	95% 1.922	BMB*
6	8.20	Sulfate	15.424	4.551	13.22	98% 4.945	BMB*
Total:			240.652	34.412	100.00	20.929	

After Initials JS

RAR 3/8/07

MAR 0 7 2007

default_letter/Integration

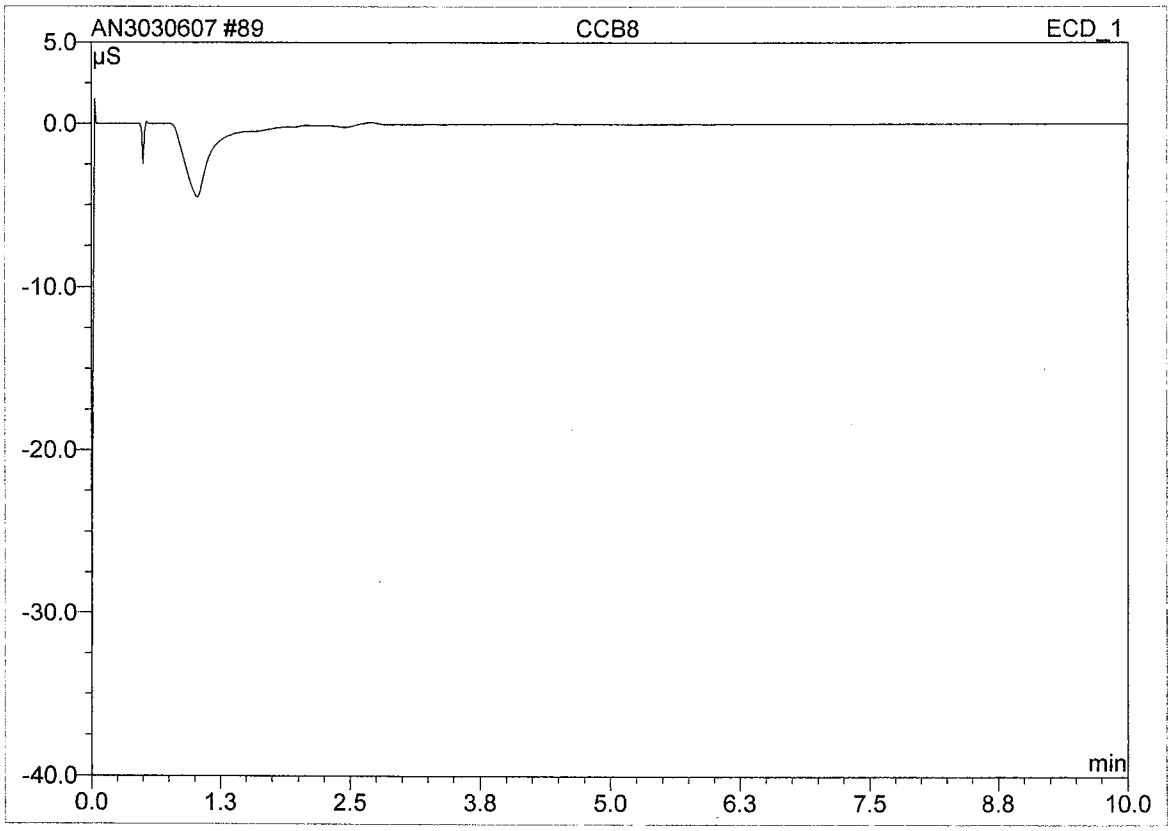
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

89 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**102**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 3:30**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



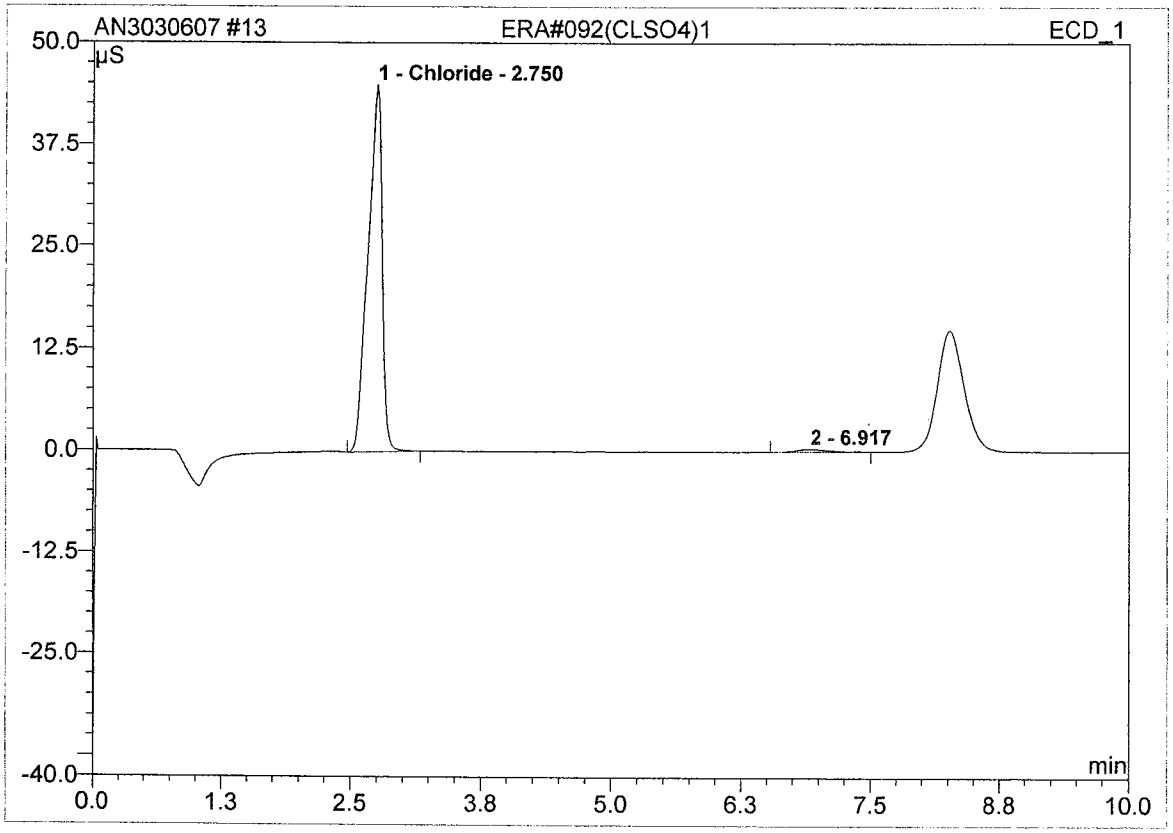
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

ldr 3/8/07

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:17**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	44.928	6.955	98.39	4.636	BMB
2	6.92	n.a.	0.325	0.114	1.61	n.a.	BMB
Total:			45.253	7.069	100.00	4.636	

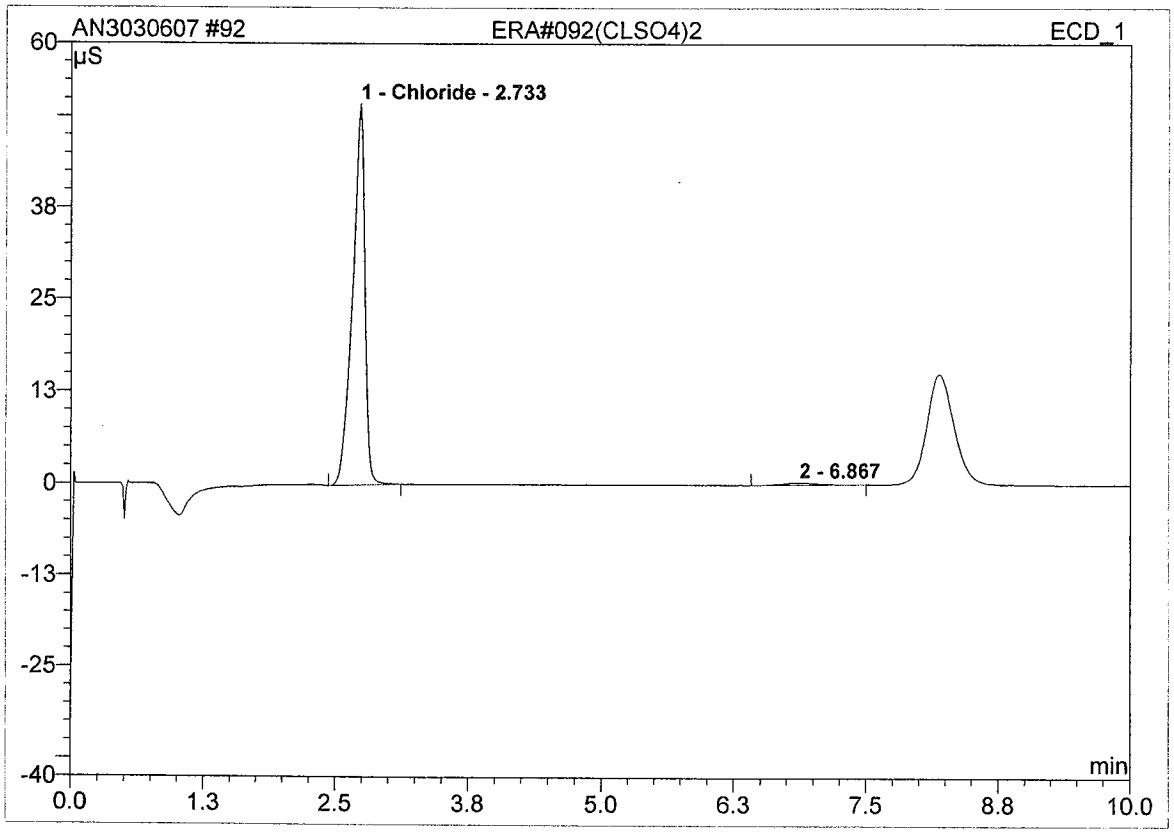
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

92 ERA#092(CLSO4)2

Sample Name:	**ERA#092(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 4:08**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.73	Chloride	51.902	7.004	98.36	4.668	BMB
2	6.87	n.a.	0.321	0.117	1.64	n.a.	BMB
Total:			52.223	7.120	100.00	4.668	

Before

MAR 0 7 2007

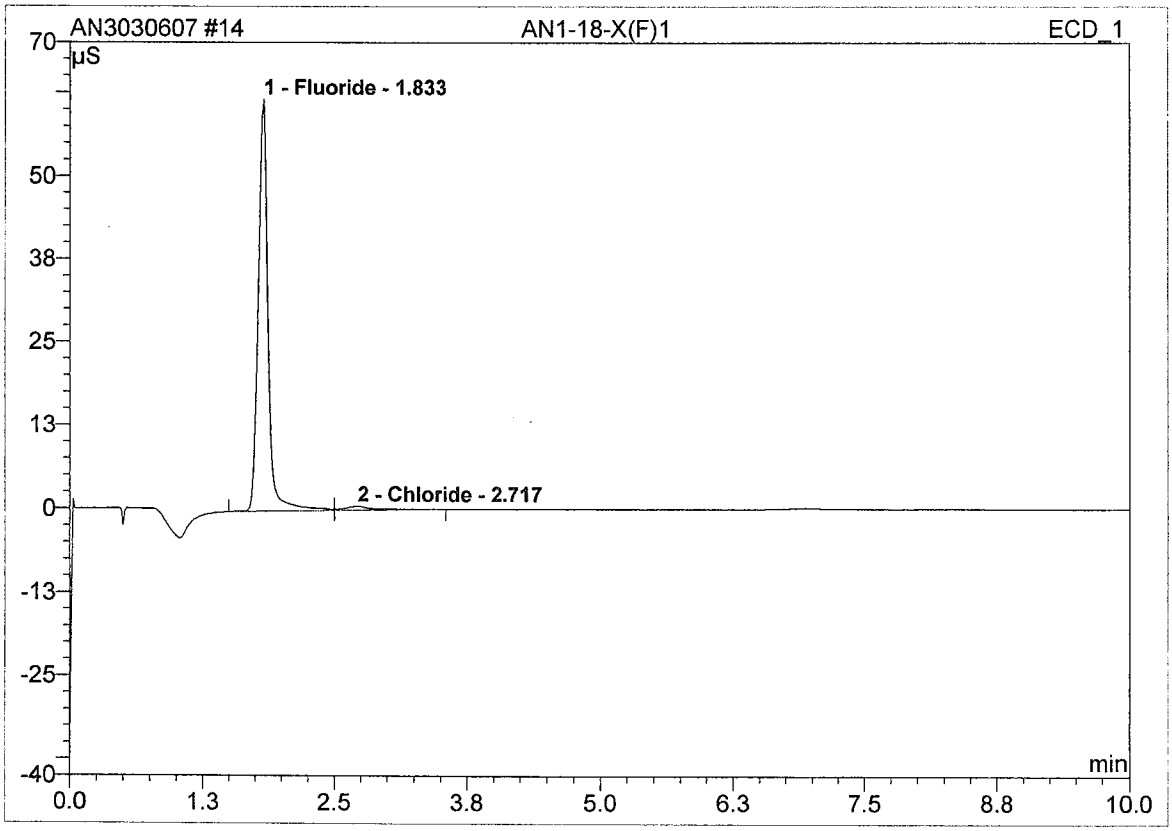
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/6/2007 10:30**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	61.857	6.612	97.11	18.985	BM
2	2.72	Chloride	0.604	0.197	2.89	0.656	MB
Total:			62.461	6.808	100.00	19.640	

Before

MAR 0 6 2007

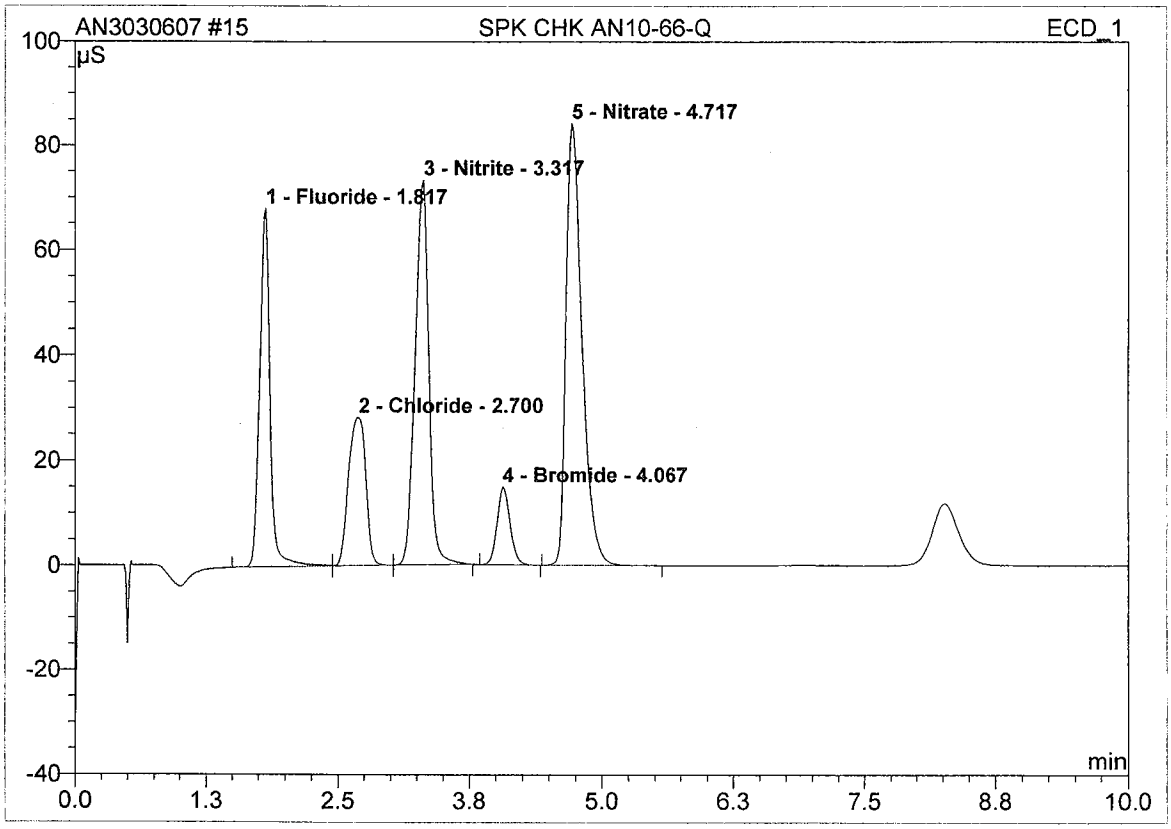
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-Q

Sample Name:	**SPK CHK AN10-66-Q**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:42**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	68.224	7.656	18.62	4.397	BM
2	2.70	Chloride	28.229	5.388	13.10	3.591	MB
3	3.32	Nitrite	73.213	11.095	26.98	4.012	bMB
4	4.07	Bromide	14.801	2.101	5.11	4.043	BMB
5	4.72	Nitrate	84.214	14.887	36.20	4.209	BMB
Total:			268.681	41.126	100.00	20.251	

Before

MAR 0 6 2007

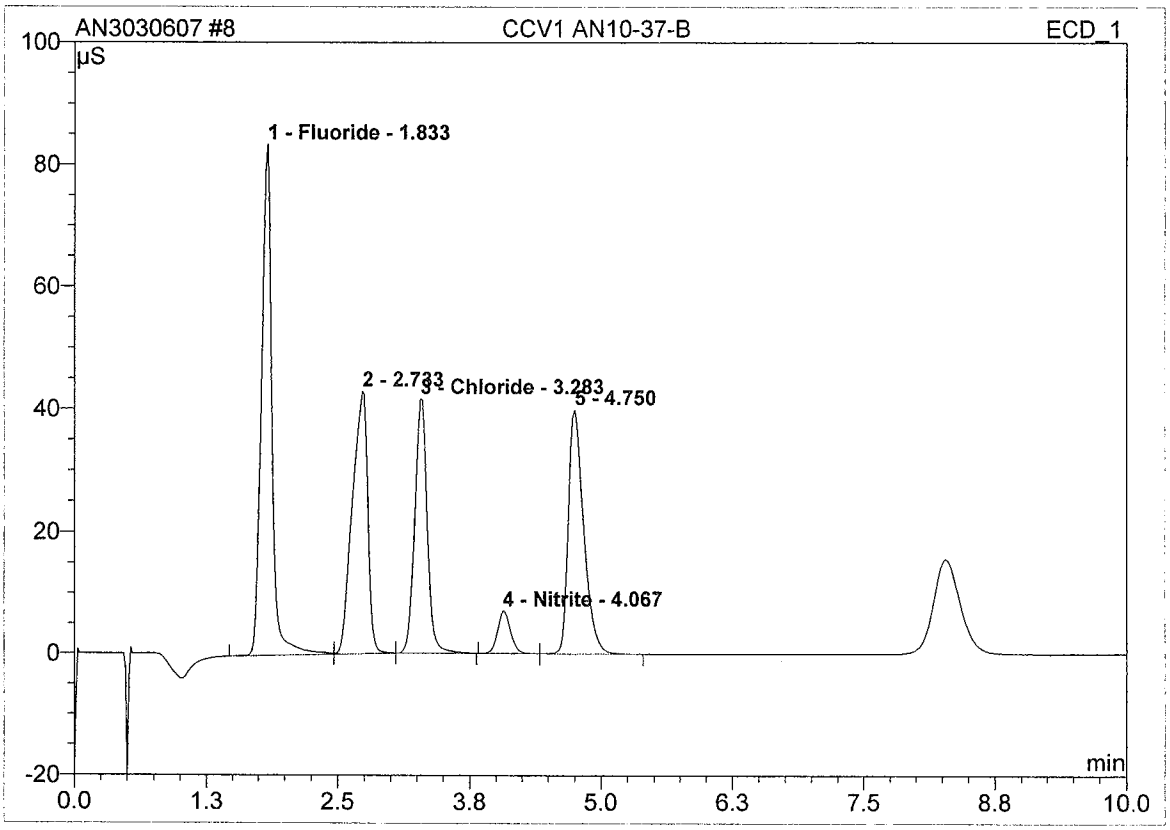
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

8 CCV1 AN10-37-B

Sample Name:	**CCV1 AN10-37-B**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 9:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	83.659	9.716	31.90	5.580	BM
2	2.73	n.a.	42.860	7.215	23.69	n.a.	Mb
3	3.28	Chloride	41.503	5.665	18.60	3.776	bMB
4	4.07	Nitrite	7.031	1.017	3.34	0.368	BMb
5	4.75	n.a.	39.849	6.841	22.46	n.a.	bMB
Total:			214.902	30.454	100.00	9.723	

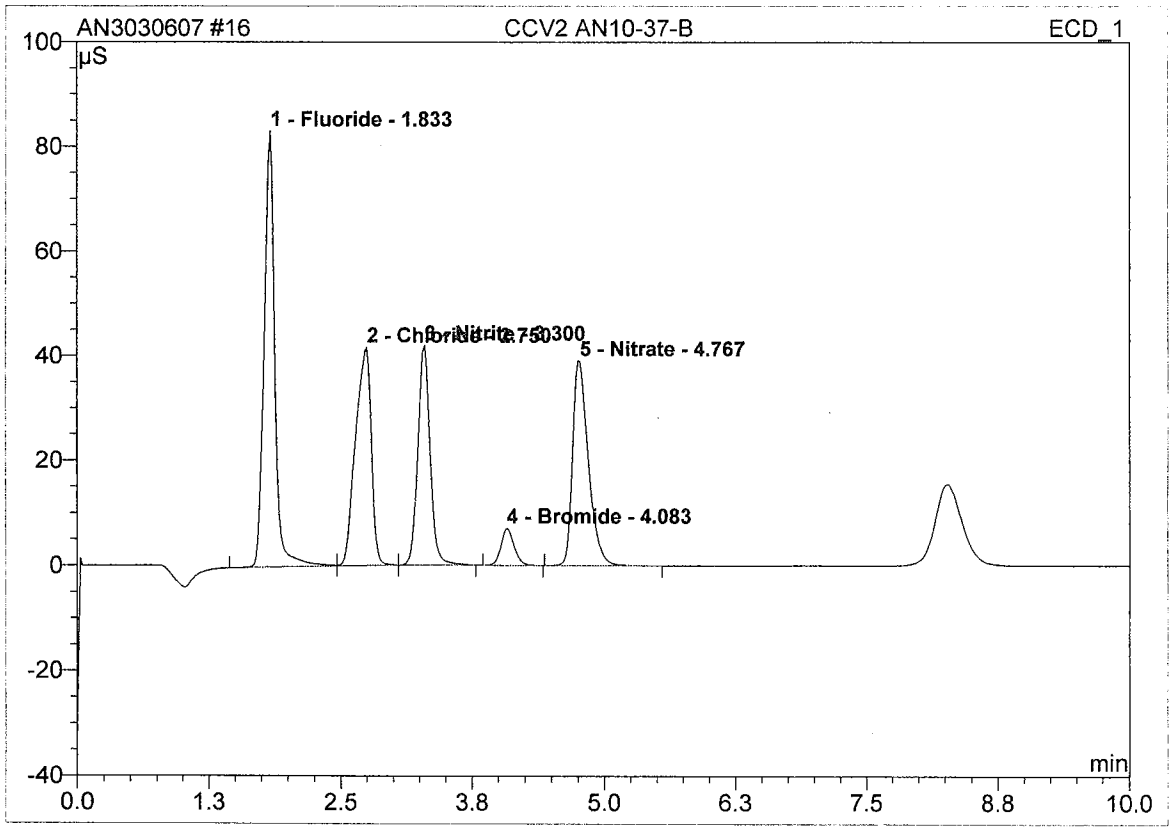
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

16 CCV2 AN10-37-B

Sample Name:	**CCV2 AN10-37-B**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 10:55**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	83.285	9.642	31.85	5.537	BM
2	2.75	Chloride	41.616	7.169	23.68	4.778	Mb
3	3.30	Nitrite	41.930	5.660	18.70	2.046	bMB
4	4.08	Bromide	6.976	1.006	3.32	1.936	BMB
5	4.77	Nitrate	39.006	6.795	22.45	1.921	BMB
Total:			212.813	30.272	100.00	16.219	

Before

MAR 0 6 2007

After
Initials JS 3/6/07

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

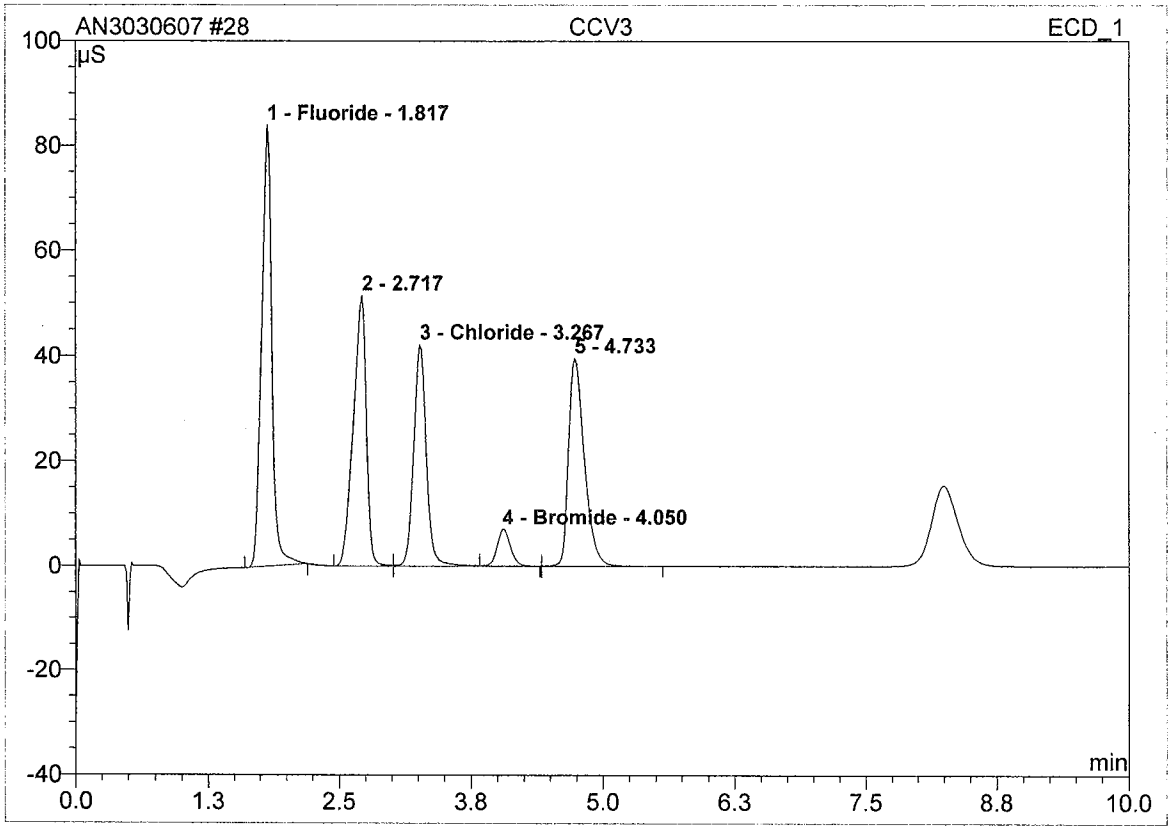
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 13:24**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	84.043	9.404	30.93	5.401	BMB
2	2.72	n.a.	51.436	7.315	24.06	n.a.	BM
3	3.27	Chloride	42.171	5.812	19.12	3.874	M
4	4.05	Bromide	6.956	1.007	3.31	1.938	Rd
5	4.73	n.a.	39.586	6.864	22.58	n.a.	MB
Total:			224.192	30.402	100.00	11.212	

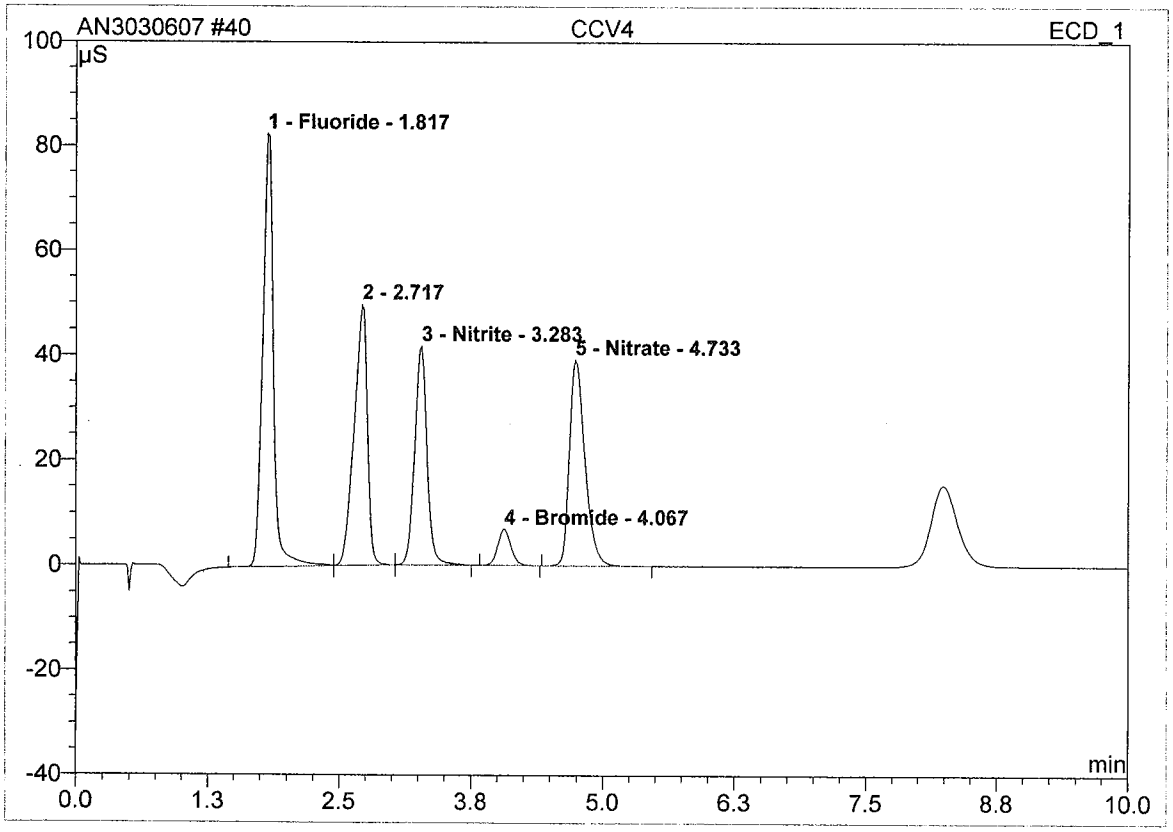
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 17:20**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	82.629	9.718	31.96	5.581	BM
2	2.72	n.a.	49.707	7.255	23.86	n.a.	Mb
3	3.28	Nitrite	41.722	5.647	18.57	2.042	bMB
4	4.07	Bromide	6.877	0.995	3.27	1.915	BMB
5	4.73	Nitrate	39.258	6.792	22.34	1.920	BMB
Total:			220.193	30.407	100.00	11.458	

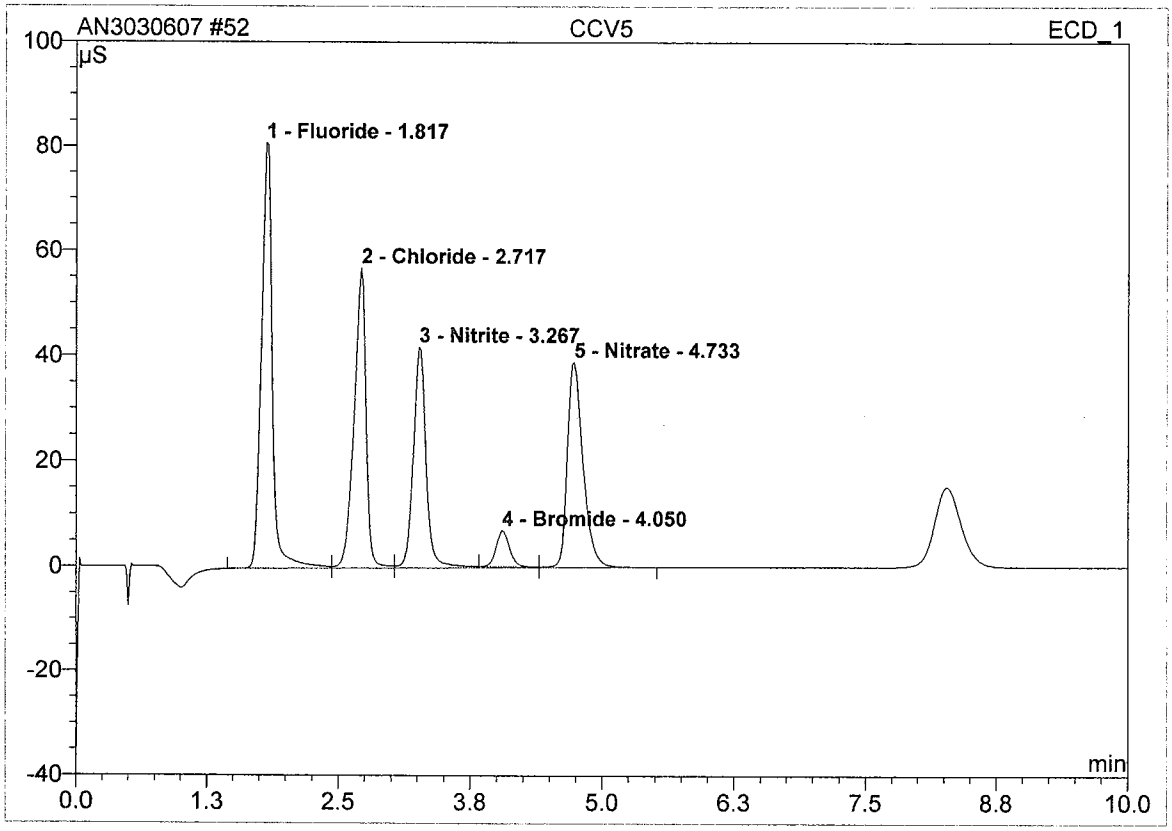
Before

MAR 0 7 2007

Columbia Analytical Services, Inc.

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 19:49**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	81.032	9.634	31.15	5.533	BM
2	2.72	Chloride	56.952	7.458	24.12	4.971	M
3	3.27	Nitrite	41.857	6.015	19.45	2.175	M
4	4.05	Bromide	6.858	0.988	3.19	1.901	Rd
5	4.73	Nitrate	38.891	6.828	22.08	1.931	MB
Total:			225.590	30.923	100.00	16.510	

Before

MAR 0 7 2007

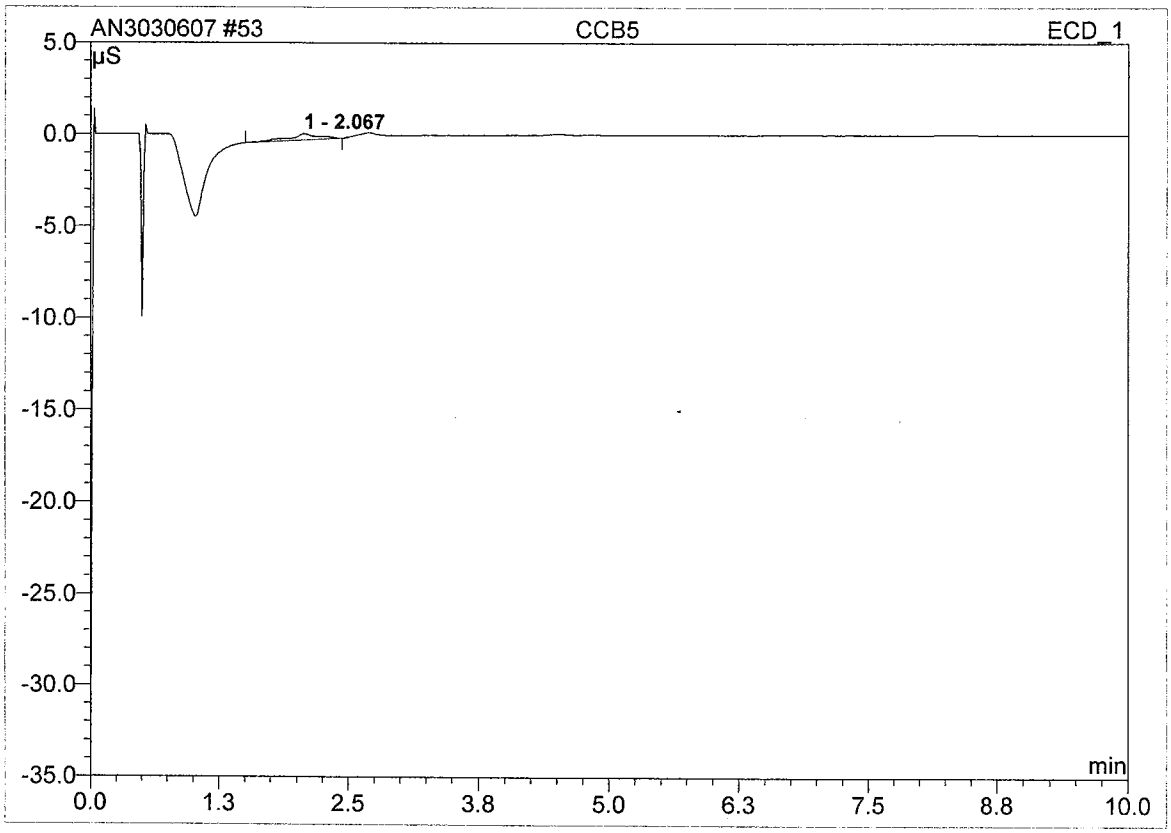
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

53 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**66**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 20:02**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.07	n.a.	0.341	0.110	100.00	n.a.	BMB
Total:			0.341	0.110	100.00	0.000	

Before

MAR 0 7 2007

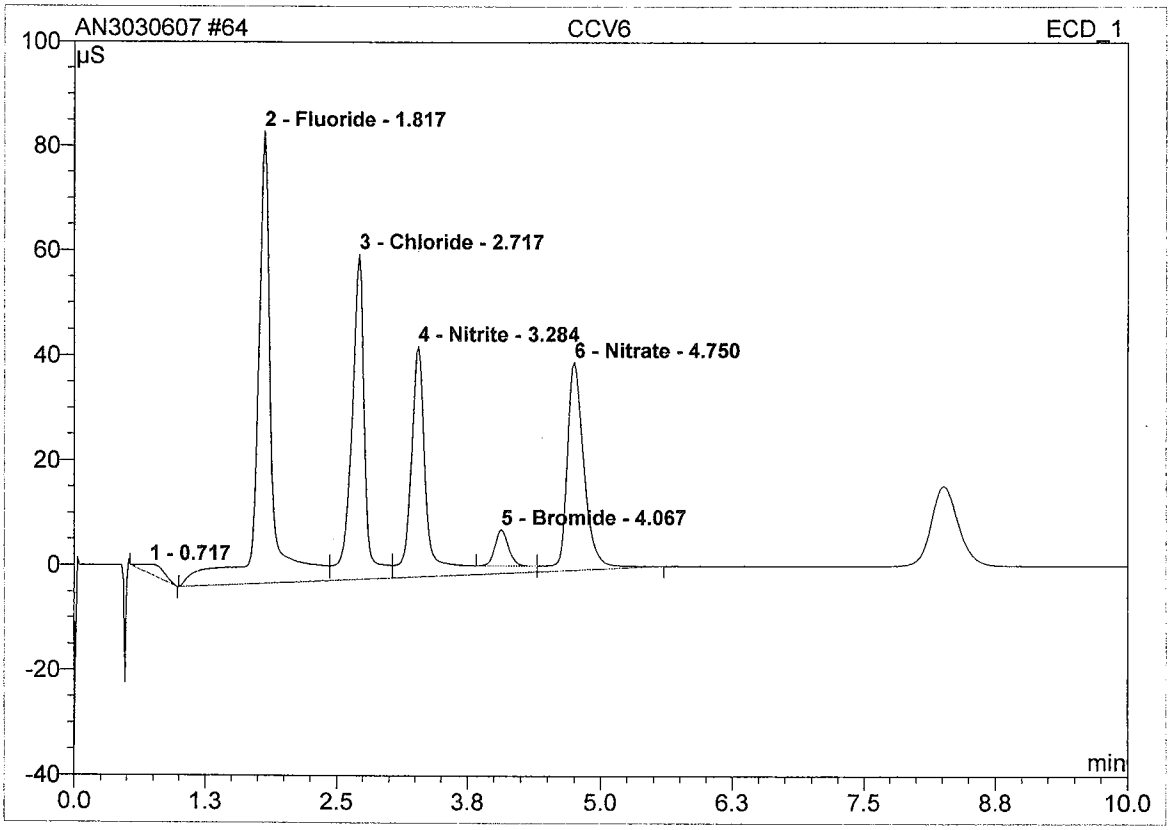
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**77**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/6/2007 22:19**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	0.72	n.a.	1.669	0.494	1.25	n.a.	BMB
2	1.82	Fluoride	86.253	13.729	34.60	7.884	BM
3	2.72	Chloride	61.946	8.928	22.50	5.950	M
4	3.28	Nitrite	43.918	8.059	20.31	2.914	M
5	4.07	Bromide	6.863	0.996	2.51	1.917	Rd
6	4.75	Nitrate	39.600	7.472	18.83	2.113	MB
Total:			240.247	39.678	100.00	20.778	

Before

default_letter/Integration

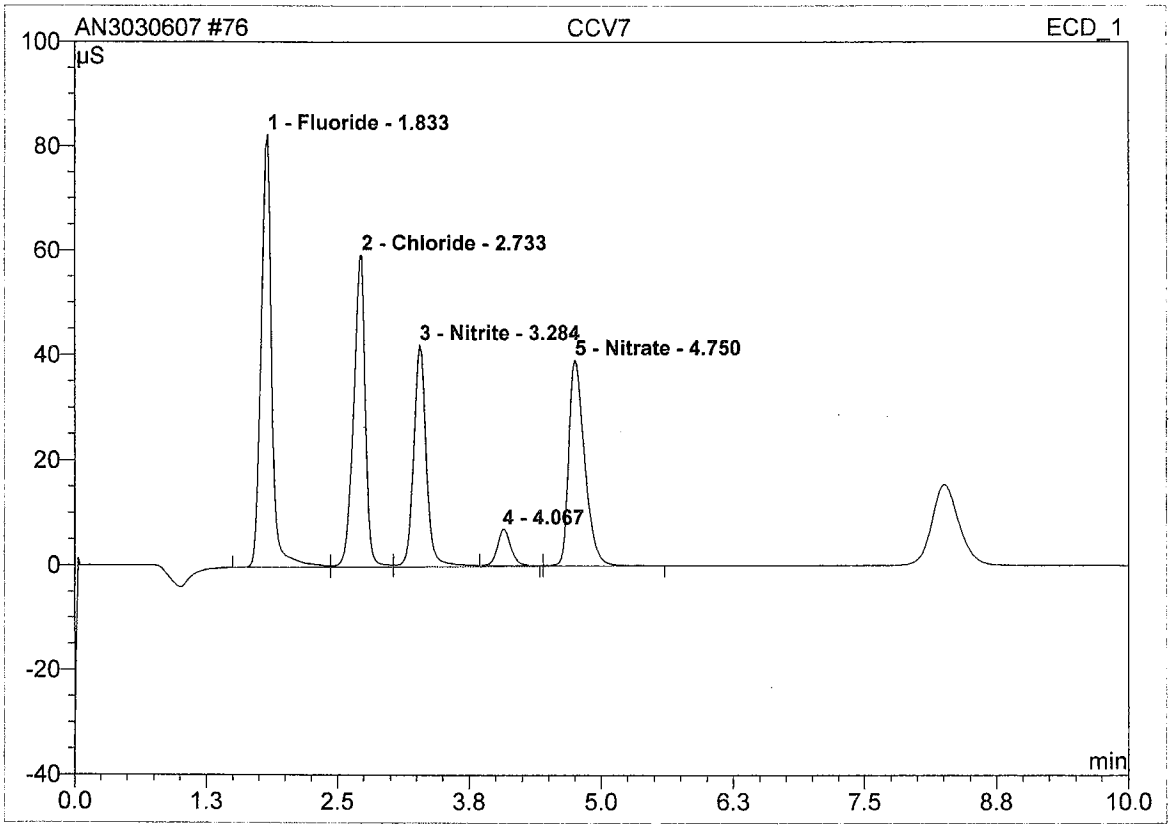
MAR 0 7 2007

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

76 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**89**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 0:48**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	82.685	9.707	31.14	5.575	BM
2	2.73	Chloride	59.484	7.575	24.30	5.048	M
3	3.28	Nitrite	42.194	6.024	19.33	2.178	M
4	4.07	n.a.	6.839	0.997	3.20	n.a.	Rd
5	4.75	Nitrate	39.202	6.867	22.03	1.942	MB
Total:			230.403	31.169	100.00	14.742	

Before

MAR 0 7 2007

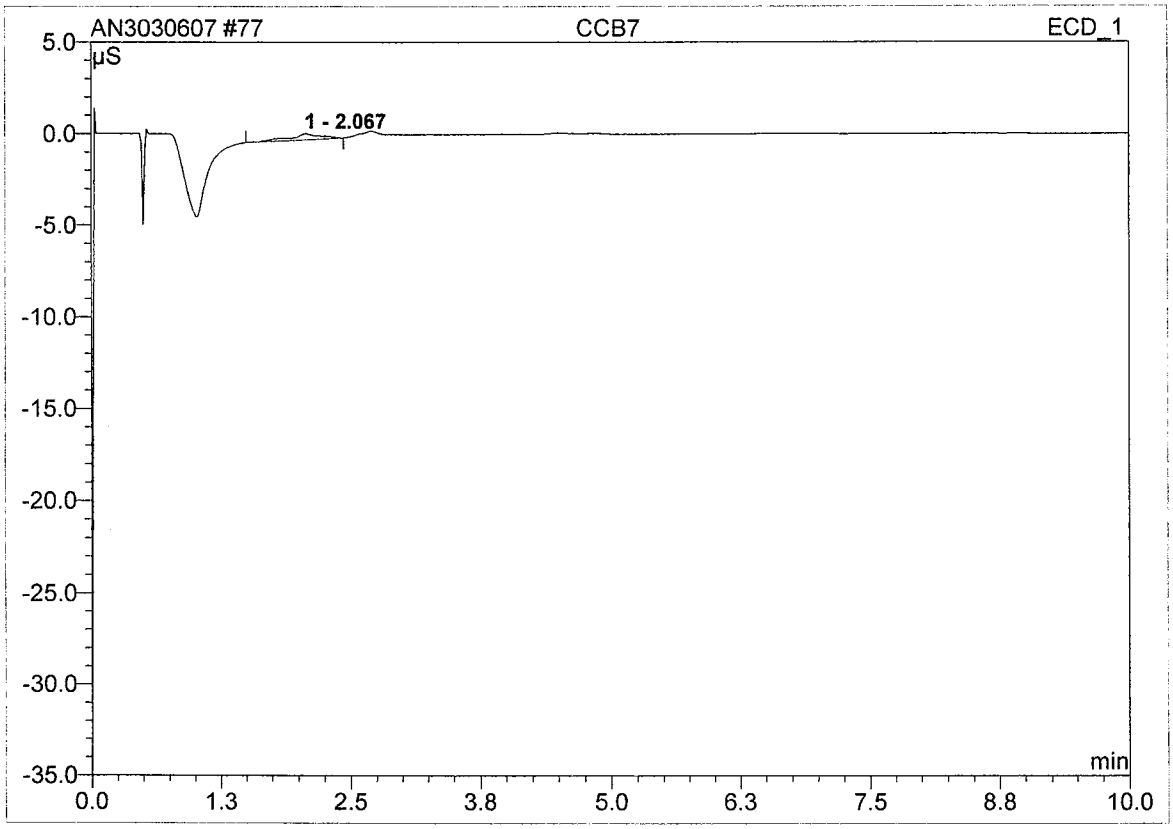
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

77 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**90**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 1:01**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.07	n.a.	0.339	0.115	100.00	n.a.	BMB
Total:			0.339	0.115	100.00	0.000	

Before

MAR 0 7 2007

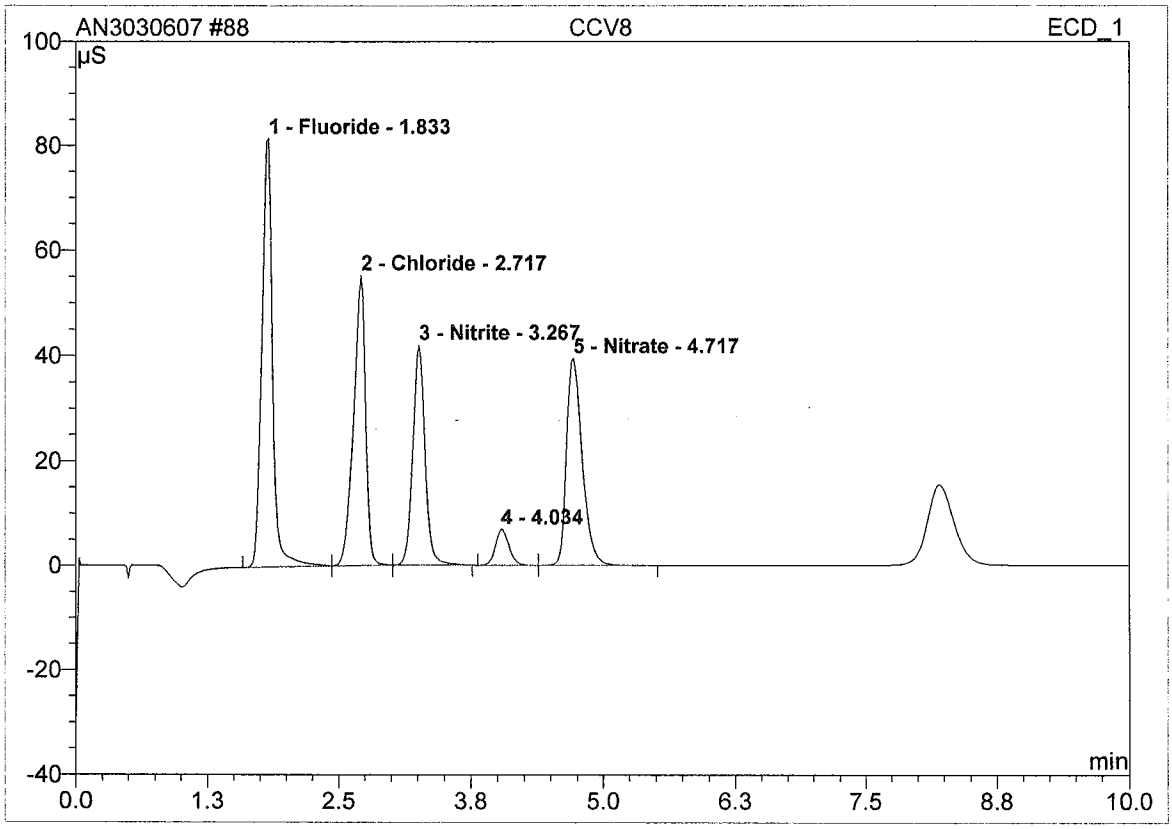
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

88 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**101**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/7/2007 3:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	81.688	9.594	31.64	5.509	BM
2	2.72	Chloride	55.249	7.284	24.03	4.855	Mb
3	3.27	Nitrite	42.001	5.644	18.62	2.041	bMB
4	4.03	n.a.	6.875	0.998	3.29	n.a.	BMb
5	4.72	Nitrate	39.513	6.799	22.42	1.922	bMB
Total:			225.326	30.318	100.00	14.327	

Before

MAR 0 7 2007

default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-85-A

Sequence: AN3012207 **Date: 01/22/07**

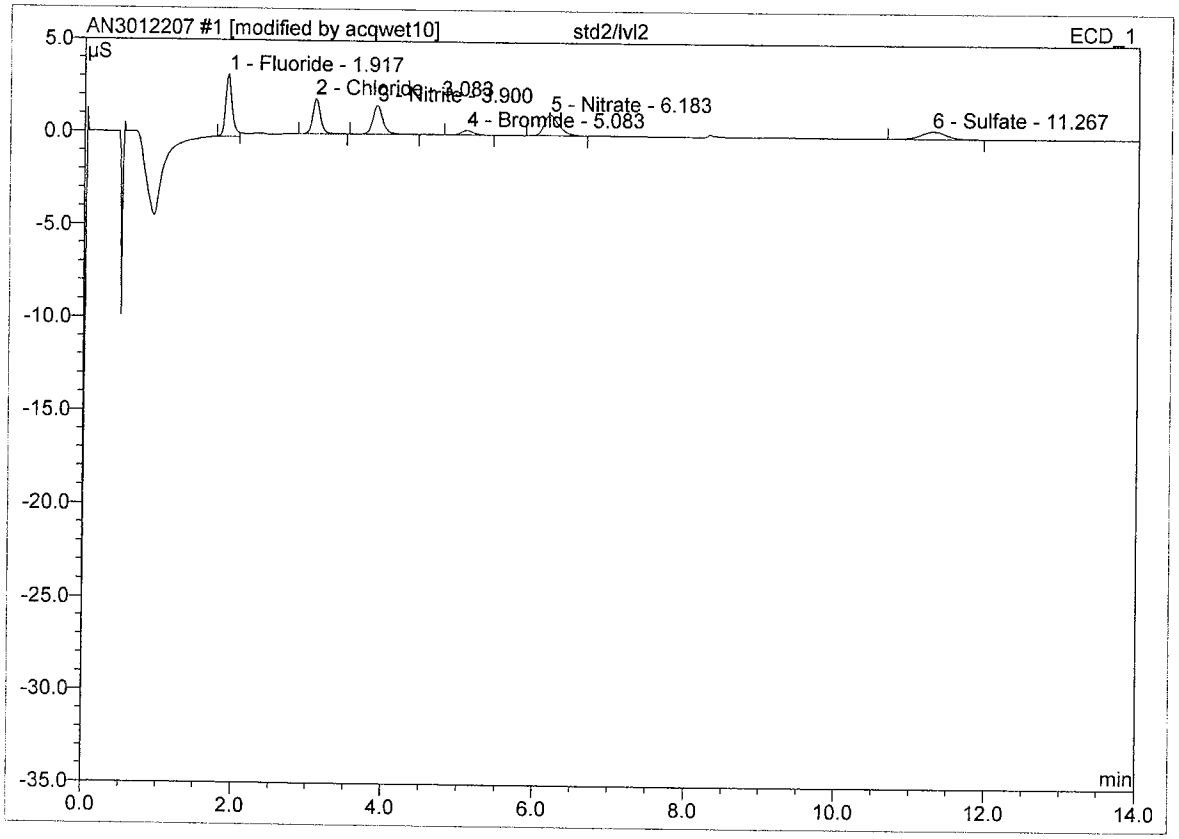
Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9777	1.7441
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9577	1.5000
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9950	2.7656
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9220	0.5197
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8492	3.5368
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9540	0.9202

All calibration standard concentrations are in mg/L unless otherwise noted.

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.335	0.329	26.26	0.189	BM *
2	3.08	Chloride	1.891	0.226	18.02	0.151	BMB*
3	3.90	Nitrite	1.545	0.238	19.01	0.086	BMB*
4	5.08	Bromide	0.242	0.046	3.63	0.088	BMB*
5	6.18	Nitrate	1.101	0.258	20.55	0.073	BMB
6	11.27	Sulfate	0.402	0.157	12.52	0.171	BMB
Total:			8.515	1.253	100.00	0.756	

After Initials BM

JAN 2 3 2007

01/26/07

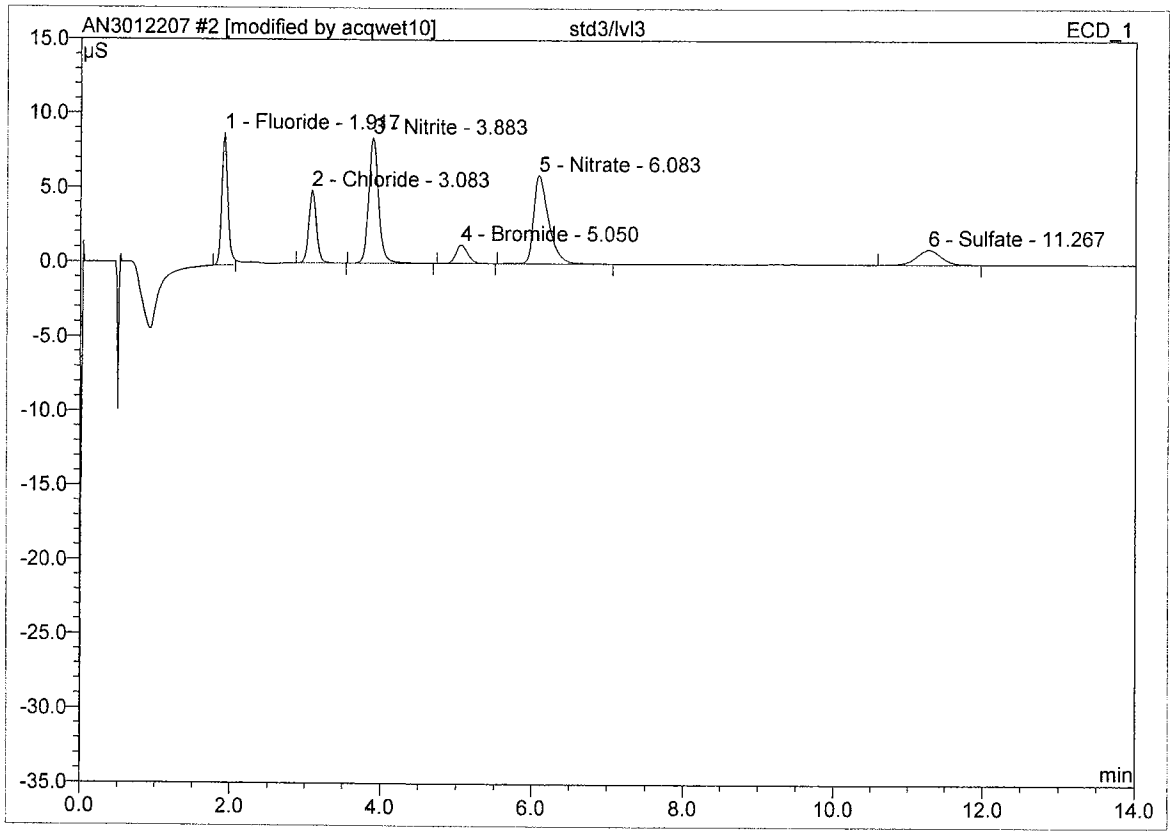
default_letter/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 119

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.892	0.838	17.98	0.480	BM *
2	3.08	Chloride	4.882	0.570	12.23	0.380	BMB*
3	3.88	Nitrite	8.409	1.254	26.92	0.454	BMB*
4	5.05	Bromide	1.245	0.229	4.91	0.440	BMB*
5	6.08	Nitrate	5.914	1.374	29.48	0.388	BMB*
6	11.27	Sulfate	1.009	0.396	8.49	0.430	BMB
Total:			30.349	4.660	100.00	2.572	

After
Initials BM

JAN 2 3 2007

BM 1/26/07

default_letter/Integration

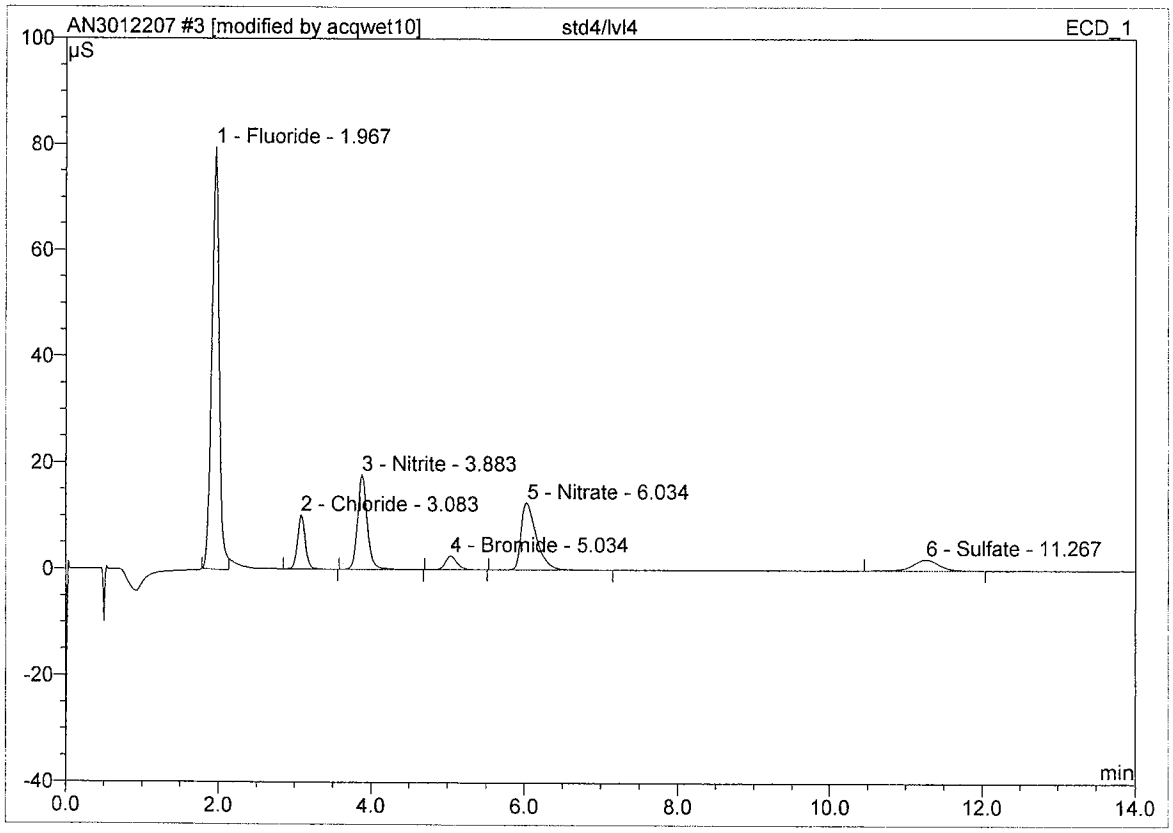
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 120

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.616	8.962	53.03	5.139	BM *
2	3.08	Chloride	10.128	1.166	6.90	0.777	BMB*
3	3.88	Nitrite	17.784	2.613	15.46	0.945	BMB*
4	5.03	Bromide	2.578	0.466	2.76	0.897	BMB*
5	6.03	Nitrate	12.589	2.891	17.10	0.817	BMB*
6	11.27	Sulfate	2.053	0.803	4.75	0.873	BMB
Total:			124.747	16.901	100.00	9.448	

After Initials TM

JAN 23 2007

1/26/07

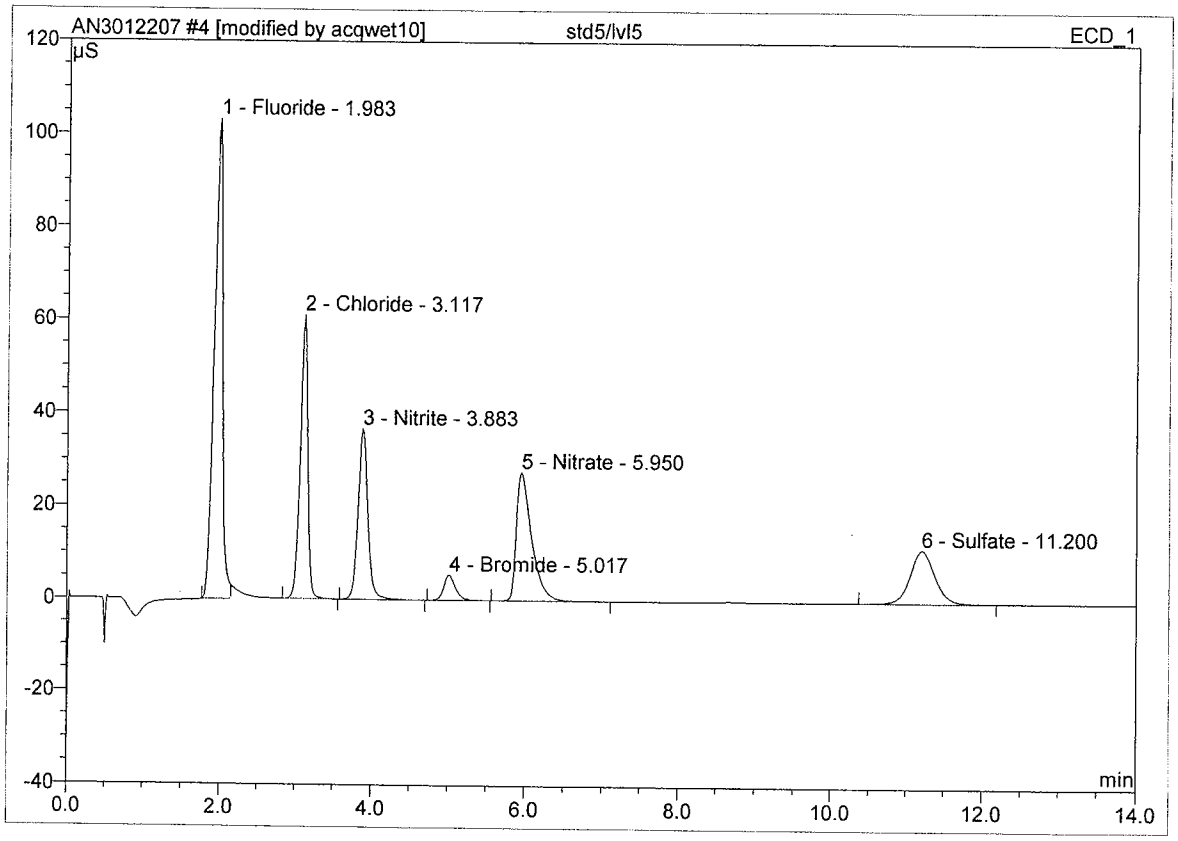
default_letter/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 121

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.196	13.173	35.29	7.553	BM *
2	3.12	Chloride	61.012	7.119	19.07	4.746	BMB*
3	3.88	Nitrite	36.628	5.460	14.63	1.974	BMB*
4	5.02	Bromide	5.419	0.955	2.56	1.838	BMB*
5	5.95	Nitrate	27.578	6.278	16.82	1.775	BMB*
6	11.20	Sulfate	11.462	4.347	11.64	4.724	BMB
Total:			245.295	37.332	100.00	22.610	

After Initials EM

01/26/07

JAN 2 3 2007

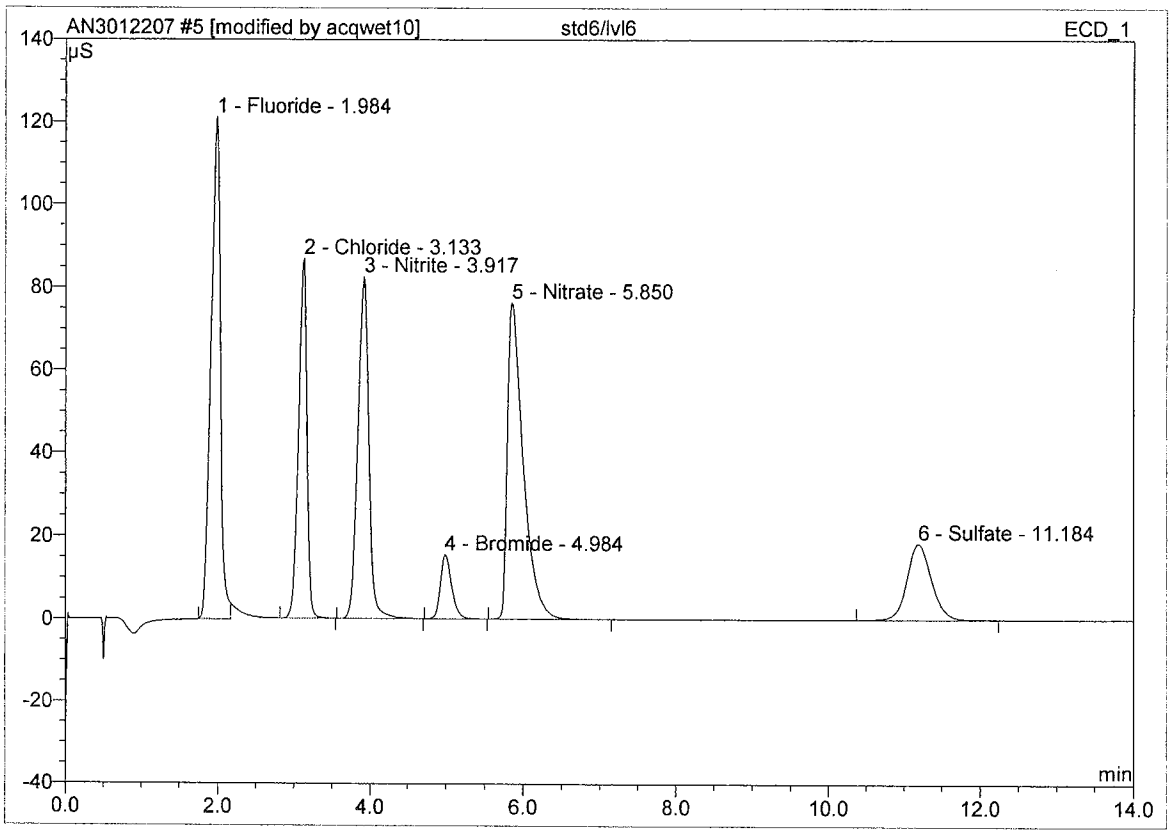
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other L22

default_letter/Integration

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.268	17.253	24.62	9.892	BM *
2	3.13	Chloride	86.820	11.203	15.99	7.469	BMB*
3	3.92	Nitrite	82.496	13.901	19.84	5.026	BMB*
4	4.98	Bromide	15.460	2.646	3.78	5.092	BMB*
5	5.85	Nitrate	76.285	18.173	25.94	5.138	BMB*
6	11.18	Sulfate	18.331	6.892	9.84	7.489	BMB
Total:			400.660	70.068	100.00	40.107	

After
Initials BM

JAN 23 2007

BM 1/26/07

default_letter/Integration

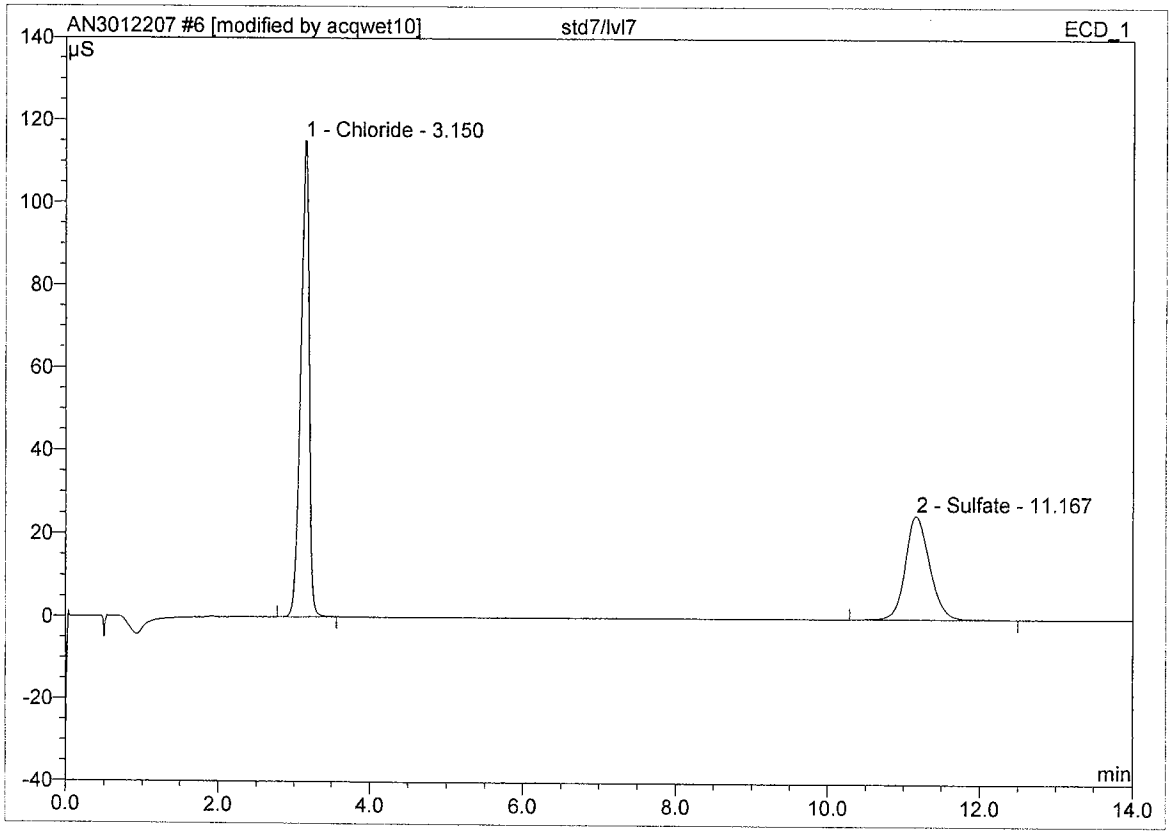
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.038	15.269	62.02	10.179	BMB*
2	11.17	Sulfate	24.940	9.352	37.98	10.163	BMB
Total:			139.978	24.621	100.00	20.342	

After Initials TM 01/26/07

JAN 2 3 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

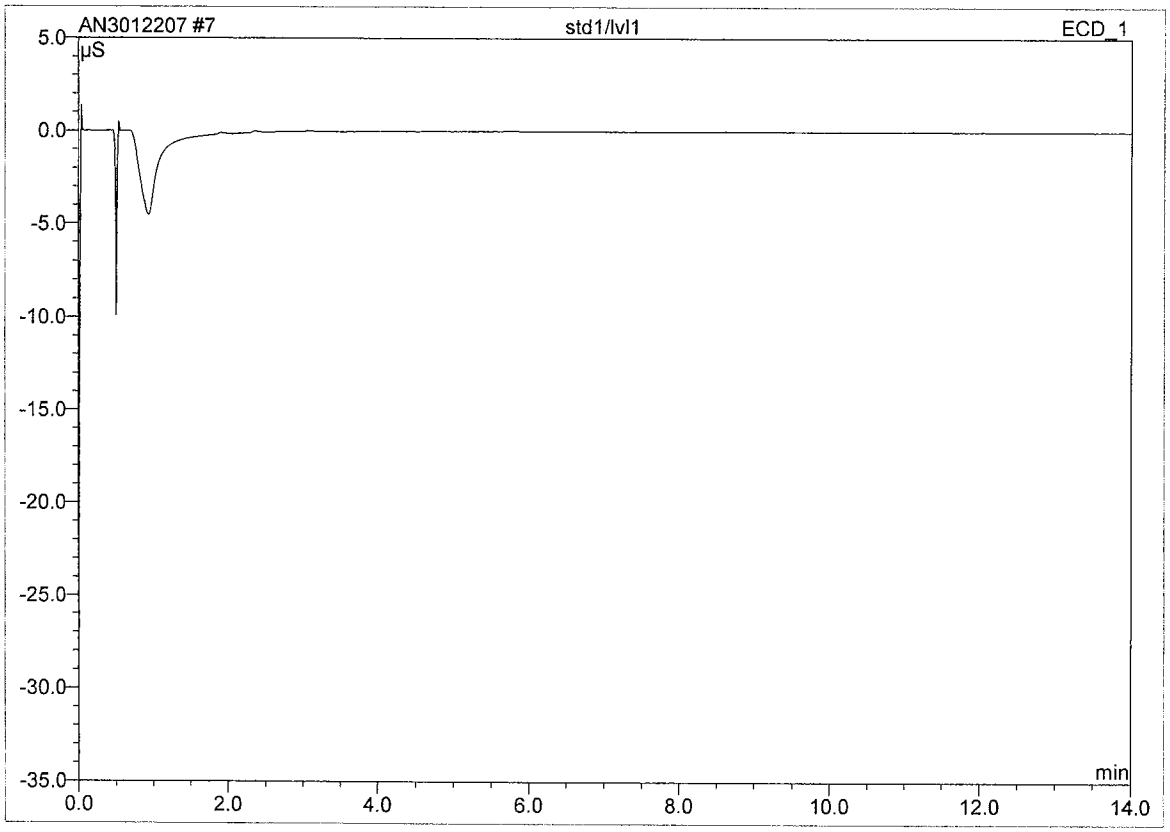
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:47**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



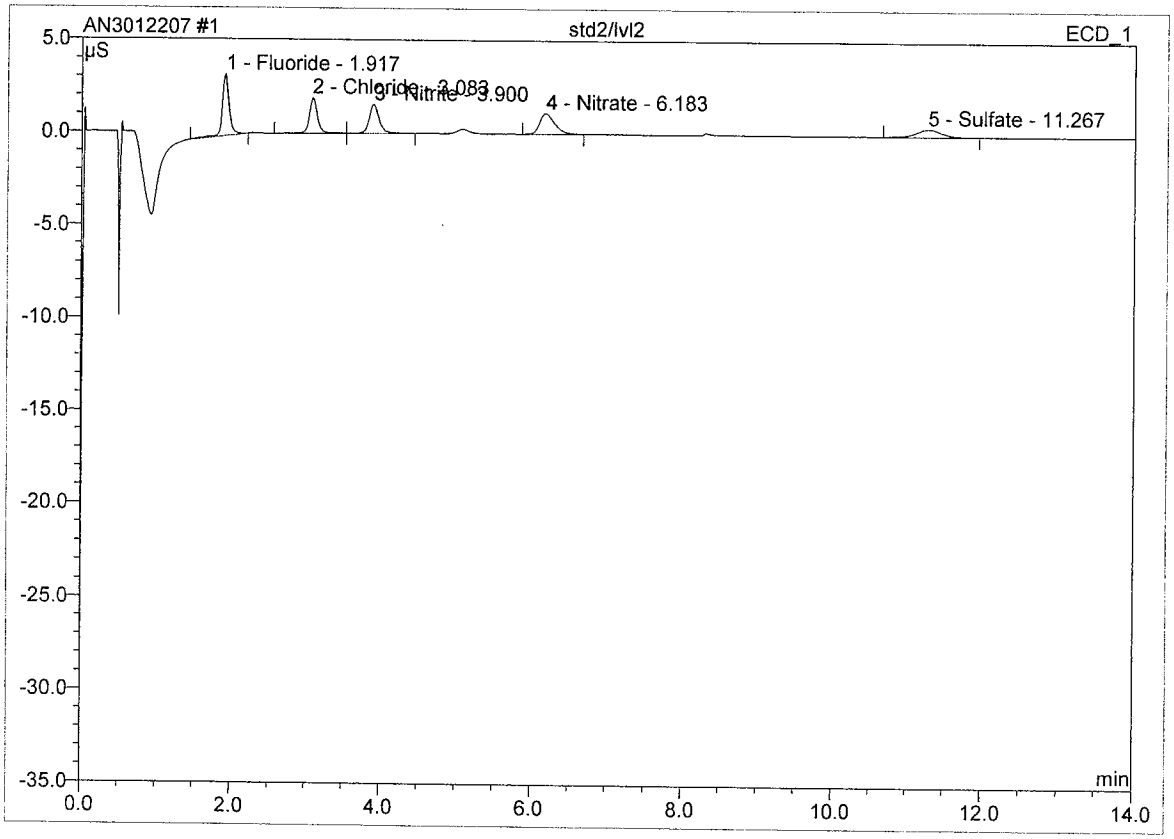
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

BH 1/26/07

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.312	0.338	26.94	0.194	BMB
2	3.08	Chloride	1.924	0.253	20.19	0.169	BM
3	3.90	Nitrite	1.558	0.249	19.83	0.090	MB
4	6.18	Nitrate	1.101	0.258	20.53	0.073	BMB
5	11.27	Sulfate	0.402	0.157	12.51	0.171	BMB
Total:			8.297	1.254	100.00	0.696	

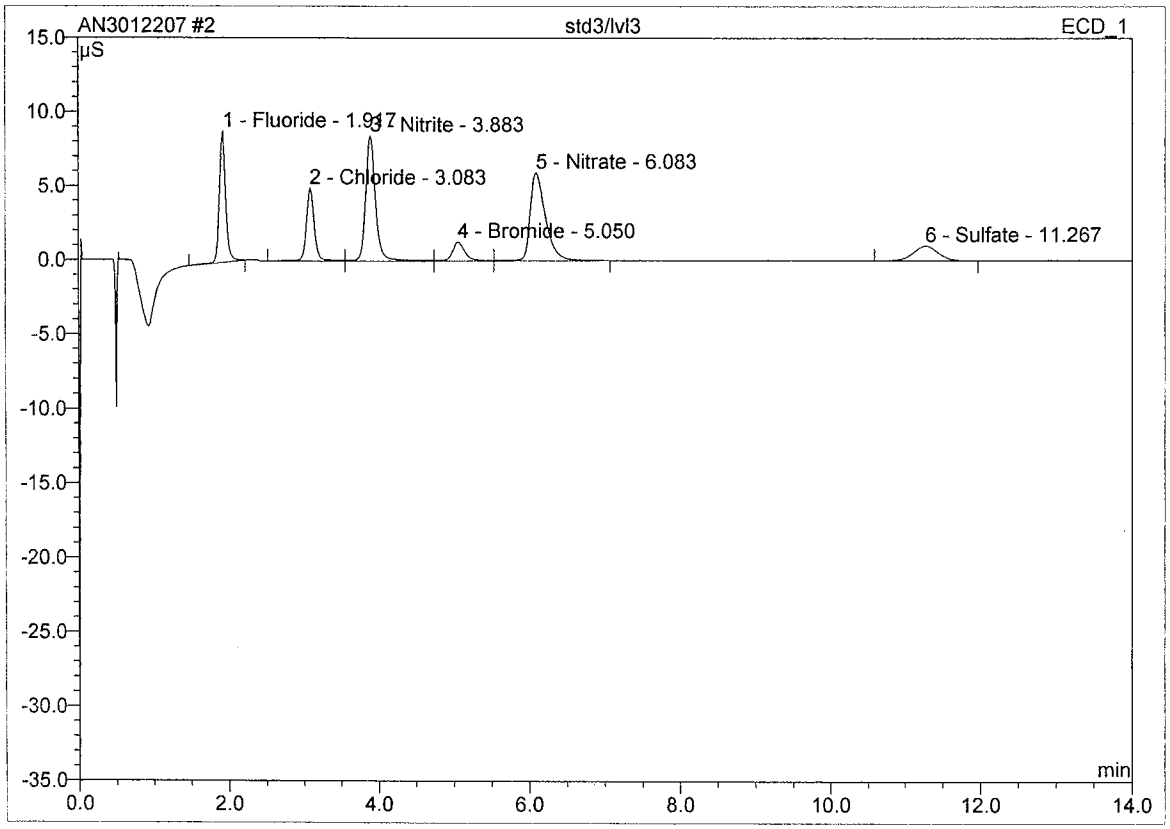
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.842	0.838	17.49	0.481	BMB
2	3.08	Chloride	4.926	0.607	12.67	0.405	BM
3	3.88	Nitrite	8.448	1.300	27.14	0.470	M
4	5.05	Bromide	1.278	0.255	5.32	0.490	M
5	6.08	Nitrate	5.932	1.395	29.12	0.394	MB
6	11.27	Sulfate	1.009	0.396	8.26	0.430	BMB
Total:			30.434	4.792	100.00	2.670	

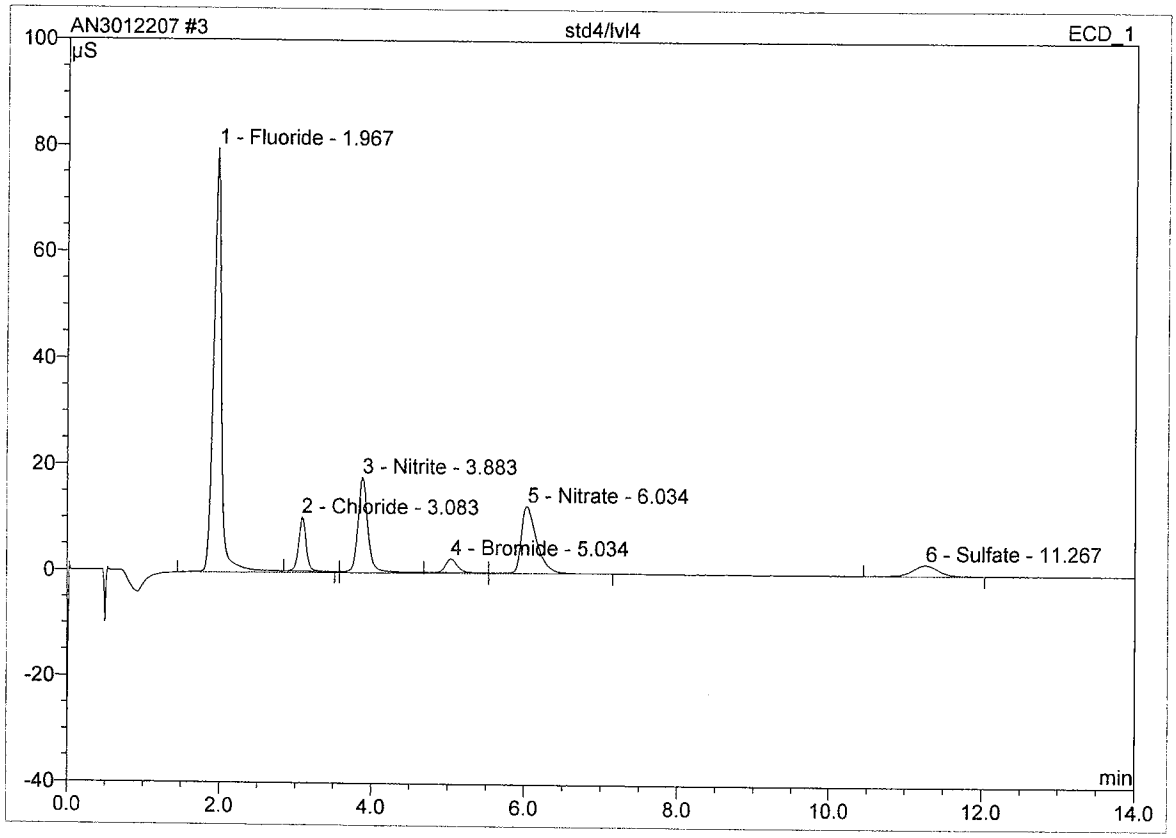
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.838	9.798	53.87	5.545	BM
2	3.08	Chloride	10.128	1.166	6.41	0.777	Rd
3	3.88	Nitrite	18.016	2.972	16.34	1.070	M
4	5.03	Bromide	2.578	0.467	2.57	0.898	Rd
5	6.03	Nitrate	12.669	2.984	16.41	0.843	MB
6	11.27	Sulfate	2.053	0.803	4.42	0.873	BMB
Total:			125.281	18.189	100.00	10.006	

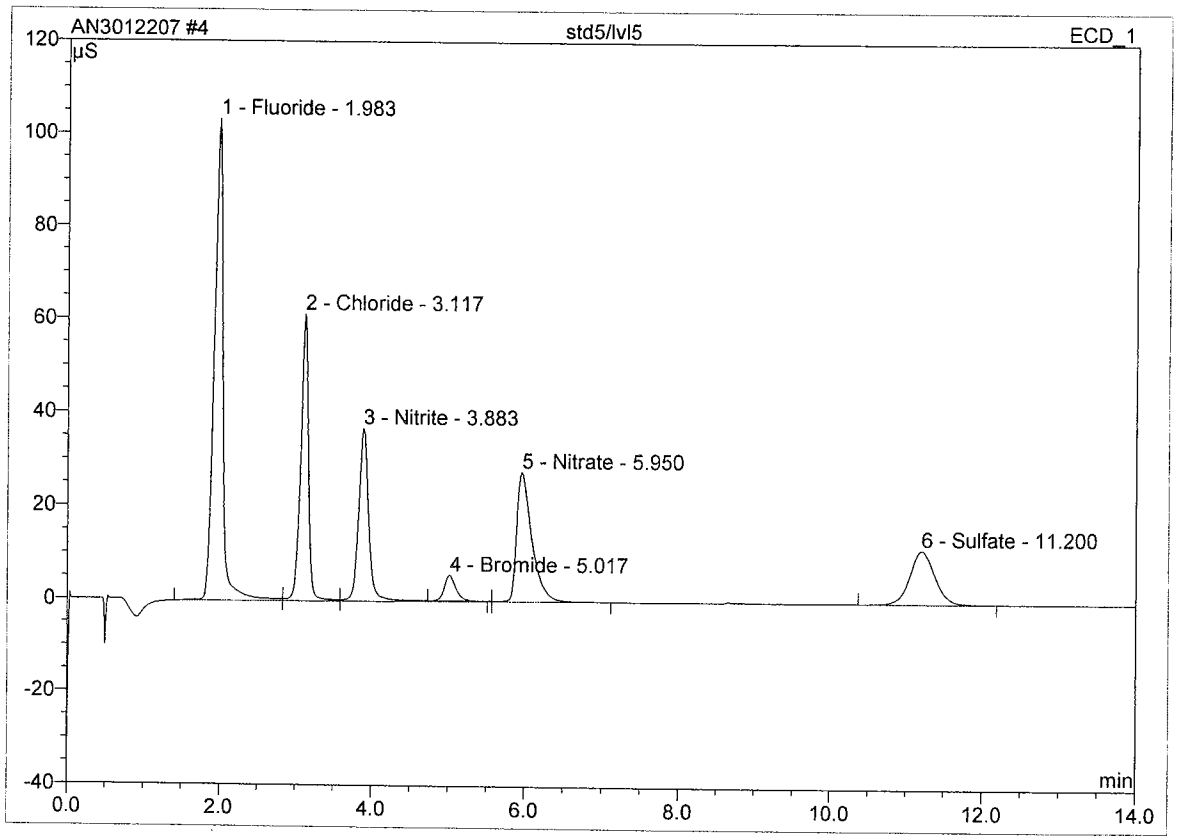
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.493	14.021	35.96	7.881	BM
2	3.12	Chloride	61.387	7.391	18.96	4.903	M
3	3.88	Nitrite	36.911	5.893	15.12	2.109	M
4	5.02	Bromide	5.419	0.955	2.45	1.838	Rd
5	5.95	Nitrate	27.675	6.378	16.36	1.800	MB
6	11.20	Sulfate	11.462	4.347	11.15	4.724	BMB
Total:			246.347	38.985	100.00	23.255	

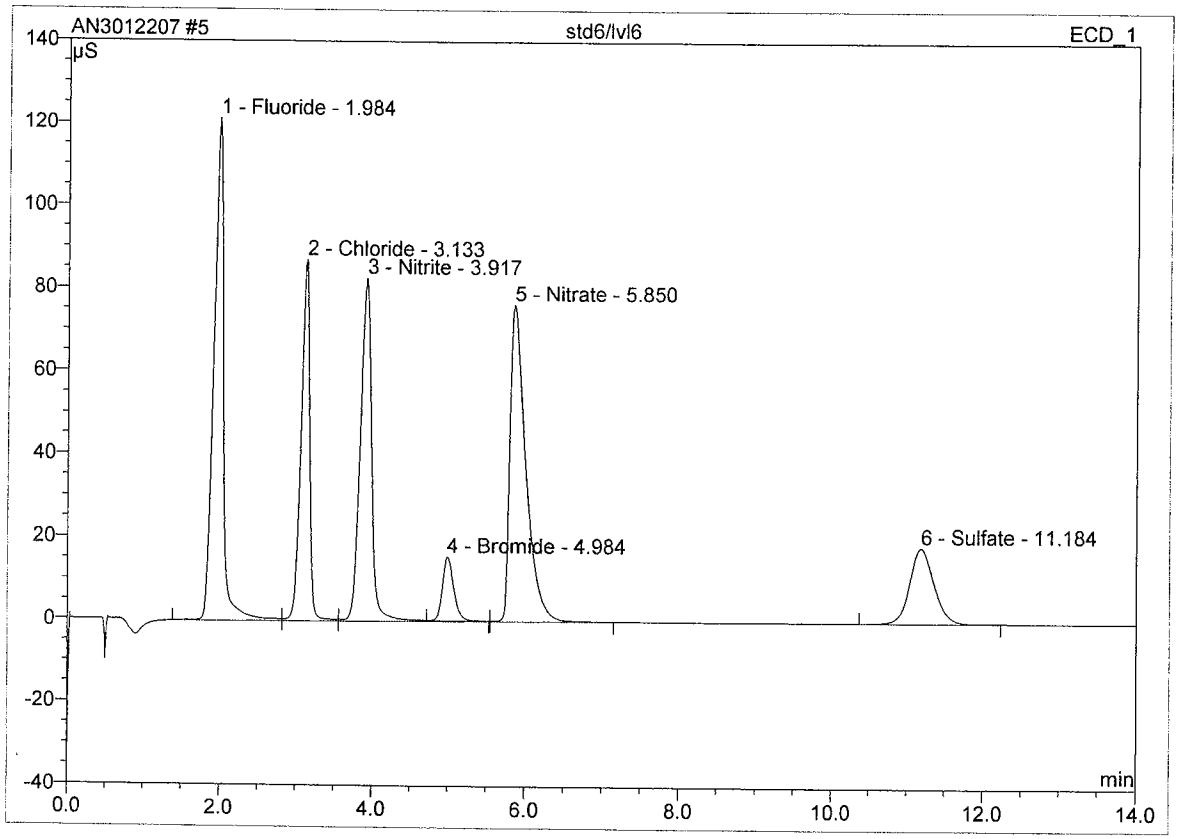
Before

JAN 23 2007

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.469	18.190	25.30	10.130	BM
2	3.13	Chloride	87.201	11.483	15.97	7.597	M
3	3.92	Nitrite	82.798	14.402	20.03	5.056	M
4	4.98	Bromide	15.460	2.646	3.68	5.092	Rd
5	5.85	Nitrate	76.399	18.285	25.43	5.143	MB
6	11.18	Sulfate	18.331	6.892	9.59	7.489	BMB
Total:			401.659	71.898	100.00	40.507	

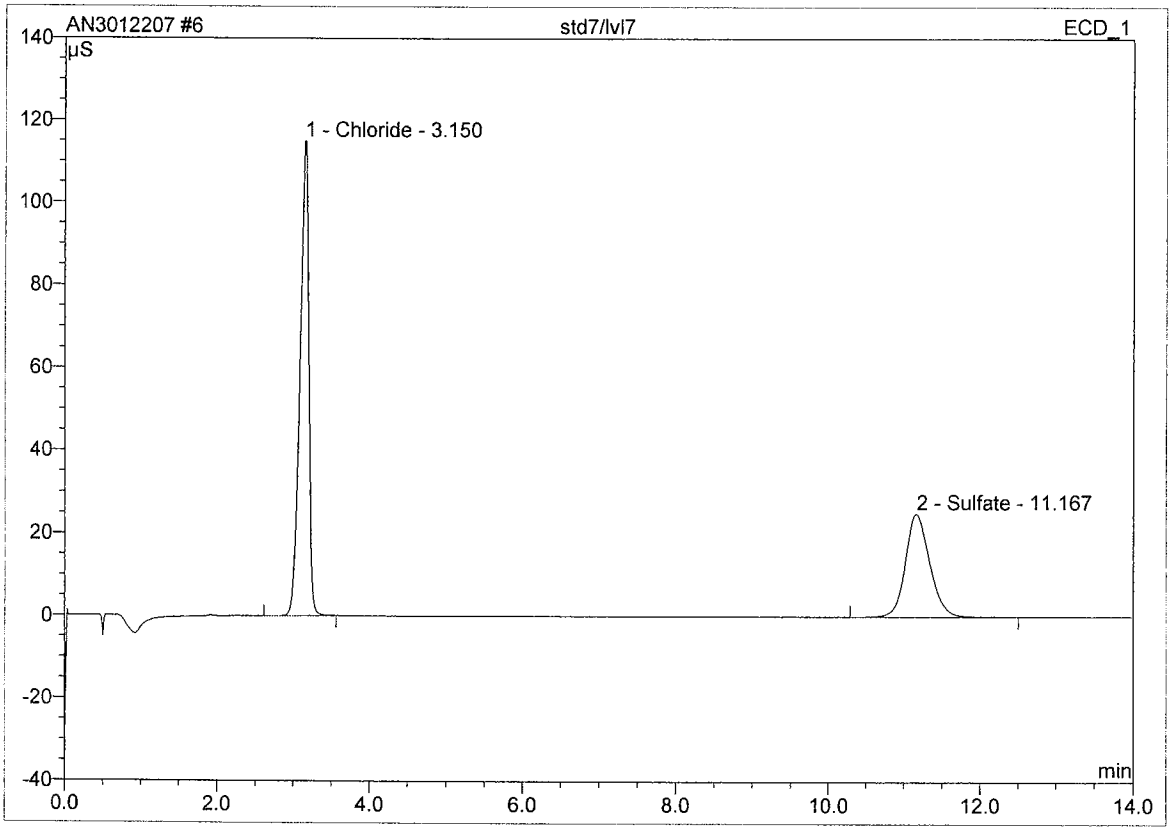
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.046	15.276	62.03	10.181	BMB
2	11.17	Sulfate	24.940	9.352	37.97	10.163	BMB
Total:			139.986	24.628	100.00	20.344	

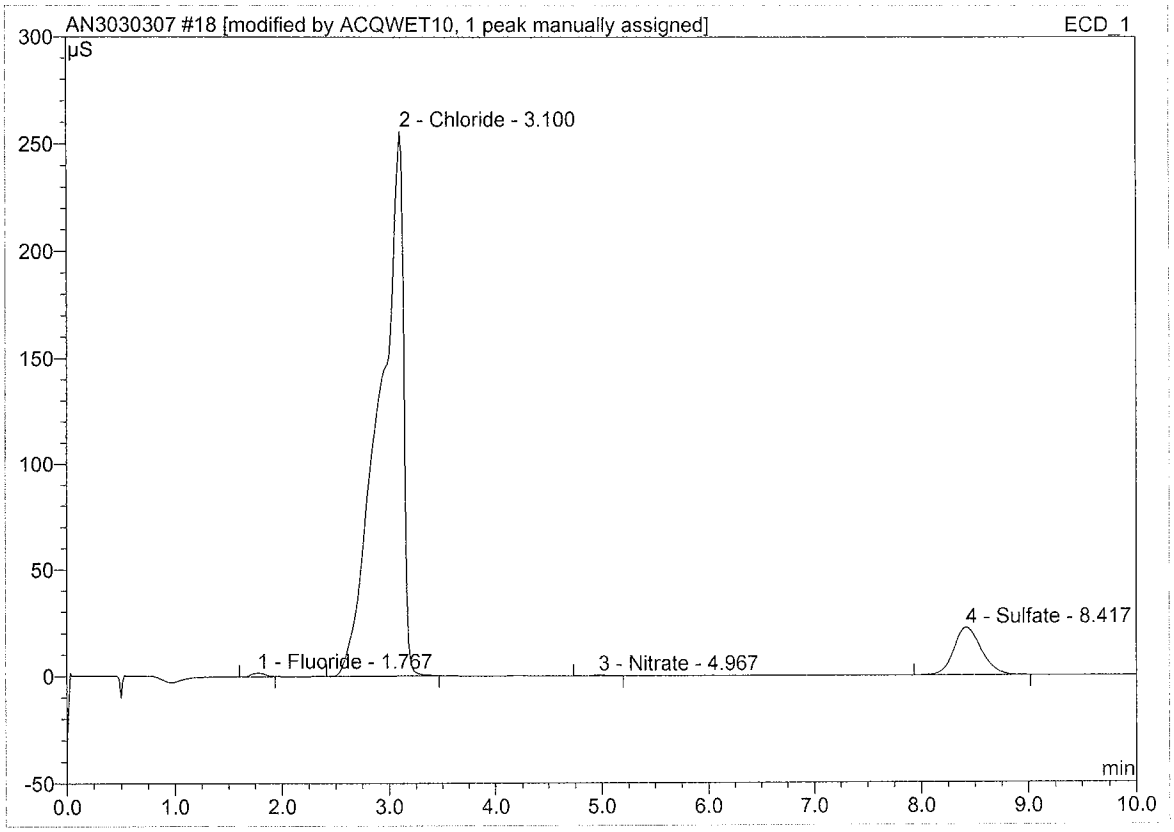
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

18 K1703-1F

Sample Name:	**K1703-1F**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 11:10**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.77	Fluoride $\bar{x}$=.3 RPD=<1	1.794	0.279	0.38	0.320	BM *
2	3.10	Chloride	255.753	65.877	90.41	87.811	BMB^
3	4.97	Nitrate <0.1 $\bar{x}$=ND RPD=—	0.365	0.062	0.08	0.035	BMB*
4	8.42	Sulfate $\bar{x}$=14.4 RPD=1	22.383	6.650	9.13	14.453	BMB*
Total:			280.294	72.868	100.00	102.619	

Nitrite <0.1 $\bar{x}$=ND RPD=—

After Initials JS

MAR 0 3 2007

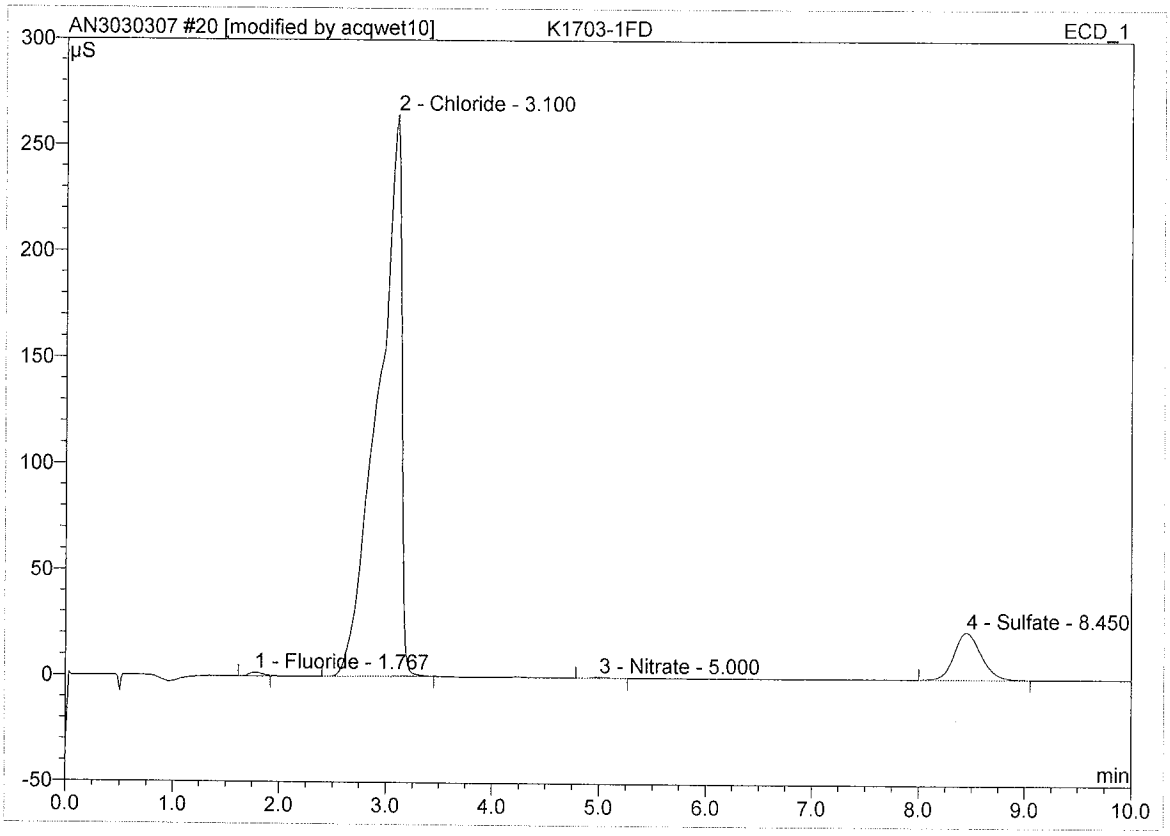
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

DAN 3/8/07

Columbia Analytical Services, Inc.

20 K1703-1FD

Sample Name:	**K1703-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 12:02**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.77	Fluoride	1.764	0.270	0.37	0.310	BM *
2	3.10	Chloride	264.491	66.131	90.51	88.150	BMB
3	5.00	Nitrate <0.1	0.368	0.064	0.09	0.036	BMB*
4	8.45	Sulfate	22.224	6.600	9.03	14.345	BMB*
Total:			288.847	73.065	100.00	102.841	

Nitrite <0.1 SS 3/6/07

RAR 3/8/07

After Initials JS

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

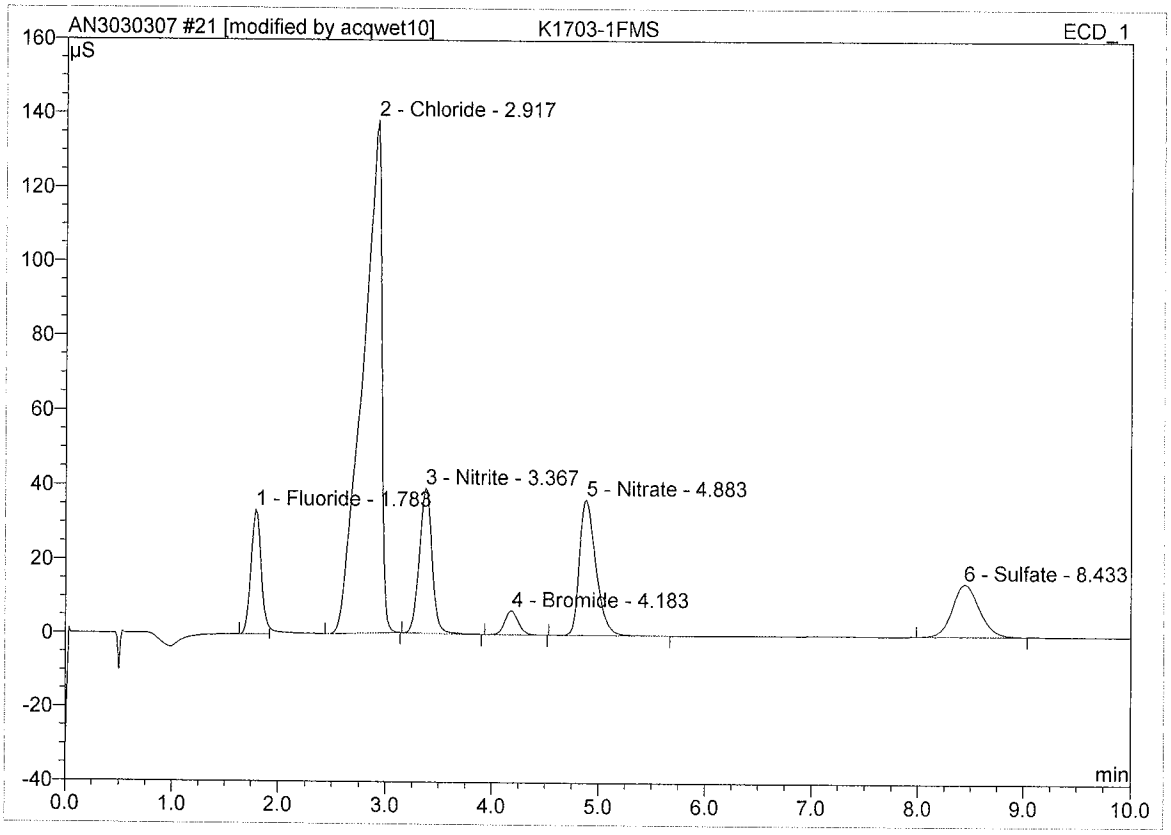
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

21 K1703-1FMS

Sample Name:	**K1703-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 12:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride %rec=103	33.616	3.711	7.57	10.647	BM *
2	2.92	Chloride	137.986	28.174	57.46	93.888	BMB*
3	3.37	Nitrite %rec=97	39.066	5.365	10.94	9.699	BMB*
4	4.18	Bromide	6.574	0.980	2.00	9.429	BMB
5	4.88	Nitrate %rec=92	36.481	6.531	13.32	9.234	BMB
6	8.43	Sulfate %rec=87	14.162	4.274	8.72	23.221	BMB*
Total:			267.885	49.036	100.00	156.119	

SPK lvl 1
10ppm

After
Initials JS

MAR 06 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder Incorrect
☐ Other

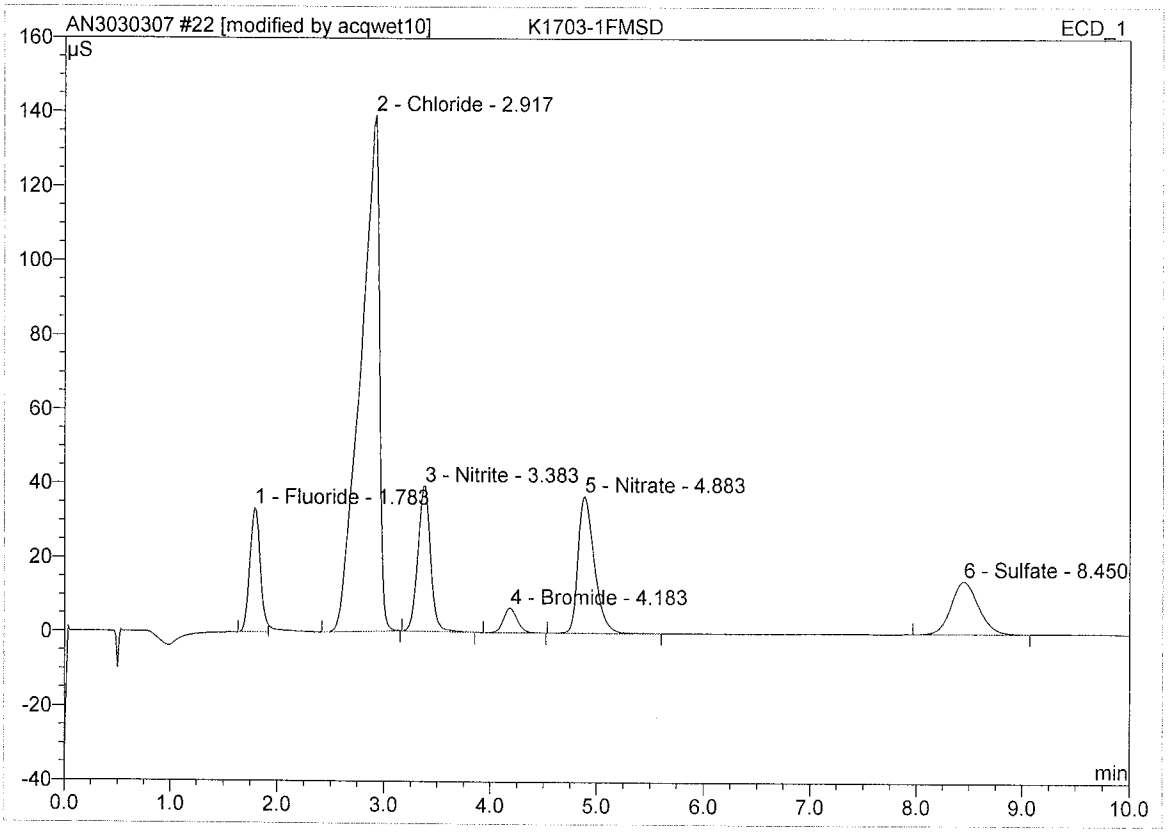
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

22 K1703-1FMSD

Sample Name:	**K1703-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 12:27**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride % rec=104	33.595	3.751	7.62	10.760	BM *
2	2.92	Chloride	138.985	28.180	57.28	93.908	BMB*
3	3.38	Nitrite % rec= 98	39.148	5.403	10.98	9.768	BMB*
4	4.18	Bromide	6.639	0.987	2.01	9.498	BMB
5	4.88	Nitrate % rec=93	36.864	6.594	13.40	9.322	BMB
6	8.45	Sulfate % rec=88	14.215	4.284	8.71	23.280	BMB*
Total:			269.445	49.200	100.00	156.536	

SPKW
10ppm

DAN 3/6/07

After Initials JS

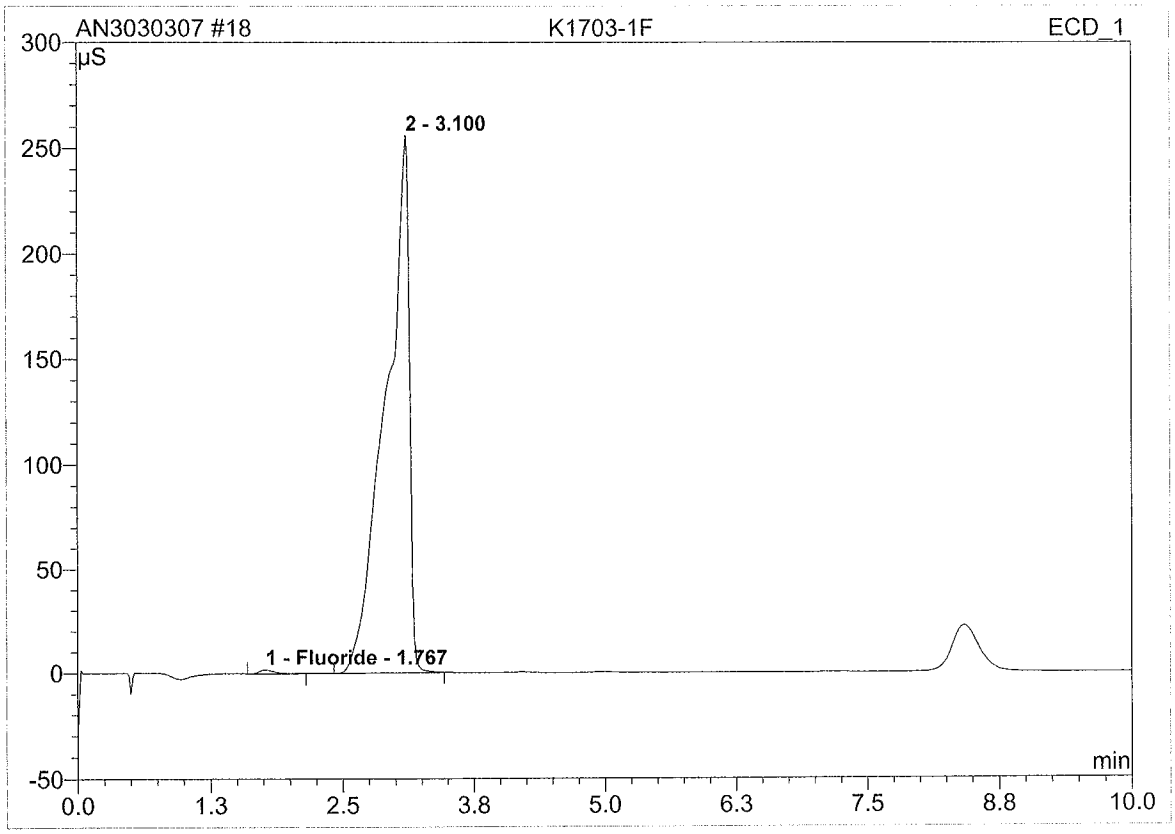
MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/Start/Stop Incorrect
☐ Other

Columbia Analytical Services, Inc.

18 K1703-1F

Sample Name:	**K1703-1F**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 11:10**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.77	Fluoride	1.789	0.289	0.44	0.332	BMB
2	3.10	n.a.	255.753	65.877	99.56	n.a.	BMB
Total:			257.542	66.166	100.00	0.332	

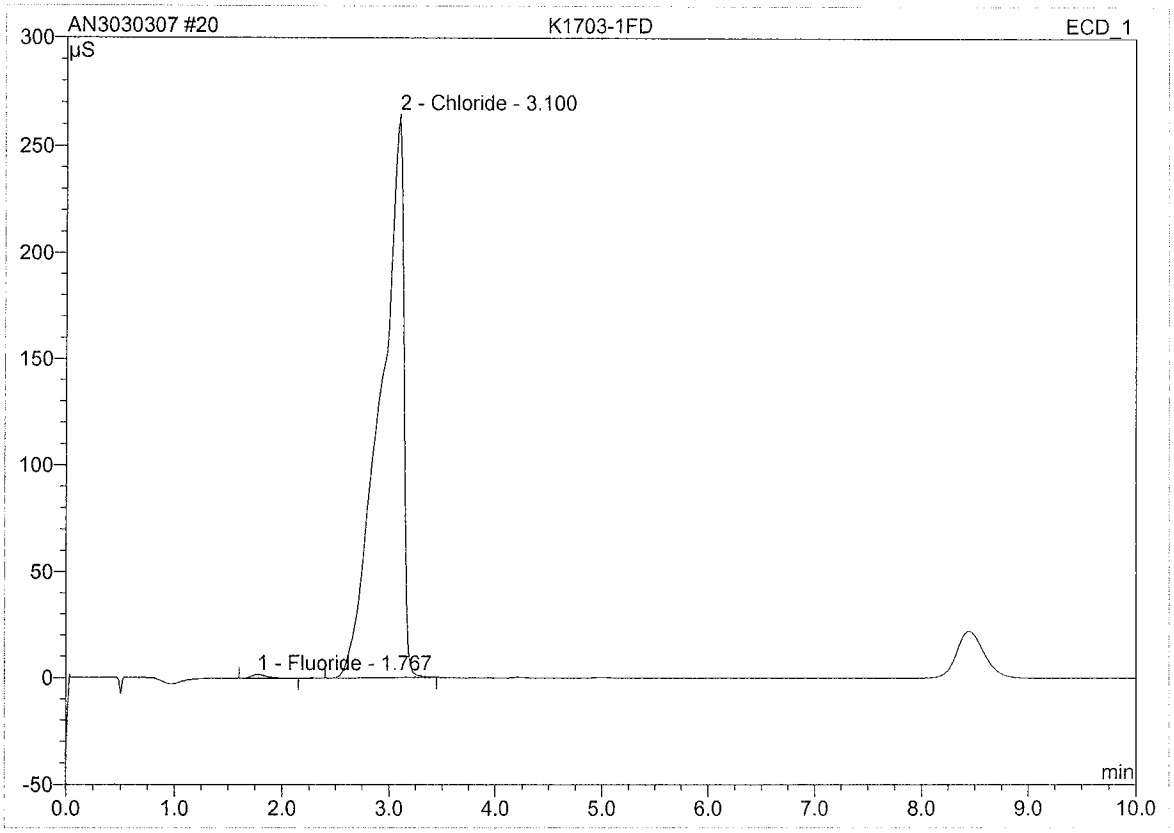
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

20 K1703-1FD

Sample Name:	**K1703-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 12:02**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.77	Fluoride	1.754	0.284	0.43	0.326	BMB
2	3.10	Chloride	264.491	66.131	99.57	88.150	BMB
Total:			266.244	66.415	100.00	88.476	

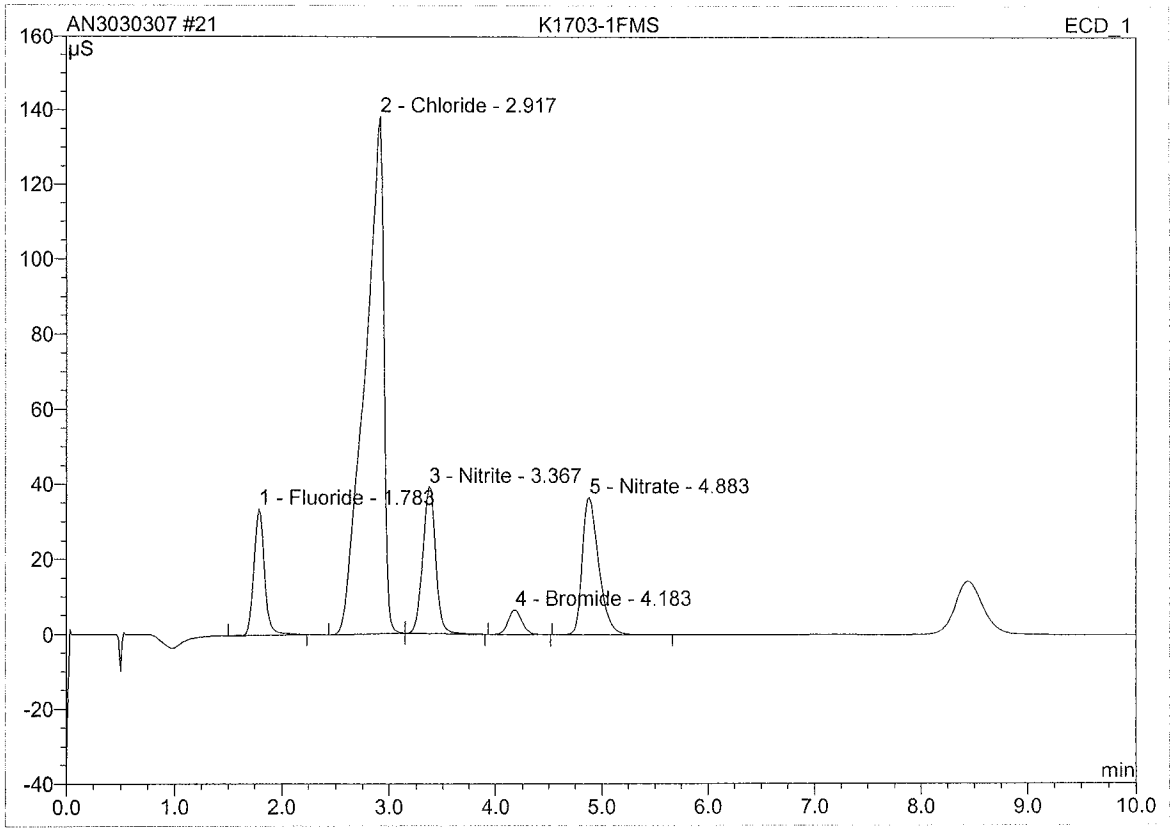
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

21 K1703-1FMS

Sample Name:	**K1703-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 12:15**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride	33.583	3.828	8.53	10.981	BMB
2	2.92	Chloride	138.020	28.192	62.79	93.946	BMb
3	3.37	Nitrite	39.066	5.365	11.95	9.699	bMB
4	4.18	Bromide	6.574	0.980	2.18	9.429	BMB
5	4.88	Nitrate	36.481	6.531	14.55	9.234	BMB
Total:			253.723	44.896	100.00	133.289	

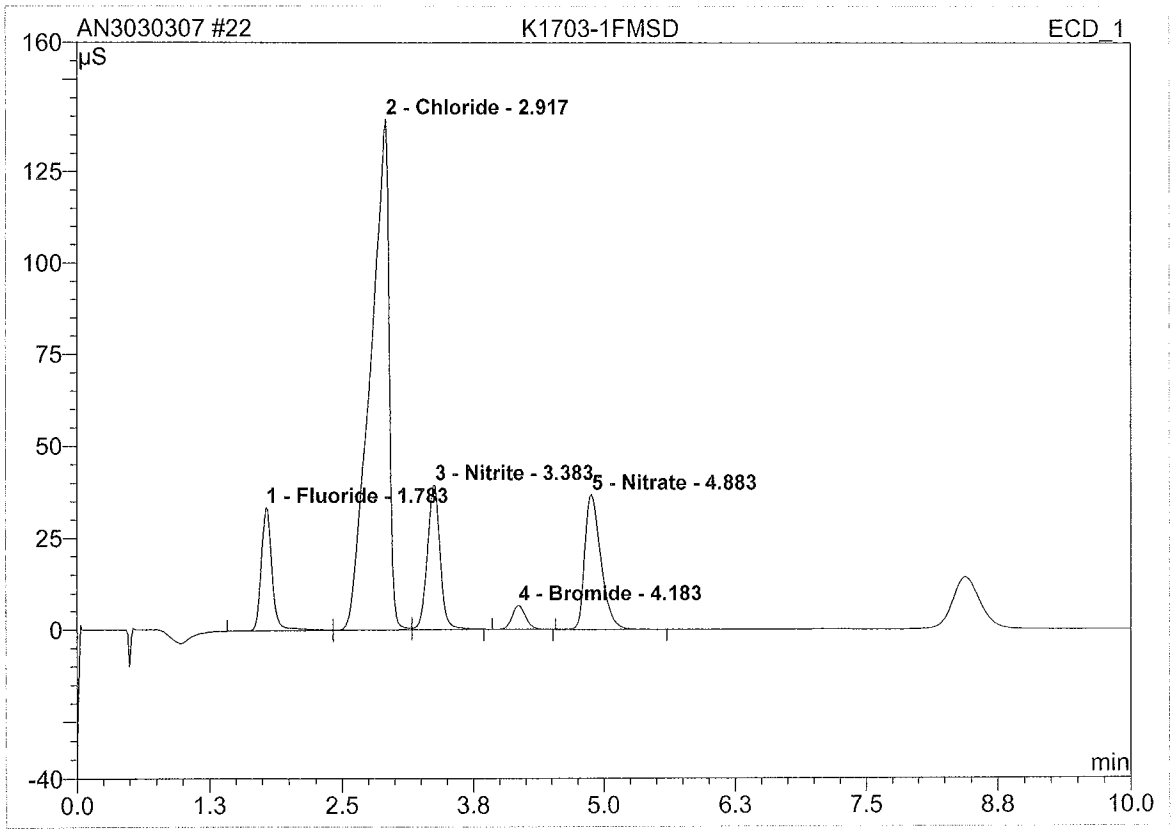
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

22 K1703-1FMSD

Sample Name:	**K1703-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 12:27**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.78	Fluoride	33.670	4.012	8.82	11.511	BM
2	2.92	Chloride	139.289	28.359	62.33	94.502	M
3	3.38	Nitrite	39.436	5.548	12.19	10.029	MB
4	4.18	Bromide	6.639	0.987	2.17	9.498	BMB
5	4.88	Nitrate	36.864	6.594	14.49	9.322	BMB
Total:			255.898	45.500	100.00	134.863	

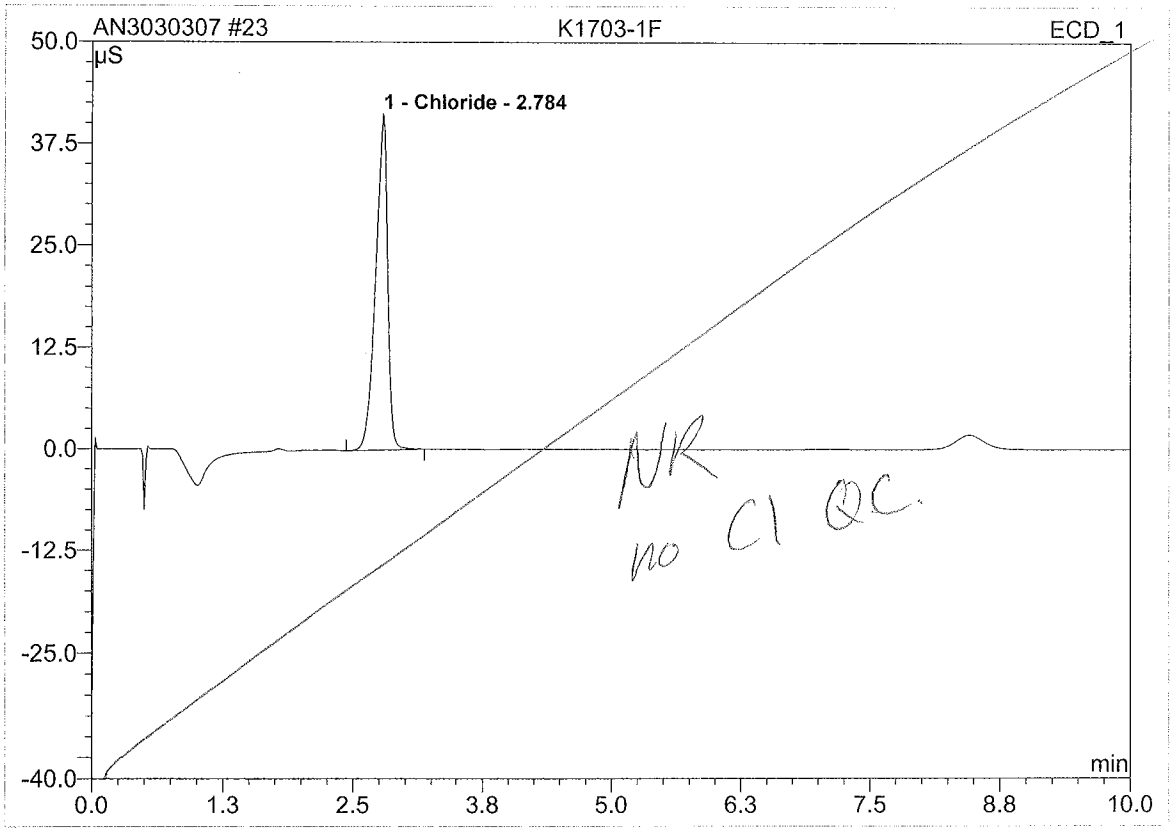
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

23 K1703-1F

Sample Name:	**K1703-1F**	*Injection Volume:*	**200.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**3/3/2007 12:40**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

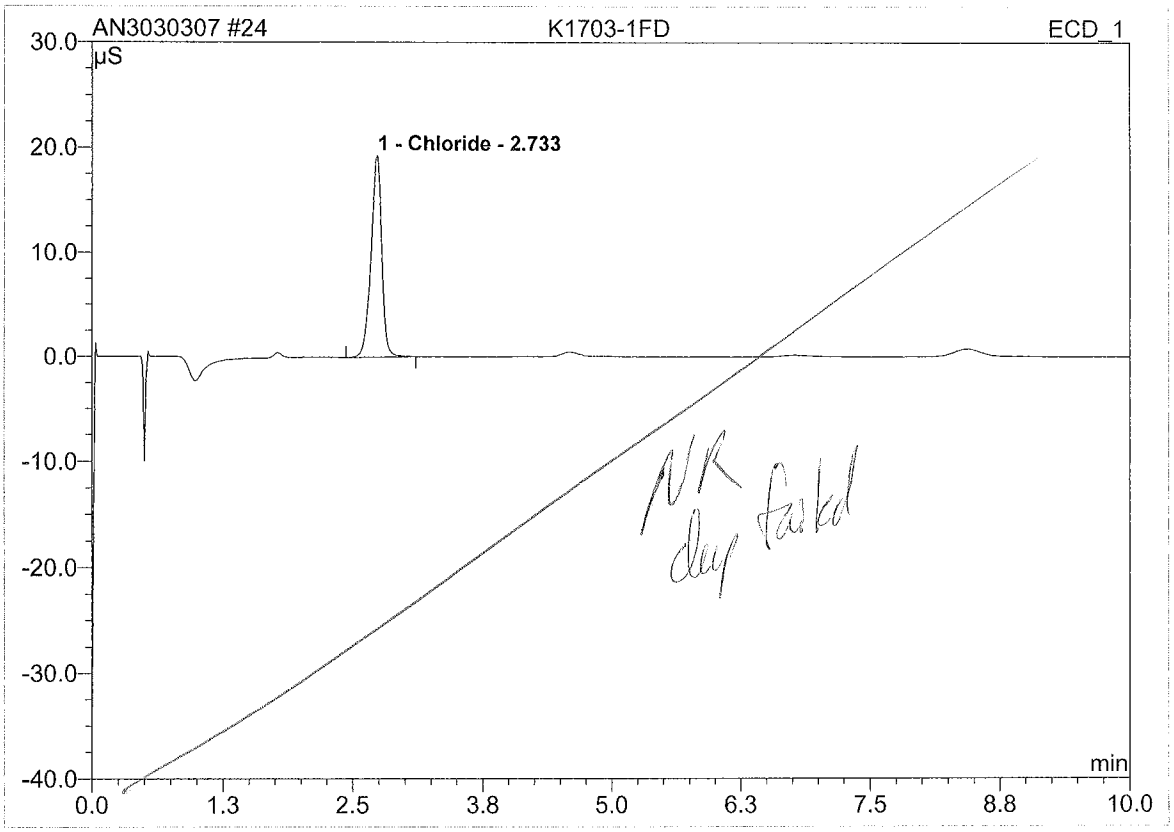


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.78	Chloride	41.259	5.480	100.00	73.045	BMB
Total:			41.259	5.480	100.00	73.045	

Columbia Analytical Services, Inc.

24 K1703-1FD

Sample Name:	**K1703-1FD**	*Injection Volume:*	**200.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**3/3/2007 12:52**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

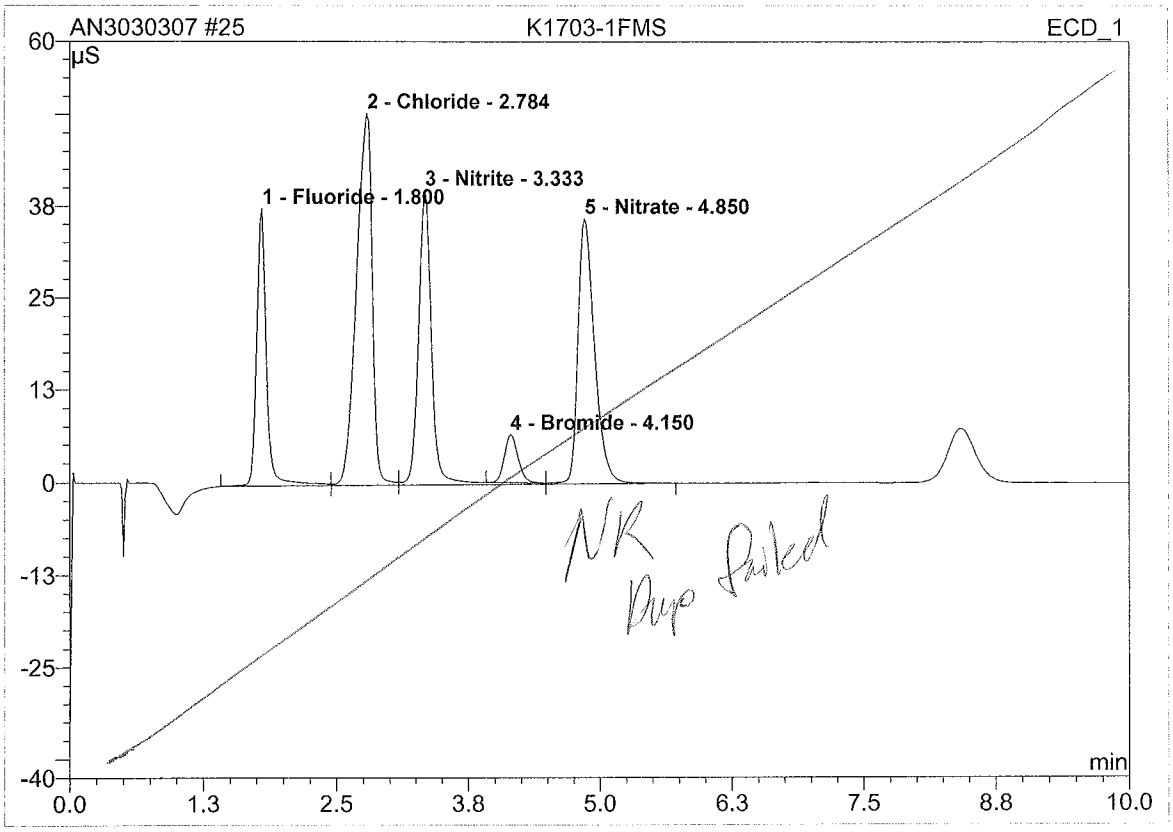


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.73	Chloride	19.297	2.278	100.00	30.365	BMB
Total:			19.297	2.278	100.00	30.365	

Columbia Analytical Services, Inc.

25 K1703-1FMS

Sample Name:	**K1703-1FMS**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**3/3/2007 13:04**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

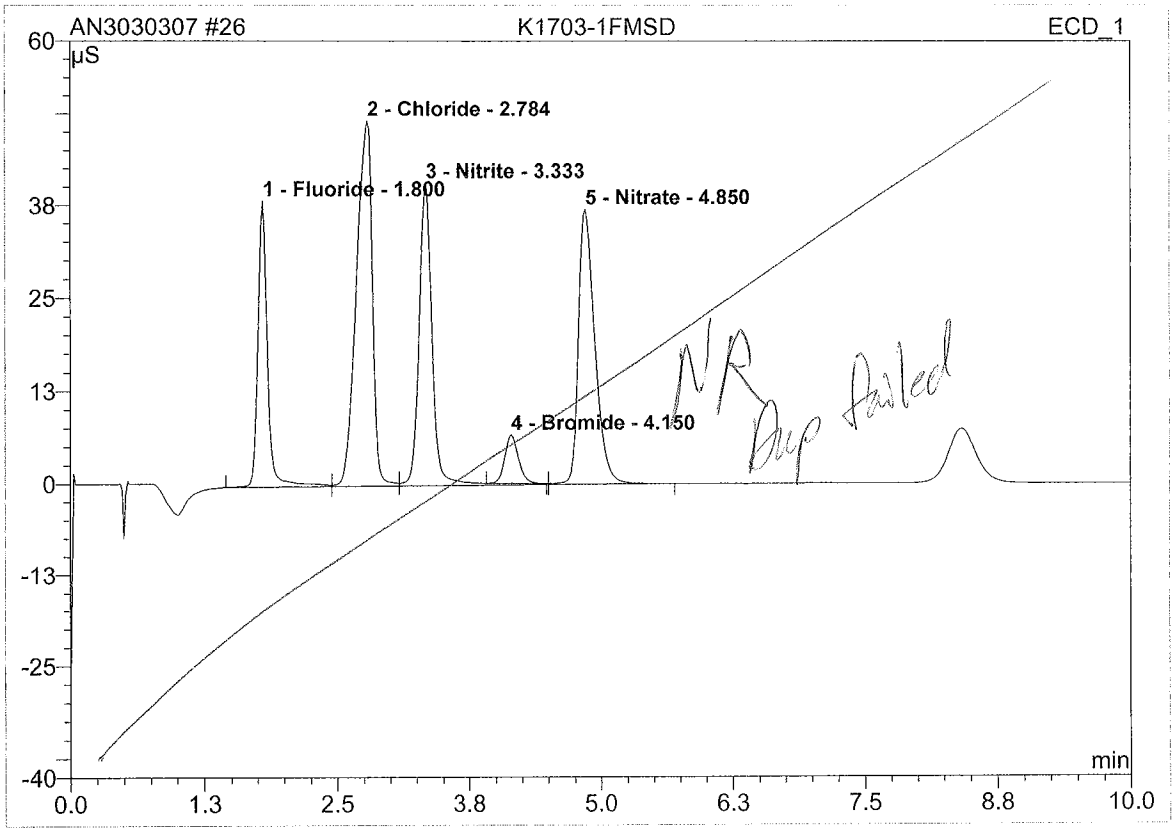


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	37.627	3.942	15.31	45.235	BM
2	2.78	Chloride	50.499	8.588	33.36	114.473	M
3	3.33	Nitrite	39.968	5.766	22.40	41.699	M
4	4.15	Bromide	6.428	0.952	3.70	36.638	Rd
5	4.85	Nitrate	35.979	6.492	25.22	36.710	MB
Total:			170.502	25.740	100.00	274.755	

Columbia Analytical Services, Inc.

26 K1703-1FMSD

Sample Name:	**K1703-1FMSD**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0**
Recording Time:	**3/3/2007 13:17**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	38.468	3.992	15.28	45.808	BM
2	2.78	Chloride	49.330	8.611	32.97	114.779	M
3	3.33	Nitrite	40.769	5.879	22.51	42.513	M
4	4.15	Bromide	6.583	0.970	3.71	37.343	Rd
5	4.85	Nitrate	37.004	6.668	25.53	37.706	MB
Total:			172.154	26.120	100.00	278.148	

79332

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value =17.5 ppm	CAS ID # = AN1-18-X	Expires: 4/12/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 5/1/07
Nitrite	True Value = 100 ppm	CAS ID # = AN10-4-E	Expires: 3/3/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-V	Expires: 4/20/07
Nitrate	True Value = 4.5 ppm	CAS ID # = AN1-18-V	Expires: 4/[illegible]/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 5/1/07

CCV CAS ID # = AN10-37-A Expires 3/3/07

Fluoride	True Value = 5.0 ppm
Chloride	True Value = 5.0 ppm
Nitrite	True Value = 2.0 ppm
Bromide	True Value = 2.0 ppm
Nitrate	True Value = 2.0 ppm
Sulfate	True Value = 5.0 ppm

Spike
2.0ppm X dilution fact CAS ID# = AN10-66-P Expires 3/3/07

Analyst: JS Date: 3/3/07

First Review: JS Date: 3/6/07

Final Review: [illegible] Date: 3/8/07

Comments: Cl dup failed, no hold times affected sample will be rerun 3/6/07

t:\wet\ic\icdqs.xls

Sequence: AN3030307
Operator: acqwet10
Printed: 3/6/2007 12:00:35 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 3/3/2007 8:14:02 AM by ACQWET10
Last Update: 3/5/2007 11:10:01 AM by acqwet10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	1/22/2007 4:09:03 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	1/22/2007 4:25:31 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	1/22/2007 4:41:58 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	1/22/2007 4:58:26 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	1/22/2007 5:14:54 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:31:22 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	1/22/2007 5:47:50 PM
8	CCV1 AN10-37-A	Unknown	26	200.0	epa300	epa300	Finished	3/3/2007 8:51:21 AM
9	CCB1	Unknown	27	200.0	epa300	epa300	Finished	3/3/2007 9:03:48 AM
10	AN10-4-E(NO2)	Unknown	28	200.0	epa300	epa300	Finished	3/3/2007 9:16:16 AM
11	MB1	Unknown	32	200.0	epa300	epa300	Finished	3/3/2007 9:28:43 AM
12	AN1-18-V(NO3)1	Unknown	29	200.0	epa300	epa300	Finished	3/3/2007 9:41:11 AM
13	ERA#092(CLSO4)1	Unknown	32	200.0	epa300	epa300	Finished	3/3/2007 9:53:38 AM
14	AN1-18-X(F)1	Unknown	33	200.0	epa300	epa300	Finished	3/3/2007 10:06:06 AM
15	SPK CHK AN10-66-P	Unknown	34	200.0	epa300	epa300	Finished	3/3/2007 10:18:34 AM
16	CCV2 AN10-37-A	Unknown	32	200.0	epa300	epa300	Finished	3/3/2007 10:31:01 AM
17	CCB2	Unknown	30	200.0	epa300	epa300	Finished	3/3/2007 10:43:29 AM
18	K1703-1F	Unknown	31	200.0	epa300	epa300	Finished	3/3/2007 11:10:19 AM
19	CAROL SAMPLE	Unknown	32	200.0	epa300	epa300	Finished	3/3/2007 11:22:47 AM
20	K1703-1FD	Unknown	33	200.0	epa300	epa300	Finished	3/3/2007 12:02:38 PM
21	K1703-1FMS	Unknown	34	200.0	epa300	epa300	Finished	3/3/2007 12:15:06 PM
22	K1703-1FMSD	Unknown	35	200.0	epa300	epa300	Finished	3/3/2007 12:27:34 PM
23	K1703-1F	Unknown	36	200.0	epa300	epa300	Finished	3/3/2007 12:40:02 PM
24	K1703-1FD	Unknown	37	200.0	epa300	epa300	Finished	3/3/2007 12:52:29 PM
25	K1703-1FMS	Unknown	38	200.0	epa300	epa300	Finished	3/3/2007 1:04:57 PM
26	K1703-1FMSD	Unknown	39	200.0	epa300	epa300	Finished	3/3/2007 1:17:25 PM
27	RB	Unknown	40	200.0	epa300	epa300	Finished	3/3/2007 1:29:53 PM
28	CCV3	Unknown	41	200.0	epa300	epa300	Finished	3/3/2007 1:42:20 PM
29	CCB3	Unknown	42	200.0	epa300	epa300	Finished	3/3/2007 1:54:48 PM
30	K1675-11	Unknown	43	200.0	epa300	epa300	Finished	3/3/2007 2:07:15 PM
31	K1634-1	Unknown	44	200.0	epa300	epa300	Finished	3/3/2007 2:19:43 PM
32	K1566-1F	Unknown	45	200.0	epa300	epa300	Finished	3/3/2007 2:32:15 PM
33	K1566-2F	Unknown	46	200.0	epa300	epa300	Finished	3/3/2007 2:44:43 PM
34	K1566-3F	Unknown	47	200.0	epa300	epa300	Finished	3/3/2007 2:57:11 PM
35	K1566-5	Unknown	48	200.0	epa300	epa300	Finished	3/3/2007 3:09:38 PM
36	K566-6F	Unknown	49	200.0	epa300	epa300	Finished	3/3/2007 3:22:06 PM
37	K1566-6FD	Unknown	50	200.0	epa300	epa300	Finished	3/3/2007 3:34:34 PM
38	K1566-6FMS	Unknown	51	200.0	epa300	epa300	Finished	3/3/2007 3:47:02 PM
39	RB	Unknown	52	200.0	epa300	epa300	Finished	3/3/2007 3:59:29 PM
40	CCV4	Unknown	53	200.0	epa300	epa300	Finished	3/3/2007 4:11:57 PM
41	CCB4	Unknown	54	200.0	epa300	epa300	Finished	3/3/2007 4:24:24 PM
42	K1566-6FMSD	Unknown	55	200.0	epa300	epa300	Finished	3/3/2007 4:36:52 PM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51
Created: 3/3/2007 8:14:02 AM by ACQWET10
Last Update: 3/5/2007 11:10:01 AM by acqwet10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	std2/lvl2	1.0000	1.0000	1.0000		03	
2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-37-A	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-4-E(NO2)	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-V(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA#092(CLSO4)1	1.0000	1.0000	1.0000		08	
14	AN1-18-X(F)1	1.0000	5.0000	1.0000		08	
15	SPK CHK AN10-66-P	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-37-A	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	K1703-1F	1.0000	2.0000	1.0000		08	
19	CAROL SAMPLE	1.0000	2.0000	1.0000		08	
20	K1703-1FD	1.0000	2.0000	1.0000		08	
21	K1703-1FMS	1.0000	5.0000	1.0000		08	
22	K1703-1FMSD	1.0000	5.0000	1.0000		08	
23	K1703-1F	1.0000	20.0000	1.0000		08	
24	K1703-1FD	1.0000	20.0000	1.0000		08	
25	K1703-1FMS	1.0000	20.0000	1.0000		08	
26	K1703-1FMSD	1.0000	20.0000	1.0000		08	
27	RB	1.0000	1.0000	1.0000		08	
28	CCV3	1.0000	1.0000	1.0000		08	
29	CCB3	1.0000	1.0000	1.0000		08	
30	K1675-11	1.0000	5.0000	1.0000		08	
31	K1634-1	1.0000	2.0000	1.0000		08	
32	K1566-1F	1.0000	5.0000	1.0000		08	
33	K1566-2F	1.0000	5.0000	1.0000		08	
34	K1566-3F	1.0000	5.0000	1.0000		08	
35	K1566-5	1.0000	5.0000	1.0000		08	
36	K566-6F	1.0000	5.0000	1.0000		08	
37	K1566-6FD	1.0000	5.0000	1.0000		08	
38	K1566-6FMS	1.0000	5.0000	1.0000		08	
39	RB	1.0000	1.0000	1.0000		08	
40	CCV4	1.0000	1.0000	1.0000		08	
41	CCB4	1.0000	1.0000	1.0000		08	
42	K1566-6FMSD	1.0000	5.0000	1.0000		08	

Sequence: AN3030307
Operator: acqwet10
Printed: 3/6/2007 12:00:35 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 3/3/2007 8:14:02 AM by ACQWET10
Last Update: 3/5/2007 11:10:01 AM by acqwet10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1645-3	Unknown	56	200.0	epa300	epa300	Finished	3/3/2007 4:49:20 PM
44	MB EXT 3/1	Unknown	57	200.0	epa300	epa300	Finished	3/3/2007 5:01:47 PM
45	K1393-18 EXT	Unknown	58	200.0	epa300	epa300	Finished	3/3/2007 5:14:15 PM
46	K1393-19 EXT	Unknown	59	200.0	epa300	epa300	Finished	3/3/2007 5:26:43 PM
47	K1393-20 EXT	Unknown	60	200.0	epa300	epa300	Finished	3/3/2007 5:39:10 PM
48	RB	Unknown	61	200.0	epa300	epa300	Finished	3/3/2007 5:51:38 PM
49	CCV5	Unknown	62	200.0	epa300	epa300	Finished	3/3/2007 6:04:05 PM
50	CCB5	Unknown	63	200.0	epa300	epa300	Finished	3/3/2007 6:16:33 PM
51	0.1ppm Fluoride	Unknown	64	200.0	epa300	epa300	Finished	3/5/2007 11:10:01 AM

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Sequence: AN3030307
Operator: acqwet10
Printed: 3/6/2007 12:00:35 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 51

Created: 3/3/2007 8:14:02 AM by ACQWET10
Last Update: 3/5/2007 11:10:01 AM by acqwet10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	K1645-3	1.0000	5.0000	1.0000		08	
44	MB EXT 3/1	1.0000	1.0000	1.0000		08	
45	K1393-18 EXT	1.0000	5.0000	1.0000		08	
46	K1393-19 EXT	1.0000	5.0000	1.0000		08	
47	K1393-20 EXT	1.0000	20.0000	1.0000		08	
48	RB	1.0000	1.0000	1.0000		08	
49	CCV5	1.0000	1.0000	1.0000		08	
50	CCB5	1.0000	1.0000	1.0000		08	
51	0.1ppm Fluoride	1.0000	1.0000	1.0000		08	

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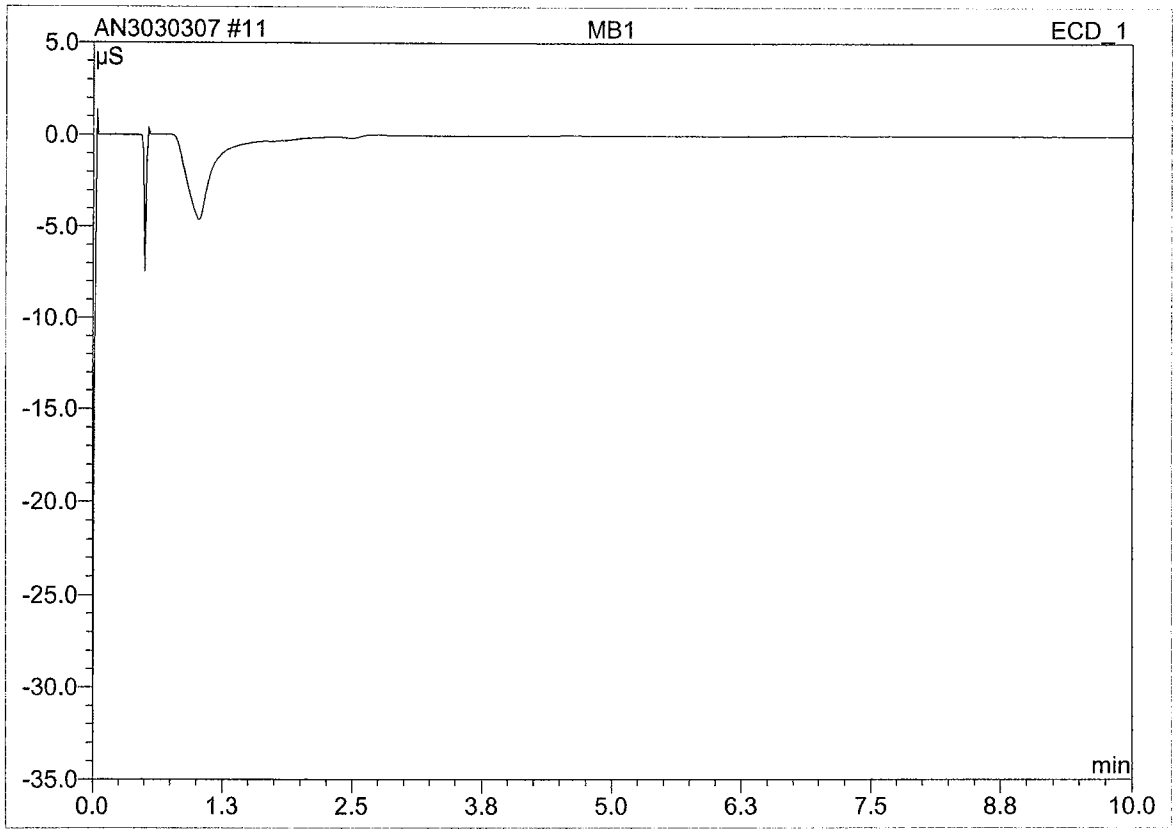
Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1703- 1F	III	X	3/4	3/20	F	2.5/5	Q.C. SPK 1/5	✓✓✓	
					Cl	↓	.25/5 +Q.C.	✓	✓20x
		dup			NO2	↓	Q.C. SPK 1/5	✓✓✓	
		ms			Br				
		msd			NO3	2.5/5	Q.C. SPK 1/5	✓✓✓	
					SO4	↓	↓	✓✓✓	
Carol's sample					F				
					Cl				
					NO2	2.5/5		✓	
					Br				
					NO3	2.5/5		✓	
					SO4				
K1675-11	III			3/19	F				
CH2M Hill					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5		✓2x
K1634-1				3/12	F				
Reynolds					Cl				
					NO2				
					Br				
					NO3				
					SO4		2.5/5	✓	
~~K16~~ 3/3/07 K1566-1				3/11	F				
Parsons					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5	✓	
-2					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5	✓	
-3					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5	✓	
-4					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
-5					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5	✓	
-6		X			F				
					Cl				
		dup			NO2				
		ms			Br				
		msd			NO3				
					SO4		1/5 +Q.C.	✓✓✓	

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K1393-18 ext					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5 •	✓	
-19 ext					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5 •	✓	
-20 ext					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4		25 5/3/07 ~~50~~ ~~1/5~~ 25/5 •	✓	
K1645-3				3/13	F				
Parsons					Cl				
					NO2				
					Br				
					NO3				
					SO4		1/5 •	✓	
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Columbia Analytical Services, Inc.

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 9:28**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



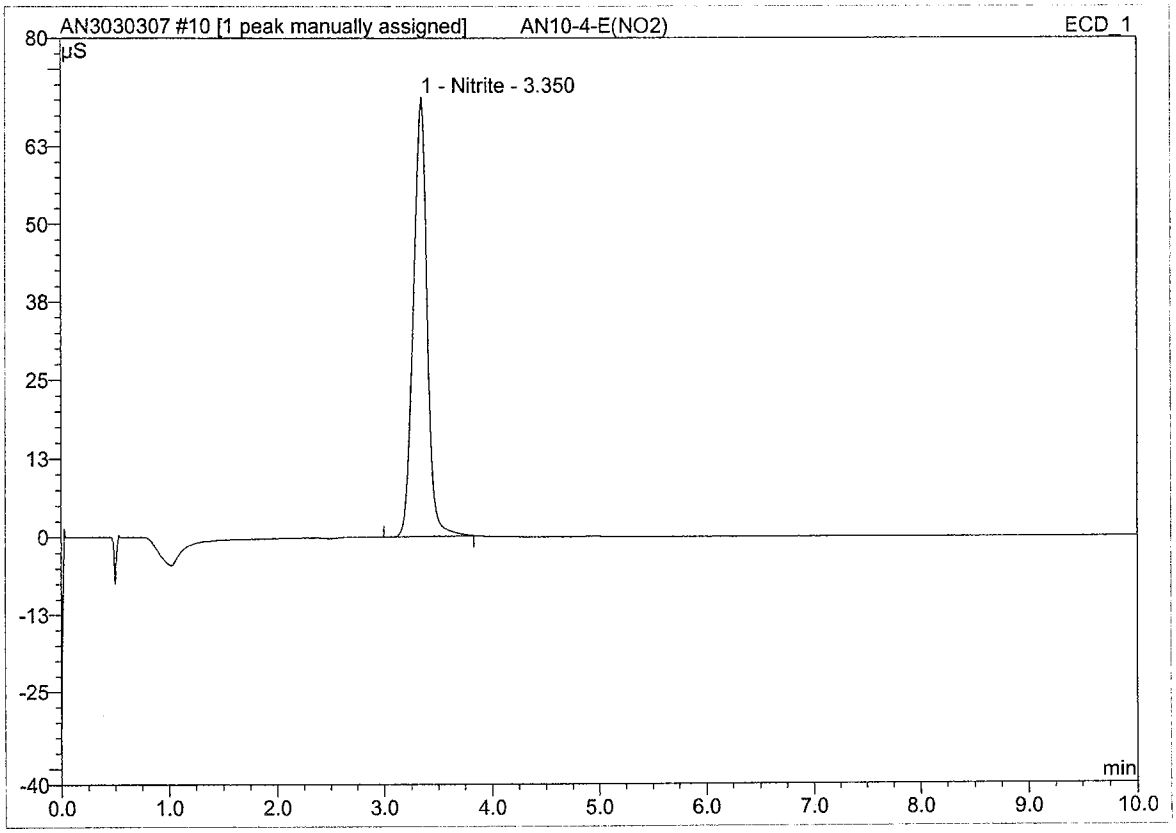
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

LRR 3/8/07

Columbia Analytical Services, Inc.

10 AN10-4-E(NO2)

Sample Name:	**AN10-4-E(NO2)**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**3/3/2007 9:16**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.35	Nitrite	70.408	10.404	100.00	94% 94.050	BMB^
Total:			70.408	10.404	100.00	94.050	

lar 3/8/07

After Initials JS

MAR 0 3 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

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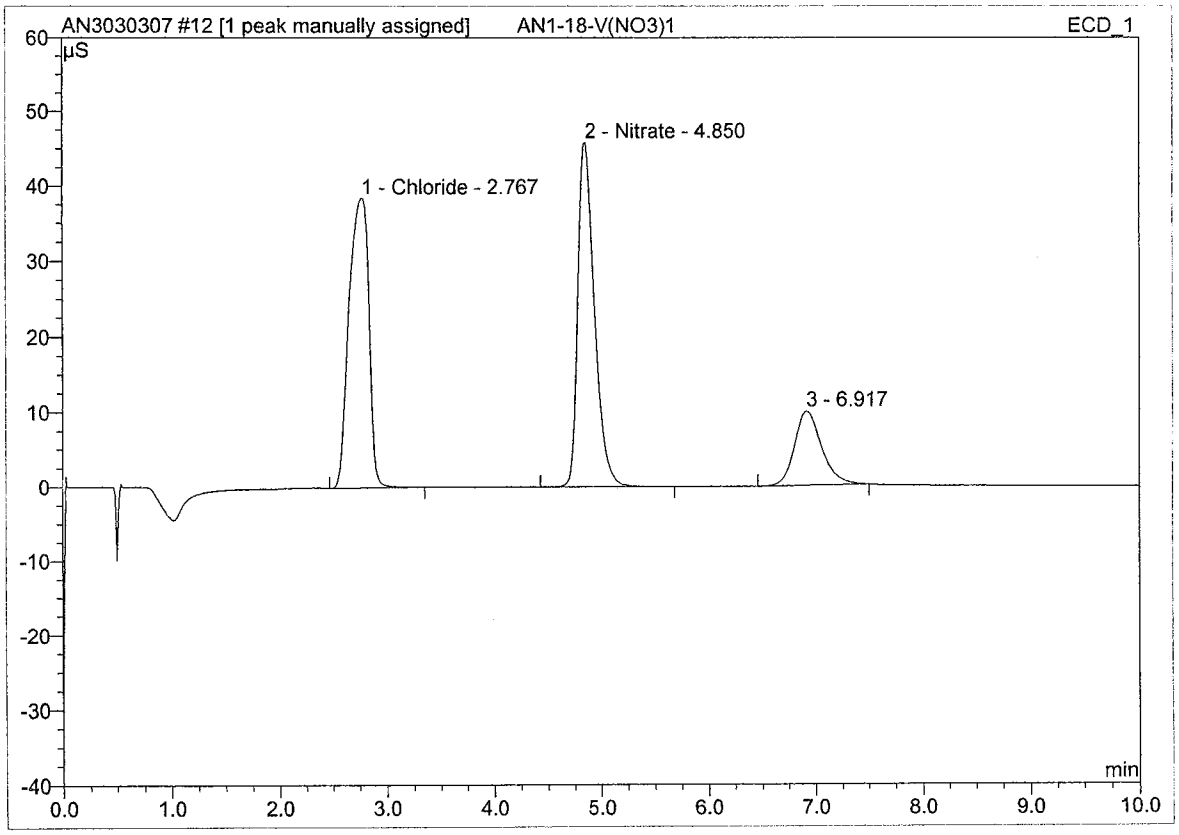
default_letter/Integration

Columbia Analytical Services, Inc.

12 AN1-18-V(NO3)1

Sample Name:	**AN1-18-V(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 9:41**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	38.439	8.210	42.40	10.944	BMB
2	4.85	Nitrate	45.807	8.234	42.52	104 4.656	BMB^
3	6.92	n.a.	9.984	2.921	15.08	n.a.	BMB
Total:			94.230	19.365	100.00	15.600	

lsa 3/8/07

After
Initials JS

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default_letter/Integration

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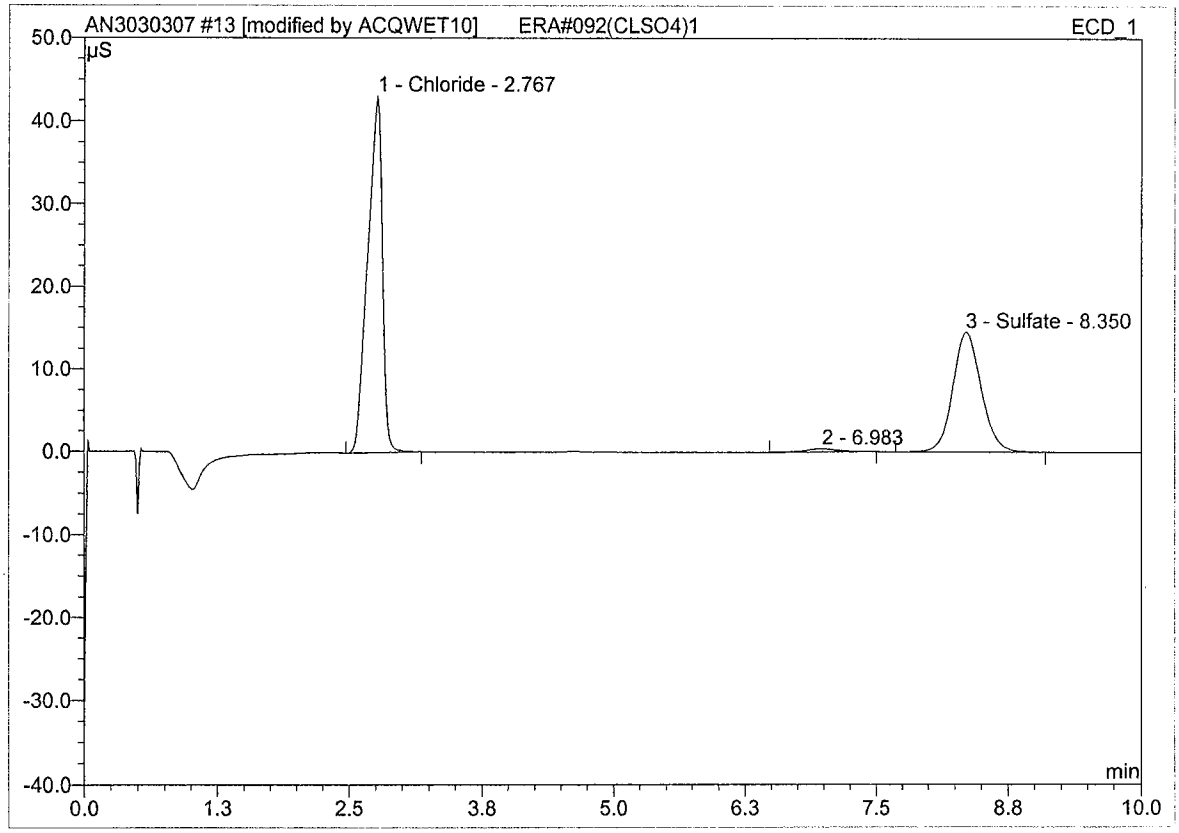
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 9:53**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	Chloride	43.175	6.930	60.00	92% 4.619	BMB
2	6.98	n.a.	0.372	0.131	1.13	n.a.	BMB
3	8.35	Sulfate	14.500	4.490	38.87	98% 4.879	BMB*
Total:			58.047	11.551	100.00	9.498	

LKR 3/8/07

After
Initials JS

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

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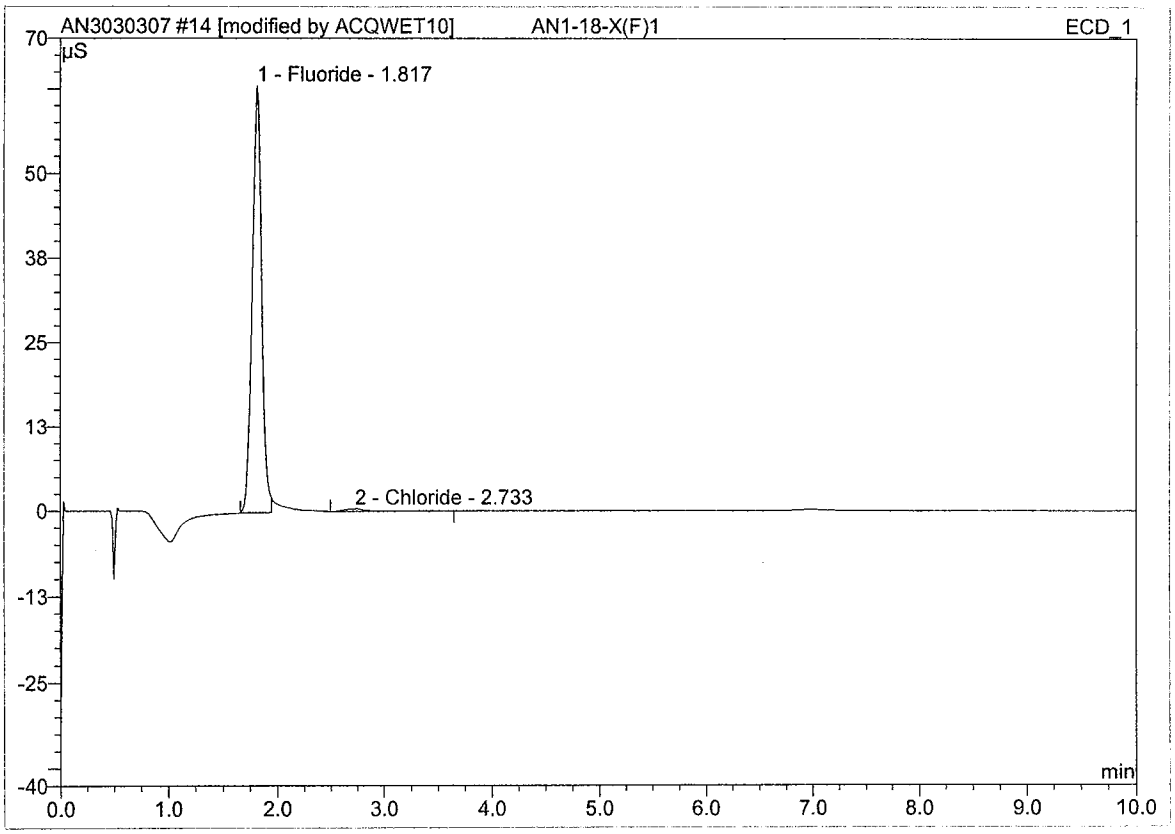
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 10:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	63.189	6.272	98.51	103% 17.994	BM *
2	2.73	Chloride	0.392	0.095	1.49	0.316	BMB*
Total:			63.581	6.367	100.00	18.310	

DAR 3/8/07

After Initials JS

MAR 0 3 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

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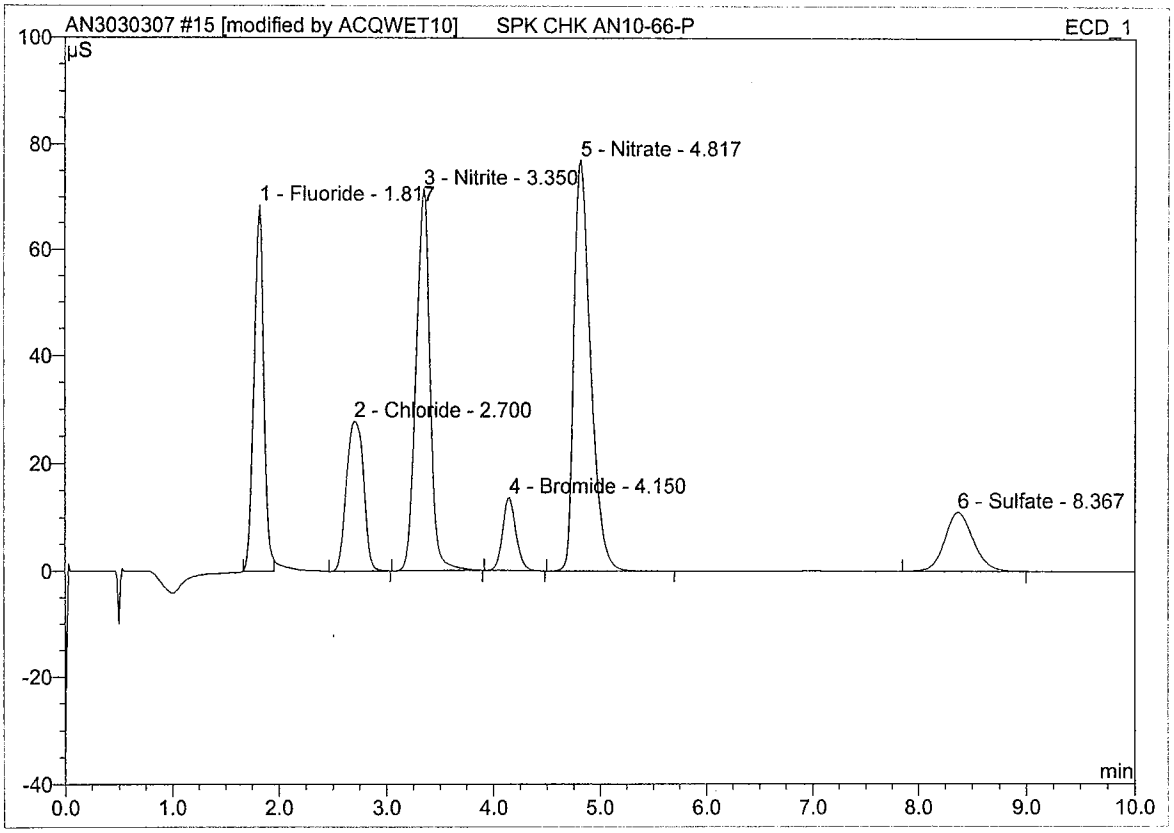
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-P

Sample Name:	**SPK CHK AN10-66-P**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 10:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride %rec=103	68.490	7.088	16.74	4.067	BM *
2	2.70	Chloride %rec=85	27.812	5.159	12.19	3.438	BMB*
3	3.35	Nitrite %rec=98	71.488	10.805	25.52	3.907	BMB*
4	4.15	Bromide %rec=95	13.648	1.990	4.70	3.829	BMB*
5	4.82	Nitrate %rec=98	76.994	13.924	32.89	3.937	BMB*
6	8.37	Sulfate %rec=93	11.055	3.372	7.96	3.664	BMB*
Total:			269.487	42.337	100.00	22.842	

After
Initials JS

lan 3/8/07

MAR 0 3 2007

default_letter/Integration

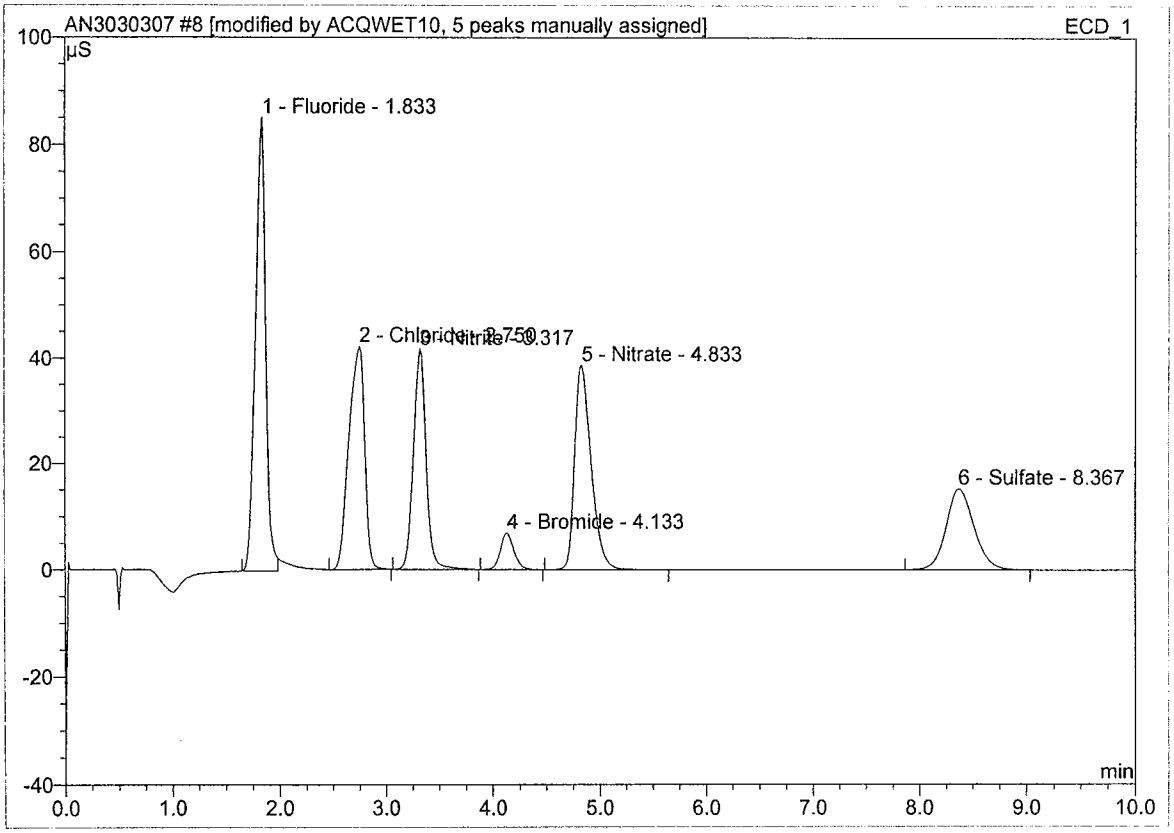
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

8 CCV1 AN10-37-A

Sample Name:	**CCV1 AN10-37-A**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 8:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.183	9.407	27.05	108% 5.397	BM *
2	2.75	Chloride	42.177	7.212	20.74	96% 4.807	BMB*^
3	3.32	Nitrite	41.639	5.639	16.22	100% 2.039	BMB*^
4	4.13	Bromide	6.879	1.008	2.90	95% 1.940	BMB*^
5	4.83	Nitrate	38.652	6.876	19.78	95% 1.944	BMB*^
6	8.37	Sulfate	15.271	4.627	13.31	100% 5.028	BMB*^
Total:			229.802	34.769	100.00	21.155	

After Initials JS

JZ 3/8/07

MAR 0 3 2007

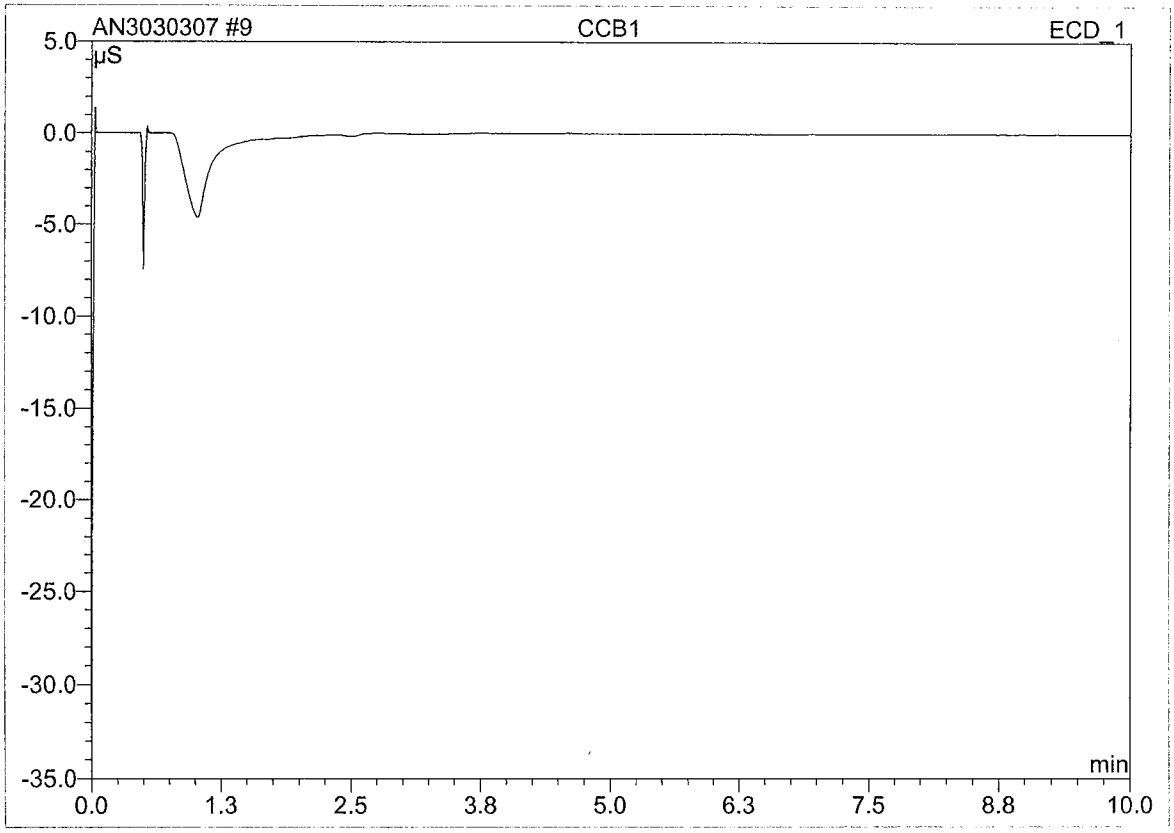
default_letter/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 9:03**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



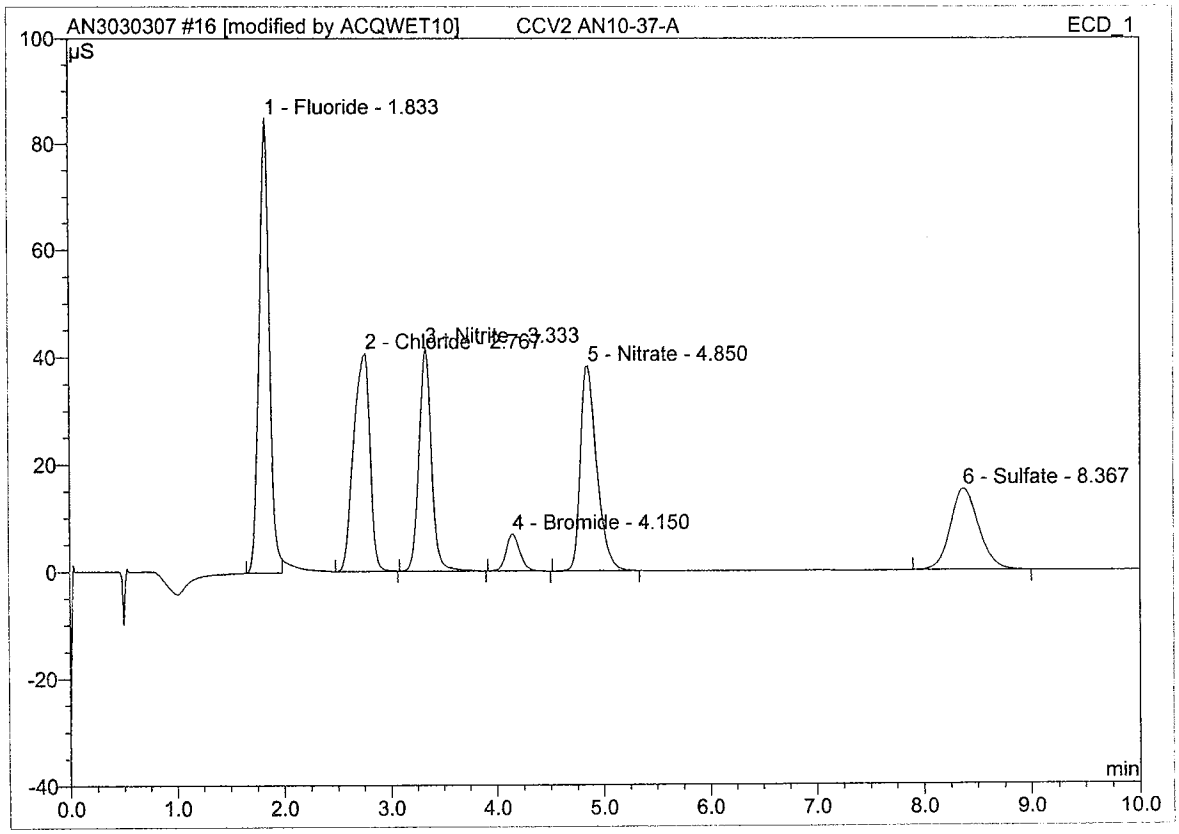
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

lar 3/8/07

Columbia Analytical Services, Inc.

16 CCV2 AN10-37-A

Sample Name:	**CCV2 AN10-37-A**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 10:31**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.033	9.414	27.08	108% 5.401	BM *
2	2.77	Chloride	40.666	7.206	20.73	96% 4.803	BMB*
3	3.33	Nitrite	41.744	5.678	16.34	105% 2.053	BMB*
4	4.15	Bromide	6.861	1.010	2.91	95% 1.944	BMB*
5	4.85	Nitrate	38.294	6.830	19.65	95% 1.931	BMB*
6	8.37	Sulfate	15.247	4.623	13.30	100% 5.024	BMB*
Total:			227.844	34.761	100.00	21.156	

After Initials JS

RKR 3/8/07

MAR 0 3 2007

default_letter/Integration

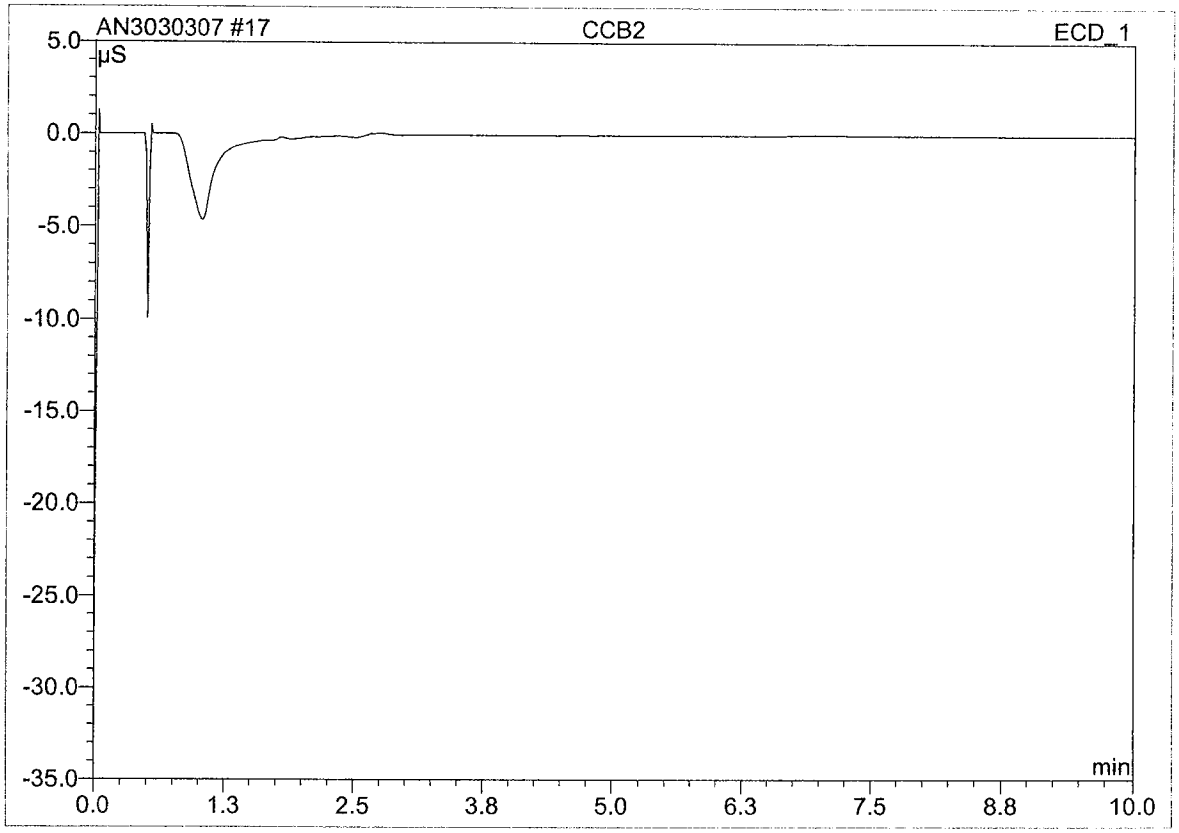
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Columbia Analytical Services, Inc.

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 10:43**	*Analyst:*	**JS / EM**
Run Time (min):	**10.02**	*Inst. ID:*	**K-IC-03**



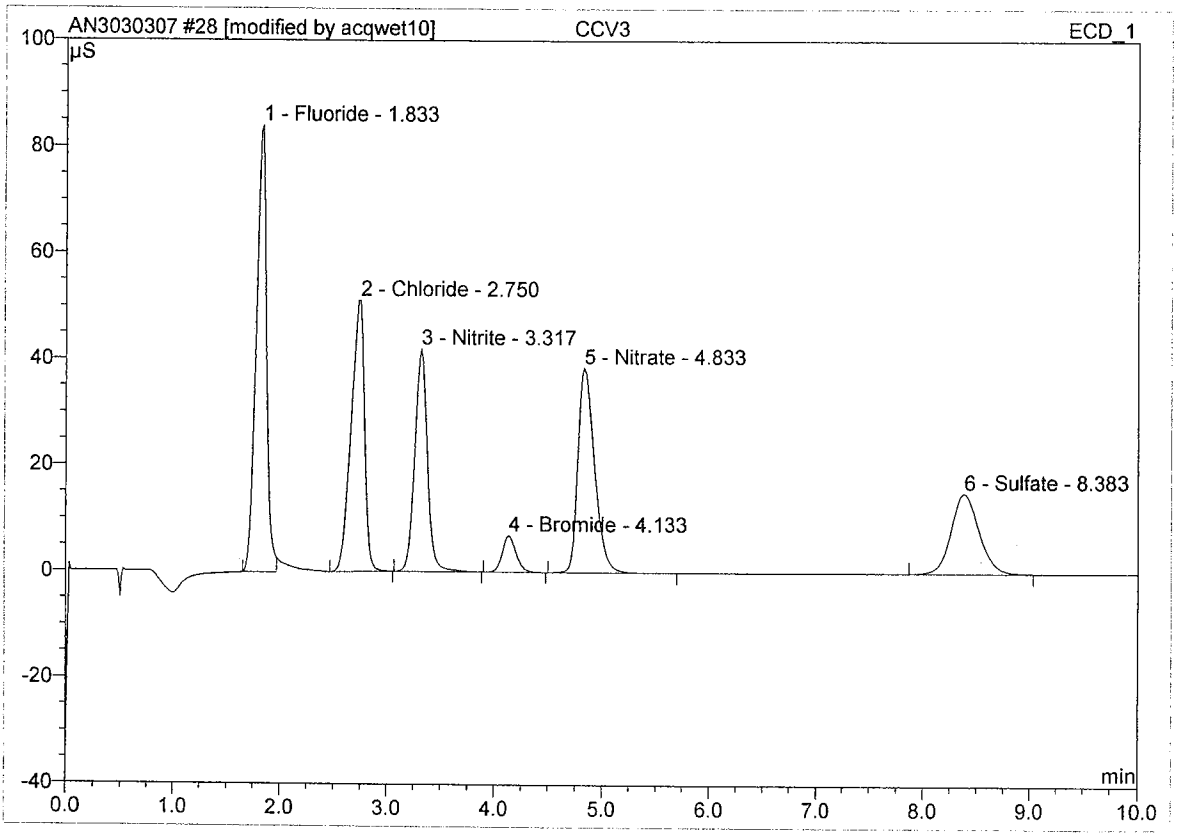
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RAR 3/8/07

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 13:42**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.128	9.340	26.82	108% 5.359	BM *
2	2.75	Chloride	51.206	7.351	21.11	98% 4.899	BMB*
3	3.32	Nitrite	41.974	5.684	16.32	105% 2.055	BMB*
4	4.13	Bromide	6.857	1.008	2.89	95% 1.939	BMB*
5	4.83	Nitrate	38.548	6.865	19.71	95% 1.941	BMB*
6	8.38	Sulfate	15.074	4.576	13.14	100% 4.973	BMB*
Total:			237.787	34.823	100.00	21.166	

After
Initials JS

DAL 3/8/07

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

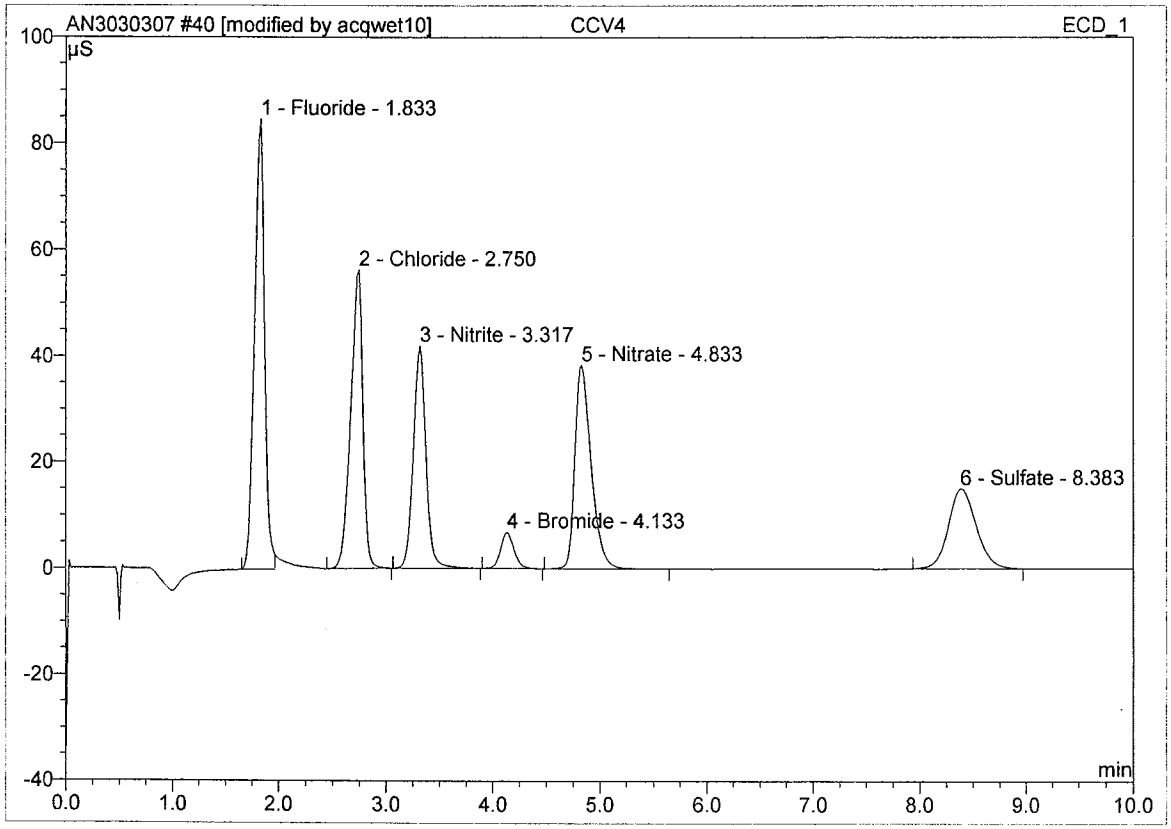
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 16:11**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.787	9.333	26.90	108% 5.355	BM *
2	2.75	Chloride	56.200	7.374	21.26	98% 4.915	BMB*
3	3.32	Nitrite	41.869	5.666	16.33	100% 2.049	BMB*
4	4.13	Bromide	6.812	0.997	2.87	95% 1.919	BMB*
5	4.83	Nitrate	38.361	6.789	19.57	95% 1.920	BMB*
6	8.38	Sulfate	14.983	4.532	13.06	98% 4.925	BMB*
Total:			243.010	34.691	100.00	21.081	

RRV 3/8/07

After
Initials JS

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

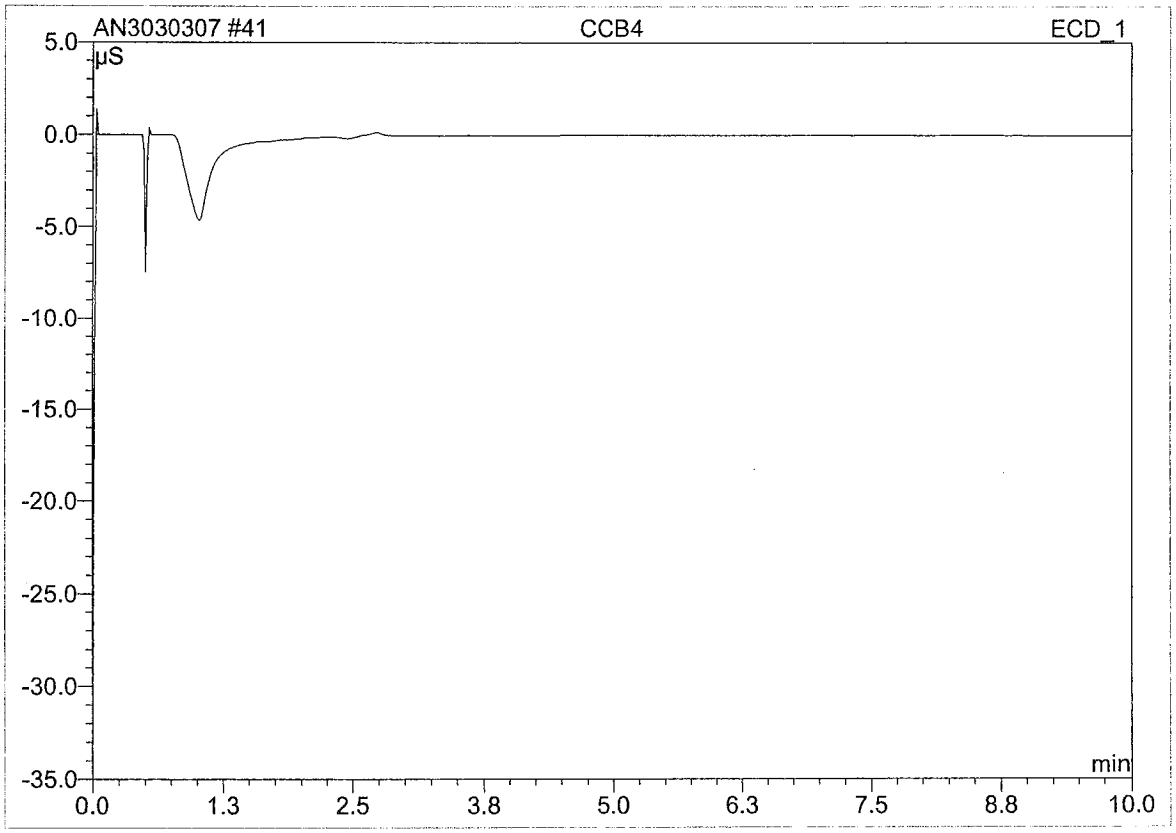
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**54**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 16:24**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



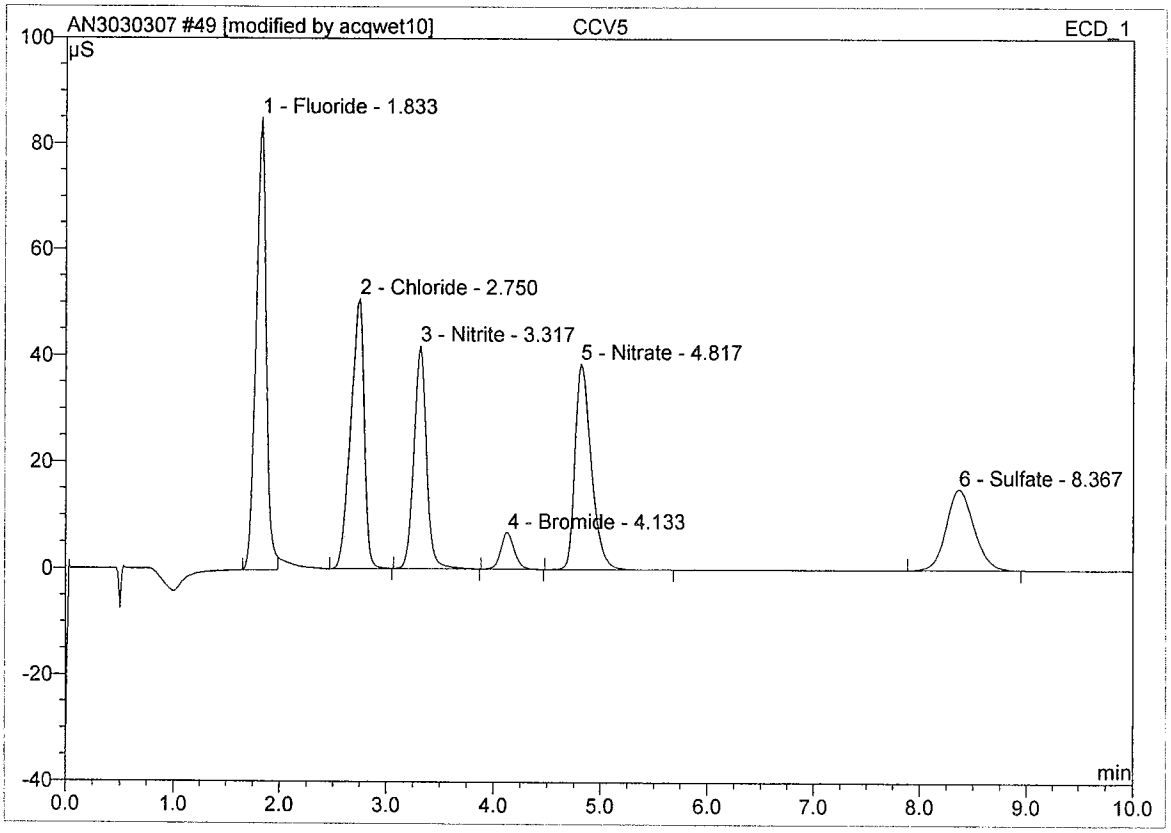
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

RDN 3/8/07

Columbia Analytical Services, Inc.

49 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 18:04**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.214	9.402	27.06	108% 5.394	BM *
2	2.75	Chloride	50.817	7.314	21.05	98% 4.875	BMB*
3	3.32	Nitrite	41.864	5.652	16.27	100% 2.044	BMB*
4	4.13	Bromide	6.776	1.002	2.88	95% 1.927	BMB*
5	4.82	Nitrate	38.646	6.828	19.65	95% 1.930	BMB*
6	8.37	Sulfate	15.108	4.547	13.09	98% 4.941	BMB*
Total:			238.425	34.744	100.00	21.111	

After Initials JS

3/8/07

MAR 0 6 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

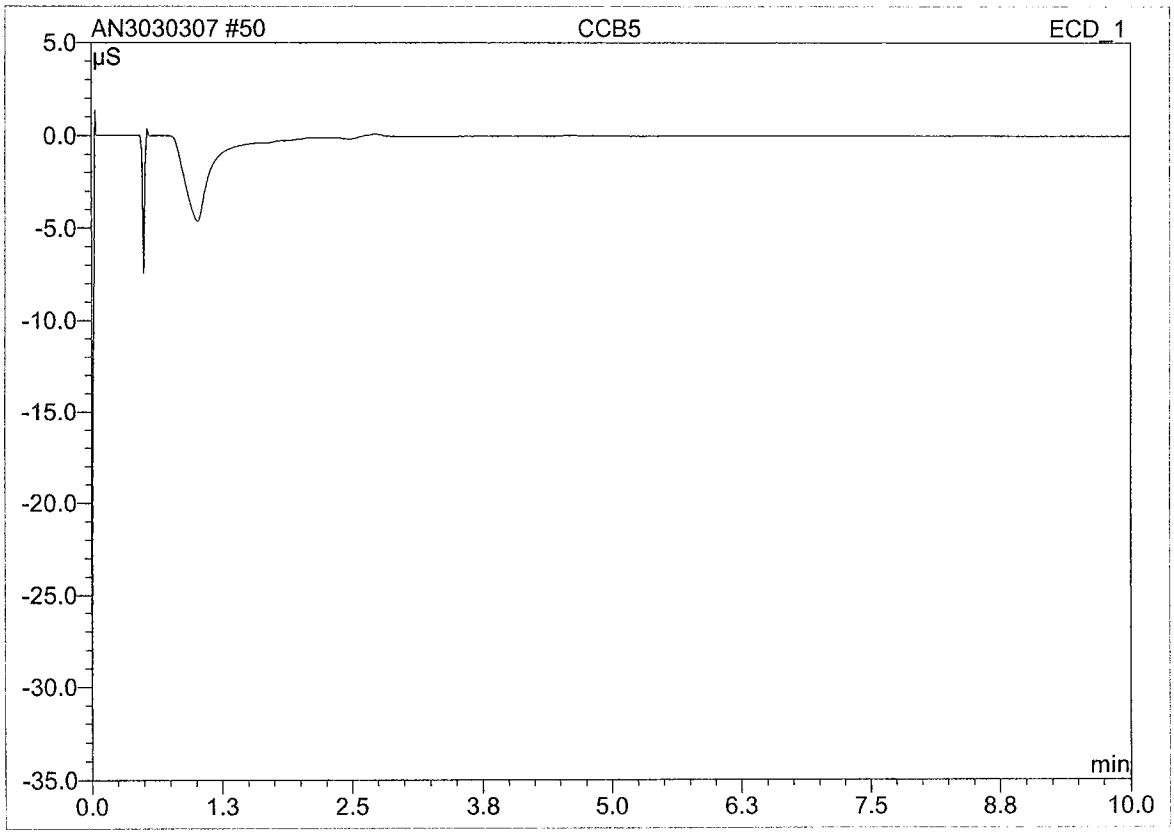
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

50 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 18:16**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**

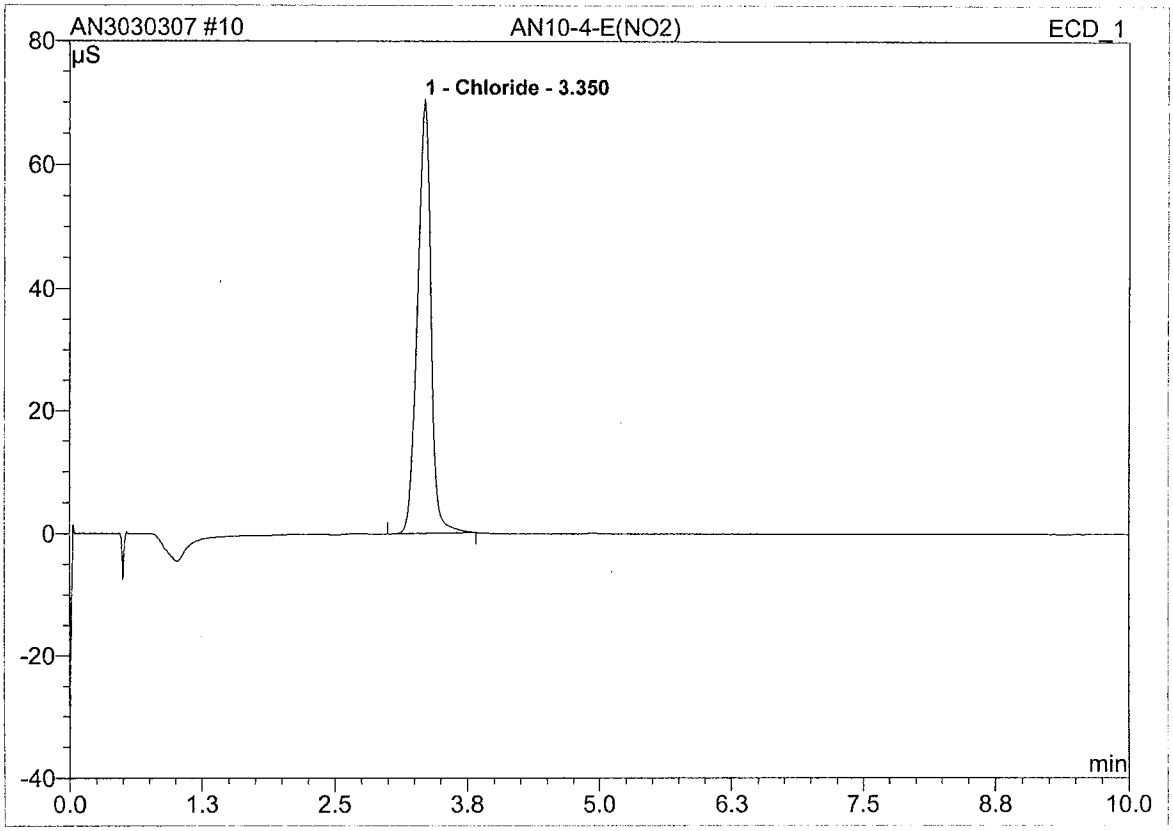


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Columbia Analytical Services, Inc.

10 AN10-4-E(NO2)

Sample Name:	**AN10-4-E(NO2)**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**3/3/2007 9:16**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.35	Chloride	70.408	10.404	100.00	173.358	BMB
Total:			70.408	10.404	100.00	173.358	

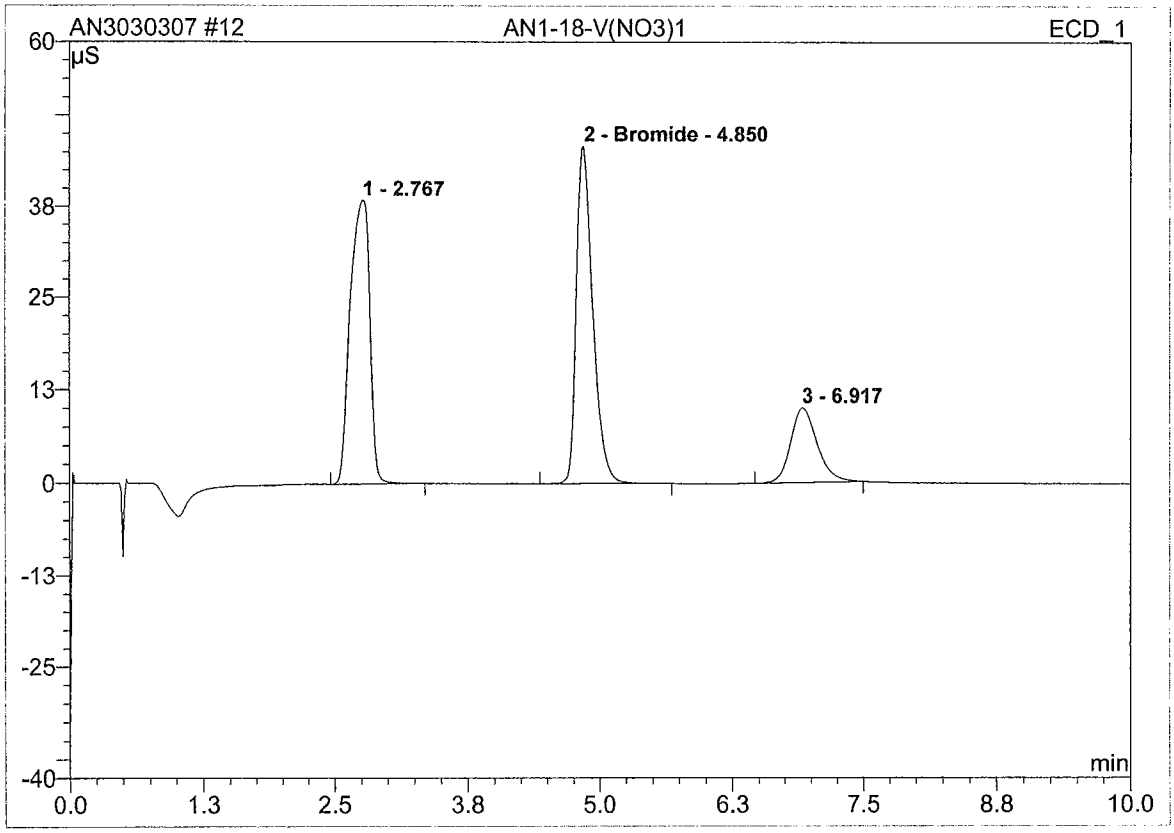
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

12 AN1-18-V(NO3)1

Sample Name:	**AN1-18-V(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**3/3/2007 9:41**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	n.a.	38.439	8.210	42.40	n.a.	BMB
2	4.85	Bromide	45.807	8.234	42.52	31.688	BMB
3	6.92	n.a.	9.984	2.921	15.08	n.a.	BMB
Total:			94.230	19.365	100.00	31.688	

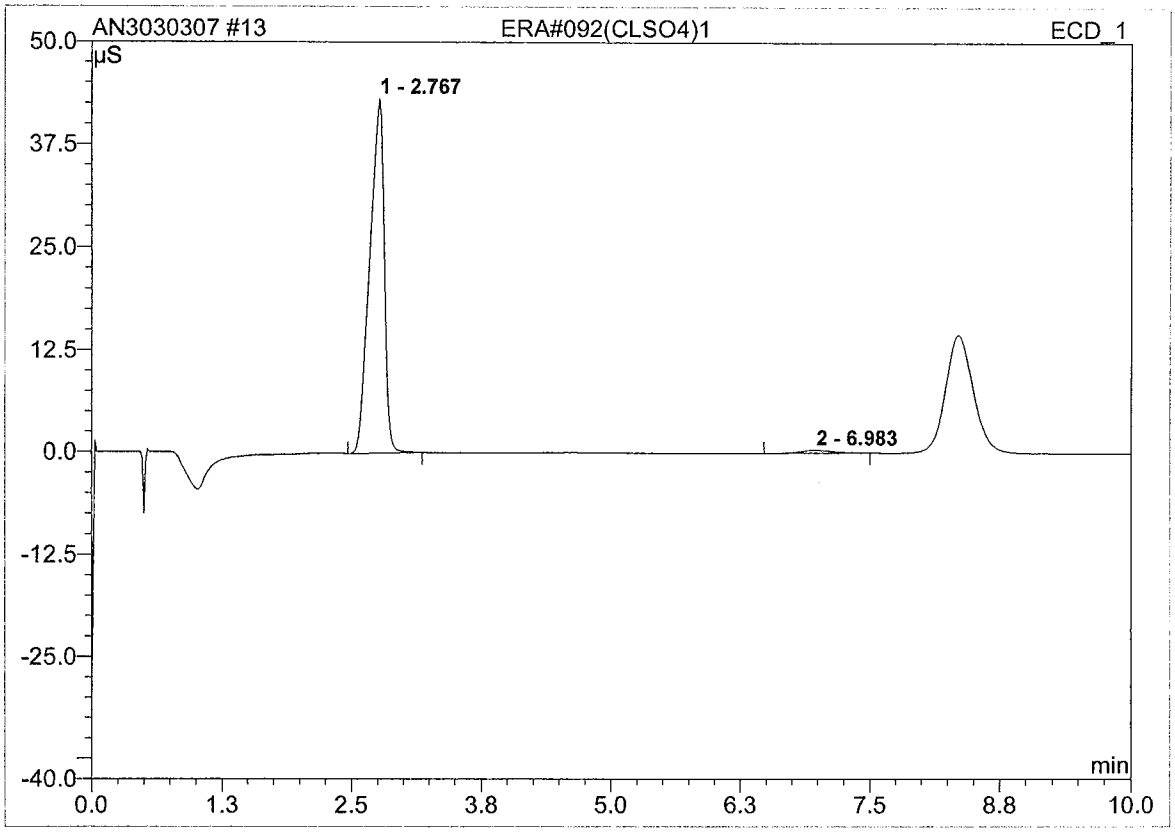
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

13 ERA#092(CLSO4)1

Sample Name:	**ERA#092(CLSO4)1**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 9:53**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.77	n.a.	43.175	6.930	98.15	n.a.	BMB
2	6.98	n.a.	0.372	0.131	1.85	n.a.	BMB
Total:			43.548	7.061	100.00	0.000	

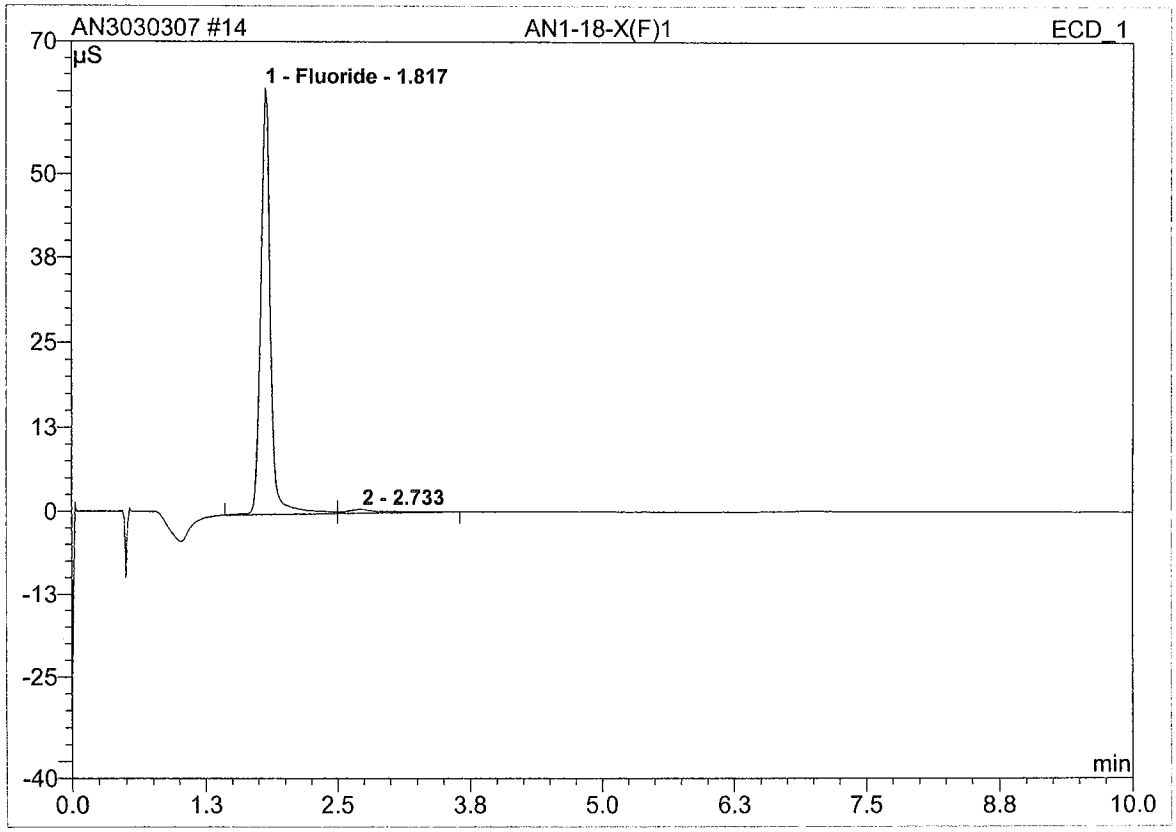
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

14 AN1-18-X(F)1

Sample Name:	**AN1-18-X(F)1**	*Injection Volume:*	**200.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0**
Recording Time:	**3/3/2007 10:06**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	63.412	6.737	96.93	19.327	BM
2	2.73	n.a.	0.556	0.213	3.07	n.a.	MB
Total:			63.968	6.950	100.00	19.327	

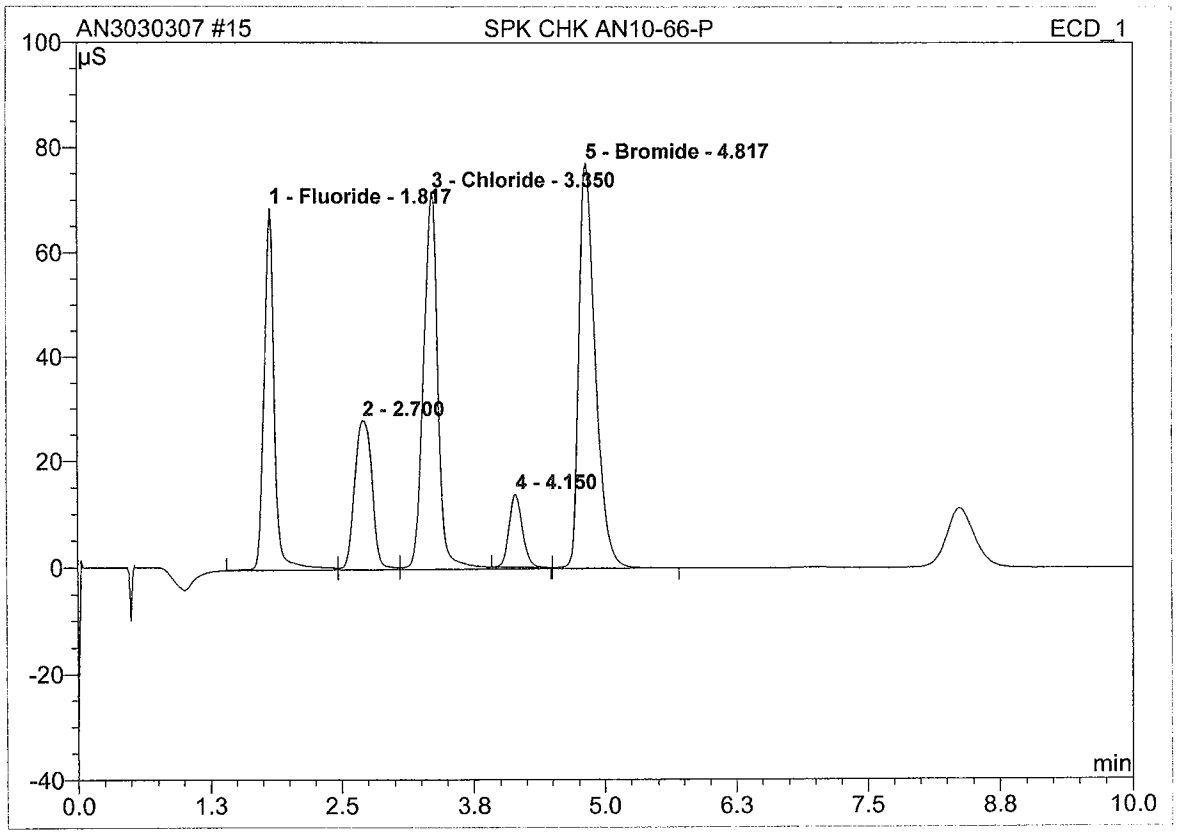
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

15 SPK CHK AN10-66-P

Sample Name:	**SPK CHK AN10-66-P**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 10:18**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride	68.935	7.688	19.03	4.411	BM
2	2.70	n.a.	28.154	5.364	13.27	n.a.	M
3	3.35	Chloride	71.880	11.319	28.01	7.544	M
4	4.15	n.a.	13.648	1.990	4.92	n.a.	Rd
5	4.82	Bromide	77.146	14.048	34.77	27.032	MB
Total:			259.763	40.409	100.00	38.987	

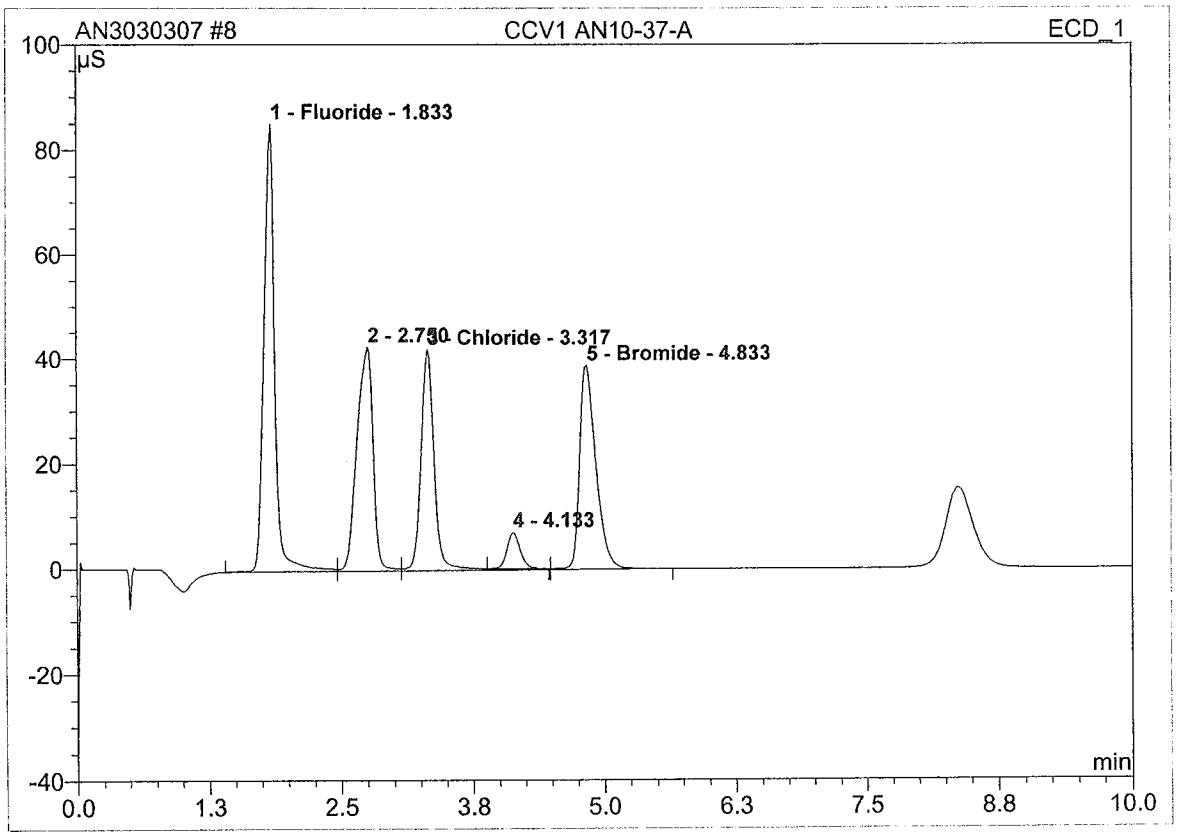
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

8 CCV1 AN10-37-A

Sample Name:	**CCV1 AN10-37-A**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 8:51**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.429	10.006	31.75	5.741	BM
2	2.75	n.a.	42.573	7.451	23.65	n.a.	M
3	3.32	Chloride	42.019	6.070	19.26	4.046	M
4	4.13	n.a.	6.879	1.008	3.20	n.a.	Rd
5	4.83	Bromide	38.772	6.975	22.14	13.422	MB
Total:			215.672	31.510	100.00	23.209	

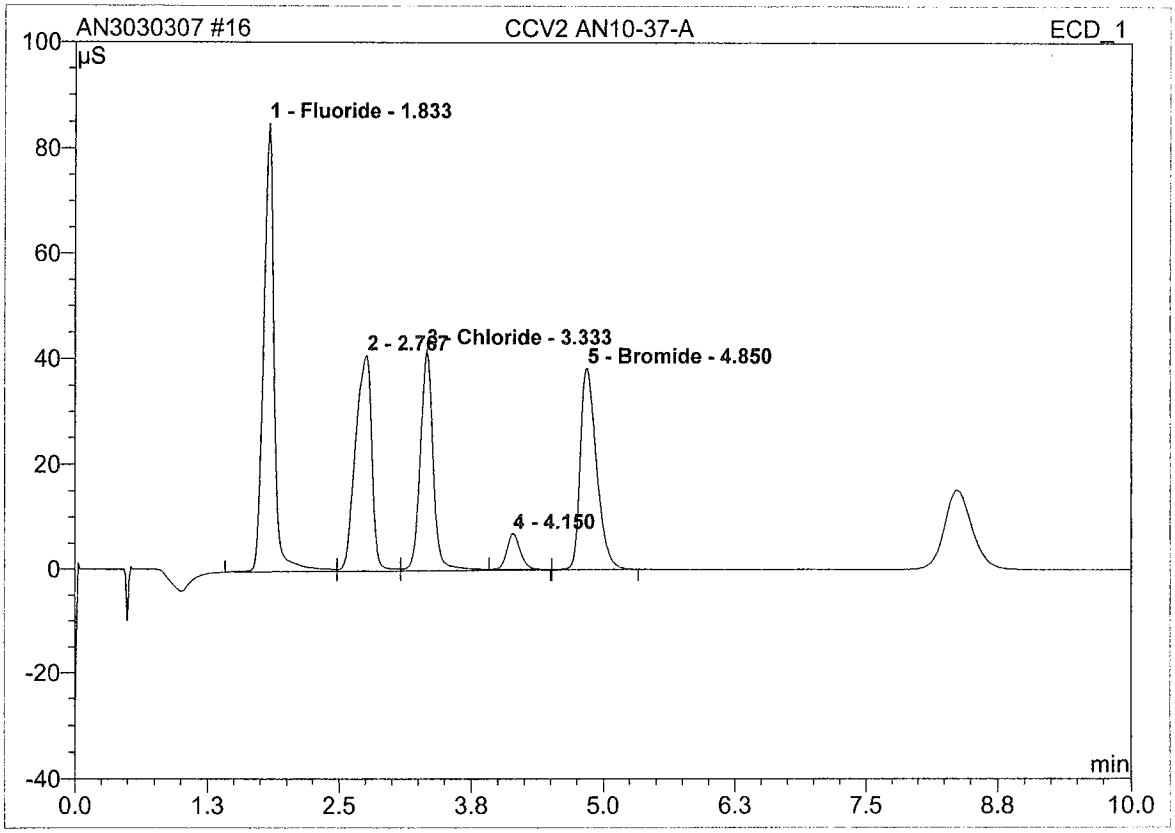
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

16 CCV2 AN10-37-A

Sample Name:	**CCV2 AN10-37-A**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 10:31**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.240	9.990	31.92	5.732	BM
2	2.77	n.a.	41.016	7.417	23.70	n.a.	M
3	3.33	Chloride	42.066	6.015	19.22	4.009	M
4	4.15	n.a.	6.861	1.010	3.23	n.a.	Rd
5	4.85	Bromide	38.346	6.866	21.94	13.212	MB
Total:			213.529	31.298	100.00	22.953	

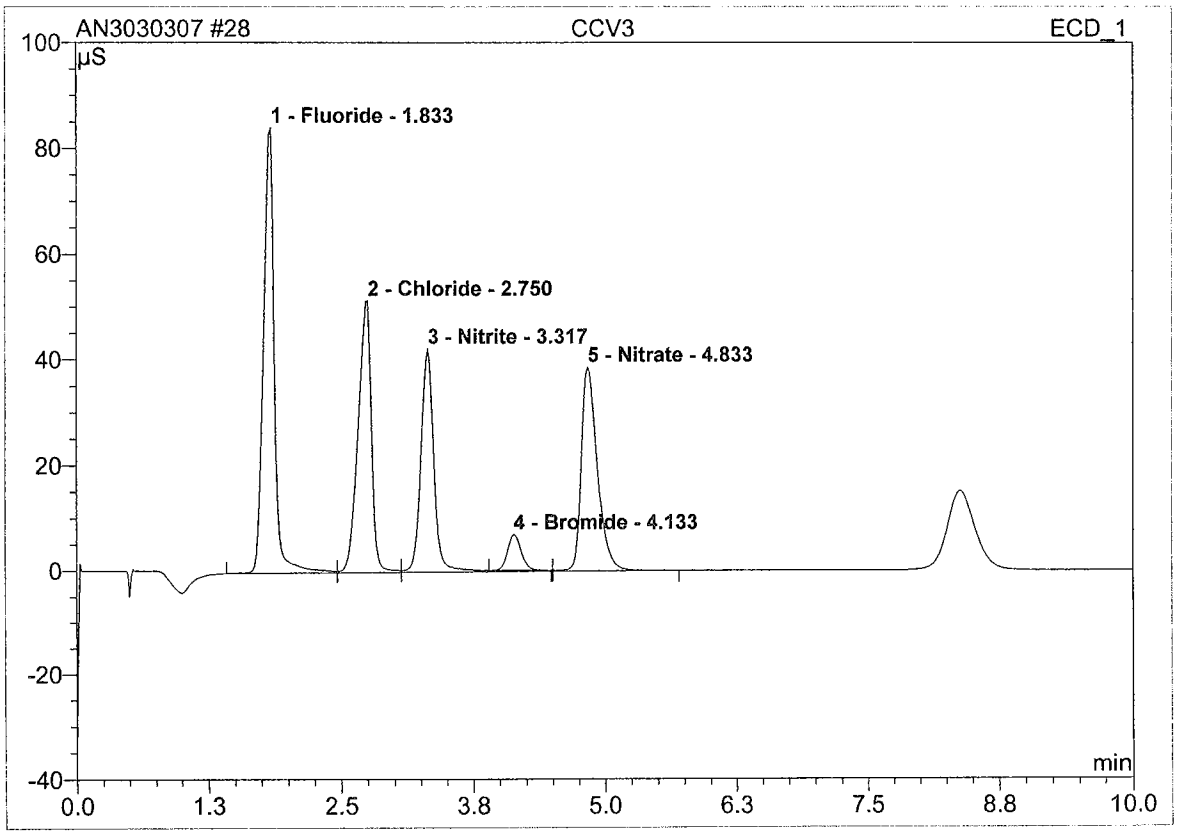
Before

MAR 0 3 2007

Columbia Analytical Services, Inc.

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 13:42**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.372	9.930	31.47	5.697	BM
2	2.75	Chloride	51.545	7.557	23.95	5.036	M
3	3.32	Nitrite	42.328	6.094	19.31	2.203	M
4	4.13	Bromide	6.857	1.008	3.19	1.939	Rd
5	4.83	Nitrate	38.671	6.966	22.08	1.970	MB
Total:			223.773	31.555	100.00	16.846	

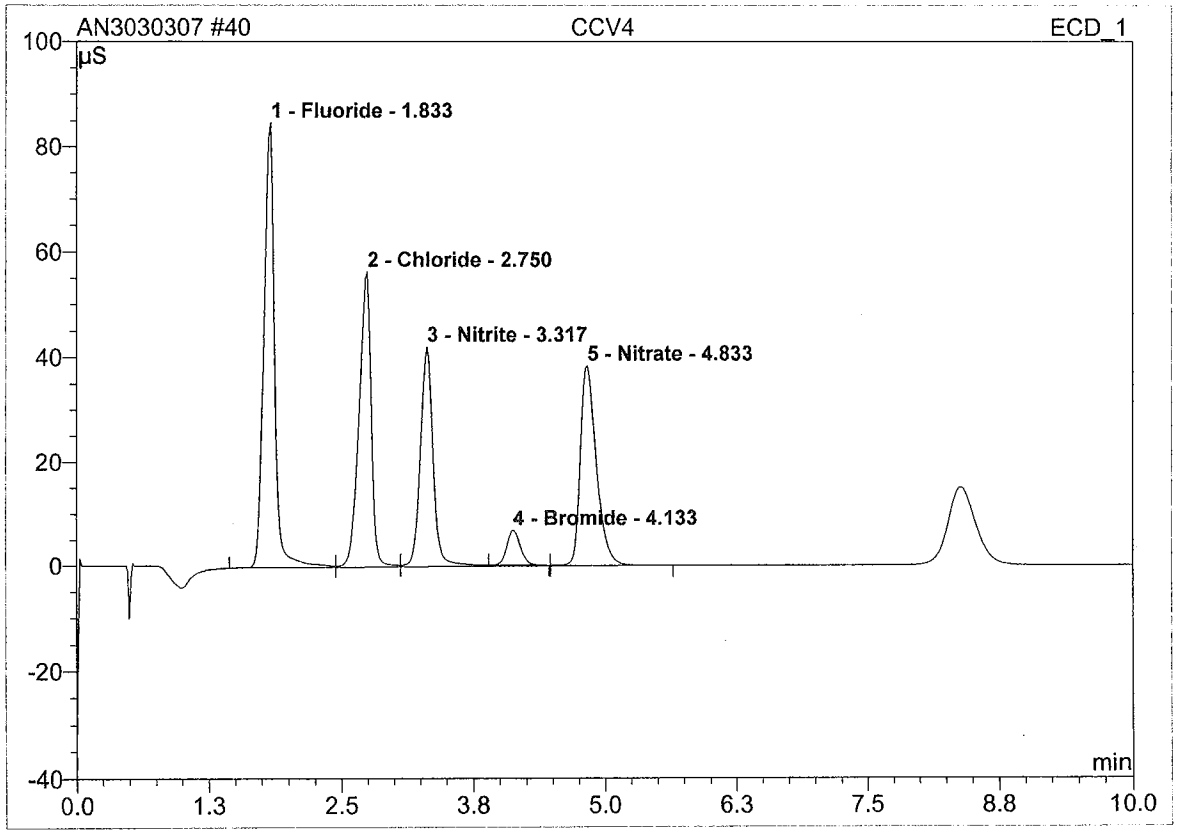
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 16:11**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	84.960	9.867	31.49	5.662	BM
2	2.75	Chloride	56.501	7.561	24.13	5.039	M
3	3.32	Nitrite	42.189	6.033	19.25	2.181	M
4	4.13	Bromide	6.812	0.997	3.18	1.919	Rd
5	4.83	Nitrate	38.465	6.876	21.94	1.944	MB
Total:			228.927	31.334	100.00	16.745	

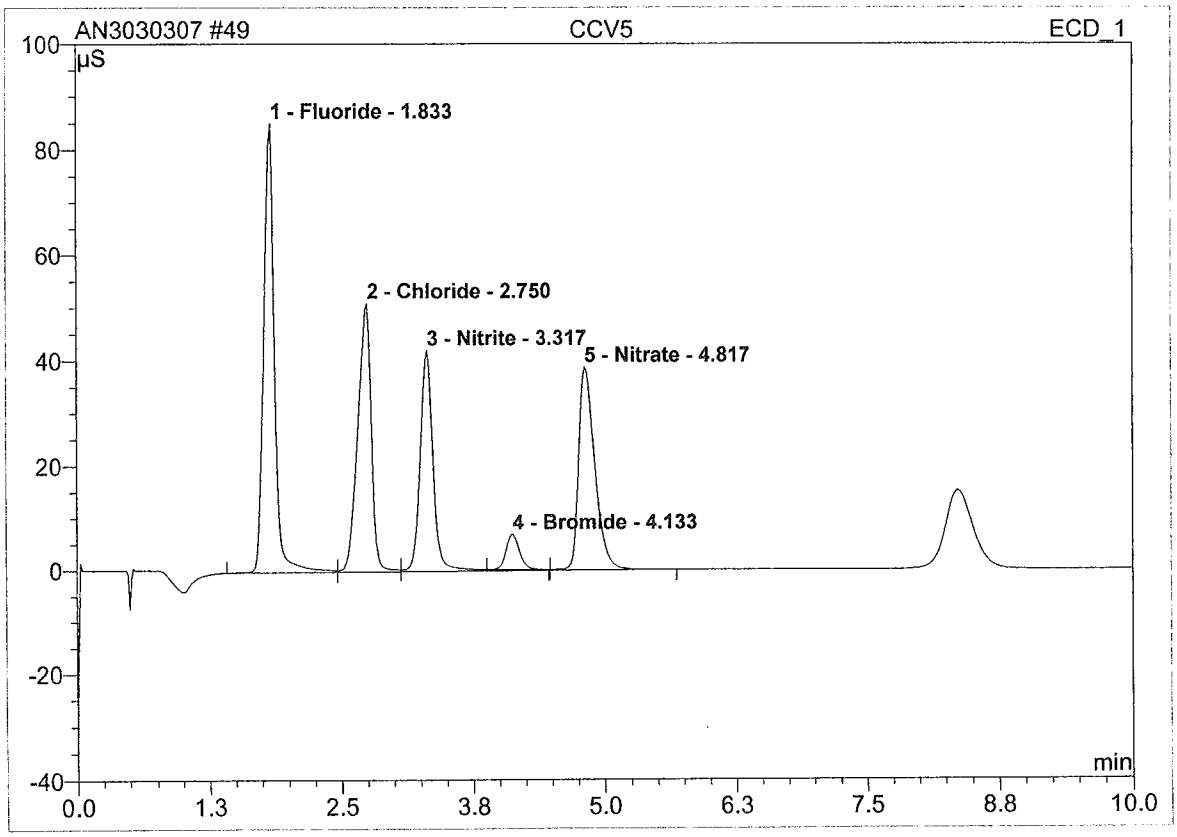
Before

MAR 0 6 2007

Columbia Analytical Services, Inc.

49 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**3/3/2007 18:04**	*Analyst:*	**JS / EM**
Run Time (min):	**10.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	85.389	9.929	31.61	5.697	BM
2	2.75	Chloride	51.152	7.517	23.93	5.010	M
3	3.32	Nitrite	42.206	6.044	19.24	2.186	M
4	4.13	Bromide	6.776	1.002	3.19	1.927	Rd
5	4.82	Nitrate	38.761	6.923	22.04	1.957	MB
Total:			224.283	31.415	100.00	16.777	

Before

MAR 0 6 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-85-A

Sequence: AN3012207 **Date: 01/22/07**

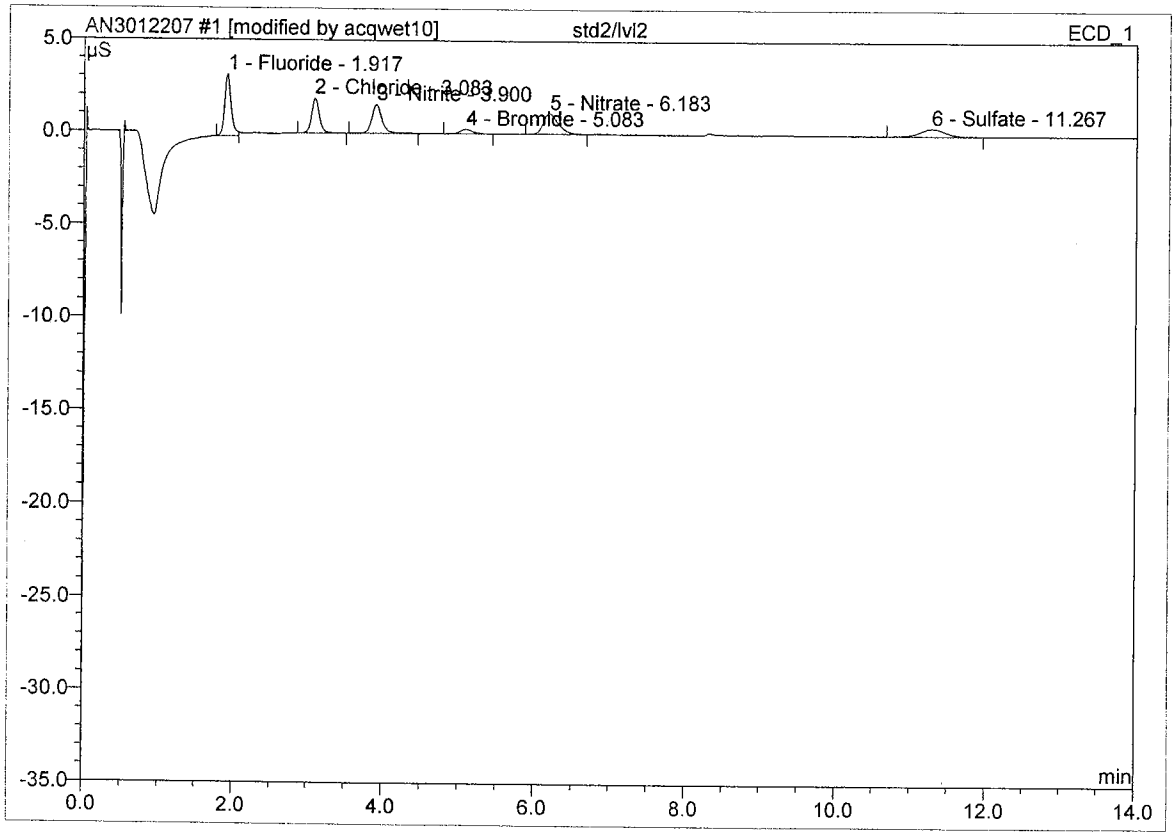
Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9777	1.7441
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9577	1.5000
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9950	2.7656
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9220	0.5197
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8492	3.5368
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9540	0.9202

All calibration standard concentrations are in mg/L unless otherwise noted.

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.335	0.329	26.26	0.189	BM *
2	3.08	Chloride	1.891	0.226	18.02	0.151	BMB*
3	3.90	Nitrite	1.545	0.238	19.01	0.086	BMB*
4	5.08	Bromide	0.242	0.046	3.63	0.088	BMB*
5	6.18	Nitrate	1.101	0.258	20.55	0.073	BMB
6	11.27	Sulfate	0.402	0.157	12.52	0.171	BMB
Total:			8.515	1.253	100.00	0.756	

After Initials BM

JAN 2 3 2007

01/26/07

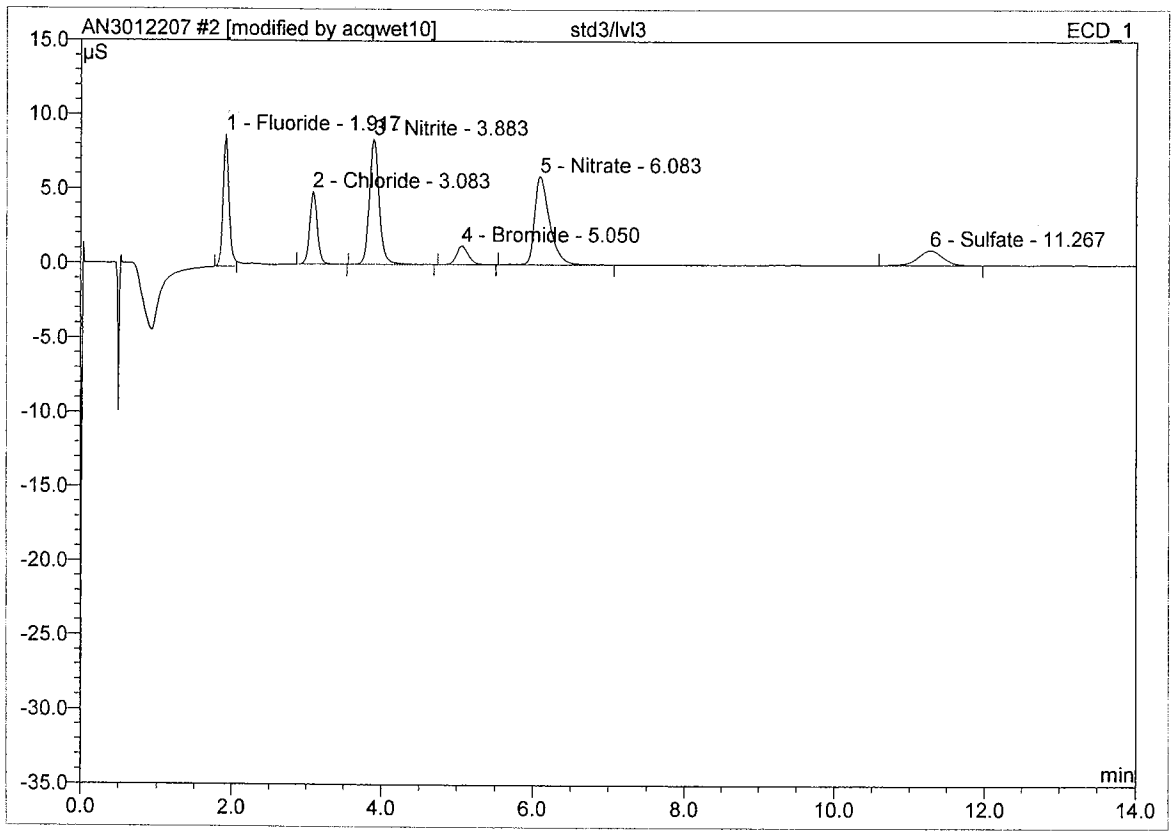
Wrong Peak/Peak not Found
Baseline/shoulder Incorrect
Other 177

default_letter/Integration

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.892	0.838	17.98	0.480	BM *
2	3.08	Chloride	4.882	0.570	12.23	0.380	BMB*
3	3.88	Nitrite	8.409	1.254	26.92	0.454	BMB*
4	5.05	Bromide	1.245	0.229	4.91	0.440	BMB*
5	6.08	Nitrate	5.914	1.374	29.48	0.388	BMB*
6	11.27	Sulfate	1.009	0.396	8.49	0.430	BMB
Total:			30.349	4.660	100.00	2.572	

After
Initials EM

JAN 2 3 2007

EM 1/26/07

default_letter/Integration

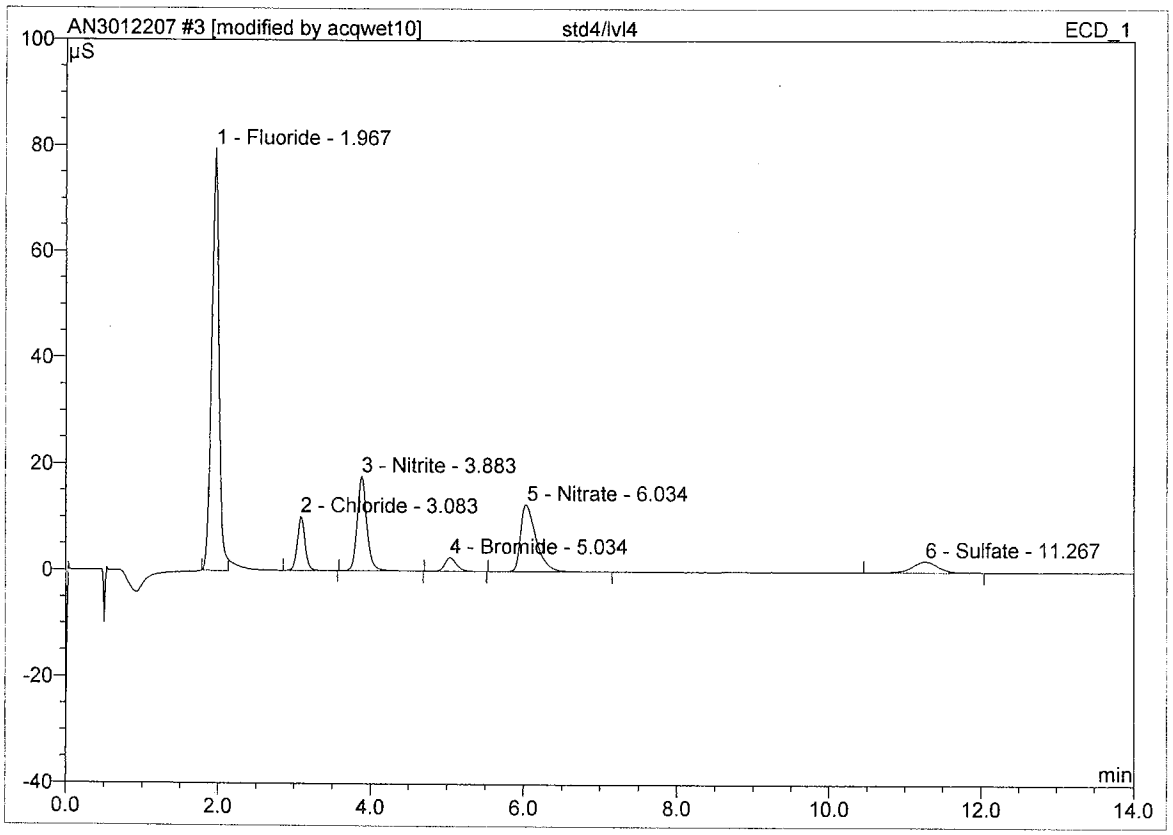
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.616	8.962	53.03	5.139	BM *
2	3.08	Chloride	10.128	1.166	6.90	0.777	BMB*
3	3.88	Nitrite	17.784	2.613	15.46	0.945	BMB*
4	5.03	Bromide	2.578	0.466	2.76	0.897	BMB*
5	6.03	Nitrate	12.589	2.891	17.10	0.817	BMB*
6	11.27	Sulfate	2.053	0.803	4.75	0.873	BMB
Total:			124.747	16.901	100.00	9.448	

After Initials EM

JAN 23 2007

1/26/07

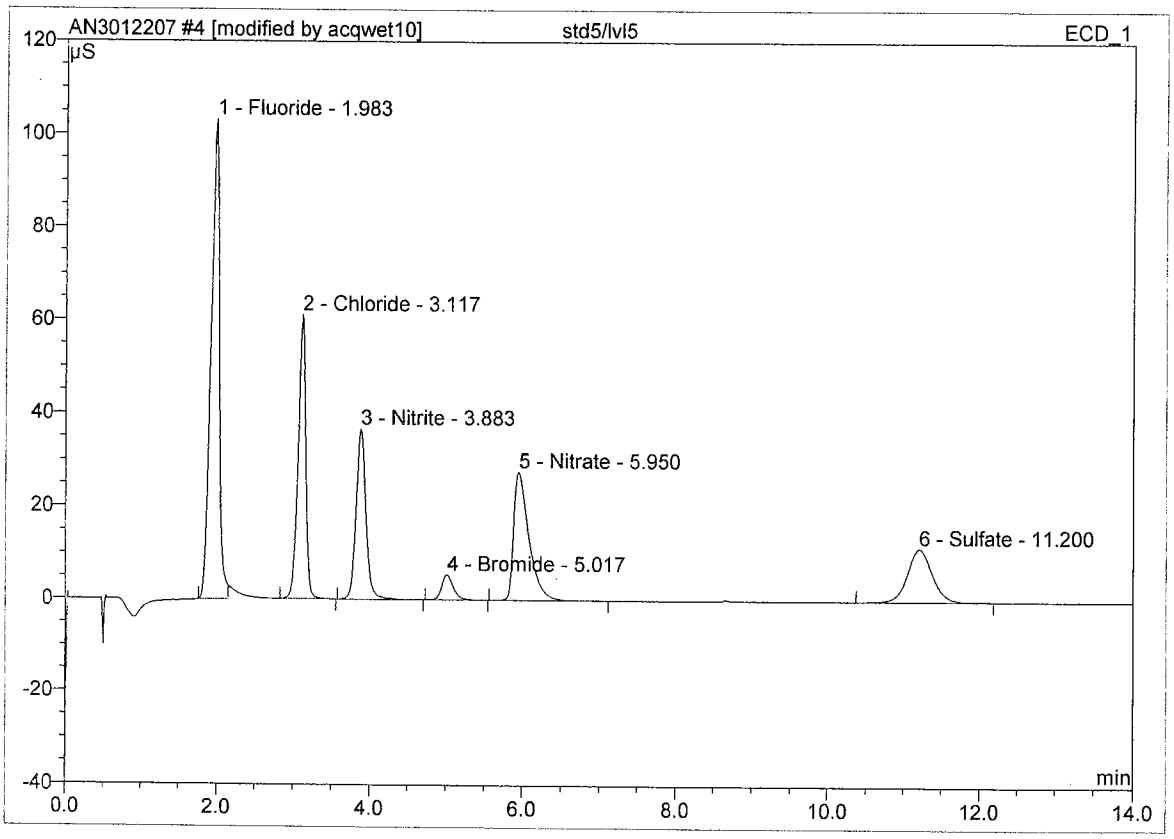
default_letter/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 179

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.196	13.173	35.29	7.553	BM *
2	3.12	Chloride	61.012	7.119	19.07	4.746	BMB*
3	3.88	Nitrite	36.628	5.460	14.63	1.974	BMB*
4	5.02	Bromide	5.419	0.955	2.56	1.838	BMB*
5	5.95	Nitrate	27.578	6.278	16.82	1.775	BMB*
6	11.20	Sulfate	11.462	4.347	11.64	4.724	BMB
Total:			245.295	37.332	100.00	22.610	

After Initials EM

01/26/07

JAN 2 3 2007

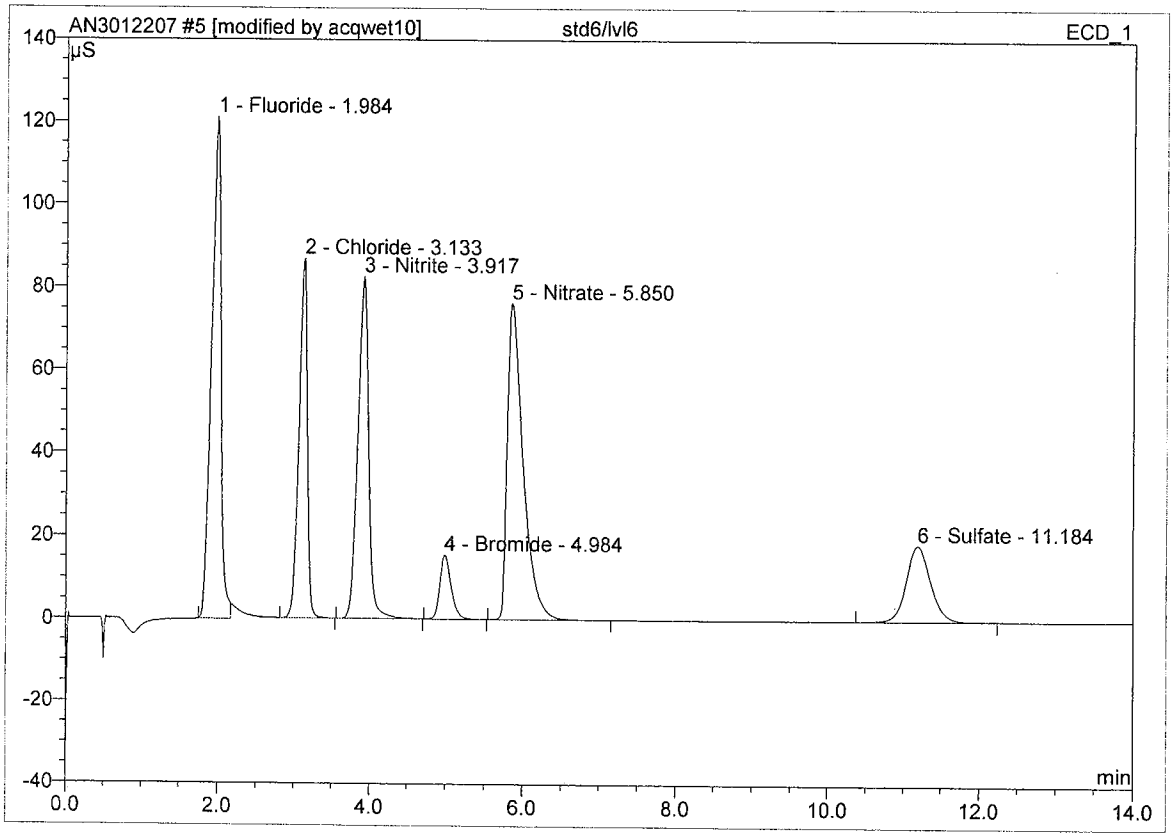
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 180

default_letter/Integration

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.268	17.253	24.62	9.892	BM *
2	3.13	Chloride	86.820	11.203	15.99	7.469	BMB*
3	3.92	Nitrite	82.496	13.901	19.84	5.026	BMB*
4	4.98	Bromide	15.460	2.646	3.78	5.092	BMB*
5	5.85	Nitrate	76.285	18.173	25.94	5.138	BMB*
6	11.18	Sulfate	18.331	6.892	9.84	7.489	BMB
Total:			400.660	70.068	100.00	40.107	

After
Initials BM

JAN 2 3 2007

BM 1/26/07

default_letter/Integration

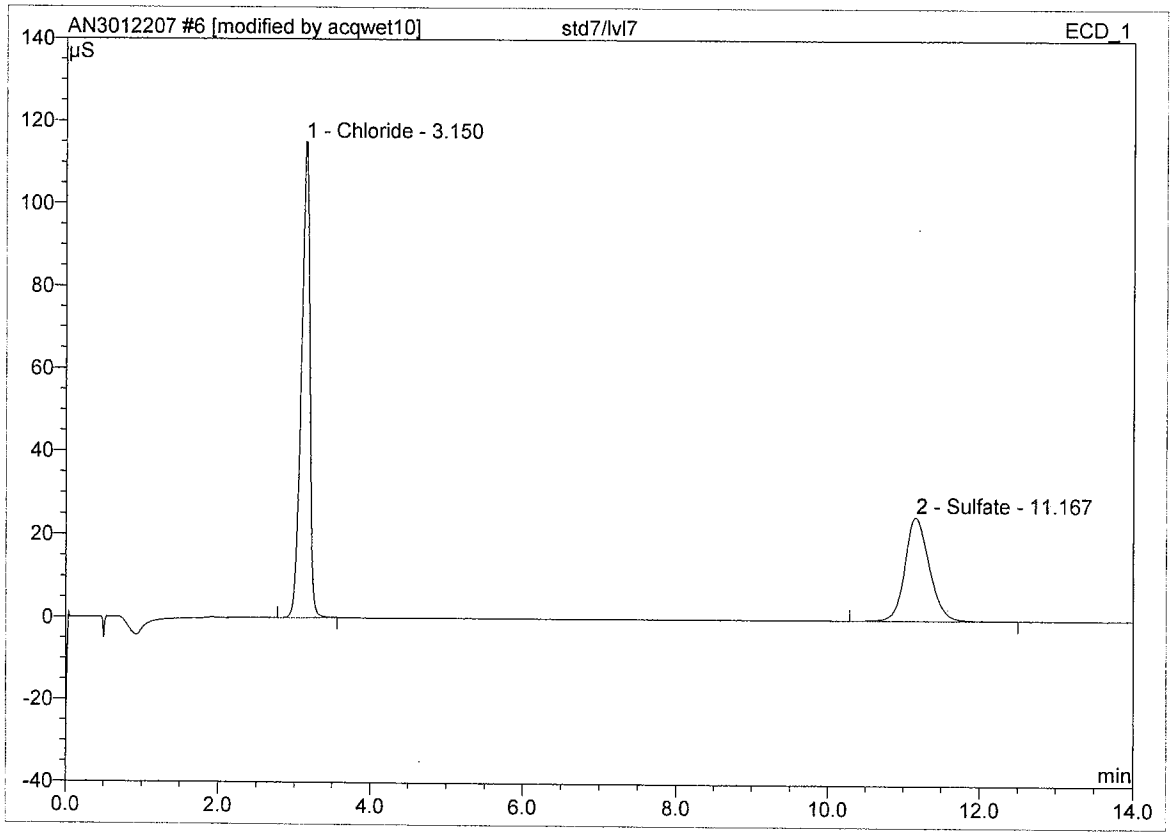
☒ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.038	15.269	62.02	10.179	BMB*
2	11.17	Sulfate	24.940	9.352	37.98	10.163	BMB
Total:			139.978	24.621	100.00	20.342	

After Initials TM 01/26/07

JAN 2 3 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

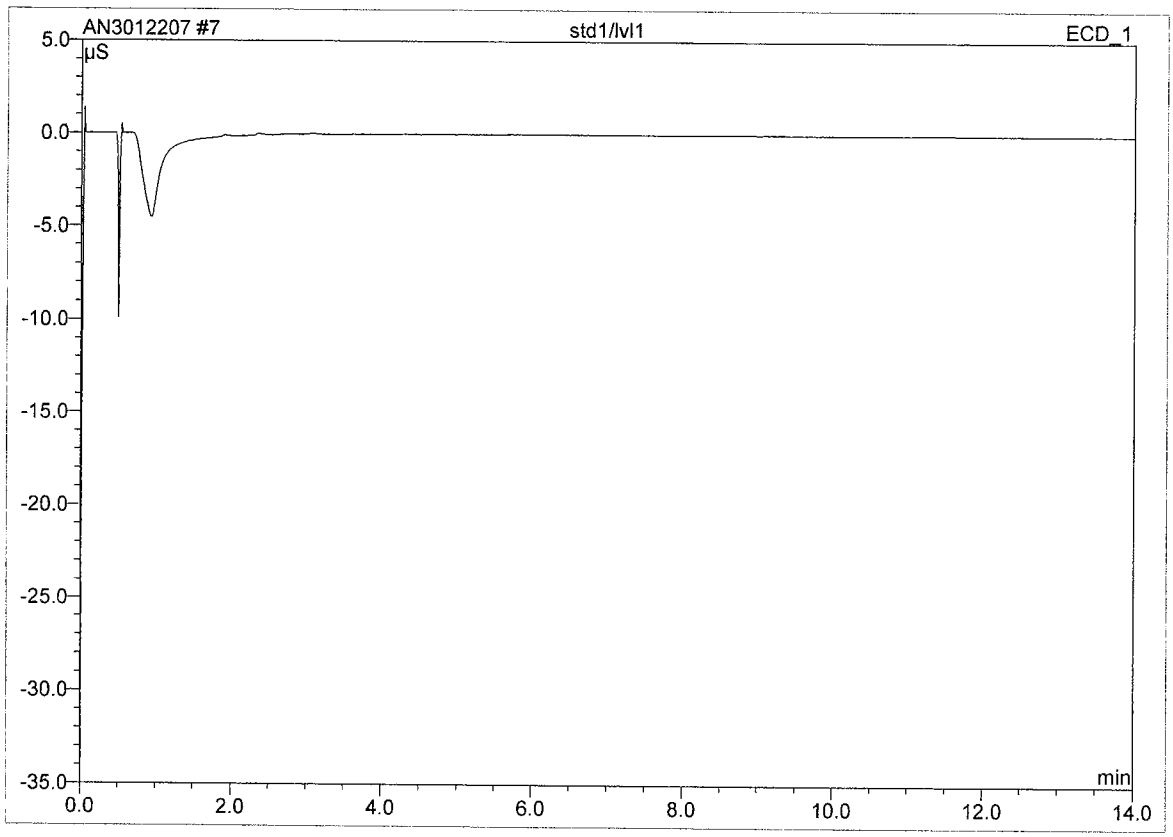
default_letter/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Columbia Analytical Services, Inc.

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:47**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



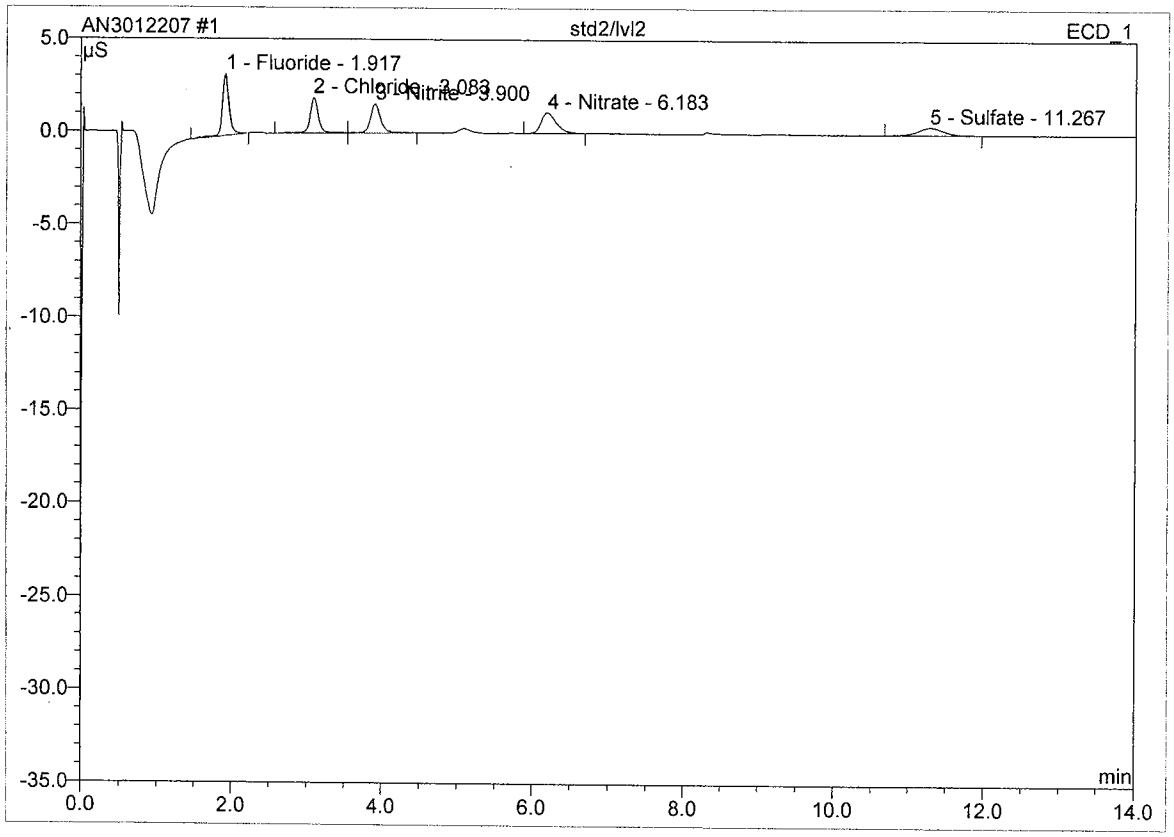
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

1/26/07

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:09**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	3.312	0.338	26.94	0.194	BMB
2	3.08	Chloride	1.924	0.253	20.19	0.169	BM
3	3.90	Nitrite	1.558	0.249	19.83	0.090	MB
4	6.18	Nitrate	1.101	0.258	20.53	0.073	BMB
5	11.27	Sulfate	0.402	0.157	12.51	0.171	BMB
Total:			8.297	1.254	100.00	0.696	

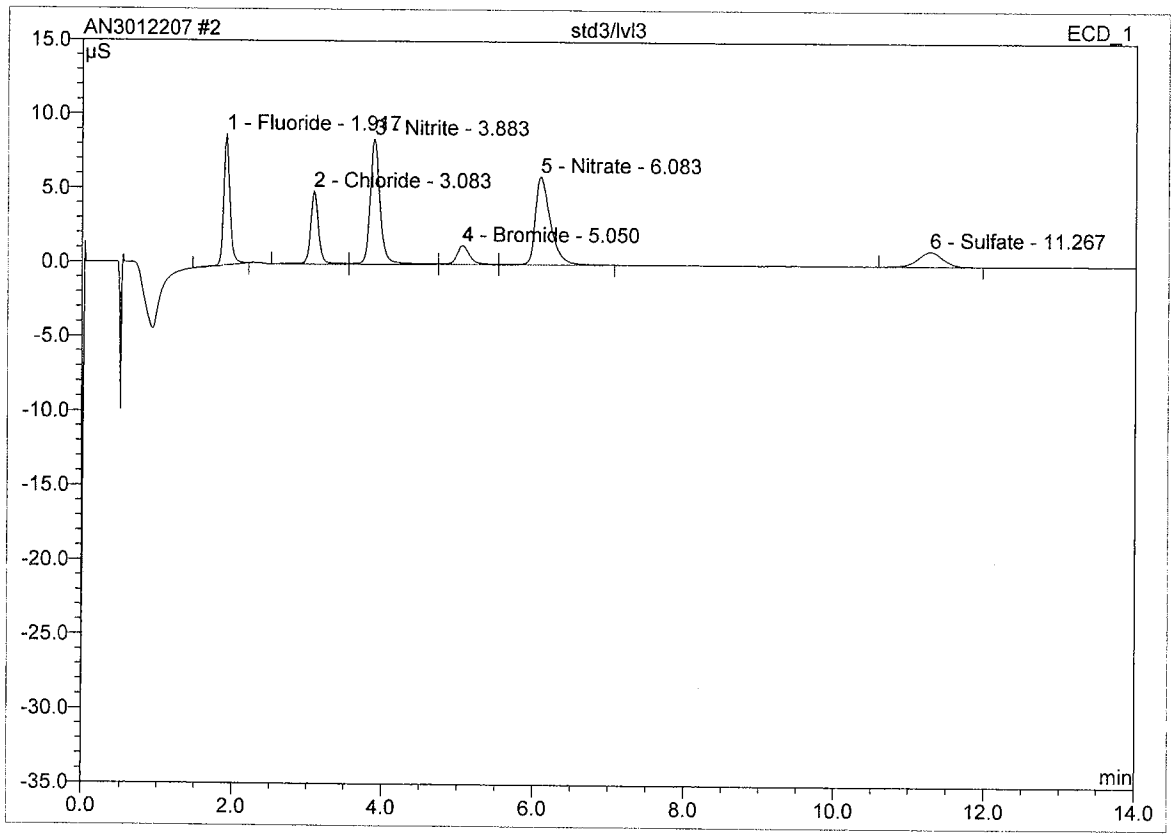
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:25**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	8.842	0.838	17.49	0.481	BMB
2	3.08	Chloride	4.926	0.607	12.67	0.405	BM
3	3.88	Nitrite	8.448	1.300	27.14	0.470	M
4	5.05	Bromide	1.278	0.255	5.32	0.490	M
5	6.08	Nitrate	5.932	1.395	29.12	0.394	MB
6	11.27	Sulfate	1.009	0.396	8.26	0.430	BMB
Total:			30.434	4.792	100.00	2.670	

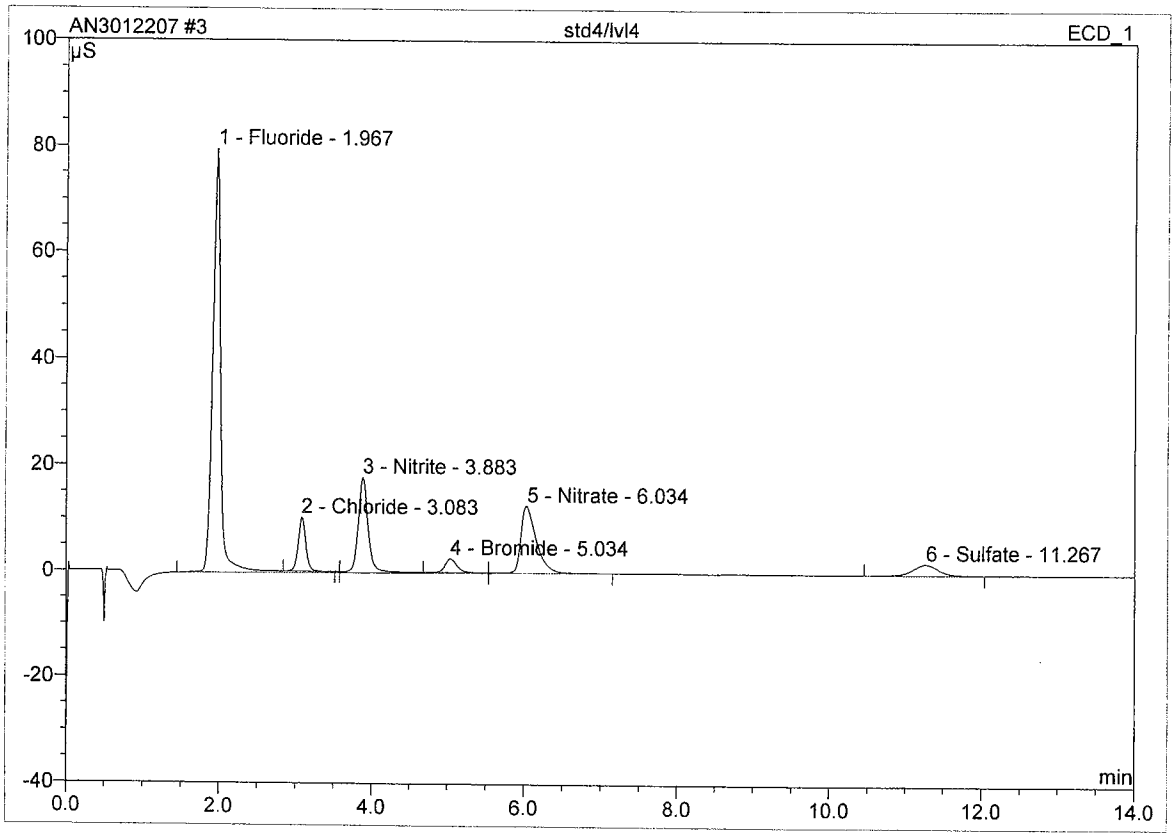
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:41**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	Fluoride	79.838	9.798	53.87	5.545	BM
2	3.08	Chloride	10.128	1.166	6.41	0.777	Rd
3	3.88	Nitrite	18.016	2.972	16.34	1.070	M
4	5.03	Bromide	2.578	0.467	2.57	0.898	Rd
5	6.03	Nitrate	12.669	2.984	16.41	0.843	MB
6	11.27	Sulfate	2.053	0.803	4.42	0.873	BMB
Total:			125.281	18.189	100.00	10.006	

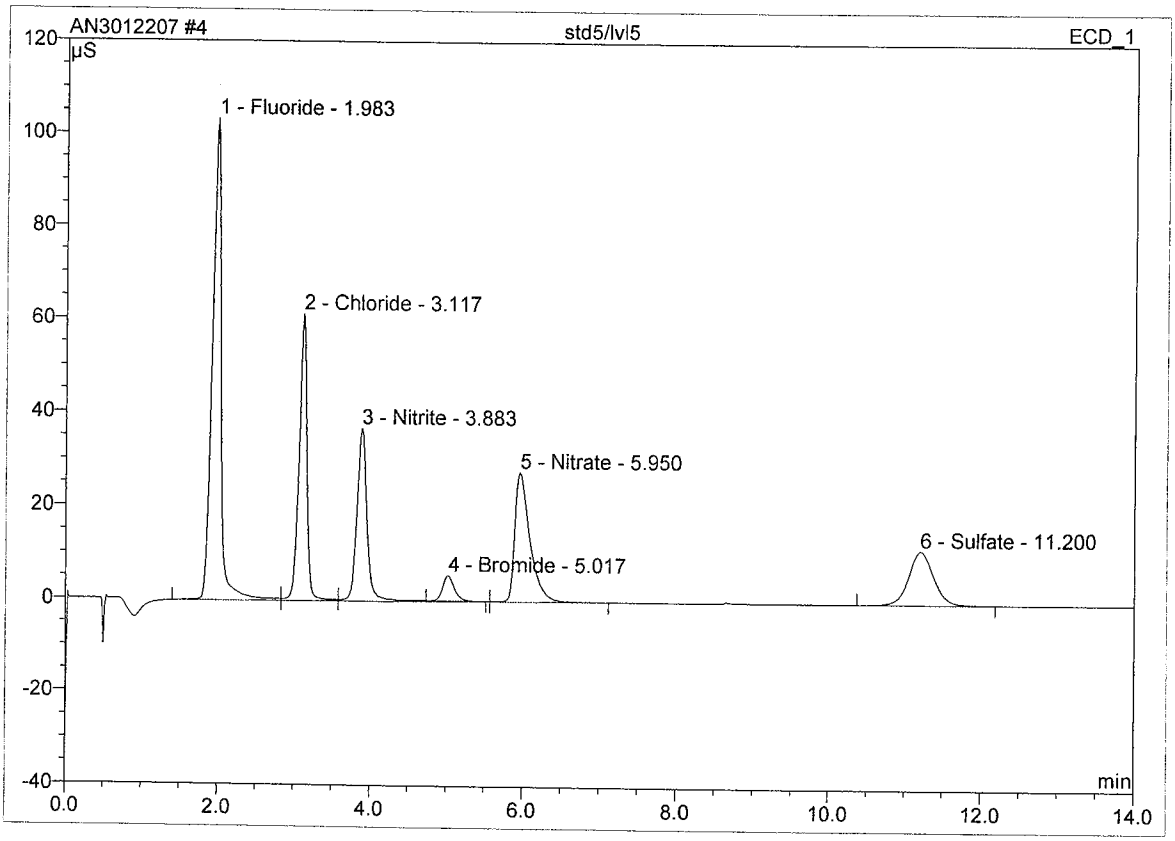
Before

JAN 23 2007

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 16:58**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



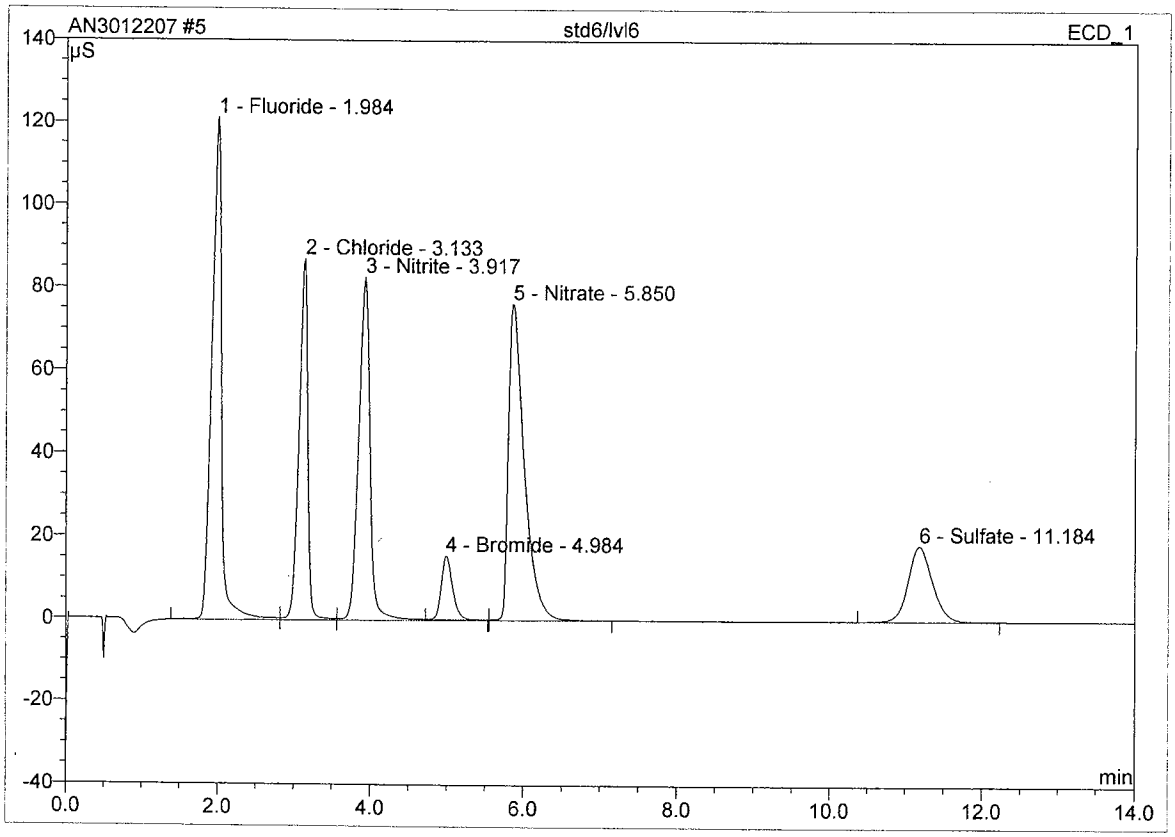
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	103.493	14.021	35.96	7.881	BM
2	3.12	Chloride	61.387	7.391	18.96	4.903	M
3	3.88	Nitrite	36.911	5.893	15.12	2.109	M
4	5.02	Bromide	5.419	0.955	2.45	1.838	Rd
5	5.95	Nitrate	27.675	6.378	16.36	1.800	MB
6	11.20	Sulfate	11.462	4.347	11.15	4.724	BMB
Total:			246.347	38.985	100.00	23.255	

Before

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:14**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.98	Fluoride	121.469	18.190	25.30	10.130	BM
2	3.13	Chloride	87.201	11.483	15.97	7.597	M
3	3.92	Nitrite	82.798	14.402	20.03	5.056	M
4	4.98	Bromide	15.460	2.646	3.68	5.092	Rd
5	5.85	Nitrate	76.399	18.285	25.43	5.143	MB
6	11.18	Sulfate	18.331	6.892	9.59	7.489	BMB
Total:			401.659	71.898	100.00	40.507	

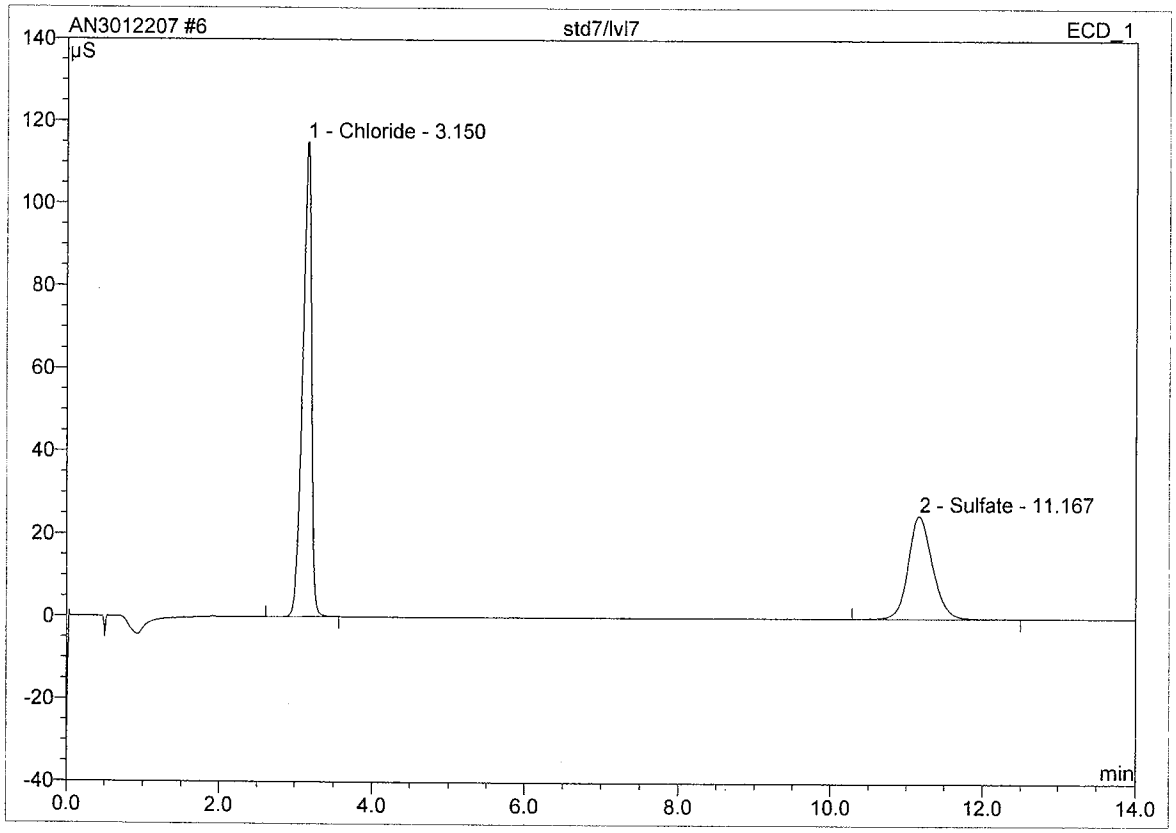
Before

JAN 2 3 2007

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	**1/22/2007**
Control Program:	**epa300**	*ICAL ID#:*	**AN10-85-A**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**1/22/2007 17:31**	*Analyst:*	**CL / EM**
Run Time (min):	**14.00**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.15	Chloride	115.046	15.276	62.03	10.181	BMB
2	11.17	Sulfate	24.940	9.352	37.97	10.163	BMB
Total:			139.986	24.628	100.00	20.344	

Before

JAN 2 3 2007

Metals

DISSOLVED METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Sample No.	Lab Sample ID.
Batch QCD1	K0701647-001D DISS
Batch QCS1	K0701647-001S DISS
DAEGW104C1	K0701703-001 DISS
DAEGW104C1D	K0701703-001D DISS
DAEGW104C1S	K0701703-001S DISS
Method Blank	K0701703-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Signature: [illegible] Date: 03/22/07

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701703
Project No.:	NA	Date Collected:	03/02/07
Project Name:	Presidio of San Franciscc	Date Received:	03/03/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: DAEGW104C1 Lab Code: K0701703-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/12/07	3/19/07	50	U	
Antimony	6020	0.05	1	3/12/07	3/20/07	0.05	U	
Arsenic	6020	0.5	1	3/12/07	3/20/07	1.0		
Barium	6010B	5.0	1	3/12/07	3/19/07	80.3		
Beryllium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/12/07	3/20/07	0.02		
Calcium	6010B	50	1	3/12/07	3/19/07	47500		
Chromium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Cobalt	6020	0.02	1	3/12/07	3/20/07	0.29		
Copper	6020	0.1	1	3/12/07	3/20/07	0.4		
Iron	6010B	20	1	3/12/07	3/19/07	20	U	
Lead	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Magnesium	6010B	20	1	3/12/07	3/19/07	55100		
Manganese	6010B	5.0	1	3/12/07	3/19/07	538		
Mercury	7470A	0.2	1	3/6/07	3/7/07	0.2	U	
Nickel	6020	0.2	1	3/12/07	3/20/07	2.8		
Potassium	6010B	2000	1	3/12/07	3/19/07	2000	U	
Selenium	6020	4.0	1	3/12/07	3/20/07	4.0	U	
Silver	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Sodium	6010B	100	1	3/12/07	3/19/07	44700		
Thallium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/12/07	3/19/07	10	U	
Zinc	6010B	10	1	3/12/07	3/19/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio of San Franciscc
Matrix: WATER

Service Request: K0701703
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K0701703-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/12/07	3/19/07	50	U	
Antimony	6020	0.05	1	3/12/07	3/20/07	0.05	U	
Arsenic	6020	0.5	1	3/12/07	3/20/07	0.5	U	
Barium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Beryllium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Calcium	6010B	50	1	3/12/07	3/19/07	50	U	
Chromium	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Cobalt	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Copper	6020	0.1	1	3/12/07	3/20/07	0.1	U	
Iron	6010B	20	1	3/12/07	3/19/07	20	U	
Lead	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Magnesium	6010B	20	1	3/12/07	3/19/07	20	U	
Manganese	6010B	5.0	1	3/12/07	3/19/07	5.0	U	
Mercury	7470A	0.2	1	3/6/07	3/7/07	0.2	U	
Nickel	6020	0.2	1	3/12/07	3/20/07	0.2	U	
Potassium	6010B	2000	1	3/12/07	3/19/07	2000	U	
Selenium	6020	4.0	1	3/12/07	3/20/07	4.0	U	
Silver	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Sodium	6010B	100	1	3/12/07	3/19/07	100	U	
Thallium	6020	0.02	1	3/12/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/12/07	3/19/07	10	U	
Zinc	6010B	10	1	3/12/07	3/19/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4950	99	5000	5160	103	5180	104	6010B
Antimony	25.0	25.4	102	25.0	24.4	98	25.0	100	6020
Arsenic	25.0	26.5	106	25.0	25.4	102	25.9	104	6020
Barium	5000	4930	99	500	512	102	514	103	6010B
Beryllium	2.5	2.65	106	25.0	26.3	105	25.9	104	6020
Cadmium	12.5	13.2	106	25.0	24.9	100	25.3	101	6020
Calcium	12500	12500	100	5000	5090	102	5080	102	6010B
Chromium	500	499	100	5000	5150	103	5170	103	6010B
Cobalt	25.0	24.8	99	25.0	24.9	100	26.3	105	6020
Copper	12.5	12.4	99	25.0	24.4	98	25.2	101	6020
Iron	2500	2440	98	5000	5120	102	5110	102	6010B
Lead	25.0	25.9	104	25.0	24.6	98	24.9	100	6020
Magnesium	12500	12300	98	5000	5110	102	5040	101	6010B
Magnesium	12500	12700	102	5000	5320	106	5170	103	6010B
Manganese	1250	1240	99	500	510	102	512	102	6010B
Mercury	5.0	5.21	104	5.0	4.88	98	4.80	96	7470A
Nickel	25.0	24.4	98	25.0	24.6	98	25.8	103	6020
Potassium	12500	12000	96	25000	25100	100	25300	101	6010B
Selenium	25.0	25.8	103	25.0	25.0	100	26.0	104	6020
Silver	12.5	12.3	98	25.0	24.1	96	25.0	100	6020
Sodium	12500	12700	102	25000	26100	104	26100	104	6010B
Thallium	25.0	25.9	104	25.0	24.9	100	24.8	99	6020
Vanadium	1250	1230	98	500	510	102	510	102	6010B
Zinc	1250	1250	100	2500	2560	102	2570	103	6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5000	100			6010B
Antimony				25.0	24.6	98			6020
Arsenic				25.0	25.5	102			6020
Barium				500	498	100			6010B
Beryllium				25.0	24.1	96			6020
Cadmium				25.0	25.8	103			6020
Calcium				5000	5020	100			6010B
Chromium				5000	5080	102			6010B
Iron				5000	5010	100			6010B
Lead				25.0	24.9	100			6020
Magnesium				5000	4930	99			6010B
Magnesium				5000	5190	104			6010B
Manganese				500	502	100			6010B
Mercury				5.0	4.86	97	4.93	99	7470A
Potassium				25000	24500	98			6010B
Selenium				25.0	25.0	100			6020
Silver				25.0	25.6	102			6020
Sodium				25000	25500	102			6010B
Thallium				25.0	24.9	100			6020
Vanadium				500	499	100			6010B
Zinc				2500	2530	101			6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.98	100	4.90	98	7470A

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cobalt	25.0	24.3	97	25.0	24.5	98	23.9	96	6020
Copper	12.5	12.1	98	25.0	24.4	98	23.6	94	6020
Nickel	25.0	24.1	96	25.0	24.4	98	23.6	94	6020

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	50.5	101		
Antimony				0.05	0.05	95		
Arsenic				0.50	0.58	116		
Barium				5.0	4.44	89		
Beryllium				0.02	0.02	101		
Cadmium				0.05	0.02	42		
Calcium				50	55.8	112		
Chromium				5.0	3.27	65		
Cobalt				0.02	0.02	110		
Copper				0.10	0.10	103		
Iron				20	20.1	101		
Lead				0.02	0.02	89		
Magnesium				20	22.1	111		
Manganese				5.0	5.32	106		
Mercury	0.20	0.2	85					
Nickel				0.20	0.19	95		
Potassium				2000	1020	51		
Selenium				1.0	1.07	107		
Silver				0.02	0.01	71		
Sodium				100	83.4	83		
Thallium				0.02	0.02	111		
Vanadium				10	6.76	68		
Zinc				10	10.5	105		

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Cobalt				0.02	0.02	106		
Copper				0.10	0.1	85		
Nickel				0.20	0.19	94		

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	50	U	50	U	50	U	50	U					6010B
Antimony	0.05	U	0.05	U	0.05	U	0.05	U					6020
Arsenic	0.5	U	0.5	U	0.5	U	0.5	U					6020
Barium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Beryllium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Cadmium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Calcium	50	U	50	U	50	U	50	U					6010B
Chromium	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Cobalt	0.02	U	0.02	U	0.02	U							6020
Copper	0.1	U	0.1	U	0.1	U							6020
Iron	20	U	20	U	20	U	20	U					6010B
Lead	0.02	U	0.02	U	0.02	U	0.02	U					6020
Magnesium	20	U	20	U	20	U	20	U					6010B
Manganese	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Mercury	0.2	U	0.2	U	0.2	U	0.2	U					7470A
Nickel	0.2	U	0.2	U	0.2	U							6020
Potassium	2000	U	2000	U	2000	U	2000	U					6010B
Selenium	4.0	U	4.0	U	4.0	U	4.0	U					6020
Silver	0.02	U	0.02	U	0.02	U	0.02	U					6020
Sodium	100	U	100	U	100	U	100	U					6010B
Thallium	0.02	U	0.02	U	0.02	U	0.02	U					6020
Vanadium	10	U	10	U	10	U	10	U					6010B
Zinc	10	U	10	U	10	U	10	U					6010B

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Mercury			0.2	U	0.2	U	0.2	U					7470A

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Cobalt	0.02	U	0.02	U	0.02	U							6020
Copper	0.1	U	0.1	U	0.1	U							6020
Nickel	0.2	U	0.2	U	0.2	U							6020

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: Excell ICPMS

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony			0.02	0.02				
Arsenic		20	0.0	20.7	104			
Beryllium			0.00	0.00				
Cadmium		20	0.73	20.4	102			
Cobalt		20	0.03	19.4	97			
Copper		20	0.4	18.7	94			
Lead			0.03	0.03				
Nickel		20	0.6	19.6	98			
Selenium			0.9	0.8				
Silver		20	0.01	17.9	90			
Thallium			0.00	0.00				

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	512000	503000	101			
Barium		500	0.3	480	96			
Calcium	500000	500000	484000	478000	96			
Chromium		500	1.6	459	92			
Iron	200000	200000	180000	177000	89			
Magnesium	500000	500000	511000	503000	101			
Manganese		500	-6.0	450	90			
Potassium			-662	-775				
Sodium			-29	-15				
Vanadium		500	-2	458	92			
Zinc		1000	10.2	973	97			

DISSOLVED METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701703
Project No.:
Units: µg/L
Project Name: Presidio of San Franciscc
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QCS1
Lab Code: K0701647-001S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	75 - 125	2100		50.0	U	2000	105		6010B
Antimony	75 - 125	21.4		0.86		20.0	103		6020
Arsenic	75 - 125	22.9		1.1		20.0	108		6020
Barium	75 - 125	2110		6.0		2000	105		6010B
Beryllium	75 - 125	20.3		0.02	U	20.0	102		6020
Cadmium	75 - 125	19.7		0.02	U	20.0	99		6020
Chromium	75 - 125	212		5.0	U	200	106		6010B
Cobalt	75 - 125	18.8		0.06		20.0	94		6020
Copper	75 - 125	19.8		1.6		20.0	91		6020
Iron	75 - 125	1030		20.0	U	1000	103		6010B
Lead	75 - 125	19.2		0.05		20.0	96		6020
Manganese	75 - 125	523		5.0	U	500	105		6010B
Nickel	75 - 125	19.9		1.7		20.0	91		6020
Selenium	75 - 125	21.1		4.0	U	20.0	106		6020
Silver	75 - 125	18.5		0.02	U	20.0	93		6020
Thallium	75 - 125	19.0		0.02	U	20.0	95		6020
Vanadium	75 - 125	523		10.0	U	500	105		6010B
Zinc	75 - 125	520		10.0	U	500	104		6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 5a -

SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701703
Project No.:
Units: µg/L
Project Name: Presidio of San Francisco
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: DAEGW104C1S
Lab Code: K0701703-001S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	75 - 125	1.0		0.2	U	1.0	101		7470A

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701703
Project No.:
Units: ug/L
Project Name: Presidio of San Francisco
Matrix: WATER

Sample Name: Batch QCA1
Lab Code: K0701647-001A DISS

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75-125	21.5		0.86		20.0	103		MS
Arsenic	75-125	22.9		1.10		20.0	109		MS
Beryllium	75-125	20.2		0.02	U	20.0	101		MS
Cadmium	75-125	20.7		0.02	U	20.0	104		MS
Cobalt	75-125	19.1		0.06		20.0	96		MS
Copper	75-125	20.1		1.64		20.0	92		MS
Lead	75-125	19.6		0.05		20.0	98		MS
Nickel	75-125	20.2		1.73		20.0	92		MS
Selenium	75-125	21.0		4.00	U	20.0	105		MS
Silver	75-125	9.40		0.02	U	10.0	94		MS
Thallium	75-125	19.4		0.02	U	20.0	97		MS

Comments:

DISSOLVED METALS

- 5b -

POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.

Service Request: K0701703

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Matrix: WATER

Sample Name: Batch QCA3

Lab Code: K0701497-001A

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercurv	75-125	0.9		0.2	U	1.00	92		CV

Comments:

DISSOLVED METALS

- 6 -

DUPLICATES

Client: Treadwell and Rollo, Inc.
Service Request: K0701703
Project No.:
Units: µg/L
Project Name: Presidio of San Francisco
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QCD1
Lab Code: K0701647-001D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		50	U	50	U			6010B
Antimony	20	0.86		0.86		1		6020
Arsenic		1.1		1.2		7		6020
Barium		6.0		6.4		7		6010B
Beryllium		0.02	U	0.02	U			6020
Cadmium		0.02	U	0.02	U			6020
Calcium	20	7340		7470		2		6010B
Chromium		5.0	U	5.0	U			6010B
Cobalt		0.06		0.06		8		6020
Copper	20	1.6		1.6		0		6020
Iron		20	U	20	U			6010B
Lead		0.05		0.05		10		6020
Magnesium	20	6410		6520		2		6010B
Manganese		5.0	U	5.0	U			6010B
Nickel	20	1.7		1.7		2		6020
Potassium		2000	U	2000	U			6010B
Selenium		4.0	U	4.0	U			6020
Silver		0.02	U	0.02	U			6020
Sodium	20	6970		7070		1		6010B
Thallium		0.02	U	0.02	U			6020
Vanadium		10	U	10	U			6010B
Zinc		10	U	10	U			6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 6 -

DUPLICATES

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701703
Project No.:		Units:	µg/L
Project Name:	Presidio of San Franciscc	Basis:	NA
Matrix:	WATER	% Solids:	0.0

Sample Name: DAEGW104C1D Lab Code: K0701703-001D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.2	U	0.2	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Aluminum	5000	5300	106					
Antimony	20.0	20.2	101					
Arsenic	20.0	20.3	102					
Barium	5000	5320	106					
Beryllium	20.0	20.3	102					
Cadmium	20.0	19.5	98					
Calcium	12500	13000	104					
Chromium	500	526	105					
Iron	2500	2570	103					
Lead	20.0	20.0	100					
Magnesium	12500	12700	102					
Manganese	1250	1310	105					
Mercury	5.00	5.05	101					
Potassium	12500	12400	99					
Selenium	20.0	20.2	101					
Silver	20.0	19.0	95					
Sodium	12500	13800	110					
Thallium	20.0	19.5	98					
Vanadium	1250	1310	105					
Zinc	1250	1320	106					

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Cobalt	20.0	18.6	93					
Copper	20.0	18.3	92					
Nickel	20.0	18.1	91					

DISSOLVED METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: K0701703

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: Batch QC2L

Lab Code: K0701647-002L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	50.0	U	250	U			6010B
Barium	29.3		25.7		13		6010B
Calcium	113000		119000		5		6010B
Chromium	5.00	U	25.0	U			6010B
Iron	20.0	U	100	U			6010B
Magnesium	233000		243000		4		6010B
Manganese	5.00	U	25.0	U			6010B
Potassium	2000	U	10000	U			6010B
Sodium	270000		283000		4		6010B
Vanadium	10.0	U	50.0	U			6010B
Zinc	689		718		4		6010B

DISSOLVED METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: K0701703

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: Batch QCL1

Lab Code: K0701647-001L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.86		0.88		2		6020
Arsenic	1.10		2.50	U			6020
Beryllium	0.02	U	0.10	U			6020
Cadmium	0.02	U	0.10	U			6020
Cobalt	0.06		0.10	U			6020
Copper	1.64		1.47		10		6020
Lead	0.05		0.10	U			6020
Nickel	1.73		1.49		14		6020
Selenium	4.00	U	20.0	U			6020
Silver	0.02	U	0.10	U			6020
Thallium	0.02	U	0.10	U			6020

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Mercury	253.70	BD	0.2		7470A

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)		Method
Antimony	123		0.05		6020
Arsenic	75		0.5		6020
Beryllium	9		0.02		6020
Cadmium	111		0.02		6020
Cobalt	59		0.02		6020
Copper	65		0.1		6020
Lead	208		0.02		6020
Nickel	60		0.2		6020
Selenium	77		4.0		6020
Silver	107		0.02		6020
Thallium	205		0.02		6020

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: TJA ICP-OES 6.2

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Aluminum	308.20		50.0		6010B
Barium	493.60		5.0		6010B
Calcium	317.90		50.0		6010B
Chromium	267.70		5.0		6010B
Iron	259.90		20.0		6010B
Magnesium	279.50		20.0		6010B
Manganese	257.60		5.0		6010B
Potassium	766.50		2000		6010B
Sodium	588.90		100		6010B
Vanadium	292.40		10.0		6010B
Zinc	213.80		10.0		6010B

Comments:

DISSOLVED METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.6	0.0052543	0.0000000	0.0003900	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0000000	0.0000000	0.0003945	0.0002503	0.0000000
Cadmium	228.8	0.0000000	0.0000000	-0.0000763	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000163	0.0000098	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000231	0.0000000	0.0170608
Copper	324.7	0.0000000	0.0000000	-0.0000278	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0011214	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000204	0.0000000	-0.0001831	0.0000226	0.0000000
Molybdenum	202	0.0000000	0.0000000	-0.0000939	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0005306	0.0000000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	-0.0013060	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0002185	0.0000000
Silver	328.0	0.0000000	0.0000000	-0.0002271	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0002680	0.0000000	0.0048362	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	-0.0002370	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000276	0.0001569

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.2	-0.0175424	0.0000000	0.0000000	0.0194632	0.0000000
Antimony	206.8	-0.0023048	0.0181871	0.0000000	0.0071351	0.0048131
Arsenic	193.6	0.0000000	0.0015165	0.0000000	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0018818	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.8	-0.0059801	0.0000000	0.0000000	0.0000000	0.0006989
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0002071	0.0003558	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0002395	0.0010048
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0003061	0.0000000
Iron	259.9	0.0000000	0.0000000	-0.0057095	0.0005288	0.0000000
Lead	220.3	-0.0136843	-0.0006403	0.0000000	0.0006789	0.0007454
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0039260	0.0000000
Molybdenum	202	0.0003104	0.0000000	0.0000000	0.0000000	0.0001848
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0045715	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0001381	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0040902	0.0000000	-0.0078044	0.0042117	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0002816	0.0000000	0.0003479	0.0000000
Vanadium	292.4	0.0000000	-0.0048333	-0.0001333	0.0246421	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0003936	0.0041984

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Sn	Ti	V		
Aluminum	308.2	0.0000000	-0.0005811	-0.0139644		
Antimony	206.8	0.0013252	0.0017210	-0.0080346		
Arsenic	193.6	0.0000000	0.0000000	0.0153511		
Barium	493.4	0.0000000	0.0000000	0.0000000		
Beryllium	313.0	0.0000000	0.0000000	0.0027493		
Boron	249.6	0.0000000	0.0000000	0.0000000		
Cadmium	228.8	0.0000000	0.0000000	0.0006840		
Calcium	317.9	0.0000000	0.0000000	0.0000000		
Chromium	267.7	0.0000000	0.0000000	0.0005697		
Cobalt	228.6	-0.0043106	0.0015561	0.0000000		
Copper	324.7	0.0000000	-0.0008431	-0.0001893		
Iron	259.9	0.0000000	-0.0009295	0.0000000		
Lead	220.3	0.0000000	0.0005080	0.0000000		
Magnesium	383.2	0.0000000	0.0000000	0.0000000		
Manganese	257.6	0.0000000	0.0000000	-0.0000791		
Molybdenum	202	0.0000000	0.0000000	0.0000000		
Nickel	231.6	0.0000000	0.0000000	0.0000000		
Phosphorus	214.9	0.0000000	0.0000000	-0.0018977		
Potassium	766.5	0.0000000	0.0000000	0.0000000		
Selenium	196.0	0.0000000	0.0000000	0.0000000		
Silicon	288.1	0.0000000	0.0000000	0.0000000		
Silver	328.0	0.0000000	-0.0001051	-0.0089511		
Sodium	588.9	0.0000000	0.0000000	0.0000000		
Strontium	421.5	0.0000000	0.0000000	0.0000000		
Thallium	190.8	0.0000000	0.0000000	0.0024657		
Tin	189.9	0.0000000	0.0461050	0.0000000		
Titanium	334.9	0.0000000	0.0000000	0.0000000		
Vanadium	292.4	0.0000000	0.0002860	0.0000000		
Zinc	213.8	0.0000000	0.0000000	0.0000000		

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	6020
Arsenic	15.00	1000.0	6020
Beryllium	15.00	1000.0	6020
Cadmium	15.00	1000.0	6020
Cobalt	15.00	500.0	6020
Copper	15.00	1000.0	6020
Lead	15.00	1000.0	6020
Nickel	15.00	1000.0	6020
Selenium	15.00	1000.0	6020
Silver	15.00	300.0	6020
Thallium	15.00	1000.0	6020

Comments: _____

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

ICP ID Number: TJA ICP-OES 6.2

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	900000.0	6010B
Barium	5.00	180000.0	6010B
Calcium	5.00	450000.0	6010B
Chromium	5.00	180000.0	6010B
Iron	5.00	450000.0	6010B
Magnesium	5.00	27000.0	6010B
Magnesium	5.00	720000.0	6010B
Manganese	5.00	4500.0	6010B
Potassium	5.00	450000.0	6010B
Sodium	5.00	900000.0	6010B
Vanadium	5.00	90000.0	6010B
Zinc	5.00	180000.0	6010B

Comments: _____

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-001D D	3/12/07	CLAA	50	50
K0701647-001S D	3/12/07	CLAA	50	50
K0701703-001 DI	3/12/07	CLAA	50	50
LCSW	3/12/07	CLAA	50	50
K0701703-MB	3/12/07	CLAA	50	50

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701703-001 DI	3/6/07	METHOD	20	20
K0701703-001D D	3/6/07	METHOD	20	20
K0701703-001S D	3/6/07	METHOD	20	20
LCSW	3/6/07	METHOD	20	20
K0701703-MB	3/6/07	METHOD	20	20

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K0701647-001D D	3/12/07	CLFAA	50	50
K0701647-001S D	3/12/07	CLFAA	50	50
K0701703-001 DI	3/12/07	CLFAA	50	50
LCSW	3/12/07	CLFAA	50	50
K0701703-MB	3/12/07	CLFAA	50	50

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Francisco

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	14:20																X									
STANDARD #1	1.00	14:22																X									
STANDARD #2	1.00	14:23																X									
STANDARD #3	1.00	14:25																X									
STANDARD #4	1.00	14:27																X									
STANDARD #5	1.00	14:29																X									
ICV	1.00	14:30																X									
ICB	1.00	14:32																X									
CCV1	1.00	14:34																X									
CCB1	1.00	14:36																X									
ZZZZZZ	1.00	14:37																									
ZZZZZZ	1.00	14:39																									
ZZZZZZ	1.00	14:41																									
ZZZZZZ	1.00	14:43																									
ZZZZZZ	1.00	14:45																									
ZZZZZZ	1.00	14:46																									
ZZZZZZ	1.00	14:48																									
ZZZZZZ	1.00	14:50																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:53																									
CCV2	1.00	14:55																X									
CCB2	1.00	14:57																X									
ZZZZZZ	1.00	14:59																									
ZZZZZZ	1.00	15:01																									
ZZZZZZ	1.00	15:02																									
ZZZZZZ	1.00	15:04																									
ZZZZZZ	1.00	15:06																									
ZZZZZZ	1.00	15:08																									
ZZZZZZ	1.00	15:09																									
ZZZZZZ	1.00	15:11																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:13																									
ZZZZZZ	1.00	15:15																									
CCV3	1.00	15:17																X									
CCB3	1.00	15:18																X									
ZZZZZZ	1.00	15:20																									
ZZZZZZ	1.00	15:22																									
ZZZZZZ	1.00	15:24																									
ZZZZZZ	1.00	15:25																									
ZZZZZZ	1.00	15:27																									
ZZZZZZ	1.00	15:38																									
K0701703-MB	1.00	15:45																X									
LCSW	1.00	15:47																X									
ZZZZZZ	1.00	15:49																									
ZZZZZZ	1.00	15:50																									
CCV4	1.00	15:52																X									
CCB4	1.00	15:54																X									
ZZZZZZ	1.00	15:56																									
K0701497-001A	1.00	15:58	999.9															X									
ZZZZZZ	1.00	15:59																									
ZZZZZZ	1.00	16:01																									
ZZZZZZ	1.00	16:03																									
ZZZZZZ	1.00	16:05																									
ZZZZZZ	1.00	16:07																									
ZZZZZZ	1.00	16:08																									
ZZZZZZ	1.00	16:10																									
ZZZZZZ	1.00	16:12																									
CCV5	1.00	16:14																X									
CCB5	1.00	16:16																X									
ZZZZZZ	1.00	16:17																									
ZZZZZZ	1.00	16:19																									

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DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/7/07 End Date: 3/7/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	16:21																									
ZZZZZZ	1.00	16:23																									
ZZZZZZ	1.00	16:25																									
K0701703-001 DISS	1.00	16:26																X									
K0701703-001D DISS	1.00	16:28																X									
K0701703-001S DISS	1.00	16:30																X									
CRA	1.00	16:39																X									
CCV6	1.00	16:41																X									
CCB6	1.00	16:43																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/19/07 End Date: 3/19/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	12:54		X			X			X	X			X		X	X			X			X		X	X	
CAL-STD3	1.00	12:56		X						X				X		X	X								X	X	
CAL-STD3	1.00	13:01		X						X				X		X	X								X	X	
CAL-STD2	1.00	13:03					X				X									X			X				
ZZZZZZ	1.00	13:04																									
CAL-STD3	1.00	13:11		X						X				X		X	X								X	X	
ICV STD 4	1.00	13:13																									
ICV	1.00	13:18		X			X			X	X			X		X	X			X			X		X	X	
ICB	1.00	13:25		X			X			X	X			X		X	X			X			X		X	X	
CCV1	1.00	13:35		X			X			X	X			X		X	X			X			X		X	X	
CCB1	1.00	13:42		X			X			X	X			X		X	X			X			X		X	X	
CRI	1.00	13:44		X			X			X	X			X		X	X			X			X		X	X	
ICSA	1.00	13:46		X			X			X	X			X		X	X			X			X		X	X	
ICSAB	1.00	13:48		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	13:51																									
ZZZZZZ	1.00	13:53																									
ZZZZZZ	1.00	13:56																									
ZZZZZZ	1.00	13:59																									
CCV2	1.00	14:02		X			X			X	X			X		X	X			X			X		X	X	
CCB2	1.00	14:04		X			X			X	X			X		X	X			X			X		X	X	
K0701703-MB	1.00	14:06		X			X			X	X			X		X	X			X			X		X	X	
LCSW	1.00	14:08		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	14:11																									
K0701647-001D DISS	1.00	14:13		X			X			X	X			X		X	X			X			X		X	X	
K0701647-001S DISS	1.00	14:15		X			X				X			X			X								X	X	
ZZZZZZ	1.00	14:17																									
K0701647-002L DISS	5.00	14:19		X			X			X	X			X		X	X			X			X		X	X	
K0701703-001 DISS	1.00	14:21		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	14:24																									
ZZZZZZ	1.00	14:26																									

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DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/19/07 End Date: 3/19/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	14:28		X			X			X	X			X		X	X			X			X		X	X	
CCB3	1.00	14:30		X			X			X	X			X		X	X			X			X		X	X	

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DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:29			X	X		X	X			X	X		X				X		X	X		X			
25 PPB STD.	1.00	11:33			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	11:36																									
ICV	1.00	11:39			X	X		X	X			X	X		X				X		X	X		X			
CCV1	1.00	11:43			X	X		X	X			X	X		X				X		X	X		X			
ICB	1.00	11:50			X	X		X	X			X	X		X				X		X	X		X			
CCB1	1.00	11:54			X	X		X	X			X	X		X				X		X	X		X			
CRA WATER	1.00	11:58			X	X		X	X			X	X		X				X		X	X		X			
ICSA	1.00	12:01			X	X		X	X			X	X		X				X		X	X		X			
ICSAB	1.00	12:04			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	12:19																									
ZZZZZZ	1.00	12:23																									
ZZZZZZ	1.00	12:25																									
ZZZZZZ	1.00	12:34																									
ZZZZZZ	1.00	12:37																									
ZZZZZZ	1.00	12:40																									
ZZZZZZ	1.00	12:43																									
CCV2	1.00	12:47			X	X		X	X			X	X		X				X		X	X		X			
CCB2	1.00	13:03			X	X		X	X			X	X		X				X		X	X		X			
K0701703-MB	1.00	13:07			X	X		X	X						X						X	X		X			
ZZZZZZ	1.00	13:10																									
K0701647-001D DISS	1.00	13:13			X	X		X	X						X						X	X		X			
K0701647-001L DISS	5.00	13:20			X	X		X	X						X						X	X		X			
K0701647-001A DISS	1.00	13:23			X	X		X	X						X						X	X		X			
K0701647-001S DISS	1.00	13:27			X	X		X	X						X						X	X		X			
LCSW	1.00	13:30			X	X		X	X						X						X	X		X			
ZZZZZZ	1.00	13:38																									
K0701703-001 DISS	1.00	13:41			X	X		X	X						X						X	X		X			
ZZZZZZ	1.00	13:45																									
CCV3	1.00	14:08			X	X		X	X						X						X	X		X			

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Form XIV - IN

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	14:12																									
CCB3	1.00	14:20																									
CCB3	1.00	14:26			X	X		X	X						X						X	X		X			

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DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701703

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	15:14										X	X						X								
25 PPB STD.	1.00	15:16										X	X						X								
ICV2	1.00	15:18										X	X						X								
CCV1	1.00	15:20										X	X						X								
ICB2	1.00	15:21										X	X						X								
CCB1	1.00	15:23										X	X						X								
CRA WATER	1.00	15:25										X	X						X								
K0701703-MB	1.00	15:27										X	X						X								
ZZZZZZ	1.00	15:29																									
K0701647-001D DISS	1.00	15:31										X	X						X								
K0701647-001L DISS	5.00	15:33										X	X						X								
K0701647-001A DISS	1.00	15:34										X	X						X								
K0701647-001S DISS	1.00	15:36										X	X						X								
LCSW	1.00	15:38										X	X						X								
ZZZZZZ	1.00	15:40																									
K0701703-001 DISS	1.00	15:42										X	X						X								
CCV2	1.00	15:47										X	X						X								
CCB2	1.00	15:49										X	X						X								

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Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s): K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747

Star Lims Run No.: 46102

Method: CLP 3010A 3020A 3005A 3050B (CLP Hot Block) Other-

Analysis for: (ICP) ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747 Blank			X	50	50	1% HNO3, 5% HCl
-LCS-W						
K0701647-1						
-10						
-1S						
-2						
K0701703-1						
K0701681-1						
-10						
-1S						
-2						
K0701682-1						
-2				25		
K0701692-1				25		
-2				50		
-3				25		
K0701740-1				50		
K0701770-1 (MS Spike)						
-10						
-1S						
K0701747-1						
-10						
-1S						
-2						
-3						
-4						

Time Digestion Started: _____

Lot # Acids Used: HNO3 C47031 **HCl** 46332 **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other: _____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added

ICP LCSW = CLP-CV-1, MET1-52-I, 0.25 mls. added

QCP CICV-2, MET1-51-T, 0.25 mls. added

QCP CICV-3, MET1-54-P, 0.25 mls. added

SS6, MET1-55-A, 0.5 mls. added

TCLP Spike/LCSE

TSS1 MET1-47-C _____ mls. added

SPIKE INFO

SS1-MET1-52-Z, 0.5 mls added SS4-MET1-48-A, _____ mls added

SS5-MET1-54-G, 0.5 mls added 200.8 1000ppb Stock (MS9-85-A) _____ mls added

SS6-MET1-55-A, 0.5 mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes: _____

Comments: _____

Analyst [signature] **Date** 3/12/07

Reviewer [signature] **Date** 3/13/07

metdig.xls

Digestion Procedures

Method #	GFAA	ICP-OES
CLP Water	Shake sample, Aliquqt 50 mls into beaker Add 0.5 mls. HNO3 Add 2 ML 30% H2O2 Cover with ribbed watchglass Heat without boiling for 2 hrs (volume = 0.5x orginal Vol.) Cool sample, Dilute to 50 mls. with DI water	same same Add 2.5 mls Concentrated HCl instead of H2O2 Cover with ribbed watchglass same same
EPA 3010A SW-846 TCLP Ext. USACOE		Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 2.5 mls Concentrated HCl. Cover and reflux for 15 mi Dilute to 50 mls with DI water.
EPA 3020A SW-846 TCLP Ext. USACOE	Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 10 ml DI water, reflux 10-15 min. Dilute to 50 mls with DI water.	
EPA 3050B	Mix sample , weigh out 1.00 g dry weight. * Add spike solution to sample. Add 5 ml DI water and 5 ml HNO3. Reflux 15 min. Cool. Add 5 ml HNO3. Cover. Reflux 30 min. NOTE: *If brown fumes are* generated, repeat the *addition of 5 mls of HNO3 after 30 min of reflux.* Reflux for 2 hrs. or to vol of 5 mls. Cool sample and add 2 mls H20 & 3 mls 30%H2O2 Cover and heat until effervescence subsides Repeat H2O2 adds twice until effervescence is minimal. Don't add > 10 mls. H2O2 **Heat to vol. of 5 mls.** Dilute to 100mls with DI water.	same same same same same same same same same same Add 10 ml of Concentrated HCl, Reflux for 15 min. Dilute to 100 mls. (to 50 mls for Flame)

GFAA NOTE: For SW-846 analysis prepare a digestate from Method 3020B for Pb & Tl analysis & a digestate from the CLFAA for As & Se.

*** Suggested Sample Aliquot Weights**

% Solids	Aliquot Wet Weight Range
>80 %	1.00 g
70-80 %	1.20 g
60-70 %	1.40 g
50-60 %	1.80 g
40-50 %	2.20 g
30-40 %	2.70 g

Spike Solution Chart

GFAA soil - 2mls SS # 4
ICP-OES soil - 2mls SS# 1 & 1 ml SS # 5 & 6
ICP-MS soil - 2mls SS# 1, & 1 ml SS # 5 & 6
ICP-OES water- 0.5mls SS# 1,5,6
GFAA water - 0.5 ml SS # 4
ICP-MS water - 1ml 200.8 stock sol'n & 1 ml Ag sol'n

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770, K0701747
Star Lims Run No.: 46602

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701747-S			X	50	50	1% HNO_3, 5% HCl

MS 3/12/07

Time Digestion Started:

Lot # Acids Used: HNO3 C47031 **HCl** 460332 **H2O2**

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added
QCP CICV-2, MET1-51-T, _____ mls. added
QCP CICV-3, MET1-54-P, _____ mls. added
SS6, MET1-55-A, _____ mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, _____ mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, _____ mls added 200.8 1000ppb Stock (MS9-85-A) _____ mls added
SS6-MET1-55-A, _____ mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes:

Comments:

Analyst Melissa [illegible] **Date** 3/12/07
Reviewer [illegible] **Date** 3/13/07

metdig.xls

Digestion Procedures

Method #	GFAA	ICP-OES
CLP Water	Shake sample, Aliquot 50 mls into beaker Add 0.5 mls. HNO3 Add 2 ML 30% H2O2 Cover with ribbed watchglass Heat without boiling for 2 hrs (volume = 0.5x orginal Vol.) Cool sample, Dilute to 50 mls. with DI water	same same Add 2.5 mls Concentrated HCl instead of H2O2 Cover with ribbed watchglass same same
EPA 3010A SW-846 TCLP Ext. USACOE		Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 2.5 mls Concentrated HCl. Cover and reflux for 15 mi Dilute to 50 mls with DI water.
EPA 3020A SW-846 TCLP Ext. USACOE	Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 10 ml DI water, reflux 10-15 min. Dilute to 50 mls with DI water.	
EPA 3050B	Mix sample , weigh out 1.00 g dry weight. * Add spike solution to sample. Add 5 ml DI water and 5 ml HNO3. Reflux 15 min. Cool. Add 5 ml HNO3. Cover. Reflux 30 min. NOTE: *If brown fumes are* generated, repeat the *addition of 5 mls of HNO3 after 30 min of reflux.* Reflux for 2 hrs. or to vol of 5 mls. Cool sample and add 2 mls H20 & 3 mls 30%H2O2 Cover and heat until effervescence subsides Repeat H2O2 adds twice until effervescence is minimal. Don't add > 10 mls. H2O2 **Heat to vol. of 5 mls.** Dilute to 100mls with DI water.	same same same same same same same same same same Add 10 ml of Concentrated HCl, Reflux for 15 min. Dilute to 100 mls. (to 50 mls for Flame)

GFAA NOTE: For SW-846 analysis prepare a digestate from Method 3020B for Pb & Tl analysis & a digestate from the CLFAA for As & Se.

*** Suggested Sample Aliquot Weights**

% Solids	Aliquot Wet Weight Range
>80 %	1.00 g
70-80 %	1.20 g
60-70 %	1.40 g
50-60 %	1.80 g
40-50 %	2.20 g
30-40 %	2.70 g

Spike Solution Chart

GFAA soil - 2mls SS # 4
ICP-OES soil - 2mls SS# 1 & 1 ml SS # 5 & 6
ICP-MS soil - 2mls SS# 1, & 1 ml SS # 5 & 6
ICP-OES water- 0.5mls SS# 1,5,6
GFAA water - 0.5 ml SS # 4
ICP-MS water - 1ml 200.8 stock sol'n & 1 ml Ag sol'n

METALS SPIKE FORM

Service Request # K0701647, K0701703, K0701681, K0701682, K0701692, K0701740, K0701770
Q.C. Sample # 1647-1, 1681-1, 1770-1, 1747-1 K0701747

Circle type of digest: GFAA (CP) FAA ICP-MS Other:_____ Initials / Date: MS 3/2/07
Circle type of sample: Soil (Water) Misc. Sludge Oil Other:_____

Solution Name	Element	mls of 1000ppm Solution	Final Volume	Source	Lot#	Exp. Date	Solution Conc. mg/L	Enter mls Added	
SS1-MET1-52-Z	HNO3	50.0	1000ml	JT Baker	C28025	-	-	0.5	Expires:7/1/07
	Al	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Ag	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Ba	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Be	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Cd	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Co	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Cr	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	20		
	Cu	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	25		
	Fe	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	100		
	Pb	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Mn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Ni	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Sb	50*	1000ml	MET1-50-J	Z-SB02097	7/1/2007	50		
	V	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Zn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
SS4-MET1-52-T	HNO3	25.0	500ml	JT BAKER	A48046	-	-		Expires:7/11/07
	As	2.0	500ml	MET1-47-I	529701	7/11/2007	4		
	Cd	2.0	500ml	MET1-49-L	605906	12/15/2007	4		
	Pb	2.0	500ml	MET1-50-C	611804	12/15/2007	4		
	Se	2.0	500ml	MET1-49-M	616579	12/15/2007	4		
	Tl	2.0	500ml	MET1-49-O	616317	12/15/2007	4		
	Cu	2.0	500ml	MET1-50-E	611815	12/15/2007	4		
SS5-MET1-54-G	HNO3	25.0	500ml	JT BAKER	B41068	-	-	0.5	Expires:7/1107
	As	50.0	500ml	MET1-47-I	529701	7/11/2007	100		
	Se	50.0	500ml	MET1-49-M	616519	12/15/2007	100		
	Tl	50.0	500ml	MET1-49-O	616317	12/15/2007	100		
SS6-MET1-54-E	HNO3	25	500ml	JT BAKER	C28025	-	-	0.5	Expires: 7/01/07
	B	50	500ml	MET1-51-C	Z-QB02041	7/1/2007	100		
	Mo	50	500ml	MET1-54-K	Z-MO02012	2/1/2008	100		

GFLCSW (MET1-52-W)	HNO3	10.0	1000ml	JT BAKER	C28025	-	-		Expires: 8/1/07
	As, Pb, Se, Tl	5.0	1000ml	QCP-CICV-3	Y-MEB194030	8/1/2007	2.5		
	Cd	-	-	QCP-CICV-3	Y-MEB194030	8/1/2007	1.25		
	Cu	2.5	1000ml	MET1-50-E	611815	12/15/2007	2.5		
CLP-CV-I (MET1-52-I)	Ca, Mg, Na, K	no dilution	-	HP	620009	9/1/2007	2500	0.25	Expires:9/1/07
	Al, Ba	no dilution	-	HP	620009	9/1/2007	1000		
	Fe	no dilution	-	HP	620009	9/1/2007	500		
	Co, Mn, Ni, V, Zn	no dilution	-	HP	620009	9/1/2007	250		
	Cu, Ag	no dilution	-	HP	620009	9/1/2007	125		
	Cr	no dilution	-	HP	620009	9/1/2007	100		
	Be	no dilution	-	HP	620009	9/1/2007	25		
QCP-CICV-2 (MET1-51-T)	Sb	no dilution	-	IV	Y- MEB194029	8/1/2007	500	0.25	Expires: 08/1/07
QCP-CICV-3 (MET1-54-P)	As, Pb, Se, Tl	no dilution	-	IV	Z-CICPI9048	3/1/2008	500	0.25	Expires: 03/01/08
	Cd	no dilution	-	IV	Z-CICPI9048	3/1/2008	250		

* Denotes volume of 1000 ppm stock standard.

Element	mls of	ppm	Source	Lot# / Lab Code	Exp. Date

3-5-07

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701647, K0701703, K0701680

Star Lims Run No.: 46113

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701647 K0701680 K0701703 Blank			*	50	50	1% HNO3
- LCS-W						
K0701647-1						
-10						
-1S						
-2						
K0701703-1						
K0701680-1 total						
-10						
-1S						
-3				10		
-4				10		
-1 Dis.				50		
-3						
-4						
					MS 3/12/07	

Time Digestion Started 3/12/07 MS

Lot # Acids Used: HNO3 MS9-50-C HCl _____ H2O2 _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:_____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added

ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added

QCP CICV-2, MET1-51-T, _____ mls. added

QCP CICV-3, MET1-54-P, _____ mls. added

SS6, MET1-55-A, _____ mls. added

TCLP Spike/LCSE

TSS1 MET1-47-C _____ mls. added

SPIKE INFO

SS1-MET1-52-Z,_____ mls added SS4-MET1-48-A,_____ mls added

SS5-MET1-54-G,_____ mls added 200.8 1000ppb Stock (MS9-85-A) 1.0 mls added

SS6-MET1-55-A,_____ mls added Ag 1000ppb Stock (MS10-10-A) 1.0 mls added

Additional spikes:_____

Comments: _____

Analyst Melissa Olson Date 3/12/07

Reviewer _____ Date 3/12/07

metdig.xls

Atomic Absorption Data Review Form

Element: Hg

Analysis Lot #: 79502

Cal. STD/CCV Source: HG1-57-F

Service Request Numbers:

K1303 K1305 K1422 K1432 K1502 K1528
K1497 K1546 K1601 K1647 K1703

	Yes	No	NA
1) Appropriate standardization completed	✓		
2) ICV within 10% of true value	✓		
3) CCVs in control	✓		
4) CCBs and or ICBs below MRL	✓		
5) All reported samples within calibration range	✓		
6) Calculations correct	✓		

Comments:

Primary Reviewed By: Patterson Date: 3-7-07

Secondary Reviewed By: EmA Date: 3/9/07

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
1	ICV	—	—	—	5.21		104%	
2	ICB	—	—	—	-0.01		<0.2	
3	CCV1	—	—	—	4.88		98%	
4	CCB1	—	—	—	-0.01		<0.2	SP 3-7-07 Tube empty second of run
5	CRA	—	—	—	0.07			
6	PBW (45833)	20ml	20ml	—	-0.01		<0.2	
7	LCSW			—	4.98		5.0	100%
8	K0701303-001			—	-0.02		<0.2	
9	-002			—	-0.01		<0.2	
10	-003			—	-0.00		<0.2	
11	-004			—	-0.01		<0.2	
12	-005			—	-0.01		<0.2	
13	-006			—	0.01		<0.2	
14	-007			—	-0.01		<0.2	
15	CCV2	—	—	—	4.80		96%	
16	CCB2	—	—	—	-0.00		<0.2	
17	K0701303-008	20ml	20ml	—	-0.01		<0.2	
18	K0701305-001			—	0.02		<0.2	
19	K0701422-001			—	-0.01		<0.2	$\bar{X}$=ND
20	-001d			—	-0.01		<0.2	RPD=—
21	-001S			—	1.04		1.04	104%
22	K0701432-001			—	0.00		<0.2	
23	-007			—	-0.01		<0.2	$\bar{X}$=ND
24	-007d			—	0.00		<0.2	RPD=—
25	-007S			—	1.01		1.01	101%

Comments: Reporting Levels:

Waters - 0.2 µg/L — TIME STARTED:

Soil - 0.02 mg/kg

TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L

Soil Spike Level : 5.0 µg/L = mg/kg

TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
LPatterson	3-7-07	1of3

[HGFORM] HG1.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
26	K0701502-001	20ml	20ml	—	0.02		<0.2	
27	CCU3	—	—	—	4.86		97%	
28	CCB3	—	—	—	-0.01		<0.2	
29	K0701502-002	20ml	20ml	—	0.03		<0.2	
30	K0701528-001			—	-0.01		<0.2	
31	-002			—	-0.00		<0.2	
32	-003			—	0.01		<0.2	
33	-004			—	0.03		<0.2	
34	-004A			—	0.93	(93%)		
35	PBW (45834)			—	-0.01		<0.2	
36	LCSW			—	5.05		5.05	101%
37	K0701497-001			—	-0.01		<0.2	$\bar{x}$=NP
38	-001d			—	-0.01		<0.2	RPD=—
39	CCU4	—	—	—	4.93		99%	
40	CCB4	—	—	—	-0.01		<0.2	
41	K0701497-001S	20ml	20ml	—	1.04		1.04	104%
42	-001A			—	0.92	(93%)		
43	-002			—	-0.00		<0.2	
44	-003			—	-0.01		<0.2	
45	-004			—	-0.01		<0.2	
46	K1497DiSS-001			—	-0.01		<0.2	
47	-002			—	0.01		<0.2	
48	-003			—	0.00		<0.2	
49	-004			—	0.01		<0.2	
50	K0701546-001			—	0.01		<0.2	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
Patterson	3-7-07	2 of 3

[HGFORM] HG2.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
51	CCV5	—	—	—	4.98		100%	
52	CCB5	—	—	—	-0.00		<0.2	—
53	K0701546-001d	20ml	20ml	—	0.00		<0.2	X=ND
54	↓ 001S			—	0.99		0.99	RPD= —
55	K0701601-001			—	0.01		<0.2	99%
56	↓ -002			—	-0.01		<0.2	
57	K0701647-001			—	0.00		<0.2	
58	K0701703-001			—	-0.01		<0.2	X=ND
59	-001d			—	-0.00		<0.2	RPD= —
60	↓ 001S	↓	↓	—	1.01		1.01	101%
61	CRA	—	—	—	0.17		0.17	85%
62	CCV6	—	—	—	4.90		98%	
63	CCB6	—	—	—	-0.01		<0.2	
64								
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75						3-7-07		

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
Patterson	3-7-07	3 of 3

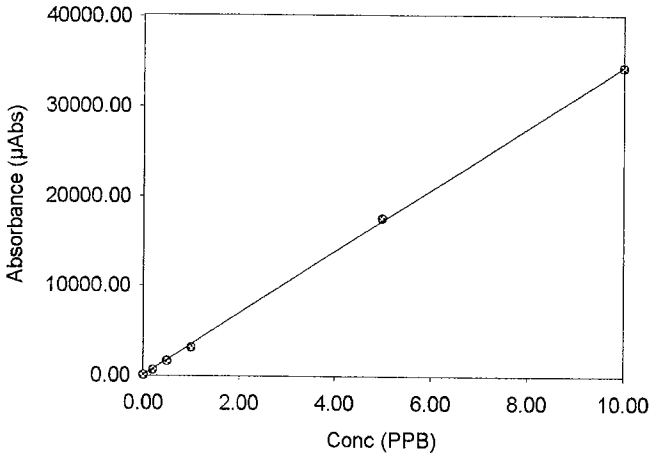
[HGFORM] HG3.XLS

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst	S. Patterson
Date Started	Wednesday, March 07, 2007, 14:20:15
Worksheet	Hg 03/07/07 Run 2
Comment	79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
Calibration Zero	07-Mar-2007, 14:20	0.00	54.50	49.40	84	57	26	31	
Standard #1	07-Mar-2007, 14:22	0.20	1.56	603.00	611	610	591	600	
Standard #2	07-Mar-2007, 14:23	0.50	4.21	1620.00	1546	1591	1651	1702	
Standard #3	07-Mar-2007, 14:25	1.00	2.60	3120.00	3197	3190	3066	3042	
Standard #4	07-Mar-2007, 14:27	5.00	0.52	17500.00	17369	17561	17509	17397	
Standard #5	07-Mar-2007, 14:29	10.00	1.39	34300.00	34630	33834	33867	34713	

Calibration Data



Int.	0.000
Slope	3436.218
Correlation	0.99989

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICV	07-Mar-2007, 14:30	5.21	0.82	17900.00	17778	17894	18107	17814	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICB	07-Mar-2007, 14:32	-0.01	10.30	-39.40	-33	-42	-40	-42	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV1	07-Mar-2007, 14:34	4.88	0.88	16800.00	16855	16905	16586	16686	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB1	07-Mar-2007, 14:36	-0.01	23.50	-28.80	-34	-26	-34	-20	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
~~CRA~~	~~07-Mar-2007, 14:37~~	~~0.07~~	~~13.10~~	~~243.00~~	~~284~~	~~250~~	~~210~~	~~229~~	3-7-07
PBW (45833)	07-Mar-2007, 14:39	-0.01	23.70	-40.80	-44	-28	-41	-50	Tube empty
LCSW (45833)	07-Mar-2007, 14:41	4.98	0.88	17100.00	17341	17054	17004	17090	See end of
K0701303-001	07-Mar-2007, 14:43	-0.02	26.50	-68.40	-84	-49	-83	-57	Run
K0701303-002	07-Mar-2007, 14:45	-0.01	44.40	-28.50	-47	-21	-27	-19	
K0701303-003	07-Mar-2007, 14:46	-0.00	114.00	-12.70	-31	-14	-9	4	
K0701303-004	07-Mar-2007, 14:48	-0.01	41.70	-49.60	-75	-31	-58	-35	
K0701303-005	07-Mar-2007, 14:50	-0.01	16.80	-46.50	-52	-43	-37	-54	
K0701303-006	07-Mar-2007, 14:52	0.01	129.00	18.90	13	-11	28	46	
K0701303-007	07-Mar-2007, 14:53	-0.01	27.60	-26.10	-30	-28	-31	-15	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV2	07-Mar-2007, 14:55	4.80	1.22	16500.00	16338	16435	16399	16785	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB2	07-Mar-2007, 14:57	-0.00	133.00	-16.60	14	-23	-38	-19	

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst S. Patterson
Date Started Wednesday, March 07, 2007, 14:59:13
Worksheet Hg 03/07/07 Run 2
Comment 79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701303-008	07-Mar-2007, 14:59	-0.01	67.60	-21.10	-30	-25	-29	0	
K0701305-001	07-Mar-2007, 15:01	0.02	10.90	80.10	80	92	75	73	
K0701422-001	07-Mar-2007, 15:02	-0.01	24.90	-49.90	-39	-67	-49	-44	
K0701422-001D	07-Mar-2007, 15:04	-0.01	28.90	-23.70	-16	-21	-33	-25	
K0701422-001S	07-Mar-2007, 15:06	1.04	1.03	3580.00	3582	3527	3589	3614	
K0701432-001	07-Mar-2007, 15:08	0.00	116.00	17.00	-10	35	28	16	
K0701432-007	07-Mar-2007, 15:09	-0.01	28.30	-24.40	-25	-21	-34	-18	
K0701432-007D	07-Mar-2007, 15:11	0.00	397.00	2.45	10	5	6	-12	
K0701432-007S	07-Mar-2007, 15:13	1.01	1.31	3470.00	3416	3437	3507	3501	
K0701502-001	07-Mar-2007, 15:15	0.02	21.30	68.20	47	76	77	73	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV3	07-Mar-2007, 15:17	4.86	1.28	16700.00	16979	16722	16503	16560	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB3	07-Mar-2007, 15:18	-0.01	60.70	-26.00	-45	-27	-25	-7	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701502-002	07-Mar-2007, 15:20	0.03	24.70	98.70	81	84	95	134	
K0701528-001	07-Mar-2007, 15:22	-0.01	54.00	-28.20	-47	-31	-24	-10	
K0701528-002	07-Mar-2007, 15:24	-0.00	223.00	-4.08	-18	-1	2	1	
K0701558-003	07-Mar-2007, 15:25	0.01	54.30	32.60	14	23	40	54	
K0701558-004	07-Mar-2007, 15:27	0.03	14.20	89.10	76	92	105	83	
K0701558-004A	07-Mar-2007, 15:38	0.93	2.21	3210.00	3119	3185	3281	3246	
PBW (45834)	07-Mar-2007, 15:45	-0.01	20.90	-36.10	-39	-44	-34	-27	
LCSW (45834)	07-Mar-2007, 15:47	5.05	0.84	17400.00	17232	17237	17527	17426	
K0701497-001	07-Mar-2007, 15:49	-0.01	70.30	-31.70	-34	-3	-33	-57	
K0701497-001D	07-Mar-2007, 15:50	-0.01	42.00	-27.60	-11	-28	-35	-36	

03-7-07
K1528

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV4	07-Mar-2007, 15:52	4.93	2.18	17000.00	16638	16781	16921	17482	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB4	07-Mar-2007, 15:54	-0.01	35.10	-24.20	-17	-28	-34	-17	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701497-001S	07-Mar-2007, 15:56	1.04	3.57	3570.00	3392	3599	3694	3600	
K0701497-001A	07-Mar-2007, 15:58	0.92	0.69	3160.00	3139	3190	3152	3169	
K0701497-002	07-Mar-2007, 15:59	-0.00	201.00	-4.63	-12	-10	-5	9	
K0701497-003	07-Mar-2007, 16:01	-0.01	42.80	-31.40	-51	-24	-28	-23	
K0701497-004	07-Mar-2007, 16:03	-0.01	54.60	-25.90	-44	-29	-12	-18	
K0701497-001 DISS	07-Mar-2007, 16:05	-0.01	96.10	-19.60	-29	-41	1	-9	
K0701497-002 DISS	07-Mar-2007, 16:07	0.01	37.10	22.10	11	30	23	25	
K0701497-003 DISS	07-Mar-2007, 16:08	0.00	421.00	4.75	21	-7	-17	23	
K0701497-004 DISS	07-Mar-2007, 16:10	0.01	99.00	21.20	3	29	6	47	
K0701546-001	07-Mar-2007, 16:12	0.01	59.00	21.60	31	34	9	12	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV5	07-Mar-2007, 16:14	4.98	1.83	17100.00	17200	17453	17153	16698	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB5	07-Mar-2007, 16:16	0.00	84.80	-15.60	-18	-26	-22	4	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701546-001D	07-Mar-2007, 16:17	0.00	1080.00	2.62	-27	-11	10	38	
K0701546-001S	07-Mar-2007, 16:19	0.99	1.00	3420.00	3466	3417	3385	3407	
K0701601-001	07-Mar-2007, 16:21	0.01	116.00	18.80	8	-5	26	45	
K0701601-002	07-Mar-2007, 16:23	-0.01	30.10	-37.30	-42	-23	-49	-36	
K0701647-001	07-Mar-2007, 16:25	-0.00	591.00	-10.60	-16	-16	-6	-5	

CETAC Hg Analysis Report - 07030701.DB - Wednesday, March 07, 2007, 4:47:43 PM

Analyst S. Patterson
Date Started Wednesday, March 07, 2007, 16:26:50
Worksheet Hg 03/07/07 Run 2
Comment 79502

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701703-001	07-Mar-2007, 16:26	-0.01	29.20	-28.40	-28	-27	-39	-19	
K0701703-001D	07-Mar-2007, 16:28	-0.00	1430.00	-1.47	-18	-21	13	20	
K0701703-001S	07-Mar-2007, 16:30	1.01	0.63	3480.00	3480	3506	3460	3460	
CRA	07-Mar-2007, 16:39	0.17	0.74	585.00	585	590	583	580	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV6	07-Mar-2007, 16:41	4.90	0.67	16900.00	16693	16848	16926	16941	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB6	07-Mar-2007, 16:43	-0.01	22.20	-49.40	-42	-52	-40	-64	

Columbia Analytical Services

EPA METHOD 7470A

Prep Run: 45833 | Prep Run: 45834

Service Request Number(s): K1303, K1305, K1422, K1432, K1502, K1528, K1497, K1546, K1601, K1647, K1703

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBW	20ml	20ml	PBW	20ml	20ml
LCSW			LCSW		
K0701303-001			K0701497-001		
-002			-001d		
-003			-001S		
-004			-002		
-005			-003		
-006			-004		
-007			K1497DISS-001		
-008			-002		
K0701305-001			-003		
K0701422-001			-004		
-001d			K0701546-001		
-001S			-001d		
K0701432-001			-001S		
-007			K0701601-001		
-007d			-002		
-007S			K0701647-001		
K0701502-001			K0701703-001		
-002			-001d		
K0701528-001			-001S		
-002					
-003					
-004					
		SP 3-6-07		SP	3-6-07
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

+1 - 40

Lot # of Reagents Used:

HNO3: C47031 | **K2S2O8: T44H13** | **NaCl: C14610**

H2SO4: 46137 | **KMnO4: C23603** | **NH2OH-HCL: C27599**

HCL: 46332 | **SnCl2: C28646**

LCSS = | **ERA CLP Soil Lot # D045540** | **Other:** Waterbath @ 95°C

LCSW= 0.1ml | **ICV Intermediate stock solution.**

*** Source Standard:** HG1-57-F **100 ppb**

**** Source Standard: ICV** HG1-56-D **1000 ppb** | **TIME STARTED:**

Comments: 0.2ml 100ppb source std to spikes

Analyst: Patterson | **Date:** 3-6-07

[HGFORM] 7470

Service Request # K0701703
Instrument ID# K-ICP-AES-01

ICP-OES Data Review Form

	Yes	No
1. Standardization completed	✓	
2. ICV within 10 % of true value	✓	
3. ICB below MRL	✓	
4. CRI standard analyzed.	✓	
5. ICS standards within 20% of true value	✓	
6. All preceding CCVs within 10 % of true value	✓	
7. Following CCV within 10 % of true value	✓	
8. Bracketing CCBs below MRL	✓	
9. Method Blank below MRL	✓	
10. MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11. All analytes within instrument linear range	✓	
12. Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments
Do not report Mg 383.2 or Ag by 200.7.

Primary Review by [illegible] Date 3/19/07

Secondary Review by [illegible] Date 3/19/07

Method: CUMNCD Sample Name: CUMNCD Operator: MMR
Run Time: 03/19/07 11:44:59
Comment: ICP3-96-E
Mode: IR Corr. Factor: 1

Elem	Cd2288	Mn2576
Avge	1090.	8.520
SDev	6.	.015
%RSD	.5905	.1716
#1	1103.	8.536
#2	1087.	8.520
#3	1092.	8.513
#4	1092.	8.526
#5	1090.	8.512
#6	1082.	8.519
#7	1082.	8.520
#8	1095.	8.531
#9	1093.	8.537
#10	1085.	8.486

IntStd	1	2	3	4	5	6	7
Mode	*Counts	None	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Cu	--	--	--	--	--	--
Wavlen	324.754	--	--	--	--	--	--
Avge	1789	1	--	--	--	--	--
SDev	12.04805	.0000000	--	--	--	--	--
%RSD	.6733012	.0000000	--	--	--	--	--
#1	1803	1	--	--	--	--	--
#2	1786	1	--	--	--	--	--
#3	1788	1	--	--	--	--	--
#4	1788	1	--	--	--	--	--
#5	1785	1	--	--	--	--	--
#6	1762	1	--	--	--	--	--
#7	1789	1	--	--	--	--	--
#8	1807	1	--	--	--	--	--
#9	1793	1	--	--	--	--	--
#10	1793	1	--	--	--	--	--

Standardization Rpt. 03/19/07 12:56:21 PM page 1

Method: 20071 Standard: STD1-Blank
Run Time: 03/19/07 12:54:33

80334

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Avge	.0097	-.0001	-.0007	.0002	.0012	.0177	.0001
#1	.0147	.0027	-.0036	.0004	.0013	.0177	-.0003
#2	.0047	-.0030	.0021	.0000	.0011	.0177	.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Avge	.0036	.0006	.0000	.0008	.0053	.0029	.0017
#1	.0060	.0021	.0011	.0016	.0044	.0057	.0017
#2	.0012	-.0009	-.0011	.0000	.0061	.0000	.0017

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Avge	-.0002	.0001	.0003	-.0001	.0231	.0061	-.0022
#1	.0037	.0004	.0004	-.0004	.0360	.0070	-.0010
#2	-.0041	-.0003	.0001	.0003	.0101	.0053	-.0034

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Avge	.1789	.0002	.0004	.0004	-.0016	.0055	.0039
#1	.1839	.0001	.0014	.0006	.0002	.0100	.0044
#2	.1740	.0003	-.0006	.0001	-.0034	.0010	.0033

Elem	Tl1908	Li6707	Sr4215
Avge	-.0039	.0006	-.0001
#1	-.0027	.0004	.0000
#2	-.0050	.0007	-.0001

CMMR
3/19/07

Method: 20071 Standard: STD3
Run Time: 03/19/07 12:56:23

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	.8862	.4280	.1574	8.304	.4396	.1639	1.526
#1	.8877	.4311	.1590	8.335	.4404	.1654	1.536
#2	.8847	.4249	.1559	8.272	.4387	.1623	1.515

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	.7631	8.701	.4155	3.437	.3928	.3962	.5838
#1	.7566	8.766	.4126	3.462	.3949	.3993	.5884
#2	.7696	8.635	.4184	3.412	.3907	.3931	.5791

Elem	Zn2138	Ti3349
Avge	.2962	1.141
#1	.2981	1.153
#2	.2943	1.129

Review 3/19/07

Method: 20071 Standard: STD3
Run Time: 03/19/07 13:01:33 ICP3-99-H 80334

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.847	.7124	1.283	6.984	.3670	.2700	6.503
#1	1.845	.7171	1.280	6.988	.3669	.2701	6.490
#2	1.850	.7077	1.286	6.981	.3671	.2699	6.515

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.217	7.370	.3502	2.884	.2027	.6506	.4977
#1	3.226	7.359	.3541	2.882	.2026	.6500	.4970
#2	3.208	7.380	.3463	2.886	.2029	.6513	.4984

Elem	Zn2138	Ti3349
Avge	1.234	.5849
#1	1.233	.5839
#2	1.236	.5859

Method: 20071 Standard: STD2
Run Time: 03/19/07 13:03:25 ICP3-99-6 80334

Elem	Sb2068	Ba4934	B_2496	Cd2288	Cr2677	Ni2316	K_7665
Avge	1.482	.2576	1.007	.1871	8.067	1.662	.7329
#1	1.483	.2593	1.014	.1879	8.088	1.664	.7267
#2	1.481	.2559	1.000	.1864	8.046	1.660	.7391

Elem	Ag3280	Na5889	Sn1899	P_2149	Si2881	Tl1908	Li6707
Avge	.2814	11.23	4.117	2.887	3.795	.4411	.5526
#1	.2817	11.31	4.120	2.897	3.801	.4406	.5593
#2	.2811	11.14	4.114	2.878	3.788	.4417	.5459

Elem	Sr4215
Avge	.5118
#1	.5156
#2	.5080

Analysis Report QC Standard 03/19/07 01:10:57 PM page 1

Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/19/07 13:04:59
Comment: ICP4-2-C 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.752	2.511	2.424	4.924	.1192	.0314	1.266
#1	Q4.732	2.503	2.399	4.886	Q.1185	.0329	1.259
#2	4.773	2.519	2.448	4.963	.1199	.0299	1.273

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.99	.4994	1.205	.6057	Q2.350	2.401	11.84
#1	11.95	.4981	1.201	.6027	Q2.340	2.408	11.79
#2	12.03	.5007	1.209	.6086	Q2.359	2.394	11.89

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q11.81	1.191	1.940	1.247	12.20	2.444	.6237
#1	Q11.74	Q1.184	1.932	1.247	12.46	2.432	.6214
#2	11.88	1.198	1.948	1.247	11.94	2.456	.6260

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.58	.0002	1.195	1.196	-.1068	.0092	1.955
#1	12.52	.0129	1.189	1.192	-.0746	.0154	1.942
#2	12.63	-.0125	1.200	1.200	-.1389	.0029	1.968

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.542	-.0026	.0006
#1	2.574	-.0039	.0007
#2	2.510	-.0013	.0004

Method: 20071 Standard: STD3
Run Time: 03/19/07 13:11:01 ICP4-5-D 80334

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.780	.6885	1.258	6.705	.3517	.2619	6.298
#1	1.781	.6911	1.259	6.720	.3523	.2623	6.299
#2	1.779	.6859	1.257	6.690	.3511	.2614	6.296

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.064	7.113	.3276	2.791	.1964	.6309	.4799
#1	3.072	7.122	.3326	2.792	.1957	.6317	.4813
#2	3.056	7.105	.3227	2.789	.1971	.6301	.4784

Elem	Zn2138	Ti3349
Avge	1.181	.5716
#1	1.182	.5719
#2	1.179	.5713

Analysis Report QC Standard 03/19/07 01:15:09 PM page 1

Method: 20071 Sample Name: ICV STD 4 Operator: MMR
Run Time: 03/19/07 13:13:07
Comment: ICP3-99-F 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0073	.0064	-.0173	.0000	-.0000	4.925	-.0008
#1	-.0016	.0108	-.0210	-.0004	-.0000	4.906	-.0000
#2	.0162	.0020	-.0135	.0004	-.0000	4.945	-.0016

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0072	-.0027	.0038	.0022	.0063	-.0266	.0077
#1	.0055	-.0020	.0023	.0008	.0050	-.0228	.0078
#2	.0089	-.0033	.0054	.0036	.0075	-.0303	.0076

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2165	.0004	-.0029	-.0030	-1.082	-.0100	.0017
#1	-.1815	.0001	-.0029	-.0047	-1.238	-.0173	-.0013
#2	-.2515	.0006	-.0029	-.0013	-.9258	-.0027	.0047

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.01	5.181	-.0043	.0006	5.020	4.946	-.0019
#1	13.93	5.157	-.0033	.0009	4.954	4.914	-.0013
#2	14.09	5.204	-.0053	.0003	5.086	4.978	-.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0032	4.863	1.006
#1	.0032	4.829	.9990
#2	.0032	4.898	1.013

Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/19/07 13:18:52
Comment: ICP4-2-C 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.949	2.487	2.523	4.932	.1216	.0188	1.264
#1	4.926	2.485	2.523	4.872	.1206	.0224	1.256
#2	4.972	2.489	2.522	4.991	.1226	.0152	1.272

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.47	.4995	1.260	.6221	2.437	2.521	12.26
#1	12.44	.5005	1.256	.6183	2.422	2.538	12.19
#2	12.50	.4984	1.264	.6259	2.452	2.504	12.32

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.67	1.238	2.004	1.251	11.96	2.489	.6223
#1	12.74	1.230	1.997	1.242	12.79	2.485	.6213
#2	12.60	1.245	2.012	1.261	Q11.13	2.494	.6234

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.73	-.0218	1.234	1.254	-.1404	-.0002	2.020
#1	12.56	-.0102	1.230	1.249	-.1144	.0123	2.002
#2	12.89	-.0333	1.238	1.259	-.1664	-.0126	2.039

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.616	-.0045	.0001
#1	2.597	.0039	.0004
#2	Q2.635	-.0129	-.0001

Analysis Report QC Standard 03/19/07 01:27:31 PM page 1

Method: 20071 Sample Name: ICB Operator: MMR
Run Time: 03/19/07 13:25:45
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0060	-.0083	-.0009	.0000	.0001	.0058	-.0004
#1	.0323	.0088	.0015	.0004	.0001	.0072	.0011
#2	-.0202	-.0254	-.0032	-.0004	.0001	.0044	-.0019

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0014	.0006	.0003	-.0034	-.0070	.0012
#1	.0041	-.0004	.0032	.0041	-.0021	-.0056	.0020
#2	-.0033	-.0024	-.0020	-.0036	-.0047	-.0084	.0004

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0962	.0003	-.0004	.0004	-.8730	.0077	.0012
#1	-.0022	.0008	.0007	.0013	-.2767	.0264	.0063
#2	-.1902	-.0002	-.0015	-.0004	-1.469	-.0109	-.0038

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0314	-.0036	-.0013	.0003	.0019	.0100	-.0019
#1	.0540	-.0061	.0003	.0003	.0359	.0332	-.0015
#2	.0087	-.0012	-.0030	.0003	-.0321	-.0133	-.0023

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0193	-.0039	.0001
#1	.0514	.0013	.0004
#2	-.0128	-.0091	-.0001

Analysis Report QC Standard 03/19/07 01:38:43 PM page 1

Method: 20071 Sample Name: CCV1 Operator: MMR
Run Time: 03/19/07 13:35:25
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.164	5.139	2.052	.5120	.5114	5.130	.5192
#1	5.084	5.044	1.992	.5030	.5061	5.046	.5140
#2	5.149	5.128	2.070	.5094	.5092	5.093	.5196
#3	5.159	5.139	2.058	.5124	.5098	5.141	.5153
#4	Q5.264	5.245	2.090	.5232	.5204	5.240	Q.5278

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.094	5.145	.5189	.5111	5.123	5.087	5.107
#1	5.038	5.065	.5105	.5026	5.068	5.024	5.054
#2	5.080	5.125	.5189	.5108	5.102	5.072	5.089
#3	5.085	5.149	.5189	.5092	5.112	5.083	5.093
#4	5.175	5.241	Q.5275	.5217	5.210	5.171	5.191

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q5.318	.5097	.5099	5.166	25.08	2.030	.5183
#1	Q5.323	.5043	.5013	5.086	23.81	1.979	.5060
#2	5.240	.5082	.5122	5.149	25.39	2.038	.5191
#3	5.245	.5083	.5064	5.174	25.48	2.014	.5202
#4	Q5.463	.5182	.5195	Q5.254	25.65	2.089	Q.5279

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.09	Q5.268	.5101	2.562	25.69	5.174	.5114
#1	25.71	5.207	.5053	2.538	25.33	5.084	.5066
#2	25.94	Q5.256	.5065	2.552	25.55	5.176	.5101
#3	26.13	Q5.260	.5070	2.556	25.80	5.173	.5104
#4	Q26.59	Q5.347	.5217	2.603	26.08	Q5.263	.5187

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.186	2.601	.5153
#1	5.100	2.567	.5073
#2	5.174	2.581	.5128
#3	5.199	2.599	.5148
#4	Q5.270	Q2.655	Q.5262

Method: 20071 Sample Name: CCB1 Operator: MMR
Run Time: 03/19/07 13:42:23
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0044	.0034	-.0202	-.0006	.0003	.0181	-.0012
#1	-.0121	.0048	-.0387	-.0010	.0005	.0217	-.0020
#2	.0032	.0020	-.0017	-.0001	.0002	.0144	-.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0021	-.0008	-.0016	.0002	-.0028	.0039
#1	-.0002	.0015	-.0012	-.0025	.0015	-.0112	.0062
#2	.0027	.0027	-.0005	-.0008	-.0011	.0056	.0016

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1334	.0003	-.0011	.0009	-.9887	-.0041	-.0013
#1	Q-.3652	.0005	-.0029	-.0021	-1.600	-.0255	-.0028
#2	.0984	.0000	.0007	.0039	-.3774	.0173	.0003

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0365	-.0090	-.0010	.0012	.0309	.0017	-.0024
#1	-.0488	.0009	-.0041	.0015	.0074	.0007	-.0040
#2	-.0242	-.0189	.0021	.0009	.0544	.0028	-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0177	-.0019	.0004
#1	-.0321	-.0013	.0004
#2	-.0032	-.0026	.0004

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Method: 20071 Sample Name: CRI Operator: MMR
Run Time: 03/19/07 13:44:18
Comment: ICP3-98-B 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0505	.0455	.1220	.0044	.0051	.0635	.0033
#1	.0597	.0469	.1161	.0046	.0052	.0621	.0045
#2	.0412	.0440	.1279	.0043	.0049	.0650	.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0558	.0033	.0093	.0101	.0201	.0318	.0221
#1	.0550	.0019	.0104	.0107	.0182	.0257	.0223
#2	.0566	.0047	.0083	.0096	.0220	.0379	.0219

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.1182	.0053	.0087	.0185	1.019	.0857	.0104
#1	Q-.1685	.0053	.0080	.0159	1.313	.0793	.0114
#2	Q-.0679	.0053	.0095	.0211	.7245	.0921	.0094

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0834	.0404	.0068	.0105	.2225	.0765	.0081
#1	.0689	.0466	.0060	.0105	.2138	.0733	.0083
#2	.0980	.0342	.0075	.0105	.2311	.0797	.0078

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0818	.0061	.0103
#1	.1251	.0032	.0105
#2	.0385	.0091	.0102

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Method: 20071 Sample Name: ICSA Operator: MMR
Run Time: 03/19/07 13:46:35
Comment: ICP3-100-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	511.7	.0351	-.2015	.0003	.0002	.0314	.0072
#1	510.3	-.0089	-.2641	.0004	.0002	.0355	.0101
#2	513.1	.0791	-.1388	.0001	.0002	.0272	.0042

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.0	.0016	-.0083	-.0018	179.7	.0632	235.9
#1	482.3	.0008	-.0068	-.0007	179.3	.0697	235.7
#2	485.8	.0024	-.0097	-.0029	180.1	.0568	236.2

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	511.5	-.0060	.0063	-.0146	-.6616	.1417	-.0033
#1	509.9	-.0065	.0052	-.0125	-.4579	.1485	-.0014
#2	513.1	-.0055	.0075	-.0168	-.8654	.1349	-.0052

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0294	-.0529	-.0025	.0102	-.1424	.0014	.0050
#1	-.0074	-.0458	-.0019	.0099	-.1941	.0079	.0050
#2	-.0514	-.0599	-.0030	.0104	-.0906	-.0051	.0050

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.1397	-.0058	.0054
#1	.1299	-.0084	.0054
#2	.1496	-.0032	.0054

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Method: 20071 Sample Name: ICSAB Operator: MMR
Run Time: 03/19/07 13:48:41
Comment: ICP3-83-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	503.4	1.004	-.2695	.4800	.4661	.0359	.9821
#1	501.5	1.017	-.2876	.4777	.4640	.0382	.9774
#2	505.2	.9906	-.2513	.4822	.4681	.0336	.9868

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	478.3	.4593	.4441	.4760	177.2	.9708	234.0
#1	476.2	.4567	.4416	.4727	176.4	.9579	233.7
#2	480.3	.4619	.4465	.4793	178.1	.9837	234.4

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	502.6	.4496	.0052	.9079	-.7748	.1248	.9710
#1	500.6	.4473	.0073	.9036	-1.162	.1127	.9650
#2	504.7	.4518	.0031	.9122	-.3874	.1369	.9770

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0145	-.0536	.4576	.9732	-.2997	.0149	.0062
#1	-.0165	-.0622	.4547	.9687	-.2794	.0044	.0067
#2	-.0126	-.0451	.4605	.9777	-.3199	.0253	.0057

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0523	-.0061	.0056
#1	-.0662	-.0045	.0054
#2	-.0383	-.0078	.0057

Method: 20071 Sample Name: PBE Operator: MMR
Run Time: 03/19/07 13:51:36
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0374	L.0068	L.0179	.0012	.0001	.0057	L.0016
#1	.0742	L.0283	.0383	.0021	.0002	.0086	L.0020
#2	L.0007	L-.0147	L-.0026	L.0004	L.0001	L.0029	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0228	.0032	L.0008	.0033	.0045	L.0105	.0041
#1	.0301	.0038	.0033	.0074	.0063	.0298	.0058
#2	.0155	.0026	L-.0016	L-.0008	L.0028	L-.0089	L.0024

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.1837	.0011	.0044	L.0034	L.0377	L.0119	L.0028
#1	.2952	.0015	.0044	L.0030	1.243	L.0228	.0089
#2	L.0722	.0007	.0044	L.0039	L-1.167	L.0009	L-.0033

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5106.	L.0024	L.0029	.0160	L.0111	.8963	L-.0009
#1	S5105.	L.0026	.0051	.0166	L.0198	.9173	L.0005
#2	S5107.	L.0023	L.0007	.0154	L.0025	.8753	L-.0023

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0128	L-.0016	.0010
#1	L.0128	.0065	.0013
#2	L.0129	L-.0097	.0007

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Method: 20071 Sample Name: LCS Operator: MMR
Run Time: 03/19/07 13:53:39
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.655	2.342	2.405	4.616	.1103	.4675	1.156
#1	4.631	2.324	2.394	4.588	.1097	.4675	1.153
#2	4.679	2.359	2.416	4.644	.1109	.4675	1.160

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.63	.4658	1.157	.5714	2.272	2.272	11.22
#1	11.59	.4656	1.152	.5662	2.262	2.267	11.17
#2	11.66	.4660	1.163	.5766	2.281	2.277	11.27

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.67	1.150	.4661	1.192	11.16	2.548	L.2049
#1	11.67	1.144	.4639	1.178	11.25	2.534	L.2019
#2	11.67	1.155	.4683	1.205	11.07	2.563	L.2080

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5104.	-.0113	1.165	1.174	-.0815	.9195	-.0010
#1	S5105.	-.0069	1.159	1.168	-.0938	.9099	-.0002
#2	S5104.	-.0156	1.170	1.180	-.0691	.9291	-.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.340	-.0084	.0013
#1	2.356	-.0091	.0013
#2	2.324	-.0078	.0013

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Method: 20071 Sample Name: K0701891-001 Operator: MMR
Run Time: 03/19/07 13:56:01
Comment: K0701891 WET 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.0763	k.0560	k3.969	.0154	k.0000	k-.3289	k.0811
#1	k.0747	k.0507	k4.002	.0151	k.0000	k-.3312	k.0843
#2	k.0779	k.0614	k3.937	.0157	k.0000	k-.3267	k.0779

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	110.8	k.0362	k.2571	k.0955	S1809.	k.0879	26.23
#1	111.2	k.0347	k.2584	k.0957	S1810.	k.0956	26.32
#2	110.4	k.0376	k.2559	k.0952	S1809.	k.0802	26.15

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k26.24	k4.681	k.1280	k.4133	L.3849	k1.730	k.2125
#1	k26.37	k4.697	k.1302	k.4164	L-.0403	k1.748	k.2125
#2	k26.10	k4.666	k.1258	k.4103	.8101	k1.712	k.2125

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	S5093.	k.2586	k.0093	k.5765	k-.5496	k14.48	k.0009
#1	S5093.	k.2697	k.0113	k.5795	k-.5453	k14.52	k.0000
#2	S5093.	k.2475	k.0074	k.5735	k-.5539	k14.44	k.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	k-4.845	.0032	.2096
#1	k-4.818	.0032	.2100
#2	k-4.872	.0032	.2092

Method: 20071 Sample Name: K0701891-001 Operator: MMR
Run Time: 03/19/07 13:59:59
Comment: K0701891 WET 1/10 DILUTION 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0114	L.0027	.4820	.0007	L.0001	.0118	L-.0015
#1	L.0167	L.0042	.4740	L.0001	L.0001	.0090	L-.0032
#2	L.0061	L.0012	.4900	.0012	L.0001	.0146	L.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.62	.0027	.0328	.0071	95.90	L.0048	3.104
#1	12.61	L.0012	.0336	.0084	95.72	L-.0005	3.099
#2	12.64	.0042	.0320	.0057	96.08	L.0102	3.110

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.343	.5068	.0043	.0451	L-1.260	.0692	L-.0005
#1	3.294	.5062	L.0017	.0451	L-1.454	.0703	L.0013
#2	3.393	.5074	.0069	.0451	L-1.067	.0681	L-.0022

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	262.0	L-.0081	L.0008	.0647	L-.0027	1.599	L-.0029
#1	261.5	L-.0153	L.0001	.0647	L-.0347	1.604	L-.0038
#2	262.4	L-.0010	L.0014	.0647	L.0293	1.595	L-.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0266	L-.0087	.0236
#1	L-.0578	L-.0104	.0236
#2	L.0047	L-.0071	.0236

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Method: 20071 Sample Name: CCV2 Operator: MMR
Run Time: 03/19/07 14:02:05
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.181	5.191	2.101	.5135	.5124	5.130	.5173
#1	5.141	5.142	2.107	.5071	.5067	5.046	.5138
#2	5.221	5.239	2.094	.5199	.5180	5.214	.5209

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.079	5.166	.5212	.5138	5.113	5.105	5.037
#1	5.036	5.112	.5160	.5092	5.059	5.071	4.987
#2	5.121	5.220	.5264	.5185	5.166	5.139	5.087

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.175	.5118	.5105	5.333	25.27	2.061	.5227
#1	5.127	.5064	.5043	5.299	25.30	2.019	.5186
#2	5.222	.5172	.5167	5.367	25.24	2.104	.5268

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.14	5.425	.5095	2.566	25.89	5.203	.5149
#1	25.85	5.412	.5030	2.542	25.71	5.155	.5096
#2	26.43	5.439	.5160	2.590	26.08	5.250	.5202

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.296	2.625	.5170
#1	5.254	2.586	.5109
#2	5.337	2.664	.5232

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Method: 20071 Sample Name: CCB2 Operator: MMR
Run Time: 03/19/07 14:04:03
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	.0068	-.0216	-.0003	.0003	.0137	.0004
#1	.0064	.0166	-.0313	-.0004	.0004	.0173	.0017
#2	-.0024	-.0030	-.0119	-.0001	.0003	.0101	-.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0054	.0038	-.0004	-.0008	.0076	.0110	.0041
#1	.0053	.0035	-.0003	-.0008	.0112	.0005	.0056
#2	.0055	.0042	-.0004	-.0008	.0040	.0215	.0026

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0415	.0005	.0004	.0043	-.5711	.0223	.0013
#1	-.0460	.0005	.0007	.0039	-1.112	.0146	.0013
#2	.1290	.0005	.0000	.0047	-.0302	.0301	.0013

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0436	.0080	.0009	.0018	.0569	.0066	-.0015
#1	.0436	.0155	-.0008	.0021	.0494	.0074	-.0020
#2	.0436	.0005	.0026	.0015	.0643	.0058	-.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0466	-.0058	.0006
#1	-.0257	-.0026	.0007
#2	-.0674	-.0091	.0004

Method: 20071 Sample Name: PBW Operator: MMR
Run Time: 03/19/07 14:06:05
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0153	L-.0010	L-.0105	L-.0007	L.0001	L.0029	L.0009
#1	L-.0048	L.0078	L-.0236	L-.0007	L.0001	L.0000	L.0008
#2	L-.0258	L-.0098	L.0027	L-.0007	L.0001	.0058	L.0011

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0005	L-.0001	L-.0007	L-.0011	L-.0023	L-.0114	L-.0010
#1	L-.0001	L-.0010	L.0007	L-.0008	L-.0032	L-.0205	L-.0010
#2	L.0010	L.0008	L-.0021	L-.0014	L-.0014	L-.0023	L-.0010

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0066	L-.0001	L-.0015	L-.0021	L-1.233	L.0137	L-.0008
#1	L-.0197	L.0001	L-.0000	L-.0047	L-1.162	L.0173	L.0002
#2	L.0328	L-.0002	L-.0029	L.0004	L-1.303	L.0100	L-.0018

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0191	L-.0163	L-.0008	L.0000	L-.0161	L.0028	L-.0024
#1	L-.0217	L-.0168	L-.0009	L.0003	L.0111	L.0055	L-.0030
#2	L-.0165	L-.0158	L-.0006	L-.0003	L-.0433	L.0002	L-.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0144	L-.0068	L.0000
#1	L-.0417	L-.0058	.0001
#2	L.0128	L-.0078	L-.0001

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Method: 20071 Sample Name: LCSW Operator: MMR
Run Time: 03/19/07 14:08:06
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.302	2.702	2.627	5.316	.1297	1.058	1.317
#1	5.324	2.721	2.653	5.365	.1307	1.060	1.324
#2	5.279	2.682	2.601	5.267	.1288	1.056	1.309

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.99	.5260	1.316	.6694	2.572	2.599	12.68
#1	13.06	.5308	1.320	.6748	2.586	2.610	12.76
#2	12.93	.5212	1.311	.6639	2.559	2.588	12.61

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.70	1.313	1.035	1.325	12.35	2.612	.6651
#1	13.81	1.320	1.037	1.332	12.06	2.622	.6672
#2	13.60	1.306	1.034	1.318	12.64	2.601	.6630

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.76	-.0304	1.308	1.320	-.1050	.0134	-.0017
#1	13.86	-.0266	1.317	1.328	-.1816	.0110	-.0026
#2	13.66	-.0343	1.299	1.311	-.0283	.0158	-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.716	-.0068	.0006
#1	2.698	-.0065	.0004
#2	2.733	-.0071	.0007

Method: 20071 Sample Name: K0701647-001D Operator: MMR
Run Time: 03/19/07 14:13:37
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0271	L.0201	L-.0163	.0064	.0001	.0235	L.0003
#1	L.0146	L.0050	L-.0364	.0060	L.0000	.0185	L.0002
#2	.0396	.0352	L.0039	.0068	.0002	.0286	L.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.475	.0032	L.0022	.0046	L.0022	L.0065	6.521
#1	7.520	L.0017	L-.0000	L.0014	L.0005	L.0032	6.567
#2	7.429	.0046	.0045	.0079	.0038	L.0098	6.474

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.972	.0005	L.0004	L.0073	1.411	L.0178	L.0033
#1	6.983	L.0001	L-.0007	.0107	.7145	L.0137	L-.0007
#2	6.961	.0008	L.0015	L.0039	2.108	L.0219	.0074

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.074	L-.0049	.0050	.0037	L.0593	6.687	L-.0006
#1	7.081	L-.0130	.0041	.0025	L.0334	6.726	L-.0005
#2	7.067	L.0033	.0059	.0049	.0853	6.647	L-.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0064	L-.0010	.0405
#1	L.0160	L-.0071	.0406
#2	L-.0032	.0052	.0403

Method: 20071 Sample Name: K0701647-001 Operator: MMR
Run Time: 03/19/07 14:11:43
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0009	L.0074	L-.0157	.0060	L.0001	.0250	L.0010
#1	L-.0185	L.0059	L-.0245	.0062	.0002	.0257	L.0023
#2	.0203	L.0089	L-.0069	.0057	L.0000	.0243	L-.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.335	L.0017	L-.0002	L.0003	L-.0012	L.0056	6.414
#1	7.354	.0033	L-.0017	L-.0008	L-.0012	L.0163	6.430
#2	7.316	L-.0000	L.0012	L.0014	L-.0012	L-.0051	6.398

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.858	.0002	L.0011	L.0060	L.0855	L-.0073	L.0011
#1	7.005	L-.0000	.0044	.0082	L.0201	L.0146	L-.0012
#2	6.712	.0004	L-.0022	L.0039	L.1509	L-.0292	L.0033

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.973	L-.0109	.0053	.0022	.0816	6.566	L-.0015
#1	6.963	L-.0095	.0074	.0019	L.0581	6.572	L-.0013
#2	6.982	L-.0123	.0031	.0025	.1051	6.560	L-.0018

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0016	L-.0032	.0396
#1	L.0032	L-.0006	.0398
#2	L-.0064	L-.0058	.0395

Method: 20071 Sample Name: K0701647-001S Operator: MMR
Run Time: 03/19/07 14:15:28
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.099	.5386	1.032	2.113	.0514	1.072	.0534
#1	2.068	.5269	1.022	2.090	.0510	1.052	.0540
#2	2.129	.5503	1.043	2.135	.0518	1.091	.0529

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.351	.2120	.5269	.2636	1.027	.5330	6.416
#1	7.307	.2114	.5222	.2592	1.019	.5265	6.372
#2	7.395	.2127	.5316	.2679	1.036	.5396	6.461

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.767	.5234	1.034	.5289	L.4855	1.035	.0534
#1	6.743	.5197	1.026	.5246	.7094	1.041	.0509
#2	6.791	.5270	1.041	.5332	L.2616	1.029	.0560

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.940	L-.0135	.5235	.5205	L.0582	6.571	L-.0016
#1	6.855	L-.0169	.5202	.5169	L.0415	6.517	L-.0010
#2	7.025	L-.0100	.5267	.5241	L.0748	6.625	L-.0022

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	1.062	L.0000	.0398
#1	1.076	.0032	.0392
#2	1.047	L-.0032	.0403

Method: 20071 Sample Name: K0701647-002 Operator: MMR
Run Time: 03/19/07 14:17:19
Comment: K0701747 1647 1703 1681 1682 1692 1740 1770 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0238	L.0191	L-.0520	.0293	.0001	.0616	.0032
#1	.0395	L.0293	L-.0281	.0293	.0002	.0687	.0031
#2	L.0081	L.0089	L-.0760	.0293	L.0001	.0544	.0032

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	112.6	L.0001	L.0008	L.0005	L-.0060	L.0112	H158.2
#1	110.6	L.0009	L.0020	L.0019	L-.0050	.0228	H156.7
#2	114.6	L-.0007	L-.0004	L-.0008	L-.0070	L-.0005	H159.8

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	232.8	.0034	L-.0015	L.0077	.8855	L-.0041	L.0038
#1	227.4	.0033	L-.0007	L-.0013	1.243	L.0128	.0053
#2	238.2	.0034	L-.0022	.0168	L.5283	L-.0210	L.0022

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	269.7	L-.0160	L-.0016	.6890	L.0686	11.59	L-.0015
#1	263.1	L-.0175	L-.0003	.6792	L.0309	11.37	L-.0000
#2	276.3	L-.0144	L-.0030	.6988	.1063	11.82	L-.0030

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0224	.0285	.7064
#1	L-.0288	.0291	.6889
#2	L-.0160	.0278	.7238

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Method: 20071 Sample Name: K0701647-002L Operator: MMR
Run Time: 03/19/07 14:19:27
Comment: K0701647 1/5 DILUTION 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0412	L-.0131	L-.0449	.0051	L.0000	.0261	L.0007
#1	L-.0452	L-.0068	L-.0293	.0054	L.0001	.0253	L.0016
#2	L-.0371	L-.0194	L-.0605	.0049	L-.0000	.0269	L-.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.80	L-.0023	L-.0041	L-.0060	L-.0027	L-.0098	H43.61
#1	23.85	L-.0005	L-.0037	L-.0052	L-.0045	L-.0037	H43.72
#2	23.75	L-.0042	L-.0045	L-.0068	L-.0010	L-.0159	H43.49

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.70	.0004	L-.0033	L.0039	L-1.499	L-.0128	L-.0068
#1	48.95	.0005	L-.0000	L.0013	L-.9057	L-.0401	L-.0063
#2	48.44	.0003	L-.0065	L.0064	L-2.093	L.0146	L-.0073

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.51	L-.0088	L-.0033	.1436	L.0328	2.389	L-.0028
#1	56.85	L-.0120	L-.0026	.1442	L.0742	2.402	L-.0028
#2	56.16	L-.0057	L-.0040	.1430	L-.0086	2.376	L-.0028

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0064	L-.0013	.1496
#1	L-.0192	.0026	.1503
#2	L.0064	L-.0052	.1489

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Method: 20071 Sample Name: K0701703-001 Operator: MMR
Run Time: 03/19/07 14:21:54
Comment: K0701703 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0060	L.0010	L-.0338	.0803	L.0001	.0454	L-.0017
#1	L.0016	L-.0117	L-.0279	.0812	L.0001	.0453	L-.0022
#2	L.0104	L.0137	L-.0397	.0795	L.0001	.0455	L-.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.47	L-.0019	L-.0006	L-.0016	L.0013	L-.0089	H48.68
#1	47.72	L-.0016	L-.0024	L-.0025	L.0014	L-.0056	H48.95
#2	47.23	L-.0021	L.0012	L-.0008	L.0011	L-.0121	H48.41

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.10	.5383	L.0000	L.0030	L.1962	L-.0169	L-.0008
#1	55.48	.5417	L-.0029	L.0047	L.6138	L.0027	L-.0013
#2	54.73	.5350	L.0029	L.0013	L-.2214	L-.0365	L-.0003

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.75	L-.0019	L-.0002	.0079	.1014	10.56	L-.0016
#1	45.13	L.0030	L-.0000	.0072	.1236	10.63	L-.0030
#2	44.37	L-.0068	L-.0004	.0085	L.0791	10.49	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0154	.0269	.2890
#1	L.0203	.0278	.2915
#2	L.0106	.0259	.2865

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Method: 20071 Sample Name: K0701681-001 Operator: MMR
Run Time: 03/19/07 14:24:09
Comment: K0701681 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7169	L.0164	L-.0209	.0111	L.0001	.0278	L.0017
#1	.6979	L.0163	L-.0005	.0112	L.0000	.0264	L.0006
#2	.7359	L.0164	L-.0413	.0110	.0001	.0292	L.0028

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.742	.0117	L.0004	.0198	2.306	L-.0018	.6170
#1	7.754	.0113	L-.0014	.0168	2.313	L-.0092	.6191
#2	7.731	.0122	L.0023	.0228	2.298	L.0057	.6149

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6407	.0730	.0049	L-.0009	L.4679	L.0190	L.0014
#1	.5751	.0729	.0060	L-.0030	L.6491	L-.0015	L-.0012
#2	.7064	.0730	L.0039	L.0013	L.2868	L.0395	L.0039

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6909	L-.0050	.0108	.2158	.1131	2.600	.0673
#1	.6799	L-.0065	.0095	.2152	.0927	2.591	.0687
#2	.7019	L-.0034	.0121	.2164	.1335	2.609	.0659

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0168	L-.0032	.0289
#1	L-.0136	L-.0019	.0289
#2	L-.0200	L-.0045	.0289

Method: 20071 Sample Name: K0701681-001D Operator: MMR
Run Time: 03/19/07 14:26:05
Comment: K0701681 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7814	L-.0056	L.0011	.0114	L.0000	.0270	L-.0013
#1	.8052	L.0037	L.0124	.0118	L-.0001	.0307	L-.0011
#2	.7576	L-.0149	L-.0102	.0110	.0001	.0234	L-.0015

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.048	.0094	L.0004	.0204	2.499	L-.0168	.6443
#1	7.984	.0086	L.0022	.0234	2.474	L-.0210	.6386
#2	8.113	.0102	L-.0014	.0174	2.524	L-.0126	.6500

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4825	.0774	L.0024	L.0073	L-.5333	L-.0081	L.0011
#1	.3952	.0768	L.0010	.0099	L.1912	L-.0132	.0049
#2	.5699	.0780	L.0039	L.0047	L-1.258	L-.0031	L-.0026

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7090	L-.0067	.0090	.2260	.1242	2.768	.0728
#1	.7200	L-.0107	.0070	.2242	.1236	2.761	.0724
#2	.6980	L-.0027	.0109	.2279	.1248	2.776	.0732

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0113	L-.0061	.0303
#1	L-.0015	L-.0084	.0303
#2	L-.0210	L-.0039	.0303

Method: 20071 Sample Name: CCV3 Operator: MMR
Run Time: 03/19/07 14:28:12
Comment: ICP4-5-E 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.997	5.067	2.036	.4983	.5000	4.963	.5122
#1	4.995	5.061	2.038	.4991	.5003	4.976	.5125
#2	4.999	5.073	2.035	.4974	.4997	4.950	.5118

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.017	5.076	.5116	.4952	5.013	5.079	4.932
#1	5.025	5.081	.5131	.4960	5.017	5.094	4.937
#2	5.009	5.071	.5102	.4944	5.009	5.065	4.927

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.190	.5018	.5060	5.119	24.50	1.979	.5082
#1	5.324	.5020	.5071	5.114	24.65	1.993	.5090
#2	5.057	.5016	.5050	5.124	24.36	1.966	.5075

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.51	5.230	.4990	2.525	25.60	5.076	.5006
#1	25.50	5.242	.5009	2.526	25.49	5.081	.5021
#2	25.51	5.218	.4970	2.524	25.70	5.072	.4991

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.126	2.518	.5010
#1	5.184	2.517	.5017
#2	5.068	2.519	.5003

Method: 20071 Sample Name: CCB3 Operator: MMR
Run Time: 03/19/07 14:30:18
Comment: 80334
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0065	.0176	.0012	-.0007	.0004	.0166	.0011
#1	.0080	.0312	-.0119	-.0010	.0005	.0187	.0013
#2	.0049	.0039	.0143	-.0004	.0003	.0144	.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0059	.0041	.0004	.0003	-.0015	.0019	.0033
#1	.0063	Q.0063	-.0004	-.0008	-.0010	.0037	.0048
#2	.0055	.0019	.0013	.0014	-.0020	.0000	.0018

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1334	.0009	.0011	.0052	-1.157	.0214	.0018
#1	.1903	.0012	.0029	.0073	-1.872	.0337	.0008
#2	.0766	.0006	-.0007	.0030	-.4428	.0091	.0028

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0430	-.0014	.0014	.0015	-.0291	.0099	-.0020
#1	.0385	-.0088	.0024	.0021	-.0210	.0047	-.0020
#2	.0475	.0061	.0003	.0009	-.0371	.0152	-.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0112	-.0055	.0004
#1	.0321	-.0091	.0004
#2	-.0546	-.0019	.0004

Service Request # _K0701703_____
Calibration _03-20-07C,D_____
QC in calibration__03-20-07C,D_____
QC Service Request #__K0701647_____
Star Lims Run # __80435_____

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL	X		
13. CRA run	X		
14. ICSA and ICSAB in control	X		
15. Serial dilution run	X		
16. Post spike in control	X		

Comments: ~~Report 62ND~~ JC 3/20/07
Report 4 ppb on Se MRL

Primary Review by JC Date 3/20/07
Secondary Review by B Date 3/20/07
R:\icp\misc\data review forms\PQ ExCell review form

ample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	25 ppb Std. MS10-46-A	Fully Quant Standard	0 kg	0 ml	1.00
3	Hydroshere	Unknown	0 kg	0 ml	1.00
4	ICV MS10-40-H	Unknown	0 kg	0 ml	1.00
5	CCV1 MS10-46-A	Unknown	0 kg	0 ml	1.00
6	ICB	Unknown	0 kg	0 ml	1.00
7	CCB1	Unknown	0 kg	0 ml	1.00
8	CRA WATER MS10-43-E	Unknown	0 kg	0 ml	1.00
9	ICSA MS10-45-C	Unknown	0 kg	0 ml	1.00
10	ICSAB MS10-45-D	Unknown	0 kg	0 ml	1.00
11	PBW K0701816	Unknown	0 kg	0 ml	1.00
12	K0701816-002	Unknown	0 kg	0 ml	1.00
13	K0701816-002D	Unknown	0 kg	0 ml	1.00
14	K0701816-002L 1/5	Unknown	0 kg	0 ml	1.00
15	K0701816-002A ±20 ±10Ag	Unknown	0 kg	0 ml	1.00
16	K0701816-002S	Unknown	0 kg	0 ml	1.00
17	LCSW K0701816	Unknown	0 kg	0 ml	1.00
18	CCV2 MS10-46-A	Unknown	0 kg	0 ml	1.00
19	CCB2	Unknown	0 kg	0 ml	1.00
20	PBW K0701647	Unknown	0 kg	0 ml	1.00
21	K0701647-001	Unknown	0 kg	0 ml	1.00
22	K0701647-001D	Unknown	0 kg	0 ml	1.00
23	K0701647-001L 1/5	Unknown	0 kg	0 ml	1.00
24	K0701647-001A ±20 ±10Ag	Unknown	0 kg	0 ml	1.00
25	K0701647-001S	Unknown	0 kg	0 ml	1.00
26	LCSW K0701647	Unknown	0 kg	0 ml	1.00
27	K0701647-002	Unknown	0 kg	0 ml	1.00
28	K0701703-001	Unknown	0 kg	0 ml	1.00
29	K0701680-001	Unknown	0 kg	0 ml	1.00
30	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
31	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
32	CCB3	Unknown	0 kg	0 ml	1.00
33	CCB3	Unknown	0 kg	0 ml	1.00
34	K0701680-001D	Unknown	0 kg	0 ml	1.00
35	K0701680-001S	Unknown	0 kg	0 ml	1.00
36	K0701680-003	Unknown	0 kg	0 ml	1.00
37	K0701680-004	Unknown	0 kg	0 ml	1.00
38	K0701680-001 DISS.	Unknown	0 kg	0 ml	1.00
39	K0701680-003 DISS.	Unknown	0 kg	0 ml	1.00
40	K0701680-004 DISS.	Unknown	0 kg	0 ml	1.00
41	CCV4 MS10-46-A	Unknown	0 kg	0 ml	1.00
42	CCB4	Unknown	0 kg	0 ml	1.00

nstrument Setup - Sample Configuration

Sample	Configuration	Date
All Samples	acqmet11	7:08:03 3/20/07

nstrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,380.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-35.10
Focus	11.30

ExCell Mass Calibration **Date: 3/20/2007**

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include
7.016	1583	0.665	-0.01	TRUE
9.012	2097	0.614	0.017	TRUE
23.985	5905	0.665	0.031	TRUE
26.982	6659	0.665	0.001	TRUE
43.956	10970	0.716	-0.014	TRUE
45.953	11490	0.614	0.034	TRUE
51.94	13004	0.767	0.001	TRUE
53.949	13511	0.767	-0.014	TRUE
55.935	14018	0.767	-0.006	TRUE
56.935	14278	0.767	0.016	TRUE
57.934	14525	0.767	-0.012	TRUE
58.933	14779	0.716	-0.012	TRUE
59.931	15032	0.767	-0.015	TRUE
62.93	15799	0.767	0.002	TRUE
63.929	16053	0.716	0.001	TRUE
64.928	16306	0.767	-0.003	TRUE
65.926	16553	0.767	-0.03	TRUE
67.925	17067	0.818	-0.008	TRUE
75.92	19101	0.766	-0.009	TRUE
114.904	29022	0.817	-0.014	TRUE
137.906	34891	0.765	0.026	TRUE
139.905	35398	0.765	0.017	TRUE
202.972	51473	0.713	0.001	TRUE
204.972	51986	0.764	0.012	TRUE
205.974	52240	0.713	0.005	TRUE
206.976	52500	0.713	0.023	TRUE
207.977	52747	0.713	-0.01	TRUE
208.98	53007	0.713	0.005	TRUE
238.051	60417	0.713	-0.034	TRUE

Excluded In Calib | Excluded In Results | Multi Element | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	[redacted]	7Li	9Be	59Co	115In	208Pb
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)0.167	(P)21350.948	(P)5750.825	(P)30694.610	(P)32603.668	(P)12538.834
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)0.000	(P)23330.374	(P)5988.090	(P)31290.104	(P)31843.289	(P)12783.884
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)0.333	(P)23550.916	(P)5964.912	(P)30817.758	(P)31738.225	(P)12556.183
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)0.667	(P)22317.941	(P)5669.459	(P)30611.670	(P)31083.469	(P)12130.815
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)0.333	(P)21663.935	(P)5484.887	(P)30996.655	(P)30882.533	(P)11586.364
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)0.300	(P)22442.823	(P)5771.635	(P)30882.160	(P)31630.237	(P)12319.216
	SD of Stability 3/20/07		(P)0.247	(P)978.528	(P)210.539	(P)270.192	(P)682.392	(P)472.459
	%RSD of Stability 3/		(P)82.402	(P)4.360	(P)3.648	(P)0.875	(P)2.157	(P)3.835

Run	Label	TimeStamp	209Bi	[redacted]	238U
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)17470.344	(P)0.000	(P)18429.714
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)17480.522	(P)0.000	(P)17702.296
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)17357.373	(P)0.000	(P)17693.618
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)16671.889	(P)0.000	(P)17172.816
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)15802.736	(P)0.167	(P)16404.247
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)16956.573	(P)0.033	(P)17480.538
	SD of Stability 3/20/07		(P)726.551	(P)0.075	(P)749.768
	%RSD of Stability 3/		(P)4.285	(P)223.607	(P)4.289

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:29**					
Antimony	121	-0.0006	-0.0004	0.001	**0**	0.0009	0
Antimony	123	-0.0027	0.0004	0.0023	**0**	0.0025	0
Arsenic	75	-0.0051	-0.0656	0.0707	**0**	0.0683	0
Beryllium	9	0.0005	-0.0005	0	**0**	0.0005	0
Cadmium	111	-0.0022	-0.0007	0.0029	**0**	0.0026	0
Cadmium	114	-0.0023	0.0035	-0.0012	**0**	0.0031	0
Chromium	52	0.0182	-0.0037	-0.0145	**0**	0.0167	0
Chromium	53	-0.001	0.0082	-0.0073	**0**	0.0078	0
Cobalt	59	-0.0004	-0.0006	0.001	**0**	0.0008	0
Copper	63	0.0069	0.0019	-0.0088	**0**	0.008	0
Copper	65	-0.0025	0.0006	0.0019	**0**	0.0023	0
Lead	206	-0.0027	0.0047	-0.002	**0**	0.0041	0
Lead	207	-0.0019	0.0023	-0.0004	**0**	0.0022	0
Lead	208	0.0002	0.0013	-0.0016	**0**	0.0015	0
Molybdenum	95	-0.0019	0.0005	0.0014	**0**	0.0017	0
Molybdenum	97	-0.0005	-0.001	0.0015	**0**	0.0013	0
Molybdenum	98	0.0007	-0.0013	0.0006	**0**	0.0011	0
Nickel	60	0.0197	0.0268	-0.0466	**0**	0.0405	0
Nickel	62	0.0339	0.029	-0.063	**0**	0.0546	0
Selenium	77	-0.0218	0.1121	-0.0904	**0**	0.103	0
Selenium	78	-0.324	0.0639	0.2601	**0**	0.2973	0
Selenium	82	-0.0533	-0.1206	0.174	**0**	0.1544	0
Silver	107	0.0014	0.0019	-0.0033	**0**	0.0029	0
Silver	109	0.0023	-0.0017	-0.0006	**0**	0.0021	0
Thallium	203	0	0.0007	-0.0007	**0**	0.0007	0
Thallium	205	-0.0004	-0.0005	0.0009	**0**	0.0008	0
Zinc	66	-0.0228	0.0178	0.005	**0**	0.0207	0
Zinc	67	0.0939	-0.0912	-0.0027	**0**	0.0926	0
Zinc	68	-0.0357	0.0116	0.0242	**0**	0.0316	0

3/20/07

Internal Standard Factors:

Lithium	6	1.028	0.98	0.993	**1.028**	n/a	n/a
Gallium	71	0.994	1.038	0.97	**0.994**	n/a	n/a
Indium	115	0.941	1.031	1.034	**0.941**	n/a	n/a
Lutetium	175	0.959	1.03	1.014	**0.959**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		25 ppb Std. MS10-46-A			Mean	SD	%RSD
TimeStamp		3/20/07 11:33					
Antimony	121	25.22	24.9	24.87	**25**	0.1918	0.7671
Antimony	123	25.2	25.08	24.72	**25**	0.2524	1.01
Arsenic	75	24.85	24.85	25.3	**25**	0.2604	1.042
Beryllium	9	24.58	25.78	24.64	**25**	0.6731	2.692
Cadmium	111	26.02	24.46	24.53	**25**	0.8799	3.52
Cadmium	114	25.35	25.08	24.57	**25**	0.3942	1.577
Chromium	52	25.13	24.76	25.11	**25**	0.2084	0.8334
Chromium	53	25.69	24.91	24.4	**25**	0.6466	2.586
Cobalt	59	26.28	24.7	24.02	**25**	1.158	4.634
Copper	63	26.42	24.33	24.25	**25**	1.233	4.934
Copper	65	26.2	24.38	24.42	**25**	1.04	4.158
Lead	206	24.99	25.09	24.92	**25**	0.0836	0.3344
Lead	207	26.15	24.25	24.6	**25**	1.01	4.039
Lead	208	25.29	24.9	24.81	**25**	0.2582	1.033
Molybdenum	95	25.78	24.89	24.33	**25**	0.7345	2.938
Molybdenum	97	26.46	24.87	23.67	**25**	1.395	5.581
Molybdenum	98	25.81	24.8	24.39	**25**	0.7352	2.941
Nickel	60	26.37	24.49	24.14	**25**	1.203	4.811
Nickel	62	26.49	24.08	24.43	**25**	1.3	5.201
Selenium	77	25.11	24.64	25.25	**25**	0.3218	1.287
Selenium	78	24.46	25.24	25.3	**25**	0.4666	1.867
Selenium	82	24.48	24.51	26.01	**25**	0.8721	3.489
Silver	107	25.97	24.28	24.74	**25**	0.8747	3.499
Silver	109	25.89	24.05	25.06	**25**	0.9251	3.7
Thallium	203	25.67	24.72	24.61	**25**	0.5847	2.339
Thallium	205	25.18	25.23	24.59	**25**	0.358	1.432
Zinc	66	26.04	24.82	24.13	**25**	0.9672	3.869
Zinc	67	25.6	25.33	24.06	**25**	0.8216	3.286
Zinc	68	25.83	24.49	24.68	**25**	0.7268	2.907

Internal Standard Factors:

Lithium	6	0.979	0.984	1.003	**0.979**	n/a	n/a
Gallium	71	1.009	0.963	0.954	**1.009**	n/a	n/a
Indium	115	1	0.998	0.996	**1**	n/a	n/a
Lutetium	175	0.98	0.989	0.977	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Hydroshere**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:36**					
Antimony	121	0.0036	0.0053	0.0033	**0.0041**	0.0011	27.11
Antimony	123	0.0009	0.0031	-0.0002	**0.0013**	0.0017	134.8
Arsenic	75	0.0115	0.0646	-0.0028	**0.0244**	0.0355	145.6
Beryllium	9	0.0031	0.0004	0.001	**0.0015**	0.0014	97.04
Cadmium	111	0.0015	-0.0021	-0.0014	**-0.0007**	0.0019	287.1
Cadmium	114	0.0011	0.001	0.0032	**0.0018**	0.0013	70.63
Chromium	52	-0.0192	-0.0038	-0.0896	**-0.0375**	0.0457	121.9
Chromium	53	-0.002	0.0141	0.004	**0.0054**	0.0082	151.6
Cobalt	59	-0.0005	0.0009	-0.0015	**-0.0004**	0.0012	315.8
Copper	63	0.0348	0.0242	0.0254	**0.0282**	0.0058	20.67
Copper	65	0.0416	0.0296	0.0284	**0.0332**	0.0073	21.96
Lead	206	-0.0071	-0.005	0.0015	**-0.0036**	0.0045	125.9
Lead	207	-0.0045	-0.0011	-0.0065	**-0.004**	0.0027	67.79
Lead	208	-0.0052	-0.0025	-0.0032	**-0.0036**	0.0014	39.39
Molybdenum	95	0.0283	0.0206	0.0127	**0.0206**	0.0078	37.85
Molybdenum	97	0.023	0.0166	0.016	**0.0185**	0.0039	20.79
Molybdenum	98	0.0232	0.0188	0.0066	**0.0162**	0.0086	53.05
Nickel	60	-0.0271	-0.013	-0.0977	**-0.0459**	0.0454	98.87
Nickel	62	-0.0116	-0.0111	-0.1265	**-0.0497**	0.0664	133.6
Selenium	77	0.1775	0.1239	0.0559	**0.1191**	0.0609	51.17
Selenium	78	0.2506	-0.13	-0.134	**-0.0045**	0.2209	4953
Selenium	82	0.1741	0.3263	0.0273	**0.1759**	0.1495	85
Silver	107	0.0787	0.0419	0.0302	**0.0503**	0.0253	50.35
Silver	109	0.0835	0.0436	0.0261	**0.0511**	0.0294	57.63
Thallium	203	0.0042	0.0022	0.0018	**0.0027**	0.0013	48.64
Thallium	205	0.0004	0.0018	0.0006	**0.0009**	0.0008	80.84
Zinc	66	0.1356	0.1555	0.126	**0.1391**	0.015	10.81
Zinc	67	0.0533	0.2041	0.2038	**0.1538**	0.087	56.6
Zinc	68	0.1659	0.1555	0.1165	**0.146**	0.026	17.82

Internal Standard Factors:

Lithium	6	0.932	0.947	0.826	**0.932**	n/a	n/a
Gallium	71	0.984	0.967	0.808	**0.984**	n/a	n/a
Indium	115	1.001	0.987	0.888	**1.001**	n/a	n/a
Lutetium	175	0.975	0.98	0.891	**0.975**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		ICV MS10-40-H			Mean	SD	%RSD
TimeStamp		3/20/07 11:39					
Antimony	121	26.44	25.79	25.65	**25.96**	0.4182	1.611
Antimony	123	24.93	25.75	25.49	**25.39**	0.4196	1.653
Arsenic	75	26.18	26.39	26.88	**26.48**	0.3623	1.368
Beryllium	9	2.546	2.692	2.711	**2.65**	0.0902	3.403
Cadmium	111	13.16	13.22	13.12	**13.17**	0.0493	0.3742
Cadmium	114	13.22	13.4	12.81	**13.14**	0.3061	2.329
Chromium	52	9.778	9.989	10.14	**9.969**	0.1819	1.825
Chromium	53	9.813	10.15	10.06	**10.01**	0.1735	1.734
Cobalt	59	24.84	24.68	24.8	**24.78**	0.0856	0.3455
Copper	63	12.31	12.08	12.37	**12.25**	0.1513	1.234
Copper	65	12.36	12.2	12.5	**12.36**	0.1527	1.236
Lead	206	25.01	25.24	24.47	**24.9**	0.3964	1.592
Lead	207	26.92	26.68	25.7	**26.43**	0.6457	2.443
Lead	208	26.4	25.98	25.26	**25.88**	0.5754	2.224
Molybdenum	95	26.43	26.19	26.07	**26.23**	0.1815	0.692
Molybdenum	97	26.02	25.94	26.19	**26.05**	0.1315	0.505
Molybdenum	98	25.37	25.79	25.7	**25.62**	0.2209	0.8622
Nickel	60	24.27	24.14	24.73	**24.38**	0.307	1.259
Nickel	62	24.78	24.4	24.15	**24.45**	0.317	1.297
Selenium	77	25.4	25.99	25.97	**25.79**	0.3353	1.3
Selenium	78	26.67	26.92	27.77	**27.12**	0.5766	2.126
Selenium	82	25.69	26.67	27.04	**26.47**	0.6978	2.637
Silver	107	12.31	12.49	12.18	**12.33**	0.155	1.257
Silver	109	12.38	12.46	12.38	**12.4**	0.0462	0.3728
Thallium	203	25.91	24.99	25.82	**25.57**	0.5085	1.988
Thallium	205	26.54	25.42	25.63	**25.86**	0.5949	2.3
Zinc	66	25.19	24.71	25.22	**25.04**	0.2831	1.131
Zinc	67	30.89	32.09	31.48	**31.49**	0.5989	1.902
Zinc	68	30.93	29.93	30.38	**30.41**	0.5034	1.655

Internal Standard Factors:

Lithium	6	0.911	0.952	0.929	**0.911**	n/a	n/a
Gallium	71	0.924	0.939	0.957	**0.924**	n/a	n/a
Indium	115	0.954	1.009	0.975	**0.954**	n/a	n/a
Lutetium	175	0.969	0.982	0.977	**0.969**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		CCV1 MS10-46-A			Mean	SD	%RSD
TimeStamp		3/20/07 11:43					
Antimony	121	24.82	25.89	25.64	**25.45**	0.5597	2.199
Antimony	123	23.92	24.91	24.25	**24.36**	0.4997	2.051
Arsenic	75	24.94	25.02	26.12	**25.36**	0.6562	2.587
Beryllium	9	26.96	26.14	25.69	**26.26**	0.6417	2.444
Cadmium	111	24.63	25.11	25.05	**24.93**	0.2627	1.054
Cadmium	114	25.46	25.26	25.13	**25.28**	0.1655	0.6544
Chromium	52	25.64	24.21	25.04	**24.97**	0.7185	2.878
Chromium	53	26.11	24.86	24.97	**25.31**	0.6922	2.735
Cobalt	59	26.3	23.98	24.39	**24.89**	1.238	4.974
Copper	63	25.74	23.84	23.98	**24.52**	1.059	4.319
Copper	65	25.75	23.51	23.98	**24.41**	1.183	4.846
Lead	206	25.43	25.55	23.77	**24.92**	0.9931	3.986
Lead	207	24.2	24.48	23.52	**24.07**	0.4938	2.052
Lead	208	24.68	25.2	23.99	**24.62**	0.6085	2.472
Molybdenum	95	25.14	24.35	24.41	**24.63**	0.4405	1.788
Molybdenum	97	25.38	24.06	24.02	**24.49**	0.7701	3.145
Molybdenum	98	24.94	23.3	23.88	**24.04**	0.8342	3.47
Nickel	60	26.35	23.71	23.86	**24.64**	1.486	6.031
Nickel	62	26.15	23.34	24.55	**24.68**	1.409	5.71
Selenium	77	25.18	24.08	25.67	**24.97**	0.8129	3.255
Selenium	78	25.09	24.04	26.02	**25.05**	0.9874	3.942
Selenium	82	23.94	24.44	26.45	**24.94**	1.325	5.312
Silver	107	24.76	23.73	23.87	**24.12**	0.561	2.326
Silver	109	24.64	24.39	23.86	**24.29**	0.3942	1.623
Thallium	203	24.77	25.45	24.46	**24.89**	0.5068	2.036
Thallium	205	25.32	25.24	24.2	**24.92**	0.6244	2.506
Zinc	66	25.23	23.14	24.27	**24.21**	1.047	4.323
Zinc	67	26.01	23.58	24.46	**24.68**	1.229	4.981
Zinc	68	26.32	24.15	24.22	**24.9**	1.23	4.941

Internal Standard Factors:

Lithium	6	1.001	0.955	0.923	**1.001**	n/a	n/a
Gallium	71	0.995	0.934	0.959	**0.995**	n/a	n/a
Indium	115	0.958	0.979	0.966	**0.958**	n/a	n/a
Lutetium	175	0.979	0.996	0.972	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:50**					
Antimony	121	0.0079	0.0124	0.005	**0.0084**	0.0037	44.33
Antimony	123	0.0053	0.0062	0.0067	**0.006**	0.0007	11.52
Arsenic	75	0.0334	0.0374	0.0398	**0.0368**	0.0032	8.747
Beryllium	9	0.0075	0.0028	0.0022	**0.0042**	0.0029	70.02
Cadmium	111	-0.0009	-0.0032	0.0026	**-0.0005**	0.0029	570.3
Cadmium	114	-0.0011	-0.0044	0.0021	**-0.0012**	0.0033	281.5
Chromium	52	0.0354	0.0083	0.0118	**0.0185**	0.0147	79.71
Chromium	53	0.007	-0.0125	0.0039	**-0.0006**	0.0105	1893
Cobalt	59	0.0003	-0.0005	-0.0013	**-0.0005**	0.0008	164.5
Copper	63	0.0067	-0.0055	-0.0097	**-0.0028**	0.0085	300.1
Copper	65	0.0037	0.0082	-0.0126	**-0.0002**	0.0109	4414
Lead	206	-0.0048	-0.0072	0.0022	**-0.0032**	0.0049	149.8
Lead	207	-0.0027	0.0001	-0.0062	**-0.0029**	0.0032	107.6
Lead	208	-0.002	-0.0035	-0.0022	**-0.0026**	0.0008	30.94
Molybdenum	95	0.007	0.005	0.0068	**0.0063**	0.0011	17.46
Molybdenum	97	0.0099	0.0075	0.0038	**0.0071**	0.0031	43.42
Molybdenum	98	0.0052	0.0081	0.0021	**0.0051**	0.003	58.21
Nickel	60	0.078	-0.0056	-0.0312	**0.0137**	0.0571	416.3
Nickel	62	0.1161	0.0628	-0.0857	**0.0311**	0.1046	336.8
Selenium	77	0.2703	-0.0677	0.0147	**0.0725**	0.1763	243.3
Selenium	78	-0.4074	0.2272	0.3143	**0.0447**	0.3939	881.2
Selenium	82	0.3229	0.0733	0.1103	**0.1688**	0.1347	79.79
Silver	107	0.0186	0.0183	0.0089	**0.0152**	0.0055	36.33
Silver	109	0.0218	0.0167	0.011	**0.0165**	0.0054	32.81
Thallium	203	0.0008	0.0001	0.0027	**0.0012**	0.0013	109.2
Thallium	205	0.0004	-0.0001	0.0001	**0.0002**	0.0003	168.3
Zinc	66	0.0906	-0.0333	-0.0447	**0.0042**	0.075	1771
Zinc	67	0.1283	-0.0888	0.0115	**0.017**	0.1087	640.8
Zinc	68	-0.0068	-0.0508	0.002	**-0.0185**	0.0283	152.6

Internal Standard Factors:

Lithium	6	0.995	1.004	0.958	**0.995**	n/a	n/a
Gallium	71	1.006	0.99	0.952	**1.006**	n/a	n/a
Indium	115	0.976	1.005	0.994	**0.976**	n/a	n/a
Lutetium	175	0.955	0.993	1.002	**0.955**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		CCB1			Mean	SD	%RSD
TimeStamp		3/20/07 11:54					
Antimony	121	0.0034	0.0068	0.003	**0.0044**	0.0021	47.4
Antimony	123	-0.0015	0.0078	0.0024	**0.0029**	0.0047	162.1
Arsenic	75	0.0281	-0.0502	0.054	**0.0106**	0.0543	510
Beryllium	9	-0.0017	0.0015	-0.0018	**-0.0007**	0.0019	279.2
Cadmium	111	-0.0021	-0.0009	0.0001	**-0.001**	0.0011	115.5
Cadmium	114	-0.0021	0.0006	0.0003	**-0.0004**	0.0015	348.1
Chromium	52	-0.0072	-0.0003	0.0191	**0.0039**	0.0136	353
Chromium	53	-0.0132	-0.002	0.0103	**-0.0016**	0.0117	719.6
Cobalt	59	0.0004	-0.0005	0.0019	**0.0006**	0.0012	198.6
Copper	63	0.0018	-0.0085	-0.0159	**-0.0075**	0.0089	118.2
Copper	65	-0.0068	-0.008	0.0114	**-0.0012**	0.0109	927.4
Lead	206	-0.0024	0.0054	0.0072	**0.0034**	0.0051	150.3
Lead	207	-0.017	-0.0043	-0.0076	**-0.0096**	0.0066	68.09
Lead	208	-0.0044	-0.0003	0.0005	**-0.0014**	0.0026	192.6
Molybdenum	95	0.0051	0.0052	0.0034	**0.0046**	0.001	21.86
Molybdenum	97	0.0079	0.0047	0.0011	**0.0046**	0.0034	74.84
Molybdenum	98	0.0033	-0.0006	0.0041	**0.0023**	0.0025	109.6
Nickel	60	0.0118	-0.0353	-0.0683	**-0.0306**	0.0403	131.6
Nickel	62	0.0309	0.1124	-0.0525	**0.0303**	0.0824	272.4
Selenium	77	-0.0404	0.1698	-0.0455	**0.028**	0.1229	439.4
Selenium	78	0.0508	0.5696	0.3007	**0.307**	0.2594	84.51
Selenium	82	0.021	-0.0409	0.1364	**0.0389**	0.09	231.6
Silver	107	0.0102	0.0016	0.0026	**0.0048**	0.0047	98.9
Silver	109	0.0074	0.0054	0.0031	**0.0053**	0.0021	40.49
Thallium	203	-0.0007	0.0001	0.0017	**0.0004**	0.0012	343.9
Thallium	205	-0.0001	0	0	**0**	0	285.3
Zinc	66	-0.0174	-0.0702	-0.062	**-0.0499**	0.0284	56.94
Zinc	67	0.0346	0.0298	-0.1136	**-0.0164**	0.0842	513.5
Zinc	68	-0.0181	-0.0384	-0.0822	**-0.0463**	0.0328	70.79

Internal Standard Factors:

Lithium	6	0.949	0.94	0.901	**0.949**	n/a	n/a
Gallium	71	0.964	0.949	0.925	**0.964**	n/a	n/a
Indium	115	0.965	0.995	0.966	**0.965**	n/a	n/a
Lutetium	175	1.001	0.98	0.963	**1.001**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CRA WATER MS10-43-E**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:58**					
Antimony	121	0.0454	0.0499	0.0481	**0.0478**	0.0023	4.715
Antimony	123	0.0398	0.0444	0.059	**0.0477**	0.01	20.97
Arsenic	75	0.5679	0.556	0.6236	**0.5825**	0.0361	6.194
Beryllium	9	0.0226	0.014	0.0236	**0.0201**	0.0053	26.43
Cadmium	111	0.02	0.0189	0.0244	**0.0211**	0.0029	13.77
Cadmium	114	0.0237	0.0228	0.021	**0.0225**	0.0014	6.269
Chromium	52	0.2071	0.2095	0.2226	**0.2131**	0.0083	3.905
Chromium	53	0.1962	0.1925	0.18	**0.1896**	0.0085	4.472
Cobalt	59	0.0228	0.021	0.022	**0.0219**	0.0009	4.116
Copper	63	0.1203	0.0922	0.0968	**0.1031**	0.0151	14.63
Copper	65	0.0921	0.1049	0.113	**0.1033**	0.0105	10.2
Lead	206	0.0202	0.0222	0.0203	**0.0209**	0.0011	5.422
Lead	207	0.018	0.0223	0.0251	**0.0218**	0.0035	16.22
Lead	208	0.0196	0.0178	0.0158	**0.0177**	0.0019	10.54
Molybdenum	95	0.0565	0.0572	0.0597	**0.0578**	0.0017	2.897
Molybdenum	97	0.0682	0.0585	0.0478	**0.0582**	0.0102	17.6
Molybdenum	98	0.0537	0.0611	0.0592	**0.058**	0.0039	6.649
Nickel	60	0.2431	0.1811	0.1428	**0.189**	0.0506	26.79
Nickel	62	0.3089	0.1331	0.1846	**0.2089**	0.0904	43.25
Selenium	77	1.129	1.153	0.9198	**1.067**	0.1285	12.04
Selenium	78	1.307	1.015	1.449	**1.257**	0.221	17.58
Selenium	82	1.265	1.145	1.28	**1.23**	0.0741	6.025
Silver	107	0.0174	0.0128	0.0123	**0.0141**	0.0028	19.79
Silver	109	0.0163	0.0135	0.0126	**0.0141**	0.0019	13.6
Thallium	203	0.0201	0.0254	0.0223	**0.0226**	0.0026	11.71
Thallium	205	0.0225	0.02	0.0237	**0.0221**	0.0019	8.487
Zinc	66	0.4535	0.4279	0.3865	**0.4226**	0.0338	8.008
Zinc	67	0.589	0.4094	0.5002	**0.4996**	0.0898	17.97
Zinc	68	0.4652	0.4909	0.4534	**0.4698**	0.0192	4.089

Internal Standard Factors:

Lithium	6	0.938	0.972	0.942	**0.938**	n/a	n/a
Gallium	71	0.979	0.965	0.958	**0.979**	n/a	n/a
Indium	115	0.994	0.996	0.985	**0.994**	n/a	n/a
Lutetium	175	1.016	0.988	0.999	**1.016**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICSA MS10-45-C**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:01**					
Antimony	121	0.0284	0.0177	0.0211	**0.0224**	0.0054	24.3
Antimony	123	0.0246	0.0135	0.0205	**0.0195**	0.0056	28.88
Arsenic	75	0.0401	-0.0688	0.0358	**0.0024**	0.0617	2609
Beryllium	9	-0.0004	-0.0005	0.0006	**-0.0001**	0.0006	554
Cadmium	111	0.7021	0.7911	0.6994	**0.7309**	0.0521	7.134
Cadmium	114	0.5295	0.5345	0.5134	**0.5258**	0.011	2.093
Chromium	52	0.2032	0.1663	0.1784	**0.1826**	0.0188	10.31
Chromium	53	3.165	3.15	3.146	**3.153**	0.0099	0.3152
Cobalt	59	0.0284	0.0281	0.0233	**0.0266**	0.0029	10.76
Copper	63	0.3256	0.322	0.3069	**0.3182**	0.0099	3.106
Copper	65	0.4054	0.4197	0.3835	**0.4029**	0.0182	4.53
Lead	206	0.0292	0.033	0.0338	**0.032**	0.0024	7.63
Lead	207	0.0375	0.0219	0.0352	**0.0315**	0.0084	26.72
Lead	208	0.0326	0.031	0.0396	**0.0344**	0.0046	13.31
Molybdenum	95	175.3	172.3	168.3	**172**	3.511	2.041
Molybdenum	97	172.6	172.7	171	**172.1**	0.9585	0.557
Molybdenum	98	174.2	167.6	164.3	**168.7**	5.035	2.984
Nickel	60	0.6187	0.5941	0.5391	**0.584**	0.0407	6.976
Nickel	62	1.201	1.382	1.317	**1.3**	0.0917	7.057
Selenium	77	0.7779	1.095	0.7095	**0.861**	0.206	23.92
Selenium	78	1.473	1.813	1.338	**1.542**	0.2446	15.86
Selenium	82	0.1596	0.1601	0.1192	**0.1463**	0.0234	16.03
Silver	107	0.0124	0.0126	0.005	**0.01**	0.0043	43.18
Silver	109	0.0126	0.013	0.0141	**0.0132**	0.0008	6.186
Thallium	203	0.0028	0.003	0.0046	**0.0035**	0.001	28.33
Thallium	205	0.0011	0.0007	0.0015	**0.0011**	0.0004	35.45
Zinc	66	2.57	2.605	2.721	**2.632**	0.0789	2.997
Zinc	67	3.454	3.9	3.806	**3.72**	0.2353	6.325
Zinc	68	2.175	2.466	2.194	**2.278**	0.1627	7.143

Internal Standard Factors:

Lithium	6	1.118	1.061	1.079	**1.118**	n/a	n/a
Gallium	71	1.087	1.104	1.09	**1.087**	n/a	n/a
Indium	115	1.088	1.096	1.071	**1.088**	n/a	n/a
Lutetium	175	1.021	1.058	1.028	**1.021**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICSAB MS10-45-D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:04**					
Antimony	121	0.021	0.0209	0.0183	**0.0201**	0.0015	7.694
Antimony	123	0.0203	0.0176	0.0146	**0.0175**	0.0029	16.45
Arsenic	75	20.5	20.94	20.78	**20.74**	0.2192	1.057
Beryllium	9	0.0011	0.0022	0.0015	**0.0016**	0.0006	36.03
Cadmium	111	19.92	20.76	20.59	**20.42**	0.446	2.184
Cadmium	114	20.49	20.18	20.57	**20.42**	0.2055	1.007
Chromium	52	20.43	19.96	19.98	**20.12**	0.2689	1.336
Chromium	53	23.73	23.05	22.89	**23.22**	0.4436	1.91
Cobalt	59	20.26	19.07	18.92	**19.42**	0.7368	3.794
Copper	63	19.38	18.55	17.95	**18.62**	0.7186	3.858
Copper	65	19.31	18.46	18.39	**18.72**	0.5117	2.734
Lead	206	0.0324	0.0274	0.029	**0.0296**	0.0025	8.516
Lead	207	0.0246	0.0385	0.029	**0.0307**	0.0071	23.17
Lead	208	0.0308	0.0316	0.031	**0.0312**	0.0004	1.379
Molybdenum	95	179.1	176.2	170.6	**175.3**	4.326	2.468
Molybdenum	97	176.9	173.5	169.5	**173.3**	3.699	2.135
Molybdenum	98	172.7	169.1	165.8	**169.2**	3.438	2.032
Nickel	60	20.49	19.4	18.99	**19.62**	0.7755	3.952
Nickel	62	21.43	20.39	19.95	**20.59**	0.7619	3.7
Selenium	77	0.7581	0.8372	0.8434	**0.8129**	0.0476	5.849
Selenium	78	1.239	1.388	1.071	**1.233**	0.1588	12.88
Selenium	82	0.1499	0.3776	0.2943	**0.2739**	0.1152	42.06
Silver	107	18.19	17.84	17.78	**17.94**	0.2188	1.22
Silver	109	18.39	18.39	18.08	**18.29**	0.1779	0.9726
Thallium	203	0.0012	0.002	0.005	**0.0027**	0.002	73.96
Thallium	205	0.0026	0.0019	0.0009	**0.0018**	0.0008	47.11
Zinc	66	22.35	21.21	21.36	**21.64**	0.6166	2.85
Zinc	67	20.25	19.62	19.25	**19.71**	0.5072	2.574
Zinc	68	21.17	20.73	19.73	**20.54**	0.7392	3.598

Internal Standard Factors:

Lithium	6	1.122	1.097	1.077	**1.122**	n/a	n/a
Gallium	71	1.115	1.071	1.051	**1.115**	n/a	n/a
Indium	115	1.088	1.082	1.05	**1.088**	n/a	n/a
Lutetium	175	1.055	1.026	1.018	**1.055**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701816**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:19**					
Antimony	121	0.0004	0.0011	0.0016	**0.001**	0.0006	56.51
Antimony	123	-0.0009	0.0012	0.0011	**0.0005**	0.0012	244.7
Arsenic	75	0.1153	-0.0419	0.0435	**0.0389**	0.0787	202.1
Beryllium	9	-0.0026	-0.0023	-0.0012	**-0.002**	0.0007	36.94
Cadmium	111	-0.002	0.002	-0.0006	**-0.0002**	0.002	957.4
Cadmium	114	-0.0009	0.0023	0.0016	**0.001**	0.0017	172.8
Chromium	52	0.1	0.1208	0.1171	**0.1126**	0.0111	9.879
Chromium	53	0.0359	0.023	0.0218	**0.0269**	0.0078	29.06
Cobalt	59	-0.0003	-0.0008	-0.0017	**-0.0009**	0.0007	73.2
Copper	63	0.0093	0.0086	0	**0.006**	0.0052	87.37
Copper	65	0.0155	0.0065	0.0196	**0.0138**	0.0067	48.49
Lead	206	0.0011	0.0003	0.0057	**0.0023**	0.0029	123.6
Lead	207	0.0109	0.0026	0.0031	**0.0055**	0.0046	84.02
Lead	208	0.0052	0.0008	0.002	**0.0027**	0.0023	84.53
Molybdenum	95	0.0101	0.0063	0.0111	**0.0092**	0.0025	27.38
Molybdenum	97	0.0131	0.0112	0.0037	**0.0093**	0.005	53.54
Molybdenum	98	0.0107	0.0076	0.0096	**0.0093**	0.0016	17.05
Nickel	60	0.0177	-0.0021	-0.0467	**-0.0104**	0.033	318.5
Nickel	62	0.0064	0.0257	0.1246	**0.0522**	0.0634	121.4
Selenium	77	-0.2246	0.2548	0.0211	**0.0171**	0.2397	1400
Selenium	78	0.0656	0.5831	0.6953	**0.448**	0.3359	74.98
Selenium	82	0.1867	0.0499	0.1681	**0.1349**	0.0742	54.99
Silver	107	0.0045	-0.0004	-0.0001	**0.0013**	0.0028	207.2
Silver	109	0.0044	-0.0007	-0.0007	**0.001**	0.003	289.6
Thallium	203	0.0017	0.0024	-0.0003	**0.0013**	0.0014	109.2
Thallium	205	-0.0014	-0.0011	-0.0024	**-0.0016**	0.0007	42.23
Zinc	66	0.2848	0.1834	0.2374	**0.2352**	0.0507	21.56
Zinc	67	0.3803	0.1409	0.2077	**0.243**	0.1235	50.83
Zinc	68	0.3148	0.284	0.246	**0.2816**	0.0345	12.25

Internal Standard Factors:

Lithium	6	1.102	1.139	1.046	**1.102**	n/a	n/a
Gallium	71	1.053	1.075	1.054	**1.053**	n/a	n/a
Indium	115	0.995	1.066	1.055	**0.995**	n/a	n/a
Lutetium	175	0.971	1.021	1	**0.971**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:23**					
Antimony	121	0.0621	0.056	0.0656	**0.0612**	0.0049	7.94
Antimony	123	0.0584	0.0586	0.0649	**0.0606**	0.0037	6.09
Arsenic	75	0.2755	0.3562	0.3035	**0.3117**	0.041	13.15
Beryllium	9	0.0003	0.0047	0.0028	**0.0026**	0.0022	84.18
Cadmium	111	0.0535	0.0347	0.064	**0.0507**	0.0148	29.25
Cadmium	114	0.0466	0.0338	0.0604	**0.0469**	0.0133	28.35
Chromium	52	4.437	4.369	4.445	**4.417**	0.042	0.9507
Chromium	53	6.426	6.587	6.312	**6.442**	0.138	2.142
Cobalt	59	0.1138	0.1066	0.1018	**0.1074**	0.0061	5.642
Copper	63	0.9695	0.9451	0.9163	**0.9436**	0.0266	2.823
Copper	65	0.5335	0.5275	0.5209	**0.5273**	0.0063	1.194
Lead	206	0.0058	0.0078	0.0018	**0.0051**	0.0031	59.98
Lead	207	0.0114	-0.0005	0.0032	**0.0047**	0.0061	128.7
Lead	208	0.0063	0.0077	0.0079	**0.0073**	0.0009	12.41
Molybdenum	95	0.1282	0.098	0.0986	**0.1082**	0.0173	15.94
Molybdenum	97	0.1198	0.1228	0.1006	**0.1144**	0.012	10.51
Molybdenum	98	0.1054	0.1003	0.0895	**0.0984**	0.0081	8.249
Nickel	60	6.481	6.313	6.146	**6.313**	0.1672	2.648
Nickel	62	5.97	5.439	5.473	**5.627**	0.2973	5.283
Selenium	77	2.723	3.011	2.873	**2.869**	0.1441	5.022
Selenium	78	3.673	4.365	4.171	**4.07**	0.3571	8.774
Selenium	82	2.485	3.071	2.805	**2.787**	0.2931	10.52
Silver	107	-0.0078	-0.0092	-0.0109	**-0.0093**	0.0016	16.65
Silver	109	-0.012	-0.0105	-0.0117	**-0.0114**	0.0008	6.826
Thallium	203	0.002	0.0036	0.0021	**0.0026**	0.0009	34.68
Thallium	205	0.0001	-0.0009	0.0024	**0.0005**	0.0017	320.4
Zinc	66	5.252	5.177	4.978	**5.136**	0.1419	2.762
Zinc	67	8.378	7.76	7.77	**7.969**	0.3537	4.438
Zinc	68	7.59	7.903	7.649	**7.714**	0.1662	2.154

Internal Standard Factors:

Lithium	6	1.144	1.098	1.135	**1.144**	n/a	n/a
Gallium	71	1.168	1.171	1.143	**1.168**	n/a	n/a
Indium	115	1.146	1.144	1.143	**1.146**	n/a	n/a
Lutetium	175	1.046	1.084	1.051	**1.046**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:25**					
Antimony	121	0.0622	0.0578	0.0644	**0.0615**	0.0034	5.452
Antimony	123	0.0552	0.0463	0.0658	**0.0558**	0.0098	17.51
Arsenic	75	0.4382	0.4726	0.2387	**0.3831**	0.1263	32.96
Beryllium	9	-0.0022	-0.0044	0.0015	**-0.0017**	0.0029	172.3
Cadmium	111	0.0549	0.0469	0.0492	**0.0503**	0.0041	8.111
Cadmium	114	0.0443	0.0413	0.0445	**0.0434**	0.0018	4.093
Chromium	52	4.688	4.474	4.553	**4.572**	0.1083	2.369
Chromium	53	6.702	6.405	6.589	**6.565**	0.15	2.285
Cobalt	59	0.1101	0.1061	0.1024	**0.1062**	0.0038	3.619
Copper	63	0.9504	0.8843	0.8677	**0.9008**	0.0438	4.86
Copper	65	0.5206	0.5019	0.4628	**0.4951**	0.0295	5.956
Lead	206	0.0081	0.0003	0.0104	**0.0063**	0.0053	84.11
Lead	207	-0.0041	0.0041	0.0084	**0.0028**	0.0063	226.8
Lead	208	0.0065	-0.0005	0.0033	**0.0031**	0.0035	113.4
Molybdenum	95	0.1069	0.1053	0.1137	**0.1086**	0.0045	4.108
Molybdenum	97	0.1146	0.1078	0.1214	**0.1146**	0.0068	5.949
Molybdenum	98	0.1068	0.0938	0.0941	**0.0983**	0.0074	7.55
Nickel	60	6.622	5.982	6.031	**6.212**	0.3561	5.732
Nickel	62	6.053	5.315	5.599	**5.656**	0.3724	6.584
Selenium	77	2.801	2.666	3.363	**2.944**	0.3694	12.55
Selenium	78	4.179	4.19	4.183	**4.184**	0.0055	0.1308
Selenium	82	3.177	3.295	3.069	**3.18**	0.1128	3.548
Silver	107	-0.0107	-0.0129	-0.0116	**-0.0117**	0.0011	9.798
Silver	109	-0.011	-0.0091	-0.0101	**-0.0101**	0.001	9.462
Thallium	203	0.0012	0.0011	0.0051	**0.0025**	0.0023	91.97
Thallium	205	0.0013	0.0021	0.0001	**0.0012**	0.001	87.13
Zinc	66	5.125	4.806	4.855	**4.929**	0.172	3.489
Zinc	67	8.022	7.521	7.781	**7.774**	0.2506	3.224
Zinc	68	8.034	7.806	7.816	**7.886**	0.129	1.635

Internal Standard Factors:

Lithium	6	1.139	1.118	1.069	**1.139**	n/a	n/a
Gallium	71	1.164	1.102	1.12	**1.164**	n/a	n/a
Indium	115	1.146	1.093	1.114	**1.146**	n/a	n/a
Lutetium	175	1.063	1.039	1.041	**1.063**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701816-002L 1/5			Mean	SD	%RSD
TimeStamp		3/20/07 12:34					
Antimony	121	0.0109	0.0108	0.014	**0.0119**	0.0018	15.15
Antimony	123	0.0052	0.0098	0.0054	**0.0068**	0.0026	38.21
Arsenic	75	0.1313	0.1429	0.0874	**0.1205**	0.0293	24.31
Beryllium	9	-0.0029	-0.0025	-0.0047	**-0.0034**	0.0012	34.63
Cadmium	111	0.0067	0.0082	0.0043	**0.0064**	0.002	30.85
Cadmium	114	0.0088	0.0141	0.0095	**0.0108**	0.0029	26.42
Chromium	52	0.9351	0.7835	0.7463	**0.8216**	0.1	12.17
Chromium	53	1.308	1.088	1.152	**1.183**	0.1131	9.564
Cobalt	59	0.0229	0.0191	0.0125	**0.0182**	0.0052	28.85
Copper	63	0.2227	0.1836	0.1521	**0.1861**	0.0354	19
Copper	65	0.1296	0.0937	0.0932	**0.1055**	0.0209	19.79
Lead	206	0.0061	0.013	0.0073	**0.0088**	0.0037	41.96
Lead	207	-0.0007	0.0066	0.0024	**0.0028**	0.0037	132.7
Lead	208	0.0044	0.0055	0.0024	**0.0041**	0.0016	39.06
Molybdenum	95	0.0312	0.0241	0.0216	**0.0256**	0.005	19.41
Molybdenum	97	0.0303	0.0213	0.0215	**0.0244**	0.0052	21.23
Molybdenum	98	0.0154	0.0148	0.015	**0.015**	0.0003	2.038
Nickel	60	1.454	1.062	0.9736	**1.163**	0.2559	21.99
Nickel	62	1.294	1.067	1.091	**1.151**	0.1244	10.81
Selenium	77	0.4971	0.312	0.4868	**0.432**	0.104	24.08
Selenium	78	1.647	1.831	1.505	**1.661**	0.1634	9.839
Selenium	82	0.7871	0.6509	0.613	**0.6837**	0.0916	13.39
Silver	107	-0.0091	-0.0115	-0.0126	**-0.0111**	0.0018	16.26
Silver	109	-0.0089	-0.0093	-0.0115	**-0.0099**	0.0014	13.8
Thallium	203	0.0005	0.0019	0.0002	**0.0009**	0.0009	107.7
Thallium	205	0.0002	0.0013	0.0022	**0.0012**	0.001	82.56
Zinc	66	1.215	0.9338	0.761	**0.97**	0.2293	23.64
Zinc	67	1.609	1.451	1.306	**1.455**	0.1517	10.43
Zinc	68	1.633	1.404	1.425	**1.487**	0.1264	8.502

Internal Standard Factors:

Lithium	6	1.123	1.046	1.071	**1.123**	n/a	n/a
Gallium	71	1.09	1.064	1.018	**1.09**	n/a	n/a
Indium	115	1.038	1.064	1.05	**1.038**	n/a	n/a
Lutetium	175	0.973	1.017	1.016	**0.973**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701816-002A +20,+10Ag			Mean	SD	%RSD
TimeStamp		3/20/07 12:37					
Antimony	121	20.49	20.95	21.39	**20.94**	0.4482	2.14
Antimony	123	20.56	19.72	20.78	**20.35**	0.5594	2.749
Arsenic	75	21.67	21.57	22.74	**21.99**	0.6473	2.944
Beryllium	9	19.19	18.39	18.29	**18.62**	0.4948	2.657
Cadmium	111	20.62	19.48	19.82	**19.97**	0.588	2.944
Cadmium	114	20.87	19.95	20.03	**20.29**	0.5117	2.522
Chromium	52	24.98	25.24	25.5	**25.24**	0.2565	1.016
Chromium	53	27.51	27.79	27.7	**27.67**	0.1413	0.5108
Cobalt	59	21.32	20.58	20.38	**20.76**	0.4941	2.38
Copper	63	20.52	19.73	19.39	**19.88**	0.5794	2.914
Copper	65	20.11	19.54	18.75	**19.47**	0.6786	3.486
Lead	206	18.38	17.84	18.36	**18.2**	0.3091	1.698
Lead	207	18.43	18.42	17.7	**18.18**	0.4207	2.314
Lead	208	18.56	18.04	18.27	**18.29**	0.2645	1.446
Molybdenum	95	22.04	21.07	21.34	**21.48**	0.4983	2.319
Molybdenum	97	21.99	21	21.48	**21.49**	0.4935	2.296
Molybdenum	98	21.58	20.52	20.65	**20.92**	0.5793	2.77
Nickel	60	26.25	25.28	25.17	**25.57**	0.5932	2.32
Nickel	62	25.18	24.35	24.12	**24.55**	0.557	2.269
Selenium	77	22.07	23.33	22.76	**22.72**	0.6309	2.777
Selenium	78	24.57	25.18	24.94	**24.9**	0.3071	1.233
Selenium	82	23.34	23.67	24.61	**23.87**	0.6567	2.751
Silver	107	8.627	8.864	8.493	**8.661**	0.1879	2.17
Silver	109	8.757	8.697	8.184	**8.546**	0.3151	3.688
Thallium	203	18.91	18.38	18.45	**18.58**	0.2893	1.557
Thallium	205	18.48	17.9	18.58	**18.32**	0.3634	1.984
Zinc	66	24.54	24.58	24.25	**24.46**	0.1763	0.7208
Zinc	67	27.07	27.4	27.99	**27.49**	0.4661	1.696
Zinc	68	27.49	27.06	27.68	**27.41**	0.3186	1.162

Internal Standard Factors:

Lithium	6	1.105	1.066	1.153	**1.105**	n/a	n/a
Gallium	71	1.127	1.132	1.104	**1.127**	n/a	n/a
Indium	115	1.125	1.091	1.117	**1.125**	n/a	n/a
Lutetium	175	1.049	1.03	1.032	**1.049**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:40**					
Antimony	121	21.34	21.15	21.62	**21.37**	0.2383	1.115
Antimony	123	20.26	20.61	20.33	**20.4**	0.1853	0.908
Arsenic	75	22.12	22.74	22.14	**22.33**	0.3511	1.572
Beryllium	9	21.19	18.5	18.91	**19.53**	1.451	7.427
Cadmium	111	20.46	19.64	20	**20.04**	0.4101	2.047
Cadmium	114	20.4	19.85	20.32	**20.19**	0.2979	1.476
Chromium	52	26.8	25.85	26.17	**26.27**	0.4821	1.835
Chromium	53	29.23	28.35	29.04	**28.87**	0.4627	1.603
Cobalt	59	22.33	20.9	20.65	**21.29**	0.908	4.265
Copper	63	21.18	19.94	19.36	**20.16**	0.932	4.623
Copper	65	20.93	19.62	19.02	**19.86**	0.9761	4.916
Lead	206	19.53	18.4	18.89	**18.94**	0.5629	2.972
Lead	207	18.64	18.54	18.93	**18.7**	0.2009	1.074
Lead	208	19.04	18.26	18.72	**18.67**	0.3904	2.091
Molybdenum	95	22.66	21.47	21.77	**21.96**	0.6187	2.817
Molybdenum	97	22.65	21.14	21.38	**21.72**	0.81	3.729
Molybdenum	98	22.01	21.32	20.64	**21.32**	0.6806	3.192
Nickel	60	27.34	25.61	25.27	**26.07**	1.114	4.272
Nickel	62	26.64	24.63	24.71	**25.33**	1.141	4.506
Selenium	77	23.68	25.13	25.34	**24.72**	0.9058	3.665
Selenium	78	25.12	25.75	25.68	**25.52**	0.345	1.352
Selenium	82	24.59	26.08	25.13	**25.26**	0.7523	2.978
Silver	107	19.46	18.72	19.26	**19.15**	0.3827	1.999
Silver	109	19.03	18.82	19.1	**18.99**	0.145	0.7639
Thallium	203	19.44	18.76	18.17	**18.79**	0.6362	3.386
Thallium	205	19.6	18.94	18.78	**19.11**	0.4339	2.271
Zinc	66	25.61	24.21	24.25	**24.69**	0.798	3.232
Zinc	67	29.13	26.72	27.76	**27.87**	1.207	4.332
Zinc	68	28.82	28.2	27.63	**28.21**	0.592	2.098

Internal Standard Factors:

Lithium	6	1.139	1.083	1.122	**1.139**	n/a	n/a
Gallium	71	1.168	1.151	1.11	**1.168**	n/a	n/a
Indium	115	1.104	1.121	1.095	**1.104**	n/a	n/a
Lutetium	175	1.068	1.059	1.041	**1.068**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		LCSW K0701816			Mean	SD	%RSD
TimeStamp		3/20/07 12:43					
Antimony	121	20.12	20.19	20.75	**20.36**	0.3453	1.696
Antimony	123	20.33	19.9	19.75	**19.99**	0.3004	1.502
Arsenic	75	19.93	20.25	20.21	**20.13**	0.1732	0.8602
Beryllium	9	21.33	19.69	19.48	**20.17**	1.01	5.006
Cadmium	111	20.31	19.73	20.17	**20.07**	0.2993	1.491
Cadmium	114	20.49	19.92	19.75	**20.05**	0.3879	1.934
Chromium	52	21.62	21.07	21.36	**21.35**	0.2759	1.292
Chromium	53	21.88	21.22	21.54	**21.55**	0.3287	1.525
Cobalt	59	21.17	20.59	20.58	**20.78**	0.336	1.617
Copper	63	20.27	19.48	19.61	**19.79**	0.4248	2.146
Copper	65	19.79	19.24	19.36	**19.47**	0.2891	1.485
Lead	206	20.31	19.59	19.27	**19.72**	0.5308	2.691
Lead	207	20.49	19.49	19.48	**19.82**	0.578	2.916
Lead	208	20.36	19.52	19.53	**19.81**	0.4824	2.436
Molybdenum	95	20.55	20.24	20.12	**20.3**	0.2213	1.09
Molybdenum	97	20.34	20.15	19.78	**20.09**	0.284	1.414
Molybdenum	98	20.1	19.22	20.03	**19.78**	0.4897	2.476
Nickel	60	20.54	19.7	20.01	**20.08**	0.4237	2.11
Nickel	62	20.61	19.6	19.7	**19.97**	0.5601	2.805
Selenium	77	19.86	20.35	21.19	**20.47**	0.6719	3.283
Selenium	78	21.51	22.48	22	**22**	0.488	2.219
Selenium	82	21.38	20.52	21.44	**21.11**	0.5168	2.448
Silver	107	20.92	19.85	20.39	**20.39**	0.5362	2.63
Silver	109	21.03	20.22	20.17	**20.47**	0.4831	2.36
Thallium	203	19.82	20.13	19.6	**19.85**	0.2654	1.337
Thallium	205	19.97	19.26	19.32	**19.52**	0.3947	2.022
Zinc	66	19.67	19.87	19.08	**19.54**	0.4073	2.085
Zinc	67	20.08	20.14	19.89	**20.04**	0.1292	0.6446
Zinc	68	20.07	20.07	20.36	**20.17**	0.17	0.8428

Internal Standard Factors:

Lithium	6	1.079	1.049	1.104	**1.079**	n/a	n/a
Gallium	71	1.006	1.013	1.02	**1.006**	n/a	n/a
Indium	115	1.023	1.024	1.027	**1.023**	n/a	n/a
Lutetium	175	1.002	0.994	1.007	**1.002**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV2 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:47**					
Antimony	121	25.83	25.15	25.52	**25.5**	0.3363	1.319
Antimony	123	26.22	24.19	24.51	**24.98**	1.092	4.374
Arsenic	75	26.25	25.95	25.44	**25.88**	0.4068	1.572
Beryllium	9	25.77	26.54	25.3	**25.87**	0.6268	2.423
Cadmium	111	26.22	24.04	25.68	**25.32**	1.135	4.482
Cadmium	114	26.09	24.44	24.96	**25.16**	0.8409	3.342
Chromium	52	26.89	26.75	26.43	**26.69**	0.2355	0.8823
Chromium	53	26.77	26.72	26.82	**26.77**	0.0517	0.193
Cobalt	59	27.1	25.94	25.98	**26.34**	0.6592	2.503
Copper	63	26.52	25.1	24.6	**25.41**	0.9969	3.923
Copper	65	26.04	24.92	24.58	**25.18**	0.7658	3.041
Lead	206	25.82	24.72	24.67	**25.07**	0.6508	2.596
Lead	207	25.61	23.91	24.42	**24.65**	0.8711	3.534
Lead	208	25.6	24.65	24.42	**24.89**	0.6236	2.505
Molybdenum	95	25.85	24.54	25.19	**25.19**	0.6509	2.584
Molybdenum	97	25.77	24.92	25.06	**25.25**	0.4574	1.811
Molybdenum	98	25.71	24.58	24.73	**25**	0.6125	2.45
Nickel	60	26.61	25.45	25.19	**25.75**	0.7555	2.934
Nickel	62	26.45	24.75	24.73	**25.31**	0.9867	3.899
Selenium	77	25.82	25.44	26.68	**25.98**	0.6334	2.438
Selenium	78	26.53	27.21	27.27	**27.01**	0.4119	1.525
Selenium	82	26.65	25.97	26.61	**26.41**	0.3836	1.452
Silver	107	25.61	24.28	25.02	**24.97**	0.6648	2.663
Silver	109	25.93	23.89	25.21	**25.01**	1.031	4.121
Thallium	203	25.41	24.67	24.74	**24.94**	0.4066	1.63
Thallium	205	25.21	24.33	24.95	**24.83**	0.452	1.821
Zinc	66	25.43	25.24	24.34	**25**	0.5843	2.337
Zinc	67	25.68	25.52	24.29	**25.16**	0.7635	3.034
Zinc	68	25.92	25.87	25.1	**25.63**	0.4599	1.794

Internal Standard Factors:

Lithium	6	1.072	1.069	1.099	**1.072**	n/a	n/a
Gallium	71	1.025	1.029	1.015	**1.025**	n/a	n/a
Indium	115	1.041	1.012	1.053	**1.041**	n/a	n/a
Lutetium	175	1.014	1	1.003	**1.014**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:03**					
Antimony	121	0.0004	0.0002	0.0044	**0.0016**	0.0024	144.6
Antimony	123	-0.0015	-0.0013	0.0023	**-0.0001**	0.0021	1464
Arsenic	75	0.0777	0.0491	0.115	**0.0806**	0.033	40.96
Beryllium	9	-0.0023	0.0005	0.0002	**-0.0005**	0.0016	296.2
Cadmium	111	0.0014	0.0032	-0.0031	**0.0005**	0.0032	662
Cadmium	114	-0.0005	-0.0005	0.0005	**-0.0002**	0.0006	305.9
Chromium	52	-0.0102	-0.0273	-0.0188	**-0.0187**	0.0086	45.8
Chromium	53	0.0095	0.0023	0.0082	**0.0067**	0.0038	57.34
Cobalt	59	-0.002	0.0008	-0.0031	**-0.0014**	0.002	139.1
Copper	63	0.0087	-0.0073	0.0001	**0.0005**	0.008	1651
Copper	65	0.011	-0.0063	0.0027	**0.0025**	0.0086	349.6
Lead	206	-0.0031	0.0027	0.0002	**0**	0.0029	5847
Lead	207	-0.0031	-0.008	0.004	**-0.0024**	0.006	253.8
Lead	208	-0.0031	0.0031	0.0002	**0.0001**	0.0031	3653
Molybdenum	95	0.007	0.0027	0.0011	**0.0036**	0.0031	85.45
Molybdenum	97	0.0022	0.0053	0.0026	**0.0034**	0.0017	50.34
Molybdenum	98	0.0025	0.0005	0.0029	**0.002**	0.0013	64.82
Nickel	60	-0.0486	-0.0832	-0.0638	**-0.0652**	0.0174	26.62
Nickel	62	0.0864	0.0612	0.4753	**0.2076**	0.2322	111.8
Selenium	77	-0.1485	-0.0899	-0.0716	**-0.1033**	0.0402	38.88
Selenium	78	0.9226	1.095	1.184	**1.067**	0.1327	12.44
Selenium	82	0.1378	0.1004	0.3182	**0.1854**	0.1164	62.79
Silver	107	0.0123	0.0081	0.0071	**0.0091**	0.0028	30.35
Silver	109	0.0105	0.0087	0.0094	**0.0095**	0.0009	9.411
Thallium	203	-0.0003	0.0002	0.0011	**0.0003**	0.0007	222
Thallium	205	-0.0015	-0.0005	-0.0011	**-0.001**	0.0005	50.17
Zinc	66	-0.0071	-0.083	-0.0355	**-0.0419**	0.0384	91.61
Zinc	67	0.0157	0.0485	-0.0597	**0.0015**	0.0555	3739
Zinc	68	0.1048	0.0452	0.0832	**0.0778**	0.0302	38.82

Internal Standard Factors:

Lithium	6	1.021	0.993	1.008	**1.021**	n/a	n/a
Gallium	71	1.006	1.004	1.016	**1.006**	n/a	n/a
Indium	115	0.981	1.066	1.045	**0.981**	n/a	n/a
Lutetium	175	0.979	1.031	1.02	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:07**					
Antimony	121	0.0024	0.0047	-0.0018	**0.0018**	0.0033	188.3
Antimony	123	-0.002	0.0028	0.0021	**0.001**	0.0026	262.6
Arsenic	75	0.0636	0.0648	0.118	**0.0822**	0.0311	37.79
Beryllium	9	0.0007	0.0007	0.0002	**0.0005**	0.0003	50.43
Cadmium	111	0.0029	-0.0019	0.0028	**0.0013**	0.0028	220.1
Cadmium	114	0.0014	0.0076	0.0013	**0.0034**	0.0036	105.9
~~Chromium~~	~~52~~	~~0.0718~~	~~-0.022~~	~~0.0409~~	~~**0.0449**~~	~~0.0251~~	~~56.04~~
Chromium	53	-0.0028	0.0095	0.0058	**0.0042**	0.0063	151.8
~~Cobalt~~	~~59~~	~~-0.0009~~	~~-0.0025~~	~~-0.0021~~	~~**-0.0018**~~	~~0.0008~~	~~45.96~~
Copper	63	0.0055	-0.0058	0.0017	**0.0005**	0.0057	1234
~~Copper~~	~~65~~	~~0.0028~~	~~-0.0001~~	~~0.0118~~	~~**0.0048**~~	~~0.0062~~	~~129.2~~
Lead	206	0.0011	0.0011	0.0067	**0.003**	0.0032	107
Lead	207	0.0044	0.0038	-0.0032	**0.0017**	0.0043	256
Lead	208	0.0029	-0.0029	0.0013	**0.0004**	0.003	713.3
Molybdenum	95	0.0052	-0.0001	0.0009	**0.002**	0.0028	143.1
Molybdenum	97	0.0033	0.0016	0.0058	**0.0036**	0.0022	60.15
Molybdenum	98	0.0045	-0.001	0.003	**0.0022**	0.0029	132.4
~~Nickel~~	~~60~~	~~-0.0599~~	~~-0.0634~~	~~-0.0906~~	~~**-0.0713**~~	~~0.0168~~	~~23.61~~
Nickel	62	0.0864	-0.0166	-0.0635	**0.0021**	0.0767	3627
Selenium	77	-0.0324	-0.1342	-0.0686	**-0.0784**	0.0516	65.85
Selenium	78	0.6664	1.062	0.839	**0.8558**	0.1984	23.18
Selenium	82	0.1752	0.082	0.3404	**0.1992**	0.1308	65.66
Silver	107	0.0068	0.006	0.0022	**0.005**	0.0025	49.51
Silver	109	0.005	0.0039	-0.0016	**0.0024**	0.0035	144.6
Thallium	203	0.0017	-0.0003	-0.0003	**0.0004**	0.0012	332.6
Thallium	205	0.0007	-0.0001	-0.0009	**-0.0001**	0.0008	863.4
~~Zinc~~	~~66~~	~~0.1052~~	~~0.082~~	~~0.082~~	~~**0.0898**~~	~~0.0134~~	~~14.94~~
Zinc	67	0.0874	0.062	0.0143	**0.0546**	0.0371	67.95
Zinc	68	0.1585	0.1028	0.1191	**0.1268**	0.0286	22.59

*See Recalibration CCV/CCB out 3/20/07

Internal Standard Factors:

Lithium	6	1.009	0.976	1.008	**1.009**	n/a	n/a
Gallium	71	1.001	1.001	0.987	**1.001**	n/a	n/a
Indium	115	1.03	1.026	1.017	**1.03**	n/a	n/a
Lutetium	175	0.972	0.986	0.975	**0.972**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 13:10**						
Antimony	121	0.9035	0.8981	0.8999	**0.9005**	0.0028	0.3071	
Antimony	123	0.8365	0.8884	0.8591	**0.8614**	0.0261	3.024	
Arsenic	75	1.049	1.075	1.177	**1.1**	0.0678	6.159	
Beryllium	9	0.0005	-0.0015	-0.002	**-0.001**	0.0013	136	
Cadmium	111	-0.0006	0.0069	0.0029	**0.0031**	0.0038	121.7	
Cadmium	114	0.0011	0.0082	0.005	**0.0048**	0.0036	74.25	
~~Chromium~~	~~52~~	~~1.148~~	~~1.031~~	~~1.064~~	**1.081**	0.0603	5.576	*
Chromium	53	1.502	1.489	1.456	**1.482**	0.0236	1.592	
~~Cobalt~~	~~59~~	~~0.0644~~	~~0.0592~~	~~0.059~~	**0.0609**	0.0031	5.089	*
Copper	63	1.876	1.705	1.734	**1.772**	0.0913	5.153	
~~Copper~~	~~65~~	~~1.816~~	~~1.632~~	~~1.67~~	**1.706**	0.097	5.685	*
Lead	206	0.0474	0.051	0.0488	**0.0491**	0.0018	3.657	
Lead	207	0.0643	0.0628	0.052	**0.0597**	0.0067	11.17	
Lead	208	0.0524	0.0538	0.0469	**0.051**	0.0037	7.215	
Molybdenum	95	0.4423	0.454	0.4517	**0.4493**	0.0062	1.382	
Molybdenum	97	0.4333	0.4803	0.411	**0.4415**	0.0354	8.01	
Molybdenum	98	0.44	0.4277	0.4205	**0.4294**	0.0098	2.294	
~~Nickel~~	~~60~~	~~1.902~~	~~1.718~~	~~1.729~~	**1.783**	0.103	5.778	*
Nickel	62	1.458	1.396	1.31	**1.388**	0.0739	5.326	
Selenium	77	0.3138	0.0459	0.0309	**0.1302**	0.1592	122.3	
Selenium	78	2.029	1.492	1.876	**1.799**	0.2767	15.38	
Selenium	82	-0.0858	-0.0447	0.2963	**0.0553**	0.2097	379.3	
Silver	107	-0.0009	-0.0003	-0.0037	**-0.0016**	0.0018	108.3	
Silver	109	-0.002	-0.0007	-0.003	**-0.0019**	0.0011	58.88	
Thallium	203	0.0014	0.002	0.0001	**0.0012**	0.0009	79.35	
Thallium	205	0.0008	0	-0.0001	**0.0003**	0.0005	178.9	
~~Zinc~~	~~66~~	~~4.432~~	~~4.045~~	~~3.892~~	**4.123**	0.2784	6.752	*
Zinc	67	4.211	4.469	4.297	**4.326**	0.1315	3.041	
Zinc	68	4.656	4.513	4.688	**4.619**	0.0934	2.021	

*Std Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.074	1.012	1.009	**1.074**	n/a	n/a
Gallium	71	1.052	1.031	1	**1.052**	n/a	n/a
Indium	115	1.061	1.07	1.028	**1.061**	n/a	n/a
Lutetium	175	1.003	1.028	1.002	**1.003**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:13**					
Antimony	121	0.9389	0.8212	0.843	**0.8677**	0.0626	7.217
Antimony	123	0.8821	0.8256	0.8571	**0.8549**	0.0283	3.314
Arsenic	75	1.13	1.169	1.243	**1.181**	0.0576	4.876
Beryllium	9	-0.0057	-0.0023	0.0029	**-0.0017**	0.0043	255.5
Cadmium	111	0.0031	0.012	0.0095	**0.0082**	0.0046	56.24
Cadmium	114	0.0037	0.0023	-0.0015	**0.0015**	0.0027	175.8
~~Chromium~~	~~52~~	~~0.9646~~	~~1.046~~	~~0.987~~	~~**0.9992**~~	~~0.0422~~	~~4.22~~
Chromium	53	1.502	1.432	1.496	**1.477**	0.0388	2.625
~~Cobalt~~	~~59~~	~~0.0595~~	~~0.0589~~	~~0.0614~~	~~**0.0599**~~	~~0.0013~~	~~2.164~~
Copper	63	1.736	1.71	1.707	**1.718**	0.0162	0.9434
~~Copper~~	~~65~~	~~1.765~~	~~1.552~~	~~1.578~~	~~**1.632**~~	~~0.1161~~	~~7.117~~
Lead	206	0.0461	0.042	0.048	**0.0454**	0.0031	6.85
Lead	207	0.0515	0.0325	0.0328	**0.0389**	0.0109	28
Lead	208	0.0524	0.0424	0.0436	**0.0462**	0.0055	11.83
Molybdenum	95	0.4678	0.4341	0.4587	**0.4535**	0.0174	3.843
Molybdenum	97	0.4397	0.4219	0.4251	**0.4289**	0.0095	2.218
Molybdenum	98	0.4556	0.4171	0.4129	**0.4286**	0.0236	5.494
~~Nickel~~	~~60~~	~~1.761~~	~~1.778~~	~~1.65~~	~~**1.73**~~	~~0.0694~~	~~4.01~~
Nickel	62	1.352	1.269	1.258	**1.293**	0.0517	3.994
Selenium	77	0.1428	0.1208	0.1061	**0.1233**	0.0185	14.98
Selenium	78	1.845	1.967	2.049	**1.954**	0.1029	5.269
Selenium	82	0.2242	0.2921	0.3111	**0.2758**	0.0457	16.57
Silver	107	-0.0034	-0.0076	-0.0008	**-0.0039**	0.0034	87.31
Silver	109	-0.0018	-0.0033	-0.0069	**-0.004**	0.0026	65.34
Thallium	203	0.0006	0.0025	0.0009	**0.0014**	0.001	73.05
Thallium	205	-0.0002	-0.0003	0.0018	**0.0005**	0.0012	249.1
~~Zinc~~	~~66~~	~~3.499~~	~~3.435~~	~~3.534~~	~~**3.489**~~	~~0.05~~	~~1.432~~
Zinc	67	3.993	4.078	3.994	**4.022**	0.0488	1.213
Zinc	68	3.985	4.044	4.033	**4.02**	0.0317	0.7891

X Std Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	0.982	1.019	1.042	**0.982**	n/a	n/a
Gallium	71	1.024	1.026	1.023	**1.024**	n/a	n/a
Indium	115	1.051	1.074	1.078	**1.051**	n/a	n/a
Lutetium	175	1.026	1.048	0.986	**1.026**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701647-001L 1/5			Mean	SD	%RSD
TimeStamp		3/20/07 13:20					
Antimony	121	0.1964	0.1883	0.1686	**0.1844**	0.0143	7.774
Antimony	123	0.1768	0.1716	0.1775	**0.1753**	0.0032	1.846
Arsenic	75	0.3009	0.2344	0.325	**0.2867**	0.0469	16.36
Beryllium	9	-0.0004	-0.0038	-0.0008	**-0.0016**	0.0018	112.2
Cadmium	111	0.004	-0.0006	-0.0006	**0.0009**	0.0027	287.7
Cadmium	114	0.0013	-0.0006	0.0043	**0.0017**	0.0025	149.2
~~Chromium~~	~~52~~	~~0.244~~	~~0.2412~~	~~0.2107~~	~~**0.232**~~	~~0.0185~~	~~7.972~~
Chromium	53	0.3352	0.3156	0.3039	**0.3182**	0.0158	4.965
~~Cobalt~~	~~59~~	~~0.0172~~	~~0.0089~~	~~0.012~~	~~**0.0127**~~	~~0.0042~~	~~32.74~~
Copper	63	0.4248	0.3461	0.3418	**0.3709**	0.0468	12.61
~~Copper~~	~~65~~	~~0.3873~~	~~0.3773~~	~~0.3364~~	~~**0.367**~~	~~0.027~~	~~7.344~~
Lead	206	0.0108	0.0185	0.0179	**0.0157**	0.0043	27.23
Lead	207	0.0113	0.0039	0.0145	**0.0099**	0.0054	54.66
Lead	208	0.0115	0.0133	0.0132	**0.0127**	0.001	7.898
Molybdenum	95	0.1064	0.0809	0.0942	**0.0938**	0.0127	13.58
Molybdenum	97	0.1207	0.0888	0.0918	**0.1004**	0.0176	17.53
Molybdenum	98	0.1078	0.0813	0.084	**0.091**	0.0146	16.01
~~Nickel~~	~~60~~	~~0.4848~~	~~0.3393~~	~~0.3111~~	~~**0.3784**~~	~~0.0932~~	~~24.64~~
Nickel	62	0.5136	0.2224	0.3531	**0.363**	0.1458	40.17
Selenium	77	0.0034	-0.0666	0.0419	**-0.0071**	0.055	773
Selenium	78	1.124	1.689	1.396	**1.403**	0.2827	20.16
Selenium	82	0.303	-0.0451	0.4315	**0.2298**	0.2466	107.3
Silver	107	-0.0048	-0.0051	-0.0071	**-0.0056**	0.0012	22.14
Silver	109	-0.0024	-0.0038	-0.0055	**-0.0039**	0.0015	39.3
Thallium	203	0.0022	0.0019	-0.0003	**0.0013**	0.0014	107
Thallium	205	-0.0013	-0.0006	-0.0004	**-0.0008**	0.0005	62.84
~~Zinc~~	~~66~~	~~1.03~~	~~0.8257~~	~~0.8247~~	~~**0.8935**~~	~~0.1183~~	~~13.24~~
Zinc	67	1.083	0.8753	0.894	**0.9508**	0.115	12.1
Zinc	68	1.092	1.113	1.046	**1.084**	0.0344	3.173

*see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.031	1.007	1.087	**1.031**	n/a	n/a
Gallium	71	1.054	1.044	1.01	**1.054**	n/a	n/a
Indium	115	1.015	1.045	1.057	**1.015**	n/a	n/a
Lutetium	175	0.99	1.004	1.001	**0.99**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001A +20,+10Ag**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:23**					
Antimony	121	21.77	21.63	21.79	**21.73**	0.0849	0.3909
Antimony	123	21.88	21.61	21	**21.5**	0.4499	2.093
Arsenic	75	22.84	22.29	23.66	**22.93**	0.6875	2.998
Beryllium	9	19.81	20.18	20.65	**20.21**	0.4197	2.077
Cadmium	111	21.07	20.6	20.44	**20.7**	0.3302	1.595
Cadmium	114	21.13	20.46	20.46	**20.68**	0.39	1.886
~~Chromium~~	~~52~~	~~22.42~~	~~22.74~~	~~22.72~~	~~**22.63**~~	~~0.1768~~	~~0.7815~~ *
Chromium	53	23.49	23.3	22.89	**23.22**	0.3045	1.311
~~Cobalt~~	~~59~~	~~21.73~~	~~20.66~~	~~20.56~~	~~**20.98**~~	~~0.6478~~	~~3.087~~ *
Copper	63	22.33	21.11	20.73	**21.39**	0.8363	3.91
~~Copper~~	~~65~~	~~22.14~~	~~20.6~~	~~20.87~~	~~**21.2**~~	~~0.8247~~	~~3.89~~ *
Lead	206	19.9	19.56	19.26	**19.57**	0.3212	1.641
Lead	207	19.69	19.46	19.75	**19.63**	0.1509	0.7687
Lead	208	19.9	19.46	19.46	**19.61**	0.2539	1.295
Molybdenum	95	21.36	21.33	20.49	**21.06**	0.4917	2.335
Molybdenum	97	21.6	20.46	20.88	**20.98**	0.577	2.75
Molybdenum	98	21.21	20.28	20.18	**20.56**	0.5655	2.751
~~Nickel~~	~~60~~	~~22.7~~	~~22.04~~	~~21.41~~	~~**22.05**~~	~~0.6429~~	~~2.915~~ *
Nickel	62	22.24	21.28	20.98	**21.5**	0.6581	3.061
Selenium	77	20.96	21.43	20.71	**21.03**	0.3636	1.729
Selenium	78	23.04	23.26	24.08	**23.46**	0.5481	2.336
Selenium	82	21.85	21.84	23.23	**22.3**	0.8012	3.592
Silver	107	9.489	9.378	9.345	**9.404**	0.0754	0.8018
Silver	109	9.441	9.604	9.296	**9.447**	0.1541	1.631
Thallium	203	19.71	19.7	19.41	**19.61**	0.1718	0.8761
Thallium	205	19.26	19.3	19.61	**19.39**	0.1915	0.9872
~~Zinc~~	~~66~~	~~24.61~~	~~23.55~~	~~23.7~~	~~**23.95**~~	~~0.5769~~	~~2.409~~ *
Zinc	67	25.25	24.94	24.12	**24.77**	0.5845	2.36
Zinc	68	25.75	24.43	25.14	**25.11**	0.6579	2.62

* see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.035	1.091	1.049	**1.035**	n/a	n/a
Gallium	71	1.075	1.04	1.015	**1.075**	n/a	n/a
Indium	115	1.053	1.051	1.018	**1.053**	n/a	n/a
Lutetium	175	1.027	1.024	1.012	**1.027**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:27**					
Antimony	121	21.24	21.52	21.62	**21.46**	0.1992	0.9282
Antimony	123	21.32	21.79	21.07	**21.39**	0.3622	1.693
Arsenic	75	22.91	23.44	22.2	**22.85**	0.6224	2.723
Beryllium	9	20.21	19.21	21.38	**20.27**	1.086	5.361
Cadmium	111	20.03	19.6	19.4	**19.68**	0.324	1.646
Cadmium	114	20.41	19.9	19.95	**20.09**	0.2786	1.387
~~Chromium~~	~~52~~	~~22.81~~	~~22.15~~	~~23.2~~	~~**22.72**~~	~~0.5318~~	~~2.34~~ *
Chromium	53	24	22.94	23.66	**23.53**	0.5401	2.295
~~Cobalt~~	~~59~~	~~21.87~~	~~20~~	~~20.67~~	~~**20.85**~~	~~0.949~~	~~4.552~~ *
Copper	63	21.85	20.49	20.69	**21.01**	0.7358	3.502
Copper	65	21.59	20.76	20.65	**21**	0.5128	2.442
Lead	206	18.74	19.74	18.82	**19.1**	0.557	2.916
Lead	207	19	19.54	18.9	**19.15**	0.3457	1.806
Lead	208	18.92	19.57	18.99	**19.16**	0.3592	1.874
Molybdenum	95	22.23	21.01	21.13	**21.45**	0.6738	3.141
Molybdenum	97	21.3	20.59	20.89	**20.93**	0.3554	1.698
Molybdenum	98	20.78	19.86	20.32	**20.32**	0.4571	2.25
~~Nickel~~	~~60~~	~~22.29~~	~~20.75~~	~~21.41~~	~~**21.48**~~	~~0.7752~~	~~3.609~~ *
Nickel	62	21.5	20.38	20.63	**20.84**	0.585	2.808
Selenium	77	20.84	20.11	22.44	**21.13**	1.189	5.629
Selenium	78	22.4	22.99	23.5	**22.96**	0.5511	2.4
Selenium	82	20.59	22.6	20.99	**21.39**	1.066	4.981
Silver	107	18.93	18.27	18.39	**18.53**	0.3508	1.894
Silver	109	19.13	18.82	19.03	**18.99**	0.1595	0.8398
Thallium	203	18.73	19.49	19.06	**19.09**	0.3804	1.992
Thallium	205	18.36	19.56	19.01	**18.98**	0.5975	3.149
~~Zinc~~	~~66~~	~~23.62~~	~~23.14~~	~~23.46~~	~~**23.41**~~	~~0.2417~~	~~1.033~~ *
Zinc	67	25.19	24.02	23.66	**24.29**	0.8011	3.298
Zinc	68	25.27	24.48	23.97	**24.57**	0.6572	2.674

*See Recalibration 3c 3/20/07

Internal Standard Factors:

Lithium	6	1.073	1.007	1.142	**1.073**	n/a	n/a
Gallium	71	1.058	1.033	1.04	**1.058**	n/a	n/a
Indium	115	1.038	1.032	1.031	**1.038**	n/a	n/a
Lutetium	175	0.974	1.025	1.013	**0.974**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:30**					
Antimony	121	20.28	20.35	21.05	**20.56**	0.4258	2.071
Antimony	123	20.18	20.15	20.21	**20.18**	0.0343	0.1697
Arsenic	75	20.36	20.2	20.29	**20.28**	0.0758	0.3736
Beryllium	9	19.63	21.15	20.16	**20.31**	0.7706	3.794
Cadmium	111	19.7	19.79	18.95	**19.48**	0.4633	2.378
Cadmium	114	20.07	19.69	19.25	**19.67**	0.4073	2.07
~~Chromium~~	~~52~~	~~21.54~~	~~21.36~~	~~21.26~~	~~**21.39**~~	~~0.1447~~	~~0.6767~~
Chromium	53	22.18	21.35	21.64	**21.72**	0.4212	1.939
~~Cobalt~~	~~59~~	~~21.01~~	~~20.23~~	~~19.7~~	~~**20.31**~~	~~0.6597~~	~~3.247~~
Copper	63	20.11	19.18	18.89	**19.4**	0.6377	3.288
~~Copper~~	~~65~~	~~19.95~~	~~19.12~~	~~18.81~~	~~**19.29**~~	~~0.5901~~	~~3.058~~
Lead	206	20.5	19.46	19.77	**19.91**	0.5323	2.673
Lead	207	19.75	20.02	19.94	**19.9**	0.139	0.6984
Lead	208	20.33	19.79	19.84	**19.99**	0.2987	1.494
Molybdenum	95	20.46	19.95	20.05	**20.15**	0.27	1.34
Molybdenum	97	20.74	20.07	19.46	**20.09**	0.6404	3.187
Molybdenum	98	20.35	19.7	19.57	**19.87**	0.4217	2.122
~~Nickel~~	~~60~~	~~20.27~~	~~19.6~~	~~19.13~~	~~**19.67**~~	~~0.5758~~	~~2.927~~
Nickel	62	20.28	18.92	18.53	**19.25**	0.9191	4.775
Selenium	77	20.61	19.74	20.38	**20.24**	0.4523	2.234
Selenium	78	22.24	22.19	21.59	**22.01**	0.3597	1.634
Selenium	82	20.79	21.42	20.99	**21.07**	0.3236	1.536
Silver	107	19.57	18.93	18.62	**19.04**	0.4841	2.543
Silver	109	19.46	18.64	18.82	**18.97**	0.4355	2.295
Thallium	203	20.03	19.61	19.98	**19.87**	0.2301	1.158
Thallium	205	19.91	18.96	19.65	**19.51**	0.4895	2.509
~~Zinc~~	~~66~~	~~19.94~~	~~19.69~~	~~18.82~~	~~**19.48**~~	~~0.5864~~	~~3.009~~
Zinc	67	20.75	19.92	19.69	**20.12**	0.5551	2.759
Zinc	68	20.66	19.99	19.09	**19.91**	0.7896	3.965

*see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.051	1.094	1.038	**1.051**	n/a	n/a
Gallium	71	1.019	1	1.006	**1.019**	n/a	n/a
Indium	115	1.013	1.015	0.994	**1.013**	n/a	n/a
Lutetium	175	1.03	1.003	1.022	**1.03**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:38**					
Antimony	121	0.0633	0.0745	0.0607	**0.0662**	0.0073	11.06
Antimony	123	0.0598	0.0684	0.0698	**0.066**	0.0054	8.218
Arsenic	75	7.087	6.96	6.936	**6.994**	0.081	1.158
Beryllium	9	-0.0017	0.0068	0.0041	**0.0031**	0.0043	140.8
Cadmium	111	0.815	0.79	0.8429	**0.816**	0.0265	3.243
Cadmium	114	0.8159	0.7599	0.749	**0.775**	0.0359	4.633
~~Chromium~~	~~52~~	~~0.7575~~	~~0.7668~~	~~0.7939~~	~~**0.7727**~~	~~0.0189~~	~~2.445~~
Chromium	53	33.06	32.55	33.57	**33.06**	0.5109	1.545
~~Cobalt~~	~~59~~	~~0.4955~~	~~0.4626~~	~~0.4682~~	~~**0.4754**~~	~~0.0176~~	~~3.705~~
Copper	63	4.217	3.667	3.636	**3.84**	0.3271	8.52
~~Copper~~	~~65~~	~~1.481~~	~~1.353~~	~~1.358~~	~~**1.397**~~	~~0.0727~~	~~5.2~~
Lead	206	0.1875	0.2008	0.1859	**0.1914**	0.0082	4.271
Lead	207	0.2098	0.1989	0.2036	**0.2041**	0.0055	2.7
Lead	208	0.1907	0.1979	0.203	**0.1972**	0.0062	3.131
Molybdenum	95	0.3181	0.2839	0.3181	**0.3067**	0.0197	6.429
Molybdenum	97	0.4629	0.4624	0.4278	**0.451**	0.0202	4.468
Molybdenum	98	0.0668	0.0771	0.0578	**0.0672**	0.0097	14.37
~~Nickel~~	~~60~~	~~16.42~~	~~14.68~~	~~14.61~~	~~**15.23**~~	~~1.027~~	~~6.743~~
Nickel	62	10.21	9.294	9.114	**9.538**	0.5851	6.135
Selenium	77	11.32	11.29	12.43	**11.68**	0.6491	5.558
Selenium	78	3.841	3.893	4.535	**4.09**	0.3865	9.451
Selenium	82	24.67	24.62	25.27	**24.85**	0.3607	1.451
Silver	107	0.1457	0.1297	0.1259	**0.1338**	0.0105	7.864
Silver	109	0.1231	0.1396	0.1412	**0.1346**	0.01	7.442
Thallium	203	0.021	0.0156	0.0234	**0.02**	0.004	19.99
Thallium	205	0.0165	0.0191	0.0196	**0.0184**	0.0017	9.069
~~Zinc~~	~~66~~	~~634.1~~	~~582.2~~	~~580.6~~	~~**599**~~	~~30.45~~	~~5.083~~
Zinc	67	561.2	517.8	518.6	**532.5**	24.83	4.663
Zinc	68	617.9	572.5	564.4	**584.9**	28.85	4.932

*See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.416	1.392	1.432	**1.416**	n/a	n/a
Gallium	71	1.702	1.666	1.627	**1.702**	n/a	n/a
Indium	115	1.556	1.628	1.572	**1.556**	n/a	n/a
Lutetium	175	1.336	1.407	1.408	**1.336**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701703-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:41**					
Antimony	121	0.0325	0.0227	0.0251	**0.0268**	0.0051	19.03
Antimony	123	0.026	0.0179	0.0218	**0.0219**	0.004	18.37
Arsenic	75	0.9639	1.04	0.9697	**0.9912**	0.0423	4.272
Beryllium	9	0.0004	-0.0034	0.0018	**-0.0004**	0.0027	680.6
Cadmium	111	0.0284	0.0256	0.0132	**0.0224**	0.0081	36.2
Cadmium	114	0.026	0.0196	0.025	**0.0235**	0.0035	14.67
~~Chromium~~	~~52~~	~~0.4433~~	~~0.4932~~	~~0.4596~~	~~**0.4654**~~	~~0.0254~~	~~5.462~~
Chromium	53	7.194	7.133	6.392	**6.907**	0.4466	6.466
~~Cobalt~~	~~59~~	~~0.3647~~	~~0.3704~~	~~0.3417~~	~~**0.3589**~~	~~0.0152~~	~~4.221~~
Copper	63	0.74	0.6983	0.6478	**0.6954**	0.0462	6.643
~~Copper~~	~~65~~	~~0.463~~	~~0.4327~~	~~0.4195~~	~~**0.4384**~~	~~0.0223~~	~~5.083~~
Lead	206	0.0095	0.0086	0.0164	**0.0115**	0.0043	37.21
Lead	207	0.0083	0.0095	0.002	**0.0066**	0.004	60.53
Lead	208	0.0108	0.0071	0.0097	**0.0092**	0.0019	20.63
Molybdenum	95	2.43	2.402	2.364	**2.399**	0.0331	1.379
Molybdenum	97	2.443	2.376	2.184	**2.334**	0.1342	5.75
Molybdenum	98	2.415	2.319	2.296	**2.343**	0.0629	2.685
~~Nickel~~	~~60~~	~~3.562~~	~~3.684~~	~~3.393~~	~~**3.546**~~	~~0.1461~~	~~4.119~~
Nickel	62	0.9965	0.7972	0.6862	**0.8266**	0.1573	19.02
Selenium	77	1.435	1.302	1.21	**1.316**	0.1132	8.603
Selenium	78	3.779	3.518	3.643	**3.647**	0.1307	3.585
Selenium	82	1.867	2.062	1.643	**1.857**	0.2093	11.27
Silver	107	-0.0028	0.0002	-0.0034	**-0.002**	0.0019	94.62
Silver	109	-0.0004	-0.0047	-0.0062	**-0.0038**	0.003	80.41
Thallium	203	0.0033	0.0013	0.003	**0.0025**	0.001	41.05
Thallium	205	0.0035	0.0009	0.0034	**0.0026**	0.0015	56.63
~~Zinc~~	~~66~~	~~9.633~~	~~9.233~~	~~9.016~~	~~**9.294**~~	~~0.3129~~	~~3.366~~
Zinc	67	15.8	15.98	15.59	**15.79**	0.1958	1.24
Zinc	68	14.37	14.11	13.72	**14.07**	0.3292	2.34

*Std Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.25	1.26	1.225	**1.25**	n/a	n/a
Gallium	71	1.361	1.375	1.357	**1.361**	n/a	n/a
Indium	115	1.313	1.326	1.329	**1.313**	n/a	n/a
Lutetium	175	1.211	1.259	1.264	**1.211**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**K0701680-001**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 13:45**						
Antimony	121	0.1522	0.1789	0.1746	**0.1686**	0.0143	8.497	
Antimony	123	0.1629	0.1488	0.1475	**0.1531**	0.0086	5.59	
Arsenic	75	8.293	8.279	8.478	**8.35**	0.1111	1.33	
Beryllium	9	0.132	0.1424	0.1371	**0.1372**	0.0052	3.792	
Cadmium	111	0.0438	0.072	0.0513	**0.0557**	0.0146	26.3	
Cadmium	114	0.0553	0.0664	0.0565	**0.0594**	0.0061	10.25	
~~Chromium~~	~~52~~	~~4.203~~	~~4.246~~	~~4.234~~	~~**4.228**~~	~~0.0226~~	~~0.5334~~	*
Chromium	53	6.784	6.499	6.379	**6.554**	0.2079	3.172	
~~Cobalt~~	~~59~~	~~2.204~~	~~2.113~~	~~2.128~~	~~**2.148**~~	~~0.0491~~	~~2.287~~	*
Copper	63	7.789	7.301	7.38	**7.49**	0.2621	3.499	
~~Copper~~	~~65~~	~~6.806~~	~~6.57~~	~~6.443~~	~~**6.606**~~	~~0.1844~~	~~2.792~~	*
Lead	206	1.211	1.228	1.2	**1.213**	0.0143	1.18	
Lead	207	1.374	1.339	1.35	**1.354**	0.0181	1.335	
Lead	208	1.329	1.282	1.302	**1.304**	0.0233	1.783	
Molybdenum	95	6.185	6.163	6.001	**6.116**	0.1005	1.643	
Molybdenum	97	5.957	6.231	6.021	**6.07**	0.1433	2.36	
Molybdenum	98	6.063	5.994	5.787	**5.948**	0.1435	2.413	
~~Nickel~~	~~60~~	~~3.821~~	~~3.618~~	~~3.65~~	~~**3.696**~~	~~0.1093~~	~~2.956~~	*
Nickel	62	4.907	4.707	4.757	**4.79**	0.1044	2.18	
Selenium	77	1.183	0.9907	1.07	**1.081**	0.0965	8.927	
Selenium	78	1.768	2.229	1.789	**1.929**	0.26	13.48	
Selenium	82	0.8331	0.849	0.9898	**0.8906**	0.0862	9.682	
Silver	107	0.0398	0.0445	0.0396	**0.0413**	0.0028	6.782	
Silver	109	0.0329	0.036	0.0284	**0.0324**	0.0038	11.76	
Thallium	203	0.016	0.0182	0.0195	**0.0179**	0.0018	10.1	
Thallium	205	0.017	0.0117	0.0126	**0.0138**	0.0028	20.37	
~~Zinc~~	~~66~~	~~7.971~~	~~7.61~~	~~7.71~~	~~**7.764**~~	~~0.1866~~	~~2.404~~	*
Zinc	67	12.07	11.11	11.98	**11.72**	0.5294	4.517	
Zinc	68	9.152	9.131	8.916	**9.066**	0.1309	1.444	

* see Recalibration 5(3/20/07

Internal Standard Factors:

Lithium	6	1.336	1.371	1.334	**1.336**	n/a	n/a
Gallium	71	1.32	1.351	1.33	**1.32**	n/a	n/a
Indium	115	1.272	1.384	1.31	**1.272**	n/a	n/a
Lutetium	175	1.163	1.207	1.196	**1.163**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:08**					
Antimony	121	25.46	25.5	24.84	**25.27**	0.37	1.464
Antimony	123	24.42	24.79	24.64	**24.62**	0.1838	0.7465
Arsenic	75	24.81	25.45	26.27	**25.51**	0.7317	2.868
Beryllium	9	24.25	23.34	24.61	**24.07**	0.6526	2.712
Cadmium	111	25.77	25.65	25.82	**25.75**	0.0893	0.347
Cadmium	114	25.18	25.12	25.62	**25.31**	0.2761	1.091
Chromium	52	28.25	28.32	29.33	**28.63**	0.6028	2.105
Chromium	53	30.19	30.15	30.86	**30.4**	0.4	1.316
Cobalt	59	30.2	28.66	28.91	**29.26**	0.8304	2.838
Copper	63	27.97	26.53	26.44	**26.98**	0.8602	3.188
Copper	65	27.05	25.87	25.39	**26.1**	0.8537	3.271
Lead	206	23.98	25.11	24.86	**24.65**	0.594	2.41
Lead	207	24.63	25.33	24.85	**24.94**	0.3608	1.447
Lead	208	24.54	25.04	25.21	**24.93**	0.3516	1.41
Molybdenum	95	26.4	26.09	26.98	**26.49**	0.4531	1.711
Molybdenum	97	26.87	26.6	26.09	**26.52**	0.3951	1.49
Molybdenum	98	26.22	26.23	25.78	**26.08**	0.2609	1
Nickel	60	29.72	27.87	27.56	**28.38**	1.169	4.12
Nickel	62	28.79	27.21	27.04	**27.68**	0.9662	3.491
Selenium	77	24.84	24.66	25.66	**25.05**	0.5308	2.118
Selenium	78	24.99	25.89	27.87	**26.25**	1.474	5.614
Selenium	82	24.25	26.34	27.22	**25.94**	1.529	5.895
Silver	107	25.92	25.71	25.2	**25.61**	0.3744	1.462
Silver	109	25.43	25.64	24.95	**25.34**	0.3552	1.402
Thallium	203	24.68	24.83	24.82	**24.78**	0.08	0.3229
Thallium	205	25.04	25.17	24.61	**24.94**	0.2949	1.183
Zinc	66	26.39	25.68	25.32	**25.8**	0.5464	2.118
Zinc	67	26.98	25.6	25.59	**26.06**	0.8007	3.072
Zinc	68	26.02	25.62	25.49	**25.71**	0.2748	1.069

Internal Standard Factors:

Lithium	6	1.283	1.235	1.205	**1.283**	n/a	n/a
Gallium	71	1.186	1.187	1.185	**1.186**	n/a	n/a
Indium	115	1.135	1.178	1.158	**1.135**	n/a	n/a
Lutetium	175	1.054	1.096	1.089	**1.054**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:12**					
Antimony	121	24.4	25.76	25.32	**25.16**	0.6935	2.756
Antimony	123	23.9	25.26	25.44	**24.87**	0.843	3.39
Arsenic	75	25.76	25.6	26.17	**25.85**	0.2921	1.13
Beryllium	9	24.43	25.55	24.79	**24.92**	0.5686	2.282
Cadmium	111	25.55	25.79	25.75	**25.7**	0.1284	0.4999
Cadmium	114	25.47	25.62	25.64	**25.58**	0.0907	0.3547
Chromium	52	28.67	29.49	29.45	**29.2**	0.4603	1.576
Chromium	53	30.72	31.13	30.59	**30.82**	0.2825	0.9168
Cobalt	59	31.02	29.61	29.26	**29.96**	0.9316	3.109
Copper	63	28.48	27.49	26.77	**27.58**	0.8577	3.11
Copper	65	27.06	26.38	25.79	**26.39**	0.6395	2.423
Lead	206	25.16	25.84	25.26	**25.42**	0.3693	1.453
Lead	207	25.18	25.75	24.88	**25.27**	0.4432	1.754
Lead	208	24.99	25.59	24.85	**25.14**	0.3929	1.563
Molybdenum	95	26.97	26.83	27.28	**27.03**	0.2282	0.8443
Molybdenum	97	26.85	26.64	27.02	**26.84**	0.1881	0.7011
Molybdenum	98	26.79	26.27	26.04	**26.37**	0.3823	1.45
Nickel	60	30.1	29.14	28.48	**29.24**	0.8118	2.776
Nickel	62	29.37	27.33	27.28	**27.99**	1.192	4.259
Selenium	77	23.75	25.21	26.57	**25.18**	1.409	5.597
Selenium	78	25.35	26.62	26.27	**26.08**	0.6527	2.503
Selenium	82	25.62	26.88	27.23	**26.57**	0.8438	3.175
Silver	107	26.59	25.74	25.27	**25.86**	0.6702	2.591
Silver	109	26.09	25.8	25.18	**25.69**	0.4661	1.814
Thallium	203	24.64	25.48	25.15	**25.09**	0.4235	1.688
Thallium	205	25.08	25.31	25.38	**25.26**	0.1566	0.62
Zinc	66	27.34	26.7	26.16	**26.73**	0.589	2.203
Zinc	67	27.02	26.88	26.49	**26.8**	0.2757	1.029
Zinc	68	26.82	26.03	26.46	**26.43**	0.3951	1.495

Not needed
JC
3/20/07

Internal Standard Factors:

Lithium	6	1.253	1.321	1.261	**1.253**	n/a	n/a
Gallium	71	1.165	1.191	1.187	**1.165**	n/a	n/a
Indium	115	1.118	1.169	1.164	**1.118**	n/a	n/a
Lutetium	175	1.052	1.1	1.097	**1.052**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:20**					
Antimony	121	0.0009	0.0011	-0.0006	**0.0005**	0.0009	191
Antimony	123	0.0022	0.0046	0.0051	**0.004**	0.0016	39.87
Arsenic	75	0.0638	0.0508	-0.0034	**0.037**	0.0357	96.27
Beryllium	9	0.0091	0.0083	0.0032	**0.0069**	0.0032	46.95
Cadmium	111	-0.0015	0.0001	0.0027	**0.0004**	0.0021	530.9
Cadmium	114	0.0046	-0.0007	0.0015	**0.0018**	0.0027	151.5
Chromium	52	0.0754	0.0952	0.0645	**0.0784**	0.0156	19.85
Chromium	53	0.0977	0.125	0.0788	**0.1005**	0.0232	23.09
Cobalt	59	0.003	0.0042	0.0037	**0.0036**	0.0006	15.57
Copper	63	0.0891	0.0848	0.0659	**0.0799**	0.0123	15.44
Copper	65	0.0811	0.0649	0.0699	**0.072**	0.0083	11.54
Lead	206	0.0062	0.0137	0.0079	**0.0092**	0.0039	42.24
Lead	207	0.0069	0.0152	0.0112	**0.0111**	0.0042	37.41
Lead	208	0.0063	0.0108	0.0077	**0.0082**	0.0023	28.28
Molybdenum	95	0.0086	0.0127	0.0046	**0.0086**	0.0041	47.44
Molybdenum	97	0.0096	0.0069	0.013	**0.0098**	0.003	30.84
Molybdenum	98	0.0111	0.0084	0.0062	**0.0086**	0.0024	28.29
Nickel	60	0.0631	0.0291	0.0318	**0.0413**	0.0189	45.67
Nickel	62	0.068	0.1286	0.2177	**0.1381**	0.0753	54.5
Selenium	77	0.0434	-0.0779	-0.0282	**-0.0209**	0.061	291.8
Selenium	78	-0.3431	0.1214	0.4682	**0.0822**	0.4071	495.3
Selenium	82	0.2725	0.0972	-0.0575	**0.104**	0.1651	158.7
Silver	107	0.0427	0.0339	0.0294	**0.0353**	0.0068	19.16
Silver	109	0.0399	0.0273	0.0216	**0.0296**	0.0094	31.8
Thallium	203	0.0026	-0.0001	0.0028	**0.0018**	0.0016	91.15
Thallium	205	-0.0006	-0.0003	0.0002	**-0.0002**	0.0004	162.4
Zinc	66	0.7394	0.5353	0.6368	**0.6372**	0.102	16.01
Zinc	67	0.8343	0.5703	0.7231	**0.7092**	0.1326	18.69
Zinc	68	0.6448	0.573	0.5162	**0.578**	0.0644	11.15

See Rerun
Not needed
JC
3/20/07

Internal Standard Factors:

Lithium	6	1.249	1.268	1.211	**1.249**	n/a	n/a
Gallium	71	1.202	1.19	1.201	**1.202**	n/a	n/a
Indium	115	1.125	1.194	1.167	**1.125**	n/a	n/a
Lutetium	175	1.071	1.093	1.117	**1.071**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:26**					
Antimony	121	0.0024	0.0021	0	**0.0015**	0.0013	89.44
Antimony	123	-0.0018	-0.0009	0.001	**-0.0006**	0.0014	258
Arsenic	75	-0.0441	0.0429	0.0801	**0.0263**	0.0638	242.4
Beryllium	9	0.0075	0.001	-0.0005	**0.0027**	0.0042	159.7
Cadmium	111	-0.0002	0	-0.0028	**-0.001**	0.0015	153
Cadmium	114	0.0045	0.001	0.0003	**0.0019**	0.0023	119.4
Chromium	52	0.0896	0.0601	0.1233	**0.091**	0.0316	34.78
Chromium	53	0.0936	0.1005	0.0412	**0.0784**	0.0324	41.31
Cobalt	59	0.0027	0.0007	-0.0005	**0.001**	0.0016	167.8
Copper	63	0.079	0.072	0.0669	**0.0726**	0.0061	8.387
Copper	65	0.0884	0.0546	0.0523	**0.0651**	0.0202	31.03
Lead	206	0.0097	0.0106	0.0006	**0.007**	0.0055	78.89
Lead	207	0.0087	0.0057	0.0039	**0.0061**	0.0025	40.5
Lead	208	0.0015	0.0056	0.0021	**0.0031**	0.0022	70.38
Molybdenum	95	0.0031	0.0041	0.0033	**0.0035**	0.0005	14.39
Molybdenum	97	0.0085	0.0101	0.0078	**0.0088**	0.0012	13.29
Molybdenum	98	0.0052	0.0023	0.0014	**0.003**	0.002	66.47
Nickel	60	0.0286	0.0161	-0.0391	**0.0018**	0.036	1959
Nickel	62	0.1933	0.2161	0.0475	**0.1523**	0.0915	60.06
Selenium	77	0.0614	0.0782	-0.198	**-0.0194**	0.1548	796
Selenium	78	-0.2649	0.1909	0.3306	**0.0856**	0.3114	364
Selenium	82	-0.1223	0.2201	0.1081	**0.0687**	0.1746	254.3
Silver	107	0.0149	0.0095	0.0054	**0.01**	0.0048	48
Silver	109	0.0095	0.0102	0.005	**0.0082**	0.0028	34.39
Thallium	203	0.0012	0.0009	-0.001	**0.0004**	0.0012	317.7
Thallium	205	0.0017	0.001	-0.0007	**0.0007**	0.0012	178.5
Zinc	66	0.5966	0.5634	0.5471	**0.569**	0.0252	4.434
Zinc	67	0.8098	0.3381	0.6657	**0.6045**	0.2417	39.99
Zinc	68	0.556	0.5044	0.6258	**0.5621**	0.0609	10.84

Internal Standard Factors:

Lithium	6	1.287	1.206	1.216	**1.287**	n/a	n/a
Gallium	71	1.207	1.223	1.195	**1.207**	n/a	n/a
Indium	115	1.119	1.178	1.165	**1.119**	n/a	n/a
Lutetium	175	1.064	1.127	1.101	**1.064**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:33**					
Antimony	121	0.1731	0.1698	0.1713	**0.1714**	0.0017	0.9808
Antimony	123	0.1647	0.1858	0.167	**0.1725**	0.0116	6.703
Arsenic	75	8.049	8.44	8.344	**8.277**	0.2039	2.463
Beryllium	9	0.1255	0.1367	0.1388	**0.1337**	0.0071	5.347
Cadmium	111	0.0558	0.0779	0.0735	**0.069**	0.0117	16.96
Cadmium	114	0.0505	0.0613	0.057	**0.0562**	0.0054	9.688
~~Chromium~~	~~52~~	~~4.095~~	~~4.312~~	~~4.09~~	~~**4.166**~~	~~0.1268~~	~~3.044~~ *
Chromium	53	4.466	4.61	4.624	**4.567**	0.0875	1.916
~~Cobalt~~	~~59~~	~~2.257~~	~~2.193~~	~~2.09~~	~~**2.18**~~	~~0.0845~~	~~3.876~~ *
Copper	63	8.161	7.662	7.18	**7.668**	0.4905	6.397
~~Copper~~	~~65~~	~~6.969~~	~~6.798~~	~~6.353~~	~~**6.707**~~	~~0.3181~~	~~4.743~~ *
Lead	206	1.31	1.29	1.195	**1.265**	0.0613	4.846
Lead	207	1.486	1.379	1.379	**1.415**	0.0617	4.363
Lead	208	1.428	1.354	1.295	**1.359**	0.0667	4.907
Molybdenum	95	6.198	6.358	6.178	**6.245**	0.0986	1.579
Molybdenum	97	6.554	6.215	5.979	**6.25**	0.2891	4.625
Molybdenum	98	6.284	6.166	5.995	**6.148**	0.1455	2.367
~~Nickel~~	~~60~~	~~4.289~~	~~4.053~~	~~3.795~~	~~**4.046**~~	~~0.2471~~	~~6.108~~ *
Nickel	62	5.393	5.343	4.897	**5.211**	0.2731	5.241
Selenium	77	0.7744	0.9209	0.8853	**0.8602**	0.0764	8.883
Selenium	78	0.6711	1.487	1.54	**1.232**	0.4869	39.51
Selenium	82	0.8036	0.7341	1.069	**0.8688**	0.1765	20.32
Silver	107	0.0316	0.0424	0.0404	**0.0381**	0.0058	15.09
Silver	109	0.0213	0.0301	0.0286	**0.0267**	0.0047	17.67
Thallium	203	0.027	0.0126	0.0179	**0.0192**	0.0073	37.89
Thallium	205	0.0143	0.0157	0.0149	**0.015**	0.0007	4.558
~~Zinc~~	~~66~~	~~8.83~~	~~8.044~~	~~8.268~~	~~**8.581**~~	~~0.2864~~	~~3.338~~ *
Zinc	67	12.13	11.57	11.82	**11.84**	0.2829	2.389
Zinc	68	10.21	9.812	9.319	**9.78**	0.4459	4.559

* See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.347	1.396	1.29	**1.347**	n/a	n/a
Gallium	71	1.348	1.409	1.359	**1.348**	n/a	n/a
Indium	115	1.237	1.312	1.321	**1.237**	n/a	n/a
Lutetium	175	1.129	1.174	1.162	**1.129**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:36**					
Antimony	121	19.54	17.63	17.46	**18.21**	1.156	6.346
Antimony	123	19.86	16.95	17.12	**17.98**	1.628	9.058
Arsenic	75	31.74	29.66	30.73	**30.71**	1.042	3.394
Beryllium	9	21.66	18.44	19.7	**19.93**	1.619	8.124
Cadmium	111	22.38	20.33	20.32	**21.01**	1.186	5.644
Cadmium	114	22.31	20.68	19.99	**20.99**	1.191	5.673
~~Chromium~~	~~52~~	~~30.69~~	~~28.22~~	~~28.24~~	~~**29.05**~~	~~1.42~~	~~4.89~~ *
Chromium	53	32.74	29.82	29.87	**30.81**	1.673	5.431
~~Cobalt~~	~~59~~	~~28.91~~	~~25.85~~	~~25.74~~	~~**26.84**~~	~~1.8~~	~~6.707~~ *
Copper	63	31.14	27.62	26.92	**28.56**	2.265	7.933
~~Copper~~	~~65~~	~~29.85~~	~~26.28~~	~~25.56~~	~~**27.06**~~	~~2.009~~	~~7.425~~ *
Lead	206	21.58	20.07	19.6	**20.42**	1.035	5.07
Lead	207	21.14	20.24	19.8	**20.39**	0.6832	3.35
Lead	208	21.38	19.9	19.55	**20.28**	0.9714	4.791
Molybdenum	95	30.49	27.15	26.36	**28**	2.193	7.83
Molybdenum	97	30.3	27.48	26.53	**28.1**	1.959	6.97
Molybdenum	98	30.11	26.68	26.63	**27.81**	1.995	7.176
~~Nickel~~	~~60~~	~~28.67~~	~~25.74~~	~~25.46~~	~~**26.62**~~	~~1.777~~	~~6.675~~ *
Nickel	62	29.2	25.91	25.97	**27.03**	1.883	6.968
Selenium	77	21.76	20.45	20.21	**20.81**	0.8334	4.006
Selenium	78	22.25	22.7	22.43	**22.46**	0.2258	1.005
Selenium	82	22.15	21.41	22.42	**21.99**	0.5231	2.379
Silver	107	21.56	19.57	18.98	**20.04**	1.354	6.758
Silver	109	20.91	19.54	19.23	**19.89**	0.8966	4.507
Thallium	203	19.17	18.48	18.58	**18.74**	0.3736	1.993
Thallium	205	19.28	18.2	18.33	**18.6**	0.5896	3.169
~~Zinc~~	~~66~~	~~33.94~~	~~30.83~~	~~30.24~~	~~**31.67**~~	~~1.989~~	~~6.282~~ *
Zinc	67	38.33	33.5	33.71	**35.18**	2.73	7.76
Zinc	68	35.08	31.65	32.41	**33.05**	1.801	5.449

*see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.447	1.373	1.348	**1.447**	n/a	n/a
Gallium	71	1.42	1.345	1.32	**1.42**	n/a	n/a
Indium	115	1.377	1.309	1.259	**1.377**	n/a	n/a
Lutetium	175	1.167	1.16	1.131	**1.167**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-003**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 14:39**						
Antimony	121	0.0637	0.0669	0.0675	**0.0661**	0.0021	3.113	
Antimony	123	0.0605	0.0711	0.0676	**0.0664**	0.0054	8.156	
Arsenic	75	2.012	2.031	2.133	**2.059**	0.065	3.157	
Beryllium	9	0.1403	0.1427	0.1633	**0.1488**	0.0126	8.482	
Cadmium	111	0.0944	0.099	0.0913	**0.0949**	0.0039	4.084	
Cadmium	114	0.1091	0.0925	0.0821	**0.0946**	0.0136	14.37	
~~Chromium~~	~~52~~	~~6.583~~	~~6.567~~	~~6.637~~	~~**6.596**~~	~~0.0367~~	~~0.5559~~	*
Chromium	53	7.544	7.107	7.066	**7.239**	0.2652	3.664	
~~Cobalt~~	~~59~~	~~2.394~~	~~2.302~~	~~2.297~~	~~**2.331**~~	~~0.0549~~	~~2.354~~	*
Copper	63	5.057	4.866	4.833	**4.919**	0.121	2.459	
~~Copper~~	~~65~~	~~4.707~~	~~4.623~~	~~4.729~~	~~**4.686**~~	~~0.0559~~	~~1.193~~	*
Lead	206	2.364	2.368	2.472	**2.401**	0.0613	2.554	
Lead	207	2.539	2.68	2.619	**2.613**	0.0707	2.706	
Lead	208	2.486	2.535	2.594	**2.538**	0.0539	2.126	
Molybdenum	95	2.434	2.322	2.352	**2.369**	0.0581	2.451	
Molybdenum	97	2.391	2.434	2.363	**2.396**	0.0354	1.478	
Molybdenum	98	2.39	2.328	2.309	**2.343**	0.0423	1.807	
~~Nickel~~	~~60~~	~~3.780~~	~~3.54~~	~~3.65~~	~~**3.66**~~	~~0.1249~~	~~3.414~~	*
Nickel	62	4.855	4.883	4.815	**4.851**	0.0344	0.7099	
Selenium	77	0.44	0.5916	0.4653	**0.499**	0.0812	16.28	
Selenium	78	0.4244	0.5671	0.8443	**0.6119**	0.2135	34.89	
Selenium	82	0.454	1.028	0.7957	**0.7592**	0.2887	38.02	
Silver	107	0.1763	0.124	0.0894	**0.1299**	0.0437	33.65	
Silver	109	0.1709	0.1153	0.0856	**0.124**	0.0433	34.94	
Thallium	203	0.0248	0.0244	0.0247	**0.0246**	0.0002	0.8944	
Thallium	205	0.0253	0.0258	0.0188	**0.0233**	0.0039	16.6	
~~Zinc~~	~~66~~	~~13.57~~	~~12.82~~	~~12.96~~	~~**13.12**~~	~~0.396~~	~~3.018~~	*
Zinc	67	14.98	14.35	13.63	**14.32**	0.6724	4.696	
Zinc	68	13.73	13.48	13.42	**13.54**	0.1606	1.186	

*See Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.27	1.249	1.262	**1.27**	n/a	n/a
Gallium	71	1.213	1.193	1.219	**1.213**	n/a	n/a
Indium	115	1.183	1.209	1.218	**1.183**	n/a	n/a
Lutetium	175	1.08	1.12	1.154	**1.08**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004**			**Mean**	**SD**	**%RSD**	
TimeStamp		**3/20/07 14:42**						
Antimony	121	0.1044	0.1045	0.1008	**0.1033**	0.0021	2.063	
Antimony	123	0.0879	0.0944	0.0975	**0.0933**	0.0049	5.267	
Arsenic	75	14.01	14.07	13.94	**14.01**	0.0677	0.4833	
Beryllium	9	1.998	1.931	2.129	**2.019**	0.1011	5.008	
Cadmium	111	0.9227	0.9895	0.8342	**0.9155**	0.0779	8.51	
Cadmium	114	0.9014	0.9117	0.8568	**0.89**	0.0292	3.28	
~~Chromium~~	~~52~~	~~62.61~~	~~63.64~~	~~64.92~~	~~**63.73**~~	~~1.158~~	~~1.818~~	✓
Chromium	53	66.84	69.33	70.41	**68.86**	1.829	2.655	
~~Cobalt~~	~~59~~	~~18.26~~	~~18.43~~	~~18.14~~	~~**18.28**~~	~~0.1489~~	~~0.8148~~	✓
Copper	63	38.38	38.43	37.69	**38.17**	0.4141	1.085	
~~Copper~~	~~65~~	~~37.28~~	~~37.64~~	~~37.33~~	~~**37.42**~~	~~0.1933~~	~~0.5165~~	✓
Lead	206	30.05	30.71	31.2	**30.65**	0.5817	1.898	
Lead	207	33.48	34.29	34.12	**33.96**	0.4289	1.263	
Lead	208	32.69	33.27	33.1	**33.02**	0.2956	0.8953	
Molybdenum	95	3.953	3.906	3.803	**3.887**	0.0771	1.982	
Molybdenum	97	3.857	4.011	3.695	**3.854**	0.158	4.099	
Molybdenum	98	3.896	3.828	3.657	**3.794**	0.1228	3.236	
~~Nickel~~	~~60~~	~~27.73~~	~~28.15~~	~~27.9~~	~~**27.93**~~	~~0.2108~~	~~0.7548~~	✓
Nickel	62	36.26	36.97	35.54	**36.26**	0.7154	1.973	
Selenium	77	5.437	5.27	5.068	**5.258**	0.1848	3.514	
Selenium	78	0.0413	0.4056	0.1218	**0.1896**	0.1913	100.9	
Selenium	82	1.883	1.782	1.677	**1.781**	0.1031	5.789	
Silver	107	0.1695	0.1834	0.1721	**0.175**	0.0074	4.209	
Silver	109	0.1537	0.1538	0.1502	**0.1526**	0.002	1.329	
Thallium	203	0.2965	0.2663	0.2738	**0.2789**	0.0157	5.634	
Thallium	205	0.2933	0.2878	0.2913	**0.2908**	0.0028	0.9501	
~~Zinc~~	~~66~~	~~96.19~~	~~97.2~~	~~97.37~~	~~**96.92**~~	~~0.6366~~	~~0.6568~~	✓
Zinc	67	103	106.6	105.4	**105**	1.802	1.716	
Zinc	68	98	97.7	97.71	**97.8**	0.168	0.1718	

*STD Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.287	1.367	1.481	**1.287**	n/a	n/a
Gallium	71	0.973	0.999	0.981	**0.973**	n/a	n/a
Indium	115	1.32	1.335	1.297	**1.32**	n/a	n/a
Lutetium	175	1.226	1.244	1.273	**1.226**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:45**					
Antimony	121	0.1658	0.146	0.124	**0.1453**	0.0209	14.41
Antimony	123	0.1509	0.1505	0.1454	**0.1489**	0.0031	2.064
Arsenic	75	7.906	7.56	7.739	**7.735**	0.1731	2.238
Beryllium	9	0.0146	0.0096	0.0079	**0.0107**	0.0035	32.36
Cadmium	111	0.0394	0.0523	0.0462	**0.046**	0.0065	14.04
Cadmium	114	0.0416	0.0373	0.0313	**0.0367**	0.0052	14.15
~~Chromium~~	~~52~~	~~0.7168~~	~~0.7169~~	~~0.7431~~	~~**0.7256**~~	~~0.0152~~	~~2.089~~
Chromium	53	0.7387	0.8439	0.846	**0.8095**	0.0614	7.582
~~Cobalt~~	~~59~~	~~0.7658~~	~~0.7486~~	~~0.7451~~	~~**0.7532**~~	~~0.0111~~	~~1.469~~
Copper	63	3.603	3.51	3.541	**3.551**	0.0473	1.332
~~Copper~~	~~65~~	~~2.717~~	~~2.632~~	~~2.651~~	~~**2.667**~~	~~0.0447~~	~~1.675~~
Lead	206	0.037	0.0426	0.0362	**0.0386**	0.0035	8.969
Lead	207	0.0416	0.0312	0.0453	**0.0394**	0.0073	18.57
Lead	208	0.0407	0.0456	0.0405	**0.0423**	0.0029	6.908
Molybdenum	95	7.214	7.37	7.317	**7.3**	0.0791	1.083
Molybdenum	97	7.451	7.329	7.256	**7.345**	0.0985	1.341
Molybdenum	98	7.282	7.143	7.04	**7.155**	0.1218	1.702
~~Nickel~~	~~60~~	~~2.027~~	~~1.987~~	~~1.934~~	~~**1.983**~~	~~0.0466~~	~~2.349~~
Nickel	62	1.983	1.98	2.04	**2.001**	0.0339	1.693
Selenium	77	0.4372	0.5876	0.5832	**0.536**	0.0856	15.97
Selenium	78	1.77	1.454	1.794	**1.672**	0.1898	11.35
Selenium	82	0.5058	0.8315	0.5886	**0.642**	0.1693	26.37
Silver	107	0.0309	0.035	0.0223	**0.0294**	0.0065	22.06
Silver	109	0.0324	0.0178	0.0176	**0.0226**	0.0085	37.63
Thallium	203	0.0042	0.0022	0.0001	**0.0022**	0.002	93.32
Thallium	205	-0.0006	-0.0002	0.0007	**0**	0.0007	1620
~~Zinc~~	~~66~~	~~3.297~~	~~3.16~~	~~3.163~~	~~**3.207**~~	~~0.0781~~	~~2.436~~
Zinc	67	4.924	4.707	4.4	**4.677**	0.2632	5.627
Zinc	68	3.814	3.73	3.696	**3.747**	0.0609	1.625

x see Recalibration JC 3/20/07

Internal Standard Factors:

Lithium	6	1.39	1.344	1.35	**1.39**	n/a	n/a
Gallium	71	1.356	1.389	1.383	**1.356**	n/a	n/a
Indium	115	1.322	1.332	1.335	**1.322**	n/a	n/a
Lutetium	175	1.189	1.201	1.197	**1.189**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07C | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**K0701680-003 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:48**					
Antimony	121	0.1049	0.1206	0.119	**0.1149**	0.0086	7.513
Antimony	123	0.1088	0.1173	0.121	**0.1157**	0.0063	5.404
Arsenic	75	2.424	2.45	2.436	**2.437**	0.0128	0.5261
Beryllium	9	0.0112	0.0061	0.0082	**0.0085**	0.0026	29.99
Cadmium	111	0.1202	0.1138	0.1343	**0.1228**	0.0105	8.543
Cadmium	114	0.1161	0.0959	0.0968	**0.1029**	0.0114	11.11
~~Chromium~~	~~52~~	~~0.5156~~	~~0.5465~~	~~0.5639~~	~~**0.542**~~	~~0.0244~~	~~4.509~~
Chromium	53	1.349	1.31	1.263	**1.307**	0.0432	3.308
~~Cobalt~~	~~59~~	~~2.189~~	~~2.126~~	~~2.082~~	~~**2.132**~~	~~0.0539~~	~~2.526~~
Copper	63	3.698	3.509	3.433	**3.547**	0.1363	3.844
~~Copper~~	~~65~~	~~2.449~~	~~2.352~~	~~2.353~~	~~**2.384**~~	~~0.0556~~	~~2.334~~
Lead	206	0.0061	0.0031	0.01	**0.0064**	0.0034	53.88
Lead	207	0.0136	0.0064	0.0129	**0.011**	0.004	36.23
Lead	208	0.0077	0.0069	0.0121	**0.0089**	0.0028	31.05
Molybdenum	95	12	12.18	12.1	**12.09**	0.0877	0.7249
Molybdenum	97	11.77	12.04	12.07	**11.96**	0.1648	1.378
Molybdenum	98	11.59	11.81	11.43	**11.61**	0.1899	1.636
~~Nickel~~	~~60~~	~~3.982~~	~~3.734~~	~~3.703~~	~~**3.806**~~	~~0.1529~~	~~4.018~~
Nickel	62	3.198	2.716	2.888	**2.934**	0.2442	8.325
Selenium	77	0.0876	0.417	0.4234	**0.3093**	0.1921	62.09
Selenium	78	2.487	2.681	2.443	**2.537**	0.1265	4.984
Selenium	82	1.253	1.065	1.241	**1.186**	0.1054	8.887
Silver	107	0.0052	-0.0031	0.0034	**0.0018**	0.0044	239.3
Silver	109	0.0031	0.0021	0.0017	**0.0023**	0.0007	31.36
Thallium	203	0.0054	0.0045	0.0073	**0.0057**	0.0014	24.86
Thallium	205	0.0058	0.002	0.0043	**0.004**	0.0019	47.8
~~Zinc~~	~~66~~	~~3.026~~	~~2.918~~	~~2.932~~	~~**2.959**~~	~~0.0591~~	~~1.996~~
Zinc	67	3.759	3.456	4.143	**3.786**	0.3445	9.098
Zinc	68	4.239	4.224	3.829	**4.097**	0.2323	5.668

*see recalibration 3c 3/20/07

Internal Standard Factors:

Lithium	6	1.37	1.349	1.329	**1.37**	n/a	n/a
Gallium	71	1.432	1.454	1.44	**1.432**	n/a	n/a
Indium	115	1.335	1.392	1.386	**1.335**	n/a	n/a
Lutetium	175	1.219	1.245	1.261	**1.219**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:51**					
Antimony	121	0.1684	0.1641	0.1789	**0.1705**	0.0076	4.447
Antimony	123	0.1819	0.1668	0.165	**0.1712**	0.0093	5.444
Arsenic	75	2.294	2.116	2.139	**2.183**	0.0967	4.431
Beryllium	9	0.0189	0.0169	0.019	**0.0183**	0.0012	6.67
Cadmium	111	0.1689	0.1507	0.145	**0.1549**	0.0125	8.043
Cadmium	114	0.1449	0.1398	0.1483	**0.1443**	0.0043	2.995
~~Chromium~~	~~52~~	~~0.9101~~	~~0.9417~~	~~0.9229~~	~~**0.9249**~~	~~0.0159~~	~~1.722~~
Chromium	53	3.144	3.153	3.277	**3.192**	0.0744	2.332
~~Cobalt~~	~~59~~	~~2.237~~	~~2.145~~	~~2.122~~	~~**2.168**~~	~~0.0612~~	~~2.821~~
Copper	63	5.862	5.501	5.36	**5.574**	0.2587	4.642
~~Copper~~	~~65~~	~~4.395~~	~~4.084~~	~~4.129~~	~~**4.202**~~	~~0.1683~~	~~4.004~~
Lead	206	0.2198	0.2094	0.2302	**0.2198**	0.0104	4.739
Lead	207	0.2414	0.2194	0.2433	**0.2347**	0.0133	5.665
Lead	208	0.2323	0.2176	0.2327	**0.2275**	0.0086	3.767
Molybdenum	95	15.41	14.67	14.3	**14.8**	0.5644	3.814
Molybdenum	97	14.97	14.29	14.44	**14.57**	0.3601	2.472
Molybdenum	98	15.02	14.05	14	**14.36**	0.5781	4.026
~~Nickel~~	~~60~~	~~3.841~~	~~3.591~~	~~3.471~~	~~**3.635**~~	~~0.189~~	~~5.2~~
Nickel	62	3.132	3.049	2.646	**2.942**	0.2602	8.843
Selenium	77	0.644	1.157	0.9583	**0.9196**	0.2585	28.11
Selenium	78	2.693	2.981	2.759	**2.811**	0.1508	5.366
Selenium	82	1.15	1.384	1.472	**1.335**	0.1668	12.49
Silver	107	0.0102	0.0054	0.0035	**0.0064**	0.0034	53.53
Silver	109	-0.0031	-0.0048	-0.0035	**-0.0038**	0.0009	24.17
Thallium	203	0.0116	0.0056	0.0064	**0.0079**	0.0033	41.71
Thallium	205	0.0058	0.0058	0.0061	**0.0059**	0.0002	3.318
~~Zinc~~	~~66~~	~~4.677~~	~~4.353~~	~~4.317~~	~~**4.449**~~	~~0.1983~~	~~4.458~~
Zinc	67	5.813	5.723	5.485	**5.674**	0.1698	2.993
Zinc	68	5.668	5.281	5.408	**5.452**	0.1976	3.624

*see Recalibration Ic 3/20/07

Internal Standard Factors:

Lithium	6	1.388	1.475	1.455	**1.388**	n/a	n/a
Gallium	71	1.461	1.467	1.447	**1.461**	n/a	n/a
Indium	115	1.401	1.353	1.394	**1.401**	n/a	n/a
Lutetium	175	1.217	1.253	1.209	**1.217**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV4 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 14:55**					
Antimony	121	25.52	25.75	26.09	**25.79**	0.2877	1.116
Antimony	123	25.09	25.11	25.47	**25.22**	0.2174	0.8619
Arsenic	75	24.9	25.82	26.28	**25.67**	0.7019	2.735
Beryllium	9	22.28	23.99	25.78	**24.02**	1.749	7.281
Cadmium	111	26.01	26.1	25.12	**25.74**	0.5404	2.099
Cadmium	114	25.17	25.37	25.29	**25.28**	0.1008	0.3988
Chromium	52	29	29.19	29.18	**29.12**	0.1059	0.3636
Chromium	53	30.95	31.34	30.84	**31.04**	0.2602	0.838
Cobalt	59	30.88	29.79	29.37	**30.01**	0.779	2.595
Copper	63	28.84	27.38	26.23	**27.49**	1.31	4.765
Copper	65	27.27	26.47	25.3	**26.35**	0.9896	3.756
Lead	206	25.22	24.34	25.59	**25.05**	0.6387	2.55
Lead	207	24.86	23.98	25.17	**24.67**	0.6199	2.513
Lead	208	25.5	24.42	25.76	**25.23**	0.7087	2.809
Molybdenum	95	26.6	26.06	25.47	**26.04**	0.5646	2.168
Molybdenum	97	26.71	26.5	25.55	**26.25**	0.6169	2.35
Molybdenum	98	25.81	26.02	25.34	**25.72**	0.3511	1.365
Nickel	60	30.67	29.25	27.78	**29.23**	1.448	4.954
Nickel	62	29	27.99	26.86	**27.95**	1.075	3.847
Selenium	77	24.86	25.4	24.58	**24.95**	0.4144	1.661
Selenium	78	26.57	27.49	26.14	**26.73**	0.6883	2.575
Selenium	82	25.65	25.97	26.61	**26.08**	0.488	1.872
Silver	107	25.2	25.18	24.8	**25.06**	0.2266	0.9045
Silver	109	25.43	24.83	24.83	**25.03**	0.3455	1.381
Thallium	203	25.42	25.55	25.1	**25.36**	0.2318	0.9142
Thallium	205	24.93	25.23	25.28	**25.15**	0.1884	0.7492
Zinc	66	27.99	27.24	25.76	**27**	1.133	4.196
Zinc	67	27.2	26.18	26.29	**26.55**	0.5589	2.105
Zinc	68	26.86	26.21	25.36	**26.14**	0.7531	2.881

Internal Standard Factors:

Lithium	6	1.358	1.311	1.322	**1.358**	n/a	n/a
Gallium	71	1.174	1.207	1.166	**1.174**	n/a	n/a
Indium	115	1.136	1.184	1.156	**1.136**	n/a	n/a
Lutetium	175	1.095	1.118	1.138	**1.095**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB4**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:03**					
Antimony	121	0.0019	0.0021	0	**0.0013**	0.0011	86.06
Antimony	123	0.0028	0.0004	0.0004	**0.0012**	0.0014	115.1
Arsenic	75	0.0737	0.0775	0.0535	**0.0682**	0.0129	18.87
Beryllium	9	0.0009	0.0051	-0.0019	**0.0014**	0.0035	250.9
Cadmium	111	0.0024	0.004	-0.0014	**0.0017**	0.0028	163.3
Cadmium	114	0.0011	0.0008	0.0004	**0.0008**	0.0004	47.03
Chromium	52	0.0365	0.0859	0.071	**0.0644**	0.0253	39.28
Chromium	53	0.1108	0.0738	0.0656	**0.0834**	0.0241	28.85
Cobalt	59	0.0002	0.0008	-0.003	**-0.0007**	0.0021	300.7
Copper	63	0.085	0.0845	0.0839	**0.0845**	0.0006	0.6781
Copper	65	0.0582	0.0641	0.0666	**0.063**	0.0043	6.847
Lead	206	0.0163	0.0026	0.0058	**0.0082**	0.0072	87.61
Lead	207	0.0154	0.0153	0.0046	**0.0118**	0.0062	52.92
Lead	208	0.0102	0.0072	0.0031	**0.0068**	0.0035	51.77
Molybdenum	95	0.0133	0.0059	0.0103	**0.0098**	0.0037	37.89
Molybdenum	97	0.0045	0.0058	0.008	**0.0061**	0.0018	29.31
Molybdenum	98	0.0039	0.0075	0.008	**0.0065**	0.0022	34.55
Nickel	60	0.0814	0.036	-0.0026	**0.0382**	0.0421	110
Nickel	62	0.0031	0.1297	0.1982	**0.1103**	0.099	89.69
Selenium	77	-0.1201	-0.2305	-0.233	**-0.1945**	0.0645	33.14
Selenium	78	0.3442	0.4134	0.4343	**0.3973**	0.0472	11.88
Selenium	82	0.1302	0.0745	-0.004	**0.0669**	0.0674	100.7
Silver	107	0.0237	0.02	0.0153	**0.0196**	0.0042	21.55
Silver	109	0.0202	0.0169	0.0114	**0.0162**	0.0045	27.52
Thallium	203	-0.0006	0.0014	0	**0.0003**	0.001	404.2
Thallium	205	-0.0012	-0.0022	-0.001	**-0.0015**	0.0007	46.32
Zinc	66	0.6875	0.5601	0.5389	**0.5955**	0.0804	13.5
Zinc	67	0.4186	0.5491	0.3605	**0.4427**	0.0966	21.82
Zinc	68	0.5589	0.5569	0.3819	**0.4992**	0.1016	20.36

Internal Standard Factors:

Lithium	6	1.315	1.372	1.328	**1.315**	n/a	n/a
Gallium	71	1.178	1.225	1.216	**1.178**	n/a	n/a
Indium	115	1.125	1.163	1.183	**1.125**	n/a	n/a
Lutetium	175	1.056	1.109	1.138	**1.056**	n/a	n/a

Sample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	25 ppb Std. MS10-46-A	Fully Quant Standard	0 kg	0 ml	1.00
3	ICV MS10-40-H	Unknown	0 kg	0 ml	1.00
4	CCV1 MS10-46-A	Unknown	0 kg	0 ml	1.00
5	ICB	Unknown	0 kg	0 ml	1.00
6	CCB1	Unknown	0 kg	0 ml	1.00
7	CRA WATER MS10-43-F	Unknown	0 kg	0 ml	1.00
8	PBW K0701647	Unknown	0 kg	0 ml	1.00
9	K0701647-001	Unknown	0 kg	0 ml	1.00
10	K0701647-001D	Unknown	0 kg	0 ml	1.00
11	K0701647-001L 1/5	Unknown	0 kg	0 ml	1.00
12	K0701647-001A +20	Unknown	0 kg	0 ml	1.00
13	K0701647-001S	Unknown	0 kg	0 ml	1.00
14	LCSW K0701647	Unknown	0 kg	0 ml	1.00
15	K0701647-002	Unknown	0 kg	0 ml	1.00
16	K0701703-001	Unknown	0 kg	0 ml	1.00
17	CCV2 MS10-46-A	Unknown	0 kg	0 ml	1.00
18	CCB2	Unknown	0 kg	0 ml	1.00
19	K0701680-001	Unknown	0 kg	0 ml	1.00
20	K0701680-001D	Unknown	0 kg	0 ml	1.00
21	K0701680-001S	Unknown	0 kg	0 ml	1.00
22	K0701680-003	Unknown	0 kg	0 ml	1.00
23	K0701680-004	Unknown	0 kg	0 ml	1.00
24	K0701680-001 DISS.	Unknown	0 kg	0 ml	1.00
25	K0701680-003 DISS.	Unknown	0 kg	0 ml	1.00
26	K0701680-004 DISS.	Unknown	0 kg	0 ml	1.00
27	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
28	CCB3	Unknown	0 kg	0 ml	1.00

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,380.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-35.10
Focus	11.30

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:14**					
Chromium	52	-0.0278	0.0229	0.0048	**0**	0.0257	0
Chromium	53	-0.0137	0.0049	0.0088	**0**	0.012	0
Cobalt	59	0.0001	-0.0017	0.0016	**0**	0.0016	0
Copper	63	-0.0061	0.0021	0.004	**0**	0.0054	0
Copper	65	-0.008	-0.0025	0.0105	**0**	0.0095	0
Nickel	60	-0.0263	0.0018	0.0245	**0**	0.0254	0
Nickel	62	-0.0025	0.0015	0.001	**0**	0.0022	0
Zinc	66	-0.0702	0.0555	0.0147	**0**	0.0641	0
Zinc	67	0.0724	0.0609	-0.1333	**0**	0.1156	0
Zinc	68	-0.0523	0.0786	-0.0263	**0**	0.0693	0

3/20/07

Internal Standard Factors:

Gallium	71	0.929	1.024	1.057	**0.929**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**25 ppb Std. MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:16**					
Chromium	52	25.28	25.76	23.96	**25**	0.9283	3.713
Chromium	53	25.36	25.56	24.07	**25**	0.808	3.232
Cobalt	59	25.73	25.68	23.58	**25**	1.228	4.914
Copper	63	25.77	25.74	23.48	**25**	1.315	5.262
Copper	65	25.83	25.61	23.56	**25**	1.249	4.995
Nickel	60	26.14	25.24	23.62	**25**	1.28	5.12
Nickel	62	26.08	25.71	23.21	**25**	1.561	6.243
Zinc	66	25.92	25.24	23.84	**25**	1.062	4.249
Zinc	67	25.54	25.07	24.39	**25**	0.5781	2.312
Zinc	68	25.71	25.39	23.9	**25**	0.9627	3.851

Internal Standard Factors:

Gallium	71	1.007	1.074	1.039	**1.007**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICV MS10-40-H**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:18**					
Chromium	52	10.32	9.887	9.689	**9.964**	0.3204	3.216
Chromium	53	10.33	10.07	9.766	**10.06**	0.2834	2.818
Cobalt	59	25.56	24.29	23.18	**24.34**	1.191	4.891
Copper	63	12.51	12.14	11.63	**12.09**	0.4448	3.678
Copper	65	12.66	12.18	11.59	**12.15**	0.5363	4.416
Nickel	60	25.03	24.29	22.92	**24.08**	1.067	4.43
Nickel	62	24.77	24.39	23.07	**24.08**	0.8889	3.692
Zinc	66	25.75	24.63	23.83	**24.74**	0.9609	3.884
Zinc	67	31.93	31.24	30.32	**31.17**	0.8111	2.603
Zinc	68	29.94	30.24	28.56	**29.58**	0.8946	3.024

Internal Standard Factors:

Gallium	71	1.008	1.055	1.036	**1.008**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV1 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:20**					
Chromium	52	28.13	24.7	23.97	**25.6**	2.219	8.667
Chromium	53	27.98	24.52	23.6	**25.37**	2.305	9.088
Cobalt	59	27.16	23.9	22.36	**24.47**	2.447	9.999
Copper	63	27.2	23.49	22.52	**24.4**	2.47	10.12
Copper	65	26.93	23.48	22.82	**24.41**	2.21	9.053
Nickel	60	27.42	23.53	22.37	**24.44**	2.644	10.82
Nickel	62	27.08	23.51	22.13	**24.24**	2.552	10.52
Zinc	66	27.74	24.28	23.22	**25.08**	2.365	9.431
Zinc	67	27.36	23.85	23.77	**24.99**	2.048	8.195
Zinc	68	28.28	24.47	23.59	**25.45**	2.492	9.79

Internal Standard Factors:

Gallium	71	1.054	1.048	1.017	**1.054**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:21**					
Chromium	52	0.0883	0.032	0.0051	**0.0418**	0.0425	101.6
Chromium	53	0.0336	0.006	-0.0021	**0.0125**	0.0187	149.9
Cobalt	59	0.0014	0.0015	-0.0011	**0.0006**	0.0015	237.1
Copper	63	-0.0218	-0.017	-0.0228	**-0.0205**	0.0031	15.2
Copper	65	-0.0041	-0.0077	-0.0083	**-0.0067**	0.0023	34.24
Nickel	60	-0.0182	-0.0088	-0.0485	**-0.0252**	0.0208	82.62
Nickel	62	-0.0121	0.0491	-0.1612	**-0.0414**	0.1082	261.1
Zinc	66	-0.0651	-0.1177	0.0214	**-0.0538**	0.0703	130.6
Zinc	67	0.0256	0.1171	-0.0991	**0.0145**	0.1085	747.4
Zinc	68	-0.0106	0.0362	0.0204	**0.0154**	0.0238	155

Internal Standard Factors:

Gallium	71	1.082	1.065	1.068	**1.082**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB1**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:23**					
Chromium	52	-0.0027	0.0055	0.0232	**0.0087**	0.0132	152.5
Chromium	53	0.0031	0.007	0.0148	**0.0083**	0.006	72.26
Cobalt	59	-0.0003	-0.0003	-0.0003	**-0.0003**	0	10.57
Copper	63	-0.0061	-0.0235	-0.0047	**-0.0115**	0.0105	91.57
Copper	65	-0.0078	0.0004	-0.0222	**-0.0099**	0.0114	115.5
Nickel	60	-0.0561	-0.0198	-0.0303	**-0.0354**	0.0187	52.77
Nickel	62	-0.0693	-0.2107	-0.1768	**-0.1523**	0.0738	48.47
Zinc	66	-0.0312	-0.0714	-0.0127	**-0.0384**	0.03	78.11
Zinc	67	-0.0069	0.0227	-0.1466	**-0.0436**	0.0904	207.4
Zinc	68	-0.1555	-0.1183	-0.1067	**-0.1268**	0.0255	20.1

Internal Standard Factors:

Gallium	71	0.979	1.042	1.076	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		CRA WATER MS10-43-E			Mean	SD	%RSD
TimeStamp		3/20/07 15:25					
Chromium	52	0.2703	0.2275	0.1756	**0.2245**	0.0475	21.14
Chromium	53	0.2046	0.2657	0.2128	**0.2277**	0.0331	14.55
Cobalt	59	0.0246	0.0202	0.0189	**0.0212**	0.003	14.21
Copper	63	0.1006	0.0956	0.0854	**0.0939**	0.0077	8.235
Copper	65	0.1016	0.0741	0.0792	**0.0849**	0.0147	17.26
Nickel	60	0.2062	0.1914	0.1644	**0.1873**	0.0212	11.32
Nickel	62	0.1685	0.175	0.0359	**0.1265**	0.0785	62.08
Zinc	66	0.5392	0.4031	0.3079	**0.4167**	0.1163	27.9
Zinc	67	0.5209	0.4271	0.3838	**0.444**	0.0701	15.78
Zinc	68	0.439	0.4007	0.3863	**0.4087**	0.0272	6.663

Internal Standard Factors:

Gallium	71	1.022	1.059	1.034	**1.022**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:27**					
Chromium	52	0.1605	0.0937	0.0174	**0.0905**	0.0716	79.1
Chromium	53	0.025	0.0234	-0.004	**0.0148**	0.0163	110.4
Cobalt	59	0.0016	-0.0012	0	**0.0001**	0.0014	1219
Copper	63	-0.0015	-0.0143	-0.0232	**-0.013**	0.0109	84.1
Copper	65	-0.0021	0.0003	-0.0021	**-0.0013**	0.0014	109.8
Nickel	60	0.0432	-0.0159	-0.0376	**-0.0034**	0.0419	1216
Nickel	62	0.018	-0.0133	-0.0575	**-0.0176**	0.038	215.9
Zinc	66	0.1282	0.0939	-0.0407	**0.0605**	0.0893	147.6
Zinc	67	0.1377	-0.0601	-0.1678	**-0.0301**	0.1549	515.7
Zinc	68	0.1217	0.0214	-0.0123	**0.0436**	0.0697	159.8

Internal Standard Factors:

Gallium	71	1.075	1.077	1.033	**1.075**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:29**					
Chromium	52	1.104	0.9272	0.9746	**1.002**	0.0915	9.136
Chromium	53	1.428	1.316	1.326	**1.357**	0.0619	4.561
Cobalt	59	0.0668	0.0623	0.0563	**0.0618**	0.0053	8.54
Copper	63	1.755	1.615	1.578	**1.649**	0.0931	5.642
Copper	65	1.731	1.607	1.573	**1.637**	0.0831	5.079
Nickel	60	1.83	1.673	1.693	**1.732**	0.0853	4.926
Nickel	62	1.552	1.283	1.107	**1.314**	0.2241	17.05
Zinc	66	4.221	3.868	3.883	**3.991**	0.1992	4.991
Zinc	67	4.831	4.151	4.599	**4.527**	0.3458	7.639
Zinc	68	4.742	4.418	4.429	**4.529**	0.1841	4.064

Internal Standard Factors:

Gallium	71	1.052	1.054	1.075	**1.052**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:31**					
Chromium	52	1.109	0.9909	0.9374	**1.012**	0.0878	8.675
Chromium	53	1.449	1.342	1.345	**1.379**	0.0608	4.408
Cobalt	59	0.0614	0.055	0.0551	**0.0572**	0.0037	6.388
Copper	63	1.816	1.609	1.527	**1.65**	0.1492	9.037
Copper	65	1.798	1.609	1.518	**1.641**	0.1428	8.7
Nickel	60	1.872	1.662	1.578	**1.704**	0.1515	8.889
Nickel	62	1.503	1.341	1.268	**1.371**	0.1207	8.806
Zinc	66	3.772	3.547	3.325	**3.548**	0.2231	6.289
Zinc	67	3.936	3.976	3.298	**3.737**	0.3805	10.18
Zinc	68	4.233	3.868	3.706	**3.936**	0.2697	6.853

Internal Standard Factors:

Gallium	71	1.064	1.084	1.074	**1.064**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001L 1/5**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:33**					
Chromium	52	0.204	0.2323	0.2141	**0.2168**	0.0143	6.609
Chromium	53	0.2775	0.2992	0.3122	**0.2963**	0.0175	5.91
Cobalt	59	0.0115	0.0104	0.0114	**0.0111**	0.0006	5.544
Copper	63	0.2978	0.2998	0.2849	**0.2942**	0.0081	2.752
Copper	65	0.2875	0.3146	0.2782	**0.2935**	0.0189	6.452
Nickel	60	0.262	0.3287	0.3041	**0.2983**	0.0338	11.32
Nickel	62	0.2859	0.1896	0.157	**0.2109**	0.067	31.78
Zinc	66	0.686	0.6842	0.6409	**0.6703**	0.0255	3.808
Zinc	67	0.6339	0.8118	0.7467	**0.7308**	0.09	12.32
Zinc	68	0.8627	0.7542	0.7679	**0.7949**	0.0591	7.43

Internal Standard Factors:

Gallium	71	0.98	1.034	1.003	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-001A +20**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:34**					
Chromium	52	22.42	21.31	19.76	**21.16**	1.334	6.305
Chromium	53	22.84	21.34	20.23	**21.47**	1.309	6.096
Cobalt	59	20.4	19.04	18.02	**19.15**	1.194	6.232
Copper	63	21.2	19.96	18.66	**19.94**	1.269	6.363
Copper	65	21.34	20.16	18.79	**20.1**	1.273	6.334
Nickel	60	21.51	20.02	18.96	**20.16**	1.28	6.347
Nickel	62	21	19.21	18.74	**19.65**	1.194	6.076
Zinc	66	24.18	23	21.46	**22.88**	1.368	5.977
Zinc	67	25.24	23.35	22.77	**23.79**	1.293	5.434
Zinc	68	25.58	24.25	22.76	**24.2**	1.411	5.833

Internal Standard Factors:

Gallium	71	1.046	1.055	1.04	**1.046**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020**
Experiment: 03-20-07D | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 80435**

Sample Name:		**K0701647-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:36**					
Chromium	52	21.69	20.92	20.52	**21.04**	0.5989	2.846
Chromium	53	22.08	21.33	21.09	**21.5**	0.5195	2.416
Cobalt	59	19.53	18.53	18.41	**18.82**	0.6115	3.249
Copper	63	20.43	19.65	18.96	**19.68**	0.7325	3.722
Copper	65	20.08	20.12	19.15	**19.79**	0.5502	2.781
Nickel	60	20.84	19.63	19.23	**19.9**	0.8398	4.22
Nickel	62	19.67	19.42	18.81	**19.3**	0.4403	2.282
Zinc	66	22.79	22.37	21.68	**22.28**	0.56	2.514
Zinc	67	24.26	22.61	22.61	**23.16**	0.9566	4.13
Zinc	68	23.62	23.37	22.96	**23.32**	0.3336	1.431

Internal Standard Factors:

Gallium	71	1.03	1.07	1.066	**1.03**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701647**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:38**					
Chromium	52	20.26	19.43	19.37	**19.69**	0.5007	2.543
Chromium	53	19.92	19.34	19.43	**19.56**	0.3098	1.583
Cobalt	59	19.34	18.37	18.11	**18.61**	0.6504	3.495
Copper	63	18.8	18.2	17.69	**18.23**	0.5567	3.053
Copper	65	18.8	18.1	18	**18.3**	0.4378	2.392
Nickel	60	18.88	17.77	17.71	**18.12**	0.6564	3.623
Nickel	62	19.21	17.88	17.52	**18.2**	0.8862	4.868
Zinc	66	18.87	18.64	18.02	**18.51**	0.4384	2.368
Zinc	67	18.7	19.43	18.45	**18.86**	0.5107	2.708
Zinc	68	19.03	18.78	18.55	**18.79**	0.2419	1.288

Internal Standard Factors:

Gallium	71	0.999	1.03	1.043	**0.999**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701647-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:40**					
Chromium	52	0.6621	0.7696	0.8119	**0.7479**	0.0772	10.33
Chromium	53	29.52	32.2	32.93	**31.55**	1.792	5.68
Cobalt	59	0.4097	0.4227	0.4489	**0.4271**	0.02	4.676
Copper	63	3.449	3.669	3.781	**3.633**	0.1691	4.653
Copper	65	1.286	1.378	1.491	**1.385**	0.1029	7.428
Nickel	60	13.16	13.84	14.44	**13.82**	0.6419	4.646
Nickel	62	8.172	9.015	9.191	**8.793**	0.5448	6.196
Zinc	66	556.9	620.1	647.4	**608.1**	46.37	7.625
Zinc	67	479.2	540.6	561.6	**527.1**	42.8	8.119
Zinc	68	545.3	610	621.6	**592.3**	41.14	6.945

Internal Standard Factors:

Gallium	71	1.459	1.636	1.69	**1.459**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701703-001			Mean	SD	%RSD
TimeStamp		3/20/07 15:42					
Chromium	52	0.3657	0.3427	0.3336	**0.3473**	0.0165	4.754
Chromium	53	5.686	5.158	5.038	**5.294**	0.3446	6.509
Cobalt	59	0.3066	0.286	0.2732	**0.2886**	0.0169	5.851
Copper	63	0.5971	0.5297	0.5149	**0.5473**	0.0438	8.006
Copper	65	0.3841	0.3751	0.3814	**0.3802**	0.0046	1.212
Nickel	60	2.976	2.749	2.799	**2.841**	0.119	4.188
Nickel	62	0.9339	0.6652	0.6632	**0.7541**	0.1557	20.65
Zinc	66	8.626	7.931	7.873	**8.143**	0.4193	5.148
Zinc	67	14.09	13.48	13.69	**13.75**	0.3098	2.252
Zinc	68	13.05	12.35	12.39	**12.6**	0.3966	3.148

Internal Standard Factors:

Gallium	71	1.179	1.193	1.183	**1.179**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV2 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:47**					
Chromium	52	24.55	24.13	23.8	**24.16**	0.3755	1.554
Chromium	53	25.42	24.71	24.67	**24.93**	0.423	1.696
Cobalt	59	24.25	24.11	23.34	**23.9**	0.4919	2.058
Copper	63	24.06	24.2	23.03	**23.76**	0.6372	2.681
Copper	65	23.78	24.03	23.06	**23.62**	0.5025	2.127
Nickel	60	23.84	24.09	22.95	**23.63**	0.6013	2.545
Nickel	62	24.13	24.51	23.01	**23.88**	0.7835	3.281
Zinc	66	23.53	24.02	23.19	**23.58**	0.4167	1.767
Zinc	67	24.41	24.86	24.06	**24.44**	0.4005	1.639
Zinc	68	24.72	23.96	23.45	**24.04**	0.6403	2.663

Internal Standard Factors:

Gallium	71	0.92	1.006	1.01	**0.92**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:49**					
Chromium	52	0.0372	0.0055	0.0408	**0.0279**	0.0194	69.74
Chromium	53	0.6042	0.6101	0.5588	**0.591**	0.0281	4.751
Cobalt	59	0.001	0.0015	0.0003	**0.001**	0.0006	64.52
Copper	63	-0.0015	-0.0073	-0.0065	**-0.0051**	0.0031	61.26
Copper	65	-0.0033	0.0023	-0.0056	**-0.0022**	0.0041	185
Nickel	60	-0.0492	-0.0891	-0.0943	**-0.0775**	0.0247	31.8
Nickel	62	-0.0958	-0.0683	-0.1543	**-0.1061**	0.0439	41.38
Zinc	66	-0.073	-0.0363	-0.081	**-0.0634**	0.0238	37.6
Zinc	67	0.2411	0.4646	0.3188	**0.3415**	0.1135	33.23
Zinc	68	-0.0161	0.0378	-0.0084	**0.0044**	0.0291	657.6

Internal Standard Factors:

Gallium	71	0.983	1.017	1.023	**0.983**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:52**					
Chromium	52	3.935	3.649	3.338	**3.641**	0.2988	8.207
Chromium	53	4.506	4.101	3.821	**4.143**	0.3443	8.312
Cobalt	59	1.867	1.704	1.602	**1.724**	0.1335	7.741
Copper	63	7.109	6.524	6.249	**6.628**	0.4389	6.623
Copper	65	6.587	6.019	5.608	**6.071**	0.4915	8.096
Nickel	60	3.421	3.158	2.861	**3.147**	0.2803	8.907
Nickel	62	4.248	4.043	3.916	**4.069**	0.1674	4.115
Zinc	66	7.957	7.197	6.674	**7.276**	0.6452	8.867
Zinc	67	11.06	10.17	9.608	**10.28**	0.7301	7.103
Zinc	68	9.348	8.795	8.159	**8.768**	0.5948	6.784

Internal Standard Factors:

Gallium	71	1.171	1.199	1.175	**1.171**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:54**					
Chromium	52	4.104	3.573	3.408	**3.695**	0.3634	9.834
Chromium	53	4.53	4.096	3.879	**4.168**	0.3317	7.959
Cobalt	59	1.962	1.697	1.592	**1.75**	0.1905	10.89
Copper	63	7.198	6.265	6.028	**6.497**	0.6183	9.516
Copper	65	6.498	5.795	5.457	**5.917**	0.531	8.975
Nickel	60	3.607	3.021	2.88	**3.169**	0.3854	12.16
Nickel	62	4.772	3.839	3.718	**4.11**	0.5771	14.04
Zinc	66	8	6.943	6.702	**7.215**	0.6903	9.567
Zinc	67	12.22	10.25	9.297	**10.59**	1.49	14.07
Zinc	68	9.344	8.516	8.27	**8.71**	0.5624	6.458

Internal Standard Factors:

Gallium	71	1.22	1.207	1.195	**1.22**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701680-001S			Mean	SD	%RSD
TimeStamp		3/20/07 15:55					
Chromium	52	24.03	22.36	21.81	**22.73**	1.154	5.078
Chromium	53	24.6	22.93	22.4	**23.31**	1.147	4.921
Cobalt	59	21.19	19.49	18.82	**19.84**	1.222	6.158
Copper	63	24.45	22.46	21.45	**22.78**	1.527	6.703
Copper	65	23.91	22.4	21.54	**22.62**	1.199	5.3
Nickel	60	21.63	19.87	18.86	**20.12**	1.399	6.956
Nickel	62	22.57	20.71	19.72	**21**	1.444	6.877
Zinc	66	28.38	26.43	26.14	**26.99**	1.22	4.521
Zinc	67	30.99	29.76	29.36	**30.04**	0.8523	2.838
Zinc	68	30.11	28.33	27.88	**28.77**	1.18	4.103

Internal Standard Factors:

Gallium	71	1.157	1.172	1.159	**1.157**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701680-003			Mean	SD	%RSD
TimeStamp		3/20/07 15:57					
Chromium	52	6.303	5.607	5.322	**5.744**	0.5047	8.786
Chromium	53	6.704	6.113	5.608	**6.142**	0.5483	8.928
Cobalt	59	2.124	1.872	1.753	**1.916**	0.1896	9.893
Copper	63	4.742	4.273	3.942	**4.319**	0.402	9.309
Copper	65	4.692	4.292	3.956	**4.313**	0.3682	8.536
Nickel	60	3.363	2.854	2.773	**2.997**	0.3199	10.67
Nickel	62	4.868	4.312	3.996	**4.392**	0.4414	10.05
Zinc	66	12.8	11.78	10.94	**11.84**	0.931	7.864
Zinc	67	14.18	13.92	12.29	**13.46**	1.025	7.612
Zinc	68	13.5	12.08	11.8	**12.46**	0.9151	7.343

Internal Standard Factors:

Gallium	71	1.132	1.136	1.109	**1.132**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 15:58**					
Chromium	52	52.79	47.68	47.63	**49.37**	2.961	5.997
Chromium	53	53.91	48.68	48.53	**50.37**	3.065	6.085
Cobalt	59	14.2	12.57	12.71	**13.16**	0.9033	6.865
Copper	63	33.24	29.66	30.51	**31.14**	1.874	6.02
Copper	65	34.57	31.16	31.69	**32.48**	1.836	5.655
Nickel	60	22.36	20.04	20.22	**20.87**	1.291	6.184
Nickel	62	30.92	27.4	27.53	**28.62**	1.993	6.964
Zinc	66	91.15	81.26	82.79	**85.06**	5.323	6.258
Zinc	67	102	91.64	92.93	**95.51**	5.624	5.888
Zinc	68	95.44	88.08	89.13	**90.88**	3.984	4.384

Internal Standard Factors:

Gallium	71	0.918	0.885	0.912	**0.918**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-001 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:00**					
Chromium	52	0.5365	0.576	0.7023	**0.6049**	0.0866	14.31
Chromium	53	0.7834	0.7797	0.7899	**0.7843**	0.0052	0.6584
Cobalt	59	0.5775	0.5788	0.6674	**0.6079**	0.0515	8.478
Copper	63	2.887	2.937	3.302	**3.042**	0.2269	7.459
Copper	65	2.272	2.328	2.529	**2.376**	0.1353	5.695
Nickel	60	1.503	1.486	1.7	**1.563**	0.1188	7.598
Nickel	62	1.446	1.543	1.741	**1.577**	0.1504	9.54
Zinc	66	2.21	2.192	2.494	**2.299**	0.1695	7.371
Zinc	67	3.628	3.747	3.945	**3.774**	0.1602	4.244
Zinc	68	2.844	3.099	3.371	**3.105**	0.2634	8.484

Internal Standard Factors:

Gallium	71	1.181	1.247	1.342	**1.181**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-003 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:02**					
Chromium	52	0.4581	0.3976	0.3986	**0.4181**	0.0346	8.283
Chromium	53	1.158	1.151	1.168	**1.159**	0.0087	0.7528
Cobalt	59	1.779	1.599	1.572	**1.65**	0.113	6.846
Copper	63	3.131	2.871	2.794	**2.932**	0.1766	6.024
Copper	65	2.115	1.9	1.993	**2.003**	0.1078	5.381
Nickel	60	3.294	2.851	2.817	**2.987**	0.2663	8.916
Nickel	62	2.411	2.344	2.119	**2.291**	0.1531	6.681
Zinc	66	2.116	1.992	2.063	**2.057**	0.0619	3.008
Zinc	67	3.555	2.915	3.272	**3.248**	0.3207	9.876
Zinc	68	3.414	3.06	3.227	**3.234**	0.1769	5.471

Internal Standard Factors:

Gallium	71	1.253	1.269	1.293	**1.253**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701680-004 DISS.**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:03**					
Chromium	52	0.6438	0.6874	0.6797	**0.6703**	0.0233	3.476
Chromium	53	2.507	2.487	2.444	**2.479**	0.0321	1.295
Cobalt	59	1.591	1.598	1.566	**1.585**	0.0171	1.076
Copper	63	4.412	4.353	4.268	**4.344**	0.0723	1.665
Copper	65	3.445	3.495	3.489	**3.476**	0.0272	0.7823
Nickel	60	2.732	2.655	2.53	**2.639**	0.1021	3.868
Nickel	62	2.405	2.064	1.888	**2.119**	0.2627	12.4
Zinc	66	3.228	3.375	3.234	**3.279**	0.0829	2.529
Zinc	67	4.519	5.013	4.315	**4.616**	0.3587	7.772
Zinc	68	4.159	4.179	4.077	**4.138**	0.054	1.306

Internal Standard Factors:

Gallium	71	1.199	1.276	1.284	**1.199**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV3 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:05**					
Chromium	52	24.51	23.86	23.32	**23.9**	0.5954	2.492
Chromium	53	24.52	24.33	23.67	**24.17**	0.4475	1.851
Cobalt	59	23.22	23.03	22.12	**22.79**	0.5916	2.596
Copper	63	23.7	22.98	22.02	**22.9**	0.8411	3.673
Copper	65	23.5	22.79	22.04	**22.78**	0.7323	3.215
Nickel	60	23.29	23.06	21.77	**22.71**	0.8153	3.591
Nickel	62	23.15	22.88	21.75	**22.59**	0.7449	3.297
Zinc	66	23.65	23.24	23	**23.3**	0.3312	1.421
Zinc	67	23.95	24.16	22.61	**23.57**	0.8389	3.559
Zinc	68	24.41	23.7	23.3	**23.81**	0.5641	2.369

Internal Standard Factors:

Gallium	71	1.028	1.08	1.064	**1.028**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07D
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 16:09**					
Chromium	52	0.0161	0.0051	-0.0355	**-0.0047**	0.0272	575
Chromium	53	0.1411	0.1314	0.1161	**0.1296**	0.0126	9.722
Cobalt	59	-0.0006	-0.0006	-0.0006	**-0.0006**	0	5.713
Copper	63	-0.007	-0.0006	-0.0136	**-0.0071**	0.0065	91.34
Copper	65	-0.0105	0.0046	-0.0133	**-0.0064**	0.0096	149.8
Nickel	60	-0.066	-0.0214	-0.0876	**-0.0584**	0.0337	57.83
Nickel	62	-0.0822	-0.0455	-0.087	**-0.0715**	0.0227	31.7
Zinc	66	-0.0296	-0.0312	0.0201	**-0.0136**	0.0292	215.5
Zinc	67	-0.1937	0.008	0.0157	**-0.0567**	0.1188	209.6
Zinc	68	0.0154	0.0095	-0.1729	**-0.0494**	0.107	216.9

Internal Standard Factors:

Gallium	71	0.998	1.074	1.069	**0.998**	n/a	n/a

Diesel & Residual Range Organics

Organic Analysis:
Diesel and Residual Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Diesel and Residual Range Organics

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104C1	K0701703-001	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: TRISH LOAR

Date: 3/23/07 Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Diesel and Residual Range Organics

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	65-135	03/20/07	Acceptable
n-Triacontane	88	65-135	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703835-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	97	65-135	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
DAEGW104C1	K0701703-001	89	88
Method Blank	KWG0703835-3	97	97
Lab Control Sample	KWG0703835-1	102	104
Duplicate Lab Control Sample	KWG0703835-2	97	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703835

	Lab Control Sample KWG0703835-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703835-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1720	1600	107	1650	1600	103	65-135	4	35
C24 - C36 RRO	1000	800	125	966	800	121	65-135	4	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:38

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\032007.TAR\0320W010.D
Lab Code:	KWG0703835-3	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
DAEGW104C1	K0701703-001	J:\GC21\DATA\032007.TAR\0320W007.D	03/20/07	12:37
Lab Control Sample	KWG0703835-1	J:\GC21\DATA\032007.TAR\0320W008.D	03/20/07	12:58
Duplicate Lab Control Sample	KWG0703835-2	J:\GC21\DATA\032007.TAR\0320W009.D	03/20/07	13:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703835-1	**Lab Code:**	KWG0703835-2
File ID:	J:\GC21\DATA\032007.TAR\0320W008.D	**File ID:**	J:\GC21\DATA\032007.TAR\0320W009.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/06/2007	**Date Extracted:**	03/06/2007
Date Analyzed:	03/20/2007	**Date Analyzed:**	03/20/2007
Time Analyzed:	12:58	**Time Analyzed:**	13:18

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
DAEGW104C1	K0701703-001	J:\GC21\DATA\032007.TAR\0320W007.D	03/20/07	12:37
Method Blank	KWG0703835-3	J:\GC21\DATA\032007.TAR\0320W010.D	03/20/07	13:38

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation					
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20	
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20	
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20	
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20	

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Calibration Date:**	01/19/2007
		Date Analyzed:	01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration ID:**	CAL6131
Analysis Method:	8015B	**Units:**	ppm
File ID:	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W003.D
J:\GC21\DATA\032007.TAR\0320W004.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1350	-2	NA	± 15 %	AverageRF
n-Triacontane	50	47	1060	1010	-5	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1070	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	490	511	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W016.D
J:\GC21\DATA\032007.TAR\0320W017.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1370	1400	2	NA	± 15 %	AverageRF
n-Triacontane	50	51	1060	1090	3	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1110	1110	1	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	521	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Diesel and Residual Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703832
Instrument ID: GC21
Column: ZB-1 15m

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0320W003.D	Continuing Calibration Verification	KWG0703832-1	3/20/2007	11:16		3/20/2007	11:30
0320W004.D	Continuing Calibration Verification	KWG0703832-1	3/20/2007	11:37		3/20/2007	11:51
0320W005.D	Instrument Blank	KWG0703832-3	3/20/2007	11:57		3/20/2007	12:11
0320W006.D	ZZZZZZ	ZZZZZZ	3/20/2007	12:17		3/20/2007	12:31
0320W007.D	DAEGW104C1	K0701703-001	3/20/2007	12:37		3/20/2007	12:51
0320W008.D	Lab Control Sample	KWG0703835-1	3/20/2007	12:58		3/20/2007	13:12
0320W009.D	Duplicate Lab Control Sample	KWG0703835-2	3/20/2007	13:18		3/20/2007	13:32
0320W010.D	Method Blank	KWG0703835-3	3/20/2007	13:38		3/20/2007	13:52
0320W016.D	Continuing Calibration Verification	KWG0703832-2	3/20/2007	15:40		3/20/2007	15:54
0320W017.D	Continuing Calibration Verification	KWG0703832-2	3/20/2007	16:00		3/20/2007	16:14
0320W018.D	Instrument Blank	KWG0703832-4	3/20/2007	16:21		3/20/2007	16:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/06/2007

Extraction Prep Log
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: KWG0703835
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104C1	K0701703-001	03/02/07	03/03/07	1020ml	2ml	NA	
Method Blank	KWG0703835-3	NA	NA	1000ml	2ml	NA	
Lab Control Sample	KWG0703835-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0703835-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
DAEGW104C1	K0701703-001	89	88
Method Blank	KWG0703835-3	97	97
Lab Control Sample	KWG0703835-1	102	104
Duplicate Lab Control Sample	KWG0703835-2	97	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703835

	Lab Control Sample KWG0703835-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703835-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1720	1600	107	1650	1600	103	65-135	4	35
C24 - C36 RRO	1000	800	125	966	800	121	65-135	4	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/06/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:38

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\032007.TAR\0320W010.D
Lab Code:	KWG0703835-3	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
DAEGW104C1	K0701703-001	J:\GC21\DATA\032007.TAR\0320W007.D	03/20/07	12:37
Lab Control Sample	KWG0703835-1	J:\GC21\DATA\032007.TAR\0320W008.D	03/20/07	12:58
Duplicate Lab Control Sample	KWG0703835-2	J:\GC21\DATA\032007.TAR\0320W009.D	03/20/07	13:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703835-1	**Lab Code:**	KWG0703835-2
File ID:	J:\GC21\DATA\032007.TAR\0320W008.D	**File ID:**	J:\GC21\DATA\032007.TAR\0320W009.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/06/2007	**Date Extracted:**	03/06/2007
Date Analyzed:	03/20/2007	**Date Analyzed:**	03/20/2007
Time Analyzed:	12:58	**Time Analyzed:**	13:18

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703835

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
DAEGW104C1	K0701703-001	J:\GC21\DATA\032007.TAR\0320W007.D	03/20/07	12:37
Method Blank	KWG0703835-3	J:\GC21\DATA\032007.TAR\0320W010.D	03/20/07	13:38

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Diesel and Residual Range Organics

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	89	65-135	03/20/07	Acceptable
n-Triacontane	88	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W007.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/20/2007 12:37
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 03/2007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	K0701703
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584806	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\032007.TAR\0320W007.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 12:37	**Quant Date:**	03/20/2007 17:49	**Vial:**	12
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-001			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	30430	22.20	89	65-135	OK
n-Triacontane	7.60	0.00	23506	22.11	88	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2968	2.68	50	U	
C24 - C36 RRO	6.35	?	4994	10.19	300	U	

Prep Amount:	1020 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

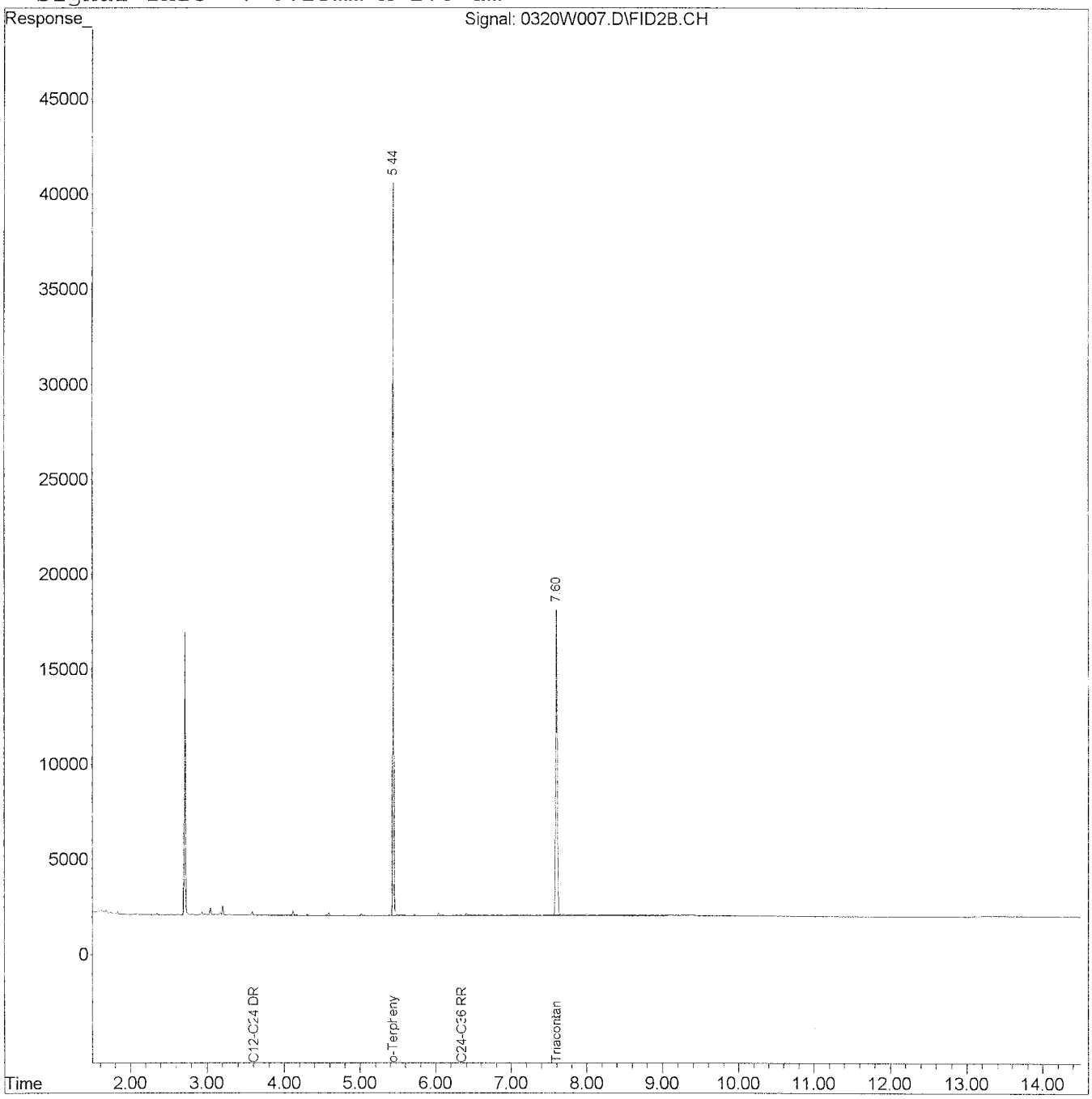
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W007.D Vial: 12
Acq On : 20 Mar 2007 12:37 pm Operator: PMulherin
Sample : k0701703-001 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703835-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	ND	U	300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	97	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W010.D
Lab ID: KWG0703835-3
RunType: MB
Matrix: WATER

Date Acquired: 03/20/2007 13:38
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: VM 03 2007

Secondary Review: Gee

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584809	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W010.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 13:38	**Quant Date:**	03/20/2007 17:50	**Vial:**	15
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703835-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	33074	24.13	97	65-135	OK
n-Triacontane	7.60	0.00	25826	24.29	97	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	3031	2.74	50	U	
C24 - C36 RRO	6.35	?	4695	9.58	300	U	

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

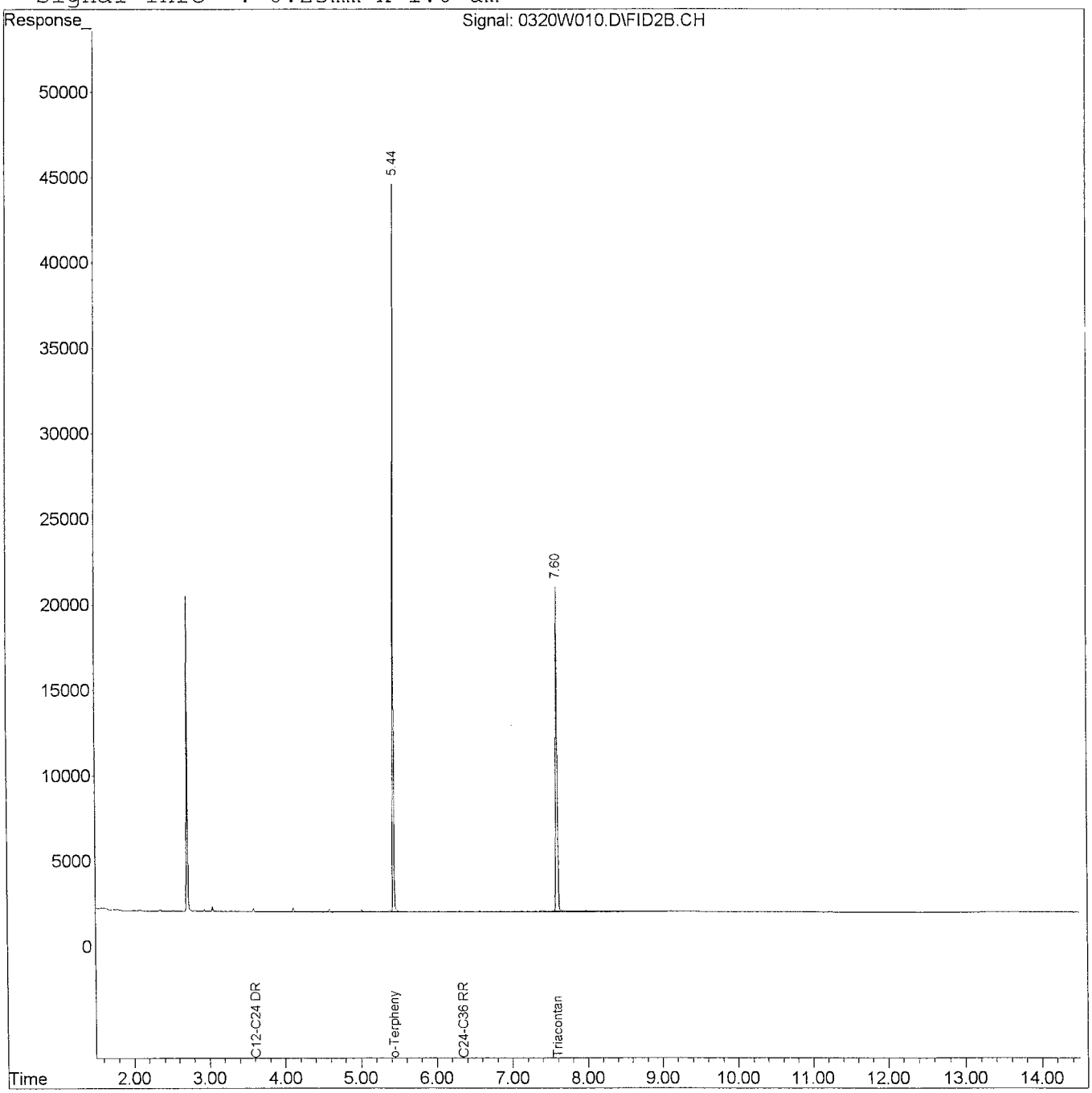
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W010.D Vial: 15
Acq On : 20 Mar 2007 1:38 pm Operator: PMulherin
Sample : KWG0703295MB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703835-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1720**		50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	**1000**		300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	102	65-135	03/20/07	Acceptable
n-Triacontane	104	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W008.D
Lab ID: KWG0703835-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/20/2007 12:58
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PMB2007

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584807	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W008.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 12:58	**Quant Date:**	03/20/2007 17:49	**Vial:**	13
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703835-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	35017	25.55	102	65-135	OK
n-Triacontane	7.60	0.00	27724	26.08	104	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	950482	858.90	1720		
C24 - C36 RRO	6.35	?	245830	501.45	1000		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

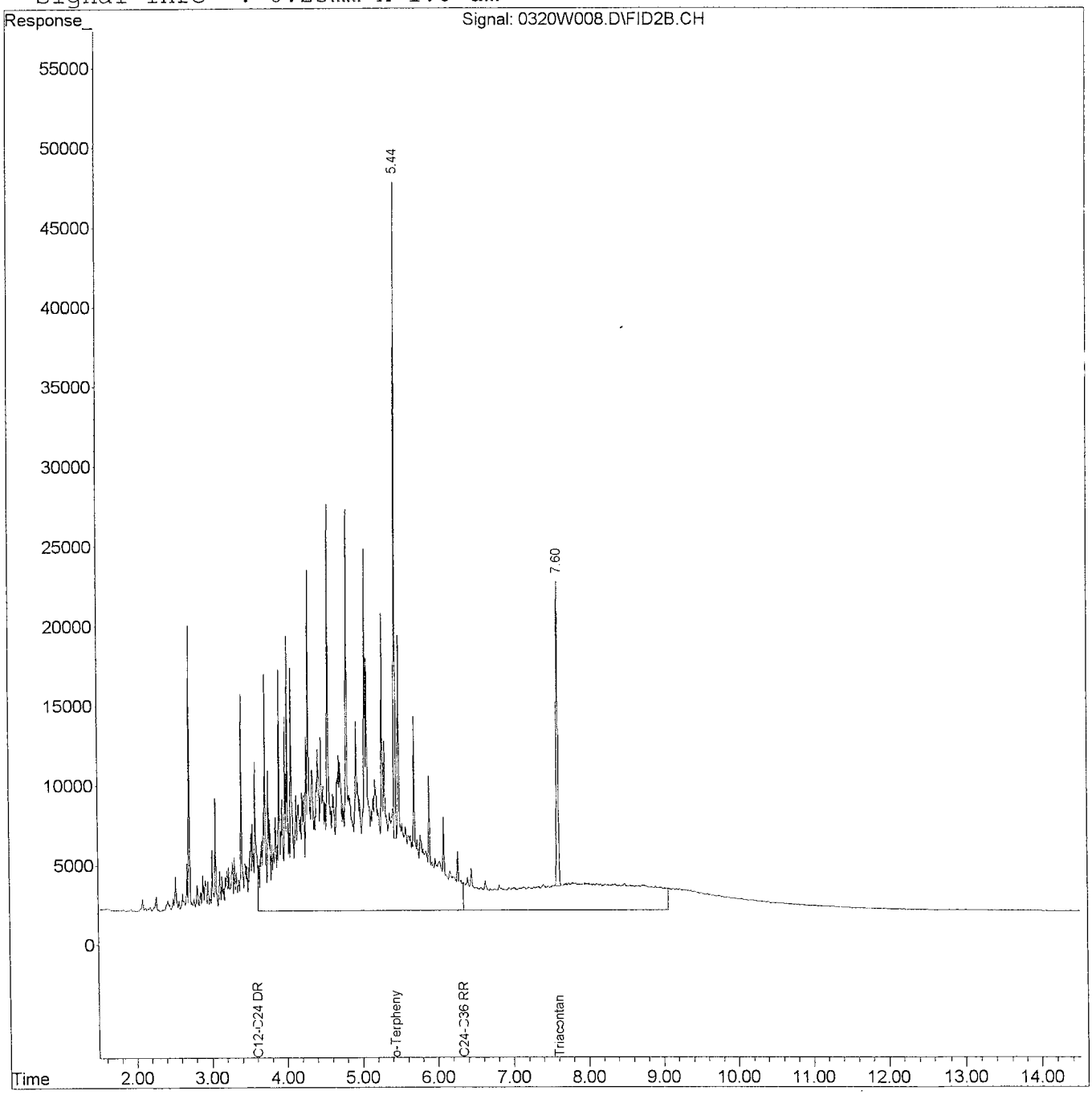
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W008.D Vial: 13
Acq On : 20 Mar 2007 12:58 pm Operator: PMulherin
Sample : KWG0703295LCS Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703835-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1650**		50	1	03/06/07	03/20/07	KWG0703835	
C24 - C36 RRO	**966**		300	1	03/06/07	03/20/07	KWG0703835	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	03/20/07	Acceptable
n-Triacontane	100	65-135	03/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W009.D
Lab ID: KWG0703835-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/20/2007 13:18
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: MM 03/2007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**	KWG0703835	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	584808	**Prep Date:**	03/06/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\032007.TAR\0320W010.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W009.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 13:18	**Quant Date:**	03/20/2007 17:49	**Vial:**	14
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0703835-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	33252	24.26	97	65-135	OK
n-Triacontane	7.60	0.00	26537	24.96	100	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	910289	822.58	1650		
C24 - C36 RRO	6.35	?	236791	483.01	966		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

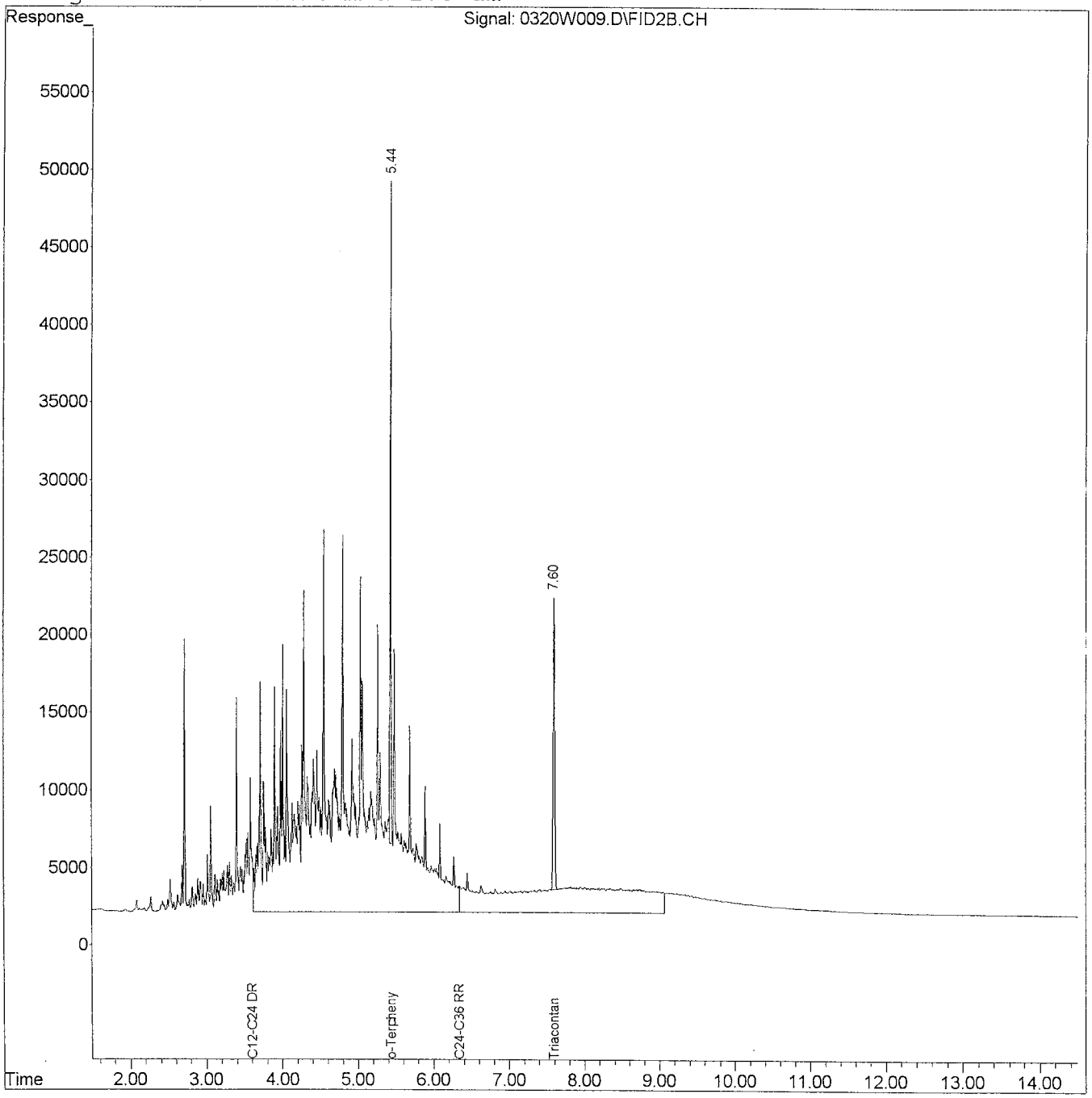
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W009.D Vial: 14
Acq On : 20 Mar 2007 1:18 pm Operator: PMulherin
Sample : KWG0703295DLCS Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Calibration Date:**	01/19/2007
		Date Analyzed:	01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration ID:**	CAL6131
Analysis Method:	8015B	**Units:**	ppm
File ID:	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

DATA ANALYSIS PARAMETERS

Method Name: J:\GC21\METHODS\0313TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

0313TAR aka CAL6131
Calibration Last Updated: Wed Mar 14 13:57:26 2007

Reference Window: 10.00 Minutes
Non-Reference Window: 5.00 Minutes
Correlation Window: 0.02 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) o-Terphenyl ( )
Ret. Time 5.44 min., Extract & Integrate from 5.39 to 5.49 min.

Lvl ID Conc (ppm) Response

D/S	50.000	-1
G/O	not used for this compound	
1	1.000	1388
2	2.500	3265
3	10.000	12778
4	25.000	35673
5	50.000	67304
6	100.000	137387
7	200.000	295291
8	not used for this compound	

Curve Fit: Avg. RF

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2) Triacontane (C-30) ( )

Ret. Time 7.61 min., Extract & Integrate from 7.56 to 7.66 min.

Lvl	ID	Conc (ppm)	Response
D/S		50.000	-1
G/O		not used for this compound	
1		1.000	1040
2		2.500	2511
3		10.000	10075
4		25.000	28327
5		50.000	51518
6		100.000	105399
7		200.000	234677
8		not used for this compound	

Curve Fit: Avg. RF

---

3) C12-C24 DRO ( )

Ret. Time 3.62 min., Extract & Integrate from 3.62 to 6.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		1000.000	-1
G/O		not used for this compound	
1		20.000	23553
2		50.000	53433
3		200.000	209426
4		500.000	582096
5		1000.000	1095644
6		2000.000	2213286
7		4000.000	4805299
8		20000.000	19835056

PM031607

Curve Fit: Avg. RF

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4) C24-C36 RRO ( )

Ret. Time 6.36 min., Extract & Integrate from 6.36 to 9.09 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		1000.000	-1
1		20.000	-1
2		50.000	24008
3		200.000	96695
4		500.000	243833

5	1000.000	498377
6	2000.000	1013769
7	5000.000	2424406
8	not used for this compound	

Curve Fit: Avg. RF

---

5) Ethylbenzene ( )

Ret. Time 2.49 min., Extract & Integrate from 2.44 to 2.54 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

6) p,m-Xylenes ( )

Ret. Time 2.53 min., Extract & Integrate from 2.48 to 2.58 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

pm031607
GA

Curve Fit: Avg. RF

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7) o-Xylene ( )

Ret. Time 2.62 min., Extract & Integrate from 2.57 to 2.67 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

8) a-Pinene ( )
Ret. Time 2.83 min., Extract & Integrate from 2.78 to 2.88 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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9) b-Pinene ( )
Ret. Time 2.99 min., Extract & Integrate from 2.94 to 3.04 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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10) 1,2,3-Trimethylbenzene ( )
Ret. Time 3.12 min., Extract & Integrate from 3.07 to 3.17 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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[illegible]

Curve Fit: Avg. RF

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11) Fluoranthene ( )
Ret. Time 5.84 min., Extract & Integrate from 5.79 to 5.89 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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12) Pyrene ( )

Ret. Time 5.95 min., Extract & Integrate from 5.90 to 6.00 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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13) Pristane ( )

Ret. Time 5.07 min., Extract & Integrate from 5.02 to 5.12 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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Curve Fit: Avg. RF

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14) Phytane ( )

Ret. Time 5.31 min., Extract & Integrate from 5.26 to 5.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	

4 not used for this compound
5 not used for this compound
6 not used for this compound
7 not used for this compound
8 not used for this compound

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Fri Mar 16 11:13:06 2007

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Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14:39 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35477	25.882 ppm
Spiked Amount 50.000		Recovery =	51.76%
2) S Triacontane (C-30)	7.61	57008	53.617 ppm
Spiked Amount 50.000		Recovery =	107.23%
Target Compounds			
3) H C12-C24 DRO	3.62	454422	410.638 ppm
4) H C24-C36 RRO	6.36	346019	705.815 ppm

PM 03/16/07

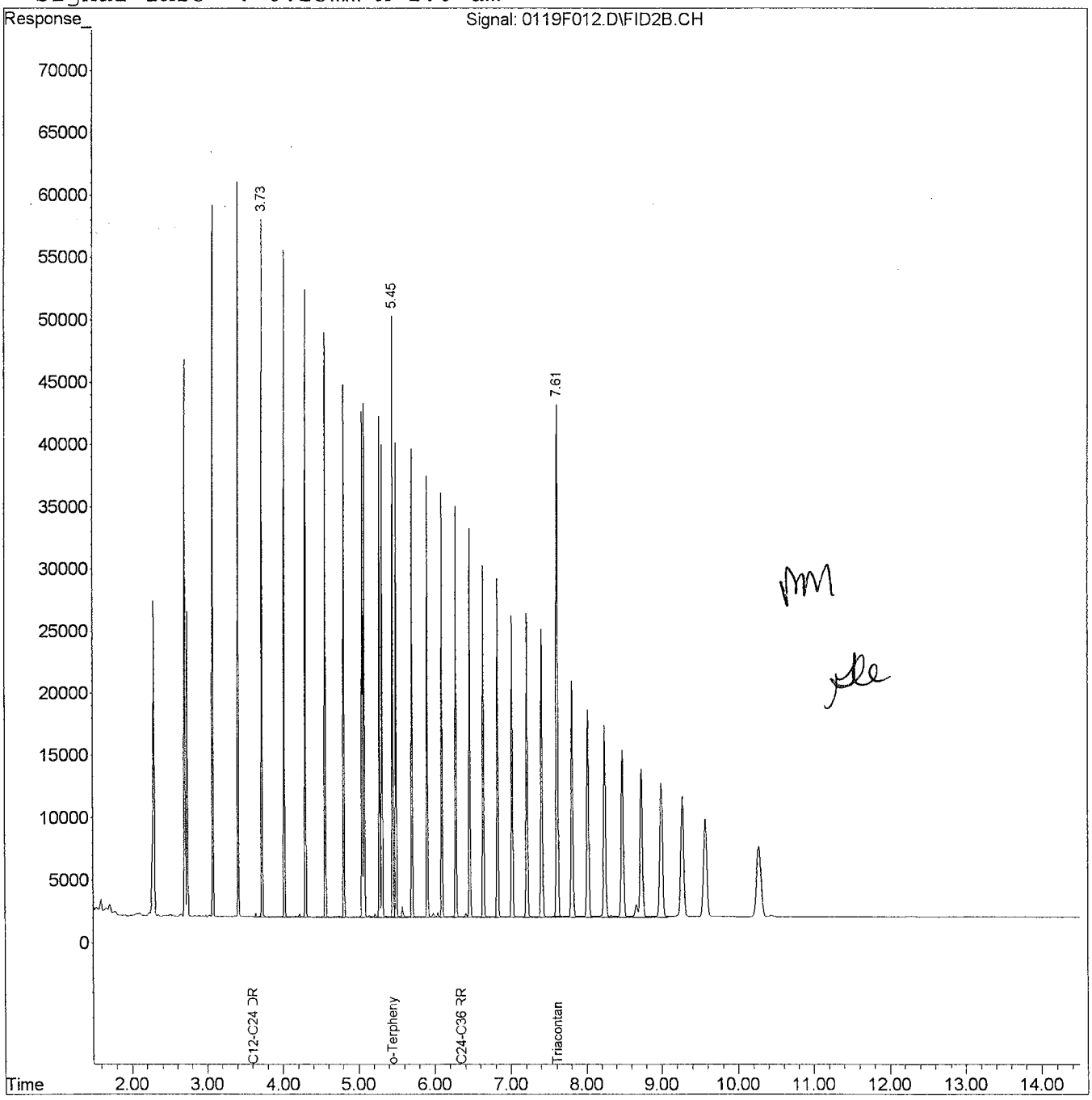
(f)=RT Delta > 1/2 Window (m)=manual int.

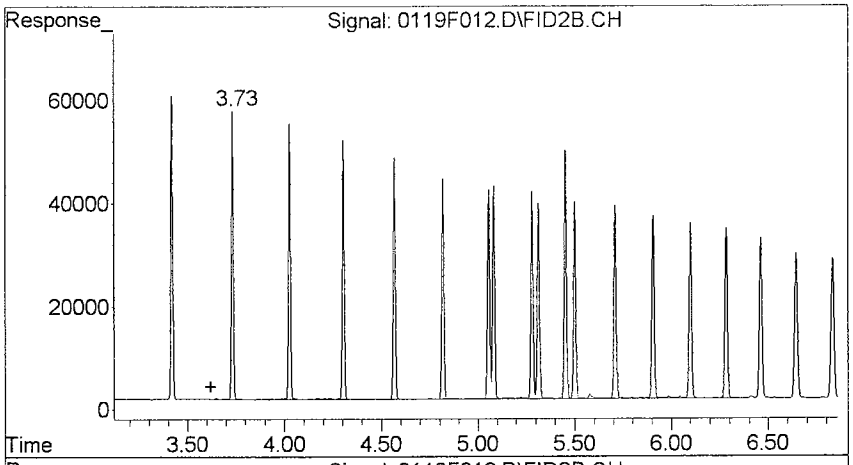
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

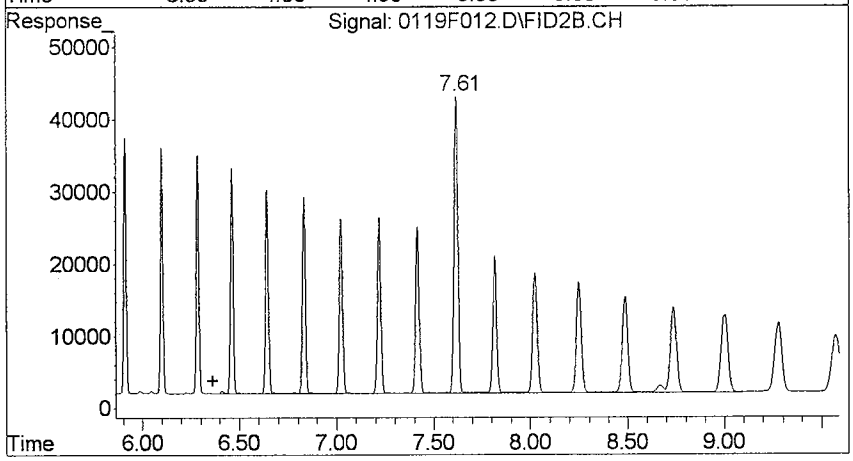
Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um





#3 C12-C24 DRO

R.T.: 3.620 min
Delta R.T.: 0.000 min
Response: 454422
Conc: 410.64 ppm m



#4 C24-C36 RRO

R.T.: 6.360 min
Delta R.T.: 0.000 min
Response: 346019
Conc: 705.81 ppm m

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Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:06 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	1388	1.031 ppm
Spiked Amount 50.000	Recovery	=	2.06%
2) S Triacontane (C-30)	7.62	1040	1.009 ppm
Spiked Amount 50.000	Recovery	=	2.02%
Target Compounds			
3) H C12-C24 DRO	3.63	23553	21.497 ppm

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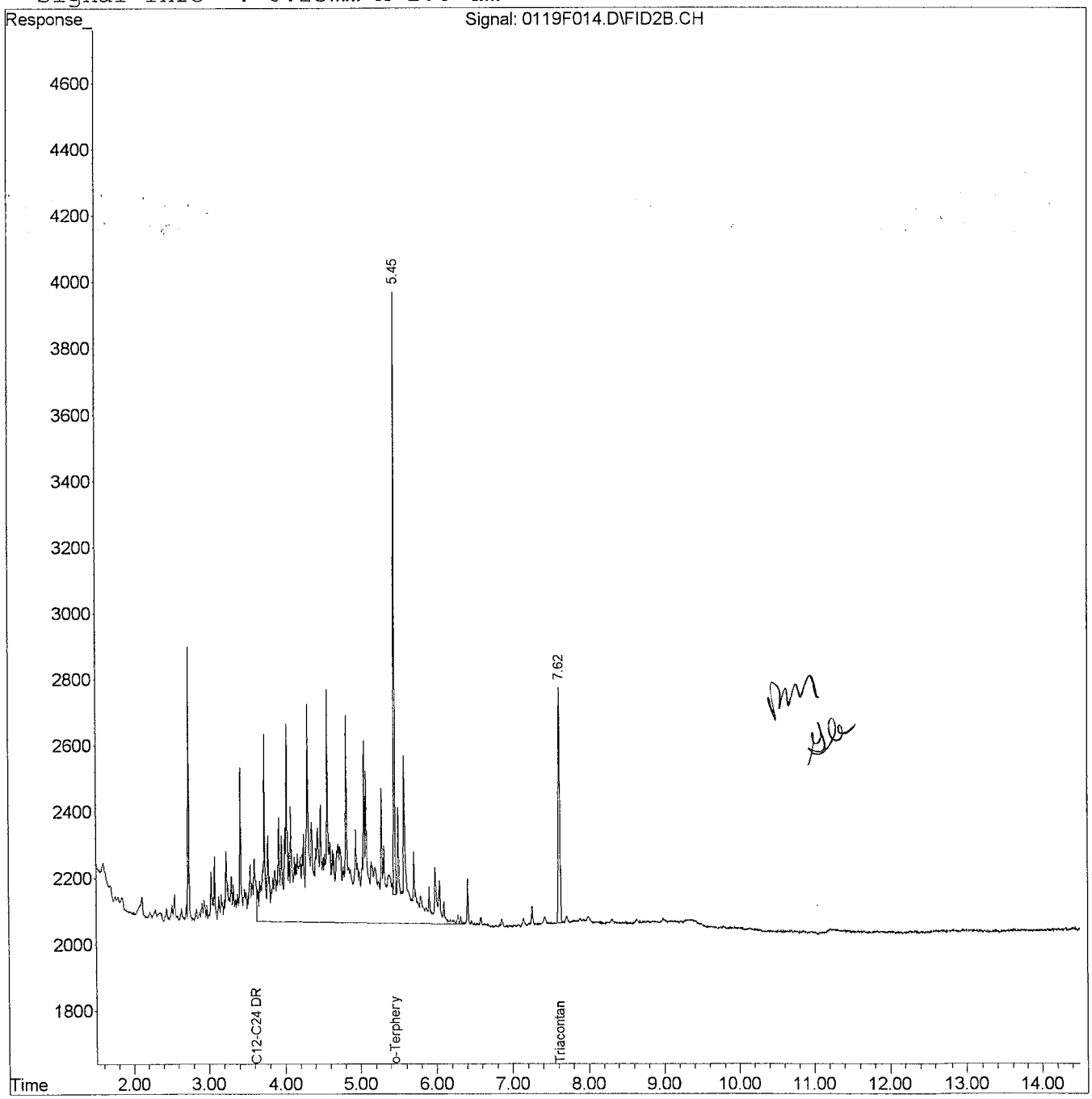
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:11 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	3265	2.426 ppm
Spiked Amount 50.000	Recovery	=	4.85%
2) S Triacontane (C-30)	7.61	2511	2.437 ppm
Spiked Amount 50.000	Recovery	=	4.87%
Target Compounds			
3) H C12-C24 DRO	3.63	53433	48.769 ppm

PM 03/16/07

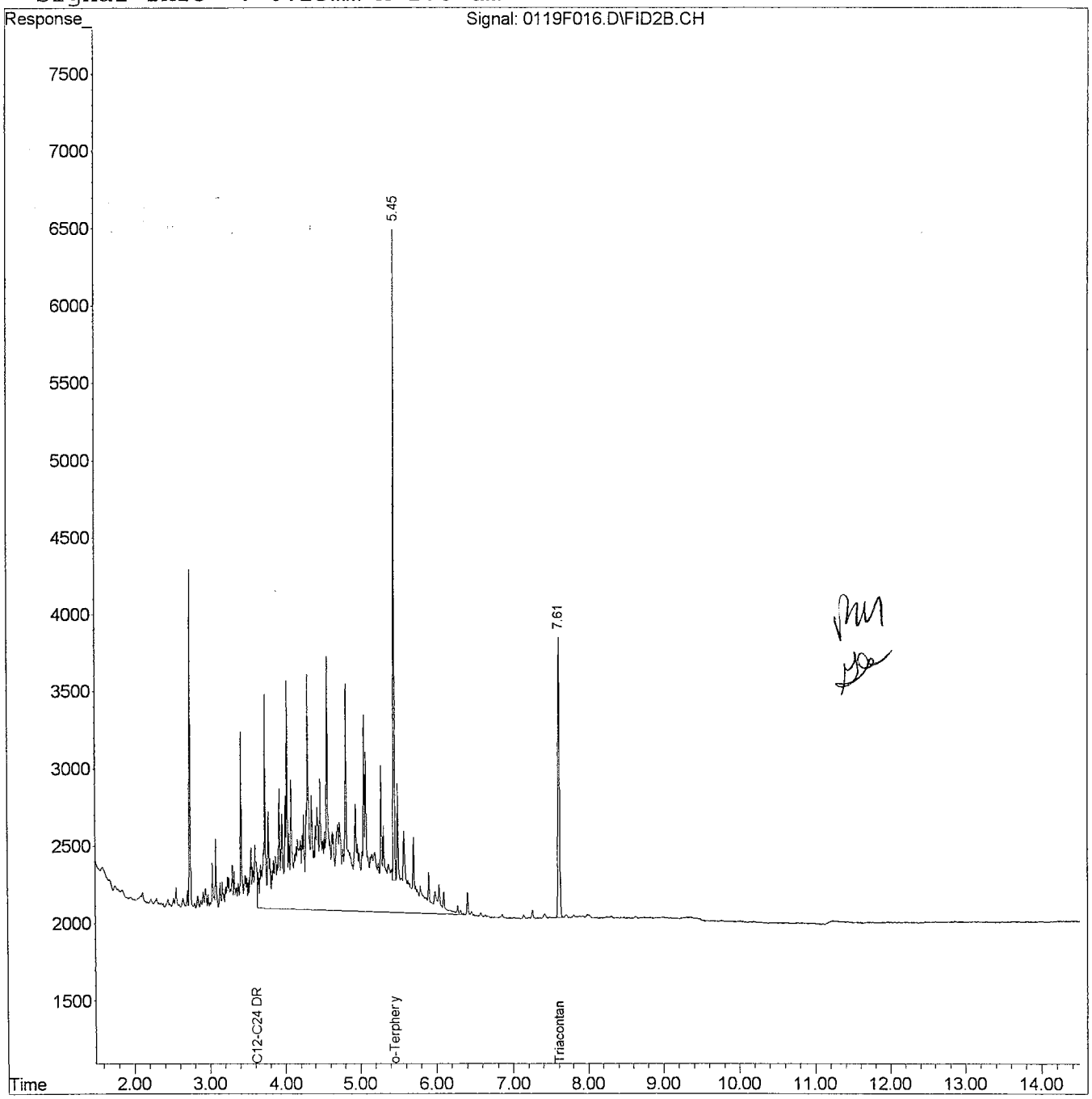
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:12 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	24008	48.172 ppm

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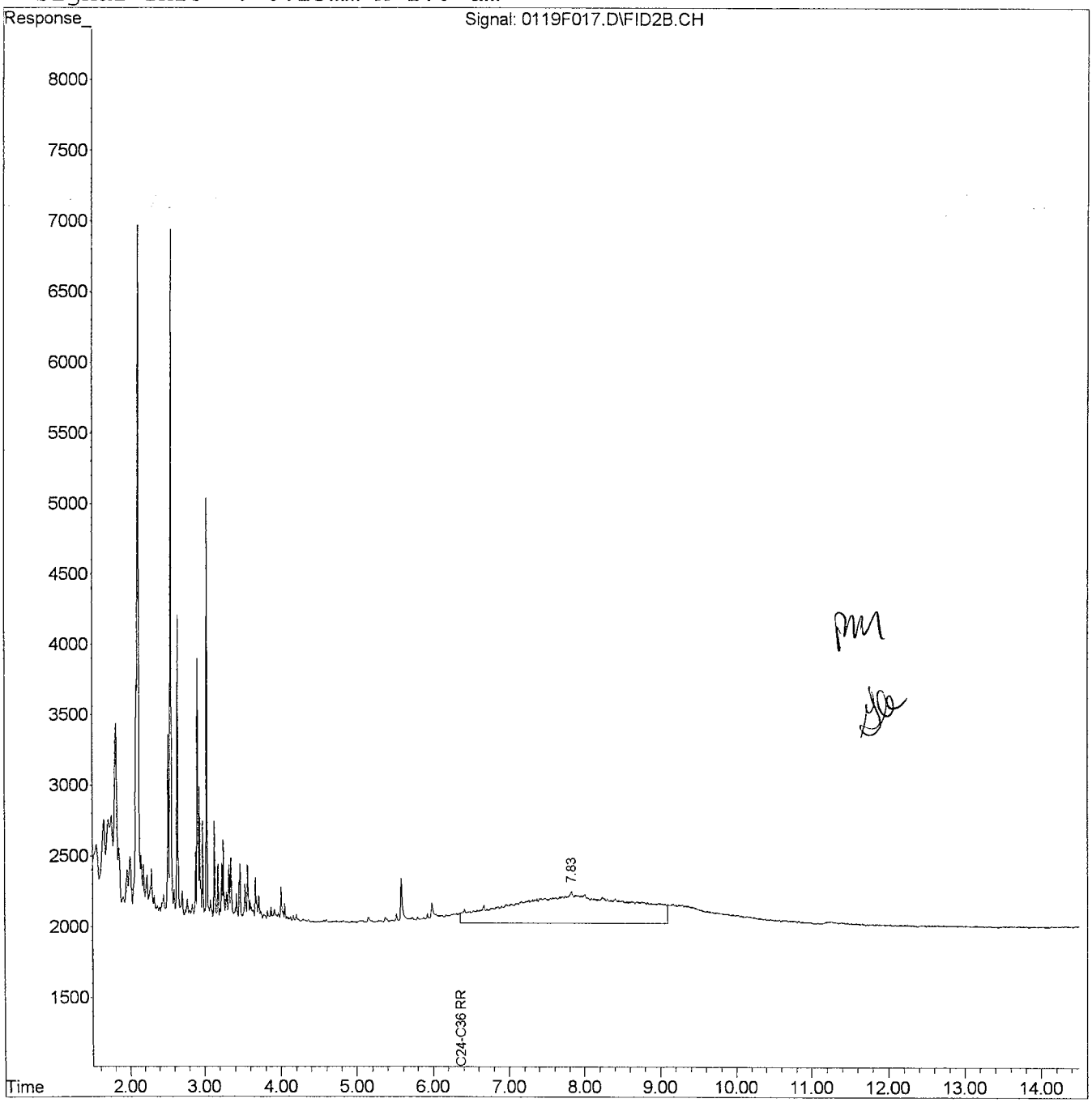
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:13 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	12778	9.493 ppm
Spiked Amount 50.000	Recovery	=	18.99%
2) S Triacontane (C-30)	7.61	10075	9.778 ppm
Spiked Amount 50.000	Recovery	=	19.56%
Target Compounds			
3) H C12-C24 DRO	3.63	209426	191.144 ppm

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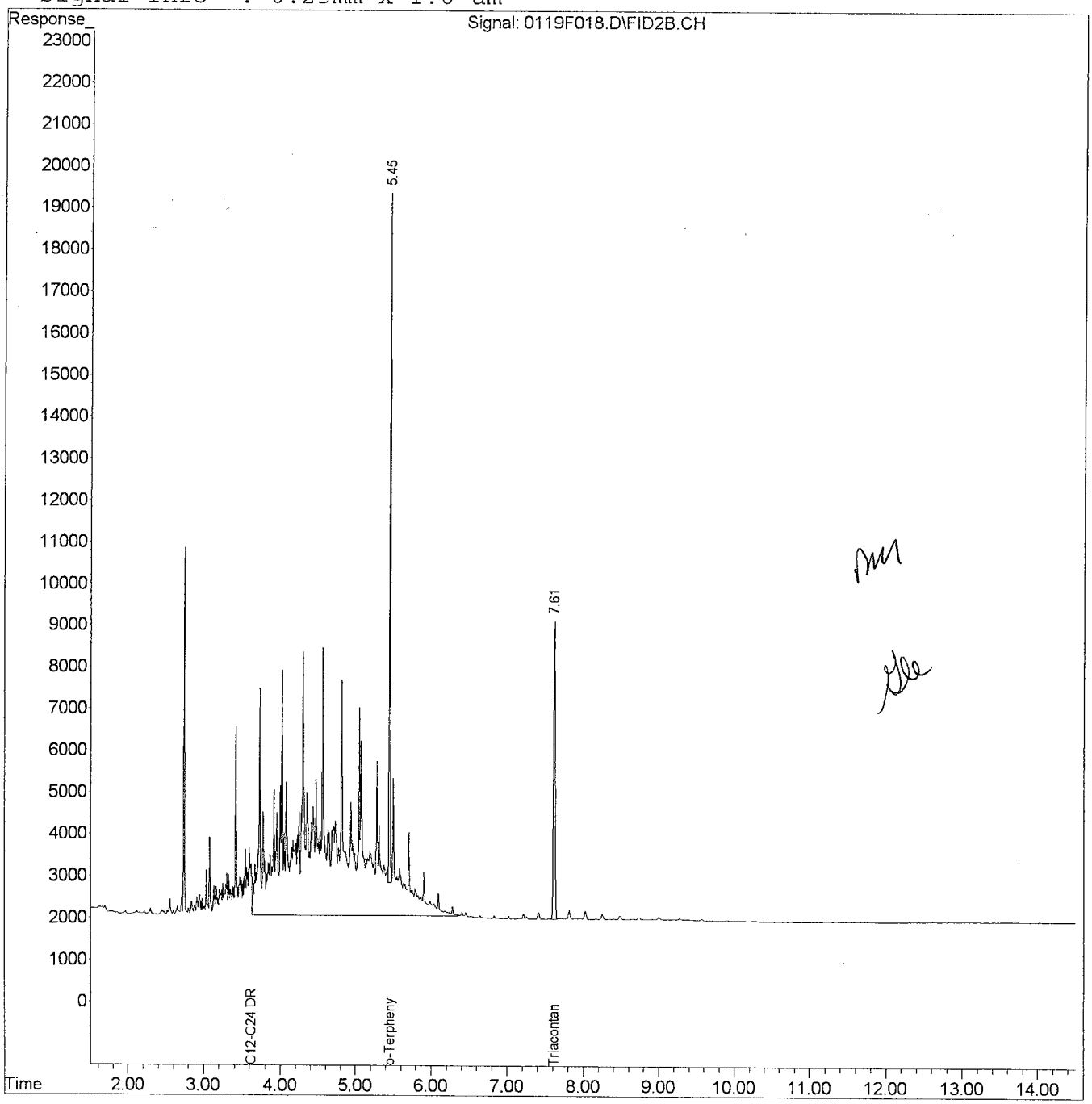
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:15 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	96695	194.020 ppm

PM 03/16/07

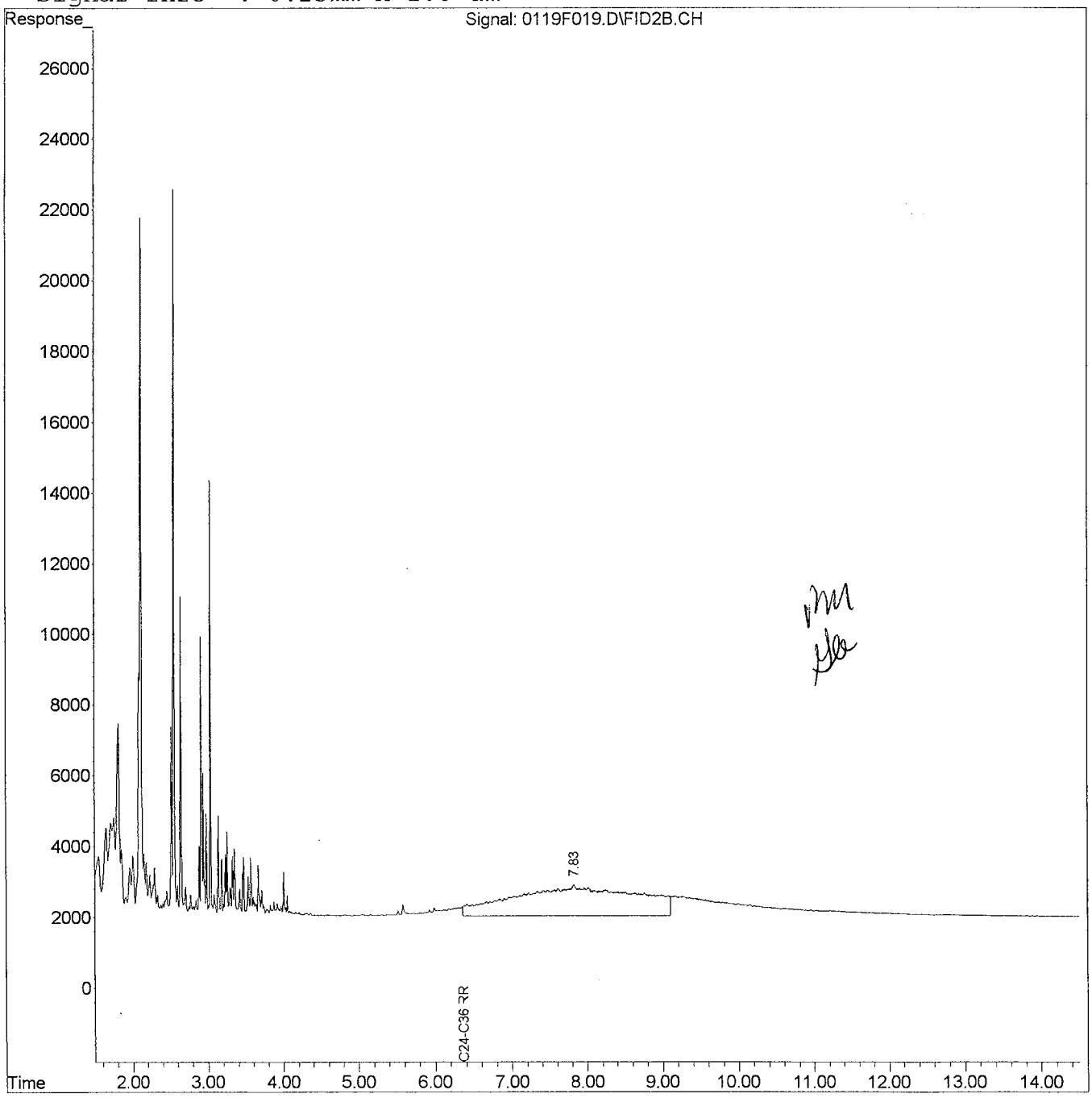
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:16 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35673	26.501 ppm
Spiked Amount 50.000	Recovery	=	53.00%
2) S Triacontane (C-30)	7.61	28327	27.492 ppm
Spiked Amount 50.000	Recovery	=	54.98%
Target Compounds			
3) H C12-C24 DRO	3.63	582096	531.282 ppm

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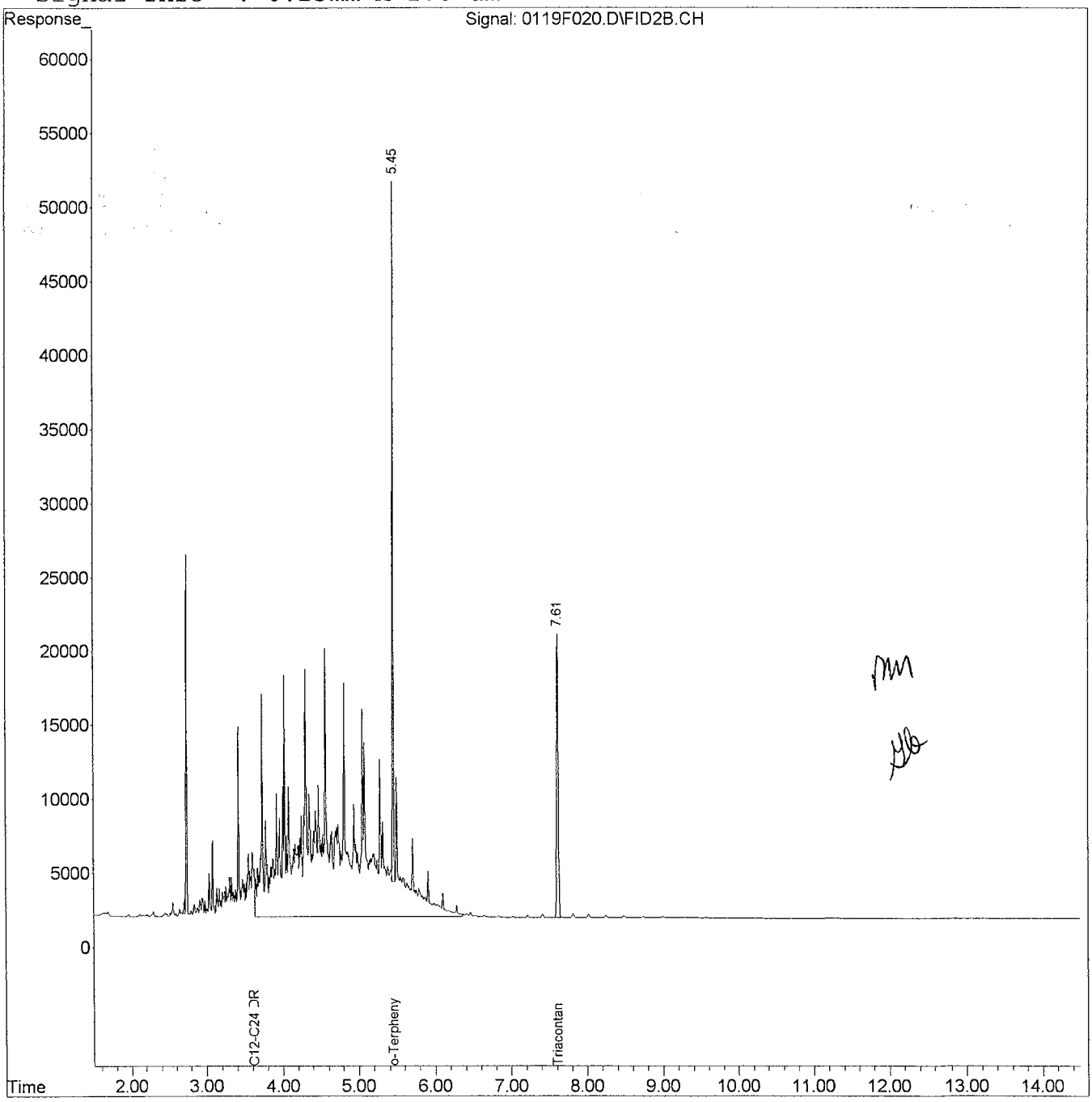
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:17 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	243833	489.254 ppm

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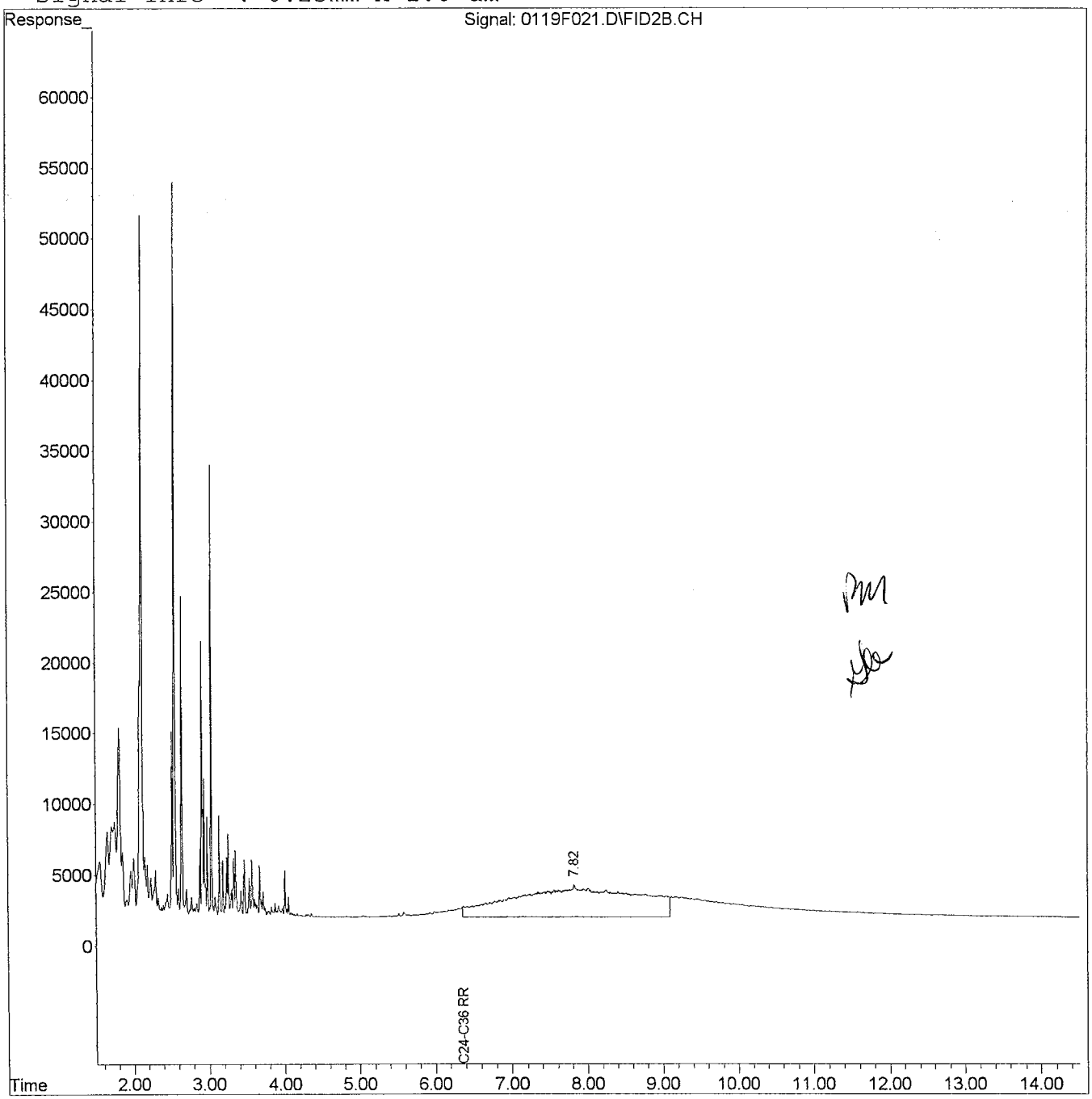
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:18 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	67304	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
2) S Triacontane (C-30)	7.61	51518	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
Target Compounds			
3) H C12-C24 DRO	3.63	1095644	1000.000 ppm

PM 03/16/07

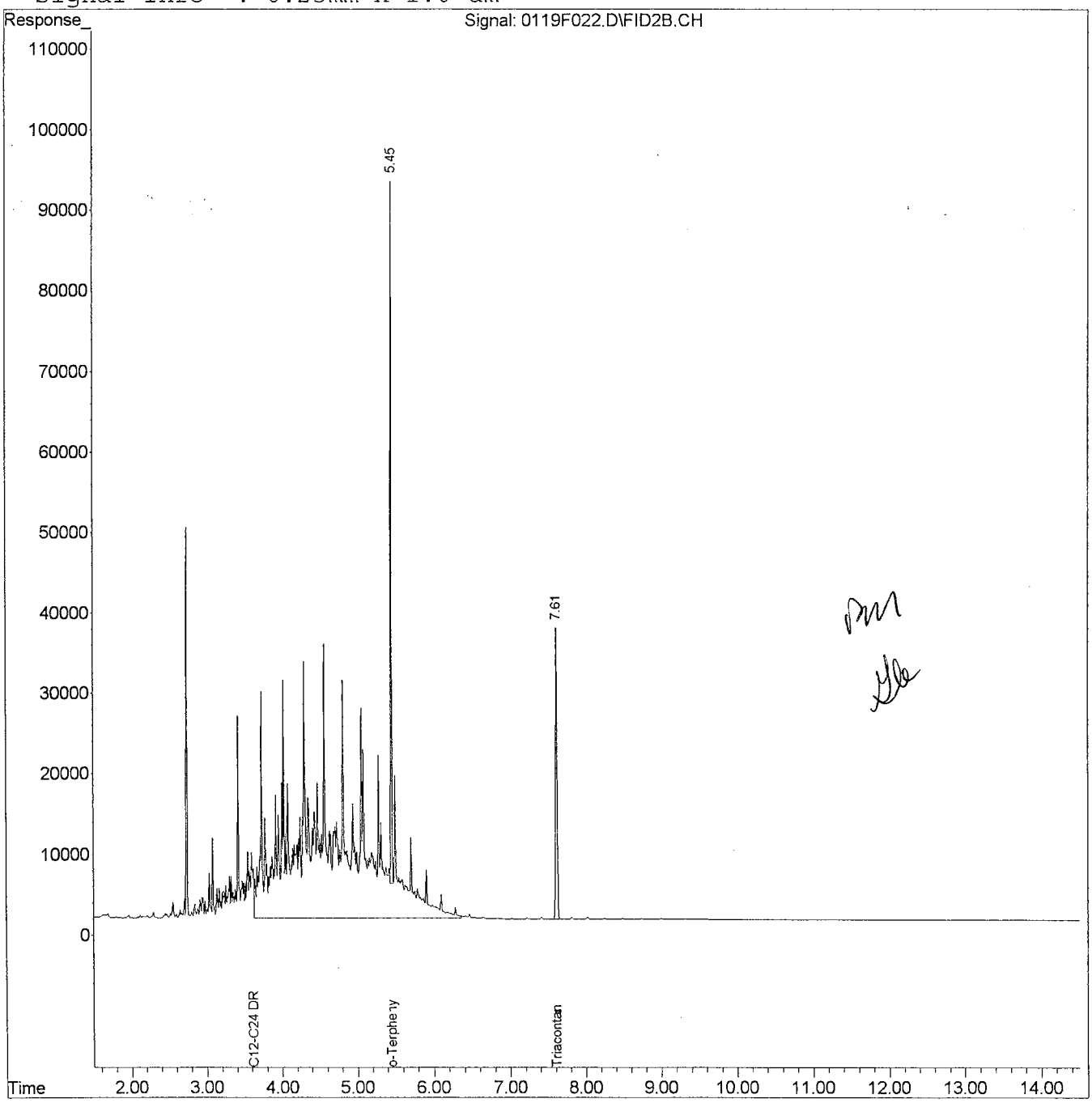
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-1O 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:20 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	498377	1000.000	ppm

PM 03/16/07
[illegible]

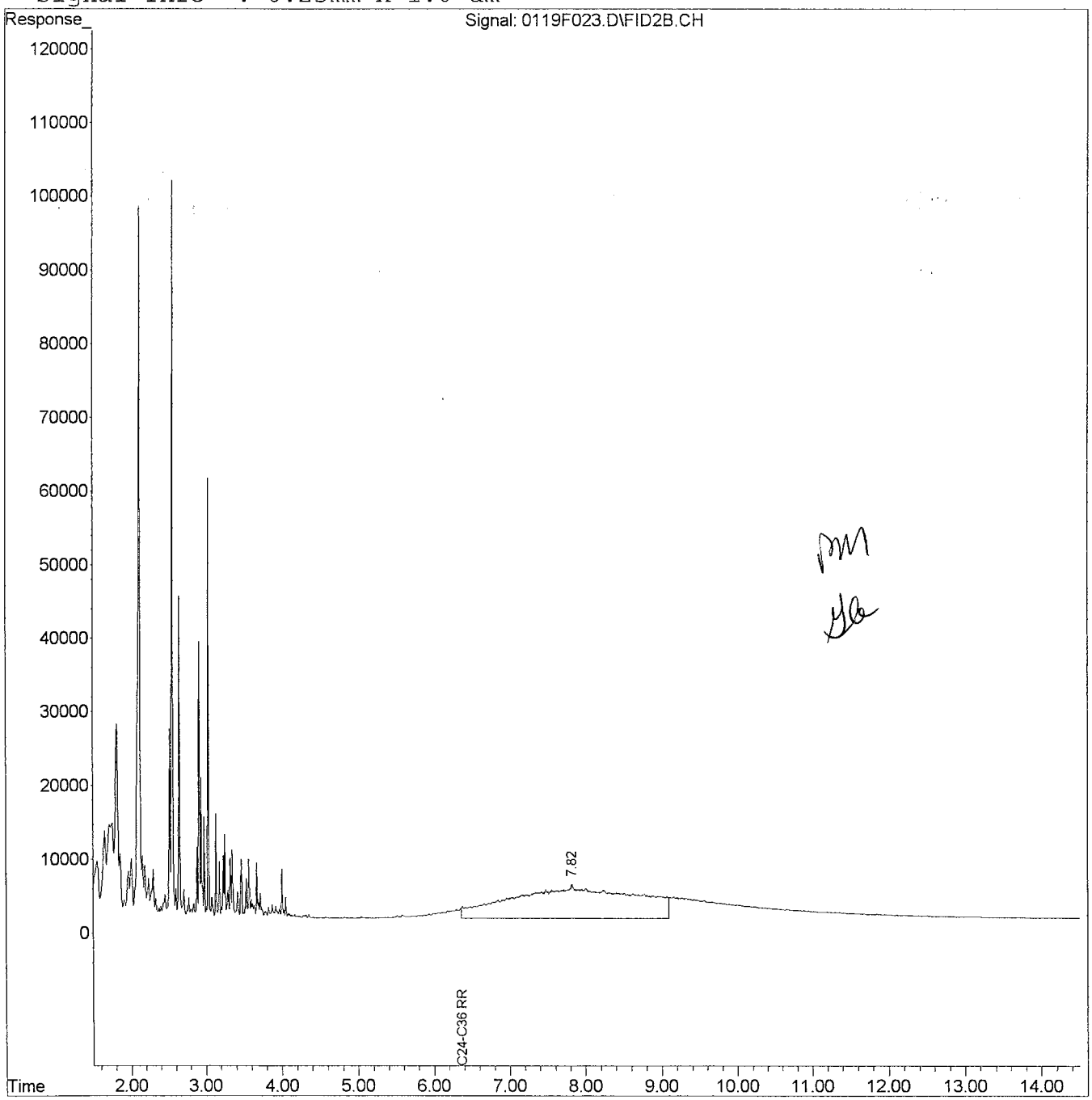
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-1O 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:21 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	137387	102.065 ppm
Spiked Amount 50.000	Recovery	=	204.13%
2) S Triacontane (C-30)	7.62	105399	102.293 ppm
Spiked Amount 50.000	Recovery	=	204.59%
Target Compounds			
3) H C12-C24 DRO	3.63	2213286	2020.078 ppm

PM 03/16/07
HB

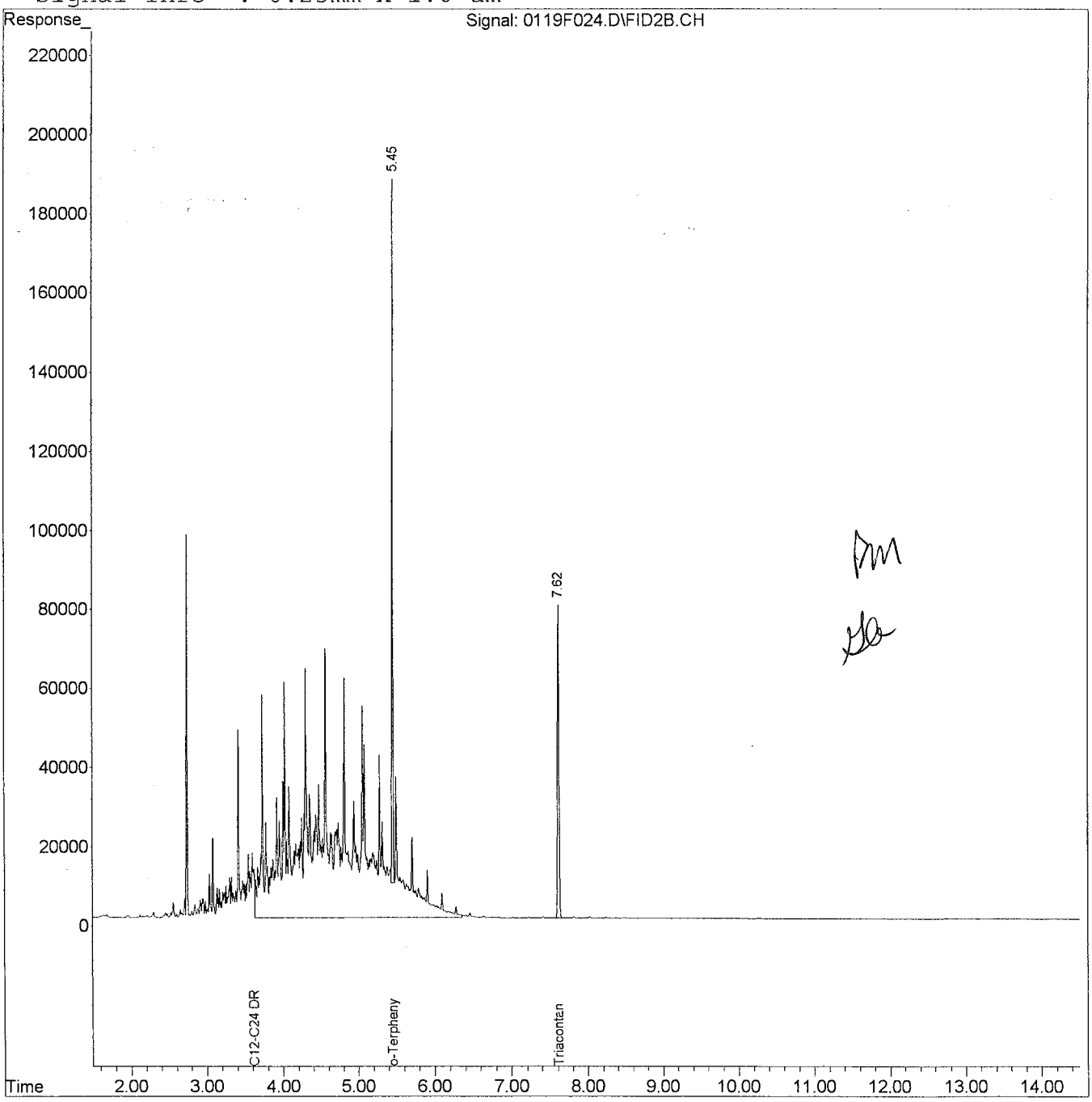
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:22 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	1013769	2034.141	ppm

pm 03/16/07

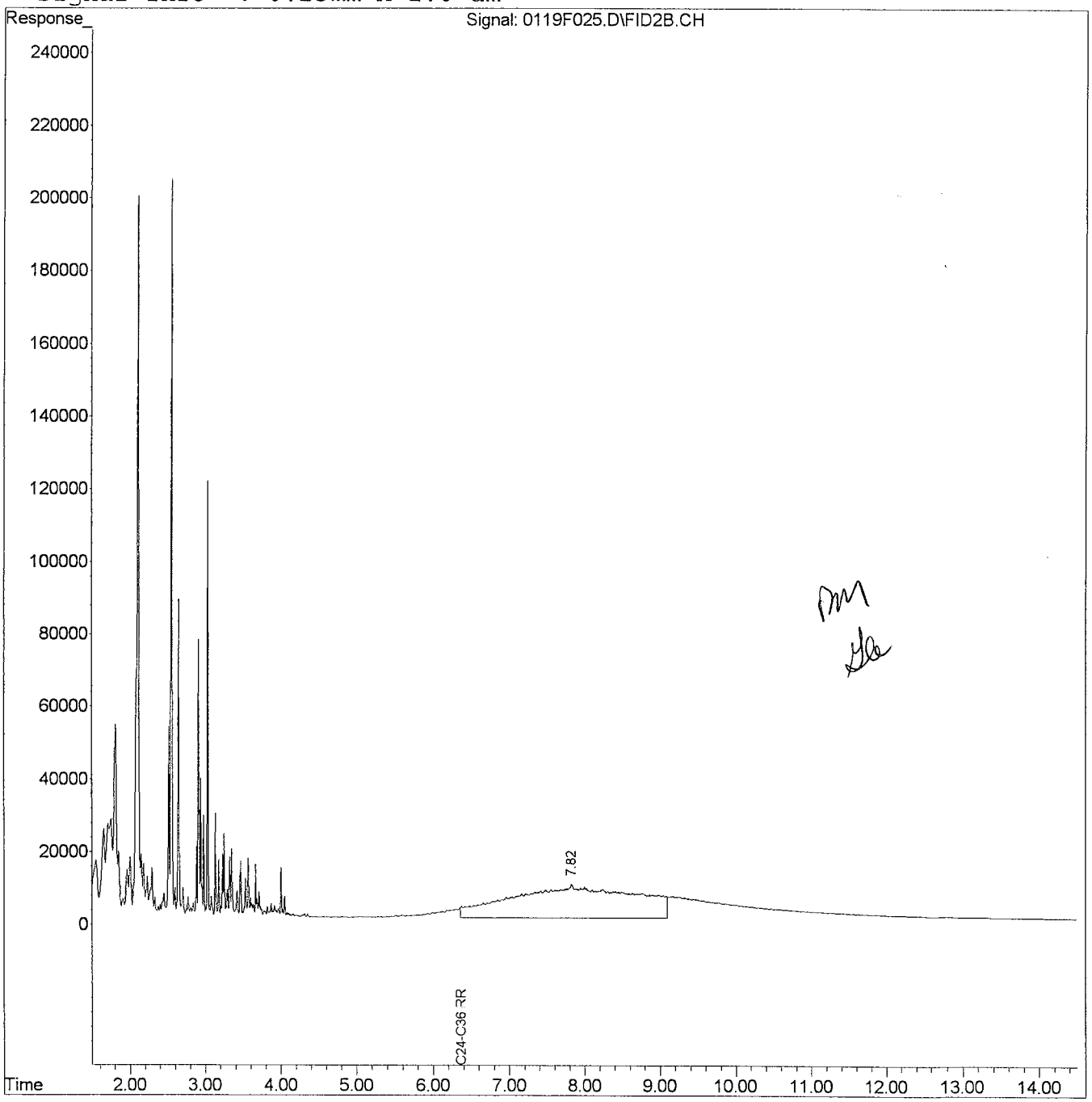
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM
Ste

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:24 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	295291	219.371 ppm
Spiked Amount 50.000		Recovery =	438.74%
2) S Triacontane (C-30)	7.62	234677	227.762 ppm
Spiked Amount 50.000		Recovery =	455.52%
Target Compounds			
3) H C12-C24 DRO	3.63	4805299	4385.821 ppm

PM 03/16/07

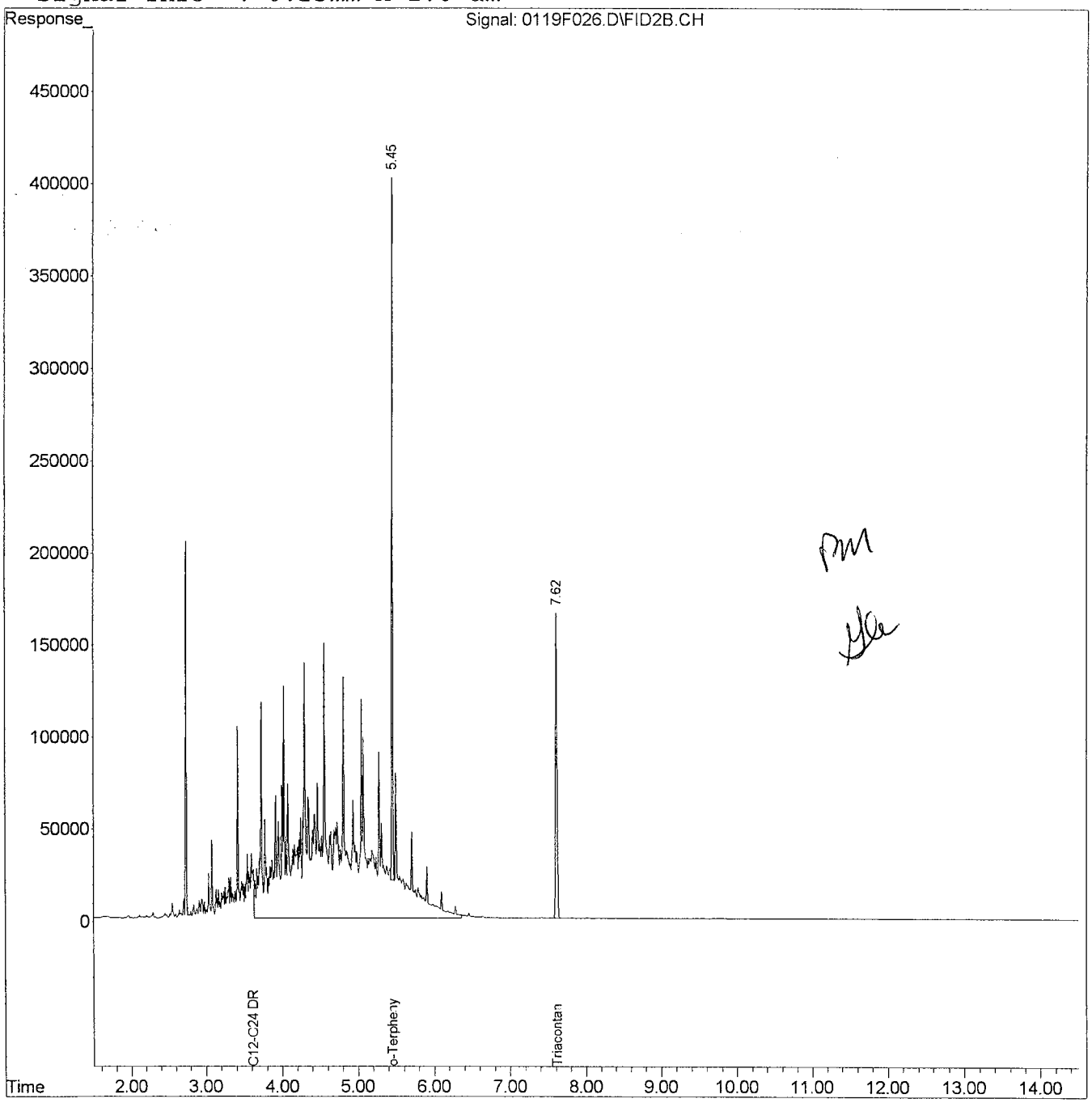
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:25 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	2424406	4864.602	ppm

pm 03/16/07

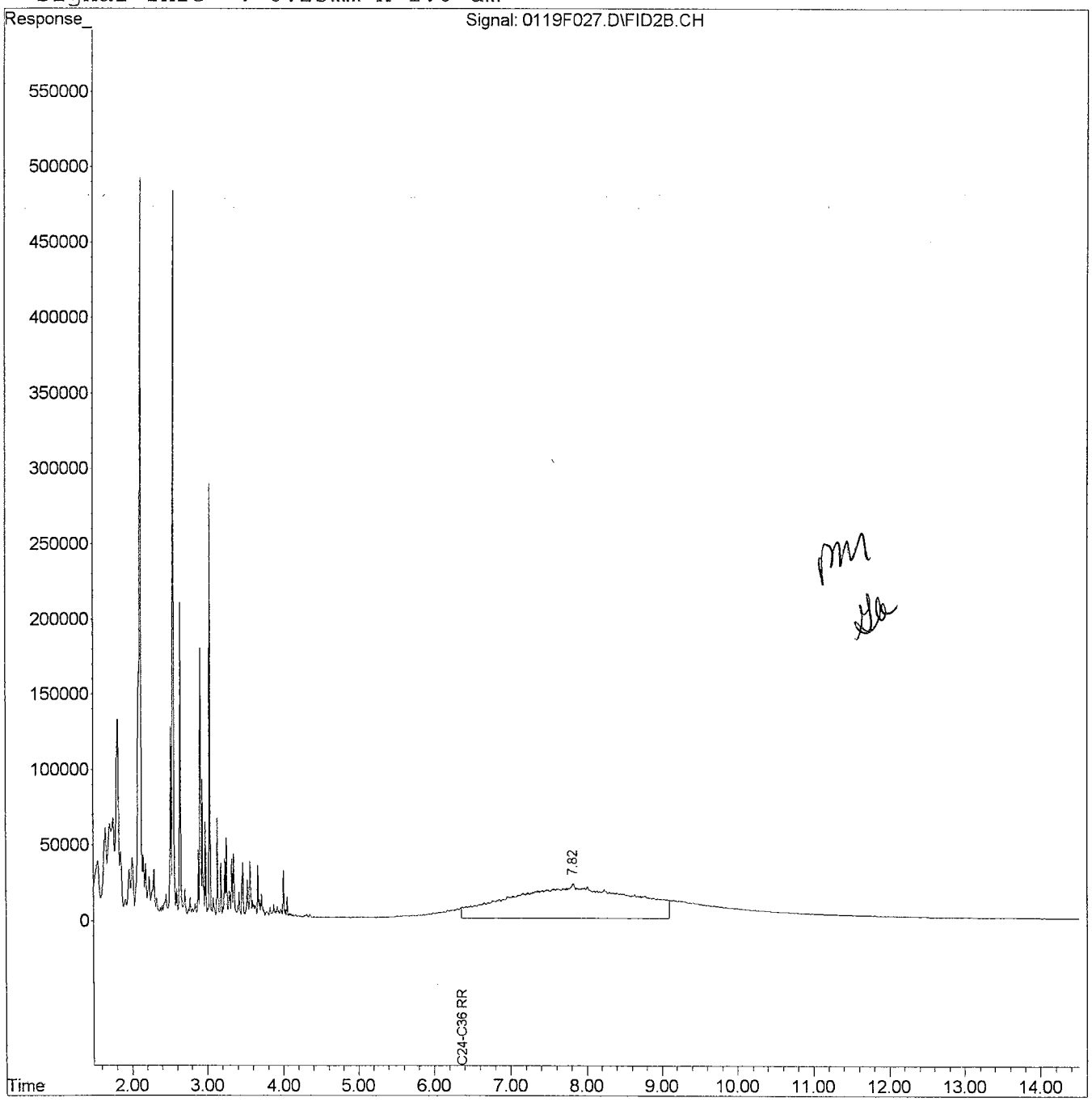
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:26 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
3) H C12-C24 DRO	3.63	19835056	18103.559 ppm

PM 031607
pla

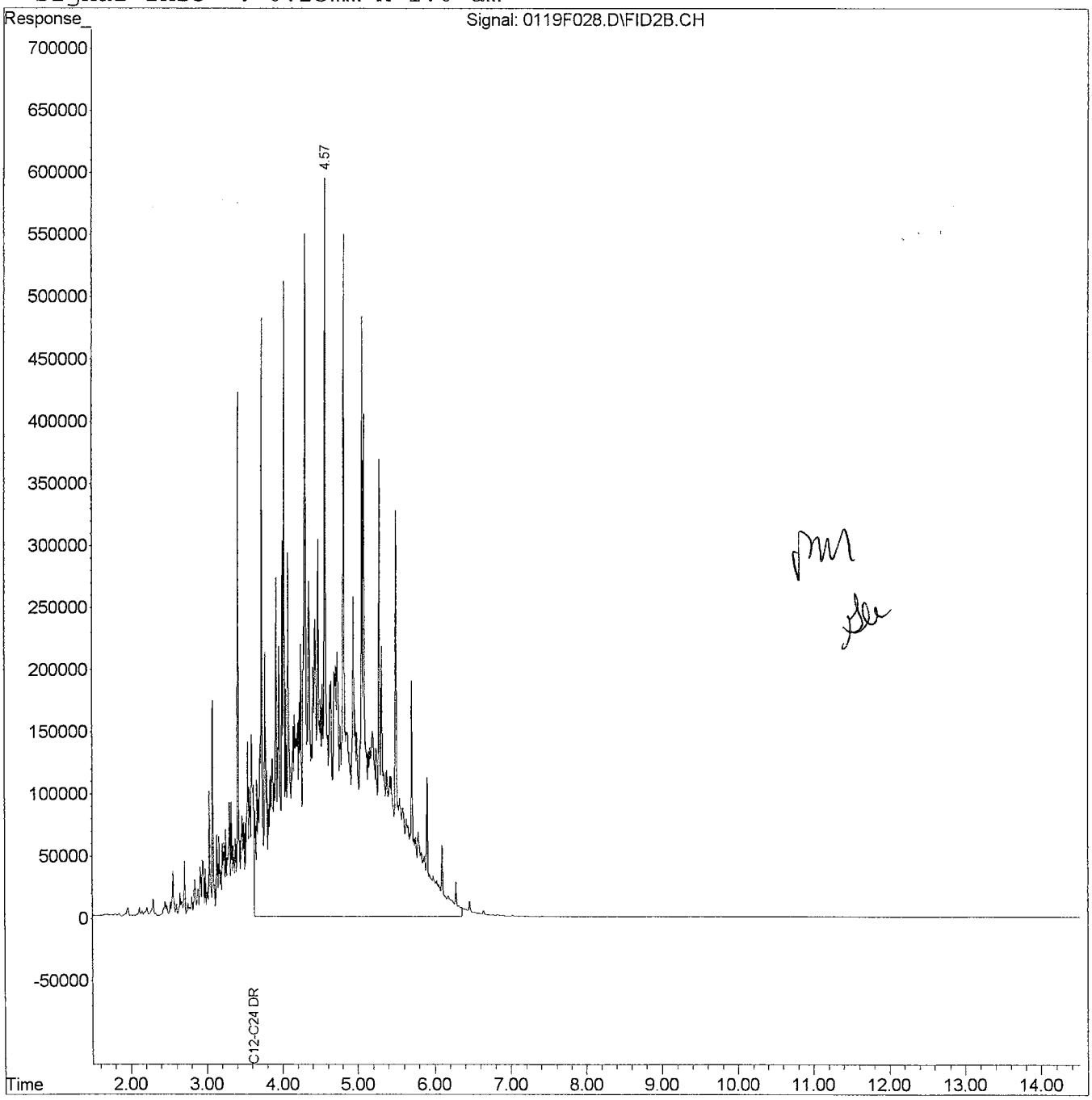
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42:03 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
3) H C12-C24 DRO	3.63	986893	891.805 ppm

PM03/16/07
Gle

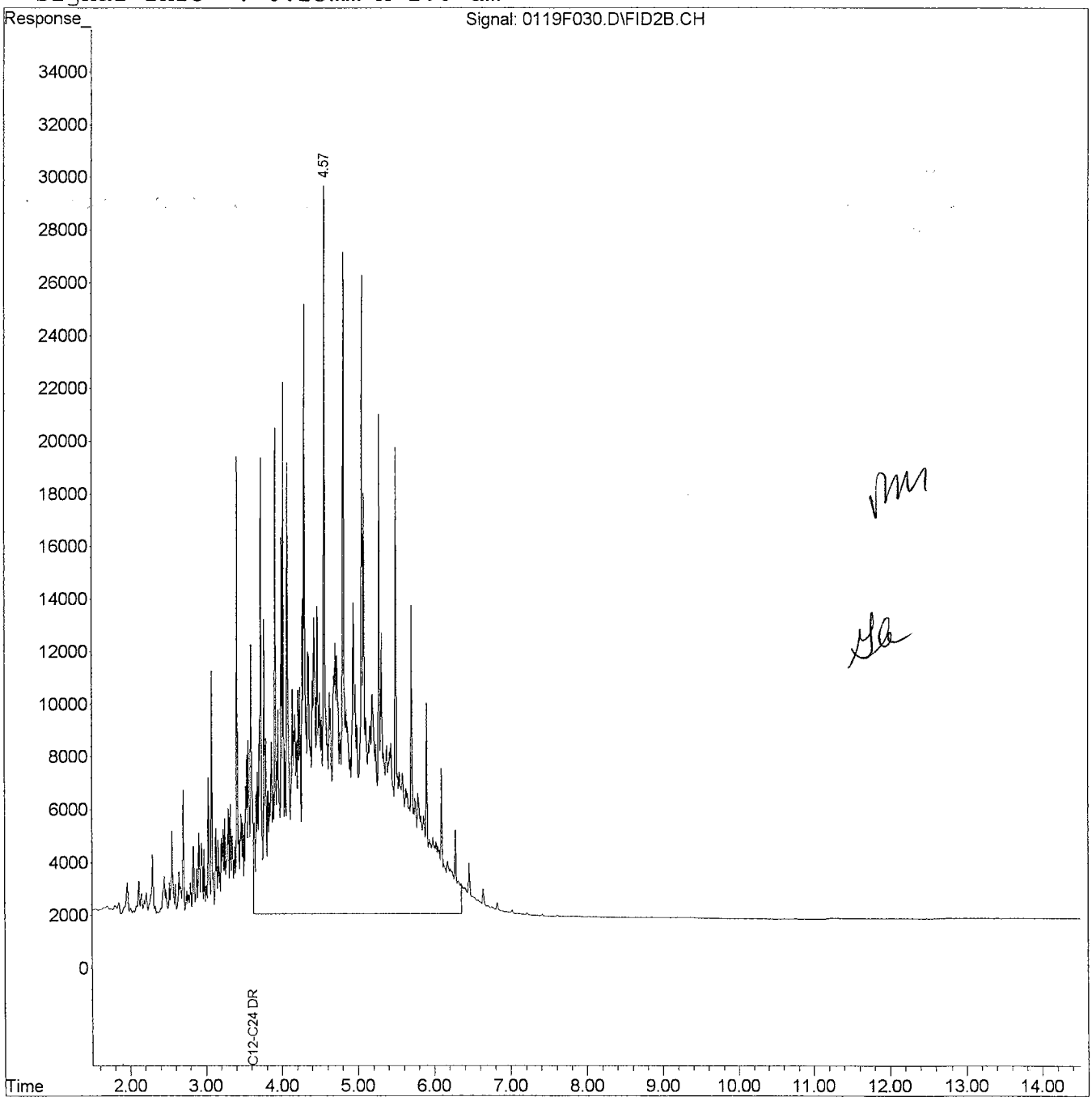
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D Vial: 27
Acq On : 20 Jan 2007 12:09 am Operator: PMulherin
Sample : HCSV8-1K 1000/1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42:04 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	460269	938.863 ppm

PM 03/16/07
sla

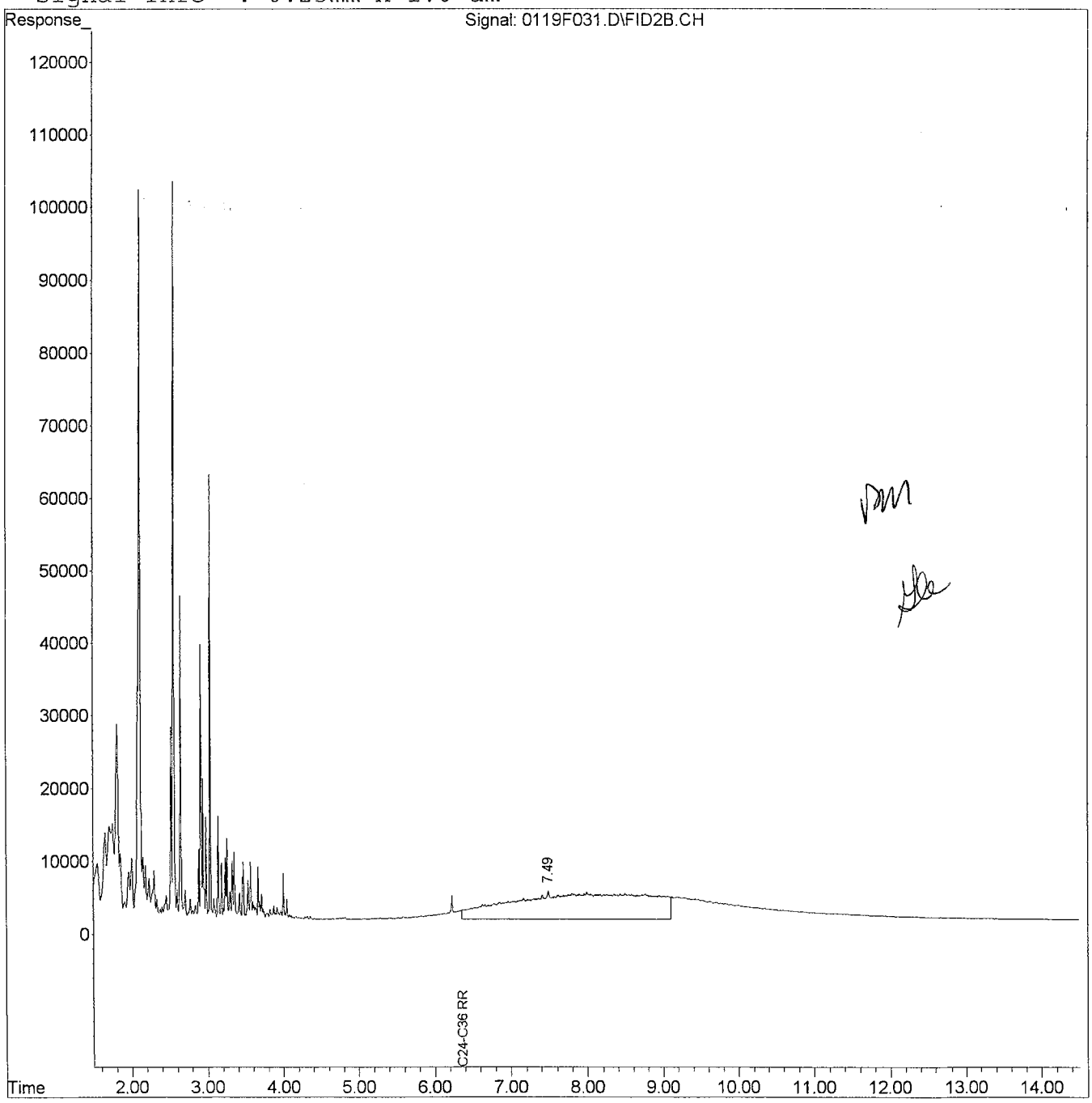
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D Vial: 27
Acq On : 20 Jan 2007 12:09 am Operator: PMulherin
Sample : HCSV8-1K 1000/1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:43 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W003.D
J:\GC21\DATA\032007.TAR\0320W004.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1350	-2	NA	± 15 %	AverageRF
n-Triacontane	50	47	1060	1010	-5	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1070	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	490	511	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W003.D
Lab ID: KWG0703832-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:16
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03 2007

Secondary Review: Gle

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W003.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:16	**Quant Date:**	03/20/2007 17:49	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		67386	49.16		65-135	NA
n-Triacontane	7.60		50389	47.39		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1073999	970.52			
C24 - C36 RRO	6.35	?	7981	16.28			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

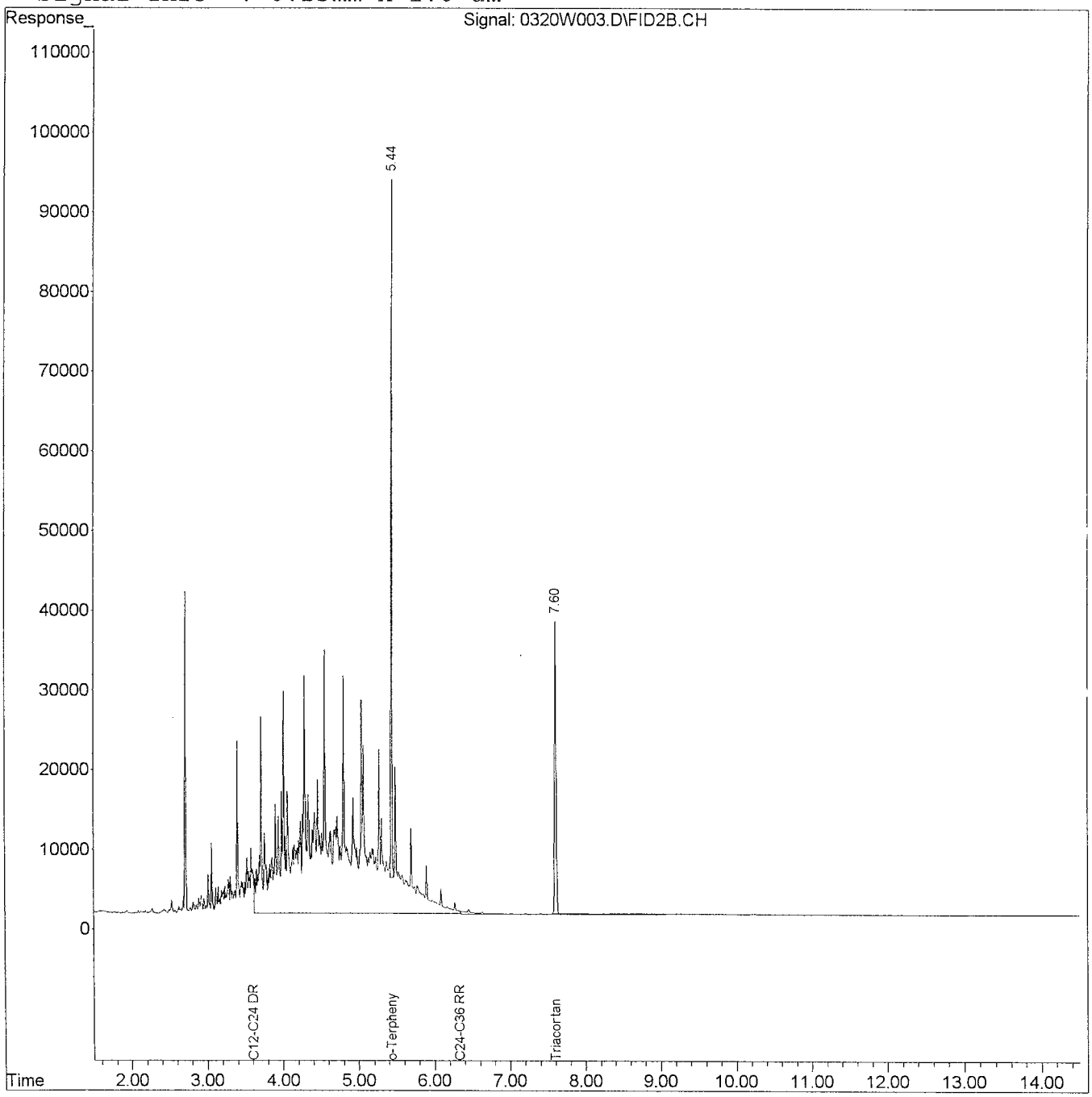
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W003.D Vial: 2
Acq On : 20 Mar 2007 11:16 am Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W004.D
Lab ID: KWG0703832-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:37
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMB 2007

Secondary Review: GL

Printed: 03/20/2007 18:02:35
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W004.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:37	**Quant Date:**	03/20/2007 17:49	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane			0			65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	49877	45.07			NR
C24 - C36 RRO	6.35	?	511057	1,042			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

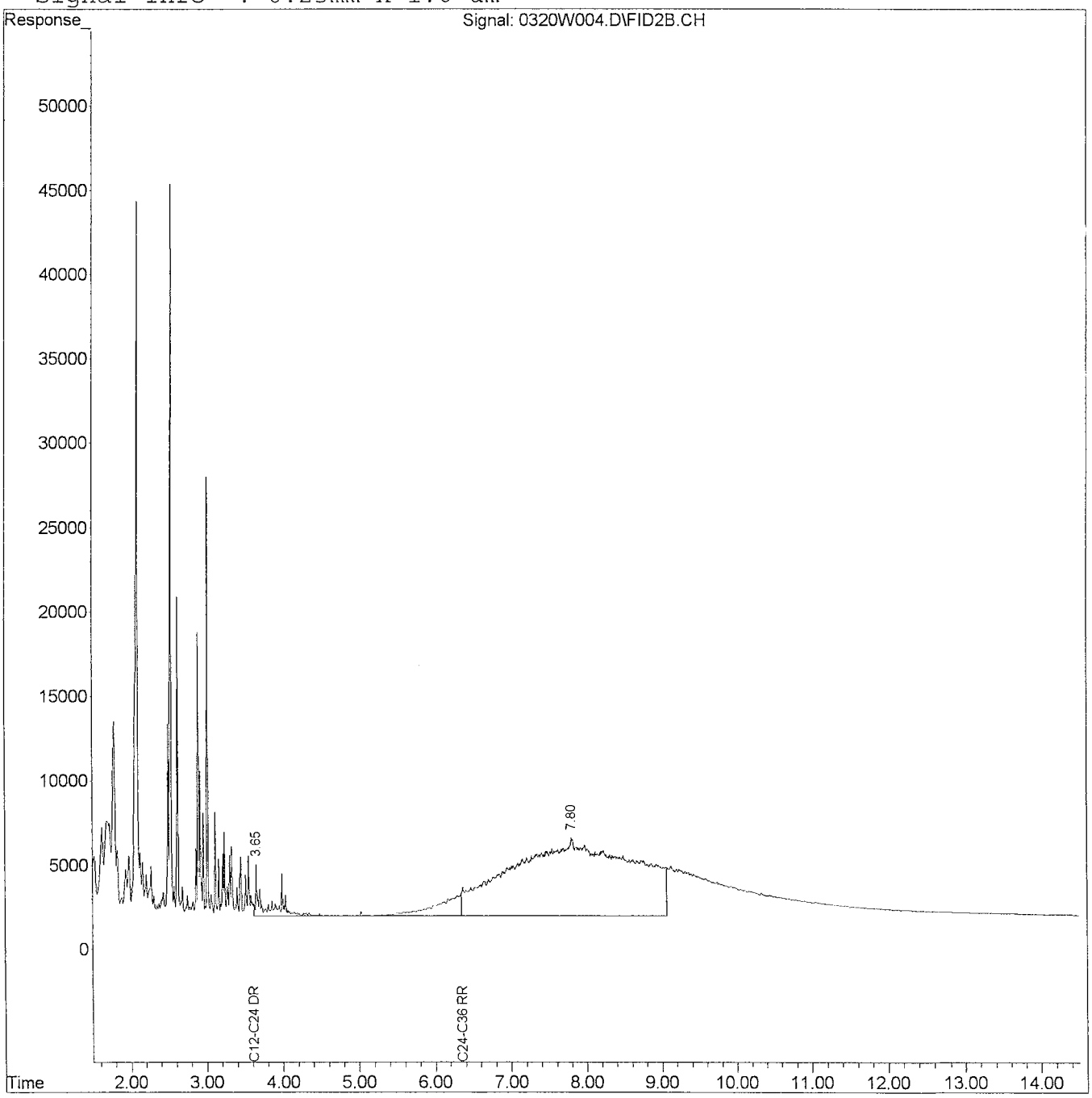
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W004.D Vial: 3
Acq On : 20 Mar 2007 11:37 am Operator: PMulherin
Sample : HCSV8-70 G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703832
Units: ppm

File ID: J:\GC21\DATA\032007.TAR\0320W016.D
J:\GC21\DATA\032007.TAR\0320W017.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1370	1400	2	NA	± 15 %	AverageRF
n-Triacontane	50	51	1060	1090	3	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1110	1110	1	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	521	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W016.D
Lab ID: KWG0703832-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 15:40
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03/2007

Secondary Review: Gla

Printed: 03/20/2007 18:02:56
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W016.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 15:40	**Quant Date:**	03/20/2007 17:50	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		69820	50.94		65-135	NA
n-Triacontane	7.60		54747	51.49		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1114161	1,007			
C24 - C36 RRO	6.35	?	8284	16.90			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

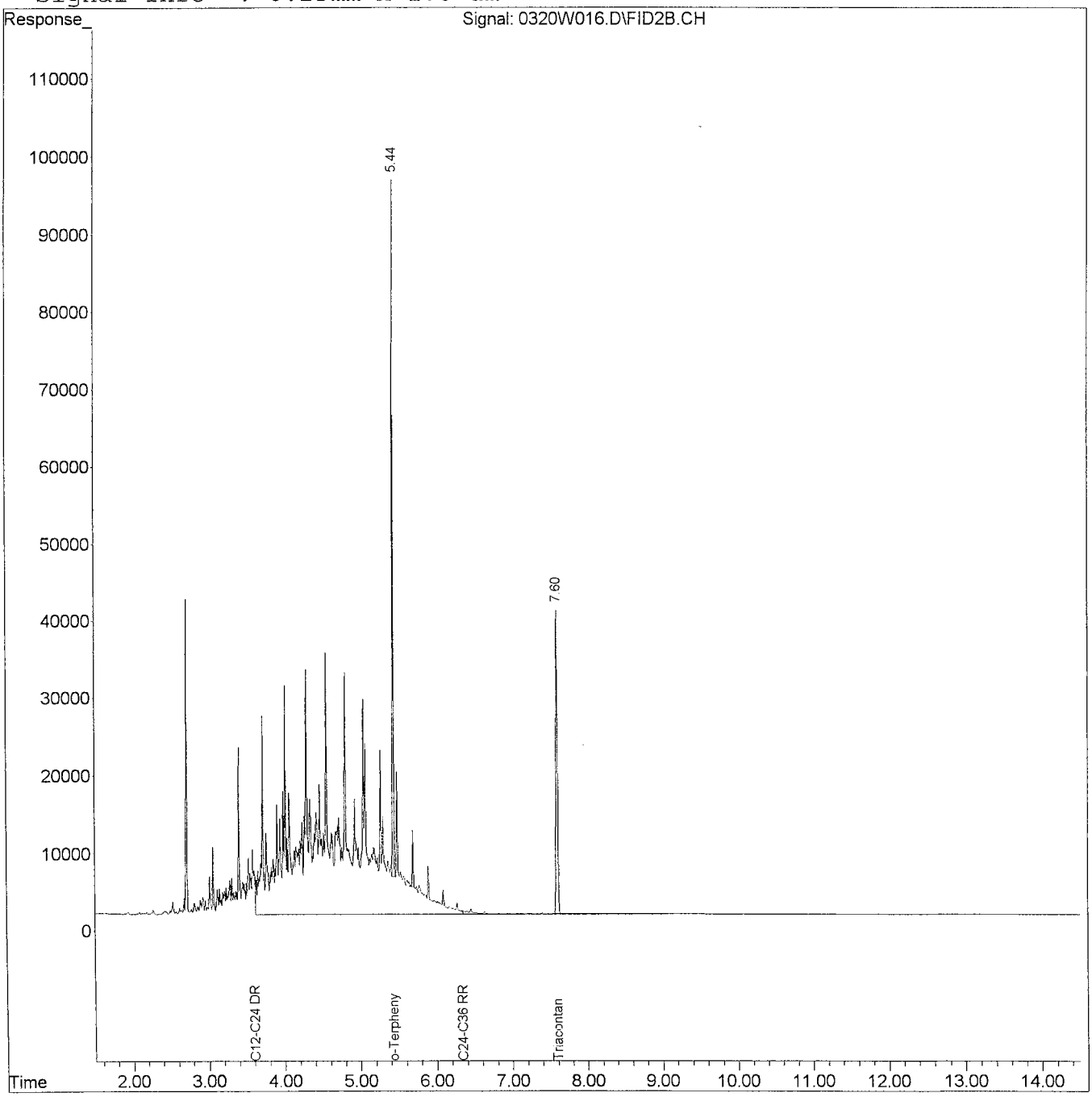
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W016.D Vial: 2
Acq On : 20 Mar 2007 3:40 pm Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W017.D
Lab ID: KWG0703832-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 16:00
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: VM 03/20/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W017.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 16:00	**Quant Date:**	03/20/2007 17:50	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703832-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane			0			65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	51179	46.25			NR
C24 - C36 RRO	6.35	?	521437	1,064			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

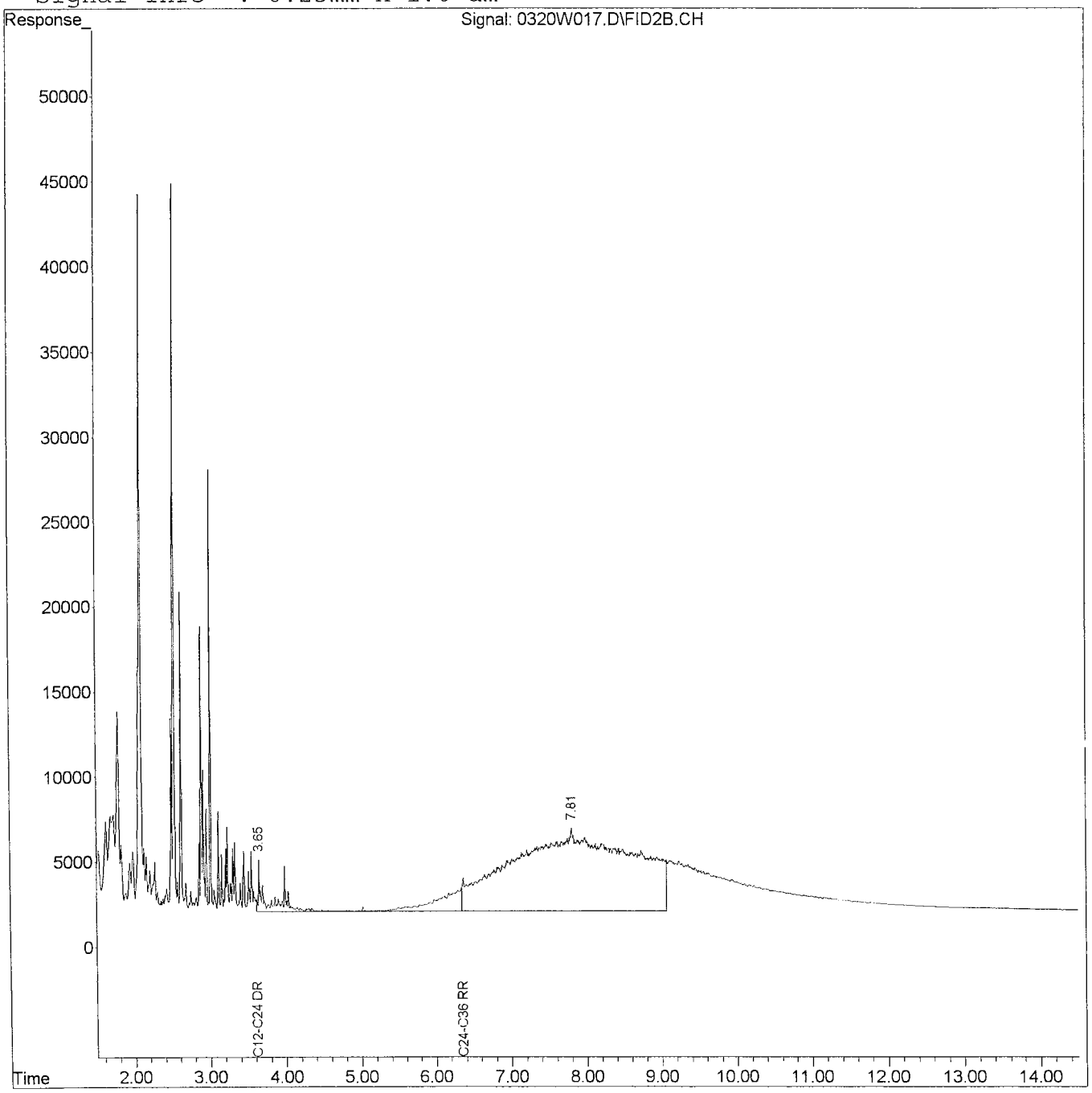
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W017.D Vial: 3
Acq On : 20 Mar 2007 4:00 pm Operator: PMulherin
Sample : HCSV8-7O G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703835	**Prep Method:**	EPA 3510C	**Prep Date:**	03/06/07 00:00
Department:	PETROLEUM H				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8015B DRO_RR	WATER	1000ml	2ml
K0701703-001	DAEGW104C1	8015B DRO_RR	WATER	1020ml	2ml
KWG0703835-1	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2ml
KWG0703835-2	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2ml
KWG0703835-3	Method Blank	8015B DRO_RR	WATER	1000ml	2ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	584805	HCSV8-6L	100uL			KCravey
K0701703-001	584806	HCSV8-6L	100uL			KCravey
KWG0703835-1	584807	HCSV8-6L	100uL	HCSV8-5I	100uL	KCravey
KWG0703835-2	584808	HCSV8-6L	100uL	HCSV8-5I	100uL	KCravey
KWG0703835-3	584809	HCSV8-6L	100uL			KCravey

Comments: PMM 3/20/07 FROM KWG0703295; NECESSARY TO OVERCOME FILE MANAGEMENT SNAFU.

Started By: CRuble Assisted By: _____ Training Yes No

Completed By: CRuble Assisted By: _____ Yes No

Reviewed By: [illegible] Date: 3/21/07 Storage: _____

Chain of Custody

Relinquished By: PM Date: 03/20/07 Extracts Examined

Received By: PM Date: 03/20/07 Yes No

Preparation Information

Group ID:	KWG0703295	**Prep Method:**	EPA 3510C	**Prep Date:**	03/06/07 14:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8015B DRO_RR	WATER	1000ml	2ml
K0701703-001	DAEGW104C1	8015B DRO_RR	WATER	1020ml	2ml
KWG0703295-1	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2ml
KWG0703295-2	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2ml
KWG0703295-3	Method Blank	8015B DRO_RR	WATER	1000ml	2ml

Lab Code	Parent Lab Code	Comments
K0701647-002		ACID/SI-GEL CLEAN-UPS DONE ON ALL SAMPLES.

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	580825	HCSV8-6-L	100uL			KCravey K Cravey 3/6/07
K0701703-001	580826	HCSV8-6-L	100uL			KCravey
KWG0703295-1	580827	HCSV8-6-L	100uL	HCSV8-5-I	100uL	KCravey
KWG0703295-2	580828	HCSV8-6-L	100uL	HCSV8-5-I	100uL	KCravey
KWG0703295-3	580829	HCSV8-6-L	100uL			KCravey

Comments:

Started By: CRuble Assisted By: Training Yes No

Completed By: CRuble Assisted By: Yes No

Reviewed By: MM Date: 031707 Storage: Box 4-C

Chain of Custody

Relinquished By: CRW Date: 3/7/07

Received By: MM Date: 031707

Extracts Examined Yes No

Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W005.D
Lab ID: KWG0703832-3
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 11:57
Date Quantitated: 03/20/2007 17:49
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM032007

Secondary Review: GL

Printed: 03/20/2007 18:02:38
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W005.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 11:57	**Quant Date:**	03/20/2007 17:49	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703832-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2186	1.98			
C24 - C36 RRO	6.35	?	7192	14.67			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

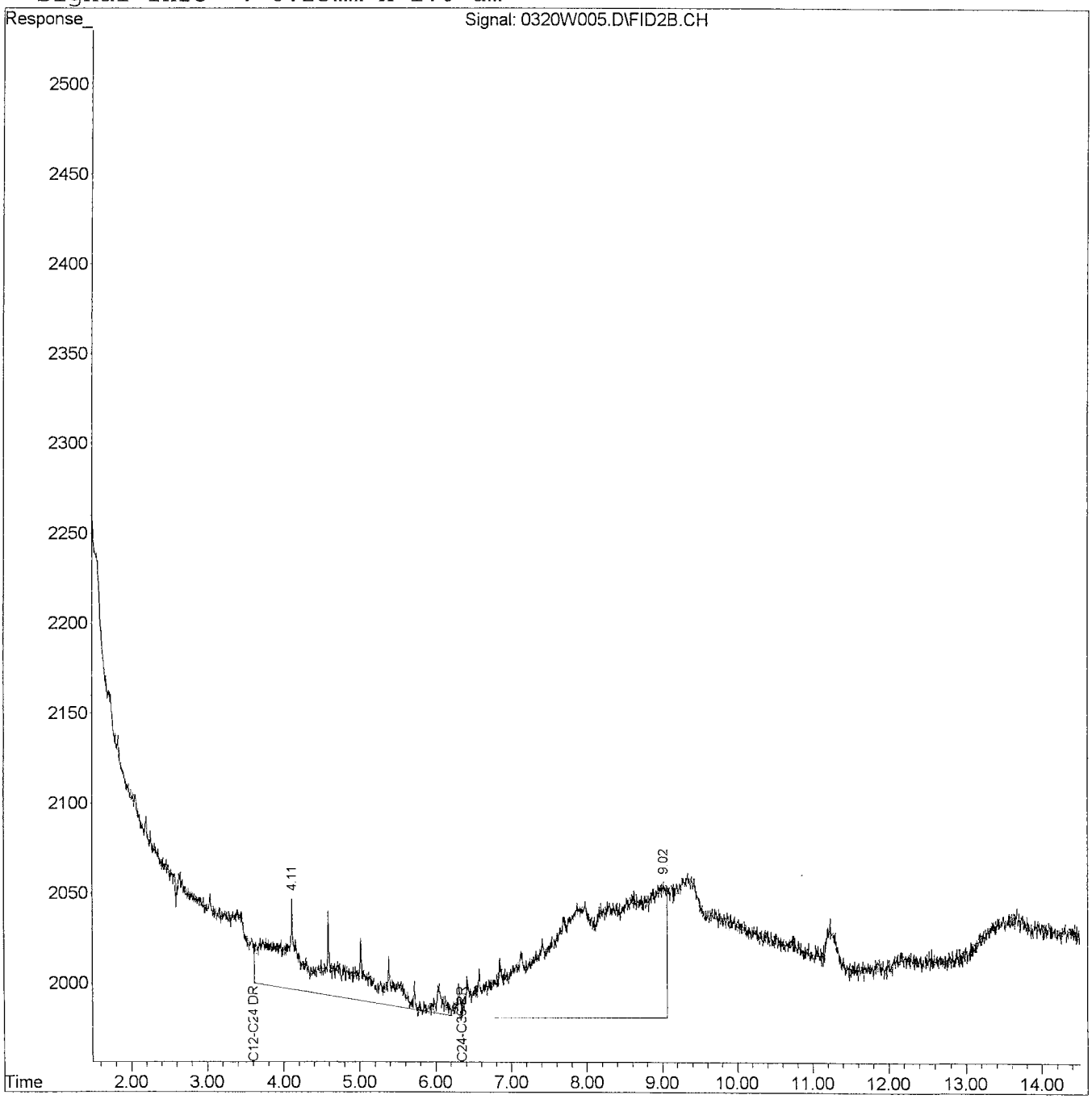
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W005.D Vial: 1
Acq On : 20 Mar 2007 11:57 am Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:49 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\032007.TAR\0320W018.D
Lab ID: KWG0703832-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/20/2007 16:21
Date Quantitated: 03/20/2007 17:50
Batch ID: KWG0703832
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 032007

Secondary Review: GL

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703832	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\032007.TAR\0320W018.D			**Instrument:**	GC21
Acqu Date:	03/20/2007 16:21	**Quant Date:**	03/20/2007 17:50	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703832-4			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2076	1.88			
C24 - C36 RRO	6.35	?	5861	11.96			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

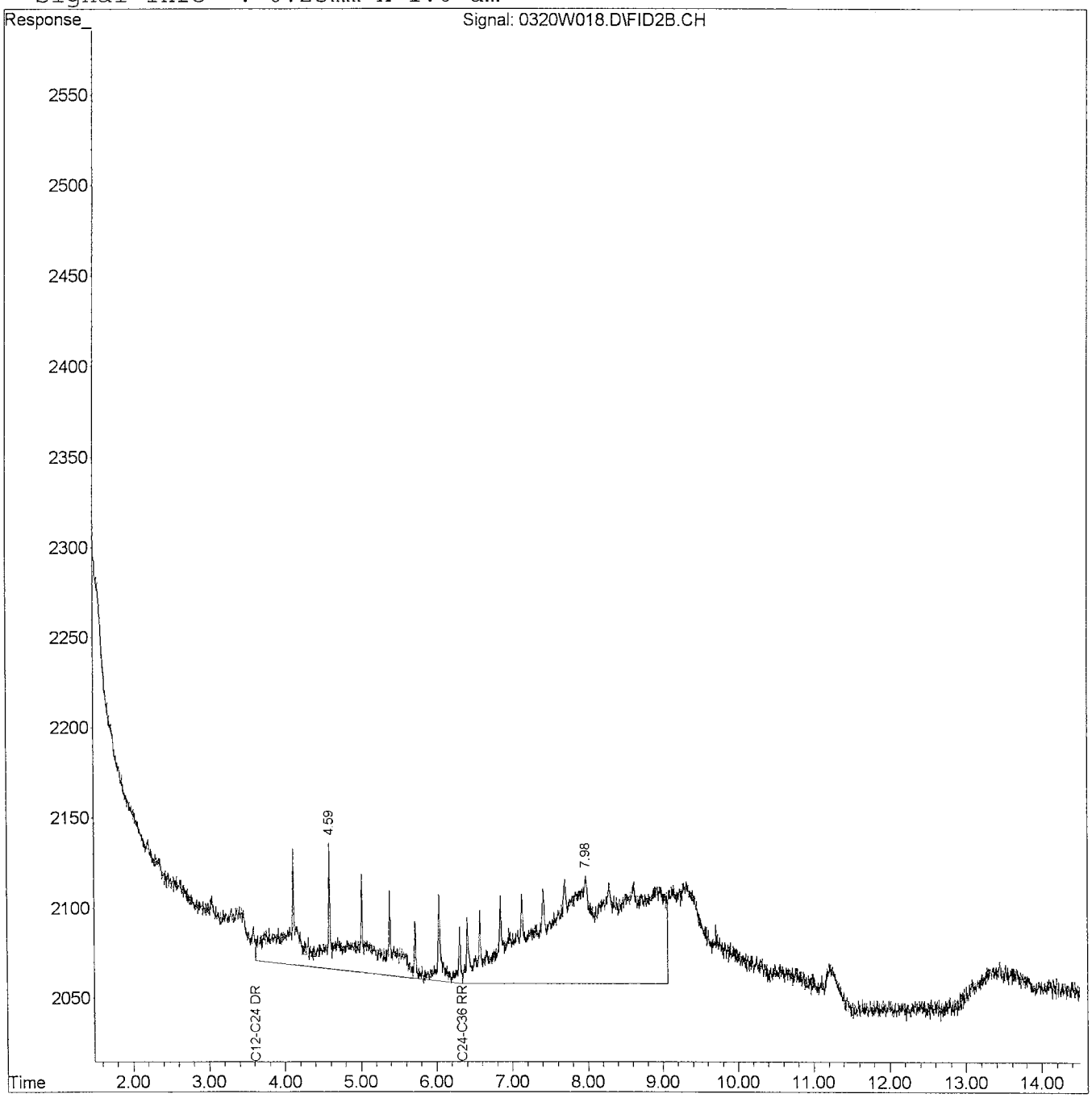
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\032007.TAR\0320W018.D Vial: 1
Acq On : 20 Mar 2007 4:21 pm Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 20 17:50 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Gasoline Range Organics

Organic Analysis:
Gasoline Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104CI	K0701703-001	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: BAL MAHERIA

Date: 03/20/07

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Gasoline Range Organics

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703711-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104C1	K0701703-001	104
Method Blank	KWG0703711-4	106
Batch QC	K0701647-001	106
Batch QCMS	KWG0703711-1	111
Batch QCDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

		Batch QCMS KWG0703711-1 Matrix Spike			Batch QCDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	15:56

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\031307.FID\0313R010.D
Lab Code:	KWG0703711-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
DAEGW104C1	K0701703-001	J:\GC06\DATA\031307.FID\0313R013.D	03/13/07	17:31

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
DAEGW104C1	K0701703-001	J:\GC06\DATA\031307.FID\0313R013.D	03/13/07	17:31

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type:	External Standard	**Calibration Date:**	09/18/2006
Analysis Method:	8015B	**Calibration ID:**	CAL6128
		Analysis Lot:	KWG0703710
		Units:	ug/L
File ID:	J:\GC06\DATA\031307.FID\0313R017.D	**Column ID:**	DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Gasoline Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703710
Instrument ID: GC06
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313R004.D	Instrument Blank	KWG0703710-1	3/13/2007	12:06		3/13/2007	12:22
0313R005.D	Continuing Calibration Verification	KWG0703710-3	3/13/2007	12:37		3/13/2007	12:53
0313R006.D	Lab Control Sample	KWG0703711-3	3/13/2007	13:49		3/13/2007	14:05
0313R007.D	Batch QCMS	KWG0703711-1	3/13/2007	14:21		3/13/2007	14:37
0313R008.D	Batch QCDMS	KWG0703711-2	3/13/2007	14:52		3/13/2007	15:08
0313R010.D	Method Blank	KWG0703711-4	3/13/2007	15:56		3/13/2007	16:12
0313R011.D	Batch QC	K0701647-001	3/13/2007	16:28		3/13/2007	16:44
0313R012.D	ZZZZZZ	ZZZZZZ	3/13/2007	17:00		3/13/2007	17:16
0313R013.D	DAEGW104C1	K0701703-001	3/13/2007	17:31		3/13/2007	17:47
0313R014.D	ZZZZZZ	ZZZZZZ	3/13/2007	18:03		3/13/2007	18:19
0313R015.D	ZZZZZZ	ZZZZZZ	3/13/2007	18:34		3/13/2007	18:50
0313R016.D	Instrument Blank	KWG0703710-2	3/13/2007	19:06		3/13/2007	19:22
0313R017.D	Continuing Calibration Verification	KWG0703710-4	3/13/2007	19:38		3/13/2007	19:54

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/13/2007

Extraction Prep Log
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Extraction Lot: KWG0703711
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104C1	K0701703-001	03/02/07	03/03/07	10ml	10ml	NA	
Method Blank	KWG0703711-4	NA	NA	10ml	10ml	NA	
Batch QC	K0701647-001	NA	NA	10ml	10ml	NA	
Batch QCMS	KWG0703711-1	NA	NA	10ml	10ml	NA	
Batch QCDMS	KWG0703711-2	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG0703711-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Gasoline Range Organics

Validation Package

Organic Analysis:
Gasoline Range Organics

Validation Package

QC Reports

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104C1	K0701703-001	104
Method Blank	KWG0703711-4	106
Batch QC	K0701647-001	106
Batch QCMS	KWG0703711-1	111
Batch QCDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

		Batch QCMS KWG0703711-1 Matrix Spike			Batch QCDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	15:56

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\031307.FID\0313R010.D
Lab Code:	KWG0703711-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
DAEGW104C1	K0701703-001	J:\GC06\DATA\031307.FID\0313R013.D	03/13/07	17:31

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
DAEGW104C1	K0701703-001	J:\GC06\DATA\031307.FID\0313R013.D	03/13/07	17:31

Organic Analysis:
Gasoline Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Gasoline Range Organics

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	104	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R013.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 17:31
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701703
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583926	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R013.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 17:31	**Quant Date:**	03/14/2007 08:20	**Vial:**	44
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-001			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1057800	104.36	104	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	74480	12.42	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

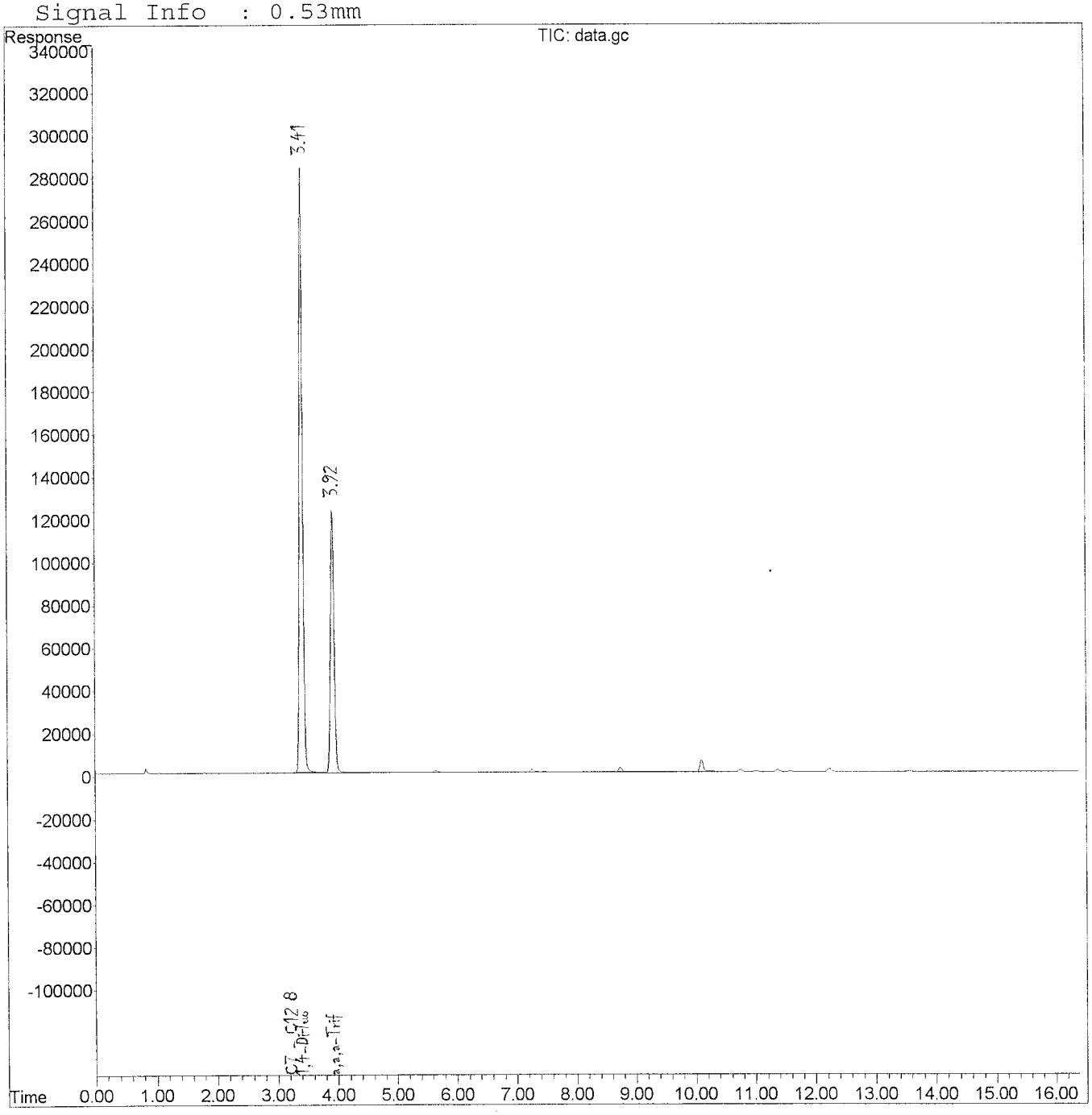
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R013.D Vial: 44
Acq On : 13 Mar 2007 05:31 pm Operator: GR
Sample : k0701703-001 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703711-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R010.D
Lab ID: KWG0703711-4
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 15:56
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Gee 3/16/07

Secondary Review: PMM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583932	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R010.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 15:56	**Quant Date:**	03/13/2007 16:35	**Vial:**	41
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703711-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1071904	105.75	106	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	48585	8.10	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

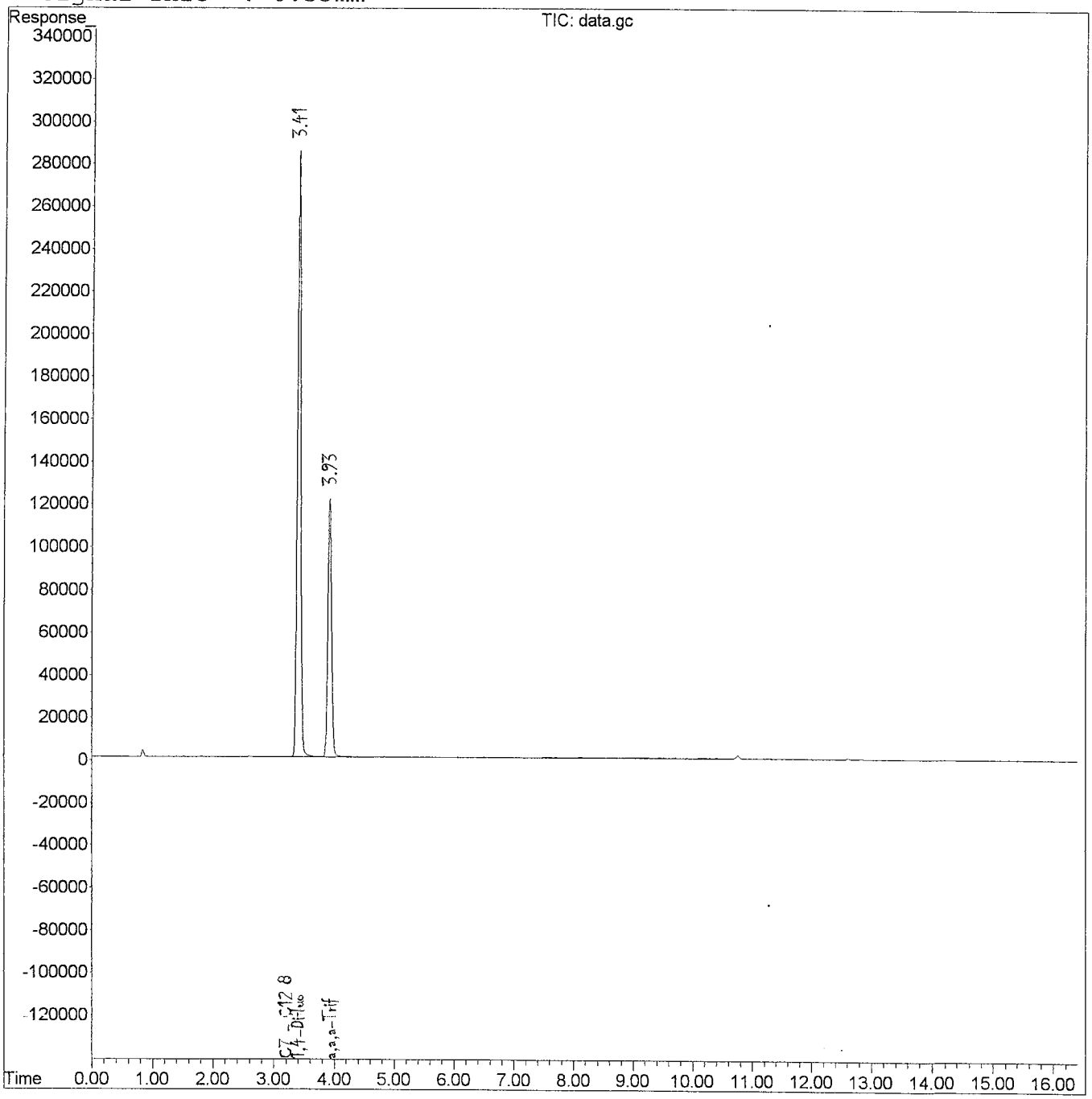
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R010.D Vial: 41
Acq On : 13 Mar 2007 03:56 pm Operator: GR
Sample : mb 1647/703/816 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R011.D
Lab ID: K0701647-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 16:28
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gee 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701647
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583924	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R011.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 16:28	**Quant Date:**	03/14/2007 08:20	**Vial:**	42
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-001			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1,4-Difluorobenzene	3.41	0.00	1073670	105.92	106	65-135	OK	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	33633	5.61	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

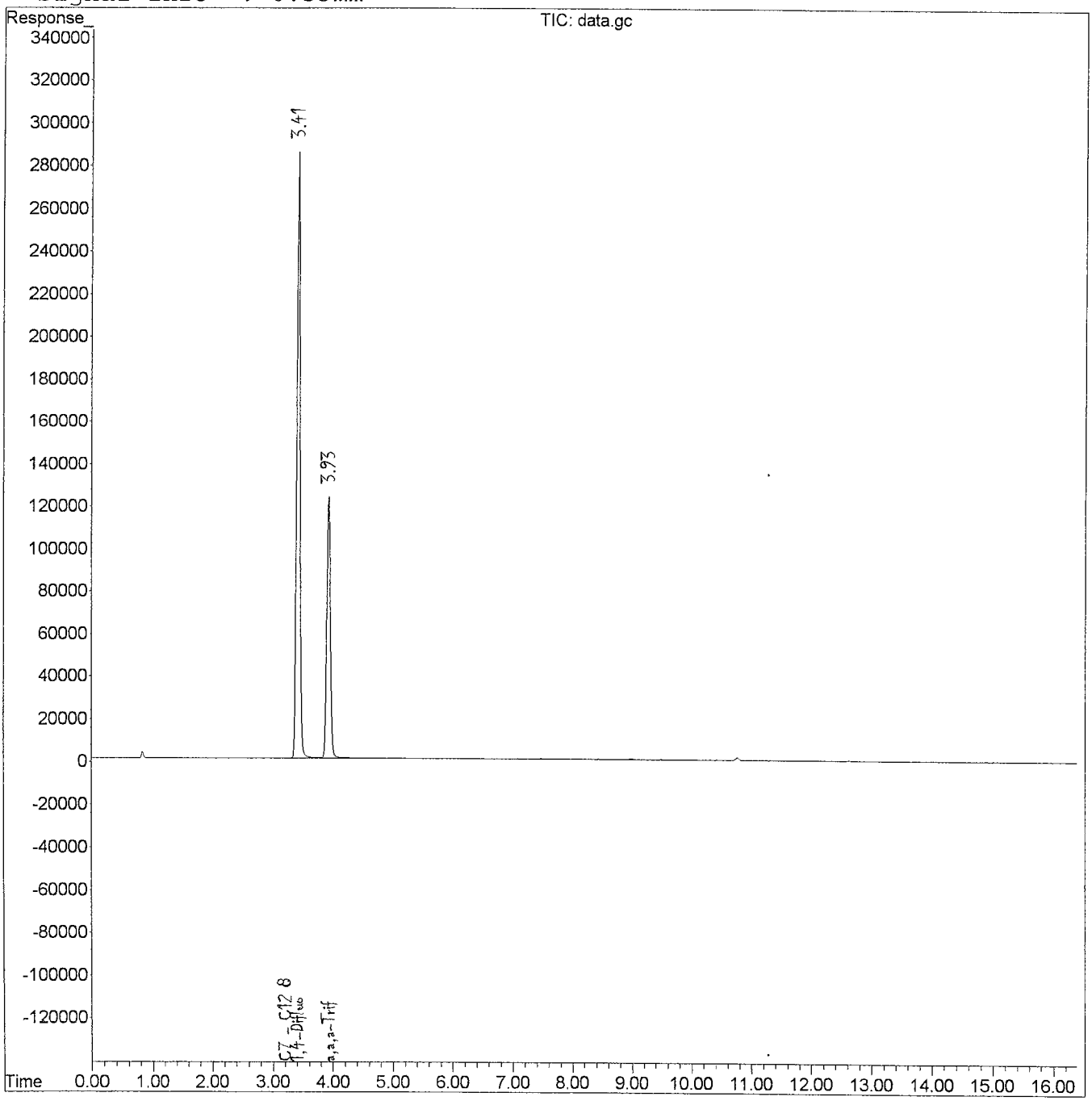
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R011.D Vial: 42
Acq On : 13 Mar 2007 04:28 pm Operator: GR
Sample : k0701647-001 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0703711-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**570**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R007.D
Lab ID: KWG0703711-1 -- K0701647-001MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 14:21
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583929	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R007.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:21	**Quant Date:**	03/13/2007 14:46	**Vial:**	39
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703711-1 -- K0701647-001MS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1125947	111.08	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3416625	569.53	570		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

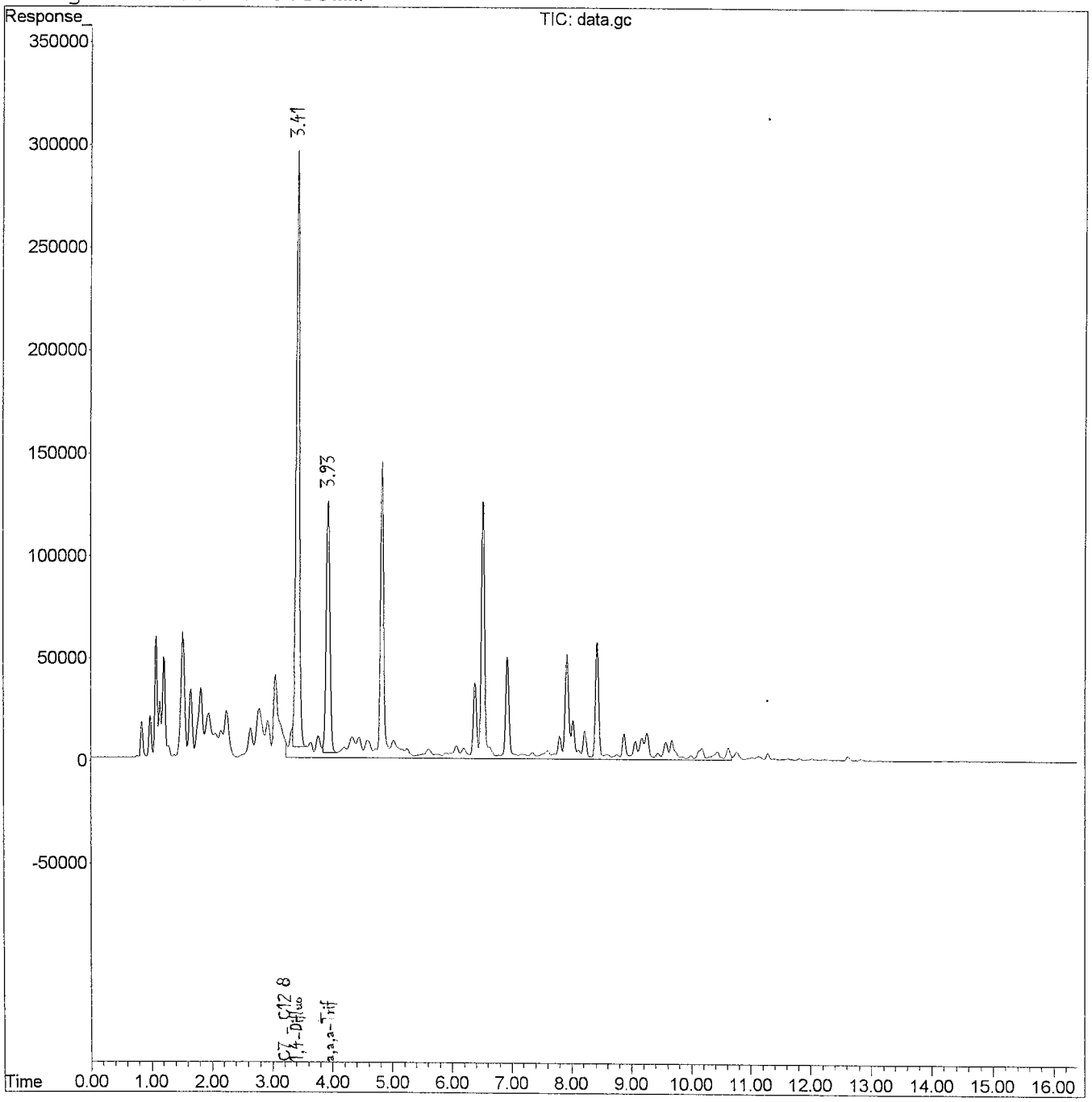
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R007.D Vial: 39
Acq On : 13 Mar 2007 02:21 pm Operator: GR
Sample : k0701647-001ms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703711-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**564**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R008.D
Lab ID: KWG0703711-2 -- K0701647-001DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 14:52
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Gle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583930	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R008.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:52	**Quant Date:**	03/13/2007 16:35	**Vial:**	40
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703711-2 -- K0701647-001DMS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1122225	110.71	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3382899	563.91	564		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

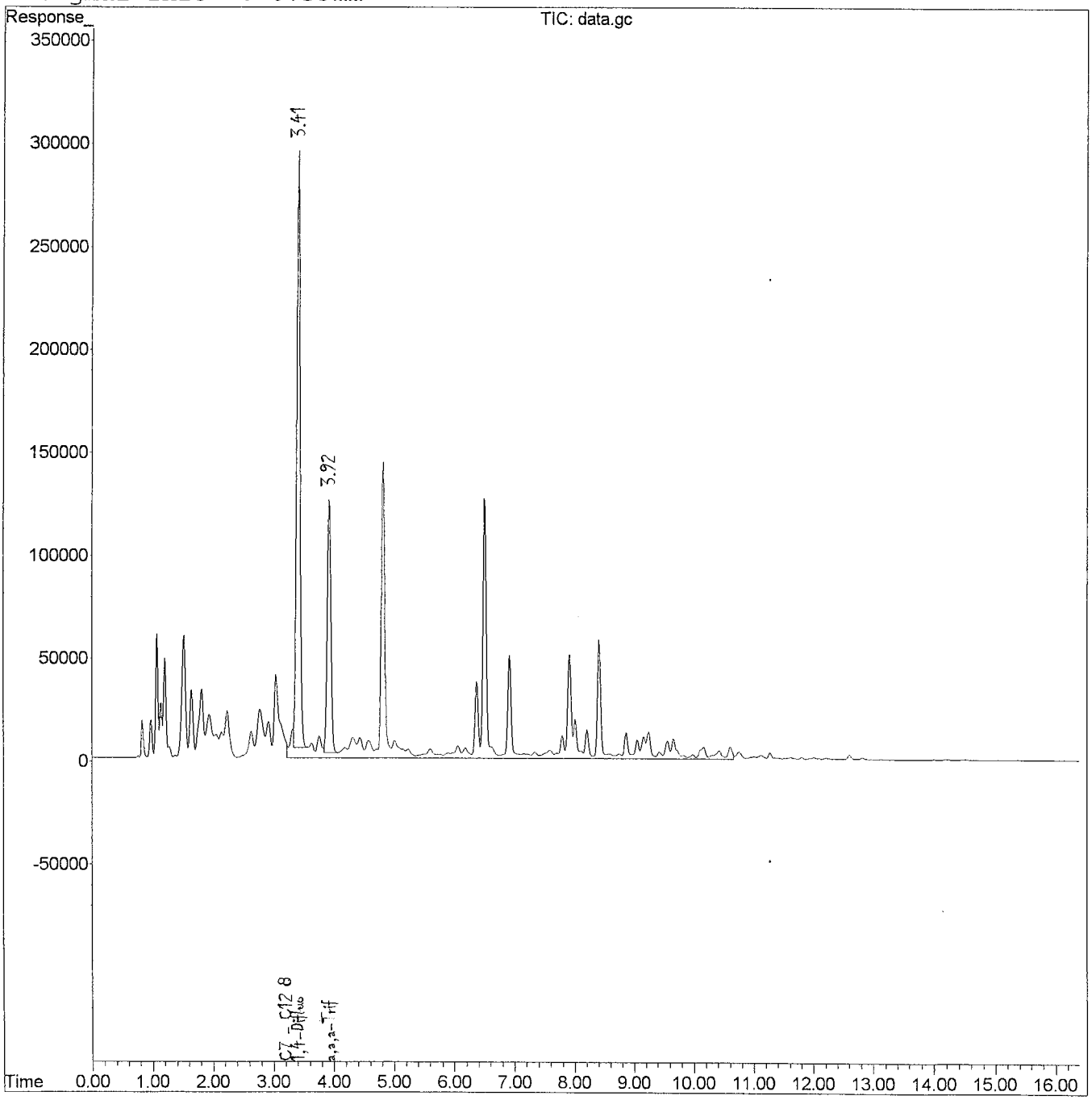
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R008.D Vial: 40
Acq On : 13 Mar 2007 02:52 pm Operator: GR
Sample : k0701647-001dms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703711-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**555**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R006.D
Lab ID: KWG0703711-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 13:49
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583931	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R006.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 13:49	**Quant Date:**	03/13/2007 14:46	**Vial:**	38
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703711-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.43	0.02	1129542	111.43	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3328540	554.85	555		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

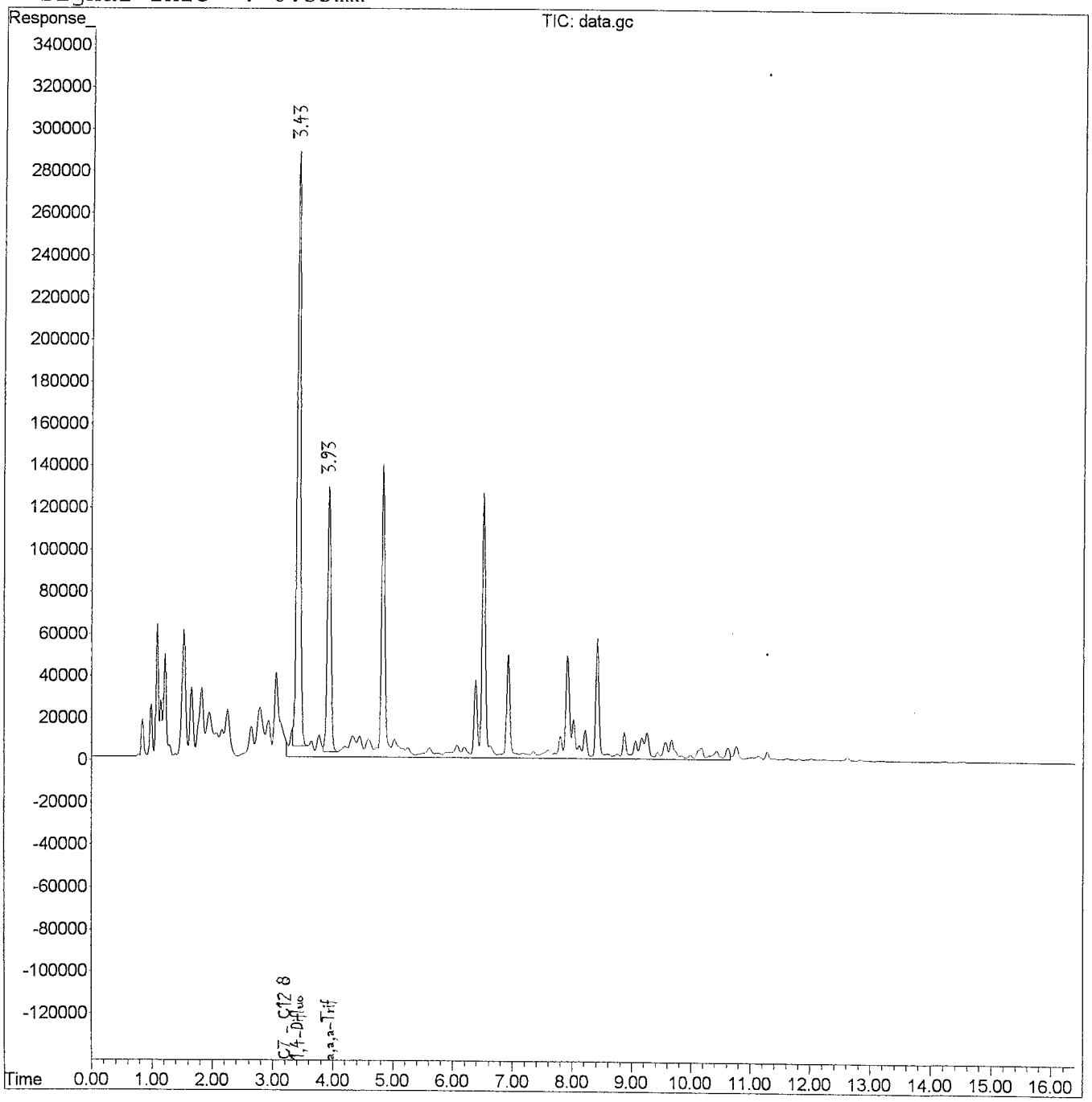
Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R006.D
Acq On : 13 Mar 2007 01:49 pm
Sample : lcs 1647/703/816
Misc :
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Vial: 38
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\GC06\METHODS\091806TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: Yes
Printer: Yes
File: No

Generate Report During Run Method: No

pm031607

CAL 6128 aka 091806tar
Calibration Last Updated: Tue Mar 13 13:10:15 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) a,a,a-Trifluorotoluene ( )

Ret. Time 3.93 min., Extract & Integrate from 3.73 to 4.13 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	533357
2		50.000	535446
3		50.000	534830
4		50.000	547317
5		50.000	560294
6		not used for this compound	
7		not used for this compound	
w_cc		50.000	-1
s_cc		50.000	-1

Curve Fit: Avg. RF

---

2) 1,4-Difluorobenzene ( )

Ret. Time 3.43 min., Extract & Integrate from 3.23 to 3.63 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	207154
2		25.000	250434
3		50.000	458000
4		100.000	1035010
5		150.000	1619666
6		not used for this compound	
7		not used for this compound	
w_cc		100.000	-1
s_cc		not used for this compound	

Curve Fit: Avg. RF

---

3) 4-Bromofluorobenzene ( )

Ret. Time 7.49 min., Extract & Integrate from 7.29 to 7.69 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	129026
2		25.000	154244
3		50.000	297734
4		100.000	650155
5		150.000	961375
6		not used for this compound	
7		not used for this compound	
w_cc		not used for this compound	
s_cc		100.000	-1

pm 03 Ke07

Curve Fit: Avg. RF

---

4) C7 - C12 8015 ( )

Ret. Time 3.22 min., Extract & Integrate from 3.22 to 10.67 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	301387
2		100.000	578840
3		200.000	1183046

4	500.000	2948011
5	1000.000	5926881
6	5000.000	30557187
7	10000.000	63275902
w_cc	500.000	-1
s_cc	500.000	-1

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Wed Mar 14 16:36:04 2007

PM03/6/07

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	533357	49.180 ug/L
2) S 1,4-Difluorobenzene	3.49	207154	20.436 ug/L
3) S 4-Bromofluorobenzene	7.57	129026	20.489 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	301387	44.582 ug/L

Ale 3/14/07

MM

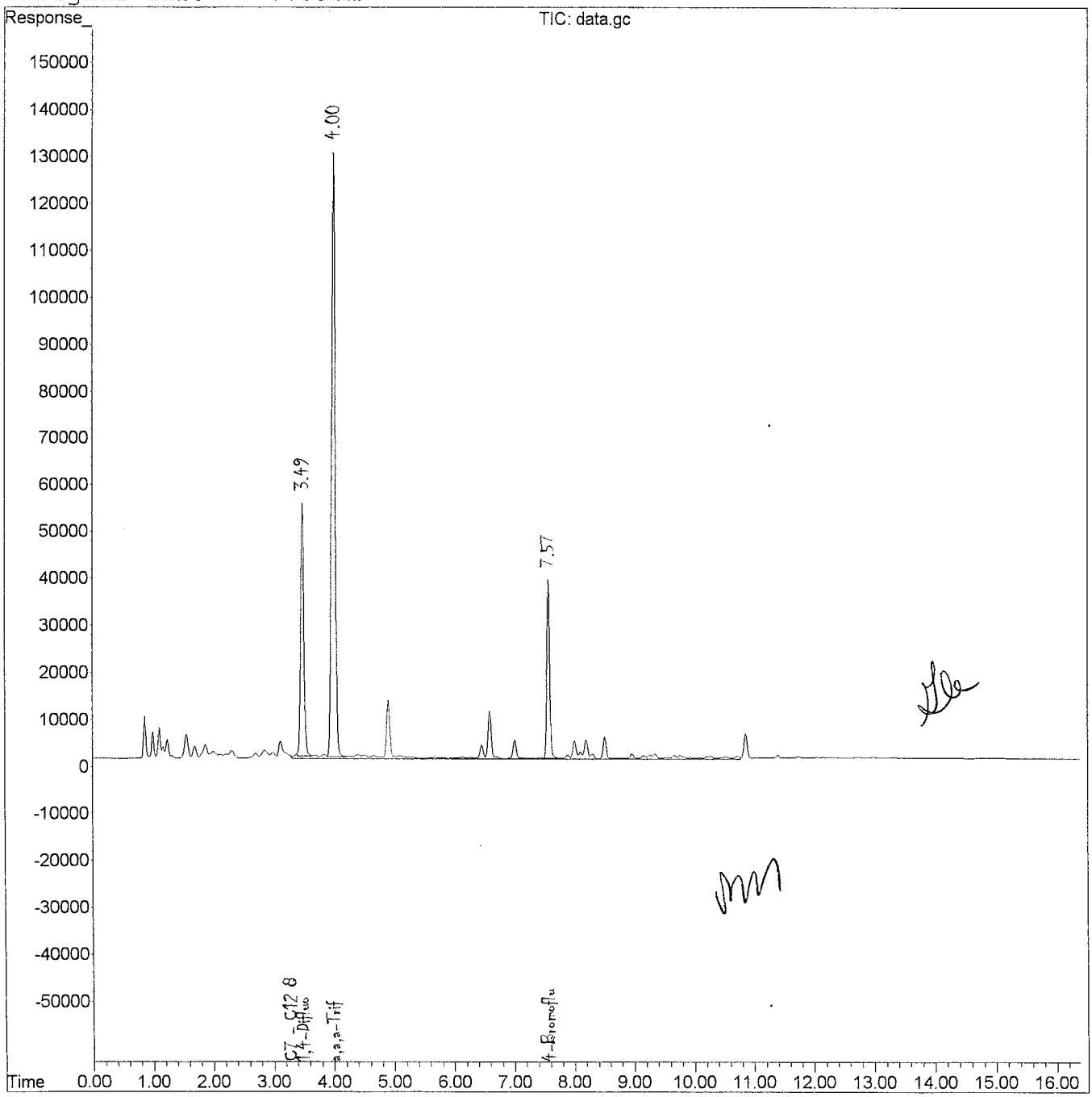
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:59 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	535446	49.373 ug/L
2) S 1,4-Difluorobenzene	3.48	250434	24.706 ug/L
3) S 4-Bromofluorobenzene	7.57	154244	24.494 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	578840	85.623 ug/L

3/14/07

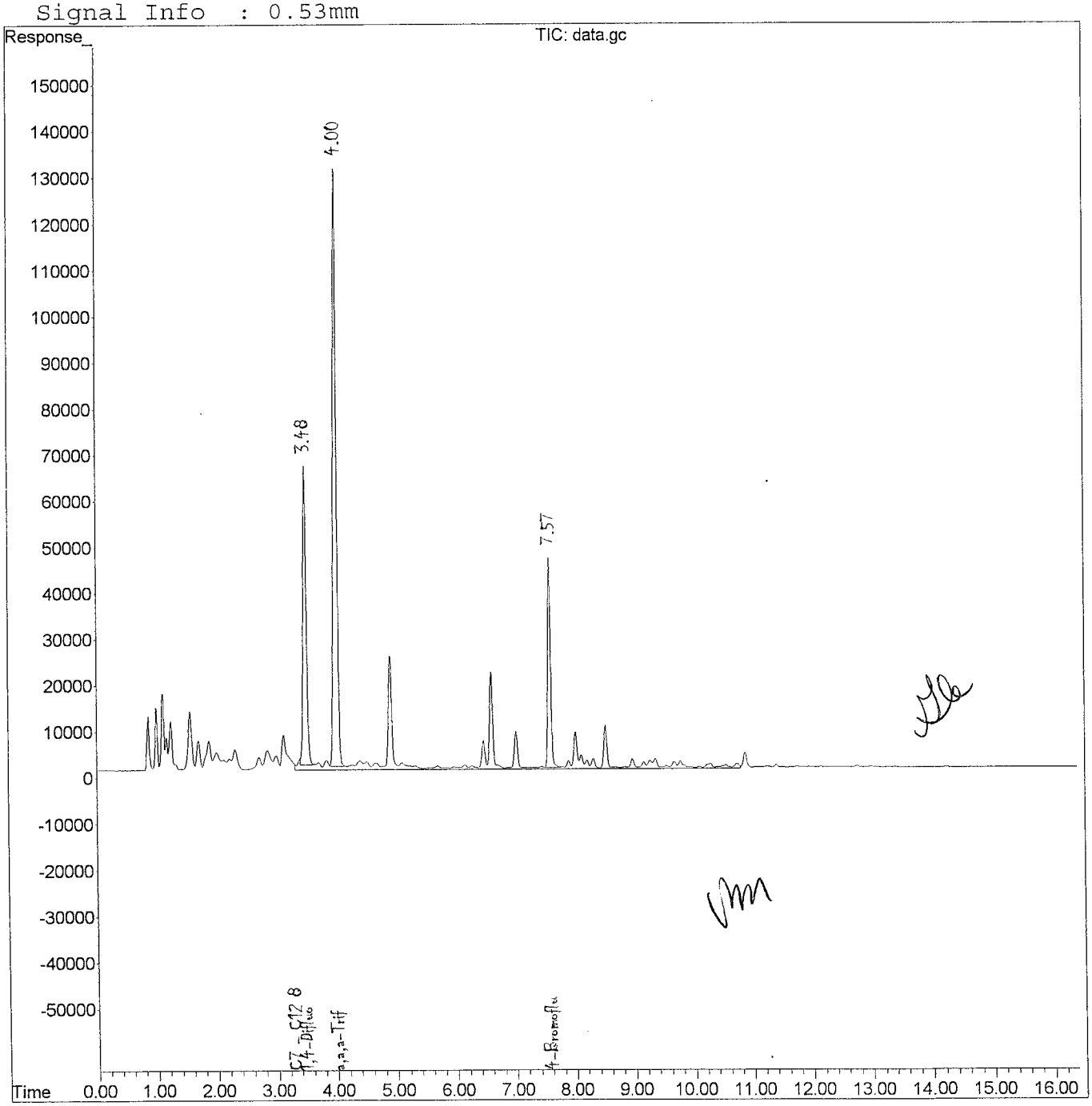
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:01 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	534830	49.316 ug/L
2) S 1,4-Difluorobenzene	3.49	458000	45.183 ug/L
3) S 4-Bromofluorobenzene	7.59	297734	47.280 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	1183046	174.998 ug/L

Ble 3/14/07

VM

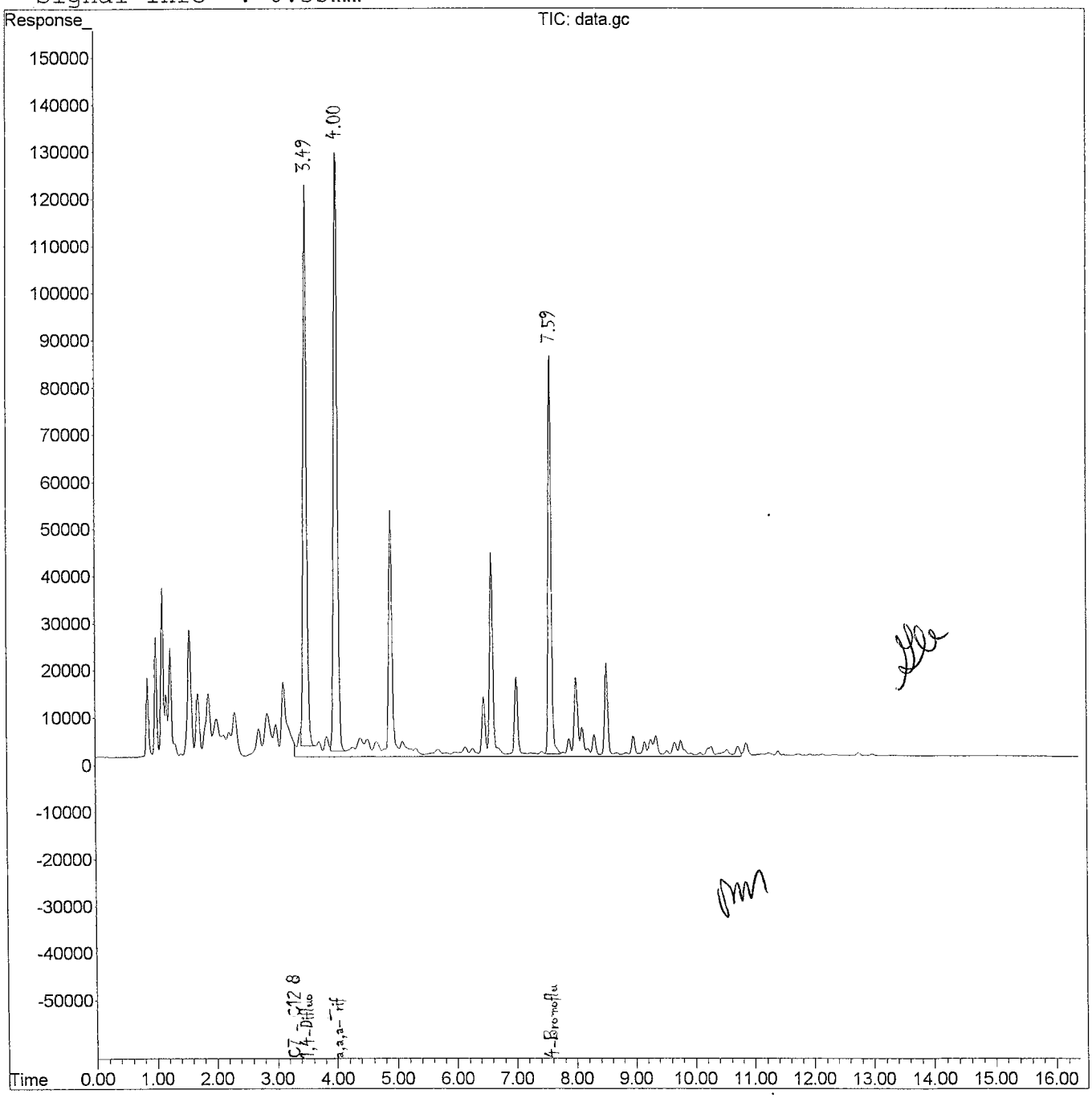
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:02 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	547317	50.467 ug/L
2) S 1,4-Difluorobenzene	3.49	1035010	102.106 ug/L
3) S 4-Bromofluorobenzene	7.59	650155	103.244 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2948011	436.075 ug/L

3/14/07

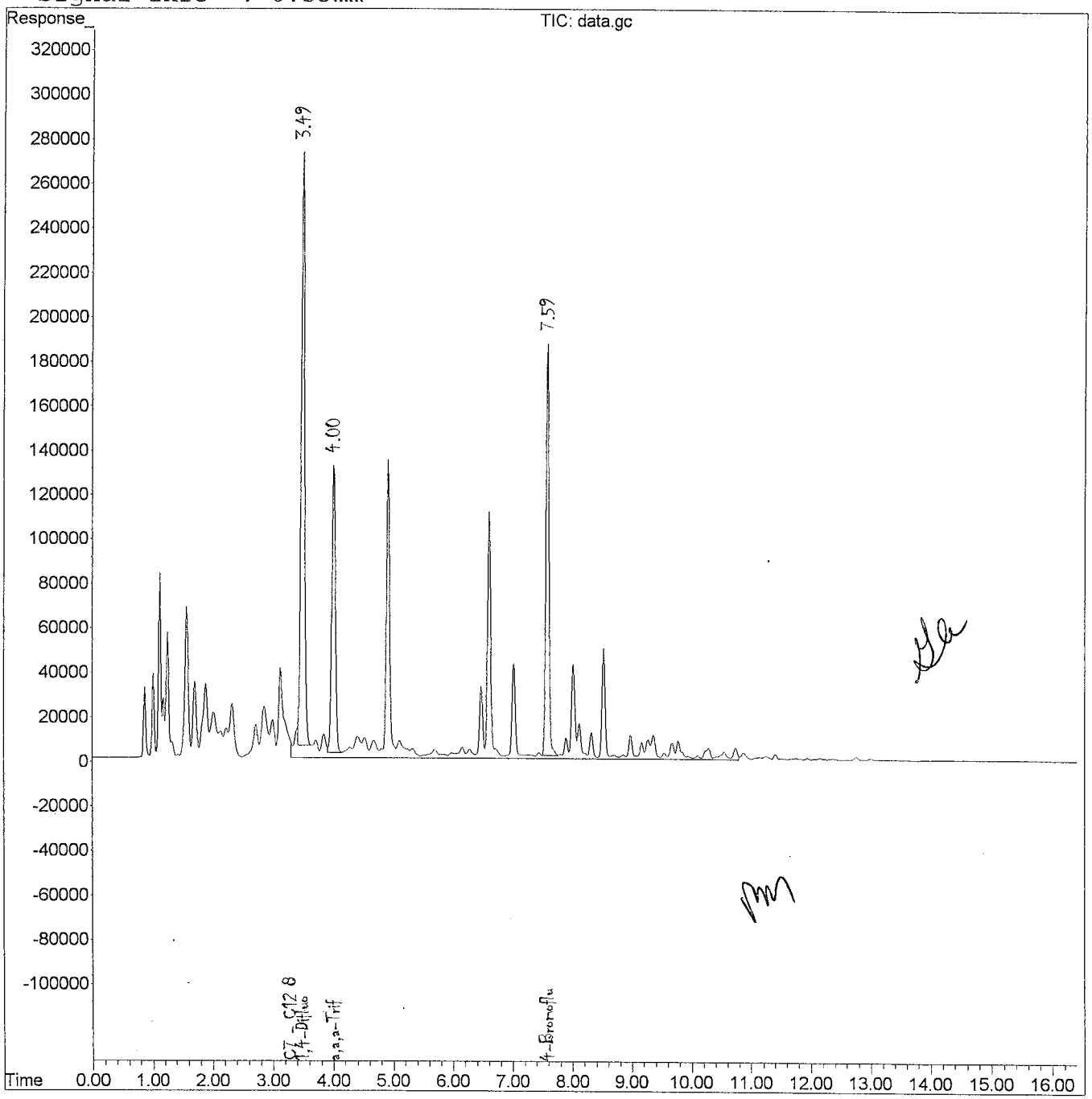
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:04 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	560294	51.664 ug/L
2) S 1,4-Difluorobenzene	3.49	1619666	159.784 ug/L
3) S 4-Bromofluorobenzene	7.59	961375	152.665 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	5926881	876.715 ug/L

3/14/07

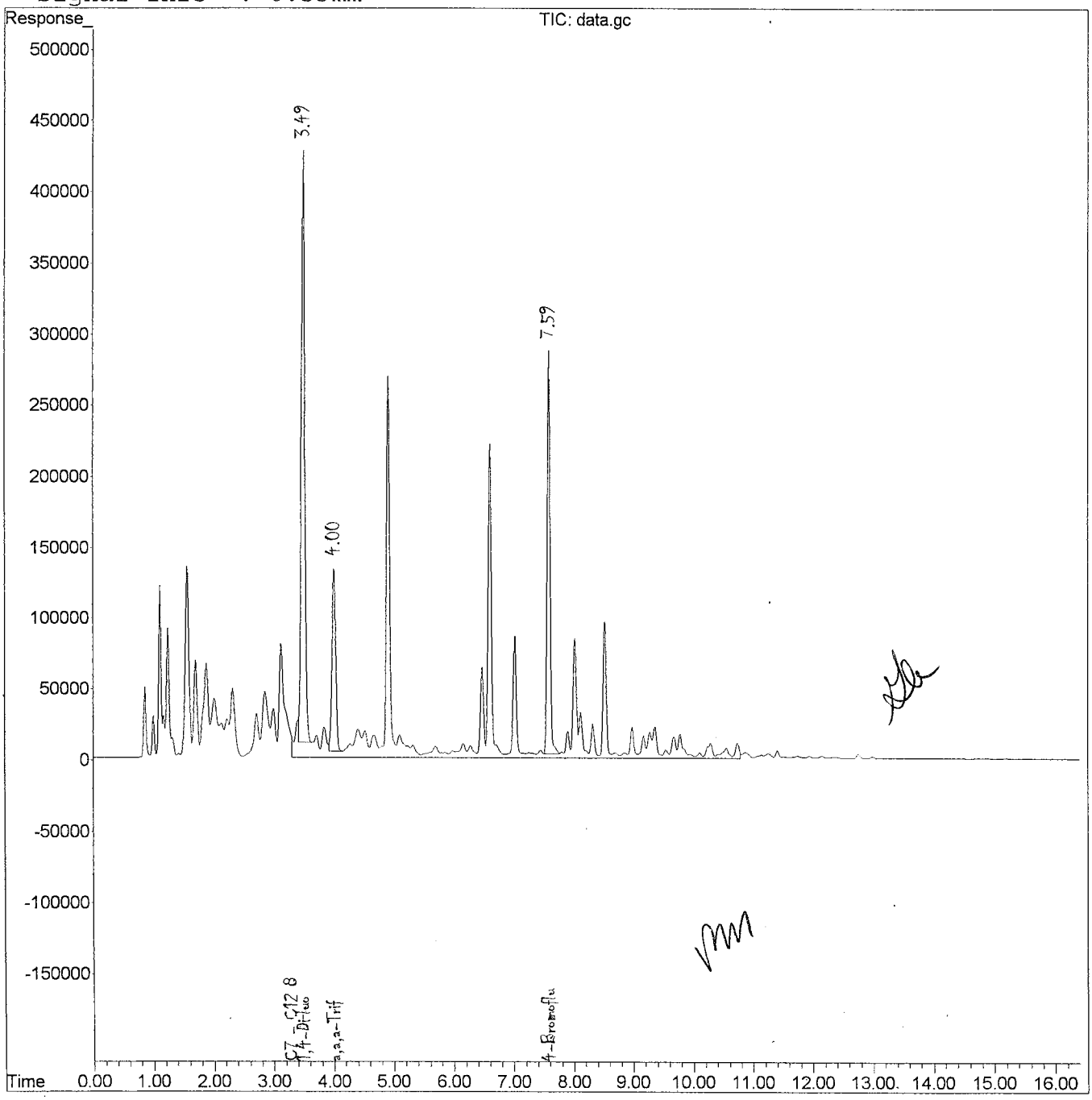
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:05 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	30557187	4520.076	ug/L

3/14/07

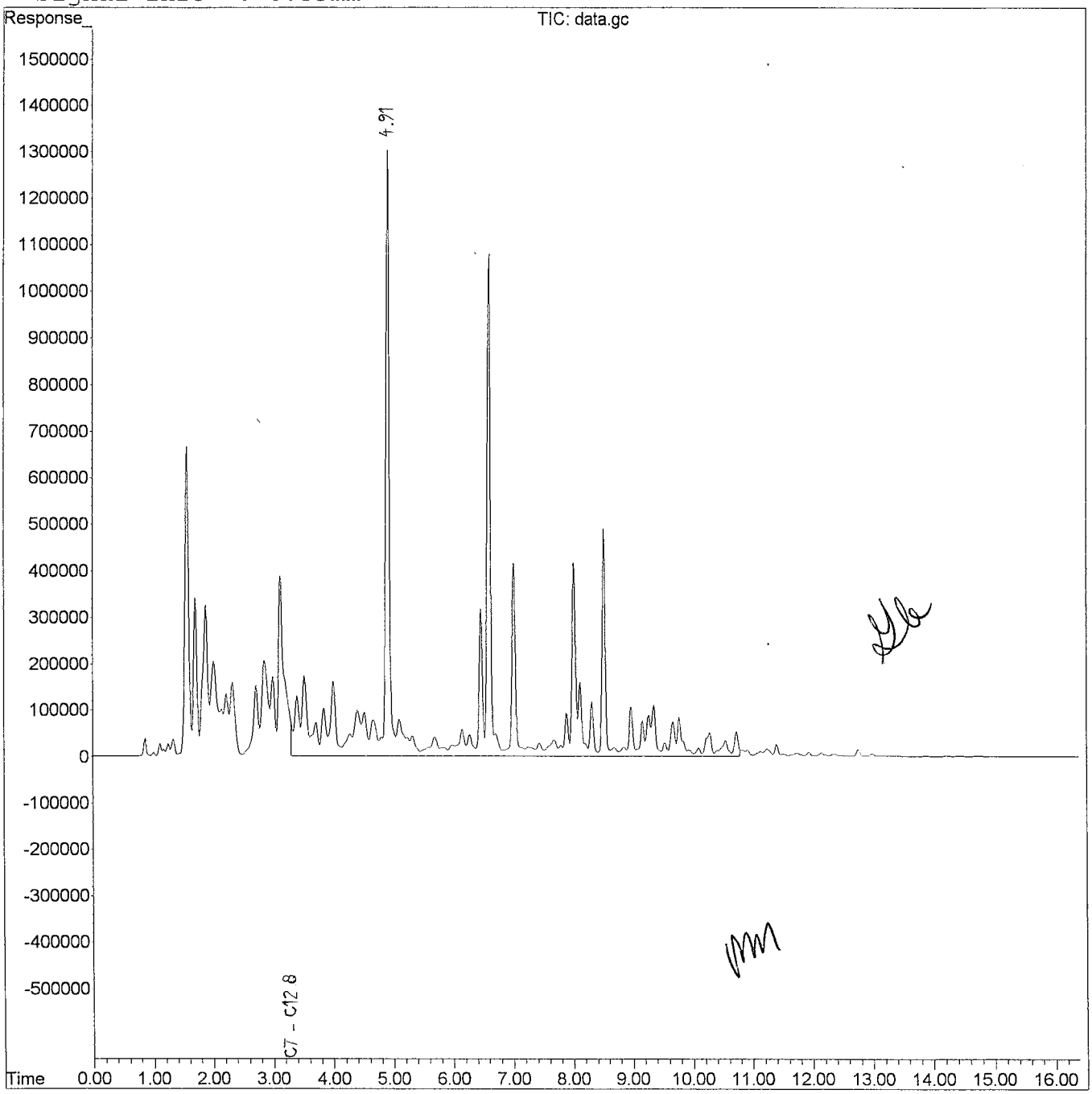
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:06 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	63275902	9359.889	ug/L

3/14/07

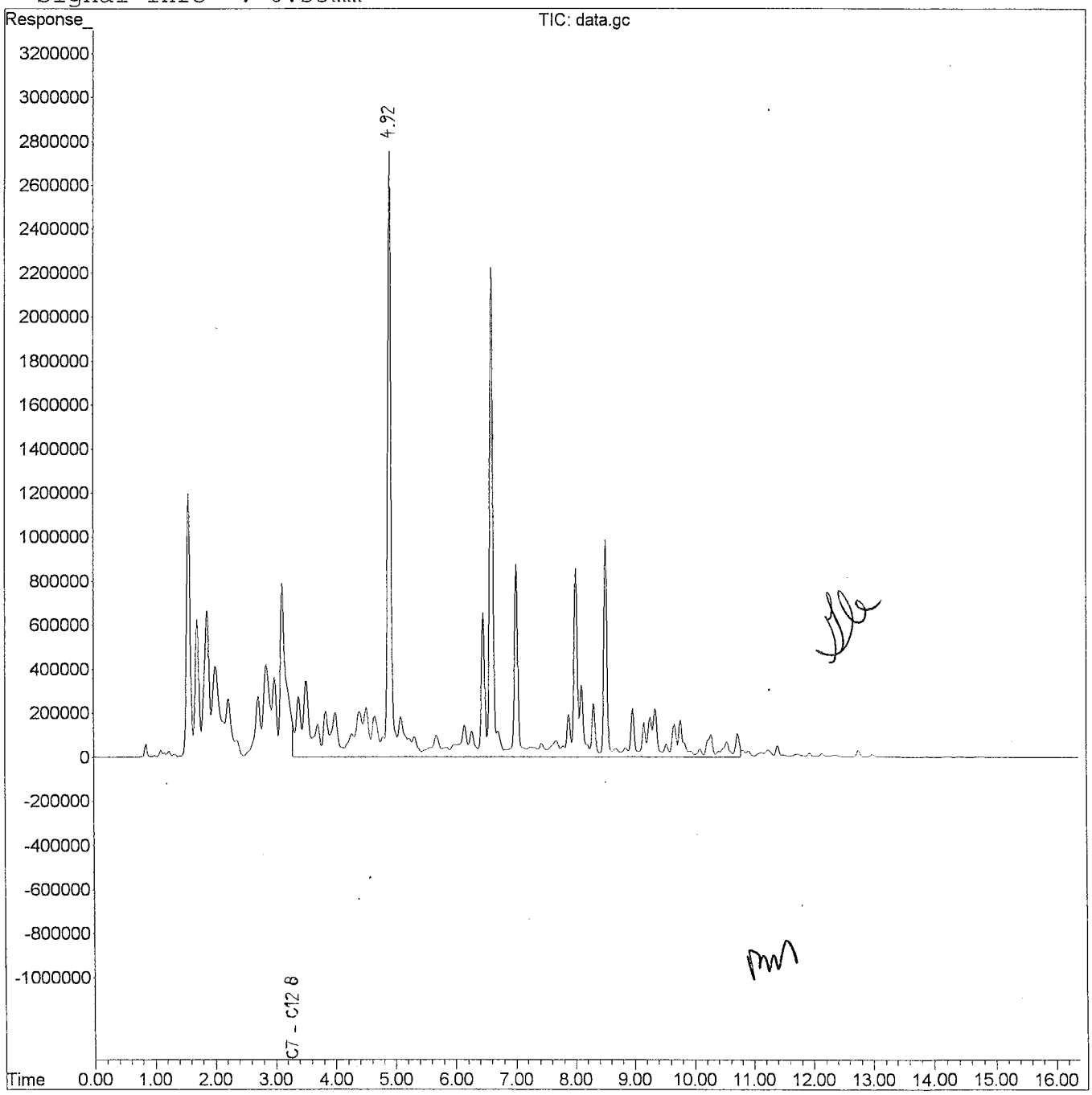
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

		Compound	R.T.	Response	Conc Units
System Monitoring Compounds					
1)	S	a,a,a-Trifluorotoluene	4.01	558695	51.516 ug/L
2)	S	1,4-Difluorobenzene	3.49	1001454	98.796 ug/L
3)	S	4-Bromofluorobenzene	7.59	628554	99.813 ug/L
Target Compounds					
4)	H	C7 - C12 8015	3.30	2898371	483.139 ug/L

3/14/07

mm

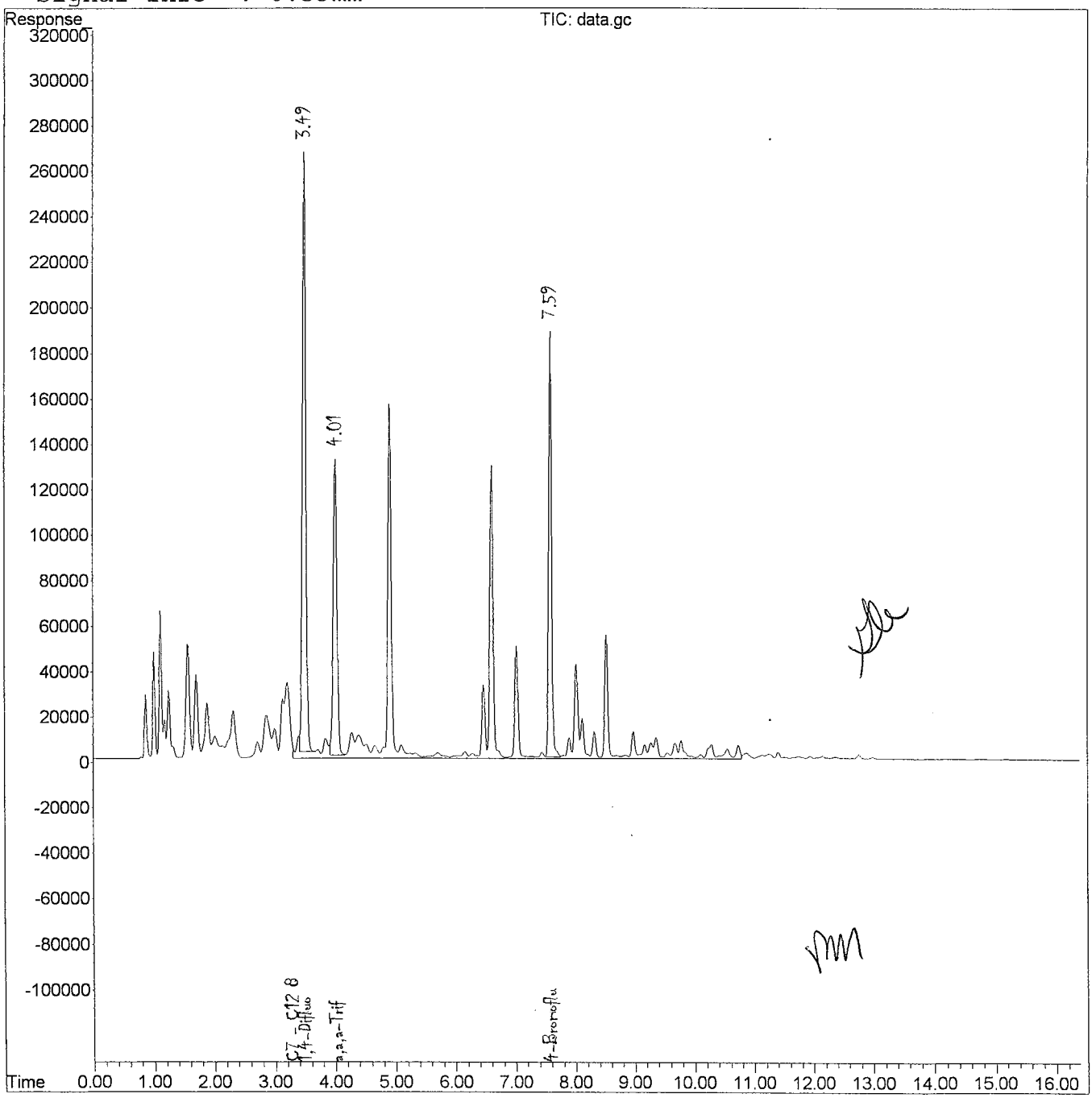
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R005.D
Lab ID: KWG0703710-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 12:37
Date Quantitated: 03/13/2007 13:10
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R005.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:37	**Quant Date:**	03/13/2007 13:10	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1,4-Difluorobenzene	3.41		1115982	110.09		65-135	NA	
4-Bromofluorobenzene			0			70-130	NA	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3070216	511.78			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

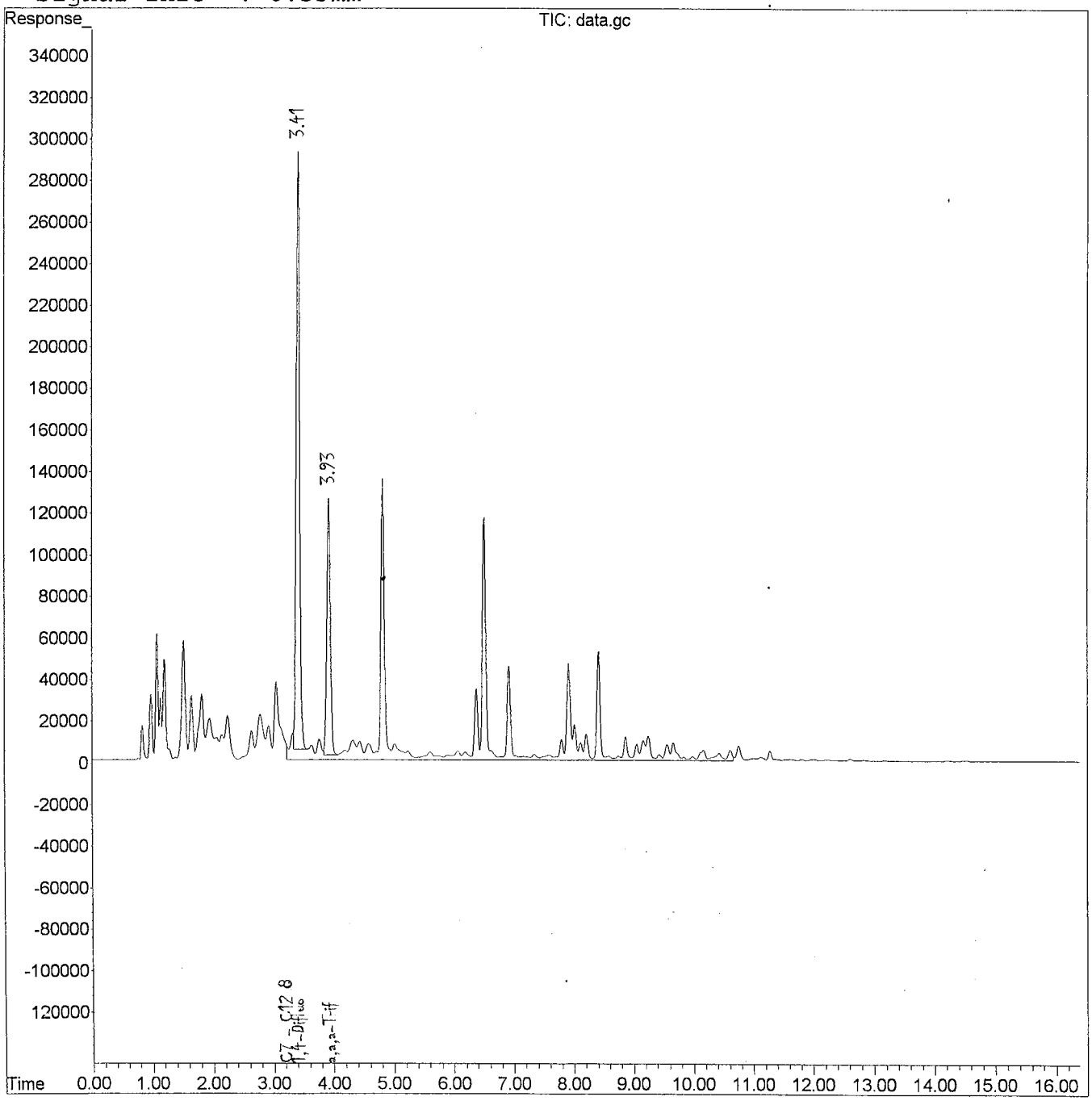
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R005.D Vial: 37
Acq On : 13 Mar 2007 12:37 pm Operator: GR
Sample : gas hcv3-88a Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 13:10 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R017.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R017.D
Lab ID: KWG0703710-4
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:38
Date Quantitated: 03/14/2007 08:19
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gm 3/16/07

Secondary Review: DM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R017.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:38	**Quant Date:**	03/14/2007 08:19	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1108088	109.32		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3154619	525.85			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

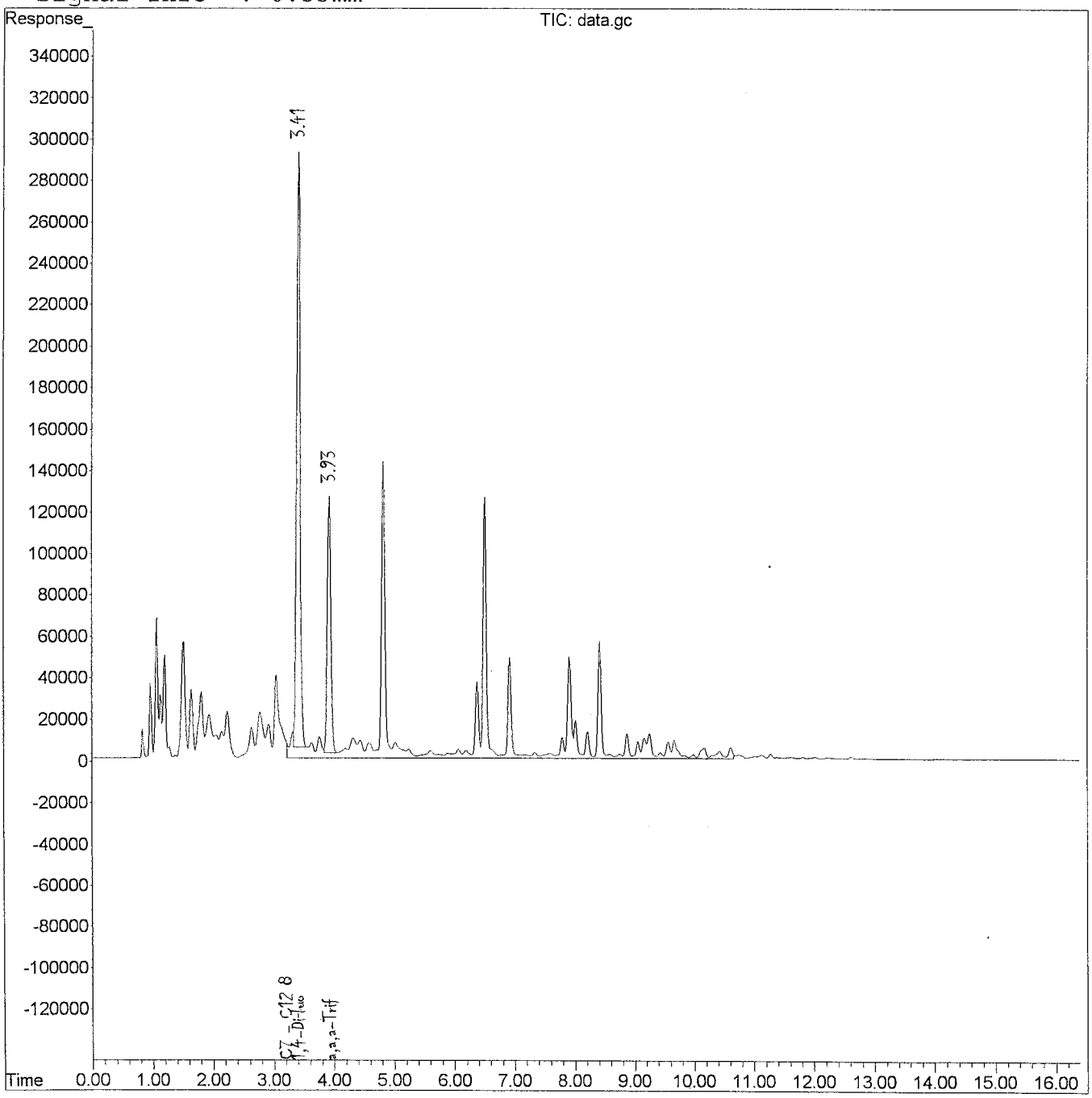
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R017.D Vial: 37
Acq On : 13 Mar 2007 07:38 pm Operator: GR
Sample : gas hcv3-88a Inst. : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:19 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703711	**Prep Method:**	EPA 5030B	**Prep Date:**	03/13/07 00:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-001	1047MW101CL	8015B VOC_GR	WATER	10ml	10ml
K0701647-002	1349MW01CL	8015B VOC_GR	WATER	10ml	10ml
K0701703-001	DAEGW104C1	8015B VOC_GR	WATER	10ml	10ml
K0701816-001	979GW115CL	8015B VOC_GR	WATER	10ml	10ml
K0701816-002	NKGW02CL	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-1	Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-2	Duplicate Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-3	Lab Control Sample	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-4	Method Blank	8015B VOC_GR	WATER	10ml	10ml

pH
<2

Lab Code	Parent Lab Code	Comments
KWG0703711-1	K0701647-001	
KWG0703711-2	K0701647-001	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-001	583924	HCV3-87R				
K0701647-002	583925	HCV3-87R				
K0701703-001	583926	HCV3-87R				
K0701816-001	583927	HCV3-87R				
K0701816-002	583928	HCV3-87R				
KWG0703711-1	583929	HCV3-87R		HCV3-87J	25uL	
KWG0703711-2	583930	HCV3-87R		HCV3-87J	25uL	
KWG0703711-3	583931	HCV3-87R		HCV3-87J	25uL	
KWG0703711-4	583932	HCV3-87R				

Comments:

Started By: GRoettge Assisted By: Training Yes No

Completed By: GRoettge Assisted By: Yes No

Reviewed By: [signature] Date: 03/16/07 Storage:

Chain of Custody

Relinquished By: [signature] Date: 3/16/07 Extracts Examined

Received By: [signature] Date: [signature] Yes No

Exception Report

Data File:	J:\GC06\DATA\031307.FID\0313R004.D	**Date Acquired:**	03/13/2007 12:06
Lab ID:	KWG0703710-1	**Date Quantitated:**	03/16/2007 08:43
RunType:	IB	**Batch ID:**	KWG0703710
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R004.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:06	**Quant Date:**	03/16/2007 08:43	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-1			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1071361	105.69		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	141389	23.57			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

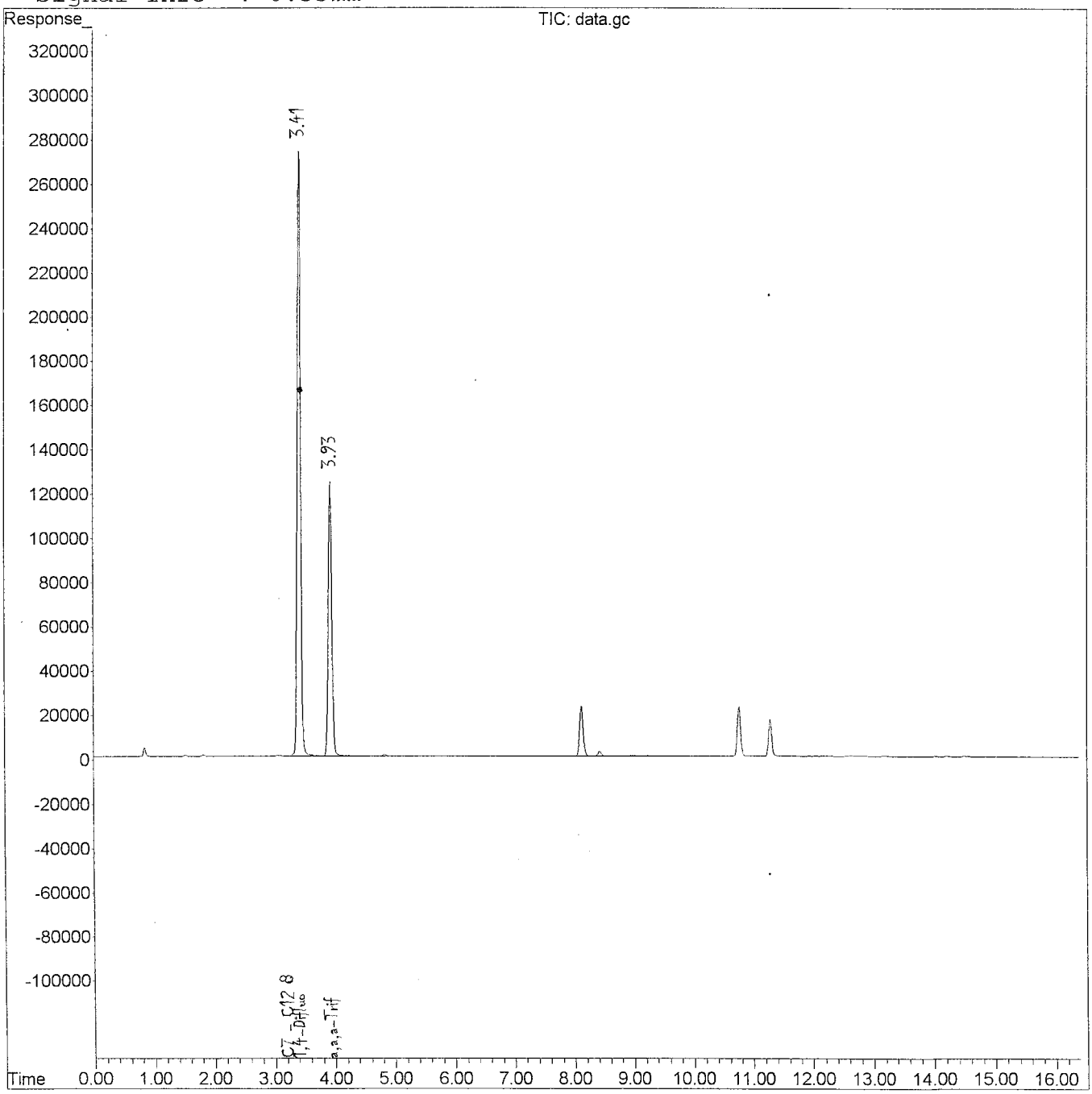
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R004.D Vial: 6
Acq On : 13 Mar 2007 12:06 pm Operator: GR
Sample : ib Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 16 8:43 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R016.D
Lab ID: KWG0703710-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:06
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R016.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:06	**Quant Date:**	03/14/2007 08:20	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-2			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1064325	105.00		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	17847	2.98			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

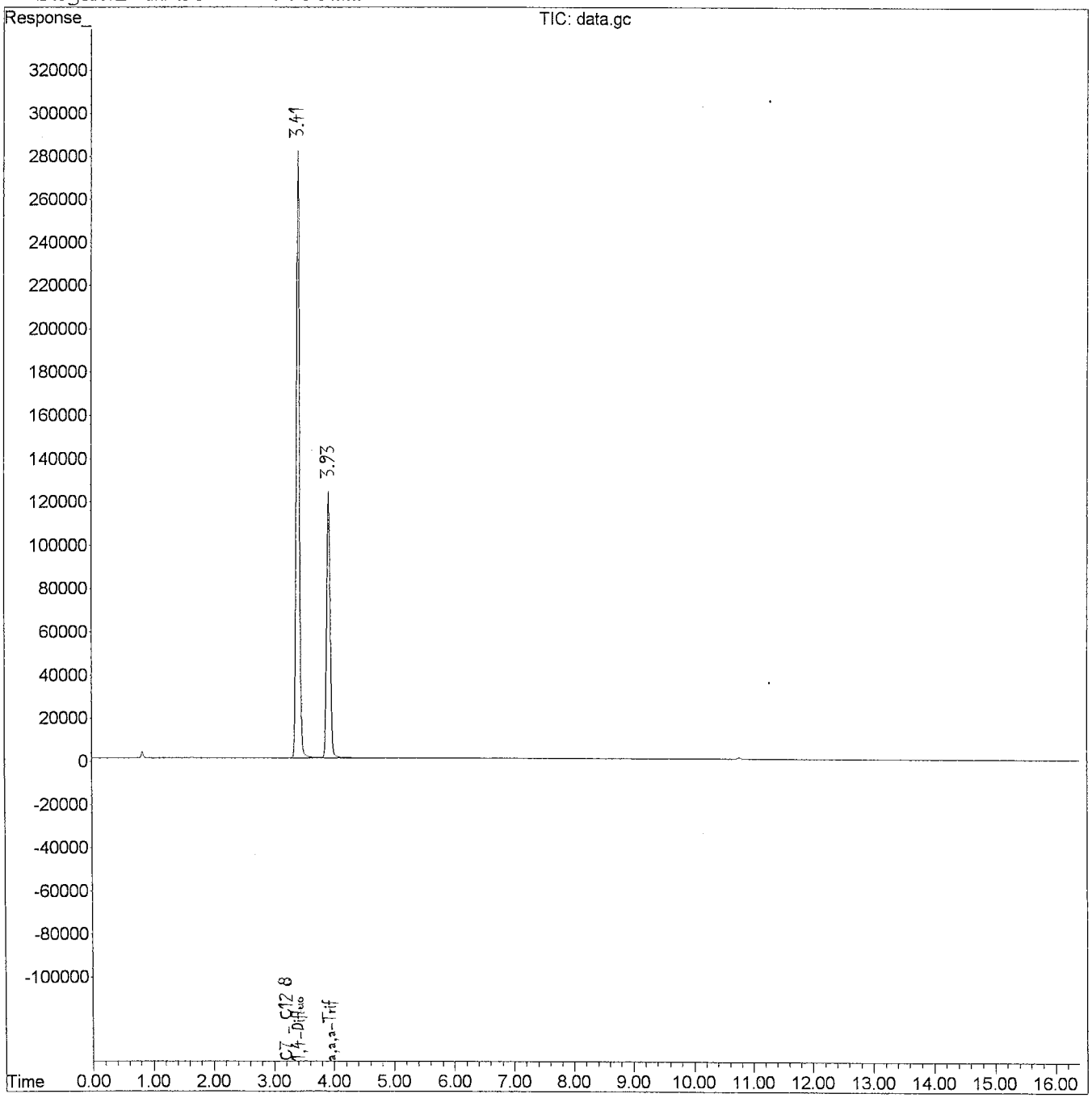
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e. Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R016.D Vial: 6
Acq On : 13 Mar 2007 07:06 pm Operator: GR
Sample : ib Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



RECEIVED
APR 0 4 2097
TREADWELL & ROLLO

Organochlorine Pesticides
EPA Method 8081

Organic Analysis:
Organochlorine Pesticides

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Organochlorine Pesticides

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104CL	K0701703-001	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janet L Heston Name: Janet L. Heston

Date: 3-28-07 Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Organochlorine Pesticides

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Aldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.48	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	38	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	51	65-135	03/22/07	Outside Control Limits

† **Analyte Comments**

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703478-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Aldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.48	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	51	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	82	65-135	03/22/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2	
DAEGW104CL	K0701703-001	38	*	51	*
Method Blank	KWG0703478-3	51	*	82	
Lab Control Sample	KWG0703478-1	53	*	80	
Duplicate Lab Control Sample	KWG0703478-2	52	*	78	

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	65-135
Sur2 =	Decachlorobiphenyl	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/22/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8081A	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703478

	Lab Control Sample KWG0703478-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703478-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.169	0.200	85	0.121	0.200	61	40-131	33 *	30
beta-BHC	0.180	0.200	90	0.138	0.200	69	38-134	26	30
gamma-BHC (Lindane)	0.186	0.200	93	0.138	0.200	69	65-135	29	35
delta-BHC	0.222	0.200	111	0.171	0.200	86	41-147	26	30
Heptachlor	0.141	0.200	71	0.0988	0.200	49 *	65-135	35	35
Aldrin	0.121	0.200	60 *	0.0785	0.200	39 *	65-135	43 *	35
Heptachlor Epoxide	0.185	0.200	92	0.150	0.200	75	43-124	21	30
gamma-Chlordane	0.189	0.200	95	0.152	0.200	76	42-121	22	30
Endosulfan I	0.181	0.200	90	0.147	0.200	74	30-115	20	30
alpha-Chlordane	0.187	0.200	94	0.153	0.200	76	44-123	20	30
Dieldrin	0.188	0.200	94	0.154	0.200	77	65-135	20	35
4,4'-DDE	0.186	0.200	93	0.153	0.200	76	31-143	20	30
Endrin	0.185	0.200	93	0.152	0.200	76	65-135	20	35
Endosulfan II	0.183	0.200	92	0.151	0.200	76	35-121	19	30
4,4'-DDD	0.188	0.200	94	0.154	0.200	77	34-142	20	30
Endrin Aldehyde	0.140	0.200	70	0.118	0.200	59	23-133	16	30
Endosulfan Sulfate	0.179	0.200	90	0.147	0.200	73	39-129	20	30
4,4'-DDT	0.194	0.200	97	0.160	0.200	80	35-135	19	35
Endrin Ketone	0.183	0.200	92	0.149	0.200	75	47-126	20	30
Methoxychlor	0.179	0.200	90	0.150	0.200	75	32-151	18	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/22/2007
		Time Analyzed:	04:54

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\032107\0321F034.D
Lab Code:	KWG0703478-3	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703478

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703478-1	J:\GC23\DATA\032107\0321F035.D	03/22/07	05:20
Duplicate Lab Control Sample	KWG0703478-2	J:\GC23\DATA\032107\0321F036.D	03/22/07	05:47
DAEGW104CL	K0701703-001	J:\GC23\DATA\032107\0321F037.D	03/22/07	06:13

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703478-1	**Lab Code:**	KWG0703478-2
File ID:	J:\GC23\DATA\032107\0321F035.D	**File ID:**	J:\GC23\DATA\032107\0321F036.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	03/09/2007	**Date Extracted:**	03/09/2007
Date Analyzed:	03/22/2007	**Date Analyzed:**	03/22/2007
Time Analyzed:	05:20	**Time Analyzed:**	05:47

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703478

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703478-3	J:\GC23\DATA\032107\0321F034.D	03/22/07	04:54
DAEGW104CL	K0701703-001	J:\GC23\DATA\032107\0321F037.D	03/22/07	06:13

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D	P	J:\GC23\DATA\030907\0309F075.D
B	J:\GC23\DATA\030907\0309F045.D	Q	J:\GC23\DATA\030907\0309F076.D
C	J:\GC23\DATA\030907\0309F046.D	R	J:\GC23\DATA\030907\0309F077.D
D	J:\GC23\DATA\030907\0309F047.D	S	J:\GC23\DATA\031207\0312F004.D
E	J:\GC23\DATA\030907\0309F048.D	T	J:\GC23\DATA\031207\0312F005.D
F	J:\GC23\DATA\030907\0309F049.D	U	J:\GC23\DATA\031207\0312F006.D
G	J:\GC23\DATA\030907\0309F058.D	V	J:\GC23\DATA\031207\0312F007.D
H	J:\GC23\DATA\030907\0309F059.D	W	J:\GC23\DATA\031207\0312F008.D
I	J:\GC23\DATA\030907\0309F060.D	X	J:\GC23\DATA\031207\0312F009.D
J	J:\GC23\DATA\030907\0309F061.D	Y	J:\GC23\DATA\031207\0312F011.D
K	J:\GC23\DATA\030907\0309F062.D	Z	J:\GC23\DATA\031207\0312F012.D
L	J:\GC23\DATA\030907\0309F063.D	AA	J:\GC23\DATA\031207\0312F013.D
M	J:\GC23\DATA\030907\0309F072.D	AB	J:\GC23\DATA\031207\0312F014.D
N	J:\GC23\DATA\030907\0309F073.D	AC	J:\GC23\DATA\031207\0312F015.D
O	J:\GC23\DATA\030907\0309F074.D	AD	J:\GC23\DATA\031207\0312F016.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	4.07E+5	B	5.0	3.75E+5	C	20	3.54E+5	D	50	3.71E+5	E	100	3.55E+5
	F	200	3.55E+5												
Decachlorobiphenyl	A	2.0	3.67E+5	B	5.0	3.38E+5	C	20	3.03E+5	D	50	2.98E+5	E	100	2.69E+5
	F	200	2.53E+5												
alpha-BHC	A	2.0	4.61E+5	B	5.0	4.29E+5	C	20	4.39E+5	D	50	4.89E+5	E	100	5.03E+5
	F	200	5.24E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.47E+5	B	5.0	2.21E+5	C	20	2.07E+5	D	50	2.13E+5	E	100	2.00E+5
	F	200	1.97E+5												
gamma-BHC (Lindane)	A	2.0	4.38E+5	B	5.0	4.17E+5	C	20	4.15E+5	D	50	4.59E+5	E	100	4.58E+5
	F	200	4.72E+5												
delta-BHC	A	2.0	4.09E+5	B	5.0	3.80E+5	C	20	3.84E+5	D	50	3.67E+5	E	100	4.36E+5
	F	200	4.54E+5												
Heptachlor	A	2.0	4.79E+5	B	5.0	4.38E+5	C	20	4.16E+5	D	50	4.43E+5	E	100	4.21E+5
	F	200	4.22E+5												
Aldrin	A	2.0	3.98E+5	B	5.0	3.71E+5	C	20	3.59E+5	D	50	3.96E+5	E	100	3.83E+5
	F	200	3.90E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.17E+5	B	5.0	3.88E+5	C	20	3.59E+5	D	50	3.81E+5	E	100	3.58E+5
	F	200	3.53E+5												
gamma-Chlordane	A	2.0	4.05E+5	B	5.0	3.78E+5	C	20	3.52E+5	D	50	3.78E+5	E	100	3.59E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.72E+5	B	5.0	3.47E+5	C	20	3.19E+5	D	50	3.03E+5	E	100	3.18E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.04E+5	B	5.0	3.74E+5	C	20	3.47E+5	D	50	3.66E+5	E	100	3.45E+5
	F	200	3.43E+5												
Dieldrin	A	2.0	3.65E+5	B	5.0	3.40E+5	C	20	3.28E+5	D	50	3.59E+5	E	100	3.44E+5
	F	200	3.48E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.42E+5	B	5.0	3.23E+5	C	20	3.12E+5	D	50	3.46E+5	E	100	3.33E+5
	F	200	3.38E+5												
Endrin	A	2.0	3.06E+5	B	5.0	2.89E+5	C	20	2.77E+5	D	50	3.02E+5	E	100	2.89E+5
	F	200	2.95E+5												
Endosulfan II	A	2.0	3.33E+5	B	5.0	3.22E+5	C	20	2.99E+5	D	50	2.96E+5	E	100	2.94E+5
	F	200	2.66E+5												
4,4'-DDD	A	2.0	2.57E+5	B	5.0	2.50E+5	C	20	2.53E+5	D	50	2.80E+5	E	100	2.68E+5
	F	200	2.74E+5												
Endrin Aldehyde	A	2.0	2.96E+5	B	5.0	2.80E+5	C	20	2.57E+5	D	50	2.65E+5	E	100	2.47E+5
	F	200	2.40E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007.

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.26E+5	B	5.0	3.01E+5	C	20	2.83E+5	D	50	2.96E+5	E	100	2.77E+5
	F	200	2.73E+5												
4,4'-DDT	A	2.0	2.87E+5	B	5.0	2.67E+5	C	20	2.61E+5	D	50	2.86E+5	E	100	2.76E+5
	F	200	2.80E+5												
Endrin Ketone	A	2.0	3.50E+5	B	5.0	3.28E+5	C	20	3.19E+5	D	50	3.36E+5	E	100	3.18E+5
	F	200	3.13E+5												
Methoxychlor	A	2.0	1.70E+5	B	5.0	1.57E+5	C	20	1.49E+5	D	50	1.58E+5	E	100	1.46E+5
	F	200	1.43E+5												
Toxaphene {1}															
													Y	100	2870
	Z	250	2830	AA	500	2550	AB	1000	2530	AC	2000	2470	AD	5000	2490

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	2050
	Z	250	2300	AA	500	2100	AB	1000	2030	AC	2000	2010	AD	5000	1940
Toxaphene {3}															
													Y	100	3370
	Z	250	3440	AA	500	3350	AB	1000	3090	AC	2000	3210	AD	5000	3240
Toxaphene {4}															
													Y	100	3880
	Z	250	4360	AA	500	4110	AB	1000	3930	AC	2000	3890	AD	5000	3870
Toxaphene {5}															
													Y	100	2270
	Z	250	2170	AA	500	2070	AB	1000	1940	AC	2000	1930	AD	5000	1860
Toxaphene {6}															
													Y	100	2110
	Z	250	2340	AA	500	2300	AB	1000	2160	AC	2000	2190	AD	5000	2120

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	13.9		≤ 20
alpha-BHC	MS	AverageRF	% RSD	7.9		≤ 20
beta-BHC	MS	AverageRF	% RSD	8.5		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	5.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	5.4		≤ 20
Aldrin	MS	AverageRF	% RSD	4.0		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	6.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	7.8		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.5		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.8		≤ 20
Endrin	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan II	MS	AverageRF	% RSD	7.8		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.6		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	8.0		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	6.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.8		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	4.2		≤ 20
Methoxychlor	MS	AverageRF	% RSD	6.3		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	5.9		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	3.9		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.8		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	7.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D
J:\GC23\DATA\030907\0309F064.D
J:\GC23\DATA\030907\0309F078.D
J:\GC23\DATA\031207\0312F010.D
J:\GC23\DATA\031207\0312F017.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	474000	458000	-3	NA	± 15 %	AverageRF
beta-BHC	40	38	214000	202000	-6	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	38	443000	426000	-4	NA	± 15 %	AverageRF
delta-BHC	40	42	405000	420000	4	NA	± 15 %	AverageRF
Heptachlor	40	38	436000	412000	-6	NA	± 15 %	AverageRF
Aldrin	40	38	383000	365000	-5	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	38	376000	353000	-6	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	372000	349000	-6	NA	± 15 %	AverageRF
Endosulfan I	40	39	329000	318000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	37	363000	338000	-7	NA	± 15 %	AverageRF
Dieldrin	40	37	348000	321000	-8	NA	± 15 %	AverageRF
4,4'-DDE	40	38	332000	317000	-5	NA	± 15 %	AverageRF
Endrin	40	39	293000	283000	-3	NA	± 15 %	AverageRF
Endosulfan II	40	39	302000	294000	-2	NA	± 15 %	AverageRF
4,4'-DDD	40	38	264000	252000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	38	264000	254000	-4	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	38	293000	276000	-6	NA	± 15 %	AverageRF
4,4'-DDT	40	39	276000	268000	-3	NA	± 15 %	AverageRF
Endrin Ketone	40	40	327000	324000	-1	NA	± 15 %	AverageRF
Methoxychlor	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	900	2620	2350	-10	NA	± 100 %	AverageRF
Toxaphene {2}	1000	900	2070	1860	-10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	870	3280	2850	-13	NA	± 100 %	AverageRF
Toxaphene {4}	1000	890	4000	3560	-11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	790	2040	1600	-21	NA	± 100 %	AverageRF
Toxaphene {6}	1000	890	2200	1960	-11	NA	± 100 %	AverageRF
Toxaphene	1000	870	NA	NA	NA	13	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D\0309F044c.d	P	J:\GC23\DATA\030907\0309F075.D\0309F075c.d
B	J:\GC23\DATA\030907\0309F045.D\0309F045c.d	Q	J:\GC23\DATA\030907\0309F076.D\0309F076c.d
C	J:\GC23\DATA\030907\0309F046.D\0309F046c.d	R	J:\GC23\DATA\030907\0309F077.D\0309F077c.d
D	J:\GC23\DATA\030907\0309F047.D\0309F047c.d	S	J:\GC23\DATA\031207\0312F004.D\0312F004c.d
E	J:\GC23\DATA\030907\0309F048.D\0309F048c.d	T	J:\GC23\DATA\031207\0312F005.D\0312F005c.d
F	J:\GC23\DATA\030907\0309F049.D\0309F049c.d	U	J:\GC23\DATA\031207\0312F006.D\0312F006c.d
G	J:\GC23\DATA\030907\0309F058.D\0309F058c.d	V	J:\GC23\DATA\031207\0312F007.D\0312F007c.d
H	J:\GC23\DATA\030907\0309F059.D\0309F059c.d	W	J:\GC23\DATA\031207\0312F008.D\0312F008c.d
I	J:\GC23\DATA\030907\0309F060.D\0309F060c.d	X	J:\GC23\DATA\031207\0312F009.D\0312F009c.d
J	J:\GC23\DATA\030907\0309F061.D\0309F061c.d	Y	J:\GC23\DATA\031207\0312F011.D\0312F011c.d
K	J:\GC23\DATA\030907\0309F062.D\0309F062c.d	Z	J:\GC23\DATA\031207\0312F012.D\0312F012c.d
L	J:\GC23\DATA\030907\0309F063.D\0309F063c.d	AA	J:\GC23\DATA\031207\0312F013.D\0312F013c.d
M	J:\GC23\DATA\030907\0309F072.D\0309F072c.d	AB	J:\GC23\DATA\031207\0312F014.D\0312F014c.d
N	J:\GC23\DATA\030907\0309F073.D\0309F073c.d	AC	J:\GC23\DATA\031207\0312F015.D\0312F015c.d
O	J:\GC23\DATA\030907\0309F074.D\0309F074c.d	AD	J:\GC23\DATA\031207\0312F016.D\0312F016c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	3.62E+5	B	5.0	3.43E+5	C	20	3.26E+5	D	50	3.27E+5	E	100	3.15E+5
	F	200	3.14E+5												
Decachlorobiphenyl	A	2.0	4.66E+5	B	5.0	4.21E+5	C	20	3.80E+5	D	50	3.53E+5	E	100	3.26E+5
	F	200	3.10E+5												
alpha-BHC	A	2.0	4.30E+5	B	5.0	4.12E+5	C	20	4.22E+5	D	50	4.51E+5	E	100	4.68E+5
	F	200	4.84E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.30E+5	B	5.0	2.16E+5	C	20	2.02E+5	D	50	2.13E+5	E	100	1.85E+5
	F	200	1.82E+5												
gamma-BHC (Lindane)	A	2.0	4.23E+5	B	5.0	4.09E+5	C	20	4.03E+5	D	50	4.27E+5	E	100	4.29E+5
	F	200	4.39E+5												
delta-BHC	A	2.0	3.88E+5	B	5.0	3.64E+5	C	20	3.76E+5	D	50	3.44E+5	E	100	4.12E+5
	F	200	4.27E+5												
Heptachlor	A	2.0	4.58E+5	B	5.0	4.29E+5	C	20	4.13E+5	D	50	4.25E+5	E	100	4.09E+5
	F	200	4.06E+5												
Aldrin	A	2.0	3.96E+5	B	5.0	3.76E+5	C	20	3.68E+5	D	50	3.86E+5	E	100	3.74E+5
	F	200	3.76E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.18E+5	B	5.0	3.88E+5	C	20	3.66E+5	D	50	3.72E+5	E	100	3.51E+5
	F	200	3.45E+5												
gamma-Chlordane	A	2.0	4.04E+5	B	5.0	3.86E+5	C	20	3.67E+5	D	50	3.75E+5	E	100	3.60E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.76E+5	B	5.0	3.57E+5	C	20	3.37E+5	D	50	3.05E+5	E	100	3.21E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.09E+5	B	5.0	3.84E+5	C	20	3.62E+5	D	50	3.67E+5	E	100	3.48E+5
	F	200	3.46E+5												
Dieldrin	A	2.0	3.90E+5	B	5.0	3.67E+5	C	20	3.55E+5	D	50	3.69E+5	E	100	3.56E+5
	F	200	3.56E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.60E+5	B	5.0	3.40E+5	C	20	3.37E+5	D	50	3.56E+5	E	100	3.45E+5
	F	200	3.47E+5												
Endrin	A	2.0	3.41E+5	B	5.0	3.18E+5	C	20	3.15E+5	D	50	3.25E+5	E	100	3.13E+5
	F	200	3.14E+5												
Endosulfan II	A	2.0	3.67E+5	B	5.0	3.51E+5	C	20	3.31E+5	D	50	3.11E+5	E	100	3.10E+5
	F	200	2.77E+5												
4,4'-DDD	A	2.0	3.13E+5	B	5.0	2.86E+5	C	20	2.80E+5	D	50	2.96E+5	E	100	2.84E+5
	F	200	2.87E+5												
Endrin Aldehyde	A	2.0	3.27E+5	B	5.0	3.09E+5	C	20	2.88E+5	D	50	2.82E+5	E	100	2.63E+5
	F	200	2.52E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.85E+5	B	5.0	3.58E+5	C	20	3.35E+5	D	50	3.31E+5	E	100	3.11E+5
	F	200	3.01E+5												
4,4'-DDT	A	2.0	3.38E+5	B	5.0	3.18E+5	C	20	3.07E+5	D	50	3.19E+5	E	100	3.07E+5
	F	200	3.08E+5												
Endrin Ketone	A	2.0	4.35E+5	B	5.0	4.10E+5	C	20	3.91E+5	D	50	3.90E+5	E	100	3.66E+5
	F	200	3.53E+5												
Methoxychlor	A	2.0	2.07E+5	B	5.0	1.94E+5	C	20	1.78E+5	D	50	1.75E+5	E	100	1.61E+5
	F	200	1.54E+5												
Toxaphene {1}															
													Y	100	7580
	Z	250	7950	AA	500	7510	AB	1000	7200	AC	2000	7220	AD	5000	7380

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	5840
	Z	250	5790	AA	500	5400	AB	1000	5210	AC	2000	5450	AD	5000	5390
Toxaphene {3}															
													Y	100	3090
	Z	250	3260	AA	500	3030	AB	1000	2850	AC	2000	2720	AD	5000	2750
Toxaphene {4}															
													Y	100	3700
	Z	250	3980	AA	500	3560	AB	1000	3850	AC	2000	3770	AD	5000	4030
Toxaphene {5}															
													Y	100	3310
	Z	250	3460	AA	500	3390	AB	1000	3100	AC	2000	3150	AD	5000	3170
Toxaphene {6}															
													Y	100	8040
	Z	250	8860	AA	500	8380	AB	1000	8010	AC	2000	8070	AD	5000	8520

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.7		≤ 20
alpha-BHC	MS	AverageRF	% RSD	6.3		≤ 20
beta-BHC	MS	AverageRF	% RSD	9.1		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	3.2		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.0		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.5		≤ 20
Aldrin	MS	AverageRF	% RSD	2.6		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	7.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	4.5		≤ 20
Endosulfan I	MS	AverageRF	% RSD	8.3		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.4		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.7		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	2.6		≤ 20
Endrin	MS	AverageRF	% RSD	3.3		≤ 20
Endosulfan II	MS	AverageRF	% RSD	10.0		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.1		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	9.7		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	9.2		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.9		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	7.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	11.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	3.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	7.1		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.6		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID:
J:\GC23\DATA\030907\0309F050.D\0309F050c.d
J:\GC23\DATA\030907\0309F064.D\0309F064c.d
J:\GC23\DATA\030907\0309F078.D\0309F078c.d
J:\GC23\DATA\031207\0312F010.D\0312F010c.d
J:\GC23\DATA\031207\0312F017.D\0312F017c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	38	444000	419000	-6	NA	± 15 %	AverageRF
beta-BHC	40	36	205000	184000	-10	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	37	422000	393000	-7	NA	± 15 %	AverageRF
delta-BHC	40	41	385000	392000	2	NA	± 15 %	AverageRF
Heptachlor	40	37	423000	391000	-8	NA	± 15 %	AverageRF
Aldrin	40	38	379000	356000	-6	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	36	373000	340000	-9	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	376000	344000	-8	NA	± 15 %	AverageRF
Endosulfan I	40	38	335000	315000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	40	36	369000	336000	-9	NA	± 15 %	AverageRF
Dieldrin	40	36	365000	327000	-11	NA	± 15 %	AverageRF
4,4'-DDE	40	37	347000	322000	-7	NA	± 15 %	AverageRF
Endrin	40	38	321000	303000	-6	NA	± 15 %	AverageRF
Endosulfan II	40	38	324000	307000	-6	NA	± 15 %	AverageRF
4,4'-DDD	40	36	291000	263000	-10	NA	± 15 %	AverageRF
Endrin Aldehyde	40	37	287000	266000	-7	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	36	337000	305000	-9	NA	± 15 %	AverageRF
4,4'-DDT	40	37	316000	294000	-7	NA	± 15 %	AverageRF
Endrin Ketone	40	38	391000	372000	-5	NA	± 15 %	AverageRF
Methoxychlor	40	38	178000	168000	-6	NA	± 15 %	AverageRF
Toxaphene {1}	1000	870	7470	6510	-13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	830	5510	4580	-17	NA	± 100 %	AverageRF
Toxaphene {3}	1000	750	2950	2210	-25	NA	± 100 %	AverageRF
Toxaphene {4}	1000	740	3810	2810	-26	NA	± 100 %	AverageRF
Toxaphene {5}	1000	820	3260	2690	-18	NA	± 100 %	AverageRF
Toxaphene {6}	1000	840	8310	6980	-16	NA	± 100 %	AverageRF
Toxaphene	1000	810	NA	NA	NA	19 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F023.D
J:\GC23\DATA\032107\0321F024.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	49	370000	359000	-3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	305000	286000	-6	NA	± 15 %	AverageRF
alpha-BHC	50	50	474000	473000	0	NA	± 15 %	AverageRF
beta-BHC	50	48	214000	206000	-4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	50	443000	446000	1	NA	± 15 %	AverageRF
delta-BHC	50	44	405000	357000	-12	NA	± 15 %	AverageRF
Heptachlor	50	50	436000	433000	-1	NA	± 15 %	AverageRF
Aldrin	50	50	383000	381000	-1	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	48	376000	364000	-3	NA	± 15 %	AverageRF
gamma-Chlordane	50	48	372000	359000	-3	NA	± 15 %	AverageRF
Endosulfan I	50	44	329000	289000	-12	NA	± 15 %	AverageRF
alpha-Chlordane	50	48	363000	350000	-4	NA	± 15 %	AverageRF
Dieldrin	50	49	348000	343000	-1	NA	± 15 %	AverageRF
4,4'-DDE	50	49	332000	328000	-1	NA	± 15 %	AverageRF
Endrin	50	51	293000	297000	1	NA	± 15 %	AverageRF
Endosulfan II	50	47	302000	282000	-6	NA	± 15 %	AverageRF
4,4'-DDD	50	50	264000	264000	0	NA	± 15 %	AverageRF
Endrin Aldehyde	50	47	264000	250000	-5	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	48	293000	282000	-4	NA	± 15 %	AverageRF
4,4'-DDT	50	50	276000	275000	-1	NA	± 15 %	AverageRF
Endrin Ketone	50	49	327000	319000	-3	NA	± 15 %	AverageRF
Methoxychlor	50	51	154000	156000	2	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	2620	2680	2	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2180	5	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	3280	3330	1	NA	± 100 %	AverageRF
Toxaphene {4}	1000	990	4000	3960	-1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	990	2040	2010	-1	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2260	3	NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA	2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F023.D\0321F023C.D
J:\GC23\DATA\032107\0321F024.D\0321F024C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	331000	344000	4	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	376000	367000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	444000	475000	7	NA	± 15 %	AverageRF
beta-BHC	50	55	205000	226000	10	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	422000	450000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	385000	366000	-5	NA	± 15 %	AverageRF
Heptachlor	50	53	423000	448000	6	NA	± 15 %	AverageRF
Aldrin	50	53	379000	401000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	373000	390000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	376000	392000	4	NA	± 15 %	AverageRF
Endosulfan I	50	48	335000	319000	-5	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	369000	384000	4	NA	± 15 %	AverageRF
Dieldrin	50	53	365000	386000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	54	347000	376000	8	NA	± 15 %	AverageRF
Endrin	50	55	321000	351000	9	NA	± 15 %	AverageRF
Endosulfan II	50	50	324000	327000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	291000	308000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	287000	292000	2	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	337000	349000	4	NA	± 15 %	AverageRF
4,4'-DDT	50	53	316000	332000	5	NA	± 15 %	AverageRF
Endrin Ketone	50	52	391000	404000	3	NA	± 15 %	AverageRF
Methoxychlor	50	53	178000	190000	7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	990	7470	7420	-1	NA	± 100 %	AverageRF
Toxaphene {2}	1000	970	5510	5340	-3	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	2940	0	NA	± 100 %	AverageRF
Toxaphene {4}	1000	990	3810	3770	-1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	980	3260	3200	-2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	990	8310	8260	-1	NA	± 100 %	AverageRF
Toxaphene	1000	990	NA	NA	NA	-1	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F041.D
J:\GC23\DATA\032107\0321F042.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	370000	381000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	50	305000	303000	-1	NA	± 15 %	AverageRF
alpha-BHC	50	53	474000	505000	7	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	219000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	443000	474000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	381000	-6	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	463000	6	NA	± 15 %	AverageRF
Aldrin	50	53	383000	406000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	388000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	372000	383000	3	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	308000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	363000	371000	2	NA	± 15 %	AverageRF
Dieldrin	50	52	348000	364000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	52	332000	348000	5	NA	± 15 %	AverageRF
Endrin	50	55	293000	320000	9	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	299000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	264000	282000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	264000	265000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	293000	300000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	54	276000	297000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	51	327000	334000	2	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	169000	10	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	2620	2840	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2210	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	3280	3580	9	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4270	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2110	4	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2270	3	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	6	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F041.D\0321F041C.D
J:\GC23\DATA\032107\0321F042.D\0321F042C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	56	331000	370000	12		NA	± 15 %	AverageRF
Decachlorobiphenyl	50	54	376000	404000	7		NA	± 15 %	AverageRF
alpha-BHC	50	58	444000	512000	15	*	NA	± 15 %	AverageRF
beta-BHC	50	57	205000	232000	13		NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	57	422000	483000	15		NA	± 15 %	AverageRF
delta-BHC	50	51	385000	391000	1		NA	± 15 %	AverageRF
Heptachlor	50	58	423000	495000	17	*	NA	± 15 %	AverageRF
Aldrin	50	57	379000	435000	15		NA	± 15 %	AverageRF
Heptachlor Epoxide	50	56	373000	422000	13		NA	± 15 %	AverageRF
gamma-Chlordane	50	57	376000	426000	14		NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	344000	3		NA	± 15 %	AverageRF
alpha-Chlordane	50	56	369000	416000	13		NA	± 15 %	AverageRF
Dieldrin	50	57	365000	414000	13		NA	± 15 %	AverageRF
4,4'-DDE	50	57	347000	398000	15		NA	± 15 %	AverageRF
Endrin	50	59	321000	379000	18	*	NA	± 15 %	AverageRF
Endosulfan II	50	54	324000	349000	7		NA	± 15 %	AverageRF
4,4'-DDD	50	57	291000	329000	13		NA	± 15 %	AverageRF
Endrin Aldehyde	50	54	287000	311000	9		NA	± 15 %	AverageRF
Endosulfan Sulfate	50	55	337000	373000	11		NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	357000	13		NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	423000	8		NA	± 15 %	AverageRF
Methoxychlor	50	58	178000	207000	16	*	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	7470	7720	3		NA	± 100 %	AverageRF
Toxaphene {2}	1000	1000	5510	5660	3		NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	3080	4		NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3960	4		NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3260	3450	6		NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8590	3		NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA		4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A

Analysis Lot: KWG0703862
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0321F002.D	Instrument Blank	KWG0703862-1	3/21/2007	14:25		3/21/2007	14:44
0321F003.D	Performance Evaluation Mixture	KWG0703862-2	3/21/2007	14:52		3/21/2007	15:11
0321F004.D	Continuing Calibration Verification	KWG0703862-3	3/21/2007	15:18		3/21/2007	15:37
0321F005.D	Continuing Calibration Verification	KWG0703862-3	3/21/2007	15:44		3/21/2007	16:04
0321F006.D	Continuing Calibration Verification	KWG0703862-3	3/21/2007	16:11		3/21/2007	16:31
0321F007.D	ZZZZZZ	ZZZZZZ	3/21/2007	16:37		3/21/2007	16:56
0321F008.D	ZZZZZZ	ZZZZZZ	3/21/2007	17:30		3/21/2007	17:49
0321F010.D	ZZZZZZ	ZZZZZZ	3/21/2007	18:23		3/21/2007	18:42
0321F011.D	ZZZZZZ	ZZZZZZ	3/21/2007	18:49		3/21/2007	19:08
0321F012.D	ZZZZZZ	ZZZZZZ	3/21/2007	19:15		3/21/2007	19:34
0321F015.D	ZZZZZZ	ZZZZZZ	3/21/2007	20:34		3/21/2007	20:53
0321F016.D	ZZZZZZ	ZZZZZZ	3/21/2007	21:01		3/21/2007	21:20
0321F017.D	ZZZZZZ	ZZZZZZ	3/21/2007	21:27		3/21/2007	21:47
0321F018.D	ZZZZZZ	ZZZZZZ	3/21/2007	21:54		3/21/2007	22:13
0321F019.D	ZZZZZZ	ZZZZZZ	3/21/2007	22:20		3/21/2007	22:39
0321F021.D	Instrument Blank	KWG0703862-4	3/21/2007	23:11		3/21/2007	23:30
0321F022.D	Performance Evaluation Mixture	KWG0703862-5	3/21/2007	23:38		3/21/2007	23:57
0321F023.D	Continuing Calibration Verification	KWG0703862-6	3/22/2007	00:04		3/22/2007	00:23
0321F024.D	Continuing Calibration Verification	KWG0703862-6	3/22/2007	00:30		3/22/2007	00:49
0321F025.D	Continuing Calibration Verification	KWG0703862-6	3/22/2007	00:57		3/22/2007	01:16
0321F034.D	Method Blank	KWG0703478-3	3/22/2007	04:54		3/22/2007	05:13
0321F035.D	Lab Control Sample	KWG0703478-1	3/22/2007	05:20		3/22/2007	05:40
0321F036.D	Duplicate Lab Control Sample	KWG0703478-2	3/22/2007	05:47		3/22/2007	06:06
0321F037.D	DAEGW104CL	K0701703-001	3/22/2007	06:13		3/22/2007	06:32
0321F039.D	Instrument Blank	KWG0703862-7	3/22/2007	07:04		3/22/2007	07:24
0321F040.D	Performance Evaluation Mixture	KWG0703862-8	3/22/2007	07:31		3/22/2007	07:50
0321F041.D	Continuing Calibration Verification	KWG0703862-9	3/22/2007	07:57		3/22/2007	08:16
0321F042.D	Continuing Calibration Verification	KWG0703862-9	3/22/2007	08:24		3/22/2007	08:44
0321F043.D	Continuing Calibration Verification	KWG0703862-9	3/22/2007	08:50		3/22/2007	09:09

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/09/2007

Extraction Prep Log
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Extraction Lot: KWG0703478
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104CL	K0701703-001	03/02/07	03/03/07	1050ml	2ml	NA	
Method Blank	KWG0703478-3	NA	NA	1050ml	2ml	NA	
Lab Control Sample	KWG0703478-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0703478-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Organochlorine Pesticides

Validation Package

Organic Analysis:
Organochlorine Pesticides

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2	
DAEGW104CL	K0701703-001	38	*	51	*
Method Blank	KWG0703478-3	51	*	82	
Lab Control Sample	KWG0703478-1	53	*	80	
Duplicate Lab Control Sample	KWG0703478-2	52	*	78	

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	65-135
Sur2 =	Decachlorobiphenyl	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/22/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8081A	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703478

	Lab Control Sample KWG0703478-1 Lab Control Spike			Duplicate Lab Control Sample KWG0703478-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.169	0.200	85	0.121	0.200	61	40-131	33 *	30
beta-BHC	0.180	0.200	90	0.138	0.200	69	38-134	26	30
gamma-BHC (Lindane)	0.186	0.200	93	0.138	0.200	69	65-135	29	35
delta-BHC	0.222	0.200	111	0.171	0.200	86	41-147	26	30
Heptachlor	0.141	0.200	71	0.0988	0.200	49 *	65-135	35	35
Aldrin	0.121	0.200	60 *	0.0785	0.200	39 *	65-135	43 *	35
Heptachlor Epoxide	0.185	0.200	92	0.150	0.200	75	43-124	21	30
gamma-Chlordane	0.189	0.200	95	0.152	0.200	76	42-121	22	30
Endosulfan I	0.181	0.200	90	0.147	0.200	74	30-115	20	30
alpha-Chlordane	0.187	0.200	94	0.153	0.200	76	44-123	20	30
Dieldrin	0.188	0.200	94	0.154	0.200	77	65-135	20	35
4,4'-DDE	0.186	0.200	93	0.153	0.200	76	31-143	20	30
Endrin	0.185	0.200	93	0.152	0.200	76	65-135	20	35
Endosulfan II	0.183	0.200	92	0.151	0.200	76	35-121	19	30
4,4'-DDD	0.188	0.200	94	0.154	0.200	77	34-142	20	30
Endrin Aldehyde	0.140	0.200	70	0.118	0.200	59	23-133	16	30
Endosulfan Sulfate	0.179	0.200	90	0.147	0.200	73	39-129	20	30
4,4'-DDT	0.194	0.200	97	0.160	0.200	80	35-135	19	35
Endrin Ketone	0.183	0.200	92	0.149	0.200	75	47-126	20	30
Methoxychlor	0.179	0.200	90	0.150	0.200	75	32-151	18	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/22/2007
		Time Analyzed:	04:54

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\032107\0321F034.D
Lab Code:	KWG0703478-3	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703478

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703478-1	J:\GC23\DATA\032107\0321F035.D	03/22/07	05:20
Duplicate Lab Control Sample	KWG0703478-2	J:\GC23\DATA\032107\0321F036.D	03/22/07	05:47
DAEGW104CL	K0701703-001	J:\GC23\DATA\032107\0321F037.D	03/22/07	06:13

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703478-1	**Lab Code:**	KWG0703478-2
File ID:	J:\GC23\DATA\032107\0321F035.D	**File ID:**	J:\GC23\DATA\032107\0321F036.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	03/09/2007	**Date Extracted:**	03/09/2007
Date Analyzed:	03/22/2007	**Date Analyzed:**	03/22/2007
Time Analyzed:	05:20	**Time Analyzed:**	05:47

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0703478

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703478-3	J:\GC23\DATA\032107\0321F034.D	03/22/07	04:54
DAEGW104CL	K0701703-001	J:\GC23\DATA\032107\0321F037.D	03/22/07	06:13

Organic Analysis:
Organochlorine Pesticides

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Organochlorine Pesticides

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Aldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.48	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	38	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	51	65-135	03/22/07	Outside Control Limits

† **Analyte Comments**

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032107\0321F037.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2007 06:13
Date Quantitated: 03/22/2007 14:40
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA		x
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
MB Surrogate Recovery	Tetrachloro-m-xylene	51	65	135	Gas LIM
Lab Control Spike	Aldrin	54	65	135	
	Tetrachloro-m-xylene	53	65	135	
Duplicate Lab Control Spike	Aldrin	36	65	135	
	gamma-BHC (Lindane)	64	65	135	
	Heptachlor	49	65	135	
	Tetrachloro-m-xylene	52	65	135	
Surrogates	Decachlorobiphenyl	47	65	135	
	Tetrachloro-m-xylene	38	65	135	
Analyte Co-elution	Endosulfan Sulfate	14.13	NA	NA	ND
	Toxaphene {5}	14.13	NA	NA	ND

Primary Review: 3/22/07

Secondary Review: 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F037.D\0321F037C.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2007 06:13
Date Quantitated: 03/22/2007 14:40
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Duplicate Lab Control Spike	NA	NA	NA		x
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	ICV
Continuing Calibration Recovery (Closing)	alpha-BHC	15.1	NA	15	Avg
	Heptachlor	16.9	NA	15	
MB Surrogate Recovery	Tetrachloro-m-xylene	51	65	135	RSC(IM
Lab Control Spike	Aldrin	54	65	135	
	Tetrachloro-m-xylene	53	65	135	
Duplicate Lab Control Spike	Aldrin	36	65	135	
	gamma-BHC (Lindane)	64	65	135	
	Heptachlor	49	65	135	
	Tetrachloro-m-xylene	52	65	135	
Surrogates	Decachlorobiphenyl	51	65	135	
	Tetrachloro-m-xylene	37	65	135	

Primary Review: [illegible] 3/22/07

Secondary Review: [illegible] 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F037.D\0321F037C.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/22/2007 06:13
Date Quantitated: 03/22/2007 14:40
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Analyte Co-elution	4,4'-DDD	12.35	NA	NA	
	Toxaphene {1}	12.35	NA	NA	

Primary Review: 3/22/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703862	**Prep Lot:**	KWG0703478	**Report Group:**	K0701703
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	582065	**Prep Date:**	03/09/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ7902
MB Ref:	J:\GC23\DATA\032107\0321F034.D	**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032107\0321F037.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F037.D\0321F037c.d			**Vial:**	31
Acqu Date:	03/22/2007 06:13	**Quant Date:**	03/22/2007 14:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0701703-001				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35	+0.01	7.10		14175321	12331901m	38.34	37.25			38*
						%Recovery =	38*	37*	Limits =	65-135	
Decachlorobiphenyl	16.90	+0.01	15.65		14285148	19135175	46.88	50.89			51*
						%Recovery =	47*	51*	Limits =	65-135	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.07	+0.03	8.17	+0.05	409391m	398760	0.8630	0.8970CCV	0.0016J	0.0017J	**0.0016J**
beta-BHC	10.10	+0.05	9.18	+0.04	223474	5229858	1.04	25.54	0.0020J	0.049	**0.0020JP** RPD
gamma-BHC (Lindane)	9.59	+0.01	8.73		881385	428474	1.99	1.02	0.0038J	0.0019J	**0.0038JP**
delta-BHC	10.47	+0.01	9.58		151383m	216648	0.3740	0.5630	0.00071J	0.0011J	**0.00071JP**
Heptachlor	10.55		9.32	+0.02	115854	331295	0.2650	0.7830CCV	0.00050J	0.0015J	**0.00050JP**
Aldrin	11.10	+0.04	9.76	-0.02	4014801	61481	10.49	0.1620	0.020	0.00040U	**0.020**
Heptachlor Epoxide	11.79	+0.03	10.64		235462	185523	0.6260	0.4970	0.0012J	0.00095J	**0.0012J**
gamma-Chlordane	12.28	+0.03	10.99		61270	77339	0.1650	0.2060	0.00032U	0.00039J	0.00032U
Endosulfan I	12.41	+0.03	11.22		314165	425797	0.9560	1.27	0.0018J	0.0024J	**0.0018J**
alpha-Chlordane	12.32		11.13	-0.01	123821	293215	0.3410	0.7940	0.0040U	0.0040U	0.0040U
Dieldrin	12.79	+0.02	11.66	+0.01	135219	72402m	0.3890	0.1980	0.00074J	0.00038J	**0.00074JP**
4,4'-DDE	12.58	+0.02	11.51	+0.05	284531	256212	0.8560	0.7370	0.0016J	0.0014J	**0.0016J**
Endrin	13.15	+0.03	12.11	-0.01	225834	54603m	0.7700	0.1700	0.0015J	0.00068U	**0.0015J**
Endosulfan II	13.59	+0.06	12.56	+0.04	1314029	863264	4.36	2.66	0.0083J	0.0051J	**0.0083JP**
4,4'-DDD	13.37	+0.02	12.35	+0.02c	2389703	551580m	9.06	1.90	0.017	0.0036J	**0.017P** RPD
Endrin Aldehyde					0d	0	0.0000	0.0000	0.00046U	0.00046U	0.00046U
Endosulfan Sulfate	14.13	+0.01c	13.17	+0.01	80166	62116	0.2740	0.1840	0.00052J	0.00047U	**0.00052J**
4,4'-DDT	13.80		12.74	+0.01	107298m	4250486	0.3880	13.45	0.00074J	0.026	**0.00074JP** RPD

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F037.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F037.D\0321F037c.d			**Vial:**	31
Acqu Date:	03/22/2007 06:13	**Quant Date:**	03/22/2007 14:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0701703-001				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endrin Ketone	14.74	14.05	157220	249793	0.4800	0.6390	0.00091J	0.0012J	**0.00091**J
Methoxychlor			0	0d	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	56.42	31.53	0.11J	0.060J	**0.11**JP
Toxaphene {1}	12.99 +0.02	12.35 -0.02 c	92389	463829m	35.22	62.06	0.067J	0.12J	
Toxaphene {2}	13.04	12.44	184741	66740	89.19	12.10	0.17J	0.028U	
Toxaphene {3}	13.22 +0.03		136170	0	41.48	0.0000	0.079J	0.028U	
Toxaphene {4}		13.01 +0.01	0d	97087	0.0000	25.45	0.028U	0.048J	
Toxaphene {5}	14.13 -0.05 c		80166	0d	39.28	0.0000	0.075J	0.028U	
Toxaphene {6}	14.68 -0.02	13.52 -0.05	169520	220328	76.92	26.50	0.15J	0.050J	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 L Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:49:19 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.10	14175321	12331901	38.343	37.250m
24)	s	Decachlorobiphen	16.90	15.65	14285148	19135175	46.875	50.894
		Target Compounds						
2)		alpha-BHC	9.07	8.17f	409391	398760	0.863m	0.897
4)		beta-BHC	10.10f	9.18f	223474	5229858	1.043	25.536 #
5)		gamma-BHC (Linda	9.59	8.73	881385	428474	1.989	1.016 #
6)		delta-BHC	10.47	9.58	151383	216648	0.374m	0.563 #
7)		Heptachlor	10.55	9.32	115854	331295	0.265	0.783 #
8)		Aldrin	11.10	9.76f	4014801	61481	10.485	0.162 #
10)		Heptachlor Epoxi	11.79	10.64	235462	185523	0.626	0.497
11)		gamma-Chlordane	12.28	10.99	61270	77339	0.165	0.206 #
12)		Endosulfan I	12.41	11.22	314165	425797	0.956	1.273 #
13)		alpha-Chlordane	12.32	11.13	123821	293215	0.341	0.794 #
14)		Dieldrin	12.79	11.66	135219	72402	0.389	0.198m#
15)		4,4'-DDE	12.58	11.51f	284531	256212	0.856	0.737
16)		Endrin	13.15	12.11	225834	54603	0.770	0.170m#
17)		Endosulfan II	13.59f	12.56	1314029	863264	4.358	2.661 #
18)		4,4'-DDD	13.37	12.35	2389703	551580	9.060	1.895m#
20)		Endosulfan Sulfa	14.13	13.17	80166	62116	0.274	0.184 #
21)		4,4'-DDT	13.80	12.74	107298	4250486	0.388m	13.450 #
22)		Endrin Ketone	14.74	14.05	157220	249793	0.480	0.639 #
25)		Toxaphene	12.99	12.35	92389	463829	35.216	62.060m#
26)		Toxaphene {2}	13.04	12.44	184741	66740	89.187	12.104 #
27)		Toxaphene {3}	13.22f	0.00	136170	0	41.478	N.D. #
28)		Toxaphene {4}	0.00	13.01	0	97087	N.D. d	25.453
29)		Toxaphene {5}	14.13f	0.00	80166	0	39.282	N.D. d#
30)		Toxaphene {6}	14.68	13.52f	169520	220328	76.923	26.501 #

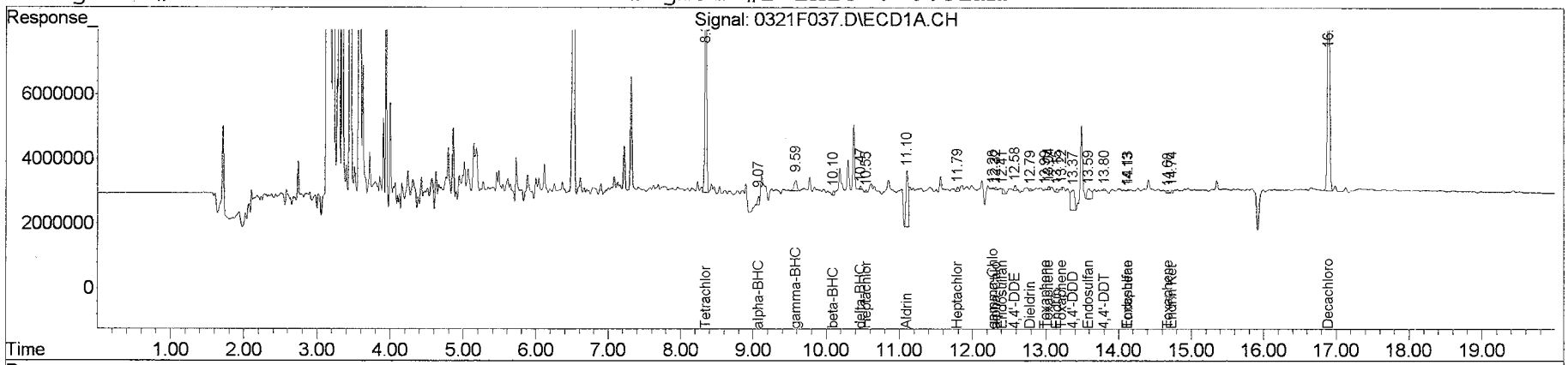
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

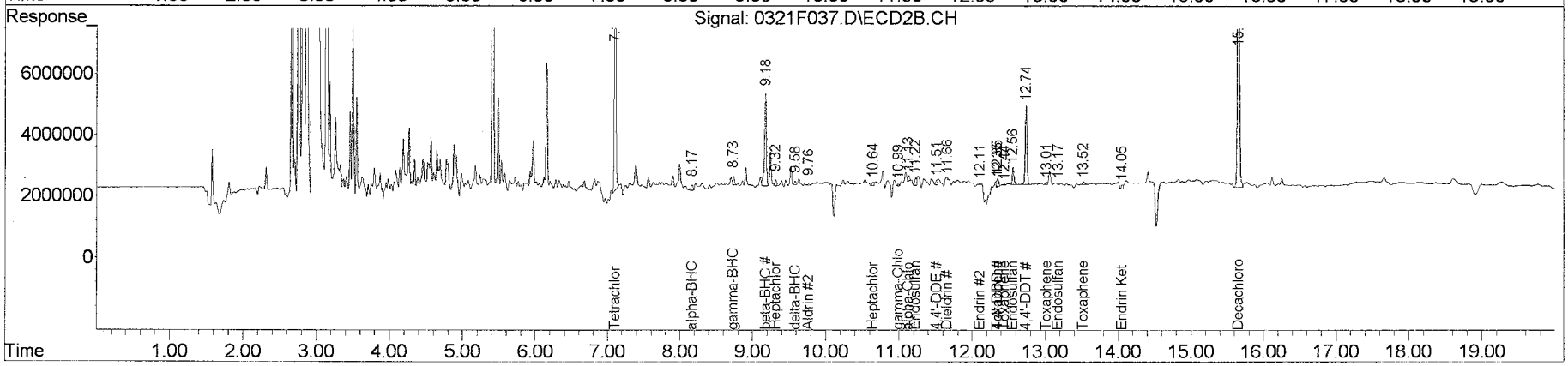
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 14:40 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

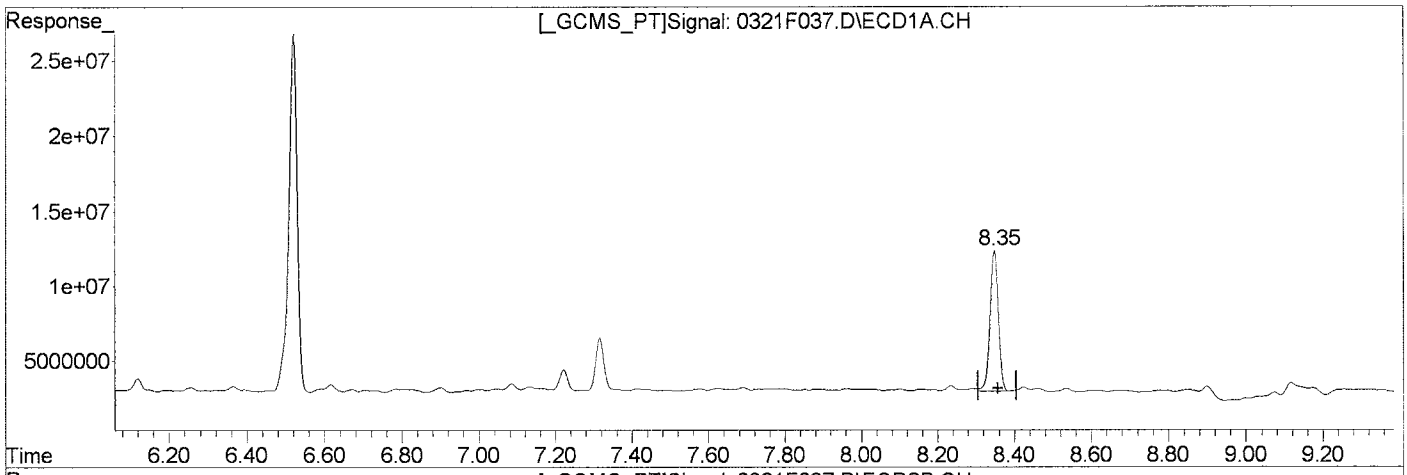


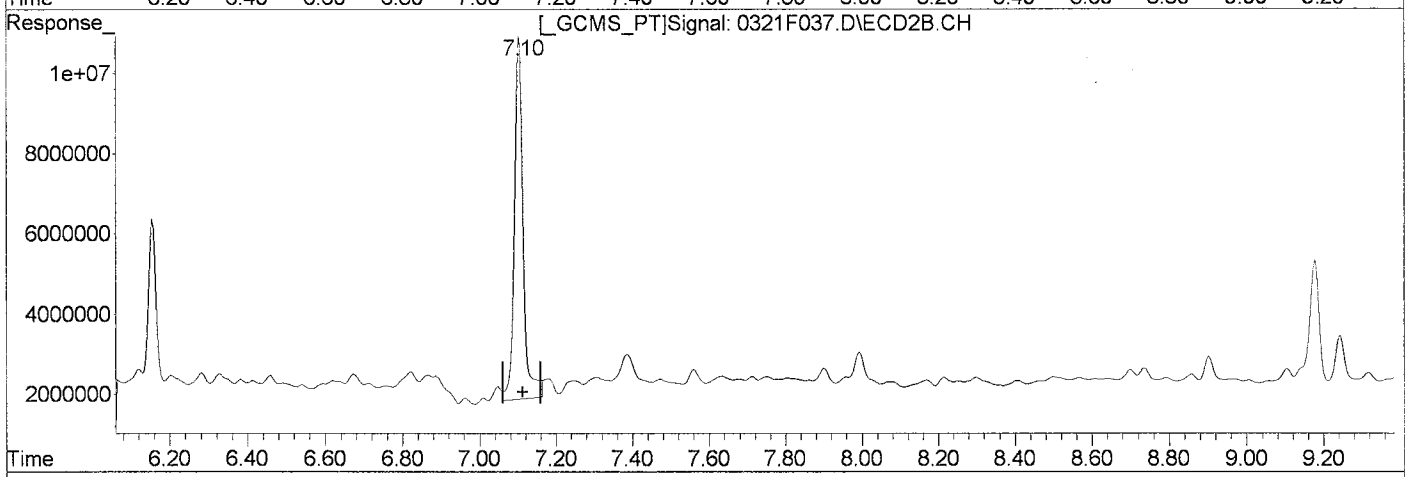


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(1) Tetrachloro-m-xylene (s)

8.35min 38.343ug/L

response 14175321

(1) Tetrachloro-m-xylene #2 (s)

7.10min 43.248ug/L

response 14317574

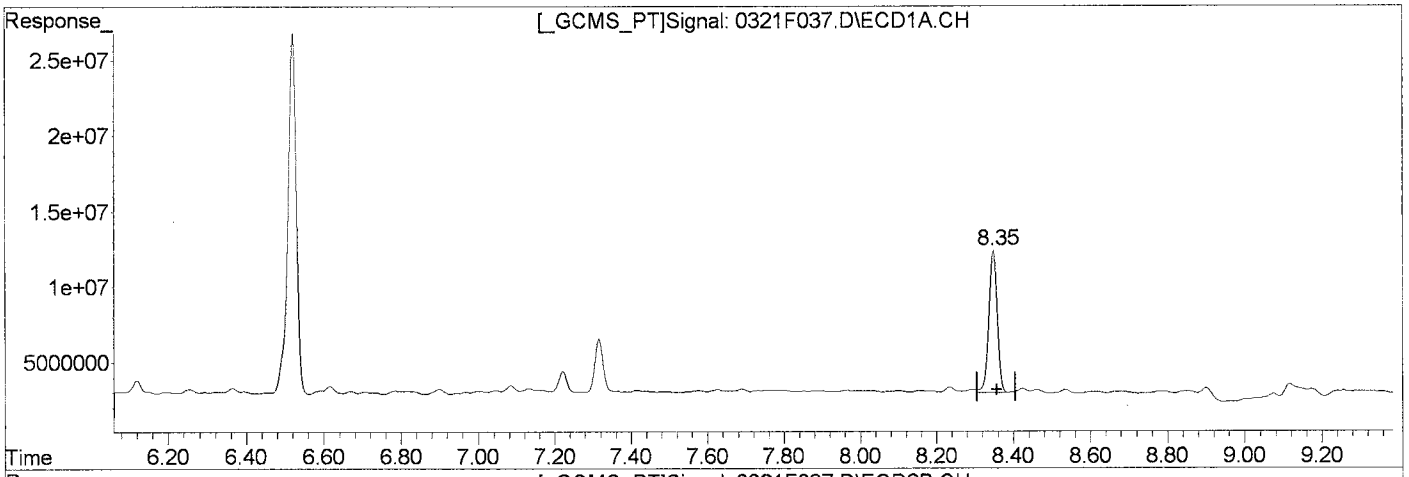
(+) = Expected Retention Time

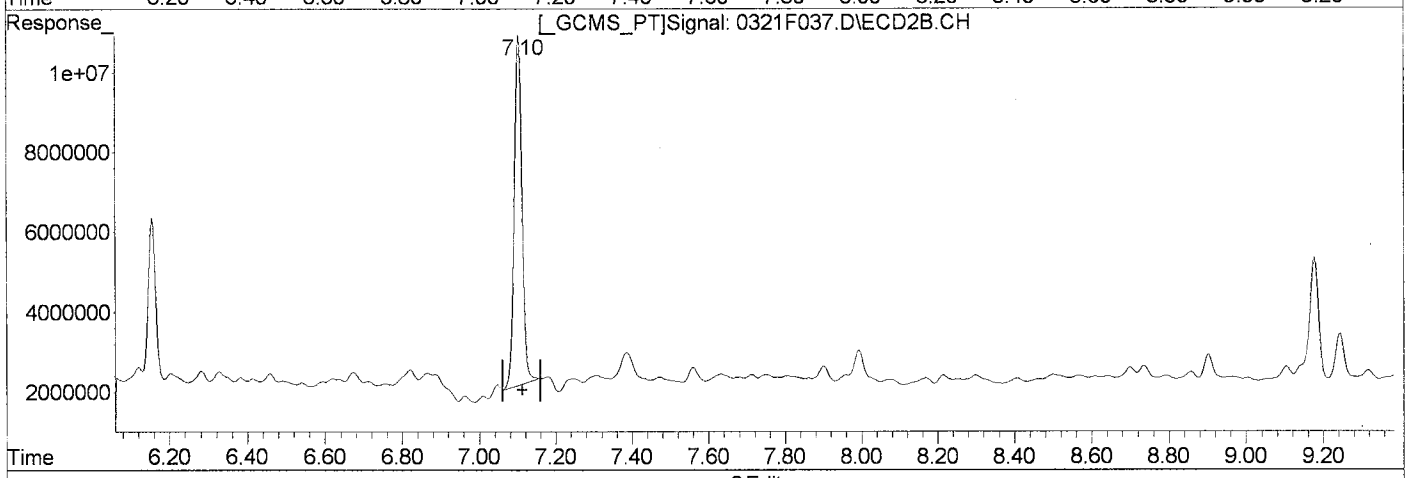
0321F037.D 031207-8081.M Thu Mar 22 14:37:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(1) Tetrachloro-m-xylene (s)

8.35min 38.343ug/L

response 14175321

(1) Tetrachloro-m-xylene #2 (s)

7.10min 37.250ug/L m

response 12331901

AK 3/23 07

After
Initials: AKD
MAR 22 2007

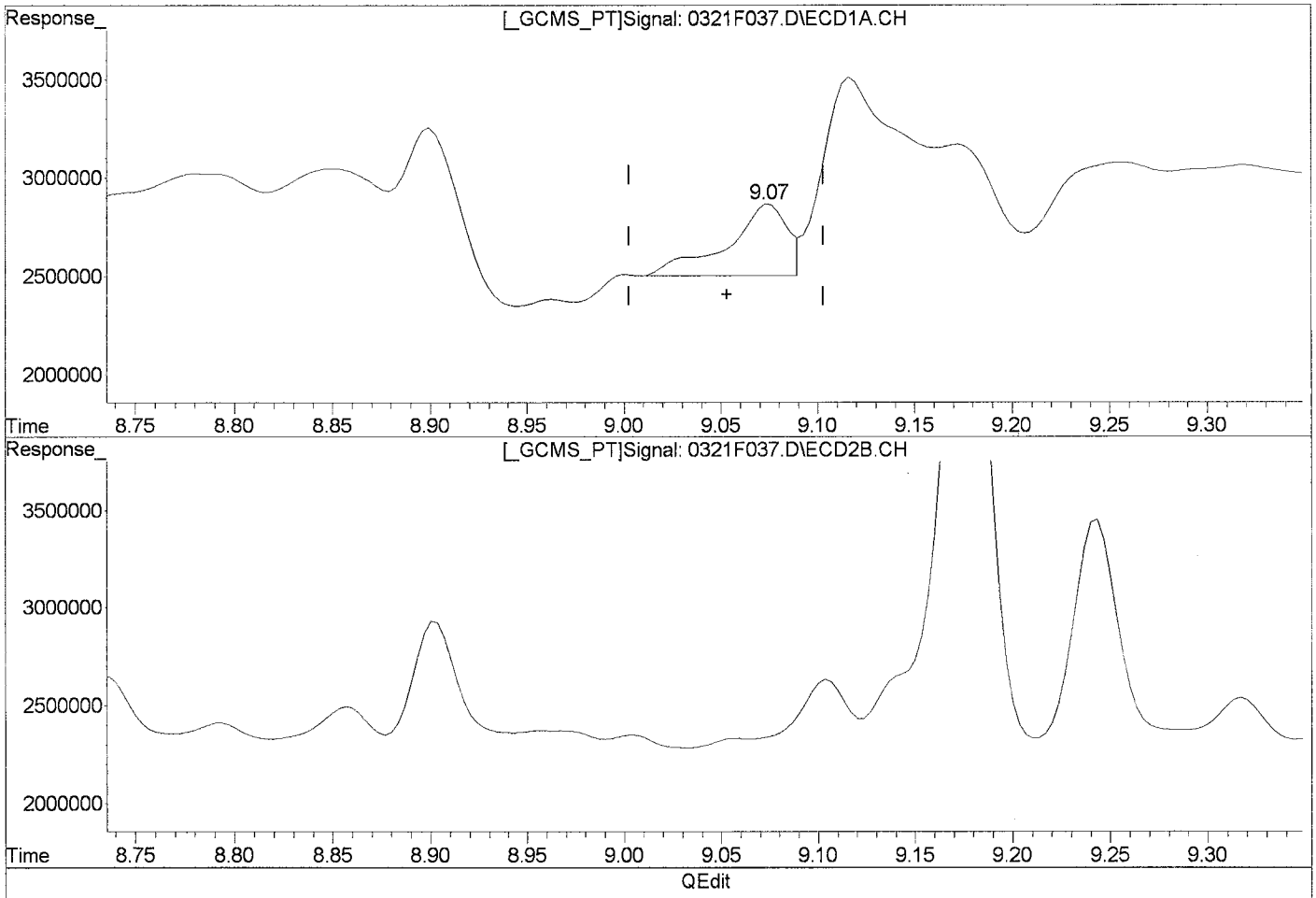
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:37:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.07min 1.698ug/L

response 804998

(2) alpha-BHC #2

8.17min 0.897ug/L

response 398760

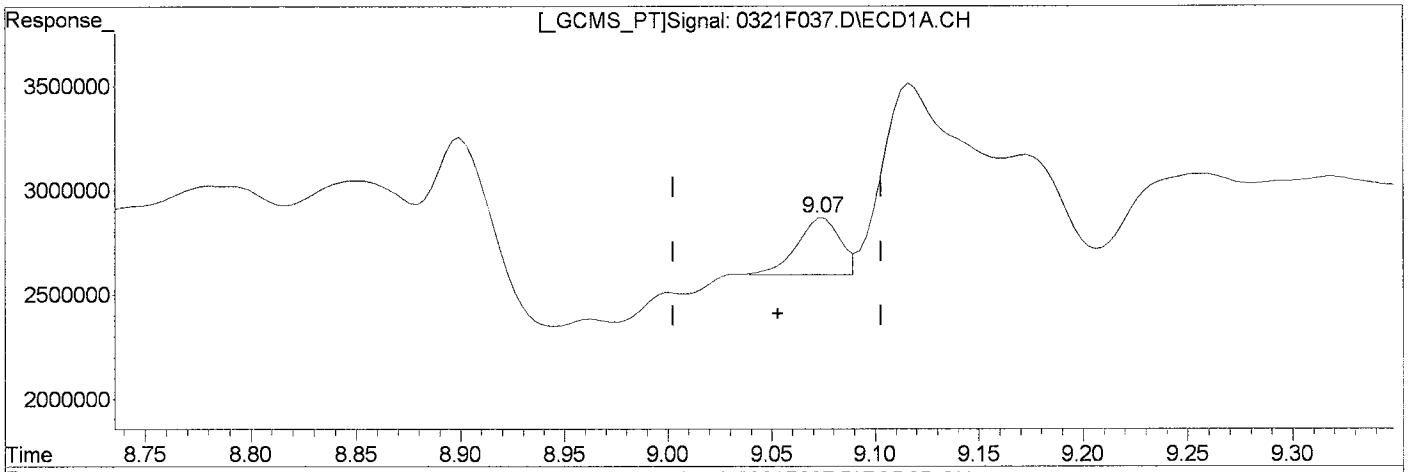
(+) = Expected Retention Time

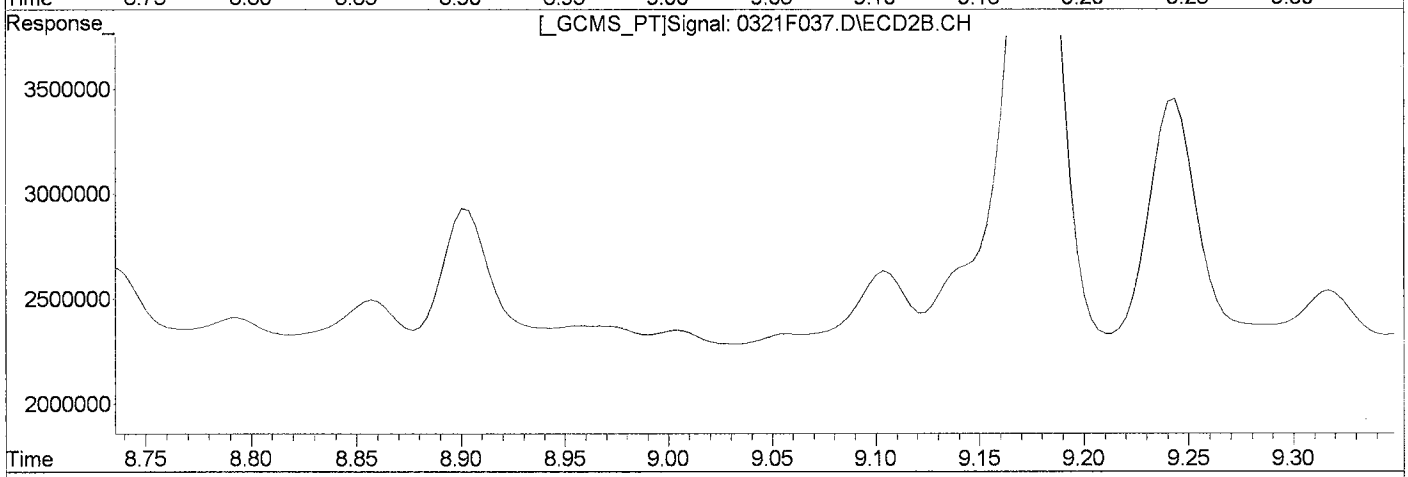
0321F037.D 031207-8081.M Thu Mar 22 14:37:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(2) alpha-BHC

9.07min 0.863ug/L m

response 409391

(2) alpha-BHC #2

8.17min 0.897ug/L

response 398760

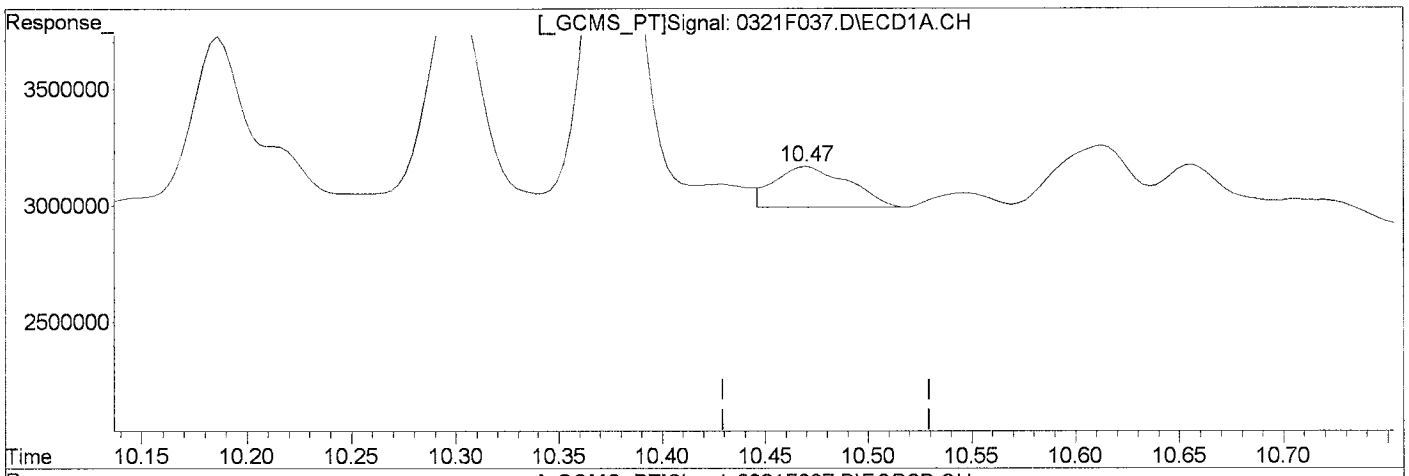
After
Initials
MAR 22 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

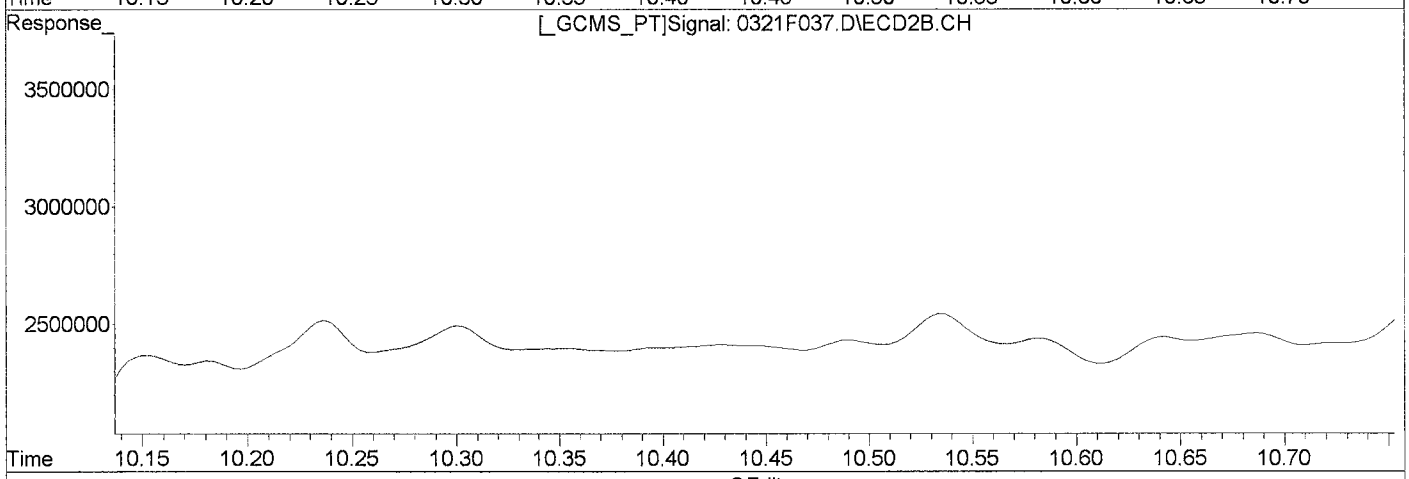
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:37:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(6) delta-BHC

10.47min 1.081ug/L

response 438064

(6) delta-BHC #2

9.58min 0.563ug/L

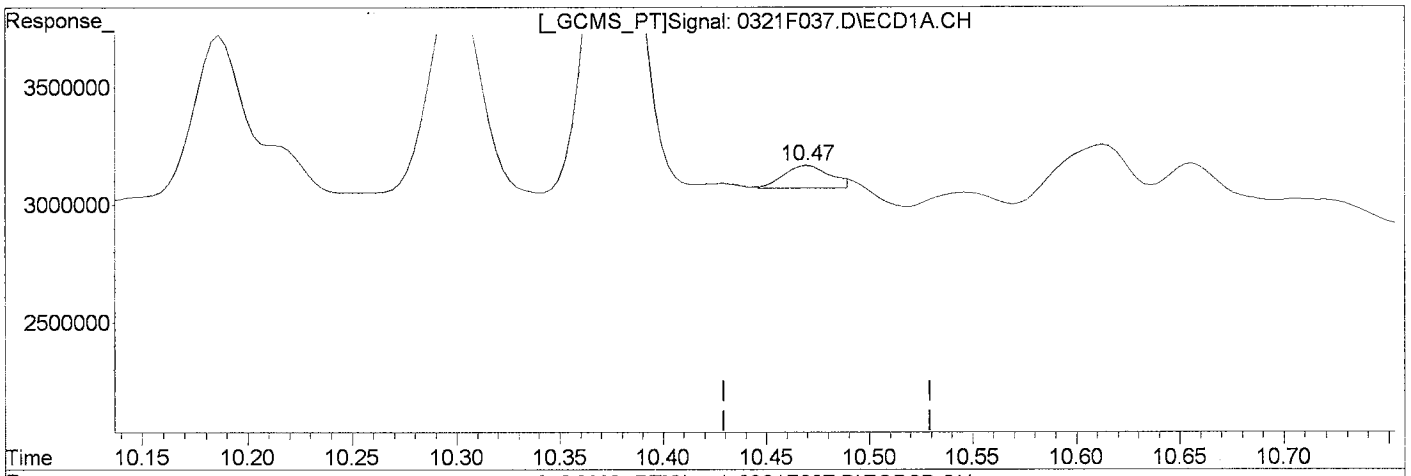
response 216648

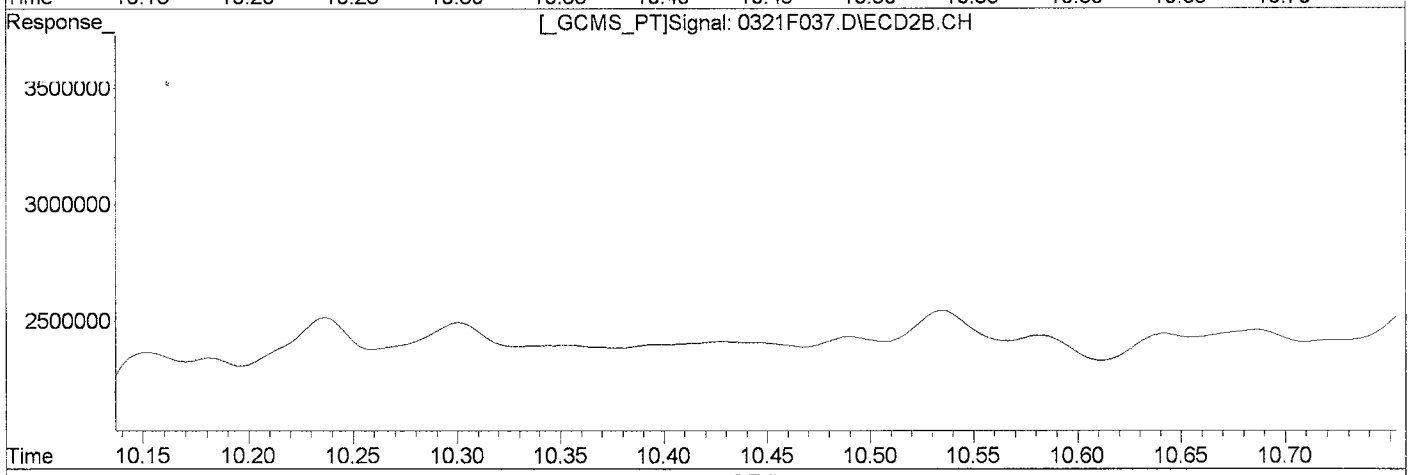
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:37:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(6) delta-BHC

10.47min 0.374ug/L m

response 151383

(6) delta-BHC #2

9.58min 0.563ug/L

response 216648

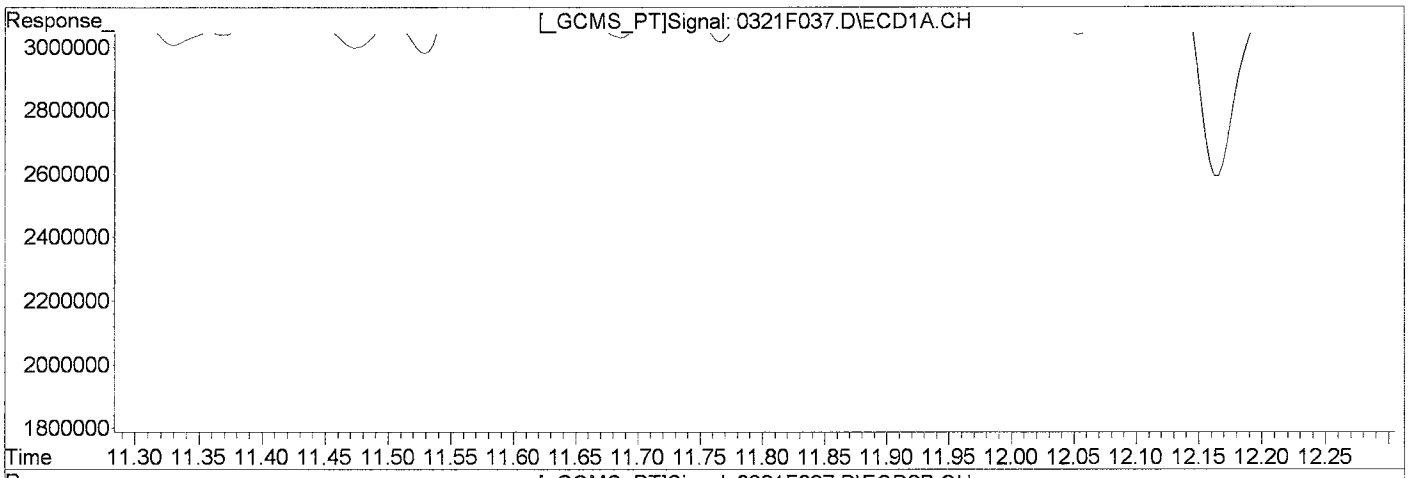
After
Initials
MAR 22 2007
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

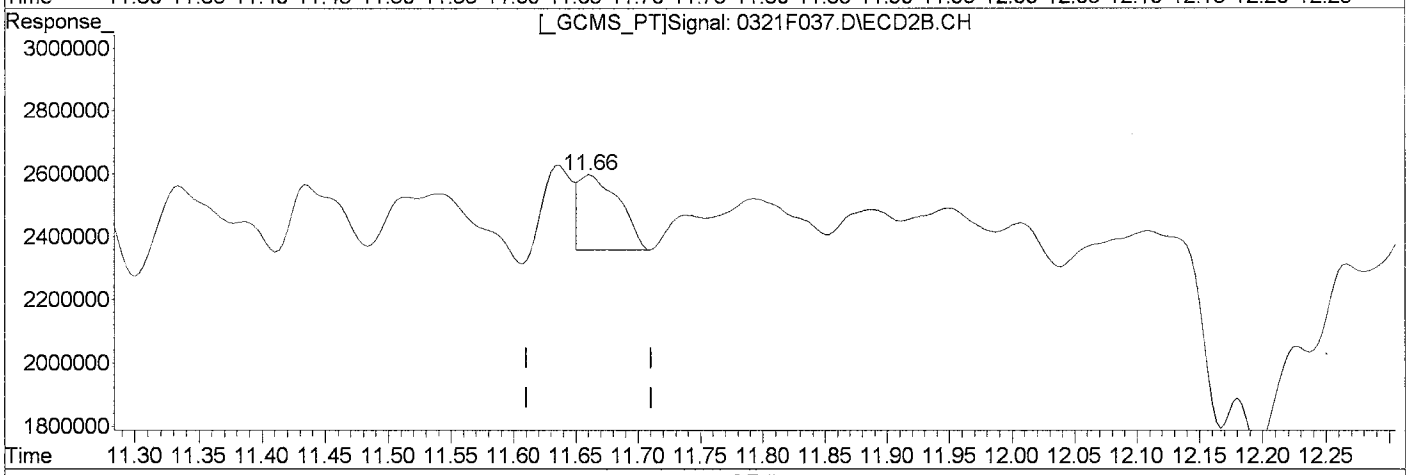
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:38:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(14) Dieldrin

12.79min 0.389ug/L

response 135219

(14) Dieldrin #2

11.66min 1.421ug/L

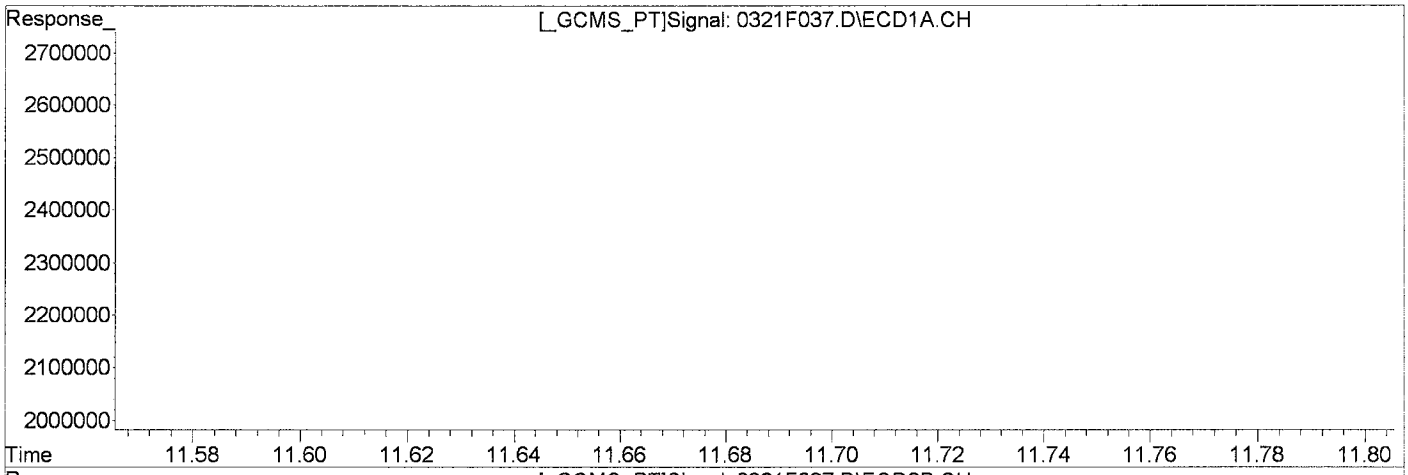
response 519178

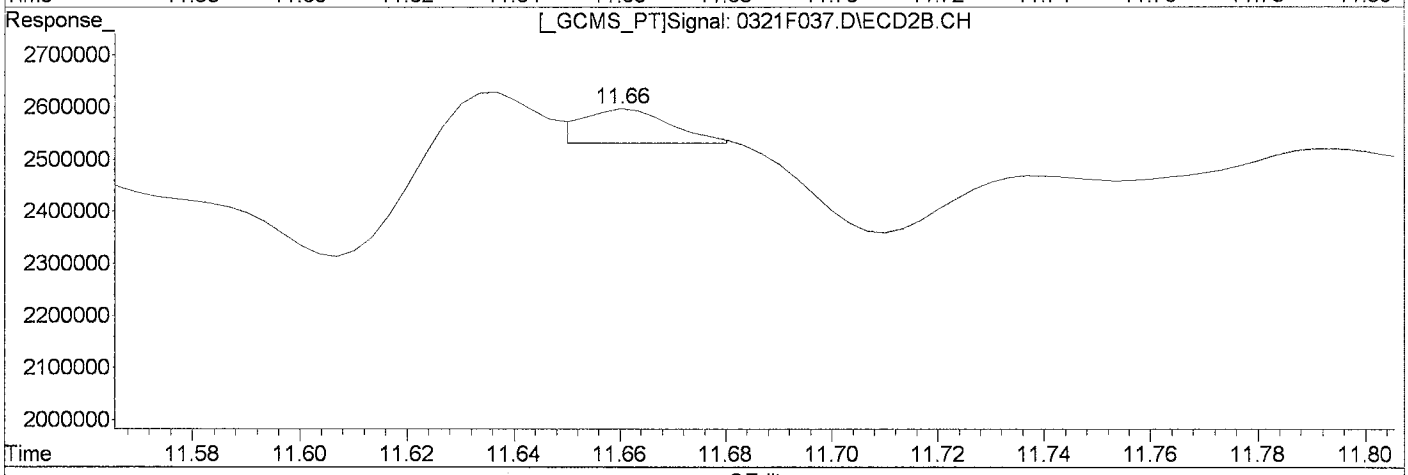
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:38:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(14) Dieldrin

12.79min 0.389ug/L

response 135219

(14) Dieldrin #2

11.66min 0.198ug/L m

response 72402

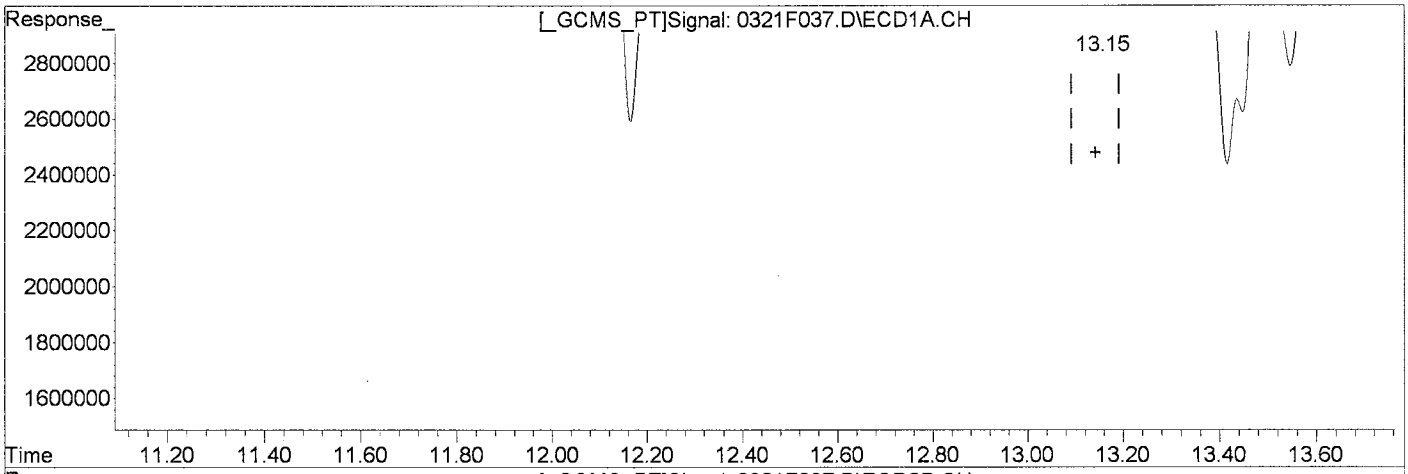
After
Initials
MAR 22 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

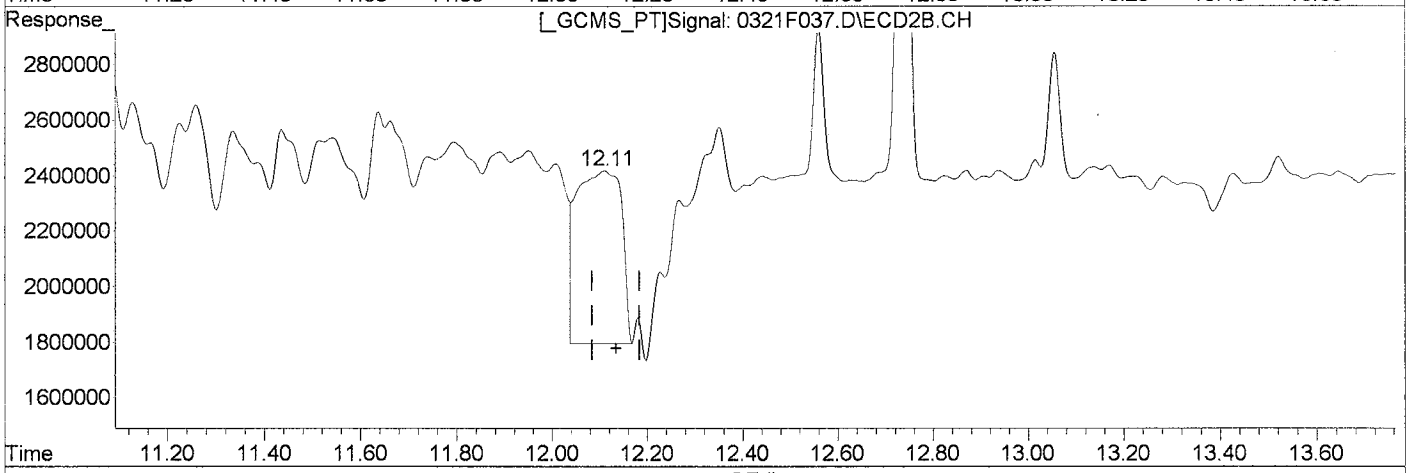
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:38:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.15min 0.770ug/L

response 225834

(16) Endrin #2

12.11min 12.602ug/L

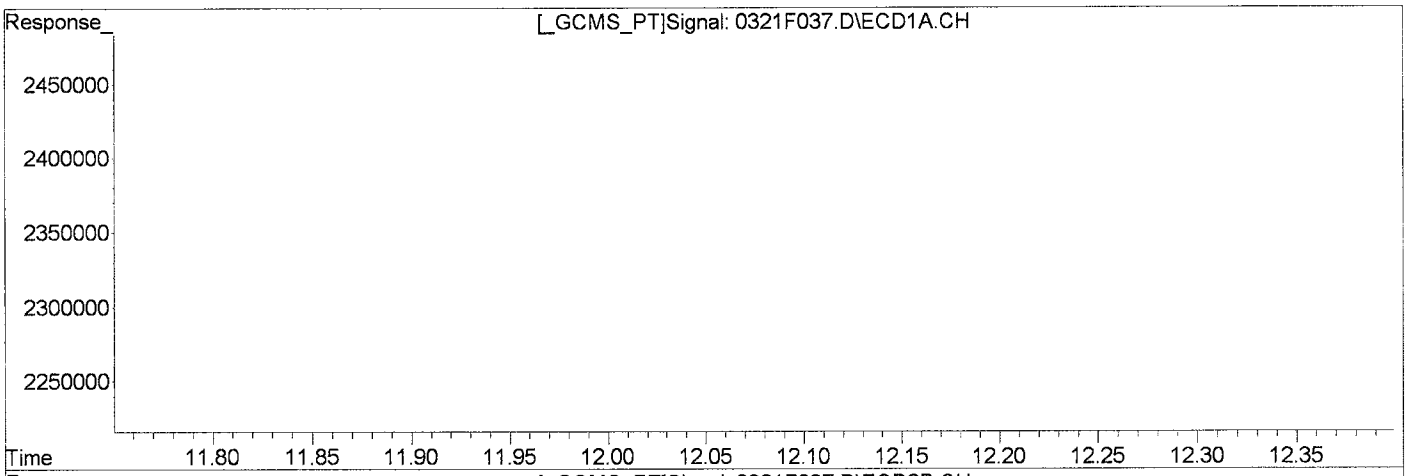
response 4045889

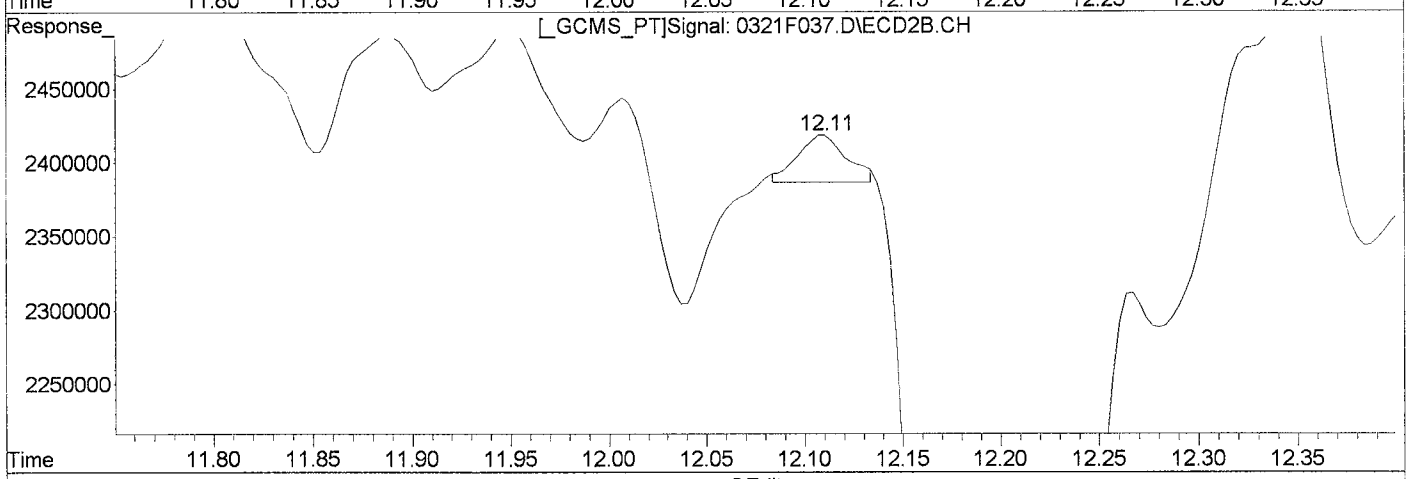
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.15min 0.770ug/L

response 225834

(16) Endrin #2

12.11min 0.170ug/L m

response 54603

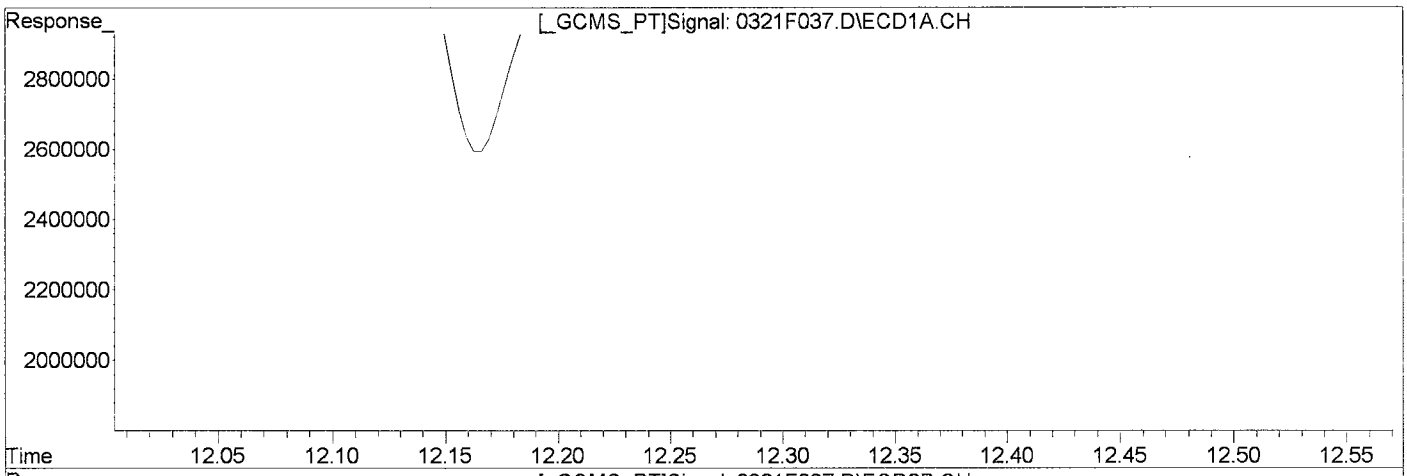
After
Initials
MAR 22 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

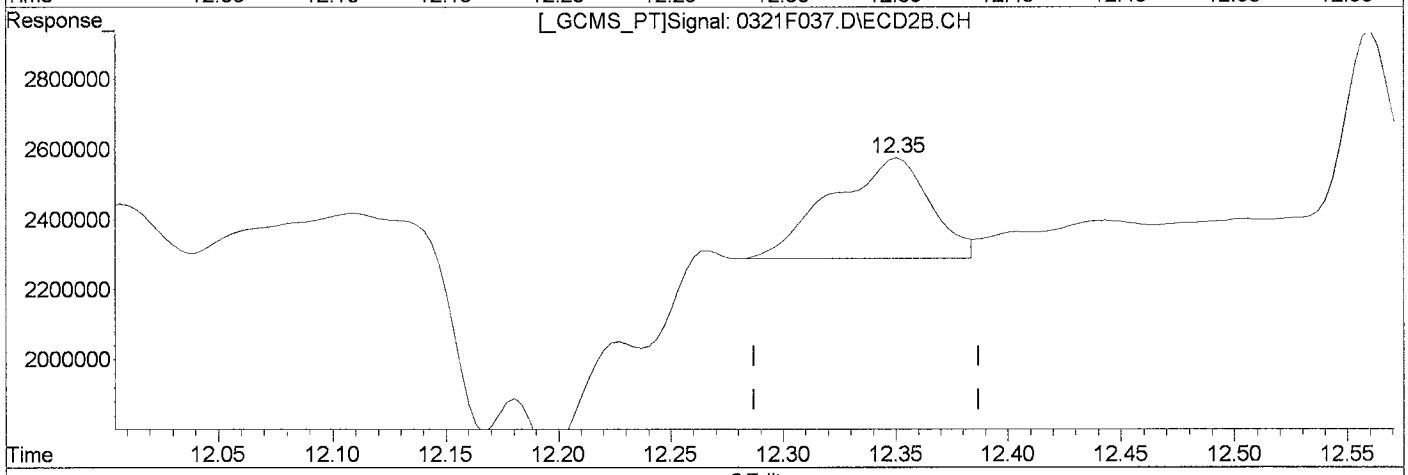
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:10 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.37min 9.060ug/L

response 2389703

(18) 4,4'-DDD #2

12.35min 3.043ug/L

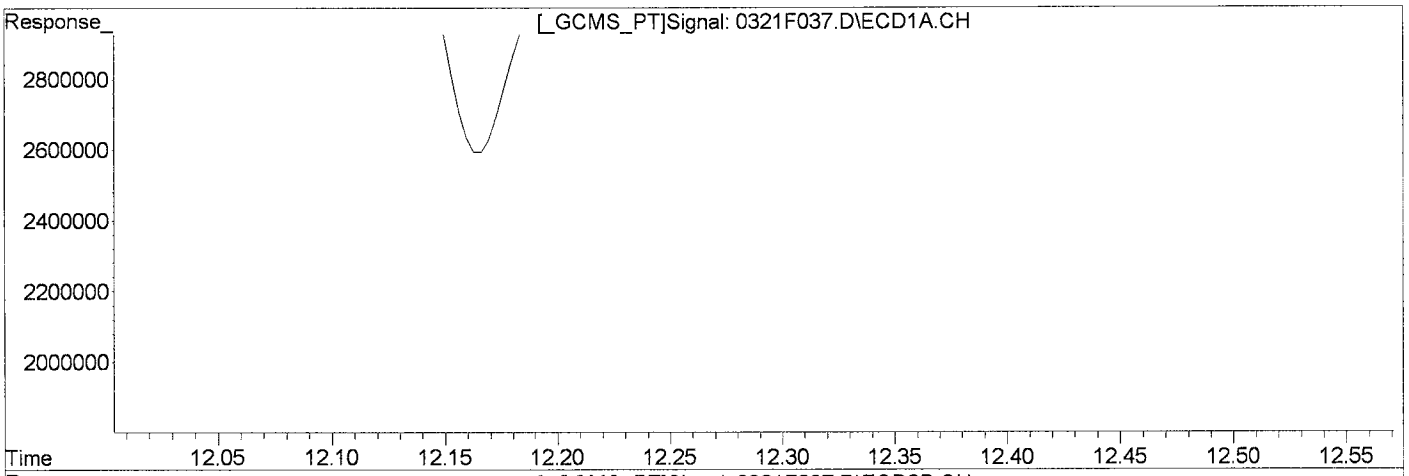
response 885816

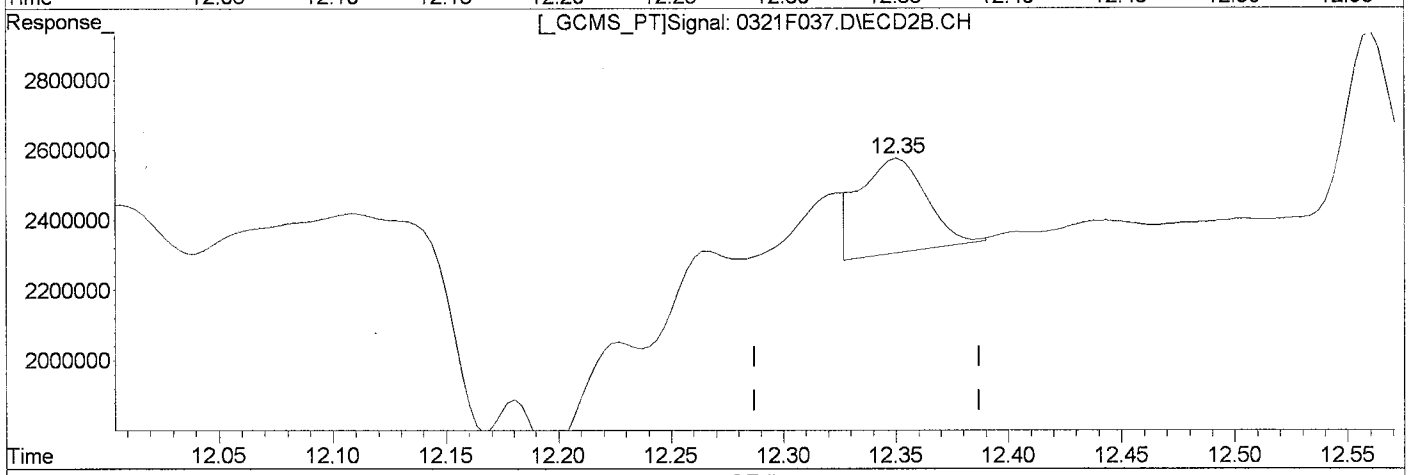
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.37min 9.060ug/L

response 2389703

(18) 4,4'-DDD #2

12.35min 1.895ug/L m

response 551580

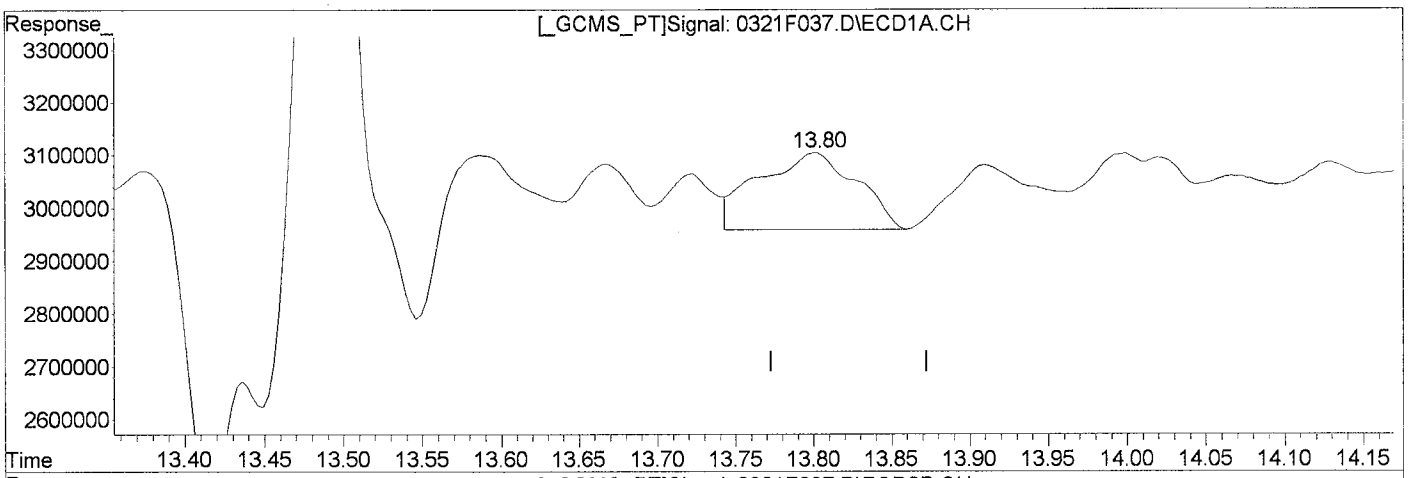
After
Initials
MAR 22 2007
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

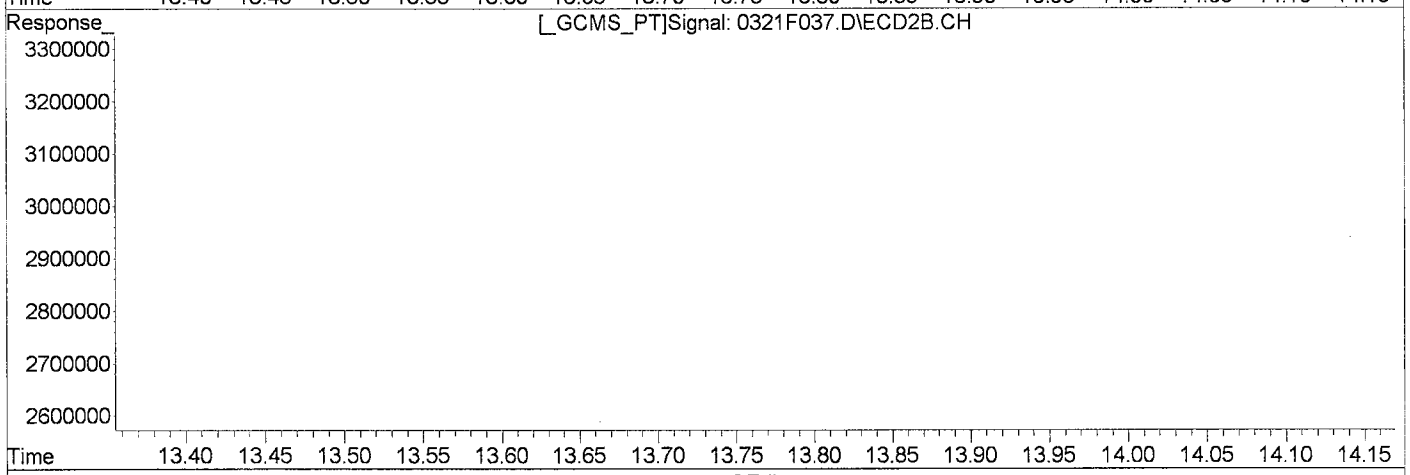
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

13.80min 2.293ug/L

response 633629

(21) 4,4'-DDT #2

12.74min 13.450ug/L

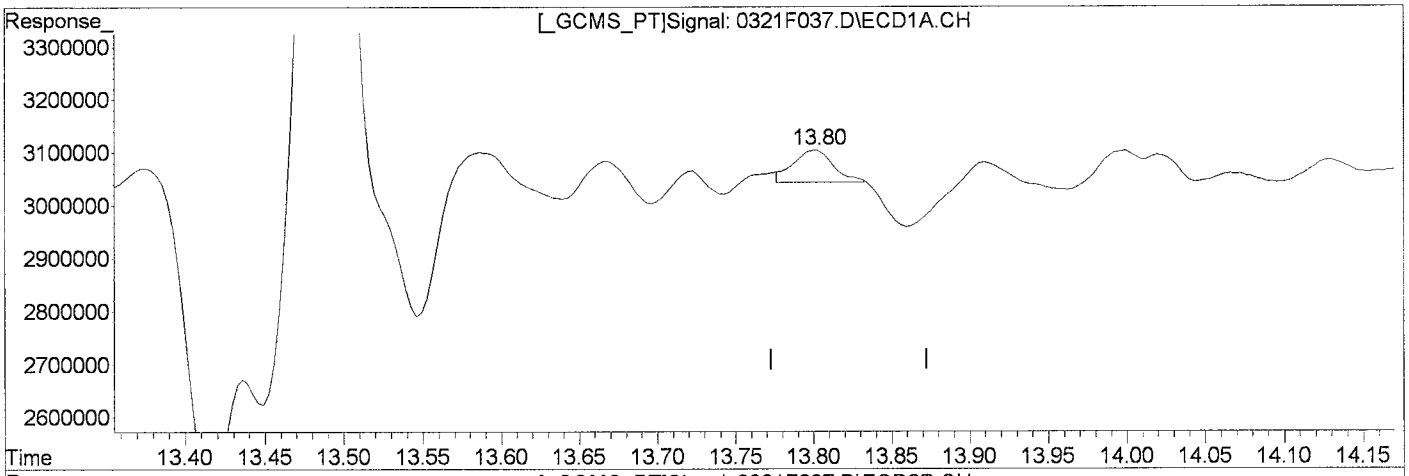
response 4250486

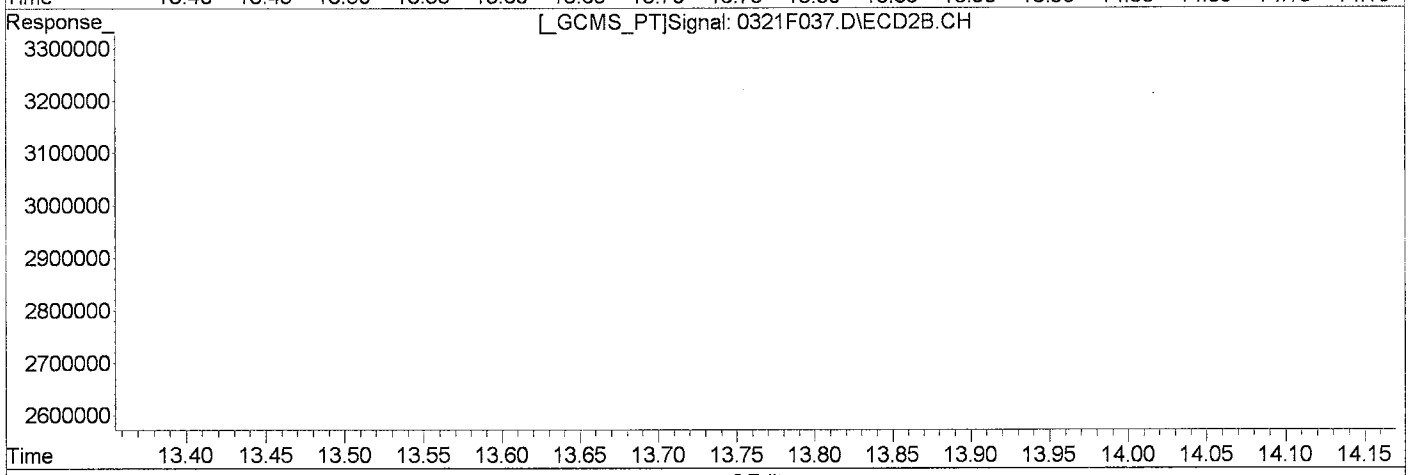
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

13.80min 0.388ug/L m

response 107298

(21) 4,4'-DDT #2

12.74min 13.450ug/L

response 4250486

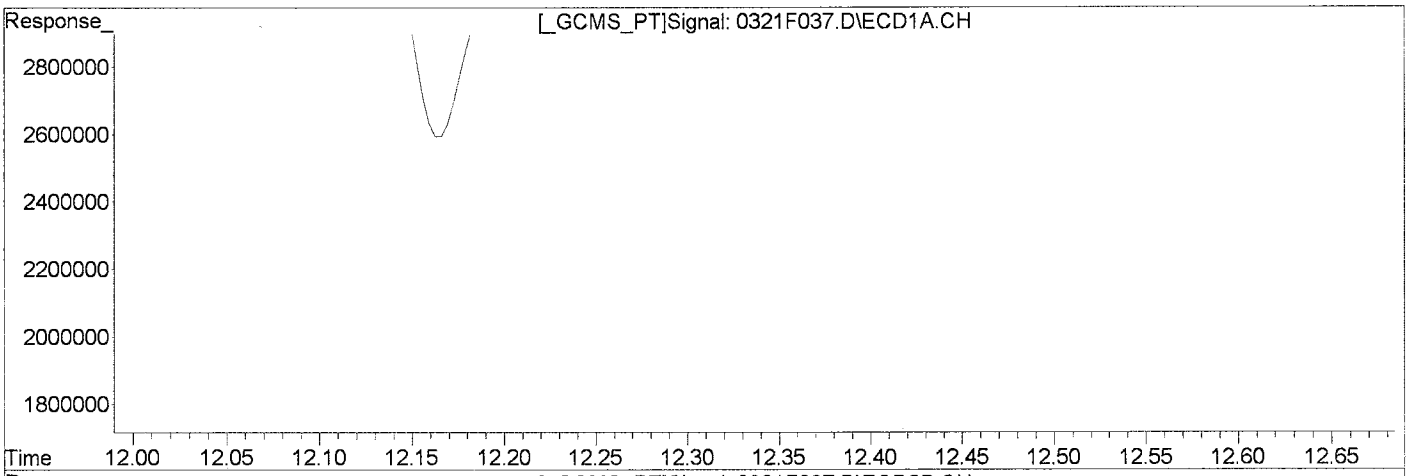
After
Initials
MAR 22 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

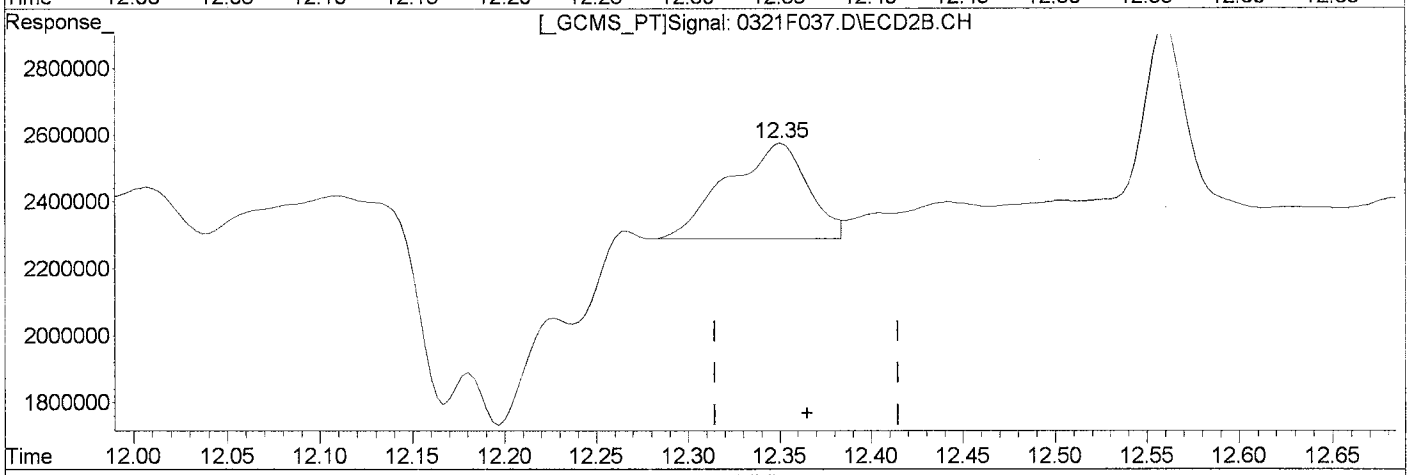
(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:39:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(25) Toxaphene

12.99min 35.216ug/L

response 92389

(25) Toxaphene #2

12.35min 118.521ug/L

response 885816

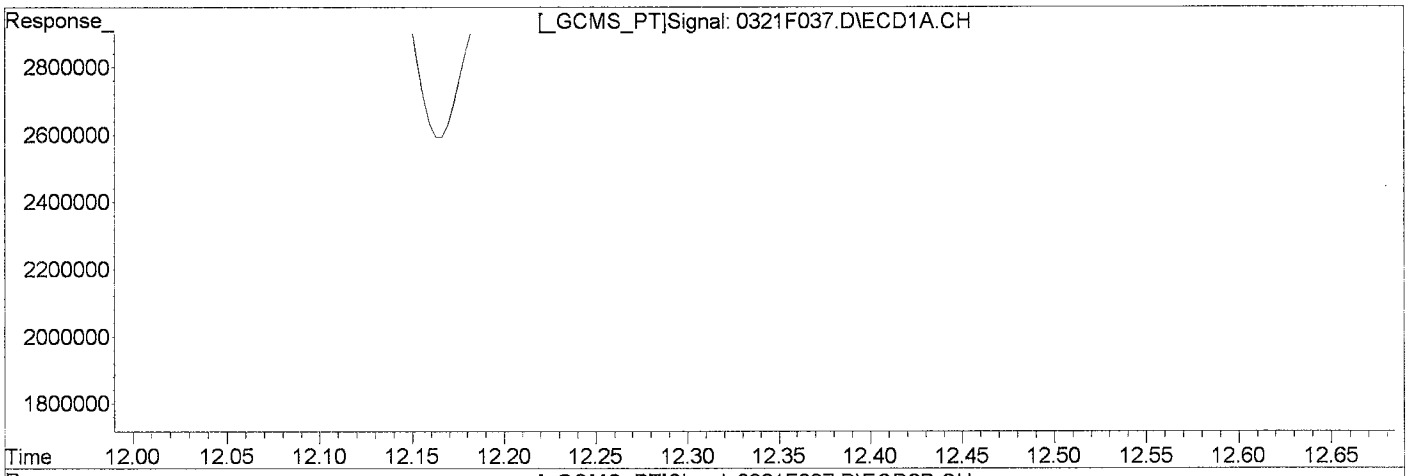
(+) = Expected Retention Time

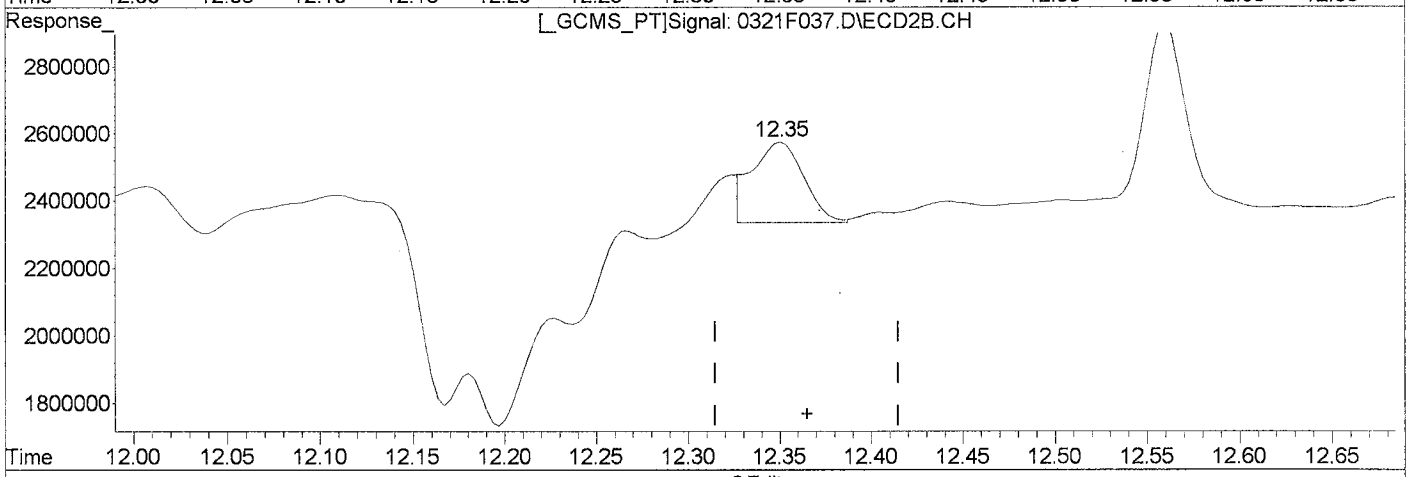
0321F037.D 031207-8081.M Thu Mar 22 14:40:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F037.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\032107\0321F037.D\ECD2B.CH
Acq On : 22 Mar 2007 6:13 am Operator: AKamawal
Sample : K0701703-001 | DAEGW104C1 Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\01703001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:49 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(25) Toxaphene

12.99min 35.216ug/L

response 92389

(25) Toxaphene #2

12.35min 62.060ug/L m

response 463829

After
Initials
MAR 22 2007
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0321F037.D 031207-8081.M Thu Mar 22 14:40:10 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703478-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Aldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	ND	U	0.0096	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.48	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	51	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	82	65-135	03/22/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032107\0321F034.D
Lab ID: KWG0703478-3
RunType: MB
Matrix: WATER

Date Acquired: 03/22/2007 04:54
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	1(a)

Primary Review: Vr 32207

Secondary Review: Ar 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F034.D\0321F034C.D
Lab ID: KWG0703478-3
RunType: MB
Matrix: WATER

Date Acquired: 03/22/2007 04:54
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	
Analyte Co-elution	4,4'-DDD	12.34	NA	NA	
	Toxaphene {1}	12.34	NA	NA	

Primary Review: 3/22/07

Secondary Review: 3/23/07

Printed: 03/22/2007 14:54:32
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/22/2007

Analysis Lot:	KWG0703862	**Prep Lot:**	KWG0703478	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	582068	**Prep Date:**	03/09/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F034.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F034.D\0321F034c.d			**Vial:**	28
Acqu Date:	03/22/2007 04:54	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.34	7.10	17324802	17013553	46.86	51.39			51OK
				%Recovery =	47OK	51OK	Limits =	18-125	
Decachlorobiphenyl	16.89	15.65	23119894	30683643	75.87	81.61			82OK
				%Recovery =	76OK	82OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC	10.05	9.14	47946	53182	0.2240	0.2600	0.00083U	0.00083U	0.00083U
gamma-BHC (Lindane)	9.58	8.73	42842	95212	0.0970	0.2260	0.00044U	0.00044U	0.00044U
delta-BHC			0	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
Heptachlor	10.59 +0.04	9.31 +0.01	38911	32602	0.0890	0.0770	0.00036U	0.00036U	0.00036U
Aldrin			0	0	0.0000	0.0000	0.00040U	0.00040U	0.00040U
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide			0d	0	0.0000	0.0000	0.00032U	0.00032U	0.00032U
gamma-Chlordane			0	0	0.0000	0.0000	0.00032U	0.00032U	0.00032U
Endosulfan I			0	0d	0.0000	0.0000	0.00044U	0.00044U	0.00044U
alpha-Chlordane			0	0	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin			0	0	0.0000	0.0000	0.00035U	0.00035U	0.00035U
4,4'-DDE			0	0d	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Endrin			0	0	0.0000	0.0000	0.00068U	0.00068U	0.00068U
Endosulfan II			0	0d	0.0000	0.0000	0.00040U	0.00040U	0.00040U
4,4'-DDD	13.35	12.34 +0.01c	87143m	68640m	0.3300	0.2360	0.0015U	0.0015U	0.0015U
Endrin Aldehyde			0	0	0.0000	0.0000	0.00046U	0.00046U	0.00046U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F034.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F034.D\0321F034c.d			**Vial:**	28
Acqu Date:	03/22/2007 04:54	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0	0	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT			0	0d	0.0000	0.0000	0.00058U	0.00058U	0.00058U
Endrin Ketone			0	0	0.0000	0.0000	0.00066U	0.00066U	0.00066U
Methoxychlor			0	0d	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	0.0000	13.27	0.028U	0.028U	0.028U
Toxaphene {1}		12.34 -0.03 c	0	93066	0.0000	12.45	0.028U	0.028U	
Toxaphene {2}		12.48 +0.04	0	100523	0.0000	18.23	0.028U	0.0347J	
Toxaphene {3}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}		13.05 -0.04	0	29819	0.0000	9.14	0.028U	0.028U	
Toxaphene {6}			0	0	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F034.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\032107\0321F034.D\ECD2B.CH
Acq On : 22 Mar 2007 4:54 am Operator: AKamawal
Sample : KWG0703478-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703478\3-MB.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:40:08 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.34	7.10	17324802	17013553	46.862	51.392
24)	s	Decachlorobiphen	16.89f	15.65	23119894	30683643	75.865	81.610
		Target Compounds						
4)		beta-BHC	10.05	9.14	47946	53182	0.224	0.260
5)		gamma-BHC (Linda	9.58	8.73	42842	95212	0.097	0.226 #
7)		Heptachlor	10.59f	9.31	38911	32602	0.089	0.077
18)		4,4'-DDD	13.35	12.34	87143	68640	0.330m	0.236m#
25)		Toxaphene	0.00	12.34	0	93066	N.D.	12.452 #
26)		Toxaphene {2}	0.00	12.48f	0	100523	N.D.	18.230 #
29)		Toxaphene {5}	0.00	13.05f	0	29819	N.D.	9.139 #

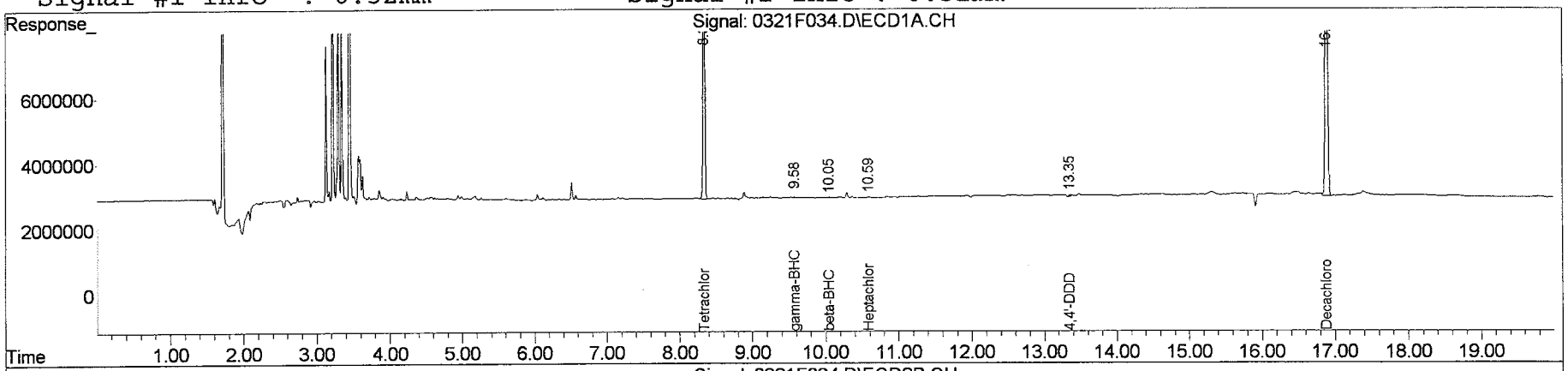
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

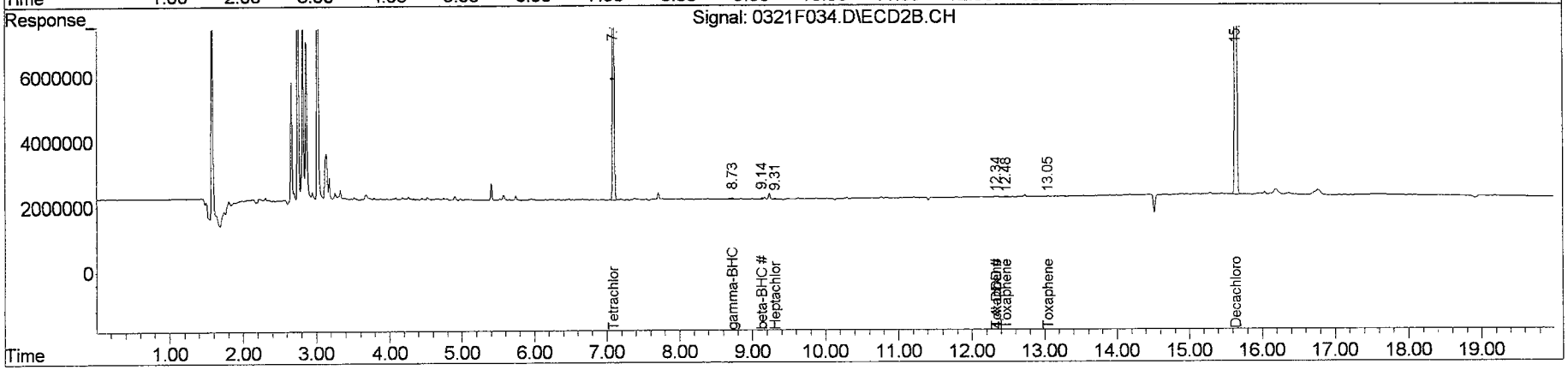
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F034.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\032107\0321F034.D\ECD2B.CH
Acq On : 22 Mar 2007 4:54 am Operator: AKamawal
Sample : KWG0703478-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703478\3-MB.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 14:36 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

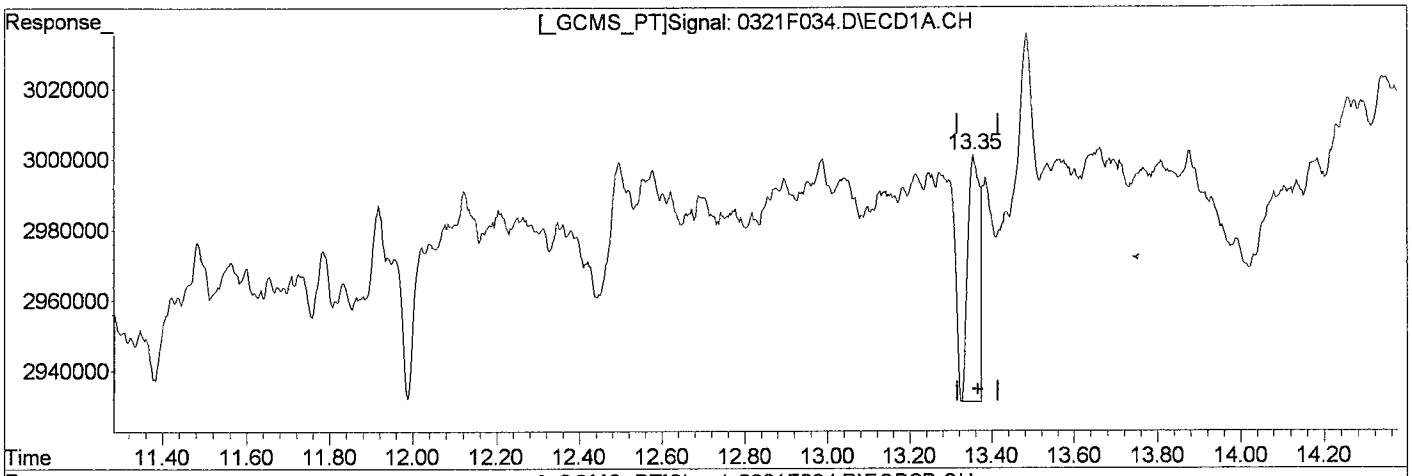


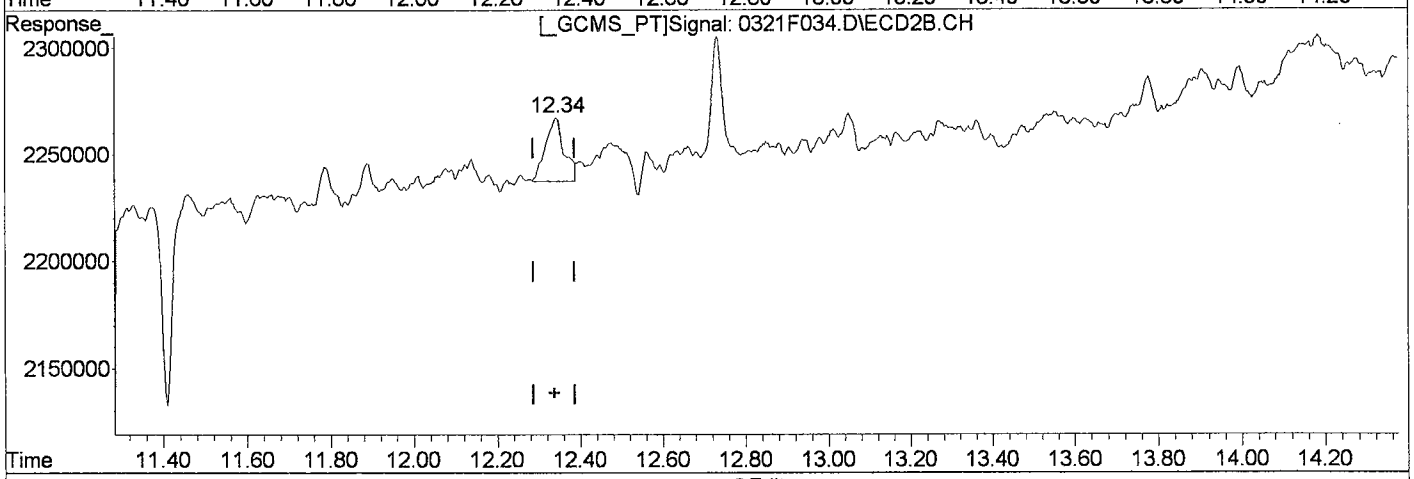


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F034.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\032107\0321F034.D\ECD2B.CH
Acq On : 22 Mar 2007 4:54 am Operator: AKamawal
Sample : KWG0703478-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703478\3-MB.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:40 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.35min 0.545ug/L

response 143776

(18) 4,4'-DDD #2

12.34min 0.320ug/L

response 93066

Before

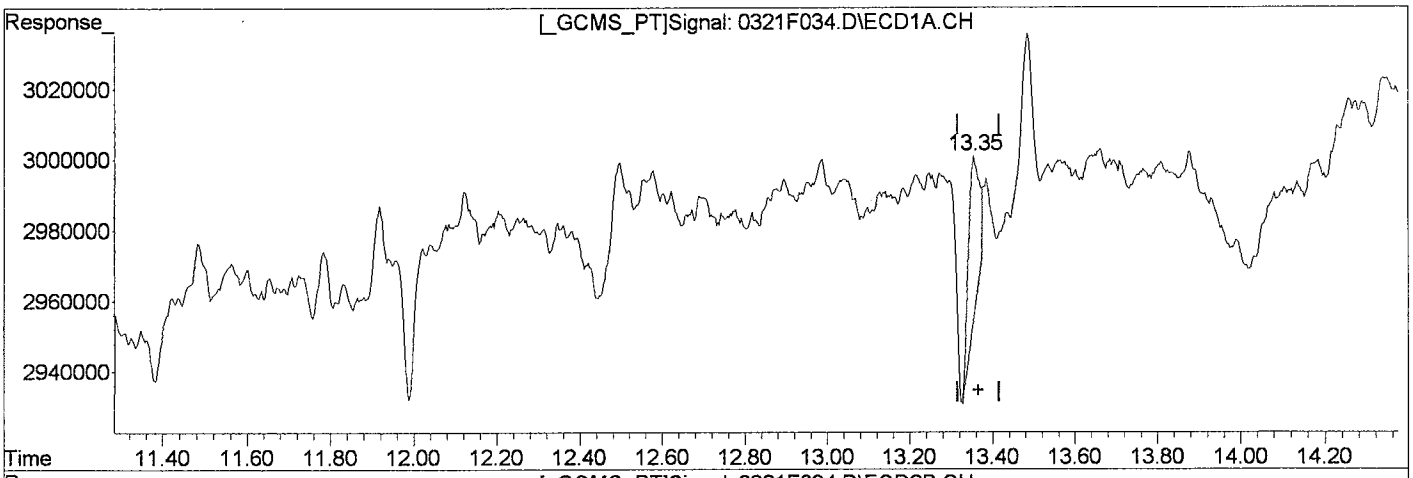
MAR 2 2 2007

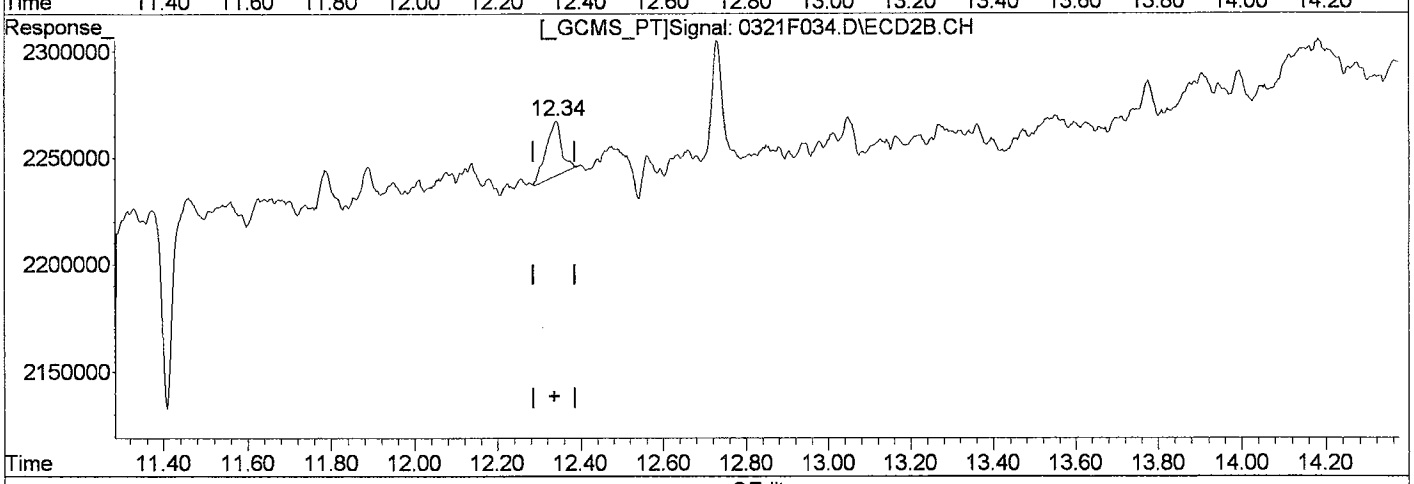
(+) = Expected Retention Time
0321F034.D 031207-8081.M Thu Mar 22 14:35:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F034.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\032107\0321F034.D\ECD2B.CH
Acq On : 22 Mar 2007 4:54 am Operator: AKamawal
Sample : KWG0703478-3 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0703478\3-MB.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:40 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD
13.35min 0.330ug/L m
response 87143

(18) 4,4'-DDD #2
12.34min 0.236ug/L m
response 68640

AK 3/23/07

After
Initials _____

MAR 22 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

(+) = Expected Retention Time
0321F034.D 031207-8081.M Thu Mar 22 14:35:54 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703478-1	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.169**		0.010	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	**0.180**		0.010	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	**0.186**		0.010	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	**0.222**		0.010	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	**0.141**		0.010	1	03/09/07	03/22/07	KWG0703478	
Aldrin	**0.121**		0.010	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	**0.185**		0.010	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	**0.189**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	**0.181**		0.010	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	**0.187**		0.010	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	**0.188**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	**0.186**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin	**0.185**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	**0.183**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	**0.188**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	**0.140**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	**0.179**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	**0.194**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	**0.183**		0.010	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	**0.179**		0.010	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.50	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	53	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	80	65-135	03/22/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032107\0321F035.D
Lab ID: KWG0703478-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/22/2007 05:20
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	IC

Primary Review: [illegible]

Secondary Review: [illegible] 3/23/07

Printed: 03/22/2007 14:54:35
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\GC23\DATA\032107\0321F035.D\0321F035C.D
Lab ID: KWG0703478-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/22/2007 05:20
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	
Continuing Calibration Recovery (Closing)	alpha-BHC	15.1	NA	15	
	Endrin	18.2	NA	15	
	Methoxychlor	16.2	NA	15	
	Heptachlor	16.9	NA	15	

Primary Review: [illegible]

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/22/2007

Analysis Lot:	KWG0703862	**Prep Lot:**	KWG0703478	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
		Prep Date:	03/09/2007		
Prep Ref:	582066				

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:	J:\GC23\DATA\032107\0321F034.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F035.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F035.D\0321F035c.d			**Vial:**	29
Acqu Date:	03/22/2007 05:20	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.34	7.10	17706749	17422442	47.90	52.63			53OK
				%Recovery =	48OK	53OK	Limits =	18-125	
Decachlorobiphenyl	16.90 +0.01	15.65	22178618	30233446	72.78	80.41			80OK
				%Recovery =	73OK	80OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.04	8.12	40095531	41555693	84.57	93.50 CCV	0.169	0.187	0.169
Hexachlorobenzene	9.17	7.95	20542118	21329160	49.32	55.09	0.0986	0.110	0.110
beta-BHC	10.05	9.14	17169029	18440451	80.14	90.04	0.160	0.180	0.160
gamma-BHC (Lindane)	9.59 +0.01	8.73	37560769	39140995	84.77	92.83	0.170	0.186	0.170
delta-BHC	10.47 +0.01	9.58	40492987	42691047	99.97	110.86	0.200	0.222	0.200
Heptachlor	10.55	9.30	30791346	33307243	70.54	78.67 CCV	0.141	0.157	0.141
Aldrin	11.06	9.78	20696972	22934376	54.05	60.47	0.108	0.121	0.108
Isodrin	11.59 +0.01	10.42	18433227	20429949	57.29	63.65	0.115	0.127	0.127
Heptachlor Epoxide	11.76	10.64	31313998	34453256	83.29	92.28	0.167	0.185	0.167
gamma-Chlordane	12.26 +0.01	10.99	31487806	35533804	84.60	94.62	0.169	0.189	0.169
Endosulfan I	12.38	11.22	26214992	30251755	79.78	90.41	0.160	0.181	0.160
alpha-Chlordane	12.33 +0.01	11.14	30192561	34566033	83.15	93.57	0.166	0.187	0.166
Dieldrin	12.78 +0.01	11.65	29690316	34337656	85.42	93.98	0.171	0.188	0.171
4,4'-DDE	12.57 +0.01	11.46	27649132	32338394	83.18	93.07	0.166	0.186	0.166
Endrin	13.13 +0.01	12.12	27154913	33291184	92.65	103.69 CCV	0.185	0.207	0.185
Endosulfan II	13.53	12.53 +0.01	25633243	29756774	85.01	91.72	0.170	0.183	0.170
4,4'-DDD	13.35	12.33	23046670	27352593	87.38	93.98	0.175	0.188	0.175
Endrin Aldehyde	13.70 +0.01	12.87	17458708	20026667	66.11	69.84	0.132	0.140	0.132

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F035.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F035.D\0321F035c.d			**Vial:**	29
Acqu Date:	03/22/2007 05:20	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.12	13.17 +0.01	24239685	30217829	82.83	89.75	0.166	0.179	0.166
4,4'-DDT	13.81 +0.01	12.74 +0.01	25019254	30633315	90.53	96.93	0.181	0.194	0.181
Endrin Ketone	14.75 +0.01	14.05	28200996	35794328	86.15	91.57	0.172	0.183	0.172
Methoxychlor	14.46	13.75 +0.01	13802270	17066193	89.72	95.72 CCV	0.179	0.191	0.179
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F035.D\ECD1A.CH Vial: 29
Signal #2 : J:\GC23\DATA\032107\0321F035.D\ECD2B.CH
Acq On : 22 Mar 2007 5:20 am Operator: AKamawal
Sample : KWG0703478-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703478\1-LCS.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:40:09 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.34	7.10	17706749	17422442	47.896	52.627
24)	s	Decachlorobiphen	16.90	15.65	22178618	30233446	72.776	80.412
		Target Compounds						
2)		alpha-BHC	9.04	8.12	40095531	41555693	84.569	93.499
3)		Hexachlorobenzen	9.17	7.95	20542118	21329160	49.318	55.094
4)		beta-BHC	10.05	9.14	17169029	18440451	80.135	90.040
5)		gamma-BHC (Linda	9.59	8.73	37560769	39140995	84.765	92.827
6)		delta-BHC	10.47	9.58	40492987	42691047	99.969	110.860
7)		Heptachlor	10.55	9.30	30791346	33307243	70.543	78.673
8)		Aldrin	11.06	9.78	20696972	22934376	54.051	60.472
9)		Isodrin	11.59	10.42	18433227	20429949	57.289	63.653
10)		Heptachlor Epoxi	11.76	10.64	31313998	34453256	83.291	92.281
11)		gamma-Chlordane	12.26	10.99	31487806	35533804	84.599	94.618
12)		Endosulfan I	12.38	11.22	26214992	30251755	79.778	90.411
13)		alpha-Chlordane	12.33	11.14	30192561	34566033	83.148	93.566
14)		Dieldrin	12.78	11.65	29690316	34337656	85.416	93.979
15)		4,4'-DDE	12.57	11.46	27649132	32338394	83.181	93.070
16)		Endrin	13.13	12.12	27154913	33291184	92.646	103.693
17)		Endosulfan II	13.53	12.53	25633243	29756774	85.012	91.722
18)		4,4'-DDD	13.35	12.33	23046670	27352593	87.378	93.976
19)		Endrin Aldehyde	13.70	12.87	17458708	20026667	66.110	69.841
20)		Endosulfan Sulfa	14.12	13.17	24239685	30217829	82.830	89.749
21)		4,4'-DDT	13.81	12.74	25019254	30633315	90.531	96.934
22)		Endrin Ketone	14.75	14.05	28200996	35794328	86.153	91.565
23)		Methoxychlor	14.46	13.75	13802270	17066193	89.724	95.719

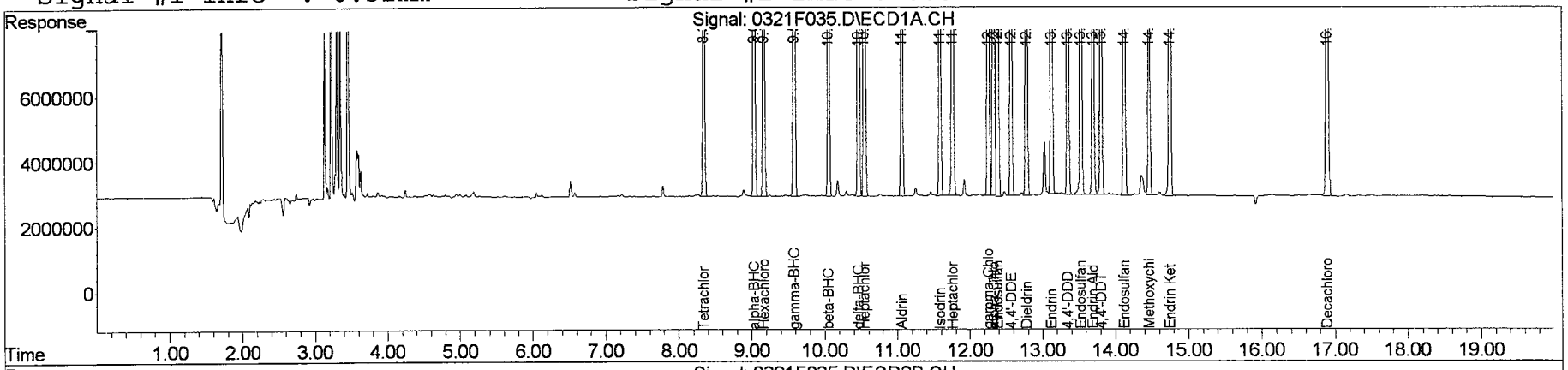
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

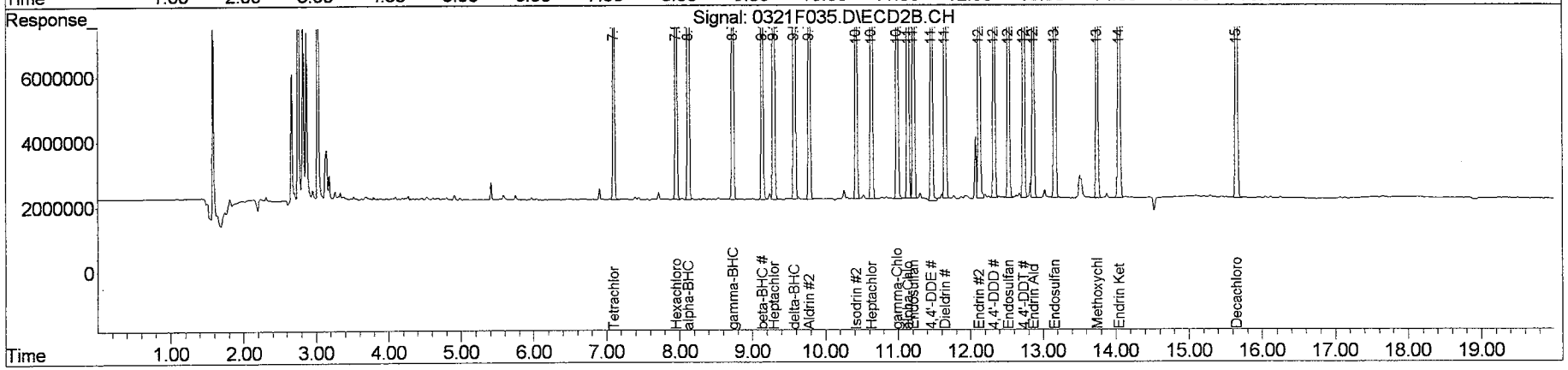
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F035.D\ECD1A.CH Vial: 29
Signal #2 : J:\GC23\DATA\032107\0321F035.D\ECD2B.CH
Acq On : 22 Mar 2007 5:20 am Operator: AKamawal
Sample : KWG0703478-1 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0703478\1-LCS.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 14:36 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703478-2	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.121**		0.010	1	03/09/07	03/22/07	KWG0703478	
beta-BHC	**0.138**		0.010	1	03/09/07	03/22/07	KWG0703478	
gamma-BHC (Lindane)	**0.138**		0.010	1	03/09/07	03/22/07	KWG0703478	
delta-BHC	**0.171**		0.010	1	03/09/07	03/22/07	KWG0703478	
Heptachlor	**0.0988**		0.010	1	03/09/07	03/22/07	KWG0703478	*
Aldrin	**0.0785**		0.010	1	03/09/07	03/22/07	KWG0703478	*
Heptachlor Epoxide	**0.150**		0.010	1	03/09/07	03/22/07	KWG0703478	
gamma-Chlordane†	**0.152**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan I	**0.147**		0.010	1	03/09/07	03/22/07	KWG0703478	
alpha-Chlordane	**0.153**		0.010	1	03/09/07	03/22/07	KWG0703478	
Dieldrin	**0.154**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDE	**0.153**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin	**0.152**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan II	**0.151**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDD	**0.154**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin Aldehyde	**0.118**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endosulfan Sulfate	**0.147**		0.010	1	03/09/07	03/22/07	KWG0703478	
4,4'-DDT	**0.160**		0.010	1	03/09/07	03/22/07	KWG0703478	
Endrin Ketone	**0.149**		0.010	1	03/09/07	03/22/07	KWG0703478	
Methoxychlor	**0.150**		0.010	1	03/09/07	03/22/07	KWG0703478	
Toxaphene	ND	U	0.50	1	03/09/07	03/22/07	KWG0703478	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	52	65-135	03/22/07	Outside Control Limits
Decachlorobiphenyl	78	65-135	03/22/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\032107\0321F036.D
Lab ID: KWG0703478-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/22/2007 05:47
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	1Q

Primary Review: 3/22/07

Secondary Review: 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F036.D\0321F036C.D
Lab ID: KWG0703478-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/22/2007 05:47
Date Quantitated: 03/22/2007 14:36
Batch ID: KWG0703862
Analysis Method: 8081A
ListJoinID: LJ7902

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	IW
Continuing Calibration Recovery (Closing)	alpha-BHC	15.1	NA	15	Ans
	Endrin	18.2	NA	15	
	Methoxychlor	16.2	NA	15	
	Heptachlor	16.9	NA	15	

Primary Review: 3/22/07

Secondary Review: 3/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	03/22/2007

Analysis Lot:	KWG0703862	**Prep Lot:**	KWG0703478	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	582067	**Prep Date:**	03/09/2007		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:	J:\GC23\DATA\032107\0321F034.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F036.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F036.D\0321F036c.d			**Vial:**	30
Acqu Date:	03/22/2007 05:47	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35 +0.01	7.10	17415329	17163401	47.11	51.84			52OK
			%Recovery =		47OK	52OK	Limits =	18-125	
Decachlorobiphenyl	16.90 +0.01	15.66 +0.01	21576544	29168042	70.80	77.58			78OK
			%Recovery =		71OK	78OK	Limits =	10-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.04	8.12	28750137	29293590	60.64	65.91 CCV	0.121	0.132	0.121
Hexachlorobenzene	9.17	7.96 +0.01	13828974	14136801	33.20	36.52	0.0664	0.0730	0.0730
beta-BHC	10.06 +0.01	9.14	13289413	14159792	62.03	69.14	0.124	0.138	0.124
gamma-BHC (Lindane)	9.59 +0.01	8.73	28180411	29085178	63.60	68.98	0.127	0.138	0.127
delta-BHC	10.47 +0.01	9.58	31468868	32980231	77.69	85.64	0.155	0.171	0.155
Heptachlor	10.55	9.30	21552513	23031230	49.38	54.49 CCV	0.0988	0.109	0.0988
Aldrin	11.07 +0.01	9.78	13705254	14884461	35.79	39.25	0.0716	0.0785	0.0716
Isodrin	11.59 +0.01	10.43 +0.01	12783851	14137742	39.73	44.05	0.0795	0.0881	0.0881
Heptachlor Epoxide	11.76	10.64	25662379	28010721	68.26	75.03	0.137	0.150	0.137
gamma-Chlordane	12.26 +0.01	10.99	25414303	28562502	68.28	76.06	0.137	0.152	0.137
Endosulfan I	12.39 +0.01	11.22	21683136	24632897	65.99	73.62	0.132	0.147	0.132
alpha-Chlordane	12.33 +0.01	11.14	24682336	28199370	67.97	76.33	0.136	0.153	0.136
Dieldrin	12.78 +0.01	11.65	24412478	28111496	70.23	76.94	0.140	0.154	0.140
4,4'-DDE	12.57 +0.01	11.47 +0.01	22756244	26538535	68.46	76.38	0.137	0.153	0.137
Endrin	13.13 +0.01	12.13 +0.01	22267616	27287565	75.97	84.99 CCV	0.152	0.170	0.152
Endosulfan II	13.54 +0.01	12.53 +0.01	21180176	24534321	70.24	75.62	0.140	0.151	0.140
4,4'-DDD	13.36 +0.01	12.33	18896763	22368273	71.64	76.85	0.143	0.154	0.143
Endrin Aldehyde	13.70 +0.01	12.87	15027756	16978728	56.91	59.21	0.114	0.118	0.114

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F036.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F036.D\0321F036c.d			**Vial:**	30
Acqu Date:	03/22/2007 05:47	**Quant Date:**	03/22/2007 14:36	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703478-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.13 +0.01	13.17 +0.01	19928160	24702762	68.10	73.37	0.136	0.147	0.136
4,4'-DDT	13.81 +0.01	12.74 +0.01	20581778	25274639	74.47	79.98	0.149	0.160	0.149
Endrin Ketone	14.75 +0.01	14.05	22997793	29214267	70.26	74.73	0.141	0.149	0.141
Methoxychlor	14.47 +0.01	13.75 +0.01	11529349	14204642	74.95	79.67 ccv	0.150	0.159	0.150
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F036.D\ECD1A.CH Vial: 30
Signal #2 : J:\GC23\DATA\032107\0321F036.D\ECD2B.CH
Acq On : 22 Mar 2007 5:47 am Operator: AKamawal
Sample : KWG0703478-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703478\2-DLCS.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:49:18 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.10	17415329	17163401	47.107	51.844
24)	s	Decachlorobiphen	16.90	15.66	21576544	29168042	70.800	77.579
		Target Compounds						
2)		alpha-BHC	9.04	8.12	28750137	29293590	60.639	65.910
3)		Hexachlorobenzen	9.17	7.96	13828974	14136801	33.201	36.516
4)		beta-BHC	10.06	9.14	13289413	14159792	62.027	69.138
5)		gamma-BHC (Linda	9.59	8.73	28180411	29085178	63.596	68.979
6)		delta-BHC	10.47	9.58	31468868	32980231	77.690	85.643
7)		Heptachlor	10.55	9.30	21552513	23031230	49.377	54.401
8)		Aldrin	11.07	9.78	13705254	14884461	35.792	39.247
9)		Isodrin	11.59	10.43	12783851	14137742	39.731	44.048
10)		Heptachlor Epoxi	11.76	10.64	25662379	28010721	68.258	75.025
11)		gamma-Chlordane	12.26	10.99	25414303	28562502	68.281	76.055
12)		Endosulfan I	12.39	11.22	21683136	24632897	65.987	73.618
13)		alpha-Chlordane	12.33	11.14	24682336	28199370	67.974	76.332
14)		Dieldrin	12.78	11.65	24412478	28111496	70.232	76.939
15)		4,4'-DDE	12.57	11.47	22756244	26538535	68.461	76.378
16)		Endrin	13.13	12.13	22267616	27287565	75.972	84.993
17)		Endosulfan II	13.54	12.53	21180176	24534321	70.243	75.624
18)		4,4'-DDD	13.36	12.33	18896763	22368273	71.644	76.851
19)		Endrin Aldehyde	13.70	12.87	15027756	16978728	56.905	59.211
20)		Endosulfan Sulfa	14.13	13.17	19928160	24702762	68.097	73.369
21)		4,4'-DDT	13.81	12.74	20581778	25274639	74.474	79.978
22)		Endrin Ketone	14.75	14.05	22997793	29214267	70.258	74.733
23)		Methoxychlor	14.47	13.75	11529349	14204642	74.949	79.670

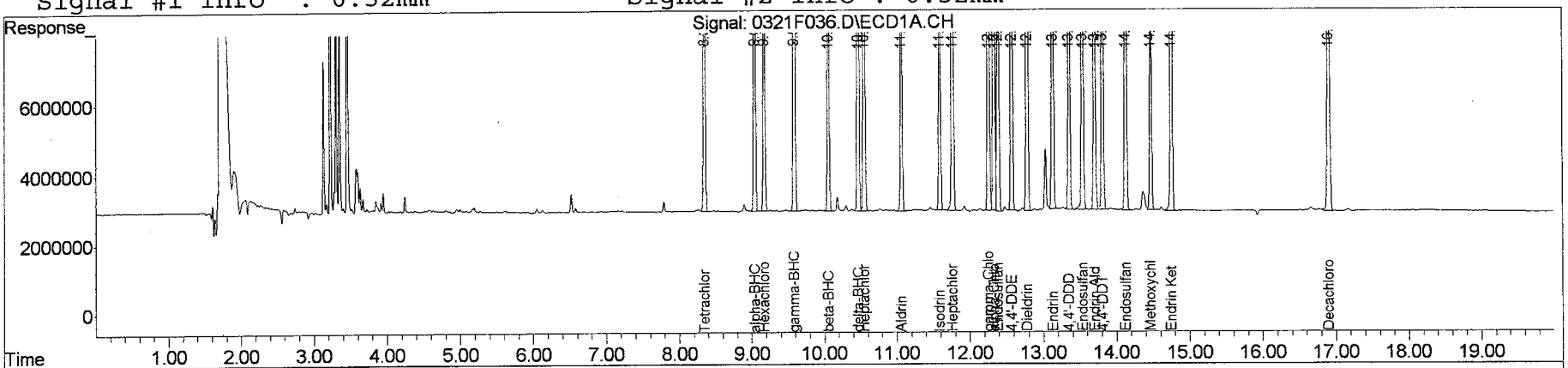
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

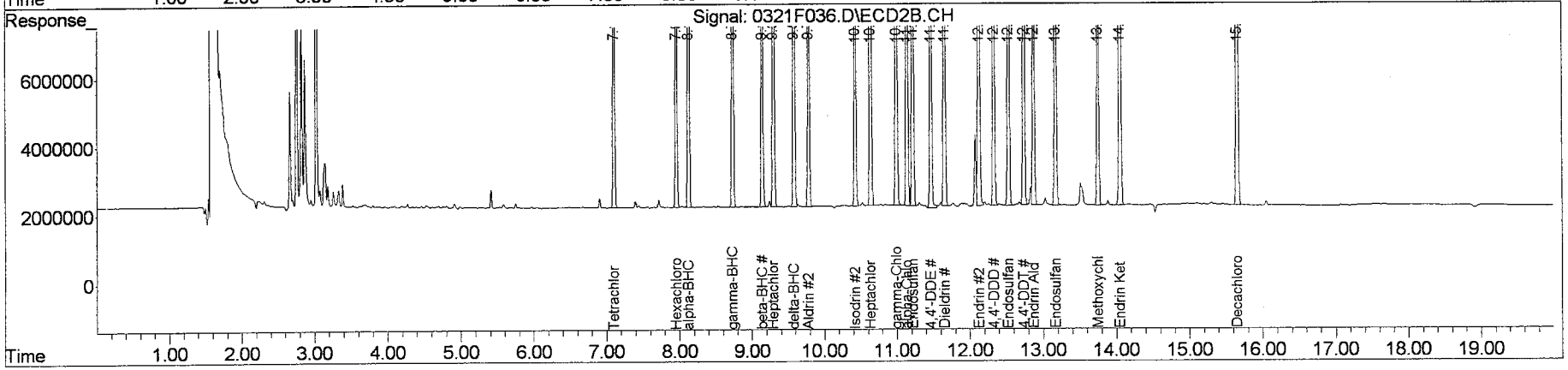
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F036.D\ECD1A.CH Vial: 30
Signal #2 : J:\GC23\DATA\032107\0321F036.D\ECD2B.CH
Acq On : 22 Mar 2007 5:47 am Operator: AKamawal
Sample : KWG0703478-2 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0703478\2-DLCS.H | F= D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 14:36 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Organic Analysis:
Organochlorine Pesticides

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D	P	J:\GC23\DATA\030907\0309F075.D
B	J:\GC23\DATA\030907\0309F045.D	Q	J:\GC23\DATA\030907\0309F076.D
C	J:\GC23\DATA\030907\0309F046.D	R	J:\GC23\DATA\030907\0309F077.D
D	J:\GC23\DATA\030907\0309F047.D	S	J:\GC23\DATA\031207\0312F004.D
E	J:\GC23\DATA\030907\0309F048.D	T	J:\GC23\DATA\031207\0312F005.D
F	J:\GC23\DATA\030907\0309F049.D	U	J:\GC23\DATA\031207\0312F006.D
G	J:\GC23\DATA\030907\0309F058.D	V	J:\GC23\DATA\031207\0312F007.D
H	J:\GC23\DATA\030907\0309F059.D	W	J:\GC23\DATA\031207\0312F008.D
I	J:\GC23\DATA\030907\0309F060.D	X	J:\GC23\DATA\031207\0312F009.D
J	J:\GC23\DATA\030907\0309F061.D	Y	J:\GC23\DATA\031207\0312F011.D
K	J:\GC23\DATA\030907\0309F062.D	Z	J:\GC23\DATA\031207\0312F012.D
L	J:\GC23\DATA\030907\0309F063.D	AA	J:\GC23\DATA\031207\0312F013.D
M	J:\GC23\DATA\030907\0309F072.D	AB	J:\GC23\DATA\031207\0312F014.D
N	J:\GC23\DATA\030907\0309F073.D	AC	J:\GC23\DATA\031207\0312F015.D
O	J:\GC23\DATA\030907\0309F074.D	AD	J:\GC23\DATA\031207\0312F016.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	4.07E+5	B	5.0	3.75E+5	C	20	3.54E+5	D	50	3.71E+5	E	100	3.55E+5
	F	200	3.55E+5												
Decachlorobiphenyl	A	2.0	3.67E+5	B	5.0	3.38E+5	C	20	3.03E+5	D	50	2.98E+5	E	100	2.69E+5
	F	200	2.53E+5												
alpha-BHC	A	2.0	4.61E+5	B	5.0	4.29E+5	C	20	4.39E+5	D	50	4.89E+5	E	100	5.03E+5
	F	200	5.24E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.47E+5	B	5.0	2.21E+5	C	20	2.07E+5	D	50	2.13E+5	E	100	2.00E+5
	F	200	1.97E+5												
gamma-BHC (Lindane)	A	2.0	4.38E+5	B	5.0	4.17E+5	C	20	4.15E+5	D	50	4.59E+5	E	100	4.58E+5
	F	200	4.72E+5												
delta-BHC	A	2.0	4.09E+5	B	5.0	3.80E+5	C	20	3.84E+5	D	50	3.67E+5	E	100	4.36E+5
	F	200	4.54E+5												
Heptachlor	A	2.0	4.79E+5	B	5.0	4.38E+5	C	20	4.16E+5	D	50	4.43E+5	E	100	4.21E+5
	F	200	4.22E+5												
Aldrin	A	2.0	3.98E+5	B	5.0	3.71E+5	C	20	3.59E+5	D	50	3.96E+5	E	100	3.83E+5
	F	200	3.90E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.17E+5	B	5.0	3.88E+5	C	20	3.59E+5	D	50	3.81E+5	E	100	3.58E+5
	F	200	3.53E+5												
gamma-Chlordane	A	2.0	4.05E+5	B	5.0	3.78E+5	C	20	3.52E+5	D	50	3.78E+5	E	100	3.59E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.72E+5	B	5.0	3.47E+5	C	20	3.19E+5	D	50	3.03E+5	E	100	3.18E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.04E+5	B	5.0	3.74E+5	C	20	3.47E+5	D	50	3.66E+5	E	100	3.45E+5
	F	200	3.43E+5												
Dieldrin	A	2.0	3.65E+5	B	5.0	3.40E+5	C	20	3.28E+5	D	50	3.59E+5	E	100	3.44E+5
	F	200	3.48E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.42E+5	B	5.0	3.23E+5	C	20	3.12E+5	D	50	3.46E+5	E	100	3.33E+5
	F	200	3.38E+5												
Endrin	A	2.0	3.06E+5	B	5.0	2.89E+5	C	20	2.77E+5	D	50	3.02E+5	E	100	2.89E+5
	F	200	2.95E+5												
Endosulfan II	A	2.0	3.33E+5	B	5.0	3.22E+5	C	20	2.99E+5	D	50	2.96E+5	E	100	2.94E+5
	F	200	2.66E+5												
4,4'-DDD	A	2.0	2.57E+5	B	5.0	2.50E+5	C	20	2.53E+5	D	50	2.80E+5	E	100	2.68E+5
	F	200	2.74E+5												
Endrin Aldehyde	A	2.0	2.96E+5	B	5.0	2.80E+5	C	20	2.57E+5	D	50	2.65E+5	E	100	2.47E+5
	F	200	2.40E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.26E+5	B	5.0	3.01E+5	C	20	2.83E+5	D	50	2.96E+5	E	100	2.77E+5
	F	200	2.73E+5												
4,4'-DDT	A	2.0	2.87E+5	B	5.0	2.67E+5	C	20	2.61E+5	D	50	2.86E+5	E	100	2.76E+5
	F	200	2.80E+5												
Endrin Ketone	A	2.0	3.50E+5	B	5.0	3.28E+5	C	20	3.19E+5	D	50	3.36E+5	E	100	3.18E+5
	F	200	3.13E+5												
Methoxychlor	A	2.0	1.70E+5	B	5.0	1.57E+5	C	20	1.49E+5	D	50	1.58E+5	E	100	1.46E+5
	F	200	1.43E+5												
Toxaphene {1}															
													Y	100	2870
	Z	250	2830	AA	500	2550	AB	1000	2530	AC	2000	2470	AD	5000	2490

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	2050
	Z	250	2300	AA	500	2100	AB	1000	2030	AC	2000	2010	AD	5000	1940
Toxaphene {3}															
													Y	100	3370
	Z	250	3440	AA	500	3350	AB	1000	3090	AC	2000	3210	AD	5000	3240
Toxaphene {4}															
													Y	100	3880
	Z	250	4360	AA	500	4110	AB	1000	3930	AC	2000	3890	AD	5000	3870
Toxaphene {5}															
													Y	100	2270
	Z	250	2170	AA	500	2070	AB	1000	1940	AC	2000	1930	AD	5000	1860
Toxaphene {6}															
													Y	100	2110
	Z	250	2340	AA	500	2300	AB	1000	2160	AC	2000	2190	AD	5000	2120

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	13.9		≤ 20
alpha-BHC	MS	AverageRF	% RSD	7.9		≤ 20
beta-BHC	MS	AverageRF	% RSD	8.5		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	5.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	5.4		≤ 20
Aldrin	MS	AverageRF	% RSD	4.0		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	6.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	7.8		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.5		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.8		≤ 20
Endrin	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan II	MS	AverageRF	% RSD	7.8		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.6		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	8.0		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	6.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.8		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	4.2		≤ 20
Methoxychlor	MS	AverageRF	% RSD	6.3		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	5.9		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	3.9		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.8		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	7.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID: J:\GC23\DATA\030907\0309F050.D
J:\GC23\DATA\030907\0309F064.D
J:\GC23\DATA\030907\0309F078.D
J:\GC23\DATA\031207\0312F010.D
J:\GC23\DATA\031207\0312F017.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	474000	458000	-3	NA	± 15 %	AverageRF
beta-BHC	40	38	214000	202000	-6	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	38	443000	426000	-4	NA	± 15 %	AverageRF
delta-BHC	40	42	405000	420000	4	NA	± 15 %	AverageRF
Heptachlor	40	38	436000	412000	-6	NA	± 15 %	AverageRF
Aldrin	40	38	383000	365000	-5	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	38	376000	353000	-6	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	372000	349000	-6	NA	± 15 %	AverageRF
Endosulfan I	40	39	329000	318000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	37	363000	338000	-7	NA	± 15 %	AverageRF
Dieldrin	40	37	348000	321000	-8	NA	± 15 %	AverageRF
4,4'-DDE	40	38	332000	317000	-5	NA	± 15 %	AverageRF
Endrin	40	39	293000	283000	-3	NA	± 15 %	AverageRF
Endosulfan II	40	39	302000	294000	-2	NA	± 15 %	AverageRF
4,4'-DDD	40	38	264000	252000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	38	264000	254000	-4	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	38	293000	276000	-6	NA	± 15 %	AverageRF
4,4'-DDT	40	39	276000	268000	-3	NA	± 15 %	AverageRF
Endrin Ketone	40	40	327000	324000	-1	NA	± 15 %	AverageRF
Methoxychlor	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	900	2620	2350	-10	NA	± 100 %	AverageRF
Toxaphene {2}	1000	900	2070	1860	-10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	870	3280	2850	-13	NA	± 100 %	AverageRF
Toxaphene {4}	1000	890	4000	3560	-11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	790	2040	1600	-21	NA	± 100 %	AverageRF
Toxaphene {6}	1000	890	2200	1960	-11	NA	± 100 %	AverageRF
Toxaphene	1000	870	NA	NA	NA	13	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\030907\0309F044.D\0309F044c.d	P	J:\GC23\DATA\030907\0309F075.D\0309F075c.d
B	J:\GC23\DATA\030907\0309F045.D\0309F045c.d	Q	J:\GC23\DATA\030907\0309F076.D\0309F076c.d
C	J:\GC23\DATA\030907\0309F046.D\0309F046c.d	R	J:\GC23\DATA\030907\0309F077.D\0309F077c.d
D	J:\GC23\DATA\030907\0309F047.D\0309F047c.d	S	J:\GC23\DATA\031207\0312F004.D\0312F004c.d
E	J:\GC23\DATA\030907\0309F048.D\0309F048c.d	T	J:\GC23\DATA\031207\0312F005.D\0312F005c.d
F	J:\GC23\DATA\030907\0309F049.D\0309F049c.d	U	J:\GC23\DATA\031207\0312F006.D\0312F006c.d
G	J:\GC23\DATA\030907\0309F058.D\0309F058c.d	V	J:\GC23\DATA\031207\0312F007.D\0312F007c.d
H	J:\GC23\DATA\030907\0309F059.D\0309F059c.d	W	J:\GC23\DATA\031207\0312F008.D\0312F008c.d
I	J:\GC23\DATA\030907\0309F060.D\0309F060c.d	X	J:\GC23\DATA\031207\0312F009.D\0312F009c.d
J	J:\GC23\DATA\030907\0309F061.D\0309F061c.d	Y	J:\GC23\DATA\031207\0312F011.D\0312F011c.d
K	J:\GC23\DATA\030907\0309F062.D\0309F062c.d	Z	J:\GC23\DATA\031207\0312F012.D\0312F012c.d
L	J:\GC23\DATA\030907\0309F063.D\0309F063c.d	AA	J:\GC23\DATA\031207\0312F013.D\0312F013c.d
M	J:\GC23\DATA\030907\0309F072.D\0309F072c.d	AB	J:\GC23\DATA\031207\0312F014.D\0312F014c.d
N	J:\GC23\DATA\030907\0309F073.D\0309F073c.d	AC	J:\GC23\DATA\031207\0312F015.D\0312F015c.d
O	J:\GC23\DATA\030907\0309F074.D\0309F074c.d	AD	J:\GC23\DATA\031207\0312F016.D\0312F016c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene	A	2.0	3.62E+5	B	5.0	3.43E+5	C	20	3.26E+5	D	50	3.27E+5	E	100	3.15E+5
	F	200	3.14E+5												
Decachlorobiphenyl	A	2.0	4.66E+5	B	5.0	4.21E+5	C	20	3.80E+5	D	50	3.53E+5	E	100	3.26E+5
	F	200	3.10E+5												
alpha-BHC	A	2.0	4.30E+5	B	5.0	4.12E+5	C	20	4.22E+5	D	50	4.51E+5	E	100	4.68E+5
	F	200	4.84E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC	A	2.0	2.30E+5	B	5.0	2.16E+5	C	20	2.02E+5	D	50	2.13E+5	E	100	1.85E+5
	F	200	1.82E+5												
gamma-BHC (Lindane)	A	2.0	4.23E+5	B	5.0	4.09E+5	C	20	4.03E+5	D	50	4.27E+5	E	100	4.29E+5
	F	200	4.39E+5												
delta-BHC	A	2.0	3.88E+5	B	5.0	3.64E+5	C	20	3.76E+5	D	50	3.44E+5	E	100	4.12E+5
	F	200	4.27E+5												
Heptachlor	A	2.0	4.58E+5	B	5.0	4.29E+5	C	20	4.13E+5	D	50	4.25E+5	E	100	4.09E+5
	F	200	4.06E+5												
Aldrin	A	2.0	3.96E+5	B	5.0	3.76E+5	C	20	3.68E+5	D	50	3.86E+5	E	100	3.74E+5
	F	200	3.76E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide	A	2.0	4.18E+5	B	5.0	3.88E+5	C	20	3.66E+5	D	50	3.72E+5	E	100	3.51E+5
	F	200	3.45E+5												
gamma-Chlordane	A	2.0	4.04E+5	B	5.0	3.86E+5	C	20	3.67E+5	D	50	3.75E+5	E	100	3.60E+5
	F	200	3.61E+5												
Endosulfan I	A	2.0	3.76E+5	B	5.0	3.57E+5	C	20	3.37E+5	D	50	3.05E+5	E	100	3.21E+5
	F	200	3.12E+5												
alpha-Chlordane	A	2.0	4.09E+5	B	5.0	3.84E+5	C	20	3.62E+5	D	50	3.67E+5	E	100	3.48E+5
	F	200	3.46E+5												
Dieldrin	A	2.0	3.90E+5	B	5.0	3.67E+5	C	20	3.55E+5	D	50	3.69E+5	E	100	3.56E+5
	F	200	3.56E+5												

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE	A	2.0	3.60E+5	B	5.0	3.40E+5	C	20	3.37E+5	D	50	3.56E+5	E	100	3.45E+5
	F	200	3.47E+5												
Endrin	A	2.0	3.41E+5	B	5.0	3.18E+5	C	20	3.15E+5	D	50	3.25E+5	E	100	3.13E+5
	F	200	3.14E+5												
Endosulfan II	A	2.0	3.67E+5	B	5.0	3.51E+5	C	20	3.31E+5	D	50	3.11E+5	E	100	3.10E+5
	F	200	2.77E+5												
4,4'-DDD	A	2.0	3.13E+5	B	5.0	2.86E+5	C	20	2.80E+5	D	50	2.96E+5	E	100	2.84E+5
	F	200	2.87E+5												
Endrin Aldehyde	A	2.0	3.27E+5	B	5.0	3.09E+5	C	20	2.88E+5	D	50	2.82E+5	E	100	2.63E+5
	F	200	2.52E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate	A	2.0	3.85E+5	B	5.0	3.58E+5	C	20	3.35E+5	D	50	3.31E+5	E	100	3.11E+5
	F	200	3.01E+5												
4,4'-DDT	A	2.0	3.38E+5	B	5.0	3.18E+5	C	20	3.07E+5	D	50	3.19E+5	E	100	3.07E+5
	F	200	3.08E+5												
Endrin Ketone	A	2.0	4.35E+5	B	5.0	4.10E+5	C	20	3.91E+5	D	50	3.90E+5	E	100	3.66E+5
	F	200	3.53E+5												
Methoxychlor	A	2.0	2.07E+5	B	5.0	1.94E+5	C	20	1.78E+5	D	50	1.75E+5	E	100	1.61E+5
	F	200	1.54E+5												
Toxaphene {1}															
													Y	100	7580
	Z	250	7950	AA	500	7510	AB	1000	7200	AC	2000	7220	AD	5000	7380

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}															
													Y	100	5840
	Z	250	5790	AA	500	5400	AB	1000	5210	AC	2000	5450	AD	5000	5390
Toxaphene {3}															
													Y	100	3090
	Z	250	3260	AA	500	3030	AB	1000	2850	AC	2000	2720	AD	5000	2750
Toxaphene {4}															
													Y	100	3700
	Z	250	3980	AA	500	3560	AB	1000	3850	AC	2000	3770	AD	5000	4030
Toxaphene {5}															
													Y	100	3310
	Z	250	3460	AA	500	3390	AB	1000	3100	AC	2000	3150	AD	5000	3170
Toxaphene {6}															
													Y	100	8040
	Z	250	8860	AA	500	8380	AB	1000	8010	AC	2000	8070	AD	5000	8520

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6126
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	5.6		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.7		≤ 20
alpha-BHC	MS	AverageRF	% RSD	6.3		≤ 20
beta-BHC	MS	AverageRF	% RSD	9.1		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	3.2		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.0		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.5		≤ 20
Aldrin	MS	AverageRF	% RSD	2.6		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	7.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	4.5		≤ 20
Endosulfan I	MS	AverageRF	% RSD	8.3		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	6.4		≤ 20
Dieldrin	MS	AverageRF	% RSD	3.7		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	2.6		≤ 20
Endrin	MS	AverageRF	% RSD	3.3		≤ 20
Endosulfan II	MS	AverageRF	% RSD	10.0		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.1		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	9.7		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	9.2		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	3.9		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	7.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	11.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	3.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	7.1		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	4.6		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	4.5		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/10/2007
Date Analyzed: 03/10/2007 - 03/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6126
Units: ug/L

File ID:
J:\GC23\DATA\030907\0309F050.D\0309F050c.d
J:\GC23\DATA\030907\0309F064.D\0309F064c.d
J:\GC23\DATA\030907\0309F078.D\0309F078c.d
J:\GC23\DATA\031207\0312F010.D\0312F010c.d
J:\GC23\DATA\031207\0312F017.D\0312F017c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	38	444000	419000	-6	NA	± 15 %	AverageRF
beta-BHC	40	36	205000	184000	-10	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	37	422000	393000	-7	NA	± 15 %	AverageRF
delta-BHC	40	41	385000	392000	2	NA	± 15 %	AverageRF
Heptachlor	40	37	423000	391000	-8	NA	± 15 %	AverageRF
Aldrin	40	38	379000	356000	-6	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	36	373000	340000	-9	NA	± 15 %	AverageRF
gamma-Chlordane	40	37	376000	344000	-8	NA	± 15 %	AverageRF
Endosulfan I	40	38	335000	315000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	40	36	369000	336000	-9	NA	± 15 %	AverageRF
Dieldrin	40	36	365000	327000	-11	NA	± 15 %	AverageRF
4,4'-DDE	40	37	347000	322000	-7	NA	± 15 %	AverageRF
Endrin	40	38	321000	303000	-6	NA	± 15 %	AverageRF
Endosulfan II	40	38	324000	307000	-6	NA	± 15 %	AverageRF
4,4'-DDD	40	36	291000	263000	-10	NA	± 15 %	AverageRF
Endrin Aldehyde	40	37	287000	266000	-7	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	36	337000	305000	-9	NA	± 15 %	AverageRF
4,4'-DDT	40	37	316000	294000	-7	NA	± 15 %	AverageRF
Endrin Ketone	40	38	391000	372000	-5	NA	± 15 %	AverageRF
Methoxychlor	40	38	178000	168000	-6	NA	± 15 %	AverageRF
Toxaphene {1}	1000	870	7470	6510	-13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	830	5510	4580	-17	NA	± 100 %	AverageRF
Toxaphene {3}	1000	750	2950	2210	-25	NA	± 100 %	AverageRF
Toxaphene {4}	1000	740	3810	2810	-26	NA	± 100 %	AverageRF
Toxaphene {5}	1000	820	3260	2690	-18	NA	± 100 %	AverageRF
Toxaphene {6}	1000	840	8310	6980	-16	NA	± 100 %	AverageRF
Toxaphene	1000	810	NA	NA	NA	19 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Sequence Name: C:\GC23\SEQUENCE\030907.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\030907\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	100	0309F001	PESTA	PRIMER
3	IB	100	0309F002	PESTA	PRIMER
4	IB	100	0309F003	PESTA	PRIMER
5	IB	100	0309F004	PESTA	PRIMER
6	IB	100	0309F005	PESTA	PRIMER
7	IB	100	0309F006	PESTA	PRIMER
8	IB	100	0309F007	PESTA	PRIMER
9	IB	100	0309F008	PESTA	PRIMER
10	IB	100	0309F009	PESTA	PRIMER
11	IB	100	0309F010	PESTA	PRIMER
12	IB	100	0309F011	PESTA	PRIMER
13	IB	100	0309F012	PESTA	PRIMER
14	IB	100	0309F013	PESTA	PRIMER
15	IB	100	0309F014	PESTA	PRIMER
16	IB	100	0309F015	PESTA	PRIMER
17	IB	100	0309F016	PESTA	PRIMER
18	IB	100	0309F017	PESTA	PRIMER
19	IB	100	0309F018	PESTA	PRIMER
20	IB	100	0309F019	PESTA	PRIMER
21	IB	100	0309F020	PESTA	PRIMER
22	IB	100	0309F021	PESTA	PRIMER
23	IB	100	0309F022	PESTA	PRIMER
24	IB	100	0309F023	PESTA	PRIMER
25	IB	100	0309F024	PESTA	PRIMER
26	IB	100	0309F025	PESTA	PRIMER
27	IB	1	0309F026	PESTA	PRIMER
28	IB	1	0309F027	PESTA	PRIMER
29	IB	1	0309F028	PESTA	PRIMER
30	IB	1	0309F029	PESTA	PRIMER
31	IB	1	0309F030	PESTA	PRIMER
32	IB	1	0309F031	PESTA	PRIMER
33	IB	1	0309F032	PESTA	PRIMER
34	IB	1	0309F033	PESTA	PRIMER
35	IB	1	0309F034	PESTA	PRIMER
36	IB	1	0309F035	PESTA	PRIMER
37	IB	1	0309F036	PESTA	PRIMER
38	IB	1	0309F037	PESTA	PRIMER
39	IB	1	0309F038	PESTA	PRIMER
40	IB	1	0309F039	PESTA	PRIMER
41	IB	1	0309F040	PESTA	HEX
42	IB	1	0309F041	PESTA	HEX
43	IB	2	0309F042	PESTA	HEX

Last Modified: Mon Mar 12 07:35:27 2007

Sequence Name: C:\GC23\SEQUENCE\030907.S

Line	Type	Vial	DataFile	Method	Sample Name
44	PEM	3	0309F043	PESTA	PEM @ 50-100ppb GCPS5-82D
45	ICAL	4	0309F044	PESTA	8081 @ 2ppb GCPS5-81E
46	ICAL	5	0309F045	PESTA	8081 @ 5ppb GCPS5-81E
47	ICAL	6	0309F046	PESTA	8081 @ 20ppb GCPS5-81E
48	ICAL	7	0309F047	PESTA	8081 @ 50ppb GCPS5-88A
49	ICAL	8	0309F048	PESTA	8081 @ 100ppb GCPS5-81E
50	ICAL	9	0309F049	PESTA	8081 @ 200ppb GCPS5-81E
51	ICV	10	0309F050	PESTA	8081 ICV @ 40ppb GCPS5-88K
52	ICAL	11	0309F051	PESTA	TOX @ 100ppb GCPS5-79e NR
53	ICAL	12	0309F052	PESTA	TOX @ 250ppb GCPS5-79e
54	ICAL	13	0309F053	PESTA	TOX @ 500ppb GCPS5-79e
55	ICAL	14	0309F054	PESTA	TOX @ 1000ppb GCPS5-83G
56	ICAL	15	0309F055	PESTA	TOX @ 2000ppb GCPS5-79e
57	ICAL	16	0309F056	PESTA	TOX @ 5000ppb GCPS5-79e
58	ICV	17	0309F057	PESTA	TOX ICV @ 1000ppb GCPS5-79b NR
59	ICAL	18	0309F058	PESTA	CHLOR@ 25PPB GCPS5-86F
60	ICAL	19	0309F059	PESTA	CHLOR@ 50PPB GCPS5-86F
61	ICAL	20	0309F060	PESTA	CHLOR@ 100PPB GCPS5-86F
62	ICAL	21	0309F061	PESTA	CHLOR@ 500PPB GCPS5-86F
63	ICAL	22	0309F062	PESTA	CHLOR@ 1000PPB GCPS5-86F
64	ICAL	23	0309F063	PESTA	CHLOR@ 2000PPB GCPS5-86F
65	ICV	24	0309F064	PESTA	CHLOR ICV @ 800ppb GCPS5-76H
66	ICAL	25	0309F065	PESTA	MISC @ 2ppb GCPS5-88M NR
67	ICAL	26	0309F066	PESTA	MISC @ 5ppb GCPS5-88M
68	ICAL	27	0309F067	PESTA	MISC @ 20ppb GCPS5-88M
69	ICAL	28	0309F068	PESTA	MISC @ 50ppb GCPS5-88M
70	ICAL	29	0309F069	PESTA	MISC @ 100ppb GCPS5-88M
71	ICAL	30	0309F070	PESTA	MISC @ 200ppb GCPS5-88M
72	ICV	31	0309F071	PESTA	MISC ICV @ 40ppb GCPS5-80P NR
73	ICAL	32	0309F072	PESTA	2,4'-DDx @ 2ppb GCPS5-82I
74	ICAL	33	0309F073	PESTA	2,4'-DDx @ 5ppb GCPS5-82I
75	ICAL	34	0309F074	PESTA	2,4'-DDx @ 20ppb GCPS5-82I
76	ICAL	35	0309F075	PESTA	2,4'-DDx @ 50ppb GCPS5-82E
77	ICAL	36	0309F076	PESTA	2,4'-DDx @ 100ppb GCPS5-82I
78	ICAL	37	0309F077	PESTA	2,4'-DDx @ 200ppb GCPS5-82I
79	ICV	38	0309F078	PESTA	2,4DDx ICV @ 40ppb GCPS5-85P
80	ICV	17	0309F079	PESTA	TOX ICV @ 1000ppb GCPS5-79b NR
81					

Sequence Name: C:\GC23\SEQUENCE\031207.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\030907\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6126

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	2	0312F002	PESTA	HEX
3	PEM	3	0312F003	PESTA	PEM @ 50-100ppb GCPS5-82D
4	ICAL	4	0312F004	PESTA	MISC @ 2ppb GCPS5-88M
5	ICAL	5	0312F005	PESTA	MISC @ 5ppb GCPS5-88M
6	ICAL	6	0312F006	PESTA	MISC @ 20ppb GCPS5-88M
7	ICAL	7	0312F007	PESTA	MISC @ 50ppb GCPS5-88M
8	ICAL	8	0312F008	PESTA	MISC @ 100ppb GCPS5-88M
9	ICAL	9	0312F009	PESTA	MISC @ 200ppb GCPS5-88M
10	ICV	10	0312F010	PESTA	MISC ICV @ 40ppb GCPS5-80P
11	ICAL	11	0312F011	PESTA	TOX @ 100ppb GCPS5-87E
12	ICAL	12	0312F012	PESTA	TOX @ 250ppb GCPS5-87E
13	ICAL	13	0312F013	PESTA	TOX @ 500ppb GCPS5-87E
14	ICAL	14	0312F014	PESTA	TOX @ 1000ppb GCPS5-89E
15	ICAL	15	0312F015	PESTA	TOX @ 2000ppb GCPS5-89E
16	ICAL	16	0312F016	PESTA	TOX @ 5000ppb GCPS5-89E
17	ICV	17	0312F017	PESTA	TOX @ 1000ppb GCPS5-89D

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F042.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\030907\0309F042.D\ECD2B.CH
Acq On : 10 Mar 2007 11:07 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

3/12/07

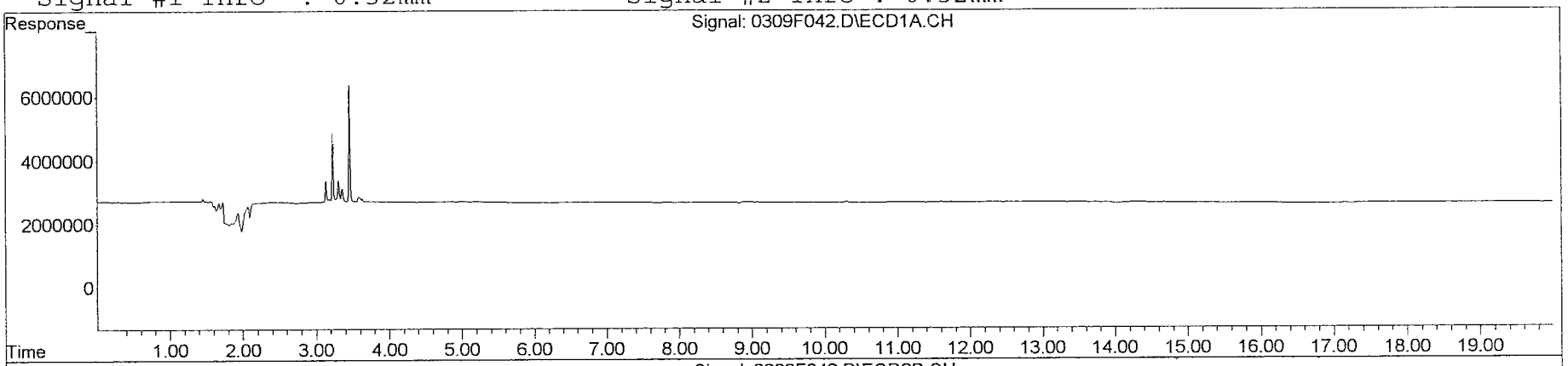
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

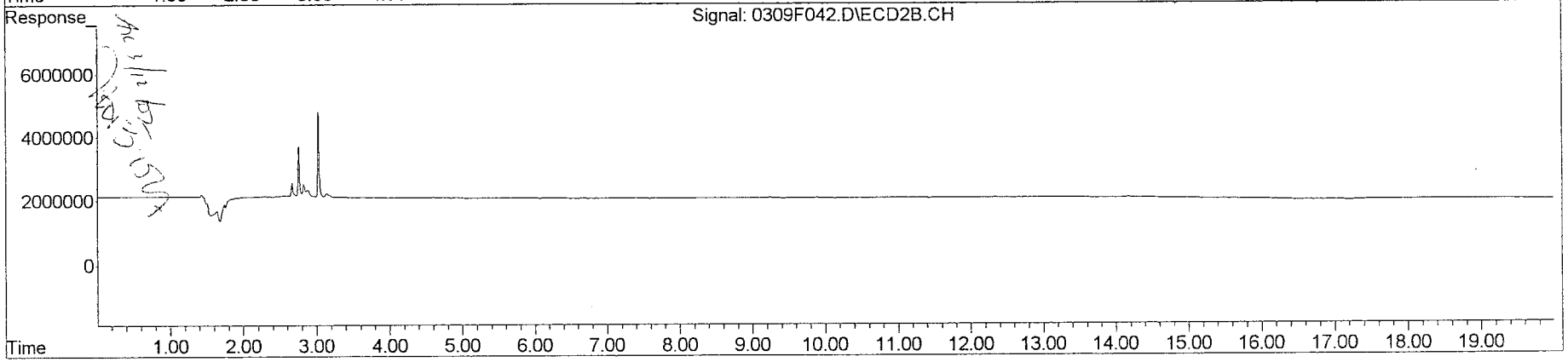
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F042.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\030907\0309F042.D\ECD2B.CH
Acq On : 10 Mar 2007 11:07 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F043.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\030907\0309F043.D\ECD2B.CH
Acq On : 10 Mar 2007 11:33 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18:10 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.58	11.48	366424	543054	1.102	1.563	#
16)	Endrin	13.14	12.13	14384020	16468108	49.075	51.294	
18)	4,4'-DDD	13.36	12.34	313058	324213	1.187	1.114	
19)	Endrin Aldehyde	13.71	12.88	358948	374478	1.359	1.306	
21)	4,4'-DDT	13.82	12.75	27232747	32418784	98.541	102.584	
22)	Endrin Ketone	14.75	14.06	485472	742601	1.483	1.900	#

AC 3/12/07
1503

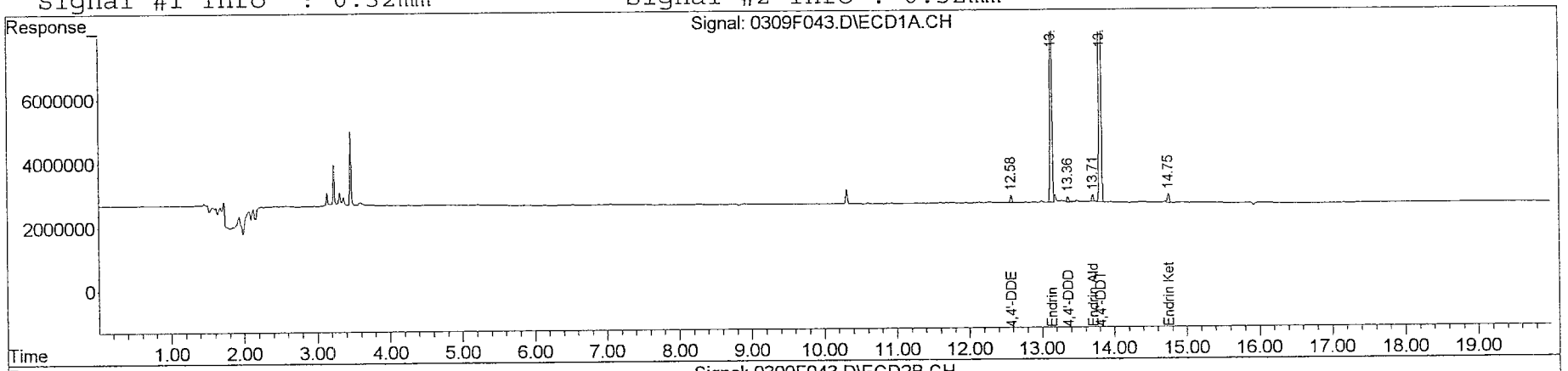
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

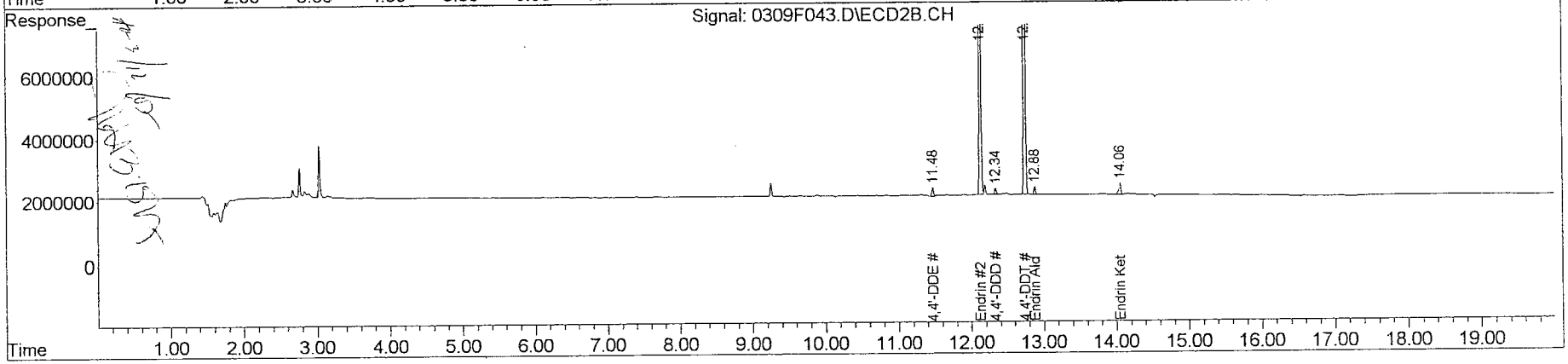
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F043.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\030907\0309F043.D\ECD2B.CH
Acq On : 10 Mar 2007 11:33 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:18 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





660

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:50:58 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	814464	723999	2.125	2.094
24)	s	Decachlorobiphen	16.91	15.66	733894	931092	2.372	2.416
		Target Compounds						
2)		alpha-BHC	9.05	8.13	922387	860177	1.875	1.864
3)		Hexachlorobenzen	9.18	7.96	980068	908146	2.250	2.255
4)		beta-BHC	10.06	9.15	493663	460330	2.218	2.122
5)		gamma-BHC (Linda	9.59	8.74	875490	845169	1.891	1.933m
6)		delta-BHC	10.47	9.59	818616	775004	1.967	1.943
7)		Heptachlor	10.56	9.30	957818	915694	2.100m	2.067
8)		Aldrin	11.07	9.79	796491	791227	1.998	2.004
9)		Isodrin	11.60	10.43	734106	707889	2.208	2.121
10)		Heptachlor Epoxi	11.77	10.64	834482	836952	2.139	2.161
11)		gamma-Chlordane	12.26	11.00	809533	807143	2.094m	2.070m
12)		Endosulfan I	12.39	11.22	743786	752576	2.187m	2.160
13)		alpha-Chlordane	12.34	11.15	807651	818525	2.148	2.139
14)		Dieldrin	12.79	11.66	730933	779390	2.023	2.041
15)		4,4'-DDE	12.58	11.47	683252	720556	1.967	1.979m
16)		Endrin	13.14	12.13	612263	682174	1.974	2.005
17)		Endosulfan II	13.54	12.53	665695	733990	2.143m	2.182
18)		4,4'-DDD	13.36	12.33	514741	626011	1.870m	2.078
19)		Endrin Aldehyde	13.71	12.88	592370	653890	2.202	2.210m
20)		Endosulfan Sulfa	14.13	13.18	651770	770457	2.176	2.213
21)		4,4'-DDT	13.81	12.74	574153	676680	2.016	2.060
22)		Endrin Ketone	14.75	14.06	700562	870564	2.118	2.168
23)		Methoxychlor	14.47	13.75	339162	414559	2.091	2.201

AK 3/12/07
W0315VX

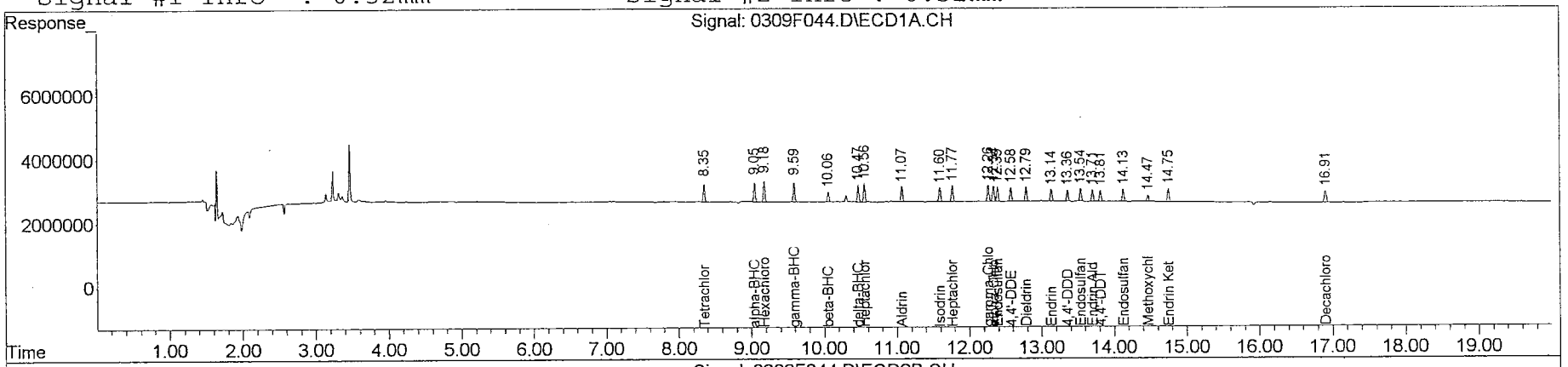
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

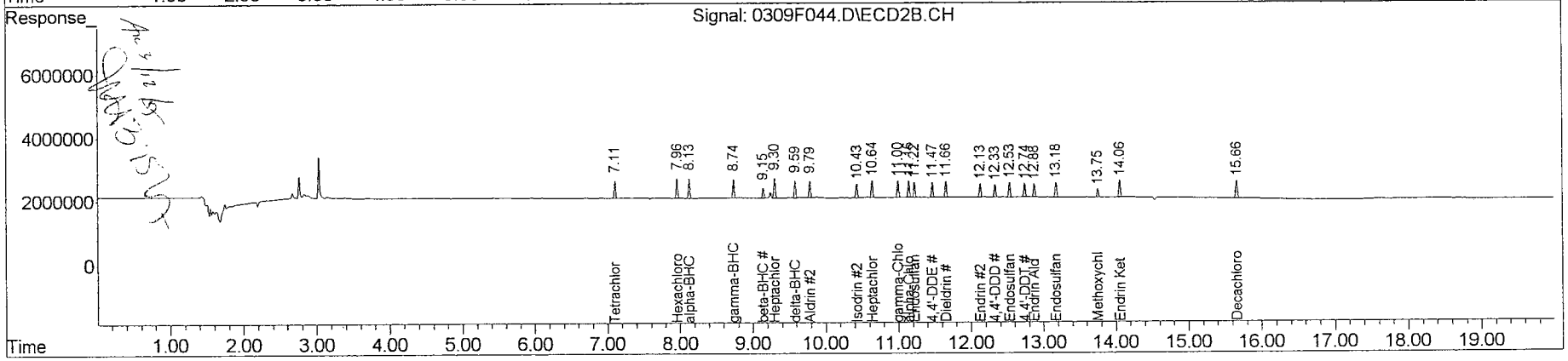
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:57 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

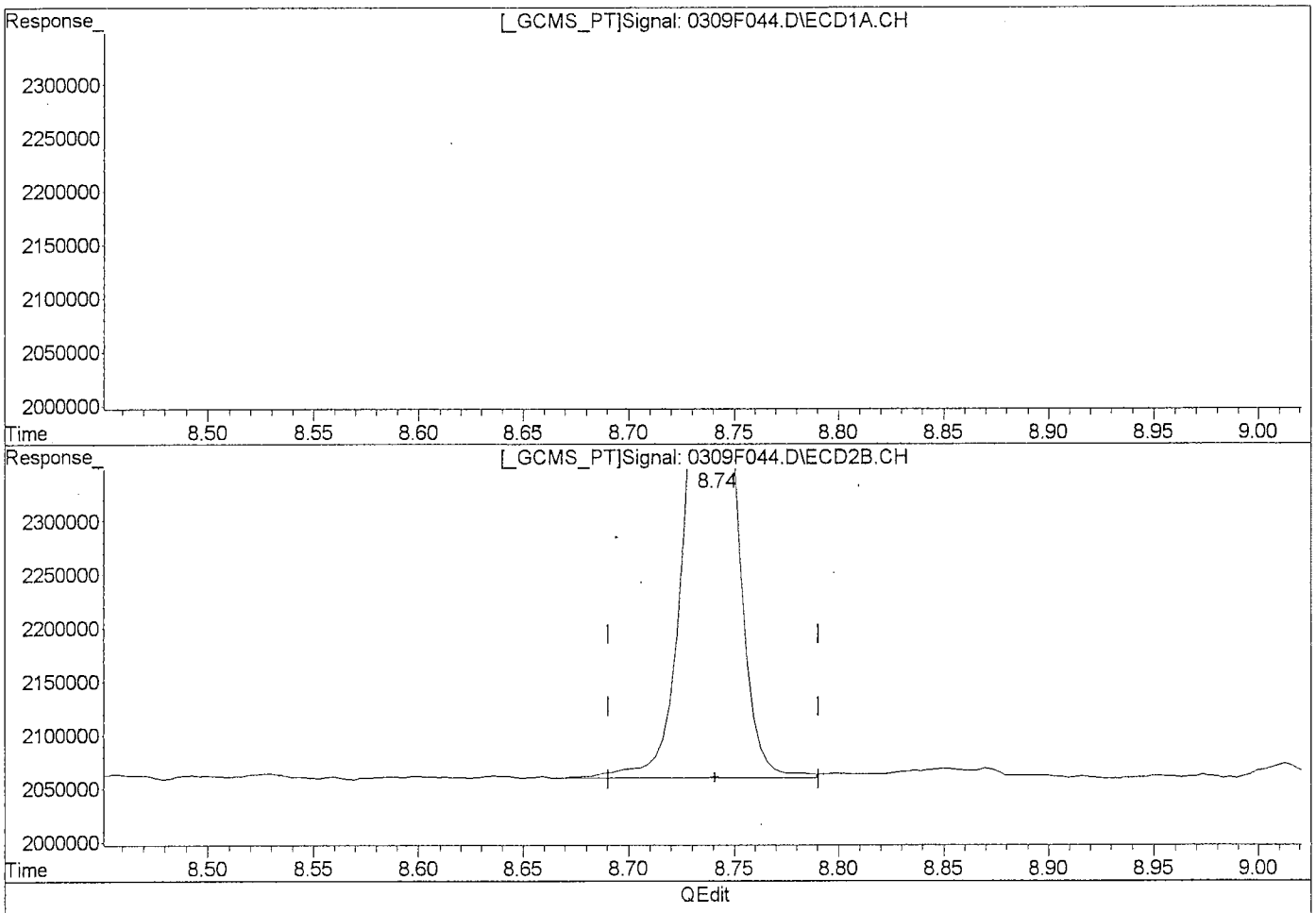




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(5) gamma-BHC (Lindane)

9.59min 1.891ug/L

response 875490

(5) gamma-BHC (Lindane) #2

8.74min 1.996ug/L

response 872771

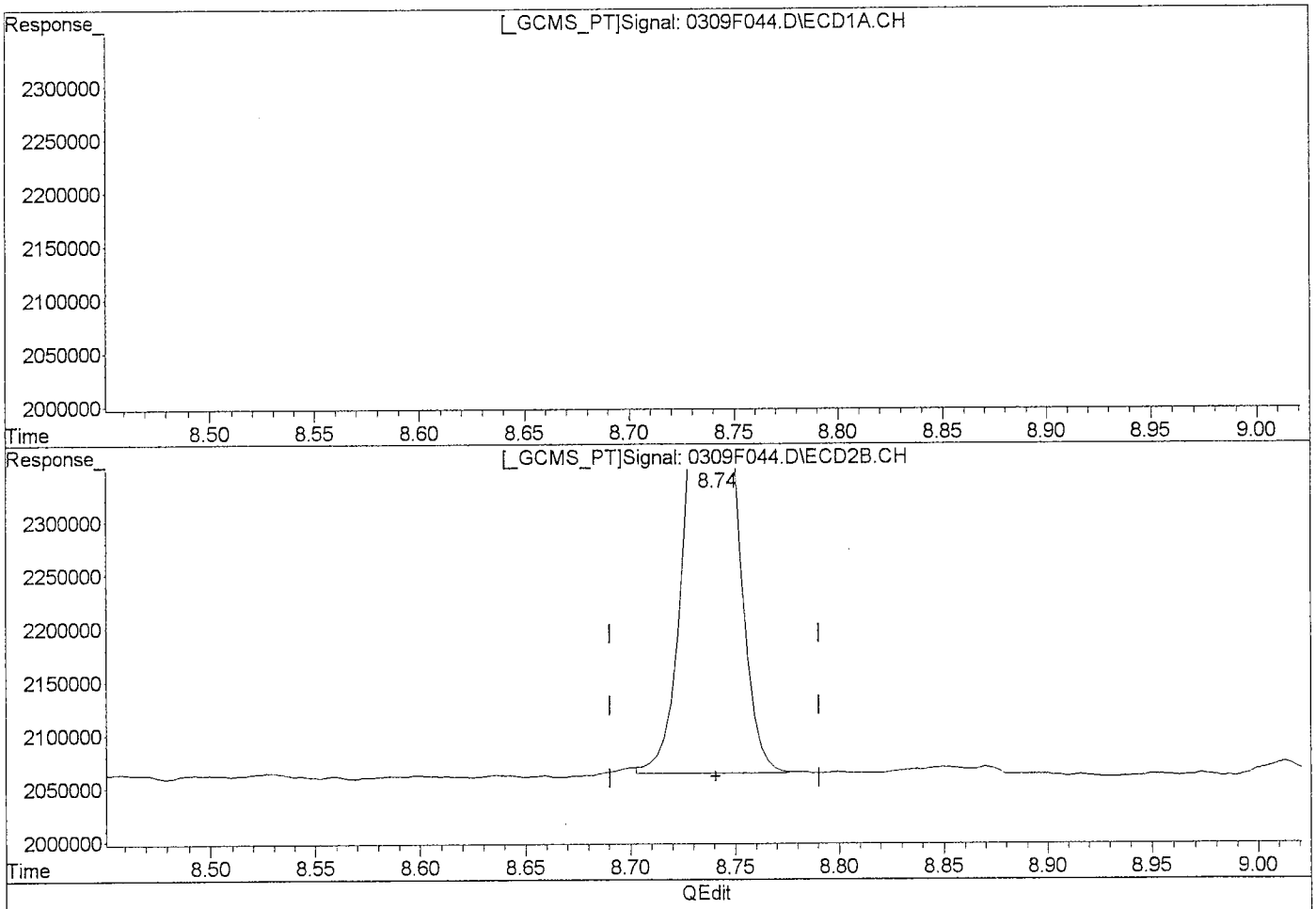
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:54:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(5) gamma-BHC (Lindane)

9.59min 1.891ug/L

response 875490

(5) gamma-BHC (Lindane) #2

8.74min 1.933ug/L m

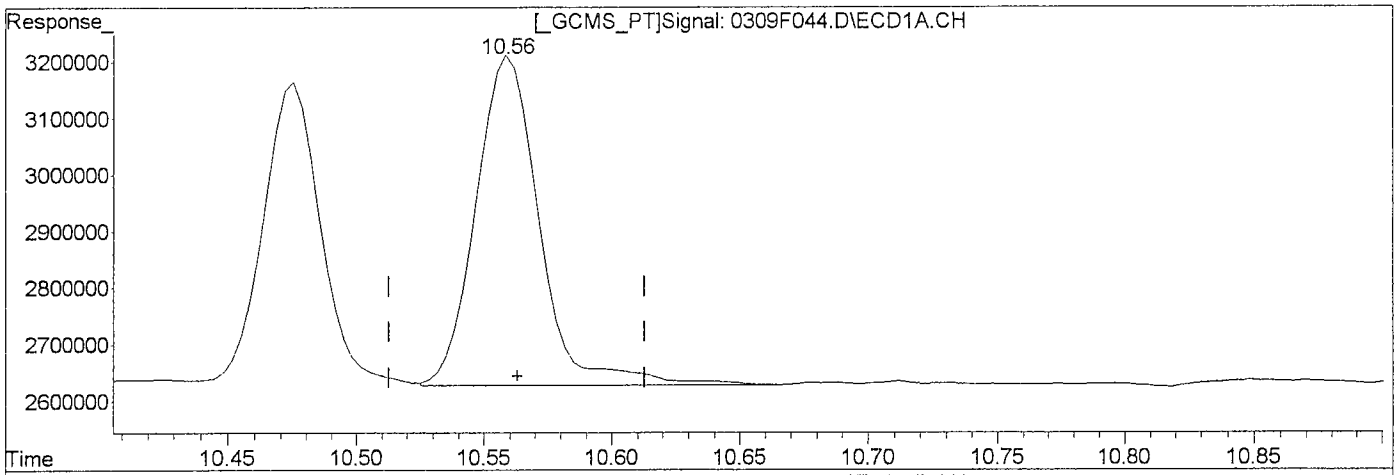
response 845169

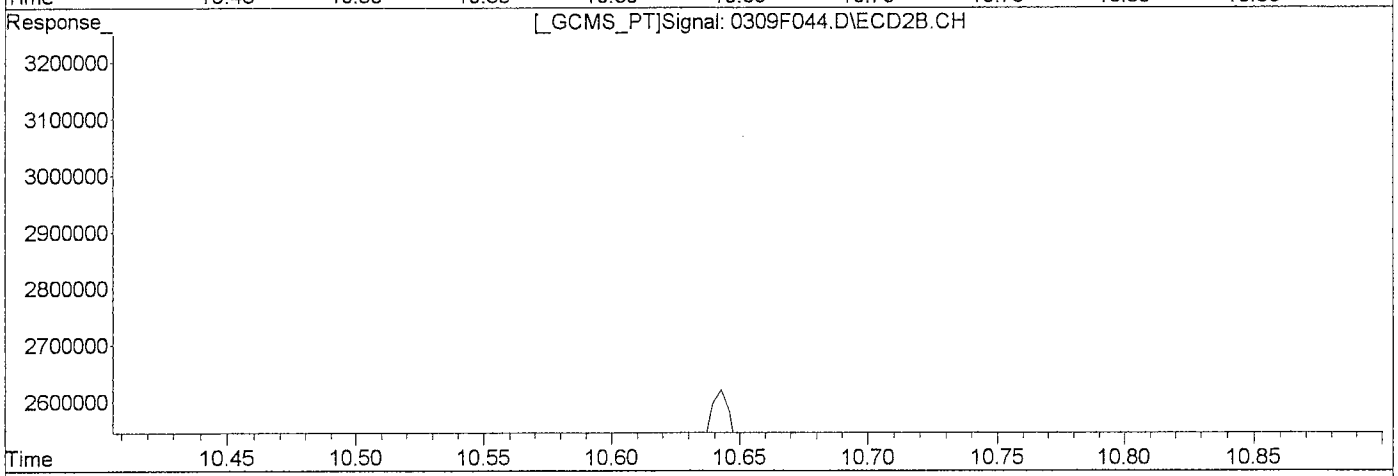
(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:55:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(7) Heptachlor

10.56min 2.205ug/L

response 1005697

(7) Heptachlor #2

9.30min 2.067ug/L

response 915694

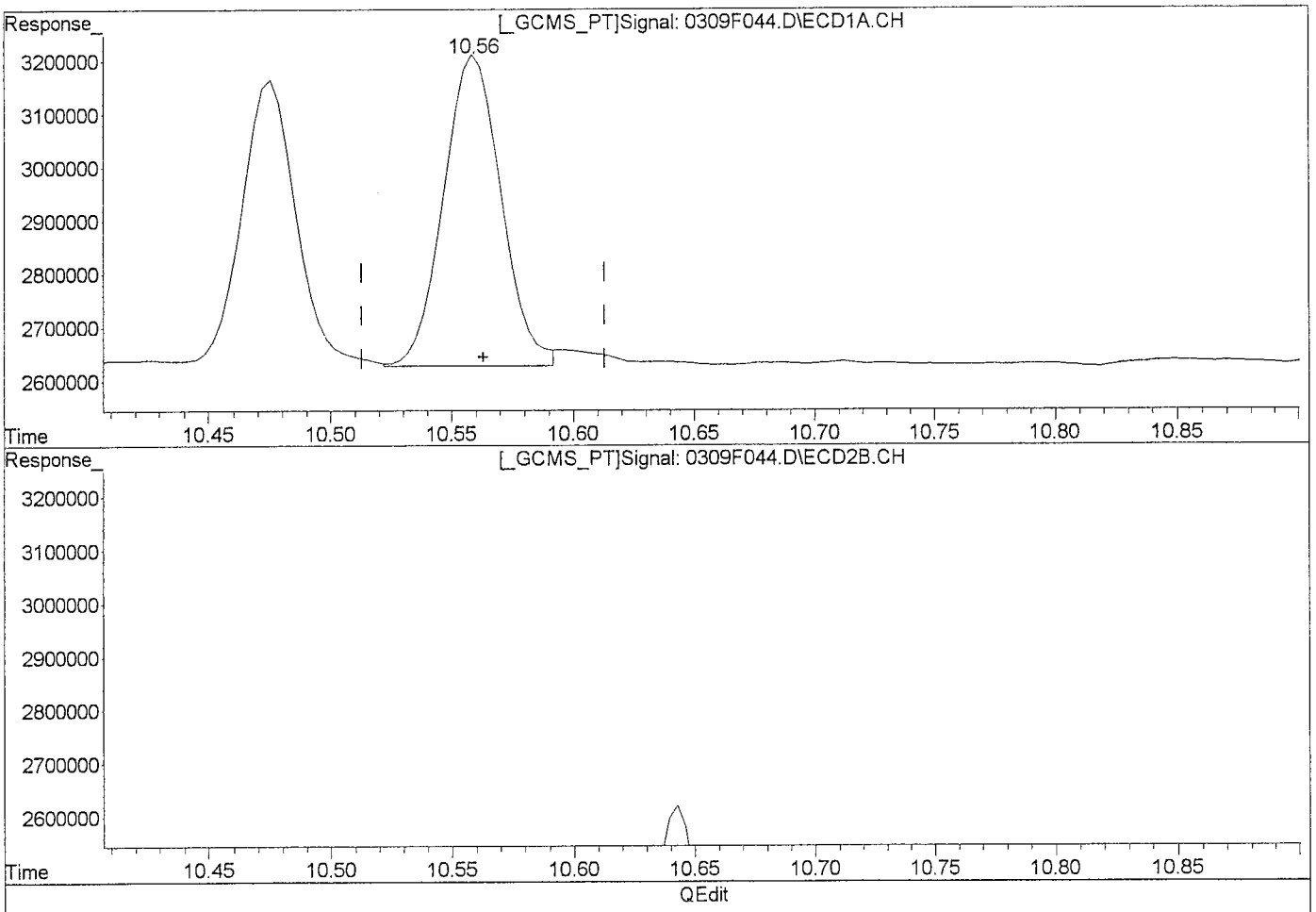
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:55:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(7) Heptachlor

10.56min 2.100ug/L m

response 957818

(7) Heptachlor #2

9.30min 2.067ug/L

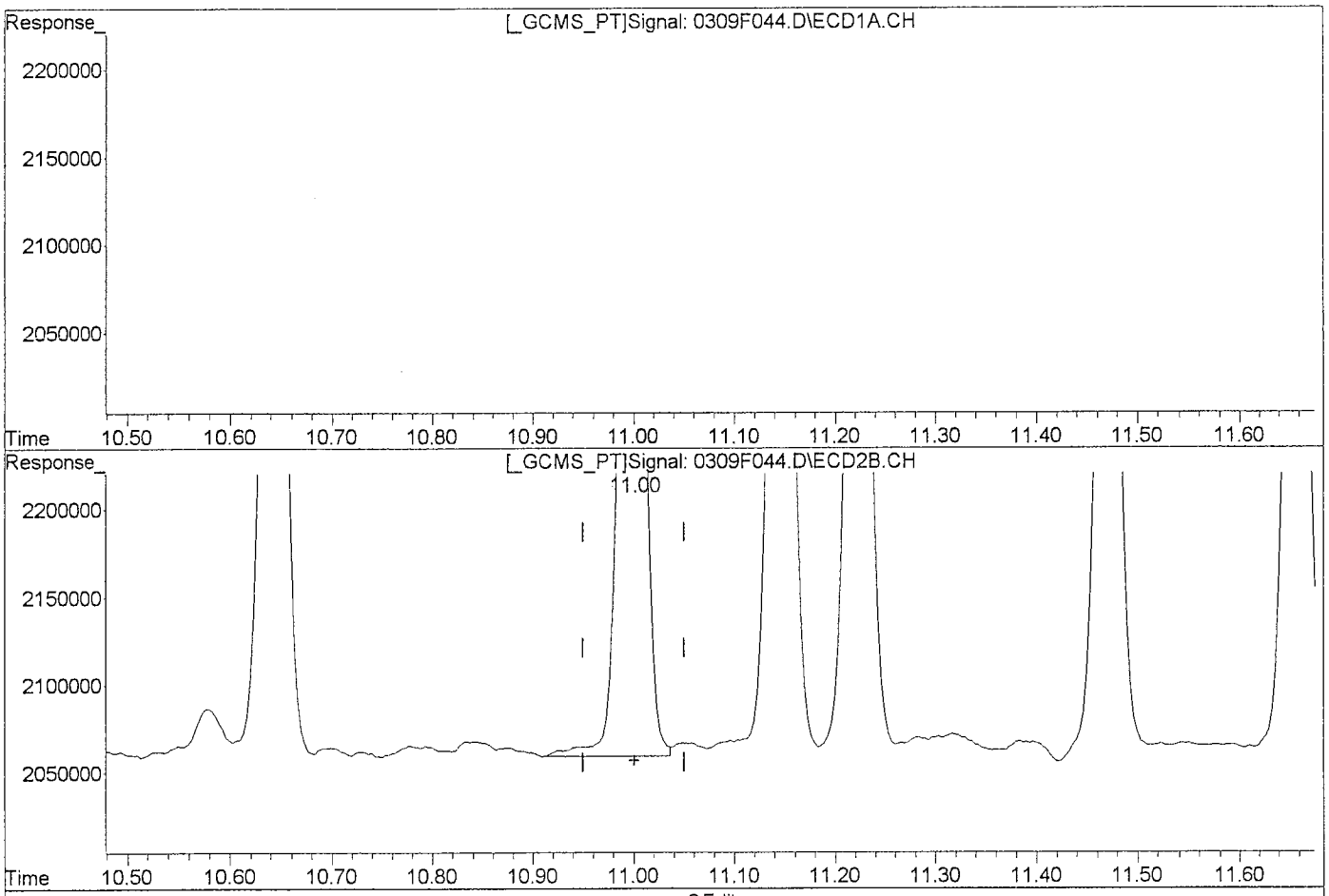
response 915694

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:55:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.151ug/L

response 838787

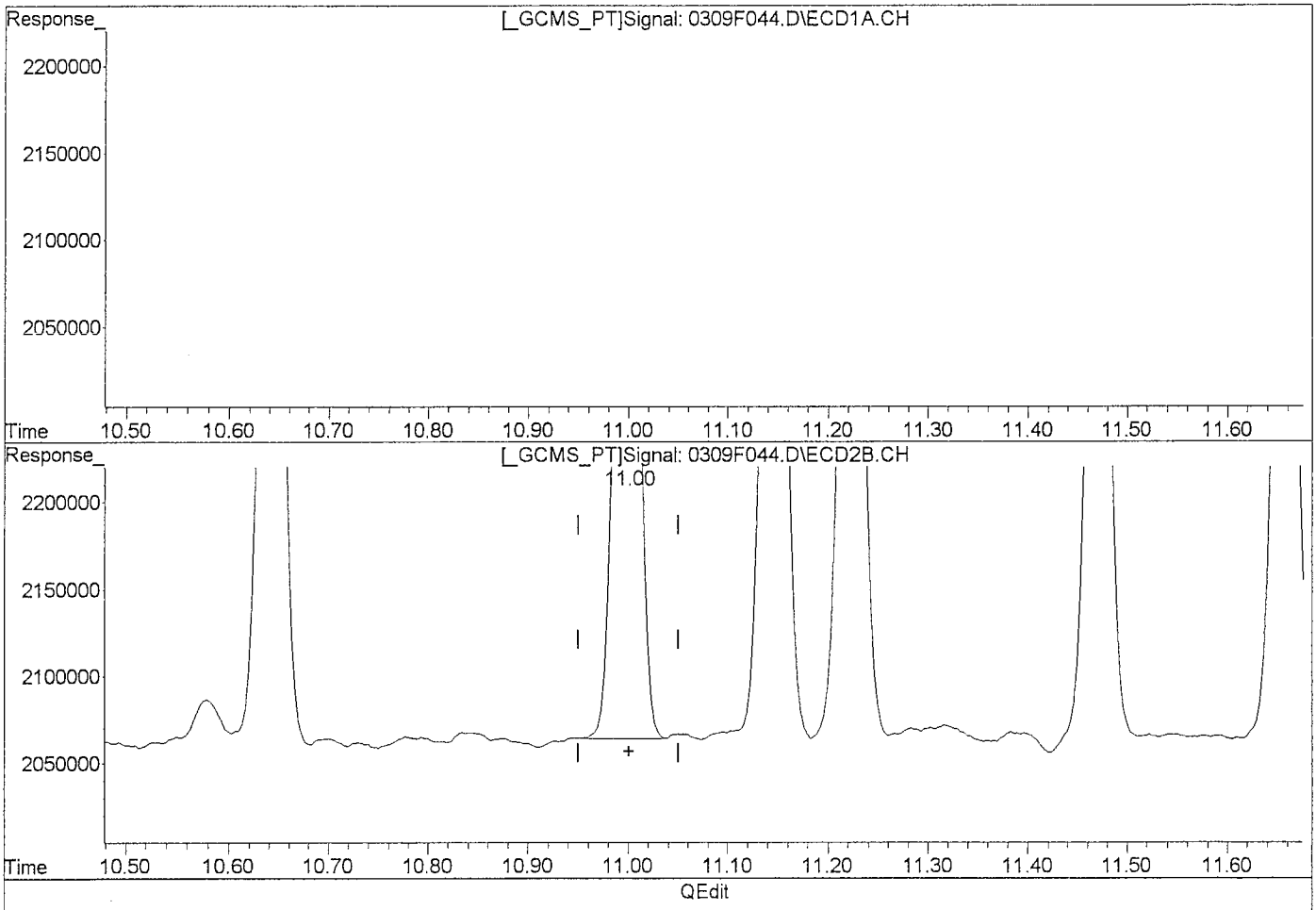
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:55:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

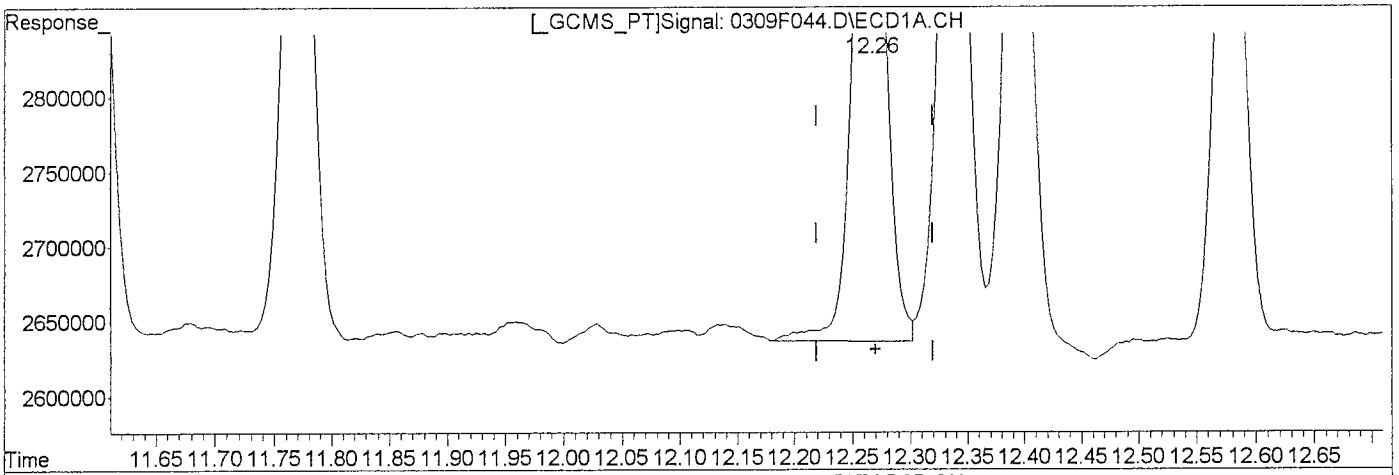
response 807143

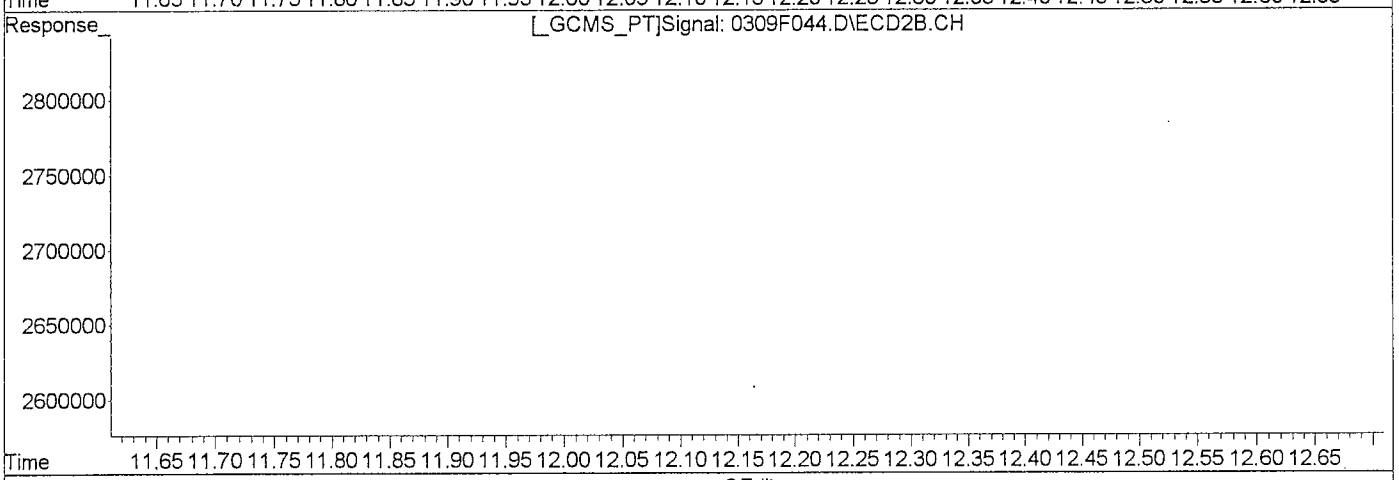
(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(11) gamma-Chlordane

12.26min 2.202ug/L

response 851319

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

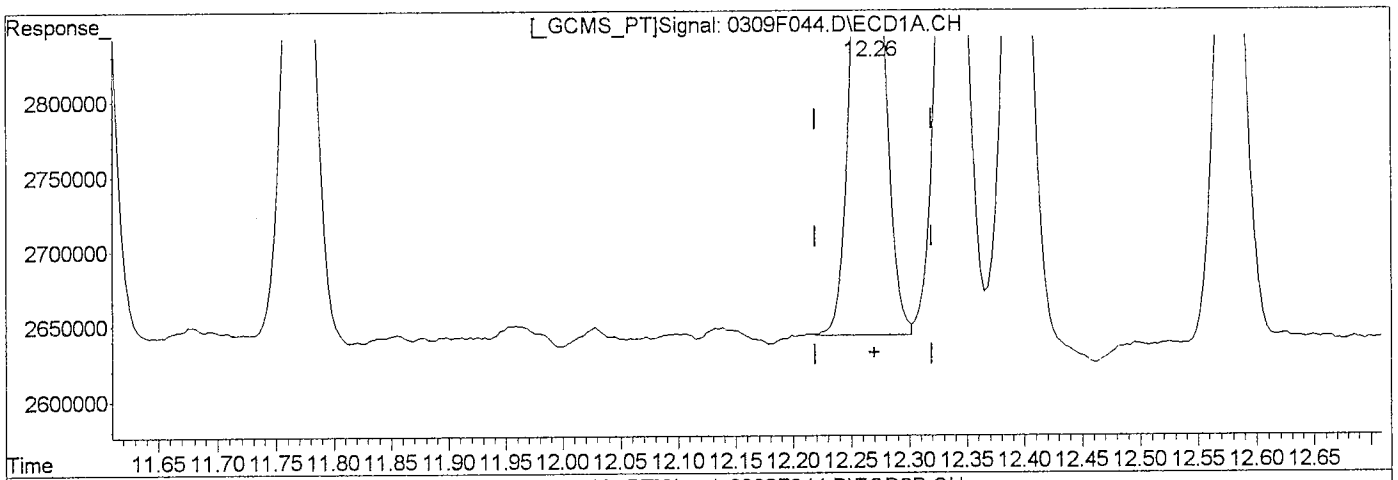
response 807143

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(11) gamma-Chlordane

12.26min 2.094ug/L m

response 809533

(11) gamma-Chlordane #2

11.00min 2.070ug/L m

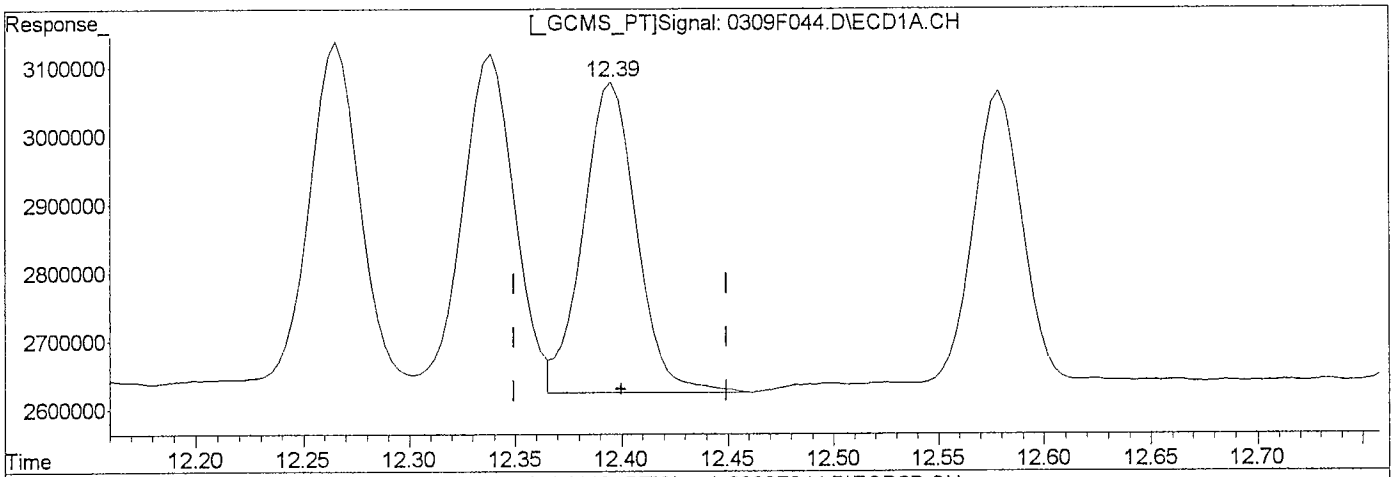
response 807143

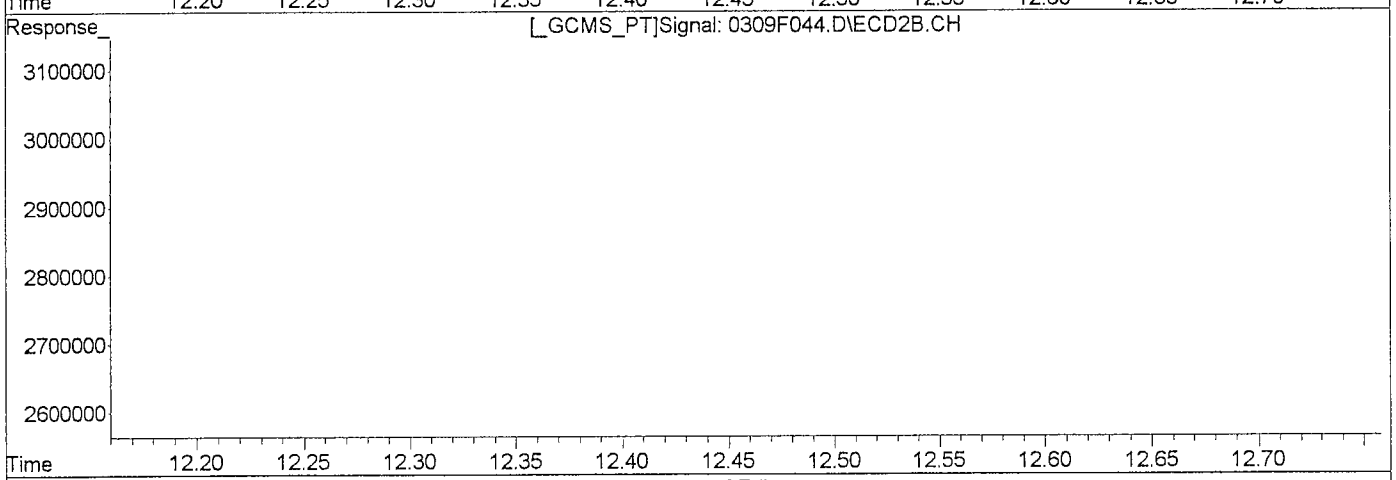
(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(12) Endosulfan I

12.39min 2.327ug/L

response 791437

(12) Endosulfan I #2

11.22min 2.160ug/L

response 752576

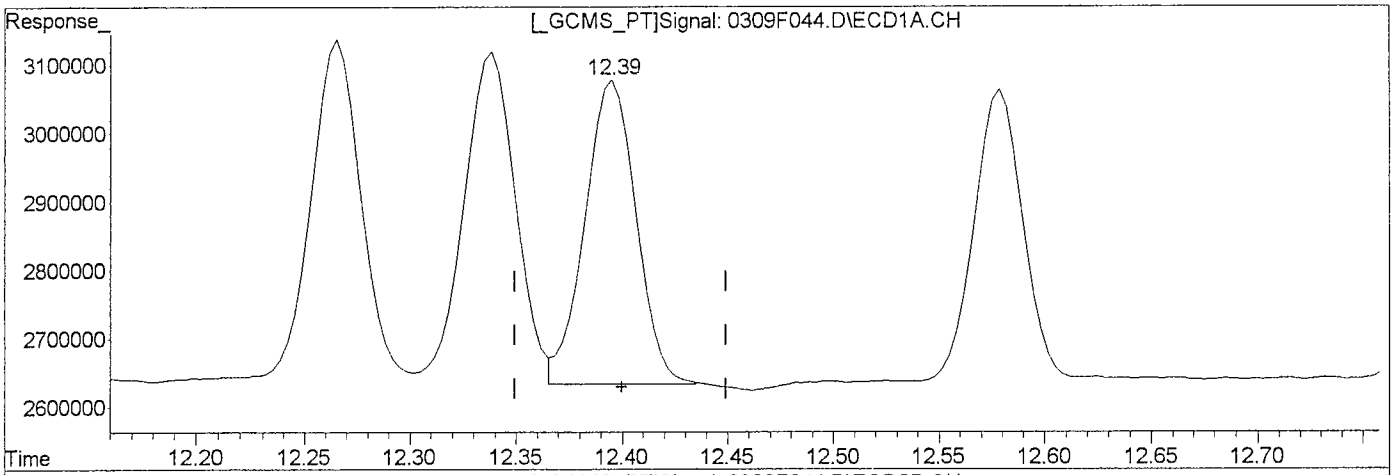
(+) = Expected Retention Time

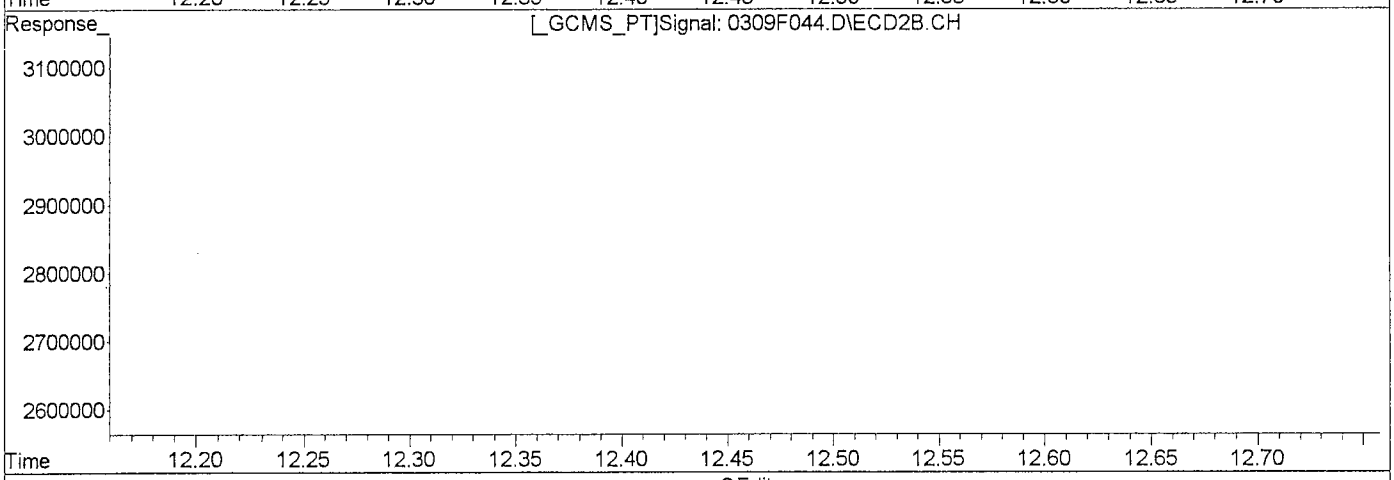
0309F044.D 030907-8081.M Mon Mar 12 07:56:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(12) Endosulfan I

12.39min 2.187ug/L m

response 743786

(12) Endosulfan I #2

11.22min 2.160ug/L

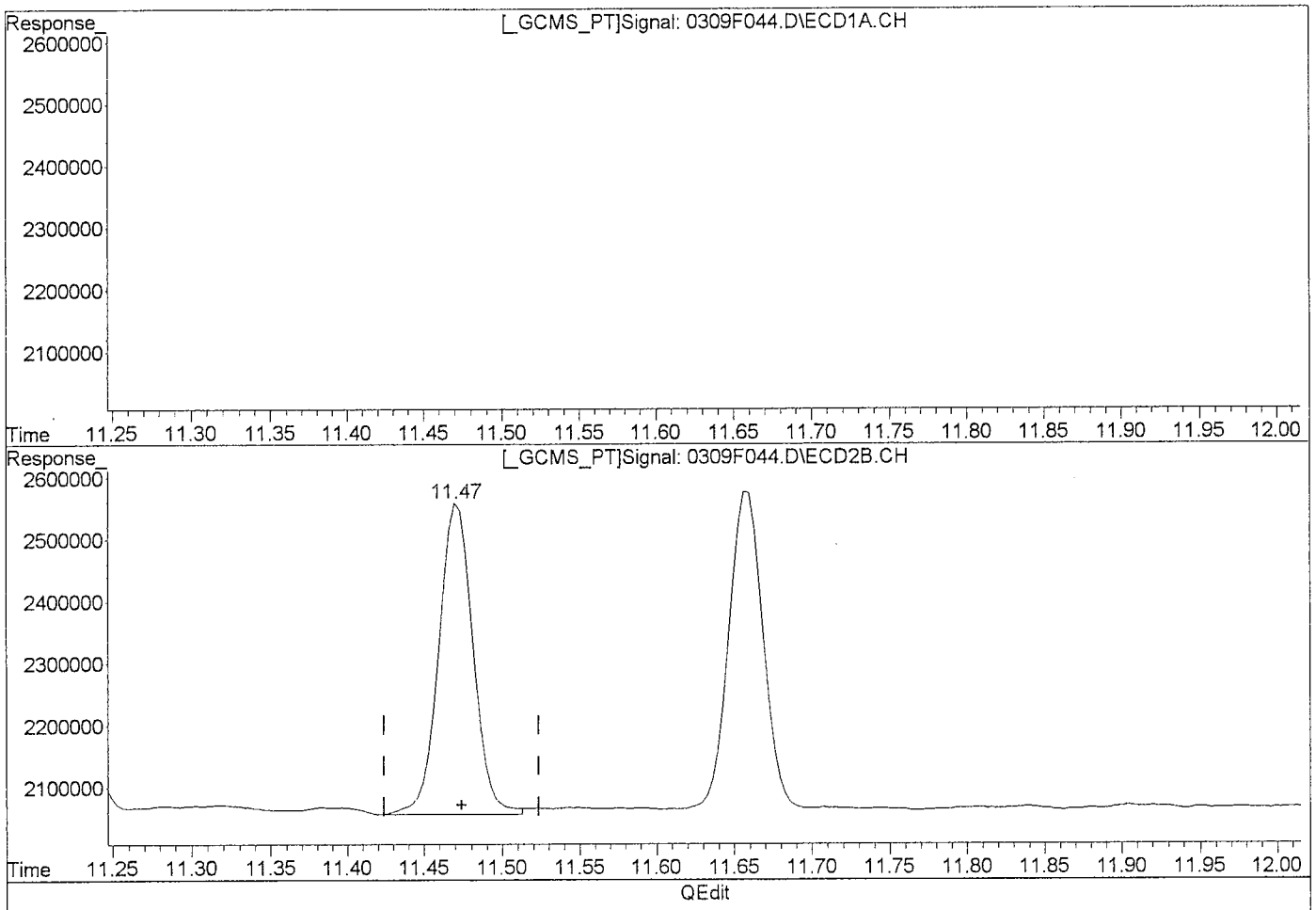
response 752576

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 1.967ug/L

response 683252

(15) 4,4'-DDE #2

11.47min 2.095ug/L

response 762620

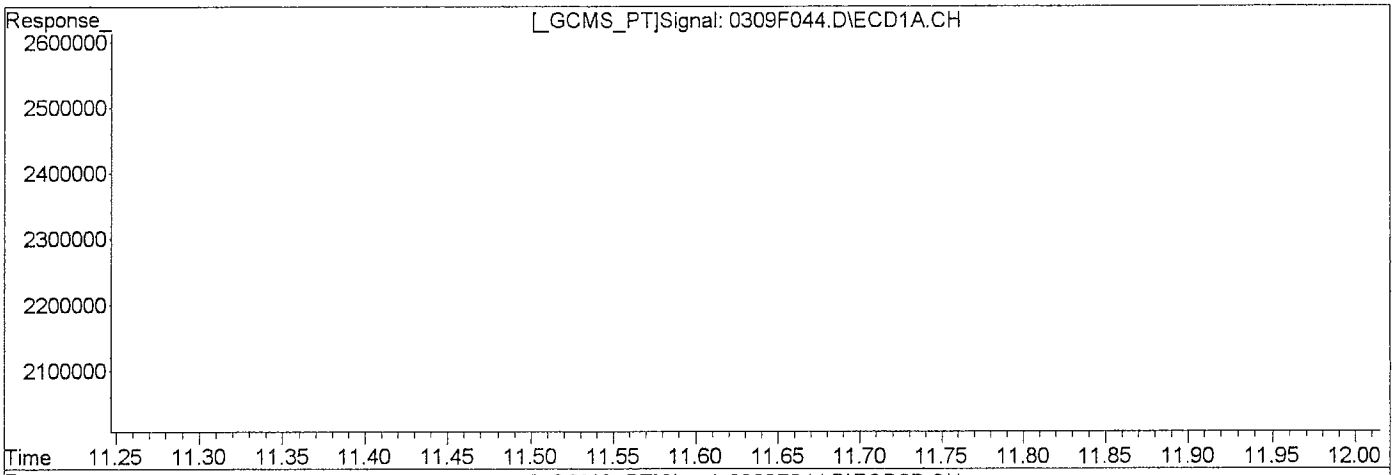
(+) = Expected Retention Time

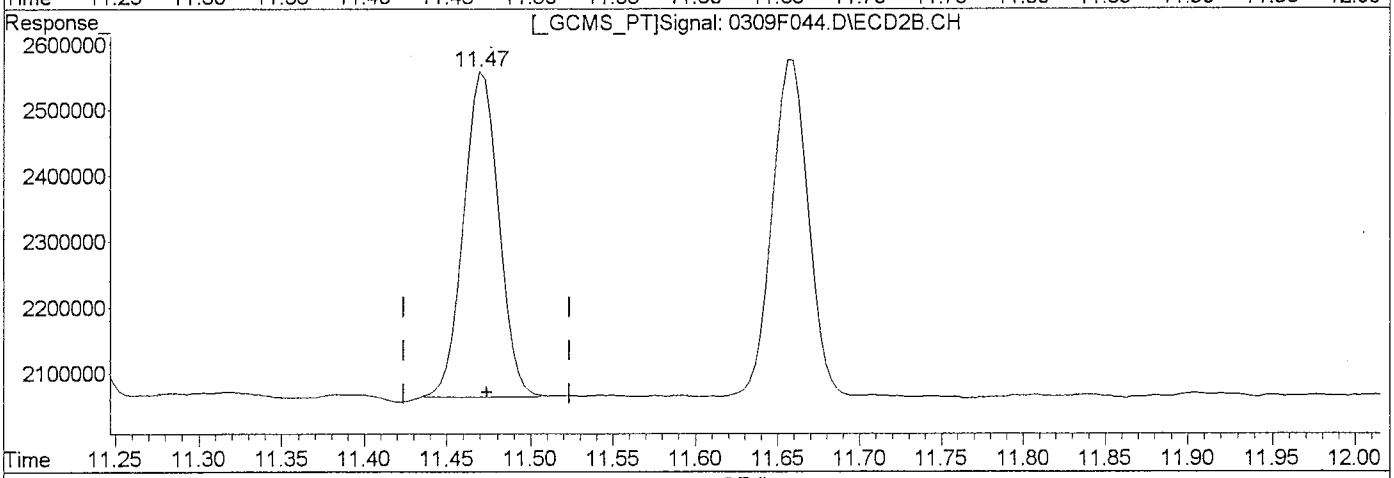
0309F044.D 030907-8081.M Mon Mar 12 07:56:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.58min 1.967ug/L

response 683252

(15) 4,4'-DDE #2

11.47min 1.979ug/L m

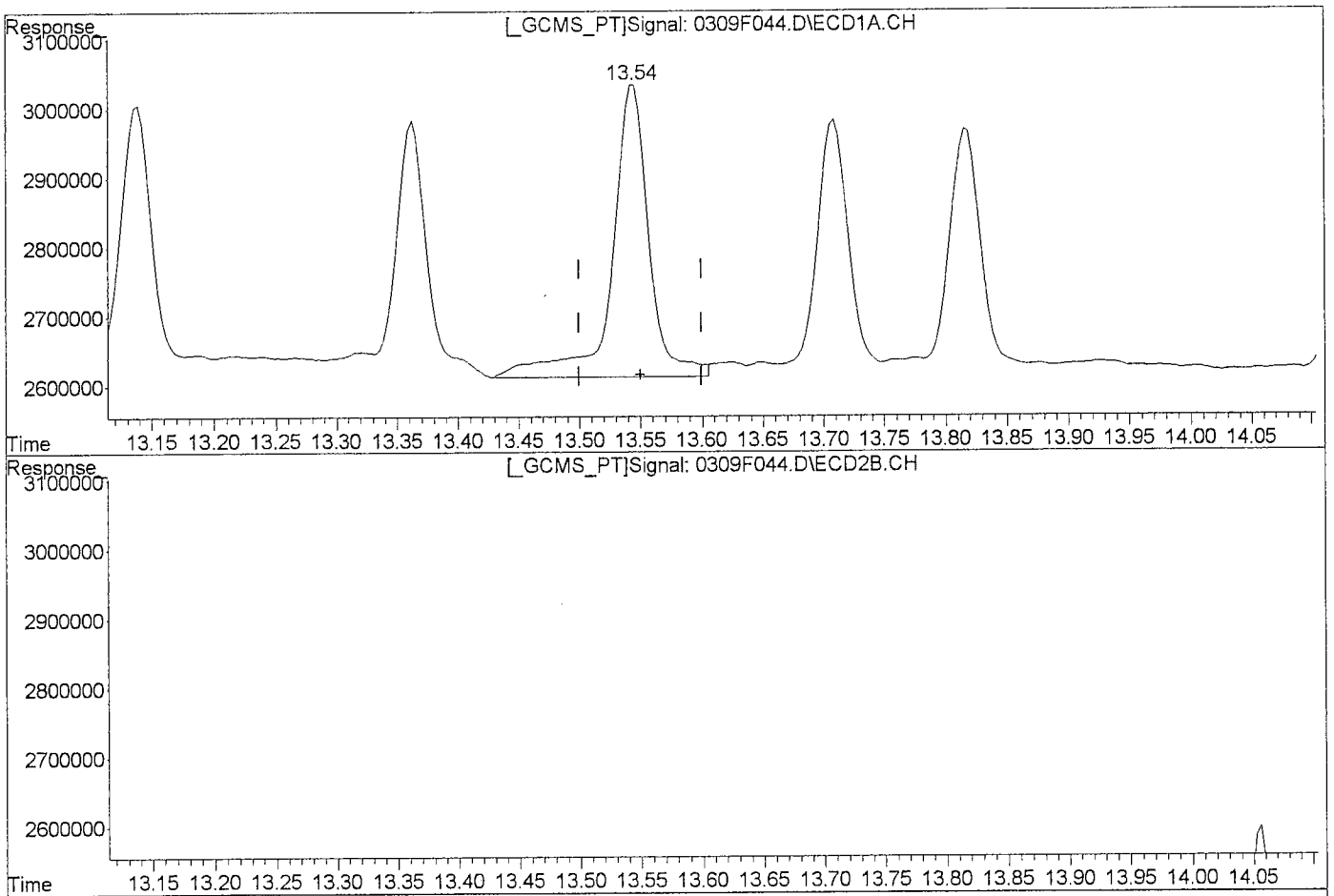
response 720556

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:56:55 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(17) Endosulfan II

13.54min 2.885ug/L

response 896471

(17) Endosulfan II #2

12.53min 2.182ug/L

response 733990

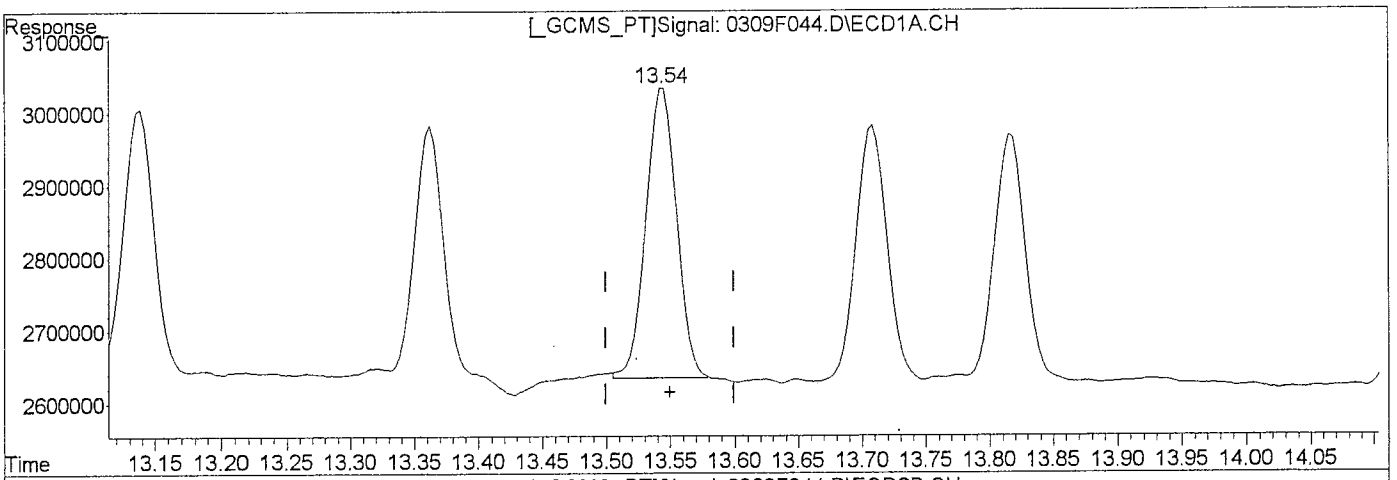
(+) = Expected Retention Time

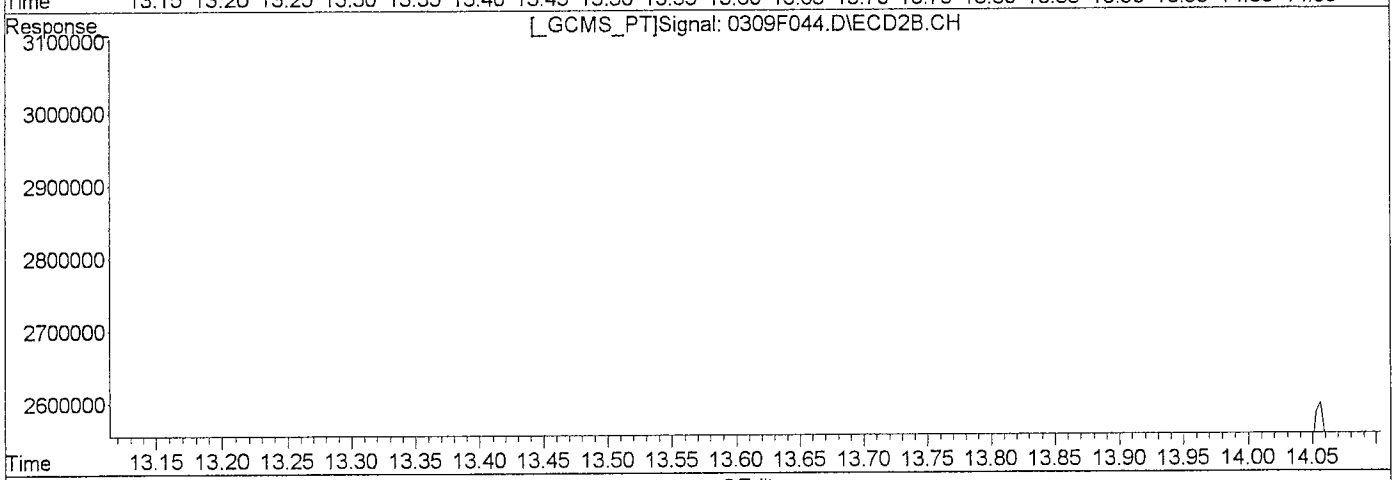
0309F044.D 030907-8081.M Mon Mar 12 07:57:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.54min 2.143ug/L m

response 665695

(17) Endosulfan II #2

12.53min 2.182ug/L

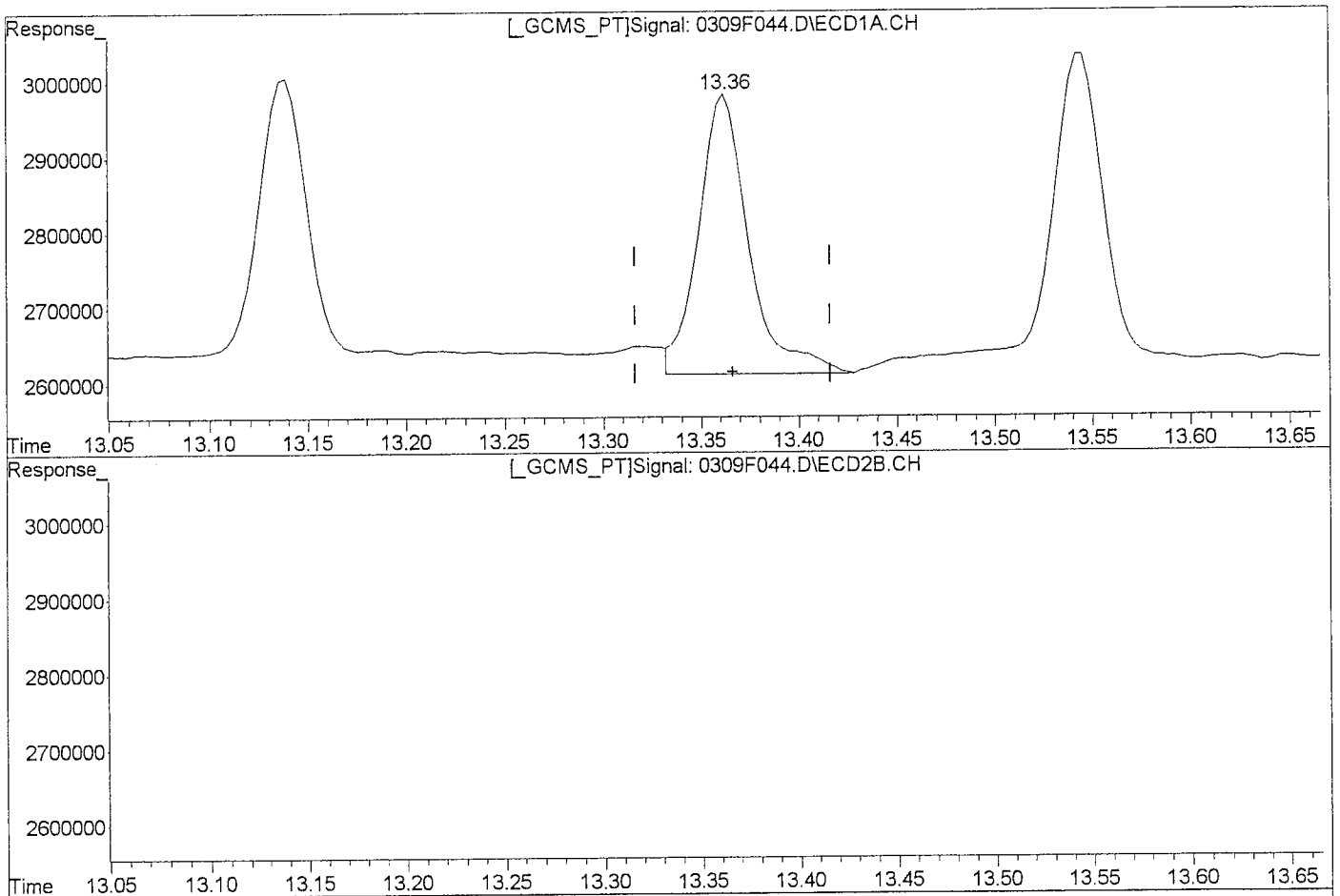
response 733990

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:57:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.36min 2.386ug/L

response 656862

(18) 4,4'-DDD #2

12.33min 2.078ug/L

response 626011

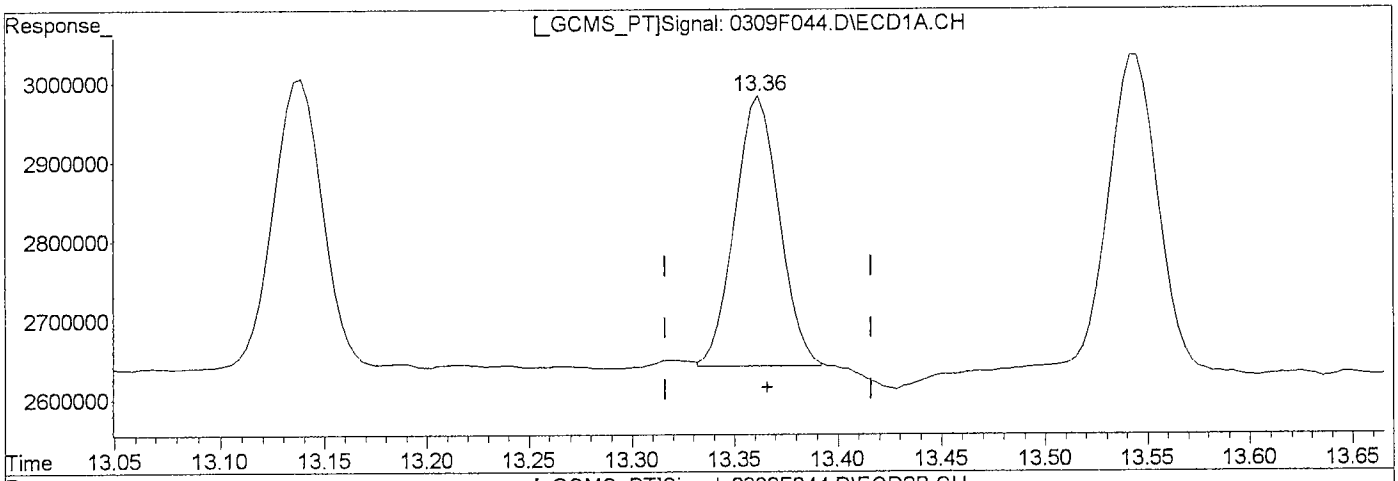
(+) = Expected Retention Time

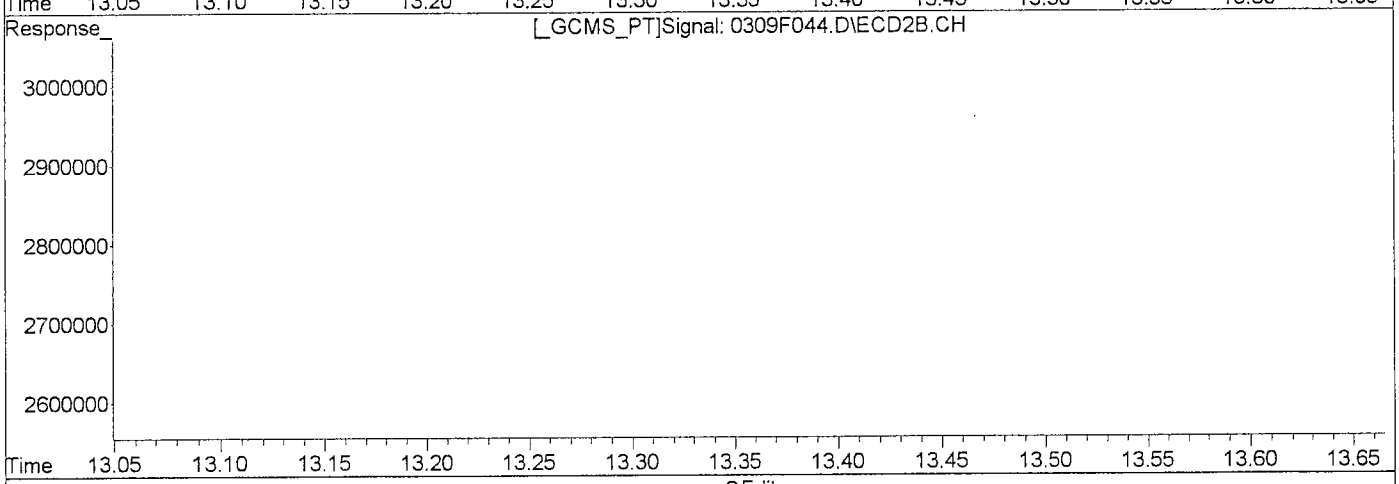
0309F044.D 030907-8081.M Mon Mar 12 07:57:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 1.870ug/L m

response 514741

(18) 4,4'-DDD #2

12.33min 2.078ug/L

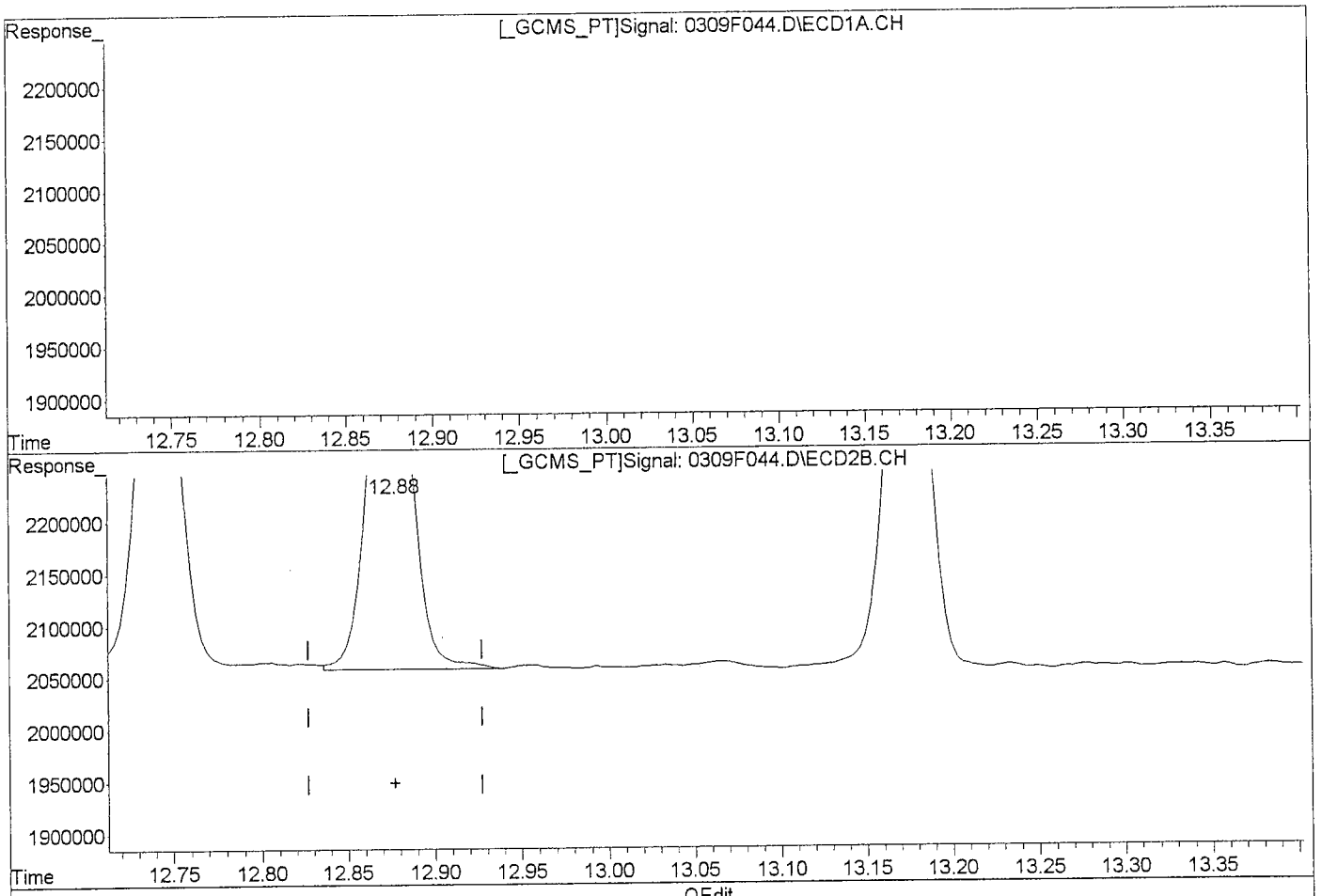
response 626011

(+) = Expected Retention Time
0309F044.D 030907-8081.M Mon Mar 12 07:57:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(19) Endrin Aldehyde

13.71min 2.202ug/L

response 592370

(19) Endrin Aldehyde #2

12.88min 2.288ug/L

response 676893

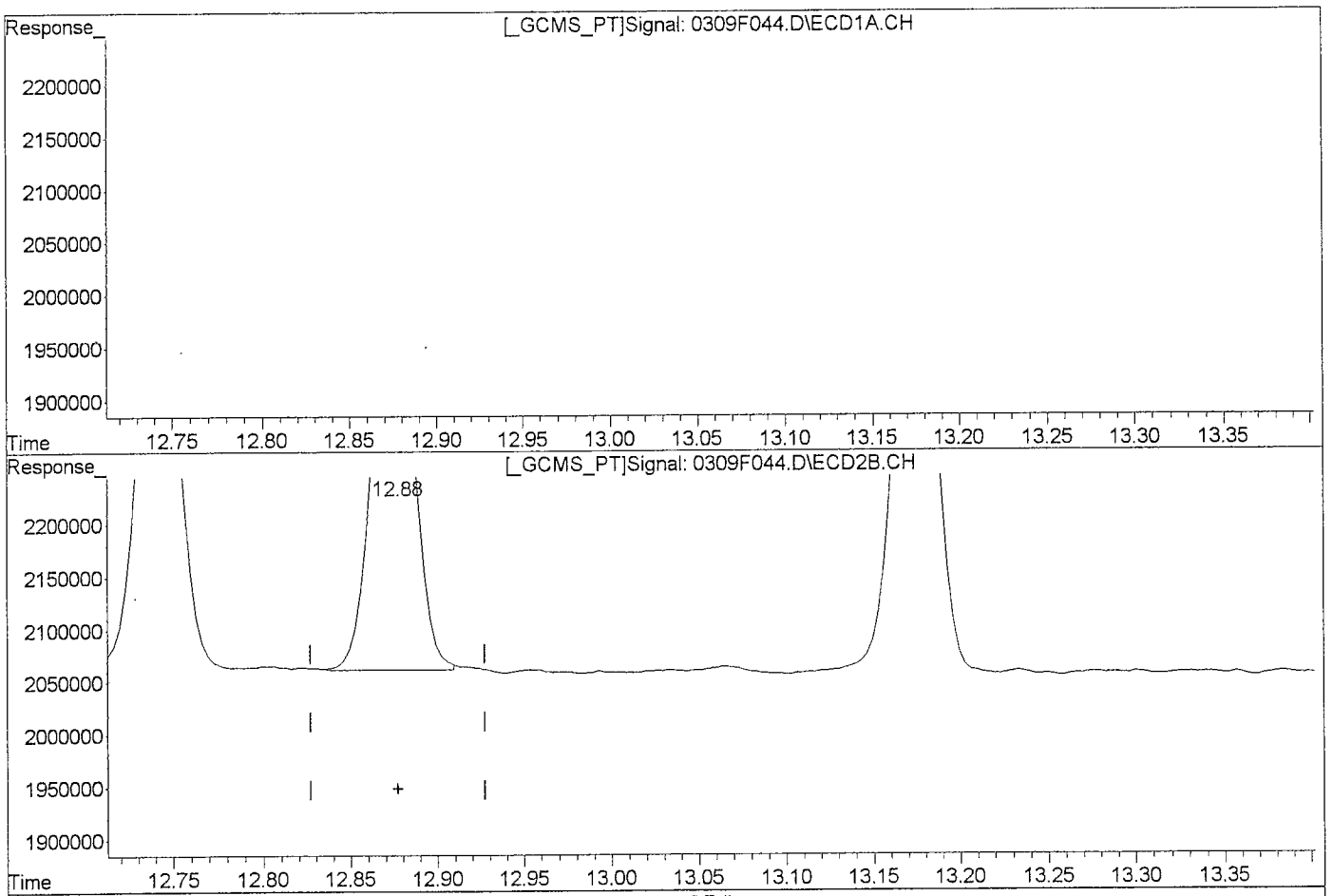
(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:57:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F044.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\030907\0309F044.D\ECD2B.CH
Acq On : 10 Mar 2007 12:00 pm Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:50 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(19) Endrin Aldehyde

13.71min 2.202ug/L

response 592370

(19) Endrin Aldehyde #2

12.88min 2.210ug/L m

response 653890

(+) = Expected Retention Time

0309F044.D 030907-8081.M Mon Mar 12 07:57:54 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:00 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	1876920	1713914	4.897	4.956
24)	s	Decachlorobiphen	16.91	15.66	1691694	2104972	5.468	5.461m
		Target Compounds						
2)		alpha-BHC	9.05	8.13	2144038	2058696	4.359	4.460
3)		Hexachlorobenzen	9.18	7.96	2232946	2124900	5.127	5.276
4)		beta-BHC	10.06	9.15	1107251	1082276	4.975m	4.989
5)		gamma-BHC (Linda	9.59	8.74	2083603	2044081	4.500	4.674
6)		delta-BHC	10.47	9.59	1898453	1820603	4.562	4.564
7)		Heptachlor	10.56	9.30	2189895	2145049	4.801	4.843
8)		Aldrin	11.07	9.79	1855560	1879317	4.655	4.761
9)		Isodrin	11.60	10.43	1594584	1658788	4.797	4.971
10)		Heptachlor Epoxi	11.77	10.64	1937854	1938697	4.968	5.006
11)		gamma-Chlordane	12.26	11.00	1890837	1931501	4.891	4.953
12)		Endosulfan I	12.39	11.22	1732781	1784011	5.096	5.120
13)		alpha-Chlordane	12.34	11.15	1869074	1919418	4.971	5.017
14)		Dieldrin	12.79	11.66	1702353	1835639	4.711	4.807
15)		4,4'-DDE	12.58	11.47	1615817	1700377	4.652	4.671m
16)		Endrin	13.14	12.13	1444252	1591086	4.656	4.677
17)		Endosulfan II	13.54	12.54	1609233	1754425	5.180	5.215
18)		4,4'-DDD	13.36	12.34	1249629	1430974	4.539m	4.750
19)		Endrin Aldehyde	13.71	12.88	1398613	1544623	5.198	5.221
20)		Endosulfan Sulfa	14.13	13.18	1505405	1790423	5.026	5.142
21)		4,4'-DDT	13.82	12.74	1335813	1589008	4.692m	4.837
22)		Endrin Ketone	14.75	14.06	1638116	2050196	4.952m	5.105
23)		Methoxychlor	14.47	13.75	783574	970612	4.832m	5.152

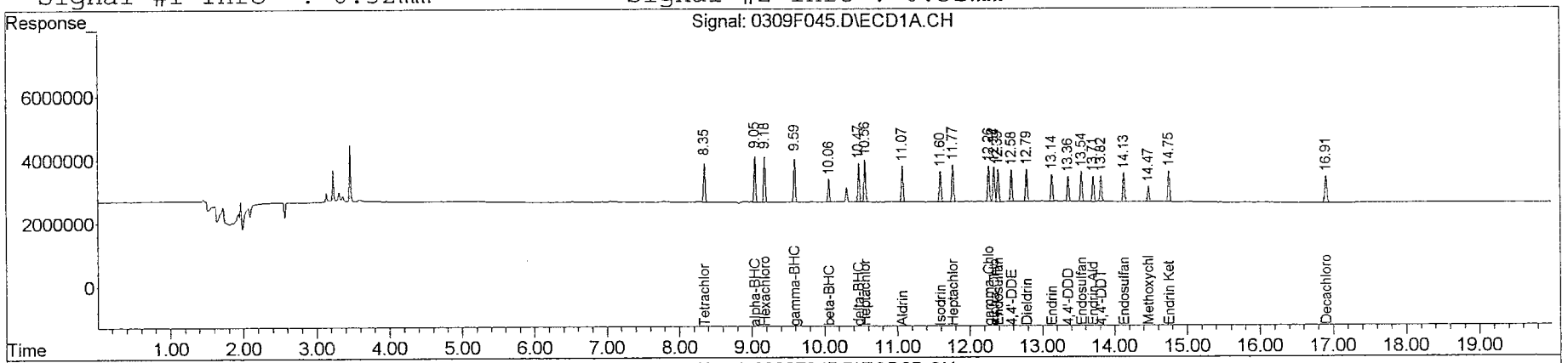
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

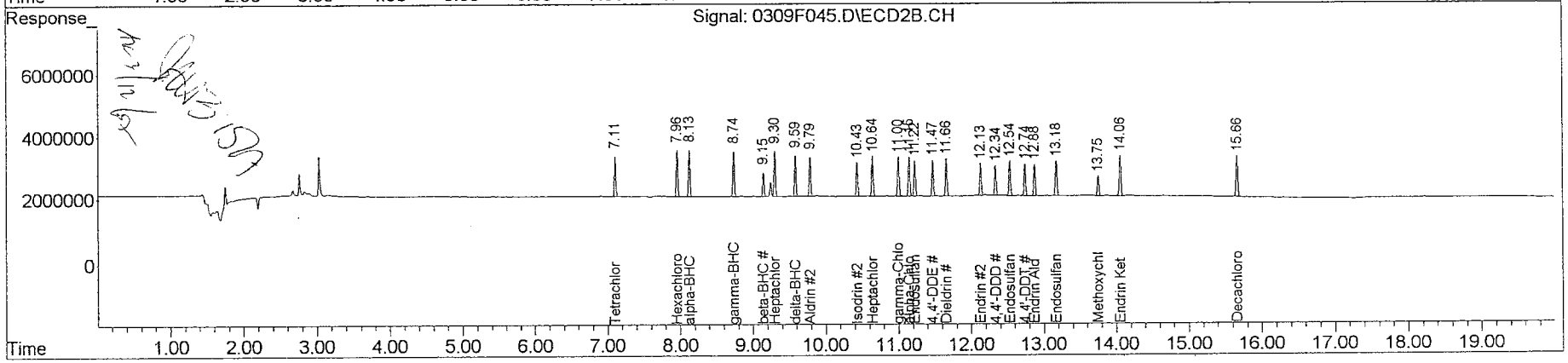
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:01 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



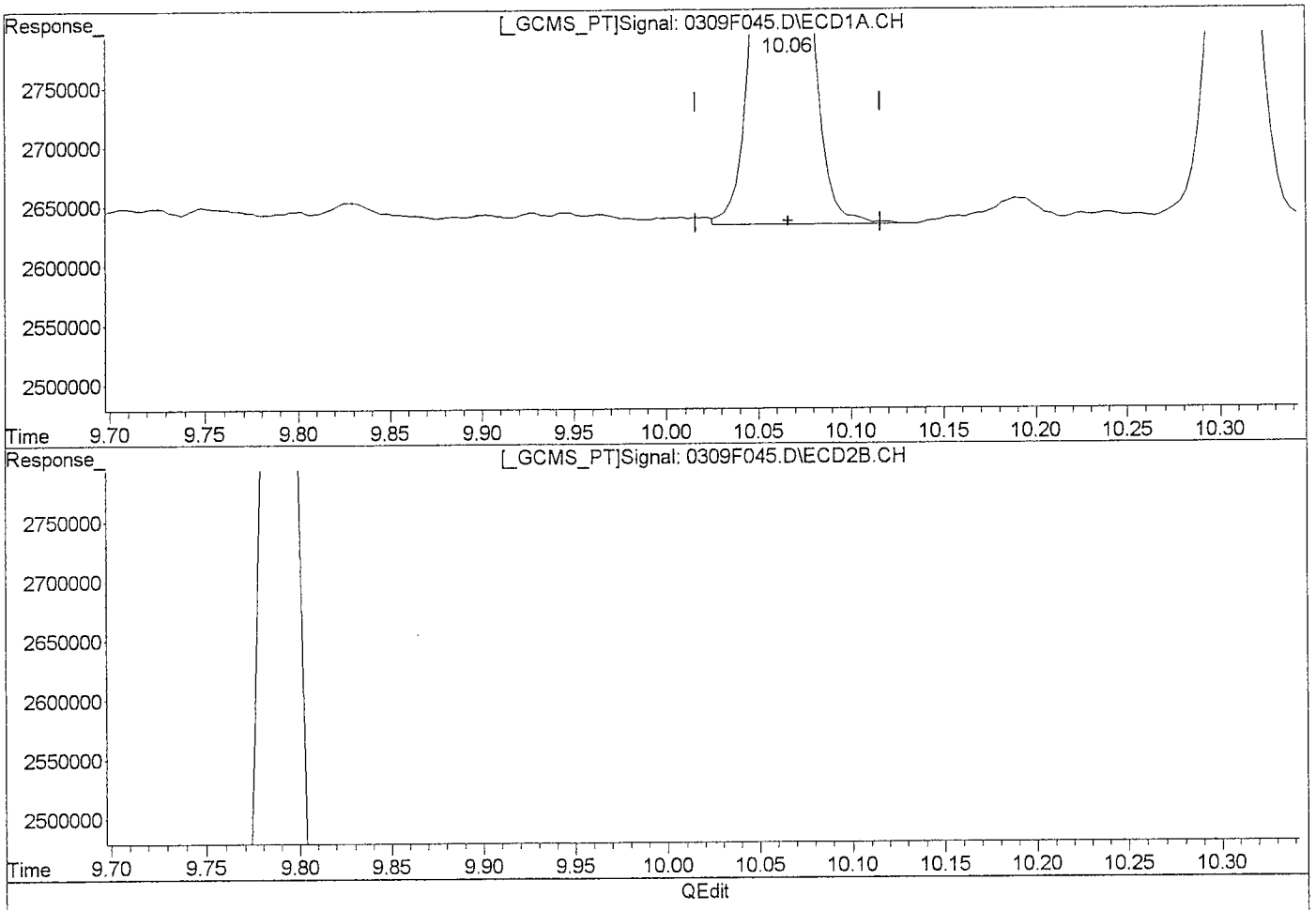


682

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(4) beta-BHC

10.06min 5.057ug/L

response 1125380

(4) beta-BHC #2

9.15min 4.989ug/L

response 1082276

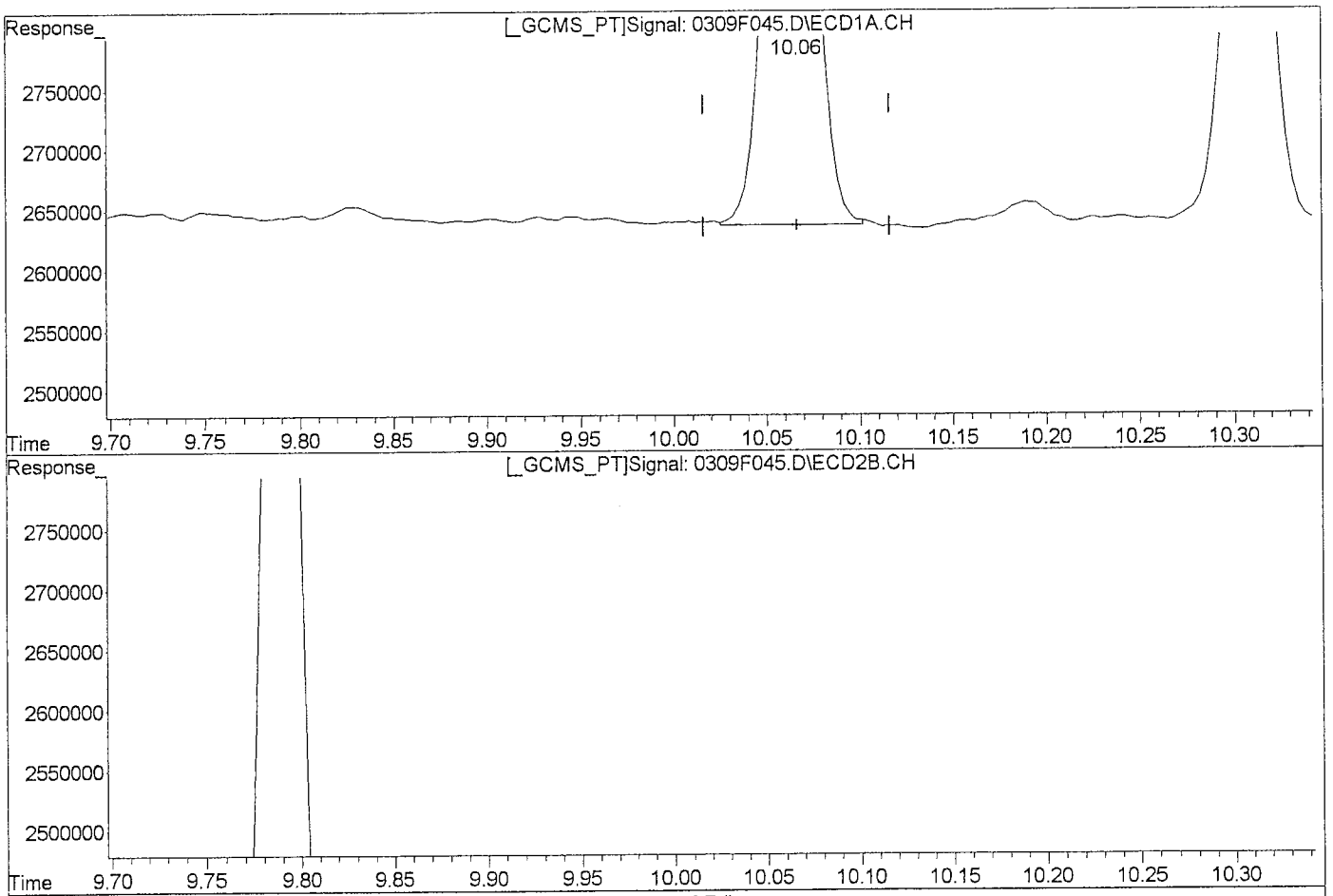
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 07:58:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(4) beta-BHC

10.06min 4.975ug/L m

response 1107251

(4) beta-BHC #2

9.15min 4.989ug/L

response 1082276

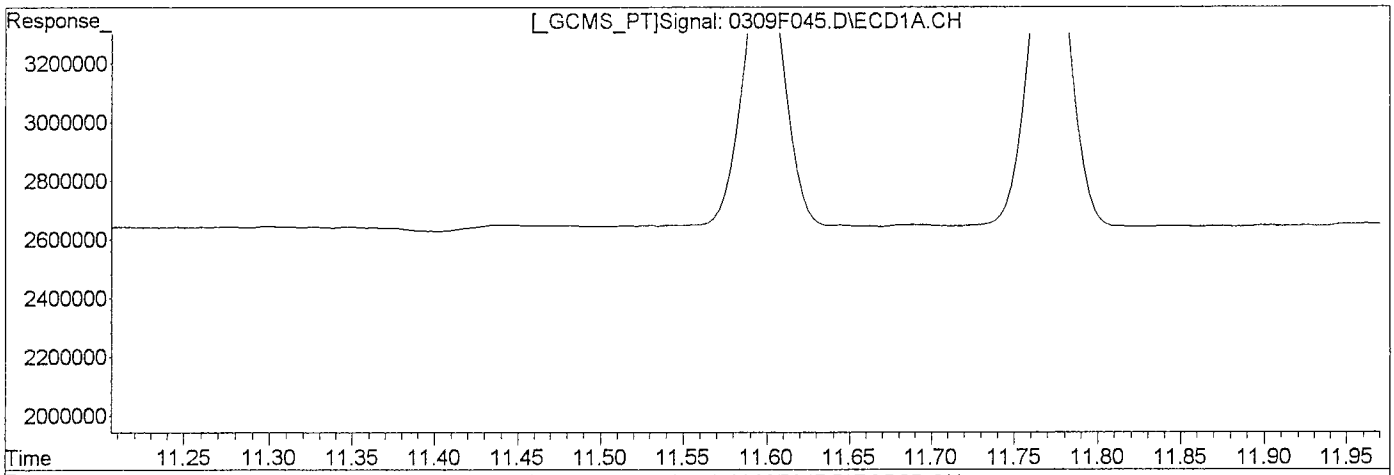
baseline AH 3/12/07

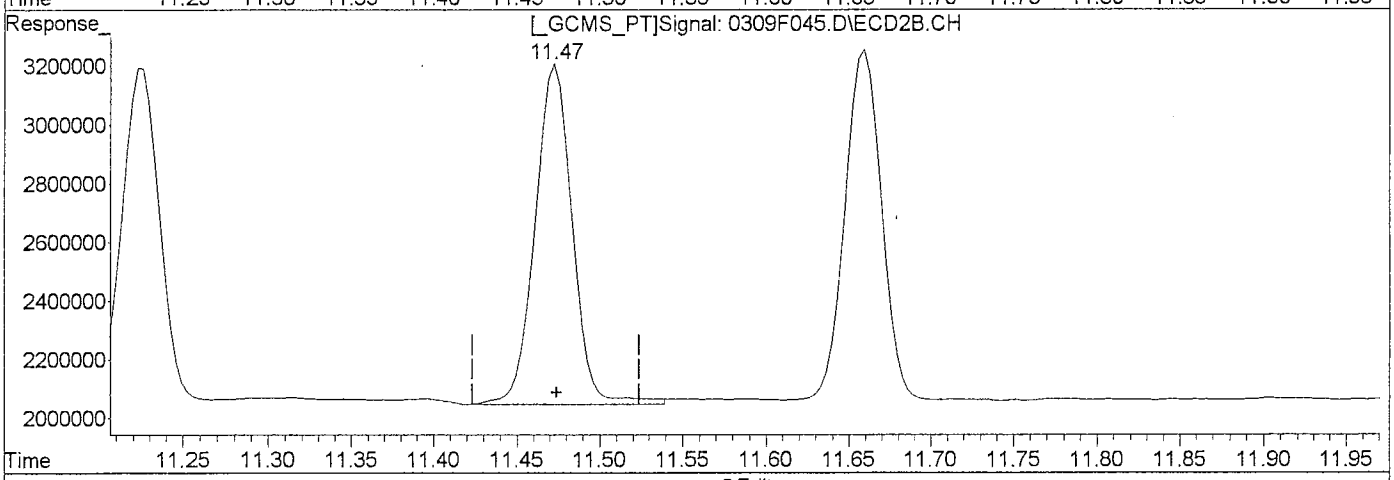
(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 07:58:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.58min 4.652ug/L

response 1615817

(15) 4,4'-DDE #2

11.47min 5.020ug/L

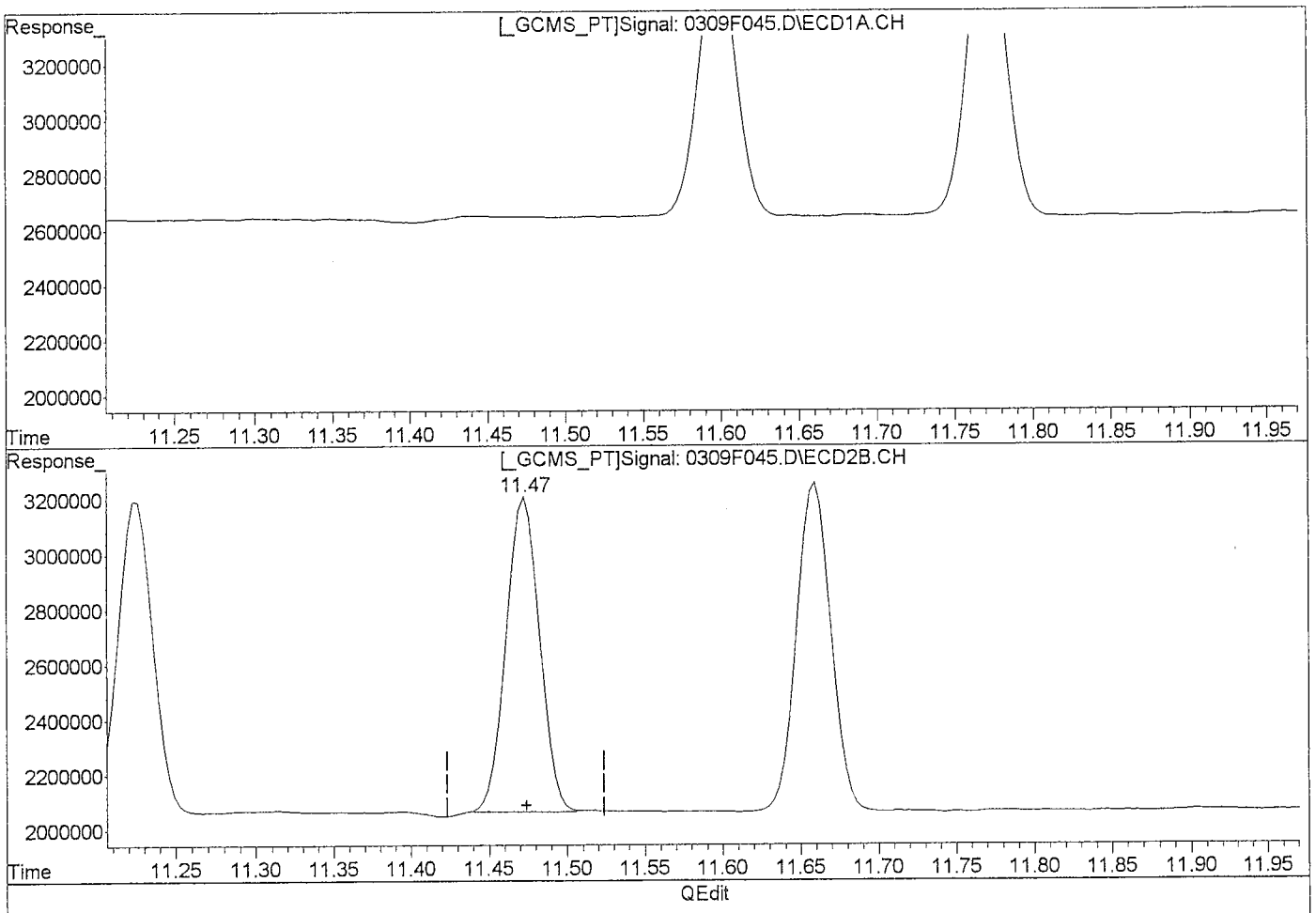
response 1827482

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 07:59:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 4.652ug/L

response 1615817

(15) 4,4'-DDE #2

11.47min 4.671ug/L m

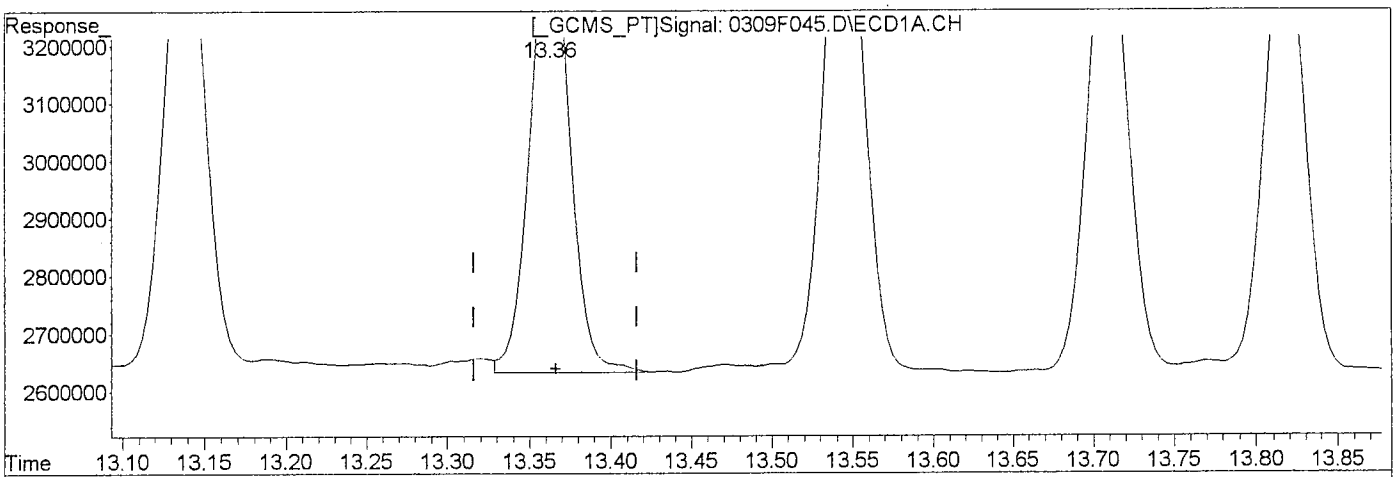
response 1700377

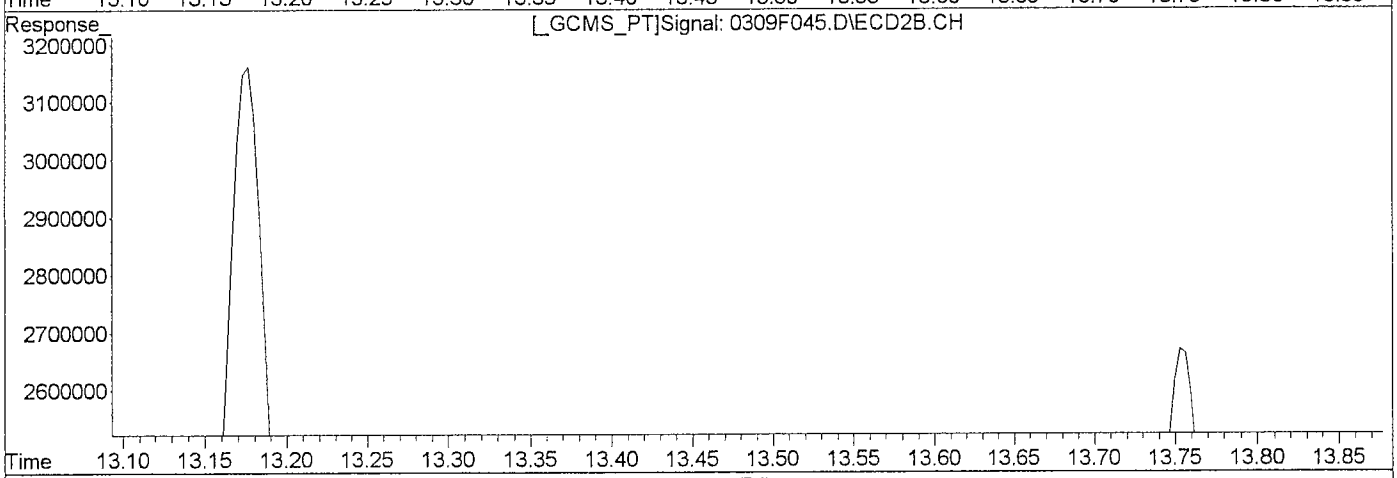
(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 07:59:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 4.796ug/L

response 1320518

(18) 4,4'-DDD #2

12.34min 4.750ug/L

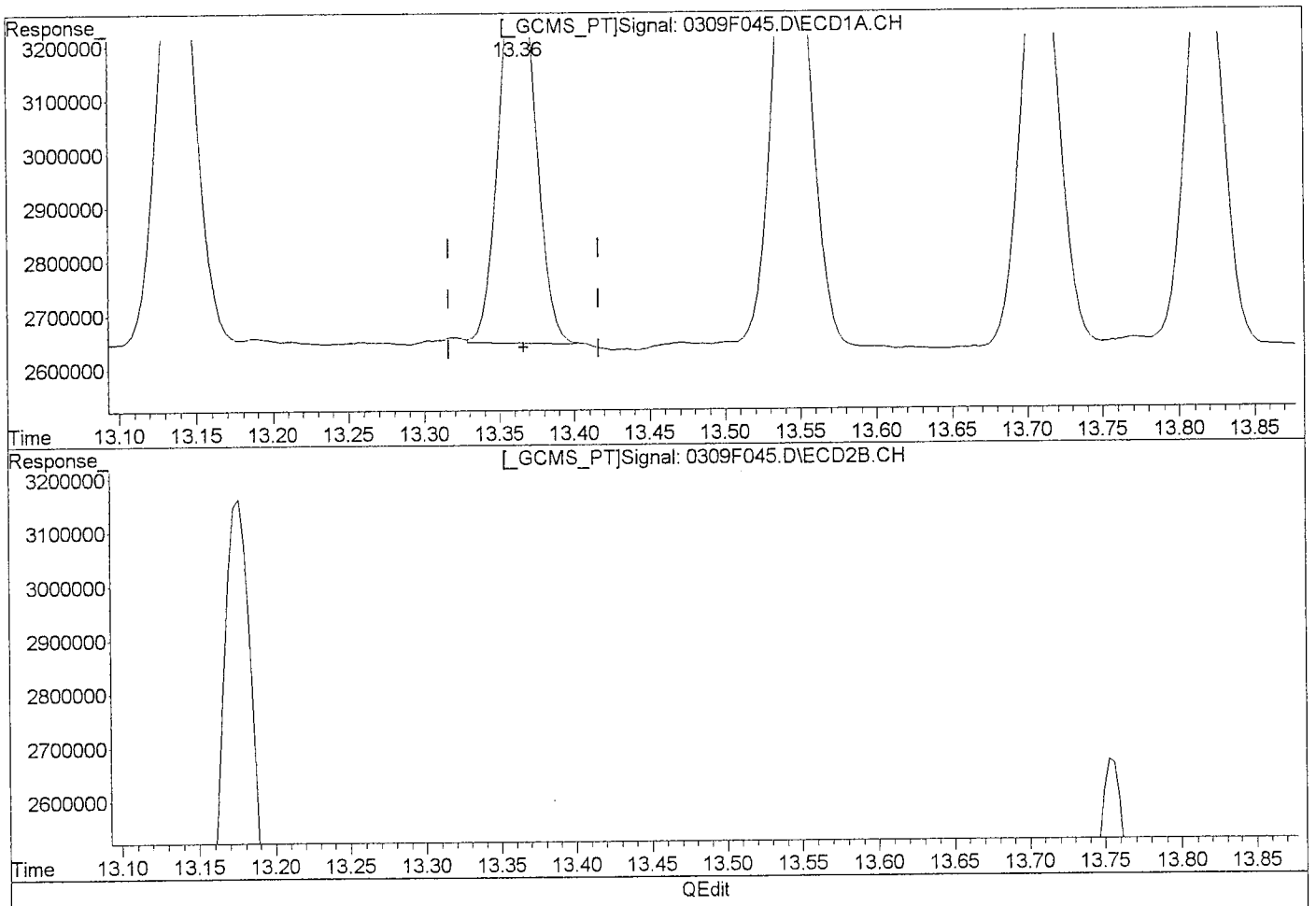
response 1430974

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:00:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.36min 4.539ug/L m

response 1249629

(18) 4,4'-DDD #2

12.34min 4.750ug/L

response 1430974

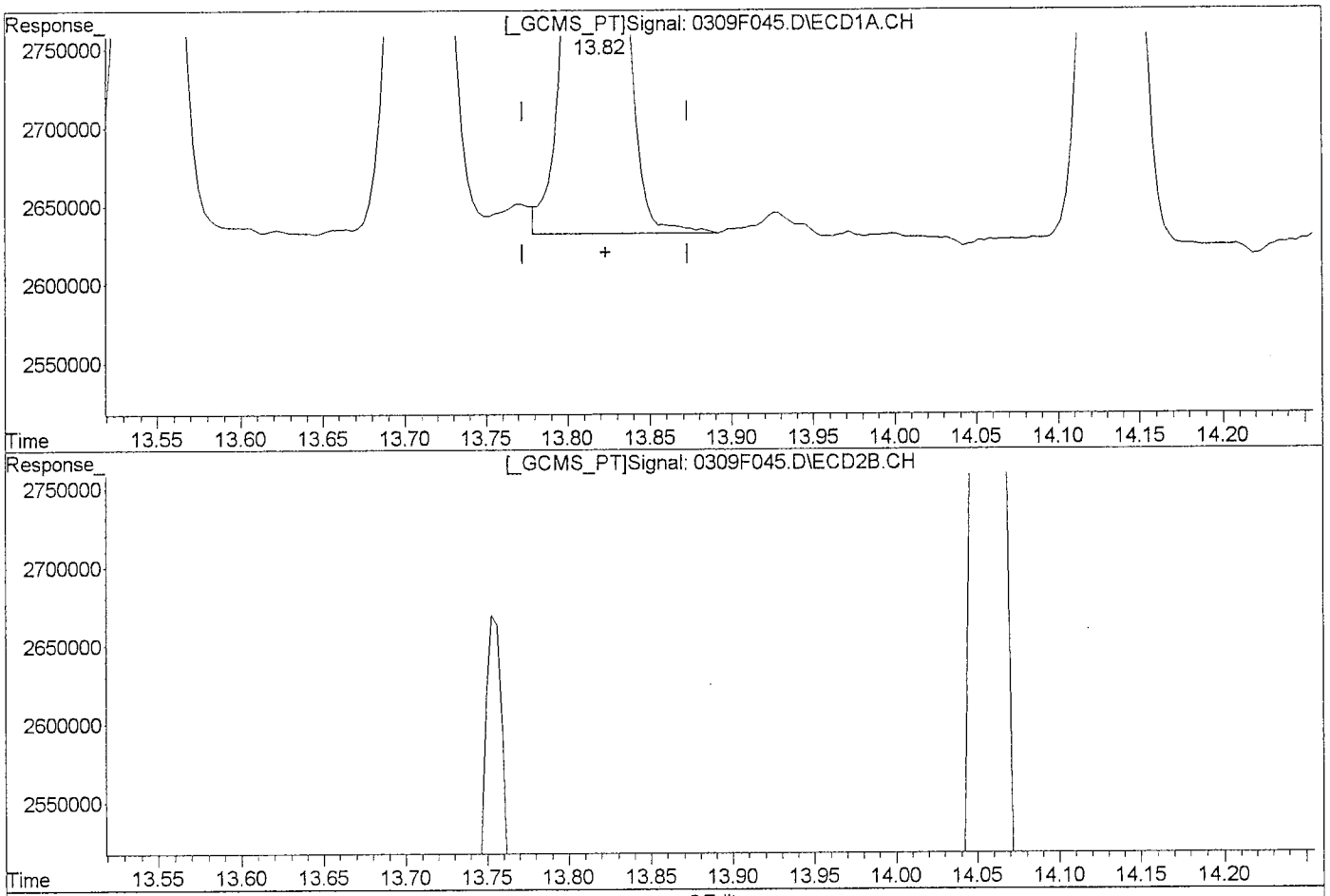
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:00:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(21) 4,4'-DDT

13.82min 4.782ug/L

response 1361683

(21) 4,4'-DDT #2

12.74min 4.837ug/L

response 1589008

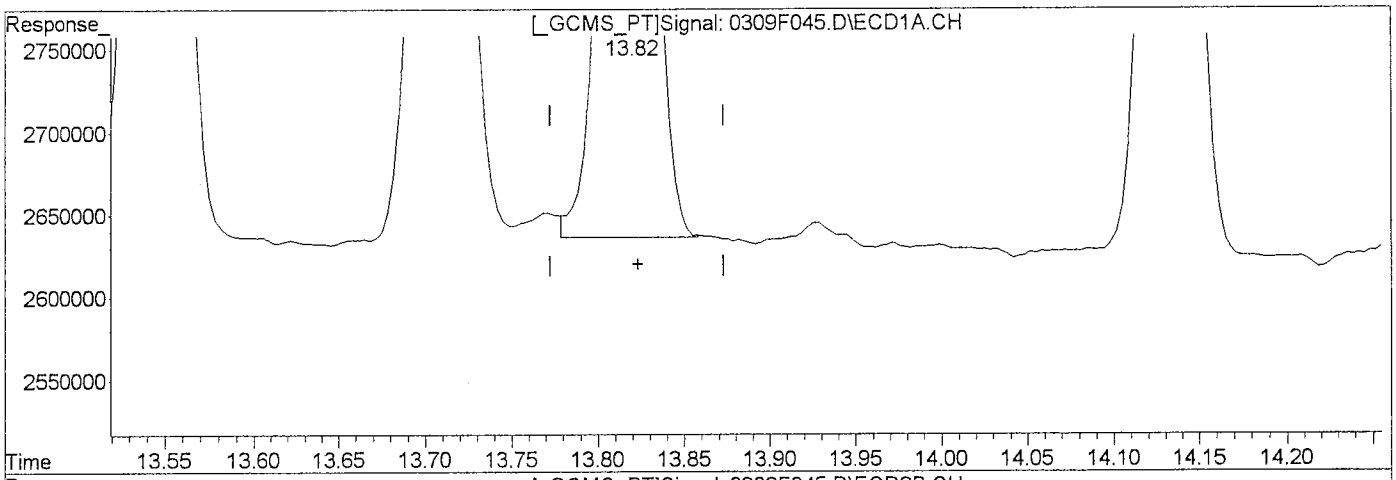
(+) = Expected Retention Time

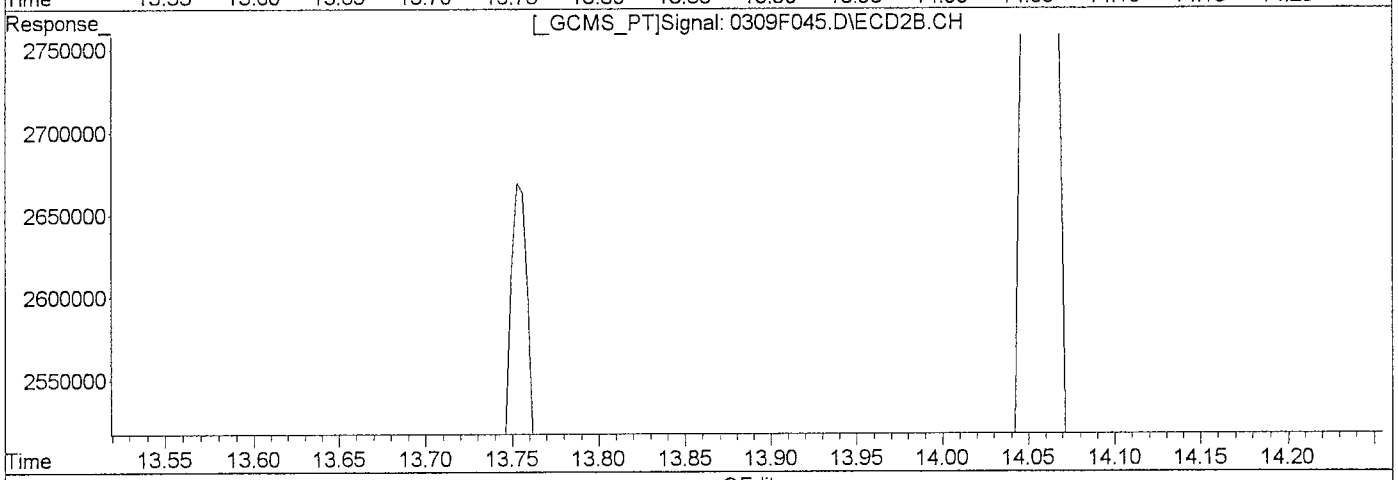
0309F045.D 030907-8081.M Mon Mar 12 08:00:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

13.82min 4.692ug/L m

response 1335813

(21) 4,4'-DDT #2

12.74min 4.837ug/L

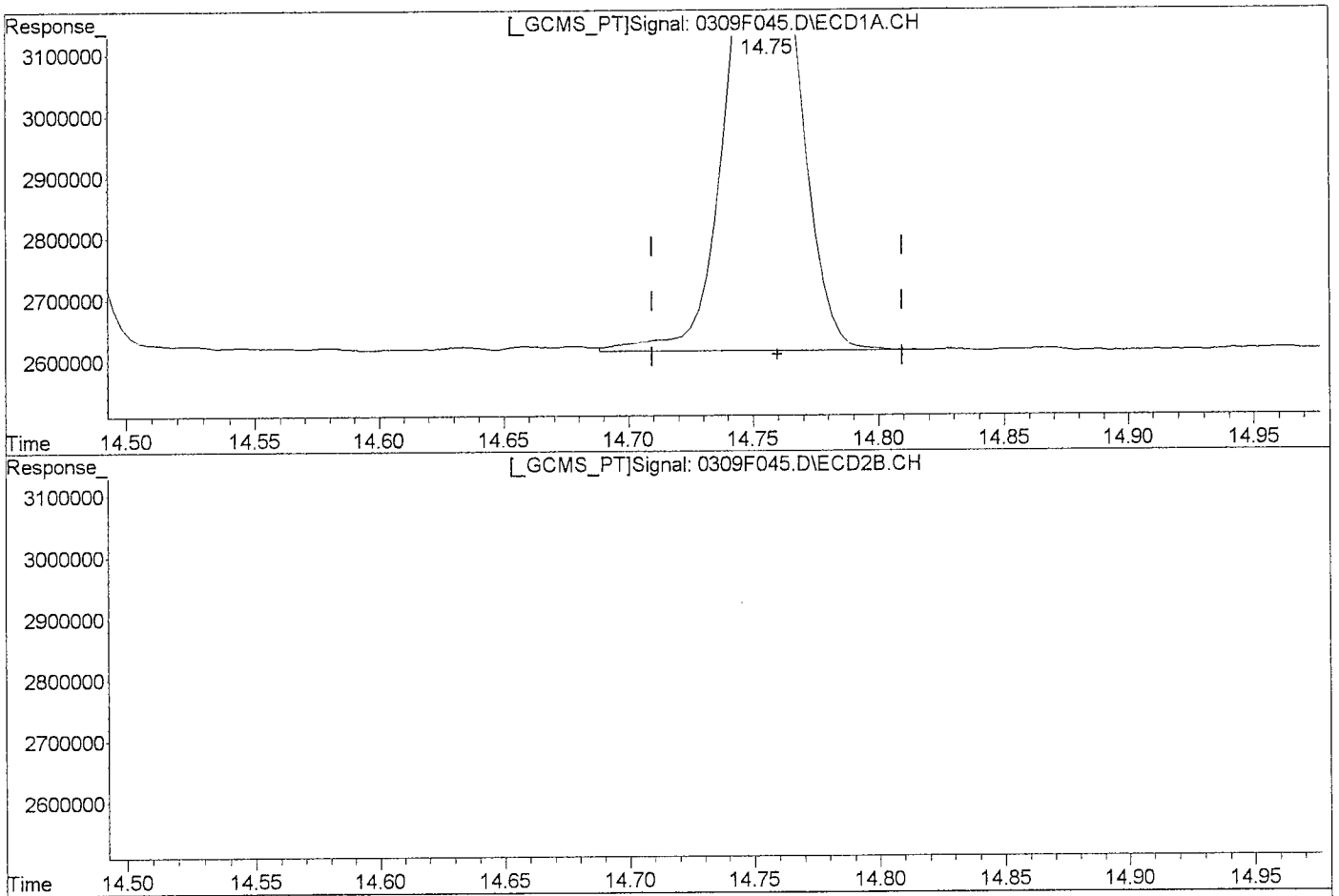
response 1589008

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:00:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(22) Endrin Ketone

14.75min 5.071ug/L

response 1677566

(22) Endrin Ketone #2

14.06min 5.105ug/L

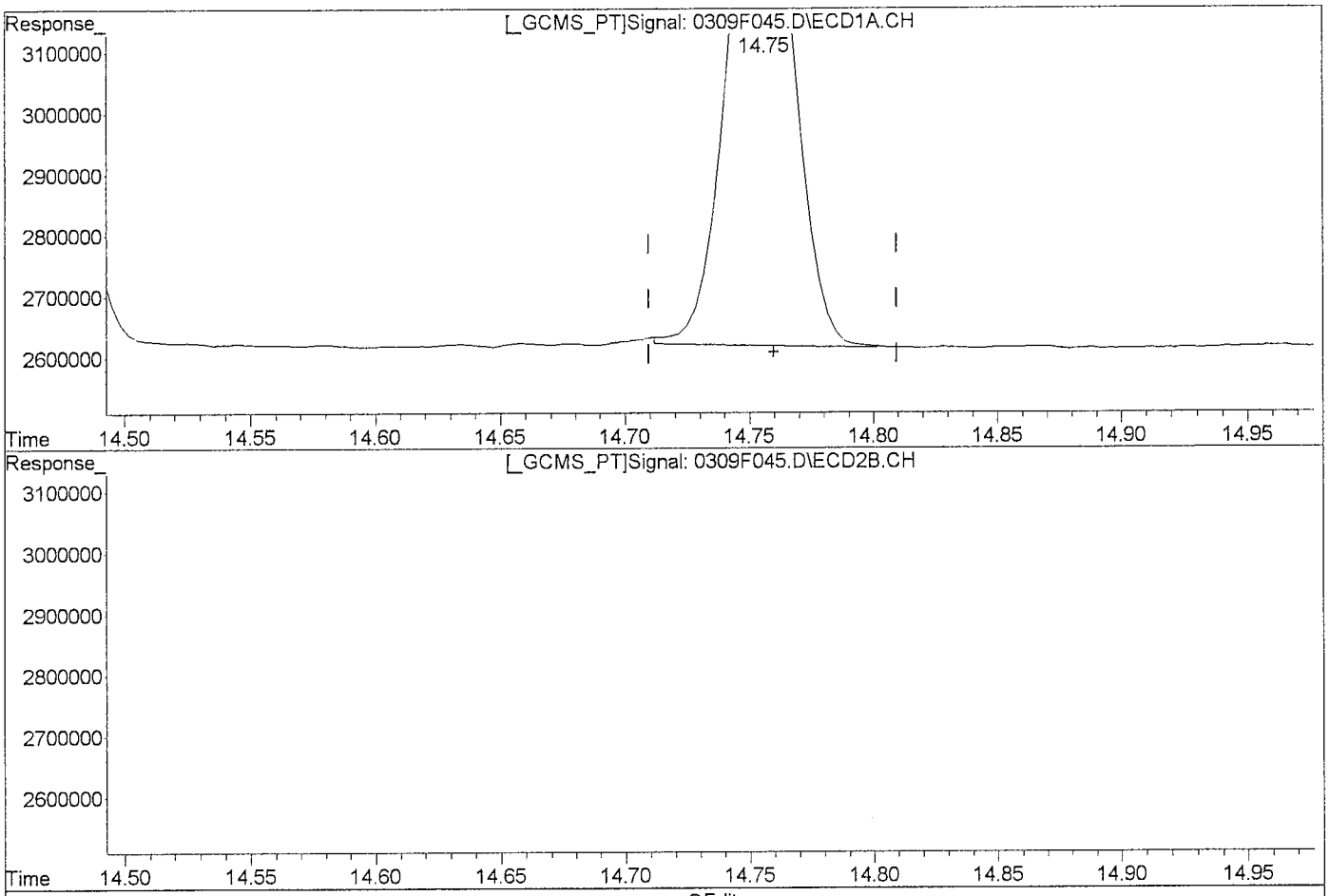
response 2050196

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(22) Endrin Ketone

14.75min 4.952ug/L m

response 1638116

(22) Endrin Ketone #2

14.06min 5.105ug/L

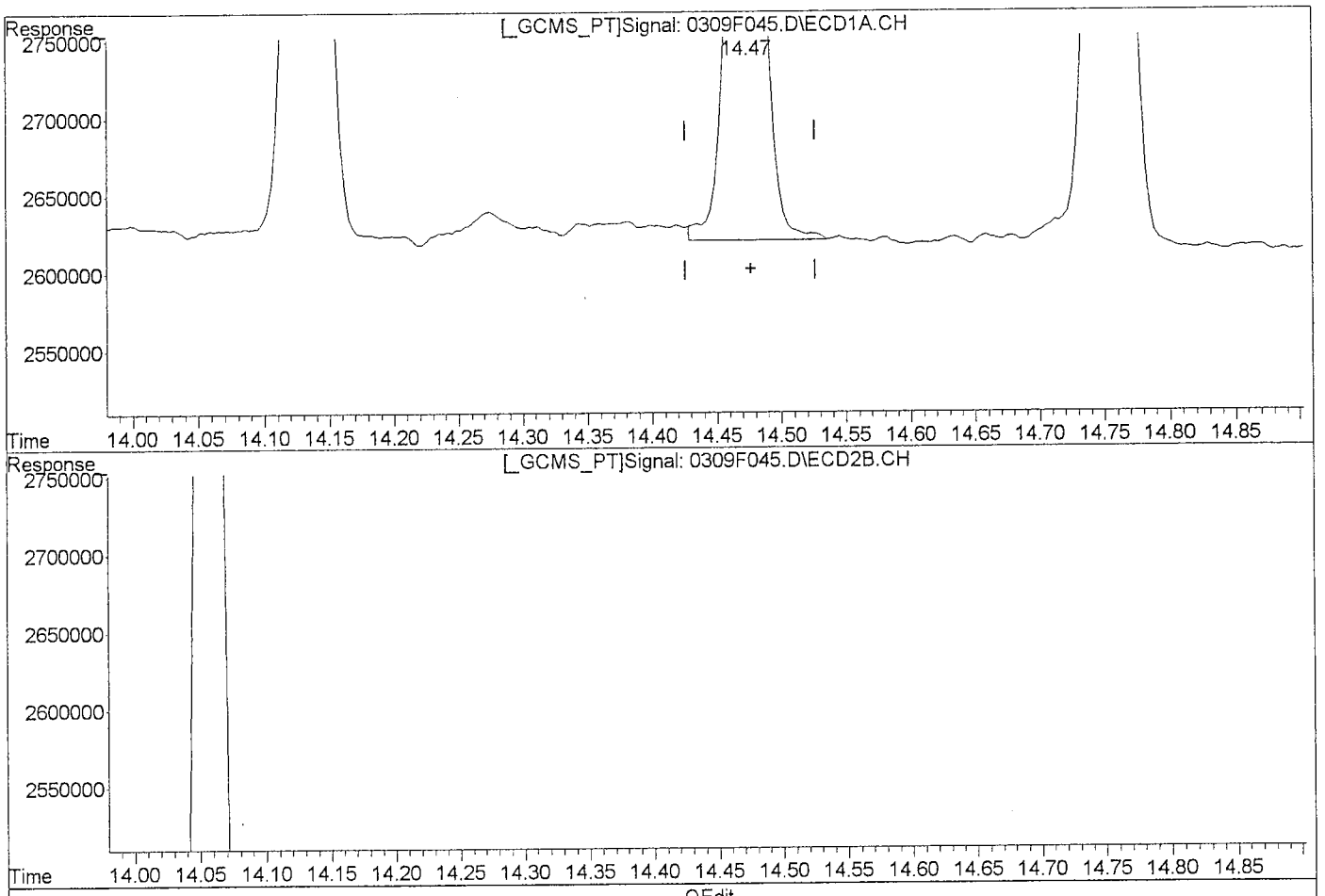
response 2050196

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:08 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(23) Methoxychlor

14.47min 5.042ug/L

response 817577

(23) Methoxychlor #2

13.75min 5.152ug/L

response 970612

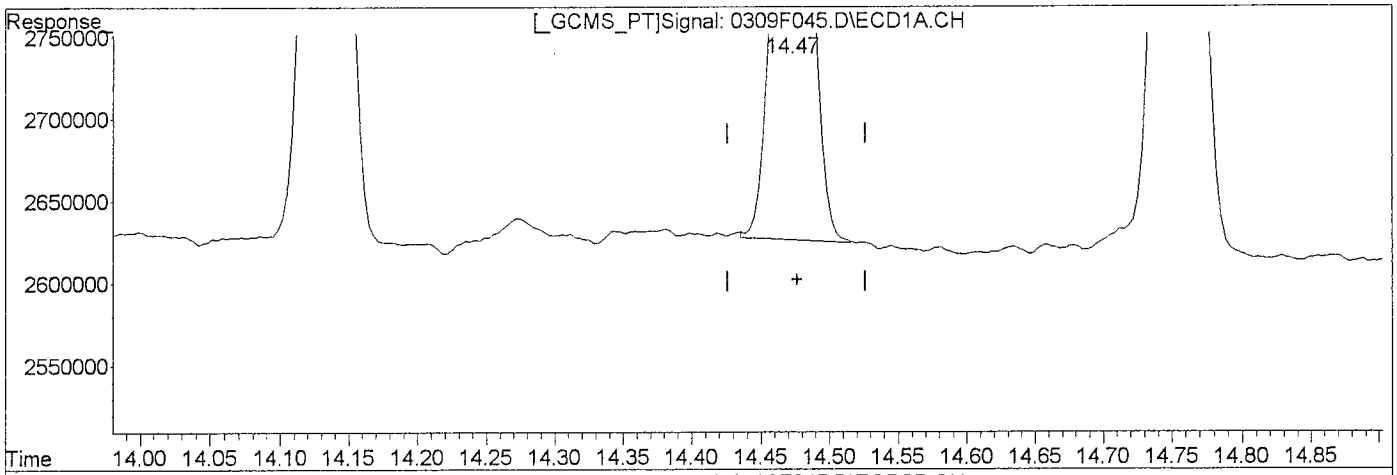
(+) = Expected Retention Time

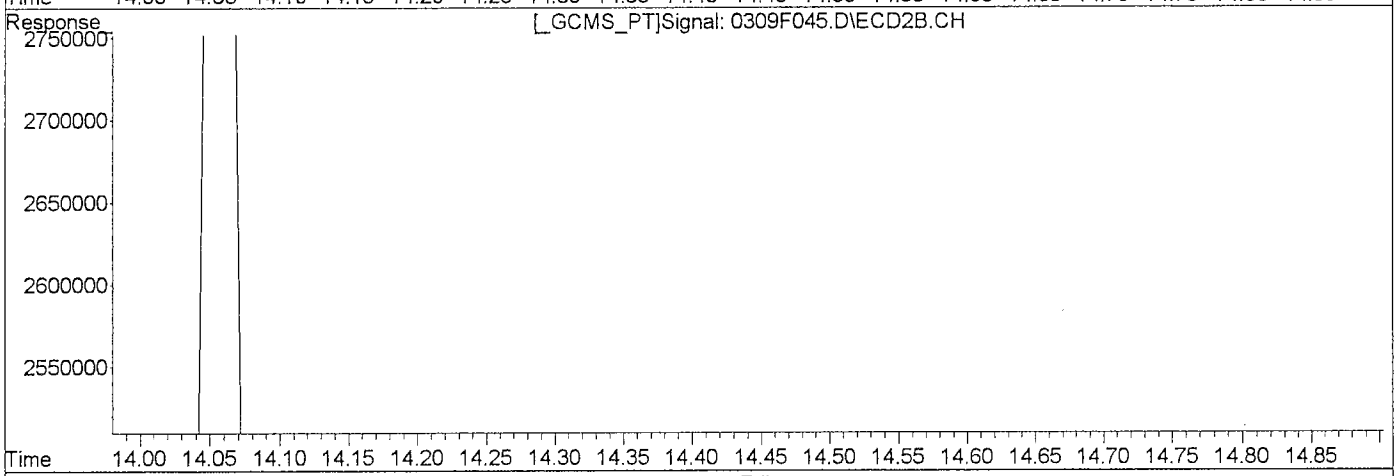
0309F045.D 030907-8081.M Mon Mar 12 08:01:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.47min 4.832ug/L m

response 783574

(23) Methoxychlor #2

13.75min 5.152ug/L

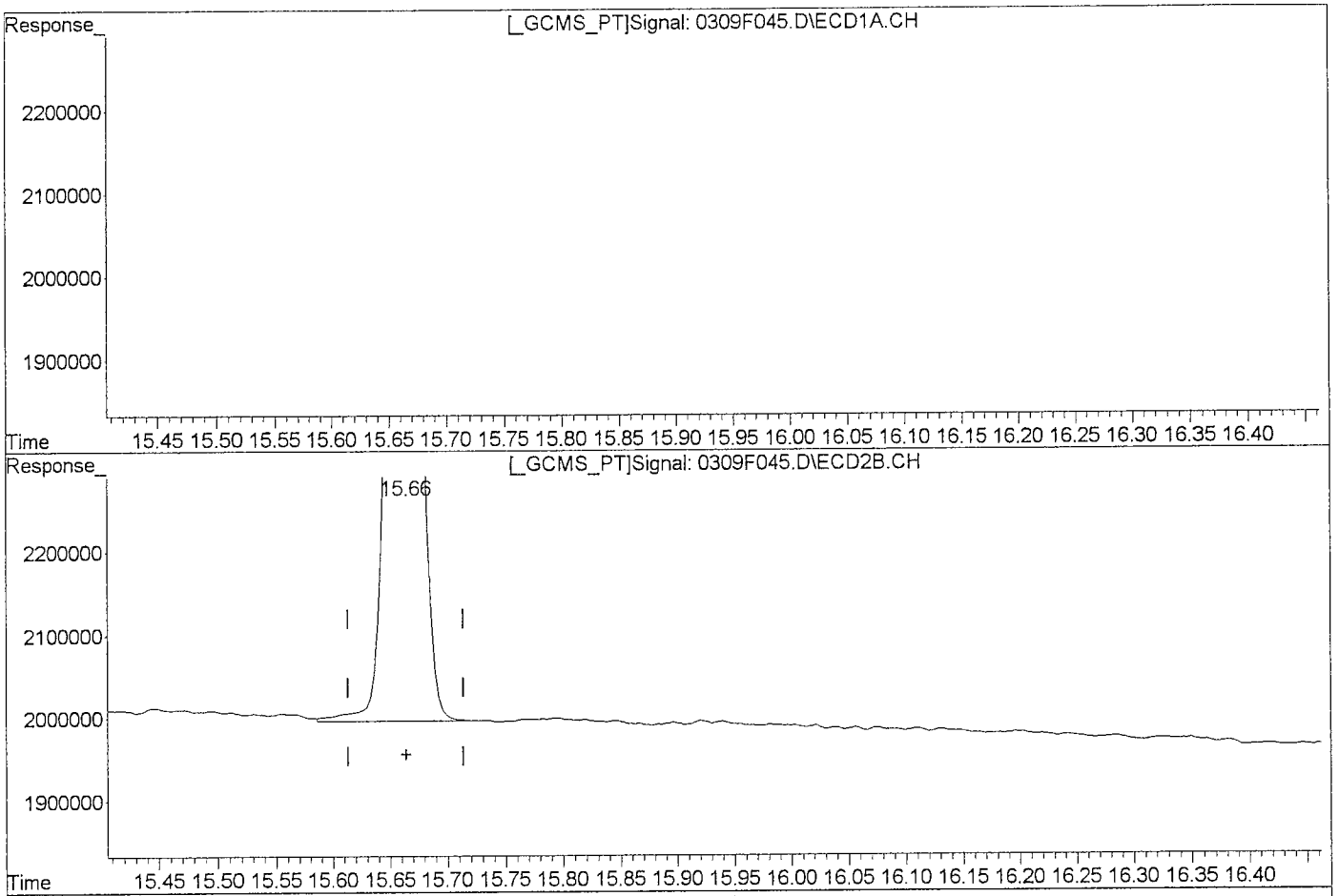
response 970612

(+) = Expected Retention Time
0309F045.D 030907-8081.M Mon Mar 12 08:01:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(24) Decachlorobiphenyl (s)

16.91min 5.468ug/L

response 1691694

(24) Decachlorobiphenyl #2 (s)

15.66min 5.565ug/L

response 2145164

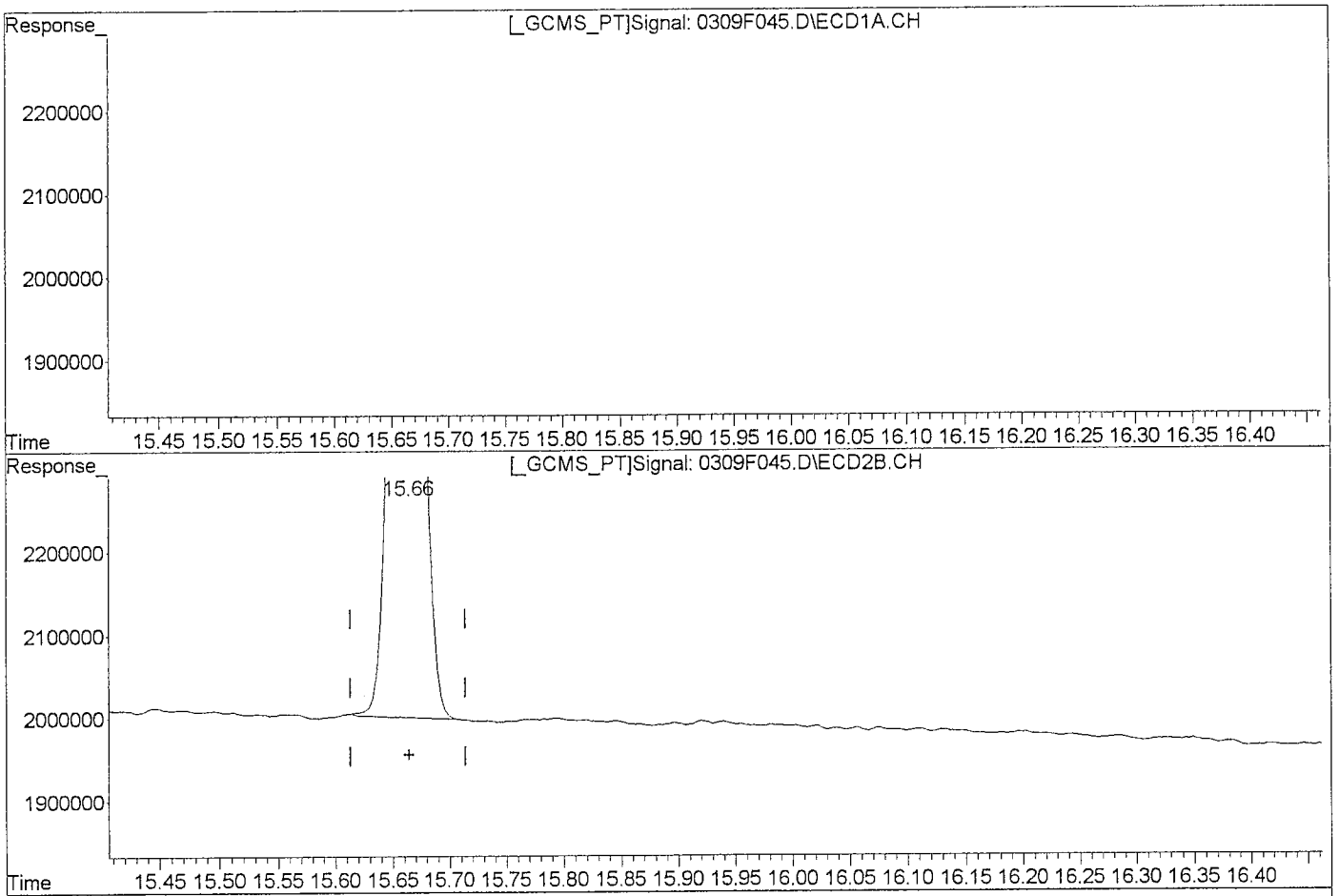
(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:01:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F045.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\030907\0309F045.D\ECD2B.CH
Acq On : 10 Mar 2007 12:26 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(24) Decachlorobiphenyl (s)

16.91min 5.468ug/L

response 1691694

(24) Decachlorobiphenyl #2 (s)

15.66min 5.461ug/L m

response 2104972

(+) = Expected Retention Time

0309F045.D 030907-8081.M Mon Mar 12 08:01:40 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:01 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.10	7079111	6514173	18.471	18.837
24)	s	Decachlorobiphen	16.90	15.66	6067149	7594676	19.609	19.703
		Target Compounds						
2)		alpha-BHC	9.05	8.12	8775110	8441959	17.841	18.290
3)		Hexachlorobenzen	9.18	7.96	8065238	7679834	18.519	19.068m
4)		beta-BHC	10.06	9.14	4144186	4033443	18.621	18.594
5)		gamma-BHC (Linda	9.59	8.73	8305715	8064160	17.939	18.441
6)		delta-BHC	10.47	9.58	7685578	7512923	18.468	18.832
7)		Heptachlor	10.56	9.30	8310944	8268825	18.219	18.668
8)		Aldrin	11.07	9.78	7188210	7362197	18.033	18.650
9)		Isodrin	11.59	10.43	6088917	6292053	18.316	18.856
10)		Heptachlor Epoxi	11.77	10.64	7184256	7326227	18.418	18.919
11)		gamma-Chlordane	12.26	10.99	7042921	7338147	18.219	18.819
12)		Endosulfan I	12.39	11.22	6386177	6730853	18.781	19.316
13)		alpha-Chlordane	12.33	11.14	6941161	7243800	18.461	18.933
14)		Dieldrin	12.78	11.65	6567021	7094605	18.171	18.581
15)		4,4'-DDE	12.57	11.47	6248775	6730163	17.991	18.488m
16)		Endrin	13.13	12.13	5546970	6309096	17.884	18.546
17)		Endosulfan II	13.54	12.53	5985661	6618369	19.266	19.674
18)		4,4'-DDD	13.36	12.33	5061387	5603770	18.384	18.602
19)		Endrin Aldehyde	13.70	12.87	5134207	5752070	19.083	19.442
20)		Endosulfan Sulfa	14.13	13.17	5656108	6692518	18.884	19.219
21)		4,4'-DDT	13.81	12.74	5224539	6134802	18.349	18.674
22)		Endrin Ketone	14.75	14.05	6384717	7819038	19.300	19.470
23)		Methoxychlor	14.47	13.75	2989328	3565827	18.434m	18.928

Author

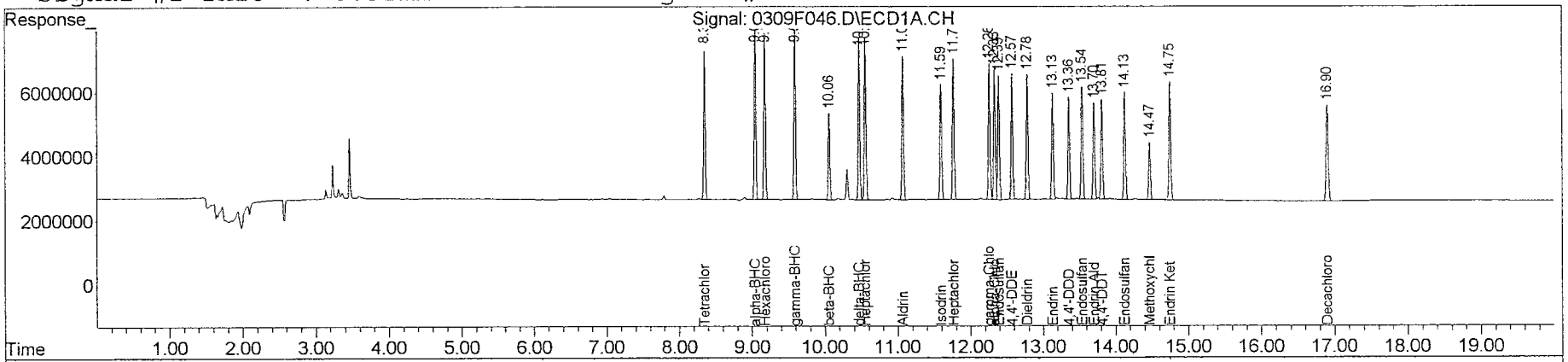
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

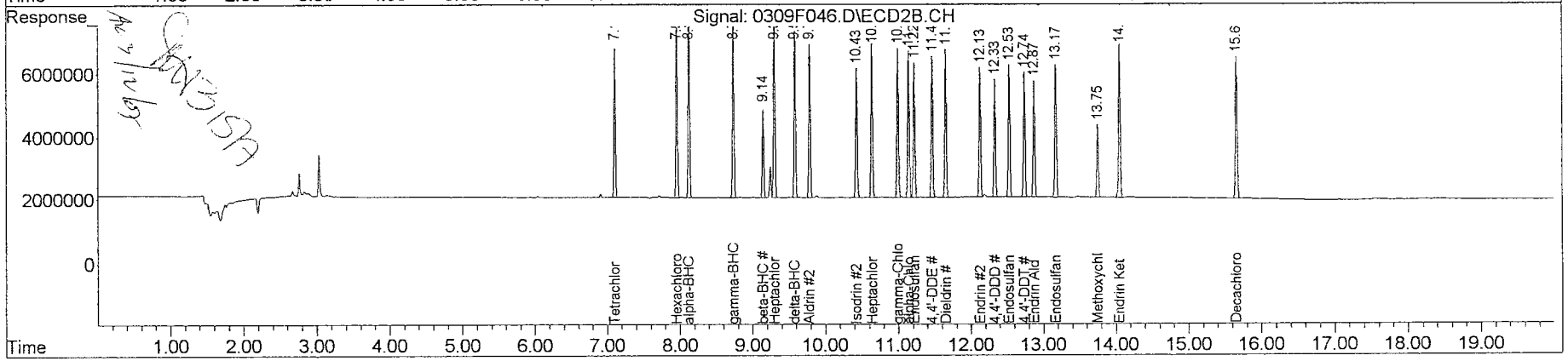
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



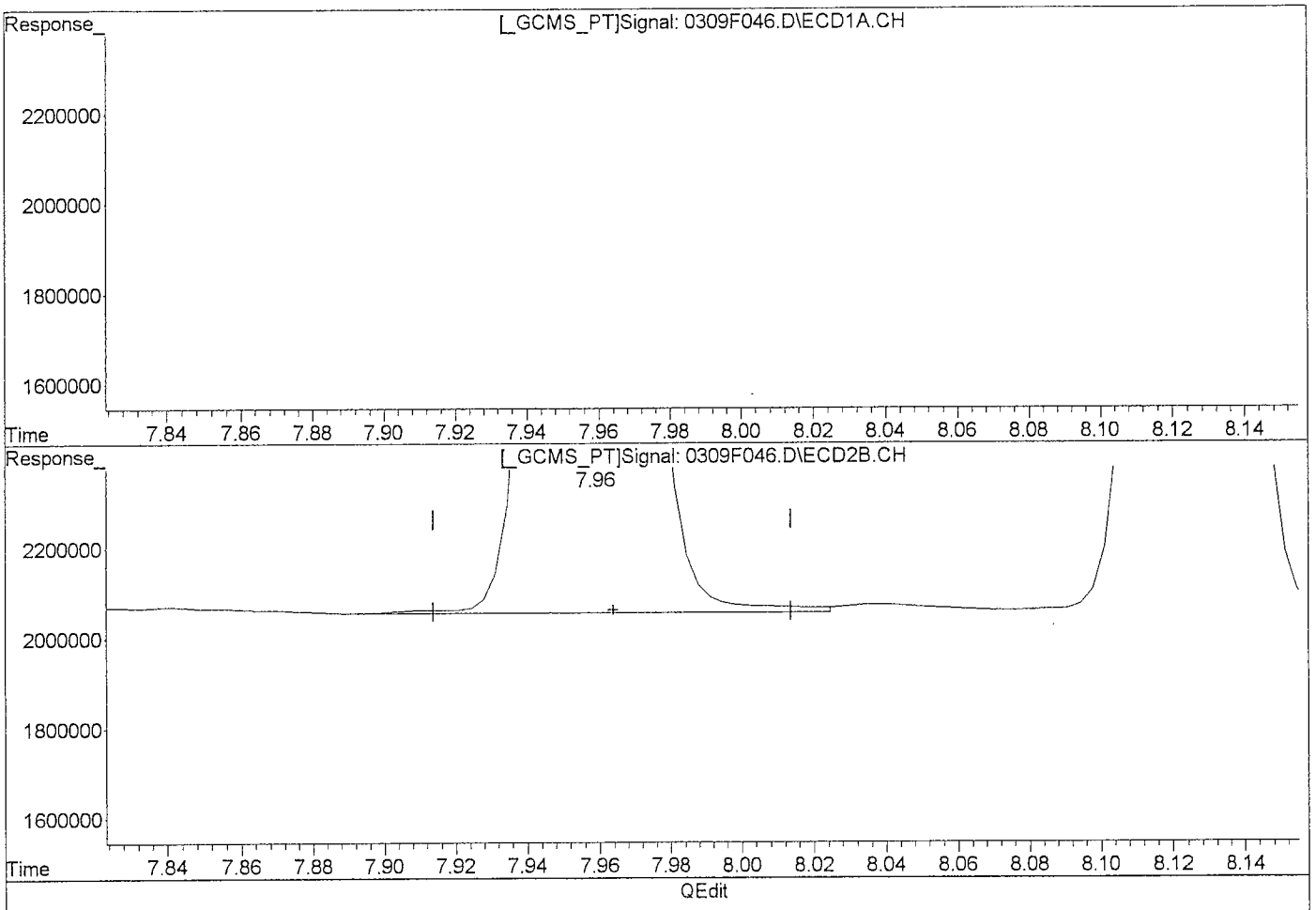


698

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.18min 18.519ug/L

response 8065238

(3) Hexachlorobenzene #2

7.96min 19.200ug/L

response 7732957

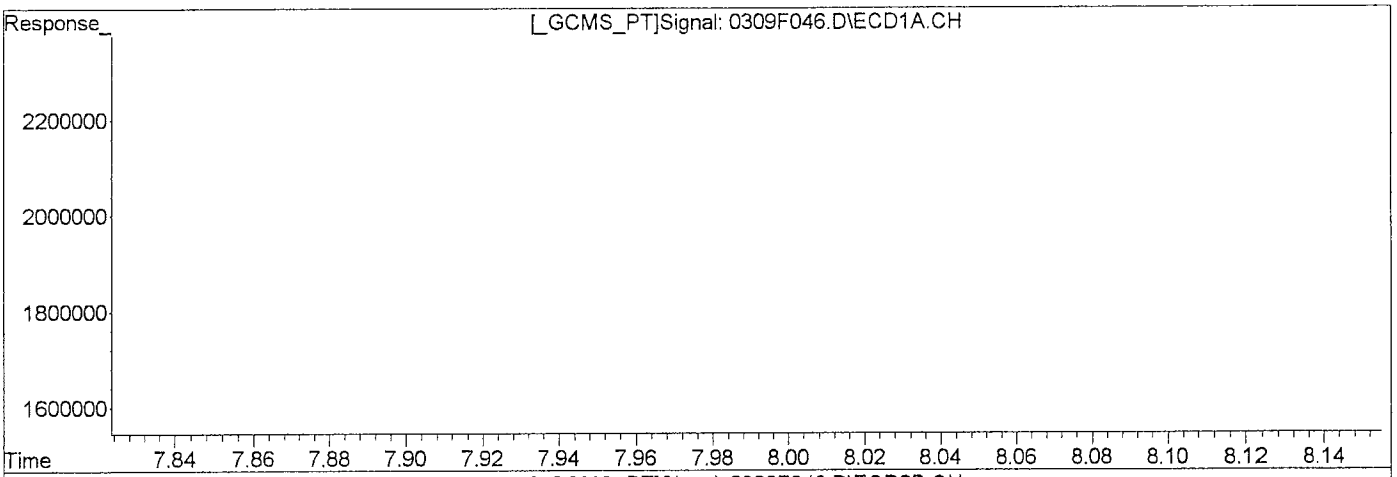
(+) = Expected Retention Time

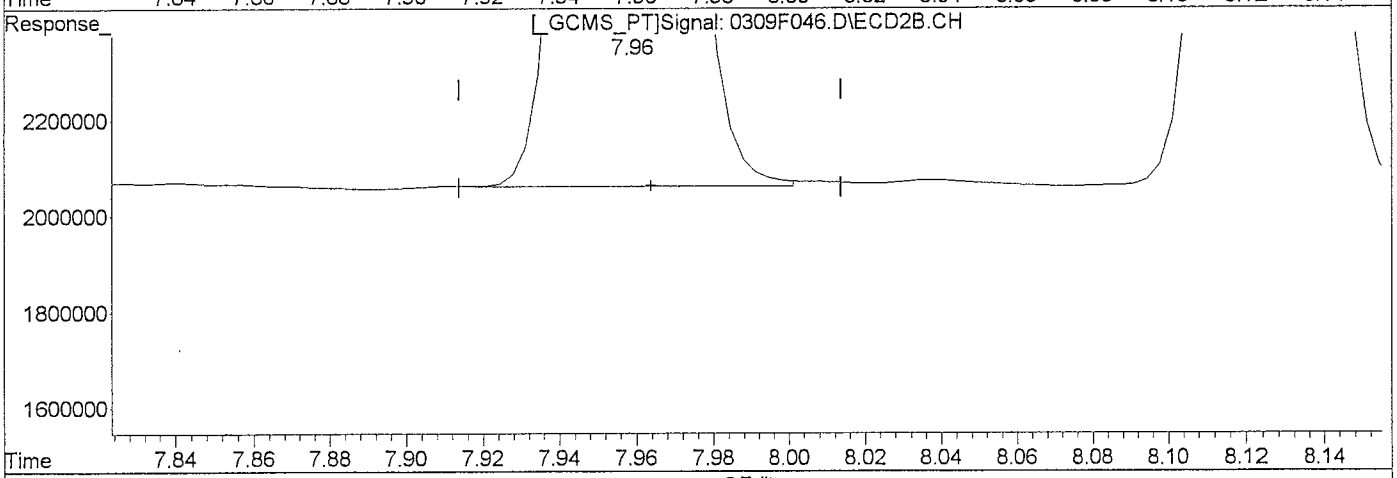
0309F046.D 030907-8081.M Mon Mar 12 08:02:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(3) Hexachlorobenzene

9.18min 18.519ug/L

response 8065238

(3) Hexachlorobenzene #2

7.96min 19.068ug/L m

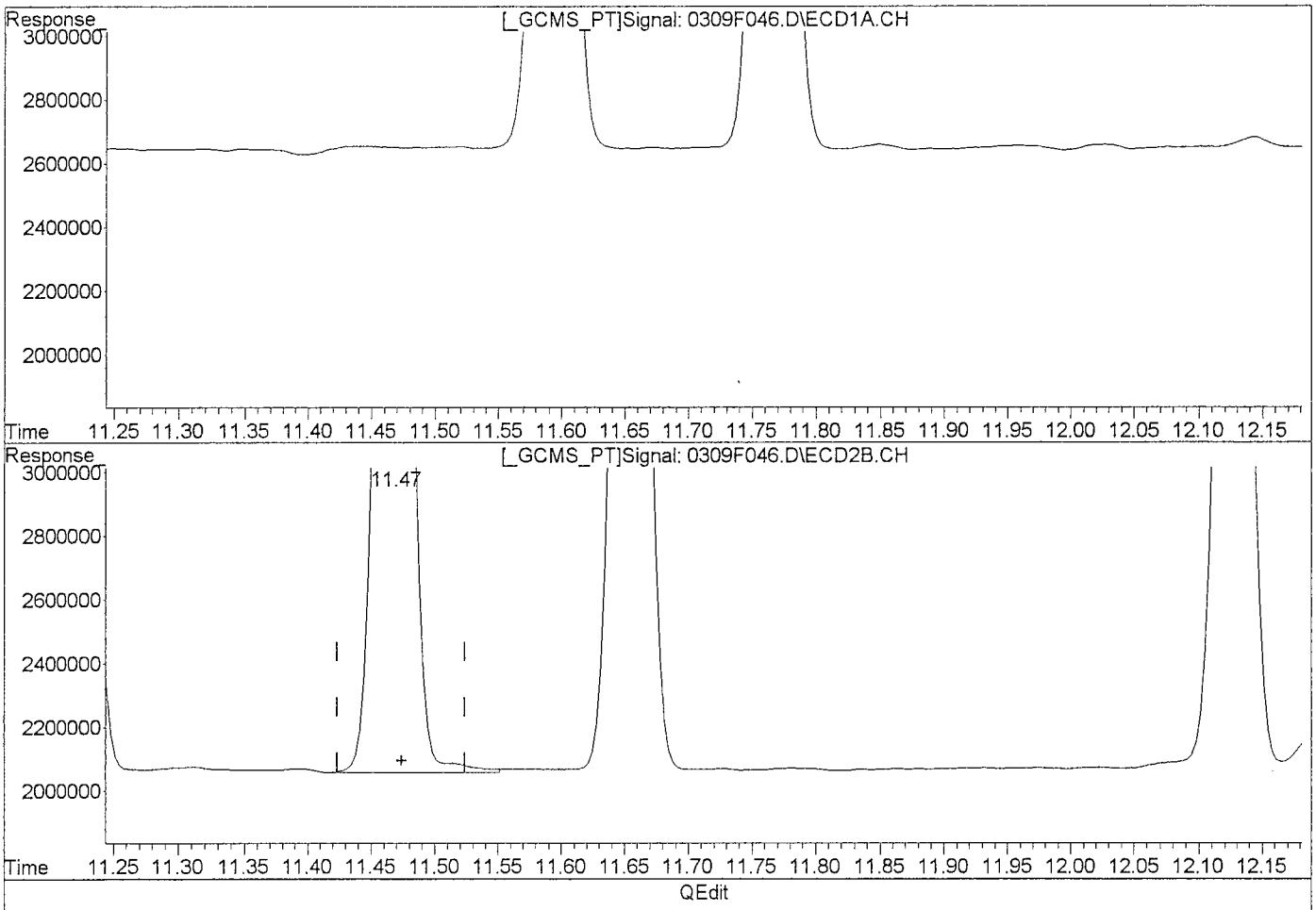
response 7679834

(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:02:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 17.991ug/L

response 6248775

(15) 4,4'-DDE #2

11.47min 18.608ug/L

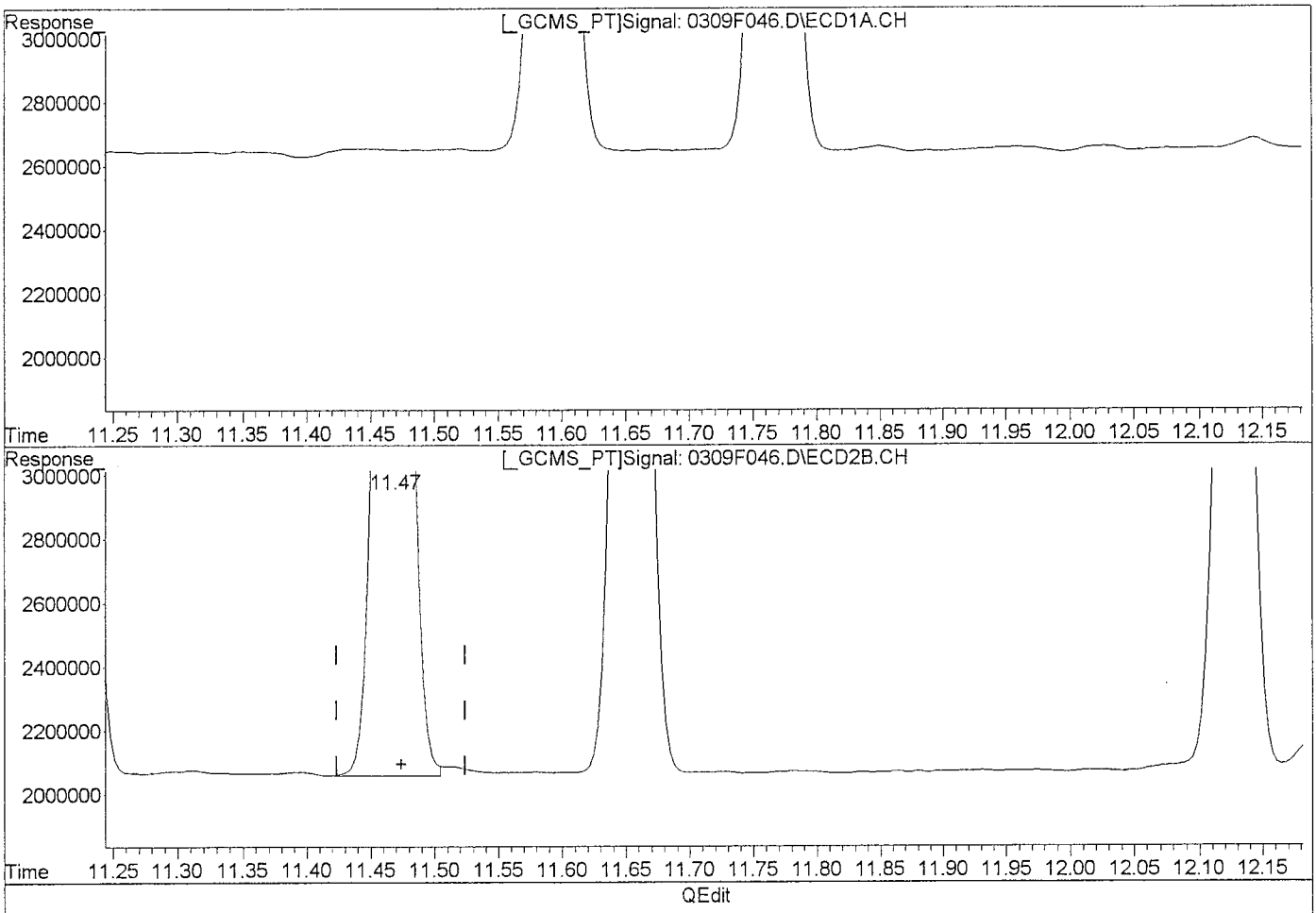
response 6773847

(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:03:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.57min 17.991ug/L

response 6248775

(15) 4,4'-DDE #2

11.47min 18.488ug/L m

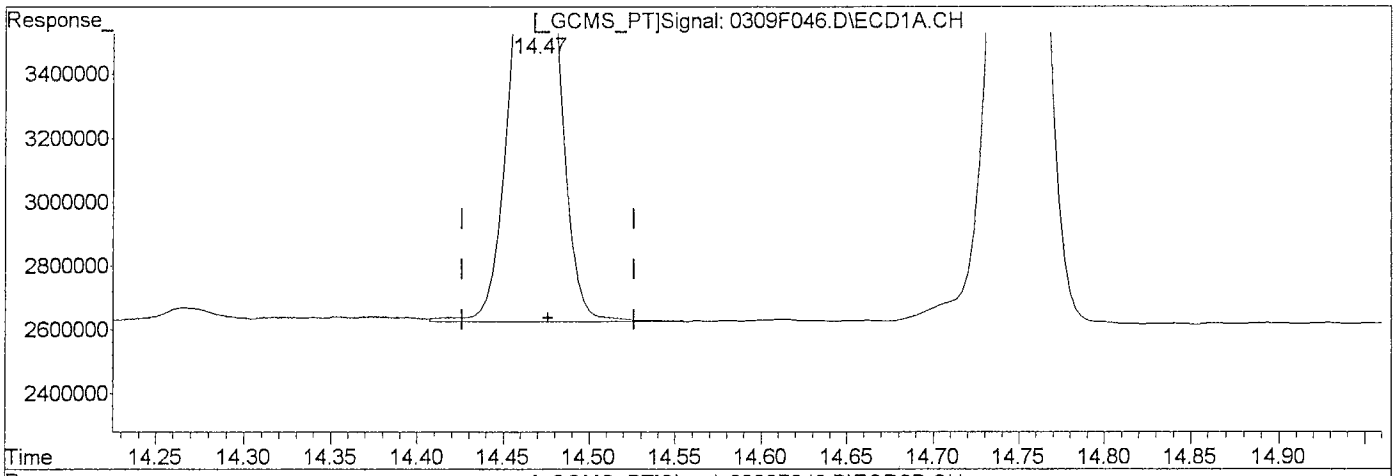
response 6730163

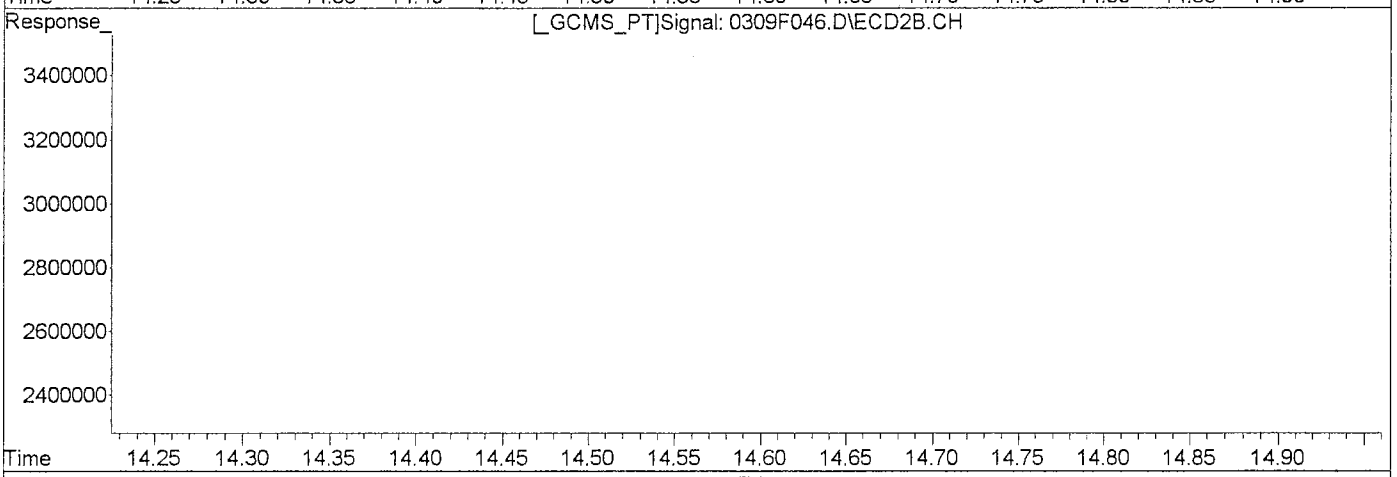
(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:03:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.47min 18.784ug/L

response 3046130

(23) Methoxychlor #2

13.75min 18.928ug/L

response 3565827

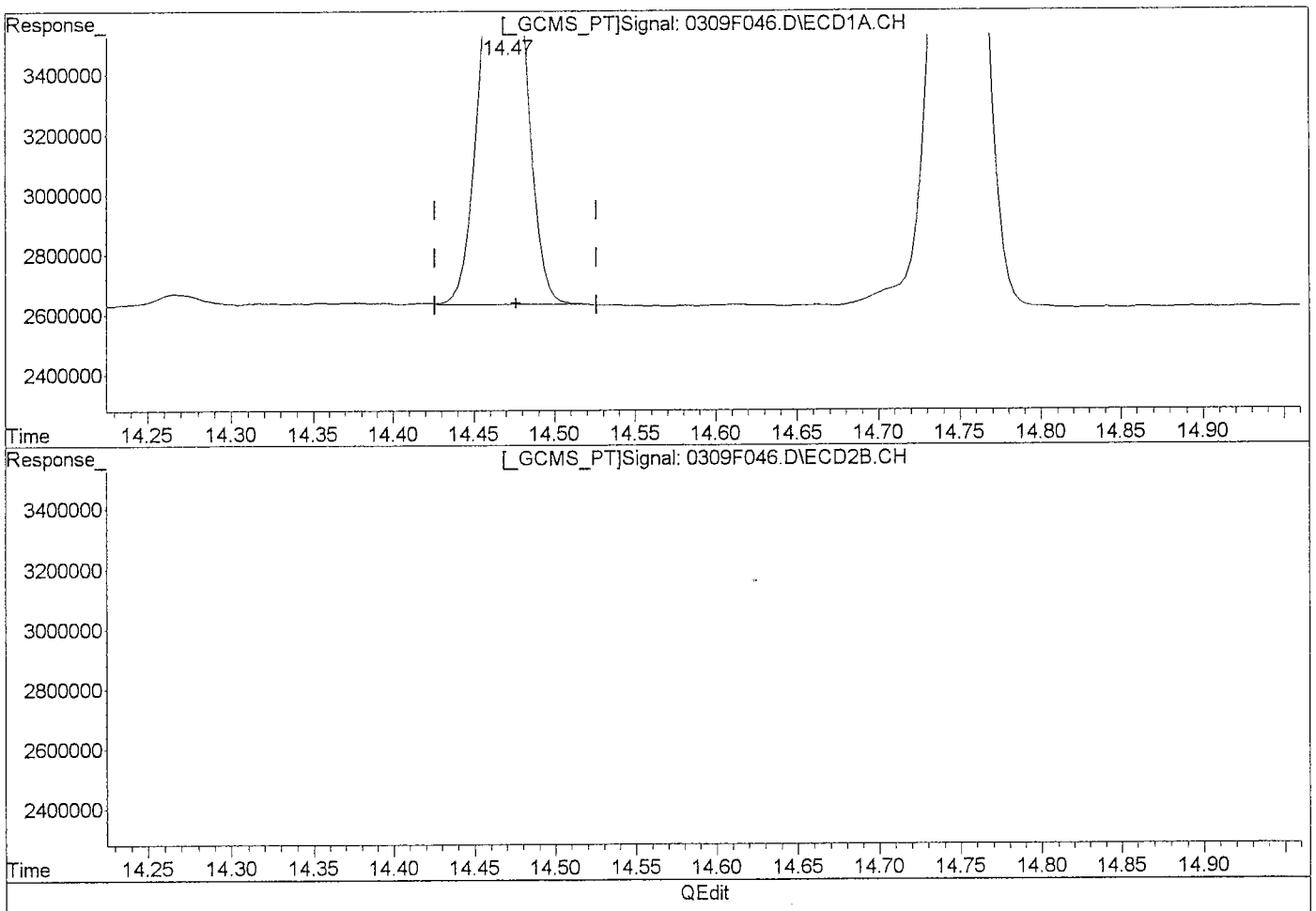
(+) = Expected Retention Time

0309F046.D 030907-8081.M Mon Mar 12 08:04:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F046.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\030907\0309F046.D\ECD2B.CH
Acq On : 10 Mar 2007 12:53 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



QEdit

(23) Methoxychlor

14.47min 18.434ug/L m

response 2989328

(23) Methoxychlor #2

13.75min 18.928ug/L

response 3565827

(+) = Expected Retention Time
0309F046.D 030907-8081.M Mon Mar 12 08:04:42 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:03 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	18562663	16343657	48.434	47.260
24)	s	Decachlorobiphen	16.91	15.66	14876934	17669639	48.083	45.840
		Target Compounds						
2)		alpha-BHC	9.05	8.13	24450030	22563954	49.711	48.887
3)		Hexachlorobenzen	9.18	7.96	20343445	18509553	46.711	45.957
4)		beta-BHC	10.07	9.15	10653153	10640354	47.866	49.051
5)		gamma-BHC (Linda	9.60	8.74	22966171	21373388	49.604	48.875
6)		delta-BHC	10.48	9.59	18370545	17183414	44.143	43.073
7)		Heptachlor	10.56	9.30	22170369	21248962	48.601	47.972
8)		Aldrin	11.08	9.79	19813668	19284462	49.707	48.852
9)		Isodrin	11.60	10.43	16347885	16041936	49.177	48.074
10)		Heptachlor Epoxi	11.77	10.65	19040611	18577427	48.813	47.973
11)		gamma-Chlordane	12.27	11.00	18909034	18771947	48.914	48.141
12)		Endosulfan I	12.40	11.23	15166940	15250873	44.603	43.767
13)		alpha-Chlordane	12.34	11.15	18300170	18325792	48.672	47.897
14)		Dieldrin	12.79	11.66	17956176	18471948	49.686	48.378
15)		4,4'-DDE	12.58	11.47	17323274	17795727	49.875	48.886m
16)		Endrin	13.14	12.13	15109869	16245537	48.716	47.756
17)		Endosulfan II	13.55	12.54	14799507	15530221	47.635	46.166
18)		4,4'-DDD	13.37	12.34	14014961	14786667	50.904	49.086
19)		Endrin Aldehyde	13.71	12.88	13258739	14095959	49.280	47.644
20)		Endosulfan Sulfa	14.14	13.18	14780041	16533521	49.345	47.479
21)		4,4'-DDT	13.82	12.75	14313890	15926384	50.272	48.479
22)		Endrin Ketone	14.76	14.06	16801211	19497321	50.788	48.550
23)		Methoxychlor	14.48	13.76	7895633	8750612	48.689	46.450

Ac 3/12/07

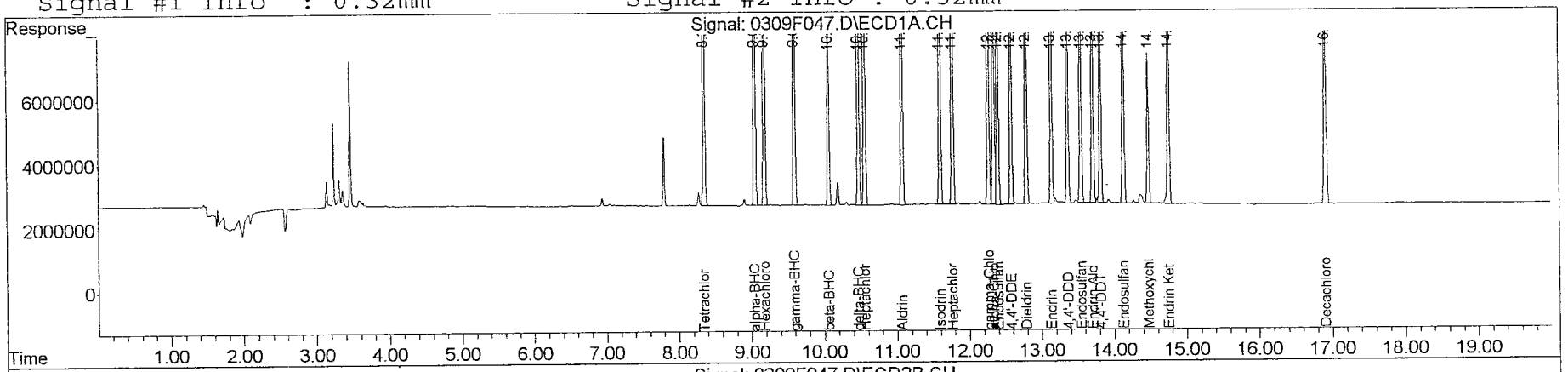
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

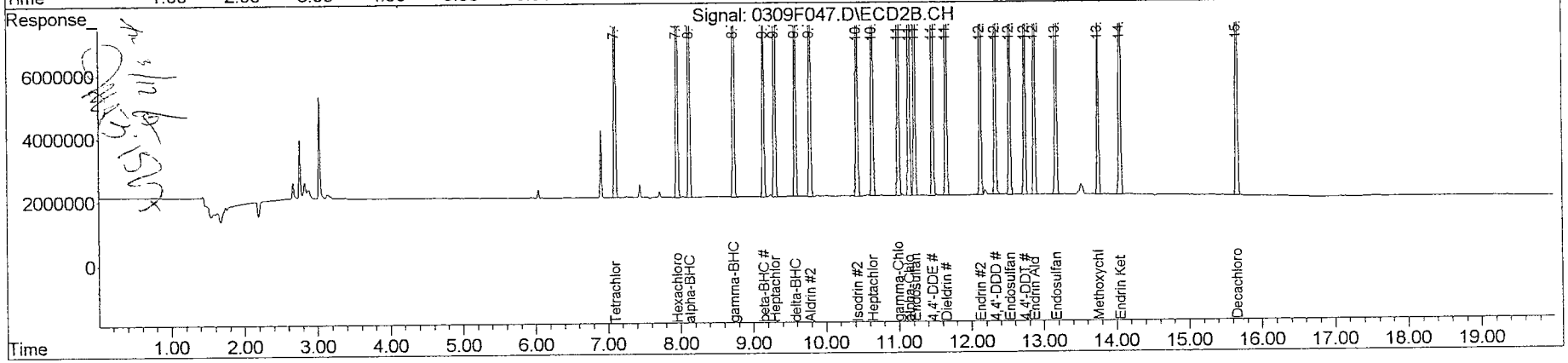
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:07 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

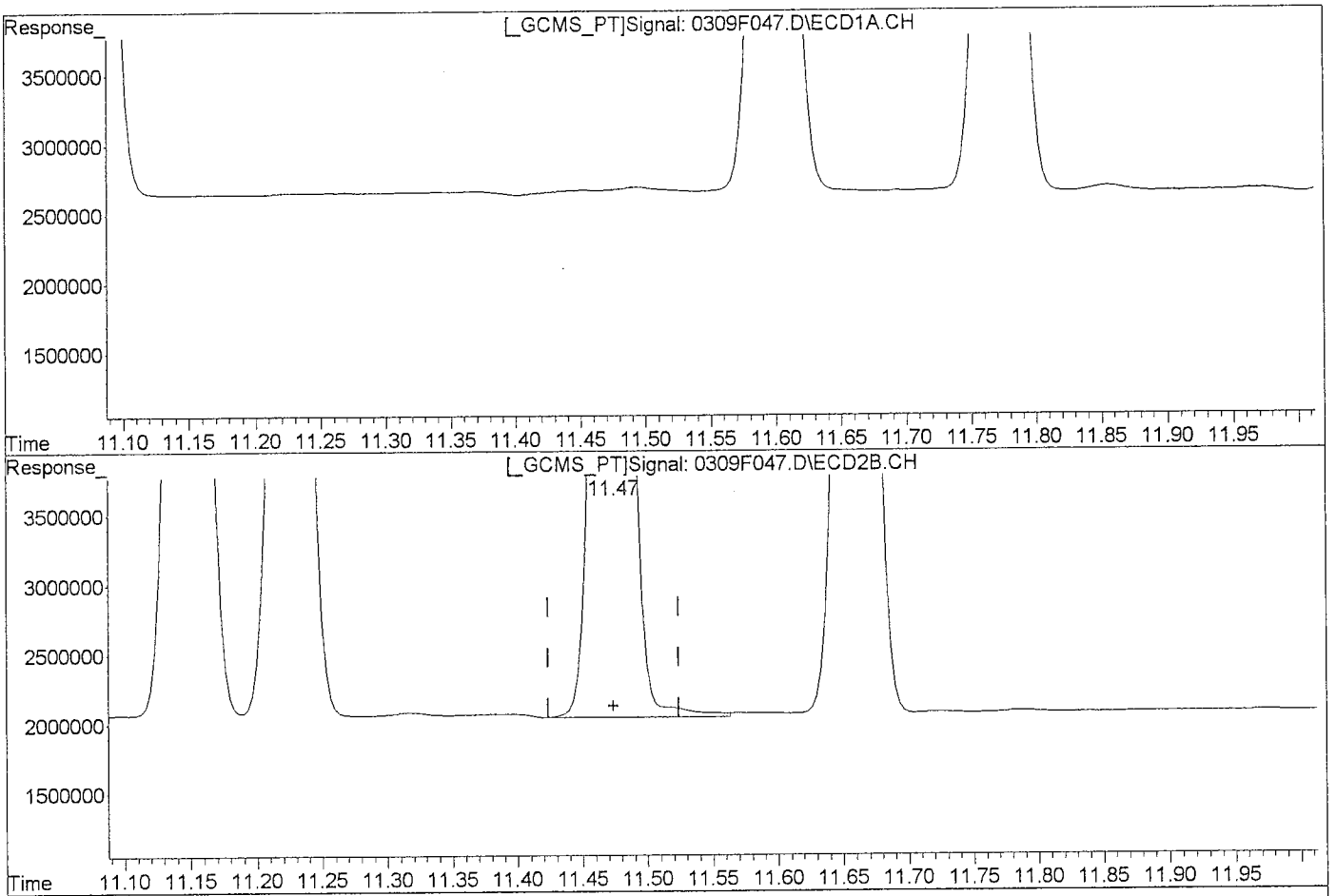




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 49.875ug/L

response 17323274

(15) 4,4'-DDE #2

11.47min 49.324ug/L

response 17955092

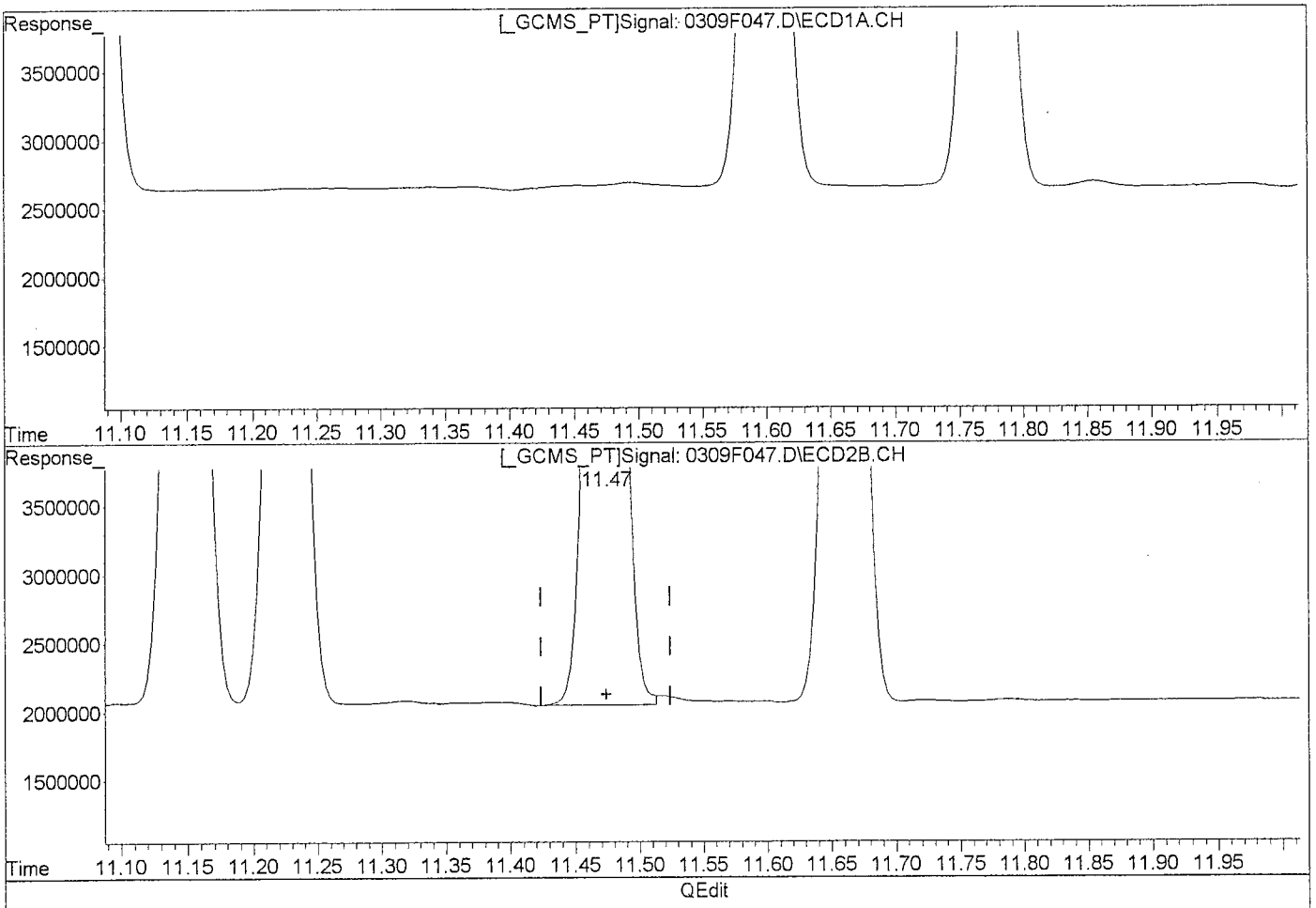
(+) = Expected Retention Time

0309F047.D 030907-8081.M Mon Mar 12 08:07:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F047.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\030907\0309F047.D\ECD2B.CH
Acq On : 10 Mar 2007 1:20 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-88A Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.58min 49.875ug/L

response 17323274

(15) 4,4'-DDE #2

11.47min 48.886ug/L m

response 17795727

(+) = Expected Retention Time
0309F047.D 030907-8081.M Mon Mar 12 08:07:31 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F048.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\030907\0309F048.D\ECD2B.CH
Acq On : 10 Mar 2007 1:46 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:04 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	35501930	31480395	92.632	91.031
24)	s	Decachlorobiphen	16.91	15.66	26949276	32611604	87.101	84.603
		Target Compounds						
2)		alpha-BHC	9.05	8.13	50309272	46757425	102.288	101.304
3)		Hexachlorobenzen	9.18	7.96	38001227	34807061	87.256	86.421
4)		beta-BHC	10.06	9.15	19984362	18530476	89.793	85.423
5)		gamma-BHC (Linda	9.59	8.74	45771960	42850816	98.862	97.988
6)		delta-BHC	10.48	9.59	43557732	41222759	104.665	103.332
7)		Heptachlor	10.56	9.31	42141405	40883320	92.380	92.299
8)		Aldrin	11.07	9.79	38287231	37448723	96.053	94.867
9)		Isodrin	11.60	10.43	30736472	30444350	92.460	91.234
10)		Heptachlor Epoxi	11.77	10.65	35782209	35091770	91.732	90.618
11)		gamma-Chlordane	12.26	11.00	35908510	36002952	92.889	92.331
12)		Endosulfan I	12.39	11.23	31809046	32128528	93.545	92.202
13)		alpha-Chlordane	12.34	11.15	34454603	34827343	91.638	91.026
14)		Dieldrin	12.79	11.66	34447269	35574211	95.318	93.168
15)		4,4'-DDE	12.58	11.47	33271099	34516904	95.790	94.820
16)		Endrin	13.13	12.13	28946785	31299043	93.328	92.007
17)		Endosulfan II	13.54	12.53	29362157	31049815	94.508	92.301
18)		4,4'-DDD	13.36	12.34	26784917	28394312	97.287	94.258
19)		Endrin Aldehyde	13.71	12.88	24651240	26278631	91.623	88.821
20)		Endosulfan Sulfa	14.13	13.17	27722392	31075830	92.555	89.241
21)		4,4'-DDT	13.81	12.74	27621975	30689645	97.011	93.418
22)		Endrin Ketone	14.75	14.05	31804096	36634133	96.139	91.222
23)		Methoxychlor	14.47	13.75	14611082	16110117	90.100	85.516

AK 3/12/07

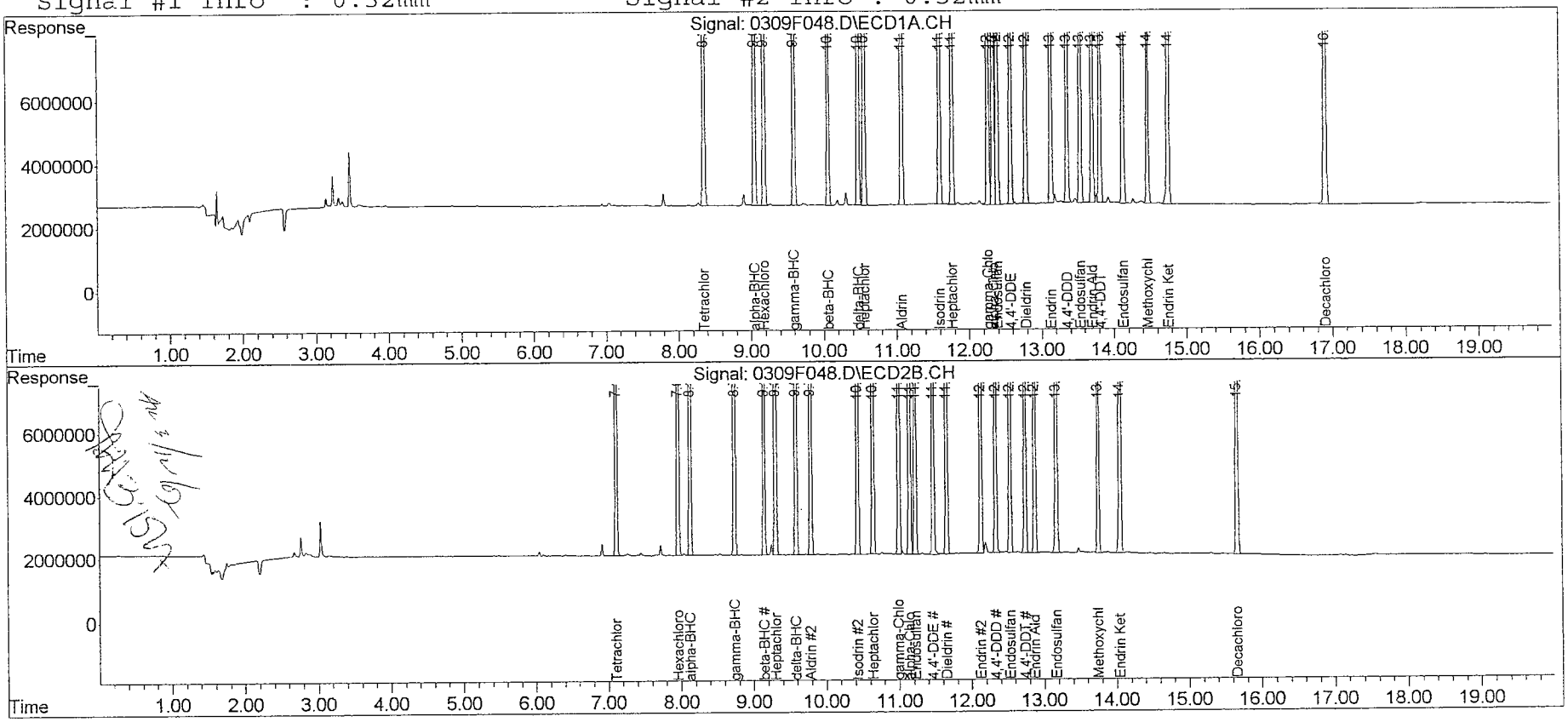
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F048.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\030907\0309F048.D\ECD2B.CH
Acq On : 10 Mar 2007 1:46 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:08 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Respcnse via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



710

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F049.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\030907\0309F049.D\ECD2B.CH
Acq On : 10 Mar 2007 2:13 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:06 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.36	7.11	71064675	62833162	185.423	181.692
24)	s	Decachlorobiphen	16.91	15.66	50566754	62019142	163.434	160.894
		Target Compounds						
2)		alpha-BHC	9.05	8.13	104.8E6	96785558	213.019	209.695
3)		Hexachlorobenzen	9.18	7.96	74477183	68304219	171.009	169.590
4)		beta-BHC	10.07	9.15	39423037	36483631	177.135	168.184
5)		gamma-BHC (Linda	9.60	8.74	94383746	87867571	203.858	200.930
6)		delta-BHC	10.48	9.59	90815343	85474576	218.220	214.256
7)		Heptachlor	10.56	9.31	84334111	81214850	184.872	183.353
8)		Aldrin	11.08	9.79	77911886	75151088	195.461	190.376
9)		Isodrin	11.60	10.43	61160938	60033879	183.980	179.907
10)		Heptachlor Epoxi	11.77	10.65	70620001	69022668	181.043	178.238
11)		gamma-Chlordane	12.27	11.00	72171993	72209072	186.696	185.183
12)		Endosulfan I	12.40	11.23	62480751	62337731	183.746	178.897
13)		alpha-Chlordane	12.34	11.15	68690647	69291241	182.694	181.102
14)		Dieldrin	12.79	11.66	69537949	71102560	192.417	186.216
15)		4,4'-DDE	12.58	11.47	67593385	69367509	194.606	190.556
16)		Endrin	13.14	12.13	58924384	62734262	189.979	184.415
17)		Endosulfan II	13.55	12.54	53112436	55329916	170.954	164.477
18)		4,4'-DDD	13.37	12.34	54807969	57459275	199.070	190.743
19)		Endrin Aldehyde	13.71	12.88	48041576	50462301	178.559	170.561
20)		Endosulfan Sulfa	14.14	13.18	54653798	60158208	182.469	172.757
21)		4,4'-DDT	13.82	12.75	56039529	61564374	196.817	187.400
22)		Endrin Ketone	14.76	14.06	62560263	70587971	189.110	175.769
23)		Methoxychlor	14.48	13.76	28638789	30791512	176.603	163.449

3/12/07

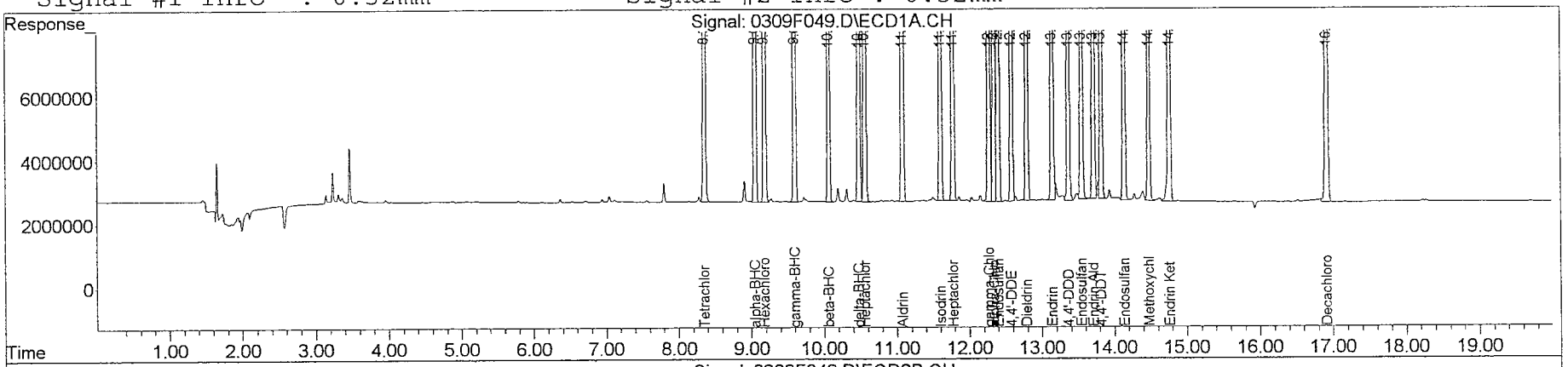
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

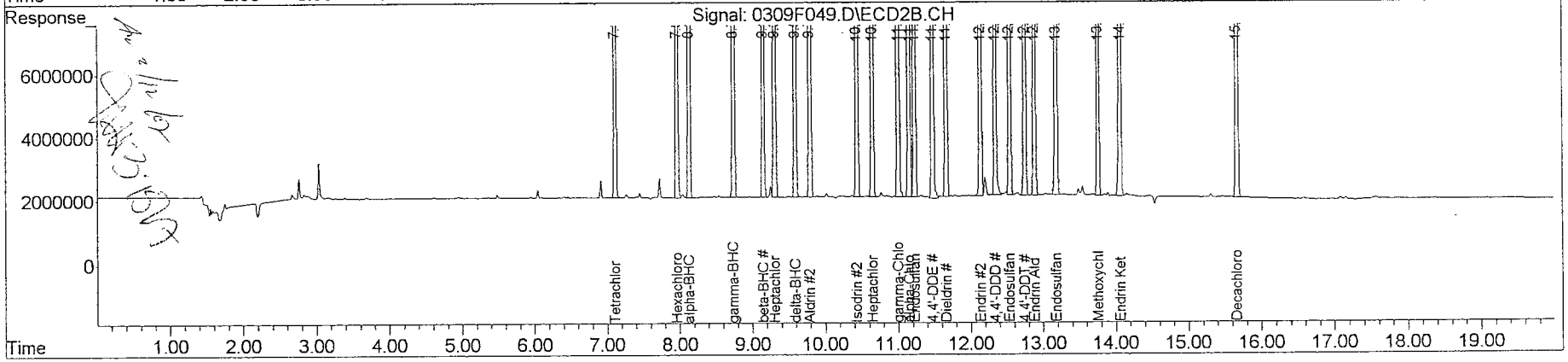
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F049.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\030907\0309F049.D\ECD2B.CH
Acq Cn : 10 Mar 2007 2:13 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-81E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:09 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F050.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\030907\0309F050.D\ECD2B.CH
Acq On : 10 Mar 2007 2:39 pm Operator: AKamawal
Sample : 8081 ICV @ 40ppb GCPS5-88K Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 08:12:25 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:11:24 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
2)	alpha-BHC	9.06	8.14	18319459	16741144	38.639	37.667
3)	Hexachlorobenzen	9.19	7.97	15618263	14137729	37.497	36.519
4)	beta-BHC	10.07	9.15	8062269	7371828	37.630	35.995
5)	gamma-BHC (Linda	9.60	8.75	17042326	15718594	38.460	37.278
6)	delta-BHC	10.48	9.59	16814933	15662393	41.513	40.672
7)	Heptachlor	10.57	9.31	16495590	15652345	37.792	36.971
8)	Aldrin	11.08	9.80	14606697	14227771	38.146	37.515
9)	Isodrin	11.60	10.44	12866912	12590335	39.990	39.227
10)	Heptachlor Epoxi	11.78	10.65	14125626	13617044	37.572	36.472
11)	gamma-Chlordane	12.27	11.01	13941806	13755093	37.458	36.627
12)	Endosulfan I	12.40	11.23	12714472	12612720	38.693	37.694
13)	alpha-Chlordane	12.35	11.15	13515486	13448363	37.221	36.403
14)	Dieldrin	12.80	11.66	12843150	13066333	36.949	35.761
15)	4,4'-DDE	12.58	11.48	12662550	12860908	38.095	37.014
16)	Endrin	13.15	12.14	11315187	12125795	38.605	37.769
17)	Endosulfan II	13.55	12.54	11772094	12260453	39.042	37.791
18)	4,4'-DDD	13.37	12.34	10079862	10522739	38.216	36.153
19)	Endrin Aldehyde	13.71	12.88	10163945	10623278	38.487	37.047
20)	Endosulfan Sulfa	14.14	13.18	11057238	12198494	37.784	36.230
21)	4,4'-DDT	13.82	12.75	10705468	11743140	38.737	37.159
22)	Endrin Ketone	14.76	14.06	12965859	14896703	39.610	38.107
23)	Methoxychlor	14.48	13.76	6094633	6700691	39.619	37.582

AK 3/12/07

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

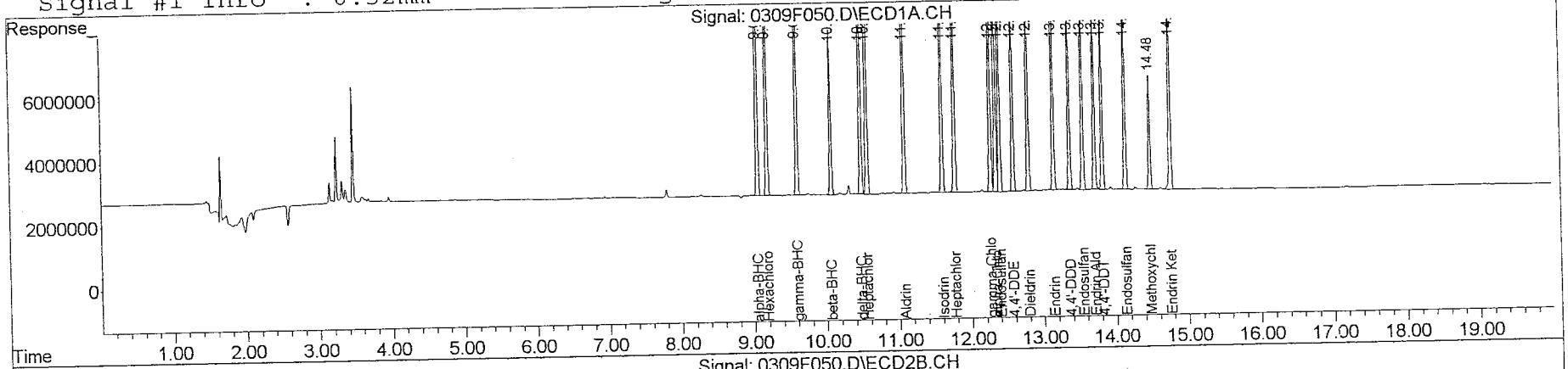
Signal #1 : J:\GC23\DATA\030907\0309F050.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\030907\0309F050.D\ECD2B.CH
Acq On : 10 Mar 2007 2:39 pm
Sample : 8081 ICV @ 40ppb GCPS5-88K
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:12 2007 Quant Results File: 030907-8081.RES

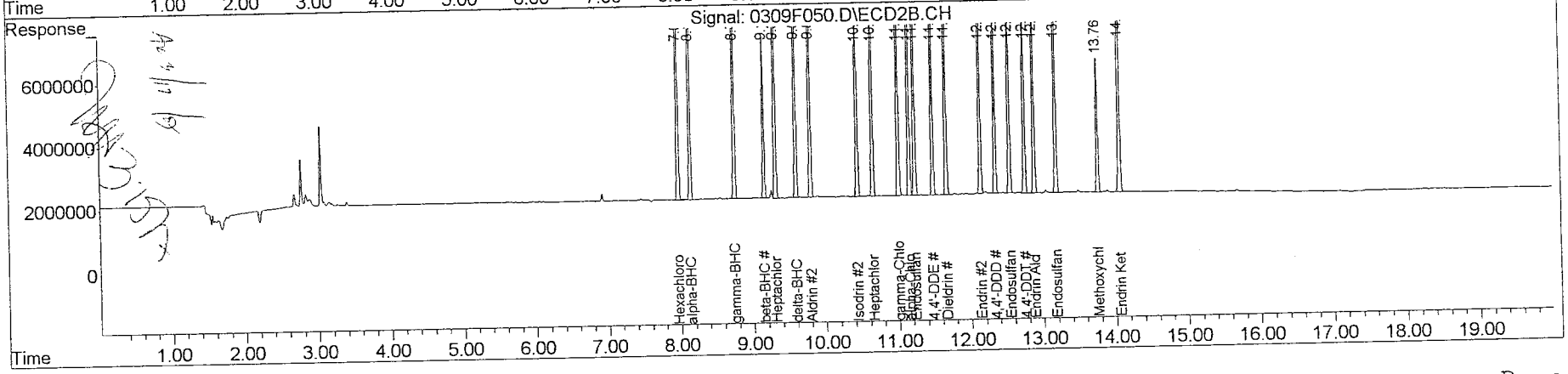
Vial: 10
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:11:24 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB
Signal #1 Info : 0.32mm

Signal #2 Phase: DB-35MS
Signal #2 Info : 0.32mm





Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:19 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.30	669948	576374	25.084	22.994
32)	Chlordane {2}	11.84	11.00	304003	902906	24.275	22.257
33)	Chlordane {3}	12.27	11.04	1098937	551037	24.748	23.649
34)	Chlordane {4}	12.34	11.09	786479	262560	25.233	21.308
35)	Chlordane {5}	12.41	11.15	649877	706830	27.037	22.760
36)	Chlordane {6}	13.38	12.57	227844	378251	32.968m	22.470 #

AK 3/12/07

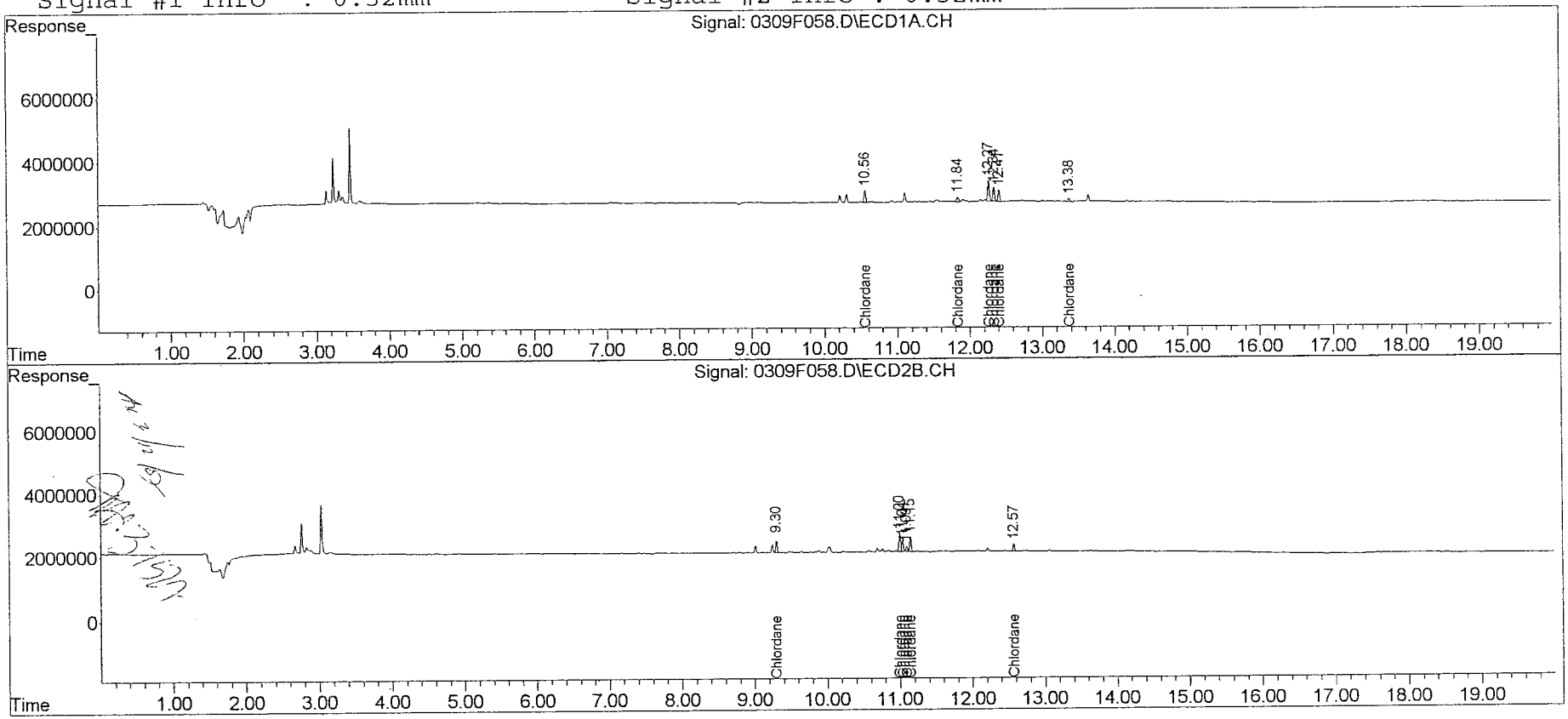
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:40 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

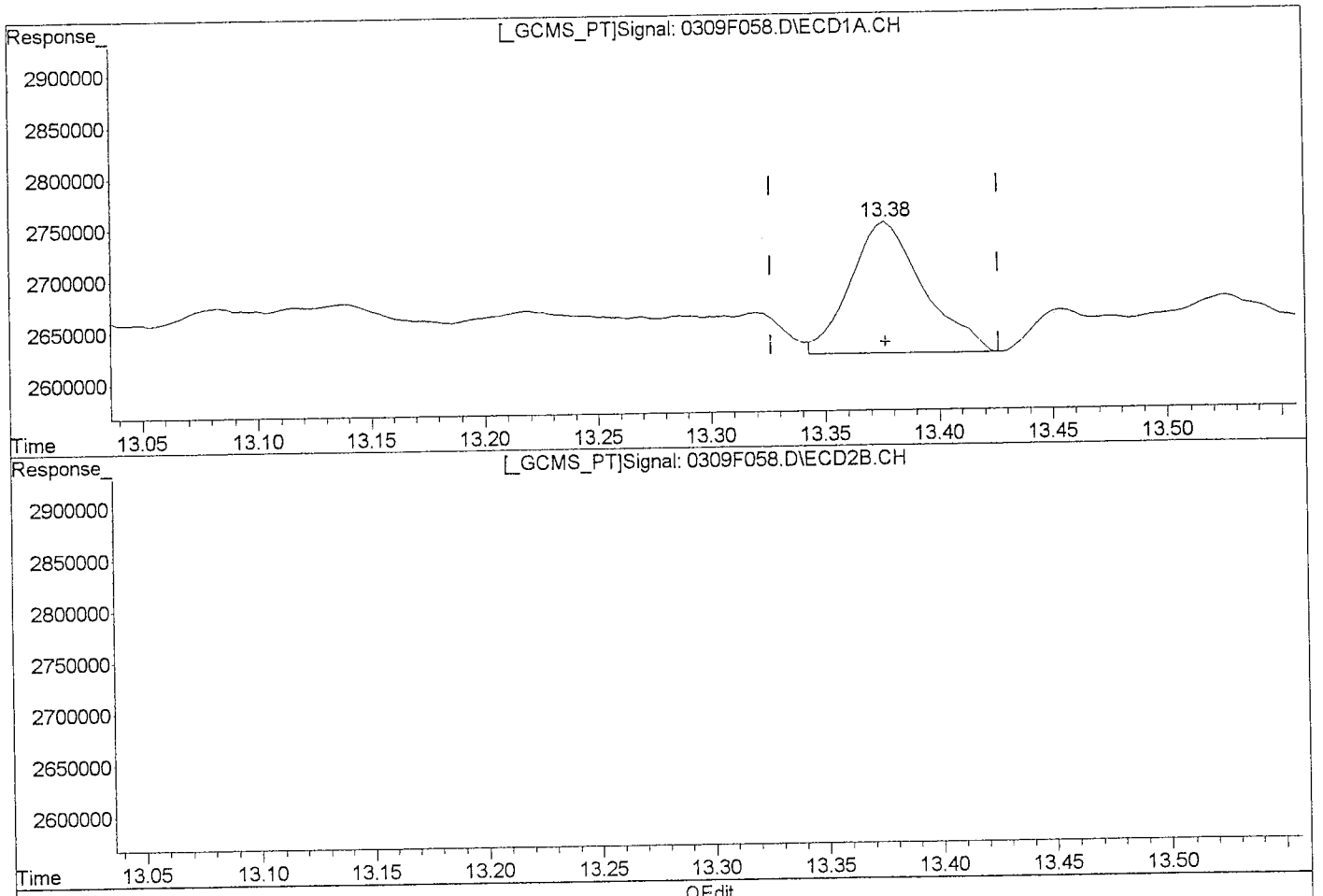


716

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration



(36) Chlordane {6}

13.38min 40.670ug/L

response 281072

(36) Chlordane {6} #2

12.57min 22.470ug/L

response 378251

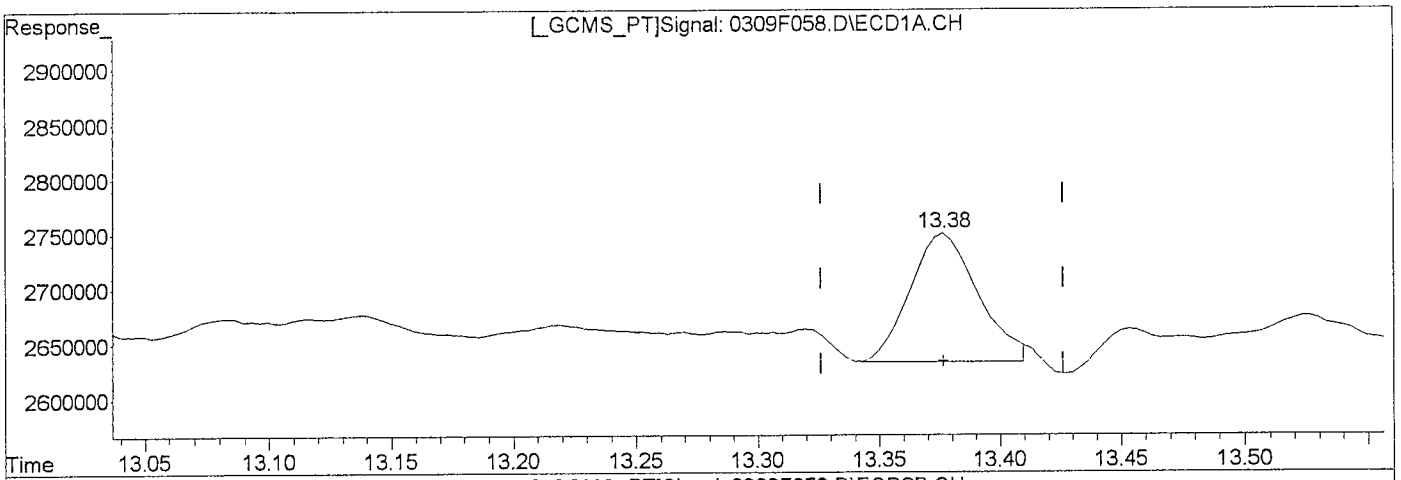
(+) = Expected Retention Time

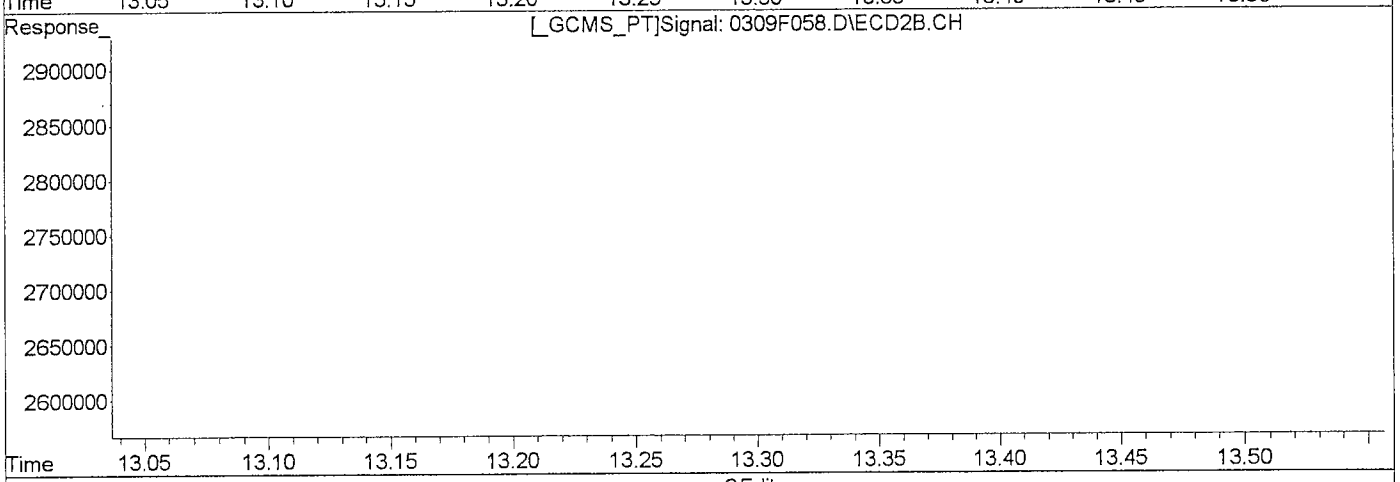
0309F058.D 030907-8081.M Mon Mar 12 08:40:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F058.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\030907\0309F058.D\ECD2B.CH
Acq On : 10 Mar 2007 6:12 pm Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration





QEdit

(36) Chlordane {6}

13.38min 32.968ug/L m

response 227844

(36) Chlordane {6} #2

12.57min 22.470ug/L

response 378251

Before

MAR 12 2007

After

(+) = Expected Retention Time

0309F058.D 030907-8081.M Mon Mar 12 08:41:01 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:21 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.31	1403706	1192212	52.557	47.562
32)	Chlordane {2}	11.84	11.00	637233	1890864	50.883	46.612
33)	Chlordane {3}	12.27	11.04	2253165	1132832	50.742	48.617
34)	Chlordane {4}	12.34	11.10	1616648	574041	51.867	46.587
35)	Chlordane {5}	12.41	11.15	1292242	1474102	53.761	47.467
36)	Chlordane {6}	13.37	12.58	374639	763583	54.208m	45.360

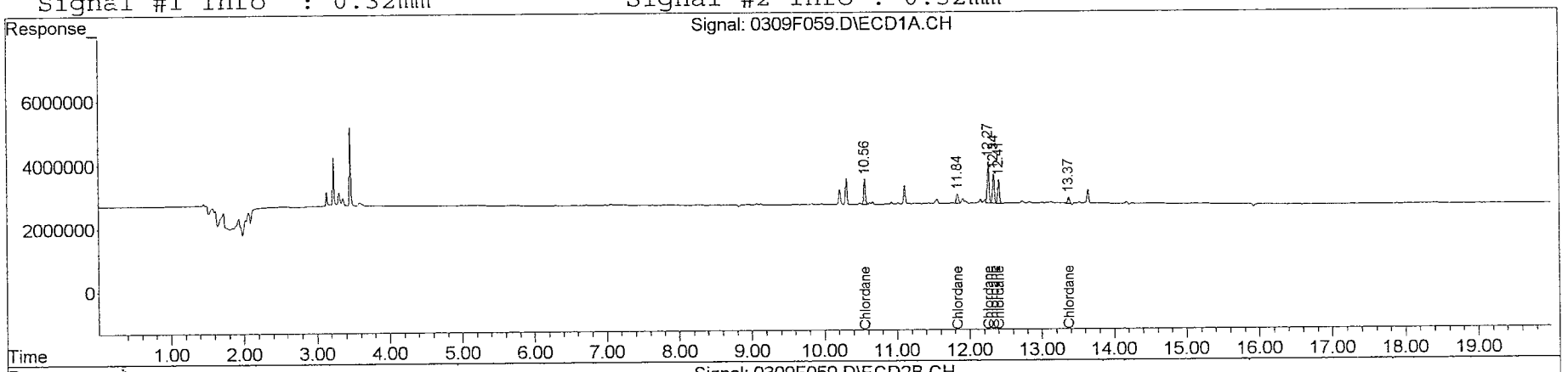
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

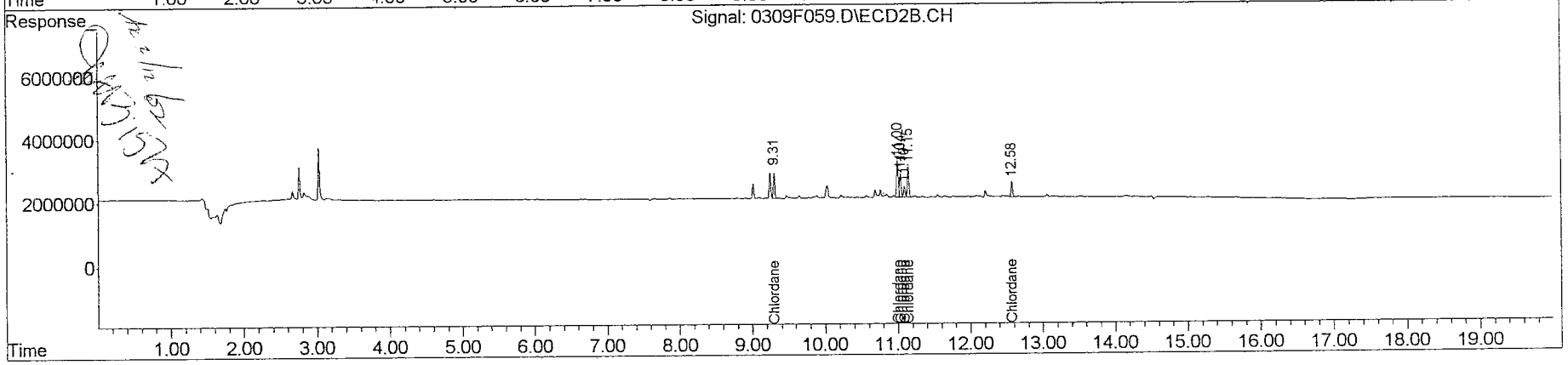
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:41 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

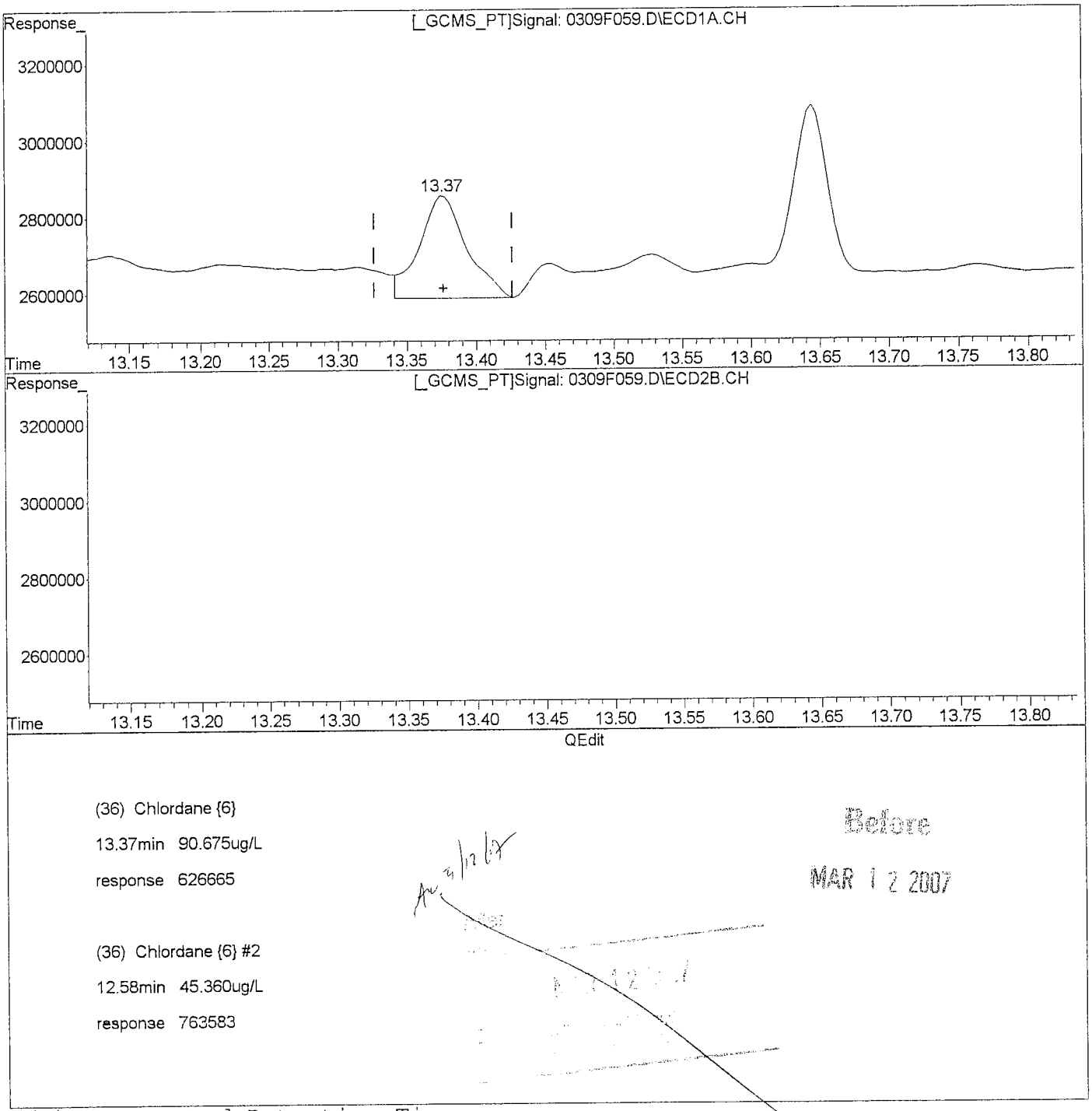




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration



(36) Chlordane {6}
13.37min 90.675ug/L
response 626665

(36) Chlordane {6} #2
12.58min 45.360ug/L
response 763583

Before
MAR 12 2007

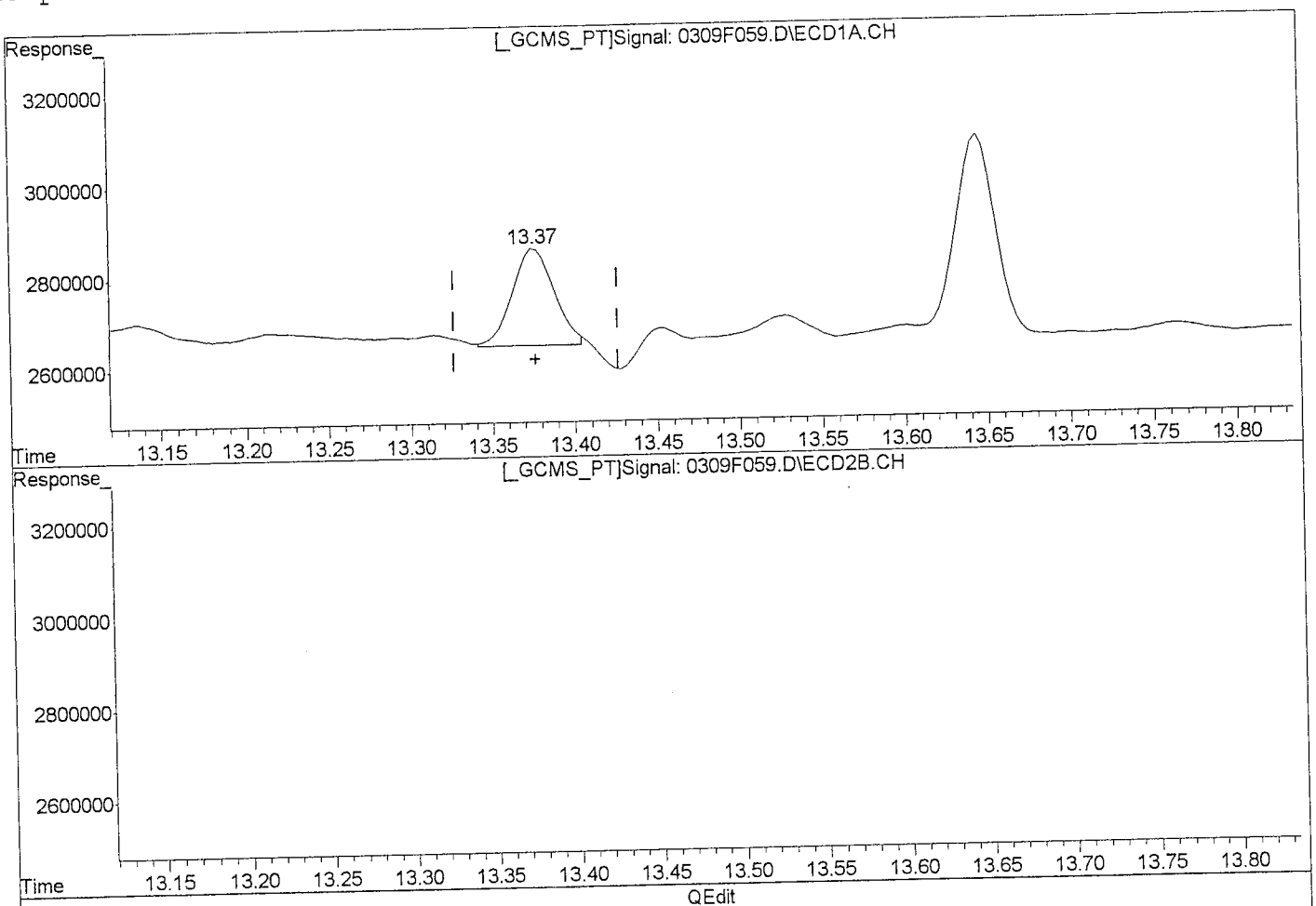
(+) = Expected Retention Time
0309F059.D 030907-8081.M Mon Mar 12 08:41:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F059.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\030907\0309F059.D\ECD2B.CH
Acq On : 10 Mar 2007 6:38 pm
Sample : CHLOR@ 50PPB GCPS5-86F
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Vial: 19
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:27:01 2007
Response via : Multiple Level Calibration



(36) Chlordane {6}
13.37min 54.208ug/L m
response 374639

(36) Chlordane {6} #2
12.58min 45.360ug/L
response 763583

Before
MAR 12 2007

(+) = Expected Retention Time
0309F059.D 030907-8081.M Mon Mar 12 08:41:38 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F060.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\030907\0309F060.D\ECD2B.CH
Acq On : 10 Mar 2007 7:05 pm Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:22 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.30	2552280	2246611	95.562	89.625
32)	Chlordane {2}	11.84	11.00	1181222	3579786	94.321	88.245
33)	Chlordane {3}	12.27	11.04	4184969	2128559	94.246	91.350
34)	Chlordane {4}	12.34	11.09	2974003	1117446	95.415	90.688
35)	Chlordane {5}	12.41	11.15	2334376	2764118	97.117	89.005
36)	Chlordane {6}	13.37	12.57	723722	1542913	104.719	91.656

AK 3/12/07

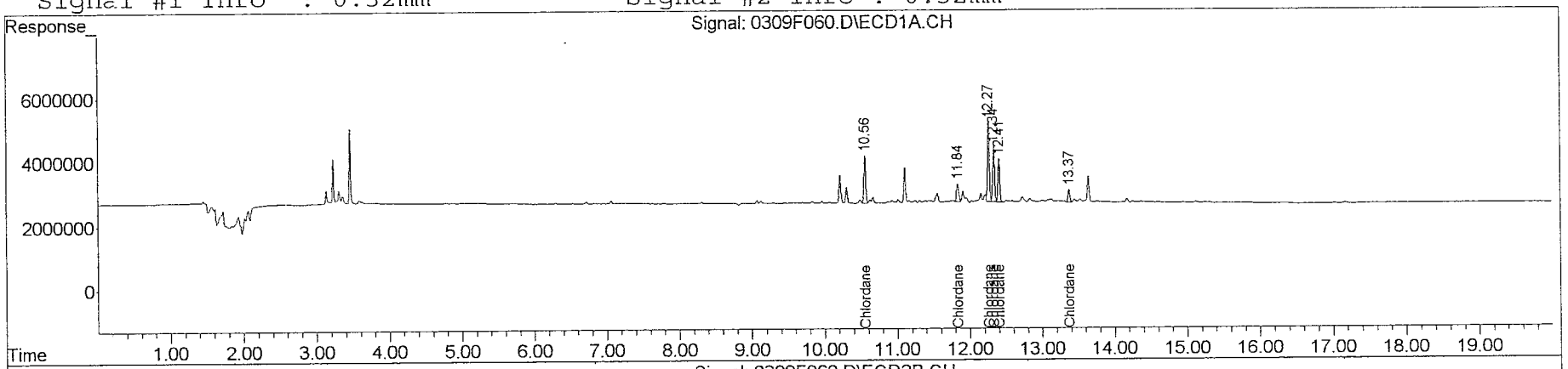
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

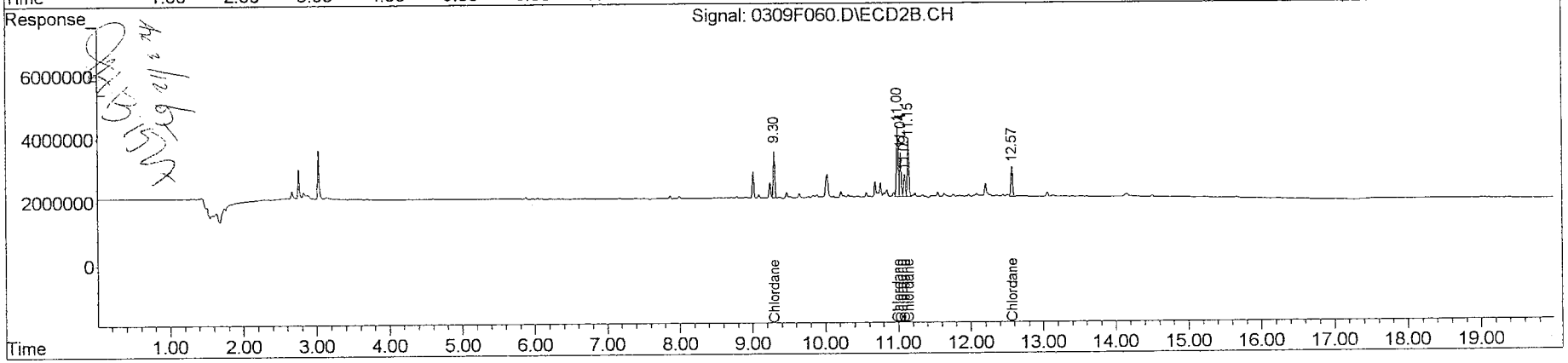
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F060.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\030907\0309F060.D\ECD2B.CH
Acq On : 10 Mar 2007 7:05 pm Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F061.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\030907\0309F061.D\ECD2B.CH
Acq On : 10 Mar 2007 7:32 pm Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:23 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.31	13104081	10816408	490.639	431.505
32)	Chlordane {2}	11.84	11.00	6233997	17695490	497.788	436.210
33)	Chlordane {3}	12.27	11.04	22051871	9891144	496.613	424.493
34)	Chlordane {4}	12.34	11.10	15239945	5287398	488.945	429.106
35)	Chlordane {5}	12.41	11.15	11437581	13337876	475.837	429.484
36)	Chlordane {6}	13.37	12.58	3154715	7305222	456.471	433.961

Ar 3/12/07

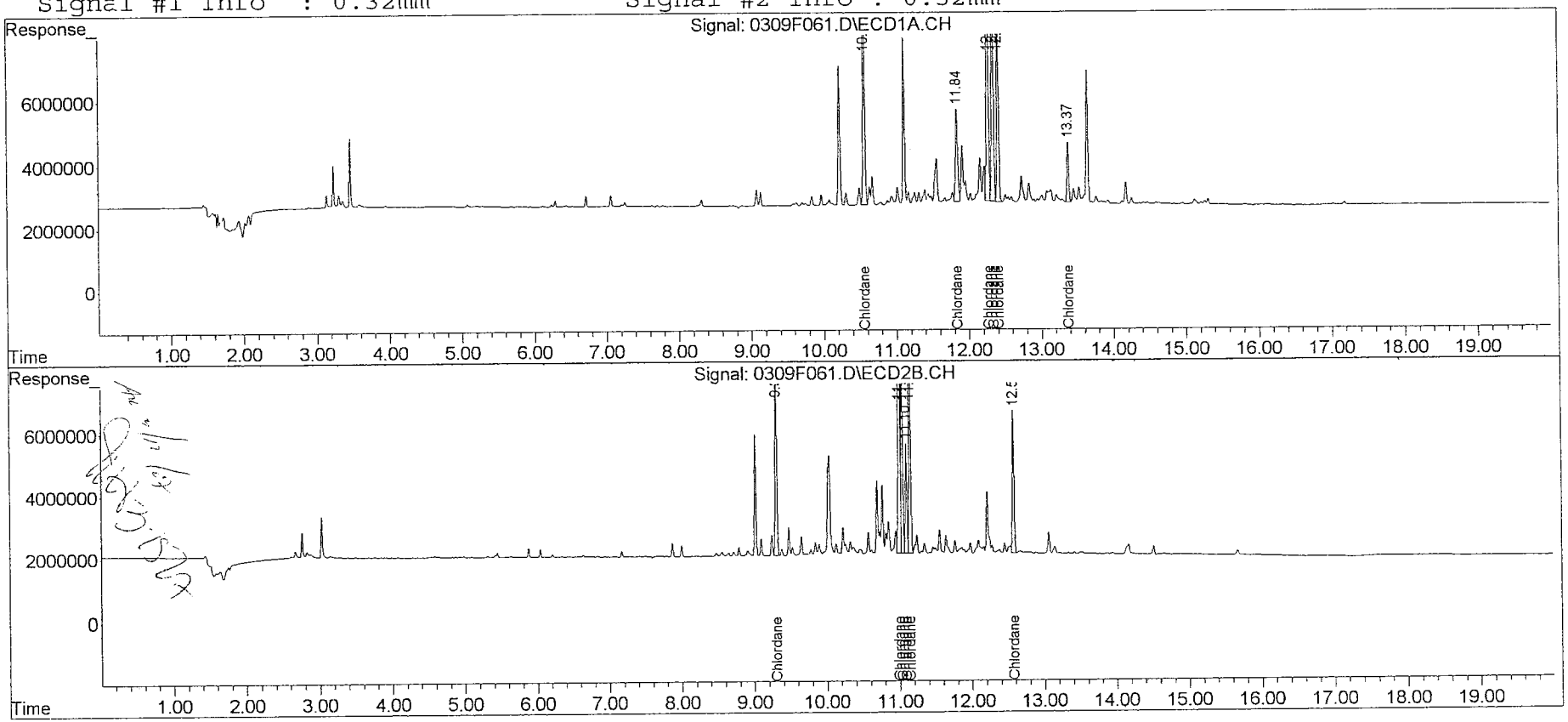
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F061.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\030907\0309F061.D\ECD2B.CH
Acq On : 10 Mar 2007 7:32 pm Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F062.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\030907\0309F062.D\ECD2B.CH
Acq On : 10 Mar 2007 7:58 pm Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:25 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.57	9.31	25210406	21656417	943.920	863.952
32)	Chlordane {2}	11.84	11.00	12400904	35363798	990.218	871.750
33)	Chlordane {3}	12.27	11.04	43497848	19350408	979.581	830.451
34)	Chlordane {4}	12.34	11.10	29791942	10539358	955.819	855.336
35)	Chlordane {5}	12.42	11.15	22079183	26439763	918.559	851.368
36)	Chlordane {6}	13.38	12.58	6004594	14370132	868.834	853.647

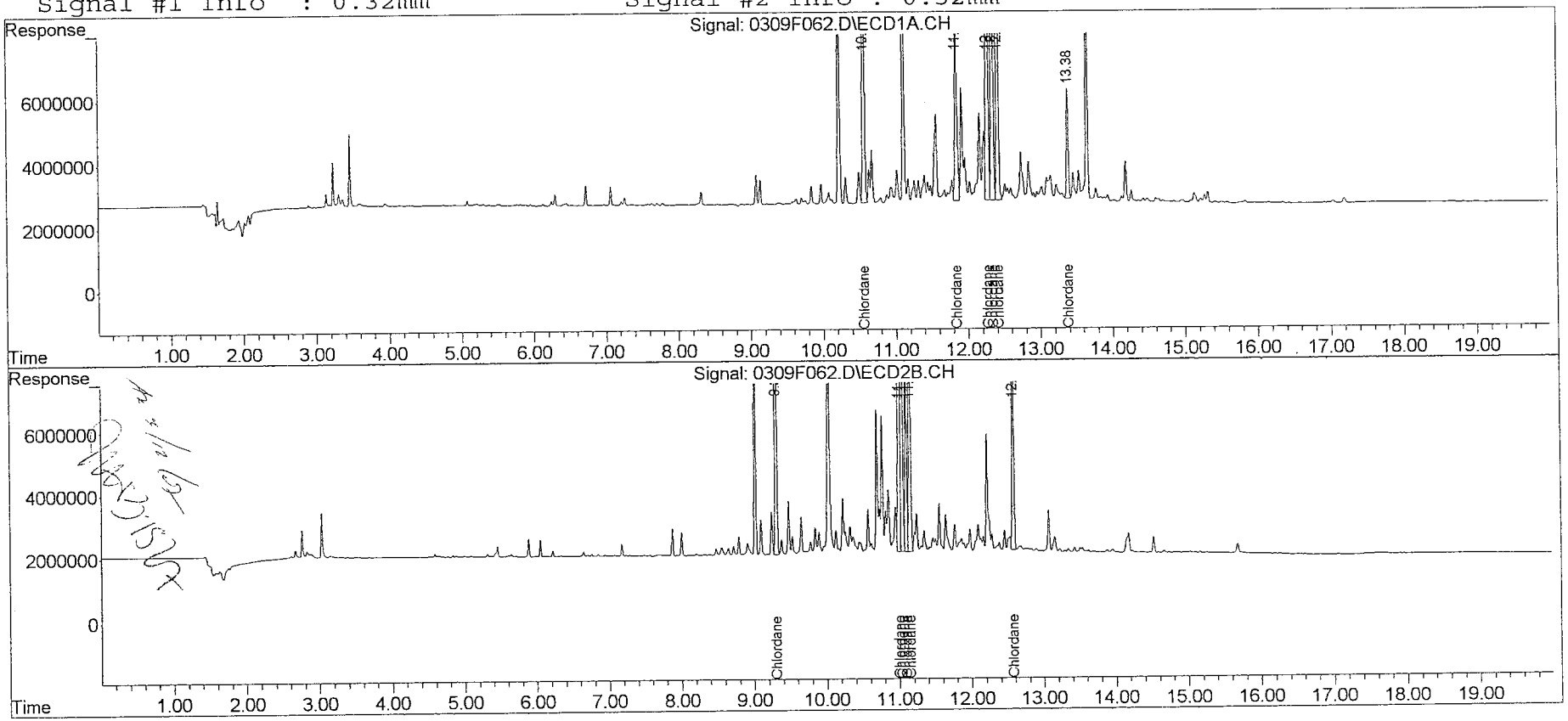
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F062.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\030907\0309F062.D\ECD2B.CH
Acq On : 10 Mar 2007 7:58 pm Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



728

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F063.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\030907\0309F063.D\ECD2B.CH
Acq On : 10 Mar 2007 8:25 pm Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:26 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.57	9.31	48878643	38181570	1830.098	1523.200
32)	Chlordane {2}	11.85	11.01	22745029	62572057	1816.201	1542.458
33)	Chlordane {3}	12.28	11.05	84529100	33349093	1903.613	1431.225
34)	Chlordane {4}	12.35	11.10	56984681	18424294	1828.247	1495.248
35)	Chlordane {5}	12.42	11.16	41449254	46198676	1724.411	1487.611
36)	Chlordane {6}	13.39	12.58	11328774	25345988	1639.216	1505.660

AK 3/12/07

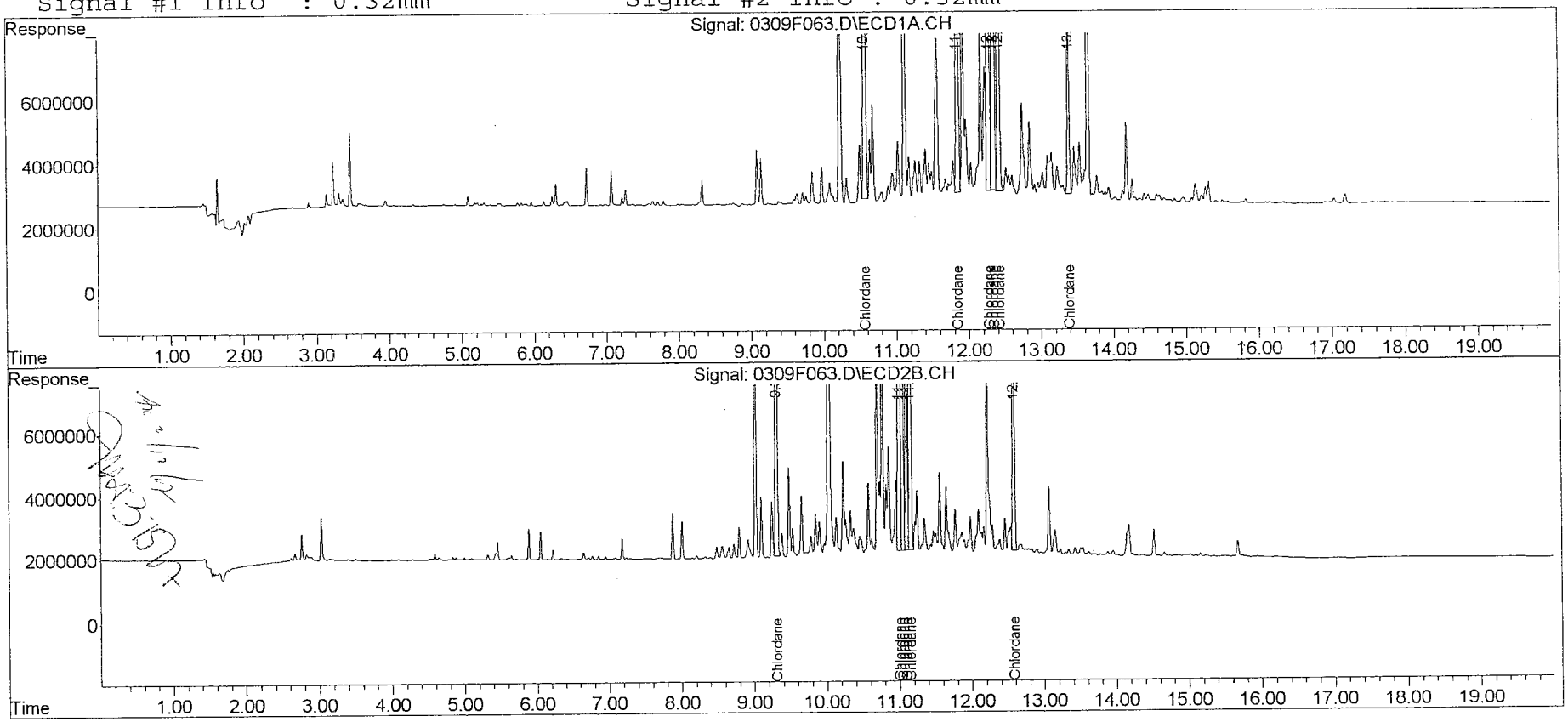
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F063.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\030907\0309F063.D\ECD2B.CH
Acq Cn : 10 Mar 2007 8:25 pm Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:43 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F064.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\030907\0309F064.D\ECD2B.CH
Acq On : 10 Mar 2007 8:51 pm Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 08:45:21 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.56	9.31	18290049	13976096	702.326	636.505	
32)	Chlordane {2}	11.84	11.00	8541447	25502424	702.437	722.543	
33)	Chlordane {3}	12.27	11.04	37516849	19130787	863.328	942.473	
34)	Chlordane {4}	12.34	11.10	23935174	8316450	787.789	786.005	
35)	Chlordane {5}	12.41	11.15	23943814	18628701	1019.879	691.611	#
36)	Chlordane {6}	13.38	12.58	6593038	7759589	945.867	532.181	#

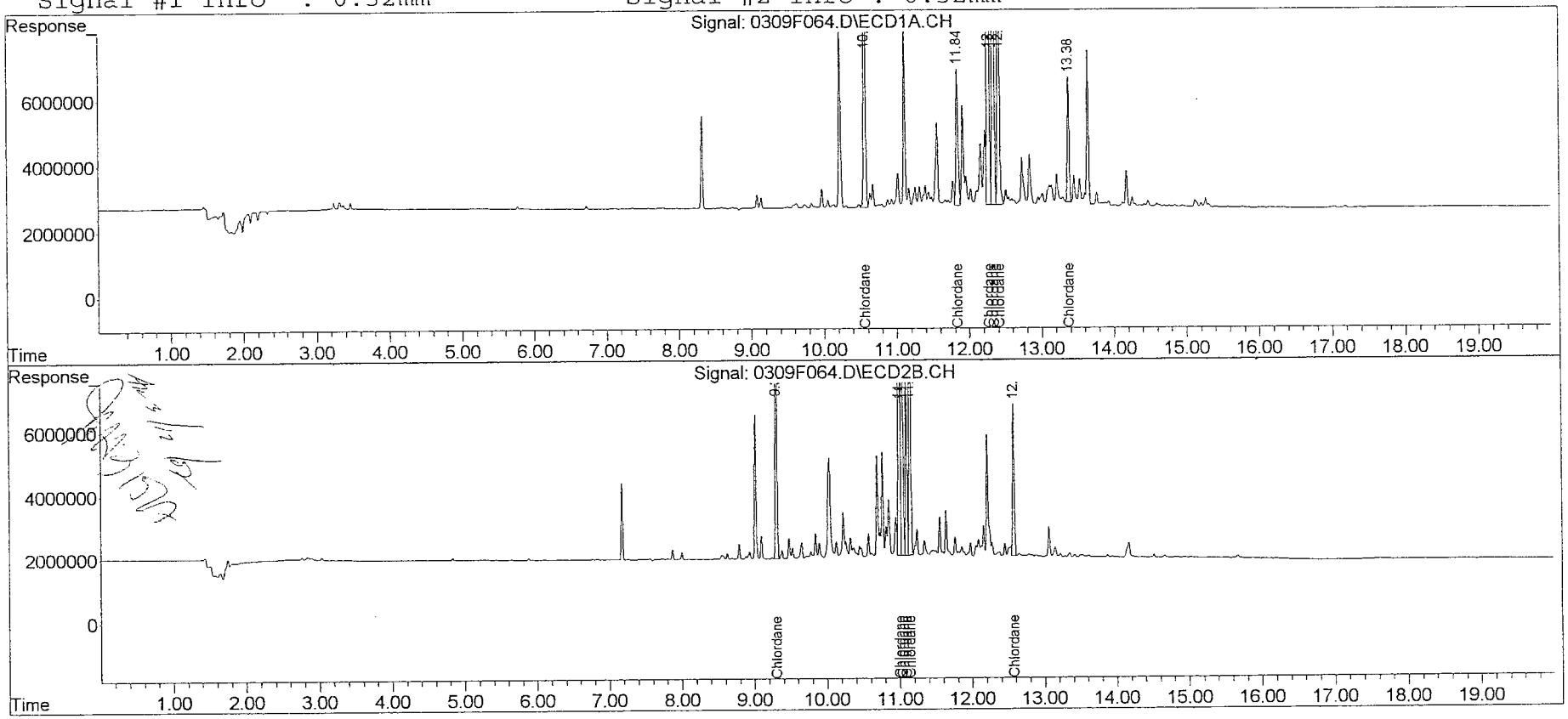
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F064.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\030907\0309F064.D\ECD2B.CH
Acq On : 10 Mar 2007 8:51 pm Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 8:45 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



732

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:39 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	570015	530488	2.108m	1.923
41)	2,4'-DDD	12.73	11.78	490429	488517	2.040	1.945
43)	2,4'-DDT	13.19	12.20	570517	627485	2.016	2.029

m 3/12 62

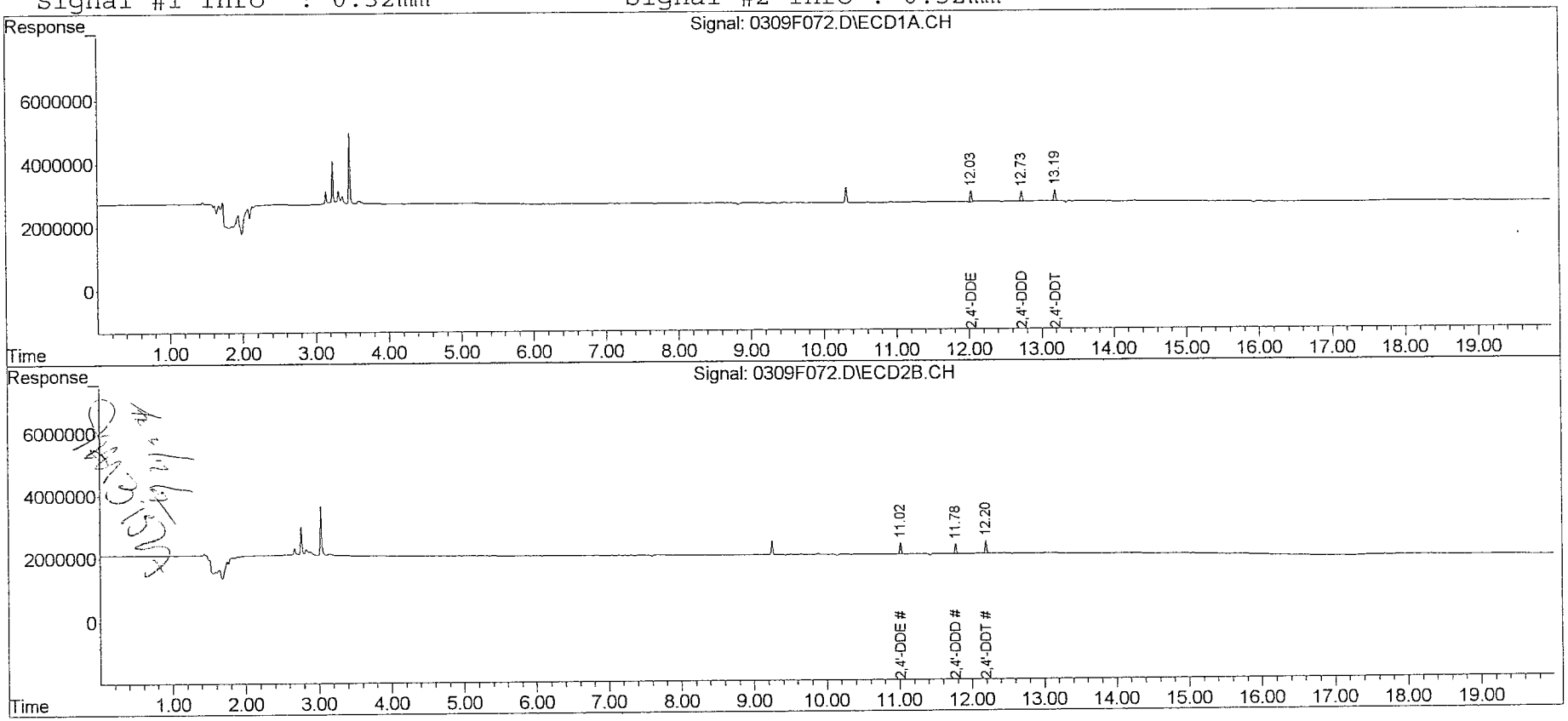
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:27 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

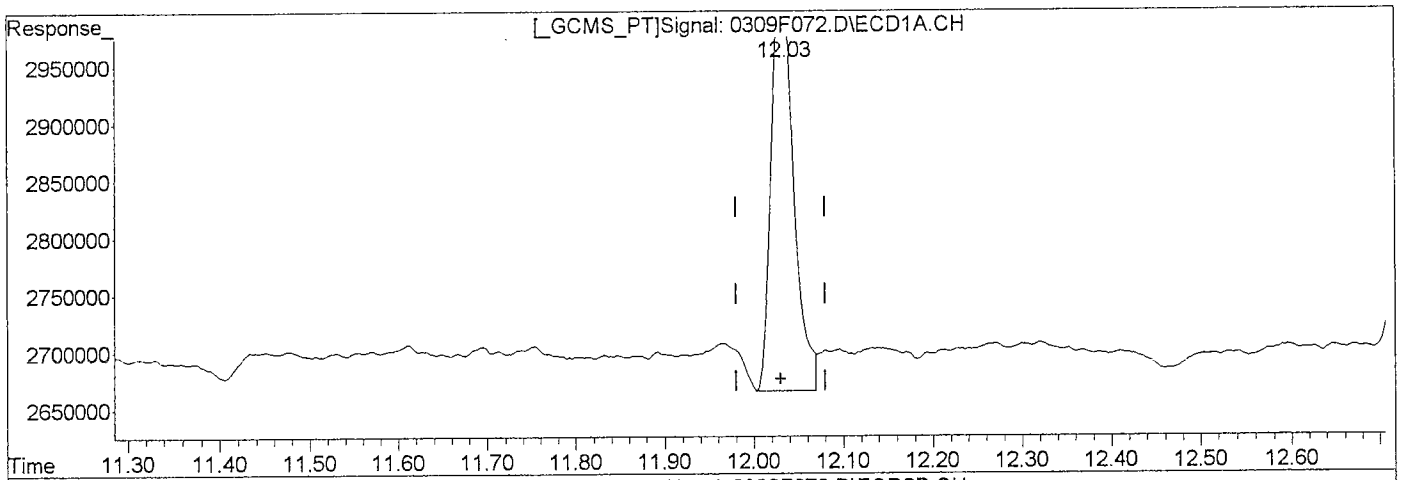
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

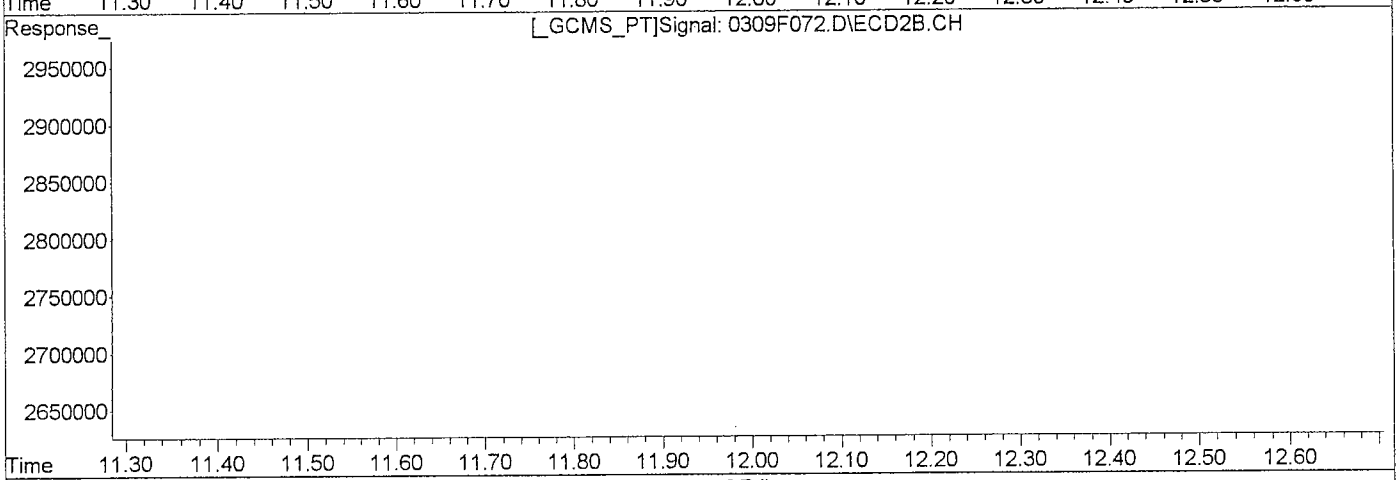


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE
12.03min 2.322ug/L
response 627827

(39) 2,4'-DDE #2
11.02min 1.923ug/L
response 530488

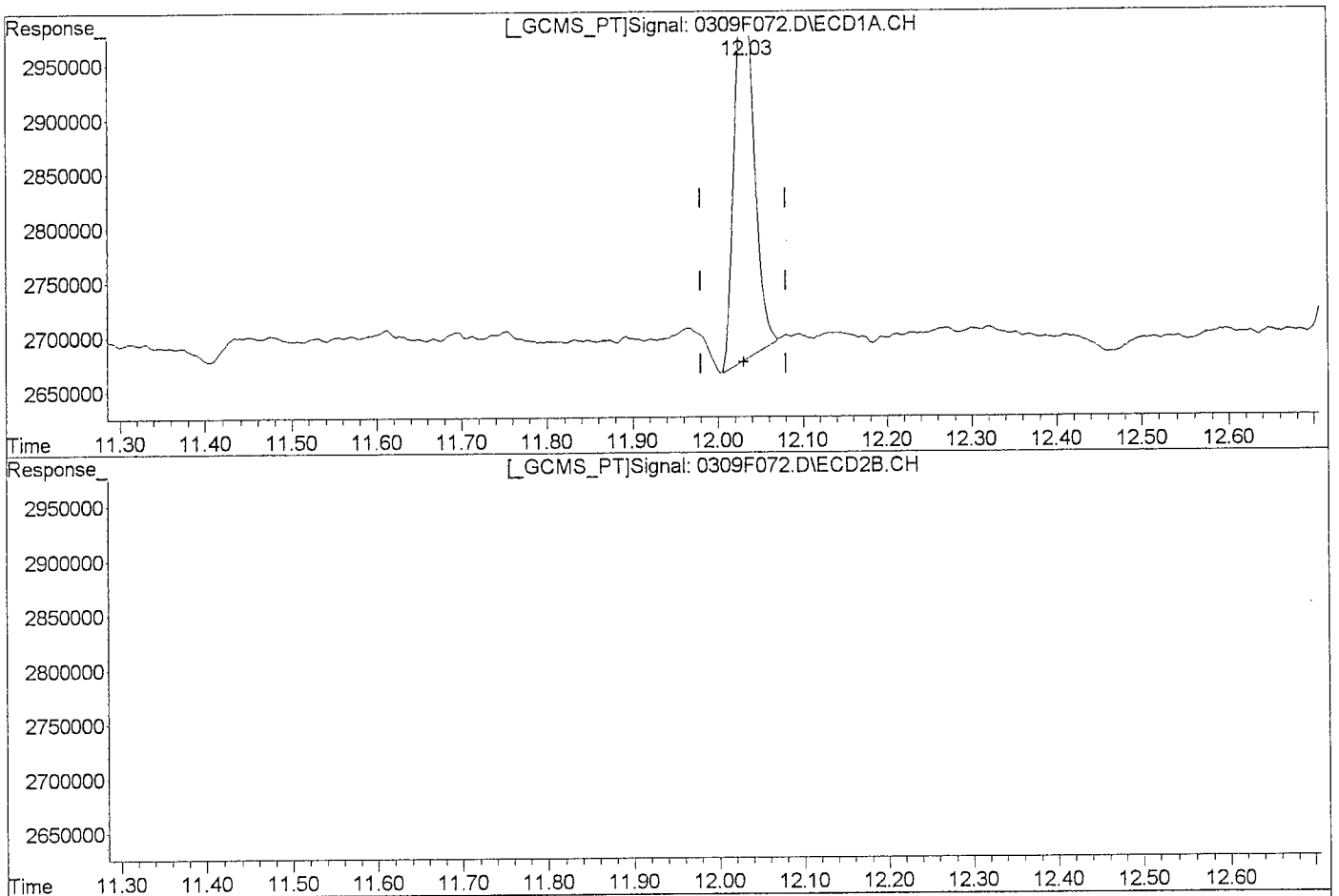
Before
MAR 12 2007

(+) = Expected Retention Time
0309F072.D 030907-8081.M Mon Mar 12 09:27:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F072.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\030907\0309F072.D\ECD2B.CH
Acq On : 11 Mar 2007 12:24 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration



(39) 2,4'-DDE
12.03min 2.108ug/L m
response 570015

(39) 2,4'-DDE #2
11.02min 1.923ug/L
response 530488

After
Before
MAR 12 2007

(+) = Expected Retention Time
0309F072.D 030907-8081.M Mon Mar 12 09:27:09 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:40 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	1317518	1352095	4.872m	4.902
41)	2,4'-DDD	12.73	11.78	1180251	1238146	4.909	4.930
43)	2,4'-DDT	13.19	12.20	1388825	1541807	4.907	4.984

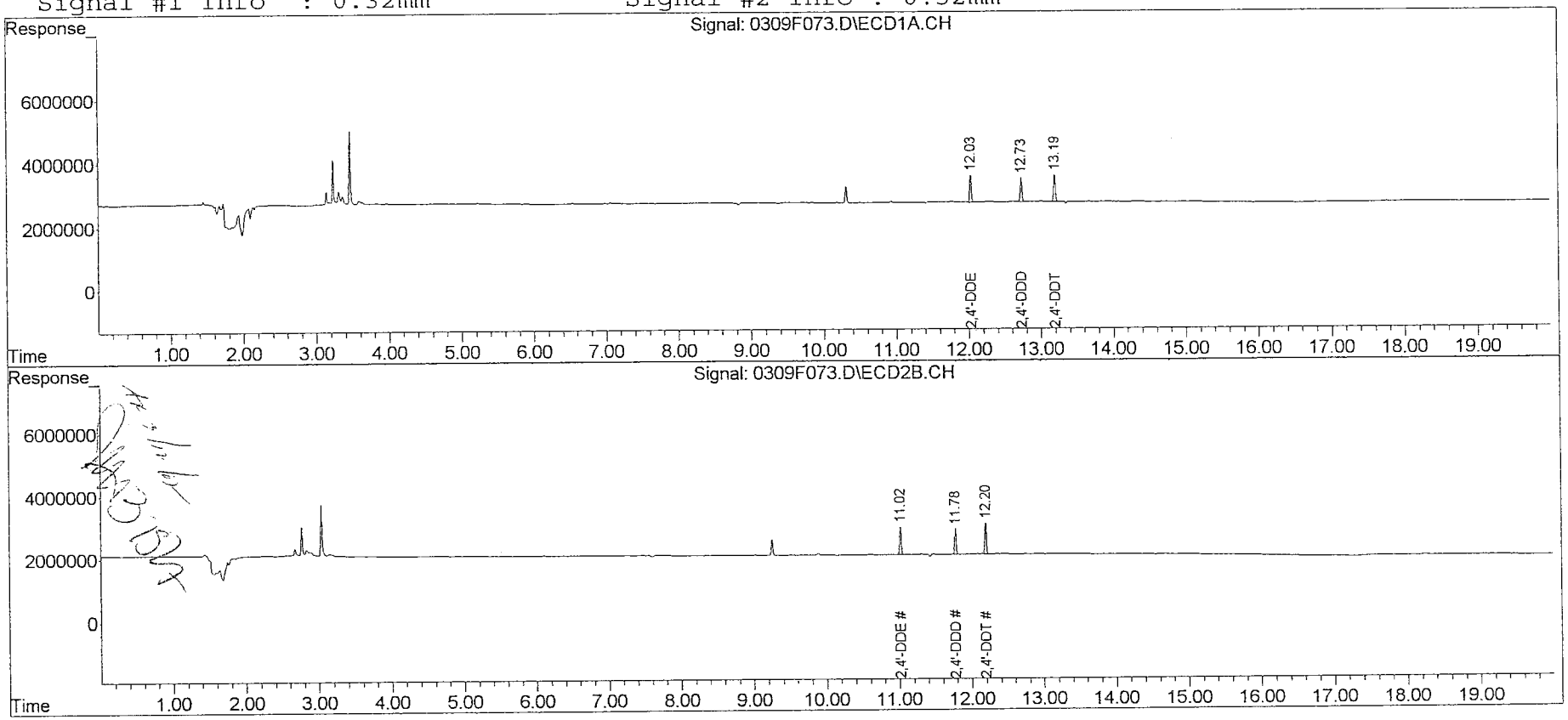
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq Cn : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:27 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

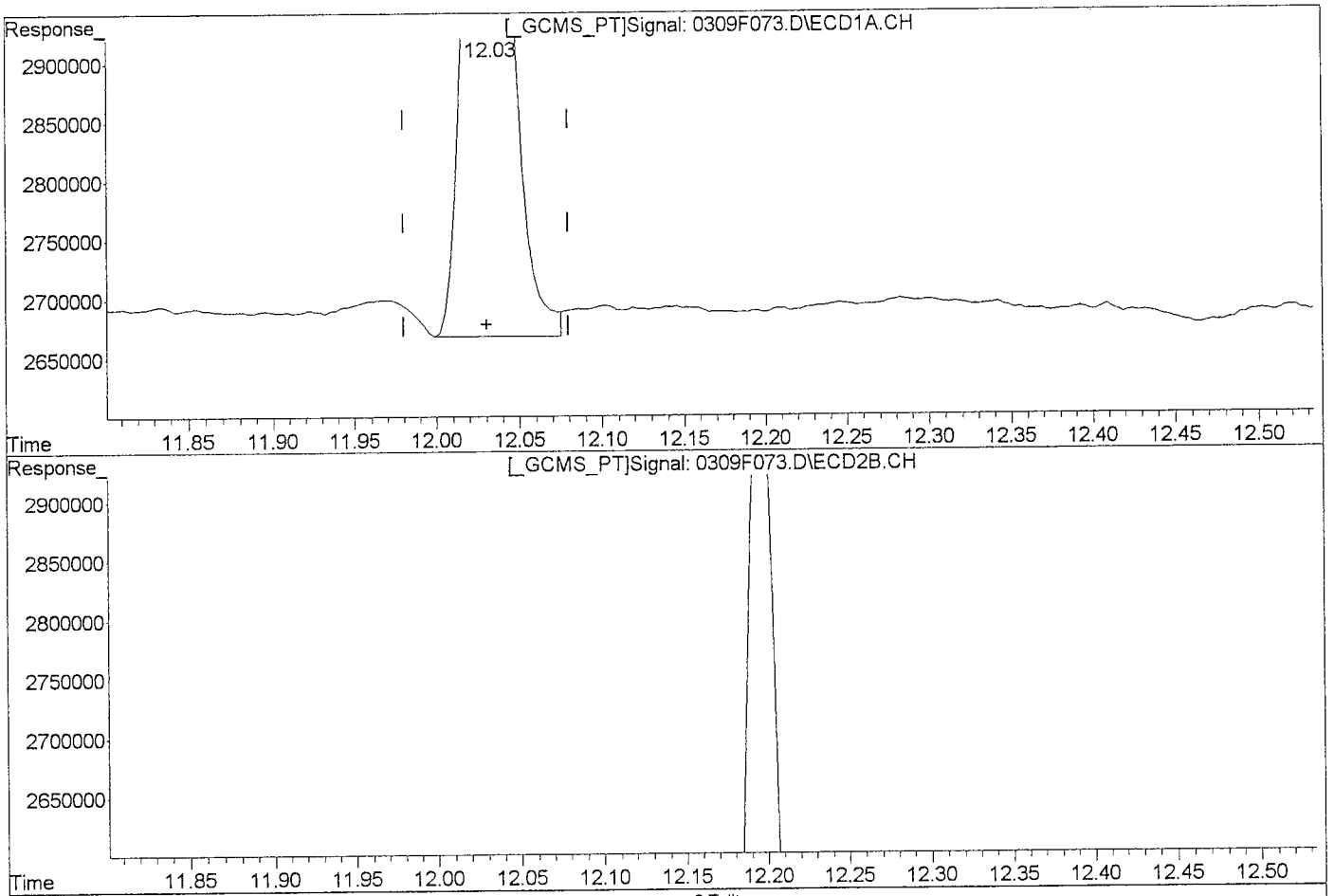
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration



(39) 2,4'-DDE

12.03min 5.035ug/L

response 1361448

Before

MAR 1 2 2007

(39) 2,4'-DDE #2

11.02min 4.902ug/L

response 1352095

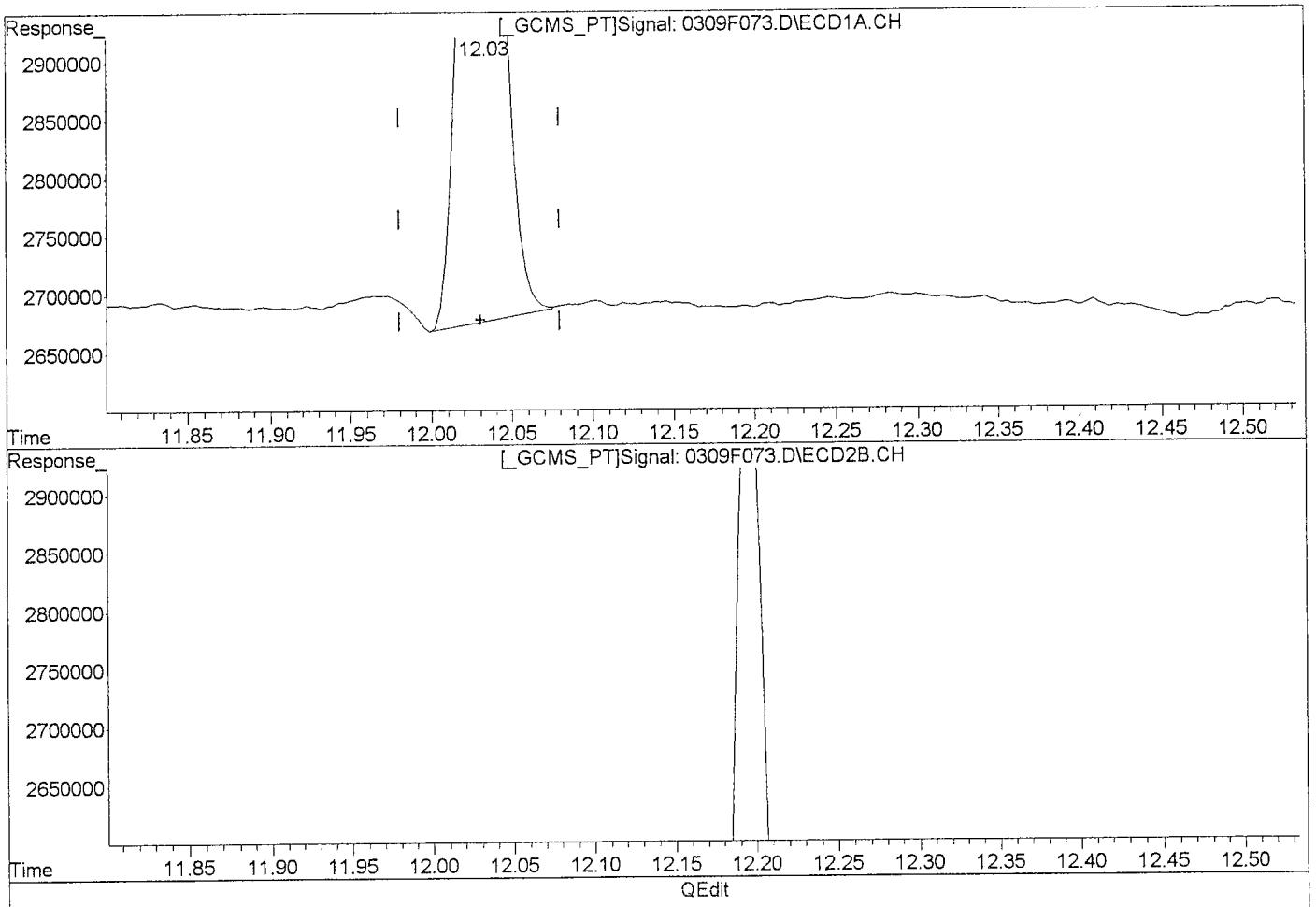
(+) = Expected Retention Time

0309F073.D 030907-8081.M Mon Mar 12 09:27:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\030907\0309F073.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\030907\0309F073.D\ECD2B.CH
Acq On : 11 Mar 2007 12:51 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 7:51 2007 Quant Results File: 030907-8081.RES

Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 08:44:32 2007
Response via : Multiple Level Calibration



(39) 2,4'-DDE

12.03min 4.872ug/L m

response 1317518

(39) 2,4'-DDE #2

11.02min 4.902ug/L

response 1352095

(+) = Expected Retention Time

0309F073.D 030907-8081.M Mon Mar 12 09:27:40 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F074.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\030907\0309F074.D\ECD2B.CH
Acq On : 11 Mar 2007 1:17 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:42 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	5001079	5178653	18.494	18.774
41)	2,4'-DDD	12.73	11.78	4490518	4745938	18.676	18.898
43)	2,4'-DDT	13.19	12.19	5312062	5770869	18.770	18.656

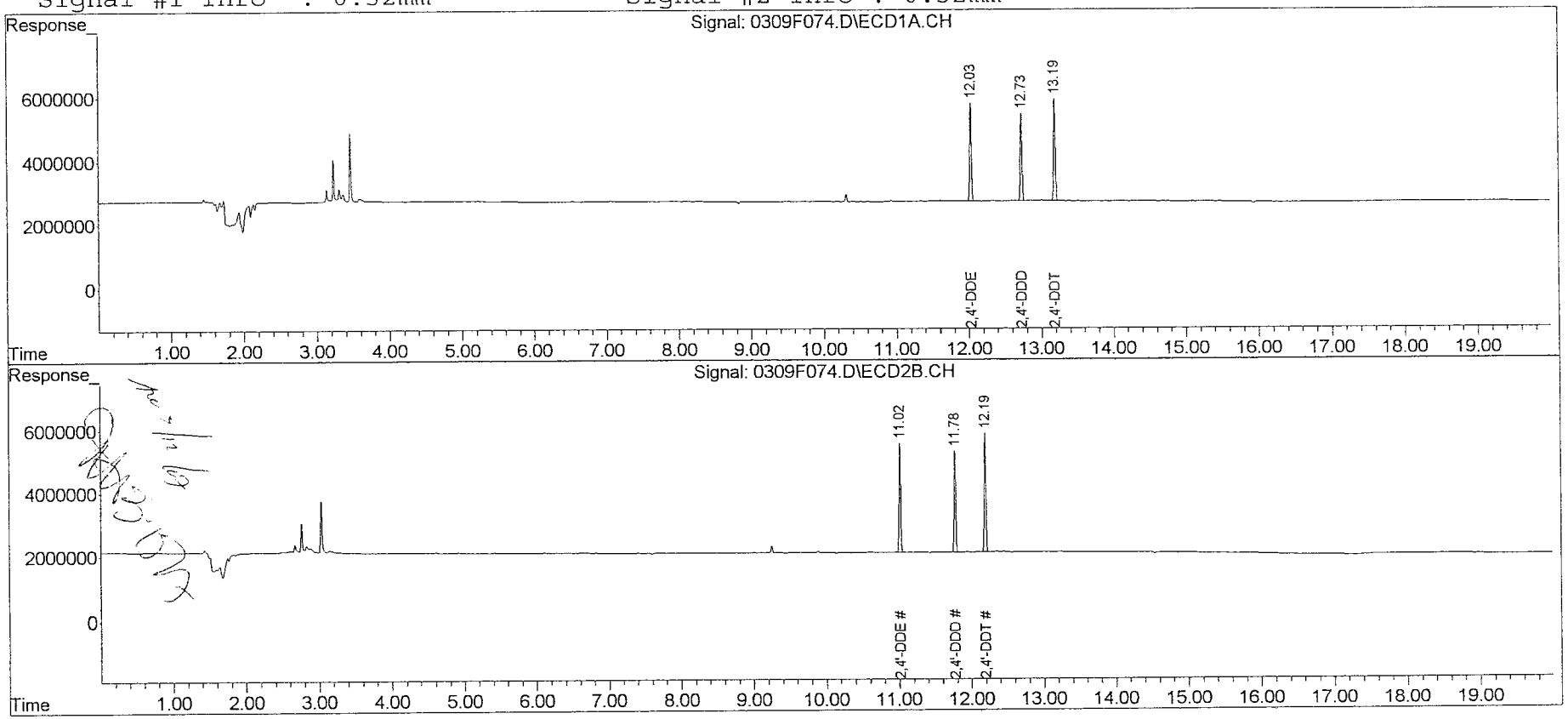
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F074.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\030907\0309F074.D\ECD2B.CH
Acq On : 11 Mar 2007 1:17 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



742

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F075.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\030907\0309F075.D\ECD2B.CH
Acq On : 11 Mar 2007 1:44 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-82E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:43 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	12573539	13475701	46.496	48.852
41)	2,4'-DDD	12.73	11.78	11230236	12268968	46.706	48.854
43)	2,4'-DDT	13.19	12.20	13337357	15068790	47.127	48.715

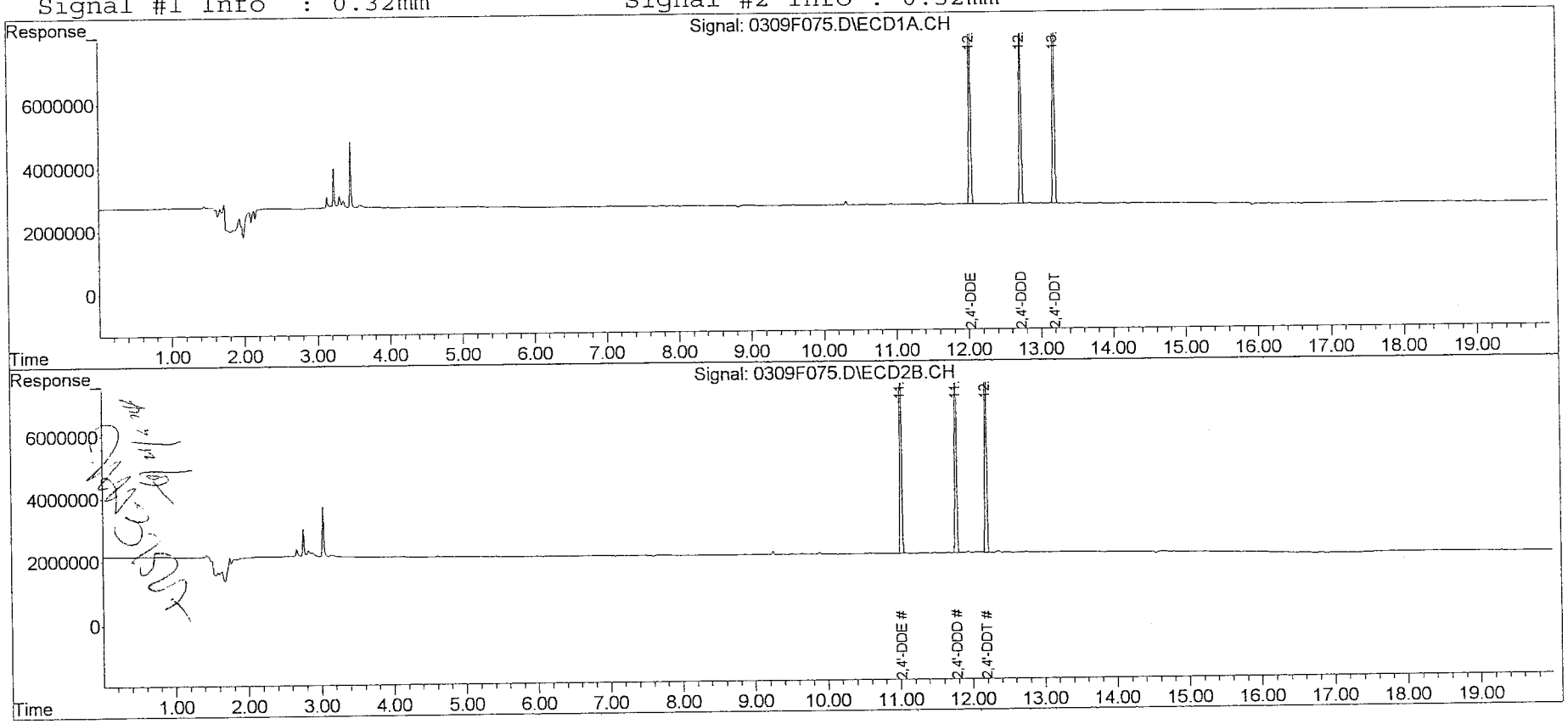
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F075.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\030907\0309F075.D\ECD2B.CH
Acq On : 11 Mar 2007 1:44 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-82E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F076.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\030907\0309F076.D\ECD2B.CH
Acq On : 11 Mar 2007 2:11 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:44 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	24574291	26717621	90.874	96.856
41)	2,4'-DDD	12.73	11.78	22005946	24299053	91.521	96.757
43)	2,4'-DDT	13.19	12.20	26255453	30060602	92.772	97.181

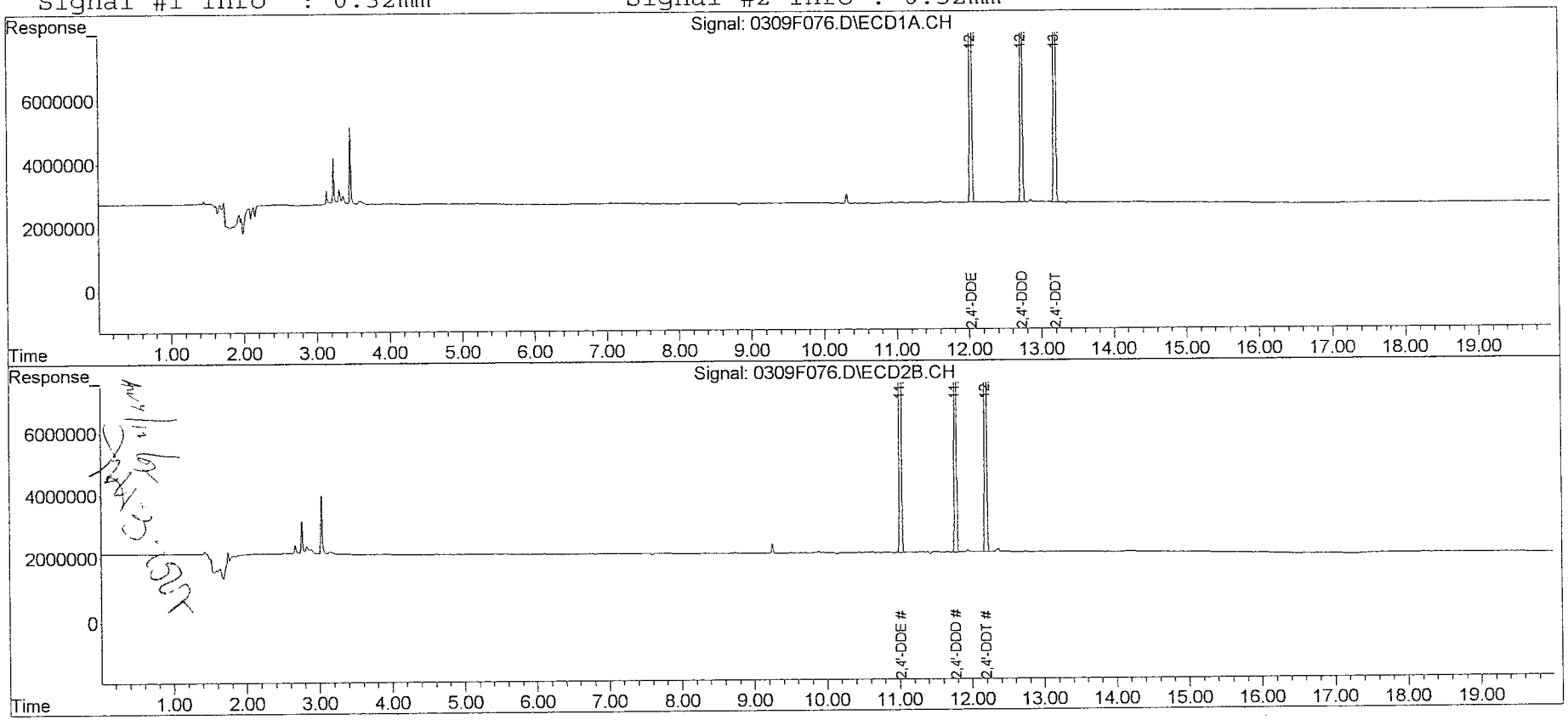
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F076.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\030907\0309F076.D\ECD2B.CH
Acq On : 11 Mar 2007 2:11 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:28 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



746

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F077.D\ECD1A.CH Vial: 37
Signal #2 : J:\GC23\DATA\030907\0309F077.D\ECD2B.CH
Acq On : 11 Mar 2007 2:37 am Operator: AKamawal
Sample : 2,4'-DDx @ 200ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 07:51:46 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	48852544	53515150	180.652	194.002
41)	2,4'-DDD	12.73	11.78	43410266	48300100	180.540	192.327
43)	2,4'-DDT	13.19	12.19	52212615	60339826	184.491	195.069

AK 3/12/07

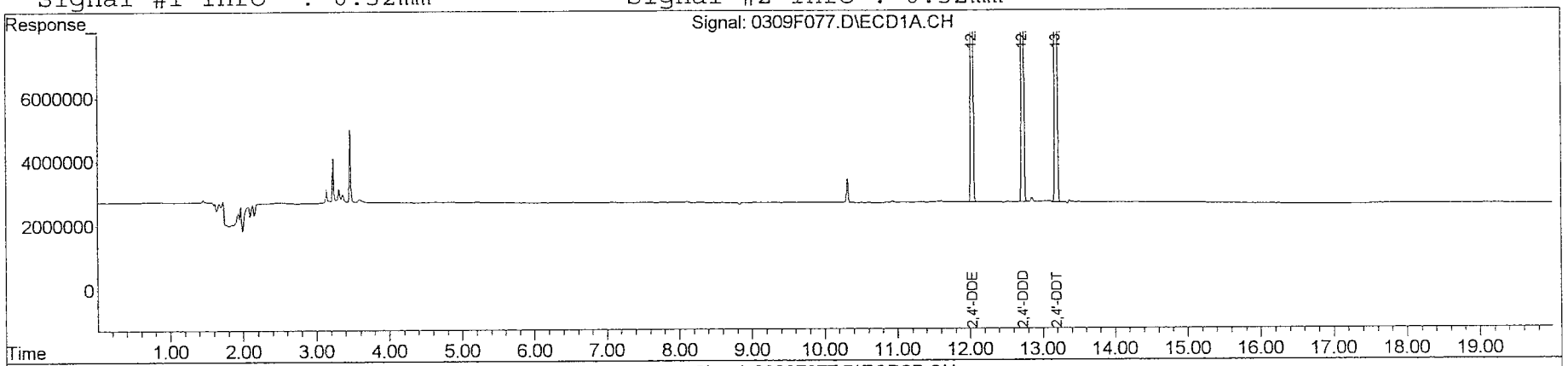
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

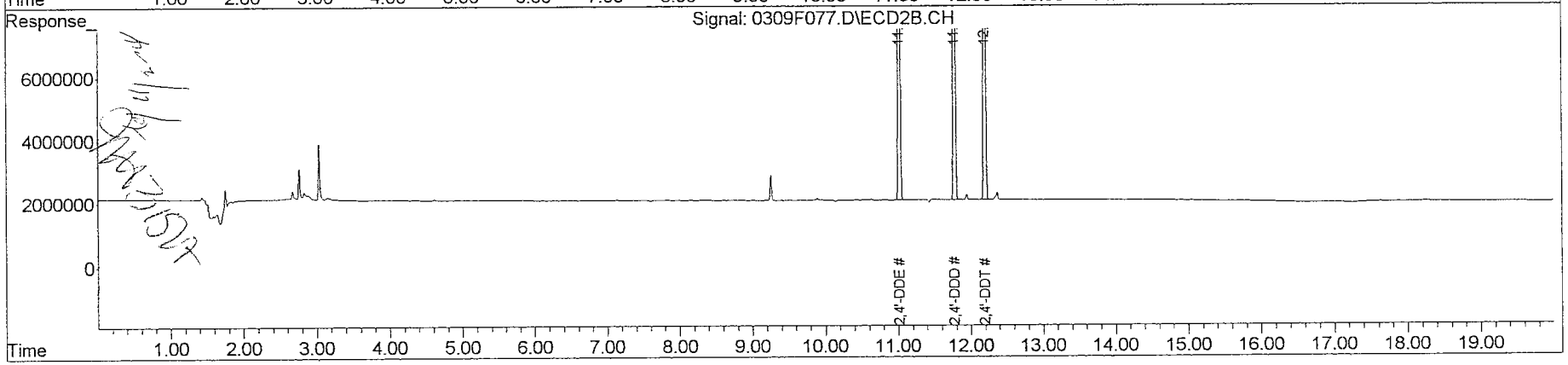
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F077.D\ECD1A.CH Vial: 37
Signal #2 : J:\GC23\DATA\030907\0309F077.D\ECD2B.CH
Acq On : 11 Mar 2007 2:37 am Operator: AKamawal
Sample : 2,4'-DDx @ 200ppb GCPS5-82I Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 9:29 2007 Quant Results File: 030907-8081.RES

Quant Method : J:\GC23\METHODS\030907-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Fri Mar 09 13:30:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F078.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\030907\0309F078.D\ECD2B.CH
Acq On : 11 Mar 2007 3:04 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 18:37:59 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.03	11.02	8699169	9404735	33.892	35.293
41)	2,4'-DDD	12.73	11.78	7809698	8638128	34.265	35.522
43)	2,4'-DDT	13.19	12.20	9229503	10620865	34.205	35.123

3/12 62

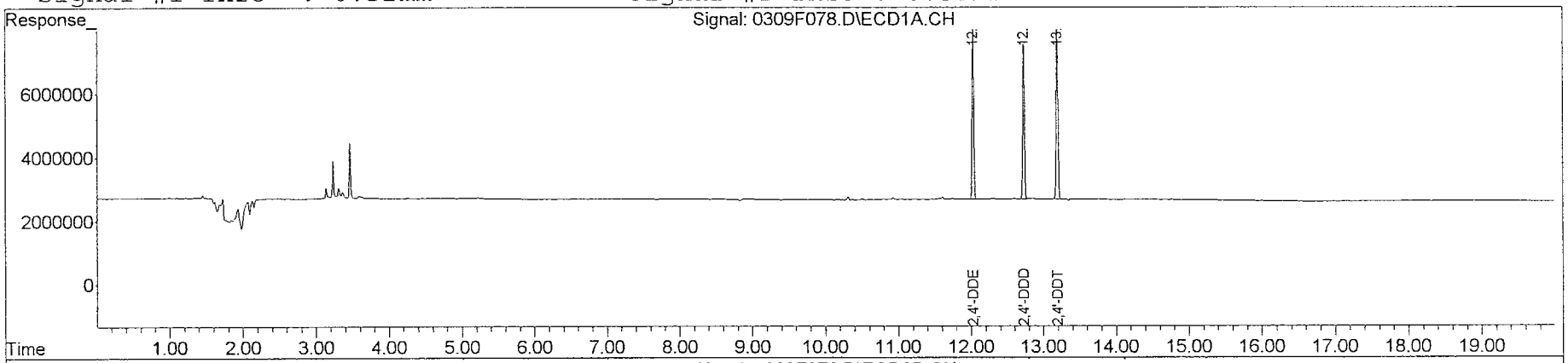
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

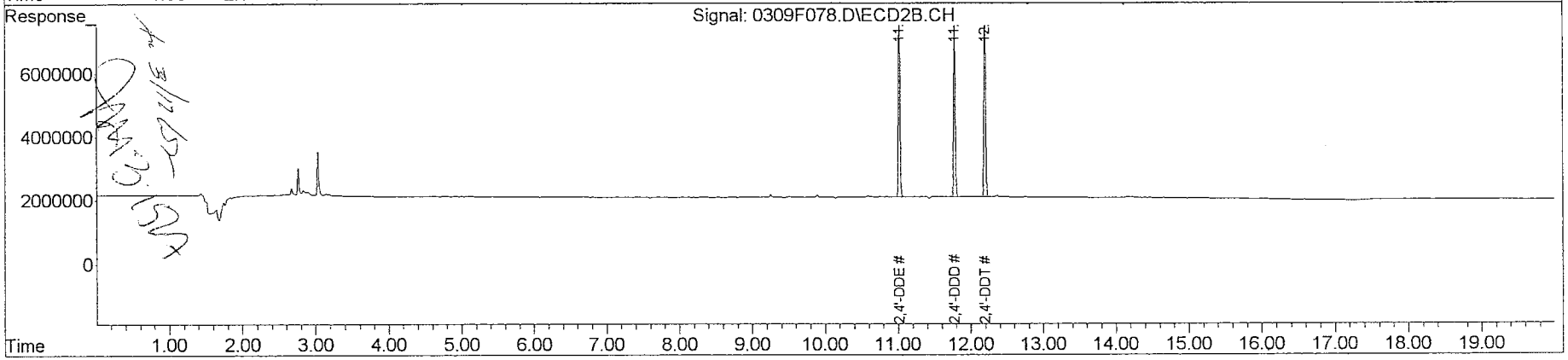
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\030907\0309F078.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\030907\0309F078.D\ECD2B.CH
Acq On : 11 Mar 2007 3:04 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 18:38 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\031207\0312F002.D\ECD2B.CH
Acq On : 12 Mar 2007 8:04 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:50:18 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

3/12/07

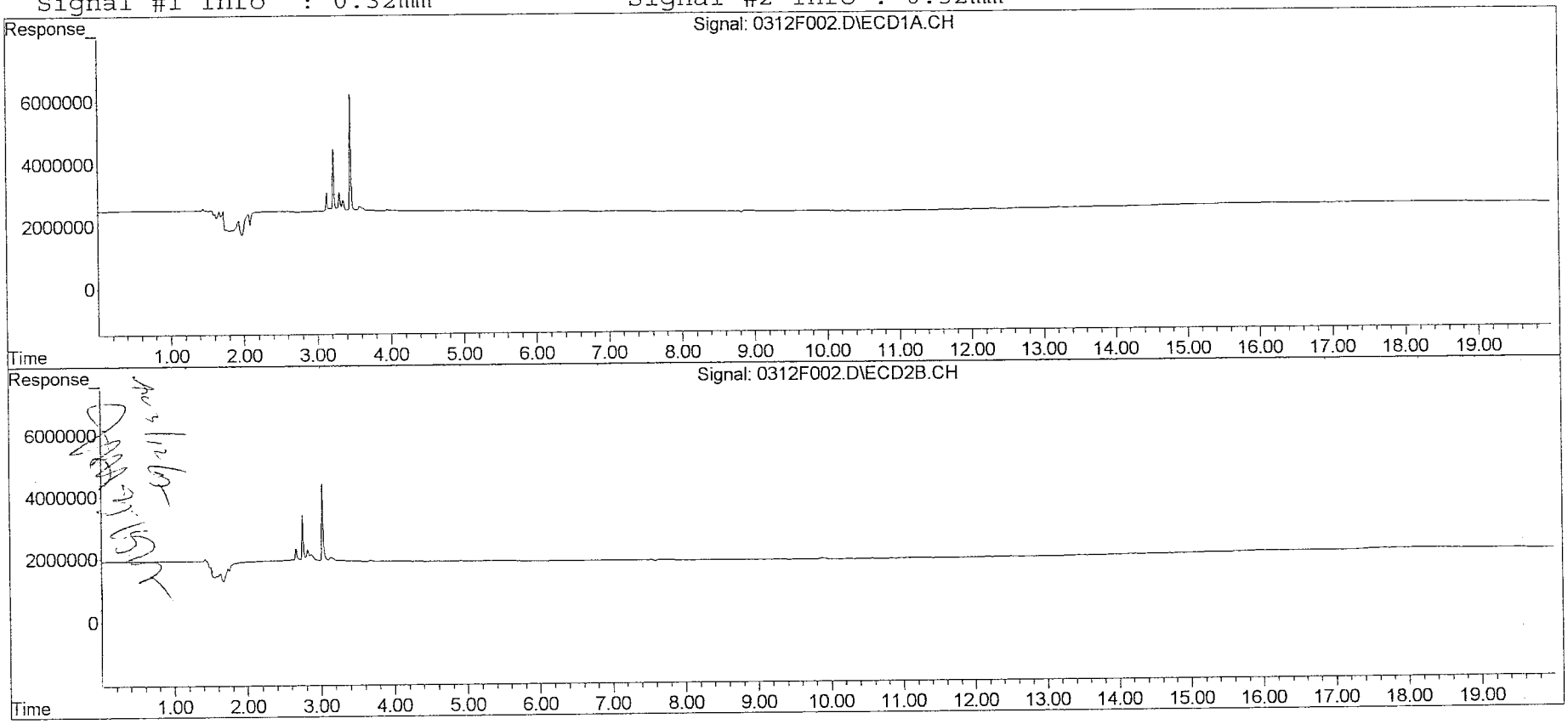
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\031207\0312F002.D\ECD2B.CH
Acq On : 12 Mar 2007 8:04 am Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:51 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\031207\0312F003.D\ECD2B.CH
Acq On : 12 Mar 2007 8:30 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:50:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.58	11.47	397642	418389	1.196	1.204
16)	Endrin	13.13	12.13	13225183	15742786	45.121	49.035
18)	4,4'-DDD	13.36	12.33	284455	314947	1.078	1.082
19)	Endrin Aldehyde	13.71	12.87	347246	365056	1.315	1.273
21)	4,4'-DDT	13.81	12.74	25027252	31062967	90.560	98.294
22)	Endrin Ketone	14.75	14.05	449967	654602	1.375	1.675

Ar 3/12/07

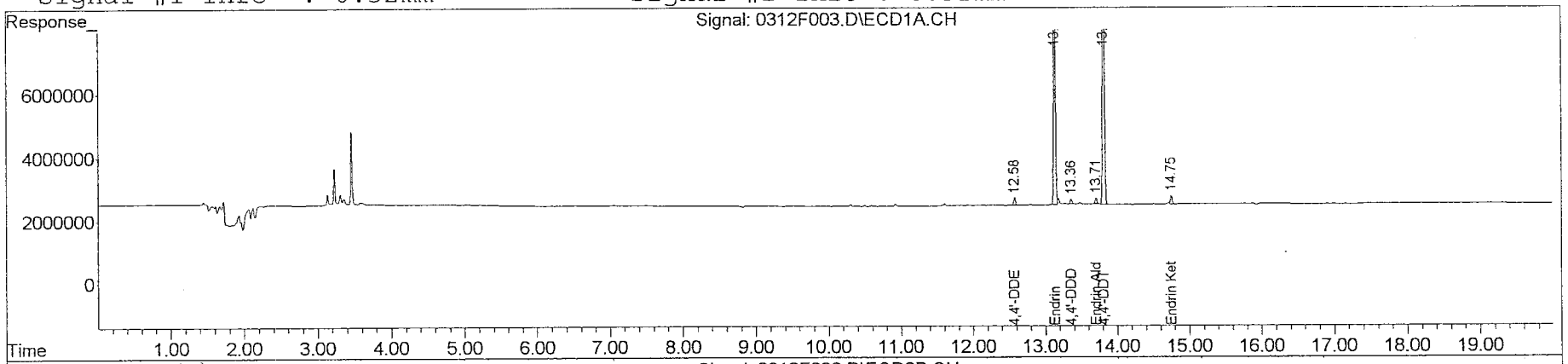
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

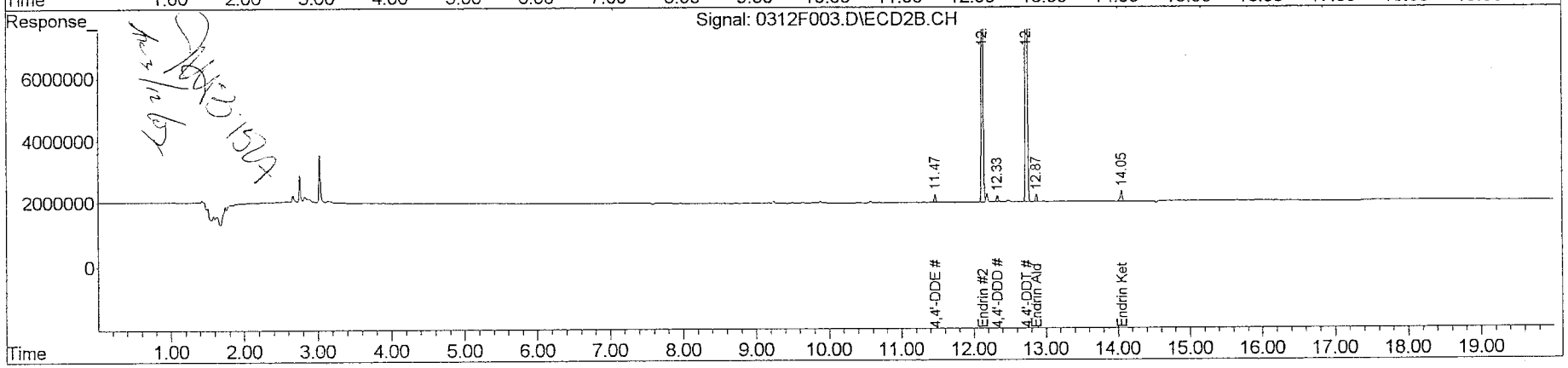
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\031207\0312F003.D\ECD2B.CH
Acq On : 12 Mar 2007 8:30 am Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-82D Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 15:51 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 15:49:14 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
37)	Chlorpyrifos	10.94	10.01	453901	409344	1788.502	1.953	#
38)	Oxychlordane	11.72	10.46	686129	697057	1.999	1.945	
40)	cis-Nonachlor	13.36	12.20	703016	775796	1.943	1.890	
42)	trans-Nonachlor	12.39	11.03	714098	750999	1.958m	1.904	
44)	Mirex	15.48	14.23	535481	717001	2.219	2.113	
46)	HCE	4.14	3.56	1280624	1216897	1.632	1.689	
47)	HCBD	4.87	4.12	1092064	1018417	1.808	1.836	

3/12/07

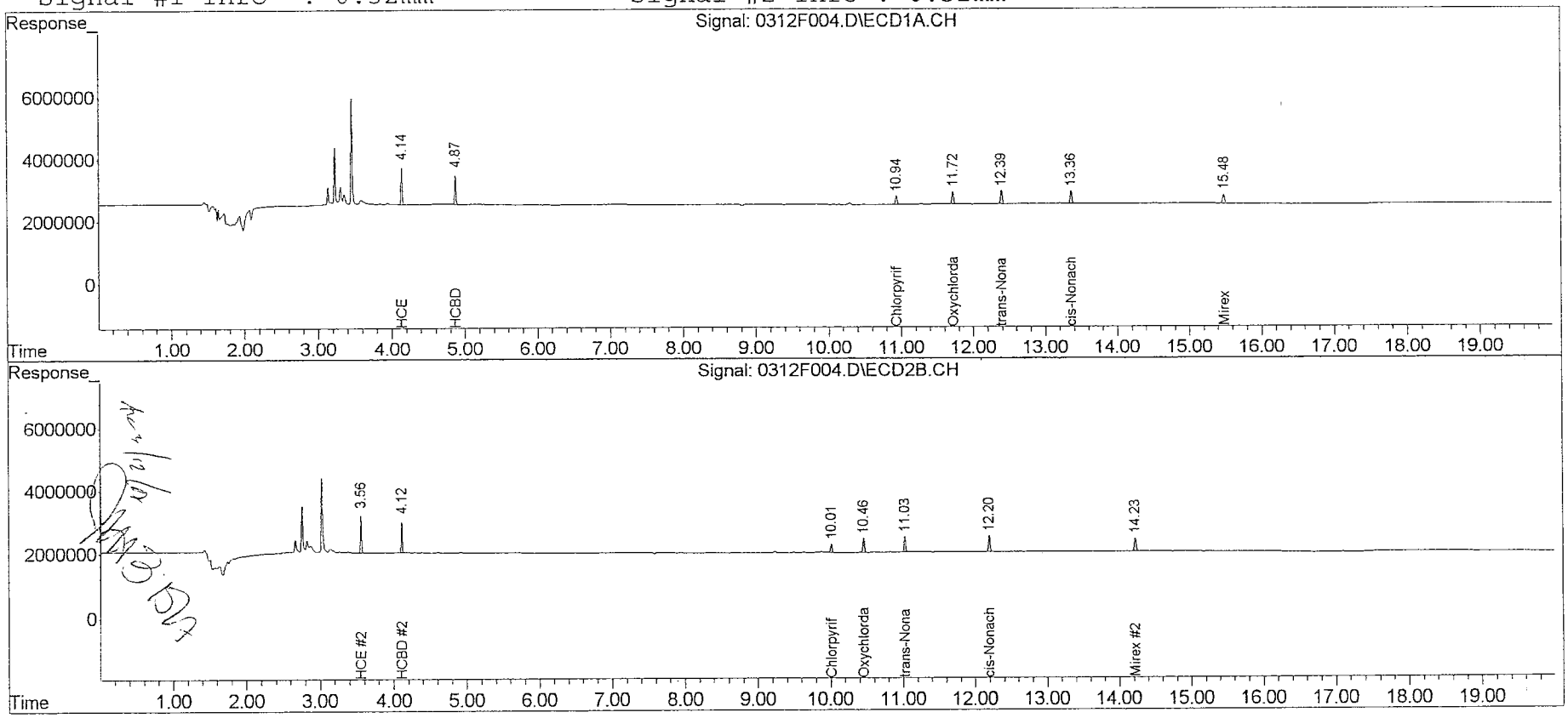
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:20 2007 Quant Results File: 031207-8081.RES

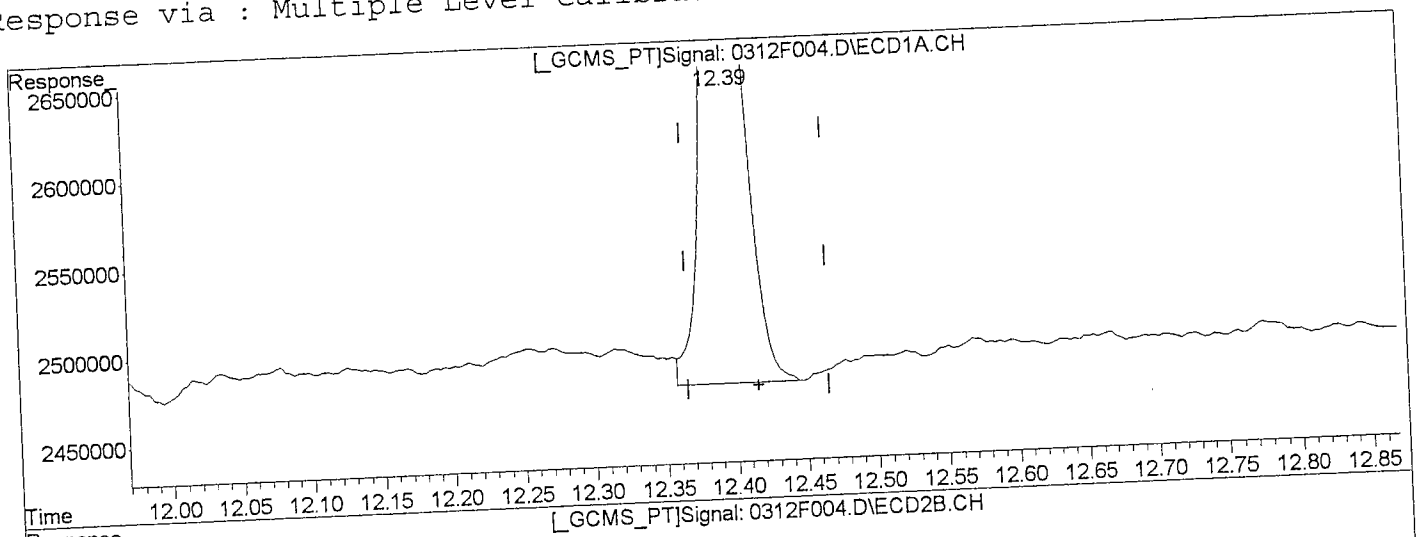
Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

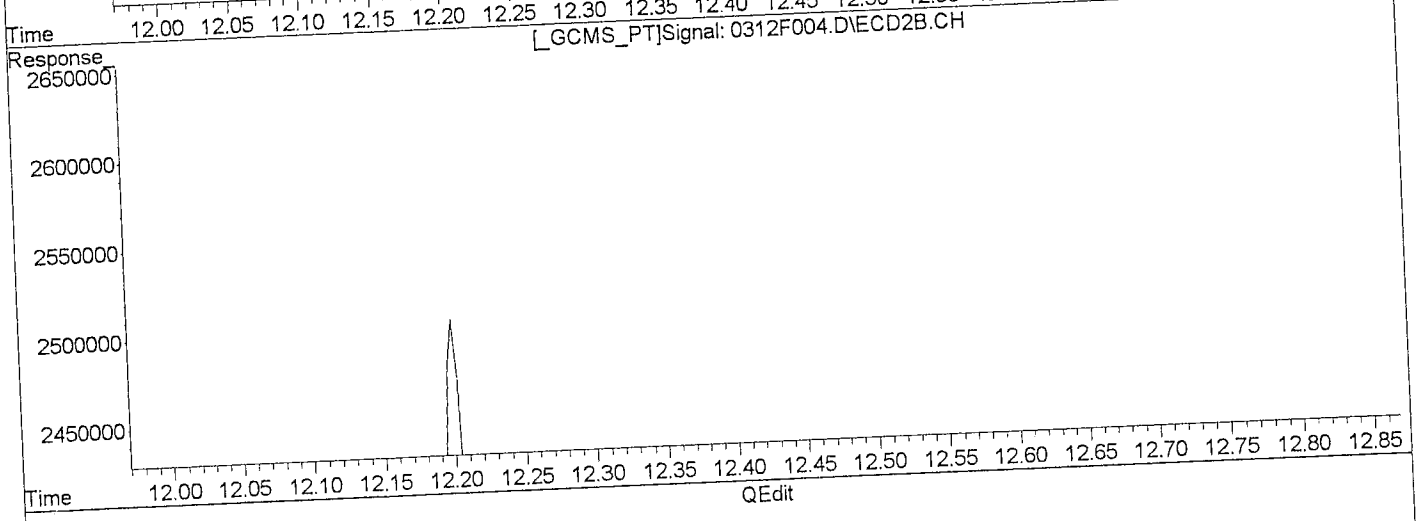
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





(42) trans-Nonachlor

12.39min 2.079ug/L

response 758107

(42) trans-Nonachlor #2

11.03min 1.904ug/L

response 750999

Before

MAR 1 2 2007

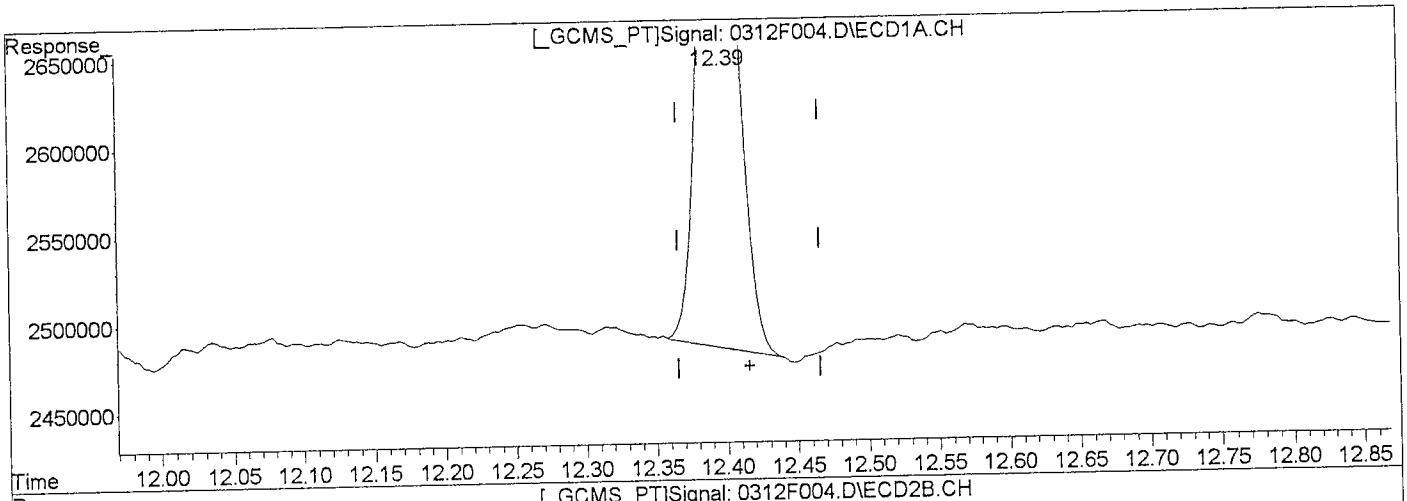
(+) = Expected Retention Time

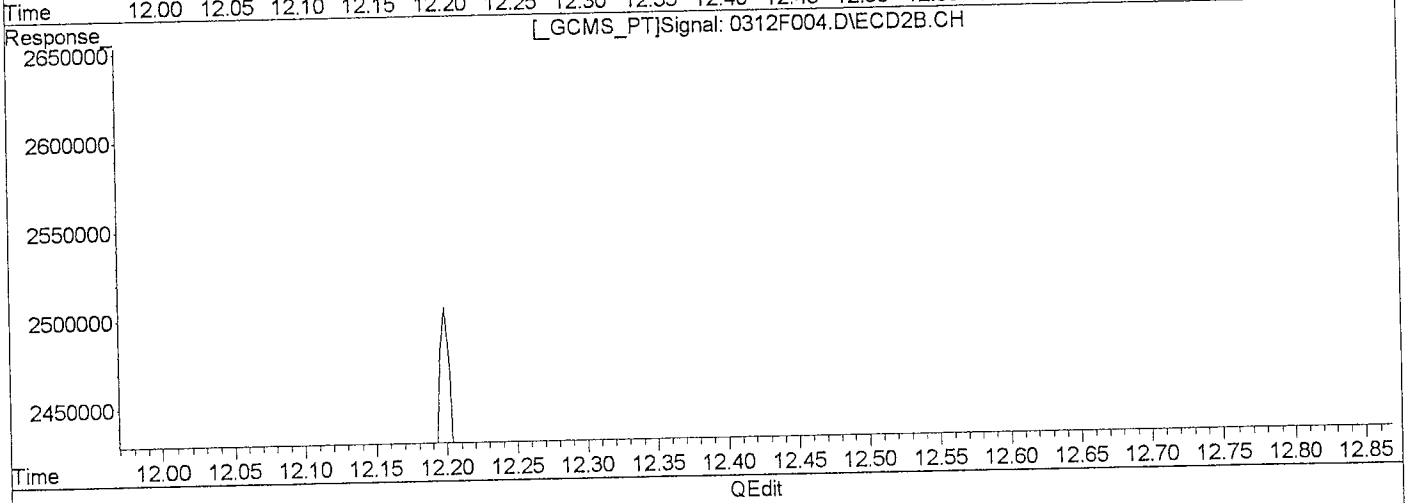
0312F004.D 031207-8081.M Mon Mar 12 12:20:11 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\031207\0312F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\031207\0312F004.D\ECD2B.CH
Acq On : 12 Mar 2007 8:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor
12.39min 1.958ug/L m
response 714098

(42) trans-Nonachlor #2
11.03min 1.904ug/L
response 750999

(+) = Expected Retention Time
0312F004.D 031207-8081.M Mon Mar 12 12:20:16 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	1013657	995964	2.835	4.751 #
38)	Oxychlordane	11.73	10.47	1551870	1685181	4.521	4.703
40)	cis-Nonachlor	13.37	12.21	1629327	1878518	4.504	4.576
42)	trans-Nonachlor	12.40	11.04	1671224	1841353	4.584m	4.668
44)	Mirex	15.49	14.24	1230516	1692000	5.098	4.986
46)	HCE	4.14	3.56	3043261	2956794	3.878	4.104
47)	HCBD	4.88	4.12	2514114	2444880	4.162	4.408

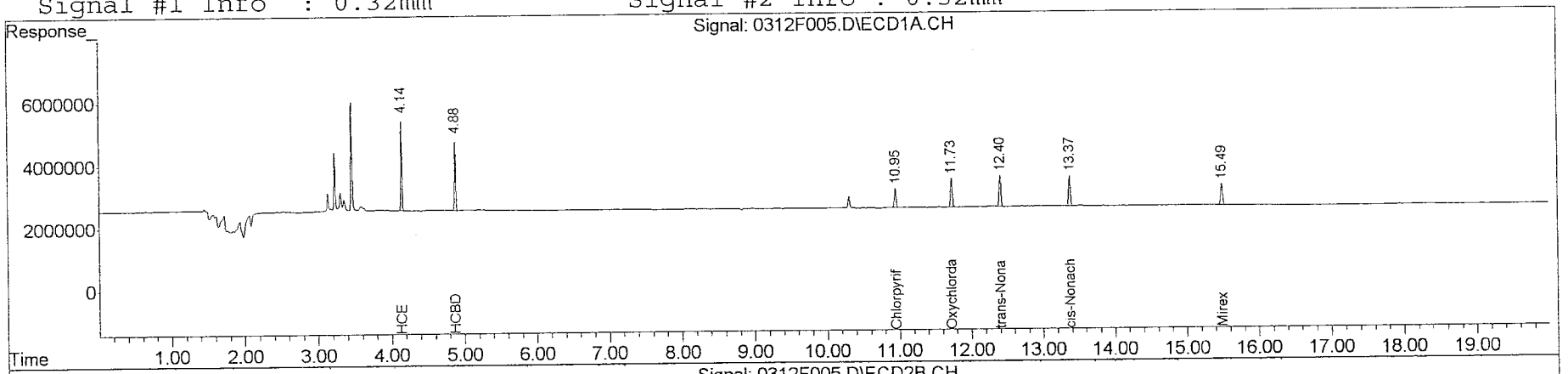
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

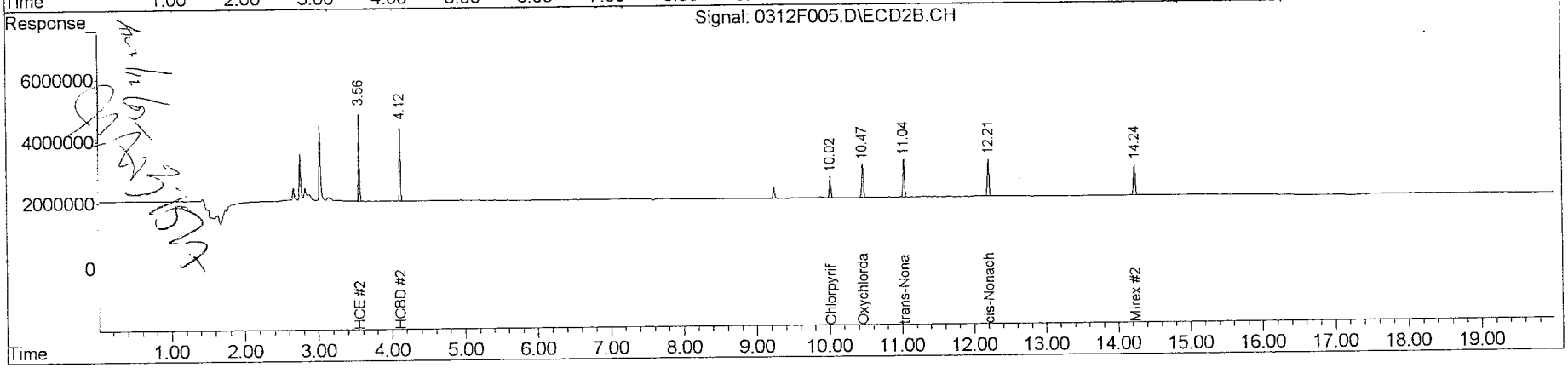
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

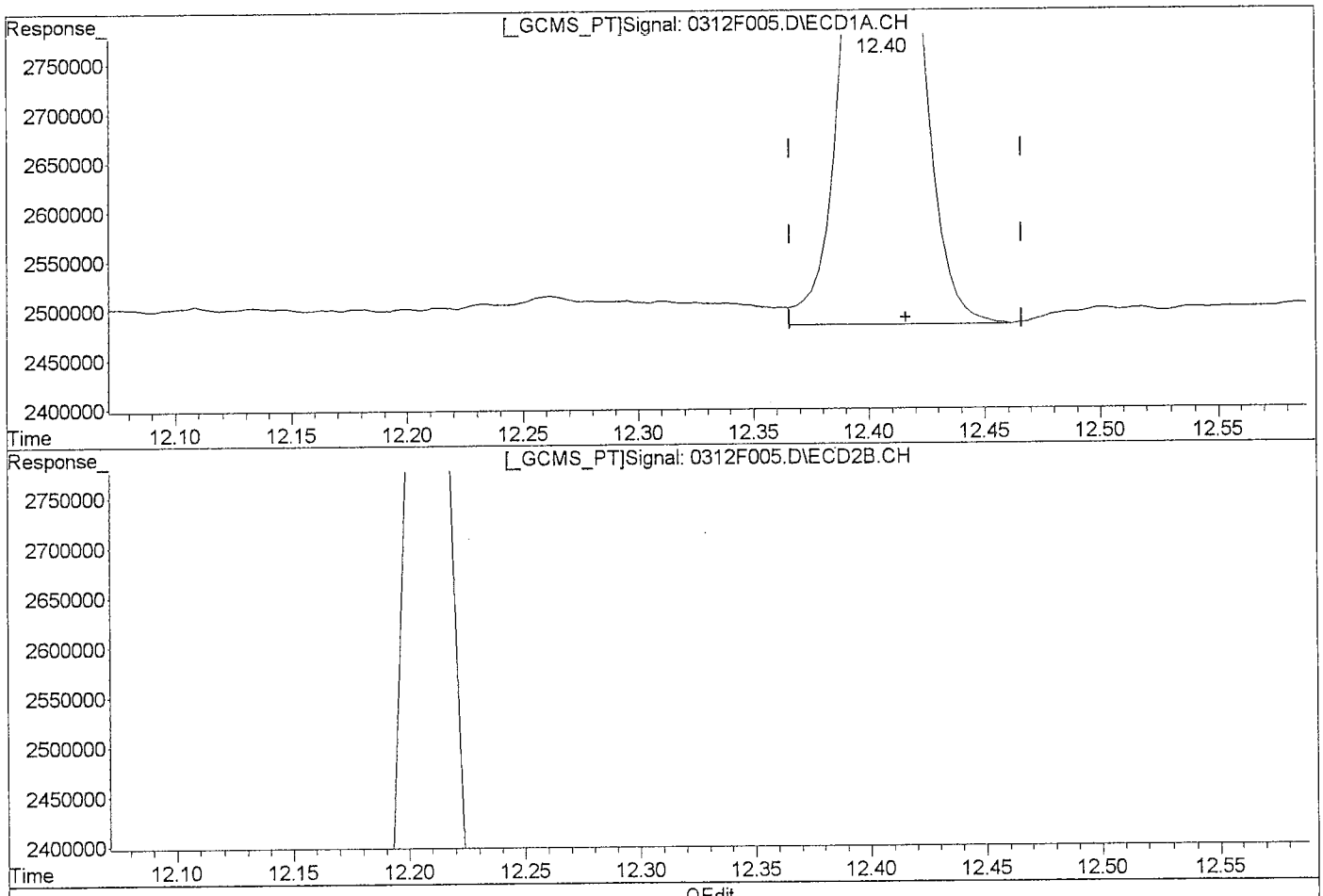




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration



QEdit

(42) trans-Nonachlor

12.40min 4.719ug/L

response 1720596

(42) trans-Nonachlor #2

11.04min 4.668ug/L

response 1841353

Before

MAR 12 2007

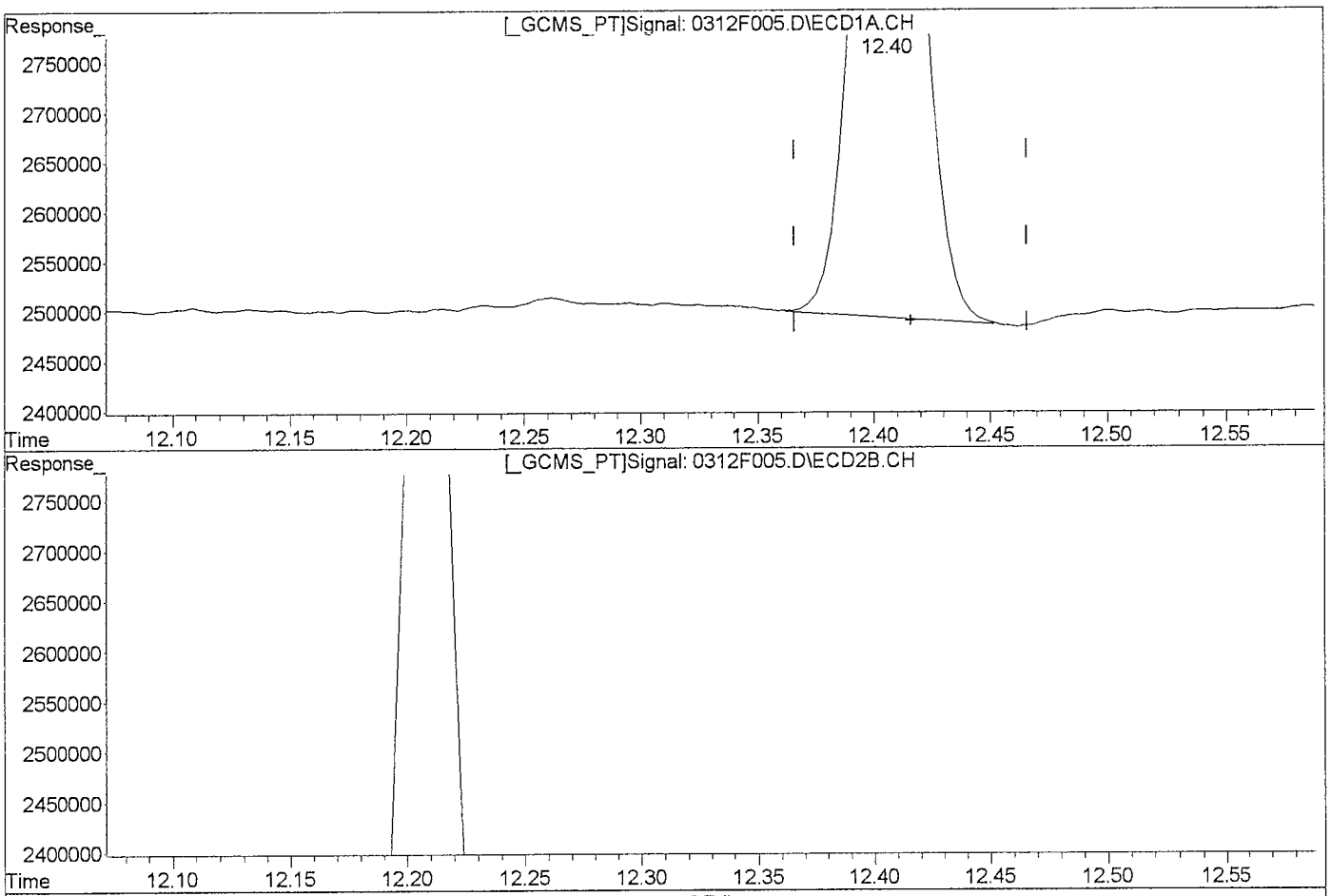
(+) = Expected Retention Time

0312F005.D 031207-8081.M Mon Mar 12 12:20:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\031207\0312F005.D\ECD2B.CH
Acq On : 12 Mar 2007 9:23 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration



QEdit

(42) trans-Nonachlor

12.40min 4.584ug/L m

response 1671224

(42) trans-Nonachlor #2

11.04min 4.668ug/L

response 1841353

(+) = Expected Retention Time
0312F005.D 031207-8081.M Mon Mar 12 12:20:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\031207\0312F006.D\ECD2B.CH
Acq On : 12 Mar 2007 9:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:22:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	4066572	4178288	18.831	19.930
38)	Oxychlordane	11.73	10.47	6452335	7027250	18.799	19.613
40)	cis-Nonachlor	13.37	12.21	6851081	8028052	18.938	19.557
42)	trans-Nonachlor	12.41	11.04	6992064	7817712	19.176	19.818
44)	Mirex	15.49	14.24	4867600	6846190	20.167	20.176
46)	HCE	4.14	3.56	14225788	14087108	18.128	19.550
47)	HCBD	4.88	4.12	11101869	11007186	18.379	19.845

AC 3/12/07

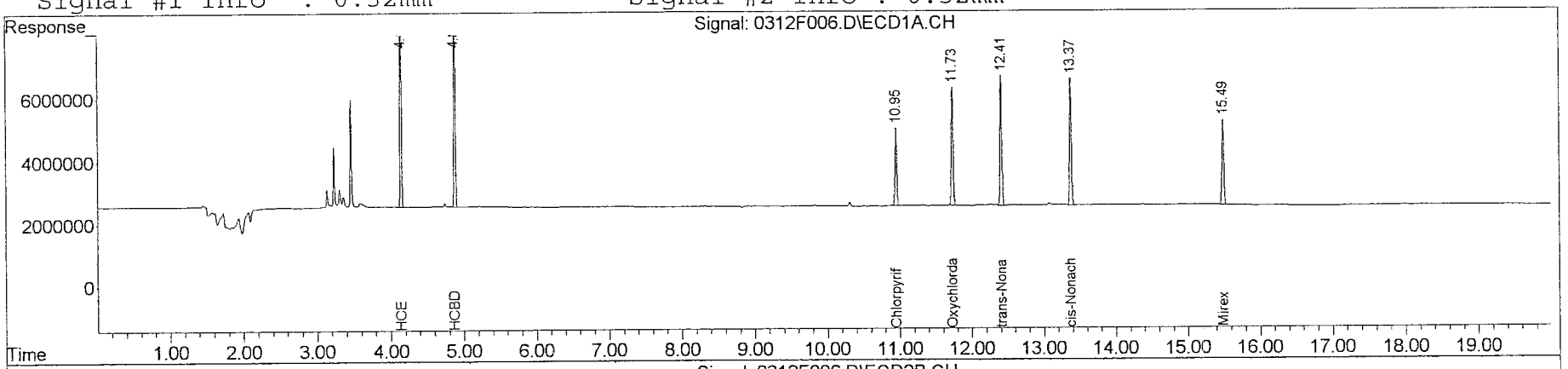
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

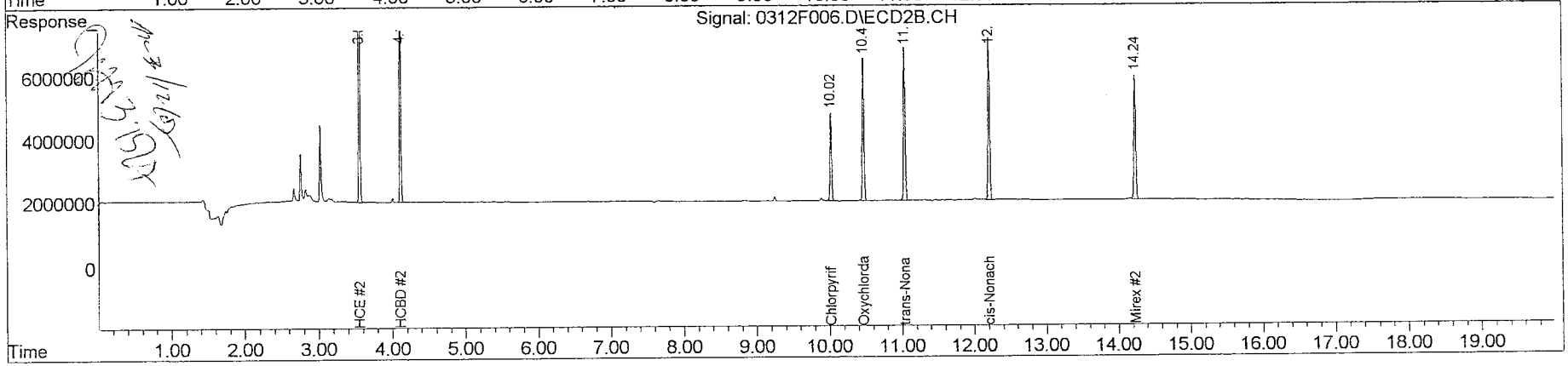
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\031207\0312F006.D\ECD2B.CH
Acq On : 12 Mar 2007 9:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F007.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\031207\0312F007.D\ECD2B.CH
Acq On : 12 Mar 2007 10:16 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 11:56:40 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.03	8709736	9229781	43.735	44.025
38)	Oxychlordane	11.74	10.47	14455688	16040578	42.117	44.769
40)	cis-Nonachlor	13.38	12.21	15516604	18731989	42.891	45.633
42)	trans-Nonachlor	12.41	11.04	15696286	18023150	43.049	45.688
44)	Mirex	15.50	14.24	10463381	14895899	43.351	43.898
46)	HCE	4.15	3.56	35079832	35048822	44.703	48.642
47)	HCBD	4.89	4.12	26078181	26246644	43.171	47.320

Am 3/12/07

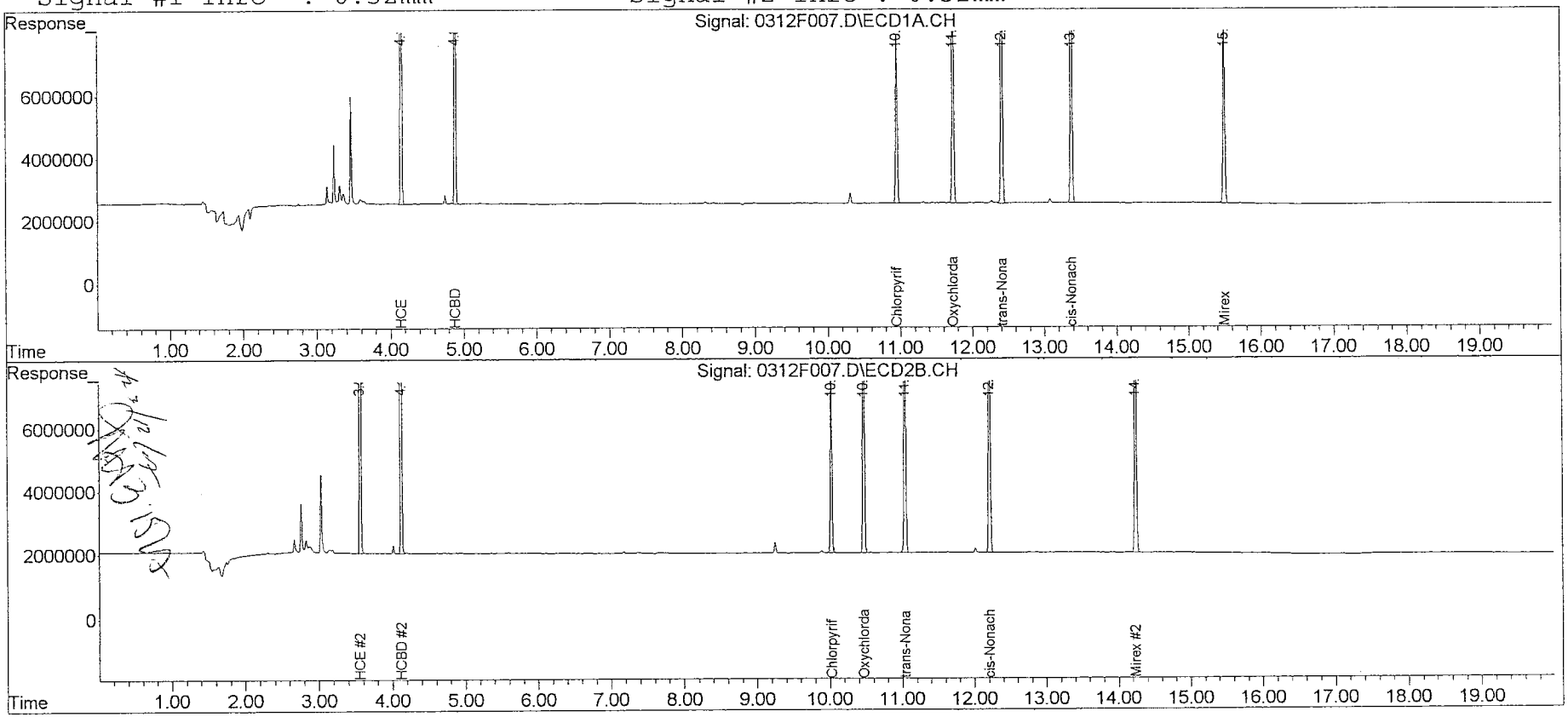
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F007.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\031207\0312F007.D\ECD2B.CH
Acq On : 12 Mar 2007 10:16 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:22 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



766

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F008.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\031207\0312F008.D\ECD2B.CH
Acq On : 12 Mar 2007 10:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:19:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	15951228	17099997	84.102	81.565
38)	Oxychlordane	11.73	10.47	27410986	30586750	79.862	85.366
40)	cis-Nonachlor	13.37	12.21	30034044	36430508	83.020	88.748
42)	trans-Nonachlor	12.41	11.04	30022449	34928371	82.340	88.542
44)	Mirex	15.49	14.24	19155830	27387201	79.364	80.710
46)	HCE	4.14	3.56	70515542	70407678	89.859	97.714
47)	HCBD	4.88	4.12	51132422	51326196	84.648	92.535

3/12/07

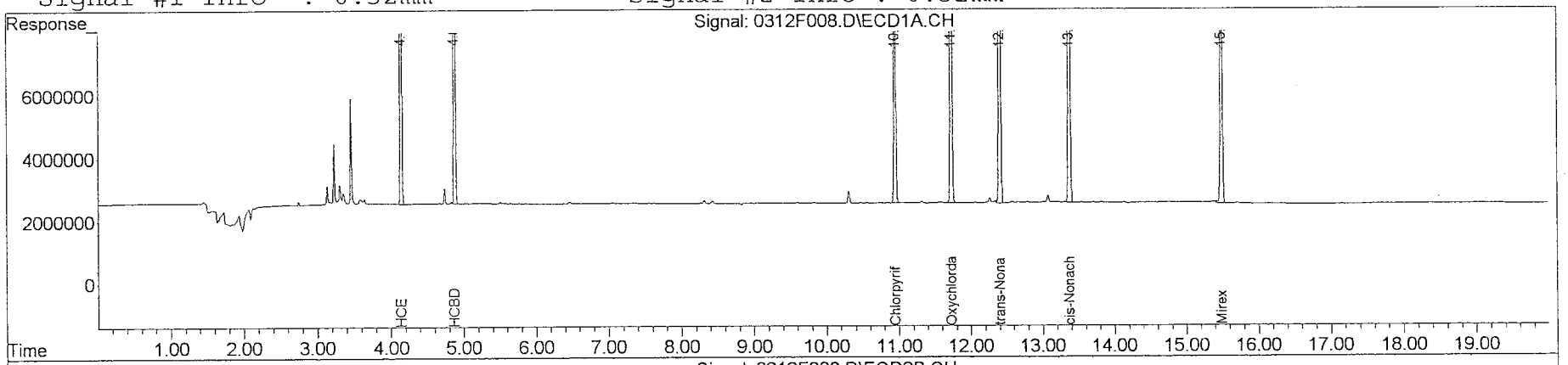
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

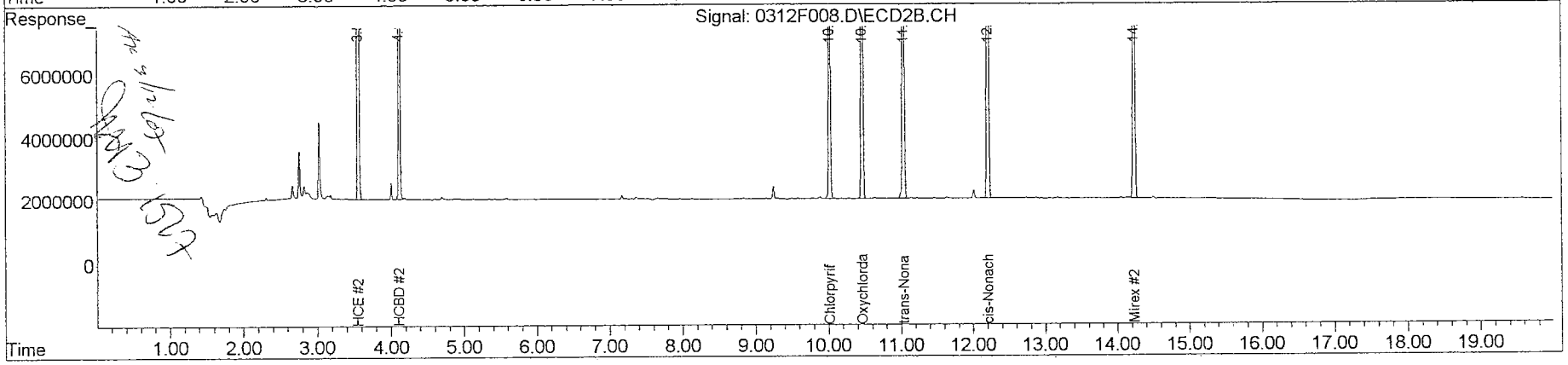
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F008.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\031207\0312F008.D\ECD2B.CH
Acq On : 12 Mar 2007 10:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:22 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





768

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\031207\0312F009.D\ECD2B.CH
Acq On : 12 Mar 2007 11:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:49:00 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.94	10.01	30384197	33132459	171.250	158.037
38)	Oxychlordane	11.72	10.46	54625896	61863565	159.152	172.658
40)	cis-Nonachlor	13.37	12.20	60710074	75348480	167.815	183.555
42)	trans-Nonachlor	12.40	11.03	60486013	71428312	165.889	181.069
44)	Mirex	15.48	14.23	36402832	53429663	150.820	157.456
46)	HCE	4.14	3.56	146.3E6	149.3E6	186.413	207.269
47)	HCBD	4.87	4.11	104.0E6	106.8E6	172.122	192.507

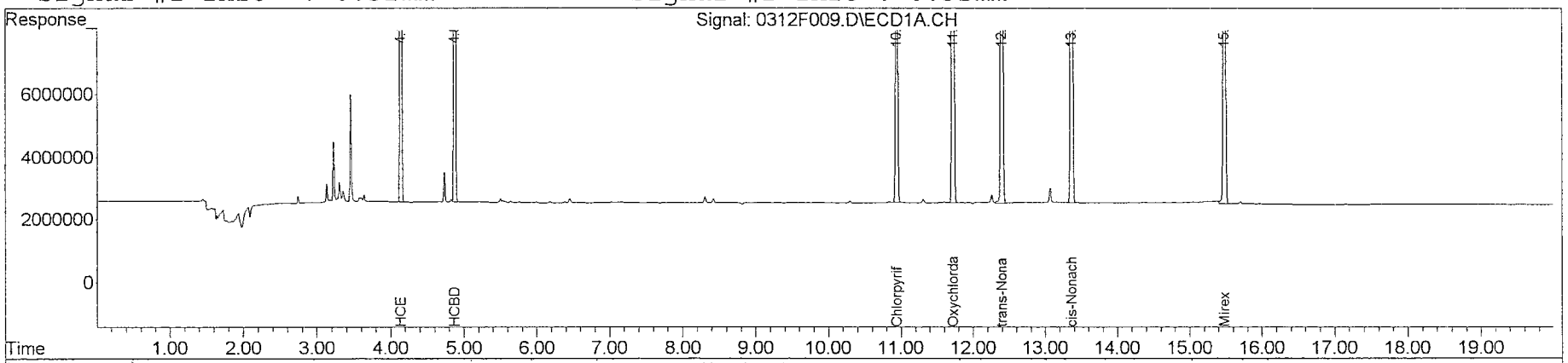
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

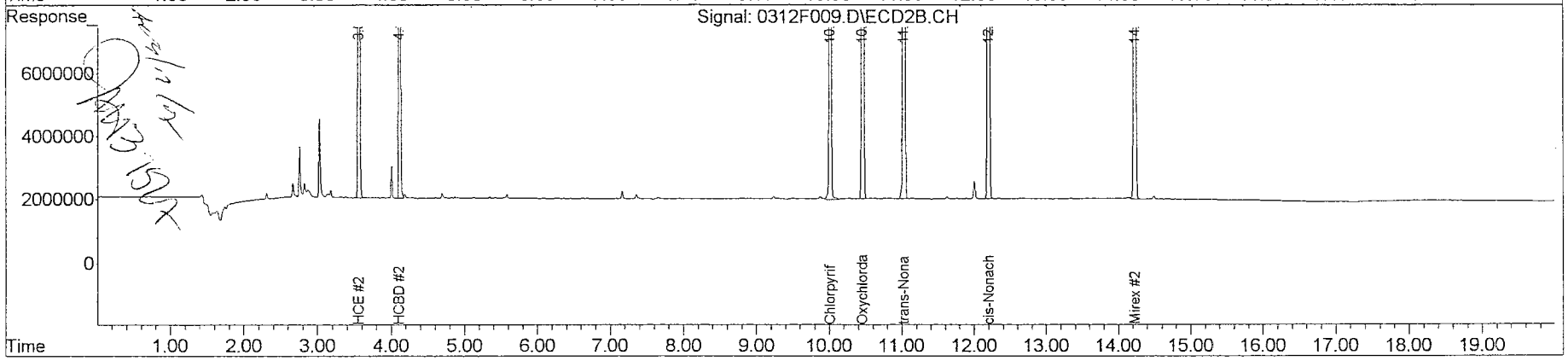
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\031207\0312F009.D\ECD2B.CH
Acq On : 12 Mar 2007 11:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:49 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 09:32:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





770

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F010.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\031207\0312F010.D\ECD2B.CH
Acq On : 12 Mar 2007 11:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:57:44 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 12:51:07 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	10.95	10.02	7272851	7748210	39.009	40.994
38)	Oxychlordane	11.73	10.47	10978651	12211847	36.345	37.138
40)	cis-Nonachlor	13.37	12.21	12222590	14648333	37.916	38.537
42)	trans-Nonachlor	12.41	11.04	12305870	14052642	37.720	38.299
44)	Mirex	15.49	14.23	8364773	11771786	37.452	37.607
46)	HCE	4.14	3.56	26147136	26008542	38.279	38.475
47)	HCBD	4.88	4.12	19210436	19308082	36.514	37.124

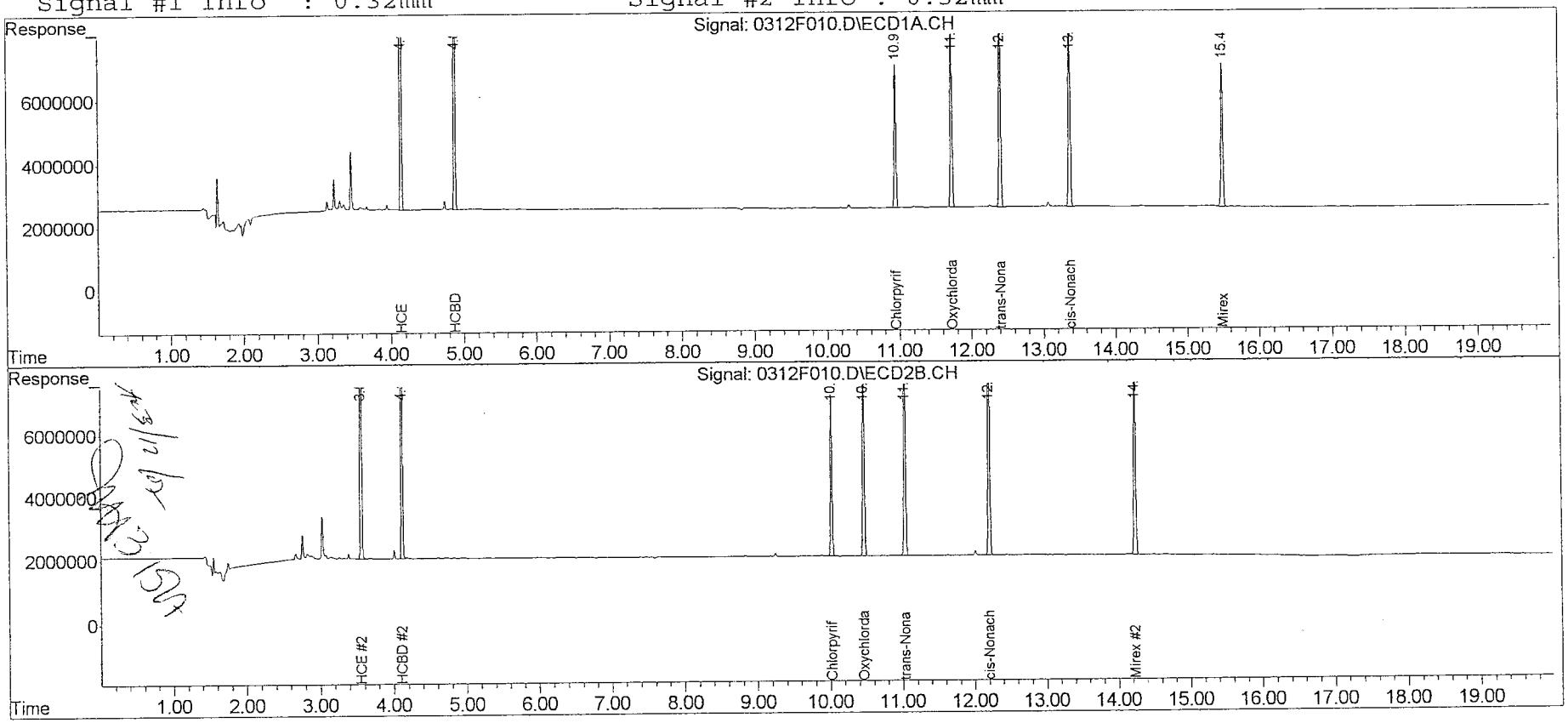
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F010.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\031207\0312F010.D\ECD2B.CH
Acq On : 12 Mar 2007 11:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 12:58 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 12:51:07 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:01 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	286904	758456	108.637	101.139
26)	Toxaphene {2}	13.05	12.45	204607	583653	45.975m	105.398m#
27)	Toxaphene {3}	13.20	12.64	336953	308888	84.223m	94.127
28)	Toxaphene {4}	13.87	13.00	387878	370340	68.394	81.908m
29)	Toxaphene {5}	14.18	13.09	227240	330865	110.883	39.900m#
30)	Toxaphene {6}	14.71	13.57	211428	803930	28.622	81.132 #

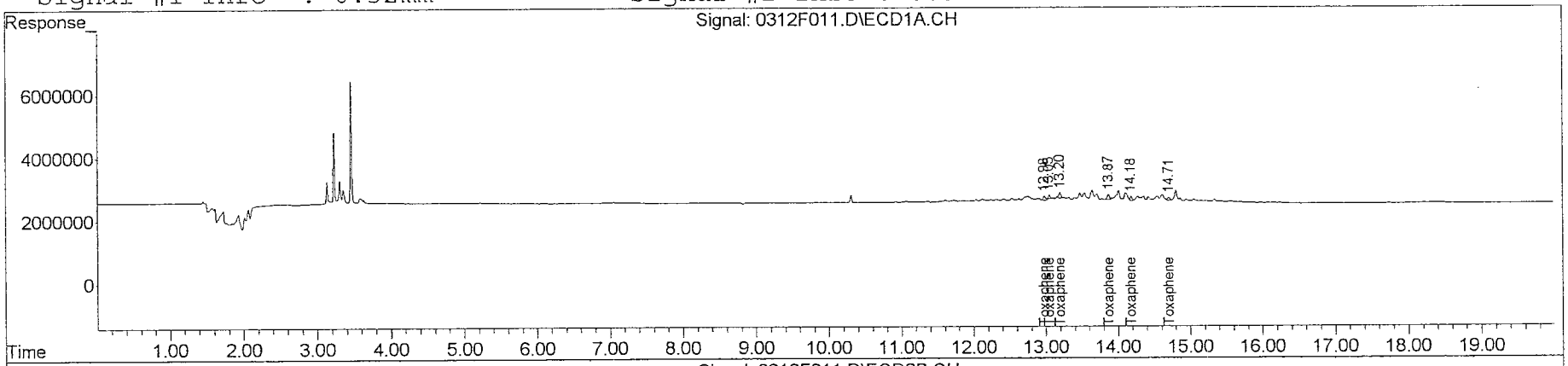
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

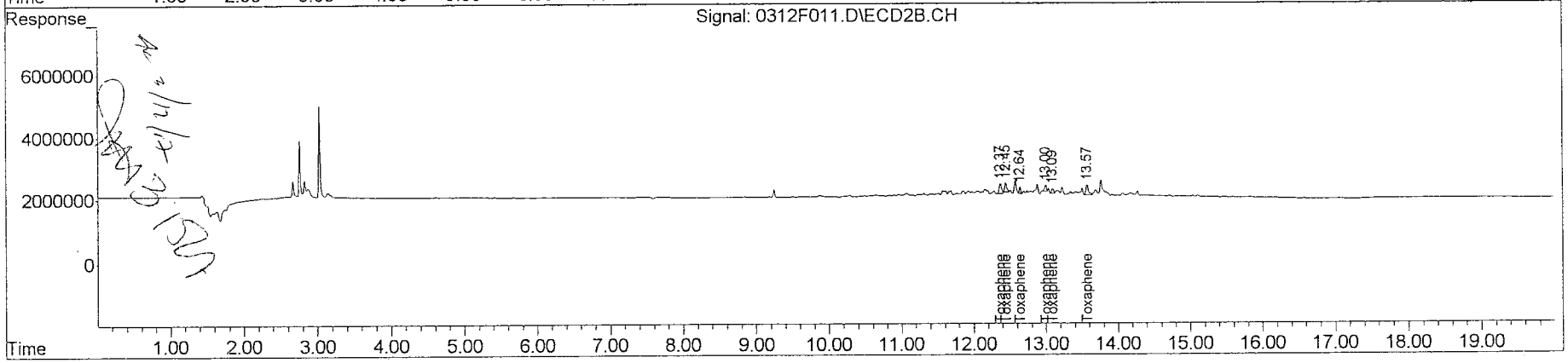
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:14 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



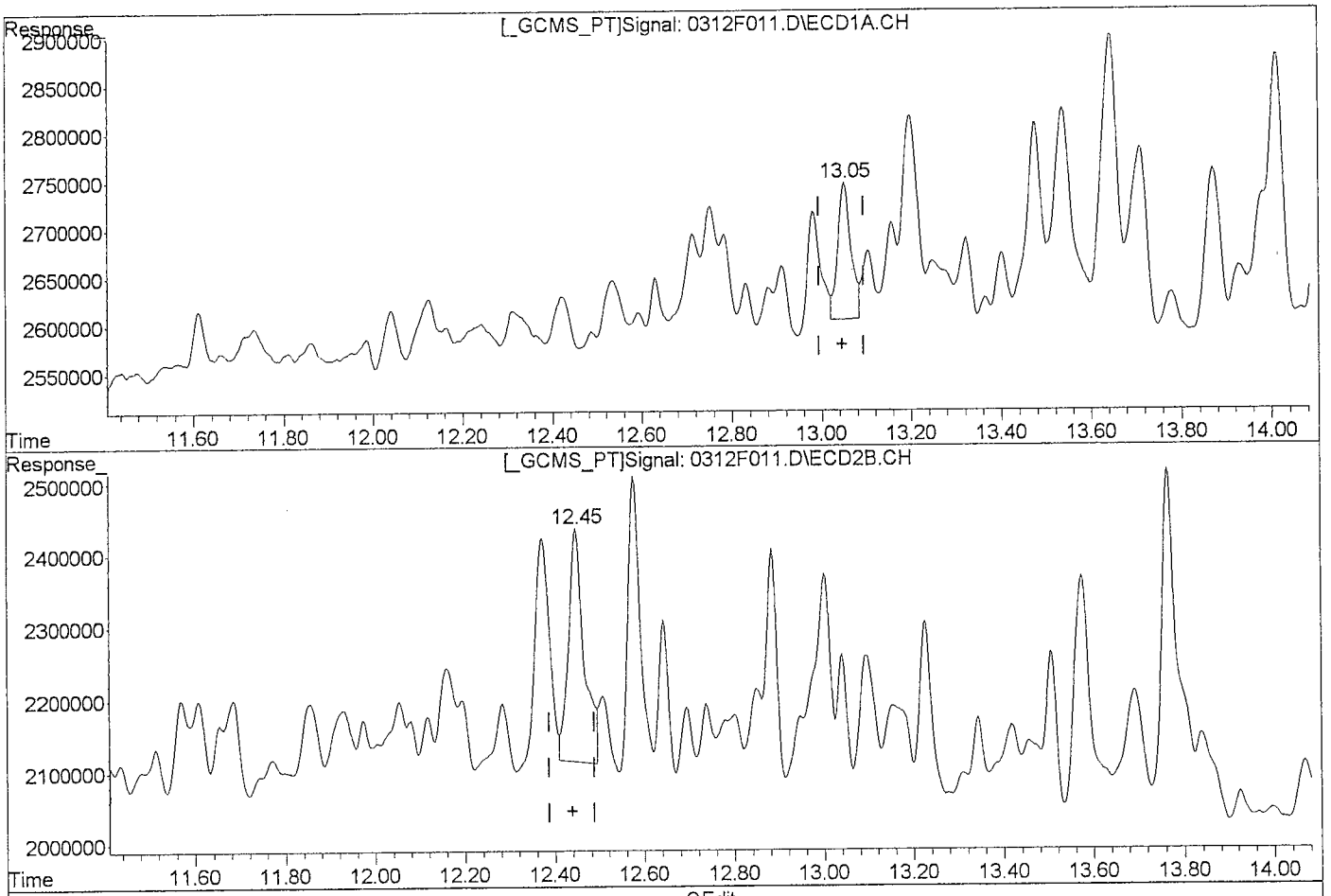


774

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 66.296ug/L

response 295047

(26) Toxaphene {2} #2

12.45min 138.280ug/L

response 765740

Before

MAR 1 2 2007

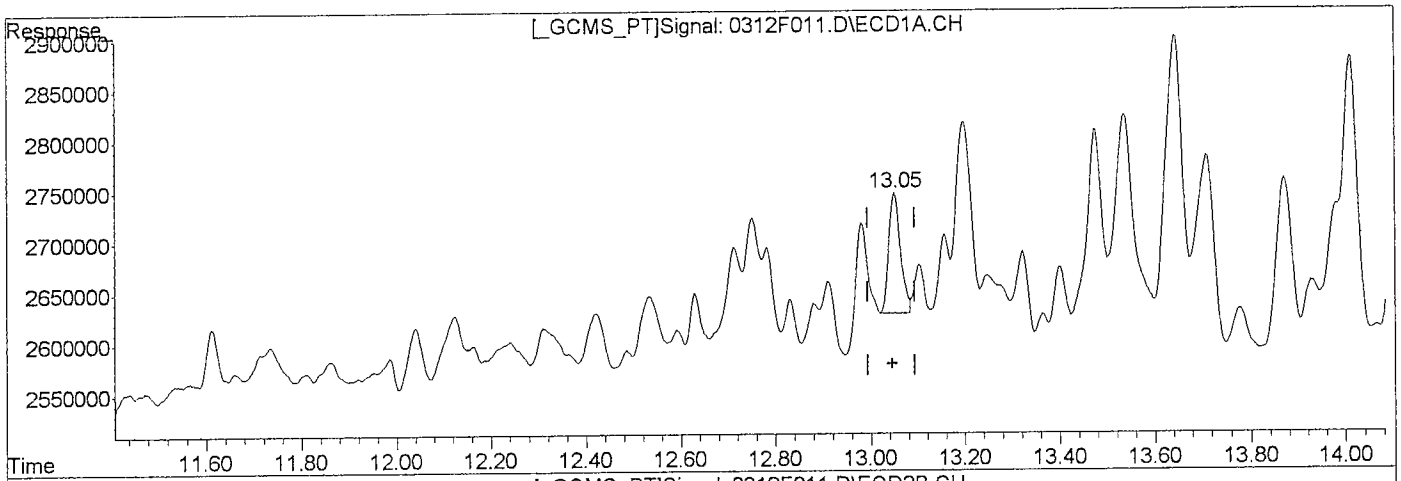
(+) = Expected Retention Time

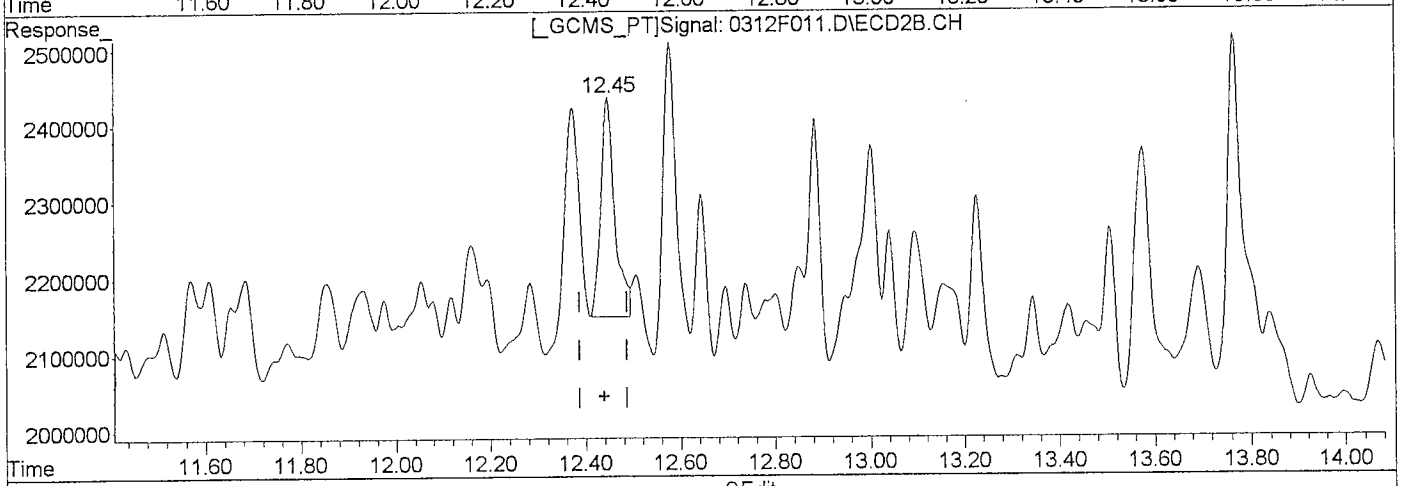
0312F011.D 031207-8081.M Mon Mar 12 17:11:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 45.975ug/L m

response 204607

(26) Toxaphene {2} #2

12.45min 105.398ug/L m

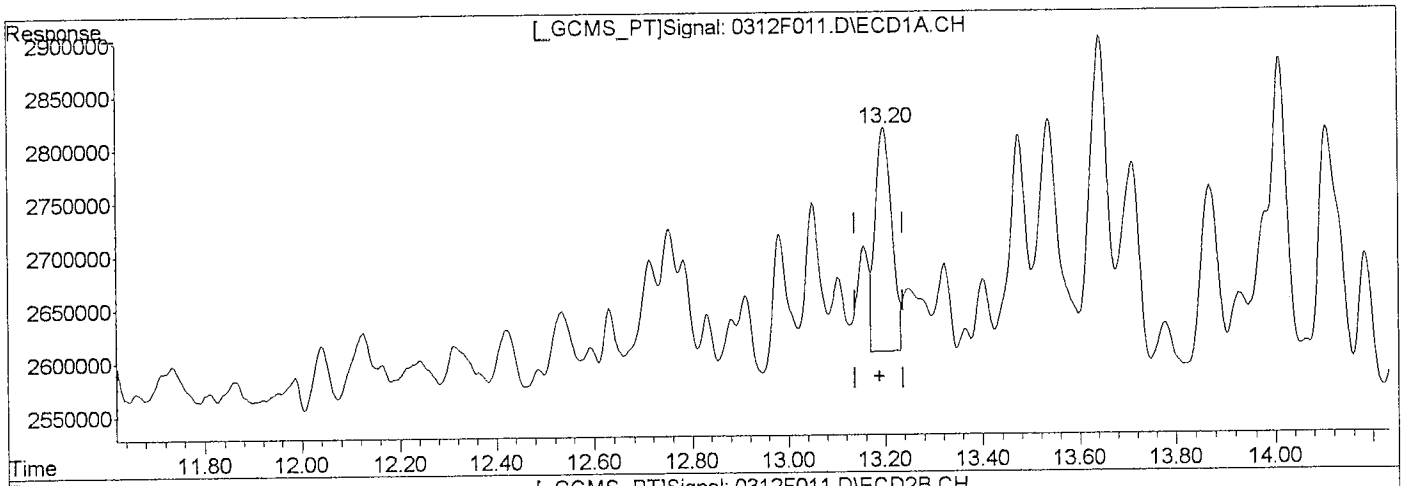
response 583653

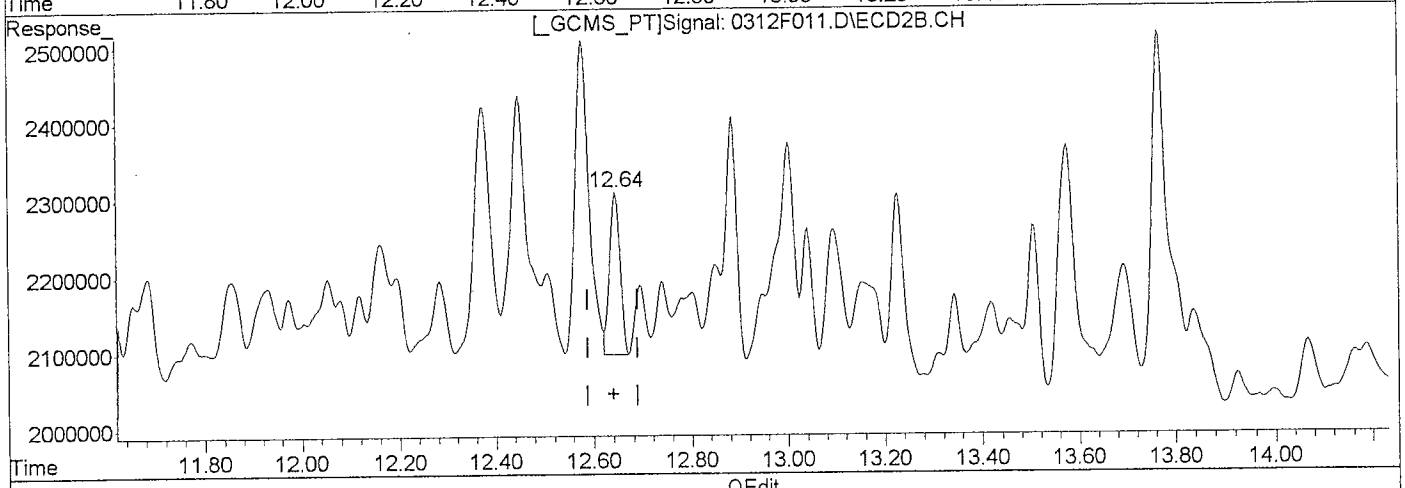
(+) = Expected Retention Time
0312F011.D 031207-8081.M Mon Mar 12 17:12:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 125.823ug/L

response 503383

(27) Toxaphene {3} #2

12.64min 94.127ug/L

response 308888

Before

MAR 1 2 2007

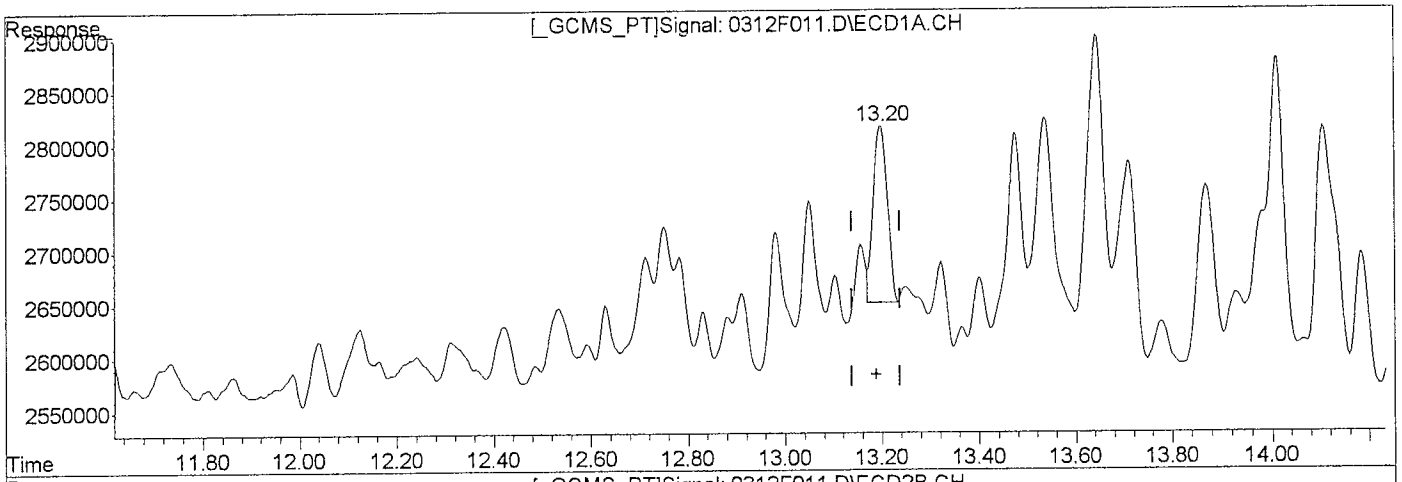
(+) = Expected Retention Time

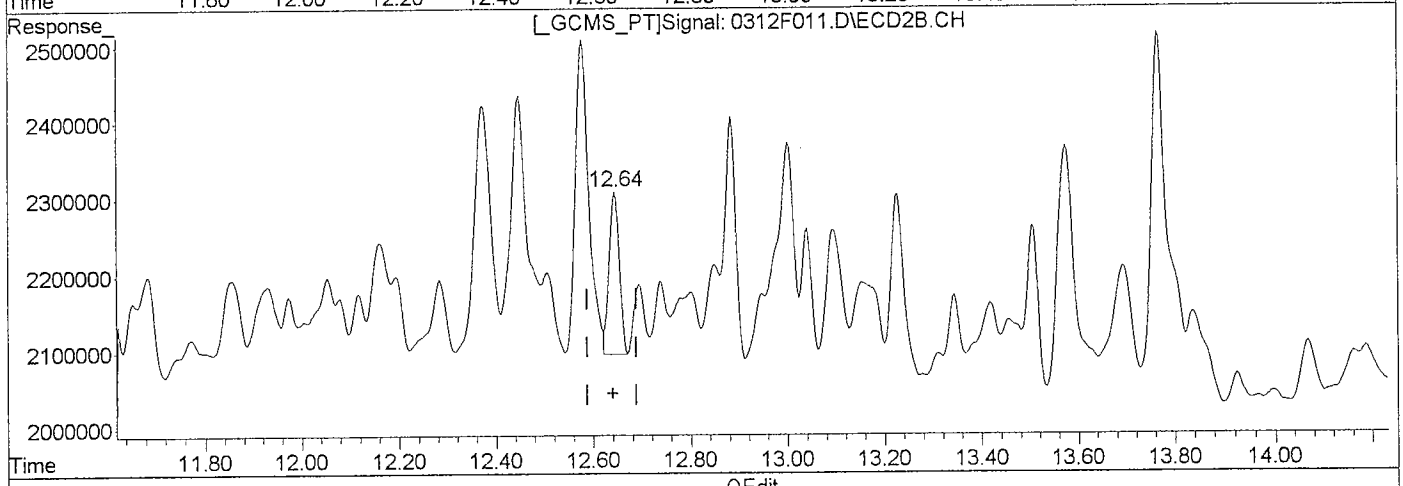
0312F011.D 031207-8081.M Mon Mar 12 17:14:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 84.223ug/L m

response 336953

(27) Toxaphene {3} #2

12.64min 94.127ug/L

response 308888

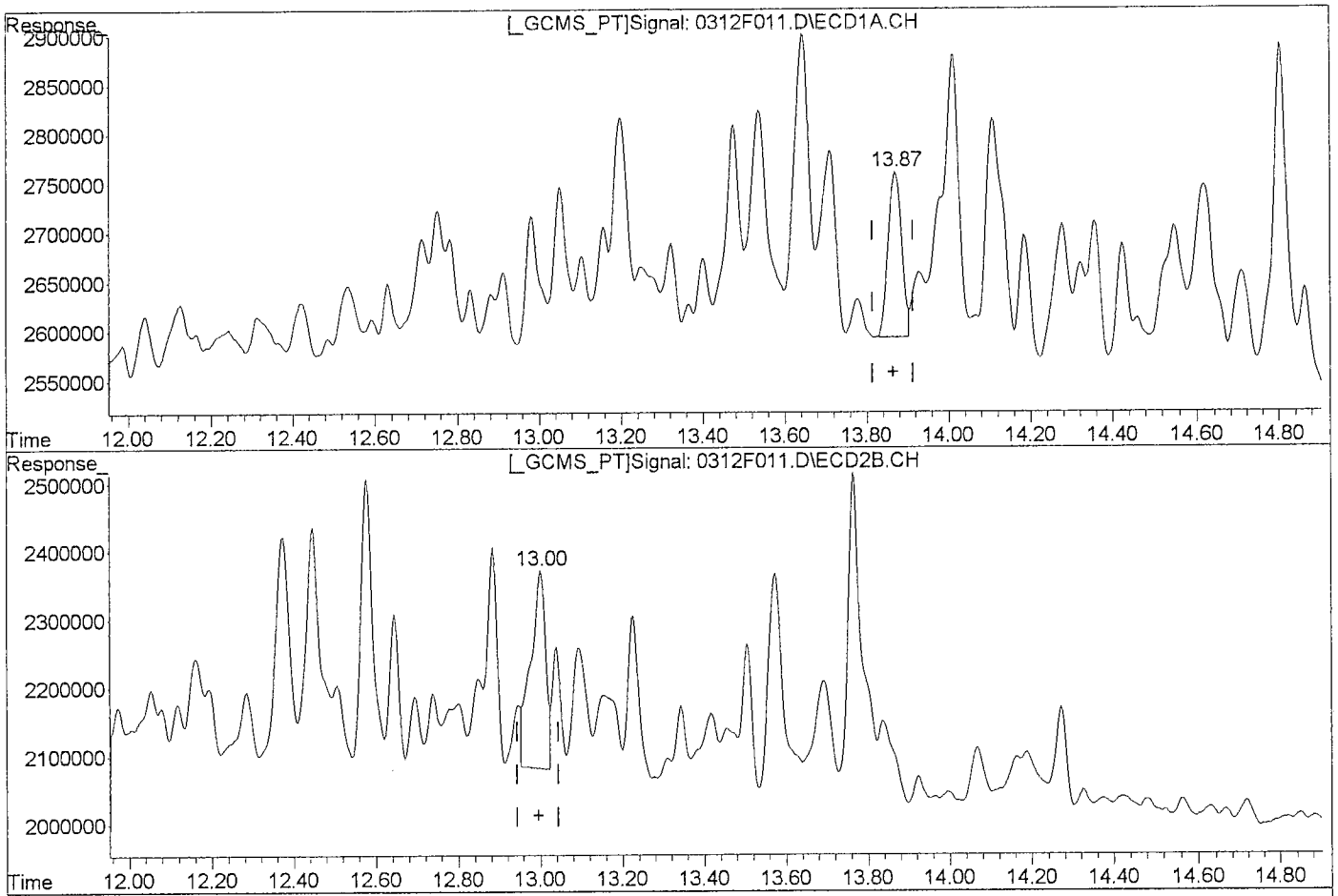
(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:14:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 68.394ug/L

response 387878

(28) Toxaphene {4} #2

13.00min 162.538ug/L

response 734898

Before

MAR 1 2 2007

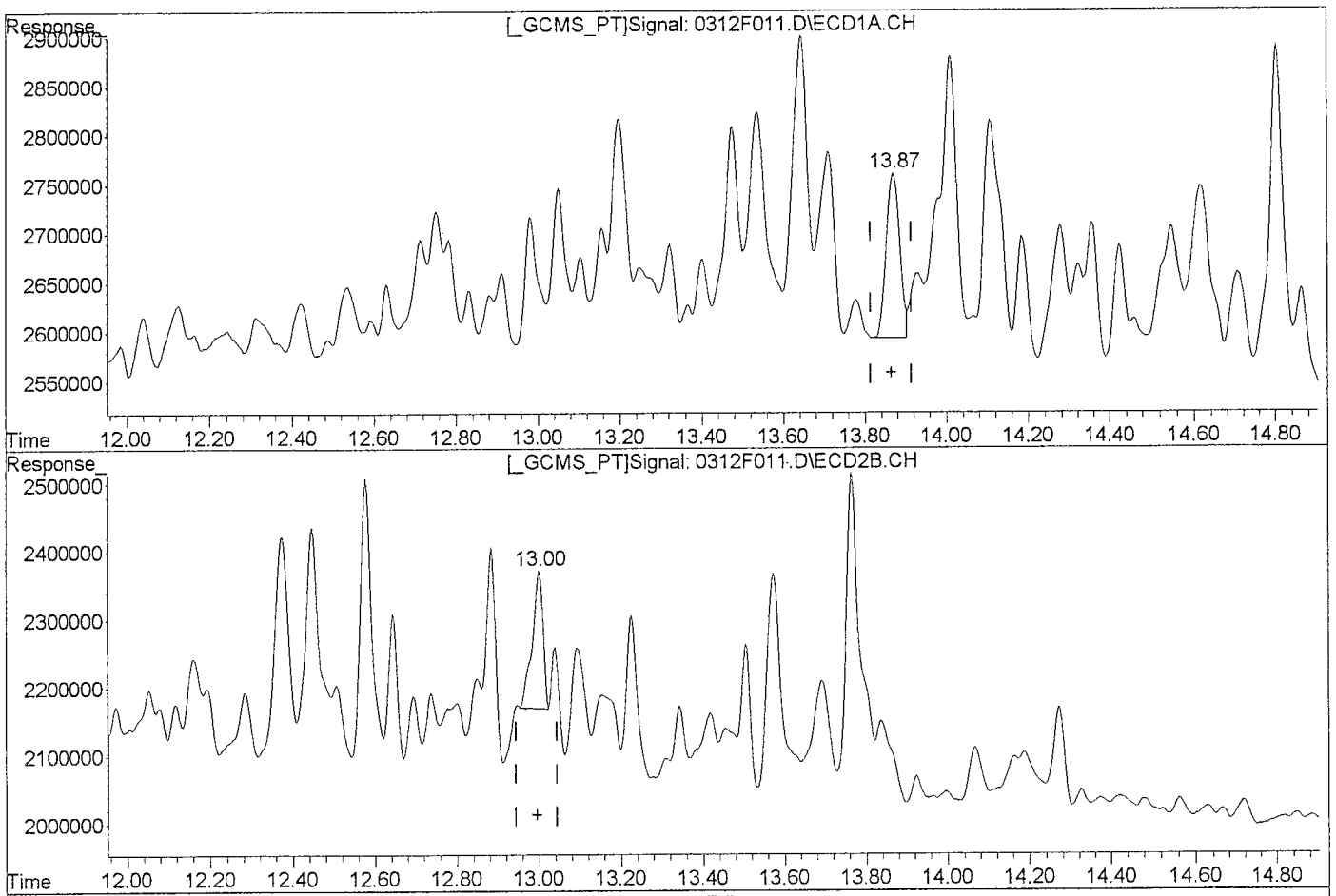
(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:14:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 68.394ug/L

response 387878

(28) Toxaphene {4} #2

13.00min 81.908ug/L m

response 370340

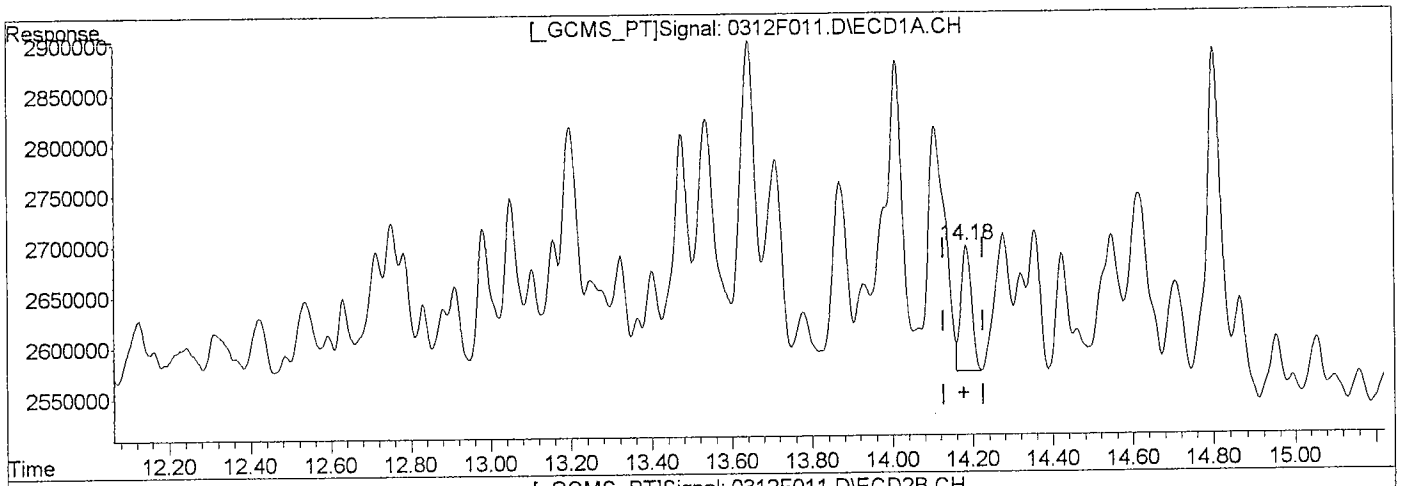
(+) = Expected Retention Time

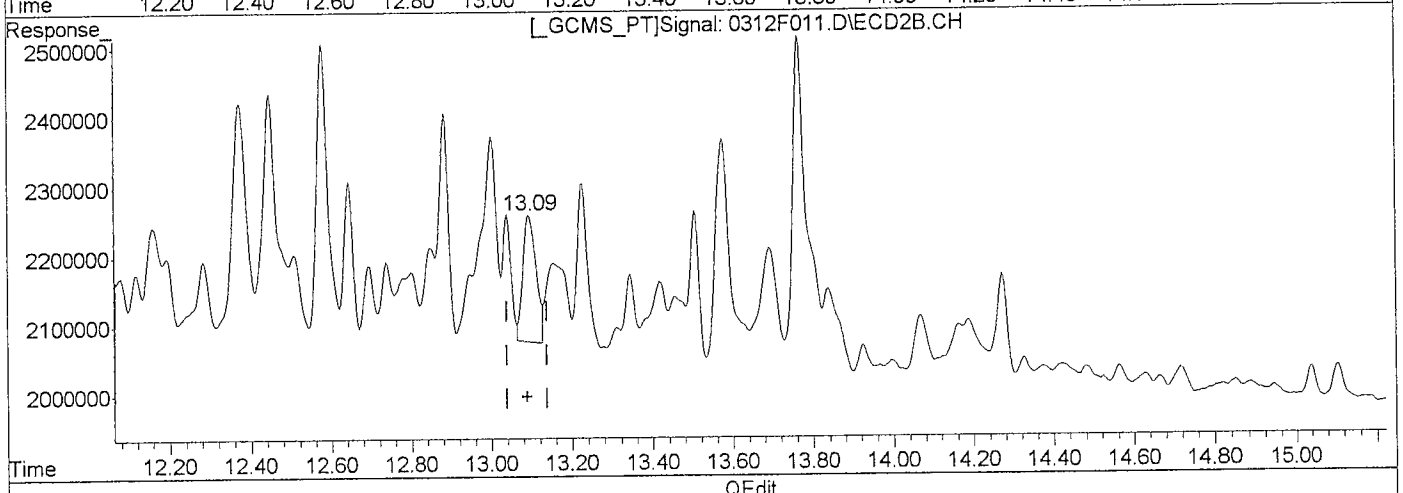
0312F011.D 031207-8081.M Mon Mar 12 17:14:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 110.883ug/L

response 227240

Before

MAR 1 2 2007

(29) Toxaphene {5} #2

13.09min 51.127ug/L

response 423967

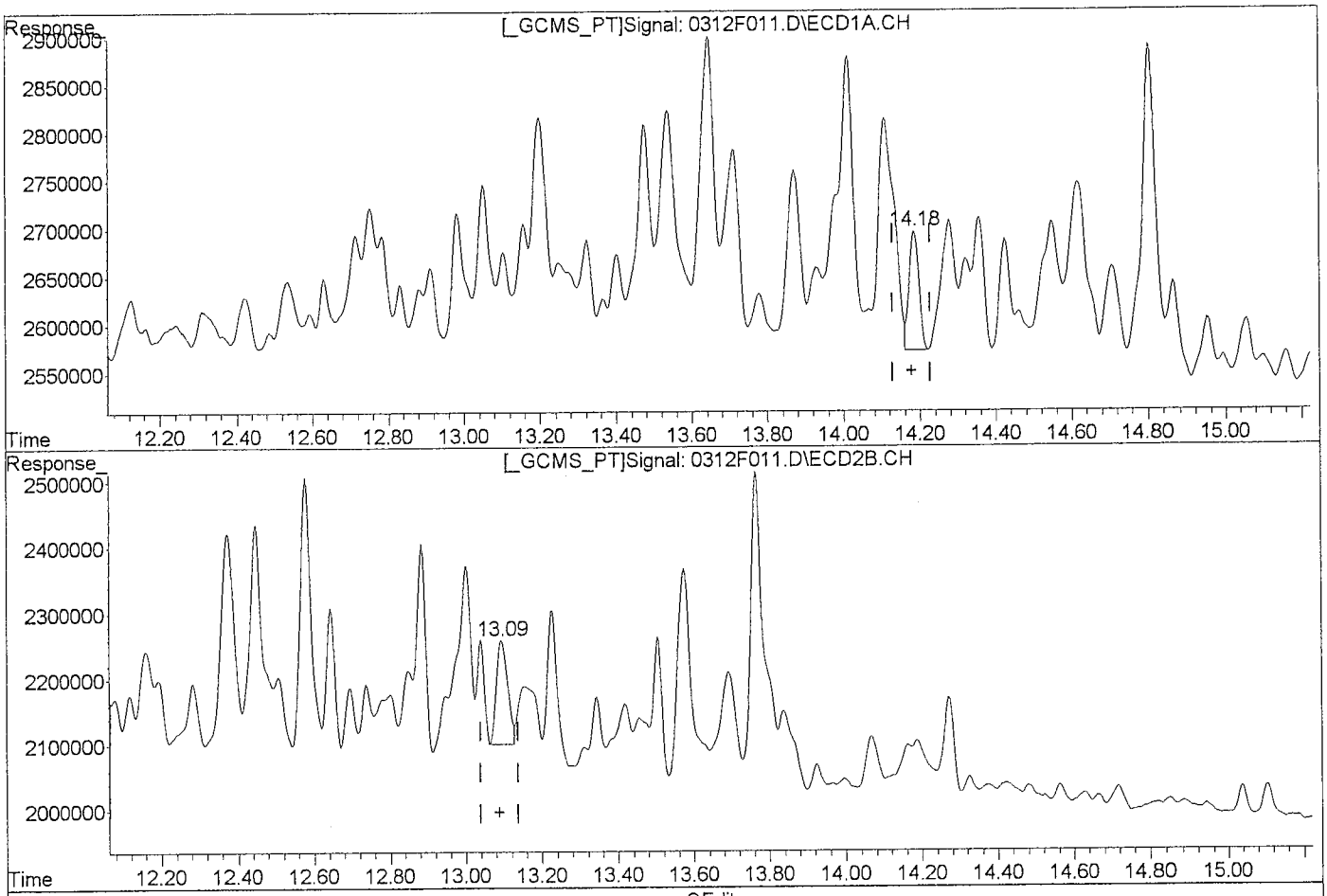
(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:14:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\031207\0312F011.D\ECD2B.CH
Acq On : 12 Mar 2007 12:01 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 110.883ug/L

response 227240

(29) Toxaphene {5} #2

13.09min 39.900ug/L m

response 330865

(+) = Expected Retention Time

0312F011.D 031207-8081.M Mon Mar 12 17:15:01 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:02 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	708662	1986384	268.337	264.881
26)	Toxaphene {2}	13.05	12.44	574141	1447500	129.008m	261.395m#
27)	Toxaphene {3}	13.19	12.64	859427	813783	214.817m	247.983m
28)	Toxaphene {4}	13.87	13.00	1089341	994565	192.082	219.968m
29)	Toxaphene {5}	14.18	13.09	542758	865162	264.841m	104.332m#
30)	Toxaphene {6}	14.70	13.57	583992	2215628	79.056m	223.599 #

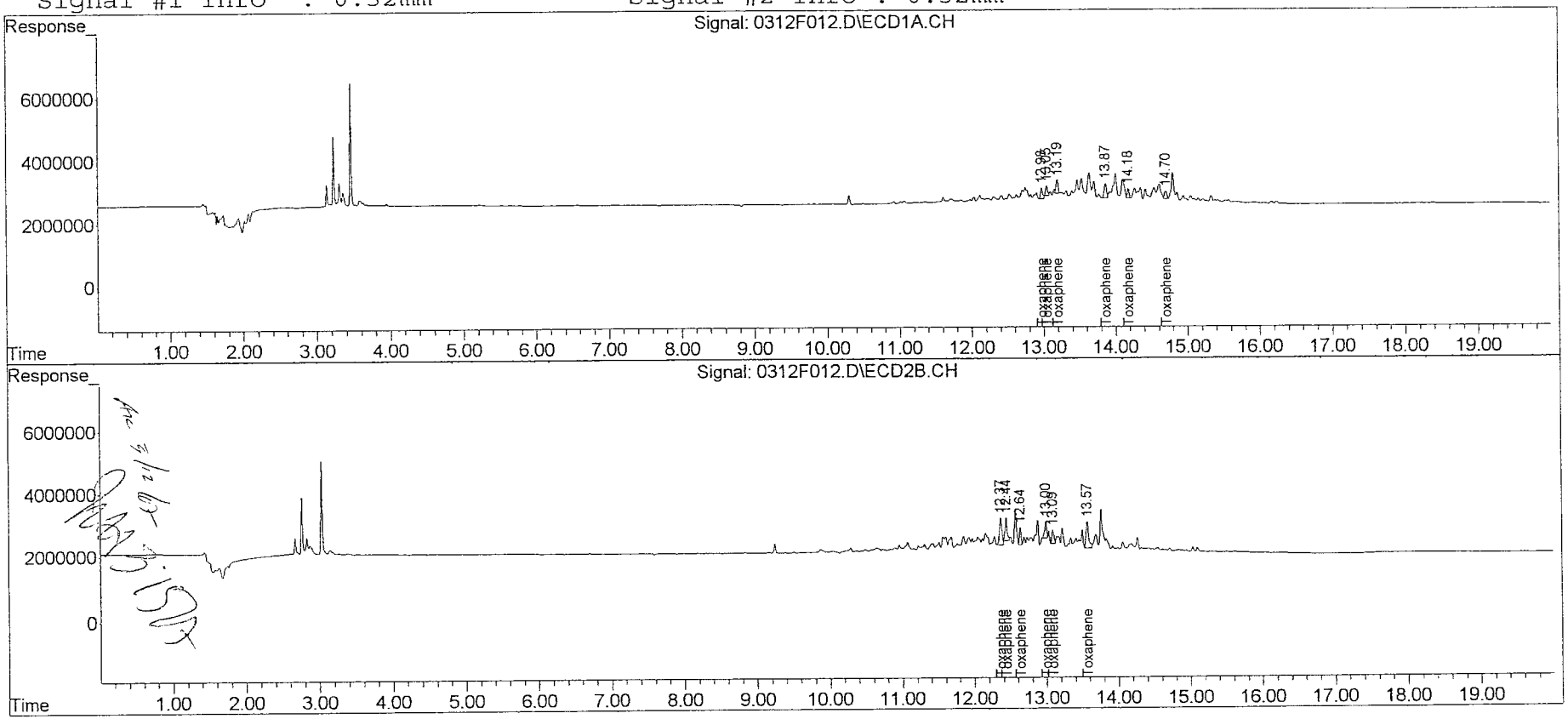
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:34 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

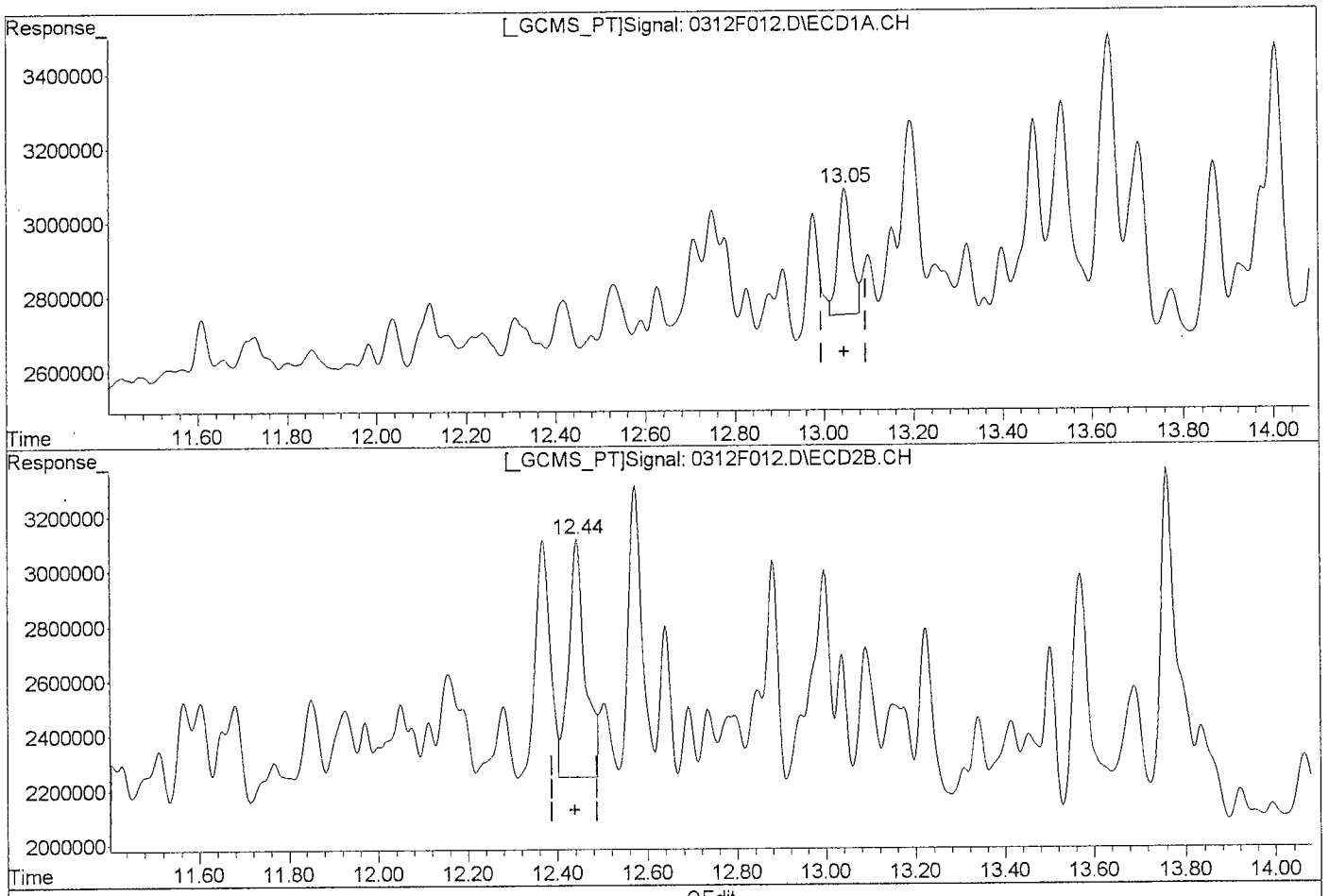
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(26) Toxaphene {2}

13.05min 159.130ug/L

response 708197

(26) Toxaphene {2} #2

12.44min 395.785ug/L

response 2191697

Before

MAR 1 2 2007

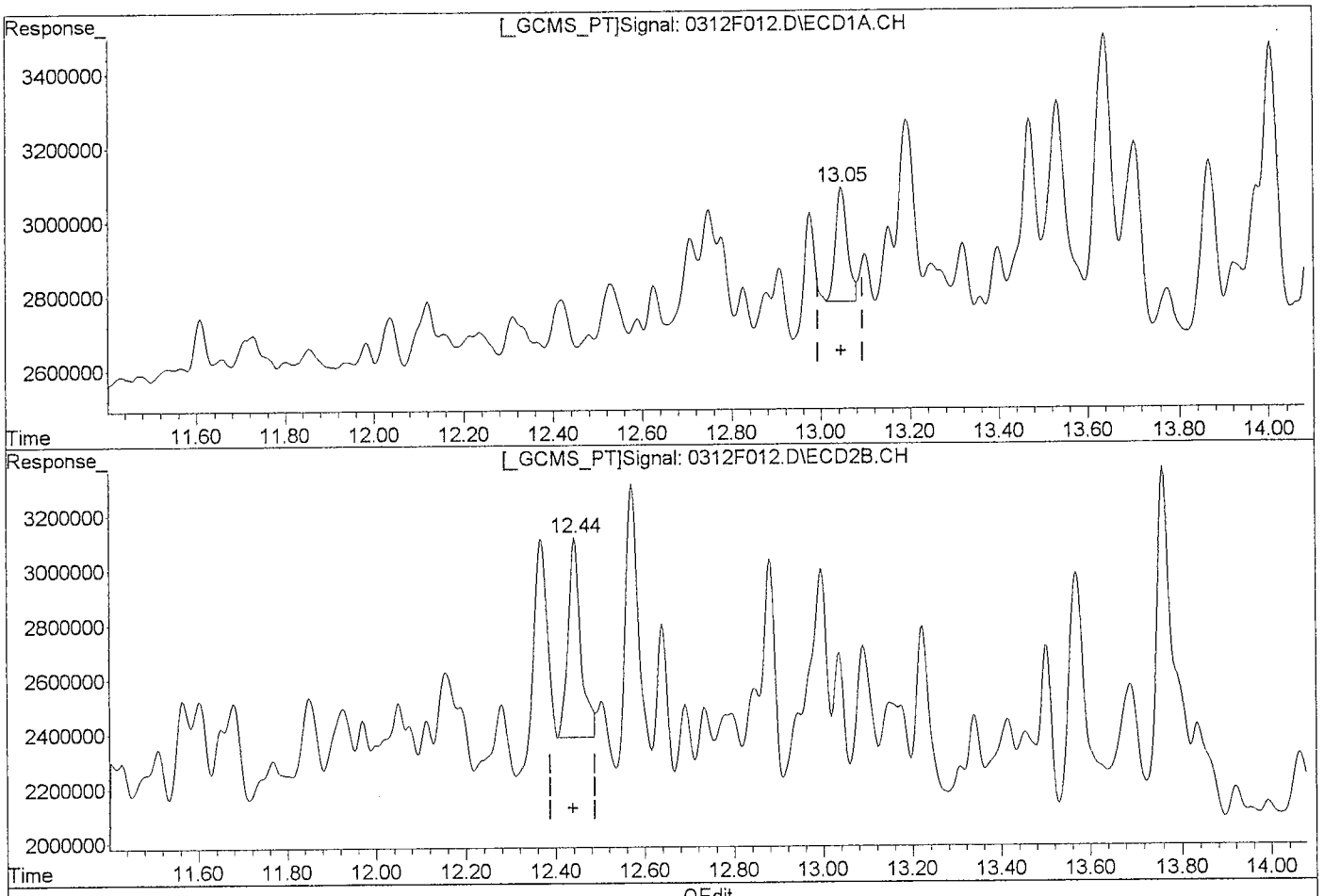
(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:32:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 129.008ug/L m

response 574141

(26) Toxaphene {2} #2

12.44min 261.395ug/L m

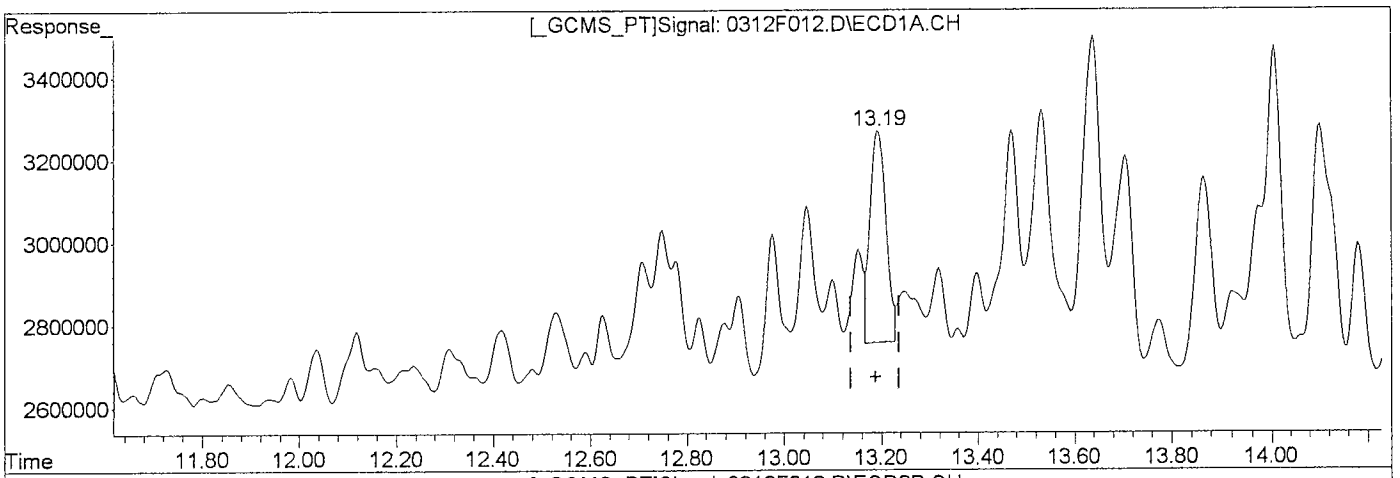
response 1447500

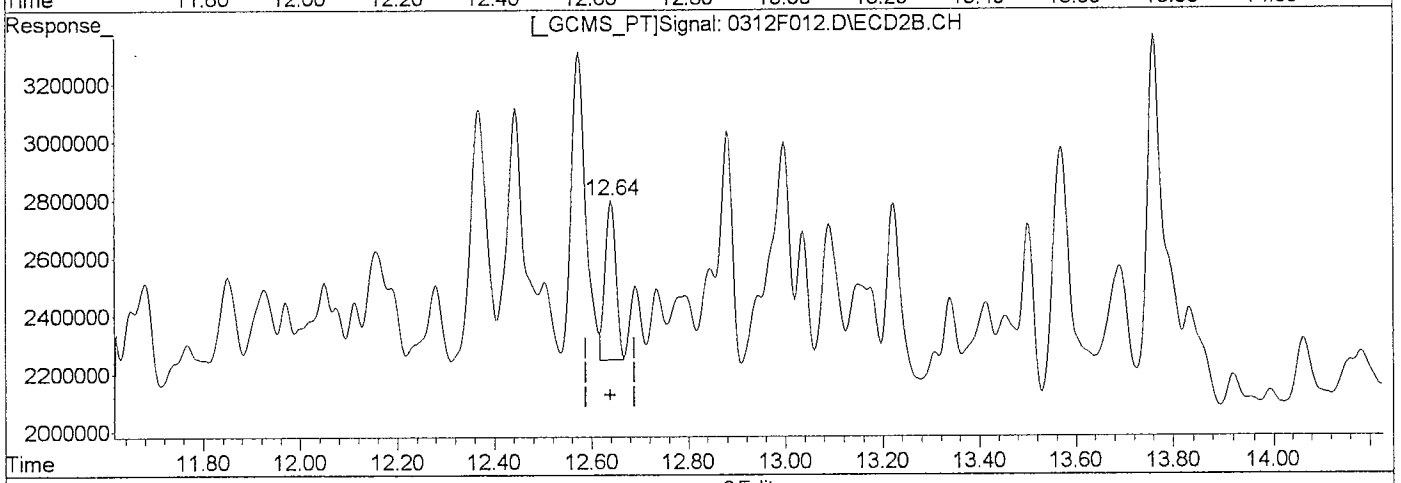
(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:32:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 296.859ug/L

response 1187655

(27) Toxaphene {3} #2

12.64min 255.098ug/L

response 837133

Before

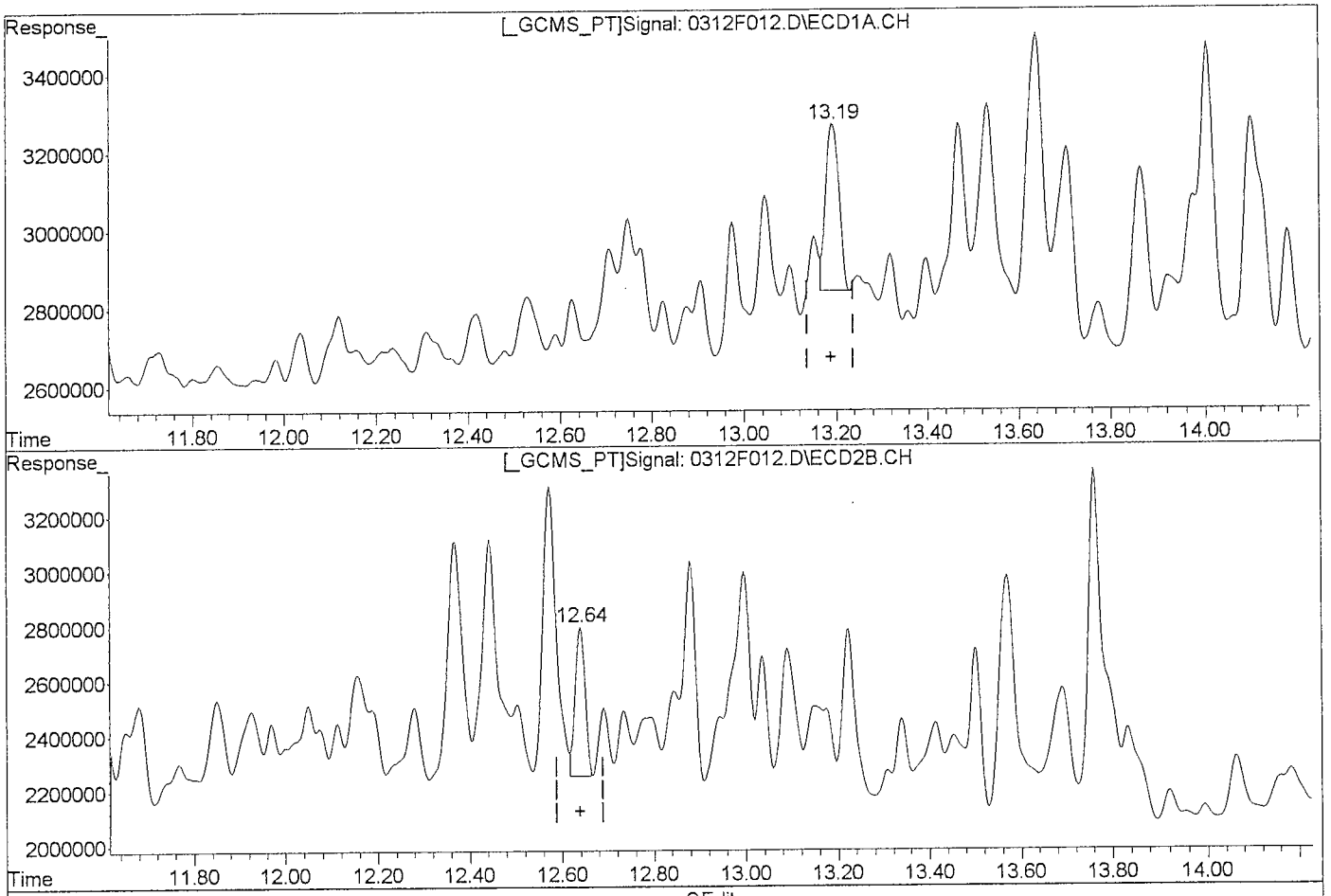
MAR 1 2 2007

(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:32:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 214.817ug/L m

response 859427

(27) Toxaphene {3} #2

12.64min 247.983ug/L m

response 813783

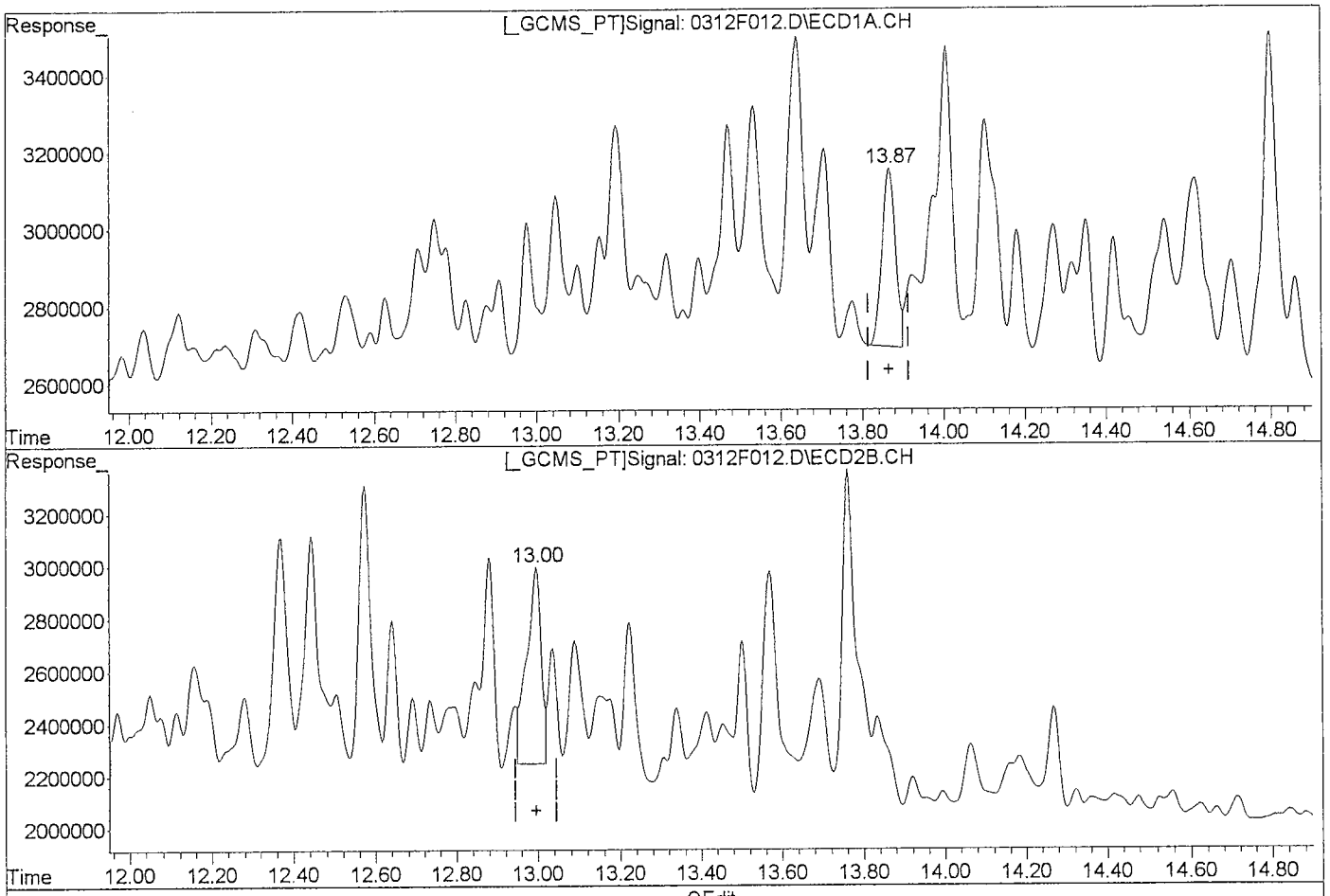
(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:32:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 192.082ug/L

response 1089341

(28) Toxaphene {4} #2

13.00min 411.367ug/L

response 1859956

Before

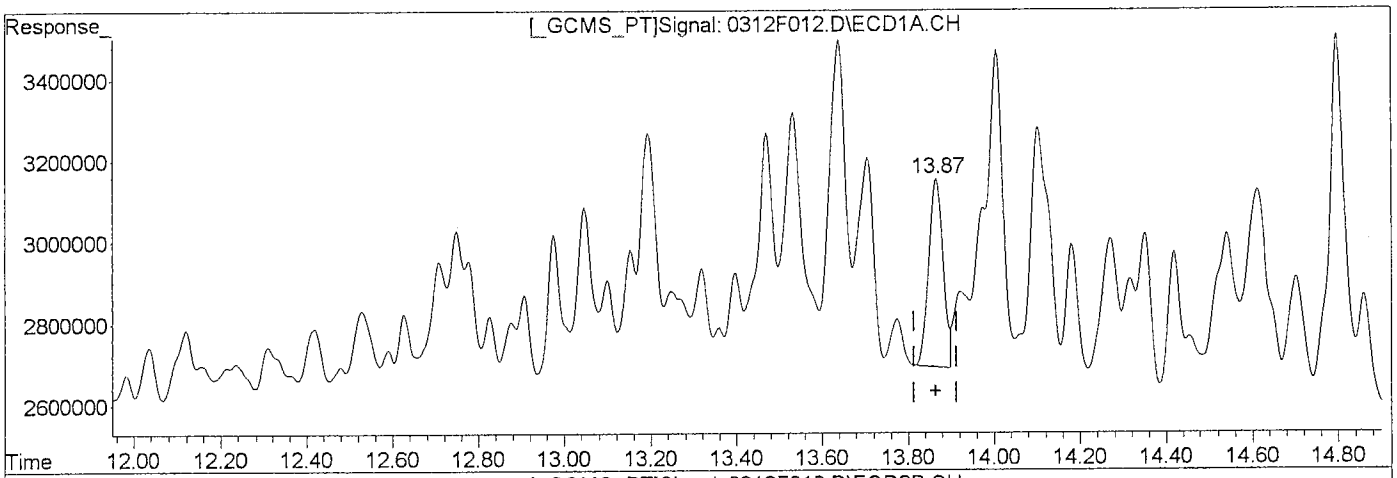
MAR 1 7 2007

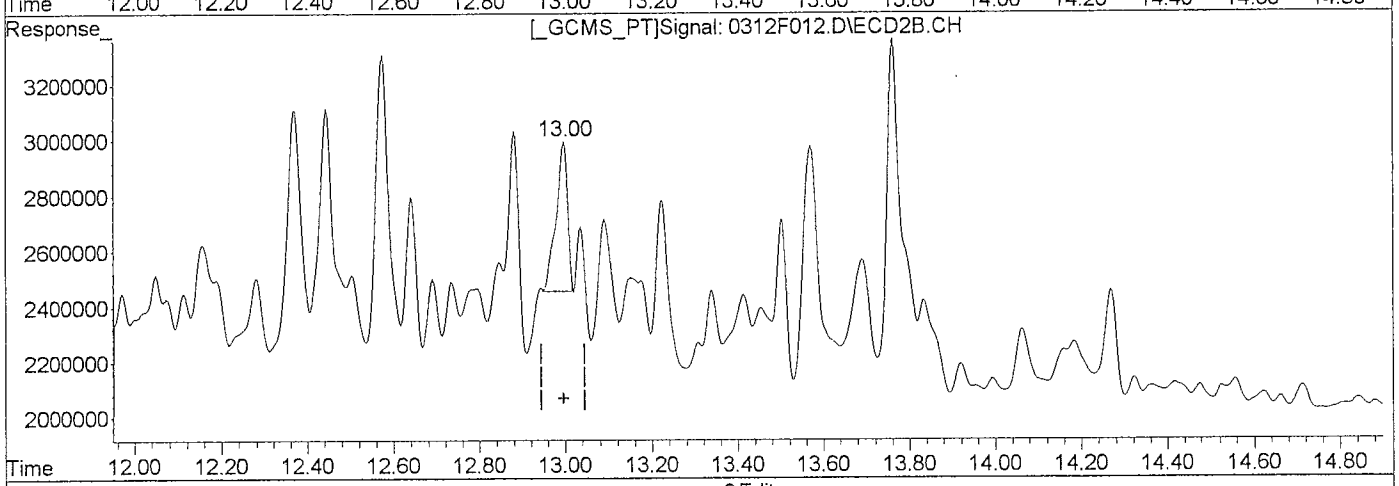
(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:32:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 192.082ug/L

response 1089341

(28) Toxaphene {4} #2

13.00min 219.968ug/L m

response 994565

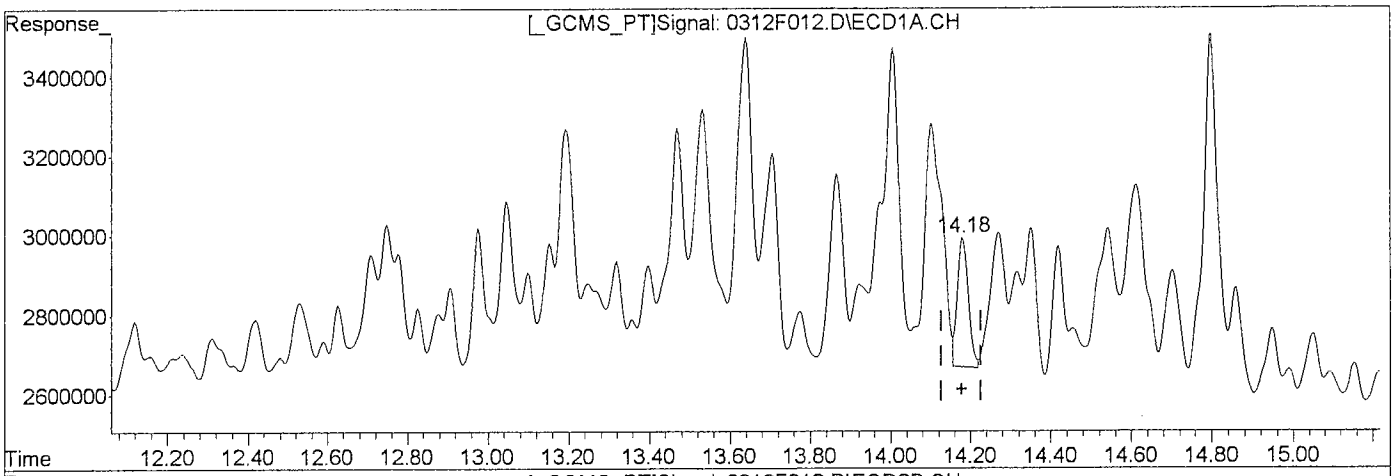
(+) = Expected Retention Time

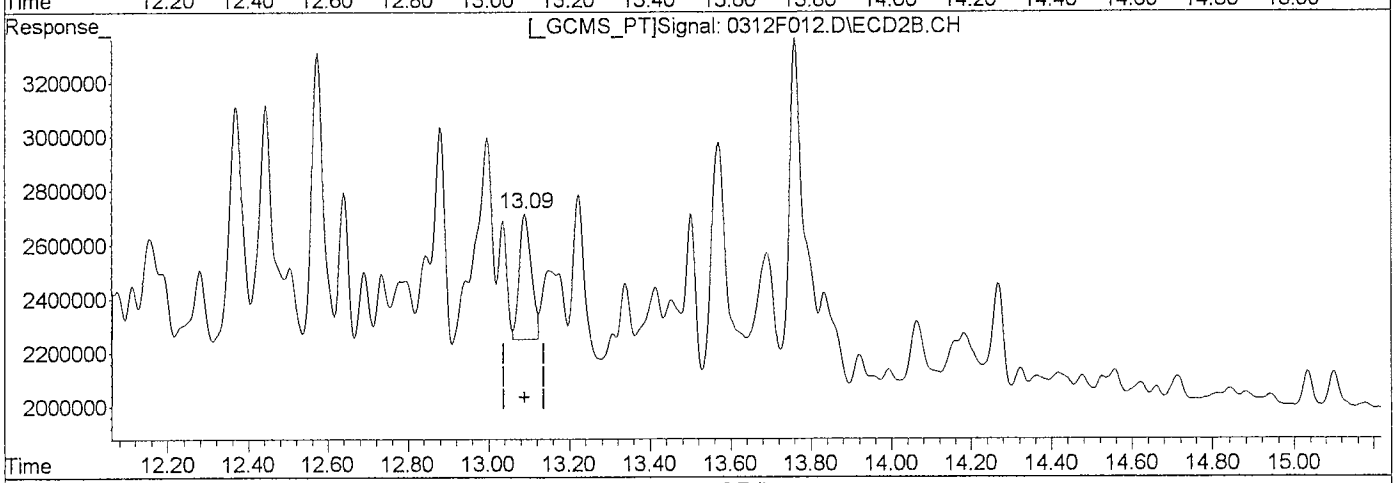
0312F012.D 031207-8081.M Mon Mar 12 17:33:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 299.887ug/L

response 614580

(29) Toxaphene {5} #2

13.09min 117.368ug/L

response 973260

Before

MAR 1 2 2007

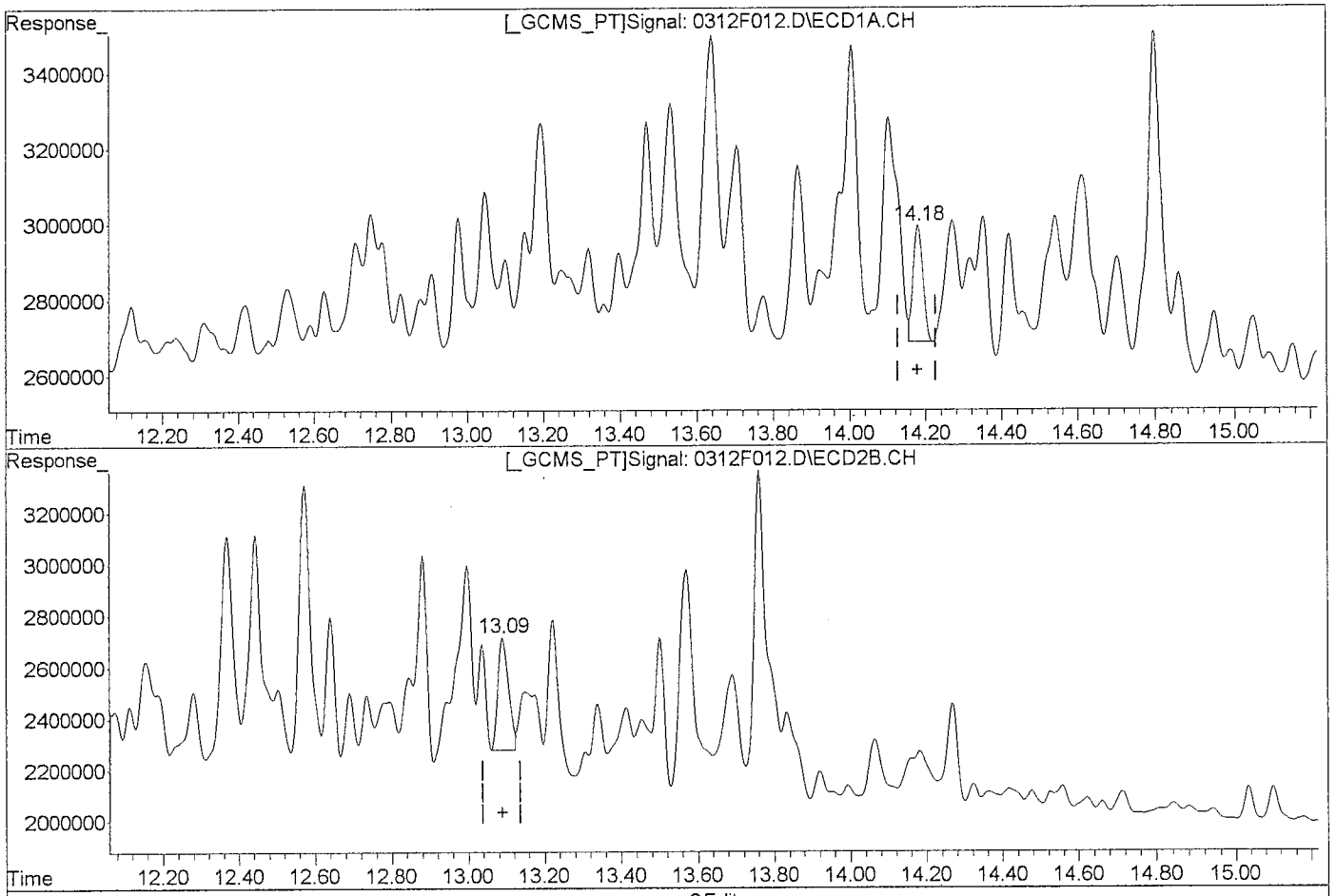
(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:33:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 264.841ug/L m

response 542758

(29) Toxaphene {5} #2

13.09min 104.332ug/L m

response 865162

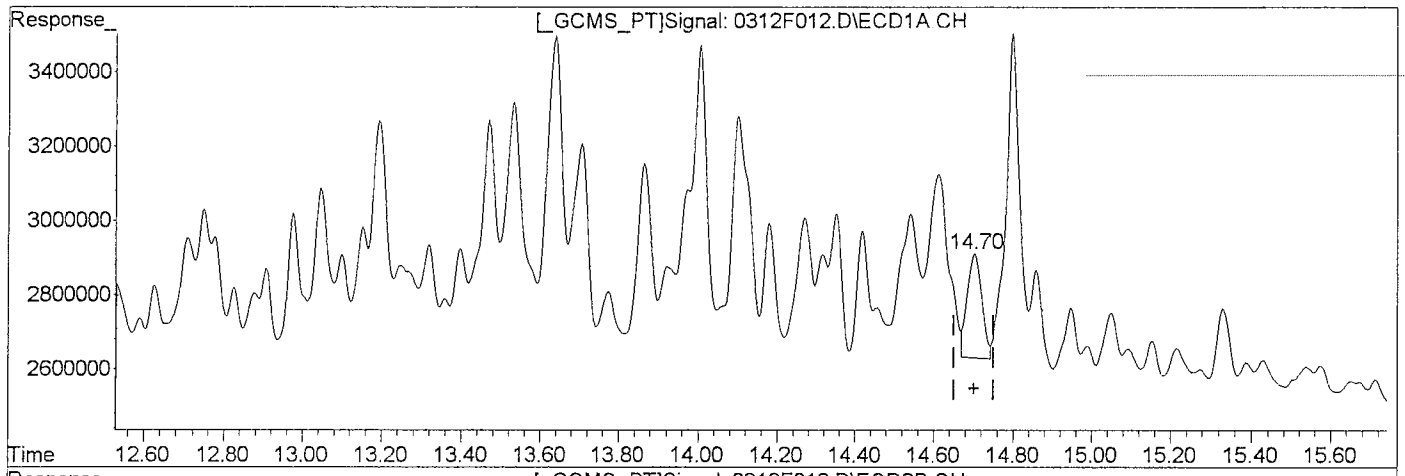
(+) = Expected Retention Time

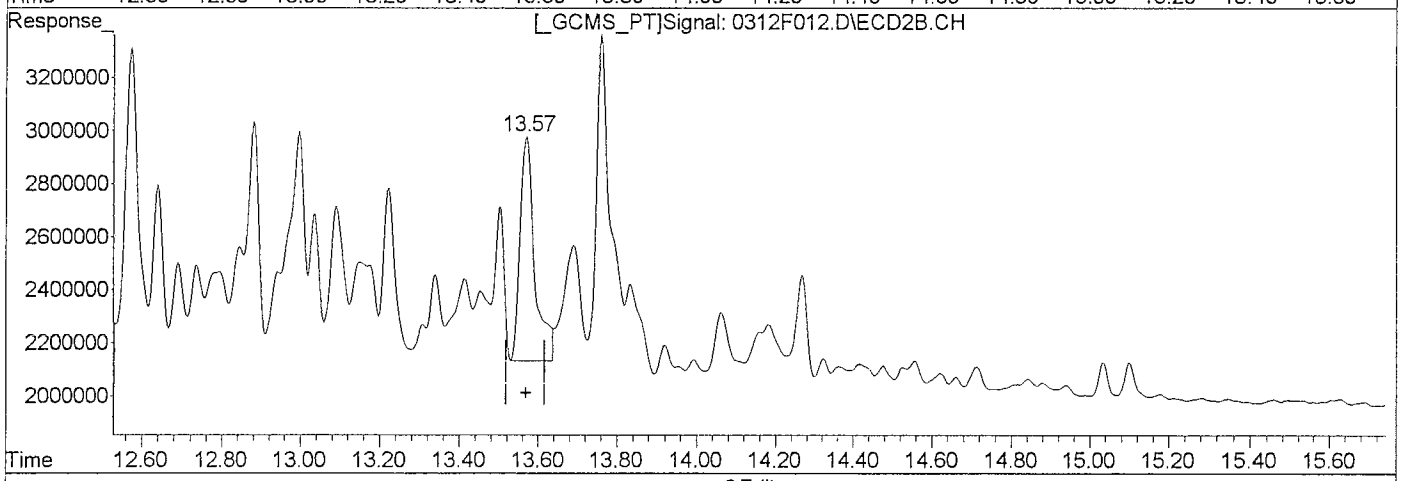
0312F012.D 031207-8081.M Mon Mar 12 17:33:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 98.128ug/L

response 724873

(30) Toxaphene {6} #2

13.57min 223.599ug/L

response 2215628

Before

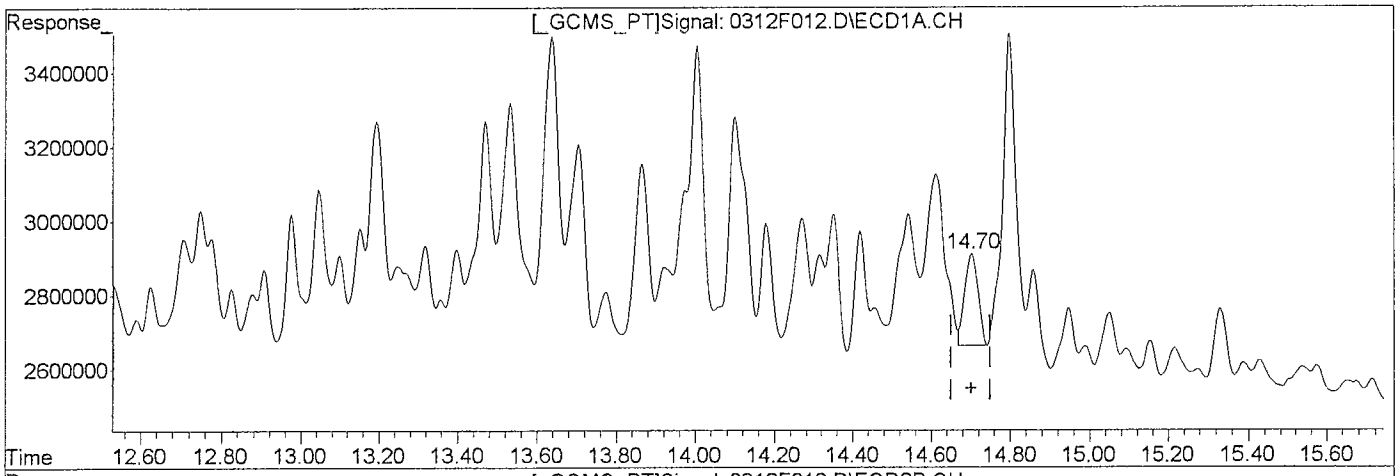
MAR 12 2007

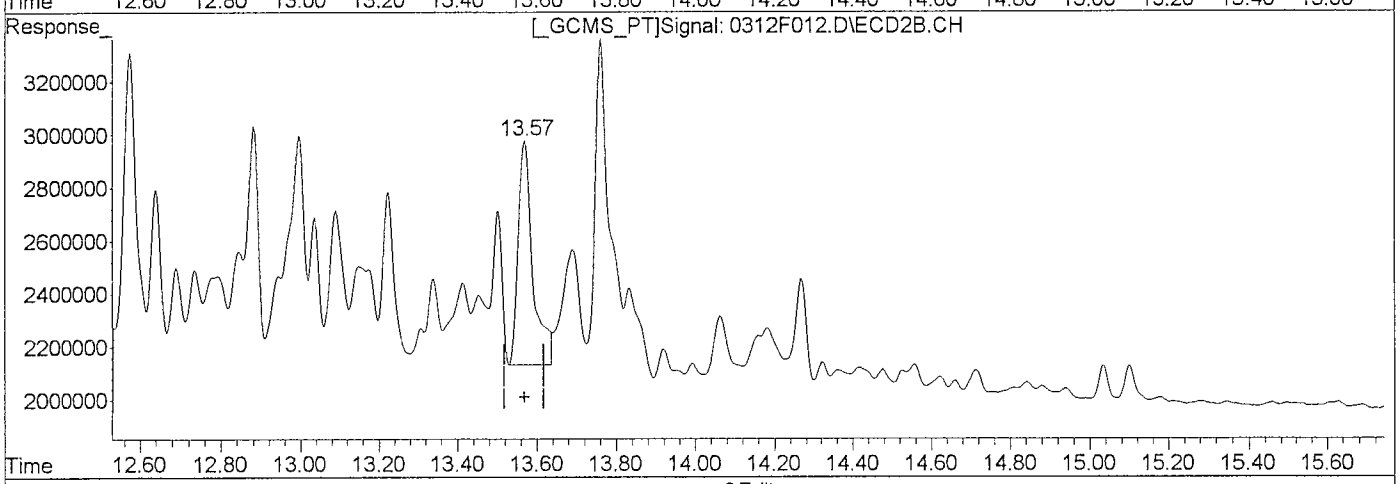
(+) = Expected Retention Time
0312F012.D 031207-8081.M Mon Mar 12 17:33:57 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\031207\0312F012.D\ECD2B.CH
Acq On : 12 Mar 2007 12:28 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 79.056ug/L m

response 583992

(30) Toxaphene {6} #2

13.57min 223.599ug/L

response 2215628

(+) = Expected Retention Time

0312F012.D 031207-8081.M Mon Mar 12 17:34:06 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:03 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	1273468	3753261	482.203	500.492
26)	Toxaphene {2}	13.05	12.45	1048026	2701329	235.489m	487.816m#
27)	Toxaphene {3}	13.20	12.64	1677312	1514247	419.251m	461.434
28)	Toxaphene {4}	13.87	13.00	2053301	1777600	362.056m	393.152m
29)	Toxaphene {5}	14.19	13.10	1036996	1696721	506.006m	204.612m#
30)	Toxaphene {6}	14.71	13.57	1150293	4188382	155.718m	422.688 #

AK 3/12/07

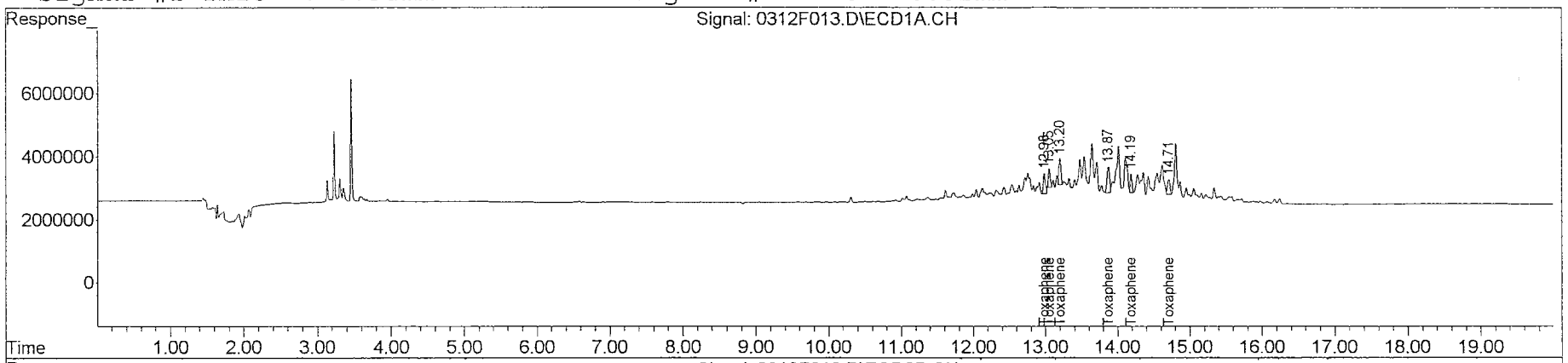
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

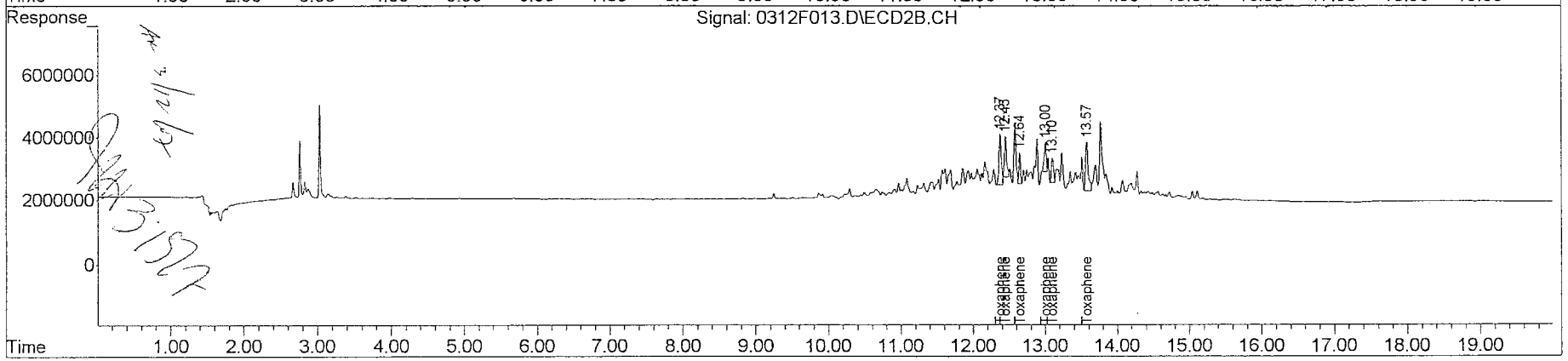
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:35 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



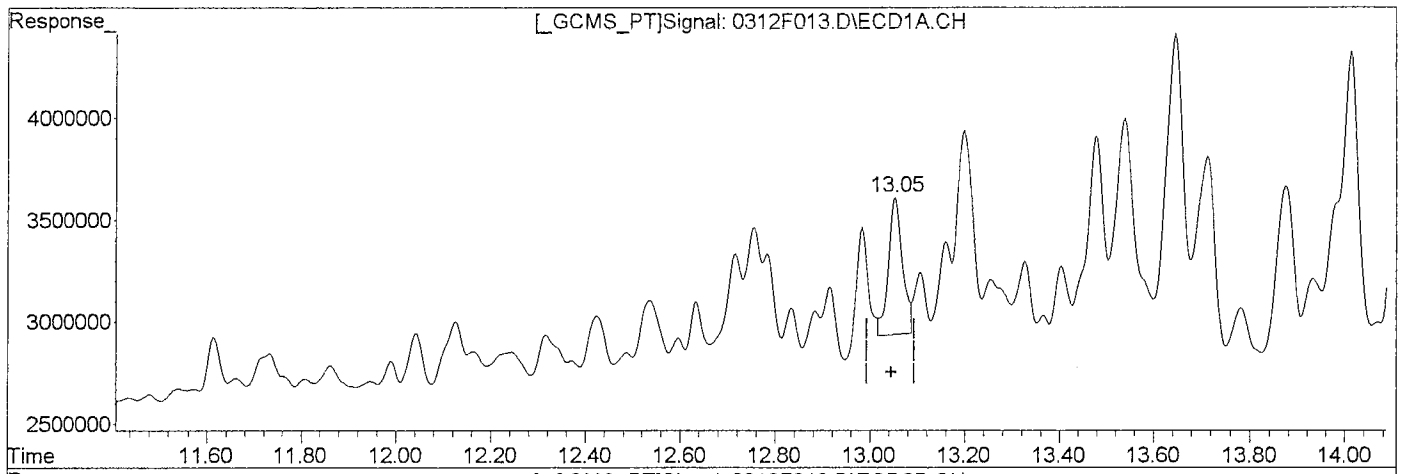


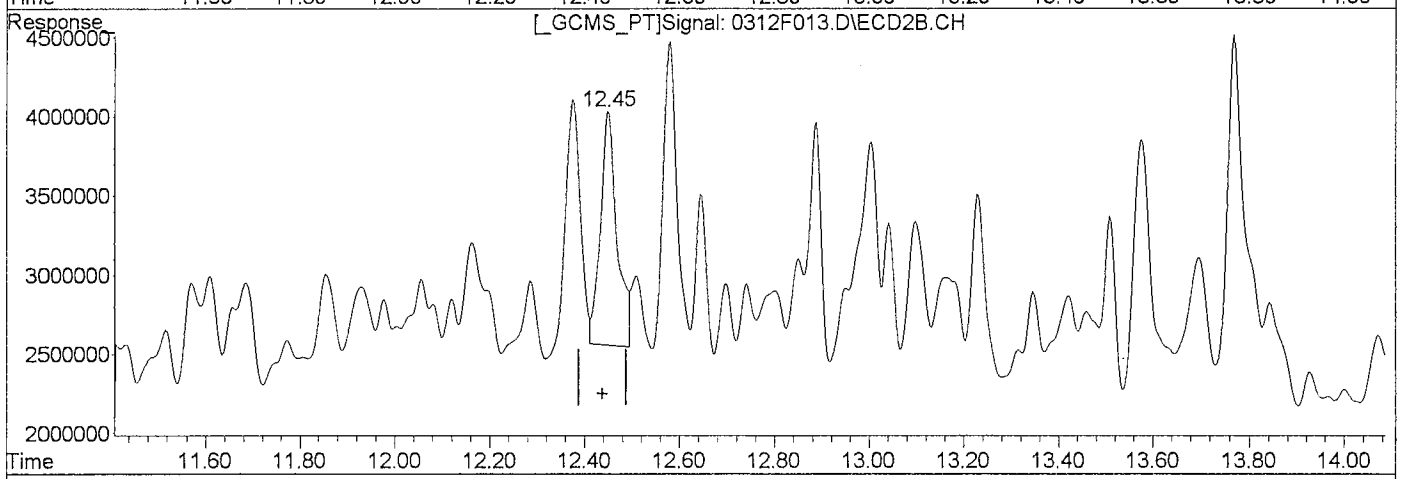
796

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





(26) Toxaphene {2}

13.05min 312.104ug/L

response 1388992

(26) Toxaphene {2} #2

12.45min 645.590ug/L

response 3575020

Before

MAR 12 2007

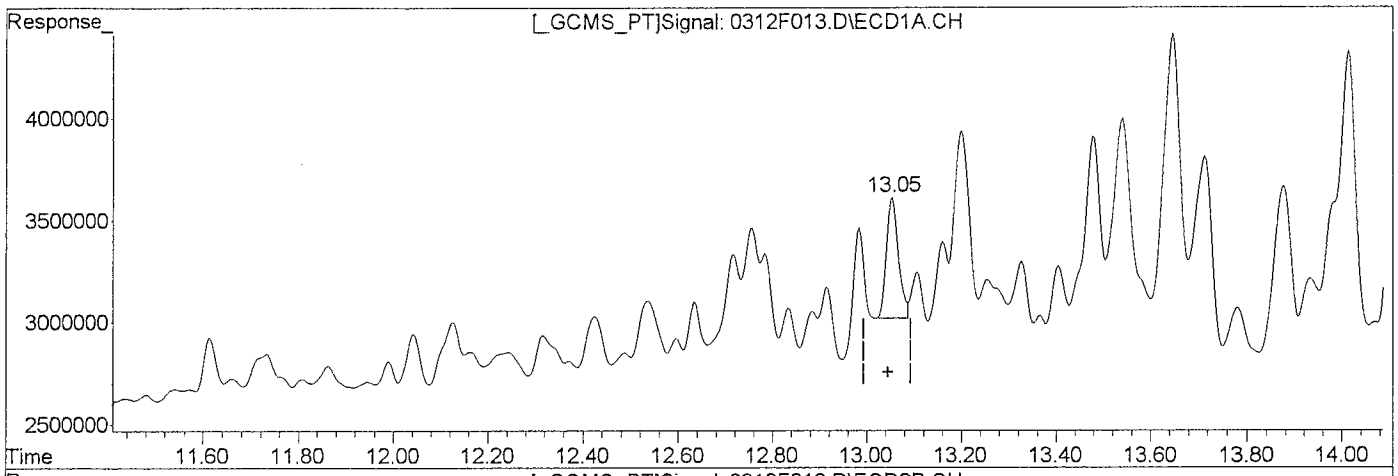
(+) = Expected Retention Time

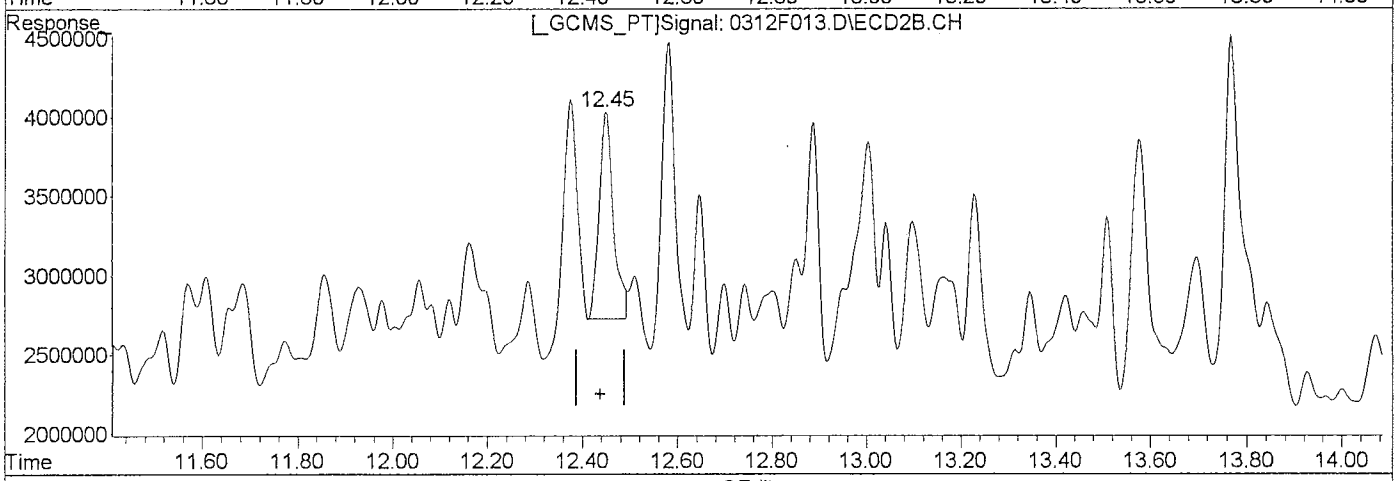
0312F013.D 031207-8081.M Mon Mar 12 17:34:30 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 235.489ug/L m

response 1048026

(26) Toxaphene {2} #2

12.45min 487.816ug/L m

response 2701329

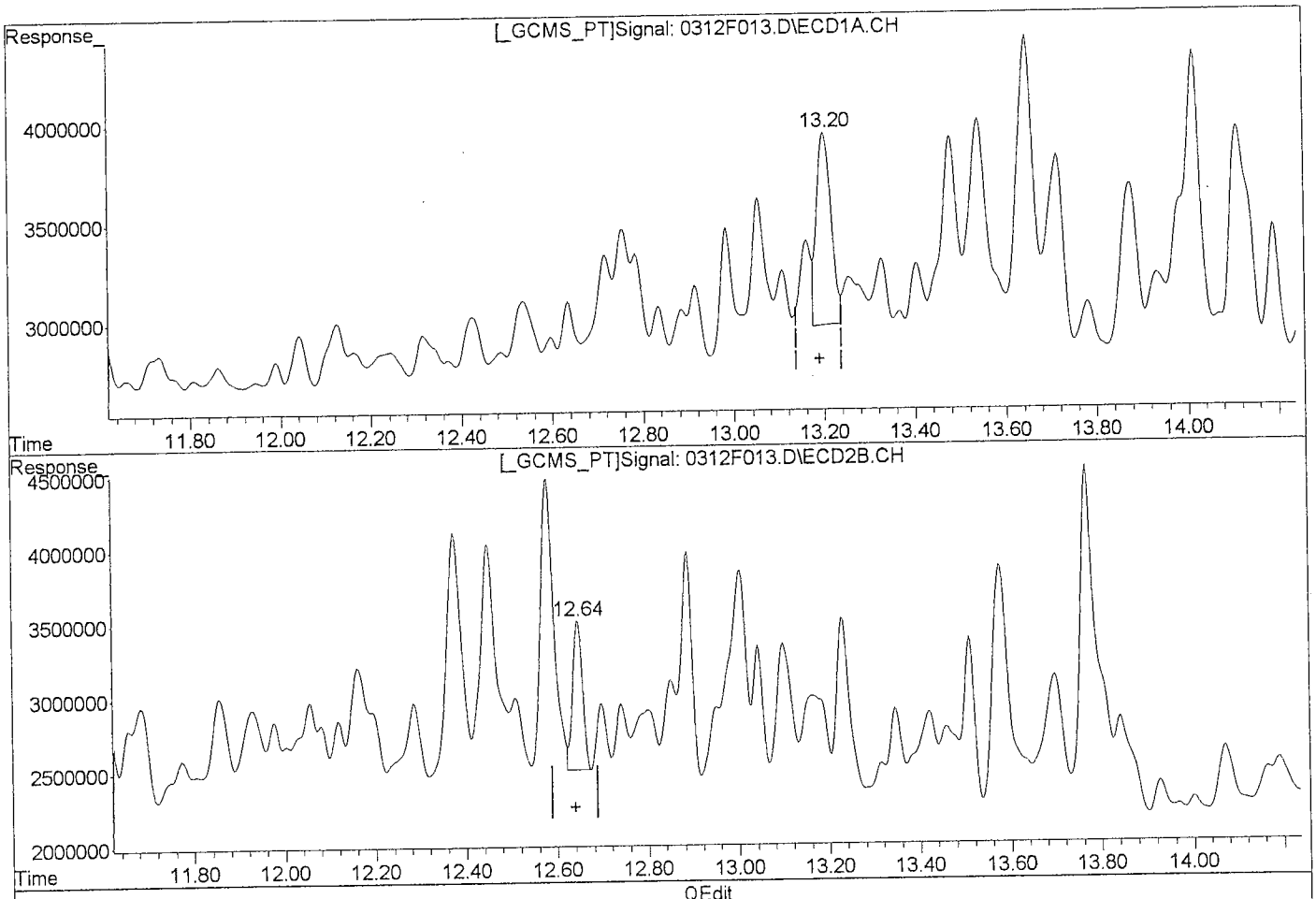
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:34:43 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.20min 550.889ug/L

response 2203961

(27) Toxaphene {3} #2

12.64min 461.434ug/L

response 1514247

Before

MAR 17 2007

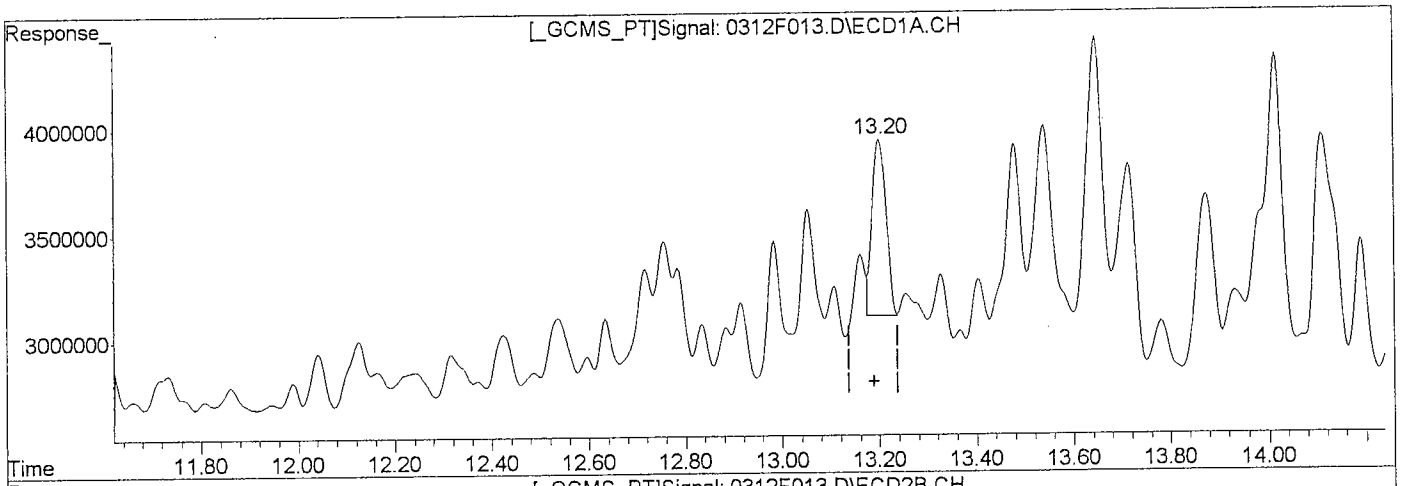
(+) = Expected Retention Time

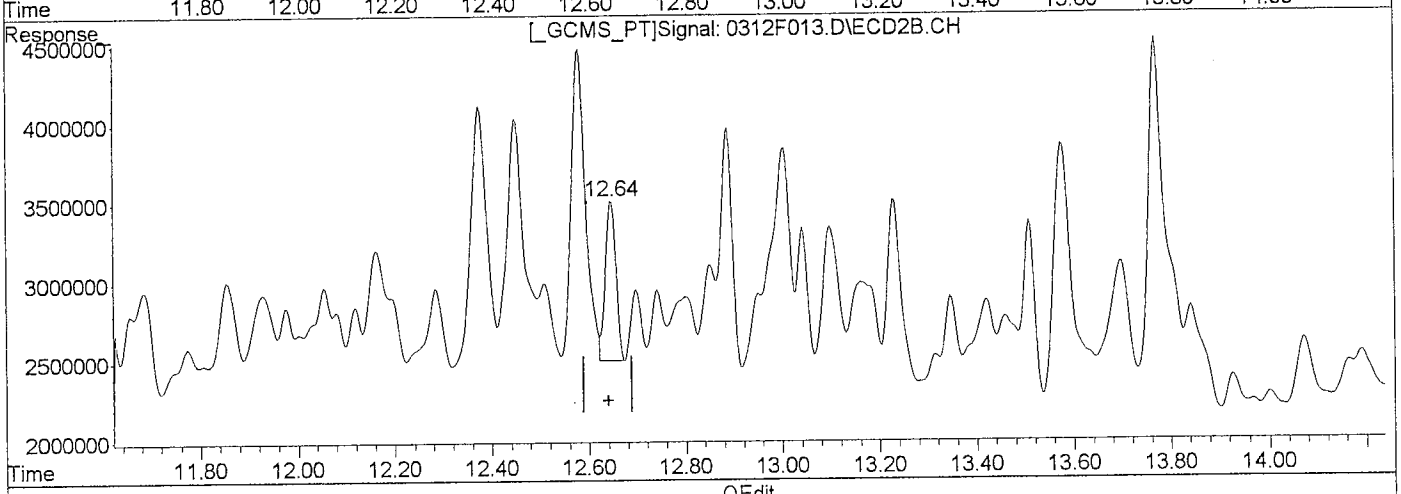
0312F013.D 031207-8081.M Mon Mar 12 17:34:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 419.251ug/L m

response 1677312

(27) Toxaphene {3} #2

12.64min 461.434ug/L

response 1514247

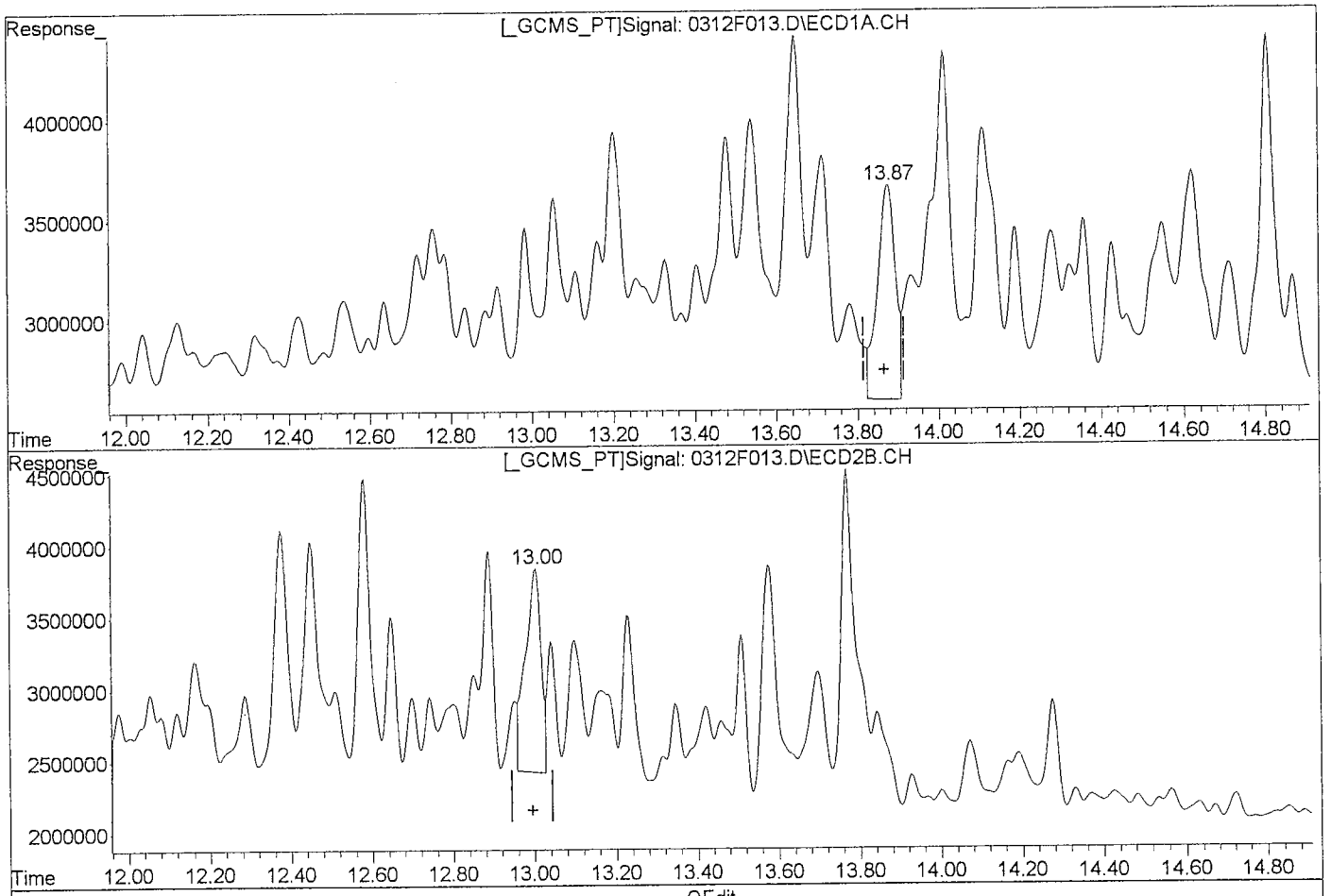
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:34:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(28) Toxaphene {4}

13.87min 585.755ug/L

response 3321946

Before

MAR 1 2 2007

(28) Toxaphene {4} #2

13.00min 838.194ug/L

response 3789813

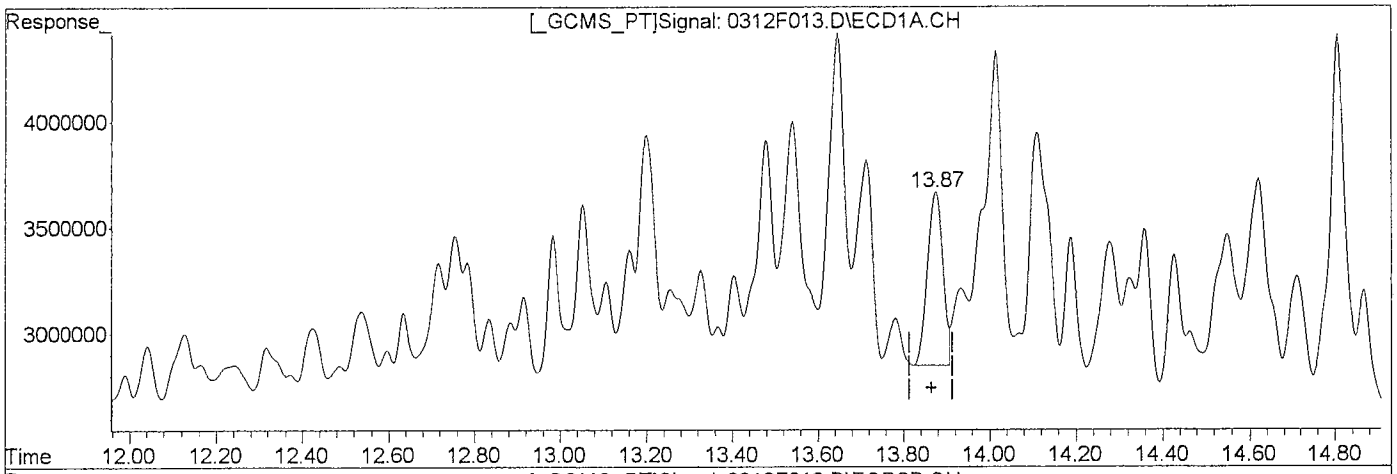
(+) = Expected Retention Time

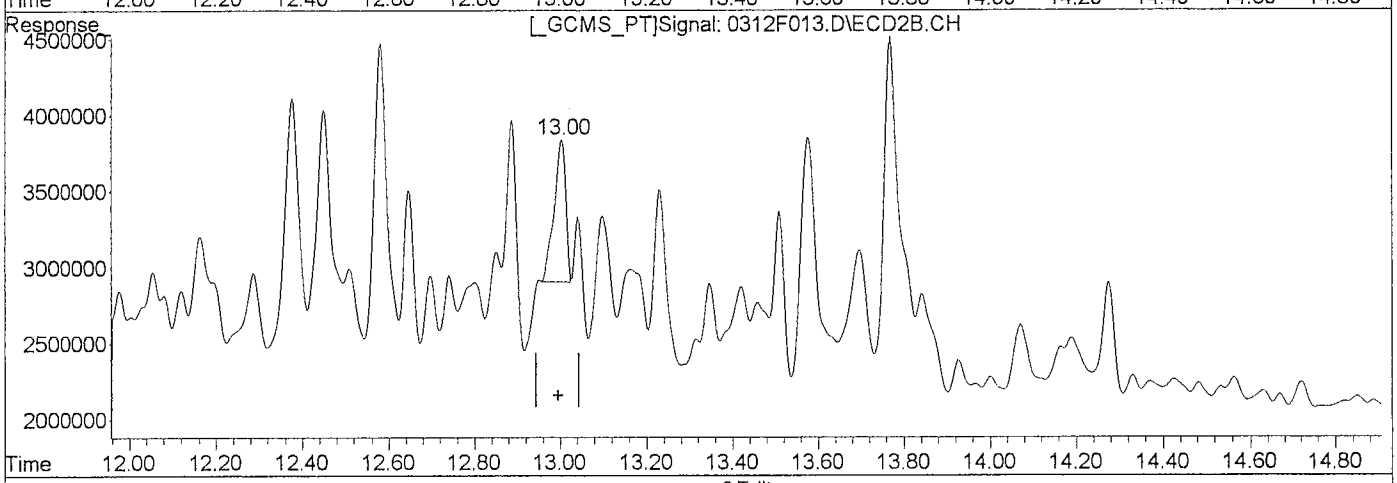
0312F013.D 031207-8081.M Mon Mar 12 17:34:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 362.056ug/L m

response 2053301

(28) Toxaphene {4} #2

13.00min 393.152ug/L m

response 1777600

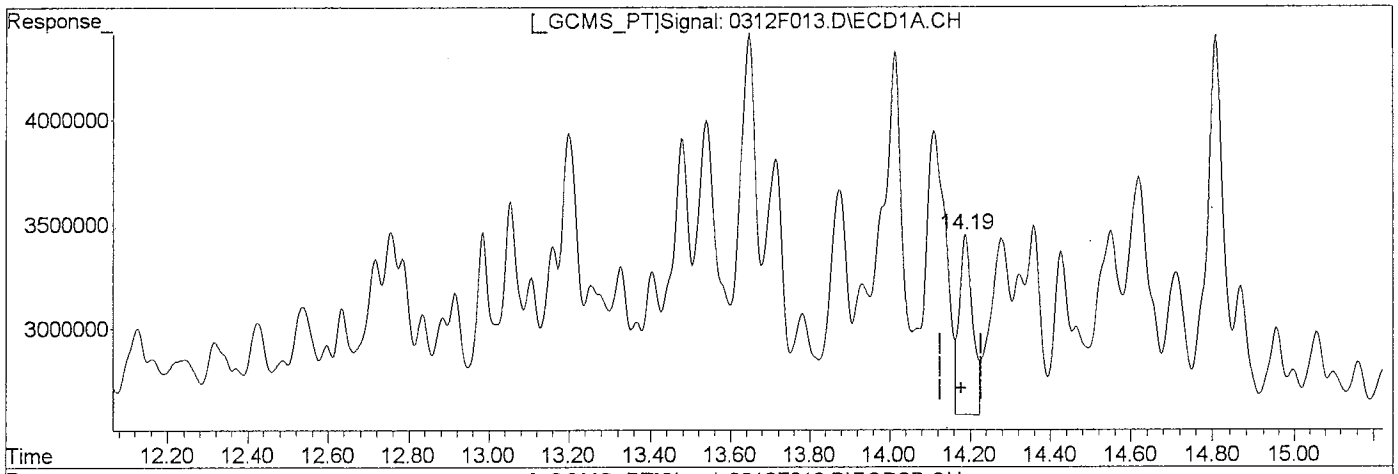
(+) = Expected Retention Time

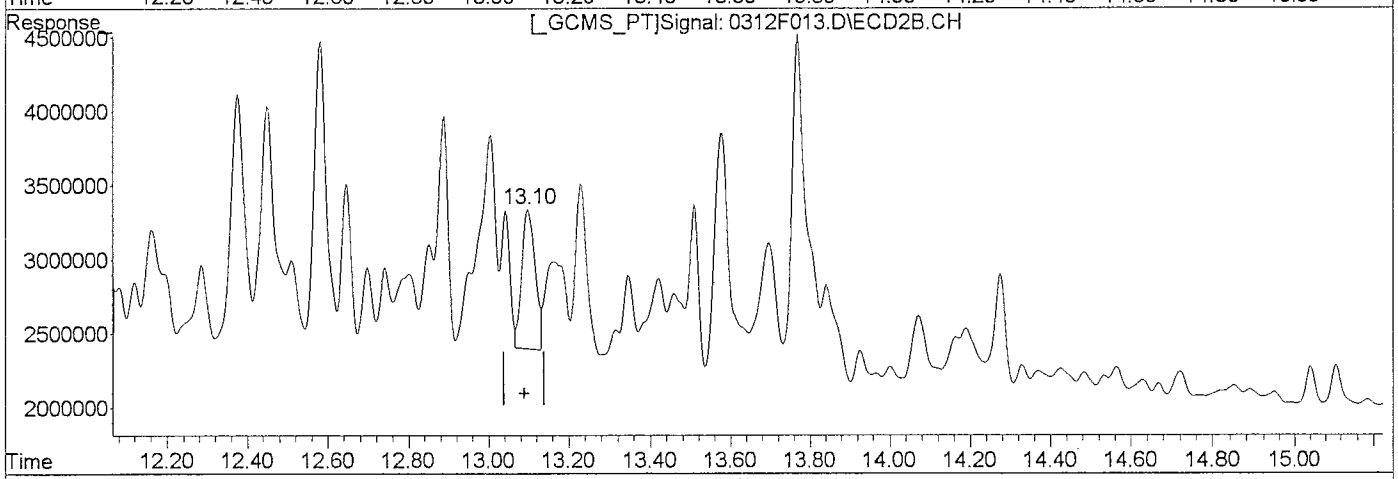
0312F013.D 031207-8081.M Mon Mar 12 17:35:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 953.296ug/L

response 1953662

Before

MAR 1 2 2007

(29) Toxaphene {5} #2

13.10min 268.946ug/L

response 2230211

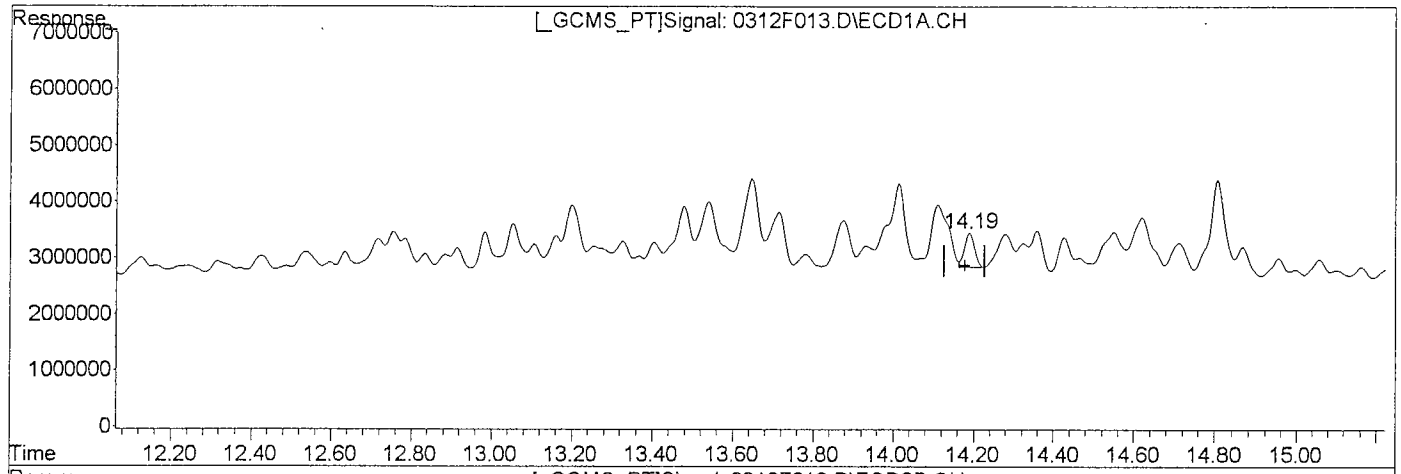
(+) = Expected Retention Time

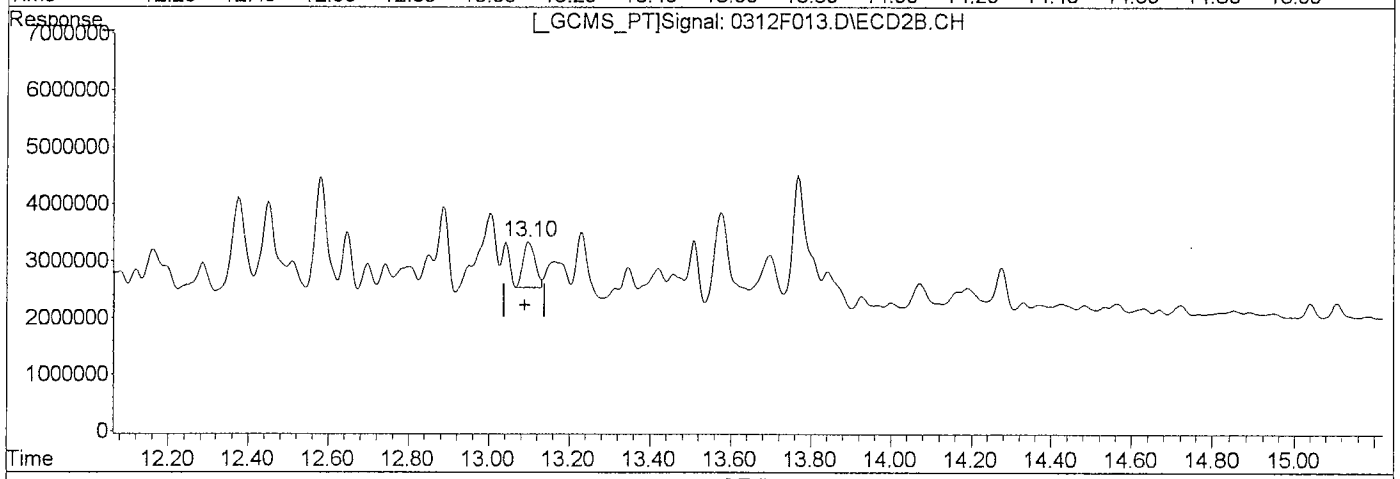
0312F013.D 031207-8081.M Mon Mar 12 17:35:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 506.006ug/L m

response 1036996

(29) Toxaphene {5} #2

13.10min 204.612ug/L m

response 1696721

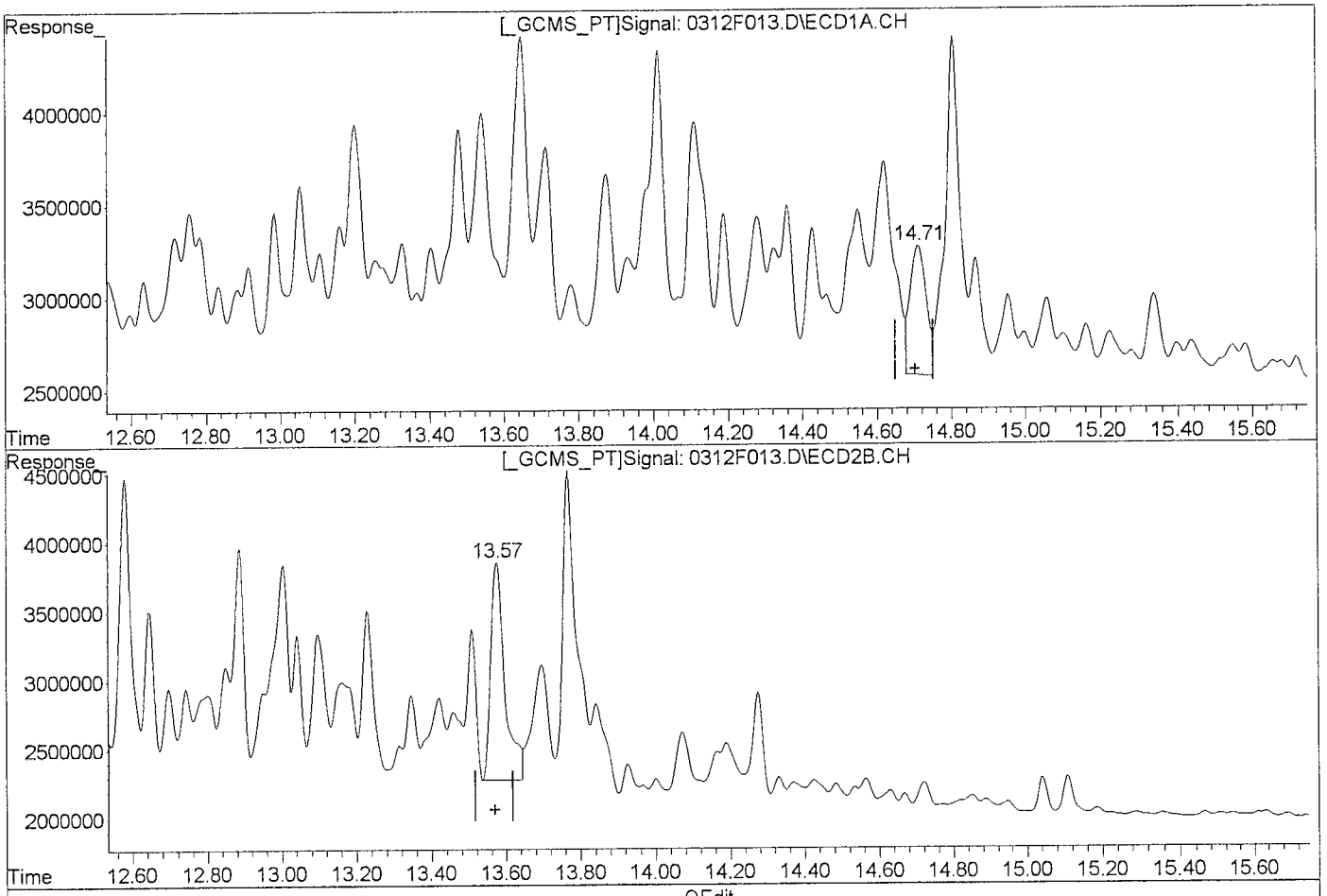
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:35:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.71min 290.334ug/L

response 2144701

(30) Toxaphene {6} #2

13.57min 422.688ug/L

response 4188382

Before

MAR 12 2007

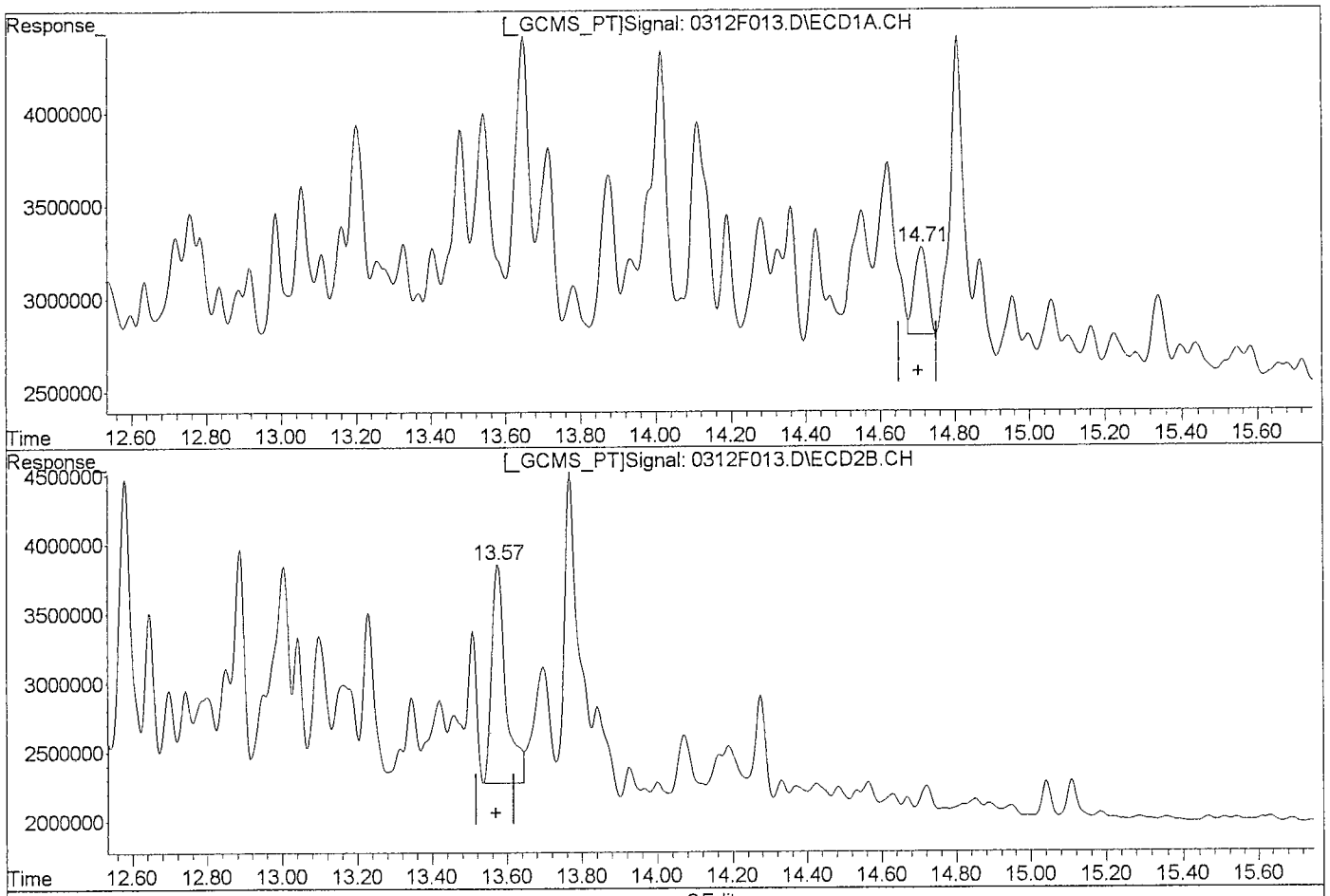
(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:35:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\031207\0312F013.D\ECD2B.CH
Acq On : 12 Mar 2007 12:54 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.71min 155.718ug/L m

response 1150293

(30) Toxaphene {6} #2

13.57min 422.688ug/L

response 4188382

(+) = Expected Retention Time

0312F013.D 031207-8081.M Mon Mar 12 17:35:48 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:04 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2533524	7200906	959.328m	960.230m
26)	Toxaphene {2}	13.04	12.44	2034790	5211519	457.213m	941.115m#
27)	Toxaphene {3}	13.19	12.64	3086542	2845572	771.494m	867.126m
28)	Toxaphene {4}	13.86	13.00	3926567	3847131	692.367m	850.871m
29)	Toxaphene {5}	14.18	13.09	1935048	3098863	944.214m	373.699m#
30)	Toxaphene {6}	14.70	13.57	2162905	8014328	292.798m	808.799m#

3/12 6x
3/13/07

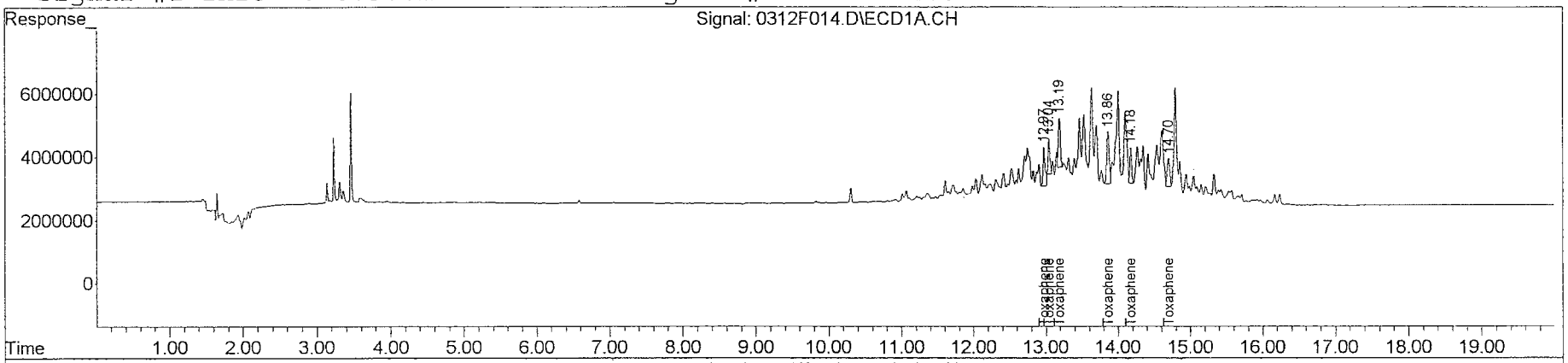
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

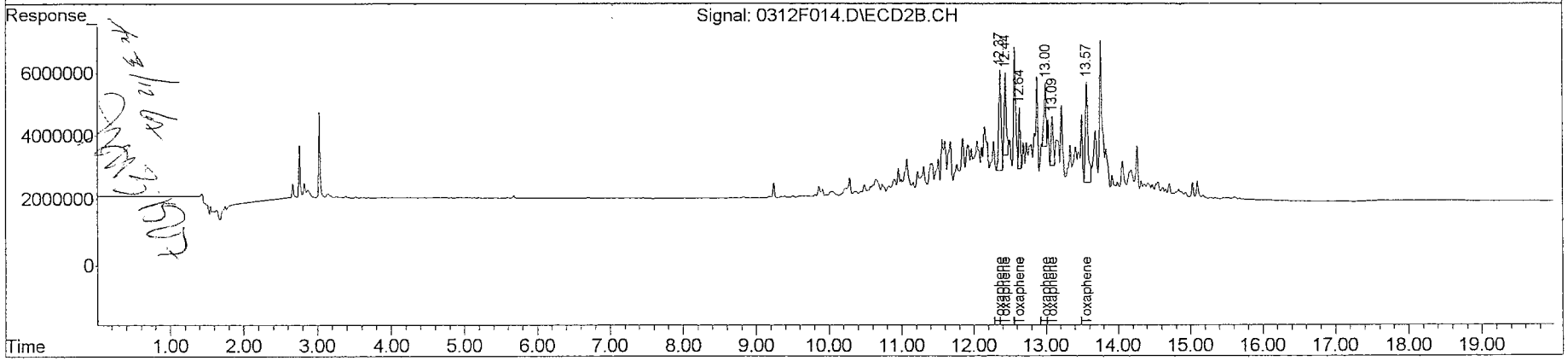
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:39 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

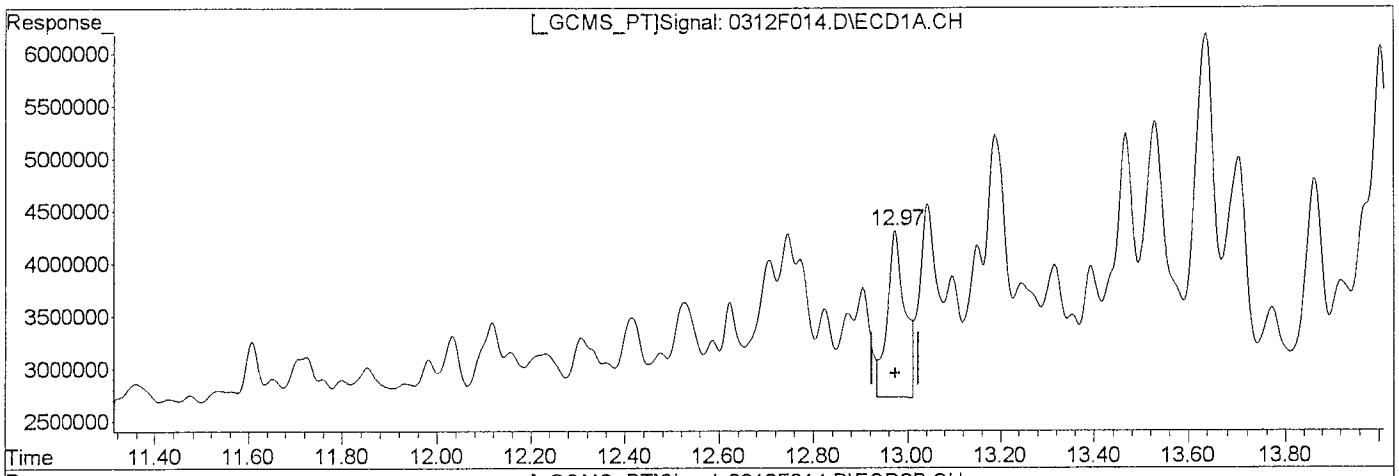


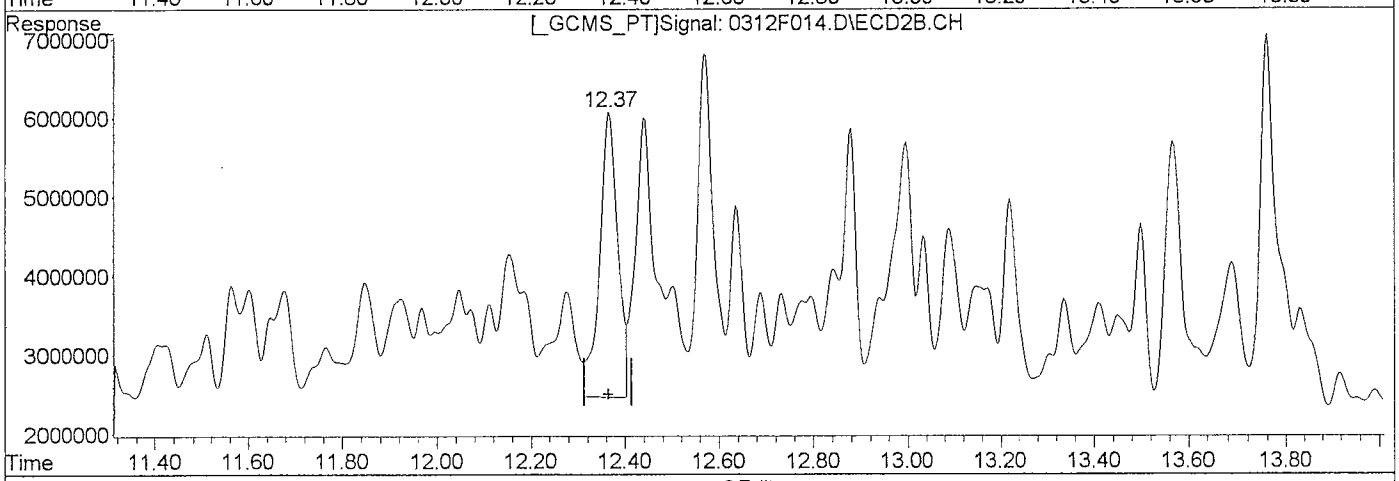


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 1573.281ug/L

response 4154936

(25) Toxaphene #2

12.37min 1276.665ug/L

response 9573895

Review

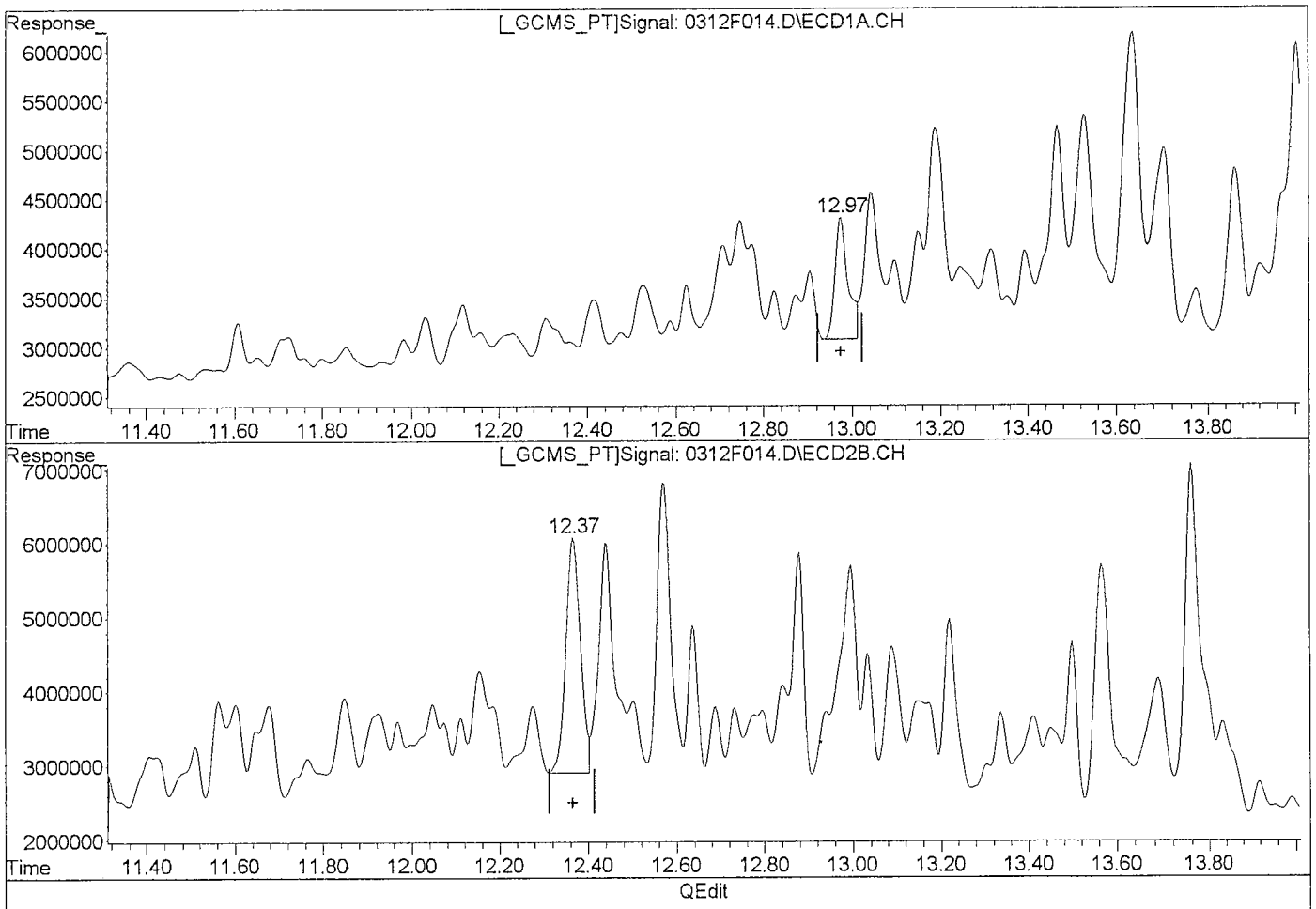
MAR 1 2 2007

(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:36:07 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(25) Toxaphene

12.97min 959.328ug/L m

response 2533524

(25) Toxaphene #2

12.37min 960.230ug/L m

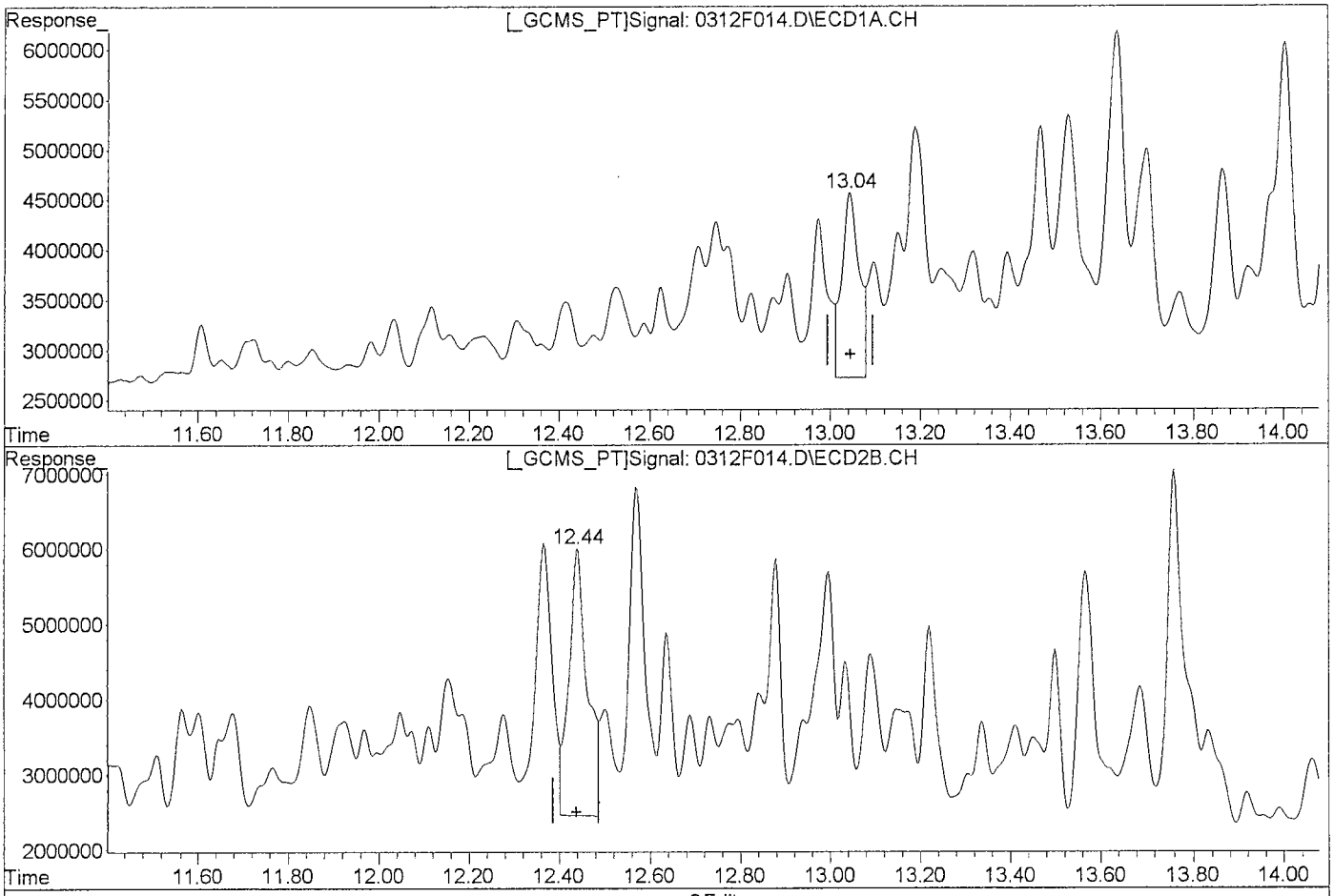
response 7200906

(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:36:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.04min 1111.922ug/L

response 4948516

(26) Toxaphene {2} #2

12.44min 1797.722ug/L

response 9955066

Before

MAR 1 7 2007

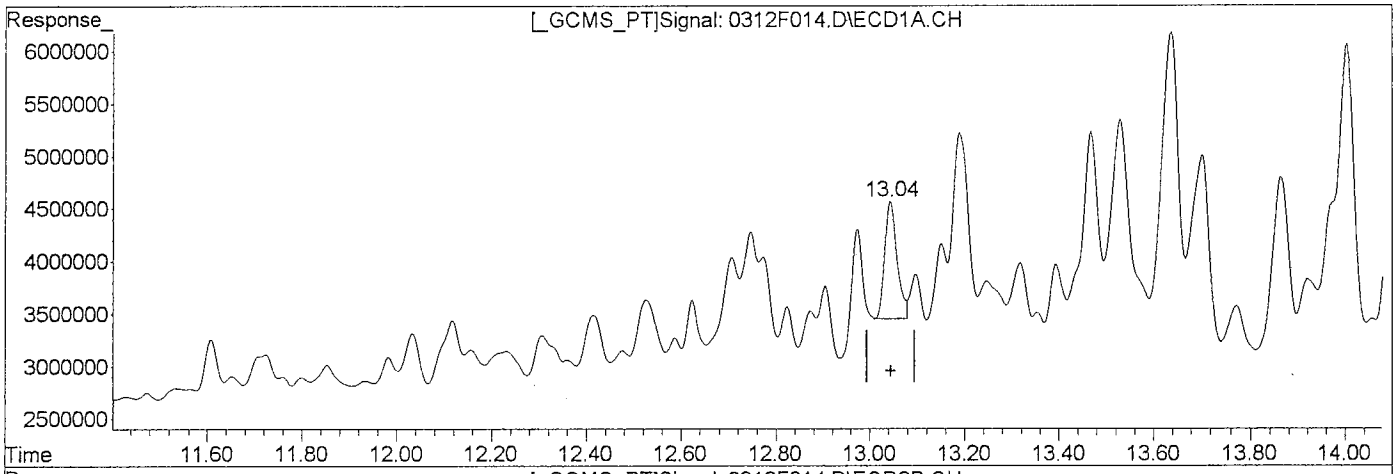
(+) = Expected Retention Time

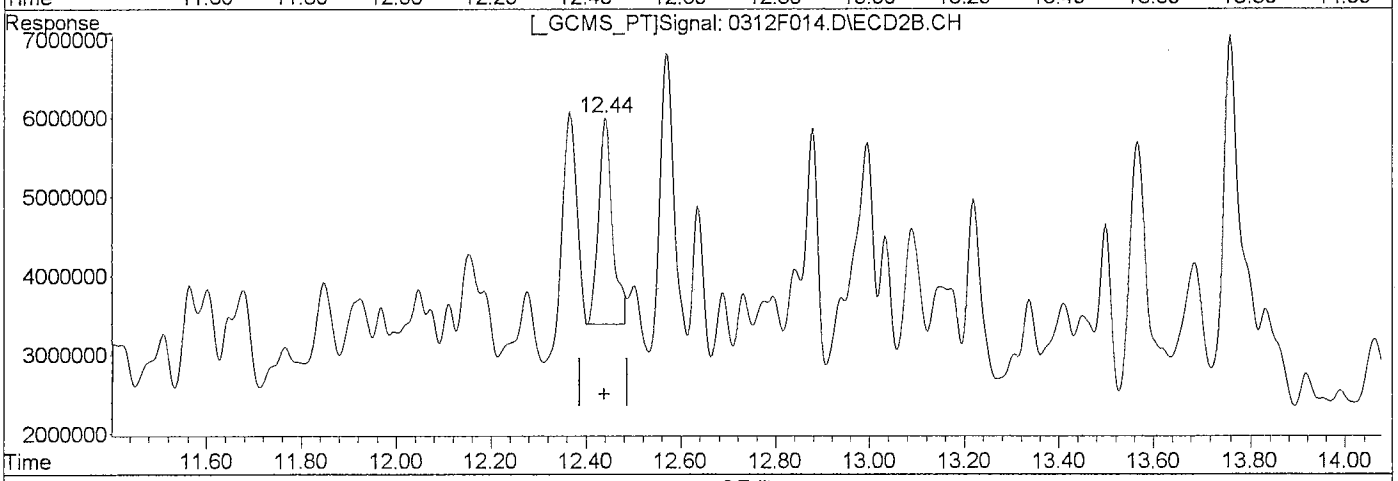
0312F014.D 031207-8081.M Mon Mar 12 17:36:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 457.213ug/L m

response 2034790

(26) Toxaphene {2} #2

12.44min 941.115ug/L m

response 5211519

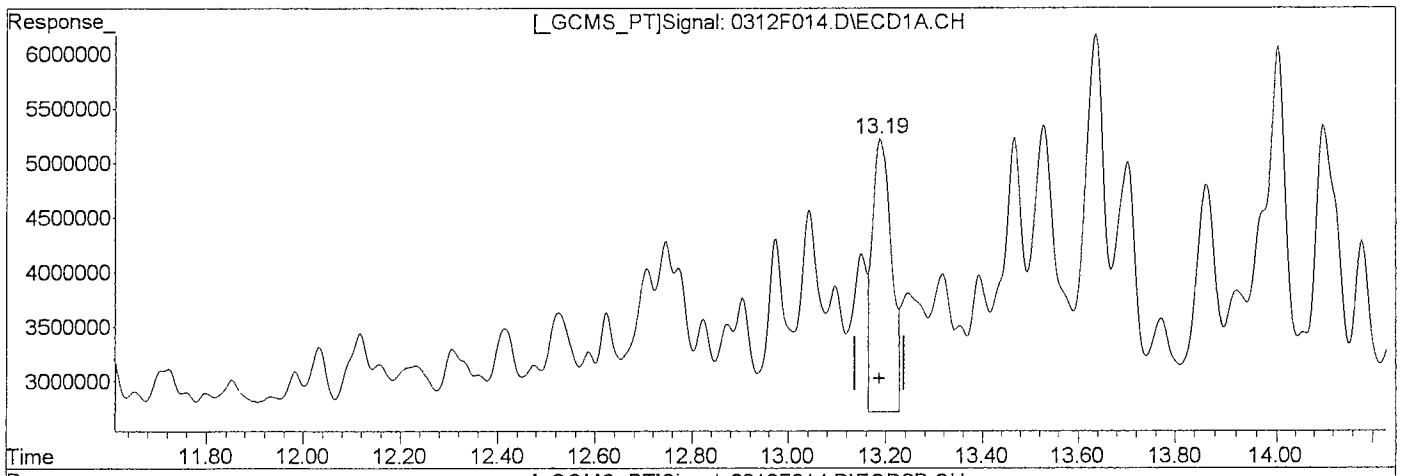
(+) = Expected Retention Time

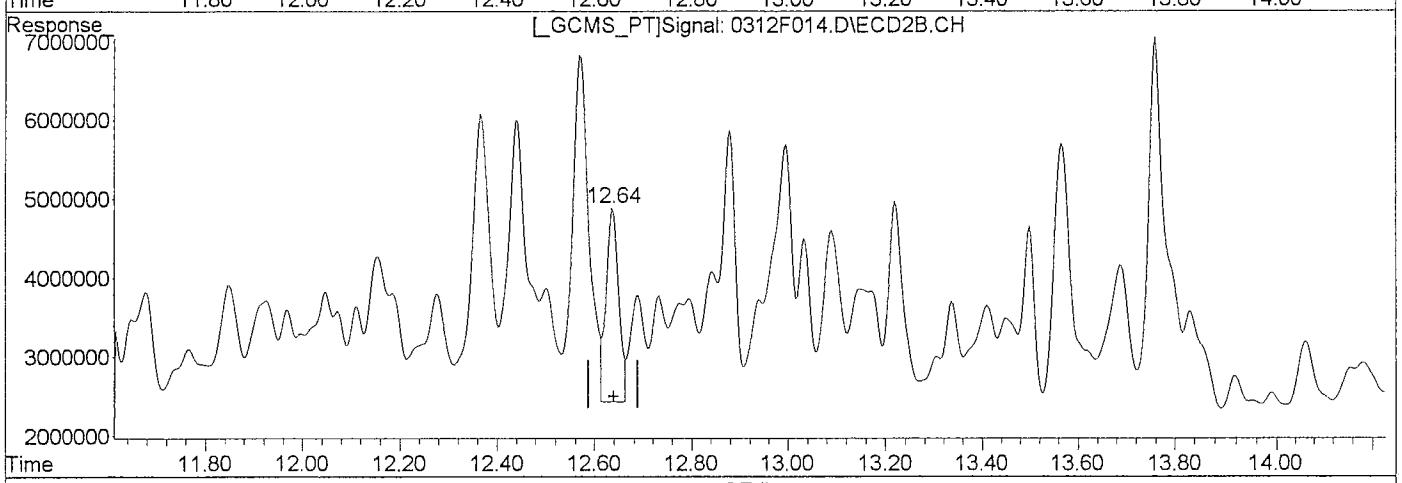
0312F014.D 031207-8081.M Mon Mar 12 17:36:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 1678.822ug/L

response 6716521

(27) Toxaphene {3} #2

12.64min 1353.698ug/L

response 4442313

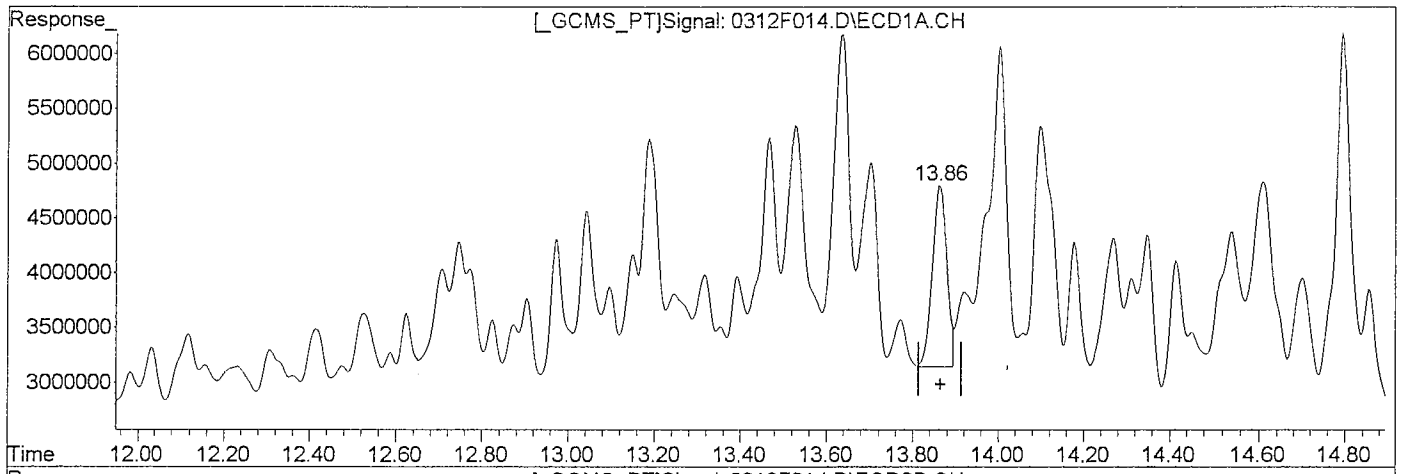
MAR 1 2 2007

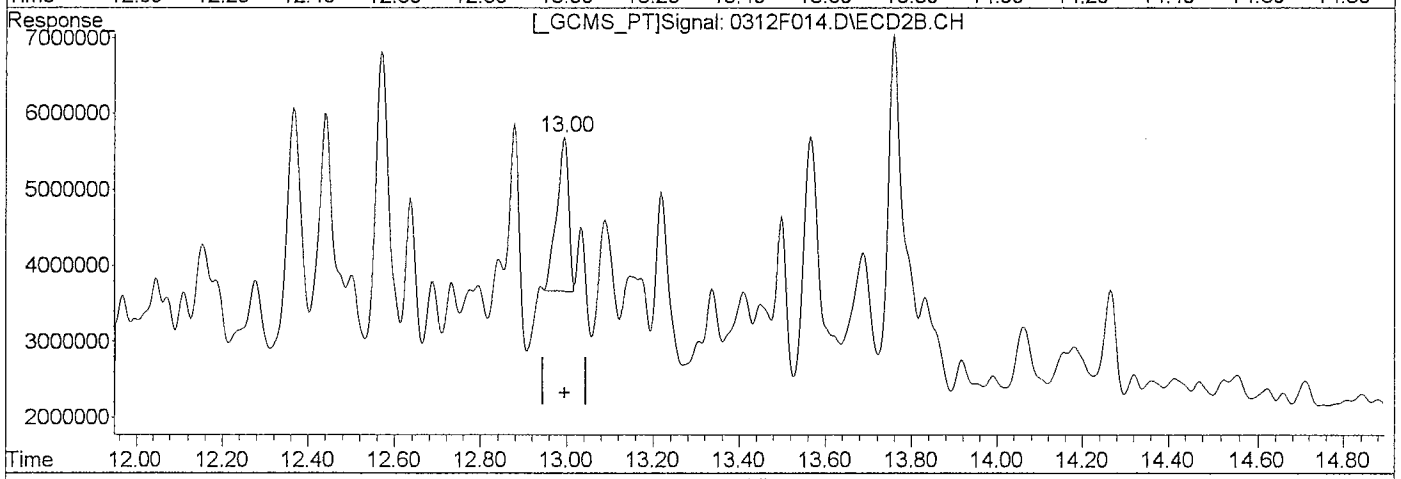
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:36:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 692.367ug/L m

response 3926567

(28) Toxaphene {4} #2

13.00min 850.871ug/L m

response 3847131

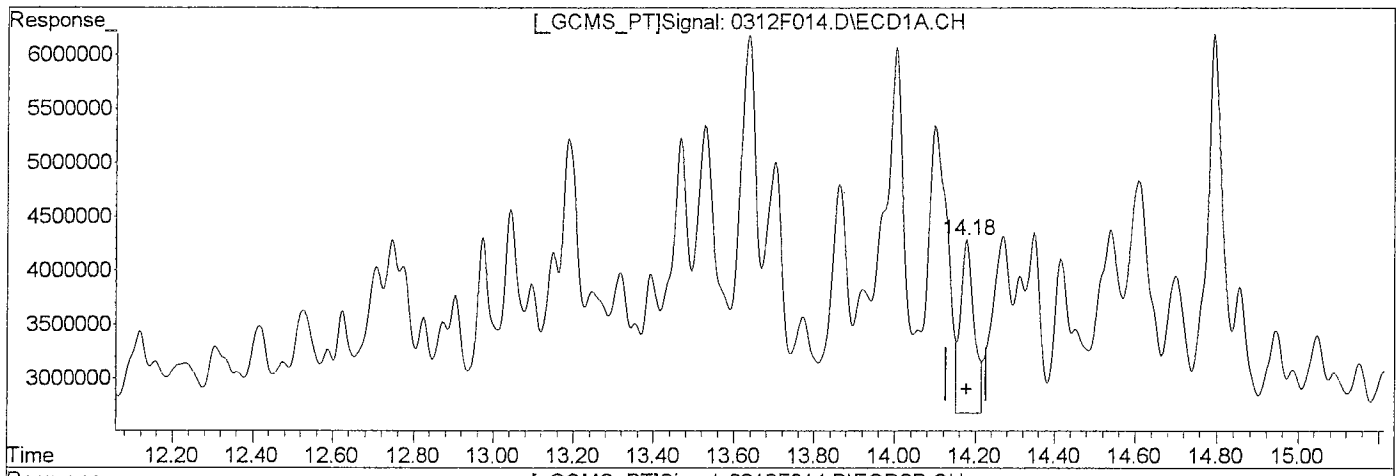
MAR 1 7 2007

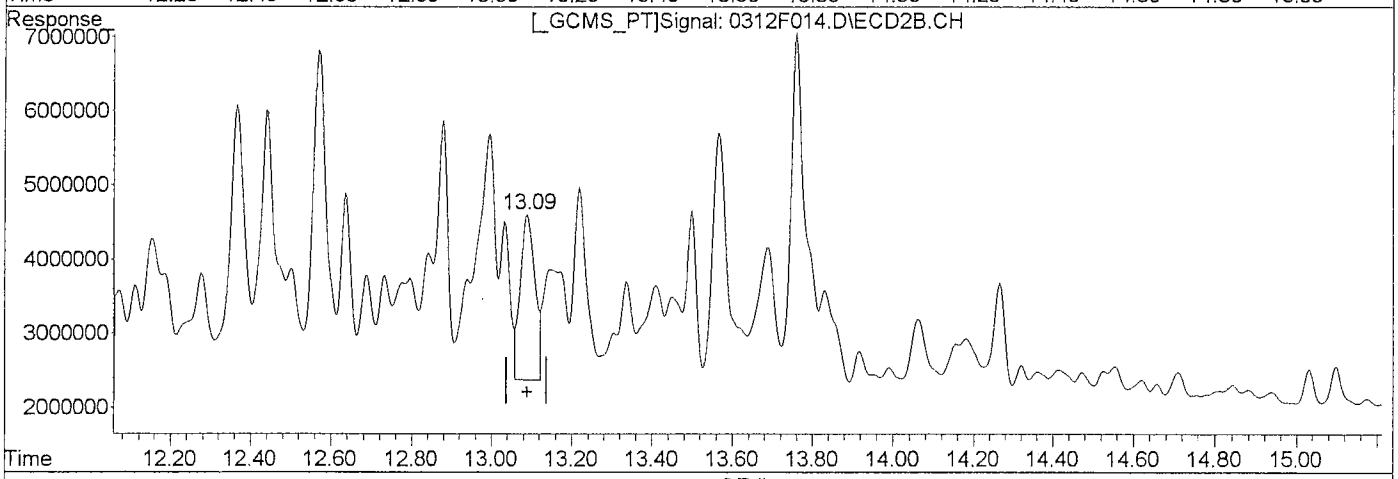
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:39:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 1832.067ug/L

response 3754592

(29) Toxaphene {5} #2

13.09min 691.388ug/L

response 5733268

for 5/12 lot

Bottom

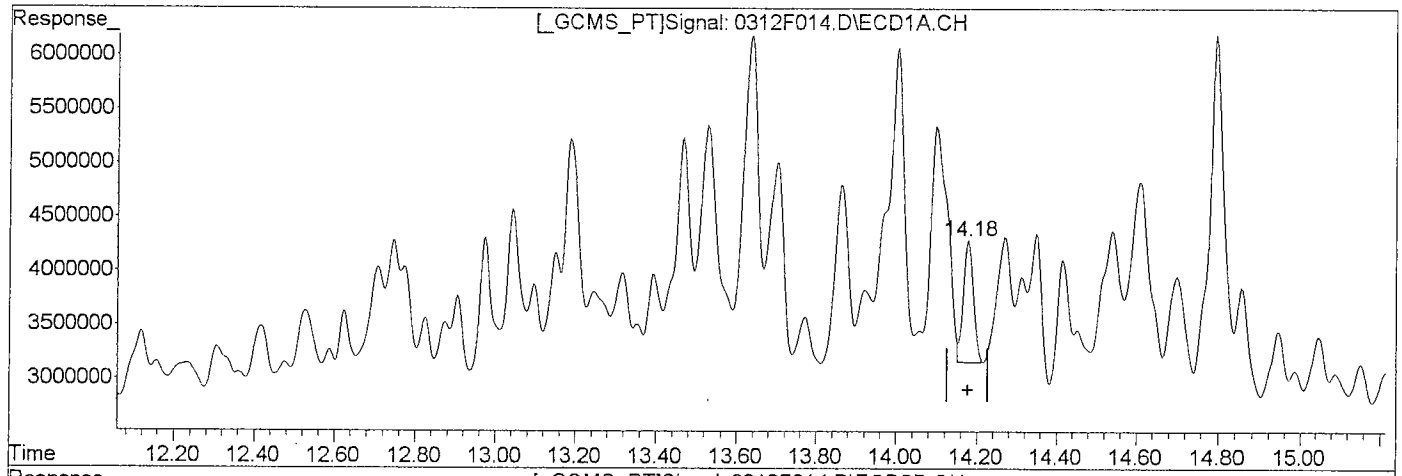
MAR 12 2007

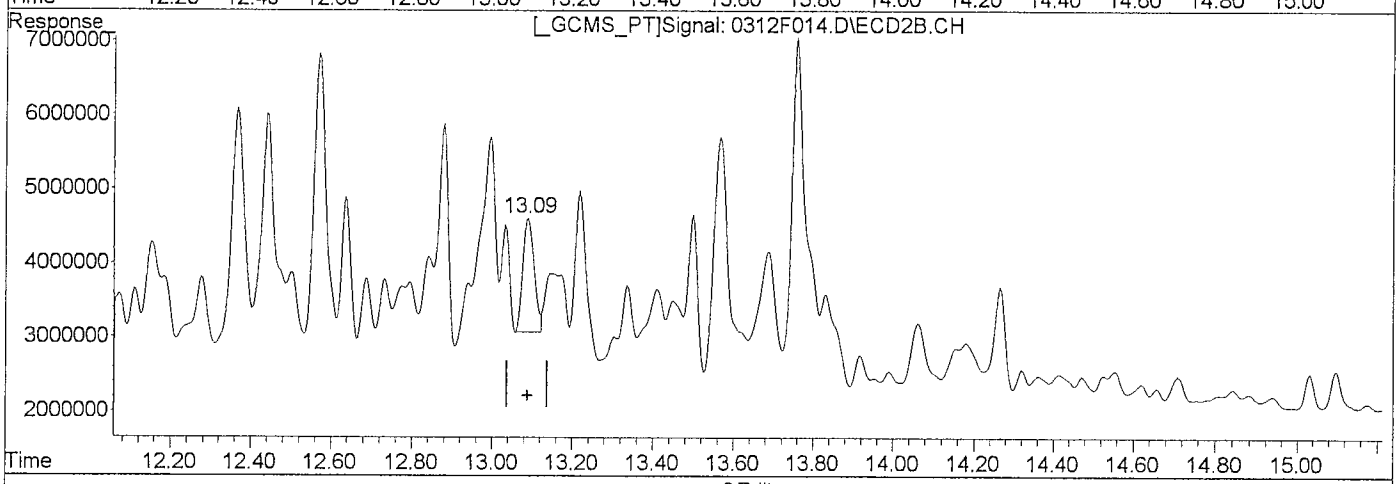
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:39:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 944.214ug/L m

response 1935048

(29) Toxaphene {5} #2

13.09min 373.699ug/L m

response 3098863

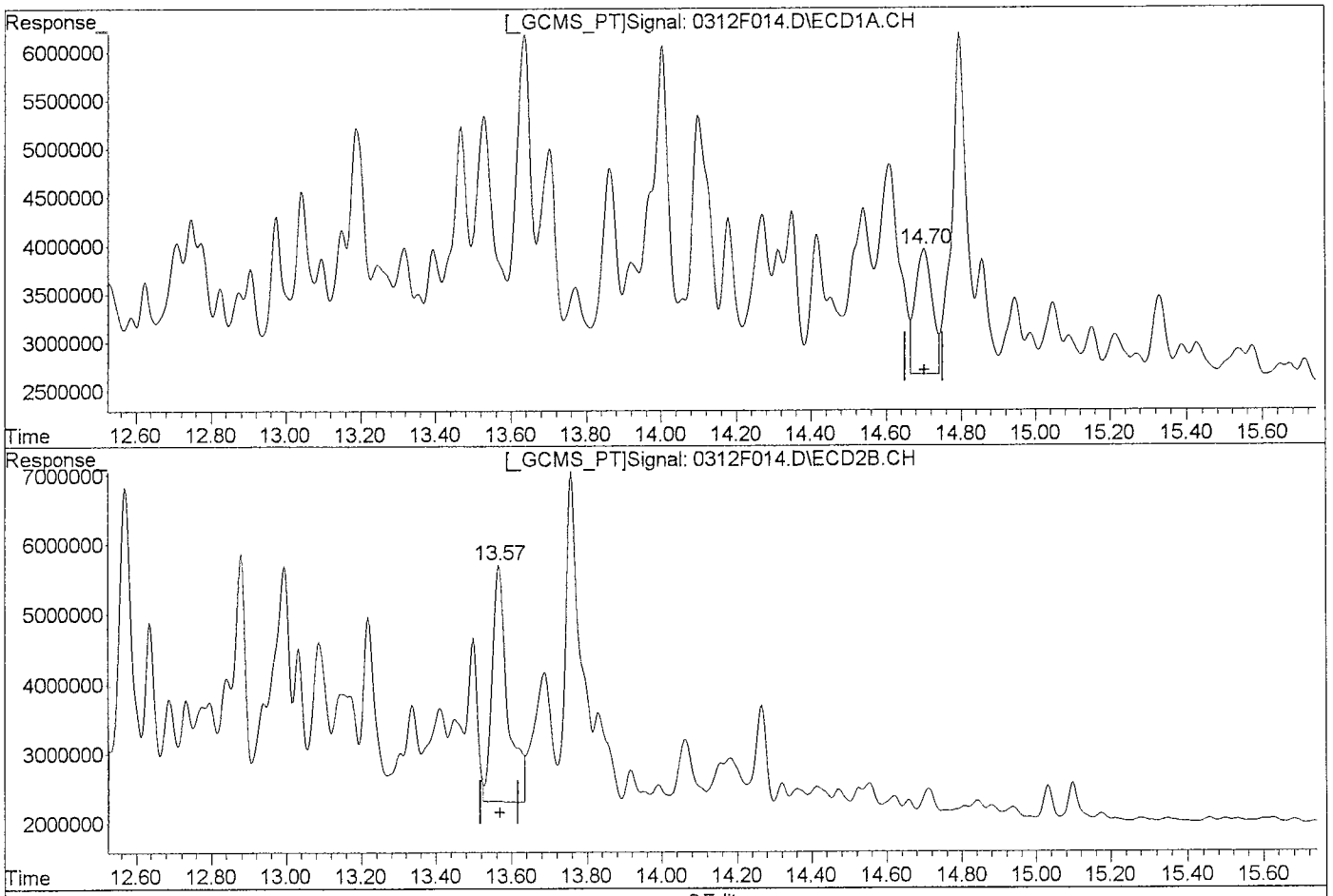
(+) = Expected Retention Time

0312F014.D 031207-8081.M Mon Mar 12 17:39:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.70min 547.705ug/L

response 4045909

(30) Toxaphene {6} #2

13.57min 976.719ug/L

response 9678236

Before

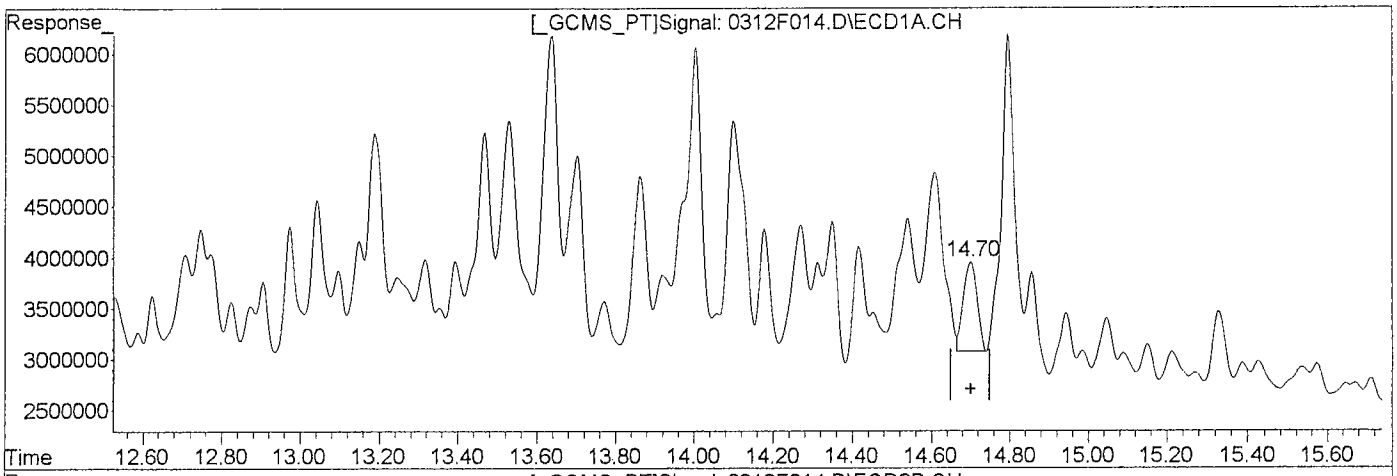
MAR 1 7 2007

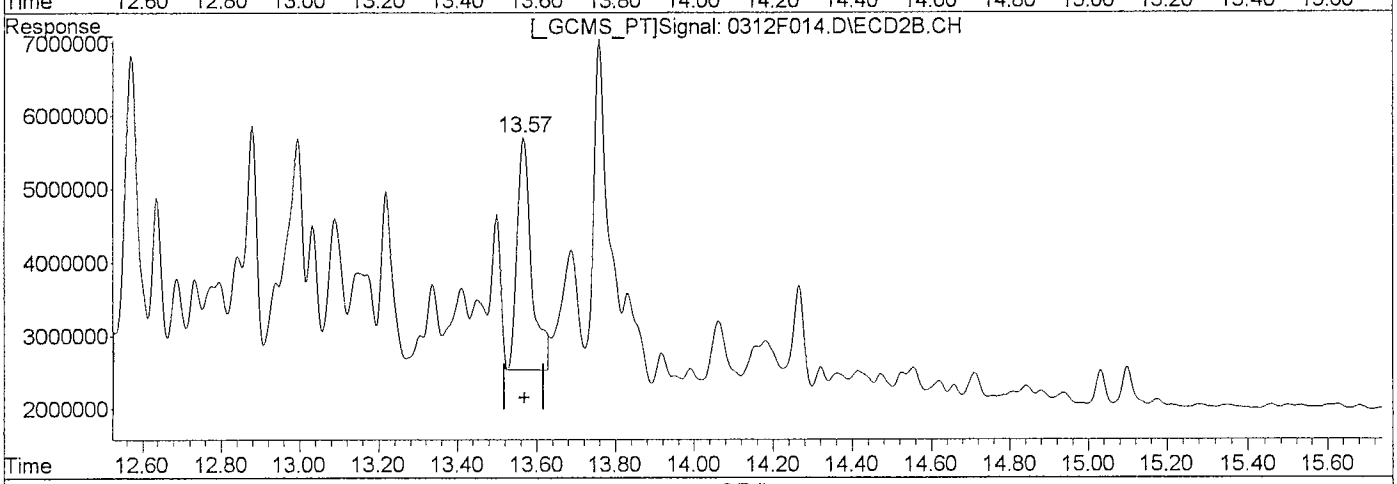
(+) = Expected Retention Time
0312F014.D 031207-8081.M Mon Mar 12 17:39:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\031207\0312F014.D\ECD2B.CH
Acq On : 12 Mar 2007 1:21 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 292.798ug/L m

response 2162905

(30) Toxaphene {6} #2

13.57min 808.799ug/L m

response 8014328

(+) = Expected Retention Time

0312F014.D 031207-8081.M Mon Mar 12 17:39:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	4937653	14447184	1869.660m	1926.511m
26)	Toxaphene {2}	13.05	12.45	4028150	10898041	905.117m	1968.008m#
27)	Toxaphene {3}	13.20	12.64	6413209	5445539	1603.008m	1659.409m
28)	Toxaphene {4}	13.87	13.00	7778089	7542971	1371.501m	1668.282m
29)	Toxaphene {5}	14.19	13.09	3865631	6290492	1886.249m	758.585m#
30)	Toxaphene {6}	14.71	13.57	4374094	16142423	592.132m	1629.080m#

AC 3/12/07

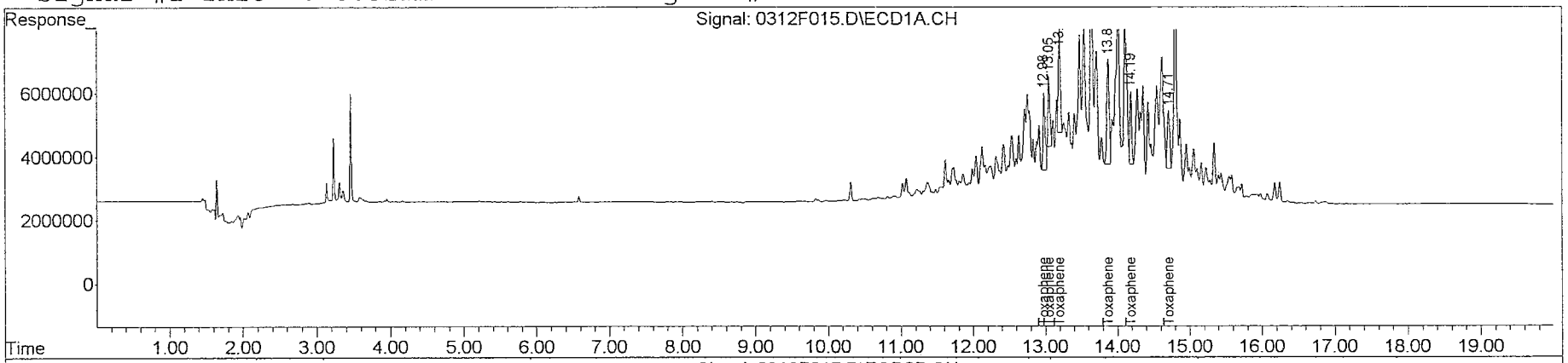
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

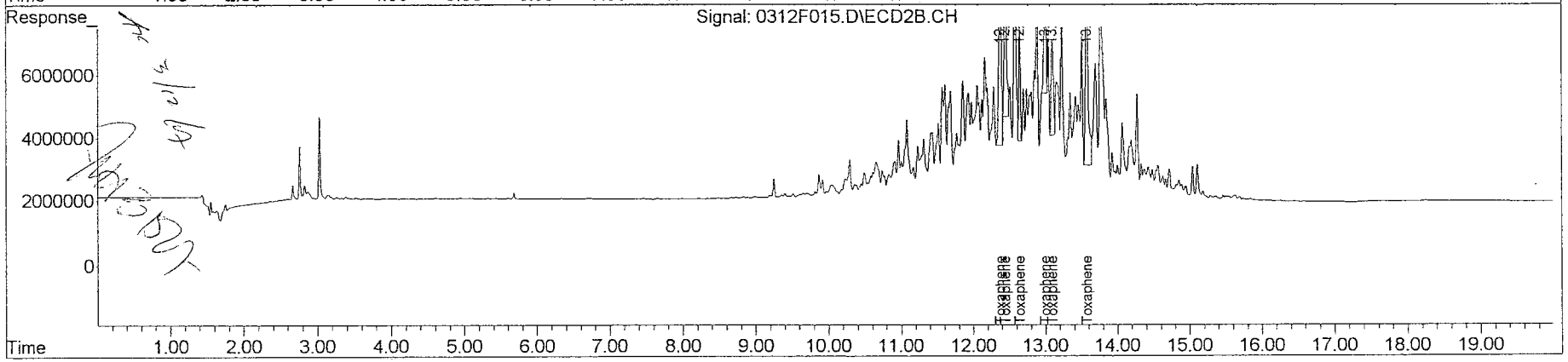
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:42 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

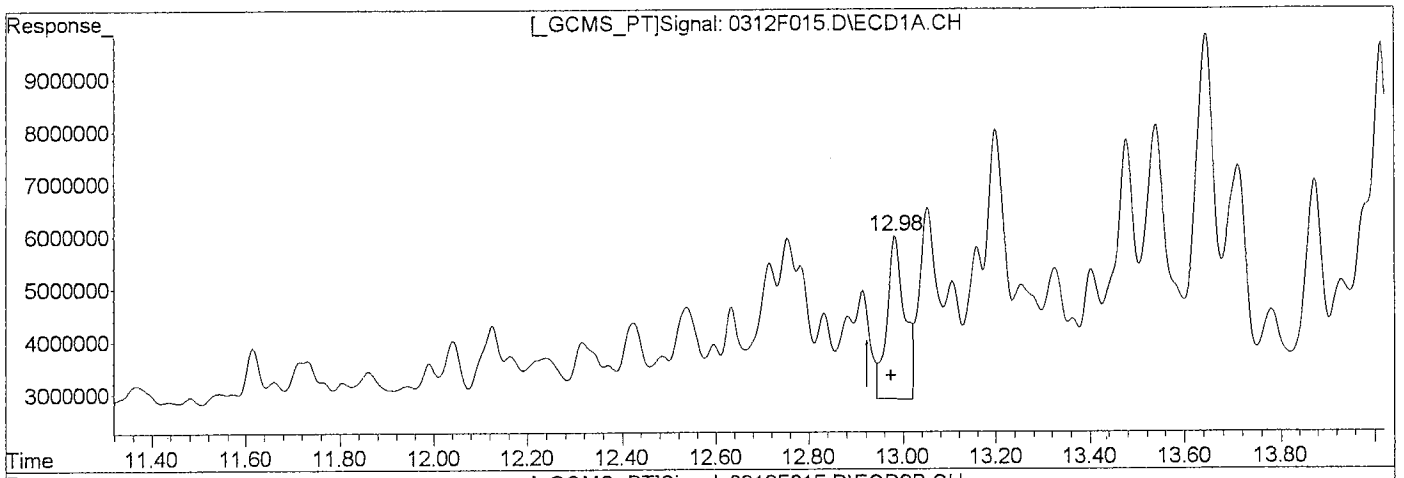


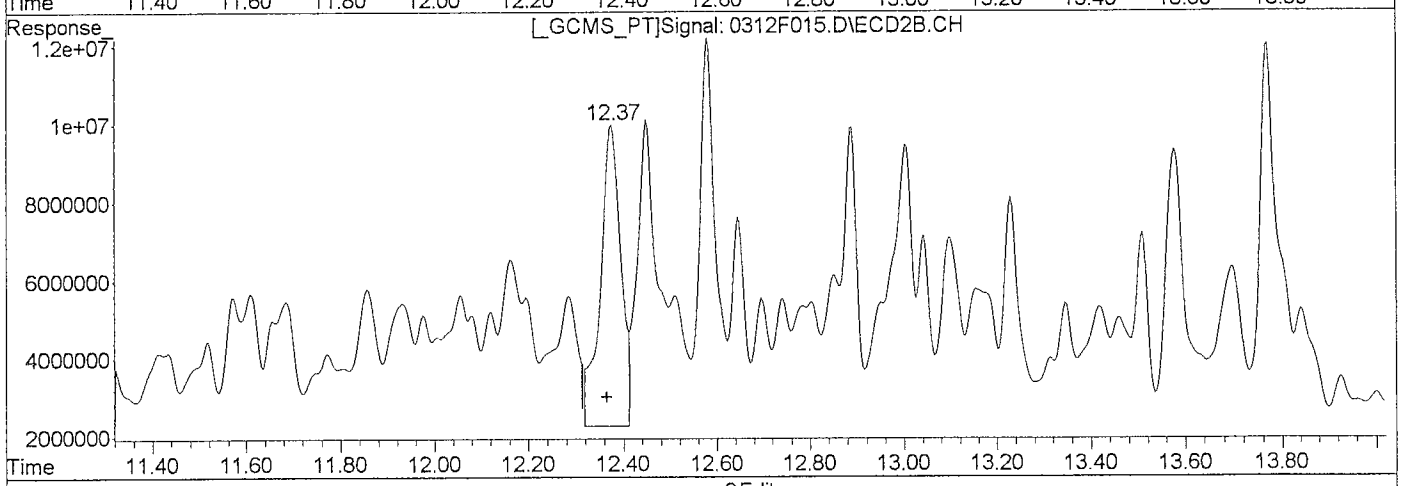


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 3094.633ug/L

response 8172728

(25) Toxaphene #2

12.37min 3053.634ug/L

response 22899647

Before

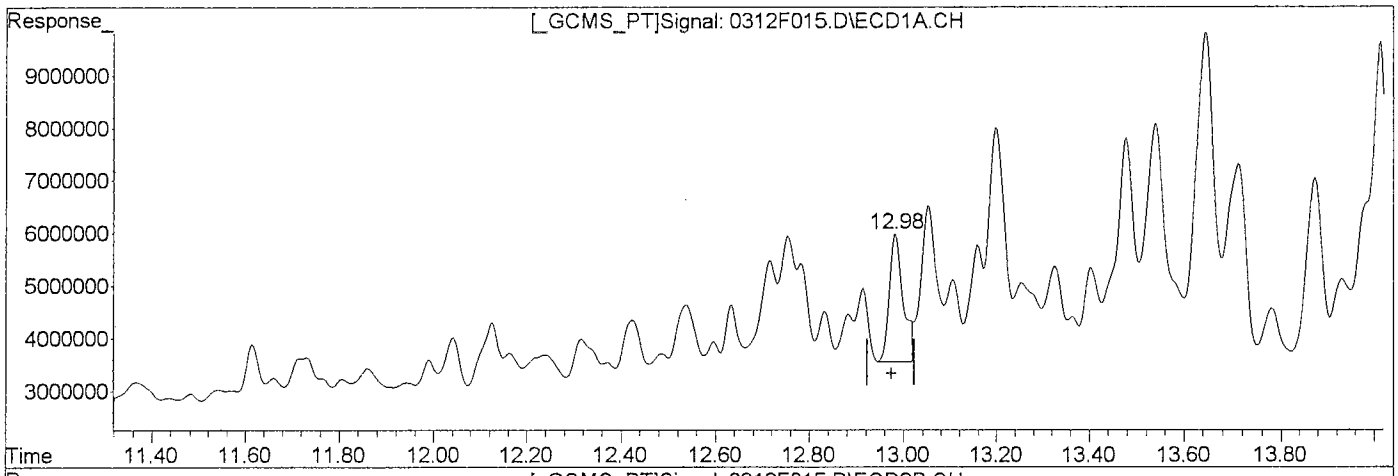
MAR 1 2 2007

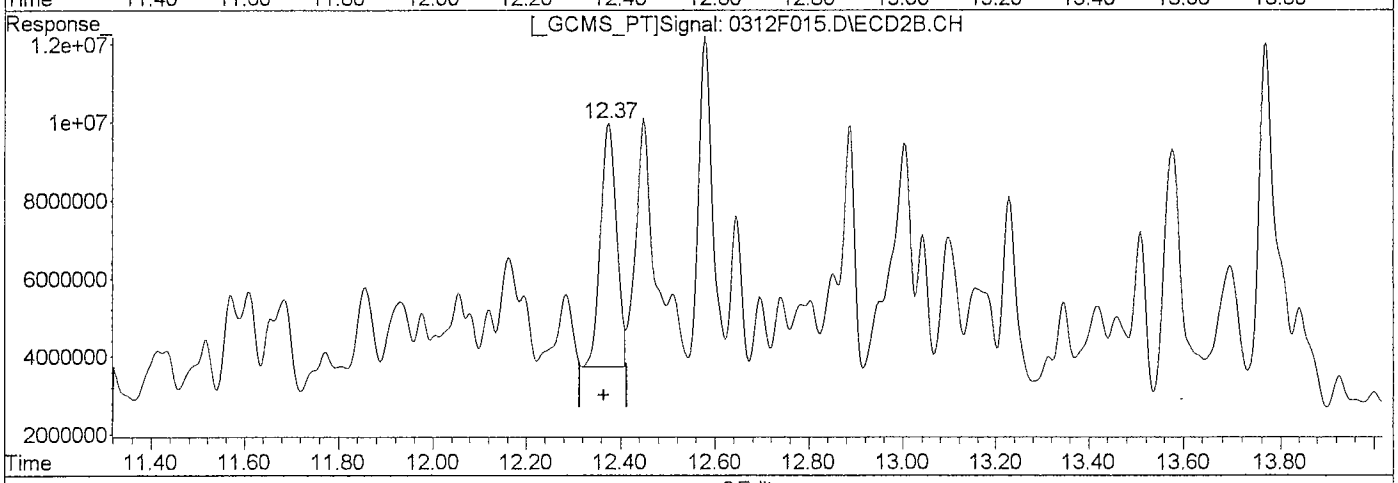
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:40:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 1869.660ug/L m

response 4937653

(25) Toxaphene #2

12.37min 1926.511ug/L m

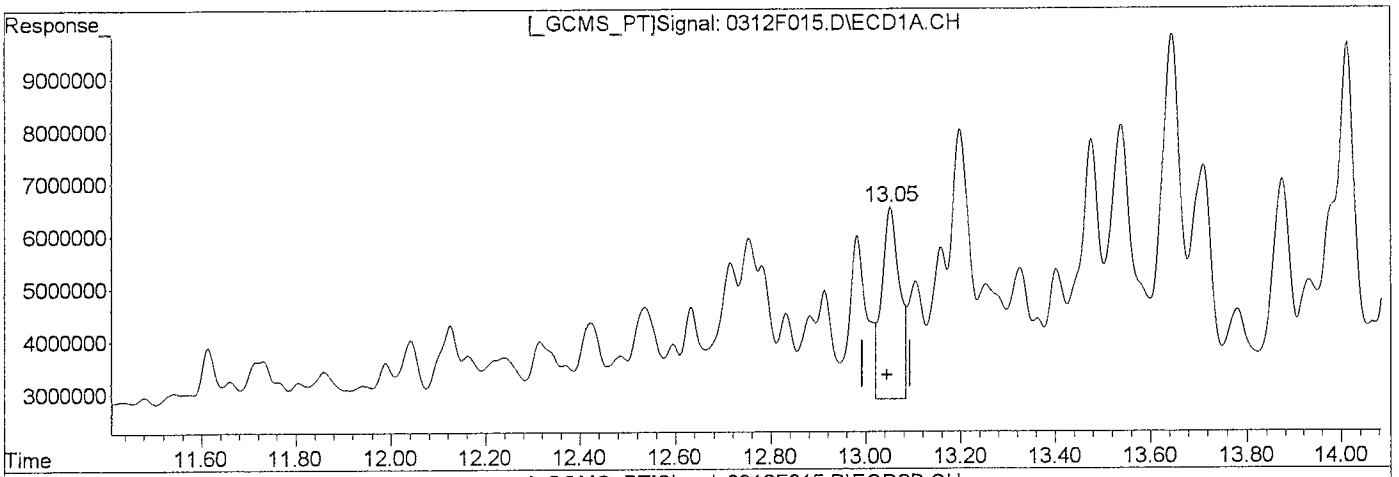
response 14447184

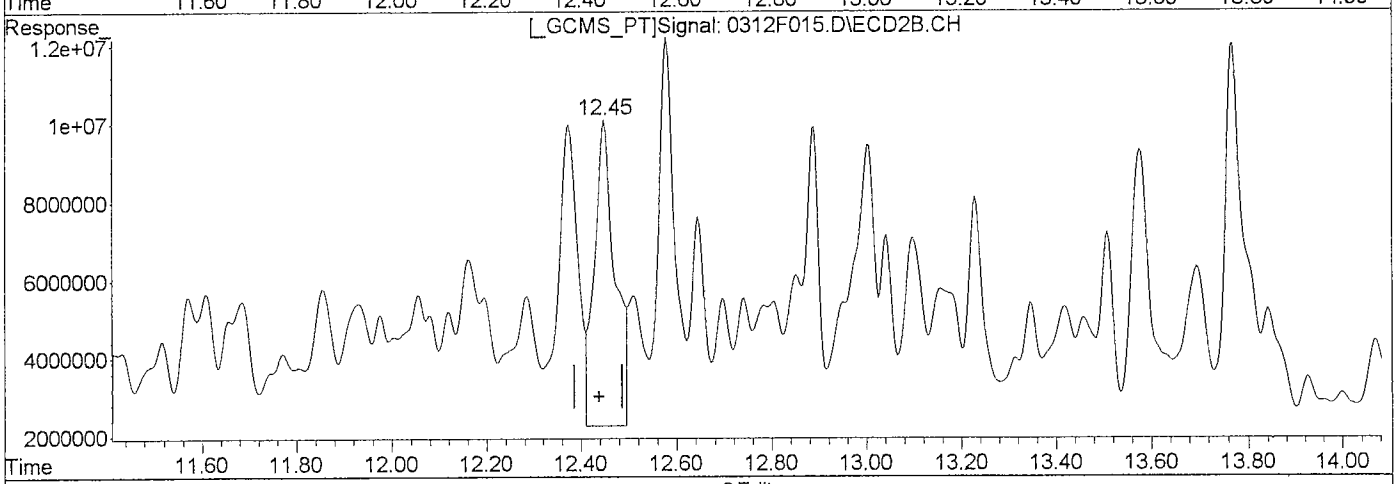
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:40:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 2123.169ug/L

response 9448989

(26) Toxaphene {2} #2

12.45min 4136.288ug/L

response 22905111

Before
MAR 12 2007

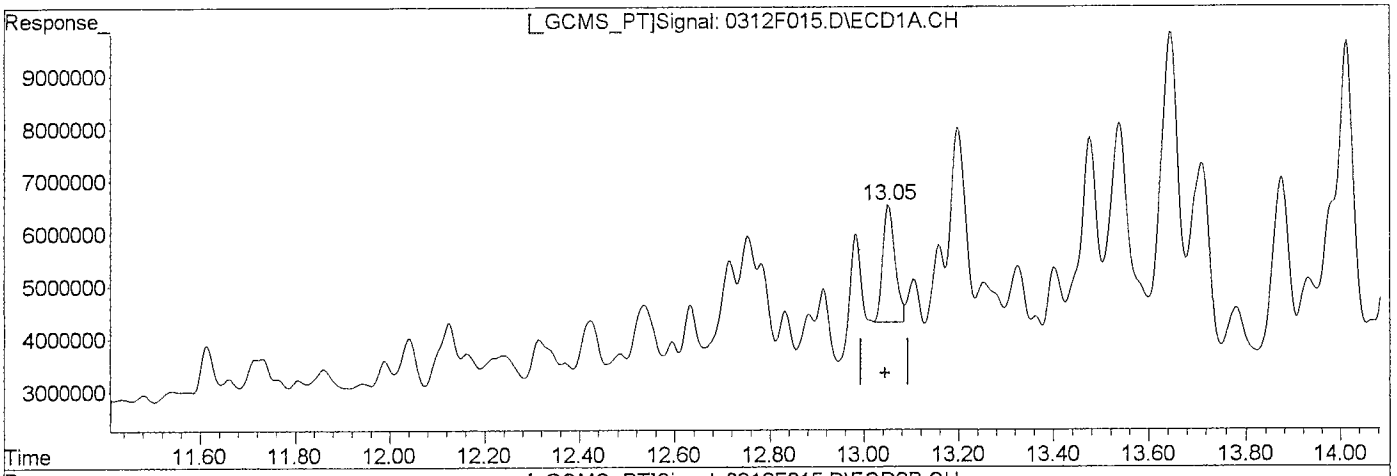
(+) = Expected Retention Time

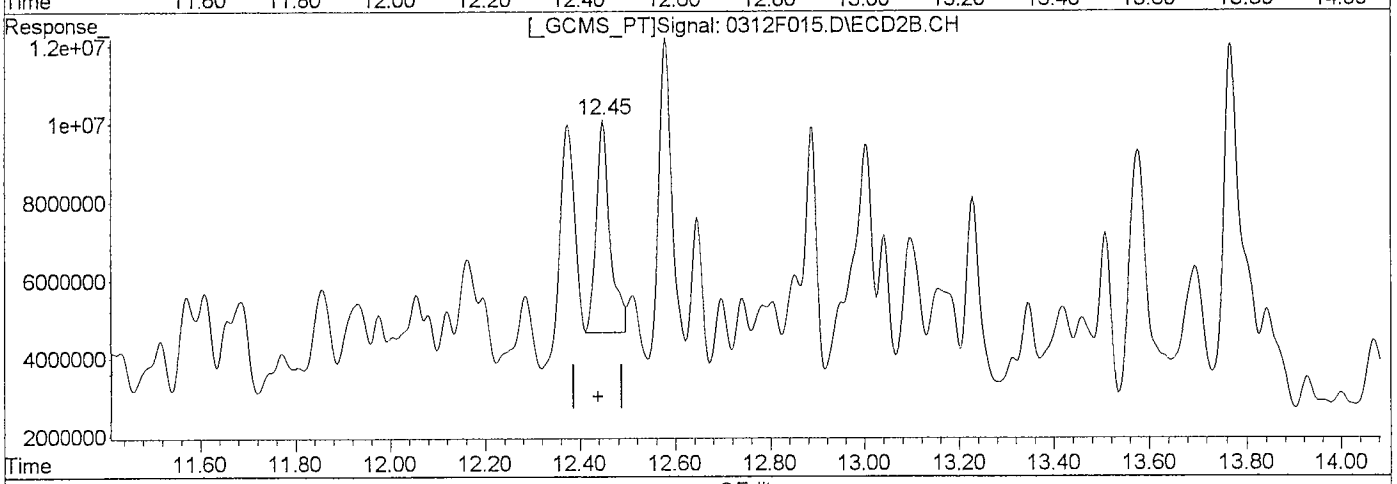
0312F015.D 031207-8081.M Mon Mar 12 17:41:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 905.117ug/L m

response 4028150

(26) Toxaphene {2} #2

12.45min 1968.008ug/L m

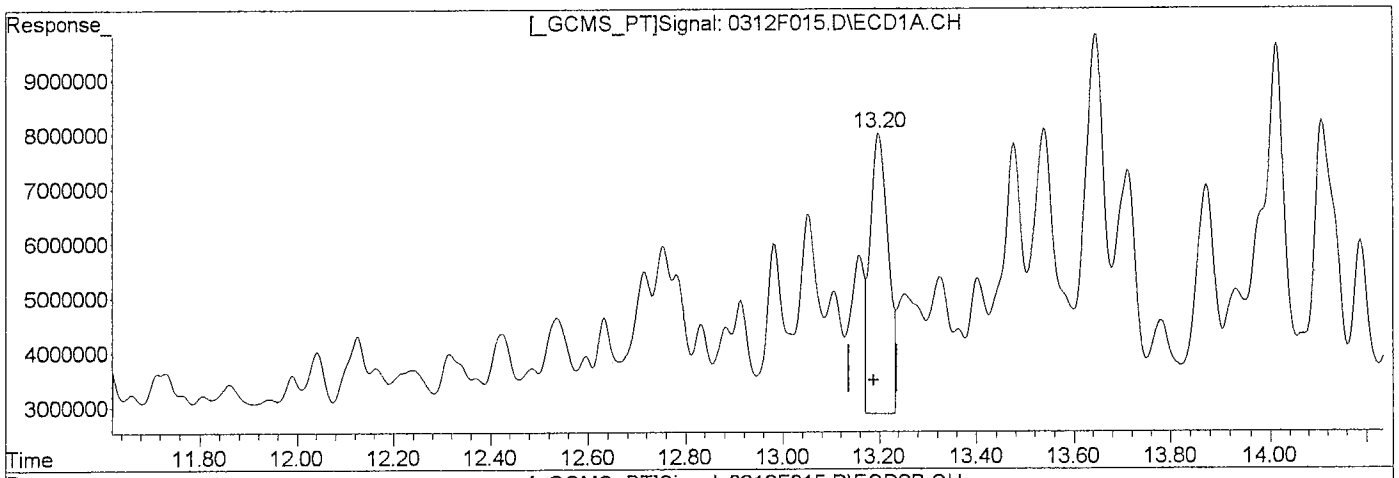
response 10898041

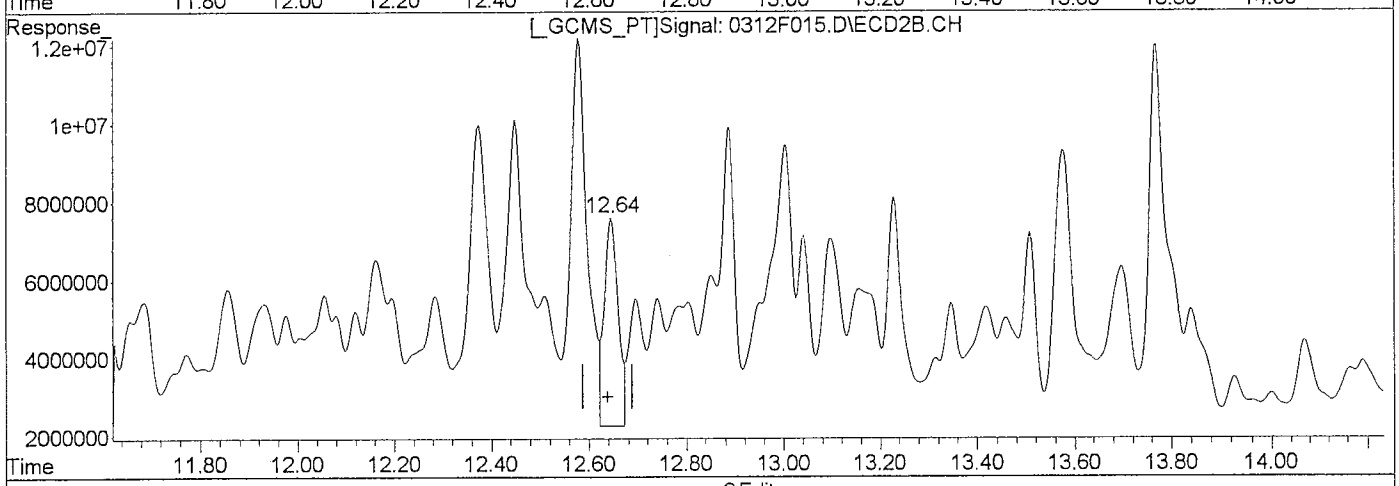
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:41:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.20min 3374.154ug/L

response 13499090

(27) Toxaphene {3} #2

12.64min 3166.331ug/L

response 10390674

MAR 1 2 2007

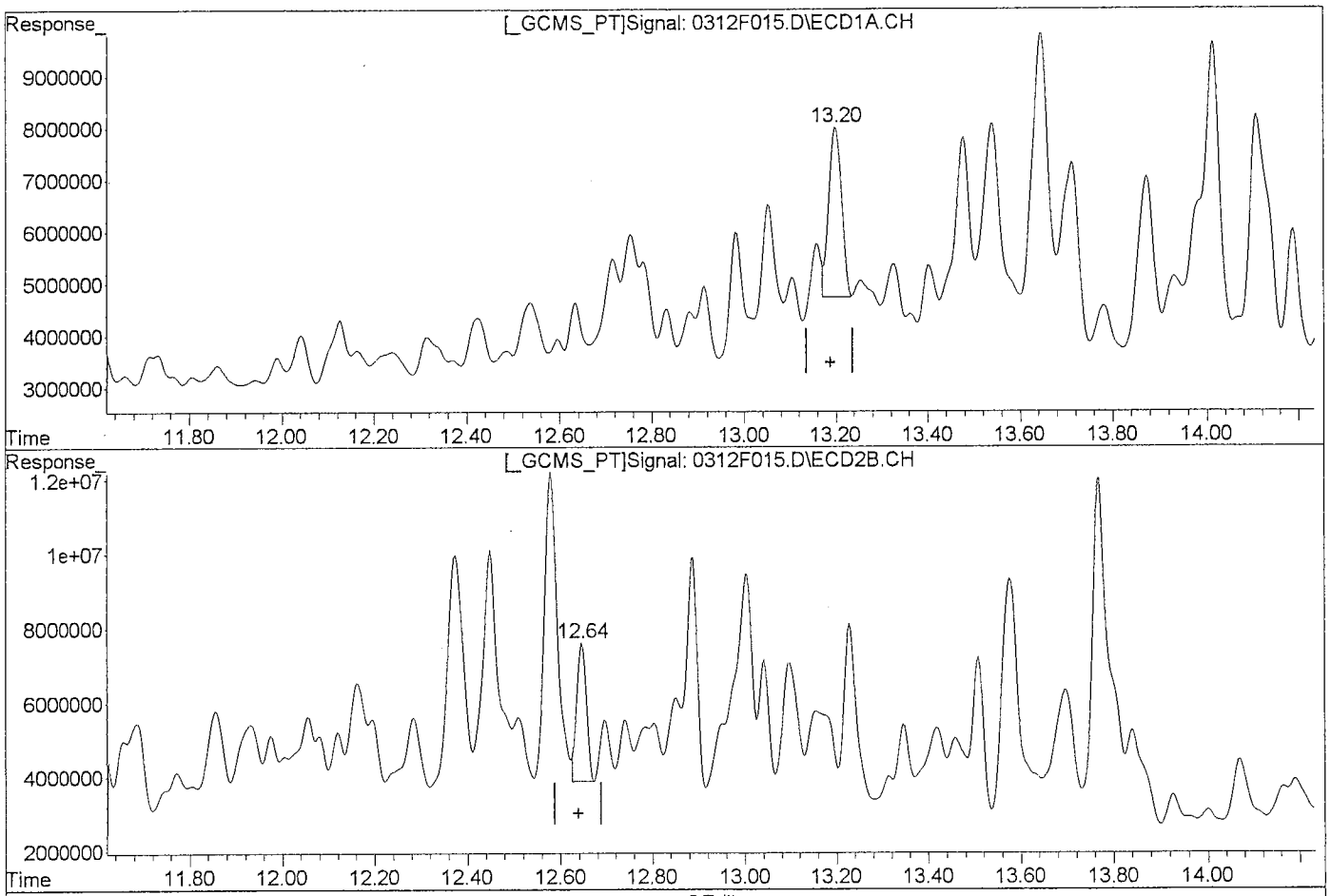
(+) = Expected Retention Time

0312F015.D 031207-8081.M Mon Mar 12 17:41:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



QEdit

(27) Toxaphene {3}

13.20min 1603.008ug/L m

response 6413209

(27) Toxaphene {3} #2

12.64min 1659.409ug/L m

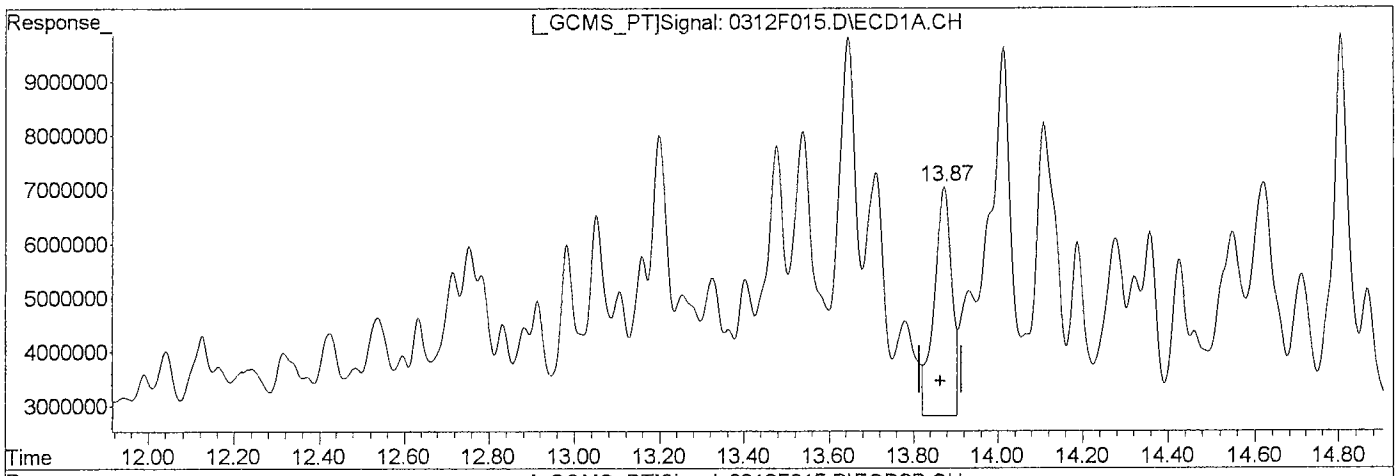
response 5445539

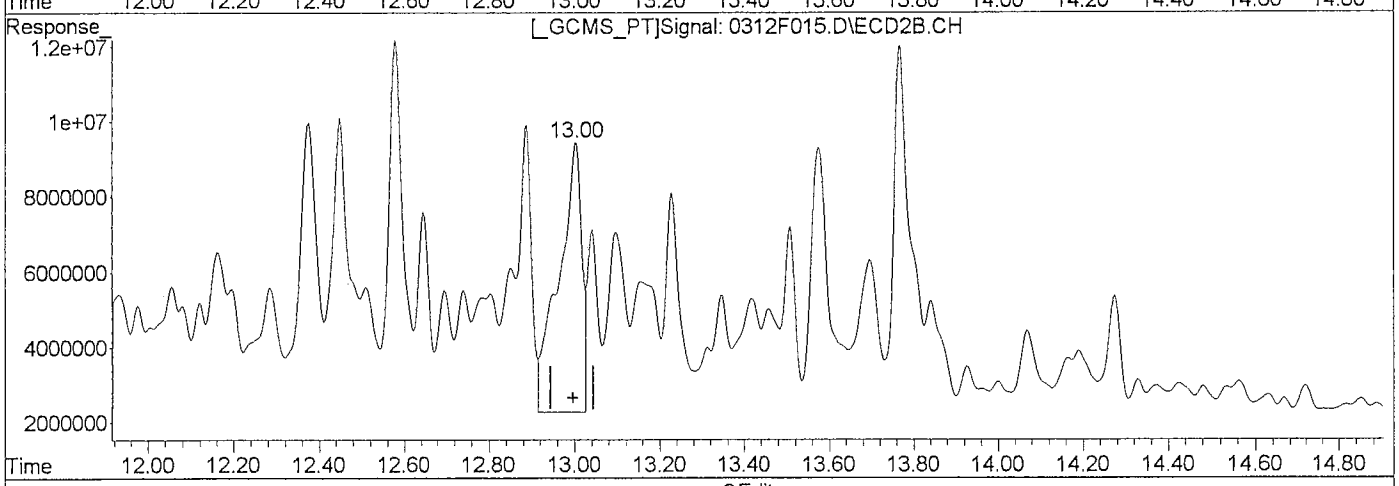
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:41:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 2178.968ug/L

response 12357419

(28) Toxaphene {4} #2

13.00min 5863.283ug/L

response 26510254

Before

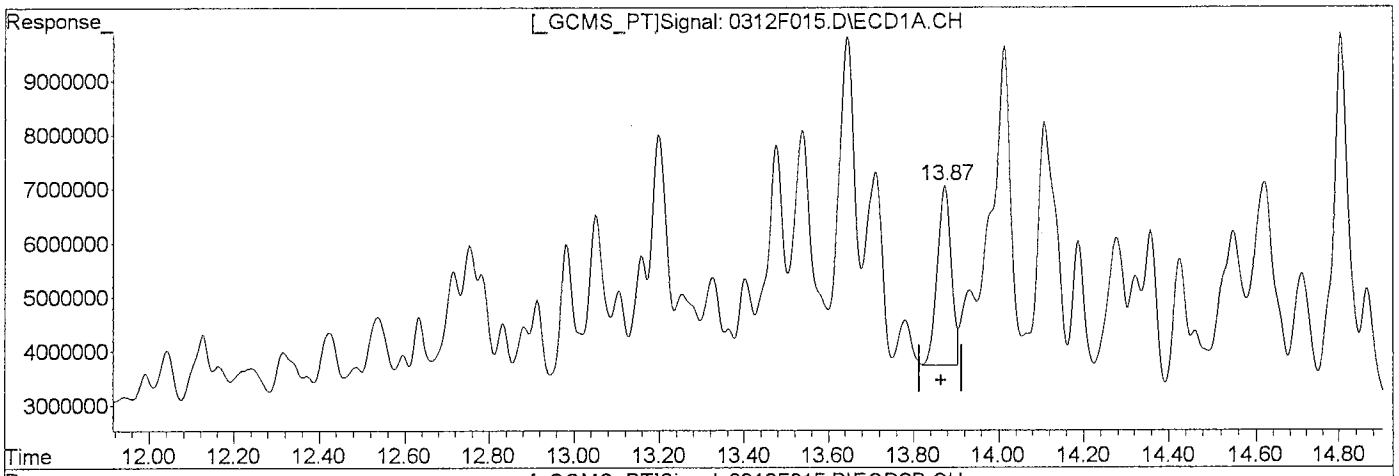
MAR 1 2 2007

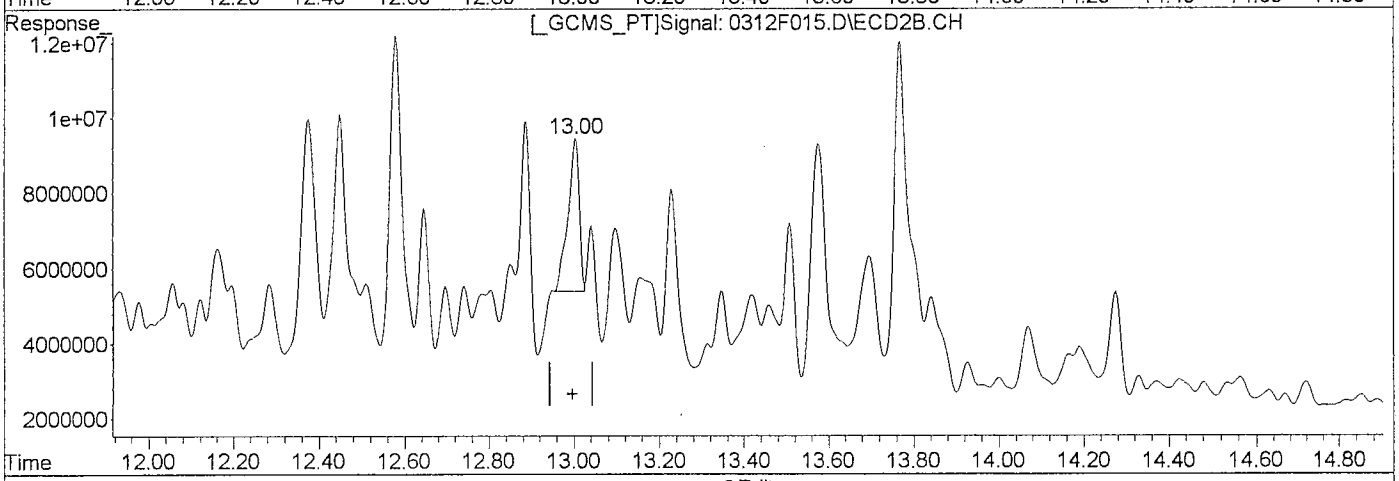
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:41:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.87min 1371.501ug/L m

response 7778089

(28) Toxaphene {4} #2

13.00min 1668.282ug/L m

response 7542971

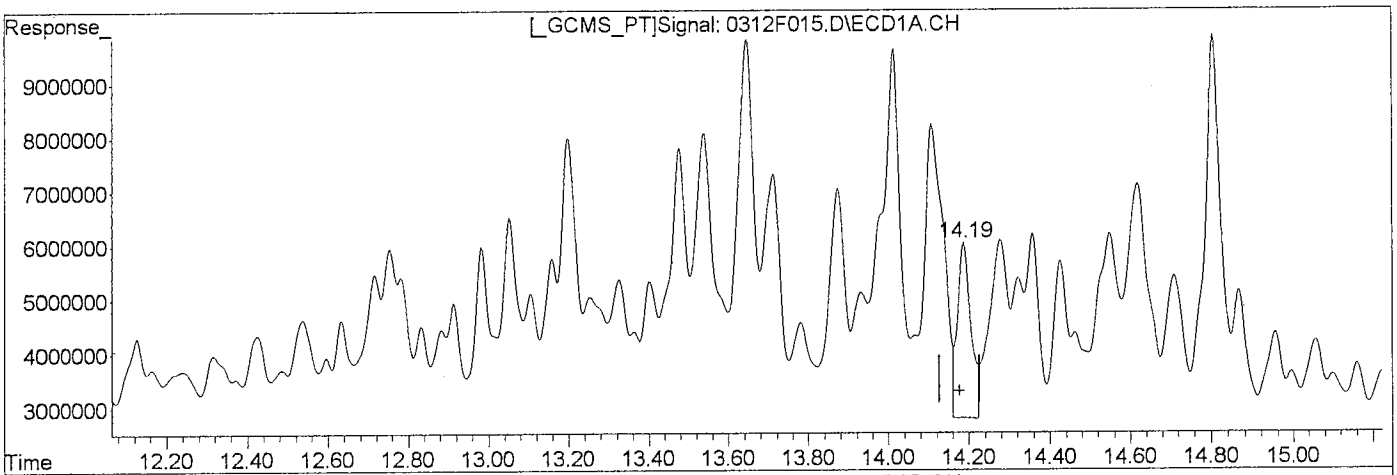
(+) = Expected Retention Time

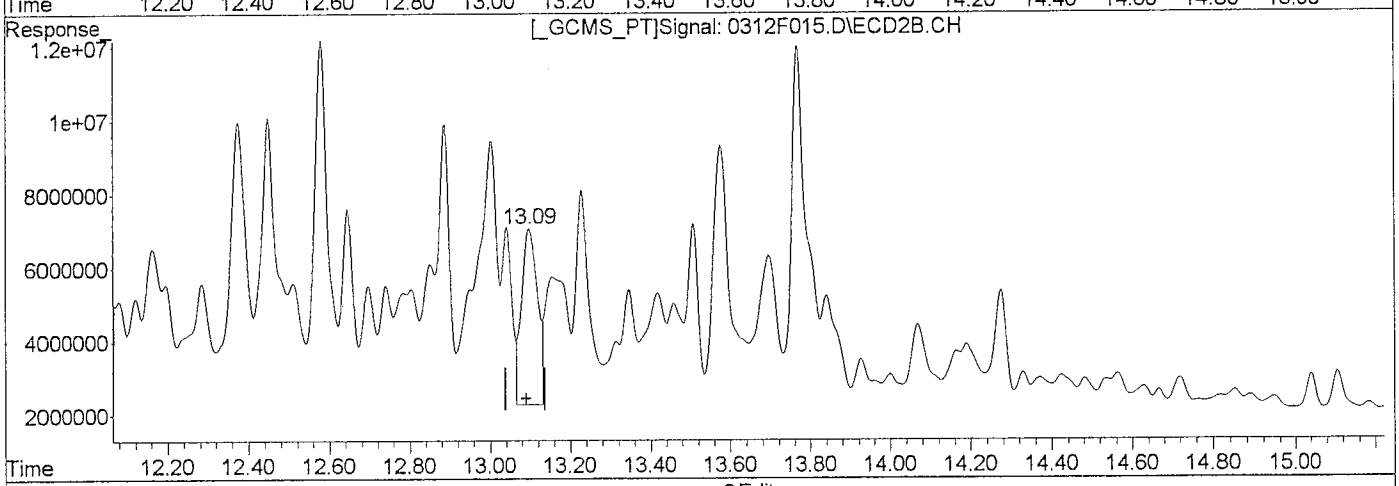
0312F015.D 031207-8081.M Mon Mar 12 17:42:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 3693.143ug/L

response 7568636

(29) Toxaphene {5} #2

13.09min 1629.456ug/L

response 13512097

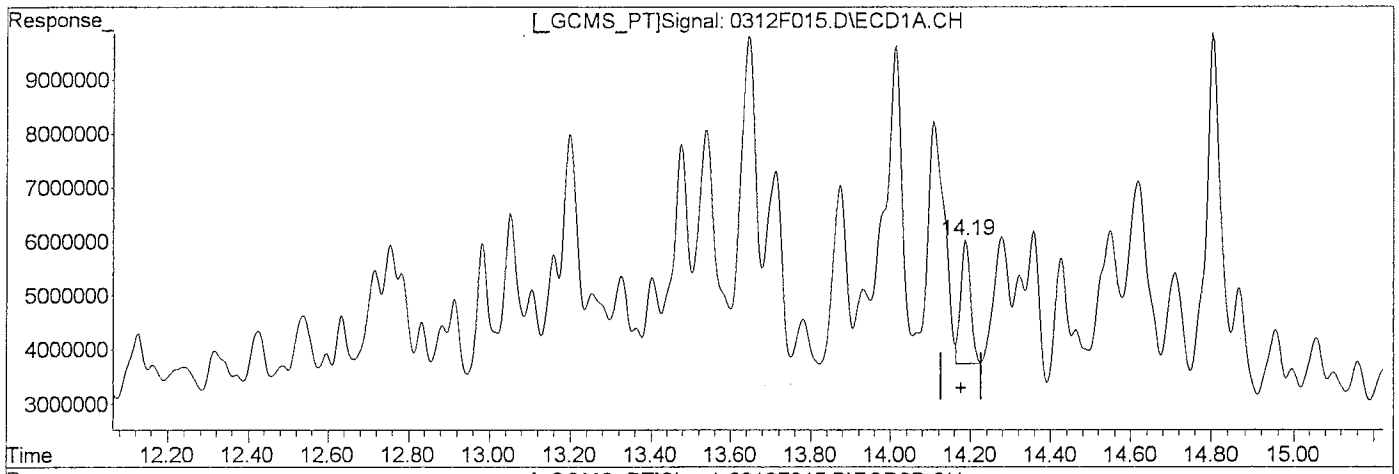
Belize
MAR 1 2 2007

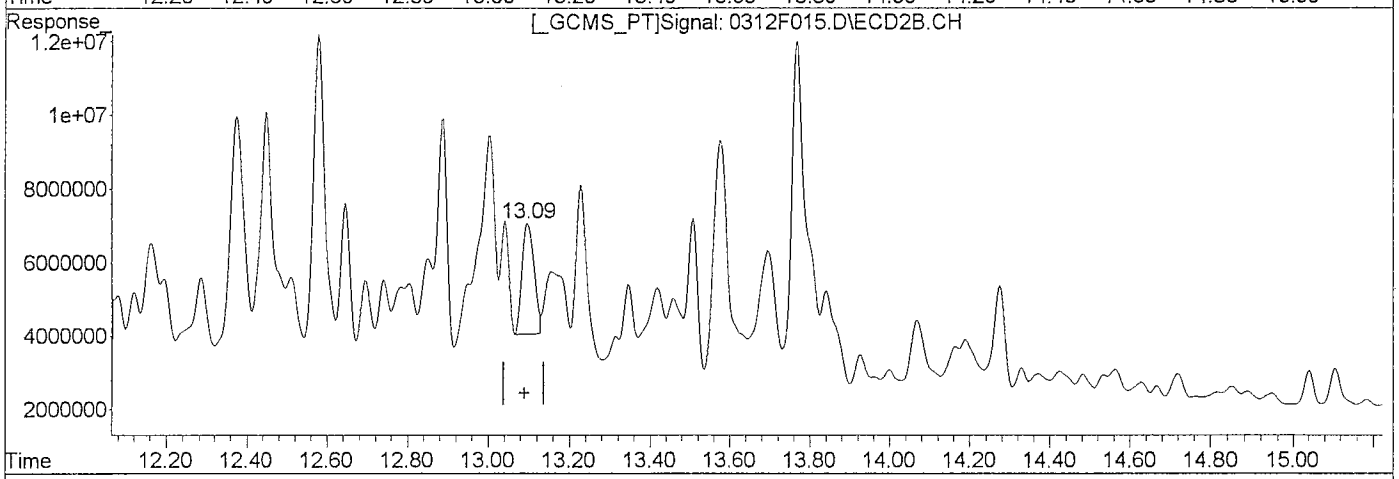
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.19min 1886.249ug/L m

response 3865631

(29) Toxaphene {5} #2

13.09min 758.585ug/L m

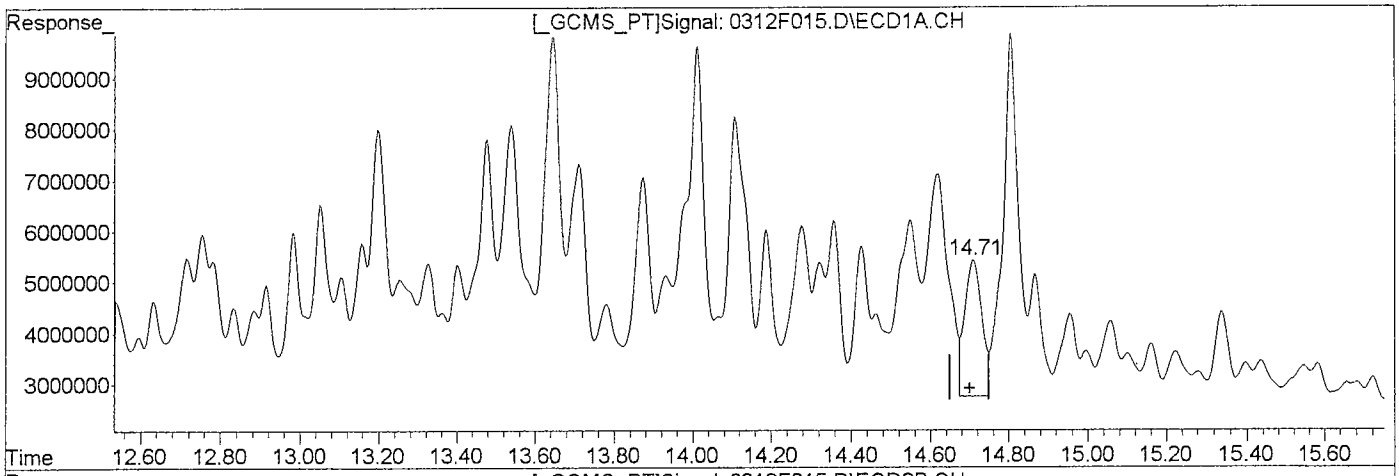
response 6290492

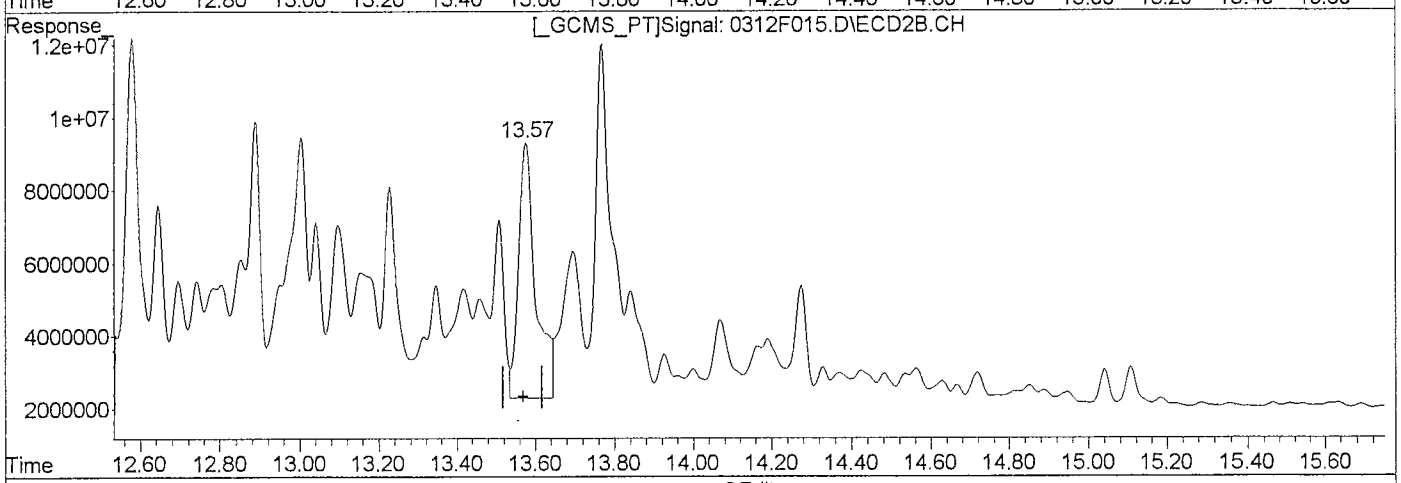
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





(30) Toxaphene {6}

14.71min 1125.128ug/L

response 8311345

(30) Toxaphene {6} #2

13.57min 2180.229ug/L

response 21603722

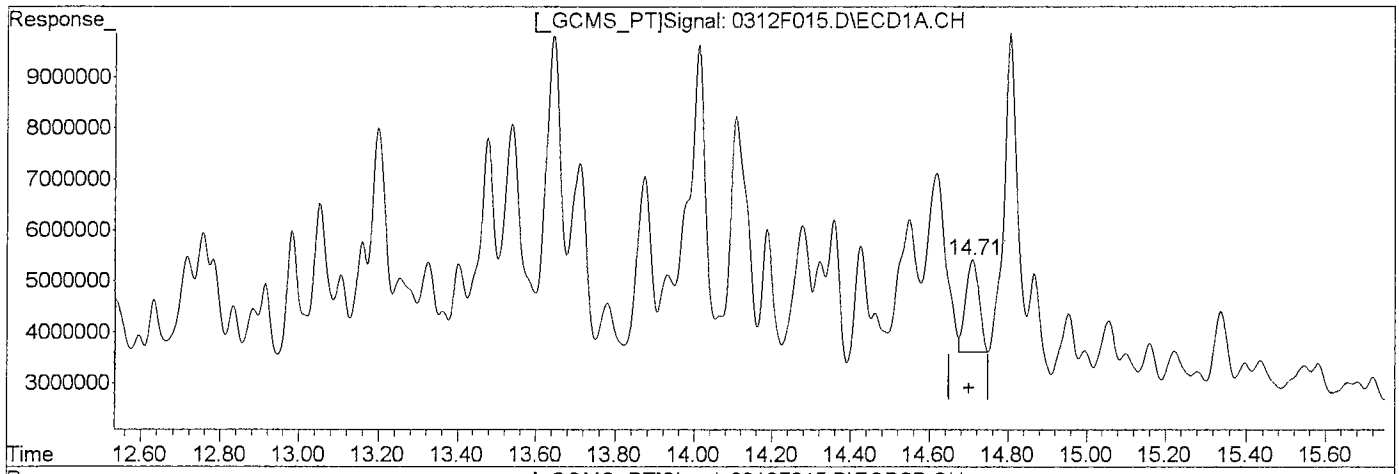
Before
MAR 1 2 2007

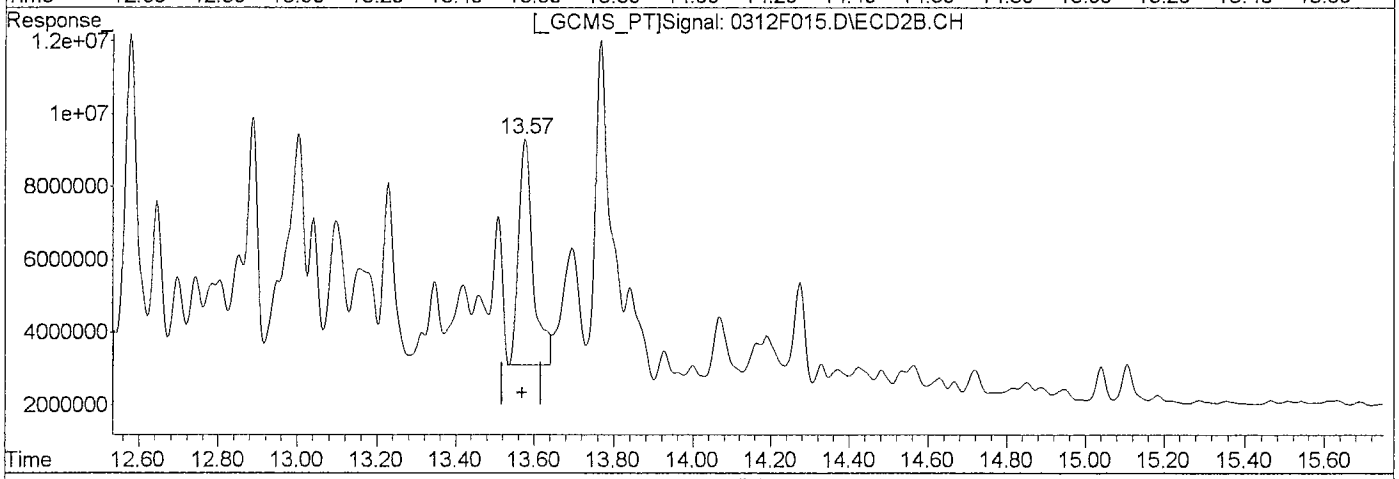
(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\031207\0312F015.D\ECD2B.CH
Acq On : 12 Mar 2007 1:47 pm Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.71min 592.132ug/L m

response 4374094

(30) Toxaphene {6} #2

13.57min 1629.080ug/L m

response 16142423

(+) = Expected Retention Time
0312F015.D 031207-8081.M Mon Mar 12 17:42:41 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09:06 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.98	12.37	12440165	36911983	4710.513m	4922.159m
26)	Toxaphene {2}	13.05	12.44	9703898	26973550	2180.447m	4870.982m#
27)	Toxaphene {3}	13.19	12.64	16213354	13738876	4052.595m	4186.623m
28)	Toxaphene {4}	13.87	13.00	19351940	20152244	3412.303m	4457.079m#
29)	Toxaphene {5}	14.18	13.09	9296961	15847341	4536.486m	1911.068m#
30)	Toxaphene {6}	14.70	13.57	10609209	42598153	1436.196m	4298.970m#

AK 3/12/07

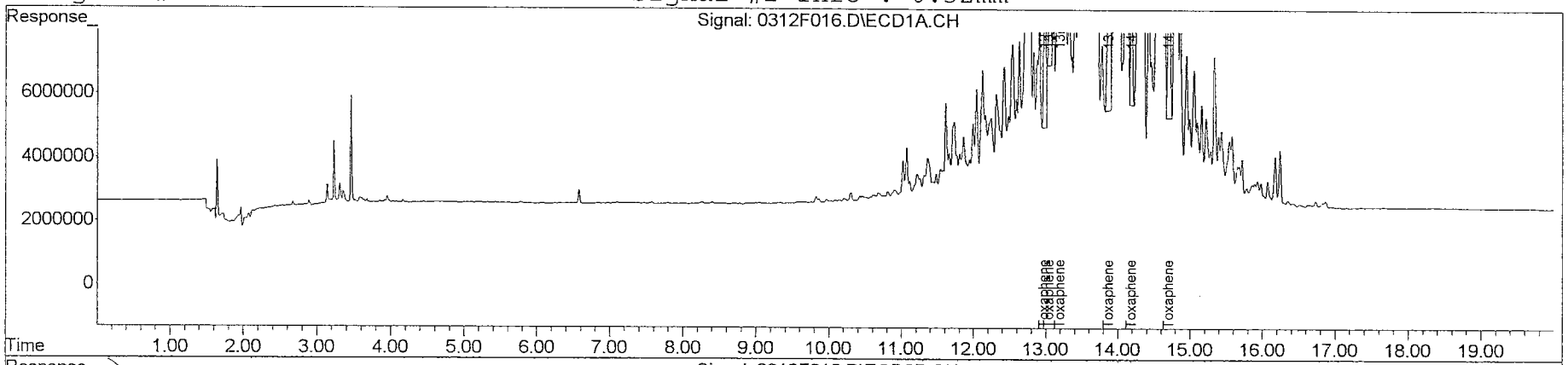
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

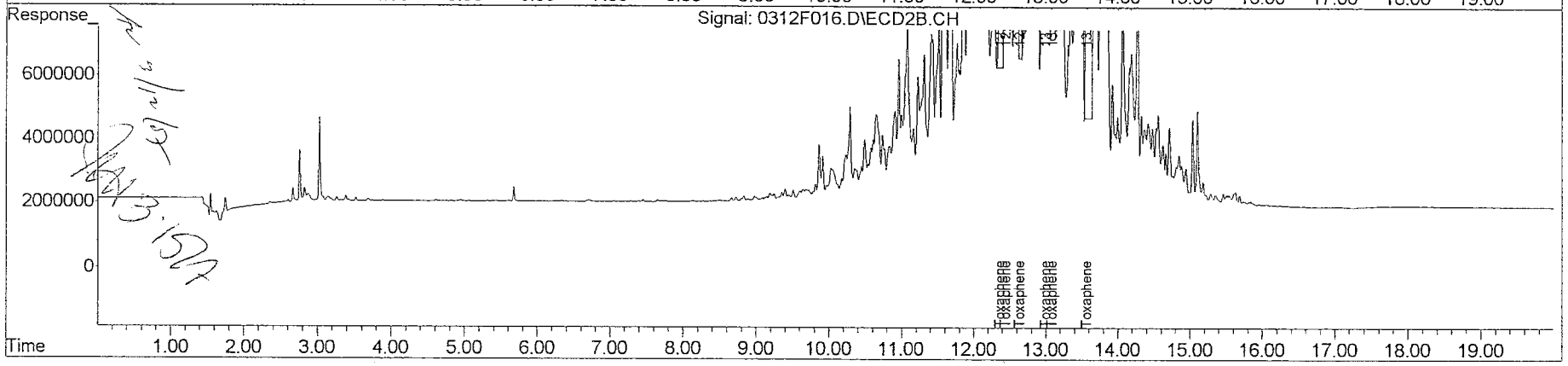
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:44 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

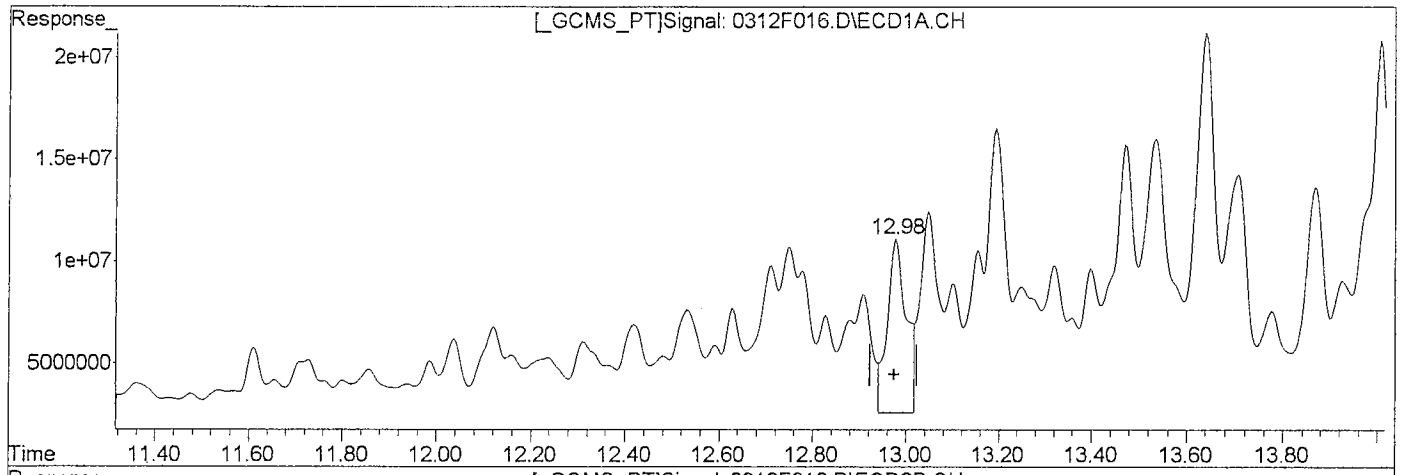


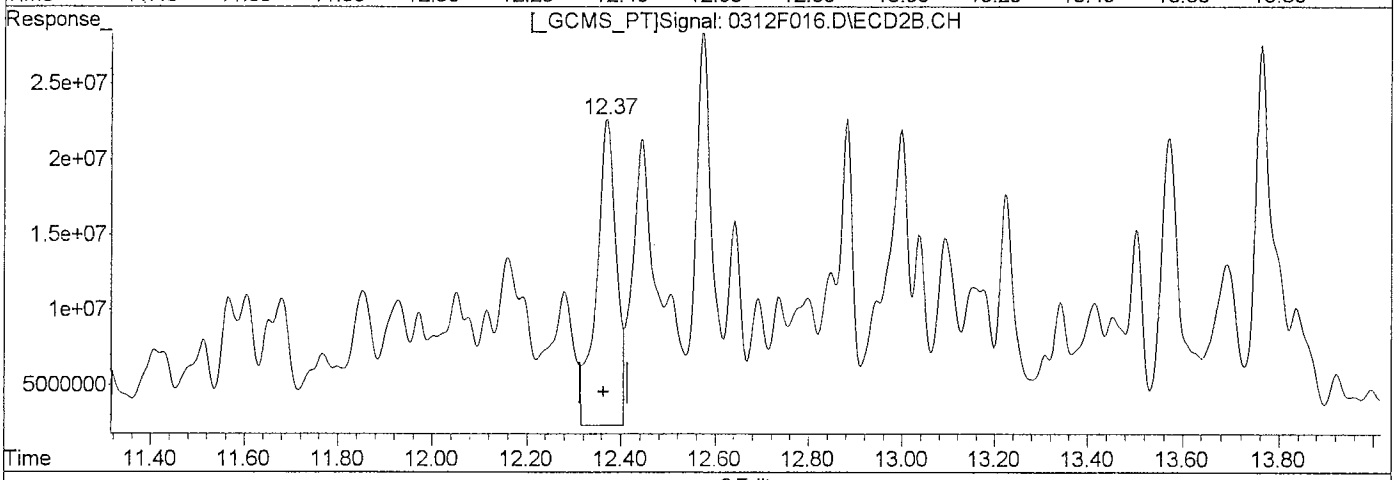


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.98min 9038.775ug/L

response 23870828

(25) Toxaphene #2

12.37min 7798.360ug/L

response 58481030

MAR 1 7 2007

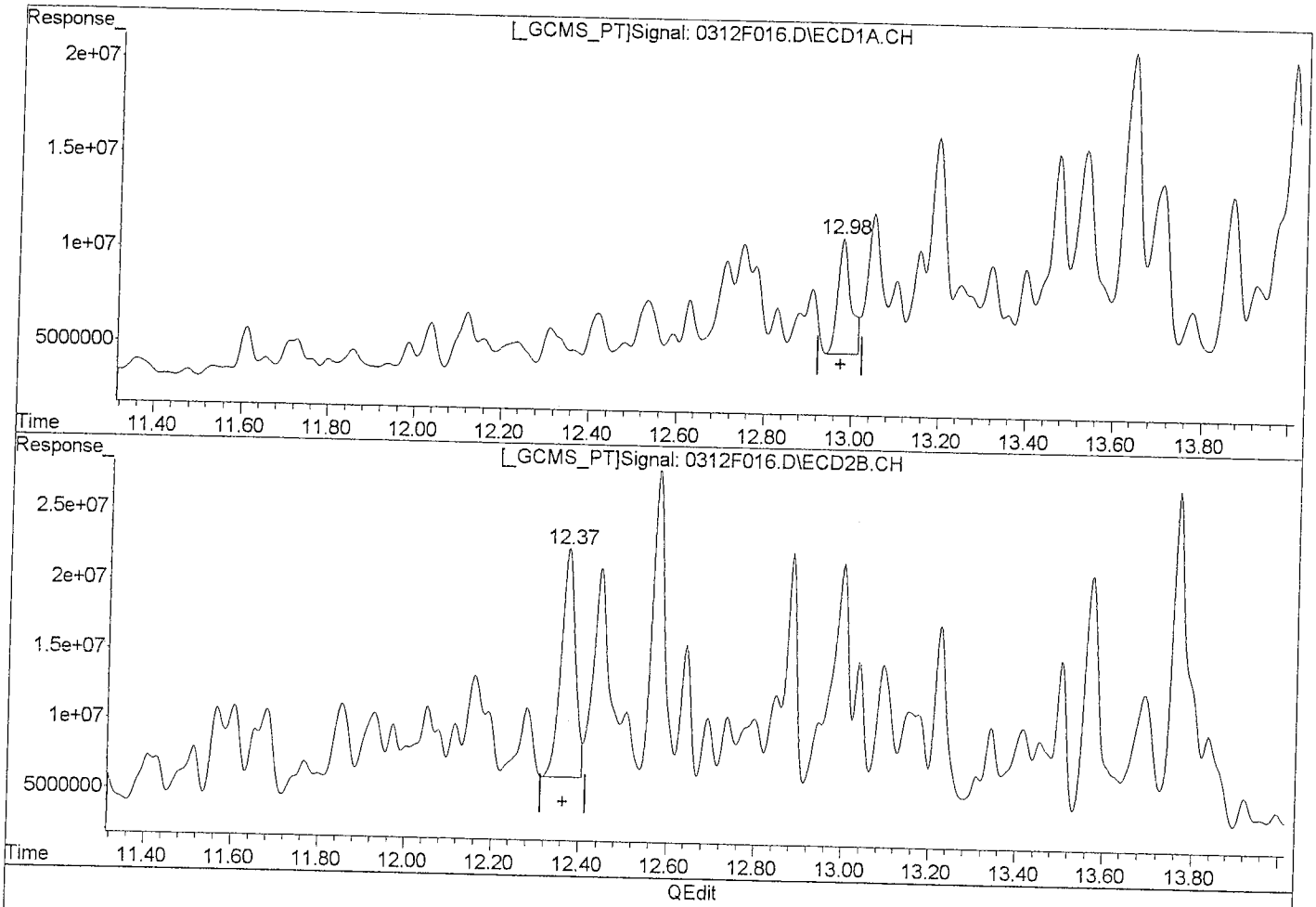
(+) = Expected Retention Time
0312F016.D 031207-8081.M Mon Mar 12 17:43:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm
Sample : TOX @ 5000ppb GCPS5-89E
Misc : SVG\W0308345\3-ICV.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Vial: 16
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.98min 4710.513ug/L m

response 12440165

(25) Toxaphene #2

12.37min 4922.159ug/L m

response 36911983

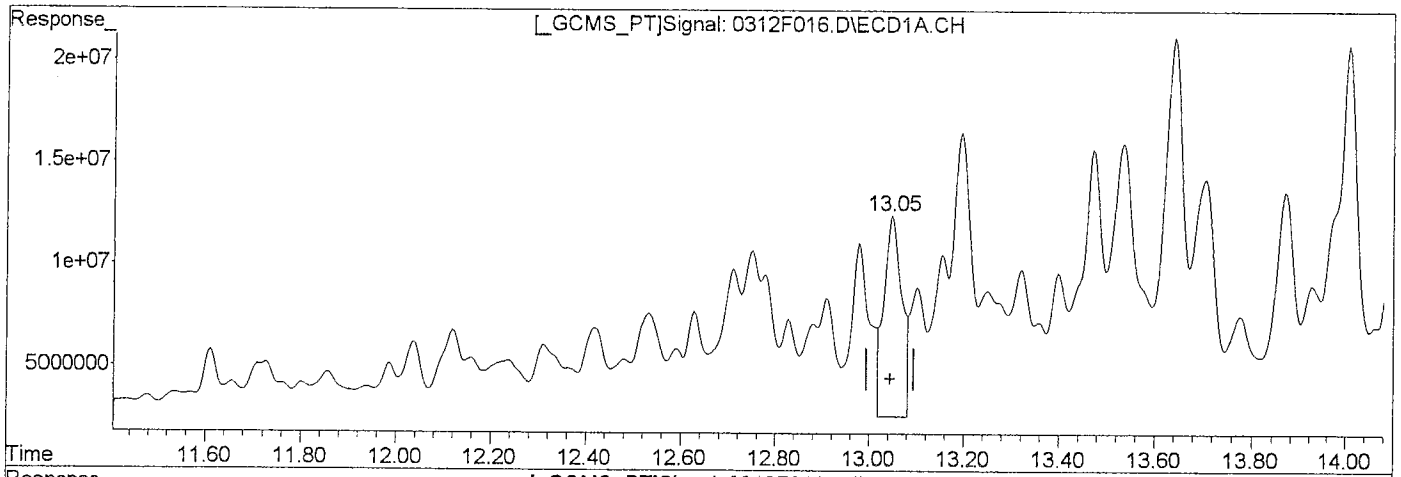
(+) = Expected Retention Time

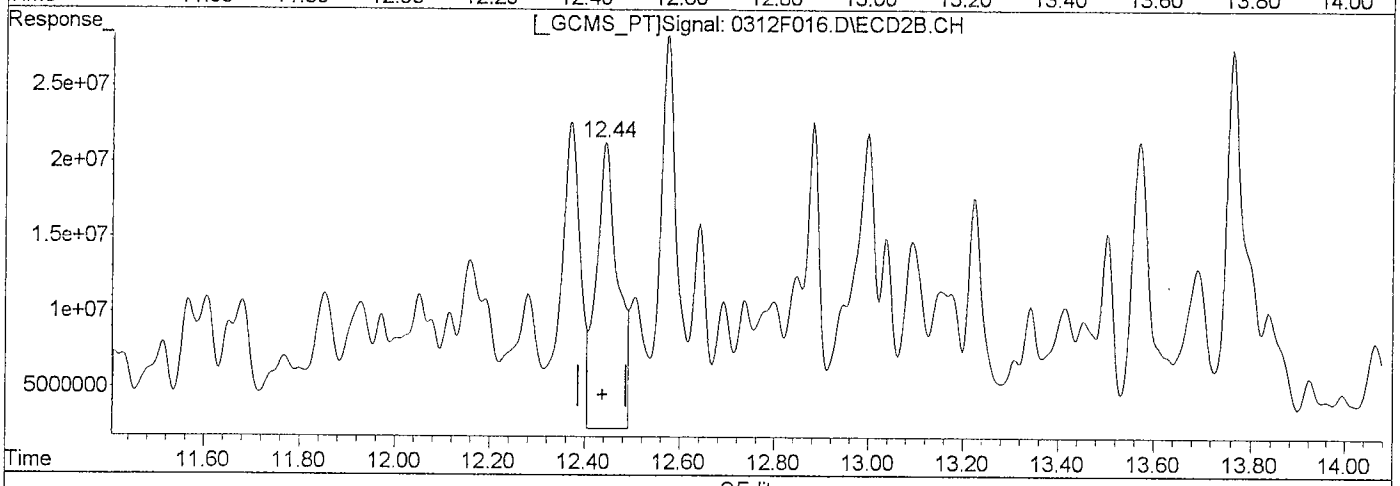
0312F016.D 031207-8081.M Mon Mar 12 17:43:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.05min 5883.245ug/L

response 26182896

(26) Toxaphene {2} #2

12.44min 10904.956ug/L

response 60387288

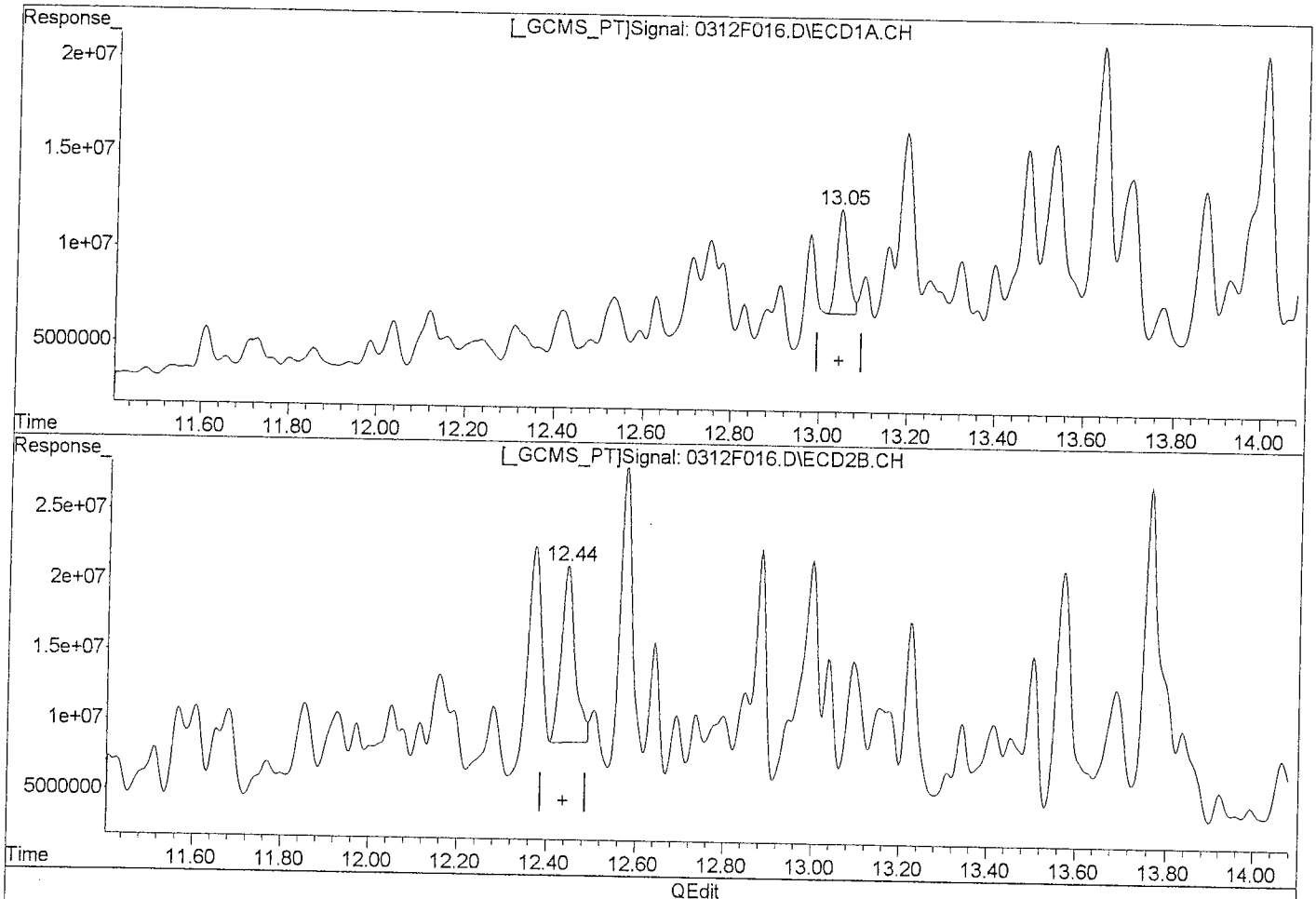
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.05min 2180.447ug/L m

response 9703898

(26) Toxaphene {2} #2

12.44min 4870.982ug/L m

response 26973550

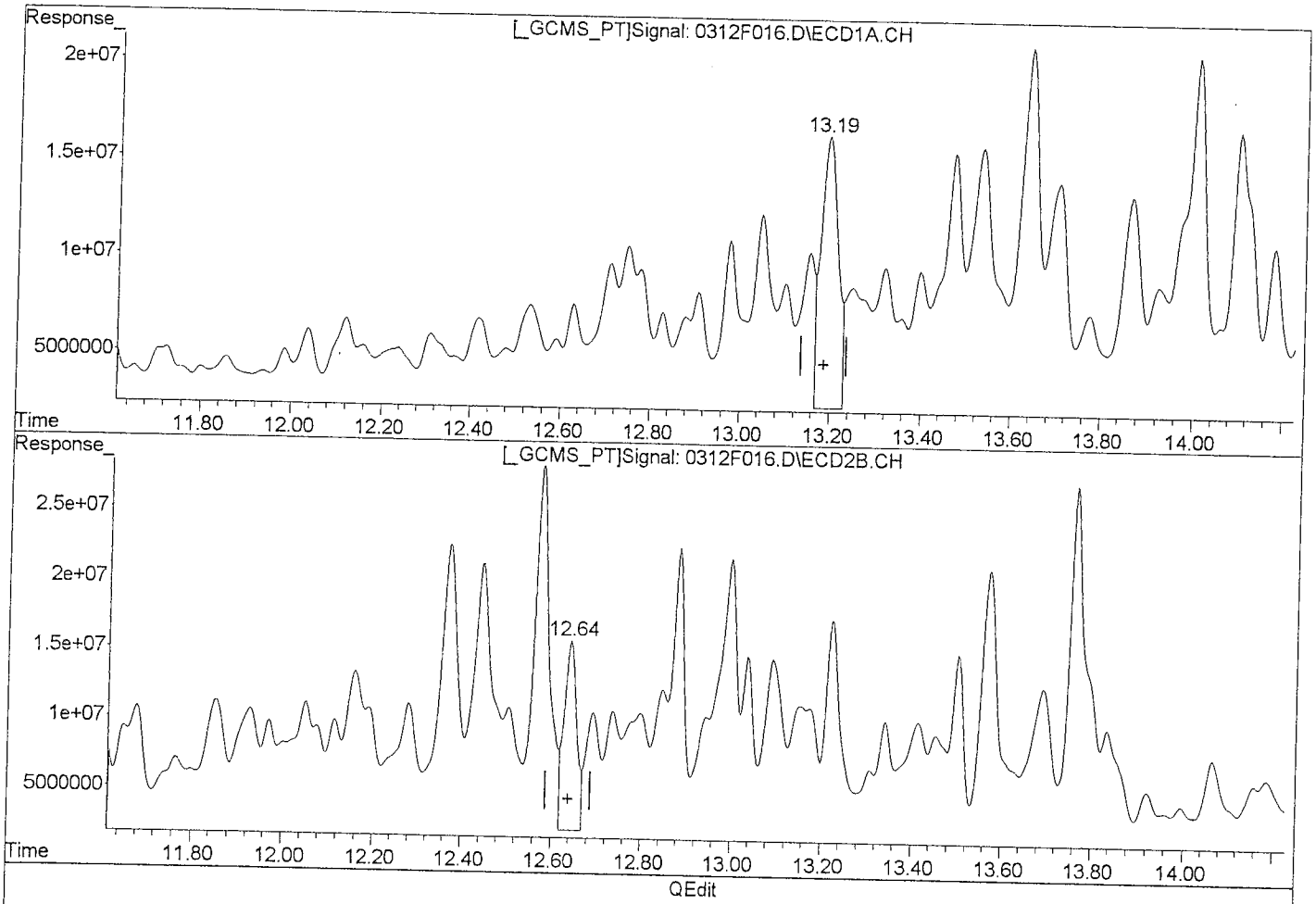
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 9166.274ug/L

response 36671819

(27) Toxaphene {3} #2

12.64min 8102.401ug/L

response 26588943

Delete
MAR 1 7 2007

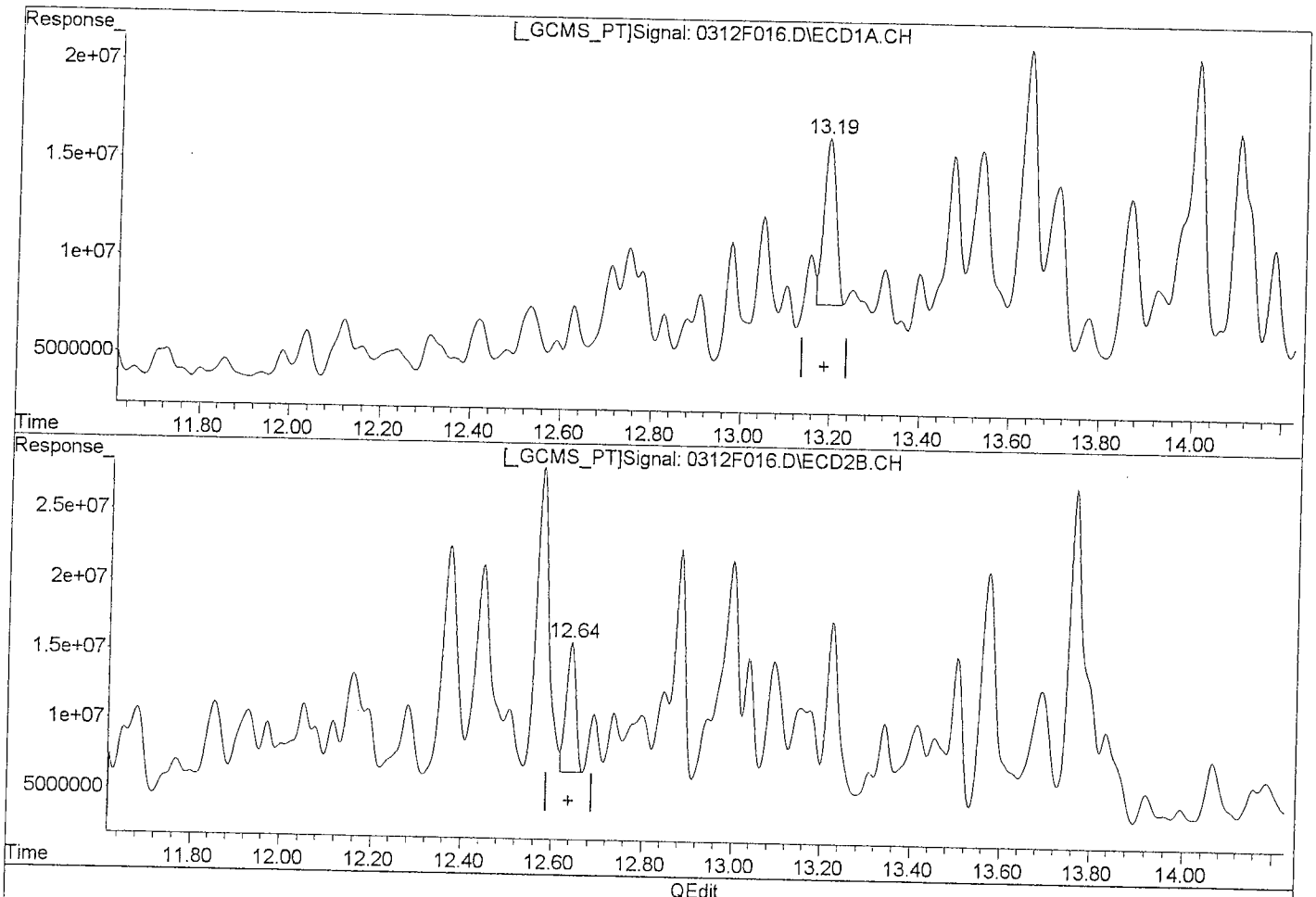
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 4052.595ug/L m

response 16213354

(27) Toxaphene {3} #2

12.64min 4186.623ug/L m

response 13738876

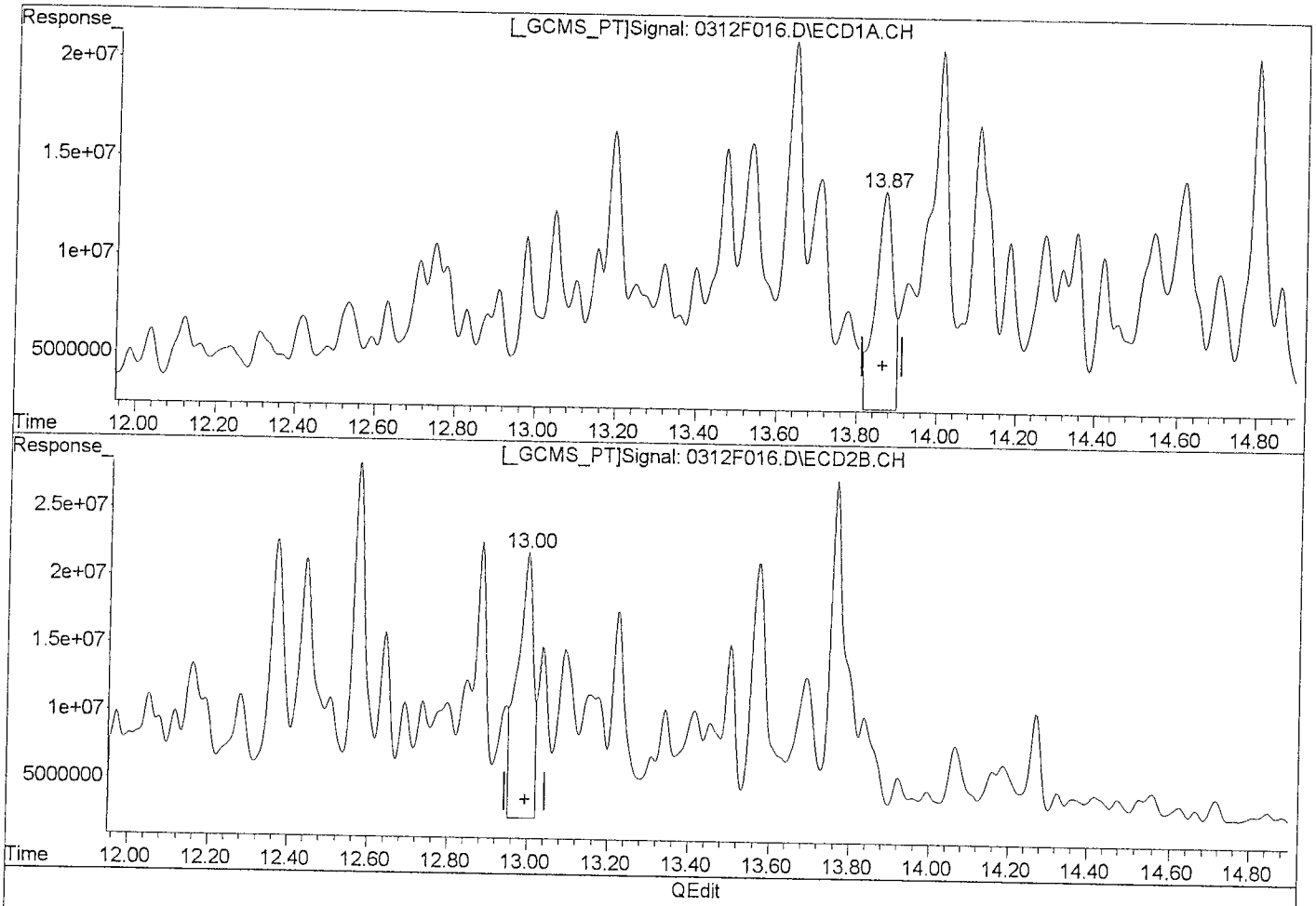
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 6000.139ug/L

response 34028135

(28) Toxaphene {4} #2

13.00min 12095.153ug/L

response 54687039

Delete

MAR 1 2 2007

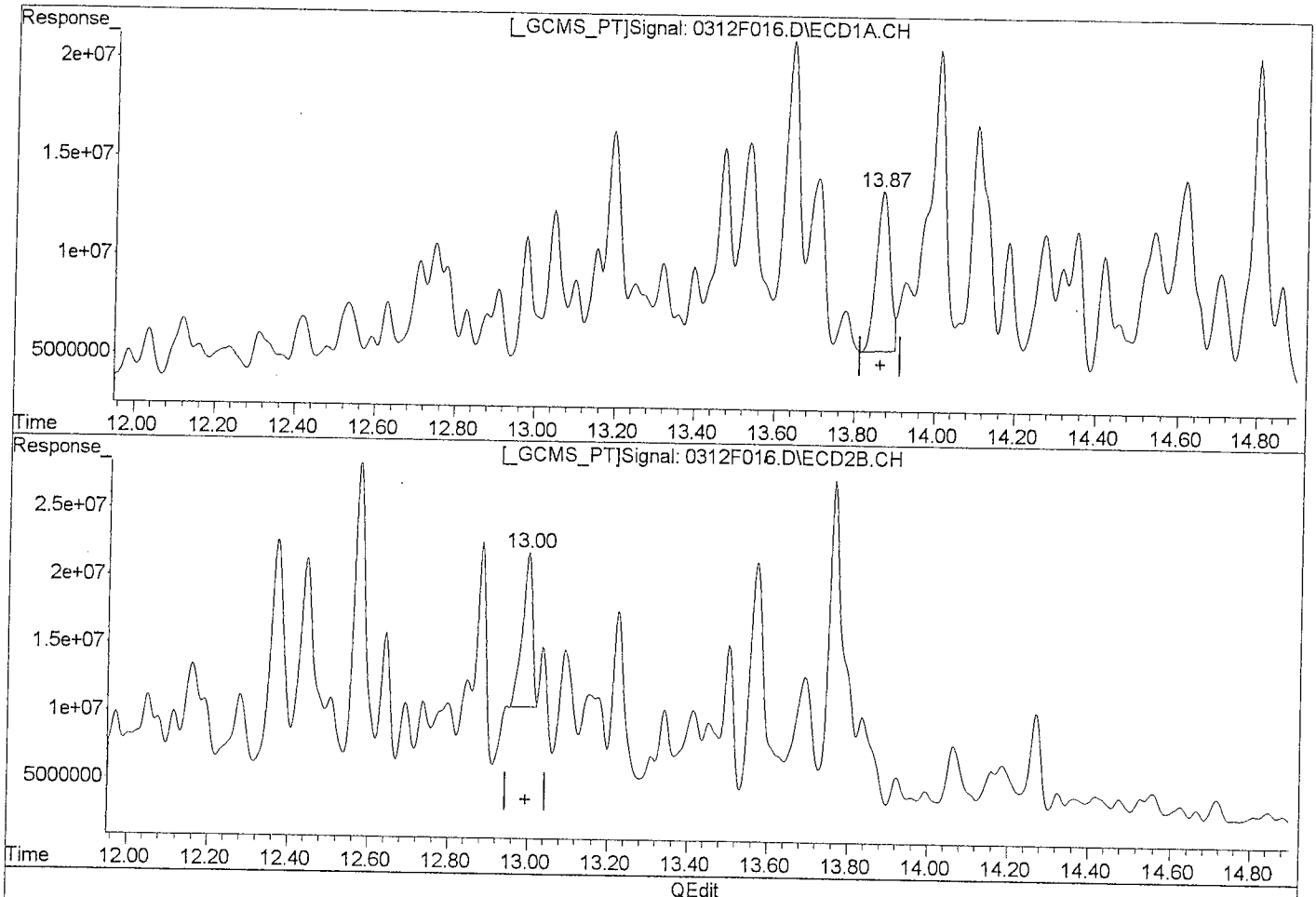
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:43:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

13.87min 3412.303ug/L m

response 19351940

(28) Toxaphene {4} #2

13.00min 4457.079ug/L m

response 20152244

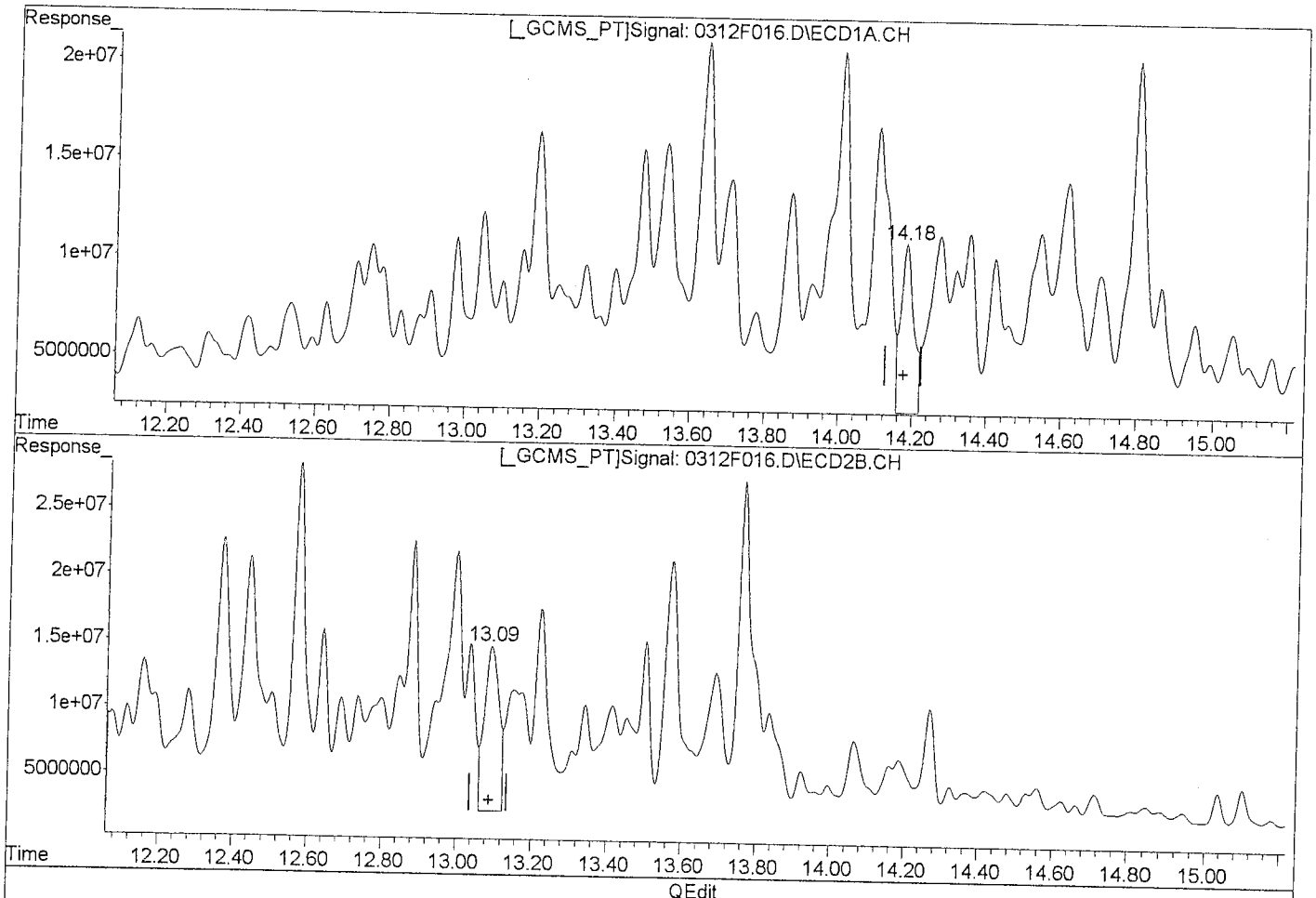
(+) = Expected Retention Time

0312F016.D 031207-8081.M Mon Mar 12 17:44:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.18min 10302.933ug/L

response 21114574

(29) Toxaphene {5} #2

13.09min 4144.397ug/L

response 34366996

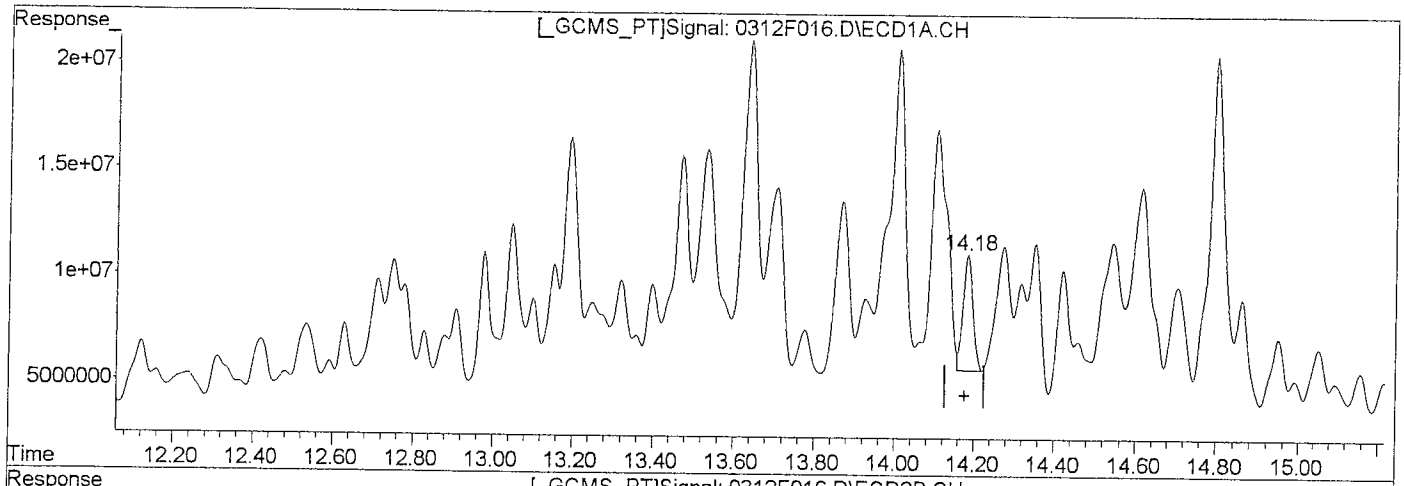
(+) = Expected Retention Time

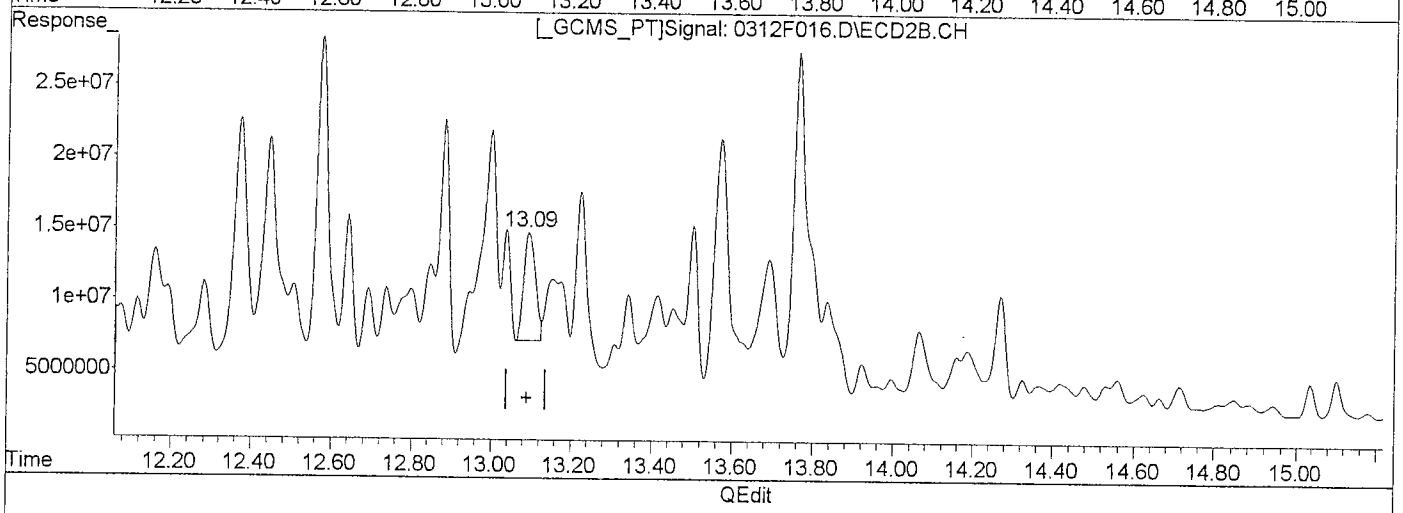
0312F016.D 031207-8081.M Mon Mar 12 17:44:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





(29) Toxaphene {5}

14.18min 4536.486ug/L m

response 9296961

(29) Toxaphene {5} #2

13.09min 1911.068ug/L m

response 15847341

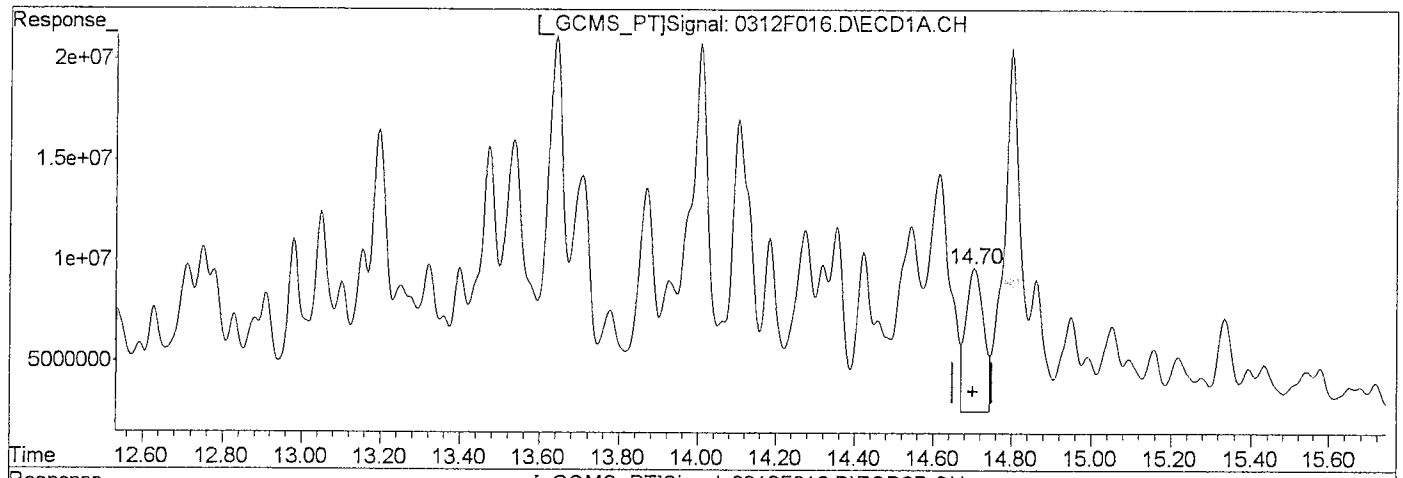
(+) = Expected Retention Time

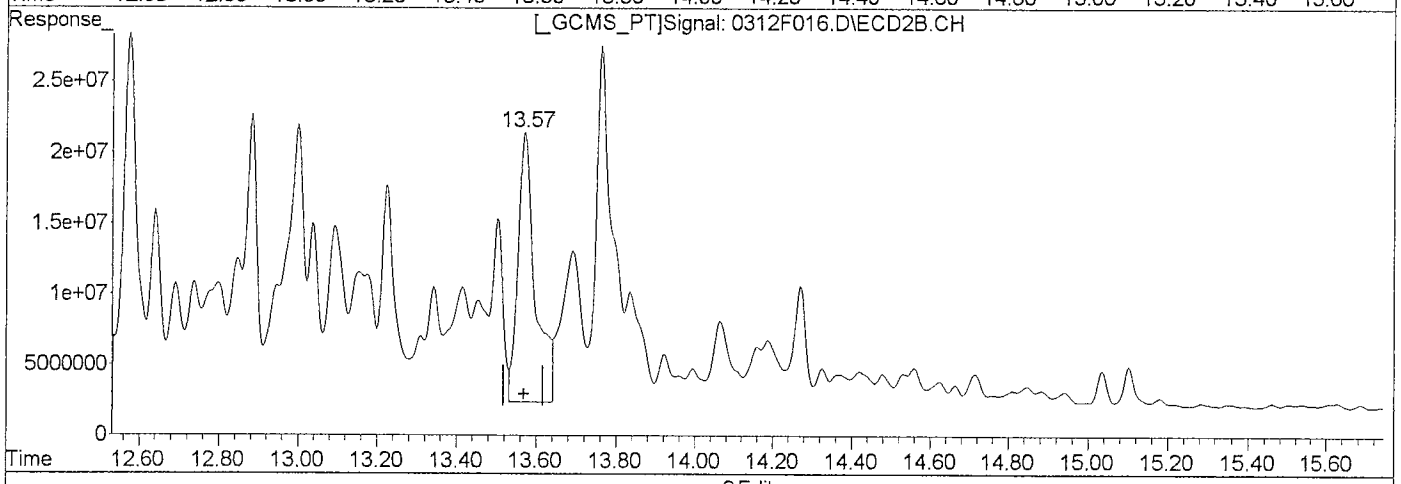
0312F016.D 031207-8081.M Mon Mar 12 17:44:16 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 3054.099ug/L

response 22560692

(30) Toxaphene {6} #2

13.57min 5884.529ug/L

response 58309338

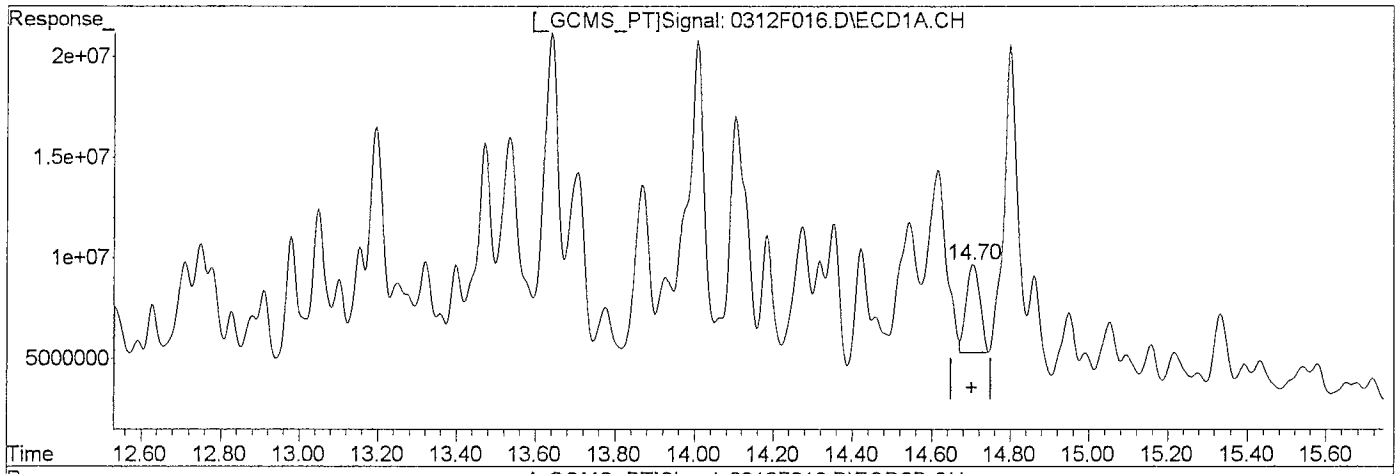
Data
MAR 1 2 2007

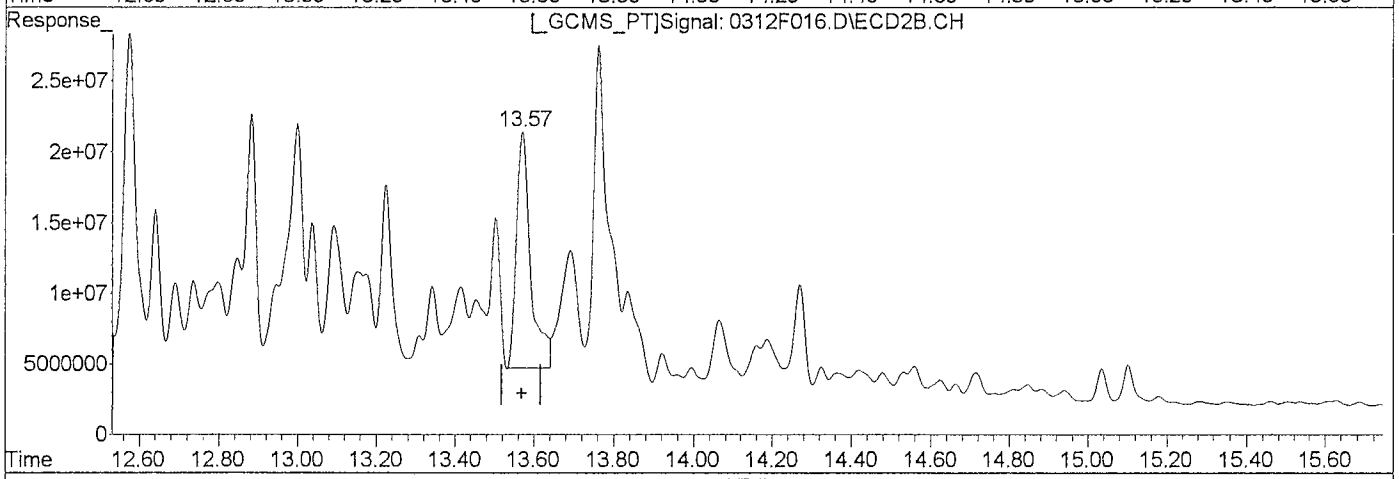
(+) = Expected Retention Time
0312F016.D 031207-8081.M Mon Mar 12 17:44:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\031207\0312F016.D\ECD2B.CH
Acq On : 12 Mar 2007 2:14 pm Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:09 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:08:02 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1436.196ug/L m

response 10609209

(30) Toxaphene {6} #2

13.57min 4298.970ug/L m

response 42598153

(+) = Expected Retention Time
0312F016.D 031207-8081.M Mon Mar 12 17:44:29 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47:05 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2349582	6505177	895.590m	870.384m
26)	Toxaphene {2}	13.04	12.44	1864817	4583212	900.274m	831.185m
27)	Toxaphene {3}	13.19	12.64	2854270	2213978	869.423m	750.984m
28)	Toxaphene {4}	13.86	13.00	3556751	2805613	888.124m	735.547m
29)	Toxaphene {5}	14.18	13.09	1602441	2691306	785.210m	824.866m
30)	Toxaphene {6}	14.70	13.57	1964360	6977726	891.363m	839.279

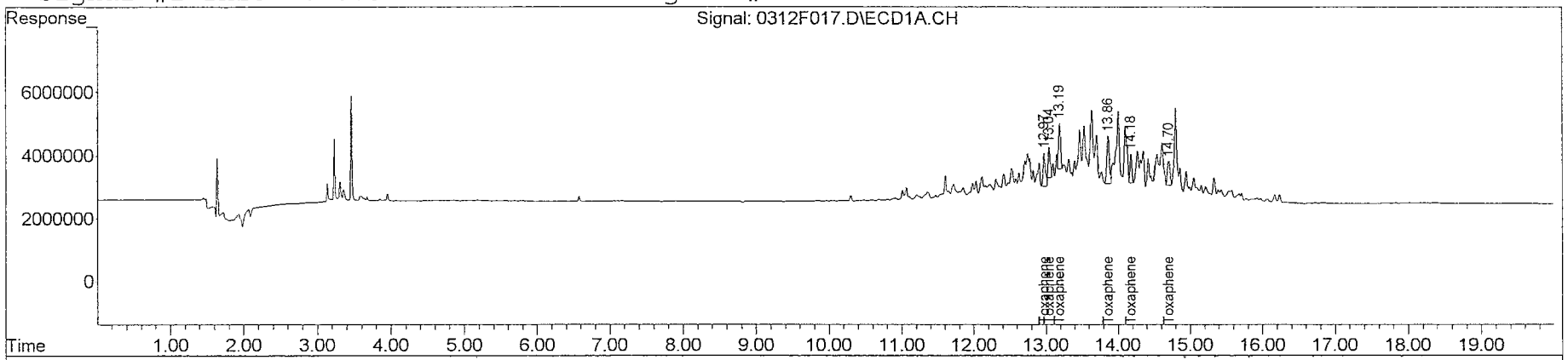
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

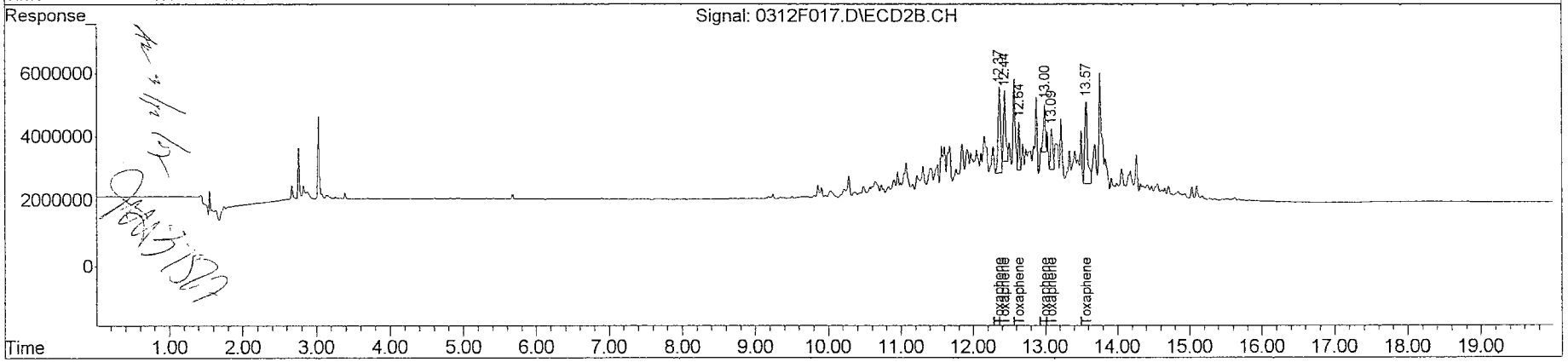
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:49 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

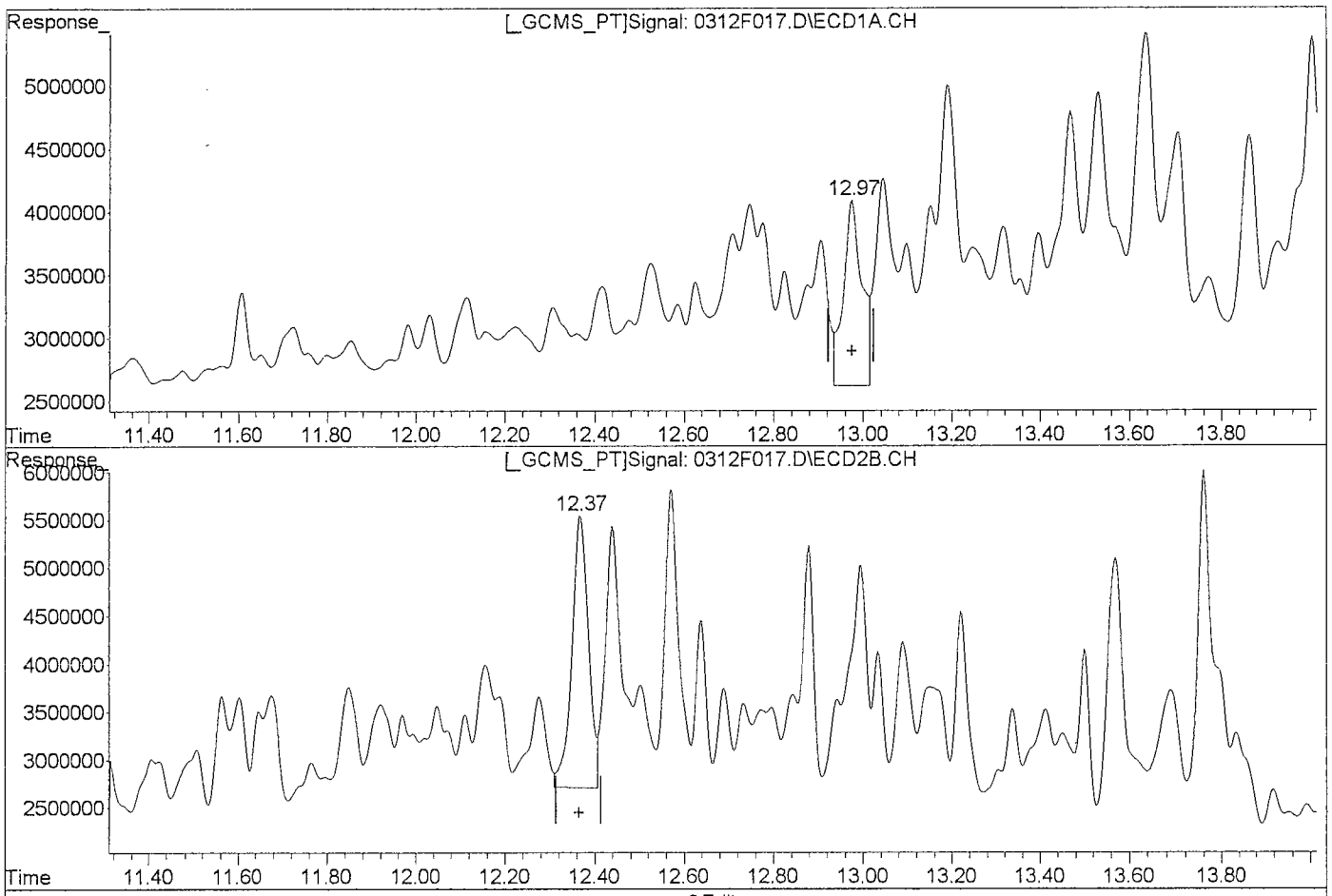




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.97min 1617.266ug/L

response 4242900

(25) Toxaphene #2

12.37min 971.393ug/L

response 7260109

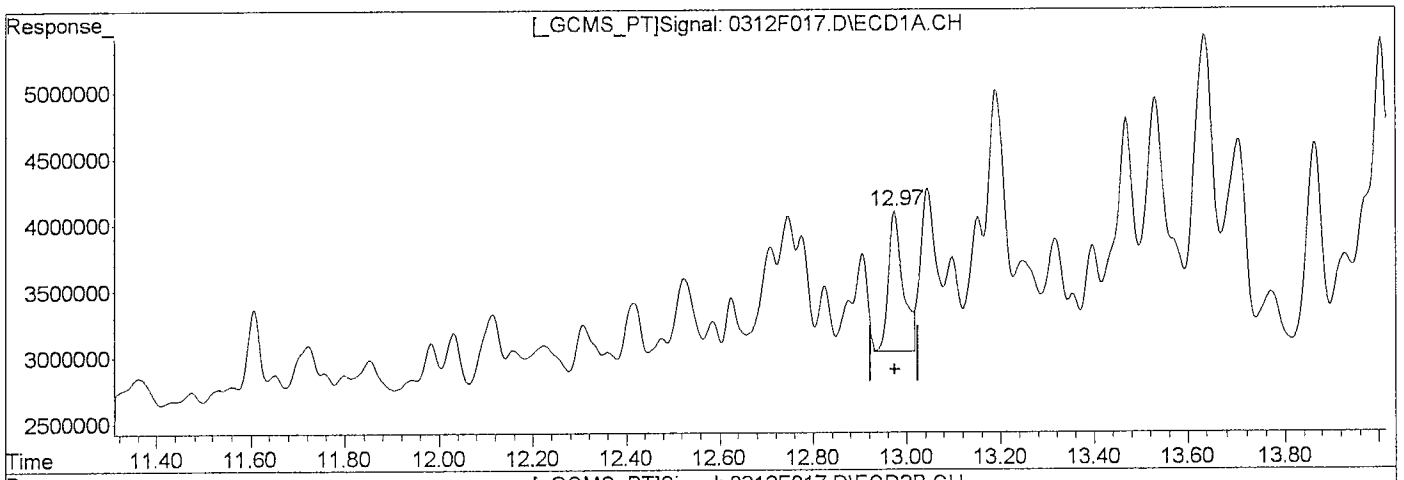
MAR 12 2007

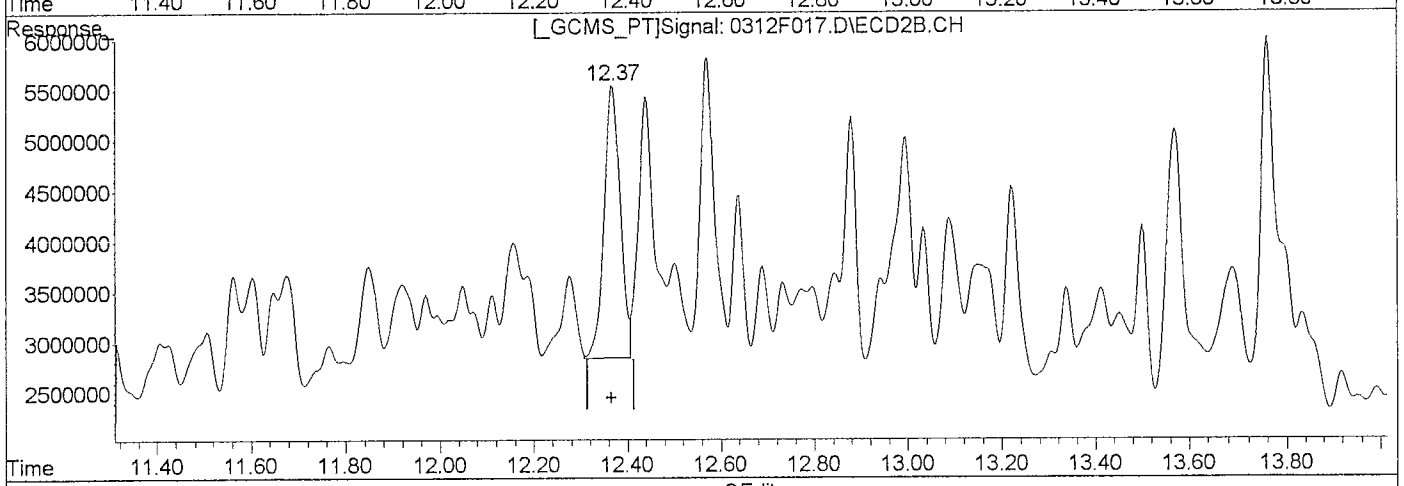
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 895.590ug/L m

response 2349582

(25) Toxaphene #2

12.37min 870.384ug/L m

response 6505177

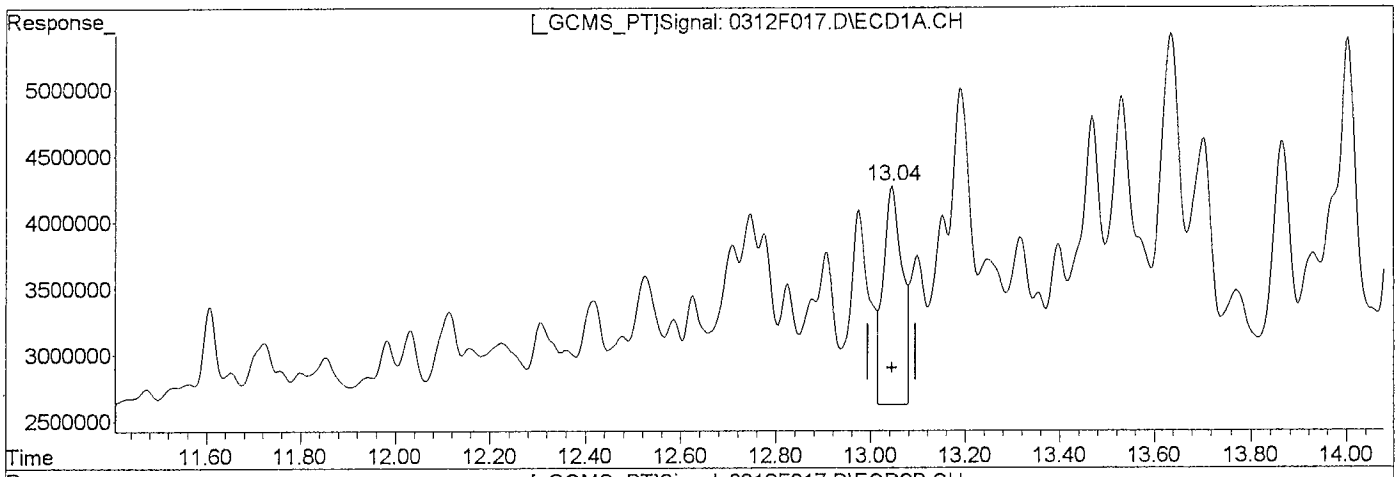
(+) = Expected Retention Time

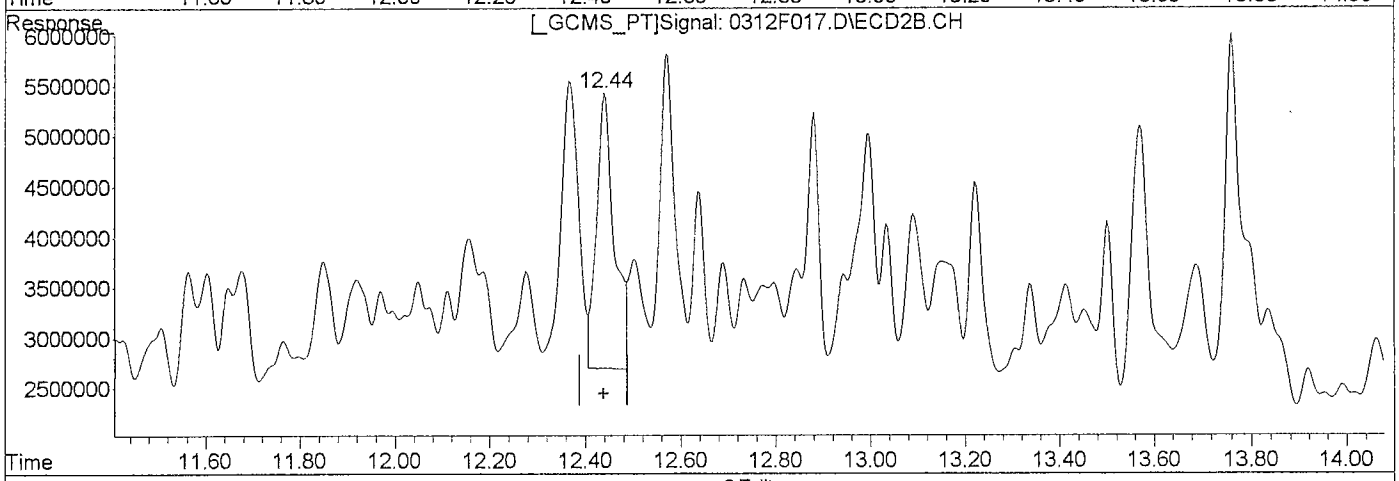
0312F017.D 031207-8081.M Mon Mar 12 17:47:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 2157.099ug/L

response 4468189

(26) Toxaphene {2} #2

12.44min 1279.766ug/L

response 7056722

Defore

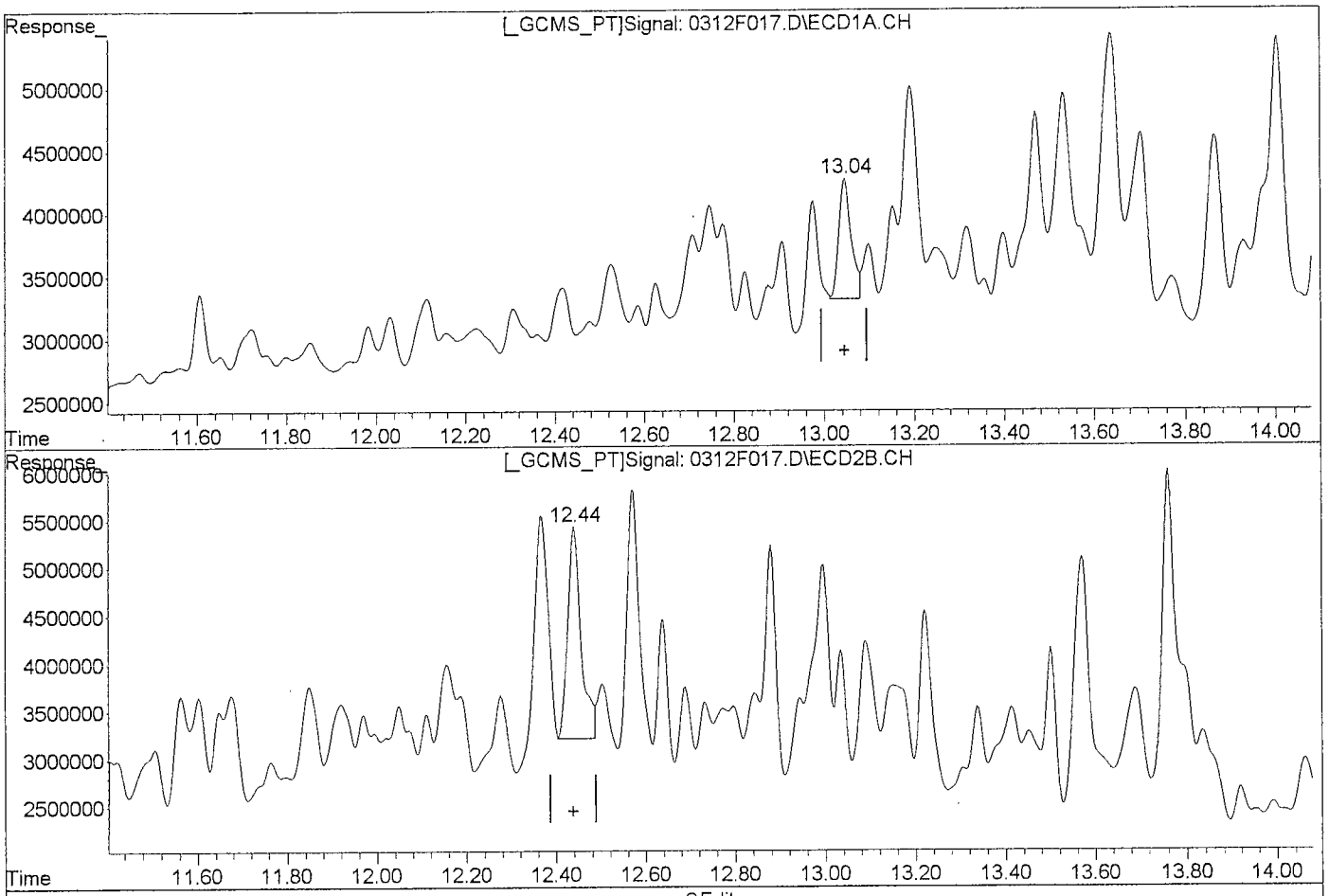
MAR 1 2 2007

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.04min 900.274ug/L m

response 1864817

(26) Toxaphene {2} #2

12.44min 831.185ug/L m

response 4583212

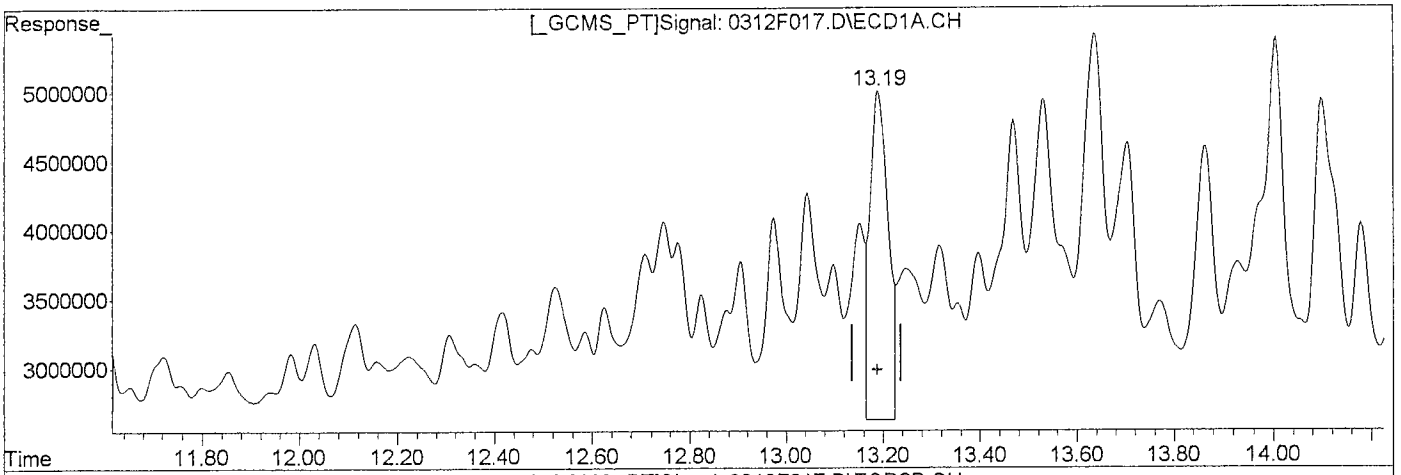
(+) = Expected Retention Time

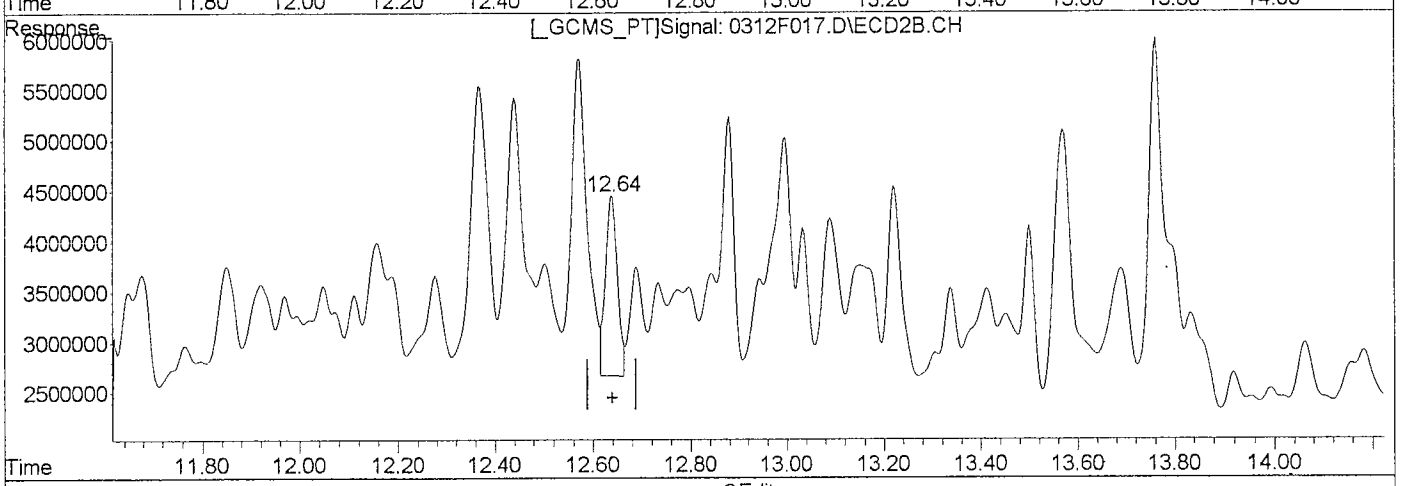
0312F017.D 031207-8081.M Mon Mar 12 17:47:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 1889.765ug/L

response 6203996

(27) Toxaphene {3} #2

12.64min 1004.981ug/L

response 2962789

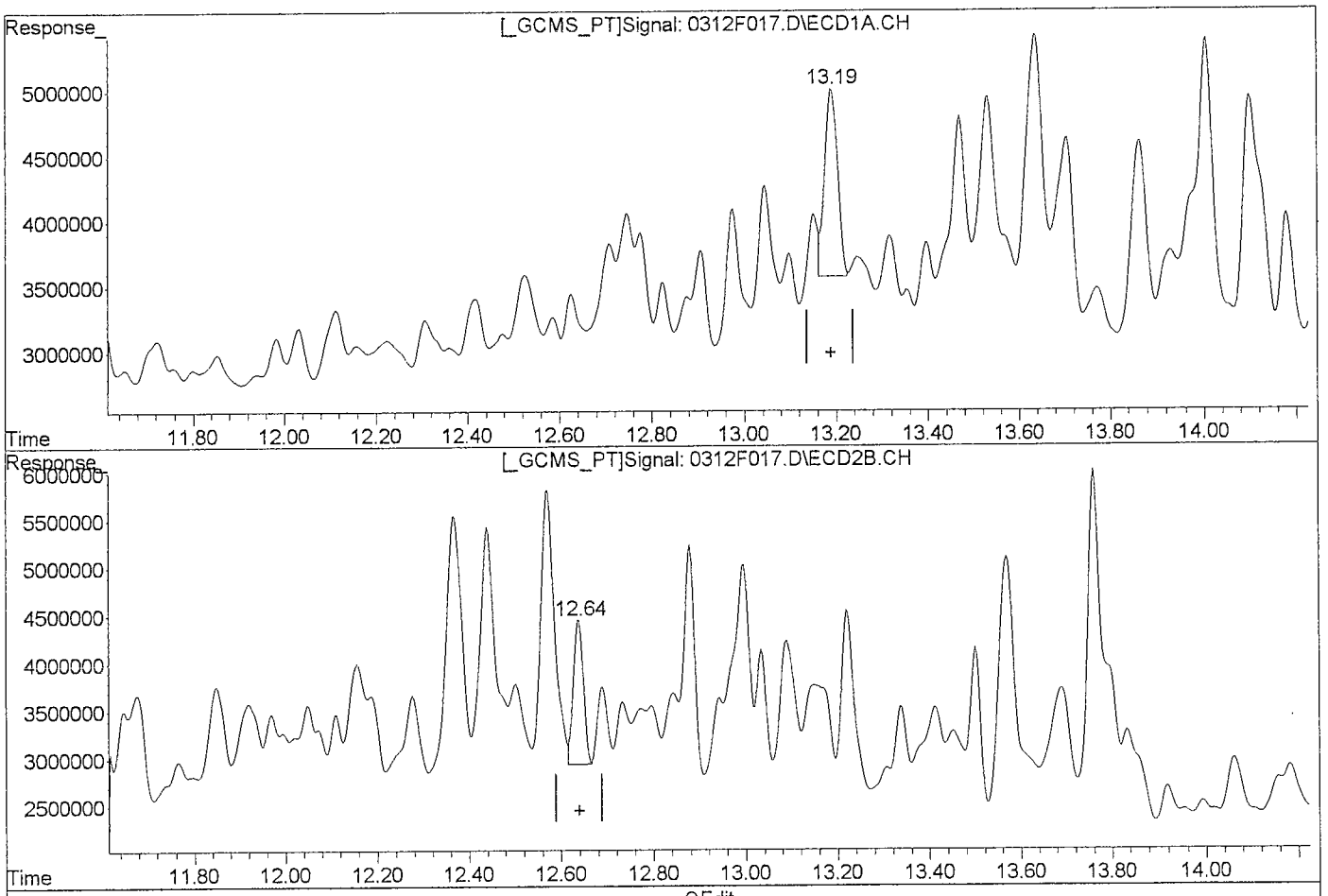
MAR 1 2 2007

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:47:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration



QEdit

(27) Toxaphene {3}

13.19min 869.423ug/L m

response 2854270

(27) Toxaphene {3} #2

12.64min 750.984ug/L m

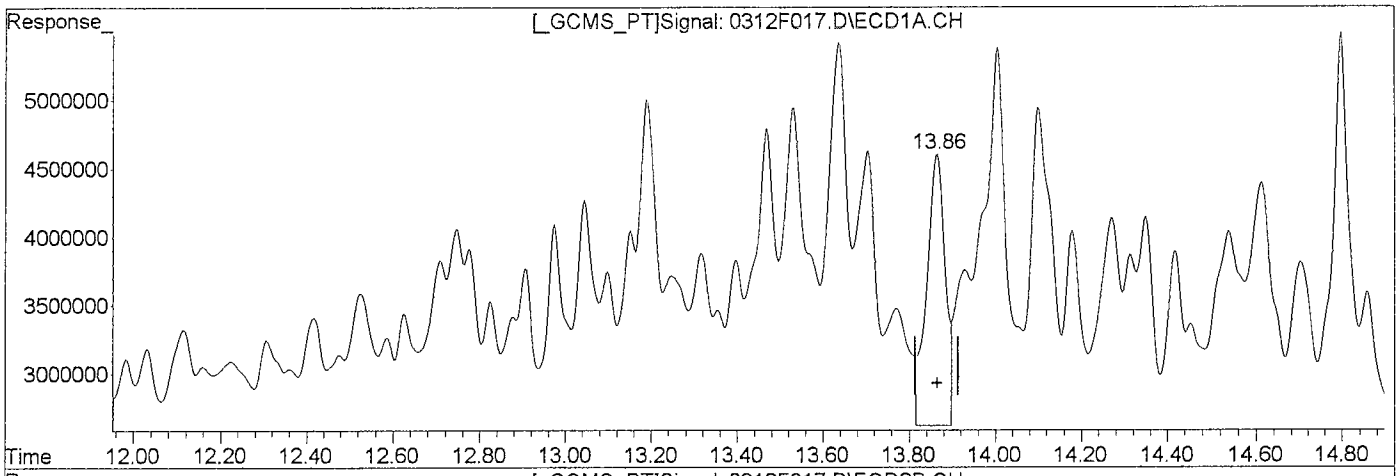
response 2213978

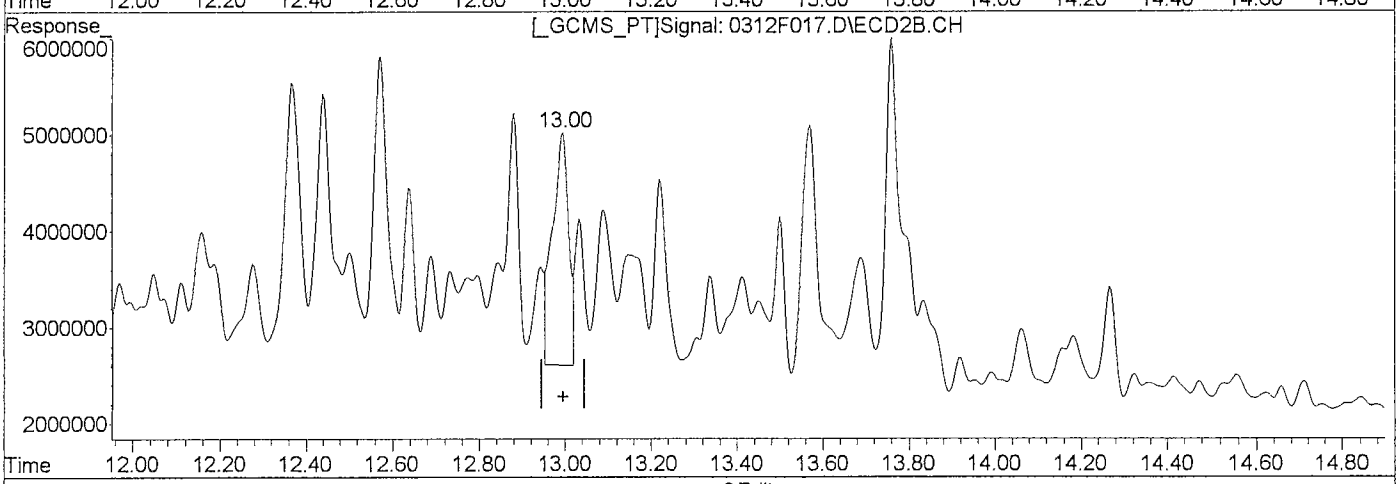
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:13 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 1483.355ug/L

response 5940525

(28) Toxaphene {4} #2

13.00min 1663.580ug/L

response 6345429

Before

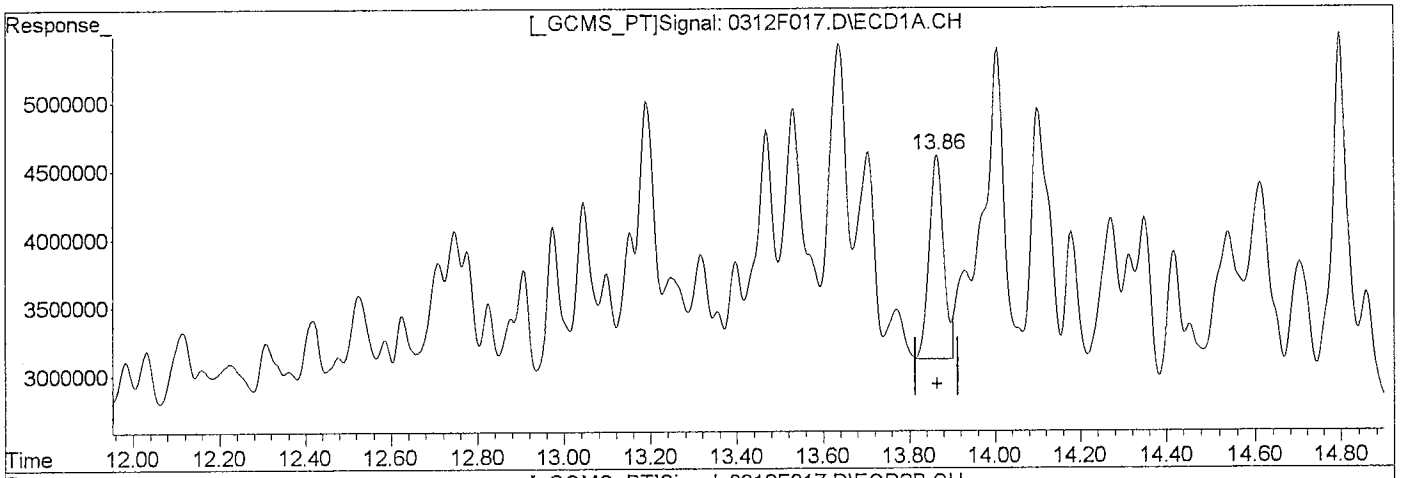
MAR 1 2 2007

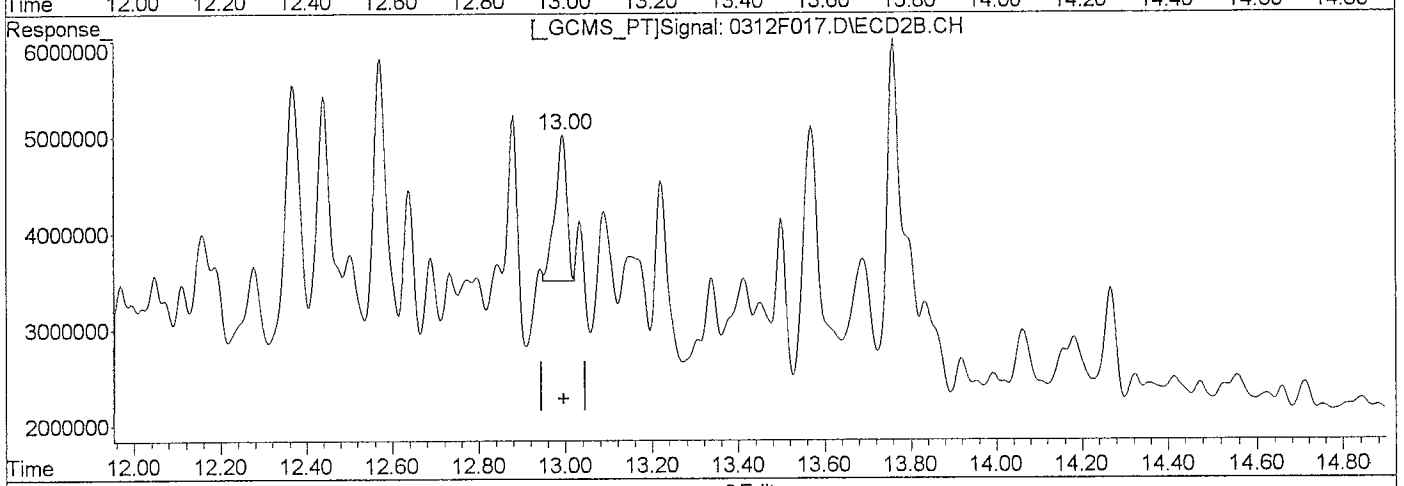
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 888.124ug/L m

response 3556751

(28) Toxaphene {4} #2

13.00min 735.547ug/L m

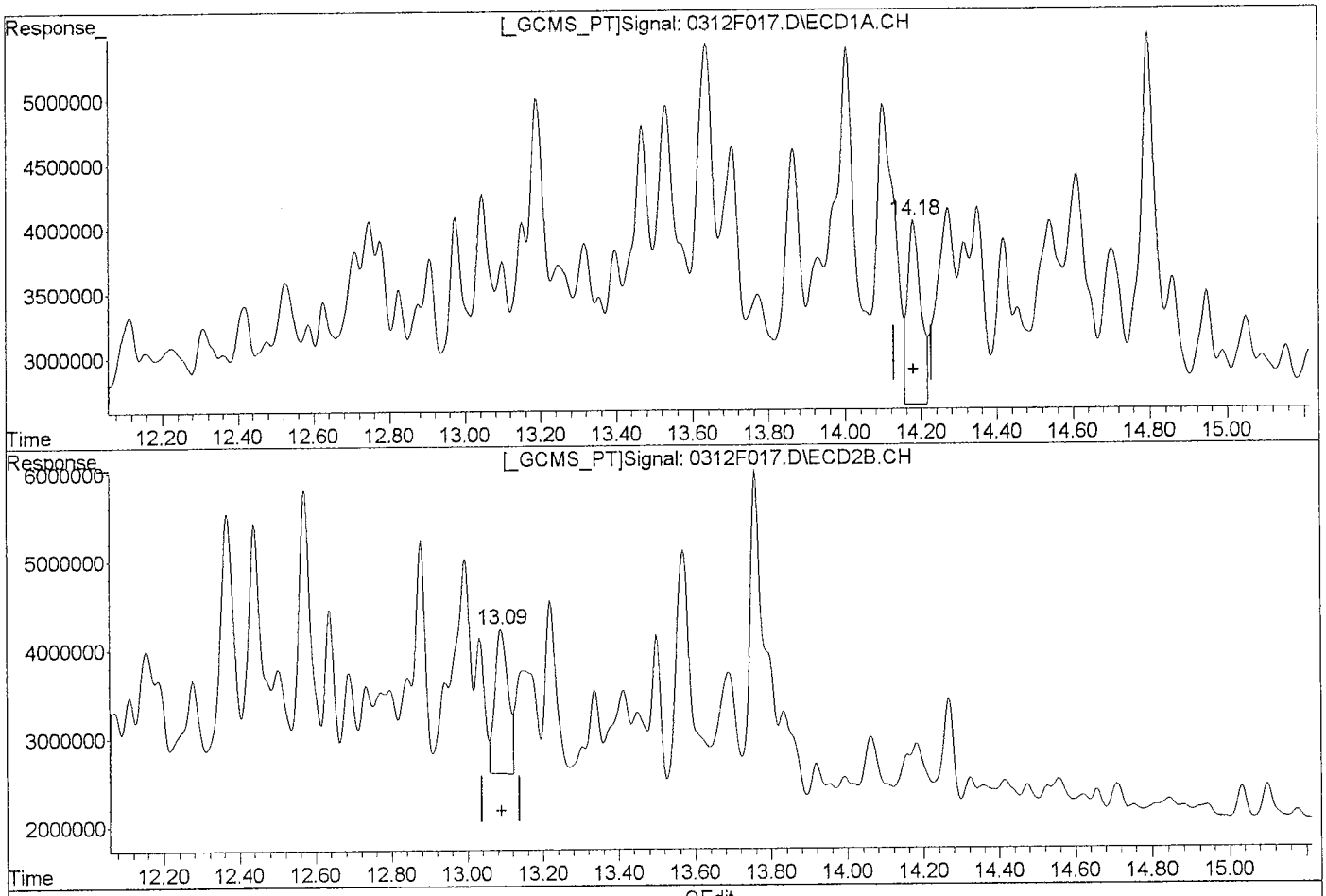
response 2805613

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration



QEdit

(29) Toxaphene {5}

14.18min 1683.989ug/L

response 3436651

(29) Toxaphene {5} #2

13.09min 1244.745ug/L

response 4061253

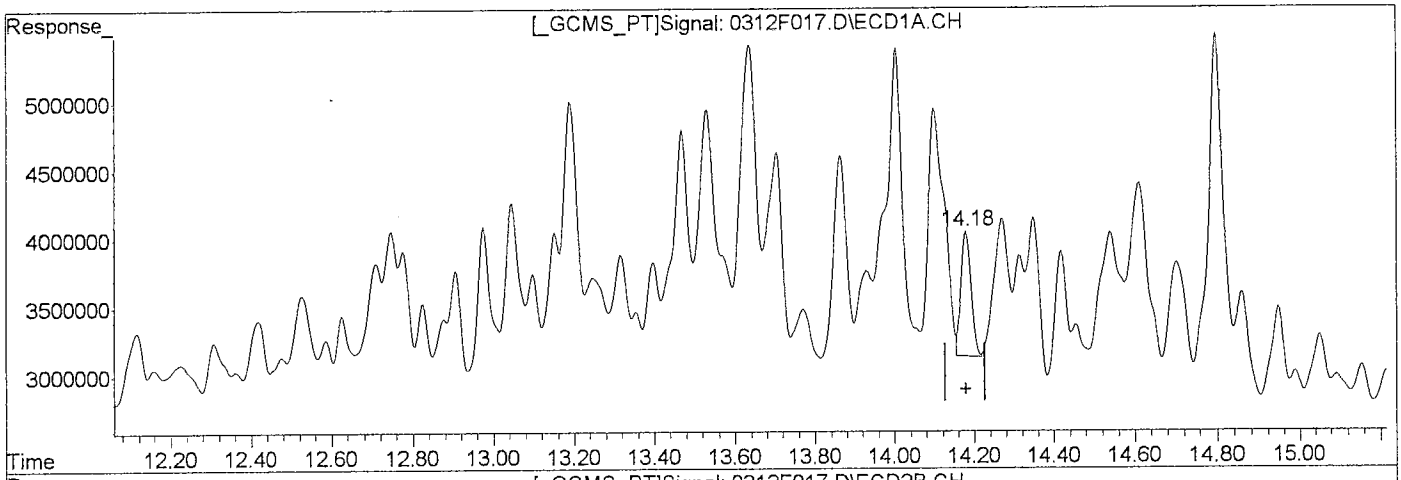
Data
MAR 1 7 2007

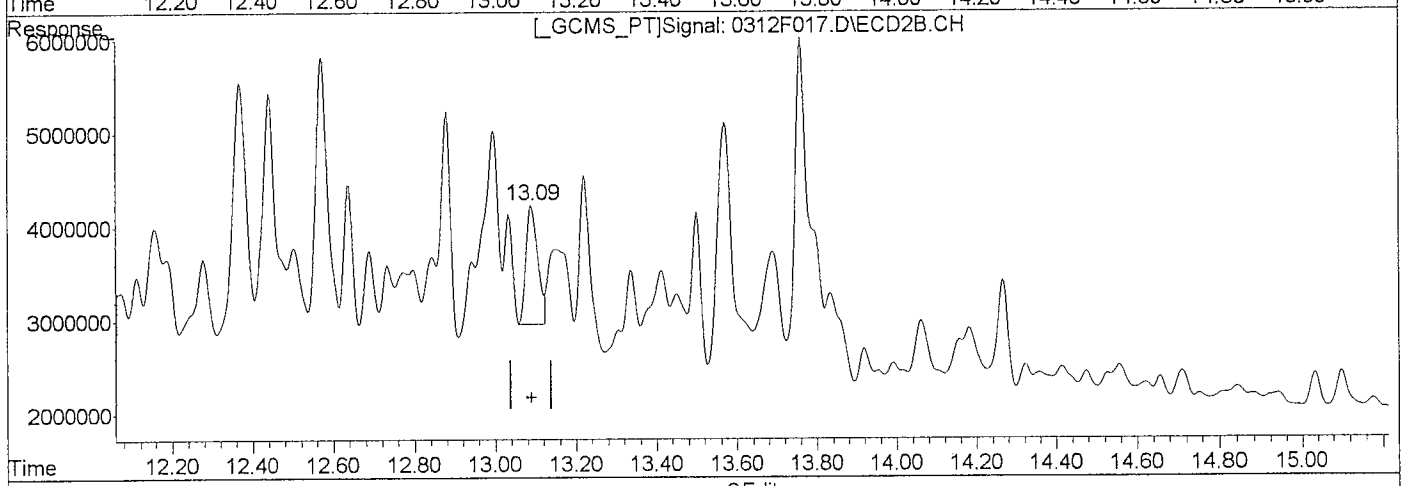
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:48:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 785.210ug/L m

response 1602441

(29) Toxaphene {5} #2

13.09min 824.866ug/L m

response 2691306

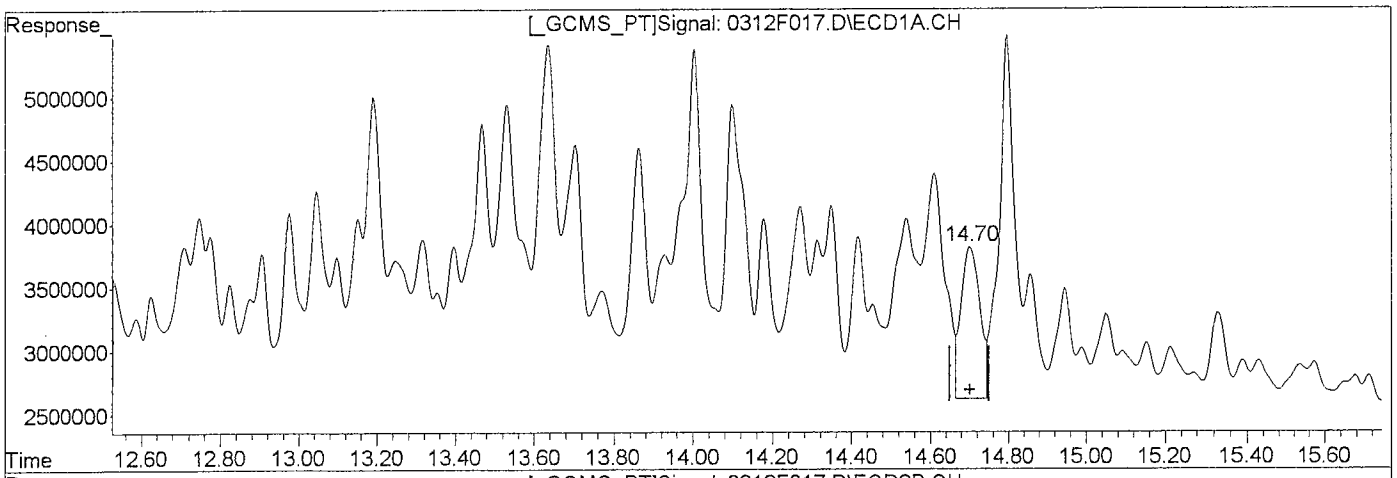
(+) = Expected Retention Time

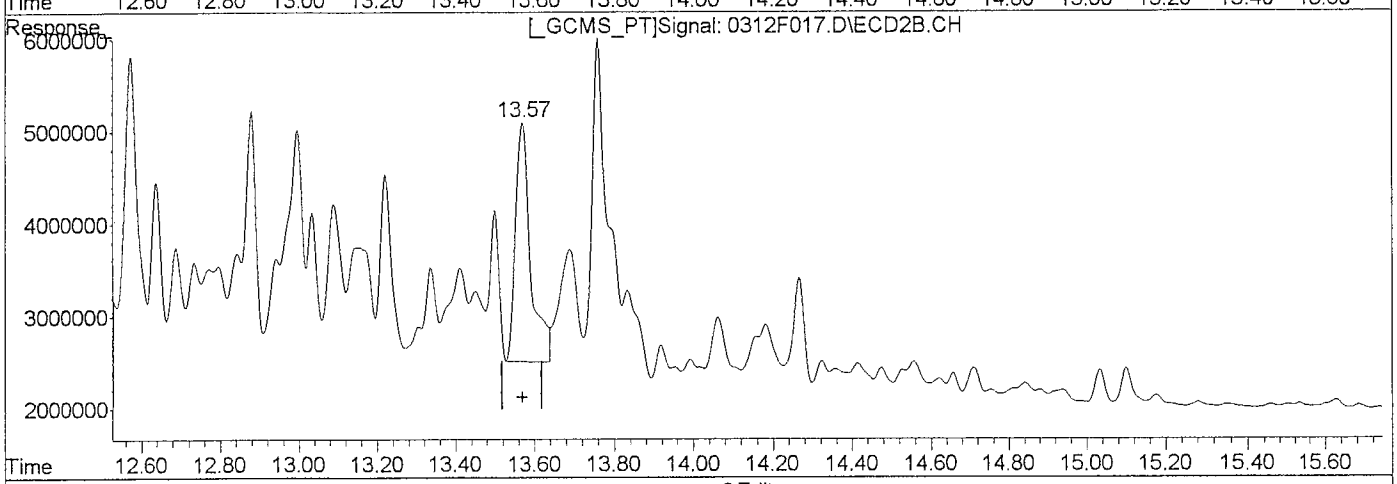
0312F017.D 031207-8081.M Mon Mar 12 17:49:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1838.734ug/L

response 4052149

(30) Toxaphene {6} #2

13.57min 839.279ug/L

response 6977726

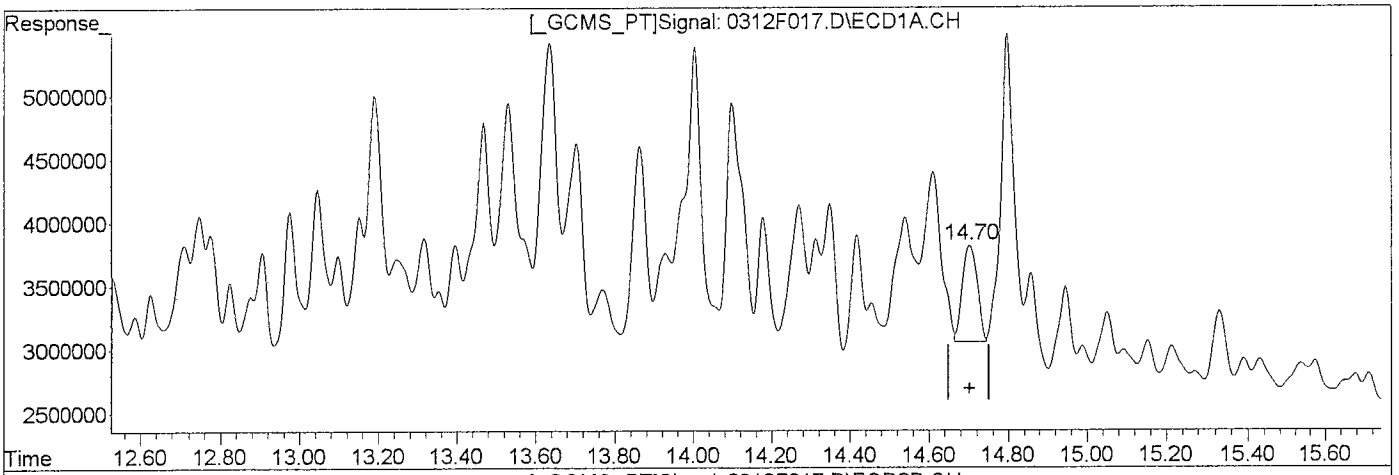
Date
MAR 1 7 2007

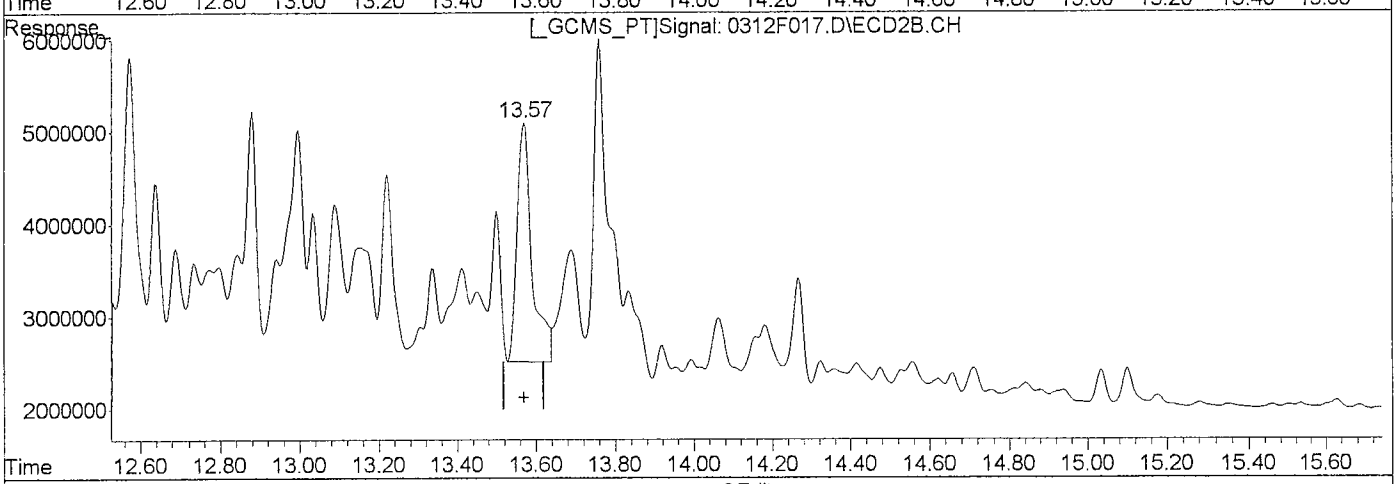
(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:49:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\031207\0312F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\031207\0312F017.D\ECD2B.CH
Acq On : 12 Mar 2007 2:40 pm Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89D Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 12 17:47 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 17:46:29 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 891.363ug/L m

response 1964360

(30) Toxaphene {6} #2

13.57min 839.279ug/L

response 6977726

(+) = Expected Retention Time
0312F017.D 031207-8081.M Mon Mar 12 17:49:11 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F023.D
J:\GC23\DATA\032107\0321F024.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	49	370000	359000	-3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	305000	286000	-6	NA	± 15 %	AverageRF
alpha-BHC	50	50	474000	473000	0	NA	± 15 %	AverageRF
beta-BHC	50	48	214000	206000	-4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	50	443000	446000	1	NA	± 15 %	AverageRF
delta-BHC	50	44	405000	357000	-12	NA	± 15 %	AverageRF
Heptachlor	50	50	436000	433000	-1	NA	± 15 %	AverageRF
Aldrin	50	50	383000	381000	-1	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	48	376000	364000	-3	NA	± 15 %	AverageRF
gamma-Chlordane	50	48	372000	359000	-3	NA	± 15 %	AverageRF
Endosulfan I	50	44	329000	289000	-12	NA	± 15 %	AverageRF
alpha-Chlordane	50	48	363000	350000	-4	NA	± 15 %	AverageRF
Dieldrin	50	49	348000	343000	-1	NA	± 15 %	AverageRF
4,4'-DDE	50	49	332000	328000	-1	NA	± 15 %	AverageRF
Endrin	50	51	293000	297000	1	NA	± 15 %	AverageRF
Endosulfan II	50	47	302000	282000	-6	NA	± 15 %	AverageRF
4,4'-DDD	50	50	264000	264000	0	NA	± 15 %	AverageRF
Endrin Aldehyde	50	47	264000	250000	-5	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	48	293000	282000	-4	NA	± 15 %	AverageRF
4,4'-DDT	50	50	276000	275000	-1	NA	± 15 %	AverageRF
Endrin Ketone	50	49	327000	319000	-3	NA	± 15 %	AverageRF
Methoxychlor	50	51	154000	156000	2	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	2620	2680	2	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2180	5	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	3280	3330	1	NA	± 100 %	AverageRF
Toxaphene {4}	1000	990	4000	3960	-1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	990	2040	2010	-1	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2260	3	NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA	2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F023.D\0321F023C.D
J:\GC23\DATA\032107\0321F024.D\0321F024C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	331000	344000	4	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	376000	367000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	444000	475000	7	NA	± 15 %	AverageRF
beta-BHC	50	55	205000	226000	10	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	422000	450000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	385000	366000	-5	NA	± 15 %	AverageRF
Heptachlor	50	53	423000	448000	6	NA	± 15 %	AverageRF
Aldrin	50	53	379000	401000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	373000	390000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	376000	392000	4	NA	± 15 %	AverageRF
Endosulfan I	50	48	335000	319000	-5	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	369000	384000	4	NA	± 15 %	AverageRF
Dieldrin	50	53	365000	386000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	54	347000	376000	8	NA	± 15 %	AverageRF
Endrin	50	55	321000	351000	9	NA	± 15 %	AverageRF
Endosulfan II	50	50	324000	327000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	291000	308000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	287000	292000	2	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	337000	349000	4	NA	± 15 %	AverageRF
4,4'-DDT	50	53	316000	332000	5	NA	± 15 %	AverageRF
Endrin Ketone	50	52	391000	404000	3	NA	± 15 %	AverageRF
Methoxychlor	50	53	178000	190000	7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	990	7470	7420	-1	NA	± 100 %	AverageRF
Toxaphene {2}	1000	970	5510	5340	-3	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	2940	0	NA	± 100 %	AverageRF
Toxaphene {4}	1000	990	3810	3770	-1	NA	± 100 %	AverageRF
Toxaphene {5}	1000	980	3260	3200	-2	NA	± 100 %	AverageRF
Toxaphene {6}	1000	990	8310	8260	-1	NA	± 100 %	AverageRF
Toxaphene	1000	990	NA	NA	NA	-1	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\032107\0321F023.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:04
Date Quantitated: 03/22/2007 08:45
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	TCA

Primary Review: [illegible]

Secondary Review: [illegible] 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F023.D\0321F023C.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:04
Date Quantitated: 03/22/2007 08:45
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	ICA

Primary Review: [illegible]

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F023.D\0321F023c.d			**Vial:**	4
Acqu Date:	03/22/2007 00:04	**Quant Date:**	03/22/2007 08:45	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.34	7.10	17959795	17206875	48.58	51.98			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	16.89	15.65	14320163	18360857	46.99	48.84			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC	9.04	8.12	23653525	23751900	49.89	53.44			
Hexachlorobenzene	9.17	7.95	19728411	19812621	47.36	51.18			
beta-BHC	10.05	9.14	10287511	11307923	48.02	55.21			
gamma-BHC (Lindane)	9.58	8.73	22296711	22522797	50.32	53.42			
delta-BHC	10.46	9.58	17848450	18286682	44.06	47.49			
Heptachlor	10.55	9.30	21636226	22382722	49.57	52.87			
Aldrin	11.06	9.78	19036965	20071682	49.72	52.92			
Isodrin	11.58	10.42	15556182	16809319	48.35	52.37			
Heptachlor Epoxide	11.76	10.64	18224424	19497972	48.47	52.22			
gamma-Chlordane	12.25	10.99	17963045	19604160	48.26	52.20			
Endosulfan I	12.38	11.22	14453234	15973541	43.98	47.74			
alpha-Chlordane	12.32	11.14	17516862	19200728	48.24	51.97			
Dieldrin	12.77	11.65	17125323	19276144	49.27	52.76			
4,4'-DDE	12.56	11.46	16416956	18796497	49.39	54.10			
Endrin	13.12	12.12	14836218	17536981	50.62	54.62			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F023.D\0321F023c.d			**Vial:**	4
Acqu Date:	03/22/2007 00:04	**Quant Date:**	03/22/2007 08:45	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II	13.53	12.52	14122390	16353771	46.84	50.41			
4,4'-DDD	13.35	12.33	13193589	15407439	50.02	52.94			
Endrin Aldehyde	13.69	12.87	12516690	14607952	47.40	50.94			
Endosulfan Sulfate	14.12	13.16	14105567	17427111	48.20	51.76			
4,4'-DDT	13.80	12.73	13731337	16622468	49.69	52.60			
Endrin Ketone	14.74	14.05	15948032	20205189	48.72	51.69			
Methoxychlor	14.46	13.74	7811019	9515216	50.78	53.37			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			NR
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F023.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.7E+5	3.6E+5	-2.8			
alpha-BHC		MS	AverageRF	15		4.7E+5	4.7E+5	-0.2			
Hexachlorobenzene		MS	AverageRF	15		4.2E+5	3.9E+5	-5.3			
gamma-BHC (Lindane)		MS	AverageRF	15		4.4E+5	4.5E+5	0.6			
beta-BHC		MS	AverageRF	15		2.1E+5	2.1E+5	-4.0			
delta-BHC		MS	AverageRF	15		4.1E+5	3.6E+5	-11.9			
Heptachlor		MS	AverageRF	15		4.4E+5	4.3E+5	-0.9			
Aldrin		MS	AverageRF	15		3.8E+5	3.8E+5	-0.6			
Isodrin		MS	AverageRF	15		3.2E+5	3.1E+5	-3.3			
Heptachlor Epoxide		MS	AverageRF	15		3.8E+5	3.6E+5	-3.1			
gamma-Chlordane		MS	AverageRF	15		3.7E+5	3.6E+5	-3.5			
alpha-Chlordane		MS	AverageRF	15		3.6E+5	3.5E+5	-3.5			
Endosulfan I		MS	AverageRF	15		3.3E+5	2.9E+5	-12.0			
4,4'-DDE		MS	AverageRF	15		3.3E+5	3.3E+5	-1.2			
Dieldrin		MS	AverageRF	15		3.5E+5	3.4E+5	-1.5			
Endrin		MS	AverageRF	15		2.9E+5	3.0E+5	1.2			
4,4'-DDD		MS	AverageRF	15		2.6E+5	2.6E+5	0.0			
Endosulfan II		MS	AverageRF	15		3.0E+5	2.8E+5	-6.3			
Endrin Aldehyde		MS	AverageRF	15		2.6E+5	2.5E+5	-5.2			
4,4'-DDT		MS	AverageRF	15		2.8E+5	2.7E+5	-0.6			
Endosulfan Sulfate		MS	AverageRF	15		2.9E+5	2.8E+5	-3.6			
Methoxychlor		MS	AverageRF	15		1.5E+5	1.6E+5	1.6			
Endrin Ketone		MS	AverageRF	15		3.3E+5	3.2E+5	-2.6			
Decachlorobiphenyl		SURR	AverageRF	15		3.0E+5	2.9E+5	-6.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	3.4

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F023.D\0321F023C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.3E+5	3.4E+5	4.0			
Hexachlorobenzene		MS	AverageRF	15		3.9E+5	4.0E+5	2.4			
alpha-BHC		MS	AverageRF	15		4.4E+5	4.8E+5	6.9			
gamma-BHC (Lindane)		MS	AverageRF	15		4.2E+5	4.5E+5	6.8			
beta-BHC		MS	AverageRF	15		2.0E+5	2.3E+5	10.4			
Heptachlor		MS	AverageRF	15		4.2E+5	4.5E+5	5.7			
delta-BHC		MS	AverageRF	15		3.9E+5	3.7E+5	-5.0			
Aldrin		MS	AverageRF	15		3.8E+5	4.0E+5	5.8			
Isodrin		MS	AverageRF	15		3.2E+5	3.4E+5	4.7			
Heptachlor Epoxide		MS	AverageRF	15		3.7E+5	3.9E+5	4.4			
gamma-Chlordane		MS	AverageRF	15		3.8E+5	3.9E+5	4.4			
alpha-Chlordane		MS	AverageRF	15		3.7E+5	3.8E+5	3.9			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.2E+5	-4.5			
4,4'-DDE		MS	AverageRF	15		3.5E+5	3.8E+5	8.2			
Dieldrin		MS	AverageRF	15		3.7E+5	3.9E+5	5.5			
Endrin		MS	AverageRF	15		3.2E+5	3.5E+5	9.2			
4,4'-DDD		MS	AverageRF	15		2.9E+5	3.1E+5	5.9			
Endosulfan II		MS	AverageRF	15		3.2E+5	3.3E+5	0.8			
4,4'-DDT		MS	AverageRF	15		3.2E+5	3.3E+5	5.2			
Endrin Aldehyde		MS	AverageRF	15		2.9E+5	2.9E+5	1.9			
Endosulfan Sulfate		MS	AverageRF	15		3.4E+5	3.5E+5	3.5			
Methoxychlor		MS	AverageRF	15		1.8E+5	1.9E+5	6.7			
Endrin Ketone		MS	AverageRF	15		3.9E+5	4.0E+5	3.4			
Decachlorobiphenyl		SURR	AverageRF	15		3.8E+5	3.7E+5	-2.3			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~5.1~~

5.4 m 32207

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F023.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F023.D\ECD2B.CH
Acq On : 22 Mar 2007 12:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:39:53 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.34	7.10	17959795	17206875	48.580	51.976
24)	s	Decachlorobiphen	16.89	15.65	14320163	18360857	46.990	48.835
		Target Compounds						
2)		alpha-BHC	9.04	8.12	23653525	23751900	49.890	53.441
3)		Hexachlorobenzen	9.17	7.95	19728411	19812621	47.364	51.177
4)		beta-BHC	10.05	9.14	10287511	11307923	48.016	55.213
5)		gamma-BHC (Linda	9.58	8.73	22296711	22522797	50.318	53.415
6)		delta-BHC	10.46	9.58	17848450	18286682	44.064	47.487
7)		Heptachlor	10.55	9.30	21636226	22382722	49.569	52.869
8)		Aldrin	11.06	9.78	19036965	20071682	49.716	52.924
9)		Isodrin	11.58	10.42	15556182	16809319	48.348	52.372
10)		Heptachlor Epoxi	11.76	10.64	18224424	19497972	48.474	52.224
11)		gamma-Chlordane	12.25	10.99	17963045	19604160	48.262	52.201
12)		Endosulfan I	12.38	11.22	14453234	15973541	43.984	47.739
13)		alpha-Chlordane	12.32	11.14	17516862	19200728	48.240	51.974
14)		Dieldrin	12.77	11.65	17125323	19276144	49.268	52.757
15)		4,4'-DDE	12.56	11.46	16416956	18796497	49.390	54.096
16)		Endrin	13.12	12.12	14836218	17536981	50.618	54.623
17)		Endosulfan II	13.53	12.52	14122390	16353771	46.837	50.408
18)		4,4'-DDD	13.35	12.33	13193589	15407439	50.021	52.936
19)		Endrin Aldehyde	13.69	12.87	12516690	14607952	47.396	50.943
20)		Endosulfan Sulfa	14.12	13.16	14105567	17427111	48.200	51.760
21)		4,4'-DDT	13.80	12.73	13731337	16622468	49.686	52.599
22)		Endrin Ketone	14.74	14.05	15948032	20205189	48.721	51.687
23)		Methoxychlor	14.46	13.74	7811019	9515216	50.777	53.368

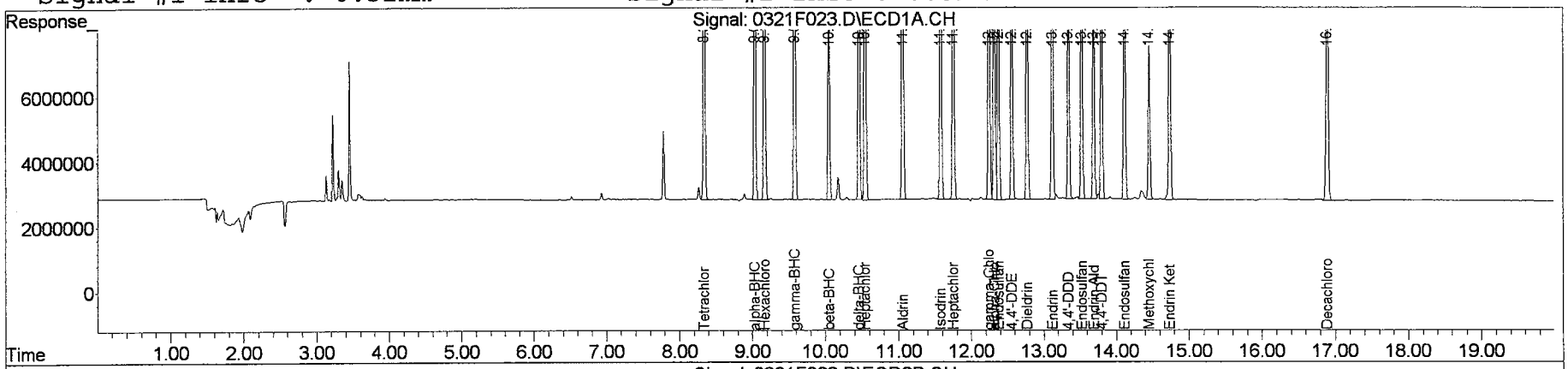
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

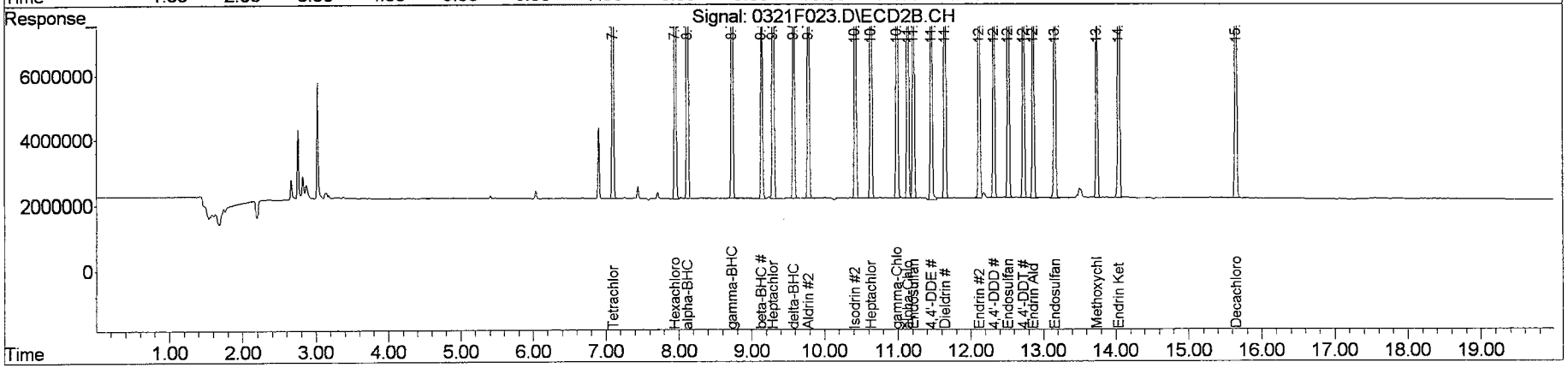
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F023.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F023.D\ECD2B.CH
Acq On : 22 Mar 2007 12:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:45 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032107\0321F024.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:30
Date Quantitated: 03/22/2007 08:48
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	1(a)

Primary Review: h.3220

Secondary Review: Ar 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F024.D\0321F024C.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:30
Date Quantitated: 03/22/2007 08:48
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	ICV

Primary Review: [illegible]

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F024.D\0321F024c.d			**Vial:**	5
Acqu Date:	03/22/2007 00:30	**Quant Date:**	03/22/2007 08:48	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			
Endosulfan I			0d	0d	0.0000	0.0000			
alpha-Chlordane			0d	0d	0.0000	0.0000			
Dieldrin			0d	0d	0.0000	0.0000			
4,4'-DDE			0d	0d	0.0000	0.0000			
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F024.D\0321F024c.d			**Vial:**	5
Acqu Date:	03/22/2007 00:30	**Quant Date:**	03/22/2007 08:48	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0d	0d	0.0000	0.0000			
Endosulfan Sulfate			0d	0d	0.0000	0.0000			
4,4'-DDT			0d	0d	0.0000	0.0000			
Endrin Ketone			0d	0d	0.0000	0.0000			
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,015	986.60			
Toxaphene {1}	12.97	12.37	2678153m	7415378m	1,021	992.17			
Toxaphene {2}	13.04	12.44	2181067m	5340634m	1,053	968.55			
Toxaphene {3}	13.19	12.64	3330322m	2940204m	1,014	997.32			
Toxaphene {4}	13.86	13.00	3964969m	3768932m	990.06	988.10			
Toxaphene {5}	14.18	13.09	2014123m	3199254m	986.94	980.55			
Toxaphene {6}	14.70	13.57	2260611m	8255069m	1,026	992.92			
Chlordane			0	0	0.0000	0.0000			NR
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F024.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,015	1,000	1.5
Toxaphene {1}		MULTI	AverageRF	100		2.6E+3	2.7E+3	2.1			
Toxaphene {2}		MULTI	AverageRF	100		2.1E+3	2.2E+3	5.3			
Toxaphene {3}		MULTI	AverageRF	100		3.3E+3	3.3E+3	1.4			
Toxaphene {4}		MULTI	AverageRF	100		4.0E+3	4.0E+3	-1.0			
Toxaphene {5}		MULTI	AverageRF	100		2.0E+3	2.0E+3	-1.3			
Toxaphene {6}		MULTI	AverageRF	100		2.2E+3	2.3E+3	2.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~2.3~~

3.4
M 32207

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580

DataFile: J:\GC23\DATA\032107\0321F024.D\0321F024C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					986.6	1,000	-1.3
Toxaphene {1}		MULTI	AverageRF	100		7.5E+3	7.4E+3	-0.8			
Toxaphene {2}		MULTI	AverageRF	100		5.5E+3	5.3E+3	-3.1			
Toxaphene {3}		MULTI	AverageRF	100		2.9E+3	2.9E+3	-0.3			
Toxaphene {4}		MULTI	AverageRF	100		3.8E+3	3.8E+3	-1.2			
Toxaphene {5}		MULTI	AverageRF	100		3.3E+3	3.2E+3	-1.9			
Toxaphene {6}		MULTI	AverageRF	100		8.3E+3	8.3E+3	-0.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~1.3~~

5.4

vr 32207

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:39:54 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2678153	7415378	1020.832m	992.167m
26)	Toxaphene {2}	13.04	12.44	2181067	5340634	1052.949m	968.546m
27)	Toxaphene {3}	13.19	12.64	3330322	2940204	1014.431m	997.320m
28)	Toxaphene {4}	13.86	13.00	3964969	3768932	990.056m	988.100m
29)	Toxaphene {5}	14.18	13.09	2014123	3199254	986.938m	980.548m
30)	Toxaphene {6}	14.70	13.57	2260611	8255069	1025.792m	992.917m

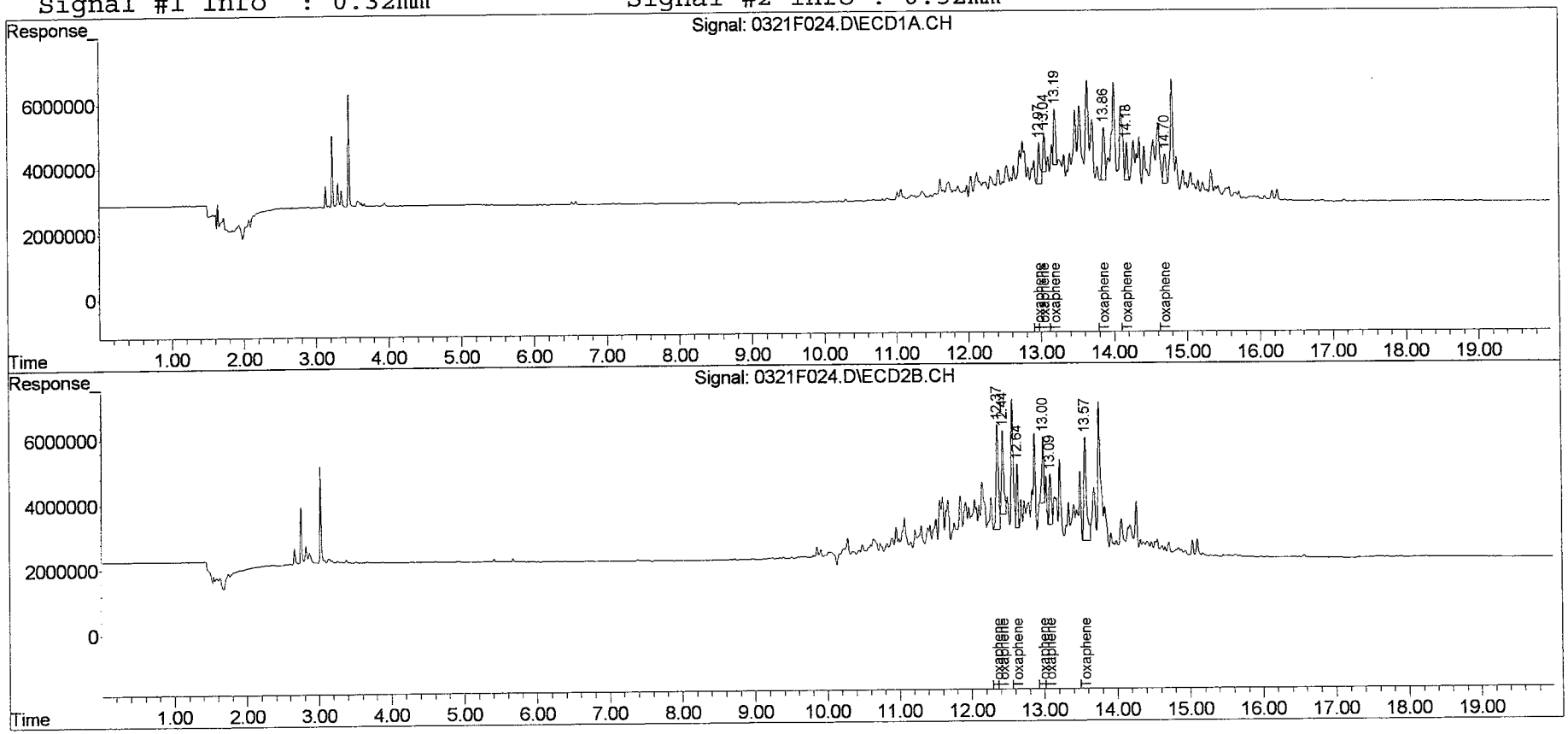
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:48 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

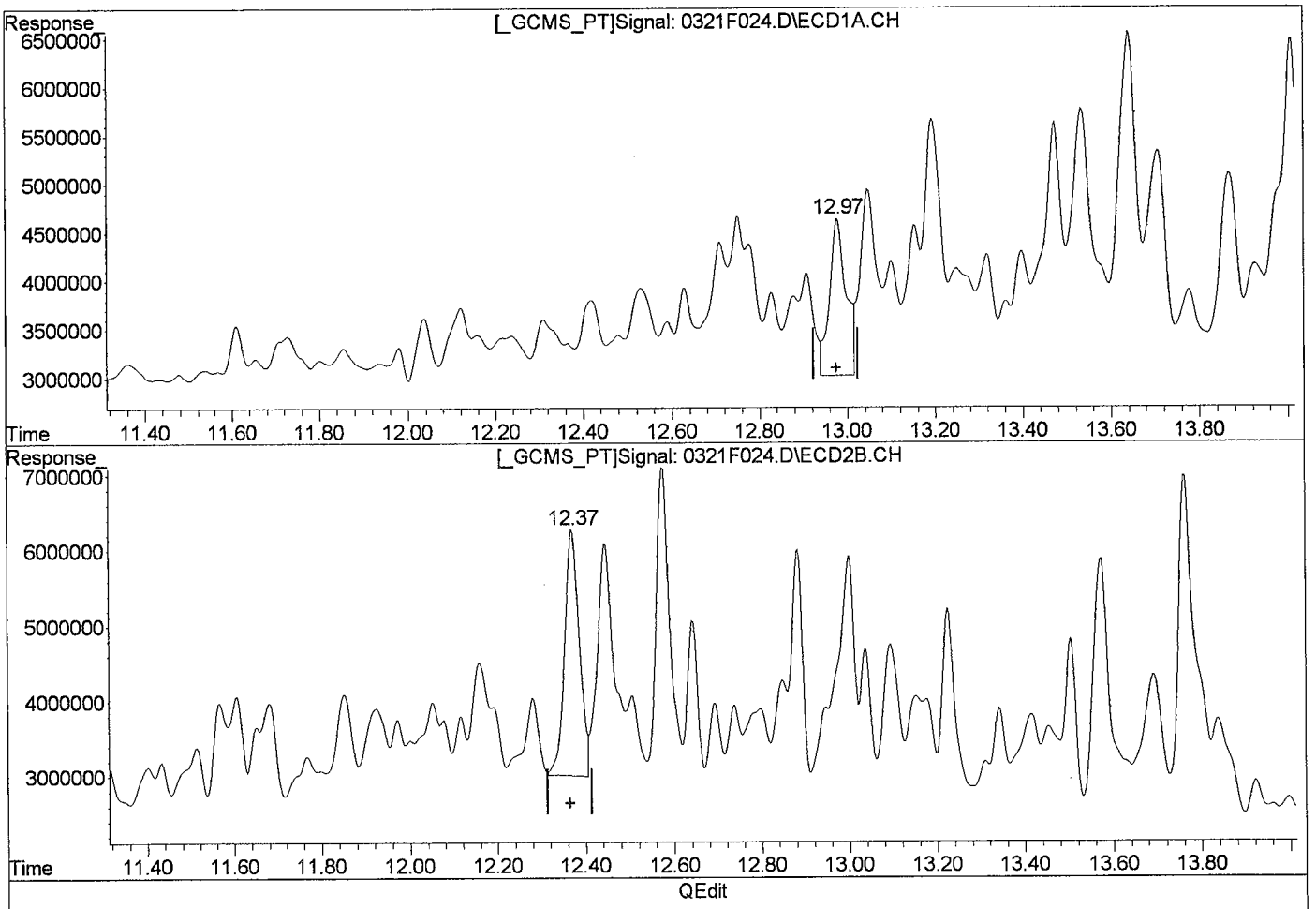


878

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.97min 1622.919ug/L

response 4257731

(25) Toxaphene #2

12.37min 1017.269ug/L

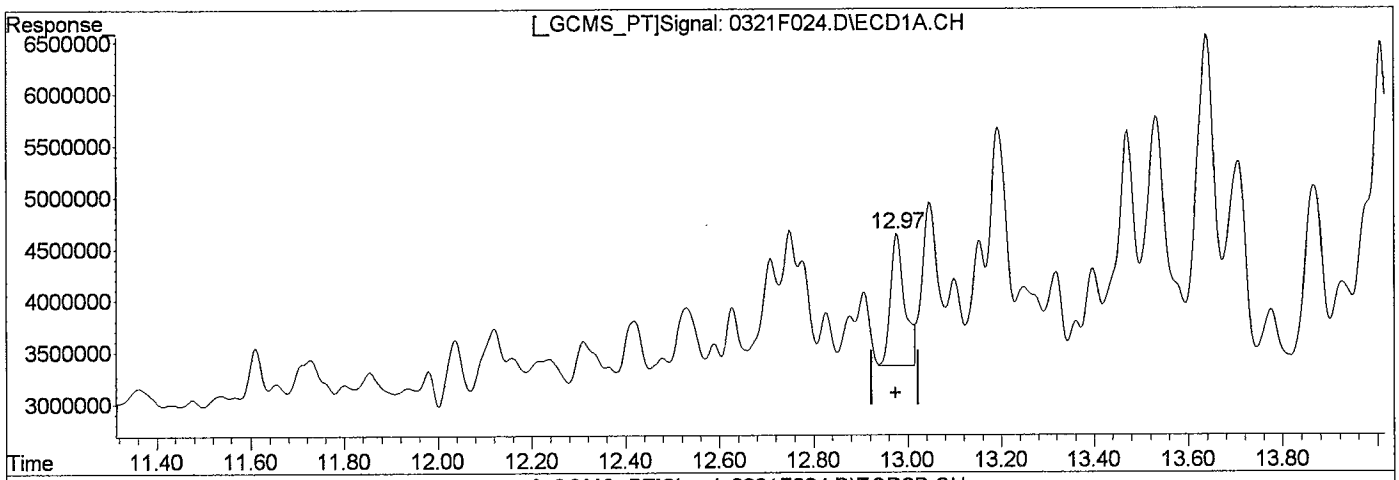
response 7602987

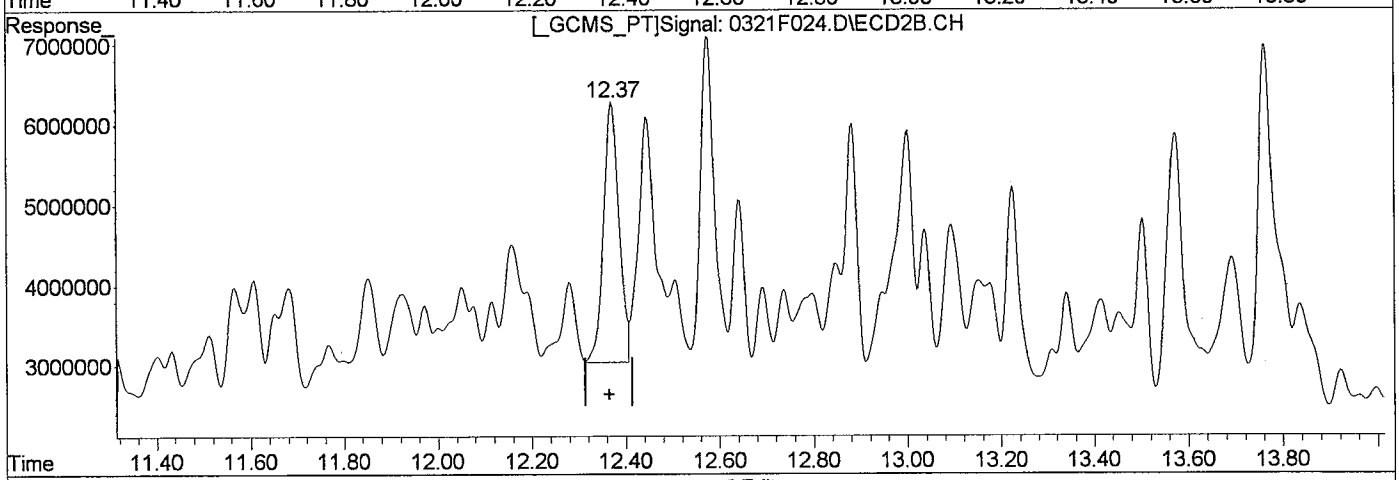
(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:46:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

12.97min 1020.832ug/L m

response 2678153

(25) Toxaphene #2

12.37min 992.167ug/L m

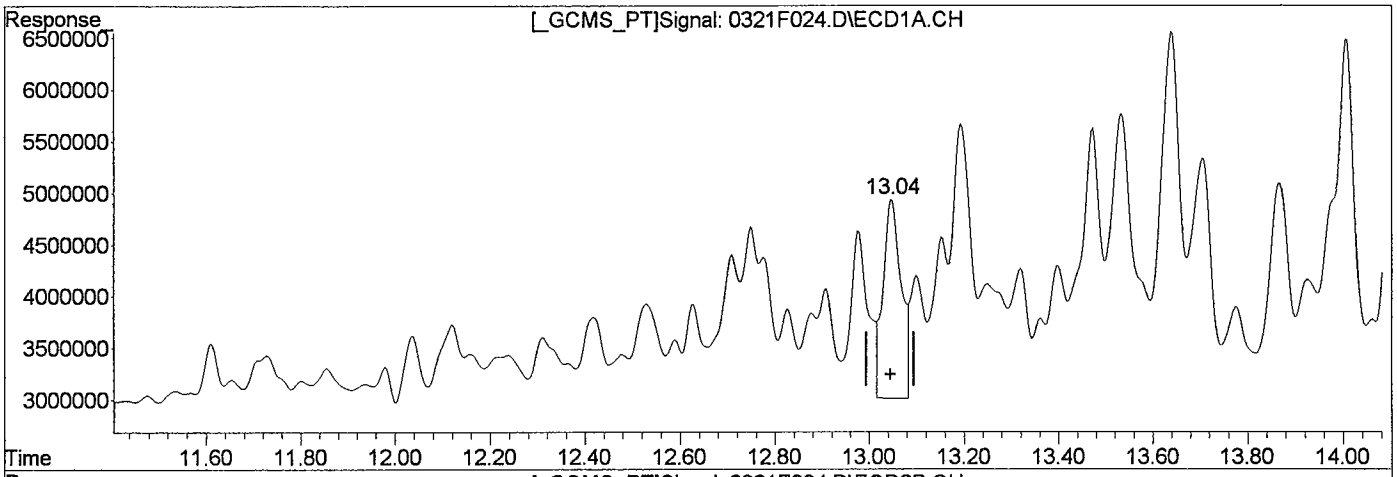
response 7415378

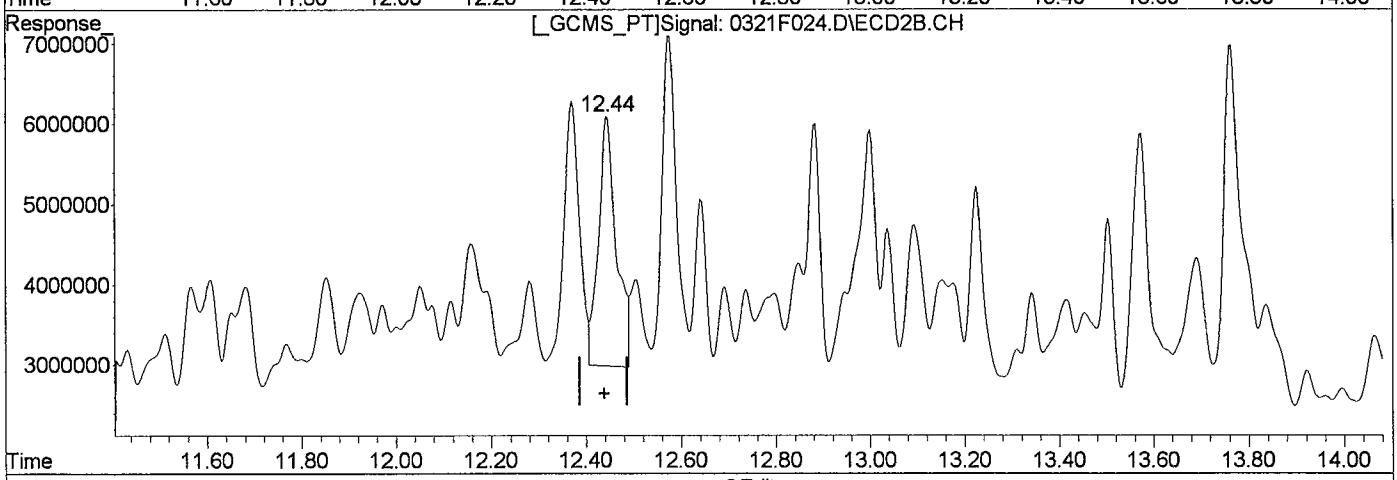
(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:47:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 2469.544ug/L

response 5115385

(26) Toxaphene {2} #2

12.44min 1477.093ug/L

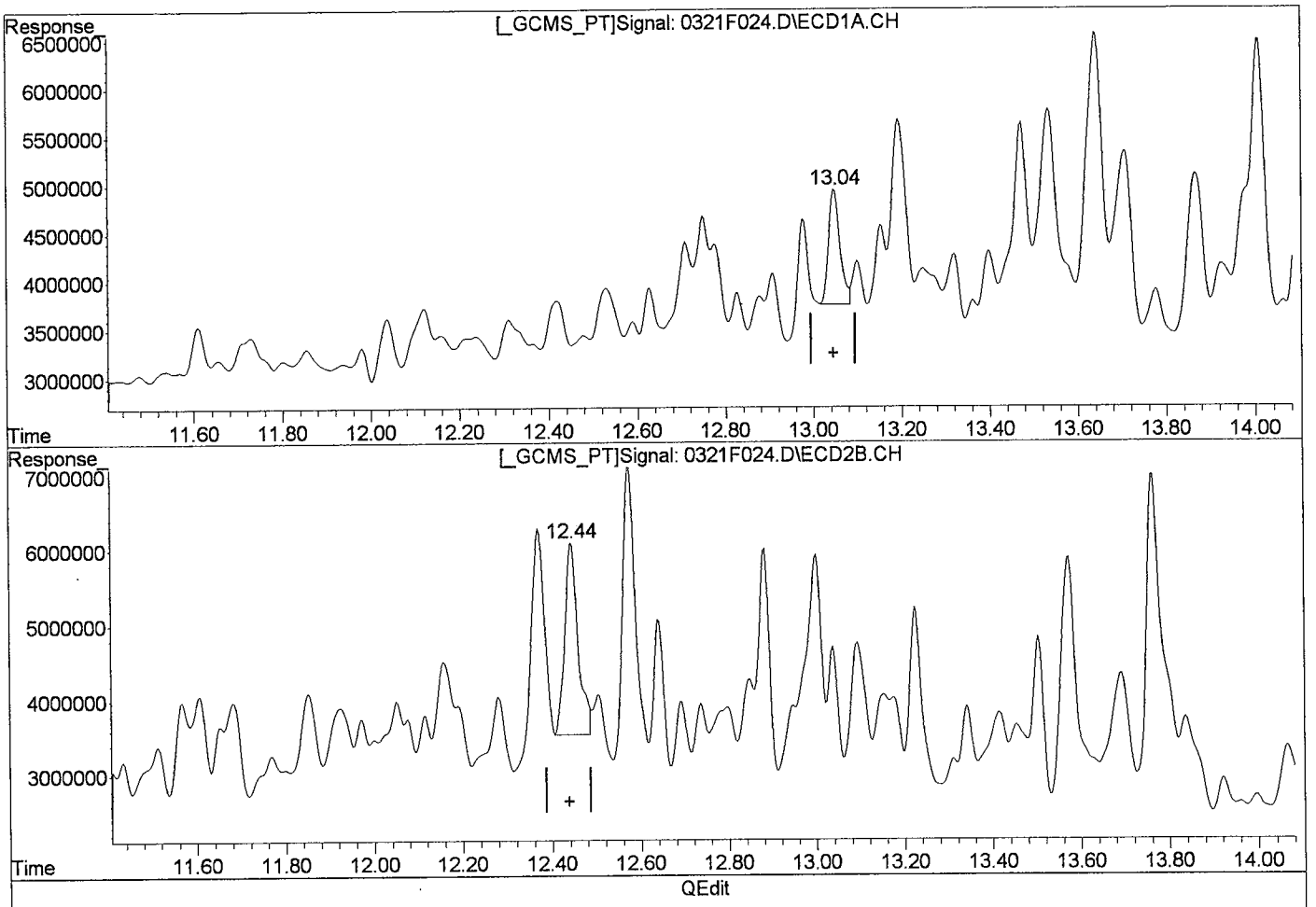
response 8144797

(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:47:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.04min 1052.949ug/L m

response 2181067

(26) Toxaphene {2} #2

12.44min 968.546ug/L m

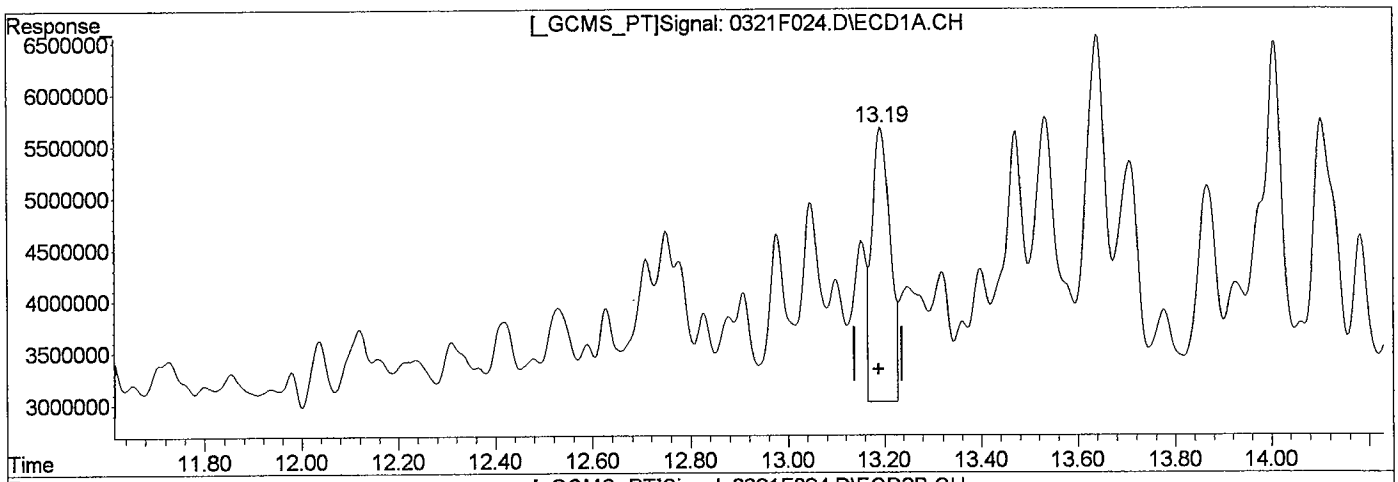
response 5340634

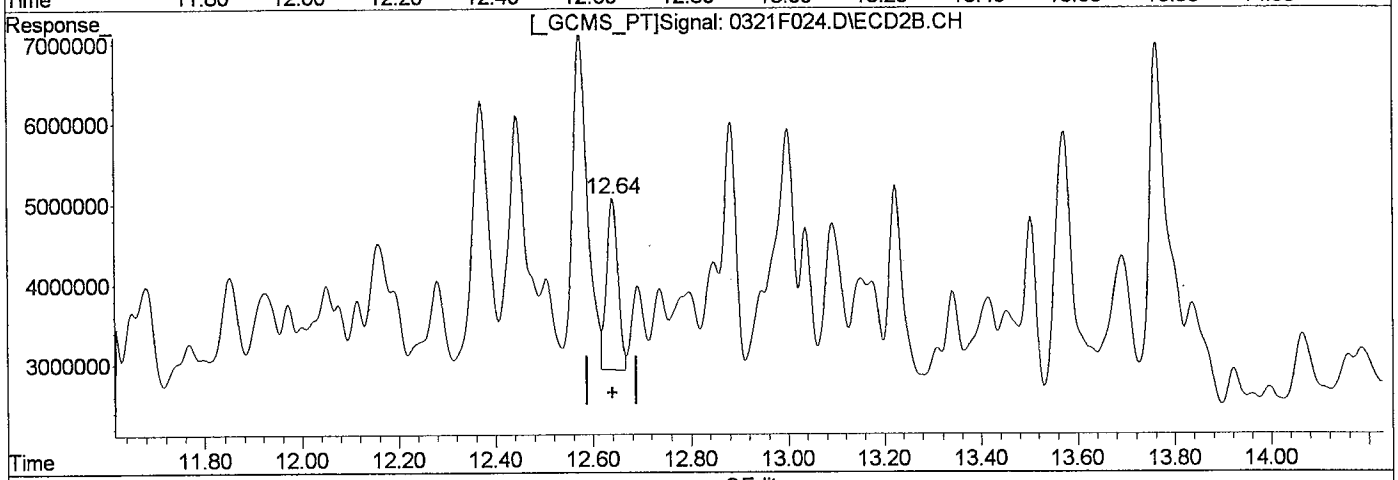
(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:47:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(27) Toxaphene {3}

13.19min 2133.353ug/L

response 7003684

(27) Toxaphene {3} #2

12.64min 1177.748ug/L

response 3472123

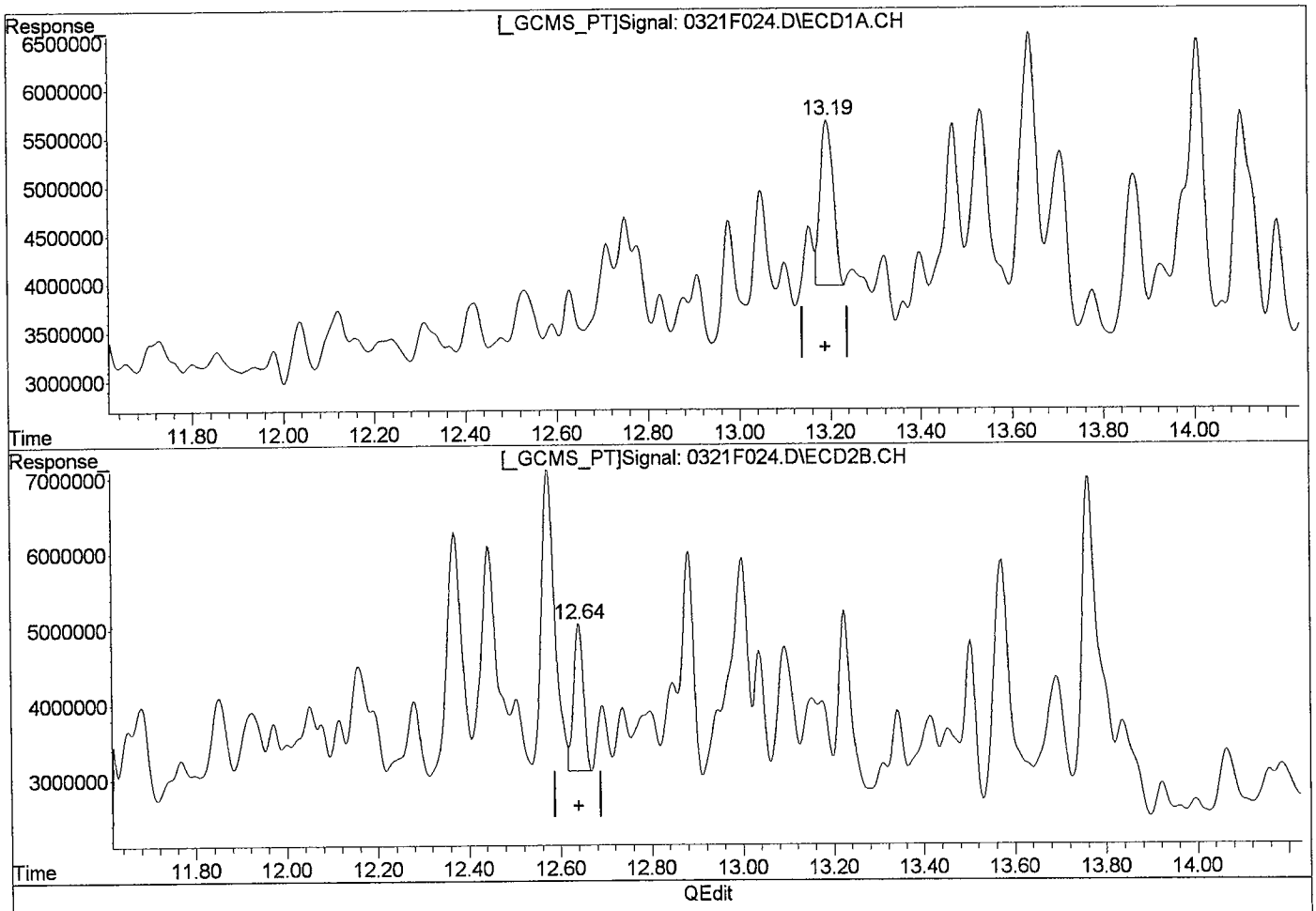
(+) = Expected Retention Time

0321F024.D 031207-8081.M Thu Mar 22 08:47:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.19min 1014.431ug/L m

response 3330322

(27) Toxaphene {3} #2

12.64min 997.320ug/L m

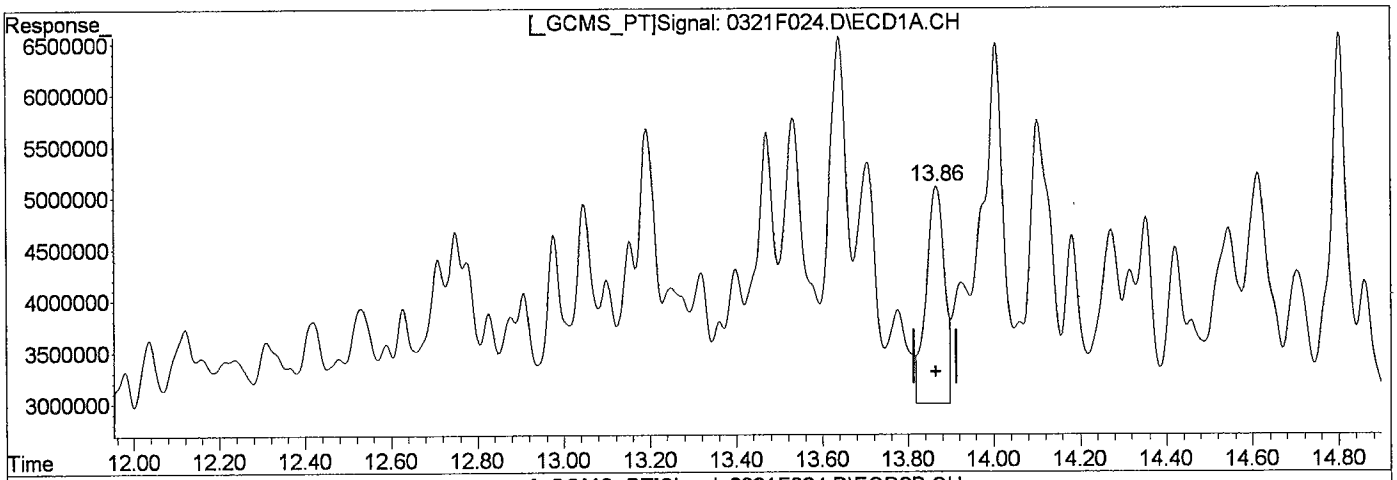
response 2940204

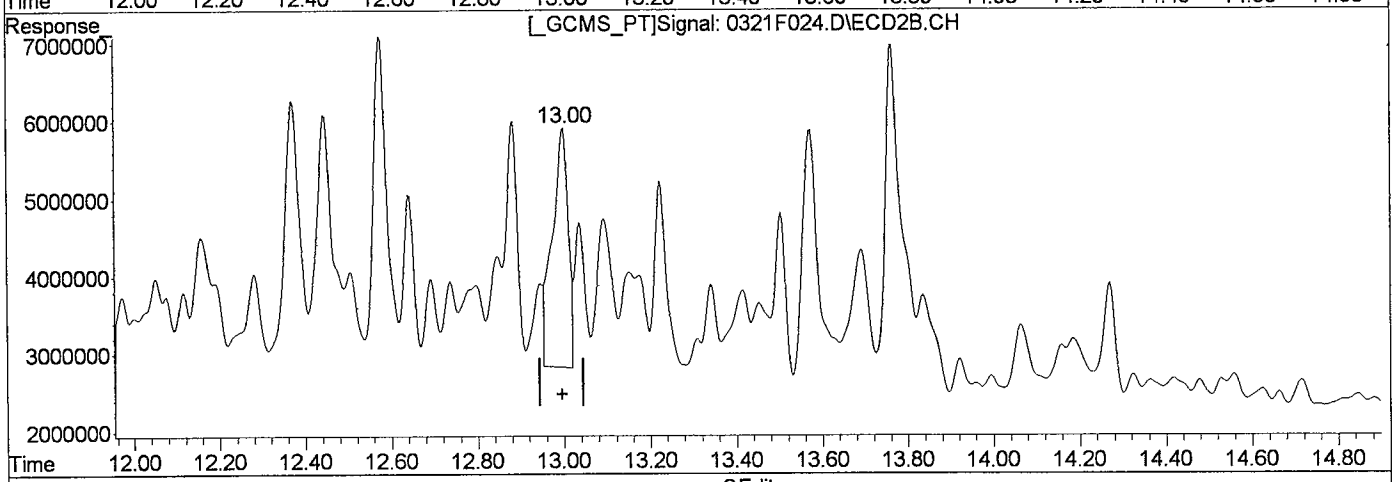
(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:47:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 1562.513ug/L

response 6257537

(28) Toxaphene {4} #2

13.00min 2072.918ug/L

response 7906774

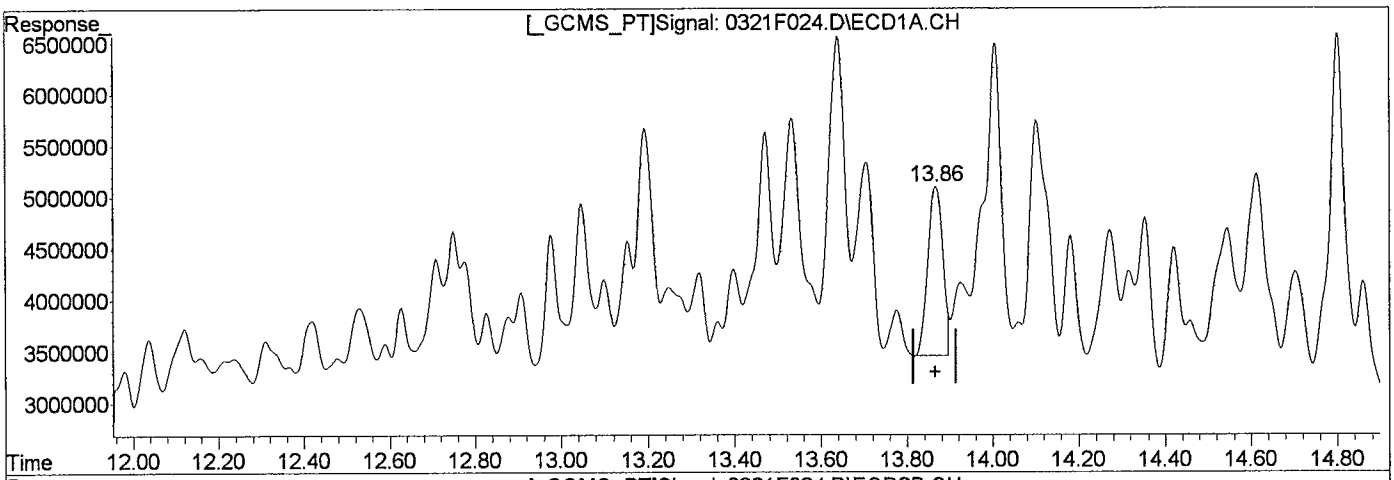
(+) = Expected Retention Time

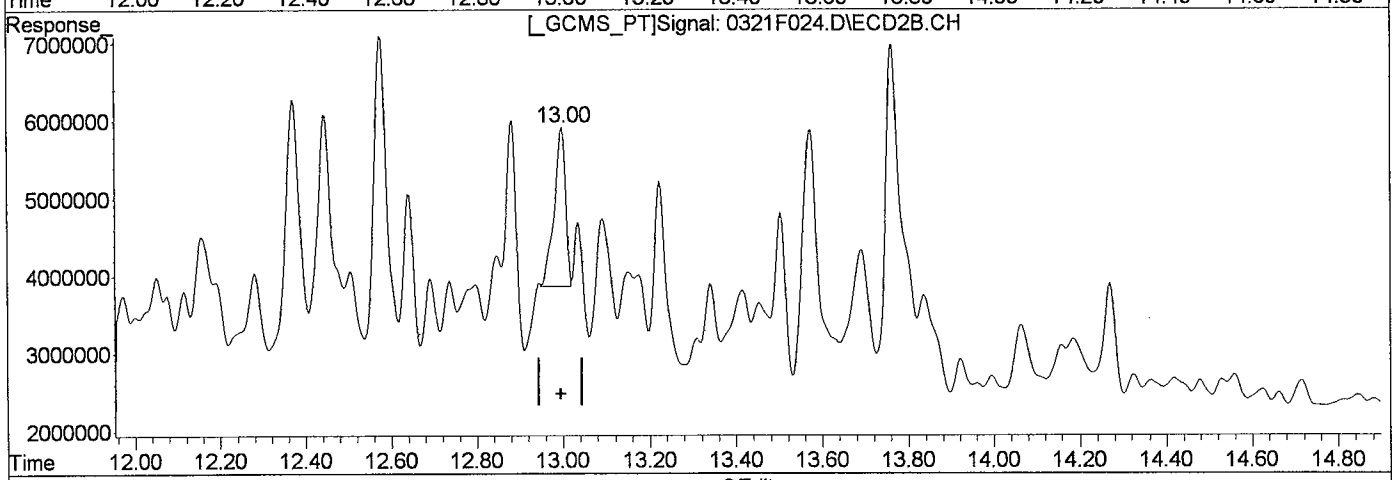
0321F024.D 031207-8081.M Thu Mar 22 08:47:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(28) Toxaphene {4}

13.86min 990.056ug/L m

response 3964969

(28) Toxaphene {4} #2

13.00min 988.100ug/L m

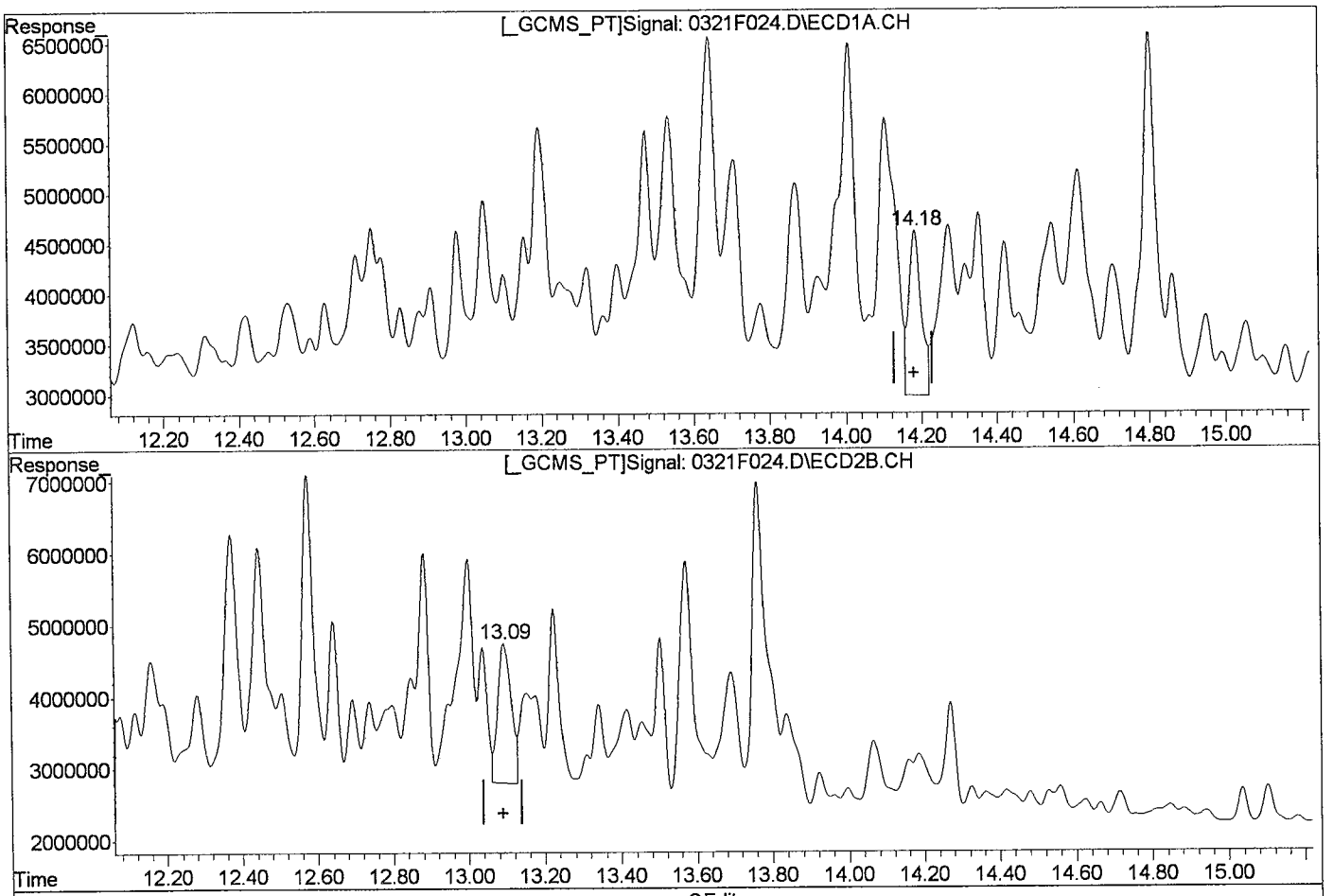
response 3768932

(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:47:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(29) Toxaphene {5}

14.18min 1875.967ug/L

response 3828436

Defr

(29) Toxaphene {5} #2

13.09min 1481.785ug/L

response 4834648

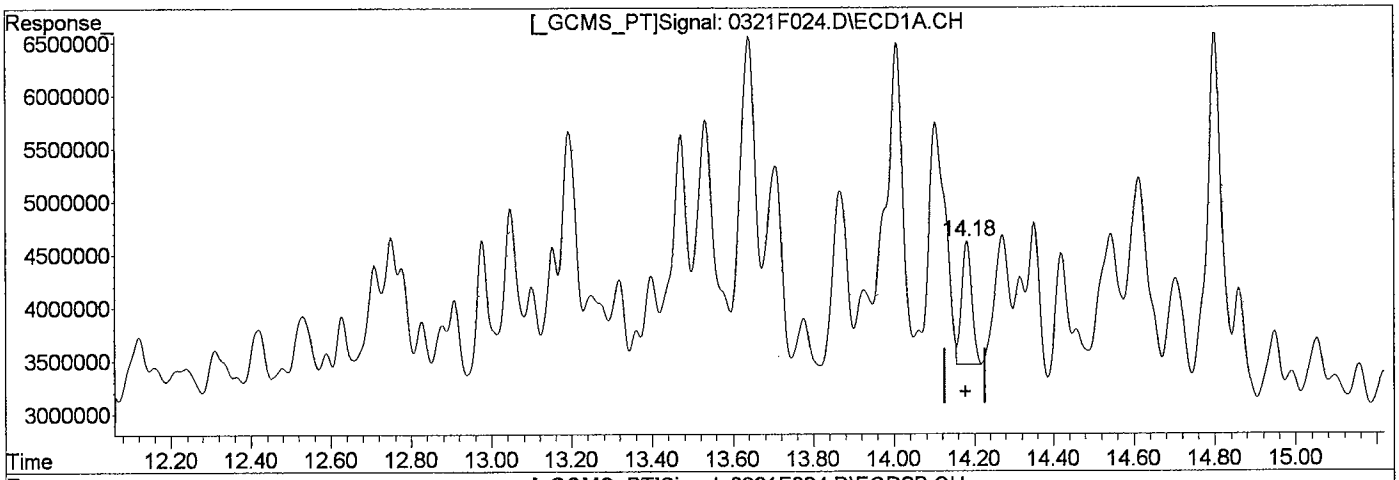
(+) = Expected Retention Time

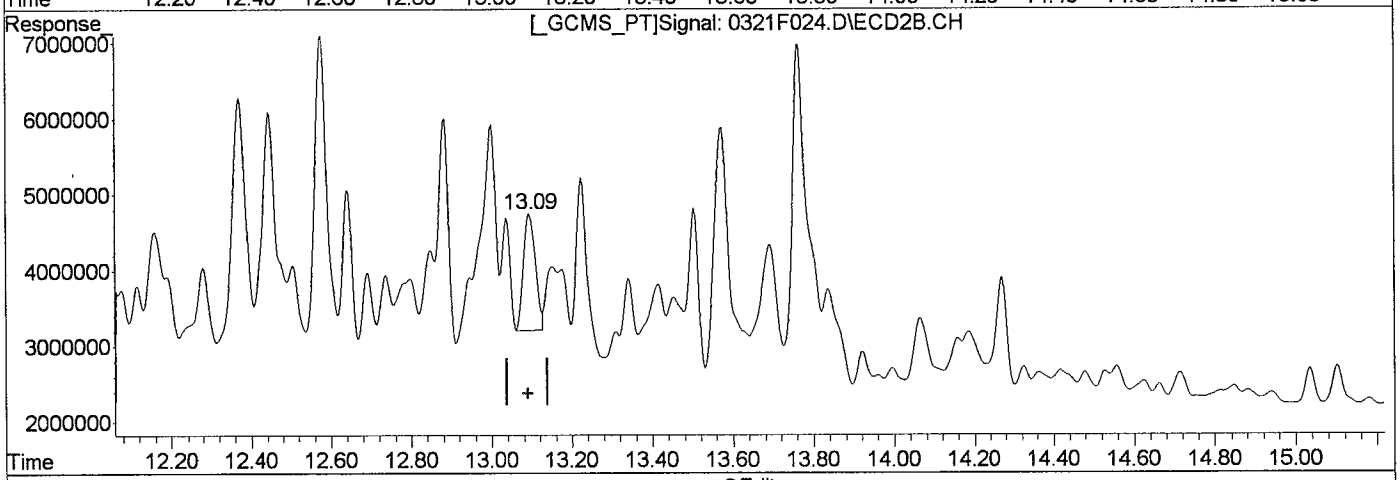
0321F024.D 031207-8081.M Thu Mar 22 08:47:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 986.938ug/L m

response 2014123

(29) Toxaphene {5} #2

13.09min 980.548ug/L m

response 3199254

base we
AH to 3/22/07

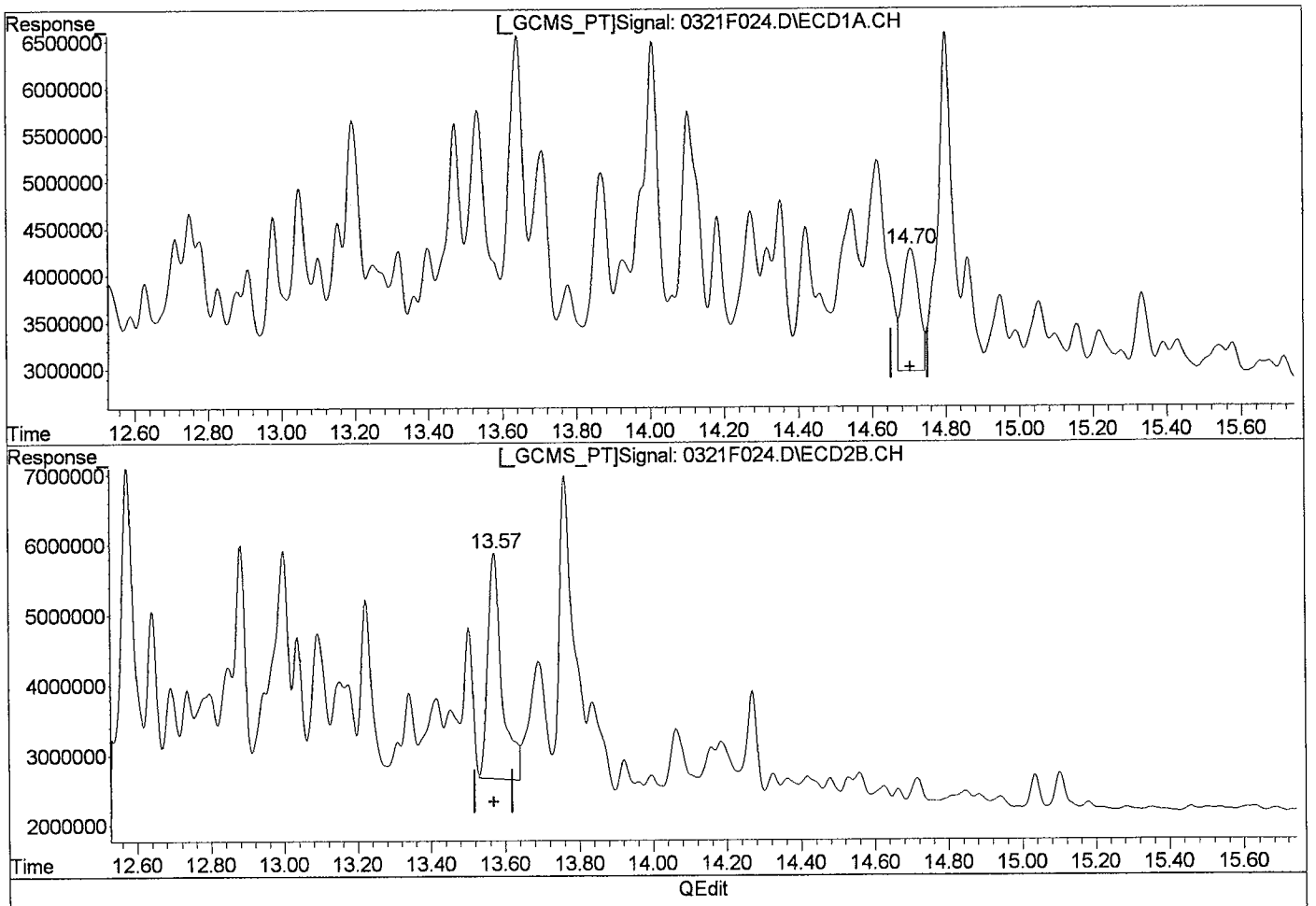
3-23-07

(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:48:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.70min 1818.693ug/L

response 4007984

(30) Toxaphene {6} #2

13.57min 1022.772ug/L

response 8503279

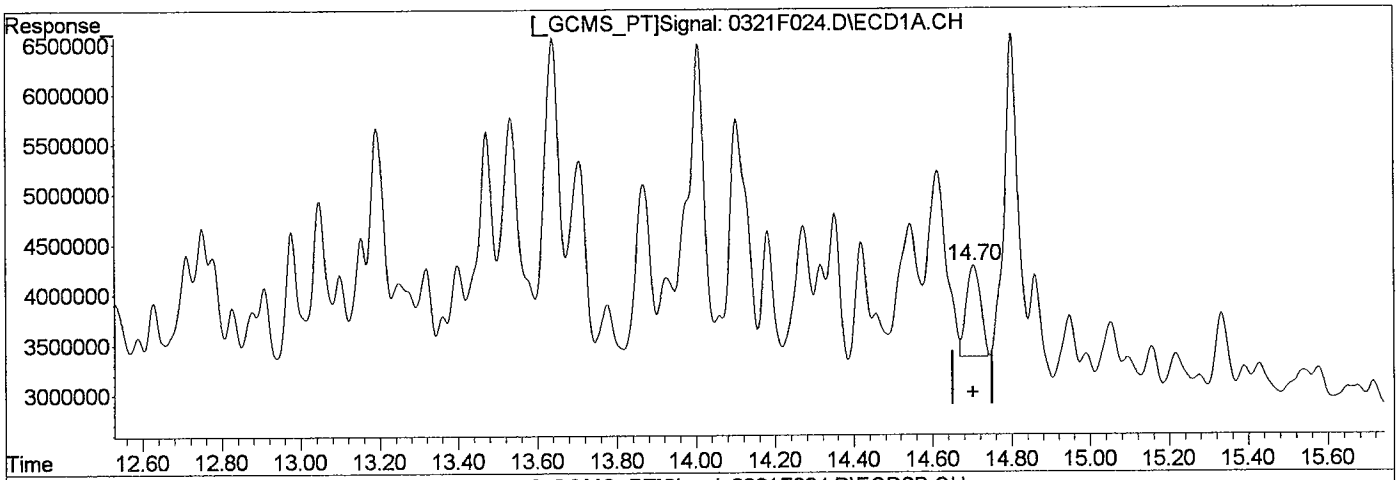
(+) = Expected Retention Time

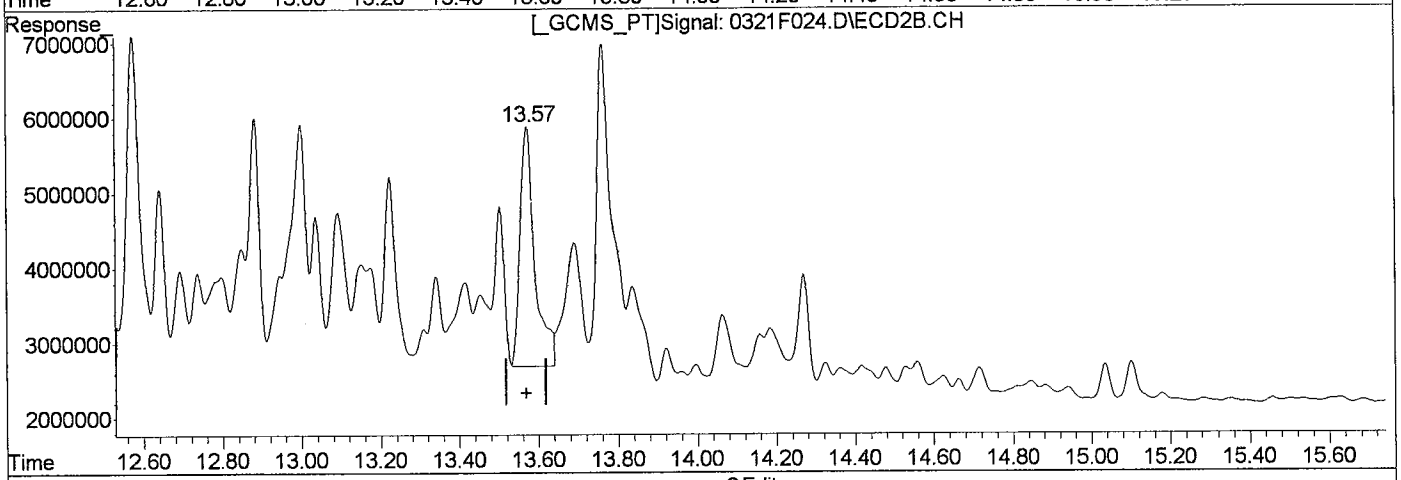
0321F024.D 031207-8081.M Thu Mar 22 08:48:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F024.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F024.D\ECD2B.CH
Acq On : 22 Mar 2007 12:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-6 Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:39 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1025.792ug/L m

response 2260611

(30) Toxaphene {6} #2

13.57min 992.917ug/L m

response 8255069

(+) = Expected Retention Time
0321F024.D 031207-8081.M Thu Mar 22 08:48:27 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F041.D
J:\GC23\DATA\032107\0321F042.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	370000	381000	3	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	50	305000	303000	-1	NA	± 15 %	AverageRF
alpha-BHC	50	53	474000	505000	7	NA	± 15 %	AverageRF
beta-BHC	50	51	214000	219000	2	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	443000	474000	7	NA	± 15 %	AverageRF
delta-BHC	50	47	405000	381000	-6	NA	± 15 %	AverageRF
Heptachlor	50	53	436000	463000	6	NA	± 15 %	AverageRF
Aldrin	50	53	383000	406000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	376000	388000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	372000	383000	3	NA	± 15 %	AverageRF
Endosulfan I	50	47	329000	308000	-6	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	363000	371000	2	NA	± 15 %	AverageRF
Dieldrin	50	52	348000	364000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	52	332000	348000	5	NA	± 15 %	AverageRF
Endrin	50	55	293000	320000	9	NA	± 15 %	AverageRF
Endosulfan II	50	50	302000	299000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	264000	282000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	264000	265000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	293000	300000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	54	276000	297000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	51	327000	334000	2	NA	± 15 %	AverageRF
Methoxychlor	50	55	154000	169000	10	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	2620	2840	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	2070	2210	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	3280	3580	9	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	4000	4270	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1000	2040	2110	4	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	2200	2270	3	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	6	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-89E

Calibration Date: 03/10/2007
Calibration ID: CAL6126
Analysis Lot: KWG0703862
Units: ug/L

File ID: J:\GC23\DATA\032107\0321F041.D\0321F041C.D
J:\GC23\DATA\032107\0321F042.D\0321F042C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	56	331000	370000	12		NA	± 15 %	AverageRF
Decachlorobiphenyl	50	54	376000	404000	7		NA	± 15 %	AverageRF
alpha-BHC	50	58	444000	512000	15	*	NA	± 15 %	AverageRF
beta-BHC	50	57	205000	232000	13		NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	57	422000	483000	15		NA	± 15 %	AverageRF
delta-BHC	50	51	385000	391000	1		NA	± 15 %	AverageRF
Heptachlor	50	58	423000	495000	17	*	NA	± 15 %	AverageRF
Aldrin	50	57	379000	435000	15		NA	± 15 %	AverageRF
Heptachlor Epoxide	50	56	373000	422000	13		NA	± 15 %	AverageRF
gamma-Chlordane	50	57	376000	426000	14		NA	± 15 %	AverageRF
Endosulfan I	50	51	335000	344000	3		NA	± 15 %	AverageRF
alpha-Chlordane	50	56	369000	416000	13		NA	± 15 %	AverageRF
Dieldrin	50	57	365000	414000	13		NA	± 15 %	AverageRF
4,4'-DDE	50	57	347000	398000	15		NA	± 15 %	AverageRF
Endrin	50	59	321000	379000	18	*	NA	± 15 %	AverageRF
Endosulfan II	50	54	324000	349000	7		NA	± 15 %	AverageRF
4,4'-DDD	50	57	291000	329000	13		NA	± 15 %	AverageRF
Endrin Aldehyde	50	54	287000	311000	9		NA	± 15 %	AverageRF
Endosulfan Sulfate	50	55	337000	373000	11		NA	± 15 %	AverageRF
4,4'-DDT	50	56	316000	357000	13		NA	± 15 %	AverageRF
Endrin Ketone	50	54	391000	423000	8		NA	± 15 %	AverageRF
Methoxychlor	50	58	178000	207000	16	*	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1000	7470	7720	3		NA	± 100 %	AverageRF
Toxaphene {2}	1000	1000	5510	5660	3		NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2950	3080	4		NA	± 100 %	AverageRF
Toxaphene {4}	1000	1000	3810	3960	4		NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3260	3450	6		NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	8310	8590	3		NA	± 100 %	AverageRF
Toxaphene	1000	1000	NA	NA	NA		4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\032107\0321F041.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 07:57
Date Quantitated: 03/22/2007 10:20
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	ICV

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032107\0321F041.D\0321F041C.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 07:57
Date Quantitated: 03/22/2007 10:20
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	1(1)

Primary Review: (m 3/22/07)

Secondary Review: 4-7/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F041.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F041.D\0321F041c.d			**Vial:**	4
Acqu Date:	03/22/2007 07:57	**Quant Date:**	03/22/2007 10:20	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.35	7.11	19046375	18483014	51.52	55.83			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	16.91	15.66	15155940	20179326	49.73	53.67			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC	9.05	8.13	25256192	25578999	53.27	57.55			
Hexachlorobenzene	9.18	7.96	20946748	21428445	50.29	55.35			
beta-BHC	10.06	9.15	10930308	11600561	51.02	56.64			
gamma-BHC (Lindane)	9.59	8.74	23704064	24162319	53.49	57.30			
delta-BHC	10.48	9.59	19034724	19528724	46.99	50.71			
Heptachlor	10.56	9.30	23172490	24736067	53.09	58.43			
Aldrin	11.07	9.79	20288963	21740727	52.99	57.33			
Isodrin	11.60	10.43	16573734	18094710	51.51	56.38			
Heptachlor Epoxide	11.77	10.65	19395713	21075350	51.59	56.45			
gamma-Chlordane	12.26	11.00	19126696	21317762	51.39	56.76			
Endosulfan I	12.40	11.23	15404826	17195295	46.88	51.39			
alpha-Chlordane	12.34	11.15	18529439	20786738	51.03	56.27			
Dieldrin	12.79	11.66	18188490	20688463	52.33	56.62			
4,4'-DDE	12.58	11.47	17395131	19896029m	52.33	57.26			
Endrin	13.14	12.13	15985623	18968146	54.54	59.08			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F041.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F041.D\0321F041c.d			**Vial:**	4
Acqu Date:	03/22/2007 07:57	**Quant Date:**	03/22/2007 10:20	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II	13.54	12.54	14947391	17436310	49.57	53.75			
4,4'-DDD	13.36	12.34	14106723	16452118	53.48	56.53			
Endrin Aldehyde	13.71	12.88	13235492	15561863	50.12	54.27			
Endosulfan Sulfate	14.13	13.18	14976492	18647505	51.18	55.38			
4,4'-DDT	13.82	12.74	14861206	17848540	53.78	56.48			
Endrin Ketone	14.75	14.06	16708207	21128278	51.04	54.05			
Methoxychlor	14.47	13.75	8460717	10359950	55.00	58.11			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F041.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.7E+5	3.8E+5	3.0			
alpha-BHC		MS	AverageRF	15		4.7E+5	5.1E+5	6.5			
Hexachlorobenzene		MS	AverageRF	15		4.2E+5	4.2E+5	0.6			
gamma-BHC (Lindane)		MS	AverageRF	15		4.4E+5	4.7E+5	7.0			
beta-BHC		MS	AverageRF	15		2.1E+5	2.2E+5	2.0			
delta-BHC		MS	AverageRF	15		4.1E+5	3.8E+5	-6.0			
Heptachlor		MS	AverageRF	15		4.4E+5	4.6E+5	6.2			
Aldrin		MS	AverageRF	15		3.8E+5	4.1E+5	6.0			
Isodrin		MS	AverageRF	15		3.2E+5	3.3E+5	3.0			
Heptachlor Epoxide		MS	AverageRF	15		3.8E+5	3.9E+5	3.2			
gamma-Chlordane		MS	AverageRF	15		3.7E+5	3.8E+5	2.8			
alpha-Chlordane		MS	AverageRF	15		3.6E+5	3.7E+5	2.1			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.1E+5	-6.2			
4,4'-DDE		MS	AverageRF	15		3.3E+5	3.5E+5	4.7			
Dieldrin		MS	AverageRF	15		3.5E+5	3.6E+5	4.7			
Endrin		MS	AverageRF	15		2.9E+5	3.2E+5	9.1			
4,4'-DDD		MS	AverageRF	15		2.6E+5	2.8E+5	7.0			
Endosulfan II		MS	AverageRF	15		3.0E+5	3.0E+5	-0.9			
Endrin Aldehyde		MS	AverageRF	15		2.6E+5	2.6E+5	0.2			
4,4'-DDT		MS	AverageRF	15		2.8E+5	3.0E+5	7.5			
Endosulfan Sulfate		MS	AverageRF	15		2.9E+5	3.0E+5	2.4			
Methoxychlor		MS	AverageRF	15		1.5E+5	1.7E+5	10.0			
Endrin Ketone		MS	AverageRF	15		3.3E+5	3.3E+5	2.1			
Decachlorobiphenyl		SURR	AverageRF	15		3.0E+5	3.0E+5	-0.5			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~4.3~~

4.1

SM 32207

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F041.D\0321F041C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		3.3E+5	3.7E+5	11.7			
Hexachlorobenzene		MS	AverageRF	15		3.9E+5	4.3E+5	10.7			
alpha-BHC		MS	AverageRF	15		4.4E+5	5.1E+5	15.1 *			
gamma-BHC (Lindane)		MS	AverageRF	15		4.2E+5	4.8E+5	14.6			
beta-BHC		MS	AverageRF	15		2.0E+5	2.3E+5	13.3			
Heptachlor		MS	AverageRF	15		4.2E+5	4.9E+5	16.9 *			
delta-BHC		MS	AverageRF	15		3.9E+5	3.9E+5	1.4			
Aldrin		MS	AverageRF	15		3.8E+5	4.3E+5	14.7			
Isodrin		MS	AverageRF	15		3.2E+5	3.6E+5	12.8			
Heptachlor Epoxide		MS	AverageRF	15		3.7E+5	4.2E+5	12.9			
gamma-Chlordane		MS	AverageRF	15		3.8E+5	4.3E+5	13.5			
alpha-Chlordane		MS	AverageRF	15		3.7E+5	4.2E+5	12.5			
Endosulfan I		MS	AverageRF	15		3.3E+5	3.4E+5	2.8			
4,4'-DDE		MS	AverageRF	15		3.5E+5	4.0E+5	14.5			
Dieldrin		MS	AverageRF	15		3.7E+5	4.1E+5	13.2			
Endrin		MS	AverageRF	15		3.2E+5	3.8E+5	18.2 *			
4,4'-DDD		MS	AverageRF	15		2.9E+5	3.3E+5	13.0			
Endosulfan II		MS	AverageRF	15		3.2E+5	3.5E+5	7.5			
4,4'-DDT		MS	AverageRF	15		3.2E+5	3.6E+5	13.0			
Endrin Aldehyde		MS	AverageRF	15		2.9E+5	3.1E+5	8.5			
Endosulfan Sulfate		MS	AverageRF	15		3.4E+5	3.7E+5	10.8			
Methoxychlor		MS	AverageRF	15		1.8E+5	2.1E+5	16.2 *			
Endrin Ketone		MS	AverageRF	15		3.9E+5	4.2E+5	8.1			
Decachlorobiphenyl		SURR	AverageRF	15		3.8E+5	4.0E+5	7.3			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~11.8~~

11.9
SM 3/22/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F041.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F041.D\ECD2B.CH
Acq On : 22 Mar 2007 7:57 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 09:19:59 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.35	7.11	19046375	18483014	51.519	55.831
24)	s	Decachlorobiphen	16.91	15.66	15155940	20179326	49.732	53.671
		Target Compounds						
2)		alpha-BHC	9.05	8.13	25256192	25578999	53.270	57.552
3)		Hexachlorobenzen	9.18	7.96	20946748	21428445	50.289	55.351
4)		beta-BHC	10.06	9.15	10930308	11600561	51.016	56.642
5)		gamma-BHC (Linda	9.59	8.74	23704064	24162319	53.494	57.304
6)		delta-BHC	10.48	9.59	19034724	19528724	46.993	50.712
7)		Heptachlor	10.56	9.30	23172490	24736067	53.089	58.427
8)		Aldrin	11.07	9.79	20288963	21740727	52.986	57.325
9)		Isodrin	11.60	10.43	16573734	18094710	51.510	56.377
10)		Heptachlor Epoxi	11.77	10.65	19395713	21075350	51.590	56.449
11)		gamma-Chlordane	12.26	11.00	19126696	21317762	51.388	56.764
12)		Endosulfan I	12.40	11.23	15404826	17195295	46.880	51.390
13)		alpha-Chlordane	12.34	11.15	18529439	20786738	51.029	56.267
14)		Dieldrin	12.79	11.66	18188490	20688463	52.327	56.623
15)		4,4'-DDE	12.58	11.47	17395131	19896029	52.333	57.261m
16)		Endrin	13.14	12.13	15985623	18968146	54.539	59.081
17)		Endosulfan II	13.54	12.54	14947391	17436310	49.573	53.745
18)		4,4'-DDD	13.36	12.34	14106723	16452118	53.483	56.525
19)		Endrin Aldehyde	13.71	12.88	13235492	15561863	50.118	54.270
20)		Endosulfan Sulfa	14.13	13.18	14976492	18647505	51.176	55.384
21)		4,4'-DDT	13.82	12.74	14861206	17848540	53.775	56.479
22)		Endrin Ketone	14.75	14.06	16708207	21128278	51.043	54.048
23)		Methoxychlor	14.47	13.75	8460717	10359950	55.000	58.106

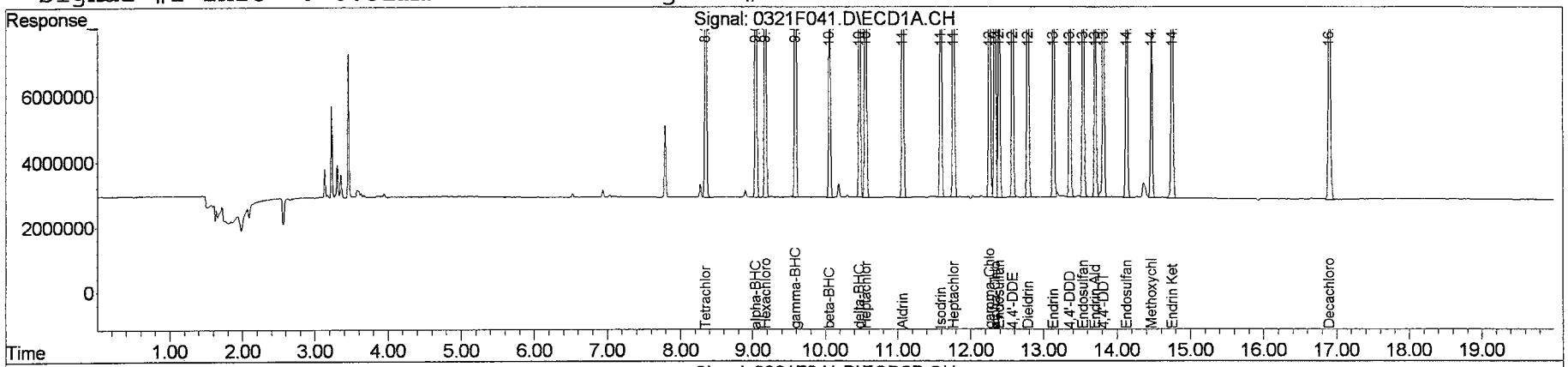
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

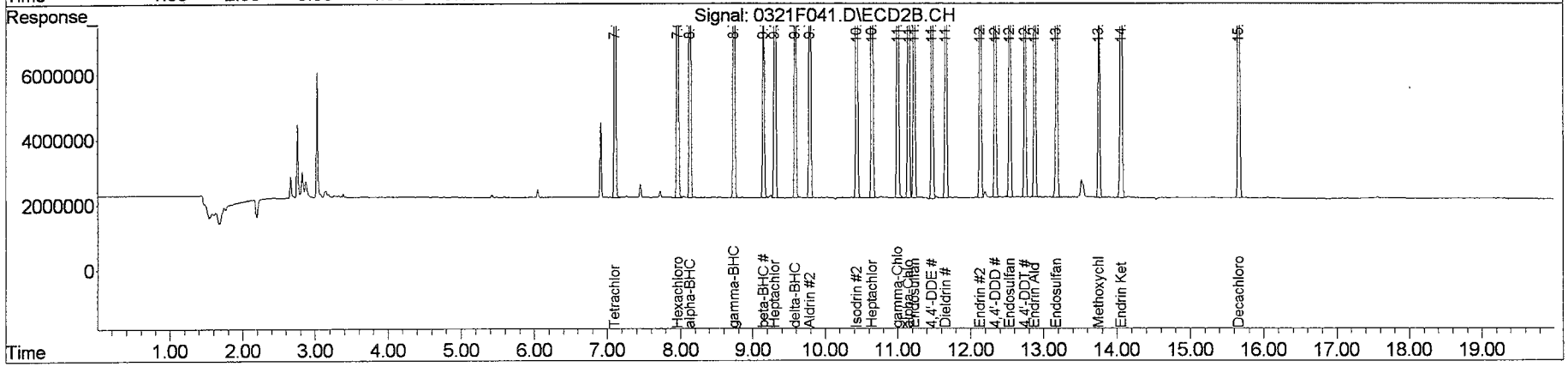
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F041.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F041.D\ECD2B.CH
Acq On : 22 Mar 2007 7:57 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



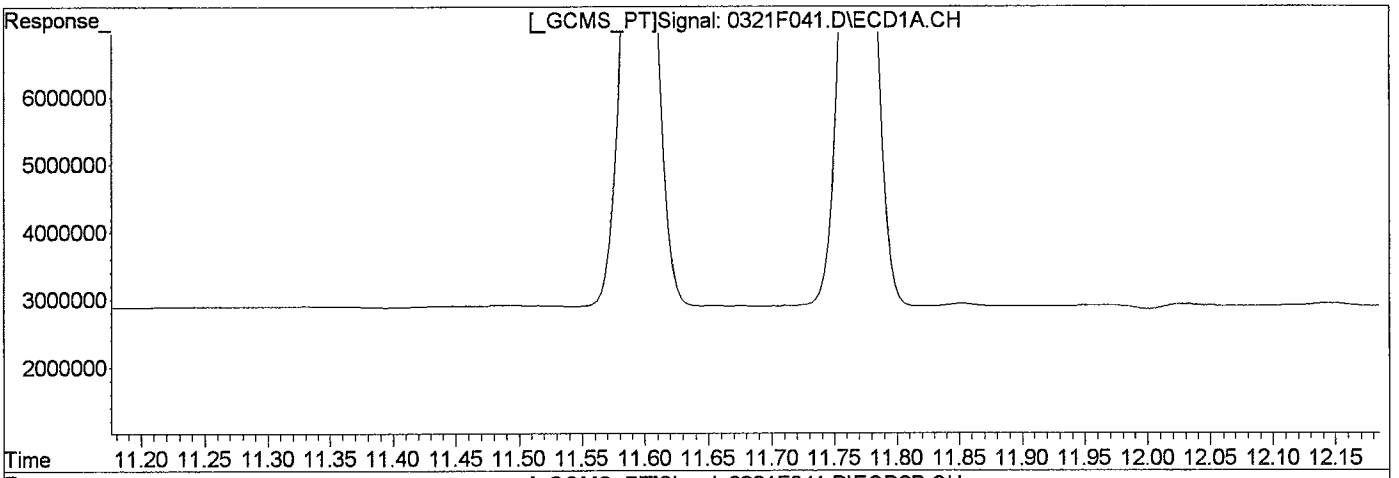


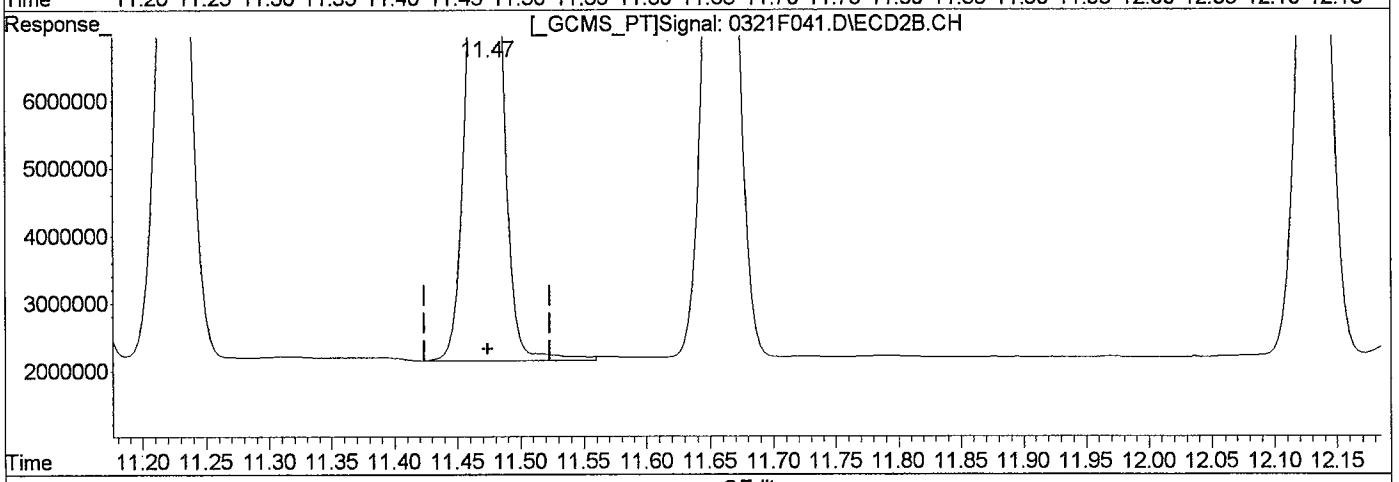
006

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F041.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F041.D\ECD2B.CH
Acq On : 22 Mar 2007 7:57 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 9:20 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.58min 52.333ug/L

response 17395131

(15) 4,4'-DDE #2

11.47min 58.076ug/L

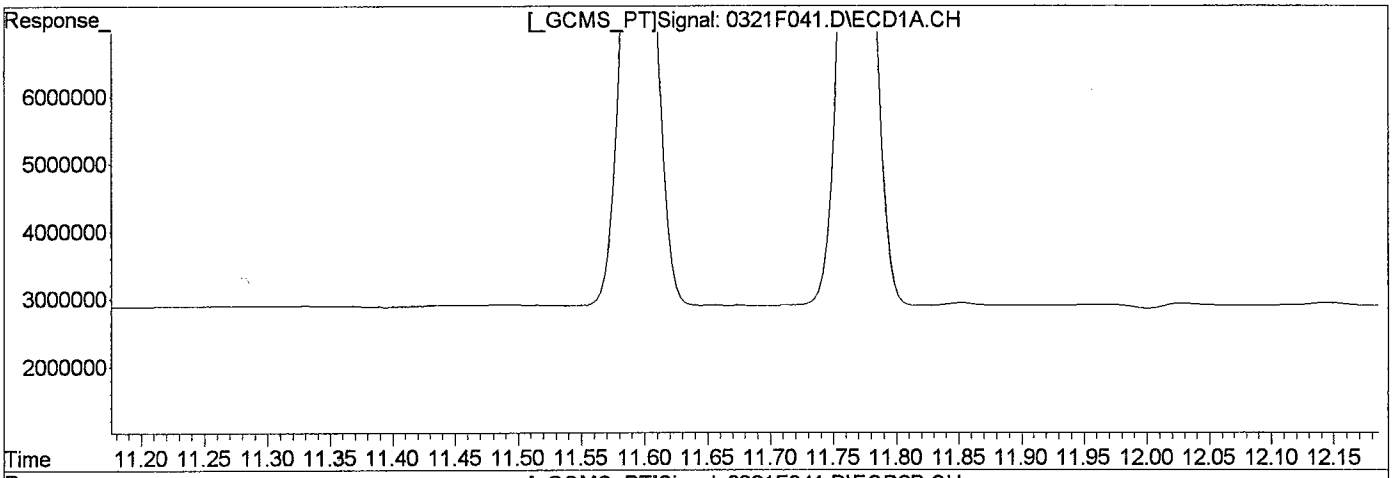
response 20179345

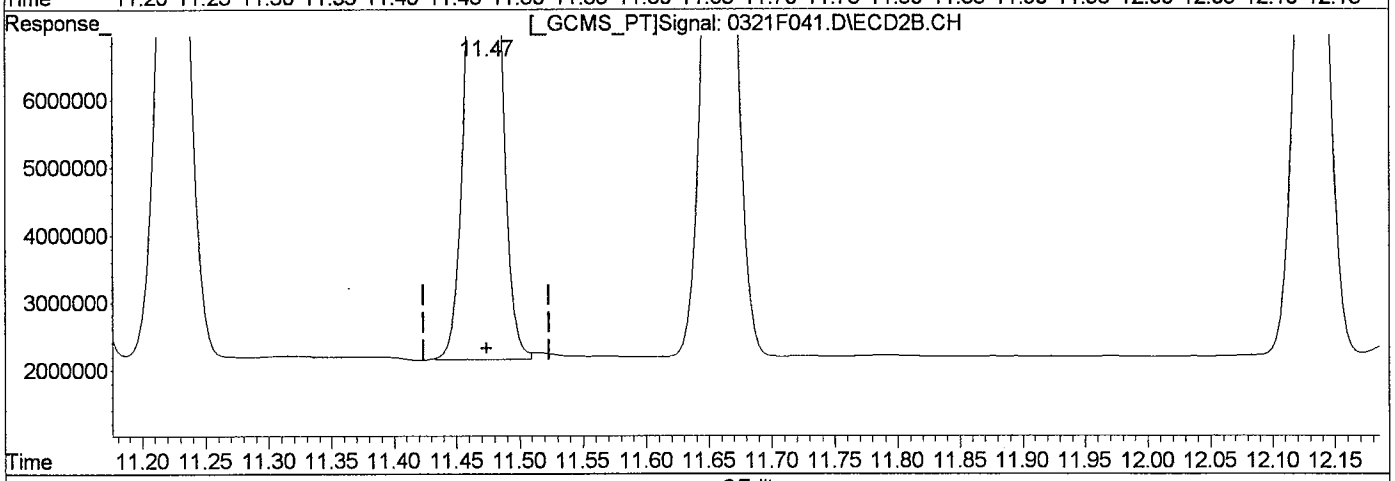
(+) = Expected Retention Time
0321F041.D 031207-8081.M Thu Mar 22 10:20:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F041.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\032107\0321F041.D\ECD2B.CH
Acq On : 22 Mar 2007 7:57 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-88a | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 9:20 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.58min 52.333ug/L

response 17395131

(15) 4,4'-DDE #2

11.47min 57.261ug/L m

response 19896029

(+) = Expected Retention Time
0321F041.D 031207-8081.M Thu Mar 22 10:20:59 2007

Exception Report

Data File: J:\GC23\DATA\032107\0321F042.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 08:24
Date Quantitated: 03/22/2007 10:23
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	IC

Primary Review: [illegible]

Secondary Review: [illegible] 7/23 [illegible]

Exception Report

Data File: J:\GC23\DATA\032107\0321F042.D\0321F042C.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 08:24
Date Quantitated: 03/22/2007 10:23
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	ICAL

Primary Review: [illegible] 3/22/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F042.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F042.D\0321F042c.d			**Vial:**	5
Acqu Date:	03/22/2007 08:24	**Quant Date:**	03/22/2007 10:23	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F042.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F042.D\0321F042c.d			**Vial:**	5
Acqu Date:	03/22/2007 08:24	**Quant Date:**	03/22/2007 10:23	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,062	1,039			
Toxaphene {1}	12.97	12.37	2841194m	7720770	1,083	1,033			
Toxaphene {2}	13.04	12.44	2205220m	5661014m	1,065	1,027			
Toxaphene {3}	13.19	12.64	3581480m	3079173	1,091	1,044			
Toxaphene {4}	13.86	13.00	4266950m	3964148	1,065	1,039			
Toxaphene {5}	14.18	13.09	2112908m	3445593	1,035	1,056			
Toxaphene {6}	14.70	13.57	2273432m	8586578	1,032	1,033			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F042.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,062	1,000	6.2
Toxaphene {1}		MULTI	AverageRF	100		2.6E+3	2.8E+3	8.3			
Toxaphene {2}		MULTI	AverageRF	100		2.1E+3	2.2E+3	6.5			
Toxaphene {3}		MULTI	AverageRF	100		3.3E+3	3.6E+3	9.1			
Toxaphene {4}		MULTI	AverageRF	100		4.0E+3	4.3E+3	6.5			
Toxaphene {5}		MULTI	AverageRF	100		2.0E+3	2.1E+3	3.5			
Toxaphene {6}		MULTI	AverageRF	100		2.2E+3	2.3E+3	3.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~6.2~~

6.1
h 3/22/07

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F042.D\0321F042C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,039	1,000	3.9
Toxaphene {1}		MULTI	AverageRF	100		7.5E+3	7.7E+3	3.3			
Toxaphene {2}		MULTI	AverageRF	100		5.5E+3	5.7E+3	2.7			
Toxaphene {3}		MULTI	AverageRF	100		2.9E+3	3.1E+3	4.4			
Toxaphene {4}		MULTI	AverageRF	100		3.8E+3	4.0E+3	3.9			
Toxaphene {5}		MULTI	AverageRF	100		3.3E+3	3.4E+3	5.6			
Toxaphene {6}		MULTI	AverageRF	100		8.3E+3	8.6E+3	3.3			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~3.9~~

11.9
3/22/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18:14 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	12.97	12.37	2841194	7720770	1082.978m	1033.028
26)	Toxaphene {2}	13.04	12.44	2205220	5661014	1064.610m	1026.648m
27)	Toxaphene {3}	13.19	12.64	3581480	3079173	1090.935m	1044.459
28)	Toxaphene {4}	13.86	13.00	4266950	3964148	1065.461m	1039.280
29)	Toxaphene {5}	14.18	13.09	2112908	3445593	1035.343m	1056.049
30)	Toxaphene {6}	14.70	13.57	2273432	8586578	1031.610m	1032.791

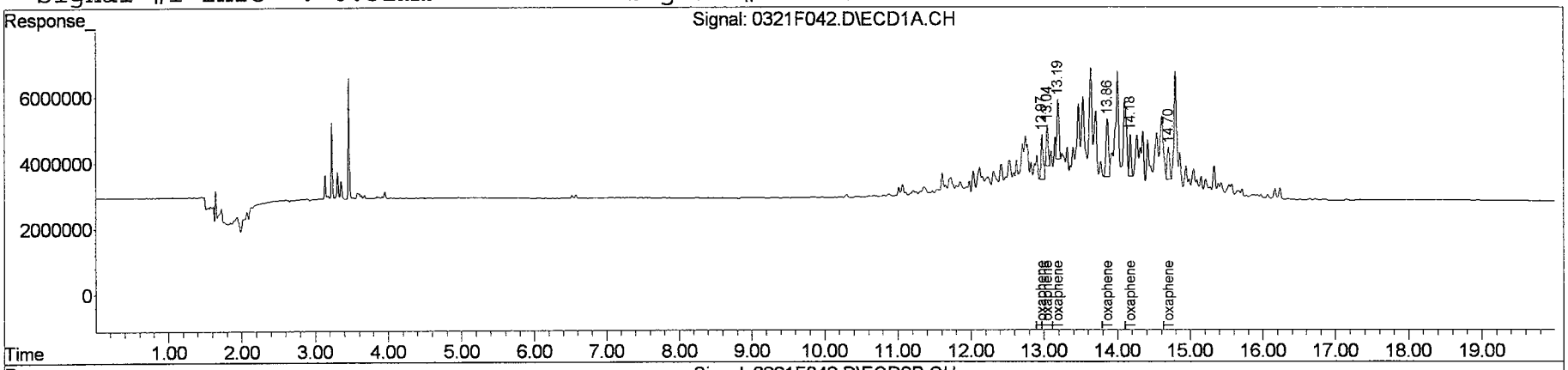
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

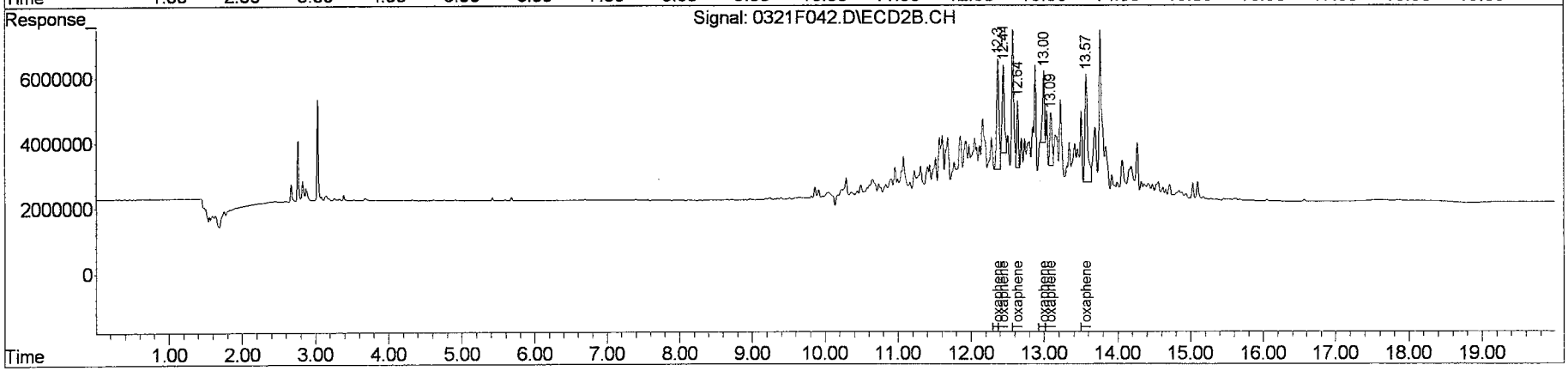
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:23 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

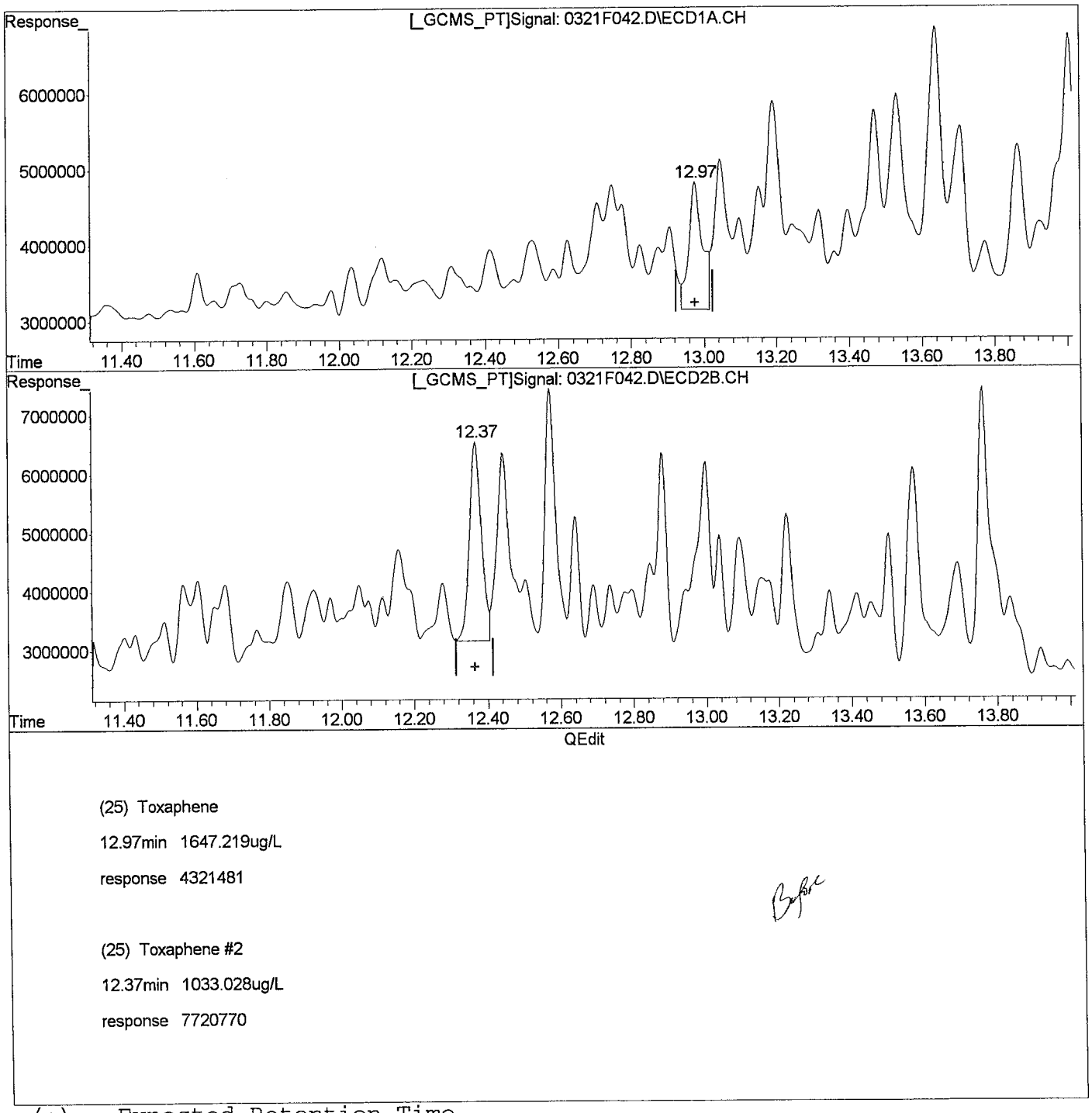




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.97min 1647.219ug/L

response 4321481

(25) Toxaphene #2

12.37min 1033.028ug/L

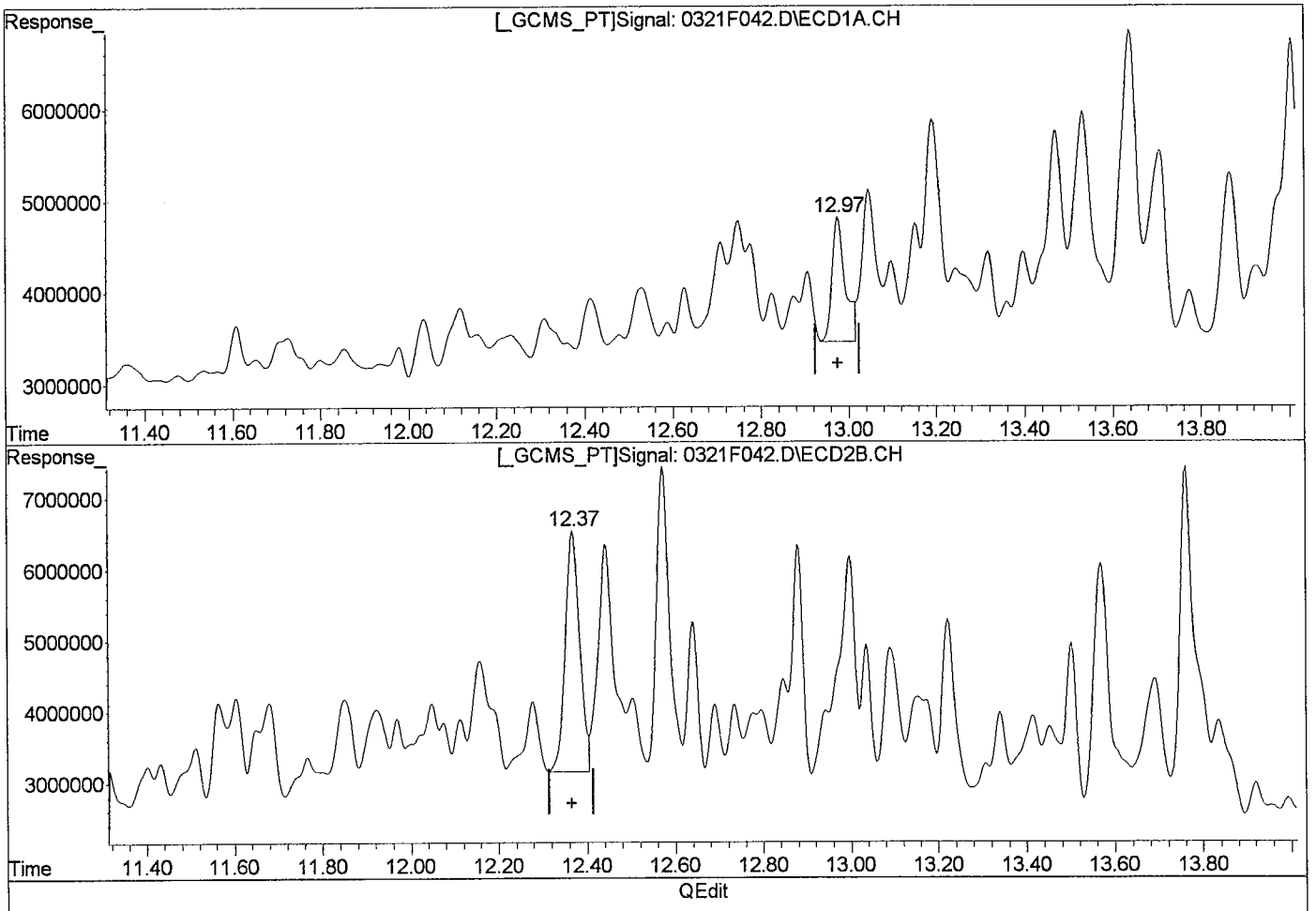
response 7720770

(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:21:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



(25) Toxaphene

12.97min 1082.978ug/L m

response 2841194

(25) Toxaphene #2

12.37min 1033.028ug/L

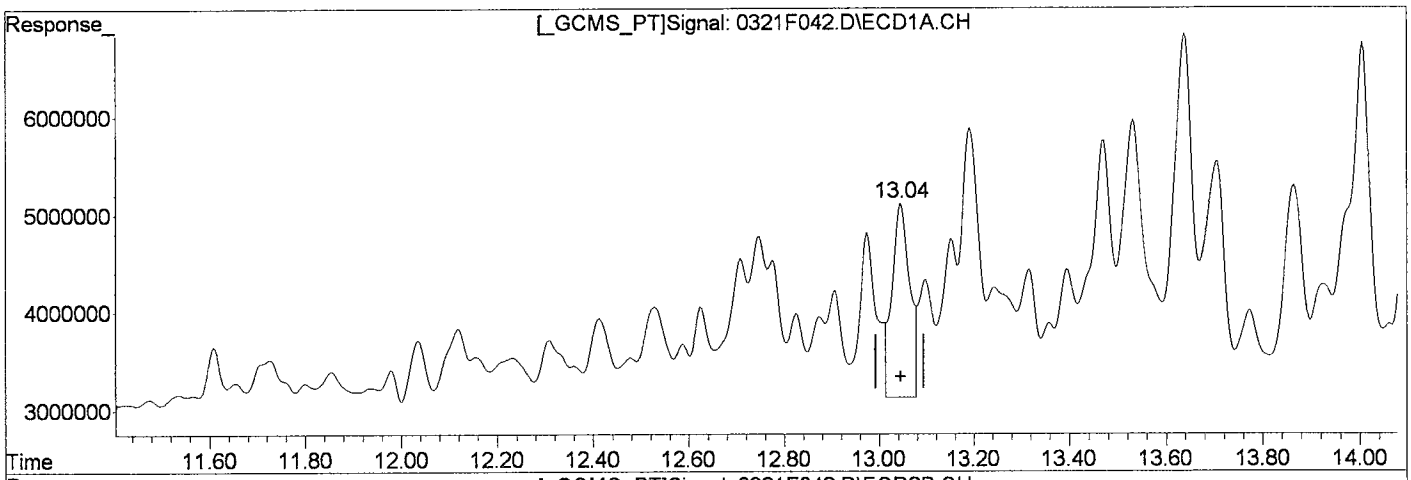
response 7720770

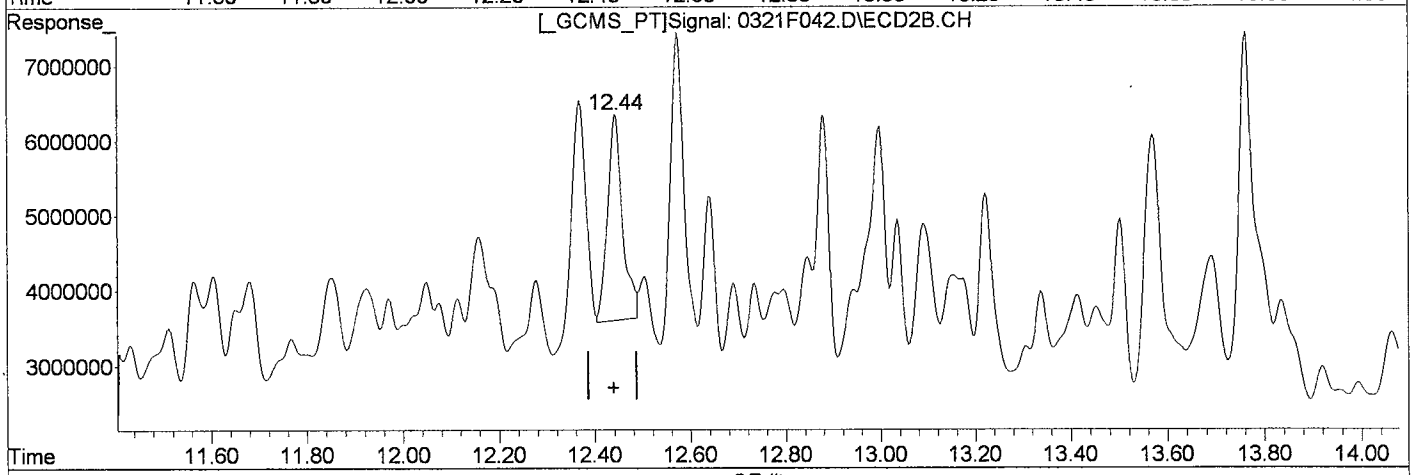
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:21:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 2445.654ug/L

response 5065900

Before

(26) Toxaphene {2} #2

12.44min 1066.150ug/L

response 5878830

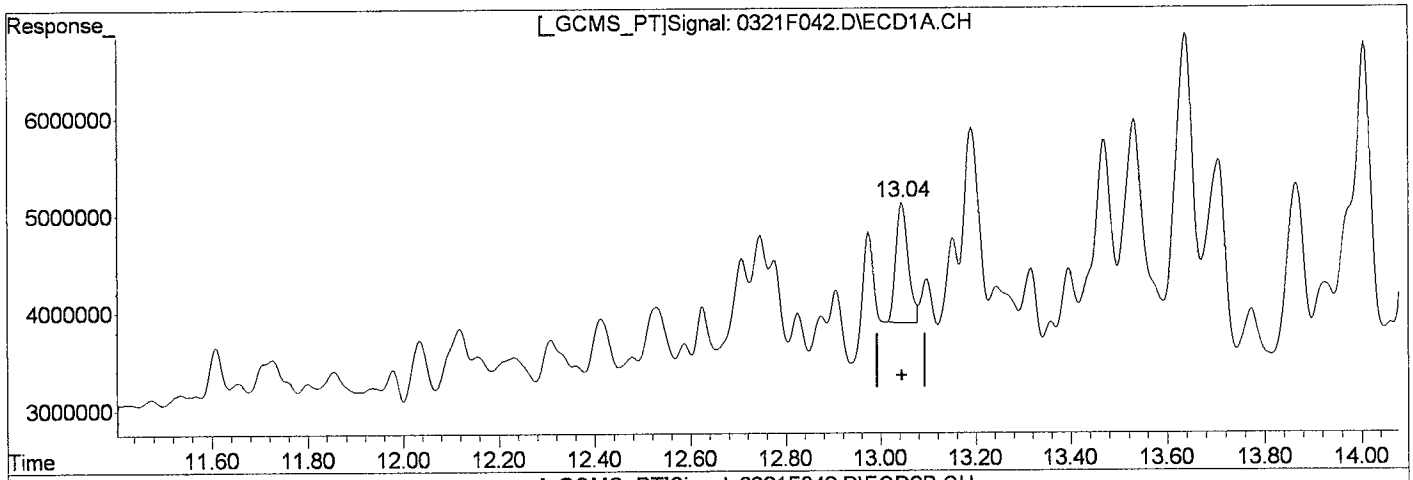
(+) = Expected Retention Time

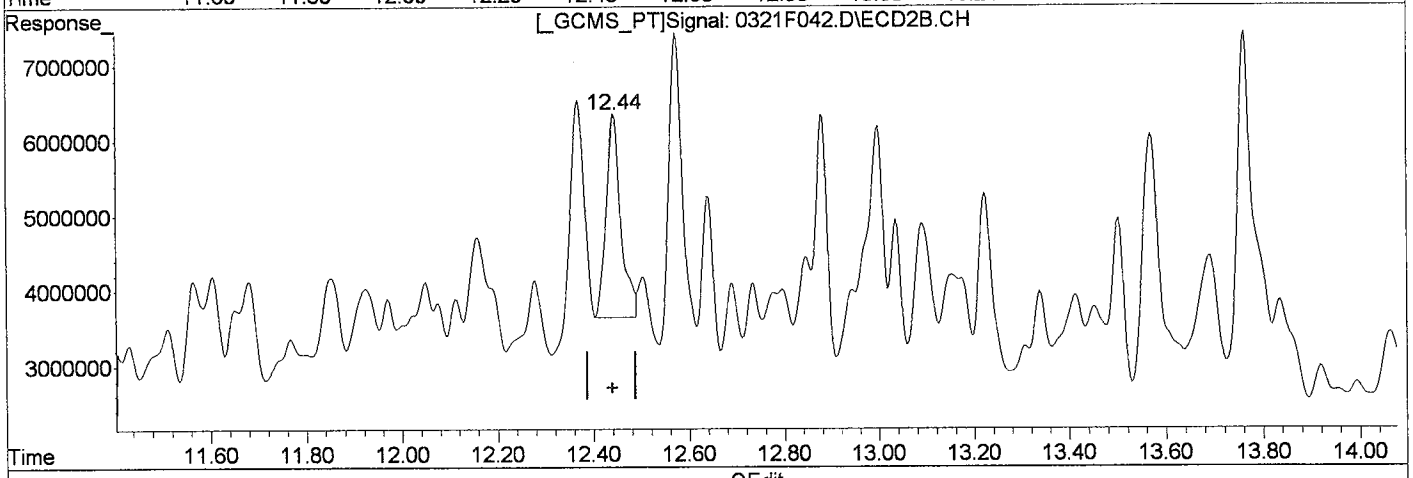
0321F042.D 031207-8081.M Thu Mar 22 10:22:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.04min 1064.610ug/L m

response 2205220

(26) Toxaphene {2} #2

12.44min 1026.648ug/L m

response 5661014

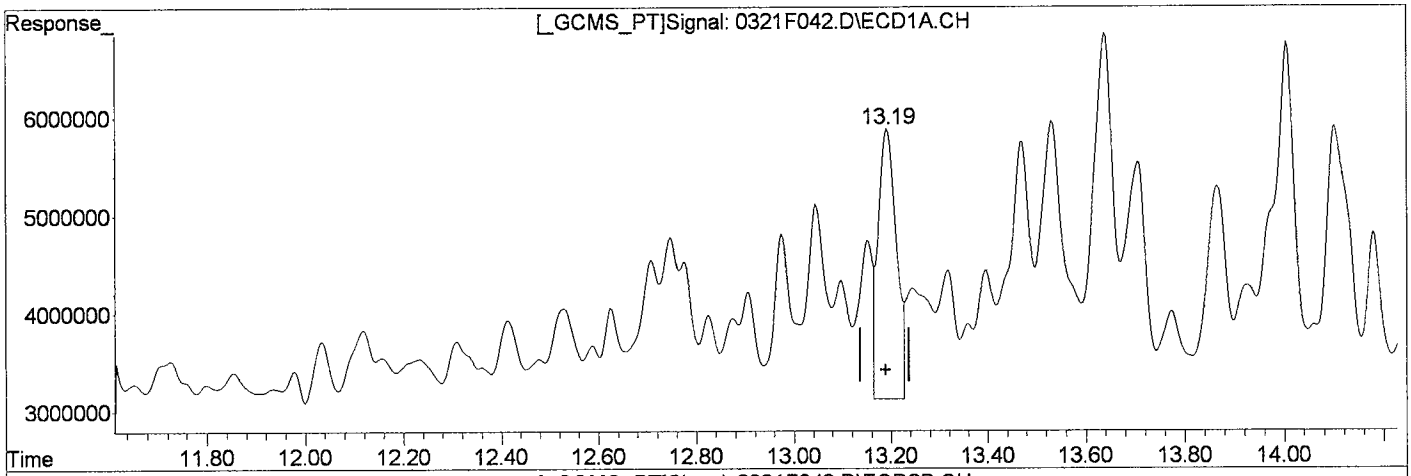
baseline
After AC 3/22/07

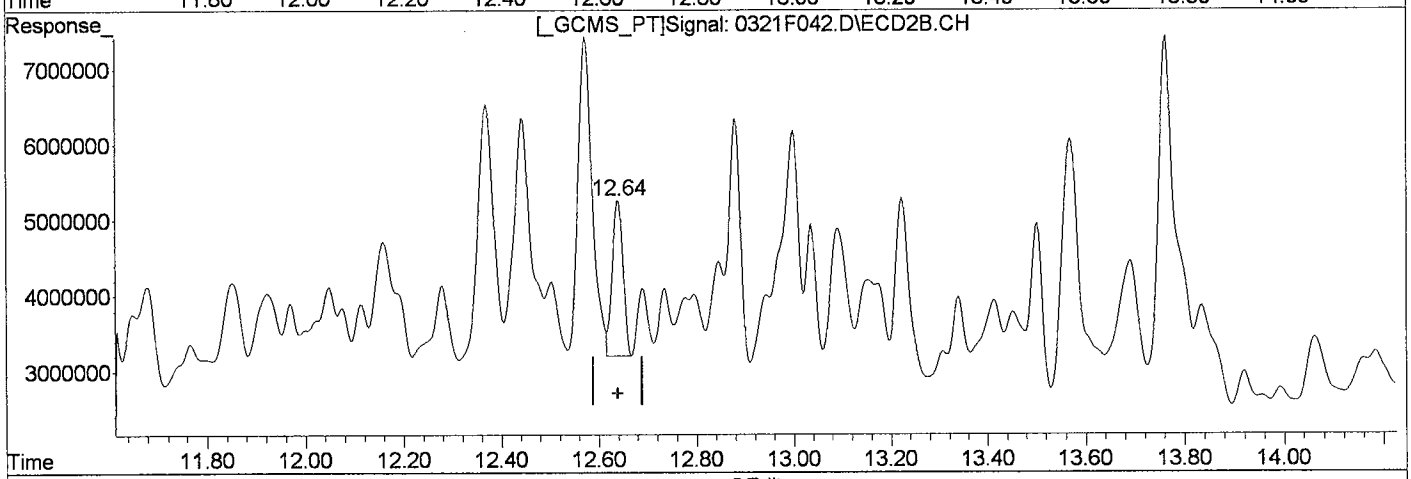
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:22:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 2193.879ug/L

response 7202386

(27) Toxaphene {3} #2

12.64min 1044.459ug/L

response 3079173

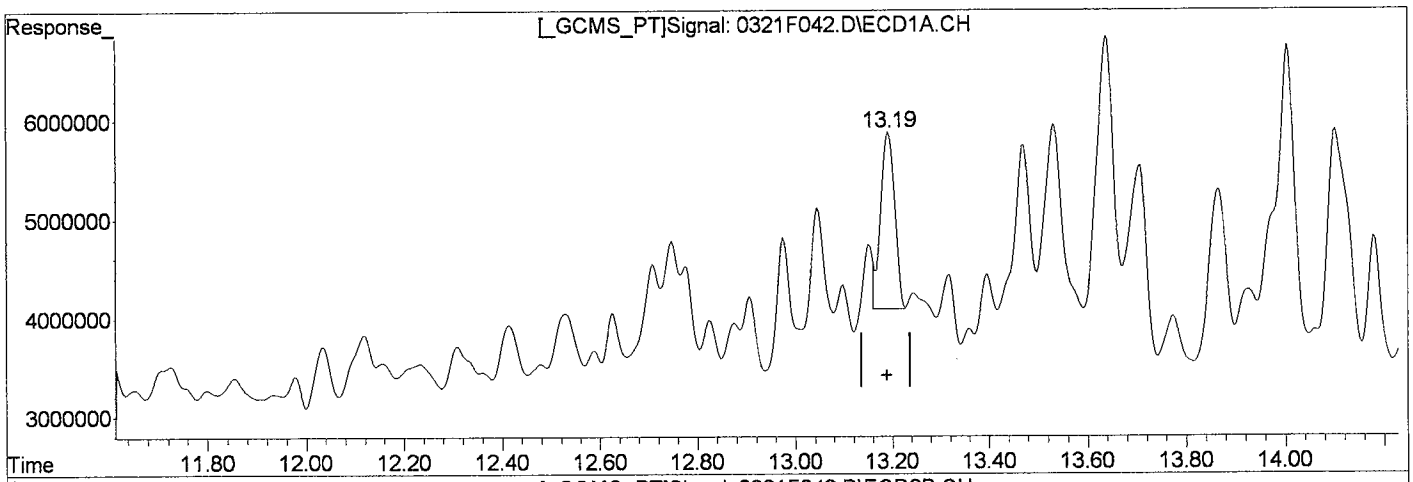
(+) = Expected Retention Time

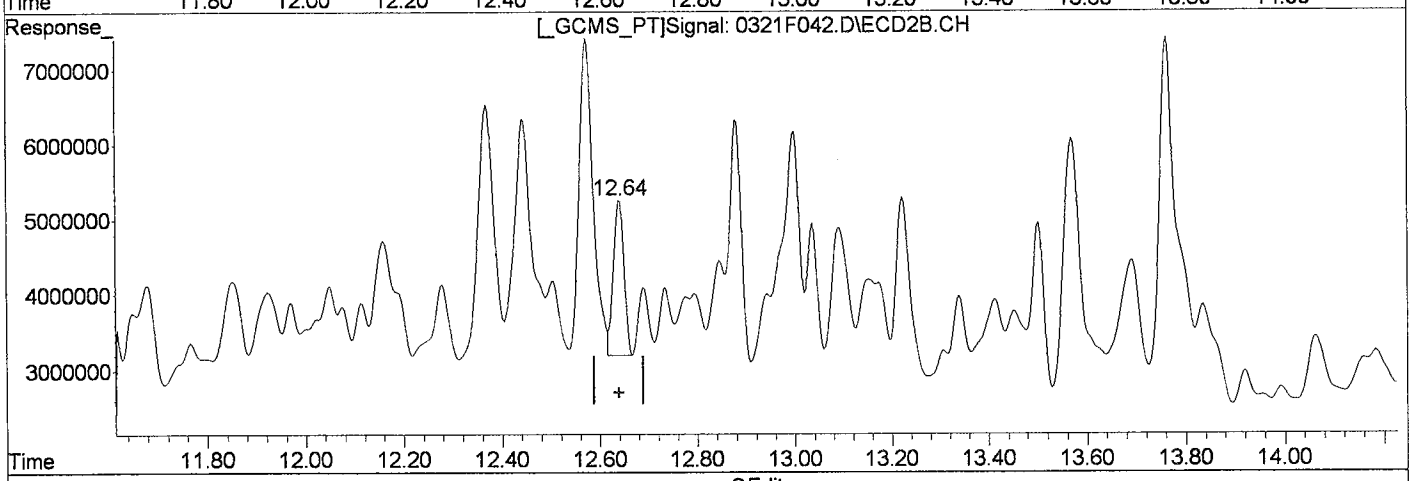
0321F042.D 031207-8081.M Thu Mar 22 10:22:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.19min 1090.935ug/L m

response 3581480

(27) Toxaphene {3} #2

12.64min 1044.459ug/L

response 3079173

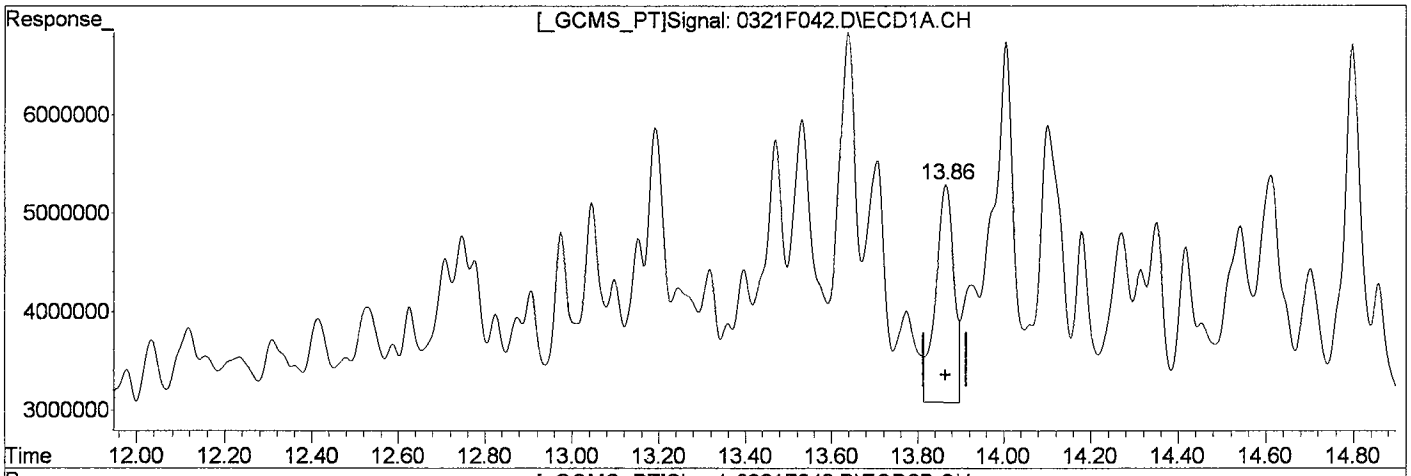
base co
3/22/07

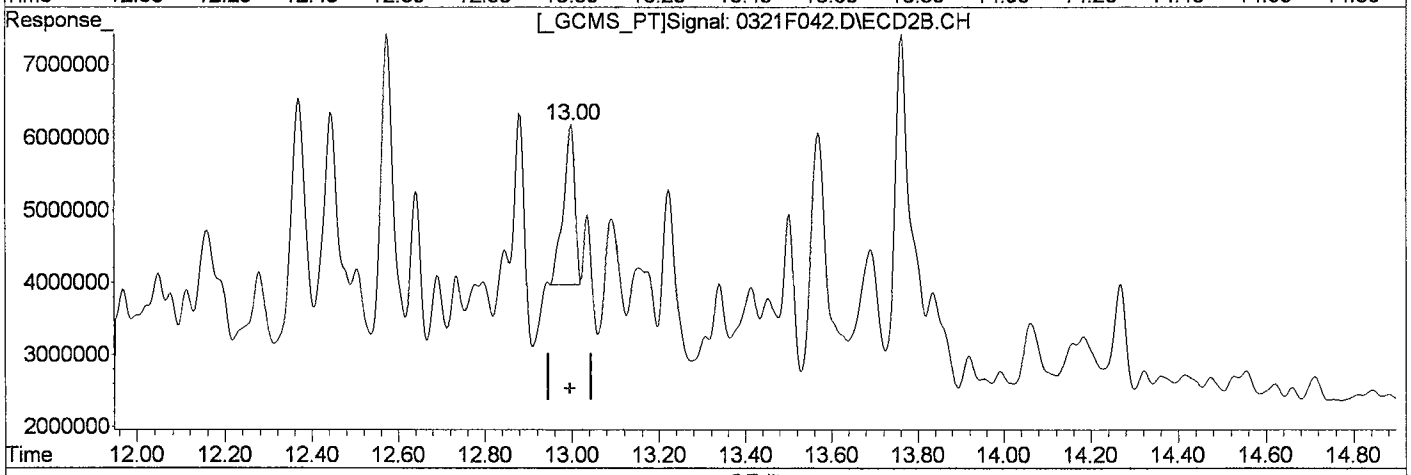
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:22:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 1635.214ug/L

response 6548692

(28) Toxaphene {4} #2

13.00min 1039.280ug/L

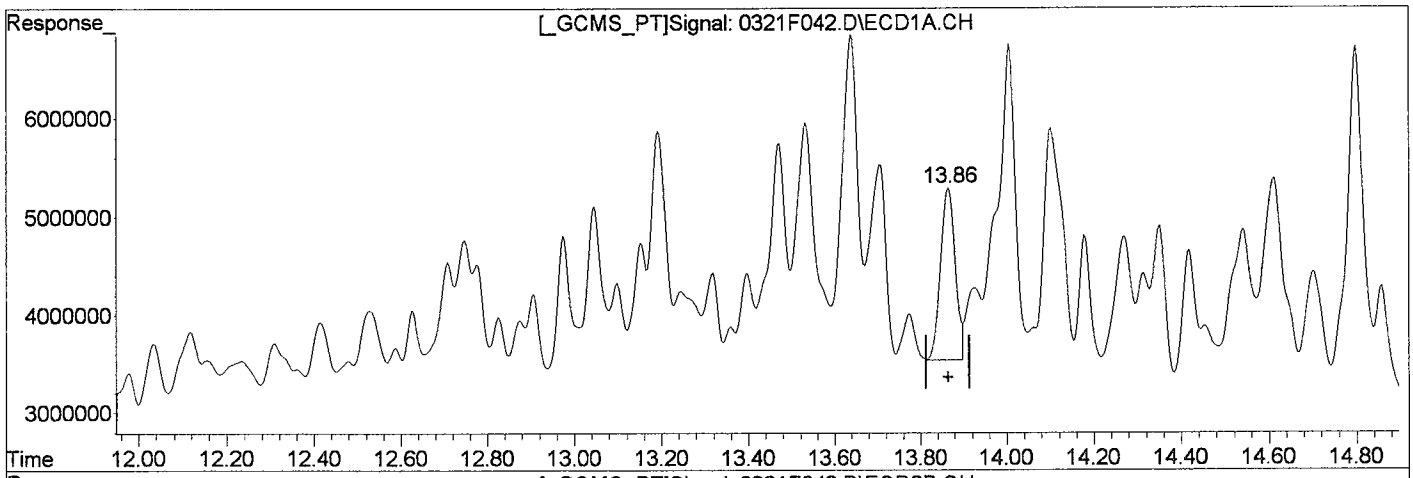
response 3964148

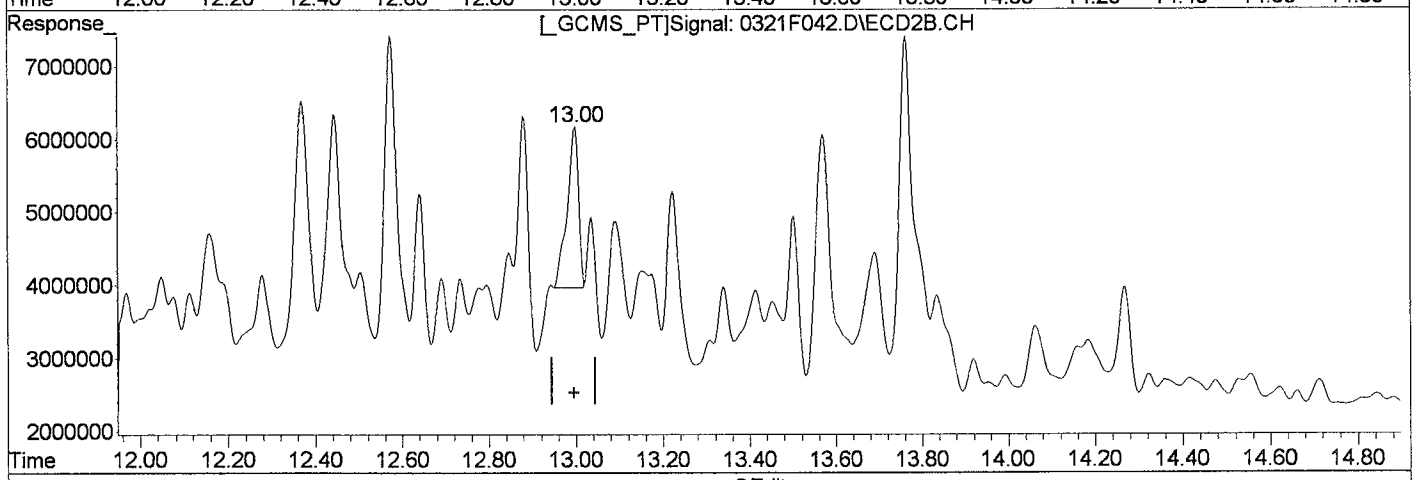
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:22:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

13.86min 1065.461ug/L m

response 4266950

(28) Toxaphene {4} #2

13.00min 1039.280ug/L

response 3964148

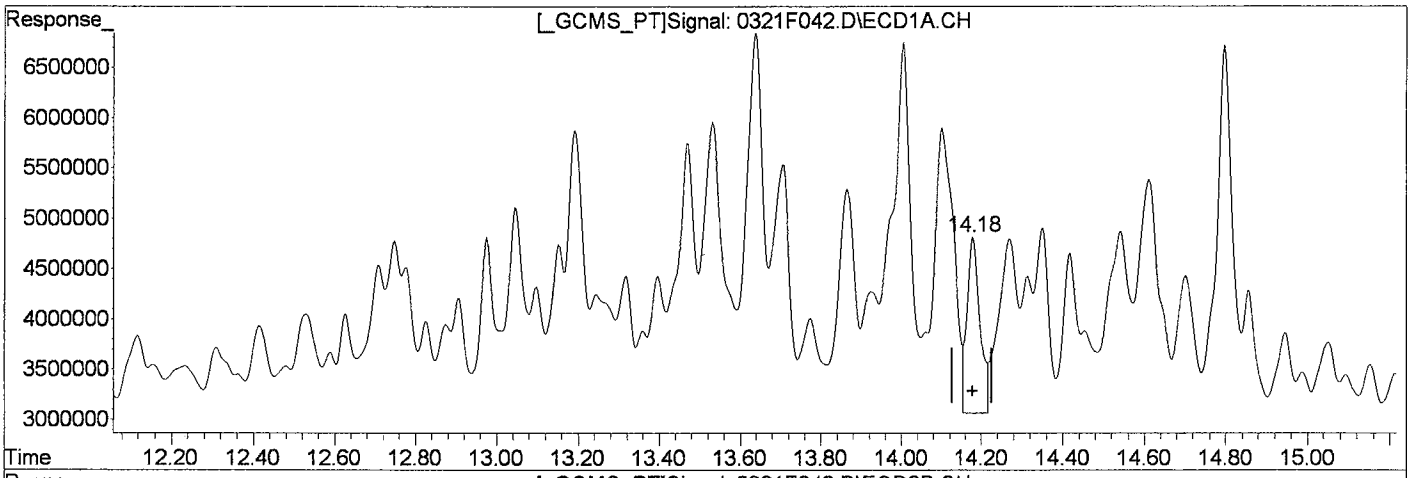
baseline after 3/22 tox
3-23-07

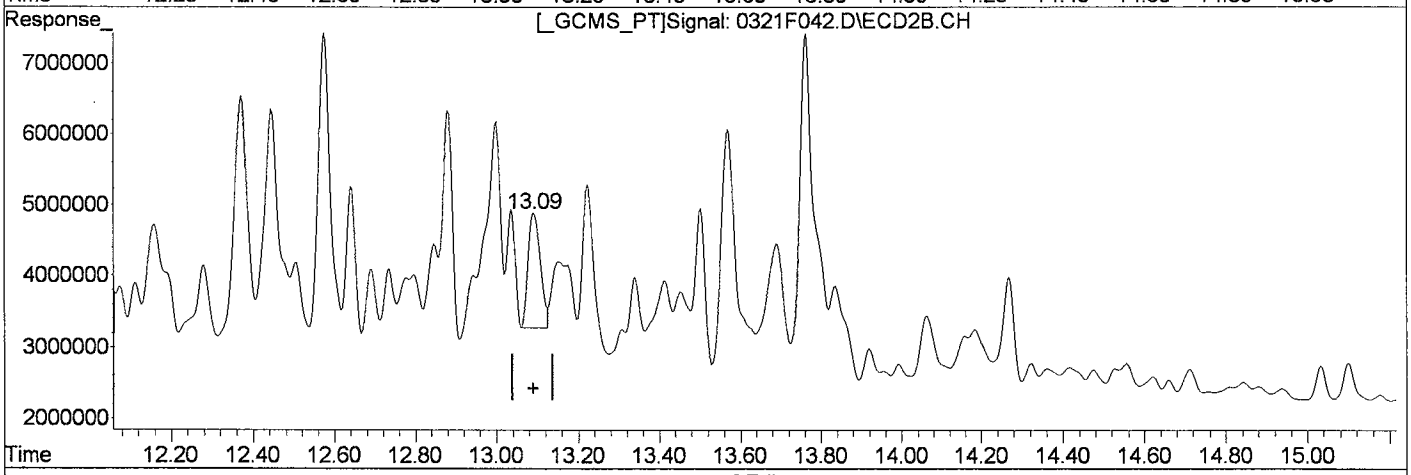
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:22:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 1934.482ug/L

response 3947852

(29) Toxaphene {5} #2

13.09min 1056.049ug/L

response 3445593

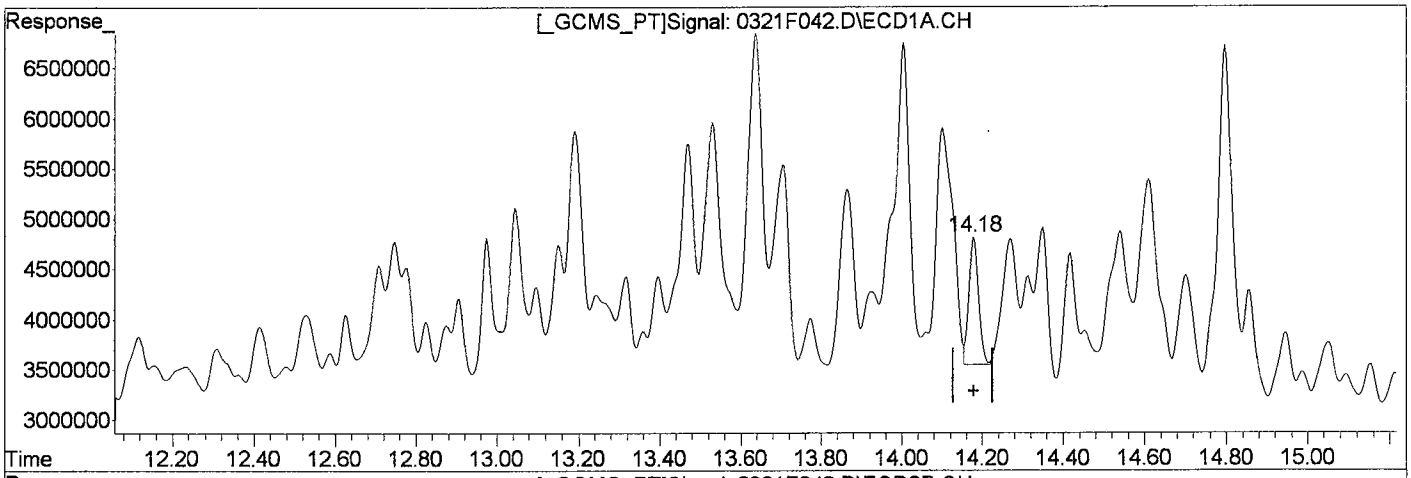
(+) = Expected Retention Time

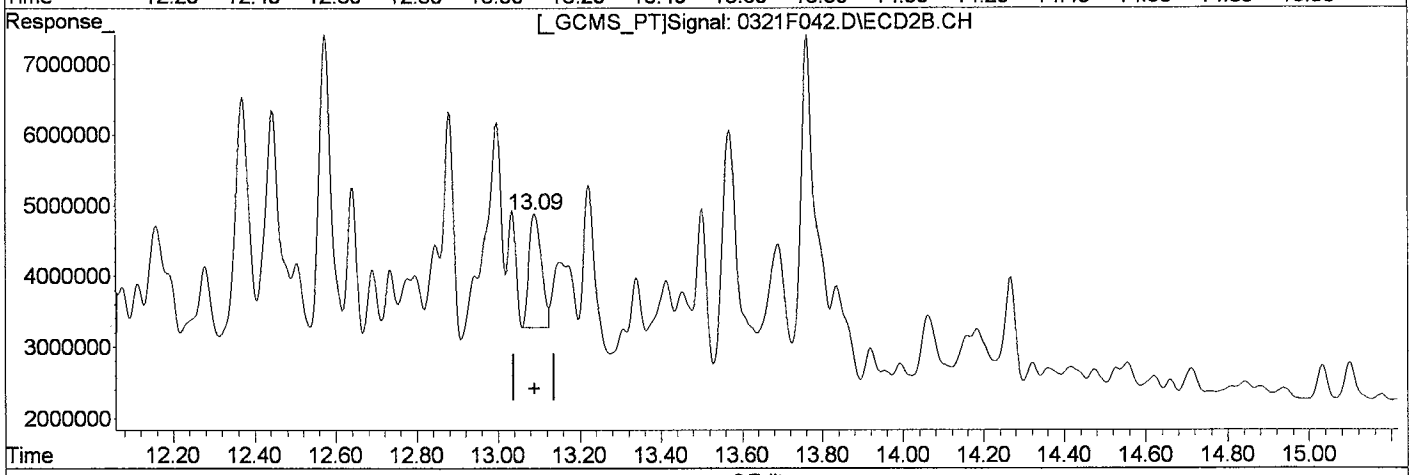
0321F042.D 031207-8081.M Thu Mar 22 10:22:47 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.18min 1035.343ug/L m

response 2112908

(29) Toxaphene {5} #2

13.09min 1056.049ug/L

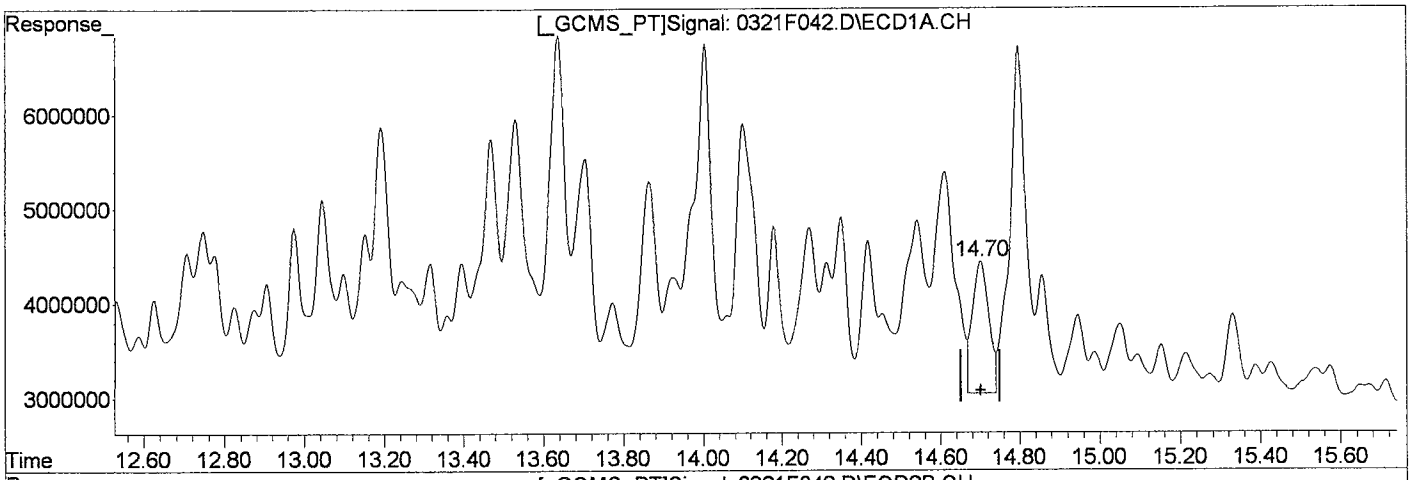
response 3445593

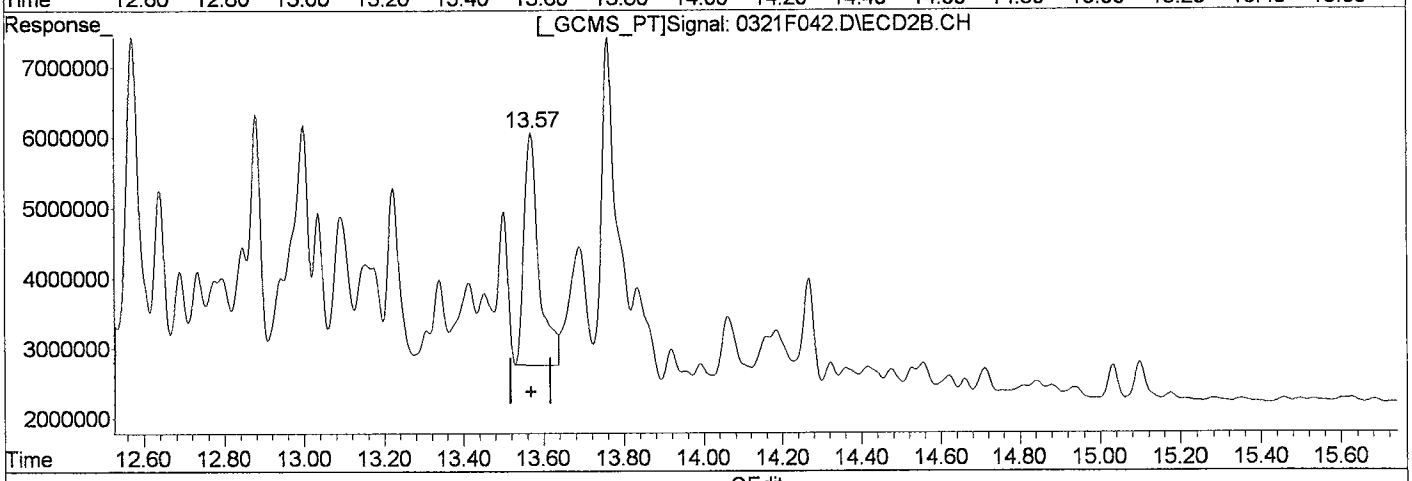
(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:23:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.70min 1883.930ug/L

response 4151750

(30) Toxaphene {6} #2

13.57min 1032.791ug/L

response 8586578

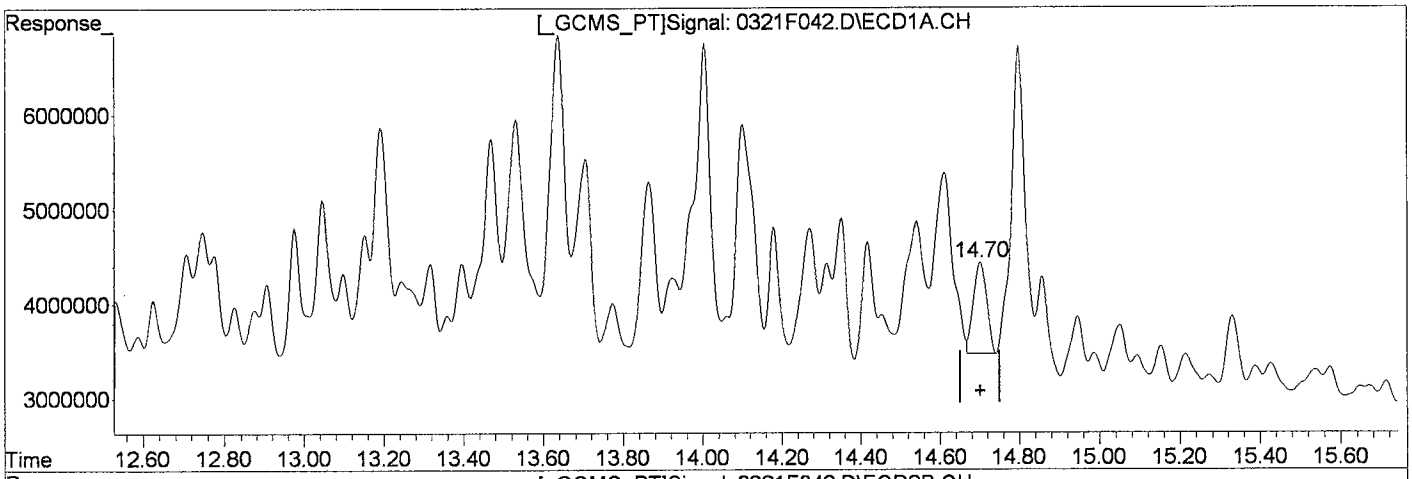
(+) = Expected Retention Time

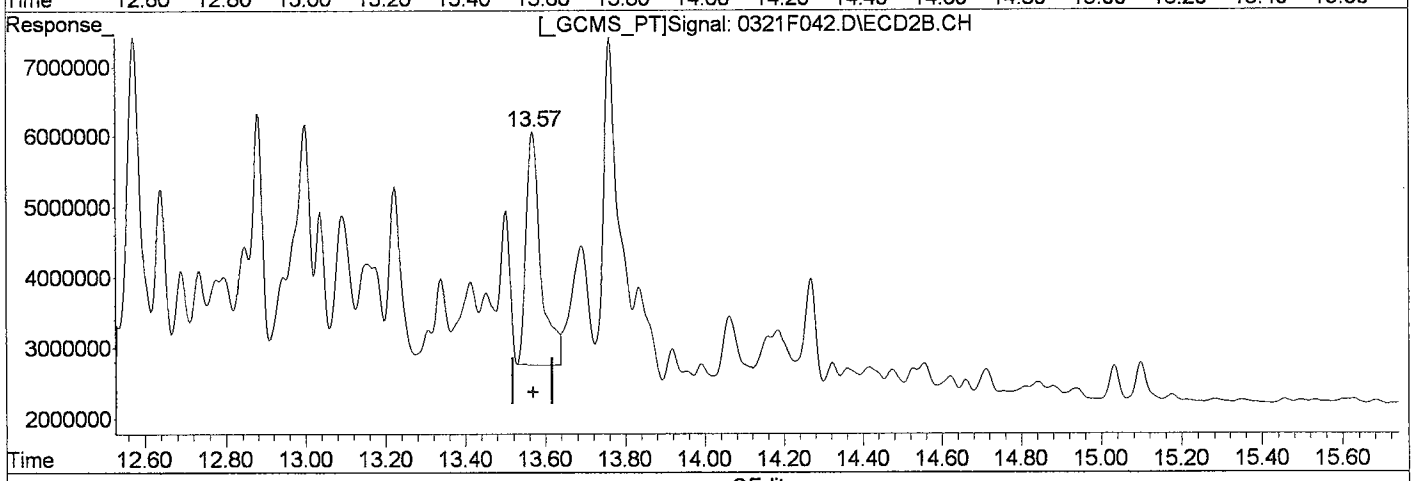
0321F042.D 031207-8081.M Thu Mar 22 10:23:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F042.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\032107\0321F042.D\ECD2B.CH
Acq On : 22 Mar 2007 8:24 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-89e | KWG0703862-9 Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





(30) Toxaphene {6}

14.70min 1031.610ug/L m

response 2273432

(30) Toxaphene {6} #2

13.57min 1032.791ug/L

response 8586578

(+) = Expected Retention Time
0321F042.D 031207-8081.M Thu Mar 22 10:23:13 2007

Organic Analysis:
Organochlorine Pesticides

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703478	**Prep Method:**	EPA 3535	**Prep Date:**	03/09/07 00:00
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K0701703-001	DAEGW104C1	8081A PEST_OC	WATER	1050 mL	2mL	
KWG0703478-1	Lab Control Sample	8081A PEST_OC	WATER	1000		
KWG0703478-2	Duplicate Lab Control Sampl	8081A PEST_OC	WATER			
KWG0703478-3	Method Blank	8081A PEST_OC	WATER	1050		

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701703-001	582065	GCPS5-88-B	100uL			PMulheri
KWG0703478-1	582066	GCPS5-88-B	100uL	PCB4-88-D	50uL	PMulheri
KWG0703478-2	582067	GCPS5-88-B	100uL	PCB4-88-D	50uL	PMulheri
KWG0703478-3	582068	GCPS5-88-B	100uL			PMulheri

Comments:

Started By: ALundqui Assisted By: Training Yes No

Completed By: ALundqui Assisted By: Yes No

Reviewed By: Date: 3/22/07 Storage:

Chain of Custody

Relinquished By: ALundquist Date: 03-14-07

Received By: Date: 3/21/07 Extracts Examined Yes No

Preparation Information

Group ID:	KWG0703478	**Prep Method:**	EPA 3535	**Prep Date:**	03/09/07 00:00
Department:	Semivoa GC				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext.	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701703-001	DAEGW104CL	NA	✓	8081A PEST_OC	WATER	1050	2	NA	2mL	100ul	
2	KWG0703478-1	Lab Control Sample		✓	8081A PEST_OC	WATER	1000					50ul
3	KWG0703478-2	Duplicate Lab Control Sample		✓	8081A PEST_OC	WATER	1000					
4	KWG0703478-3	Method Blank		✓	8081A PEST_OC	WATER	1050					

Comments:

Surrogate ID: GCPS5-88-B 2ppm 100ul Saturn exp: 08-22-07

Spike ID: GCPS5-89-A 4ppm 50ul Microsyringe #6 exp: 03-22-07

Witness: RM 030907

Started By: ALundqui Assisted By:

Completed By: Sm for AL 32209 Assisted By:

Additional Prep Information For Pest/PCB Water by 3535

Service Request # K0701702 K0701703 Work Group # Pest: KWG 0703478

PCB: KWG 0703477

Solvents/Reagents used:

Acetone Lot # 46146 Hexane Lot # 46167

H_2O-Phobic DVB extraction Disk Lot # 005021-PL

Extraction Program # 8081.6 Initial Purge Program # 8081.4

Start (Time/Date/Initial): 12:30 p.m. 03-09-07 AL

Stop (Time/Date/Initial): 2:00 p.m. 03-09-07 AL

Cleanups:

Sulfuric Acid Clean-up (3665): ~~03-13-07~~ 03-14-07 AL (PCB aliquots only)

Clean-up #2: NA ☐ all samples ☐ some samples:

Clean-up #3: NA ☐ all samples ☐ some samples:

Pest Vial: yellow Vial Storage: J7-10 Freezer

PCB Vial: green Vial Storage: D7-10 Freezer

Archived Extract Storage: NA

Comments/Observations: 1703-1 used 4 discs on SPE.

Not enough sample received for MS/MSD. PC requested no MS. KWG 3477-1 LCS 03-13-07 was lost due to broken glassware.

Bench Sheet Review Check List
☑ Hold Times Met (if no, Reason:)
☐ Prep date, dept, method, product code correct in stealth
☐ Spike Information correct
☐ Weights/Volumes and units correct on raw and final bench sheets
☐ Sample IDs have been checked—Bottle numbers appended if required
☐ Names present for: Started by, Completed by, relinquished by, and witnessed by.
☐ Training has been circled
☐ Extract Storage recorded
☐ Additional Prep Sheet completely filled out (NA or line out Blanks)
☐ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

Sequence Name: C:\GC23\SEQUENCE\032107.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\032107\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6126

Run # 80635

Line	Type	Vial	DataFile	Method	Sample Name			
1	DeleteGC							
2	MaskName -	----R---						
3	IB	1	0321F001	PESTA	KWG0703862-1	IB	8081A	
4	IB	2	0321F002	PESTA	KWG0703862-1	IB	8081A	
5	PEM	3	0321F003	PESTA	PEM @ 50-100ppb	gcps5-89f		
6	CCV	4	0321F004	PESTA	8081 @ 50ppb	gcps5-88a	KW	
7	CCV	5	0321F005	PESTA	tox @ 1000ppb	gcps5-89e	K	
8	CCV	6	0321F006	PESTA	chlor @ 500ppb	gcps5-86f		
9	MB	7	0321F007	PESTA	KWG0702883-4	MB	8081A PES	
10	LCS	8	0321F008	PESTA	KWG0702883-3	LCS	8081A PE	
11	LCS	9	0321F009	PESTA	KWG0702883-7	LCS	8081A PE	-NR
12	SMPL	10	0321F010	PESTA	K0701251-003	WLP-DMMU-01		
13	MS	11	0321F011	PESTA	KWG0702883-1	K0701251-003MS		
14	DMS	12	0321F012	PESTA	KWG0702883-2	K0701251-003DM		
15	MS	13	0321F013	PESTA	KWG0702883-5	K0701251-003MS		NR
16	DMS	14	0321F014	PESTA	KWG0702883-6	K0701251-003DM		
17	MB	15	0321F015	PESTA	KWG0703072-4	MB	8081A PES	
18	LCS	16	0321F016	PESTA	KWG0703072-3	LCS	8081A PE	
19	SMPL	17	0321F017	PESTA	K0701505-001	LW3-IDW-59B		
20	MS	18	0321F018	PESTA	KWG0703072-1	K0701505-001MS		
21	MS	19	0321F019	PESTA	KWG0703072-2	K0701505-001MS		
22	IB	1	0321F020	PESTA	KWG0703862-4	IB	8081A	
23	IB	2	0321F021	PESTA	KWG0703862-4	IB	8081A	
24	PEM	3	0321F022	PESTA	PEM @ 50-100ppb	gcps5-89f		
25	CCV	4	0321F023	PESTA	8081 @ 50ppb	gcps5-88a	KW	
26	CCV	5	0321F024	PESTA	tox @ 1000ppb	gcps5-89e	K	
27	CCV	6	0321F025	PESTA	chlor @ 500ppb	gcps5-86f		
28	MB	20	0321F026	PESTA	KWG0703527-3	MB	608 Modif	608
29	LCS	21	0321F027	PESTA	KWG0703527-1	LCS	608 Modi	
30	DLCS	22	0321F028	PESTA	KWG0703527-2	DLCS	608 Mod	
31	SMPL	23	0321F029	PESTA	K0701812-001	7D030607G		
32	SMPL	24	0321F030	PESTA	K0701836-001	4a-g-030607		
33	SMPL	25	0321F031	PESTA	K0701853-001	Decon		
34	SMPL	26	0321F032	PESTA	K0701876-003	8D030707		
35	SMPL	27	0321F033	PESTA	P0700230-003	PLANT EFFLUENT		
36	MB	28	0321F034	PESTA	KWG0703478-3	MB	8081A PES	
37	LCS	29	0321F035	PESTA	KWG0703478-1	LCS	8081A PE	
38	DLCS	30	0321F036	PESTA	KWG0703478-2	DLCS	8081A P	
39	SMPL	31	0321F037	PESTA	K0701703-001	DAEGW104C1		3/22/07
40	IB	1	0321F038	PESTA	KWG0703862-7	IB	8081A	
41	IB	2	0321F039	PESTA	KWG0703862-7	IB	8081A	
42	PEM	3	0321F040	PESTA	PEM @ 50-100ppb	gcps5-89f		
43	CCV	4	0321F041	PESTA	8081 @ 50ppb	gcps5-88a	KW	

Last Modified: Wed Mar 21 14:51:07 2007

Page: 1

Sequence Name: C:\GC23\SEQUENCE\032107.S

Line	Type	Vial	DataFile	Method	Sample Name		
44	CCV	5	0321F042	PESTA	tox @ 1000ppb	gcps5-89e	K
45	CCV	6	0321F043	PESTA	chlor @ 500ppb	gcps5-86f	
46							

Exception Report

Data File: J:\GC23\DATA\032107\0321F021.D
Lab ID: KWG0703862-4
RunType: IB
Matrix: MISC

Date Acquired: 03/21/2007 23:11
Date Quantitated: 03/22/2007 14:25
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	NW

Primary Review: [illegible] 3/22/07

Secondary Review: [illegible] 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F021.D\0321F021C.D
Lab ID: KWG0703862-4
RunType: IB
Matrix: MISC

Date Acquired: 03/21/2007 23:11
Date Quantitated: 03/22/2007 14:25
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	

Primary Review: MB 3/22/07

Secondary Review: [illegible] 3/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F021.D\0321F021c.d			**Vial:**	2
Acqu Date:	03/21/2007 23:11	**Quant Date:**	03/22/2007 14:25	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	16.42		26597	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0	0d	0.0000	0.0000			
Endrin			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F021.D\0321F021c.d			**Vial:**	2
Acqu Date:	03/21/2007 23:11	**Quant Date:**	03/22/2007 14:25	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0	0	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0d	0.0000	0.0000			
Toxaphene {2}			0	0	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0d	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0d	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0	0	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F021.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\032107\0321F021.D\ECD2B.CH
Acq On : 21 Mar 2007 11:11 pm Operator: AKamawal
Sample : KWG0703862-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703862\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:39:51 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

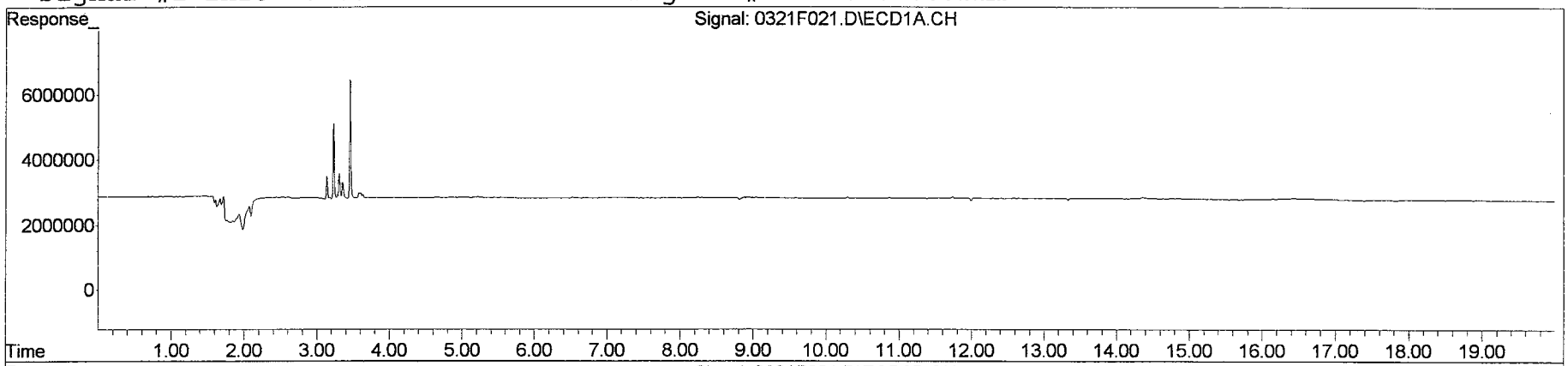
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

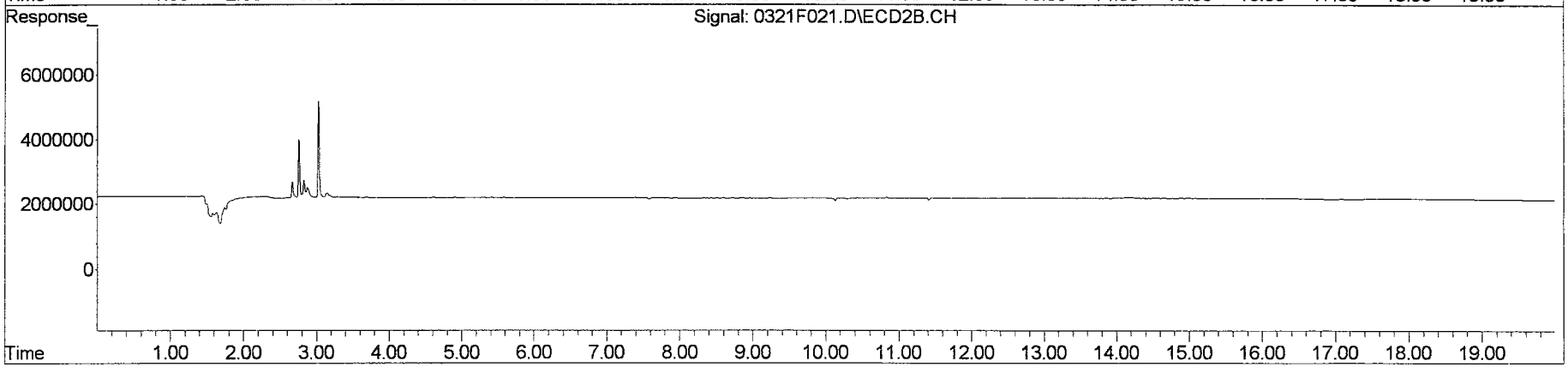
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F021.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\032107\0321F021.D\ECD2B.CH
Acq On : 21 Mar 2007 11:11 pm Operator: AKamawal
Sample : KWG0703862-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703862\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 14:25 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032107\0321F022.D
Lab ID: KWG0703862-5
RunType: PEM
Matrix: MISC

Date Acquired: 03/21/2007 23:38
Date Quantitated: 03/22/2007 08:45
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032107\0321F022.D\0321F022C.D
Lab ID: KWG0703862-5
RunType: PEM
Matrix: MISC

Date Acquired: 03/21/2007 23:38
Date Quantitated: 03/22/2007 08:45
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	NW

Primary Review: [illegible]

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**
Analysis Method:	8081A	**Prep Method:**		
Prep Ref:		**Prep Date:**		

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ1983
MB Ref:		**Method ID:**	MJ110
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032107\0321F022.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F022.D\0321F022c.d			**Vial:**	3
Acqu Date:	03/21/2007 23:38	**Quant Date:**	03/22/2007 08:45	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
gamma-BHC (Lindane)	0d	0d		
Heptachlor	0d	0d		
Heptachlor Epoxide	0d	0d		
Endrin	14166717	16467435		
Methoxychlor	0d	0d		
Chlordane {1}	0d	0d		
Chlordane {2}	0d	0d		
Chlordane {3}	0d	0d		
Chlordane {4}	0d	0d		
Chlordane {5}	0d	0d		
Chlordane {6}	0d	0d		
Chlordane	0	0		
Toxaphene {1}	0d	0d		
Toxaphene {2}	0d	0d		
Toxaphene {3}	0d	0d		
Toxaphene {4}	0d	0d		
Toxaphene {5}	0d	0d		
Toxaphene {6}	0d	0d		
Toxaphene	0	0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F022.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F022.D\ECD2B.CH
Acq On : 21 Mar 2007 11:38 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:39:52 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.57	11.47	278182	362931	0.837	1.045	
16)	Endrin	13.13	12.13	14166717	16467435	48.334	51.292	
18)	4,4'-DDD	13.36	12.33	284065	344727	1.077	1.184	
19)	Endrin Aldehyde	13.70	12.87	199818	234794	0.757	0.819	
21)	4,4'-DDT	13.81	12.74	26279809	31414124	95.093	99.405	
22)	Endrin Ketone	14.75	14.05	340060	528972	1.039	1.353	#

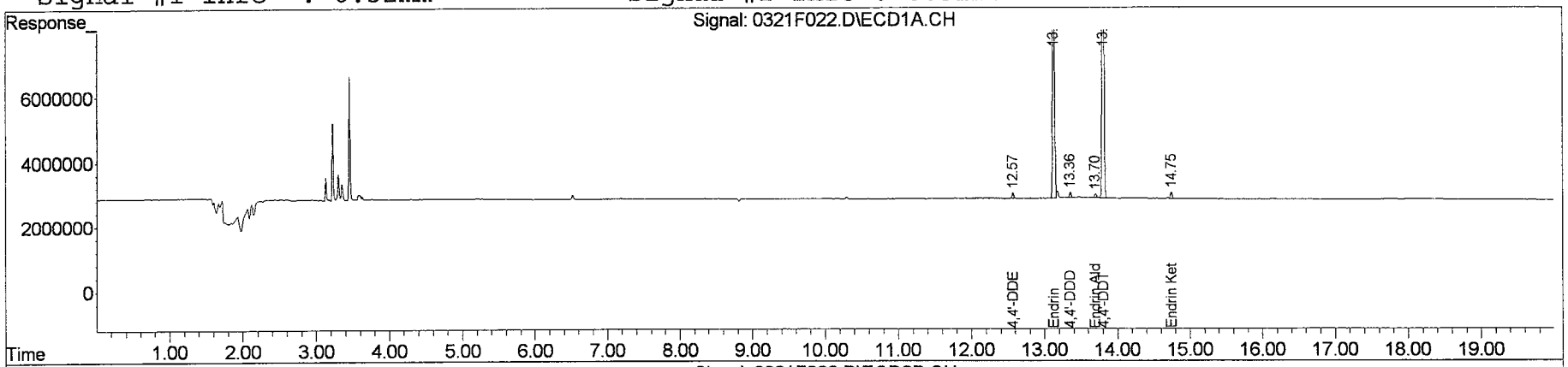
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

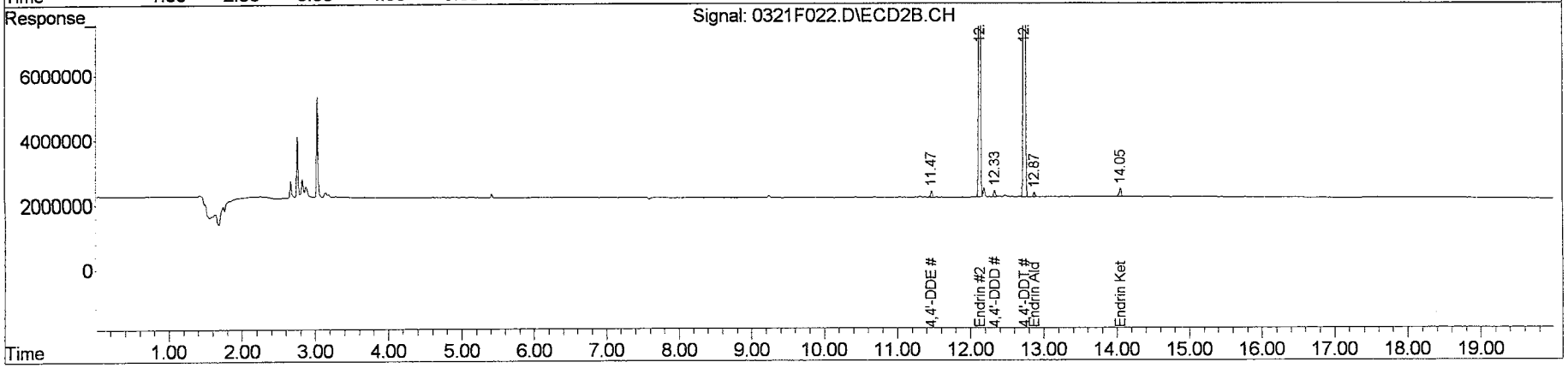
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F022.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F022.D\ECD2B.CH
Acq On : 21 Mar 2007 11:38 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:45 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032107\0321F025.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:57
Date Quantitated: 03/22/2007 08:48
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	1(2)

Primary Review: Ln 3/22/07

Secondary Review: 3/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F025.D\0321F025C.D
Lab ID: KWG0703862-6
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 00:57
Date Quantitated: 03/22/2007 08:48
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	1(A)

Primary Review: Lm 3/23/07

Secondary Review: AL 3/23

Printed: 03/22/2007 13:38:19
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F025.D\0321F025c.d			**Vial:**	6
Acqu Date:	03/22/2007 00:57	**Quant Date:**	03/22/2007 08:48	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			
Endosulfan I			0d	0d	0.0000	0.0000			
alpha-Chlordane			0d	0d	0.0000	0.0000			
Dieldrin			0d	0d	0.0000	0.0000			
4,4'-DDE			0d	0d	0.0000	0.0000			
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F025.D\0321F025c.d			**Vial:**	6
Acqu Date:	03/22/2007 00:57	**Quant Date:**	03/22/2007 08:48	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0d	0d	0.0000	0.0000			
Endosulfan Sulfate			0d	0d	0.0000	0.0000			
4,4'-DDT			0d	0d	0.0000	0.0000			
Endrin Ketone			0d	0d	0.0000	0.0000			
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	484.11	577.55			
Chlordane {1}	10.56	9.30	12605722	12488563	484.05	568.76			
Chlordane {2}	11.83	11.00	6108773	20189912	502.38	572.03			
Chlordane {3}	12.26	11.04	21138001	11631148	486.42	573.01			
Chlordane {4}	12.33	11.09	14666125	6327182	482.71	598.00			
Chlordane {5}	12.40	11.14	10891227	15442646	463.91	573.33			
Chlordane {6}	13.37	12.57	3381995	8459495	485.20	580.18			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580

DataFile: J:\GC23\DATA\032107\0321F025.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					484.1	500.0	-3.2
Chlordane {1}		MULTI	AverageRF	100		2.6E+4	2.5E+4	-3.2			
Chlordane {2}		MULTI	AverageRF	100		1.2E+4	1.2E+4	0.5			
Chlordane {3}		MULTI	AverageRF	100		4.3E+4	4.2E+4	-2.7			
Chlordane {4}		MULTI	AverageRF	100		3.0E+4	2.9E+4	-3.5			
Chlordane {5}		MULTI	AverageRF	100		2.3E+4	2.2E+4	-7.2			
Chlordane {6}		MULTI	AverageRF	100		7.0E+3	6.8E+3	-3.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	3.3

3.4
u 3220

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F025.D\0321F025C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					577.5	500.0	15.5 *
Chlordane {1}		MULTI	AverageRF	100		2.2E+4	2.5E+4	13.8			
Chlordane {2}		MULTI	AverageRF	100		3.5E+4	4.0E+4	14.4			
Chlordane {3}		MULTI	AverageRF	100		2.0E+4	2.3E+4	14.6			
Chlordane {4}		MULTI	AverageRF	100		1.1E+4	1.3E+4	19.6			
Chlordane {5}		MULTI	AverageRF	100		2.7E+4	3.1E+4	14.7			
Chlordane {6}		MULTI	AverageRF	100		1.5E+4	1.7E+4	16.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~15.5~~

5.4
5.4 3/22/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F025.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\032107\0321F025.D\ECD2B.CH
Acq On : 22 Mar 2007 12:57 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0703862- Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:39:55 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.56	9.30	12605722	12488563	484.051	568.759
32)	Chlordane {2}	11.83	11.00	6108773	20189912	502.377	572.027
33)	Chlordane {3}	12.26	11.04	21138001	11631148	486.422	573.006
34)	Chlordane {4}	12.33	11.09	14666125	6327182	482.713	597.995
35)	Chlordane {5}	12.40	11.14	10891227	15442646	463.908	573.326
36)	Chlordane {6}	13.37	12.57	3381995	8459495	485.196	580.183

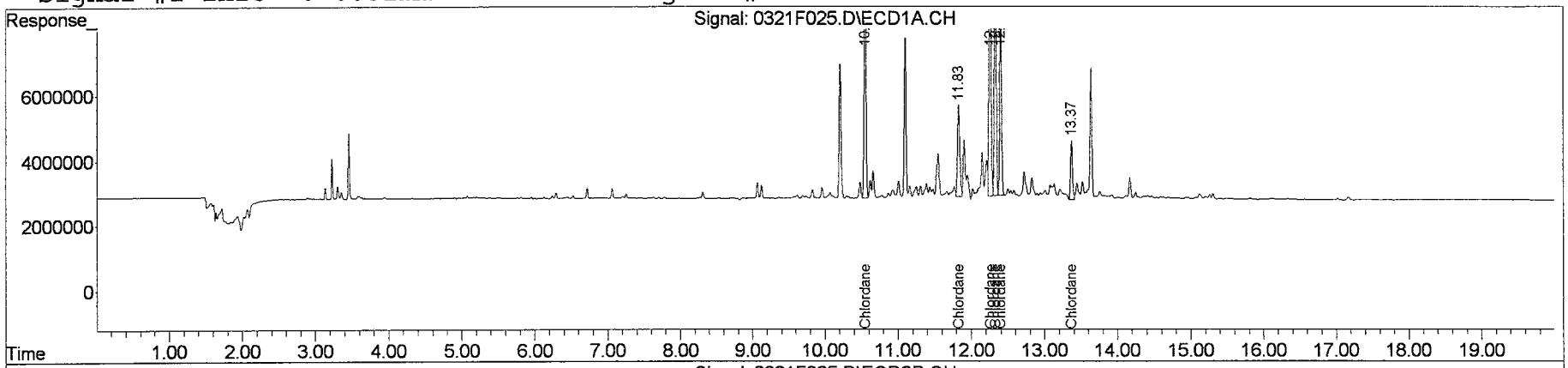
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

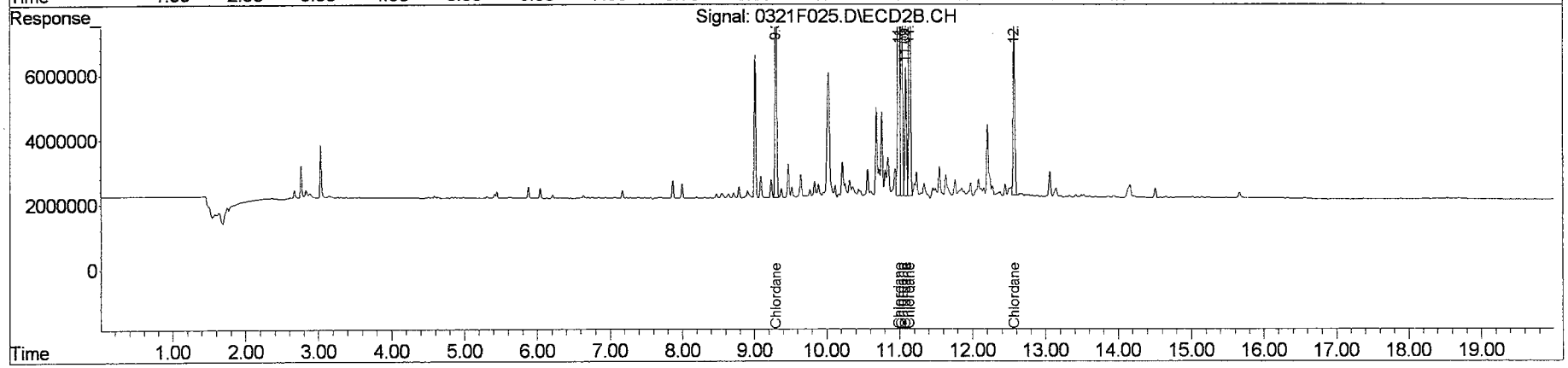
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F025.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\032107\0321F025.D\ECD2B.CH
Acq On : 22 Mar 2007 12:57 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0703862- Inst : GC23
Misc : SEMIVOA GC\W0703862\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:48 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032107\0321F039.D
Lab ID: KWG0703862-7
RunType: IB
Matrix: MISC

Date Acquired: 03/22/2007 07:04
Date Quantitated: 03/22/2007 10:19
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	1CV

Primary Review: [illegible]

Secondary Review: [illegible] 7/23

Exception Report

Data File: J:\GC23\DATA\032107\0321F039.D\0321F039C.D
Lab ID: KWG0703862-7
RunType: IB
Matrix: MISC

Date Acquired: 03/22/2007 07:04
Date Quantitated: 03/22/2007 10:19
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	

Primary Review: [illegible]

Secondary Review: [illegible] 3/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F039.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F039.D\0321F039c.d			**Vial:**	2
Acqu Date:	03/22/2007 07:04	**Quant Date:**	03/22/2007 10:19	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-7				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0d	0.0000	0.0000			
4,4'-DDE			0d	0d	0.0000	0.0000			
Endrin			0	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F039.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F039.D\0321F039c.d			**Vial:**	2
Acqu Date:	03/22/2007 07:04	**Quant Date:**	03/22/2007 10:19	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-7				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0	0	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0	0d	0.0000	0.0000			
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0d	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0d	0.0000	0.0000			
Toxaphene {2}			0	0	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0d	0.0000	0.0000			
Chlordane {4}			0	0d	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0d	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane	11.74	10.44	201347	181331	0.6670	0.5510			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0	0d	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F039.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\032107\0321F039.D\ECD2B.CH
Acq On : 22 Mar 2007 7:04 am Operator: AKamawal
Sample : KWG0703862-7 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703862\7-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:49:21 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
38)	Oxychlordane	11.74	10.44f	201347	181331	0.667	0.551

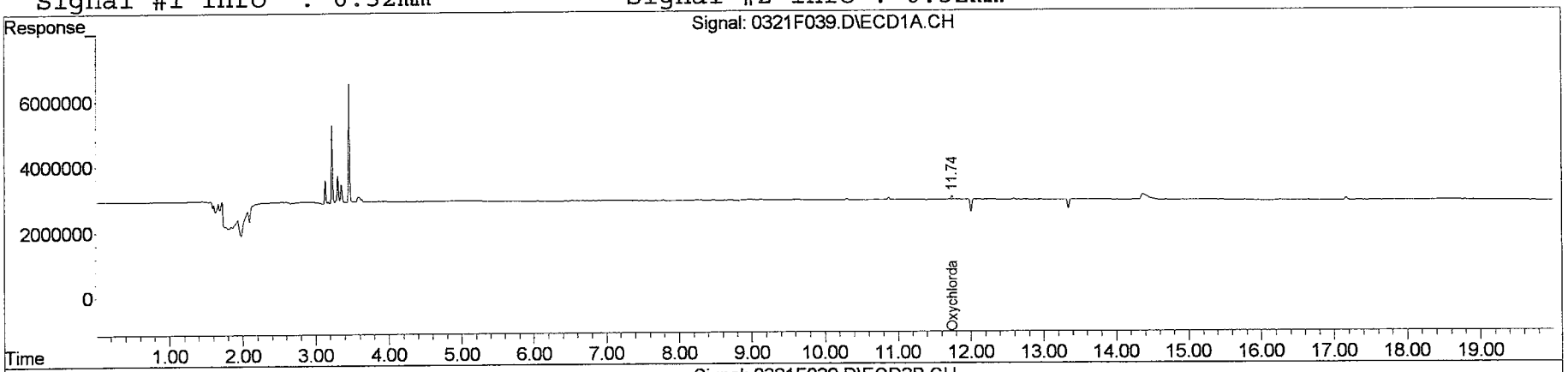
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

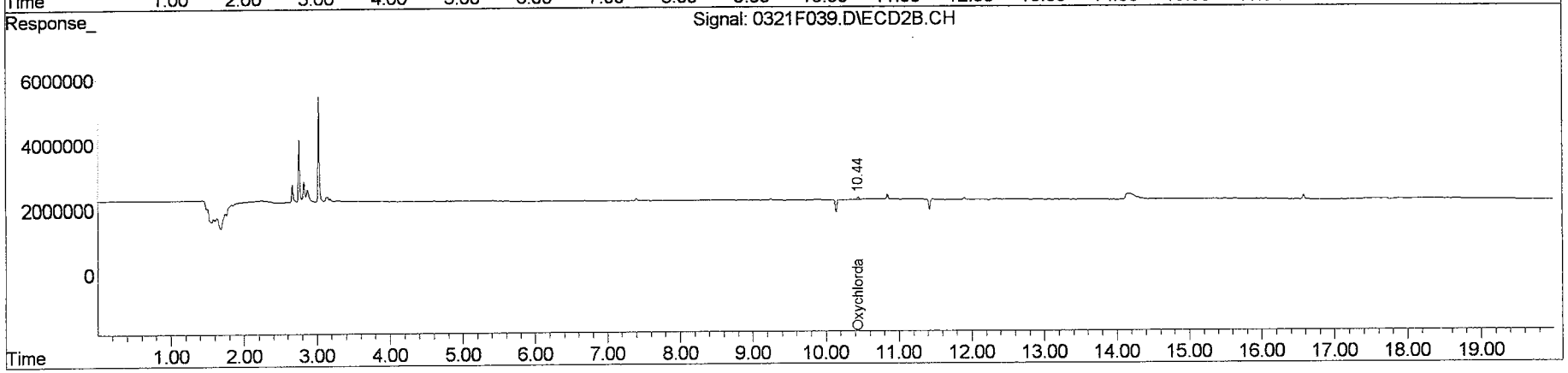
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F039.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\032107\0321F039.D\ECD2B.CH
Acq On : 22 Mar 2007 7:04 am Operator: AKamawal
Sample : KWG0703862-7 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0703862\7-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:19 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\032107\0321F040.D
Lab ID: KWG0703862-8
RunType: PEM
Matrix: MISC

Date Acquired: 03/22/2007 07:31
Date Quantitated: 03/22/2007 10:20
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\032107\0321F040.D\0321F040C.D
Lab ID: KWG0703862-8
RunType: PEM
Matrix: MISC

Date Acquired: 03/22/2007 07:31
Date Quantitated: 03/22/2007 10:20
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	1(a)

Primary Review: 03/22/07

Secondary Review: 4/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:	Organochlorine Pesticides	**Report List ID:**	LJ7902
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\032107\0321F040.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F040.D\0321F040c.d			**Vial:**	3
Acqu Date:	03/22/2007 07:31	**Quant Date:**	03/22/2007 10:20	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-8				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	227878	299216m		
Endrin	15100431	18106814	2.4	2.9
Endosulfan II	0d	0d		
4,4'-DDD	295126m	327421		
Endrin Aldehyde	117830	155959		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	27677486	34546030	1.9	1.8
Endrin Ketone	258199	382338		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F040.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F040.D\0321F040c.d			**Vial:**	3
Acqu Date:	03/22/2007 07:31	**Quant Date:**	03/22/2007 10:20	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-8				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 08:57:46 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.57	11.47	227878	299216	0.686	0.861m#
16)	Endrin	13.13	12.13	15100431	18106814	51.519	56.398
18)	4,4'-DDD	13.36	12.34	295126	327421	1.119m	1.125
19)	Endrin Aldehyde	13.70	12.88	117830	155959	0.446	0.544
21)	4,4'-DDT	13.81	12.74	27677486	34546030	100.150	109.316
22)	Endrin Ketone	14.75	14.06	258199	382338	0.789	0.978

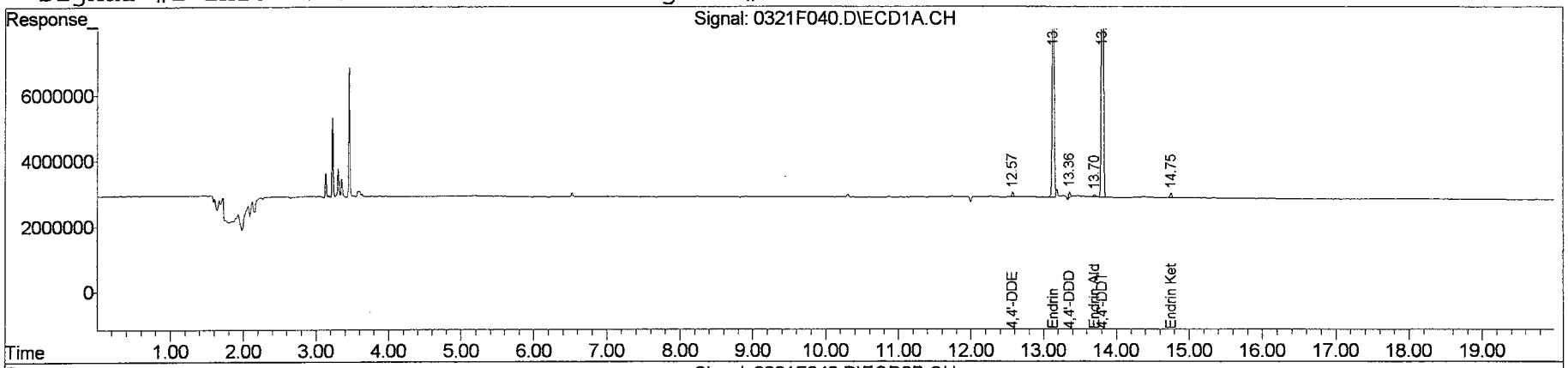
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

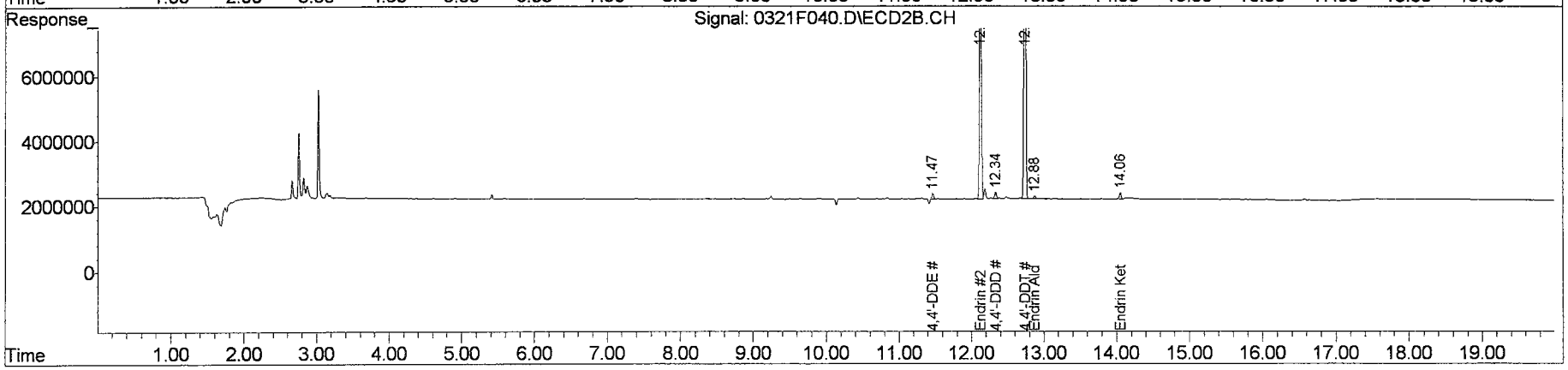
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:20 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

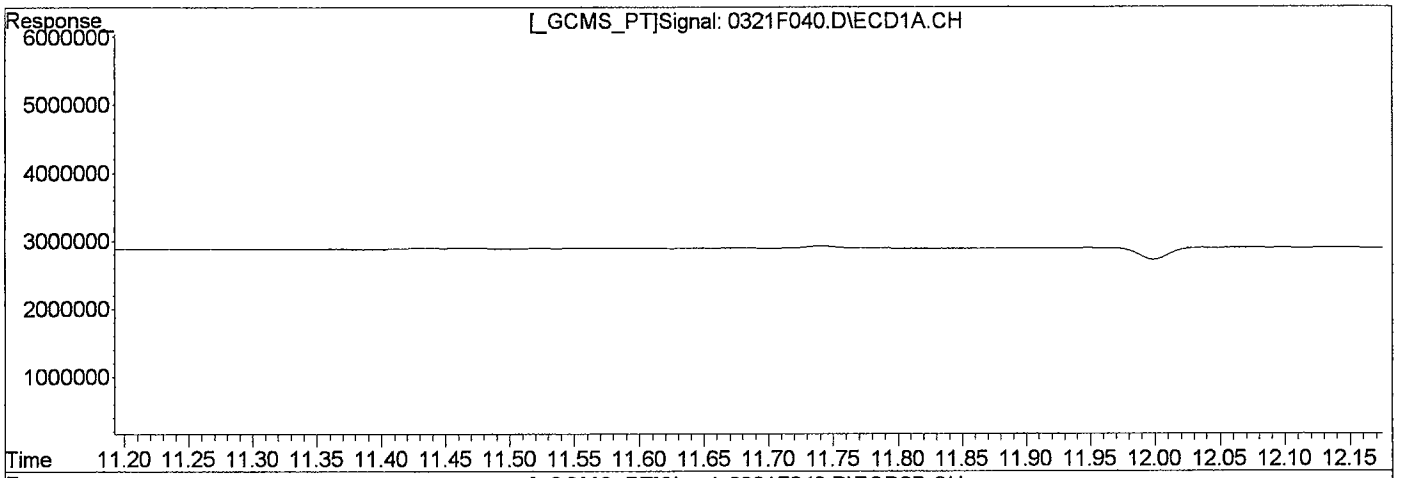


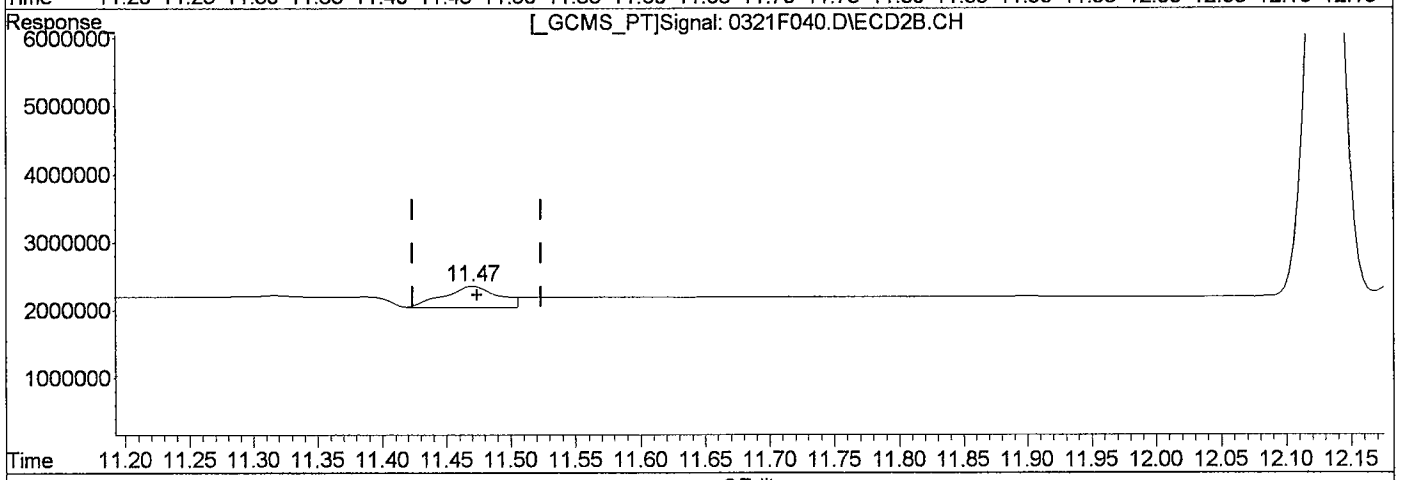


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:57 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.57min 0.686ug/L

response 227878

(15) 4,4'-DDE #2

11.47min 2.673ug/L

response 928682

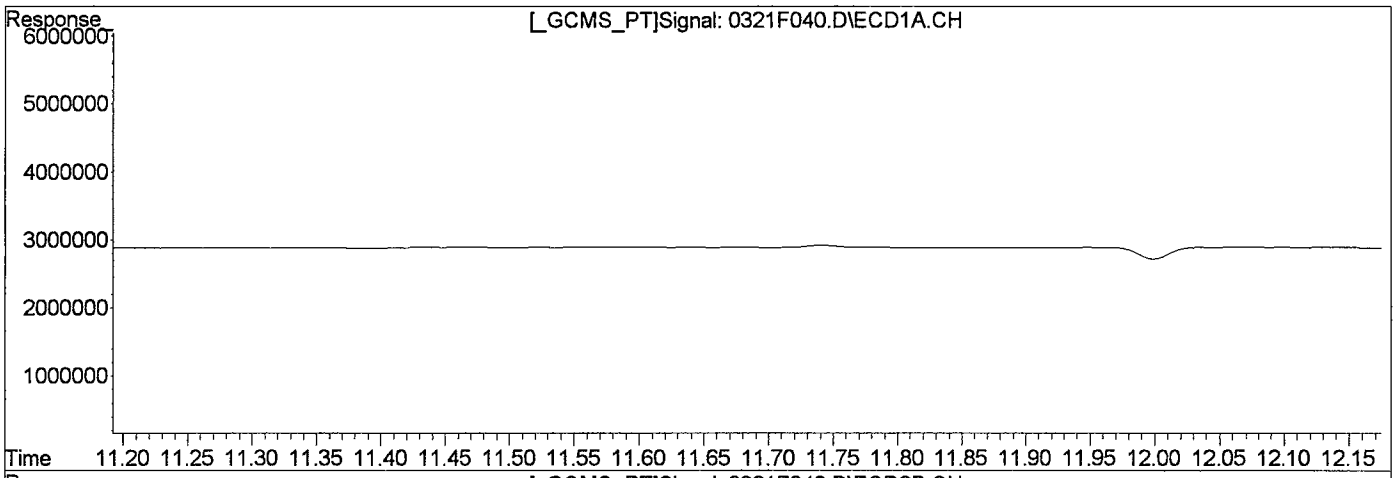
(+) = Expected Retention Time

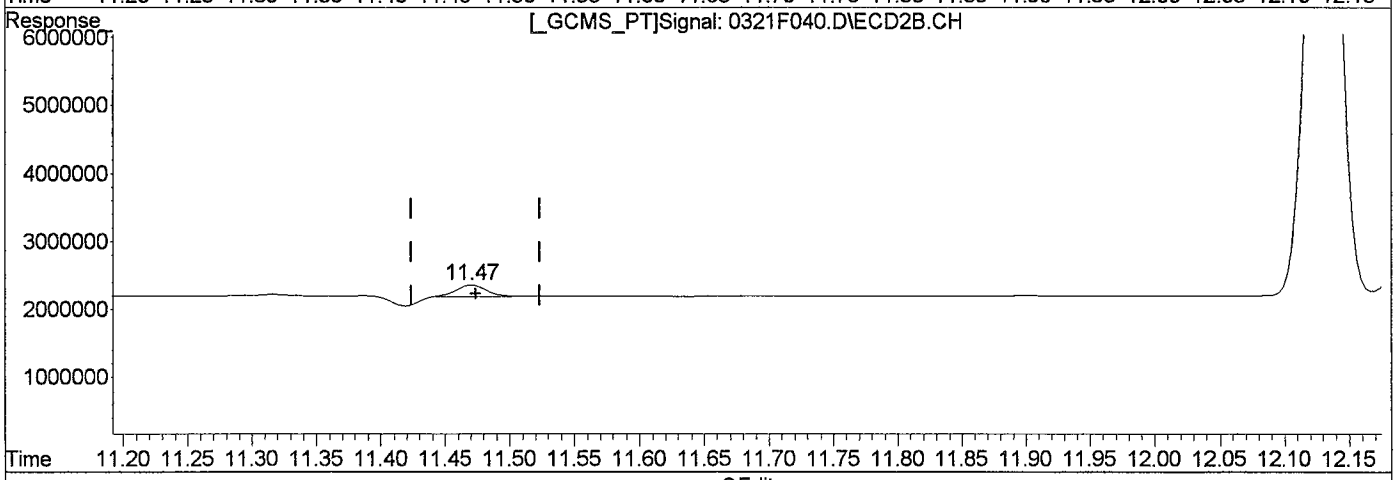
0321F040.D 031207-8081.M Thu Mar 22 10:19:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:57 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.57min 0.686ug/L

response 227878

(15) 4,4'-DDE #2

11.47min 0.861ug/L m

response 299216

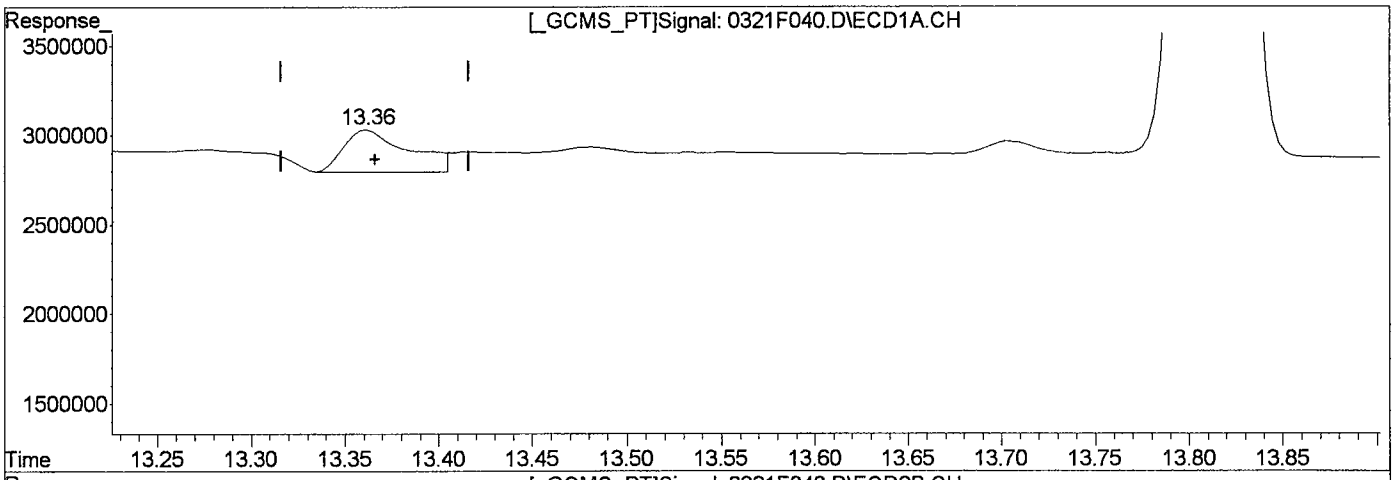
3/22/07

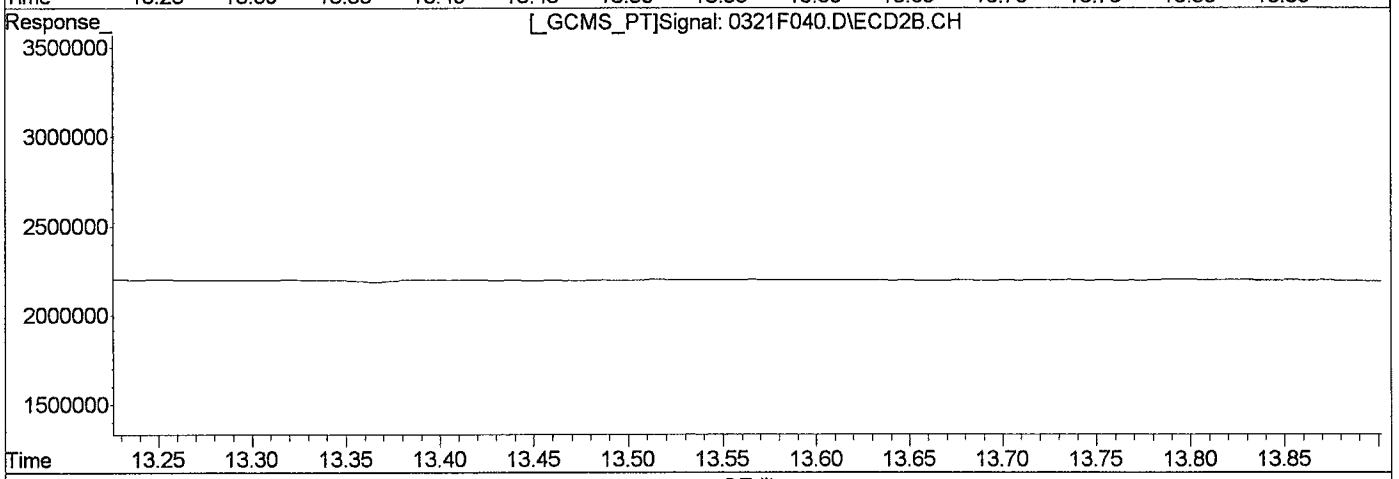
(+) = Expected Retention Time
0321F040.D 031207-8081.M Thu Mar 22 10:20:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:57 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.36min 2.196ug/L

response 579114

(18) 4,4'-DDD #2

12.34min 1.125ug/L

response 327421

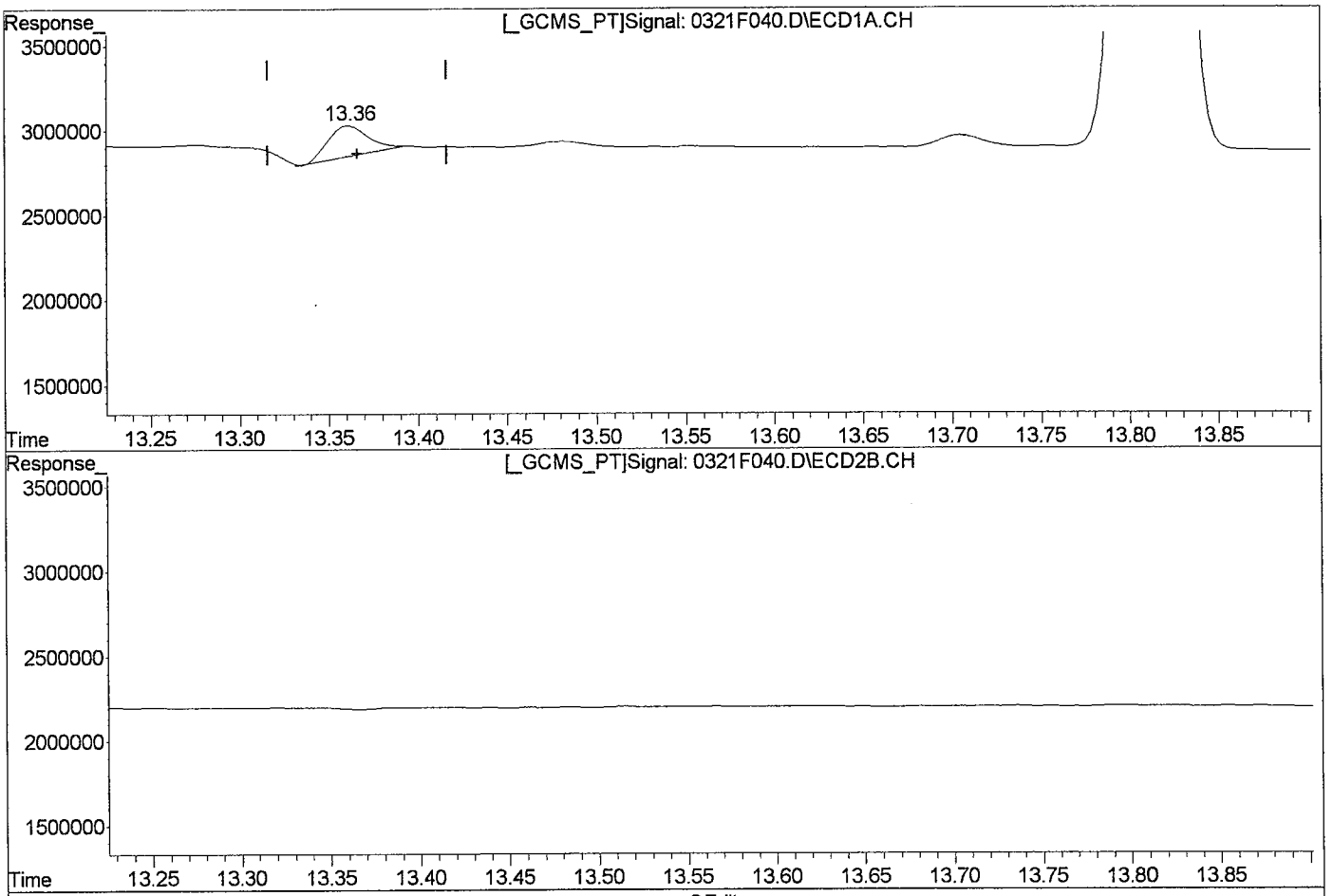
(+) = Expected Retention Time

0321F040.D 031207-8081.M Thu Mar 22 10:20:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\032107\0321F040.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\032107\0321F040.D\ECD2B.CH
Acq On : 22 Mar 2007 7:31 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-89f | KWG0703862 Inst : GC23
Misc : SEMIVOA GC\W0703862\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 8:57 2007 Quant Results File: 031207-8081.RES

Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.36min 1.119ug/L m

response 295126

(18) 4,4'-DDD #2

12.34min 1.125ug/L

response 327421

(+) = Expected Retention Time
0321F040.D 031207-8081.M Thu Mar 22 10:20:15 2007

Exception Report

Data File: J:\GC23\DATA\032107\0321F043.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 08:50
Date Quantitated: 03/22/2007 10:23
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	2,4'-DDE	-15.3	NA	15	KV

Primary Review: 3/22/07

Secondary Review: 4/23/07

Exception Report

Data File: J:\GC23\DATA\032107\0321F043.D\0321F043C.D
Lab ID: KWG0703862-9
RunType: CCV
Matrix: MISC

Date Acquired: 03/22/2007 08:50
Date Quantitated: 03/22/2007 10:23
Batch ID: KWG0703862
Analysis Method: 8081A
MethodJoinID: MJ109

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Toxaphene	-19.1	NA	15	1(V)

Primary Review: Cm 3/23/07

Secondary Review: Ac 3/23/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	03/21/2007

Analysis Lot:	KWG0703862	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\031207-8081.	**Calibration ID:**	CAL6126
Title:			
MB Ref:		**Method ID:**	MJ109
		Quant based on Method	

Data File #1:	J:\GC23\DATA\032107\0321F043.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F043.D\0321F043c.d			**Vial:**	6
Acqu Date:	03/22/2007 08:50	**Quant Date:**	03/22/2007 10:23	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	19-134	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	26-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	70-130	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\032107\0321F043.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\032107\0321F043.D\0321F043c.d			**Vial:**	6
Acqu Date:	03/22/2007 08:50	**Quant Date:**	03/22/2007 10:23	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0703862-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	503.01	615.26			
Chlordane {1}	10.55	9.30	13544570	13531631	520.10	616.26			
Chlordane {2}	11.83	11.00	6027796	21731911	495.72	615.72			
Chlordane {3}	12.26	11.03	21870419	12433118	503.28	612.51			
Chlordane {4}	12.33	11.09	15009994	6607251	494.03	624.47			
Chlordane {5}	12.40	11.14	11621762	16615244	495.03	616.86			
Chlordane {6}	13.37	12.57	3554351	8832376	509.92	605.76			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F043.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					503.0	500.0	0.6
Chlordane {1}		MULTI	AverageRF	100		2.6E+4	2.7E+4	4.0			
Chlordane {2}		MULTI	AverageRF	100		1.2E+4	1.2E+4	-0.9			
Chlordane {3}		MULTI	AverageRF	100		4.3E+4	4.4E+4	0.7			
Chlordane {4}		MULTI	AverageRF	100		3.0E+4	3.0E+4	-1.2			
Chlordane {5}		MULTI	AverageRF	100		2.3E+4	2.3E+4	-1.0			
Chlordane {6}		MULTI	AverageRF	100		7.0E+3	7.1E+3	2.0			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~1.6~~

4.1

m 32207

Calibration Verification Report

Calibration ID: CAL6126
Method ID: MJ580
DataFile: J:\GC23\DATA\032107\0321F043.D\0321F043C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					615.3	500.0	23.1 *
Chlordane {1}		MULTI	AverageRF	100		2.2E+4	2.7E+4	23.3			
Chlordane {2}		MULTI	AverageRF	100		3.5E+4	4.3E+4	23.1			
Chlordane {3}		MULTI	AverageRF	100		2.0E+4	2.5E+4	22.5			
Chlordane {4}		MULTI	AverageRF	100		1.1E+4	1.3E+4	24.9			
Chlordane {5}		MULTI	AverageRF	100		2.7E+4	3.3E+4	23.4			
Chlordane {6}		MULTI	AverageRF	100		1.5E+4	1.8E+4	21.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~23.1~~

11.9
h 32207

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F043.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\032107\0321F043.D\ECD2B.CH
Acq On : 22 Mar 2007 8:50 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0703862- Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:18:19 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.55	9.30	13544570	13531631	520.102	616.263	
32)	Chlordane {2}	11.83	11.00	6027796	21731911	495.718	615.716	
33)	Chlordane {3}	12.26	11.03	21870419	12433118	503.276	612.514	
34)	Chlordane {4}	12.33	11.09	15009994	6607251	494.031	624.465	#
35)	Chlordane {5}	12.40	11.14	11621762	16615244	495.025	616.860	
36)	Chlordane {6}	13.37	12.57	3554351	8832376	509.923	605.757	

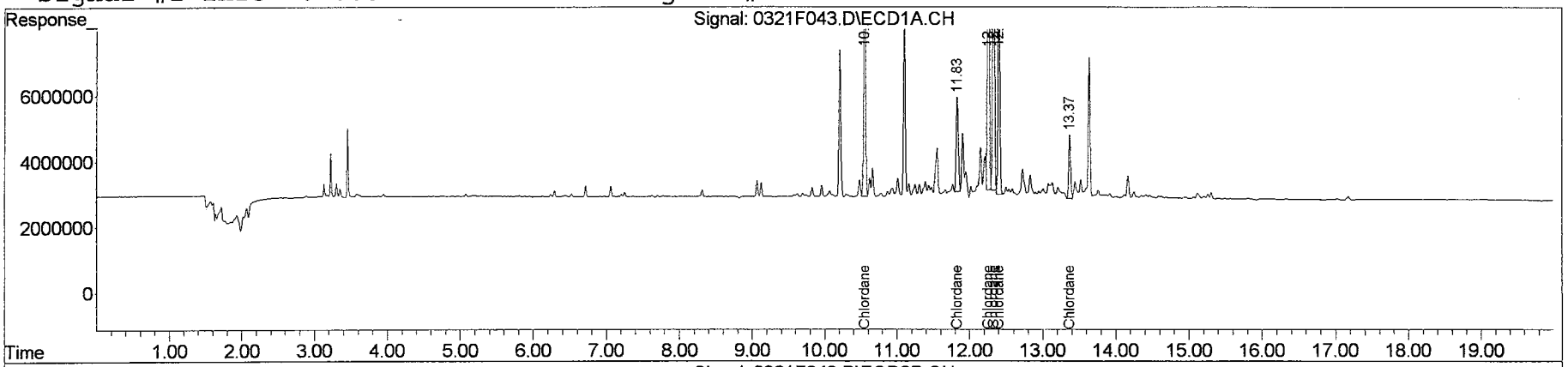
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

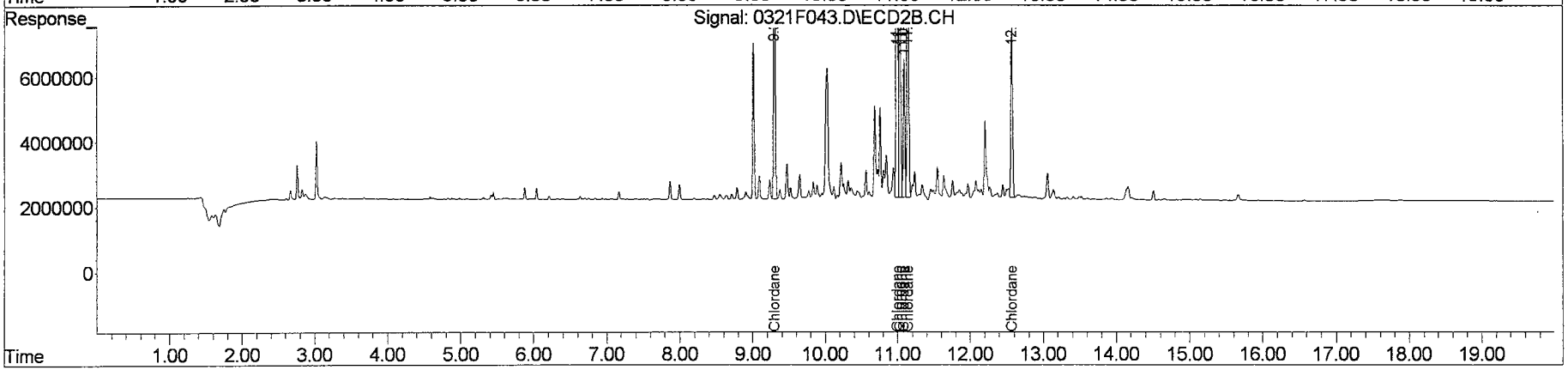
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\032107\0321F043.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\032107\0321F043.D\ECD2B.CH
Acq On : 22 Mar 2007 8:50 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0703862- Inst : GC23
Misc : SEMIVOA GC\W0703862\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 22 10:23 2007 Quant Results File: 031207-8081.RES

Quant Method : J:\GC23\METHODS\031207-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Mon Mar 12 18:37:09 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





971

Polychlorinated Biphenyls
PCB's
EPA Method 8082

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Polychlorinated Biphenyls (PCBs)

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104CL	K0701703-001	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janet L. Heston Name: Janet L. Heston

Date: 3-7-07 Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Polychlorinated Biphenyls (PCBs)

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1221	ND	U	0.39	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1232	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1242	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1248	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1254	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1260	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	56	10-144	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703477-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1221	ND	U	0.39	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1232	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1242	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1248	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1254	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1260	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	90	10-144	03/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535
Analysis Method: 8082

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104CL	K0701703-001	56
Method Blank	KWG0703477-3	90
Lab Control Sample	KWG0703477-2	88

Surrogate Recovery Control Limits (%)

Sur1 = Decachlorobiphenyl 10-144

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8082	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703477

	Lab Control Sample KWG0703477-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Aroclor 1016	1.62	2.00	81	50-125
Aroclor 1260	1.74	2.00	87	56-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:34

Method Blank Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**File ID:**	J:\GC09\DATA\032007.B\0320F009.D
Lab Code:	KWG0703477-3	**Instrument ID:**	GC09.i
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082	**Extraction Lot:**	KWG0703477

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703477-2	J:\GC09\DATA\032007.B\0320F011.D	03/20/07	14:00
DAEGW104CL	K0701703-001	J:\GC09\DATA\032007.B\0320F013.D	03/20/07	14:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	14:00

Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Lab Control Sample	**File ID:**	J:\GC09\DATA\032007.B\0320F011.D
Lab Code:	KWG0703477-2	**Instrument ID:**	GC09.i
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082	**Extraction Lot:**	KWG0703477

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703477-3	J:\GC09\DATA\032007.B\0320F009.D	03/20/07	13:34
DAEGW104CL	K0701703-001	J:\GC09\DATA\032007.B\0320F013.D	03/20/07	14:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	\\cash1\acqudata\GC09\data\031607.B\0316F012.D	H	\\cash1\acqudata\GC09\data\031607.B\0316F038.D
B	\\cash1\acqudata\GC09\data\031607.B\0316F016.D	I	\\cash1\acqudata\GC09\data\031607.B\0316F039.D
C	\\cash1\acqudata\GC09\data\031607.B\0316F020.D	J	\\cash1\acqudata\GC09\data\031607.B\0316F040.D
D	\\cash1\acqudata\GC09\data\031607.B\0316F024.D	K	\\cash1\acqudata\GC09\data\031607.B\0316F041.D
E	\\cash1\acqudata\GC09\data\031607.B\0316F028.D	L	\\cash1\acqudata\GC09\data\031607.B\0316F042.D
F	\\cash1\acqudata\GC09\data\031607.B\0316F032.D	M	\\cash1\acqudata\GC09\data\031607.B\0316F043.D
G	\\cash1\acqudata\GC09\data\031607.B\0316F036.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl															
							H	2.5	7240	I	5.0	7420	J	50	6490
	K	100	5970	L	200	5460	M	500	4890						
Aroclor 1016 {1}															
							H	25	60.1	I	50	62.5	J	500	70.3
	K	1000	65.9	L	2000	58.4	M	5000	51.6						
Aroclor 1016 {2}															
							H	25	138	I	50	136	J	500	140
	K	1000	130	L	2000	115	M	5000	100						
Aroclor 1016 {3}															
							H	25	120	I	50	131	J	500	122
	K	1000	113	L	2000	99.8	M	5000	88.6						
Aroclor 1016 {4}															
							H	25	116	I	50	172	J	500	143
	K	1000	131	L	2000	116	M	5000	105						
Aroclor 1016 {5}															
							H	25	223	I	50	236	J	500	197
	K	1000	183	L	2000	158	M	5000	137						
Aroclor 1260 {1}															
							H	25	472	I	50	458	J	500	399
	K	1000	365	L	2000	326	M	5000	286						
Aroclor 1260 {2}															
							H	25	277	I	50	280	J	500	238
	K	1000	219	L	2000	201	M	5000	183						
Aroclor 1260 {3}															
							H	25	480	I	50	517	J	500	471
	K	1000	421	L	2000	403	M	5000	369						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {4}															
							H	25	595	I	50	659	J	500	604
	K	1000	568	L	2000	535	M	5000	499						
Aroclor 1260 {5}															
							H	25	470	I	50	473	J	500	445
	K	1000	423	L	2000	401	M	5000	373						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.9		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	10.5		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	12.3		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	13.9		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	18.4		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	19.9		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	19.0		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	17.0		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	12.4		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	9.7		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	9.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007
Date Analyzed: 03/17/2007

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082

Calibration ID: CAL6143
Units: ng/mL

File ID: \\cash1\acqudata\GC09\data\031607.B\0316F044.D
\\cash1\acqudata\GC09\data\031607.B\0316F045.D
\\cash1\acqudata\GC09\data\031607.B\0316F046.D
\\cash1\acqudata\GC09\data\031607.B\0316F047.D
\\cash1\acqudata\GC09\data\031607.B\0316F048.D
\\cash1\acqudata\GC09\data\031607.B\0316F049.D
\\cash1\acqudata\GC09\data\031607.B\0316F050.D
\\cash1\acqudata\GC09\data\031607.B\0316F051.D
\\cash1\acqudata\GC09\data\031607.B\0316F052.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016 {1}	1000	1000	61.4	62.5	2	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	990	126	125	-1	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	960	112	108	-4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	131	130	0	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	940	189	177	-6	NA	± 100 %	AverageRF
Aroclor 1016	1000	980	NA	NA	NA	2	± 15 %	NA
Aroclor 1260 {1}	1000	870	384	334	-13	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	890	233	208	-11	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	830	444	366	-17	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1100	577	619	7	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1100	431	462	7	NA	± 100 %	AverageRF
Aroclor 1260	1000	950	NA	NA	NA	5	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	\\cash1\acqudata\GC09\data\031607_r.b\0316R012.D	H	\\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
B	\\cash1\acqudata\GC09\data\031607_r.b\0316R016.D	I	\\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
C	\\cash1\acqudata\GC09\data\031607_r.b\0316R020.D	J	\\cash1\acqudata\GC09\data\031607_r.b\0316R040.D
D	\\cash1\acqudata\GC09\data\031607_r.b\0316R024.D	K	\\cash1\acqudata\GC09\data\031607_r.b\0316R041.D
E	\\cash1\acqudata\GC09\data\031607_r.b\0316R028.D	L	\\cash1\acqudata\GC09\data\031607_r.b\0316R042.D
F	\\cash1\acqudata\GC09\data\031607_r.b\0316R032.D	M	\\cash1\acqudata\GC09\data\031607_r.b\0316R043.D
G	\\cash1\acqudata\GC09\data\031607_r.b\0316R036.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl															
							H	2.5	7650	I	5.0	7810	J	50	6490
	K	100	5900	L	200	5330	M	500	4700						
Aroclor 1016 {1}															
							H	25	130	I	50	164	J	500	140
	K	1000	127	L	2000	114	M	5000	98.3						
Aroclor 1016 {2}															
							H	25	271	I	50	312	J	500	274
	K	1000	247	L	2000	210	M	5000	184						
Aroclor 1016 {3}															
							H	25	155	I	50	185	J	500	201
	K	1000	201	L	2000	180	M	5000	159						
Aroclor 1016 {4}															
							H	25	182	I	50	198	J	500	196
	K	1000	174	L	2000	154	M	5000	135						
Aroclor 1016 {5}															
							H	25	174	I	50	192	J	500	187
	K	1000	162	L	2000	147	M	5000	129						
Aroclor 1260 {1}															
							H	25	224	I	50	263	J	500	242
	K	1000	225	L	2000	210	M	5000	194						
Aroclor 1260 {2}															
							H	25	498	I	50	565	J	500	478
	K	1000	441	L	2000	410	M	5000	378						
Aroclor 1260 {3}															
							H	25	250	I	50	312	J	500	263
	K	1000	241	L	2000	219	M	5000	198						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {4}															
							H	25	334	I	50	359	J	500	308
	K	1000	290	L	2000	272	M	5000	253						
Aroclor 1260 {5}															
							H	25	640	I	50	655	J	500	552
	K	1000	514	L	2000	480	M	5000	443						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	19.7		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	17.4		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	18.6		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	11.0		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	14.2		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	14.7		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	10.7		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	14.5		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	16.0		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	13.0		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	15.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007
Date Analyzed: 03/17/2007

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082

Calibration ID: CAL6143
Units: ng/mL

File ID: \\cash1\acqudata\GC09\data\031607_r.b\0316R044.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R047.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R048.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R050.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R051.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R052.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016 {1}	1000	950	129	123	-5	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	910	250	228	-9	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1000	180	188	5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	950	173	165	-5	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	950	165	158	-5	NA	± 100 %	AverageRF
Aroclor 1016	1000	960	NA	NA	NA	4	± 15 %	NA
Aroclor 1260 {1}	1000	990	226	224	-1	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	850	462	392	-15	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	247	273	10	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1000	303	307	2	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1000	547	570	4	NA	± 100 %	AverageRF
Aroclor 1260	1000	1000	NA	NA	NA	0	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F004.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	97	6240	6050	-3	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1100	61.4	67.9	11	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1100	126	137	8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1000	112	113	0	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	131	136	4	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	970	189	184	-3	NA	± 100 %	AverageRF
Aroclor 1016	1000	1000	NA	NA	NA	4	± 15 %	NA
Aroclor 1260 {1}	1000	940	384	363	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	930	233	218	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	940	444	417	-6	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	990	577	571	-1	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	990	431	425	-1	NA	± 100 %	AverageRF
Aroclor 1260	1000	960	NA	NA	NA	-4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R004.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	96	6310	6070	-4	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1000	129	135	4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	970	250	243	-3	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1100	180	201	12	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	173	179	3	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1000	165	165	0	NA	± 100 %	AverageRF
Aroclor 1016	1000	1000	NA	NA	NA	3	± 15 %	NA
Aroclor 1260 {1}	1000	1000	226	227	0	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	970	462	448	-3	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1000	247	246	0	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	980	303	296	-2	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	960	547	526	-4	NA	± 100 %	AverageRF
Aroclor 1260	1000	980	NA	NA	NA	-2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F020.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	110	6240	6600	6	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1200	61.4	71.4	16	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1100	126	142	12	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1100	112	125	11	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1200	131	150	15	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1100	189	200	6	NA	± 100 %	AverageRF
Aroclor 1016	1000	1100	NA	NA	NA	12	± 15 %	NA
Aroclor 1260 {1}	1000	1000	384	396	3	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	1000	233	244	5	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	444	478	8	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1100	577	636	10	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1100	431	473	10	NA	± 100 %	AverageRF
Aroclor 1260	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R020.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	100	6310	6450	2	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1000	129	135	4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1000	250	262	5	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1200	180	214	19	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1100	173	186	8	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1100	165	174	6	NA	± 100 %	AverageRF
Aroclor 1016	1000	1100	NA	NA	NA	8	± 15 %	NA
Aroclor 1260 {1}	1000	1100	226	244	8	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	1100	462	485	5	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	247	263	7	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1000	303	317	5	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1000	547	570	4	NA	± 100 %	AverageRF
Aroclor 1260	1000	1100	NA	NA	NA	6	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Polychlorinated Biphenyls (PCBs)

Analysis Method: 8082

Analysis Lot: KWG0703803
Instrument ID: GC09.i
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0320F003.D	Instrument Blank	KWG0703803-1	3/20/2007	11:00		3/20/2007	11:00
0320F004.D	Continuing Calibration Verification	KWG0703803-2	3/20/2007	11:26		3/20/2007	11:26
0320F005.D	ZZZZZZ	ZZZZZZ	3/20/2007	11:52		3/20/2007	11:52
0320F006.D	ZZZZZZ	ZZZZZZ	3/20/2007	12:17		3/20/2007	12:17
0320F007.D	ZZZZZZ	ZZZZZZ	3/20/2007	12:43		3/20/2007	12:43
0320F008.D	ZZZZZZ	ZZZZZZ	3/20/2007	13:08		3/20/2007	13:08
0320F009.D	Method Blank	KWG0703477-3	3/20/2007	13:34		3/20/2007	13:34
0320F011.D	Lab Control Sample	KWG0703477-2	3/20/2007	14:00		3/20/2007	14:00
0320F012.D	ZZZZZZ	ZZZZZZ	3/20/2007	14:25		3/20/2007	14:25
0320F013.D	DAEGW104CL	K0701703-001	3/20/2007	14:51		3/20/2007	14:51
0320F014.D	ZZZZZZ	ZZZZZZ	3/20/2007	15:16		3/20/2007	15:16
0320F015.D	ZZZZZZ	ZZZZZZ	3/20/2007	15:42		3/20/2007	15:42
0320F016.D	ZZZZZZ	ZZZZZZ	3/20/2007	16:08		3/20/2007	16:08
0320F017.D	ZZZZZZ	ZZZZZZ	3/20/2007	16:33		3/20/2007	16:33
0320F019.D	Instrument Blank	KWG0703803-3	3/20/2007	17:39		3/20/2007	17:39
0320F020.D	Continuing Calibration Verification	KWG0703803-4	3/20/2007	18:05		3/20/2007	18:05
0320F021.D	ZZZZZZ	ZZZZZZ	3/20/2007	18:30		3/20/2007	18:30
0320F022.D	ZZZZZZ	ZZZZZZ	3/20/2007	18:56		3/20/2007	18:56
0320F023.D	ZZZZZZ	ZZZZZZ	3/20/2007	19:22		3/20/2007	19:22
0320F024.D	ZZZZZZ	ZZZZZZ	3/20/2007	19:47		3/20/2007	19:47
0320F025.D	ZZZZZZ	ZZZZZZ	3/20/2007	20:13		3/20/2007	20:13
0320F026.D	ZZZZZZ	ZZZZZZ	3/20/2007	20:39		3/20/2007	20:39
0320F027.D	ZZZZZZ	ZZZZZZ	3/20/2007	21:04		3/20/2007	21:04
0320F028.D	ZZZZZZ	ZZZZZZ	3/20/2007	21:30		3/20/2007	21:30
0320F029.D	ZZZZZZ	ZZZZZZ	3/20/2007	21:56		3/20/2007	21:56
0320F030.D	ZZZZZZ	ZZZZZZ	3/20/2007	22:21		3/20/2007	22:21
0320F031.D	ZZZZZZ	ZZZZZZ	3/20/2007	22:47		3/20/2007	22:47
0320F032.D	ZZZZZZ	ZZZZZZ	3/20/2007	23:13		3/20/2007	23:13
0320F033.D	ZZZZZZ	ZZZZZZ	3/20/2007	23:38		3/20/2007	23:38
0320F034.D	ZZZZZZ	ZZZZZZ	3/21/2007	00:04		3/21/2007	00:04
0320F036.D	Instrument Blank	KWG0703803-5	3/21/2007	01:10		3/21/2007	01:10
0320F037.D	Continuing Calibration Verification	KWG0703803-6	3/21/2007	01:35		3/21/2007	01:35
0320F038.D	ZZZZZZ	ZZZZZZ	3/21/2007	02:01		3/21/2007	02:01
0320F039.D	ZZZZZZ	ZZZZZZ	3/21/2007	02:27		3/21/2007	02:27
0320F041.D	ZZZZZZ	ZZZZZZ	3/21/2007	03:18		3/21/2007	03:18

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Polychlorinated Biphenyls (PCBs)

Analysis Method: 8082

Analysis Lot: KWG0703803
Instrument ID: GC09.i
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0320F042.D	ZZZZZZ	ZZZZZZ	3/21/2007	03:43		3/21/2007	03:43
0320F043.D	ZZZZZZ	ZZZZZZ	3/21/2007	04:09		3/21/2007	04:09
0320F044.D	ZZZZZZ	ZZZZZZ	3/21/2007	04:35		3/21/2007	04:35
0320F045.D	ZZZZZZ	ZZZZZZ	3/21/2007	05:01		3/21/2007	05:01
0320F046.D	ZZZZZZ	ZZZZZZ	3/21/2007	05:27		3/21/2007	05:27
0320F047.D	ZZZZZZ	ZZZZZZ	3/21/2007	05:53		3/21/2007	05:53
0320F048.D	ZZZZZZ	ZZZZZZ	3/21/2007	06:18		3/21/2007	06:18
0320F050.D	Instrument Blank	KWG0703803-7	3/21/2007	07:24		3/21/2007	07:24
0320F051.D	Continuing Calibration Verification	KWG0703803-8	3/21/2007	07:50		3/21/2007	07:50
0320F052.D	ZZZZZZ	ZZZZZZ	3/21/2007	08:15		3/21/2007	08:15
0320F053.D	ZZZZZZ	ZZZZZZ	3/21/2007	08:41		3/21/2007	08:41
0320F054.D	ZZZZZZ	ZZZZZZ	3/21/2007	09:07		3/21/2007	09:07
0320F055.D	ZZZZZZ	ZZZZZZ	3/21/2007	09:32		3/21/2007	09:32
0320F056.D	ZZZZZZ	ZZZZZZ	3/21/2007	09:58		3/21/2007	09:58
0320F057.D	ZZZZZZ	ZZZZZZ	3/21/2007	10:24		3/21/2007	10:24
0320F058.D	ZZZZZZ	ZZZZZZ	3/21/2007	10:49		3/21/2007	10:49
0320F059.D	ZZZZZZ	ZZZZZZ	3/21/2007	11:15		3/21/2007	11:15
0320F060.D	ZZZZZZ	ZZZZZZ	3/21/2007	11:41		3/21/2007	11:41
0320F062.D	Instrument Blank	KWG0703803-9	3/21/2007	12:47		3/21/2007	12:47
0320F063.D	Continuing Calibration Verification	KWG0703803-10	3/21/2007	13:13		3/21/2007	13:13
0320F064.D	ZZZZZZ	ZZZZZZ	3/21/2007	13:38		3/21/2007	13:38
0320F065.D	ZZZZZZ	ZZZZZZ	3/21/2007	14:04		3/21/2007	14:04
0320F066.D	ZZZZZZ	ZZZZZZ	3/21/2007	14:30		3/21/2007	14:30
0320F068.D	Instrument Blank	KWG0703803-11	3/21/2007	15:36		3/21/2007	15:36
0320F069.D	Continuing Calibration Verification	KWG0703803-12	3/21/2007	16:02		3/21/2007	16:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/09/2007

Extraction Prep Log
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535
Analysis Method: 8082

Extraction Lot: KWG0703477
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104CL	K0701703-001	03/02/07	03/03/07	1050ml	2ml	NA	
Method Blank	KWG0703477-3	NA	NA	1050ml	2ml	NA	
Lab Control Sample	KWG0703477-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

QC Reports

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535
Analysis Method: 8082

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104CL	K0701703-001	56
Method Blank	KWG0703477-3	90
Lab Control Sample	KWG0703477-2	88

Surrogate Recovery Control Limits (%)

Sur1 = Decachlorobiphenyl 10-144

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007

Lab Control Spike Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8082	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703477

	Lab Control Sample KWG0703477-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Aroclor 1016	1.62	2.00	81	50-125
Aroclor 1260	1.74	2.00	87	56-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	13:34

Method Blank Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**File ID:**	J:\GC09\DATA\032007.B\0320F009.D
Lab Code:	KWG0703477-3	**Instrument ID:**	GC09.i
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082	**Extraction Lot:**	KWG0703477

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703477-2	J:\GC09\DATA\032007.B\0320F011.D	03/20/07	14:00
DAEGW104CL	K0701703-001	J:\GC09\DATA\032007.B\0320F013.D	03/20/07	14:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/09/2007
Sample Matrix:	Water	**Date Analyzed:**	03/20/2007
		Time Analyzed:	14:00

Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Lab Control Sample	**File ID:**	J:\GC09\DATA\032007.B\0320F011.D
Lab Code:	KWG0703477-2	**Instrument ID:**	GC09.i
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082	**Extraction Lot:**	KWG0703477

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703477-3	J:\GC09\DATA\032007.B\0320F009.D	03/20/07	13:34
DAEGW104CL	K0701703-001	J:\GC09\DATA\032007.B\0320F013.D	03/20/07	14:51

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Polychlorinated Biphenyls (PCBs)

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1221	ND	U	0.39	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1232	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1242	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1248	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1254	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1260	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	56	10-144	03/20/07	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F013.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/20/2007 14:51
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: M-3/20/07

Secondary Review: 3/21/07

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R013.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/20/2007 14:51
Date Quantitated: 03/21/2007 10:29
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: m 3/21/07

Secondary Review: 3/21/07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8082 PCB	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703803	**Prep Lot:**	KWG0703477	**Report Group:**	K0701703
Analysis Method:	8082	**Prep Method:**	EPA 3535		
Prep Ref:	582060	**Prep Date:**	03/09/2007		

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:	Polychlorinated Biphenyls (PCBs)	**Report List ID:**	LJ4698
MB Ref:	J:\GC09\DATA\032007.B\0320F009.D	**Method ID:**	MJ579
		Quant based on Report List	

Data File #1:	J:\GC09\DATA\032007.B\0320F013.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R013.D			**Vial:**	11
Acqu Date:	03/20/2007 14:51	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K0701703-001				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Decachlorobiphenyl	17.32 +0.00	18.86 0.00	352440	352931	56.45	55.92			56OK
			%Recovery =		56OK	56OK	Limits =	10-144	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.0089U	0.0089U	0.0089U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1221			0	0	0.0000	0.0000	0.0071U	0.0071U	0.0071U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1232			0	0	0.0000	0.0000	0.0072U	0.0072U	0.0072U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1242			0	0	0.0000	0.0000	0.020U	0.020U	0.020U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.020U	0.020U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F013.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R013.D			**Vial:**	11
Acqu Date:	03/20/2007 14:51	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K0701703-001				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1248			0	0	0.0000	0.0000	0.016U	0.016U	0.016U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1254			0	0	0.0000	0.0000	0.0036U	0.0036U	0.0036U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1260			0	0	0.0000	0.0000	0.0063U	0.0063U	0.0063U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.0063U	0.0063U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F013.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F013.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R013.D
Inj Date : 20-MAR-2007 14:51
Sample Info: K0701703-001 | DAEGW104C1
Misc Info : KELSO\SEMIVOA GC\8082-PCB\01703001.H | F=2 D=
Cal Date : 21-MAR-2007 09:41
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.450	5.133	274327	289309	46.2	44.5		100.00(RM)
Decachlorobiphenyl	17.317	18.860	352440	352931	56.4	55.9		100.00(R)

QC Flag Legend

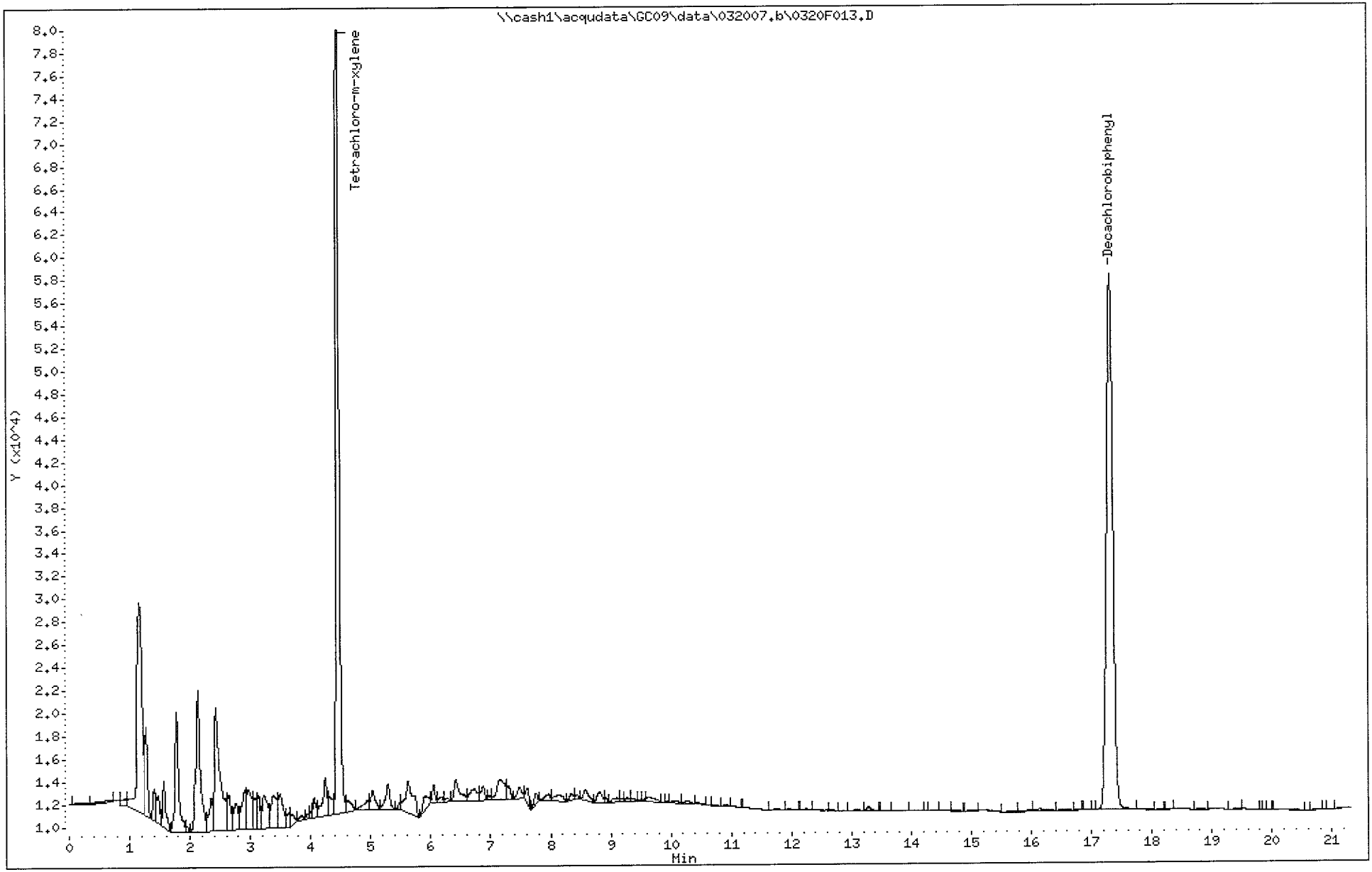
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F013.D
Date : 20-MAR-2007 14:51
Client ID:
Sample Info: K0701703-001 | DAEGW104C1

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



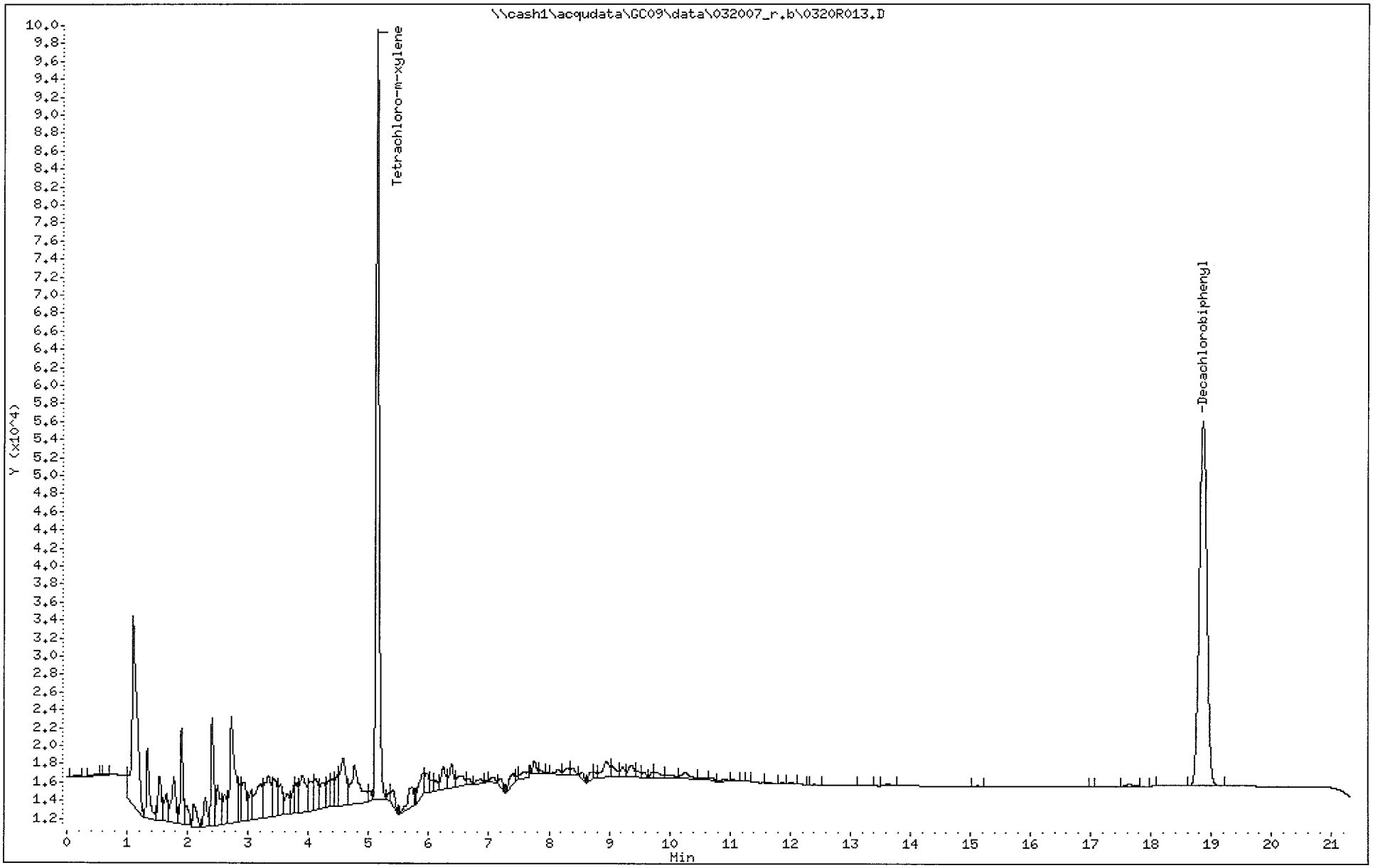
Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R013.D
Date : 20-MAR-2007 14:51
Client ID:
Sample Info: K0701703-001 | DAEGW104C1

Instrument: GC09.i

Operator: LHarris

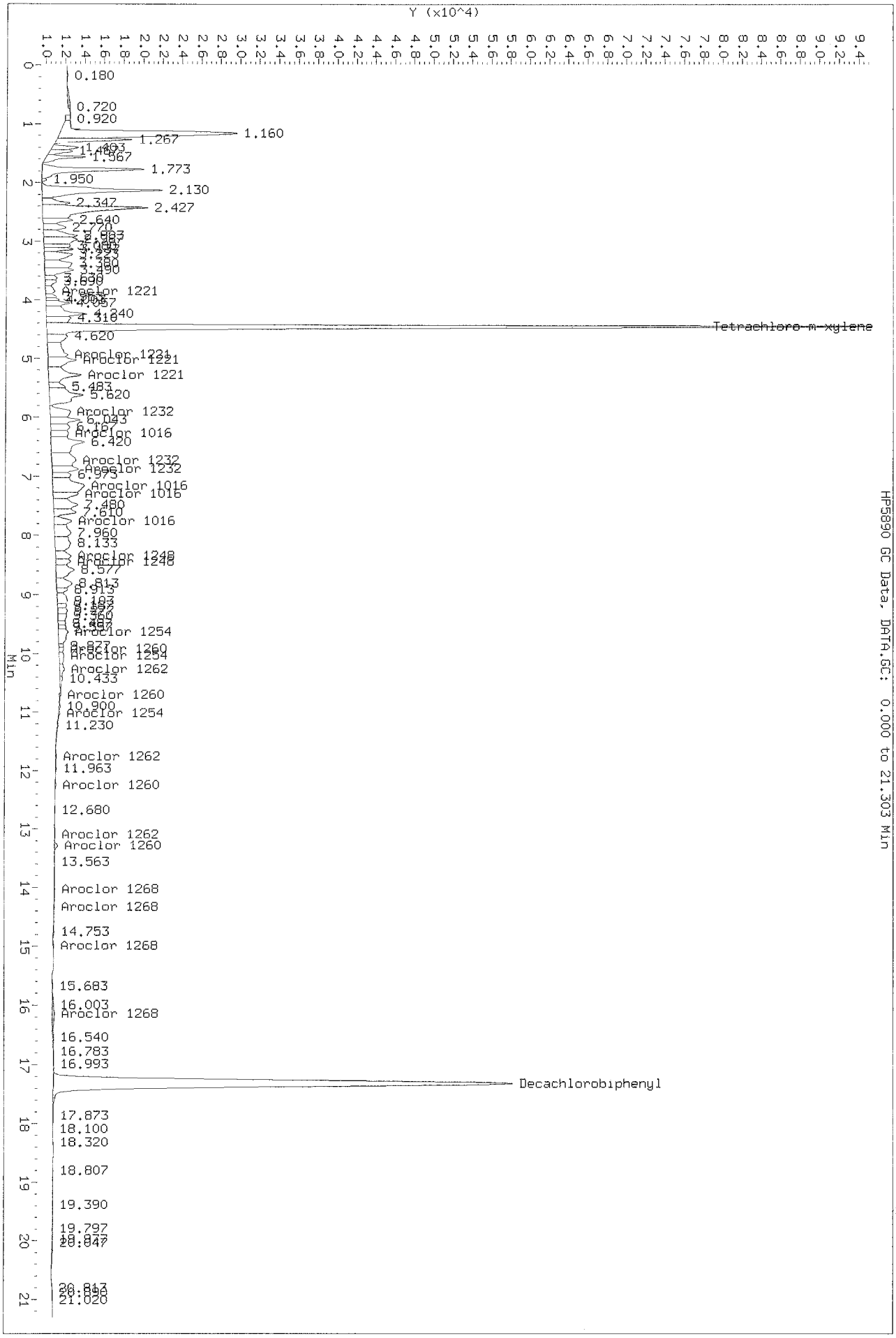
Column phase: DB-XLB

Column diameter: 0.53



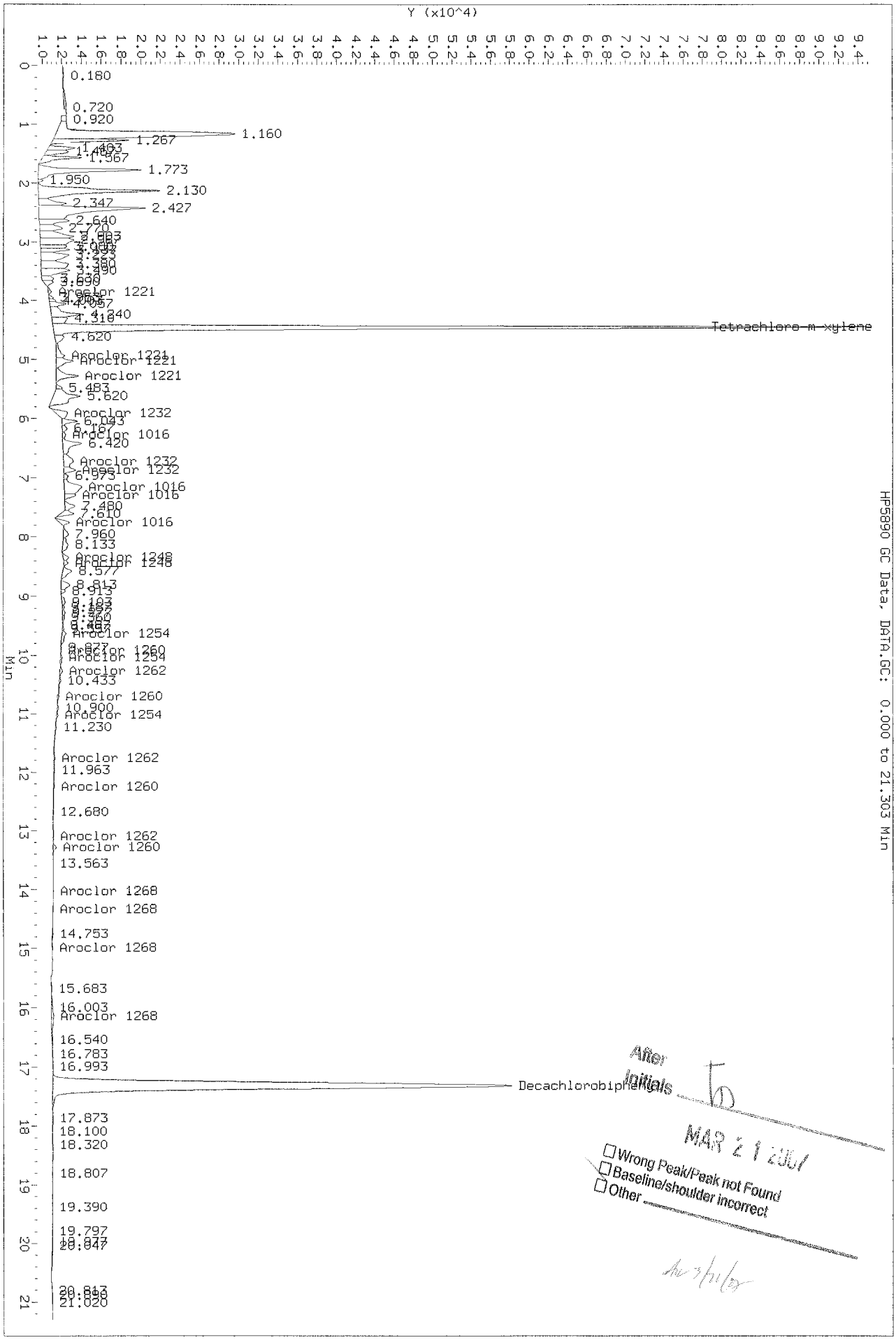
Data File: \\cash1\acqudata\GC09\data\032007.b\0320F013.D
Injection Date: 20-MAR-2007 14:51
Instrument: GC09.1
Client Sample ID:

HP5890 GC Data. DATA.GC: 0.000 to 21.303 Min



Data File: \\cash1\acqudata\GC09\data\032007.b\0320F013.D
Injection Date: 20-MAR-2007 14:51
Instrument: GC09.i
Client Sample ID:

HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min



After
Initials
MAR 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703477-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1221	ND	U	0.39	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1232	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1242	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1248	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1254	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1260	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	90	10-144	03/20/07	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F009.D
Lab ID: KWG0703477-3
RunType: MB
Matrix: WATER

Date Acquired: 03/20/2007 13:34
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R009.D
Lab ID: KWG0703477-3
RunType: MB
Matrix: WATER

Date Acquired: 03/20/2007 13:34
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/21/07

Secondary Review: 3/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/14/2007

Analysis Lot:	KWG0703803	**Prep Lot:**	KWG0703477	**Report Group:**	
Analysis Method:	8082	**Prep Method:**	EPA 3535		
Prep Ref:	582064	**Prep Date:**	03/09/2007		

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:		**Method ID:**	MJ579
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F009.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R009.D			**Vial:**	7
Acqu Date:	03/20/2007 13:34	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1		RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	4.45	0.00	5.13	356595	375925	60.11	57.77			60OK
				%Recovery =		60OK	58OK	Limits =	27-136	
Decachlorobiphenyl	17.31	0.00	18.86	564802	556612	90.46	88.19			90OK
				%Recovery =		90OK	88OK	Limits =	10-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00			0	0		0.0000			
				%Recovery =				Limits =	70-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.0089U	0.0089U	0.0089U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.0089U	0.0089U	
Aroclor 1221			0	0	0.0000	0.0000	0.0071U	0.0071U	0.0071U
Aroclor 1221 {1}			0d	0	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {2}			0d	0	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {3}			0d	0	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {4}			0d	0	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1232			0	0	0.0000	0.0000	0.0072U	0.0072U	0.0072U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D. Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F009.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R009.D			**Vial:**	7
Acqu Date:	03/20/2007 13:34	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1242			0	0	0.0000	0.0000	0.020U	0.020U	0.020U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1248			0	0	0.0000	0.0000	0.016U	0.016U	0.016U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1254			0	0	0.0000	0.0000	0.0036U	0.0036U	0.0036U
Aroclor 1254 {1}			0	0	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {2}			0	0	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {3}			0	0	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {4}			0	0	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {5}			0	0	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1260			0	0	0.0000	0.0000	0.0063U	0.0063U	0.0063U
Aroclor 1260 {1}			0	0	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {2}			0	0	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {3}			0	0	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {4}			0	0	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1260 {5}			0	0	0.0000	0.0000	0.0063U	0.0063U	
Aroclor 1262			0	0	0.0000	0.0000	0.0043U	0.0043U	0.0043U
Aroclor 1262 {1}			0	0	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {2}			0	0	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {3}			0	0	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {4}			0	0	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {5}			0	0	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1268			0	0	0.0000	0.0000	0.063U	0.063U	0.063U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.063U	0.063U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F009.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R009.D			**Vial:**	7
Acqu Date:	03/20/2007 13:34	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F009.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F009.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R009.D
Inj Date : 20-MAR-2007 13:34
Sample Info: KWG0703477-3 | MB | 8082 PCB | WATER
Misc Info : SEMIVOA GC\W0703477\3-MB.H | F=2 D=1 A=1050
Cal Date : 21-MAR-2007 09:41
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.447	5.133	356595	375925	60.1	57.8		100.00(R)
Decachlorobiphenyl	17.310	18.863	564802	556612	90.4	88.2		100.00(R)

QC Flag Legend

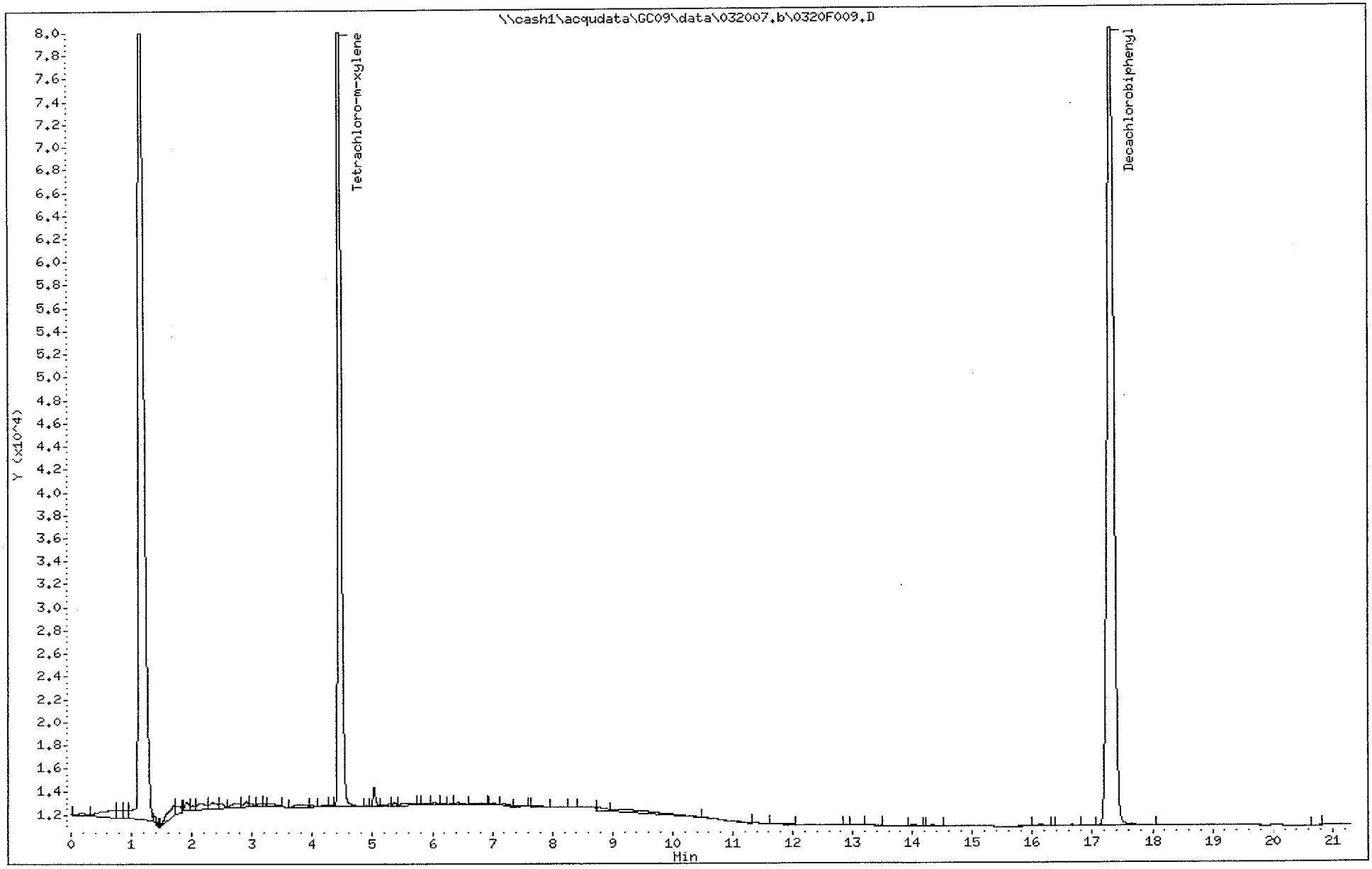
R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F009.D
Date : 20-MAR-2007 13:34
Client ID:
Sample Info: KWG0703477-3 | MB | 8082 PCB | WATER

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



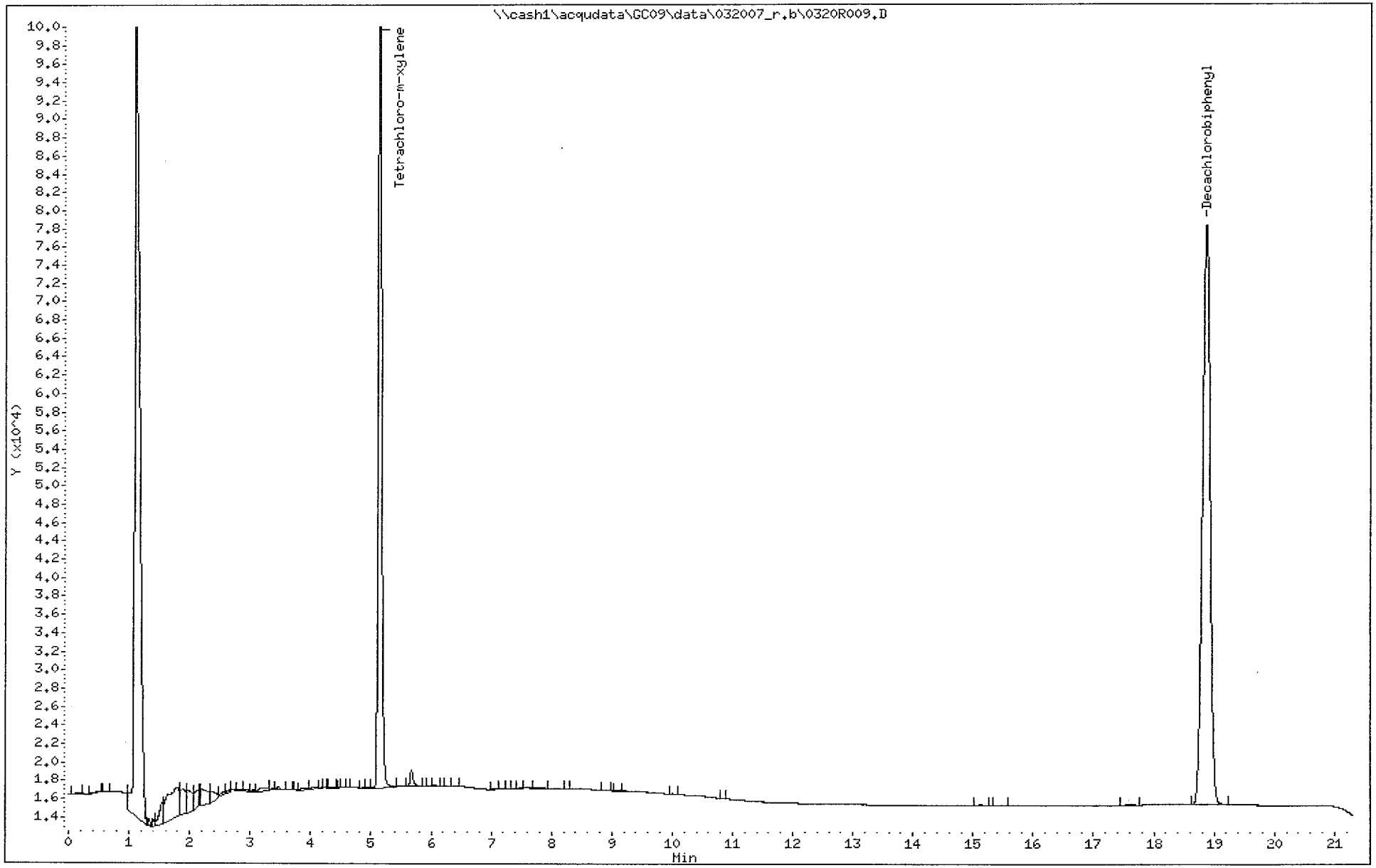
Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R009.D
Date : 20-MAR-2007 13:34
Client ID:
Sample Info: KWG0703477-3 | MB | 8082 PCB | WATER

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCBs)

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703477-2	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8082		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**1.62**		0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1221	ND	U	0.40	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1232	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1242	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1248	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1254	ND	U	0.20	1	03/09/07	03/20/07	KWG0703477	
Aroclor 1260	**1.74**		0.20	1	03/09/07	03/20/07	KWG0703477	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	88	10-144	03/20/07	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F011.D
Lab ID: KWG0703477-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/20/2007 14:00
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/21/07

Secondary Review: 3/21/07

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R011.D
Lab ID: KWG0703477-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/20/2007 14:00
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible] 3/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/14/2007

Analysis Lot:	KWG0703803	**Prep Lot:**	KWG0703477	**Report Group:**	
Analysis Method:	8082	**Prep Method:**	EPA 3535		
Prep Ref:	582063	**Prep Date:**	03/09/2007		

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:	J:\GC09\DATA\032007.B\0320F009.D	**Method ID:**	MJ579
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F011.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R011.D			**Vial:**	9
Acqu Date:	03/20/2007 14:00	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	4.45	0.00	5.13		368479	392367	62.12	60.30			62OK
					%Recovery =		62OK	60OK	Limits =	27-136	
Decachlorobiphenyl	17.31	0.00	18.86	0.00	552538	544967	88.50	86.34			88OK
					%Recovery =		88OK	86OK	Limits =	10-144	
2,2',4,4',5,5'-Hexabromobiphen	0.00				0	0		0.0000			
					%Recovery =				Limits =	70-130	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016					0	0	809.29	792.78	1.62	1.59	1.62
Aroclor 1016 {1}	6.25	0.00	6.36		50895m	95214	828.35	737.72	1.66	1.48	
Aroclor 1016 {2}	6.31	0.00	7.35		98773m	192290	781.05	769.76	1.56	1.54	
Aroclor 1016 {3}	7.11	0.00	7.58	0.00	92230m	156083	821.51	865.45	1.64	1.73	
Aroclor 1016 {4}	7.26		7.86	0.00	109950m	137485	841.83	793.93	1.68	1.59	
Aroclor 1016 {5}	7.69		8.15	0.00	146173m	131671	773.70	797.02	1.55	1.59	
Aroclor 1221					0	0	0.0000	0.0000	0.0071U	0.0071U	0.0071U
Aroclor 1221 {1}					0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {2}					0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {3}					0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1221 {4}					0d	0d	0.0000	0.0000	0.0071U	0.0071U	
Aroclor 1232					0	0	0.0000	0.0000	0.0072U	0.0072U	0.0072U
Aroclor 1232 {1}					0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {2}					0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1232 {3}					0d	0d	0.0000	0.0000	0.0072U	0.0072U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F011.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R011.D			**Vial:**	9
Acqu Date:	03/20/2007 14:00	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.0072U	0.0072U	
Aroclor 1242			0	0	0.0000	0.0000	0.020U	0.020U	0.020U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.020U	0.020U	
Aroclor 1248			0	0	0.0000	0.0000	0.016U	0.016U	0.016U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Aroclor 1254			0	0	0.0000	0.0000	0.0036U	0.0036U	0.0036U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.0036U	0.0036U	
Aroclor 1260			0	0	814.44	872.04	1.63	1.74	1.74
Aroclor 1260 {1}	9.93 0.00	11.30 0.00	286198	194678	744.85	859.99	1.49	1.72	
Aroclor 1260 {2}	10.72	11.67	177501	338036	761.55	732.00	1.52	1.46	
Aroclor 1260 {3}	11.03 0.00	11.86	306263	239591	690.41	969.73	1.38	1.94	
Aroclor 1260 {4}	12.25 0.00	12.41	541421	268431	938.81	886.88	1.88	1.77	
Aroclor 1260 {5}	13.30 0.00	13.20 0.00	403370	498970	936.58	911.61	1.87	1.82	
Aroclor 1262			0	0	0.0000	0.0000	0.0043U	0.0043U	0.0043U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.0043U	0.0043U	
Aroclor 1268			0	0	0.0000	0.0000	0.063U	0.063U	0.063U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.063U	0.063U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.063U	0.063U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F011.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R011.D			**Vial:**	9
Acqu Date:	03/20/2007 14:00	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703477-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F011.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F011.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R011.D
Inj Date : 20-MAR-2007 14:00
Sample Info: KWG0703477-2 | DLCS | 8082 PCB | WATER
Misc Info : SEMIVOA GC\W0703477\2-DLCS.H | F=2 D=1 A=1000
Cal Date : 21-MAR-2007 09:41
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.447	5.133	368479	392367	62.1	60.3		100.00(R)
Aroclor 1016	6.250	6.357	50895	95214	828	738	80.00- 120.00	100.00(M)
	6.310	7.353	98773	192290	781	770	163.94- 245.92	194.07(M)
	7.110	7.577	92230	156083	822	865	133.46- 200.19	181.22(M)
	7.263	7.860	109950	137485	842	794	162.78- 244.18	216.03(M)
	7.687	8.150	146173	131671	774	797	210.23- 315.34	287.20(M)
		Average of Peak Amounts =			809	793		
Aroclor 1260	9.927	11.297	286198	194678	745	860	80.00- 120.00	100.00
	10.717	11.670	177501	338036	762	732	48.00- 72.00	62.02
	11.030	11.863	306263	239591	690	970	97.01- 145.52	107.01
	12.253	12.407	541421	268431	939	887	133.48- 200.22	189.18
	13.300	13.203	403370	498970	936	912	98.70- 148.05	140.94
		Average of Peak Amounts =			814	872		
Decachlorobiphenyl	17.310	18.860	552538	544967	88.5	86.3		100.00(R)

QC Flag Legend

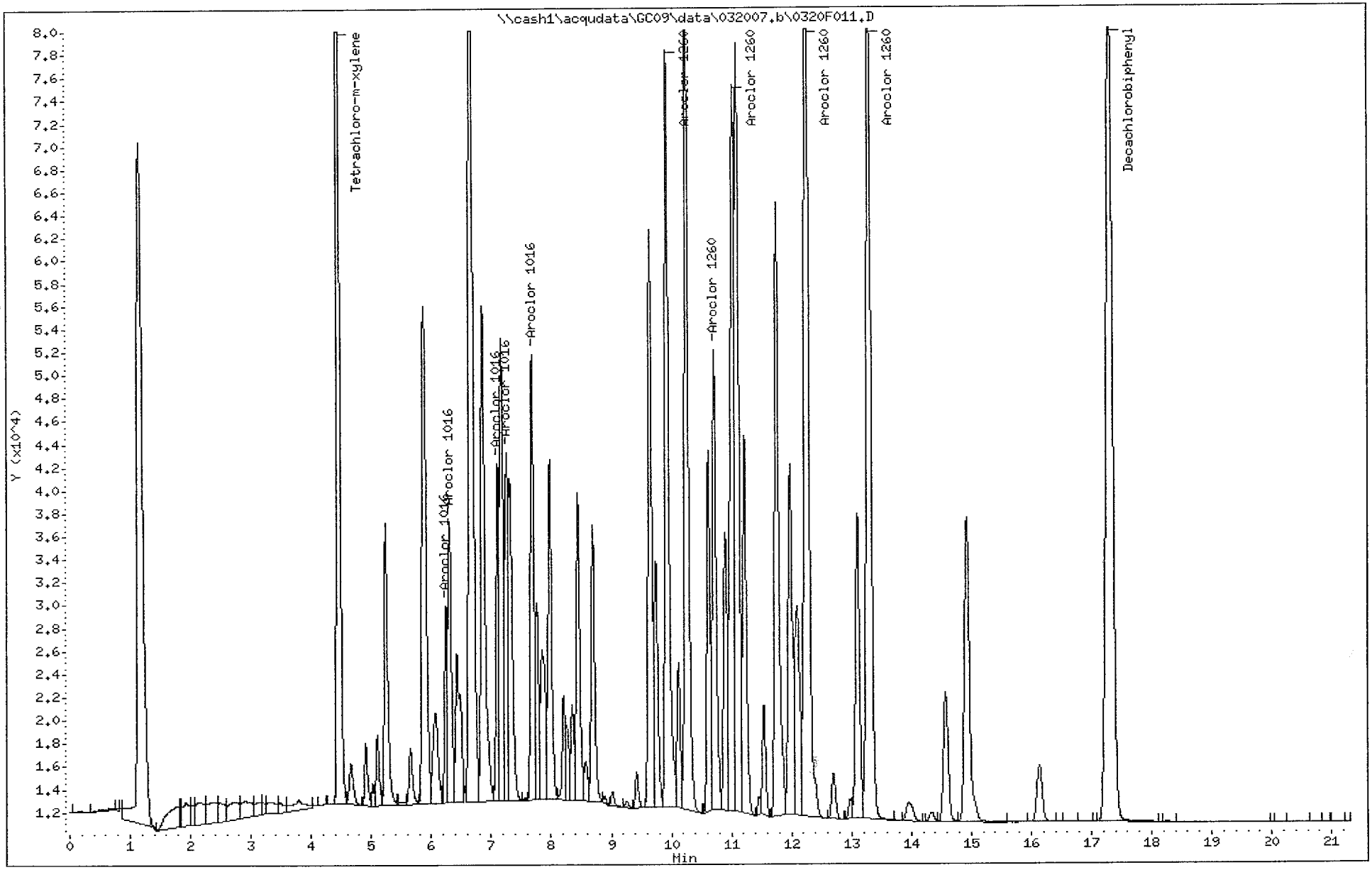
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F011.D
Date : 20-MAR-2007 14:00
Client ID:
Sample Info: KWG0703477-2 | DLCS | 8082 PCB | WATER

Column phase: DB-35MS

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

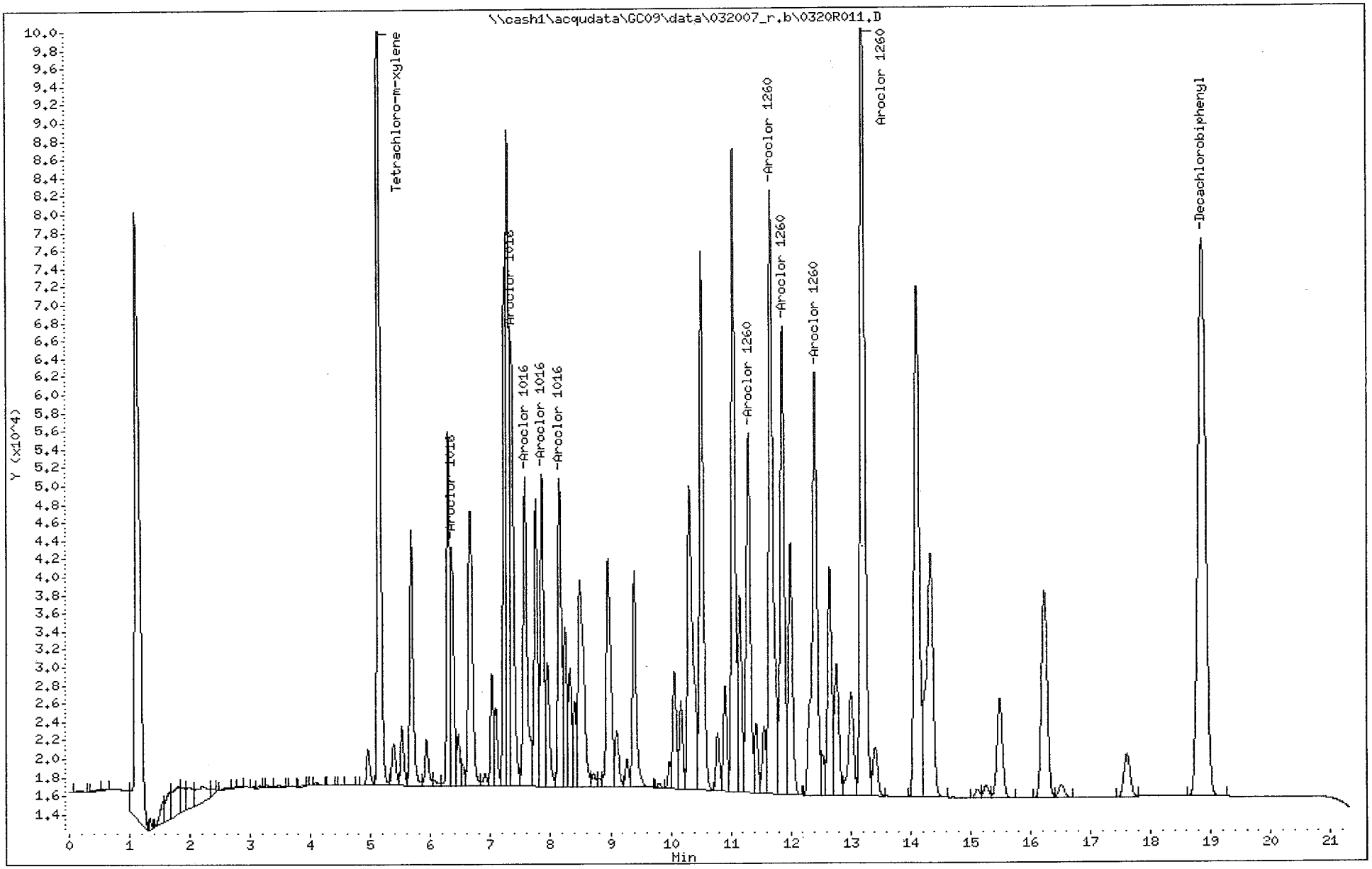


Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R011.D
Date : 20-MAR-2007 14:00
Client ID:
Sample Info: KWG0703477-2 | DLCS | 8082 PCB | WATER

Column phase: DB-XLB

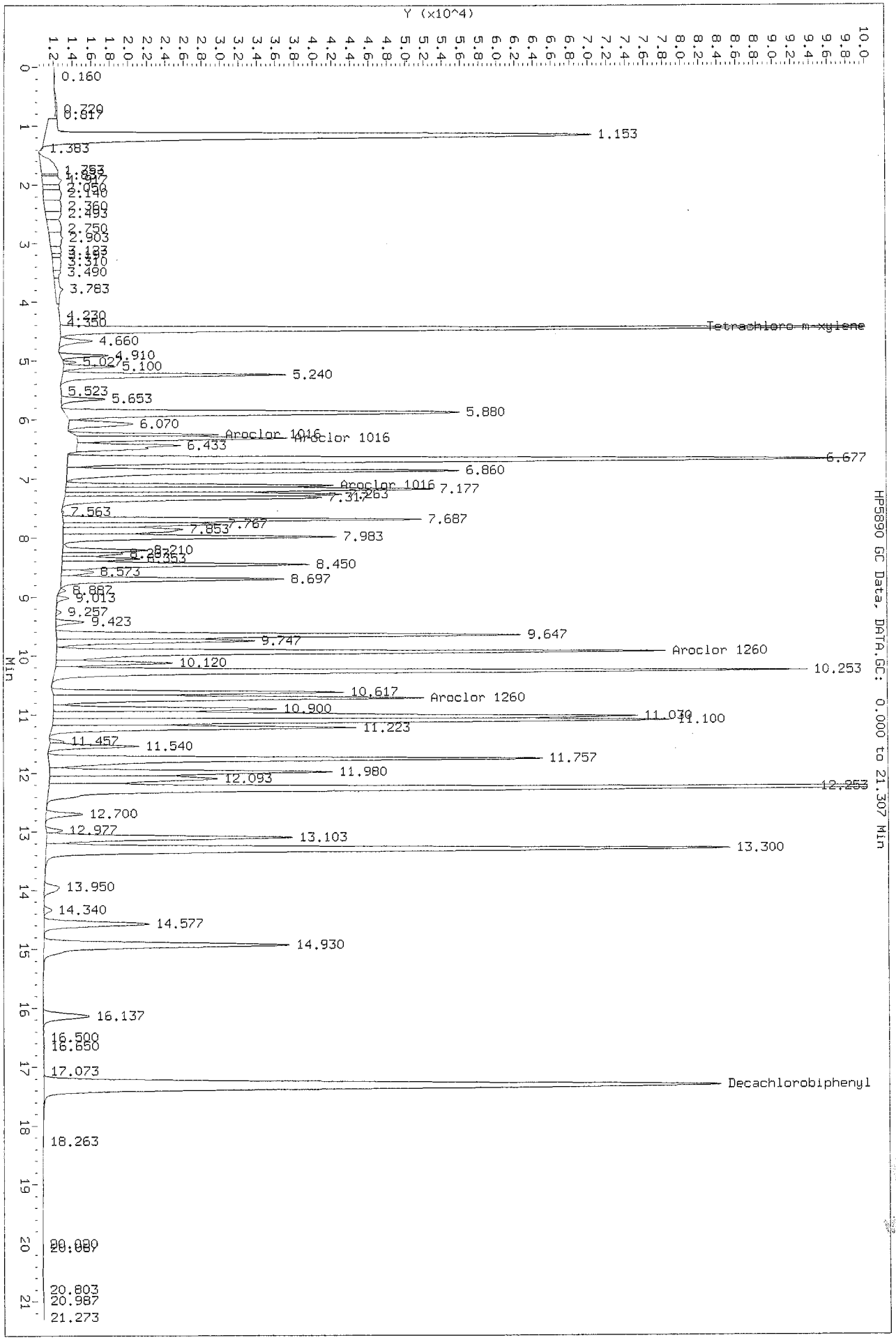
Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53



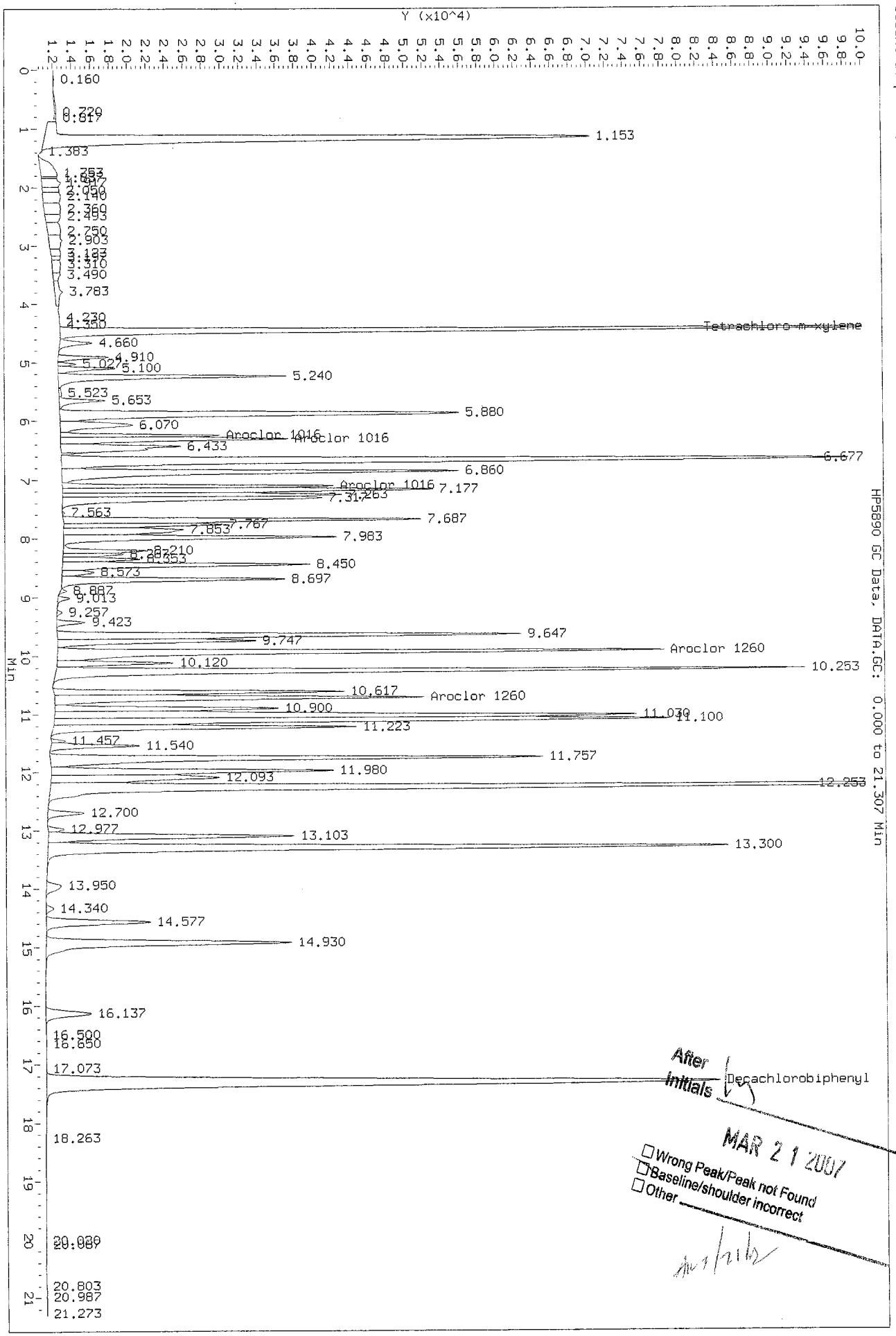
1030

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F011.D
Injection Date: 20-MAR-2007 14:00
Instrument: GC09.1
Client Sample ID:



Receive
MAR 21 2007

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F011.D
Injection Date: 20-MAR-2007 14:00
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.307 Min

After
Initials
MAR 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	\\cash1\acqudata\GC09\data\031607.B\0316F012.D	H	\\cash1\acqudata\GC09\data\031607.B\0316F038.D
B	\\cash1\acqudata\GC09\data\031607.B\0316F016.D	I	\\cash1\acqudata\GC09\data\031607.B\0316F039.D
C	\\cash1\acqudata\GC09\data\031607.B\0316F020.D	J	\\cash1\acqudata\GC09\data\031607.B\0316F040.D
D	\\cash1\acqudata\GC09\data\031607.B\0316F024.D	K	\\cash1\acqudata\GC09\data\031607.B\0316F041.D
E	\\cash1\acqudata\GC09\data\031607.B\0316F028.D	L	\\cash1\acqudata\GC09\data\031607.B\0316F042.D
F	\\cash1\acqudata\GC09\data\031607.B\0316F032.D	M	\\cash1\acqudata\GC09\data\031607.B\0316F043.D
G	\\cash1\acqudata\GC09\data\031607.B\0316F036.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl															
							H	2.5	7240	I	5.0	7420	J	50	6490
	K	100	5970	L	200	5460	M	500	4890						
Aroclor 1016 {1}															
							H	25	60.1	I	50	62.5	J	500	70.3
	K	1000	65.9	L	2000	58.4	M	5000	51.6						
Aroclor 1016 {2}															
							H	25	138	I	50	136	J	500	140
	K	1000	130	L	2000	115	M	5000	100						
Aroclor 1016 {3}															
							H	25	120	I	50	131	J	500	122
	K	1000	113	L	2000	99.8	M	5000	88.6						
Aroclor 1016 {4}															
							H	25	116	I	50	172	J	500	143
	K	1000	131	L	2000	116	M	5000	105						
Aroclor 1016 {5}															
							H	25	223	I	50	236	J	500	197
	K	1000	183	L	2000	158	M	5000	137						
Aroclor 1260 {1}															
							H	25	472	I	50	458	J	500	399
	K	1000	365	L	2000	326	M	5000	286						
Aroclor 1260 {2}															
							H	25	277	I	50	280	J	500	238
	K	1000	219	L	2000	201	M	5000	183						
Aroclor 1260 {3}															
							H	25	480	I	50	517	J	500	471
	K	1000	421	L	2000	403	M	5000	369						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {4}															
							H	25	595	I	50	659	J	500	604
	K	1000	568	L	2000	535	M	5000	499						
Aroclor 1260 {5}															
							H	25	470	I	50	473	J	500	445
	K	1000	423	L	2000	401	M	5000	373						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	15.9		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	10.5		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	12.3		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	13.9		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	18.4		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	19.9		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	19.0		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	17.0		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	12.4		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	9.7		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	9.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007
Date Analyzed: 03/17/2007

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082

Calibration ID: CAL6143
Units: ng/mL

File ID:
\\cash1\acqudata\GC09\data\031607.B\0316F044.D
\\cash1\acqudata\GC09\data\031607.B\0316F045.D
\\cash1\acqudata\GC09\data\031607.B\0316F046.D
\\cash1\acqudata\GC09\data\031607.B\0316F047.D
\\cash1\acqudata\GC09\data\031607.B\0316F048.D
\\cash1\acqudata\GC09\data\031607.B\0316F049.D
\\cash1\acqudata\GC09\data\031607.B\0316F050.D
\\cash1\acqudata\GC09\data\031607.B\0316F051.D
\\cash1\acqudata\GC09\data\031607.B\0316F052.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016 {1}	1000	1000	61.4	62.5	2	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	990	126	125	-1	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	960	112	108	-4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	131	130	0	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	940	189	177	-6	NA	± 100 %	AverageRF
Aroclor 1016	1000	980	NA	NA	NA	2	± 15 %	NA
Aroclor 1260 {1}	1000	870	384	334	-13	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	890	233	208	-11	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	830	444	366	-17	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1100	577	619	7	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1100	431	462	7	NA	± 100 %	AverageRF
Aroclor 1260	1000	950	NA	NA	NA	5	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	\\cash1\acqudata\GC09\data\031607_r.b\0316R012.D	H	\\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
B	\\cash1\acqudata\GC09\data\031607_r.b\0316R016.D	I	\\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
C	\\cash1\acqudata\GC09\data\031607_r.b\0316R020.D	J	\\cash1\acqudata\GC09\data\031607_r.b\0316R040.D
D	\\cash1\acqudata\GC09\data\031607_r.b\0316R024.D	K	\\cash1\acqudata\GC09\data\031607_r.b\0316R041.D
E	\\cash1\acqudata\GC09\data\031607_r.b\0316R028.D	L	\\cash1\acqudata\GC09\data\031607_r.b\0316R042.D
F	\\cash1\acqudata\GC09\data\031607_r.b\0316R032.D	M	\\cash1\acqudata\GC09\data\031607_r.b\0316R043.D
G	\\cash1\acqudata\GC09\data\031607_r.b\0316R036.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl															
							H	2.5	7650	I	5.0	7810	J	50	6490
	K	100	5900	L	200	5330	M	500	4700						
Aroclor 1016 {1}															
							H	25	130	I	50	164	J	500	140
	K	1000	127	L	2000	114	M	5000	98.3						
Aroclor 1016 {2}															
							H	25	271	I	50	312	J	500	274
	K	1000	247	L	2000	210	M	5000	184						
Aroclor 1016 {3}															
							H	25	155	I	50	185	J	500	201
	K	1000	201	L	2000	180	M	5000	159						
Aroclor 1016 {4}															
							H	25	182	I	50	198	J	500	196
	K	1000	174	L	2000	154	M	5000	135						
Aroclor 1016 {5}															
							H	25	174	I	50	192	J	500	187
	K	1000	162	L	2000	147	M	5000	129						
Aroclor 1260 {1}															
							H	25	224	I	50	263	J	500	242
	K	1000	225	L	2000	210	M	5000	194						
Aroclor 1260 {2}															
							H	25	498	I	50	565	J	500	478
	K	1000	441	L	2000	410	M	5000	378						
Aroclor 1260 {3}															
							H	25	250	I	50	312	J	500	263
	K	1000	241	L	2000	219	M	5000	198						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {4}															
							H	25	334	I	50	359	J	500	308
	K	1000	290	L	2000	272	M	5000	253						
Aroclor 1260 {5}															
							H	25	640	I	50	655	J	500	552
	K	1000	514	L	2000	480	M	5000	443						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL6143
Instrument ID: GC09.i

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	19.7		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	17.4		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	18.6		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	11.0		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	14.2		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	14.7		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	10.7		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	14.5		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	16.0		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	13.0		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	15.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/16/2007
Date Analyzed: 03/17/2007

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082

Calibration ID: CAL6143
Units: ng/mL

File ID:
\\cash1\acqudata\GC09\data\031607_r.b\0316R044.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R047.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R048.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R050.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R051.D
\\cash1\acqudata\GC09\data\031607_r.b\0316R052.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016 {1}	1000	950	129	123	-5	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	910	250	228	-9	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1000	180	188	5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	950	173	165	-5	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	950	165	158	-5	NA	± 100 %	AverageRF
Aroclor 1016	1000	960	NA	NA	NA	4	± 15 %	NA
Aroclor 1260 {1}	1000	990	226	224	-1	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	850	462	392	-15	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	247	273	10	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1000	303	307	2	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1000	547	570	4	NA	± 100 %	AverageRF
Aroclor 1260	1000	1000	NA	NA	NA	0	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Sequence Name: D:\GC09\SEQUENCE\031607.S
Comment:
Operator: LHarris
Data Path: D:\GC09\DATA\031607.B\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

3082
ICAL 6143

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	MaskName -	----r---			
3	SOLN	100	0316F001	PCB1	PRIMER
4	SOLN	100	0316F002	PCB1	PRIMER
5	SOLN	100	0316F003	PCB1	PRIMER
6	SOLN	100	0316F004	PCB1	PRIMER
7	SOLN	100	0316F005	PCB1	PRIMER
8	SOLN	100	0316F006	PCB1	PRIMER
9	SOLN	100	0316F007	PCB1	PRIMER
10	IB	1	0316F008	PCB1	IB
11	IB	2	0316F009	PCB1	IB
12	ICAL	3	0316F010	PCB1	1221 @ 50ppb | PCB4-86H | KWG0701324-
13	ICAL	4	0316F011	PCB1	1221 @ 500ppb | PCB4-86I | KWG0701324
14	ICAL	5	0316F012	PCB1	1221 @ 1000ppb | PCB4-87J | KWG070132
15	ICAL	6	0316F013	PCB1	1221 @ 2000ppb | PCB4-86J | KWG070132
16	ICAL	7	0316F014	PCB1	1232 @ 50ppb | PCB4-86K | KWG0701324-
17	ICAL	8	0316F015	PCB1	1232 @ 500ppb | PCB4-86L | KWG0701324
18	ICAL	9	0316F016	PCB1	1232 @ 1000ppb | PCB4-86B | KWG070132
19	ICAL	10	0316F017	PCB1	1232 @ 2000ppb | PCB4-86M | KWG070132
20	ICAL	11	0316F018	PCB1	1242 @ 50ppb | PCB4-86N | KWG0701324-
21	ICAL	12	0316F019	PCB1	1242 @ 500ppb | PCB4-86O | KWG0701324
22	ICAL	13	0316F020	PCB1	1242 @ 1000ppb | PCB4-86C | KWG070132
23	ICAL	14	0316F021	PCB1	1242 @ 2000ppb | PCB4-86P | KWG070132
24	ICAL	15	0316F022	PCB1	1248 @ 50ppb | PCB4-86Q | KWG0701324-
25	ICAL	16	0316F023	PCB1	1248 @ 500ppb | PCB4-86R | KWG0701324
26	ICAL	17	0316F024	PCB1	1248 @ 1000ppb | PCB4-87K | KWG070132
27	ICAL	18	0316F025	PCB1	1248 @ 2000ppb | PCB4-86S | KWG070132
28	ICAL	19	0316F026	PCB1	1254 @ 50ppb | PCB4-87A | KWG0701324-
29	ICAL	20	0316F027	PCB1	1254 @ 500ppb | PCB4-87B | KWG0701324
30	ICAL	21	0316F028	PCB1	1254 @ 1000ppb | PCB4-87L | KWG070132
31	ICAL	22	0316F029	PCB1	1254 @ 2000ppb | PCB4-87C | KWG070132
32	ICAL	23	0316F030	PCB1	1262 @ 50ppb | PCB4-87D | KWG0701324-
33	ICAL	24	0316F031	PCB1	1262 @ 500ppb | PCB4-87E | KWG0701324
34	ICAL	25	0316F032	PCB1	1262 @ 1000ppb | PCB4-87M | KWG070132
35	ICAL	26	0316F033	PCB1	1262 @ 2000ppb | PCB4-87F | KWG070132
36	ICAL	27	0316F034	PCB1	1268 @ 50ppb | PCB4-87G | KWG0701324-
37	ICAL	28	0316F035	PCB1	1268 @ 500ppb | PCB4-87H | KWG0701324
38	ICAL	29	0316F036	PCB1	1268 @ 1000ppb | PCB4-87N | KWG070132
39	ICAL	30	0316F037	PCB1	1268 @ 2000ppb | PCB4-87I | KWG070132
40	ICAL	31	0316F038	PCB1	1660 @ 25ppb | PCB4-85M | KWG0701324-
41	ICAL	32	0316F039	PCB1	1660 @ 50ppb | PCB4-85N | KWG0701324-
42	ICAL	33	0316F040	PCB1	1660 @ 500ppb | PCB4-85O | KWG0701324
43	ICAL	34	0316F041	PCB1	1660 @ 1000ppb | PCB4-88E | KWG070132

Sequence Name: D:\GC09\SEQUENCE\031607.S

Line	Type	Vial	DataFile	Method	Sample Name		
44	ICAL	35	0316F042	PCB1	1660 @ 2000ppb	PCB4-85Q	KWG070132
45	ICAL	36	0316F043	PCB1	1660 @ 5000ppb	PCB4-85R	KWG070132
46	ICV	37	0316F044	PCB1	1016 @ 1000ppb	PCB4-84D	KWG070132
47	ICV	38	0316F045	PCB1	1221 @ 1000ppb	PCB4-87P	KWG070132
48	ICV	39	0316F046	PCB1	1232 @ 1000ppb	PCB4-84F	KWG070132
49	ICV	40	0316F047	PCB1	1242 @ 1000ppb	PCB4-84G	KWG070132
50	ICV	41	0316F048	PCB1	1248 @ 1000ppb	PCB4-84H	KWG070132
51	ICV	42	0316F049	PCB1	1254 @ 1000ppb	PCB4-84I	KWG070132
52	ICV	43	0316F050	PCB1	1260 @ 1000ppb	PCB4-84J	KWG070132
53	ICV	44	0316F051	PCB1	1262 @ 1000ppb	PCB4-84K	KWG070132
54	ICV	45	0316F052	PCB1	1268 @ 1000ppb	PCB4-84L	KWG070132

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F009.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F009.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R009.D
Inj Date : 16-MAR-2007 15:33
Sample Info: IB
Misc Info : SEMIVOA GC\W0701324\2-IB.H
Cal Date : 19-MAR-2007 11:32
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

3/19/07

3/20/07

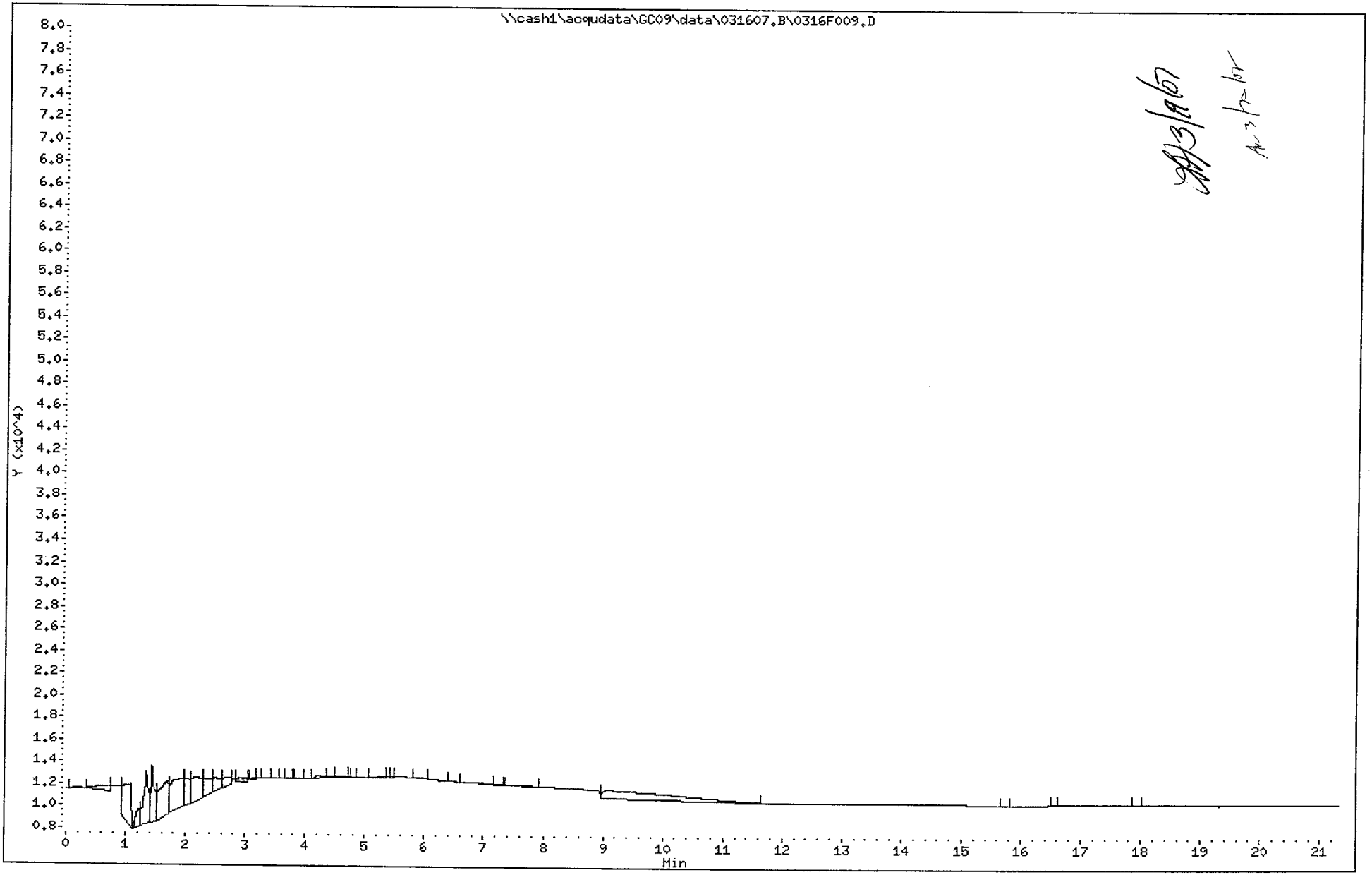
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F009.D
Date : 16-MAR-2007 15:33
Client ID:
Sample Info: IB

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



1045

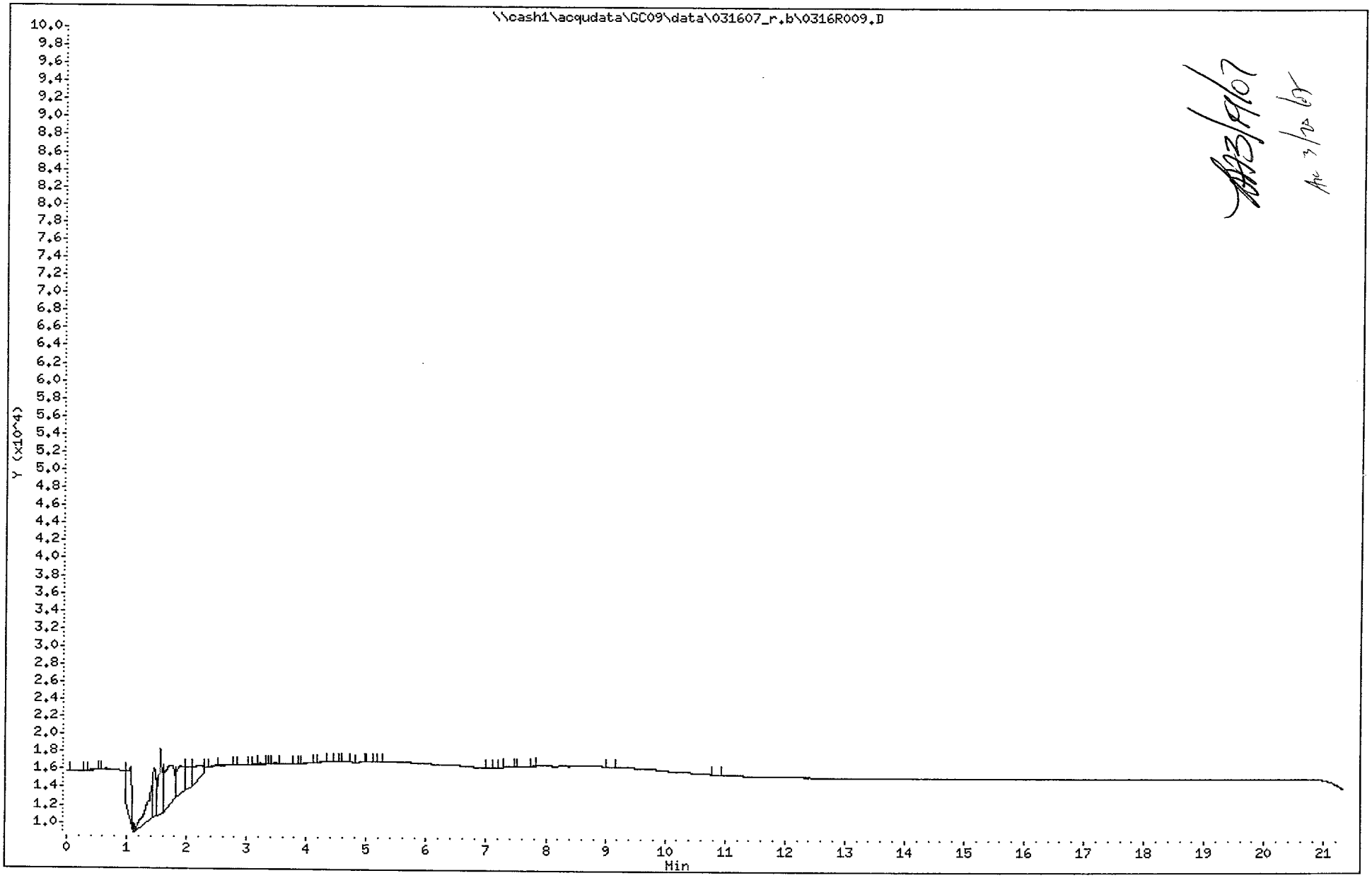
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R009.D
Date : 16-MAR-2007 15:33
Client ID:
Sample Info: IB

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



1046

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F012.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F012.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R012.D
Inj Date : 16-MAR-2007 16:50
Sample Info: 1221 @ 1000ppb | PCB4-87J | KWG0701324-3
Misc Info : SEMIVOA GC\W0701324\3-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1221.SUB
Sub List #2 : AR1221.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	3.790	4.093	51813	53425	1000	1000	80.00- 120.00	100.00
	4.917	5.397	76738	85016	1000	1000	118.48- 177.73	148.11
	5.107	5.523	50687	55889	1000	1000	78.26- 117.39	97.83
	5.243	5.680	175315	182851	1000	1000	270.69- 406.03	338.36
		Average of Peak Amounts =			1000	1000		

3/19/07

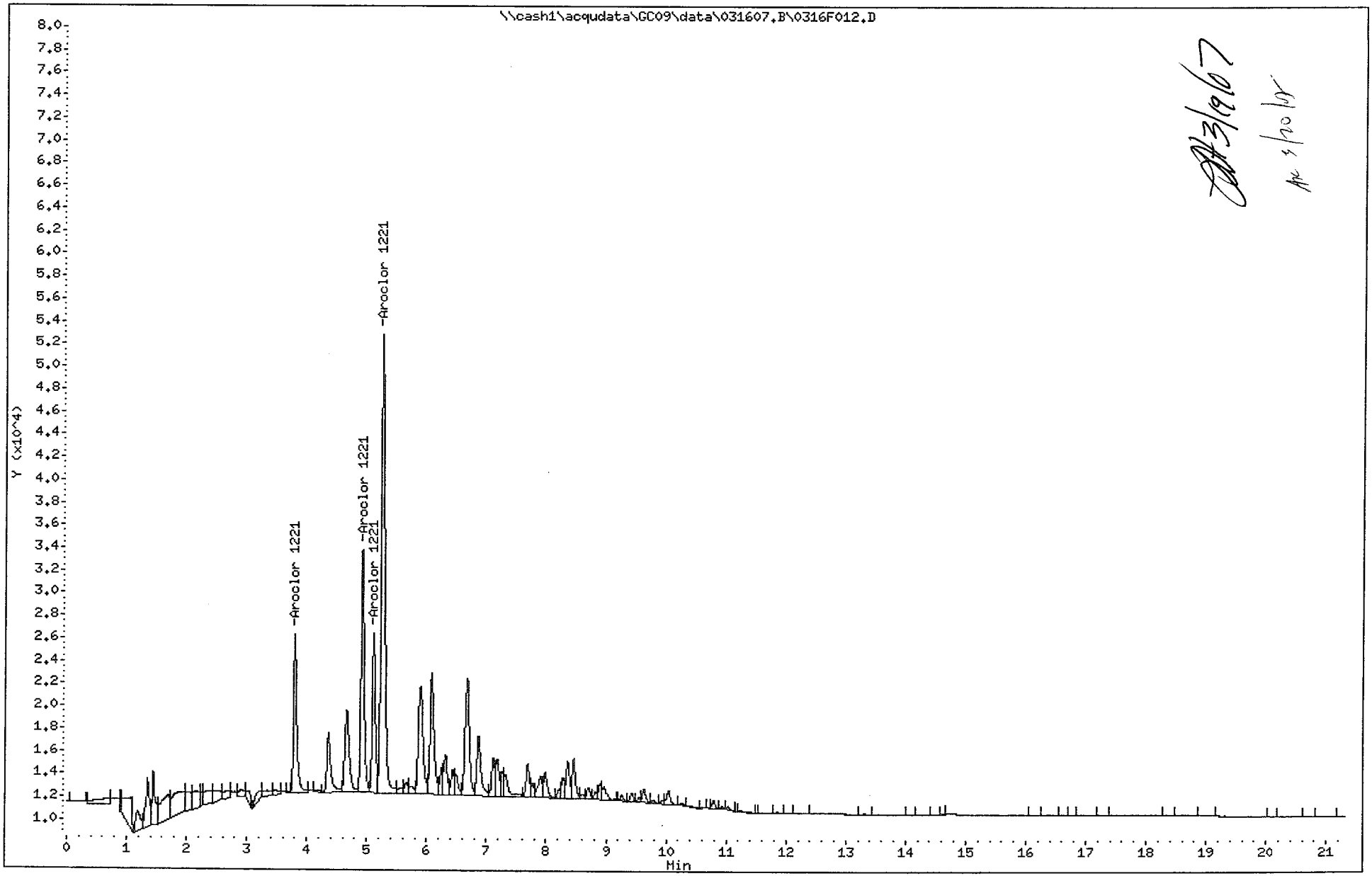
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F012.D
Date : 16-MAR-2007 16:50
Client ID:
Sample Info: 1221 @ 1000ppb | PCB4-87J | KWG0701324-3

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



3/19/07
Ar 3/20/07

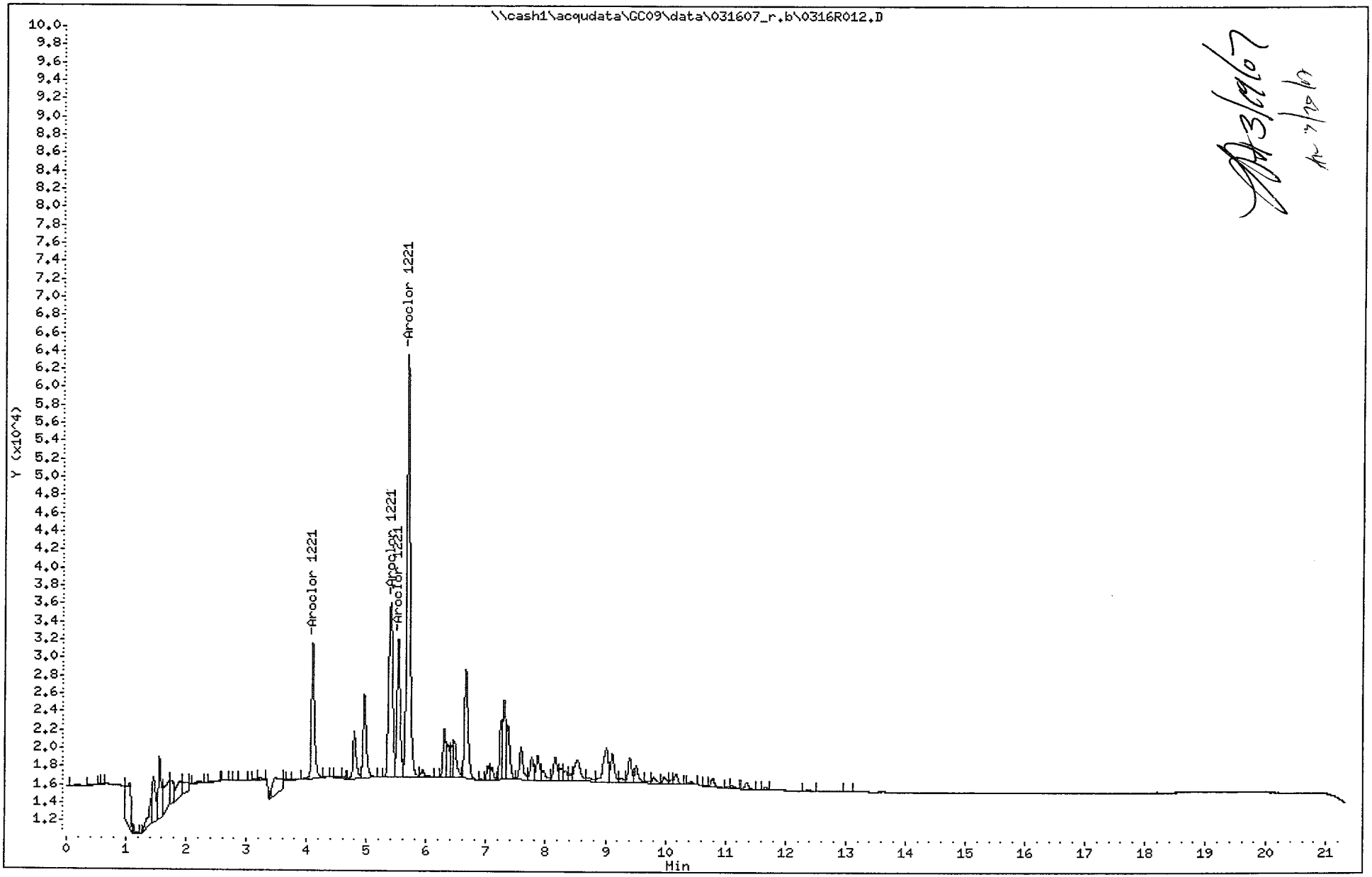
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R012.D
Date : 16-MAR-2007 16:50
Client ID:
Sample Info: 1221 @ 1000ppb | PCB4-87J | KWG0701324-3

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



Data File: \\cash1\acqudata\GC09\data\031607.B\0316F016.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F016.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R016.D
Inj Date : 16-MAR-2007 18:32
Sample Info: 1232 @ 1000ppb | PCB4-86B | KWG0701324-4
Misc Info : SEMIVOA GC\W0701324\4-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1232.SUB
Sub List #2 : AR1232.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.243	5.680	149846	156225	1000	1000	80.00- 120.00	100.00(M)
	5.883	6.360	134060	57176	1000	1000	71.57- 107.36	89.47(M)
	6.680	6.660	240815	102307	1000	1000	128.57- 192.85	160.71(M)
	6.867	7.297	105277	157051	1000	1000	56.21- 84.31	70.26(M)
		Average of Peak Amounts =			1000	1000		

QC Flag Legend

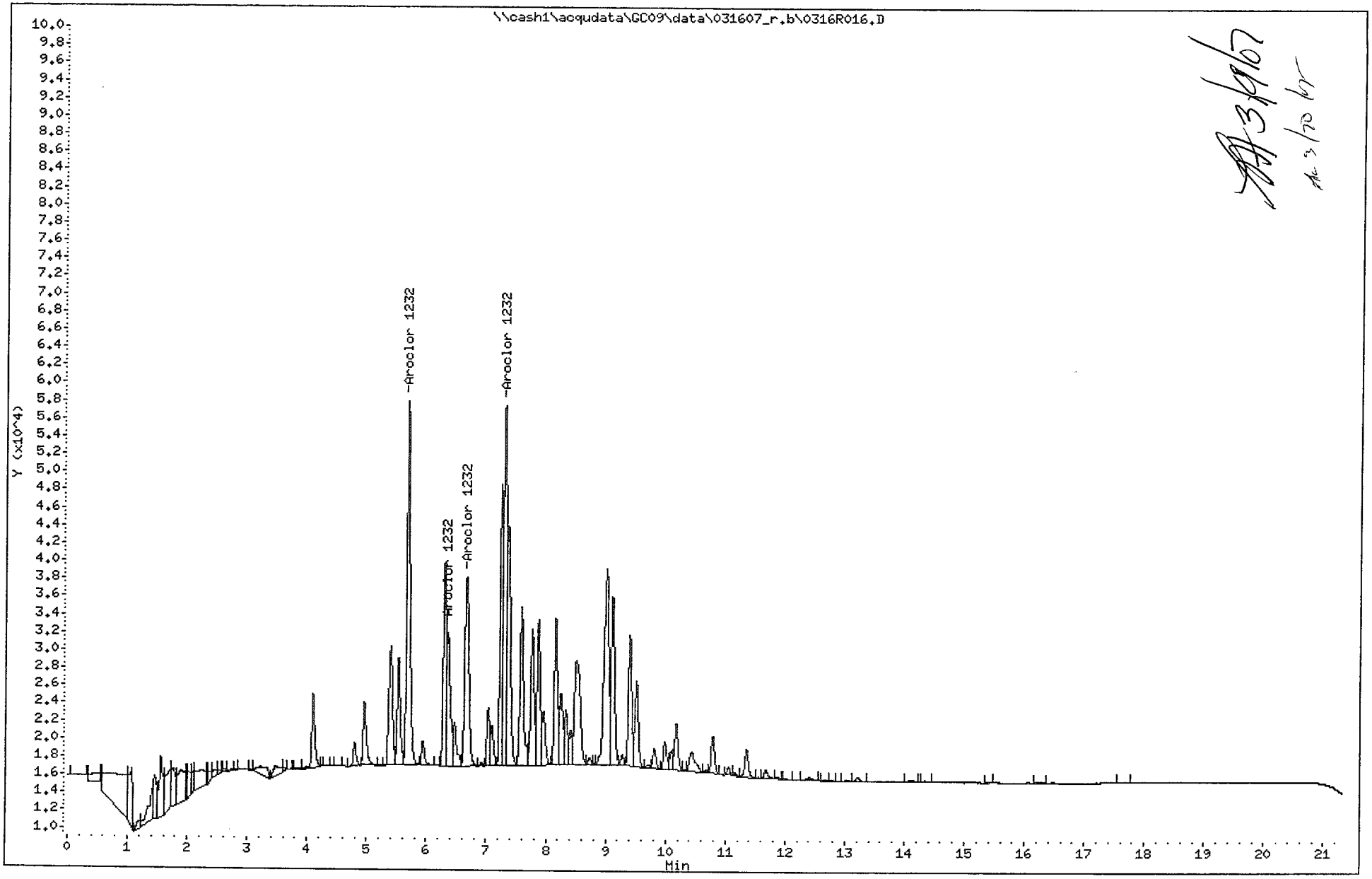
M - Compound response manually integrated.

3/20/07

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R016.D
Date : 16-MAR-2007 18:32
Client ID:
Sample Info: 1232 @ 1000ppb | PCB4-86B | KWG0701324-4

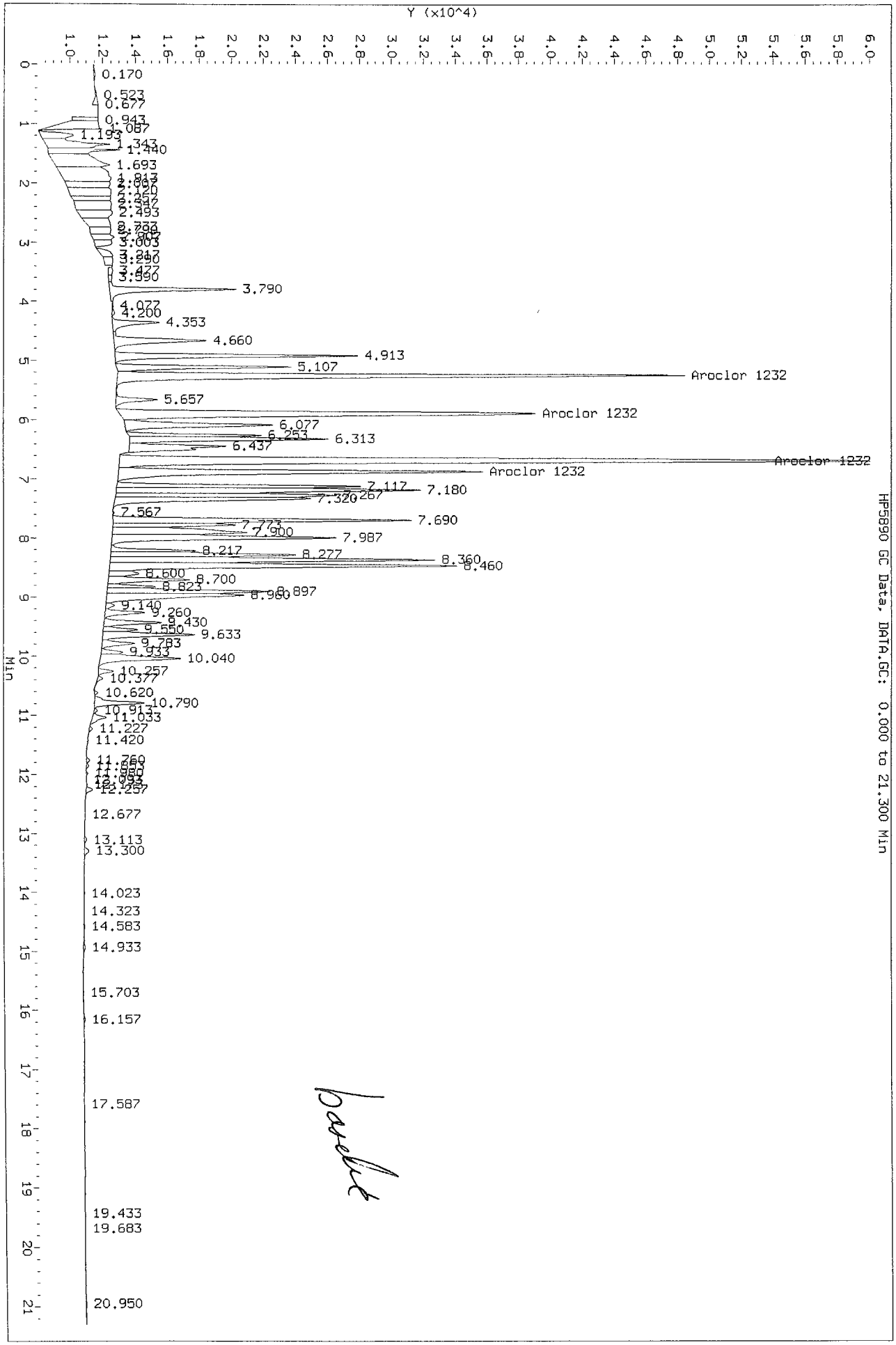
Instrument: GC09.i

Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.53



1051

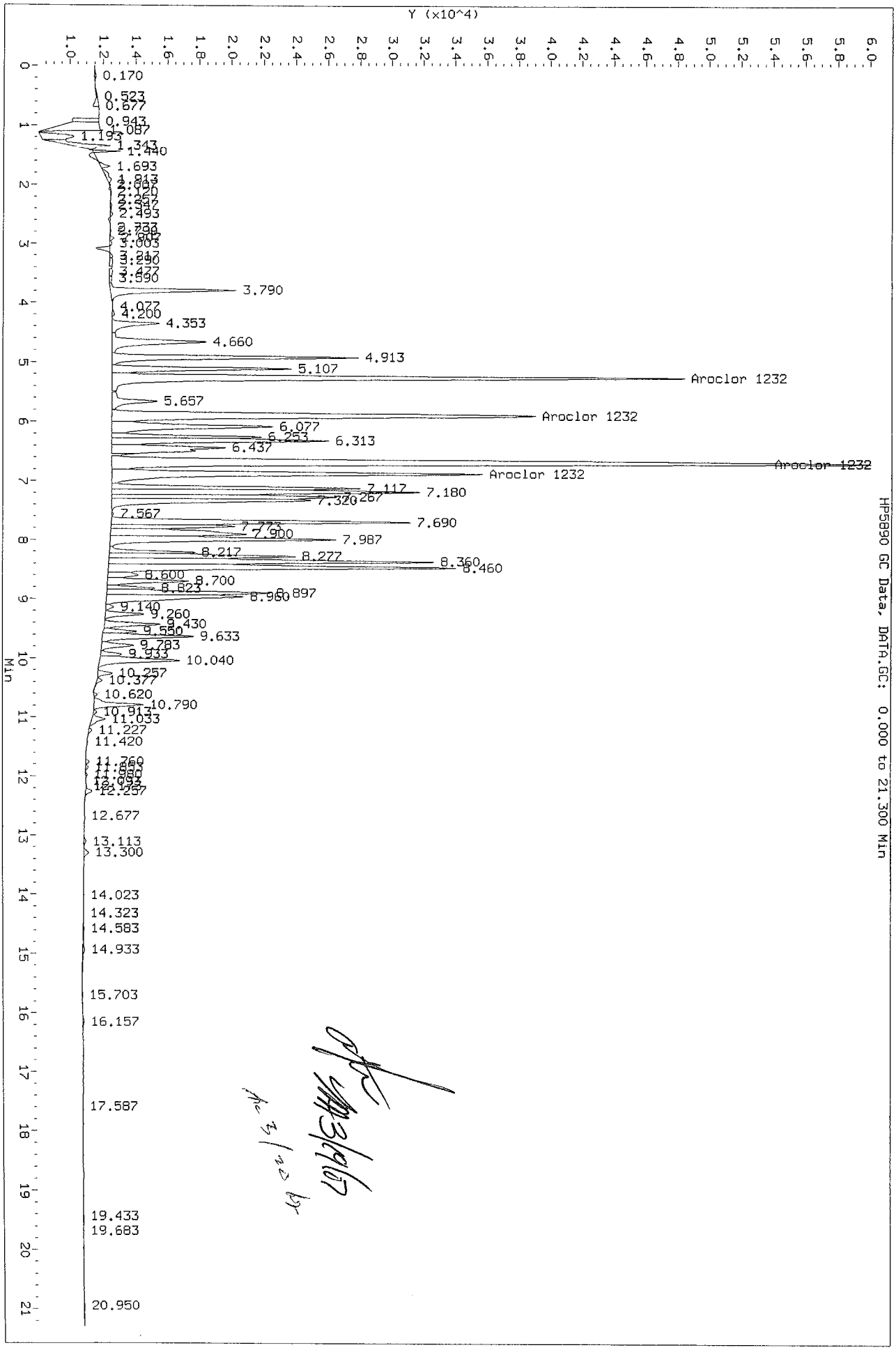
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F016.D
Injection Date: 16-MAR-2007 18:32
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.300 Min

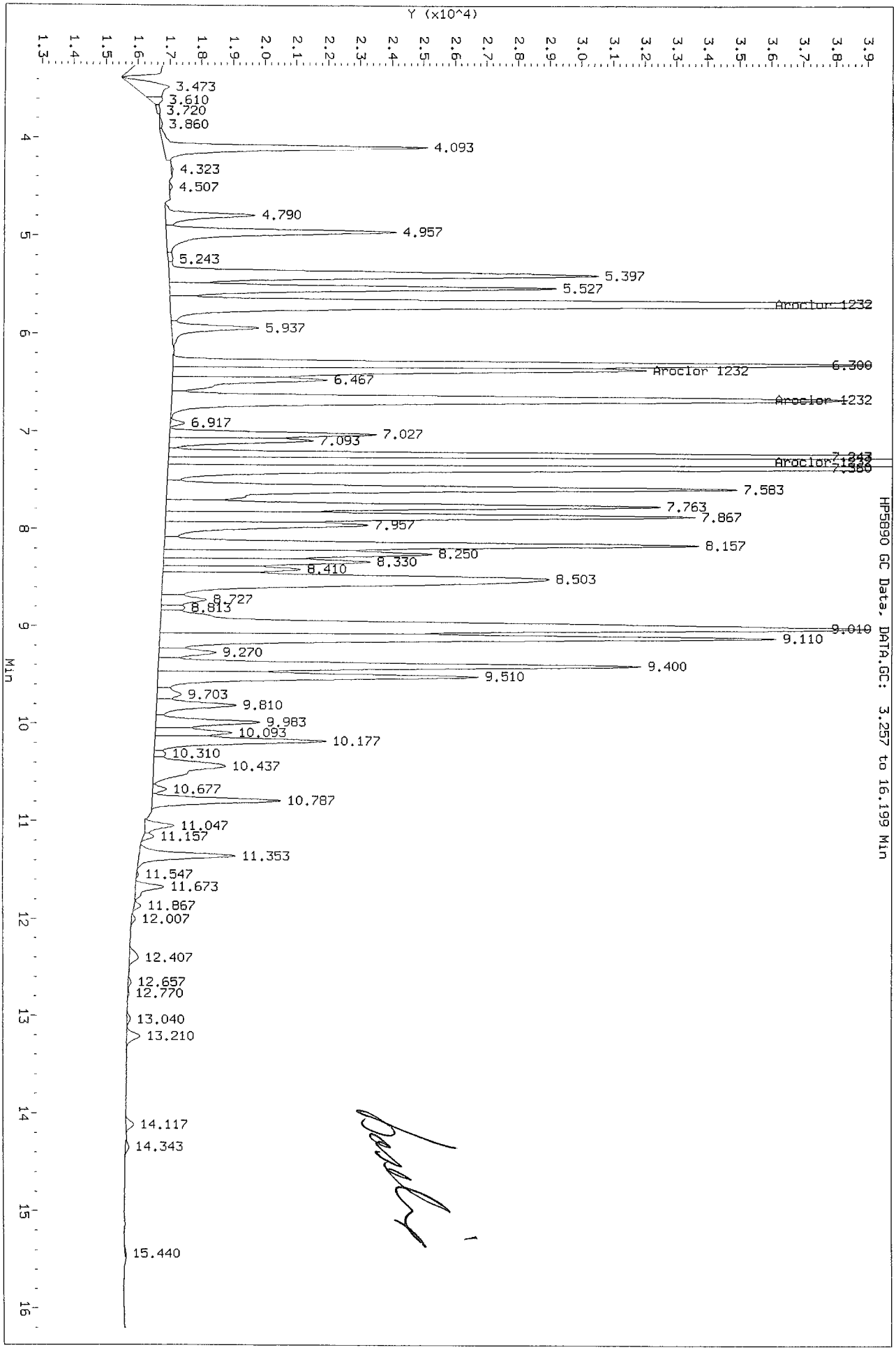
Baselie

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F016.D
Injection Date: 16-MAR-2007 18:32
Instrument: GC09.i
Client Sample ID:



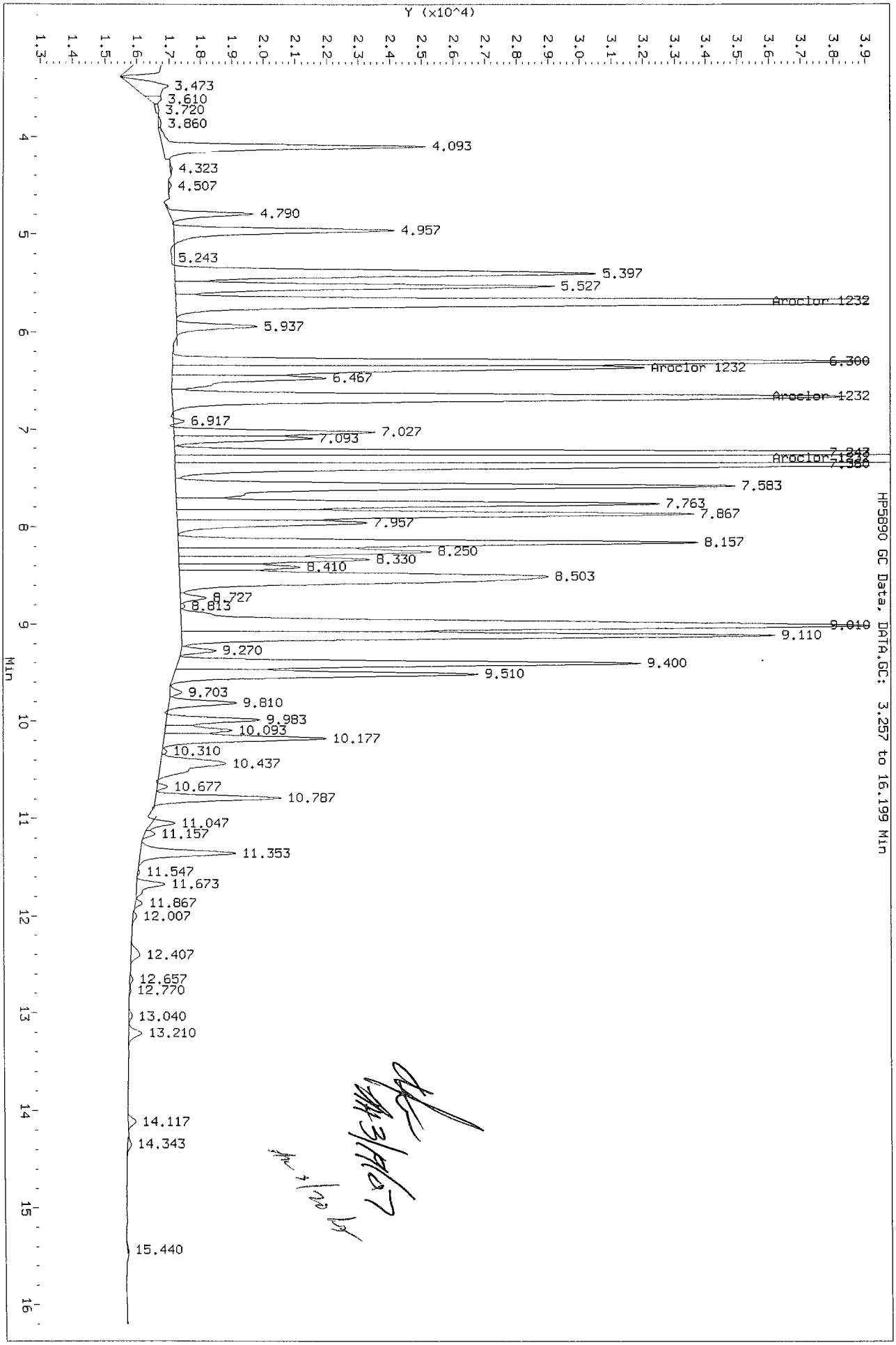
HP5890 GC Data, DATA.GC: 0.000 to 21.300 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R016.D
Injection Date: 16-MAR-2007 18:32
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data. DATA.GC: 3.257 to 16.199 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R016.D
Injection Date: 16-MAR-2007 18:32
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 3.257 to 16.199 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F020.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F020.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R020.D
Inj Date : 16-MAR-2007 20:15
Sample Info: 1242 @ 1000ppb | PCB4-86C | KWG0701324-5
Misc Info : SEMIVOA GC\W0701324\5-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1242.SUB
Sub List #2 : AR1242.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	5.883	6.300	231546	144086	1000	1000	80.00- 120.00	100.00(M)
	6.680	7.297	434956	288045	1000	1000	150.28- 225.42	187.85(M)
	6.867	7.583	195360	150505	1000	1000	67.50- 101.25	84.37(M)
	7.180	7.763	161252	117209	1000	1000	55.71- 83.57	69.64(M)
	7.690	7.867	142594	136160	1000	1000	49.27- 73.90	61.58(M)
			Average of Peak Amounts =		1000	1000		

QC Flag Legend

M - Compound response manually integrated.

3/19/07
3/20/07

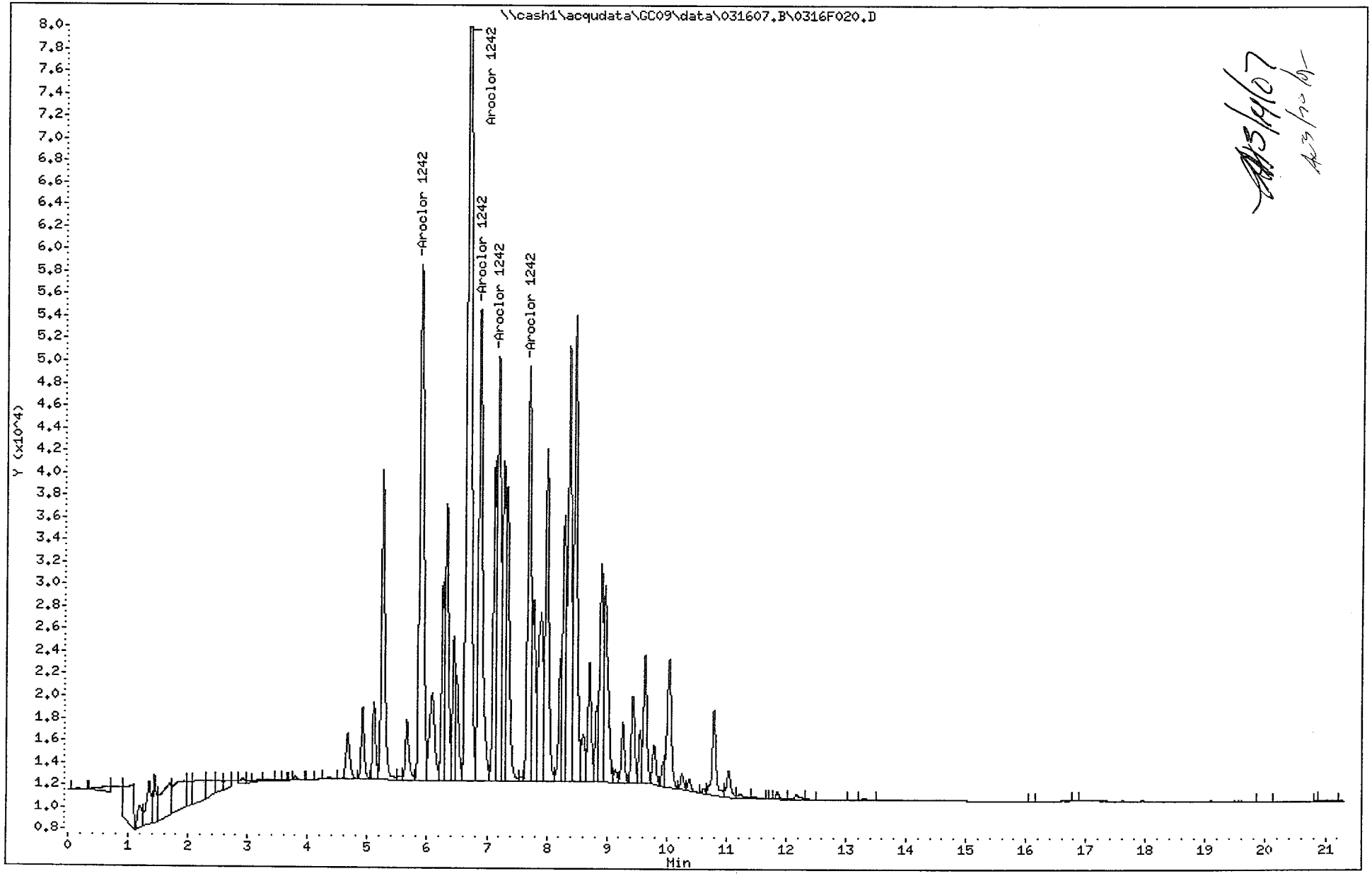
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F020.D
Date : 16-MAR-2007 20:15
Client ID:
Sample Info: 1242 @ 1000ppb | PCB4-86C | KWG0701324-5

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



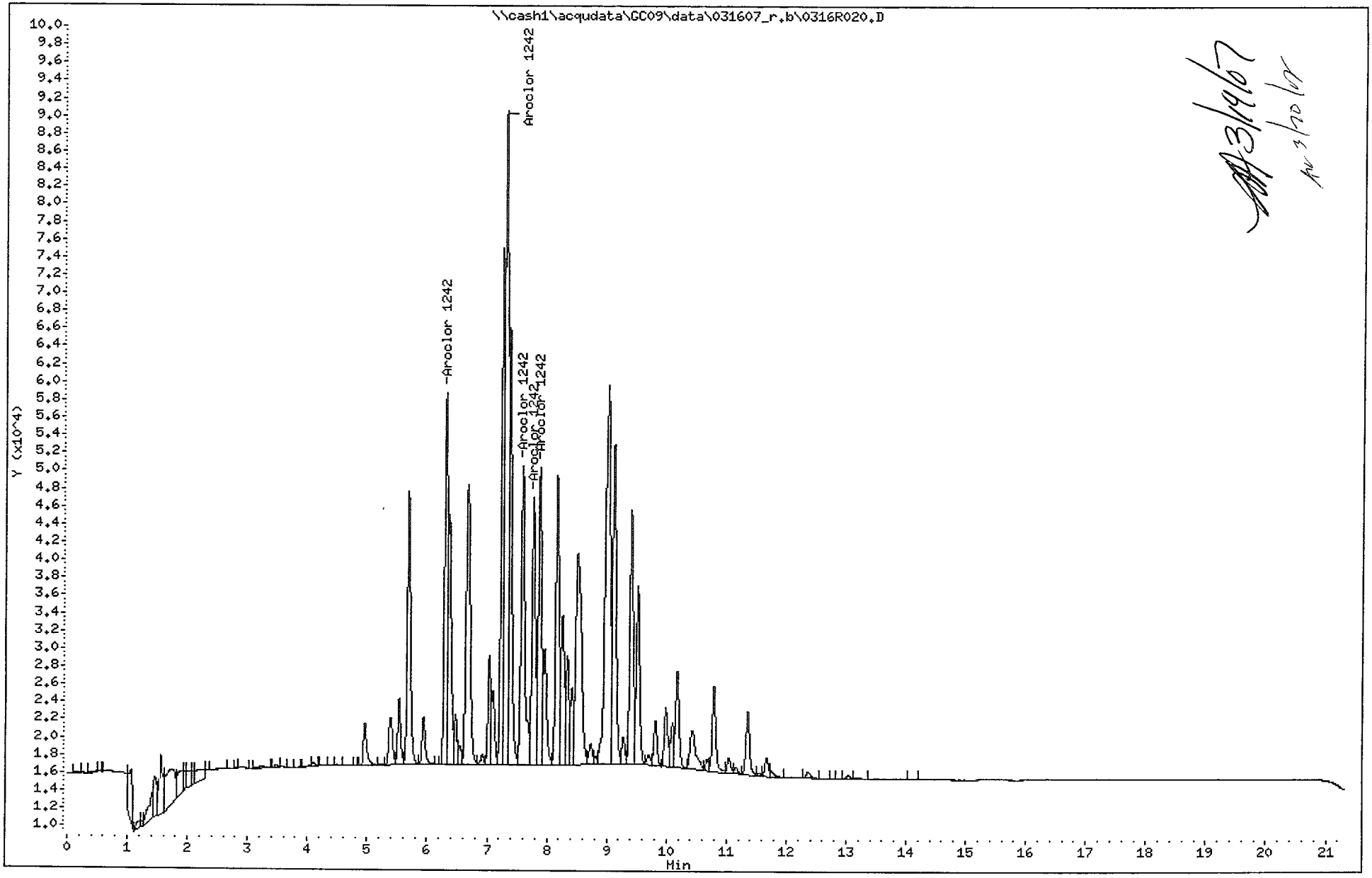
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R020.D
Date : 16-MAR-2007 20:15
Client ID:
Sample Info: 1242 @ 1000ppb | PCB4-86C | KWG0701324-5

Instrument: GC09.i

Operator: LHarris

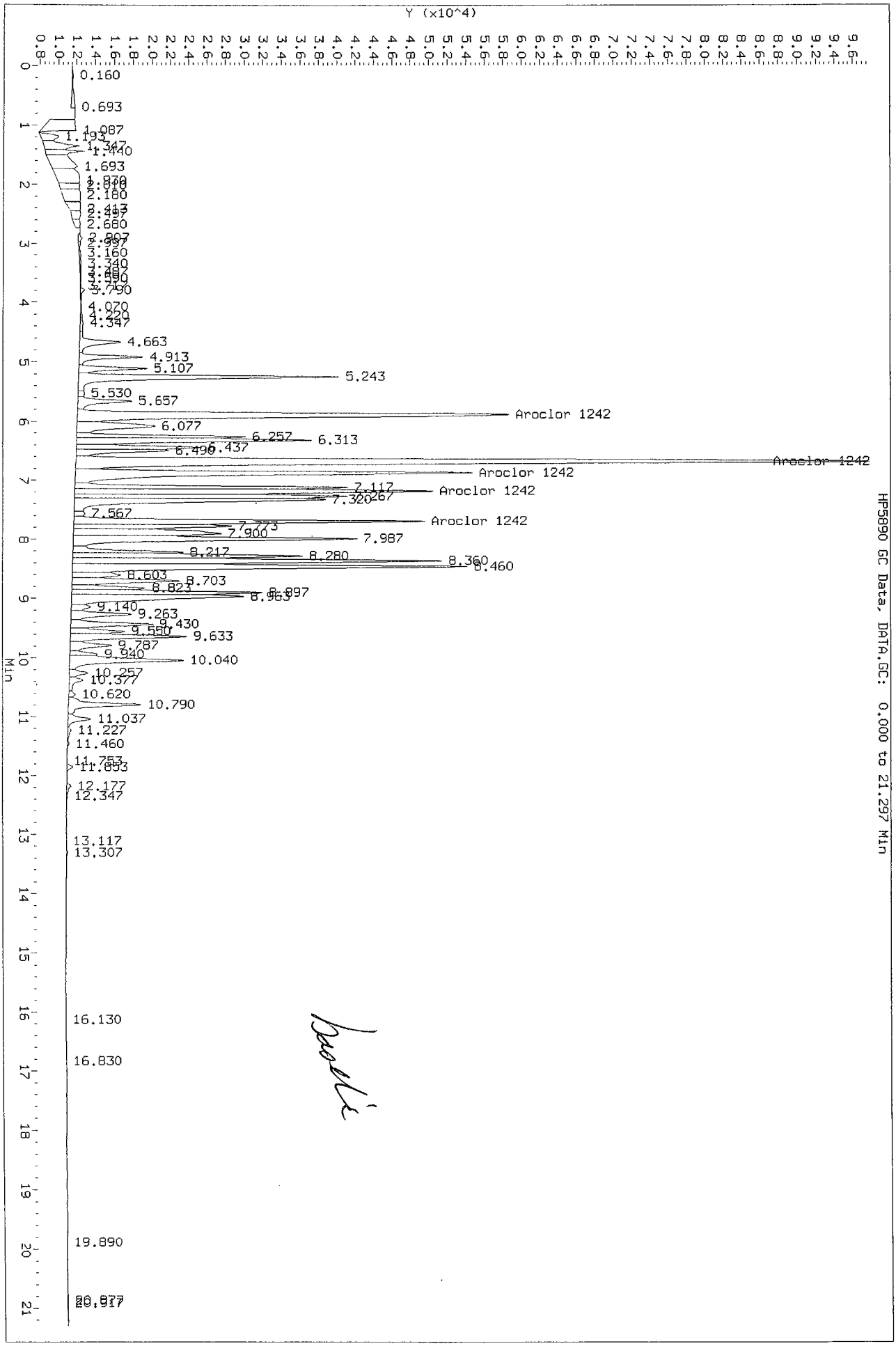
Column phase: DB-XLB

Column diameter: 0.53



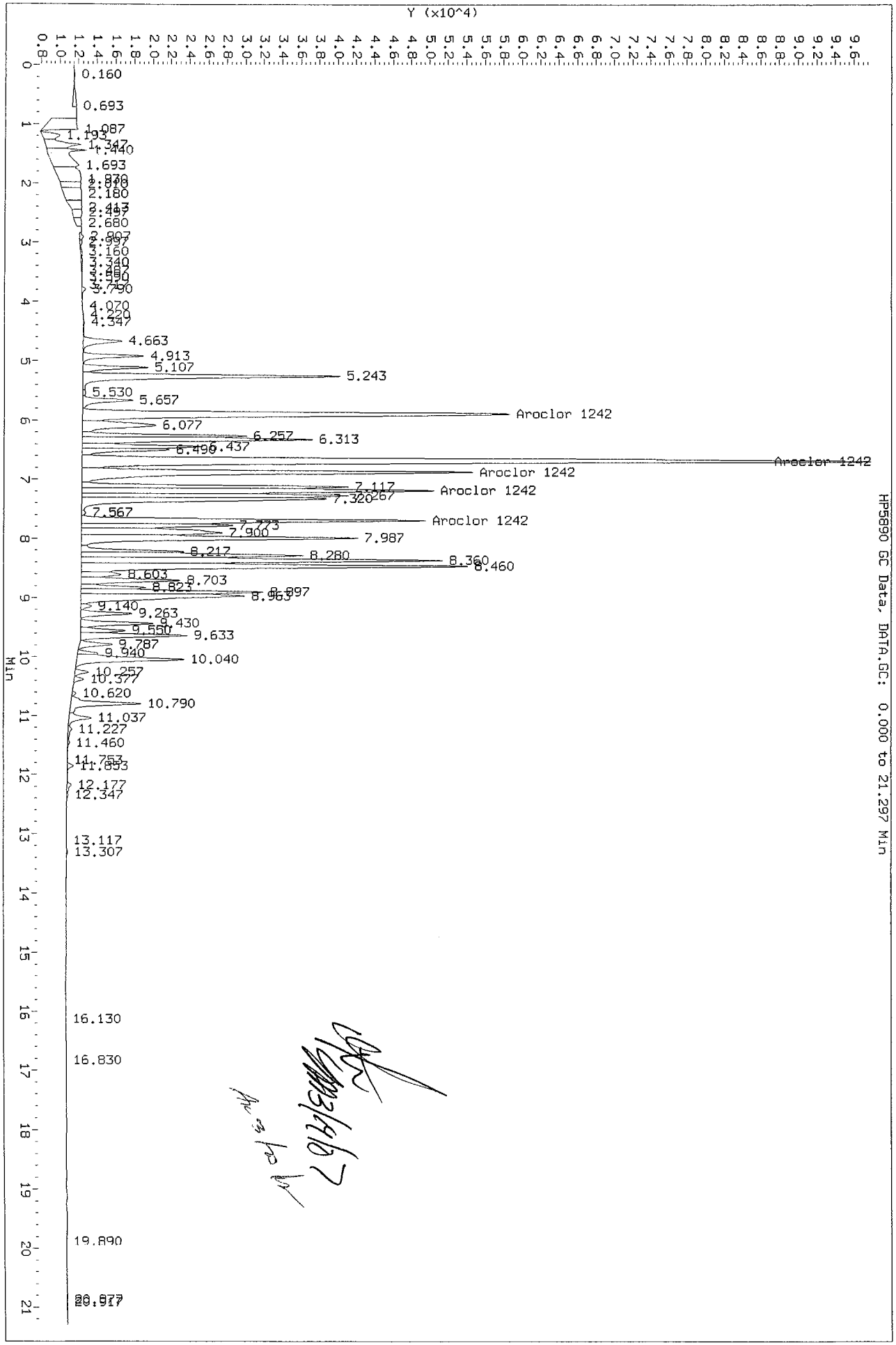
1058

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F020.D
Injection Date: 16-MAR-2007 20:15
Instrument: GC09.1
Client Sample ID:

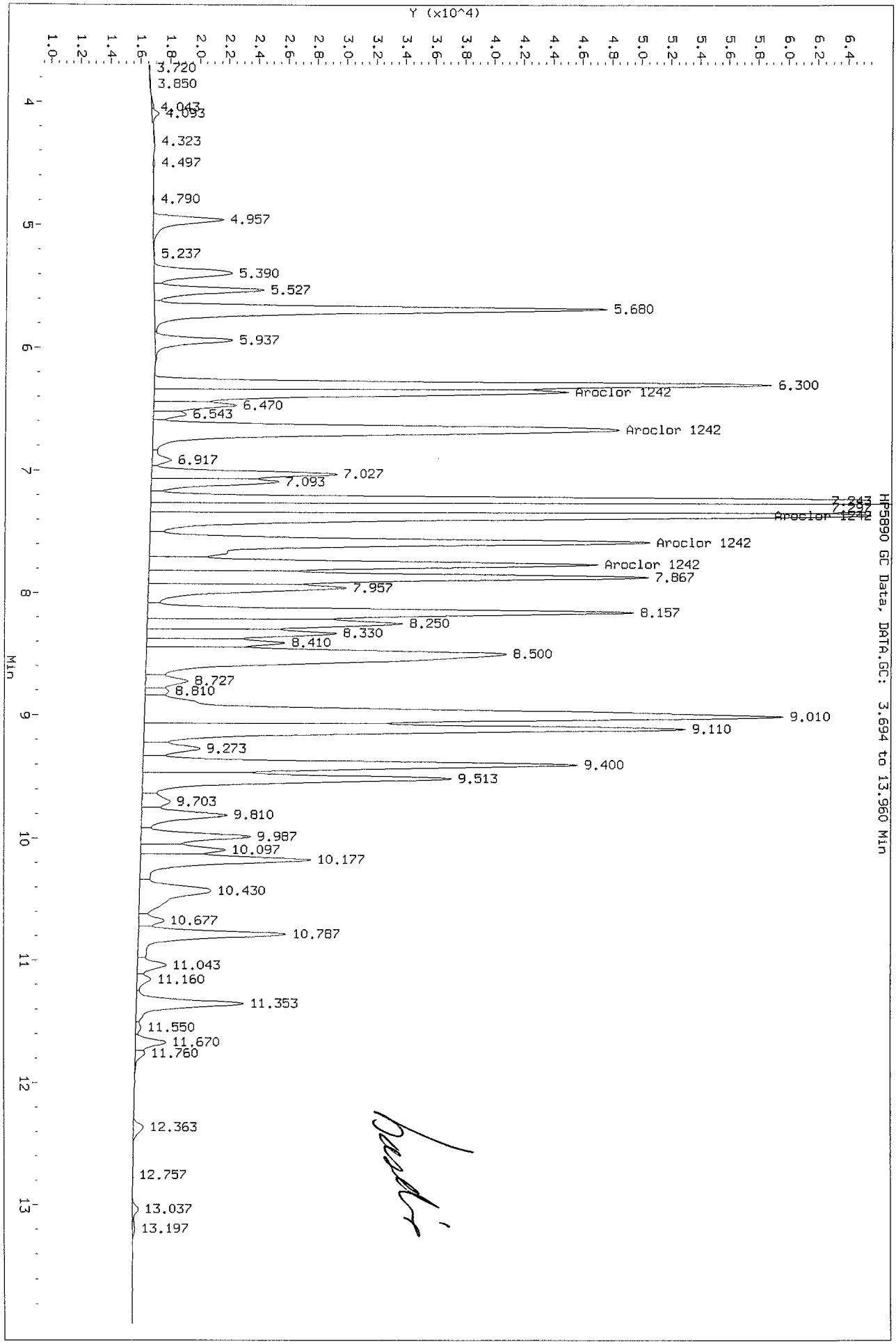


HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F020.D
Injection Date: 16-MAR-2007 20:15
Instrument: GC09.i
Client Sample ID:

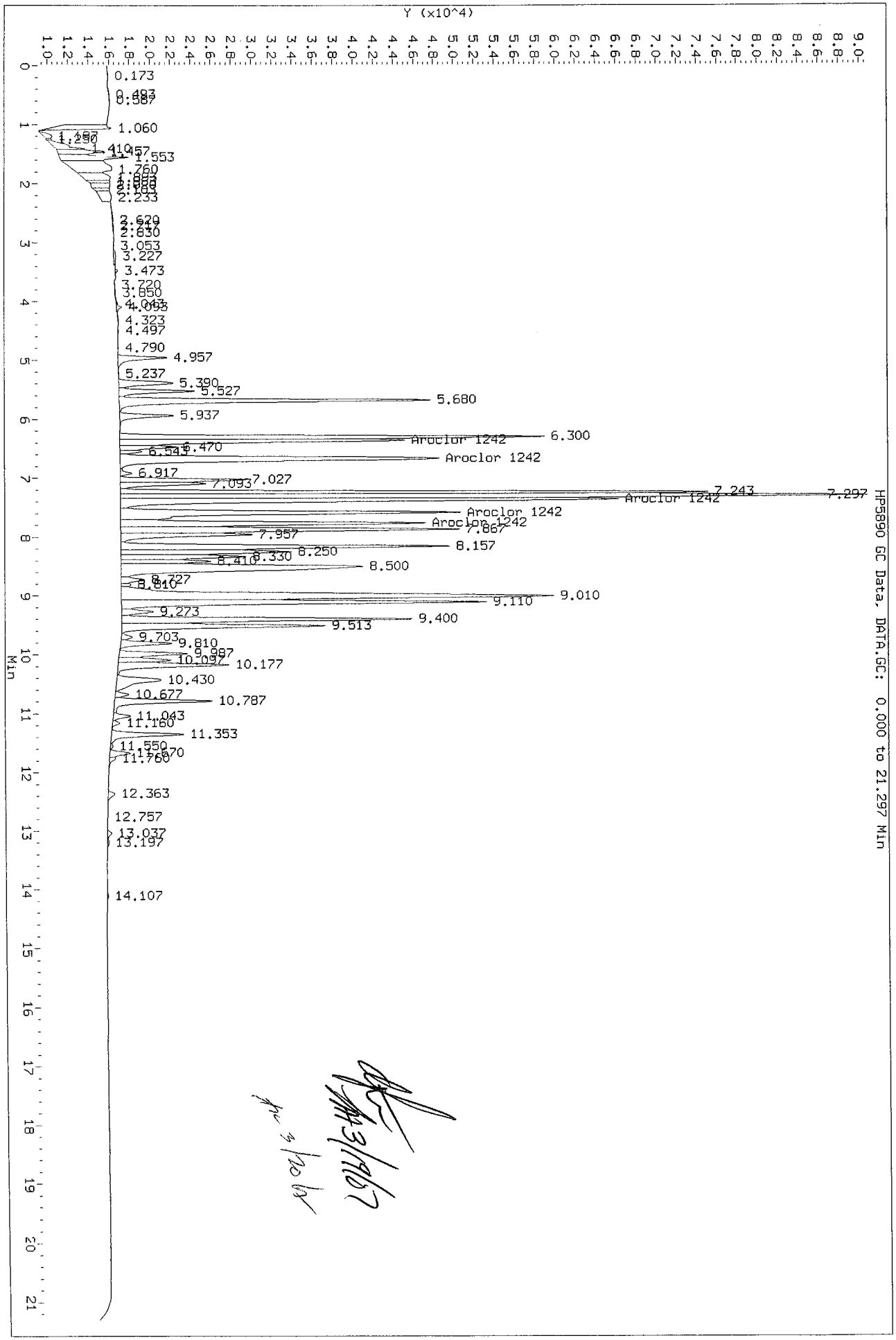


Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R020.D
Injection Date: 16-MAR-2007 20:15
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 3.694 to 13.960 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R020.D
Injection Date: 16-MAR-2007 20:15
Instrument: GC09.1
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

3/16/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F024.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F024.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R024.D
Inj Date : 16-MAR-2007 21:57
Sample Info: 1248 @ 1000ppb | PCB4-87K | KWG0701324-6
Misc Info : SEMIVOA GC\W0701324\6-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	7.180	7.763	282099	196551	1000	1000	80.00- 120.00	100.00(M)
	7.267	7.867	159137	197160	1000	1000	45.13- 67.69	56.41(M)
	7.690	8.157	222553	206488	1000	1000	63.11- 94.67	78.89(M)
	8.360	9.010	280119	437810	1000	1000	79.44- 119.16	99.30(M)
	8.460	9.110	333595	272375	1000	1000	94.60- 141.91	118.25(M)
			Average of Peak Amounts =		1000	1000		

QC Flag Legend

M - Compound response manually integrated.

3/19/07
3/20 br

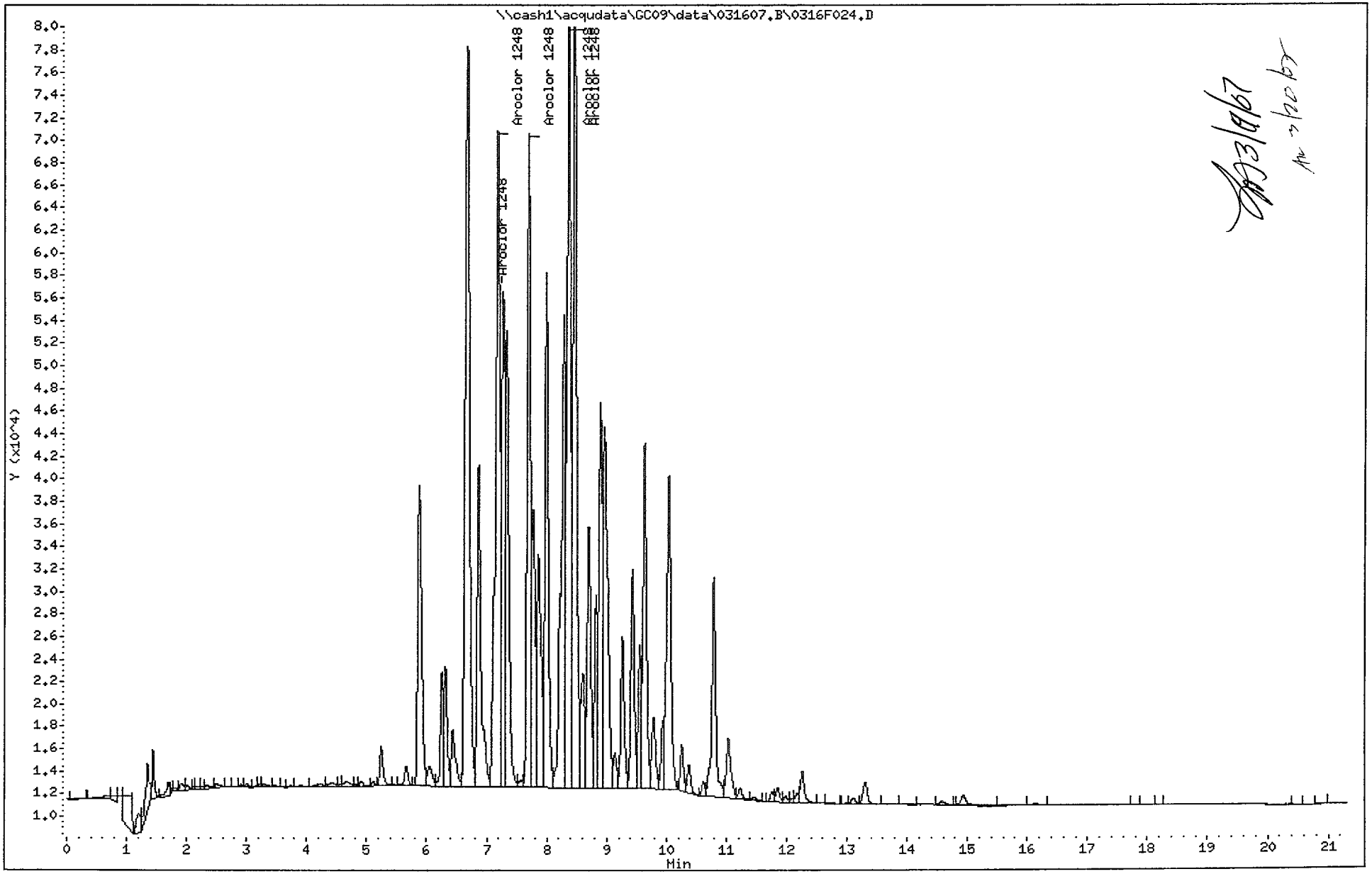
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F024.D
Date : 16-MAR-2007 21:57
Client ID:
Sample Info: 1248 @ 1000ppb | PCB4-87K | KWG0701324-6

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



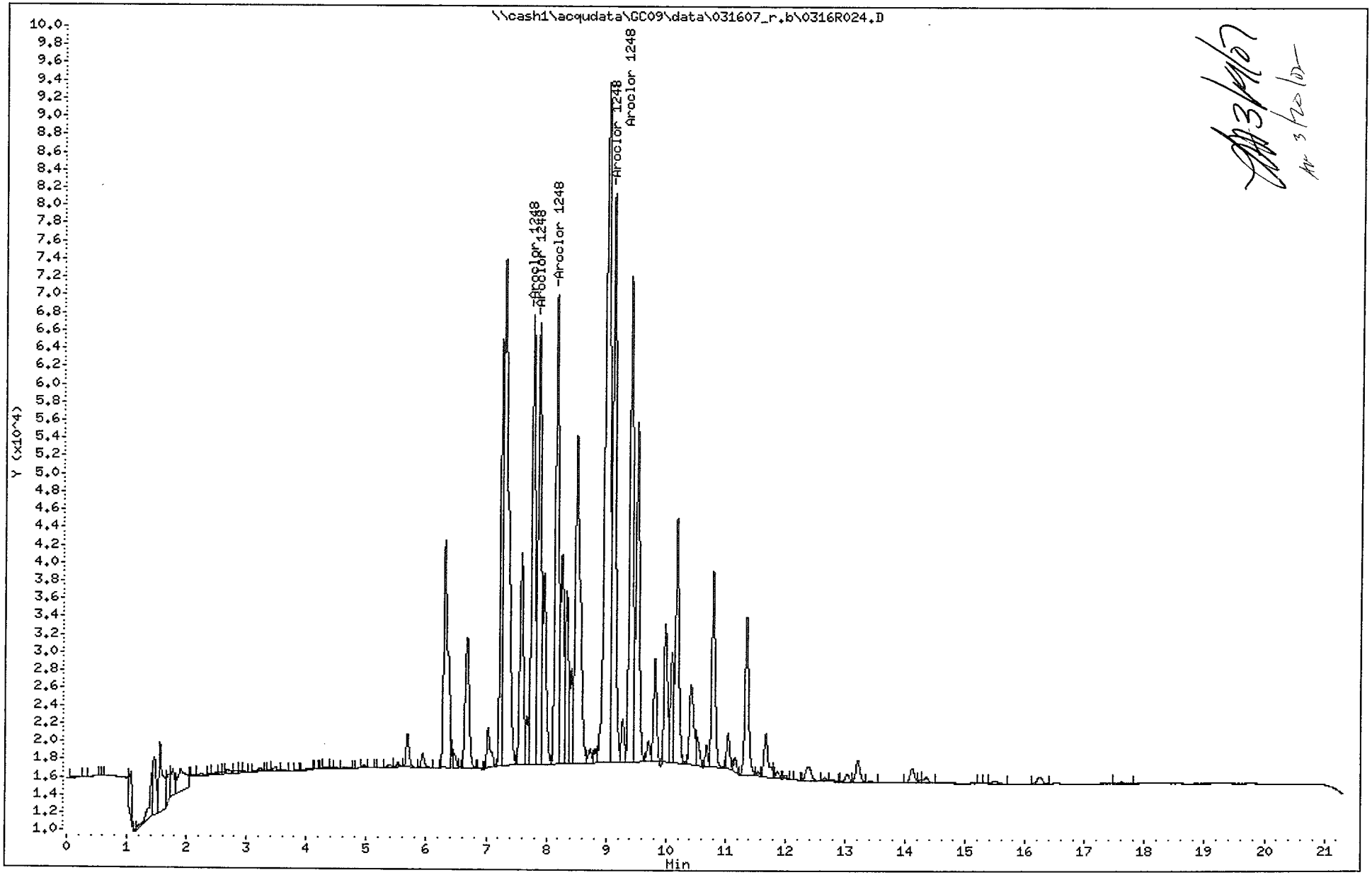
1064

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R024.D
Date : 16-MAR-2007 21:57
Client ID:
Sample Info: 1248 @ 1000ppb | PCB4-87K | KWG0701324-6

Instrument: GC09.i

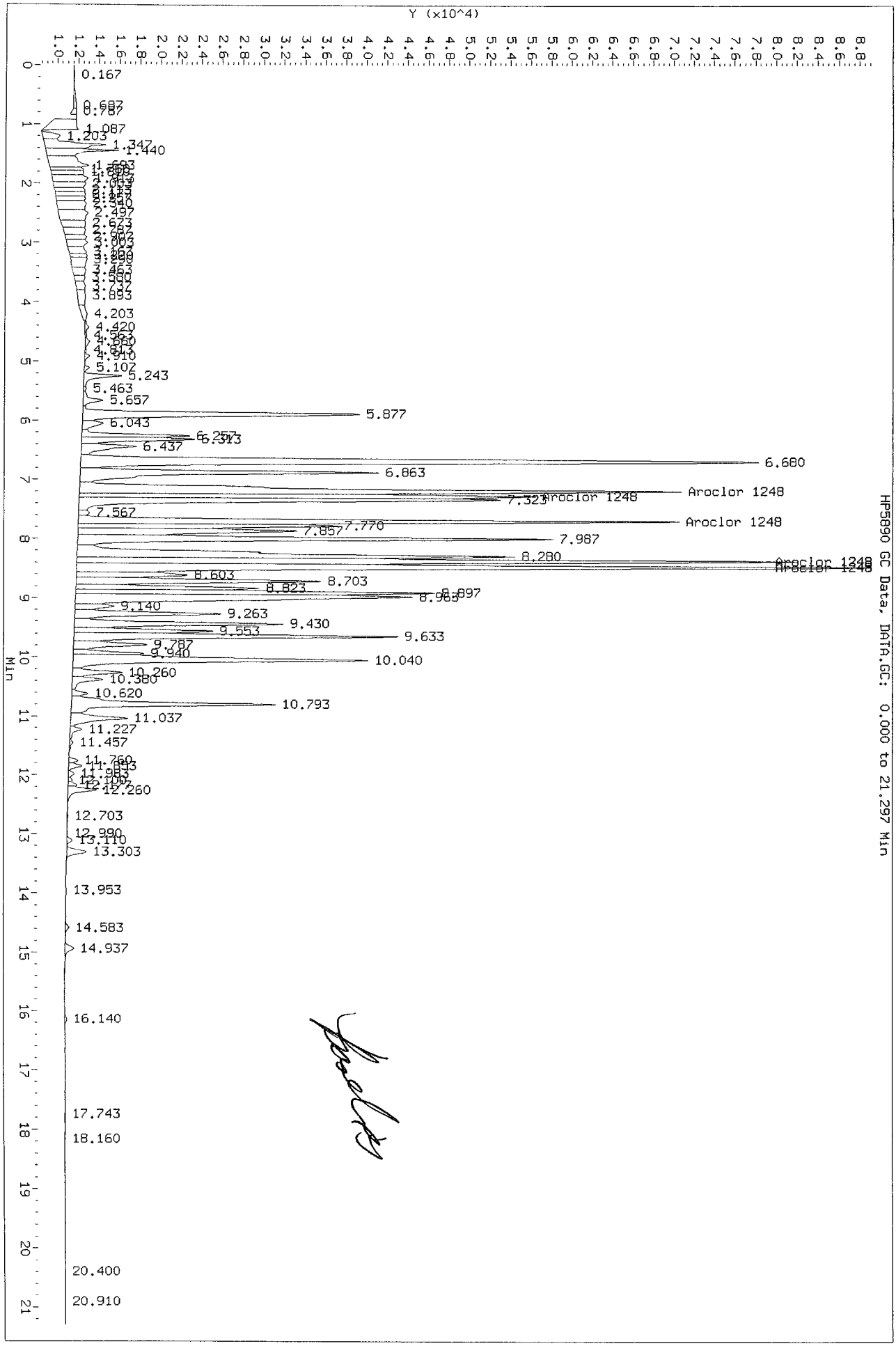
Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



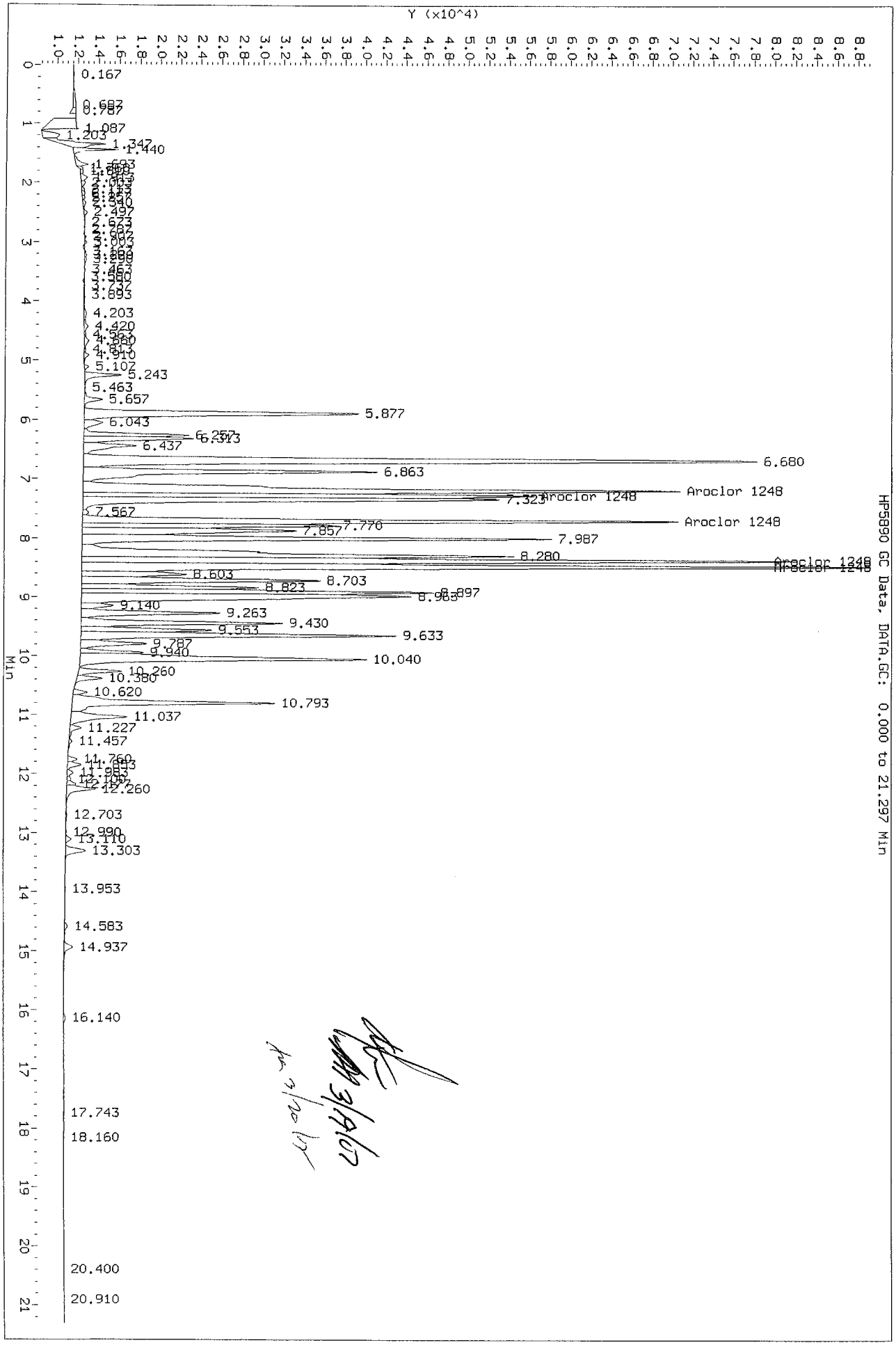
1065

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F024.D
Injection Date: 16-MAR-2007 21:57
Instrument: GC09:1
Client Sample ID:



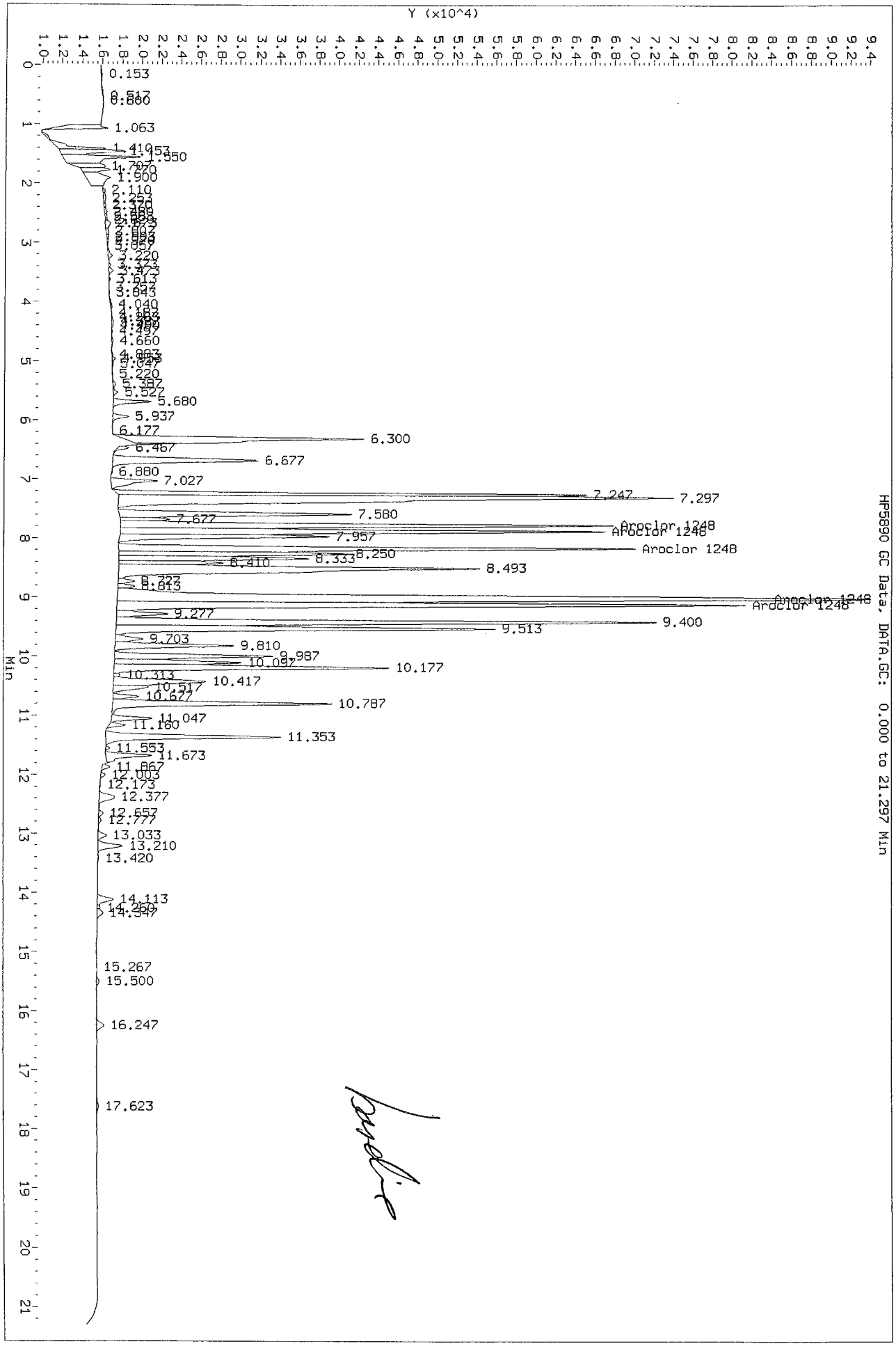
HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F024.D
Injection Date: 16-MAR-2007 21:57
Instrument: GC09.i
Client Sample ID:

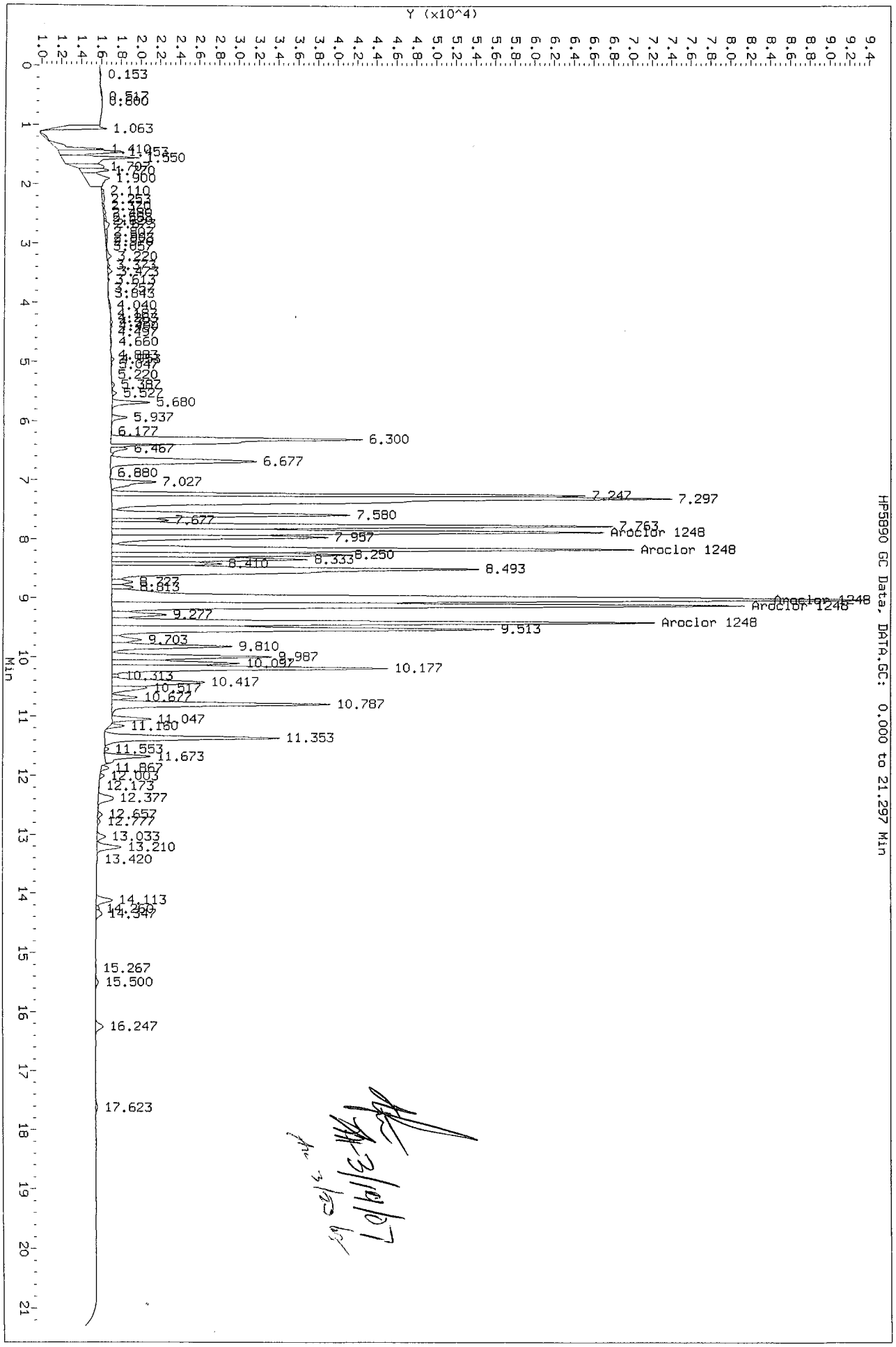


3/16/07
for 3/20/07

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R024.D
Injection Date: 16-MAR-2007 21:57
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\031607_60Br.b\0316R024.D
Injection Date: 16-MAR-2007 21:57
Instrument: GC09.i
Client Sample ID:



3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F028.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F028.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R028.D
Inj Date : 16-MAR-2007 23:40
Sample Info: 1254 @ 1000ppb | PCB4-87L | KWG0701324-7
Misc Info : SEMIVOA GC\W0701324\7-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1254.SUB
Sub List #2 : AR1254.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1254	8.453	8.963	278718	361758	1000	1000	80.00- 120.00	100.00
	8.700	9.400	295251	344041	1000	1000	84.75- 127.12	105.93
	9.637	10.177	415882	335931	1000	1000	119.37- 179.05	149.21
	10.040	10.787	370380	259220	1000	1000	106.31- 159.46	132.89
	11.037	11.673	339940	318816	1000	1000	97.57- 146.36	121.97
			Average of Peak Amounts =		1000	1000		

3/19/07
3/20

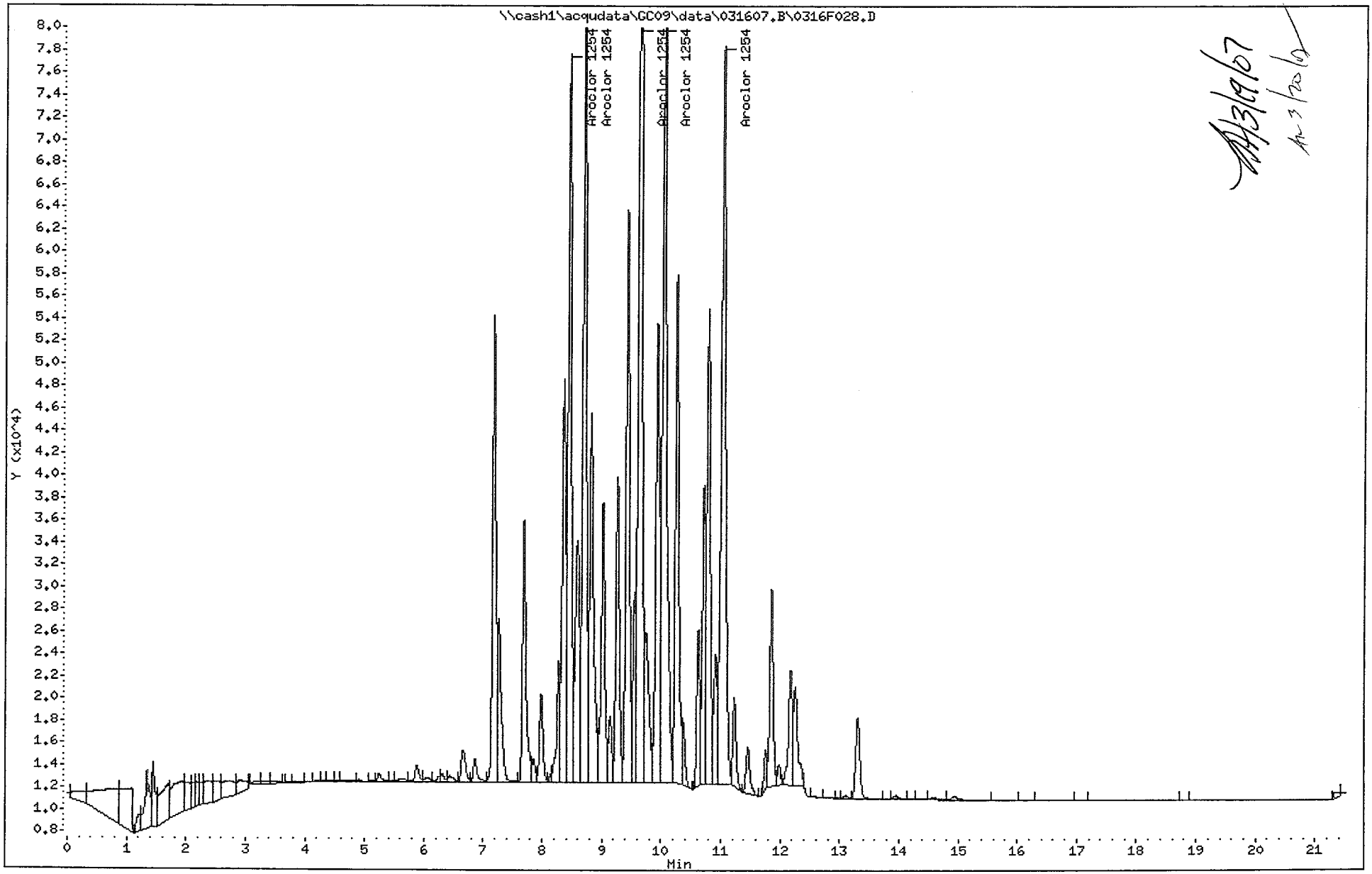
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F028.D
Date : 16-MAR-2007 23:40
Client ID:
Sample Info: 1254 @ 1000ppb | PCB4-87L | KWG0701324-7

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



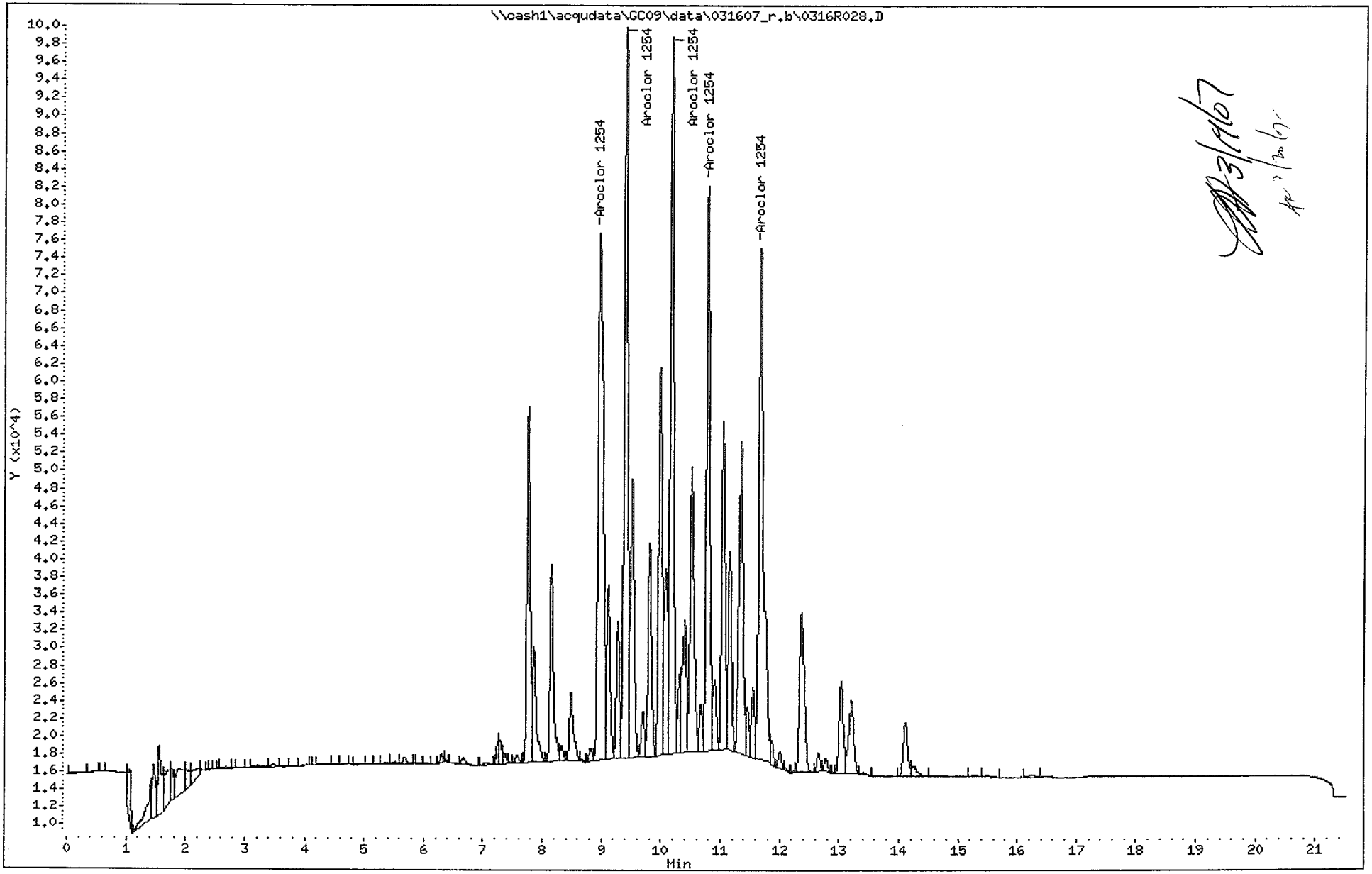
1071

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R028.D
Date : 16-MAR-2007 23:40
Client ID:
Sample Info: 1254 @ 1000ppb | PCB4-87L | KWG0701324-7

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

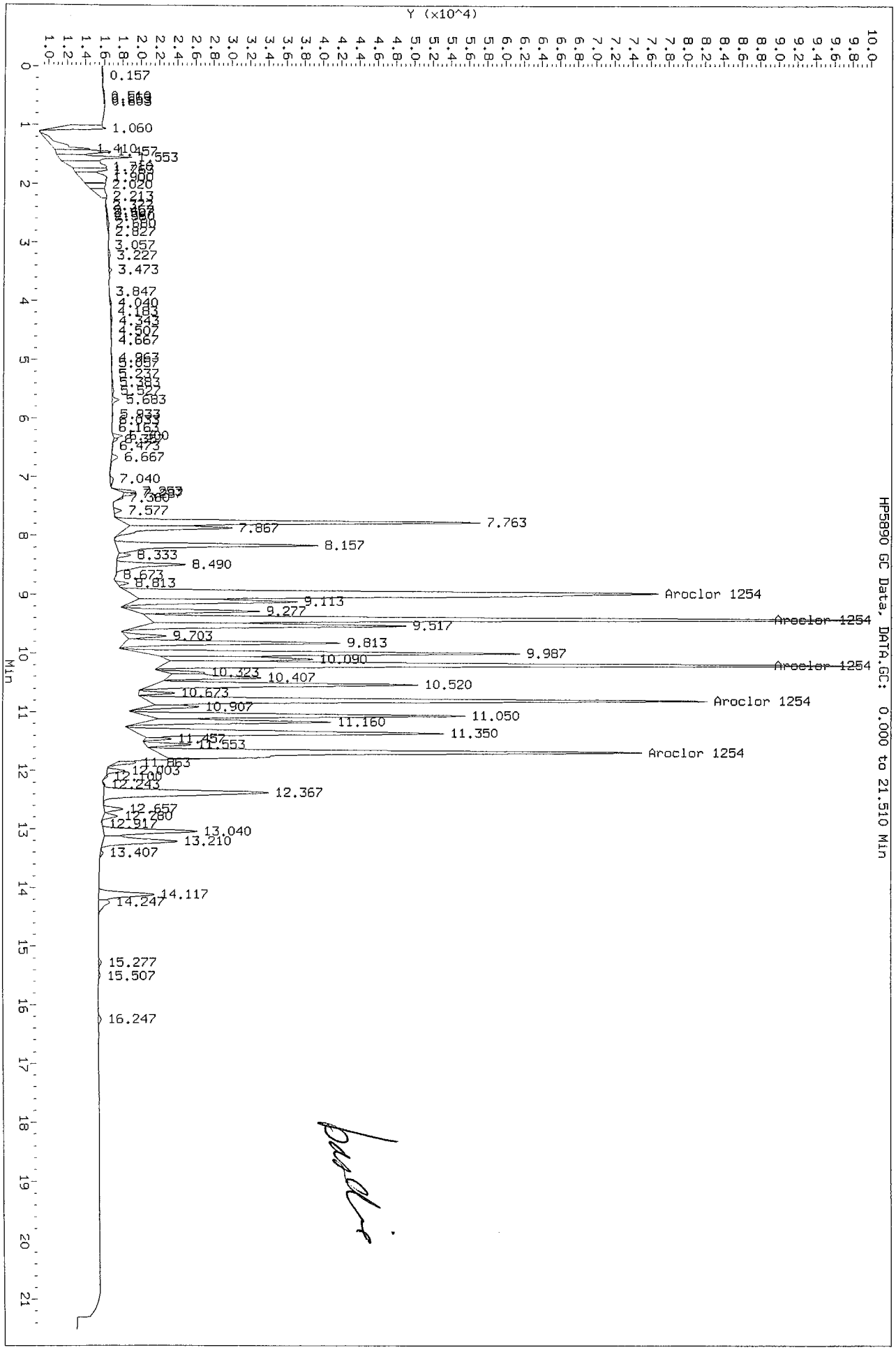
Column phase: DB-XLB



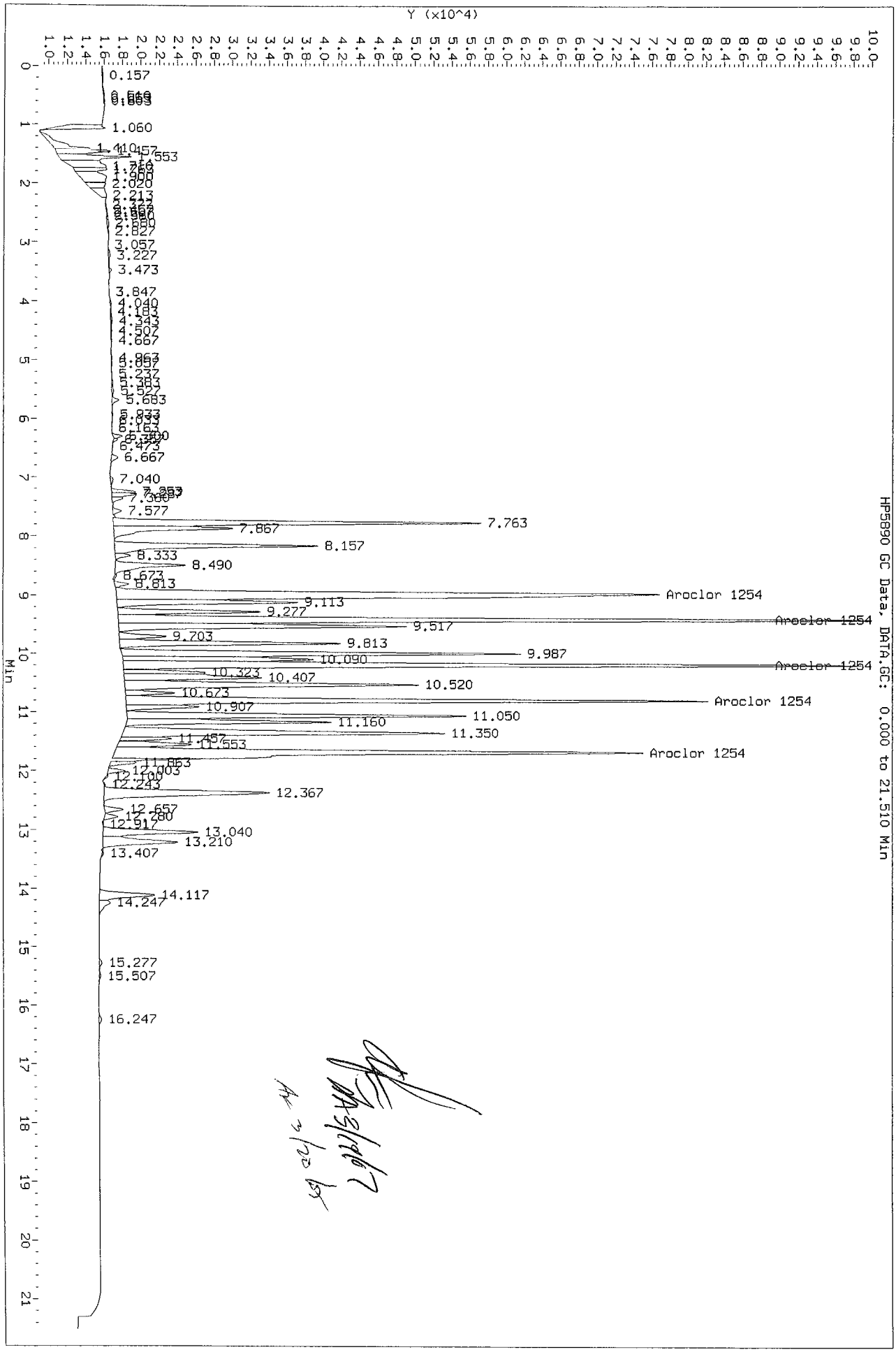
3/19/07

1072

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R028.D
Injection Date: 15-MAR-2007 23:40
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R028.D
Injection Date: 16-MAR-2007 23:40
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\031607.B\0316F032.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F032.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R032.D
Inj Date : 17-MAR-2007 01:22
Sample Info: 1262 @ 1000ppb | PCB4-87M | KWG0701324-8
Misc Info : SEMIVOA GC\W0701324\8-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1262.SUB
Sub List #2 : AR1262.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1262	10.260	11.050	293515	259297	1000	1000	80.00- 120.00	100.00(M)
	11.107	11.870	419171	363143	1000	1000	114.25- 171.37	142.81(M)
	11.760	12.413	328216	282396	1000	1000	89.46- 134.19	111.82(M)
	12.260	13.210	638510	603408	1000	1000	174.03- 261.05	217.54(M)
	13.110	14.117	285674	442358	1000	1000	77.86- 116.79	97.33(M)
			Average of Peak Amounts =		1000	1000		

QC Flag Legend

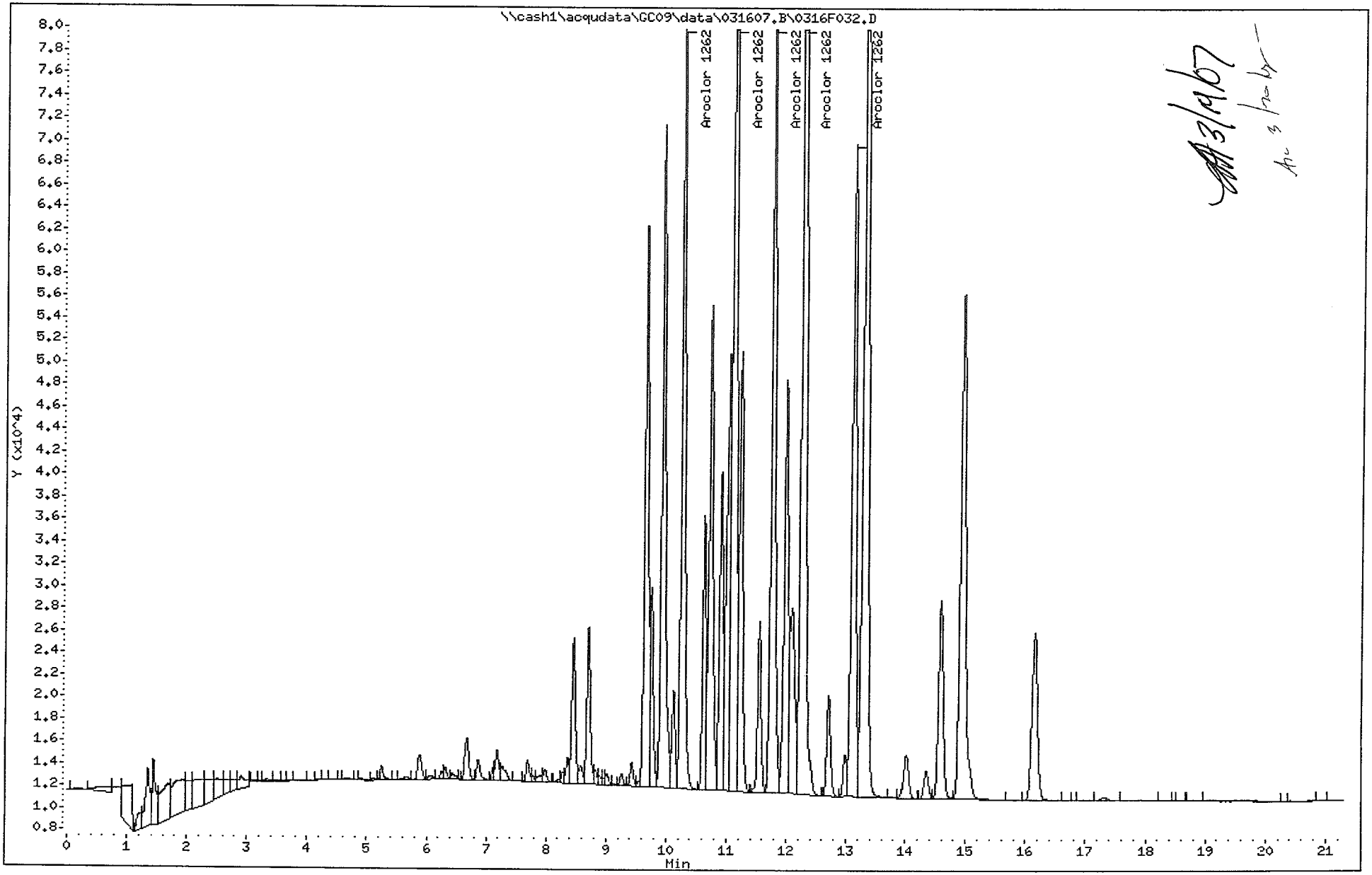
M - Compound response manually integrated.

3/19/07
3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F032.D
Date : 17-MAR-2007 01:22
Client ID:
Sample Info: 1262 @ 1000ppb | PCB4-87M | KWG0701324-8

Instrument: GC09.i

Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.53



3/19/07

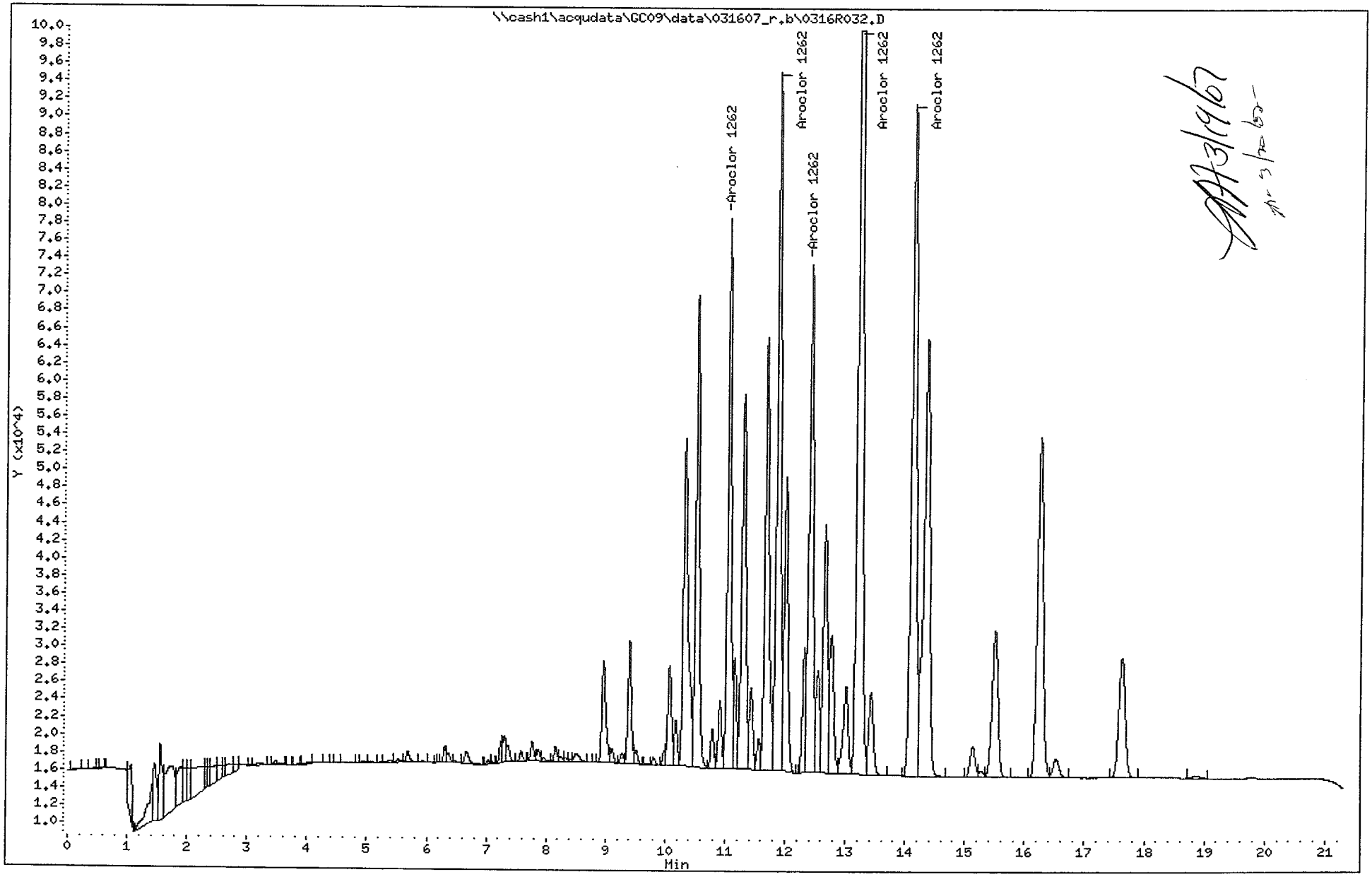
1076

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R032.D
Date : 17-MAR-2007 01:22
Client ID:
Sample Info: 1262 @ 1000ppb | PCB4-87M | KWG0701324-8

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



Data File: \\cash1\acqudata\GC09\data\031607.B\0316F036.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F036.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R036.D
Inj Date : 17-MAR-2007 03:04
Sample Info: 1268 @ 1000ppb | PCB4-87N | KWG0701324-9
Misc Info : SEMIVOA GC\W0701324\9-ICAL.H
Cal Date : 19-MAR-2007 10:25
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1268.SUB
Sub List #2 : AR1268.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1268	13.287	14.357	773994	746234	1000	1000	80.00- 120.00	100.00
	14.023	15.130	622821	611101	1000	1000	64.37- 96.56	80.47
	14.353	15.447	164550	180981	1000	1000	17.01- 25.51	21.26
	14.940	16.247	282377	281128	1000	1000	29.19- 43.78	36.48
	16.150	17.620	1770937	1719693	1000	1000	183.04- 274.57	228.81
			Average of Peak Amounts =		1000	1000		

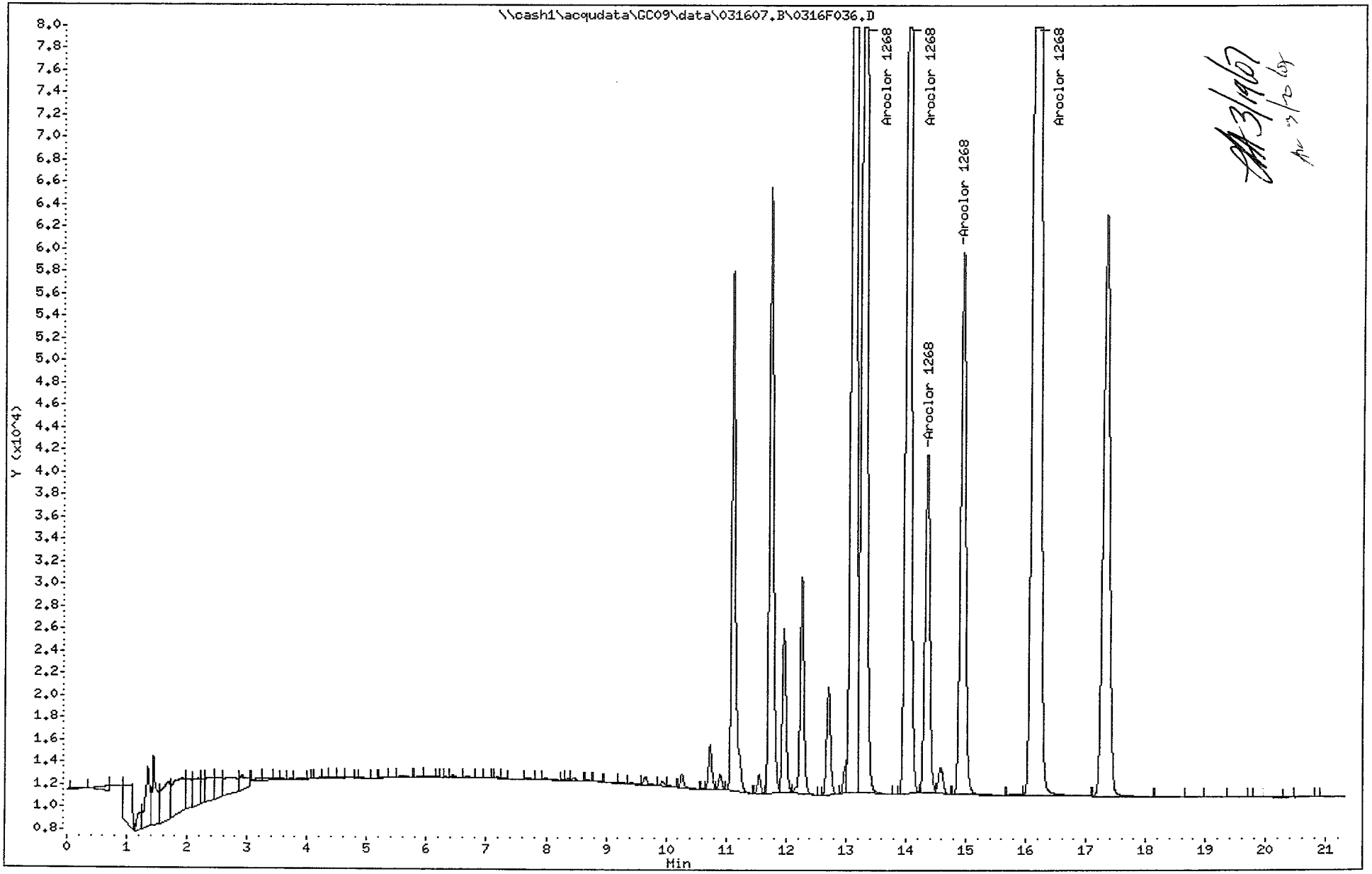
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F036.D
Date : 17-MAR-2007 03:04
Client ID:
Sample Info: 1268 @ 1000ppb | PCB4-87N | KWG0701324-9

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



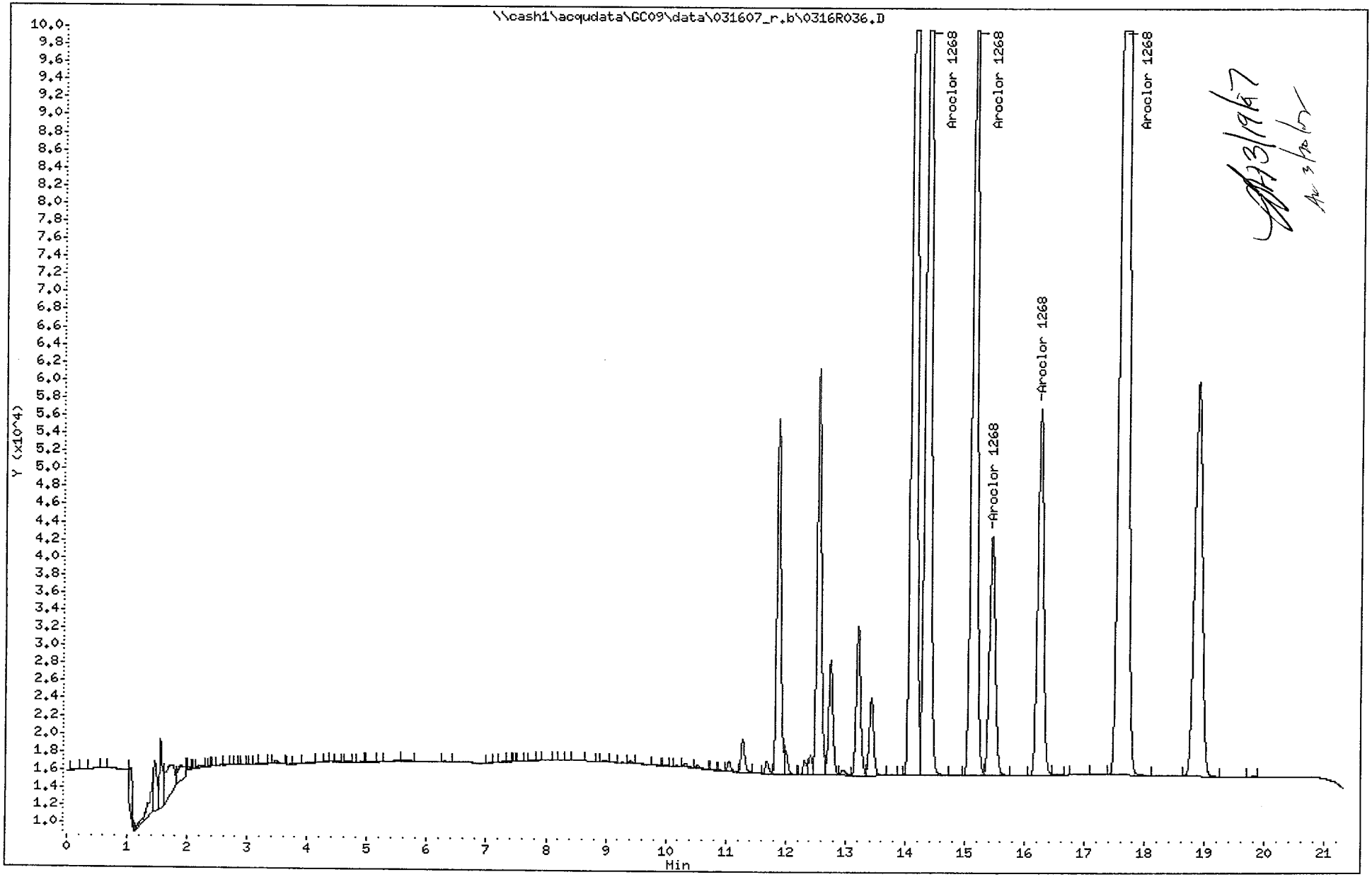
1079

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R036.D
Date : 17-MAR-2007 03:04
Client ID:
Sample Info: 1268 @ 1000ppb | PCB4-87N | KWG0701324-9

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



1080

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F038.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F038.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
Inj Date : 17-MAR-2007 03:55
Sample Info: 1660 @ 25ppb | PCB4-85M | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.447	5.137	16286	18031	2.74	2.77		100.00
Aroclor 1016	6.250	6.360	1502	3253	24.4	25.3	80.00- 120.00	100.00(M)
	6.313	7.360	3450	6779	27.3	27.1	155.75- 233.62	229.66(M)
	7.113	7.580	2991	3869	26.6	20.9	137.50- 206.25	199.13(M)
	7.267	7.867	2910	4558	22.3	25.3	163.24- 244.86	193.70(M)
	7.687	8.157	5573	4355	29.5	25.8	212.35- 318.53	370.98(M)
			Average of Peak Amounts =		26.0	24.9		
Aroclor 1260	9.933	11.300	11794	5604	36.0	24.8	80.00- 120.00	100.00(M)
	10.720	11.673	6928	12461	21.3	27.0	51.26- 76.89	58.74(M)
	11.033	11.867	11995	6238	27.7	25.2	103.14- 154.72	101.70(M)
	12.260	12.410	14884	8340	30.7	27.6	139.61- 209.42	126.19(M)
	13.303	13.210	11758	16010	22.2	29.2	104.15- 156.23	99.69(M)
			Average of Peak Amounts =		27.6	26.8		
Decachlorobiphenyl	17.317	18.870	18097	19117	2.90	3.03		100.00

QC Flag Legend

M - Compound response manually integrated.

3/19/07

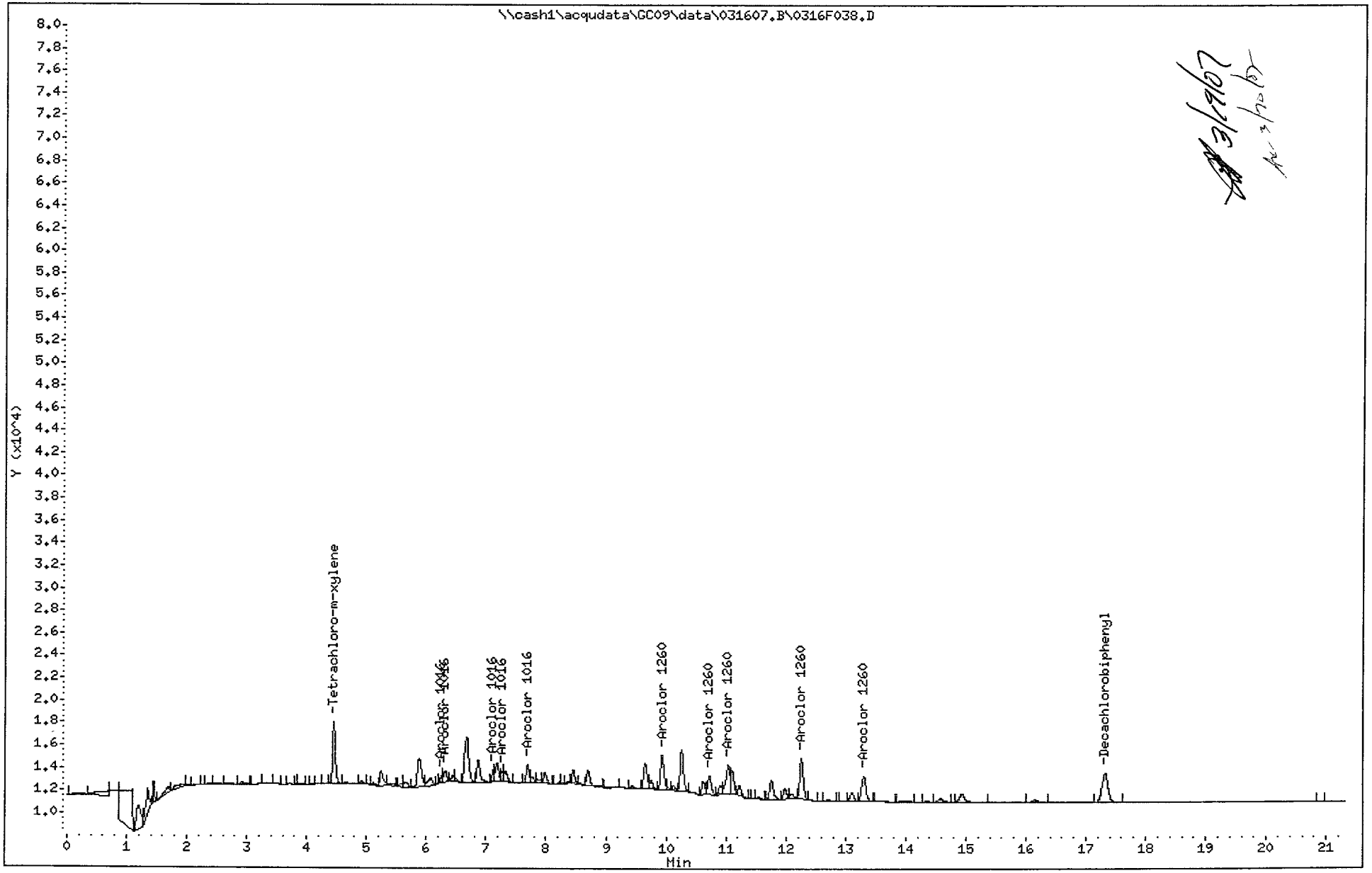
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F038.D
Date : 17-MAR-2007 03:55
Client ID:
Sample Info: 1660 @ 25ppb | PCB4-85M | KWG0701324-10

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



1082

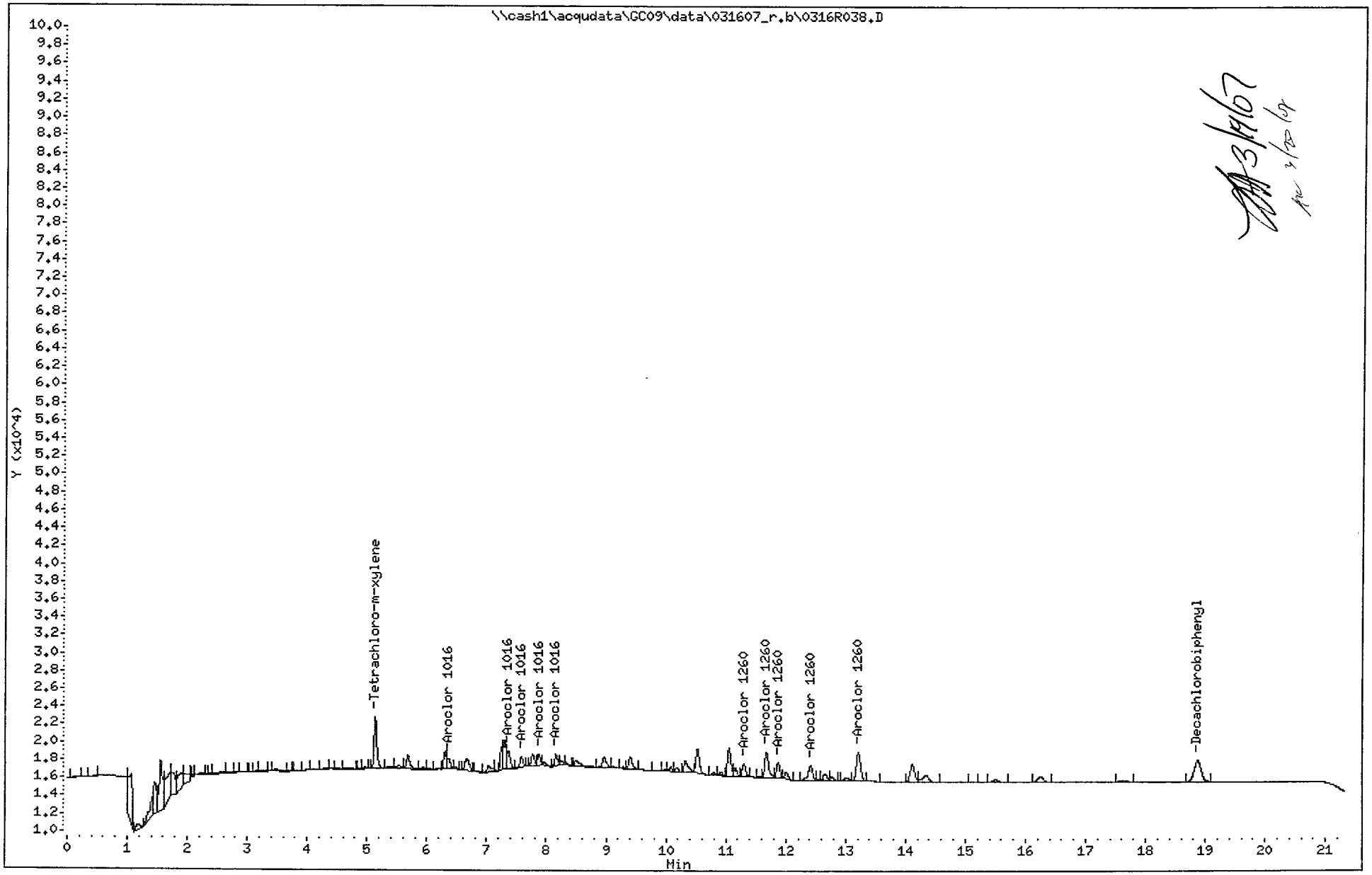
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
Date : 17-MAR-2007 03:55
Client ID:
Sample Info: 1660 @ 25ppb | PCB4-85M | KWG0701324-10

Instrument: GC09.i

Operator: LHarris

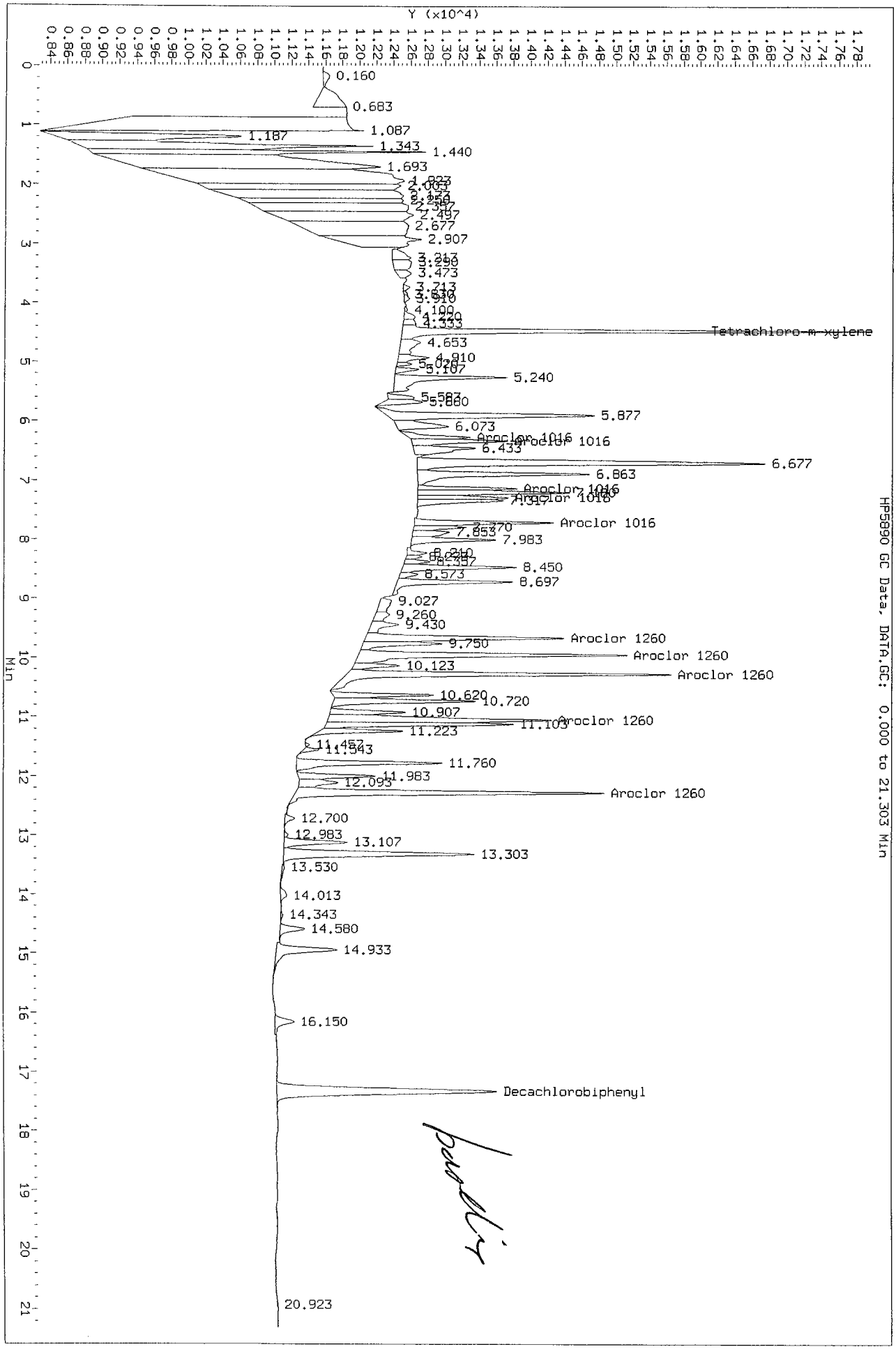
Column phase: DB-XLB

Column diameter: 0.53



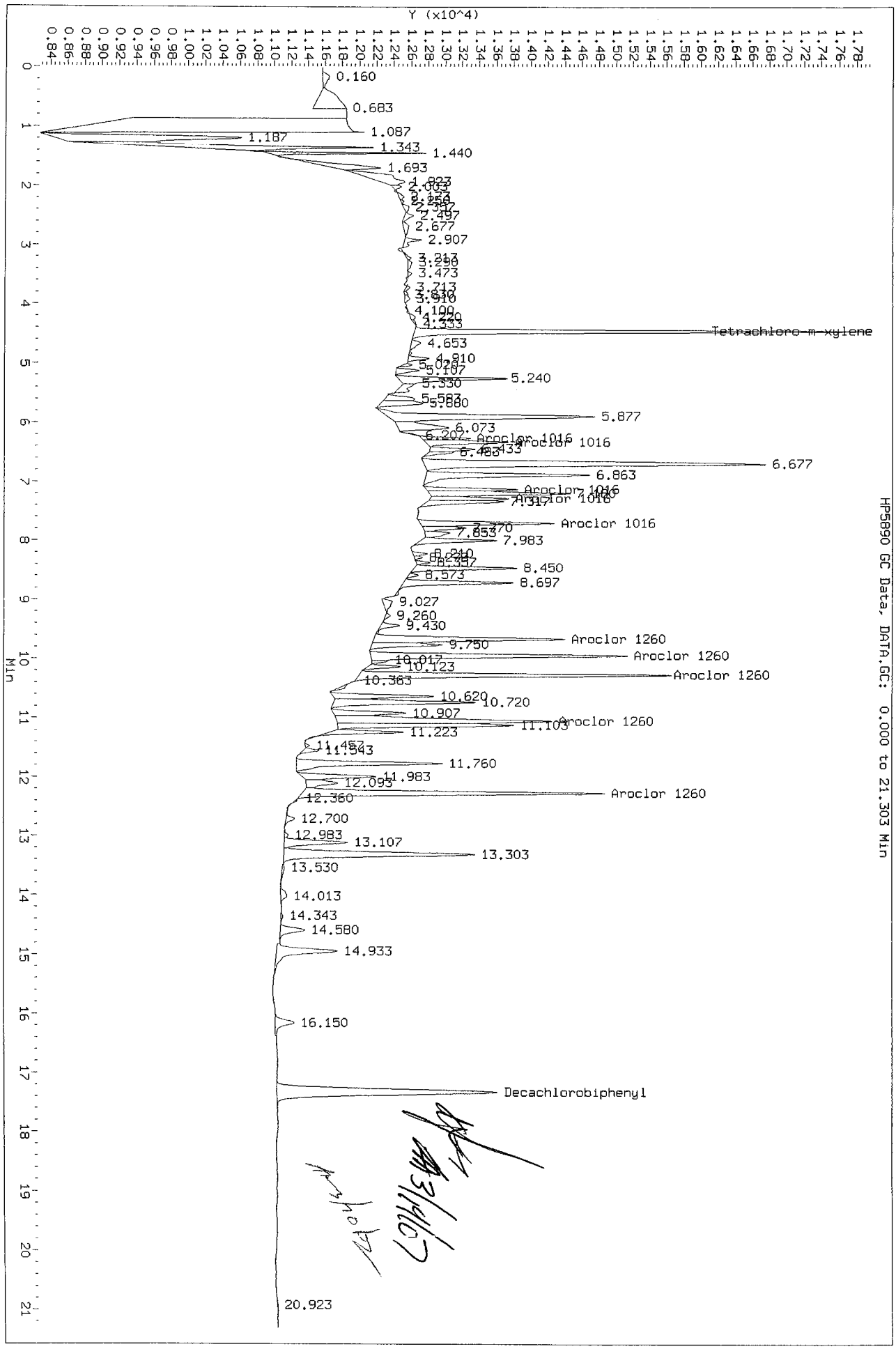
1083

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F038.D
Injection Date: 17-MAR-2007 03:55
Instrument: GC09.i
Client Sample ID:



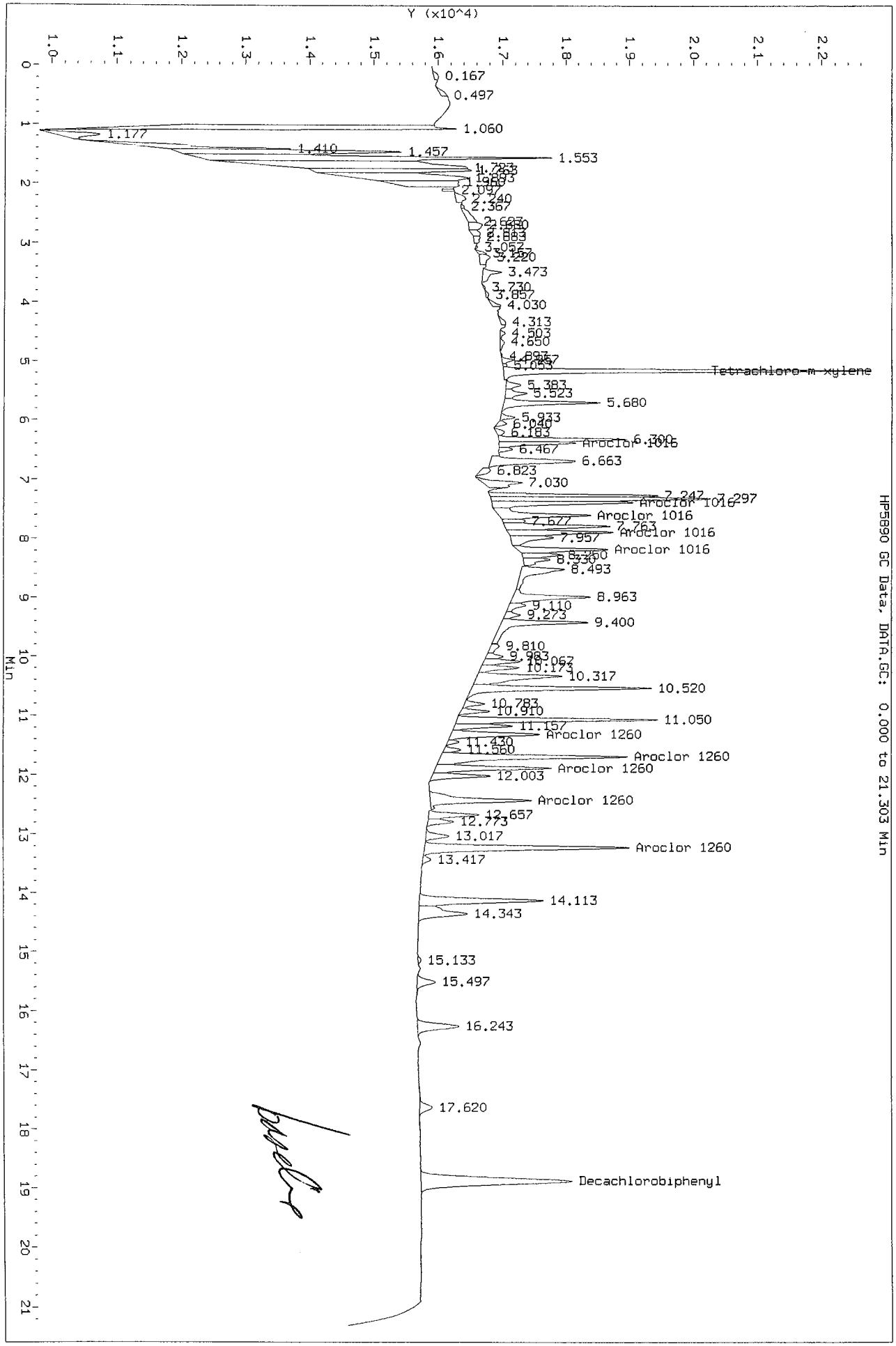
HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F038.D
Injection Date: 17-MAR-2007 03:55
Instrument: GC09:i
Client Sample ID:



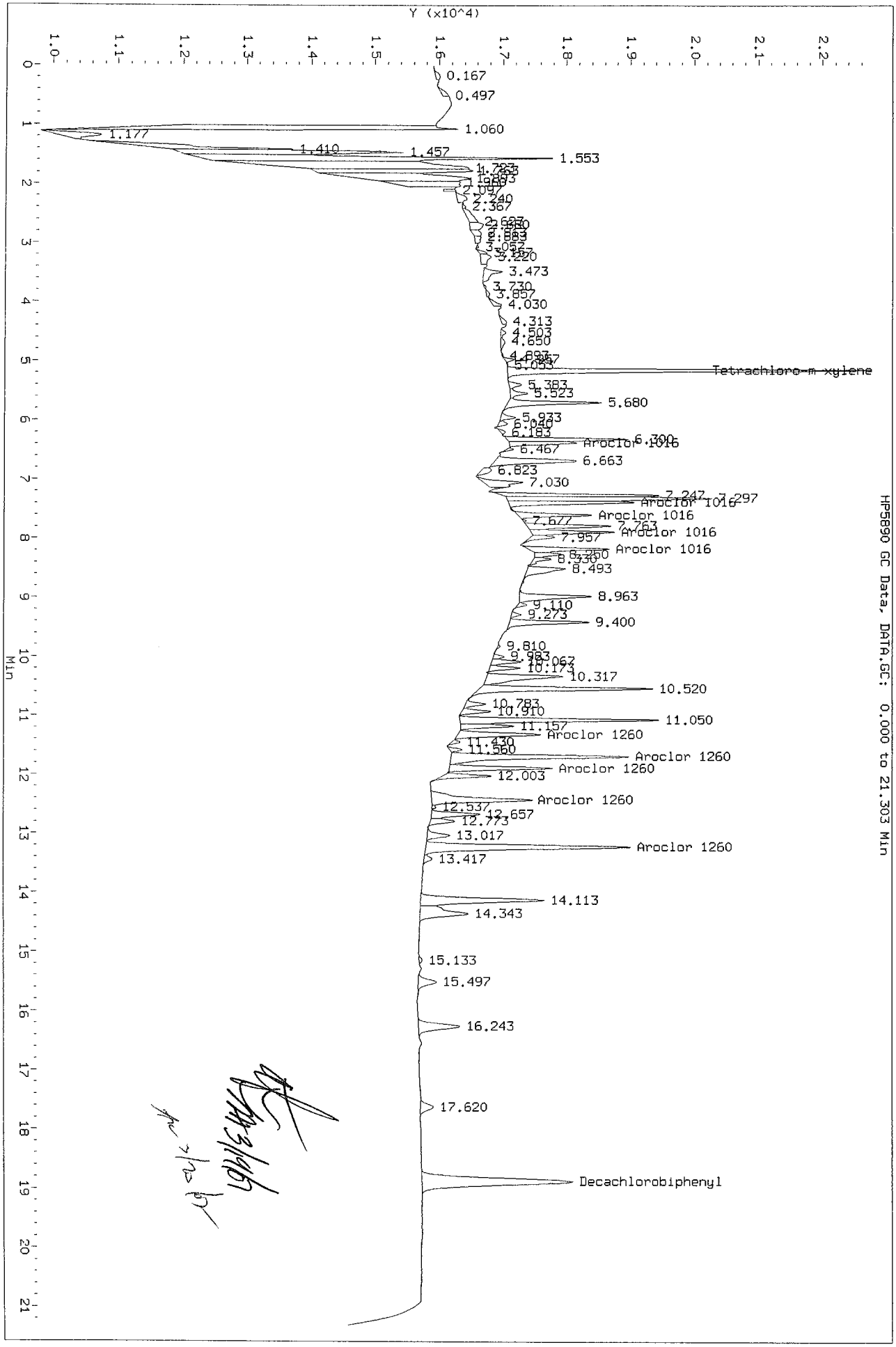
HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
Injection Date: 17-MAR-2007 03:55
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R038.D
Injection Date: 17-MAR-2007 03:55
Instrument: GC09:1
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F039.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F039.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
Inj Date : 17-MAR-2007 04:21
Sample Info: 1660 @ 50ppb | PCB4-85N | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.450	5.137	33439	37443	5.64	5.75		100.00
Aroclor 1016	6.250	6.357	3124	8211	50.8	63.6	80.00- 120.00	100.00(M)
	6.313	7.360	6776	15587	53.6	62.4	155.75- 233.62	216.93(M)
	7.113	7.580	6544	9274	58.3	51.4	137.50- 206.25	209.49(M)
	7.267	7.867	8596	9895	65.8	57.1	163.24- 244.86	275.19(M)
	7.690	8.153	11788	9618	62.4	58.2	212.35- 318.53	377.37(M)
		Average of Peak Amounts =			58.2	58.5		
Aroclor 1260	9.933	11.300	22901	13149	66.5	58.1	80.00- 120.00	100.00(M)
	10.720	11.673	13982	28242	47.4	61.2	51.26- 76.89	61.05(M)
	11.033	11.867	25868	15619	60.5	63.2	103.14- 154.72	112.95(M)
	12.260	12.410	32949	17967	64.8	59.4	139.61- 209.42	143.87(M)
	13.303	13.210	23634	32748	47.4	59.8	104.15- 156.23	103.20(M)
		Average of Peak Amounts =			57.3	60.3		
Decachlorobiphenyl	17.317	18.870	37078	39029	5.94	6.18		100.00

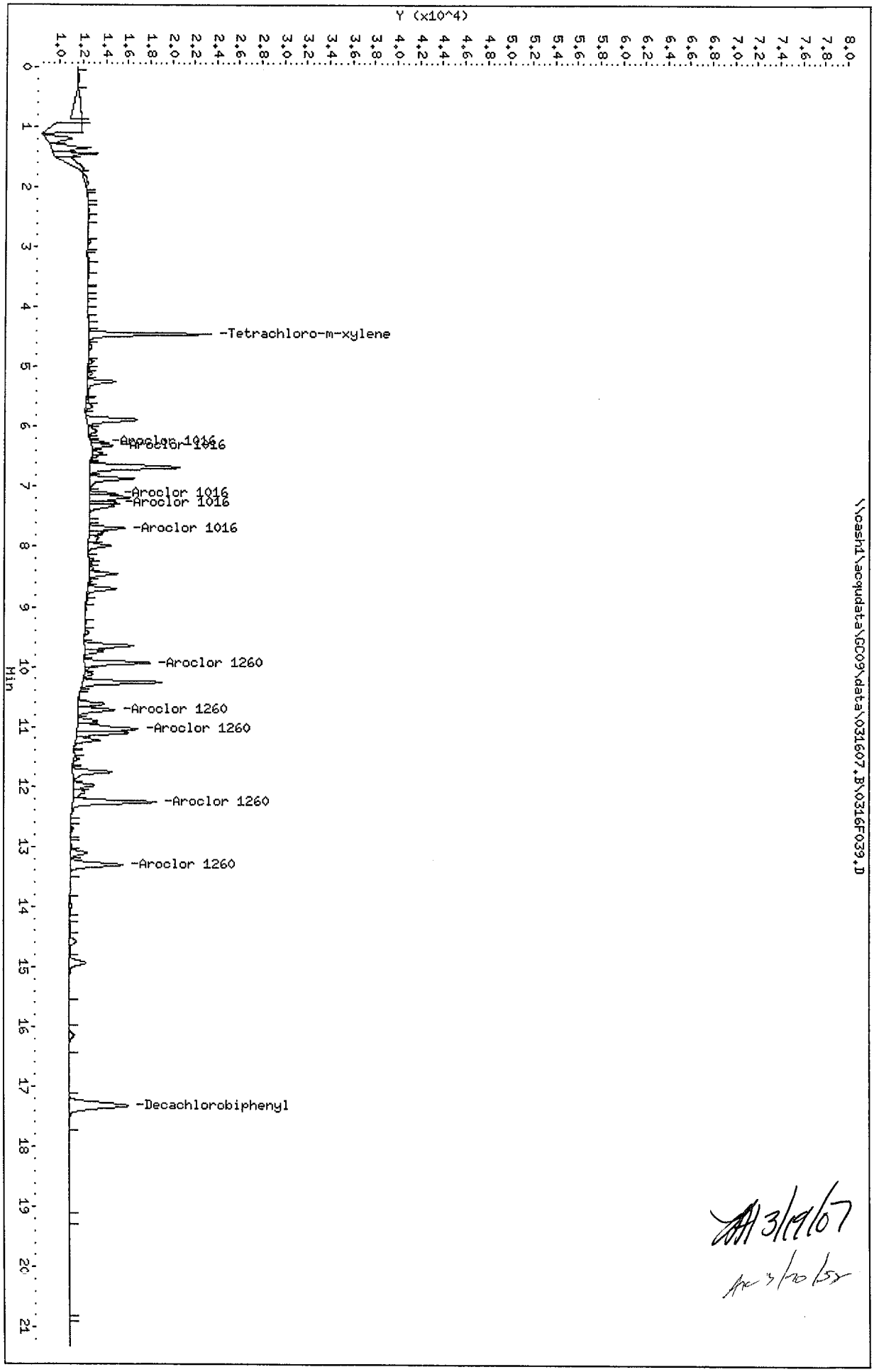
QC Flag Legend

M - Compound response manually integrated.

3/19/07

Data File: \\cash1\acqudata\GC09\data\031607,B\0316F039,D
Date : 17-MAR-2007 04:21
Client ID:
Sample Info: 1660 @ 50ppb I PCB4-85N I KWG0701324-10
Column phase: DB-35MS

Instrument: GC09.i
Operator: LHarris
Column diameter: 0.53



\\cash1\acqudata\GC09\data\031607,B\0316F039,D

3/19/07

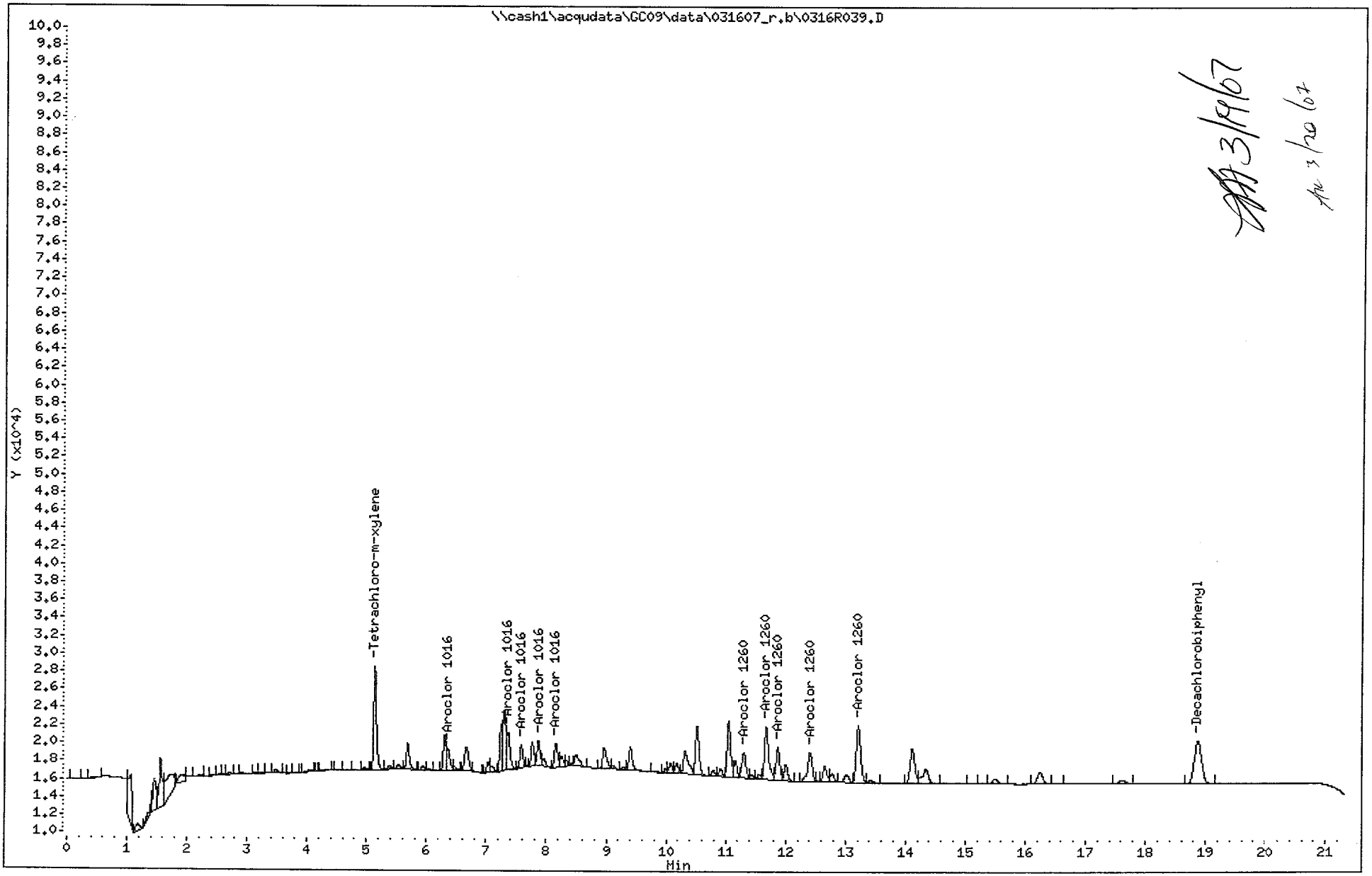
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
Date : 17-MAR-2007 04:21
Client ID:
Sample Info: 1660 @ 50ppb | PCB4-85N | KWG0701324-10

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

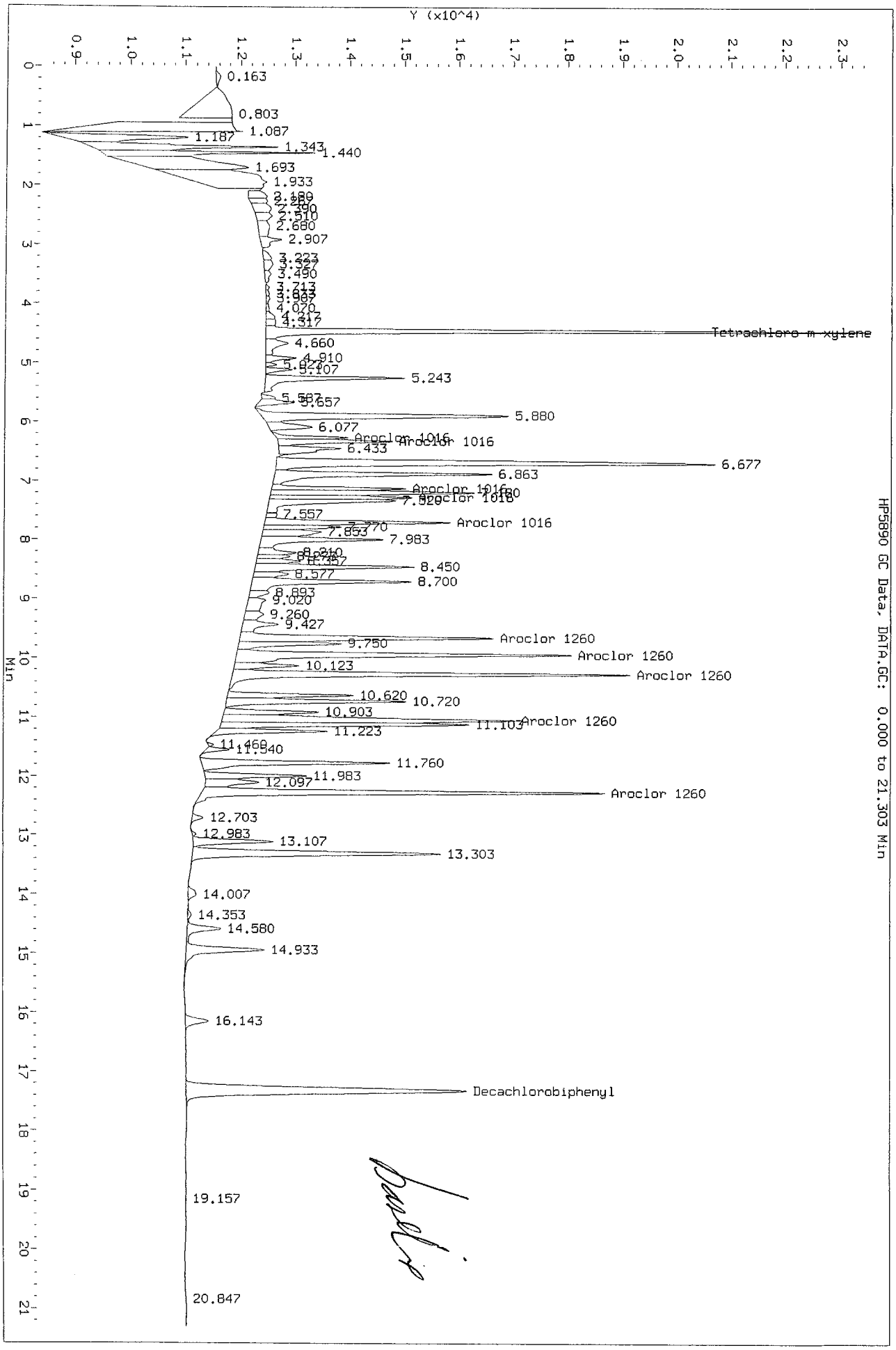
Column diameter: 0.53



3/19/07

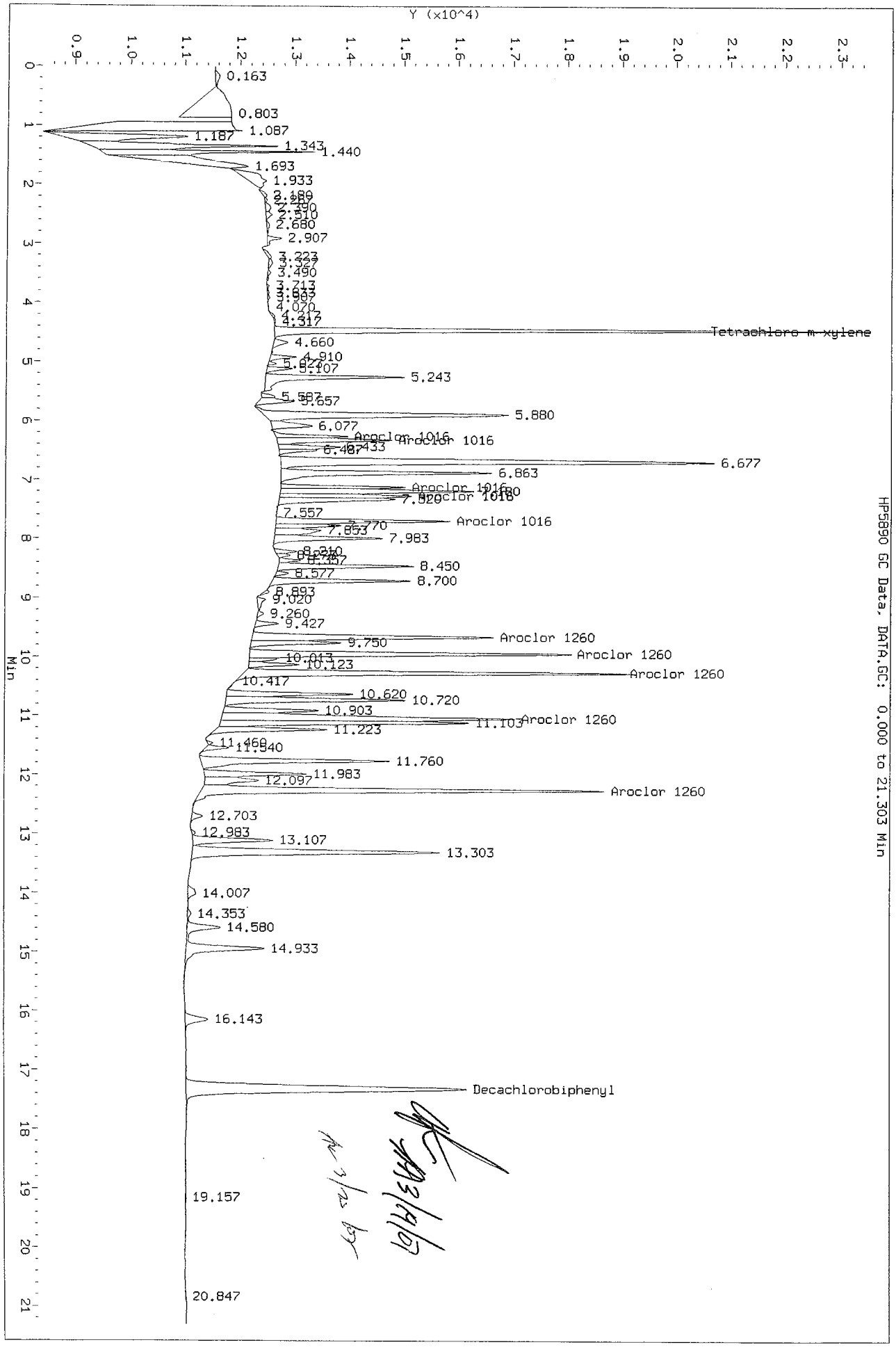
1090

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F039.D
Injection Date: 17-MAR-2007 04:21
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

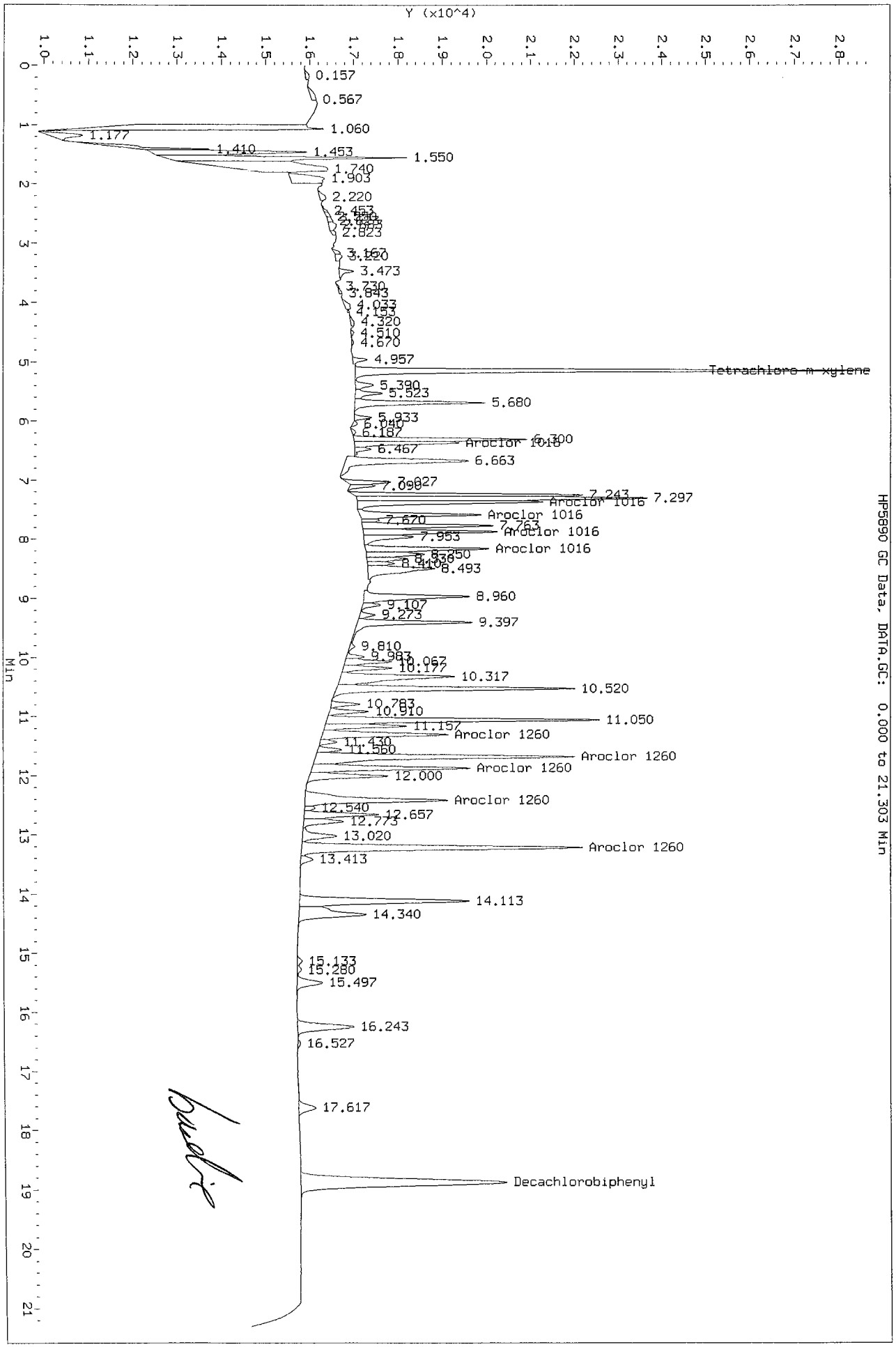
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F039.D
Injection Date: 17-MAR-2007 04:21
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

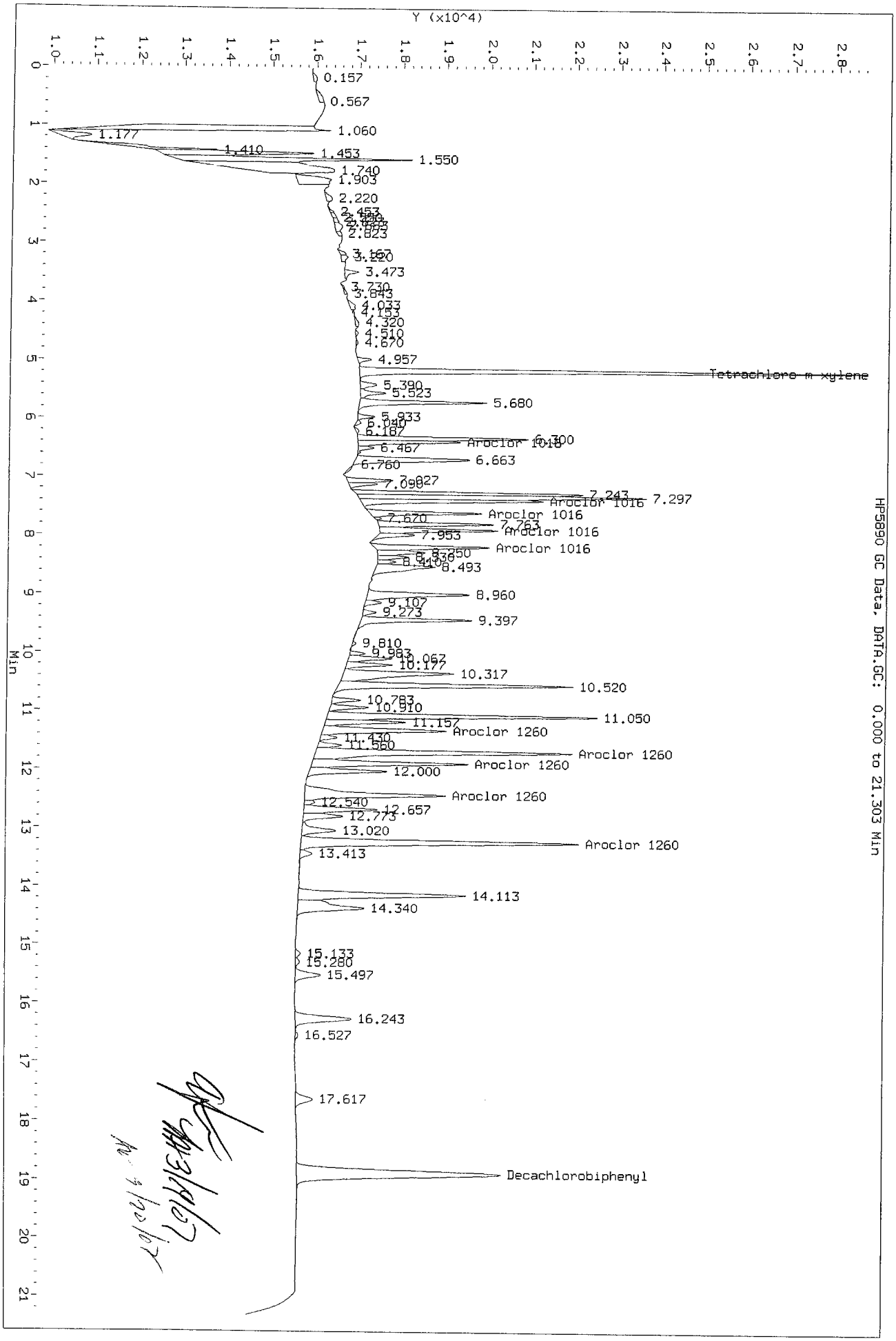
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
Injection Date: 17-MAR-2007 04:21
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R039.D
Injection Date: 17-MAR-2007 04:21
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data. DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F040.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F040.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R040.D
Inj Date : 17-MAR-2007 04:47
Sample Info: 1660 @ 500ppb | PCB4-850 | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

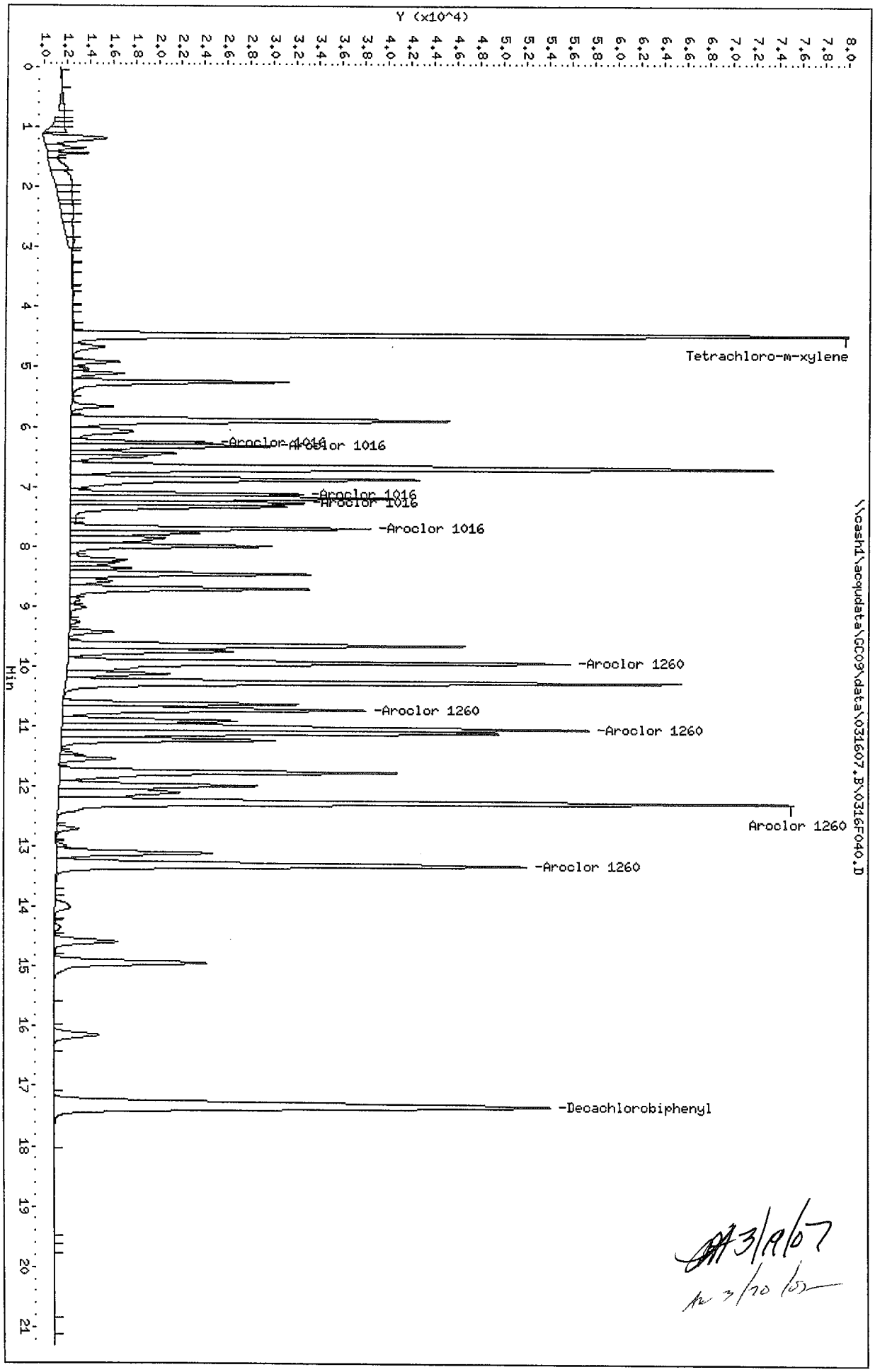
Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.453	5.137	314954	344382	53.1	48.7		100.00
Aroclor 1016	6.257	6.357	35125	70130	572	475	80.00- 120.00	100.00
	6.313	7.357	69976	137145	553	469	155.75- 233.62	199.22
	7.117	7.580	60999	100539	543	446	137.50- 206.25	173.66
	7.267	7.867	71300	97920	546	448	163.24- 244.86	202.99
	7.690	8.157	98357	93380	521	478	212.35- 318.53	280.02
		Average of Peak Amounts =			547	463		
Aroclor 1260	9.933	11.303	199380	121162	579	489	80.00- 120.00	100.00
	10.720	11.673	119032	238893	403	465	51.26- 76.89	59.70
	11.037	11.867	235388	131512	551	464	103.14- 154.72	118.06
	12.260	12.410	301825	154045	593	475	139.61- 209.42	151.38
	13.307	13.210	222303	275949	446	467	104.15- 156.23	111.50
		Average of Peak Amounts =			514	472		
Decachlorobiphenyl	17.320	18.873	324326	324398	51.9	46.6		100.00

3/9/07
3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F040.D
Date : 17-MAR-2007 04:47
Client ID:
Sample Info: 1660 @ 500ppb | PCB4-850 | KWG0701324-10
Column phase: DB-35MS

Instrument: GC09.i
Operator: LHarris
Column diameter: 0.53



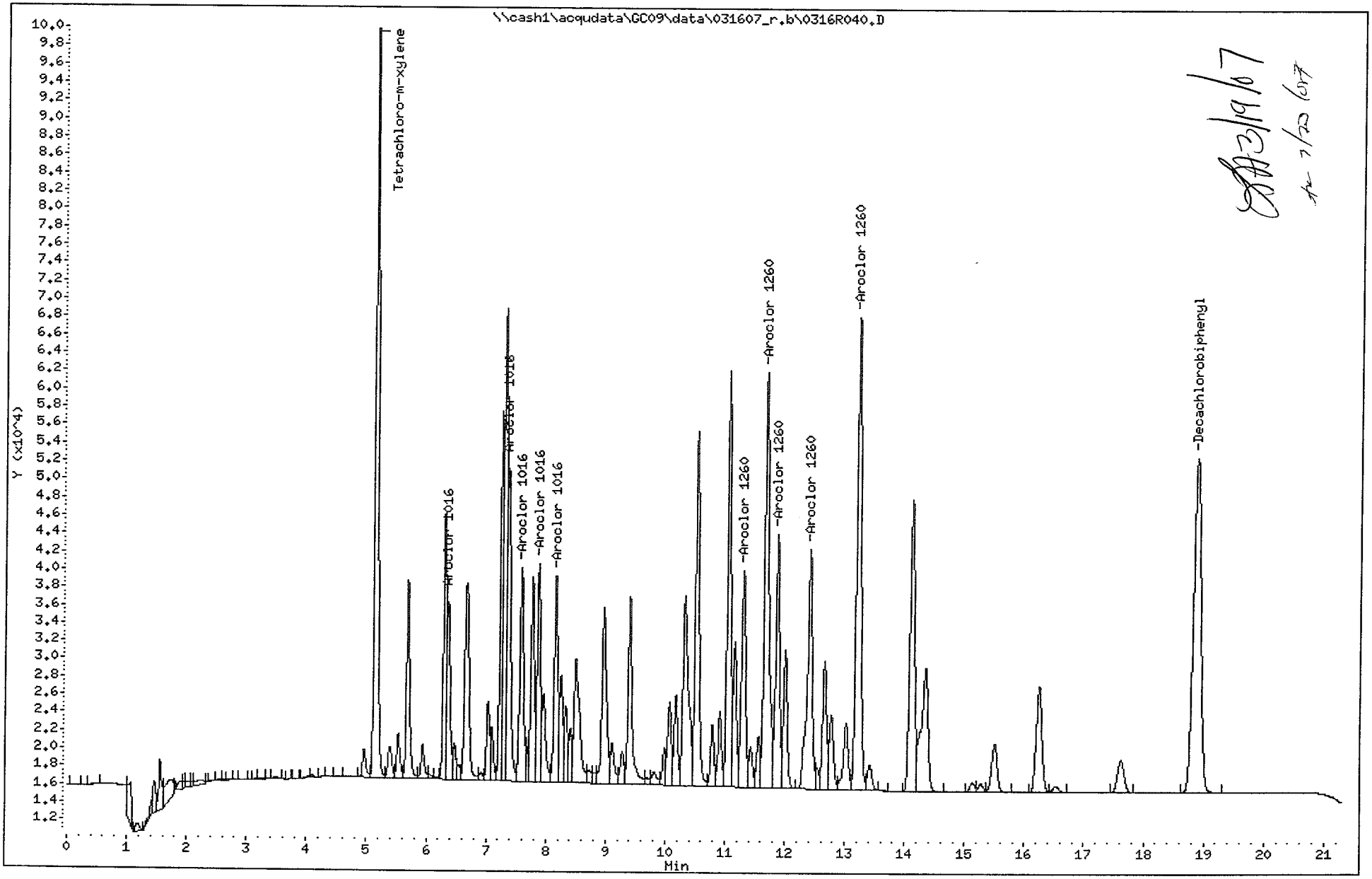
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R040.D
Date : 17-MAR-2007 04:47
Client ID:
Sample Info: 1660 @ 500ppb | PCB4-850 | KWG0701324-10

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



1097

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F041.D
Report Date: 19-Mar-2007 14:53

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F041.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R041.D
Inj Date : 17-MAR-2007 05:13
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.453	5.137	589450	638376	99.4	90.3		100.00
Aroclor 1016	6.257	6.357	65877	127364	1070	863	80.00- 120.00	100.00
	6.313	7.357	129685	247331	1020	846	155.75- 233.62	196.86
	7.117	7.580	112711	200965	1000	892	137.50- 206.25	171.09
	7.267	7.867	131148	173551	1000	794	163.24- 244.86	199.08
	7.690	8.157	183020	162105	969	830	212.35- 318.53	277.82
		Average of Peak Amounts =			1010	845		
Aroclor 1260	9.933	11.303	364977	225248	1020	910	80.00- 120.00	100.00
	10.720	11.673	219325	441333	809	859	51.26- 76.89	60.09
	11.037	11.867	421239	240729	981	850	103.14- 154.72	115.42
	12.260	12.410	568238	289793	1060	893	139.61- 209.42	155.69
	13.307	13.210	423409	514043	893	871	104.15- 156.23	116.01
		Average of Peak Amounts =			953	877		
Decachlorobiphenyl	17.320	18.873	596918	589579	95.6	84.7		100.00

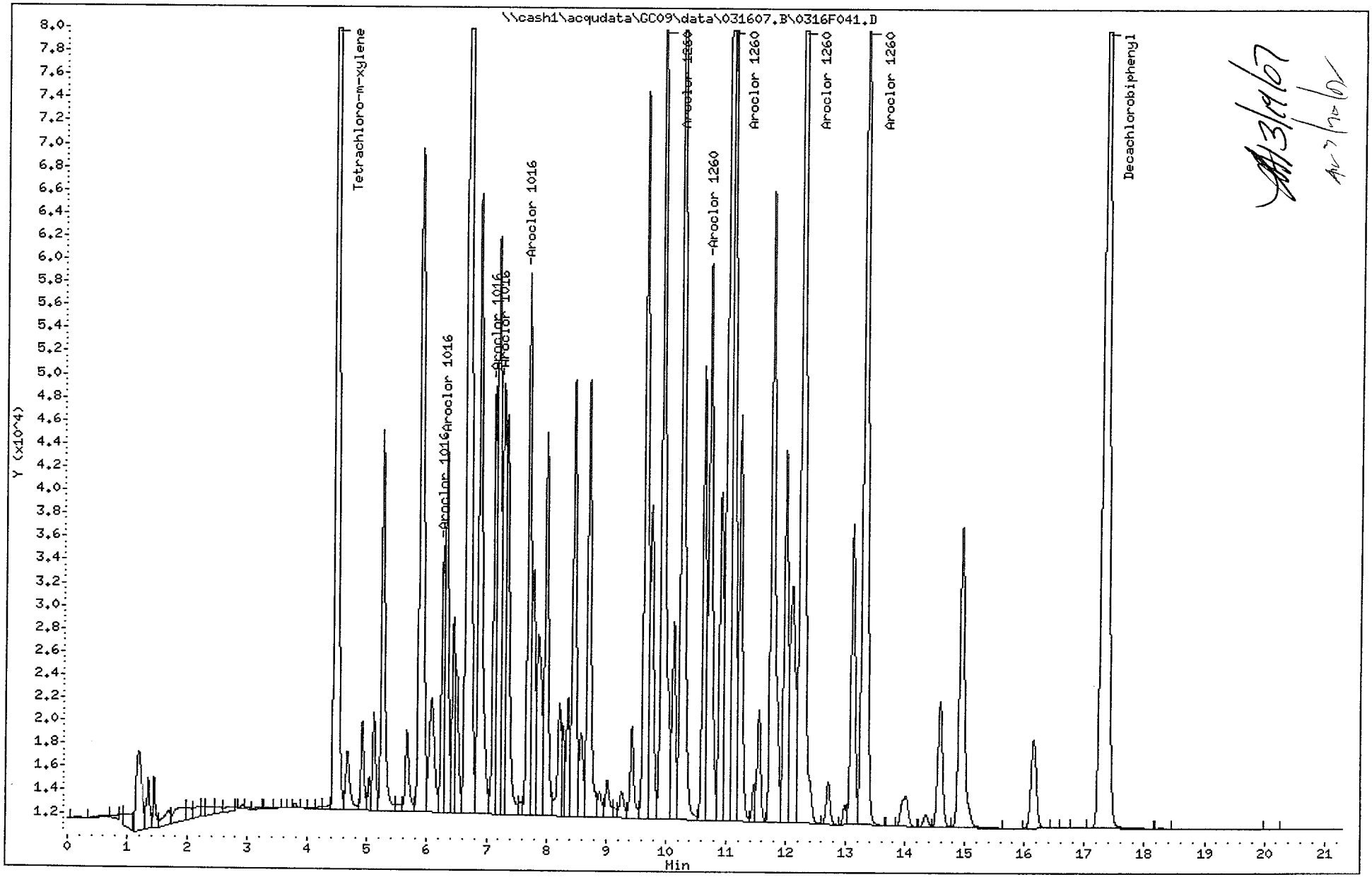
3/19/07
3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F041.D
Date : 17-MAR-2007 05:13
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0701324-10

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



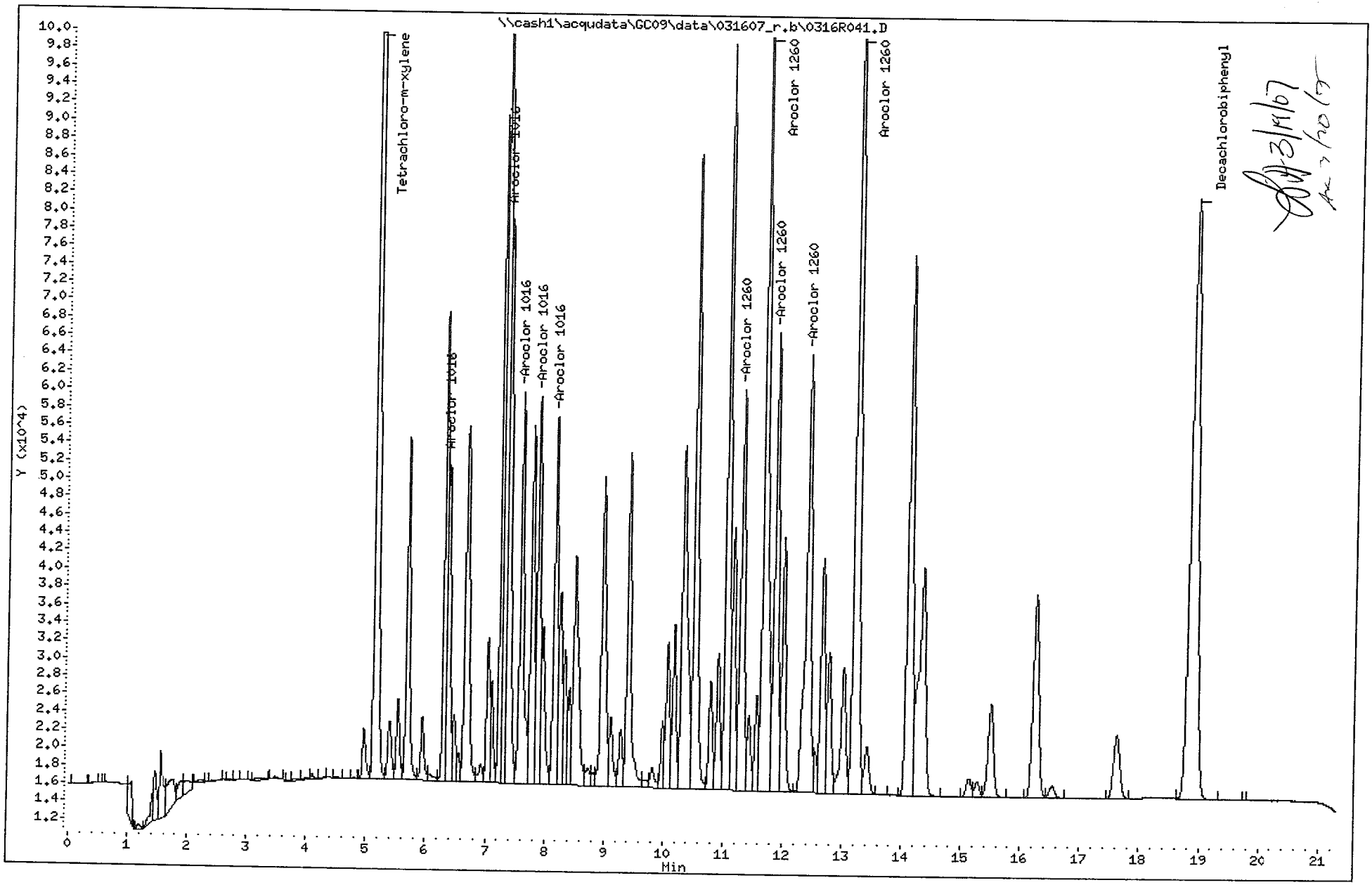
1099

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R041.D
Date : 17-MAR-2007 05:13
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0701324-10

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



3/19/07

1100

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F042.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F042.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R042.D
Inj Date : 17-MAR-2007 05:38
Sample Info: 1660 @ 2000ppb | PCB4-85Q | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.450	5.137	1077541	1173631	182	172		100.00
Aroclor 1016	6.257	6.360	116809	228209	1900	1620	80.00- 120.00	100.00
	6.313	7.357	230489	420669	1820	1520	155.75- 233.62	197.32
	7.117	7.580	199549	360889	1780	1670	137.50- 206.25	170.83
	7.267	7.867	232755	308981	1780	1500	163.24- 244.86	199.26
	7.690	8.153	316604	294146	1680	1580	212.35- 318.53	271.04
		Average of Peak Amounts =			1790	1580		
Aroclor 1260	9.933	11.303	651522	419652	1750	1750	80.00- 120.00	100.00
	10.720	11.673	401946	820067	1610	1660	51.26- 76.89	61.69
	11.037	11.867	806927	437694	1850	1620	103.14- 154.72	123.85
	12.260	12.410	1069309	543485	1930	1730	139.61- 209.42	164.12
	13.307	13.210	801065	960002	1770	1690	104.15- 156.23	122.95
		Average of Peak Amounts =			1780	1690		
Decachlorobiphenyl	17.320	18.870	1092211	1066242	175	161		100.00

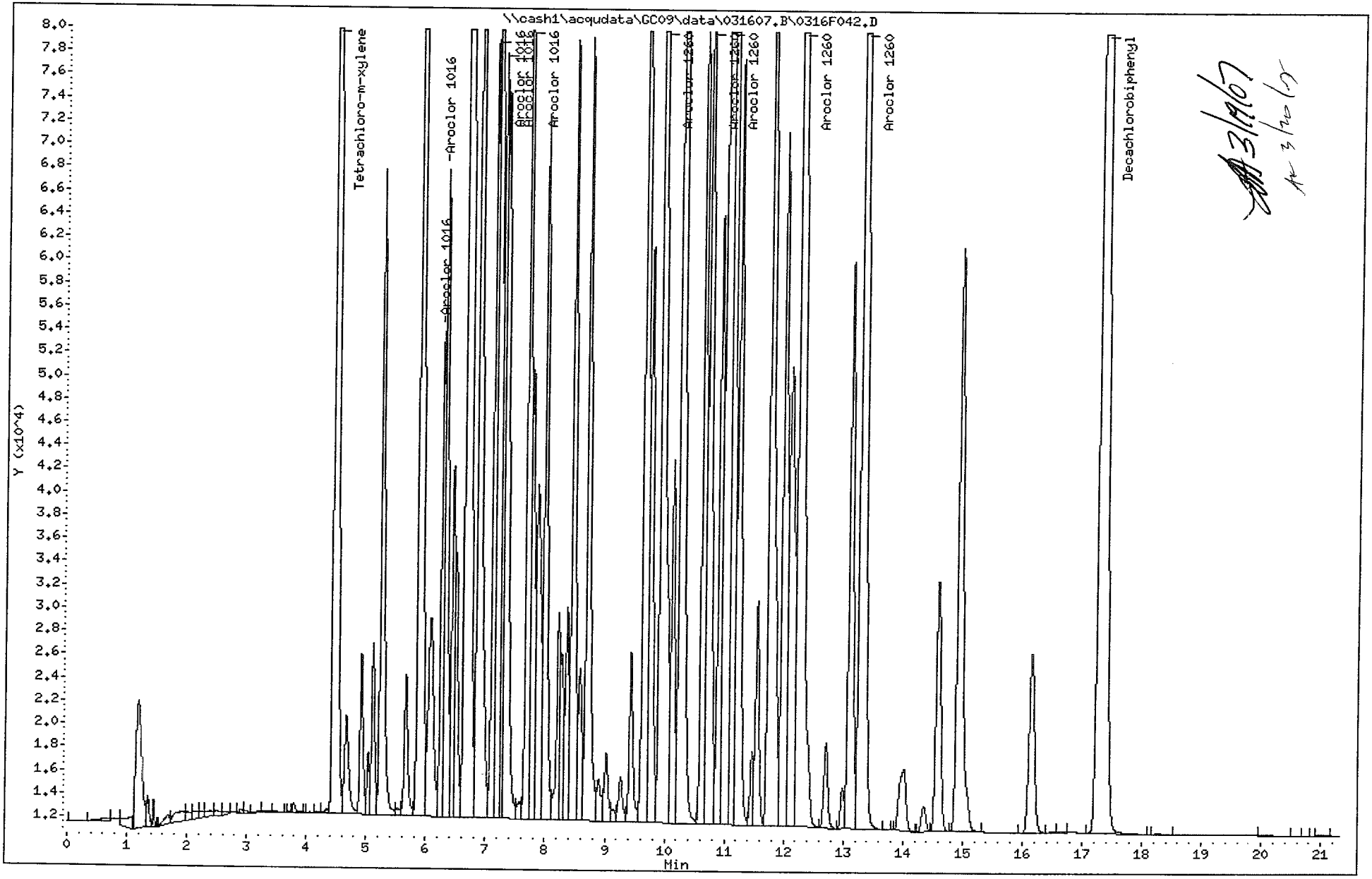
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F042.D
Date : 17-MAR-2007 05:38
Client ID:
Sample Info: 1660 @ 2000ppb | PCB4-85Q | KWG0701324-10

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



1102

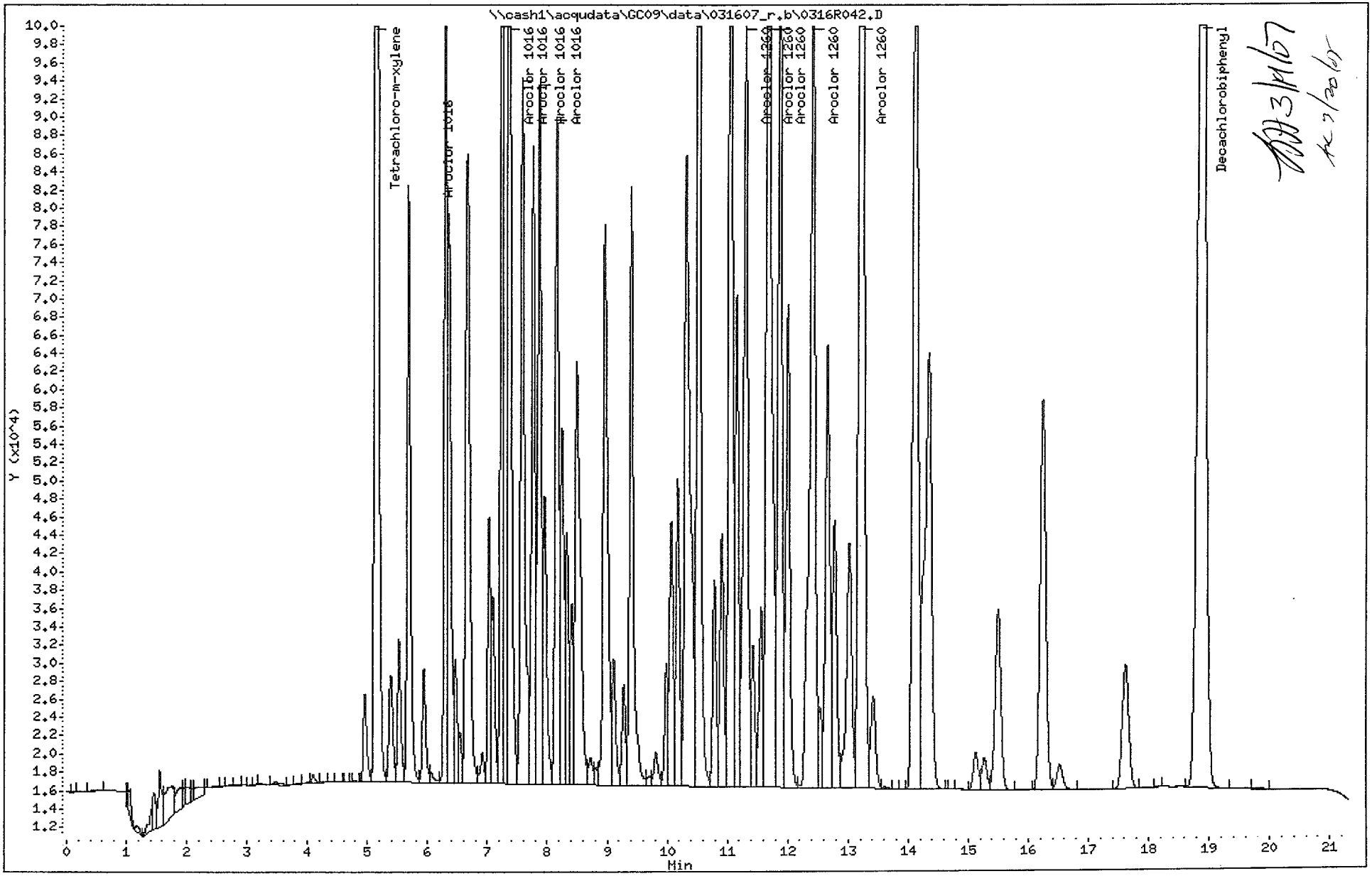
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R042.D
Date : 17-MAR-2007 05:38
Client ID:
Sample Info: 1660 @ 2000ppb | PCB4-85Q | KWG0701324-10

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



1103

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F043.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F043.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R043.D
Inj Date : 17-MAR-2007 06:04
Sample Info: 1660 @ 5000ppb | PCB4-85R | KWG0701324-10
Misc Info : SEMIVOA GC\W0701324\10-ICAL.H
Cal Date : 19-MAR-2007 10:49
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.453	5.137	2404948	2600046	405	396		100.00
Aroclor 1016	6.257	6.360	257789	491595	4200	3670	80.00- 120.00	100.00
	6.313	7.357	501881	919822	3970	3530	155.75- 233.62	194.69
	7.117	7.583	443079	796756	3950	3850	137.50- 206.25	171.88
	7.267	7.867	526013	674593	4030	3480	163.24- 244.86	204.05
	7.690	8.157	684275	643587	3620	3650	212.35- 318.53	265.44
		Average of Peak Amounts =			3950	3640		
Aroclor 1260	9.933	11.303	1430758	968465	3720	4170	80.00- 120.00	100.00
	10.720	11.673	916768	1891793	3930	3990	51.26- 76.89	64.08
	11.037	11.870	1844665	989625	4160	3830	103.14- 154.72	128.93
	12.260	12.413	2496866	1267227	4330	4170	139.61- 209.42	174.51
	13.307	13.210	1862738	2214057	4320	4040	104.15- 156.23	130.19
		Average of Peak Amounts =			4090	4040		
Decachlorobiphenyl	17.320	18.870	2445631	2351693	392	372		100.00

3/19/07

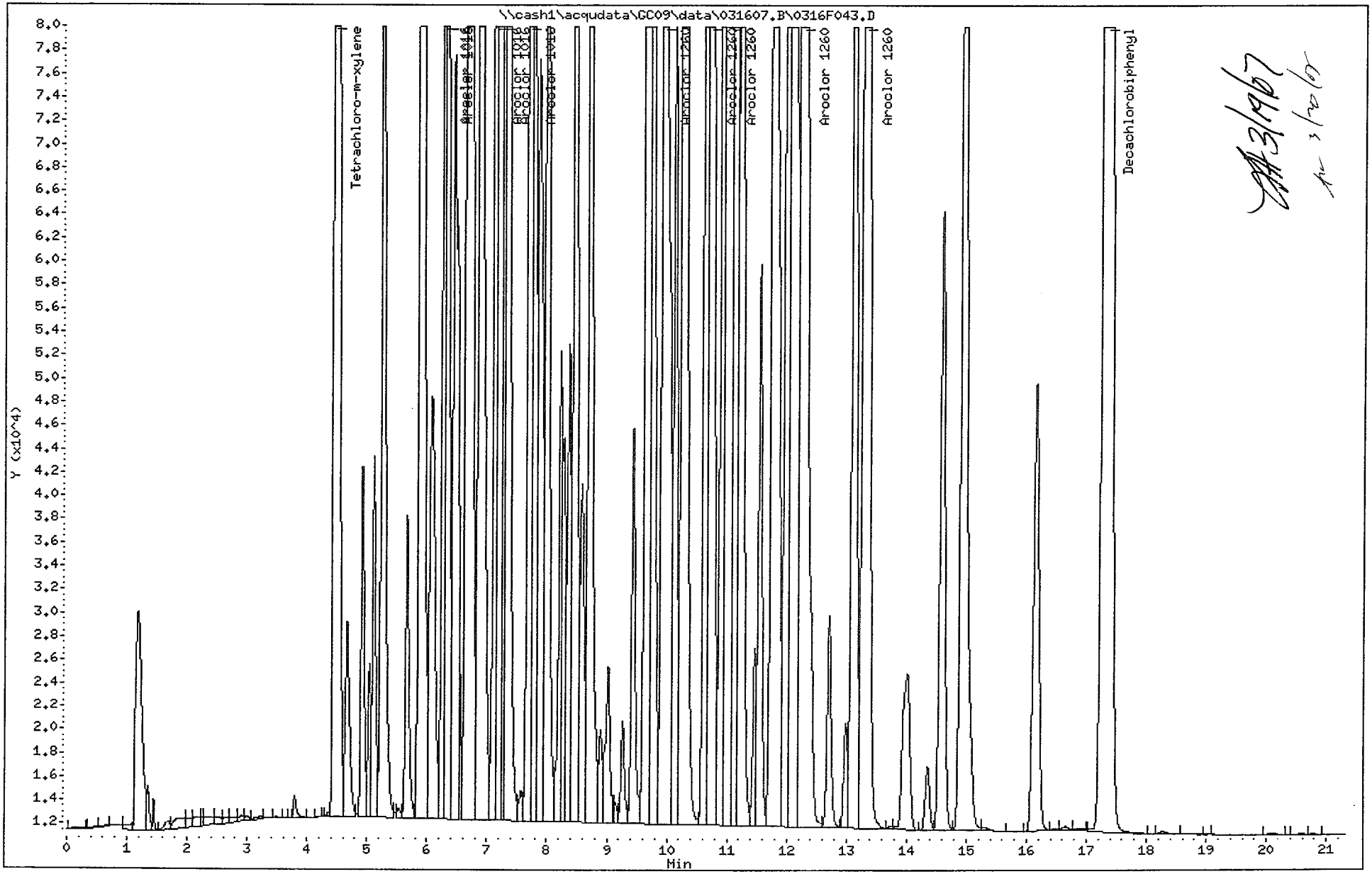
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F043.D
Date : 17-MAR-2007 06:04
Client ID:
Sample Info: 1660 @ 5000ppb | PCB4-85R | KWG0701324-10

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



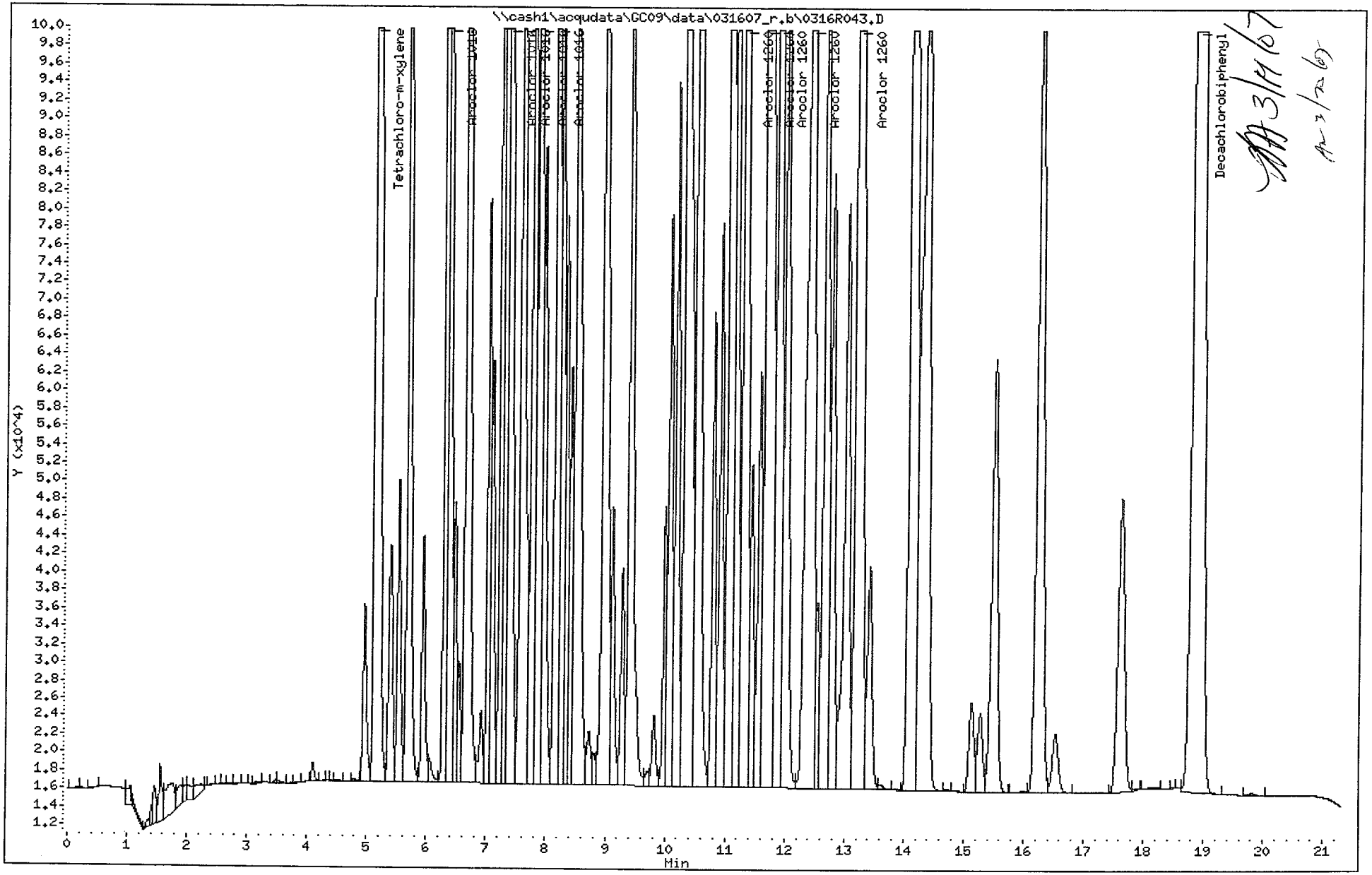
1105

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R043.D
Date : 17-MAR-2007 06:04
Client ID:
Sample Info: 1660 @ 5000ppb | PCB4-85R | KWG0701324-10

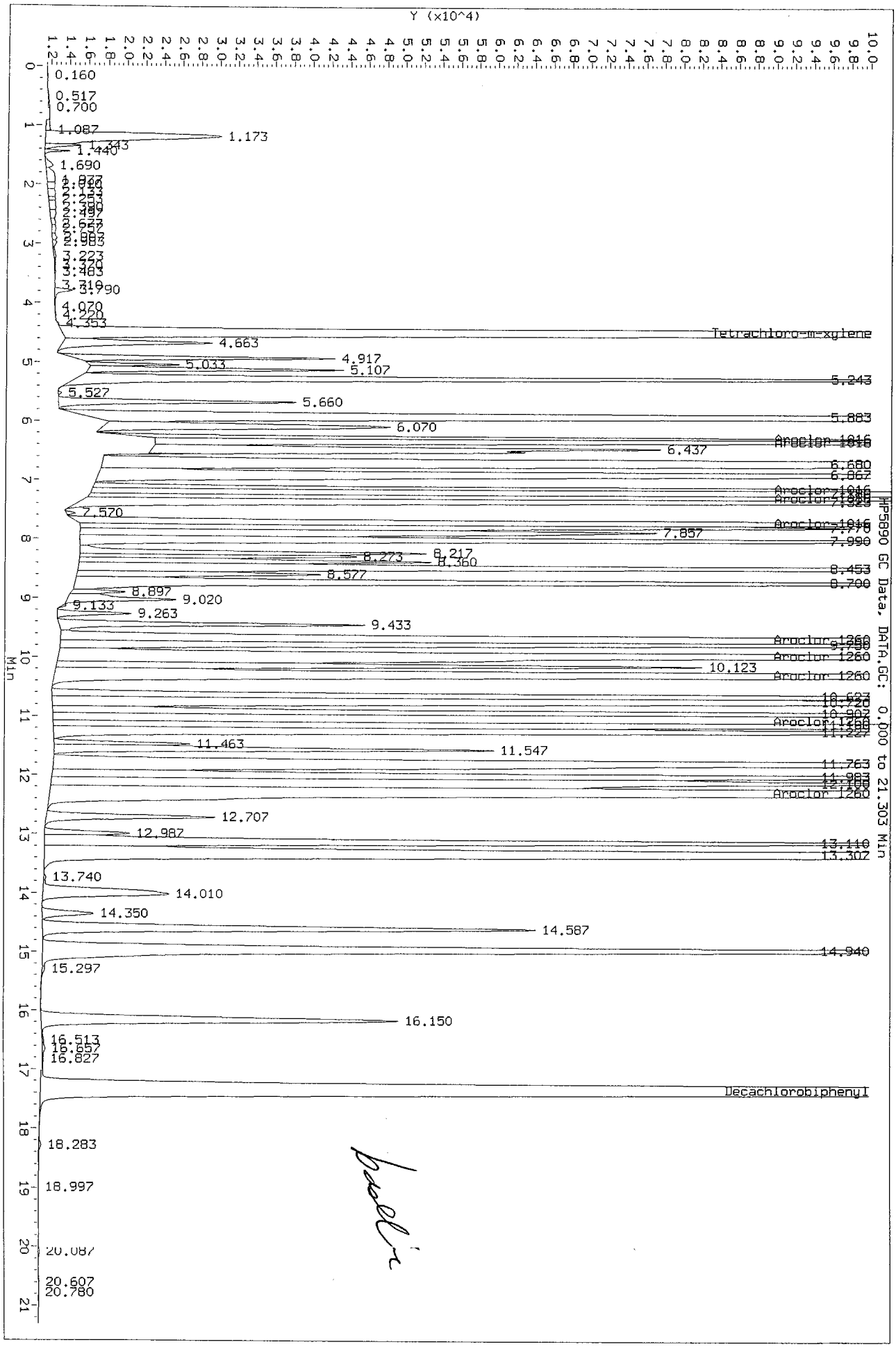
Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



1106


Data File: \\cash1\acqudata\GC09\data\031607.B\0316F043.D
Injection Date: 17-MAR-2007 06:04
Instrument: GC09.i
Client Sample ID:
HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min
Y (x10^4)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
0.160
0.517
0.700
1.087
1.173
1.343
1.440
1.690
3.790
4.070
4.220
4.353
4.663
4.917
5.033
5.107
5.243
5.527
5.660
5.883
6.070
6.437
6.680
6.867
7.570
7.857
7.990
8.217
8.273
8.360
8.453
8.577
8.700
8.897
9.020
9.133
9.263
9.433
10.123
11.463
11.547
11.763
12.707
12.987
13.110
13.307
13.740
14.010
14.350
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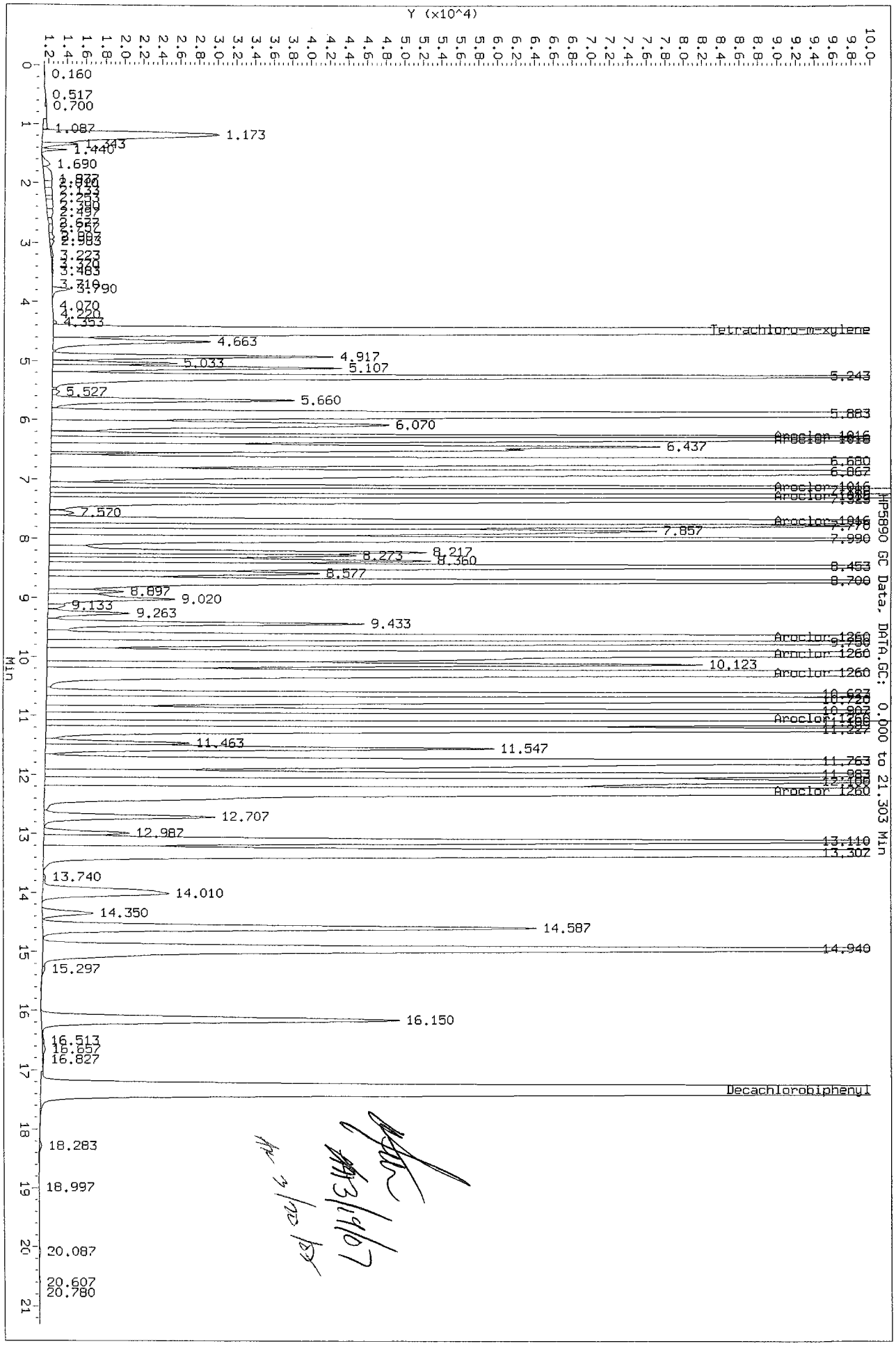
16.827
18.283
18.997
20.087
20.607
20.780

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F043.D
Injection Date: 17-MAR-2007 06:04
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\031607.B\0316F044.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F044.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R044.D
Inj Date : 17-MAR-2007 06:30
Sample Info: 1016 @ 1000ppb | PCB4-84D | KWG0701324-11
Misc Info : SEMIVOA GC\W0701324\11-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1016.sub
Sub List #2 : AR1016.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1016	6.257	6.360	62489	123150	1020	954	80.00- 120.00	100.00(M)
	6.313	7.357	124906	227606	988	911	155.75- 233.62	199.88(M)
	7.117	7.583	108181	188465	964	1040	137.50- 206.25	173.12(M)
	7.267	7.867	130246	164692	997	951	163.24- 244.86	208.43(M)
	7.690	8.157	176786	157607	936	954	212.35- 318.53	282.91(M)
			Average of Peak Amounts =		981	962		

QC Flag Legend

M - Compound response manually integrated.

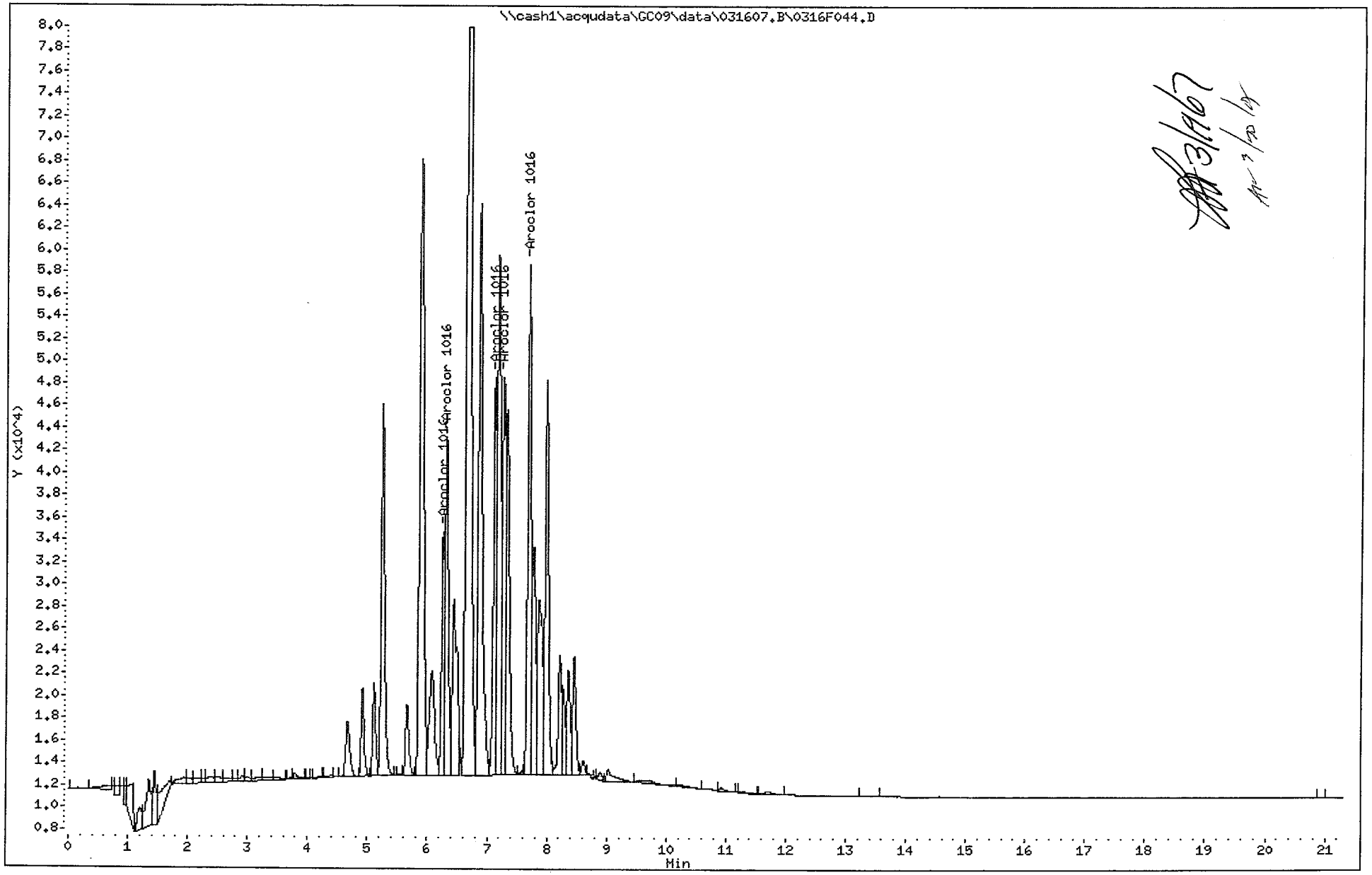
3/19/07
3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F044.D
Date : 17-MAR-2007 06:30
Client ID:
Sample Info: 1016 @ 1000ppb | PCB4-84D | KWG0701324-11

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



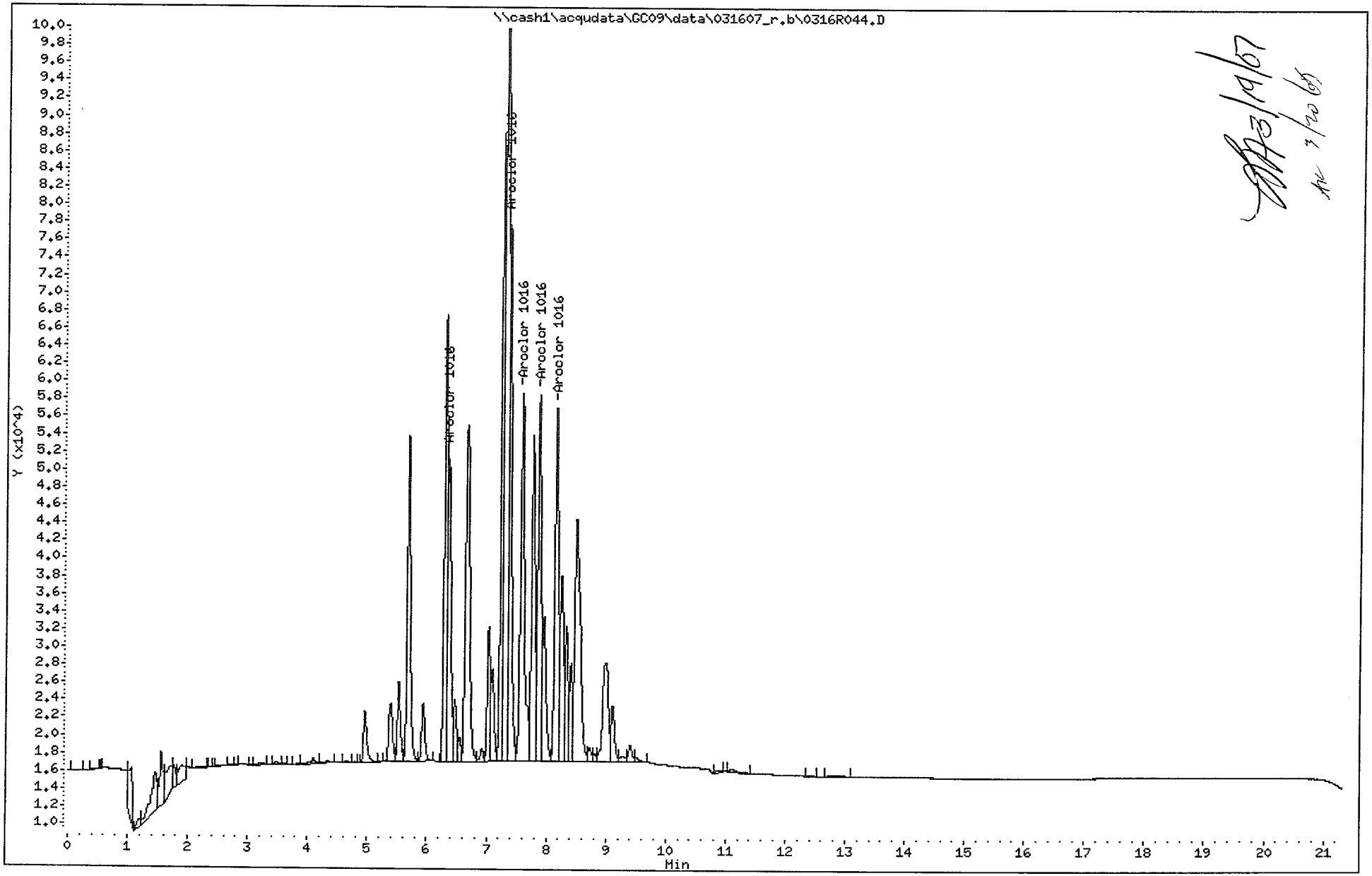
1110

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R044.D
Date : 17-MAR-2007 06:30
Client ID:
Sample Info: 1016 @ 1000ppb | PCB4-84D | KWG0701324-11

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

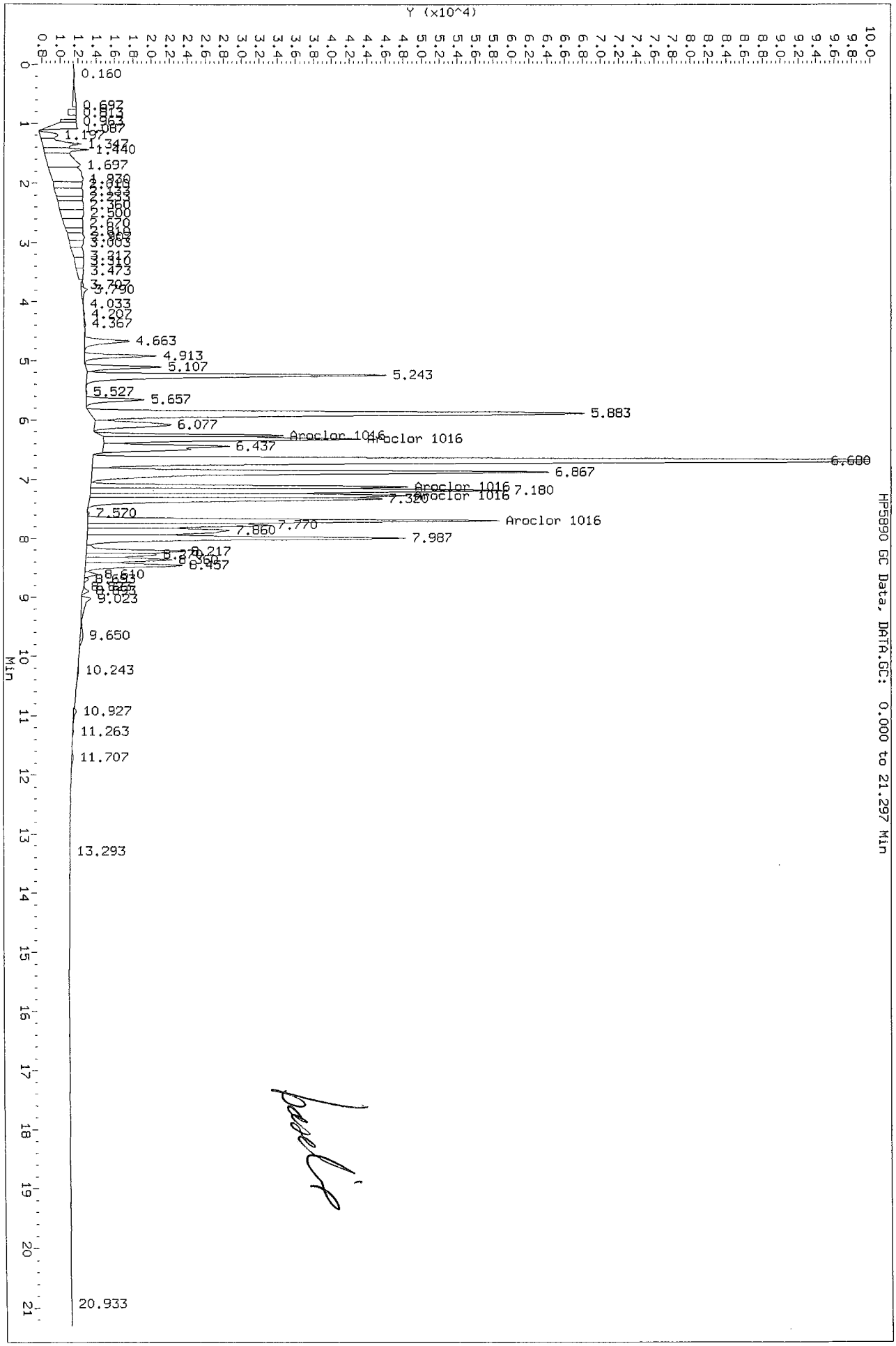
Column phase: DB-XLB



3/19/07
AW 3/20/07

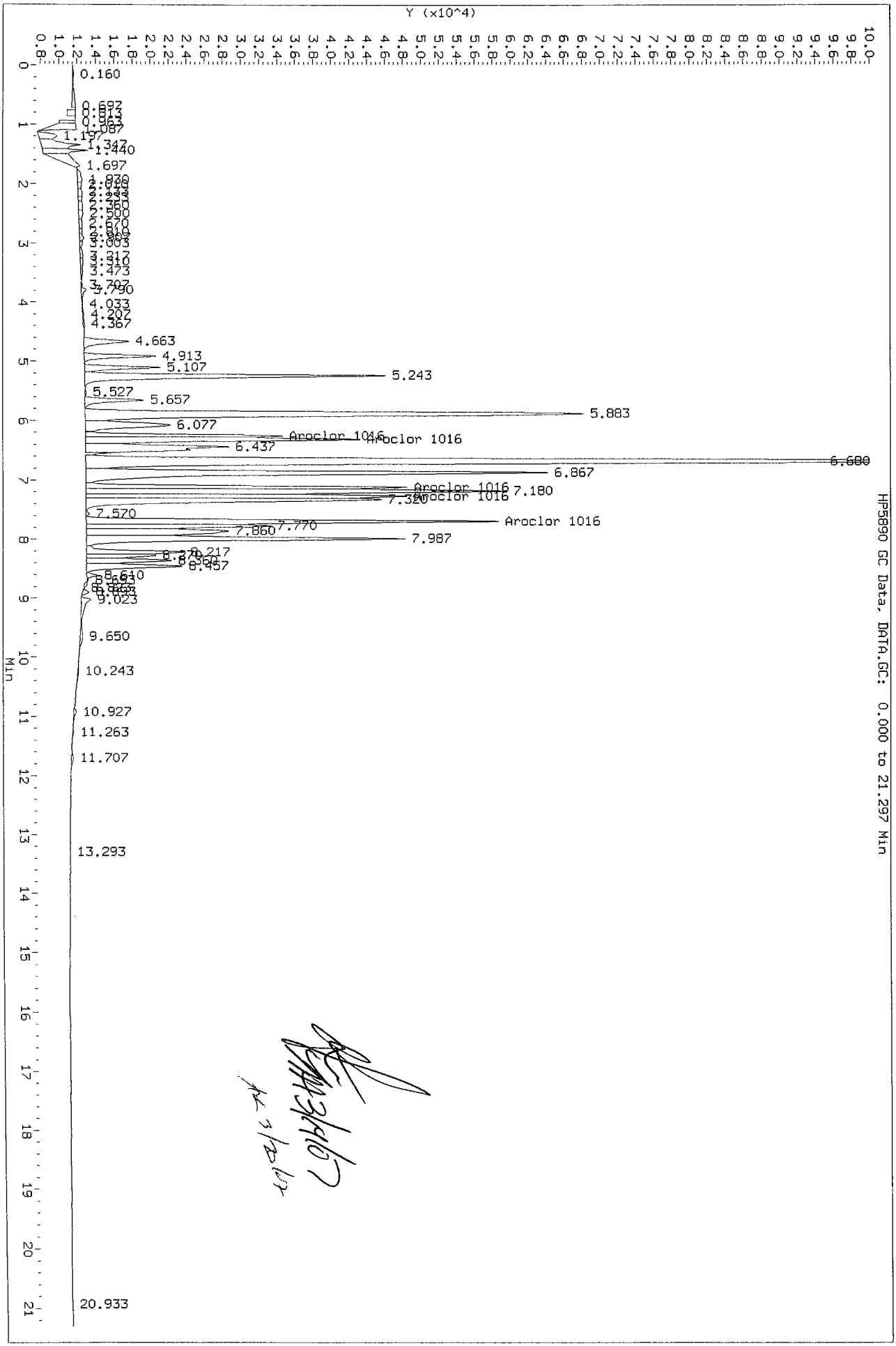
1111

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F044.D
Injection Date: 17-MAR-2007 06:30
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F044.D
Injection Date: 17-MAR-2007 06:30
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F045.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F045.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
Inj Date : 17-MAR-2007 06:56
Sample Info: 1221 @ 1000ppb | PCB4-87P | KWG0701324-12
Misc Info : SEMIVOA GC\W0701324\12-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1221.SUB
Sub List #2 : AR1221.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	3.790	4.093	48388	49215	934	921	80.00- 120.00	100.00(M)
	4.917	5.397	77581	86998	1010	1020	118.48- 177.73	160.33(M)
	5.107	5.523	51469	58684	1020	1050	78.26- 117.39	106.37(M)
	5.243	5.680	175377	186531	1000	1020	270.69- 406.03	362.43(M)
			Average of Peak Amounts =		991	1000		

QC Flag Legend

M - Compound response manually integrated.

3/19/07
3/20/07

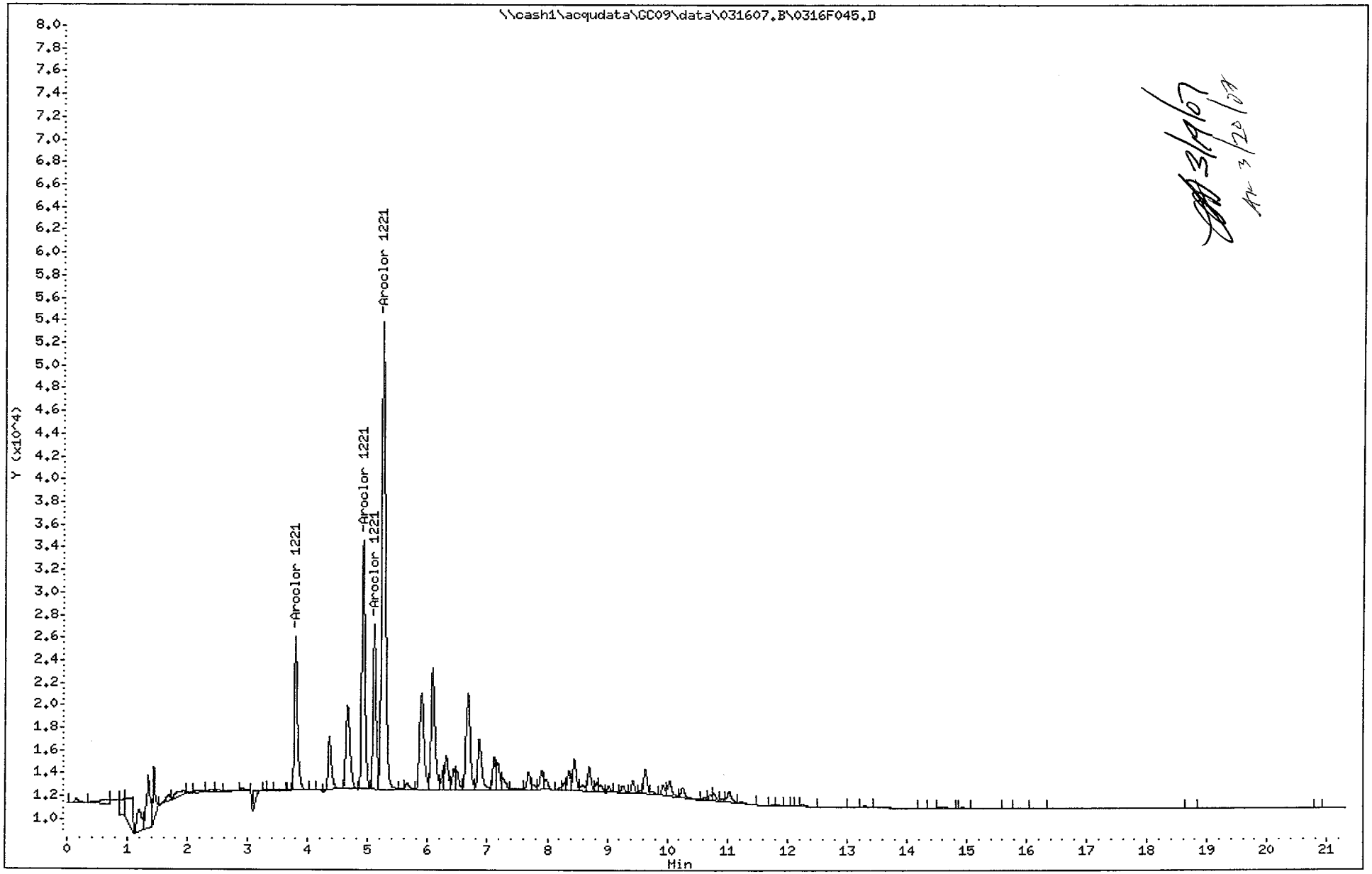
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F045.D
Date : 17-MAR-2007 06:56
Client ID:
Sample Info: 1221 @ 1000ppb | PCB4-87P | KWG0701324-12

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



3/19/07

1115

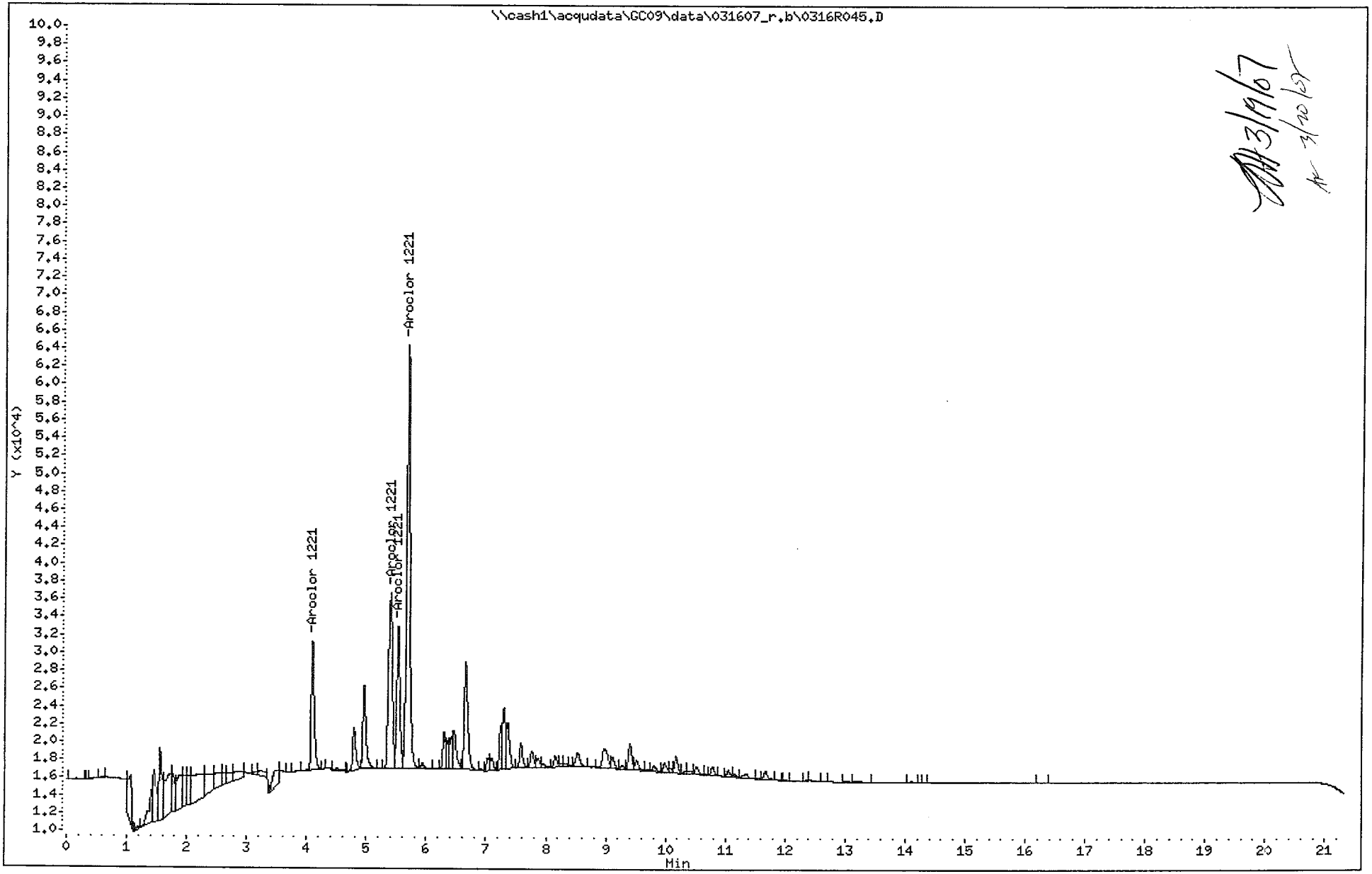
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
Date : 17-MAR-2007 06:56
Client ID:
Sample Info: 1221 @ 1000ppb | PCB4-87P | KWG0701324-12

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

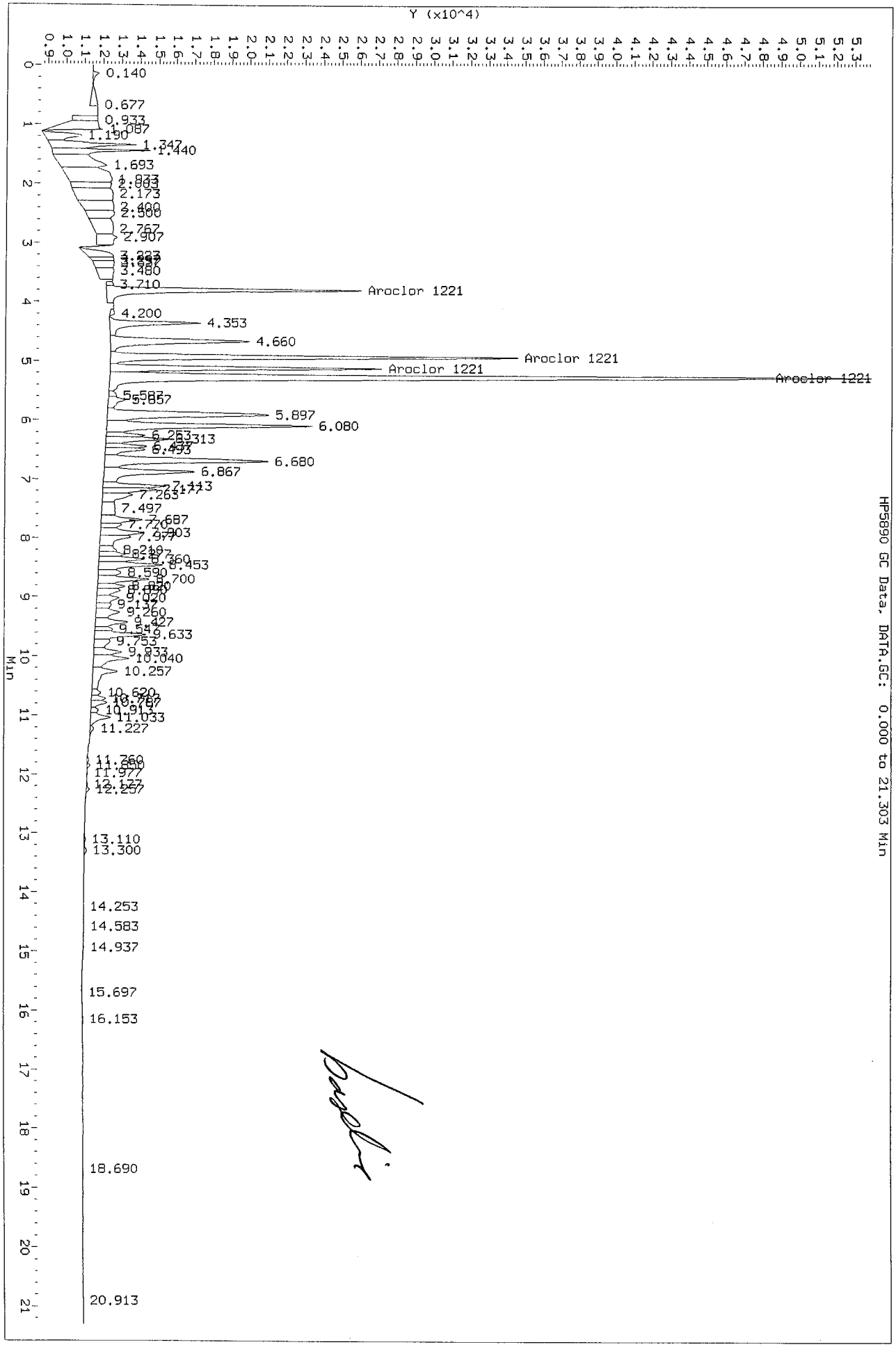
Column diameter: 0.53



3/19/07
3/20/07

1116

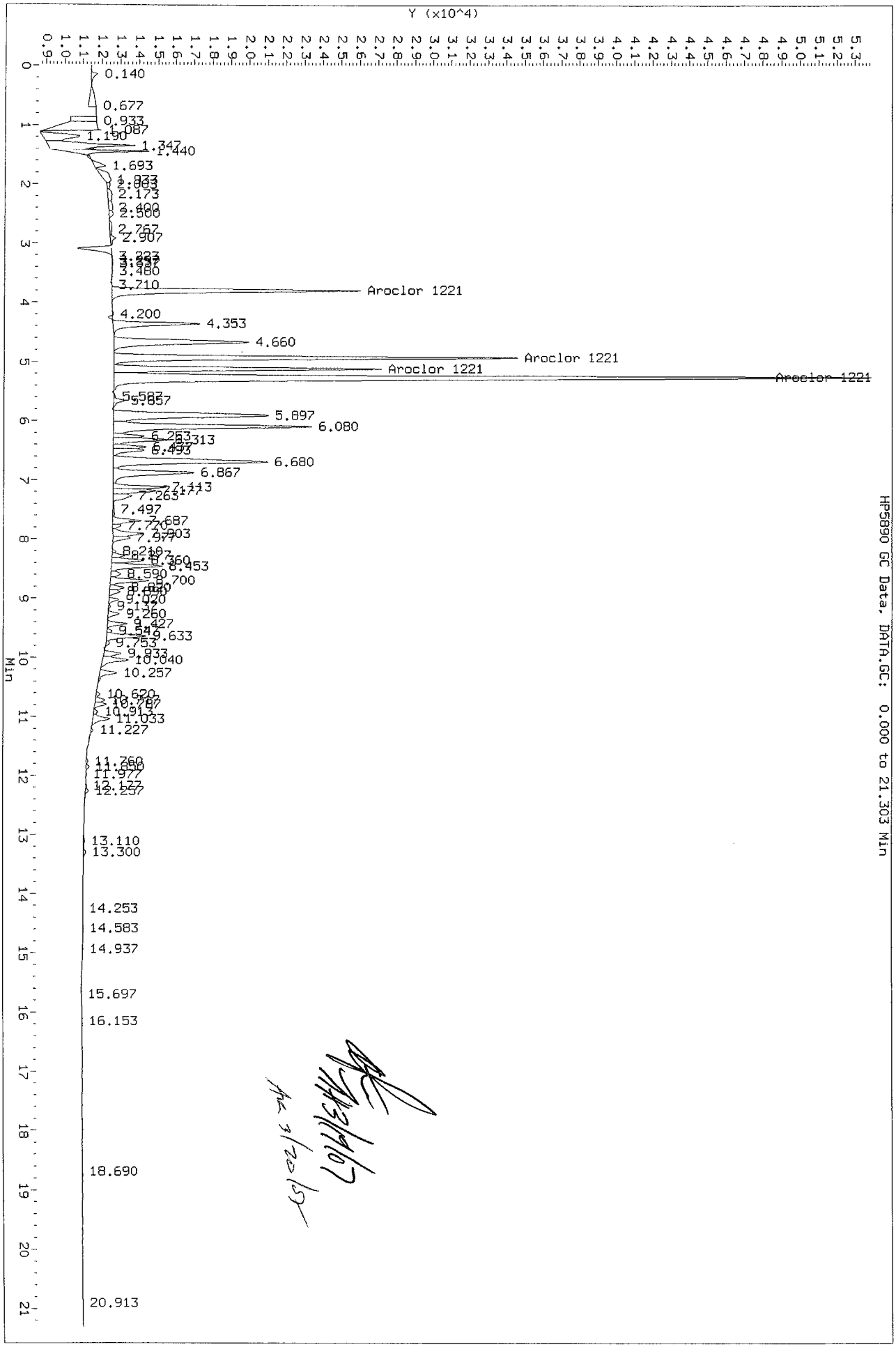
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F045.D
Injection Date: 17-MAR-2007 06:56
Instrument: GC09.i
Client Sample ID:



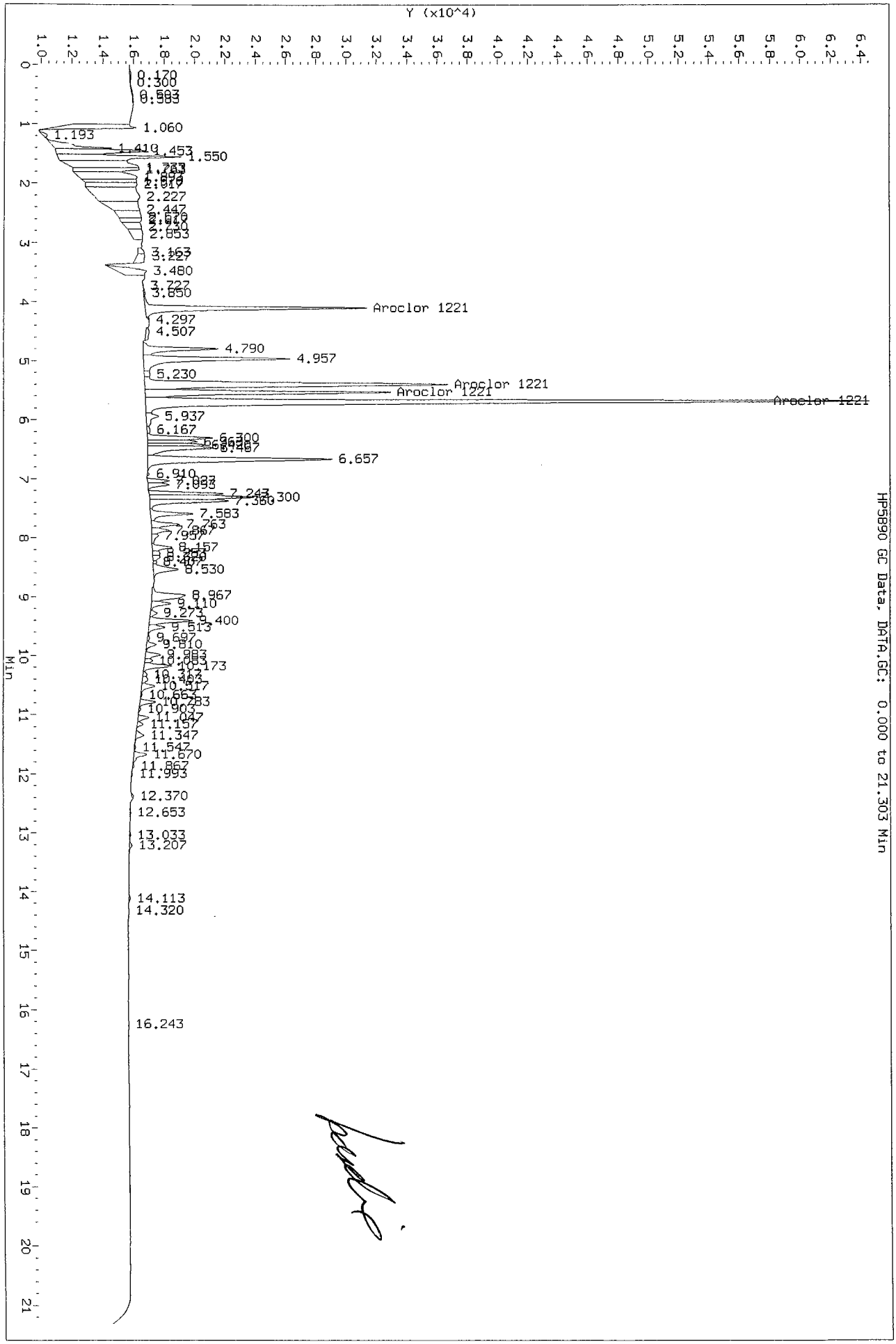
HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\accudata\GC09\data\031607.B\0316F045.D
Injection Date: 17-MAR-2007 06:56
Instrument: GC09.i
Client Sample ID:

HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

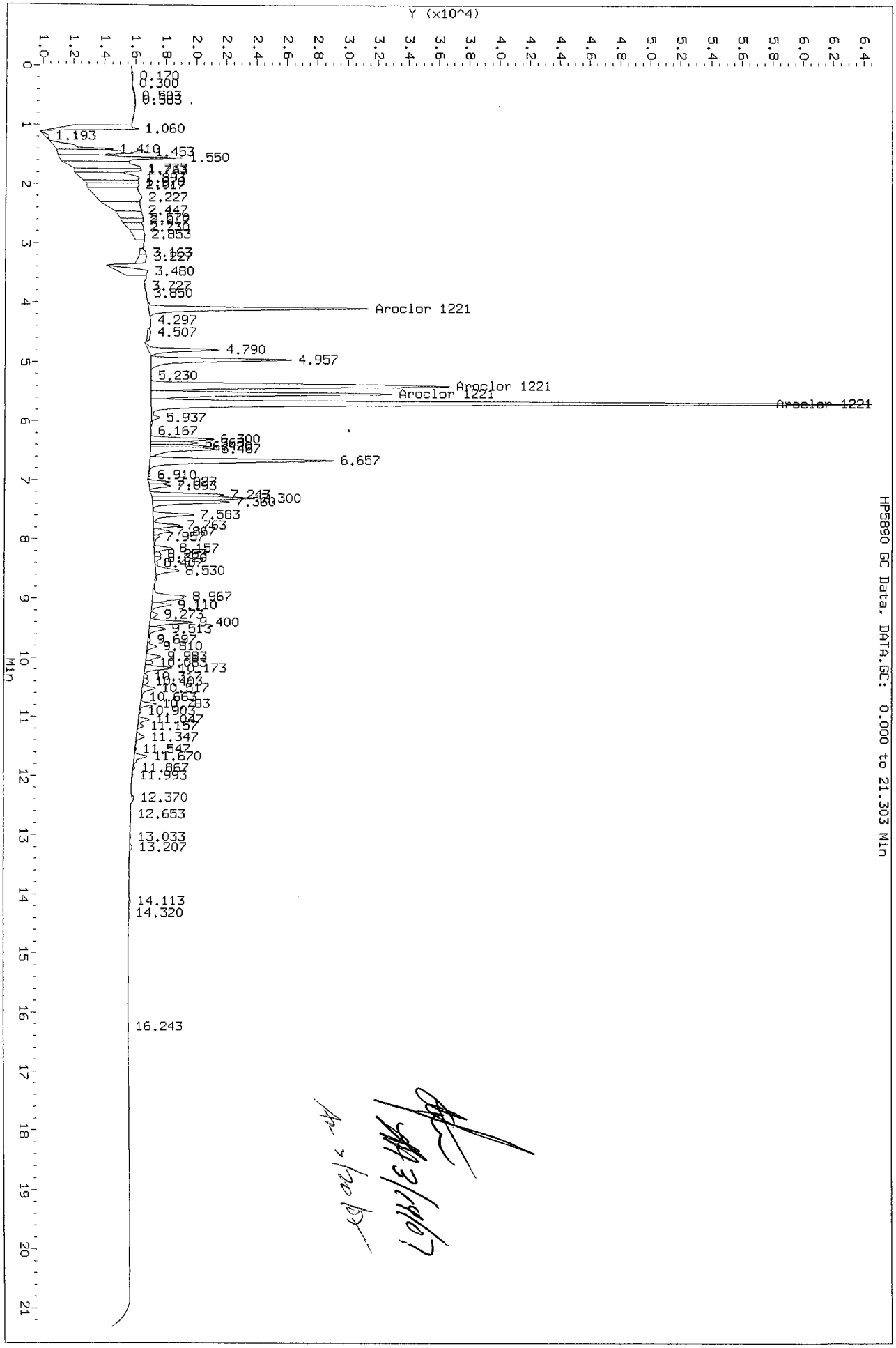


Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
Injection Date: 17-MAR-2007 06:56
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC; 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R045.D
Injection Date: 17-MAR-2007 06:56
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F046.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F046.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
Inj Date : 17-MAR-2007 07:22
Sample Info: 1232 @ 1000ppb | PCB4-84F | KWG0701324-13
Misc Info : SEMIVOA GC\W0701324\13-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1232.SUB
Sub List #2 : AR1232.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.243	5.680	158571	168411	1060	1080	80.00- 120.00	100.00(M)
	5.883	6.360	139627	60818	1040	1060	71.57- 107.36	88.05(M)
	6.680	6.660	243822	104095	1010	1020	128.57- 192.85	153.76(M)
	6.867	7.297	108661	153921	1030	980	56.21- 84.31	68.53(M)
		Average of Peak Amounts =			1040	1040		

QC Flag Legend

M - Compound response manually integrated.

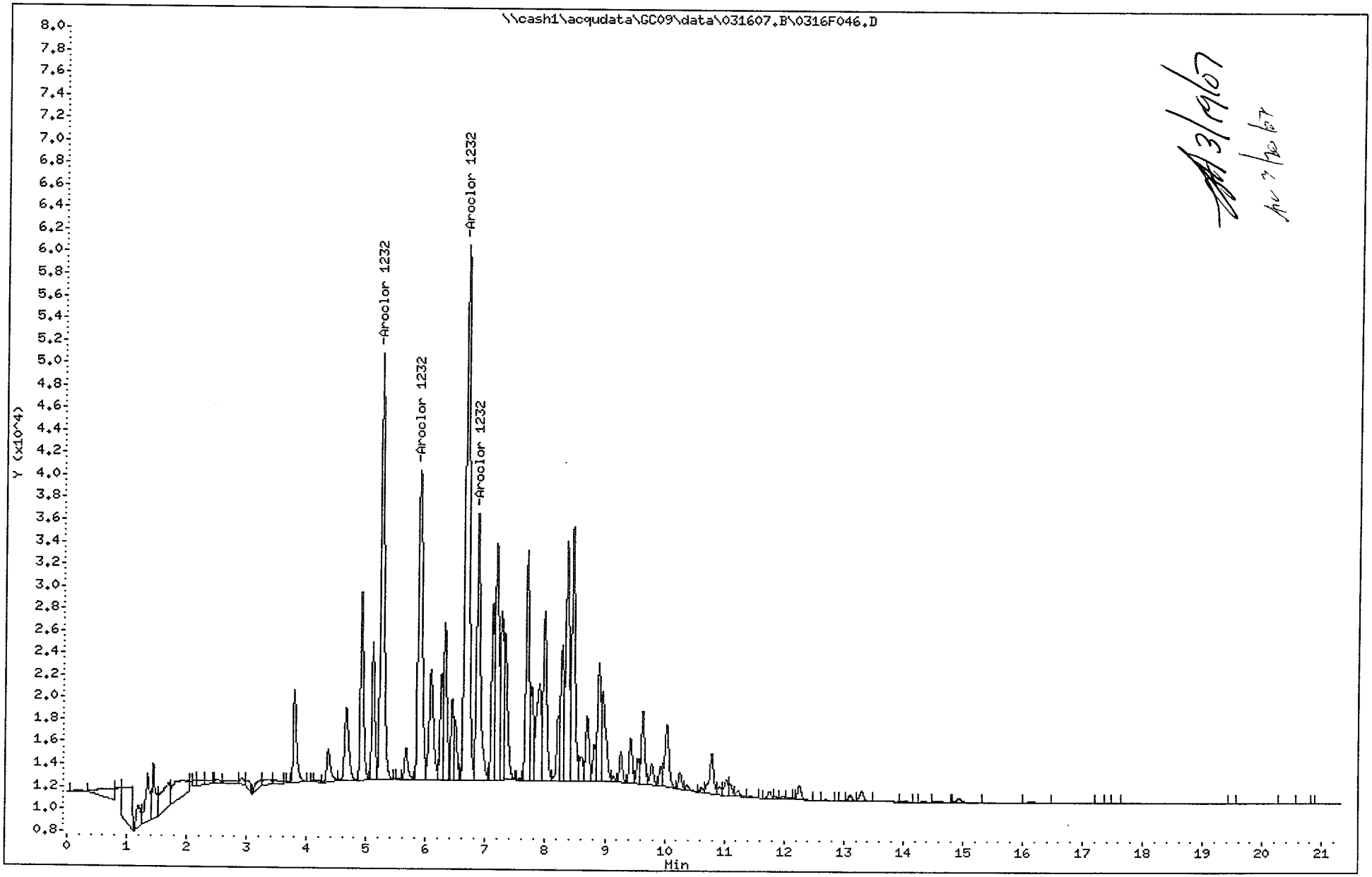
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F046.D
Date : 17-MAR-2007 07:22
Client ID:
Sample Info: 1232 @ 1000ppb | PCB4-84F | KWG0701324-13

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



1122

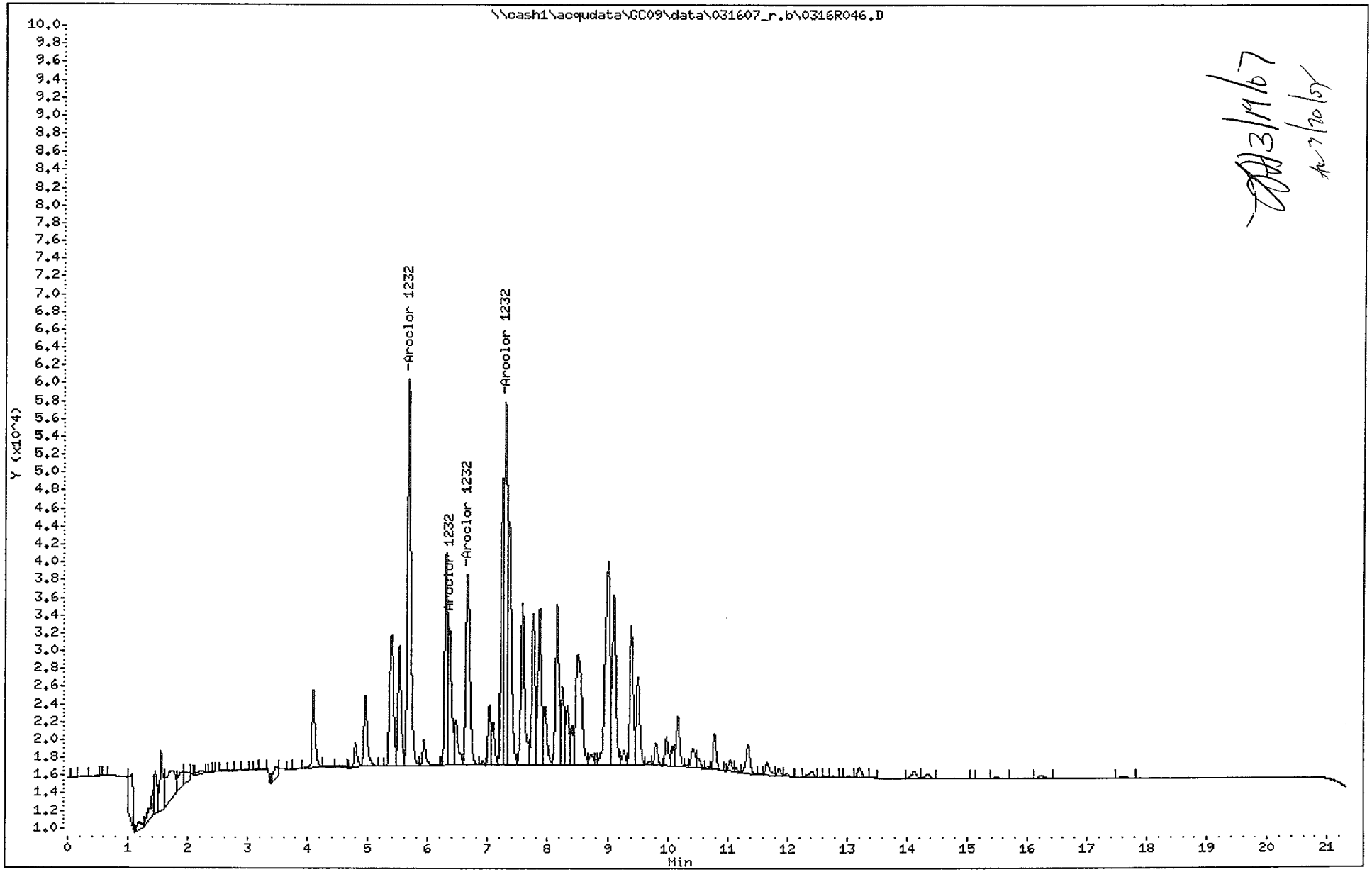
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
Date : 17-MAR-2007 07:22
Client ID:
Sample Info: 1232 @ 1000ppb | PCB4-84F | KWG0701324-13

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

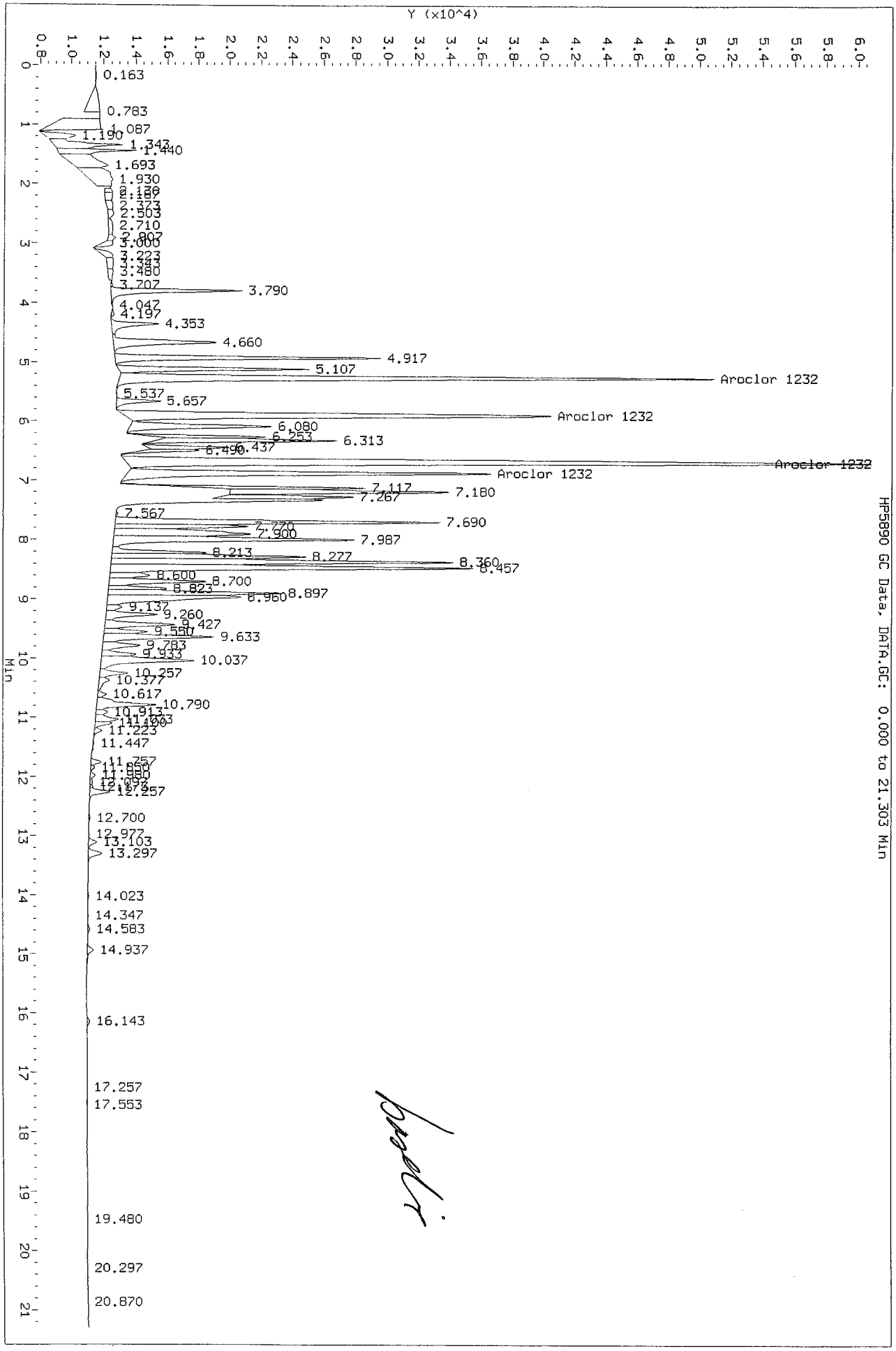
Column diameter: 0.53



3/19/07
4/7/07

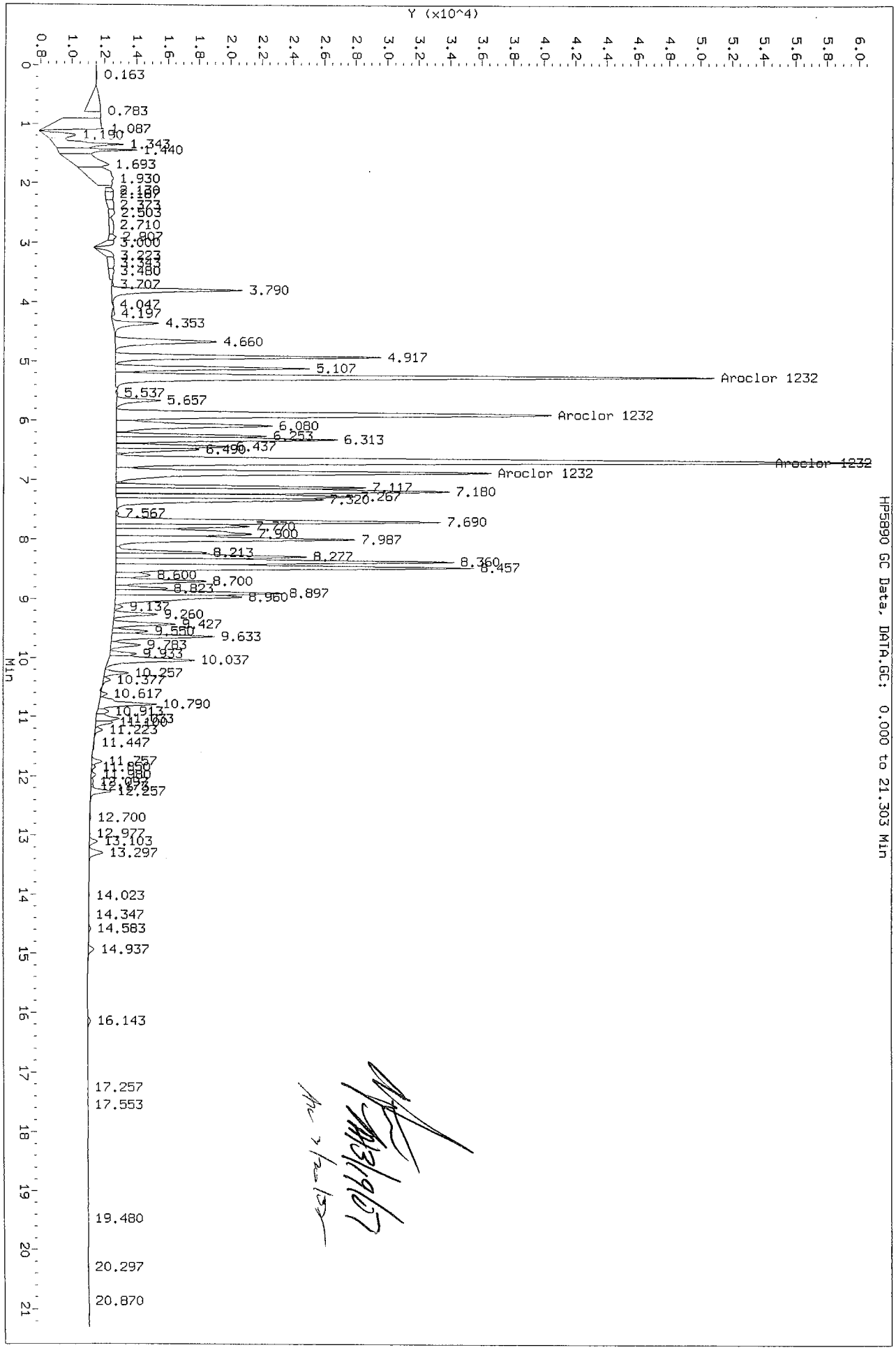
1123

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F046.D
Injection Date: 17-MAR-2007 07:22
Instrument: GC09.i
Client Sample ID:



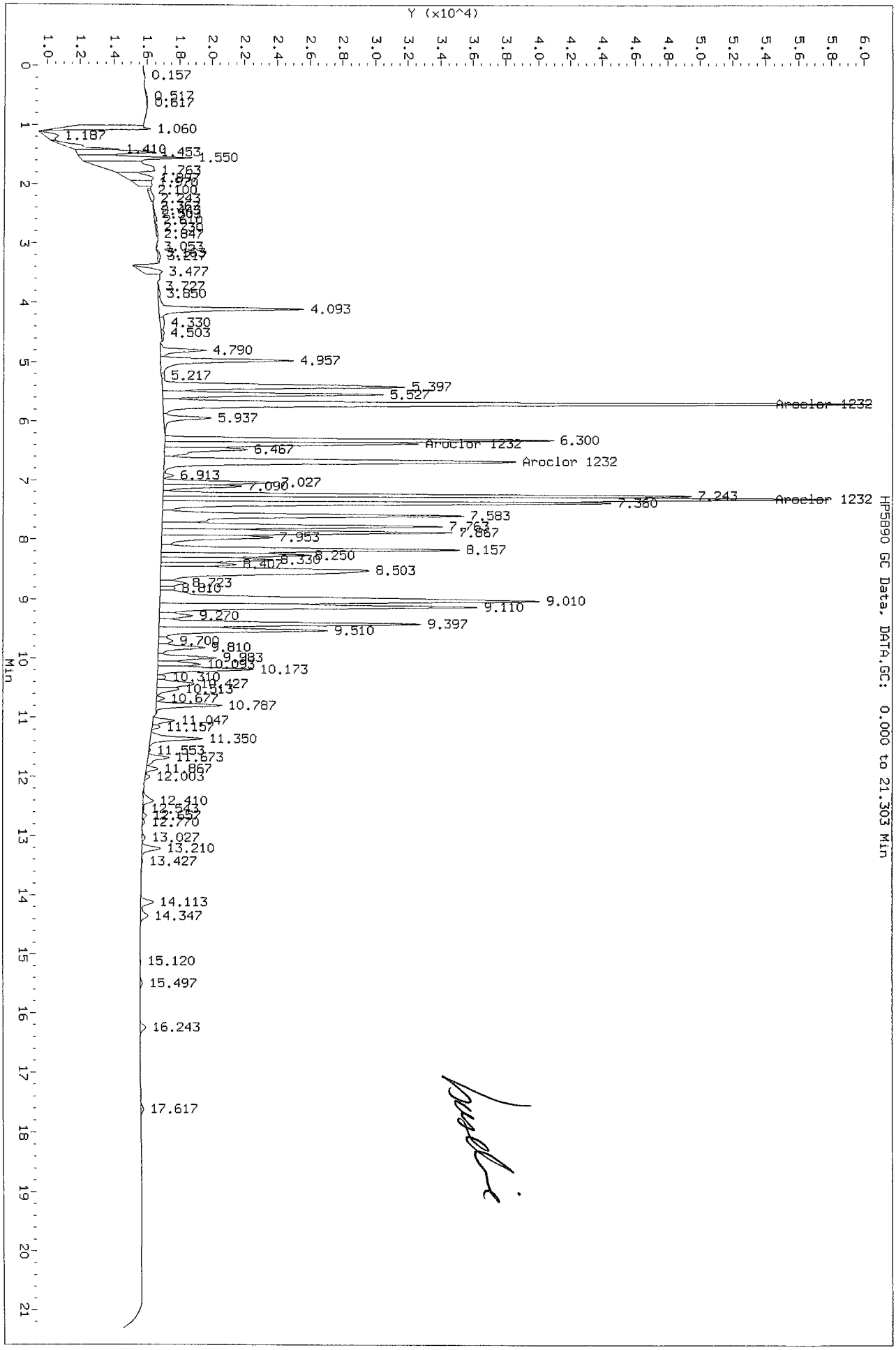
HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F046.D
Injection Date: 17-MAR-2007 07:22
Instrument: GC09.i
Client Sample ID:



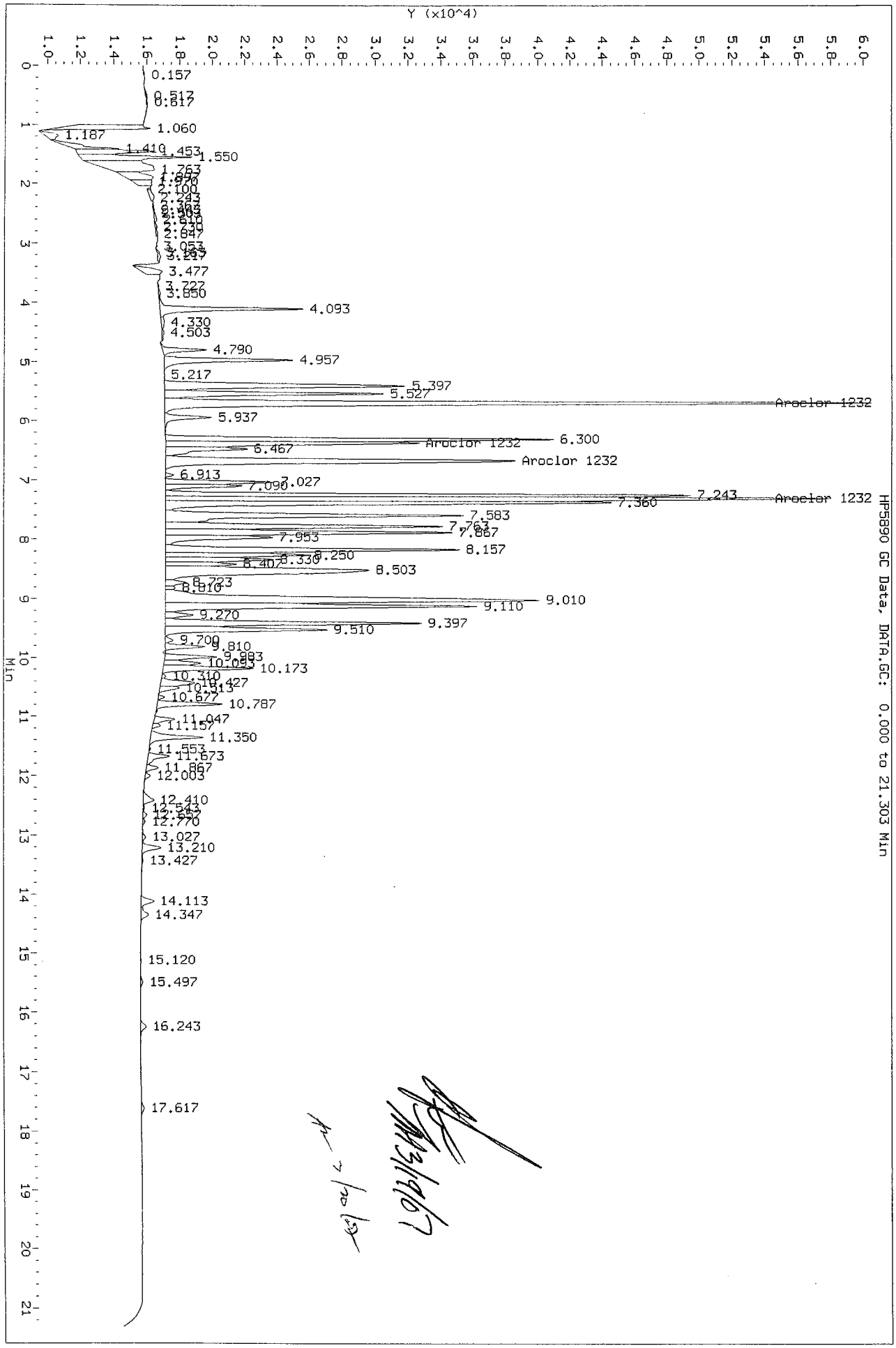
HP5890 GC Data. DATA.GC; 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
Injection Date: 17-MAR-2007 07:22
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R046.D
Injection Date: 17-MAR-2007 07:22
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.303 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F047.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F047.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R047.D
Inj Date : 17-MAR-2007 07:47
Sample Info: 1242 @ 1000ppb | PCB4-84G | KWG0701324-14
Misc Info : SEMIVOA GC\W0701324\14-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1242.SUB
Sub List #2 : AR1242.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	5.883	6.297	232183	143648	1000	997	80.00- 120.00	100.00(M)
	6.680	7.297	442077	270370	1020	939	150.28- 225.42	190.40(M)
	6.867	7.580	199190	154312	1020	1020	67.50- 101.25	85.79(M)
	7.180	7.763	172135	127137	1070	1080	55.71- 83.57	74.14(M)
	7.690	7.867	148781	139069	1040	1020	49.27- 73.90	64.08(M)
			Average of Peak Amounts =		1030	1010		

QC Flag Legend

M - Compound response manually integrated.

3/19/07
3/20/07

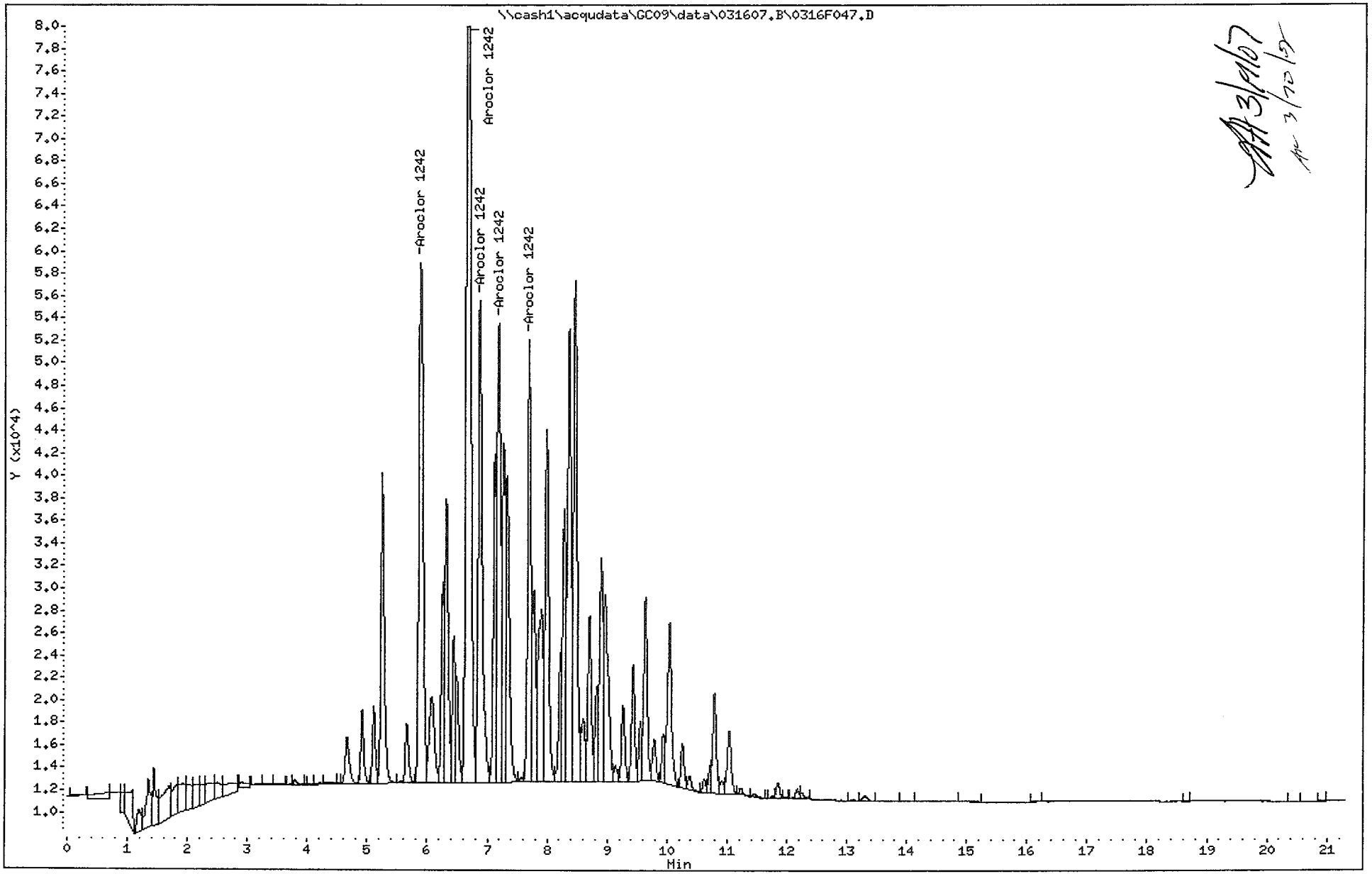
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F047.D
Date : 17-MAR-2007 07:47
Client ID:
Sample Info: 1242 @ 1000ppb | PCB4-84G | KWG0701324-14

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



1129

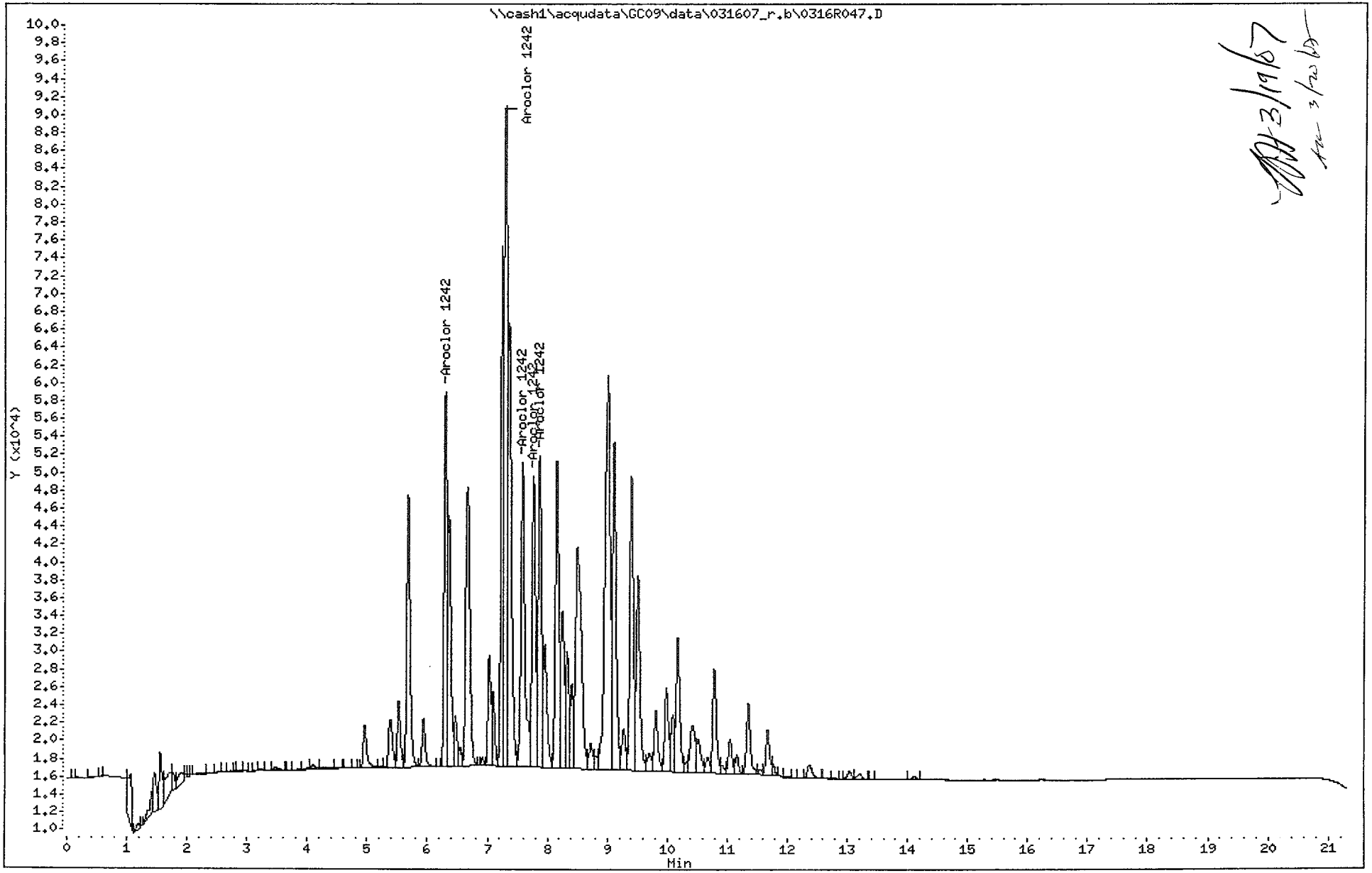
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R047.D
Date : 17-MAR-2007 07:47
Client ID:
Sample Info: 1242 @ 1000ppb | PCB4-84G | KWG0701324-14

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

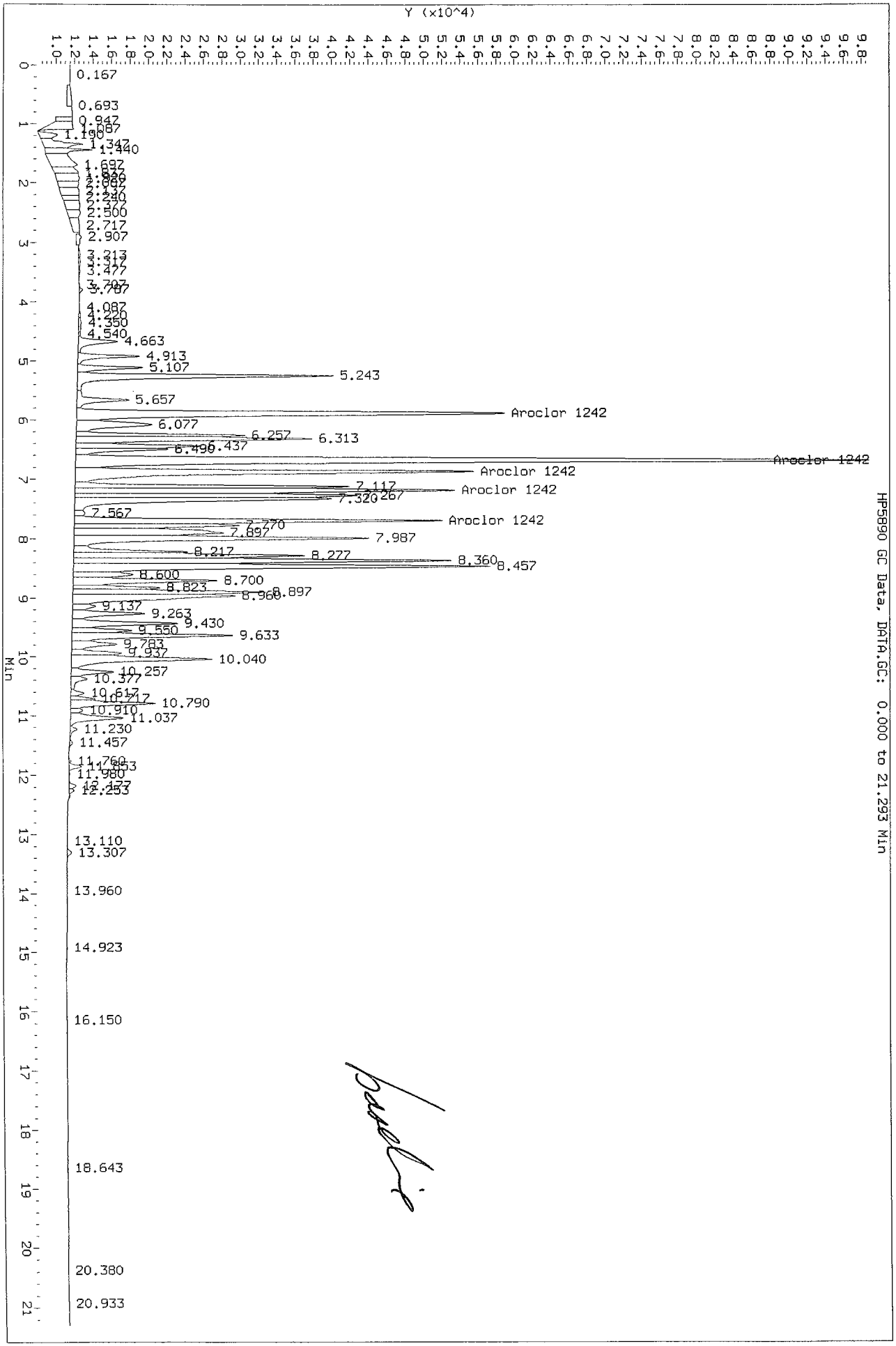
Column diameter: 0.53



3/19/07
for 3 pg

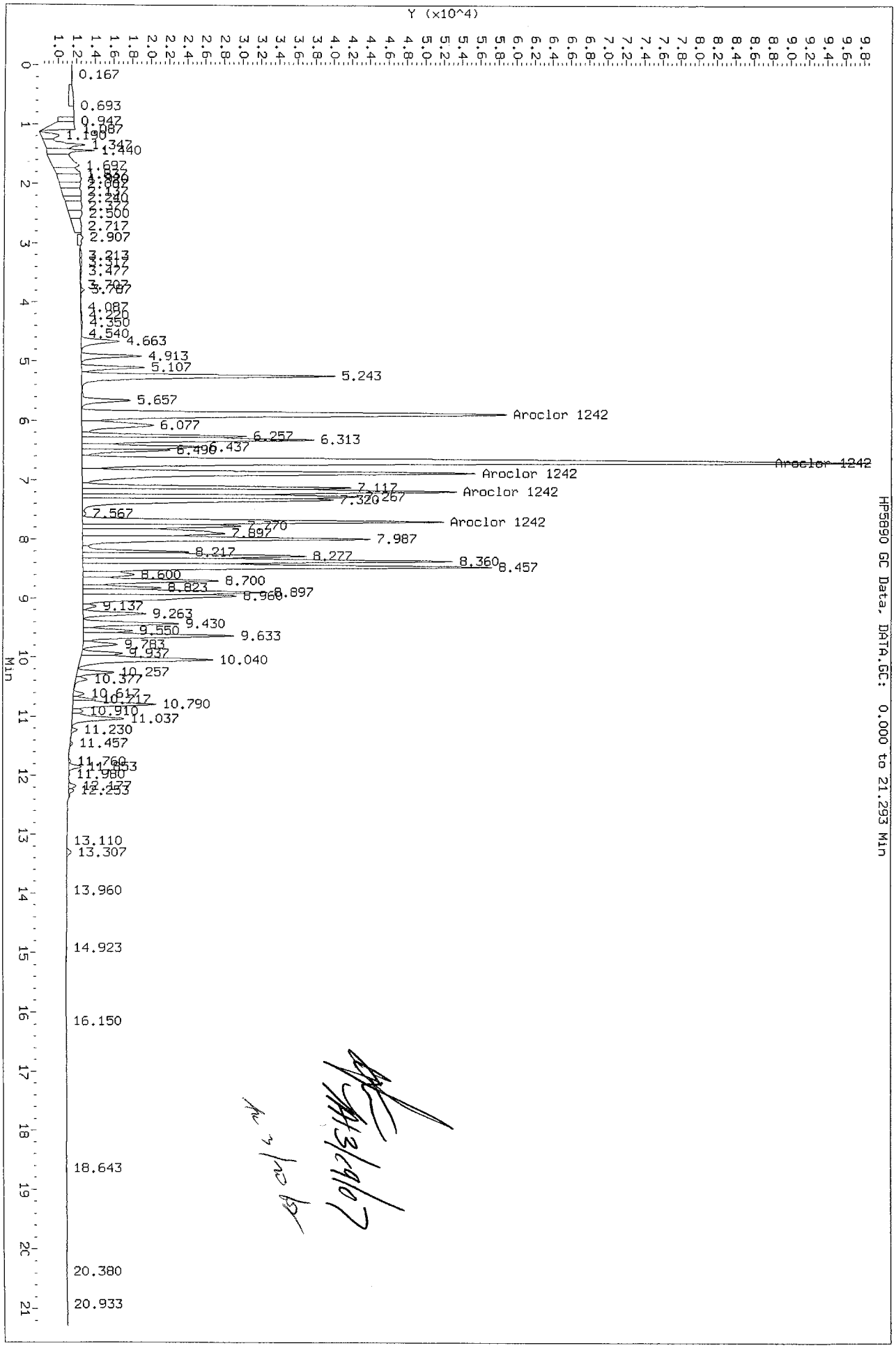
1130

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F047.D
Injection Date: 17-MAR-2007 07:47
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.293 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F047.D
Injection Date: 17-MAR-2007 07:47
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.293 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F048.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F048.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R048.D
Inj Date : 17-MAR-2007 08:13
Sample Info: 1248 @ 1000ppb | PCB4-84H | KWG0701324-15
Misc Info : SEMIVOA GC\W0701324\15-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	7.180	7.763	287510	205252	1020	1040	80.00- 120.00	100.00(M)
	7.267	7.867	163453	191599	1030	972	45.13- 67.69	56.85(M)
	7.690	8.157	228043	213755	1020	1040	63.11- 94.67	79.32(M)
	8.360	9.010	275262	430223	983	983	79.44- 119.16	95.74(M)
	8.457	9.110	319048	250244	956	919	94.60- 141.91	110.97(M)
			Average of Peak Amounts =		1000	991		

QC Flag Legend

M - Compound response manually integrated.

3/19/07
3/20/07

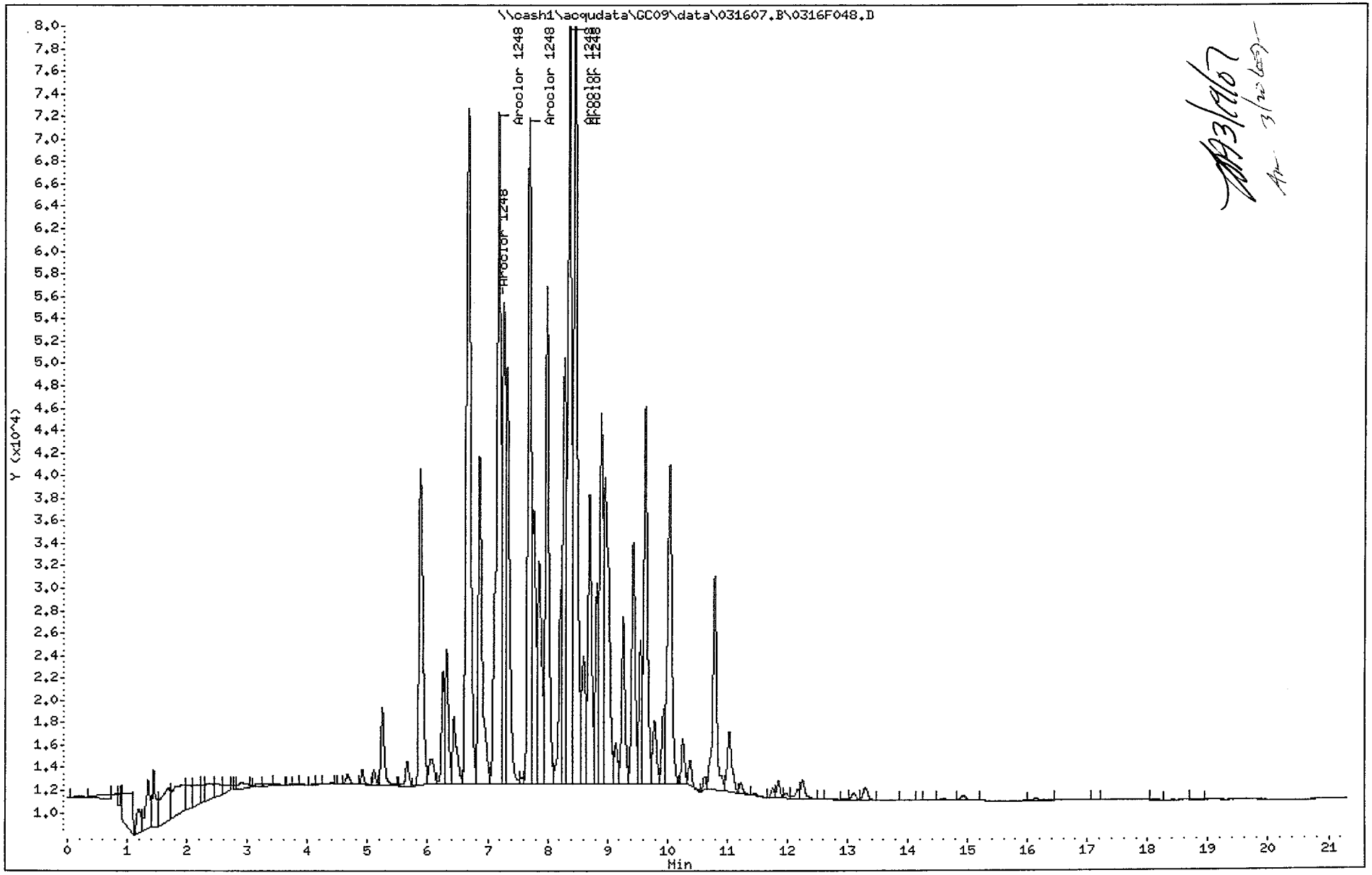
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F048.D
Date : 17-MAR-2007 08:13
Client ID:
Sample Info: 1248 @ 1000ppb | PCB4-84H | KWG0701324-15

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



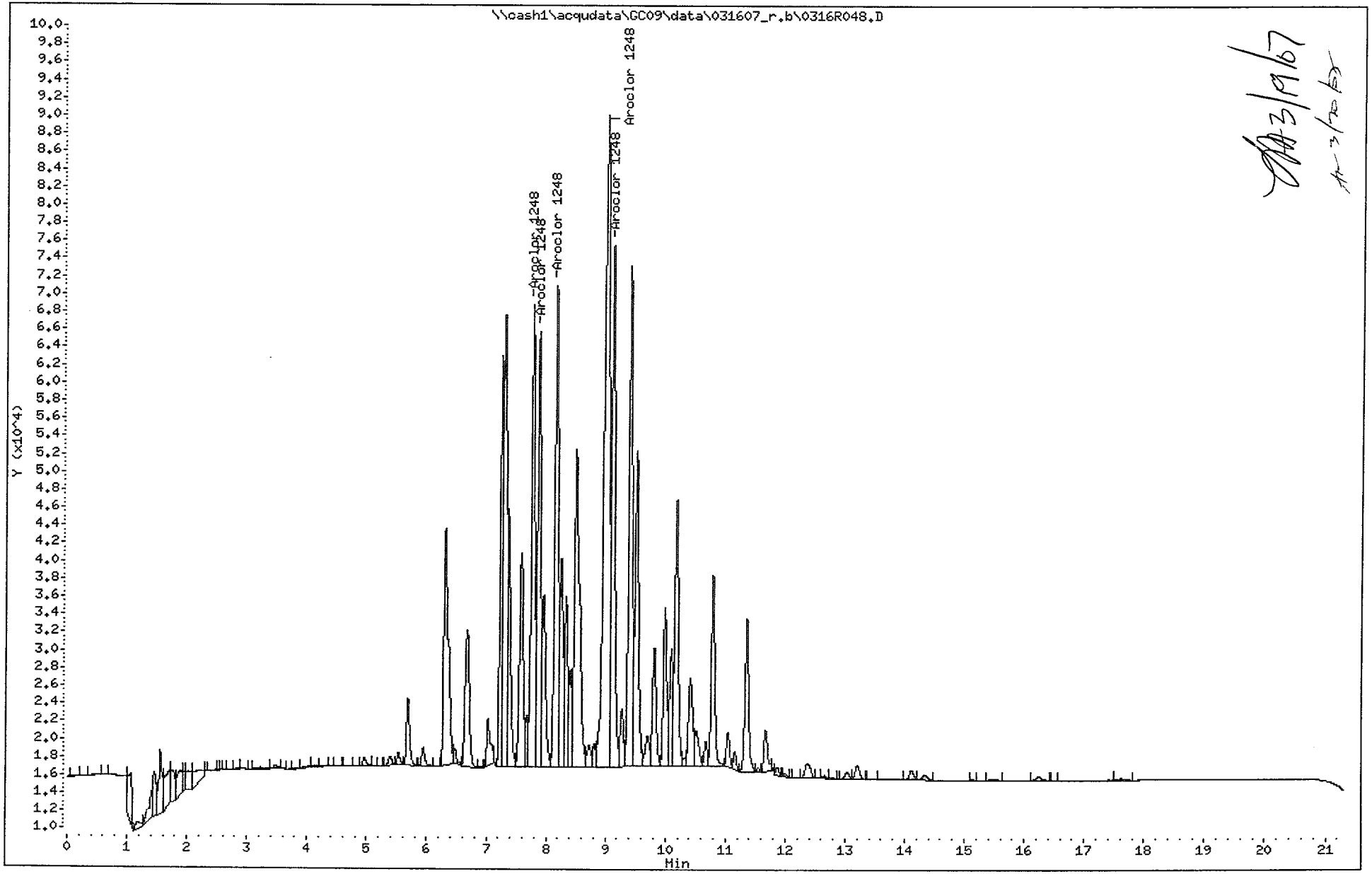
1134

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R048.D
Date : 17-MAR-2007 08:13
Client ID:
Sample Info: 1248 @ 1000ppb | PCB4-84H | KWG0701324-15

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

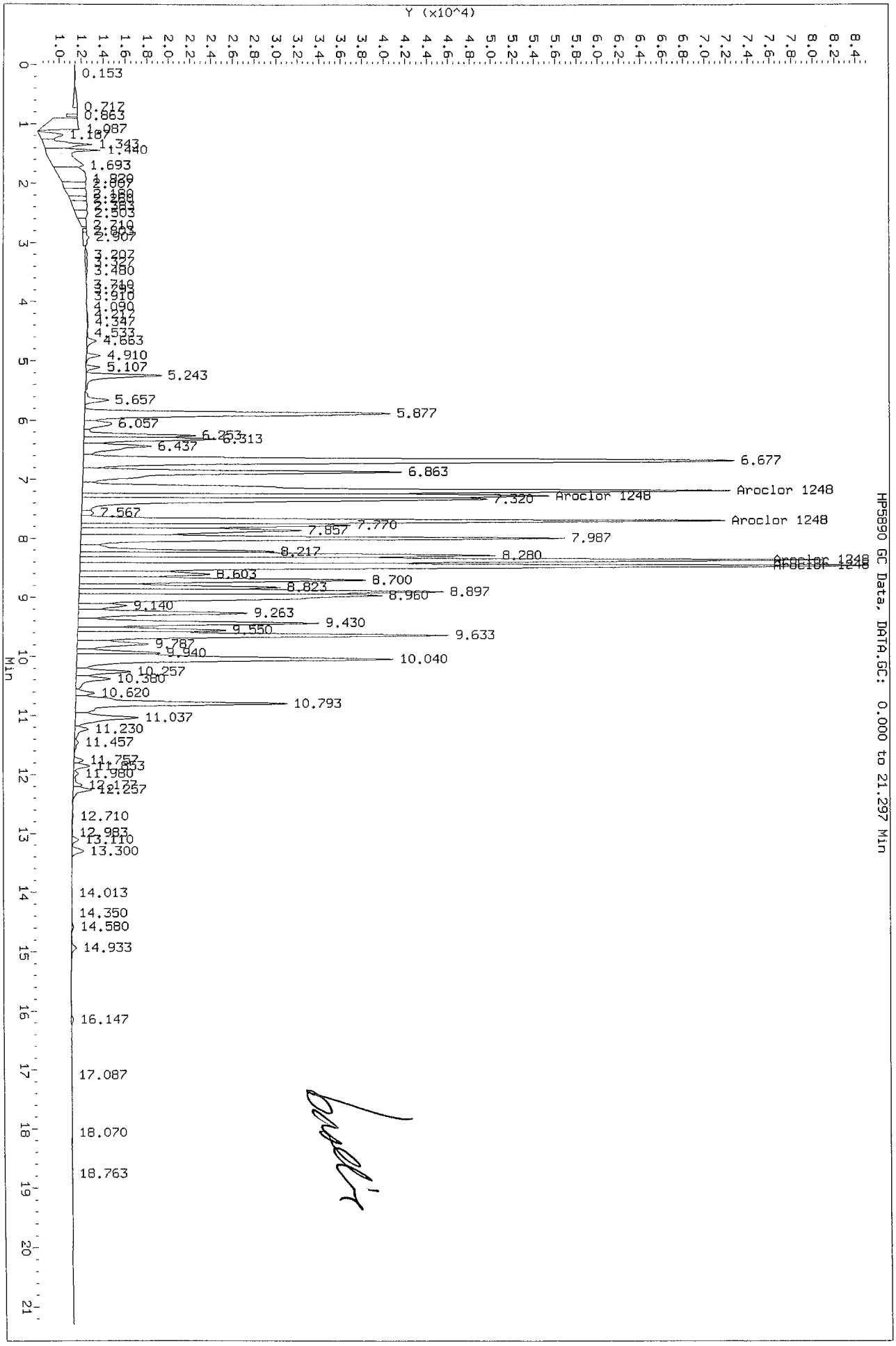
Column phase: DB-XLB



3/19/07

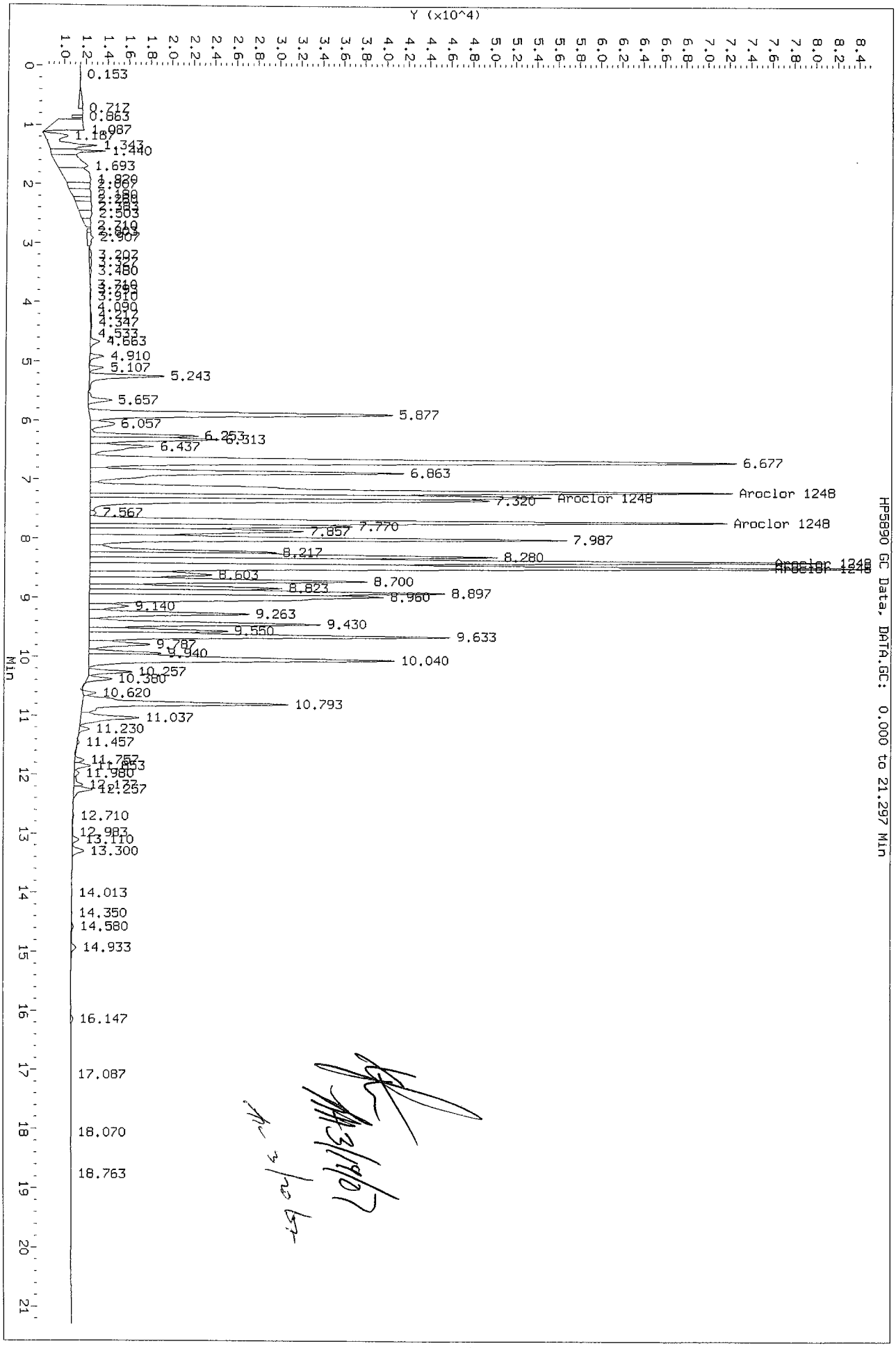
1135

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F048.D
Injection Date: 17-MAR-2007 08:13
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F048.D
Injection Date: 17-MAR-2007 08:13
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\031607.B\0316F049.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F049.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
Inj Date : 17-MAR-2007 08:39
Sample Info: 1254 @ 1000ppb | PCB4-84I | KWG0701324-16
Misc Info : SEMIVOA GC\W0701324\16-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1254.SUB
Sub List #2 : AR1254.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1254	8.453	8.963	293673	367324	1050	1020	80.00- 120.00	100.00
	8.700	9.400	315324	358486	1070	1040	84.75- 127.12	107.37
	9.637	10.177	440391	345634	1060	1030	119.37- 179.05	149.96
	10.040	10.787	401485	276512	1080	1070	106.31- 159.46	136.71
	11.037	11.670	428711	381477	1260	1200	97.57- 146.36	145.98
			Average of Peak Amounts =		1100	1070		

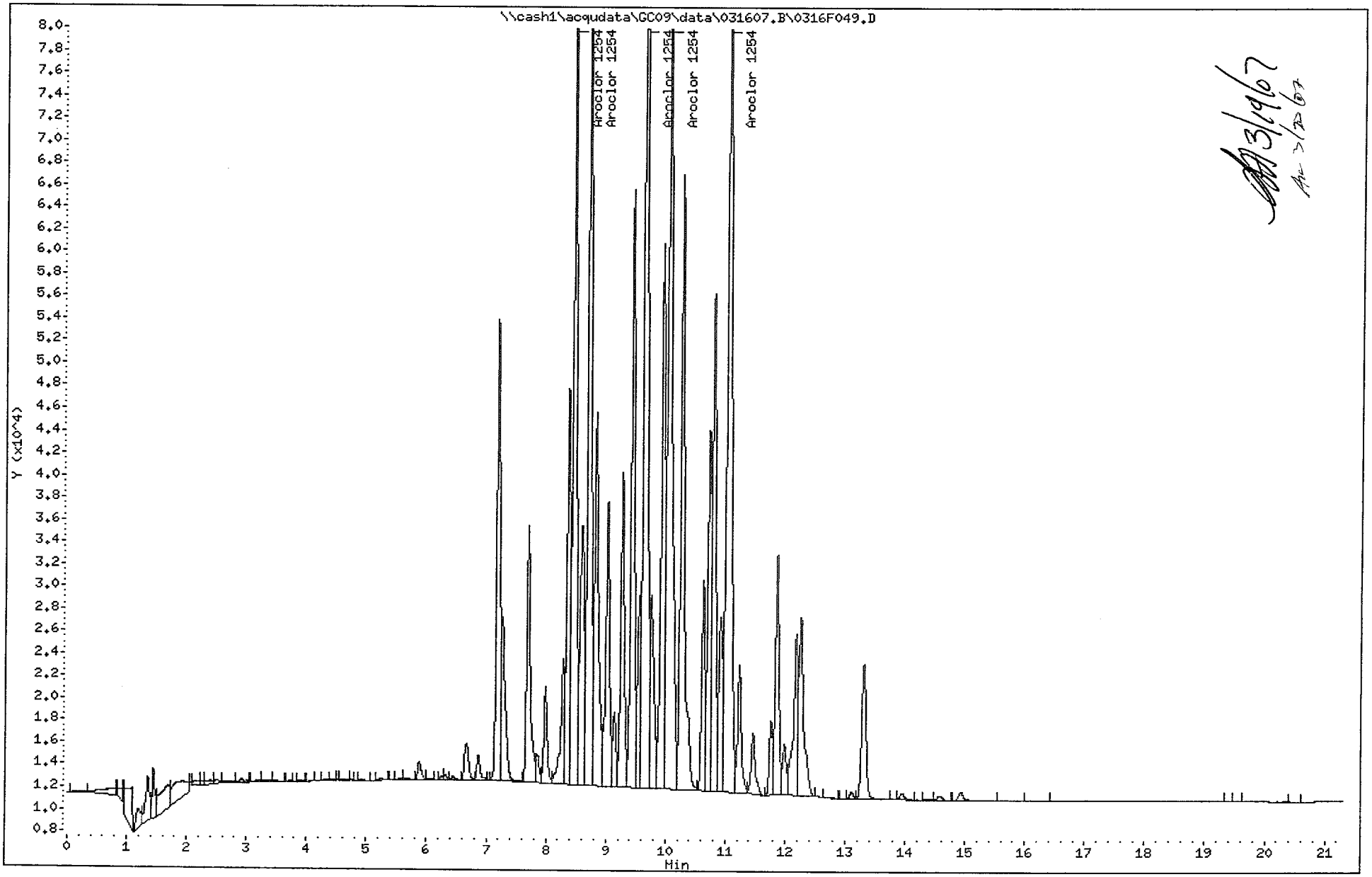
3/19/07
AE 3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F049.D
Date : 17-MAR-2007 08:39
Client ID:
Sample Info: 1254 @ 1000ppb | PCB4-84I | KWG0701324-16

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



3/19/07
AL 3/20/07

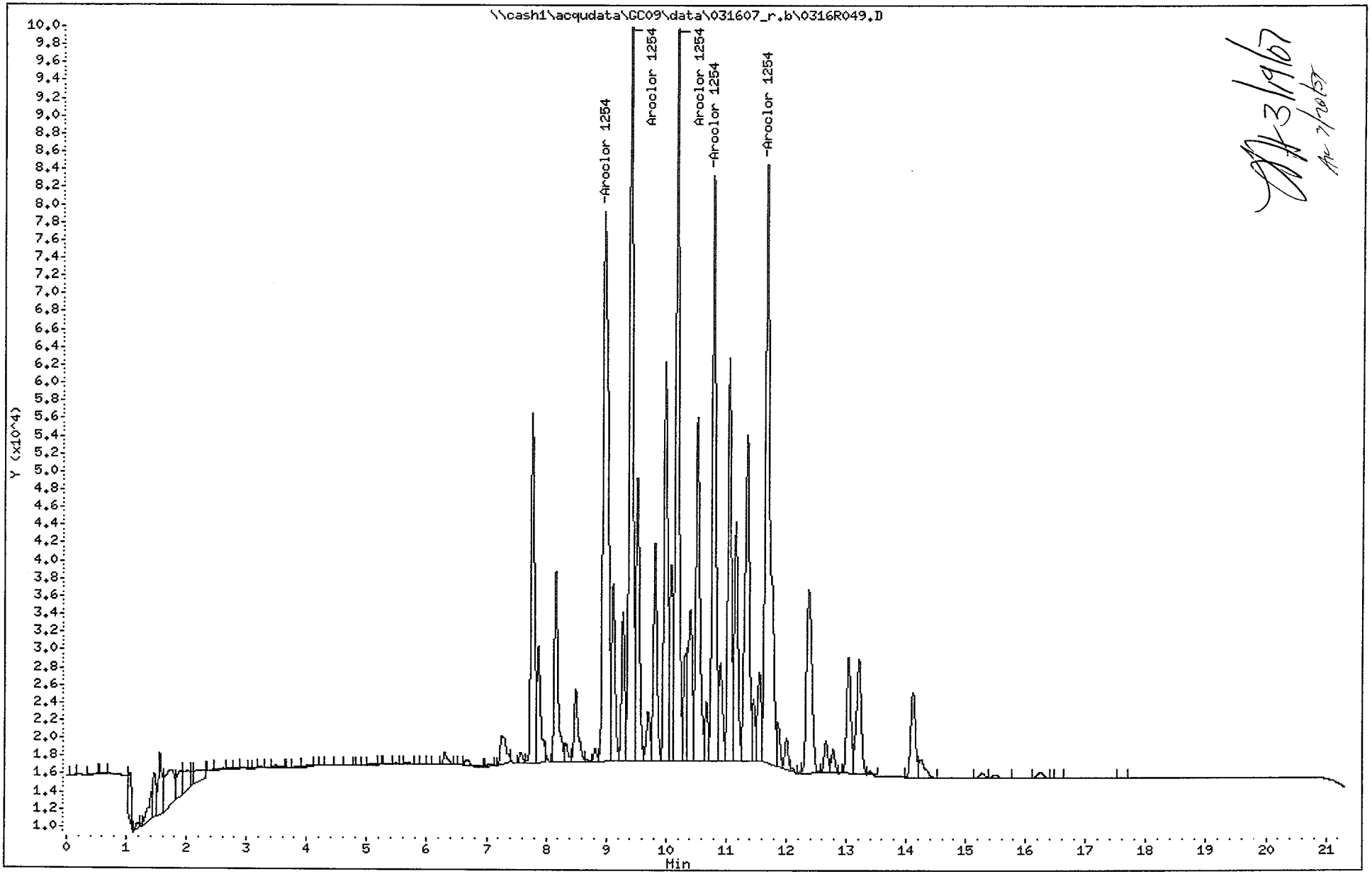
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
Date : 17-MAR-2007 08:39
Client ID:
Sample Info: 1254 @ 1000ppb | PCB4-84I | KWG0701324-16

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

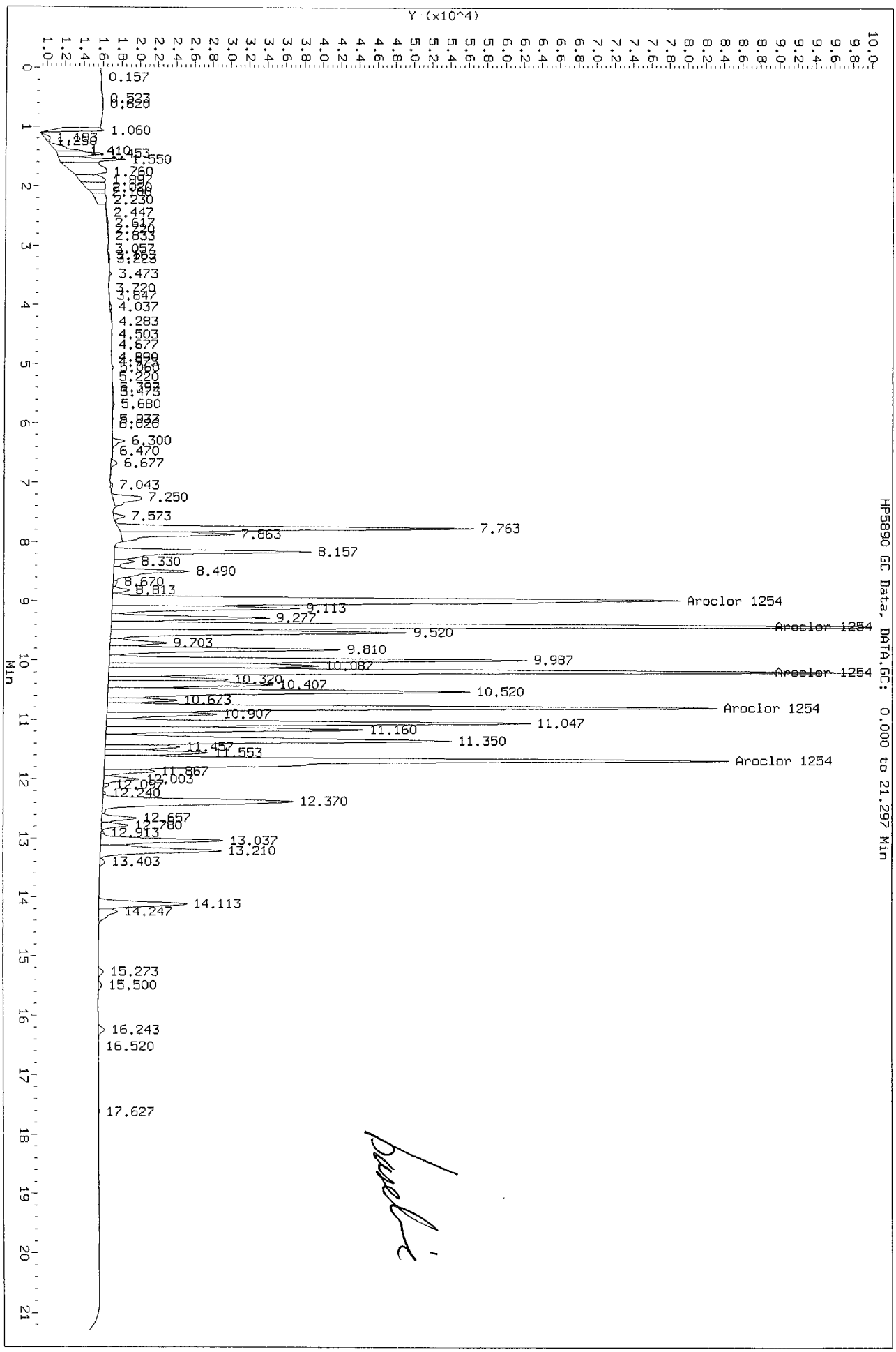
Column diameter: 0.53



3/19/07

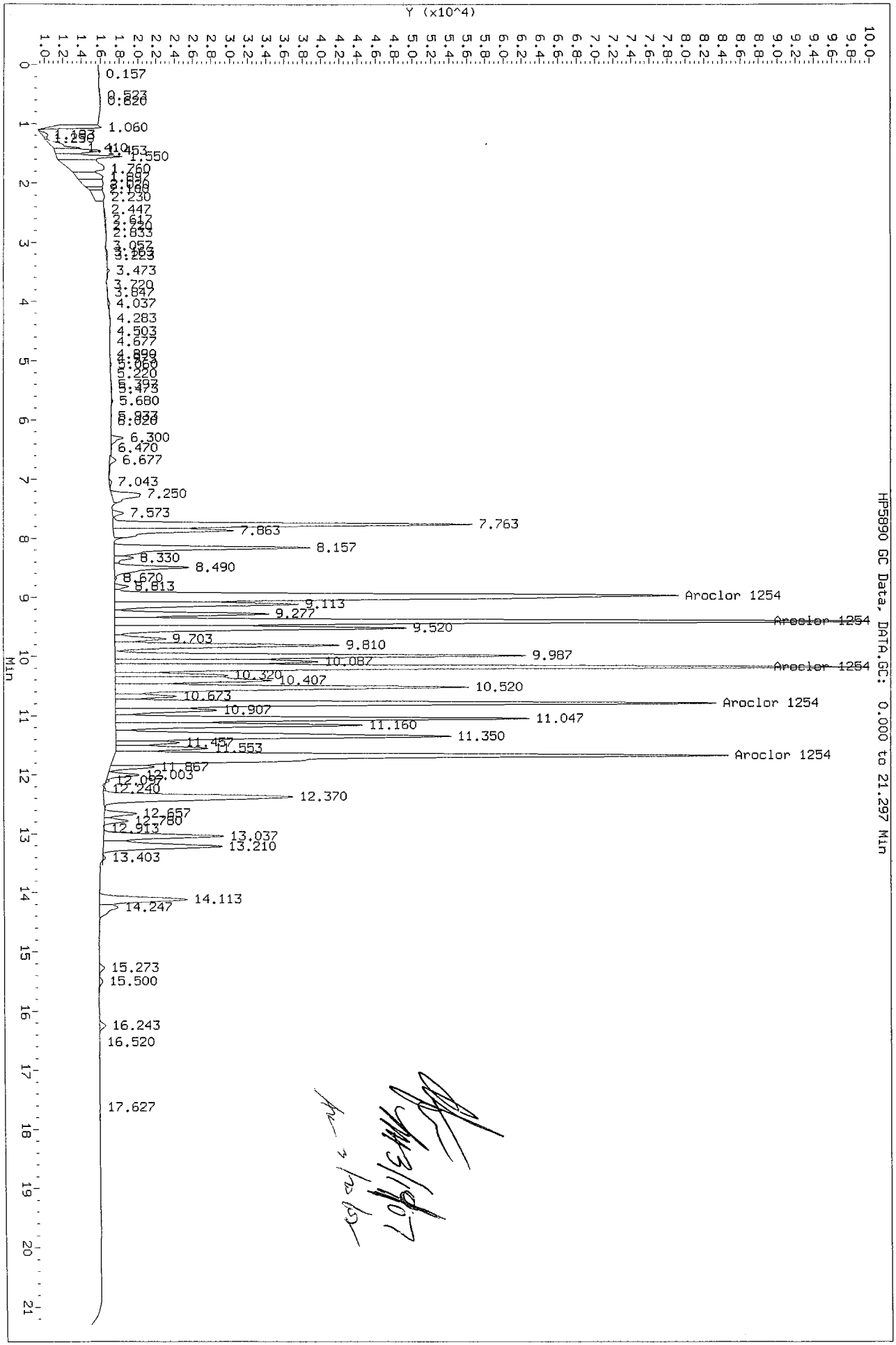
1140

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
Injection Date: 17-MAR-2007 08:39
Instrument: GC09.i
Client Sample ID:



HP5890 GC Data, DATA.GC: 0.000 to 21.297 Min

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R049.D
Injection Date: 17-MAR-2007 08:39
Instrument: GC09.i
Client Sample ID:



3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F050.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F050.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R050.D
Inj Date : 17-MAR-2007 09:05
Sample Info: 1260 @ 1000ppb | PCB4-84J | KWG0701324-17
Misc Info : SEMIVOA GC\W0701324\17-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1260.sub
Sub List #2 : AR1260.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1260	9.933	11.300	334229	223667	870	988	80.00- 120.00	100.00
	10.720	11.673	208048	391555	893	848	51.26- 76.89	62.25
	11.033	11.867	366444	272555	826	1100	103.14- 154.72	109.64
	12.260	12.410	619364	307253	1070	1020	139.61- 209.42	185.31
	13.303	13.210	462243	569699	1070	1040	104.15- 156.23	138.30
			Average of Peak Amounts =		946	999		

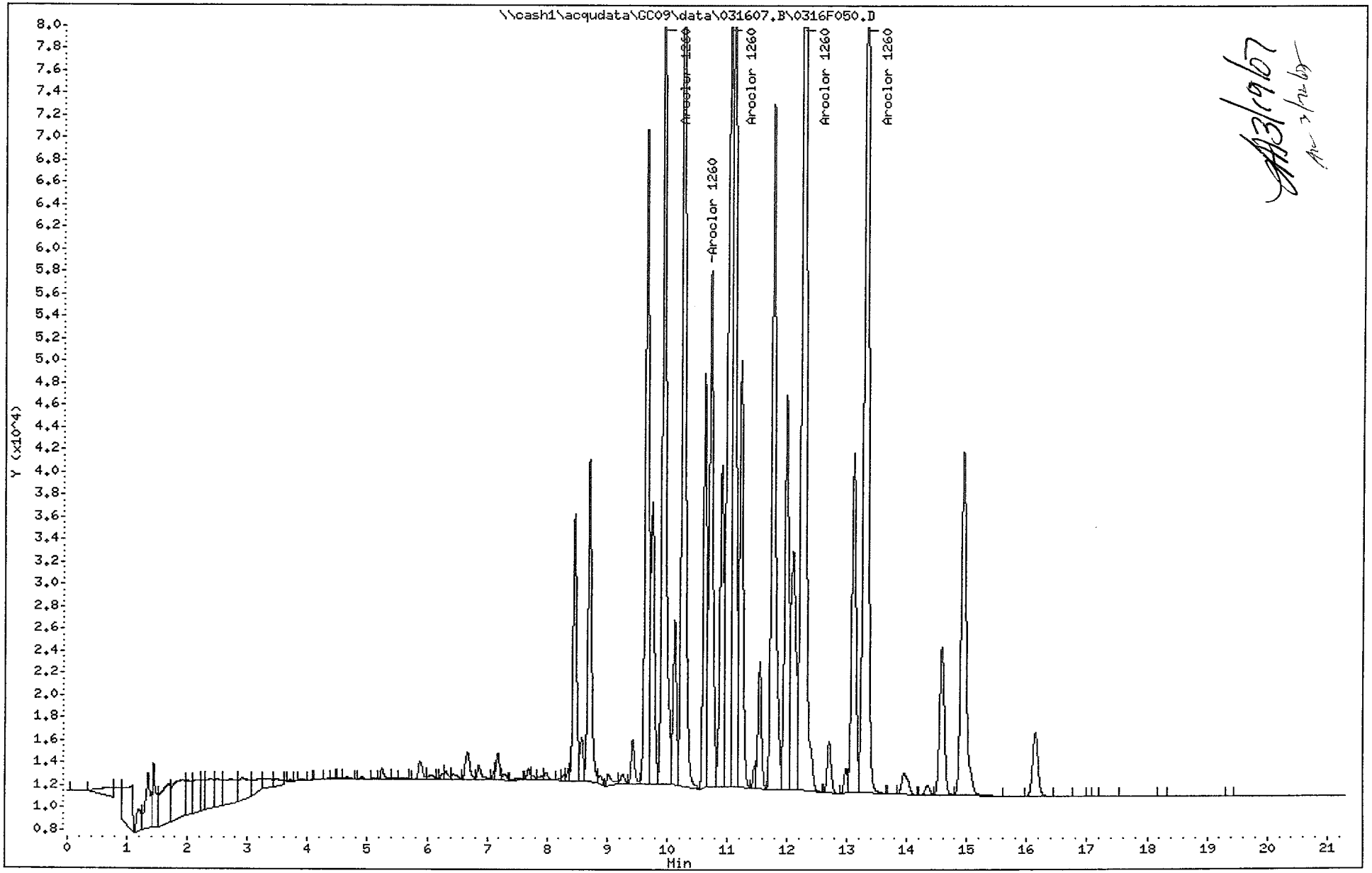
3/19/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F050.D
Date : 17-MAR-2007 09:05
Client ID:
Sample Info: 1260 @ 1000ppb | PCB4-84J | KWG0701324-17

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



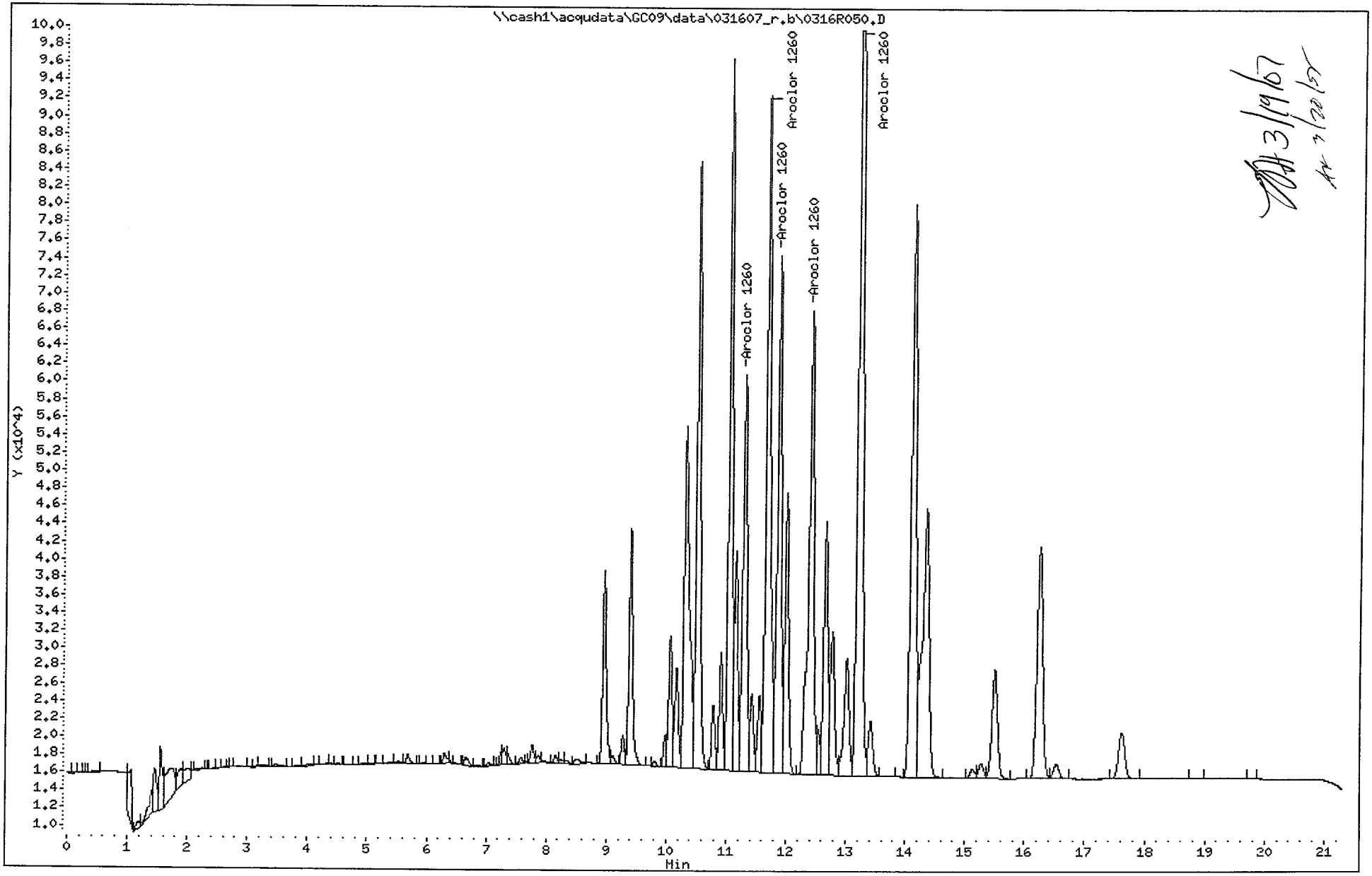
1144

Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R050.D
Date : 17-MAR-2007 09:05
Client ID:
Sample Info: 1260 @ 1000ppb | PCB4-84J | KWG0701324-17

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



3/19/07

1145

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F051.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F051.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R051.D
Inj Date : 17-MAR-2007 09:31
Sample Info: 1262 @ 1000ppb | PCB4-84K | KWG0701324-18
Misc Info : SEMIVOA GC\W0701324\18-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1262.SUB
Sub List #2 : AR1262.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1262	10.257	11.047	314768	270158	1070	1040	80.00- 120.00	100.00
	11.107	11.867	438876	375549	1050	1030	114.25- 171.37	139.43
	11.760	12.410	349118	294290	1060	1040	89.46- 134.19	110.91
	12.260	13.210	676100	628565	1060	1040	174.03- 261.05	214.79
	13.110	14.113	302328	461961	1060	1040	77.86- 116.79	96.05
			Average of Peak Amounts =		1060	1040		

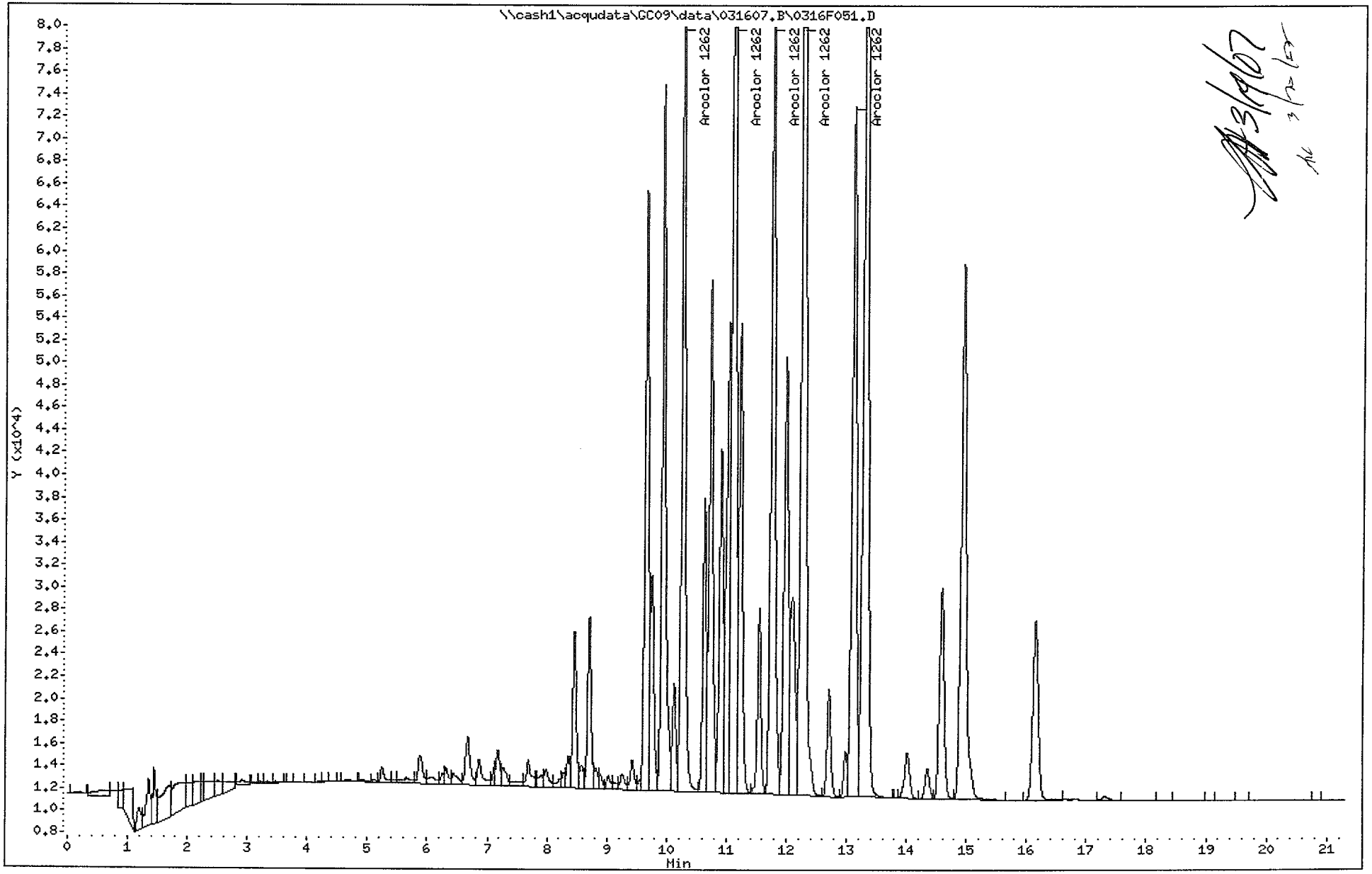
3/19/07
3/20/07

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F051.D
Date : 17-MAR-2007 09:31
Client ID:
Sample Info: 1262 @ 1000ppb | PCB4-84K | KWG0701324-18

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-35MS



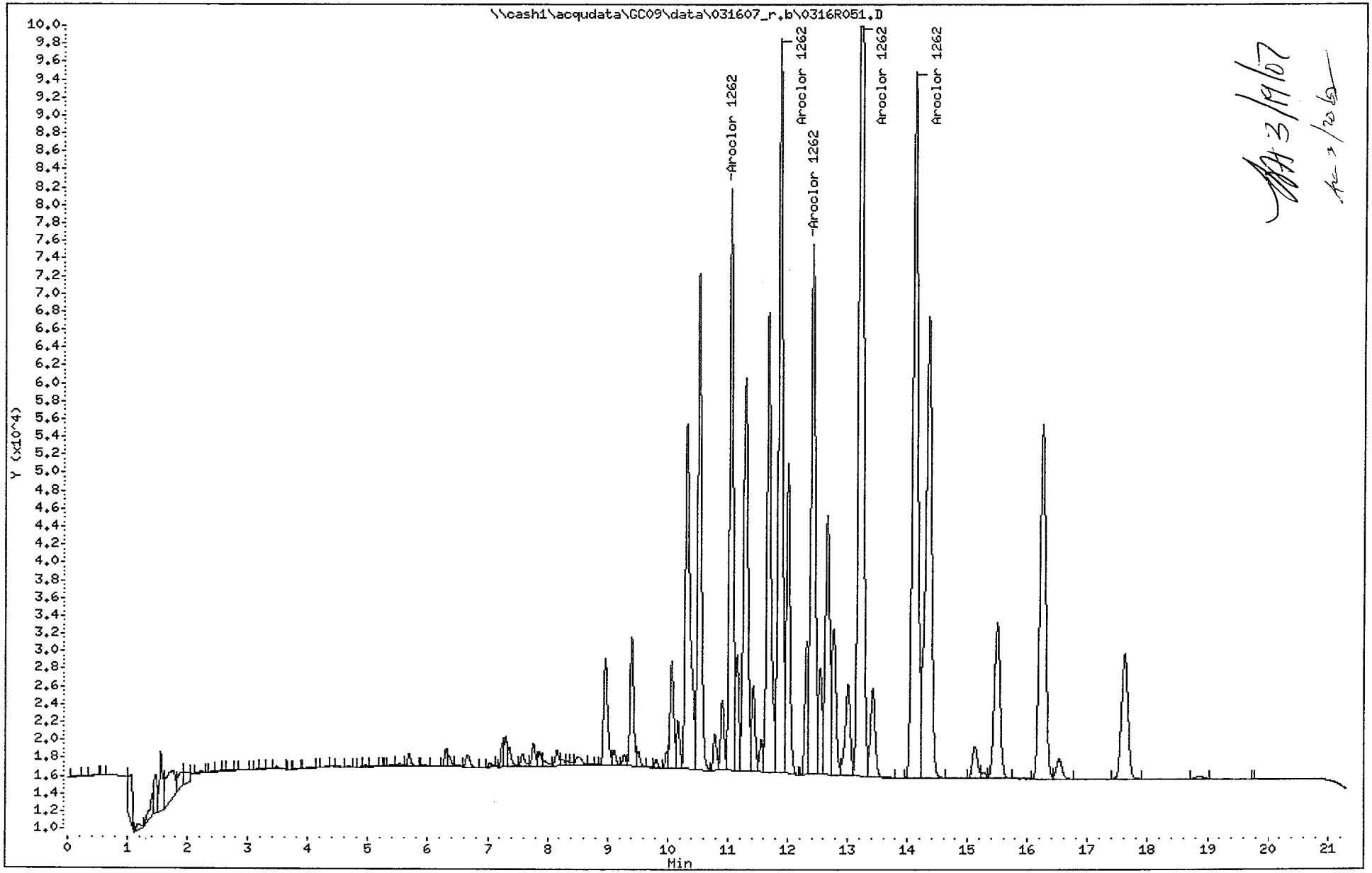
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R051.D
Date : 17-MAR-2007 09:31
Client ID:
Sample Info: 1262 @ 1000ppb | PCB4-84K | KWG0701324-18

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



3/19/07

1148

Data File: \\cash1\acqudata\GC09\data\031607.B\0316F052.D
Report Date: 19-Mar-2007 14:54

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\031607.B\0316F052.D
Sample #2 : \\cash1\acqudata\GC09\data\031607_r.b\0316R052.D
Inj Date : 17-MAR-2007 09:57
Sample Info: 1268 @ 1000ppb | PCB4-84L | KWG0701324-19
Misc Info : SEMIVOA GC\W0701324\19-ICV.H
Cal Date : 19-MAR-2007 10:53
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\031607.B\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\031607_r.b\031607_r.m
Sub List #1 : AR1268.SUB
Sub List #2 : AR1268.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1268	13.287	14.353	786745	751343	1020	1010	80.00- 120.00	100.00
	14.023	15.130	699557	679152	1120	1110	64.37- 96.56	88.92
	14.353	15.443	179554	193119	1090	1070	17.01- 25.51	22.82
	14.940	16.243	276498	273030	979	971	29.19- 43.78	35.14
	16.150	17.620	1899703	1830864	1070	1060	183.04- 274.57	241.46
			Average of Peak Amounts =		1060	1040		

3/19/07
3/20/07

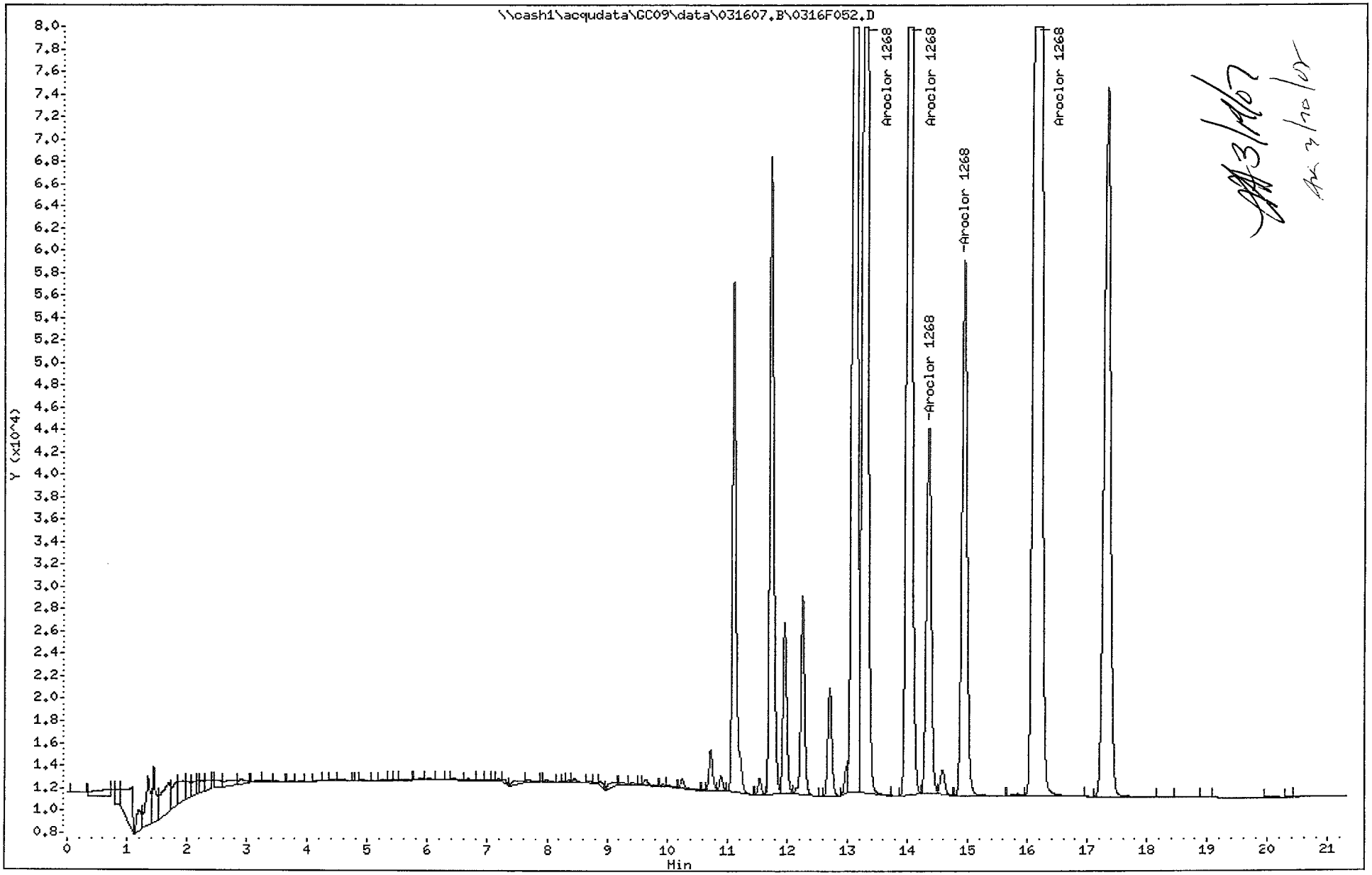
Data File: \\cash1\acqudata\GC09\data\031607.B\0316F052.D
Date : 17-MAR-2007 09:57
Client ID:
Sample Info: 1268 @ 1000ppb | PCB4-84L | KWG0701324-19

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53



1150

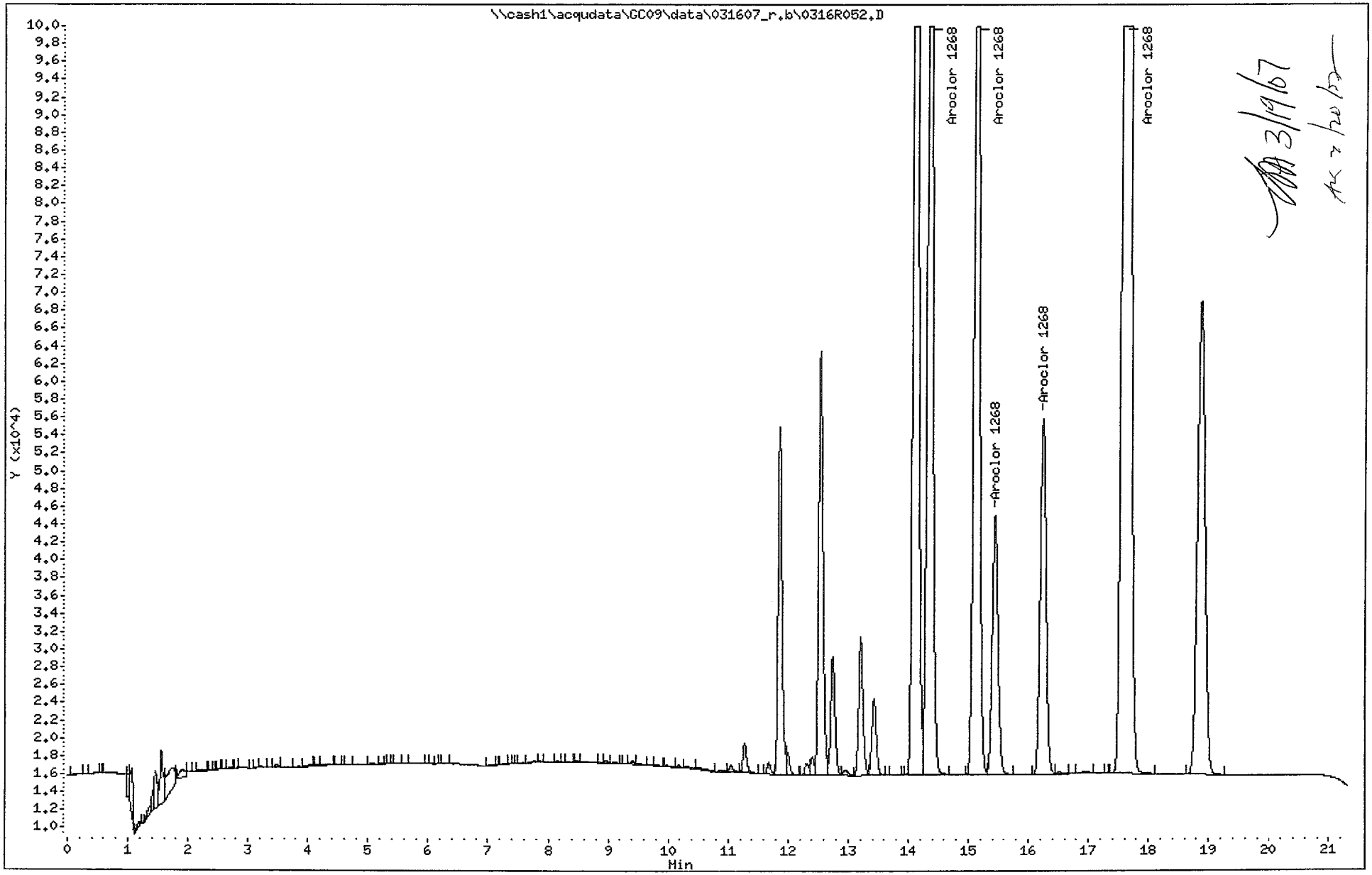
Data File: \\cash1\acqudata\GC09\data\031607_r.b\0316R052.D
Date : 17-MAR-2007 09:57
Client ID:
Sample Info: 1268 @ 1000ppb | PCB4-84L | KWG0701324-19

Instrument: GC09.i

Operator: LHarris

Column phase: DB-XLB

Column diameter: 0.53



1151

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F004.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	97	6240	6050	-3	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1100	61.4	67.9	11	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1100	126	137	8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1000	112	113	0	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	131	136	4	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	970	189	184	-3	NA	± 100 %	AverageRF
Aroclor 1016	1000	1000	NA	NA	NA	4	± 15 %	NA
Aroclor 1260 {1}	1000	940	384	363	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	930	233	218	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	940	444	417	-6	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	990	577	571	-1	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	990	431	425	-1	NA	± 100 %	AverageRF
Aroclor 1260	1000	960	NA	NA	NA	-4	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R004.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	96	6310	6070	-4	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1000	129	135	4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	970	250	243	-3	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1100	180	201	12	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1000	173	179	3	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1000	165	165	0	NA	± 100 %	AverageRF
Aroclor 1016	1000	1000	NA	NA	NA	3	± 15 %	NA
Aroclor 1260 {1}	1000	1000	226	227	0	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	970	462	448	-3	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1000	247	246	0	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	980	303	296	-2	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	960	547	526	-4	NA	± 100 %	AverageRF
Aroclor 1260	1000	980	NA	NA	NA	-2	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F004.D
Lab ID: KWG0703803-2
RunType: CCV
Matrix: LIQUID

Date Acquired: 03/20/2007 11:26
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R004.D
Lab ID: KWG0703803-2
RunType: CCV
Matrix: LIQUID

Date Acquired: 03/20/2007 11:26
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible] 3/21/07

Secondary Review: [illegible] 3/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	LIQUID
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703803	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:		**Method ID:**	MJ150
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F004.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R004.D			**Vial:**	96
Acqu Date:	03/20/2007 11:26	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	4.45	5.13	638619	681409	107.65	104.72			NA
				%Recovery =	NA	NA	Limits =	21-142	
Decachlorobiphenyl	17.31	18.86	605232	606715	96.93	96.12			NA
				%Recovery =	NA	NA	Limits =	33-153	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1016			0	0	1,041	1,033			
Aroclor 1016 {1}	6.25	6.36	67911	134836	1,105	1,045			
Aroclor 1016 {2}	6.31	7.35	136828	243262	1,082	973.80			
Aroclor 1016 {3}	7.11	7.58	112771	201468	1,004	1,117			
Aroclor 1016 {4}	7.26	7.86	135853	178712	1,040	1,032			
Aroclor 1016 {5}	7.69	8.15	183660	165040	972.11	999.01			
Aroclor 1260			0	0	959.11	982.19			
Aroclor 1260 {1}	9.93	11.30	362550	227412	943.56	1,005			
Aroclor 1260 {2}	10.72	11.67	217716	448349	934.09	970.88			
Aroclor 1260 {3}	11.03	11.86	417246	245866	940.60	995.12			
Aroclor 1260 {4}	12.26	12.41	570911	296264	989.95	978.84			
Aroclor 1260 {5}	13.30	13.21	425239	526290	987.36	961.52			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6143
Method ID: MJ150
DataFile: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F004.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Aroclor 1016		MS	NA	15					1,041	1,000	4.1
Aroclor 1260		MS	NA	15					959.1	1,000	-4.1
Tetrachloro-m-xylene		SURR	AverageRF	15		5.9E+3	6.4E+3	7.7			
Aroclor 1016 {1}		MULTI	AverageRF	100		6.1E+1	6.8E+1	10.5			
Aroclor 1016 {2}		MULTI	AverageRF	100		1.3E+2	1.4E+2	8.2			
Aroclor 1016 {3}		MULTI	AverageRF	100		1.1E+2	1.1E+2	0.4			
Aroclor 1016 {4}		MULTI	AverageRF	100		1.3E+2	1.4E+2	4.0			
Aroclor 1016 {5}		MULTI	AverageRF	100		1.9E+2	1.8E+2	-2.8			
Aroclor 1260 {1}		MULTI	AverageRF	100		3.8E+2	3.6E+2	-5.6			
Aroclor 1260 {2}		MULTI	AverageRF	100		2.3E+2	2.2E+2	-6.6			
Aroclor 1260 {3}		MULTI	AverageRF	100		4.4E+2	4.2E+2	-5.9			
Aroclor 1260 {4}		MULTI	AverageRF	100		5.8E+2	5.7E+2	-1.0			
Aroclor 1260 {5}		MULTI	AverageRF	100		4.3E+2	4.3E+2	-1.3			
Decachlorobiphenyl		SURR	AverageRF	15		6.2E+3	6.1E+3	-3.1			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.8

Calibration Verification Report

Calibration ID: CAL6143
Method ID: MJ150
DataFile: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R004.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Aroclor 1016		MS	NA	15					1,033	1,000	3.3
Aroclor 1260		MS	NA	15					982.2	1,000	-1.8
Tetrachloro-m-xylene		SURR	AverageRF	15		6.5E+3	6.8E+3	4.7			
Aroclor 1016 {1}		MULTI	AverageRF	100		1.3E+2	1.3E+2	4.5			
Aroclor 1016 {2}		MULTI	AverageRF	100		2.5E+2	2.4E+2	-2.6			
Aroclor 1016 {3}		MULTI	AverageRF	100		1.8E+2	2.0E+2	11.7			
Aroclor 1016 {4}		MULTI	AverageRF	100		1.7E+2	1.8E+2	3.2			
Aroclor 1016 {5}		MULTI	AverageRF	100		1.7E+2	1.7E+2	-0.1			
Aroclor 1260 {1}		MULTI	AverageRF	100		2.3E+2	2.3E+2	0.5			
Aroclor 1260 {2}		MULTI	AverageRF	100		4.6E+2	4.5E+2	-2.9			
Aroclor 1260 {3}		MULTI	AverageRF	100		2.5E+2	2.5E+2	-0.5			
Aroclor 1260 {4}		MULTI	AverageRF	100		3.0E+2	3.0E+2	-2.1			
Aroclor 1260 {5}		MULTI	AverageRF	100		5.5E+2	5.3E+2	-3.8			
Decachlorobiphenyl		SURR	AverageRF	15		6.3E+3	6.1E+3	-3.9			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	3.4

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F004.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F004.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R004.D
Inj Date : 20-MAR-2007 11:26
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-2
Misc Info : SEMIVOA GC\W0703803\2-CCV.H
Cal Date : 21-MAR-2007 09:41
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

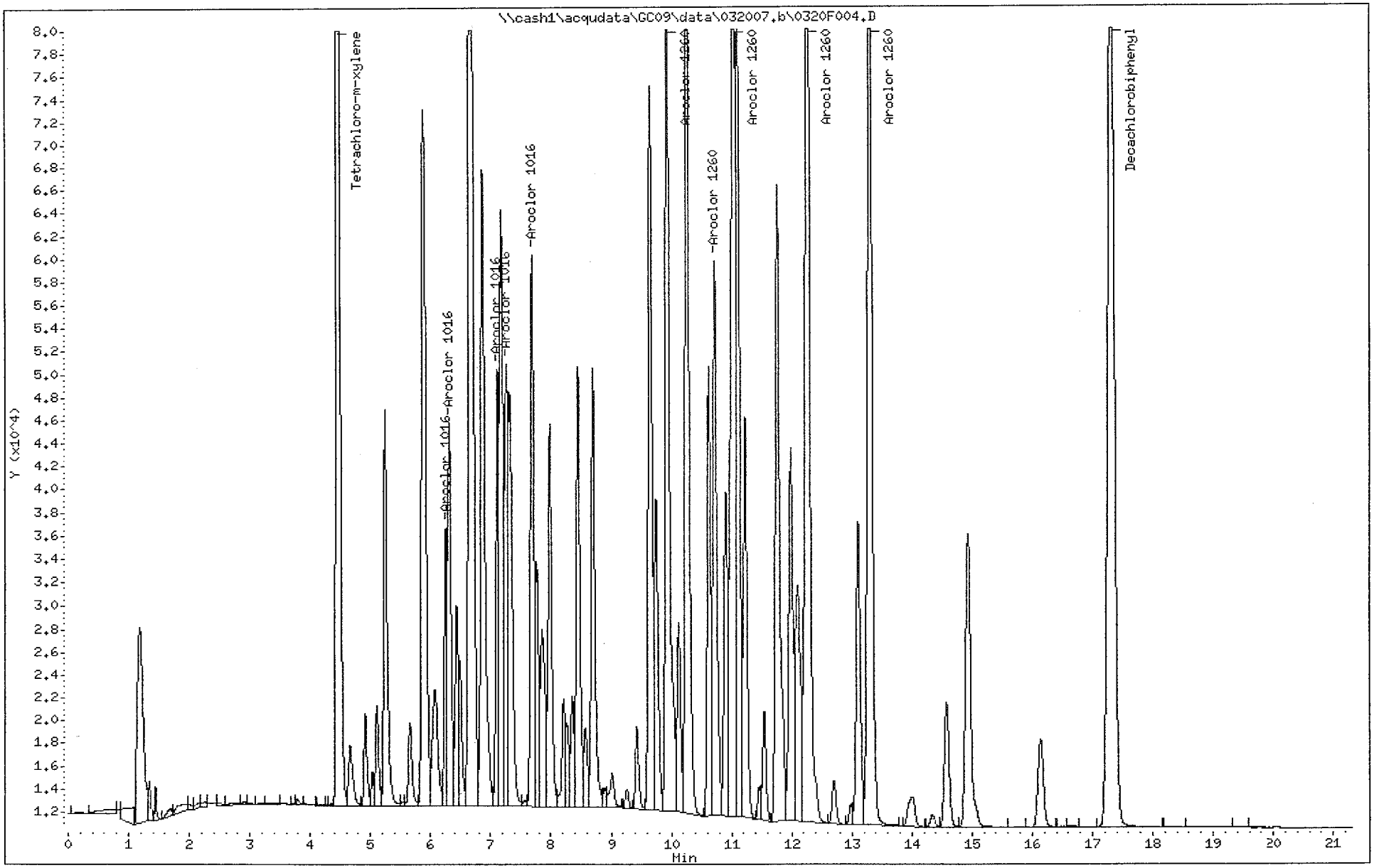
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.450	5.133	638619	681409	108	105		100.00
Aroclor 1016	6.253	6.357	67911	134836	1100	1040	80.00- 120.00	100.00
	6.313	7.353	136828	243262	1080	974	163.94- 245.92	201.48
	7.113	7.580	112771	201468	1000	1120	133.46- 200.19	166.06
	7.263	7.863	135853	178712	1040	1030	162.78- 244.18	200.05
	7.687	8.153	183660	165040	972	999	210.23- 315.34	270.44
		Average of Peak Amounts =			1040	1030		
Aroclor 1260	9.930	11.300	362550	227412	944	1000	80.00- 120.00	100.00
	10.717	11.670	217716	448349	934	971	48.00- 72.00	60.05
	11.033	11.863	417246	245866	941	995	97.01- 145.52	115.09
	12.257	12.407	570911	296264	990	979	133.48- 200.22	157.47
	13.303	13.207	425239	526290	987	962	98.70- 148.05	117.29
		Average of Peak Amounts =			959	981		
Decachlorobiphenyl	17.313	18.863	605232	606715	96.9	96.1		100.00

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F004.D
Date : 20-MAR-2007 11:26
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-2

Column phase: DB-35MS

Instrument: GC09.i

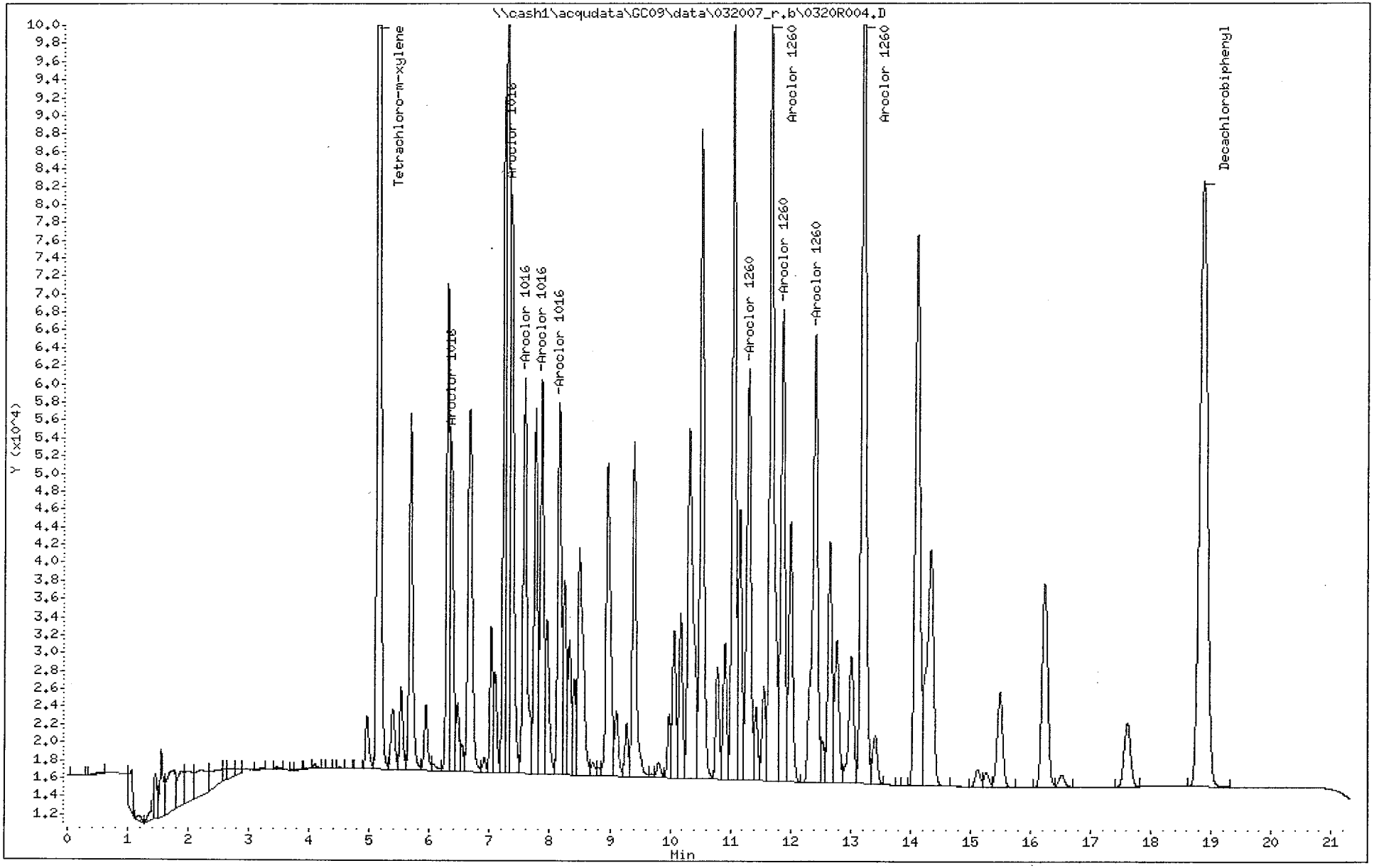
Operator: LHarris
Column diameter: 0.53



Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R004.D
Date : 20-MAR-2007 11:26
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-2

Instrument: GC09.i
Operator: LHarris

Column phase: DB-XLB
Column diameter: 0.53



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F020.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	110	6240	6600	6	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1200	61.4	71.4	16	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1100	126	142	12	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1100	112	125	11	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1200	131	150	15	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1100	189	200	6	NA	± 100 %	AverageRF
Aroclor 1016	1000	1100	NA	NA	NA	12	± 15 %	NA
Aroclor 1260 {1}	1000	1000	384	396	3	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	1000	233	244	5	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	444	478	8	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1100	577	636	10	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1100	431	473	10	NA	± 100 %	AverageRF
Aroclor 1260	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/20/2007

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082
CCV Standard ID: PCB4-88E

Calibration Date: 03/16/2007
Calibration ID: CAL6143
Analysis Lot: KWG0703803
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R020.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	100	100	6310	6450	2	NA	± 15 %	AverageRF
Aroclor 1016 {1}	1000	1000	129	135	4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	1000	1000	250	262	5	NA	± 100 %	AverageRF
Aroclor 1016 {3}	1000	1200	180	214	19	NA	± 100 %	AverageRF
Aroclor 1016 {4}	1000	1100	173	186	8	NA	± 100 %	AverageRF
Aroclor 1016 {5}	1000	1100	165	174	6	NA	± 100 %	AverageRF
Aroclor 1016	1000	1100	NA	NA	NA	8	± 15 %	NA
Aroclor 1260 {1}	1000	1100	226	244	8	NA	± 100 %	AverageRF
Aroclor 1260 {2}	1000	1100	462	485	5	NA	± 100 %	AverageRF
Aroclor 1260 {3}	1000	1100	247	263	7	NA	± 100 %	AverageRF
Aroclor 1260 {4}	1000	1000	303	317	5	NA	± 100 %	AverageRF
Aroclor 1260 {5}	1000	1000	547	570	4	NA	± 100 %	AverageRF
Aroclor 1260	1000	1100	NA	NA	NA	6	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F020.D
Lab ID: KWG0703803-4
RunType: CCV
Matrix: LIQUID

Date Acquired: 03/20/2007 18:05
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Printed: 03/21/2007 10:45:59
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R020.D
Lab ID: KWG0703803-4
RunType: CCV
Matrix: LIQUID

Date Acquired: 03/20/2007 18:05
Date Quantitated: 03/21/2007 10:29
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible] 3/21/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	LIQUID
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703803	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:		**Method ID:**	MJ150
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F020.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R020.D			**Vial:**	96
Acqu Date:	03/20/2007 18:05	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-4				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	4.45	5.13	649829m	696034	109.54	106.97			NA
				%Recovery =	NA	NA	Limits =	21-142	
Decachlorobiphenyl	17.31	18.86	660410	645231	105.77	102.23			NA
				%Recovery =	NA	NA	Limits =	33-153	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1016			0	0	1,121	1,082			
Aroclor 1016 {1}	6.25	6.35	71444m	134652	1,163	1,043			
Aroclor 1016 {2}	6.31	7.35	141629m	261885	1,120	1,048			
Aroclor 1016 {3}	7.11	7.58	124993m	214374	1,113	1,189			
Aroclor 1016 {4}	7.26	7.86	150447m	186461	1,152	1,077			
Aroclor 1016 {5}	7.69	8.15	200121m	174294	1,059	1,055			
Aroclor 1260			0	0	1,071	1,057			
Aroclor 1260 {1}	9.93	11.30	395930m	244324	1,030	1,079			
Aroclor 1260 {2}	10.72	11.67	244344m	484889	1,048	1,050			
Aroclor 1260 {3}	11.03	11.86	477669m	263175	1,077	1,065			
Aroclor 1260 {4}	12.26	12.40	635847m	317483	1,103	1,049			
Aroclor 1260 {5}	13.30	13.20	472920m	569926	1,098	1,041			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6143
Method ID: MJ150
DataFile: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F020.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Aroclor 1016		MS	NA	15					1,121	1,000	12.1
Aroclor 1260		MS	NA	15					1,071	1,000	7.1
Tetrachloro-m-xylene		SURR	AverageRF	15		5.9E+3	6.5E+3	9.5			
Aroclor 1016 {1}		MULTI	AverageRF	100		6.1E+1	7.1E+1	16.3			
Aroclor 1016 {2}		MULTI	AverageRF	100		1.3E+2	1.4E+2	12.0			
Aroclor 1016 {3}		MULTI	AverageRF	100		1.1E+2	1.2E+2	11.3			
Aroclor 1016 {4}		MULTI	AverageRF	100		1.3E+2	1.5E+2	15.2			
Aroclor 1016 {5}		MULTI	AverageRF	100		1.9E+2	2.0E+2	5.9			
Aroclor 1260 {1}		MULTI	AverageRF	100		3.8E+2	4.0E+2	3.0			
Aroclor 1260 {2}		MULTI	AverageRF	100		2.3E+2	2.4E+2	4.8			
Aroclor 1260 {3}		MULTI	AverageRF	100		4.4E+2	4.8E+2	7.7			
Aroclor 1260 {4}		MULTI	AverageRF	100		5.8E+2	6.4E+2	10.3			
Aroclor 1260 {5}		MULTI	AverageRF	100		4.3E+2	4.7E+2	9.8			
Decachlorobiphenyl		SURR	AverageRF	15		6.2E+3	6.6E+3	5.8			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	9.3

Calibration Verification Report

Calibration ID: CAL6143
Method ID: MJ150
DataFile: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R020.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Aroclor 1016		MS	NA	15					1,082	1,000	8.2
Aroclor 1260		MS	NA	15					1,057	1,000	5.7
Tetrachloro-m-xylene		SURR	AverageRF	15		6.5E+3	7.0E+3	7.0			
Aroclor 1016 {1}		MULTI	AverageRF	100		1.3E+2	1.3E+2	4.3			
Aroclor 1016 {2}		MULTI	AverageRF	100		2.5E+2	2.6E+2	4.8			
Aroclor 1016 {3}		MULTI	AverageRF	100		1.8E+2	2.1E+2	18.9			
Aroclor 1016 {4}		MULTI	AverageRF	100		1.7E+2	1.9E+2	7.7			
Aroclor 1016 {5}		MULTI	AverageRF	100		1.7E+2	1.7E+2	5.5			
Aroclor 1260 {1}		MULTI	AverageRF	100		2.3E+2	2.4E+2	7.9			
Aroclor 1260 {2}		MULTI	AverageRF	100		4.6E+2	4.8E+2	5.0			
Aroclor 1260 {3}		MULTI	AverageRF	100		2.5E+2	2.6E+2	6.5			
Aroclor 1260 {4}		MULTI	AverageRF	100		3.0E+2	3.2E+2	4.9			
Aroclor 1260 {5}		MULTI	AverageRF	100		5.5E+2	5.7E+2	4.1			
Decachlorobiphenyl		SURR	AverageRF	15		6.3E+3	6.5E+3	2.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	6.6

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F020.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F020.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R020.D
Inj Date : 20-MAR-2007 18:05
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-4
Misc Info : SEMIVOA GC\W0703803\4-CCV.H
Cal Date : 21-MAR-2007 09:42
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	4.450	5.133	649829	696034	110	107		100.00(M)
Aroclor 1016	6.253	6.353	71444	134652	1160	1040	80.00- 120.00	100.00(M)
	6.310	7.353	141629	261885	1120	1050	163.94- 245.92	198.24(M)
	7.113	7.577	124993	214374	1110	1190	133.46- 200.19	174.95(M)
	7.263	7.860	150447	186461	1150	1080	162.78- 244.18	210.58(M)
	7.687	8.150	200121	174294	1060	1060	210.23- 315.34	280.11(M)
		Average of Peak Amounts =			1120	1080		
Aroclor 1260	9.930	11.297	395930	244324	1030	1080	80.00- 120.00	100.00(M)
	10.717	11.667	244344	484889	1050	1050	48.00- 72.00	61.71(M)
	11.030	11.863	477669	263175	1080	1060	97.01- 145.52	120.64(M)
	12.257	12.403	635847	317483	1100	1050	133.48- 200.22	160.60(M)
	13.300	13.203	472920	569926	1100	1040	98.70- 148.05	119.45(M)
		Average of Peak Amounts =			1070	1060		
Decachlorobiphenyl	17.313	18.857	660410	645231	106	102		100.00

QC Flag Legend

M - Compound response manually integrated.

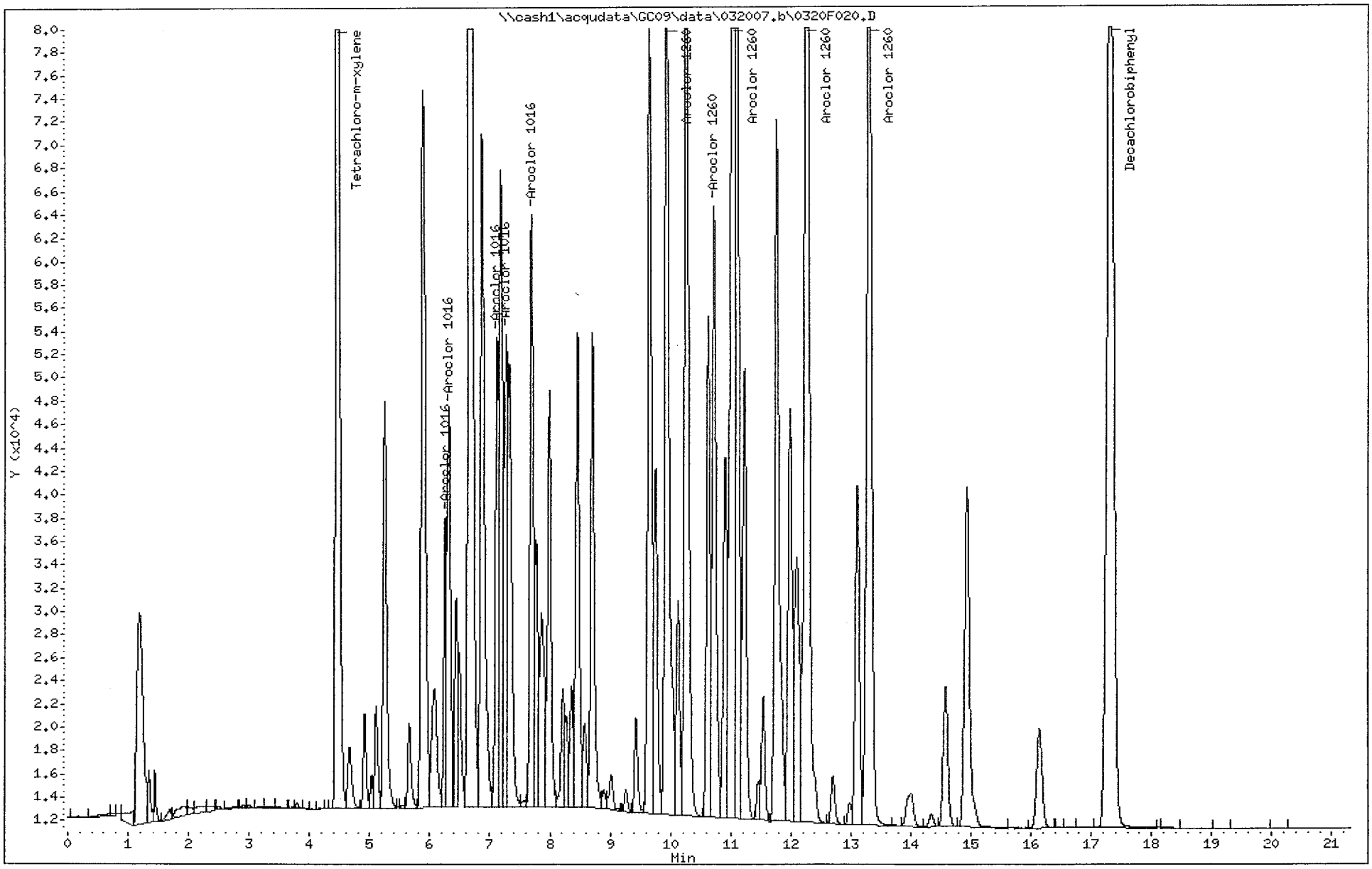
Data File: \\cash1\acqudata\GC09\data\032007.b\0320F020.D
Date : 20-MAR-2007 18:05
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-4

Instrument: GC09.i

Operator: LHarris

Column phase: DB-35MS

Column diameter: 0.53

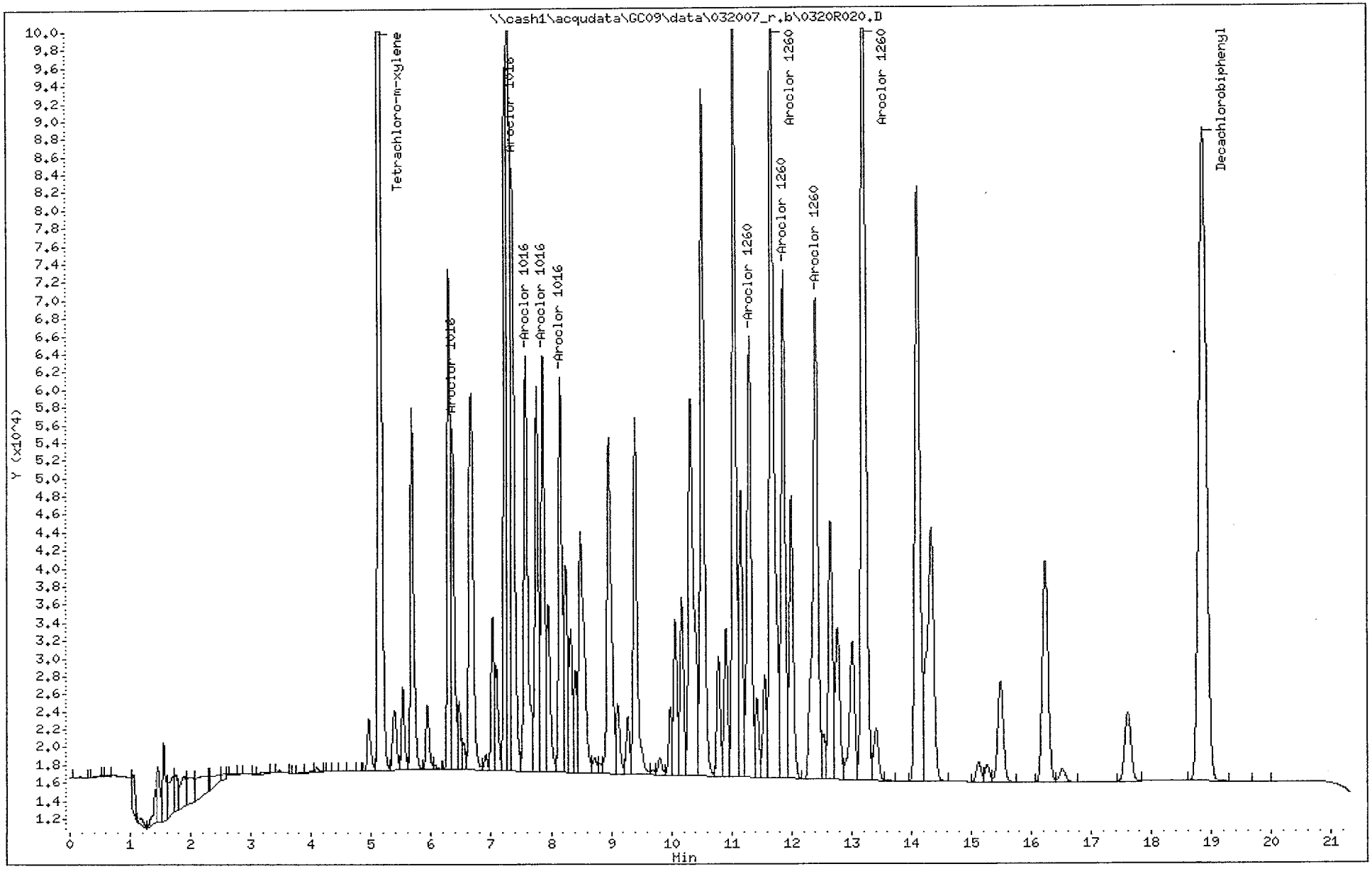


Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R020.D
Date : 20-MAR-2007 18:05
Client ID:
Sample Info: 1660 @ 1000ppb | PCB4-88E | KWG0703803-4

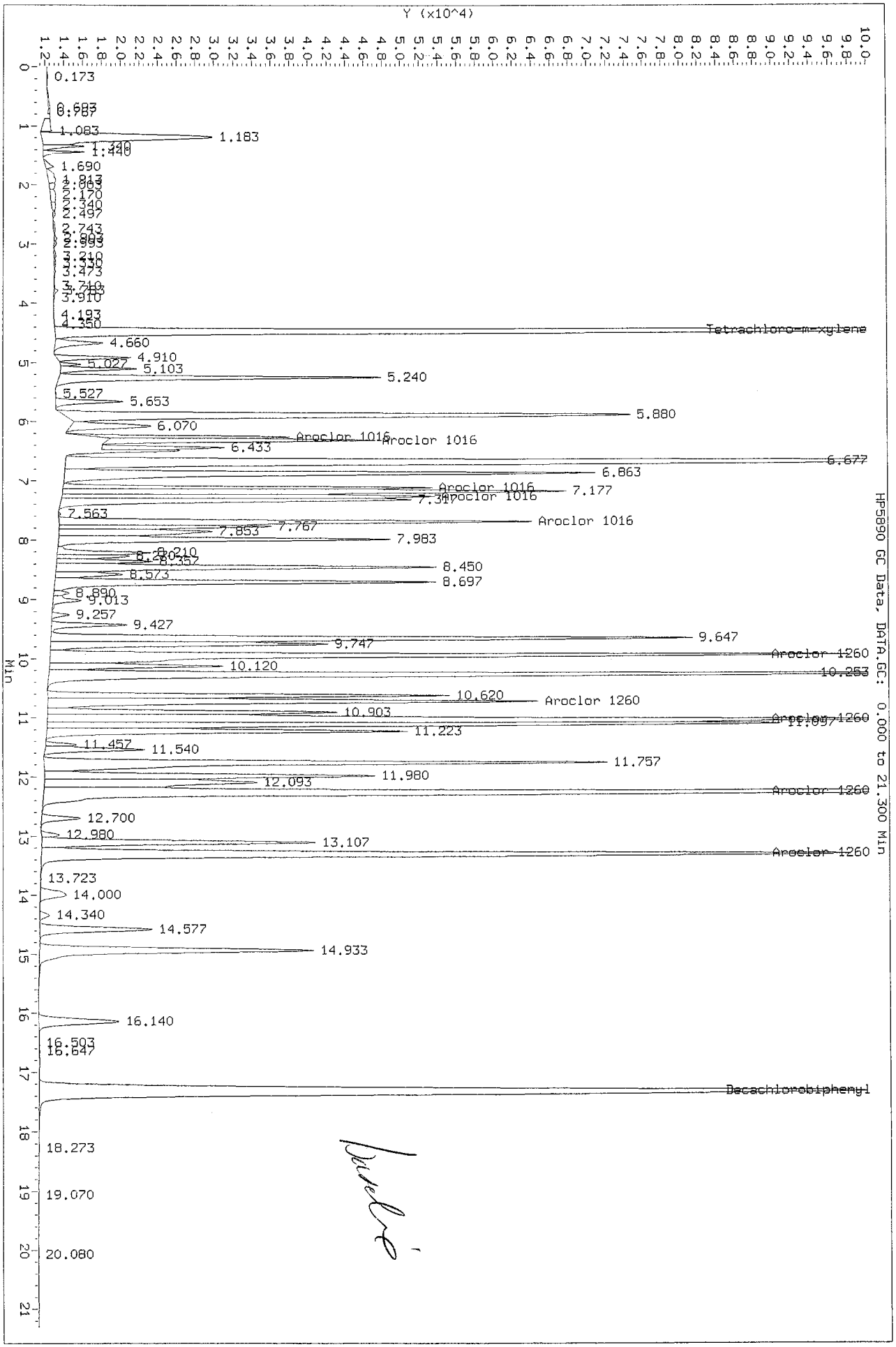
Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

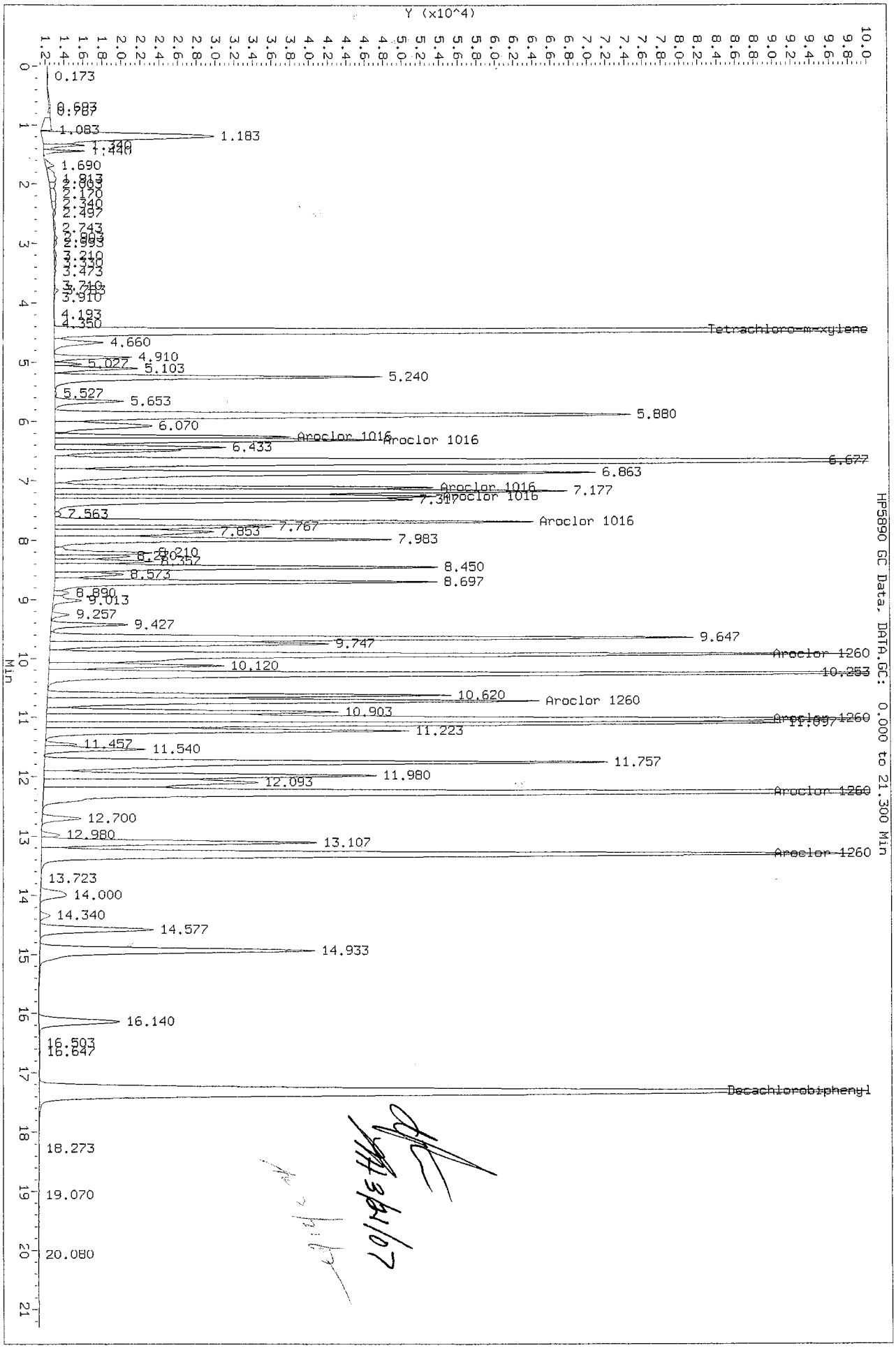
Column phase: DB-XLB



Data File: \\cash1\acqudata\GC09\data\032007.b\0320F020.D
Injection Date: 20-MAR-2007 18:05
Instrument: GC09.i
Client Sample ID:



Data File: \\cash1\acqudata\GC09\data\032007.b\0320F020.D
Injection Date: 20-MAR-2007 18:05
Instrument: GC09.i
Client Sample ID:



Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703477	**Prep Method:**	EPA 3535	**Prep Date:**	03/09/07 00:00
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701702-001	AV-030207-PW	8082 PCB	WATER	1020ml	2ml
K0701703-001	DAEGW104C1	8082 PCB	WATER	1050ml	2ml
~~KWG0703477-1~~	~~Lab Control Sample~~	~~8082 PCB~~	~~WATER~~	~~1000ml~~	~~2ml~~ 3-26-07 lost during extraction
KWG0703477-2	~~Duplicate~~ Lab Control Sampl	8082 PCB	WATER	1000ml	2ml
KWG0703477-3	Method Blank	8082 PCB	WATER	1050ml	2ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701702-001	582061	GCPS5-88-B	100uL			PMulheri
K0701703-001	582060	GCPS5-88-B	100uL			PMulheri
KWG0703477-1	582062	GCPS5-88-B	100uL	PCB4-88-D	50uL	PMulheri
KWG0703477-2	582063	GCPS5-88-B	100uL	PCB4-88-D	50uL	PMulheri
KWG0703477-3	582064	GCPS5-88-B	100uL			PMulheri

Comments:

Started By: ALundqui Assisted By: Training Yes No

Completed By: ALundqui Assisted By: Yes No

Reviewed By: Date: 3/21/07 Storage:

Chain of Custody

Relinquished By: ALundquist Date: 03-14-07

Received By: Date: 3/20/07 Extracts Examined Yes No

Preparation Information

Group ID: KWG0703477 **Prep Method:** EPA 3535 **Prep Date:** 03/09/07 00:00
Department: Semivoa GC

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext.	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701702-001	AV-030207-PW	NA	✓	8082 PCB	WATER	1020	2	NA	2mL	100ul	
2	K0701703-001	DAEGW104CL		✓	8082 PCB	WATER	1050					
3	~~KWG0703477-1~~ ~~Lab Control Sample~~ 03-26-07			✓	8082 PCB	WATER	1000					50ul
4	KWG0703477-2 ~~Duplicate~~ Lab Control Sample 03-26-07			✓	8082 PCB	WATER	1000					
5	KWG0703477-3	Method Blank		✓	8082 PCB	WATER	1050					

Comments: # 460019

Surrogate ID: GCPS5-88-B 200m 100 ul Saturn exp 08-22-07
Spike ID: PCB4-88-D 40 ug/ml 50 ul Microsyringe #6 exp: 08-21-07
Witness: PM 030907 (SCI I)

Started By: ALundqui Assisted By:
Completed By: ALundquist Assisted By:

Additional Prep Information For Pest/PCB Water by 3535

Service Request # K0701702 K0701703 Work Group # Pest: KWG 0703478

PCB: KWG 0703477

Solvents/Reagents used:

Acetone Lot # 461446 Hexane Lot # 461467

H_2O-Phobic DVB extraction Disk Lot # 1005021-PL

Extraction Program # 8081.6 Initial Purge Program # 8081.4

Start (Time/Date/Initial): 12:30 p.m. 03-09-07 AL

Stop (Time/Date/Initial): 2:00 p.m. 03-09-07 AL

Cleanups:

Sulfuric Acid Clean-up (3665): 03-~~13~~ 14-07 AL 03-14-07 AL (PCB aliquots only)

Clean-up #2: NA ☐ all samples ☐ some samples:

Clean-up #3: NA ☐ all samples ☐ some samples:

Pest Vial: yellow Vial Storage: J7-10 Freezer

PCB Vial: green Vial Storage: D7-10 Tiger one

Archived Extract Storage: NA

Comments/Observations: 1703-1 used 4 doses on SPE.

Not enough sample received for MS/MSD. PC requested no MS.
KWG 3477-1 LCS was lost due to broken glassware.

Bench Sheet Review Check List
☑ Hold Times Met (if no, Reason:)
☐ Prep date, dept, method, product code correct in stealth
☐ Spike Information correct
☐ Weights/Volumes and units correct on raw and final bench sheets
☐ Sample IDs have been checked—Bottle numbers appended if required
☐ Names present for: Started by, Completed by, relinquished by, and witnessed by.
☐ Training has been circled
☐ Extract Storage recorded
☐ Additional Prep Sheet completely filled out (NA or line out Blanks)
☐ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

Columbia Analytical Services, Inc.

Appendix from EXT-3535
For Extracting 8081/8082 Compounds in water by
EPA Method 3535A

1. Mark the level of the sample on the sample container for determination of sample volume.
2. Adjust pH of the sample to 2 using H2SO4. Be careful not to go below 2, as this will cause breakdown of the extraction disk.
3. Add between 2mL and 5mL of methanol to each sample, and shake well.
4. Add 100uL of 8081/8082 surrogate to all samples and 50uL of 8081 spike to Pest QC and 50uL of 8082 spike to PCB QC.
5. Shake sample to mix.
6. Prepare sample bottles with Horizon cap adapters and verify seal
7. Run purge method 8081.4 on extractors 2 times.
8. Assemble extractors using UCT brand C18 cartridges.
9. Load extraction program 8081.6 on the Horizon control box.
10. Load samples onto Horizon extractors and slowly turn clockwise until sample seal is broken. (Glug effect)
11. Start extraction program.
12. Run purge method 8081.8 on extractors between samples.
13. Take VOA vial extract to Dry Disk station. Place dry disk in vacuum system and rinse once with DCM, then condition with one Hexane rinse. Place turbovap tube into place for collection. Pour sample onto the Dry Disk and rinse VOA vial 2 times with Hexane. After sample has been vacuumed from water, agitate water with one more Hexane rinse.
14. Place sample into tubovap and concentrate with a nitrogen flow just strong enough to create a vortex.
15. Concentrate Hexane and take to a 2mL final volume in Hexane. Split, if necessary, pesticide from PCB portion using a 1mL pipette and placing pesticide aliquot in a yellow autosampler vial. After remaining PCB aliquot has had an Acid clean-up, hexane portion is removed and then placed in a green autosampler vial.

Sequence Name: D:\GC09\SEQUENCE\032007.S
Comment:
Operator: LHarris
Data Path: D:\GC09\DATA\032007.B\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

ICAL 6143

	Line	Type	Vial	DataFile	Method	Sample Name
	1	DeleteGC				
	2	MaskName - ----r---				
	3	IB	1	0320F001	PCB1	IB
	4	IB	1	0320F002	PCB1	IB
	5	IB	2	0320F003	PCB1	KWG0703803-1 | IB | 8082 PCB
OK, OK	6	CCV	96	0320F004	PCB1	1660 @ 1000ppb | PCB4-88E | KWG070380
	7	MB	3	0320F005	PCB1	KWG0703726-3 | MB | 8082 PCB | WATER
	8	LCS	4	0320F006	PCB1	KWG0703726-1 | LCS | 8082 PCB | WATER
	9	DLCS	5	0320F007	PCB1	KWG0703726-2 | DLCS | 8082 PCB | WATE
	10	SMPL	6	0320F008	PCB1	K0701422-001 | C076R013
	11	MB	7	0320F009	PCB1	KWG0703477-3 | MB | 8082 PCB | WATER
	12	DLCS	9	0320F011	PCB1	KWG0703477-2 | DLCS | 8082 PCB | WATE
	13	SMPL	10	0320F012	PCB1	K0701702-001 | AV-030207-PW
	14	SMPL	11	0320F013	PCB1	K0701703-001 | DAEGW104C1
	15	MB	12	0320F014	PCB1	KWG0703462-4 | MB | 8082 PCB_LL | MAR
	16	LCS	13	0320F015	PCB1	KWG0703462-3 | LCS | 8082 PCB_LL | MA
	17	DLCS	14	0320F016	PCB1	KWG0703462-5 | DLCS | 8082 PCB_LL | M
	18	SMPL	15	0320F017	PCB1	K0701078-019 | LW3-UC08-D
	19	IB	1	0320F018	BAKE	BAKE
	20	IB	2	0320F019	PCB1	KWG0703803-3 | IB | 8082 PCB
OK, OK	21	CCV	96	0320F020	PCB1	1660 @ 1000ppb | PCB4-88E | KWG070380
	22	MB	16	0320F021	PCB1	KWG0703552-4 | MB | 8082 PCB | SOLID
	23	LCS	17	0320F022	PCB1	KWG0703552-3 | LCS | 8082 PCB | SOLID
	24	SMPL	18	0320F023	PCB1	K0701802-001 | Vactor #88
	25	MS	19	0320F024	PCB1	KWG0703552-1 | K0701802-001MS | 8082
	26	DMS	20	0320F025	PCB1	KWG0703552-2 | K0701802-001DMS | 8082
	27	MB	21	0320F026	PCB1	KWG0703401-4 | MB | 8082 PCB_LL | PAP
	28	LCS	22	0320F027	PCB1	KWG0703401-2 | LCS | 8082 PCB_LL | PA
	29	DLCS	23	0320F028	PCB1	KWG0703401-3 | DLCS | 8082 PCB_LL | P
	30	SMPL	24	0320F029	PCB1	K0701523-008 | Composite
	31	MS	25	0320F030	PCB1	KWG0703401-1 | K0701523-008MS | 8082
	32	SMPL	26	0320F031	PCB1	K0701540-001 | De Pere 09922 GP West
	33	SMPL	27	0320F032	PCB1	K0701604-008 | Composite
	34	SMPL	28	0320F033	PCB1	K0701661-008 | Composite
	35	SMPL	29	0320F034	PCB1	K0701717-008 | Composite
	36	IB	1	0320F035	BAKE	BAKE
	37	IB	2	0320F036	PCB1	KWG0703803-5 | IB | 8082 PCB
OK, OK	38	CCV	97	0320F037	PCB1	1660 @ 1000ppb | PCB4-88E | KWG070380
	39	MB	30	0320F038	PCB1	KWG0702624-4 | MB | 8082 PCB_LL | MAR
	40	LCS	31	0320F039	PCB1	KWG0702624-3 | LCS | 8082 PCB_LL | MA
	41	SMPL	32	0320F040	PCB1	K0701078-001 | LW3-UC03-B – NR, need 5X
	42	SMPL	33	0320F041	PCB1	K0701078-002 | LW3-UC03-C
	43	SMPL	34	0320F042	PCB1	K0701078-003 | LW3-UC03-D

Last Modified: Tue Mar 20 10:08:54 2007

Page: 1

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F003.D
Lab ID: KWG0703803-1
RunType: IB
Matrix: LIQUID

Date Acquired: 03/20/2007 11:00
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/3/21/07

Secondary Review: 4/3/21/07

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R003.D
Lab ID: KWG0703803-1
RunType: IB
Matrix: LIQUID

Date Acquired: 03/20/2007 11:00
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible] 3/21/07

Secondary Review: [illegible] 3/22/07

Printed: 03/21/2007 10:44:32
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	LIQUID
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703803	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:		**Method ID:**	MJ150
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F003.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R003.D			**Vial:**	2
Acqu Date:	03/20/2007 11:00	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-1				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	21-142	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	33-153	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000			
Aroclor 1016 {1}			0	0	0.0000	0.0000			
Aroclor 1016 {2}			0	0	0.0000	0.0000			
Aroclor 1016 {3}			0	0	0.0000	0.0000			
Aroclor 1016 {4}			0	0	0.0000	0.0000			
Aroclor 1016 {5}			0	0	0.0000	0.0000			
Aroclor 1221			0	0	0.0000	0.0000			
Aroclor 1221 {1}			0d	0d	0.0000	0.0000			
Aroclor 1221 {2}			0d	0d	0.0000	0.0000			
Aroclor 1221 {3}			0d	0d	0.0000	0.0000			
Aroclor 1221 {4}			0d	0d	0.0000	0.0000			
Aroclor 1232			0	0	0.0000	0.0000			
Aroclor 1232 {1}			0d	0	0.0000	0.0000			
Aroclor 1232 {2}			0d	0	0.0000	0.0000			
Aroclor 1232 {3}			0d	0	0.0000	0.0000			
Aroclor 1232 {4}			0d	0	0.0000	0.0000			
Aroclor 1242			0	0	0.0000	0.0000			
Aroclor 1242 {1}			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F003.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R003.D			**Vial:**	2
Acqu Date:	03/20/2007 11:00	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-1				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1242 {2}			0	0	0.0000	0.0000			
Aroclor 1242 {3}			0	0	0.0000	0.0000			
Aroclor 1242 {4}			0	0	0.0000	0.0000			
Aroclor 1242 {5}			0	0	0.0000	0.0000			
Aroclor 1248			0	0	0.0000	0.0000			
Aroclor 1248 {1}			0	0	0.0000	0.0000			
Aroclor 1248 {2}			0	0	0.0000	0.0000			
Aroclor 1248 {3}			0	0	0.0000	0.0000			
Aroclor 1248 {4}			0	0	0.0000	0.0000			
Aroclor 1248 {5}			0	0	0.0000	0.0000			
Aroclor 1254			0	0	0.0000	0.0000			
Aroclor 1254 {1}			0	0	0.0000	0.0000			
Aroclor 1254 {2}			0	0	0.0000	0.0000			
Aroclor 1254 {3}			0	0	0.0000	0.0000			
Aroclor 1254 {4}			0	0	0.0000	0.0000			
Aroclor 1254 {5}			0	0	0.0000	0.0000			
Aroclor 1260			0	0	0.0000	0.0000			
Aroclor 1260 {1}			0	0	0.0000	0.0000			
Aroclor 1260 {2}			0	0	0.0000	0.0000			
Aroclor 1260 {3}			0	0	0.0000	0.0000			
Aroclor 1260 {4}			0	0	0.0000	0.0000			
Aroclor 1260 {5}			0	0	0.0000	0.0000			
Aroclor 1262			0	0	0.0000	0.0000			
Aroclor 1262 {1}			0	0	0.0000	0.0000			
Aroclor 1262 {2}			0	0	0.0000	0.0000			
Aroclor 1262 {3}			0	0	0.0000	0.0000			
Aroclor 1262 {4}			0	0	0.0000	0.0000			
Aroclor 1262 {5}			0	0	0.0000	0.0000			
Aroclor 1268			0	0	0.0000	0.0000			
Aroclor 1268 {1}			0	0	0.0000	0.0000			
Aroclor 1268 {2}			0	0	0.0000	0.0000			
Aroclor 1268 {3}			0	0	0.0000	0.0000			
Aroclor 1268 {4}			0	0	0.0000	0.0000			
Aroclor 1268 {5}			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F003.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F003.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R003.D
Inj Date : 20-MAR-2007 11:00
Sample Info: KWG0703803-1 | IB | 8082 PCB
Misc Info : SEMIVOA GC\W0703803\1-IB.H
Cal Date : 19-MAR-2007 11:40
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

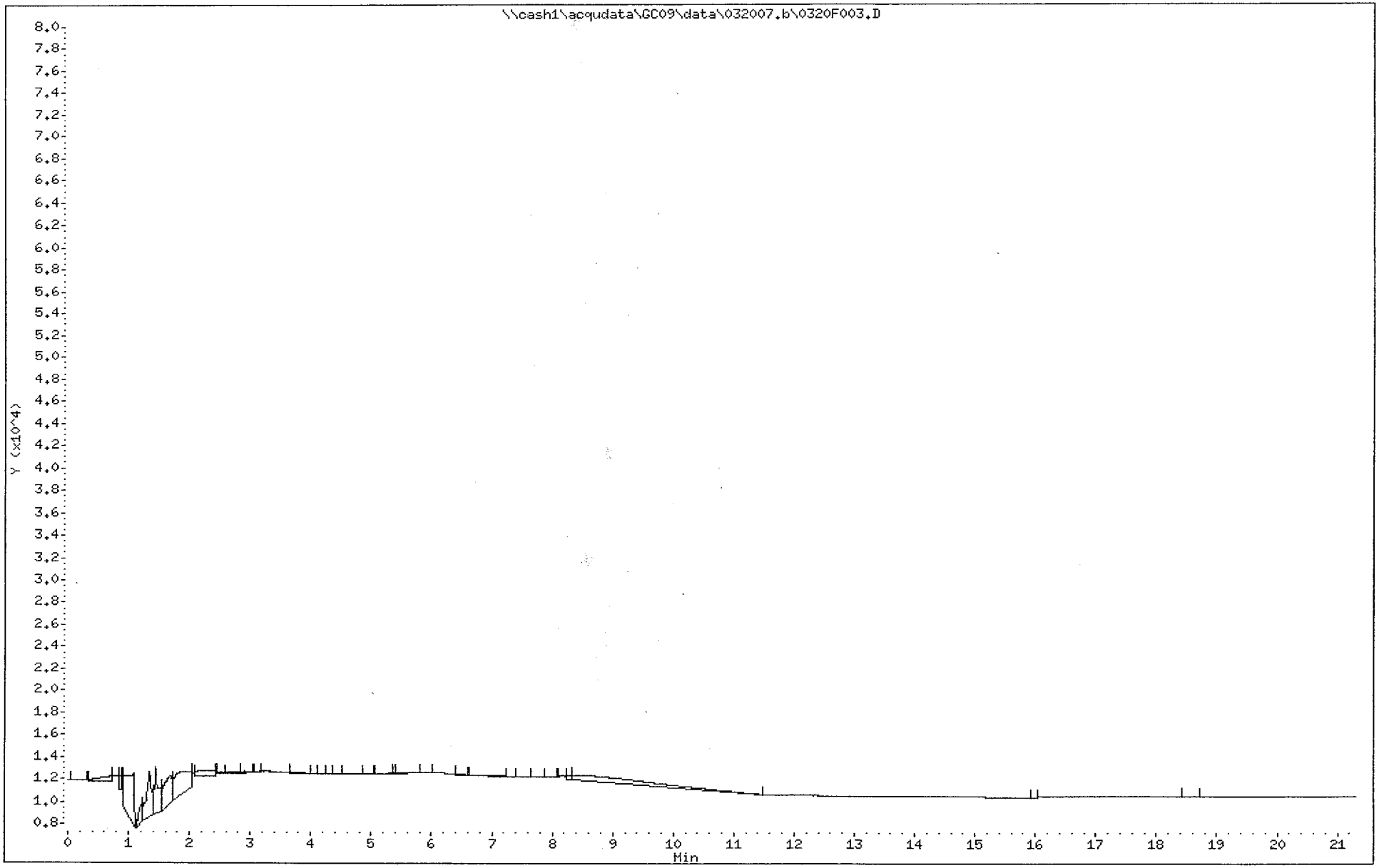
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F003.D
Date : 20-MAR-2007 11:00
Client ID:
Sample Info: KWG0703803-1 | IB | 8082 PCB

Column phase: DB-35MS

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

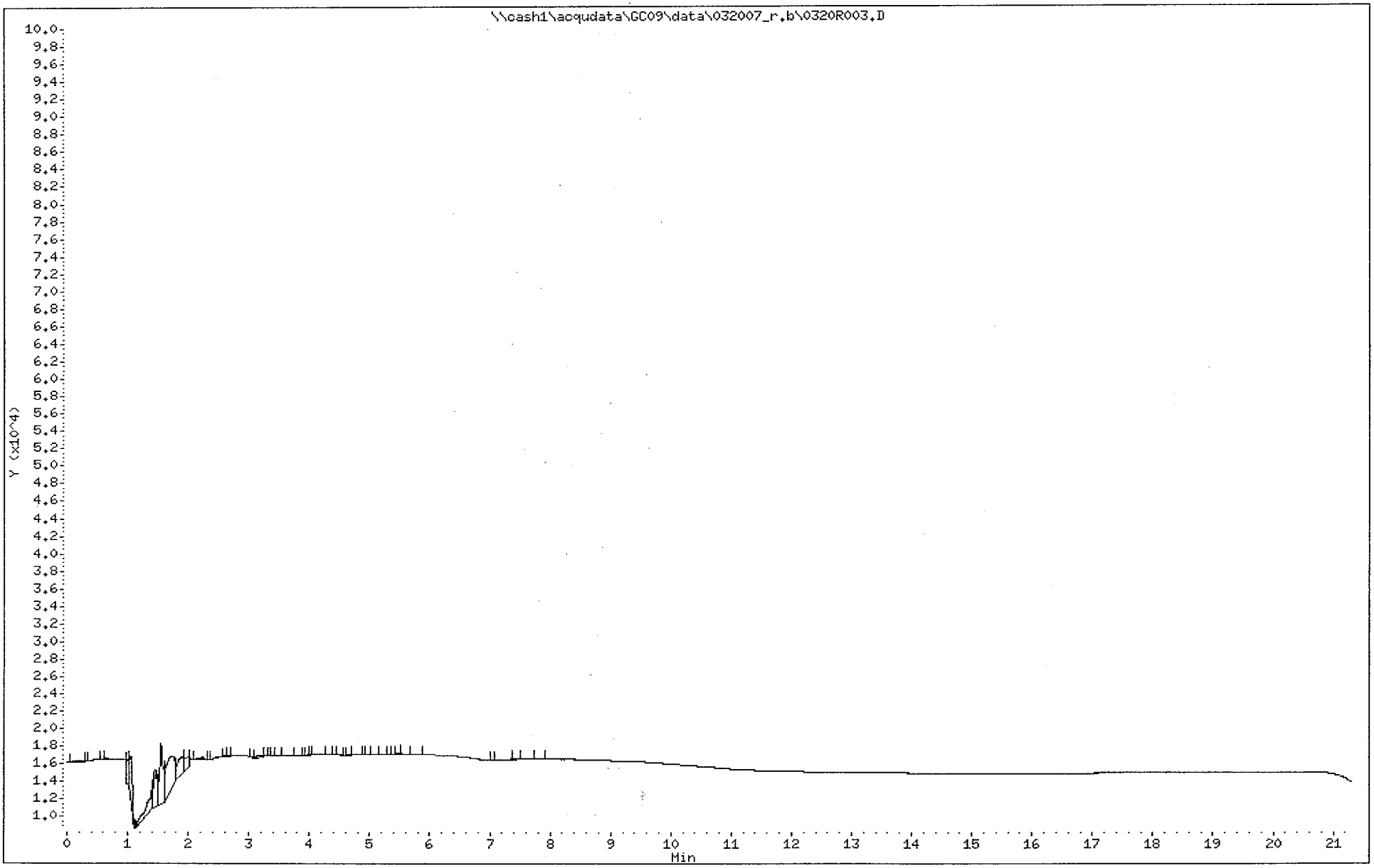


Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R003.D
Date : 20-MAR-2007 11:00
Client ID:
Sample Info: KWG0703803-1 | IB | 8082 PCB

Column phase: DB-XLB

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53



Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007.B\0320F019.D
Lab ID: KWG0703803-3
RunType: IB
Matrix: LIQUID

Date Acquired: 03/20/2007 17:39
Date Quantitated: 03/21/2007 10:28
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/21/07

Secondary Review: 3/21/07

Printed: 03/21/2007 10:45:53
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: \\CASH1\ACQUDATA\GC09\DATA\032007_R.B\0320R019.D
Lab ID: KWG0703803-3
RunType: IB
Matrix: LIQUID

Date Acquired: 03/20/2007 17:39
Date Quantitated: 03/21/2007 10:29
Batch ID: KWG0703803
Analysis Method: 8082
MethodJoinID: MJ150

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 03/32/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	LIQUID
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	03/20/2007

Analysis Lot:	KWG0703803	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC09\DATA\032007.B\031607_F.M	**Calibration ID:**	CAL6143
Title:			
MB Ref:		**Method ID:**	MJ150
		Quant based on Method	

Data File #1:	J:\GC09\DATA\032007.B\0320F019.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R019.D			**Vial:**	2
Acqu Date:	03/20/2007 17:39	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	21-142	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	33-153	

Target Compounds

Final Conc. Units:

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000			
Aroclor 1016 {1}			0	0	0.0000	0.0000			
Aroclor 1016 {2}			0	0	0.0000	0.0000			
Aroclor 1016 {3}			0	0	0.0000	0.0000			
Aroclor 1016 {4}			0	0	0.0000	0.0000			
Aroclor 1016 {5}			0	0	0.0000	0.0000			
Aroclor 1221			0	0	0.0000	0.0000			
Aroclor 1221 {1}			0d	0d	0.0000	0.0000			
Aroclor 1221 {2}			0d	0d	0.0000	0.0000			
Aroclor 1221 {3}			0d	0d	0.0000	0.0000			
Aroclor 1221 {4}			0d	0d	0.0000	0.0000			
Aroclor 1232			0	0	0.0000	0.0000			
Aroclor 1232 {1}			0d	0	0.0000	0.0000			
Aroclor 1232 {2}			0d	0	0.0000	0.0000			
Aroclor 1232 {3}			0d	0	0.0000	0.0000			
Aroclor 1232 {4}			0d	0	0.0000	0.0000			
Aroclor 1242			0	0	0.0000	0.0000			
Aroclor 1242 {1}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC09\DATA\032007.B\0320F019.D			**Instrument:**	GC09.i
Data File #2:	\\cash1\acqudata\GC09\data\032007_r.b\0320R019.D			**Vial:**	2
Acqu Date:	03/20/2007 17:39	**Quant Date:**	03/21/2007 10:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG0703803-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:**

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/Kg #1	ug/Kg #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000			
Aroclor 1242 {3}			0d	0d	0.0000	0.0000			
Aroclor 1242 {4}			0d	0d	0.0000	0.0000			
Aroclor 1242 {5}			0d	0d	0.0000	0.0000			
Aroclor 1248			0	0	0.0000	0.0000			
Aroclor 1248 {1}			0	0	0.0000	0.0000			
Aroclor 1248 {2}			0	0	0.0000	0.0000			
Aroclor 1248 {3}			0	0	0.0000	0.0000			
Aroclor 1248 {4}			0	0	0.0000	0.0000			
Aroclor 1248 {5}			0	0	0.0000	0.0000			
Aroclor 1254			0	0	0.0000	0.0000			
Aroclor 1254 {1}			0	0	0.0000	0.0000			
Aroclor 1254 {2}			0	0	0.0000	0.0000			
Aroclor 1254 {3}			0	0	0.0000	0.0000			
Aroclor 1254 {4}			0	0	0.0000	0.0000			
Aroclor 1254 {5}			0	0	0.0000	0.0000			
Aroclor 1260			0	0	0.0000	0.0000			
Aroclor 1260 {1}			0	0	0.0000	0.0000			
Aroclor 1260 {2}			0	0	0.0000	0.0000			
Aroclor 1260 {3}			0	0	0.0000	0.0000			
Aroclor 1260 {4}			0	0	0.0000	0.0000			
Aroclor 1260 {5}			0	0	0.0000	0.0000			
Aroclor 1262			0	0	0.0000	0.0000			
Aroclor 1262 {1}			0	0	0.0000	0.0000			
Aroclor 1262 {2}			0	0	0.0000	0.0000			
Aroclor 1262 {3}			0	0	0.0000	0.0000			
Aroclor 1262 {4}			0	0	0.0000	0.0000			
Aroclor 1262 {5}			0	0	0.0000	0.0000			
Aroclor 1268			0	0	0.0000	0.0000			
Aroclor 1268 {1}			0	0	0.0000	0.0000			
Aroclor 1268 {2}			0	0	0.0000	0.0000			
Aroclor 1268 {3}			0	0	0.0000	0.0000			
Aroclor 1268 {4}			0	0	0.0000	0.0000			
Aroclor 1268 {5}			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F019.D
Report Date: 21-Mar-2007 10:28

Laboratory Name

Sample #1 : \\cash1\acqudata\GC09\data\032007.b\0320F019.D
Sample #2 : \\cash1\acqudata\GC09\data\032007_r.b\0320R019.D
Inj Date : 20-MAR-2007 17:39
Sample Info: KWG0703803-3 | IB | 8082 PCB
Misc Info : SEMIVOA GC\W0703803\3-IB.H
Cal Date : 21-MAR-2007 09:41
Operator : LHarris
Inst ID : GC09.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC09\data\032007.b\031607_f.m
Method #2 : \\cash1\acqudata\GC09\data\032007_r.b\031607_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

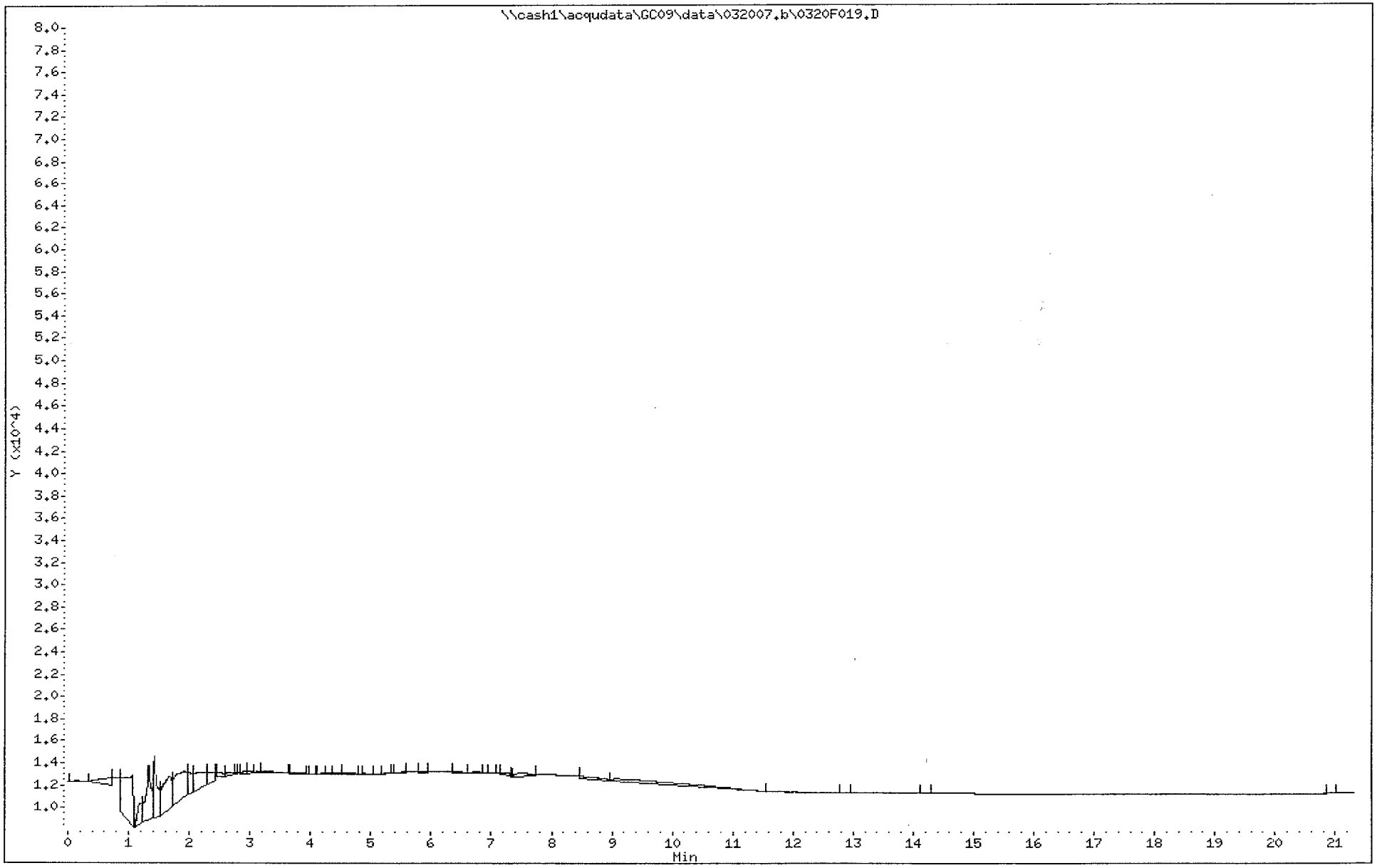
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

Data File: \\cash1\acqudata\GC09\data\032007.b\0320F019.D
Date : 20-MAR-2007 17:39
Client ID:
Sample Info: KWG0703803-3 | IB | 8082 PCB

Column phase: DB-35MS

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

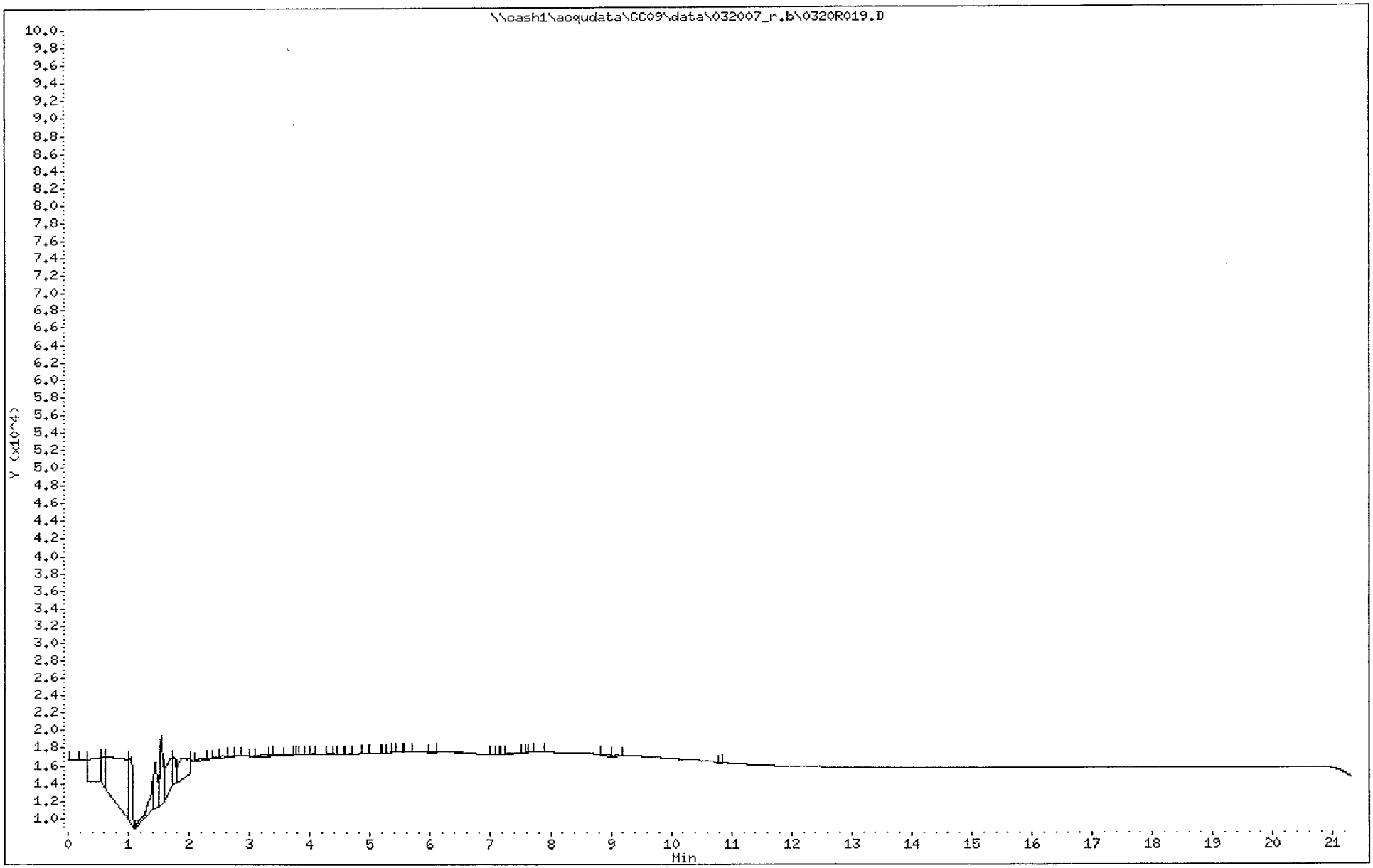


Data File: \\cash1\acqudata\GC09\data\032007_r.b\0320R019.D
Date : 20-MAR-2007 17:39
Client ID:
Sample Info: KWG0703803-3 | IB | 8082 PCB

Instrument: GC09.i

Operator: LHarris
Column diameter: 0.53

Column phase: DB-XLB



Volatile Organic Compounds
EPA Method 8260B

Organic Analysis:
Volatile Organic Compounds

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104C1	K0701703-001	03/02/2007	03/03/2007
TB030207C124	K0701703-002	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: 3/2007 Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: 03/02/2007
Date Received: 03/03/2007

Volatile Organic Compounds

Sample Name: DAEGW104C1
Lab Code: K0701703-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Volatile Organic Compounds

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	95	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: 03/02/2007
Date Received: 03/03/2007

Volatile Organic Compounds

Sample Name: TB030207C124
Lab Code: K0701703-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Volatile Organic Compounds

Sample Name:	TB030207C124	**Units:**	ug/L
Lab Code:	K0701703-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0703590-6

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703590-6	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	97	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
DAEGW104C1	K0701703-001	88	109	95
TB030207C124	K0701703-002	88	109	92
Method Blank	KWG0703590-6	91	110	97
Batch QC	K0702006-003	105	109	99
Batch QCMS	KWG0703590-1	102	110	101
Batch QCDMS	KWG0703590-2	104	110	101
Lab Control Sample	KWG0703590-5	81	108	92

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F003.D	**Lab Code:**	KWG0703563-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703563
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	402,584	5.62	180,989	9.07	163,576	11.49
	Upper Limit ==>	805,168	6.12	361,978	9.57	327,152	11.99
	Lower Limit ==>	201,292	5.12	90,495	8.57	81,788	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703590-5	410,000	5.62	177,755	9.07	161,244	11.49
Batch QCMS	KWG0703590-1	415,453	5.62	197,367	9.07	193,579	11.49
Batch QCDMS	KWG0703590-2	413,056	5.62	199,776	9.08	197,260	11.49
Method Blank	KWG0703590-6	393,497	5.62	177,163	9.08	164,037	11.49
TB030207C124	K0701703-002	398,868	5.62	179,821	9.08	159,552	11.49
DAEGW104C1	K0701703-001	398,595	5.62	180,118	9.08	163,203	11.49
Batch QC	K0702006-003	398,540	5.62	191,622	9.08	186,069	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

		Batch QCMS KWG0703590-1 Matrix Spike			Batch QCDMS KWG0703590-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	10.9	10.0	109	10.4	10.0	104	65-135	5	35
Benzene	ND	10.5	10.0	105	10.1	10.0	101	65-135	3	35
Trichloroethene (TCE)	ND	10.3	10.0	103	10.0	10.0	100	65-135	3	35
Toluene	ND	10.6	10.0	106	10.3	10.0	103	65-135	3	35
Chlorobenzene	ND	8.36	10.0	84	7.98	10.0	80	65-135	5	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	8.55	10.0	86	57-134
Vinyl Acetate	46.9	50.0	94	10-202
2-Chloroethyl Vinyl Ether	9.14	10.0	91	10-180
Chloromethane	9.64	10.0	96	39-134
Vinyl Chloride	10.5	10.0	105	60-125
Bromomethane	8.94	10.0	89	25-163
Chloroethane	9.32	10.0	93	61-126
Acetone	37.6	50.0	75	65-136
1,1-Dichloroethene	10.4	10.0	104	65-135
Carbon Disulfide	22.0	20.0	110	59-130
Methylene Chloride	11.7	10.0	117	62-122
trans-1,2-Dichloroethene	9.75	10.0	98	72-119
1,1-Dichloroethane	10.3	10.0	103	66-126
2-Butanone (MEK)	44.4	50.0	89	60-143
cis-1,2-Dichloroethene	9.99	10.0	100	74-119
Chloroform	9.32	10.0	93	70-121
1,1,1-Trichloroethane (TCA)	10.2	10.0	102	68-133
Carbon Tetrachloride	9.88	10.0	99	59-147
1,2-Dichloroethane (EDC)	9.41	10.0	94	70-129
Benzene	9.91	10.0	99	65-135
Trichloroethene (TCE)	9.84	10.0	98	65-135
1,2-Dichloropropane	10.0	10.0	100	68-122
Bromodichloromethane	9.87	10.0	99	77-129
2-Hexanone	33.7	50.0	67	58-129
cis-1,3-Dichloropropene	9.55	10.0	96	70-129
Toluene	9.96	10.0	100	65-135
trans-1,3-Dichloropropene	7.64	10.0	76	62-123
1,1,2-Trichloroethane	8.11	10.0	81	76-118
4-Methyl-2-pentanone (MIBK)	39.9	50.0	80	62-131
Tetrachloroethene (PCE)	7.98	10.0	80	71-117
Dibromochloromethane	7.55	10.0	76	71-129
Chlorobenzene	8.23	10.0	82	65-135
Ethylbenzene	8.38	10.0	84	75-118
Xylenes, Total	25.4	30.0	85	70-130
Styrene	8.70	10.0	87	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	6.75	10.0	68	61-141
1,1,2,2-Tetrachloroethane	8.02	10.0	80	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	12:12

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F011.D
Lab Code:	KWG0703590-6	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/07	09:55
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/07	12:51
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/07	14:29
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:55

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F100.D
Lab Code:	KWG0703590-5	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/07	12:12
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/07	12:51
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/07	14:29
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007
Time Analyzed: 08:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F002.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703563

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703563-2	J:\MS18\DATA\031307\0313F003.D	03/13/2007	09:02	
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/2007	09:55	
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/2007	10:15	
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/2007	10:34	
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/2007	12:12	
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/2007	12:51	
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/2007	14:29	
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/2007	15:08	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

File ID: J:\MS18\DATA\031307\0313F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	21	0.01	0.448	0.466	4	NA	± 30 %	AverageRF
Vinyl Acetate	20	21	0.01	0.0285	0.0298	4	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.5	0.01	0.213	0.182	-15	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	10	0.01	0.0853	0.0873	2	NA	± 40 %	AverageRF
† Chloromethane	10	9.9	0.10	0.355	0.351	-1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.326	0.329	1	NA	± 20 %	AverageRF
Bromomethane	10	7.7	0.01	0.157	0.120	-23	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	200	0.01	0.0283	0.0287	1	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.01	0.242	0.256	6	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.872	11	NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.259	0.257	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.301	6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.545	10	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.306	6	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.510	4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.443	8	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.364	0.385	6	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.281	6	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.24	5	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.304	7	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.268	9	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.281	5	NA	± 30 %	AverageRF
2-Hexanone	200	190	0.01	0.0294	0.0278	-5	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.310	3	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.792	9	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.6	0.01	0.532	0.455	-15	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.1	0.01	0.318	0.290	-9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0370	0.0413	12	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.1	0.01	0.723	0.584	-19	NA	± 30 %	AverageRF
Dibromochloromethane	10	7.9	0.01	0.427	0.337	-21	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.78	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	8.9	0.01	1.18	1.05	-11	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.30	-11	NA	± 30 %	AverageRF
o-Xylene	10	8.8	0.01	1.35	1.19	-12	NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.945	1.01	7	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.157	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.8	0.30	0.370	0.328	-12	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.05	9	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.5	0.01	0.877	0.835	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260B

Analysis Lot: KWG0703563
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313F002.D	GC/MS Tuning - Bromofluorobenzene	KWG0703563-1	03/13/2007	08:42		03/13/2007	08:57
0313F003.D	Continuing Calibration Verification	KWG0703563-2	03/13/2007	09:02		03/13/2007	09:17
0313F100.D	Lab Control Sample	KWG0703590-5	03/13/2007	09:55		03/13/2007	10:10
0313F005.D	Batch QCMS	KWG0703590-1	03/13/2007	10:15		03/13/2007	10:30
0313F006.D	Batch QCDMS	KWG0703590-2	03/13/2007	10:34		03/13/2007	10:49
0313F007.D	ZZZZZZ	ZZZZZZ	03/13/2007	10:54		03/13/2007	11:09
0313F008.D	ZZZZZZ	ZZZZZZ	03/13/2007	11:13		03/13/2007	11:28
0313F011.D	Method Blank	KWG0703590-6	03/13/2007	12:12		03/13/2007	12:27
0313F012.D	ZZZZZZ	ZZZZZZ	03/13/2007	12:31		03/13/2007	12:46
0313F013.D	TB030207C124	K0701703-002	03/13/2007	12:51		03/13/2007	13:06
0313F014.D	ZZZZZZ	ZZZZZZ	03/13/2007	13:10		03/13/2007	13:25
0313F015.D	ZZZZZZ	ZZZZZZ	03/13/2007	13:30		03/13/2007	13:45
0313F016.D	ZZZZZZ	ZZZZZZ	03/13/2007	13:49		03/13/2007	14:04
0313F017.D	ZZZZZZ	ZZZZZZ	03/13/2007	14:10		03/13/2007	14:25
0313F018.D	DAEGW104C1	K0701703-001	03/13/2007	14:29		03/13/2007	14:44
0313F019.D	ZZZZZZ	ZZZZZZ	03/13/2007	14:49		03/13/2007	15:04
0313F020.D	Batch QC	K0702006-003	03/13/2007	15:08		03/13/2007	15:23
0313F021.D	ZZZZZZ	ZZZZZZ	03/13/2007	15:28		03/13/2007	15:43
0313F022.D	ZZZZZZ	ZZZZZZ	03/13/2007	15:47		03/13/2007	16:02
0313F023.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:07		03/13/2007	16:22
0313F024.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:26		03/13/2007	16:41
0313F025.D	ZZZZZZ	ZZZZZZ	03/13/2007	16:46		03/13/2007	17:01
0313F026.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:06		03/13/2007	17:21
0313F027.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:25		03/13/2007	17:40
0313F028.D	ZZZZZZ	ZZZZZZ	03/13/2007	17:47		03/13/2007	18:02
0313F029.D	ZZZZZZ	ZZZZZZ	03/13/2007	18:06		03/13/2007	18:21
0313F030.D	ZZZZZZ	ZZZZZZ	03/13/2007	18:26		03/13/2007	18:41
0313F034.D	ZZZZZZ	ZZZZZZ	03/13/2007	19:44		03/13/2007	19:59
0313F035.D	ZZZZZZ	ZZZZZZ	03/13/2007	20:03		03/13/2007	20:18

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/13/2007

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: KWG0703590
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104C1	K0701703-001	03/02/07	03/03/07	10ml	10ml	NA	
TB030207C124	K0701703-002	03/02/07	03/03/07	10ml	10ml	NA	
Method Blank	KWG0703590-6	NA	NA	10ml	10ml	NA	
Batch QC	K0702006-003	NA	NA	10ml	10ml	NA	
Batch QCMS	KWG0703590-1	NA	NA	10ml	10ml	NA	
Batch QCDMS	KWG0703590-2	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG0703590-5	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Volatile Organic Compounds

Validation Package

Organic Analysis:
Volatile Organic Compounds

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
DAEGW104C1	K0701703-001	88	109	95
TB030207C124	K0701703-002	88	109	92
Method Blank	KWG0703590-6	91	110	97
Batch QC	K0702006-003	105	109	99
Batch QCMS	KWG0703590-1	102	110	101
Batch QCDMS	KWG0703590-2	104	110	101
Lab Control Sample	KWG0703590-5	81	108	92

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F003.D	**Lab Code:**	KWG0703563-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703563
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	402,584	5.62	180,989	9.07	163,576	11.49
	Upper Limit ==>	805,168	6.12	361,978	9.57	327,152	11.99
	Lower Limit ==>	201,292	5.12	90,495	8.57	81,788	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703590-5	410,000	5.62	177,755	9.07	161,244	11.49
Batch QCMS	KWG0703590-1	415,453	5.62	197,367	9.07	193,579	11.49
Batch QCDMS	KWG0703590-2	413,056	5.62	199,776	9.08	197,260	11.49
Method Blank	KWG0703590-6	393,497	5.62	177,163	9.08	164,037	11.49
TB030207C124	K0701703-002	398,868	5.62	179,821	9.08	159,552	11.49
DAEGW104C1	K0701703-001	398,595	5.62	180,118	9.08	163,203	11.49
Batch QC	K0702006-003	398,540	5.62	191,622	9.08	186,069	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

		Batch QCMS KWG0703590-1 Matrix Spike			Batch QCDMS KWG0703590-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	10.9	10.0	109	10.4	10.0	104	65-135	5	35
Benzene	ND	10.5	10.0	105	10.1	10.0	101	65-135	3	35
Trichloroethene (TCE)	ND	10.3	10.0	103	10.0	10.0	100	65-135	3	35
Toluene	ND	10.6	10.0	106	10.3	10.0	103	65-135	3	35
Chlorobenzene	ND	8.36	10.0	84	7.98	10.0	80	65-135	5	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	8.55	10.0	86	57-134
Vinyl Acetate	46.9	50.0	94	10-202
2-Chloroethyl Vinyl Ether	9.14	10.0	91	10-180
Chloromethane	9.64	10.0	96	39-134
Vinyl Chloride	10.5	10.0	105	60-125
Bromomethane	8.94	10.0	89	25-163
Chloroethane	9.32	10.0	93	61-126
Acetone	37.6	50.0	75	65-136
1,1-Dichloroethene	10.4	10.0	104	65-135
Carbon Disulfide	22.0	20.0	110	59-130
Methylene Chloride	11.7	10.0	117	62-122
trans-1,2-Dichloroethene	9.75	10.0	98	72-119
1,1-Dichloroethane	10.3	10.0	103	66-126
2-Butanone (MEK)	44.4	50.0	89	60-143
cis-1,2-Dichloroethene	9.99	10.0	100	74-119
Chloroform	9.32	10.0	93	70-121
1,1,1-Trichloroethane (TCA)	10.2	10.0	102	68-133
Carbon Tetrachloride	9.88	10.0	99	59-147
1,2-Dichloroethane (EDC)	9.41	10.0	94	70-129
Benzene	9.91	10.0	99	65-135
Trichloroethene (TCE)	9.84	10.0	98	65-135
1,2-Dichloropropane	10.0	10.0	100	68-122
Bromodichloromethane	9.87	10.0	99	77-129
2-Hexanone	33.7	50.0	67	58-129
cis-1,3-Dichloropropene	9.55	10.0	96	70-129
Toluene	9.96	10.0	100	65-135
trans-1,3-Dichloropropene	7.64	10.0	76	62-123
1,1,2-Trichloroethane	8.11	10.0	81	76-118
4-Methyl-2-pentanone (MIBK)	39.9	50.0	80	62-131
Tetrachloroethene (PCE)	7.98	10.0	80	71-117
Dibromochloromethane	7.55	10.0	76	71-129
Chlorobenzene	8.23	10.0	82	65-135
Ethylbenzene	8.38	10.0	84	75-118
Xylenes, Total	25.4	30.0	85	70-130
Styrene	8.70	10.0	87	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703590

	Lab Control Sample KWG0703590-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	6.75	10.0	68	61-141
1,1,2,2-Tetrachloroethane	8.02	10.0	80	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	12:12

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F011.D
Lab Code:	KWG0703590-6	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/07	09:55
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/07	12:51
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/07	14:29
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	09:55

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F100.D
Lab Code:	KWG0703590-5	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703590

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/07	10:15
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/07	10:34
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/07	12:12
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/07	12:51
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/07	14:29
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/07	15:08

Organic Analysis:
Volatile Organic Compounds

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: 03/02/2007
Date Received: 03/03/2007

Volatile Organic Compounds

Sample Name: DAEGW104C1
Lab Code: K0701703-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Volatile Organic Compounds

Sample Name:	DAEGW104C1	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	95	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F018.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 14:29
Date Quantitated: 03/14/2007 11:42
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MM

Primary Review: KM 3/14/07

Secondary Review: EAh 3/15/7

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0701703
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582902	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F018.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 14:29	**Quant Date:**	03/14/2007 11:42	**Vial:**	16
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-001			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	398595	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	180118	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	163203	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	74556	8.76	88	76-114	OK
1	Toluene-d8	7.49	0.00	0.00	98	420635	10.88	109	88-110	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	149362	9.46	95	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.39	-0.01	0.00	43	914	0.8100	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride	2.78		0.00	84	695	0.0700	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F018.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 14:29	**Quant Date:**	03/14/2007 11:42	**Vial:**	16
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-001			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0**d**		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

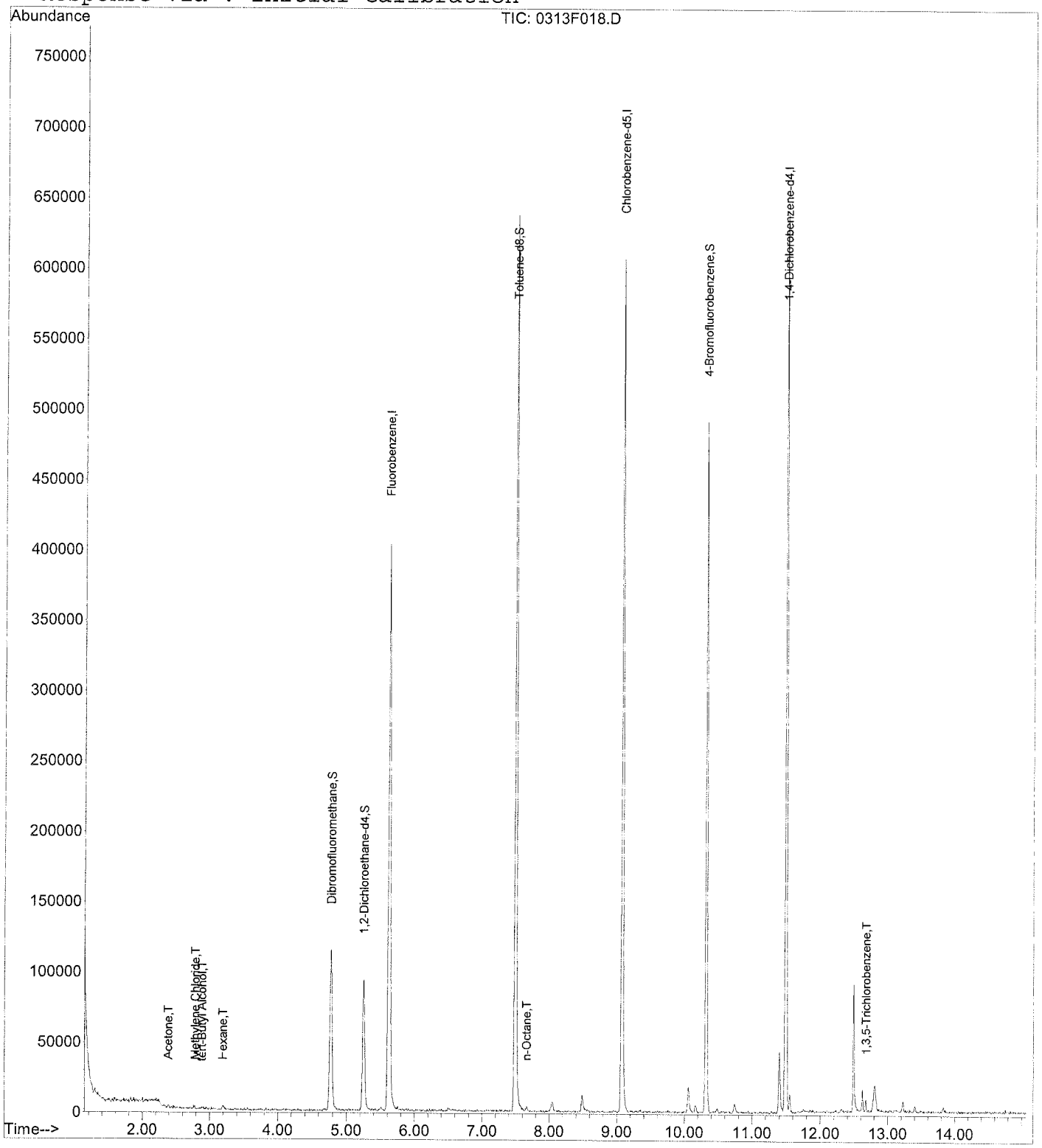
Quantitation Report (QT Reviewed)

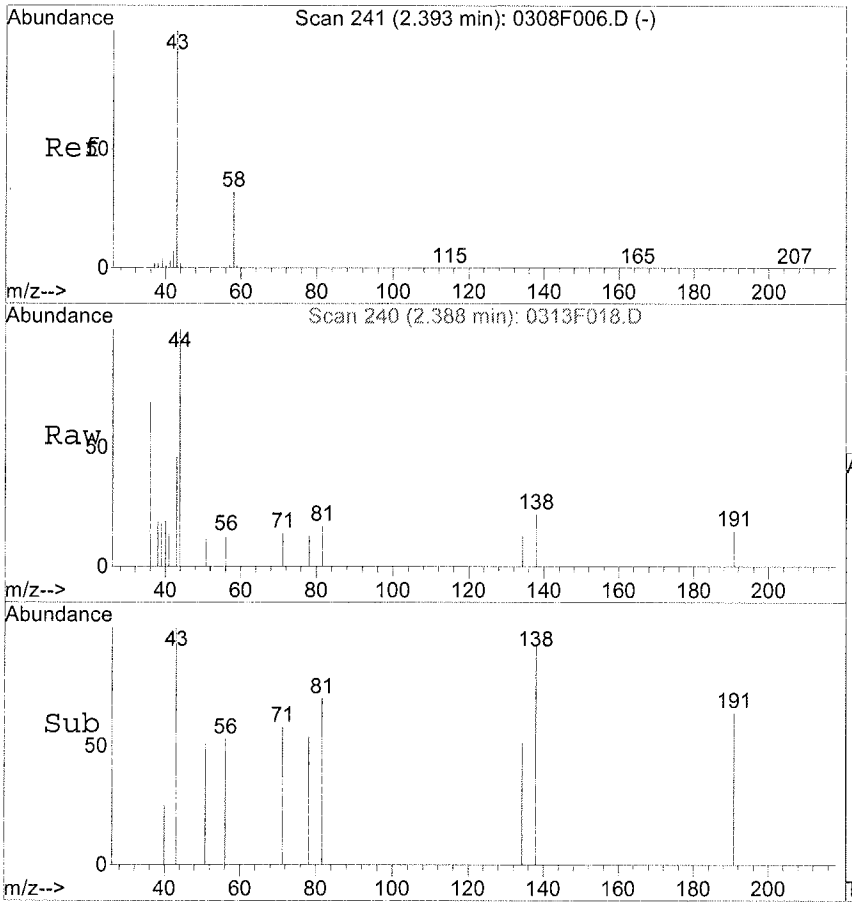
Data File : J:\MS18\DATA\031307\0313F018.D
Acq On : 13 Mar 2007 2:29 pm
Sample : K1703-001
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:42 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00

Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

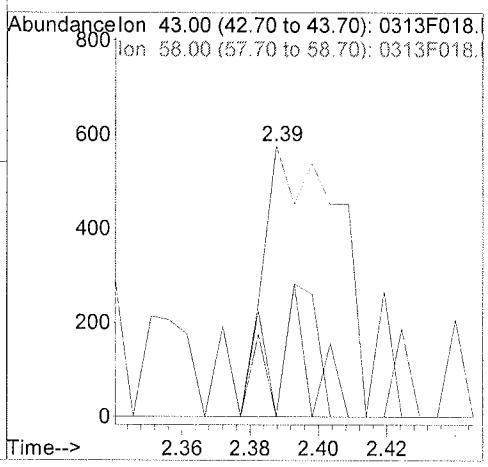


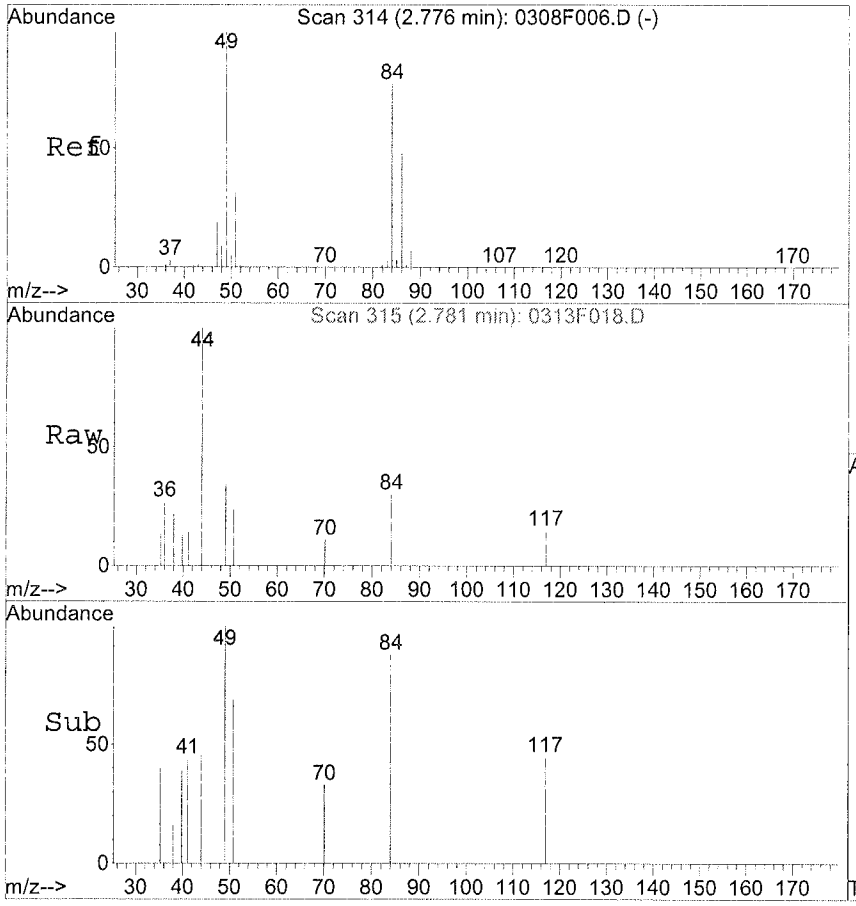


#13
Acetone
Concen: 0.81 PPB
RT: 2.39 min Scan# 240
Delta R.T. -0.01 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion: 43 Resp: 914

Ion	Ratio	Lower	Upper
43	100		
58	0.0	1.7	61.7#
42	0.0	0.0	36.8

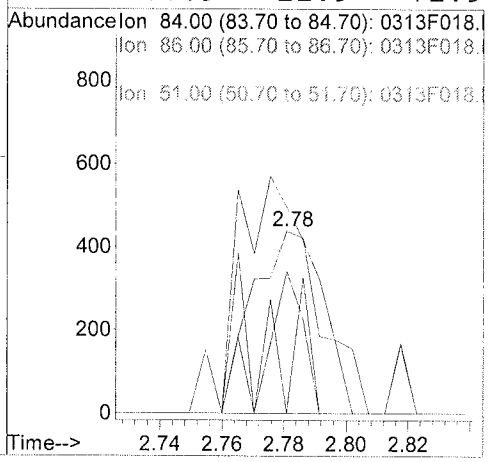


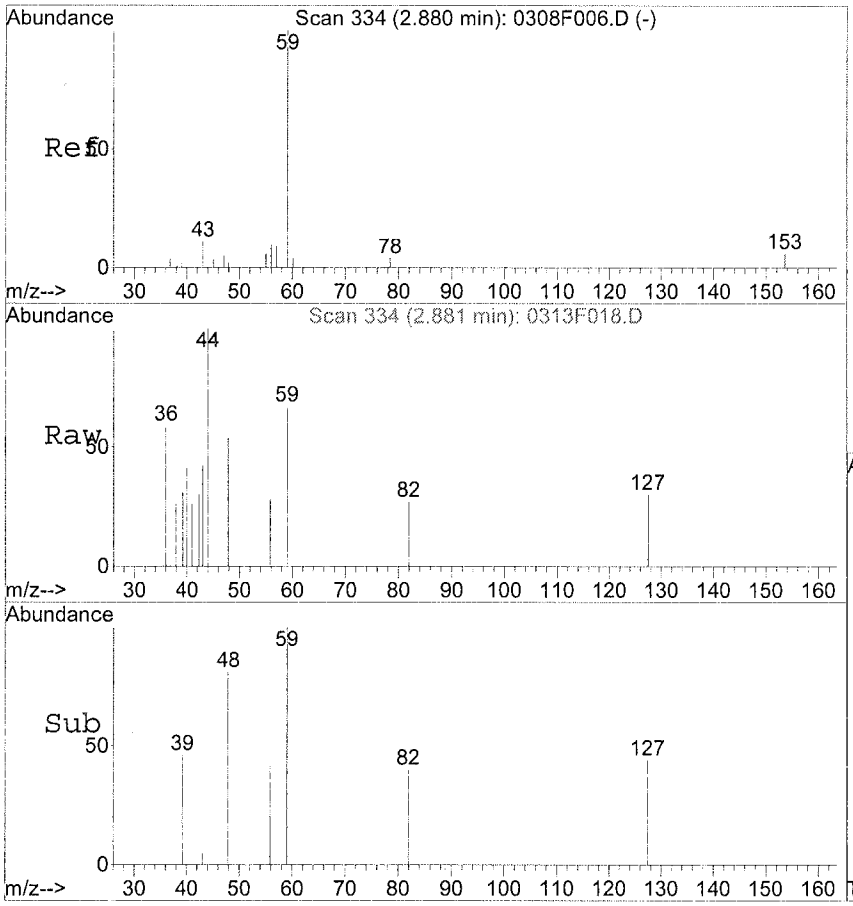


#18
Methylene Chloride
Concen: 0.07 PPB
RT: 2.78 min Scan# 315
Delta R.T. 0.01 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion: 84 Resp: 695

Ion	Ratio	Lower	Upper
84	100		
86	0.0	32.9	92.9#
49	113.2	99.7	159.7
51	77.9	11.9	71.9#

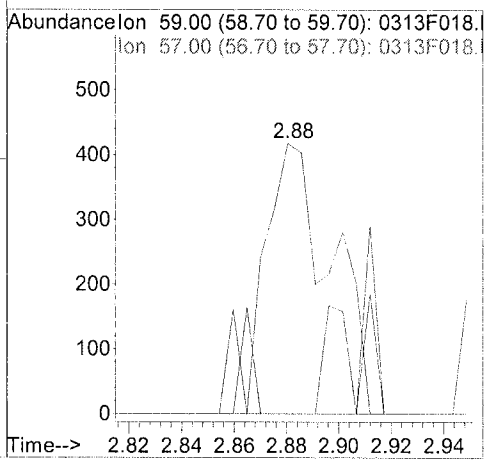


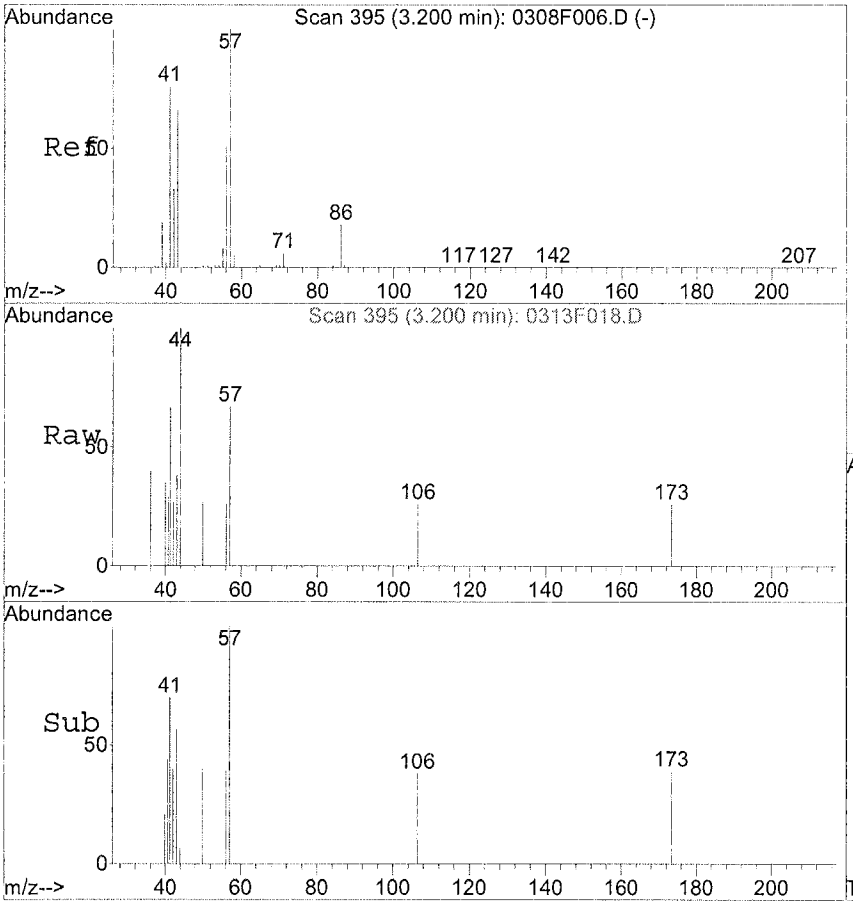


#19
tert-Butyl Alcohol
Concen: 3.41 PPB
RT: 2.88 min Scan# 334
Delta R.T. 0.00 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion: 59 Resp: 767

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	38.5
60	0.0	0.0	33.5

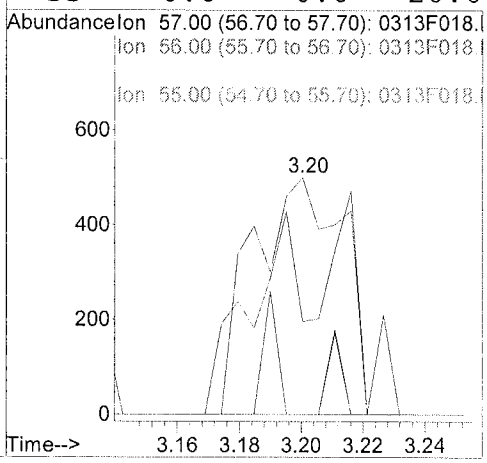


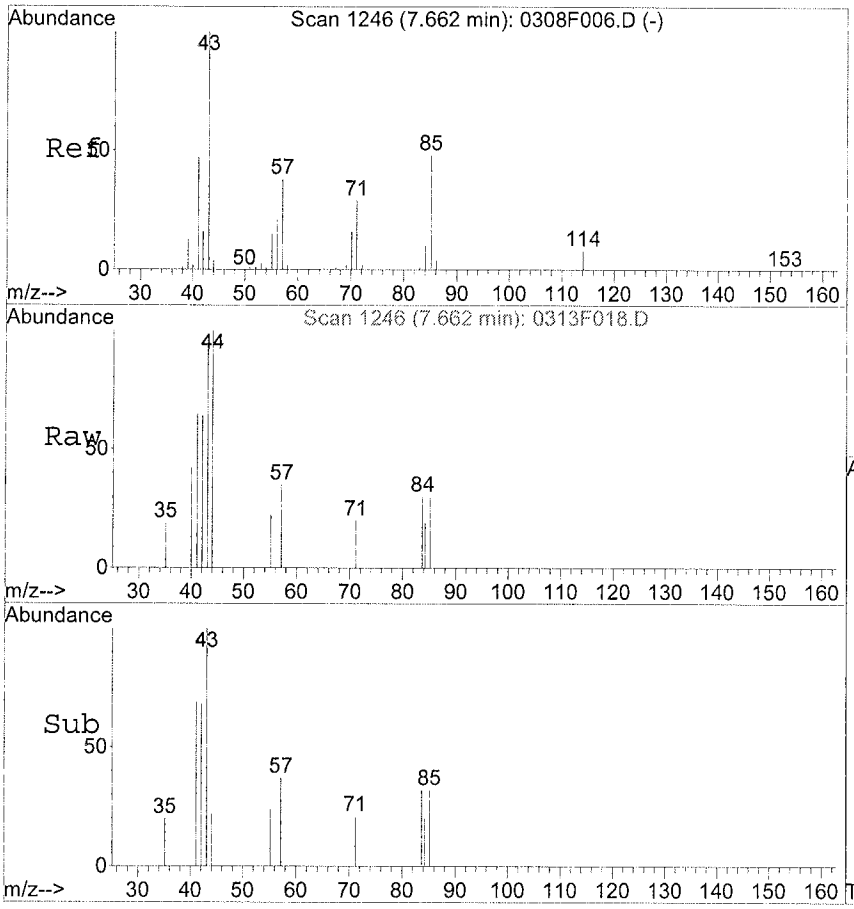


#23
Hexane
Concen: 0.09 PPB
RT: 3.20 min Scan# 395
Delta R.T. 0.00 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion: 57 Resp: 1012

Ion	Ratio	Lower	Upper
57	100		
56	39.2	21.1	81.1
71	0.0	0.0	35.9
55	0.0	0.0	20.0

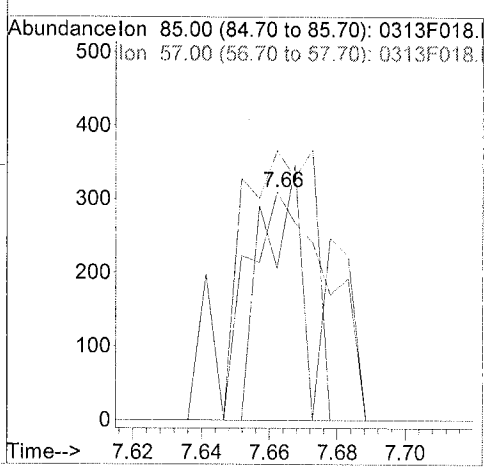


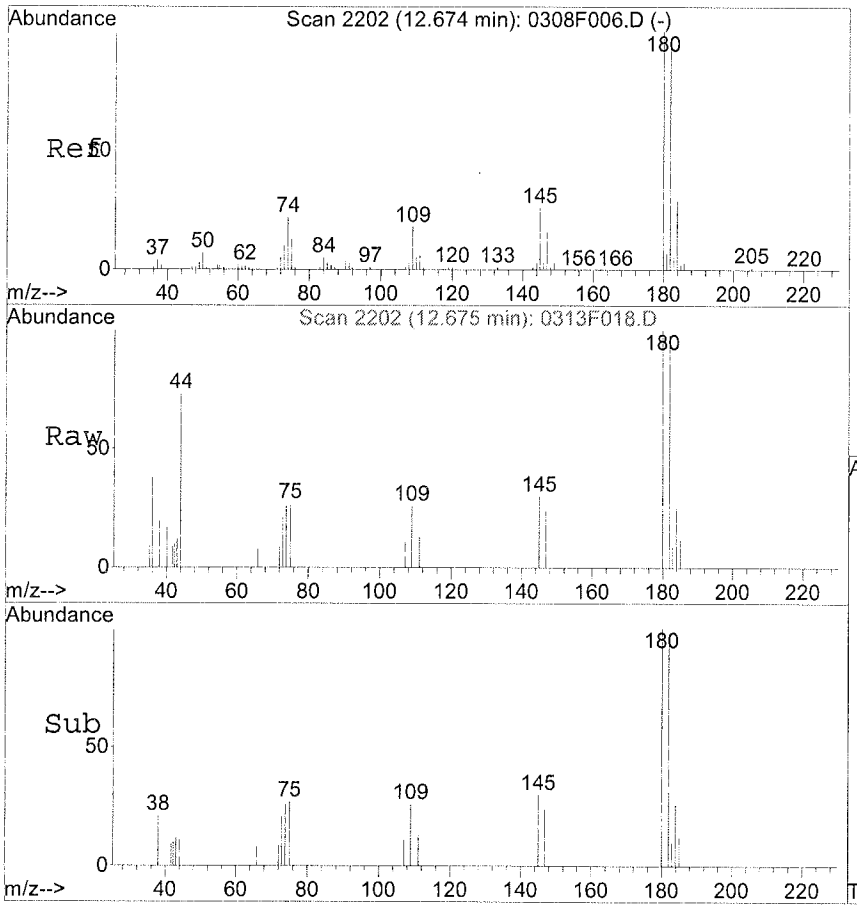


#61
n-Octane
Concen: 0.11 PPB
RT: 7.66 min Scan# 1246
Delta R.T. 0.00 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion: 85 Resp: 509

Ion	Ratio	Lower	Upper
85	100		
57	118.1	47.9	107.9#
71	66.5	31.3	91.3

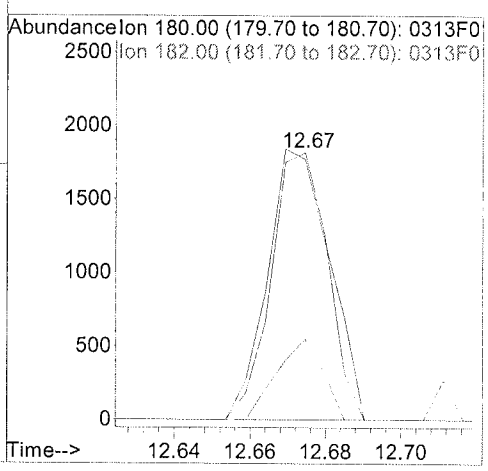




#99
1,3,5-Trichlorobenzene
Concen: 0.08 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F018.D
Acq: 13 Mar 2007 2:29 pm

Tgt Ion:180 Resp: 1883

Ion	Ratio	Lower	Upper
180	100		
182	97.5	64.4	124.4
145	30.3	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: 03/02/2007
Date Received: 03/03/2007

Volatile Organic Compounds

Sample Name: TB030207C124
Lab Code: K0701703-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Volatile Organic Compounds

Sample Name:	TB030207C124	**Units:**	ug/L
Lab Code:	K0701703-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F013.D
Lab ID: K0701703-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 12:51
Date Quantitated: 03/14/2007 11:34
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MEL

Primary Review: KA 3/14/07

Secondary Review: R-A h 3/15/7

Printed: 03/14/2007 13:36:13
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0701703
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582903	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F013.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:51	**Quant Date:**	03/14/2007 11:34	**Vial:**	11
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	398868	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	179821	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	159552	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.26	0.01	0.00	65	74711	8.78	88	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	419972	10.85	109	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	144448	9.16	92	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40		0.00	43	2026	1.79	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride	2.77	-0.01	0.00	84	1041	0.1000	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform	4.55		0.00	83	884m	0.0500	0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F013.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:51	**Quant Date:**	03/14/2007 11:34	**Vial:**	11
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701703-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene	7.56	-0.01	0.00	92	2141	0.0700	0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

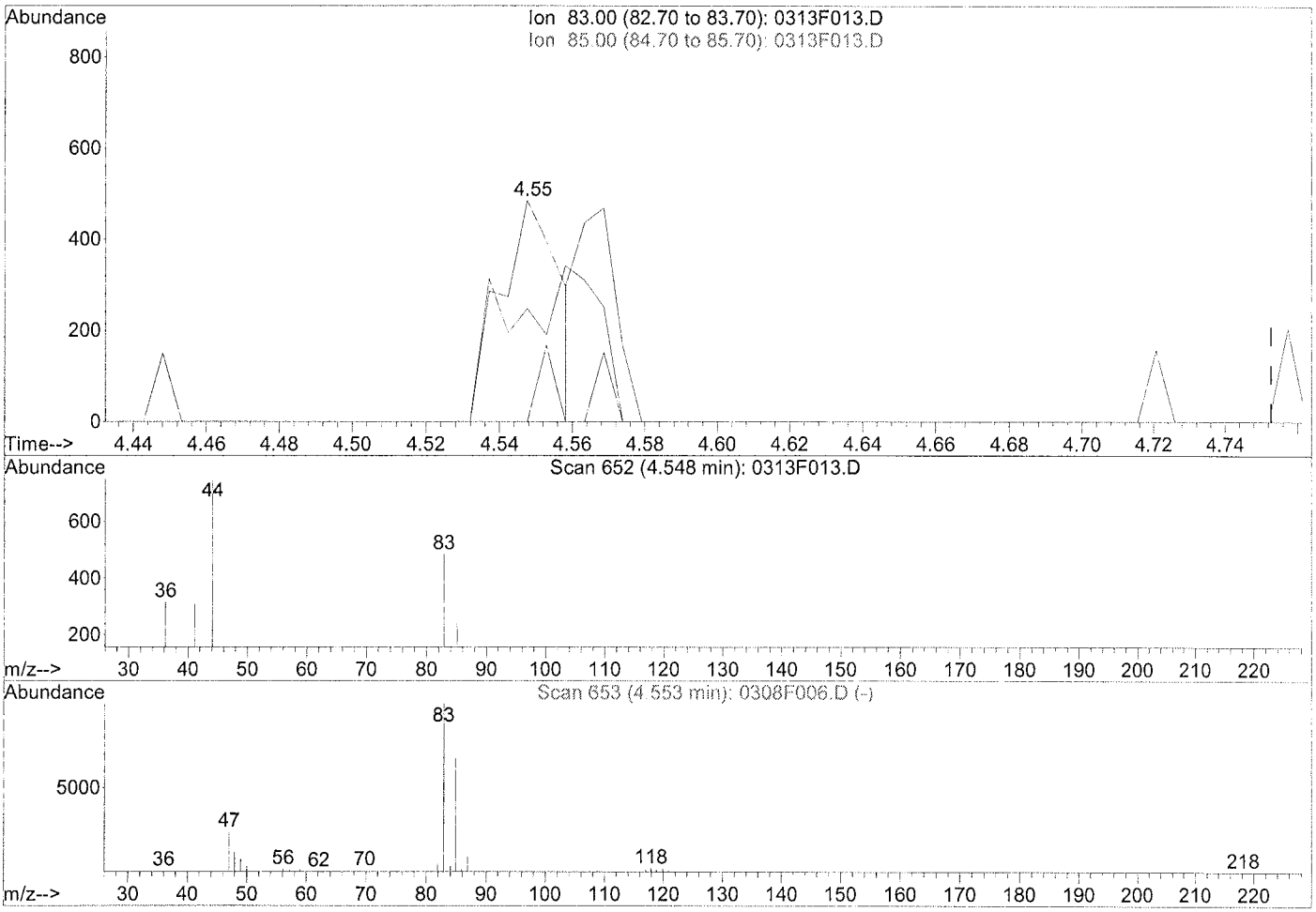
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F013.D
Acq On : 13 Mar 2007 12:51 pm
Sample : K1703-002 TB34432
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:33 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F013.D

(37) Chloroform (CT)

4.55min 0.03PPB

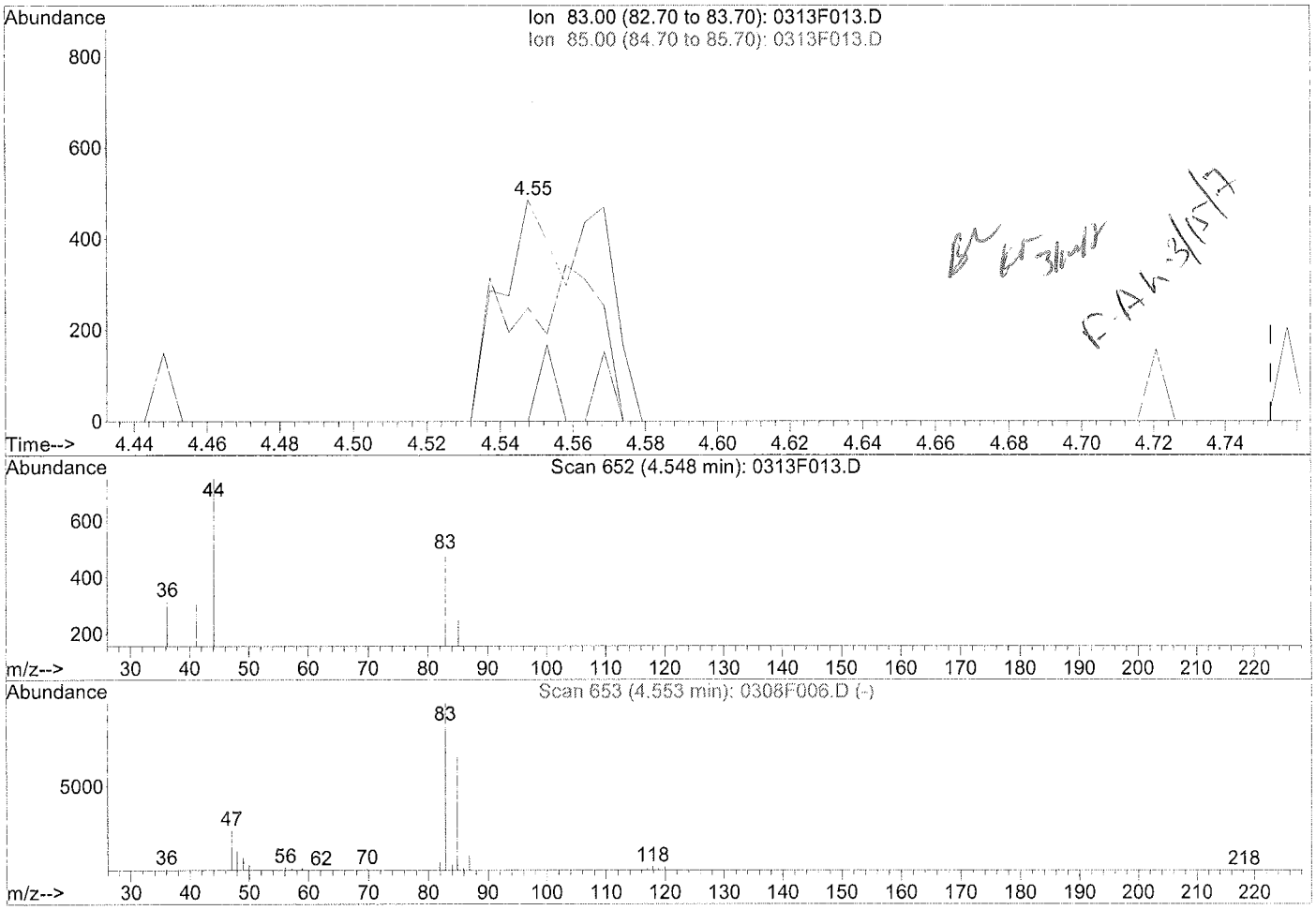
response 547

Ion	Exp%	Act%
83.00	100	100
85.00	67.70	51.13
47.00	23.90	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F013.D Vial: 11
Acq On : 13 Mar 2007 12:51 pm Operator:
Sample : K1703-002 TB34432 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:34 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F013.D

(37) Chloroform (CT)

4.55min 0.05PPB m

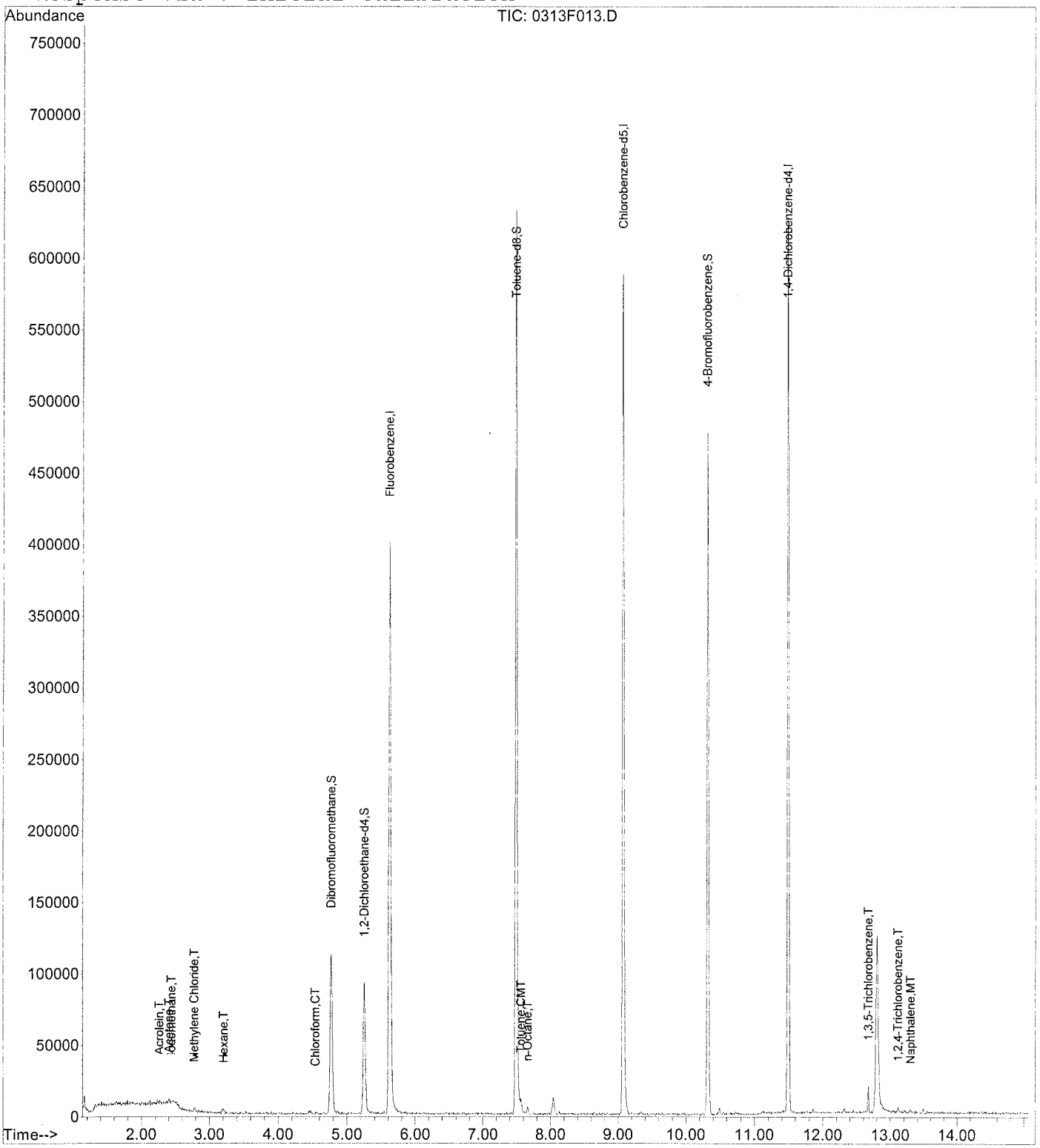
response 884

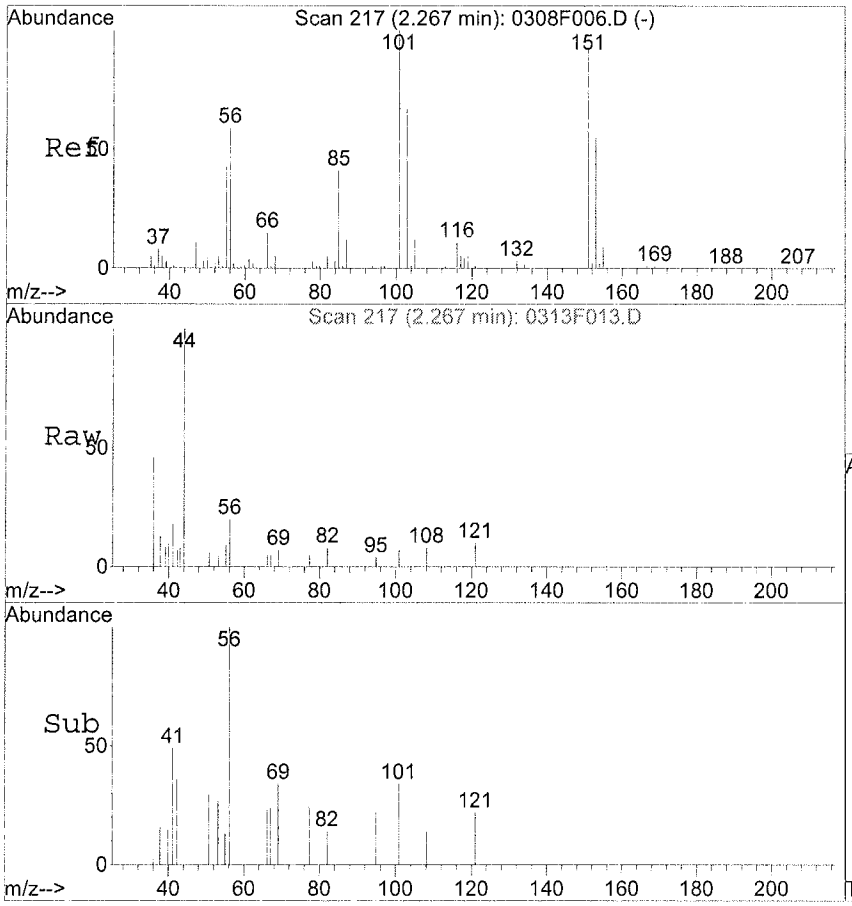
Ion	Exp%	Act%
83.00	100	100
85.00	67.70	51.13
47.00	23.90	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F013.D Vial: 11
Acq On : 13 Mar 2007 12:51 pm Operator:
Sample : K1703-002 TB34432 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:34 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

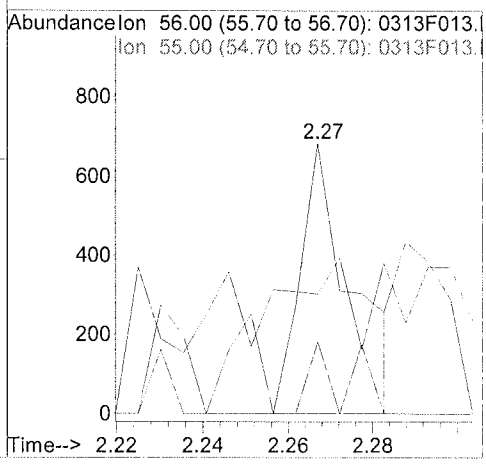


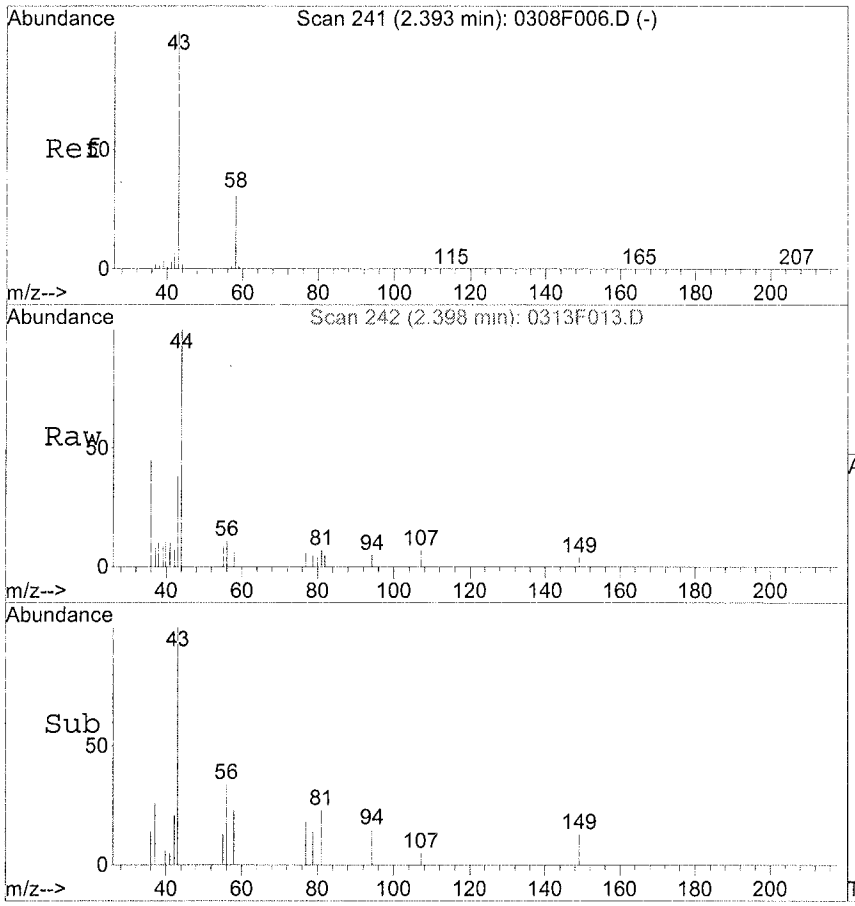


#10
Acrolein
Concen: 3.40 PPB
RT: 2.27 min Scan# 217
Delta R.T. 0.00 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 56 Resp: 703

Ion	Ratio	Lower	Upper
56	100		
55	7.6	42.9	102.9#
53	26.5	0.0	37.7

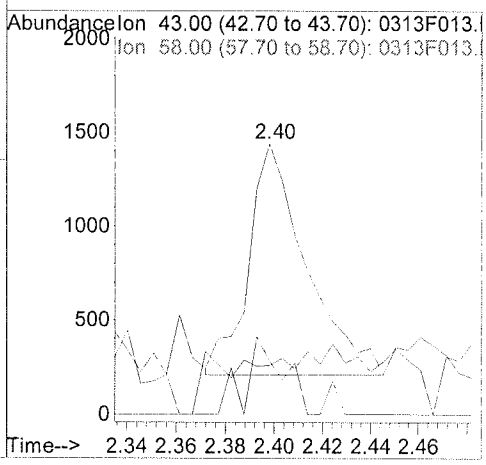


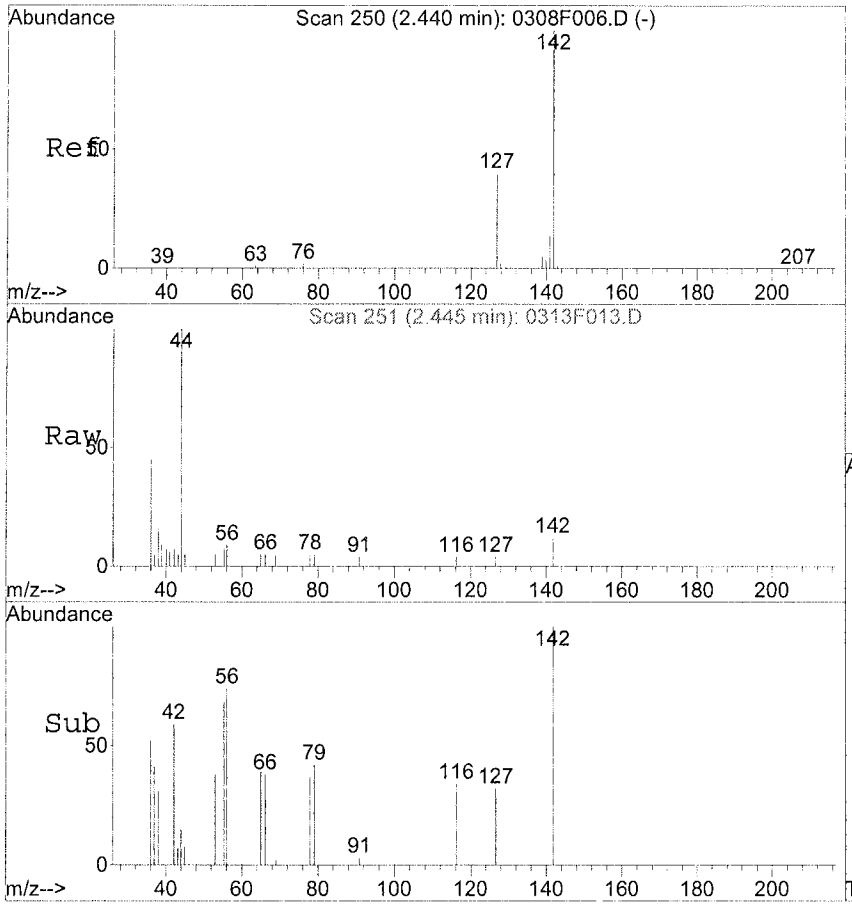


#13
Acetone
Concen: 1.79 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 43 Resp: 2026

Ion	Ratio	Lower	Upper
43	100		
58	23.1	1.7	61.7
42	0.0	0.0	36.8

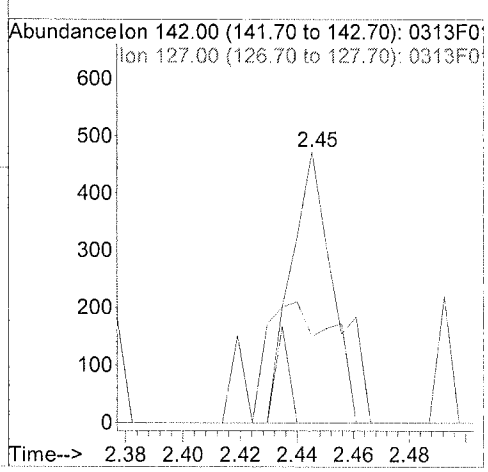


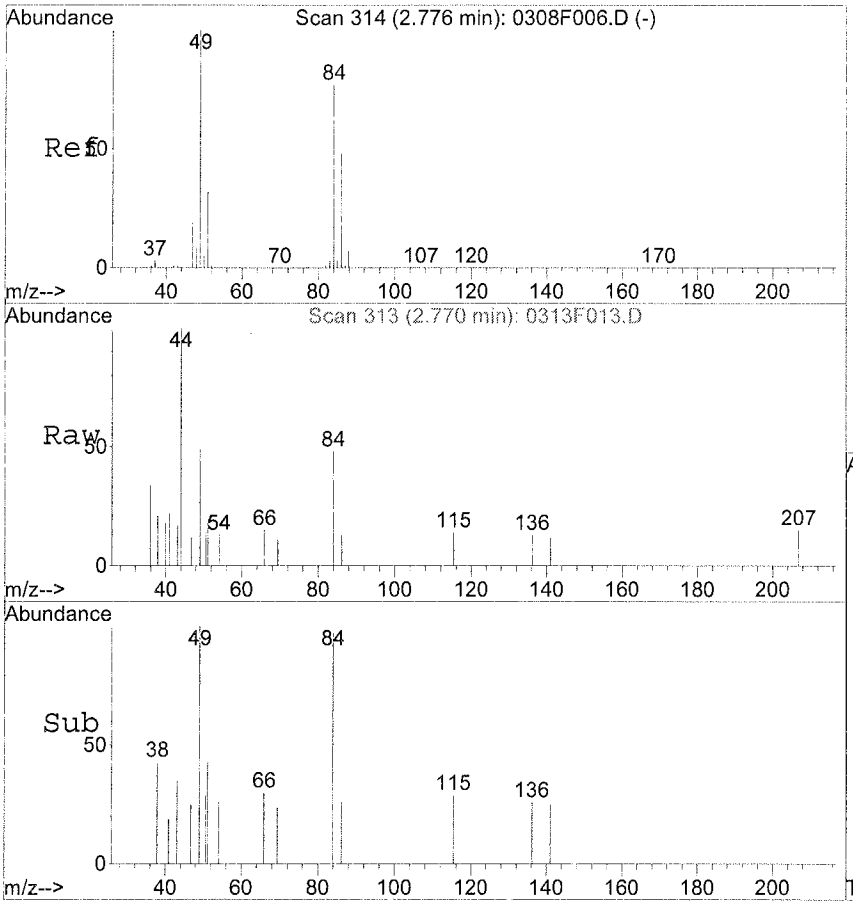


#14
Iodomethane
Concen: 0.06 PPB
RT: 2.45 min Scan# 251
Delta R.T. 0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion:142 Resp: 616

Ion	Ratio	Lower	Upper
142	100		
127	31.8	9.7	69.7
141	0.0	0.0	44.1

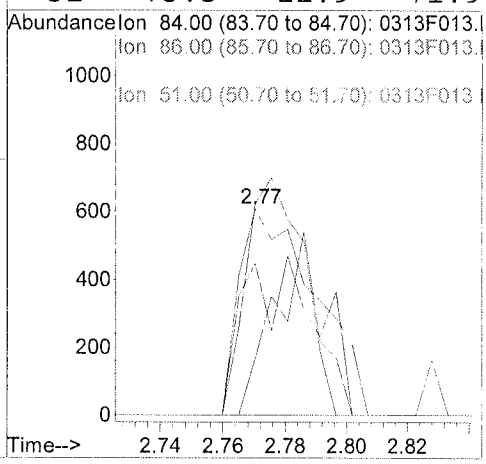


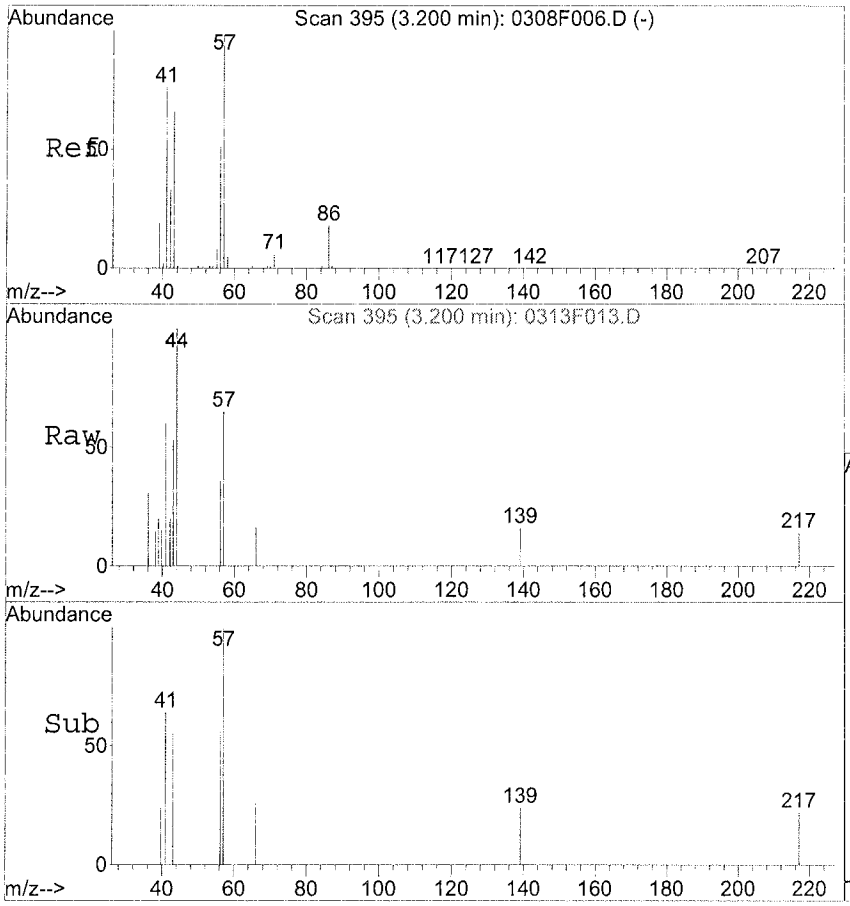


#18
Methylene Chloride
Concen: 0.10 PPB
RT: 2.77 min Scan# 313
Delta R.T. -0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 84 Resp: 1041

Ion	Ratio	Lower	Upper
84	100		
86	27.5	32.9	92.9#
49	102.6	99.7	159.7
51	73.5	11.9	71.9#

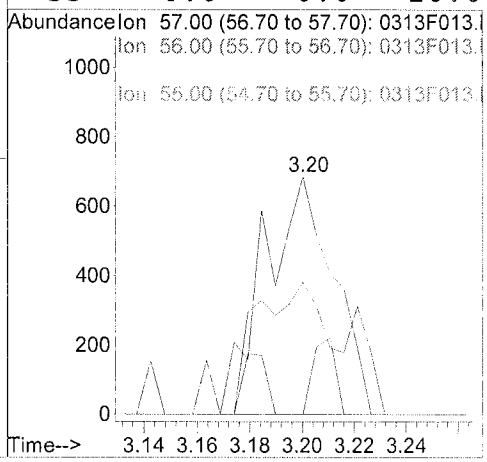


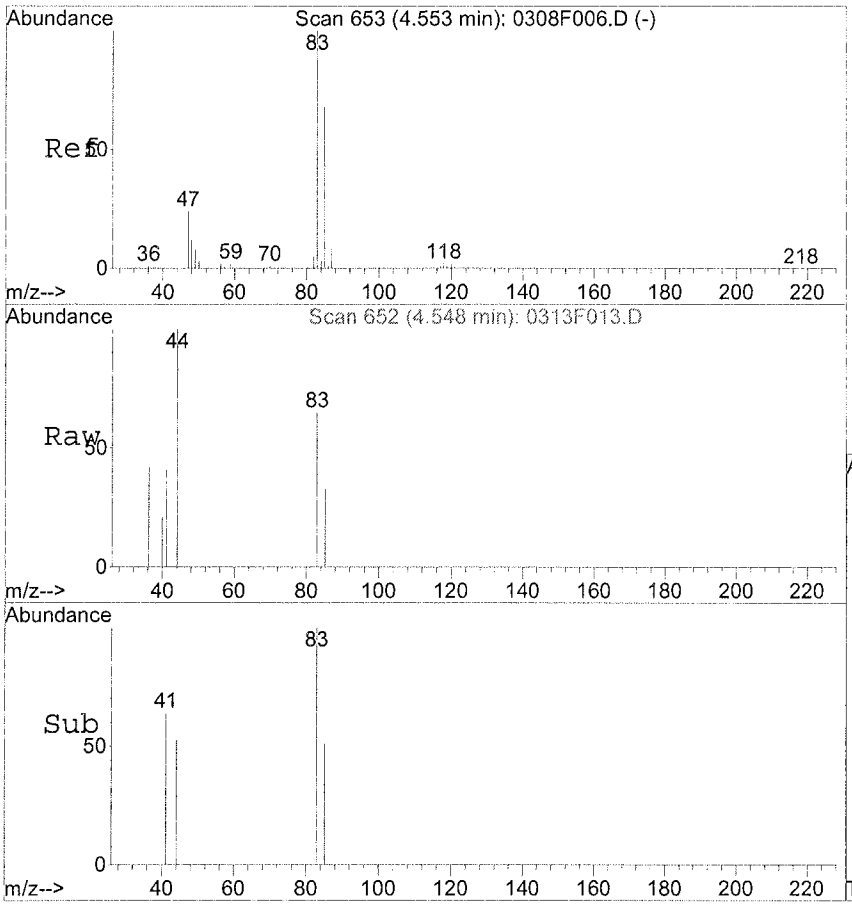


#23
Hexane
Concen: 0.11 PPB
RT: 3.20 min Scan# 395
Delta R.T. 0.00 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 57 Resp: 1266

Ion	Ratio	Lower	Upper
57	100		
56	55.8	21.1	81.1
71	0.0	0.0	35.9
55	0.0	0.0	20.0

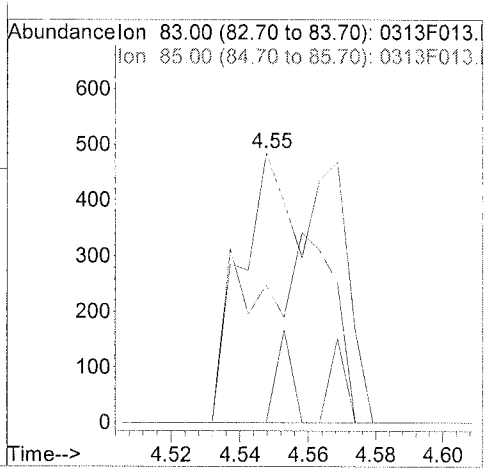


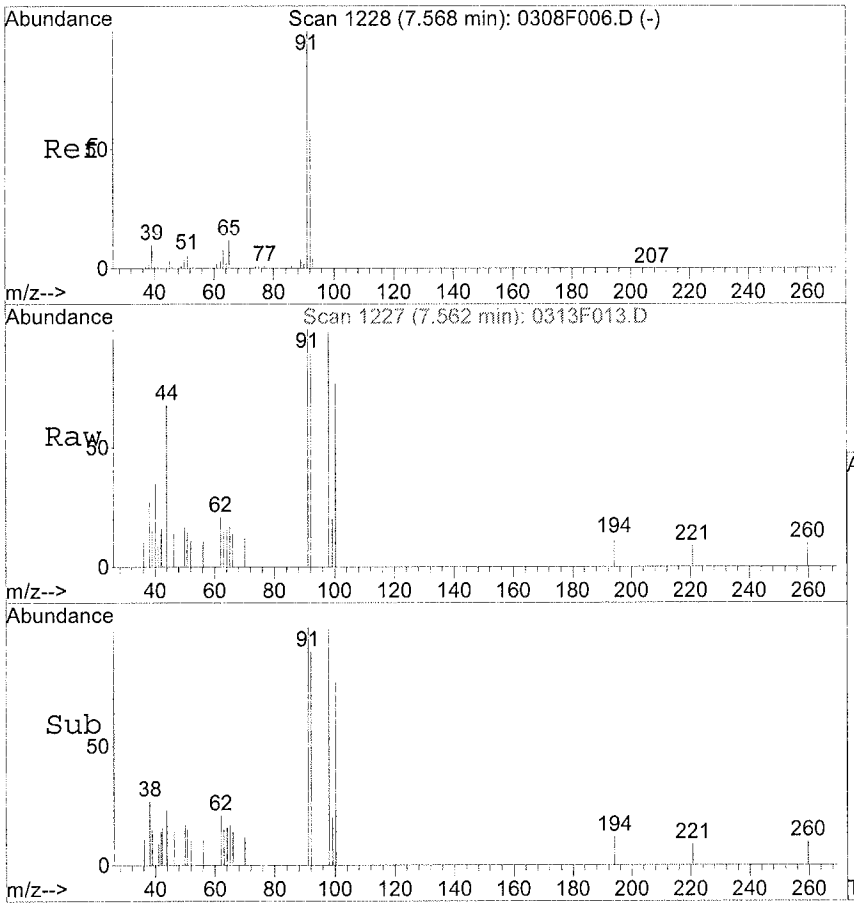


#37
Chloroform
Concen: 0.05 PPB m
RT: 4.55 min Scan# 652
Delta R.T. -0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 83 Resp: 884

Ion	Ratio	Lower	Upper
83	100		
85	51.1	37.7	97.7
47	0.0	0.0	53.9

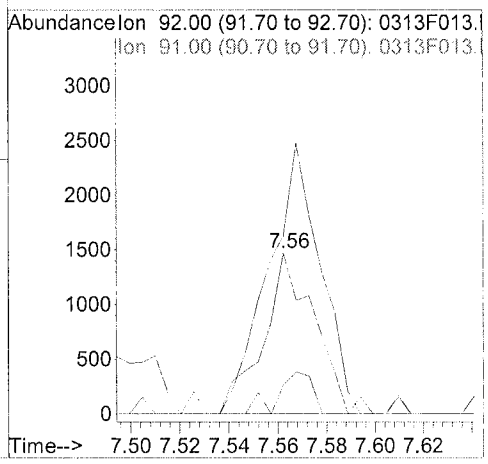


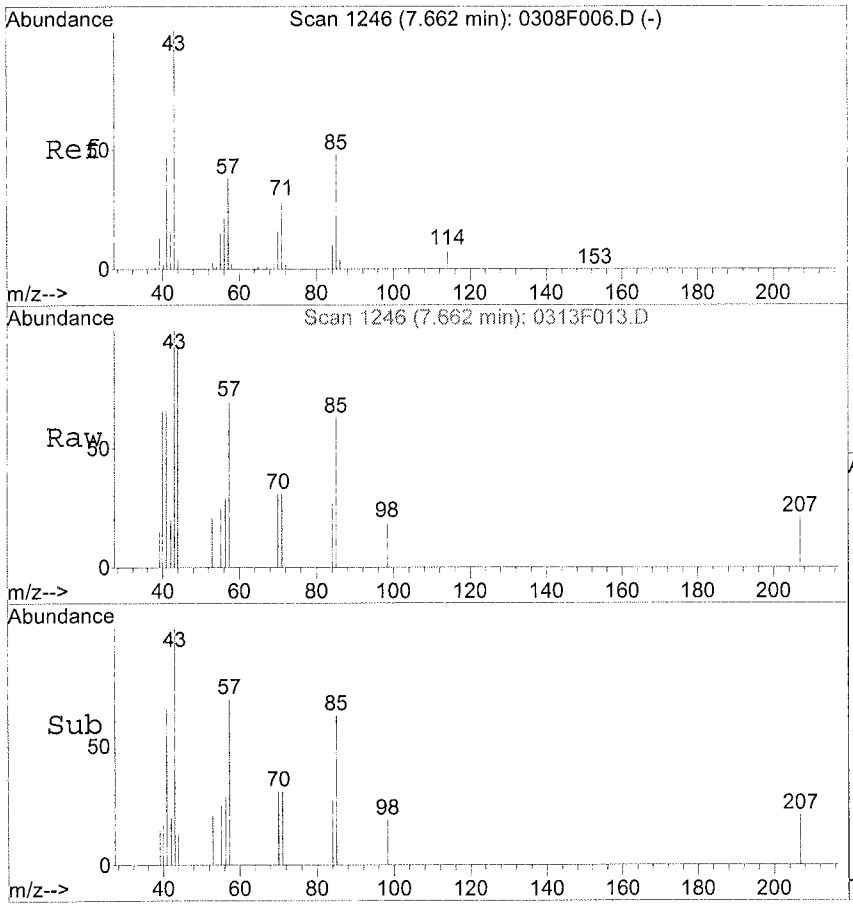


#59
Toluene
Concen: 0.07 PPB
RT: 7.56 min Scan# 1227
Delta R.T. -0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 92 Resp: 2141

Ion	Ratio	Lower	Upper
92	100		
91	110.7	141.7	201.7#
65	18.3	0.0	50.4

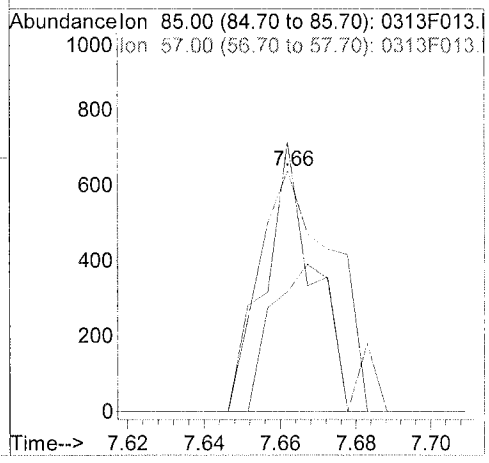


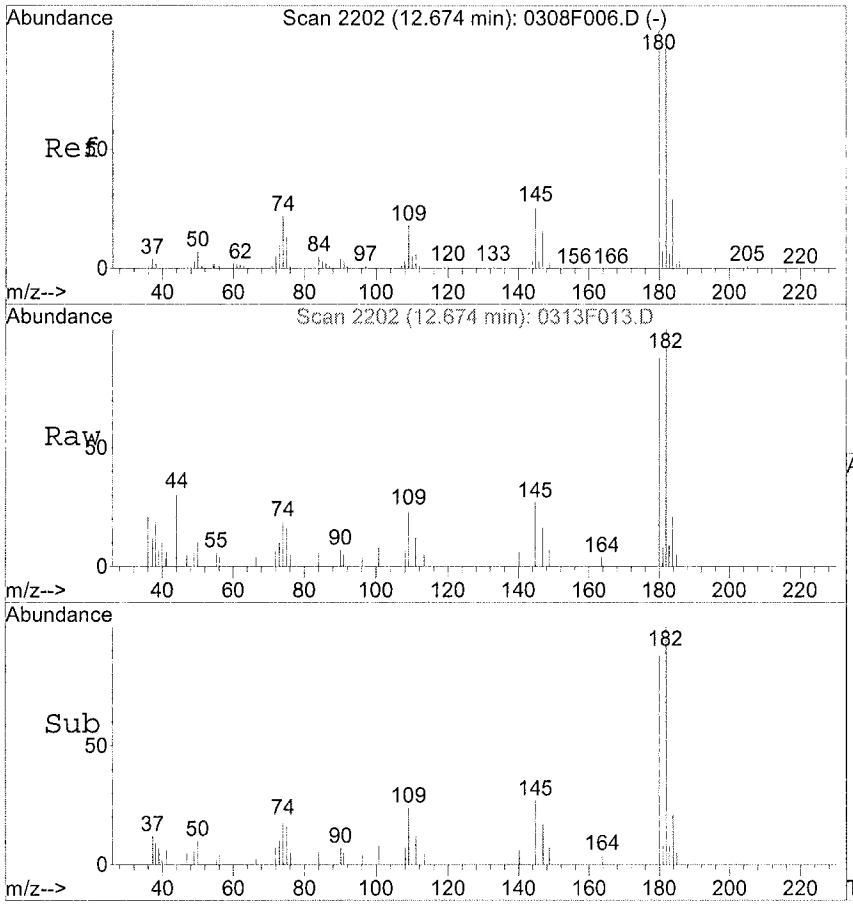


#61
n-Octane
Concen: 0.19 PPB
RT: 7.66 min Scan# 1246
Delta R.T. 0.00 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion: 85 Resp: 848

Ion	Ratio	Lower	Upper
85	100		
57	112.1	47.9	107.9#
71	49.7	31.3	91.3

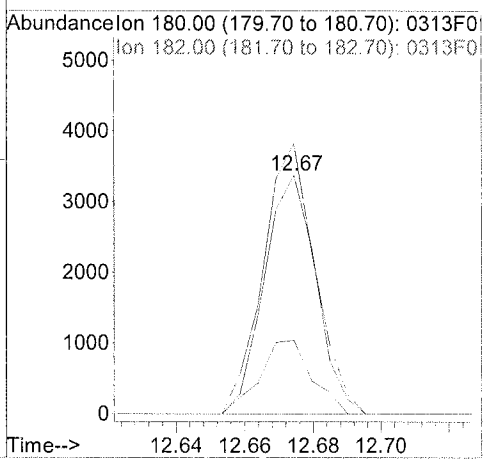


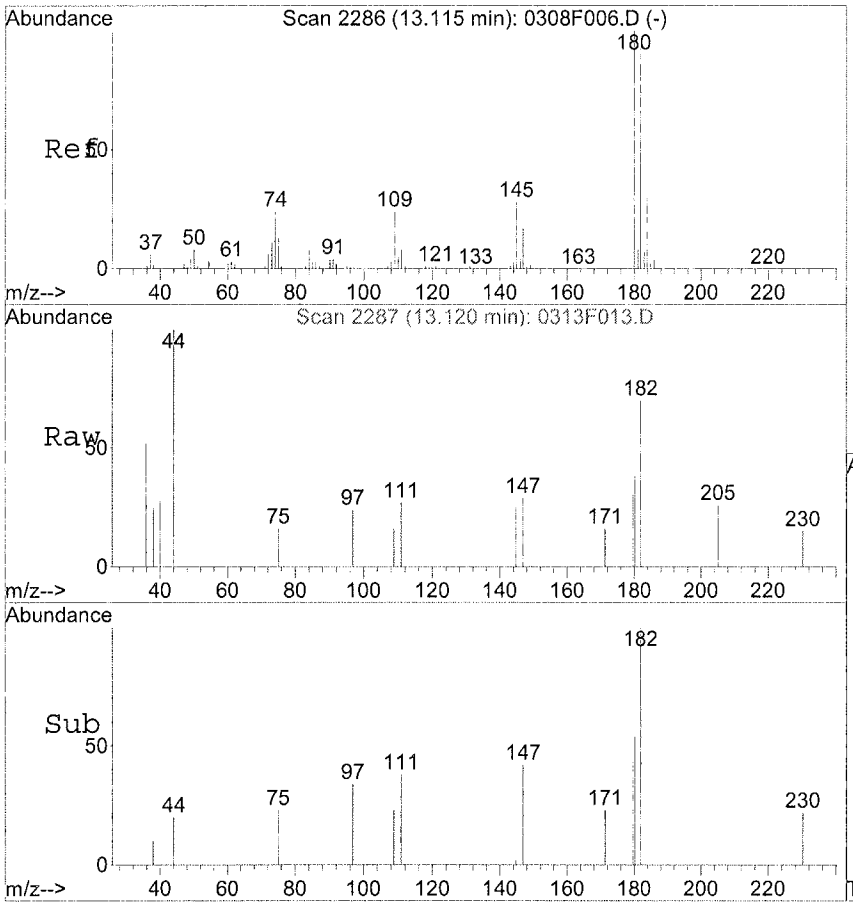


#99
1,3,5-Trichlorobenzene
Concen: 0.15 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion:180 Resp: 3526

Ion	Ratio	Lower	Upper
180	100		
182	113.3	64.4	124.4
145	30.8	0.0	55.5

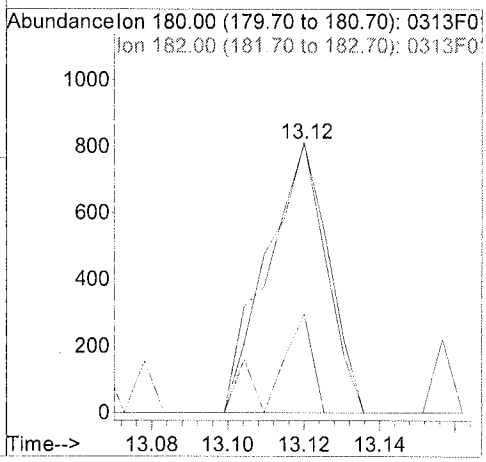


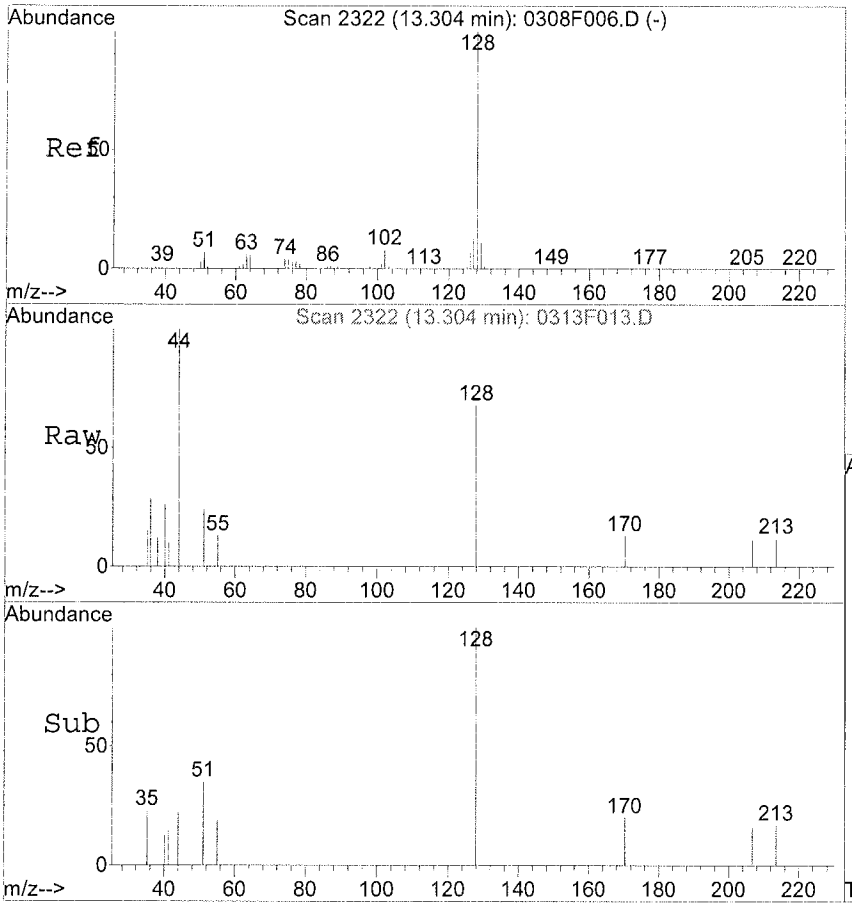


#100
1,2,4-Trichlorobenzene
Concen: 0.05 PPB
RT: 13.12 min Scan# 2287
Delta R.T. 0.01 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion:180 Resp: 905

Ion	Ratio	Lower	Upper
180	100		
182	100.6	66.5	126.5
145	36.6	0.0	58.1

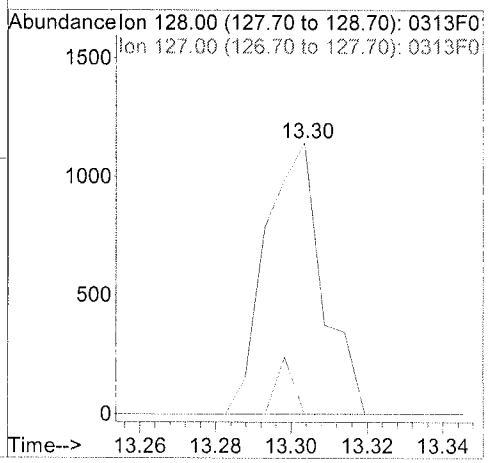




#102
Naphthalene
Concen: 0.05 PPB
RT: 13.30 min Scan# 2322
Delta R.T. 0.00 min
Lab File: 0313F013.D
Acq: 13 Mar 2007 12:51 pm

Tgt Ion:128 Resp: 1191

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.7
102	0.0	0.0	38.4



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0703590-6

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703590-6	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	97	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F011.D
Lab ID: KWG0703590-6
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 12:12
Date Quantitated: 03/13/2007 14:13
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NC
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NC
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KL 3/13/07

Secondary Review: F.Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582925	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	393497	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	177163	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	164037	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	77464	9.31	93	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	76471	9.11	91	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	419881	11.00	110	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	149913	9.65	97	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.17	U	
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	Dichlorofluoromethane (CFC 21				67	0		0.40	U	
1	Trichlorofluoromethane				101	0		0.14	U	
1	Ethyl Ether				59	0		0.058	U	
1	Acrolein				56	0d		6.7	U	
1	Trichlorotrifluoroethane				151	0		0.14	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40		0.00	43	1122	1.01	4.1	U	
1	Iodomethane	2.43	-0.01	0.00	142	1152	0.1000	0.38	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	3-Chloro-1-propene				76	0d		0.16	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile				40	0d		7.5	U	
1	Methylene Chloride	2.77	-0.01	0.00	84	1118	0.1100	0.20	U	
1	tert-Butyl Alcohol				59	0		1.1	U	
1	Acrylonitrile				53	0		0.54	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	n-Hexane	3.20		0.00	57	2075	0.1900	0.190	J	
1	Diisopropyl Ether				45	0		0.25	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	Chloroprene				53	0		0.35	U	
1	tert-Butyl Ethyl Ether				59	0		0.075	U	
1	2,2-Dichloropropane				77	0		0.18	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Propionitrile				54	0		1.3	U	
1	Ethyl Acetate				61	0		0.62	U	
1	Methacrylonitrile				67	0		0.45	U	
1	Bromochloromethane				128	0		0.17	U	
1	Tetrahydrofuran				71	0		0.84	U	
1	Chloroform				83	0d		0.14	U	
1	tert-Butyl Formate				59	0		0.18	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	1,1-Dichloropropene				75	0		0.15	U	
1	Isobutyl Alcohol				43	0		7.8	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	tert-Amyl Methyl Ether				55	0		0.15	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Dibromomethane				93	0		0.12	U	
1	Methyl Methacrylate				69	0		0.36	U	
1	1,4-Dioxane				88	0		26	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Nitropropane				43	0d		2.0	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene				92	0d		0.11	U	
2	n-Octane	7.66		0.00	85	1139	0.2500	0.29	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	Ethyl Methacrylate				69	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	1,3-Dichloropropane				76	0		0.15	U	
2	Dibromochloromethane				129	0		0.11	U	
2	1,2-Dibromoethane (EDB)				107	0		0.099	U	
2	1-Chlorohexane				91	0d		0.13	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	1,1,1,2-Tetrachloroethane				131	0		0.12	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
2	Isopropylbenzene				105	0d		0.11	U	
2	cis-1,4-Dichloro-2-butene				89	0		0.60	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	
3	trans-1,4-Dichloro-2-butene				53	0		0.60	U	
3	Bromobenzene				156	0		0.18	U	
3	n-Propylbenzene				91	0d		0.098	U	
3	1,2,3-Trichloropropane				110	0		0.22	U	
3	2-Chlorotoluene				91	0d		0.12	U	
3	1,3,5-Trimethylbenzene				105	0d		0.13	U	
3	4-Chlorotoluene				91	0d		0.12	U	
3	tert-Butylbenzene				119	0		0.13	U	
3	1,2,4-Trimethylbenzene				105	0d		0.15	U	
3	sec-Butylbenzene				105	0d		0.13	U	
3	4-Isopropyltoluene				119	0d		0.13	U	
3	1,3-Dichlorobenzene	11.42		0.00	146	1429	0.0500	0.11	U	
3	1,4-Dichlorobenzene	11.51	-0.01	0.00	146	1293	0.0500	0.12	U	
3	n-Butylbenzene	11.86		0.00	91	2568	0.0500	0.23	U	
3	1,2-Dichlorobenzene				146	0d		0.12	U	
3	1,2-Dibromo-3-chloropropane				155	0		1.0	U	
3	1,3,5-Trichlorobenzene	12.67		0.00	180	6502	0.2800	0.35	U	
3	1,2,4-Trichlorobenzene	13.11		0.00	180	1447	0.0800	0.22	U	
3	Hexachlorobutadiene	13.21		0.00	225	945	0.0900	0.28	U	
3	Naphthalene	13.30		0.00	128	2019	0.0900	0.29	U	
3	1,2,3-Trichlorobenzene	13.49		0.00	180	1523	0.1000	0.33	U	
	1,1,2-Trifluoroethane				0	0		1.0	U	NR
	1,1-Dichloropropane				0	0		1.0	U	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F011.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 12:12	**Quant Date:**	03/13/2007 14:13	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703590-6			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

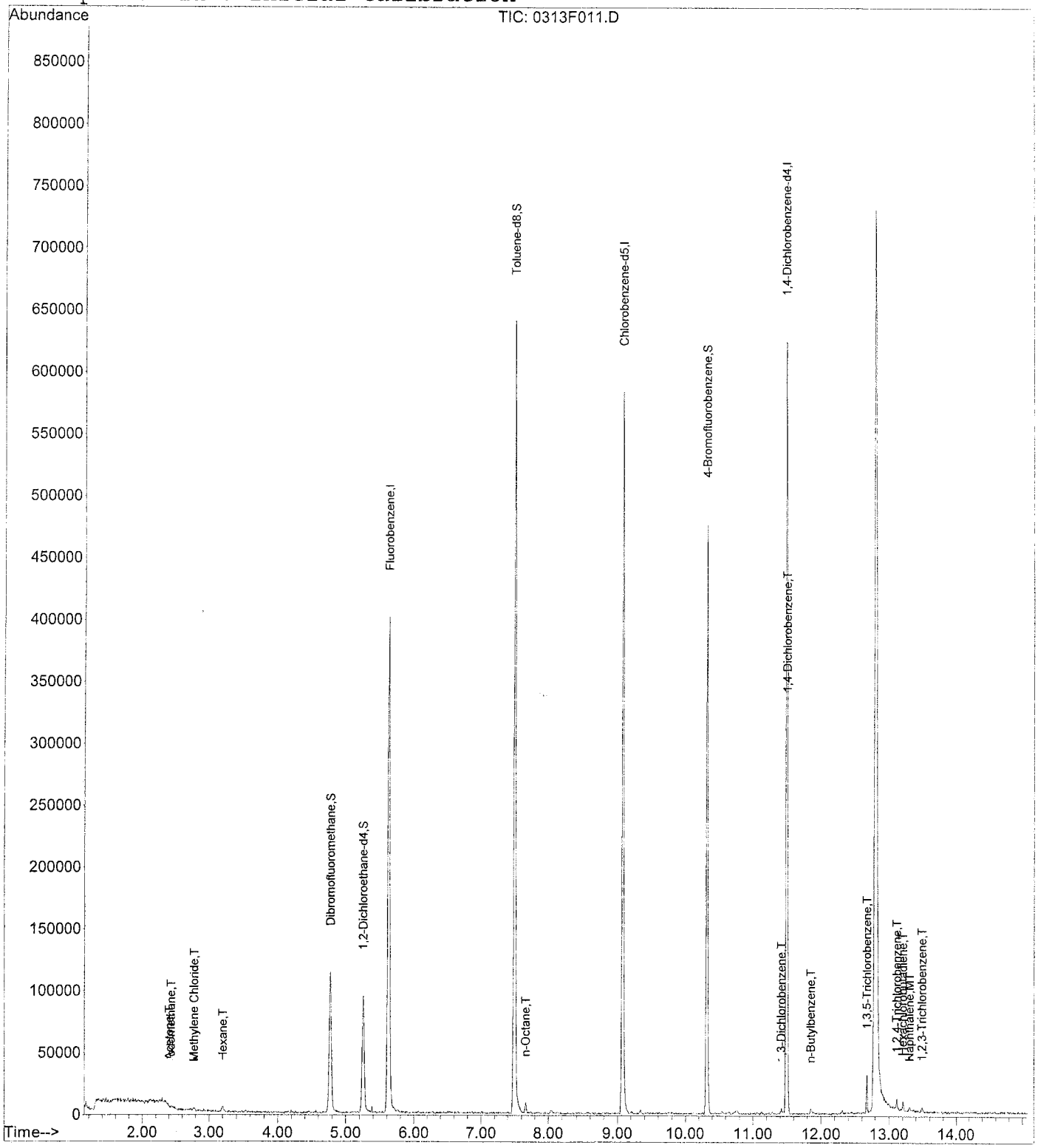
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

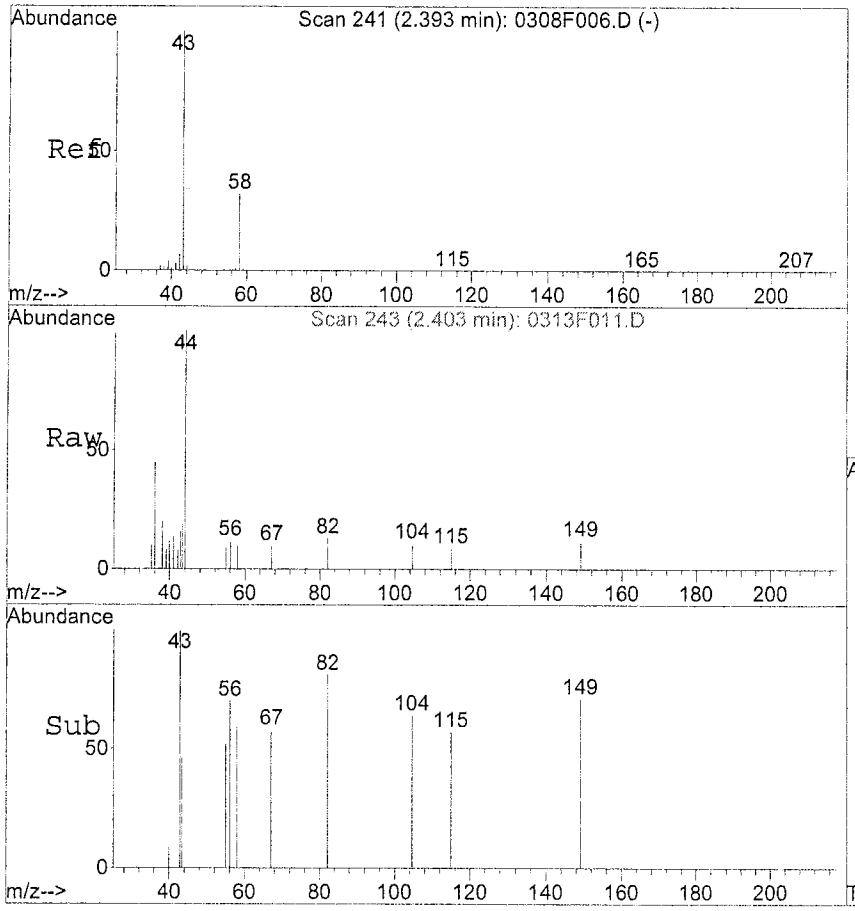
Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F011.D
Acq On : 13 Mar 2007 12:12 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:13 2007

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

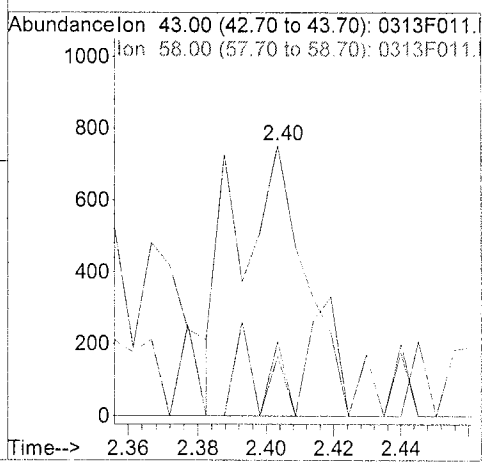


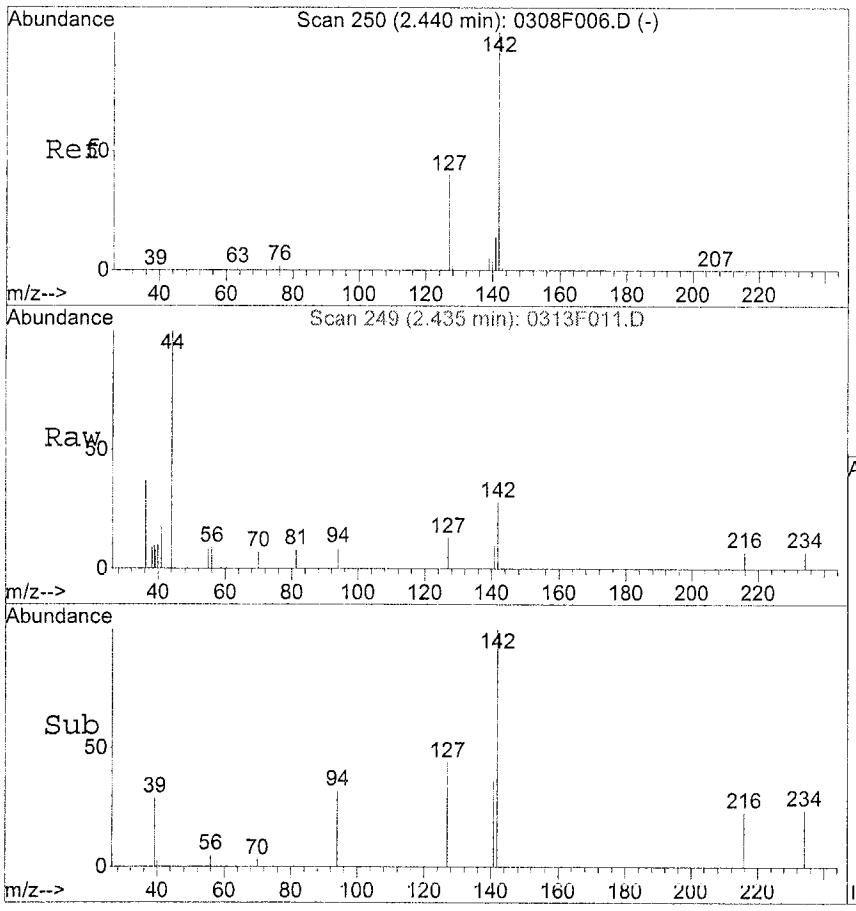


#13
Acetone
Concen: 1.01 PPB
RT: 2.40 min Scan# 243
Delta R.T. 0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 43 Resp: 1122

Ion	Ratio	Lower	Upper
43	100		
58	27.4	1.7	61.7
42	22.0	0.0	36.8

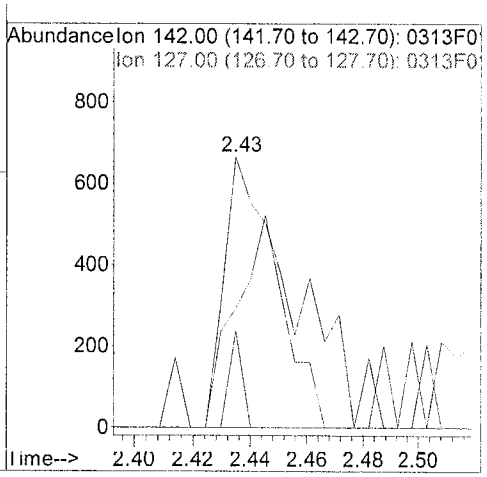


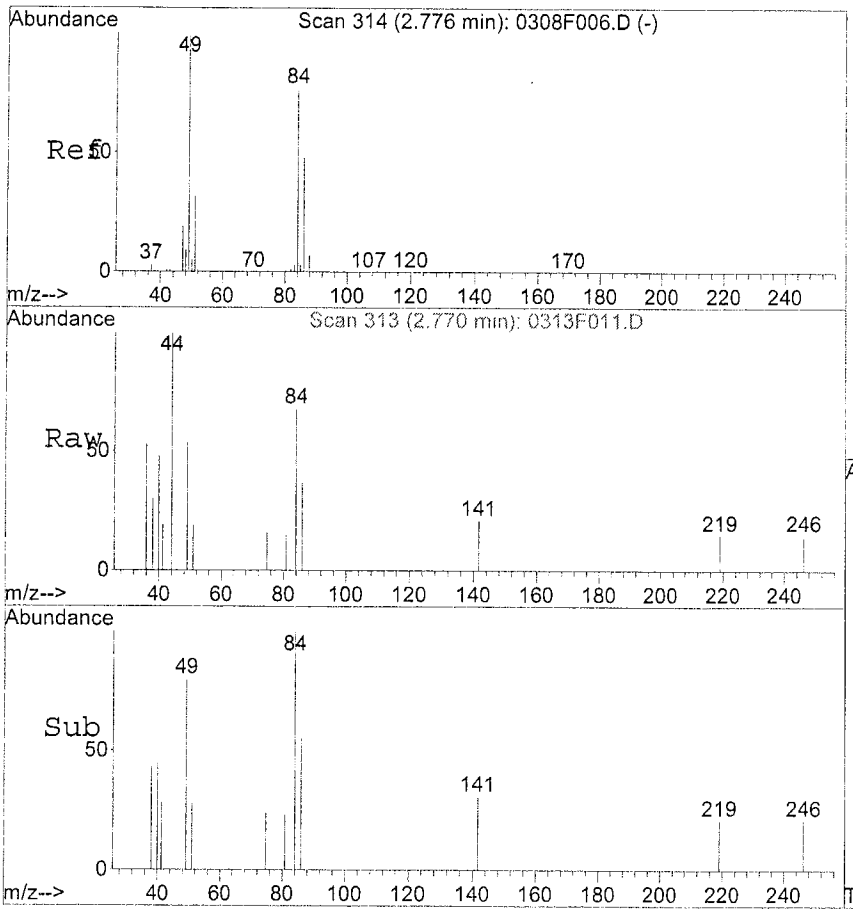


#14
Iodomethane
Concen: 0.10 PPB
RT: 2.43 min Scan# 249
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:142 Resp: 1152

Ion	Ratio	Lower	Upper
142	100		
127	44.1	9.7	69.7
141	35.8	0.0	44.1

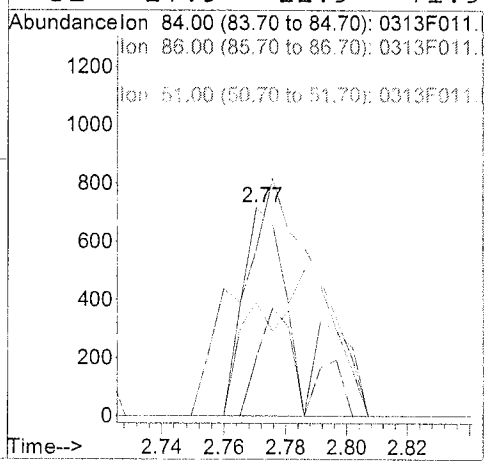


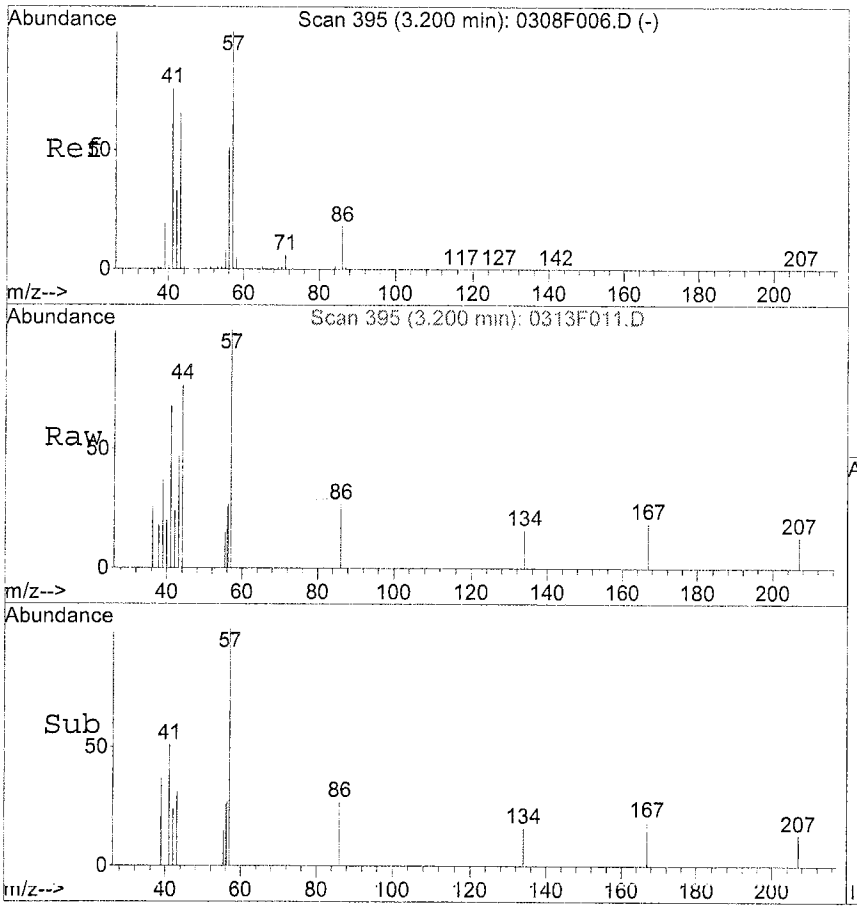


#18
Methylene Chloride
Concen: 0.11 PPB
RT: 2.77 min Scan# 313
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 84 Resp: 1118

Ion	Ratio	Lower	Upper
84	100		
86	54.7	32.9	92.9
49	79.9	99.7	159.7#
51	27.9	11.9	71.9

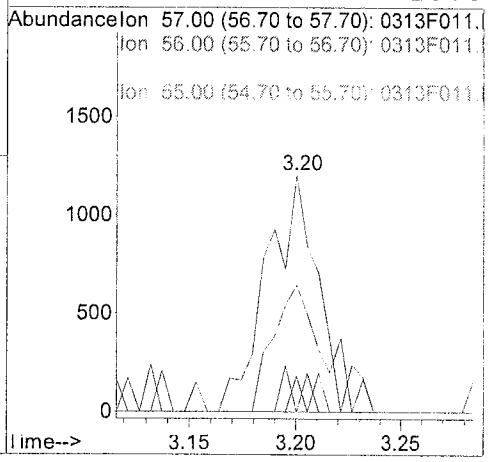


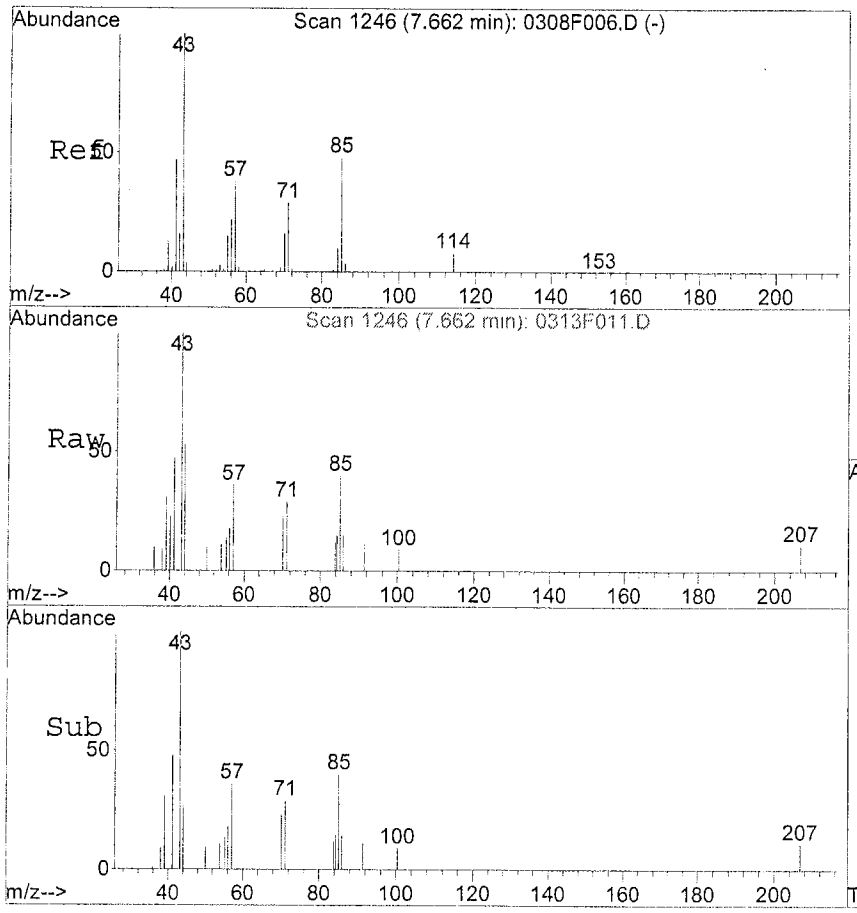


#23
Hexane
Concen: 0.19 PPB
RT: 3.20 min Scan# 395
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 57 Resp: 2075

Ion	Ratio	Lower	Upper
57	100		
56	53.5	21.1	81.1
71	0.0	0.0	35.9
55	15.1	0.0	20.0

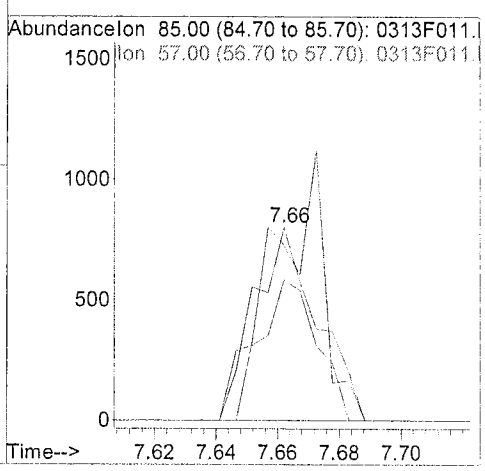


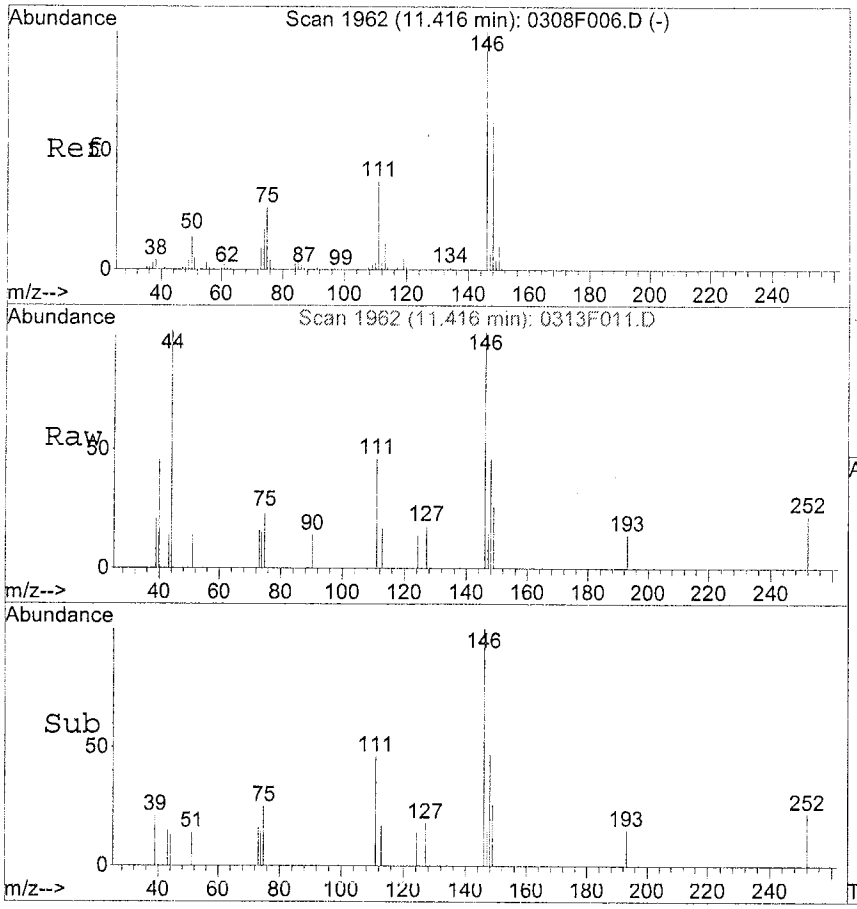


#61
n-Octane
Concen: 0.25 PPB
RT: 7.66 min Scan# 1246
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 85 Resp: 1139

Ion	Ratio	Lower	Upper
85	100		
57	90.8	47.9	107.9
71	72.9	31.3	91.3

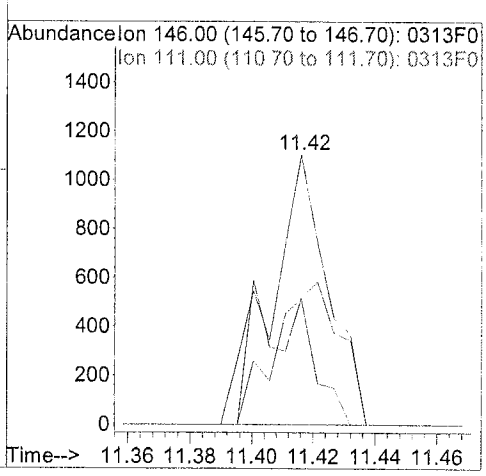


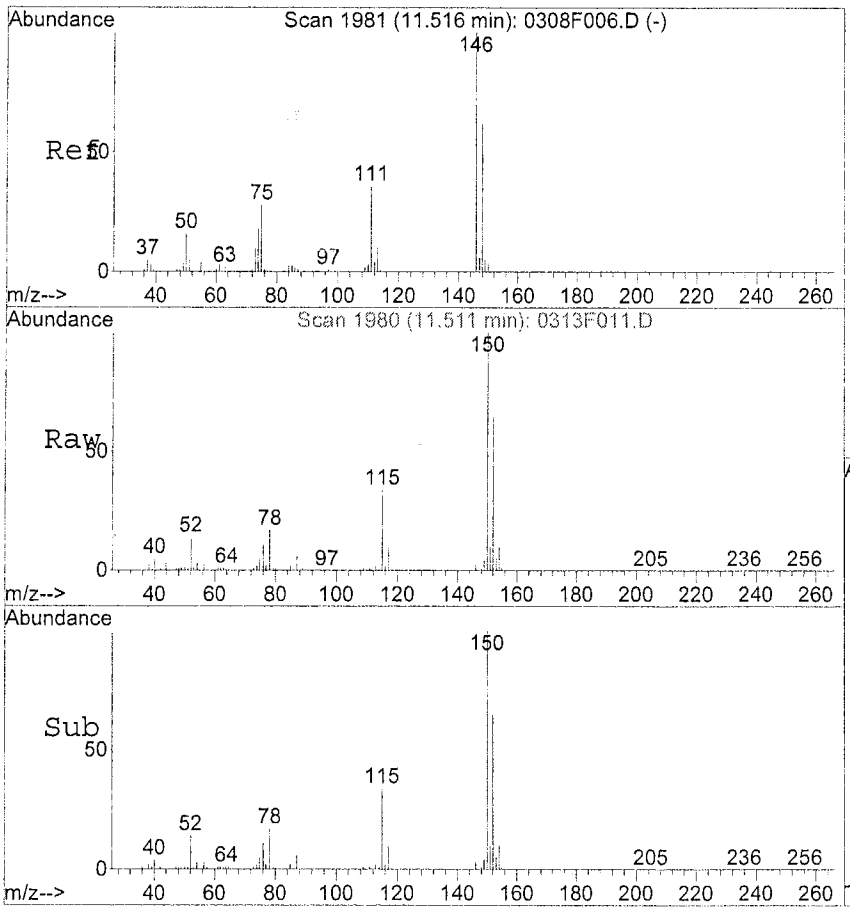


#94
1,3-Dichlorobenzene
Concen: 0.05 PPB
RT: 11.42 min Scan# 1962
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:146 Resp: 1429

Ion	Ratio	Lower	Upper
146	100		
111	46.5	6.9	66.9
148	46.9	32.2	92.2

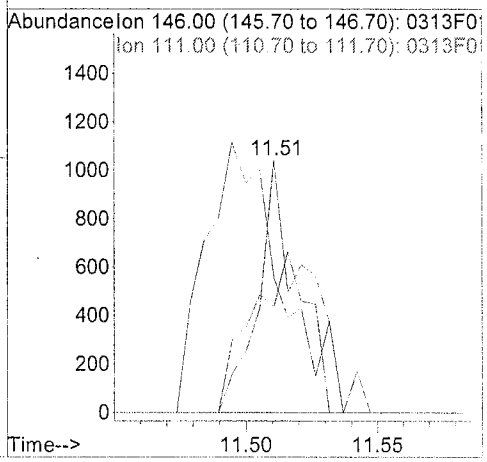


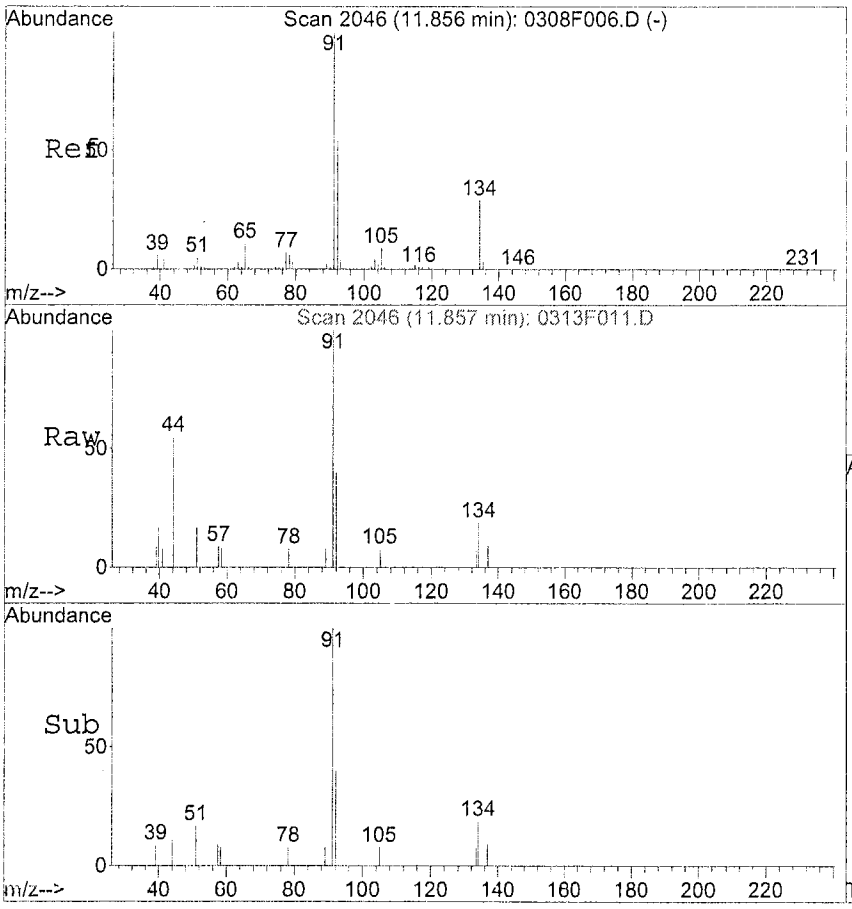


#95
1,4-Dichlorobenzene
Concen: 0.05 PPB
RT: 11.51 min Scan# 1980
Delta R.T. -0.01 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:146 Resp: 1293

Ion	Ratio	Lower	Upper
146	100		
111	53.4	5.6	65.6
148	41.9	32.4	92.4

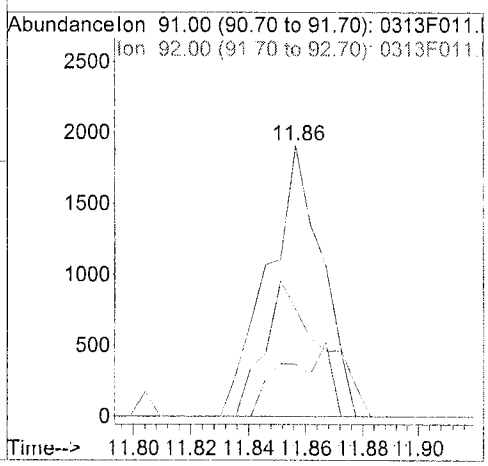


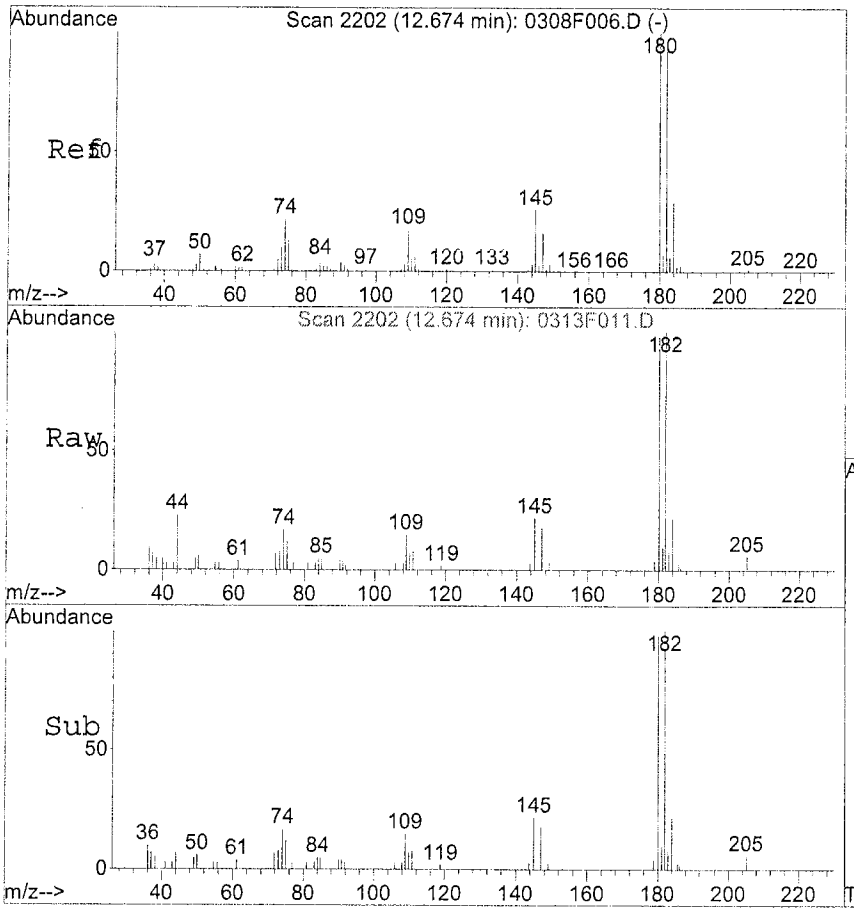


#96
n-Butylbenzene
Concen: 0.05 PPB
RT: 11.86 min Scan# 2046
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
92	39.6	23.7	83.7
134	19.3	0.0	59.0

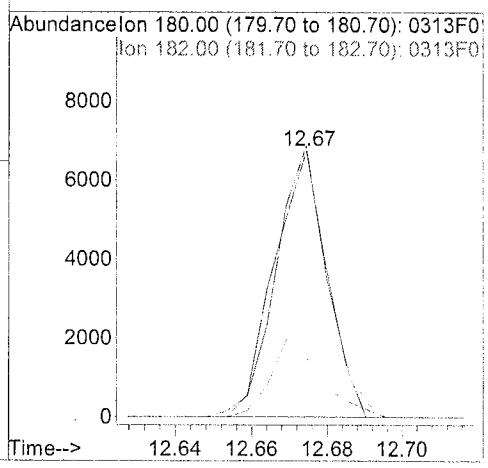


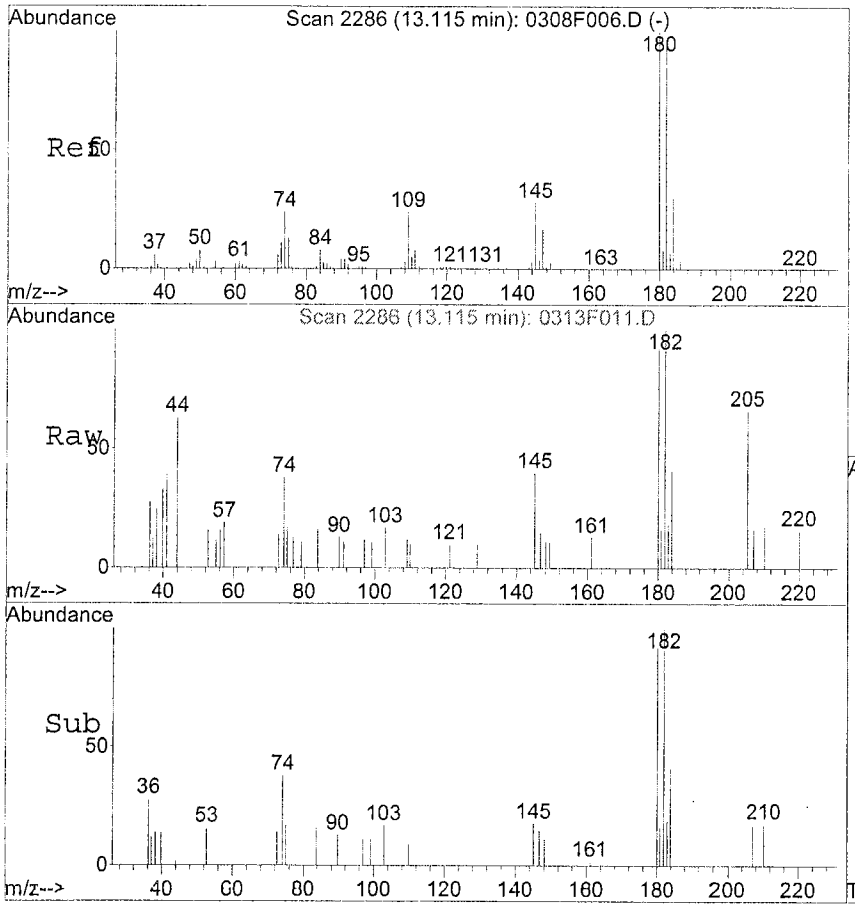


#99
1,3,5-Trichlorobenzene
Concen: 0.28 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 6502

Ion	Ratio	Lower	Upper
180	100		
182	102.0	64.4	124.4
145	22.4	0.0	55.5

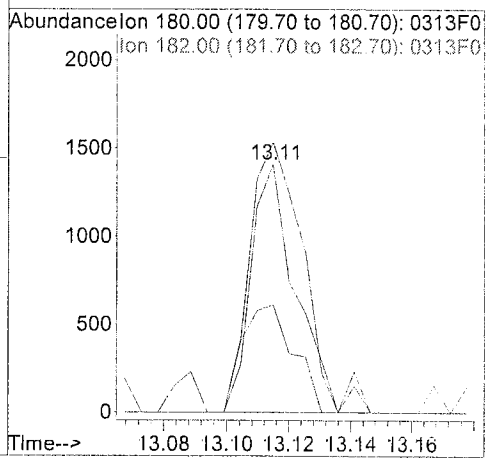


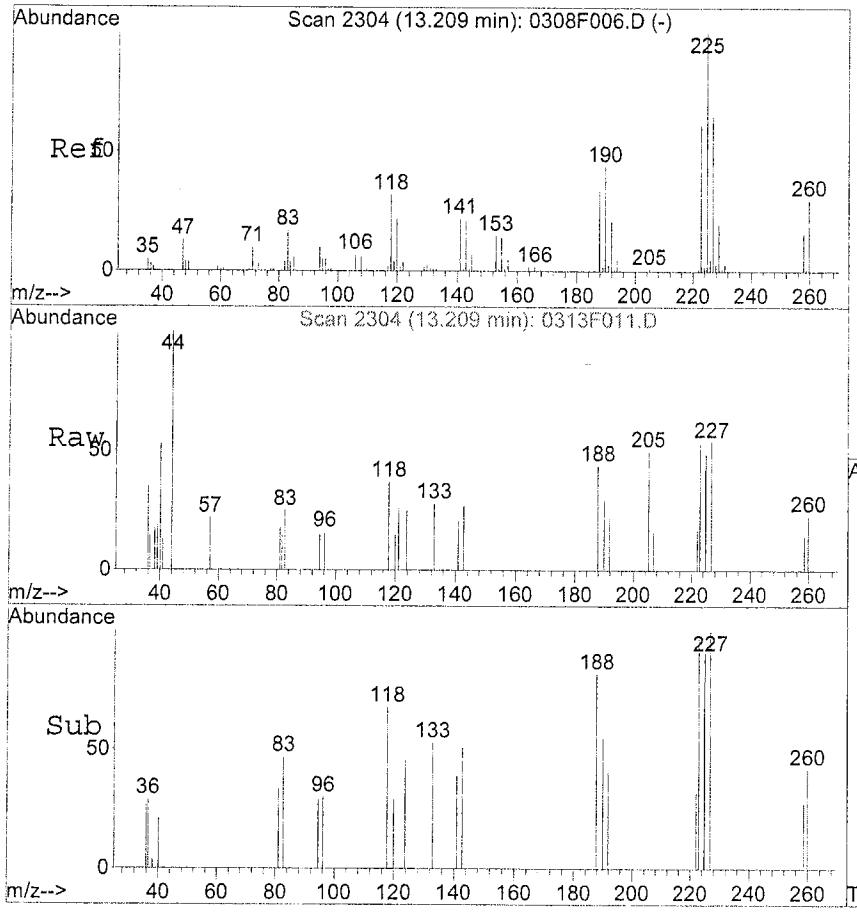


#100
1,2,4-Trichlorobenzene
Concen: 0.08 PPB
RT: 13.11 min Scan# 2286
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 1447

Ion	Ratio	Lower	Upper
180	100		
182	108.9	66.5	126.5
145	43.4	0.0	58.1

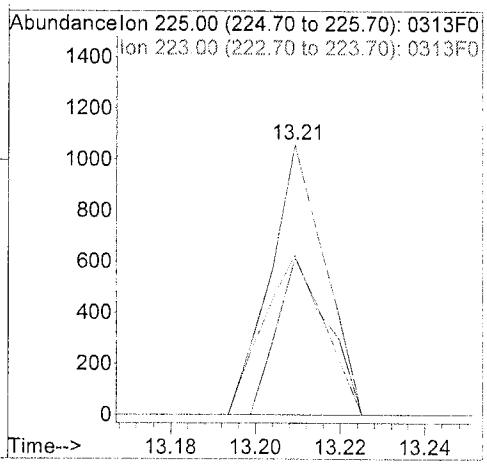


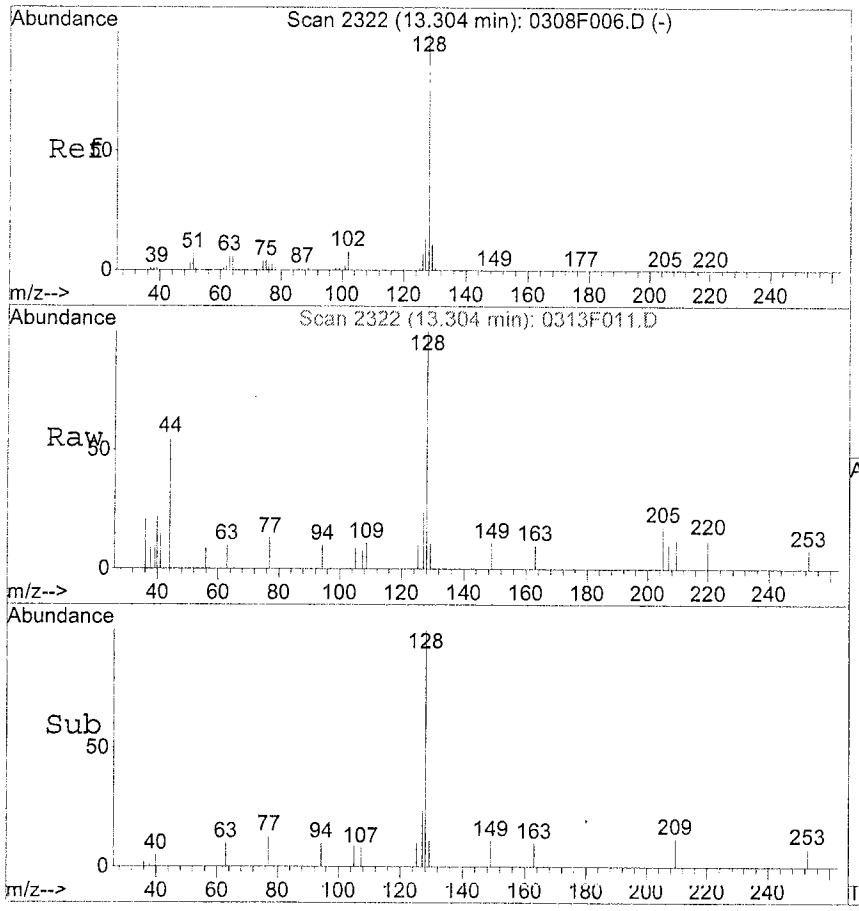


#101
Hexachlorobutadiene
Concen: 0.09 PPB
RT: 13.21 min Scan# 2304
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:225 Resp: 945

Ion	Ratio	Lower	Upper
225	100		
223	58.0	32.1	92.1
227	59.1	35.1	95.1

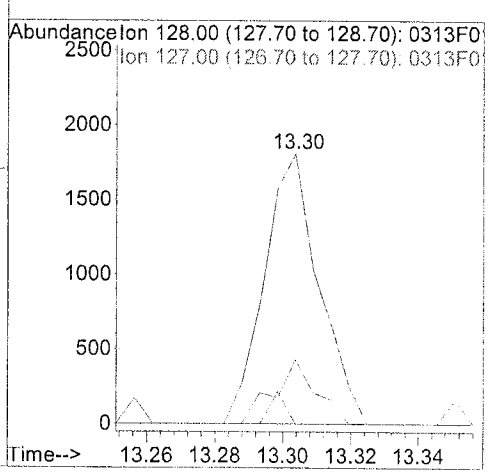


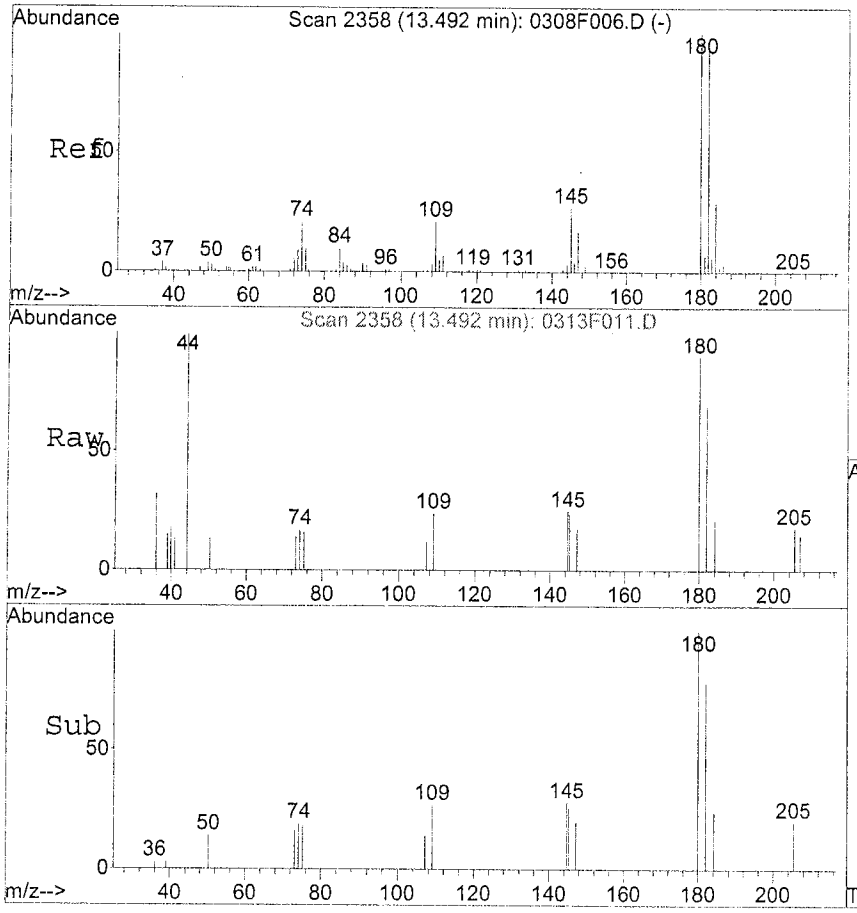


#102
Naphthalene
Concen: 0.09 PPB
RT: 13.30 min Scan# 2322
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:128 Resp: 2019

Ion	Ratio	Lower	Upper
128	100		
127	23.7	0.0	42.7
102	0.0	0.0	38.4

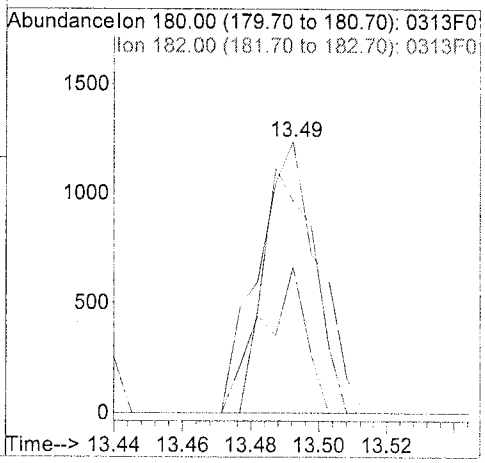




#103
1,2,3-Trichlorobenzene
Concen: 0.10 PPB
RT: 13.49 min Scan# 2358
Delta R.T. 0.00 min
Lab File: 0313F011.D
Acq: 13 Mar 2007 12:12 pm

Tgt Ion:180 Resp: 1523

Ion	Ratio	Lower	Upper
180	100		
182	78.2	66.6	126.6
145	53.8	0.0	57.7



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K0702006-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0702006-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	105	76-114	03/13/07	Acceptable
Toluene-d8	109	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	99	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F020.D
Lab ID: K0702006-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 15:08
Date Quantitated: 03/14/2007 11:45
Batch ID: KWG0703563
Analysis Method: 8260B
ListJoinID: LJ800

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MAV

Primary Review: [illegible]

Secondary Review: F-Ah-3/15/7

Quantitation Report

Bottle ID:		**Tier:**	III	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/05/2007	**Receive Date:**	03/10/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	K0702006
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582919	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F020.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 15:08	**Quant Date:**	03/14/2007 11:45	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0702006-003			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	398540	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	191622	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	186069	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.26	0.01	0.00	65	89266	10.50	105	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	420023	10.86	109	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	166061	9.89	99	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.31		0.00	50	1627	0.1200	0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0d		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.39	-0.01	0.00	43	1436	1.27	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride	2.78		0.00	84	603	0.0600	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F020.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 15:08	**Quant Date:**	03/14/2007 11:45	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0702006-003			**Soln Conc. Units:**	PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene	7.56	-0.01	0.00	92	8625	0.3000	0.30	J	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0**d**		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

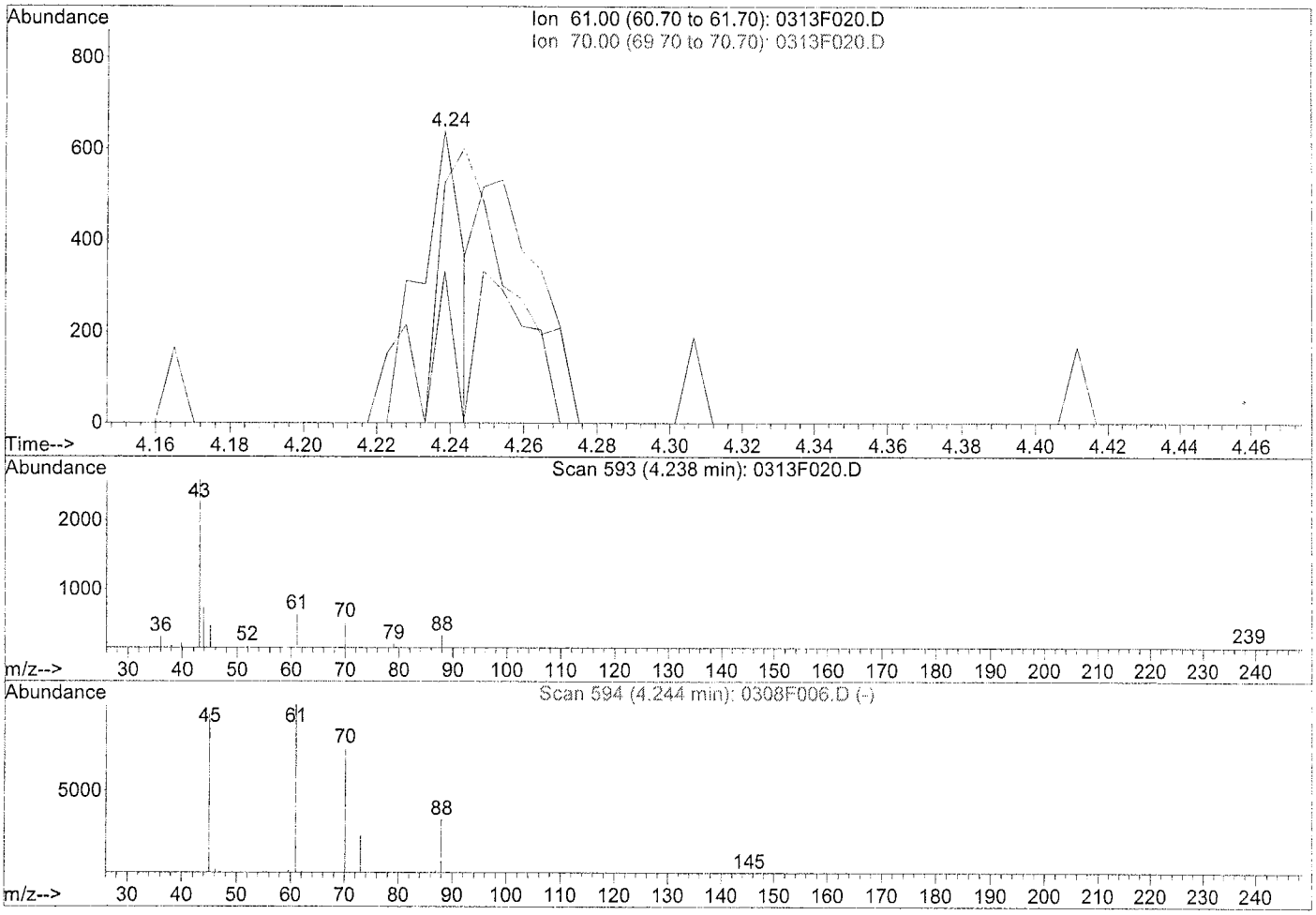
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : ~~K1703-003~~ K1006-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:44 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F020.D

(33) Ethyl Acetate (T)

4.24min 1.02PPB

response 510

Ion	Exp%	Act%
61.00	100	100
70.00	67.10	82.32
88.00	29.30	52.11
0.00	0.00	0.00

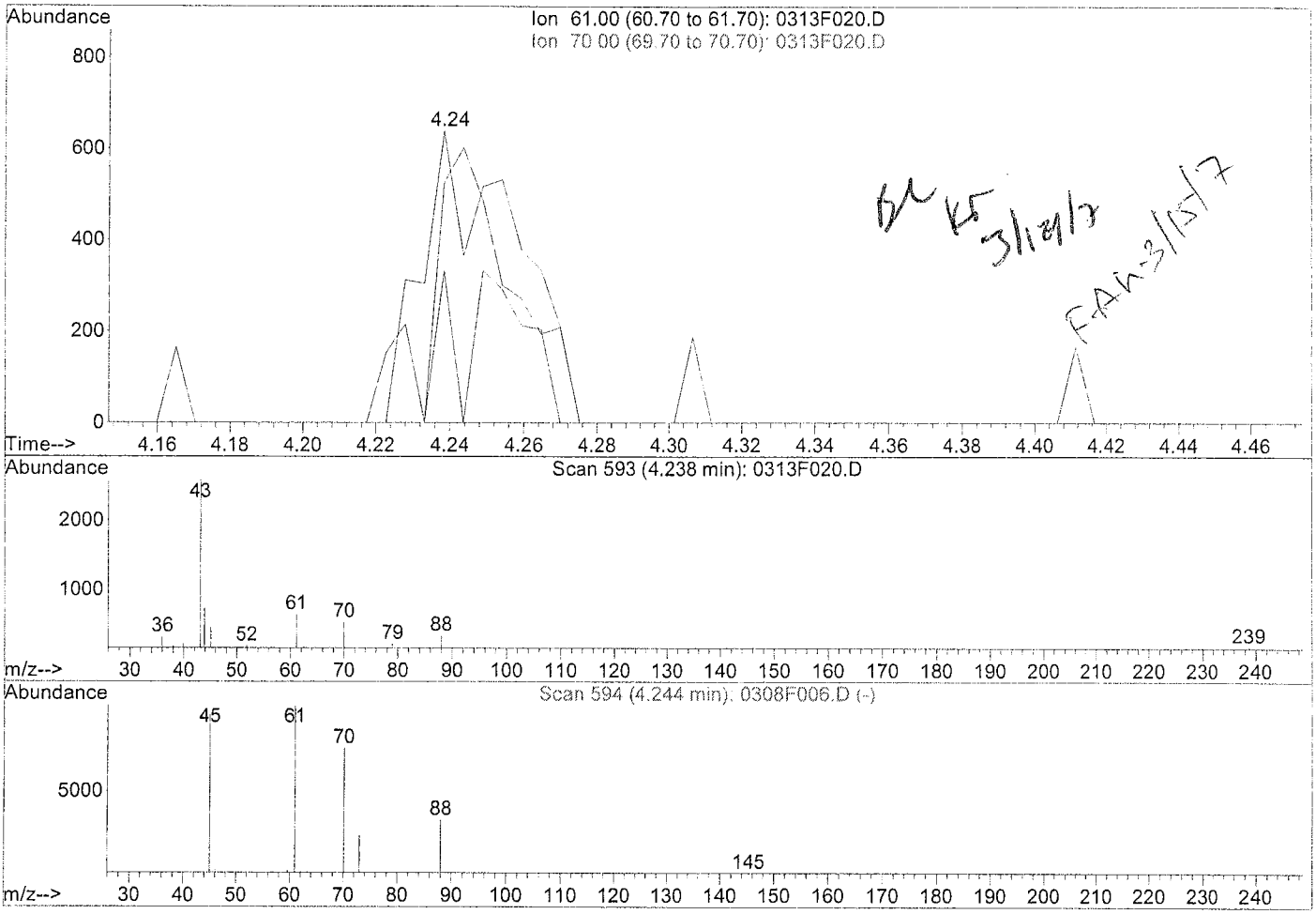
0313F020.D 022607.M Wed Mar 14 11:44:28 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : K1703-003 K100-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:44 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



BL KS 3/14/07 FAN 3/15/7

TIC: 0313F020.D

(33) Ethyl Acetate (T)

4.24min 2.26PPB m

response 1130

Ion	Exp%	Act%
61.00	100	100
70.00	67.10	82.32
88.00	29.30	52.11
0.00	0.00	0.00

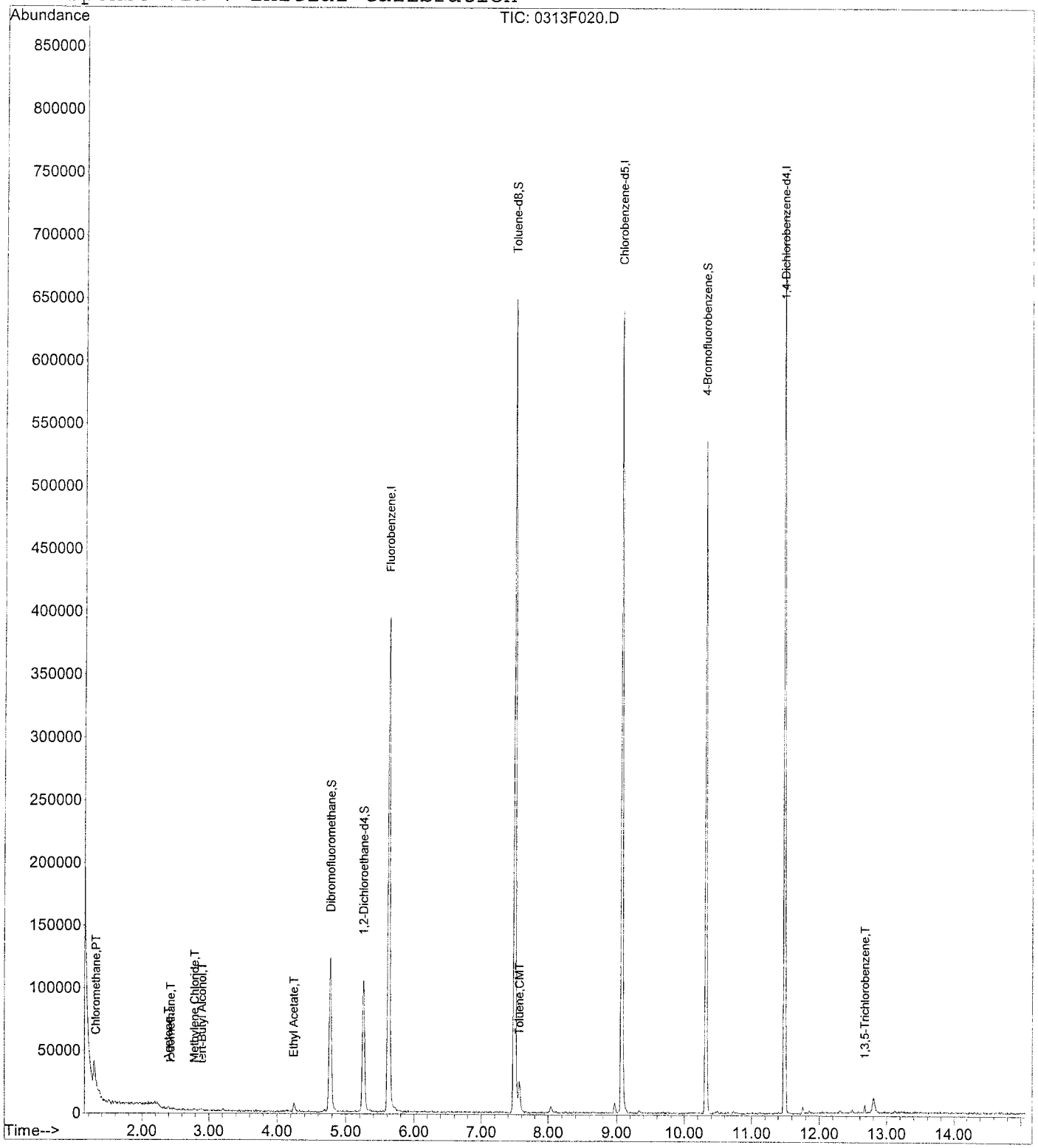
0313F020.D 022607.M Wed Mar 14 11:44:33 2007

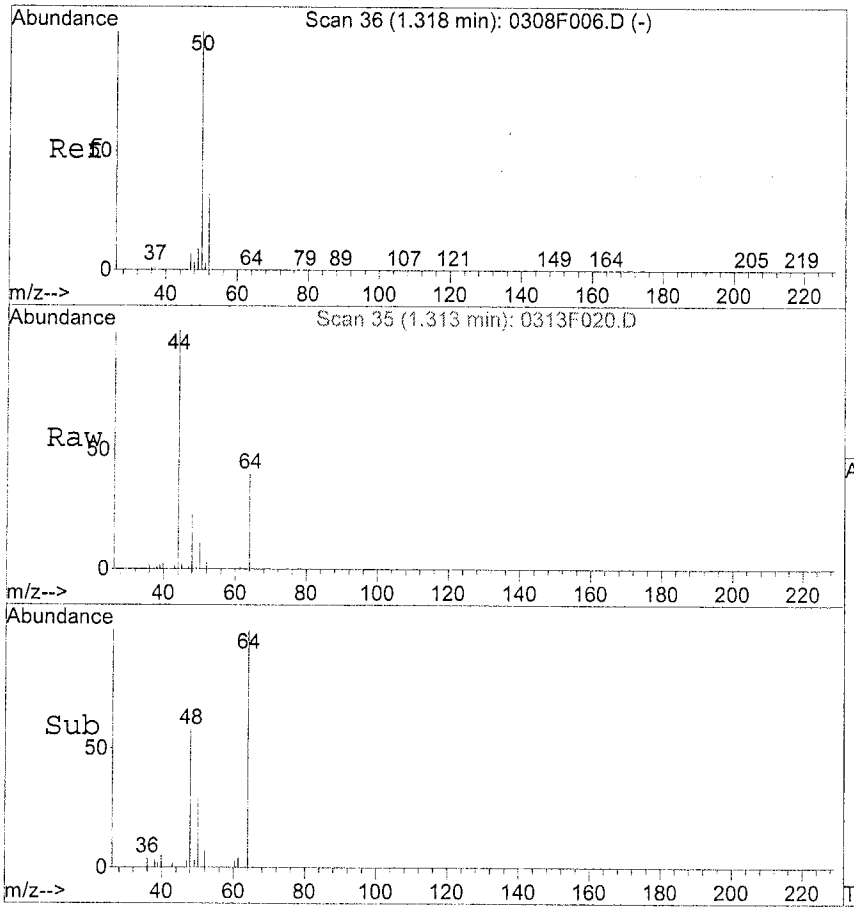
Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F020.D
Acq On : 13 Mar 2007 3:08 pm
Sample : ~~K1703-003~~ K 2002-3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 11:45 2007 KM 3/14/18

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

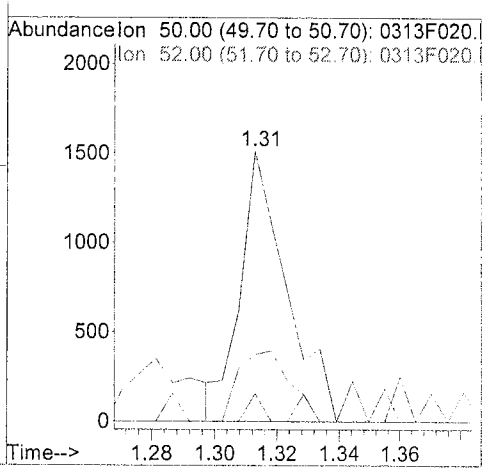


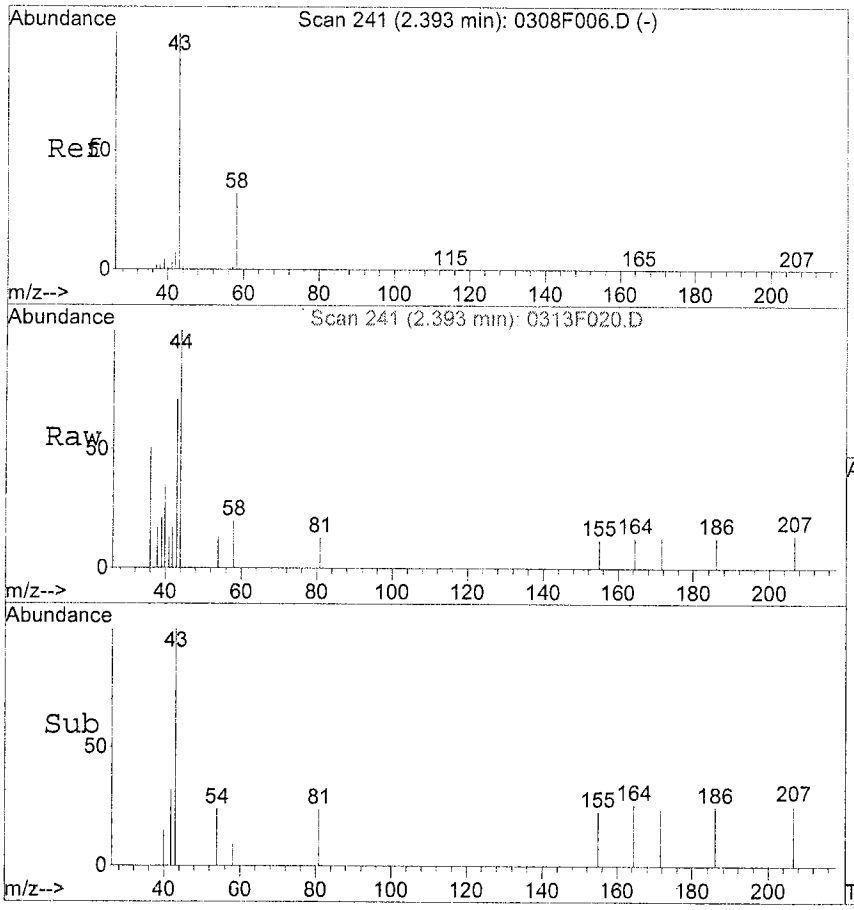


#3
Chloromethane
Concen: 0.12 PPB
RT: 1.31 min Scan# 35
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 50 Resp: 1627

Ion	Ratio	Lower	Upper
50	100		
52	24.7	1.8	61.8
49	10.2	0.0	38.7

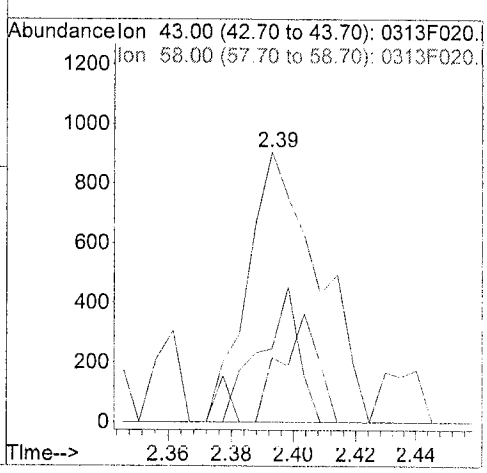


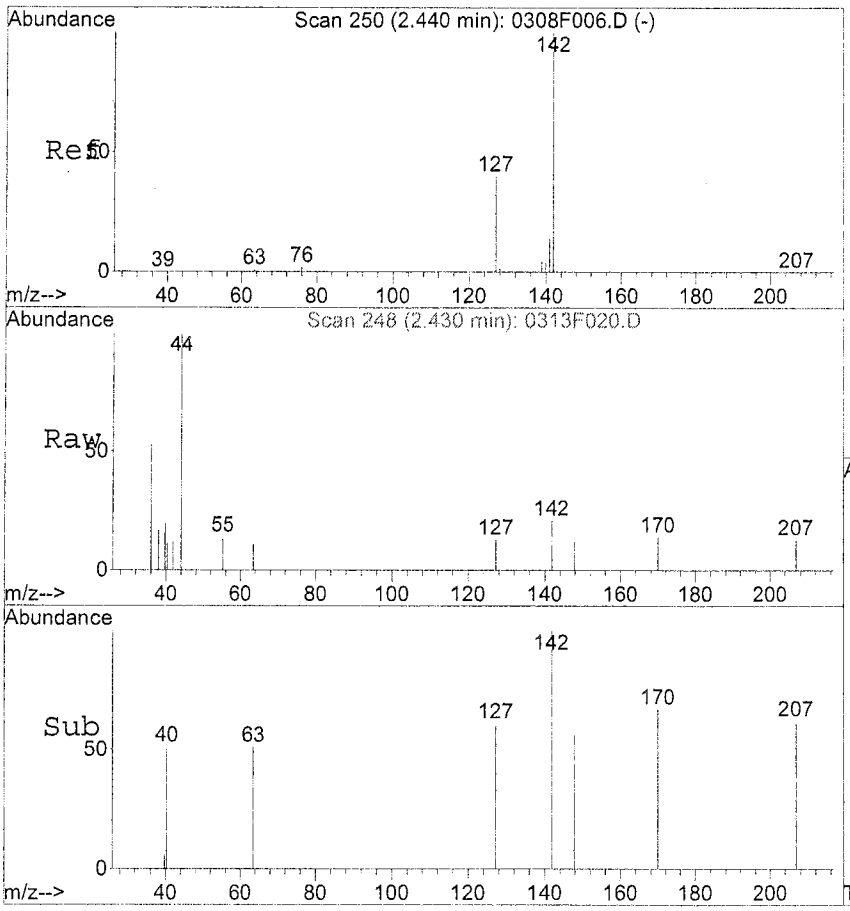


#13
Acetone
Concen: 1.27 PPB
RT: 2.39 min Scan# 241
Delta R.T. 0.00 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 43 Resp: 1436

Ion	Ratio	Lower	Upper
43	100		
58	27.1	1.7	61.7
42	23.8	0.0	36.8

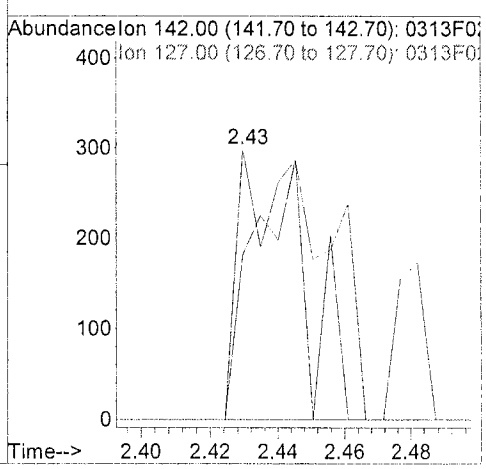


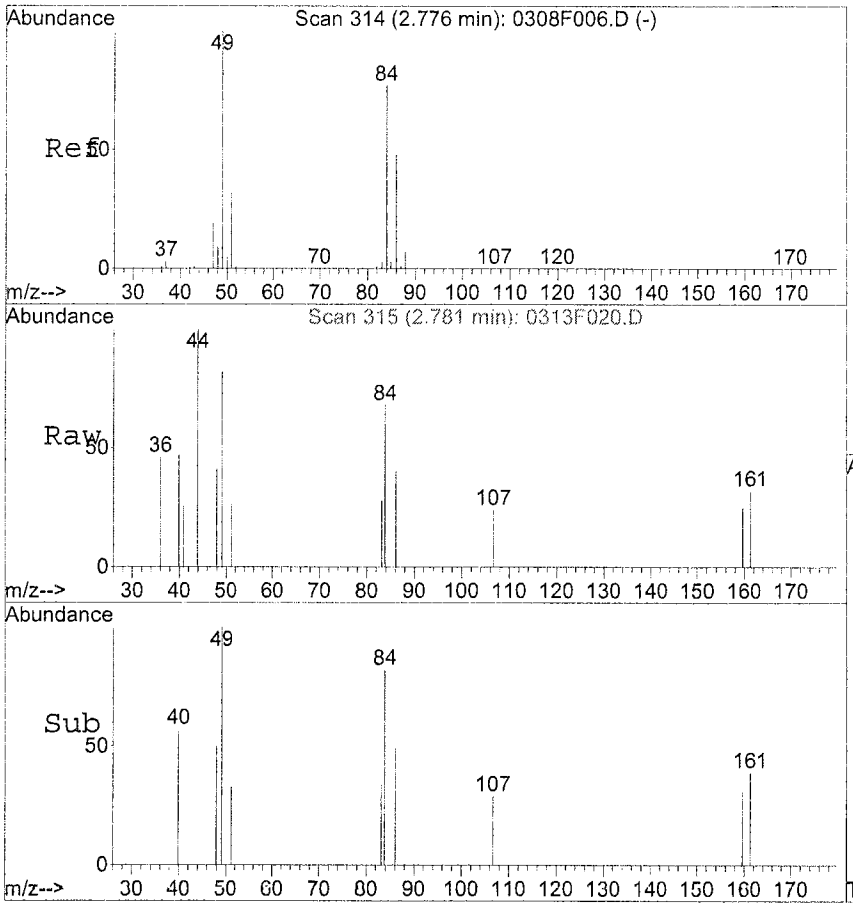


#14
Iodomethane
Concen: 0.05 PPB
RT: 2.43 min Scan# 248
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion:142 Resp: 516

Ion	Ratio	Lower	Upper
142	100		
127	60.9	9.7	69.7
141	0.0	0.0	44.1

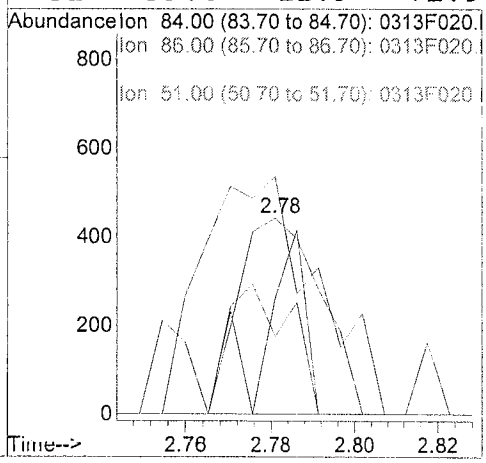


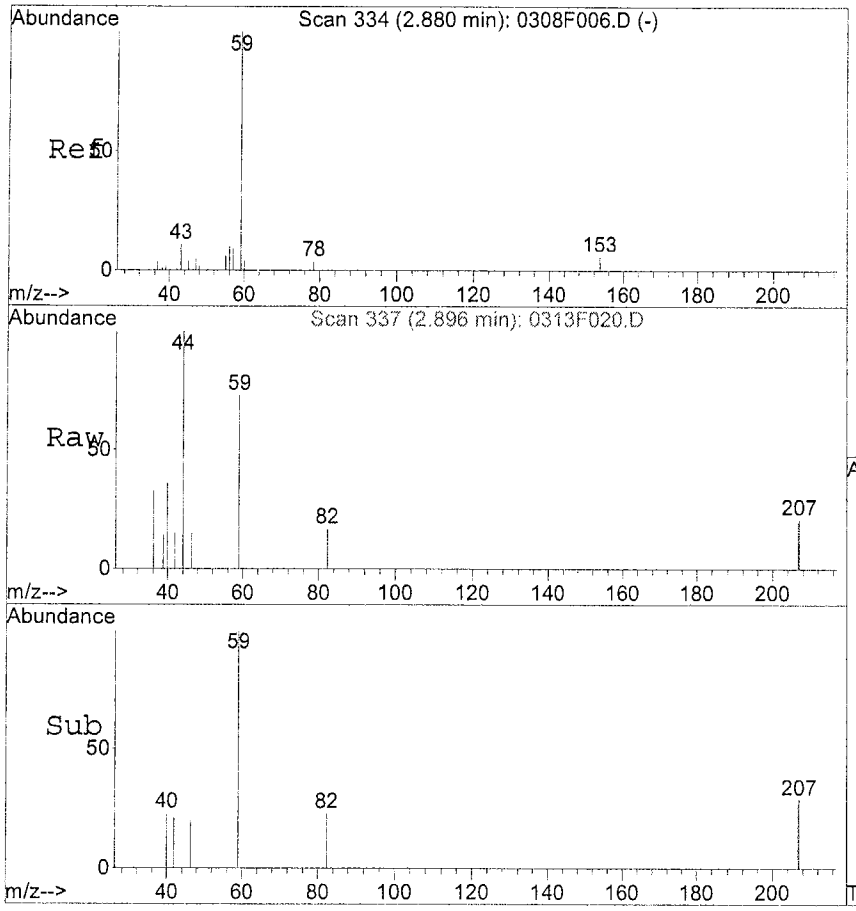


#18
Methylene Chloride
Concen: 0.06 PPB
RT: 2.78 min Scan# 315
Delta R.T. 0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 84 Resp: 603

Ion	Ratio	Lower	Upper
84	100		
86	59.0	32.9	92.9
49	121.3	99.7	159.7
51	39.6	11.9	71.9

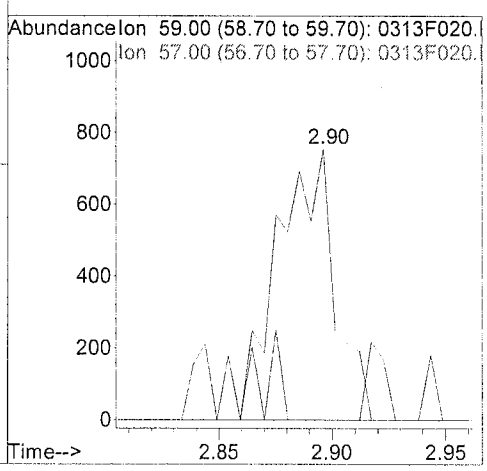


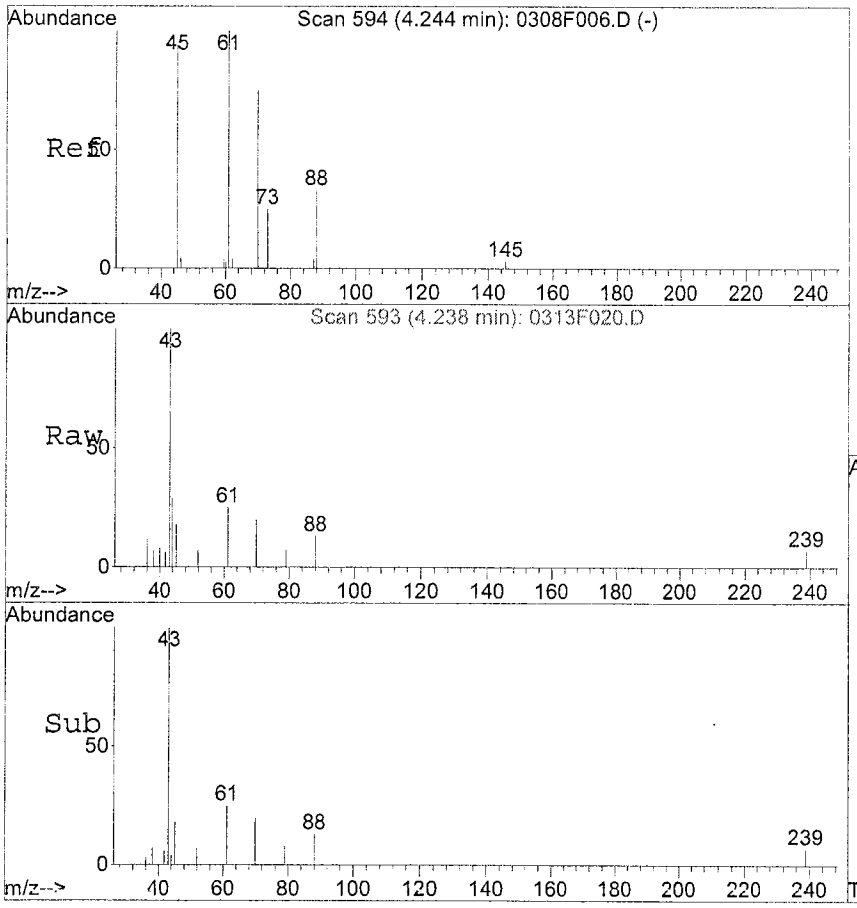


#19
tert-Butyl Alcohol
Concen: 6.10 PPB
RT: 2.90 min Scan# 337
Delta R.T. 0.02 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 59 Resp: 1373

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	38.5
60	0.0	0.0	33.5

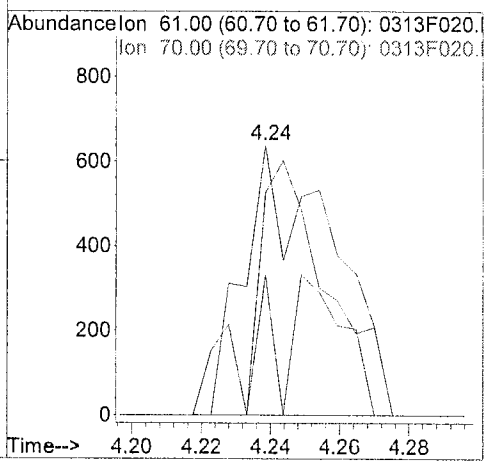


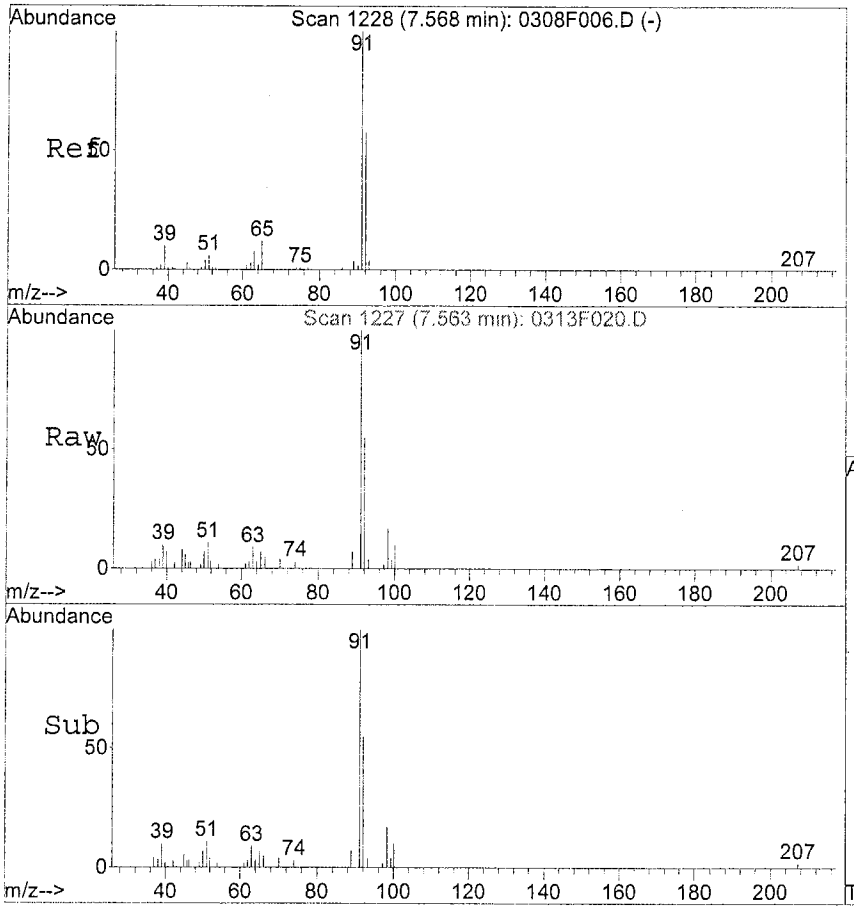


#33
Ethyl Acetate
Concen: 2.26 PPB m
RT: 4.24 min Scan# 593
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 61 Resp: 1130

Ion	Ratio	Lower	Upper
61	100		
70	82.3	37.1	97.1
88	52.1	0.0	59.3

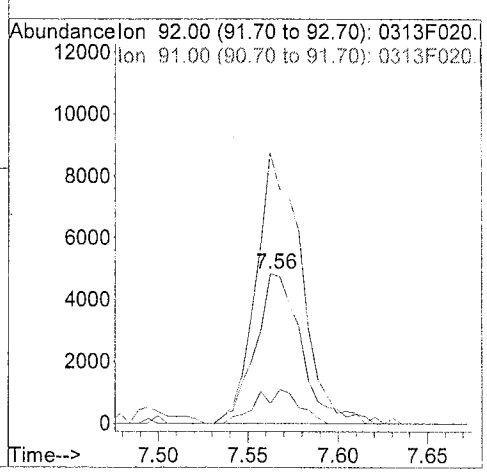


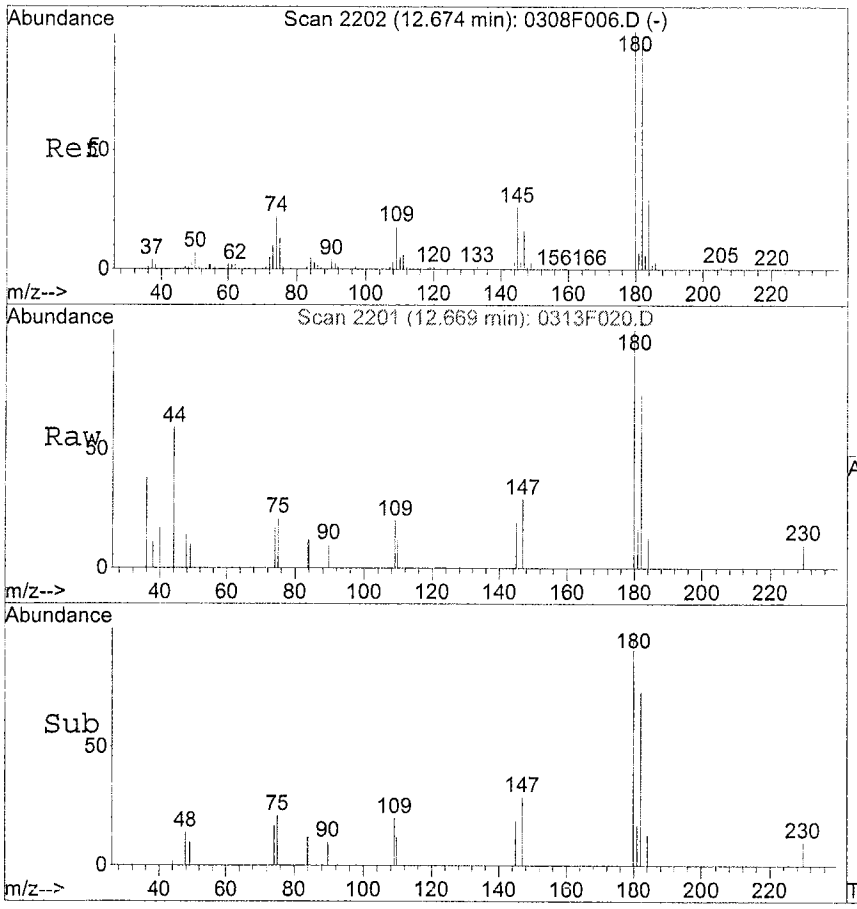


#59
Toluene
Concen: 0.30 PPB
RT: 7.56 min Scan# 1227
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion: 92 Resp: 8625

Ion	Ratio	Lower	Upper
92	100		
91	181.2	141.7	201.7
65	13.1	0.0	50.4

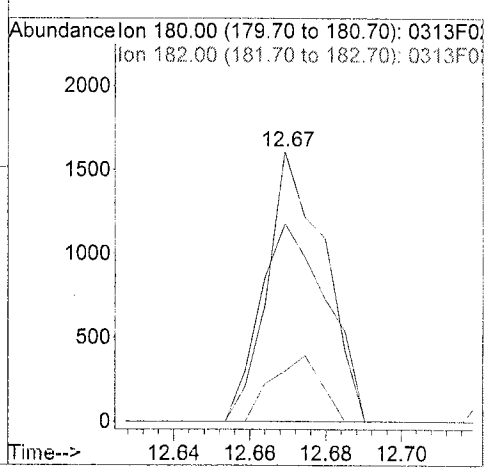




#99
1,3,5-Trichlorobenzene
Concen: 0.06 PPB
RT: 12.67 min Scan# 2201
Delta R.T. -0.01 min
Lab File: 0313F020.D
Acq: 13 Mar 2007 3:08 pm

Tgt Ion:180 Resp: 1646

Ion	Ratio	Lower	Upper
180	100		
182	73.2	64.4	124.4
145	18.6	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0703590-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**13.6**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**69.2**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**0.200**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**10.5**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**9.33**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.24**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**51.6**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.9**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**12.9**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**67.2**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**66.4**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**10.6**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**9.29**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**10.1**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**83.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**7.00**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**9.16**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**8.36**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**8.19**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0703590-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**24.6**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**6.34**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**9.45**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	102	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	101	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F005.D
Lab ID: KWG0703590-1 -- K0702006-003MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 10:15
Date Quantitated: 03/13/2007 14:09
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NR
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MPV
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NR
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KA 3/13/07

Secondary Review: F-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582920	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	415453	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	197367	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	193579	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	96101	10.94	109	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	90019	10.15	102	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	443876	11.01	110	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	174045	10.06	101	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	96351	7.64	7.64		
1	Chloromethane	1.32	0.01	0.00	50	153924	10.45	10.5		
1	Vinyl Chloride	1.39		0.00	62	147954	10.92	10.9		
1	Bromomethane	1.63		0.00	96	60921	9.33	9.33		
1	Chloroethane	1.70	-0.01	0.00	64	84504	9.24	9.24		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	230784	10.50	10.5		
1	Trichlorofluoromethane	1.87		0.00	101	178614	9.64	9.64		
1	Ethyl Ether	2.10		0.00	59	83303	14.09	14.1		
1	Acrolein	2.27		0.00	56	62430	289.98	290		
1	Trichlorotrifluoroethane	2.27		0.00	151	82620	9.65	9.65		
1	1,1-Dichloroethene	2.29		0.00	96	109716	10.91	10.9		
1	Acetone	2.39	-0.01	0.00	43	60627	51.55	51.6		
1	Iodomethane	2.44		0.00	142	369478	31.70	31.7		
1	Carbon Disulfide	2.47		0.00	76	750902	22.93	22.9		
1	3-Chloro-1-propene	2.64		0.00	76	217656	39.75	39.8		

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	111388	415.07	415		
1	Methylene Chloride	2.78		0.00	84	138073	12.85	12.9		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	47872	204.07	204		
1	Acrylonitrile	3.08	-0.01	0.00	53	84589	55.36	55.4		
1	Methyl tert-Butyl Ether	2.97		0.00	73	253836	13.64	13.6		
1	trans-1,2-Dichloroethene	3.00		0.00	96	119241	10.15	10.2		
1	n-Hexane	3.20		0.00	57	383808	32.47	32.5		
1	Diisopropyl Ether	3.48		0.00	45	1005562	29.93	29.9		
1	1,1-Dichloroethane	3.48		0.00	63	225506	10.93	10.9		
1	Vinyl Acetate	3.54	0.01	0.00	86	81907	69.20	69.2		
1	Chloroprene	3.53	-0.01	0.00	53	735019	32.93	32.9		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	754472	31.17	31.2		
1	2,2-Dichloropropane	4.11		0.00	77	140727	10.16	10.2		
1	cis-1,2-Dichloroethene	4.15		0.00	96	129564	10.84	10.8		
1	2-Butanone (MEK)	4.20		0.00	72	26510	67.21	67.2		
1	Propionitrile	4.37		0.00	54	21933	41.81	41.8		
1	Ethyl Acetate	4.25	0.01	0.00	61	30037	57.70	57.7		
1	Methacrylonitrile	4.52		0.00	67	81134	44.08	44.1		
1	Bromochloromethane	4.45		0.00	128	47840	10.92	10.9		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	11199	26.27	26.3		
1	Chloroform	4.56	0.01	0.00	83	209058	10.23	10.2		
1	tert-Butyl Formate	4.58		0.00	59	22569	9.12	9.12		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	181210	10.67	10.7		
1	Carbon Tetrachloride	4.88		0.00	117	161386	10.68	10.7		
1	1,1-Dichloropropene	4.95		0.00	75	167631	10.20	10.2		
1	Isobutyl Alcohol	5.26		0.00	43	47984	436.79	437		
1	Benzene	5.21		0.00	78	514298	10.49	10.5		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	130319	11.80	11.8		
1	tert-Amyl Methyl Ether	5.36	-0.01	0.00	55	178348	31.22	31.2		
1	Trichloroethene (TCE)	6.06		0.00	95	121373	10.29	10.3		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	120046	11.81	11.8		
1	Dibromomethane	6.53		0.00	93	47266	11.77	11.8		
1	Methyl Methacrylate	6.56		0.00	69	169269	53.07	53.1		
1	1,4-Dioxane	6.55	-0.01	0.00	88	15199	408.41	408		
1	Bromodichloromethane	6.73		0.00	83	130770	11.79	11.8		
1	2-Nitropropane	7.10		0.00	43	41305	39.85	39.9		
1	2-Chloroethyl Vinyl Ether	7.26	0.12	0.02	63	703	0.2000	0.200	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	145885	11.65	11.7		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	129069	83.93	83.9		
1	Toluene	7.57		0.00	92	318877	10.55	10.6		
2	n-Octane	7.66		0.00	85	78503	15.68	15.7		
2	trans-1,3-Dichloropropene	7.93	0.01	0.00	75	97550	9.29	9.29		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	425272	52.17	52.2		

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D: Result from dilution
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d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	63224	10.06	10.1		
2	Tetrachloroethene (PCE)	8.13		0.00	164	99872	7.00	7.00		
2	2-Hexanone	8.39		0.00	57	38479	66.41	66.4		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	141131	9.77	9.77		
2	Dibromochloromethane	8.49		0.00	129	77165	9.16	9.16		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	66339	9.75	9.75		
2	1-Chlorohexane	9.10		0.00	91	162990	7.89	7.89		
2	Chlorobenzene	9.10		0.00	112	339891	8.36	8.36		
2	Ethylbenzene	9.21	0.01	0.00	106	190615	8.19	8.19		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	106276	8.95	8.95		
2	m,p-Xylenes	9.34		0.00	106	465868	16.16	16.2		
2	o-Xylene	9.75		0.00	106	224703	8.41	8.41		
2	Styrene	9.78		0.00	103	118310**m**	6.34	6.34		
2	Bromoform	9.98		0.00	173	39762	9.45	9.45		
2	Isopropylbenzene	10.13		0.00	105	523037	7.15	7.15		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	25331	35.83	35.8		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	80943	11.29	11.3		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	77113	49.60	49.6		
3	Bromobenzene	10.45		0.00	156	135144	8.24	8.24		
3	n-Propylbenzene	10.55		0.00	91	670500	7.75	7.75		
3	1,2,3-Trichloropropane	10.56	-0.01	0.00	110	25481	11.19	11.2		
3	2-Chlorotoluene	10.65		0.00	91	406455	8.01	8.01		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	461477	7.73	7.73		
3	4-Chlorotoluene	10.77		0.00	91	464397	7.99	7.99		
3	tert-Butylbenzene	11.06		0.00	119	423920	7.56	7.56		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	473913	7.87	7.87		
3	sec-Butylbenzene	11.28	-0.01	0.00	105	589760	7.88	7.88		
3	4-Isopropyltoluene	11.44		0.00	119	470283	6.97	6.97		
3	1,3-Dichlorobenzene	11.42		0.00	146	258623	7.74	7.74		
3	1,4-Dichlorobenzene	11.52		0.00	146	258142	7.83	7.83		
3	n-Butylbenzene	11.86		0.00	91	400075	6.86	6.86		
3	1,2-Dichlorobenzene	11.89		0.00	146	235106	8.05	8.05		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	8423	8.91	8.91		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	811218	29.10	29.1		
3	1,2,4-Trichlorobenzene	13.11		0.00	180	164931	7.62	7.62		
3	Hexachlorobutadiene	13.21		0.00	225	76694	5.95	5.95		
3	Naphthalene	13.30		0.00	128	313340	11.50	11.5		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	144885	8.16	8.16		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F005.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:15	**Quant Date:**	03/13/2007 14:09	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703590-1 -- K0702006-003MS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

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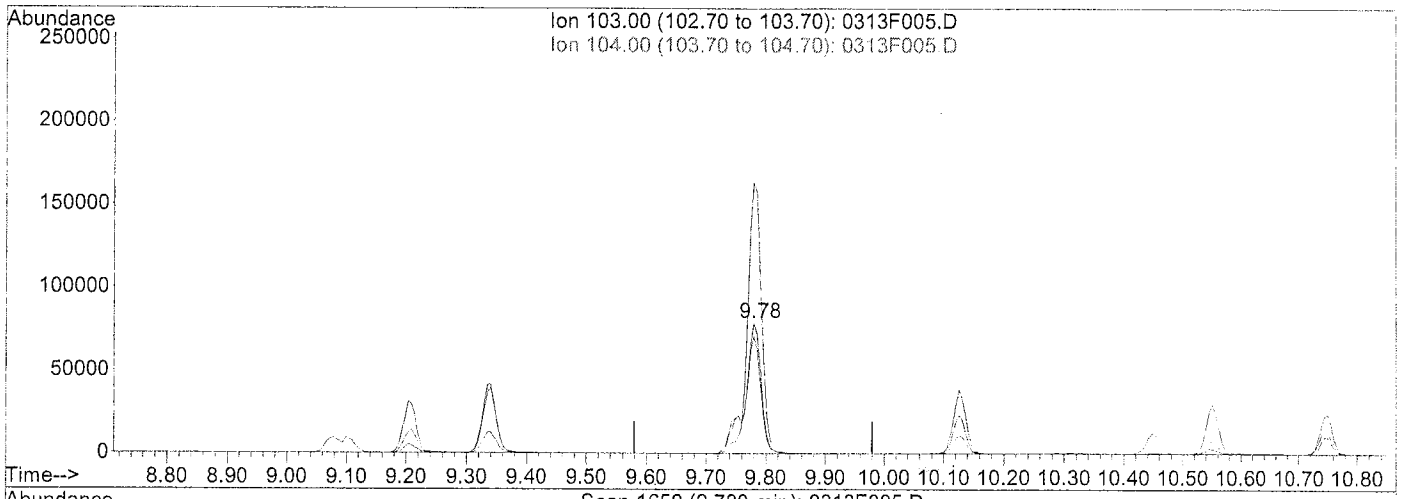
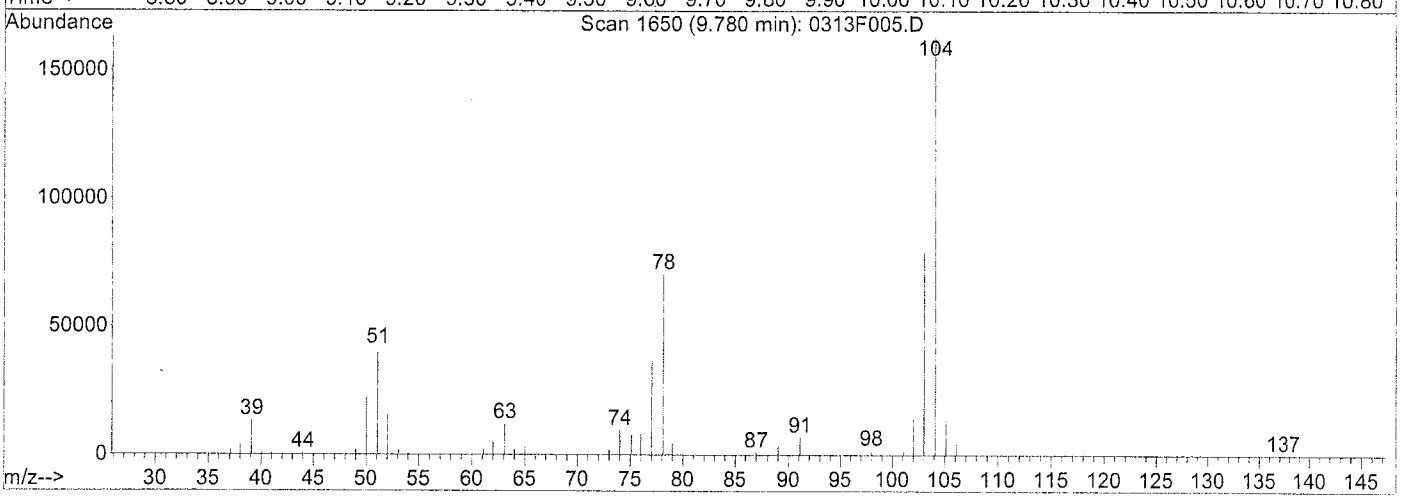
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F005.D
Acq On : 13 Mar 2007 10:15 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007

Vial: 5
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F005.D

(76) Styrene (T)

9.78min 7.88PPB

response 146892

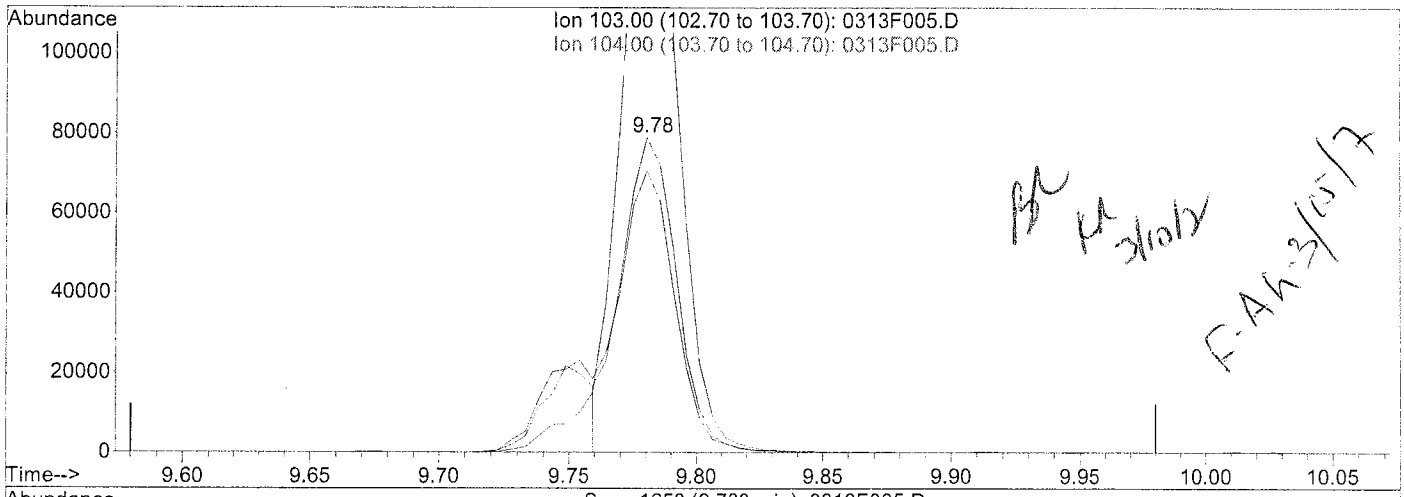
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.26
78.00	89.70	89.33
0.00	0.00	0.00

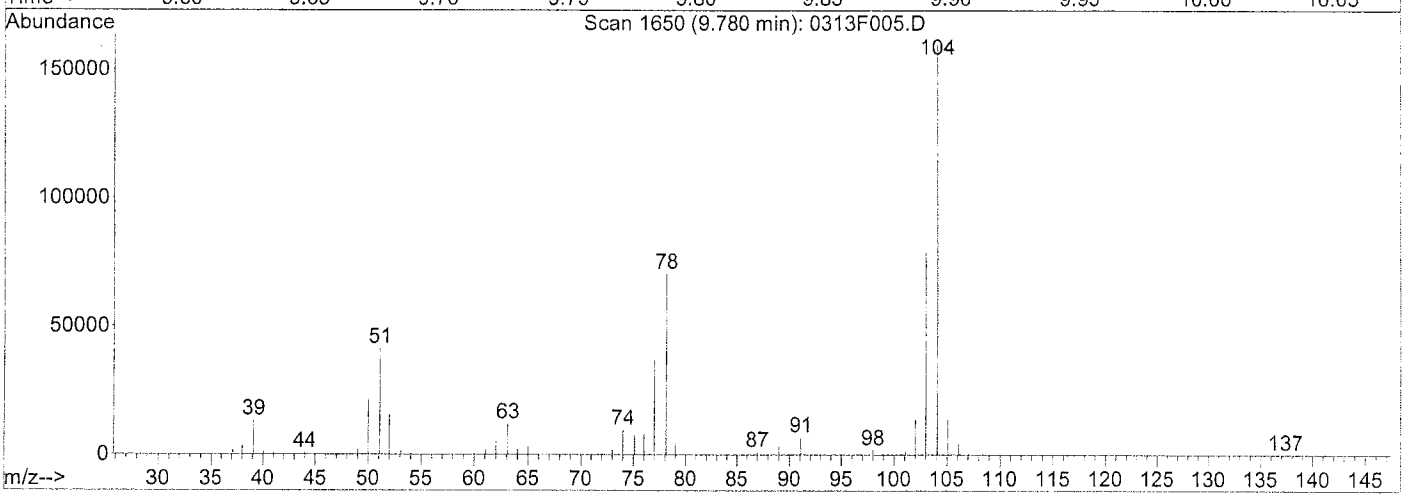
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F005.D
Acq On : 13 Mar 2007 10:15 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007

Vial: 5
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F005.D

(76) Styrene (T)

9.78min 6.34PPB m

response 118310

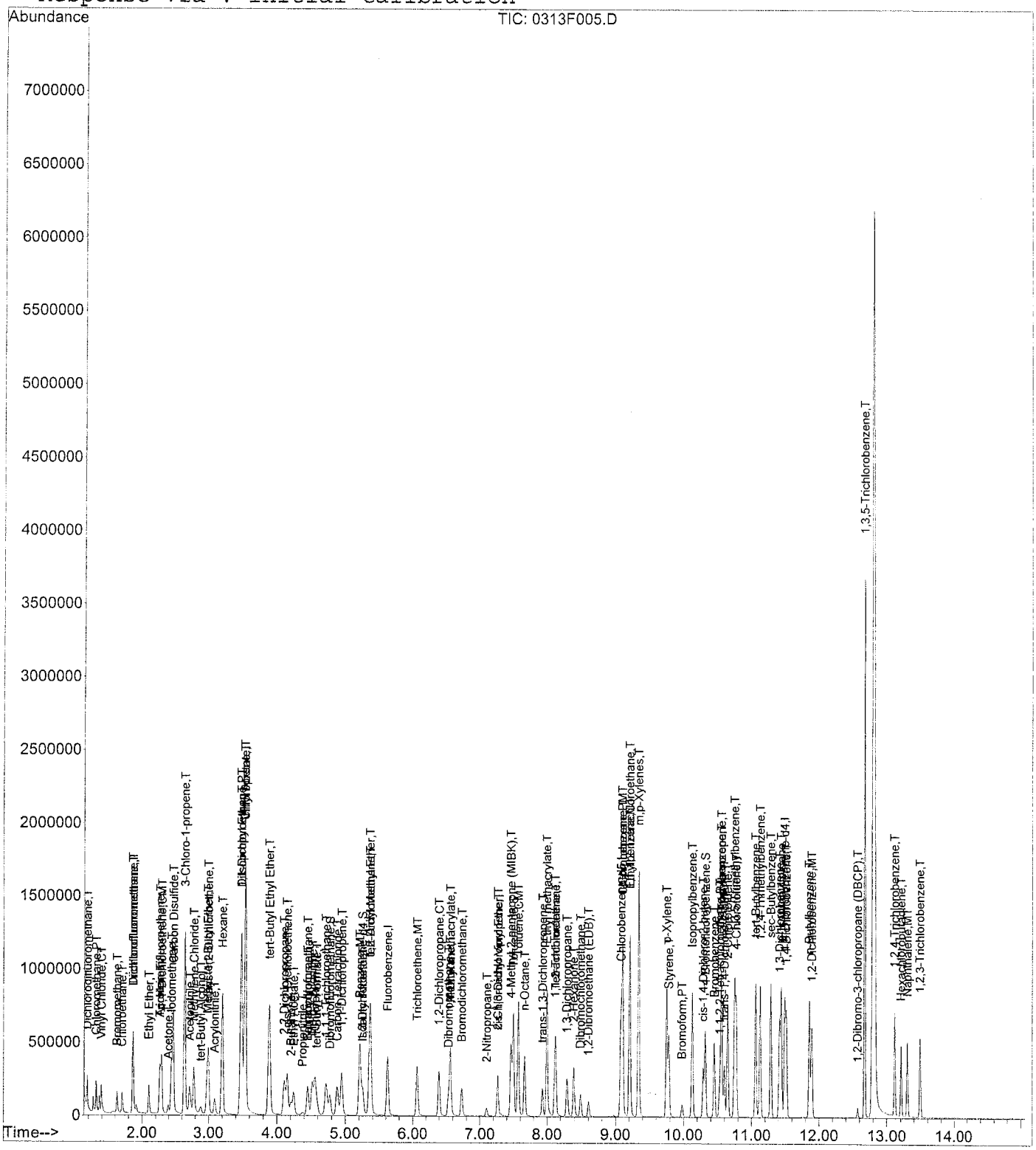
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.26
78.00	89.70	89.33
0.00	0.00	0.00

0313F005.D 022607.M Tue Mar 13 14:09:08 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F005.D Vial: 5
Acq On : 13 Mar 2007 10:15 am Operator:
Sample : K2006-003MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration


Abundance
TIC: 0313F005.D
7000000
6500000
6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Time-->
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
1,3,5-Trichlorobenzene,T
1,2-Dibromo-3-chloropropane (DBCP),T
Hexachlorobutadiene,MT
Naphthalene,MT
1,2,3-Trichlorobenzene,T
Styrene,p-Xylene,T
Bromoform,PT
Isopropylbenzene,T
Chlorobenzene,MT
m,p-Xylenes,T
Fluorobenzene,I
Trichloroethene,MT
1,2-Dichloropropane,CT
Bromodichloromethane,T
2-Nitropropane,T
n-Octane,T
4-Methyl-2-pentanone (MIBK),T
trans-1,3-Dichloropropene,T
1,3-Dichloropropane,T
Dibromochloromethane,T
1,2-Dibromoethane (EDB),T
tert-Butyl Ethyl Ether,T
Hexane,T
3-Chloro-1-propene,T
Acrylonitrile,T
Acetone,I
Ethyl Ether,T
Vinyl Chloride,CT
Chloroethane,PT
Chloromethane,T
Dichlorodifluoromethane,T
Dichloromethane,T
Carbon Disulfide,T
Methyl Acetate,T
Propionitrile,T
Methyl Methacrylate,T
Ethyl Methacrylate,T
Acrylonitrile,T
Iodomethane,T
Bromoethane,T
Chloroprene,T
Methyl Iodide,T
Methyl Tert-Butyl Ether,T
Ethyl Acetate,T
Methyl Acryl

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703590-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**13.2**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**66.7**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**0.220**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**9.88**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**10.2**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.00**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**54.5**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.6**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**12.1**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**59.5**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**10.1**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**11.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**11.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**65.9**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**11.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**8.89**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**9.42**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**83.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**6.70**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**8.64**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**7.98**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**7.72**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703590-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**23.6**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**6.07**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**8.70**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**10.6**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	104	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	101	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F006.D
Lab ID: KWG0703590-2 -- K0702006-003DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 10:34
Date Quantitated: 03/13/2007 14:09
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MW
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NL
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KN 3/15/07

Secondary Review: F-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582921	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	413056	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	199776	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	197260	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	95848	10.97	110	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	91603	10.39	104	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	441206	11.01	110	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	176163	10.06	101	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	90188	7.19	7.19		
1	Chloromethane	1.31		0.00	50	144761	9.88	9.88		
1	Vinyl Chloride	1.39		0.00	62	144220	10.71	10.7		
1	Bromomethane	1.63		0.00	96	66201	10.20	10.2		
1	Chloroethane	1.70	-0.01	0.00	64	81845	9.00	9.00		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	220838	10.11	10.1		
1	Trichlorofluoromethane	1.87		0.00	101	172217	9.35	9.35		
1	Ethyl Ether	2.10		0.00	59	77847	13.24	13.2		
1	Acrolein	2.27		0.00	56	59337	277.21	277		
1	Trichlorotrifluoroethane	2.27		0.00	151	82456	9.68	9.68		
1	1,1-Dichloroethene	2.29		0.00	96	103481	10.35	10.4		
1	Acetone	2.39	-0.01	0.00	43	63756	54.52	54.5		
1	Iodomethane	2.44		0.00	142	382540	33.01	33.0		
1	Carbon Disulfide	2.47		0.00	76	735750	22.59	22.6		
1	3-Chloro-1-propene	2.64		0.00	76	228409	41.95	42.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	111644	418.44	418		
1	Methylene Chloride	2.78		0.00	84	129141	12.08	12.1		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	48013	205.86	206		
1	Acrylonitrile	3.09		0.00	53	79354	52.24	52.2		
1	Methyl tert-Butyl Ether	2.97		0.00	73	244450	13.21	13.2		
1	trans-1,2-Dichloroethene	3.00		0.00	96	117166	10.03	10.0		
1	n-Hexane	3.20		0.00	57	380876	32.41	32.4		
1	Diisopropyl Ether	3.48		0.00	45	968962	29.01	29.0		
1	1,1-Dichloroethane	3.48		0.00	63	219585	10.70	10.7		
1	Vinyl Acetate	3.53		0.00	86	78461	66.67	66.7		
1	Chloroprene	3.54		0.00	53	714098	32.18	32.2		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	738085	30.67	30.7		
1	2,2-Dichloropropane	4.11		0.00	77	136937	9.94	9.94		
1	cis-1,2-Dichloroethene	4.15		0.00	96	128273	10.79	10.8		
1	2-Butanone (MEK)	4.21	0.01	0.00	72	23351	59.54	59.5		
1	Propionitrile	4.37		0.00	54	21117	40.49	40.5		
1	Ethyl Acetate	4.25	0.01	0.00	61	30844	59.59	59.6		
1	Methacrylonitrile	4.52		0.00	67	81151	44.34	44.3		
1	Bromochloromethane	4.45		0.00	128	46470	10.66	10.7		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	10483	24.73	24.7		
1	Chloroform	4.55		0.00	83	203952	10.03	10.0		
1	tert-Butyl Formate	4.58		0.00	59	18554	7.54	7.54		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	175272	10.38	10.4		
1	Carbon Tetrachloride	4.88		0.00	117	152754	10.16	10.2		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	161461	9.88	9.88		
1	Isobutyl Alcohol	5.26		0.00	43	46780	428.30	428		
1	Benzene	5.21		0.00	78	493609	10.13	10.1		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	124110	11.31	11.3		
1	tert-Amyl Methyl Ether	5.37		0.00	55	173203	30.50	30.5		
1	Trichloroethene (TCE)	6.06		0.00	95	117615	10.03	10.0		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	116315	11.51	11.5		
1	Dibromomethane	6.53		0.00	93	43791	10.97	11.0		
1	Methyl Methacrylate	6.56		0.00	69	161734	51.00	51.0		
1	1,4-Dioxane	6.55	-0.01	0.00	88	14047	379.65	380		
1	Bromodichloromethane	6.73		0.00	83	127277	11.54	11.5		
1	2-Nitropropane	7.10		0.00	43	39543	38.37	38.4		
1	2-Chloroethyl Vinyl Ether	7.27	0.13	0.02	63	761	0.2200	0.220	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	139353	11.20	11.2		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	128317	83.93	83.9		
1	Toluene	7.57		0.00	92	308393	10.26	10.3		
2	n-Octane	7.66		0.00	85	80167	15.82	15.8		
2	trans-1,3-Dichloropropene	7.92		0.00	75	94467	8.89	8.89		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	411854	49.92	49.9		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	59933	9.42	9.42		
2	Tetrachloroethene (PCE)	8.13		0.00	164	96779	6.70	6.70		
2	2-Hexanone	8.39		0.00	57	38626	65.86	65.9		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	134808	9.22	9.22		
2	Dibromochloromethane	8.49		0.00	129	73749	8.64	8.64		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	63104	9.17	9.17		
2	1-Chlorohexane	9.10		0.00	91	155799	7.45	7.45		
2	Chlorobenzene	9.10		0.00	112	328562	7.98	7.98		
2	Ethylbenzene	9.20		0.00	106	181991	7.72	7.72		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	102928	8.57	8.57		
2	m,p-Xylenes	9.34		0.00	106	448957	15.39	15.4		
2	o-Xylene	9.75		0.00	106	221119	8.17	8.17		
2	Styrene	9.78		0.00	103	114589m	6.07	6.07		
2	Bromoform	9.98		0.00	173	37070	8.70	8.70		
2	Isopropylbenzene	10.13		0.00	105	505792	6.83	6.83		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	23969	33.50	33.5		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	77763	10.64	10.6		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	74870	47.26	47.3		
3	Bromobenzene	10.45		0.00	156	129773	7.76	7.76		
3	n-Propylbenzene	10.55		0.00	91	639974	7.26	7.26		
3	1,2,3-Trichloropropane	10.57		0.00	110	23828	10.27	10.3		
3	2-Chlorotoluene	10.65		0.00	91	397268	7.68	7.68		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	449011	7.38	7.38		
3	4-Chlorotoluene	10.77		0.00	91	448226	7.57	7.57		
3	tert-Butylbenzene	11.06		0.00	119	409053	7.16	7.16		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	455072	7.42	7.42		
3	sec-Butylbenzene	11.29		0.00	105	570255	7.48	7.48		
3	4-Isopropyltoluene	11.44		0.00	119	457275	6.65	6.65		
3	1,3-Dichlorobenzene	11.42		0.00	146	253246	7.44	7.44		
3	1,4-Dichlorobenzene	11.52		0.00	146	250856	7.47	7.47		
3	n-Butylbenzene	11.86		0.00	91	383650	6.46	6.46		
3	1,2-Dichlorobenzene	11.89		0.00	146	228329	7.67	7.67		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	8238	8.55	8.55		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	785241	27.64	27.6		
3	1,2,4-Trichlorobenzene	13.11		0.00	180	157990	7.16	7.16		
3	Hexachlorobutadiene	13.21		0.00	225	73315	5.58	5.58		
3	Naphthalene	13.30		0.00	128	311054	11.20	11.2		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	141631	7.83	7.83		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F006.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 10:34	**Quant Date:**	03/13/2007 14:09	**Vial:**	6
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703590-2 -- K0702006-003DMS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

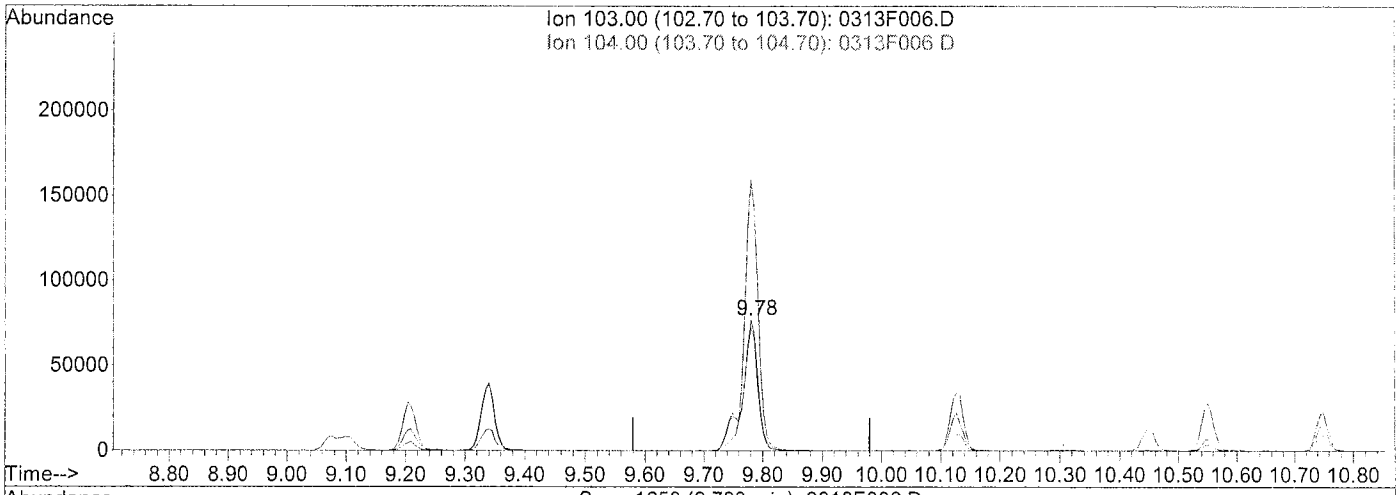
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

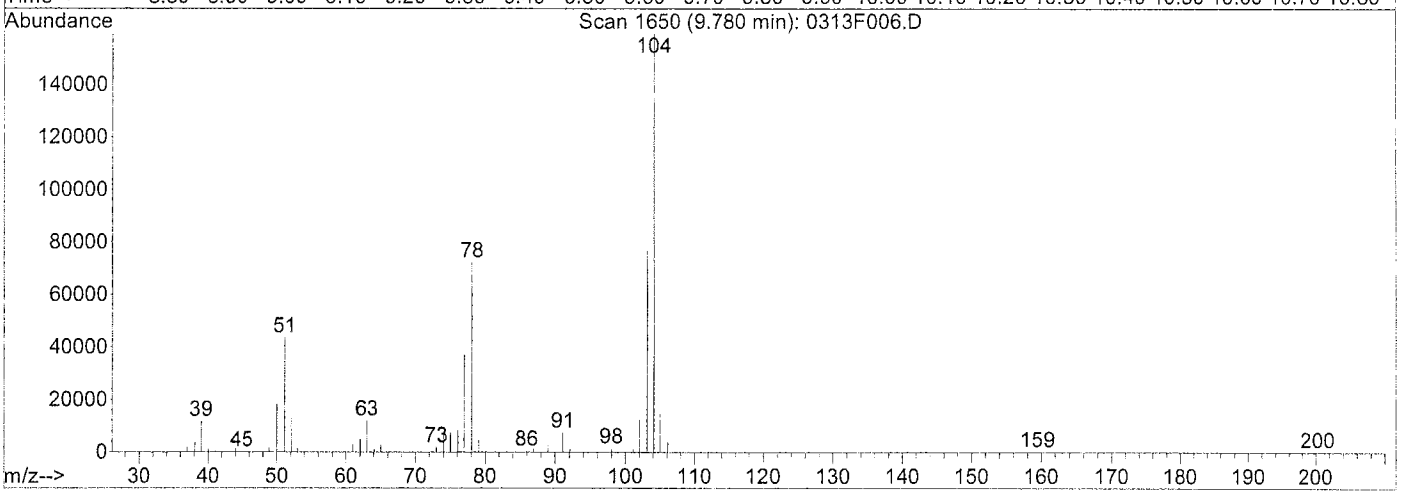
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F006.D
Acq On : 13 Mar 2007 10:34 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007

Vial: 6
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F006.D

(76) Styrene (T)

9.78min 7.63PPB

response 144069

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.67
78.00	89.70	94.05
0.00	0.00	0.00

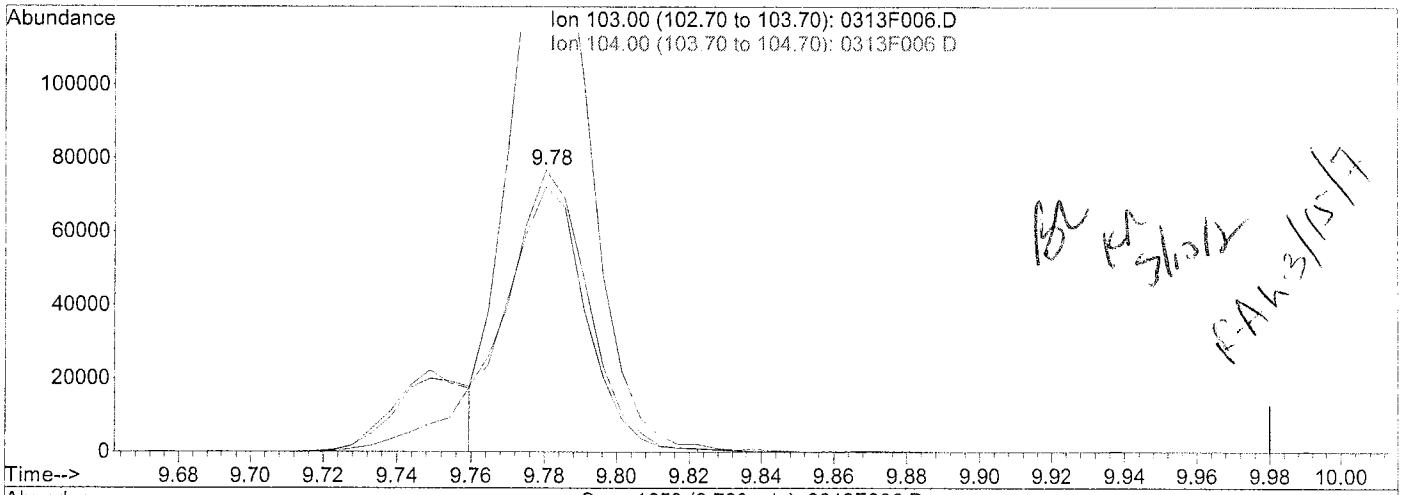
0313F006.D 022607.M Tue Mar 13 14:09:51 2007

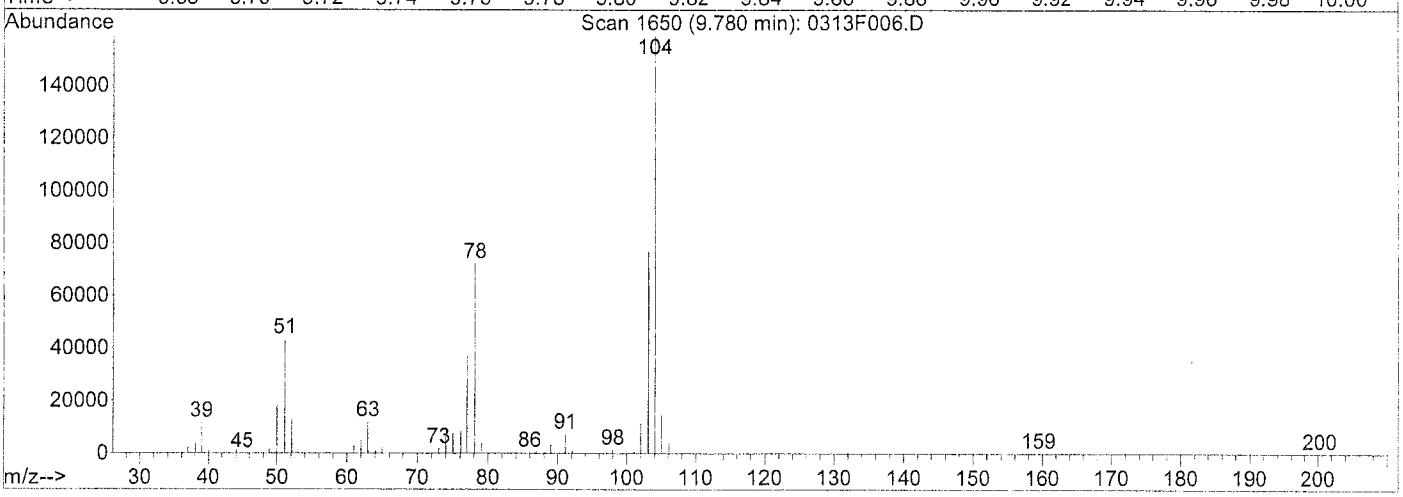
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F006.D
Acq On : 13 Mar 2007 10:34 am
Sample : K2006-003MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007

Vial: 6
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F006.D

(76) Styrene (T)

9.78min 6.07PPB m

response 114589

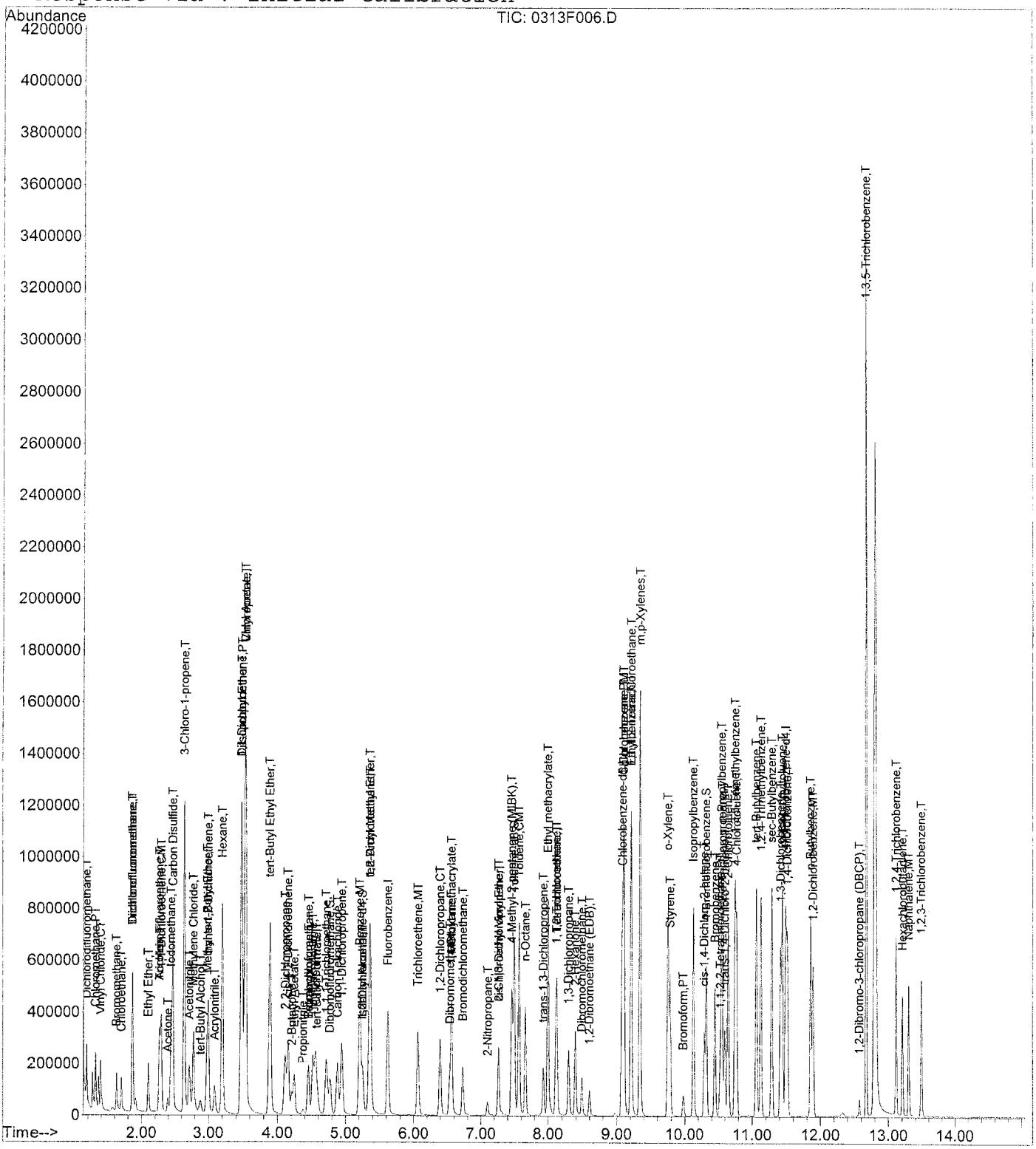
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	207.67
78.00	89.70	94.05
0.00	0.00	0.00

0313F006.D 022607.M Tue Mar 13 14:09:56 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F006.D Vial: 6
Acq On : 13 Mar 2007 10:34 am Operator:
Sample : K2006-003MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:09 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Lab Control Sample
Lab Code: KWG0703590-5

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**8.55**		2.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Acetate	**46.9**		10	1	03/13/07	03/13/07	KWG0703590	
2-Chloroethyl Vinyl Ether	**9.14**		10	1	03/13/07	03/13/07	KWG0703590	
Chloromethane	**9.64**		1.0	1	03/13/07	03/13/07	KWG0703590	
Vinyl Chloride	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromomethane	**8.94**		1.0	1	03/13/07	03/13/07	KWG0703590	
Chloroethane	**9.32**		1.0	1	03/13/07	03/13/07	KWG0703590	
Acetone	**37.6**		10	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethene	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Disulfide	**22.0**		5.0	1	03/13/07	03/13/07	KWG0703590	
Methylene Chloride	**11.7**		4.5	1	03/13/07	03/13/07	KWG0703590	
trans-1,2-Dichloroethene	**9.75**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1-Dichloroethane	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Butanone (MEK)	**44.4**		10	1	03/13/07	03/13/07	KWG0703590	*
cis-1,2-Dichloroethene	**9.99**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chloroform	**9.32**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,1-Trichloroethane (TCA)	**10.2**		0.50	1	03/13/07	03/13/07	KWG0703590	
Carbon Tetrachloride	**9.88**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloroethane (EDC)	**9.41**		0.50	1	03/13/07	03/13/07	KWG0703590	
Benzene	**9.91**		0.50	1	03/13/07	03/13/07	KWG0703590	
Trichloroethene (TCE)	**9.84**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,2-Dichloropropane	**10.0**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromodichloromethane	**9.87**		0.50	1	03/13/07	03/13/07	KWG0703590	
2-Hexanone	**33.7**		10	1	03/13/07	03/13/07	KWG0703590	
cis-1,3-Dichloropropene	**9.55**		0.50	1	03/13/07	03/13/07	KWG0703590	
Toluene	**9.96**		0.50	1	03/13/07	03/13/07	KWG0703590	
trans-1,3-Dichloropropene	**7.64**		0.50	1	03/13/07	03/13/07	KWG0703590	
1,1,2-Trichloroethane	**8.11**		0.50	1	03/13/07	03/13/07	KWG0703590	
4-Methyl-2-pentanone (MIBK)	**39.9**		10	1	03/13/07	03/13/07	KWG0703590	
Tetrachloroethene (PCE)	**7.98**		0.50	1	03/13/07	03/13/07	KWG0703590	
Dibromochloromethane	**7.55**		0.50	1	03/13/07	03/13/07	KWG0703590	
Chlorobenzene	**8.23**		0.50	1	03/13/07	03/13/07	KWG0703590	
Ethylbenzene	**8.38**		0.50	1	03/13/07	03/13/07	KWG0703590	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703590-5	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**25.4**		1.0	1	03/13/07	03/13/07	KWG0703590	
Styrene	**8.70**		0.50	1	03/13/07	03/13/07	KWG0703590	
Bromoform	**6.75**		1.0	1	03/13/07	03/13/07	KWG0703590	
1,1,2,2-Tetrachloroethane	**8.02**		0.50	1	03/13/07	03/13/07	KWG0703590	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	81	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F100.D
Lab ID: KWG0703590-5
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 09:55
Date Quantitated: 03/13/2007 14:08
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Continuing Calibration Recovery	cis-1,4-Dichloro-2-butene	-40.0	NA	30	NL
Continuing Calibration Minimum RF	Acrolein	0.0070	0.01	NA	
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0055	0.01	NA	
	Isobutyl Alcohol	0.0024	0.01	NA	

Primary Review: KW 3/15/07

Secondary Review: E-Ah 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**	KWG0703590	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	582924	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F011.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	410000	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	177755	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	161244	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	84742	9.77	98	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	70735	8.08	81	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	428420	10.77	108	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	143522	9.21	92	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	.Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	94930	7.63	7.63		
1	Chloromethane	1.31		0.00	50	140124	9.64	9.64		
1	Vinyl Chloride	1.39		0.00	62	139760	10.45	10.5		
1	Bromomethane	1.63		0.00	96	57589	8.94	8.94		
1	Chloroethane	1.70	-0.01	0.00	64	84087	9.32	9.32		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	264341	12.19	12.2		
1	Trichlorofluoromethane	1.86	-0.01	0.00	101	174130	9.52	9.52		
1	Ethyl Ether	2.10		0.00	59	58169	9.97	9.97		
1	Acrolein	2.26	-0.01	0.00	56	50827	239.23	239		
1	Trichlorotrifluoroethane	2.27		0.00	151	86107	10.19	10.2		
1	1,1-Dichloroethene	2.29		0.00	96	103356	10.41	10.4		
1	Acetone	2.39	-0.01	0.00	43	43648	37.61	37.6		
1	Iodomethane	2.43	-0.01	0.00	142	348297	30.28	30.3		
1	Carbon Disulfide	2.46	-0.01	0.00	76	712038	22.03	22.0		
1	3-Chloro-1-propene	2.63	-0.01	0.00	76	189188	35.01	35.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	78600	296.79	297		
1	Methylene Chloride	2.78		0.00	84	124122	11.70	11.7		
1	tert-Butyl Alcohol	2.88	-0.01	0.00	59	21540	93.04	93.0		
1	Acrylonitrile	3.09		0.00	53	55226	36.63	36.6		
1	Methyl tert-Butyl Ether	2.97		0.00	73	156958	8.55	8.55		
1	trans-1,2-Dichloroethene	2.99	-0.01	0.00	96	113085	9.75	9.75		
1	n-Hexane	3.20		0.00	57	398973	34.20	34.2		
1	Diisopropyl Ether	3.47	-0.01	0.00	45	728657	21.98	22.0		
1	1,1-Dichloroethane	3.47	-0.01	0.00	63	209292	10.28	10.3		
1	Vinyl Acetate	3.53		0.00	86	54734	46.86	46.9		
1	Chloroprene	3.53	-0.01	0.00	53	615401	27.94	27.9		
1	tert-Butyl Ethyl Ether	3.88	-0.01	0.00	59	486889	20.38	20.4		
1	2,2-Dichloropropane	4.11		0.00	77	129409	9.46	9.46		
1	cis-1,2-Dichloroethene	4.15		0.00	96	117863	9.99	9.99		
1	2-Butanone (MEK)	4.20		0.00	72	17292	44.42	44.4		
1	Propionitrile	4.37		0.00	54	13003	25.12	25.1		
1	Ethyl Acetate	4.24		0.00	61	16323	31.77	31.8		
1	Methacrylonitrile	4.51	-0.01	0.00	67	45393	24.99	25.0		
1	Bromochloromethane	4.45		0.00	128	41071	9.50	9.50		
1	Tetrahydrofuran	4.45	-0.01	0.00	71	6893	16.38	16.4		
1	Chloroform	4.55		0.00	83	188017	9.32	9.32		
1	tert-Butyl Formate	4.58		0.00	59	39752	16.27	16.3		
1	1,1,1-Trichloroethane (TCA)	4.71	-0.01	0.00	97	171627	10.24	10.2		
1	Carbon Tetrachloride	4.87	-0.01	0.00	117	147326	9.88	9.88		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	164216	10.13	10.1		
1	Isobutyl Alcohol	5.25	-0.01	0.00	43	25231	232.73	233		
1	Benzene	5.21		0.00	78	479290	9.91	9.91		
1	1,2-Dichloroethane (EDC)	5.35	-0.01	0.00	62	102534	9.41	9.41		
1	tert-Amyl Methyl Ether	5.36	-0.01	0.00	55	108627	19.27	19.3		
1	Trichloroethene (TCE)	6.06		0.00	95	114462	9.84	9.84		
1	1,2-Dichloropropane	6.39	-0.01	0.00	63	100291	10.00	10.0		
1	Dibromomethane	6.53		0.00	93	34989	8.83	8.83		
1	Methyl Methacrylate	6.56		0.00	69	83634	26.57	26.6		
1	1,4-Dioxane	6.54	-0.02	0.00	88	8905	242.47	242		
1	Bromodichloromethane	6.73		0.00	83	108011	9.87	9.87		
1	2-Nitropropane	7.10		0.00	43	18476	18.06	18.1		
1	2-Chloroethyl Vinyl Ether	7.13	-0.01	0.00	63	31962	9.14	9.14		
1	cis-1,3-Dichloropropene	7.26		0.00	75	117912	9.55	9.55		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	60555	39.90	39.9		
1	Toluene	7.56	-0.01	0.00	92	296921	9.96	9.96		
2	n-Octane	7.66		0.00	85	93077	20.64	20.6		
2	trans-1,3-Dichloropropene	7.92		0.00	75	72236	7.64	7.64		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	175142	23.86	23.9		

U: Undetected at or above MDL
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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	45901	8.11	8.11		
2	Tetrachloroethene (PCE)	8.12	-0.01	0.00	164	102653	7.98	7.98		
2	2-Hexanone	8.39		0.00	57	17595	33.72	33.7		
2	1,3-Dichloropropane	8.29	-0.01	0.00	76	103814	7.98	7.98		
2	Dibromochloromethane	8.49		0.00	129	57277	7.55	7.55		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	47298	7.72	7.72		
2	1-Chlorohexane	9.10		0.00	91	156039	8.39	8.39		
2	Chlorobenzene	9.10		0.00	112	301380	8.23	8.23		
2	Ethylbenzene	9.21	0.01	0.00	106	175722	8.38	8.38		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	87574	8.19	8.19		
2	m,p-Xylenes	9.33	-0.01	0.00	106	442385	17.04	17.0		
2	o-Xylene	9.75		0.00	106	200830	8.34	8.34		
2	Styrene	9.78		0.00	103	146047m	8.70	8.70		
2	Bromoform	9.97	-0.01	0.00	173	25584	6.75	6.75		
2	Isopropylbenzene	10.13		0.00	105	504792	7.67	7.67		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	11437	17.96	18.0		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	47922	8.02	8.02		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	34425	26.58	26.6		
3	Bromobenzene	10.45		0.00	156	107664	7.88	7.88		
3	n-Propylbenzene	10.55		0.00	91	662799	9.20	9.20		
3	1,2,3-Trichloropropane	10.57		0.00	110	15291	8.06	8.06		
3	2-Chlorotoluene	10.65		0.00	91	375111	8.87	8.87		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	451255	9.07	9.07		
3	4-Chlorotoluene	10.77		0.00	91	425954	8.80	8.80		
3	tert-Butylbenzene	11.06		0.00	119	411620	8.81	8.81		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	444203	8.86	8.86		
3	sec-Butylbenzene	11.29		0.00	105	596551	9.57	9.57		
3	4-Isopropyltoluene	11.44		0.00	119	486351	8.65	8.65		
3	1,3-Dichlorobenzene	11.42		0.00	146	227613	8.18	8.18		
3	1,4-Dichlorobenzene	11.52		0.00	146	220569	8.03	8.03		
3	n-Butylbenzene	11.86		0.00	91	424141	8.73	8.73		
3	1,2-Dichlorobenzene	11.89		0.00	146	187803	7.72	7.72		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	5259	6.68	6.68		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	690988	29.76	29.8		
3	1,2,4-Trichlorobenzene	13.12	0.01	0.00	180	129780	7.20	7.20		
3	Hexachlorobutadiene	13.21		0.00	225	84879	7.90	7.90		
3	Naphthalene	13.30		0.00	128	185187	8.16	8.16		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	105527	7.14	7.14		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F100.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:55	**Quant Date:**	03/13/2007 14:08	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703590-5			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

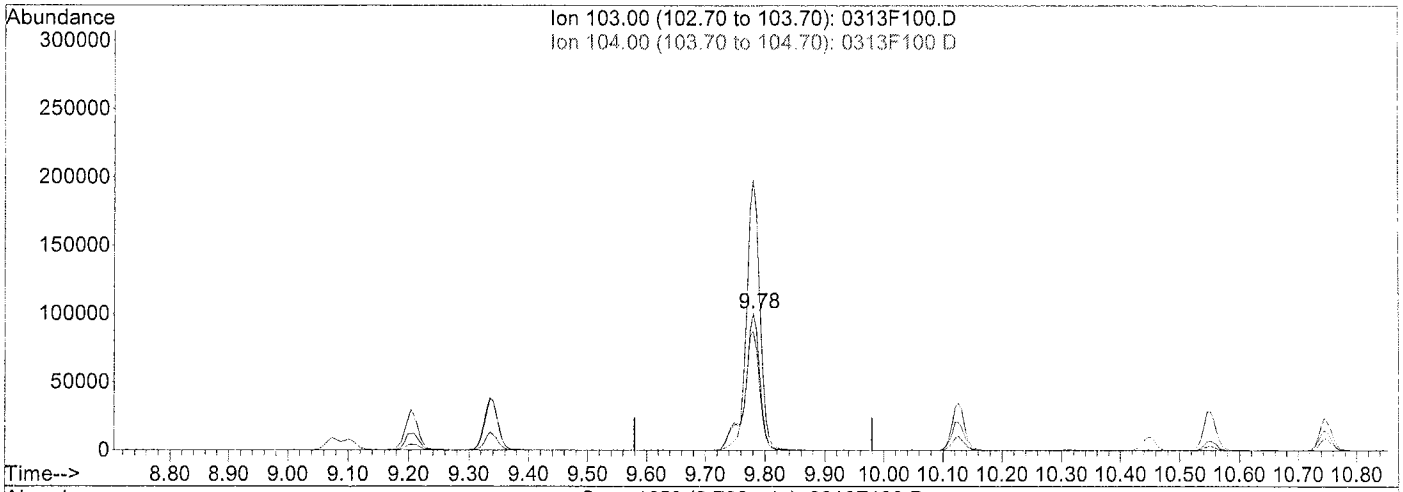
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

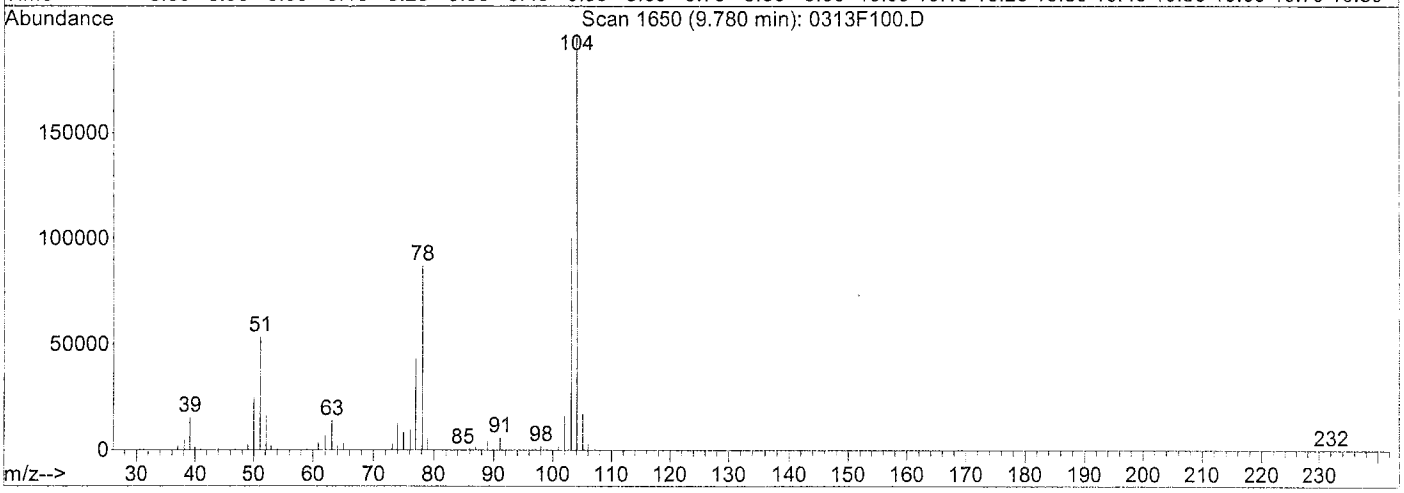
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F100.D
Acq On : 13 Mar 2007 9:55 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 10:19 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F100.D

(76) Styrene (T)

9.78min 10.44PPB

response 175273

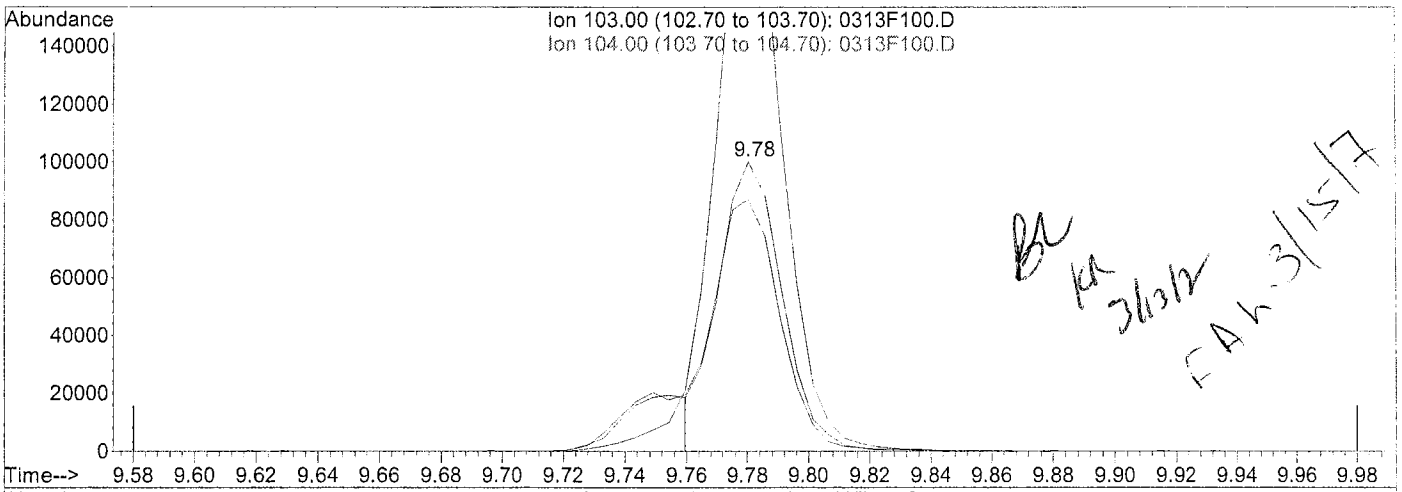
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	197.83
78.00	89.70	87.05
0.00	0.00	0.00

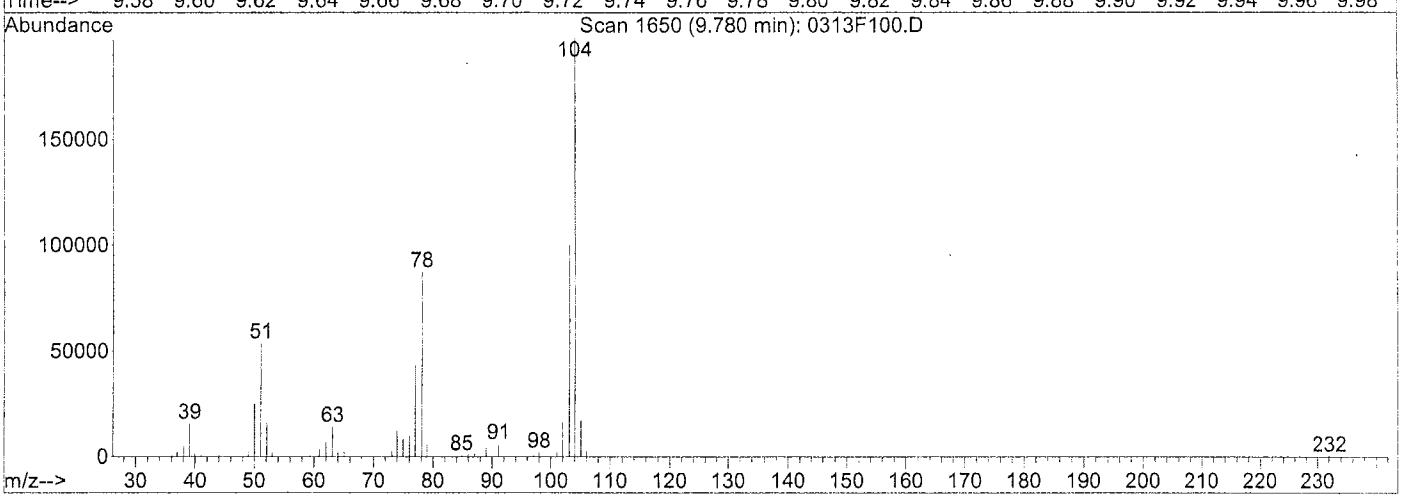
0313F100.D 022607.M Tue Mar 13 14:08:02 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F100.D Vial: 4
Acq On : 13 Mar 2007 9:55 am Operator:
Sample : LCS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F100.D

(76) Styrene (T)

9.78min 8.70PPB m

response 146047

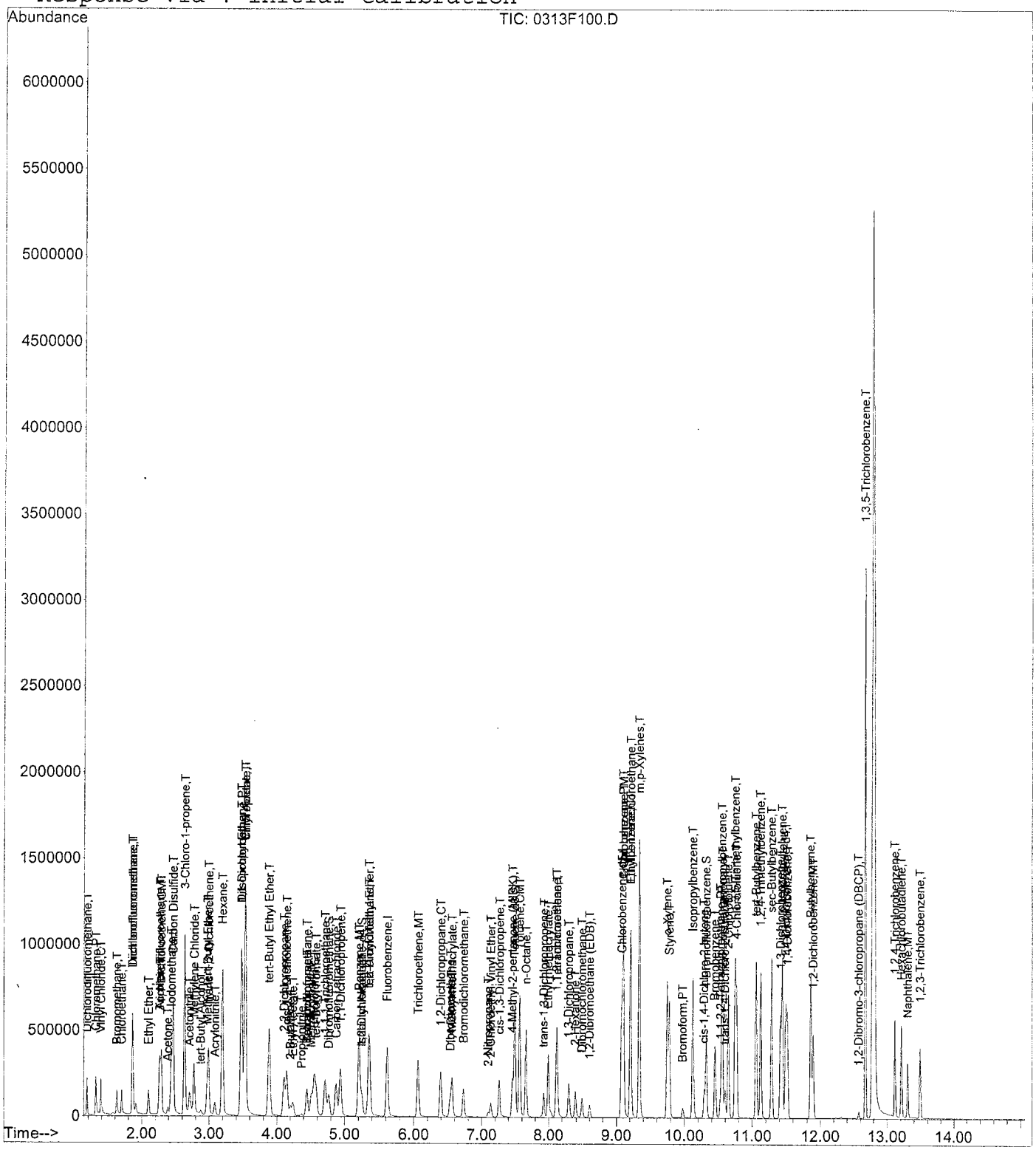
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	197.83
78.00	89.70	87.05
0.00	0.00	0.00

0313F100.D 022607.M Tue Mar 13 14:08:07 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F100.D Vial: 4
Acq On : 13 Mar 2007 9:55 am Operator:
Sample : LCS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:08 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007
Time Analyzed: 08:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F002.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703563

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703563-2	J:\MS18\DATA\031307\0313F003.D	03/13/2007	09:02	
Lab Control Sample	KWG0703590-5	J:\MS18\DATA\031307\0313F100.D	03/13/2007	09:55	
Batch QCMS	KWG0703590-1	J:\MS18\DATA\031307\0313F005.D	03/13/2007	10:15	
Batch QCDMS	KWG0703590-2	J:\MS18\DATA\031307\0313F006.D	03/13/2007	10:34	
Method Blank	KWG0703590-6	J:\MS18\DATA\031307\0313F011.D	03/13/2007	12:12	
TB030207C124	K0701703-002	J:\MS18\DATA\031307\0313F013.D	03/13/2007	12:51	
DAEGW104C1	K0701703-001	J:\MS18\DATA\031307\0313F018.D	03/13/2007	14:29	
Batch QC	K0702006-003	J:\MS18\DATA\031307\0313F020.D	03/13/2007	15:08	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS18\DATA\031307\0313F002.D
Lab ID: KWG0703563-1
RunType: BFB
Matrix: WATER

Date Acquired: 03/13/2007 08:42
Date Quantitated:
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: KN 3/13/07

Secondary Review: F-A h-3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F002.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 08:42	**Quant Date:**		**Vial:**	2
Run Type:	BFB			**Dilution:**	1.0
Lab ID:	KWG0703563-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.6	7826	Pass
75	95	30	60	48.8	20501	Pass
95	95	100	100	100.0	41997	Pass
96	95	5	9	6.7	2823	Pass
173	174	0	2	0.2	72	Pass
174	95	50	120	82.0	34458	Pass
175	174	5	9	7.8	2685	Pass
176	174	95	101	98.3	33858	Pass
177	176	5	9	7.1	2403	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

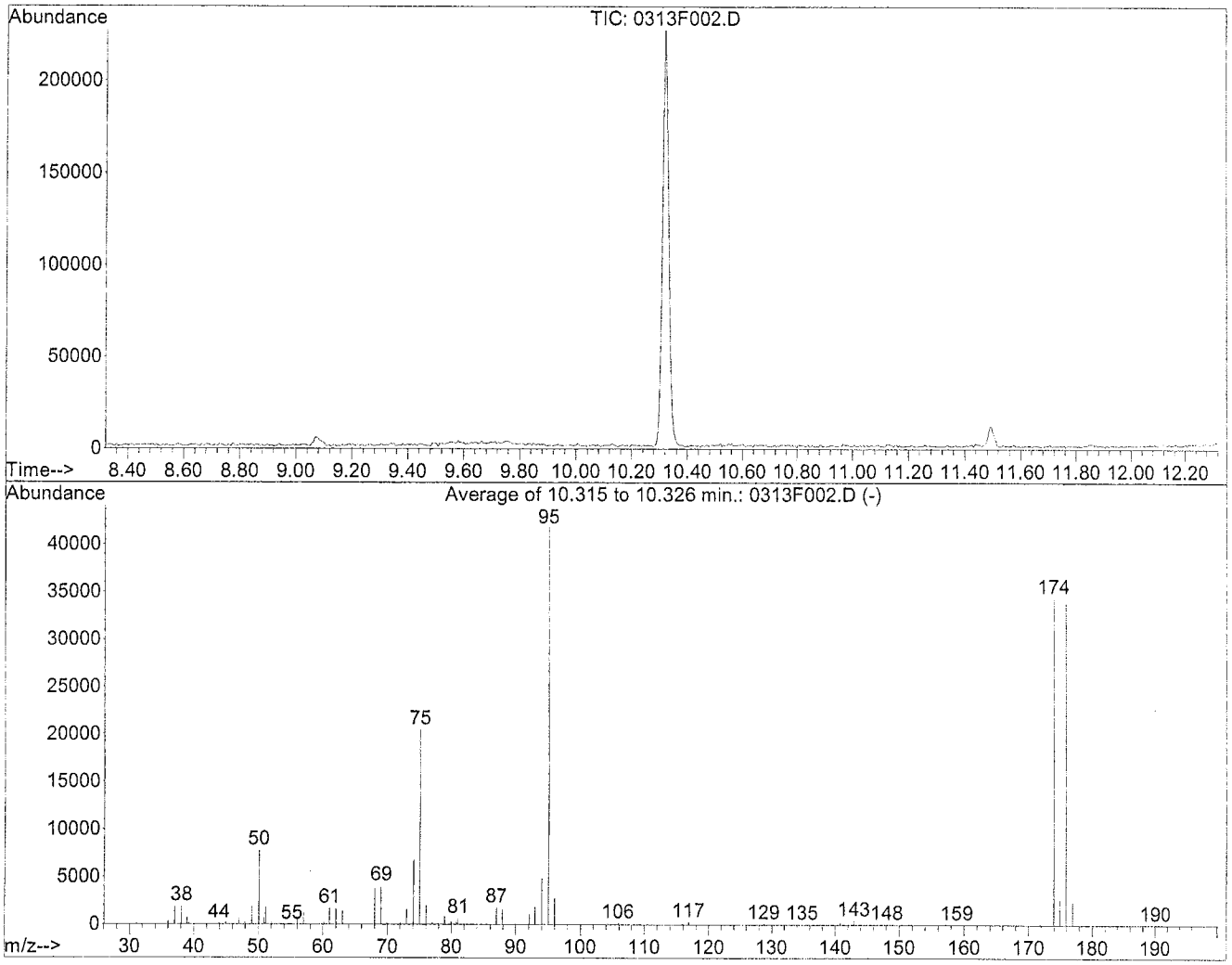
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

BFB

Data File : J:\MS18\DATA\031307\0313F002.D
Acq On : 13 Mar 2007 8:42 am
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 2
Operator:
Inst : GC-MS 18
Multiplr: 1.00



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	7826	PASS
75	95	30	60	48.8	20501	PASS
95	95	100	100	100.0	41997	PASS
96	95	5	9	6.7	2823	PASS
173	174	0.00	2	0.2	72	PASS
174	95	50	120	82.0	34458	PASS
175	174	5	9	7.8	2685	PASS
176	174	95	101	98.3	33858	PASS
177	176	5	9	7.1	2403	PASS

0313F002.D 022607.M Tue Mar 13 14:06:37 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

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† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Date: 2/26/07

By: Kleessner

IS/SS Std. ID: 45VOA - 54C

CCV Std ID: 45WA 55B/55A/46C/54B

LCS/ICV Std ID: 45WA-54A/55C/52P/53A/51A/52B

BFB Std. ID: 45WA - 49F

Columbia Analytical Services, Inc.
Injection Log
MS18 - Agilent 5973

Tune File: BFB4

New Tune: yes

ICAL Date: 2/26/07 Cal 6077

Second RV: 2/27/7

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	BFB	0226F016	8260.M	5µl-150ml			
2	IB	0226F061					
3	8260 Ical 0.1ppb	62					
4	0.2ppb	63					
5	0.5ppb	64					
6	1ppb	65					
7	2ppb	66					
8	5ppb	67					
9	10ppb	68					
10	20ppb	69					
11	40ppb	70					
12	60ppb	71					
13	IB	72					
14	IB	73					
15	ICV	74					
16	ICV						
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

INTIAL CALIBRATION CURVE

Date 2/26/7 Analysis: 8260/624

Prepared By KR Instrument: MS18

Matrix: Water

Stock Solution #1 45WA-54C Analytes: Surrogate Init. Concentration: 100ppm

Stock Solution #2 45WA 55B Analytes: Low 8260 Init. Concentration: 5/10/20/100/200ppm

Stock Solution #3 45WA 55A Analytes: 8260 Init. Concentration: 50/100/200/1000/2000p

Stock Solution #4 45WA-48C Analytes: Ketones Init. Concentration: 2000ppm

Stock Solution #5 45WA 54B Analytes: Low Ketones Init. Concentration: 200ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Aliquot of Stock Solution #4 (µL)	Final Conc. of #4 (µg/L)	Aliquot of Stock Solution #5 (µL)	Final Conc. of #5 (µg/L)
		1	0.1					1	4
2.0	4	2	0.2					2.5	10
2.5	5	5.0	0.5					5	20
3.0	6	10	1					10	40
3.5	7			2.0	2	2	80		
4.0	8			5.0	5	2.5	100		
5.0	10			10	10	5.0	200		
10	20			20	20	10	400		
20	40			40	40	20	800		
25	50			60	60	40	1600		

8260 ICV: 10uL of 50/250ppm Accustd ICV (45WA-54A) + 50uL of 100ppm Acrolein (45WA-55C) + 5uL of 100ppm Dichlorofluoromethane (45WA 52F) + 5uL of 200ppm n-Octane/TBF/Tetrahydrafuran (45WA 52A

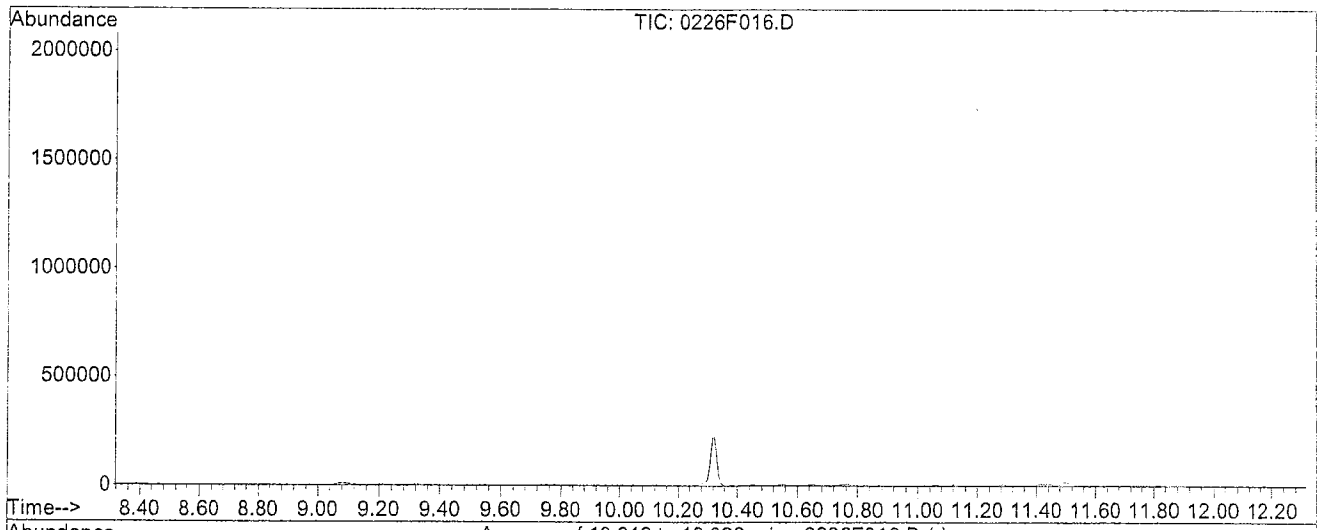
O Reagent 45WA-51A Spl App 45WA-52B 75µ

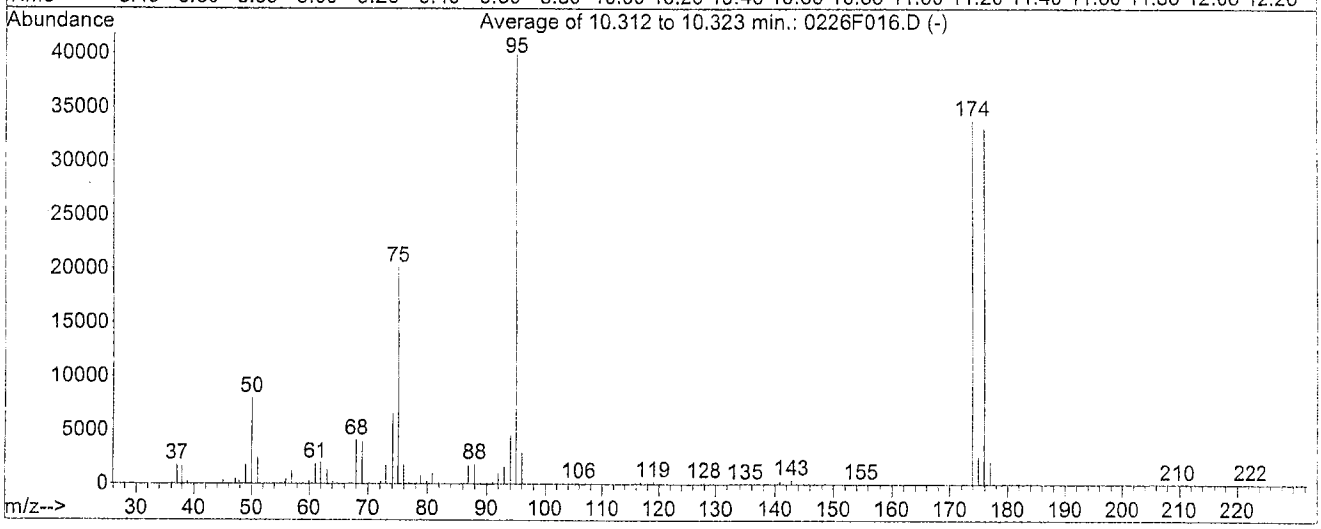
1320

BFB

Data File : J:\MS18\DATA\022607\0226F016.D
Acq On : 26 Feb 2007 2:18 pm
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\021607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00





AutoFind: Scans 1761, 1762, 1763; Background Corrected with Scan 1754

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	8012	PASS
75	95	30	60	50.5	20137	PASS
95	95	100	100	100.0	39856	PASS
96	95	5	9	7.4	2934	PASS
173	174	0.00	2	0.2	60	PASS
174	95	50	120	84.9	33840	PASS
175	174	5	9	7.6	2560	PASS
176	174	95	101	97.9	33136	PASS
177	176	5	9	6.4	2111	PASS

KC 2/27/7

0226F016.D 021607.M Mon Feb 26 14:50:53 2007

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	408646	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	149796	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	143736	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
58) Toluene-d8	7.49	98	2392	0.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.60%	
80) 4-Bromofluorobenzene	10.32	95	1356	0.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.90%	

Target Compounds							Qvalue
6) Chloroethane	1.72	64	576	0.07	PPB	#	48
10) Acrolein	2.28	56	1719	4.50	PPB		81
13) Acetone	2.41	43	2448	2.31	PPB		88
14) Iodomethane	2.44	142	1911	0.16	PPB		75
15) Carbon Disulfide	2.48	76	693	0.02	PPB		62
16) 3-Chloro-1-propene	2.48	76	693	0.13	PPB	#	1
18) Methylene Chloride	2.78	84	827	0.08	PPB	#	80
23) Hexane	3.19	57	691	0.06	PPB		90
37) Chloroform	4.57	83	867	0.05	PPB	#	54
45) Benzene	5.22	78	978	0.02	PPB		62
59) Toluene	7.56	92	582	0.02	PPB	#	10
61) n-Octane	7.65	85	840	0.20	PPB	#	72
70) 1-Chlorohexane	9.21	91	808	0.05	PPB		82
74) m,p-Xylenes	9.34	106	663	0.03	PPB		85
78) Isopropylbenzene	10.13	105	617	0.01	PPB		65
85) n-Propylbenzene	10.55	91	1624	0.02	PPB		83
87) 2-Chlorotoluene	10.65	91	772	0.02	PPB	#	10
88) 1,3,5-Trimethylbenzene	10.75	105	701	0.02	PPB	#	19
89) 4-Chlorotoluene	10.77	91	1404	0.03	PPB		73
91) 1,2,4-Trimethylbenzene	11.13	105	1093	0.03	PPB		70
92) sec-Butylbenzene	11.29	105	1135	0.02	PPB		47
93) p-Isopropyltoluene	11.44	119	1697	0.04	PPB		75
94) 1,3-Dichlorobenzene	11.42	146	1269	0.05	PPB		81
95) 1,4-Dichlorobenzene	11.52	146	1679	0.07	PPB		88
96) n-Butylbenzene	11.85	91	2428	0.06	PPB		84
97) 1,2-Dichlorobenzene	11.89	146	782	0.04	PPB	#	63
99) 1,3,5-Trichlorobenzene	12.68	180	3548	0.18	PPB		97
100) 1,2,4-Trichlorobenzene	13.12	180	1931	0.14	PPB		97

(#) = qualifier out of range (m) = manual integration
0226F061.D 022607.M Tue Feb 27 06:26:13 2007

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007 Quant Results File: 022607.RES

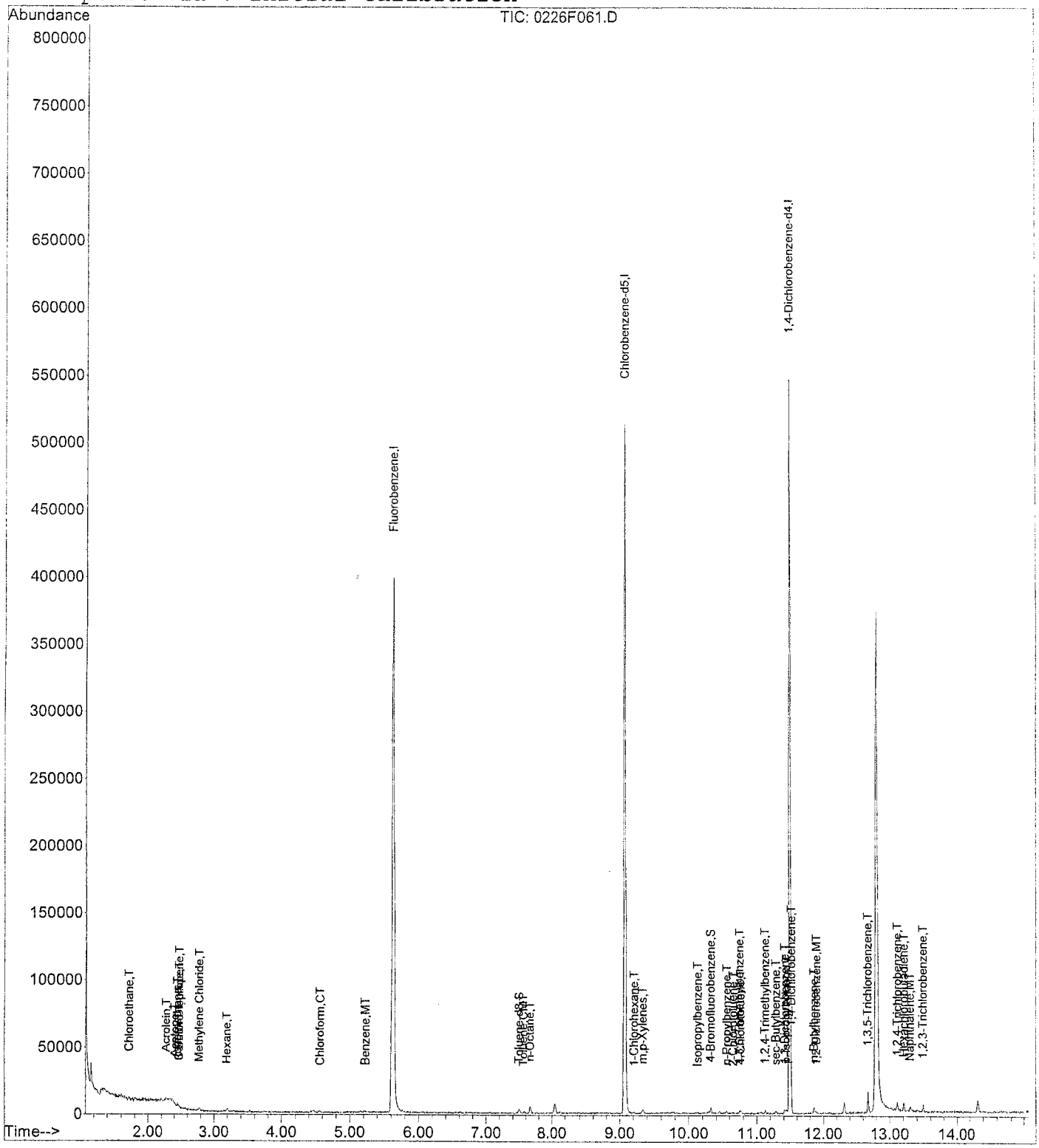
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
101) Hexachlorobutadiene	13.21	225	700	0.07 PPB	73
102) Naphthalene	13.30	128	1855	0.11 PPB	83
103) 1,2,3-Trichlorobenzene	13.49	180	1413	0.12 PPB	82

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/27/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	404707	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	149144	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	138643	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
58) Toluene-d8	0.00	98	0d	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
80) 4-Bromofluorobenzene	0.00	95	0d	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.19	85	1486	0.13	PPB	91
3) Chloromethane	1.32	50	1681	0.11	PPB	85
4) Vinyl Chloride	1.39	62	1409	0.11	PPB	87
5) Bromomethane	1.64	96	716	0.09	PPB	90
6) Chloroethane	1.71	64	1156	0.13	PPB	89
7) Dichlorofluoromethane	1.87	67	2701	0.12	PPB	95
8) Trichlorofluoromethane	1.87	101	1797	0.10	PPB	87
9) Ethyl Ether	2.11	59	647	0.12	PPB #	66
10) Acrolein	2.27	56	2025	5.35	PPB	72
11) Trichlorotrifluoroethane	2.27	151	773	0.09	PPB	79
12) 1,1-Dichloroethene	2.30	96	1009	0.10	PPB	88
13) Acetone	2.41	43	5625	5.37	PPB	92
14) Iodomethane	2.44	142	5044	0.41	PPB	91
15) Carbon Disulfide	2.47	76	3650	0.12	PPB	97
16) 3-Chloro-1-propene	2.47	76	3650	0.67	PPB #	1
18) Methylene Chloride	2.78	84	4181	0.43	PPB	91
21) Methyl tert-Butyl Ether	2.98	73	4141	0.25	PPB	75
22) trans-1,2-Dichloroethene	3.00	96	1200	0.11	PPB	77
23) Hexane	3.20	57	1759	0.15	PPB	67
24) Diisopropyl Ether	3.49	45	3087	0.10	PPB	83
25) 1,1-Dichloroethane	3.48	63	1970	0.10	PPB	89
27) Chloroprene	3.54	53	7634	0.34	PPB	83
28) tert-Butyl Ethyl Ether	3.89	59	2188	0.10	PPB	78
29) 2,2-Dichloropropane	4.12	77	1119	0.08	PPB #	50
30) cis-1,2-Dichloroethene	4.15	96	1439	0.13	PPB #	40
31) 2-Butanone	4.22	72	1434	3.96	PPB #	69
34) Methacrylonitrile	4.52	67	842	0.49	PPB #	48
37) Chloroform	4.56	83	2994	0.16	PPB	92

(#) = qualifier out of range (m) = manual integration
0226F062.D 022607.M Tue Feb 27 06:30:50 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
39)	1,1,1-Trichloroethane	4.72	97	1489	0.09	PPB	#	53
42)	1,1-Dichloropropene	4.95	75	1634	0.11	PPB		92
45)	Benzene	5.22	78	5633	0.13	PPB		93
46)	1,2-Dichloroethane	5.37	62	958	0.10	PPB	#	69
48)	Trichloroethene	6.07	95	1014	0.09	PPB	#	82
49)	1,2-Dichloropropane	6.40	63	933	0.10	PPB	#	70
53)	Bromodichloromethane	6.73	83	986	0.10	PPB		86
56)	cis-1,3-Dichloropropene	7.26	75	843	0.07	PPB		65
57)	4-Methyl-2-pentanone (MIBK	7.46	58	5331	3.80	PPB		89
59)	Toluene	7.56	92	2864	0.10	PPB		96
61)	n-Octane	7.67	85	806	0.19	PPB		83
62)	trans-1,3-Dichloropropene	7.93	75	611	0.08	PPB		90
63)	Ethyl methacrylate	8.00	69	619	0.10	PPB		81
65)	Tetrachloroethene	8.12	164	1259	0.13	PPB	#	71
66)	2-Hexanone	8.39	57	1458	3.51	PPB	#	67
67)	1,3-Dichloropropane	8.29	76	998	0.10	PPB		55
69)	1,2-Dibromoethane (EDB)	8.60	107	522	0.11	PPB		76
70)	1-Chlorohexane	9.10	91	2176	0.14	PPB		96
71)	Chlorobenzene	9.10	112	3379	0.12	PPB	#	67
72)	Ethylbenzene	9.21	106	1567	0.09	PPB		86
73)	1,1,1,2-Tetrachloroethane	9.22	131	981	0.12	PPB		83
74)	m,p-Xylenes	9.34	106	4477	0.22	PPB		93
75)	o-Xylene	9.75	106	2120	0.11	PPB	#	71
76)	Styrene	9.79	103	1872	0.14	PPB		95
78)	Isopropylbenzene	10.13	105	5625	0.11	PPB		95
79)	cis-1,4-Dichloro-2-butene	10.65	89	719	1.32	PPB	#	1
82)	1,1,2,2-Tetrachloroethane	10.52	83	651	0.13	PPB		82
84)	Bromobenzene	10.45	156	1387	0.13	PPB	#	67
85)	n-Propylbenzene	10.55	91	5803	0.09	PPB		87
87)	2-Chlorotoluene	10.65	91	3881	0.11	PPB		93
88)	1,3,5-Trimethylbenzene	10.75	105	3570	0.08	PPB		89
89)	4-Chlorotoluene	10.77	91	5046	0.12	PPB		82
90)	tert-Butylbenzene	11.07	119	4119	0.10	PPB		80
91)	1,2,4-Trimethylbenzene	11.12	105	4597	0.11	PPB		90
92)	sec-Butylbenzene	11.29	105	5344	0.10	PPB		88
93)	p-Isopropyltoluene	11.44	119	4930	0.11	PPB		79
94)	1,3-Dichlorobenzene	11.41	146	3435	0.15	PPB		91
95)	1,4-Dichlorobenzene	11.51	146	3508	0.15	PPB		91
96)	n-Butylbenzene	11.86	91	5380	0.14	PPB		91
97)	1,2-Dichlorobenzene	11.90	146	2536	0.13	PPB		91
99)	1,3,5-Trichlorobenzene	12.68	180	4101	0.21	PPB		92
100)	1,2,4-Trichlorobenzene	13.12	180	2726	0.20	PPB		80

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D
Acq On : 26 Feb 2007 7:31 pm
Sample : 8260 ICAL 0.1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007

Vial: 10
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

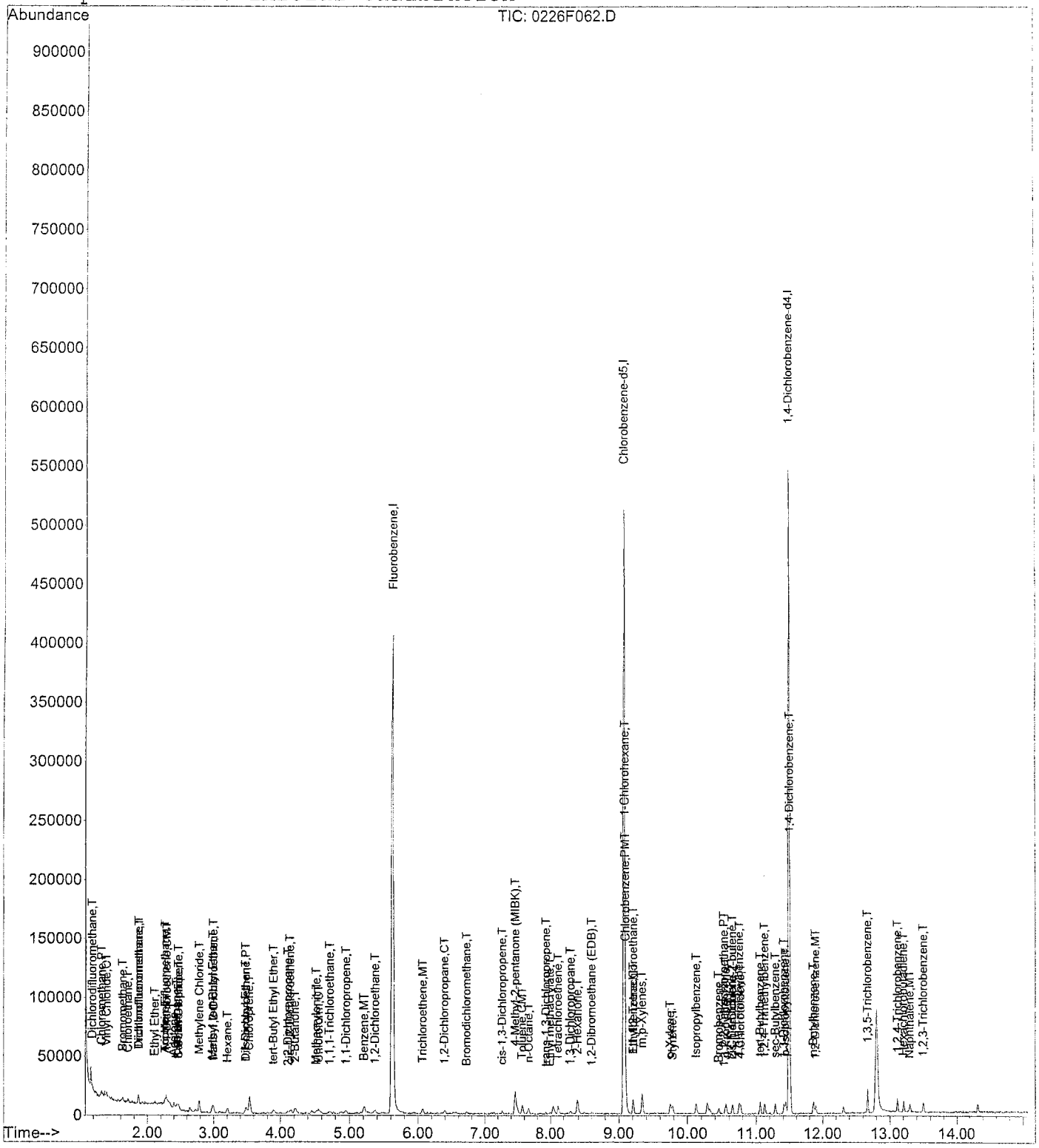
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
101)	Hexachlorobutadiene	13.21	225	1633	0.17	PPB	92
102)	Naphthalene	13.31	128	3166	0.20	PPB	89
103)	1,2,3-Trichlorobenzene	13.49	180	1994	0.18	PPB	96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:30 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	402827	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	150028	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140162	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	33005	4.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	41.80%	
44) 1,2-Dichloroethane-d4	5.25	65	34661	4.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	45.20%	
58) Toluene-d8	7.50	98	149658	3.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	39.10%	
80) 4-Bromofluorobenzene	10.32	95	51100	3.56	PPB	0.00
Spiked Amount 10.000			Recovery	=	35.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	2529	0.23	PPB		89
3) Chloromethane	1.32	50	2899	0.19	PPB		91
4) Vinyl Chloride	1.39	62	2415	0.19	PPB		89
5) Bromomethane	1.64	96	1220	0.15	PPB		87
6) Chloroethane	1.70	64	1483	0.17	PPB		89
7) Dichlorofluoromethane	1.86	67	4813	0.22	PPB		87
8) Trichlorofluoromethane	1.87	101	3253	0.17	PPB		83
9) Ethyl Ether	2.10	59	1198	0.22	PPB	#	67
10) Acrolein	2.27	56	2649m	7.03	PPB		
11) Trichlorotrifluoroethane	2.27	151	1558	0.18	PPB	#	71
12) 1,1-Dichloroethene	2.30	96	2090	0.21	PPB		82
13) Acetone	2.41	43	12279	11.77	PPB		92
14) Iodomethane	2.44	142	8758	0.72	PPB		98
15) Carbon Disulfide	2.47	76	6600	0.22	PPB		90
16) 3-Chloro-1-propene	2.64	76	1038	0.19	PPB	#	52
17) Acetonitrile	2.73	40	2947	11.78	PPB		87
18) Methylene Chloride	2.78	84	4917	0.51	PPB		91
20) Acrylonitrile	3.09	53	1459	1.09	PPB		88
21) Methyl tert-Butyl Ether	2.98	73	7168	0.44	PPB		93
22) trans-1,2-Dichloroethene	2.99	96	2163	0.19	PPB		86
23) Hexane	3.20	57	2801	0.23	PPB		97
24) Diisopropyl Ether	3.48	45	6699	0.22	PPB		88
25) 1,1-Dichloroethane	3.48	63	3991	0.21	PPB		97
27) Chloroprene	3.53	53	16214	0.73	PPB		86
28) tert-Butyl Ethyl Ether	3.89	59	4484	0.20	PPB		83
29) 2,2-Dichloropropane	4.11	77	2137	0.15	PPB		83
30) cis-1,2-Dichloroethene	4.16	96	2492	0.23	PPB		83
31) 2-Butanone	4.22	72	3652	10.14	PPB		89

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	Methacrylonitrile	4.52	67	1368	0.80	PPB		88
35)	Bromochloromethane	4.46	128	776	0.20	PPB	#	71
37)	Chloroform	4.56	83	4439	0.23	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	2952	0.19	PPB		97
41)	Carbon Tetrachloride	4.89	117	2613	0.18	PPB		80
42)	1,1-Dichloropropene	4.94	75	2915	0.19	PPB		90
45)	Benzene	5.22	78	9393	0.22	PPB		72
46)	1,2-Dichloroethane	5.37	62	2173	0.22	PPB		86
47)	tert-Amyl Methyl Ether	5.37	55	1127	0.20	PPB	#	1
48)	Trichloroethene	6.07	95	2293	0.20	PPB		84
49)	1,2-Dichloropropane	6.40	63	2072	0.23	PPB		79
50)	Dibromomethane	6.54	93	786	0.22	PPB		89
53)	Bromodichloromethane	6.73	83	1596	0.16	PPB		86
55)	2-Chloroethyl Vinyl Ether	7.14	63	677	0.20	PPB	#	57
56)	cis-1,3-Dichloropropene	7.27	75	1931	0.17	PPB		84
57)	4-Methyl-2-pentanone (MIBK	7.46	58	15185	10.86	PPB		94
59)	Toluene	7.57	92	5988	0.21	PPB		90
61)	n-Octane	7.67	85	1467	0.34	PPB		76
62)	trans-1,3-Dichloropropene	7.94	75	1364	0.17	PPB		72
63)	Ethyl methacrylate	7.99	69	1260	0.21	PPB		79
64)	1,1,2-Trichloroethane	8.11	83	802	0.18	PPB	#	32
65)	Tetrachloroethene	8.13	164	2422	0.24	PPB		93
66)	2-Hexanone	8.39	57	4246	10.15	PPB	#	81
67)	1,3-Dichloropropane	8.29	76	2426	0.25	PPB		84
68)	Dibromochloromethane	8.48	129	930	0.16	PPB		67
69)	1,2-Dibromoethane (EDB)	8.60	107	936	0.20	PPB		85
70)	1-Chlorohexane	9.10	91	3666	0.24	PPB		69
71)	Chlorobenzene	9.10	112	6576	0.23	PPB		91
72)	Ethylbenzene	9.21	106	3650	0.21	PPB	#	77
73)	1,1,1,2-Tetrachloroethane	9.21	131	1499	0.18	PPB		91
74)	m,p-Xylenes	9.34	106	8837	0.42	PPB		91
75)	o-Xylene	9.75	106	3939	0.21	PPB		96
76)	Styrene	9.78	103	2771	0.21	PPB		91
78)	Isopropylbenzene	10.13	105	11039	0.21	PPB		90
82)	1,1,2,2-Tetrachloroethane	10.52	83	1113	0.22	PPB		71
84)	Bromobenzene	10.45	156	2517	0.23	PPB		90
85)	n-Propylbenzene	10.55	91	12117	0.19	PPB		96
87)	2-Chlorotoluene	10.65	91	7585	0.21	PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	8305	0.19	PPB		98
89)	4-Chlorotoluene	10.77	91	9009	0.22	PPB		94
90)	tert-Butylbenzene	11.06	119	8581	0.21	PPB		94
91)	1,2,4-Trimethylbenzene	11.12	105	8799	0.22	PPB		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
92)	sec-Butylbenzene	11.29	105	10728	0.20	PPB		92
93)	p-Isopropyltoluene	11.44	119	9536	0.20	PPB		93
94)	1,3-Dichlorobenzene	11.42	146	5521	0.24	PPB		96
95)	1,4-Dichlorobenzene	11.52	146	5691	0.25	PPB		87
96)	n-Butylbenzene	11.85	91	8534	0.22	PPB		92
97)	1,2-Dichlorobenzene	11.90	146	4687	0.24	PPB		93
99)	1,3,5-Trichlorobenzene	12.67	180	5402	0.28	PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	4009	0.30	PPB		84
101)	Hexachlorobutadiene	13.21	225	2468	0.25	PPB	#	51
102)	Naphthalene	13.30	128	4343	0.27	PPB		97
103)	1,2,3-Trichlorobenzene	13.49	180	3209	0.28	PPB		87

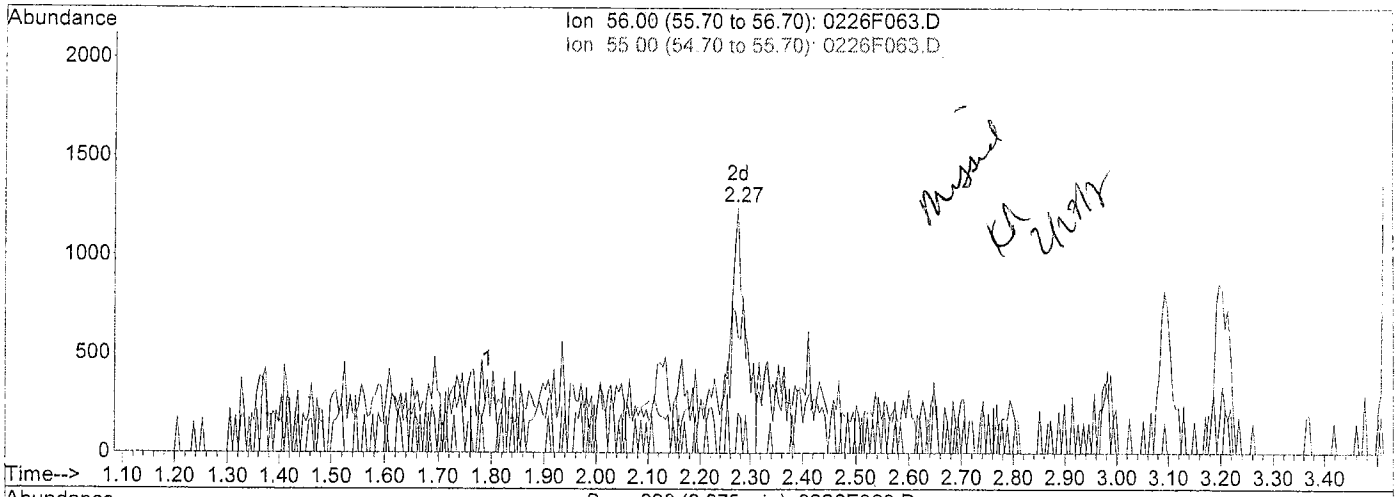
(#) = qualifier out of range (m) = manual integration

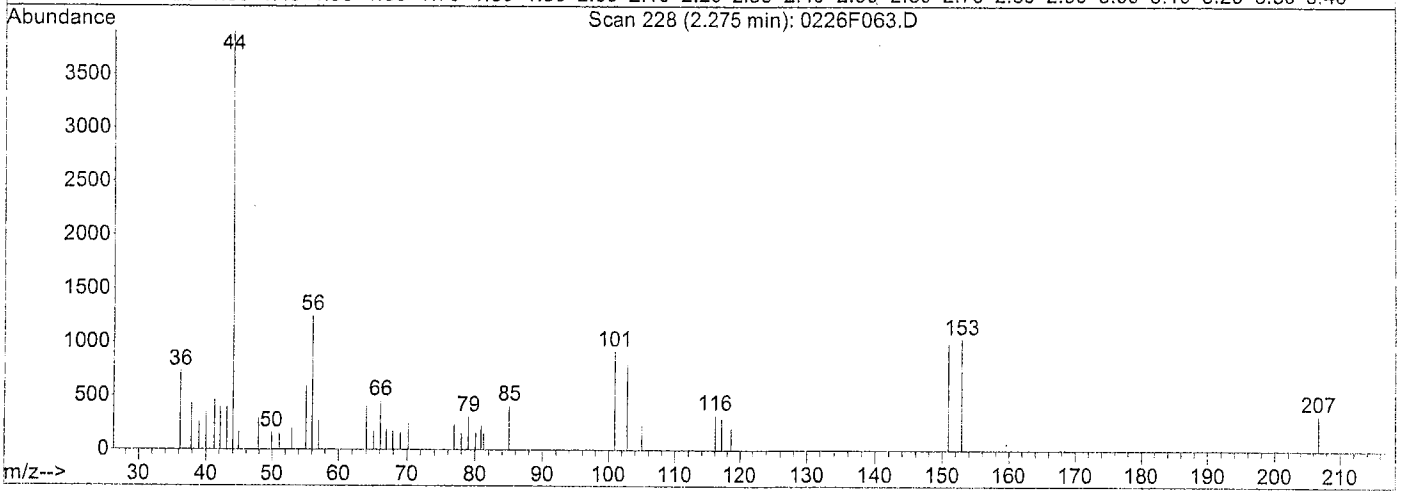
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:33 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F063.D

(10) Acrolein (T)

2.27min 7.03PPB m

response 2649

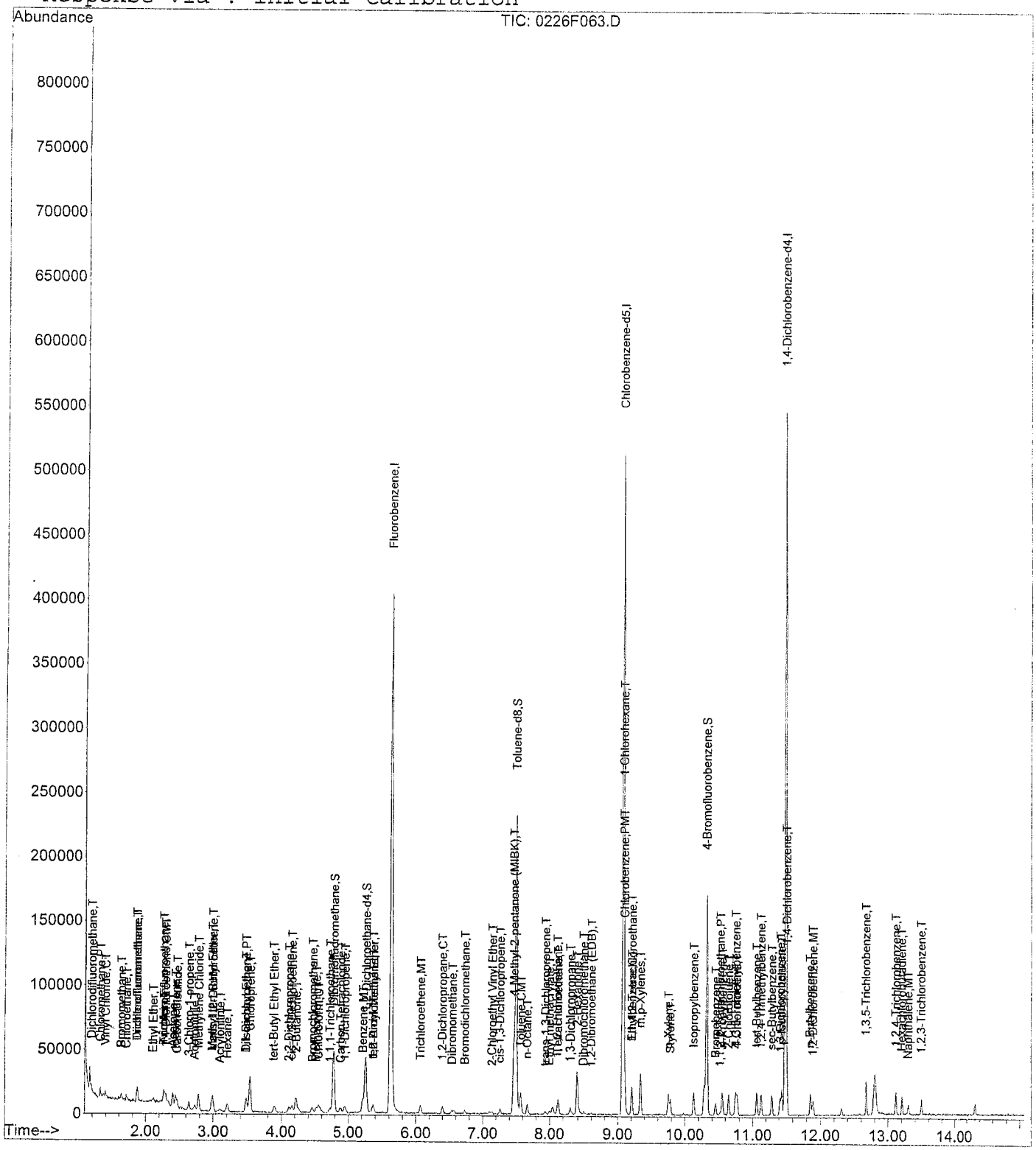
Ion	Exp%	Act%
56.00	100	100
55.00	69.40	47.07
53.00	8.30	16.36
0.00	0.00	0.00

0226F063.D 022607.M Tue Feb 27 06:33:24 2007

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	407863	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145744	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140151	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	43506	5.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.40%	
44) 1,2-Dichloroethane-d4	5.26	65	42922	5.53	PPB	0.00
Spiked Amount 10.000			Recovery	=	55.30%	
58) Toluene-d8	7.50	98	196664	5.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.70%	
80) 4-Bromofluorobenzene	10.32	95	64515	4.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	46.20%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	5278	0.47	PPB	95
3) Chloromethane	1.32	50	6609	0.44	PPB	92
4) Vinyl Chloride	1.39	62	5880	0.46	PPB	98
5) Bromomethane	1.63	96	3223	0.39	PPB	95
6) Chloroethane	1.71	64	5033	0.58	PPB	97
7) Dichlorofluoromethane	1.87	67	9909	0.45	PPB	94
8) Trichlorofluoromethane	1.87	101	8561	0.45	PPB	88
9) Ethyl Ether	2.11	59	2620	0.47	PPB	94
10) Acrolein	2.27	56	2456	6.44	PPB	94
11) Trichlorotrifluoroethane	2.27	151	4093	0.46	PPB	97
12) 1,1-Dichloroethene	2.30	96	4494	0.44	PPB	91
13) Acetone	2.40	43	20231	19.16	PPB	95
14) Iodomethane	2.44	142	20153	1.64	PPB	95
15) Carbon Disulfide	2.47	76	14583	0.48	PPB	98
16) 3-Chloro-1-propene	2.65	76	2163	0.40	PPB	95
17) Acetonitrile	2.72	40	4251	16.78	PPB	89
18) Methylene Chloride	2.78	84	7631	0.77	PPB	90
19) tert-Butyl Alcohol	2.89	59	567	2.21	PPB	78
20) Acrylonitrile	3.08	53	2841	2.10	PPB	76
21) Methyl tert-Butyl Ether	2.98	73	15341	0.92	PPB	96
22) trans-1,2-Dichloroethene	3.00	96	5452	0.48	PPB	98
23) Hexane	3.20	57	5640	0.46	PPB	81
24) Diisopropyl Ether	3.49	45	15292	0.49	PPB	92
25) 1,1-Dichloroethane	3.49	63	9162	0.48	PPB	88
26) Vinyl Acetate	3.53	86	1102	1.02	PPB #	40
27) Chloroprene	3.54	53	37853	1.67	PPB	91
28) tert-Butyl Ethyl Ether	3.89	59	10463	0.47	PPB	94
29) 2,2-Dichloropropane	4.12	77	6271	0.45	PPB	90

(#) = qualifier out of range (m) = manual integration
0226F064.D 022607.M Tue Feb 27 06:38:43 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	5464	0.50	PPB		87
31)	2-Butanone	4.21	72	6794	18,63	PPB		92
33)	Ethyl Acetate	4.24	61	963	1.95	PPB	#	34
34)	Methacrylonitrile	4.52	67	3325	1.91	PPB	#	81
35)	Bromochloromethane	4.47	128	2132	0.55	PPB	#	45
37)	Chloroform	4.56	83	8989	0.47	PPB		88
38)	tert-Butyl Formate	4.58	59	1070	0.50	PPB		72
39)	1,1,1-Trichloroethane	4.72	97	7434	0.47	PPB		92
41)	Carbon Tetrachloride	4.89	117	6529	0.46	PPB		92
42)	1,1-Dichloropropene	4.94	75	8043	0.53	PPB		91
43)	Isobutyl Alcohol	5.27	43	2115	20.03	PPB		77
45)	Benzene	5.22	78	22228	0.51	PPB		94
46)	1,2-Dichloroethane	5.36	62	5131	0.51	PPB		87
47)	tert-Amyl Methyl Ether	5.37	55	2884	0.51	PPB	#	31
48)	Trichloroethene	6.07	95	5447	0.47	PPB		92
49)	1,2-Dichloropropane	6.40	63	4215	0.47	PPB		96
50)	Dibromomethane	6.54	93	1586	0.44	PPB		93
51)	Methyl methacrylate	6.57	69	1372	0.45	PPB		67
53)	Bromodichloromethane	6.73	83	4906	0.47	PPB		82
54)	2-Nitropropane	7.11	43	1899	1.97	PPB		76
55)	2-Chloroethyl Vinyl Ether	7.14	63	1215	0.36	PPB		84
56)	cis-1,3-Dichloropropene	7.26	75	4548	0.40	PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.47	58	24845	17.55	PPB		95
59)	Toluene	7.57	92	14022	0.48	PPB		85
61)	n-Octane	7.67	85	2166	0.52	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	2900	0.38	PPB		93
63)	Ethyl methacrylate	8.00	69	2396	0.41	PPB		98
64)	1,1,2-Trichloroethane	8.12	83	2368	0.54	PPB		84
65)	Tetrachloroethene	8.13	164	5698	0.58	PPB		94
66)	2-Hexanone	8.39	57	6875	16.92	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	4998	0.53	PPB		96
68)	Dibromochloromethane	8.49	129	2698	0.47	PPB		83
69)	1,2-Dibromoethane (EDB)	8.60	107	2149	0.46	PPB		92
70)	1-Chlorohexane	9.10	91	7325	0.49	PPB		82
71)	Chlorobenzene	9.10	112	14139	0.51	PPB		98
72)	Ethylbenzene	9.21	106	8631	0.52	PPB	#	78
73)	1,1,1,2-Tetrachloroethane	9.21	131	3600	0.45	PPB		96
74)	m,p-Xylenes	9.34	106	19892	0.98	PPB		94
75)	o-Xylene	9.75	106	9204	0.50	PPB		93
76)	Styrene	9.78	103	6435m	0.49	PPB		
77)	Bromoform	9.98	173	1203	0.41	PPB		92
78)	Isopropylbenzene	10.13	105	25318	0.49	PPB		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

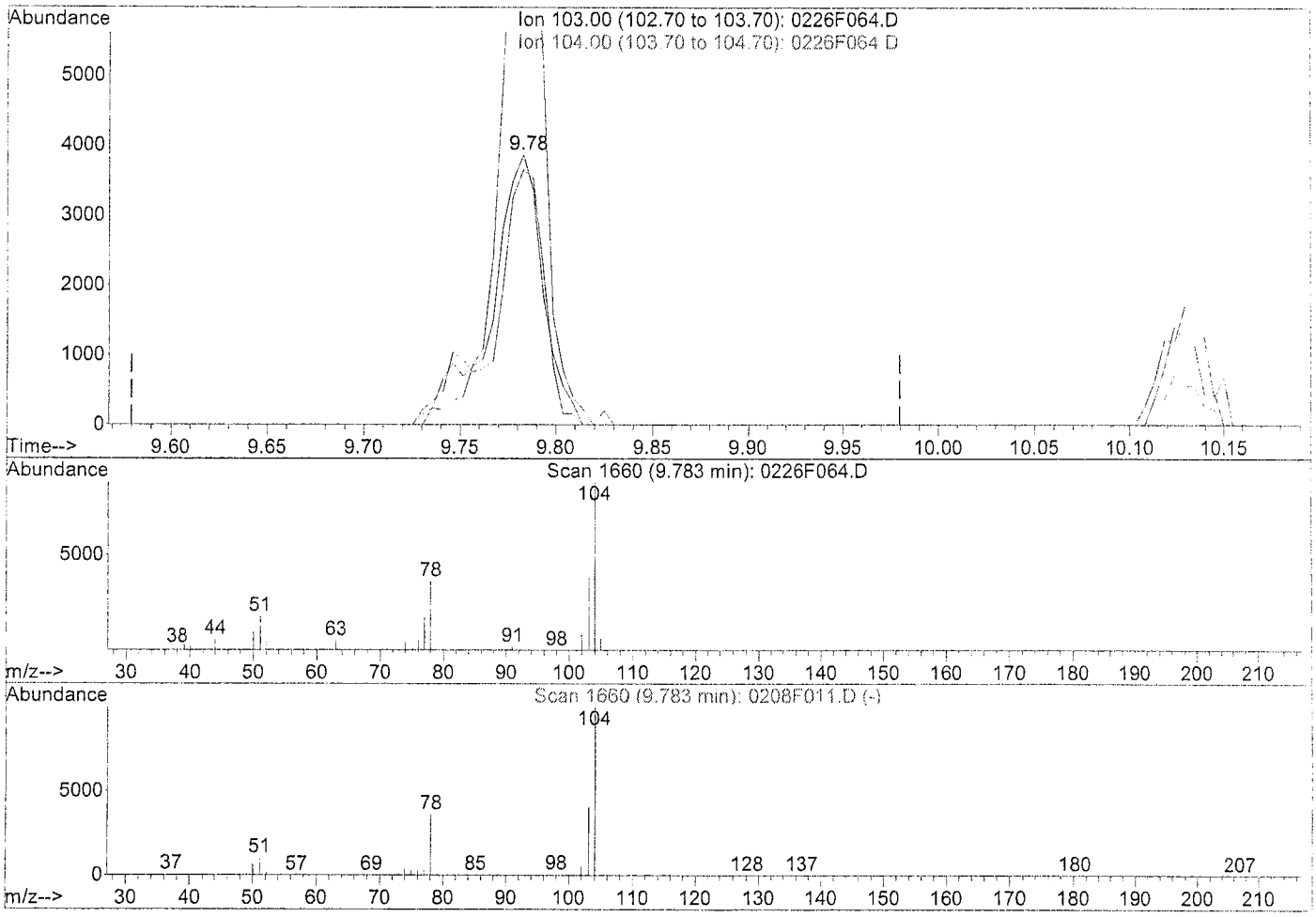
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.28	89	401m	0.75 PPB		
82)	1,1,2,2-Tetrachloroethane	10.52	83	2287	0.45 PPB		76
84)	Bromobenzene	10.45	156	5729	0.51 PPB		95
85)	n-Propylbenzene	10.55	91	29499	0.46 PPB		94
86)	1,2,3-Trichloropropane	10.57	110	795	0.48 PPB	#	31
87)	2-Chlorotoluene	10.65	91	18037	0.49 PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	19845	0.46 PPB		92
89)	4-Chlorotoluene	10.77	91	20353	0.49 PPB		93
90)	tert-Butylbenzene	11.06	119	18687	0.46 PPB		98
91)	1,2,4-Trimethylbenzene	11.13	105	19360	0.47 PPB		93
92)	sec-Butylbenzene	11.29	105	23947	0.45 PPB		92
93)	p-Isopropyltoluene	11.44	119	20958	0.44 PPB		99
94)	1,3-Dichlorobenzene	11.42	146	11414	0.49 PPB		93
95)	1,4-Dichlorobenzene	11.52	146	11852	0.52 PPB		97
96)	n-Butylbenzene	11.86	91	18986	0.48 PPB		95
97)	1,2-Dichlorobenzene	11.89	146	9824	0.50 PPB		91
98)	1,2-Dibromo-3-chloropropan	12.57	155	217m	0.34 PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	9975	0.51 PPB		93
100)	1,2,4-Trichlorobenzene	13.12	180	7755	0.57 PPB		92
101)	Hexachlorobutadiene	13.21	225	4438	0.46 PPB		96
102)	Naphthalene	13.31	128	8881	0.56 PPB		95
103)	1,2,3-Trichlorobenzene	13.49	180	6349	0.56 PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.55PPB

response 7208

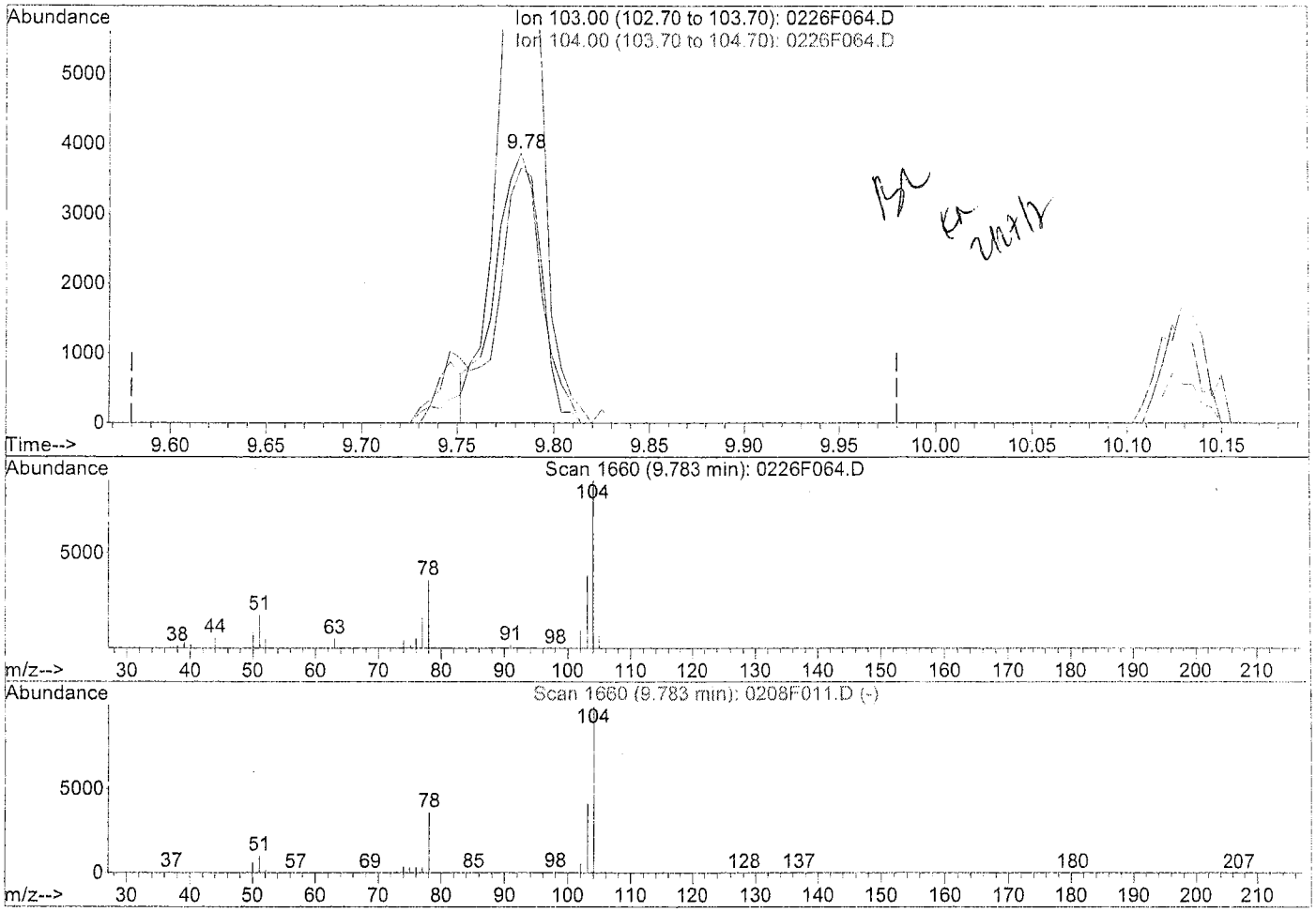
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:37:19 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.49PPB m

response 6435

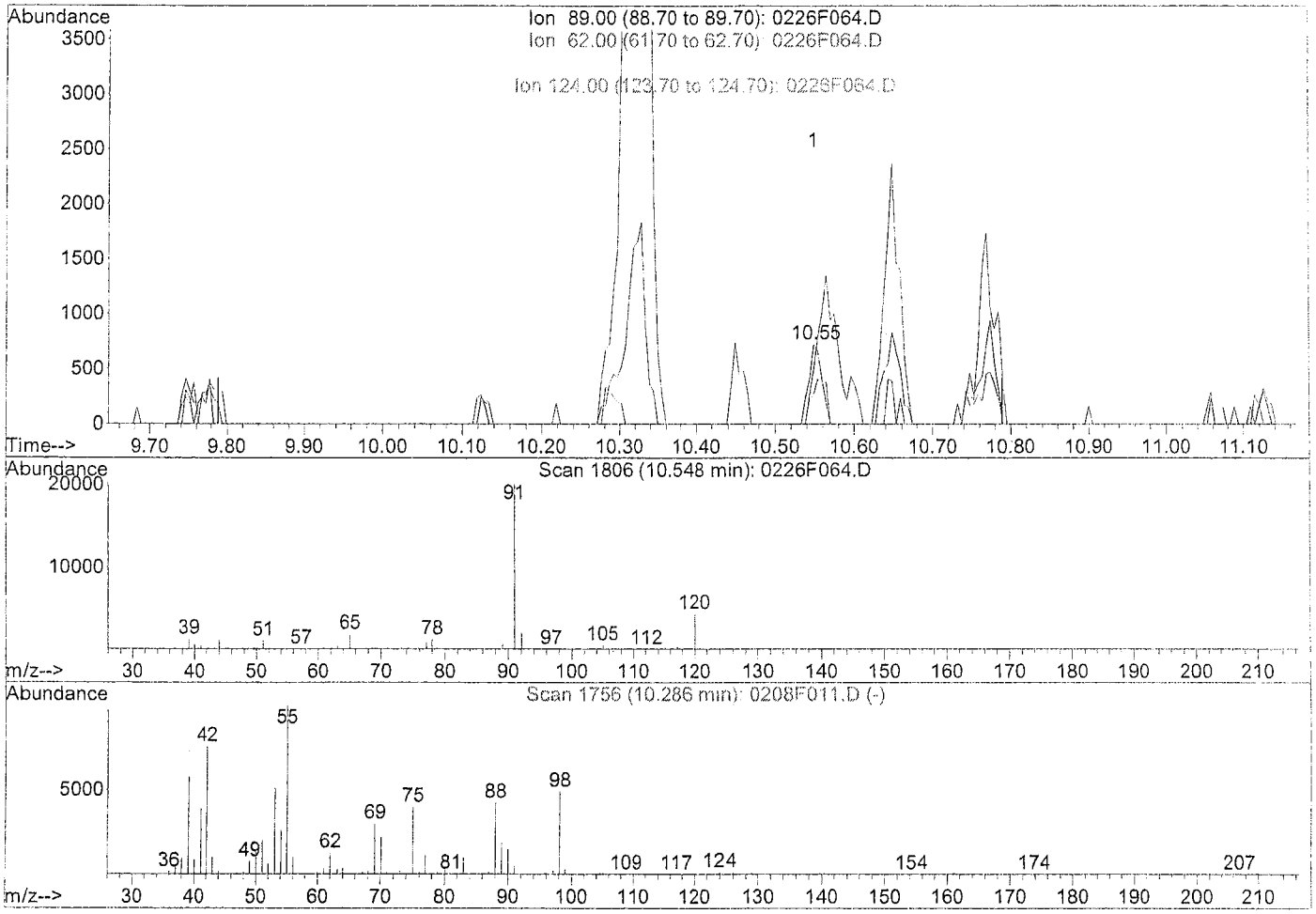
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:37:28 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.55min 1.54PPB

response 820

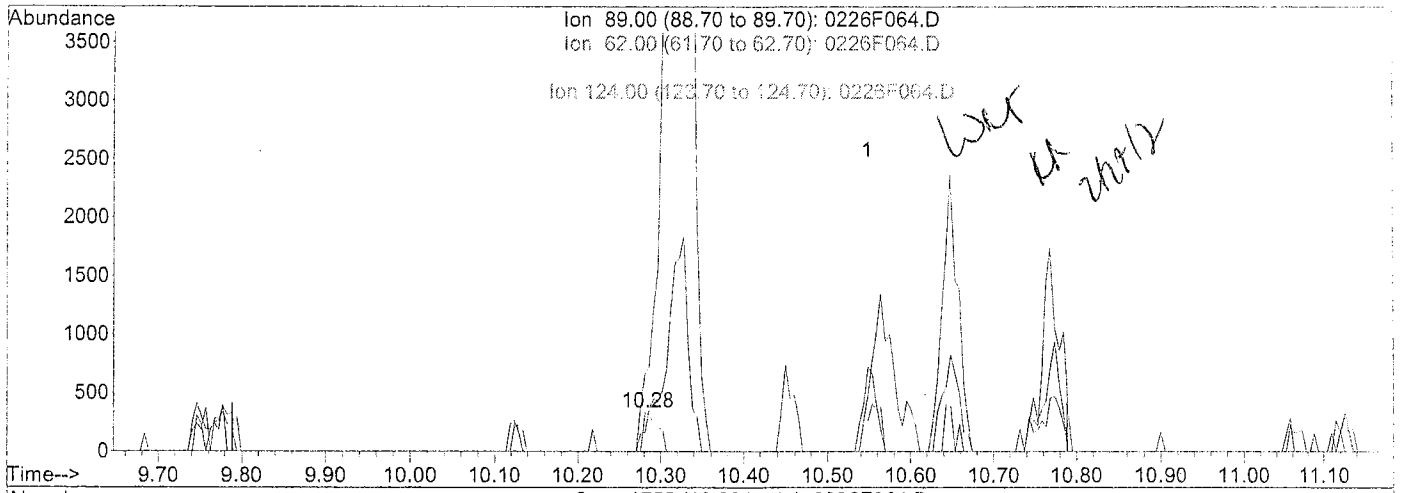
Ion	Exp%	Act%
89.00	100	100
62.00	69.80	36.84#
75.00	225.00	67.59#
124.00	9.50	0.00

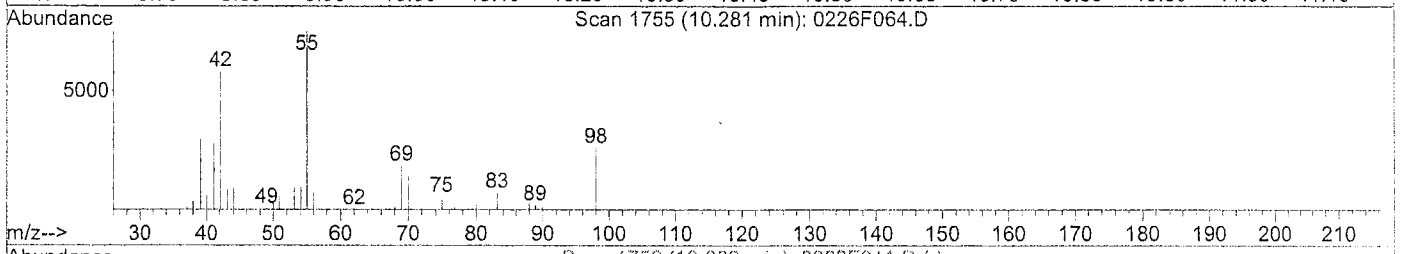
0226F064.D 022607.M Tue Feb 27 06:37:42 2007

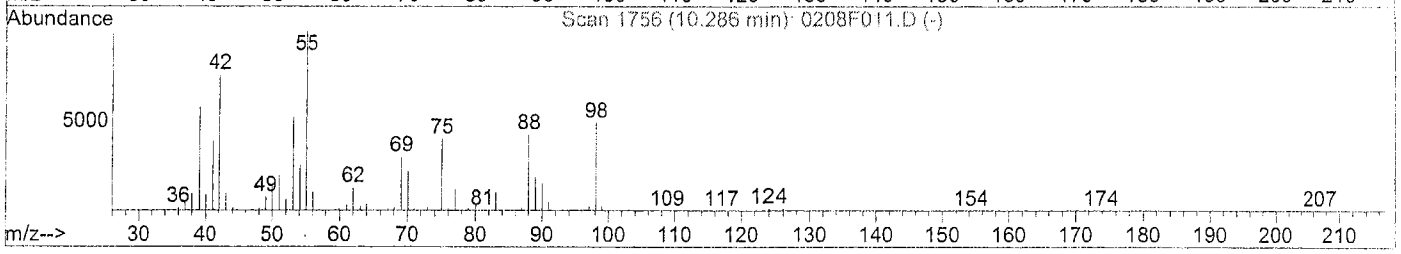
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration







TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.28min 0.75PPB m

response 401

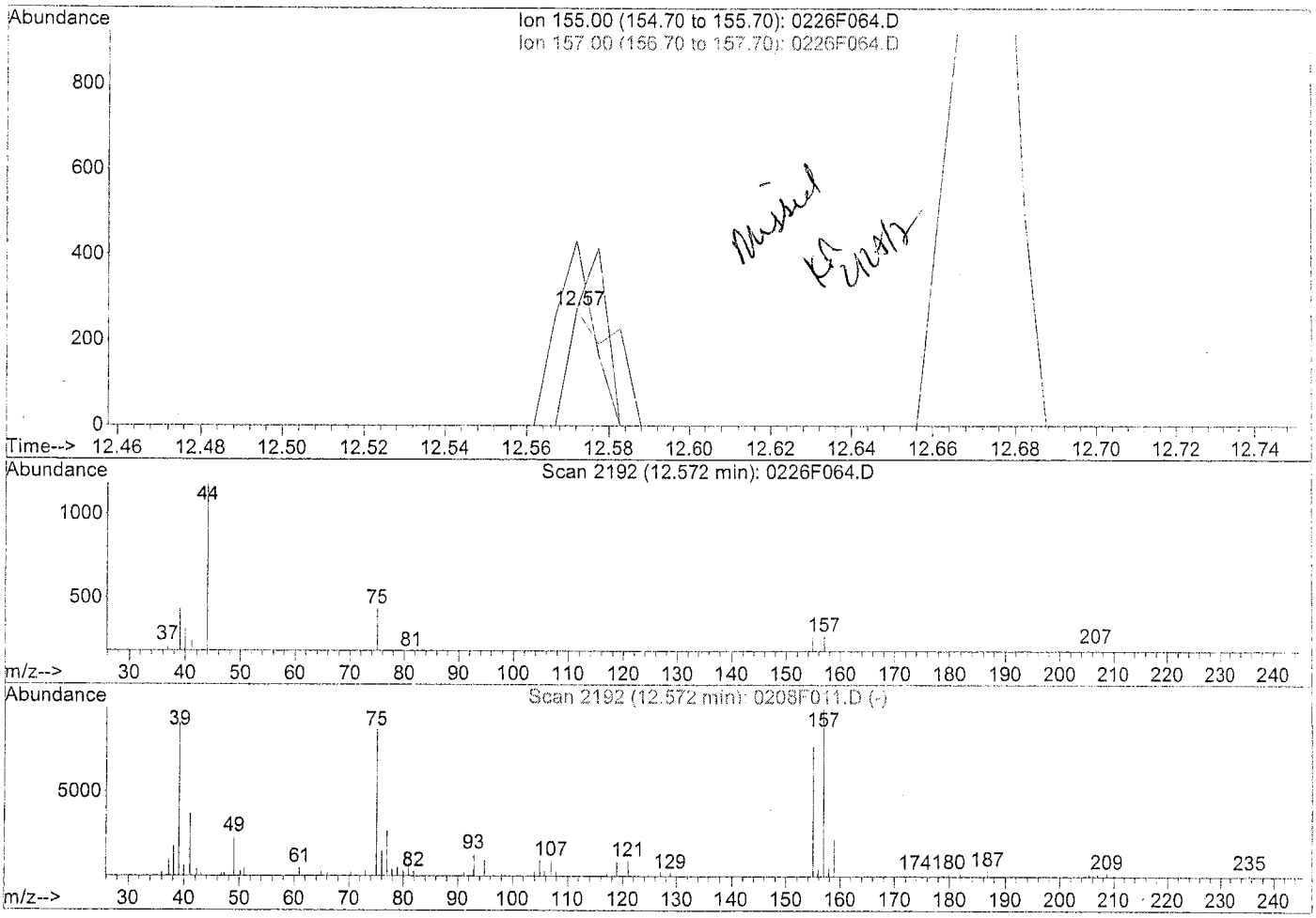
Ion	Exp%	Act%
89.00	100	100
62.00	69.80	49.40
75.00	225.00	201.20
124.00	9.50	0.00

0226F064.D 022607.M Tue Feb 27 06:37:50 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration



TIC: 0226F064.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.57min 0.34PPB m

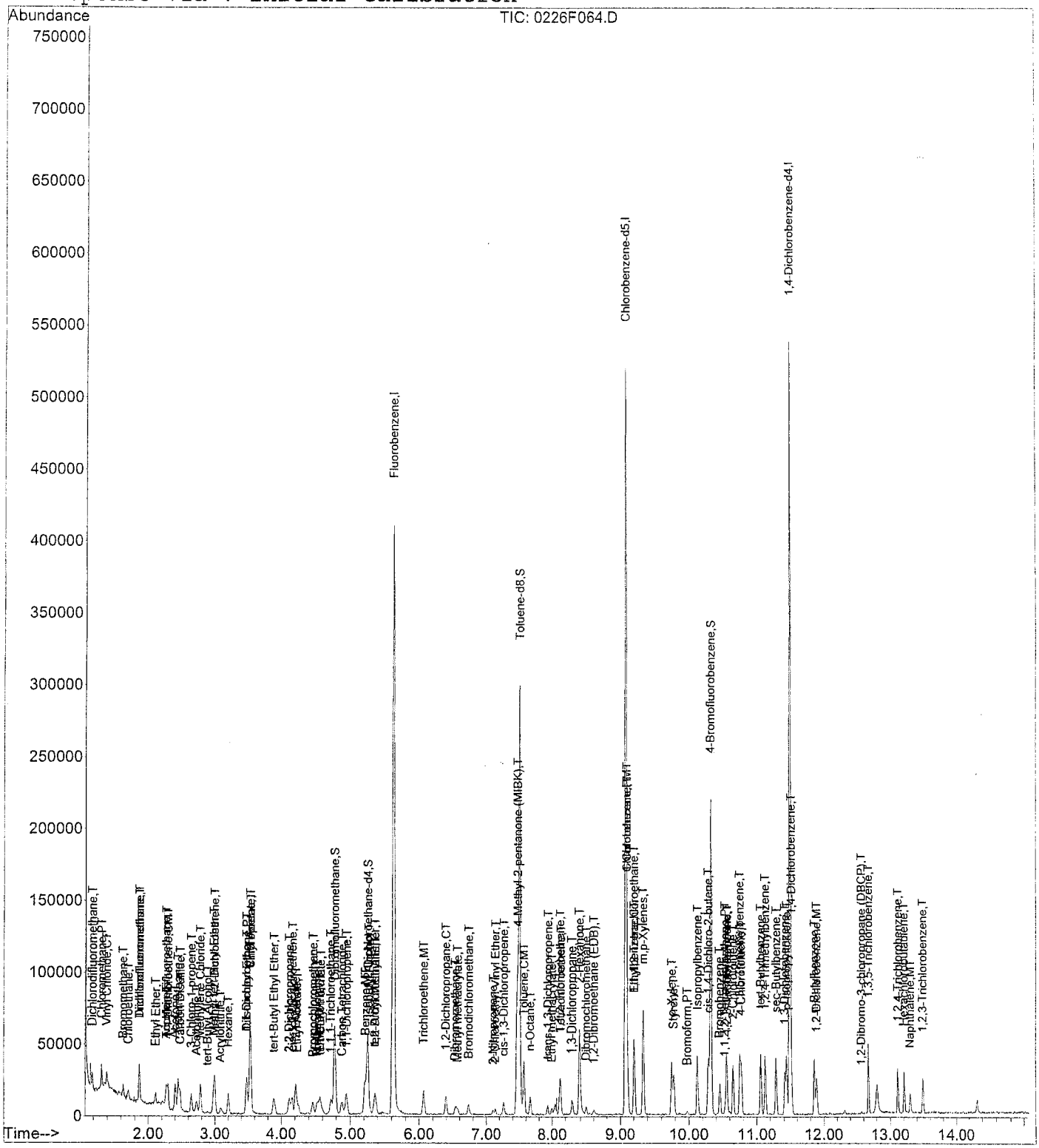
response 217

Ion	Exp%	Act%
155.00	100	100
157.00	130.70	100.37#
75.00	95.90	160.15#
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:38:33 2007

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

14 unit

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398164	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	148958	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140278	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	45979	5.89	PPB	0.00
Spiked Amount 10.000			Recovery	=	58.90%	
44) 1,2-Dichloroethane-d4	5.25	65	48590	6.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	64.20%	
58) Toluene-d8	7.49	98	206319	5.45	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.50%	
80) 4-Bromofluorobenzene	10.32	95	72161	5.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	11097	1.00	PPB		97
3) Chloromethane	1.32	50	14619	0.99	PPB		97
4) Vinyl Chloride	1.39	62	12652	1.01	PPB		97
5) Bromomethane	1.63	96	6375	0.79	PPB		77
6) Chloroethane	1.71	64	9558	1.13	PPB		95
7) Dichlorofluoromethane	1.87	67	20051	0.93	PPB		95
8) Trichlorofluoromethane	1.87	101	17404	0.95	PPB		94
9) Ethyl Ether	2.11	59	5602	1.04	PPB		86
10) Acrolein	2.27	56	4248	11.41	PPB		84
11) Trichlorotrifluoroethane	2.27	151	8260	0.94	PPB		92
12) 1,1-Dichloroethene	2.30	96	9433	0.95	PPB		98
13) Acetone	2.40	43	44115	42.79	PPB		98
14) Iodomethane	2.44	142	41401	3.45	PPB		99
15) Carbon Disulfide	2.47	76	29280	0.98	PPB		92
16) 3-Chloro-1-propene	2.64	76	5368	1.01	PPB	#	70
17) Acetonitrile	2.72	40	10067	40.71	PPB		97
18) Methylene Chloride	2.78	84	12100	1.26	PPB		92
19) tert-Butyl Alcohol	2.89	59	1140	4.56	PPB		64
20) Acrylonitrile	3.09	53	5690	4.30	PPB		89
21) Methyl tert-Butyl Ether	2.98	73	36213	2.22	PPB		97
22) trans-1,2-Dichloroethene	2.99	96	11154	1.01	PPB		83
23) Hexane	3.20	57	11608	0.97	PPB		95
24) Diisopropyl Ether	3.48	45	30731	1.00	PPB		89
25) 1,1-Dichloroethane	3.48	63	19195	1.04	PPB		97
26) Vinyl Acetate	3.53	86	2192	2.07	PPB	#	61
27) Chloroprene	3.54	53	82999	3.76	PPB		91
28) tert-Butyl Ethyl Ether	3.89	59	23285	1.07	PPB		89
29) 2,2-Dichloropropane	4.11	77	12098	0.89	PPB		97

(#) = qualifier out of range (m) = manual integration

2/27/7

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	10839	1.02 PPB		87
31)	2-Butanone	4.21	72	14882	41.81 PPB	#	85
32)	Propionitrile	4.38	54	2026	4.44 PPB		80
33)	Ethyl Acetate	4.25	61	1853	3.85 PPB	#	39
34)	Methacrylonitrile	4.52	67	6658	3.93 PPB		90
35)	Bromochloromethane	4.45	128	4136	1.10 PPB		89
36)	Tetrahydrofuran	4.46	71	638	1.82 PPB		86
37)	Chloroform	4.56	83	18513	0.99 PPB		88
38)	tert-Butyl Formate	4.59	59	2180	1.05 PPB		84
39)	1,1,1-Trichloroethane	4.72	97	15156	0.97 PPB		98
41)	Carbon Tetrachloride	4.88	117	13014	0.93 PPB		95
42)	1,1-Dichloropropene	4.95	75	15772	1.07 PPB		94
43)	Isobutyl Alcohol	5.28	43	3571	34.65 PPB		78
45)	Benzene	5.22	78	46773	1.10 PPB		95
46)	1,2-Dichloroethane	5.35	62	10504	1.08 PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	5677	1.03 PPB	#	36
48)	Trichloroethene	6.07	95	11532	1.03 PPB		83
49)	1,2-Dichloropropane	6.40	63	9878	1.12 PPB		90
50)	Dibromomethane	6.53	93	3562	1.02 PPB		97
51)	Methyl methacrylate	6.57	69	2881	0.96 PPB		87
52)	1,4-Dioxane	6.56	88	1386	42.70 PPB		78
53)	Bromodichloromethane	6.73	83	10281	1.02 PPB		98
54)	2-Nitropropane	7.10	43	4313	4.57 PPB		92
55)	2-Chloroethyl Vinyl Ether	7.14	63	3328	1.01 PPB		95
56)	cis-1,3-Dichloropropene	7.26	75	10021	0.89 PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	56940	41.20 PPB		89
59)	Toluene	7.57	92	27973	0.99 PPB		96
61)	n-Octane	7.66	85	9952	2.35 PPB		85
62)	trans-1,3-Dichloropropene	7.93	75	6317	0.81 PPB		99
63)	Ethyl methacrylate	8.00	69	5479	0.91 PPB		94
64)	1,1,2-Trichloroethane	8.12	83	4747	1.06 PPB		90
65)	Tetrachloroethene	8.13	164	10122	1.01 PPB		92
66)	2-Hexanone	8.39	57	16941	40.80 PPB		98
67)	1,3-Dichloropropane	8.29	76	11084	1.14 PPB		94
68)	Dibromochloromethane	8.48	129	5302	0.90 PPB		93
69)	1,2-Dibromoethane (EDB)	8.60	107	5239	1.10 PPB		93
70)	1-Chlorohexane	9.10	91	15021	0.98 PPB		90
71)	Chlorobenzene	9.11	112	29952	1.06 PPB		99
72)	Ethylbenzene	9.21	106	16774	0.99 PPB		96
73)	1,1,1,2-Tetrachloroethane	9.22	131	8323	1.02 PPB		83
74)	m,p-Xylenes	9.34	106	42311	2.04 PPB		96
75)	o-Xylene	9.75	106	18605	0.99 PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

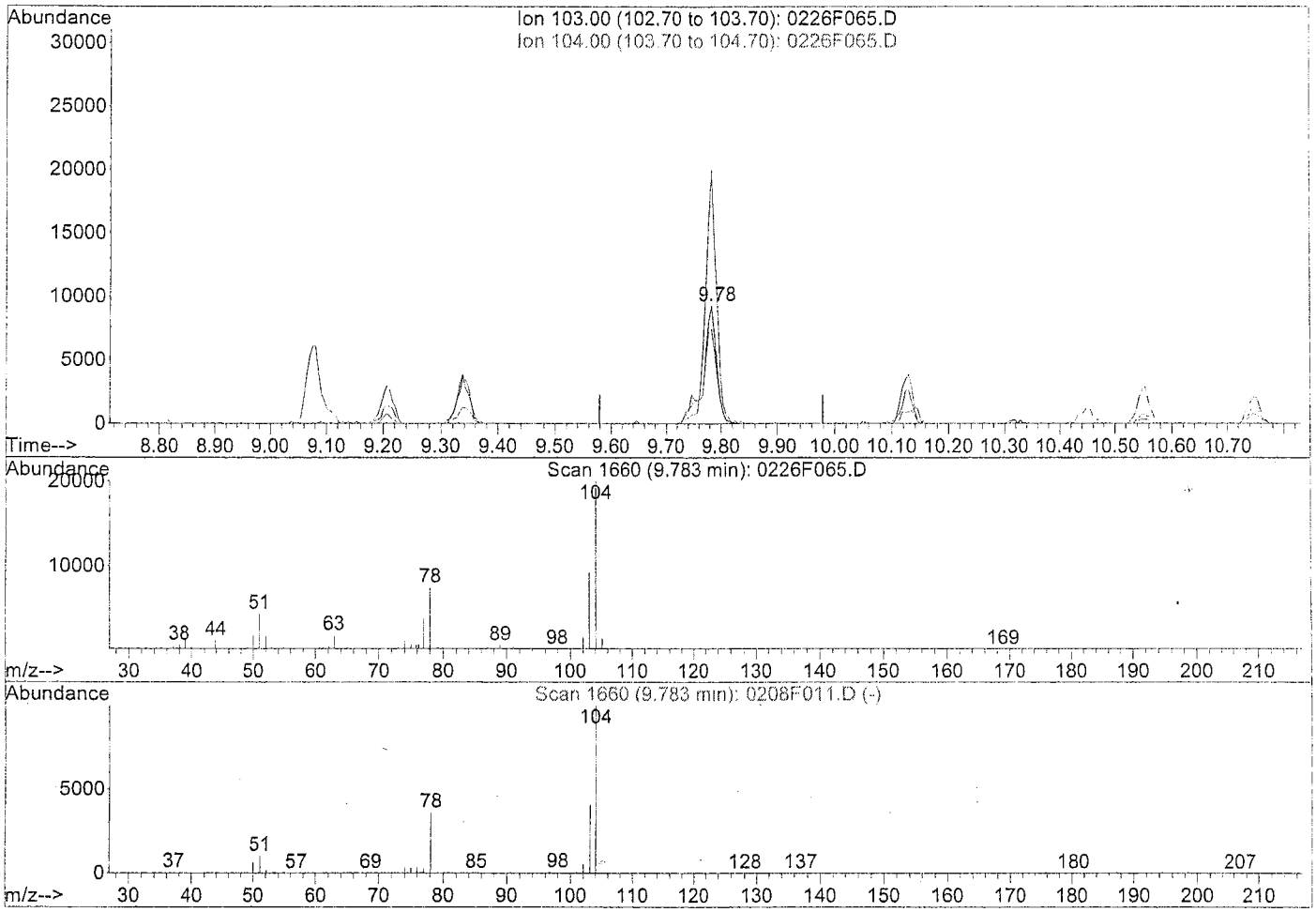
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	12601m	0.94	PPB		
77)	Bromoform	9.97	173	2579	0.86	PPB		72
78)	Isopropylbenzene	10.13	105	51807	0.99	PPB		97
79)	cis-1,4-Dichloro-2-butene	10.29	89	1315	2.41	PPB		87
82)	1,1,2,2-Tetrachloroethane	10.53	83	4923	0.98	PPB		95
83)	trans-1,4-Dichloro-2-buten	10.60	53	888	0.68	PPB	#	54
84)	Bromobenzene	10.45	156	10980	0.99	PPB		92
85)	n-Propylbenzene	10.55	91	60717	0.94	PPB		95
86)	1,2,3-Trichloropropane	10.56	110	1563	0.95	PPB		98
87)	2-Chlorotoluene	10.65	91	36180	0.98	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	42462	0.98	PPB		98
89)	4-Chlorotoluene	10.77	91	40621	0.97	PPB		95
90)	tert-Butylbenzene	11.06	119	38262	0.94	PPB		91
91)	1,2,4-Trimethylbenzene	11.13	105	41104	1.01	PPB		96
92)	sec-Butylbenzene	11.28	105	51713	0.96	PPB		96
93)	p-Isopropyltoluene	11.44	119	45163	0.96	PPB		93
94)	1,3-Dichlorobenzene	11.41	146	24426	1.04	PPB		90
95)	1,4-Dichlorobenzene	11.52	146	23058	1.00	PPB		98
96)	n-Butylbenzene	11.86	91	39779	1.00	PPB		98
97)	1,2-Dichlorobenzene	11.90	146	20285	1.04	PPB		97
98)	1,2-Dibromo-3-chloropropan	12.58	155	424m	0.66	PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	19525	1.00	PPB		98
100)	1,2,4-Trichlorobenzene	13.12	180	15574	1.15	PPB		99
101)	Hexachlorobutadiene	13.21	225	8917	0.92	PPB		93
102)	Naphthalene	13.30	128	18417	1.16	PPB		89
103)	1,2,3-Trichlorobenzene	13.49	180	11894	1.05	PPB		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F065.D

(76) Styrene (T)

9.78min 1.15PPB

response 15467

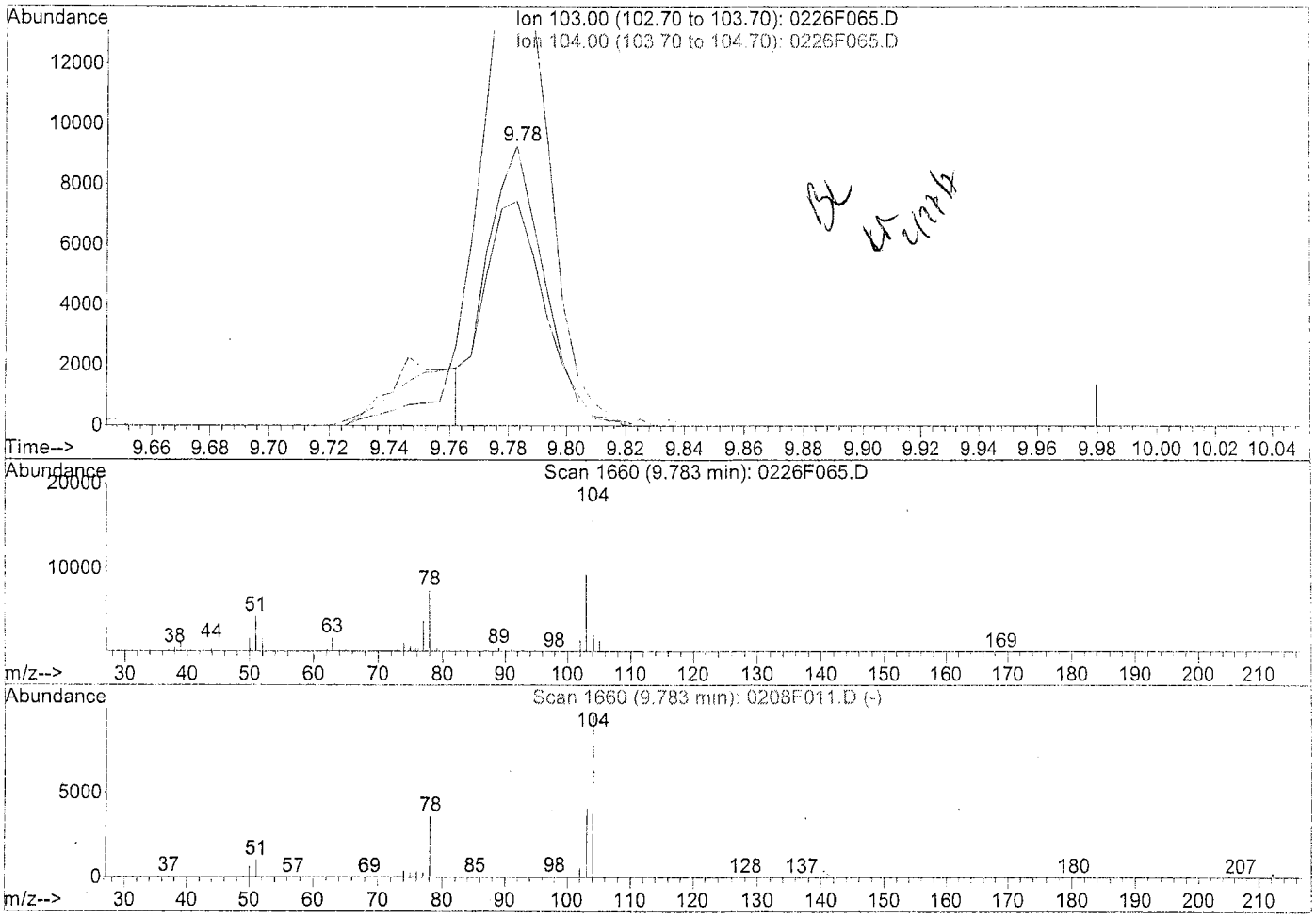
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

0226F065.D 022607.M Tue Feb 27 06:39:51 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:39 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F065.D

(76) Styrene (T)

9.78min 0.94PPB m

response 12601

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

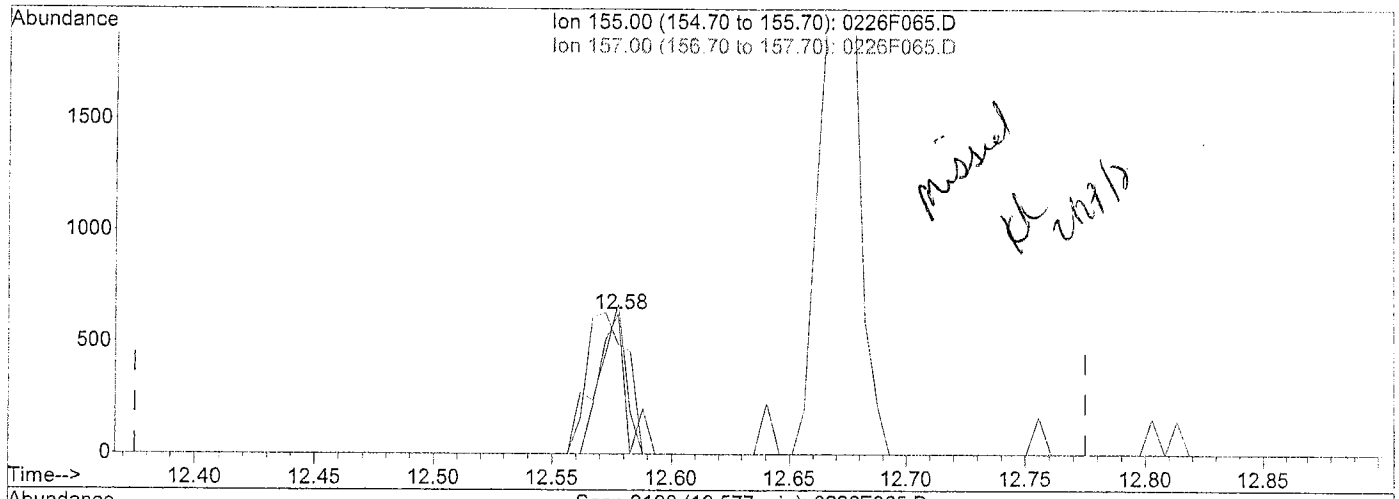
0226F065.D 022607.M Tue Feb 27 06:39:58 2007

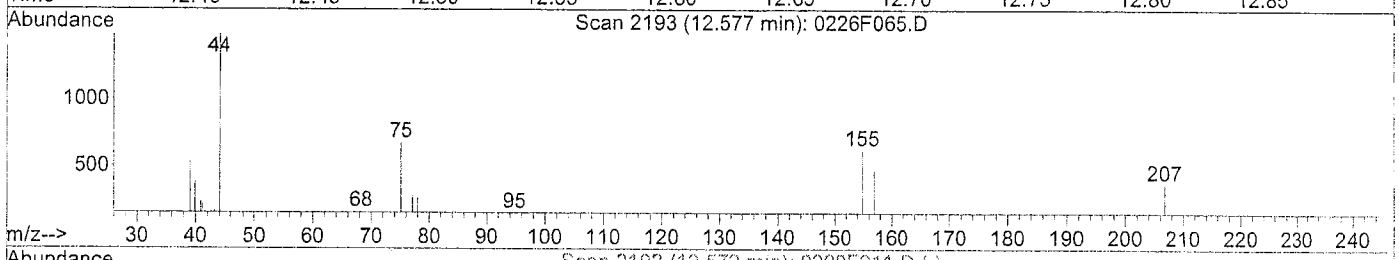
Quantitation Report (Qedit)

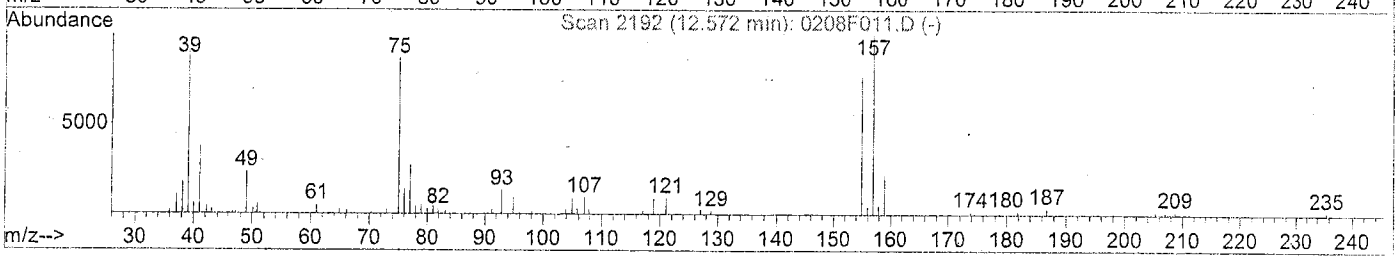
Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration







TIC: 0226F065.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.58min 0.66PPB m

response 424

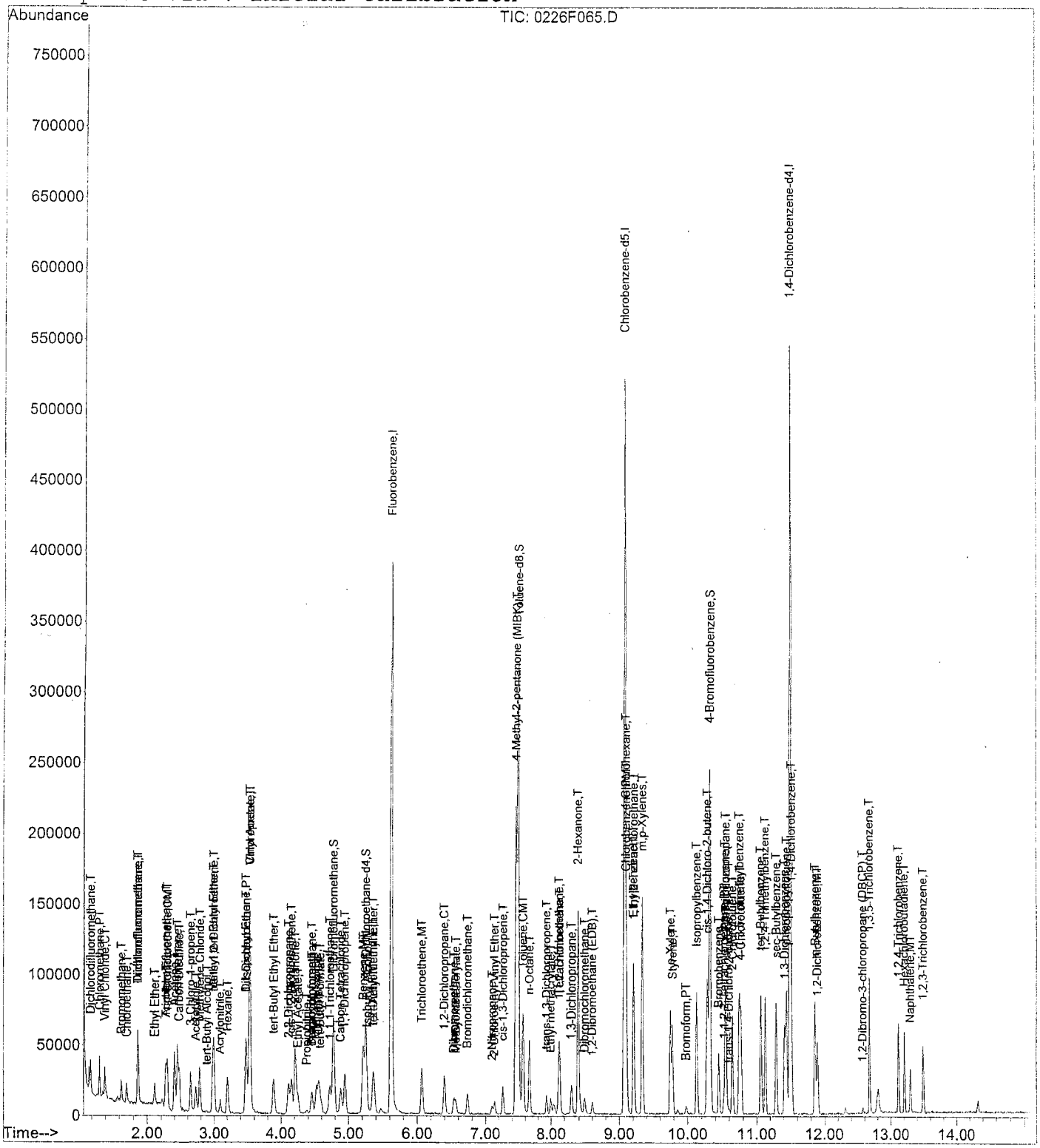
Ion	Exp%	Act%
155.00	100	100
157.00	130.70	78.75#
75.00	95.90	107.83
0.00	0.00	0.00

2/27/7

0226F065.D 022607.M Tue Feb 27 06:40:21 2007

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F066.D
Acq On : 26 Feb 2007 8:49 pm
Sample : 8260 ICAL 2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007

Vial: 14
Operator:
Inst : GC-MS 18
Multiplr: 1.00

Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.62	96	396471	10.00 PPB	0.00
60) Chlorobenzene-d5	9.07	82	150846	10.00 PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	144820	10.00 PPB	0.00
System Monitoring Compounds					
40) Dibromofluoromethane	4.78	113	54041	6.95 PPB	0.00
Spiked Amount 10.000			Recovery	= 69.50%	
44) 1,2-Dichloroethane-d4	5.26	65	55372	7.34 PPB	0.00
Spiked Amount 10.000			Recovery	= 73.40%	
58) Toluene-d8	7.50	98	233536	6.19 PPB	0.00
Spiked Amount 10.000			Recovery	= 61.90%	
80) 4-Bromofluorobenzene	10.32	95	84688	5.86 PPB	0.00
Spiked Amount 10.000			Recovery	= 58.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.18	85	22411	2.04 PPB	94
3) Chloromethane	1.32	50	28870	1.96 PPB	96
4) Vinyl Chloride	1.39	62	25302	2.03 PPB	95
5) Bromomethane	1.63	96	11775	1.46 PPB	94
6) Chloroethane	1.71	64	16043	1.91 PPB	94
7) Dichlorofluoromethane	1.87	67	38501	1.79 PPB	98
8) Trichlorofluoromethane	1.87	101	34095	1.86 PPB	94
9) Ethyl Ether	2.11	59	11073	2.07 PPB	89
10) Acrolein	2.27	56	7124	19.22 PPB	82
11) Trichlorotrifluoroethane	2.27	151	15594	1.78 PPB	87
12) 1,1-Dichloroethene	2.30	96	18502	1.88 PPB	94
13) Acetone	2.40	43	80636	78.55 PPB	99
14) Iodomethane	2.44	142	77598	6.50 PPB	99
15) Carbon Disulfide	2.47	76	59777	2.01 PPB	97
16) 3-Chloro-1-propene	2.64	76	9758	1.84 PPB	87
17) Acetonitrile	2.72	40	19964	81.08 PPB	84
18) Methylene Chloride	2.78	84	21730	2.27 PPB	89
19) tert-Butyl Alcohol	2.89	59	2211	8.88 PPB	82
20) Acrylonitrile	3.09	53	11143	8.46 PPB	87
21) Methyl tert-Butyl Ether	2.98	73	66985	4.13 PPB	99
22) trans-1,2-Dichloroethene	3.00	96	21614	1.96 PPB	96
23) Hexane	3.20	57	21927	1.85 PPB	93
24) Diisopropyl Ether	3.48	45	61770	2.02 PPB	93
25) 1,1-Dichloroethane	3.48	63	38085	2.07 PPB	99
26) Vinyl Acetate	3.54	86	3940	3.74 PPB	94
27) Chloroprene	3.54	53	160844	7.31 PPB	93
28) tert-Butyl Ethyl Ether	3.89	59	45445	2.09 PPB	97
29) 2,2-Dichloropropane	4.11	77	23840	1.75 PPB	95

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	22937	2.16	PPB		94
31)	2-Butanone	4.21	72	28988	81.78	PPB	#	84
32)	Propionitrile	4.38	54	4159	9.15	PPB		92
33)	Ethyl Acetate	4.25	61	3956	8.25	PPB		81
34)	Methacrylonitrile	4.52	67	13529	8.01	PPB		90
35)	Bromochloromethane	4.46	128	8482	2.26	PPB		86
36)	Tetrahydrofuran	4.46	71	1157	3.32	PPB	#	79
37)	Chloroform	4.56	83	45720	2.46	PPB		94
38)	tert-Butyl Formate	4.59	59	3846	1.86	PPB		85
39)	1,1,1-Trichloroethane	4.72	97	30003	1.93	PPB		99
41)	Carbon Tetrachloride	4.89	117	25325	1.82	PPB		95
42)	1,1-Dichloropropene	4.94	75	29117	1.98	PPB		96
43)	Isobutyl Alcohol	5.27	43	7434	72.43	PPB		81
45)	Benzene	5.22	78	88714	2.10	PPB		97
46)	1,2-Dichloroethane	5.36	62	21504	2.21	PPB		95
47)	tert-Amyl Methyl Ether	5.37	55	11736	2.13	PPB	#	33
48)	Trichloroethene	6.07	95	21446	1.92	PPB		95
49)	1,2-Dichloropropane	6.40	63	18583	2.12	PPB		94
50)	Dibromomethane	6.53	93	7716	2.22	PPB		95
51)	Methyl methacrylate	6.57	69	5777	1.93	PPB		90
52)	1,4-Dioxane	6.56	88	2890	89.42	PPB		96
53)	Bromodichloromethane	6.74	83	19712	1.96	PPB		97
54)	2-Nitropropane	7.10	43	8486	9.04	PPB		94
55)	2-Chloroethyl Vinyl Ether	7.13	63	7116	2.17	PPB		92
56)	cis-1,3-Dichloropropene	7.27	75	20481	1.83	PPB		93
57)	4-Methyl-2-pentanone (MIBK	7.46	58	111330	80.90	PPB		92
59)	Toluene	7.57	92	55429	1.96	PPB		98
61)	n-Octane	7.66	85	7047	1.64	PPB		86
62)	trans-1,3-Dichloropropene	7.93	75	13652	1.73	PPB		90
63)	Ethyl methacrylate	7.99	69	11494	1.88	PPB		98
64)	1,1,2-Trichloroethane	8.12	83	9383	2.07	PPB		94
65)	Tetrachloroethene	8.13	164	19395	1.92	PPB		92
66)	2-Hexanone	8.39	57	33468	79.60	PPB	#	79
67)	1,3-Dichloropropane	8.29	76	21550	2.19	PPB		95
68)	Dibromochloromethane	8.49	129	11119	1.87	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	9747	2.03	PPB		91
70)	1-Chlorohexane	9.10	91	27247	1.75	PPB		84
71)	Chlorobenzene	9.11	112	57379	2.01	PPB		96
72)	Ethylbenzene	9.21	106	32883	1.92	PPB		98
73)	1,1,1,2-Tetrachloroethane	9.22	131	16419	1.99	PPB		95
74)	m,p-Xylenes	9.34	106	80873	3.85	PPB		99
75)	o-Xylene	9.75	106	38511	2.02	PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

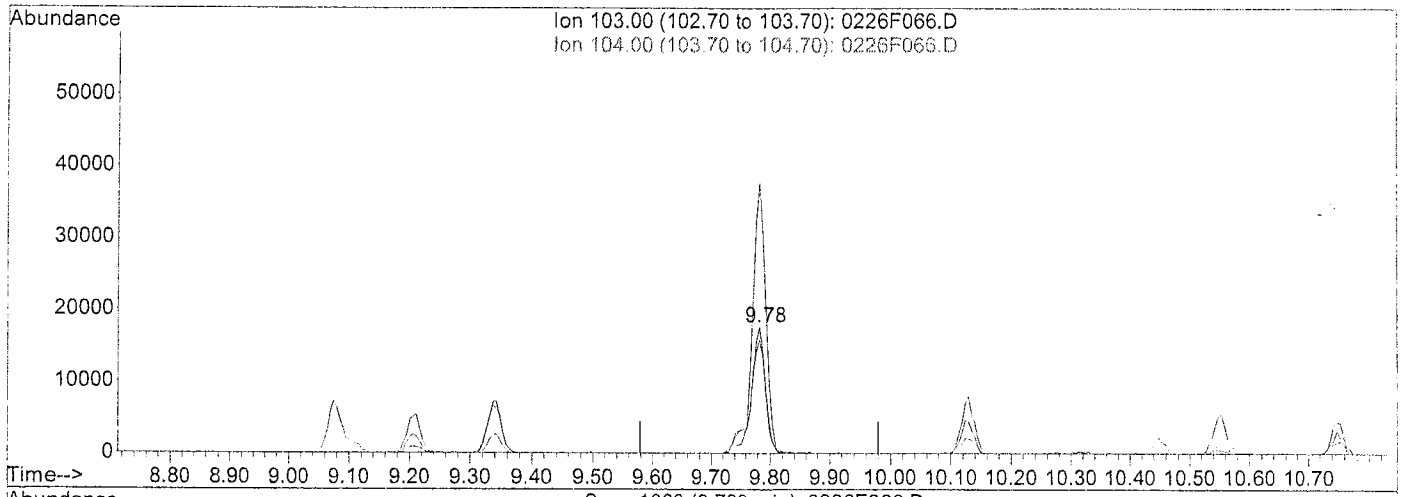
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

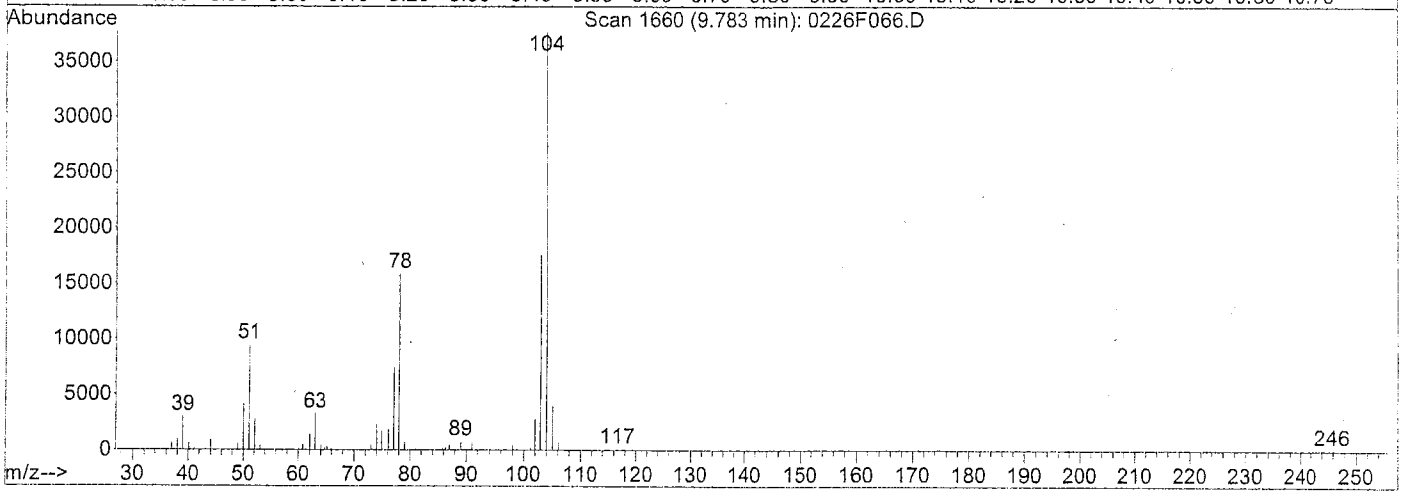
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
76)	Styrene	9.78	103	25822m	1.90 PPB		
77)	Bromoform	9.98	173	5718	1.89 PPB		87
78)	Isopropylbenzene	10.13	105	103479	1.94 PPB		100
79)	cis-1,4-Dichloro-2-butene	10.29	89	2572	4.65 PPB	#	75
82)	1,1,2,2-Tetrachloroethane	10.52	83	10590	2.03 PPB		87
83)	trans-1,4-Dichloro-2-buten	10.60	53	2081	1.54 PPB		68
84)	Bromobenzene	10.45	156	21998	1.91 PPB		100
85)	n-Propylbenzene	10.55	91	121574	1.83 PPB		98
86)	1,2,3-Trichloropropane	10.56	110	3337	1.97 PPB		96
87)	2-Chlorotoluene	10.65	91	71375	1.87 PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	86259	1.92 PPB		92
89)	4-Chlorotoluene	10.77	91	80240	1.86 PPB		93
90)	tert-Butylbenzene	11.06	119	77039	1.84 PPB		90
91)	1,2,4-Trimethylbenzene	11.12	105	81853	1.94 PPB		95
92)	sec-Butylbenzene	11.29	105	104295	1.88 PPB		98
93)	p-Isopropyltoluene	11.44	119	92903	1.91 PPB		98
94)	1,3-Dichlorobenzene	11.41	146	46241	1.91 PPB		94
95)	1,4-Dichlorobenzene	11.52	146	45755	1.93 PPB		98
96)	n-Butylbenzene	11.86	91	79219	1.94 PPB		97
97)	1,2-Dichlorobenzene	11.90	146	40425	2.01 PPB		98
98)	1,2-Dibromo-3-chloropropan	12.58	155	1261	1.90 PPB	#	52
99)	1,3,5-Trichlorobenzene	12.67	180	37725	1.88 PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	29607	2.12 PPB		97
101)	Hexachlorobutadiene	13.21	225	17404	1.73 PPB		93
102)	Naphthalene	13.31	128	36422	2.23 PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	24412	2.10 PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F066.D

(76) Styrene (T)

9.78min 2.21PPB

response 29938

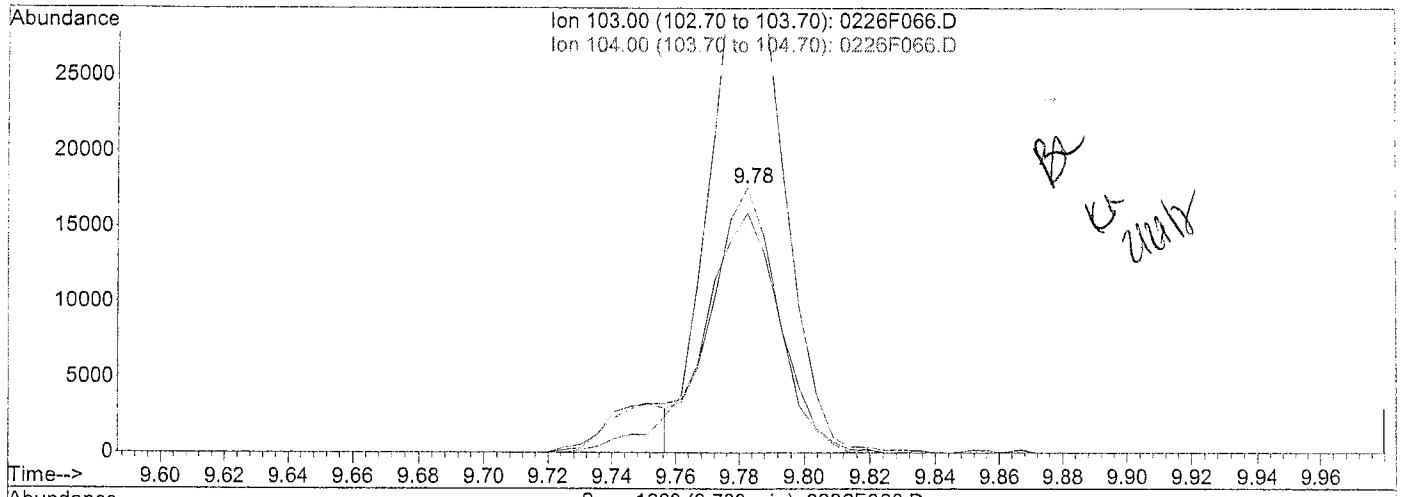
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	214.70
78.00	89.30	90.50
0.00	0.00	0.00

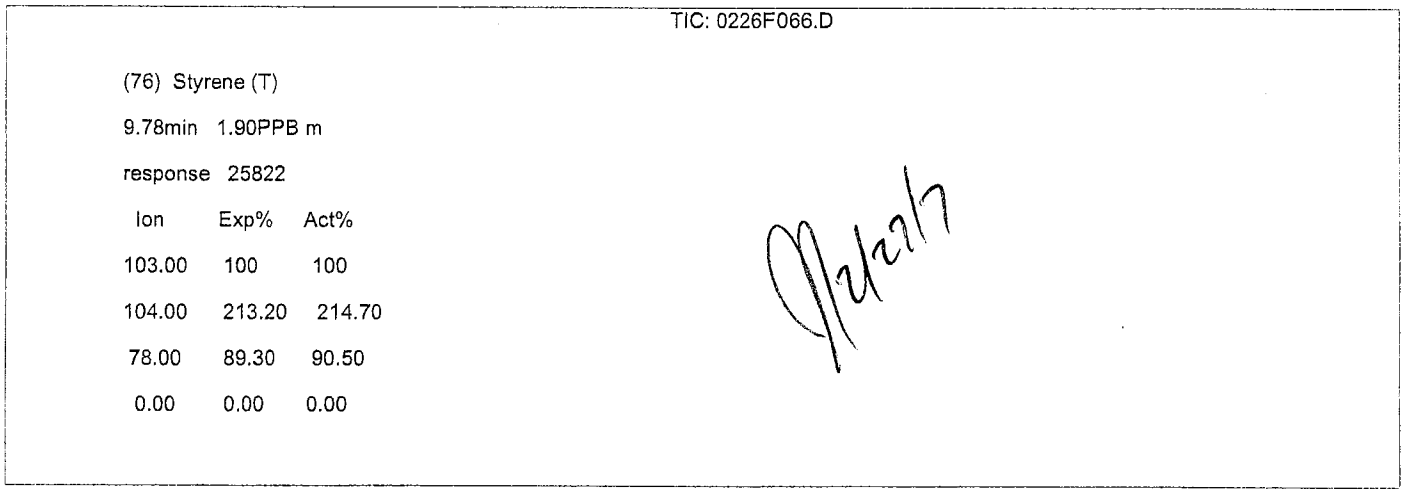
0226F066.D 022607.M Tue Feb 27 06:41:20 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



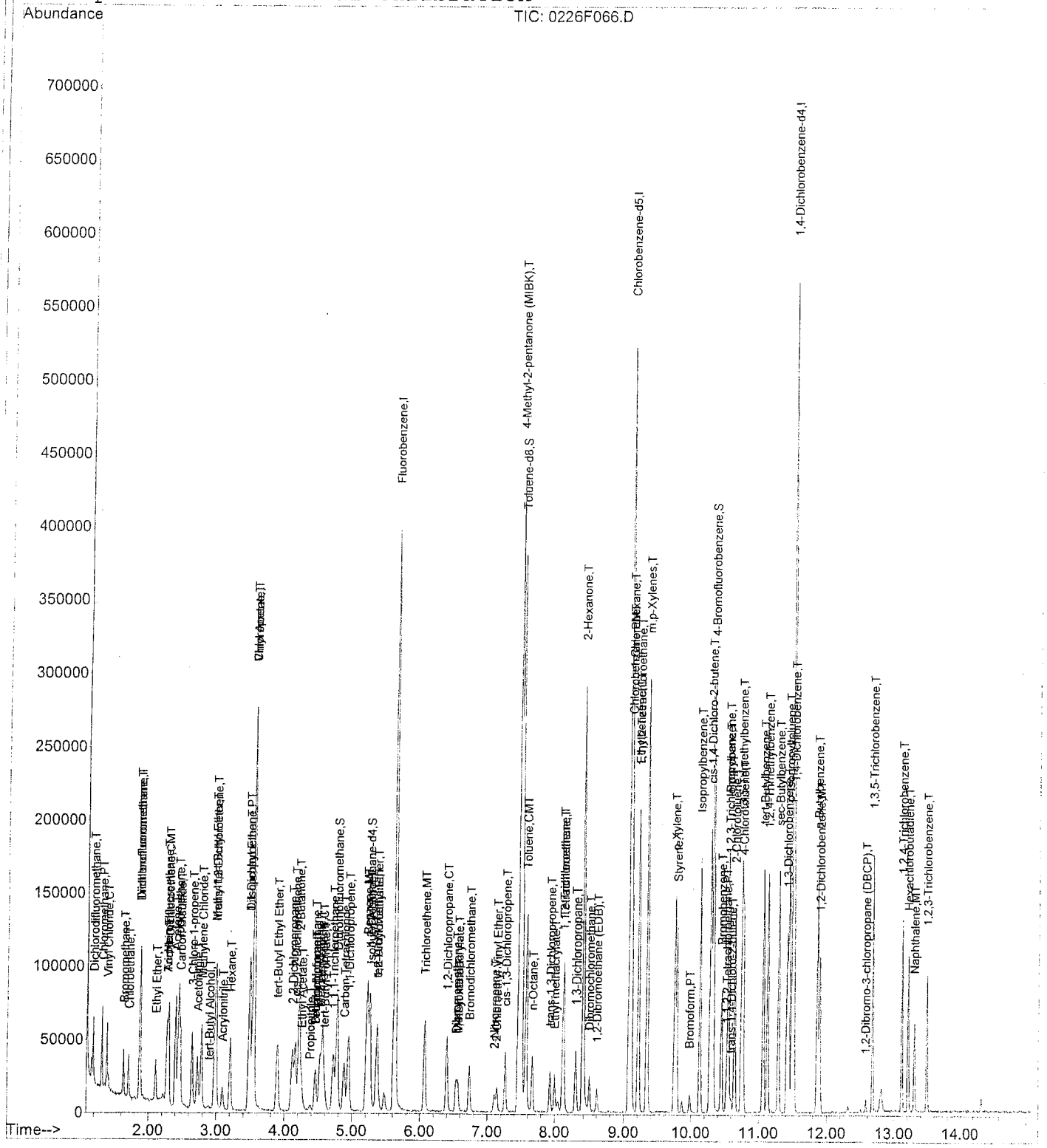


0226F066.D 022607.M Tue Feb 27 06:41:26 2007

Data File : J:\MS18\DATA\022607A\0226F066.D
Acq On : 26 Feb 2007 8:49 pm
Sample : 8260 ICAL 2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007

Vial: 14
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398460	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145687	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	141186	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	68519	8.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	87.70%	
44) 1,2-Dichloroethane-d4	5.26	65	67688	8.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	89.30%	
58) Toluene-d8	7.50	98	319855	8.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	84.40%	
80) 4-Bromofluorobenzene	10.32	95	103733	7.43	PPB	0.00
Spiked Amount 10.000			Recovery	=	74.30%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	60381	5.46	PPB	97
3) Chloromethane	1.32	50	69513	4.70	PPB	99
4) Vinyl Chloride	1.39	62	66034	5.28	PPB	98
5) Bromomethane	1.64	96	29211	3.61	PPB	98
6) Chloroethane	1.71	64	41374	4.91	PPB	96
7) Dichlorofluoromethane	1.87	67	100416	4.64	PPB	95
8) Trichlorofluoromethane	1.87	101	90199	4.90	PPB	98
9) Ethyl Ether	2.11	59	28350	5.26	PPB	92
10) Acrolein	2.27	56	15730	42.23	PPB	92
11) Trichlorotrifluoroethane	2.27	151	40851	4.65	PPB	94
12) 1,1-Dichloroethene	2.30	96	46986	4.75	PPB	87
13) Acetone	2.40	43	105369	102.13	PPB	97
14) Iodomethane	2.44	142	213329	17.77	PPB	97
15) Carbon Disulfide	2.47	76	152344	5.09	PPB	98
16) 3-Chloro-1-propene	2.64	76	23998	4.50	PPB #	63
17) Acetonitrile	2.72	40	52684	212.90	PPB	96
18) Methylene Chloride	2.78	84	50670	5.27	PPB	91
19) tert-Butyl Alcohol	2.88	59	5416	21.65	PPB	86
20) Acrylonitrile	3.09	53	28380	21.44	PPB	97
21) Methyl tert-Butyl Ether	2.98	73	178598	10.96	PPB	97
22) trans-1,2-Dichloroethene	3.00	96	56282	5.09	PPB	95
23) Hexane	3.20	57	57189	4.80	PPB	99
24) Diisopropyl Ether	3.48	45	166189	5.41	PPB	93
25) 1,1-Dichloroethane	3.48	63	98976	5.34	PPB	97
26) Vinyl Acetate	3.54	86	11692	11.03	PPB #	88
27) Chloroprene	3.54	53	427721	19.35	PPB	96
28) tert-Butyl Ethyl Ether	3.89	59	118361	5.42	PPB	98
29) 2,2-Dichloropropane	4.12	77	63108	4.62	PPB	100

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	56845	5.33	PPB		99
31)	2-Butanone	4.21	72	36741	103.14	PPB	#	80
32)	Propionitrile	4.38	54	9709	21.26	PPB		98
33)	Ethyl Acetate	4.25	61	11355	23.55	PPB		97
34)	Methacrylonitrile	4.52	67	36874	21.73	PPB		91
35)	Bromochloromethane	4.46	128	20382	5.40	PPB		89
36)	Tetrahydrofuran	4.46	71	2147	6.13	PPB	#	73
37)	Chloroform	4.56	83	93773	5.02	PPB		98
38)	tert-Butyl Formate	4.59	59	10422	5.00	PPB		86
39)	1,1,1-Trichloroethane	4.72	97	83254	5.33	PPB		95
41)	Carbon Tetrachloride	4.89	117	70450	5.03	PPB		95
42)	1,1-Dichloropropene	4.94	75	76745	5.19	PPB		97
43)	Isobutyl Alcohol	5.26	43	20452	198.27	PPB		86
45)	Benzene	5.22	78	228795	5.40	PPB		99
46)	1,2-Dichloroethane	5.35	62	52993	5.43	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	28054	5.07	PPB	#	65
48)	Trichloroethene	6.07	95	56955	5.08	PPB		92
49)	1,2-Dichloropropane	6.40	63	49049	5.57	PPB		95
50)	Dibromomethane	6.54	93	19441	5.57	PPB		89
51)	Methyl methacrylate	6.56	69	15596	5.18	PPB		95
52)	1,4-Dioxane	6.56	88	7116	219.09	PPB		98
53)	Bromodichloromethane	6.73	83	53787	5.32	PPB		94
54)	2-Nitropropane	7.10	43	25113	26.62	PPB		97
55)	2-Chloroethyl Vinyl Ether	7.14	63	16670	5.05	PPB		94
56)	cis-1,3-Dichloropropene	7.27	75	59157	5.27	PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.46	58	148514	107.39	PPB		89
59)	Toluene	7.57	92	145312	5.12	PPB		98
61)	n-Octane	7.66	85	19316	4.66	PPB		81
62)	trans-1,3-Dichloropropene	7.93	75	39876	5.24	PPB		98
63)	Ethyl methacrylate	7.99	69	31284	5.29	PPB		89
64)	1,1,2-Trichloroethane	8.12	83	24441	5.57	PPB		98
65)	Tetrachloroethene	8.13	164	51694	5.30	PPB		94
66)	2-Hexanone	8.39	57	43817	107.90	PPB	#	85
67)	1,3-Dichloropropane	8.29	76	56397	5.94	PPB		98
68)	Dibromochloromethane	8.49	129	31402	5.47	PPB		97
69)	1,2-Dibromoethane (EDB)	8.60	107	26040	5.61	PPB		89
70)	1-Chlorohexane	9.10	91	74332	4.95	PPB		89
71)	Chlorobenzene	9.11	112	154591	5.60	PPB		99
72)	Ethylbenzene	9.21	106	88387	5.34	PPB		88
73)	1,1,1,2-Tetrachloroethane	9.21	131	45860	5.74	PPB		94
74)	m,p-Xylenes	9.34	106	216473	10.66	PPB		94
75)	o-Xylene	9.75	106	101783	5.52	PPB		93

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	72666m	5.54	PPB		
77)	Bromoform	9.98	173	15362	5.25	PPB		97
78)	Isopropylbenzene	10.13	105	275225	5.35	PPB		99
79)	cis-1,4-Dichloro-2-butene	10.29	89	8317	15.58	PPB		89
82)	1,1,2,2-Tetrachloroethane	10.53	83	27223	5.36	PPB		98
83)	trans-1,4-Dichloro-2-buten	10.60	53	5489	4.16	PPB	#	39
84)	Bromobenzene	10.45	156	59285	5.29	PPB		88
85)	n-Propylbenzene	10.55	91	323570	5.00	PPB		96
86)	1,2,3-Trichloropropane	10.56	110	8286	5.01	PPB		86
87)	2-Chlorotoluene	10.65	91	187663	5.05	PPB		100
88)	1,3,5-Trimethylbenzene	10.75	105	226630	5.17	PPB		100
89)	4-Chlorotoluene	10.77	91	217059	5.16	PPB		94
90)	tert-Butylbenzene	11.06	119	206764	5.07	PPB		99
91)	1,2,4-Trimethylbenzene	11.13	105	220843	5.37	PPB		95
92)	sec-Butylbenzene	11.29	105	278078	5.14	PPB		99
93)	p-Isopropyltoluene	11.44	119	251801	5.30	PPB		96
94)	1,3-Dichlorobenzene	11.41	146	119986	5.09	PPB		99
95)	1,4-Dichlorobenzene	11.52	146	119494	5.16	PPB		98
96)	n-Butylbenzene	11.86	91	217963	5.46	PPB		95
97)	1,2-Dichlorobenzene	11.90	146	104640	5.33	PPB		100
98)	1,2-Dibromo-3-chloropropan	12.57	155	3334	5.16	PPB	#	75
99)	1,3,5-Trichlorobenzene	12.67	180	97070	4.96	PPB		99
100)	1,2,4-Trichlorobenzene	13.12	180	76478	5.60	PPB		96
101)	Hexachlorobutadiene	13.21	225	47226	4.82	PPB		94
102)	Naphthalene	13.30	128	99252	6.24	PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	64471	5.68	PPB		98

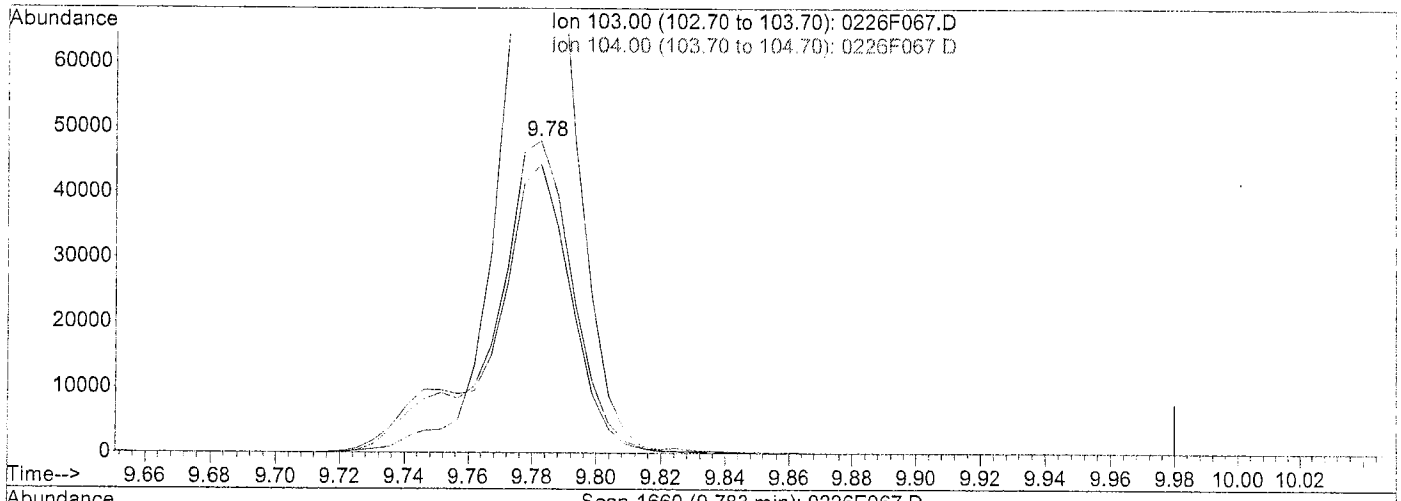
(#) = qualifier out of range (m) = manual integration

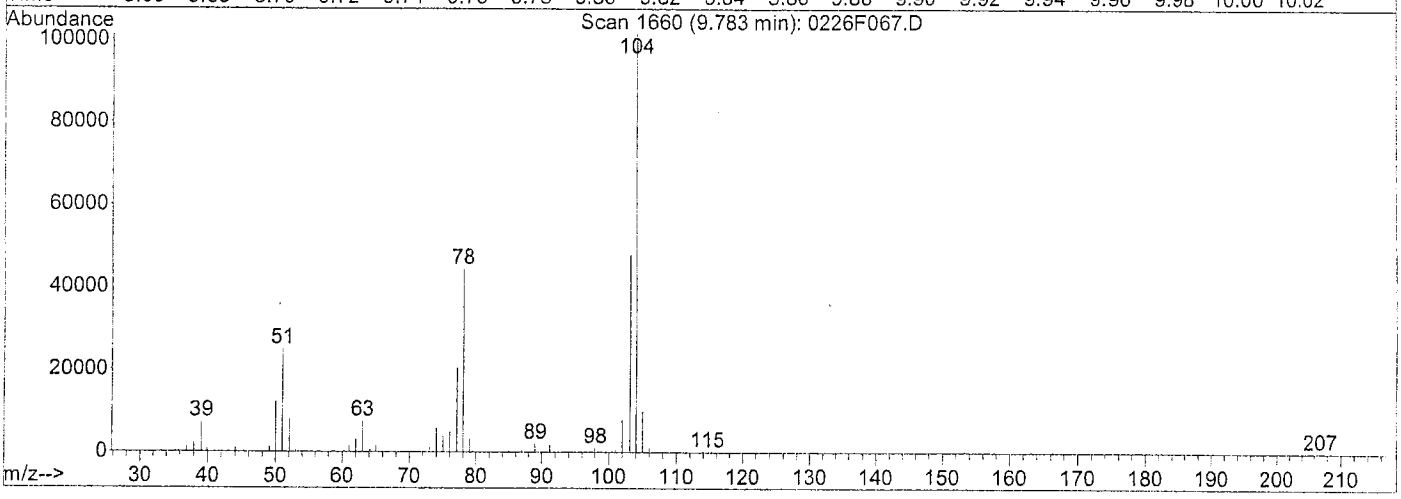
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F067.D

(76) Styrene (T)

9.78min 6.45PPB

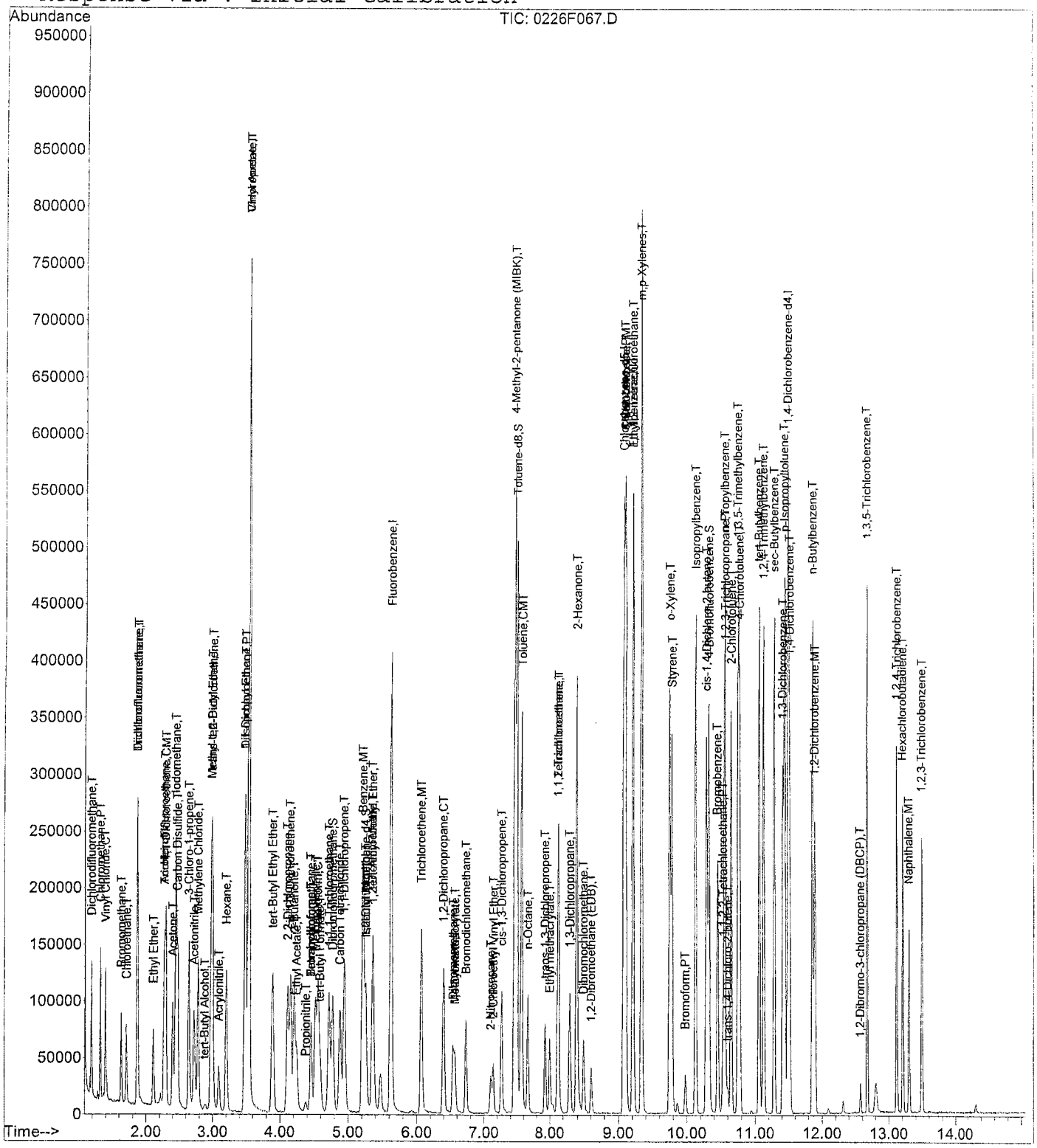
response 84560

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.67
78.00	89.30	92.47
0.00	0.00	0.00

0226F067.D 022607.M Tue Feb 27 06:42:37 2007

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:42 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KT 2/27/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	403812	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	151762	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	144072	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89247	11.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	112.70%	
44) 1,2-Dichloroethane-d4	5.25	65	87121	11.35	PPB	0.00
Spiked Amount 10.000			Recovery	=	113.50%	
58) Toluene-d8	7.50	98	400788	10.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.40%	
80) 4-Bromofluorobenzene	10.32	95	133921	9.21	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.10%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	124571	11.11	PPB		98
3) Chloromethane	1.32	50	140240	9.36	PPB		98
4) Vinyl Chloride	1.39	62	137910	10.88	PPB		97
5) Bromomethane	1.64	96	60979	7.44	PPB		99
6) Chloroethane	1.71	64	84534	9.89	PPB		96
7) Dichlorofluoromethane	1.87	67	204448	9.31	PPB		98
8) Trichlorofluoromethane	1.87	101	184619	9.90	PPB		99
9) Ethyl Ether	2.10	59	55291	10.12	PPB		92
10) Acrolein	2.27	56	31411	83.21	PPB		97
11) Trichlorotrifluoroethane	2.27	151	85831	9.64	PPB		95
12) 1,1-Dichloroethene	2.30	96	97608	9.73	PPB		92
13) Acetone	2.40	43	205485	196.53	PPB		97
14) Iodomethane	2.44	142	467618	38.43	PPB		94
15) Carbon Disulfide	2.47	76	315439	10.40	PPB		99
16) 3-Chloro-1-propene	2.64	76	53781	9.95	PPB	#	71
17) Acetonitrile	2.72	40	106655	425.28	PPB		96
18) Methylene Chloride	2.78	84	99156	10.17	PPB		91
19) tert-Butyl Alcohol	2.88	59	11122	43.86	PPB		89
20) Acrylonitrile	3.09	53	56504	42.13	PPB		97
21) Methyl tert-Butyl Ether	2.98	73	358987	21.74	PPB		99
22) trans-1,2-Dichloroethene	3.00	96	115625	10.31	PPB		99
23) Hexane	3.20	57	113550	9.40	PPB		96
24) Diisopropyl Ether	3.48	45	336039	10.80	PPB		94
25) 1,1-Dichloroethane	3.48	63	209736	11.18	PPB		97
26) Vinyl Acetate	3.54	86	21789	20.28	PPB		97
27) Chloroprene	3.54	53	898643	40.12	PPB		95
28) tert-Butyl Ethyl Ether	3.89	59	240064	10.84	PPB		99
29) 2,2-Dichloropropane	4.12	77	137711	9.95	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	114712	10.60	PPB		95
31)	2-Butanone	4.21	72	71146	197.07	PPB	#	67
32)	Propionitrile	4.38	54	19596	42.34	PPB		94
33)	Ethyl Acetate	4.25	61	18216	37.28	PPB		99
34)	Methacrylonitrile	4.52	67	70776	41.16	PPB		92
35)	Bromochloromethane	4.46	128	42742	11.17	PPB		93
36)	Tetrahydrofuran	4.46	71	3458	9.74	PPB		93
37)	Chloroform	4.56	83	190349	10.05	PPB		95
38)	tert-Butyl Formate	4.59	59	23013	10.90	PPB		82
39)	1,1,1-Trichloroethane	4.72	97	176036	11.13	PPB		99
41)	Carbon Tetrachloride	4.89	117	156172	11.01	PPB		96
42)	1,1-Dichloropropene	4.95	75	163742	10.92	PPB		99
43)	Isobutyl Alcohol	5.26	43	41145	393.60	PPB		97
45)	Benzene	5.22	78	474612	11.05	PPB		98
46)	1,2-Dichloroethane	5.36	62	108267	10.95	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	55333	9.87	PPB	#	53
48)	Trichloroethene	6.07	95	120226	10.57	PPB		97
49)	1,2-Dichloropropane	6.40	63	100503	11.26	PPB		96
50)	Dibromomethane	6.53	93	40829	11.54	PPB		92
51)	Methyl methacrylate	6.56	69	30518	10.01	PPB		94
52)	1,4-Dioxane	6.55	88	14576	442.82	PPB		99
53)	Bromodichloromethane	6.73	83	113038	11.04	PPB		98
54)	2-Nitropropane	7.10	43	52977	55.41	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	34585	10.35	PPB		97
56)	cis-1,3-Dichloropropene	7.27	75	127486	11.21	PPB		95
57)	4-Methyl-2-pentanone (MIBK	7.46	58	288359	205.74	PPB		94
59)	Toluene	7.57	92	298609	10.38	PPB		96
61)	n-Octane	7.66	85	40171	9.30	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	88093	11.10	PPB		95
63)	Ethyl methacrylate	7.99	69	63914	10.38	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	48667	10.65	PPB		97
65)	Tetrachloroethene	8.13	164	104117	10.25	PPB		90
66)	2-Hexanone	8.39	57	89907	212.53	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	109377	11.07	PPB		99
68)	Dibromochloromethane	8.49	129	66110	11.05	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	52860	10.93	PPB		96
70)	1-Chlorohexane	9.10	91	157908	10.09	PPB		89
71)	Chlorobenzene	9.11	112	306994	10.67	PPB		97
72)	Ethylbenzene	9.21	106	184254	10.69	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	95270	11.45	PPB		97
74)	m,p-Xylenes	9.34	106	447160	21.14	PPB		93
75)	o-Xylene	9.75	106	210813	10.98	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
76)	Styrene	9.78	103	144112m	10.55 PPB		
77)	Bromoform	9.98	173	31459	10.32 PPB		96
78)	Isopropylbenzene	10.13	105	577931	10.79 PPB		98
79)	cis-1,4-Dichloro-2-butene	10.29	89	19460	35.00 PPB		90
82)	1,1,2,2-Tetrachloroethane	10.53	83	52286	10.09 PPB		93
83)	trans-1,4-Dichloro-2-buten	10.60	53	11625	8.63 PPB	#	55
84)	Bromobenzene	10.45	156	119850	10.47 PPB		99
85)	n-Propylbenzene	10.55	91	662757	10.04 PPB		99
86)	1,2,3-Trichloropropane	10.57	110	17336	10.27 PPB		97
87)	2-Chlorotoluene	10.65	91	379164	10.00 PPB		98
88)	1,3,5-Trimethylbenzene	10.75	105	468351	10.47 PPB		97
89)	4-Chlorotoluene	10.77	91	430835	10.04 PPB		98
90)	tert-Butylbenzene	11.06	119	422202	10.15 PPB		96
91)	1,2,4-Trimethylbenzene	11.13	105	459299	10.94 PPB		99
92)	sec-Butylbenzene	11.29	105	579322	10.49 PPB		99
93)	p-Isopropyltoluene	11.44	119	524015	10.81 PPB		100
94)	1,3-Dichlorobenzene	11.42	146	243972	10.13 PPB		96
95)	1,4-Dichlorobenzene	11.52	146	239462	10.14 PPB		98
96)	n-Butylbenzene	11.86	91	444455	10.92 PPB		98
97)	1,2-Dichlorobenzene	11.89	146	209640	10.47 PPB		97
98)	1,2-Dibromo-3-chloropropan	12.57	155	6502	9.86 PPB		85
99)	1,3,5-Trichlorobenzene	12.67	180	197683	9.89 PPB		95
100)	1,2,4-Trichlorobenzene	13.12	180	153394	11.02 PPB		99
101)	Hexachlorobutadiene	13.21	225	90689	9.08 PPB		98
102)	Naphthalene	13.30	128	208325	12.83 PPB		99
103)	1,2,3-Trichlorobenzene	13.49	180	128067	11.05 PPB		98

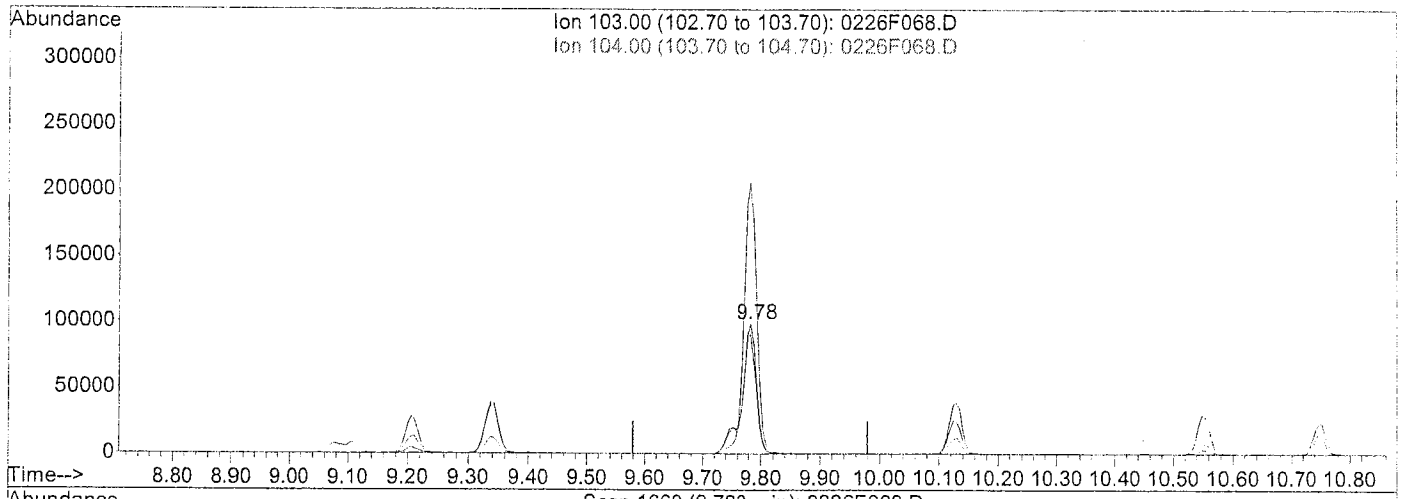
(#) = qualifier out of range (m) = manual integration

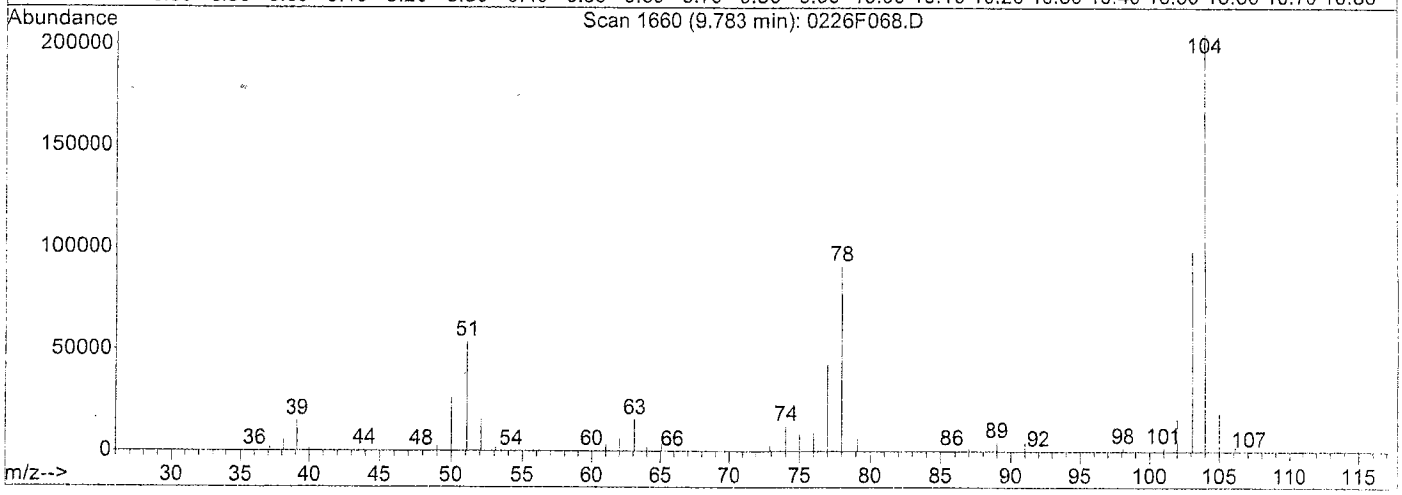
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F068.D

(76) Styrene (T)

9.78min 12.83PPB

response 175178

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

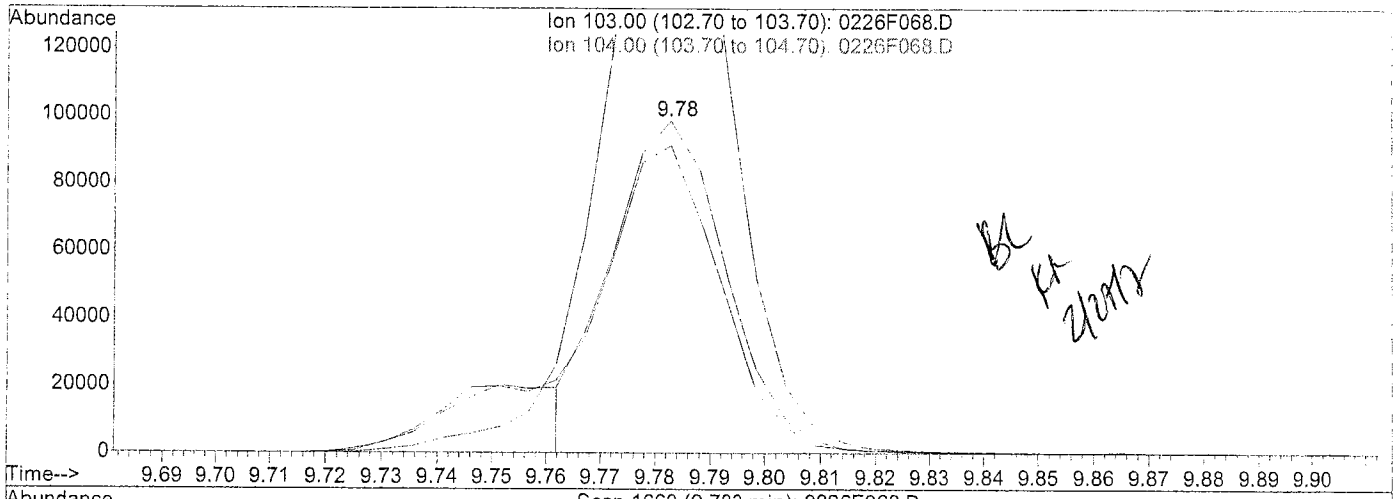
0226F068.D 022607.M Tue Feb 27 06:27:11 2007

Quantitation Report (Qedit)

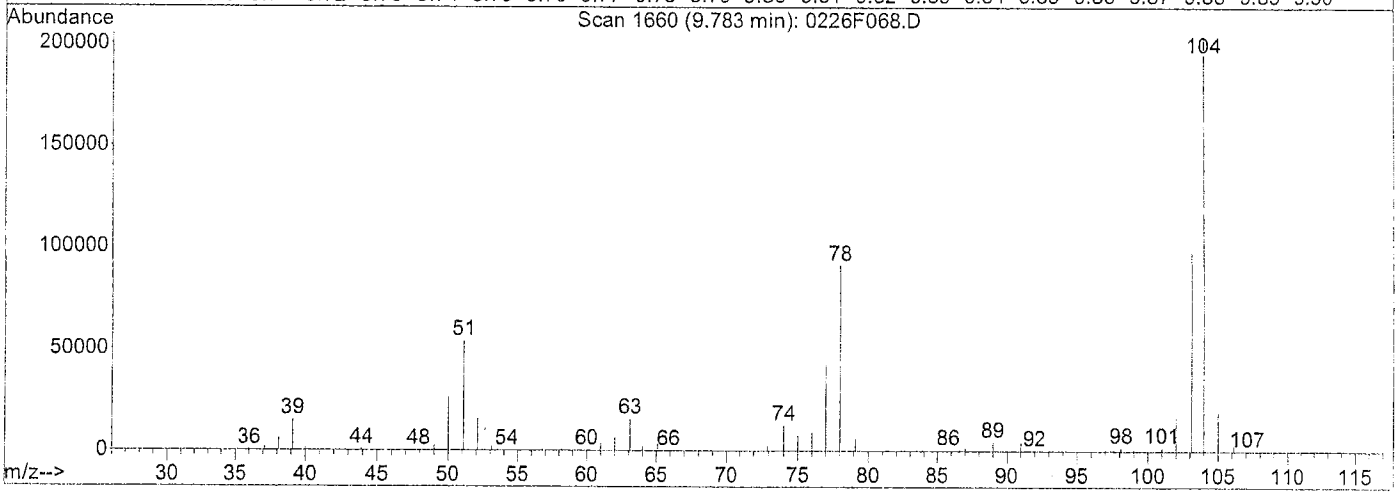
Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



BL KA 2/28/07



TIC: 0226F068.D

(76) Styrene (T)

9.78min 10.55PPB m

response 144112

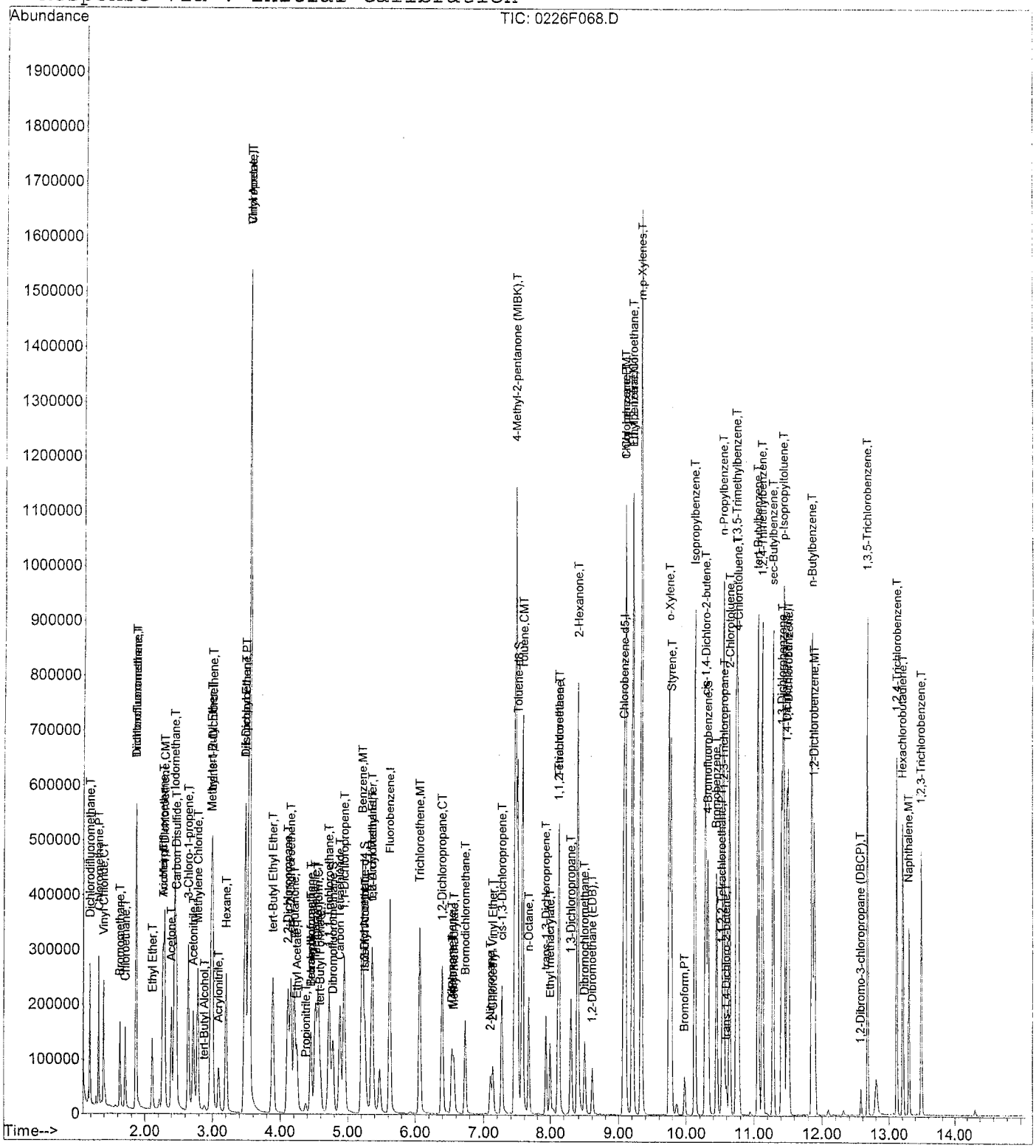
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

2/27/7

0226F068.D 022607.M Tue Feb 27 06:27:19 2007

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	404000	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	152766	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	146402	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	188379	23.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	237.70%	
44) 1,2-Dichloroethane-d4	5.25	65	179179	23.32	PPB	0.00
Spiked Amount 10.000			Recovery	=	233.20%	
58) Toluene-d8	7.50	98	841502	21.90	PPB	0.00
Spiked Amount 10.000			Recovery	=	219.00%	
80) 4-Bromofluorobenzene	10.32	95	284208	19.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	194.20%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	251781	22.44	PPB		98
3) Chloromethane	1.32	50	288850	19.26	PPB		99
4) Vinyl Chloride	1.39	62	273300	21.56	PPB		99
5) Bromomethane	1.64	96	130110	15.88	PPB		100
6) Chloroethane	1.71	64	169615	19.83	PPB		96
7) Dichlorofluoromethane	1.87	67	413532	18.83	PPB		100
8) Trichlorofluoromethane	1.87	101	380748	20.42	PPB		99
9) Ethyl Ether	2.11	59	117224	21.45	PPB		94
10) Acrolein	2.27	56	73144	193.67	PPB		99
11) Trichlorotrifluoroethane	2.27	151	175629	19.71	PPB		98
12) 1,1-Dichloroethene	2.30	96	197800	19.72	PPB		86
13) Acetone	2.40	43	438861	419.54	PPB		97
14) Iodomethane	2.44	142	970573	79.73	PPB		97
15) Carbon Disulfide	2.47	76	643649	21.21	PPB		98
16) 3-Chloro-1-propene	2.64	76	110470	20.43	PPB	#	67
17) Acetonitrile	2.72	40	221617	883.27	PPB		97
18) Methylene Chloride	2.78	84	198973	20.39	PPB		93
19) tert-Butyl Alcohol	2.88	59	22854	90.09	PPB		98
20) Acrylonitrile	3.09	53	119423	89.00	PPB		96
21) Methyl tert-Butyl Ether	2.98	73	745870	45.15	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	235441	20.98	PPB		99
23) Hexane	3.20	57	230837	19.10	PPB		99
24) Diisopropyl Ether	3.48	45	678998	21.81	PPB		95
25) 1,1-Dichloroethane	3.48	63	424269	22.60	PPB		100
26) Vinyl Acetate	3.54	86	49076	45.67	PPB	#	86
27) Chloroprene	3.54	53	1843352	82.26	PPB		96
28) tert-Butyl Ethyl Ether	3.89	59	494037	22.30	PPB		98
29) 2,2-Dichloropropane	4.12	77	300852	21.72	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	239408	22.12	PPB		95
31)	2-Butanone	4.21	72	160136	443.36	PPB		90
32)	Propionitrile	4.38	54	41737	90.13	PPB		97
33)	Ethyl Acetate	4.25	61	39809	81.44	PPB		97
34)	Methacrylonitrile	4.52	67	151813	88.25	PPB		96
35)	Bromochloromethane	4.46	128	89077	23.26	PPB		92
36)	Tetrahydrofuran	4.45	71	7772	21.89	PPB	#	80
37)	Chloroform	4.56	83	395072	20.84	PPB		99
38)	tert-Butyl Formate	4.59	59	53775	25.46	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	369336	23.34	PPB		99
41)	Carbon Tetrachloride	4.88	117	327305	23.06	PPB		99
42)	1,1-Dichloropropene	4.95	75	336645	22.45	PPB		100
43)	Isobutyl Alcohol	5.25	43	91945	879.15	PPB		94
45)	Benzene	5.22	78	958304	22.30	PPB		98
46)	1,2-Dichloroethane	5.36	62	225340	22.77	PPB		97
47)	tert-Amyl Methyl Ether	5.37	55	107401	19.15	PPB	#	66
48)	Trichloroethene	6.07	95	240905	21.18	PPB		96
49)	1,2-Dichloropropane	6.40	63	208455	23.33	PPB		98
50)	Dibromomethane	6.53	93	83298	23.53	PPB		95
51)	Methyl methacrylate	6.56	69	65492	21.47	PPB		94
52)	1,4-Dioxane	6.55	88	29639	900.01	PPB		97
53)	Bromodichloromethane	6.73	83	238884	23.32	PPB		99
54)	2-Nitropropane	7.10	43	122870	128.44	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	74844	22.38	PPB		92
56)	cis-1,3-Dichloropropene	7.27	75	277916	24.43	PPB		97
57)	4-Methyl-2-pentanone (MIBK	7.46	58	630278	449.49	PPB		93
59)	Toluene	7.57	92	613345	21.31	PPB		96
61)	n-Octane	7.66	85	77478	17.81	PPB		95
62)	trans-1,3-Dichloropropene	7.93	75	199775	25.02	PPB		98
63)	Ethyl methacrylate	7.99	69	140803	22.71	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	102351	22.25	PPB		96
65)	Tetrachloroethene	8.13	164	214152	20.94	PPB		96
66)	2-Hexanone	8.39	57	195901	460.05	PPB		92
67)	1,3-Dichloropropane	8.29	76	229985	23.11	PPB		98
68)	Dibromochloromethane	8.49	129	145562	24.18	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	115379	23.70	PPB		99
70)	1-Chlorohexane	9.10	91	323339	20.53	PPB		89
71)	Chlorobenzene	9.11	112	632153	21.83	PPB		98
72)	Ethylbenzene	9.21	106	376732	21.71	PPB		93
73)	1,1,1,2-Tetrachloroethane	9.22	131	201867	24.11	PPB		98
74)	m,p-Xylenes	9.34	106	922761	43.33	PPB		94
75)	o-Xylene	9.75	106	434500	22.49	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

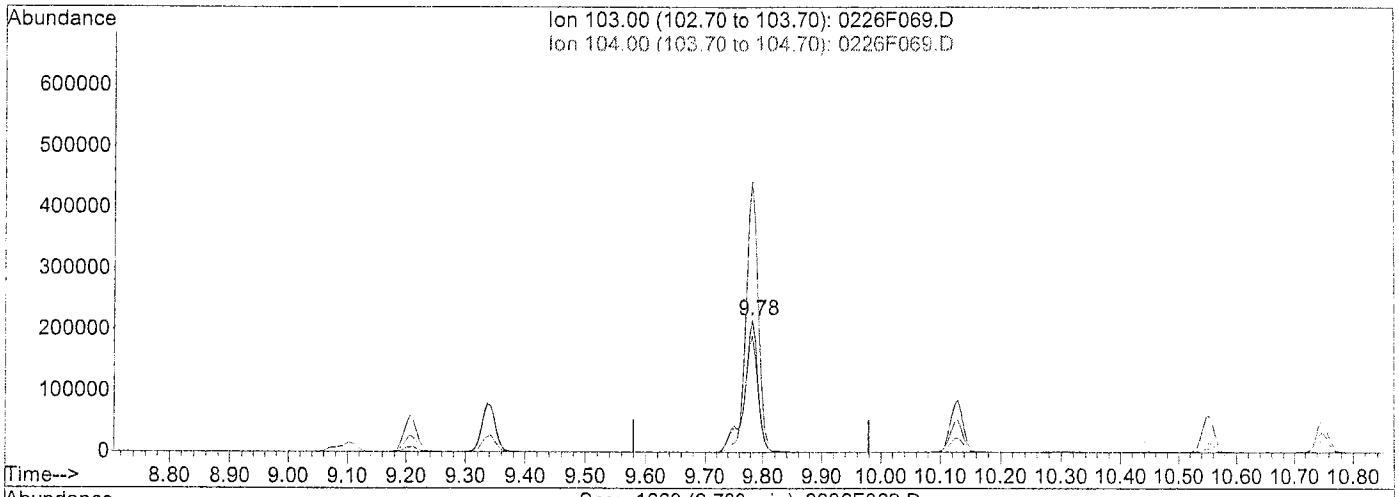
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	319396m	23.23	PPB	
77)	Bromoform	9.98	173	73841	24.07	PPB	99
78)	Isopropylbenzene	10.13	105	1180375	21.89	PPB	98
79)	cis-1,4-Dichloro-2-butene	10.29	89	48129	86.00	PPB	97
82)	1,1,2,2-Tetrachloroethane	10.53	83	114731	21.78	PPB	99
83)	trans-1,4-Dichloro-2-buten	10.60	53	25259	18.46	PPB	78
84)	Bromobenzene	10.45	156	248622	21.38	PPB	93
85)	n-Propylbenzene	10.55	91	1399366	20.87	PPB	99
86)	1,2,3-Trichloropropane	10.56	110	35736	20.84	PPB	91
87)	2-Chlorotoluene	10.65	91	789652	20.49	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	980089	21.57	PPB	99
89)	4-Chlorotoluene	10.77	91	901906	20.68	PPB	97
90)	tert-Butylbenzene	11.06	119	882711	20.89	PPB	95
91)	1,2,4-Trimethylbenzene	11.13	105	961827	22.54	PPB	97
92)	sec-Butylbenzene	11.29	105	1200545	21.39	PPB	99
93)	p-Isopropyltoluene	11.44	119	1104810	22.43	PPB	99
94)	1,3-Dichlorobenzene	11.41	146	513687	21.00	PPB	97
95)	1,4-Dichlorobenzene	11.52	146	497315	20.73	PPB	100
96)	n-Butylbenzene	11.86	91	942987	22.80	PPB	99
97)	1,2-Dichlorobenzene	11.90	146	434951	21.38	PPB	98
98)	1,2-Dibromo-3-chloropropan	12.57	155	15260	22.78	PPB	93
99)	1,3,5-Trichlorobenzene	12.67	180	406644	20.02	PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	320907	22.68	PPB	99
101)	Hexachlorobutadiene	13.21	225	190357	18.75	PPB	98
102)	Naphthalene	13.30	128	437530	26.52	PPB	99
103)	1,2,3-Trichlorobenzene	13.49	180	269904	22.92	PPB	98

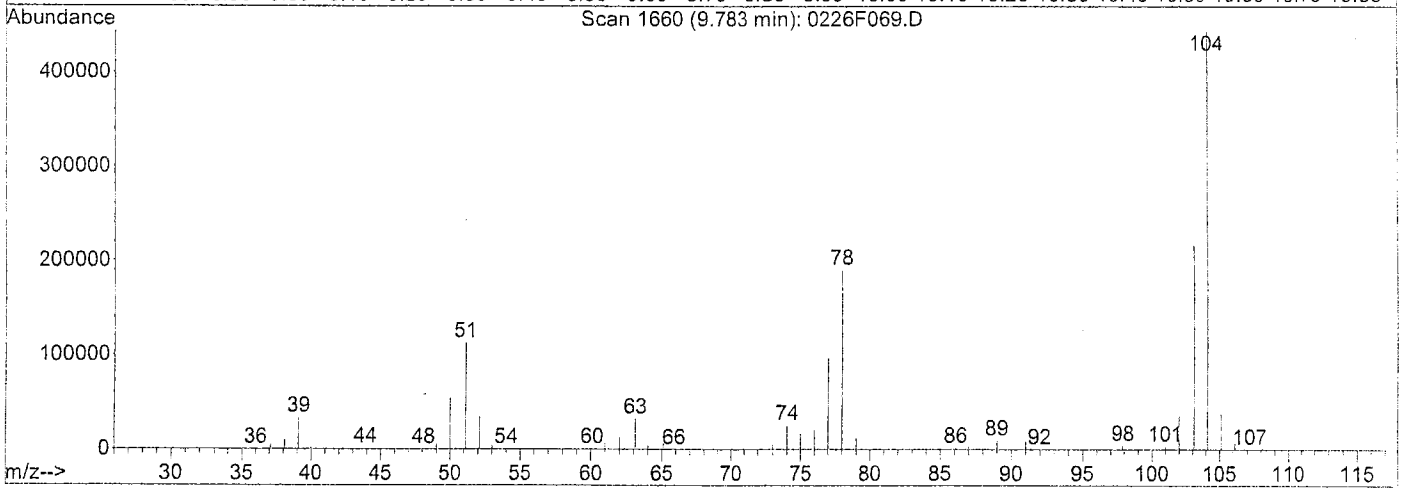
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 26.87PPB

response 369439

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

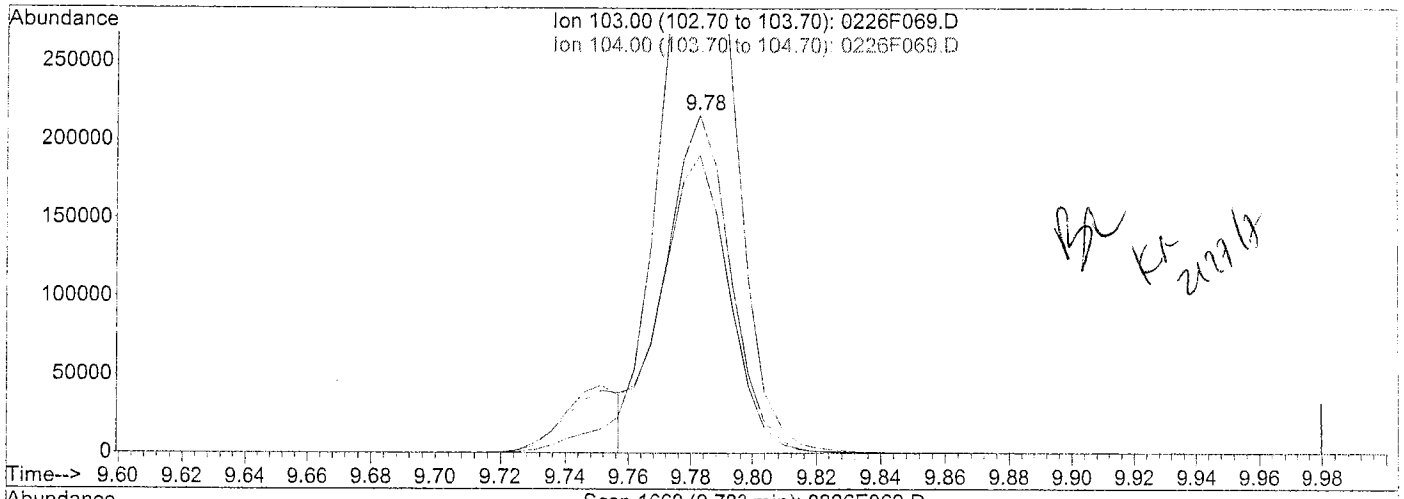
0226F069.D 022607.M Tue Feb 27 06:44:42 2007

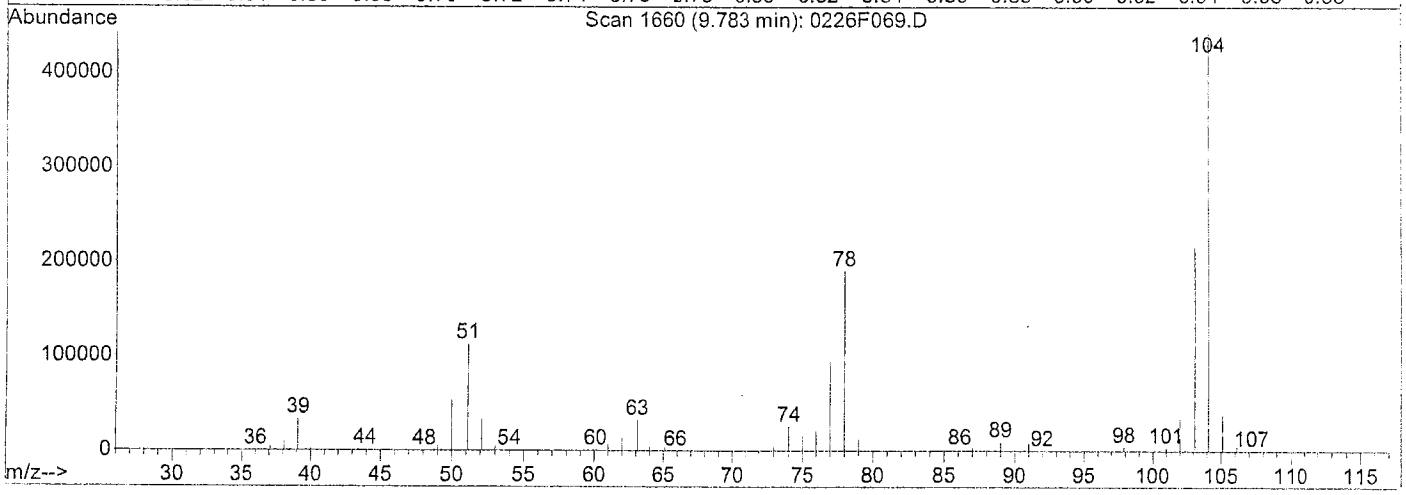
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F069.D
Acq On : 26 Feb 2007 9:47 pm
Sample : 8260 ICAL 20
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007

Vial: 17
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 23.23PPB m

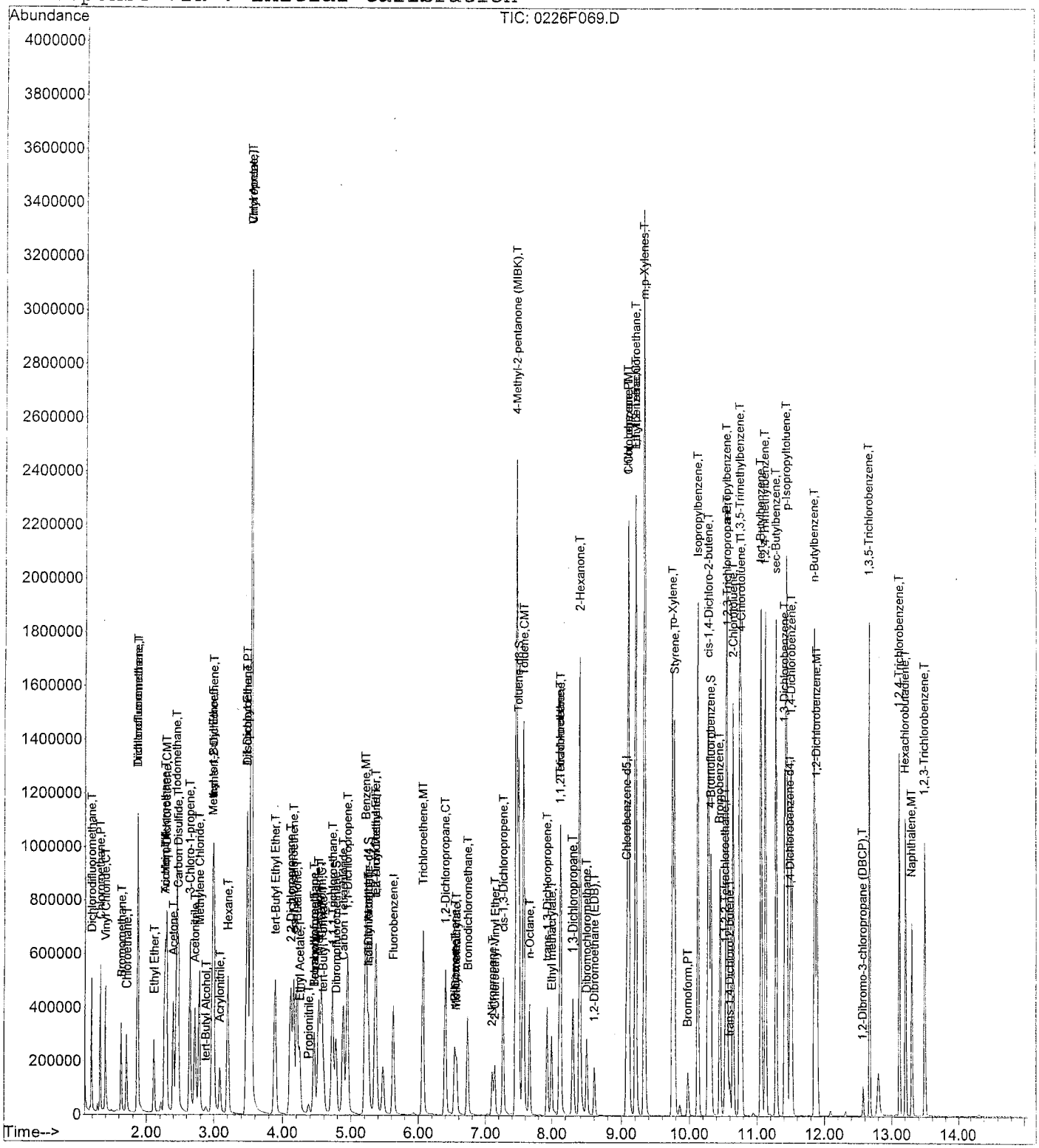
response 319396

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

0226F069.D 022607.M Tue Feb 27 06:44:48 2007

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	408340	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	154956	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	149638	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	383411	47.87	PPB	0.00
Spiked Amount 10.000			Recovery	=	478.70%	
44) 1,2-Dichloroethane-d4	5.25	65	359350	46.28	PPB	0.00
Spiked Amount 10.000			Recovery	=	462.80%	
58) Toluene-d8	7.50	98	1735727	44.70	PPB	0.00
Spiked Amount 10.000			Recovery	=	447.00%	
80) 4-Bromofluorobenzene	10.32	95	576553	38.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	388.40%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	494660	43.62	PPB		97
3) Chloromethane	1.32	50	583158	38.47	PPB		99
4) Vinyl Chloride	1.39	62	547371	42.72	PPB		100
5) Bromomethane	1.63	96	261612	31.59	PPB		99
6) Chloroethane	1.71	64	343613	39.75	PPB		97
7) Dichlorofluoromethane	1.87	67	834811	37.61	PPB		98
8) Trichlorofluoromethane	1.87	101	760627	40.35	PPB		99
9) Ethyl Ether	2.10	59	222343	40.26	PPB		91
10) Acrolein	2.26	56	168883	442.41	PPB		98
11) Trichlorotrifluoroethane	2.27	151	355258	39.45	PPB		98
12) 1,1-Dichloroethene	2.30	96	404508	39.90	PPB		86
13) Acetone	2.40	43	839861	794.36	PPB		98
14) Iodomethane	2.44	142	2090150	169.87	PPB		98
15) Carbon Disulfide	2.47	76	1298763	42.34	PPB		98
16) 3-Chloro-1-propene	2.64	76	245272	44.87	PPB	#	67
17) Acetonitrile	2.72	40	430769	1698.62	PPB		99
18) Methylene Chloride	2.78	84	395964	40.15	PPB		96
19) tert-Butyl Alcohol	2.88	59	45520	177.54	PPB		97
20) Acrylonitrile	3.09	53	229934	169.54	PPB		98
21) Methyl tert-Butyl Ether	2.98	73	1451099	86.91	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	473012	41.71	PPB		99
23) Hexane	3.20	57	462591	37.87	PPB		96
24) Diisopropyl Ether	3.48	45	1354656	43.06	PPB		95
25) 1,1-Dichloroethane	3.48	63	840085	44.27	PPB		99
26) Vinyl Acetate	3.53	86	96291	88.65	PPB		99
27) Chloroprene	3.53	53	3687501	162.81	PPB		95
28) tert-Butyl Ethyl Ether	3.89	59	967085	43.18	PPB		99
29) 2,2-Dichloropropane	4.12	77	633257	45.23	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D
Acq On : 26 Feb 2007 10:07 pm
Sample : 8260 ICAL 40
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007

Vial: 18
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	472231	43.17	PPB		95
31)	2-Butanone	4.20	72	316468	866.88	PPB	#	78
32)	Propionitrile	4.37	54	79415	169.67	PPB		97
33)	Ethyl Acetate	4.25	61	80083	162.09	PPB		98
34)	Methacrylonitrile	4.52	67	293112	168.58	PPB		90
35)	Bromochloromethane	4.46	128	174712	45.13	PPB		92
36)	Tetrahydrofuran	4.45	71	14144	39.41	PPB	#	77
37)	Chloroform	4.56	83	784363	40.94	PPB		96
38)	tert-Butyl Formate	4.59	59	110313	51.67	PPB		90
39)	1,1,1-Trichloroethane	4.72	97	741046	46.32	PPB		98
41)	Carbon Tetrachloride	4.89	117	677066	47.19	PPB		99
42)	1,1-Dichloropropene	4.95	75	666225	43.95	PPB		98
43)	Isobutyl Alcohol	5.25	43	190308	1800.32	PPB		97
45)	Benzene	5.22	78	1904128	43.84	PPB		98
46)	1,2-Dichloroethane	5.36	62	444170	44.41	PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	206493	36.42	PPB	#	72
48)	Trichloroethene	6.07	95	483438	42.05	PPB		96
49)	1,2-Dichloropropane	6.40	63	417005	46.18	PPB		96
50)	Dibromomethane	6.53	93	164695	46.03	PPB		96
51)	Methyl methacrylate	6.56	69	131319	42.60	PPB		94
52)	1,4-Dioxane	6.55	88	57475	1726.72	PPB		90
53)	Bromodichloromethane	6.73	83	489803	47.31	PPB		100
54)	2-Nitropropane	7.10	43	253942	262.64	PPB		99
55)	2-Chloroethyl Vinyl Ether	7.14	63	149151	44.13	PPB		95
56)	cis-1,3-Dichloropropene	7.27	75	575560	50.06	PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	1210959	854.43	PPB		92
59)	Toluene	7.57	92	1217873	41.87	PPB		94
61)	n-Octane	7.66	85	155800	35.32	PPB		91
62)	trans-1,3-Dichloropropene	7.93	75	423202	52.24	PPB		97
63)	Ethyl methacrylate	7.99	69	275946	43.88	PPB		93
64)	1,1,2-Trichloroethane	8.12	83	200133	42.89	PPB		97
65)	Tetrachloroethene	8.13	164	428462	41.29	PPB		92
66)	2-Hexanone	8.39	57	374270	866.50	PPB	#	85
67)	1,3-Dichloropropane	8.29	76	443110	43.90	PPB		98
68)	Dibromochloromethane	8.49	129	298550	48.89	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	223907	45.34	PPB		94
70)	1-Chlorohexane	9.10	91	661499	41.40	PPB		87
71)	Chlorobenzene	9.11	112	1263933	43.02	PPB		97
72)	Ethylbenzene	9.21	106	763789	43.38	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	414717	48.83	PPB		97
74)	m,p-Xylenes	9.34	106	1877827	86.94	PPB		97
75)	o-Xylene	9.75	106	871078	44.44	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

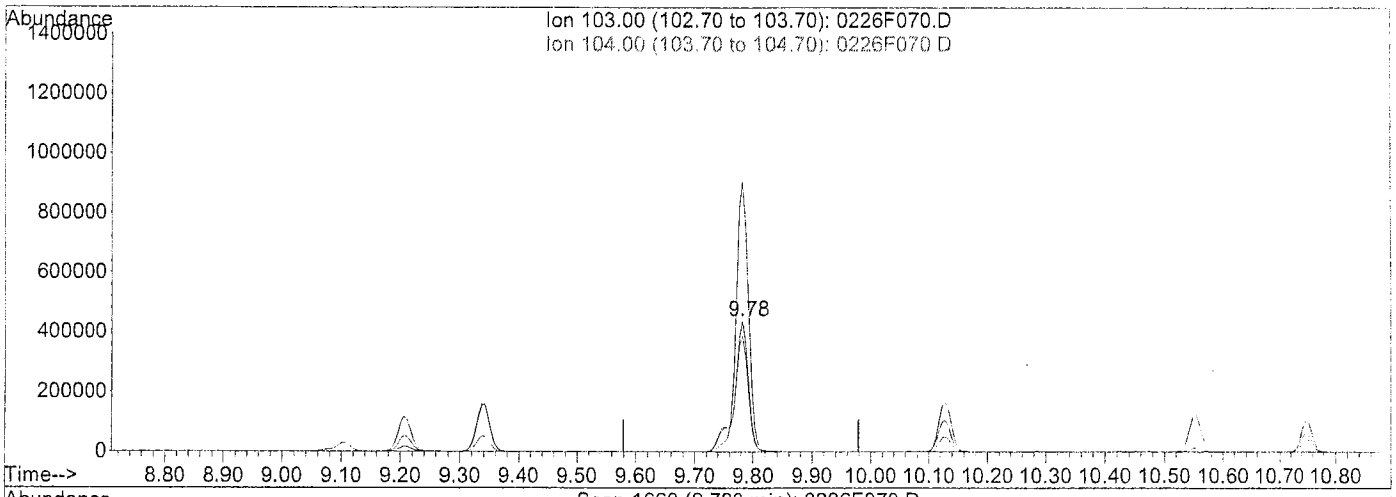
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	617063m	44.25	PPB	
77)	Bromoform	9.98	173	153674	49.38	PPB	99
78)	Isopropylbenzene	10.13	105	2400165	43.89	PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	109155	192.29	PPB	100
82)	1,1,2,2-Tetrachloroethane	10.53	83	217182	40.34	PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	51947	37.14	PPB	76
84)	Bromobenzene	10.45	156	505063	42.49	PPB	95
85)	n-Propylbenzene	10.55	91	2821346	41.16	PPB	99
86)	1,2,3-Trichloropropane	10.57	110	69664	39.74	PPB	96
87)	2-Chlorotoluene	10.65	91	1577210	40.04	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	1982759	42.69	PPB	98
89)	4-Chlorotoluene	10.77	91	1819917	40.82	PPB	97
90)	tert-Butylbenzene	11.06	119	1794894	41.56	PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	1940125	44.49	PPB	99
92)	sec-Butylbenzene	11.29	105	2439847	42.53	PPB	98
93)	p-Isopropyltoluene	11.44	119	2236777	44.44	PPB	99
94)	1,3-Dichlorobenzene	11.42	146	1024740	40.98	PPB	97
95)	1,4-Dichlorobenzene	11.52	146	985791	40.19	PPB	97
96)	n-Butylbenzene	11.86	91	1899413	44.93	PPB	99
97)	1,2-Dichlorobenzene	11.90	146	864664	41.57	PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	31100	45.41	PPB	89
99)	1,3,5-Trichlorobenzene	12.68	180	827481	39.85	PPB	100
100)	1,2,4-Trichlorobenzene	13.12	180	638434	44.14	PPB	100
101)	Hexachlorobutadiene	13.21	225	384198	37.03	PPB	98
102)	Naphthalene	13.30	128	867573	51.44	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	524588	43.59	PPB	98

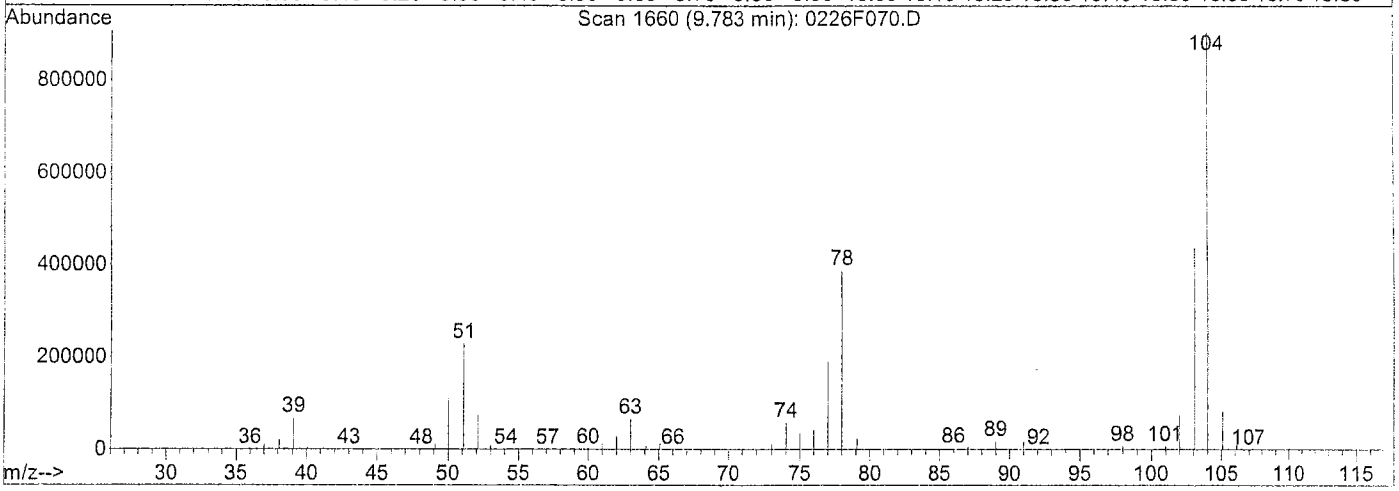
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 53.21PPB

response 741975

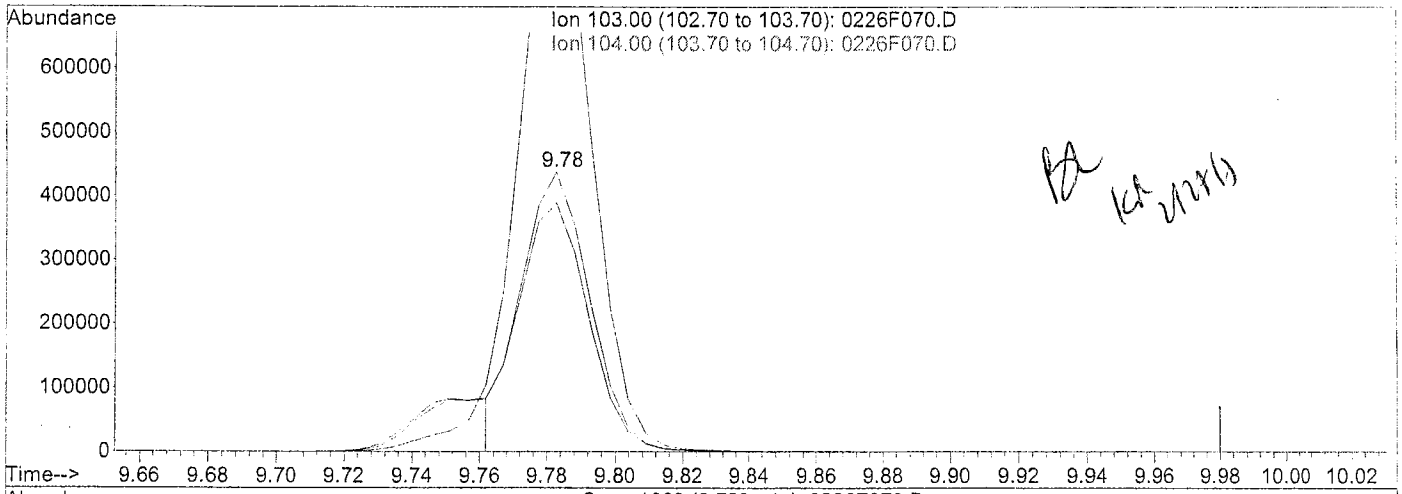
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

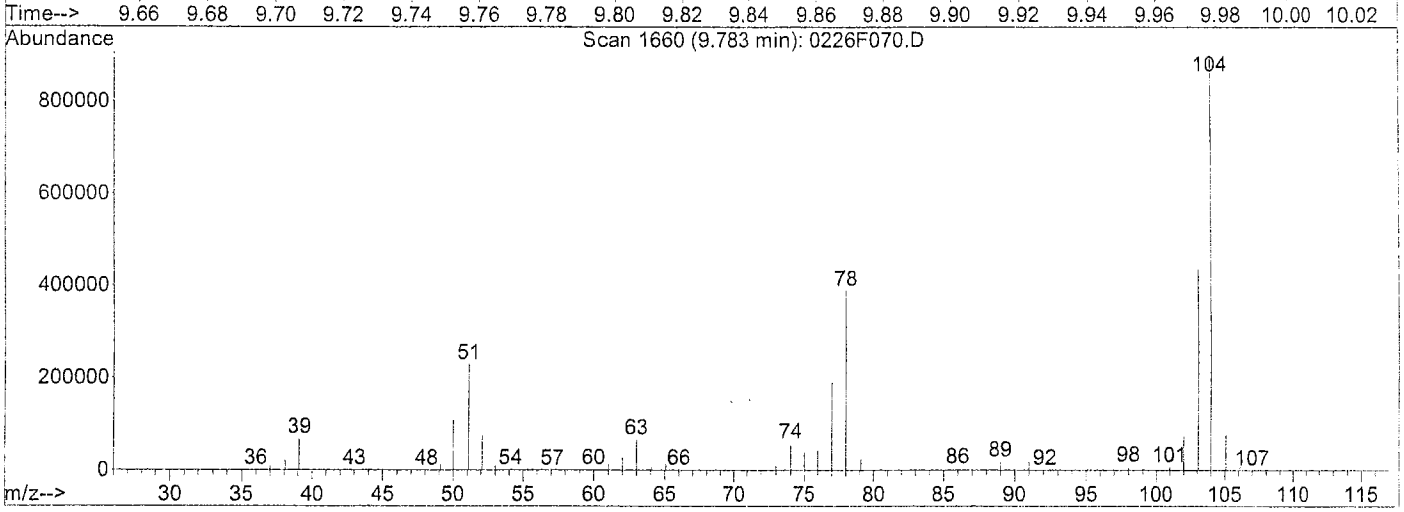
0226F070.D 022607.M Tue Feb 27 06:45:48 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 44.25PPB m

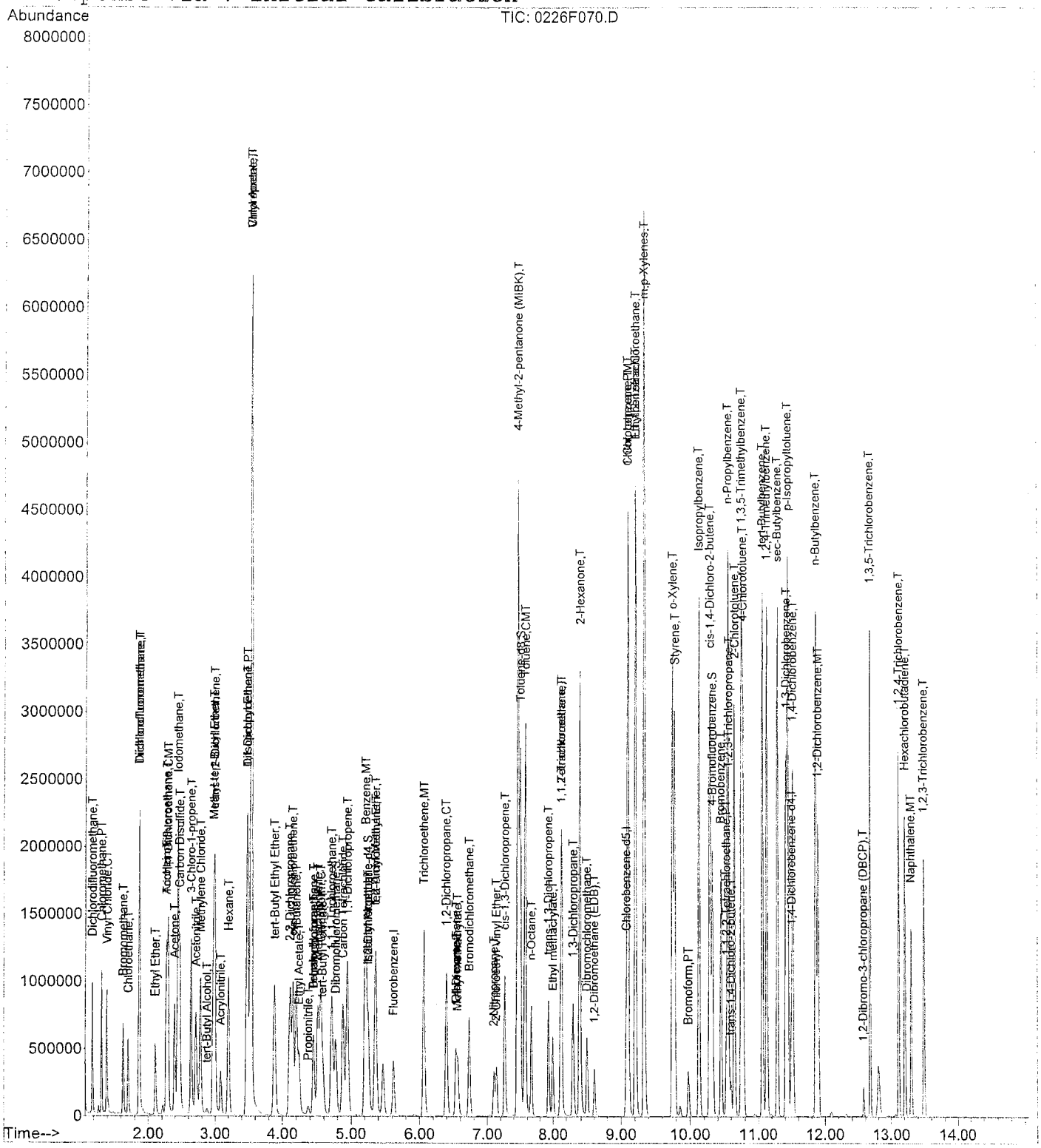
response 617063

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

0226F070.D 022607.M Tue Feb 27 06:45:54 2007

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KK 2/27/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	415821	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	160857	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	154573	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	485455	59.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	595.20%	
44) 1,2-Dichloroethane-d4	5.25	65	462401	58.48	PPB	0.00
Spiked Amount 10.000			Recovery	=	584.80%	
58) Toluene-d8	7.50	98	2150656	54.39	PPB	0.00
Spiked Amount 10.000			Recovery	=	543.90%	
80) 4-Bromofluorobenzene	10.32	95	732272	47.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	475.20%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	771161	66.78	PPB		98
3) Chloromethane	1.32	50	912514	59.11	PPB		99
4) Vinyl Chloride	1.39	62	853270	65.39	PPB		99
5) Bromomethane	1.63	96	391996	46.48	PPB		98
6) Chloroethane	1.71	64	511647	58.13	PPB		97
7) Dichlorofluoromethane	1.87	67	1285506	56.87	PPB		98
8) Trichlorofluoromethane	1.87	101	1192858	62.14	PPB		98
9) Ethyl Ether	2.10	59	362132	64.39	PPB		92
10) Acrolein	2.27	56	402935	1036.55	PPB		97
11) Trichlorotrifluoroethane	2.27	151	548307	59.80	PPB		97
12) 1,1-Dichloroethene	2.30	96	626435	60.67	PPB		87
13) Acetone	2.40	43	1833503	1702.96	PPB		97
14) Iodomethane	2.44	142	3236317	258.29	PPB		97
15) Carbon Disulfide	2.47	76	2047070	65.54	PPB		98
16) 3-Chloro-1-propene	2.64	76	381640	68.56	PPB	#	70
17) Acetonitrile	2.72	40	717032	2776.55	PPB		98
18) Methylene Chloride	2.78	84	610000	60.75	PPB		91
19) tert-Butyl Alcohol	2.88	59	76488	292.95	PPB		97
20) Acrylonitrile	3.09	53	372157	269.47	PPB		97
21) Methyl tert-Butyl Ether	2.98	73	2349933	138.22	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	731872	63.37	PPB		100
23) Hexane	3.20	57	734030	59.01	PPB		98
24) Diisopropyl Ether	3.48	45	2134700	66.63	PPB		95
25) 1,1-Dichloroethane	3.48	63	1289688	66.74	PPB		99
26) Vinyl Acetate	3.54	86	161541	146.04	PPB		94
27) Chloroprene	3.54	53	5767667	250.08	PPB		97
28) tert-Butyl Ethyl Ether	3.89	59	1555832	68.22	PPB		99
29) 2,2-Dichloropropane	4.12	77	1014659	71.16	PPB		98

(#) = qualifier out of range (m) = manual integration
0226F071.D 022607.M Tue Feb 27 06:47:15 2007 Page 1

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Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	739836	66.41	PPB		96
31)	2-Butanone	4.20	72	686351	1846.26	PPB	#	77
32)	Propionitrile	4.38	54	131349	275.58	PPB		97
33)	Ethyl Acetate	4.25	61	134819	267.96	PPB		97
34)	Methacrylonitrile	4.52	67	472009	266.59	PPB		93
35)	Bromochloromethane	4.46	128	280391	71.13	PPB		91
36)	Tetrahydrofuran	4.45	71	23371	63.95	PPB	#	80
37)	Chloroform	4.56	83	1207312	61.89	PPB		98
38)	tert-Butyl Formate	4.59	59	193716	89.10	PPB		90
39)	1,1,1-Trichloroethane	4.72	97	1162545	71.37	PPB		99
41)	Carbon Tetrachloride	4.89	117	1057872	72.40	PPB		97
42)	1,1-Dichloropropene	4.95	75	1040919	67.43	PPB		99
43)	Isobutyl Alcohol	5.25	43	309754	2877.57	PPB		96
45)	Benzene	5.22	78	2953716	66.78	PPB		97
46)	1,2-Dichloroethane	5.36	62	697690	68.50	PPB		97
47)	tert-Amyl Methyl Ether	5.37	55	326295	56.51	PPB	#	78
48)	Trichloroethene	6.07	95	743445	63.50	PPB		96
49)	1,2-Dichloropropane	6.40	63	652453	70.96	PPB		98
50)	Dibromomethane	6.53	93	262921	72.16	PPB		96
51)	Methyl methacrylate	6.56	69	215476	68.64	PPB		90
52)	1,4-Dioxane	6.55	88	89504	2640.59	PPB		92
53)	Bromodichloromethane	6.73	83	777000	73.70	PPB		99
54)	2-Nitropropane	7.10	43	424171	430.81	PPB		100
55)	2-Chloroethyl Vinyl Ether	7.14	63	239992	69.73	PPB		95
56)	cis-1,3-Dichloropropene	7.27	75	918958	78.50	PPB		95
57)	4-Methyl-2-pentanone (MIBK	7.46	58	2643593	1831.71	PPB		91
59)	Toluene	7.57	92	1898584	64.10	PPB		95
61)	n-Octane	7.66	85	244931	53.48	PPB		95
62)	trans-1,3-Dichloropropene	7.93	75	692971	82.41	PPB		97
63)	Ethyl methacrylate	7.99	69	453399	69.46	PPB		90
64)	1,1,2-Trichloroethane	8.12	83	318709	65.80	PPB		98
65)	Tetrachloroethene	8.13	164	665882	61.82	PPB		94
66)	2-Hexanone	8.39	57	824666	1839.21	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	708214	67.60	PPB		99
68)	Dibromochloromethane	8.49	129	479455	75.64	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	361743	70.56	PPB		97
70)	1-Chlorohexane	9.10	91	1052218	63.43	PPB		95
71)	Chlorobenzene	9.11	112	1977099	64.83	PPB		97
72)	Ethylbenzene	9.21	106	1192950	65.27	PPB		98
73)	1,1,1,2-Tetrachloroethane	9.22	131	649223	73.64	PPB		99
74)	m,p-Xylenes	9.34	106	2941646	131.20	PPB		97
75)	o-Xylene	9.75	106	1355348	66.62	PPB		95

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

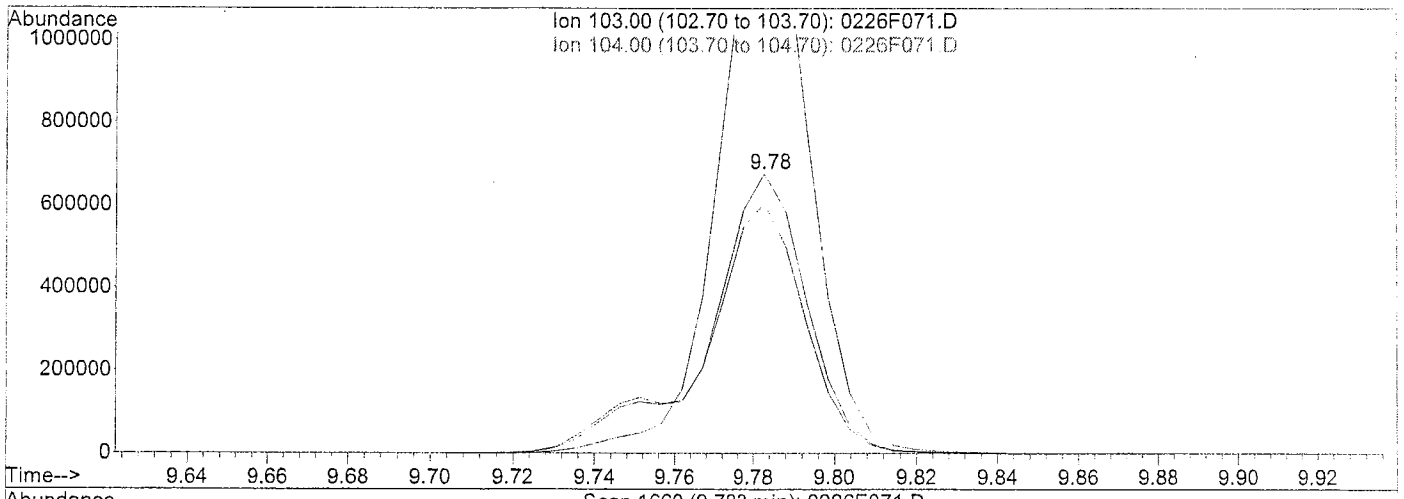
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76)	Styrene	9.78	103	972150m	67.16 PPB	
77)	Bromoform	9.98	173	261396	80.92 PPB	100
78)	Isopropylbenzene	10.13	105	3753846	66.12 PPB	100
79)	cis-1,4-Dichloro-2-butene	10.29	89	191415	324.83 PPB	99
82)	1,1,2,2-Tetrachloroethane	10.53	83	362061	65.10 PPB	97
83)	trans-1,4-Dichloro-2-buten	10.60	53	88579	61.32 PPB	89
84)	Bromobenzene	10.45	156	790183	64.35 PPB	98
85)	n-Propylbenzene	10.55	91	4419561	62.42 PPB	98
86)	1,2,3-Trichloropropane	10.56	110	115913	64.02 PPB	92
87)	2-Chlorotoluene	10.65	91	2466712	60.62 PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	3117383	64.97 PPB	100
89)	4-Chlorotoluene	10.77	91	2836934	61.60 PPB	98
90)	tert-Butylbenzene	11.06	119	2795015	62.64 PPB	97
91)	1,2,4-Trimethylbenzene	11.13	105	3049204	67.69 PPB	98
92)	sec-Butylbenzene	11.29	105	3826843	64.58 PPB	99
93)	p-Isopropyltoluene	11.44	119	3513577	67.57 PPB	100
94)	1,3-Dichlorobenzene	11.42	146	1617764	62.63 PPB	98
95)	1,4-Dichlorobenzene	11.52	146	1564101	61.74 PPB	98
96)	n-Butylbenzene	11.86	91	2985569	68.37 PPB	98
97)	1,2-Dichlorobenzene	11.90	146	1367187	63.64 PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	49279	69.66 PPB	90
99)	1,3,5-Trichlorobenzene	12.67	180	1296708	60.46 PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	1006289	67.35 PPB	100
101)	Hexachlorobutadiene	13.21	225	605137	56.46 PPB	98
102)	Naphthalene	13.30	128	1380704	79.25 PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	843695	67.87 PPB	99

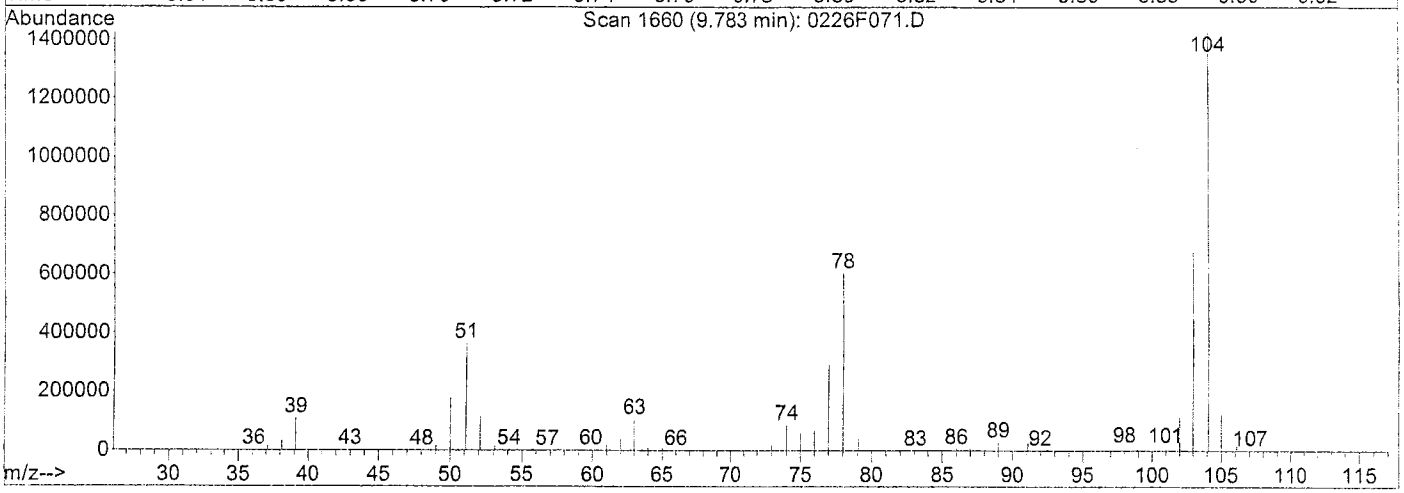
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QedIt)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 80.59PPB

response 1166585

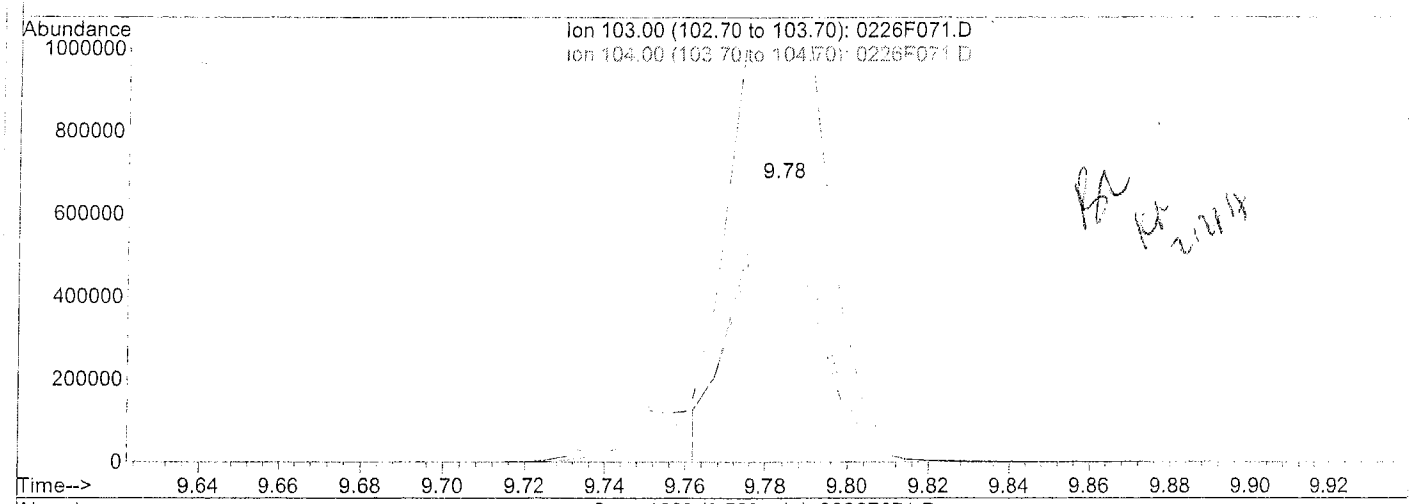
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

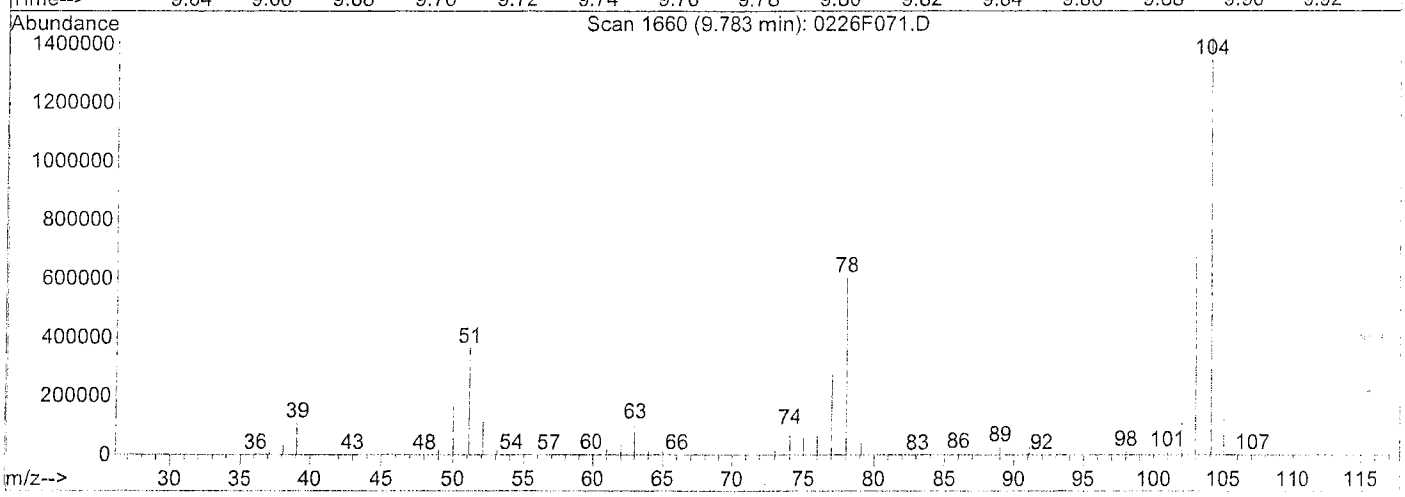
0226F071.D 022607.M Tue Feb 27 06:46:54 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 67.16PPB m

response 972150

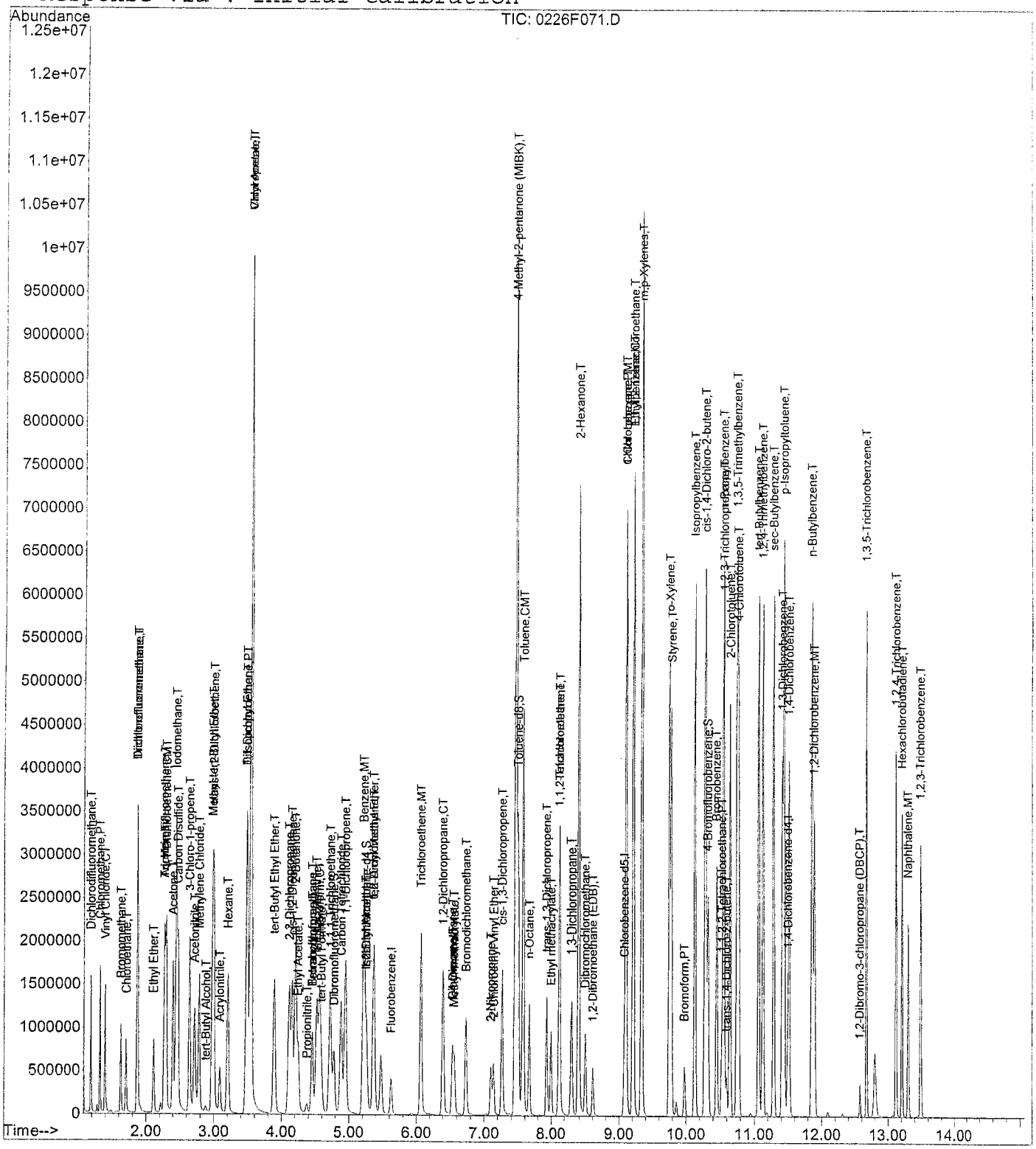
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

0226F071.D 022607.M Tue Feb 27 06:46:59 2007

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KS 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	410307	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	155343	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	148210	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89116	10.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.70%	
44) 1,2-Dichloroethane-d4	5.25	65	86935	9.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
58) Toluene-d8	7.50	98	401532	10.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.90%	
80) 4-Bromofluorobenzene	10.32	95	133839	9.83	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.30%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	122710	9.85	PPB	98
3) Chloromethane	1.32	50	137820	9.47	PPB	98
4) Vinyl Chloride	1.39	62	142259	10.63	PPB	98
5) Bromomethane	1.63	96	65113	10.10	PPB	96
6) Chloroethane	1.71	64	85996	9.52	PPB	99
7) Dichlorofluoromethane	1.87	67	247297	11.40	PPB	98
8) Trichlorofluoromethane	1.87	101	172201	9.41	PPB	98
9) Ethyl Ether	2.10	59	57795	9.90	PPB	91
10) Acrolein	2.26	56	29258	137.61	PPB	96
11) Trichlorotrifluoroethane	2.27	151	87195	10.31	PPB	97
12) 1,1-Dichloroethene	2.30	96	98452	9.91	PPB	81
13) Acetone	2.40	43	48375	41.65	PPB	97
14) Iodomethane	2.44	142	449235	39.02	PPB	98
15) Carbon Disulfide	2.47	76	713104	22.05	PPB	98
16) 3-Chloro-1-propene	2.64	76	187268	34.63	PPB #	71
17) Acetonitrile	2.72	40	86406	326.02	PPB	96
18) Methylene Chloride	2.78	84	122777	11.57	PPB	98
19) tert-Butyl Alcohol	2.88	59	24669	106.48	PPB	96
20) Acrylonitrile	3.09	53	59864	39.67	PPB	96
21) Methyl tert-Butyl Ether	2.98	73	181364	9.87	PPB	99
22) trans-1,2-Dichloroethene	3.00	96	113433	9.78	PPB	97
23) Hexane	3.20	57	345542	29.60	PPB	99
24) Diisopropyl Ether	3.48	45	682437	20.57	PPB	96
25) 1,1-Dichloroethane	3.48	63	205873	10.10	PPB	99
26) Vinyl Acetate	3.53	86	52728	45.10	PPB #	74
27) Chloroprene	3.53	53	594936	26.99	PPB	93
28) tert-Butyl Ethyl Ether	3.89	59	496262	20.76	PPB	97
29) 2,2-Dichloropropane	4.11	77	133531	9.76	PPB	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	121550	10.29	PPB		99
31)	2-Butanone	4.20	72	18998	48.77	PPB		94
32)	Propionitrile	4.38	54	15205	29.35	PPB		91
33)	Ethyl Acetate	4.25	61	16433	31.96	PPB		89
34)	Methacrylonitrile	4.51	67	54749	30.12	PPB		97
35)	Bromochloromethane	4.46	128	42612	9.84	PPB	#	85
36)	Tetrahydrofuran	4.46	71	7012	16.65	PPB	#	63
37)	Chloroform	4.56	83	194431	9.63	PPB		95
38)	tert-Butyl Formate	4.59	59	44560	18.22	PPB		88
39)	1,1,1-Trichloroethane	4.72	97	172247	10.27	PPB		96
41)	Carbon Tetrachloride	4.89	117	153126	10.26	PPB		95
42)	1,1-Dichloropropene	4.95	75	159938	9.85	PPB		97
43)	Isobutyl Alcohol	5.26	43	31174	287.33	PPB		94
45)	Benzene	5.22	78	463767	9.58	PPB		98
46)	1,2-Dichloroethane	5.36	62	113114	10.37	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	107846	19.12	PPB	#	74
48)	Trichloroethene	6.07	95	114213	9.81	PPB		98
49)	1,2-Dichloropropane	6.40	63	103777	10.34	PPB		98
50)	Dibromomethane	6.54	93	40529	10.22	PPB		95
51)	Methyl methacrylate	6.56	69	103223	32.77	PPB		93
52)	1,4-Dioxane	6.56	88	9940	270.45	PPB		99
53)	Bromodichloromethane	6.73	83	118043	10.78	PPB		98
54)	2-Nitropropane	7.10	43	29919	29.23	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.13	63	37798	10.80	PPB		85
56)	cis-1,3-Dichloropropene	7.27	75	128603	10.40	PPB		97
57)	4-Methyl-2-pentanone (MIBK	7.46	58	70198	46.22	PPB		88
59)	Toluene	7.57	92	296954	9.95	PPB		95
61)	n-Octane	7.66	85	75941	19.27	PPB		90
62)	trans-1,3-Dichloropropene	7.93	75	86090	10.41	PPB		93
63)	Ethyl methacrylate	7.99	69	231415	36.07	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	52038	10.52	PPB		96
65)	Tetrachloroethene	8.13	164	105028	9.35	PPB		95
66)	2-Hexanone	8.39	57	21544	47.24	PPB		91
67)	1,3-Dichloropropane	8.30	76	114260	10.05	PPB		97
68)	Dibromochloromethane	8.49	129	68418	10.31	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	55935	10.45	PPB		99
70)	1-Chlorohexane	9.10	91	159902	9.84	PPB		89
71)	Chlorobenzene	9.11	112	308610	9.64	PPB		97
72)	Ethylbenzene	9.21	106	181080	9.88	PPB		93
73)	1,1,1,2-Tetrachloroethane	9.22	131	95714	10.24	PPB		95
74)	m,p-Xylenes	9.34	106	447979	19.74	PPB		94
75)	o-Xylene	9.75	106	212281	10.09	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76)	Styrene	9.78	103	154123m	10.50 PPB	
77)	Bromoform	9.98	173	34687	10.47 PPB	99
78)	Isopropylbenzene	10.13	105	507594	8.82 PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	17551	31.54 PPB	98
82)	1,1,2,2-Tetrachloroethane	10.53	83	57510	10.48 PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	45505	38.23 PPB	86
84)	Bromobenzene	10.45	156	123237	9.81 PPB	98
85)	n-Propylbenzene	10.55	91	662233	10.00 PPB	99
86)	1,2,3-Trichloropropane	10.56	110	19032	10.91 PPB	99
87)	2-Chlorotoluene	10.65	91	386757	9.95 PPB	98
88)	1,3,5-Trimethylbenzene	10.75	105	468167	10.24 PPB	98
89)	4-Chlorotoluene	10.77	91	439077	9.86 PPB	99
90)	tert-Butylbenzene	11.06	119	423884	9.87 PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	466823	10.13 PPB	99
92)	sec-Butylbenzene	11.29	105	610363	10.66 PPB	99
93)	p-Isopropyltoluene	11.44	119	502922	9.73 PPB	99
94)	1,3-Dichlorobenzene	11.42	146	248060	9.69 PPB	98
95)	1,4-Dichlorobenzene	11.52	146	250075	9.90 PPB	98
96)	n-Butylbenzene	11.86	91	437186	9.79 PPB	100
97)	1,2-Dichlorobenzene	11.90	146	217011	9.71 PPB	94
98)	1,2-Dibromo-3-chloropropan	12.58	155	6328	8.74 PPB	97
99)	1,3,5-Trichlorobenzene	12.68	180	829529	38.86 PPB	99
100)	1,2,4-Trichlorobenzene	13.12	180	157556	9.51 PPB	100
101)	Hexachlorobutadiene	13.21	225	95797	9.71 PPB	99
102)	Naphthalene	13.30	128	216028	10.35 PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	134149	9.87 PPB	97

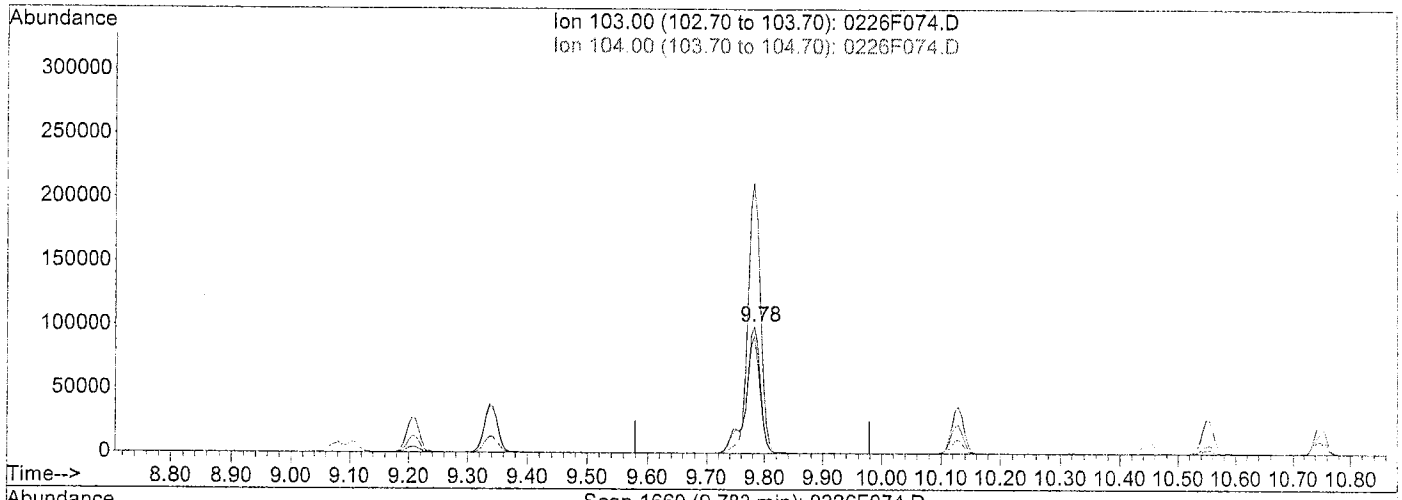
(#) = qualifier out of range (m) = manual integration

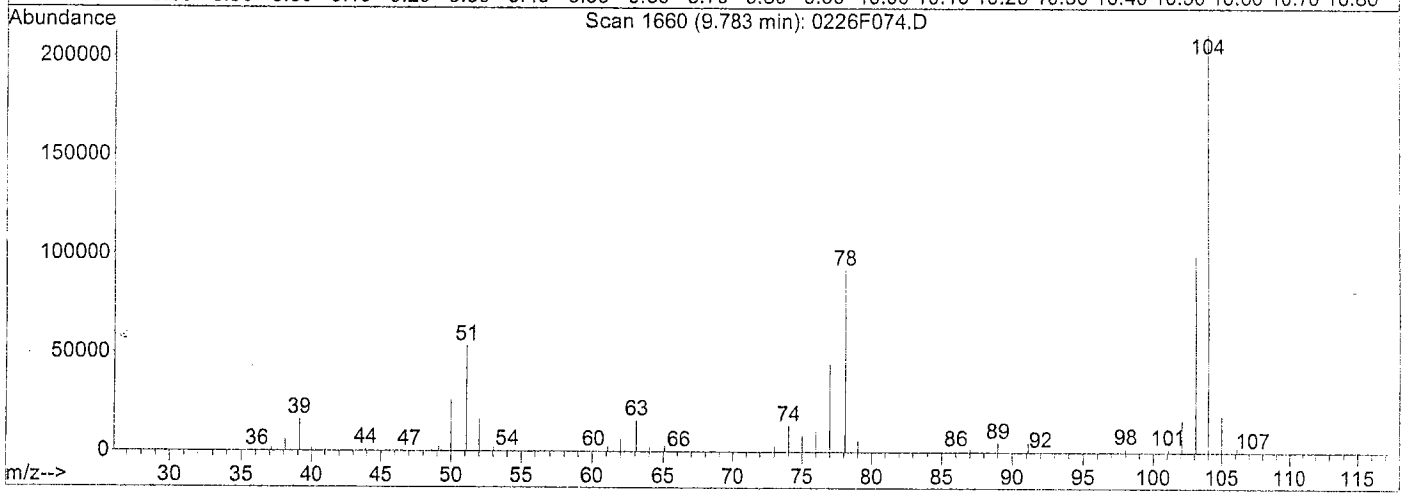
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 12.10PPB

response 177602

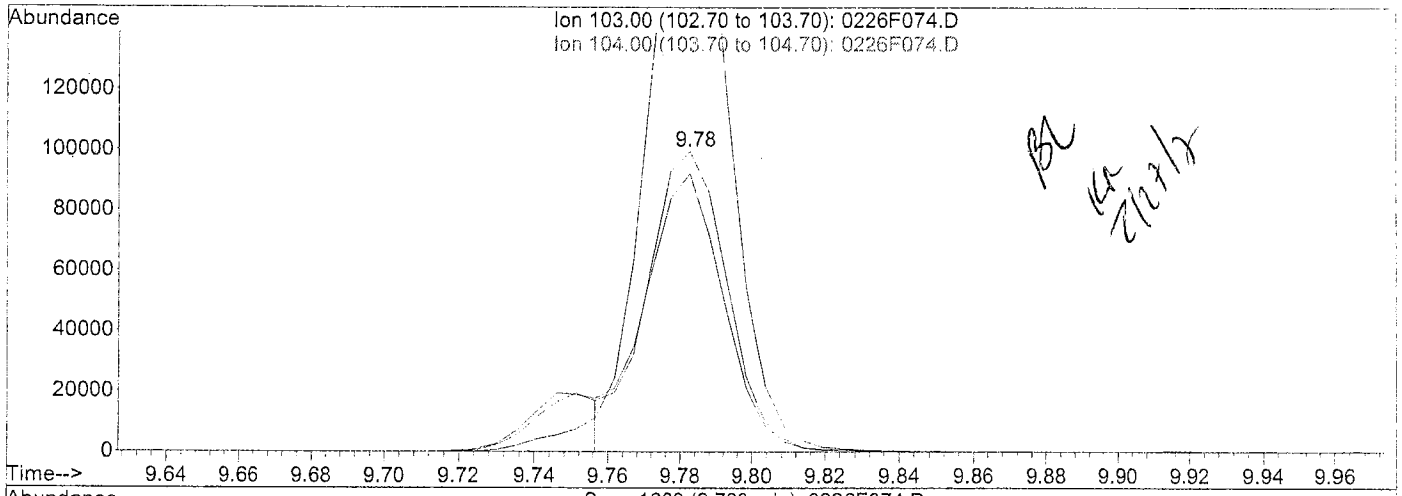
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

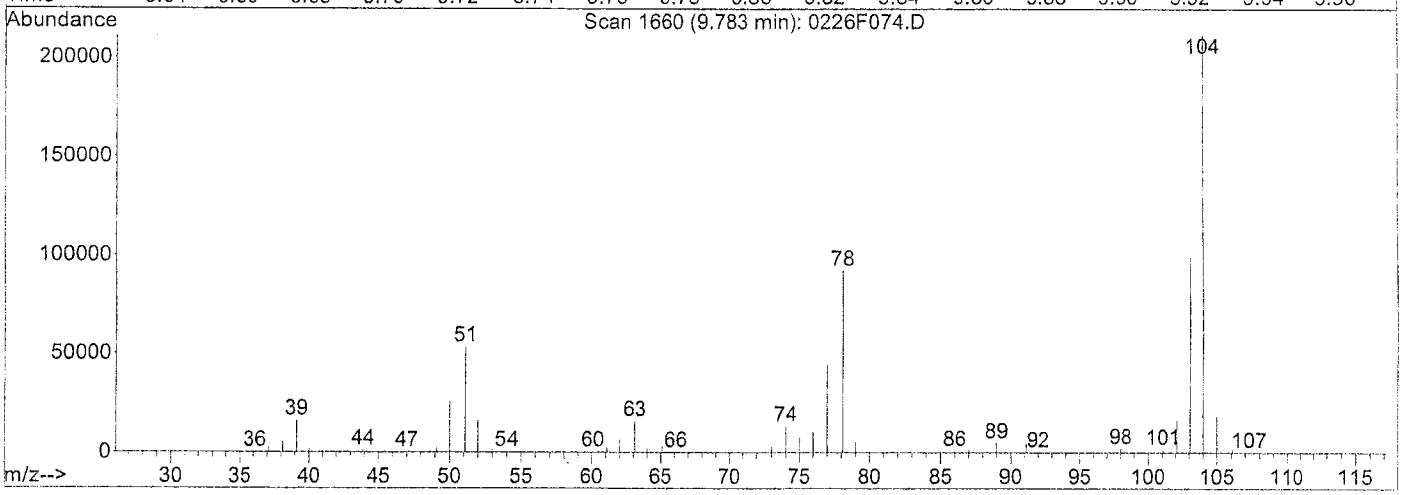
0226F074.D 022607.M Tue Feb 27 07:16:48 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 10.50PPB m

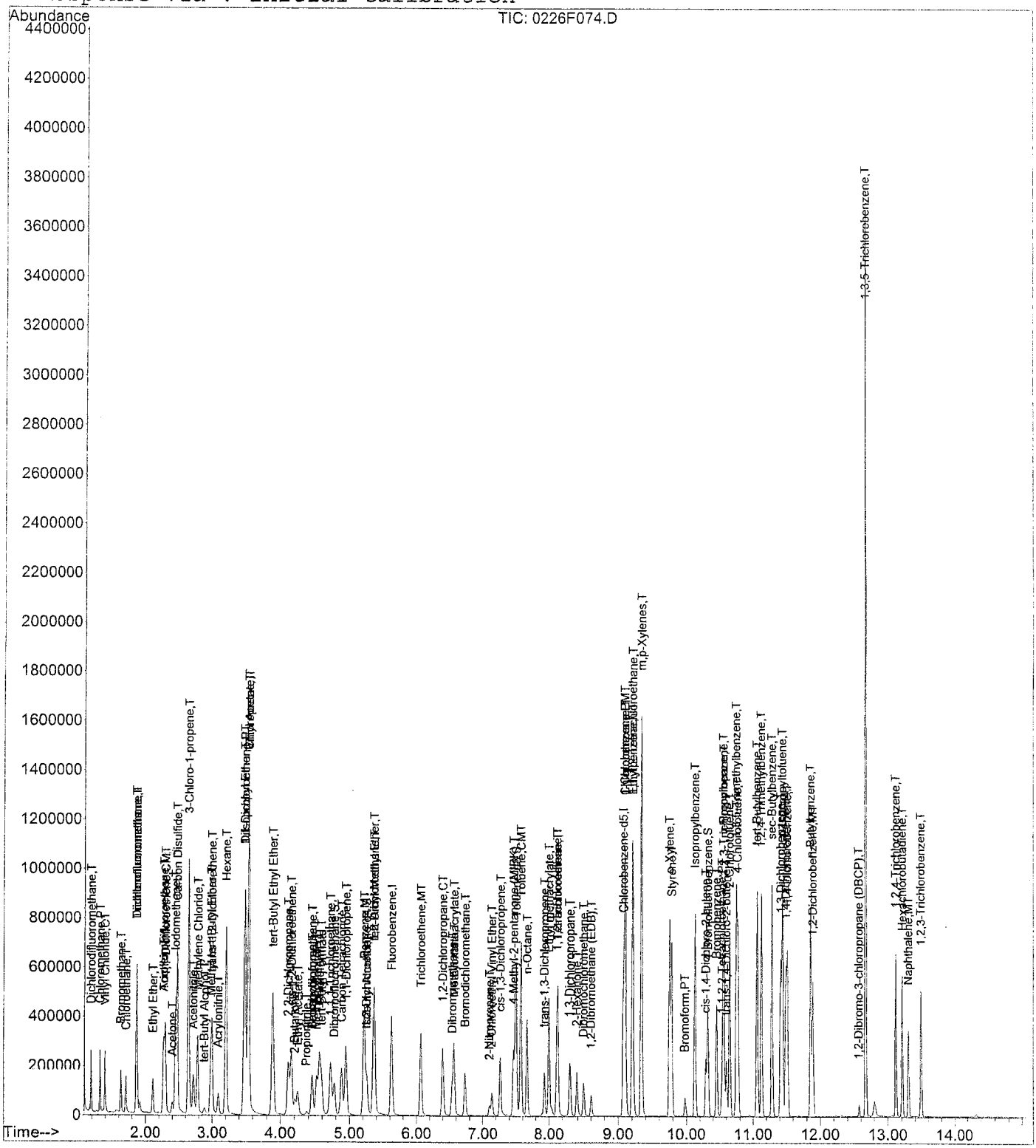
response 154123

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

0226F074.D 022607.M Tue Feb 27 07:16:54 2007

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

File ID: J:\MS18\DATA\031307\0313F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	21	0.01	0.448	0.466	4	NA	± 30 %	AverageRF
Vinyl Acetate	20	21	0.01	0.0285	0.0298	4	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.5	0.01	0.213	0.182	-15	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	10	0.01	0.0853	0.0873	2	NA	± 40 %	AverageRF
† Chloromethane	10	9.9	0.10	0.355	0.351	-1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.326	0.329	1	NA	± 20 %	AverageRF
Bromomethane	10	7.7	0.01	0.157	0.120	-23	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	200	0.01	0.0283	0.0287	1	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.01	0.242	0.256	6	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.872	11	NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.259	0.257	-1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.301	6	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.545	10	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.306	6	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.510	4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.443	8	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.364	0.385	6	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.281	6	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.24	5	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.304	7	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.268	9	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.281	5	NA	± 30 %	AverageRF
2-Hexanone	200	190	0.01	0.0294	0.0278	-5	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.310	3	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.792	9	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.6	0.01	0.532	0.455	-15	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.1	0.01	0.318	0.290	-9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	220	0.01	0.0370	0.0413	12	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.1	0.01	0.723	0.584	-19	NA	± 30 %	AverageRF
Dibromochloromethane	10	7.9	0.01	0.427	0.337	-21	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.78	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	8.9	0.01	1.18	1.05	-11	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.30	-11	NA	± 30 %	AverageRF
o-Xylene	10	8.8	0.01	1.35	1.19	-12	NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.945	1.01	7	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.157	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703563
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.8	0.30	0.370	0.328	-12	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.05	9	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.5	0.01	0.877	0.835	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Exception Report

Data File: J:\MS18\DATA\031307\0313F003.D
Lab ID: KWG0703563-2
RunType: CCV
Matrix: WATER

Date Acquired: 03/13/2007 09:02
Date Quantitated: 03/13/2007 09:28
Batch ID: KWG0703563
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NG
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	

Primary Review: KR 3/13/07

Secondary Review: F-A h 3/15/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/13/2007

Analysis Lot:	KWG0703563	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F002.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	-0.01	96	402584	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	180989	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	163576	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77			113	84275	9.90		80-120	NA
1	1,2-Dichloroethane-d4	5.25			65	73172	8.52		70-124	NA
1	Toluene-d8	7.49			98	424311	10.86		80-122	NA
2	4-Bromofluorobenzene	10.32			95	151154	9.53		73-116	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18			85	103429	8.46			
1	Chloromethane	1.31			50	141304	9.90			
1	Vinyl Chloride	1.39			62	132416	10.09			
1	Bromomethane	1.63			96	48511	7.67			
1	Chloroethane	1.71			64	85114	9.60			
1	Dichlorofluoromethane (CFC 21	1.86			67	221976	10.43			
1	Trichlorofluoromethane	1.87			101	189031	10.53			
1	Ethyl Ether	2.10			59	61644	10.76			
1	Acrolein	2.27			56	56584	271.23			
1	Trichlorotrifluoroethane	2.27			151	90392	10.89			
1	1,1-Dichloroethene	2.29			96	103220	10.59			
1	Acetone	2.40			43	231346	203.00			
1	Iodomethane	2.44			142	400058	35.42			
1	Carbon Disulfide	2.47			76	350919	11.06			
1	3-Chloro-1-propene	2.64			76	60904	11.48			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.72			40	104821	403.08			
1	Methylene Chloride	2.78			84	103303	9.92			
1	tert-Butyl Alcohol	2.89			59	10973	48.27			
1	Acrylonitrile	3.09			53	58985	39.84			
1	Methyl tert-Butyl Ether	2.97			73	375077	20.80			
1	trans-1,2-Dichloroethene	3.00			96	121092	10.64			
1	n-Hexane	3.20			57	134471	11.74			
1	Diisopropyl Ether	3.48			45	367112	11.28			
1	1,1-Dichloroethane	3.48			63	219215	10.96			
1	Vinyl Acetate	3.53			86	23957	20.89			
1	Chloroprene	3.54			53	919877	42.53			
1	tert-Butyl Ethyl Ether	3.89			59	247414	10.55			
1	2,2-Dichloropropane	4.11			77	131213	9.77			
1	cis-1,2-Dichloroethene	4.15			96	123027	10.62			
1	2-Butanone (MEK)	4.20			72	87787	229.67			
1	Propionitrile	4.37			54	20743	40.81			
1	Ethyl Acetate	4.24			61	19914	39.47			
1	Methacrylonitrile	4.52			67	72075	40.41			
1	Bromochloromethane	4.45			128	42954	10.11			
1	Tetrahydrofuran	4.46			71	4092	9.90			
1	Chloroform	4.55			83	205357	10.37			
1	tert-Butyl Formate	4.58			59	19551	8.15			
1	1,1,1-Trichloroethane (TCA)	4.72			97	178463	10.84			
1	Carbon Tetrachloride	4.88			117	154922	10.58			
1	1,1-Dichloropropene	4.95			75	171168	10.75			
1	Isobutyl Alcohol	5.26			43	39144	367.71			
1	Benzene	5.21			78	498939	10.50			
1	1,2-Dichloroethane (EDC)	5.36			62	113231	10.58			
1	tert-Amyl Methyl Ether	5.37			55	59871	10.82			
1	Trichloroethene (TCE)	6.06			95	122382	10.71			
1	1,2-Dichloropropane	6.40			63	107835	10.95			
1	Dibromomethane	6.53			93	41324	10.62			
1	Methyl Methacrylate	6.56			69	32170	10.41			
1	1,4-Dioxane	6.56			88	14032	389.11			
1	Bromodichloromethane	6.73			83	113141	10.53			
1	2-Nitropropane	7.10			43	42963	42.77			
1	2-Chloroethyl Vinyl Ether	7.14			63	35133	10.23			
1	cis-1,3-Dichloropropene	7.26			75	124908	10.30			
1	4-Methyl-2-pentanone (MIBK)	7.46			58	332618	223.21			
1	Toluene	7.57			92	318688	10.88			
2	n-Octane	7.66			85	43234	9.42			
2	trans-1,3-Dichloropropene	7.92			75	82323	8.55			
2	Ethyl Methacrylate	8.00			69	67068	8.97			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F003.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 09:02	**Quant Date:**	03/13/2007 09:28	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703563-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11			83	52490	9.11			
2	Tetrachloroethene (PCE)	8.13			164	105633	8.07			
2	2-Hexanone	8.39			57	100743	189.61			
2	1,3-Dichloropropane	8.30			76	114907	8.68			
2	Dibromochloromethane	8.49			129	61032	7.90			
2	1,2-Dibromoethane (EDB)	8.60			107	53043	8.51			
2	1-Chlorohexane	9.10			91	160479	8.48			
2	Chlorobenzene	9.10			112	321865	8.63			
2	Ethylbenzene	9.20			106	189500	8.88			
2	1,1,1,2-Tetrachloroethane	9.21			131	92521	8.50			
2	m,p-Xylenes	9.34			106	468963	17.74			
2	o-Xylene	9.75			106	215766	8.80			
2	Styrene	9.78			103	182177	10.65			
2	Bromoform	9.98			173	28500	7.38			
2	Isopropylbenzene	10.13			105	598033	8.92			
2	cis-1,4-Dichloro-2-butene	10.29			89	15549	23.99			
3	1,1,2,2-Tetrachloroethane	10.52			83	53573	8.84			
3	trans-1,4-Dichloro-2-butene	10.60			53	10907	8.30			
3	Bromobenzene	10.45			156	117059	8.44			
3	n-Propylbenzene	10.55			91	706263	9.66			
3	1,2,3-Trichloropropane	10.57			110	17948	9.33			
3	2-Chlorotoluene	10.65			91	391309	9.12			
3	1,3,5-Trimethylbenzene	10.75			105	478736	9.48			
3	4-Chlorotoluene	10.77			91	449414	9.15			
3	tert-Butylbenzene	11.06			119	433432	9.15			
3	1,2,4-Trimethylbenzene	11.13			105	464375	9.13			
3	sec-Butylbenzene	11.29			105	590756	9.34			
3	4-Isopropyltoluene	11.44			119	527482	9.25			
3	1,3-Dichlorobenzene	11.42			146	238508	8.44			
3	1,4-Dichlorobenzene	11.52			146	230979	8.29			
3	n-Butylbenzene	11.86			91	445367	9.04			
3	1,2-Dichlorobenzene	11.89			146	195243	7.91			
3	1,2-Dibromo-3-chloropropane	12.57			155	5735	7.18			
3	1,3,5-Trichlorobenzene	12.67			180	165716	7.03			
3	1,2,4-Trichlorobenzene	13.11			180	133967	7.32			
3	Hexachlorobutadiene	13.21			225	82583	7.58			
3	Naphthalene	13.30			128	188258	8.17			
3	1,2,3-Trichlorobenzene	13.49			180	111567	7.44			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

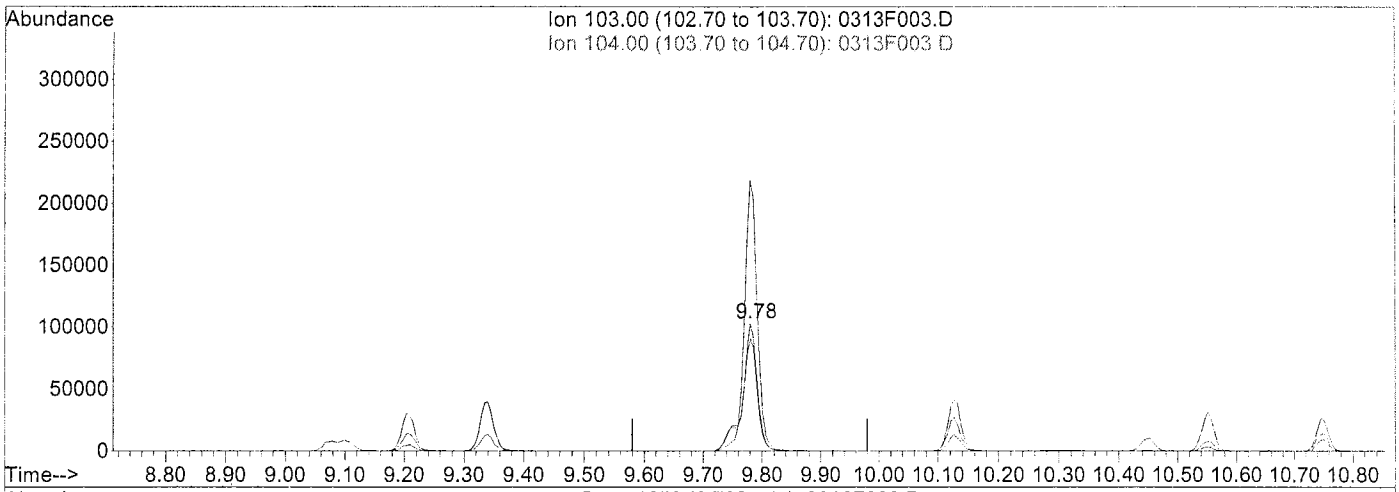
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

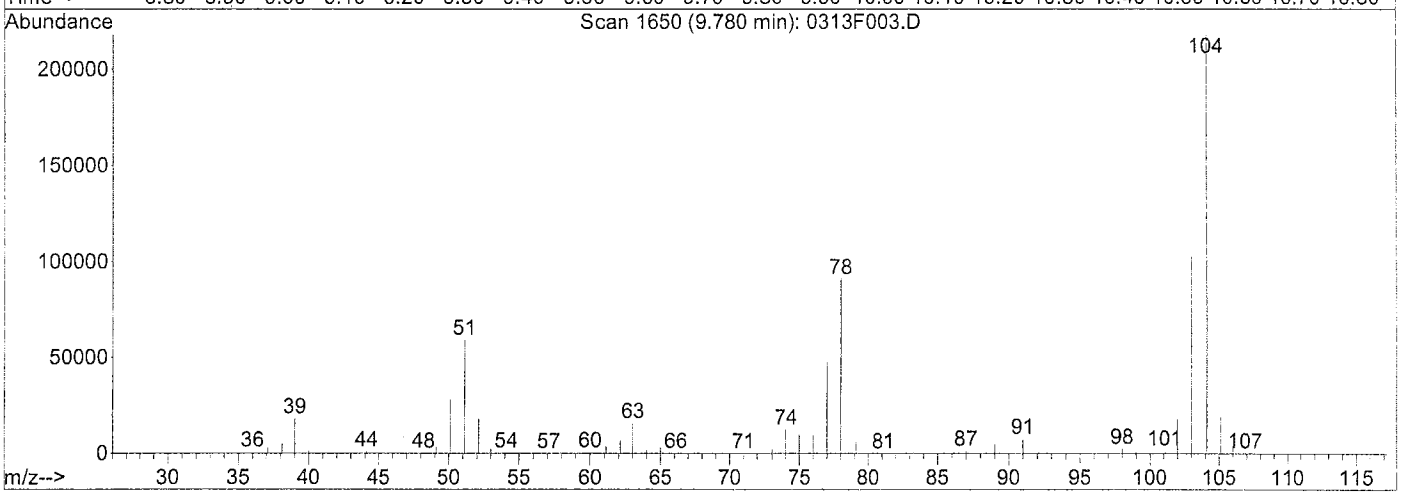
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 9:28 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F003.D

(76) Styrene (T)

9.78min 10.65PPB

response 182177

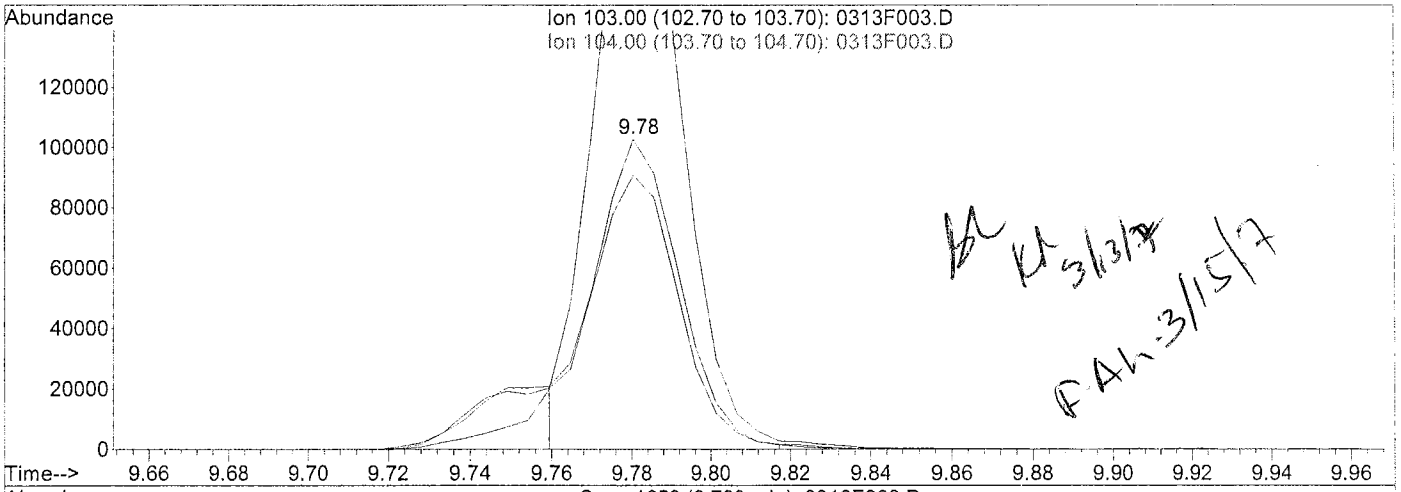
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	212.38
78.00	89.70	88.32
0.00	0.00	0.00

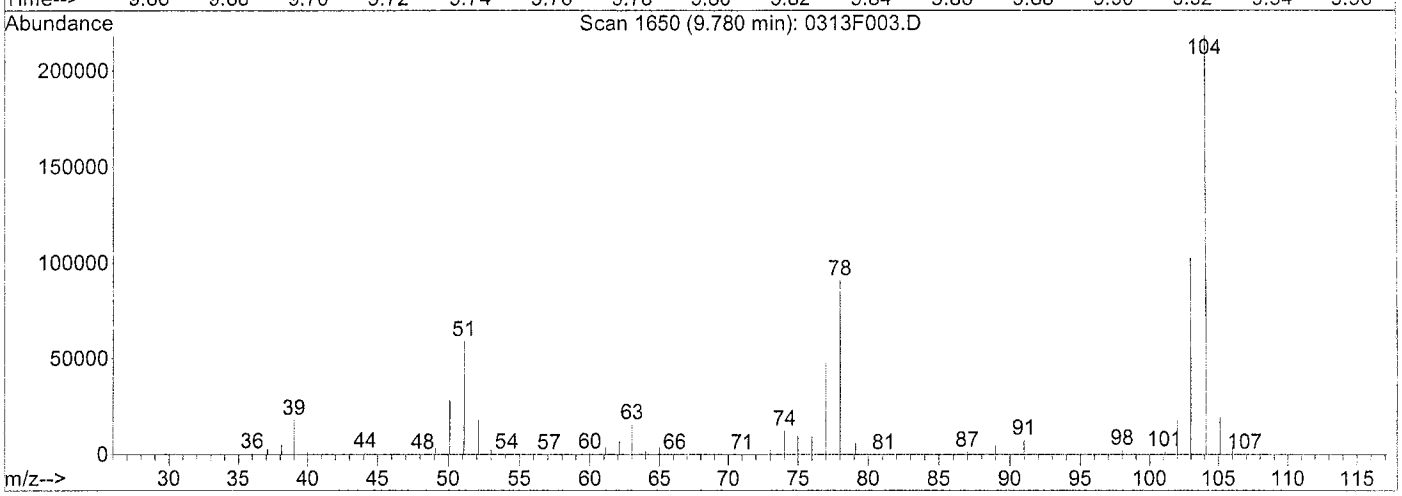
0313F003.D 022607.M Tue Mar 13 14:07:19 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:07 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F003.D

(76) Styrene (T)

9.78min 8.86PPB m

response 151561

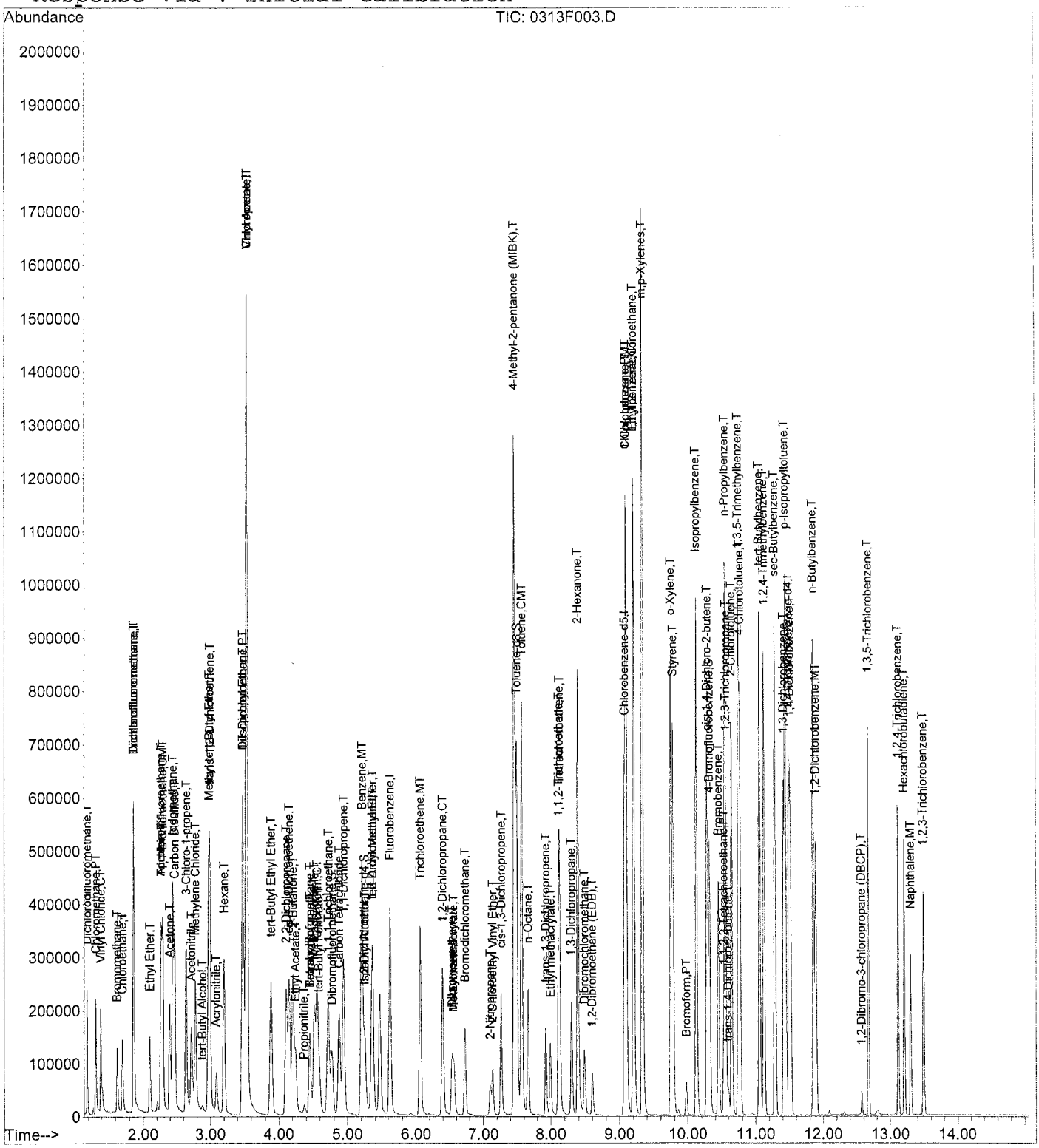
Ion	Exp%	Act%
103.00	100	100
104.00	210.10	212.38
78.00	89.70	88.32
0.00	0.00	0.00

0313F003.D 022607.M Tue Mar 13 14:07:25 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F003.D Vial: 3
Acq On : 13 Mar 2007 9:02 am Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:07 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

1st Window

1/2

Date: 3/13/7

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File: BFB4

By: K[illegible]

New Tune: NO

IS/SS Std. ID: 45WA SSD

79718 / 79902

CCV Std ID: 45WA 200/VIE

ICAL Date: 2/21/07 Cal 6072

LCS/ICV Std ID: 45WA-64E/55F/63A/68B/MV 650

Second RV: F-Ah-3/15/7

BFB Std. ID: 45WA-29F

LIMS ID: K[illegible]0703563/3590

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	MBL	0313F001	8260.M				
2	BFB	2		5µl → 50ml			
3	CCV	3		5µl → 50ml			
4	LCS	100		10/10/5/5/5/7.5µl → 100ml			
5	K2006 - 3 MS	5		8.0/10/10/10/10/10µl → 100ml	22		
6	↓ 3 DMS	6					
7	K1794 - 10 MS	7					
8	↓ 10 DMS	8					
9	IB	9					
10	MBL	10		0.[illegible]5µl → 50ml			
11	MB	11					
12	K2006 - 1	12			22		TB34413
13	K1703 - 2	13					TB34432
14	~~K1794 - 1~~	14					TB34470
15	~~↓ 4~~	15					TB34463
16	K1647 - 1	16					
17	↓ 2	17					
18	K1703 - 1	18					
19	K2006 - 2	19					
20	↓ 3	20					
21	K1852 - 7	21					
22	8	22					
23	9	23					
24	10	24					
25	11	25					TB34479
26	K1869 - 1	26					TB34485
27	↓ 2	27					

PSC

2/2

Date: 3/17/7

By:

IS/SS Std. ID:

Columbia Analytical Services, Inc.
Injection Log
MS18 - Agilent 5973

Tune File:

New Tune:

CCV Std ID:

ICAL Date:

LCS/ICV Std ID:

Second RV:

BFB Std. ID:

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	K1869-3	0313F028	8260.m		4		
2	4	29					
3	5	30					
4	IB	31-33					
5	K1869-1 Dil	34		100x 600µl→50ml			
6	1 Base	35		100x 5ml→50ml			
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D
Acq On : 13 Mar 2007 11:52 am
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007

Vial: 8
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 3/13/7 FAK 3/15/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	400017	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	178928	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	162445	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.77	113	82596	9.76	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.60%	
44) 1,2-Dichloroethane-d4	5.25	65	73260	8.58	PPB	0.00
Spiked Amount 10.000			Recovery	=	85.80%	
58) Toluene-d8	7.49	98	423896	10.92	PPB	0.00
Spiked Amount 10.000			Recovery	=	109.20%	
80) 4-Bromofluorobenzene	10.32	95	142102	9.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	90.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	3540	0.29	PPB		86
3) Chloromethane	1.31	50	7083	0.50	PPB		93
4) Vinyl Chloride	1.39	62	6262	0.48	PPB		99
5) Bromomethane	1.63	96	3004	0.48	PPB		94
6) Chloroethane	1.71	64	3404	0.39	PPB		79
7) Dichlorofluoromethane	1.86	67	10072	0.48	PPB		97
8) Trichlorofluoromethane	1.86	101	7771	0.44	PPB		92
9) Ethyl Ether	2.10	59	2573	0.45	PPB		90
10) Acrolein	2.27	56	4193	20.23	PPB		87
11) Trichlorotrifluoroethane	2.27	151	3678	0.45	PPB		99
12) 1,1-Dichloroethene	2.29	96	4191	0.43	PPB		92
13) Acetone	2.40	43	9939	8.78	PPB		85
14) Iodomethane	2.44	142	16539	1.47	PPB		99
15) Carbon Disulfide	2.47	76	15055	0.48	PPB		92
16) 3-Chloro-1-propene	2.64	76	2828	0.54	PPB	#	70
17) Acetonitrile	2.72	40	4909	19.00	PPB	#	77
18) Methylene Chloride	2.78	84	7974	0.77	PPB		98
19) tert-Butyl Alcohol	2.90	59	803	3.56	PPB		60
20) Acrylonitrile	3.09	53	2737	1.86	PPB		94
21) Methyl tert-Butyl Ether	2.97	73	17313	0.97	PPB		96
22) trans-1,2-Dichloroethene	3.00	96	6153	0.54	PPB		91
23) Hexane	3.20	57	7610	0.67	PPB		91
24) Diisopropyl Ether	3.48	45	15511	0.48	PPB		97
25) 1,1-Dichloroethane	3.48	63	9358	0.47	PPB		88
26) Vinyl Acetate	3.54	86	1132	0.99	PPB	#	10
27) Chloroprene	3.53	53	36022	1.68	PPB		93
28) tert-Butyl Ethyl Ether	3.89	59	11631	0.50	PPB		97
29) 2,2-Dichloropropane	4.11	77	5149	0.39	PPB		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	5538	0.48 PPB		88
31)	2-Butanone	4.21	72	3522	9.27 PPB		63
32)	Propionitrile	4.38	54	1144	2.27 PPB		64
33)	Ethyl Acetate	4.25	61	1086	2.17 PPB		78
34)	Methacrylonitrile	4.52	67	3838	2.17 PPB	#	71
35)	Bromochloromethane	4.46	128	2163	0.51 PPB	#	76
37)	Chloroform	4.55	83	9540	0.48 PPB		84
39)	1,1,1-Trichloroethane	4.72	97	6634	0.41 PPB		96
41)	Carbon Tetrachloride	4.88	117	5846	0.40 PPB		93
42)	1,1-Dichloropropene	4.95	75	6891	0.44 PPB		90
43)	Isobutyl Alcohol	5.26	43	1593	15.06 PPB		76
45)	Benzene	5.21	78	21945	0.46 PPB		90
46)	1,2-Dichloroethane	5.36	62	5145	0.48 PPB		91
47)	tert-Amyl Methyl Ether	5.37	55	3106	0.56 PPB	#	30
48)	Trichloroethene	6.06	95	5821	0.51 PPB		84
49)	1,2-Dichloropropane	6.39	63	4893	0.50 PPB	#	63
50)	Dibromomethane	6.54	93	1873	0.48 PPB	#	78
51)	Methyl methacrylate	6.57	69	1729	0.56 PPB		76
53)	Bromodichloromethane	6.73	83	5043	0.47 PPB		92
54)	2-Nitropropane	7.10	43	1758	1.76 PPB		91
55)	2-Chloroethyl Vinyl Ether	7.13	63	1325	0.39 PPB	#	64
56)	cis-1,3-Dichloropropene	7.26	75	4775	0.40 PPB		93
57)	4-Methyl-2-pentanone (MIBK	7.46	58	14141	9.55 PPB	#	83
59)	Toluene	7.57	92	14067	0.48 PPB		95
61)	n-Octane	7.66	85	3280	0.72 PPB		72
62)	trans-1,3-Dichloropropene	7.93	75	3104	0.33 PPB		88
63)	Ethyl methacrylate	7.99	69	2793	0.38 PPB		77
64)	1,1,2-Trichloroethane	8.11	83	2456	0.43 PPB		85
65)	Tetrachloroethene	8.13	164	5002	0.39 PPB		89
66)	2-Hexanone	8.39	57	2831	5.39 PPB	#	85
67)	1,3-Dichloropropane	8.30	76	5102	0.39 PPB		83
68)	Dibromochloromethane	8.49	129	2177	0.28 PPB		80
69)	1,2-Dibromoethane (EDB)	8.61	107	2512	0.41 PPB		99
70)	1-Chlorohexane	9.09	91	7015	0.37 PPB		96
71)	Chlorobenzene	9.10	112	13978	0.38 PPB		96
72)	Ethylbenzene	9.20	106	7908	0.37 PPB		92
73)	1,1,1,2-Tetrachloroethane	9.21	131	3637	0.34 PPB		88
74)	m,p-Xylenes	9.34	106	20201	0.77 PPB		92
75)	o-Xylene	9.75	106	9649	0.40 PPB		98
76)	Styrene	9.78	103	7001	0.41 PPB	#	85
77)	Bromoform	9.97	173	943	0.25 PPB		75
78)	Isopropylbenzene	10.13	105	22567	0.34 PPB		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D
Acq On : 13 Mar 2007 11:52 am
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11:54 2007

Vial: 8
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

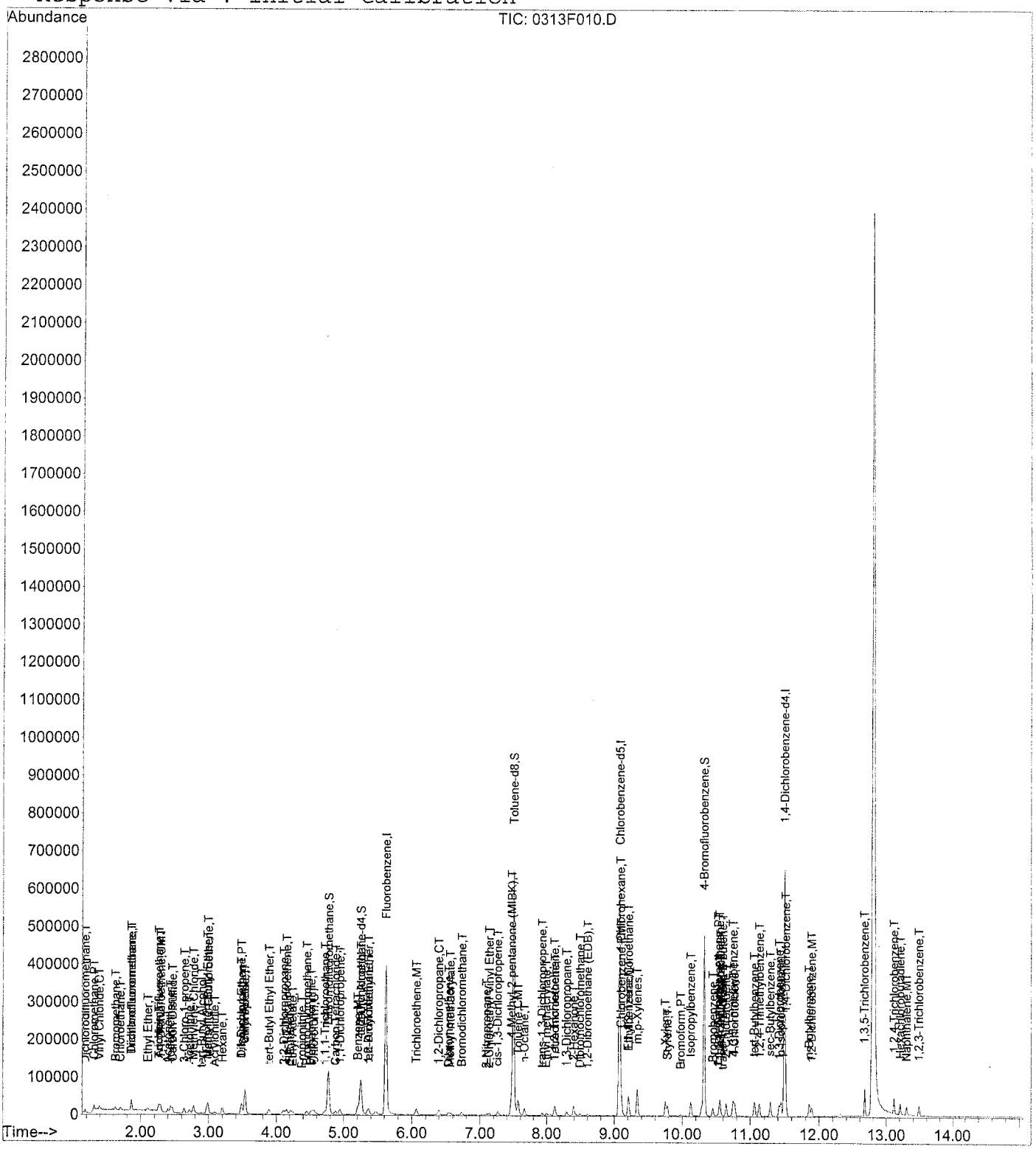
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.55	89	913	1.42	PPB	#	22
82)	1,1,2,2-Tetrachloroethane	10.52	83	2604	0.43	PPB		93
83)	trans-1,4-Dichloro-2-buten	10.60	53	779	0.60	PPB		80
84)	Bromobenzene	10.45	156	5252	0.38	PPB		83
85)	n-Propylbenzene	10.55	91	28659	0.39	PPB		91
86)	1,2,3-Trichloropropane	10.57	110	882	0.46	PPB	#	79
87)	2-Chlorotoluene	10.65	91	16228	0.38	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	18787	0.37	PPB		91
89)	4-Chlorotoluene	10.77	91	20327	0.42	PPB		88
90)	tert-Butylbenzene	11.06	119	16349	0.35	PPB		88
91)	1,2,4-Trimethylbenzene	11.12	105	17843	0.35	PPB		97
92)	sec-Butylbenzene	11.28	105	22076	0.35	PPB		98
93)	p-Isopropyltoluene	11.44	119	19380	0.34	PPB		97
94)	1,3-Dichlorobenzene	11.42	146	11704	0.42	PPB		99
95)	1,4-Dichlorobenzene	11.52	146	11642	0.42	PPB		96
96)	n-Butylbenzene	11.86	91	16870	0.34	PPB		92
97)	1,2-Dichlorobenzene	11.89	146	9121	0.37	PPB		89
99)	1,3,5-Trichlorobenzene	12.67	180	15929	0.68	PPB		95
100)	1,2,4-Trichlorobenzene	13.11	180	8297	0.46	PPB		82
101)	Hexachlorobutadiene	13.21	225	4653	0.43	PPB		91
102)	Naphthalene	13.30	128	11432	0.50	PPB		95
103)	1,2,3-Trichlorobenzene	13.49	180	6652	0.45	PPB		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\031307\0313F010.D Vial: 8
Acq On : 13 Mar 2007 11:52 am Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 13 14:11 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Polynuclear Aromatic Hydrocarbons

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
DAEGW104CL	K0701703-001	03/02/2007	03/03/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [illegible]

Name: Mike Erickson

Date: [illegible]

Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	84	42-137	03/30/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703403-4	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	81	42-137	03/30/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104CL	K0701703-001	84
Method Blank	KWG0703403-4	81
Batch QC	K0701647-002	79
Batch QCMS	KWG0703403-1	80
Lab Control Sample	KWG0703403-2	82
Duplicate Lab Control Sample	KWG0703403-3	86

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl 42-137

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007

Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

Analyte Name	Sample Result	Batch QCMS KWG0703403-1 Matrix Spike Result	Expected	%Rec	%Rec Limits
Naphthalene	ND	6.46	10.0	65	53-109
Acenaphthylene	ND	7.58	10.0	76	41-112
Acenaphthene	ND	7.20	10.0	72	54-105
Fluorene	ND	0.811	1.00	81	36-132
Phenanthrene	ND	0.932	1.00	93	58-116
Anthracene	ND	0.896	1.00	90	61-113
Fluoranthene	ND	0.918	1.00	92	47-135
Pyrene	ND	0.896	1.00	90	34-150
Benz(a)anthracene	ND	0.897	1.00	90	62-119
Chrysene	ND	0.906	1.00	91	55-122
Benzo(b)fluoranthene	ND	0.914	1.00	91	48-135
Benzo(k)fluoranthene	ND	0.896	1.00	90	66-113
Benzo(a)pyrene	ND	0.889	1.00	89	61-116
Dibenz(a,h)anthracene	ND	1.74	1.00	174 *	54-130
Benzo(g,h,i)perylene	ND	1.08	1.00	108	59-121
Indeno(1,2,3-cd)pyrene	ND	0.813	1.00	81	54-116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/08/2007
Date Analyzed: 03/30/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703403

	Lab Control Sample KWG0703403-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703403-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	7.97	10.0	80	8.26	10.0	83	65-101	4	30
Acenaphthylene	8.68	10.0	87	8.99	10.0	90	70-96	4	30
Acenaphthene	8.71	10.0	87	9.03	10.0	90	70-100	4	30
Fluorene	0.851	1.00	85	0.885	1.00	89	70-100	4	30
Phenanthrene	0.902	1.00	90	0.934	1.00	93	74-106	3	30
Anthracene	0.893	1.00	89	0.938	1.00	94	74-107	5	30
Fluoranthene	0.857	1.00	86	0.908	1.00	91	74-104	6	30
Pyrene	0.908	1.00	91	0.968	1.00	97	69-117	6	30
Benz(a)anthracene	0.939	1.00	94	0.978	1.00	98	77-109	4	30
Chrysene	0.916	1.00	92	0.983	1.00	98	74-108	7	30
Benzo(b)fluoranthene	0.965	1.00	97	1.02	1.00	102	77-109	5	30
Benzo(k)fluoranthene	0.934	1.00	93	0.992	1.00	99	78-110	6	30
Benzo(a)pyrene	0.908	1.00	91	0.964	1.00	96	73-106	6	30
Dibenz(a,h)anthracene	0.831	1.00	83	0.826	1.00	83	52-129	1	30
Benzo(g,h,i)perylene	1.06	1.00	106	1.09	1.00	109	55-130	3	30
Indeno(1,2,3-cd)pyrene	0.847	1.00	85	0.914	1.00	91	43-137	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007
		Time Analyzed:	02:53

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\032907PA\03290028.D
Lab Code:	KWG0703403-4	**Instrument ID:**	LC06
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703403-2	J:\LC06\DATA\032907PA\03290029.D	03/30/07	03:17
Duplicate Lab Control Sample	KWG0703403-3	J:\LC06\DATA\032907PA\03290030.D	03/30/07	03:41
Batch QC	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
Batch QCMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29
DAEGW104CL	K0701703-001	J:\LC06\DATA\032907PA\03290033.D	03/30/07	04:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703403-2	**Lab Code:**	KWG0703403-3
File ID:	J:\LC06\DATA\032907PA\03290029.D	**File ID:**	J:\LC06\DATA\032907PA\03290030.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/30/2007	**Date Analyzed:**	03/30/2007
Time Analyzed:	03:17	**Time Analyzed:**	03:41

Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703403-4	J:\LC06\DATA\032907PA\03290028.D	03/30/07	02:53
Batch QC	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
Batch QCMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29
DAEGW104CL	K0701703-001	J:\LC06\DATA\032907PA\03290033.D	03/30/07	04:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz(a)anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo(b)fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo(k)fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo(a)pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Benzo(g,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Indeno(1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D\03280030c.d

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Benzo(b)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(k)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D\03290012C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	36800	2	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23600	2	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12700	1	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	164000	1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	374000	2	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	777000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	98200	1	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79500	2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	392000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	275000	1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	169000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	251000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	55700	1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	90700	2	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	216000	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	9.9	2940000	2920000	-1		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	809000	-1		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6400000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9060000	0		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	4750000	4600000	-3		NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24200000	-6		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14200000	-1		NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9300000	0		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	0.99	3220000	3190000	-1		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16300000	0		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.98	5420000	5300000	-2		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14100000	0		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D\03290023C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	24200	5	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	7	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	381000	3	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	783000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.1	97500	103000	6	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	81600	5	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.1	244000	258000	6	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	391000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	278000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	171000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.99	55100	54400	-1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	91700	3	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	219000	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0	NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2	NA	± 15 %	AverageRF
Acenaphthene	10	10	816000	814000	0	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6360000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9280000	2	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4480000	-6	NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24400000	-6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	14400000	14300000	0	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	9320000	9270000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	1	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.93	5420000	5050000	-7	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20 *	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14300000	1	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D\03290035C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	119000	2	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23800	3	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12900	3	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	165000	2	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	372000	1	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	778000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	101000	4	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	82300	6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	394000	4	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	279000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	172000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	254000	2	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	54800	0	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	93400	5	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	220000	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1530000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	811000	-1		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	0.98	5320000	5210000	-2		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9190000	1		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.94	4750000	4450000	-6		NA	± 15 %	AverageRF
Pyrene	1.0	0.93	25900000	24000000	-7		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14300000	-1		NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9370000	1		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3240000	1		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16400000	1		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.97	5420000	5270000	-3		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10400000	19	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14200000	1		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8310

Analysis Lot: KWG0704189
Instrument ID: LC06
Column: DAD Vydac C

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
03290011.D	Instrument Blank	KWG0704189-4	3/29/2007	20:08		3/29/2007	20:21
03290012.D	Continuing Calibration Verification	KWG0704189-1	3/29/2007	20:32		3/29/2007	20:45
03290018.D	ZZZZZZ	ZZZZZZ	3/29/2007	22:55		3/29/2007	23:08
03290019.D	ZZZZZZ	ZZZZZZ	3/29/2007	23:19		3/29/2007	23:32
03290020.D	ZZZZZZ	ZZZZZZ	3/29/2007	23:42		3/29/2007	23:55
03290021.D	ZZZZZZ	ZZZZZZ	3/30/2007	00:05		3/30/2007	00:18
03290022.D	ZZZZZZ	ZZZZZZ	3/30/2007	00:30		3/30/2007	00:43
03290023.D	Continuing Calibration Verification	KWG0704189-2	3/30/2007	00:54		3/30/2007	01:07
03290024.D	Instrument Blank	KWG0704189-5	3/30/2007	01:18		3/30/2007	01:31
03290025.D	ZZZZZZ	ZZZZZZ	3/30/2007	01:42		3/30/2007	01:55
03290026.D	ZZZZZZ	ZZZZZZ	3/30/2007	02:06		3/30/2007	02:19
03290027.D	ZZZZZZ	ZZZZZZ	3/30/2007	02:29		3/30/2007	02:42
03290028.D	Method Blank	KWG0703403-4	3/30/2007	02:53		3/30/2007	03:06
03290029.D	Lab Control Sample	KWG0703403-2	3/30/2007	03:17		3/30/2007	03:30
03290030.D	Duplicate Lab Control Sample	KWG0703403-3	3/30/2007	03:41		3/30/2007	03:54
03290031.D	Batch QC	K0701647-002	3/30/2007	04:05		3/30/2007	04:18
03290032.D	Batch QCMS	KWG0703403-1	3/30/2007	04:29		3/30/2007	04:42
03290033.D	DAEGW104CL	K0701703-001	3/30/2007	04:53		3/30/2007	05:06
03290034.D	ZZZZZZ	ZZZZZZ	3/30/2007	05:16		3/30/2007	05:29
03290035.D	Continuing Calibration Verification	KWG0704189-3	3/30/2007	05:39		3/30/2007	05:52
03290036.D	Instrument Blank	KWG0704189-6	3/30/2007	06:04		3/30/2007	06:17

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/08/2007

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Extraction Lot: KWG0703403
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
DAEGW104CL	K0701703-001	03/02/07	03/03/07	1000ml	1.00ml	NA	
Method Blank	KWG0703403-4	NA	NA	1000ml	1.00ml	NA	
Batch QC	K0701647-002	NA	NA	1010ml	1.00ml	NA	
Batch QCMS	KWG0703403-1	NA	NA	1000ml	1.00ml	NA	
Lab Control Sample	KWG0703403-2	NA	NA	1000ml	1.00ml	NA	
Duplicate Lab Control Sample	KWG0703403-3	NA	NA	1000ml	1.00ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
DAEGW104CL	K0701703-001	84
Method Blank	KWG0703403-4	81
Batch QC	K0701647-002	79
Batch QCMS	KWG0703403-1	80
Lab Control Sample	KWG0703403-2	82
Duplicate Lab Control Sample	KWG0703403-3	86

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl 42-137

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007

Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-002	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

		Batch QCMS KWG0703403-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	ND	6.46	10.0	65	53-109
Acenaphthylene	ND	7.58	10.0	76	41-112
Acenaphthene	ND	7.20	10.0	72	54-105
Fluorene	ND	0.811	1.00	81	36-132
Phenanthrene	ND	0.932	1.00	93	58-116
Anthracene	ND	0.896	1.00	90	61-113
Fluoranthene	ND	0.918	1.00	92	47-135
Pyrene	ND	0.896	1.00	90	34-150
Benz(a)anthracene	ND	0.897	1.00	90	62-119
Chrysene	ND	0.906	1.00	91	55-122
Benzo(b)fluoranthene	ND	0.914	1.00	91	48-135
Benzo(k)fluoranthene	ND	0.896	1.00	90	66-113
Benzo(a)pyrene	ND	0.889	1.00	89	61-116
Dibenz(a,h)anthracene	ND	1.74	1.00	174 *	54-130
Benzo(g,h,i)perylene	ND	1.08	1.00	108	59-121
Indeno(1,2,3-cd)pyrene	ND	0.813	1.00	81	54-116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Extracted: 03/08/2007
Date Analyzed: 03/30/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510B
Analysis Method: 8310

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703403

	Lab Control Sample KWG0703403-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703403-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	7.97	10.0	80	8.26	10.0	83	65-101	4	30
Acenaphthylene	8.68	10.0	87	8.99	10.0	90	70-96	4	30
Acenaphthene	8.71	10.0	87	9.03	10.0	90	70-100	4	30
Fluorene	0.851	1.00	85	0.885	1.00	89	70-100	4	30
Phenanthrene	0.902	1.00	90	0.934	1.00	93	74-106	3	30
Anthracene	0.893	1.00	89	0.938	1.00	94	74-107	5	30
Fluoranthene	0.857	1.00	86	0.908	1.00	91	74-104	6	30
Pyrene	0.908	1.00	91	0.968	1.00	97	69-117	6	30
Benz(a)anthracene	0.939	1.00	94	0.978	1.00	98	77-109	4	30
Chrysene	0.916	1.00	92	0.983	1.00	98	74-108	7	30
Benzo(b)fluoranthene	0.965	1.00	97	1.02	1.00	102	77-109	5	30
Benzo(k)fluoranthene	0.934	1.00	93	0.992	1.00	99	78-110	6	30
Benzo(a)pyrene	0.908	1.00	91	0.964	1.00	96	73-106	6	30
Dibenz(a,h)anthracene	0.831	1.00	83	0.826	1.00	83	52-129	1	30
Benzo(g,h,i)perylene	1.06	1.00	106	1.09	1.00	109	55-130	3	30
Indeno(1,2,3-cd)pyrene	0.847	1.00	85	0.914	1.00	91	43-137	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Extracted:**	03/08/2007
Sample Matrix:	Water	**Date Analyzed:**	03/30/2007
		Time Analyzed:	02:53

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\032907PA\03290028.D
Lab Code:	KWG0703403-4	**Instrument ID:**	LC06
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703403-2	J:\LC06\DATA\032907PA\03290029.D	03/30/07	03:17
Duplicate Lab Control Sample	KWG0703403-3	J:\LC06\DATA\032907PA\03290030.D	03/30/07	03:41
Batch QC	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
Batch QCMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29
DAEGW104CL	K0701703-001	J:\LC06\DATA\032907PA\03290033.D	03/30/07	04:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703403-2	**Lab Code:**	KWG0703403-3
File ID:	J:\LC06\DATA\032907PA\03290029.D	**File ID:**	J:\LC06\DATA\032907PA\03290030.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	03/08/2007	**Date Extracted:**	03/08/2007
Date Analyzed:	03/30/2007	**Date Analyzed:**	03/30/2007
Time Analyzed:	03:17	**Time Analyzed:**	03:41

Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0703403

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703403-4	J:\LC06\DATA\032907PA\03290028.D	03/30/07	02:53
Batch QC	K0701647-002	J:\LC06\DATA\032907PA\03290031.D	03/30/07	04:05
Batch QCMS	KWG0703403-1	J:\LC06\DATA\032907PA\03290032.D	03/30/07	04:29
DAEGW104CL	K0701703-001	J:\LC06\DATA\032907PA\03290033.D	03/30/07	04:53

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	03/02/2007
Sample Matrix:	Water	**Date Received:**	03/03/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	DAEGW104CL	**Units:**	ug/L
Lab Code:	K0701703-001	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	84	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290033.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MMA

Exception Report

Data File: J:\LC06\DATA\032907PA\03290033.D\03290033C.D
Lab ID: K0701703-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MMK

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	03/02/2007	**Receive Date:**	03/03/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	K0701703
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581532	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\032907PA\03290033.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290033.D\03290033c.d			**Vial:**	56
Acqu Date:	03/30/2007 04:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701703-001				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19 -0.02	7.16 -0.02	24326168	975604	8.28	8.39			84OK
				%Recovery =	83OK	84OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
Acenaphthene			0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene		4.75 +0.01	0	1587	0.0000	0.0040	0.013U	0.013U	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene			0	0	0.0000	0.0000	0.037U	0.037U	0.037U
Pyrene	6.20 -0.01		60540	0	0.0020	0.0000	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene		8.39 -0.03	0	9302	0.0000	0.0340	0.067U	0.067U	0.067U
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene			0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.61 -0.05	0	2774	0.0000	0.0500	0.035U	0.050J	0.035U
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	1.00 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290033.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290033.D\03290033c.d			**Vial:**	56
Acqu Date:	03/30/2007 04:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701703-001				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

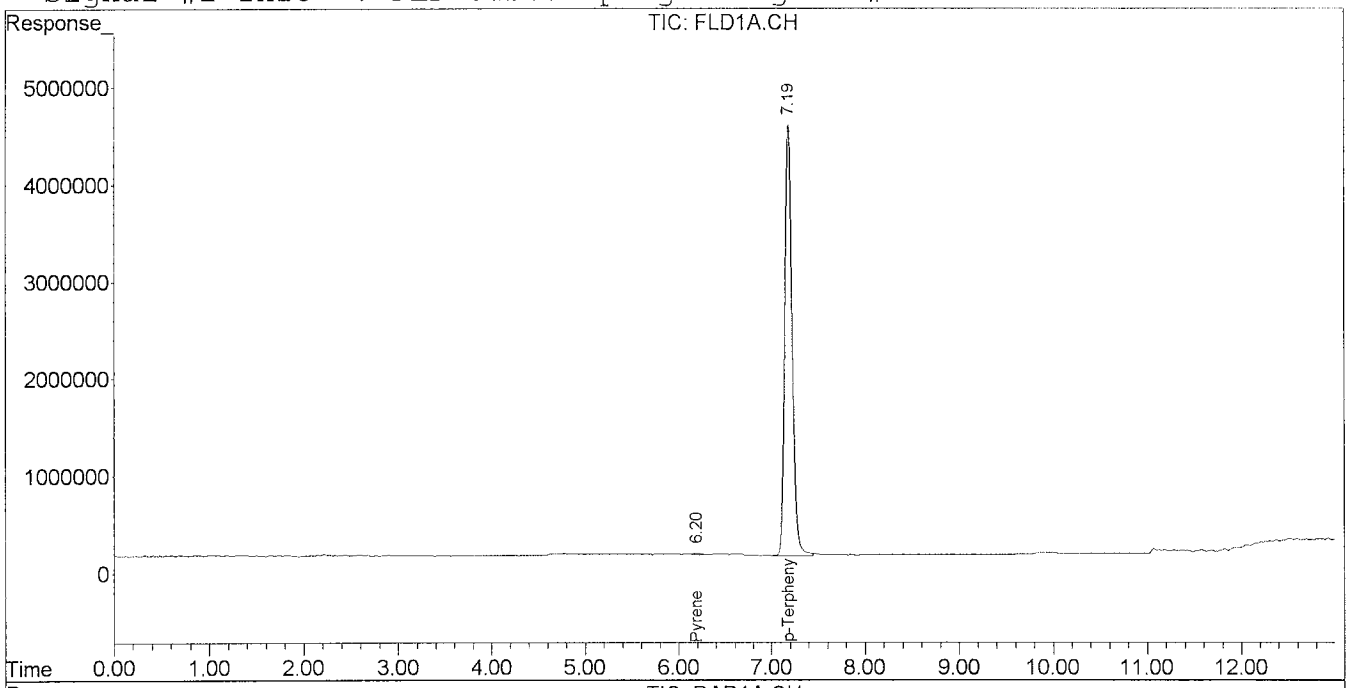
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

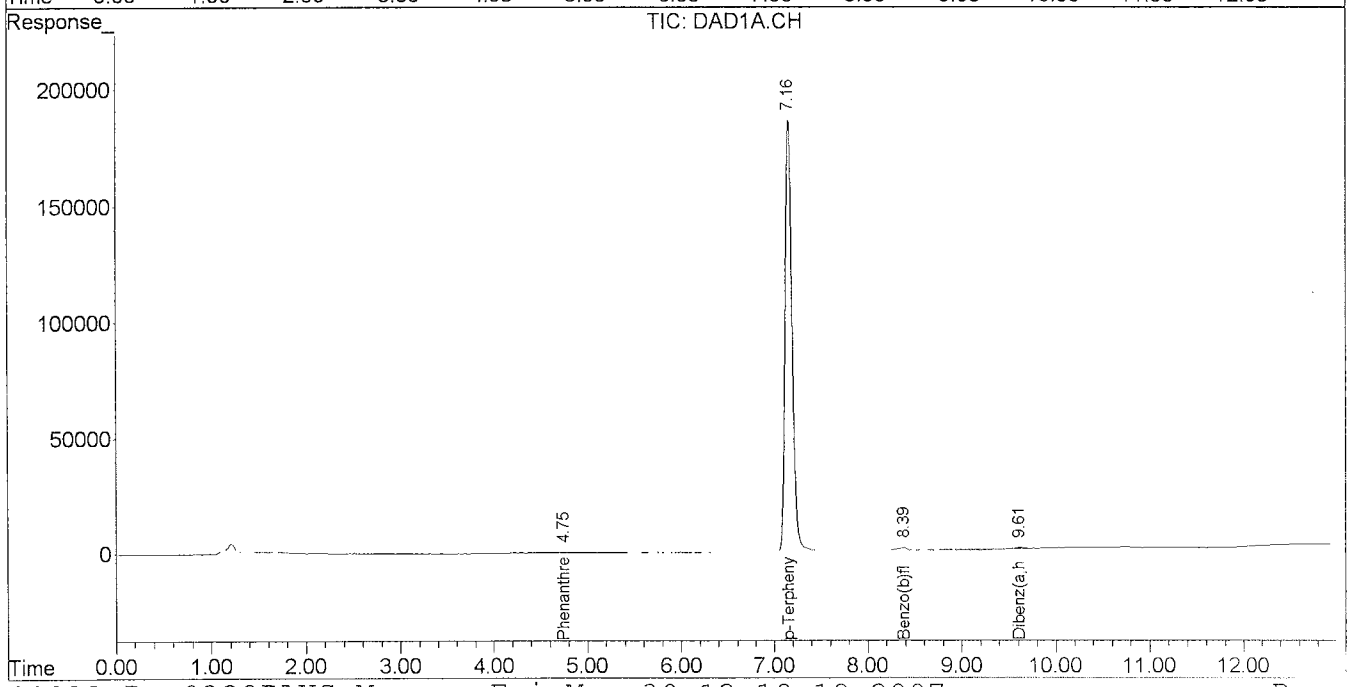
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290033.D\FLD1A.CH Vial: 56
Signal #2 : J:\LC06\DATA\032907PA\03290033.D\DAD1A.CH
Acq On : 30-Mar-2007, 04:53:03 Operator: Paul
Sample : K0701703-001 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703403-4	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	81	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290028.D
Lab ID: KWG0703403-4
RunType: MB
Matrix: WATER

Date Acquired: 03/30/2007 02:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Printed: 03/30/2007 13:17:22
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\LC06\DATA\032907PA\03290028.D\03290028C.D
Lab ID: KWG0703403-4
RunType: MB
Matrix: WATER

Date Acquired: 03/30/2007 02:53
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581537	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290028.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290028.D\03290028c.d			**Vial:**	51
Acqu Date:	03/30/2007 02:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	-0.02	7.17	-0.01	23522429	944434	8.01	8.12			81OK
						%Recovery =	80OK	81OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	-0.01			94876	0	0.0610	0.0000	0.13U	0.13U	0.13U
Acenaphthylene					0	0	0.0000	0.0000		0.12U	0.12U
2-Methylnaphthalene/Dibe					0	0	0.0000	0.0000	0.14U	0.14U	0.14U
Acenaphthene					0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene					0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene			4.73	-0.01	0	733	0.0000	0.0020	0.013U	0.013U	0.013U
Anthracene					0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene					0	0	0.0000	0.0000	0.037U	0.037U	0.037U
Pyrene			6.17	-0.01	0	1796	0.0000	0.0230	0.024U	0.024U	0.024U
Benz(a)anthracene					0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene					0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene			8.38	-0.01	0	5875	0.0000	0.0220	0.067U	0.067U	0.067U
Benzo(k)fluoranthene					0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene					0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene			9.65	-0.01	0	1438	0.0000	0.0260	0.035U	0.035U	0.035U
Benzo(g,h,i)perylene					0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene					0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290028.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290028.D\03290028c.d			**Vial:**	51
Acqu Date:	03/30/2007 02:53	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

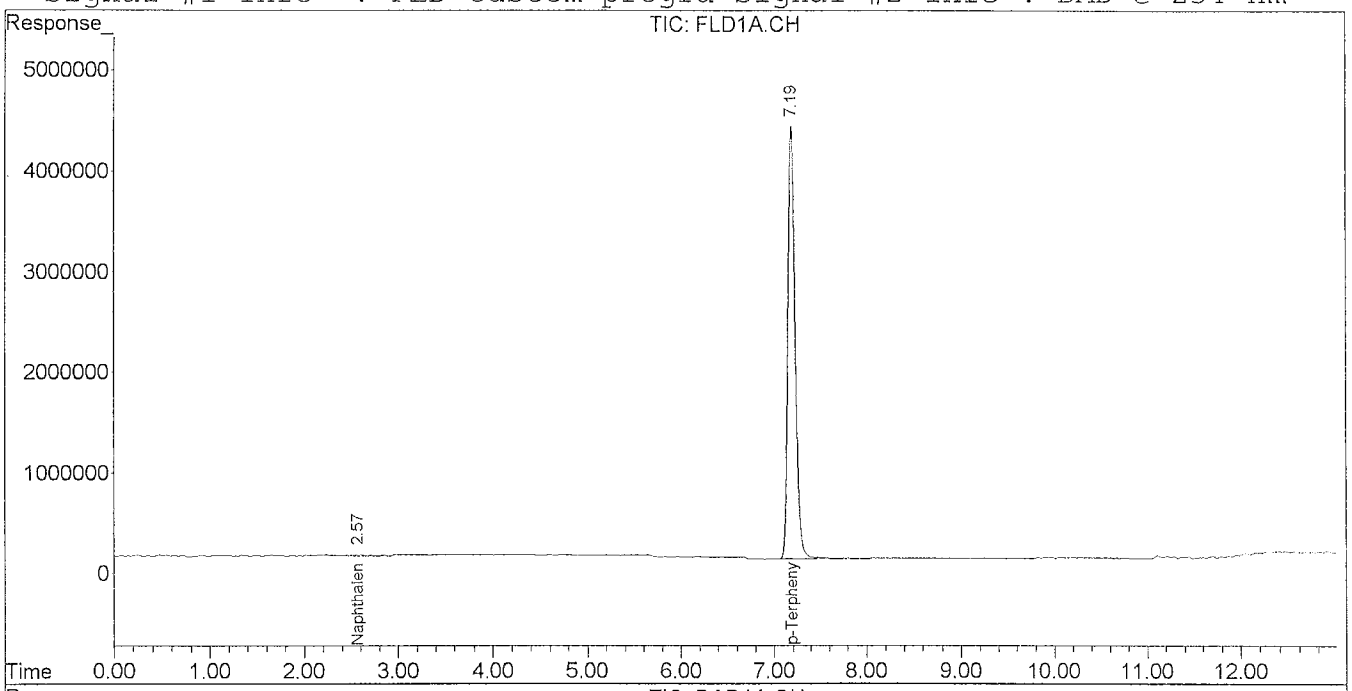
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

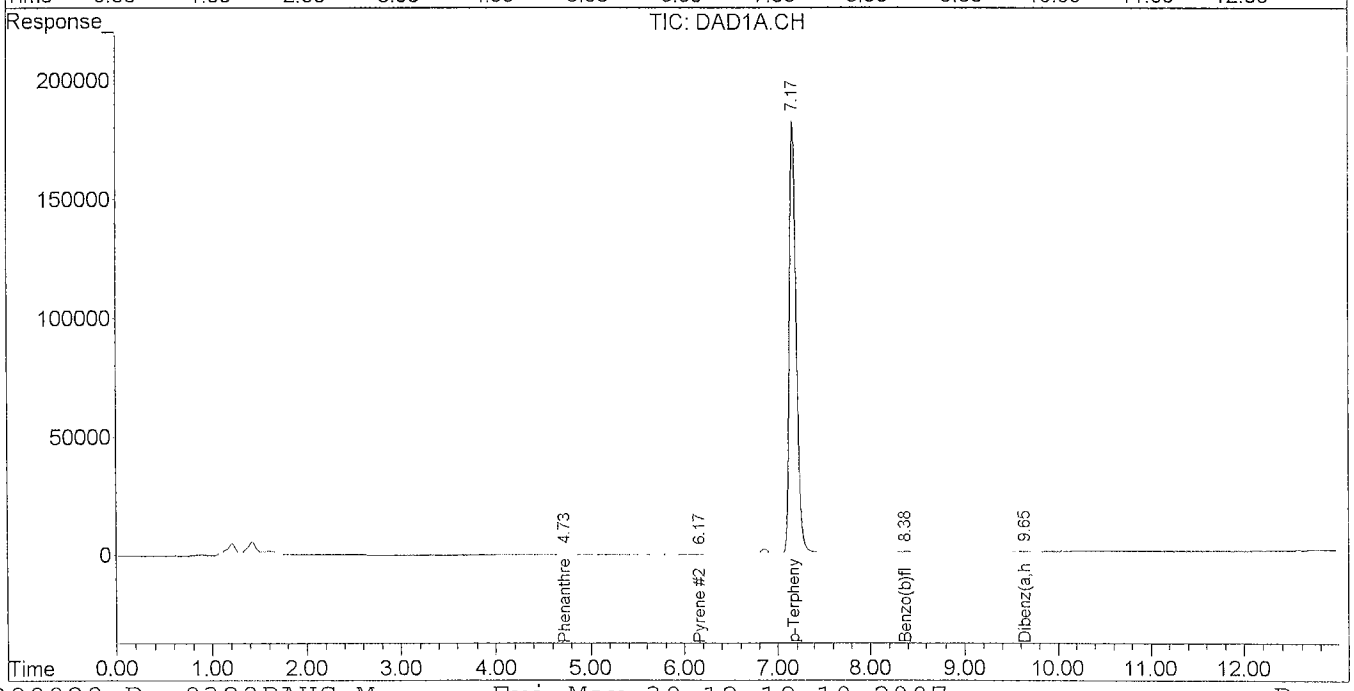
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290028.D\FLD1A.CH Vial: 51
Signal #2 : J:\LC06\DATA\032907PA\03290028.D\DAD1A.CH
Acq On : 30-Mar-2007, 02:53:44 Operator: Paul
Sample : KWG0703403MB Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701703
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Batch QC
Lab Code: K0701647-002

Units: ug/L
Basis: NA

Extraction Method: EPA 3510B
Analysis Method: 8310

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	ND	U	1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	ND	U	0.20	1	03/08/07	03/30/07	KWG0703403	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	03/08/07	03/30/07	KWG0703403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	79	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290031.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:05
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Batch QC

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: DMC

Exception Report

Data File: J:\LC06\DATA\032907PA\03290031.D\03290031C.D
Lab ID: K0701647-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/30/2007 04:05
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	K0701647
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581533	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\032907PA\03290031.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290031.D\03290031c.d			**Vial:**	54
Acqu Date:	03/30/2007 04:05	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701647-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.20 -0.01	7.17 -0.01	23015830	924740	7.84	7.95			79OK
			%Recovery =		78OK	79OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
Acenaphthene		3.93 +0.03	0	965	0.0000	0.0770	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene	4.72 -0.05	4.74	30381	6977	0.0060	0.0190	0.013U	0.019J	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene		5.88 +0.03	0	6456	0.0000	0.0660	0.037U	0.065J	0.037U
Pyrene	6.18 -0.03	6.14 -0.04	176369	1059	0.0070	0.0140	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene		8.41 -0.01	0	7647	0.0000	0.0280	0.067U	0.067U	0.067U
Benzo(k)fluoranthene	8.78 +0.01		35649	0	0.0020	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene	9.12 +0.01		35826	0	0.0030	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.65 -0.01	0	45764	0.0000	0.8310	0.035U	0.82	0.035U
Benzo(g,h,i)perylene		10.02 +0.02	0	15836	0.0000	0.1780	0.036U	0.18J	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1010 ml	**Dilution:**	1.0
Prep Final Vol:	1.00 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290031.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290031.D\03290031c.d			**Vial:**	54
Acqu Date:	03/30/2007 04:05	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0701647-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

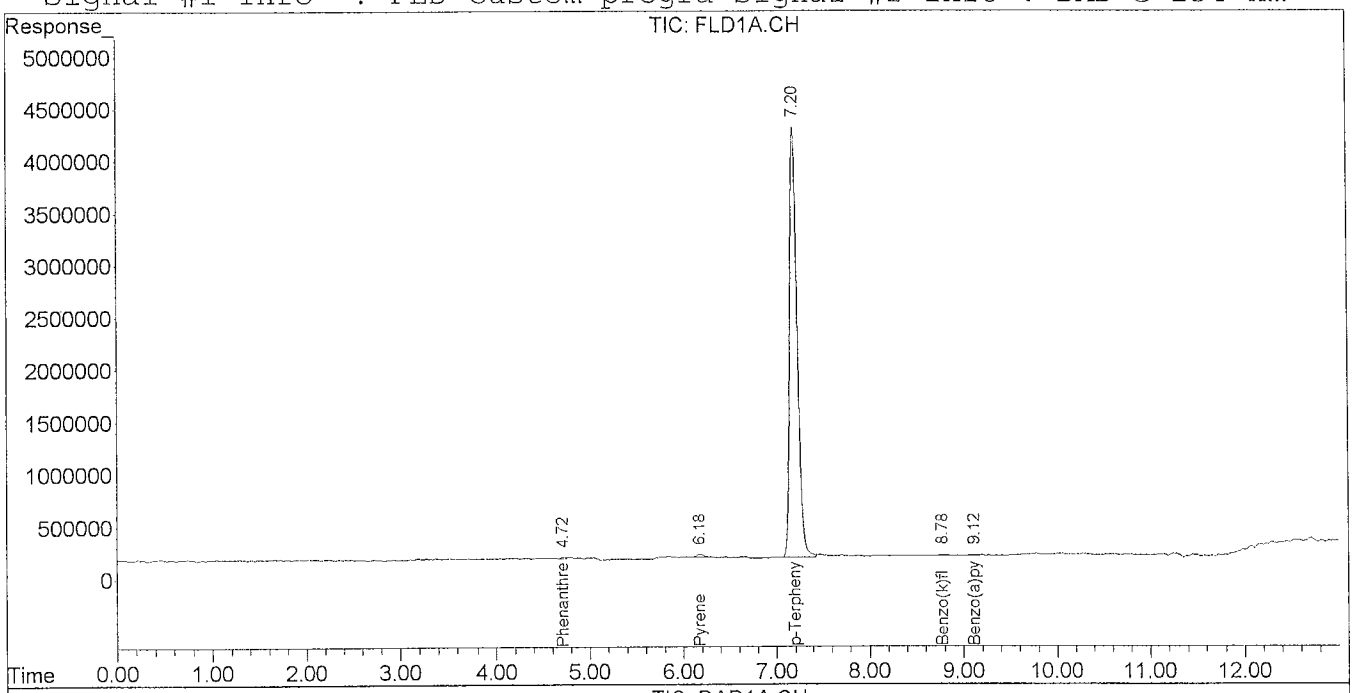
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

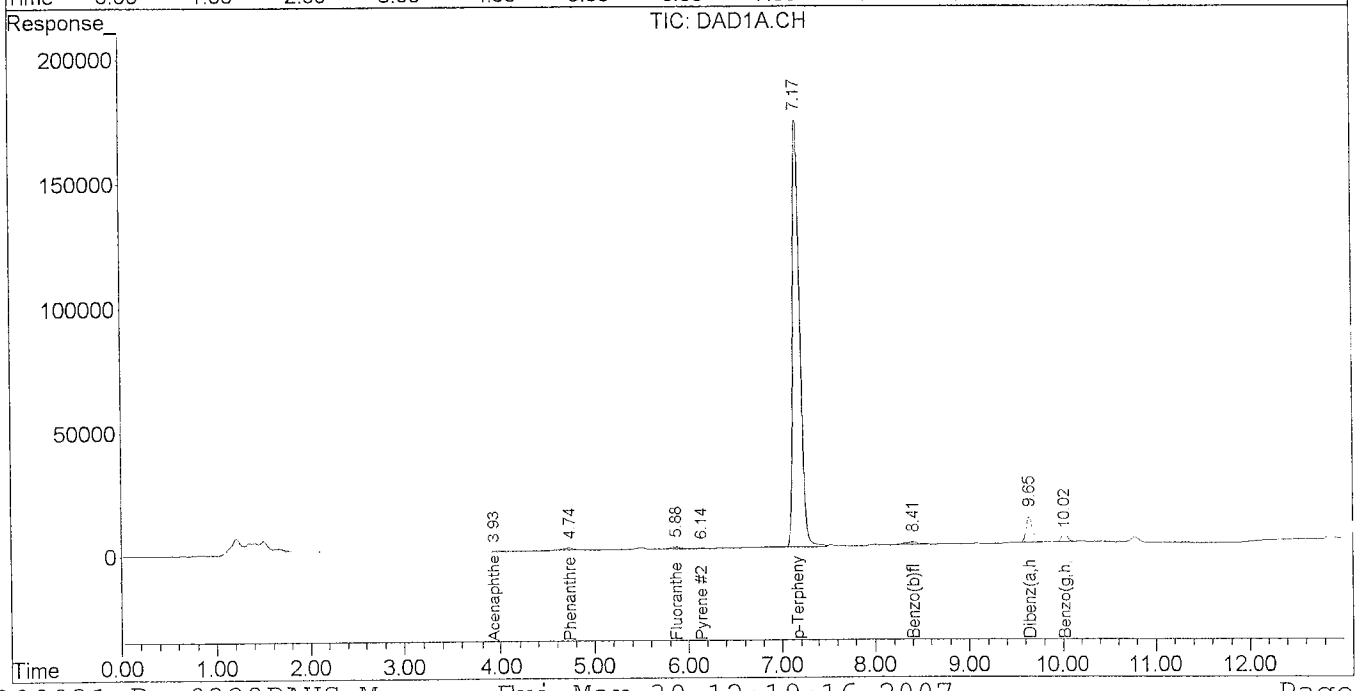
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290031.D\FLD1A.CH Vial: 54
Signal #2 : J:\LC06\DATA\032907PA\03290031.D\DAD1A.CH
Acq On : 30-Mar-2007, 04:05:22 Operator: Paul
Sample : K0701647-002 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0703403-1	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**6.46**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**7.58**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**7.20**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.811**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.932**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.896**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.918**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.896**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.897**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.906**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**0.914**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.896**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.889**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**1.74**	P	0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.08**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.813**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	80	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290032.D
Lab ID: KWG0703403-1 -- K0701647-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/30/2007 04:29
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Batch QC

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NCMR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	"

Primary Review: 4/2/07

Secondary Review: AMY

Exception Report

Data File: J:\LC06\DATA\032907PA\03290032.D\03290032C.D
Lab ID: KWG0703403-1 -- K0701647-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/30/2007 04:29
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: VR 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581534	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290032.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290032.D\03290032c.d			**Vial:**	55
Acqu Date:	03/30/2007 04:29	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-1 -- K0701647-002MS				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	-0.02	7.17	-0.01	23144503	930374	7.88	8.00			80OK
						%Recovery =	79OK	80OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	-0.01	2.54	-0.02	10044316	232301	6.46	6.42	6.46	6.42	**6.46**
Acenaphthylene			2.97	-0.01	0	175182	0.0000	7.58		7.58	**7.58**
2-Methylnaphthalene/Dibe	3.61	-0.02	3.58	-0.03	4266418	199357	6.58	6.94	6.58	6.94	**6.94**
Acenaphthene	3.91	-0.02	3.89	-0.01	5878427	81842	7.20	6.53	7.20	6.53	**7.20**
Fluorene	4.19	-0.03	4.17	-0.03	5064201	131514	0.7850	0.8110	0.785	0.811	**0.811**
Phenanthrene	4.74	-0.03	4.72	-0.02	4601387	343100	0.8650	0.9320	0.865	0.932	**0.932**
Anthracene	5.25	-0.03	5.22	-0.04	7779208	672063	0.8550	0.8960	0.855	0.896	**0.896**
Fluoranthene	5.84	-0.03	5.82	-0.03	3842195	89462	0.8100	0.9180	0.810	0.918	**0.918**
Pyrene	6.18	-0.03	6.16	-0.02	21261122	69611	0.8210	0.8960	0.821	0.896	**0.896**
Benz(a)anthracene	7.37	-0.02	7.36	-0.01	12500506	218666	0.8690	0.8970	0.869	0.897	**0.897**
Chrysene	7.55	-0.02	7.53	-0.03	8339546	344524	0.8940	0.9060	0.894	0.906	**0.906**
Benzo(b)fluoranthene	8.43	-0.02	8.41	-0.01	2784233	249035	0.8650	0.9140	0.865	0.914	**0.914**
Benzo(k)fluoranthene	8.75	-0.02	8.73	-0.03	14443438	150960	0.8900	0.8960	0.890	0.896	**0.896**
Benzo(a)pyrene	9.09	-0.02	9.06	-0.03	10455630	221463	0.8750	0.8890	0.875	0.889	**0.889**
Dibenz(a,h)anthracene	9.66	-0.03	9.64	-0.02	5152460	95661	0.9510	1.74	0.951	1.74	**1.74P**
Benzo(g,h,i)perylene	9.99	-0.03	9.98	-0.02	9458996	94270	1.08CCV	1.06	1.08	1.06	**1.08**
Indeno(1,2,3-cd)pyrene	10.19	-0.03	10.17	-0.03	11481966	170448	0.8130	0.8050	0.813	0.805	**0.813**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290032.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290032.D\03290032c.d			**Vial:**	55
Acqu Date:	03/30/2007 04:29	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-1 -- K0701647-002MS				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

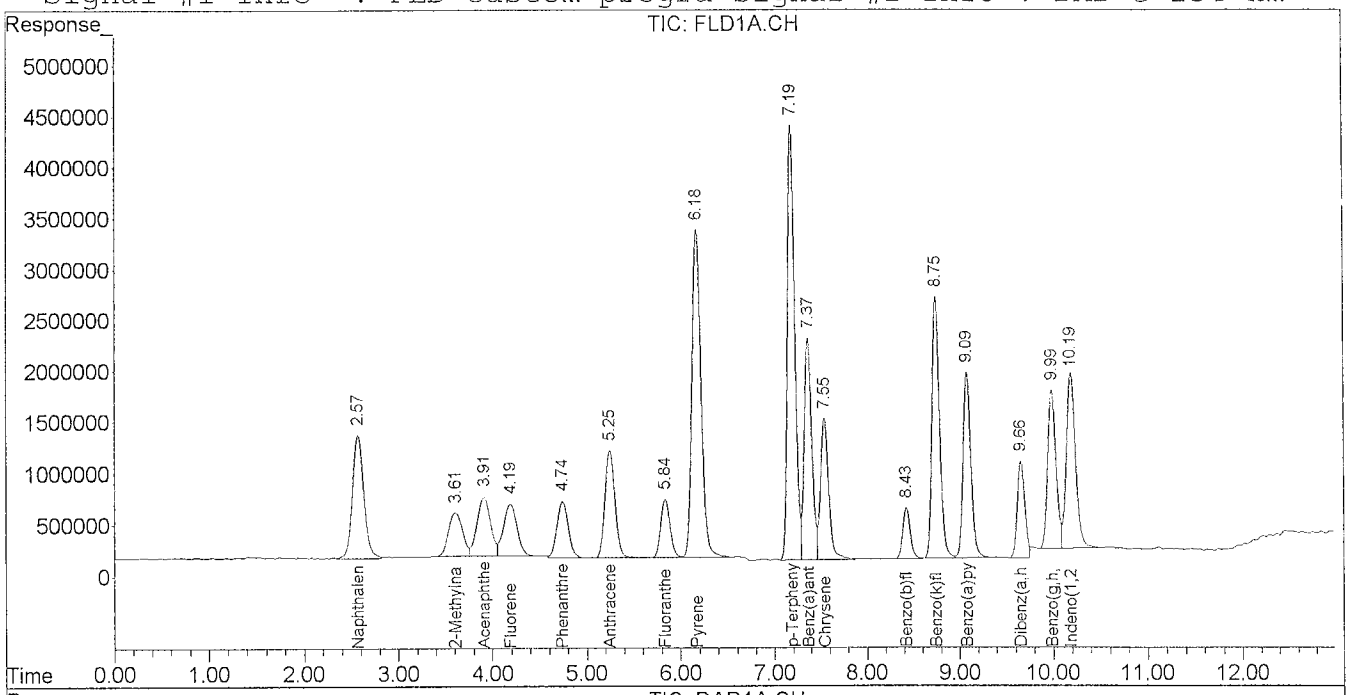
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

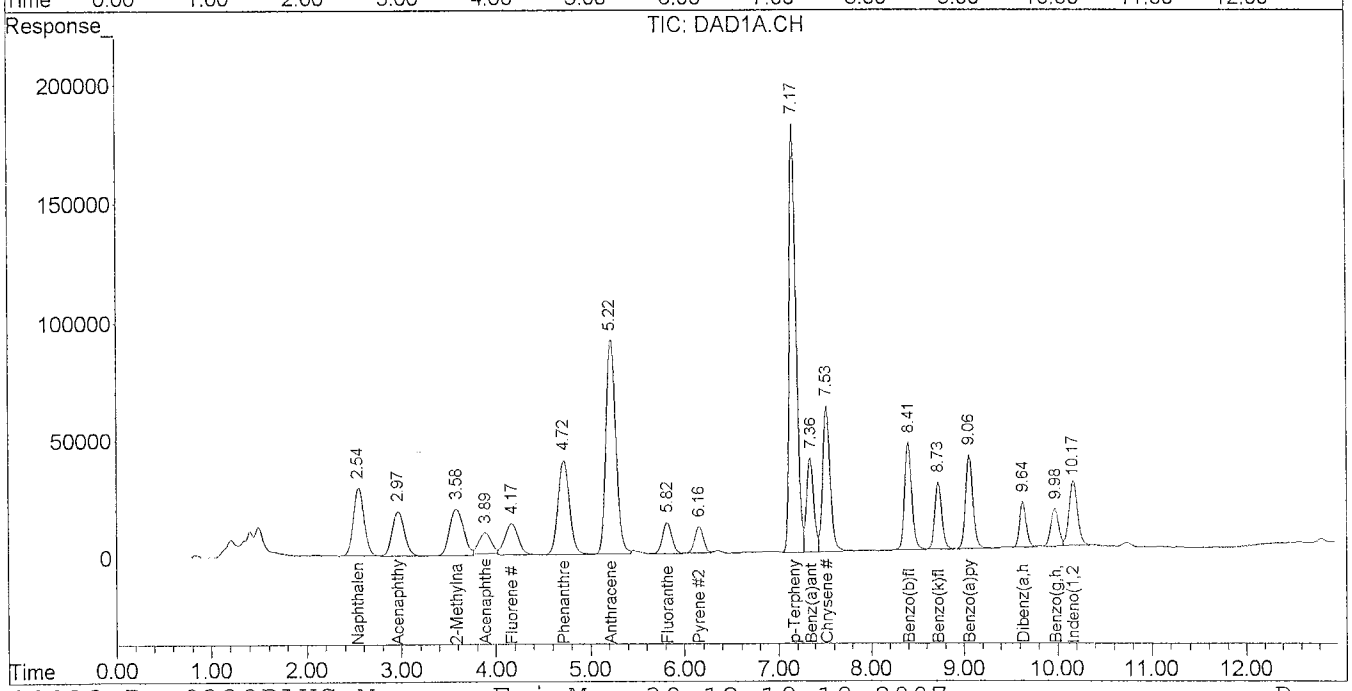
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290032.D\FLD1A.CH Vial: 55
Signal #2 : J:\LC06\DATA\032907PA\03290032.D\DAD1A.CH
Acq On : 30-Mar-2007, 04:29:12 Operator: Paul
Sample : K0701647-002MS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703403-2	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**7.97**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**8.68**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**8.71**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.851**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.902**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.893**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.857**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.908**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.939**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.916**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**0.965**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.934**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.908**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**0.831**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.06**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.847**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	82	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290029.D
Lab ID: KWG0703403-2
RunType: LCS
Matrix: WATER

Date Acquired: 03/30/2007 03:17
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NCAR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	

Primary Review: VL 4/2/07

Secondary Review: MMC

Exception Report

Data File: J:\LC06\DATA\032907PA\03290029.D\03290029C.D
Lab ID: KWG0703403-2
RunType: LCS
Matrix: WATER

Date Acquired: 03/30/2007 03:17
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MAG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581535	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290029.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290029.D\03290029c.d			**Vial:**	52
Acqu Date:	03/30/2007 03:17	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.20	-0.01	7.18		23726723	949638	8.08	8.16			82OK
						%Recovery =	81OK	82OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	-0.01	2.55	-0.01	12174086	288457	7.84	7.97	7.84	7.97	**7.97**
Acenaphthylene			2.98		0	200734	0.0000	8.68		8.68	**8.68**
2-Methylnaphthalene/Dibe	3.61	-0.02	3.59	-0.02	5268592	239140	8.12	8.32	8.12	8.32	**8.32**
Acenaphthene	3.91	-0.02	3.90		6706428	109157	8.22	8.71	8.22	8.71	**8.71**
Fluorene	4.20	-0.02	4.18	-0.02	5349542	137996	0.8290	0.8510	0.829	0.851	**0.851**
Phenanthrene	4.75	-0.02	4.73	-0.01	4617531	331974	0.8680	0.9020	0.868	0.902	**0.902**
Anthracene	5.26	-0.02	5.25	-0.01	7960819	669781	0.8750	0.8930	0.875	0.893	**0.893**
Fluoranthene	5.86	-0.01	5.83	-0.02	3807729	83565	0.8020	0.8570	0.802	0.857	**0.857**
Pyrene	6.20	-0.01	6.18		20907925	70489	0.8070	0.9080	0.807	0.908	**0.908**
Benz(a)anthracene	7.39		7.37		12715070	228906	0.8840	0.9390	0.884	0.939	**0.939**
Chrysene	7.57		7.55	-0.01	8373655	348240	0.8980	0.9160	0.898	0.916	**0.916**
Benzo(b)fluoranthene	8.45		8.42		2921190	262841	0.9080	0.9650	0.908	0.965	**0.965**
Benzo(k)fluoranthene	8.77		8.75	-0.01	15037143	157274	0.9260	0.9340	0.926	0.934	**0.934**
Benzo(a)pyrene	9.11		9.09		10777605	226335	0.9020	0.9080	0.902	0.908	**0.908**
Dibenz(a,h)anthracene	9.69		9.67	+0.01	4034153	45759	0.7440	0.8310	0.744	0.831	**0.831**
Benzo(g,h,i)perylene	10.02		10.01	+0.01	9248368	82062	1.06[CCV]	0.9200	1.06	0.920	**1.06**
Indeno(1,2,3-cd)pyrene	10.22		10.21	+0.01	11879749	179393	0.8410	0.8470	0.841	0.847	**0.847**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290029.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290029.D\03290029c.d			**Vial:**	52
Acqu Date:	03/30/2007 03:17	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

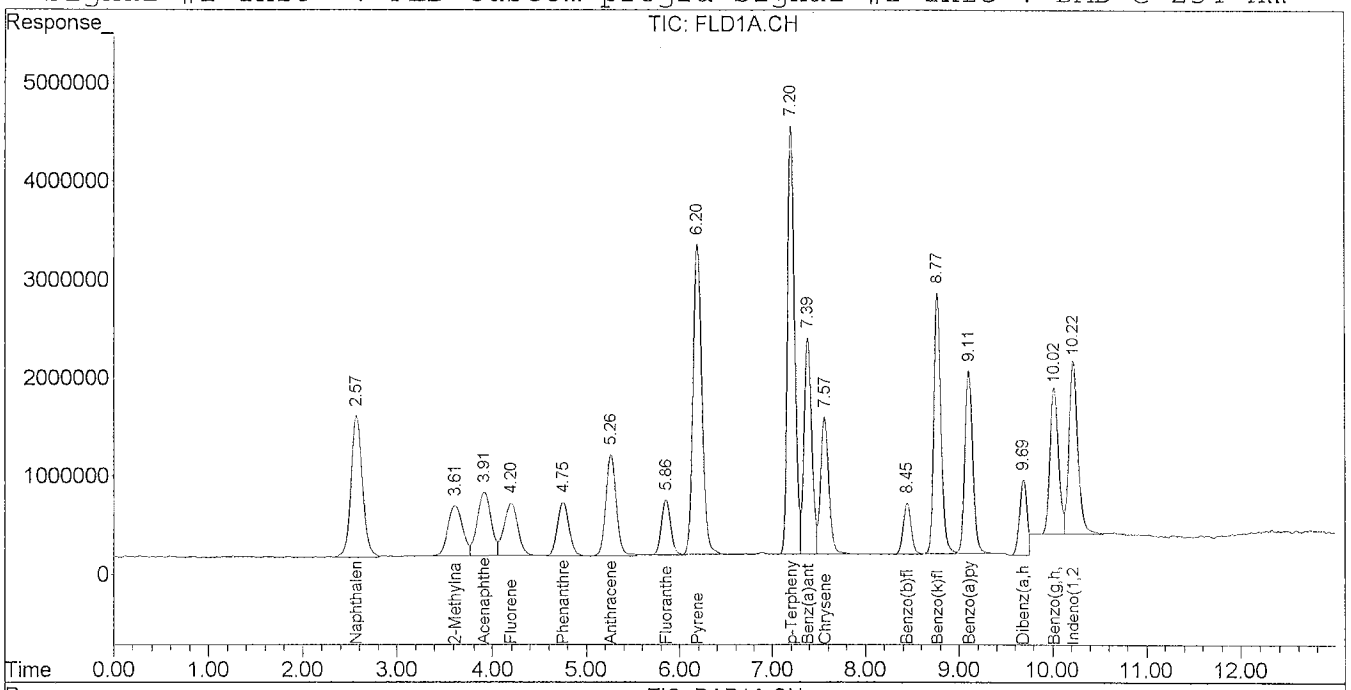
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

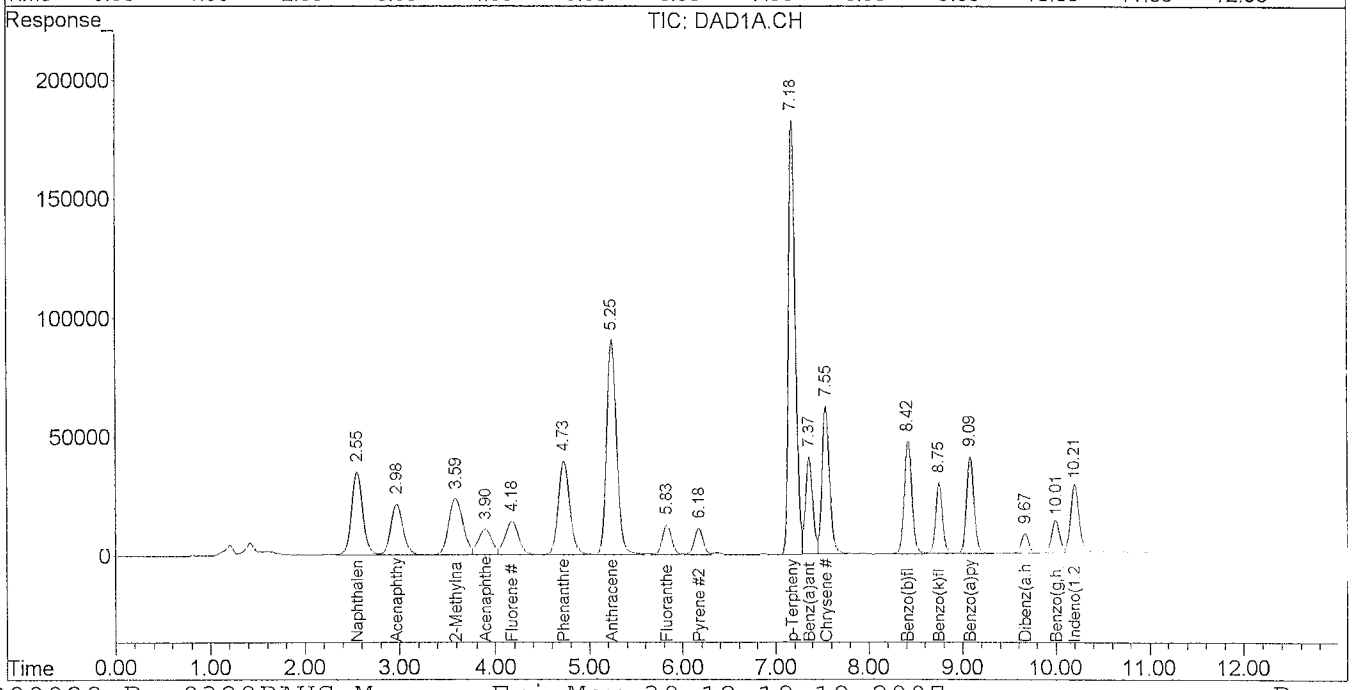
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290029.D\FLD1A.CH Vial: 52
Signal #2 : J:\LC06\DATA\032907PA\03290029.D\DAD1A.CH
Acq On : 30-Mar-2007, 03:17:35 Operator: Paul
Sample : KWG0703403LCS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701703
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703403-3	**Basis:**	NA
Extraction Method:	EPA 3510B	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**8.26**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthylene	**8.99**		1.0	1	03/08/07	03/30/07	KWG0703403	
Acenaphthene	**9.03**		1.0	1	03/08/07	03/30/07	KWG0703403	
Fluorene	**0.885**		0.20	1	03/08/07	03/30/07	KWG0703403	
Phenanthrene	**0.934**		0.10	1	03/08/07	03/30/07	KWG0703403	
Anthracene	**0.938**		0.10	1	03/08/07	03/30/07	KWG0703403	
Fluoranthene	**0.908**		0.20	1	03/08/07	03/30/07	KWG0703403	
Pyrene	**0.968**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benz(a)anthracene	**0.978**		0.10	1	03/08/07	03/30/07	KWG0703403	
Chrysene	**0.983**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(b)fluoranthene	**1.02**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(k)fluoranthene	**0.992**		0.10	1	03/08/07	03/30/07	KWG0703403	
Benzo(a)pyrene	**0.964**		0.10	1	03/08/07	03/30/07	KWG0703403	
Dibenz(a,h)anthracene	**0.826**		0.20	1	03/08/07	03/30/07	KWG0703403	
Benzo(g,h,i)perylene	**1.09**		0.20	1	03/08/07	03/30/07	KWG0703403	*
Indeno(1,2,3-cd)pyrene	**0.914**		0.10	1	03/08/07	03/30/07	KWG0703403	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	86	42-137	03/30/07	Acceptable

Comments:

Exception Report

Data File:	J:\LC06\DATA\032907PA\03290030.D	**Date Acquired:**	03/30/2007 03:41
Lab ID:	KWG0703403-3	**Date Quantitated:**	03/30/2007 10:52
RunType:	DLCS	**Batch ID:**	KWG0704189
Matrix:	WATER	**Analysis Method:**	8310
		MethodJoinID:	MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Benzo(g,h,i)perylene	20.0	NA	15	SEE NARR
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	19.2	NA	15	↓

Primary Review: VC 4/2/07

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\032907PA\03290030.D\03290030C.D
Lab ID: KWG0703403-3
RunType: DLCS
Matrix: WATER

Date Acquired: 03/30/2007 03:41
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/08/2007

Analysis Lot:	KWG0704189	**Prep Lot:**	KWG0703403	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510B		
Prep Ref:	581536	**Prep Date:**	03/08/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\032907PA\03290028.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290030.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290030.D\03290030c.d			**Vial:**	53
Acqu Date:	03/30/2007 03:41	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.18	-0.03	7.17	-0.01	25108419	1006111	8.55	8.65			86OK
						%Recovery =	85OK	86OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58		2.56		12835860	295344	8.26	8.16	8.26	8.16	**8.26**
Acenaphthylene			2.98		0	207884	0.0000	8.99		8.99	**8.99**
2-Methylnaphthalene/Dibe	3.61	-0.02	3.60	-0.01	5462390	249750	8.42	8.69	8.42	8.69	**8.69**
Acenaphthene	3.91	-0.02	3.89	-0.01	6990202	113151	8.57	9.03	8.57	9.03	**9.03**
Fluorene	4.20	-0.02	4.18	-0.02	5556562	143428	0.8610	0.8850	0.861	0.885	**0.885**
Phenanthrene	4.75	-0.02	4.73	-0.01	4851538	343738	0.9120	0.9340	0.912	0.934	**0.934**
Anthracene	5.26	-0.02	5.24	-0.02	8339740	703630	0.9160	0.9380	0.916	0.938	**0.938**
Fluoranthene	5.84	-0.03	5.82	-0.03	3878515	88489	0.8170	0.9080	0.817	0.908	**0.908**
Pyrene	6.18	-0.03	6.16	-0.02	21871760	75162	0.8450	0.9680	0.845	0.968	**0.968**
Benz(a)anthracene	7.37	-0.02	7.34	-0.03	13485757	238359	0.9370	0.9780	0.937	0.978	**0.978**
Chrysene	7.54	-0.03	7.52	-0.04	8871731	373608	0.9510	0.9830	0.951	0.983	**0.983**
Benzo(b)fluoranthene	8.42	-0.03	8.40	-0.02	3114993	277498	0.9680	1.02	0.968	1.02	**1.02**
Benzo(k)fluoranthene	8.74	-0.03	8.73	-0.03	15915111	167125	0.9800	0.9920	0.980	0.992	**0.992**
Benzo(a)pyrene	9.08	-0.03	9.06	-0.03	11508900	239546	0.9640	0.9610	0.964	0.961	**0.964**
Dibenz(a,h)anthracene	9.66	-0.03	9.64	-0.02	4266312	45458	0.7870	0.8260	0.787	0.826	**0.826**
Benzo(g,h,i)perylene	9.99	-0.03	9.97	-0.03	9536768	84311	1.09 CCV	0.9450	1.09	0.945	**1.09**
Indeno(1,2,3-cd)pyrene	10.19	-0.03	10.17	-0.03	12669004	193610	0.8970	0.9140	0.897	0.914	**0.914**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\032907PA\03290030.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290030.D\03290030c.d			**Vial:**	53
Acqu Date:	03/30/2007 03:41	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0703403-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.00 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

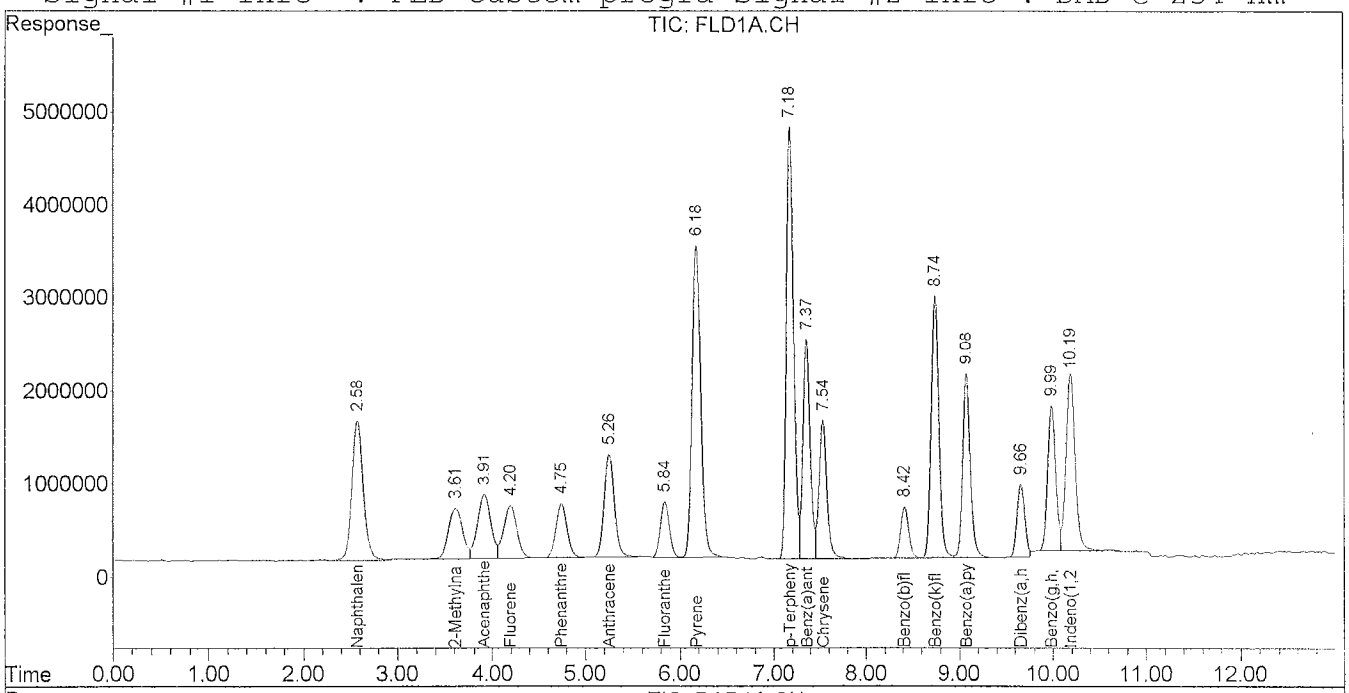
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

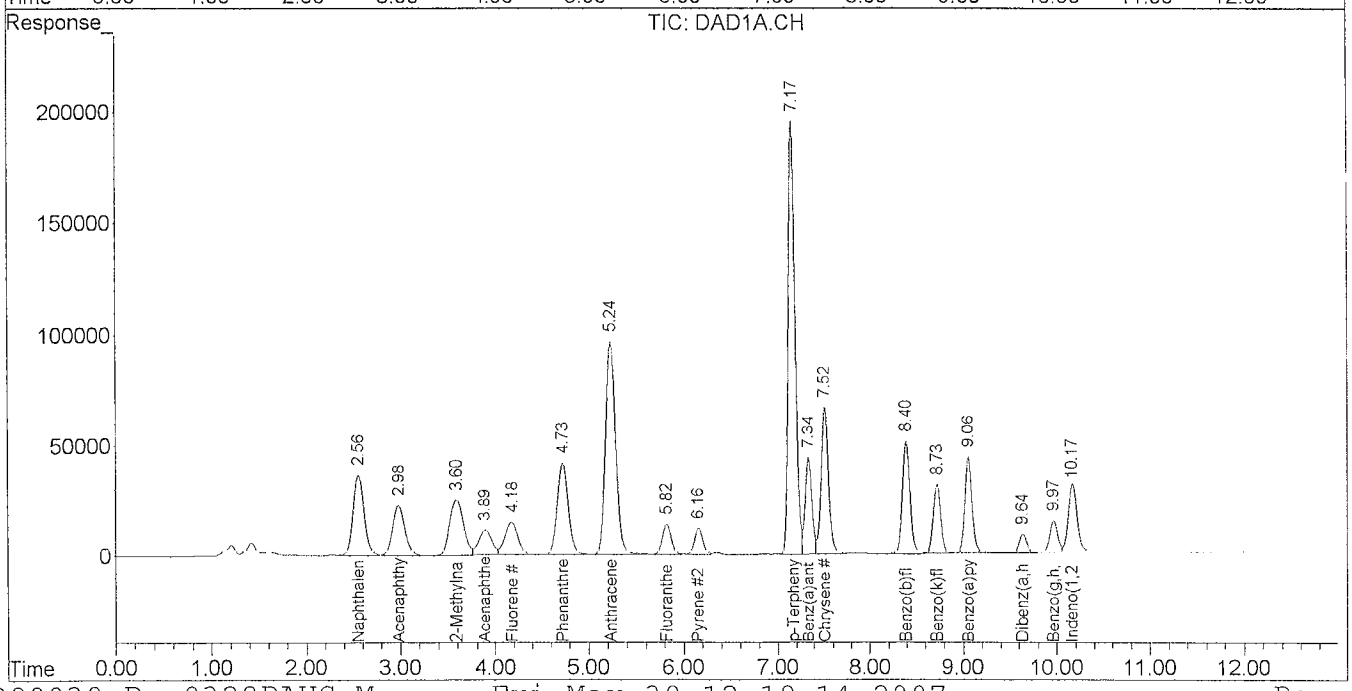
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290030.D\FLD1A.CH Vial: 53
Signal #2 : J:\LC06\DATA\032907PA\03290030.D\DAD1A.CH
Acq On : 30-Mar-2007, 03:41:28 Operator: Paul
Sample : KWG0703403DLCS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz(a)anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo(b)fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo(k)fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo(a)pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Benzo(g,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Indeno(1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D\03280030c.d

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Benzo(b)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(k)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\LC06\METHODS\0328PAHS.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

pm032907

0328PAHs aka CAL6170
Calibration Last Updated: Wed Mar 28 22:27:12 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) Naphthalene ( )
Ret. Time 2.58 min., Extract & Integrate from 2.53 to 2.63 min.

Lvl ID Conc (ug/mL) Response

CCV	10.000	-1
1	1.000	1616285
2	2.000	3117249
3	5.000	8051900
4	10.000	15618134
5	20.000	32030393
6	50.000	74936469
7	100.000	142915511

Curve Fit: Avg. RF

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2) Acenaphthylene ( )
Ret. Time 3.16 min., Extract & Integrate from 3.16 to 3.16 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

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3) 2-Methylnaphthalene ( )
Ret. Time 3.63 min., Extract & Integrate from 3.58 to 3.68 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	675582
2		2.000	1326316
3		5.000	3193656
4		10.000	6393320
5		20.000	13036535
6		50.000	31616711
7		100.000	64106201

pm032407

Curve Fit: Avg. RF

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4) Acenaphthene ( )
Ret. Time 3.93 min., Extract & Integrate from 3.87 to 3.99 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	849080
2		2.000	1645409
3		5.000	4012450
4		10.000	8107649
5		20.000	16380514
6		50.000	40017661
7		100.000	80863233

Curve Fit: Avg. RF

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5) Fluorene ( )
Ret. Time 4.21 min., Extract & Integrate from 4.16 to 4.26 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	655851
2		0.200	1305788
3		0.500	3165885
4		1.000	6455183
5		2.000	13037373
6		5.000	31796156
7		10.000	64296595

Curve Fit: Avg. RF

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6) Phenanthrene ( )
Ret. Time 4.76 min., Extract & Integrate from 4.71 to 4.81 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	513510
2		0.200	1059577
3		0.500	2662862
4		1.000	5391539
5		2.000	10768593
6		5.000	26562195
7		10.000	54003564

Curve Fit: Avg. RF

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7) Anthracene ( )
Ret. Time 5.27 min., Extract & Integrate from 5.21 to 5.33 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	896935
2		0.200	1904593
3		0.500	4673208
4		1.000	8912960
5		2.000	18057968
6		5.000	44482232
7		10.000	90242988

PM 032907

Curve Fit: Avg. RF

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8) Fluoranthene ( )
Ret. Time 5.85 min., Extract & Integrate from 5.80 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	498389
2		0.200	1100137
3		0.500	2306705
4		1.000	4619076
5		2.000	8974769
6		5.000	22188195

7	10.000	45749539

Curve Fit: Avg. RF

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9) Pyrene ( )

Ret. Time 6.19 min., Extract & Integrate from 6.14 to 6.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	2561788
2		0.200	5141694
3		0.500	12770395
4		1.000	26079628
5		2.000	52604582
6		5.000	129344510
7		10.000	261327859

Curve Fit: Avg. RF

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10) p-Terphenyl ( )

Ret. Time 7.19 min., Extract & Integrate from 7.13 to 7.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	2971418
2		2.000	6004467
3		5.000	14350937
4		10.000	29220571
5		20.000	58778300
6		50.000	145291735
7		100.000	295250656

Curve Fit: Avg. RF

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11) Benz(a)anthracene ( )

Ret. Time 7.37 min., Extract & Integrate from 7.29 to 7.45 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1453538
2		0.200	2842764
3		0.500	7127365
4		1.000	14376186
5		2.000	28969567
6		5.000	71452786
7		10.000	145456474

pm032907

Curve Fit: Avg. RF

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12) Chrysene ( )

Ret. Time 7.55 min., Extract & Integrate from 7.49 to 7.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	890676

2	0.200	1827784
3	0.500	4671564
4	1.000	9470153
5	2.000	18934947
6	5.000	47147677
7	10.000	95127195

Curve Fit: Avg. RF

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13) Benzo(b)fluoranthene ( )
Ret. Time 8.42 min., Extract & Integrate from 8.34 to 8.50 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	329575
2		0.200	656278
3		0.500	1585127
4		1.000	3153643
5		2.000	6444928
6		5.000	15785292
7		10.000	32512842

Curve Fit: Avg. RF

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14) Benzo(k)fluoranthene ( )
Ret. Time 8.74 min., Extract & Integrate from 8.66 to 8.82 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1627349
2		0.200	3275877
3		0.500	8030146
4		1.000	16291932
5		2.000	32802216
6		5.000	80609520
7		10.000	161243738

PM 032907

Curve Fit: Avg. RF

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15) Benzo(a)pyrene ( )
Ret. Time 9.08 min., Extract & Integrate from 8.99 to 9.17 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1172902
2		0.200	2376819
3		0.500	5951067
4		1.000	12087980
5		2.000	24120811
6		5.000	59849384
7		10.000	119668076

Curve Fit: Avg. RF

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16) Dibenz(a,h)anthracene ( )

Ret. Time 9.65 min., Extract & Integrate from 9.56 to 9.74 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	528930
2		0.200	1070467
3		0.500	2690421
4		1.000	5454531
5		2.000	10970124
6		5.000	27193125
7		10.000	55313300

Curve Fit: Avg. RF

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17) Benzo(g,h,i)perylene ( )
Ret. Time 9.98 min., Extract & Integrate from 9.89 to 10.07 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	774212
2		0.200	1628378
3		0.500	4330750
4		1.000	9022809
5		2.000	19289508
6		5.000	43105690
7		10.000	94801391

Curve Fit: Avg. RF

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18) Indeno(1,2,3-cd)pyrene ( )
Ret. Time 10.18 min., Extract & Integrate from 10.07 to 10.29 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1409282
2		0.200	2839793
3		0.500	6922934
4		1.000	14068661
5		2.000	28429576
6		5.000	70621147
7		10.000	143425917

PM 032907

Curve Fit: Avg. RF

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19) Signal #2 ( )
Ret. Time 0.00 min., Extract & Integrate from 0.00 to 0.00 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

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20) Naphthalene #2 ( )
Ret. Time 2.56 min., Extract & Integrate from 2.51 to 2.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	35239
2		2.000	73393
3		5.000	175786
4		10.000	362793
5		20.000	733964
6		50.000	1816789
7		100.000	3694782

Curve Fit: Avg. RF

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21) Acenaphthylene #2 ( )
Ret. Time 2.98 min., Extract & Integrate from 2.92 to 3.04 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	21595
2		2.000	44570
3		5.000	115264
4		10.000	233229
5		20.000	478156
6		50.000	1181484
7		100.000	2406259

Curve Fit: Avg. RF

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22) 2-Methylnaphthalene #2 ( )
Ret. Time 3.60 min., Extract & Integrate from 3.54 to 3.66 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	27178
2		2.000	56062
3		5.000	140130
4		10.000	290014
5		20.000	593155
6		50.000	1465419
7		100.000	2994696

pm032407

Curve Fit: Avg. RF

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23) Acenaphthene #2 ( )
Ret. Time 3.90 min., Extract & Integrate from 3.85 to 3.95 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	11308
2		2.000	22613
3		5.000	58571

4	10.000	131301
5	20.000	267348
6	50.000	673607
7	100.000	1343628

Curve Fit: Avg. RF

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24) Fluorene #2 ( )
Ret. Time 4.18 min., Extract & Integrate from 4.12 to 4.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	15757
2		0.200	28386
3		0.500	75046
4		1.000	171038
5		2.000	346458
6		5.000	842802
7		10.000	1726074

Curve Fit: Avg. RF

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25) Phenanthrene #2 ( )
Ret. Time 4.74 min., Extract & Integrate from 4.69 to 4.79 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	33664
2		0.200	74146
3		0.500	181890
4		1.000	374224
5		2.000	759025
6		5.000	1868551
7		10.000	3774932

pm032407

Curve Fit: Avg. RF

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26) Anthracene #2 ( )
Ret. Time 5.25 min., Extract & Integrate from 5.20 to 5.30 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	76159
2		0.200	152285
3		0.500	380578
4		1.000	774610
5		2.000	1543469
6		5.000	3647690
7		10.000	6894749

Curve Fit: Avg. RF

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27) Fluoranthene #2 ( )
Ret. Time 5.84 min., Extract & Integrate from 5.78 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	9164
2		0.200	17621
3		0.500	46619
4		1.000	99801
5		2.000	207035
6		5.000	510608
7		10.000	1039098

Curve Fit: Avg. RF

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28) Pyrene #2 ( )
Ret. Time 6.17 min., Extract & Integrate from 6.12 to 6.22 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	7014
2		0.200	14671
3		0.500	37542
4		1.000	79224
5		2.000	164170
6		5.000	406326
7		10.000	824890

Curve Fit: Avg. RF

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29) p-Terphenyl #2 ( )
Ret. Time 7.17 min., Extract & Integrate from 7.11 to 7.23 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	114938
2		2.000	237213
3		5.000	573021
4		10.000	1165706
5		20.000	2350454
6		50.000	5768380
7		100.000	11673630

pm 032907

Curve Fit: Avg. RF

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30) Benz(a)anthracene #2 ( )
Ret. Time 7.36 min., Extract & Integrate from 7.28 to 7.44 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	22458
2		0.200	48797
3		0.500	122386
4		1.000	248426
5		2.000	496343
6		5.000	1238659
7		10.000	2482982

Curve Fit: Avg. RF

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31) Chrysene #2 ( )
Ret. Time 7.53 min., Extract & Integrate from 7.47 to 7.59 min.

Lvl ID	Conc (ug/mL)	Response
CCV	1.000	-1
1	0.100	35394
2	0.200	76066
3	0.500	189443
4	1.000	387238
5	2.000	777432
6	5.000	1930709
7	10.000	3862295

Curve Fit: Avg. RF

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32) Benzo(b)fluoranthene #2 ( )
Ret. Time 8.40 min., Extract & Integrate from 8.31 to 8.49 min.

Lvl ID	Conc (ug/mL)	Response
CCV	1.000	-1
1	0.100	27248
2	0.200	53458
3	0.500	134375
4	1.000	272534
5	2.000	552249
6	5.000	1367885
7	10.000	2767895

Curve Fit: Avg. RF

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33) Benzo(k)fluoranthene #2 ( )
Ret. Time 8.72 min., Extract & Integrate from 8.64 to 8.80 min.

Lvl ID	Conc (ug/mL)	Response
CCV	1.000	-1
1	0.100	16097
2	0.200	32788
3	0.500	83124
4	1.000	171306
5	2.000	345666
6	5.000	855438
7	10.000	1725568

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Curve Fit: Avg. RF

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34) Benzo(a)pyrene #2 ( )
Ret. Time 9.05 min., Extract & Integrate from 8.99 to 9.11 min.

Lvl ID	Conc (ug/mL)	Response
CCV	1.000	1
1	0.100	24039
2	0.200	48515
3	0.500	125020
4	1.000	251443
5	2.000	509324

6	5.000	1256720
7	10.000	2541208

Curve Fit: Avg. RF

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35) Dibenz(a,h)anthracene #2 ( )
Ret. Time 9.62 min., Extract & Integrate from 9.53 to 9.71 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	5590
2		0.200	11144
3		0.500	27868
4		1.000	54054
5		2.000	110410
6		5.000	270343
7		10.000	547025

Curve Fit: Avg. RF

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36) Benzo(g,h,i)perylene #2 ( )
Ret. Time 9.96 min., Extract & Integrate from 9.87 to 10.05 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	8022
2		0.200	17914
3		0.500	45055
4		1.000	91202
5		2.000	183728
6		5.000	449845
7		10.000	913046

Curve Fit: Avg. RF

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37) Indeno(1,2,3-cd)pyrene #2 ( )
Ret. Time 10.16 min., Extract & Integrate from 10.07 to 10.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	20018
2		0.200	41262
3		0.500	104472
4		1.000	215803
5		2.000	431674
6		5.000	1080621
7		10.000	2189286

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Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Thu Mar 29 11:37:20 2007

PM032907

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:11 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.16	2971418	114938	1.010	0.987	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	1616285	35239	1.017	0.978	
2)	t	Acenaphthylene	0.00	2.98	0	21595	N.D.	0.946	#
3)	t	2-Methylnaphthal	3.62	3.60	675582	27178	1.033	0.958	
4)	t	Acenaphthene	3.92	3.90	849080	11308	1.034	0.930	
5)	t	Fluorene	4.20	4.18	655851	15757	0.101	0.099	
6)	t	Phenanthrene	4.76	4.73	513510	33664	0.097	0.092	
7)	t	Anthracene	5.25	5.24	896935	76159	0.098	0.099	
8)	t	Fluoranthene	5.84	5.82	498389	9164	0.103	0.096	
9)	t	Pyrene	6.18	6.16	2561788	7014	0.099	0.092	
11)	t	Benz(a)anthracen	7.36	7.34	1453538	22458	0.101	0.093	
12)	t	Chrysene	7.53	7.52	890676	35394	0.096	0.094	
13)	t	Benzo(b)fluorant	8.41	8.38	329575	27248	0.102	0.100	
14)	t	Benzo(k)fluorant	8.73	8.70	1627349	16097	0.100	0.096	
15)	t	Benzo(a)pyrene	9.06	9.04	1172902	24039	0.098	0.097	
16)	t	Dibenz(a,h)anthr	9.64	9.61	528930	5590	0.098	0.101	
17)	t	Benzo(g,h,i)pery	9.96	9.94	774212	8022	0.088	0.091	
18)	t	Indeno(1,2,3-cd)	10.16	10.14	1409282	20018	0.100	0.096	

PM 032907

MLK

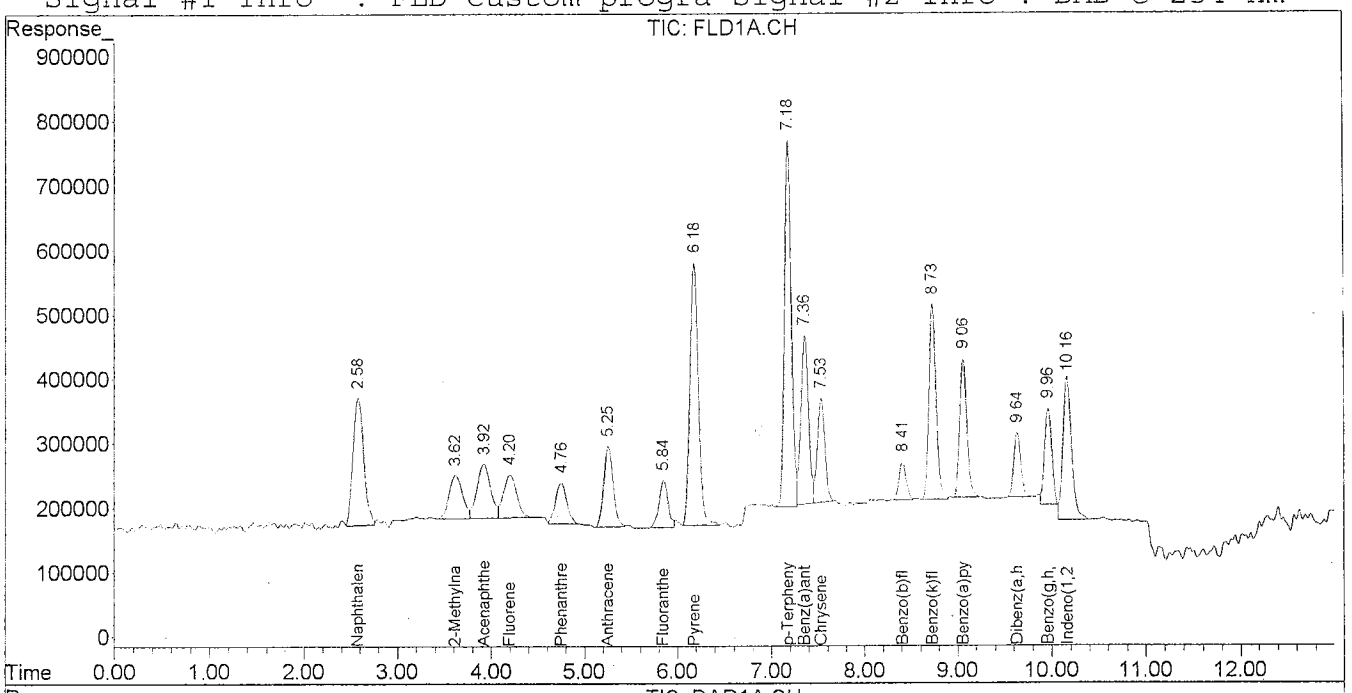
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

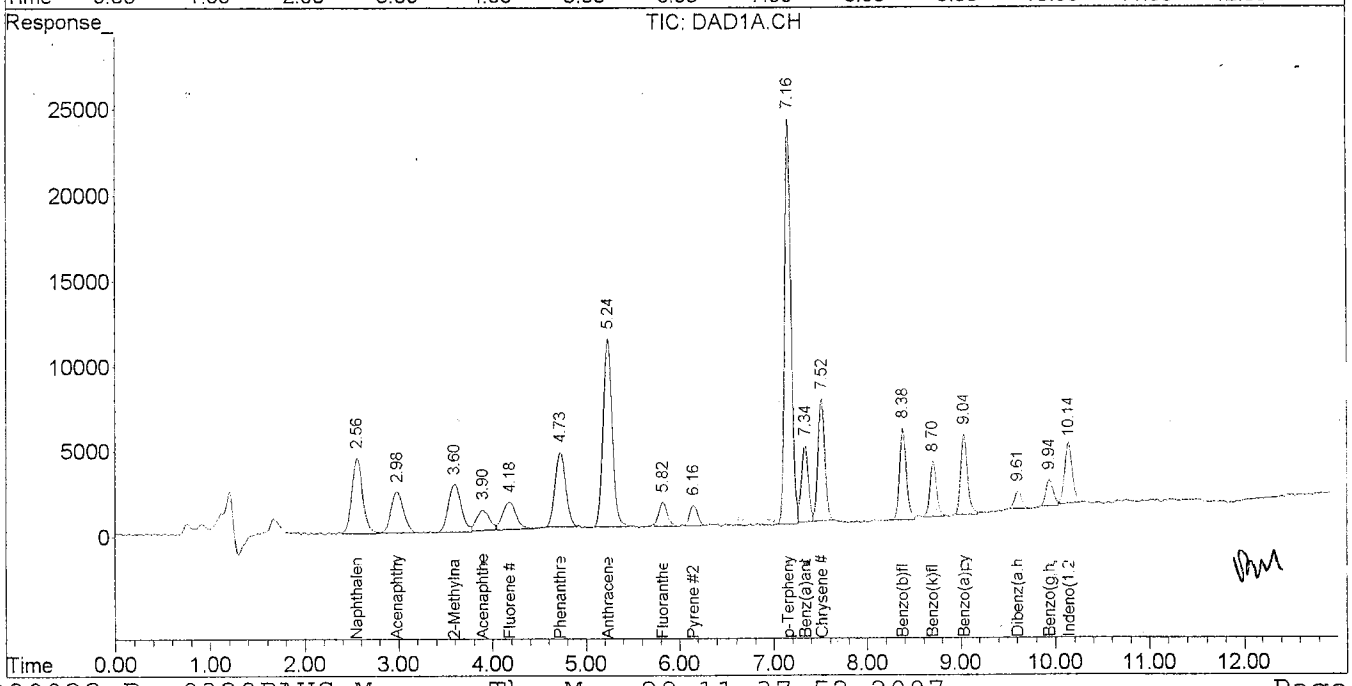
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.16	6004467	237213	2.042	2.037	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	3117249	73393	1.961	2.038	
2)	t	Acenaphthylene	0.00	2.99	0	44570	N.D.	1.952	#
3)	t	2-Methylnaphthal	3.62	3.60	1326316	56062	2.029	1.975	
4)	t	Acenaphthene	3.92	3.91	1645409	22613	2.005	1.859	
5)	t	Fluorene	4.20	4.19	1305788	28386	0.202	0.179	
6)	t	Phenanthrene	4.74	4.73	1059577	74146	0.200	0.203	
7)	t	Anthracene	5.25	5.24	1904593	152285	0.208	0.199	
8)	t	Fluoranthene	5.84	5.83	1100137	17621	0.227	0.185	
9)	t	Pyrene	6.18	6.16	5141694	14671	0.198	0.193	
11)	t	Benz(a)anthracen	7.36	7.35	2842764	48797	0.198	0.202	
12)	t	Chrysene	7.53	7.52	1827784	76066	0.197	0.201	
13)	t	Benzo(b)fluorant	8.41	8.39	656278	53458	0.204	0.197	
14)	t	Benzo(k)fluorant	8.73	8.72	3275877	32788	0.201	0.196	
15)	t	Benzo(a)pyrene	9.06	9.05	2376819	48515	0.199	0.196	
16)	t	Dibenz(a,h)anthr	9.64	9.63	1070467	11144	0.197	0.201	
17)	t	Benzo(g,h,i)pery	9.97	9.96	1628378	17914	0.185	0.202	
18)	t	Indeno(1,2,3-cd)	10.17	10.16	2839793	41262	0.202	0.197	

PM 032907

MG

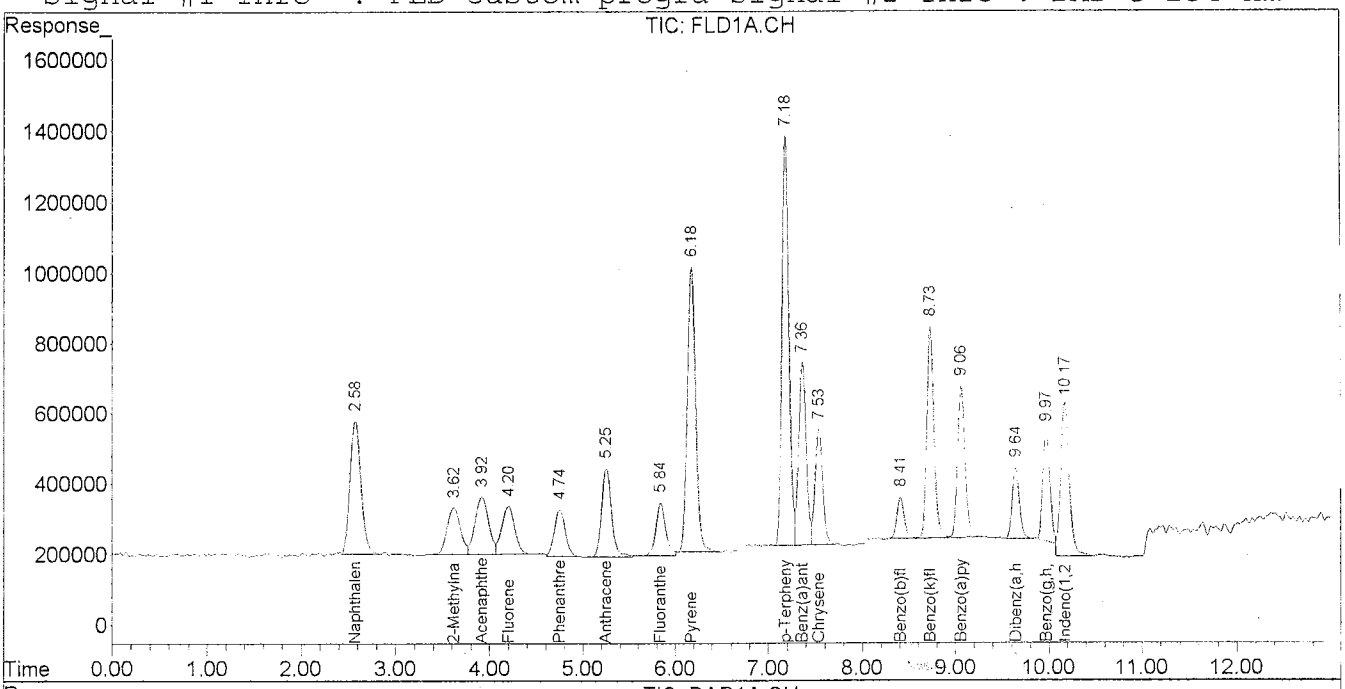
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

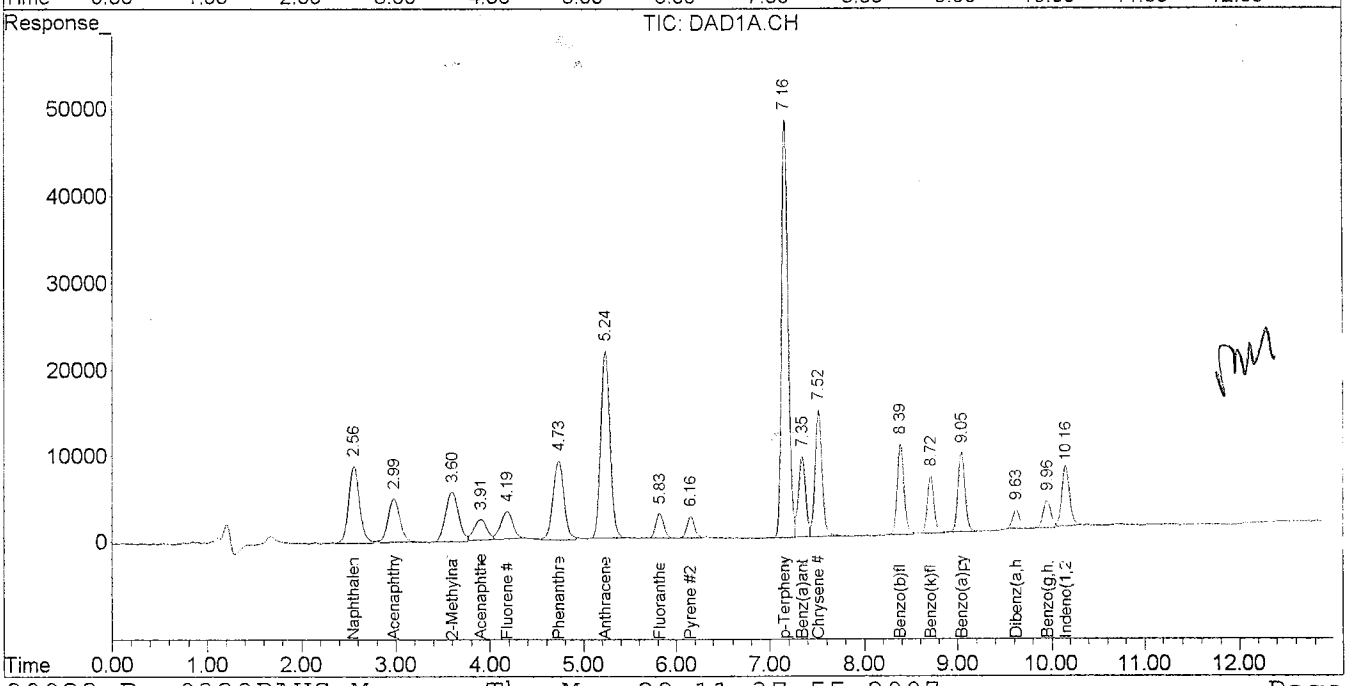
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.16	14350937	573021	4.880	4.921	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	8051900	175786	5.065	4.881	
2)	t	Acenaphthylene	0.00	2.99	0	115264	N.D.	5.048	#
3)	t	2-Methylnaphthal	3.62	3.60	3193656	140130	4.885	4.938	
4)	t	Acenaphthene	3.93	3.91	4012450	58571	4.888	4.815	
5)	t	Fluorene	4.20	4.19	3165885	75046	0.489	0.473	
6)	t	Phenanthrene	4.76	4.74	2662862	181890	0.502	0.498	
7)	t	Anthracene	5.26	5.24	4673208	380578	0.510	0.497	
8)	t	Fluoranthene	5.85	5.83	2306705	46619	0.477	0.489	
9)	t	Pyrene	6.18	6.16	12770395	37542	0.493	0.494	
11)	t	Benz(a)anthracen	7.37	7.35	7127365	122386	0.496	0.506	
12)	t	Chrysene	7.54	7.52	4671564	189443	0.504	0.501	
13)	t	Benzo(b)fluorant	8.41	8.39	1585127	134375	0.492	0.495	
14)	t	Benzo(k)fluorant	8.73	8.71	8030146	83124	0.492	0.498	
15)	t	Benzo(a)pyrene	9.07	9.04	5951067	125020	0.498	0.504	
16)	t	Dibenz(a,h)anthr	9.64	9.63	2690421	27868	0.496	0.504	
17)	t	Benzo(g,h,i)pery	9.98	9.95	4330750	45055	0.493	0.509	
18)	t	Indeno(1,2,3-cd)	10.18	10.15	6922934	104472	0.492	0.499	

PM 032907

MA

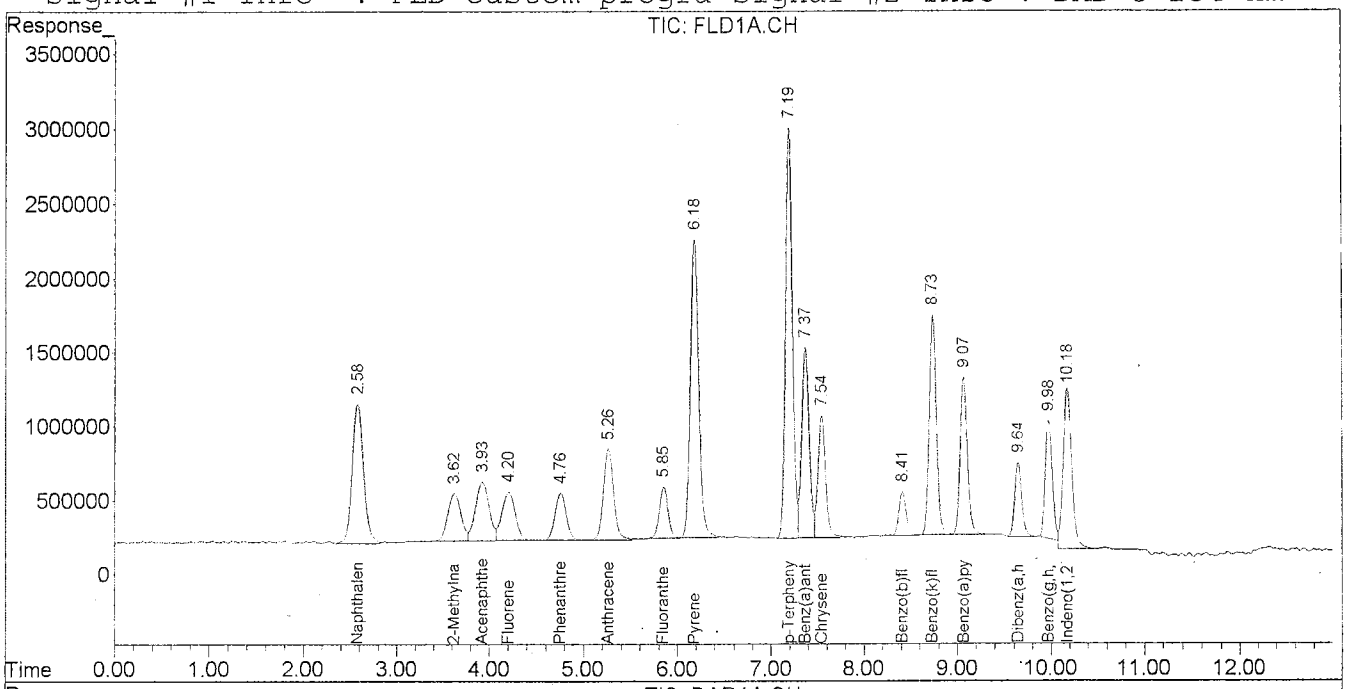
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

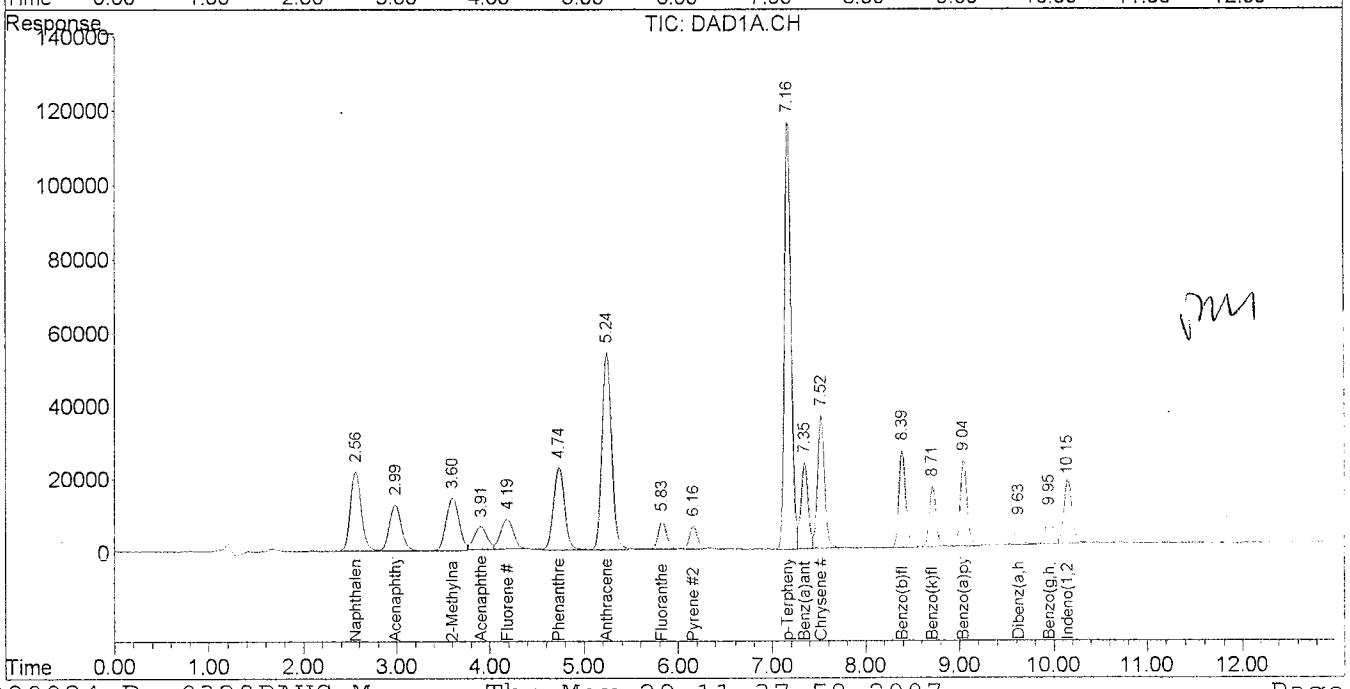
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.17	29220571	1165706	9.936	10.010	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	15618134	362793	9.824	10.074	
2)	t	Acenaphthylene	0.00	2.98	0	233229	N.D.	10.215	#
3)	t	2-Methylnaphthal	3.63	3.60	6393320	290014	9.780	10.219	
4)	t	Acenaphthene	3.93	3.90	8107649	131301	9.878	10.793	
5)	t	Fluorene	4.21	4.18	6455183	171038	0.996	1.077	
6)	t	Phenanthrene	4.76	4.74	5391539	374224	1.016	1.025	
7)	t	Anthracene	5.27	5.25	8912960	774610	0.973	1.011	
8)	t	Fluoranthene	5.85	5.84	4619076	99801	0.954	1.048	
9)	t	Pyrene	6.19	6.17	26079628	79224	1.006	1.043	
11)	t	Benz(a)anthracen	7.37	7.34	14376186	248426	1.000	1.027	
12)	t	Chrysene	7.55	7.53	9470153	387238	1.022	1.025	
13)	t	Benzo(b)fluorant	8.42	8.40	3153643	272534	0.978	1.004	
14)	t	Benzo(k)fluorant	8.74	8.72	16291932	171306	0.998	1.025	
15)	t	Benzo(a)pyrene	9.08	9.05	12087980	251443	1.012	1.015	
16)	t	Dibenz(a,h)anthr	9.65	9.62	5454531	54054	1.006	0.977	
17)	t	Benzo(g,h,i)pery	9.98	9.96	9022809	91202	1.026	1.029	
18)	t	Indeno(1,2,3-cd)	10.18	10.16	14068661	215803	0.999	1.031	

pm 032907

mk

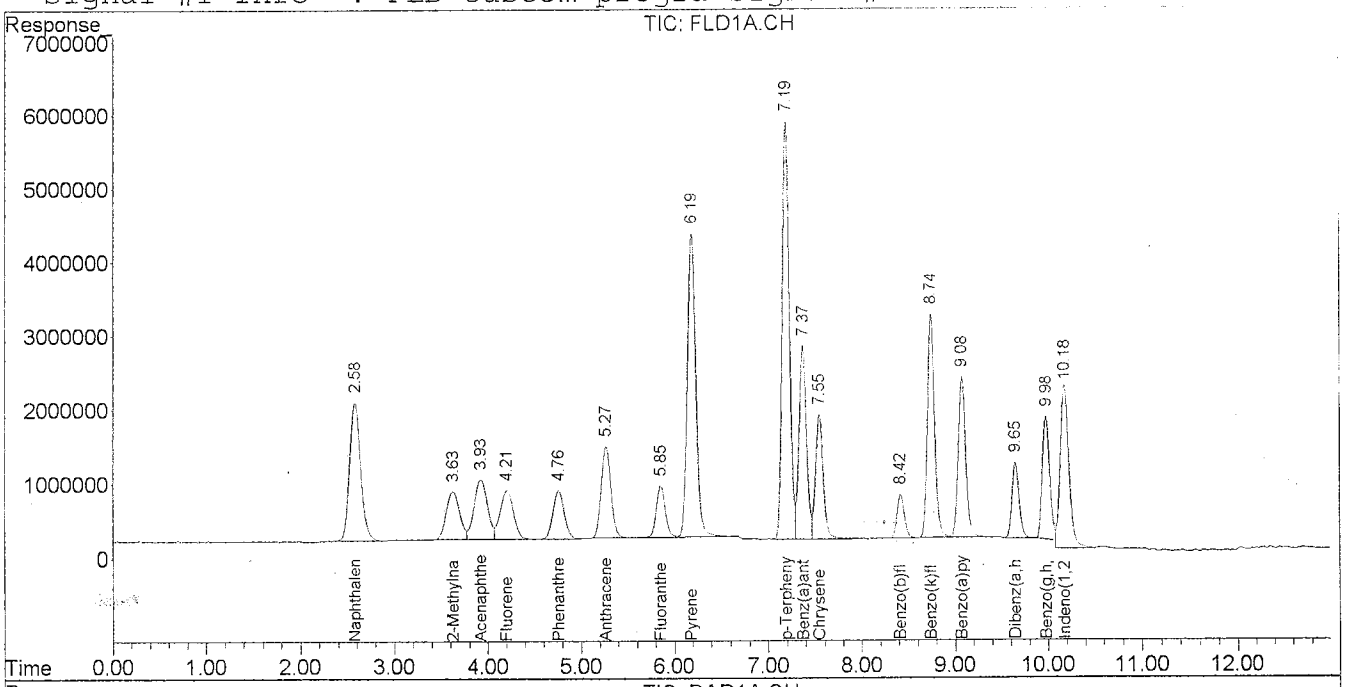
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

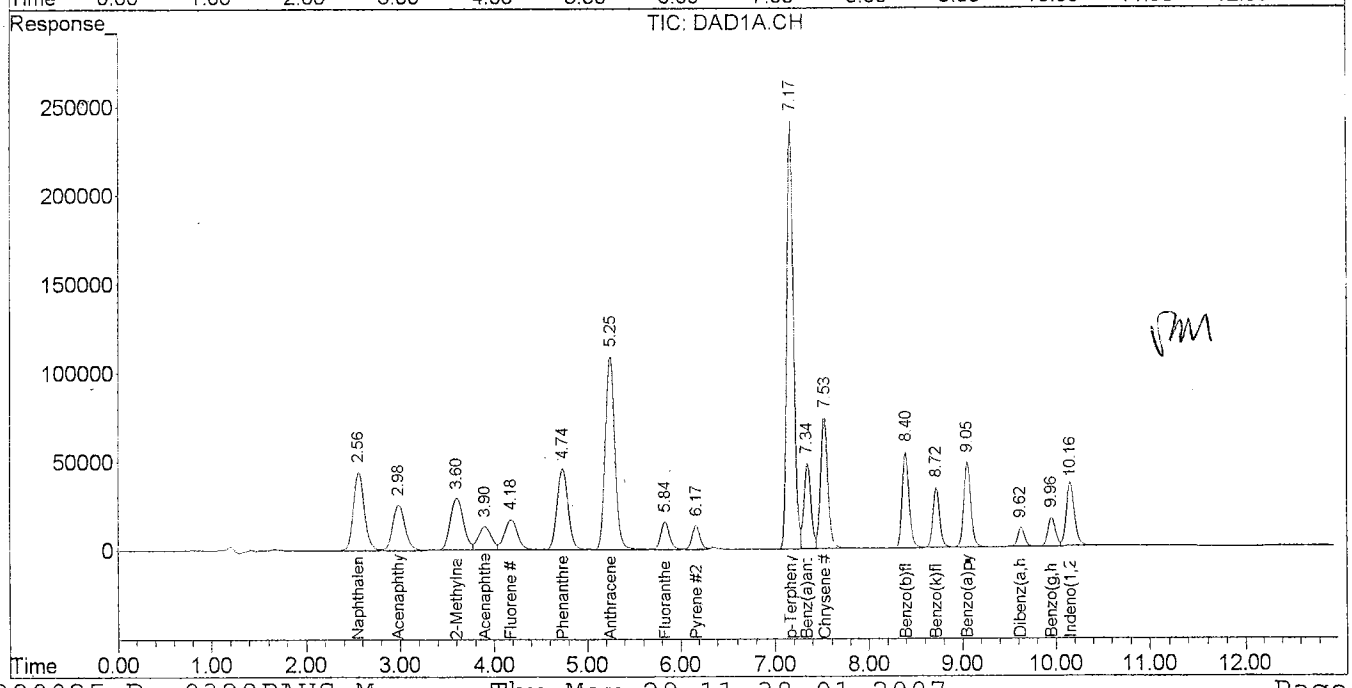
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:14 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.16	58778300	2350454	19.986	20.185	
		Target Compounds							
1)	t	Naphthalene	2.57	2.56	32030393	733964	20.148	20.380	
2)	t	Acenaphthylene	0.00	2.97	0	478156	N.D.	20.942	#
3)	t	2-Methylnaphthal	3.61	3.59	13036535	593155	19.942	20.901	
4)	t	Acenaphthene	3.92	3.89	16380514	267348	19.956	21.976	
5)	t	Fluorene	4.20	4.17	13037373	346458	2.012	2.182	
6)	t	Phenanthrene	4.75	4.73	10768593	759025	2.029	2.080	
7)	t	Anthracene	5.26	5.24	18057968	1543469	1.972	2.015	
8)	t	Fluoranthene	5.85	5.83	8974769	207035	1.854	2.173	
9)	t	Pyrene	6.18	6.16	52604582	164170	2.030	2.161	
11)	t	Benz(a)anthracen	7.37	7.35	28969567	496343	2.016	2.051	
12)	t	Chrysene	7.55	7.52	18934947	777432	2.044	2.058	
13)	t	Benzo(b)fluorant	8.42	8.40	6444928	552249	1.999	2.035	
14)	t	Benzo(k)fluorant	8.75	8.73	32802216	345666	2.010	2.069	
15)	t	Benzo(a)pyrene	9.08	9.05	24120811	509324	2.019	2.055	
16)	t	Dibenz(a,h)anthr	9.66	9.64	10970124	110410	2.023	1.996	
17)	t	Benzo(g,h,i)pery	9.99	9.96	19289508	183728	2.194	2.074	
18)	t	Indeno(1,2,3-cd)	10.19	10.16	28429576	431674	2.019	2.061	

PM 032907

MK

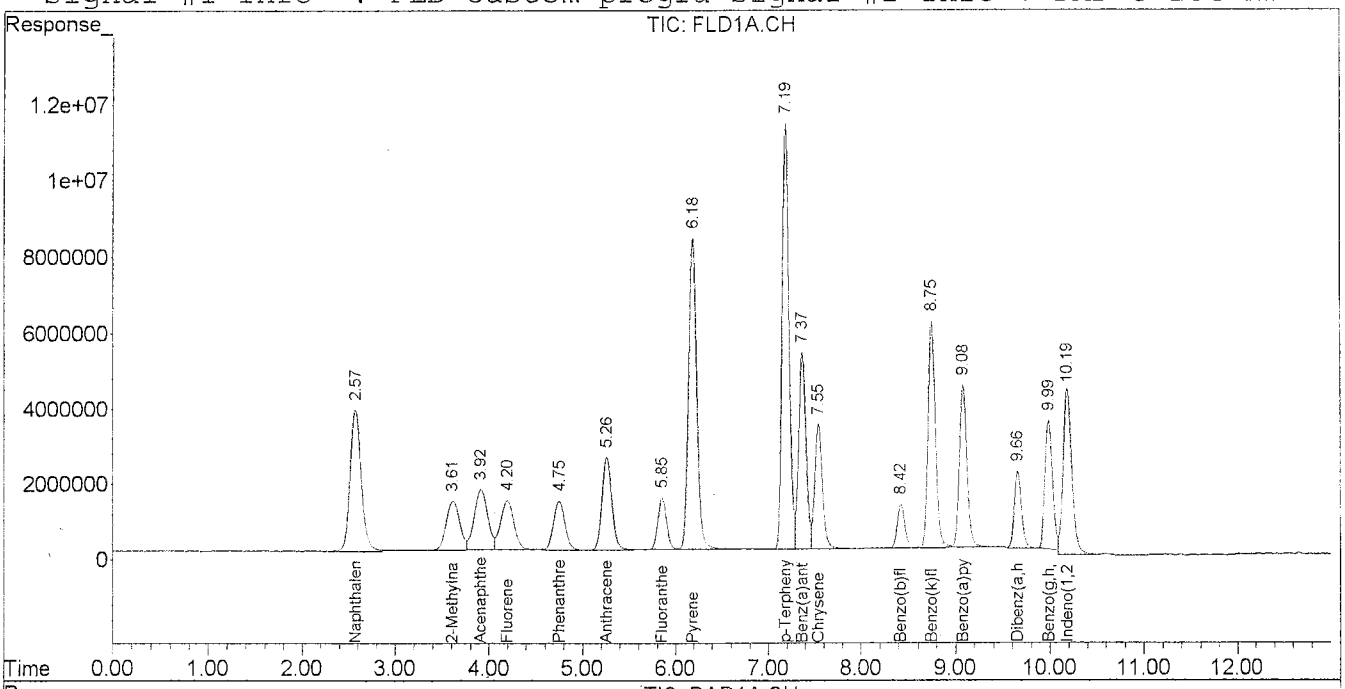
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

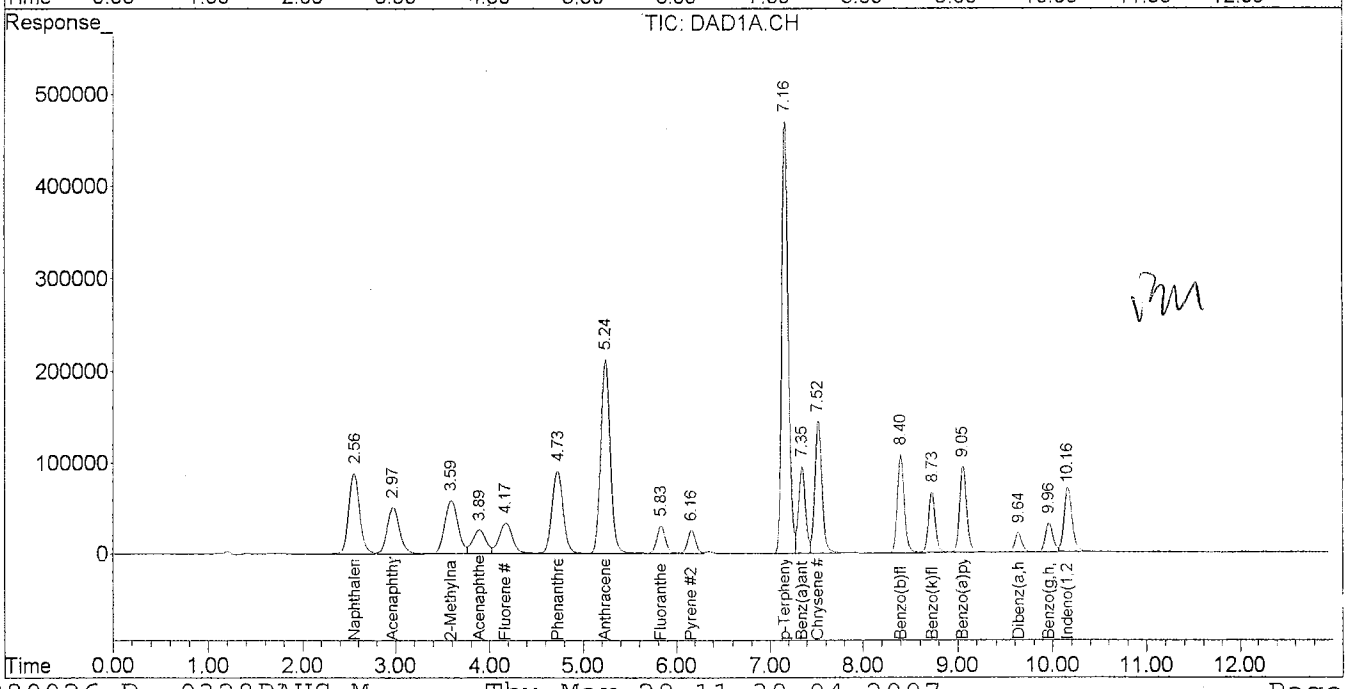
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-80 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
		System Monitoring Compounds						
10)	s	p-Terphenyl	7.18	7.17	145.3E6	5768380	49.403	49.536
		Target Compounds						
1)	t	Naphthalene	2.58	2.57	74936469	1816789	47.138	50.447
2)	t	Acenaphthylene	0.00	2.99	0	1181484	N.D.	51.745 #
3)	t	2-Methylnaphthal	3.62	3.61	31616711	1465419	48.364	51.638
4)	t	Acenaphthene	3.92	3.90	40017661	673607	48.754	55.371
5)	t	Fluorene	4.20	4.18	31796156	842802	4.908	5.308
6)	t	Phenanthrene	4.76	4.74	26562195	1868551	5.005	5.120
7)	t	Anthracene	5.26	5.25	44482232	3647690	4.858	4.761
8)	t	Fluoranthene	5.85	5.83	22188195	510608	4.583	5.360
9)	t	Pyrene	6.18	6.17	129.3E6	406326	5.004	5.348
11)	t	Benz(a)anthracen	7.37	7.35	71452786	1238659	4.971	5.119
12)	t	Chrysene	7.55	7.53	47147677	1930709	5.089	5.110
13)	t	Benzo(b)fluorant	8.42	8.39	15785292	1367885	4.895	5.039
14)	t	Benzo(k)fluorant	8.74	8.73	80609520	855438	4.951	5.121
15)	t	Benzo(a)pyrene	9.07	9.06	59849384	1256720	5.016	5.071
16)	t	Dibenz(a,h)anthr	9.64	9.63	27193125	270343	5.043	4.887
17)	t	Benzo(g,h,i)pery	9.97	9.95	43105690	449845	4.988	5.078
18)	t	Indeno(1,2,3-cd)	10.17	10.15	70621147	1080621	5.014	5.160

PM 032907

MA

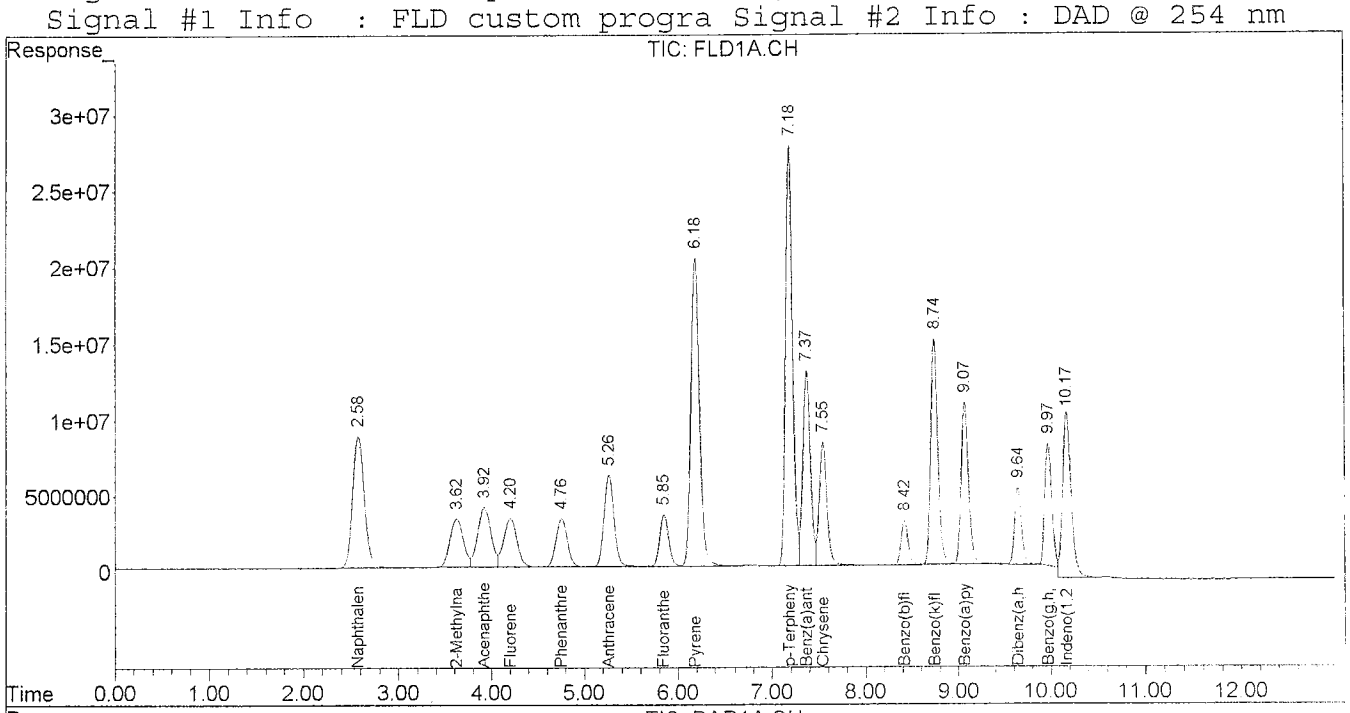
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

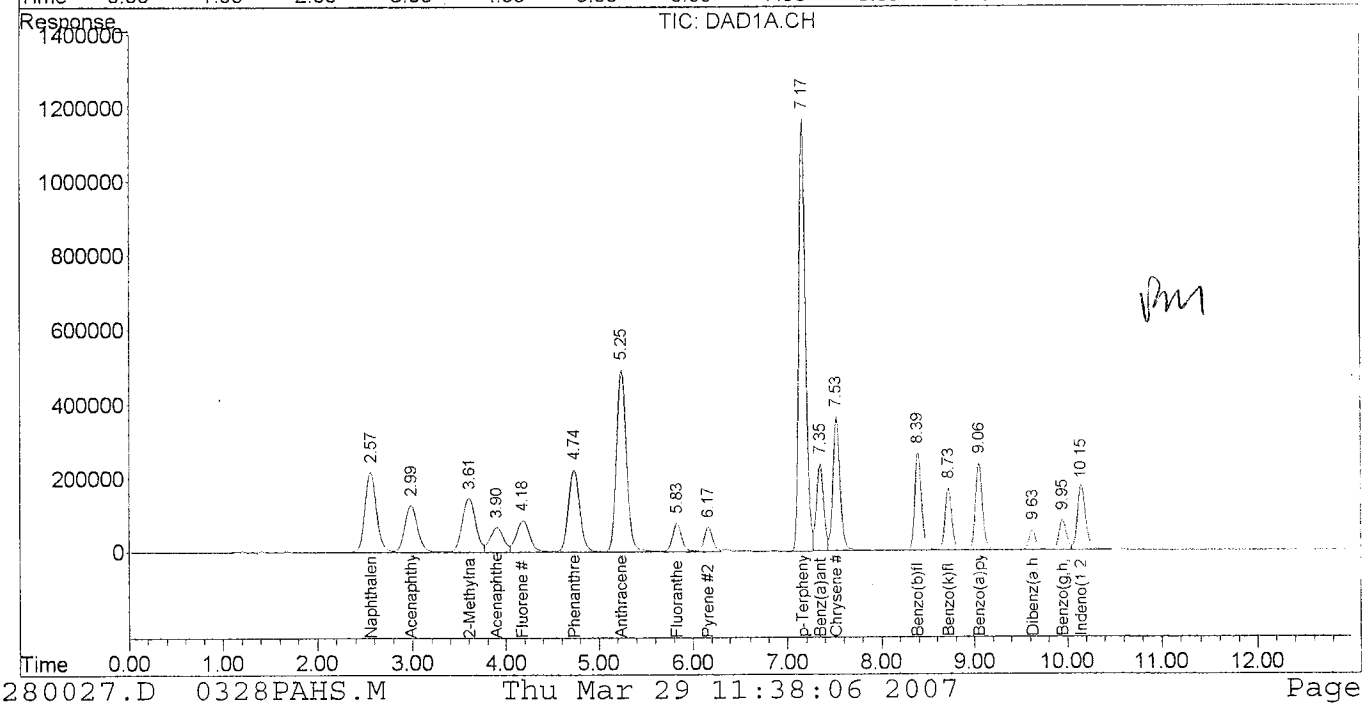
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-80 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.17	7.16	295.3E6	11673630	100.593	100.403	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	142.9E6	3694782	90.765	102.440	
2)	t	Acenaphthylene	0.00	2.98	0	2406259	N.D.	104.777	#
3)	t	2-Methylnaphthal	3.62	3.60	64106201	2994696	98.601	104.953	
4)	t	Acenaphthene	3.92	3.90	80863233	1343628	98.927	108.505	
5)	t	Fluorene	4.21	4.18	64296595	1726074	9.955	10.761	
6)	t	Phenanthrene	4.76	4.73	54003564	3774932	10.174	10.302	
7)	t	Anthracene	5.26	5.24	90242988	6894749	9.903	9.072	
8)	t	Fluoranthene	5.85	5.82	45749539	1039098	9.584	10.779	
9)	t	Pyrene	6.18	6.17	261.3E6	824890	10.108	10.733	
11)	t	Benz(a)anthracen	7.37	7.34	145.5E6	2482982	10.130	10.220	
12)	t	Chrysene	7.54	7.52	95127195	3862295	10.237	10.185	
13)	t	Benzo(b)fluorant	8.42	8.40	32512842	2767895	10.118	10.184	
14)	t	Benzo(k)fluorant	8.74	8.72	161.2E6	1725568	9.920	10.288	
15)	t	Benzo(a)pyrene	9.08	9.05	119.7E6	2541208	10.023	10.230	
16)	t	Dibenz(a,h)anthr	9.65	9.62	55313300	547025	10.243	9.925	
17)	t	Benzo(g,h,i)pery	9.98	9.96	94801391	913046	10.974	10.279	
18)	t	Indeno(1,2,3-cd)	10.18	10.16	143.4E6	2189286	10.179	10.399	

PM 032907
MMa

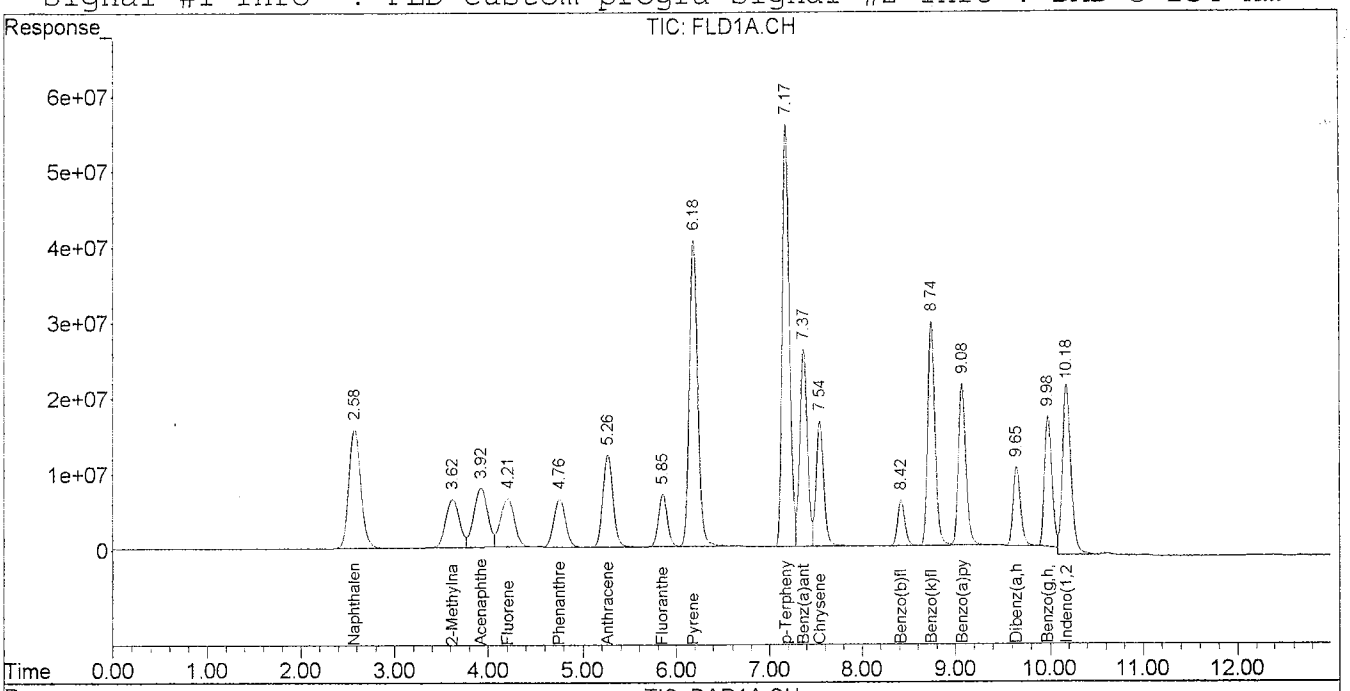
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

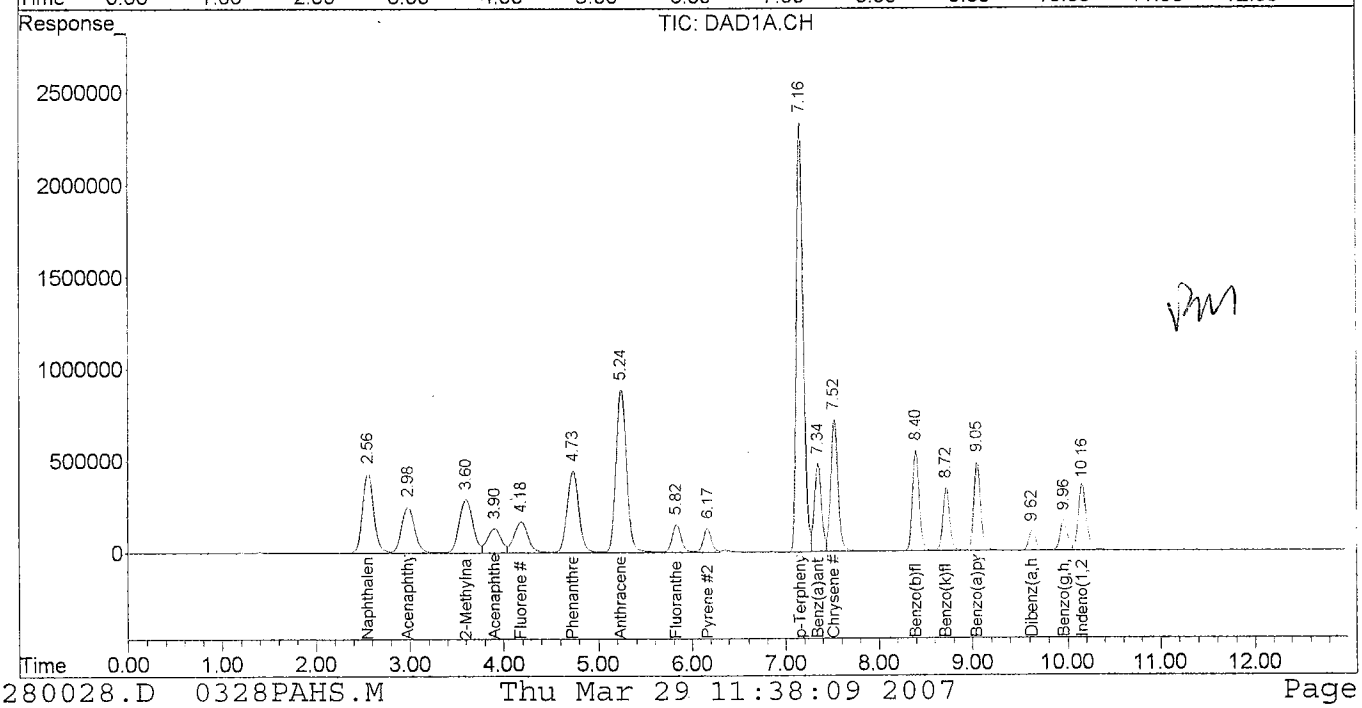
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51:18 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	0.00	0.00	0	0	N.D.	N.D.	
		Target Compounds							
1)	t	Naphthalene	2.57	2.55	15613155	349828	10.048	9.666	
2)	t	Acenaphthylene	0.00	2.98	0	236722	N.D.	10.238	#
3)	t	2-Methylnaphthal	3.62	3.59	6289944	290383	9.694	10.105	
4)	t	Acenaphthene	3.92	3.90	8097489	132922	9.922	10.605	
5)	t	Fluorene	4.20	4.18	6382965	172630	0.989	1.065	
6)	t	Phenanthrene	4.76	4.74	5455013	383185	1.025	1.041	
7)	t	Anthracene	5.27	5.25	9009446	780460	0.990	1.041	
8)	t	Fluoranthene	5.85	5.83	4515083	94550	0.951	0.970	
9)	t	Pyrene	6.19	6.17	25445981	79730	0.983	1.027	
11)	t	Benz(a)anthracen	7.38	7.35	13768617	235418	0.957	0.966	
12)	t	Chrysene	7.55	7.53	9112870	376550	0.977	0.990	
13)	t	Benzo(b)fluorant	8.42	8.41	3222467	277265	1.001	1.017	
14)	t	Benzo(k)fluorant	8.75	8.73	16510612	174111	1.017	1.034	
15)	t	Benzo(a)pyrene	9.08	9.06	11993613	252748	1.004	1.014	
16)	t	Dibenz(a,h)anthr	9.66	9.63	6168325	61443	1.138	1.116	
17)	t	Benzo(g,h,i)pery	9.99	9.97	9917288	95106	1.132	1.066	
18)	t	Indeno(1,2,3-cd)	10.19	10.17	13338604	204710	0.944	0.967	

PM 032907
MA

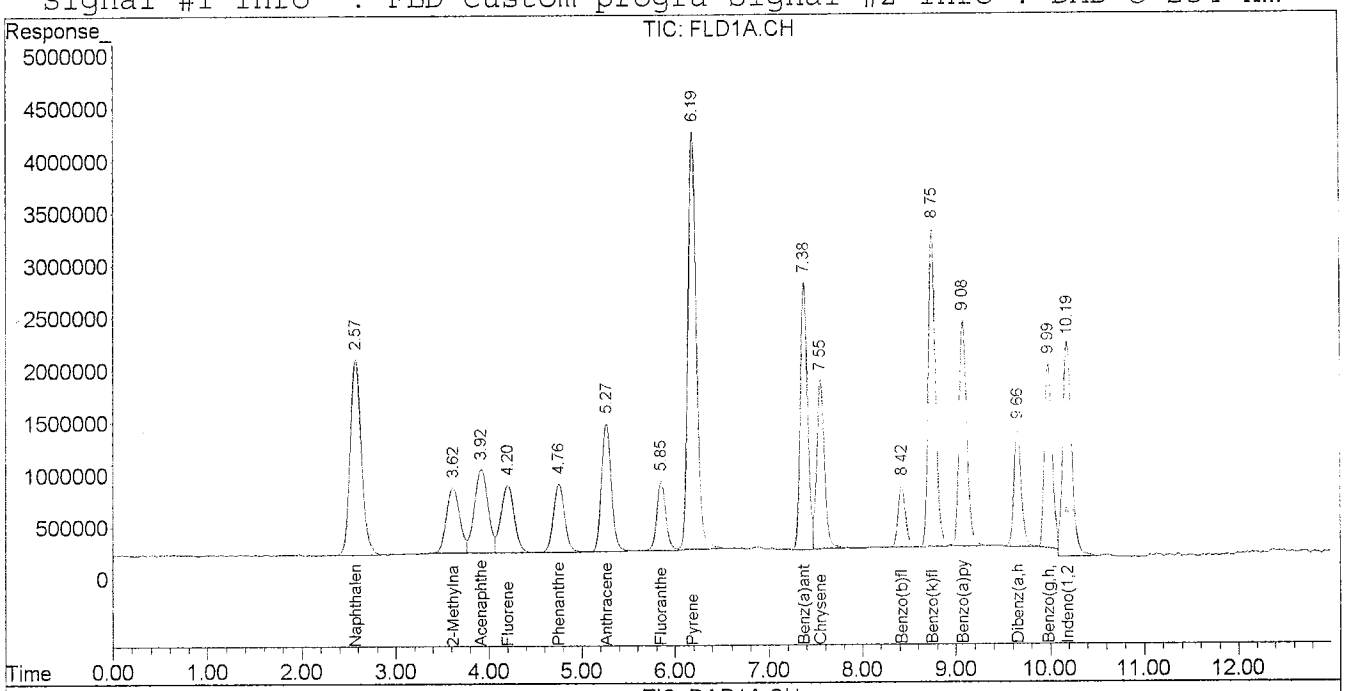
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

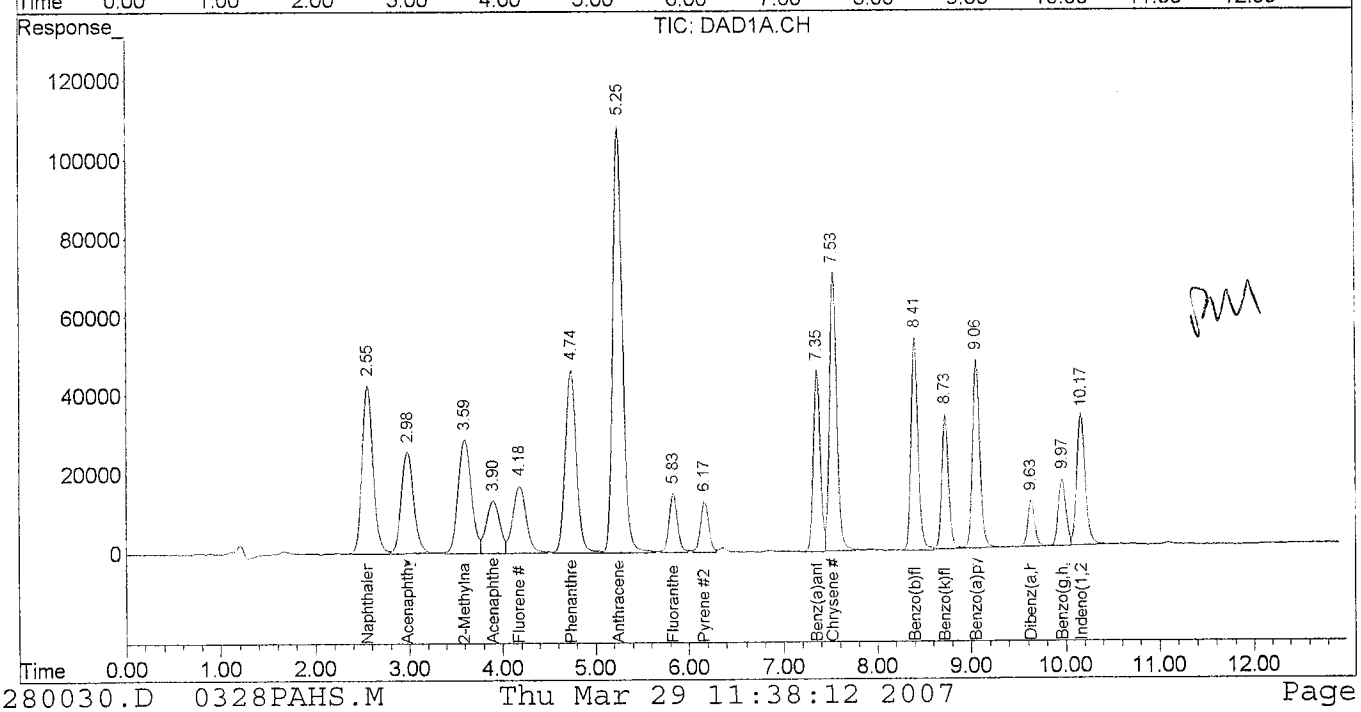
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D\03290012C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	36800	2	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23600	2	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12700	1	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	164000	1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	374000	2	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	777000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	98200	1	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79500	2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	392000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	275000	1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	169000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	251000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	55700	1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	90700	2	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	216000	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290012.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	9.9	2940000	2920000	-1	NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	809000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6400000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9060000	0	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	4750000	4600000	-3	NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24200000	-6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14200000	-1	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9300000	0	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	0.99	3220000	3190000	-1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16300000	0	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.98	5420000	5300000	-2	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20 *	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14100000	0	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\032907PA\03290012.D
Lab ID: KWG0704189-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:32
Date Quantitated: 03/29/2007 21:32
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: VR 4/2/07

Secondary Review: AMG

Exception Report

Data File: J:\LC06\DATA\032907PA\03290012.D\03290012C.D
Lab ID: KWG0704189-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:32
Date Quantitated: 03/29/2007 21:32
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: m 4/2/07

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290012.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290012.D\03290012c.d			**Vial:**	14
Acqu Date:	03/29/2007 20:32	**Quant Date:**	03/29/2007 21:32	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-1				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	7.16	29195279	1176826	9.94	10.12			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.56	15182273	367971	9.77	10.17			
Acenaphthylene		2.99	0	236191	0.0000	10.22			
2-Methylnaphthalene/Dibe	3.63	3.60	6436548	293756	9.92	10.22			
Acenaphthene	3.93	3.91	8094789	126942	9.92	10.13			
Fluorene	4.20	4.19	6398797	163798	0.9910	1.01			
Phenanthrene	4.75	4.74	5312672	374493	0.9980	1.02			
Anthracene	5.26	5.23	9061669	776511	0.9960	1.04			
Fluoranthene	5.85	5.83	4595765	98194	0.9680	1.01			
Pyrene	6.18	6.16	24244367	79452	0.9360	1.02			
Benz(a)anthracene	7.37	7.35	14182834	251153	0.9860	1.03			
Chrysene	7.54	7.52	9304746	391642	0.9980	1.03			
Benzo(b)fluoranthene	8.41	8.39	3193282	274617	0.9920	1.01			
Benzo(k)fluoranthene	8.74	8.71	16269045	169026	1.00	1.00			
Benzo(a)pyrene	9.07	9.04	12106942	251354	1.01	1.01			
Dibenz(a,h)anthracene	9.65	9.63	5303236	55666	0.9790	1.01			
Benzo(g,h,i)perylene	9.98	9.95	10502631	90682	1.20	1.02			
Indeno(1,2,3-cd)pyrene	10.17	10.15	14126031	216352	1.00	1.02			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

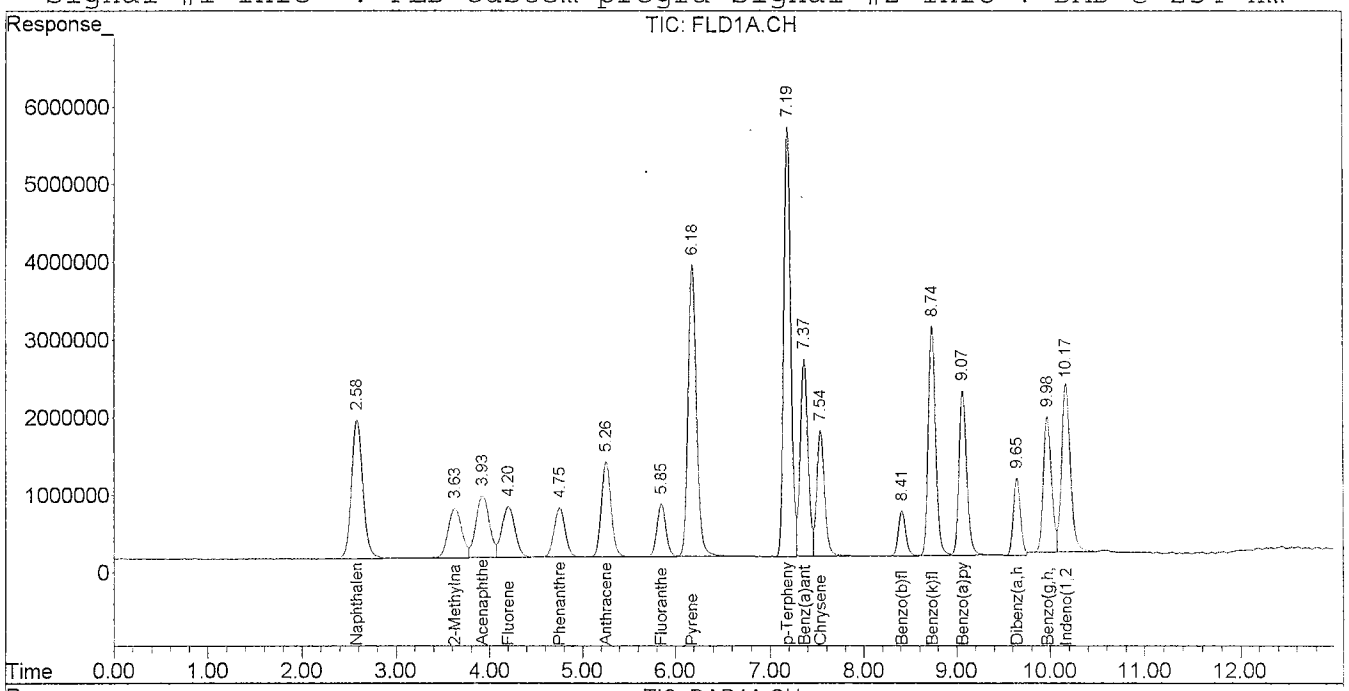
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

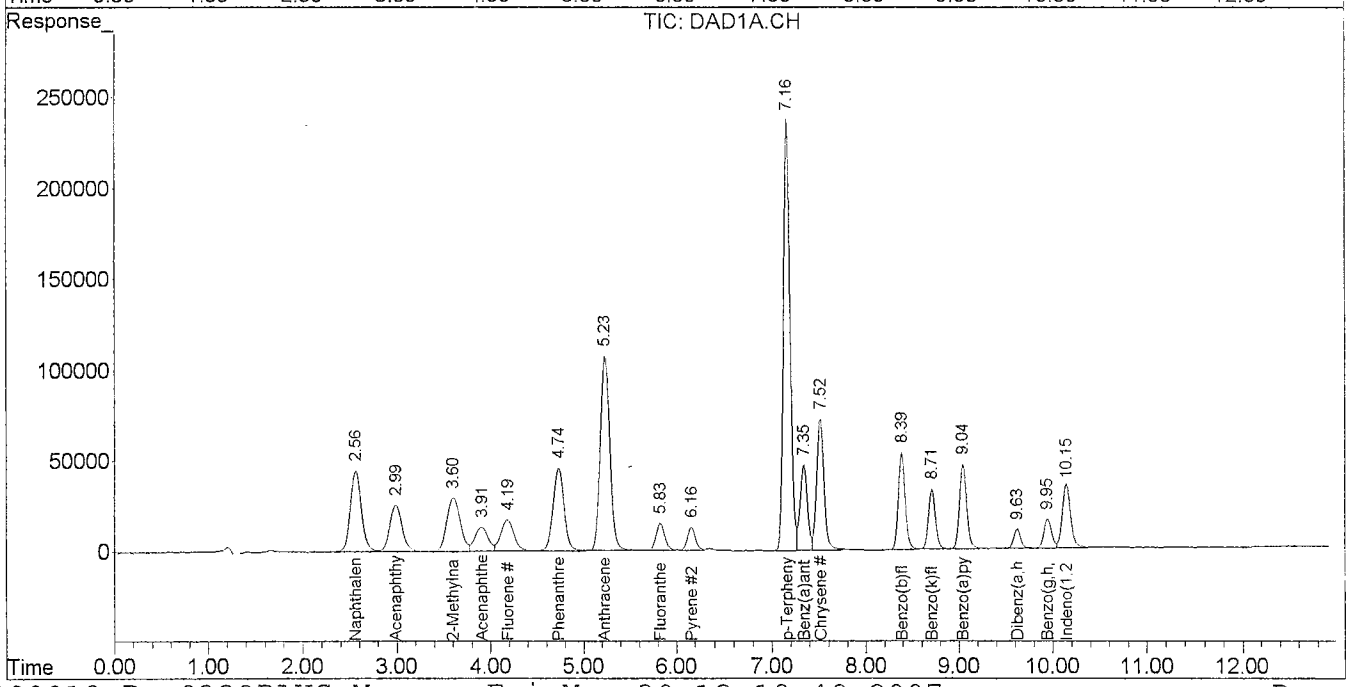
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290012.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290012.D\DAD1A.CH
Acq On : 29-Mar-2007, 20:32:04 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 29 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D\03290023C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	118000	1	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	24200	5	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	7	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	381000	3	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	783000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.1	97500	103000	6	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	81600	5	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.1	244000	258000	6	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	391000	3	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	278000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	171000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.99	55100	54400	-1	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	91700	3	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	219000	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290023.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0		NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1520000	-2		NA	± 15 %	AverageRF
Acenaphthene	10	10	816000	814000	0		NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6360000	-1		NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5310000	0		NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9280000	2		NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4480000	-6		NA	± 15 %	AverageRF
Pyrene	1.0	0.94	25900000	24400000	-6		NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	14400000	14300000	0		NA	± 15 %	AverageRF
Chrysene	1.0	0.99	9320000	9270000	-1		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	1		NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12100000	1		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.93	5420000	5050000	-7		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10500000	20	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14300000	1		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\032907PA\03290023.D
Lab ID: KWG0704189-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 00:54
Date Quantitated: 03/30/2007 10:49
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: AMH

Exception Report

Data File: J:\LC06\DATA\032907PA\03290023.D\03290023C.D
Lab ID: KWG0704189-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 00:54
Date Quantitated: 03/30/2007 10:49
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290023.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290023.D\03290023c.d			**Vial:**	14
Acqu Date:	03/30/2007 00:54	**Quant Date:**	03/30/2007 10:49	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.21	7.18	29396298	1179618	10.01	10.14			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.56	15157199	371902	9.76	10.28			
Acenaphthylene		2.98	0	241937	0.0000	10.46			
2-Methylnaphthalene/Dibe	3.63	3.61	6555156	297681	10.10	10.36			
Acenaphthene	3.93	3.90	8140348	136990	9.97	10.93			
Fluorene	4.22	4.20	6358954	173270	0.9850	1.07			
Phenanthrene	4.77	4.74	5310341	380633	0.9980	1.03			
Anthracene	5.28	5.26	9275725	782504	1.02	1.04			
Fluoranthene	5.87	5.85	4483685	102999	0.9450	1.06			
Pyrene	6.21	6.18	24381984	81622	0.9420	1.05			
Benz(a)anthracene	7.39	7.37	14339169	257726	0.9970	1.06			
Chrysene	7.57	7.56	9265377	391428	0.9940	1.03			
Benzo(b)fluoranthene	8.45	8.42	3219237	278102	1.00	1.02			
Benzo(k)fluoranthene	8.77	8.76	16461367	171292	1.01	1.02			
Benzo(a)pyrene	9.11	9.09	12071071	252911	1.01	1.02			
Dibenz(a,h)anthracene	9.69	9.66	5054232	54423	0.9330	0.9890			
Benzo(g,h,i)perylene	10.02	10.00	10507948	91703	1.20	1.03			
Indeno(1,2,3-cd)pyrene	10.22	10.20	14307390	218591	1.01	1.03			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

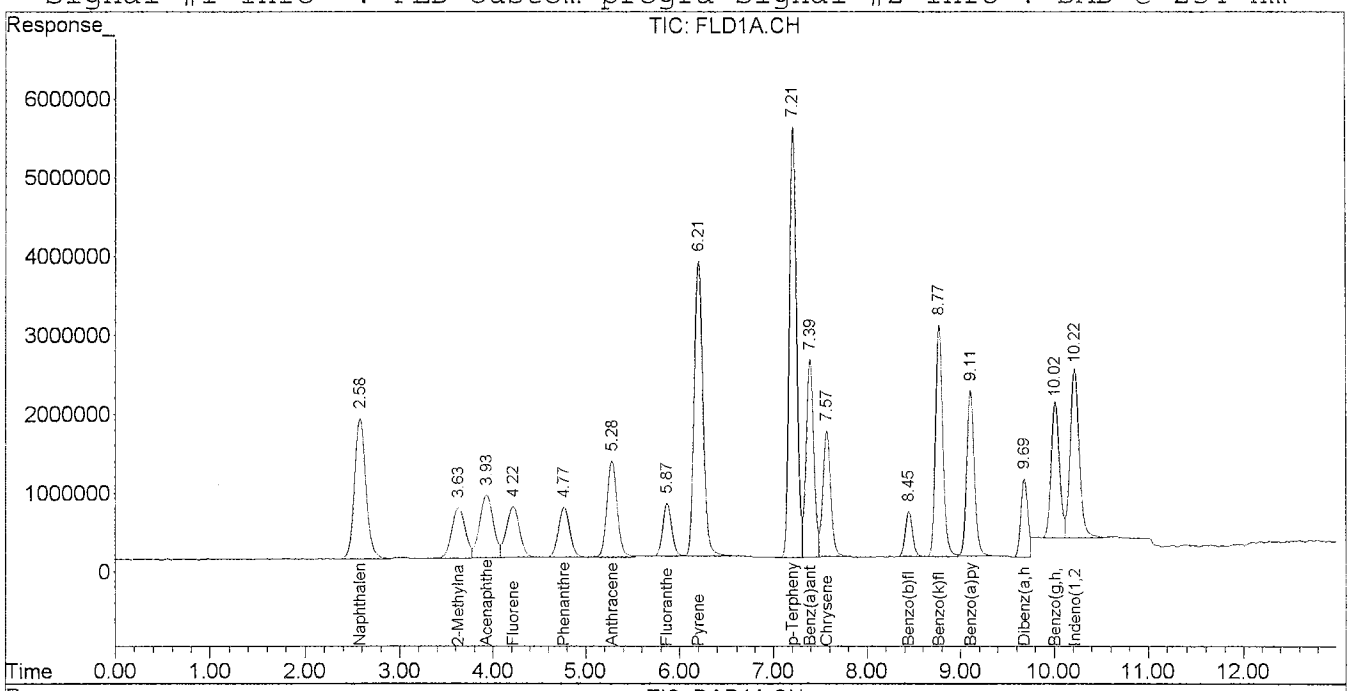
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

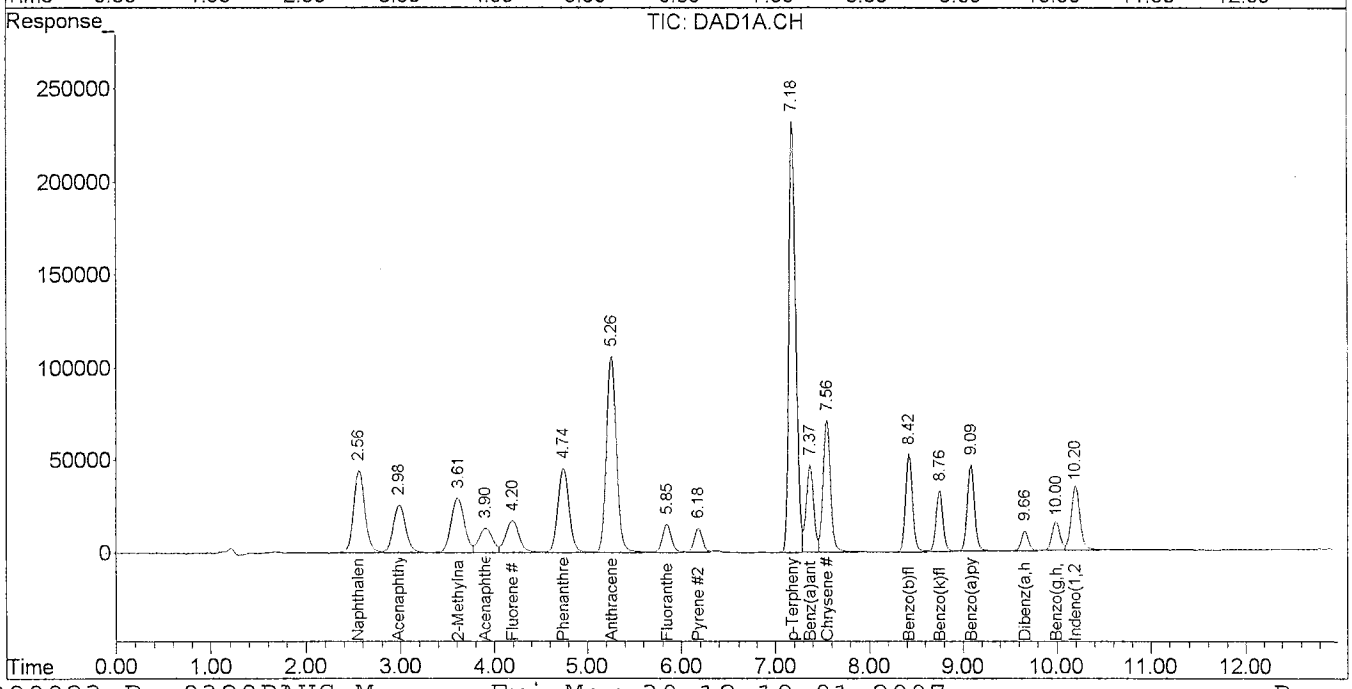
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290023.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290023.D\DAD1A.CH
Acq On : 30-Mar-2007, 00:54:29 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:49 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D\03290035C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	116000	119000	2	NA	± 15 %	AverageRF
Naphthalene	10	10	36200	37200	3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23800	3	NA	± 15 %	AverageRF
Acenaphthene	10	10	12500	12900	3	NA	± 15 %	AverageRF
Fluorene	1.0	1.0	162000	165000	2	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	372000	1	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	778000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	1.0	97500	101000	4	NA	± 15 %	AverageRF
Pyrene	1.0	1.1	77700	82300	6	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	1.0	244000	251000	3	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	380000	394000	4	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	279000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	172000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	254000	2	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.0	55100	54800	0	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.0	89200	93400	5	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	212000	220000	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701703
Date Analyzed: 03/30/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0704189
Units: ug/mL

File ID: J:\LC06\DATA\032907PA\03290035.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	10	10	2940000	2940000	0	NA	± 15 %	AverageRF
Naphthalene	10	9.8	1550000	1530000	-2	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	811000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	0.98	5320000	5210000	-2	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	9100000	9190000	1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.94	4750000	4450000	-6	NA	± 15 %	AverageRF
Pyrene	1.0	0.93	25900000	24000000	-7	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.99	14400000	14300000	-1	NA	± 15 %	AverageRF
Chrysene	1.0	1.0	9320000	9370000	1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3240000	1	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16400000	1	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	0.97	5420000	5270000	-3	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.2	8760000	10400000	19 *	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	1.0	14100000	14200000	1	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\032907PA\03290035.D
Lab ID: KWG0704189-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 05:39
Date Quantitated: 03/30/2007 10:50
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\032907PA\03290035.D\03290035C.D
Lab ID: KWG0704189-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 05:39
Date Quantitated: 03/30/2007 10:50
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290035.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290035.D\03290035c.d			**Vial:**	14
Acqu Date:	03/30/2007 05:39	**Quant Date:**	03/30/2007 10:50	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19	7.17	29372568	1185047	10.00	10.19			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.58	2.55	15254191	372202	9.82	10.28			
Acenaphthylene		2.98	0	237559	0.0000	10.27			
2-Methylnaphthalene/Dibe	3.62	3.59	6477319	293750	9.98	10.22			
Acenaphthene	3.92	3.90	8109963	128831	9.94	10.28			
Fluorene	4.20	4.18	6380999	165080	0.9890	1.02			
Phenanthrene	4.75	4.73	5206818	372217	0.9790	1.01			
Anthracene	5.26	5.23	9194140	777826	1.01	1.04			
Fluoranthene	5.85	5.83	4453648	100906	0.9390	1.04			
Pyrene	6.18	6.17	23983766	82299	0.9260	1.06			
Benz(a)anthracene	7.37	7.35	14268369	250906	0.9920	1.03			
Chrysene	7.55	7.53	9371584	393982	1.01	1.04			
Benzo(b)fluoranthene	8.42	8.39	3243138	278530	1.01	1.02			
Benzo(k)fluoranthene	8.75	8.73	16399215	171886	1.01	1.02			
Benzo(a)pyrene	9.08	9.06	12036519	254282	1.01	1.02			
Dibenz(a,h)anthracene	9.66	9.65	5273856	54822	0.9730	0.9960			
Benzo(g,h,i)perylene	9.99	9.97	10440109	93425	1.19	1.05			
Indeno(1,2,3-cd)pyrene	10.19	10.17	14236330	219539	1.01	1.04			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

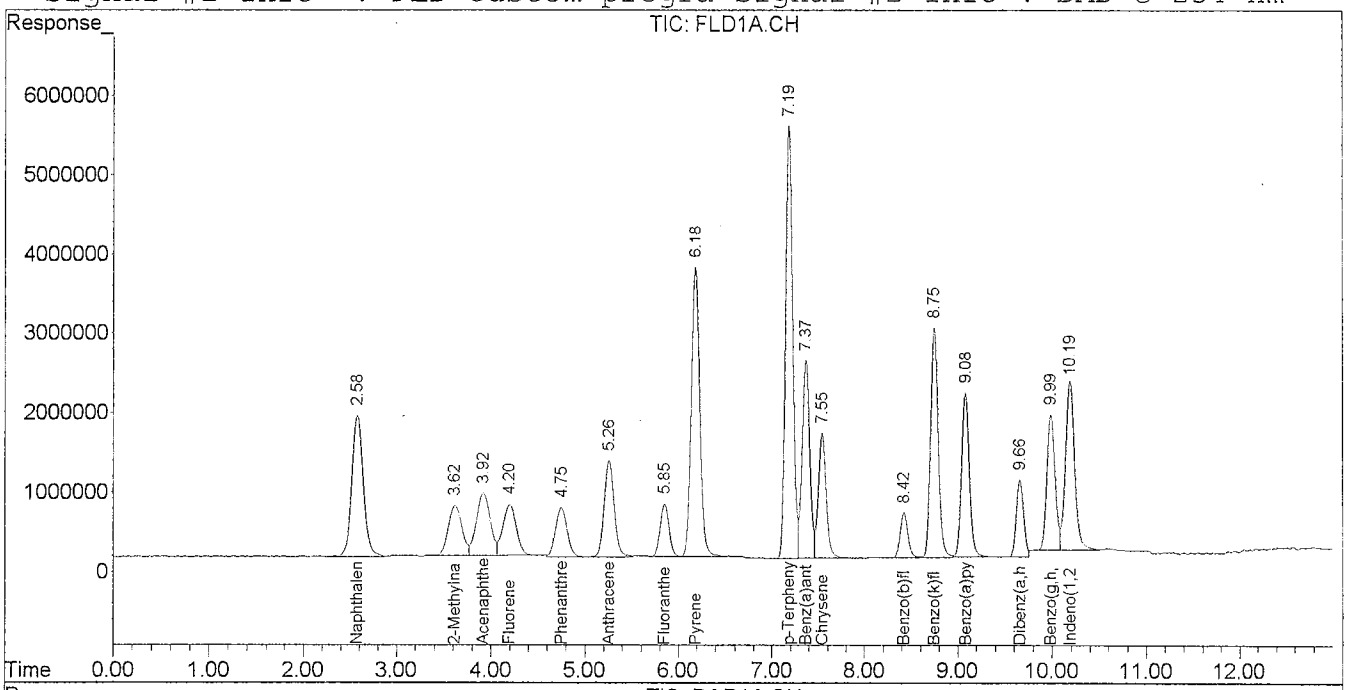
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

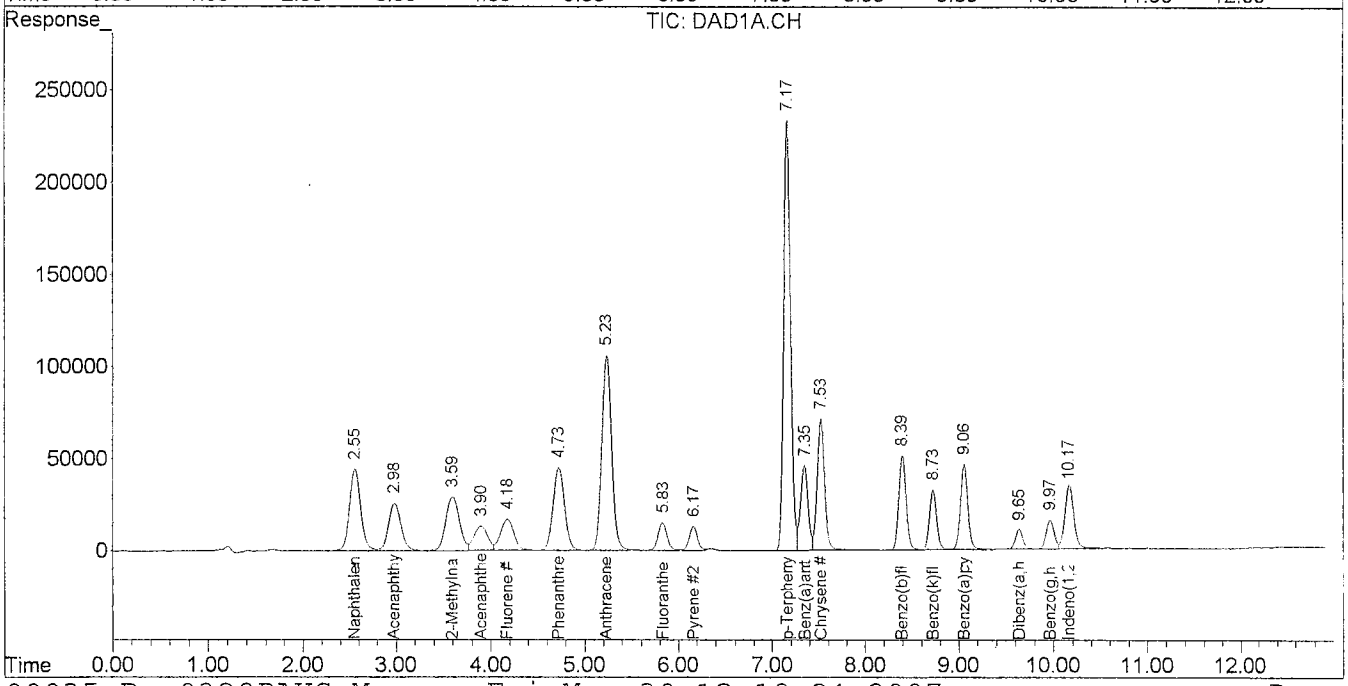
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290035.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032907PA\03290035.D\DAD1A.CH
Acq On : 30-Mar-2007, 05:39:54 Operator: Paul
Sample : 8-7D 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:50 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703403	**Prep Method:**	EPA 3510B	**Prep Date:**	03/08/07 06:30
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-002	1349MW01CL	8310 PAH	WATER	~~1000ml~~ 1010 ml	1.00ml PM 032707
K0701703-001	DAEGW104CL	8310 PAH	WATER	1000ml	1.00ml
K0701812-001	7D030607G	610 PAH	WATER	~~1010ml~~ 1000 ml	1.00ml PM 032707
KWG0703403-1	Matrix Spike	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-2	Lab Control Sample	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-3	Duplicate Lab Control Sampl	8310 PAH	WATER	1000ml	1.00ml
KWG0703403-4	Method Blank	8310 PAH	WATER	1000ml	1.00ml

Lab Code	Parent Lab Code	Comments
KWG0703403-1	K0701647-002	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-002	581533	HCSV8-5G	100uL			MThompso
K0701703-001	581532	HCSV8-5G	100uL			MThompso
K0701812-001	581531	HCSV8-5G	100uL			MThompso
KWG0703403-1	581534	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-2	581535	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-3	581536	HCSV8-5G	100uL	HCSV8-7C	100uL	MThompso
KWG0703403-4	581537	HCSV8-5G	100uL			MThompso

Comments:

Started By: SJones Assisted By: — Training Yes No

Completed By: SJones Assisted By: — Yes No

Reviewed By: PM Date: 032707 Storage: Box 7A

Chain of Custody

Relinquished By: S. Jones Date: 3/9/07

Received By: PM Date: 032707

Extracts Examined Yes No

Preparation Information

Group ID:	KWG0703403	**Prep Method:**	EPA 3510B	**Prep Date:**	03/08/07 06:30
Department:	Petroleum HC				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. ml	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701647-002	1349MW01CL		✓	8310 PAH	WATER	1,010	N/A	N/A	1.0 ml	100 ml	N/A
2	K0701703-001	DAEGW104C1		✓	8310 PAH	WATER	1000	↓	↓	↓	↓	↓
3	K0701812-001	7D030607G		✓	610 PAH	WATER	1000	↓	↓	↓	↓	↓
4	KWG0703403-1	Matrix Spike 1647-2			8310 PAH	WATER	1000	↓	↓	↓	↓	100 ml
5	KWG0703403-2	Lab Control Sample			8310 PAH	WATER	1000	↓	↓	↓	↓	↓
6	KWG0703403-3	Duplicate Lab Control Sample			8310 PAH	WATER	1000	↓	↓	↓	↓	↓
7	KWG0703403-4	Method Blank			8310 PAH	WATER	1000	↓	↓	↓	↓	N/A

DCM Lot # 46347

Glass Wool Lot # GW030207

Na_2SO_4 Lot # 46300651

Sonic Horn Tuned N/A
Initial / Date

Comments: Insufficient sample quantity for proper Q.C.

Surrogate ID: HCSV8-5G

Spike ID: HCSV8-7C

Witness: MT 3/8/07

Started By: SJones Assisted By: —

Completed By: SJones Assisted By: —

Exception Report

Data File: J:\LC06\DATA\032907PA\03290011.D
Lab ID: KWG0704189-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:08
Date Quantitated: 03/30/2007 10:51
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290011.D\03290011C.D
Lab ID: KWG0704189-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/29/2007 20:08
Date Quantitated: 03/30/2007 10:51
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290011.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290011.D\03290011c.d			**Vial:**	1
Acqu Date:	03/29/2007 20:08	**Quant Date:**	03/30/2007 10:51	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	0.00	7.19	0	2604		0.0220			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene		2.52	0	696	0.0000	0.0190			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene		5.87	0	2344	0.0000	0.0240			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene		7.53	0	961	0.0000	0.0030			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.73		31418	0	0.0020	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

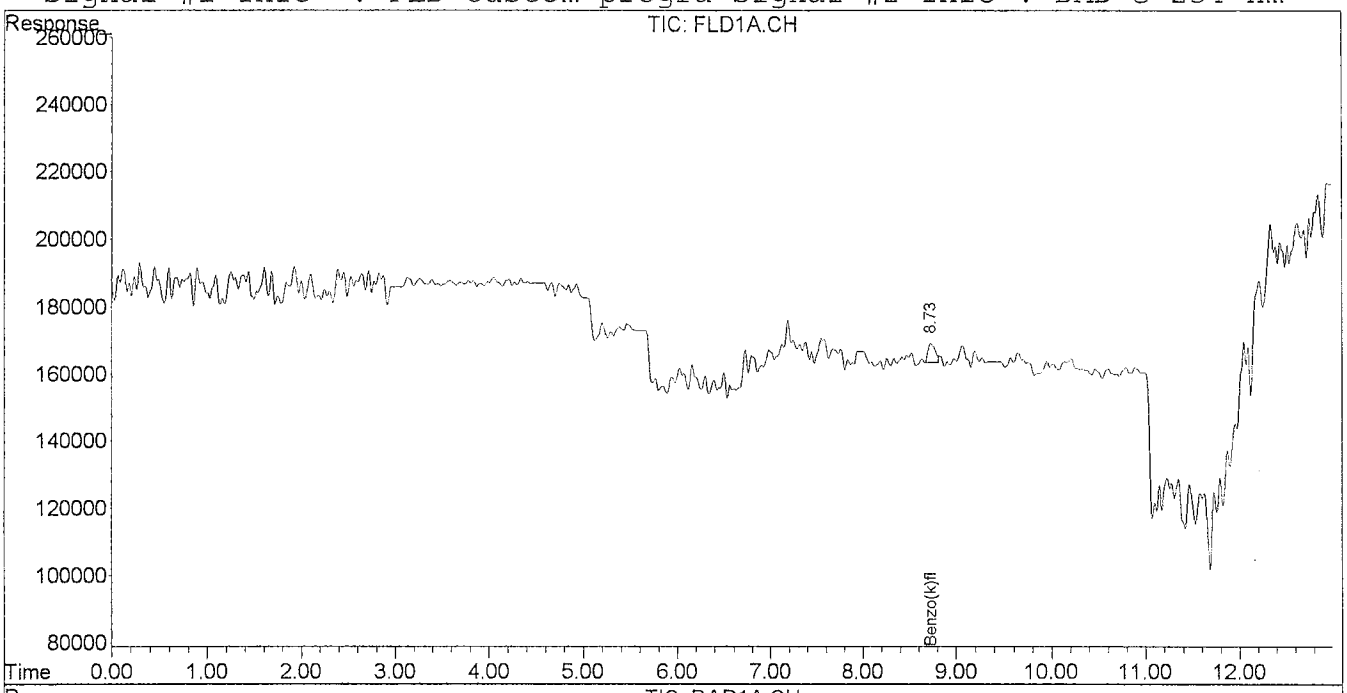
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

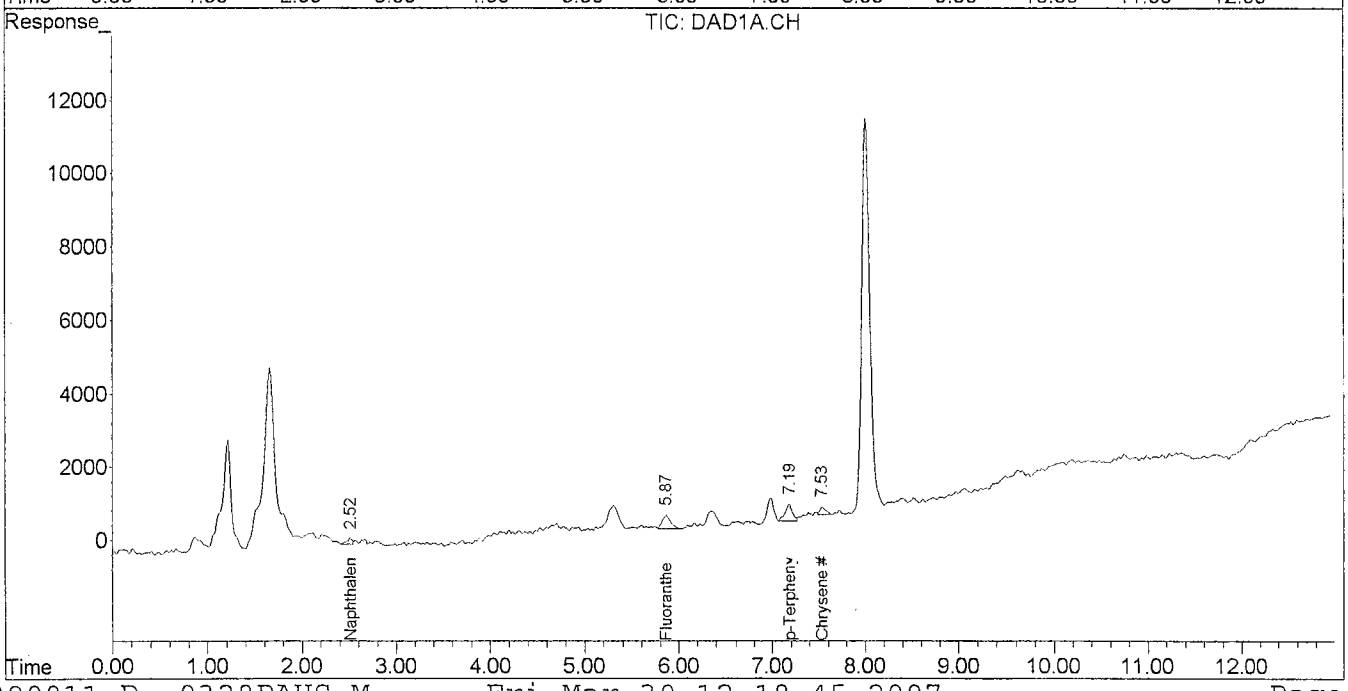
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290011.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290011.D\DAD1A.CH
Acq On : 29-Mar-2007, 20:08:13 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:51 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\032907PA\03290036.D
Lab ID: KWG0704189-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 06:04
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review: MLG

Exception Report

Data File: J:\LC06\DATA\032907PA\03290036.D\03290036C.D
Lab ID: KWG0704189-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 06:04
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: VR 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290036.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290036.D\03290036c.d			**Vial:**	1
Acqu Date:	03/30/2007 06:04	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-6				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.18	7.17	76647	1590	0.0260	0.0140			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene		5.28	0	4682	0.0000	0.0060			
Fluoranthene		5.84	0	864	0.0000	0.0090			
Pyrene	6.16		37291	0	0.0010	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.74	8.73	37615	702	0.0020	0.0040			
Benzo(a)pyrene		9.04	0	1671	0.0000	0.0070			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene	10.20		68289	0	0.0050	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

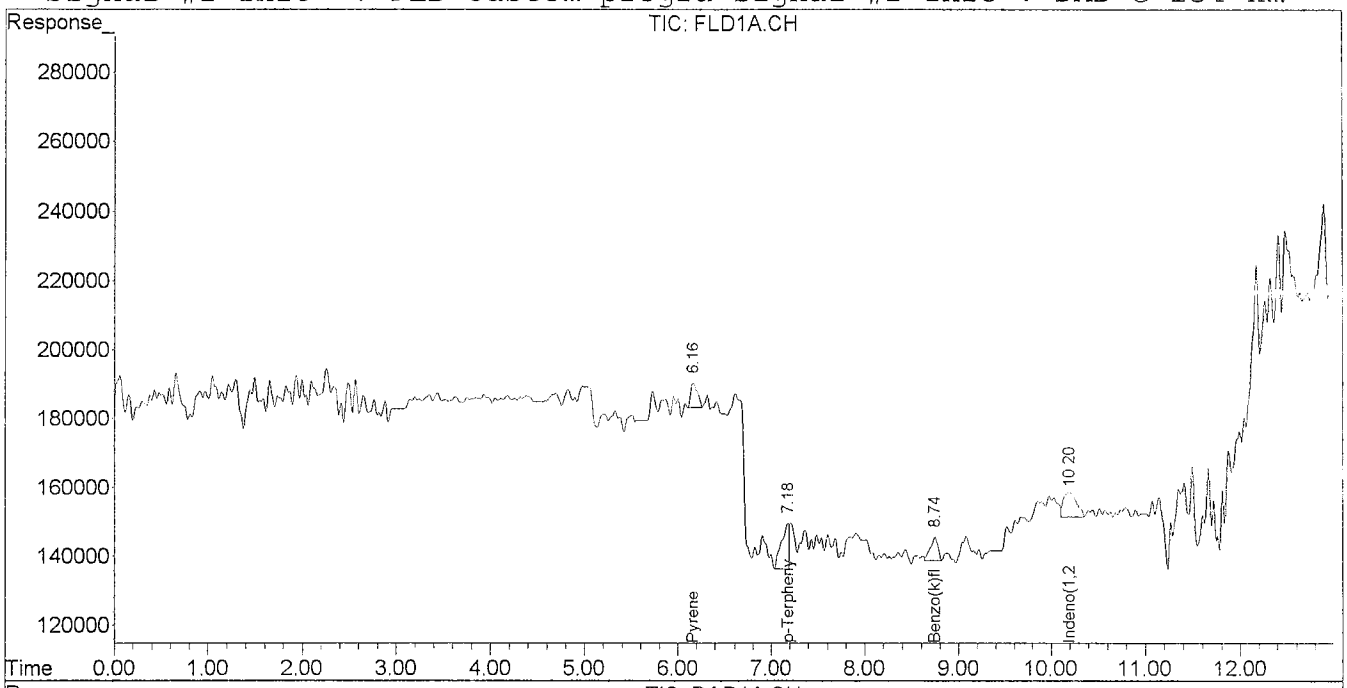
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

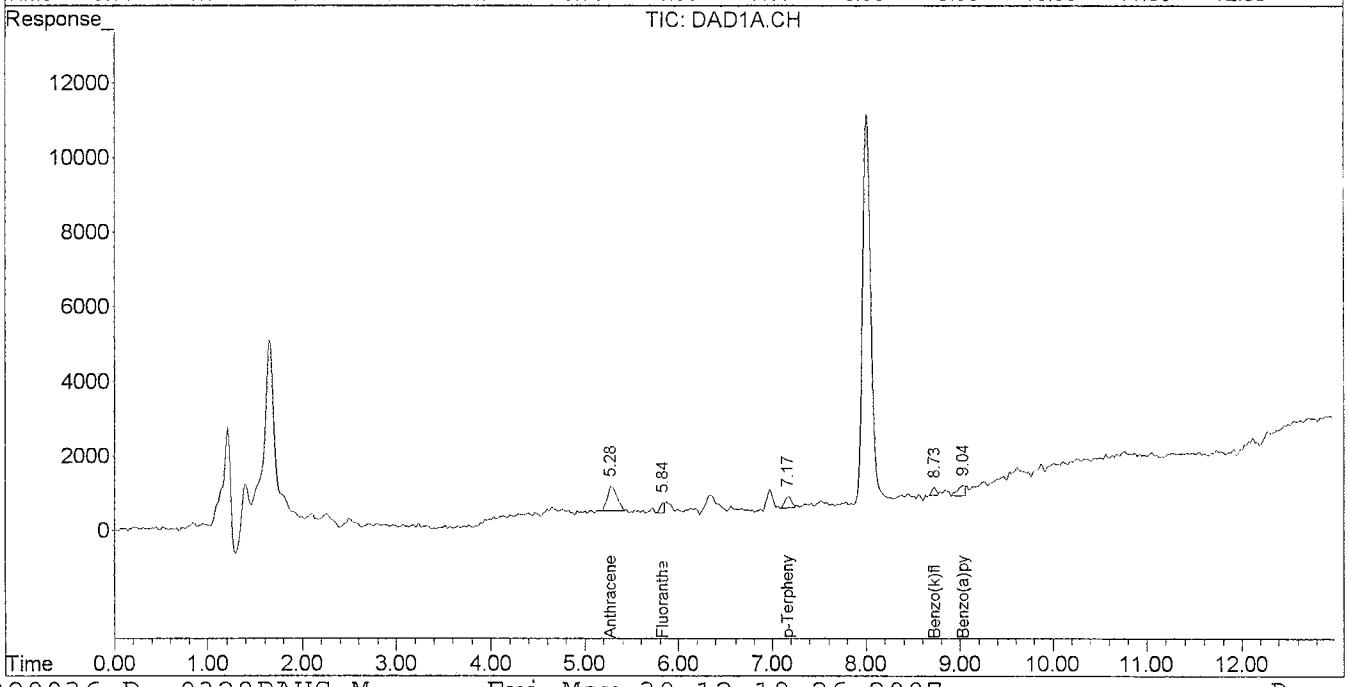
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290036.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290036.D\DAD1A.CH
Acq On : 30-Mar-2007, 06:04:36 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\032907PA\03290024.D
Lab ID: KWG0704189-5
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 01:18
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 4/2/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\032907PA\03290024.D\03290024C.D
Lab ID: KWG0704189-5
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/30/2007 01:18
Date Quantitated: 03/30/2007 10:52
Batch ID: KWG0704189
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: JL 4/2/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704189	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\032907PA\03290024.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\032907PA\03290024.D\03290024c.d			**Vial:**	1
Acqu Date:	03/30/2007 01:18	**Quant Date:**	03/30/2007 10:52	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0704189-5				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.23	7.21	58741	1953	0.0200	0.0170			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene		5.86	0	772	0.0000	0.0080			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene	8.78	8.73	63382	632	0.0040	0.0040			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene			0	0	0.0000	0.0000			
Benzo(g,h,i)perylene	10.02		75550	0	0.0090	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

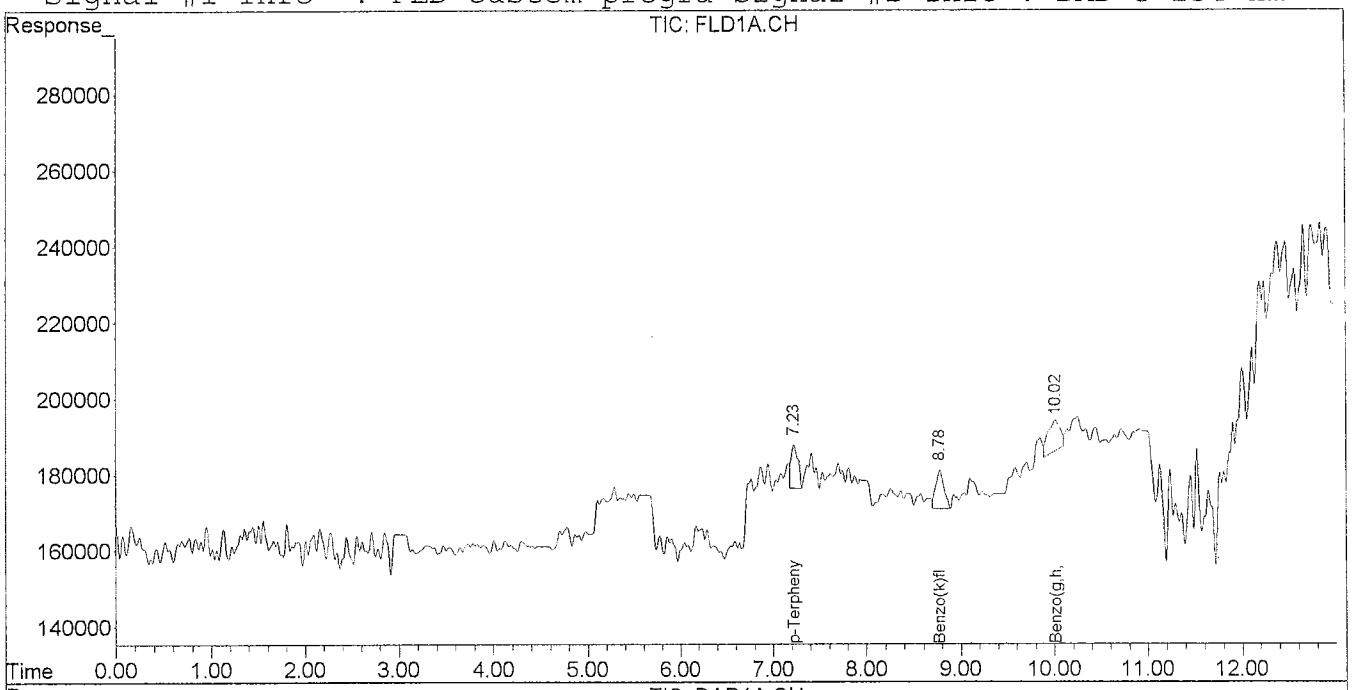
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

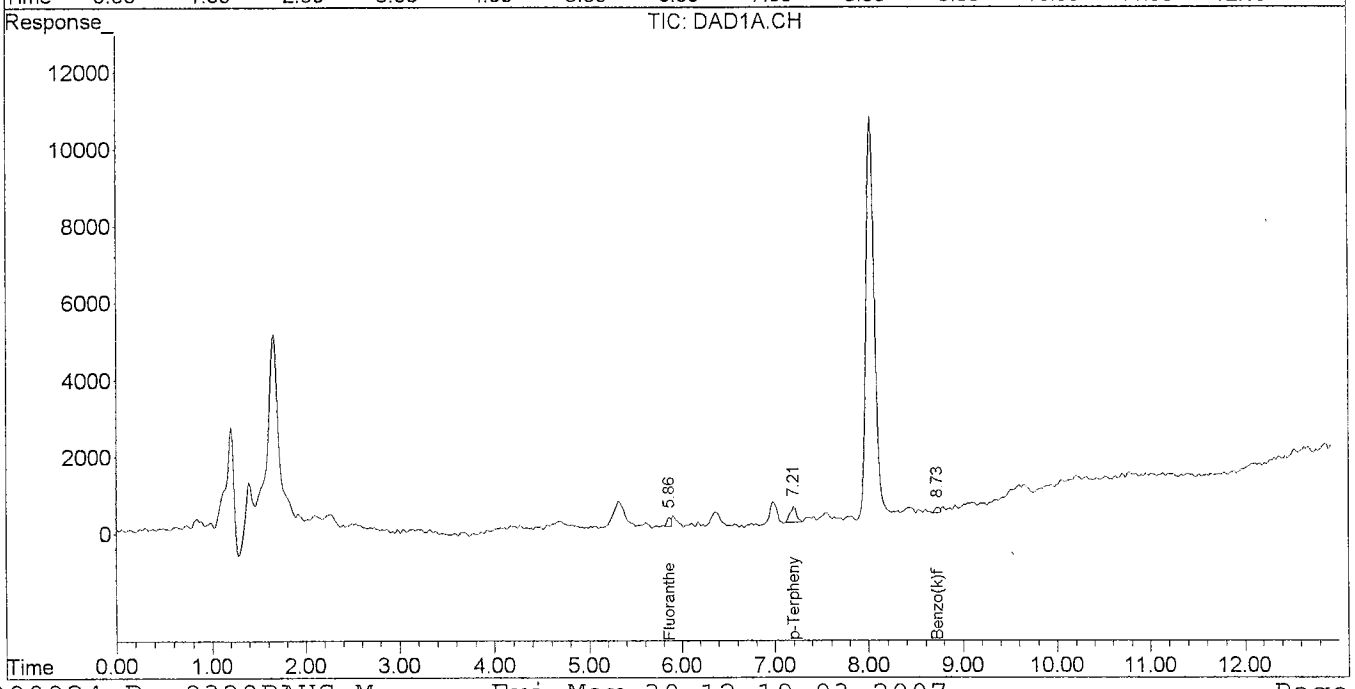
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032907PA\03290024.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\032907PA\03290024.D\DAD1A.CH
Acq On : 30-Mar-2007, 01:18:18 Operator: Paul
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 30 10:52 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





MDL Studies

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	7470A								
Extr./Dig. Method:	7470A								
Matrix:	Water								
Units:	ug/L								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Mercury	0.20	0.210	0.007	2.896	0.020	0.03	3%	105%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	7470A								
Extr./Dig. Method:	7470A								
Matrix:	Water								
Units:	ug/L								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Mercury	0.20	0.210	0.007	2.896	0.020	0.03	3%	105%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Aluminum	80	73.8	62.4	50.9	50.1	58.9	68.8	66.1
Antimony	120	112.0	114.0	111.0	114.0	105.1	117.9	129.8
Arsenic	120	87.7	99.1	87.0	92.2	86.0	91.2	88.6
Barium	3.6	3.1	3.5	2.9	3.2	3.2	3.2	2.9
Beryllium	0.80	0.6	0.7	0.6	0.6	0.8	0.8	0.8
Boron	24	18.5	21.4	17.1	19.3	18.5	25.0	22.8
Cadmium	12	12.1	11.5	13.3	12.4	12.1	14.0	12.9
Calcium	20	26.9	24.8	20.8	22.4	25.9	24.2	24.4
Chromium	8.0	6.1	6.5	6.1	6.6	8.3	7.5	7.0
Cobalt	12	10.4	11.1	9.1	9.4	10.4	10.0	10.8
Copper	8.0	6.8	6.6	4.5	4.0	5.3	6.6	6.6
Iron	16	15.8	13.9	13.8	14.8	14.0	14.5	14.2
Lead	120	104.4	106.4	100.1	108.1	113.9	114.9	103.4
Lithium	16	14.8	15.7	12.1	10.9	14.2	13.3	13.0
Manganese	1.6	0.9	1.4	1.0	1.1	1.3	1.3	1.3
Molybdenum	16	14.0	13.2	15.1	15.8	15.8	17.3	18.0
Nickel	80	74.0	84.5	81.1	82.4	79.0	82.4	79.0
Phosphorus	280	266.5	274.9	287.8	311.8	218.0	314.3	293.0
Potassium	4000	2599	2473	2007	2012	2569	2634	2361
Selenium	120	80.7	111.6	101.5	103.9	104.9	109.2	114.5
Silicon	80	99.8	102.6	89.7	84.9	93.6	96.3	94.2
Silver	12	9.6	11.1	6.9	6.9	8.9	9.7	9.1
Sodium	280	280.0	274.6	249.3	255.7	272.0	282.9	282.9
Strontium	0.80	0.8	0.7	0.4	0.5	0.4	0.5	0.5
Thallium	200	138.3	163.3	161.7	160.0	180.0	151.7	143.3
Tin	80	78.0	80.6	80.1	79.2	76.1	84.6	73.1
Titanium	12	10.1	10.2	10.0	9.9	10.8	11.0	11.0
Vanadium	20	18.2	18.0	18.0	18.1	19.1	20.0	18.7

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6010C / 200.7
Extr./Dig. Method:	CLP
Matrix:	WATER
Units:	ug/L (ppb)
Sample ID:	
Date Analyzed:	

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	80	61.571	8.903	3.143	27.983	30	14%	77%	Valid MDL Data
Antimony	120	114.829	7.662	3.143	24.082	30	7%	96%	Valid MDL Data
Arsenic	120	90.257	4.488	3.143	14.107	20	5%	75%	Valid MDL Data
Barium	3.6	3.143	0.207	3.143	0.651	0.7	7%	87%	Valid MDL Data
Beryllium	0.80	0.700	0.100	3.143	0.314	0.4	14%	88%	Valid MDL Data
Boron	24	20.371	2.806	3.143	8.819	9	14%	85%	Valid MDL Data
Cadmium	12	12.614	0.845	3.143	2.657	3	7%	105%	Valid MDL Data
Calcium	20	24.200	2.057	3.143	6.464	7	8%	121%	Valid MDL Data
Chromium	8.0	6.871	0.801	3.143	2.519	3	12%	86%	Valid MDL Data
Cobalt	12	10.171	0.723	3.143	2.272	3	7%	85%	Valid MDL Data
Copper	8.0	5.771	1.161	3.143	3.651	4	20%	72%	Valid MDL Data
Iron	16	14.429	0.699	3.143	2.198	3	5%	90%	Valid MDL Data
Lead	120	107.314	5.450	3.143	17.130	20	5%	89%	Valid MDL Data
Lithium	16	13.429	1.633	3.143	5.132	6	12%	84%	Valid MDL Data
Manganese	1.6	1.186	0.186	3.143	0.586	0.6	16%	74%	Valid MDL Data
Molybdenum	16	15.600	1.698	3.143	5.337	6	11%	98%	Valid MDL Data
Nickel	80	80.343	3.419	3.143	10.747	20	4%	100%	Valid MDL Data
Phosphorus	280	280.900	32.823	3.143	103.163	200	12%	100%	Valid MDL Data
Potassium	4000	2379.286	268.253	3.143	843.119	900	11%	59%	Valid MDL Data
Selenium	120	103.757	11.140	3.143	35.013	40	11%	86%	Valid MDL Data
Silicon	80	94.443	5.958	3.143	18.727	20	6%	118%	Valid MDL Data
Silver	12	8.886	1.528	3.143	4.802	5	17%	74%	Valid MDL Data
Sodium	280	271.057	13.436	3.143	42.229	50	5%	97%	Valid MDL Data
Strontium	0.80	0.543	0.151	3.143	0.475	0.5	28%	68%	Valid MDL Data
Thallium	200	156.900	13.935	3.143	43.799	50	9%	78%	Valid MDL Data
Tin	80	78.814	3.632	3.143	11.415	20	5%	99%	Valid MDL Data
Titanium	12	10.429	0.486	3.143	1.526	2	5%	87%	Valid MDL Data
Vanadium	20	18.586	0.747	3.143	2.348	3	4%	93%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7		Instrument:		K-ICP-AES-01			
Extr./Dig. Method:	CLP		Analyst(s):		MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Magnesium	3	1.7	1.5	1.9	1.5	1.5	1.5	2.0

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Magnesium	3	1.657	0.215	3.143	0.675	0.7	13%	55%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7		Instrument:		K-ICP-AES-01			
Extr./Dig. Method:	CLP		Analyst(s):		MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Zinc	5.0	7.9	5.9	5.0	5.6	6.1	6.5	6.7

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	5.0	6.243	0.924	3.143	2.903	3	15%	125%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services
Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02				
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan				
Matrix:		Water								
Units:		µg/L								
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Aluminum	27	2.00	2.5040	2.4890	2.4620	2.5550	2.4760	2.5170	2.3800	2.5000
Antimony	121	0.05	0.0576	0.0514	0.0570	0.0535	0.0512	0.0533	0.0504	0.0578
Antimony	123	0.05	0.0527	0.0482	0.0473	0.0495	0.0555	0.0525	0.0502	0.0527
Arsenic	75	0.50	0.5958	0.6457	0.5854	0.5623	0.5879	0.6215	0.6057	0.5972
Barium	135	0.05	0.0589	0.0578	0.0572	0.0594	0.0662	0.0593	0.0503	0.0617
Barium	137	0.05	0.0581	0.0510	0.0480	0.0605	0.0580	0.0569	0.0590	0.0575
Beryllium	9	0.02	0.0326	0.0295	0.0325	0.0300	0.0316	0.0266	0.0266	0.0289
Bismuth	209	0.02	0.0262	0.0276	0.0339	0.0259	0.0268	0.0285	0.0291	0.0274
Boron	10	0.50	0.5487	0.6324	0.5320	0.5301	0.5065	0.5822	0.4802	0.4783
Boron	11	0.50	0.6702	0.6156	0.5880	0.5868	0.5793	0.6853	0.5530	0.6403
Cadmium	114	0.02	0.0204	0.0209	0.0207	0.0167	0.0236	0.0234	0.0244	0.0185
Cobalt	59	0.02	0.0233	0.0246	0.0218	0.0248	0.0237	0.0230	0.0225	0.0218
Copper	63	0.10	0.0864	0.0932	0.0856	0.0874	0.0967	0.0814	0.1005	0.0959
Copper	65	0.10	0.0912	0.0990	0.0951	0.0930	0.1105	0.0920	0.1028	0.0950
Lead	208	0.02	0.0266	0.0219	0.0212	0.0198	0.0191	0.0179	0.0177	0.0189
Manganese	55	0.05	0.0461	0.0634	0.0551	0.0483	0.0553	0.0602	0.0492	0.0455
Molybdenum	95	0.05	0.0621	0.0635	0.0603	0.0590	0.0585	0.0547	0.0636	0.0567
Molybdenum	97	0.05	0.0567	0.0568	0.0545	0.0516	0.0587	0.0529	0.0528	0.0585
Molybdenum	98	0.05	0.0597	0.0597	0.0506	0.0607	0.0661	0.0488	0.0559	0.0523
Nickel	60	0.20	0.2042	0.1871	0.1884	0.1829	0.1951	0.2145	0.2154	0.2091
Nickel	62	0.20	0.2075	0.1138	0.1577	0.2120	0.2305	0.1776	0.1996	0.2680
Selenium	77	1.00	0.6827	0.7298	0.7267	0.9852	1.0390	0.6241	1.0710	1.0110
Selenium	82	1.00	1.1760	1.2980	1.1260	0.9936	1.1420	1.0700	1.2660	1.2370
Thallium	203	0.02	0.0237	0.0250	0.0205	0.0263	0.0207	0.0205	0.0209	0.0243
Thallium	205	0.02	0.0216	0.0230	0.0213	0.0214	0.0226	0.0217	0.0213	0.0210
Tin	118	0.05	0.0544	0.0557	0.0451	0.0495	0.0554	0.0535	0.0483	0.0520
Tin	120	0.05	0.0541	0.0481	0.0468	0.0517	0.0513	0.0522	0.0493	0.0446
Vanadium	51	0.20	0.2053	0.2123	0.1846	0.1611	0.1703	0.1618	0.1566	0.1405

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	27	2.00	2.485	0.051	2.998	0.153	0.2	2%	124%	Valid MDL Data
Antimony	121	0.05	0.054	0.003	2.998	0.009	0.01	6%	108%	Valid MDL Data
Antimony	123	0.05	0.051	0.003	2.998	0.008	0.009	5%	102%	Valid MDL Data
Arsenic	75	0.50	0.600	0.025	2.998	0.075	0.08	4%	120%	Valid MDL Data
Barium	135	0.05	0.059	0.004	2.998	0.013	0.02	8%	118%	Valid MDL Data
Barium	137	0.05	0.056	0.004	2.998	0.013	0.02	8%	112%	Valid MDL Data
Beryllium	9	0.02	0.030	0.002	2.998	0.007	0.008	8%	149%	Valid MDL Data
Bismuth	209	0.02	0.028	0.003	2.998	0.008	0.008	9%	141%	Valid MDL Data
Boron	10	0.50	0.536	0.052	2.998	0.156	0.2	10%	107%	Valid MDL Data
Boron	11	0.50	0.615	0.047	2.998	0.140	0.2	8%	123%	Valid MDL Data
Cadmium	114	0.02	0.021	0.003	2.998	0.008	0.008	13%	105%	Valid MDL Data
Cobalt	59	0.02	0.023	0.001	2.998	0.003	0.004	5%	116%	Valid MDL Data
Copper	63	0.10	0.091	0.007	2.998	0.020	0.02	7%	91%	Valid MDL Data
Copper	65	0.10	0.097	0.007	2.998	0.020	0.02	7%	97%	Valid MDL Data
Lead	208	0.02	0.020	0.003	2.998	0.009	0.009	14%	102%	Valid MDL Data
Manganese	55	0.05	0.053	0.007	2.998	0.020	0.02	13%	106%	Valid MDL Data
Molybdenum	95	0.05	0.060	0.003	2.998	0.010	0.01	5%	120%	Valid MDL Data
Molybdenum	97	0.05	0.055	0.003	2.998	0.008	0.009	5%	111%	Valid MDL Data
Molybdenum	98	0.05	0.057	0.006	2.998	0.018	0.02	10%	113%	Valid MDL Data
Nickel	60	0.20	0.200	0.013	2.998	0.039	0.04	6%	100%	Valid MDL Data
Nickel	62	0.20	0.196	0.047	2.998	0.140	0.2	24%	98%	Valid MDL Data
Selenium	77	1.00	0.859	0.184	2.998	0.551	0.6	21%	86%	Valid MDL Data
Selenium	82	1.00	1.164	0.103	2.998	0.307	0.4	9%	116%	Valid MDL Data
Thallium	203	0.02	0.023	0.002	2.998	0.007	0.008	10%	114%	Valid MDL Data
Thallium	205	0.02	0.022	0.001	2.998	0.002	0.003	3%	109%	Valid MDL Data
Tin	118	0.05	0.052	0.004	2.998	0.011	0.02	7%	103%	Valid MDL Data
Tin	120	0.05	0.050	0.003	2.998	0.009	0.01	6%	100%	Valid MDL Data
Vanadium	51	0.20	0.174	0.025	2.998	0.074	0.08	14%	87%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Zinc	66	0.50	0.4113	0.4695	0.4795	0.4364	0.4888	0.4751	0.5023	0.4445
Zinc	67	0.50	0.3707	0.4172	0.3737	0.3673	0.4494	0.4436	0.3571	0.2864
Zinc	68	0.50	0.4309	0.5022	0.4405	0.4218	0.4711	0.4660	0.4063	0.4136

Supervisor Approval _____

QA/QC Approval _____

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	66	0.50	0.463	0.030	2.998	0.091	0.1	7%	93%	Valid MDL Data
Zinc	67	0.50	0.383	0.053	2.998	0.159	0.2	14%	77%	Valid MDL Data
Zinc	68	0.50	0.444	0.033	2.998	0.099	0.1	7%	89%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02						
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan						
Matrix:		Water										
Units:		µg/L										
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9	MDL-10
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9	Result 10
Cadmium	111	0.02	0.0213	0.0241	0.0210	0.0221	0.0199	0.0204	0.0194	0.0232	0.0226	0.0243
Chromium	52	0.20	0.3890	0.4005	0.4359	0.4374	0.4120	0.4414	0.3894	0.3828	0.4116	0.3878
Silver	107	0.02	0.0203	0.0217	0.0227	0.0219	0.0210	0.0210	0.0213	0.0207	0.0200	0.0181
Silver	109	0.02	0.0223	0.0245	0.0209	0.0206	0.0200	0.0204	0.0205	0.0210	0.0188	0.0211
Uranium	238	0.02	0.0188	0.0211	0.0181	0.0193	0.0208	0.0207	0.0201	0.0213	0.0212	0.0199

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Cadmium	111	0.02	0.022	0.002	2.821	0.005	0.005	8%	109%	Valid MDL Data
Chromium	52	0.20	0.409	0.023	2.821	0.064	0.07	6%	204%	Valid MDL Data
Silver	107	0.02	0.021	0.001	2.821	0.004	0.004	6%	104%	Valid MDL Data
Silver	109	0.02	0.021	0.002	2.821	0.004	0.005	7%	105%	Valid MDL Data
Uranium	238	0.02	0.020	0.001	2.821	0.003	0.004	5%	101%	Valid MDL Data

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1768

Analytical Method: 8015B
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: gc21 **Column:** ZB-1 15 m

File ID	Data File	Data Path	AcqDate
A	1028F010.D	J:\GC21\DATA\102806\	10/28/2006 17:45
B	1028F011.D	J:\GC21\DATA\102806\	10/28/2006 18:06
C	1028F012.D	J:\GC21\DATA\102806\	10/28/2006 18:26
D	1028F013.D	J:\GC21\DATA\102806\	10/28/2006 18:47
E	1028F014.D	J:\GC21\DATA\102806\	10/28/2006 19:07
F	1028F015.D	J:\GC21\DATA\102806\	10/28/2006 19:27
G	1028F016.D	J:\GC21\DATA\102806\	10/28/2006 19:48

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C10 - C25 DRO	A	93.7	B	90.2	C	98.7	D	97.2	E	97.6	F	95.8	G	90.7		
Diesel Range Organics	A	136	B	131	C	143	D	139	E	141	F	139	G	131		
Diesel Range Organics (DRO)	A	97.8	B	93.9	C	102	D	101	E	101	F	98.9	G	93.6		
Motor Oil	A	167	B	157	C	170	D	165	E	167	F	167	G	154		
Residual Range Organics (RRO)	A	167	B	157	C	170	D	165	E	167	F	167	G	154		

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C10 - C25 DRO	80.0	94.8	3.40	3.143	11	ug/L	4	119	Valid MDL Data
Diesel Range Organics	80.0	137	4.72	3.143	15	ug/L	3	171	Valid MDL Data
Diesel Range Organics (DRO)	80.0	98.3	3.43	3.143	11	ug/L	3	123	Valid MDL Data
Motor Oil	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)
Residual Range Organics (RRO)	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)

Supervisor Approval: 1/18/07

QA/QC Approval:

Printed: 10/30/2006 10:10:20

Columbia Analytical Services

MDL Study Report

Analytical Method: 8015B/NWTPH-GX/AK101
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC06 **Column:** DB-624

MDL Study ID: MDL1837

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0227R007.D	J:\GC06\DATA\022707.FID\	02/27/2007 12:34	E	0227R011.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:41
B	0227R008.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:06	F	0227R012.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:13
C	0227R009.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:37	G	0227R013.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:44
D	0227R010.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:09	H	0227R014.D	J:\GC06\DATA\022707.FID\	02/27/2007 16:16

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C6 - C10 GRO	A	81.5	B	94.0	C	97.4	D	112	E	110	F	80.8	G	102	H	115
Gasoline Range Organics (GRO)	A	80.0	B	92.2	C	95.6	D	111	E	108	F	78.8	G	101	H	113
Gasoline Range Organics-NWTPH	A	85.1	B	96.1	C	98.5	D	108	E	108	F	87.7	G	99.7	H	108

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C6 - C10 GRO	100	99.1	13.2	2.998	40	ug/L	13	99	Valid MDL Data
Gasoline Range Organics (GRO)	100	97.4	13.2	2.998	40	ug/L	14	97	Valid MDL Data
Gasoline Range Organics-NWTPH	100	98.9	9.06	2.998	27	ug/L	9	99	Valid MDL Data

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Supervisor Approval: 3/23/07 QA/QC Approval:

Printed: 02/28/2007 08:17:45
u:\Stealth\Crystal rpt\MDLStudy.rpt

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06 **Column:** FLD Vydac C-18 4.6 x 150 mm

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	03130004.D	J:\LC06\DATA\031306PA\	03/13/2006 16:38	E	03130008.D	J:\LC06\DATA\031306PA\	03/13/2006 17:58
B	03130005.D	J:\LC06\DATA\031306PA\	03/13/2006 16:58	F	03130009.D	J:\LC06\DATA\031306PA\	03/13/2006 18:18
C	03130006.D	J:\LC06\DATA\031306PA\	03/13/2006 17:18	G	03130010.D	J:\LC06\DATA\031306PA\	03/13/2006 18:37
D	03130007.D	J:\LC06\DATA\031306PA\	03/13/2006 17:38	H	03130011.D	J:\LC06\DATA\031306PA\	03/13/2006 18:57

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
2-Methylnaphthalene/Dibenzofuran	A	0.681	B	0.708	C	0.615	D	0.702	E	0.684	F	0.593	G	0.672	H	0.607
Acenaphthene	A	0.764	B	0.780	C	0.730	D	0.764	E	0.809	F	0.790	G	0.720	H	0.720
Acenaphthylene																
Anthracene	A	0.0880	B	0.0840	C	0.0810	D	0.0790	E	0.0870	F	0.0840	G	0.0800	H	0.0810
Benz(a)anthracene	A	0.0980	B	0.0980	C	0.0970	D	0.0920	E	0.105	F	0.101	G	0.0980	H	0.0970
Benzo(a)pyrene	A	0.113	B	0.110	C	0.110	D	0.108	E	0.117	F	0.111	G	0.113	H	0.114
Benzo(b)fluoranthene	A	0.0920	B	0.0880	C	0.0920	D	0.0890	E	0.0890	F	0.0920	G	0.0930	H	0.0850
Benzo(g,h,i)perylene	A	0.0810	B	0.0940	C	0.0730	D	0.0680	E	0.0800	F	0.0730	G	0.0700	H	0.0710
Benzo(k)fluoranthene	A	0.0900	B	0.0860	C	0.0860	D	0.0850	E	0.0920	F	0.0860	G	0.0880	H	0.0880
Chrysene	A	0.0830	B	0.0920	C	0.0920	D	0.0900	E	0.103	F	0.101	G	0.0890	H	0.0860
Dibenz(a,h)anthracene	A	0.0810	B	0.0850	C	0.0870	D	0.0800	E	0.0850	F	0.0790	G	0.0890	H	0.0800
Fluoranthene	A	0.0820	B	0.0870	C	0.0730	D	0.0860	E	0.0840	F	0.0750	G	0.0690	H	0.0670
Fluorene	A	0.0780	B	0.0780	C	0.0810	D	0.0790	E	0.0900	F	0.0870	G	0.0700	H	0.0820
Indeno(1,2,3-cd)pyrene	A	0.0810	B	0.0870	C	0.0810	D	0.0720	E	0.0880	F	0.0740	G	0.0790	H	0.0750
Naphthalene	A	0.730	B	0.695	C	0.692	D	0.729	E	0.710	F	0.733	G	0.724	H	0.728
Phenanthrene	A	0.0840	B	0.0890	C	0.0840	D	0.0880	E	0.0890	F	0.0820	G	0.0780	H	0.0870
Pyrene	A	0.0760	B	0.0760	C	0.0760	D	0.0750	E	0.0850	F	0.0810	G	0.0800	H	0.0820

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Supervisor Approval: M Gulu 3/28/06

QA/QC Approval:

Printed: 03/14/2006 19:37:49

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06
Column: FLD Vydac C-18 4.6 x 150 mm

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
2-Methylnaphthalene/Dibenzofuran	1.00	0.658	0.0455	2.998	0.14	ug/L	7	66	Valid MDL Data
Acenaphthene	1.00	0.760	0.0334	2.998	0.10	ug/L	4	76	Valid MDL Data
Acenaphthylene				0	0.12	ug/L			
Anthracene	0.100	0.0830	0.00330	2.998	0.0099	ug/L	4	83	Spike level too high (Spike>10*MDL)
Benz(a)anthracene	0.100	0.0983	0.00369	2.998	0.011	ug/L	4	98	Valid MDL Data
Benzo(a)pyrene	0.100	0.112	0.00283	2.998	0.0085	ug/L	3	112	Spike level too high (Spike>10*MDL)
Benzo(b)fluoranthene	0.100	0.0900	0.00273	2.998	0.0082	ug/L	3	90	Spike level too high (Spike>10*MDL)
Benzo(g,h,i)perylene	0.100	0.0763	0.00851	2.998	0.026	ug/L	11	76	Valid MDL Data
Benzo(k)fluoranthene	0.100	0.0876	0.00239	2.998	0.0072	ug/L	3	88	Spike level too high (Spike>10*MDL)
Chrysene	0.100	0.0920	0.00689	2.998	0.021	ug/L	7	92	Valid MDL Data
Dibenz(a,h)anthracene	0.100	0.0833	0.00373	2.998	0.011	ug/L	4	83	Valid MDL Data
Fluoranthene	0.100	0.0779	0.00786	2.998	0.024	ug/L	10	78	Valid MDL Data
Fluorene	0.100	0.0806	0.00609	2.998	0.018	ug/L	8	81	Valid MDL Data
Indeno(1,2,3-cd)pyrene	0.100	0.0796	0.00585	2.998	0.018	ug/L	7	80	Valid MDL Data
Naphthalene	1.00	0.718	0.0164	2.998	0.049	ug/L	2	72	Spike level too high (Spike>10*MDL)
Phenanthrene	0.100	0.0851	0.00387	2.998	0.012	ug/L	5	85	Valid MDL Data
Pyrene	0.100	0.0789	0.00364	2.998	0.011	ug/L	5	79	Valid MDL Data

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Supervisor Approval: 3/28/06

QA/QC Approval:

Printed: 03/14/2006 19:37:49

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06 **Column:** DAD Vydac C-18 4.6 x 150 mm

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	03130004c.d	J:\LC06\DATA\031306PA\03130004.D\	03/13/2006 16:38	E	03130008c.d	J:\LC06\DATA\031306PA\03130008.D\	03/13/2006 17:58
B	03130005c.d	J:\LC06\DATA\031306PA\03130005.D\	03/13/2006 16:58	F	03130009c.d	J:\LC06\DATA\031306PA\03130009.D\	03/13/2006 18:18
C	03130006c.d	J:\LC06\DATA\031306PA\03130006.D\	03/13/2006 17:18	G	03130010c.d	J:\LC06\DATA\031306PA\03130010.D\	03/13/2006 18:37
D	03130007c.d	J:\LC06\DATA\031306PA\03130007.D\	03/13/2006 17:38	H	03130011c.d	J:\LC06\DATA\031306PA\03130011.D\	03/13/2006 18:57

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**
2-Methylnaphthalene/Dibenzofuran	A	0.690	B	0.664	C	0.670	D	0.684	E	0.720	F	0.780	G	0.724	H	0.682
Acenaphthene	A	0.908	B	0.779	C	0.811	D	0.854	E	0.784	F	0.912	G	0.836	H	0.847
Acenaphthylene	A	0.779	B	0.815	C	0.779	D	0.807	E	0.811	F	0.846	G	0.887	H	0.775
Anthracene	A	0.0790	B	0.0770	C	0.0770	D	0.0780	E	0.0830	F	0.0820	G	0.0780	H	0.0790
Benz(a)anthracene	A	0.117	B	0.109	C	0.113	D	0.100	E	0.123	F	0.114	G	0.115	H	0.120
Benzo(a)pyrene	A	0.142	B	0.138	C	0.139	D	0.135	E	0.146	F	0.142	G	0.147	H	0.141
Benzo(b)fluoranthene	A	0.0940	B	0.0920	C	0.0950	D	0.0860	E	0.102	F	0.101	G	0.157	H	0.0950
Benzo(g,h,i)perylene	A	0.0980	B	0.0950	C	0.0890	D	0.102	E	0.122	F	0.111	G	0.120	H	0.0980
Benzo(k)fluoranthene	A	0.0820	B	0.0750	C	0.0830	D	0.0760	E	0.0890	F	0.0840	G	0.110	H	0.0880
Chrysene	A	0.0910	B	0.0920	C	0.0930	D	0.0880	E	0.104	F	0.0940	G	0.0910	H	0.0930
Dibenz(a,h)anthracene	A	0.0690	B	0.0730	C	0.0910	D	0.0870	E	0.103	F	0.0780	G	0.0960	H	0.0870
Fluoranthene	A	0.0750	B	0.0760	C	0.0770	D	0.110	E	0.0950	F	0.0820	G	0.0820	H	0.0950
Fluorene	A	0.0880	B	0.0760	C	0.0830	D	0.0840	E	0.0810	F	0.0960	G	0.0880	H	0.0840
Indeno(1,2,3-cd)pyrene	A	0.0770	B	0.0790	C	0.0770	D	0.0750	E	0.0920	F	0.0740	G	0.106	H	0.0750
Naphthalene	A	0.752	B	0.726	C	0.749	D	0.736	E	0.747	F	0.852	G	0.710	H	0.751
Phenanthrene	A	0.0840	B	0.0880	C	0.0860	D	0.0920	E	0.0930	F	0.0950	G	0.0840	H	0.0860
Pyrene	A	0.0840	B	0.0770	C	0.0790	D	0.0950	E	0.101	F	0.0880	G	0.0860	H	0.0910

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Supervisor Approval: M Curlin 3/28/06

QA/QC Approval: [illegible]

Printed: 03/14/2006 19:33:06

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1557

Analytical Method: 8310
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: LC06
Column: DAD Vydac C-18 4.6 x 150 mm

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
2-Methylnaphthalene/Dibenzofuran	1.00	0.702	0.0382	2.998	0.11	ug/L	5	70	Valid MDL Data
Acenaphthene	1.00	0.841	0.0504	2.998	0.15	ug/L	6	84	Valid MDL Data
Acenaphthylene	1.00	0.812	0.0385	2.998	0.12	ug/L	5	81	Valid MDL Data
Anthracene	0.100	0.0791	0.00223	2.998	0.0067	ug/L	3	79	Spike level too high (Spike>10*MDL)
Benz(a)anthracene	0.100	0.114	0.00706	2.998	0.021	ug/L	6	114	Valid MDL Data
Benzo(a)pyrene	0.100	0.141	0.00399	2.998	0.012	ug/L	3	141	Valid MDL Data
Benzo(b)fluoranthene	0.100	0.103	0.0225	2.998	0.067	ug/L	22	103	Valid MDL Data
Benzo(g,h,i)perylene	0.100	0.104	0.0120	2.998	0.036	ug/L	12	104	Valid MDL Data
Benzo(k)fluoranthene	0.100	0.0859	0.0109	2.998	0.033	ug/L	13	86	Valid MDL Data
Chrysene	0.100	0.0933	0.00471	2.998	0.014	ug/L	5	93	Valid MDL Data
Dibenz(a,h)anthracene	0.100	0.0855	0.0116	2.998	0.035	ug/L	14	86	Valid MDL Data
Fluoranthene	0.100	0.0865	0.0124	2.998	0.037	ug/L	14	87	Valid MDL Data
Fluorene	0.100	0.0850	0.00588	2.998	0.018	ug/L	7	85	Valid MDL Data
Indeno(1,2,3-cd)pyrene	0.100	0.0819	0.0113	2.998	0.034	ug/L	14	82	Valid MDL Data
Naphthalene	1.00	0.753	0.0426	2.998	0.13	ug/L	6	75	Valid MDL Data
Phenanthrene	0.100	0.0885	0.00428	2.998	0.013	ug/L	5	89	Valid MDL Data
Pyrene	0.100	0.0876	0.00800	2.998	0.024	ug/L	9	88	Valid MDL Data

1567

Supervisor Approval: MM Carlin 3/28/06

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047.D	J:\GC23\DATA\092906\	09/30/2006 13:15	E	0929F051.D	J:\GC23\DATA\092906\	09/30/2006 15:00
B	0929F048.D	J:\GC23\DATA\092906\	09/30/2006 13:41	F	0929F052.D	J:\GC23\DATA\092906\	09/30/2006 15:26
C	0929F049.D	J:\GC23\DATA\092906\	09/30/2006 14:07	G	0929F059.D	J:\GC23\DATA\092906\	09/30/2006 18:30
D	0929F050.D	J:\GC23\DATA\092906\	09/30/2006 14:33	H	0929F060.D	J:\GC23\DATA\092906\	09/30/2006 18:56

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0759	B	0.0703	C	0.0773	D	0.0687	E	0.0783	F	0.0773	G	0.0740	H	0.0639
Toxaphene	A	0.179	B	0.175	C	0.169	D	0.178	E	0.188	F	0.178	G	0.165	H	0.166

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0732	0.00510	2.998	0.015	ug/L	7	73	Valid MDL Data
Toxaphene	0.200	0.175	0.00753	2.998	0.023	ug/L	4	87	Valid MDL Data

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047c.d	J:\GC23\DATA\092906\0929F047.D\	09/30/2006 13:15	E	0929F051c.d	J:\GC23\DATA\092906\0929F051.D\	09/30/2006 15:00
B	0929F048c.d	J:\GC23\DATA\092906\0929F048.D\	09/30/2006 13:41	F	0929F052c.d	J:\GC23\DATA\092906\0929F052.D\	09/30/2006 15:26
C	0929F049c.d	J:\GC23\DATA\092906\0929F049.D\	09/30/2006 14:07	G	0929F059c.d	J:\GC23\DATA\092906\0929F059.D\	09/30/2006 18:30
D	0929F050c.d	J:\GC23\DATA\092906\0929F050.D\	09/30/2006 14:33	H	0929F060c.d	J:\GC23\DATA\092906\0929F060.D\	09/30/2006 18:56

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0746	B	0.0705	C	0.0732	D	0.0707	E	0.0756	F	0.0743	G	0.0673	H	0.0659
Toxaphene	A	0.141	B	0.142	C	0.137	D	0.132	E	0.160	F	0.154	G	0.147	H	0.140

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0715	0.00354	2.998	0.011	ug/L	5	72	Valid MDL Data
Toxaphene	0.200	0.144	0.00924	2.998	0.028	ug/L	6	72	Valid MDL Data

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088.D	J:\GC23\DATA\081006\	08/12/2006 06:05	E	0810F092.D	J:\GC23\DATA\081006\	08/12/2006 07:51
B	0810F089.D	J:\GC23\DATA\081006\	08/12/2006 06:31	F	0810F093.D	J:\GC23\DATA\081006\	08/12/2006 08:17
C	0810F090.D	J:\GC23\DATA\081006\	08/12/2006 06:58	G	0810F094.D	J:\GC23\DATA\081006\	08/12/2006 08:44
D	0810F091.D	J:\GC23\DATA\081006\	08/12/2006 07:24	H	0810F095.D	J:\GC23\DATA\081006\	08/12/2006 09:10

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00192	B	0.00262	C	0.00154	D	0.00318	E	0.00207	F	0.0024	G	0.00233	H	0.00262
4,4'-DDE	A	0.00179	B	0.00157	C	0.00153	D	0.00185	E	0.00182	F	0.0017	G	0.00177	H	0.00168
4,4'-DDT	A	0.00175	B	0.00173	C	0.00169	D	0.00180	E	0.00176	F	0.0019	G	0.00160	H	0.00171
Aldrin	A	0.00091	B	0.00090	C	0.00075	D	0.00078	E	0.00068	F	0.0007	G	0.000616	H	0.00078
alpha-BHC	A	0.00166	B	0.00152	C	0.00136	D	0.00160	E	0.00171	F	0.0016	G	0.00151	H	0.00161
~~alpha-Chlordane~~	~~A~~	~~0.00191~~	~~B~~	~~0.00181~~	~~C~~	~~0.00167~~	~~D~~	~~0.00192~~	~~E~~	~~0.00179~~	~~F~~	~~0.0018~~	~~G~~	~~0.00177~~	~~H~~	~~0.00187~~
beta-BHC	A	0.00216	B	0.00209	C	0.00176	D	0.00183	E	0.00213	F	0.0022	G	0.00186	H	0.00195
delta-BHC	A	0.00194	B	0.00190	C	0.00176	D	0.00187	E	0.00173	F	0.0018	G	0.00162	H	0.00186
Dieldrin	A	0.00203	B	0.00189	C	0.00169	D	0.00191	E	0.00184	F	0.0018	G	0.00166	H	0.00181
Endosulfan I	A	0.00165	B	0.00158	C	0.00146	D	0.00185	E	0.00158	F	0.0018	G	0.00150	H	0.00179
Endosulfan II	A	0.00181	B	0.00175	C	0.00158	D	0.00182	E	0.00204	F	0.0018	G	0.00176	H	0.00167
Endosulfan Sulfate	A	0.00236	B	0.00245	C	0.00215	D	0.00260	E	0.00232	F	0.0025	G	0.00221	H	0.00249
Endrin	A	0.00209	B	0.00198	C	0.00205	D	0.00189	E	0.00189	F	0.0018	G	0.00210	H	0.00181
Endrin Aldehyde	A	0.00191	B	0.00187	C	0.00161	D	0.00178	E	0.00201	F	0.0018	G	0.00211	H	0.00179
Endrin Ketone	A	0.00252	B	0.00231	C	0.00210	D	0.00232	E	0.00225	F	0.0024	G	0.00229	H	0.00283
gamma-BHC (Lindane)	A	0.00167	B	0.00176	C	0.00144	D	0.00179	E	0.00193	F	0.0016	G	0.00158	H	0.00169
gamma-Chlordane	A	0.00208	B	0.00194	C	0.00177	D	0.00187	E	0.00179	F	0.0019	G	0.00176	H	0.00183
Heptachlor	A	0.00167	B	0.00155	C	0.00165	D	0.00181	E	0.00162	F	0.0016	G	0.00173	H	0.00154
Heptachlor Epoxide	A	0.00215	B	0.00198	C	0.00184	D	0.00196	E	0.00186	F	0.0018	G	0.00181	H	0.00191
Hexachlorobenzene	A	0.00172	B	0.00161	C	0.00147	D	0.00159	E	0.00158	F	0.0017	G	0.00165	H	0.00160
Isodrin	A	0.00118	B	0.00095	C	0.00080	D	0.00071	E	0.00067	F	0.0008	G	0.000574	H	0.00082
Methoxychlor	A	0.00271	B	0.00233	C	0.00216	D	0.00222	E	0.00217	F	0.0022	G	0.00230	H	0.00248

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00235	0.000505	2.998	0.0015	ug/L	22	94	Valid MDL Data
4,4'-DDE	0.00250	0.00172	0.000120	2.998	0.00036	ug/L	7	69	Valid MDL Data
4,4'-DDT	0.00250	0.00175	0.000107	2.998	0.00032	ug/L	6	70	Valid MDL Data
Aldrin	0.00250	0.000774	0.000101	2.998	0.00030	ug/L	13	31	Valid MDL Data
alpha-BHC	0.00250	0.00158	0.000112	2.998	0.00033	ug/L	7	63	Valid MDL Data
~~alpha-Chlordane~~	~~0.00250~~	~~0.00182~~	~~0.0000816~~	~~2.998~~	~~0.00024~~	~~ug/L~~	~~4~~	~~73~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00200	0.000182	2.998	0.00054	ug/L	9	80	Valid MDL Data
delta-BHC	0.00250	0.00182	0.000105	2.998	0.00031	ug/L	6	73	Valid MDL Data
Dieldrin	0.00250	0.00183	0.000117	2.998	0.00035	ug/L	6	73	Valid MDL Data
Endosulfan I	0.00250	0.00165	0.000146	2.998	0.00044	ug/L	9	66	Valid MDL Data
Endosulfan II	0.00250	0.00178	0.000133	2.998	0.00040	ug/L	7	71	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00239	0.000157	2.998	0.00047	ug/L	7	96	Valid MDL Data
Endrin	0.00250	0.00196	0.000108	2.998	0.00032	ug/L	5	79	Valid MDL Data
Endrin Aldehyde	0.00250	0.00186	0.000152	2.998	0.00046	ug/L	8	75	Valid MDL Data
Endrin Ketone	0.00250	0.00238	0.000220	2.998	0.00066	ug/L	9	95	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00168	0.000146	2.998	0.00044	ug/L	9	67	Valid MDL Data
gamma-Chlordane	0.00250	0.00187	0.000108	2.998	0.00032	ug/L	6	75	Valid MDL Data
Heptachlor	0.00250	0.00165	0.0000924	2.998	0.00028	ug/L	6	66	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00192	0.000108	2.998	0.00032	ug/L	6	77	Valid MDL Data
Hexachlorobenzene	0.00250	0.00161	0.0000780	2.998	0.00023	ug/L	5	65	Spike level too high (Spike>10*MDL) *
Isodrin	0.00250	0.000815	0.000185	2.998	0.00056	ug/L	23	33	Valid MDL Data
Methoxychlor	0.00250	0.00232	0.000190	2.998	0.00057	ug/L	8	93	Valid MDL Data

* other column OK

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Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088c.d	J:\GC23\DATA\081006\0810F088.D\	08/12/2006 06:05	E	0810F092c.d	J:\GC23\DATA\081006\0810F092.D\	08/12/2006 07:51
B	0810F089c.d	J:\GC23\DATA\081006\0810F089.D\	08/12/2006 06:31	F	0810F093c.d	J:\GC23\DATA\081006\0810F093.D\	08/12/2006 08:17
C	0810F090c.d	J:\GC23\DATA\081006\0810F090.D\	08/12/2006 06:58	G	0810F094c.d	J:\GC23\DATA\081006\0810F094.D\	08/12/2006 08:44
D	0810F091c.d	J:\GC23\DATA\081006\0810F091.D\	08/12/2006 07:24	H	0810F095c.d	J:\GC23\DATA\081006\0810F095.D\	08/12/2006 09:10

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00234	B	0.00233	C	0.00219	D	0.00218	E	0.00204	F	0.0021	G	0.00218	H	0.00223
4,4'-DDE	A	0.00211	B	0.00210	C	0.00201	D	0.00217	E	0.00211	F	0.0021	G	0.00210	H	0.00191
4,4'-DDT	A	0.00402	B	0.00380	C	0.00375	D	0.00418	E	0.00377	F	0.0041	G	0.00418	H	0.00378
Aldrin	A	0.00122	B	0.00101	C	0.00093	D	0.00103	E	0.00085	F	0.0009	G	0.000778	H	0.00093
alpha-BHC	A	0.00190	B	0.00190	C	0.00166	D	0.00180	E	0.00186	F	0.0018	G	0.00181	H	0.00176
~~alpha-Chlordane~~	~~A~~	~~0.00216~~	~~B~~	~~0.00218~~	~~C~~	~~0.00207~~	~~D~~	~~0.00223~~	~~E~~	~~0.00214~~	~~F~~	~~0.0022~~	~~G~~	~~0.00209~~	~~H~~	~~0.00215~~
beta-BHC	A	0.00323	B	0.00363	C	0.00302	D	0.00354	E	0.00320	F	0.0029	G	0.00309	H	0.00364
delta-BHC	A	0.00209	B	0.00212	C	0.00189	D	0.00245	E	0.00234	F	0.0022	G	0.00242	H	0.00231
Dieldrin	A	0.00221	B	0.00218	C	0.00201	D	0.00204	E	0.00199	F	0.0021	G	0.00191	H	0.00200
Endosulfan I	A	0.00194	B	0.00193	C	0.00181	D	0.00194	E	0.00190	F	0.0018	G	0.00187	H	0.00191
Endosulfan II	A	0.00206	B	0.00201	C	0.00189	D	0.00208	E	0.00226	F	0.0020	G	0.00197	H	0.00207
Endosulfan Sulfate	A	0.00236	B	0.00242	C	0.00219	D	0.00235	E	0.00247	F	0.0022	G	0.00247	H	0.00221
Endrin	A	0.00236	B	0.00275	C	0.00214	D	0.00258	E	0.00247	F	0.0025	G	0.00207	H	0.00231
Endrin Aldehyde	A	0.00198	B	0.00205	C	0.00191	D	0.00190	E	0.00205	F	0.0018	G	0.00190	H	0.00178
Endrin Ketone	A	0.00227	B	0.00222	C	0.00187	D	0.00213	E	0.00224	F	0.0022	G	0.00212	H	0.00232
gamma-BHC (Lindane)	A	0.00209	B	0.00205	C	0.00184	D	0.00201	E	0.00208	F	0.0021	G	0.00195	H	0.00214
gamma-Chlordane	A	0.00223	B	0.00228	C	0.00208	D	0.00225	E	0.00232	F	0.0022	G	0.00233	H	0.00225
Heptachlor	A	0.00203	B	0.00181	C	0.00179	D	0.00194	E	0.00184	F	0.0021	G	0.00181	H	0.00184
Heptachlor Epoxide	A	0.00221	B	0.00229	C	0.00200	D	0.00222	E	0.00225	F	0.0023	G	0.00208	H	0.00218
Hexachlorobenzene	A	0.00215	B	0.00204	C	0.00205	D	0.00200	E	0.00199	F	0.0022	G	0.00196	H	0.00198
Isodrin	A	0.00132	B	0.00104	C	0.00098	D	0.00088	E	0.00086	F	0.0008	G	0.000788	H	0.00087
Methoxychlor	A	0.00268	B	0.00251	C	0.00172	D	0.00216	E	0.00229	F	0.0026	G	0.00220	H	0.00223

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00220	0.0000990	2.998	0.00030	ug/L	4	88	Valid MDL Data
4,4'-DDE	0.00250	0.00208	0.0000836	2.998	0.00025	ug/L	4	83	Valid MDL Data
4,4'-DDT	0.00250	0.00395	0.000194	2.998	0.00058	ug/L	5	158	Valid MDL Data
Aldrin	0.00250	0.000960	0.000134	2.998	0.00040	ug/L	14	38	Valid MDL Data
alpha-BHC	0.00250	0.00181	0.0000789	2.998	0.00024	ug/L	4	72	Spike level too high (Spike>10*MDL)
~~alpha-Chlordane~~	~~0.00250~~	~~0.00216~~	~~0.0000577~~	~~2.998~~	~~0.00017~~	~~ug/L~~	~~3~~	~~86~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00329	0.000277	2.998	0.00083	ug/L	8	132	Valid MDL Data
delta-BHC	0.00250	0.00223	0.000191	2.998	0.00057	ug/L	9	89	Valid MDL Data
Dieldrin	0.00250	0.00206	0.000101	2.998	0.00030	ug/L	5	82	Valid MDL Data
Endosulfan I	0.00250	0.00190	0.0000436	2.998	0.00013	ug/L	2	76	Spike level too high (Spike>10*MDL)*
Endosulfan II	0.00250	0.00205	0.000108	2.998	0.00032	ug/L	5	82	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00234	0.000113	2.998	0.00034	ug/L	5	94	Valid MDL Data
Endrin	0.00250	0.00240	0.000227	2.998	0.00068	ug/L	9	96	Valid MDL Data
Endrin Aldehyde	0.00250	0.00193	0.0000922	2.998	0.00028	ug/L	5	77	Valid MDL Data
Endrin Ketone	0.00250	0.00218	0.000142	2.998	0.00043	ug/L	7	87	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00204	0.000103	2.998	0.00031	ug/L	5	81	Valid MDL Data
gamma-Chlordane	0.00250	0.00225	0.0000781	2.998	0.00023	ug/L	3	90	Spike level too high (Spike>10*MDL)
Heptachlor	0.00250	0.00190	0.000122	2.998	0.00036	ug/L	6	76	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00220	0.000105	2.998	0.00031	ug/L	5	88	Valid MDL Data
Hexachlorobenzene	0.00250	0.00205	0.000102	2.998	0.00031	ug/L	5	82	Valid MDL Data
Isodrin	0.00250	0.000955	0.000166	2.998	0.00050	ug/L	17	38	Valid MDL Data
Methoxychlor	0.00250	0.00230	0.000310	2.998	0.00093	ug/L	13	92	Valid MDL Data

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

File ID	Data File	Data Path	AcqDate
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B	1205F022.D	J:\MS18\DATA\120506\	12/05/2006 17:08
C	1205F023.D	J:\MS18\DATA\120506\	12/05/2006 17:28
D	1205F024.D	J:\MS18\DATA\120506\	12/05/2006 17:48
E	1205F025.D	J:\MS18\DATA\120506\	12/05/2006 18:07
F	1205F026.D	J:\MS18\DATA\120506\	12/05/2006 18:27
G	1205F027.D	J:\MS18\DATA\120506\	12/05/2006 18:47
H	1205F028.D	J:\MS18\DATA\120506\	12/05/2006 19:06
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J	1206F012.D	J:\MS18\DATA\120606\	12/06/2006 15:07
K	1206F013.D	J:\MS18\DATA\120606\	12/06/2006 15:27
L	1206F014.D	J:\MS18\DATA\120606\	12/06/2006 15:46
M	1206F015.D	J:\MS18\DATA\120606\	12/06/2006 16:06
N	1206F016.D	J:\MS18\DATA\120606\	12/06/2006 16:26
O	1206F017.D	J:\MS18\DATA\120606\	12/06/2006 16:45
P	1206F018.D	J:\MS18\DATA\120606\	12/06/2006 17:05
Q	1206F019.D	J:\MS18\DATA\120606\	12/06/2006 17:25
R	1206F020.D	J:\MS18\DATA\120606\	12/06/2006 17:44
S	1206F021.D	J:\MS18\DATA\120606\	12/06/2006 18:04
T	1206F022.D	J:\MS18\DATA\120606\	12/06/2006 18:24
U	1206F023.D	J:\MS18\DATA\120606\	12/06/2006 18:43
V	1206F024.D	J:\MS18\DATA\120606\	12/06/2006 19:03
W	1206F025.D	J:\MS18\DATA\120606\	12/06/2006 19:22
X	1206F026.D	J:\MS18\DATA\120606\	12/06/2006 19:42
Y	0117F005.D	J:\MS18\DATA\011707\	01/17/2007 15:46
Z	0117F006.D	J:\MS18\DATA\011707\	01/17/2007 16:06
AA	0117F007.D	J:\MS18\DATA\011707\	01/17/2007 16:25
AB	0117F008.D	J:\MS18\DATA\011707\	01/17/2007 16:45
AC	0117F009.D	J:\MS18\DATA\011707\	01/17/2007 17:04
AD	0117F010.D	J:\MS18\DATA\011707\	01/17/2007 17:24
AE	0117F011.D	J:\MS18\DATA\011707\	01/17/2007 17:44

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,1,1,2-Tetrachloroethane	A	0.210	B	0.180	C	0.160	D	0.170	E	0.170	F	0.180	G	0.190	H	0.180
1,1,1-Trichloroethane (TCA)	A	0.210	B	0.200	C	0.200	D	0.200	E	0.150	F	0.190	G	0.200	H	0.220
1,1,2,2-Tetrachloroethane	A	0.210	B	0.220	C	0.160	D	0.160	E	0.160	F	0.210	G	0.220	H	0.220
1,1,2-Trichloroethane	A	0.240	B	0.190	C	0.160	D	0.240	E	0.180	F	0.210	G	0.240	H	0.230
1,1-Dichloroethane	A	0.210	B	0.190	C	0.190	D	0.210	E	0.150	F	0.190	G	0.190	H	0.210
1,1-Dichloroethene	A	0.240	B	0.170	C	0.190	D	0.230	E	0.170	F	0.200	G	0.210	H	0.230
1,1-Dichloropropene	A	0.210	B	0.200	C	0.190	D	0.210	E	0.160	F	0.230	G	0.190	H	0.210
1,2,3-Trichlorobenzene	I	0.510	J	0.520	K	0.540	L	0.510	M	0.480	N	0.490	O	0.450	P	0.520
1,2,3-Trichloropropane	I	0.510	J	0.520	K	0.510	L	0.490	M	0.510	N	0.660	O	0.580	P	0.650
1,2,4-Trichlorobenzene	A	0.410	B	0.310	C	0.300	D	0.290	E	0.220	F	0.270	G	0.250	H	0.240
1,2,4-Trimethylbenzene	A	0.220	B	0.180	C	0.170	D	0.200	E	0.150	F	0.190	G	0.180	H	0.190
1,2-Dibromo-3-chloropropane	I	0.590	J	0.710	L	0.680	M	0.430	N	0.280	O	0.460	P	0.380		

Supervisor Approval: 2/2/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,2-Dibromoethane (EDB)	A	0.210	B	0.230	C	0.210	D	0.180	E	0.190	F	0.150	G	0.190	H	0.200
1,2-Dichlorobenzene	A	0.250	B	0.210	C	0.200	D	0.220	E	0.180	F	0.210	G	0.180	H	0.220
1,2-Dichloroethane (EDC)	A	0.200	B	0.200	C	0.180	D	0.210	E	0.150	F	0.190	G	0.220	H	0.210
1,2-Dichloropropane	A	0.220	B	0.170	C	0.180	D	0.220	E	0.180	F	0.200	G	0.210	H	0.220
1,3,5-Trichlorobenzene	I	0.630	J	0.670	K	0.600	L	0.610	M	0.510	N	0.560	O	0.520	P	0.580
1,3,5-Trimethylbenzene	A	0.220	B	0.200	C	0.170	D	0.200	E	0.150	F	0.190	G	0.170	H	0.190
1,3-Dichlorobenzene	A	0.270	B	0.240	C	0.210	D	0.230	E	0.190	F	0.240	G	0.190	H	0.230
1,3-Dichloropropane	A	0.210	B	0.200	C	0.180	D	0.180	E	0.160	F	0.210	G	0.180	H	0.210
1,4-Dichlorobenzene	A	0.280	B	0.240	C	0.210	D	0.250	E	0.190	F	0.230	G	0.210	H	0.220
1,4-Dioxane	Q	38.2	R	58.5	S	47.5	T	32.2	U	49.0	V	37.5	W	43.9	X	37.9
1-Chlorohexane	A	0.280	B	0.220	C	0.230	D	0.250	E	0.140	F	0.250	G	0.210	H	0.230
2,2-Dichloropropane	A	0.190	B	0.190	C	0.160	D	0.180	E	0.140	F	0.210	G	0.180	H	0.230
2-Butanone (MEK)	A	9.54	B	10.1	C	10.3	D	9.58	E	8.64	F	8.74	G	10.5	H	10.6
2-Chloroethyl Vinyl Ether	I	0.550	J	0.550	K	0.470	L	0.510	M	0.560	N	0.590	O	0.540	P	0.450
2-Chlorotoluene	A	0.240	B	0.190	C	0.190	D	0.220	E	0.170	F	0.200	G	0.170	H	0.230
2-Hexanone	A	9.93	B	8.99	C	10.2	D	8.78	E	9.12	F	8.44	G	7.97	H	10.0
2-Nitropropane	I	2.07	J	1.88	K	1.87	L	2.03	M	2.01	N	2.02	O	2.04	P	2.28
3-Chloro-1-propene	A	0.220	B	0.230	C	0.190	D	0.210	E	0.170	F	0.180	G	0.220	H	0.210
4-Chlorotoluene	A	0.230	B	0.210	C	0.190	D	0.210	E	0.170	F	0.200	G	0.180	H	0.200
4-Isopropyltoluene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.160	F	0.170	G	0.160	H	0.190
4-Methyl-2-pentanone (MIBK)	A	11.2	B	11.6	C	12.0	D	11.1	E	11.8	F	11.2	G	11.3	H	12.5
Acetone	A	10.6	B	10.4	C	12.1	D	9.33	E	9.18	F	9.56	G	11.0	H	11.3
Acetonitrile	A	10.4	B	9.38	C	11.9	D	8.45	E	9.86	F	8.73	G	11.0	H	11.8
Acrolein	I	14.8	J	13.5	K	11.8	L	14.8	M	12.6	N	16.9	O	10.2	P	11.1
Acrylonitrile	A	1.13	B	1.03	C	1.03	D	1.05	E	0.870	F	0.830	G	1.01	H	1.14
Benzene	A	0.220	B	0.190	C	0.180	D	0.200	E	0.160	F	0.210	G	0.200	H	0.220
Bromobenzene	A	0.240	B	0.200	C	0.210	D	0.210	E	0.170	F	0.200	G	0.180	H	0.220
Bromochloromethane	A	0.230	B	0.210	C	0.150	D	0.210	E	0.180	F	0.240	G	0.160	H	0.220
Bromodichloromethane	A	0.200	B	0.160	C	0.170	D	0.180	E	0.140	F	0.170	G	0.190	H	0.180
Bromoform	A	0.220	B	0.120	C	0.160	D	0.160	E	0.130	F	0.130	G	0.140	H	0.180
Bromomethane	A	0.330	B	0.320	C	0.230	D	0.310	E	0.250	F	0.340	G	0.320	H	0.300

Supervisor Approval: 2/28/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Carbon Disulfide	A	0.210	B	0.200	C	0.170	D	0.210	E	0.150	F	0.220	G	0.190	H	0.210
Carbon Tetrachloride	A	0.190	B	0.180	C	0.170	D	0.190	E	0.160	F	0.200	G	0.190	H	0.210
Chlorobenzene	A	0.220	B	0.200	C	0.180	D	0.210	E	0.160	F	0.200	G	0.180	H	0.220
Chloroethane	A	0.310	B	0.190	C	0.190	D	0.230	E	0.210	F	0.280	G	0.250	H	0.230
Chloroform	A	0.240	B	0.200	C	0.160	D	0.220	E	0.170	F	0.180	G	0.200	H	0.220
Chloromethane	A	0.240	B	0.210	C	0.290	D	0.260	E	0.200	F	0.280	G	0.290	H	0.290
Chloroprene	A	0.820	B	0.690	C	0.670	D	0.780	E	0.570	F	0.750	G	0.720	H	0.790
cis-1,2-Dichloroethene	A	0.230	B	0.210	C	0.210	D	0.180	E	0.170	F	0.230	G	0.210	H	0.220
cis-1,3-Dichloropropene	A	0.210	B	0.180	C	0.180	D	0.170	E	0.150	F	0.200	G	0.190	H	0.180
cis-1,4-Dichloro-2-butene	I	1.69	J	1.58	K	1.78	L	1.53	M	1.60	N	1.59	O	1.57	P	1.80
Dibromochloromethane	A	0.180	B	0.160	C	0.170	D	0.180	E	0.140	F	0.220	G	0.170	H	0.150
Dibromomethane	A	0.230	B	0.210	C	0.230	D	0.240	E	0.200	F	0.220	G	0.230	H	0.120
Dichlorodifluoromethane	A	0.240	B	0.190	C	0.180	D	0.240	E	0.190	F	0.220	G	0.190	H	0.230
Dichlorofluoromethane (CFC 21)	A	0.200	B	0.210	C	0.170	D	0.220	E	0.190	F	0.200	G	0.210	H	0.230
Diisopropyl Ether	A	0.210	B	0.180	C	0.180	D	0.210	E	0.160	F	0.200	G	0.190	H	0.210
Ethyl Acetate	I	2.04	J	2.02	K	1.99	L	2.29	M	2.19	N	2.53	O	1.99	P	1.99
Ethyl Ether	A	0.230	B	0.190	C	0.190	D	0.200	E	0.210	F	0.180	G	0.220	H	0.230
Ethyl Methacrylate	A	0.240	B	0.160	C	0.180	D	0.210	E	0.130	F	0.160	G	0.230	H	0.210
Ethylbenzene	A	0.220	B	0.200	C	0.170	D	0.190	E	0.160	F	0.220	G	0.180	H	0.210
Hexachlorobutadiene	A	0.410	B	0.350	C	0.320	D	0.280	E	0.270	F	0.310	G	0.250	H	0.280
Iodomethane	A	0.720	B	0.710	C	0.660	D	0.730	E	0.580	F	0.740	G	0.720	H	0.820
Isobutyl Alcohol	I	24.9	J	27.7	K	21.8	L	20.2	M	23.8	N	27.0	O	22.5	P	23.3
Isopropylbenzene	A	0.210	B	0.190	C	0.170	D	0.210	E	0.140	F	0.200	G	0.170	H	0.210
m,p-Xylenes	A	0.420	B	0.390	C	0.340	D	0.370	E	0.300	F	0.400	G	0.350	H	0.380
Methacrylonitrile	A	1.00	B	0.740	C	0.960	D	0.910	E	0.640	F	0.940	G	0.890	H	0.910
Methyl Methacrylate	A	0.350	B	0.240	C	0.290	D	0.250	E	0.130	F	0.240	G	0.260	H	0.260
Methyl tert-Butyl Ether	A	0.390	B	0.360	C	0.370	D	0.380	E	0.350	F	0.360	G	0.370	H	0.440
Methylene Chloride	A	0.280	B	0.220	C	0.250	D	0.260	E	0.190	F	0.220	G	0.240	H	0.250
Naphthalene	I	0.500	J	0.540	K	0.470	L	0.540	M	0.450	N	0.510	O	0.490	P	0.480
n-Butylbenzene	A	0.260	B	0.220	C	0.210	D	0.210	E	0.160	F	0.200	G	0.190	H	0.200
n-Hexane	I	0.580	J	0.640	K	0.600	L	0.580	M	0.520	N	0.630	O	0.470		

Supervisor Approval: 2/24/07 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**	**File**	**Value**
n-Octane	I	0.690	J	0.750	K	0.630	L	0.640	M	0.630	N	0.680	O	0.520	P	0.620
n-Propylbenzene	A	0.220	B	0.190	C	0.180	D	0.210	E	0.160	F	0.190	G	0.180	H	0.210
o-Xylene	A	0.220	B	0.170	C	0.170	D	0.190	E	0.160	F	0.190	G	0.160	H	0.210
Propionitrile	I	2.16	J	2.49	K	3.10	L	2.08	M	1.90	N	2.41	O	2.10	P	2.55
sec-Butylbenzene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.190
Styrene	A	0.220	B	0.180	C	0.190	D	0.170	E	0.140	F	0.170	G	0.210	H	0.200
tert-Amyl Methyl Ether	A	0.300	B	0.260	C	0.240	D	0.270	E	0.240	F	0.310	G	0.270	H	0.250
tert-Butyl Alcohol	I	3.35	J	3.36	K	2.72	L	3.26	M	2.52	N	3.45	O	3.07	P	2.92
tert-Butyl Ethyl Ether	A	0.210	B	0.180	C	0.180	D	0.190	E	0.150	F	0.190	G	0.180	H	0.200
tert-Butyl Formate	I	0.510	J	0.390	K	0.520	L	0.380	N	0.430	O	0.380	P	0.420		
tert-Butylbenzene	A	0.210	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.200
Tetrachloroethene (PCE)	A	0.270	B	0.230	C	0.190	D	0.230	E	0.160	F	0.230	G	0.220	H	0.230
Tetrahydrofuran	Q	1.33	R	1.25	S	1.67	T	0.780	U	1.33	V	1.11	W	1.36	X	0.920
Toluene	A	0.230	B	0.200	C	0.180	D	0.210	E	0.160	F	0.210	G	0.200	H	0.230
trans-1,2-Dichloroethene	A	0.260	B	0.240	C	0.230	D	0.230	E	0.210	F	0.190	G	0.210	H	0.250
trans-1,3-Dichloropropene	A	0.200	B	0.200	C	0.140	D	0.190	E	0.140	F	0.190	G	0.170	H	0.160
trans-1,4-Dichloro-2-butene	A	0.450	B	0.350	C	0.400	D	0.320	E	0.300	F	0.330	G	0.270	H	0.300
Trichloroethene (TCE)	A	0.210	B	0.180	C	0.210	D	0.220	E	0.160	F	0.230	G	0.200	H	0.230
Trichlorofluoromethane	A	0.240	B	0.190	C	0.190	D	0.230	E	0.140	F	0.220	G	0.190	H	0.230
Trichlorotrifluoroethane	A	0.270	B	0.230	C	0.200	D	0.210	E	0.160	F	0.230	G	0.240	H	0.220
Vinyl Acetate	I	1.11	J	1.09	K	0.930	L	0.890	M	0.740	N	0.920	O	0.710	P	0.970
Vinyl Chloride	Y	0.100	Z	0.110	AA	0.110	AB	0.100	AC	0.0900	AD	0.100	AE	0.110		

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Supervisor Approval: 2/4/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
1,1,1,2-Tetrachloroethane	0.200	0.180	0.0151	2.998	0.045	ug/L	8	90	Valid MDL Data
1,1,1-Trichloroethane (TCA)	0.200	0.196	0.0207	2.998	0.062	ug/L	11	98	Valid MDL Data
1,1,2,2-Tetrachloroethane	0.200	0.195	0.0293	2.998	0.088	ug/L	15	98	Valid MDL Data
1,1,2-Trichloroethane	0.200	0.211	0.0314	2.998	0.094	ug/L	15	106	Valid MDL Data
1,1-Dichloroethane	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
1,1-Dichloroethene	0.200	0.205	0.0273	2.998	0.082	ug/L	13	103	Valid MDL Data
1,1-Dichloropropene	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,2,3-Trichlorobenzene	0.500	0.503	0.0282	2.998	0.084	ug/L	6	101	Valid MDL Data
1,2,3-Trichloropropane	0.500	0.554	0.0678	2.998	0.20	ug/L	12	111	Valid MDL Data
1,2,4-Trichlorobenzene	0.200	0.286	0.0588	2.998	0.18	ug/L	21	143	Valid MDL Data
1,2,4-Trimethylbenzene	0.200	0.185	0.0207	2.998	0.062	ug/L	11	93	Valid MDL Data
1,2-Dibromo-3-chloropropane	0.500	0.504	0.160	3.143	0.50	ug/L	32	101	Valid MDL Data
1,2-Dibromoethane (EDB)	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
1,2-Dichlorobenzene	0.200	0.209	0.0230	2.998	0.069	ug/L	11	104	Valid MDL Data
1,2-Dichloroethane (EDC)	0.200	0.195	0.0220	2.998	0.066	ug/L	11	98	Valid MDL Data
1,2-Dichloropropane	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,3,5-Trichlorobenzene	0.500	0.585	0.0542	2.998	0.16	ug/L	9	117	Valid MDL Data
1,3,5-Trimethylbenzene	0.200	0.186	0.0220	2.998	0.066	ug/L	12	93	Valid MDL Data
1,3-Dichlorobenzene	0.200	0.225	0.0273	2.998	0.082	ug/L	12	113	Valid MDL Data
1,3-Dichloropropane	0.200	0.191	0.0189	2.998	0.057	ug/L	10	96	Valid MDL Data
1,4-Dichlorobenzene	0.200	0.229	0.0280	2.998	0.084	ug/L	12	114	Valid MDL Data
1,4-Dioxane	40.0	43.1	8.39	2.998	25	ug/L	19	108	Valid MDL Data
1-Chlorohexane	0.200	0.226	0.0410	2.998	0.12	ug/L	18	113	Valid MDL Data
2,2-Dichloropropane	0.200	0.185	0.0278	2.998	0.083	ug/L	15	93	Valid MDL Data
2-Butanone (MEK)	8.00	9.76	0.767	2.998	2.3	ug/L	8	122	Valid MDL Data
2-Chloroethyl Vinyl Ether	0.500	0.528	0.0474	2.998	0.14	ug/L	9	106	Valid MDL Data
2-Chlorotoluene	0.200	0.201	0.0264	2.998	0.079	ug/L	13	101	Valid MDL Data
2-Hexanone	8.00	9.18	0.806	2.998	2.4	ug/L	9	115	Valid MDL Data
2-Nitropropane	2.50	2.03	0.127	2.998	0.38	ug/L	6	81	Valid MDL Data
3-Chloro-1-propene	0.200	0.204	0.0213	2.998	0.064	ug/L	10	102	Valid MDL Data
4-Chlorotoluene	0.200	0.199	0.0189	2.998	0.057	ug/L	9	99	Valid MDL Data

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4-Isopropyltoluene	0.200	0.185	0.0233	2.998	0.070	ug/L	13	93	Valid MDL Data
4-Methyl-2-pentanone (MIBK)	8.00	11.6	0.481	2.998	1.4	ug/L	4	145	Valid MDL Data
Acetone	8.00	10.4	1.01	2.998	3.0	ug/L	10	130	Valid MDL Data
Acetonitrile	8.00	10.2	1.32	2.998	4.0	ug/L	13	127	Valid MDL Data
Acrolein	10.0	13.2	2.22	2.998	6.6	ug/L	17	132	Valid MDL Data
Acrylonitrile	0.800	1.01	0.111	2.998	0.33	ug/L	11	126	Valid MDL Data
Benzene	0.200	0.198	0.0205	2.998	0.062	ug/L	10	99	Valid MDL Data
Bromobenzene	0.200	0.204	0.0220	2.998	0.066	ug/L	11	102	Valid MDL Data
Bromochloromethane	0.200	0.200	0.0330	2.998	0.099	ug/L	16	100	Valid MDL Data
Bromodichloromethane	0.200	0.174	0.0185	2.998	0.055	ug/L	11	87	Valid MDL Data
Bromoform	0.200	0.155	0.0330	2.998	0.099	ug/L	21	78	Valid MDL Data
Bromomethane	0.200	0.300	0.0393	2.998	0.12	ug/L	13	150	Valid MDL Data
Carbon Disulfide	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
Carbon Tetrachloride	0.200	0.186	0.0160	2.998	0.048	ug/L	9	93	Valid MDL Data
Chlorobenzene	0.200	0.196	0.0213	2.998	0.064	ug/L	11	98	Valid MDL Data
Chloroethane	0.200	0.236	0.0424	2.998	0.13	ug/L	18	118	Valid MDL Data
Chloroform	0.200	0.199	0.0275	2.998	0.082	ug/L	14	99	Valid MDL Data
Chloromethane	0.200	0.258	0.0369	2.998	0.11	ug/L	14	129	Valid MDL Data
Chloroprene	0.800	0.724	0.0803	2.998	0.24	ug/L	11	90	Valid MDL Data
cis-1,2-Dichloroethene	0.200	0.208	0.0219	2.998	0.066	ug/L	11	104	Valid MDL Data
cis-1,3-Dichloropropene	0.200	0.183	0.0183	2.998	0.055	ug/L	10	91	Valid MDL Data
cis-1,4-Dichloro-2-butene	2.00	1.64	0.102	2.998	0.30	ug/L	6	82	Valid MDL Data
Dibromochloromethane	0.200	0.171	0.0242	2.998	0.072	ug/L	14	86	Valid MDL Data
Dibromomethane	0.200	0.210	0.0385	2.998	0.12	ug/L	18	105	Valid MDL Data
Dichlorodifluoromethane	0.200	0.210	0.0251	2.998	0.075	ug/L	12	105	Valid MDL Data
Dichlorofluoromethane (CFC 21)	0.200	0.204	0.0185	2.998	0.055	ug/L	9	102	Valid MDL Data
Diisopropyl Ether	0.200	0.193	0.0183	2.998	0.055	ug/L	10	96	Valid MDL Data
Ethyl Acetate	2.00	2.13	0.196	2.998	0.59	ug/L	9	107	Valid MDL Data
Ethyl Ether	0.200	0.206	0.0192	2.998	0.058	ug/L	9	103	Valid MDL Data
Ethyl Methacrylate	0.200	0.190	0.0385	2.998	0.12	ug/L	20	95	Valid MDL Data
Ethylbenzene	0.200	0.194	0.0226	2.998	0.068	ug/L	12	97	Valid MDL Data

Supervisor Approval: 2/28/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Hexachlorobutadiene	0.200	0.309	0.0517	2.998	0.15	ug/L	17	154	Valid MDL Data
Iodomethane	0.800	0.710	0.0687	2.998	0.21	ug/L	10	89	Valid MDL Data
Isobutyl Alcohol	20.0	23.9	2.58	2.998	7.7	ug/L	11	119	Valid MDL Data
Isopropylbenzene	0.200	0.188	0.0255	2.998	0.076	ug/L	14	94	Valid MDL Data
m,p-Xylenes	0.400	0.369	0.0380	2.998	0.11	ug/L	10	92	Valid MDL Data
Methacrylonitrile	0.800	0.874	0.121	2.998	0.36	ug/L	14	109	Valid MDL Data
Methyl Methacrylate	0.200	0.253	0.0614	2.998	0.18	ug/L	24	126	Valid MDL Data
Methyl tert-Butyl Ether	0.400	0.378	0.0282	2.998	0.084	ug/L	7	94	Valid MDL Data
Methylene Chloride	0.200	0.239	0.0280	2.998	0.084	ug/L	12	119	Valid MDL Data
Naphthalene	0.500	0.498	0.0320	2.998	0.096	ug/L	6	100	Valid MDL Data
n-Butylbenzene	0.200	0.206	0.0283	2.998	0.085	ug/L	14	103	Valid MDL Data
n-Hexane	0.500	0.574	0.0605	3.143	0.19	ug/L	11	115	Valid MDL Data
n-Octane	0.500	0.645	0.0665	2.998	0.20	ug/L	10	129	Valid MDL Data
n-Propylbenzene	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
o-Xylene	0.200	0.184	0.0226	2.998	0.068	ug/L	12	92	Valid MDL Data
Propionitrile	2.00	2.35	0.378	2.998	1.1	ug/L	16	117	Valid MDL Data
sec-Butylbenzene	0.200	0.189	0.0236	2.998	0.071	ug/L	12	94	Valid MDL Data
Styrene	0.200	0.185	0.0256	2.998	0.077	ug/L	14	93	Valid MDL Data
tert-Amyl Methyl Ether	0.200	0.268	0.0260	2.998	0.078	ug/L	10	134	Valid MDL Data
tert-Butyl Alcohol	2.50	3.08	0.336	2.998	1.0	ug/L	11	123	Valid MDL Data
tert-Butyl Ethyl Ether	0.200	0.185	0.0177	2.998	0.053	ug/L	10	93	Valid MDL Data
tert-Butyl Formate	0.500	0.433	0.0594	3.143	0.19	ug/L	14	87	Valid MDL Data
tert-Butylbenzene	0.200	0.188	0.0198	2.998	0.059	ug/L	11	94	Valid MDL Data
Tetrachloroethene (PCE)	0.200	0.220	0.0325	2.998	0.097	ug/L	15	110	Valid MDL Data
Tetrahydrofuran	1.00	1.22	0.278	2.998	0.83	ug/L	23	122	Valid MDL Data
Toluene	0.200	0.203	0.0238	2.998	0.071	ug/L	12	101	Valid MDL Data
trans-1,2-Dichloroethene	0.200	0.228	0.0231	2.998	0.069	ug/L	10	114	Valid MDL Data
trans-1,3-Dichloropropene	0.200	0.174	0.0250	2.998	0.075	ug/L	14	87	Valid MDL Data
trans-1,4-Dichloro-2-butene	0.200	0.340	0.0590	2.998	0.18	ug/L	17	170	Valid MDL Data
Trichloroethene (TCE)	0.200	0.205	0.0245	2.998	0.073	ug/L	12	103	Valid MDL Data
Trichlorofluoromethane	0.200	0.204	0.0329	2.998	0.099	ug/L	16	102	Valid MDL Data

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Trichlorotrifluoroethane	0.200	0.220	0.0321	2.998	0.096	ug/L	15	110	Valid MDL Data
Vinyl Acetate	1.00	0.920	0.144	2.998	0.43	ug/L	16	92	Valid MDL Data
Vinyl Chloride	0.100	0.103	0.00756	3.143	0.024	ug/L	7	103	Valid MDL Data

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	EPA 310.1 / SM 2320B			Instrument:	pH meter			
Extr./Dig. Method:	NA			Analyst(s):	J. White			
Matrix:	Water							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	01/13/06	01/18/06	01/18/06	01/18/06	01/18/06	01/18/06	01/18/06
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Alkalinity	2.00	2.20	2.00	2.00	1.60	2.40	2.00	2.00

Supervisor Approval M.P.

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	EPA 310.1 / SM 232
Extr./Dig. Method:	NA
Matrix:	Water
Units:	mg/L
Sample ID:	
Date Analyzed:	

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Alkalinity	2.00	2.029	0.243	3.143	0.764	0.8	12%	101%	Valid MDL Data

Supervisor Approval M.P.

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	300.0			Instrument:	DX-120 (AN3)			
Extr./Dig. Method:	N/A			Analyst(s):	J. Sanderson			
Matrix:	water							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007	2/23/2007
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Fluoride	0.050	0.0470	0.046	0.048	0.0470	0.044	0.044	0.046
Chloride	0.050	0.048	0.055	0.049	0.050	0.055	0.052	0.050
Nitrite	0.050	0.040	0.041	0.040	0.040	0.041	0.040	0.040
Bromide	0.050	0.043	0.039	0.041	0.043	0.042	0.043	0.042
Nitrate	0.025	0.025	0.027	0.026	0.025	0.026	0.026	0.026
Sulfate	0.050	0.051	0.055	0.050	0.053	0.054	0.051	0.049

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Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	300.0
Extr./Dig. Method:	N/A
Matrix:	water
Units:	mg/L
Sample ID:	
Date Analyzed:	

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Fluoride	0.050	0.046	0.002	3.143	0.005	0.005	3%	92%	Invalid --- Spike level >10*MDL
Chloride	0.050	0.051	0.003	3.143	0.009	0.009	5%	103%	Valid MDL Data
Nitrite	0.050	0.040	0.000	3.143	0.002	0.002	1%	81%	Invalid --- Spike level >10*MDL
Bromide	0.050	0.042	0.001	3.143	0.005	0.005	3%	84%	Invalid --- Spike level >10*MDL
Nitrate	0.025	0.026	0.001	3.143	0.002	0.003	3%	103%	Invalid --- Spike level >10*MDL
Sulfate	0.050	0.052	0.002	3.143	0.007	0.007	4%	104%	Valid MDL Data

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	EPA 130.2			Instrument:	Buret			
Extr./Dig. Method:				Analyst(s):	cfs			
Matrix:	water							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/20/2007	3/20/2007	3/20/2007	3/20/2007	3/20/2007	3/20/2007	3/20/2007
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Hardness	1.07	0.80	1.20	1.20	1.20	0.80	1.20	1.20

MDL source: TX/1-96-0

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method: EPA 130.2

Extr./Dig. Method:

Matrix: water

Units: mg/L

Sample ID:

Date Analyzed:

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Hardness	1.07	1.086	0.195	3.143	0.613	0.7	18%	101%	Valid MDL Data
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A
		#DIV/0!	#DIV/0!	#N/A	#N/A	#N/A	#DIV/0!	#DIV/0!	#N/A

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services Method Detection Limit study								
Analytical Method: 425.1								
Extr./ Dig. Method: NA								
Matrix: Water								
Units: mg/L								
Analyst: SP								
Instrument: spec								
Sample ID:Form/1-52-D		MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
Date Analyzed:1/10/06		01/10/06	01/10/06	01/10/06	01/10/06	01/10/06	01/10/06	01/10/06
	Spike							
Analyte:	Level:	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Methylene Blue Active Substances	0.1000	0.1245	0.1199	0.1070	0.1208	0.1264	0.1144	0.1098

Supervisor Approval M. S.

QA/QC Approval

Columbia Analytical Services Method Detectio									
Analytical Method: 425.1									
Extr./ Dig. Method: NA									
Matrix: Water									
Units: mg/L									
Analyst: SP									
Instrument: spec									
Sample ID:Form/1-52-D									
Date Analyzed: /10/06									
	Spike				Calc.	Reported		Average	
Analyte:	Level:	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Methylene Blue Active Substances	0.1000	0.118	0.007	3.143	0.023	0.03	6%	118%	Valid MDL Data

Supervisor Approval M. S.

QA/QC Approval

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1567

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0316F040.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 04:37	E	0316F044.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 06:23
B	0316F041.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 05:03	F	0316F045.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 06:49
C	0316F042.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 05:30	G	0316F046.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 07:16
D	0316F043.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 05:56	H	0316F047.D	\\Cash3\Acqudata\GC09\data\031606.b\	03/17/2006 07:43

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1248	A	0.0158	B	0.0181	C	0.0281	D	0.0244	E	0.0195	F	0.0297	G	0.0291	H	0.0268

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1248	0.0250	0.0239	0.00543	2.998	0.016	ug/L	23	96	Valid MDL Data

1590

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1567

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i **Column:** DB-XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0316R040.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 04:37	E	0316R044.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 06:23
B	0316R041.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 05:03	F	0316R045.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 06:49
C	0316R042.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 05:30	G	0316R046.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 07:16
D	0316R043.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 05:56	H	0316R047.D	\\Cash3\Acqudata\GC09\data\031606_r.b	03/17/2006 07:43

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1248	A	0.0132	B	0.0156	C	0.0232	D	0.0199	E	0.0167	F	0.0243	G	0.0269	H	0.0236

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1248	0.0250	0.0204	0.00486	2.998	0.015	ug/L	24	82	Valid MDL Data

1591

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1627

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0510F032.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 05:14	E	0510F036.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 07:01
B	0510F033.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 05:41	F	0510F037.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 07:27
C	0510F034.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 06:08	G	0510F038.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 07:54
D	0510F035.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 06:34	H	0510F039.D	\\Cash3\Acqudata\GC09\data\051006.b\	05/11/2006 08:21

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1232	A	0.0289	B	0.0281	C	0.0293	D	0.0318	E	0.0284	F	0.0307	G	0.0236	H	0.0280
Aroclor 1262	A	0.0235	B	0.0235	C	0.0242	D	0.0258	E	0.0251	F	0.0257	G	0.0237	H	0.0264

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1232	0.0250	0.0286	0.00242	2.998	0.0072	ug/L	8	114	Valid MDL Data
Aroclor 1262	0.0250	0.0247	0.00114	2.998	0.0034	ug/L	5	99	Valid MDL Data

1592

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1627

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i **Column:** DB-XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0510R032.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 05:14	E	0510R036.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 07:01
B	0510R033.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 05:41	F	0510R037.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 07:27
C	0510R034.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 06:08	G	0510R038.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 07:54
D	0510R035.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 06:34	H	0510R039.D	\\Cash3\Acqudata\GC09\data\051006_r.b	05/11/2006 08:21

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1232	A	0.0247	B	0.0240	C	0.0248	D	0.0288	E	0.0253	F	0.0265	G	0.0232	H	0.0292
Aroclor 1262	A	0.0247	B	0.0257	C	0.0268	D	0.0286	E	0.0264	F	0.0280	G	0.0257	H	0.0284

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1232	0.0250	0.0258	0.00218	2.998	0.0065	ug/L	8	103	Valid MDL Data
Aroclor 1262	0.0250	0.0268	0.00144	2.998	0.0043	ug/L	5	107	Valid MDL Data

1593

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-35MS

MDL Study ID: MDL1700

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0809F005.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 17:43	E	0809F009.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 19:30
B	0809F006.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 18:10	F	0809F010.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 19:57
C	0809F007.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 18:37	G	0809F011.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 20:23
D	0809F008.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 19:03	H	0809F012.D	\\Cash3\Acqudata\GC09\data\080906.b\	08/09/2006 20:50

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1221	A	0.0287	B	0.0248	C	0.0265	D	0.0229	E	0.0222	F	0.0256	G	0.0224	H	0.0225
Aroclor 1254	A	0.0207	B	0.0185	C	0.0191	D	0.0198	E	0.0182	F	0.0183	G	0.0166	H	0.0188

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1221	0.0250	0.0245	0.00235	2.998	0.0071	ug/L	10	98	Valid MDL Data
Aroclor 1254	0.0250	0.0187	0.00120	2.998	0.0036	ug/L	6	75	Valid MDL Data

1594

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-XLB

MDL Study ID: MDL1700

File ID	Data File	Data Path	AcqDate
A	0809R005.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 17:43
B	0809R006.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 18:10
C	0809R007.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 18:37
D	0809R008.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 19:03
E	0809R009.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 19:30
F	0809R010.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 19:57
G	0809R011.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 20:23
H	0809R012.D	\\Cash3\Acqudata\GC09\data\080906_r.b	08/09/2006 20:50

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1221	A	0.0309	B	0.0311	C	0.0347	D	0.0316	E	0.0324	F	0.0321	G	0.0315	H	0.0320
Aroclor 1254	A	0.0186	B	0.0190	C	0.0190	D	0.0193	E	0.0185	F	0.0189	G	0.0179	H	0.0191

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1221	0.0250	0.0320	0.00120	2.998	0.0036	ug/L	4	128	Valid MDL Data
Aroclor 1254	0.0250	0.0188	0.000424	2.998	0.0013	ug/L	2	75	Spike level too high (Spike>10*MDL)

1595

Supervisor Approval: _____

QA/QC Approval: _____

* other column OK

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082A
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-35MS

MDL Study ID: MDL1539

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0215F016.D	\\CASH3\acqudata\GC09\data\021506.B\	02/15/2006 22:34	E	0215F020.D	\\CASH3\acqudata\GC09\data\021506.B\	02/16/2006 00:17
B	0215F017.D	\\CASH3\acqudata\GC09\data\021506.B\	02/15/2006 23:00	F	0215F021.D	\\CASH3\acqudata\GC09\data\021506.B\	02/16/2006 00:43
C	0215F018.D	\\CASH3\acqudata\GC09\data\021506.B\	02/15/2006 23:26	G	0215F022.D	\\CASH3\acqudata\GC09\data\021506.B\	02/16/2006 01:09
D	0215F019.D	\\CASH3\acqudata\GC09\data\021506.B\	02/15/2006 23:51	H	0215F023.D	\\CASH3\acqudata\GC09\data\021506.B\	02/16/2006 01:34

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1016	A	0.0221	B	0.0310	C	0.0279	D	0.0264	E	0.0289	F	0.0278	G	0.0271	H	0.0285
Aroclor 1260	A	0.0210	B	0.0265	C	0.0250	D	0.0262	E	0.0265	F	0.0249	G	0.0273	H	0.0260

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1016	0.0250	0.0275	0.00255	2.998	0.0077	ug/L	9	110	Valid MDL Data
Aroclor 1260	0.0250	0.0254	0.00194	2.998	0.0058	ug/L	8	102	Valid MDL Data

1596

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082A
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-XLB

MDL Study ID: MDL1539

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0215R016.D	\\CASH3\acqudata\GC09\data\021506_r.	02/15/2006 22:34	E	0215R020.D	\\CASH3\acqudata\GC09\data\021506_r.	02/16/2006 00:17
B	0215R017.D	\\CASH3\acqudata\GC09\data\021506_r.	02/15/2006 23:00	F	0215R021.D	\\CASH3\acqudata\GC09\data\021506_r.	02/16/2006 00:43
C	0215R018.D	\\CASH3\acqudata\GC09\data\021506_r.	02/15/2006 23:26	G	0215R022.D	\\CASH3\acqudata\GC09\data\021506_r.	02/16/2006 01:09
D	0215R019.D	\\CASH3\acqudata\GC09\data\021506_r.	02/15/2006 23:51	H	0215R023.D	\\CASH3\acqudata\GC09\data\021506_r.	02/16/2006 01:34

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1016	A	0.0328	B	0.0360	C	0.0356	D	0.0323	E	0.0383	F	0.0413	G	0.0381	H	0.0375
Aroclor 1260	A	0.0264	B	0.0297	C	0.0289	D	0.0313	E	0.0308	F	0.0295	G	0.0288	H	0.0336

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1016	0.0250	0.0365	0.00296	2.998	0.0089	ug/L	8	146	Valid MDL Data
Aroclor 1260	0.0250	0.0299	0.00209	2.998	0.0063	ug/L	7	119	Valid MDL Data

1597

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082A
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-35MS

MDL Study ID: MDL1498

File ID	Data File	Data Path	AcqDate
A	0114F002.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 20:31
B	0114F003.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 20:59
C	0114F004.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 21:26
D	0114F005.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 21:54
E	0114F006.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 22:22
F	0114F007.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 22:50
G	0114F008.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 23:18
H	0114F009.D	\\CASH3\acqudata\GC09\data\011406.b\	01/14/2006 23:46

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1242	A	0.117	B	0.131	C	0.110	D	0.120	E	0.112	F	0.113	G	0.113	H	0.111
Aroclor 1268	A	0.0408	B	0.0879	C	0.0861	D	0.0881	E	0.0929	F	0.0893	G	0.118	H	0.0853

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1242	0.100	0.116	0.00680	2.998	0.020	ug/L	6	116	Valid MDL Data
Aroclor 1268	0.100	0.0861	0.0212	2.998	0.063	ug/L	25	86	Valid MDL Data

1598

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8082A
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC09.i
Column: DB-XLB

MDL Study ID: MDL1498

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0114R002.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 20:31	E	0114R006.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 22:22
B	0114R003.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 20:59	F	0114R007.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 22:50
C	0114R004.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 21:26	G	0114R008.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 23:18
D	0114R005.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 21:54	H	0114R009.D	\\CASH3\acqudata\GC09\data\011406_r.	01/14/2006 23:46

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Aroclor 1242	A	0.107	B	0.104	C	0.102	D	0.109	E	0.102	F	0.106	G	0.106	H	0.102
Aroclor 1268	A	0.0478	B	0.102	C	0.0989	D	0.103	E	0.104	F	0.102	G	0.112	H	0.0985

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Aroclor 1242	0.100	0.105	0.00270	2.998	0.0081	ug/L	3	105	Spike level too high (Spike>10*MDL)
Aroclor 1268	0.100	0.0960	0.0199	2.998	0.060	ug/L	21	96	Valid MDL Data

1599

Supervisor Approval: _____

QA/QC Approval: _____

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1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

April 2, 2007 Analytical Report for Service Request No: K0701816

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RECEIVED
APR 04 2007
TREADWELL & ROLLO

RE: Presidio of San Francisco

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on March 07, 2007. For your reference, these analyses have been assigned our service request number K0701816.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata

Gregory Salata, Ph.D.
Project Chemist

GS/afs

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Treadwell and Rollo, Inc.	**Service Request No.:**	K0701816
Project:	Presidio of San Francisco	**Date Received:**	03/07/07
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 03/07/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

No anomalies associated with the analysis of these samples were observed.

Nitrosamines by EPA Method 521

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Initial Calibration (ICAL) Exceptions:
The primary evaluation criterion was exceeded for Acetone, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, and Bromoform in ICAL ID CAL6077. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.6%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

The CAS minimum relative response factor criterion for 2-Butanone (MEK) was not met in ICAL ID CAL6077. In accordance with CAS standard operating procedures, a Method Reporting Limit (MRL) check standard containing

Approved by Stephen Salerno **Date** 4/2/07

the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality is not significantly affected. No further corrective action was appropriate.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for Methylene Chloride in Laboratory Control Sample (LCS) KWG0703662-3. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, this compound is not included in the subset of analytes used to control the analysis. The recovery information reported for this analyte is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

Surrogate Exceptions:
The control criteria were exceeded for the Toluene-d8 surrogate in Matrix Spike NKGW02CLMS and Duplicate Matrix Spike NKGW02CLDMS. The associated matrix spike recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outlier is flagged accordingly. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by Gregory Salatka **Date** 4/2/07

Chain of Custody Documentation

Treadwell&Rollo S270071

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2197
Page: 1 of 1

K07018 16

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS / D. Raynal / P. Cornish
Recorder (signature required): [signature]
Sent to Laboratory (Name): CAS

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260) / MTBE	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Cyanide	NDMA 1625					COMMENTS / NOTES
979GW115CL	3/6/07	1010			X		6				2	X	X	X	X													
NKGW02CL	↓	~~1110~~			X		6		1	1	5	X	X	X	X			X		X		X	X					
TB030607 2A					X		2								X													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, ~~Cr, Cd,~~ Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [signature]	DATE: 3/6/07	RECEIVED BY: [signature] P. BINS CAS	DATE: 3/6/07
PRINT NAME: Devin Raynal	FIRM: BTS	TIME: 1520	PRINT NAME:	FIRM:	TIME: 1520
RELINQUISHED BY: [signature]	DATE: 3/6/07	RECEIVED BY: [signature] CAS	DATE: 3/7/07 1015
PRINT NAME: P. BINS	FIRM: CAS VIA FED-EX	TIME: 1800	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

9

K0201816

Lora
Greg

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

Client / Project: CAS

Received: 3/7/07 Opened: 3/7/07 By: AL

1. Samples were received via? *US Mail* *Fed Ex* *UPS* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *NA* *Other* _____
3. Were custody seals on containers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? ~~Y~~ ~~N~~ If present, were they signed and dated? ~~Y~~ ~~N~~
4. Is the shipper's air-bill filed? If not, record air-bill number: _____ NA Y N
5. **Temperature of cooler(s) upon receipt (°C):** _____ _____ _____ _____
   Temperature Blank (°C): 0.3 _____ _____ _____
6. If applicable, list Chain of Custody Numbers: 3.8 _____ _____ _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Packing material used. *Inserts* *Bubble Wrap* *Gel Packs* *Bagged Ice* *Other* _____
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* Y N
10. Were all bottle labels complete (i.e analysis, preservation, etc.)? Y N
11. Did all bottle labels and tags agree with custody papers? *Indicate in the table below* Y N
12. **Were the correct types of bottles used for the tests indicated?** Y N
13. Were all of the preserved bottles received at the lab with the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles checked for absence of air bubbles? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

Additional Discrepancies & Resolution: _____

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701816
Date Collected : 03/06/07
Date Received : 03/07/07

Cyanide, Total

Prep Method : METHOD
Analysis Method : 9012A
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
NKGW02CL	K0701816-002	0.01	1	03/09/07	03/14/07	ND	
Method Blank	K0701816-MB	0.01	1	03/09/07	03/14/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701816
Project Name :	Presidio of San Francisco	**Date Collected :**	3/6/2007
Project Number :	NA	**Date Received :**	3/7/2007
Sample Matrix :	Water	**Date Prepared :**	03/09/07
		Date Analyzed :	03/14/07

Duplicate Summary
Inorganic Parameters

Sample Name :	NKGW02CL	Units :	mg/L
Lab Code :	K0701816-002DUP	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	METHOD	9012A	0.01	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701816
Project Name :	Presidio of San Francisco	**Date Collected :**	3/6/2007
Project Number :	NA	**Date Received :**	3/7/2007
Sample Matrix :	Water	**Date Prepared :**	03/09/07
		Date Analyzed :	03/14/07

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	NKGW02CL		Units :	mg/L
Lab Code :	K0701816-002MS	K0701816-002DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Cyanide, Total	METHOD	9012A	0.01	0.10	0.10	ND	0.09	0.09	90	90	90-110	<1	

Report By: MLEACH

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701816
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	03/09/07
		Date Analyzed :	03/14/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701816-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	METHOD	9012A	0.73	0.75	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio of San Francisco

Service Request : K0701816
Date Collected : NA
Date Received : NA

Cyanide, Total
SW846 9012A
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	3/14/2007	100	101	101
CCV2 Result	3/14/2007	100	100	100

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	3/14/2007	10	ND
CCB2 Result	3/14/2007	10	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio of San Francisco
Project Number : NA
Sample Matrix : Water

Service Request : K0701816
Date Collected : 03/06/07
Date Received : 03/07/07

Solids, Total Dissolved (TDS)

Units : mg/L
Basis : NA

Analysis Method : 160.1
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
NKGW02CL	K0701816-002	5	1	03/13/07	247	
Method Blank	K0701816-MB	5	1	03/13/07	ND	

Report By: MLEACH

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701816
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/13/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0701813-002DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved (TDS)	160.1	5	525	543	534	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0701816
Project Name :	Presidio of San Francisco	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	03/13/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0701816-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved (TDS)	NONE	160.1	617	542	88	85-115	

Work Request # (Original K1816) K1855 K1784 K1797 K1848 P0229 K1813 K1836

Tier: ~~III~~ I I IIA IIA IIA IIA IIA

Date Analyzed: 3/14/07

Analyst: B Hutton

Analysis: CNTOT/9012A CV/335.2 CV/335.1

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

12.) K1855 Rush
P0229 Rush

Final Approved by: [signature] Date: 3/14/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

Page of

Work Order #:

Method: EPA 335.1 / 335.4

9012 / SM 4500-CN I&E / SM 4500-CN C&E

Analysis: Total CN^- CN^- WAD Chlor. CN^-

Run# 79873

Method modified using the Lachat Autoanalyzer for the colorimetric analysis.

Date Prepared	Lab Sample ID	Sample Dilution	Initial Wt./Vol. (g) or (ml)	Final Volume (ml)	ug/L (in solution)	mg/L - mg/kg As Rec'd	% Solids	mg/kg Dry Wt.
03/09/2007	MB	1	50.0	25.0	-1.020	<0.01		
03/09/2007	LCS	1	5.00	25.0	149.016	0.75		
03/09/2007	0.15	2	50.0	25.0	155.800	0.16		
03/09/2007	0.05	1	50.0	25.0	101.191	0.05		
03/09/2007	1816-2	1	50.0	25.0	-0.052	<0.01		
03/09/2007	1816-2d	1	50.0	25.0	-0.712	<0.01		
03/09/2007	1816-2ms	1	50.0	25.0	179.516	0.09		
03/09/2007	1816-2msd	1	50.0	25.0	180.142	0.09		
03/09/2007	1855-3	1	50.0	25.0	0.029	<0.003		
03/09/2007	1855-4	1	50.0	25.0	0.196	<0.003		
03/09/2007	1784-1	1	50.0	25.0	99.407	0.05		
03/09/2007	1747-1	1	50.0	25.0	7.728	<0.01		
03/09/2007	1747-2	2	50.0	25.0	3.751	<0.01		
03/09/2007	1747-3	1	50.0	25.0	3.161	<0.01		
03/09/2007	1747-4	1	50.0	25.0	17.781	<0.01		
03/09/2007	1747-5	2	50.0	25.0	3.023	<0.01		
03/09/2007	1848-1	1	50.0	25.0	1.856	<0.01		
03/09/2007	p0229-1	1	50.0	25.0	1.557	<0.003		
03/09/2007	p0229-2	1	50.0	25.0	4.300	<0.003		
03/09/2007	p0229-3	1	50.0	25.0	2.785	<0.003		

Comments: All standards and total cyanides distilled with sulfamic acid.

LCS: Inorganic Ventures Lot #: S-CN01027 ID # CN/5-12-C T.V. = 0.73 mg/L % REC:103

0.15 Distilled = (0.75 mL x 10 ppm KCN) / 50 mL %REC=104 Qualitative test for sulfides: X

0.05 Distilled= (0.25 mL x 10 ppm KCN) / 50 mL %REC=100 Qualitative test for oxidants: X

10 ppm KCN ID #: CN/5-25-B

1816-2ms= (0.50 mL x 10 ppm KCN) / 50.ml = 0.10mg/L % REC: =90

1816-2/2d x =ND RPD--

1816-2msd= (0.50 mL x 10 ppm KCN) / 50.ml = 0.10mg/L % REC: =90

Prepared By:	B. Uttland	Date Prepared:	3/9/07 0915
Analyzed By:	B. Uttland	Date Analyzed:	3/14/07
Reviewed By:		Date Reviewed:	3/14/07

COLUMBIA ANALYTICAL SERVICES, INC. Page of

Work Order #.: Method: EPA 335.1 / 335.4

9012 / SM 4500-CN I&E / SM 4500-CN C&E

Analysis: Total CN^- CN^- WAD Chlor. CN^-

Method modified using the Lachat Autoanalyzer for the colorimetric analysis.

Date Prepared	Lab Sample ID	Sample dilution	Initial Wt./Vol. (g) or (ml)	Final Volume (ml)	mg/L (in solution)	mg/L - mg/kg As Rec'd	% Solids	mg/kg Dry Wt.
03/09/2007	1813-2	1	50.0	25.0	0.967	<0.01		
03/09/2007	1813-3	1	50.0	25.0	2.682	<0.01		
03/09/2007	1813-4	1	50.0	25.0	4.793	<0.01		
03/09/2007	1813-5	1	50.0	25.0	3.224	<0.01		
03/09/2007	1813-6	1	50.0	25.0	4.217	<0.01		
03/09/2007	1836-1	1	50.0	25.0	5.693	<0.003		

Prepared By: B. Hilland	Date Prepared: 3/9/07 0915
Analyzed By: B. Hilland	Date Analyzed: 3/14/07
Reviewed By:	Date Reviewed: 3/14/07

==========

QuikChem AE Postrun Report for Tray 07031401.RS
Method: CYANIDE 0-300ug/L

This report prepared on 03/14/07 at 02:27 pm.
This tray was run on 03/14/07 at 02:25 pm.
Operator: Brian Hetland Tray Template: PAULA BH 3/14/07

ICV=0.150mg/L NaCN CN/5-46-S CCV=0.100mg/L KCN CN/5-35-V
LCS=IV LOT# S-CN01027 ID#:CN/5-12-C

==========

-- Page 1 of report for tray 07031401.RS ----------

Cup#	Sample ID		1 cyanide2 ug/L	
101	ICV		149.022	99%
102	ICB		-1.643<	<10.0
103	CCV-1		101.190	101%
104	CCB-1		-0.907<	<10.0
105	MB 3/9		-1.020<	
106	LCS		149.016	
107	0.150 DIST 2X		155.800	
108	0.050 DIST		101.191	
109	1816-2		-0.052<	
110	1816-2d		-0.712<	
111	1816-2ms		179.516	
112	1816-2msd		180.142	
113	1855-3		0.029<	
114	1855-4		0.196<	
115	CCV-2		100.496	100%
116	CCB-2		-1.292<	<10.0
117	1784-1		99.407	
118	1747-1	2.5/5.0	1.293<	NR
119	1747-2	2.5/5.0	3.751<	
120	1747-3	2.5/5.0	1.256<	NR
121	1747-4	2.5/5.0	8.104	NR
122	1747-5	2.5/5.0	3.023<	
123	1848-1		1.856<	
124	p0229-1		1.557<	
125	p0229-2		4.300<	
126	p0229-3		2.785<	
127	CCV-3		102.323	102%
128	CCB-3		-1.790<	<10.0
129	1747-1		7.728	
130	1747-2		20.606	NR
131	1747-3		3.161<	

> Concentration was significantly greater than the high standard's concentration
< Concentration was significantly less than the lowest non-zero standard's conce
If the sample was diluted, > and < -flagged concentrations reported are dilute

Report for tray 07031401.RS continued on next page . . .

BH 3/14/07

6 EH 3/14/07

Cup#	Sample ID	1 cyanide2 ug/L	
132	1747-4	17.781	
133	1747-5	105.864	NR
134	1813-2	0.967<	
135	1813-3	2.682<	
136	1813-4	4.793<	
137	1813-5	3.224<	
138	1813-6	4.217<	
139	CCV-4	102.212	102
140	CCB-4	-1.531<	<10.0
141	1836-1	5.693	
142	MB 3/13	1.958<	
143	LCS	142.447	
144	0.150 DIST 2X	155.753	
145	0.050 DIST	101.201	
146	1987-1	88.038	
147	1987-1d	87.180	
148	1987-1ms	294.237	
149	1987-1msd	294.446	
150	1937-1	10.291	
151	CCV-5	100.547	~~100~~ 101.0
152	CCB-5	-0.721<	<10.0
153	1937-2	5.343<	
154	1937-3	3.366<	
155	1971-2	4.683<	
156	1971-3	4.354<	
157	1971-4	4.597<	
158	1981-1	6.220	
159	1991-1	2.127<	
160	1991-2	4.742<	
161	CCV6	100.763	101
162	CCB6	-0.863<	<10.0

> Concentration was significantly greater than the high standard's concentration
< Concentration was significantly less than the lowest non-zero standard's conce
If the sample was diluted, > and < -flagged concentrations reported are dilute

--------- End of Report for Tray 07031401.RS ----------

3/14/07

QuikChem AE Calibration Report for Calibration 07031401
Method: CYANIDE 0-300ug/L
This calibration was done on 03/14/07 at 01:35 pm BH 3/14/07
This report prepared on 03/14/07 at 01:35 pm

	Analyte		Units	---- Average Concentrations --- Known	Determined	% Residual
Standard A,	cyanide2	ug/L	300.000	297.935	0.69	0.0591
Standard B,	cyanide2	ug/L	200.000	199.554	0.22	0.0397
Standard C,	cyanide2	ug/L	150.000	153.888	-2.59	0.0307
Standard D,	cyanide2	ug/L	100.000	101.421	-1.42	0.0203
Standard E,	cyanide2	ug/L	50.000	50.205	-0.41	0.0102
Standard F,	cyanide2	ug/L	20.000	19.104	4.48	0.0041
Standard G,	cyanide2	ug/L	10.000	9.549	4.51	0.0022
Standard H,	cyanide2	ug/L	0.000	-0.602	***.**	0.0002

---------- End of Calibration Report For Calibration 07031401 ----------

Calibration Statistics Report

Cal Ref: 07031401 03/14/07 01:35 pm
Method: CYN1

Slope = 0.1973
Itc = 0.0003

Channel: cyanide2

Correlation Coefficients

Seg	Stds	Full	Chord 1	Chord 2	Chord 3	Chord 4	Chord 5
1	A-H	0.9997	0.9982	0.9995	0.9996	0.9999	0.9777 ?

Percent Standard Deviation in Slope

1	A-H	0.6	1.5	0.8	0.7	0.3	5.3

BH 3/14/07

COLUMBIA ANALYTICAL SERVICES, INC. Page of

Work Order #: Method: EPA 335.1 / 335.4

9012 / SM 4500-CN I&E / SM 4500-CN C&E

Analysis: Total CN^- CN^- WAD Chlor. CN^-

Method modified using the Lachat Autoanalyzer for the colorimetric analysis.

Date Prepared	Lab Sample ID	Sample Dilution	Initial Wt./Vol. (g) or (ml)	Final Volume (ml)	ug/L (in solution)	mg/L - mg/kg As Rec'd	% Solids	mg/kg Dry Wt.
3/9/2007	MB	1	50.0	25.0		0.0		
3/9/2007	LCS	1	5.00	25.0		0.00		
3/9/2007	0.15	2	50.0	25.0		0.00		
3/9/2007	0.05	1	50.0	25.0		0.00		
3/9/2007	1816-2	1	50.0	25.0		0.00		
3/9/2007	1816-2d	1	50.0	25.0		0.00		
3/9/2007	1816-2ms	1	50.0	25.0		0.00		
3/9/2007	1816-2msd	1	50.0	25.0		0.00		
3/9/2007	1855-3	MDL 1	50.0	25.0		0.00		
3/9/2007	1855-4	1	50.0	25.0		0.00		
3/9/2007	1784-1	1	50.0	25.0		0.00		
3/9/2007	1747-1	1	50.0	25.0		0.00		
3/9/2007	1747-2	1	50.0	25.0		0.00		
3/9/2007	1747-3	1	50.0	25.0		0.00		
3/9/2007	1747-4	1	50.0	25.0		0.00		
3/9/2007	1747-5	1	50.0	25.0		0.00		
3/9/2007	1848-1	1	50.0	25.0		0.00		
3/9/2007	p0229-1	MDL 1	50.0	25.0		0.00		
3/9/2007	p0229-2	1	50.0	25.0		0.00		
3/9/2007	p0229-3	1	50.0	25.0		0.00		

Comments: All standards and total cyanides distilled with sulfamic acid.

LCS: Inorganic Ventures Lot #: S-CN01027 ID # CN/5-12-C T.V. = 0.73 mg/L % REC:

0.15 Distilled = (0.75 mL x 10 ppm KCN) / 50 mL %REC= Qualitative test for sulfides: X

0.05 Distilled= (0.25 mL x 10 ppm KCN) / 50 mL %REC= Qualitative test for oxidants: X

10 ppm KCN ID #: CN/5-25-B

1816-2ms= (0.50 mL x 10 ppm KCN) / 50.ml = 0.10mg/L % REC: =

1816-2/2d x = RPD =

1816-2msd= (0.50 mL x 10 ppm KCN) / 50.ml = 0.10mg/L % REC: =

Prepared By: B. Wetter	Date Prepared: 3/9/07 0915
Analyzed By: B. Wetter	Date Analyzed: 3/14/07
Reviewed By:	Date Reviewed: 3/14/07

COLUMBIA ANALYTICAL SERVICES, INC.

Page of

Work Order #.:

Method: EPA 335.1 / 335.4

9012 / SM 4500-CN I&E / SM 4500-CN C&E

Analysis: Total CN^- CN^- WAD Chlor. CN^-

Method modified using the Lachat Autoanalyzer for the colorimetric analysis.

Date Prepared	Lab Sample ID	Sample dilution	Initial Wt./Vol. (g) or (ml)	Final Volume (ml)	mg/L (in solution)	mg/L - mg/kg As Rec'd	% Solids	mg/kg Dry Wt.
3/9/2007	1813-2	1	50.0	25.0		0.0		
3/9/2007	1813-3	1	50.0	25.0		0.0		
3/9/2007	1813-4	1	50.0	25.0		0.0		
3/9/2007	1813-5	1	50.0	25.0		0.0		
3/9/2007	1813-6	1	50.0	25.0		0.0		
3/9/2007	1836-1	MDL 1	50.0	25.0		0.0		
		1	50.0	25.0		0.0		
						#DIV/0!		
						#DIV/0!		
						#DIV/0!		
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						#DIV/0!		
						#DIV/0!		
						#DIV/0!		

Prepared By:	B. Hutton	Date Prepared:	3/9/07 0915
Analyzed By:	B. Hutton	Date Analyzed:	3/14/07
Reviewed By:		Date Reviewed:	3/16/07

Work Request #	Original (1813)	1814	1816	1821	1842	1857	1872	1879	1983
Tier:	V	II	V	I	I	I	II	V	II
Date Analyzed:	3/13/07		1994	2017					
Analyst:	RMcKee		V	V					
Analysis:	TDS							79989	

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 3/19/07

DQREPORT

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703748

Matrix: WATER

PrepID: KWG0703747

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
MB		200	117.6542	117.6542	0.0000	0.000	NA	584180
LCS		50	68.2946	68.2675	0.0271	542.000	NA	584179
K0701813-001		200	65.9033	65.9028	0.0005	2.500	14	584141
K0701813-002		100	76.9065	76.8540	0.0525	525.000	775	584142
K0701813-002DUP		100	71.2223	71.1680	0.0543	543.000	775	584174
K0701813-003		100	71.7670	71.7214	0.0456	456.000	651	584143
K0701813-004		100	71.9709	71.9128	0.0581	581.000	695	584144
K0701813-005		100	73.2668	73.2460	0.0208	208.000	325	584145
K0701813-006		100	76.4763	76.4302	0.0461	461.000	742	584146
K0701814-001		75	63.6292	63.5312	0.0980	1306.667	1310	584147
K0701816-002		100	64.5167	64.4920	0.0247	247.000	411	584148
K0701821-001		100	70.0162	69.9673	0.0489	489.000	875	584149
K0701842-002		100	69.9372	69.9242	0.0130	130.000	264	584140
K0701857-001		100	64.9591	64.9420	0.0171	171.000	203	584151
K0701872-001		75	75.0480	74.9977	0.0503	670.667	1330	584152
K0701872-001DUP		75	73.5750	73.5283	0.0467	622.667	1330	584175
K0701872-002		75	81.7037	81.6594	0.0443	590.667	1020	584153
K0701872-003		100	70.7443	70.7193	0.0250	250.000	402	584154
K0701872-004		75	64.5639	64.5143	0.0496	661.333	1260	584155
K0701872-005		75	84.5278	84.4714	0.0564	752.000	1250	584156
K0701872-006		100	64.1374	64.1139	0.0235	235.000	424	584157
K0701872-007		75	74.8465	74.7753	0.0712	949.333	1660	584158
K0701872-008		100	71.8432	71.8158	0.0274	274.000	383	584159
K0701872-009		75	74.4042	74.2952	0.1090	1453.333	2560	584150
K0701879-001		100	65.8720	65.8574	0.0146	146.000	227	584161
K0701879-001DUP		100	75.0842	75.0709	0.0133	133.000	227	584176
K0701879-002		100	73.5477	73.5350	0.0127	127.000	225	584162
K0701879-003		100	76.2753	76.2602	0.0151	151.000	194	584163
K0701879-004		100	75.8582	75.8517	0.0065	65.000	187	584164
K0701879-005		100	74.9401	74.9350	0.0051	51.000	139	584165
K0701983-002		100	79.2540	79.2254	0.0286	286.000	423	584166
K0701983-002DUP		100	62.8332	62.8019	0.0313	313.000	423	584177
MB		200	114.9127	114.9127	0.0000	0.000	NA	584180
LCS		50	79.8717	79.8439	0.0278	556.000	NA	584179
K0701994-001		100	72.3532	72.3349	0.0183	183.000	300	584167
K0701994-001DUP		100	67.5209	67.5024	0.0185	185.000	300	584178
K0701994-002		100	71.9724	71.9561	0.0163	163.000	271	584168
K0701994-003		100	74.9314	74.9143	0.0171	171.000	277	584169
K0701994-004		100	66.1019	66.0884	0.0135	135.000	240	584170

Analyst:		Date:	
Approved By:		Date:	3/19/07

Columbia Analytical Services

Service Request:

Method: 160.1

Analysis: T. Dissolved Solids

AnalysisID: KWG0703748

Matrix: WATER

PrepID: KWG0703747

LabID	Crucible #	Sample Volume (ml)	Crucible + Dry Sample (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	Total Dissolved Solids (mg/L)	Conductivity	PrepID
K0701994-005		100	70.2829	70.2617	0.0212	212.000	314	584160
MB		200	124.6895	124.6894	0.0001	0.500	NA	584180
K0702017-002		100	69.3704	69.3662	0.0042	42.000	71	584172
K0702017-003		100	72.8424	72.8371	0.0053	53.000	67	584173
K0702017-004		100	70.0825	70.0777	0.0048	48.000	72	584171

LCS: TV = ~~1110~~ 617 ppm APG 4033 Lot # 112073 98 Reference # TDS/1-18-~~W~~ X LCS-2=99%

LCS - 1 88%
2 90%

Comments:

1813-2 X = 534 RPD = 3%
1872-1 X = 647 RPD = 7%
1879-1 X = 140 RPD = 9%
1983-2 X = 300 RPD = 9%
1994-1 X = 184 RPD = 1%

Analyst:	RMcKee	Date:	3/16/07
Approved By:		Date:	3/19/07

RW RMcKee 3/16/07

COLUMBIA ANALYTICAL SERVICES, INC.

79989

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	Blank	LCS	1813-1	1813-2	1813-2d	1813-3	1813-4
Crucible Number	J16	Lil Bill	Dish	1	Kells	Mona	36
Conductivity	~~200~~	—	13.62U	774.5U	774.5U	650.9U	694.7U
Sample Volume (mL)	200	50	200	100	100	100	100
Wt. Cru. + Dry Sample (1)	117.6542	68.2946	65.9033	76.9065	71.2223	71.7670	71.9709
Wt. Cru. + Dry Sample (2)	117.6543	68.2948	65.9033	76.9067	71.2225	71.7670	71.9706
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	117.6542	68.2675	65.9028	76.8540	71.1680	71.7214	71.9128
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1813-5	1813-6	1814-1	1816-2	1821-1	1842-2	1857-1
Crucible Number	Jayla	43A	B8	19A	-7	30	BV
Conductivity	325.4U	742.3U	1.312m	410.9U	875.0U	263.9U	203.4U
Sample Volume (mL)	100	100	75	100	100	100	100
Wt. Cru. + Dry Sample (1)	73.2668	76.4763	63.6292	64.5167	70.0162	69.9372	64.9591
Wt. Cru. + Dry Sample (2)	73.2669	76.4766	63.6290	64.5170	70.0162	69.9370	64.9589
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	73.2460	76.4302	63.5312	64.4920	69.9673	69.9242	64.9420
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #: Lot #: ID#: T.V. = 617 % Rec =

Comments: 112098 H8-X

105 time Start	1745 3/	3/07
Stop	0830 3/	14/07
105 temp Start	105°C	
Stop	105°C	
Wt (1) Start	0830 3/	14/07
Stop	1200 3/	14/07
Wt(1) Start	180°C	
Temp Stop	180°C	
Wt (2) Start	1340 3/	4/07
Stop	1520 3/	14/07
Wt(2) Start	180°C	
Temp Stop	180°C	
Wt (3) Start		
Stop		
Wt(3) Start		
Temp Stop		

Balance #

Analyzed By:	RMcKee	Date Prepared:	3/13/07
Reviewed By:		Date Reviewed:	3/19/07

 RMcKee 3/13/07 TDS.BCH

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Analysis: Total Dissolved Solids

Method: EPA 160.1

Sample Number	1872-1	1872-1d	1872-2	1872-3	1872-4	1872-5	1872-6
Crucible Number	35	17	4	-2	50A	Mike	16A
Conductivity	1.326m	1.326m	1018U	401.5U	1.260m	1.250m	424.4U
Sample Volume (mL)	75	75	75	100	75	75	100
Wt. Cru. + Dry Sample (1)	75.0480	73.5750	81.7037	70.7443	64.5639	84.5278	64.1374
Wt. Cru. + Dry Sample (2)	75.0478	73.5752	81.7036	70.7440	64.5639	84.5275	64.1374
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	74.9977	73.5283	81.6594	70.7193	64.5143	84.4714	64.1139
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1872-7	1872-8	1872-9	1879-1	1879-1d	1879-2	1879-3
Crucible Number	54A	26	007	PG	9 ~~4~~	20	54A
Conductivity	1.656m	382.8U	2.557m	227.2U	227.2U	225.0U	194.1U
Sample Volume (mL)	75	100	75	100	100	100	100
Wt. Cru. + Dry Sample (1)	74.8465	71.8432	74.4042	65.8720	75.0842	73.5477	76.2753
Wt. Cru. + Dry Sample (2)	74.8465	71.8432	74.4040	65.8718	75.0845	73.5475	76.2753
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	74.7753	71.8158	74.2952	65.8574	75.0709	73.5350	76.2602
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	1879-4	1879-5	~~1983~~ 1983-2 (RM)	1983-2d	MB-2	LCS-2	1994-1
Crucible Number	16	23	7	Angie	DMX	22	-5
Conductivity	186.6U	138.7U	423.4U	423.4U	—	—	299.5U
Sample Volume (mL)	100	100	100	100	200	50	100
Wt. Cru. + Dry Sample (1)	75.8582	74.9401	79.2540	62.8332	114.9127	79.8717	72.3532
Wt. Cru. + Dry Sample (2)	75.8580	74.9400	79.2536	62.8330	114.9127	79.8715	72.3530
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	75.8517	74.9350	79.2254	62.8019	114.9127	79.8439	72.3349
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Analyzed By:	RMcKee	Date Prepared:	3/13/07
Reviewed By:		Date Reviewed:	3/19/07

TDS.BCH

(RM) RMcKee 3/13/07

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	1994-1d	1994-2	1994-3	1994-4	1994-5	MB	2017-2
Crucible Number	9A	Flash	36A	49A	24	DL	JJ
Conductivity	299.5 U	270.7 U	276.6 U	(RW) ~~24~~ 239.7 U	314.0 U	—	70.61 U
Sample Volume (mL)	100	100	100	100	100	200	100
Wt. Cru. + Dry Sample (1)	67.5209	71.9724	74.9314	66.1019	70.2829	124.6895	69.3704
Wt. Cru. + Dry Sample (2)	67.5206	71.9723	74.9314	66.1017	70.2825	124.6894	69.3702
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	67.5024	71.9561	74.9143	66.0884	70.2617	124.6894	69.3662
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	2017-3	2017-4					
Crucible Number	34	Larry					
Conductivity	67.05 U	72.19 U					
Sample Volume (mL)	100	100					
Wt. Cru. + Dry Sample (1)	72.8424	70.0825					
Wt. Cru. + Dry Sample (2)	72.8423	70.0823					
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	~~72.8462~~ (RW)	~~70.0826~~ (RW)					
Wt. Dry Sample (g)	72.8371	70.0777					
Total Solids (mg/L)							

Sample Number							
Crucible Number							
Conductivity							
Sample Volume (mL)							
Wt. Cru. + Dry Sample (1)							
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)							
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Analyzed By: R McKee | Date Prepared: 3/13/07

Reviewed By: [illegible] | Date Reviewed: 3/14/07

(RW) RMcKee 3/13/07

Metals

DISSOLVED METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Sample No.	Lab Sample ID.
NKGW02CL	K0701816-002 DISS
NKGW02CLD	K0701816-002D DISS
NKGW02CLS	K0701816-002S DISS
Method Blank	K0701816-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Signature: Date: 03/20/07

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	Treadwell and Rollo, Inc.	Service Request:	K0701816
Project No.:	NA	Date Collected:	03/06/07
Project Name:	Presidio of San Francisco	Date Received:	03/07/07
Matrix:	WATER	Units:	µG/L
		Basis:	NA

Sample Name: NKGW02CL Lab Code: K0701816-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/16/07	3/23/07	50	U	
Antimony	6020	0.05	1	3/16/07	3/20/07	0.06		
Arsenic	6020	0.5	1	3/16/07	3/20/07	0.5	U	
Barium	6010B	5.0	1	3/16/07	3/23/07	37.5		
Beryllium	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/16/07	3/20/07	0.05		
Calcium	6010B	50	1	3/16/07	3/23/07	12200		
Chromium	6010B	5.0	1	3/16/07	3/23/07	5.0	U	
Cobalt	6020	0.02	1	3/16/07	3/20/07	0.11		
Copper	6020	0.1	1	3/16/07	3/20/07	0.5		
Iron	6010B	20	1	3/16/07	3/23/07	20	U	
Lead	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Magnesium	6010B	20	1	3/16/07	3/23/07	19900		
Manganese	6010B	5.0	1	3/16/07	3/23/07	5.0	U	
Mercury	7470A	0.2	1	3/20/07	3/21/07	0.2	U	
Nickel	6020	0.2	1	3/16/07	3/20/07	6.3		
Potassium	6010B	2000	1	3/16/07	3/23/07	2000	U	
Selenium	6020	4.0	1	3/16/07	3/20/07	4.0	U	
Silver	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Sodium	6010B	100	1	3/16/07	3/23/07	40800		
Thallium	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/16/07	3/23/07	10	U	
Zinc	6010B	10	1	3/16/07	3/23/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio of San Francisco
Matrix: WATER

Service Request: K0701816
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K0701816-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1	3/16/07	3/23/07	50	U	
Antimony	6020	0.05	1	3/16/07	3/20/07	0.05	U	
Arsenic	6020	0.5	1	3/16/07	3/20/07	0.5	U	
Barium	6010B	5.0	1	3/16/07	3/23/07	5.0	U	
Beryllium	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Cadmium	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Calcium	6010B	50	1	3/16/07	3/23/07	50	U	
Chromium	6010B	5.0	1	3/16/07	3/23/07	5.0	U	
Cobalt	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Copper	6020	0.1	1	3/16/07	3/20/07	0.1	U	
Iron	6010B	20	1	3/16/07	3/23/07	20	U	
Lead	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Magnesium	6010B	20	1	3/16/07	3/23/07	20	U	
Manganese	6010B	5.0	1	3/16/07	3/23/07	5.0	U	
Mercury	7470A	0.2	1	3/20/07	3/21/07	0.2	U	
Nickel	6020	0.2	1	3/16/07	3/20/07	0.2	U	
Potassium	6010B	2000	1	3/16/07	3/23/07	2000	U	
Selenium	6020	4.0	1	3/16/07	3/20/07	4.0	U	
Silver	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Sodium	6010B	100	1	3/16/07	3/23/07	100	U	
Thallium	6020	0.02	1	3/16/07	3/20/07	0.02	U	
Vanadium	6010B	10	1	3/16/07	3/23/07	10	U	
Zinc	6010B	10	1	3/16/07	3/23/07	10	U	

% Solids: 0.0

Comments:

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4980	100	5000	4950	99	4990	100	6010B
Antimony	25.0	25.4	102	25.0	24.4	98	25.0	100	6020
Arsenic	25.0	26.5	106	25.0	25.4	102	25.9	104	6020
Barium	5000	5080	102	500	499	100	508	102	6010B
Beryllium	2.5	2.65	106	25.0	26.3	105	25.9	104	6020
Cadmium	12.5	13.2	106	25.0	24.9	100	25.3	101	6020
Calcium	12500	12400	99	5000	4940	99	5010	100	6010B
Chromium	500	501	100	5000	5020	100	5110	102	6010B
Cobalt	25.0	24.8	99	25.0	24.9	100	26.3	105	6020
Copper	12.5	12.4	99	25.0	24.4	98	25.2	101	6020
Iron	2500	2440	98	5000	4950	99	5030	101	6010B
Lead	25.0	25.9	104	25.0	24.6	98	24.9	100	6020
Magnesium	12500	12200	98	5000	4950	99	5010	100	6010B
Magnesium	12500	12200	98	5000	4930	99	4980	100	6010B
Manganese	1250	1240	99	500	492	98	500	100	6010B
Mercury	5.0	5.19	104	5.0	4.85	97	4.88	98	7470A
Nickel	25.0	24.4	98	25.0	24.6	98	25.8	103	6020
Potassium	12500	12900	103	25000	25900	103	26100	104	6010B
Selenium	25.0	25.8	103	25.0	25.0	100	26.0	104	6020
Silver	12.5	12.3	98	25.0	24.1	96	25.0	100	6020
Sodium	12500	13000	104	25000	25300	101	25800	103	6010B
Thallium	25.0	25.9	104	25.0	24.9	100	24.8	99	6020
Vanadium	1250	1230	98	500	491	98	498	100	6010B
Zinc	1250	1250	100	2500	2470	99	2510	100	6010B

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Francisco

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.83	97	4.82	96	7470A

DISSOLVED METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	4.81	96	4.90	98	7470A

DISSOLVED METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Francisco

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	78.7	157		
Antimony				0.05	0.05	95		
Arsenic				0.50	0.58	116		
Barium				5.0	5.29	106		
Beryllium				0.02	0.02	101		
Cadmium				0.02	0.02	105		
Calcium				50	56.0	112		
Chromium				5.0	3.74	75		
Cobalt				0.02	0.02	110		
Copper				0.10	0.10	103		
Iron				20	24.8	124		
Lead				0.02	0.02	89		
Magnesium				20	22.6	113		
Manganese				5.0	5.17	103		
Mercury	0.20	0.2	100					
Nickel				0.20	0.19	95		
Potassium				2000	2320	116		
Selenium				1.0	1.07	107		
Silver				0.02	0.01	71		
Sodium				100	128	128		
Thallium				0.02	0.02	111		
Vanadium				10	8.46	85		
Zinc				10	10.7	107		

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	50	U	50	U	50	U							6010B
Antimony	0.05	U	0.05	U	0.05	U							6020
Arsenic	0.5	U	0.5	U	0.5	U							6020
Barium	5.0	U	5.0	U	5.0	U							6010B
Beryllium	0.02	U	0.02	U	0.02	U							6020
Cadmium	0.02	U	0.02	U	0.02	U							6020
Calcium	50	U	50	U	50	U							6010B
Chromium	5.0	U	5.0	U	5.0	U							6010B
Cobalt	0.02	U	0.02	U	0.02	U							6020
Copper	0.1	U	0.1	U	0.1	U							6020
Iron	20	U	20	U	20	U							6010B
Lead	0.02	U	0.02	U	0.02	U							6020
Magnesium	20	U	20	U	20	U							6010B
Manganese	5.0	U	5.0	U	5.0	U							6010B
Mercury	0.2	U	0.2	U	0.2	U	0.2	U					7470A
Nickel	0.2	U	0.2	U	0.2	U							6020
Potassium	2000	U	2000	U	2000	U							6010B
Selenium	4.0	U	4.0	U	4.0	U							6020
Silver	0.02	U	0.02	U	0.02	U							6020
Sodium	100	U	100	U	100	U							6010B
Thallium	0.02	U	0.02	U	0.02	U							6020
Vanadium	10	U	10	U	10	U							6010B
Zinc	10	U	10	U	10	U							6010B

DISSOLVED METALS
- 3 -
BLANKS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Mercury			0.2	U	0.2	U	0.2	U					7470A

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: Excell ICPMS

ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony			0.02	0.02				
Arsenic		20	0.0	20.7	104			
Beryllium			0.00	0.00				
Cadmium		20	0.73	20.4	102			
Cobalt		20	0.03	19.4	97			
Copper		20	0.4	18.7	94			
Lead			0.03	0.03				
Nickel		20	0.6	19.6	98			
Selenium			0.9	0.8				
Silver		20	0.01	17.9	90			
Thallium			0.00	0.00				

DISSOLVED METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	491000	501000	100			
Barium		500	1.7	483	97			
Calcium	500000	500000	467000	475000	95			
Chromium		500	0.1	456	91			
Iron	200000	200000	173000	176000	88			
Magnesium	500000	500000	475000	486000	97			
Manganese		500	-6.3	444	89			
Potassium			747	-127				
Sodium			27.7	3				
Vanadium		500	-2	448	90			
Zinc		1000	11.5	952	95			

DISSOLVED METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.
Service Request: K0701816
Project No.:
Units: µg/L
Project Name: Presidio of San Franciscc
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: NKGW02CLS
Lab Code: K0701816-002S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	75 - 125	1990		50.0	U	2000	100		6010B
Antimony	75 - 125	20.4		0.06		20.0	102		6020
Arsenic	75 - 125	22.3		0.5	U	20.0	112		6020
Barium	75 - 125	2070		37.5		2000	101		6010B
Beryllium	75 - 125	19.5		0.02	U	20.0	98		6020
Cadmium	75 - 125	20.0		0.05		20.0	100		6020
Chromium	75 - 125	208		5.0	U	200	104		6010B
Cobalt	75 - 125	21.3		0.11		20.0	106		6020
Copper	75 - 125	19.9		0.5		20.0	97		6020
Iron	75 - 125	989		20.0	U	1000	99		6010B
Lead	75 - 125	18.7		0.02	U	20.0	94		6020
Manganese	75 - 125	499		5.0	U	500	100		6010B
Mercury	75 - 125	1.0		0.2	U	1.0	96		7470A
Nickel	75 - 125	26.1		6.3		20.0	99		6020
Selenium	75 - 125	24.7		4.0	U	20.0	124		6020
Silver	75 - 125	19.1		0.02	U	20.0	96		6020
Thallium	75 - 125	19.1		0.02	U	20.0	96		6020
Vanadium	75 - 125	496		10.0	U	500	99		6010B
Zinc	75 - 125	502		10.0	U	500	100		6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 5b -

POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.

Service Request: K0701816

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Matrix: WATER

Sample Name: NKGW02CLA

Lab Code: K0701816-002A DISS

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimonv	75-125	20.4		0.06		20.0	102		MS
Arsenic	75-125	22.0		0.5	U	20.0	110		MS
Bervllium	75-125	18.6		0.02	U	20.0	93		MS
Cadmium	75-125	20.0		0.05		20.0	100		MS
Cobalt	75-125	20.8		0.11		20.0	103		MS
Copper	75-125	19.5		0.5		20.0	95		MS
Lead	75-125	18.3		0.02	U	20.0	92		MS
Mercurv	75-125	0.9		0.2	U	1.00	94		CV
Nickel	75-125	25.6		6.31		20.0	96		MS
Selenium	75-125	22.7		4.00	U	20.0	114		MS
Silver	75-125	8.66		0.02	U	10.0	87		MS
Thallium	75-125	18.3		0.02	U	20.0	92		MS

Comments:

DISSOLVED METALS

- 6 -

DUPLICATES

Client: Treadwell and Rollo, Inc.
Project No.:
Project Name: Presidio of San Franciscc
Matrix: WATER

Service Request: K0701816
Units: µg/L
Basis: NA
% Solids: 0.0

Sample Name: NKGW02CLD
Lab Code: K0701816-002D DISS

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		50	U	50	U			6010B
Antimony		0.06		0.06		8		6020
Arsenic		0.5	U	0.5	U			6020
Barium	20	37.5		37.6		0		6010B
Beryllium		0.02	U	0.02	U			6020
Cadmium		0.05		0.05		1		6020
Calcium	20	12200		12400		2		6010B
Chromium		5.0	U	5.0	U			6010B
Cobalt	20	0.11		0.11		1		6020
Copper	20	0.5		0.5		6		6020
Iron		20	U	20	U			6010B
Lead		0.02	U	0.02	U			6020
Magnesium	20	19900		20200		1		6010B
Manganese		5.0	U	5.0	U			6010B
Mercury		0.2	U	0.2	U			7470A
Nickel	20	6.3		6.2		2		6020
Potassium		2000	U	2000	U			6010B
Selenium		4.0	U	4.0	U			6020
Silver		0.02	U	0.02	U			6020
Sodium	20	40800		41300		1		6010B
Thallium		0.02	U	0.02	U			6020
Vanadium		10	U	10	U			6010B
Zinc		10	U	10	U			6010B

An empty field in the Control Limit column indicates the control limit is not applicabl

DISSOLVED METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Aluminum	5000	5020	100						
Antimony	20.0	20.0	100						
Arsenic	20.0	20.1	101						
Barium	5000	5170	103						
Beryllium	20.0	20.2	101						
Cadmium	20.0	20.1	101						
Calcium	12500	12600	101						
Chromium	500	512	102						
Cobalt	20.0	20.8	104						
Copper	20.0	19.5	98						
Iron	2500	2480	99						
Lead	20.0	19.8	99						
Magnesium	12500	12400	99						
Manganese	1250	1260	101						
Mercury	5.00	5.10	102						
Nickel	20.0	20.1	101						
Potassium	12500	12200	98						
Selenium	20.0	20.5	103						
Silver	20.0	20.4	102						
Sodium	12500	13200	106						
Thallium	20.0	19.5	98						
Vanadium	1250	1250	100						
Zinc	1250	1270	102						

DISSOLVED METALS

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ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: K0701816

Project No.:

Units: ug/L

Project Name: Presidio of San Franciscc

Sample Name: NKGW02CLL

Lab Code: K0701816-002L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	50.0	U	250	U			6010B
Antimony	0.06		0.25	U			6020
Arsenic	0.5	U	2.50	U			6020
Barium	37.5		39.7		6		6010B
Beryllium	0.02	U	0.10	U			6020
Cadmium	0.05		0.10	U			6020
Calcium	12200		12200		0		6010B
Chromium	5.00	U	25.0	U			6010B
Cobalt	0.11		0.10	U			6020
Copper	0.5		0.5		0		6020
Iron	20.0	U	100	U			6010B
Lead	0.02	U	0.10	U			6020
Magnesium	19900		20300		2		6010B
Manganese	5.00	U	25.0	U			6010B
Nickel	6.31		5.81		8		6020
Potassium	2000	U	10000	U			6010B
Selenium	4.00	U	20.0	U			6020
Silver	0.02	U	0.10	U			6020
Sodium	40800		40600		0		6010B
Thallium	0.02	U	0.10	U			6020
Vanadium	10.0	U	50.0	U			6010B
Zinc	10.0	U	50.0	U			6010B

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Mercury	253.70	BD	0.2		7470A

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)		Method
Antimony	123		0.05		6020
Arsenic	75		0.5		6020
Beryllium	9		0.02		6020
Cadmium	111		0.02		6020
Cobalt	59		0.02		6020
Copper	65		0.1		6020
Lead	208		0.02		6020
Nickel	60		0.2		6020
Selenium	77		4.0		6020
Silver	107		0.02		6020
Thallium	205		0.02		6020

Comments:

DISSOLVED METALS

-10-

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP/ICP-MS ID #: TJA ICP-OES 6.2

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)		Method
Aluminum	308.20		50.0		6010B
Barium	493.60		5.0		6010B
Calcium	317.90		50.0		6010B
Chromium	267.70		5.0		6010B
Iron	259.90		20.0		6010B
Magnesium	279.50		20.0		6010B
Manganese	257.60		5.0		6010B
Potassium	766.50		2000		6010B
Sodium	588.90		100		6010B
Vanadium	292.40		10.0		6010B
Zinc	213.80		10.0		6010B

Comments:

DISSOLVED METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.6	0.0052543	0.0000000	0.0003900	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0000000	0.0000000	0.0003945	0.0002503	0.0000000
Cadmium	228.8	0.0000000	0.0000000	-0.0000763	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000163	0.0000098	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000231	0.0000000	0.0170608
Copper	324.7	0.0000000	0.0000000	-0.0000278	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0011214	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000204	0.0000000	-0.0001831	0.0000226	0.0000000
Molybdenum	202	0.0000000	0.0000000	-0.0000939	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0005306	0.0000000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	-0.0013060	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0002185	0.0000000
Silver	328.0	0.0000000	0.0000000	-0.0002271	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0002680	0.0000000	0.0048362	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	-0.0002370	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000276	0.0001569

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Francisco

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.2	-0.0175424	0.0000000	0.0000000	0.0194632	0.0000000
Antimony	206.8	-0.0023048	0.0181871	0.0000000	0.0071351	0.0048131
Arsenic	193.6	0.0000000	0.0015165	0.0000000	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0018818	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.8	-0.0059801	0.0000000	0.0000000	0.0000000	0.0006989
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0002071	0.0003558	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0002395	0.0010048
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0003061	0.0000000
Iron	259.9	0.0000000	0.0000000	-0.0057095	0.0005288	0.0000000
Lead	220.3	-0.0136843	-0.0006403	0.0000000	0.0006789	0.0007454
Magnesium	383.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0039260	0.0000000
Molybdenum	202	0.0003104	0.0000000	0.0000000	0.0000000	0.0001848
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0045715	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0001381	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0040902	0.0000000	-0.0078044	0.0042117	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0002816	0.0000000	0.0003479	0.0000000
Vanadium	292.4	0.0000000	-0.0048333	-0.0001333	0.0246421	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0003936	0.0041984

Comments:

DISSOLVED METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Sn	Ti	V		
Aluminum	308.2	0.0000000	-0.0005811	-0.0139644		
Antimony	206.8	0.0013252	0.0017210	-0.0080346		
Arsenic	193.6	0.0000000	0.0000000	0.0153511		
Barium	493.4	0.0000000	0.0000000	0.0000000		
Beryllium	313.0	0.0000000	0.0000000	0.0027493		
Boron	249.6	0.0000000	0.0000000	0.0000000		
Cadmium	228.8	0.0000000	0.0000000	0.0006840		
Calcium	317.9	0.0000000	0.0000000	0.0000000		
Chromium	267.7	0.0000000	0.0000000	0.0005697		
Cobalt	228.6	-0.0043106	0.0015561	0.0000000		
Copper	324.7	0.0000000	-0.0008431	-0.0001893		
Iron	259.9	0.0000000	-0.0009295	0.0000000		
Lead	220.3	0.0000000	0.0005080	0.0000000		
Magnesium	383.2	0.0000000	0.0000000	0.0000000		
Manganese	257.6	0.0000000	0.0000000	-0.0000791		
Molybdenum	202	0.0000000	0.0000000	0.0000000		
Nickel	231.6	0.0000000	0.0000000	0.0000000		
Phosphorus	214.9	0.0000000	0.0000000	-0.0018977		
Potassium	766.5	0.0000000	0.0000000	0.0000000		
Selenium	196.0	0.0000000	0.0000000	0.0000000		
Silicon	288.1	0.0000000	0.0000000	0.0000000		
Silver	328.0	0.0000000	-0.0001051	-0.0089511		
Sodium	588.9	0.0000000	0.0000000	0.0000000		
Strontium	421.5	0.0000000	0.0000000	0.0000000		
Thallium	190.8	0.0000000	0.0000000	0.0024657		
Tin	189.9	0.0000000	0.0461050	0.0000000		
Titanium	334.9	0.0000000	0.0000000	0.0000000		
Vanadium	292.4	0.0000000	0.0002860	0.0000000		
Zinc	213.8	0.0000000	0.0000000	0.0000000		

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	6020
Arsenic	15.00	1000.0	6020
Beryllium	15.00	1000.0	6020
Cadmium	15.00	1000.0	6020
Cobalt	15.00	500.0	6020
Copper	15.00	1000.0	6020
Lead	15.00	1000.0	6020
Nickel	15.00	1000.0	6020
Selenium	15.00	1000.0	6020
Silver	15.00	300.0	6020
Thallium	15.00	1000.0	6020

Comments:

DISSOLVED METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

ICP ID Number: TJA ICP-OES 6.2

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	900000.0	6010B
Barium	5.00	180000.0	6010B
Calcium	5.00	450000.0	6010B
Chromium	5.00	180000.0	6010B
Iron	5.00	450000.0	6010B
Magnesium	5.00	27000.0	6010B
Magnesium	5.00	720000.0	6010B
Manganese	5.00	4500.0	6010B
Potassium	5.00	450000.0	6010B
Sodium	5.00	900000.0	6010B
Vanadium	5.00	90000.0	6010B
Zinc	5.00	180000.0	6010B

Comments: _____

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCSW	3/16/07	CLAA	50	50
K0701816-MB	3/16/07	CLAA	50	50
K0701816-002 DI	3/16/07	CLAA	50	50
K0701816-002D D	3/16/07	CLAA	50	50
K0701816-002S D	3/16/07	CLAA	50	50

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCSW	3/20/07	METHOD	20	20
K0701816-MB	3/20/07	METHOD	20	20
K0701816-002 DI	3/20/07	METHOD	20	20
K0701816-002D D	3/20/07	METHOD	20	20
K0701816-002S D	3/20/07	METHOD	20	20

DISSOLVED METALS
- 13 -
PREPARATION LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCSW	3/16/07	CLFAA	50	50
K0701816-MB	3/16/07	CLFAA	50	50
K0701816-002 DI	3/16/07	CLFAA	50	50
K0701816-002D D	3/16/07	CLFAA	50	50
K0701816-002S D	3/16/07	CLFAA	50	50

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/21/07 End Date: 3/21/07

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	09:45																X									
STANDARD #1	1.00	09:47																X									
STANDARD #2	1.00	09:48																X									
STANDARD #3	1.00	09:50																X									
STANDARD #4	1.00	09:52																X									
STANDARD #5	1.00	09:54																X									
ICV	1.00	09:56																X									
ICB	1.00	09:57																X									
CCV1	1.00	09:59																X									
CCB1	1.00	10:01																X									
CRA	1.00	10:03																X									
ZZZZZZ	1.00	10:04																									
ZZZZZZ	1.00	10:06																									
ZZZZZZ	1.00	10:08																									
ZZZZZZ	1.00	10:10																									
ZZZZZZ	1.00	10:11																									
ZZZZZZ	1.00	10:13																									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	1.00	10:18																									
CCV2	1.00	10:21																X									
CCB2	1.00	10:23																X									
K0701816-MB	1.00	10:32																X									
LCSW	1.00	10:34																X									
ZZZZZZ	1.00	10:36																									
ZZZZZZ	1.00	10:37																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:41																									
ZZZZZZ	1.00	10:43																									
ZZZZZZ	1.00	10:44																									
ZZZZZZ	1.00	10:46																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: CETAC-1 Method: CV

Start Date: 3/21/07 End Date: 3/21/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:48																									
CCV3	1.00	10:50																X									
CCB3	1.00	10:52																X									
ZZZZZZ	1.00	10:53																									
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:00																									
ZZZZZZ	1.00	11:02																									
ZZZZZZ	1.00	11:04																									
ZZZZZZ	1.00	11:06																									
ZZZZZZ	1.00	11:08																									
ZZZZZZ	1.00	11:09																									
CCV4	1.00	11:11																X									
CCB4	1.00	11:13																X									
ZZZZZZ	1.00	11:15																									
ZZZZZZ	1.00	11:17																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:20																									
ZZZZZZ	1.00	11:22																									
ZZZZZZ	1.00	11:24																									
ZZZZZZ	1.00	11:26																									
K0701816-002 DISS	1.00	11:27																X									
K0701816-002D DISS	1.00	11:29																X									
K0701816-002S DISS	1.00	11:31																X									
CCV5	1.00	11:33																X									
CCB5	1.00	11:35																X									
K0701816-002A DISS	1.00	11:42	999.9															X									
CCV6	1.00	11:43																X									
CCB6	1.00	11:45																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 3/23/07 End Date: 3/23/07

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	09:45		X			X			X	X			X		X	X			X			X		X	X	
CAL-STD3	1.00	09:48		X						X				X		X	X								X	X	
CAL-STD2	1.00	09:50					X				X									X			X				
ICV	1.00	09:54		X			X			X	X			X		X	X			X			X		X	X	
ICV	1.00	09:56																									
ICB	1.00	09:58		X			X			X	X			X		X	X			X			X		X	X	
CCV1	1.00	10:00		X			X			X	X			X		X	X			X			X		X	X	
CCB1	1.00	10:04		X			X			X	X			X		X	X			X			X		X	X	
CRI	1.00	10:07		X			X			X	X			X		X	X			X			X		X	X	
ICSA	1.00	10:10		X			X			X	X			X		X	X			X			X		X	X	
ICSAB	1.00	10:12		X			X			X	X			X		X	X			X			X		X	X	
K0701816-MB	1.00	10:16		X			X			X	X			X		X	X			X			X		X	X	
LCSW	1.00	10:18		X			X			X	X			X		X	X			X			X		X	X	
K0701816-002 DISS	1.00	10:20		X			X			X	X			X		X	X			X			X		X	X	
K0701816-002D DISS	1.00	10:23		X			X			X	X			X		X	X			X			X		X	X	
K0701816-002S DISS	1.00	10:25		X			X				X			X			X								X	X	
K0701816-002L DISS	5.00	10:27		X			X			X	X			X		X	X			X			X		X	X	
CCV2	1.00	10:29		X			X			X	X			X		X	X			X			X		X	X	
CCB2	1.00	10:31		X			X			X	X			X		X	X			X			X		X	X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

DISSOLVED METALS
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Service Request: K0701816

Project No.:

Project Name: Presidio of San Franciscc

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 3/20/07 End Date: 3/20/07

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:29			X	X		X	X			X	X		X				X		X	X		X			
25 PPB STD.	1.00	11:33			X	X		X	X			X	X		X				X		X	X		X			
ZZZZZZ	1.00	11:36																									
ICV	1.00	11:39			X	X		X	X			X	X		X				X		X	X		X			
CCV1	1.00	11:43			X	X		X	X			X	X		X				X		X	X		X			
ICB	1.00	11:50			X	X		X	X			X	X		X				X		X	X		X			
CCB1	1.00	11:54			X	X		X	X			X	X		X				X		X	X		X			
CRA WATER	1.00	11:58			X	X		X	X			X	X		X				X		X	X		X			
ICSA	1.00	12:01			X	X		X	X			X	X		X				X		X	X		X			
ICSAB	1.00	12:04			X	X		X	X			X	X		X				X		X	X		X			
K0701816-MB	1.00	12:19			X	X		X	X			X	X		X				X		X	X		X			
K0701816-002 DISS	1.00	12:23			X	X		X	X			X	X		X				X		X	X		X			
K0701816-002D DISS	1.00	12:25			X	X		X	X			X	X		X				X		X	X		X			
K0701816-002L DISS	5.00	12:34			X	X		X	X			X	X		X				X		X	X		X			
K0701816-002A DISS	1.00	12:37			X	X		X	X			X	X		X				X		X	X		X			
K0701816-002S DISS	1.00	12:40			X	X		X	X			X	X		X				X		X	X		X			
LCSW	1.00	12:43			X	X		X	X			X	X		X				X		X	X		X			
CCV2	1.00	12:47			X	X		X	X			X	X		X				X		X	X		X			
CCB2	1.00	13:03			X	X		X	X			X	X		X				X		X	X		X			

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0701816
Star Lims Run No.: 46356

Method : CLP 3010A 3020A
3005A 3050B (CLP Hot Block) Other- _____

Analysis for : (ICP) ICP-MS GFAA
Flame AA Other _____

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0701816-Blank			X	50	50	1%HNO3,5%HCl
-LCSW						
-2						
-2D						
-2S						
					MS 3/19/07	

Time Digestion Started: _____

Lot # Acids Used: HNO3 CU7031 **HCl** 46332 **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other: _____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, 0.25 mls. added
QCP CICV-2, MET1-51-T, 0.25 mls. added
QCP CICV-3, MET1-51-U, 0.25 mls. added
SS6, MET1-55-A, 0.5 mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, 0.5 mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, 0.5 mls added 200.8 1000ppb Stock (MS10-43-B) _____ mls added
SS6-MET1-55-A, 0.5 mls added Ag 1000ppb Stock (MS10-10-A) _____ mls added

Additional spikes: _____

Comments: _____

Analyst [signature] **Date** ~~3/16/07~~ 3/16/07
Reviewer [signature] **Date** 3/20/07

metdig.xls

METALS SPIKE FORM

Service Request # K0701816
Q.C. Sample # 1816-1

Circle type of digest: GFAA ICP FAA ICP-MS Other:_____ Initials / Date: MS / 3/16/07
Circle type of sample: Soil Water Misc. Sludge Oil Other:_____

Solution Name	Element	mls of 1000ppm Solution	Final Volume	Source	Lot#	Exp. Date	Solution Conc. mg/L	Enter mls Added	
SS1-MET1-52-Z	HNO3	50.0	1000ml	JT Baker	C28025	-	-	0.5	Expires:7/1/07
	Al	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Ag	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Ba	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	200		
	Be	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Cd	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	5		
	Co	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Cr	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	20		
	Cu	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	25		
	Fe	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	100		
	Pb	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Mn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Ni	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Sb	50*	1000ml	MET1-50-J	Z-SB02097	7/1/2007	50		
	V	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
	Zn	100	1000ml	MET1-51-V	Z-MEB213068	9/1/2007	50		
SS4-MET1-52-T	HNO3	25.0	500ml	JT BAKER	A48046	-	-		Expires:7/11/07
	As	2.0	500ml	MET1-47-I	529701	7/11/2007	4		
	Cd	2.0	500ml	MET1-49-L	605906	12/15/2007	4		
	Pb	2.0	500ml	MET1-50-C	611804	12/15/2007	4		
	Se	2.0	500ml	MET1-49-M	616579	12/15/2007	4		
	Tl	2.0	500ml	MET1-49-O	616317	12/15/2007	4		
	Cu	2.0	500ml	MET1-50-E	611815	12/15/2007	4		
SS5-MET1-54-G	HNO3	25.0	500ml	JT BAKER	B41068	-	-	0.5	Expires:7/1107
	As	50.0	500ml	MET1-47-I	529701	7/11/2007	100		
	Se	50.0	500ml	MET1-49-M	616519	12/15/2007	100		
	Tl	50.0	500ml	MET1-49-O	616317	12/15/2007	100		
SS6-MET1-54-E	HNO3	25	500ml	JT BAKER	C28025	-	-	05	Expires: 7/01/07
	B	50	500ml	MET1-51-C	Z-QB02041	7/1/2007	100		
	Mo	50	500ml	MET1-54-K	Z-MO02012	2/1/2008	100		
GFLCSW (MET1-52-W)	HNO3	10.0	1000ml	JT BAKER	C28025	-	-		Expires: 8/1/07
	As, Pb, Se, Tl	5.0	1000ml	QCP-CICV-3	Y-MEB194030	8/1/2007	2.5		
	Cd	-	-	QCP-CICV-3	Y-MEB194030	8/1/2007	1.25		
	Cu	2.5	1000ml	MET1-50-E	611815	12/15/2007	2.5		
CLP-CV-1 (MET1-52-I)	Ca, Mg, Na, K	no dilution	-	HP	620009	9/1/2007	2500	0.25	Expires:9/1/07
	Al, Ba	no dilution	-	HP	620009	9/1/2007	1000		
	Fe	no dilution	-	HP	620009	9/1/2007	500		
	Co, Mn, Ni, V, Zn	no dilution	-	HP	620009	9/1/2007	250		
	Cu, Ag	no dilution	-	HP	620009	9/1/2007	125		
	Cr	no dilution	-	HP	620009	9/1/2007	100		
	Be	no dilution	-	HP	620009	9/1/2007	25		
QCP-CICV-2 (MET1-51-T)	Sb	no dilution	-	IV	Y- MEB194029	8/1/2007	500	0.25	Expires: 08/1/07
QCP-CICV-3 (MET1-54-P)	As, Pb, Se, Tl	no dilution	-	IV	Z-CICPI9048	3/1/2008	500	0.25	Expires: 03/01/08
	Cd	no dilution	-	IV	Z-CICPI9048	3/1/2008	250		

* Denotes volume of 1000 ppm stock standard.

Element	mls of	ppm	Source	Lot# / Lab Code	Exp. Date

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : KU701816 Sb-As-D6020 46438
Star Lims Run No.: 46358

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
KU701816-Blank			X	50	50	1% HNO_3
-LCSW						
-2						
-20						
-25						

MS 3/16/07

Time Digestion Started:

Lot # Acids Used: HNO3 MS9-50-C **HCl** _____ **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added
ICP LCSW = CLP-CV-1, MET1-52-I, _____ mls. added
QCP CICV-2, MET1-51-T, _____ mls. added
QCP CICV-3, MET1-51-U, _____ mls. added
SS6, MET1-55-A, _____ mls. added

TCLP Spike/LCSE
TSS1 MET1-47-C _____ mls. added

SPIKE INFO
SS1-MET1-52-Z, _____ mls added SS4-MET1-48-A, _____ mls added
SS5-MET1-54-G, _____ mls added 200.8 1000ppb Stock (MS10-43-B) 1.0 mls added
SS6-MET1-55-A, _____ mls added Ag 1000ppb Stock (MS10-10-A) 1.0 mls added

Additional spikes:

Comments:

Analyst Melissa Ab **Date** 3/16/07
Reviewer [illegible] **Date** 3/20/07

metdig.xls

Digestion Procedures

Method #	GFAA	ICP-OES
CLP Water	Shake sample, Aliquot 50 mls into beaker Add 0.5 mls. HNO3 Add 2 ML 30% H2O2 Cover with ribbed watchglass Heat without boiling for 2 hrs (volume = 0.5x orginal Vol.) Cool sample, Dilute to 50 mls. with DI water	same same Add 2.5 mls Concentrated HCl instead of H2O2 Cover with ribbed watchglass same same
EPA 3010A SW-846 TCLP Ext. USACOE		Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3. Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 2.5 mls Concentrated HCl. Cover and reflux for 15 mi Dilute to 50 mls with DI water.
EPA 3020A SW-846 TCLP Ext. USACOE	Shake sample and measure 50 ml into beaker Add 1.5 ml of HNO3, cover with ribbed watchglass Evaporate to 5 ml. Do Not let go DRY Cool, Add 1.5 ml of HNO3, Cover and reflux until digestate is light color or color has stabilized Reduce volume to 5 mls, Cool Add 10 ml DI water, reflux 10-15 min. Dilute to 50 mls with DI water.	
EPA 3050B	Mix sample ; weigh out 1.00 g dry weight. * Add spike solution to sample. Add 5 ml DI water and 5 ml HNO3. Reflux 15 min. Cool. Add 5 ml HNO3. Cover. Reflux 30 min. NOTE: *If brown fumes are* generated, repeat the *addition of 5 mls of HNO3 after 30 min of reflux.* Reflux for 2 hrs. or to vol of 5 mls. Cool sample and add 2 mls H20 & 3 mls 30%H2O2 Cover and heat until effervescence subsides Repeat H2O2 adds twice until effervescence is minimal. Don't add > 10 mls. H2O2 **Heat to vol. of 5 mls.** Dilute to 100mls with DI water.	same same same same same same same same same same Add 10 ml of Concentrated HCl, Reflux for 15 min. Dilute to 100 mls. (to 50 mls for Flame)

GFAA NOTE: For SW-846 analysis prepare a digestate from Method 3020B for Pb & Tl analysis & a digestate from the CLFAA for As & Se.

*** Suggested Sample Aliquot Weights**

% Solids	Aliquot Wet Weight Range
>80 %	1.00 g
70-80 %	1.20 g
60-70 %	1.40 g
50-60 %	1.80 g
40-50 %	2.20 g
30-40 %	2.70 g

Spike Solution Chart

GFAA soil - 2mls SS # 4
ICP-OES soil - 2mls SS# 1 & 1 ml SS # 5 & 6
ICP-MS soil - 2mls SS# 1, & 1 ml SS # 5 & 6
ICP-OES water- 0.5mls SS# 1,5,6
GFAA water - 0.5 ml SS # 4
ICP-MS water - 1ml 200.8 stock sol'n & 1 ml Ag sol'n

Atomic Absorption Data Review Form

Element: Hg

Analysis Lot #: 80526

Cal. STD/CCV Source: HG1-57-R

Service Request Numbers:

K2171 K0665 K2193 K2102 K1669
K1816

	Yes	No	NA
1) Appropriate standardization completed	✓		
2) ICV within 10% of true value	✓		
3) CCVs in control	✓		
4) CCBs and or ICBs below MRL	✓		
5) All reported samples within calibration range	✓		
6) Calculations correct	✓		

Comments:

Primary Reviewed By: SPatterson Date: 3-21-07

Secondary Reviewed By: EmA Date: 3/21/07

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
1	ICV	—	—	—	5.19		104%	
2	ICB	—	—	—	0.01		<0.2	
3	CCV1	—	—	—	4.85		97%	
4	CCB1	—	—	—	0.00		<0.2	
5	CRA	—	—	—	0.20		0.20	100%
6	PBE#1 (46456)	20ml	20ml	—	0.01		<0.2	
7	LCSE#			—	4.47		4.5	89%
8	K0702171-001			—	0.01		<0.2	$\bar{X}$=ND
9	-001d			—	0.02		<0.2	RPD=—
10	-001S			—	4.50		4.5	90%
11	-002			—	0.01		<0.2	
12	-003			—	0.01		<0.2	
13	-001A			—	1.07		(106%)	
14	CCV2	—	—	—	4.88		98%	
15	CCB2	—	—	—	0.00		<0.2	
16	PBW (46464)	20ml	20ml	—	0.01		<0.2	
17	LCSW			—	5.10		102%	
18	K0700665-010			—	0.01		<0.2	$\bar{X}$=ND
19	-010d			—	0.01		<0.2	RPD=—
20	-010S			—	0.94		0.94	94%
21	K0702193-001			—	0.01		<0.2	
22	-002			—	0.01		<0.2	$\bar{X}$=ND
23	-002d			—	-0.01		<0.2	RPD=—
24	-002S			—	0.94		0.94	94%
25	-003			—	0.01		<0.2	

Comments: Reporting Levels:

Waters - 0.2 µg/L — TIME STARTED:

Soil - 0.02 mg/kg

TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L

Soil Spike Level : 5.0 µg/L = mg/kg

TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
Patterson	3-21-07	1 of 3

[HGFORM] HG1.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
26	CCV3	—	—	—	4.83		97%	
27	CCB3	—	—	—	0.01		<0.2	
28	K0702102-002	10ml	20ml	—	0.01		<0.2	
29	K0701669-001	20ml		—	-0.00		<0.2	X=ND
30	-001d			—	0.00		<0.2	RPD= —
31	-001S			—	1.01		1.01	101%
32	-002			—	0.00		<0.2	
33	-003			—	-0.00		<0.2	
34	-004			—	-0.00		<0.2	
35	-005			—	-0.00		<0.2	
36	-006			—	0.01		<0.2	
37	-007			—	0.01		<0.2	
38	CCV4	—	—	—	4.82		96%	
39	CCB4	—	—	—	0.00		<0.2	
40	K11669-DISS-001	20ml	20ml	—	0.01		<0.2	
41	-002			—	0.01		<0.2	
42	-003			—	0.01		<0.2	
43	-004			—	0.01		<0.2	
44	-005			—	-0.00		<0.2	
45	-006			—	-0.00		<0.2	
46	-007			—	0.00		<0.2	
47	K0701816-002			—	0.01		<0.2	X=ND
48	-002d			—	0.00		<0.2	RPD= —
49	-002S			—	0.96		0.96	96%
50	CCV5	—	—	—	4.81		96%	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
SPatterson	3-21-07	2 of 3

[HGFORM] HG2.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)
51	CCB5	—	—	—	0.01		<0.2
52	K0701816-002A	20ml	20ml	—	0.94		(93%)
53	CCV6	—	—	—	4.90		~~<0.2~~ 98% SP 3-21-07
54	CCB6	—	—	—	0.01		<0.2
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75						SP 3-21-07	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
J Patterson	3-21-07	3 of 3

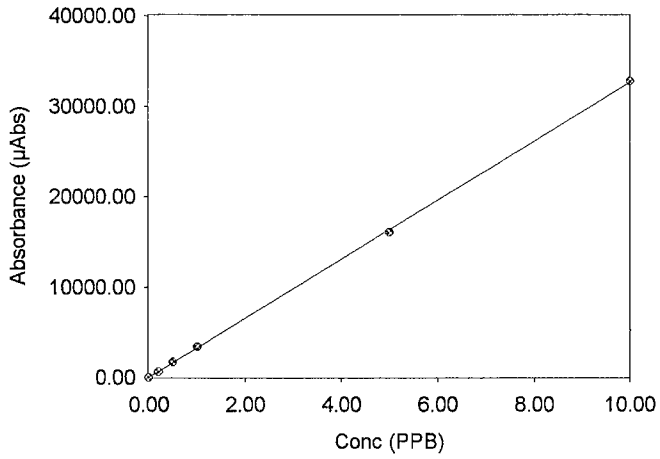
[HGFORM] HG3.XLS

CETAC Hg Analysis Report - 07032100.DB - Wednesday, March 21, 2007, 11:46:38 AM

Analyst S. Patterson
Date Started Wednesday, March 21, 2007, 09:45:22
Worksheet Hg 03/21/07 Run 1
Comment 80526

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
Calibration Zero	21-Mar-2007, 09:45	0.00	72.30	15.60	-0	21	17	25	
Standard #1	21-Mar-2007, 09:47	0.20	2.00	688.00	705	694	675	680	
Standard #2	21-Mar-2007, 09:48	0.50	1.72	1740.00	1716	1782	1740	1722	
Standard #3	21-Mar-2007, 09:50	1.00	1.12	3450.00	3405	3445	3452	3499	
Standard #4	21-Mar-2007, 09:52	5.00	1.46	16100.00	15825	16036	16083	16394	
Standard #5	21-Mar-2007, 09:54	10.00	2.36	32800.00	31821	32896	33707	32759	

Calibration Data



Int.	0.000
Slope	3268.963
Correlation	0.99993

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICV	21-Mar-2007, 09:56	5.19	2.34	17000.00	16840	16709	16748	17550	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICB	21-Mar-2007, 09:57	0.01	40.60	23.10	34	23	23	11	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV1	21-Mar-2007, 09:59	4.85	0.70	15900.00	15767	15776	15990	15931	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB1	21-Mar-2007, 10:01	0.00	338.00	3.47	-1	-11	10	16	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CRA	21-Mar-2007, 10:03	0.20	1.28	660.00	664	658	670	650	
PBE #1 (46456)	21-Mar-2007, 10:04	0.01	47.70	24.10	13	21	40	21	
LCSE #1 (46456)	21-Mar-2007, 10:06	4.47	0.12	14600.00	14599	14627	14587	14593	
K0702171-001	21-Mar-2007, 10:08	0.01	29.90	32.40	25	38	43	23	
K0702171-001D	21-Mar-2007, 10:10	0.02	15.50	72.00	76	86	65	62	
K0702171-001S	21-Mar-2007, 10:11	4.50	0.54	14700.00	14627	14674	14705	14813	
K0702171-002	21-Mar-2007, 10:13	0.01	31.20	23.50	28	15	30	21	
K0702171-003	21-Mar-2007, 10:15	0.01	83.40	36.90	78	42	9	18	
K0702171-001A	21-Mar-2007, 10:18	1.07	0.72	3500.00	3468	3501	3523	3521	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV2	21-Mar-2007, 10:21	4.88	1.45	16000.00	15682	15890	16042	16226	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB2	21-Mar-2007, 10:23	0.00	63.80	10.70	18	14	3	8	

Analyst S. Patterson
Date Started Wednesday, March 21, 2007, 10:32:29
Worksheet Hg 03/21/07 Run 1
Comment 80526

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
PBW (46464)	21-Mar-2007, 10:32	0.01	18.70	35.70	37	41	26	39	
LCSW (46464)	21-Mar-2007, 10:34	5.10	0.64	16700.00	16597	16616	16661	16832	
K0700665-010	21-Mar-2007, 10:36	0.01	80.40	24.00	1	17	44	34	
K0700665-010D	21-Mar-2007, 10:37	0.01	165.00	19.20	-24	20	52	28	
K0700665-010S	21-Mar-2007, 10:39	0.94	2.06	3080.00	3023	3034	3133	3143	
K0702193-001	21-Mar-2007, 10:41	0.01	46.60	16.40	11	9	22	24	
K0702193-002	21-Mar-2007, 10:43	0.01	86.70	25.20	12	14	18	58	
K0702193-002D	21-Mar-2007, 10:44	-0.01	44.20	-25.10	-35	-10	-32	-23	
K0702193-002S	21-Mar-2007, 10:46	0.94	1.39	3090.00	3025	3102	3088	3126	
K0702193-003	21-Mar-2007, 10:48	0.01	59.30	28.60	18	18	54	25	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV3	21-Mar-2007, 10:50	4.83	1.12	15800.00	16049	15701	15779	15652	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB3	21-Mar-2007, 10:52	0.01	23.90	35.10	26	41	29	43	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0702102-002	21-Mar-2007, 10:53	0.01	57.80	21.80	38	17	23	8	
K0701669-001	21-Mar-2007, 10:55	-0.00	1040.00	-0.81	-5	-6	-4	12	
K0701669-001D	21-Mar-2007, 10:57	0.00	304.00	2.55	10	-3	-5	8	
K0701669-001S	21-Mar-2007, 10:59	1.01	1.95	3310.00	3386	3344	3254	3260	
K0701669-002	21-Mar-2007, 11:00	0.00	74.70	12.10	18	3	22	6	
K0701669-003	21-Mar-2007, 11:02	-0.00	838.00	-0.45	-1	-6	1	3	
K0701669-004	21-Mar-2007, 11:04	-0.00	358.00	-4.48	-9	-10	-18	19	
K0701669-005	21-Mar-2007, 11:06	-0.00	62.50	-12.30	-16	-18	-1	-14	
K0701669-006	21-Mar-2007, 11:08	0.01	53.50	34.00	14	24	55	43	
K0701669-007	21-Mar-2007, 11:09	0.01	99.70	19.00	41	28	6	0	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV4	21-Mar-2007, 11:11	4.82	0.63	15800.00	15796	15713	15897	15671	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB4	21-Mar-2007, 11:13	0.00	193.00	6.76	-0	22	12	-7	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701669-001 DISS	21-Mar-2007, 11:15	0.01	56.40	25.20	29	11	17	43	
K0701669-002 DISS	21-Mar-2007, 11:17	0.01	52.70	40.30	17	50	65	29	
K0701669-003 DISS	21-Mar-2007, 11:18	0.01	19.60	26.80	29	26	20	32	
K0701669-004 DISS	21-Mar-2007, 11:20	0.01	45.90	24.70	17	22	19	41	
K0701669-005 DISS	21-Mar-2007, 11:22	-0.00	496.00	-1.41	-9	-3	7	-1	
K0701669-006 DISS	21-Mar-2007, 11:24	-0.00	320.00	-2.53	-1	-14	3	2	
K0701669-007 DISS	21-Mar-2007, 11:26	0.00	236.00	4.41	-3	17	9	-5	
K0701816-002	21-Mar-2007, 11:27	0.01	14.10	41.40	35	42	49	39	
K0701816-002D	21-Mar-2007, 11:29	0.00	452.00	3.87	8	25	-17	-0	
K0701816-002S	21-Mar-2007, 11:31	0.96	0.92	3130.00	3089	3152	3148	3136	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV5	21-Mar-2007, 11:33	4.81	2.72	15700.00	15315	15520	15708	16307	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB5	21-Mar-2007, 11:35	-0.01	44.80	-16.40	-10	-15	-27	-13	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0701816-002A	21-Mar-2007, 11:42	0.94	1.61	3070.00	3147	3050	3061	3038	

CETAC Hg Analysis Report - 07032100.DB - Wednesday, March 21, 2007, 11:46:39 AM

Analyst S. Patterson
Date Started Wednesday, March 21, 2007, 11:43:52
Worksheet Hg 03/21/07 Run 1
Comment 80526

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV6	21-Mar-2007, 11:43	4.90	4.75	16000.00	15321	15465	16277	16954	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB6	21-Mar-2007, 11:45	0.01	43.00	37.30	14	48	48	40	

Columbia Analytical Services

EPA METHOD 7470A

PrepRun: 46456

Service Request Number(s) : K2171

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBE#1	20ml	20ml			
LCSE#1					
K0702171-001					
-001d					
001S					
-002					
003					
		SP 3-20-07			
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

Lot # of Reagents Used:

HNO3: C47031 **K2S2O8: T44H13** **NaCl: C14610**

H2SO4: 46137 **KMnO4: C23603** **NH2OH-HCL: C27599**

HCL: 46332 **SnCl2: C28646**

LCSS = **ERA CLP Soil Lot # D045540** **Other:** Waterbath @ 95°C

LCSW= **ICV Intermediate stock solution.**

*** Source Standard:** HG1-57-R **100 ppb**

**** Source Standard: ICV** HG1-57-O **1000 ppb** **TIME STARTED:**

Comments: 0.1ml 1000 ppb TCLP std to spike & LCSS (HG1-57-P)

Analyst: SPatterson

Date: 3-20-07

[HGFORM] 7470

Columbia Analytical Services

EPA METHOD 7470A

PrepRun: 46464

Service Request Number(s) : K0665, K2193, K2102, K1669, K1816

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBW	20ml	20ml	K1669DSS-006	20ml	20ml
LCSW			-007		
K0700665-010			K0701816-002		
-010d			-002d		
-010s			-002s		
K0702193-001					
-002d					
-002					
-002s					
-003					
(+) K0702102-002	10ml				
K0701669-001	20ml				
-001d					
-001s					
-002					
-003					
-004					
-005					
-006					
-007					
K1669DSS-001					
-002					
-003					
-004					
-005				3-20-07	
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

Lot # of Reagents Used:

HNO3: C47031 **K2S2O8: T44H13** **NaCl: C14610**

H2SO4: 46137 **KMnO4: C23603** **NH2OH-HCL: C27599**

HCL: 46332 **SnCl2: C28646**

LCSS = **ERA CLP Soil Lot # D045540** **Other:** Waterbath @ 95°C

LCSW= 0.1ml **ICV Intermediate stock solution.**

*** Source Standard:** HG1-57-F **100 ppb**

**** Source Standard: ICV** HG1-57-O **1000 ppb** **TIME STARTED:**

Comments: 0.2ml 100ppb source std to spikes

(+) limited sample volume

Analyst: Patterson **Date:** 3-20-07

[HGFORM] 7470

Service Request # K0701811e
Instrument ID# K-ICP-AES-01

ICP-OES Data Review Form

	Yes	No
1. Standardization completed	✓	
2. ICV within 10 % of true value	✓	
3. ICB below MRL	✓	
4. CRI standard analyzed.	✓	
5. ICS standards within 20% of true value	✓	
6. All preceding CCVs within 10 % of true value	✓	
7. Following CCV within 10 % of true value	✓	
8. Bracketing CCBs below MRL	✓	
9. Method Blank below MRL	✓	
10. MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11. All analytes within instrument linear range	✓	
12. Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments

Primary Review by [illegible] Date 3/23/07

Secondary Review by [illegible] Date 3/23/7

Method: 20071 Standard: STD1-Blank
Run Time: 03/23/07 09:45:58

80715B

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Avge	.0074	-.0011	-.0038	-.0001	.0011	.0184	.0000
#1	.0050	-.0017	-.0039	-.0001	.0011	.0184	.0000
#2	.0097	-.0006	-.0037	.0000	.0011	.0183	.0000

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Avge	.0017	.0005	-.0005	.0005	.0015	.0009	.0010
#1	.0007	-.0007	-.0007	.0004	.0011	-.0027	.0010
#2	.0028	.0017	-.0003	.0006	.0019	.0044	.0010

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Avge	-.0016	.0000	.0002	.0001	.0060	.0069	-.0022
#1	-.0040	.0000	.0000	.0003	.0012	.0040	-.0029
#2	.0009	.0000	.0004	-.0001	.0108	.0099	-.0016

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Avge	.1689	-.0021	-.0002	.0001	-.0011	.0031	.0028
#1	.1624	-.0040	-.0009	.0001	-.0009	.0021	.0023
#2	.1754	-.0001	.0004	.0000	-.0014	.0040	.0033

Elem	Tl1908	Li6707	Sr4215
Avge	-.0039	-.0003	-.0001
#1	-.0034	-.0009	-.0001
#2	-.0043	.0002	.0000

Uuuk 3/23/07

Standardization Rpt. 03/23/07 09:50:17 AM page 1

Method: 20071 Standard: STD3
Run Time: 03/23/07 09:48:30 ICP 4-5-D 80715B

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.906	.7269	1.328	6.765	.3591	.2771	6.471
#1	1.905	.7203	1.330	6.773	.3590	.2773	6.475
#2	1.907	.7334	1.327	6.757	.3593	.2770	6.466

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	3.088	7.239	.3620	2.869	.2036	.6593	.4989
#1	3.091	7.247	.3626	2.870	.2036	.6629	.4999
#2	3.085	7.230	.3614	2.869	.2036	.6557	.4979

Elem	Zn2138	Ti3349
Avge	1.224	.6034
#1	1.225	.6039
#2	1.223	.6030

Standardization Rpt. 03/23/07 09:52:25 AM

Method: 20071 Standard: STD2
Run Time: 03/23/07 09:50:39 ICP3-99-6 80715B

Elem	Sb2068	Ba4934	B_2496	Cd2288	Cr2677	Ni2316	K_7665
Avge	1.511	.2696	1.048	.1919	8.191	1.686	.7661
#1	1.504	.2679	1.044	.1914	8.168	1.687	.7659
#2	1.518	.2713	1.051	.1924	8.214	1.685	.7663

Elem	Ag3280	Na5889	Sn1899	P_2149	Si2881	Tl1908	Li6707
Avge	.2901	11.78	4.475	2.973	3.867	.4771	.5926
#1	.2889	11.71	4.468	2.966	3.852	.4774	.5877
#2	.2913	11.85	4.482	2.980	3.883	.4769	.5976

Elem	Sr4215
Avge	.5387
#1	.5351
#2	.5423

Analysis Report QC Standard 03/23/07 09:56:40 AM page 1

Method: 20071 Sample Name: ICV Operator: MMR
Run Time: 03/23/07 09:54:43
Comment: ICP4-2-C 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.975	2.521	2.462	5.083	.1218	.0138	1.274
#1	4.965	2.505	2.467	5.090	.1219	.0165	1.278
#2	4.985	2.538	2.457	5.077	.1216	.0110	1.270

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.38	.5010	1.243	.6272	2.443	2.466	12.24
#1	12.40	.5038	1.240	.6259	2.446	2.467	12.25
#2	12.37	.4982	1.245	.6284	2.439	2.465	12.22

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.20	1.236	2.001	1.265	12.93	2.478	.6314
#1	12.24	1.238	1.999	1.279	12.65	2.482	.6297
#2	12.17	1.234	2.003	1.251	Q13.22	2.474	.6331

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.03	-.0021	1.232	1.249	-.1600	.0067	2.026
#1	13.05	-.0083	1.234	1.248	-.1858	-.0044	2.031
#2	13.02	.0042	1.229	1.250	-.1342	.0177	2.022

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.580	.0018	.0005
#1	2.563	.0027	.0004
#2	2.598	.0009	.0007

Analysis Report QC Standard 03/23/07 09:58:48 AM page 1

Method: 20071 Sample Name: ICV STD 4 Operator: MMR
Run Time: 03/23/07 09:56:55
Comment: ICP3-99-F 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0346	.0096	-.0193	.0007	.0000	5.121	.0018
#1	.0154	.0028	-.0339	.0003	.0000	5.119	.0021
#2	.0538	.0163	-.0047	.0011	-.0000	5.124	.0016

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0126	-.0010	.0042	.0021	.0228	-.0007	.0100
#1	.0105	-.0022	.0040	.0018	.0222	-.0064	.0099
#2	.0147	.0003	.0044	.0023	.0234	.0051	.0101

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0809	.0002	.0004	.0089	.0611	-.0104	.0012
#1	-.1302	.0001	-.0003	.0072	-.4135	-.0283	-.0017
#2	-.0316	.0003	.0011	.0106	.5357	.0075	.0042

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.55	5.129	-.0014	.0017	5.103	5.070	.0007
#1	14.55	5.133	-.0032	.0009	5.041	5.063	.0013
#2	14.56	5.125	.0004	.0026	5.165	5.076	.0001

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0209	5.086	1.047
#1	-.0120	5.095	1.046
#2	-.0298	5.078	1.047

Analysis Report QC Standard 03/23/07 10:00:42 AM page 1

Method: 20071 Sample Name: ICB Operator: MMR
Run Time: 03/23/07 09:58:53
Comment: 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0264	.0116	.0062	.0000	-.0000	.0097	.0003
#1	.0305	.0038	-.0030	.0000	-.0000	.0104	.0001
#2	.0223	.0193	.0154	.0000	.0000	.0090	.0005

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0014	-.0012	.0024	.0018	-.0007	-.0018	.0000
#1	.0010	-.0004	.0010	.0018	-.0002	-.0009	.0000
#2	.0017	-.0020	.0037	.0018	-.0012	-.0028	.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0197	.0001	-.0018	-.0008	-.0117	-.0279	.0027
#1	.0118	.0001	.0004	-.0013	-.1504	-.0336	.0017
#2	-.0513	.0000	-.0039	-.0004	.1269	-.0223	.0037

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0320	-.0067	.0006	.0006	-.0378	.0171	-.0005
#1	.0465	.0059	.0015	.0003	-.0432	.0186	.0004
#2	.0175	-.0193	-.0002	.0009	-.0324	.0156	-.0013

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0861	.0033	.0001
#1	-.1039	.0033	.0001
#2	-.0683	.0033	.0001

Analysis Report QC Standard 03/23/07 10:03:59 AM page 1

Method: 20071 Sample Name: CCV1 Operator: MMR
Run Time: 03/23/07 10:00:54
Comment: ICP4-6-D 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.954	5.033	1.984	.4992	.4903	5.023	.5054
#1	5.023	5.064	1.976	.5054	.4958	5.106	.5150
#2	4.925	5.045	1.986	.4991	.4890	5.006	.5014
#3	4.937	4.973	1.994	.4917	.4846	4.955	.4976
#4	4.933	5.053	1.980	.5007	.4918	5.026	.5075

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.938	5.020	.5017	.4905	4.949	4.934	4.945
#1	4.973	5.065	.5053	.4945	4.997	4.940	4.991
#2	4.912	4.995	.4997	.4893	4.930	4.893	4.926
#3	4.912	4.980	.5020	.4883	4.907	4.940	4.900
#4	4.953	5.040	.4996	.4898	4.962	4.966	4.965

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.931	.4924	.4929	5.035	25.86	1.933	.5072
#1	4.864	.4969	.4951	5.061	26.11	1.949	.5102
#2	4.856	.4904	.4902	5.003	25.19	Q1.890	.5033
#3	5.073	.4885	.4902	5.018	Q26.45	1.942	.5101
#4	4.931	.4938	.4958	5.059	25.69	1.950	.5053

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.28	5.115	.4910	2.475	24.88	5.047	.4939
#1	25.60	5.139	.4933	2.495	25.00	5.096	.4989
#2	25.19	5.068	.4878	2.467	24.92	5.021	.4925
#3	24.99	5.128	.4911	2.457	24.77	5.024	.4887
#4	25.35	5.125	.4918	2.480	24.84	5.046	.4958

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.016	2.517	.5011
#1	5.076	2.550	.5071
#2	5.056	2.516	.5002
#3	4.952	2.475	.4938
#4	4.979	2.525	.5031

Analysis Report QC Standard 03/23/07 10:05:54 AM page 1

Method: 20071 Sample Name: CCB1 Operator: MMR
Run Time: 03/23/07 10:04:07
Comment: 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0203	.0019	.0142	.0001	.0001	.0083	-.0013
#1	.0418	.0039	.0145	.0000	.0001	.0104	-.0024
#2	-.0011	-.0001	.0139	.0003	.0001	.0062	-.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0011	.0008	.0003	-.0006	.0074	.0002
#1	.0029	.0001	.0030	.0023	-.0002	.0046	.0004
#2	.0023	.0022	-.0013	-.0018	-.0009	.0102	.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0809	-.0002	.0007	-.0004	.4064	.0205	.0003
#1	-.0158	-.0000	.0004	.0030	.3994	.0319	.0037
#2	.1775	-.0005	.0011	-.0038	.4135	.0092	-.0031

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0323	.0051	.0025	-.0000	.0228	.0042	.0001
#1	.0452	-.0027	.0007	.0003	.0012	.0105	.0004
#2	.0194	.0129	.0044	-.0003	.0444	-.0020	-.0001

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0104	.0051	.0000
#1	.0089	.0039	.0001
#2	-.0297	.0063	-.0001

Analysis Report QC Standard 03/23/07 10:10:11 AM page 1

Method: 20071 Sample Name: CRI Operator: MMR
Run Time: 03/23/07 10:07:51
Comment: ICP3-98-B 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0787	.0604	.1002	.0053	.0049	.0527	.0047
#1	.0508	.0556	.1115	.0045	.0048	.0521	.0048
#2	Q.1066	.0652	.0888	.0061	.0050	.0534	.0045

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0560	.0037	.0115	.0103	.0248	.0405	.0226
#1	.0516	.0004	.0083	.0065	.0222	.0292	.0227
#2	.0603	.0071	.0147	.0142	.0275	.0519	.0225

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q-.0731	.0052	.0084	.0229	2.321	.1031	.0099
#1	Q-.2367	.0048	.0067	.0140	.9914	.0860	.0057
#2	Q.0906	.0056	.0102	.0318	3.651	.1201	.0140

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1283	.0405	.0085	.0107	.1999	.0829	.0093
#1	.0945	.0368	.0056	.0107	.1368	.0590	.0094
#2	.1622	.0442	.0113	.0107	.2629	Q.1068	.0092

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0652	.0099	.0105
#1	.0682	.0039	.0102
#2	.0623	.0160	.0107

Analysis Report QC Standard 03/23/07 10:12:34 AM page 1

Method: 20071 Sample Name: ICSA Operator: MMR
Run Time: 03/23/07 10:10:44
Comment: ICP3-100-E 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	490.7	.0354	-.1733	.0017	.0002	.0249	.0061
#1	492.0	.0153	-.2152	.0016	.0001	.0211	.0057
#2	489.4	.0555	-.1313	.0019	.0002	.0288	.0065

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	466.8	.0001	-.0056	-.0008	173.4	.0579	227.7
#1	466.2	.0003	-.0049	-.0011	173.6	.0442	227.3
#2	467.4	-.0001	-.0063	-.0006	173.3	.0716	228.1

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	475.4	-.0063	.0012	-.0178	.7471	.0611	-.0019
#1	476.7	-.0061	.0012	-.0191	.3383	.0621	-.0034
#2	474.1	-.0065	.0012	-.0165	1.156	.0600	-.0005

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0277	-.0427	-.0021	.0115	-.1911	.0133	.0064
#1	.0249	-.0580	-.0018	.0112	-.2446	.0103	.0063
#2	.0305	-.0274	-.0023	.0118	-.1376	.0163	.0065

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0189	.0054	.0057
#1	.0141	.0021	.0057
#2	.0236	.0087	.0057

Analysis Report QC Standard 03/23/07 10:14:38 AM page 1

Method: 20071 Sample Name: ICSAB Operator: MMR
Run Time: 03/23/07 10:12:50
Comment: ICP4-7-A 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	500.6	1.006	-.1806	.4829	.4581	.0246	.9716
#1	502.3	1.017	-.1590	.4842	.4593	.0233	.9706
#2	498.9	.9955	-.2021	.4816	.4569	.0258	.9727

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	474.6	.4565	.4325	.4683	176.3	.9419	228.3
#1	475.6	.4574	.4330	.4696	176.6	.9409	228.5
#2	473.6	.4555	.4320	.4670	175.9	.9428	228.1

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	485.7	.4444	.0076	.8925	-.1269	.1346	.9362
#1	487.6	.4456	.0101	.8967	-.5686	.1333	.9368
#2	483.9	.4432	.0051	.8882	.3148	.1359	.9356

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0034	-.0336	.4481	.9520	-.2956	.0048	.0056
#1	-.0089	-.0190	.4503	.9528	-.2802	.0007	.0052
#2	.0157	-.0482	.4460	.9512	-.3110	.0088	.0059

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0739	.0015	.0054
#1	.1841	.0009	.0054
#2	-.0363	.0021	.0054

Method: 20071 Sample Name: PBW Operator: MMR
Run Time: 03/23/07 10:16:47
Comment: K0701816 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0278	L.0134	L-.0030	L.0004	L.0001	L.0013	L-.0003
#1	L-.0004	L.0037	L-.0195	L.0000	.0001	L-.0007	L-.0004
#2	.0561	L.0230	L.0136	.0008	L.0001	L.0034	L-.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0079	.0023	L.0018	.0023	L.0004	L.0190	L.0002
#1	L.0055	.0024	L-.0010	L.0003	L-.0007	L.0176	L.0002
#2	.0102	.0022	.0046	.0044	L.0015	.0204	L.0002

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.1440	.0003	L.0025	L-.0008	L.4769	L.0153	.0047
#1	L.1104	L-.0000	L.0032	L-.0106	L-.3289	L-.0048	L-.0007
#2	L.1775	.0006	L.0018	.0089	1.283	L.0354	.0101

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0523	L-.0027	.0034	.0015	L.0216	L.0171	L-.0011
#1	.0243	L.0018	L.0027	L.0009	L.0324	L-.0042	L-.0025
#2	.0803	L-.0072	.0041	.0020	L.0108	.0384	L.0004

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0119	.0042	.0004
#1	L-.0416	.0021	.0001
#2	L.0178	.0063	.0007

Method: 20071 Sample Name: LCSW Operator: MMR
Run Time: 03/23/07 10:18:48
Comment: K0701816 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.018	2.584	2.495	5.168	.1243	1.026	1.296
#1	4.990	2.568	2.472	5.073	.1227	1.009	1.283
#2	5.046	2.600	2.518	5.263	.1258	1.043	1.309

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.62	.5118	1.265	.6338	2.483	2.514	12.40
#1	12.53	.5054	1.257	.6270	2.460	2.491	12.27
#2	12.71	.5182	1.274	.6405	2.506	2.537	12.52

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.44	1.261	.9834	1.293	12.18	2.499	.6377
#1	12.21	1.248	.9722	1.278	13.03	2.451	.6349
#2	12.68	1.274	.9946	1.309	11.34	2.547	.6405

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.21	-.0076	1.251	1.270	-.1325	-.0037	.0006
#1	12.99	-.0018	1.236	1.261	-.1187	.0115	.0017
#2	13.42	-.0133	1.265	1.279	-.1464	-.0189	-.0006

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.564	.0000	.0003
#1	2.549	.0075	.0007
#2	2.579	-.0075	-.0001

Method: 20071 Sample Name: K0701816-002 Operator: MMR
Run Time: 03/23/07 10:20:59
Comment: K0701816 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0162	L.0105	L-.0001	.0375	L.0001	.0685	L-.0007
#1	L-.0064	L.0077	L.0044	.0379	.0001	.0706	L.0014
#2	.0387	L.0134	L-.0046	.0371	L-.0000	.0664	L-.0029

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.25	.0033	L.0008	L.0003	L.0030	L-.0037	19.92
#1	12.28	.0022	L.0002	L-.0013	.0034	L-.0148	19.99
#2	12.22	.0045	L.0014	L.0018	L.0026	L.0074	19.85

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.17	L.0001	L.0004	.0080	L.6155	L-.0135	L.0025
#1	20.15	L-.0003	L-.0003	L.0072	L.2725	L-.0135	L-.0007
#2	20.19	.0005	L.0011	.0089	.9586	L-.0135	.0056

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.79	L.0005	L.0011	.0055	L-.0648	15.58	L.0001
#1	41.02	L.0043	L-.0004	.0050	L-.0768	15.62	L-.0006
#2	40.56	L-.0034	L.0027	.0061	L-.0528	15.53	L.0008

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0267	.0081	.0898
#1	L.0356	.0057	.0903
#2	L.0178	.0105	.0892

Method: 20071 Sample Name: K0701816-002D Operator: MMR
Run Time: 03/23/07 10:23:06
Comment: K0701816 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0064	L-.0039	L.0235	.0376	L.0001	.0670	L-.0004
#1	L.0109	L.0057	L.0234	.0376	L.0000	.0649	L-.0026
#2	L-.0237	L-.0135	L.0236	.0376	.0001	.0691	L.0018

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.41	.0041	L-.0018	L-.0000	.0033	L-.0023	20.19
#1	12.46	.0026	L-.0022	L.0018	L.0027	L-.0199	20.28
#2	12.37	.0057	L-.0014	L-.0018	.0038	L.0153	20.10

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.50	L-.0001	L.0004	L.0025	L.2584	L.0039	L-.0015
#1	20.52	L-.0002	L-.0011	L-.0021	L.1457	L.0048	L-.0003
#2	20.49	L.0000	L.0018	L.0072	L.3712	L.0031	L-.0027

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.31	L-.0085	L.0009	.0047	L.0204	15.77	L-.0004
#1	41.58	L-.0075	L-.0007	.0044	L.0252	15.86	L-.0006
#2	41.03	L-.0094	L.0024	.0049	L.0156	15.68	L-.0001

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0149	L-.0006	.0908
#1	L-.0089	L-.0051	.0916
#2	L-.0208	.0039	.0900

Method: 20071 Sample Name: K0701816-002S Operator: MMR
Run Time: 03/23/07 10:25:01
Comment: K0701816 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.992	.5383	1.012	2.066	.0494	1.091	.0504
#1	2.018	.5603	1.021	2.074	.0495	1.093	.0511
#2	1.967	.5162	1.003	2.058	.0493	1.089	.0498

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.33	.2083	.5044	.2498	.9889	.5034	20.05
#1	12.36	.2084	.5078	.2523	.9939	.4932	20.11
#2	12.31	.2082	.5010	.2472	.9840	.5136	20.00

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.26	.4991	.9919	.5082	.7542	.9992	.0549
#1	20.25	.5012	.9957	.5120	1.034	.9866	.0581
#2	20.28	.4970	.9880	.5044	L.4746	1.012	.0517

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.04	L.0007	.4959	.5023	L-.0708	15.68	L.0005
#1	41.20	L-.0018	.4971	.5034	L-.0582	15.73	L.0006
#2	40.87	L.0033	.4947	.5011	L-.0833	15.62	L.0004

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.9554	.0078	.0904
#1	1.001	.0093	.0911
#2	.9094	.0063	.0898

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Method: 20071 Sample Name: K0701816-002L Operator: MMR
Run Time: 03/23/07 10:27:26
Comment: K0701816 1/5 DILUTION 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0230	L.0029	L.0277	.0079	L.0001	.0177	L-.0016
#1	.0357	L-.0019	.0488	.0085	.0001	.0191	L-.0030
#2	L.0102	L.0077	L.0067	.0074	L.0000	.0164	L-.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.445	L.0006	.0036	.0023	L.0022	L-.0018	4.070
#1	2.440	L.0017	.0046	.0023	L.0026	L.0051	4.059
#2	2.451	L-.0006	L.0026	.0023	L.0017	L-.0088	4.081

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.007	.0004	L.0007	L-.0017	.8716	L-.0135	L.0024
#1	4.090	.0006	L.0025	L.0021	1.287	L-.0057	.0042
#2	3.925	.0002	L-.0011	L-.0055	L.4558	L-.0214	L.0007

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.117	L.0002	L.0002	.0011	L-.0066	3.085	L.0006
#1	8.121	L.0011	L.0008	.0013	L-.0108	3.080	.0011
#2	8.113	L-.0008	L-.0004	L.0008	L-.0024	3.089	L.0001

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0015	L.0018	.0179
#1	L.0208	.0045	.0179
#2	L-.0238	L-.0009	.0179

Analysis Report QC Standard 03/23/07 10:31:09 AM page 1

Method: 20071 Sample Name: CCV2 Operator: MMR
Run Time: 03/23/07 10:29:21
Comment: ICP4-6-D 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.993	5.097	1.991	.5075	.5001	5.087	.5141
#1	4.966	5.078	1.990	.5025	.4967	5.035	.5140
#2	5.020	5.116	1.991	.5126	.5034	5.138	.5141

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.014	5.112	.5094	.4963	5.028	5.028	5.008
#1	4.996	5.085	.5067	.4924	5.000	5.020	4.981
#2	5.031	5.139	.5121	.5001	5.057	5.037	5.035

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.976	.5000	.5022	5.131	26.08	1.961	.5127
#1	4.986	.4971	.5015	5.113	26.55	1.964	.5107
#2	4.966	.5029	.5029	5.149	25.61	1.958	.5147

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.76	5.113	.4980	2.510	25.55	5.121	.5016
#1	25.55	5.095	.4952	2.497	25.53	5.095	.4982
#2	25.97	5.130	.5008	2.524	25.56	5.147	.5050

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	5.094	2.553	.5095
#1	5.070	2.526	.5050
#2	5.118	2.579	.5140

Analysis Report QC Standard 03/23/07 10:33:35 AM page 1

Method: 20071 Sample Name: CCB2 Operator: MMR
Run Time: 03/23/07 10:31:16
Comment: 80715B
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0350	.0211	.0252	.0008	.0001	.0097	.0025
#1	.0298	.0134	.0169	.0003	.0002	.0104	.0034
#2	.0402	.0287	.0336	.0013	-.0000	.0090	.0017

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0047	.0029	.0036	.0026	.0009	.0113	.0003
#1	.0059	.0036	.0030	.0023	-.0014	.0153	.0004
#2	.0035	.0022	.0042	.0028	.0031	.0074	.0002

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1025	.0005	.0018	-.0000	.5733	.0031	.0061
#1	.1420	.0003	.0004	.0013	-.0940	-.0057	.0052
#2	.0631	.0006	.0032	-.0013	1.240	.0118	.0071

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0843	-.0027	.0028	.0012	-.0096	.0204	.0018
#1	.0822	-.0034	.0041	.0009	-.0108	.0116	.0013
#2	.0865	-.0021	.0016	.0015	-.0084	.0292	.0023

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0134	.0051	.0005
#1	-.0059	.0045	.0004
#2	.0327	.0057	.0007

Service Request # _K0701816_____
Calibration _03-20-07C_____
QC in calibration__03-20-07C_____
QC Service Request #__K0701816_____
Star Lims Run # __80435_____

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	__X__	____	____
2. ICV within 10 % of true value	__X__	____	____
3. CCV's in control	__X__	____	____
4. CCB's and/or ICB's below MRL	__X__	____	____
5. Method blank below MRL	__X__	____	____
6. LCS in control	__X__	____	____
7. Spike and duplicate in control	__X__	____	____
8. All analytes within instrument linear range	__X__	____	____
9. Adequate rinse out time allowed	__X__	____	____
10. Internal standards in control	__X__	____	____
11. Interferences checked	__X__	____	____
12. Se over MRL	__X__	____	____
13. CRA run	__X__	____	____
14. ICSA and ICSAB in control	__X__	____	____
15. Serial dilution run	__X__	____	____
16. Post spike in control	__X__	____	____

Comments: ~~Report 62 NT~~ SC 3/20/07
Report 4 ppb Se MRL.

Primary Review by SC Date 3/20/07
Secondary Review by [illegible] Date 3/21/07
R:\icp\misc\data review forms\PQ ExCell review form

Sample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	25 ppb Std. MS10-46-A	Fully Quant Standard	0 kg	0 ml	1.00
3	Hydroshere	Unknown	0 kg	0 ml	1.00
4	ICV MS10-40-H	Unknown	0 kg	0 ml	1.00
5	CCV1 MS10-46-A	Unknown	0 kg	0 ml	1.00
6	ICB	Unknown	0 kg	0 ml	1.00
7	CCB1	Unknown	0 kg	0 ml	1.00
8	CRA WATER MS10-43-F	Unknown	0 kg	0 ml	1.00
9	ICSA MS10-45-C	Unknown	0 kg	0 ml	1.00
10	ICSAB MS10-45-D	Unknown	0 kg	0 ml	1.00
11	PBW K0701816	Unknown	0 kg	0 ml	1.00
12	K0701816-002	Unknown	0 kg	0 ml	1.00
13	K0701816-002D	Unknown	0 kg	0 ml	1.00
14	K0701816-002L 1/5	Unknown	0 kg	0 ml	1.00
15	K0701816-002A +20 +10Ag	Unknown	0 kg	0 ml	1.00
16	K0701816-002S	Unknown	0 kg	0 ml	1.00
17	LCSW K0701816	Unknown	0 kg	0 ml	1.00
18	CCV2 MS10-46-A	Unknown	0 kg	0 ml	1.00
19	CCB2	Unknown	0 kg	0 ml	1.00
20	PBW K0701647	Unknown	0 kg	0 ml	1.00
21	K0701647-001	Unknown	0 kg	0 ml	1.00
22	K0701647-001D	Unknown	0 kg	0 ml	1.00
23	K0701647-001L 1/5	Unknown	0 kg	0 ml	1.00
24	K0701647-001A +20 +10Ag	Unknown	0 kg	0 ml	1.00
25	K0701647-001S	Unknown	0 kg	0 ml	1.00
26	LCSW K0701647	Unknown	0 kg	0 ml	1.00
27	K0701647-002	Unknown	0 kg	0 ml	1.00
28	K0701703-001	Unknown	0 kg	0 ml	1.00
29	K0701680-001	Unknown	0 kg	0 ml	1.00
30	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
31	CCV3 MS10-46-A	Unknown	0 kg	0 ml	1.00
32	CCB3	Unknown	0 kg	0 ml	1.00
33	CCB3	Unknown	0 kg	0 ml	1.00
34	K0701680-001D	Unknown	0 kg	0 ml	1.00
35	K0701680-001S	Unknown	0 kg	0 ml	1.00
36	K0701680-003	Unknown	0 kg	0 ml	1.00
37	K0701680-004	Unknown	0 kg	0 ml	1.00
38	K0701680-001 DISS.	Unknown	0 kg	0 ml	1.00
39	K0701680-003 DISS.	Unknown	0 kg	0 ml	1.00
40	K0701680-004 DISS.	Unknown	0 kg	0 ml	1.00
41	CCV4 MS10-46-A	Unknown	0 kg	0 ml	1.00
42	CCB4	Unknown	0 kg	0 ml	1.00

Instrument Setup - Sample Configuration

Sample	Configuration	Date
All Samples	acqmet11	7:08:03 3/20/07

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 7:08:03 3/20/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-512.00
Lens1	9.40
Lens2	-20.30
Lens3	9.80
Pole Bias	1.50
Sampling Depth	364.00
Horizontal	-42.00
Vertical	84.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,380.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-35.10
Focus	11.30

ExCell Mass Calibration **Date: 3/20/2007**

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include
7.016	1583	0.665	-0.01	TRUE
9.012	2097	0.614	0.017	TRUE
23.985	5905	0.665	0.031	TRUE
26.982	6659	0.665	0.001	TRUE
43.956	10970	0.716	-0.014	TRUE
45.953	11490	0.614	0.034	TRUE
51.94	13004	0.767	0.001	TRUE
53.949	13511	0.767	-0.014	TRUE
55.935	14018	0.767	-0.006	TRUE
56.935	14278	0.767	0.016	TRUE
57.934	14525	0.767	-0.012	TRUE
58.933	14779	0.716	-0.012	TRUE
59.931	15032	0.767	-0.015	TRUE
62.93	15799	0.767	0.002	TRUE
63.929	16053	0.716	0.001	TRUE
64.928	16306	0.767	-0.003	TRUE
65.926	16553	0.767	-0.03	TRUE
67.925	17067	0.818	-0.008	TRUE
75.92	19101	0.766	-0.009	TRUE
114.904	29022	0.817	-0.014	TRUE
137.906	34891	0.765	0.026	TRUE
139.905	35398	0.765	0.017	TRUE
202.972	51473	0.713	0.001	TRUE
204.972	51986	0.764	0.012	TRUE
205.974	52240	0.713	0.005	TRUE
206.976	52500	0.713	0.023	TRUE
207.977	52747	0.713	-0.01	TRUE
208.98	53007	0.713	0.005	TRUE
238.051	60417	0.713	-0.034	TRUE

Excluded In Calib | Excluded In Results | Peak Run Excluded | Multi Element | Semi Quant | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	5Bkg	7Li	9Be	59Co	115In	208Pb
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)0.167	(P)21350.948	(P)5750.825	(P)30694.610	(P)32603.668	(P)12538.834
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)0.000	(P)23330.374	(P)5988.090	(P)31290.104	(P)31843.289	(P)12783.884
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)0.333	(P)23550.916	(P)5964.912	(P)30817.758	(P)31738.225	(P)12556.183
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)0.667	(P)22317.941	(P)5669.459	(P)30611.670	(P)31083.469	(P)12130.815
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)0.333	(P)21663.935	(P)5484.887	(P)30996.655	(P)30882.533	(P)11586.364
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)0.300	(P)22442.823	(P)5771.635	(P)30882.160	(P)31630.237	(P)12319.216
	SD of Stability 3/20/07		(P)0.247	(P)978.528	(P)210.539	(P)270.192	(P)682.392	(P)472.459
	%RSD of Stability 3/		(P)82.402	(P)4.360	(P)3.648	(P)0.875	(P)2.157	(P)3.835

Run	Label	TimeStamp	209Bi	220Bkg	238U
1	Stability 3/20/07	3/20/2007 7:15:22 A	(P)17470.344	(P)0.000	(P)18429.714
2	Stability 3/20/07	3/20/2007 7:16:24 A	(P)17480.522	(P)0.000	(P)17702.296
3	Stability 3/20/07	3/20/2007 7:17:26 A	(P)17357.373	(P)0.000	(P)17693.618
4	Stability 3/20/07	3/20/2007 7:18:28 A	(P)16671.889	(P)0.000	(P)17172.816
5	Stability 3/20/07	3/20/2007 7:19:30 A	(P)15802.736	(P)0.167	(P)16404.247
	Mean of Stability 3/2	3/20/2007 7:15:22 A	(P)16956.573	(P)0.033	(P)17480.538
	SD of Stability 3/20/07		(P)726.551	(P)0.075	(P)749.768
	%RSD of Stability 3/		(P)4.285	(P)223.607	(P)4.289

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:29**					
Antimony	121	-0.0006	-0.0004	0.001	**0**	0.0009	0
Antimony	123	-0.0027	0.0004	0.0023	**0**	0.0025	0
Arsenic	75	-0.0051	-0.0656	0.0707	**0**	0.0683	0
Beryllium	9	0.0005	-0.0005	0	**0**	0.0005	0
Cadmium	111	-0.0022	-0.0007	0.0029	**0**	0.0026	0
Cadmium	114	-0.0023	0.0035	-0.0012	**0**	0.0031	0
Chromium	52	0.0182	-0.0037	-0.0145	**0**	0.0167	0
Chromium	53	-0.001	0.0082	-0.0073	**0**	0.0078	0
Cobalt	59	-0.0004	-0.0006	0.001	**0**	0.0008	0
Copper	63	0.0069	0.0019	-0.0088	**0**	0.008	0
Copper	65	-0.0025	0.0006	0.0019	**0**	0.0023	0
Lead	206	-0.0027	0.0047	-0.002	**0**	0.0041	0
Lead	207	-0.0019	0.0023	-0.0004	**0**	0.0022	0
Lead	208	0.0002	0.0013	-0.0016	**0**	0.0015	0
Molybdenum	95	-0.0019	0.0005	0.0014	**0**	0.0017	0
Molybdenum	97	-0.0005	-0.001	0.0015	**0**	0.0013	0
Molybdenum	98	0.0007	-0.0013	0.0006	**0**	0.0011	0
Nickel	60	0.0197	0.0268	-0.0466	**0**	0.0405	0
Nickel	62	0.0339	0.029	-0.063	**0**	0.0546	0
Selenium	77	-0.0218	0.1121	-0.0904	**0**	0.103	0
Selenium	78	-0.324	0.0639	0.2601	**0**	0.2973	0
Selenium	82	-0.0533	-0.1206	0.174	**0**	0.1544	0
Silver	107	0.0014	0.0019	-0.0033	**0**	0.0029	0
Silver	109	0.0023	-0.0017	-0.0006	**0**	0.0021	0
Thallium	203	0	0.0007	-0.0007	**0**	0.0007	0
Thallium	205	-0.0004	-0.0005	0.0009	**0**	0.0008	0
Zinc	66	-0.0228	0.0178	0.005	**0**	0.0207	0
Zinc	67	0.0939	-0.0912	-0.0027	**0**	0.0926	0
Zinc	68	-0.0357	0.0116	0.0242	**0**	0.0316	0

3/20/07

Internal Standard Factors:

Lithium	6	1.028	0.98	0.993	**1.028**	n/a	n/a
Gallium	71	0.994	1.038	0.97	**0.994**	n/a	n/a
Indium	115	0.941	1.031	1.034	**0.941**	n/a	n/a
Lutetium	175	0.959	1.03	1.014	**0.959**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**25 ppb Std. MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:33**					
Antimony	121	25.22	24.9	24.87	**25**	0.1918	0.7671
Antimony	123	25.2	25.08	24.72	**25**	0.2524	1.01
Arsenic	75	24.85	24.85	25.3	**25**	0.2604	1.042
Beryllium	9	24.58	25.78	24.64	**25**	0.6731	2.692
Cadmium	111	26.02	24.46	24.53	**25**	0.8799	3.52
Cadmium	114	25.35	25.08	24.57	**25**	0.3942	1.577
Chromium	52	25.13	24.76	25.11	**25**	0.2084	0.8334
Chromium	53	25.69	24.91	24.4	**25**	0.6466	2.586
Cobalt	59	26.28	24.7	24.02	**25**	1.158	4.634
Copper	63	26.42	24.33	24.25	**25**	1.233	4.934
Copper	65	26.2	24.38	24.42	**25**	1.04	4.158
Lead	206	24.99	25.09	24.92	**25**	0.0836	0.3344
Lead	207	26.15	24.25	24.6	**25**	1.01	4.039
Lead	208	25.29	24.9	24.81	**25**	0.2582	1.033
Molybdenum	95	25.78	24.89	24.33	**25**	0.7345	2.938
Molybdenum	97	26.46	24.87	23.67	**25**	1.395	5.581
Molybdenum	98	25.81	24.8	24.39	**25**	0.7352	2.941
Nickel	60	26.37	24.49	24.14	**25**	1.203	4.811
Nickel	62	26.49	24.08	24.43	**25**	1.3	5.201
Selenium	77	25.11	24.64	25.25	**25**	0.3218	1.287
Selenium	78	24.46	25.24	25.3	**25**	0.4666	1.867
Selenium	82	24.48	24.51	26.01	**25**	0.8721	3.489
Silver	107	25.97	24.28	24.74	**25**	0.8747	3.499
Silver	109	25.89	24.05	25.06	**25**	0.9251	3.7
Thallium	203	25.67	24.72	24.61	**25**	0.5847	2.339
Thallium	205	25.18	25.23	24.59	**25**	0.358	1.432
Zinc	66	26.04	24.82	24.13	**25**	0.9672	3.869
Zinc	67	25.6	25.33	24.06	**25**	0.8216	3.286
Zinc	68	25.83	24.49	24.68	**25**	0.7268	2.907

Internal Standard Factors:

Lithium	6	0.979	0.984	1.003	**0.979**	n/a	n/a
Gallium	71	1.009	0.963	0.954	**1.009**	n/a	n/a
Indium	115	1	0.998	0.996	**1**	n/a	n/a
Lutetium	175	0.98	0.989	0.977	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**Hydroshere**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:36**					
Antimony	121	0.0036	0.0053	0.0033	**0.0041**	0.0011	27.11
Antimony	123	0.0009	0.0031	-0.0002	**0.0013**	0.0017	134.8
Arsenic	75	0.0115	0.0646	-0.0028	**0.0244**	0.0355	145.6
Beryllium	9	0.0031	0.0004	0.001	**0.0015**	0.0014	97.04
Cadmium	111	0.0015	-0.0021	-0.0014	**-0.0007**	0.0019	287.1
Cadmium	114	0.0011	0.001	0.0032	**0.0018**	0.0013	70.63
Chromium	52	-0.0192	-0.0038	-0.0896	**-0.0375**	0.0457	121.9
Chromium	53	-0.002	0.0141	0.004	**0.0054**	0.0082	151.6
Cobalt	59	-0.0005	0.0009	-0.0015	**-0.0004**	0.0012	315.8
Copper	63	0.0348	0.0242	0.0254	**0.0282**	0.0058	20.67
Copper	65	0.0416	0.0296	0.0284	**0.0332**	0.0073	21.96
Lead	206	-0.0071	-0.005	0.0015	**-0.0036**	0.0045	125.9
Lead	207	-0.0045	-0.0011	-0.0065	**-0.004**	0.0027	67.79
Lead	208	-0.0052	-0.0025	-0.0032	**-0.0036**	0.0014	39.39
Molybdenum	95	0.0283	0.0206	0.0127	**0.0206**	0.0078	37.85
Molybdenum	97	0.023	0.0166	0.016	**0.0185**	0.0039	20.79
Molybdenum	98	0.0232	0.0188	0.0066	**0.0162**	0.0086	53.05
Nickel	60	-0.0271	-0.013	-0.0977	**-0.0459**	0.0454	98.87
Nickel	62	-0.0116	-0.0111	-0.1265	**-0.0497**	0.0664	133.6
Selenium	77	0.1775	0.1239	0.0559	**0.1191**	0.0609	51.17
Selenium	78	0.2506	-0.13	-0.134	**-0.0045**	0.2209	4953
Selenium	82	0.1741	0.3263	0.0273	**0.1759**	0.1495	85
Silver	107	0.0787	0.0419	0.0302	**0.0503**	0.0253	50.35
Silver	109	0.0835	0.0436	0.0261	**0.0511**	0.0294	57.63
Thallium	203	0.0042	0.0022	0.0018	**0.0027**	0.0013	48.64
Thallium	205	0.0004	0.0018	0.0006	**0.0009**	0.0008	80.84
Zinc	66	0.1356	0.1555	0.126	**0.1391**	0.015	10.81
Zinc	67	0.0533	0.2041	0.2038	**0.1538**	0.087	56.6
Zinc	68	0.1659	0.1555	0.1165	**0.146**	0.026	17.82

Internal Standard Factors:

Lithium	6	0.932	0.947	0.826	**0.932**	n/a	n/a
Gallium	71	0.984	0.967	0.808	**0.984**	n/a	n/a
Indium	115	1.001	0.987	0.888	**1.001**	n/a	n/a
Lutetium	175	0.975	0.98	0.891	**0.975**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICV MS10-40-H**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:39**					
Antimony	121	26.44	25.79	25.65	**25.96**	0.4182	1.611
Antimony	123	24.93	25.75	25.49	**25.39**	0.4196	1.653
Arsenic	75	26.18	26.39	26.88	**26.48**	0.3623	1.368
Beryllium	9	2.546	2.692	2.711	**2.65**	0.0902	3.403
Cadmium	111	13.16	13.22	13.12	**13.17**	0.0493	0.3742
Cadmium	114	13.22	13.4	12.81	**13.14**	0.3061	2.329
Chromium	52	9.778	9.989	10.14	**9.969**	0.1819	1.825
Chromium	53	9.813	10.15	10.06	**10.01**	0.1735	1.734
Cobalt	59	24.84	24.68	24.8	**24.78**	0.0856	0.3455
Copper	63	12.31	12.08	12.37	**12.25**	0.1513	1.234
Copper	65	12.36	12.2	12.5	**12.36**	0.1527	1.236
Lead	206	25.01	25.24	24.47	**24.9**	0.3964	1.592
Lead	207	26.92	26.68	25.7	**26.43**	0.6457	2.443
Lead	208	26.4	25.98	25.26	**25.88**	0.5754	2.224
Molybdenum	95	26.43	26.19	26.07	**26.23**	0.1815	0.692
Molybdenum	97	26.02	25.94	26.19	**26.05**	0.1315	0.505
Molybdenum	98	25.37	25.79	25.7	**25.62**	0.2209	0.8622
Nickel	60	24.27	24.14	24.73	**24.38**	0.307	1.259
Nickel	62	24.78	24.4	24.15	**24.45**	0.317	1.297
Selenium	77	25.4	25.99	25.97	**25.79**	0.3353	1.3
Selenium	78	26.67	26.92	27.77	**27.12**	0.5766	2.126
Selenium	82	25.69	26.67	27.04	**26.47**	0.6978	2.637
Silver	107	12.31	12.49	12.18	**12.33**	0.155	1.257
Silver	109	12.38	12.46	12.38	**12.4**	0.0462	0.3728
Thallium	203	25.91	24.99	25.82	**25.57**	0.5085	1.988
Thallium	205	26.54	25.42	25.63	**25.86**	0.5949	2.3
Zinc	66	25.19	24.71	25.22	**25.04**	0.2831	1.131
Zinc	67	30.89	32.09	31.48	**31.49**	0.5989	1.902
Zinc	68	30.93	29.93	30.38	**30.41**	0.5034	1.655

Internal Standard Factors:

Lithium	6	0.911	0.952	0.929	**0.911**	n/a	n/a
Gallium	71	0.924	0.939	0.957	**0.924**	n/a	n/a
Indium	115	0.954	1.009	0.975	**0.954**	n/a	n/a
Lutetium	175	0.969	0.982	0.977	**0.969**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV1 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:43**					
Antimony	121	24.82	25.89	25.64	**25.45**	0.5597	2.199
Antimony	123	23.92	24.91	24.25	**24.36**	0.4997	2.051
Arsenic	75	24.94	25.02	26.12	**25.36**	0.6562	2.587
Beryllium	9	26.96	26.14	25.69	**26.26**	0.6417	2.444
Cadmium	111	24.63	25.11	25.05	**24.93**	0.2627	1.054
Cadmium	114	25.46	25.26	25.13	**25.28**	0.1655	0.6544
Chromium	52	25.64	24.21	25.04	**24.97**	0.7185	2.878
Chromium	53	26.11	24.86	24.97	**25.31**	0.6922	2.735
Cobalt	59	26.3	23.98	24.39	**24.89**	1.238	4.974
Copper	63	25.74	23.84	23.98	**24.52**	1.059	4.319
Copper	65	25.75	23.51	23.98	**24.41**	1.183	4.846
Lead	206	25.43	25.55	23.77	**24.92**	0.9931	3.986
Lead	207	24.2	24.48	23.52	**24.07**	0.4938	2.052
Lead	208	24.68	25.2	23.99	**24.62**	0.6085	2.472
Molybdenum	95	25.14	24.35	24.41	**24.63**	0.4405	1.788
Molybdenum	97	25.38	24.06	24.02	**24.49**	0.7701	3.145
Molybdenum	98	24.94	23.3	23.88	**24.04**	0.8342	3.47
Nickel	60	26.35	23.71	23.86	**24.64**	1.486	6.031
Nickel	62	26.15	23.34	24.55	**24.68**	1.409	5.71
Selenium	77	25.18	24.08	25.67	**24.97**	0.8129	3.255
Selenium	78	25.09	24.04	26.02	**25.05**	0.9874	3.942
Selenium	82	23.94	24.44	26.45	**24.94**	1.325	5.312
Silver	107	24.76	23.73	23.87	**24.12**	0.561	2.326
Silver	109	24.64	24.39	23.86	**24.29**	0.3942	1.623
Thallium	203	24.77	25.45	24.46	**24.89**	0.5068	2.036
Thallium	205	25.32	25.24	24.2	**24.92**	0.6244	2.506
Zinc	66	25.23	23.14	24.27	**24.21**	1.047	4.323
Zinc	67	26.01	23.58	24.46	**24.68**	1.229	4.981
Zinc	68	26.32	24.15	24.22	**24.9**	1.23	4.941

Internal Standard Factors:

Lithium	6	1.001	0.955	0.923	**1.001**	n/a	n/a
Gallium	71	0.995	0.934	0.959	**0.995**	n/a	n/a
Indium	115	0.958	0.979	0.966	**0.958**	n/a	n/a
Lutetium	175	0.979	0.996	0.972	**0.979**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:50**					
Antimony	121	0.0079	0.0124	0.005	**0.0084**	0.0037	44.33
Antimony	123	0.0053	0.0062	0.0067	**0.006**	0.0007	11.52
Arsenic	75	0.0334	0.0374	0.0398	**0.0368**	0.0032	8.747
Beryllium	9	0.0075	0.0028	0.0022	**0.0042**	0.0029	70.02
Cadmium	111	-0.0009	-0.0032	0.0026	**-0.0005**	0.0029	570.3
Cadmium	114	-0.0011	-0.0044	0.0021	**-0.0012**	0.0033	281.5
Chromium	52	0.0354	0.0083	0.0118	**0.0185**	0.0147	79.71
Chromium	53	0.007	-0.0125	0.0039	**-0.0006**	0.0105	1893
Cobalt	59	0.0003	-0.0005	-0.0013	**-0.0005**	0.0008	164.5
Copper	63	0.0067	-0.0055	-0.0097	**-0.0028**	0.0085	300.1
Copper	65	0.0037	0.0082	-0.0126	**-0.0002**	0.0109	4414
Lead	206	-0.0048	-0.0072	0.0022	**-0.0032**	0.0049	149.8
Lead	207	-0.0027	0.0001	-0.0062	**-0.0029**	0.0032	107.6
Lead	208	-0.002	-0.0035	-0.0022	**-0.0026**	0.0008	30.94
Molybdenum	95	0.007	0.005	0.0068	**0.0063**	0.0011	17.46
Molybdenum	97	0.0099	0.0075	0.0038	**0.0071**	0.0031	43.42
Molybdenum	98	0.0052	0.0081	0.0021	**0.0051**	0.003	58.21
Nickel	60	0.078	-0.0056	-0.0312	**0.0137**	0.0571	416.3
Nickel	62	0.1161	0.0628	-0.0857	**0.0311**	0.1046	336.8
Selenium	77	0.2703	-0.0677	0.0147	**0.0725**	0.1763	243.3
Selenium	78	-0.4074	0.2272	0.3143	**0.0447**	0.3939	881.2
Selenium	82	0.3229	0.0733	0.1103	**0.1688**	0.1347	79.79
Silver	107	0.0186	0.0183	0.0089	**0.0152**	0.0055	36.33
Silver	109	0.0218	0.0167	0.011	**0.0165**	0.0054	32.81
Thallium	203	0.0008	0.0001	0.0027	**0.0012**	0.0013	109.2
Thallium	205	0.0004	-0.0001	0.0001	**0.0002**	0.0003	168.3
Zinc	66	0.0906	-0.0333	-0.0447	**0.0042**	0.075	1771
Zinc	67	0.1283	-0.0888	0.0115	**0.017**	0.1087	640.8
Zinc	68	-0.0068	-0.0508	0.002	**-0.0185**	0.0283	152.6

Internal Standard Factors:

Lithium	6	0.995	1.004	0.958	**0.995**	n/a	n/a
Gallium	71	1.006	0.99	0.952	**1.006**	n/a	n/a
Indium	115	0.976	1.005	0.994	**0.976**	n/a	n/a
Lutetium	175	0.955	0.993	1.002	**0.955**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB1**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:54**					
Antimony	121	0.0034	0.0068	0.003	**0.0044**	0.0021	47.4
Antimony	123	-0.0015	0.0078	0.0024	**0.0029**	0.0047	162.1
Arsenic	75	0.0281	-0.0502	0.054	**0.0106**	0.0543	510
Beryllium	9	-0.0017	0.0015	-0.0018	**-0.0007**	0.0019	279.2
Cadmium	111	-0.0021	-0.0009	0.0001	**-0.001**	0.0011	115.5
Cadmium	114	-0.0021	0.0006	0.0003	**-0.0004**	0.0015	348.1
Chromium	52	-0.0072	-0.0003	0.0191	**0.0039**	0.0136	353
Chromium	53	-0.0132	-0.002	0.0103	**-0.0016**	0.0117	719.6
Cobalt	59	0.0004	-0.0005	0.0019	**0.0006**	0.0012	198.6
Copper	63	0.0018	-0.0085	-0.0159	**-0.0075**	0.0089	118.2
Copper	65	-0.0068	-0.008	0.0114	**-0.0012**	0.0109	927.4
Lead	206	-0.0024	0.0054	0.0072	**0.0034**	0.0051	150.3
Lead	207	-0.017	-0.0043	-0.0076	**-0.0096**	0.0066	68.09
Lead	208	-0.0044	-0.0003	0.0005	**-0.0014**	0.0026	192.6
Molybdenum	95	0.0051	0.0052	0.0034	**0.0046**	0.001	21.86
Molybdenum	97	0.0079	0.0047	0.0011	**0.0046**	0.0034	74.84
Molybdenum	98	0.0033	-0.0006	0.0041	**0.0023**	0.0025	109.6
Nickel	60	0.0118	-0.0353	-0.0683	**-0.0306**	0.0403	131.6
Nickel	62	0.0309	0.1124	-0.0525	**0.0303**	0.0824	272.4
Selenium	77	-0.0404	0.1698	-0.0455	**0.028**	0.1229	439.4
Selenium	78	0.0508	0.5696	0.3007	**0.307**	0.2594	84.51
Selenium	82	0.021	-0.0409	0.1364	**0.0389**	0.09	231.6
Silver	107	0.0102	0.0016	0.0026	**0.0048**	0.0047	98.9
Silver	109	0.0074	0.0054	0.0031	**0.0053**	0.0021	40.49
Thallium	203	-0.0007	0.0001	0.0017	**0.0004**	0.0012	343.9
Thallium	205	-0.0001	0	0	**0**	0	285.3
Zinc	66	-0.0174	-0.0702	-0.062	**-0.0499**	0.0284	56.94
Zinc	67	0.0346	0.0298	-0.1136	**-0.0164**	0.0842	513.5
Zinc	68	-0.0181	-0.0384	-0.0822	**-0.0463**	0.0328	70.79

Internal Standard Factors:

Lithium	6	0.949	0.94	0.901	**0.949**	n/a	n/a
Gallium	71	0.964	0.949	0.925	**0.964**	n/a	n/a
Indium	115	0.965	0.995	0.966	**0.965**	n/a	n/a
Lutetium	175	1.001	0.98	0.963	**1.001**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CRA WATER MS10-43-E**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 11:58**					
Antimony	121	0.0454	0.0499	0.0481	**0.0478**	0.0023	4.715
Antimony	123	0.0398	0.0444	0.059	**0.0477**	0.01	20.97
Arsenic	75	0.5679	0.556	0.6236	**0.5825**	0.0361	6.194
Beryllium	9	0.0226	0.014	0.0236	**0.0201**	0.0053	26.43
Cadmium	111	0.02	0.0189	0.0244	**0.0211**	0.0029	13.77
Cadmium	114	0.0237	0.0228	0.021	**0.0225**	0.0014	6.269
Chromium	52	0.2071	0.2095	0.2226	**0.2131**	0.0083	3.905
Chromium	53	0.1962	0.1925	0.18	**0.1896**	0.0085	4.472
Cobalt	59	0.0228	0.021	0.022	**0.0219**	0.0009	4.116
Copper	63	0.1203	0.0922	0.0968	**0.1031**	0.0151	14.63
Copper	65	0.0921	0.1049	0.113	**0.1033**	0.0105	10.2
Lead	206	0.0202	0.0222	0.0203	**0.0209**	0.0011	5.422
Lead	207	0.018	0.0223	0.0251	**0.0218**	0.0035	16.22
Lead	208	0.0196	0.0178	0.0158	**0.0177**	0.0019	10.54
Molybdenum	95	0.0565	0.0572	0.0597	**0.0578**	0.0017	2.897
Molybdenum	97	0.0682	0.0585	0.0478	**0.0582**	0.0102	17.6
Molybdenum	98	0.0537	0.0611	0.0592	**0.058**	0.0039	6.649
Nickel	60	0.2431	0.1811	0.1428	**0.189**	0.0506	26.79
Nickel	62	0.3089	0.1331	0.1846	**0.2089**	0.0904	43.25
Selenium	77	1.129	1.153	0.9198	**1.067**	0.1285	12.04
Selenium	78	1.307	1.015	1.449	**1.257**	0.221	17.58
Selenium	82	1.265	1.145	1.28	**1.23**	0.0741	6.025
Silver	107	0.0174	0.0128	0.0123	**0.0141**	0.0028	19.79
Silver	109	0.0163	0.0135	0.0126	**0.0141**	0.0019	13.6
Thallium	203	0.0201	0.0254	0.0223	**0.0226**	0.0026	11.71
Thallium	205	0.0225	0.02	0.0237	**0.0221**	0.0019	8.487
Zinc	66	0.4535	0.4279	0.3865	**0.4226**	0.0338	8.008
Zinc	67	0.589	0.4094	0.5002	**0.4996**	0.0898	17.97
Zinc	68	0.4652	0.4909	0.4534	**0.4698**	0.0192	4.089

Internal Standard Factors:

Lithium	6	0.938	0.972	0.942	**0.938**	n/a	n/a
Gallium	71	0.979	0.965	0.958	**0.979**	n/a	n/a
Indium	115	0.994	0.996	0.985	**0.994**	n/a	n/a
Lutetium	175	1.016	0.988	0.999	**1.016**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICSA MS10-45-C**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:01**					
Antimony	121	0.0284	0.0177	0.0211	**0.0224**	0.0054	24.3
Antimony	123	0.0246	0.0135	0.0205	**0.0195**	0.0056	28.88
Arsenic	75	0.0401	-0.0688	0.0358	**0.0024**	0.0617	2609
Beryllium	9	-0.0004	-0.0005	0.0006	**-0.0001**	0.0006	554
Cadmium	111	0.7021	0.7911	0.6994	**0.7309**	0.0521	7.134
Cadmium	114	0.5295	0.5345	0.5134	**0.5258**	0.011	2.093
Chromium	52	0.2032	0.1663	0.1784	**0.1826**	0.0188	10.31
Chromium	53	3.165	3.15	3.146	**3.153**	0.0099	0.3152
Cobalt	59	0.0284	0.0281	0.0233	**0.0266**	0.0029	10.76
Copper	63	0.3256	0.322	0.3069	**0.3182**	0.0099	3.106
Copper	65	0.4054	0.4197	0.3835	**0.4029**	0.0182	4.53
Lead	206	0.0292	0.033	0.0338	**0.032**	0.0024	7.63
Lead	207	0.0375	0.0219	0.0352	**0.0315**	0.0084	26.72
Lead	208	0.0326	0.031	0.0396	**0.0344**	0.0046	13.31
Molybdenum	95	175.3	172.3	168.3	**172**	3.511	2.041
Molybdenum	97	172.6	172.7	171	**172.1**	0.9585	0.557
Molybdenum	98	174.2	167.6	164.3	**168.7**	5.035	2.984
Nickel	60	0.6187	0.5941	0.5391	**0.584**	0.0407	6.976
Nickel	62	1.201	1.382	1.317	**1.3**	0.0917	7.057
Selenium	77	0.7779	1.095	0.7095	**0.861**	0.206	23.92
Selenium	78	1.473	1.813	1.338	**1.542**	0.2446	15.86
Selenium	82	0.1596	0.1601	0.1192	**0.1463**	0.0234	16.03
Silver	107	0.0124	0.0126	0.005	**0.01**	0.0043	43.18
Silver	109	0.0126	0.013	0.0141	**0.0132**	0.0008	6.186
Thallium	203	0.0028	0.003	0.0046	**0.0035**	0.001	28.33
Thallium	205	0.0011	0.0007	0.0015	**0.0011**	0.0004	35.45
Zinc	66	2.57	2.605	2.721	**2.632**	0.0789	2.997
Zinc	67	3.454	3.9	3.806	**3.72**	0.2353	6.325
Zinc	68	2.175	2.466	2.194	**2.278**	0.1627	7.143

Internal Standard Factors:

Lithium	6	1.118	1.061	1.079	**1.118**	n/a	n/a
Gallium	71	1.087	1.104	1.09	**1.087**	n/a	n/a
Indium	115	1.088	1.096	1.071	**1.088**	n/a	n/a
Lutetium	175	1.021	1.058	1.028	**1.021**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**ICSAB MS10-45-D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:04**					
Antimony	121	0.021	0.0209	0.0183	**0.0201**	0.0015	7.694
Antimony	123	0.0203	0.0176	0.0146	**0.0175**	0.0029	16.45
Arsenic	75	20.5	20.94	20.78	**20.74**	0.2192	1.057
Beryllium	9	0.0011	0.0022	0.0015	**0.0016**	0.0006	36.03
Cadmium	111	19.92	20.76	20.59	**20.42**	0.446	2.184
Cadmium	114	20.49	20.18	20.57	**20.42**	0.2055	1.007
Chromium	52	20.43	19.96	19.98	**20.12**	0.2689	1.336
Chromium	53	23.73	23.05	22.89	**23.22**	0.4436	1.91
Cobalt	59	20.26	19.07	18.92	**19.42**	0.7368	3.794
Copper	63	19.38	18.55	17.95	**18.62**	0.7186	3.858
Copper	65	19.31	18.46	18.39	**18.72**	0.5117	2.734
Lead	206	0.0324	0.0274	0.029	**0.0296**	0.0025	8.516
Lead	207	0.0246	0.0385	0.029	**0.0307**	0.0071	23.17
Lead	208	0.0308	0.0316	0.031	**0.0312**	0.0004	1.379
Molybdenum	95	179.1	176.2	170.6	**175.3**	4.326	2.468
Molybdenum	97	176.9	173.5	169.5	**173.3**	3.699	2.135
Molybdenum	98	172.7	169.1	165.8	**169.2**	3.438	2.032
Nickel	60	20.49	19.4	18.99	**19.62**	0.7755	3.952
Nickel	62	21.43	20.39	19.95	**20.59**	0.7619	3.7
Selenium	77	0.7581	0.8372	0.8434	**0.8129**	0.0476	5.849
Selenium	78	1.239	1.388	1.071	**1.233**	0.1588	12.88
Selenium	82	0.1499	0.3776	0.2943	**0.2739**	0.1152	42.06
Silver	107	18.19	17.84	17.78	**17.94**	0.2188	1.22
Silver	109	18.39	18.39	18.08	**18.29**	0.1779	0.9726
Thallium	203	0.0012	0.002	0.005	**0.0027**	0.002	73.96
Thallium	205	0.0026	0.0019	0.0009	**0.0018**	0.0008	47.11
Zinc	66	22.35	21.21	21.36	**21.64**	0.6166	2.85
Zinc	67	20.25	19.62	19.25	**19.71**	0.5072	2.574
Zinc	68	21.17	20.73	19.73	**20.54**	0.7392	3.598

Internal Standard Factors:

Lithium	6	1.122	1.097	1.077	**1.122**	n/a	n/a
Gallium	71	1.115	1.071	1.051	**1.115**	n/a	n/a
Indium	115	1.088	1.082	1.05	**1.088**	n/a	n/a
Lutetium	175	1.055	1.026	1.018	**1.055**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**PBW K0701816**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:19**					
Antimony	121	0.0004	0.0011	0.0016	**0.001**	0.0006	56.51
Antimony	123	-0.0009	0.0012	0.0011	**0.0005**	0.0012	244.7
Arsenic	75	0.1153	-0.0419	0.0435	**0.0389**	0.0787	202.1
Beryllium	9	-0.0026	-0.0023	-0.0012	**-0.002**	0.0007	36.94
Cadmium	111	-0.002	0.002	-0.0006	**-0.0002**	0.002	957.4
Cadmium	114	-0.0009	0.0023	0.0016	**0.001**	0.0017	172.8
Chromium	52	0.1	0.1208	0.1171	**0.1126**	0.0111	9.879
Chromium	53	0.0359	0.023	0.0218	**0.0269**	0.0078	29.06
Cobalt	59	-0.0003	-0.0008	-0.0017	**-0.0009**	0.0007	73.2
Copper	63	0.0093	0.0086	0	**0.006**	0.0052	87.37
Copper	65	0.0155	0.0065	0.0196	**0.0138**	0.0067	48.49
Lead	206	0.0011	0.0003	0.0057	**0.0023**	0.0029	123.6
Lead	207	0.0109	0.0026	0.0031	**0.0055**	0.0046	84.02
Lead	208	0.0052	0.0008	0.002	**0.0027**	0.0023	84.53
Molybdenum	95	0.0101	0.0063	0.0111	**0.0092**	0.0025	27.38
Molybdenum	97	0.0131	0.0112	0.0037	**0.0093**	0.005	53.54
Molybdenum	98	0.0107	0.0076	0.0096	**0.0093**	0.0016	17.05
Nickel	60	0.0177	-0.0021	-0.0467	**-0.0104**	0.033	318.5
Nickel	62	0.0064	0.0257	0.1246	**0.0522**	0.0634	121.4
Selenium	77	-0.2246	0.2548	0.0211	**0.0171**	0.2397	1400
Selenium	78	0.0656	0.5831	0.6953	**0.448**	0.3359	74.98
Selenium	82	0.1867	0.0499	0.1681	**0.1349**	0.0742	54.99
Silver	107	0.0045	-0.0004	-0.0001	**0.0013**	0.0028	207.2
Silver	109	0.0044	-0.0007	-0.0007	**0.001**	0.003	289.6
Thallium	203	0.0017	0.0024	-0.0003	**0.0013**	0.0014	109.2
Thallium	205	-0.0014	-0.0011	-0.0024	**-0.0016**	0.0007	42.23
Zinc	66	0.2848	0.1834	0.2374	**0.2352**	0.0507	21.56
Zinc	67	0.3803	0.1409	0.2077	**0.243**	0.1235	50.83
Zinc	68	0.3148	0.284	0.246	**0.2816**	0.0345	12.25

Internal Standard Factors:

Lithium	6	1.102	1.139	1.046	**1.102**	n/a	n/a
Gallium	71	1.053	1.075	1.054	**1.053**	n/a	n/a
Indium	115	0.995	1.066	1.055	**0.995**	n/a	n/a
Lutetium	175	0.971	1.021	1	**0.971**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:23**					
Antimony	121	0.0621	0.056	0.0656	**0.0612**	0.0049	7.94
Antimony	123	0.0584	0.0586	0.0649	**0.0606**	0.0037	6.09
Arsenic	75	0.2755	0.3562	0.3035	**0.3117**	0.041	13.15
Beryllium	9	0.0003	0.0047	0.0028	**0.0026**	0.0022	84.18
Cadmium	111	0.0535	0.0347	0.064	**0.0507**	0.0148	29.25
Cadmium	114	0.0466	0.0338	0.0604	**0.0469**	0.0133	28.35
Chromium	52	4.437	4.369	4.445	**4.417**	0.042	0.9507
Chromium	53	6.426	6.587	6.312	**6.442**	0.138	2.142
Cobalt	59	0.1138	0.1066	0.1018	**0.1074**	0.0061	5.642
Copper	63	0.9695	0.9451	0.9163	**0.9436**	0.0266	2.823
Copper	65	0.5335	0.5275	0.5209	**0.5273**	0.0063	1.194
Lead	206	0.0058	0.0078	0.0018	**0.0051**	0.0031	59.98
Lead	207	0.0114	-0.0005	0.0032	**0.0047**	0.0061	128.7
Lead	208	0.0063	0.0077	0.0079	**0.0073**	0.0009	12.41
Molybdenum	95	0.1282	0.098	0.0986	**0.1082**	0.0173	15.94
Molybdenum	97	0.1198	0.1228	0.1006	**0.1144**	0.012	10.51
Molybdenum	98	0.1054	0.1003	0.0895	**0.0984**	0.0081	8.249
Nickel	60	6.481	6.313	6.146	**6.313**	0.1672	2.648
Nickel	62	5.97	5.439	5.473	**5.627**	0.2973	5.283
Selenium	77	2.723	3.011	2.873	**2.869**	0.1441	5.022
Selenium	78	3.673	4.365	4.171	**4.07**	0.3571	8.774
Selenium	82	2.485	3.071	2.805	**2.787**	0.2931	10.52
Silver	107	-0.0078	-0.0092	-0.0109	**-0.0093**	0.0016	16.65
Silver	109	-0.012	-0.0105	-0.0117	**-0.0114**	0.0008	6.826
Thallium	203	0.002	0.0036	0.0021	**0.0026**	0.0009	34.68
Thallium	205	0.0001	-0.0009	0.0024	**0.0005**	0.0017	320.4
Zinc	66	5.252	5.177	4.978	**5.136**	0.1419	2.762
Zinc	67	8.378	7.76	7.77	**7.969**	0.3537	4.438
Zinc	68	7.59	7.903	7.649	**7.714**	0.1662	2.154

Internal Standard Factors:

Lithium	6	1.144	1.098	1.135	**1.144**	n/a	n/a
Gallium	71	1.168	1.171	1.143	**1.168**	n/a	n/a
Indium	115	1.146	1.144	1.143	**1.146**	n/a	n/a
Lutetium	175	1.046	1.084	1.051	**1.046**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002D**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:25**					
Antimony	121	0.0622	0.0578	0.0644	**0.0615**	0.0034	5.452
Antimony	123	0.0552	0.0463	0.0658	**0.0558**	0.0098	17.51
Arsenic	75	0.4382	0.4726	0.2387	**0.3831**	0.1263	32.96
Beryllium	9	-0.0022	-0.0044	0.0015	**-0.0017**	0.0029	172.3
Cadmium	111	0.0549	0.0469	0.0492	**0.0503**	0.0041	8.111
Cadmium	114	0.0443	0.0413	0.0445	**0.0434**	0.0018	4.093
Chromium	52	4.688	4.474	4.553	**4.572**	0.1083	2.369
Chromium	53	6.702	6.405	6.589	**6.565**	0.15	2.285
Cobalt	59	0.1101	0.1061	0.1024	**0.1062**	0.0038	3.619
Copper	63	0.9504	0.8843	0.8677	**0.9008**	0.0438	4.86
Copper	65	0.5206	0.5019	0.4628	**0.4951**	0.0295	5.956
Lead	206	0.0081	0.0003	0.0104	**0.0063**	0.0053	84.11
Lead	207	-0.0041	0.0041	0.0084	**0.0028**	0.0063	226.8
Lead	208	0.0065	-0.0005	0.0033	**0.0031**	0.0035	113.4
Molybdenum	95	0.1069	0.1053	0.1137	**0.1086**	0.0045	4.108
Molybdenum	97	0.1146	0.1078	0.1214	**0.1146**	0.0068	5.949
Molybdenum	98	0.1068	0.0938	0.0941	**0.0983**	0.0074	7.55
Nickel	60	6.622	5.982	6.031	**6.212**	0.3561	5.732
Nickel	62	6.053	5.315	5.599	**5.656**	0.3724	6.584
Selenium	77	2.801	2.666	3.363	**2.944**	0.3694	12.55
Selenium	78	4.179	4.19	4.183	**4.184**	0.0055	0.1308
Selenium	82	3.177	3.295	3.069	**3.18**	0.1128	3.548
Silver	107	-0.0107	-0.0129	-0.0116	**-0.0117**	0.0011	9.798
Silver	109	-0.011	-0.0091	-0.0101	**-0.0101**	0.001	9.462
Thallium	203	0.0012	0.0011	0.0051	**0.0025**	0.0023	91.97
Thallium	205	0.0013	0.0021	0.0001	**0.0012**	0.001	87.13
Zinc	66	5.125	4.806	4.855	**4.929**	0.172	3.489
Zinc	67	8.022	7.521	7.781	**7.774**	0.2506	3.224
Zinc	68	8.034	7.806	7.816	**7.886**	0.129	1.635

Internal Standard Factors:

Lithium	6	1.139	1.118	1.069	**1.139**	n/a	n/a
Gallium	71	1.164	1.102	1.12	**1.164**	n/a	n/a
Indium	115	1.146	1.093	1.114	**1.146**	n/a	n/a
Lutetium	175	1.063	1.039	1.041	**1.063**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002L 1/5**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:34**					
Antimony	121	0.0109	0.0108	0.014	**0.0119**	0.0018	15.15
Antimony	123	0.0052	0.0098	0.0054	**0.0068**	0.0026	38.21
Arsenic	75	0.1313	0.1429	0.0874	**0.1205**	0.0293	24.31
Beryllium	9	-0.0029	-0.0025	-0.0047	**-0.0034**	0.0012	34.63
Cadmium	111	0.0067	0.0082	0.0043	**0.0064**	0.002	30.85
Cadmium	114	0.0088	0.0141	0.0095	**0.0108**	0.0029	26.42
Chromium	52	0.9351	0.7835	0.7463	**0.8216**	0.1	12.17
Chromium	53	1.308	1.088	1.152	**1.183**	0.1131	9.564
Cobalt	59	0.0229	0.0191	0.0125	**0.0182**	0.0052	28.85
Copper	63	0.2227	0.1836	0.1521	**0.1861**	0.0354	19
Copper	65	0.1296	0.0937	0.0932	**0.1055**	0.0209	19.79
Lead	206	0.0061	0.013	0.0073	**0.0088**	0.0037	41.96
Lead	207	-0.0007	0.0066	0.0024	**0.0028**	0.0037	132.7
Lead	208	0.0044	0.0055	0.0024	**0.0041**	0.0016	39.06
Molybdenum	95	0.0312	0.0241	0.0216	**0.0256**	0.005	19.41
Molybdenum	97	0.0303	0.0213	0.0215	**0.0244**	0.0052	21.23
Molybdenum	98	0.0154	0.0148	0.015	**0.015**	0.0003	2.038
Nickel	60	1.454	1.062	0.9736	**1.163**	0.2559	21.99
Nickel	62	1.294	1.067	1.091	**1.151**	0.1244	10.81
Selenium	77	0.4971	0.312	0.4868	**0.432**	0.104	24.08
Selenium	78	1.647	1.831	1.505	**1.661**	0.1634	9.839
Selenium	82	0.7871	0.6509	0.613	**0.6837**	0.0916	13.39
Silver	107	-0.0091	-0.0115	-0.0126	**-0.0111**	0.0018	16.26
Silver	109	-0.0089	-0.0093	-0.0115	**-0.0099**	0.0014	13.8
Thallium	203	0.0005	0.0019	0.0002	**0.0009**	0.0009	107.7
Thallium	205	0.0002	0.0013	0.0022	**0.0012**	0.001	82.56
Zinc	66	1.215	0.9338	0.761	**0.97**	0.2293	23.64
Zinc	67	1.609	1.451	1.306	**1.455**	0.1517	10.43
Zinc	68	1.633	1.404	1.425	**1.487**	0.1264	8.502

Internal Standard Factors:

Lithium	6	1.123	1.046	1.071	**1.123**	n/a	n/a
Gallium	71	1.09	1.064	1.018	**1.09**	n/a	n/a
Indium	115	1.038	1.064	1.05	**1.038**	n/a	n/a
Lutetium	175	0.973	1.017	1.016	**0.973**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		K0701816-002A +20,+10Ag			Mean	SD	%RSD
TimeStamp		3/20/07 12:37					
Antimony	121	20.49	20.95	21.39	**20.94**	0.4482	2.14
Antimony	123	20.56	19.72	20.78	**20.35**	0.5594	2.749
Arsenic	75	21.67	21.57	22.74	**21.99**	0.6473	2.944
Beryllium	9	19.19	18.39	18.29	**18.62**	0.4948	2.657
Cadmium	111	20.62	19.48	19.82	**19.97**	0.588	2.944
Cadmium	114	20.87	19.95	20.03	**20.29**	0.5117	2.522
Chromium	52	24.98	25.24	25.5	**25.24**	0.2565	1.016
Chromium	53	27.51	27.79	27.7	**27.67**	0.1413	0.5108
Cobalt	59	21.32	20.58	20.38	**20.76**	0.4941	2.38
Copper	63	20.52	19.73	19.39	**19.88**	0.5794	2.914
Copper	65	20.11	19.54	18.75	**19.47**	0.6786	3.486
Lead	206	18.38	17.84	18.36	**18.2**	0.3091	1.698
Lead	207	18.43	18.42	17.7	**18.18**	0.4207	2.314
Lead	208	18.56	18.04	18.27	**18.29**	0.2645	1.446
Molybdenum	95	22.04	21.07	21.34	**21.48**	0.4983	2.319
Molybdenum	97	21.99	21	21.48	**21.49**	0.4935	2.296
Molybdenum	98	21.58	20.52	20.65	**20.92**	0.5793	2.77
Nickel	60	26.25	25.28	25.17	**25.57**	0.5932	2.32
Nickel	62	25.18	24.35	24.12	**24.55**	0.557	2.269
Selenium	77	22.07	23.33	22.76	**22.72**	0.6309	2.777
Selenium	78	24.57	25.18	24.94	**24.9**	0.3071	1.233
Selenium	82	23.34	23.67	24.61	**23.87**	0.6567	2.751
Silver	107	8.627	8.864	8.493	**8.661**	0.1879	2.17
Silver	109	8.757	8.697	8.184	**8.546**	0.3151	3.688
Thallium	203	18.91	18.38	18.45	**18.58**	0.2893	1.557
Thallium	205	18.48	17.9	18.58	**18.32**	0.3634	1.984
Zinc	66	24.54	24.58	24.25	**24.46**	0.1763	0.7208
Zinc	67	27.07	27.4	27.99	**27.49**	0.4661	1.696
Zinc	68	27.49	27.06	27.68	**27.41**	0.3186	1.162

Internal Standard Factors:

Lithium	6	1.105	1.066	1.153	**1.105**	n/a	n/a
Gallium	71	1.127	1.132	1.104	**1.127**	n/a	n/a
Indium	115	1.125	1.091	1.117	**1.125**	n/a	n/a
Lutetium	175	1.049	1.03	1.032	**1.049**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**K0701816-002S**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:40**					
Antimony	121	21.34	21.15	21.62	**21.37**	0.2383	1.115
Antimony	123	20.26	20.61	20.33	**20.4**	0.1853	0.908
Arsenic	75	22.12	22.74	22.14	**22.33**	0.3511	1.572
Beryllium	9	21.19	18.5	18.91	**19.53**	1.451	7.427
Cadmium	111	20.46	19.64	20	**20.04**	0.4101	2.047
Cadmium	114	20.4	19.85	20.32	**20.19**	0.2979	1.476
Chromium	52	26.8	25.85	26.17	**26.27**	0.4821	1.835
Chromium	53	29.23	28.35	29.04	**28.87**	0.4627	1.603
Cobalt	59	22.33	20.9	20.65	**21.29**	0.908	4.265
Copper	63	21.18	19.94	19.36	**20.16**	0.932	4.623
Copper	65	20.93	19.62	19.02	**19.86**	0.9761	4.916
Lead	206	19.53	18.4	18.89	**18.94**	0.5629	2.972
Lead	207	18.64	18.54	18.93	**18.7**	0.2009	1.074
Lead	208	19.04	18.26	18.72	**18.67**	0.3904	2.091
Molybdenum	95	22.66	21.47	21.77	**21.96**	0.6187	2.817
Molybdenum	97	22.65	21.14	21.38	**21.72**	0.81	3.729
Molybdenum	98	22.01	21.32	20.64	**21.32**	0.6806	3.192
Nickel	60	27.34	25.61	25.27	**26.07**	1.114	4.272
Nickel	62	26.64	24.63	24.71	**25.33**	1.141	4.506
Selenium	77	23.68	25.13	25.34	**24.72**	0.9058	3.665
Selenium	78	25.12	25.75	25.68	**25.52**	0.345	1.352
Selenium	82	24.59	26.08	25.13	**25.26**	0.7523	2.978
Silver	107	19.46	18.72	19.26	**19.15**	0.3827	1.999
Silver	109	19.03	18.82	19.1	**18.99**	0.145	0.7639
Thallium	203	19.44	18.76	18.17	**18.79**	0.6362	3.386
Thallium	205	19.6	18.94	18.78	**19.11**	0.4339	2.271
Zinc	66	25.61	24.21	24.25	**24.69**	0.798	3.232
Zinc	67	29.13	26.72	27.76	**27.87**	1.207	4.332
Zinc	68	28.82	28.2	27.63	**28.21**	0.592	2.098

Internal Standard Factors:

Lithium	6	1.139	1.083	1.122	**1.139**	n/a	n/a
Gallium	71	1.168	1.151	1.11	**1.168**	n/a	n/a
Indium	115	1.104	1.121	1.095	**1.104**	n/a	n/a
Lutetium	175	1.068	1.059	1.041	**1.068**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**LCSW K0701816**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:43**					
Antimony	121	20.12	20.19	20.75	**20.36**	0.3453	1.696
Antimony	123	20.33	19.9	19.75	**19.99**	0.3004	1.502
Arsenic	75	19.93	20.25	20.21	**20.13**	0.1732	0.8602
Beryllium	9	21.33	19.69	19.48	**20.17**	1.01	5.006
Cadmium	111	20.31	19.73	20.17	**20.07**	0.2993	1.491
Cadmium	114	20.49	19.92	19.75	**20.05**	0.3879	1.934
Chromium	52	21.62	21.07	21.36	**21.35**	0.2759	1.292
Chromium	53	21.88	21.22	21.54	**21.55**	0.3287	1.525
Cobalt	59	21.17	20.59	20.58	**20.78**	0.336	1.617
Copper	63	20.27	19.48	19.61	**19.79**	0.4248	2.146
Copper	65	19.79	19.24	19.36	**19.47**	0.2891	1.485
Lead	206	20.31	19.59	19.27	**19.72**	0.5308	2.691
Lead	207	20.49	19.49	19.48	**19.82**	0.578	2.916
Lead	208	20.36	19.52	19.53	**19.81**	0.4824	2.436
Molybdenum	95	20.55	20.24	20.12	**20.3**	0.2213	1.09
Molybdenum	97	20.34	20.15	19.78	**20.09**	0.284	1.414
Molybdenum	98	20.1	19.22	20.03	**19.78**	0.4897	2.476
Nickel	60	20.54	19.7	20.01	**20.08**	0.4237	2.11
Nickel	62	20.61	19.6	19.7	**19.97**	0.5601	2.805
Selenium	77	19.86	20.35	21.19	**20.47**	0.6719	3.283
Selenium	78	21.51	22.48	22	**22**	0.488	2.219
Selenium	82	21.38	20.52	21.44	**21.11**	0.5168	2.448
Silver	107	20.92	19.85	20.39	**20.39**	0.5362	2.63
Silver	109	21.03	20.22	20.17	**20.47**	0.4831	2.36
Thallium	203	19.82	20.13	19.6	**19.85**	0.2654	1.337
Thallium	205	19.97	19.26	19.32	**19.52**	0.3947	2.022
Zinc	66	19.67	19.87	19.08	**19.54**	0.4073	2.085
Zinc	67	20.08	20.14	19.89	**20.04**	0.1292	0.6446
Zinc	68	20.07	20.07	20.36	**20.17**	0.17	0.8428

Internal Standard Factors:

Lithium	6	1.079	1.049	1.104	**1.079**	n/a	n/a
Gallium	71	1.006	1.013	1.02	**1.006**	n/a	n/a
Indium	115	1.023	1.024	1.027	**1.023**	n/a	n/a
Lutetium	175	1.002	0.994	1.007	**1.002**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCV2 MS10-46-A**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 12:47**					
Antimony	121	25.83	25.15	25.52	**25.5**	0.3363	1.319
Antimony	123	26.22	24.19	24.51	**24.98**	1.092	4.374
Arsenic	75	26.25	25.95	25.44	**25.88**	0.4068	1.572
Beryllium	9	25.77	26.54	25.3	**25.87**	0.6268	2.423
Cadmium	111	26.22	24.04	25.68	**25.32**	1.135	4.482
Cadmium	114	26.09	24.44	24.96	**25.16**	0.8409	3.342
Chromium	52	26.89	26.75	26.43	**26.69**	0.2355	0.8823
Chromium	53	26.77	26.72	26.82	**26.77**	0.0517	0.193
Cobalt	59	27.1	25.94	25.98	**26.34**	0.6592	2.503
Copper	63	26.52	25.1	24.6	**25.41**	0.9969	3.923
Copper	65	26.04	24.92	24.58	**25.18**	0.7658	3.041
Lead	206	25.82	24.72	24.67	**25.07**	0.6508	2.596
Lead	207	25.61	23.91	24.42	**24.65**	0.8711	3.534
Lead	208	25.6	24.65	24.42	**24.89**	0.6236	2.505
Molybdenum	95	25.85	24.54	25.19	**25.19**	0.6509	2.584
Molybdenum	97	25.77	24.92	25.06	**25.25**	0.4574	1.811
Molybdenum	98	25.71	24.58	24.73	**25**	0.6125	2.45
Nickel	60	26.61	25.45	25.19	**25.75**	0.7555	2.934
Nickel	62	26.45	24.75	24.73	**25.31**	0.9867	3.899
Selenium	77	25.82	25.44	26.68	**25.98**	0.6334	2.438
Selenium	78	26.53	27.21	27.27	**27.01**	0.4119	1.525
Selenium	82	26.65	25.97	26.61	**26.41**	0.3836	1.452
Silver	107	25.61	24.28	25.02	**24.97**	0.6648	2.663
Silver	109	25.93	23.89	25.21	**25.01**	1.031	4.121
Thallium	203	25.41	24.67	24.74	**24.94**	0.4066	1.63
Thallium	205	25.21	24.33	24.95	**24.83**	0.452	1.821
Zinc	66	25.43	25.24	24.34	**25**	0.5843	2.337
Zinc	67	25.68	25.52	24.29	**25.16**	0.7635	3.034
Zinc	68	25.92	25.87	25.1	**25.63**	0.4599	1.794

Internal Standard Factors:

Lithium	6	1.072	1.069	1.099	**1.072**	n/a	n/a
Gallium	71	1.025	1.029	1.015	**1.025**	n/a	n/a
Indium	115	1.041	1.012	1.053	**1.041**	n/a	n/a
Lutetium	175	1.014	1	1.003	**1.014**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 03-20-07C
Units: µg/L (ppb)

Method: EPA 6020
Analyst: Jim Chan
Analysis Lot # : 80435

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**3/20/07 13:03**					
Antimony	121	0.0004	0.0002	0.0044	**0.0016**	0.0024	144.6
Antimony	123	-0.0015	-0.0013	0.0023	**-0.0001**	0.0021	1464
Arsenic	75	0.0777	0.0491	0.115	**0.0806**	0.033	40.96
Beryllium	9	-0.0023	0.0005	0.0002	**-0.0005**	0.0016	296.2
Cadmium	111	0.0014	0.0032	-0.0031	**0.0005**	0.0032	662
Cadmium	114	-0.0005	-0.0005	0.0005	**-0.0002**	0.0006	305.9
Chromium	52	-0.0102	-0.0273	-0.0188	**-0.0187**	0.0086	45.8
Chromium	53	0.0095	0.0023	0.0082	**0.0067**	0.0038	57.34
Cobalt	59	-0.002	0.0008	-0.0031	**-0.0014**	0.002	139.1
Copper	63	0.0087	-0.0073	0.0001	**0.0005**	0.008	1651
Copper	65	0.011	-0.0063	0.0027	**0.0025**	0.0086	349.6
Lead	206	-0.0031	0.0027	0.0002	**0**	0.0029	5847
Lead	207	-0.0031	-0.008	0.004	**-0.0024**	0.006	253.8
Lead	208	-0.0031	0.0031	0.0002	**0.0001**	0.0031	3653
Molybdenum	95	0.007	0.0027	0.0011	**0.0036**	0.0031	85.45
Molybdenum	97	0.0022	0.0053	0.0026	**0.0034**	0.0017	50.34
Molybdenum	98	0.0025	0.0005	0.0029	**0.002**	0.0013	64.82
Nickel	60	-0.0486	-0.0832	-0.0638	**-0.0652**	0.0174	26.62
Nickel	62	0.0864	0.0612	0.4753	**0.2076**	0.2322	111.8
Selenium	77	-0.1485	-0.0899	-0.0716	**-0.1033**	0.0402	38.88
Selenium	78	0.9226	1.095	1.184	**1.067**	0.1327	12.44
Selenium	82	0.1378	0.1004	0.3182	**0.1854**	0.1164	62.79
Silver	107	0.0123	0.0081	0.0071	**0.0091**	0.0028	30.35
Silver	109	0.0105	0.0087	0.0094	**0.0095**	0.0009	9.411
Thallium	203	-0.0003	0.0002	0.0011	**0.0003**	0.0007	222
Thallium	205	-0.0015	-0.0005	-0.0011	**-0.001**	0.0005	50.17
Zinc	66	-0.0071	-0.083	-0.0355	**-0.0419**	0.0384	91.61
Zinc	67	0.0157	0.0485	-0.0597	**0.0015**	0.0555	3739
Zinc	68	0.1048	0.0452	0.0832	**0.0778**	0.0302	38.82

Internal Standard Factors:

Lithium	6	1.021	0.993	1.008	**1.021**	n/a	n/a
Gallium	71	1.006	1.004	1.016	**1.006**	n/a	n/a
Indium	115	0.981	1.066	1.045	**0.981**	n/a	n/a
Lutetium	175	0.979	1.031	1.02	**0.979**	n/a	n/a

Nitrosamines by EPA 521

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
NKGW02CL	K0701816-002	03/06/2007	03/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jim Smith

Date: 3/30/09 Title: PM Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Nitrosamines by EPA 521

Sample Name:	NKGW02CL	**Units:**	ng/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	82	70-130	03/29/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0704194-3	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	83	70-130	03/29/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
NKGW02CL	K0701816-002	82
Method Blank	KWG0704194-3	83
Lab Control Sample	KWG0704194-1	81
Duplicate Lab Control Sample	KWG0704194-2	81

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007
		Time Analyzed:	12:06

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\032907\0329009.D	**Lab Code:**	KWG0704193-2
Instrument ID:	MS16	**Analysis Lot:**	KWG0704193
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	422,908	14.30
	Upper Limit ==>	634,362	14.70
	Lower Limit ==>	211,454	13.90
Associated Analyses			
Continuing Calibration Verificati	KWG0704193-2	469,604	14.36
Method Blank	KWG0704194-3	446,455	14.35
Lab Control Sample	KWG0704194-1	466,254	14.33
Duplicate Lab Control Sample	KWG0704194-2	428,416	14.33
NKGW02CL	K0701816-002	408,275	14.30

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007
		Time Analyzed:	14:02

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\032907\0329014.D	**Lab Code:**	KWG0704193-3
Instrument ID:	MS16	**Analysis Lot:**	KWG0704193
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	422,908	14.30
	Upper Limit ==>	634,362	14.70
	Lower Limit ==>	211,454	13.90
Associated Analyses			
Continuing Calibration Verificati	KWG0704193-3	509,041	14.36

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/29/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method:	METHOD	**Units:**	ng/L
Analysis Method:	521	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0704194

	Lab Control Sample KWG0704194-1 Lab Control Spike			Duplicate Lab Control Sample KWG0704194-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
N-Nitrosodimethylamine	30.0	40.0	75	29.9	40.0	75	70-130	0	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/29/2007
		Time Analyzed:	12:31

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\032907\0329010.D
Lab Code:	KWG0704194-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0704194

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0704194-1	J:\MS16\DATA\032907\0329011.D	03/29/07	12:54
Duplicate Lab Control Sample	KWG0704194-2	J:\MS16\DATA\032907\0329012.D	03/29/07	13:17
NKGW02CL	K0701816-002	J:\MS16\DATA\032907\0329013.D	03/29/07	13:39

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Lab Control Sample/Duplicate Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0704194-1	**Lab Code:**	KWG0704194-2
File ID:	J:\MS16\DATA\032907\0329011.D	**File ID:**	J:\MS16\DATA\032907\0329012.D
Instrument ID:	MS16	**Instrument ID:**	MS16
Date Extracted:	03/13/2007	**Date Extracted:**	03/13/2007
Date Analyzed:	03/29/2007	**Date Analyzed:**	03/29/2007
Time Analyzed:	12:54	**Time Analyzed:**	13:17

Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0704194

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0704194-3	J:\MS16\DATA\032907\0329010.D	03/29/07	12:31
NKGW02CL	K0701816-002	J:\MS16\DATA\032907\0329013.D	03/29/07	13:39

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 03/29/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL6171
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\032907\0329002.D	D	J:\MS16\DATA\032907\0329005.D
B	J:\MS16\DATA\032907\0329003.D	E	J:\MS16\DATA\032907\0329006.D
C	J:\MS16\DATA\032907\0329004.D	F	J:\MS16\DATA\032907\0329007.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosodimethylamine-d6	A	20	0.551	B	20	0.417	C	20	0.459	D	20	0.543	E	20	0.593
	F	20	0.545												
N-Nitrosodimethylamine	A	1.0	0.364	B	2.0	0.480	C	5.0	0.416	D	10	0.360	E	20	0.356
	F	50	0.366												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 03/29/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL6171
Instrument ID: MS16

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	12.7		≤ 30	0.518		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	12.6		≤ 30	0.391		

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Calibration Date:**	03/29/2007
		Date Analyzed:	03/29/2007

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type:	Internal Standard	**Calibration ID:**	CAL6171
Analysis Method:	521	**Units:**	ug/L

File ID: J:\MS16\DATA\032907\0329008.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	20	16	0.391	0.319	-18	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type:	Internal Standard	**Calibration Date:**	03/29/2007
Analysis Method:	521	**Calibration ID:**	CAL6171
		Analysis Lot:	KWG0704193
		Units:	ug/L

File ID: J:\MS16\DATA\032907\0329009.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		0.518	0.541	4	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	1.0	0.97		0.391	0.379	-3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/29/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 03/29/2007
Calibration ID: CAL6171
Analysis Lot: KWG0704193
Units: ug/L

File ID: J:\MS16\DATA\032907\0329014.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	19		0.518	0.500	-3	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	23		0.391	0.446	14	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0704193
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\0329001.D	GC/MS Tuning - Decafluorotripheny	KWG0704193-1	3/29/2007	09:00		3/29/2007	09:16
\0329009.D	Continuing Calibration Verification	KWG0704193-2	3/29/2007	12:06		3/29/2007	12:22
\0329010.D	Method Blank	KWG0704194-3	3/29/2007	12:31		3/29/2007	12:47
\0329011.D	Lab Control Sample	KWG0704194-1	3/29/2007	12:54		3/29/2007	13:10
\0329012.D	Duplicate Lab Control Sample	KWG0704194-2	3/29/2007	13:17		3/29/2007	13:33
\0329013.D	NKGW02CL	K0701816-002	3/29/2007	13:39		3/29/2007	13:55
\0329014.D	Continuing Calibration Verification	KWG0704193-3	3/29/2007	14:02		3/29/2007	14:18

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0704194
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
NKGW02CL	K0701816-002	03/06/07	03/07/07	500ml	1ml	NA	
Method Blank	KWG0704194-3	NA	NA	500ml	1ml	NA	
Lab Control Sample	KWG0704194-1	NA	NA	500ml	1ml	NA	
Duplicate Lab Control Sample	KWG0704194-2	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Nitrosamines by EPA 521

Validation Package

Organic Analysis:
Nitrosamines by EPA 521

Validation Package

QC Reports

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
NKGW02CL	K0701816-002	82
Method Blank	KWG0704194-3	83
Lab Control Sample	KWG0704194-1	81
Duplicate Lab Control Sample	KWG0704194-2	81

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007
		Time Analyzed:	12:06

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\032907\0329009.D	**Lab Code:**	KWG0704193-2
Instrument ID:	MS16	**Analysis Lot:**	KWG0704193
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	422,908	14.30
	Upper Limit ==>	634,362	14.70
	Lower Limit ==>	211,454	13.90
Associated Analyses			
Continuing Calibration Verificati	KWG0704193-2	469,604	14.36
Method Blank	KWG0704194-3	446,455	14.35
Lab Control Sample	KWG0704194-1	466,254	14.33
Duplicate Lab Control Sample	KWG0704194-2	428,416	14.33
NKGW02CL	K0701816-002	408,275	14.30

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007
		Time Analyzed:	14:02

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\032907\0329014.D	**Lab Code:**	KWG0704193-3
Instrument ID:	MS16	**Analysis Lot:**	KWG0704193
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	422,908	14.30
	Upper Limit ==>	634,362	14.70
	Lower Limit ==>	211,454	13.90
Associated Analyses			
Continuing Calibration Verificati	KWG0704193-3	509,041	14.36

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/29/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method:	METHOD	**Units:**	ng/L
Analysis Method:	521	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0704194

	Lab Control Sample KWG0704194-1 Lab Control Spike			Duplicate Lab Control Sample KWG0704194-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
N-Nitrosodimethylamine	30.0	40.0	75	29.9	40.0	75	70-130	0	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/29/2007
		Time Analyzed:	12:31

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\032907\0329010.D
Lab Code:	KWG0704194-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0704194

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0704194-1	J:\MS16\DATA\032907\0329011.D	03/29/07	12:54
Duplicate Lab Control Sample	KWG0704194-2	J:\MS16\DATA\032907\0329012.D	03/29/07	13:17
NKGW02CL	K0701816-002	J:\MS16\DATA\032907\0329013.D	03/29/07	13:39

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Lab Control Sample/Duplicate Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0704194-1	**Lab Code:**	KWG0704194-2
File ID:	J:\MS16\DATA\032907\0329011.D	**File ID:**	J:\MS16\DATA\032907\0329012.D
Instrument ID:	MS16	**Instrument ID:**	MS16
Date Extracted:	03/13/2007	**Date Extracted:**	03/13/2007
Date Analyzed:	03/29/2007	**Date Analyzed:**	03/29/2007
Time Analyzed:	12:54	**Time Analyzed:**	13:17

Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0704194

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0704194-3	J:\MS16\DATA\032907\0329010.D	03/29/07	12:31
NKGW02CL	K0701816-002	J:\MS16\DATA\032907\0329013.D	03/29/07	13:39

Organic Analysis:
Nitrosamines by EPA 521

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Nitrosamines by EPA 521

Sample Name:	NKGW02CL	**Units:**	ng/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	82	70-130	03/29/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0704194-3	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	83	70-130	03/29/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**Units:**	ng/L
Lab Code:	KWG0704194-1	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**30.0**		2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	81	70-130	03/29/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Duplicate Lab Control Sample	**Units:**	ng/L
Lab Code:	KWG0704194-2	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**29.9**		2.0	1	03/13/07	03/29/07	KWG0704194	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	81	70-130	03/29/07	Acceptable

Comments:

Organic Analysis:
Nitrosamines by EPA 521

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 03/29/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL6171
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\032907\0329002.D	D	J:\MS16\DATA\032907\0329005.D
B	J:\MS16\DATA\032907\0329003.D	E	J:\MS16\DATA\032907\0329006.D
C	J:\MS16\DATA\032907\0329004.D	F	J:\MS16\DATA\032907\0329007.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosodimethylamine-d6	A	20	0.551	B	20	0.417	C	20	0.459	D	20	0.543	E	20	0.593
	F	20	0.545												
N-Nitrosodimethylamine	A	1.0	0.364	B	2.0	0.480	C	5.0	0.416	D	10	0.360	E	20	0.356
	F	50	0.366												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 03/29/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL6171
Instrument ID: MS16

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	12.7		≤ 30	0.518		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	12.6		≤ 30	0.391		

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 03/29/2007
Date Analyzed: 03/29/2007

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL6171
Units: ug/L

File ID: J:\MS16\DATA\032907\0329008.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	20	16	0.391	0.319	-18	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type:	Internal Standard	**Calibration Date:**	03/29/2007
Analysis Method:	521	**Calibration ID:**	CAL6171
		Analysis Lot:	KWG0704193
		Units:	ug/L

File ID: J:\MS16\DATA\032907\0329009.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		0.518	0.541	4	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	1.0	0.97		0.391	0.379	-3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/29/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type:	Internal Standard	**Calibration Date:**	03/29/2007
Analysis Method:	521	**Calibration ID:**	CAL6171
		Analysis Lot:	KWG0704193
		Units:	ug/L

File ID: J:\MS16\DATA\032907\0329014.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	19		0.518	0.500	-3	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	23		0.391	0.446	14	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Organic Analysis:
Nitrosamines by EPA 521

Validation Package

Sample Prep and Screen Data

Exception Report

Data File: J:\MS16\DATA\032907\0329013.D
Lab ID: K0701816-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/29/2007 13:39
Date Quantitated: 03/29/2007 13:59
Batch ID: KWG0704193
Analysis Method: 521
ListJoinID: LJ7674

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/5/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	521 Nitrosamine	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0704193	**Prep Lot:**	KWG0704194	**Report Group:**	K0701816
Analysis Method:	521	**Prep Method:**	METHOD		
Prep Ref:	587354	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:	Nitrosamines by EPA 521	**Report List ID:**	LJ7674
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:	J:\MS16\DATA\032907\0329010.D	**Quant based on Report List**	

Data File:	J:\MS16\DATA\032907\0329013.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 13:39	**Quant Date:**	03/29/2007 13:59	**Vial:**	12
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-002			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.30	0.00	81	408275	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.62	-0.18	-0.01	46	43429	16.43	82	70-130	OK

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine				47	0		1.4	U	

Prep Amount:	500 ml	**Dilution:**	1.0
Prep Final Vol:	1 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329013.D
Acq On : 29 Mar 07 13:39
Sample : K0701816-002
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:59:28 2007

Vial: 12
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.30	81	408275	80.00 ug/ml	0.00
System Monitoring Compounds					
3) NDMA-d6	8.62	46	43429	16.43 ug/L	-0.02
Target Compounds					Qvalue

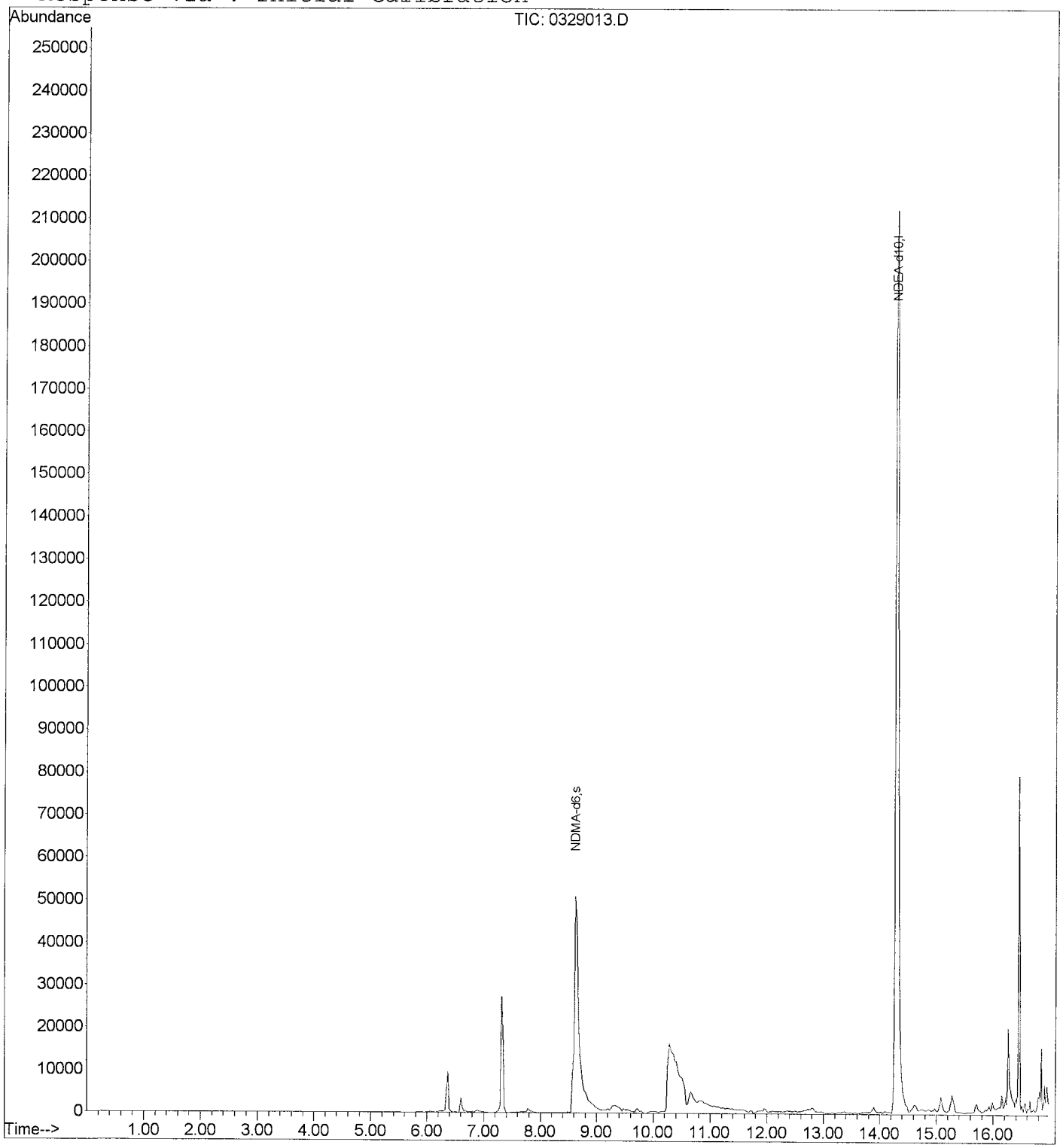
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329013.D
Acq On : 29 Mar 07 13:39
Sample : K0701816-002
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:59 2007

Vial: 12
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS16\DATA\032907\0329010.D
Lab ID: KWG0704194-3
RunType: MB
Matrix: WATER

Date Acquired: 03/29/2007 12:31
Date Quantitated: 03/29/2007 12:51
Batch ID: KWG0704193
Analysis Method: 521
MethodJoinID: MJ756

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/30/07

Secondary Review: [illegible]

Printed: 03/30/2007 13:04:42
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	521 Nitrosamine	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704193	**Prep Lot:**	KWG0704194	**Report Group:**	
Analysis Method:	521	**Prep Method:**	METHOD		
Prep Ref:	587357	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:			
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:		**Quant based on Method**	

Data File:	J:\MS16\DATA\032907\0329010.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 12:31	**Quant Date:**	03/29/2007 12:51	**Vial:**	9
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0704194-3			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.35	0.05	81	446455	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.76	-0.04	0.00	46	47827	16.54	83	70-130	OK

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine				47	0		1.4	U	

Prep Amount:	500 ml	**Dilution:**	1.0
Prep Final Vol:	1 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329010.D Vial: 9
Acq On : 29 Mar 2007 12:31 Operator: JSMITH
Sample : MB 031307 Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:51:23 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.35	81	446455	80.00 ug/ml	0.05
System Monitoring Compounds					
3) NDMA-d6	8.76	46	47827	16.54 ug/L	0.13
Target Compounds					Qvalue

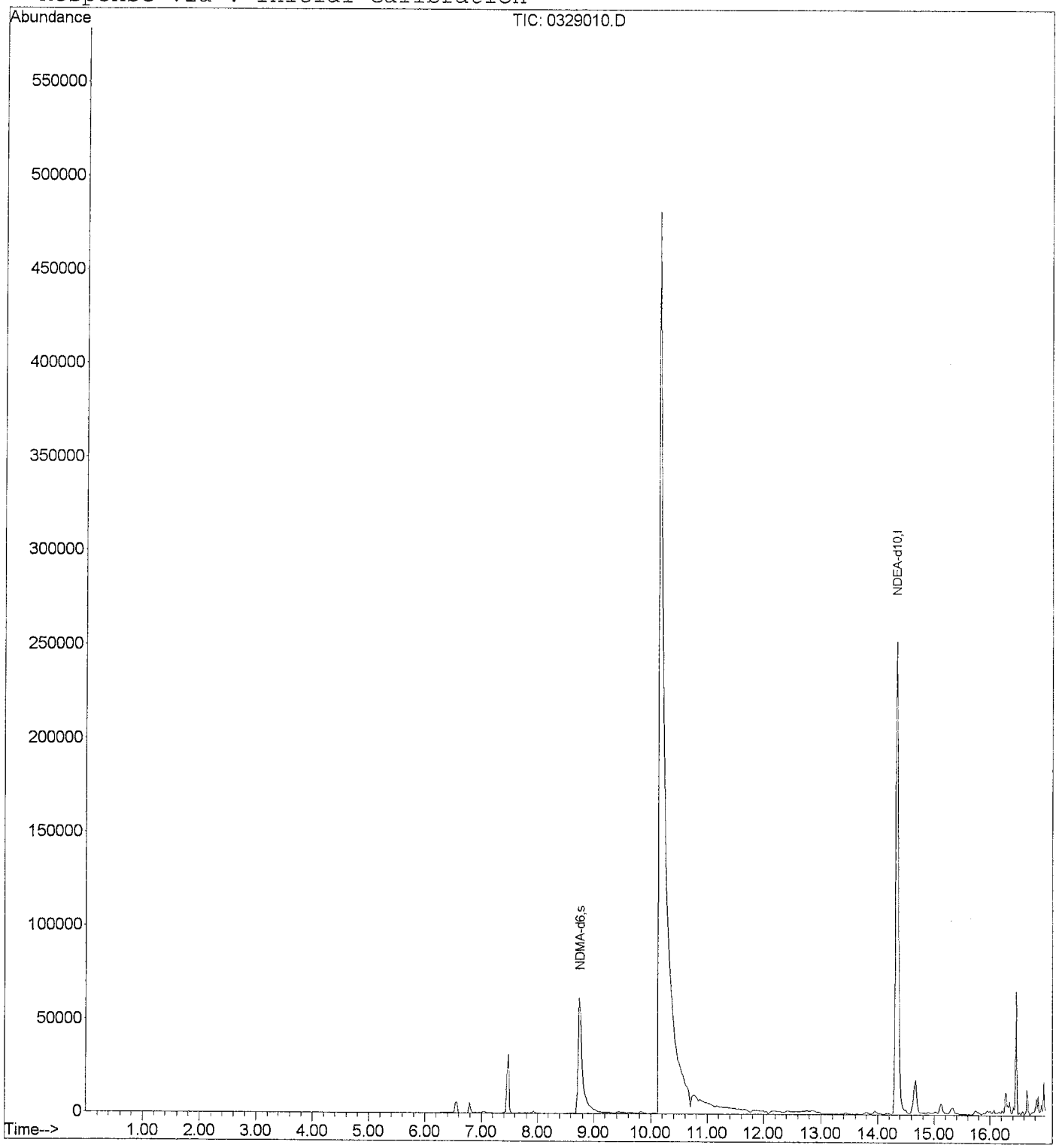
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329010.D
Acq On : 29 Mar 2007 12:31
Sample : MB 031307
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:51 2007

Vial: 9
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS16\DATA\032907\0329011.D
Lab ID: KWG0704194-1
RunType: LCS
Matrix: WATER

Date Acquired: 03/29/2007 12:54
Date Quantitated: 03/29/2007 13:14
Batch ID: KWG0704193
Analysis Method: 521
MethodJoinID: MJ756

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/30/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	521 Nitrosamine	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704193	**Prep Lot:**	KWG0704194	**Report Group:**	
Analysis Method:	521	**Prep Method:**	METHOD		
Prep Ref:	587355	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:			
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:	J:\MS16\DATA\032907\0329010.D	**Quant based on Method**	

Data File:	J:\MS16\DATA\032907\0329011.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 12:54	**Quant Date:**	03/29/2007 13:14	**Vial:**	10
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0704194-1			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.33	0.03	81	466254	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.72	-0.08	0.00	46	48647	16.11	81	70-130	OK

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	8.82	-0.11	-0.01	47	34120	14.99	30.0		

Prep Amount:	500 ml	**Dilution:**	1.0
Prep Final Vol:	1 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Lab Control Spike Summary Report

Lab Control Spike Information — *ListJoinID :* LJ7674

Data File:	J:\MS16\DATA\032907\0329011.D	**Instrument:**	MS16
Lab ID:	KWG0704194-1	**Dilution:**	1
Client ID:	Lab Control Sample	**Units:**	ng/L
Prod Code:	521 Nitrosamine	**Acqu Date:**	03/29/2007 12:54
Matrix:	WATER	**Quant Date:**	03/29/2007 13:14

Duplicate Lab Control Spike Information

Data File:	J:\MS16\DATA\032907\0329012.D	**Instrument:**	MS16
Lab ID:	KWG0704194-2	**Dilution:**	1
Client ID:	Duplicate Lab Control Sample	**Units:**	ng/L
Prod Code:	521 Nitrosamine	**Acqu Date:**	03/29/2007 13:17
Matrix:	WATER	**Quant Date:**	03/29/2007 13:42

	LCS			DLCS					
Parameter Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
N-Nitrosodimethylamine	30.0	40.0	75	29.9	40.0	75	70-130	0	30

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329011.D Vial: 10
Acq On : 29 Mar 2007 12:54 Operator: JSMITH
Sample : LCS 031307 Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:14:17 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.33	81	466254	80.00 ug/ml	0.04
System Monitoring Compounds					
3) NDMA-d6	8.72	46	48647	16.11 ug/L	0.08
Target Compounds					Qvalue
2) NDMA	8.82	47	34120	14.99 ug/L	84

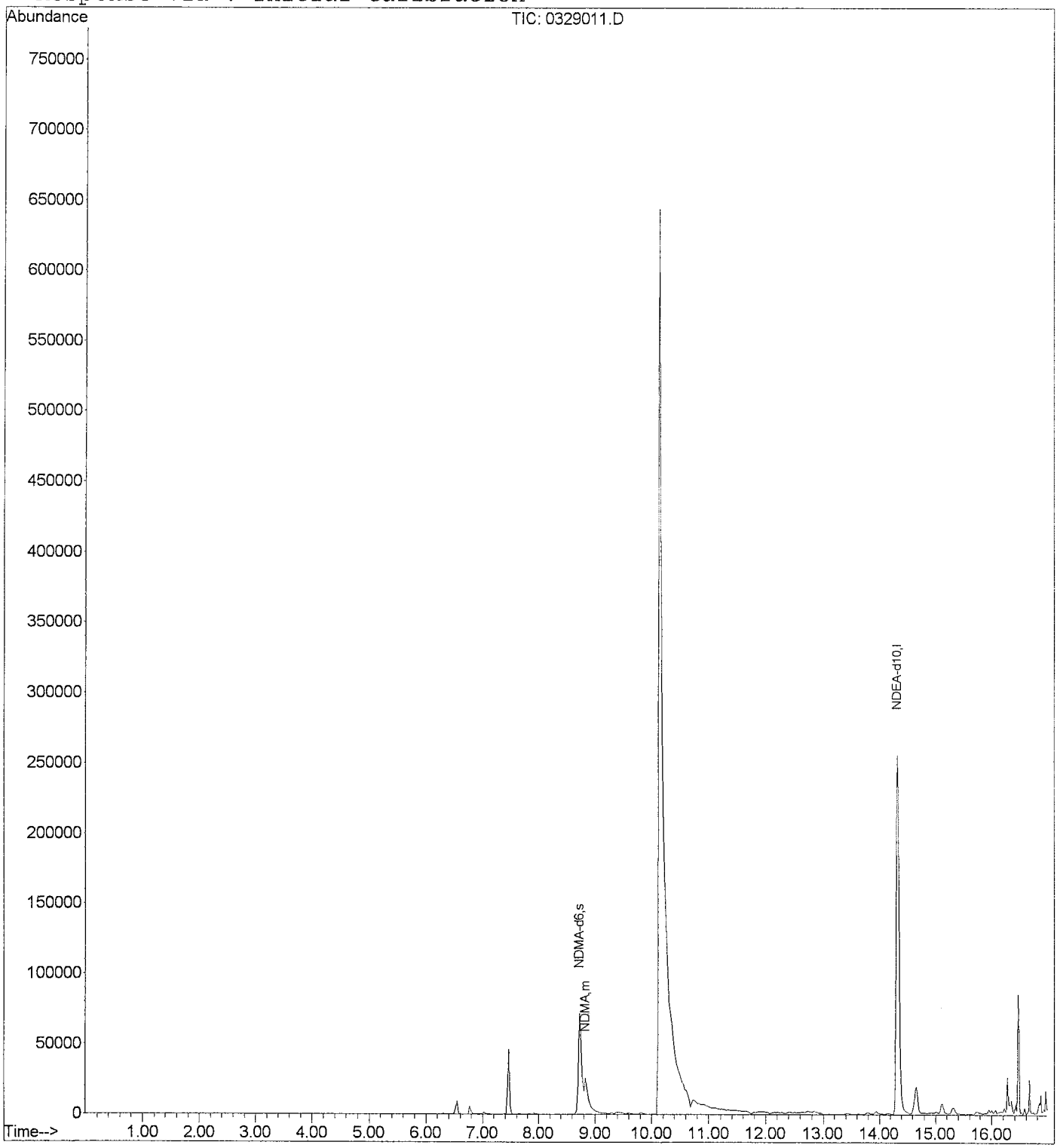
(#) = qualifier out of range (m) = manual integration
0329011.D 521_032907NDMA.M Fri Mar 30 12:54:20 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329011.D
Acq On : 29 Mar 2007 12:54
Sample : LCS 031307
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:14 2007

Vial: 10
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS16\DATA\032907\0329012.D
Lab ID: KWG0704194-2
RunType: DLCS
Matrix: WATER

Date Acquired: 03/29/2007 13:17
Date Quantitated: 03/29/2007 13:42
Batch ID: KWG0704193
Analysis Method: 521
MethodJoinID: MJ756

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/30/07

Secondary Review: MM

Printed: 03/30/2007 13:04:48
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	521 Nitrosamine	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704193	**Prep Lot:**	KWG0704194	**Report Group:**	
Analysis Method:	521	**Prep Method:**	METHOD		
Prep Ref:	587356	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:			
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:	J:\MS16\DATA\032907\0329010.D	**Quant based on Method**	

Data File:	J:\MS16\DATA\032907\0329012.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 13:17	**Quant Date:**	03/29/2007 13:42	**Vial:**	11
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0704194-2			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.33	0.03	81	428416	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.70	-0.10	-0.01	46	45128	16.27	81	70-130	OK

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	8.80	-0.13	-0.01	47	31268	14.95	29.9		

Prep Amount:	500 ml	**Dilution:**	1.0
Prep Final Vol:	1 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329012.D Vial: 11
Acq On : 29 Mar 07 13:17 Operator: JSMITH
Sample : DLCS 031307 Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:42:49 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

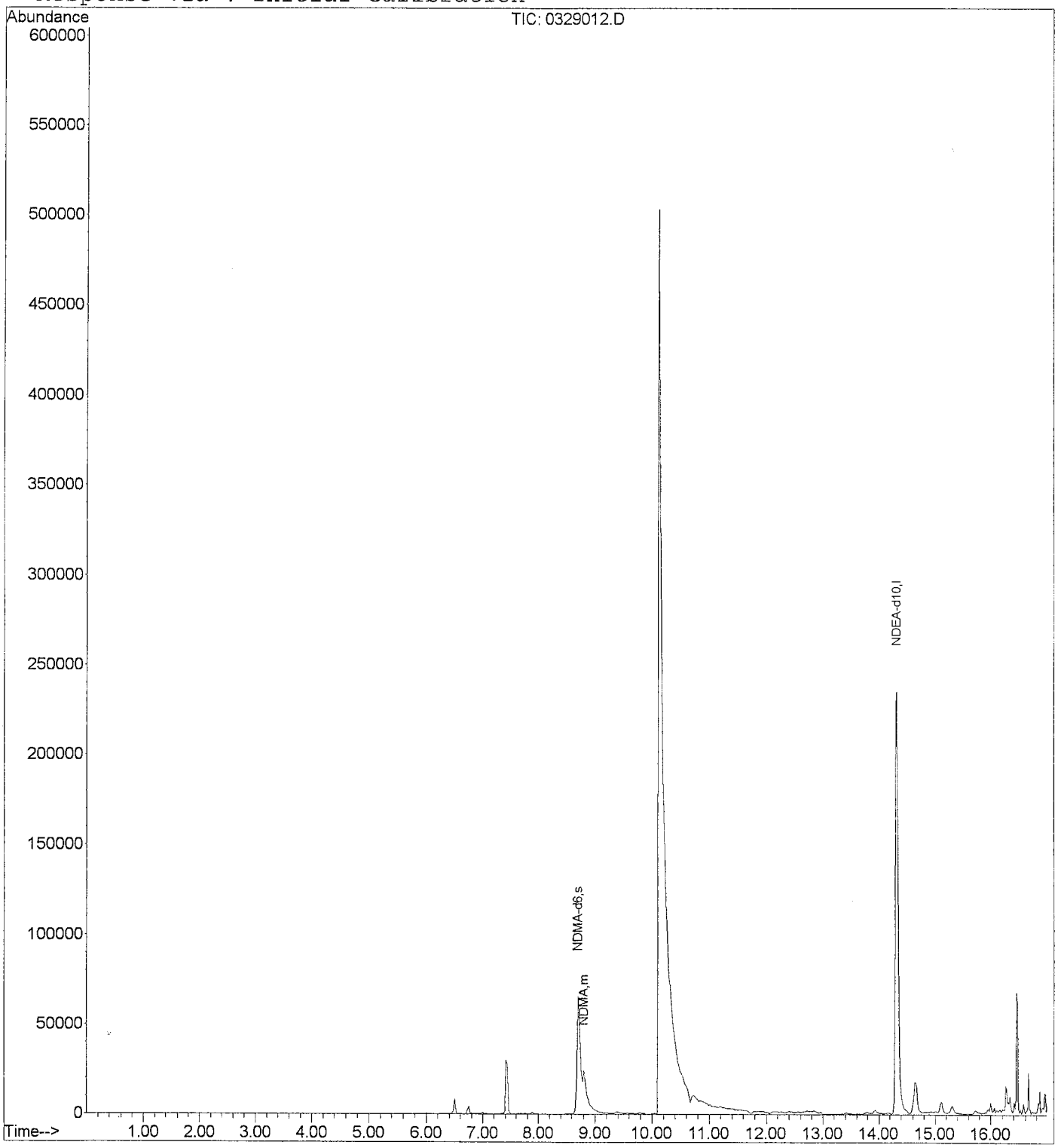
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.33	81	428416	80.00 ug/ml	0.03
System Monitoring Compounds					
3) NDMA-d6	8.70	46	45128	16.27 ug/L	0.06
Target Compounds					Qvalue
2) NDMA	8.80	47	31268	14.95 ug/L	55

(#) = qualifier out of range (m) = manual integration
0329012.D 521_032907NDMA.M Fri Mar 30 12:54:21 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329012.D
Vial: 11
Acq On : 29 Mar 07 13:17
Operator: JSMITH
Sample : DLCS 031307
Inst : MS16
Misc :
Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 13:42 2007
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Initial Calibration - Detailed Report

Calibration ID:	CAL6171	**Instrument ID:**	MS16
Method ID:	MJ756	**Column Name:**	MS
		Calibration Fit:	AverageRF

FileID	File Location	Acquisition Date	Quantitation Date	Last Updated
117712	J:\MS16\DATA\032907\0329002.D	03/29/2007 09:22	03/29/2007 10:31	03/29/2007 12:43
117713	J:\MS16\DATA\032907\0329003.D	03/29/2007 09:48	03/29/2007 10:31	03/29/2007 12:43
117714	J:\MS16\DATA\032907\0329004.D	03/29/2007 10:11	03/29/2007 10:32	03/29/2007 12:43
117715	J:\MS16\DATA\032907\0329005.D	03/29/2007 10:34	03/29/2007 10:55	03/29/2007 12:43
117716	J:\MS16\DATA\032907\0329006.D	03/29/2007 10:57	03/29/2007 11:16	03/29/2007 12:43
117717	J:\MS16\DATA\032907\0329007.D	03/29/2007 11:19	03/29/2007 11:39	03/29/2007 12:43

	FileID							
Parameter Name	**117712**	**117713**	**117714**	**117715**	**117716**	**117717**	**Mean RF**	**%RSD**
N-Nitrosodimethylamine	0.364	0.480	0.416	0.360	0.356	0.366	0.391	12.6
N-Nitrosodimethylamine-d6	0.551	0.417	0.459	0.543	0.593	0.545	0.518	12.7

3/29/07
[illegible]
[illegible] 3/30/07

Second Source Calibration Verification Summary

CalibrationID: CAL6171

Units: ug/L

Method ID: MJ756

Column: MS

DataFile Location: J:\MS16\DATA\032907\0329008.D

Parameter Name	File ID	Curve Fit	Method Criteria	AveRF	SSV RF	% Diff	True Value	Sol'n Conc	% Drift
N-Nitrosodimethylamine	117718	AverageRF	30	0.391	0.319	-18.4	20.00	16.3	

DATA ANALYSIS PARAMETERS

Method Name: J:\MS16\METHODS\521_032907NDMA.M

Percent Report Settings

Sort By: Signal

Output Destination
    Screen: Yes
    Printer: No
    File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
L:\DATABASE\NIST98.L	0

Integration Events: Meth Default

Report Type: Summary

Output Destination
    Screen: No
    Printer: Yes
    File: No

Generate Report During Run Method: No

Quantitative Report Settings

Report Type: Summary

Output Destination
    Screen: No
    Printer: Yes
    File: No

Generate Report During Run Method: Yes

CAL 6171
Calibration Last Updated: Thu Mar 29 12:40:40 2007

Reference Window: 0.60 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.05 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

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1) NDEA-d10 (ISTD)

Ret. Time 14.30 min., Extract & Integrate from 13.90 to 14.70 min.

Signal	Rel Resp.	Pct. Unc.(abs)	Integration
Tgt 81.00			*** METH DEFAULT ***
Q1 113.00	0.00	20.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/ml)	Response
1	80.000	418883
2	80.000	467348
3	80.000	410007
4	80.000	352451
5	80.000	381208
6	80.000	507552

Qualifier Peak Analysis OFF ISTD conc: 80.000 ug/ml
Curve Fit: Avg. RF

---

2) NDMA ( )

Ret. Time 8.77 min., Extract & Integrate from 7.27 to 10.27 min.

Signal	Rel Resp.	Pct. Unc.(abs)	Integration
Tgt 47.00			*** METH DEFAULT ***
Q1 75.00	30.70	100.0	*** METH DEFAULT ***

Lvl ID	Conc (ug/L)	Response
1	1.000	1908
2	2.000	5609
3	5.000	10672
4	10.000	15853
5	20.000	33931
6	50.000	116178

Qualifier Peak Analysis OFF
Curve Fit: Avg. RF

---

3) NDMA-d6 ( )

Ret. Time 8.64 min., Extract & Integrate from 7.14 to 10.14 min.

Signal	Rel Resp.	Pct. Unc.(abs)	Integration
Tgt 46.00			*** METH DEFAULT ***

Q1 81.00 7.10 100.0 *** METH DEFAULT ***

Lvl	ID	Conc (ug/L)	Response
1		20.000	57707
2		20.000	48726
3		20.000	47057
4		20.000	47852
5		20.000	56495
6		20.000	69158

Qualifier Peak Analysis OFF
Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Thu Mar 29 12:49:23 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329002.D Vial: 2
Acq On : 29 Mar 2007 09:22 Operator: JSMITH
Sample : 1PPB 3-29G Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:31:18 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 10:31:13 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.36	81	418883	80.00 ug/ml	0.06
System Monitoring Compounds					
3) NDMA-d6	8.81	46	57707	22.99 ug/L	0.17
Target Compounds					Qvalue
2) NDMA	8.92	47	1908	0.70 ug/L	76

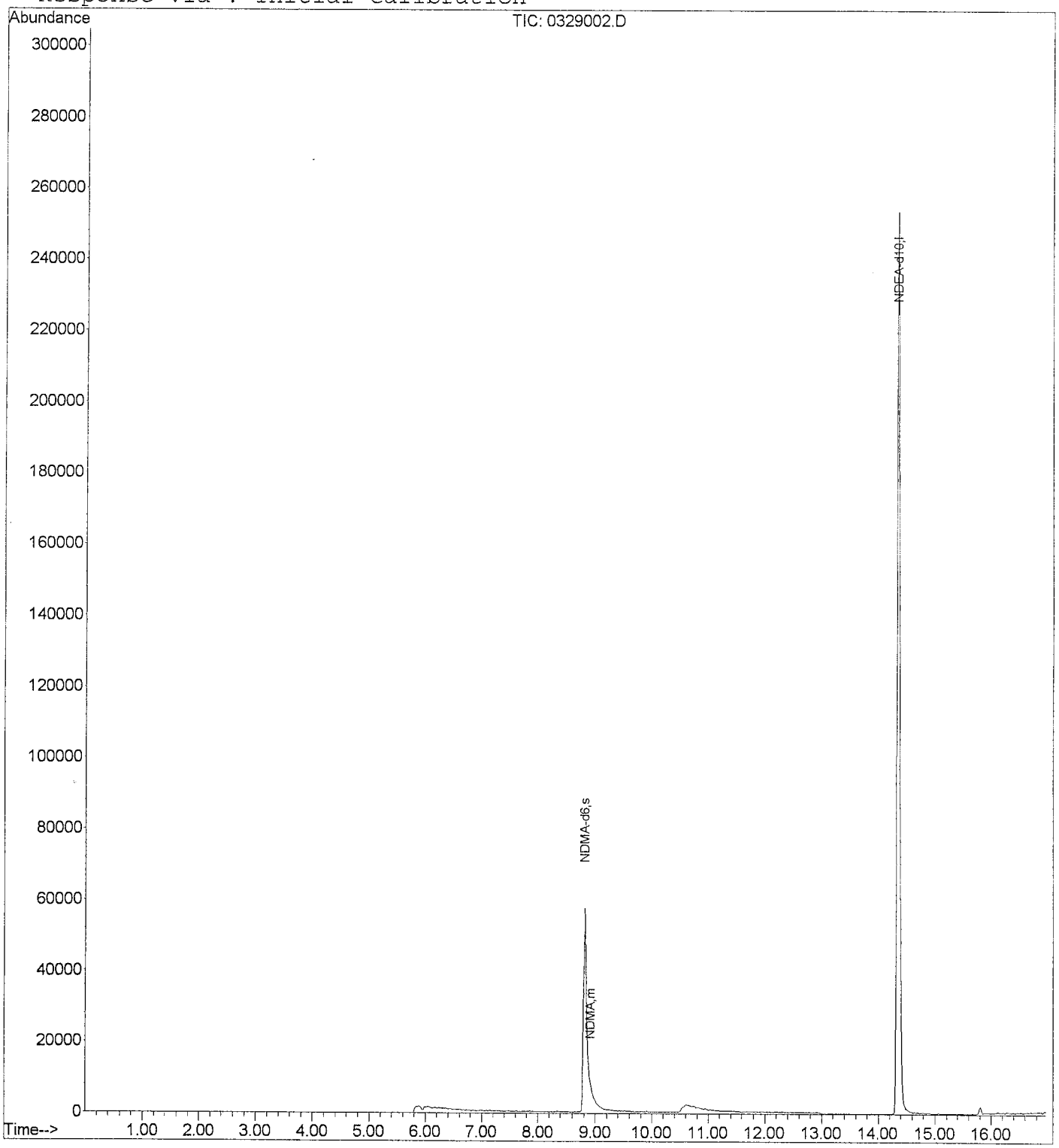
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329002.D
Acq On : 29 Mar 2007 09:22
Sample : 1PPB 3-29G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:31 2007

Vial: 2
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329003.D Vial: 3
Acq On : 29 Mar 2007 09:48 Operator: JSMITH
Sample : 2PPB 3-29H Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:31:31 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 10:31:13 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.30	81	467348	80.00 ug/ml	0.00
System Monitoring Compounds					
3) NDMA-d6	8.64	46	48726	17.40 ug/L	0.00
Target Compounds					Qvalue
2) NDMA	8.77	47	5609	1.85 ug/L	85

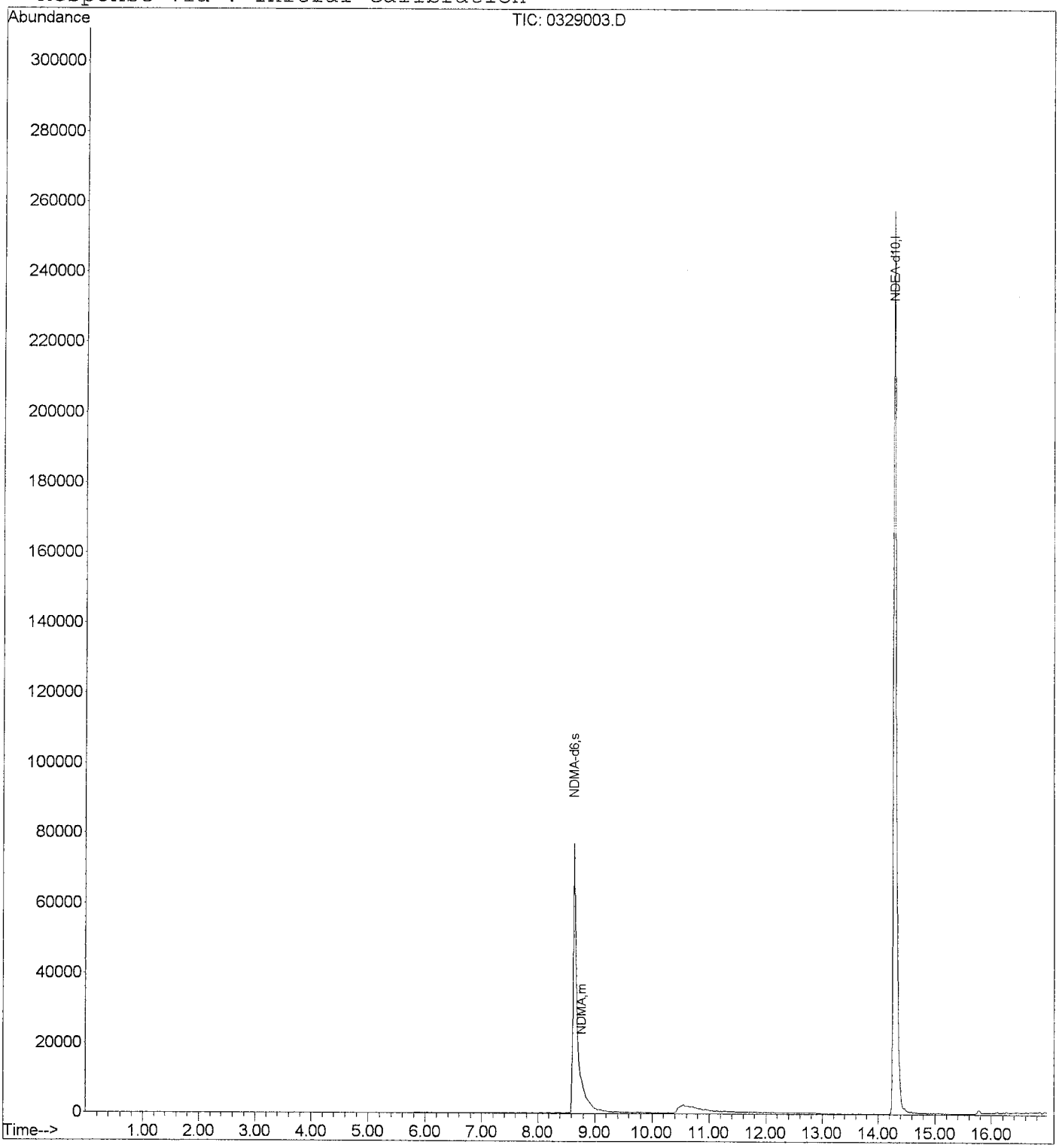
(#) = qualifier out of range (m) = manual integration
0329003.D 521_032907NDMA.M Thu Mar 29 12:48:29 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329003.D
Acq On : 29 Mar 2007 09:48
Sample : 2PPB 3-29H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:31 2007

Vial: 3
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329004.D Vial: 4
Acq On : 29 Mar 2007 10:11 Operator: JSMITH
Sample : 5PPB 3-29I Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:32:53 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 10:31:13 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) NDEA-d10	14.29	81	410007	80.00	ug/ml	-0.01
System Monitoring Compounds						
3) NDMA-d6	8.63	46	47057	19.16	ug/L	0.00
Target Compounds						Qvalue
2) NDMA	8.74	47	10672	4.02	ug/L	1

(#) = qualifier out of range (m) = manual integration

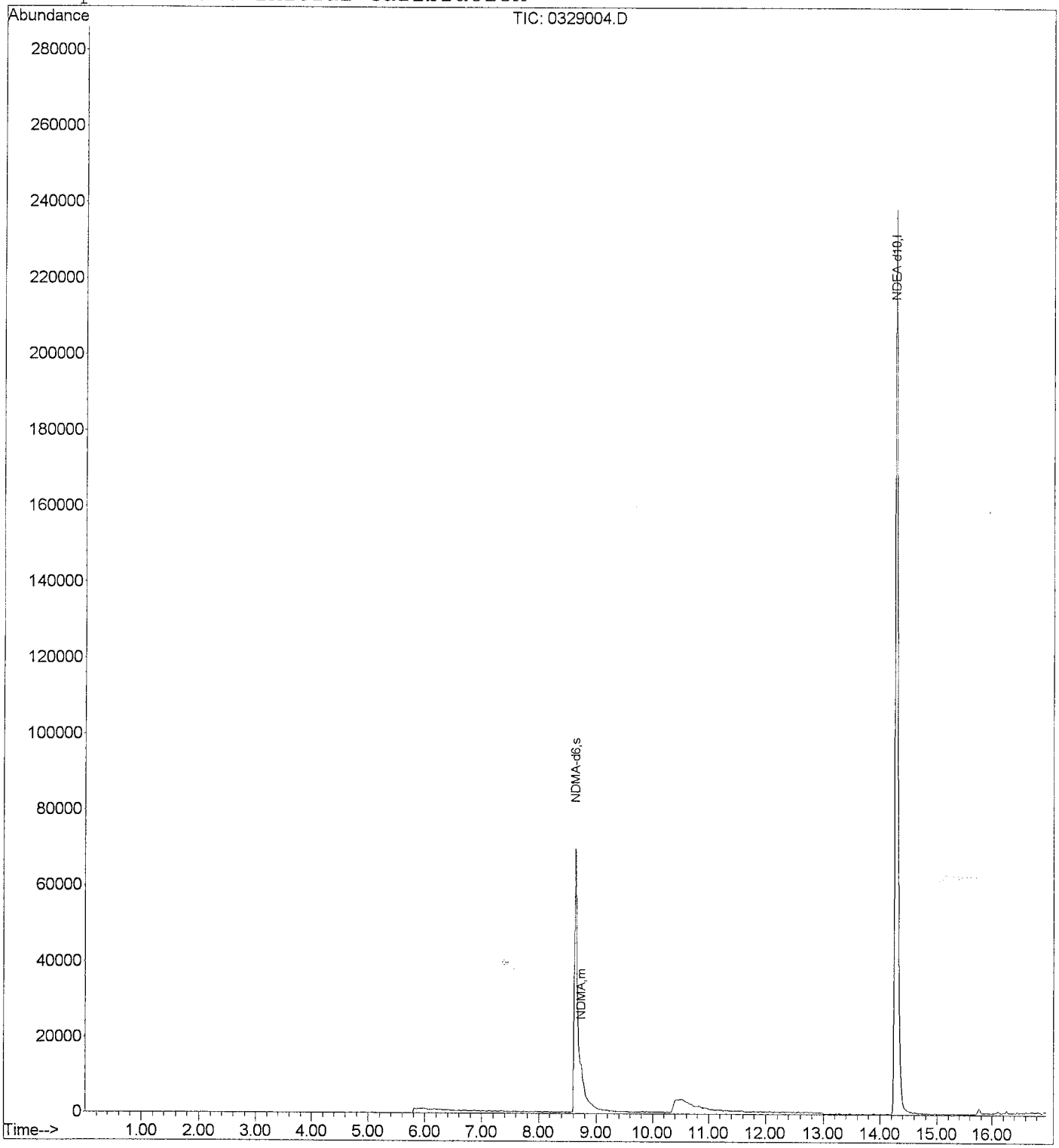
Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329004.D
Acq On : 29 Mar 2007 10:11
Sample : 5PPB 3-29I
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:32 2007

Vial: 4
Operator: JSMITH
Inst : MS16
Multiplr: 1.00

Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329005.D Vial: 5
Acq On : 29 Mar 2007 10:34 Operator: JSMITH
Sample : 10PPB 3-29J Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:55:21 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 10:31:13 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.27	81	352451	80.00 ug/ml	-0.03
System Monitoring Compounds					
3) NDMA-d6	8.60	46	47852	22.66 ug/L	-0.04
Target Compounds					Qvalue
2) NDMA	8.70	47	15853	6.94 ug/L	40

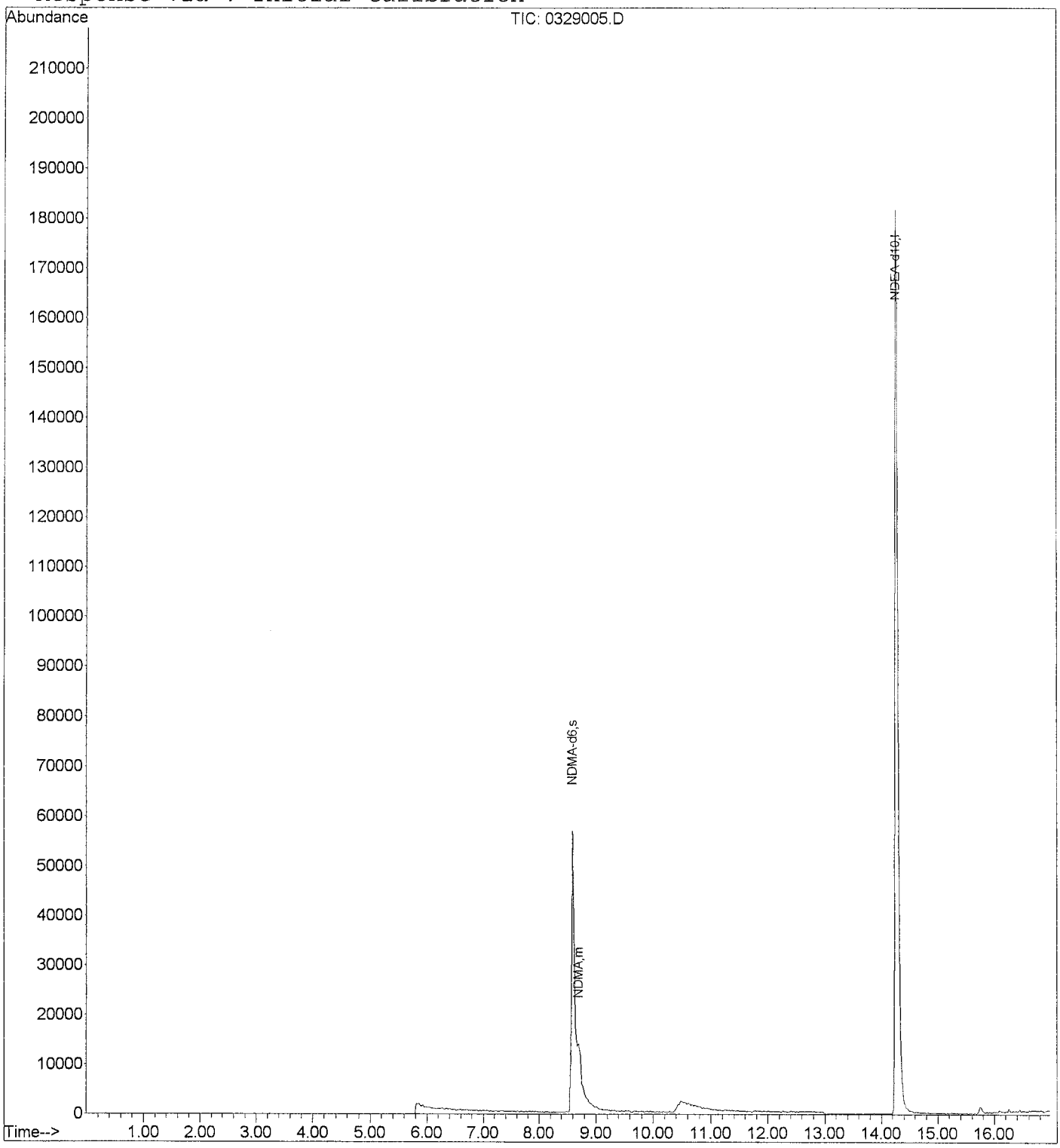
(#) = qualifier out of range (m) = manual integration
0329005.D 521_032907NDMA.M Thu Mar 29 12:48:31 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329005.D
Acq On : 29 Mar 2007 10:34
Sample : 10PPB 3-29J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 10:55 2007

Vial: 5
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329006.D Vial: 6
Acq On : 29 Mar 2007 10:57 Operator: JSMITH
Sample : 20PPB 3-29K Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 11:16:43 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 10:59:02 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.30	81	381208	80.00 ug/ml	0.00
System Monitoring Compounds					
3) NDMA-d6	8.68	46	56495	24.07 ug/L	0.04
Target Compounds					Qvalue
2) NDMA	8.78	47	33931	17.57 ug/L	99

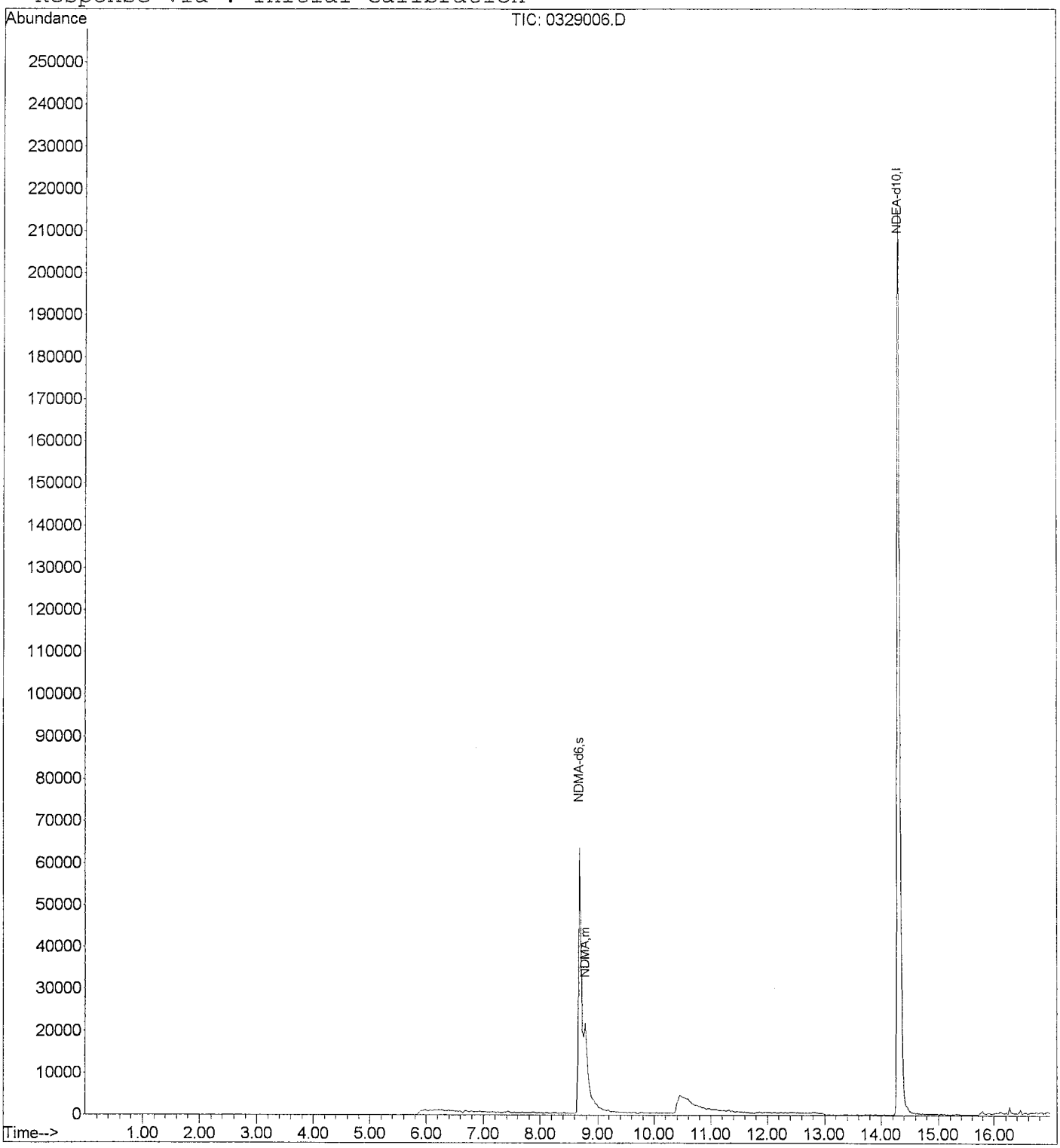
(#) = qualifier out of range (m) = manual integration
0329006.D 521_032907NDMA.M Thu Mar 29 12:48:32 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329006.D
Acq On : 29 Mar 2007 10:57
Sample : 20PPB 3-29K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 11:16 2007

Vial: 6
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329007.D Vial: 7
Acq On : 29 Mar 2007 11:19 Operator: JSMITH
Sample : 50PPB 3-28F Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 11:39:51 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 11:17:35 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.30	81	507552	80.00 ug/ml	0.00
System Monitoring Compounds					
3) NDMA-d6	8.64	46	69158	21.26 ug/L	0.00
Target Compounds					Qvalue
2) NDMA	8.74	47	116178	46.32 ug/L	79

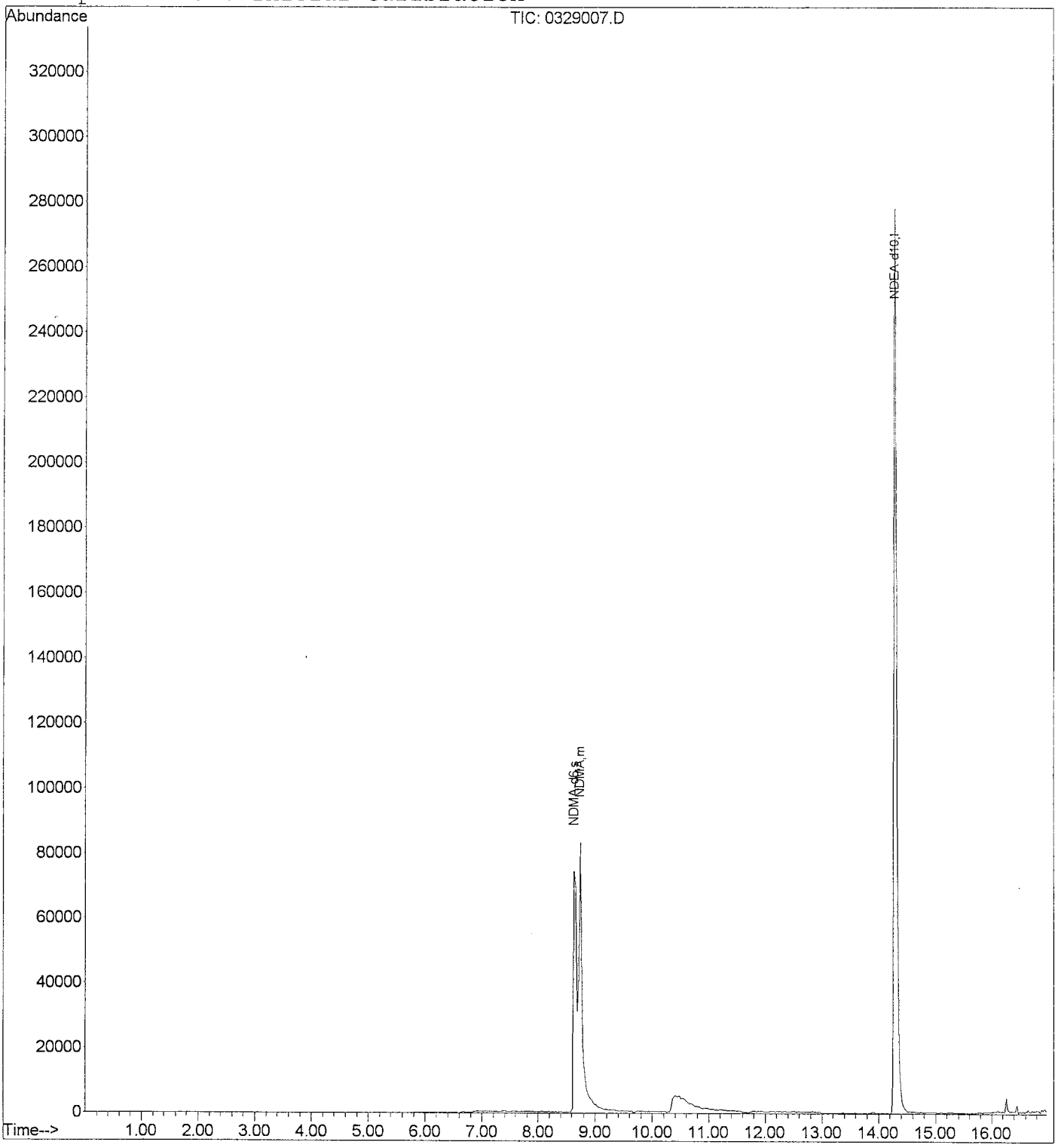
(#) = qualifier out of range (m) = manual integration
0329007.D 521_032907NDMA.M Thu Mar 29 12:48:33 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329007.D
Acq On : 29 Mar 2007 11:19
Sample : 50PPB 3-28F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 11:39 2007

Vial: 7
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329008.D Vial: 8
Acq On : 29 Mar 2007 11:42 Operator: JSMITH
Sample : ICV 20PPB 3-28Q Inst : MS16
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:00:54 2007 Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL
Last Update : Thu Mar 29 11:40:09 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.34	81	477074	80.00 ug/ml	0.05
System Monitoring Compounds					
3) NDMA-d6	8.78	46	67192	21.75 ug/L	0.14
Target Compounds					Qvalue
2) NDMA	8.89	47	38016	16.32 ug/L	78

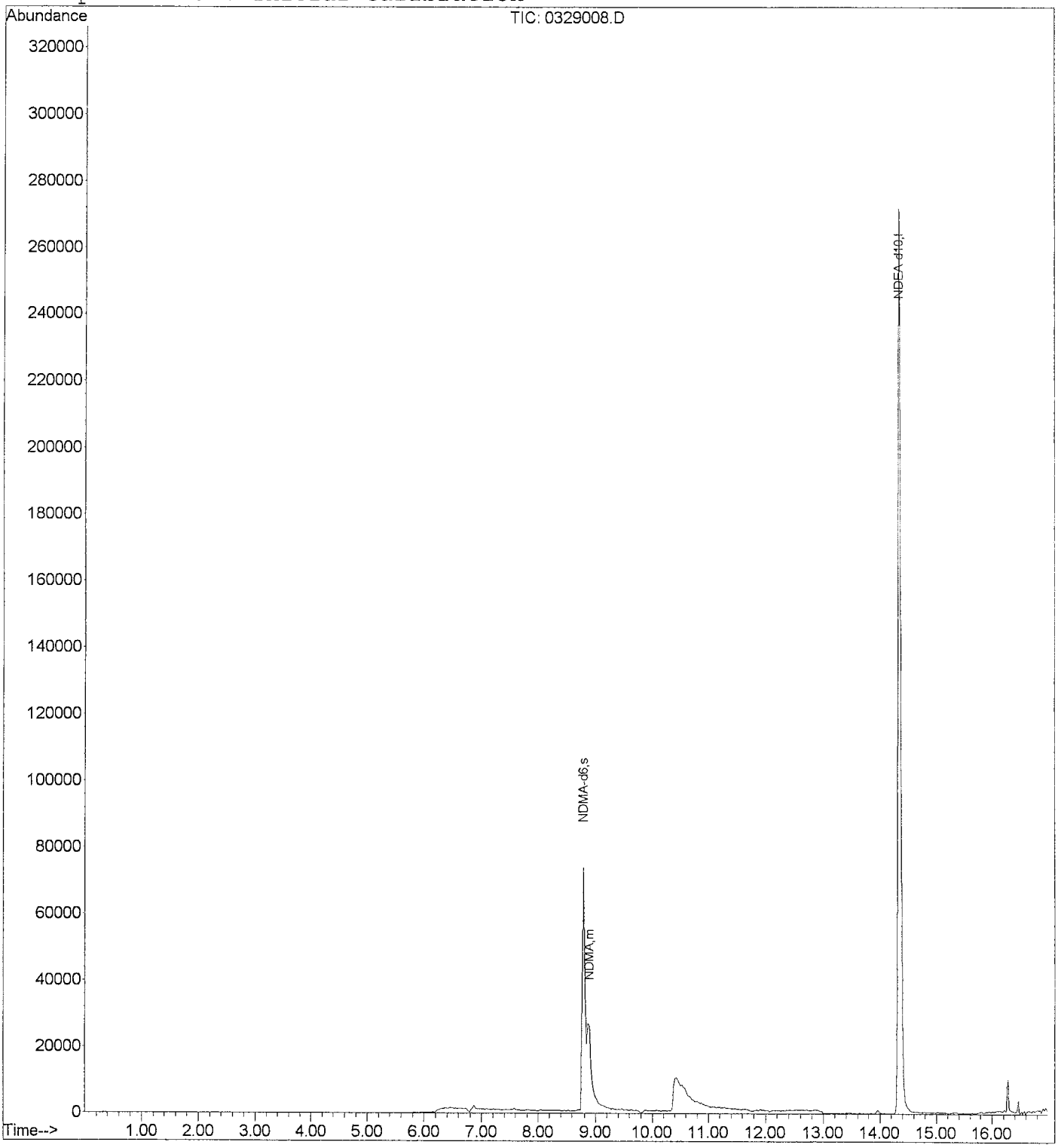
(#) = qualifier out of range (m) = manual integration
0329008.D 521_032907NDMA.M Thu Mar 29 12:48:34 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329008.D
Acq On : 29 Mar 2007 11:42
Sample : ICV 20PPB 3-28Q
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:00 2007

Vial: 8
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS16\DATA\032907\0329009.D
Lab ID: KWG0704193-2
RunType: CCV
Matrix: DRINKH2O

Date Acquired: 03/29/2007 12:06
Date Quantitated: 03/29/2007 12:51
Batch ID: KWG0704193
Analysis Method: 521
MethodJoinID: MJ756

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/30/07

Secondary Review: [illegible]

Printed: 03/30/2007 13:04:39
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	DRINKH2O
Prod Code:	521 NITROSAMINE	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704193	**Prep Lot:**		**Report Group:**	
Analysis Method:	521	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:			
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:		**Quant based on Method**	

Data File:	J:\MS16\DATA\032907\0329009.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 12:06	**Quant Date:**	03/29/2007 12:51	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0704193-2			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.36	0.06	81	469604	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.80			46	63486	20.88		70-130	NA

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	8.93			47	2225	0.9700			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6171
Method ID: MJ756
DataFile: J:\MS16\DATA\032907\0329009.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
N-Nitrosodimethylamine-d6		SURR	AverageRF	30		0.518	0.541	4.4			
N-Nitrosodimethylamine		MS	AverageRF	30		0.391	0.379	-2.9			

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329009.D
Acq On : 29 Mar 2007 12:06
Sample : 1PPB 3-29G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:51:04 2007

Vial: 2
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.36	81	469604	80.00 ug/ml	0.06
System Monitoring Compounds					
3) NDMA-d6	8.80	46	63486	20.88 ug/L	0.16
Target Compounds					Qvalue
2) NDMA	8.93	47	2225	0.97 ug/L	66

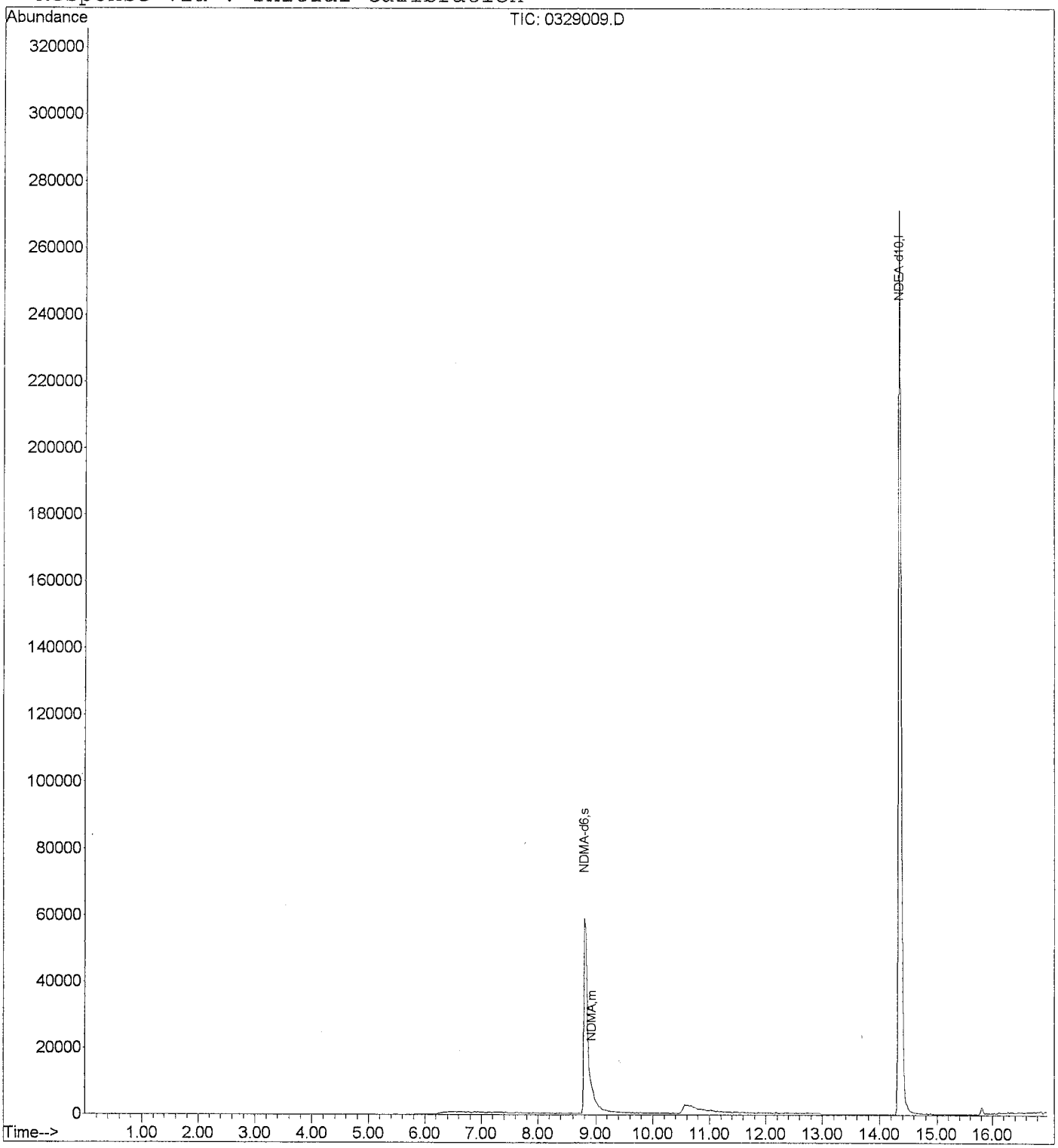
(#) = qualifier out of range (m) = manual integration
0329009.D 521_032907NDMA.M Fri Mar 30 12:54:17 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329009.D
Acq On : 29 Mar 2007 12:06
Sample : 1PPB 3-29G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 12:51 2007

Vial: 2
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS16\DATA\032907\0329014.D
Lab ID: KWG0704193-3
RunType: CCV
Matrix: DRINKH2O

Date Acquired: 03/29/2007 14:02
Date Quantitated: 03/29/2007 14:23
Batch ID: KWG0704193
Analysis Method: 521
MethodJoinID: MJ756

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/30/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	DRINKH2O
Prod Code:	521 NITROSAMINE	**Collect Date:**		**Receive Date:**	03/30/2007

Analysis Lot:	KWG0704193	**Prep Lot:**		**Report Group:**	
Analysis Method:	521	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS16\METHODS\521_032907ND	**Calibration ID:**	CAL6171
Title:			
Tune Ref:	J:\MS16\DATA\032907\0329001.D	**Method ID:**	MJ756
MB Ref:		**Quant based on Method**	

Data File:	J:\MS16\DATA\032907\0329014.D			**Instrument:**	MS16
Acqu Date:	03/29/2007 14:02	**Quant Date:**	03/29/2007 14:23	**Vial:**	6
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0704193-3			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	N-Nitrosodiethylamine-d10	14.36	0.06	81	509041	80.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	N-Nitrosodimethylamine-d6	8.84			46	63679	19.32		70-130	NA

Target Compounds

Final Conc. Units: ng/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	8.92			47	56766	22.85			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6171
Method ID: MJ756

DataFile: J:\MS16\DATA\032907\0329014.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
N-Nitrosodimethylamine-d6		SURR	AverageRF	30		0.518	0.500	-3.4			
N-Nitrosodimethylamine		MS	AverageRF	30		0.391	0.446	14.2			

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329014.D
Acq On : 29 Mar 07 14:02
Sample : 20PPB 3-29K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 14:23:41 2007

Vial: 6
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907NDMA.

Quant Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration
DataAcq Meth : 521NDMA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) NDEA-d10	14.36	81	509041	80.00 ug/ml	0.06
System Monitoring Compounds					
3) NDMA-d6	8.84	46	63679	19.32 ug/L	0.20
Target Compounds					Qvalue
2) NDMA	8.92	47	56766	22.85 ug/L	5

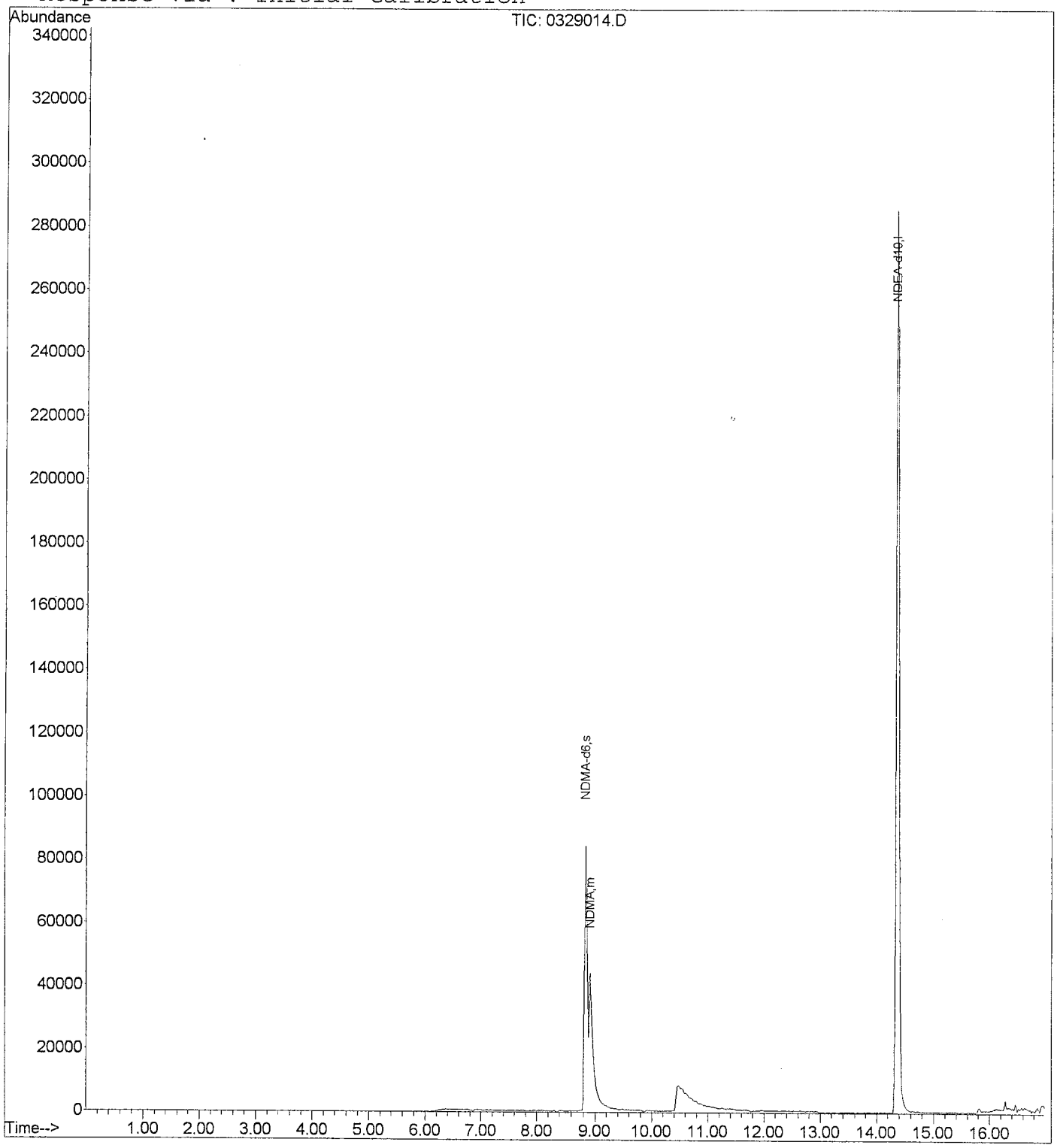
(#) = qualifier out of range (m) = manual integration
0329014.D 521_032907NDMA.M Fri Mar 30 12:54:25 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS16\DATA\032907\0329014.D
Acq On : 29 Mar 07 14:02
Sample : 20PPB 3-29K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 29 14:23 2007

Vial: 6
Operator: JSMITH
Inst : MS16
Multiplr: 1.00
Quant Results File: 521_032907ND

Method : J:\MS16\METHODS\521_032907NDMA.M (RTE Integrator)
Title : CAL 6171
Last Update : Thu Mar 29 12:40:40 2007
Response via : Initial Calibration



Preparation Information

Group ID:	KWG0704194	**Prep Method:**	METHOD	**Prep Date:**	03/13/07 08:00
Department:	Semivoa DW				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701816-002	NKGW02CL	521 Nitrosamines	WATER	500ml	1ml
KWG0704194-1	Lab Control Sample	521 Nitrosamines	WATER	500ml	1ml
KWG0704194-2	Duplicate Lab Control Sampl	521 Nitrosamines	WATER	500ml	1ml
KWG0704194-3	Method Blank	521 Nitrosamines	WATER	500ml	1ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701816-002	587354	DWSTD03-29B	40uL			
KWG0704194-1	587355	DWSTD03-29B	40uL	DWSTD03-27H	200uL	
KWG0704194-2	587356	DWSTD03-29B	40uL	DWSTD03-27H	200uL	
KWG0704194-3	587357	DWSTD03-29B	40uL			

Comments:

Started By: LPortwoo Assisted By: — Training Yes No

Completed By: LPortwoo Assisted By: — Yes No

Reviewed By: [illegible] Date: 3/30/07 Storage: 215A-F-05

Chain of Custody

Relinquished By: [illegible] Date: 3/13/07

Received By: Jim Smith Date: 3/29/07

Extracts Examined Yes No

Preparation Information Benchsheet

Prep Run#: 46153 **Prep WorkFlow:** OrgExtDW(14/28) **Status:** Draft
Team: Semivoa DW **Prep Method:** Method **Prep Date/Time:**
Number of Copies to make: 1

#	Lab Code	Client ID	B#	√	Test	Matrix	Amt Ext.	pH	Int Vol	Final Vol	Surr Added	Spike Added
1	KQ0700350-01	Lab Control Sample			521/Nitrosamines	Water	500 mL	N/A		1 mL	40 µg/L	200 µg/L
2	KQ0700350-02	Lab Control Sample Dup			521/Nitrosamines	Water						200 µg/L
3	KQ0700350-03	Method Blank			521/Nitrosamines	Water						
4	K0701816-002	NKGW02CL	.10	✓	521/Nitrosamines	Water						

Comments:

Surrogate ID: DWS TD03-29B 0.5 ppm 4/5/2007 Spike ID: DWS TD03-27H 0.1 ppm exp 5/9/07

Witnessed By:

Analyst: Assisted By: Mark Black

COLUMBIA ANALYTICAL SERVICES, INC.

Service Request No.: As Listed **Date Extracted:** 3/13/07

Analyst: Loren Portwood / Jim Smith **Method:** EPA 521

StarLims Run :

Nitrosoamines in Water

Lab ID	Client ID	Sample Volume	Surr	MS	Emuls	Final Volume
K0701816-002		500 mL	4 ml		no	1 mL
3/13/07-LCS				2 ml	No	
DLCS					No	
mB					No	

Comments: 2 ml Int Added DWSTD03-28L. 4ppm exp 11/16/07

DCM Lot # 46347 **MeOH Lot #** E04E18 **Sulfate Lot #** 2-23-07 46616035

SPE Cartridge Lot # V-24281

Surrogate ID: DWSTD03-29B exp. 5/28/07 0.5ppm

Spike ID : DWSTD03-27H 0.1ppm exp. 5/9/07

Vial: 2mL Amber **Extract Storage:** 215A-F-06 **Extracts Received:** 3/13/07

Reviewed By: J	**Date:** 3/30/07

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1588

Analytical Method: 521
Extraction Method: METHOD
Matrix: DRINKH2O
Instrument: MS16 **Column:** MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0324024.D	J:\MS16\DATA\032406\	03/24/2006 23:35	E	0324028.D	J:\MS16\DATA\032406\	03/25/2006 02:07
B	0324025.D	J:\MS16\DATA\032406\	03/25/2006 00:13	F	0324029.D	J:\MS16\DATA\032406\	03/25/2006 02:45
C	0324026.D	J:\MS16\DATA\032406\	03/25/2006 00:51	G	0324030.D	J:\MS16\DATA\032406\	03/25/2006 03:23
D	0324027.D	J:\MS16\DATA\032406\	03/25/2006 01:29	H	0324031.D	J:\MS16\DATA\032406\	03/25/2006 04:01

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
N-Nitrosodiethylamine	A	3.42	B	2.48	C	2.70	D	2.90	E	3.22	F	2.88	G	2.88	H	3.12
N-Nitrosodimethylamine	A	3.92	B	3.16	C	3.96	D	3.54	E	3.96	F	3.74	G	3.18	H	4.56
N-Nitrosodi-n-butylamine	A	4.10	B	3.62	C	4.42	D	4.34	E	4.00	F	4.12	G	4.64	H	4.02
N-Nitrosodi-n-propylamine	A	2.90	B	2.22	C	2.52	D	2.72	E	2.92	F	3.02	G	2.44	H	2.28
N-Nitrosomethylethylamine	A	3.34	B	2.94	C	2.90	D	3.08	E	3.42	F	3.30	G	3.32	H	3.44
N-Nitrosopiperidine	A	3.18	B	2.54	C	2.80	D	2.82	E	2.98	F	3.32	G	2.76	H	2.64
N-Nitrosopyrrolidine	A	3.06	B	2.18	C	2.52	D	2.72	E	2.78	F	2.60	G	2.94	H	2.54

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
N-Nitrosodiethylamine	4.00	2.95	0.297	2.998	0.89	ng/L	10	74	Valid MDL Data
N-Nitrosodimethylamine	4.00	3.75	0.461	2.998	1.4	ng/L	12	94	Valid MDL Data
N-Nitrosodi-n-butylamine	4.00	4.16	0.310	2.998	0.93	ng/L	7	104	Valid MDL Data
N-Nitrosodi-n-propylamine	4.00	2.63	0.306	2.998	0.92	ng/L	12	66	Valid MDL Data
N-Nitrosomethylethylamine	4.00	3.22	0.214	2.998	0.64	ng/L	7	80	Valid MDL Data
N-Nitrosopiperidine	4.00	2.88	0.265	2.998	0.79	ng/L	9	72	Valid MDL Data
N-Nitrosopyrrolidine	4.00	2.67	0.274	2.998	0.82	ng/L	10	67	Valid MDL Data

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Supervisor Approval: _____ QA/QC Approval: _____

Printed: 03/27/2006 14:49:06

u:\Stealth\Crystal.rpt\MDLStudy.rpt

Diesel & Residual Range Organics

Organic Analysis:
Diesel and Residual Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Cover Page - Organic Analysis Data Package
Diesel and Residual Range Organics

Sample Name	Lab Code	Date Collected	Date Received
979GW115CL	K0701816-001	03/06/2007	03/07/2007
NKGW02CL	K0701816-002	03/06/2007	03/07/2007
NKGW02CLMS	KWG0703704-1	03/06/2007	03/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: BILL MULHERIN

Date: 03\20\07

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Diesel and Residual Range Organics

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/16/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/16/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	93	65-135	03/16/07	Acceptable
n-Triacontane	102	65-135	03/16/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Diesel and Residual Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/16/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/16/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	94	65-135	03/16/07	Acceptable
n-Triacontane	103	65-135	03/16/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703704-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/15/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/15/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	65-135	03/15/07	Acceptable
n-Triacontane	100	65-135	03/15/07	Acceptable

Comments:

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
979GW115CL	K0701816-001	93	102
NKGW02CL	K0701816-002	94	103
Method Blank	KWG0703704-4	90	100
NKGW02CLMS	KWG0703704-1	99	107
Lab Control Sample	KWG0703704-2	101	107
Duplicate Lab Control Sample	KWG0703704-3	90	96

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/16/2007

Matrix Spike Summary
Diesel and Residual Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

		NKGW02CLMS KWG0703704-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C12 - C24 DRO	ND	1300	1600	81	65-135
C24 - C36 RRO	ND	849	800	106	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/15/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703704

	Lab Control Sample KWG0703704-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703704-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1400	1600	87	1280	1600	80	65-135	9	35
C24 - C36 RRO	846	800	106	760	800	95	65-135	11	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/15/2007
		Time Analyzed:	23:45

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\031507.TAR\0315F036.D
Lab Code:	KWG0703704-4	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703704-2	J:\GC21\DATA\031507.TAR\0315F034.D	03/15/07	23:04
Duplicate Lab Control Sample	KWG0703704-3	J:\GC21\DATA\031507.TAR\0315F035.D	03/15/07	23:25
979GW115CL	K0701816-001	J:\GC21\DATA\031507.TAR\0315F037.D	03/16/07	00:05
NKGW02CL	K0701816-002	J:\GC21\DATA\031507.TAR\0315F038.D	03/16/07	00:25
NKGW02CLMS	KWG0703704-1	J:\GC21\DATA\031507.TAR\0315F039.D	03/16/07	00:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703704-2	**Lab Code:**	KWG0703704-3
File ID:	J:\GC21\DATA\031507.TAR\0315F034.D	**File ID:**	J:\GC21\DATA\031507.TAR\0315F035.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/13/2007	**Date Extracted:**	03/13/2007
Date Analyzed:	03/15/2007	**Date Analyzed:**	03/15/2007
Time Analyzed:	23:04	**Time Analyzed:**	23:25

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703704-4	J:\GC21\DATA\031507.TAR\0315F036.D	03/15/07	23:45
979GW115CL	K0701816-001	J:\GC21\DATA\031507.TAR\0315F037.D	03/16/07	00:05
NKGW02CL	K0701816-002	J:\GC21\DATA\031507.TAR\0315F038.D	03/16/07	00:25
NKGW02CLMS	KWG0703704-1	J:\GC21\DATA\031507.TAR\0315F039.D	03/16/07	00:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007
Date Analyzed: 01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6131
Units: ppm

File ID: J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D
J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/15/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type:	External Standard	**Calibration Date:**	01/19/2007
Analysis Method:	8015B	**Calibration ID:**	CAL6131
		Analysis Lot:	KWG0703774
		Units:	ppm
File ID:	J:\GC21\DATA\031507.TAR\0315F027.D J:\GC21\DATA\031507.TAR\0315F028.D	**Column ID:**	ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1340	-2	NA	± 15 %	AverageRF
n-Triacontane	50	52	1060	1100	4	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1080	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	525	7	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/16/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703774
Units: ppm

File ID: J:\GC21\DATA\031507.TAR\0315F040.D
J:\GC21\DATA\031507.TAR\0315F041.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	50	1370	1360	-1	NA	± 15 %	AverageRF
n-Triacontane	50	52	1060	1110	4	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1080	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	548	12	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Analysis Run Log
Diesel and Residual Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703774
Instrument ID: GC21
Column: ZB-1 15m

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0315F027.D	Continuing Calibration Verification	KWG0703774-1	3/15/2007	20:42		3/15/2007	20:56
0315F028.D	Continuing Calibration Verification	KWG0703774-1	3/15/2007	21:03		3/15/2007	21:17
0315F029.D	Instrument Blank	KWG0703774-3	3/15/2007	21:23		3/15/2007	21:37
0315F034.D	Lab Control Sample	KWG0703704-2	3/15/2007	23:04		3/15/2007	23:18
0315F035.D	Duplicate Lab Control Sample	KWG0703704-3	3/15/2007	23:25		3/15/2007	23:39
0315F036.D	Method Blank	KWG0703704-4	3/15/2007	23:45		3/15/2007	23:59
0315F037.D	979GW115CL	K0701816-001	3/16/2007	00:05		3/16/2007	00:19
0315F038.D	NKGW02CL	K0701816-002	3/16/2007	00:25		3/16/2007	00:39
0315F039.D	NKGW02CLMS	KWG0703704-1	3/16/2007	00:46		3/16/2007	01:00
0315F040.D	Continuing Calibration Verification	KWG0703774-2	3/16/2007	01:06		3/16/2007	01:20
0315F041.D	Continuing Calibration Verification	KWG0703774-2	3/16/2007	01:26		3/16/2007	01:40
0315F042.D	Instrument Blank	KWG0703774-4	3/16/2007	01:47		3/16/2007	02:01

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007

Extraction Prep Log
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: KWG0703704
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
979GW115CL	K0701816-001	03/06/07	03/07/07	1050ml	2.0ml	NA	
NKGW02CL	K0701816-002	03/06/07	03/07/07	1050ml	2.0ml	NA	
Method Blank	KWG0703704-4	NA	NA	1000ml	2.0ml	NA	
NKGW02CLMS	KWG0703704-1	03/06/07	03/07/07	1000ml	2.0ml	NA	
Lab Control Sample	KWG0703704-2	NA	NA	1000ml	2.0ml	NA	
Duplicate Lab Control Sample	KWG0703704-3	NA	NA	1000ml	2.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
979GW115CL	K0701816-001	93	102
NKGW02CL	K0701816-002	94	103
Method Blank	KWG0703704-4	90	100
NKGW02CLMS	KWG0703704-1	99	107
Lab Control Sample	KWG0703704-2	101	107
Duplicate Lab Control Sample	KWG0703704-3	90	96

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/16/2007

Matrix Spike Summary
Diesel and Residual Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

		NKGW02CLMS KWG0703704-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C12 - C24 DRO	ND	1300	1600	81	65-135
C24 - C36 RRO	ND	849	800	106	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/15/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703704

	Lab Control Sample KWG0703704-2 Lab Control Spike			Duplicate Lab Control Sample KWG0703704-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1400	1600	87	1280	1600	80	65-135	9	35
C24 - C36 RRO	846	800	106	760	800	95	65-135	11	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/15/2007
		Time Analyzed:	23:45

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\031507.TAR\0315F036.D
Lab Code:	KWG0703704-4	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703704-2	J:\GC21\DATA\031507.TAR\0315F034.D	03/15/07	23:04
Duplicate Lab Control Sample	KWG0703704-3	J:\GC21\DATA\031507.TAR\0315F035.D	03/15/07	23:25
979GW115CL	K0701816-001	J:\GC21\DATA\031507.TAR\0315F037.D	03/16/07	00:05
NKGW02CL	K0701816-002	J:\GC21\DATA\031507.TAR\0315F038.D	03/16/07	00:25
NKGW02CLMS	KWG0703704-1	J:\GC21\DATA\031507.TAR\0315F039.D	03/16/07	00:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0703704-2	**Lab Code:**	KWG0703704-3
File ID:	J:\GC21\DATA\031507.TAR\0315F034.D	**File ID:**	J:\GC21\DATA\031507.TAR\0315F035.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	03/13/2007	**Date Extracted:**	03/13/2007
Date Analyzed:	03/15/2007	**Date Analyzed:**	03/15/2007
Time Analyzed:	23:04	**Time Analyzed:**	23:25

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703704

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0703704-4	J:\GC21\DATA\031507.TAR\0315F036.D	03/15/07	23:45
979GW115CL	K0701816-001	J:\GC21\DATA\031507.TAR\0315F037.D	03/16/07	00:05
NKGW02CL	K0701816-002	J:\GC21\DATA\031507.TAR\0315F038.D	03/16/07	00:25
NKGW02CLMS	KWG0703704-1	J:\GC21\DATA\031507.TAR\0315F039.D	03/16/07	00:46

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Diesel and Residual Range Organics

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/16/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/16/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	93	65-135	03/16/07	Acceptable
n-Triacontane	102	65-135	03/16/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F037.D
Lab ID: K0701816-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/16/2007 00:05
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 031907

Secondary Review: 92

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	K0701816
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583875	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\031507.TAR\0315F036.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\031507.TAR\0315F037.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 00:05	**Quant Date:**	03/16/2007 11:38	**Vial:**	36
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-001			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	31718	23.14	93	65-135	OK
n-Triacontane	7.60	0.00	27049	25.44	102	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2706	2.45	50	U	
C24 - C36 RRO	6.35	?	2768	5.65	300	U	

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

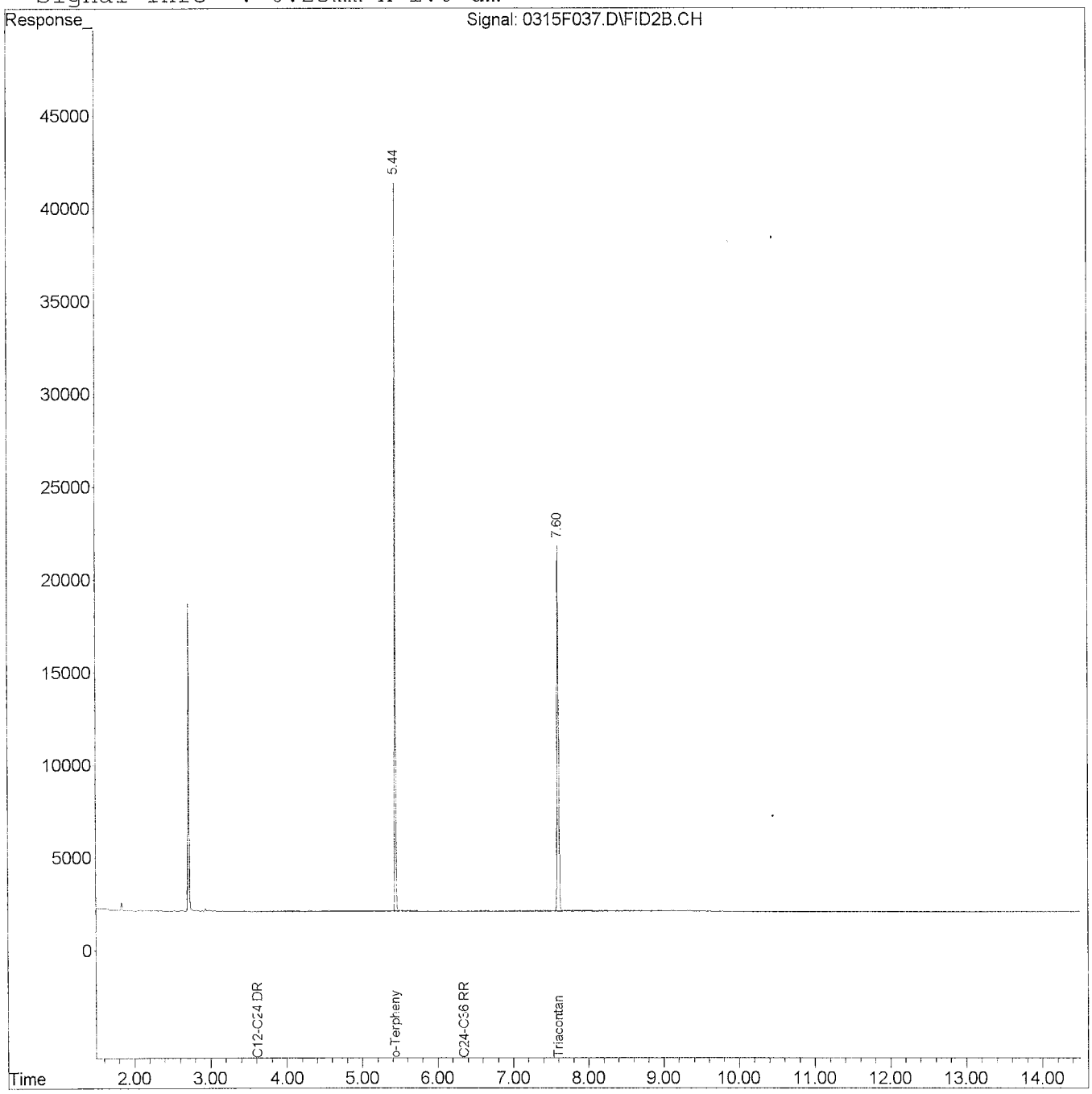
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F037.D Vial: 36
Acq On : 16 Mar 2007 12:05 am Operator: PMulherin
Sample : K0701816-001 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Diesel and Residual Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/16/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/16/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	94	65-135	03/16/07	Acceptable
n-Triacontane	103	65-135	03/16/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F038.D
Lab ID: K0701816-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/16/2007 00:25
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 031907

Secondary Review: 9L

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	K0701816
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583876	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\031507.TAR\0315F036.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\031507.TAR\0315F038.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 00:25	**Quant Date:**	03/16/2007 11:38	**Vial:**	37
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-002			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	32090	23.41	94	65-135	OK
n-Triacontane	7.60	0.00	27288	25.67	103	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	4681	4.23	50	U	
C24 - C36 RRO	6.35	?	7758	15.83	300	U	

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

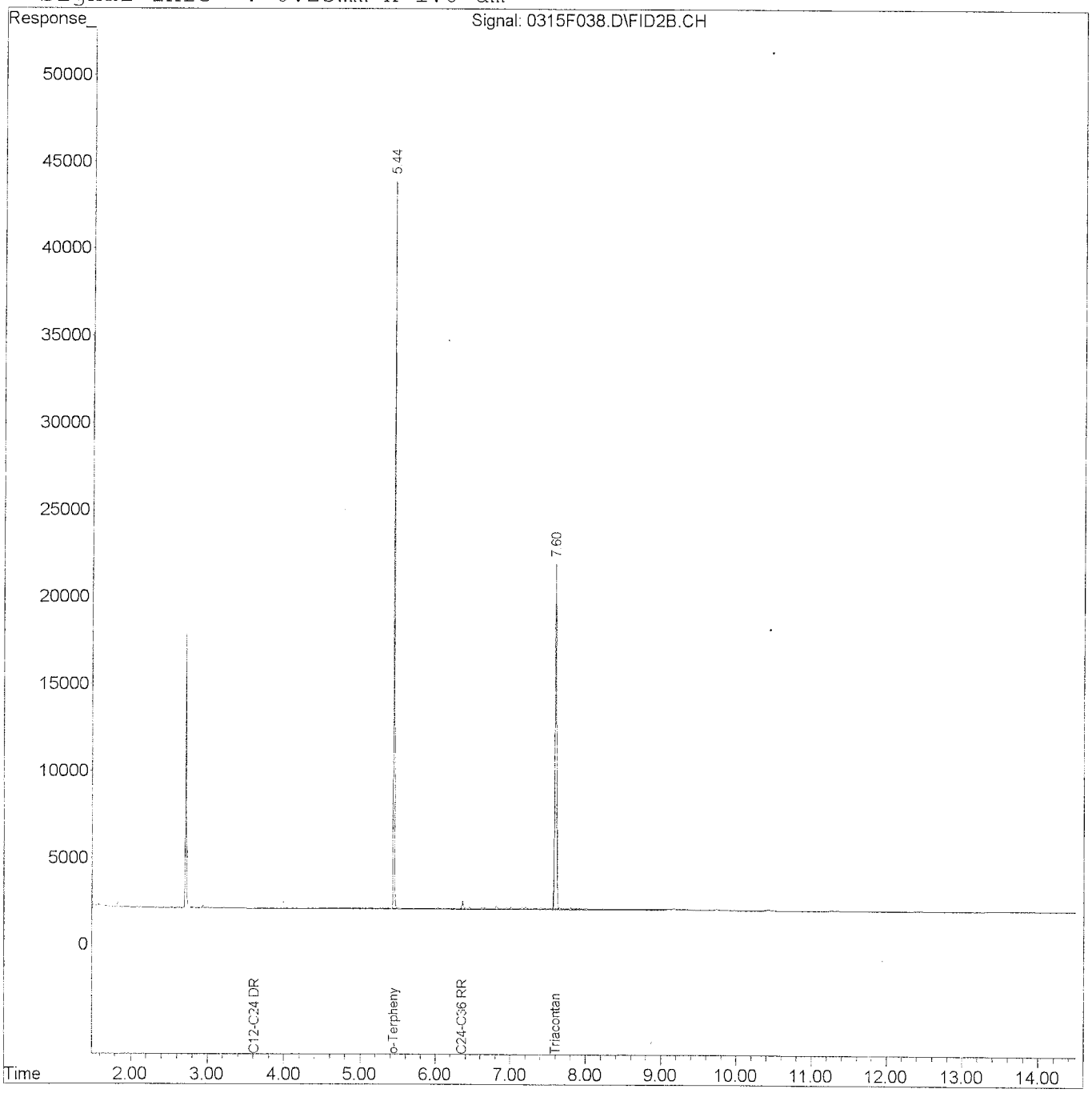
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F038.D Vial: 37
Acq On : 16 Mar 2007 12:25 am Operator: PMulherin
Sample : K0701816-002 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703704-4	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	03/13/07	03/15/07	KWG0703704	
C24 - C36 RRO	ND	U	300	1	03/13/07	03/15/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	65-135	03/15/07	Acceptable
n-Triacontane	100	65-135	03/15/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F036.D
Lab ID: KWG0703704-4
RunType: MB
Matrix: WATER

Date Acquired: 03/15/2007 23:45
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 03/19/07

Secondary Review: 92

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583880	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F036.D			**Instrument:**	GC21
Acqu Date:	03/15/2007 23:45	**Quant Date:**	03/16/2007 11:38	**Vial:**	35
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703704-4			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	30972	22.60	90	65-135	OK
n-Triacontane	7.60	0.00	26538	24.96	100	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	2727	2.46	50	U	
C24 - C36 RRO	6.35	?	4630	9.44	300	U	

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

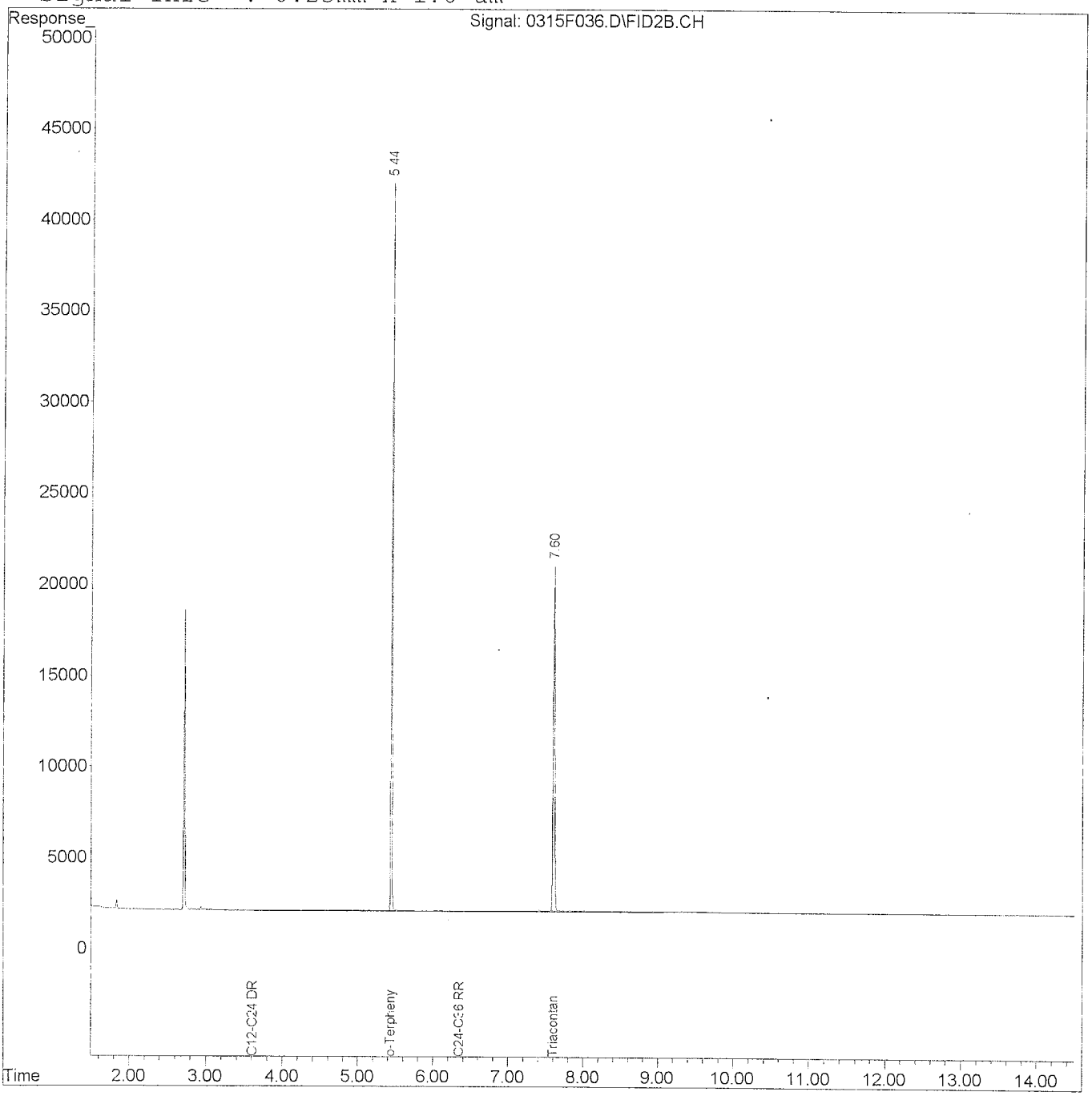
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F036.D
Acq On : 15 Mar 2007 11:45 pm
Sample : KWG0703507MB
Misc :
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Vial: 35
Operator: PMulherin
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Diesel and Residual Range Organics

Sample Name:	NKGW02CLMS	**Units:**	ug/L
Lab Code:	KWG0703704-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1300**		50	1	03/13/07	03/16/07	KWG0703704	
C24 - C36 RRO	**849**		300	1	03/13/07	03/16/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	99	65-135	03/16/07	Acceptable
n-Triacontane	107	65-135	03/16/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F039.D
Lab ID: KWG0703704-1 -- K0701816-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/16/2007 00:46
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 03/19/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583877	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:	J:\GC21\DATA\031507.TAR\0315F036.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F039.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 00:46	**Quant Date:**	03/16/2007 11:38	**Vial:**	38
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703704-1 -- K0701816-002MS			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	34057	24.85	99	65-135	OK
n-Triacontane	7.60	0.00	28500	26.81	107	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	719806	650.45	1300		
C24 - C36 RRO	6.35	?	208199	424.69	849		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

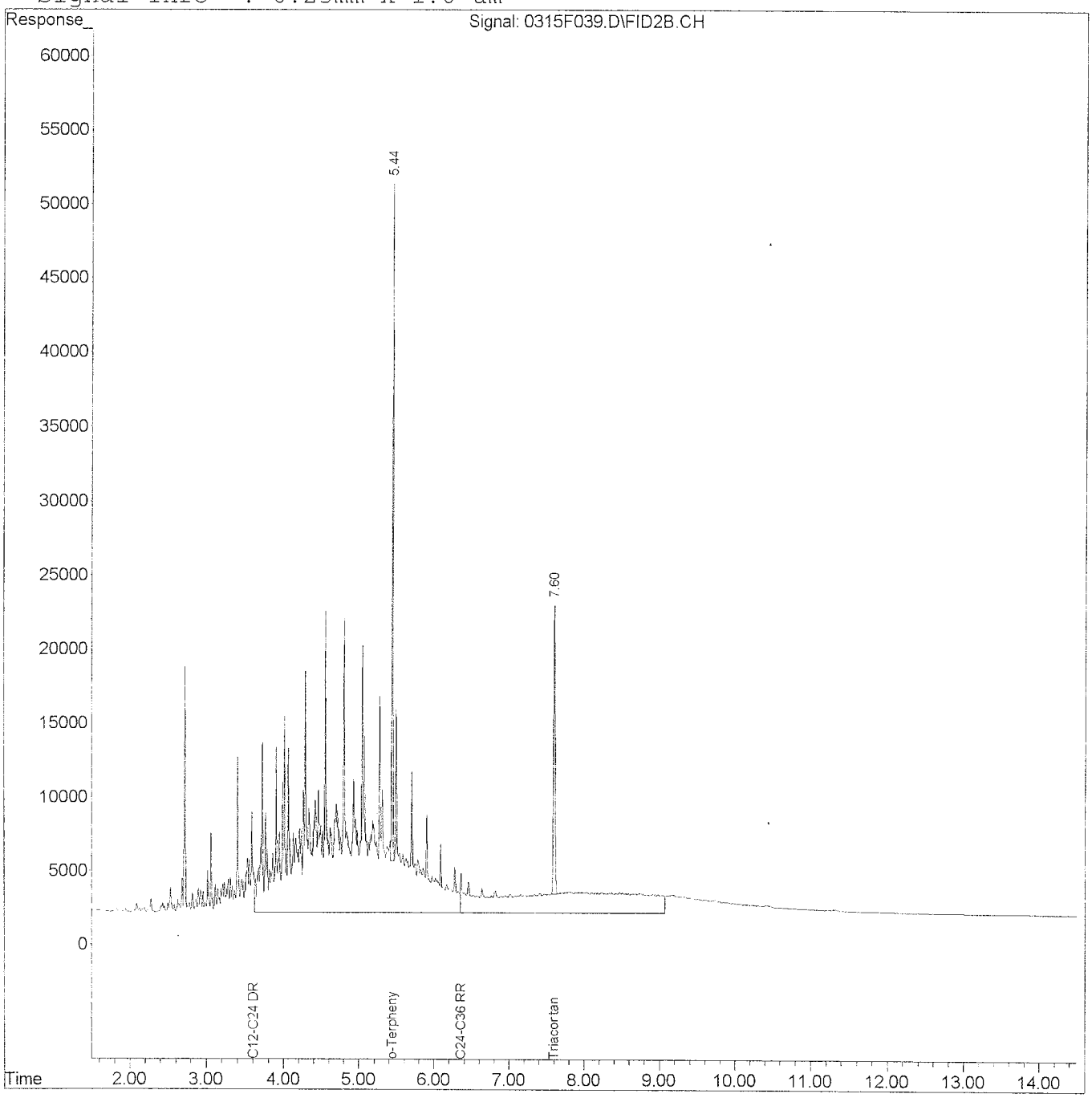
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F039.D Vial: 38
Acq On : 16 Mar 2007 12:46 am Operator: PMulherin
Sample : K0701816-002MS Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703704-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1400**		50	1	03/13/07	03/15/07	KWG0703704	
C24 - C36 RRO	**846**		300	1	03/13/07	03/15/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	101	65-135	03/15/07	Acceptable
n-Triacontane	107	65-135	03/15/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F034.D
Lab ID: KWG0703704-2
RunType: LCS
Matrix: WATER

Date Acquired: 03/15/2007 23:04
Date Quantitated: 03/16/2007 11:37
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: PM 03/19/07

Secondary Review: gc

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583878	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\031507.TAR\0315F036.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F034.D			**Instrument:**	GC21
Acqu Date:	03/15/2007 23:04	**Quant Date:**	03/16/2007 11:37	**Vial:**	33
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703704-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	34565	25.22	101	65-135	OK
n-Triacontane	7.60	0.00	28492	26.80	107	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	774161	699.57	1400		
C24 - C36 RRO	6.35	?	207292	422.84	846		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

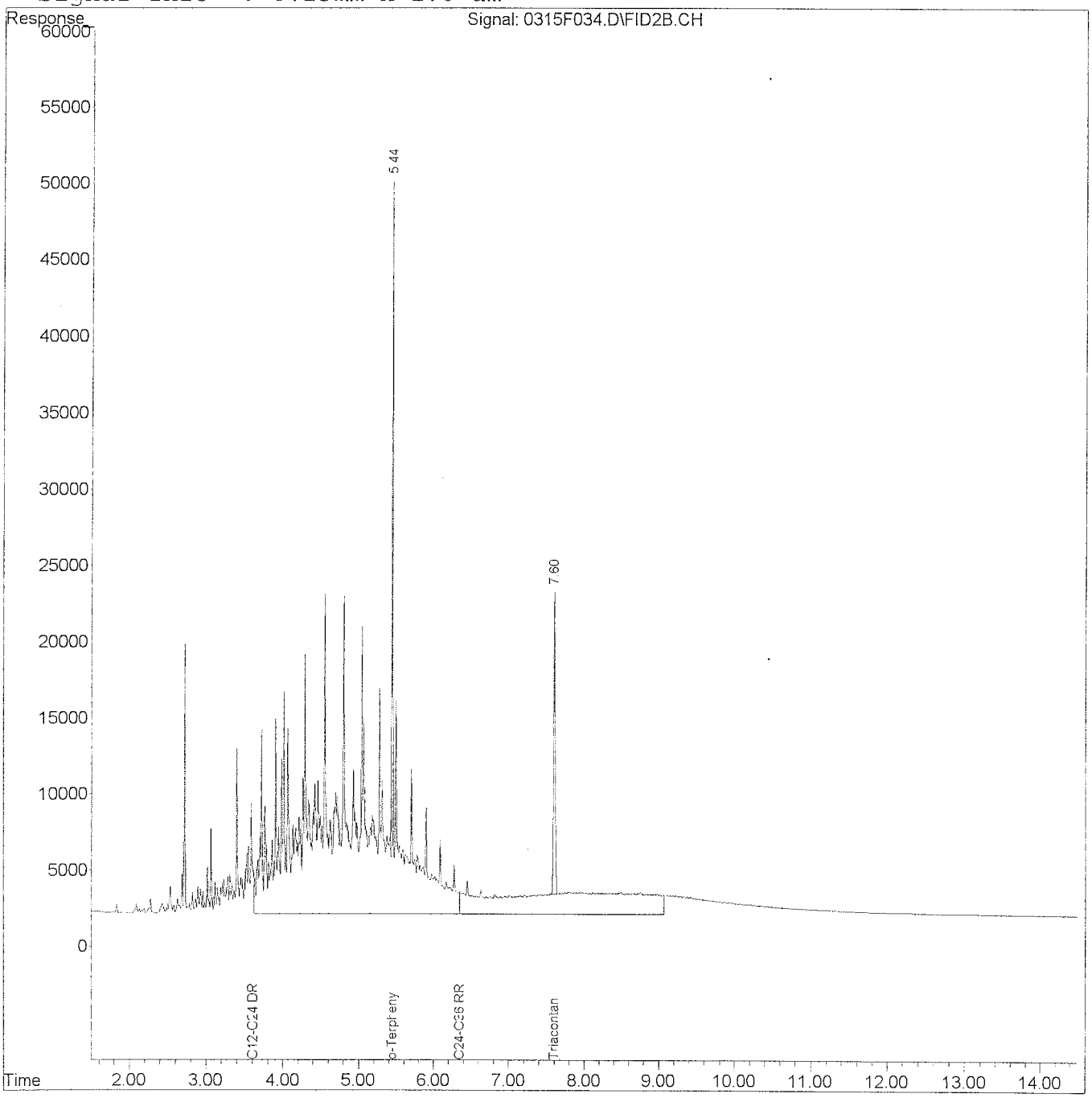
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F034.D Vial: 33
Acq On : 15 Mar 2007 11:04 pm Operator: PMulherin
Sample : KWG0703507LCS Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703704-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1280**		50	1	03/13/07	03/15/07	KWG0703704	
C24 - C36 RRO	**760**		300	1	03/13/07	03/15/07	KWG0703704	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	90	65-135	03/15/07	Acceptable
n-Triacontane	96	65-135	03/15/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F035.D
Lab ID: KWG0703704-3
RunType: DLCS
Matrix: WATER

Date Acquired: 03/15/2007 23:25
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: VMG 3/19/07

Secondary Review: gc

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703774	**Prep Lot:**	KWG0703704	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	583879	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:		**Method ID:**	MJ828
MB Ref:	J:\GC21\DATA\031507.TAR\0315F036.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F035.D			**Instrument:**	GC21
Acqu Date:	03/15/2007 23:25	**Quant Date:**	03/16/2007 11:38	**Vial:**	34
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0703704-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44	0.00	30849	22.51	90	65-135	OK
n-Triacontane	7.60	0.00	25505	23.99	96	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	708456	640.20	1280		
C24 - C36 RRO	6.35	?	186173	379.76	760		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

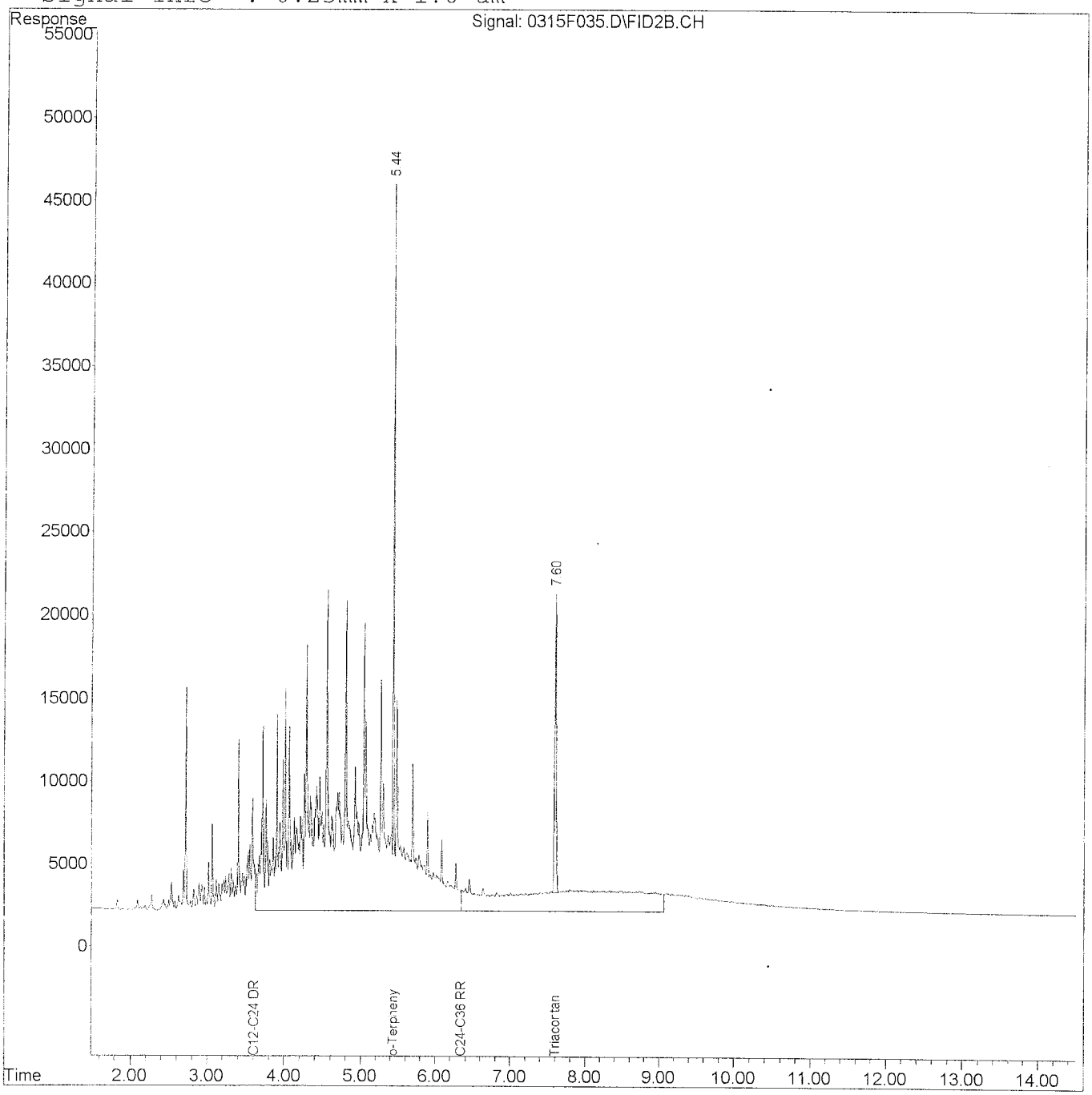
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F035.D
Acq On : 15 Mar 2007 11:25 pm
Sample : KWG0703507DLCS
Misc :
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Vial: 34
Operator: PMulherin
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D	H	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D
B	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D	I	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D
C	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D	J	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D
D	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D	K	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D
E	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D	L	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D
F	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D	M	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D
G	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D	N	J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl	A	1.0	1390	B	2.5	1310				D	10	1280			
	F	25	1430				H	50	1350				J	100	1370
				L	200	1480									
n-Triacontane	A	1.0	1040	B	2.5	1000				D	10	1010			
	F	25	1130				H	50	1030				J	100	1050
				L	200	1170									
C12 - C24 DRO	A	20	1180	B	50	1070				D	200	1050			
	F	500	1160				H	1000	1100				J	2000	1110
				L	4000	1200				N	20000	992			
C24 - C36 RRO							C	50	480				E	200	483
				G	500	488				I	1000	498			
	K	2000	507				M	5000	485						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6131
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	5.0		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.1		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	6.4		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	2.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 01/19/2007
Date Analyzed: 01/19/2007 - 01/20/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6131
Units: ppm

File ID: J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D
J:\GC21\DATA\CALIBRAT\031307.TAR\0119F031.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	890	1110	987	-11	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	940	490	460	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\GC21\METHODS\0313TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

0313TAR aka CAL6131
Calibration Last Updated: Wed Mar 14 13:57:26 2007

Reference Window: 10.00 Minutes
Non-Reference Window: 5.00 Minutes
Correlation Window: 0.02 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) o-Terphenyl ( )
Ret. Time 5.44 min., Extract & Integrate from 5.39 to 5.49 min.

Lvl ID Conc (ppm) Response

D/S	50.000	-1
G/O	not used for this compound	
1	1.000	1388
2	2.500	3265
3	10.000	12778
4	25.000	35673
5	50.000	67304
6	100.000	137387
7	200.000	295291
8	not used for this compound	

Curve Fit: Avg. RF

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2) Triacontane (C-30) ( )

Ret. Time 7.61 min., Extract & Integrate from 7.56 to 7.66 min.

Lvl	ID	Conc (ppm)	Response
D/S		50.000	-1
G/O		not used for this compound	
1		1.000	1040
2		2.500	2511
3		10.000	10075
4		25.000	28327
5		50.000	51518
6		100.000	105399
7		200.000	234677
8		not used for this compound	

Curve Fit: Avg. RF

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3) C12-C24 DRO ( )

Ret. Time 3.62 min., Extract & Integrate from 3.62 to 6.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		1000.000	-1
G/O		not used for this compound	
1		20.000	23553
2		50.000	53433
3		200.000	209426
4		500.000	582096
5		1000.000	1095644
6		2000.000	2213286
7		4000.000	4805299
8		20000.000	19835056

MB1607

Curve Fit: Avg. RF

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4) C24-C36 RRO ( )

Ret. Time 6.36 min., Extract & Integrate from 6.36 to 9.09 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		1000.000	-1
1		20.000	-1
2		50.000	24008
3		200.000	96695
4		500.000	243833

5	1000.000	498377
6	2000.000	1013769
7	5000.000	2424406
8	not used for this compound	

Curve Fit: Avg. RF

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5) Ethylbenzene ( )

Ret. Time 2.49 min., Extract & Integrate from 2.44 to 2.54 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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6) p,m-Xylenes ( )

Ret. Time 2.53 min., Extract & Integrate from 2.48 to 2.58 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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Curve Fit: Avg. RF

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7) o-Xylene ( )

Ret. Time 2.62 min., Extract & Integrate from 2.57 to 2.67 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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8) a-Pinene ( )
Ret. Time 2.83 min., Extract & Integrate from 2.78 to 2.88 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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9) b-Pinene ( )
Ret. Time 2.99 min., Extract & Integrate from 2.94 to 3.04 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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10) 1,2,3-Trimethylbenzene ( )
Ret. Time 3.12 min., Extract & Integrate from 3.07 to 3.17 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

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sb

Curve Fit: Avg. RF

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11) Fluoranthene ( )
Ret. Time 5.84 min., Extract & Integrate from 5.79 to 5.89 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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12) Pyrene ( )

Ret. Time 5.95 min., Extract & Integrate from 5.90 to 6.00 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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13) Pristane ( )

Ret. Time 5.07 min., Extract & Integrate from 5.02 to 5.12 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

mm 03/16/07

Curve Fit: Avg. RF

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14) Phytane ( )

Ret. Time 5.31 min., Extract & Integrate from 5.26 to 5.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	

4 not used for this compound
5 not used for this compound
6 not used for this compound
7 not used for this compound
8 not used for this compound

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Fri Mar 16 11:13:06 2007

pm 3/16/07

Gle

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14:39 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35477	25.882 ppm
Spiked Amount 50.000	Recovery	=	51.76%
2) S Triacontane (C-30)	7.61	57008	53.617 ppm
Spiked Amount 50.000	Recovery	=	107.23%
Target Compounds			
3) H C12-C24 DRO	3.62	454422	410.638 ppm
4) H C24-C36 RRO	6.36	346019	705.815 ppm

pm 03/16/07

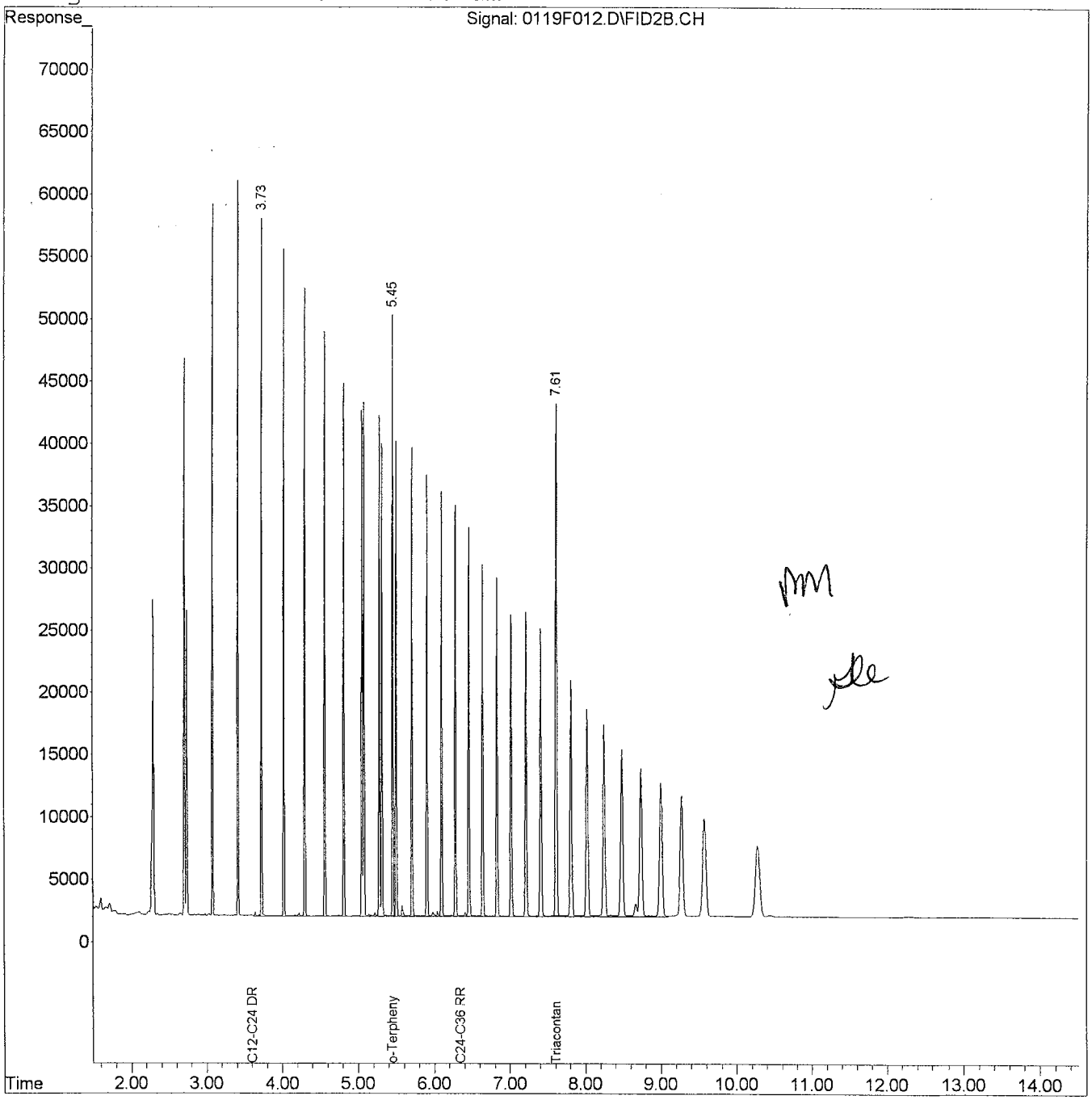
(f)=RT Delta > 1/2 Window (m)=manual int.

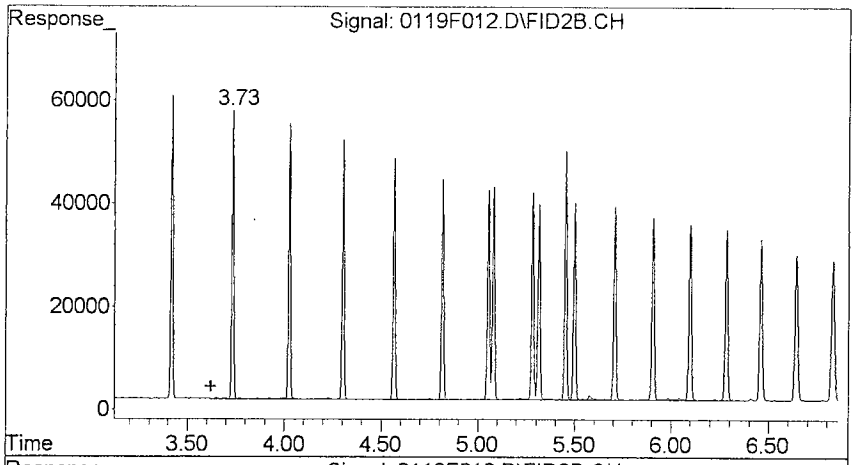
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F012.D Vial: 4
Acq On : 19 Jan 2007 5:46 pm Operator: PMulherin
Sample : HCSV7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:14 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Wed Mar 14 13:57:26 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

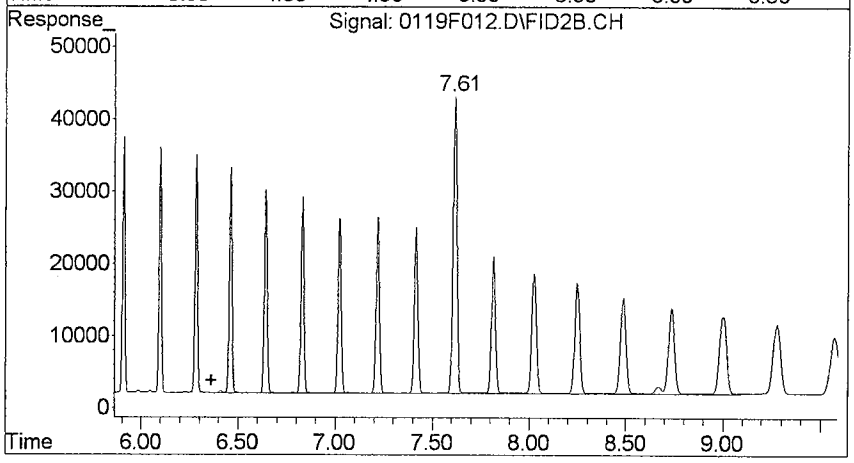
Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um





#3 C12-C24 DRO

R.T.: 3.620 min
Delta R.T.: 0.000 min
Response: 454422
Conc: 410.64 ppm m



#4 C24-C36 RRO

R.T.: 6.360 min
Delta R.T.: 0.000 min
Response: 346019
Conc: 705.81 ppm m

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:06 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	1388	1.031 ppm
Spiked Amount 50.000	Recovery	=	2.06%
2) S Triacontane (C-30)	7.62	1040	1.009 ppm
Spiked Amount 50.000	Recovery	=	2.02%
Target Compounds			
3) H C12-C24 DRO	3.63	23553	21.497 ppm

PM 031607
Gla

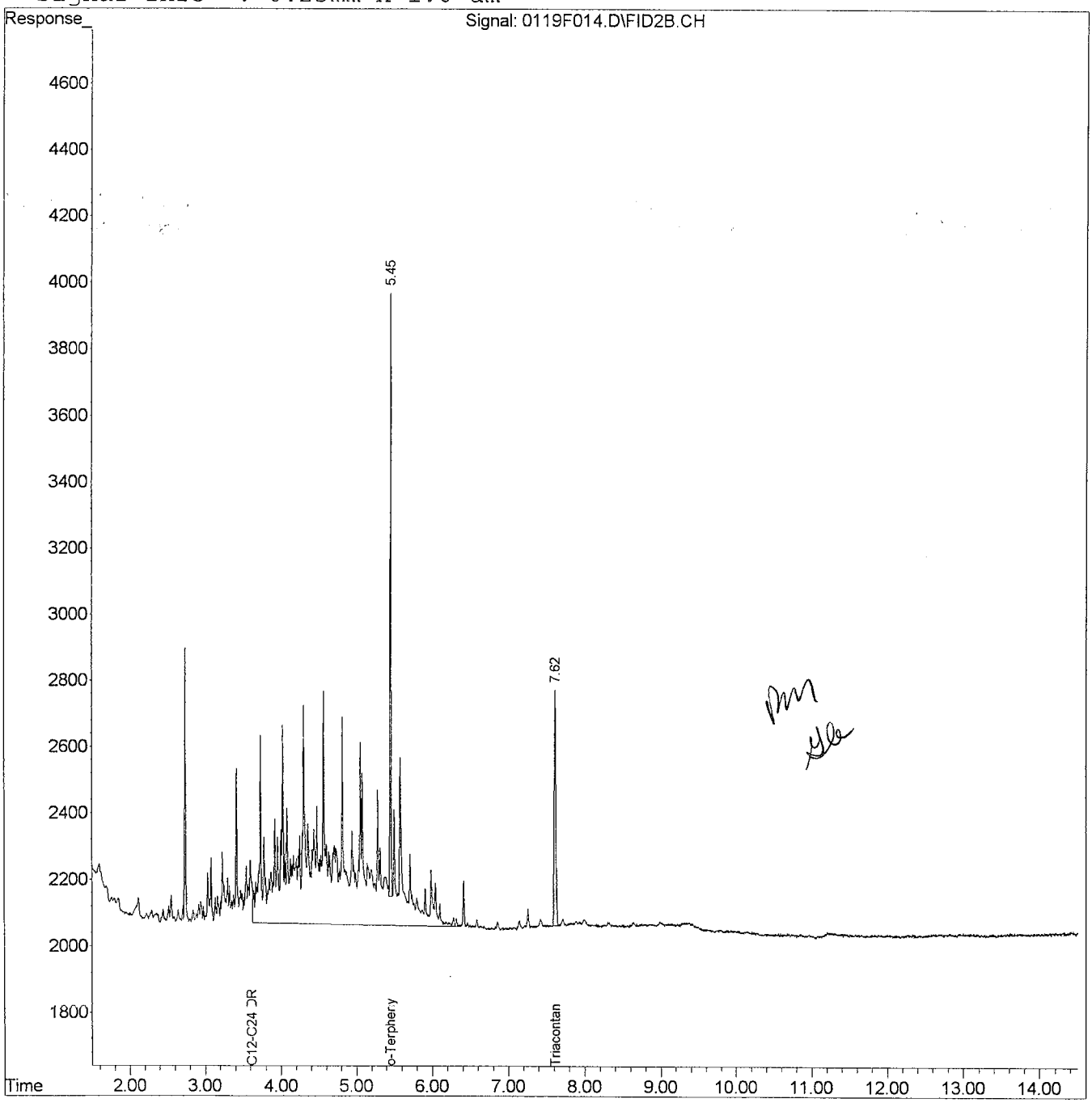
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F014.D Vial: 18
Acq On : 19 Jan 2007 6:28 pm Operator: PMulherin
Sample : HCSV7-93E 20/1 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:11 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	3265	2.426 ppm
Spiked Amount 50.000		Recovery =	4.85%
2) S Triacontane (C-30)	7.61	2511	2.437 ppm
Spiked Amount 50.000		Recovery =	4.87%
Target Compounds			
3) H C12-C24 DRO	3.63	53433	48.769 ppm

PM 03/16/07

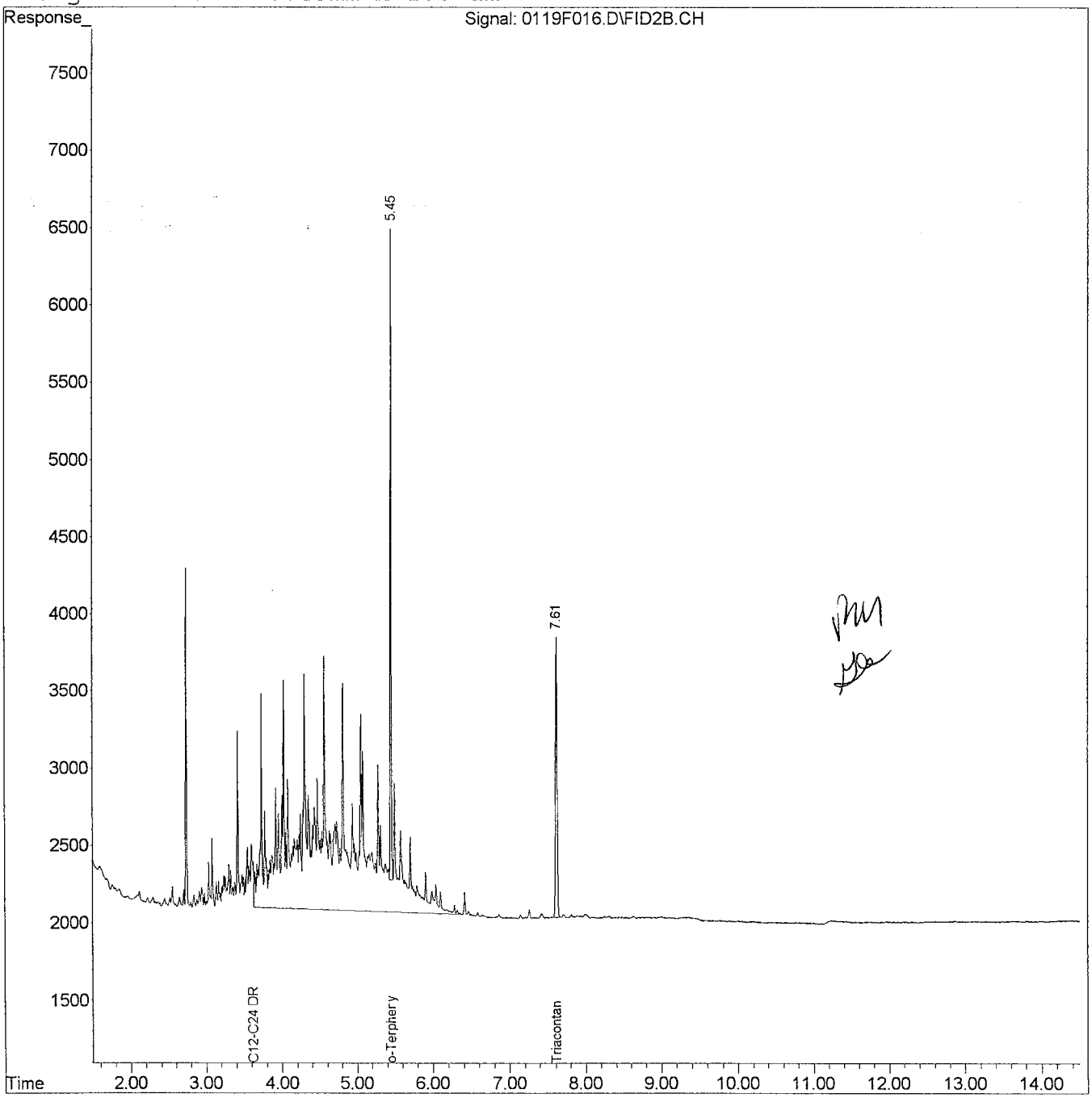
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F016.D Vial: 19
Acq On : 19 Jan 2007 7:08 pm Operator: PMulherin
Sample : HCSV7-93D 50/2.5 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:12 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	24008	48.172 ppm

PM 03/16/07
pee

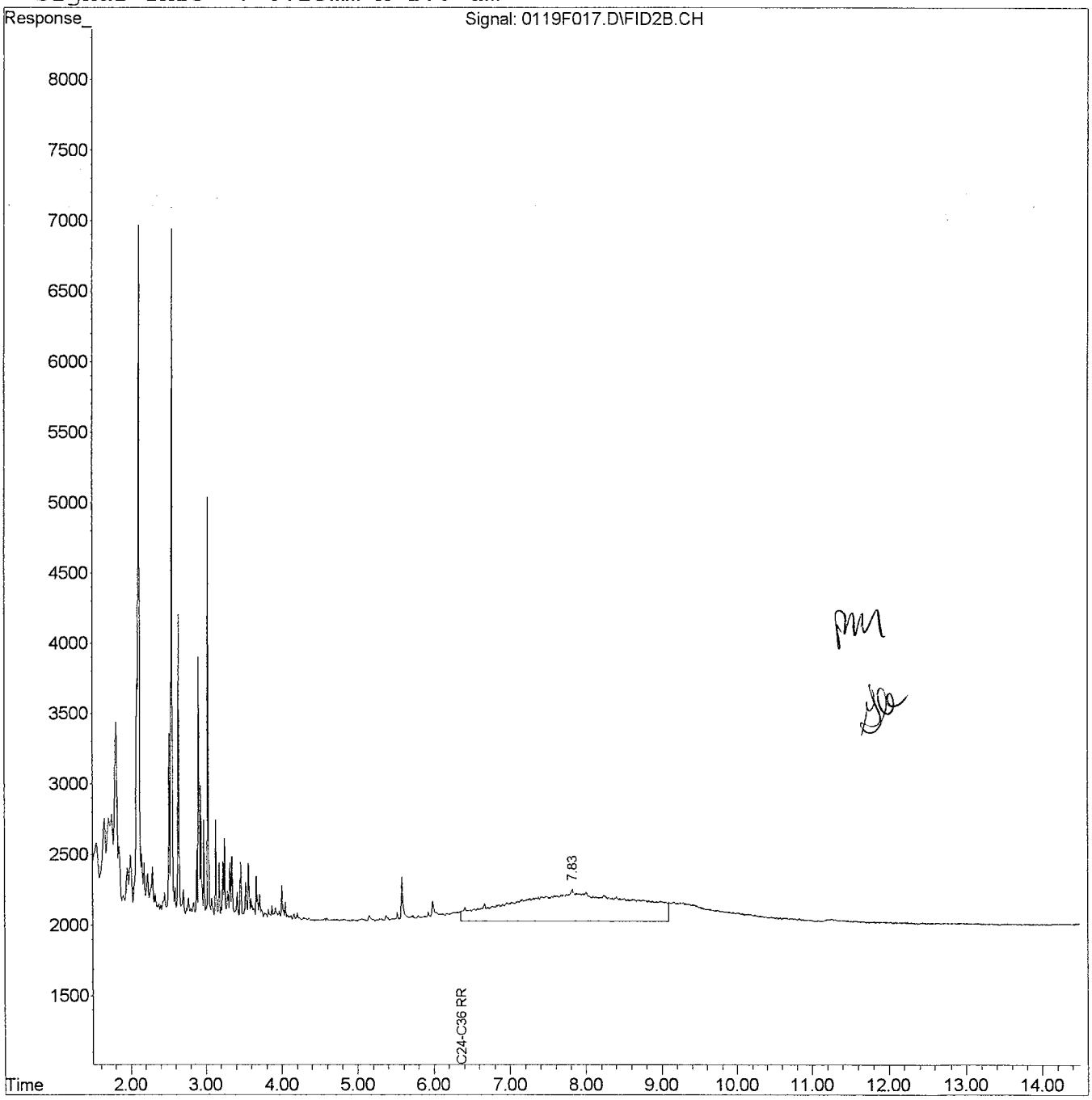
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F017.D Vial: 12
Acq On : 19 Jan 2007 7:28 pm Operator: PMulherin
Sample : HCSV8-2C 50/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:13 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	12778	9.493 ppm
Spiked Amount 50.000	Recovery	=	18.99%
2) S Triacontane (C-30)	7.61	10075	9.778 ppm
Spiked Amount 50.000	Recovery	=	19.56%
Target Compounds			
3) H C12-C24 DRO	3.63	209426	191.144 ppm

pm03/16/07
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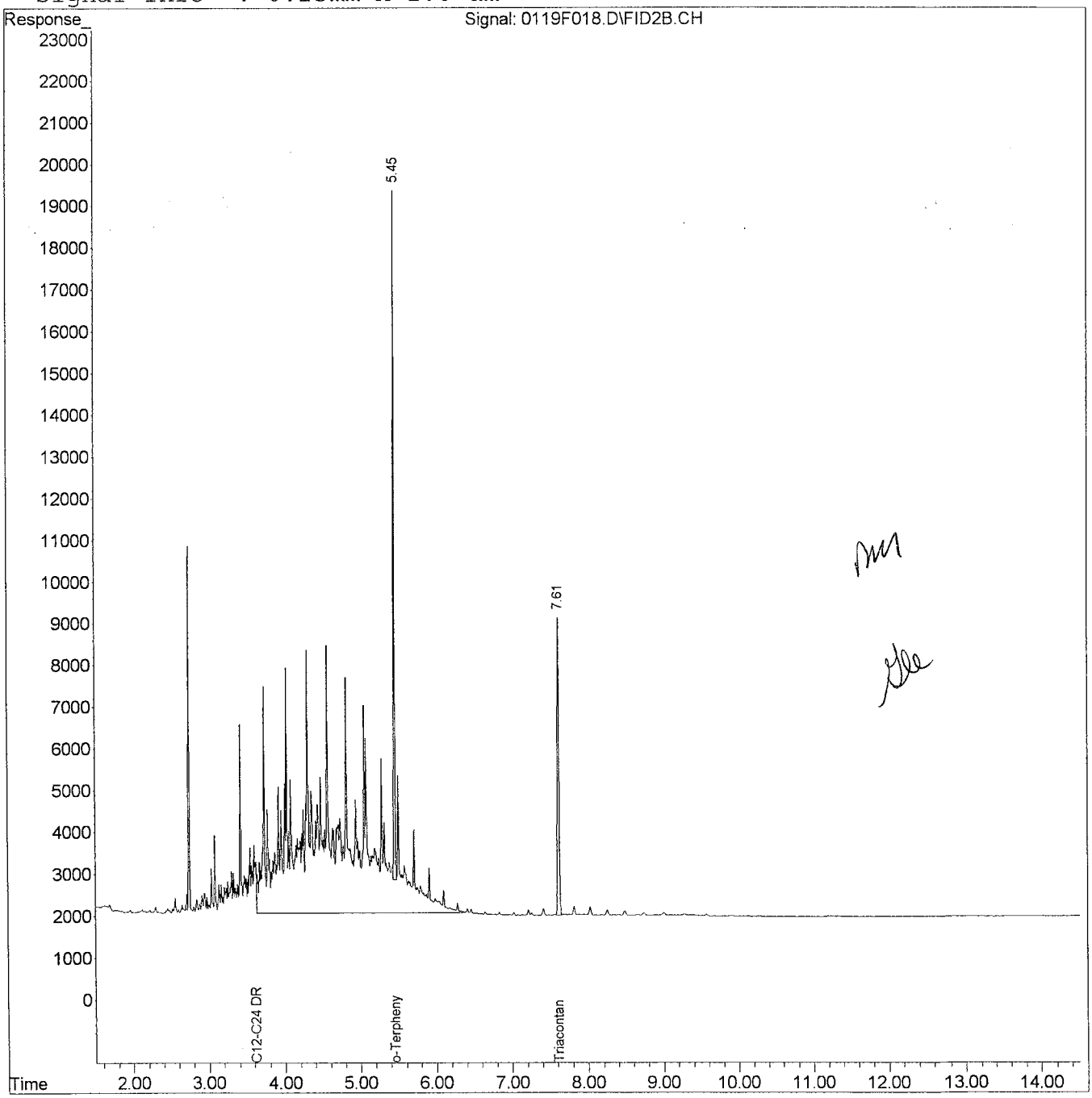
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F018.D Vial: 20
Acq On : 19 Jan 2007 7:48 pm Operator: PMulherin
Sample : HCSV7-93C 200/10 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:15 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	96695	194.020 ppm

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Ale

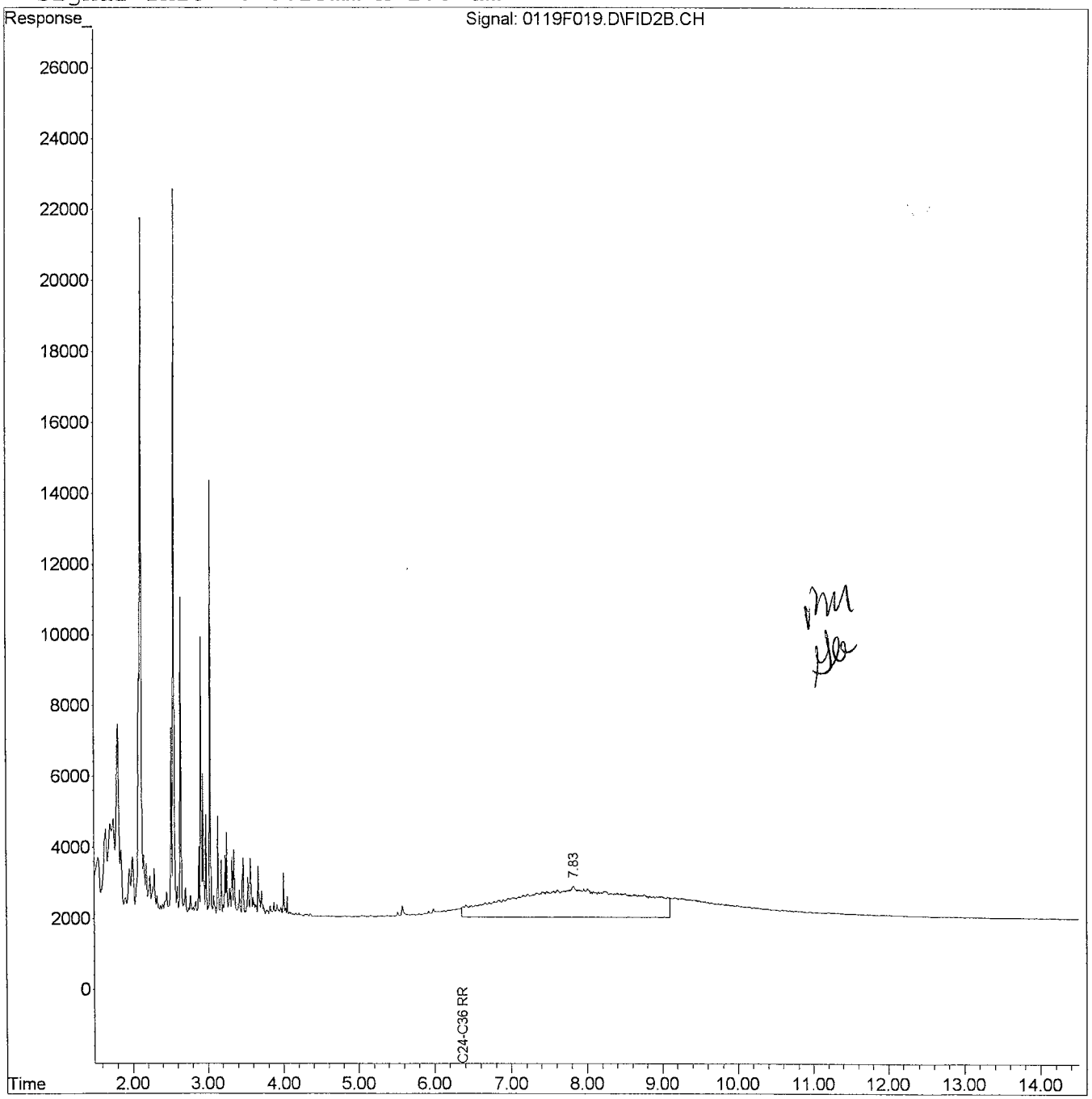
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F019.D Vial: 13
Acq On : 19 Jan 2007 8:08 pm Operator: PMulherin
Sample : HCSV8-2B 200/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:16 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	35673	26.501 ppm
Spiked Amount 50.000	Recovery	=	53.00%
2) S Triacontane (C-30)	7.61	28327	27.492 ppm
Spiked Amount 50.000	Recovery	=	54.98%
Target Compounds			
3) H C12-C24 DRO	3.63	582096	531.282 ppm

PM03/16/07

file

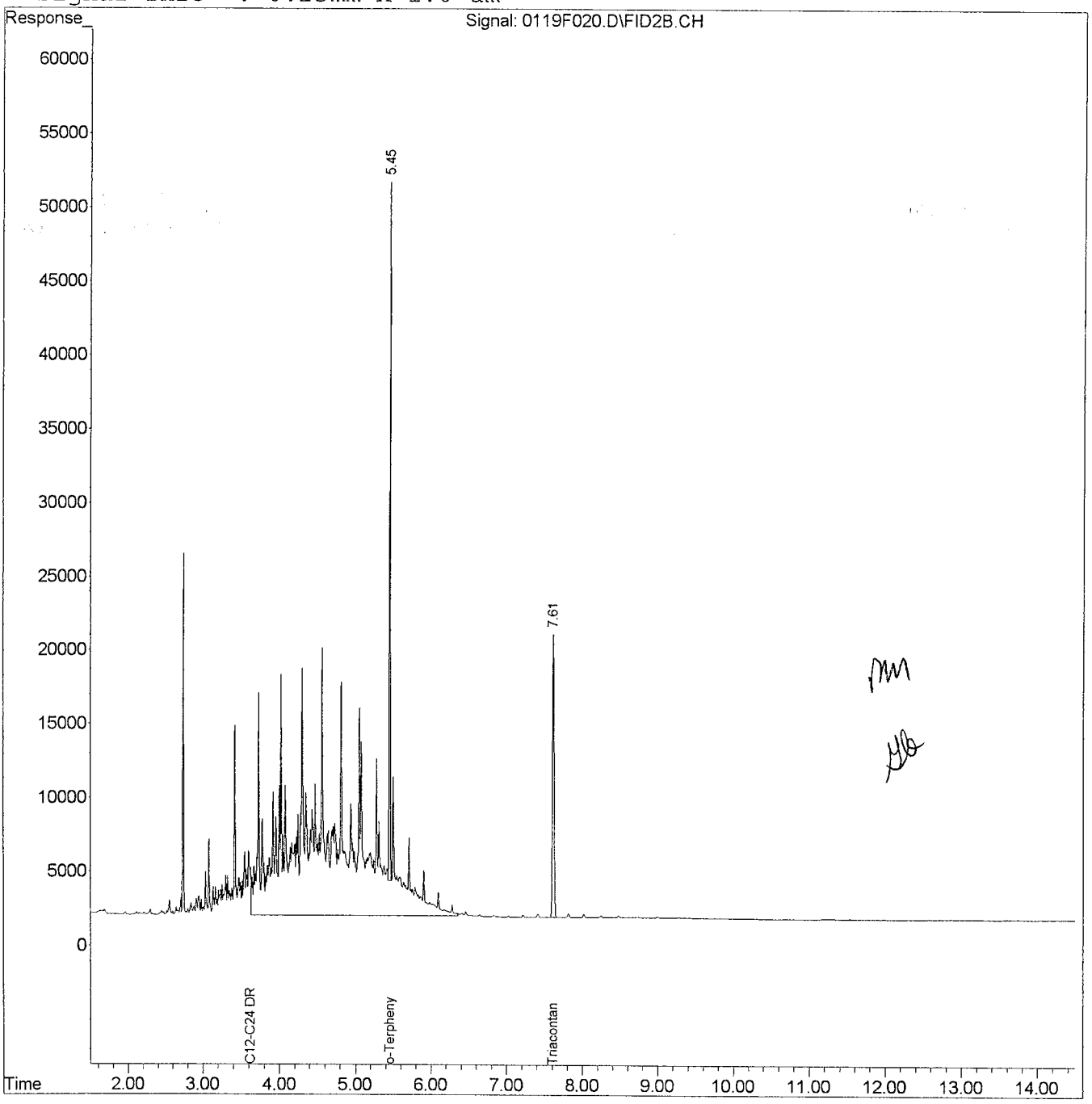
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F020.D Vial: 21
Acq On : 19 Jan 2007 8:29 pm Operator: PMulherin
Sample : HCSV7-93B 500/25 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:17 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.36	243833	489.254 ppm

PMB 16 07

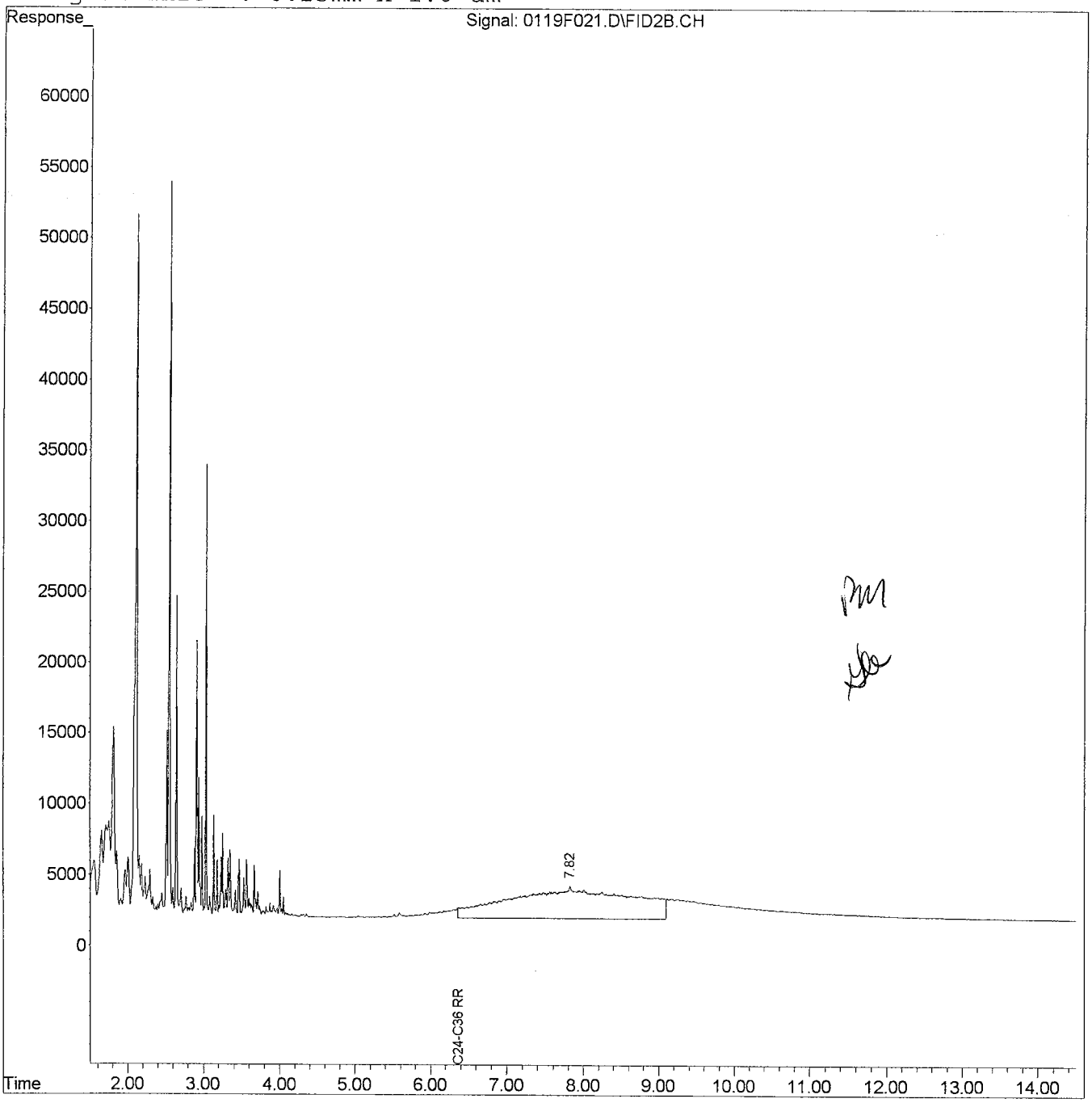
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F021.D Vial: 14
Acq On : 19 Jan 2007 8:49 pm Operator: PMulherin
Sample : HCSV8-2A 500/500 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:18 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	67304	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
2) S Triacontane (C-30)	7.61	51518	50.000 ppm
Spiked Amount 50.000		Recovery =	100.00%
Target Compounds			
3) H C12-C24 DRO	3.63	1095644	1000.000 ppm

vm03/16/07

pte

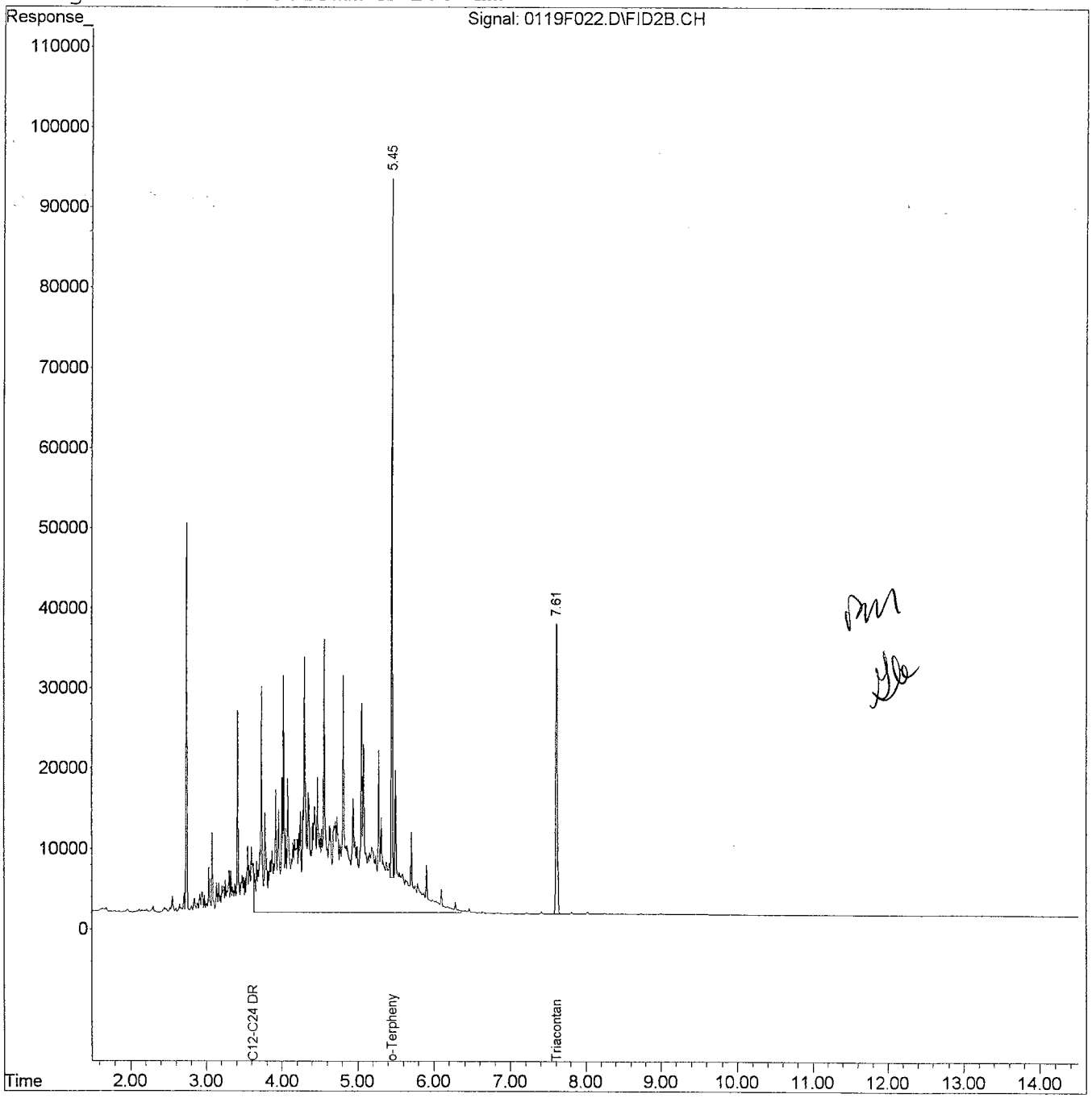
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F022.D Vial: 22
Acq On : 19 Jan 2007 9:09 pm Operator: PMulherin
Sample : HCSV7-93A 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM
GB

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-10 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:20 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	498377	1000.000	ppm

PM 03/16/07

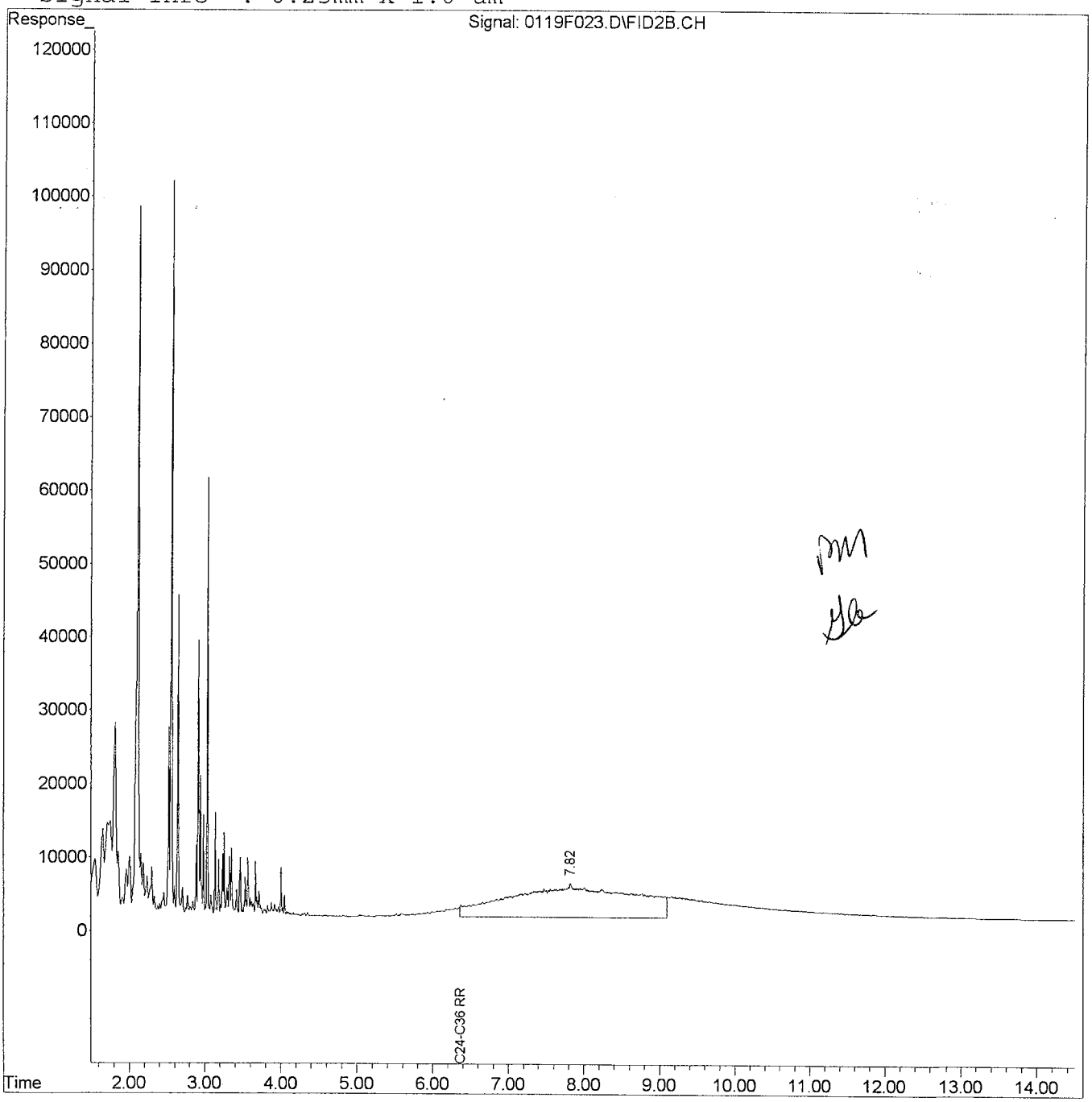
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F023.D Vial: 15
Acq On : 19 Jan 2007 9:29 pm Operator: PMulherin
Sample : HCSV8-1O 1000/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:21 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	137387	102.065 ppm
Spiked Amount 50.000		Recovery =	204.13%
2) S Triacontane (C-30)	7.62	105399	102.293 ppm
Spiked Amount 50.000		Recovery =	204.59%
Target Compounds			
3) H C12-C24 DRO	3.63	2213286	2020.078 ppm

PM 031607
HB

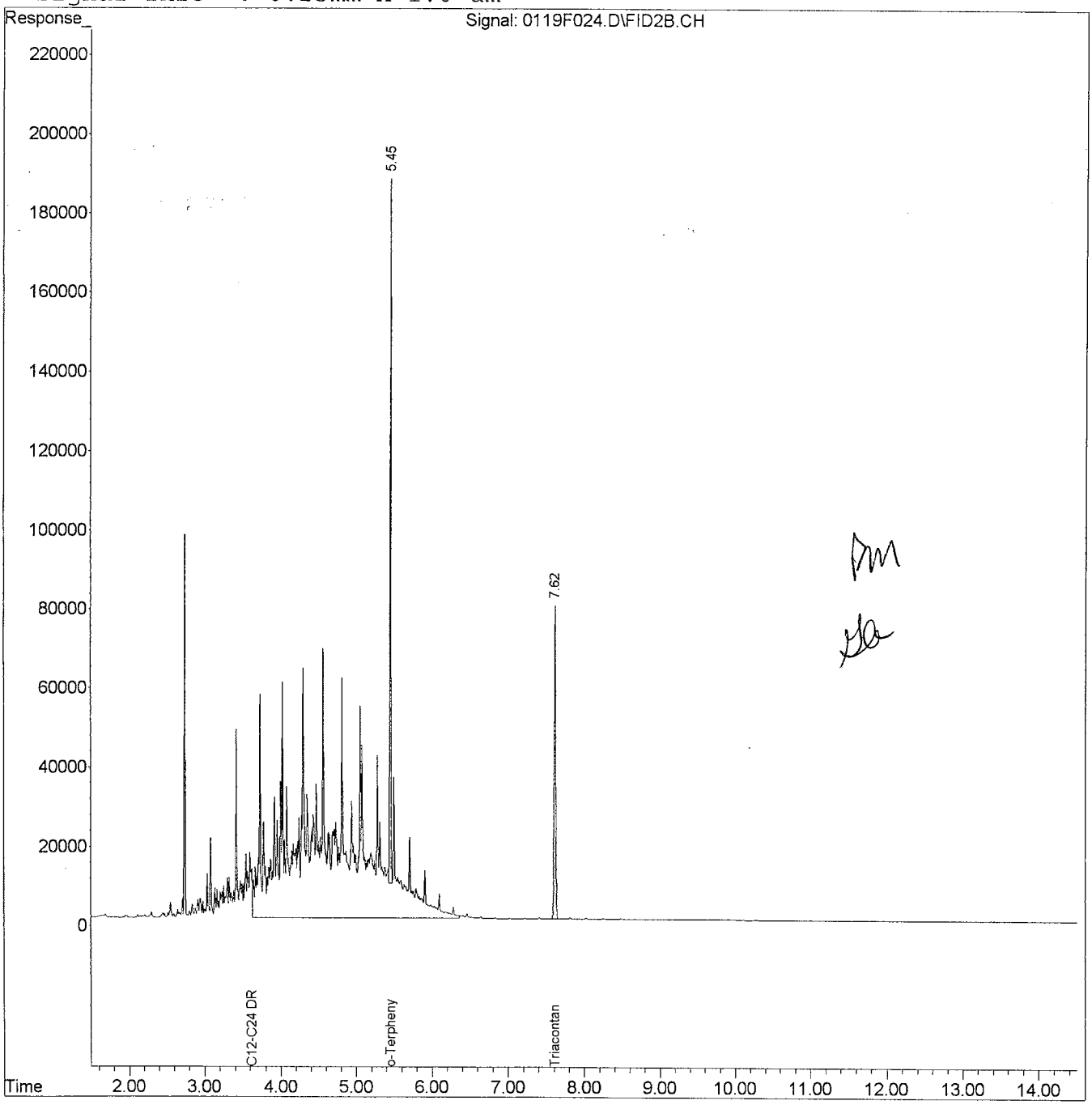
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F024.D Vial: 23
Acq On : 19 Jan 2007 9:49 pm Operator: PMulherin
Sample : HCSV7-92Q 2000/100 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:22 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	1013769	2034.141	ppm

pm 03/16/07

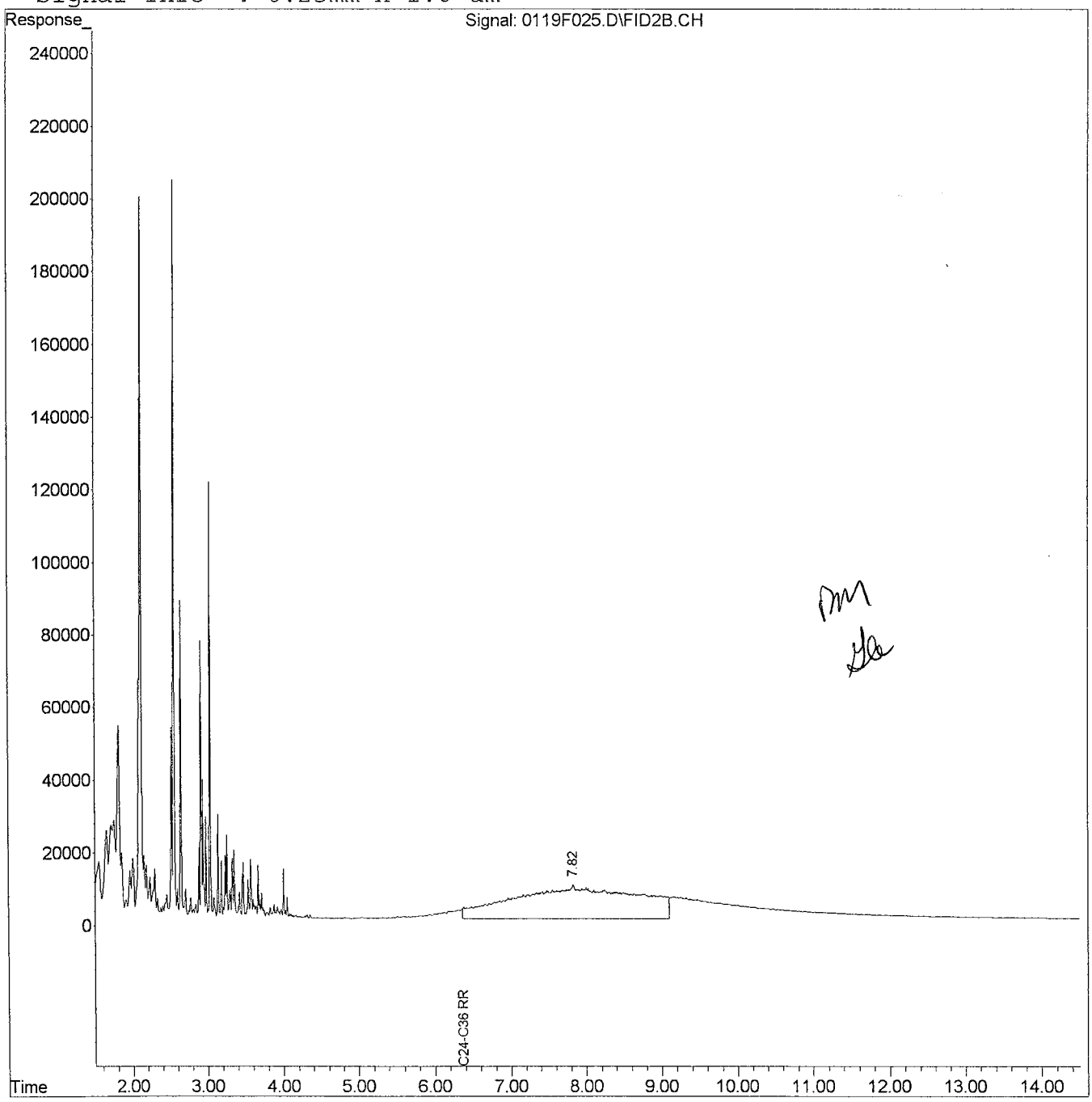
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F025.D Vial: 16
Acq On : 19 Jan 2007 10:09 pm Operator: PMulherin
Sample : HCSV8-1N 2000/2000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:24 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.45	295291	219.371 ppm
Spiked Amount 50.000		Recovery =	438.74%
2) S Triacontane (C-30)	7.62	234677	227.762 ppm
Spiked Amount 50.000		Recovery =	455.52%
Target Compounds			
3) H C12-C24 DRO	3.63	4805299	4385.821 ppm

PM 03/16/07

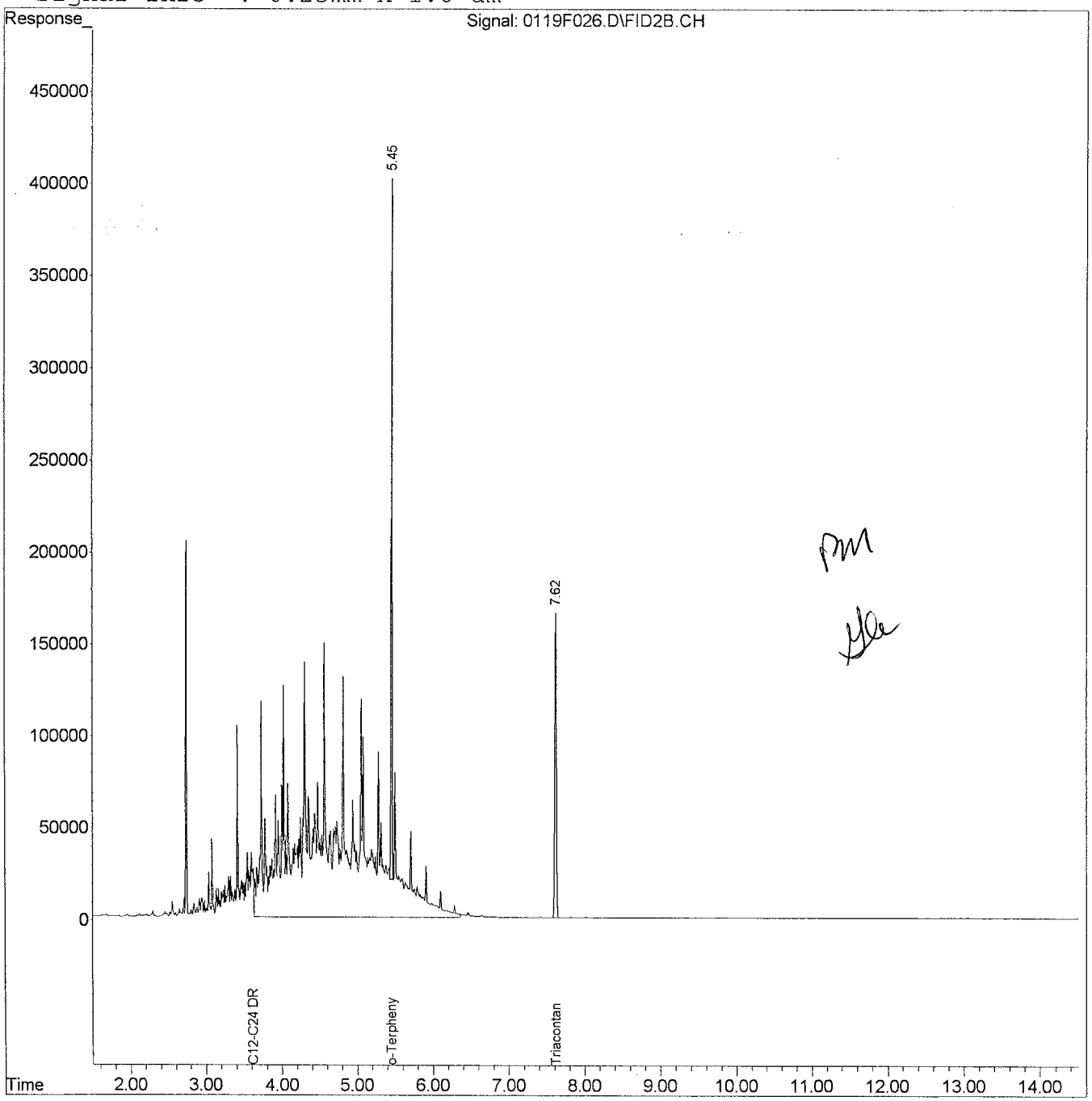
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F026.D Vial: 24
Acq On : 19 Jan 2007 10:29 pm Operator: PMulherin
Sample : HCSV7-92O 4000/200 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:25 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.36	2424406	4864.602	ppm

pm 03/16/07

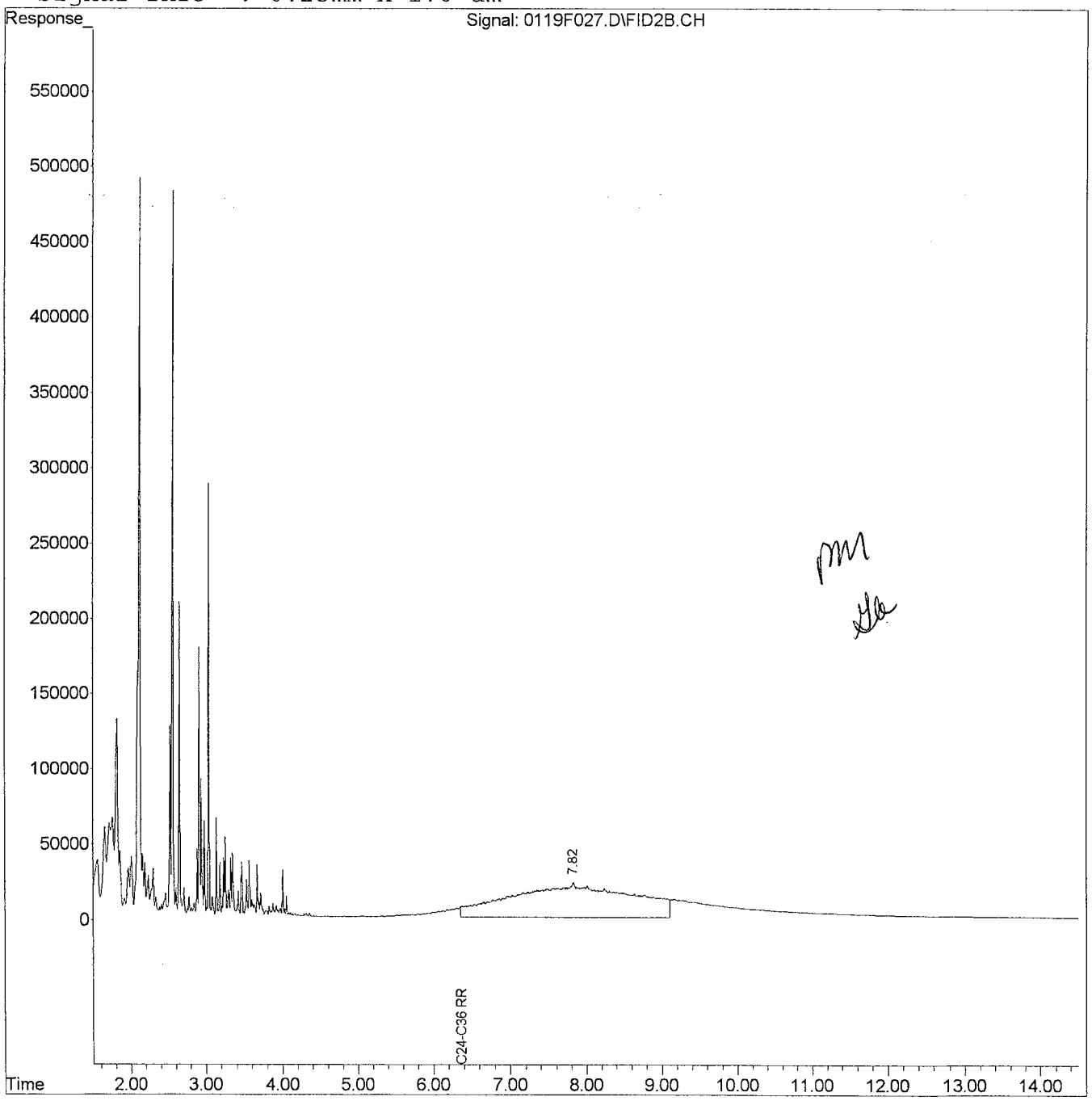
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F027.D Vial: 17
Acq On : 19 Jan 2007 10:49 pm Operator: PMulherin
Sample : HCSV8-1M 5000/5000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



pm

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:36:26 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
3) H C12-C24 DRO	3.63	19835056	18103.559 ppm

PM 031607
pke

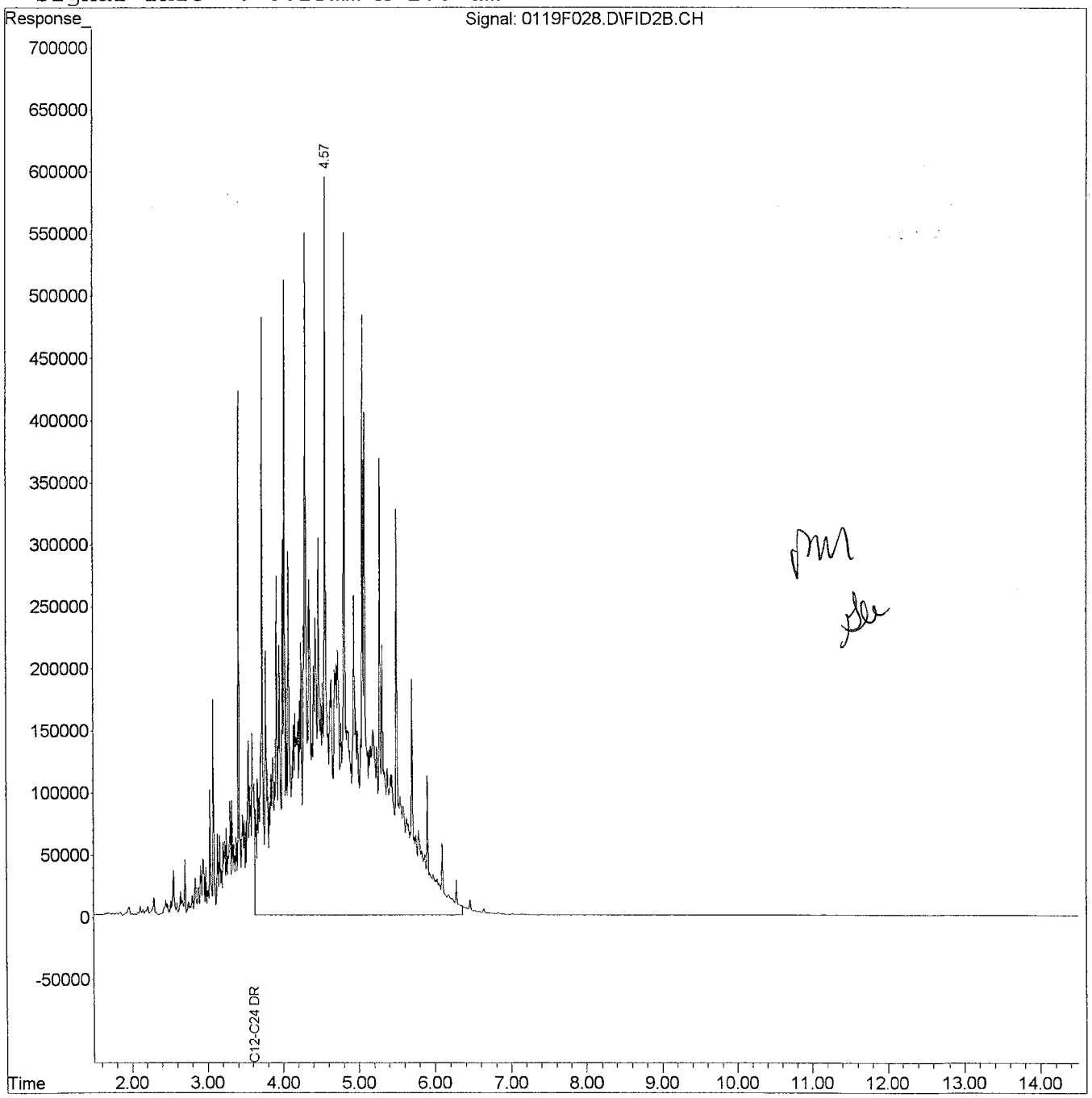
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F028.D Vial: 25
Acq On : 19 Jan 2007 11:09 pm Operator: PMulherin
Sample : HCSV8-1J 20000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:34:37 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



PM

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42:03 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Initial Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
3) H C12-C24 DRO	3.63	986893	891.805 ppm

PM03/16/07
Gle

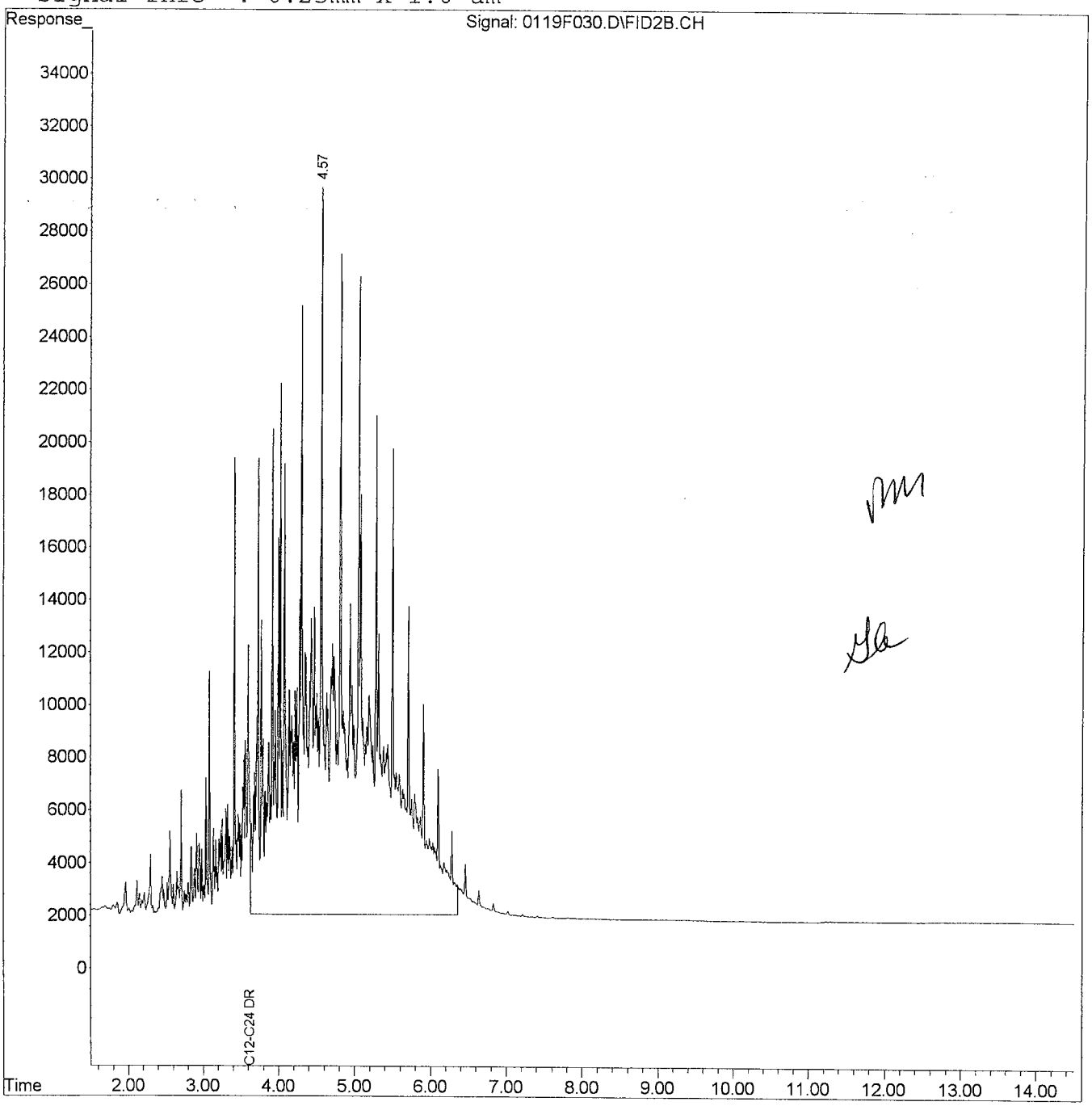
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\CALIBRAT\031307.TAR\0119F030.D Vial: 26
Acq On : 19 Jan 2007 11:49 pm Operator: PMulherin
Sample : HCSV8-3R 1000 ppm ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 14 12:42 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL
Last Update : Wed Mar 14 12:41:18 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/15/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703774
Units: ppm

File ID: J:\GC21\DATA\031507.TAR\0315F027.D
J:\GC21\DATA\031507.TAR\0315F028.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	49	1370	1340	-2	NA	± 15 %	AverageRF
n-Triacontane	50	52	1060	1100	4	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1080	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	525	7	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F027.D
Lab ID: KWG0703774-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/15/2007 20:42
Date Quantitated: 03/16/2007 11:37
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: VM 03/19/07

Secondary Review: 92

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/19/2007

Analysis Lot:	KWG0703774	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F027.D			**Instrument:**	GC21
Acqu Date:	03/15/2007 20:42	**Quant Date:**	03/16/2007 11:37	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703774-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		66861	48.78		65-135	NA
n-Triacontane	7.60		55057	51.78		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1078731	974.79			
C24 - C36 RRO	6.35	?	16316	33.28			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

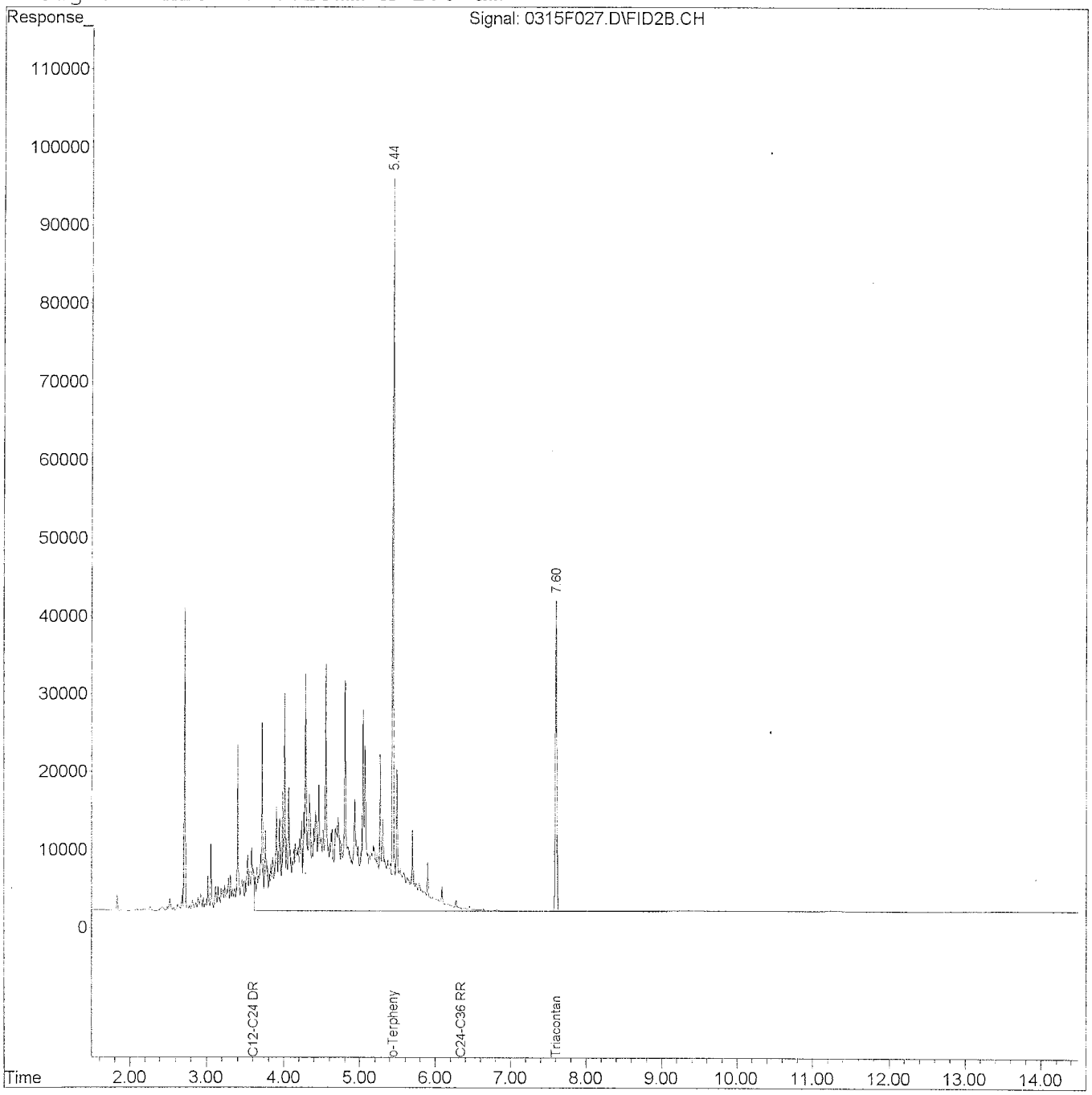
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F027.D Vial: 2
Acq On : 15 Mar 2007 8:42 pm Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F028.D
Lab ID: KWG0703774-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/15/2007 21:03
Date Quantitated: 03/16/2007 11:37
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-clution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 03/19/07

Secondary Review: 92

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	NWTPH-Dx	Collect Date:		Receive Date:	03/19/2007

Analysis Lot:	KWG0703774	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0313TAR.M	Calibration ID:	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\031507.TAR\0315F028.D			Instrument:	GC21
Acqu Date:	03/15/2007 21:03	Quant Date:	03/16/2007 11:37	Vial:	3
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0703774-1			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane			0			65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	49063	44.34			NR
C24 - C36 RRO	6.35	?	524639	1,070			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

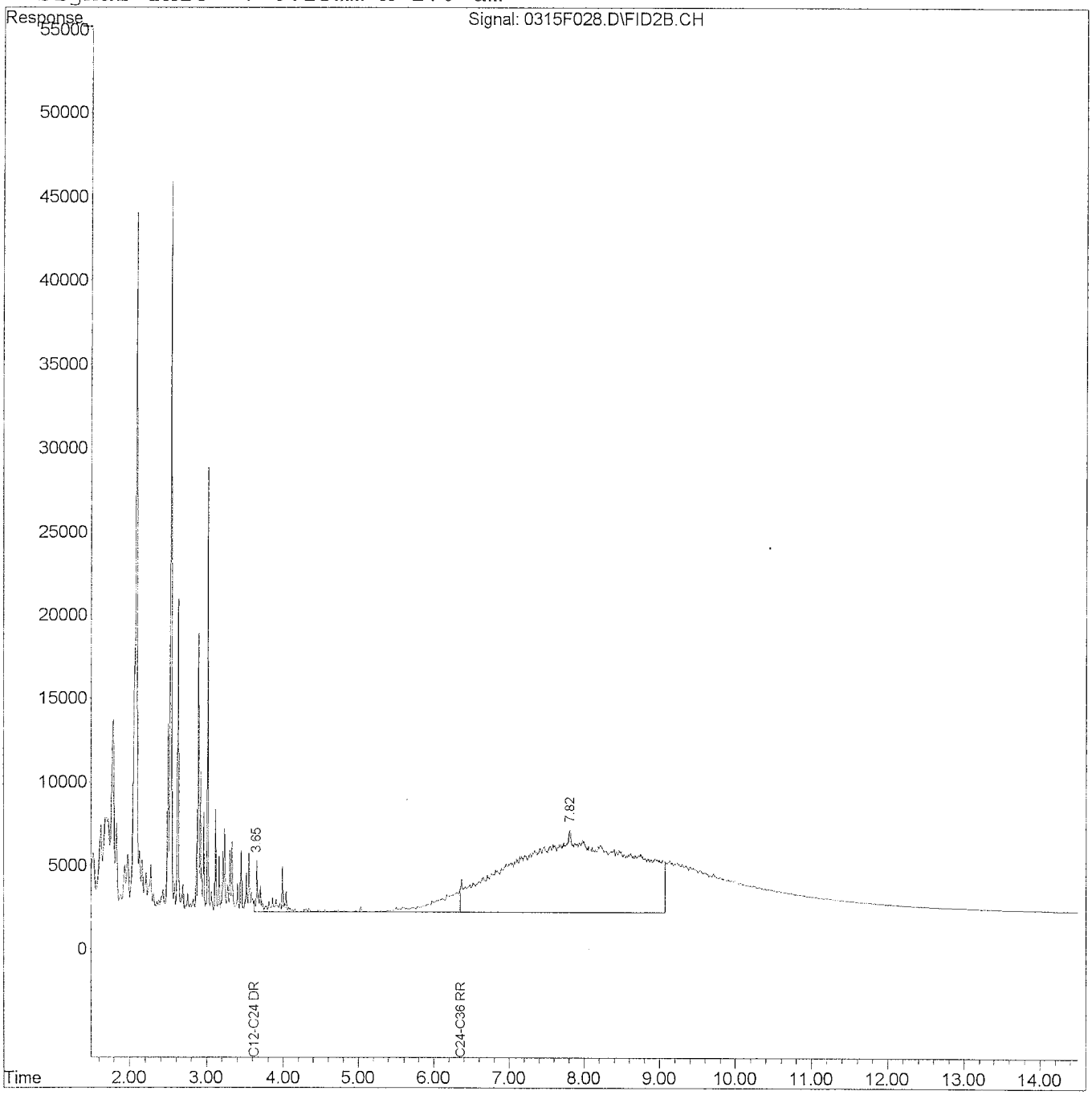
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F028.D Vial: 3
Acq On : 15 Mar 2007 9:03 pm Operator: PMulherin
Sample : HCSV8-7O G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/16/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 01/19/2007
Calibration ID: CAL6131
Analysis Lot: KWG0703774
Units: ppm

File ID: J:\GC21\DATA\031507.TAR\0315F040.D
J:\GC21\DATA\031507.TAR\0315F041.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	50	1370	1360	-1	NA	± 15 %	AverageRF
n-Triacontane	50	52	1060	1110	4	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	970	1110	1080	-3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	490	548	12	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F040.D
Lab ID: KWG0703774-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/16/2007 01:06
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03/19/07

Secondary Review: gc

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/19/2007

Analysis Lot:	KWG0703774	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F040.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 01:06	**Quant Date:**	03/16/2007 11:38	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703774-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.44		68105	49.69		65-135	NA
n-Triacontane	7.60		55414	52.12		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	1078494	974.58			
C24 - C36 RRO	6.35	?	7789	15.89			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

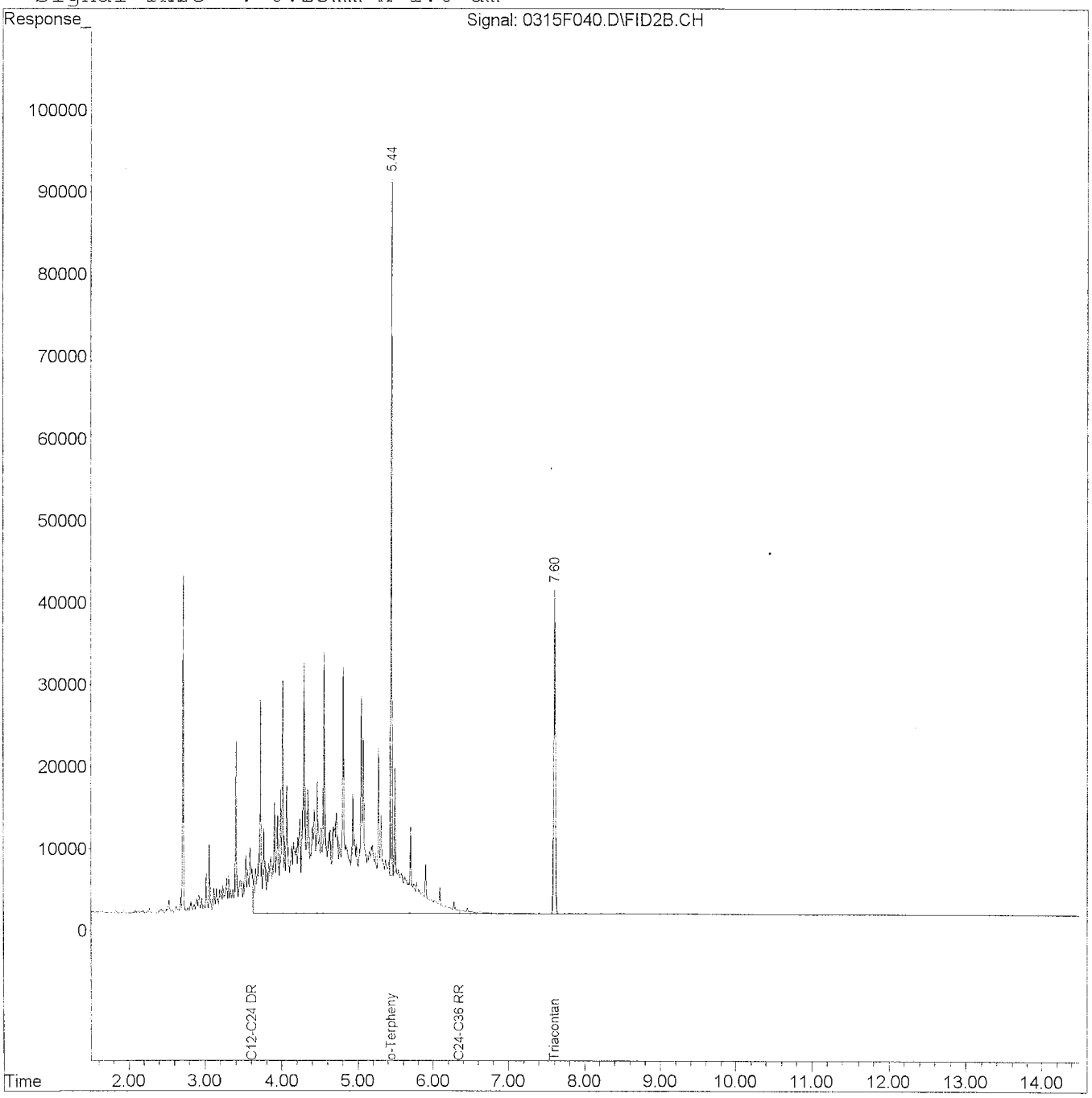
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F040.D Vial: 2
Acq On : 16 Mar 2007 1:06 am Operator: PMulherin
Sample : HCSV7-97L D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F041.D
Lab ID: KWG0703774-2
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/16/2007 01:26
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 031907

Secondary Review: 92

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/19/2007

Analysis Lot:	KWG0703774	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F041.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 01:26	**Quant Date:**	03/16/2007 11:38	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703774-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl			0			65-135	NA	NR
n-Triacontane	7.61		172	0.1620		65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	52910	47.81			NR
C24 - C36 RRO	6.35	?	548071	1,118			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

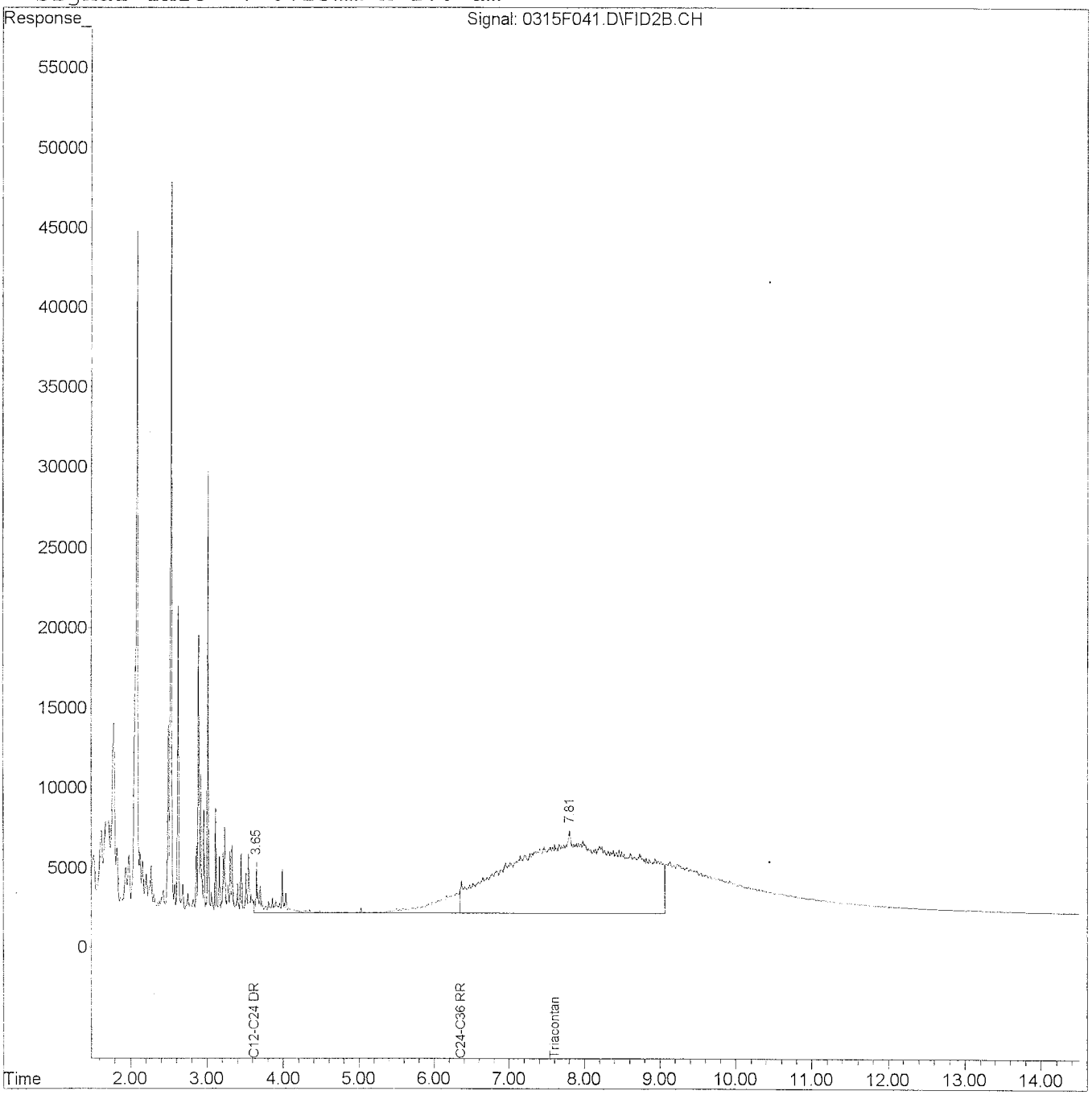
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F041.D Vial: 3
Acq On : 16 Mar 2007 1:26 am Operator: PMulherin
Sample : HCSV8-7O G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703704	**Prep Method:**	EPA 3510C	**Prep Date:**	03/13/07 00:00
Department:	PETROLEUM H				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701816-001	979GW115CL	8015B DRO_RR	WATER	1050ml	2.0ml
K0701816-002	NKGW02CL	8015B DRO_RR	WATER	1050ml	2.0ml
KWG0703704-1	Matrix Spike	8015B DRO_RR	WATER	1000ml	2.0ml
KWG0703704-2	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2.0ml
KWG0703704-3	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2.0ml
KWG0703704-4	Method Blank	8015B DRO_RR	WATER	1000ml	2.0ml

Lab Code	Parent Lab Code	Comments
KWG0703704-1	K0701816-002	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701816-001	583875	HCSV8-6L	100uL			SJones
K0701816-002	583876	HCSV8-6L	100uL			SJones
KWG0703704-1	583877	HCSV8-6L	100uL	HCSV8-5I	100uL	SJones
KWG0703704-2	583878	HCSV8-6L	100uL	HCSV8-5I	100uL	SJones
KWG0703704-3	583879	HCSV8-6L	100uL	HCSV8-5I	100uL	SJones
KWG0703704-4	583880	HCSV8-6L	100uL			SJones

Comments:

Started By: CRuble Assisted By: Training Yes No

Completed By: CRuble Assisted By: Yes No

Reviewed By: PM Date: 031507 Storage:

Chain of Custody

Relinquished By: PM FOR CRW Date: 031507

Received By: PM Date: 031507

Extracts Examined Yes No

Preparation Information

Group ID: KWG0703507 **Prep Method:** EPA 3510C **Prep Date:** 03/13/07
Department: Petroleum HC
Also For KWG0703704

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. mL	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0701816-001	979GW115CL		√	8015B DRO_RRO	WATER	1050	<2		2mL	100uL	
2	K0701816-002	NKGW02CL		√	8015B DRO_RRO	WATER	1050					
3	K0701899-001	MW-4-0307		√	NWTPH-Dx NW_TPH	WATER	500			1mL		
4	K0701899-002	MW-3-0307		√	NWTPH-Dx NW_TPH	WATER						
5	K0701899-003	MW-2-0307		√	NWTPH-Dx NW_TPH	WATER						
6	K0701899-004	MW-1-0307		√	NWTPH-Dx NW_TPH	WATER						
7	K0701899-006	MW-5-0307		√	NWTPH-Dx NW_TPH	WATER						
8	KWG0703507-1	Matrix Spike K0701816-2			8015B DRO_RRO	WATER	1000			2mL		100uL
9	KWG0703507-2	Duplicate Client Sample K0701899-1			NWTPH-Dx NW_TPH	WATER	500			1mL		
10	KWG0703507-3	Lab Control Sample			NWTPH-Dx NW_TPH	WATER	1000			2mL		100uL
11	KWG0703507-4	Method Blank			NWTPH-Dx NW_TPH	WATER						
12	KWG0703507-5	Duplicate Lab Control Sample			NWTPH-Dx NW_TPH	WATER						100uL

DCM Lot # 46347
Glass Wool Lot # GW030207
Na_2SO_4 Lot # 46228636

Sonic Horn Tuned NA
Initial / Date

Comments:

Surrogate ID: HCSV8-6-L
Spike ID: HCSV8-5-I
Witness: Sjones 3/13/07
Started By: CRW Assisted By: G. Roettger / Allison Reagan
Completed By: Assisted By:

Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F029.D
Lab ID: KWG0703774-3
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/15/2007 21:23
Date Quantitated: 03/16/2007 11:37
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: DM 03/19/07

Secondary Review: 9c

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/19/2007

Analysis Lot:	KWG0703774	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F029.D			**Instrument:**	GC21
Acqu Date:	03/15/2007 21:23	**Quant Date:**	03/16/2007 11:37	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703774-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	7263	6.56			
C24 - C36 RRO	6.35	?	11887	24.25			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

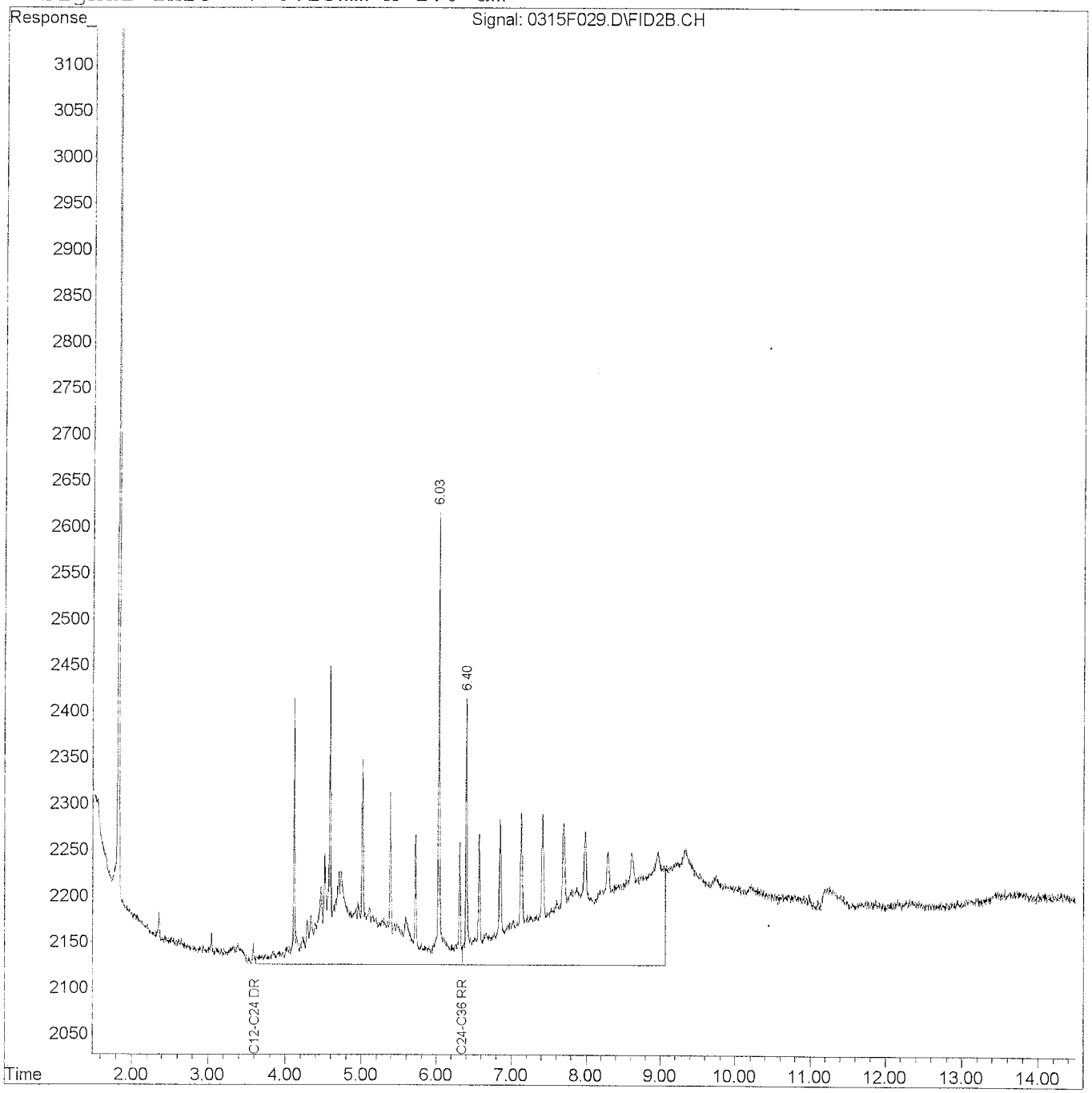
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F029.D Vial: 1
Acq On : 15 Mar 2007 9:23 pm Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:37 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\031507.TAR\0315F042.D
Lab ID: KWG0703774-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/16/2007 01:47
Date Quantitated: 03/16/2007 11:38
Batch ID: KWG0703774
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM 03/19/07

Secondary Review: 92

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Dx	**Collect Date:**		**Receive Date:**	03/19/2007

Analysis Lot:	KWG0703774	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0313TAR.M	**Calibration ID:**	CAL6131
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\031507.TAR\0315F042.D			**Instrument:**	GC21
Acqu Date:	03/16/2007 01:47	**Quant Date:**	03/16/2007 11:38	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703774-4			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.62	?	3199	2.89			
C24 - C36 RRO	6.35	?	7802	15.92			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

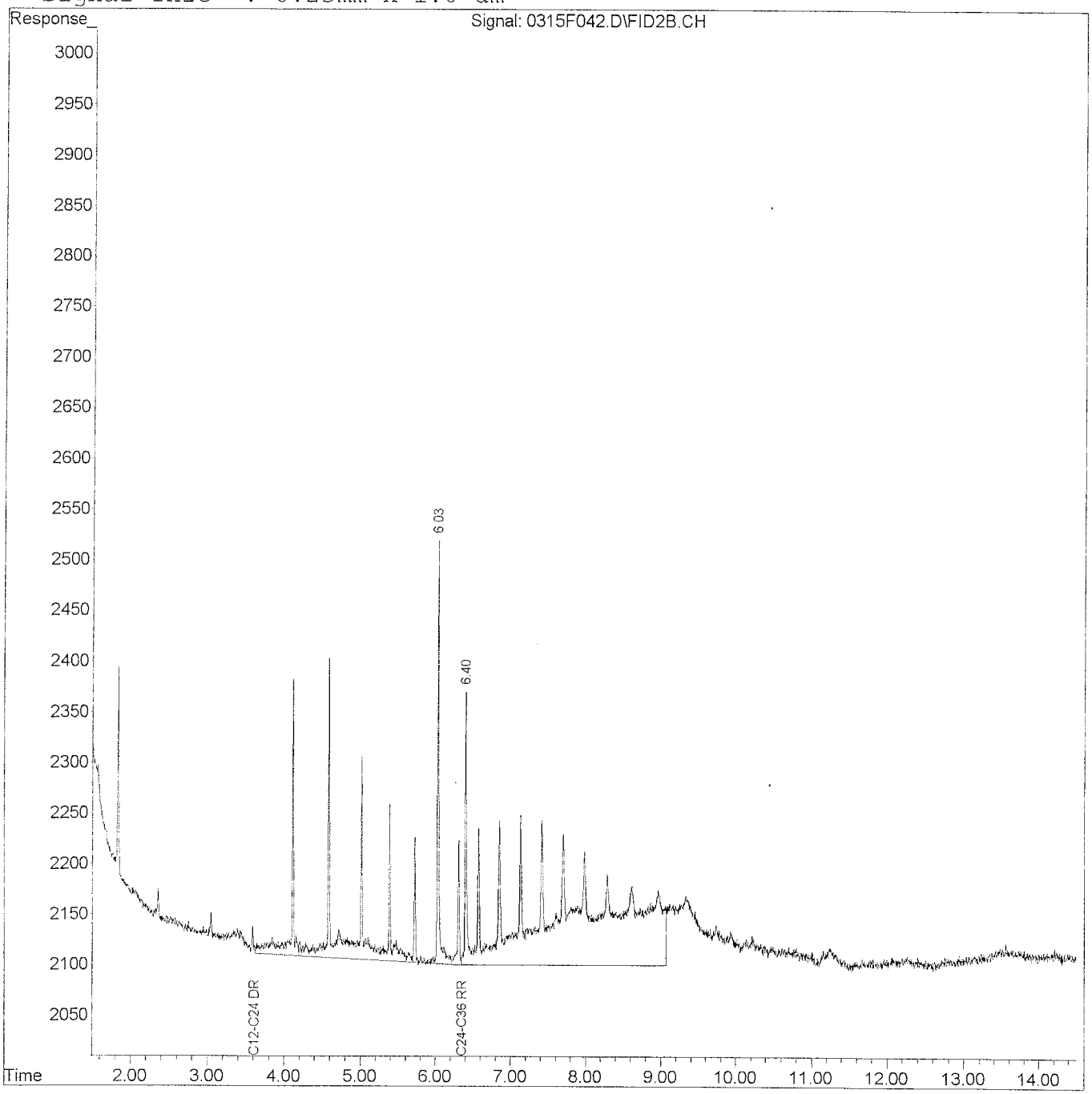
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\031507.TAR\0315F042.D Vial: 1
Acq On : 16 Mar 2007 1:47 am Operator: PMulherin
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Mar 16 11:38 2007 Quant Results File: 0313TAR.RES

Quant Method : J:\GC21\METHODS\0313TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Fri Mar 16 11:37:19 2007
Response via : Single Level Calibration
DataAcq Meth : BACK.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Gasoline Range Organics

Organic Analysis:
Gasoline Range Organics

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Cover Page - Organic Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
979GW115CL	K0701816-001	03/06/2007	03/07/2007
NKGW02CL	K0701816-002	03/06/2007	03/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: PAUL MULHERIN

Date: 03\20\07 Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Gasoline Range Organics

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Gasoline Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703711-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
979GW115CL	K0701816-001	105
NKGW02CL	K0701816-002	105
Method Blank	KWG0703711-4	106
Batch QC	K0701647-001	106
Batch QCMS	KWG0703711-1	111
Batch QCDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

		Batch QCMS KWG0703711-1 Matrix Spike			Batch QCDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	15:56

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\031307.FID\0313R010.D
Lab Code:	KWG0703711-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
979GW115CL	K0701816-001	J:\GC06\DATA\031307.FID\0313R014.D	03/13/07	18:03
NKGW02CL	K0701816-002	J:\GC06\DATA\031307.FID\0313R015.D	03/13/07	18:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
979GW115CL	K0701816-001	J:\GC06\DATA\031307.FID\0313R014.D	03/13/07	18:03
NKGW02CL	K0701816-002	J:\GC06\DATA\031307.FID\0313R015.D	03/13/07	18:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R017.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Analysis Run Log
Gasoline Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0703710
Instrument ID: GC06
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313R004.D	Instrument Blank	KWG0703710-1	3/13/2007	12:06		3/13/2007	12:22
0313R005.D	Continuing Calibration Verification	KWG0703710-3	3/13/2007	12:37		3/13/2007	12:53
0313R006.D	Lab Control Sample	KWG0703711-3	3/13/2007	13:49		3/13/2007	14:05
0313R007.D	Batch QCMS	KWG0703711-1	3/13/2007	14:21		3/13/2007	14:37
0313R008.D	Batch QCDMS	KWG0703711-2	3/13/2007	14:52		3/13/2007	15:08
0313R010.D	Method Blank	KWG0703711-4	3/13/2007	15:56		3/13/2007	16:12
0313R011.D	Batch QC	K0701647-001	3/13/2007	16:28		3/13/2007	16:44
0313R012.D	ZZZZZZ	ZZZZZZ	3/13/2007	17:00		3/13/2007	17:16
0313R013.D	ZZZZZZ	ZZZZZZ	3/13/2007	17:31		3/13/2007	17:47
0313R014.D	979GW115CL	K0701816-001	3/13/2007	18:03		3/13/2007	18:19
0313R015.D	NKGW02CL	K0701816-002	3/13/2007	18:34		3/13/2007	18:50
0313R016.D	Instrument Blank	KWG0703710-2	3/13/2007	19:06		3/13/2007	19:22
0313R017.D	Continuing Calibration Verification	KWG0703710-4	3/13/2007	19:38		3/13/2007	19:54

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007

Extraction Prep Log
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Extraction Lot: KWG0703711
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
979GW115CL	K0701816-001	03/06/07	03/07/07	10ml	10ml	NA	
NKGW02CL	K0701816-002	03/06/07	03/07/07	10ml	10ml	NA	
Method Blank	KWG0703711-4	NA	NA	10ml	10ml	NA	
Batch QC	K0701647-001	NA	NA	10ml	10ml	NA	
Batch QCMS	KWG0703711-1	NA	NA	10ml	10ml	NA	
Batch QCDMS	KWG0703711-2	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG0703711-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Gasoline Range Organics

Validation Package

Organic Analysis:
Gasoline Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
979GW115CL	K0701816-001	105
NKGW02CL	K0701816-002	105
Method Blank	KWG0703711-4	106
Batch QC	K0701647-001	106
Batch QCMS	KWG0703711-1	111
Batch QCDMS	KWG0703711-2	111
Lab Control Sample	KWG0703711-3	111

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0701647-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

		Batch QCMS KWG0703711-1 Matrix Spike			Batch QCDMS KWG0703711-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	570	500	114	564	500	113	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703711

	Lab Control Sample KWG0703711-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	555	500	111	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007
Time Analyzed: 15:56

Method Blank Summary
Gasoline Range Organics

Sample Name: Method Blank
Lab Code: KWG0703711-4

File ID: J:\GC06\DATA\031307.FID\0313R010.D
Instrument ID: GC06

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low
Extraction Lot: KWG0703711

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703711-3	J:\GC06\DATA\031307.FID\0313R006.D	03/13/07	13:49
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
979GW115CL	K0701816-001	J:\GC06\DATA\031307.FID\0313R014.D	03/13/07	18:03
NKGW02CL	K0701816-002	J:\GC06\DATA\031307.FID\0313R015.D	03/13/07	18:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	13:49

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\031307.FID\0313R006.D
Lab Code:	KWG0703711-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0703711

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG0703711-1	J:\GC06\DATA\031307.FID\0313R007.D	03/13/07	14:21
Batch QCDMS	KWG0703711-2	J:\GC06\DATA\031307.FID\0313R008.D	03/13/07	14:52
Method Blank	KWG0703711-4	J:\GC06\DATA\031307.FID\0313R010.D	03/13/07	15:56
Batch QC	K0701647-001	J:\GC06\DATA\031307.FID\0313R011.D	03/13/07	16:28
979GW115CL	K0701816-001	J:\GC06\DATA\031307.FID\0313R014.D	03/13/07	18:03
NKGW02CL	K0701816-002	J:\GC06\DATA\031307.FID\0313R015.D	03/13/07	18:34

Organic Analysis:
Gasoline Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Gasoline Range Organics

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R014.D
Lab ID: K0701816-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 18:03
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701816
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583927	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R014.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 18:03	**Quant Date:**	03/14/2007 08:20	**Vial:**	45
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-001			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1,4-Difluorobenzene	3.41	0.00	1059573	104.53	105	65-135	OK	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	31046	5.18	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

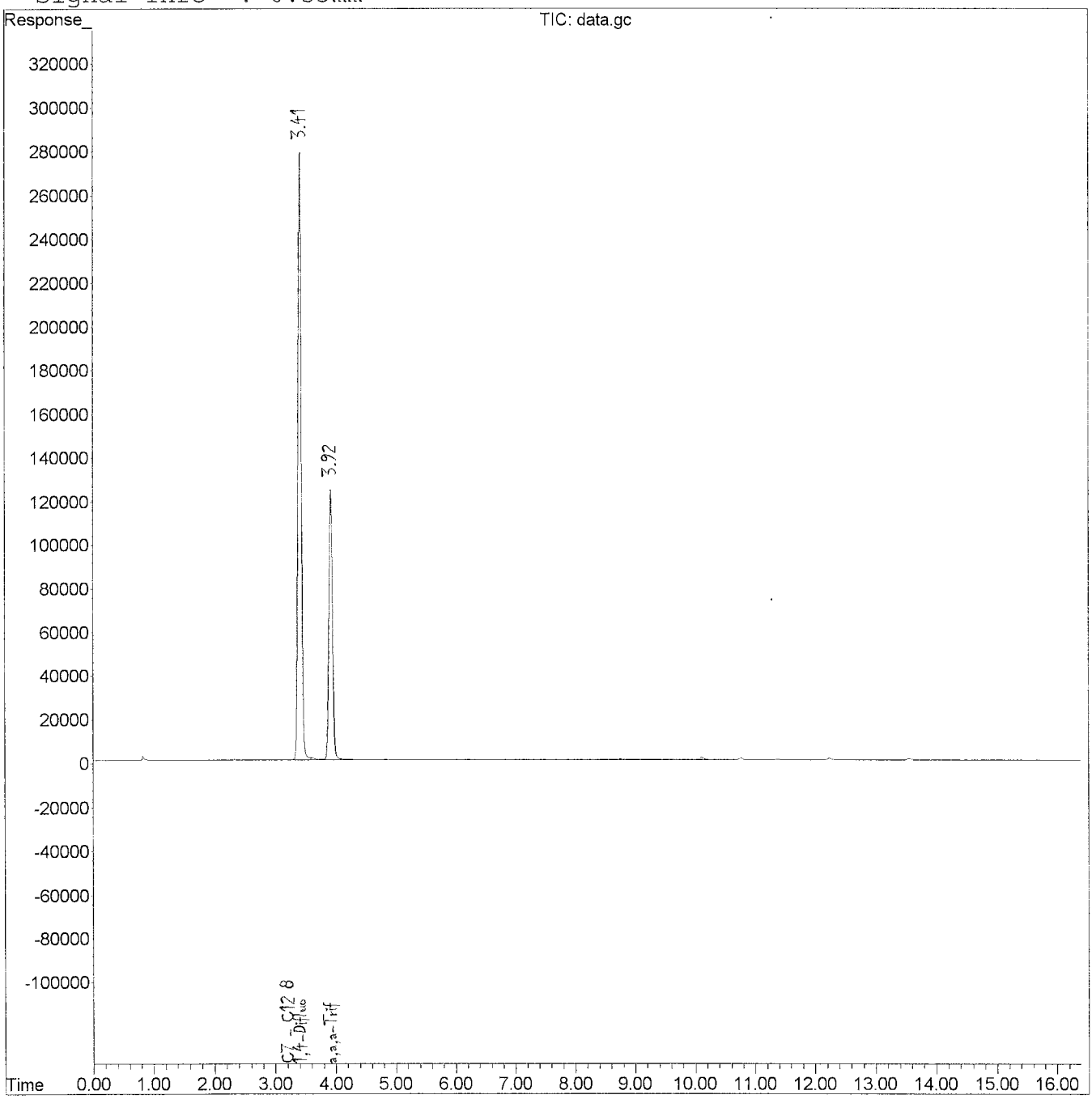
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R014.D Vial: 45
Acq On : 13 Mar 2007 06:03 pm Operator: GR
Sample : k0701816-001 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Gasoline Range Organics

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	105	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R015.D
Lab ID: K0701816-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 18:34
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701816
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583928	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R015.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 18:34	**Quant Date:**	03/14/2007 08:20	**Vial:**	46
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-002			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1061893	104.76	105	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	21915	3.65	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

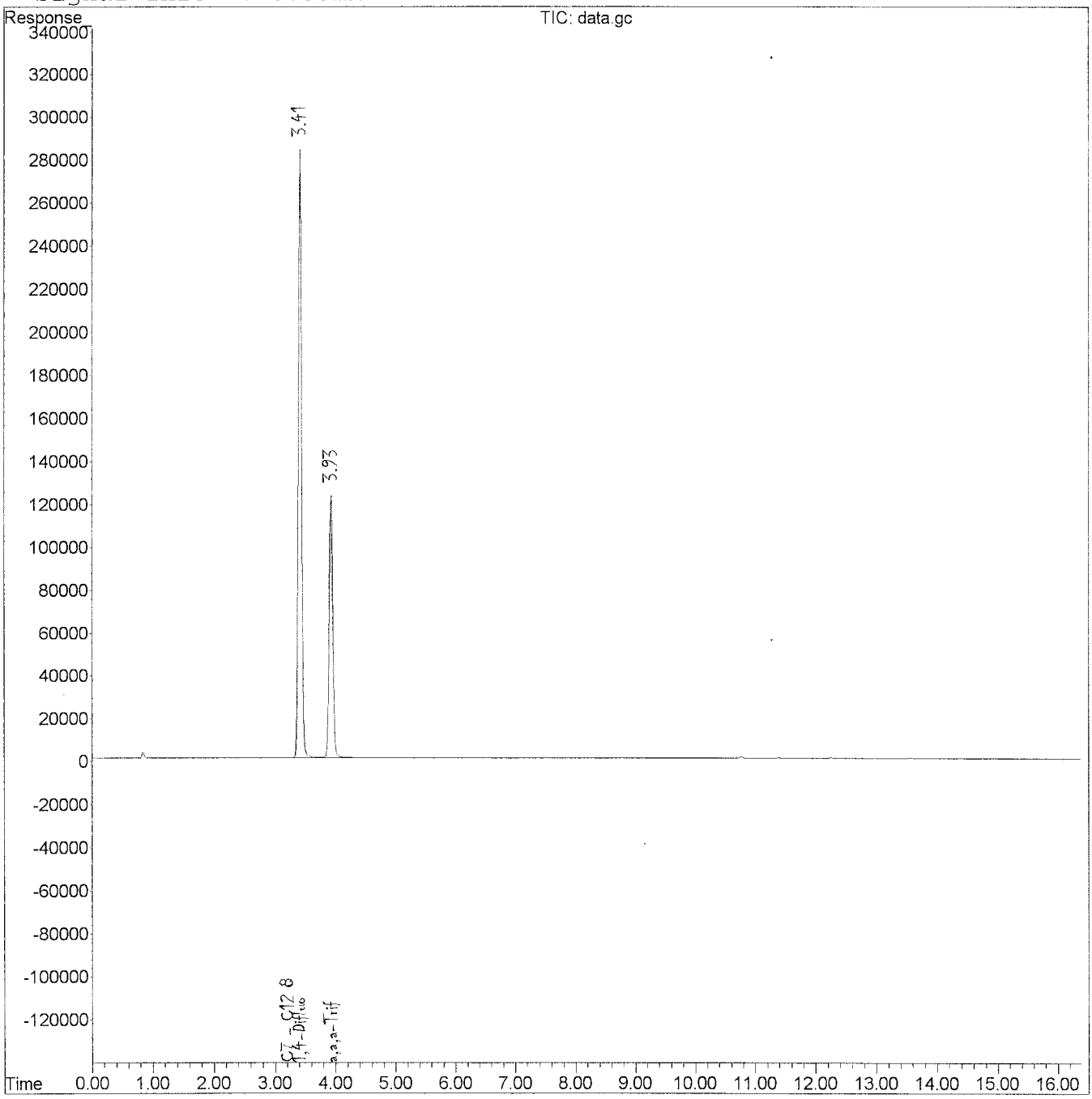
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R015.D Vial: 46
Acq On : 13 Mar 2007 06:34 pm Operator: GR
Sample : k0701816-002 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703711-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R010.D
Lab ID: KWG0703711-4
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 15:56
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Lee 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583932	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R010.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 15:56	**Quant Date:**	03/13/2007 16:35	**Vial:**	41
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703711-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1071904	105.75	106	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	48585	8.10	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

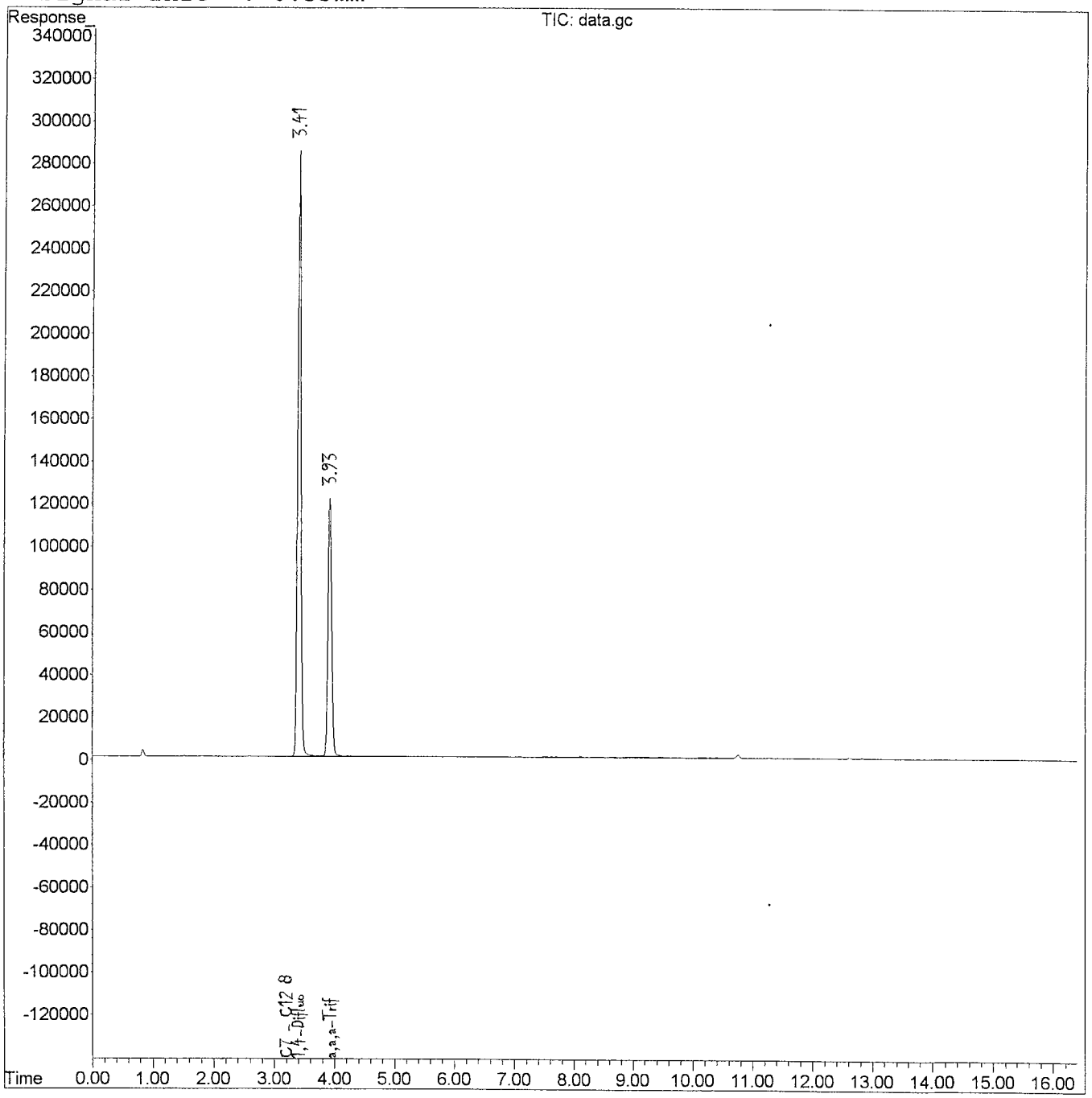
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R010.D Vial: 41
Acq On : 13 Mar 2007 03:56 pm Operator: GR
Sample : mb 1647/703/816 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Batch QC
Lab Code: K0701647-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8015B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	106	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R011.D
Lab ID: K0701647-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 16:28
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gee 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	03/01/2007	**Receive Date:**	03/02/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	K0701647
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583924	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\031307.FID\0313R011.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 16:28	**Quant Date:**	03/14/2007 08:20	**Vial:**	42
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701647-001			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1073670	105.92	106	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	33633	5.61	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

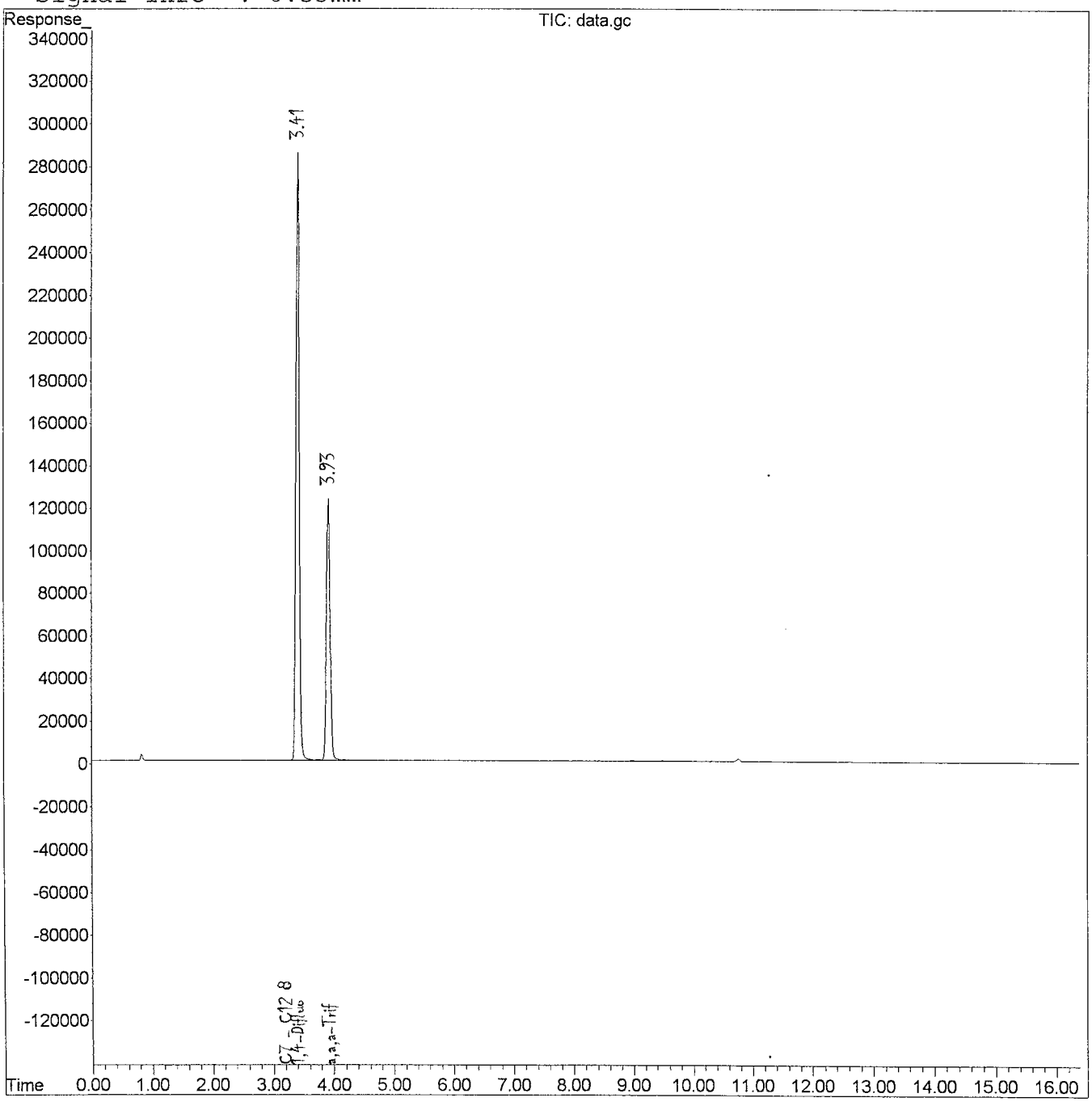
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R011.D Vial: 42
Acq On : 13 Mar 2007 04:28 pm Operator: GR
Sample : k0701647-001 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Batch QCMS
Lab Code: KWG0703711-1

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**570**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R007.D
Lab ID: KWG0703711-1 -- K0701647-001MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 14:21
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Ga 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583929	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R007.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:21	**Quant Date:**	03/13/2007 14:46	**Vial:**	39
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703711-1 -- K0701647-001MS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1125947	111.08	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3416625	569.53	570		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

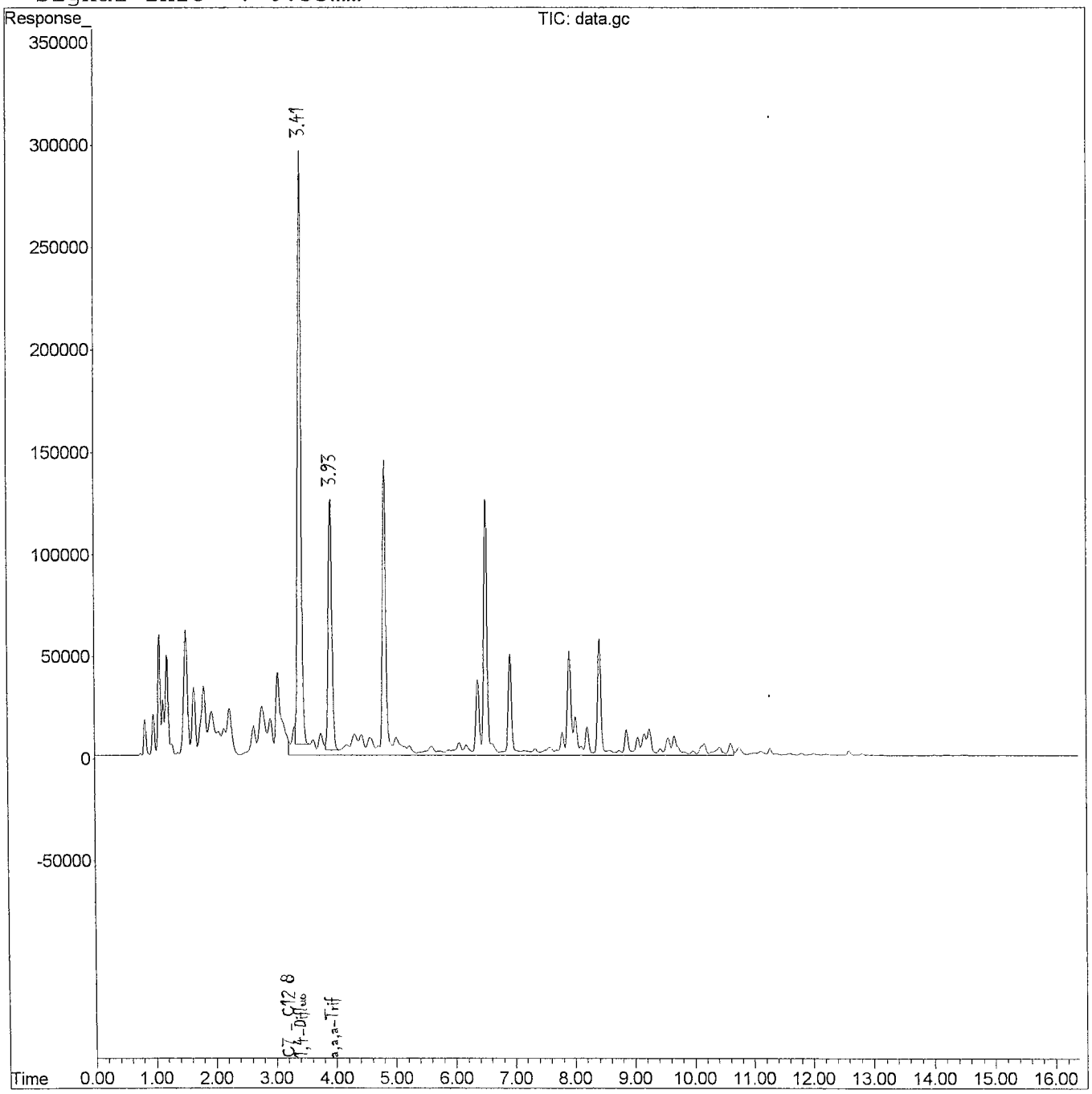
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
c: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R007.D Vial: 39
Acq On : 13 Mar 2007 02:21 pm Operator: GR
Sample : k0701647-001ms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG0703711-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**564**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R008.D
Lab ID: KWG0703711-2 -- K0701647-001DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 14:52
Date Quantitated: 03/13/2007 16:35
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Gle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583930	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R008.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 14:52	**Quant Date:**	03/13/2007 16:35	**Vial:**	40
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703711-2 -- K0701647-001DMS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41	0.00	1122225	110.71	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3382899	563.91	564		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

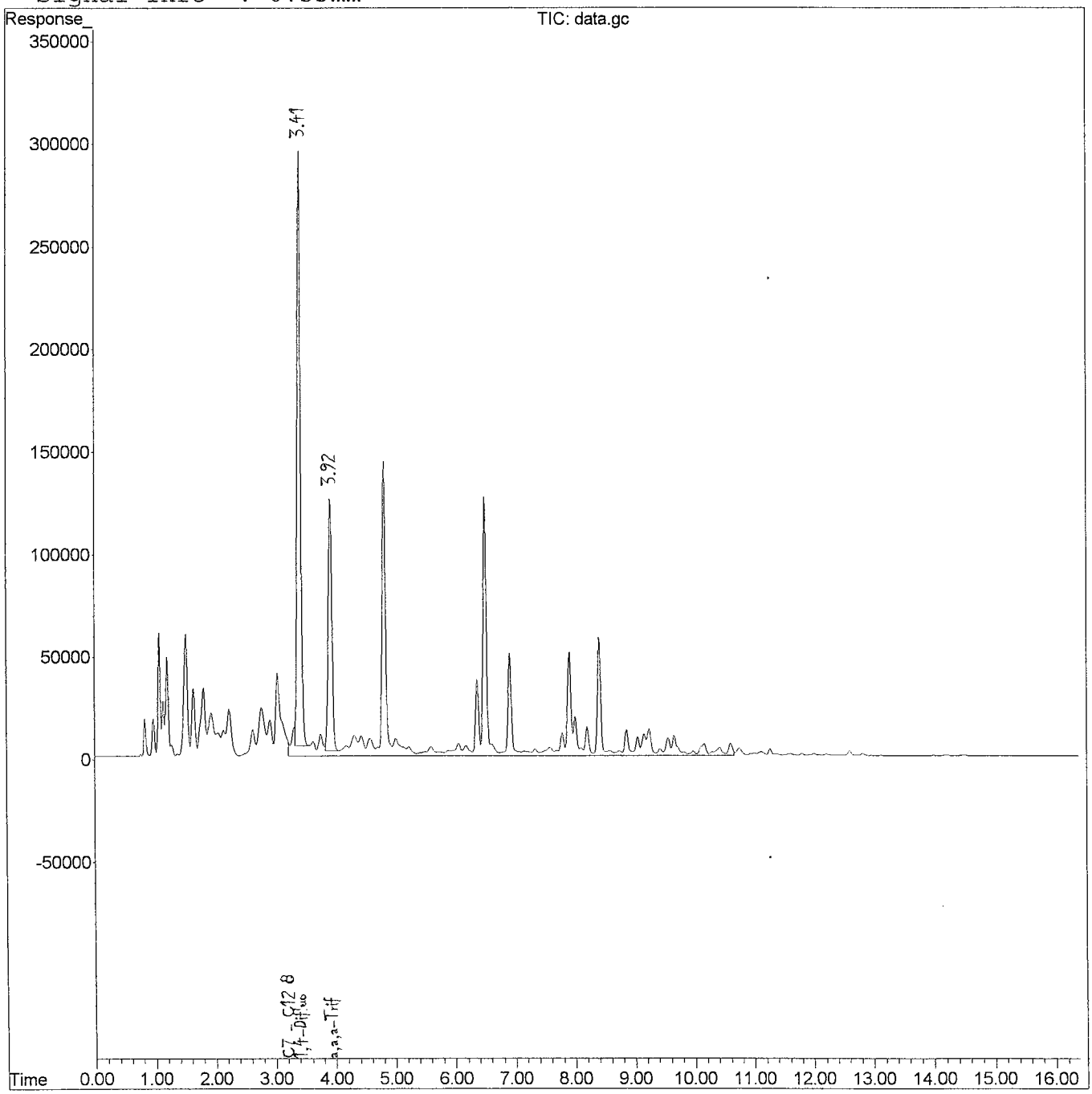
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R008.D Vial: 40
Acq On : 13 Mar 2007 02:52 pm Operator: GR
Sample : k0701647-001dms Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 16:35 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703711-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**555**		50	1	03/13/07	03/13/07	KWG0703711	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	111	65-135	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R006.D
Lab ID: KWG0703711-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 13:49
Date Quantitated: 03/13/2007 14:46
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Sle 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**	KWG0703711	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	583931	**Prep Date:**	03/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:		**Method ID:**	MJ832
MB Ref:	J:\GC06\DATA\031307.FID\0313R010.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R006.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 13:49	**Quant Date:**	03/13/2007 14:46	**Vial:**	38
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703711-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.43	0.02	1129542	111.43	111	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3328540	554.85	555		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

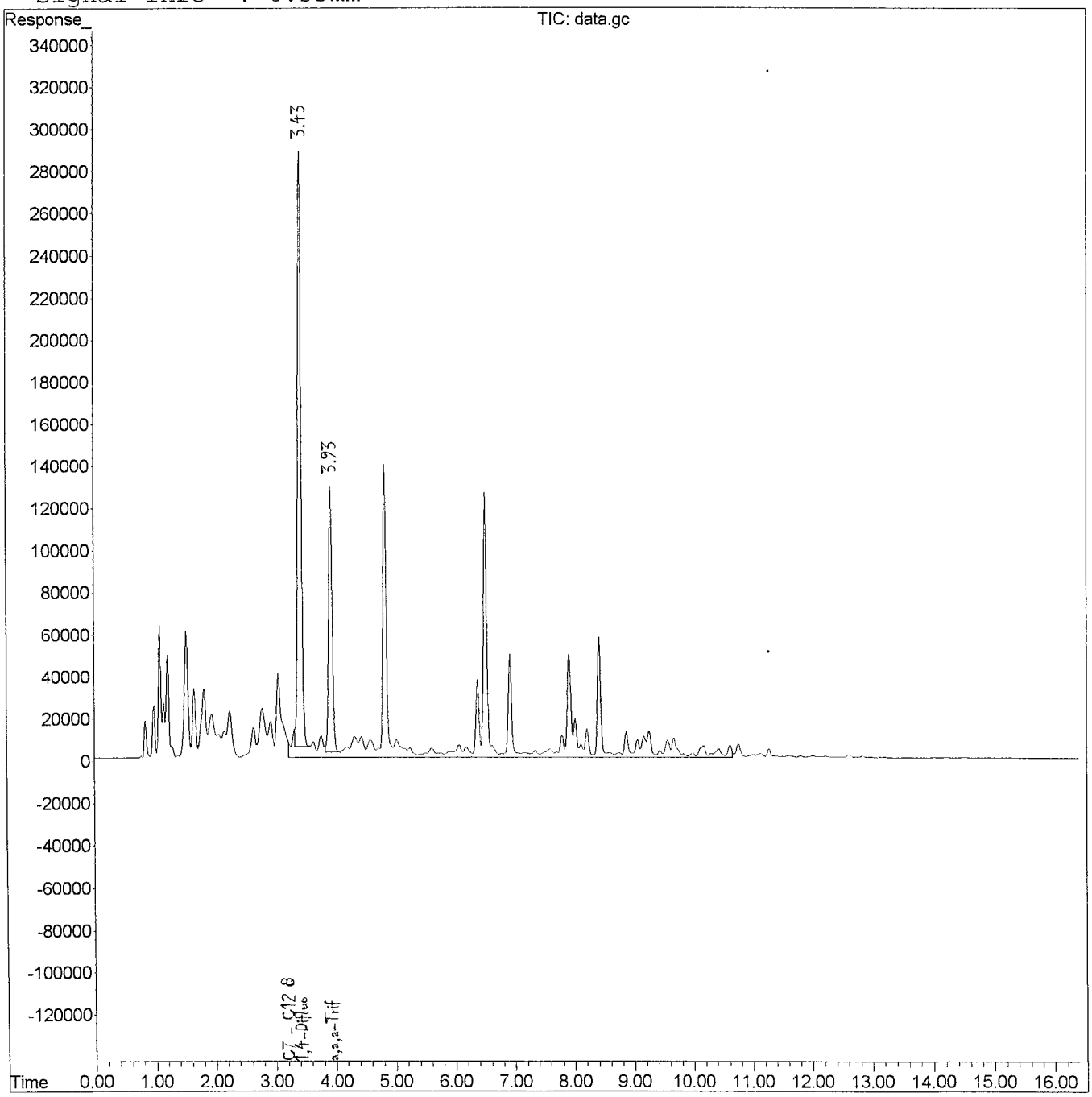
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R006.D Vial: 38
Acq On : 13 Mar 2007 01:49 pm Operator: GR
Sample : lcs 1647/703/816 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 14:46 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\GC06\METHODS\091806TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: Yes
Printer: Yes
File: No

Generate Report During Run Method: No

pm031607

CAL 6128 aka 091806tar
Calibration Last Updated: Tue Mar 13 13:10:15 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) a,a,a-Trifluorotoluene ( )

Ret. Time 3.93 min., Extract & Integrate from 3.73 to 4.13 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	533357
2		50.000	535446
3		50.000	534830
4		50.000	547317
5		50.000	560294
6		not used for this compound	
7		not used for this compound	
w_cc		50.000	-1
s_cc		50.000	-1

Curve Fit: Avg. RF

---

2) 1,4-Difluorobenzene ( )

Ret. Time 3.43 min., Extract & Integrate from 3.23 to 3.63 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	207154
2		25.000	250434
3		50.000	458000
4		100.000	1035010
5		150.000	1619666
6		not used for this compound	
7		not used for this compound	
w_cc		100.000	-1
s_cc		not used for this compound	

Curve Fit: Avg. RF

---

3) 4-Bromofluorobenzene ( )

Ret. Time 7.49 min., Extract & Integrate from 7.29 to 7.69 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	129026
2		25.000	154244
3		50.000	297734
4		100.000	650155
5		150.000	961375
6		not used for this compound	
7		not used for this compound	
w_cc		not used for this compound	
s_cc		100.000	-1

jm 03 Ke07

Curve Fit: Avg. RF

---

4) C7 - C12 8015 ( )

Ret. Time 3.22 min., Extract & Integrate from 3.22 to 10.67 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	301387
2		100.000	578840
3		200.000	1183046

4	500.000	2948011
5	1000.000	5926881
6	5000.000	30557187
7	10000.000	63275902
w_cc	500.000	-1
s_cc	500.000	-1

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Wed Mar 14 16:36:04 2007

pm03/6/07

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

		Compound	R.T.	Response	Conc Units
System Monitoring Compounds					
1)	S	a,a,a-Trifluorotoluene	4.00	533357	49.180 ug/L
2)	S	1,4-Difluorobenzene	3.49	207154	20.436 ug/L
3)	S	4-Bromofluorobenzene	7.57	129026	20.489 ug/L
Target Compounds					
4)	H	C7 - C12 8015	3.30	301387	44.582 ug/L

3/14/07

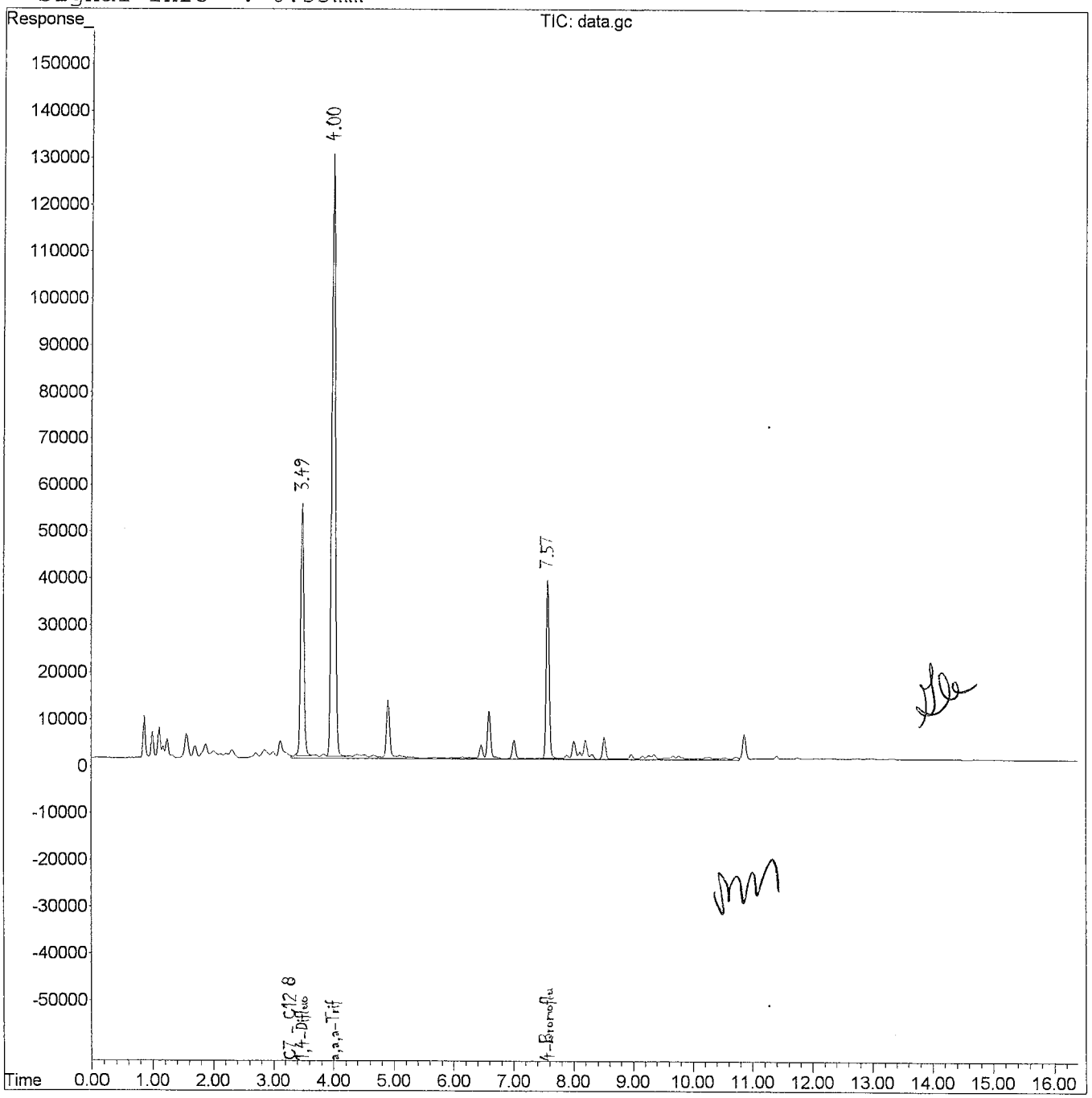
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:59 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	535446	49.373 ug/L
2) S 1,4-Difluorobenzene	3.48	250434	24.706 ug/L
3) S 4-Bromofluorobenzene	7.57	154244	24.494 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	578840	85.623 ug/L

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VMM

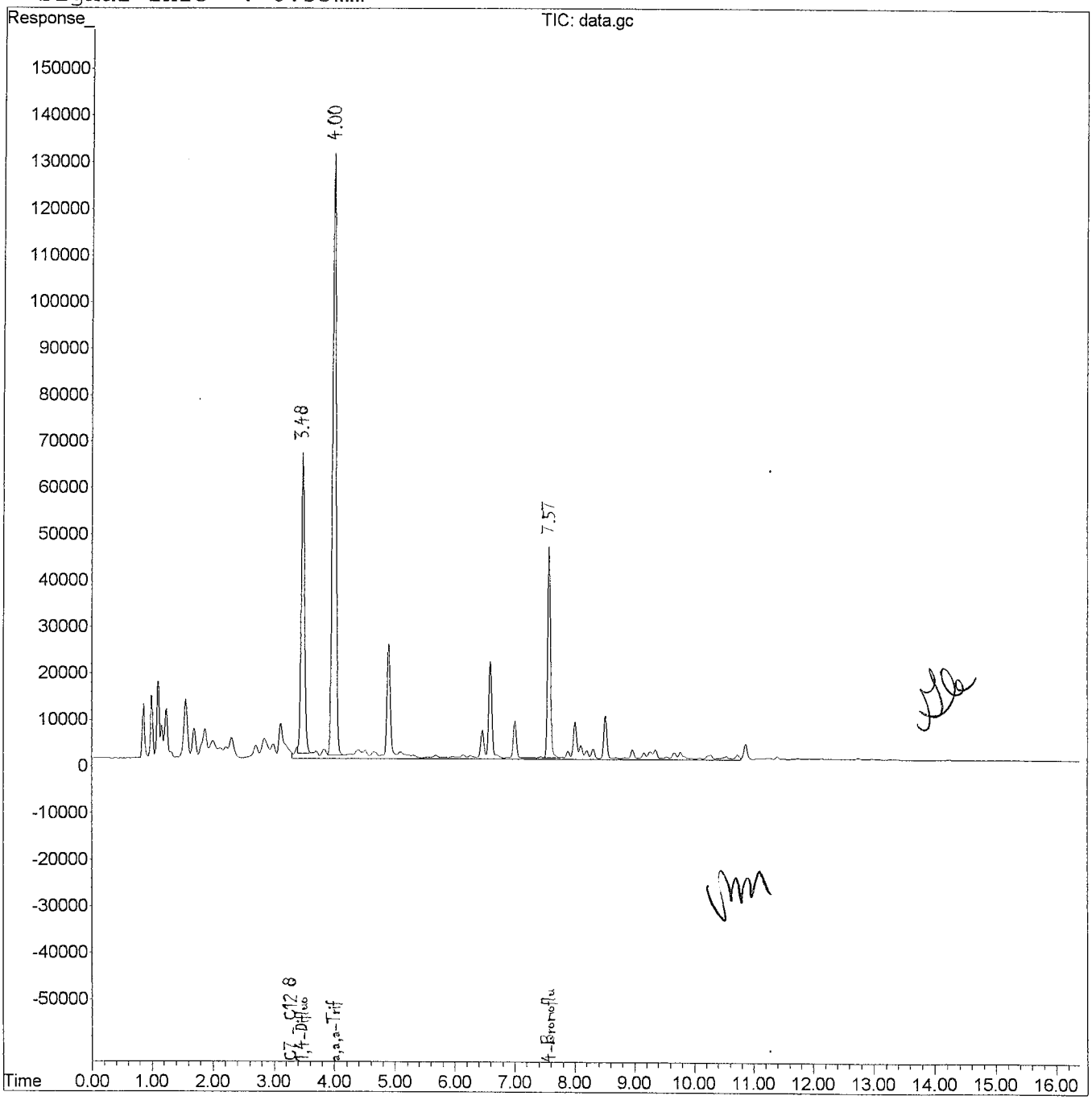
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:01 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

		Compound	R.T.	Response	Conc Units
System Monitoring Compounds					
1)	S	a,a,a-Trifluorotoluene	4.00	534830	49.316 ug/L
2)	S	1,4-Difluorobenzene	3.49	458000	45.183 ug/L
3)	S	4-Bromofluorobenzene	7.59	297734	47.280 ug/L
Target Compounds					
4)	H	C7 - C12 8015	3.30	1183046	174.998 ug/L

Ale 3/14/07

pm

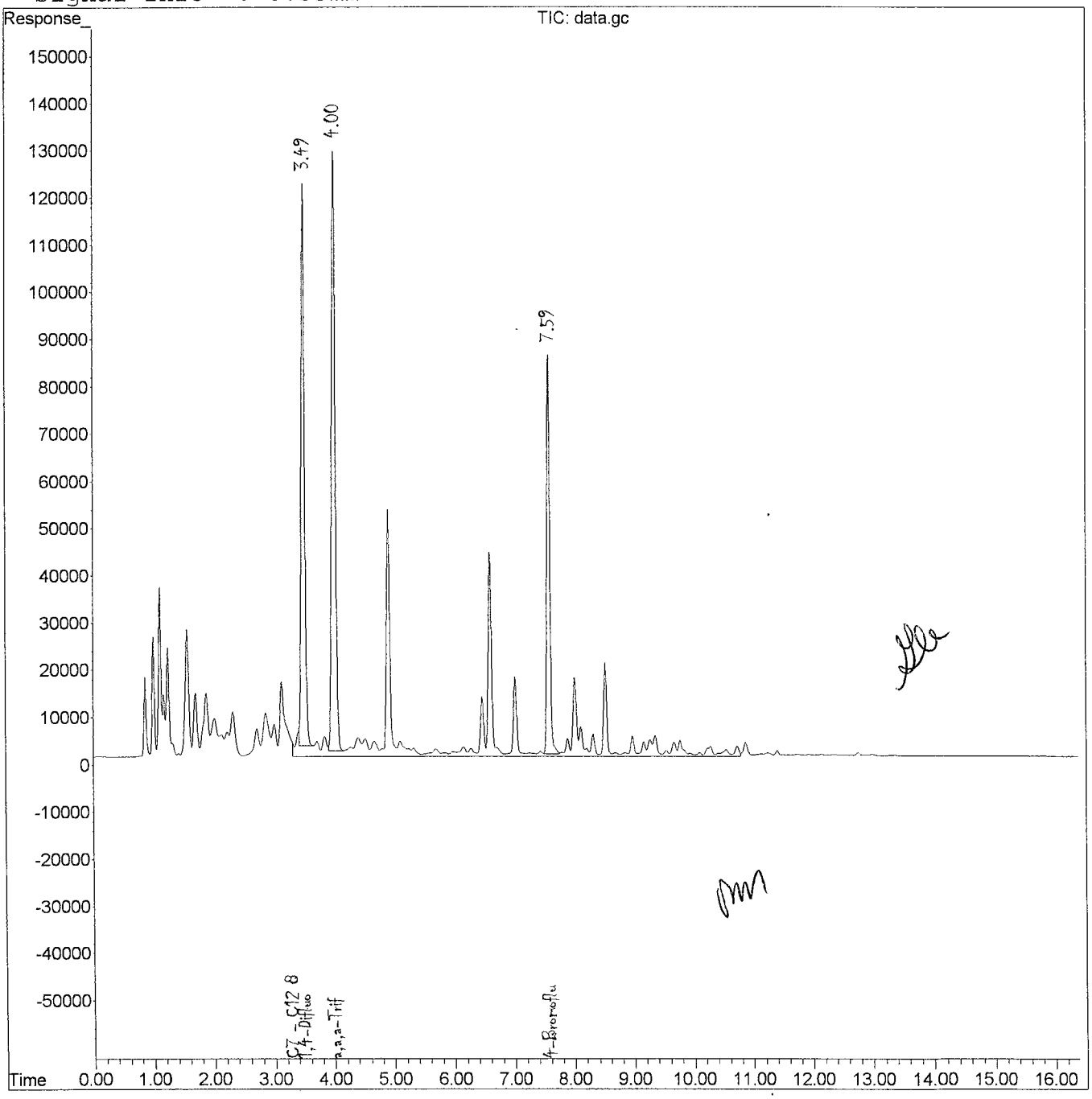
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:02 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	547317	50.467 ug/L
2) S 1,4-Difluorobenzene	3.49	1035010	102.106 ug/L
3) S 4-Bromofluorobenzene	7.59	650155	103.244 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2948011	436.075 ug/L

3/14/07

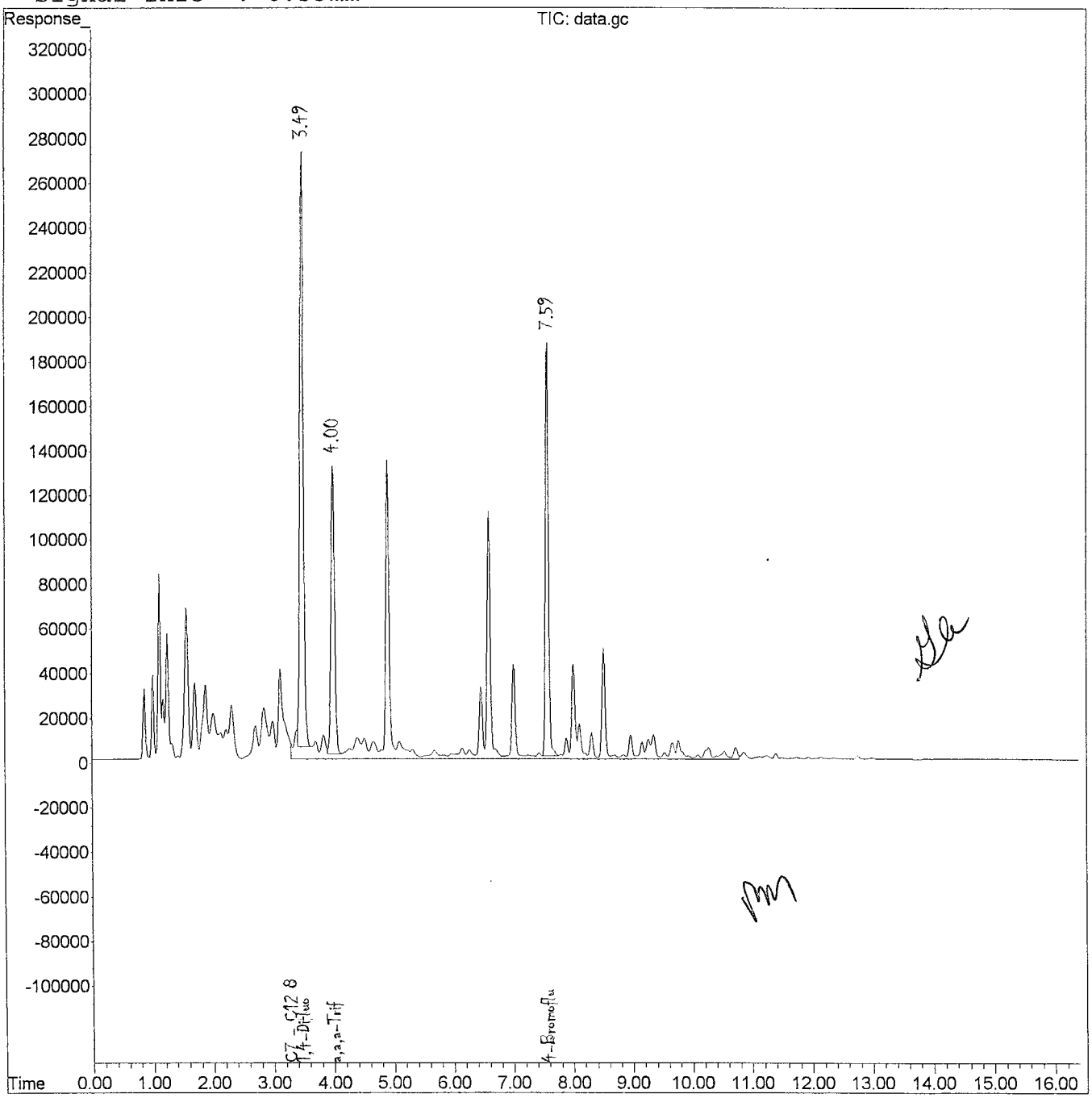
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:04 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
1)	S	a,a,a-Trifluorotoluene	4.00	560294	51.664	ug/L
2)	S	1,4-Difluorobenzene	3.49	1619666	159.784	ug/L
3)	S	4-Bromofluorobenzene	7.59	961375	152.665	ug/L
Target Compounds						
4)	H	C7 - C12 8015	3.30	5926881	876.715	ug/L

3/14/07

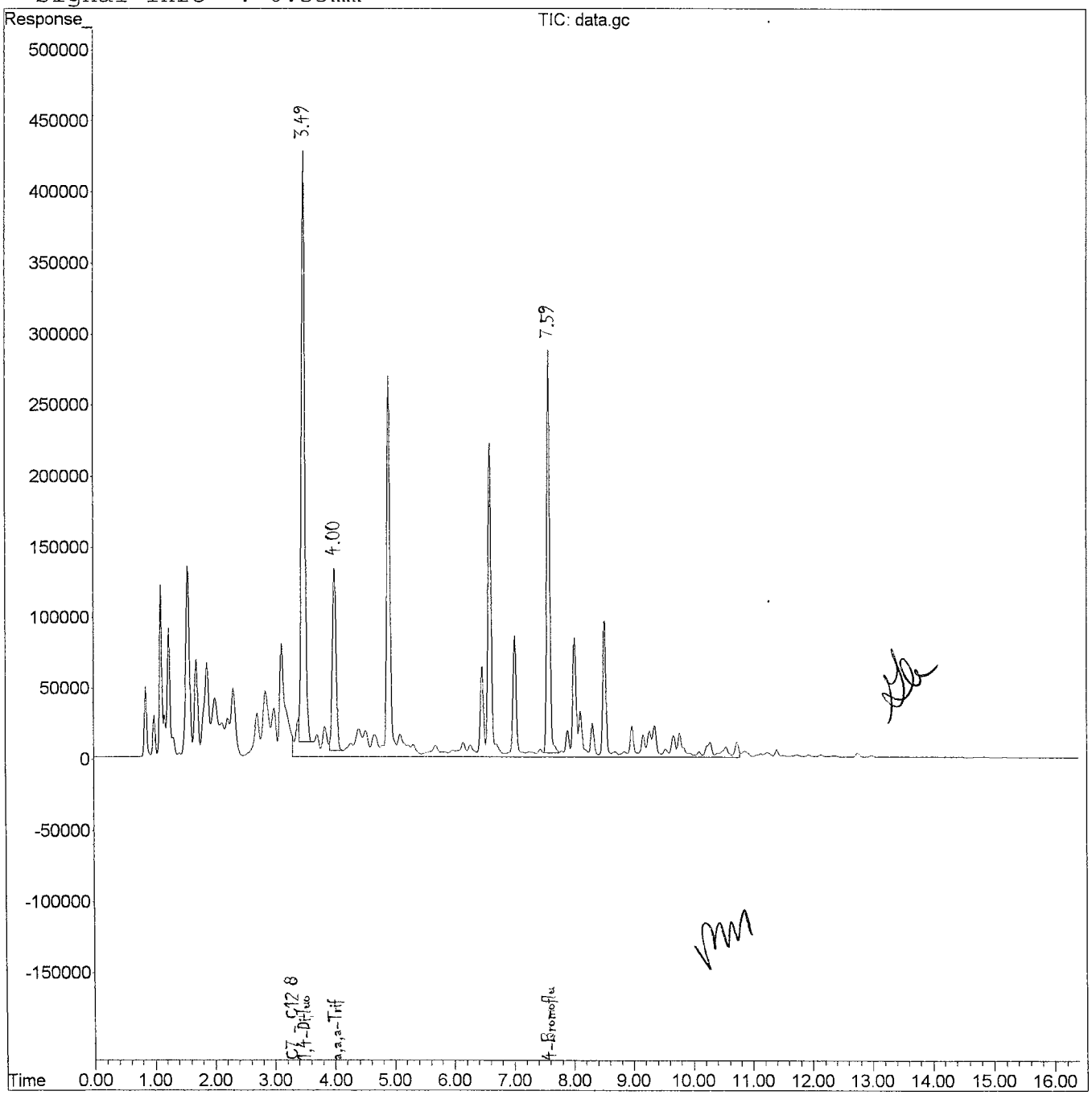
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:05 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	30557187	4520.076	ug/L

3/14/07

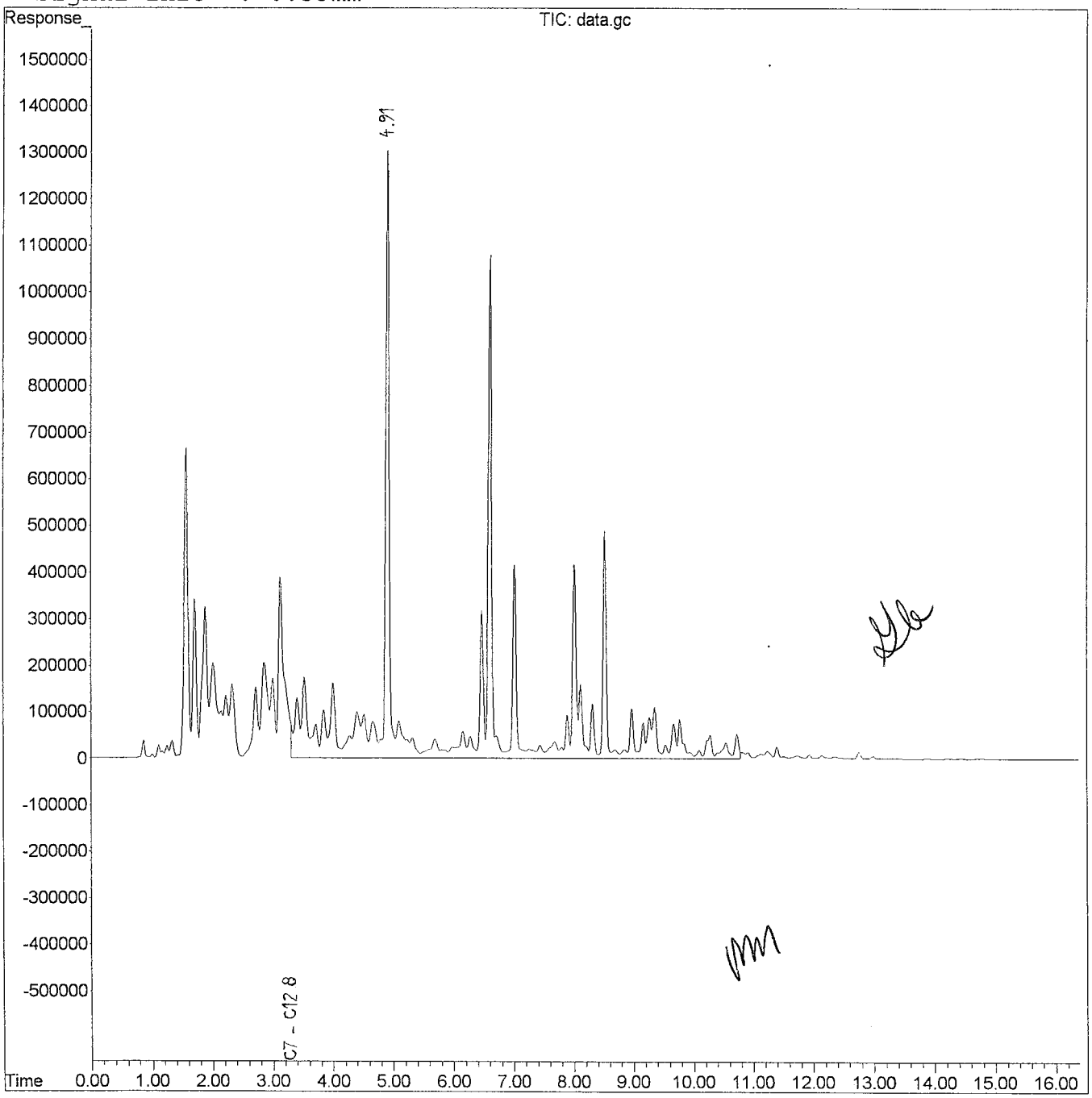
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:06 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	63275902	9359.889	ug/L

3/14/07

pm

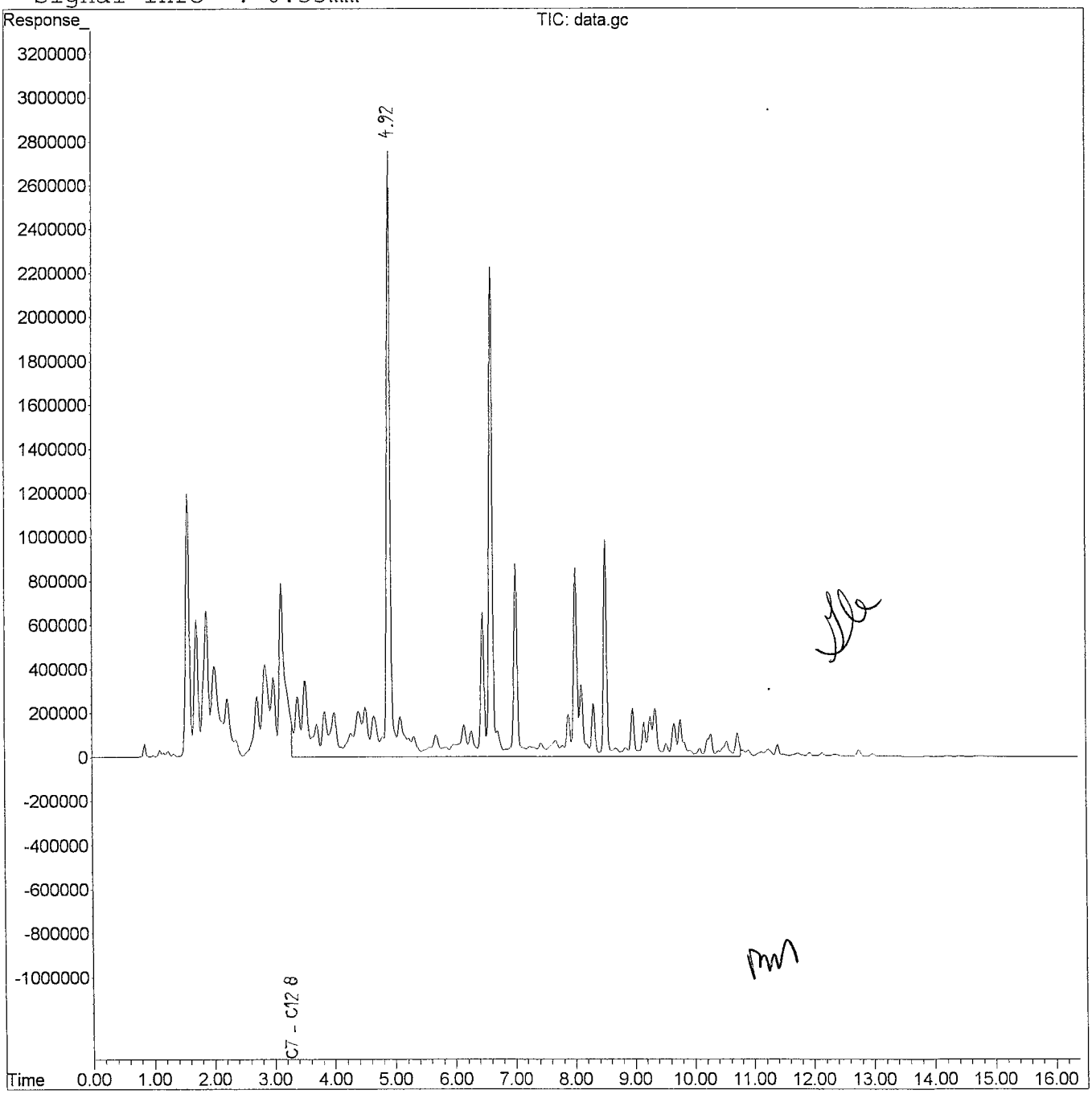
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.01	558695	51.516 ug/L
2) S 1,4-Difluorobenzene	3.49	1001454	98.796 ug/L
3) S 4-Bromofluorobenzene	7.59	628554	99.813 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2898371	483.139 ug/L

3/14/07

mm

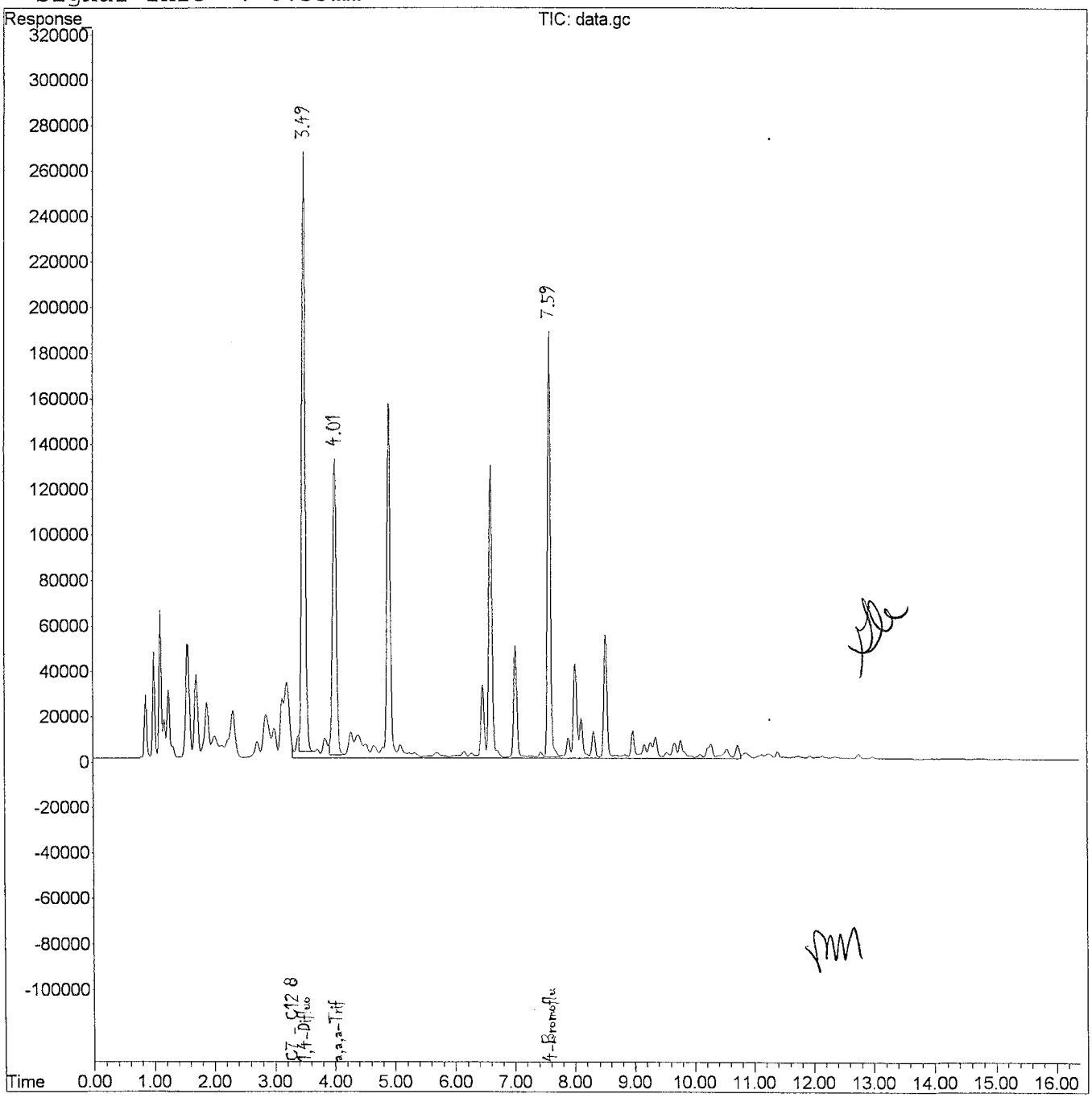
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R005.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	510	6000	6140	2	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11200	10	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R005.D
Lab ID: KWG0703710-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 12:37
Date Quantitated: 03/13/2007 13:10
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 3/16/07

Secondary Review: MM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R005.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:37	**Quant Date:**	03/13/2007 13:10	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1115982	110.09		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3070216	511.78			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

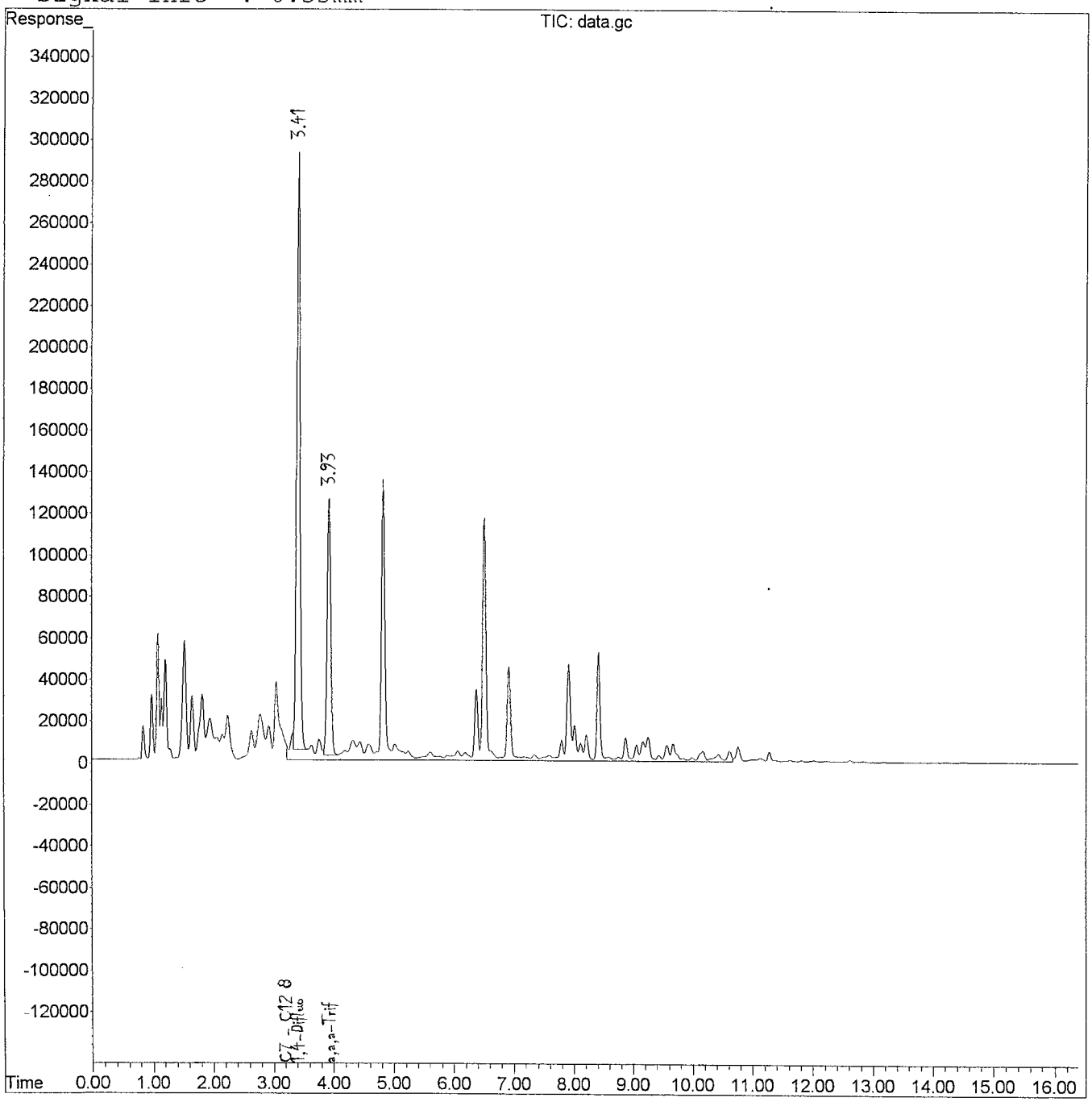
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R005.D Vial: 37
Acq On : 13 Mar 2007 12:37 pm Operator: GR
Sample : gas hcv3-88a Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 13:10 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0703710
Units: ug/L

File ID: J:\GC06\DATA\031307.FID\0313R017.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	530	6000	6310	5	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	110	10100	11100	9	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R017.D
Lab ID: KWG0703710-4
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:38
Date Quantitated: 03/14/2007 08:19
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R017.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:38	**Quant Date:**	03/14/2007 08:19	**Vial:**	37
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703710-4			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1108088	109.32		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3154619	525.85			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

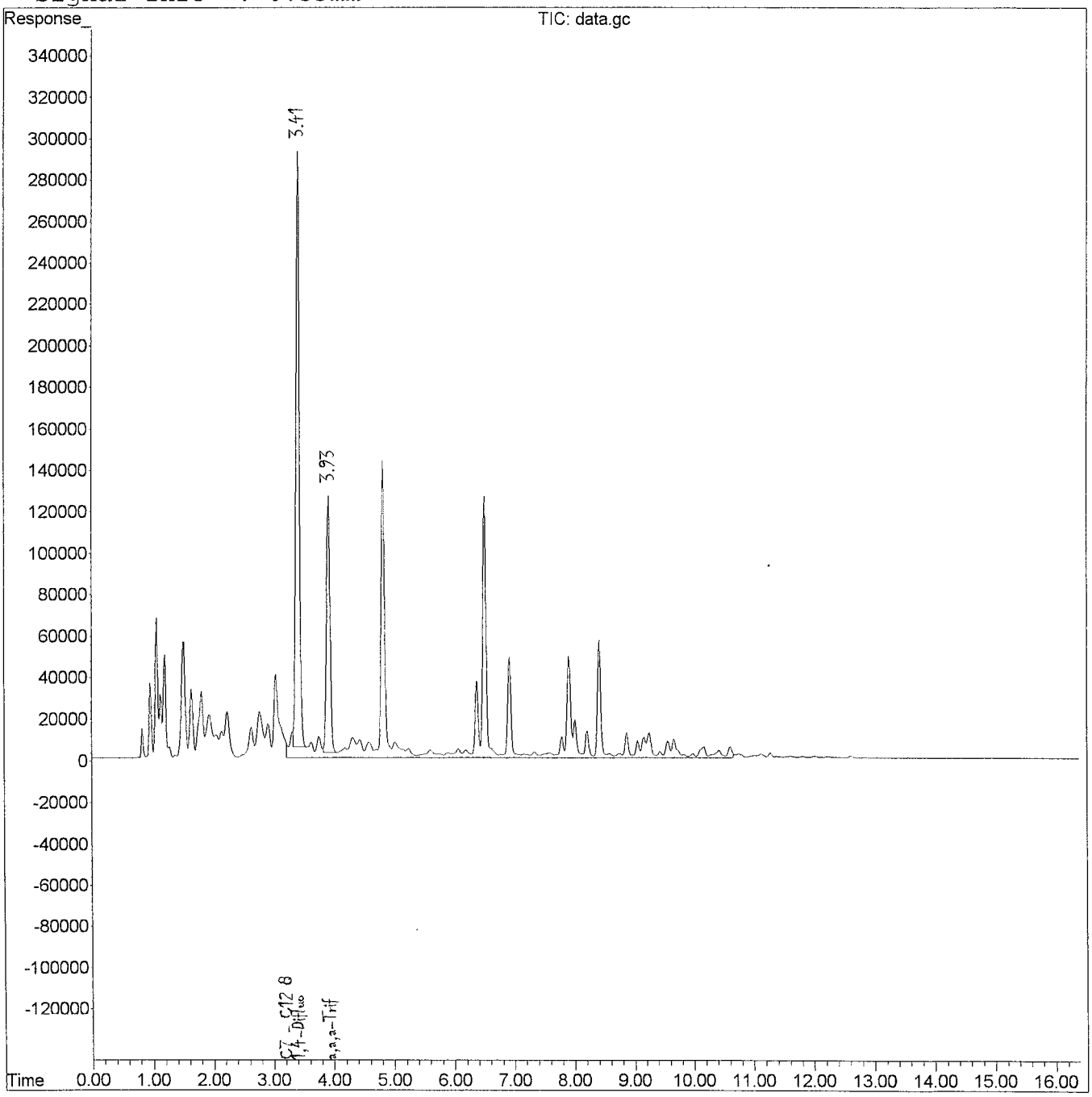
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R017.D Vial: 37
Acq On : 13 Mar 2007 07:38 pm Operator: GR
Sample : gas hcv3-88a Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:19 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0703711	**Prep Method:**	EPA 5030B	**Prep Date:**	03/13/07 00:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0701647-001	1047MW101CL	8015B VOC_GR	WATER	10ml	10ml
K0701647-002	1349MW01CL	8015B VOC_GR	WATER	10ml	10ml
K0701703-001	DAEGW104C1	8015B VOC_GR	WATER	10ml	10ml
K0701816-001	979GW115CL	8015B VOC_GR	WATER	10ml	10ml
K0701816-002	NKGW02CL	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-1	Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-2	Duplicate Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-3	Lab Control Sample	8015B VOC_GR	WATER	10ml	10ml
KWG0703711-4	Method Blank	8015B VOC_GR	WATER	10ml	10ml

pH
<2

Lab Code	Parent Lab Code	Comments
KWG0703711-1	K0701647-001	
KWG0703711-2	K0701647-001	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0701647-001	583924	HCV3-87R				
K0701647-002	583925	HCV3-87R				
K0701703-001	583926	HCV3-87R				
K0701816-001	583927	HCV3-87R				
K0701816-002	583928	HCV3-87R				
KWG0703711-1	583929	HCV3-87R		HCV3-87J	25uL	
KWG0703711-2	583930	HCV3-87R		HCV3-87J	25uL	
KWG0703711-3	583931	HCV3-87R		HCV3-87J	25uL	
KWG0703711-4	583932	HCV3-87R				

Comments:

Started By: GRoettge Assisted By: Training Yes No

Completed By: GRoettge Assisted By: Yes No

Reviewed By: [illegible] Date: 03/16/07 Storage:

Chain of Custody

Relinquished By: [illegible] Date: 3/16/07 Extracts Examined

Received By: [illegible] Date: [illegible] Yes No

Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R004.D
Lab ID: KWG0703710-1
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 12:06
Date Quantitated: 03/16/2007 08:43
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 3/16/07

Secondary Review: VM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R004.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 12:06	**Quant Date:**	03/16/2007 08:43	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-1			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1071361	105.69		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	141389	23.57			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

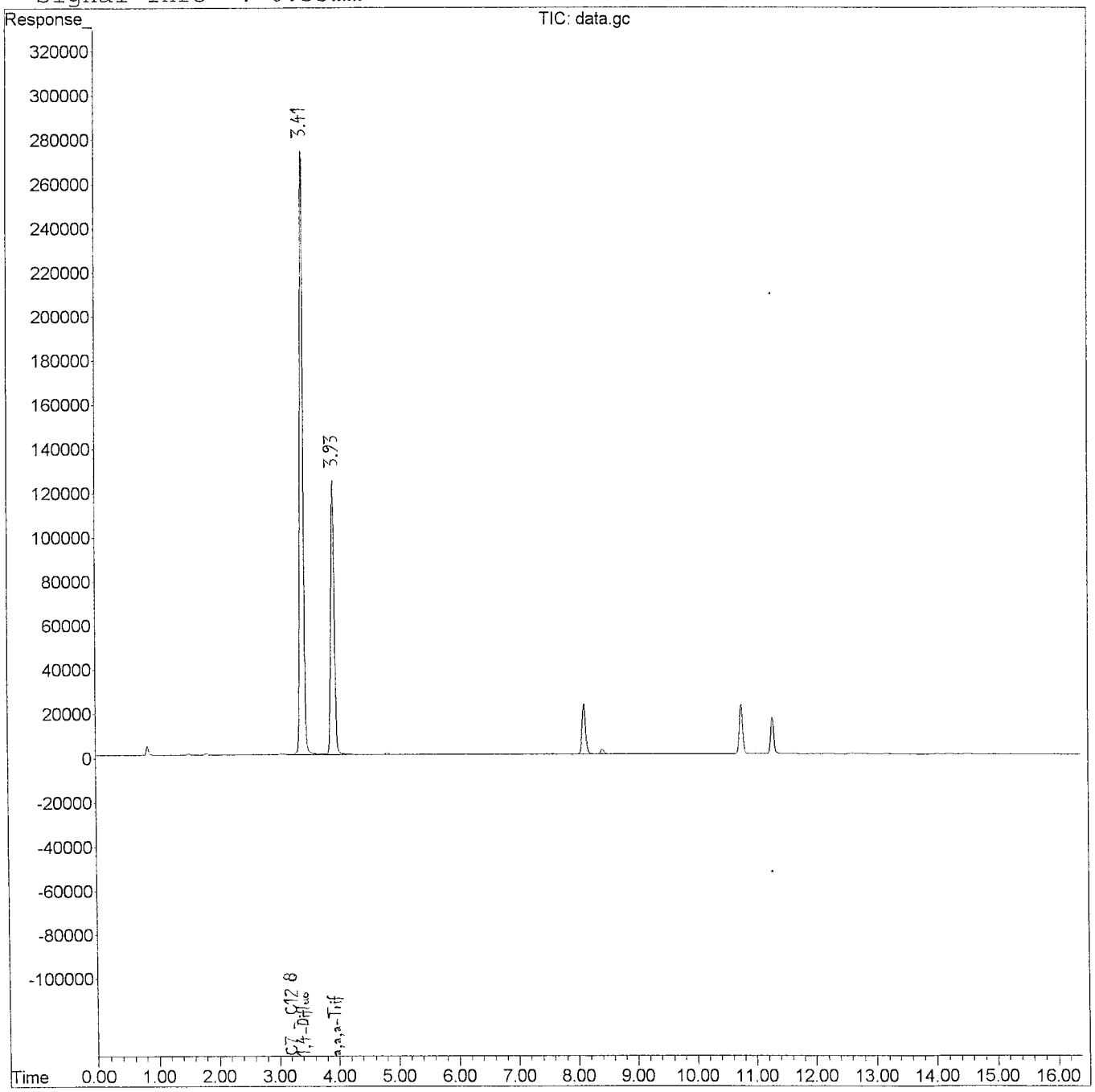
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R004.D Vial: 6
Acq On : 13 Mar 2007 12:06 pm Operator: GR
Sample : ib Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 16 8:43 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Exception Report

Data File: J:\GC06\DATA\031307.FID\0313R016.D
Lab ID: KWG0703710-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 03/13/2007 19:06
Date Quantitated: 03/14/2007 08:20
Batch ID: KWG0703710
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 3/16/07

Secondary Review: PM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	NWTPH-Gx NW_GAS	**Collect Date:**		**Receive Date:**	03/16/2007

Analysis Lot:	KWG0703710	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\031307.FID\0313R016.D			**Instrument:**	GC06
Acqu Date:	03/13/2007 19:06	**Quant Date:**	03/14/2007 08:20	**Vial:**	6
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0703710-2			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.41		1064325	105.00		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	17847	2.98			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

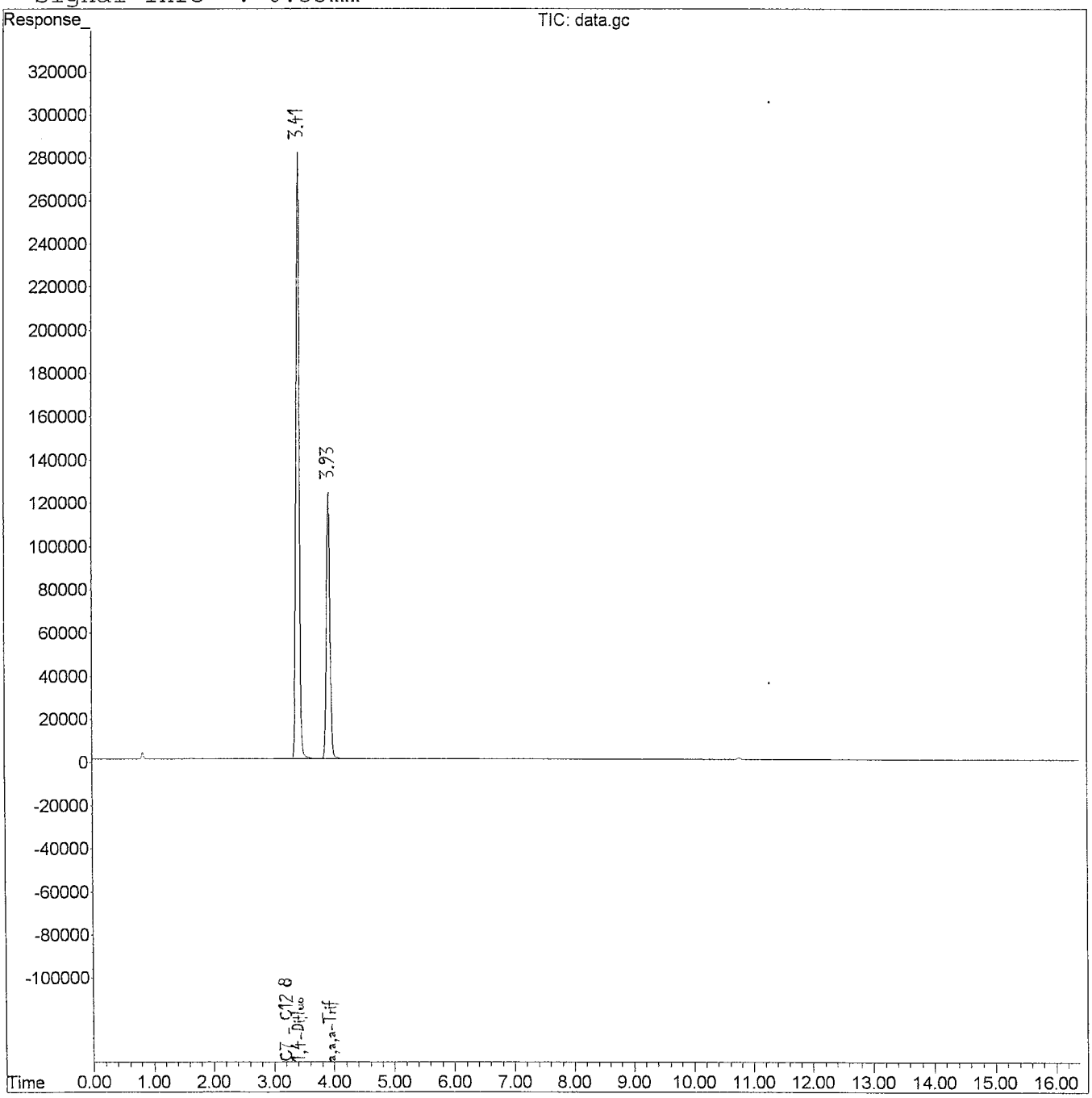
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\031307.FID\0313R016.D Vial: 6
Acq On : 13 Mar 2007 07:06 pm Operator: GR
Sample : ib Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 14 8:20 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Volatile Organic Compounds
EPA Method 8260B

Organic Analysis:
Volatile Organic Compounds

Summary Package

Sample and QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
979GW115CL	K0701816-001	03/06/2007	03/07/2007
NKGW02CL	K0701816-002	03/06/2007	03/07/2007
TB0306072A	K0701816-003	03/06/2007	03/07/2007
NKGW02CLMS	KWG0703662-1	03/06/2007	03/07/2007
NKGW02CLDMS	KWG0703662-2	03/06/2007	03/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jo Hammer

Date: 3/2017 Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: 03/06/2007
Date Received: 03/07/2007

Volatile Organic Compounds

Sample Name: 979GW115CL
Lab Code: K0701816-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Acetone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/14/07	03/14/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/14/07	03/14/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	*
cis-1,2-Dichloroethene	**1.8**		0.50	1	03/14/07	03/14/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Benzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Trichloroethene (TCE)	**0.55**		0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Toluene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Styrene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	76-114	03/14/07	Acceptable
Toluene-d8	110	88-110	03/14/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/14/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: 03/06/2007
Date Received: 03/07/2007

Volatile Organic Compounds

Sample Name: NKGW02CL
Lab Code: K0701816-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Acetone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/14/07	03/14/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/14/07	03/14/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Benzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Toluene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Styrene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	76-114	03/14/07	Acceptable
Toluene-d8	108	88-110	03/14/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/14/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: 03/06/2007
Date Received: 03/07/2007

Volatile Organic Compounds

Sample Name: TB0306072A
Lab Code: K0701816-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	TB0306072A	**Units:**	ug/L
Lab Code:	K0701816-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG0703662-4

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703662-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/13/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2		Sur3
979GW115CL	K0701816-001	93	110		92
NKGW02CL	K0701816-002	94	108		93
TB0306072A	K0701816-003	88	110		93
Method Blank	KWG0703662-4	89	108		93
NKGW02CLMS	KWG0703662-1	91	113	*	98
NKGW02CLDMS	KWG0703662-2	95	114	*	97
Lab Control Sample	KWG0703662-3	86	107		95

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	21:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F038.D	**Lab Code:**	KWG0703660-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703660
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	376,486	5.62	172,476	9.07	159,407	11.49
	Upper Limit ==>	752,972	6.12	344,952	9.57	318,814	11.99
	Lower Limit ==>	188,243	5.12	86,238	8.57	79,704	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703662-3	392,095	5.62	175,596	9.07	162,667	11.49
NKGW02CLMS	KWG0703662-1	378,884	5.62	173,178	9.08	163,566	11.49
NKGW02CLDMS	KWG0703662-2	384,233	5.62	180,282	9.07	169,111	11.49
Method Blank	KWG0703662-4	388,812	5.62	172,200	9.08	151,438	11.49
TB0306072A	K0701816-003	380,770	5.62	173,672	9.08	157,065	11.49
979GW115CL	K0701816-001	376,849	5.62	175,434	9.08	156,058	11.49
NKGW02CL	K0701816-002	373,467	5.62	176,296	9.08	158,245	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

Analyte Name	Sample Result	NKGW02CLMS KWG0703662-1 Matrix Spike			NKGW02CLDMS KWG0703662-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	12.1	10.0	121	12.0	10.0	120	65-135	1	35
Benzene	ND	11.7	10.0	117	11.7	10.0	117	65-135	0	35
Trichloroethene (TCE)	ND	11.4	10.0	114	11.8	10.0	118	65-135	3	35
Toluene	ND	12.6	10.0	126	12.7	10.0	127	65-135	1	35
Chlorobenzene	ND	9.27	10.0	93	9.16	10.0	92	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703662

	Lab Control Sample KWG0703662-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	11.0	10.0	110	57-134
Vinyl Acetate	49.3	50.0	99	10-202
2-Chloroethyl Vinyl Ether	11.8	10.0	118	10-180
Chloromethane	10.2	10.0	102	39-134
Vinyl Chloride	11.0	10.0	110	60-125
Bromomethane	9.17	10.0	92	25-163
Chloroethane	9.25	10.0	93	61-126
Acetone	47.7	50.0	95	65-136
1,1-Dichloroethene	11.0	10.0	110	65-135
Carbon Disulfide	23.1	20.0	116	59-130
Methylene Chloride	12.7	10.0	127 *	62-122
trans-1,2-Dichloroethene	10.5	10.0	105	72-119
1,1-Dichloroethane	11.0	10.0	110	66-126
2-Butanone (MEK)	52.7	50.0	105	60-143
cis-1,2-Dichloroethene	11.1	10.0	111	74-119
Chloroform	10.3	10.0	103	70-121
1,1,1-Trichloroethane (TCA)	10.8	10.0	108	68-133
Carbon Tetrachloride	10.5	10.0	105	59-147
1,2-Dichloroethane (EDC)	10.9	10.0	109	70-129
Benzene	10.5	10.0	105	65-135
Trichloroethene (TCE)	10.8	10.0	108	65-135
1,2-Dichloropropane	11.3	10.0	113	68-122
Bromodichloromethane	10.8	10.0	108	77-129
2-Hexanone	39.9	50.0	80	58-129
cis-1,3-Dichloropropene	10.4	10.0	104	70-129
Toluene	10.7	10.0	107	65-135
trans-1,3-Dichloropropene	8.33	10.0	83	62-123
1,1,2-Trichloroethane	9.35	10.0	94	76-118
4-Methyl-2-pentanone (MIBK)	51.1	50.0	102	62-131
Tetrachloroethene (PCE)	8.12	10.0	81	71-117
Dibromochloromethane	8.25	10.0	83	71-129
Chlorobenzene	8.58	10.0	86	65-135
Ethylbenzene	8.91	10.0	89	75-118
Xylenes, Total	26.6	30.0	89	70-130
Styrene	9.13	10.0	91	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703662

	Lab Control Sample KWG0703662-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	7.94	10.0	79	61-141
1,1,2,2-Tetrachloroethane	9.61	10.0	96	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	22:59

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F044.D
Lab Code:	KWG0703662-4	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703662-3	J:\MS18\DATA\031307\0313F039.D	03/13/07	21:21
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/07	21:41
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/07	22:00
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/07	23:38
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/07	02:14
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/07	02:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	21:21

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F039.D
Lab Code:	KWG0703662-3	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/07	21:41
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/07	22:00
Method Blank	KWG0703662-4	J:\MS18\DATA\031307\0313F044.D	03/13/07	22:59
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/07	23:38
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/07	02:14
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/07	02:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007
Time Analyzed: 20:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F037.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703660

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.6	7818	PASS
75	95	30	60	46.7	18616	PASS
95	95	100	100	100.0	39880	PASS
96	95	5	9	6.1	2439	PASS
173	174	0	2	0.4	115	PASS
174	95	50	120	76.9	30661	PASS
175	174	5	9	8.7	2673	PASS
176	174	95	101	96.1	29469	PASS
177	176	5	9	7.4	2169	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703660-2	J:\MS18\DATA\031307\0313F038.D	03/13/2007	21:02	
Lab Control Sample	KWG0703662-3	J:\MS18\DATA\031307\0313F039.D	03/13/2007	21:21	
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/2007	21:41	
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/2007	22:00	
Method Blank	KWG0703662-4	J:\MS18\DATA\031307\0313F044.D	03/13/2007	22:59	
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/2007	23:38	
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/2007	02:14	
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/2007	02:34	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703660
Units: PPB

File ID: J:\MS18\DATA\031307\0313F038.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	22	0.01	0.448	0.482	8	NA	± 30 %	AverageRF
Vinyl Acetate	20	13	0.01	0.0285	0.0185	-35	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.9	0.01	0.213	0.190	-11	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.01	0.0853	0.0919	8	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.10	0.355	0.357	1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	9.9	0.01	0.326	0.321	-1	NA	± 20 %	AverageRF
Bromomethane	10	8.9	0.01	0.157	0.140	-11	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	220	0.01	0.0283	0.0316	12	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	10	0.01	0.242	0.248	3	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.870	10	NA	± 30 %	AverageRF
Methylene Chloride	10	10	0.01	0.259	0.261	1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.306	8	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.556	12	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.311	8	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.515	5	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.434	6	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.01	0.364	0.378	4	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.295	11	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.27	8	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.319	12	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.271	11	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.282	6	NA	± 30 %	AverageRF
2-Hexanone	200	210	0.01	0.0294	0.0304	3	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.306	1	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.802	10	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.3	0.01	0.532	0.442	-17	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.0	0.01	0.318	0.286	-10	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	250	0.01	0.0370	0.0456	23	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.0	0.01	0.723	0.577	-20	NA	± 30 %	AverageRF
Dibromochloromethane	10	8.1	0.01	0.427	0.346	-19	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.76	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.0	0.01	1.18	1.06	-10	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.28	-12	NA	± 30 %	AverageRF
o-Xylene	10	8.7	0.01	1.35	1.18	-13	NA	± 30 %	AverageRF
Styrene	10	9.1	0.01	0.945	0.864	-9	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.158	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703660
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.6	0.30	0.370	0.317	-14	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.09	13	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.7	0.01	0.877	0.847	-3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260B

Analysis Lot: KWG0703660
Instrument ID: GC-MS 18

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0313F037.D	GC/MS Tuning - Bromofluorobenzene	KWG0703660-1	03/13/2007	20:42		03/13/2007	20:57
0313F038.D	Continuing Calibration Verification	KWG0703660-2	03/13/2007	21:02		03/13/2007	21:17
0313F039.D	Lab Control Sample	KWG0703662-3	03/13/2007	21:21		03/13/2007	21:36
0313F040.D	NKGW02CLMS	KWG0703662-1	03/13/2007	21:41		03/13/2007	21:56
0313F041.D	NKGW02CLDMS	KWG0703662-2	03/13/2007	22:00		03/13/2007	22:15
0313F044.D	Method Blank	KWG0703662-4	03/13/2007	22:59		03/13/2007	23:14
0313F045.D	ZZZZZZ	ZZZZZZ	03/13/2007	23:18		03/13/2007	23:33
0313F046.D	TB0306072A	K0701816-003	03/13/2007	23:38		03/13/2007	23:53
0313F047.D	ZZZZZZ	ZZZZZZ	03/13/2007	23:57		03/14/2007	00:12
0313F048.D	ZZZZZZ	ZZZZZZ	03/14/2007	00:16		03/14/2007	00:31
0313F049.D	ZZZZZZ	ZZZZZZ	03/14/2007	00:36		03/14/2007	00:51
0313F050.D	ZZZZZZ	ZZZZZZ	03/14/2007	00:55		03/14/2007	01:10
0313F051.D	ZZZZZZ	ZZZZZZ	03/14/2007	01:15		03/14/2007	01:30
0313F052.D	ZZZZZZ	ZZZZZZ	03/14/2007	01:35		03/14/2007	01:50
0313F053.D	ZZZZZZ	ZZZZZZ	03/14/2007	01:55		03/14/2007	02:10
0313F054.D	979GW115CL	K0701816-001	03/14/2007	02:14		03/14/2007	02:29
0313F055.D	NKGW02CL	K0701816-002	03/14/2007	02:34		03/14/2007	02:49
0313F056.D	ZZZZZZ	ZZZZZZ	03/14/2007	02:53		03/14/2007	03:08
0313F057.D	ZZZZZZ	ZZZZZZ	03/14/2007	03:13		03/14/2007	03:28
0313F058.D	ZZZZZZ	ZZZZZZ	03/14/2007	03:32		03/14/2007	03:47
0313F059.D	ZZZZZZ	ZZZZZZ	03/14/2007	03:52		03/14/2007	04:07
0313F060.D	ZZZZZZ	ZZZZZZ	03/14/2007	04:12		03/14/2007	04:27
0313F061.D	ZZZZZZ	ZZZZZZ	03/14/2007	04:31		03/14/2007	04:46
0313F062.D	ZZZZZZ	ZZZZZZ	03/14/2007	04:51		03/14/2007	05:06
0313F063.D	ZZZZZZ	ZZZZZZ	03/14/2007	05:11		03/14/2007	05:26
0313F064.D	ZZZZZZ	ZZZZZZ	03/14/2007	05:30		03/14/2007	05:45
0313F065.D	ZZZZZZ	ZZZZZZ	03/14/2007	05:49		03/14/2007	06:04
0313F066.D	ZZZZZZ	ZZZZZZ	03/14/2007	06:09		03/14/2007	06:24

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/14/2007

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: KWG0703662
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
979GW115CL	K0701816-001	03/06/07	03/07/07	10ml	10ml	NA	
NKGW02CL	K0701816-002	03/06/07	03/07/07	10ml	10ml	NA	
TB0306072A	K0701816-003	03/06/07	03/07/07	10ml	10ml	NA	
Method Blank	KWG0703662-4	NA	NA	10ml	10ml	NA	
NKGW02CLMS	KWG0703662-1	03/06/07	03/07/07	10ml	10ml	NA	
NKGW02CLDMS	KWG0703662-2	03/06/07	03/07/07	10ml	10ml	NA	
Lab Control Sample	KWG0703662-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Volatile Organic Compounds

Validation Package

Organic Analysis:
Volatile Organic Compounds

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2		Sur3
979GW115CL	K0701816-001	93	110		92
NKGW02CL	K0701816-002	94	108		93
TB0306072A	K0701816-003	88	110		93
Method Blank	KWG0703662-4	89	108		93
NKGW02CLMS	KWG0703662-1	91	113	*	98
NKGW02CLDMS	KWG0703662-2	95	114	*	97
Lab Control Sample	KWG0703662-3	86	107		95

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Analyzed:**	03/13/2007
		Time Analyzed:	21:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID:	J:\MS18\DATA\031307\0313F038.D	**Lab Code:**	KWG0703660-2
Instrument ID:	GC-MS 18	**Analysis Lot:**	KWG0703660
Analysis Method:	8260B		

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	376,486	5.62	172,476	9.07	159,407	11.49
	Upper Limit ==>	752,972	6.12	344,952	9.57	318,814	11.99
	Lower Limit ==>	188,243	5.12	86,238	8.57	79,704	10.99
	ICAL Result ==>	403,812	5.63	151,762	9.07	144,072	11.49
Associated Analyses							
Lab Control Sample	KWG0703662-3	392,095	5.62	175,596	9.07	162,667	11.49
NKGW02CLMS	KWG0703662-1	378,884	5.62	173,178	9.08	163,566	11.49
NKGW02CLDMS	KWG0703662-2	384,233	5.62	180,282	9.07	169,111	11.49
Method Blank	KWG0703662-4	388,812	5.62	172,200	9.08	151,438	11.49
TB0306072A	K0701816-003	380,770	5.62	173,672	9.08	157,065	11.49
979GW115CL	K0701816-001	376,849	5.62	175,434	9.08	156,058	11.49
NKGW02CL	K0701816-002	373,467	5.62	176,296	9.08	158,245	11.49

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

Analyte Name	Sample Result	NKGW02CLMS KWG0703662-1 Matrix Spike			NKGW02CLDMS KWG0703662-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	12.1	10.0	121	12.0	10.0	120	65-135	1	35
Benzene	ND	11.7	10.0	117	11.7	10.0	117	65-135	0	35
Trichloroethene (TCE)	ND	11.4	10.0	114	11.8	10.0	118	65-135	3	35
Toluene	ND	12.6	10.0	126	12.7	10.0	127	65-135	1	35
Chlorobenzene	ND	9.27	10.0	93	9.16	10.0	92	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Extracted: 03/13/2007
Date Analyzed: 03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0703662

	Lab Control Sample KWG0703662-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	11.0	10.0	110	57-134
Vinyl Acetate	49.3	50.0	99	10-202
2-Chloroethyl Vinyl Ether	11.8	10.0	118	10-180
Chloromethane	10.2	10.0	102	39-134
Vinyl Chloride	11.0	10.0	110	60-125
Bromomethane	9.17	10.0	92	25-163
Chloroethane	9.25	10.0	93	61-126
Acetone	47.7	50.0	95	65-136
1,1-Dichloroethene	11.0	10.0	110	65-135
Carbon Disulfide	23.1	20.0	116	59-130
Methylene Chloride	12.7	10.0	127 *	62-122
trans-1,2-Dichloroethene	10.5	10.0	105	72-119
1,1-Dichloroethane	11.0	10.0	110	66-126
2-Butanone (MEK)	52.7	50.0	105	60-143
cis-1,2-Dichloroethene	11.1	10.0	111	74-119
Chloroform	10.3	10.0	103	70-121
1,1,1-Trichloroethane (TCA)	10.8	10.0	108	68-133
Carbon Tetrachloride	10.5	10.0	105	59-147
1,2-Dichloroethane (EDC)	10.9	10.0	109	70-129
Benzene	10.5	10.0	105	65-135
Trichloroethene (TCE)	10.8	10.0	108	65-135
1,2-Dichloropropane	11.3	10.0	113	68-122
Bromodichloromethane	10.8	10.0	108	77-129
2-Hexanone	39.9	50.0	80	58-129
cis-1,3-Dichloropropene	10.4	10.0	104	70-129
Toluene	10.7	10.0	107	65-135
trans-1,3-Dichloropropene	8.33	10.0	83	62-123
1,1,2-Trichloroethane	9.35	10.0	94	76-118
4-Methyl-2-pentanone (MIBK)	51.1	50.0	102	62-131
Tetrachloroethene (PCE)	8.12	10.0	81	71-117
Dibromochloromethane	8.25	10.0	83	71-129
Chlorobenzene	8.58	10.0	86	65-135
Ethylbenzene	8.91	10.0	89	75-118
Xylenes, Total	26.6	30.0	89	70-130
Styrene	9.13	10.0	91	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0703662

	Lab Control Sample KWG0703662-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	7.94	10.0	79	61-141
1,1,2,2-Tetrachloroethane	9.61	10.0	96	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	22:59

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS18\DATA\031307\0313F044.D
Lab Code:	KWG0703662-4	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0703662-3	J:\MS18\DATA\031307\0313F039.D	03/13/07	21:21
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/07	21:41
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/07	22:00
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/07	23:38
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/07	02:14
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/07	02:34

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Extracted:**	03/13/2007
Sample Matrix:	Water	**Date Analyzed:**	03/13/2007
		Time Analyzed:	21:21

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS18\DATA\031307\0313F039.D
Lab Code:	KWG0703662-3	**Instrument ID:**	GC-MS 18
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0703662

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/07	21:41
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/07	22:00
Method Blank	KWG0703662-4	J:\MS18\DATA\031307\0313F044.D	03/13/07	22:59
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/07	23:38
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/07	02:14
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/07	02:34

Organic Analysis:
Volatile Organic Compounds

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco
Sample Matrix: Water

Service Request: K0701816
Date Collected: 03/06/2007
Date Received: 03/07/2007

Volatile Organic Compounds

Sample Name: 979GW115CL
Lab Code: K0701816-001

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Acetone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/14/07	03/14/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/14/07	03/14/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	*
cis-1,2-Dichloroethene	**1.8**		0.50	1	03/14/07	03/14/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Benzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Trichloroethene (TCE)	**0.55**		0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Toluene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	979GW115CL	**Units:**	ug/L
Lab Code:	K0701816-001	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Styrene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	93	76-114	03/14/07	Acceptable
Toluene-d8	110	88-110	03/14/07	Acceptable
4-Bromofluorobenzene	92	86-115	03/14/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F054.D
Lab ID: K0701816-001
RunType: SMPL
Matrix: WATER

Date Acquired: 03/14/2007 02:14
Date Quantitated: 03/14/2007 16:11
Batch ID: KWG0703660
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Lab Control Spike	Methylene Chloride	127	62	122	cicb cmpd

Primary Review: KR 3/15/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	K0701816
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583540	**Prep Date:**	03/14/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F054.D			**Instrument:**	GC-MS 18
Acqu Date:	03/14/2007 02:14	**Quant Date:**	03/14/2007 16:11	**Vial:**	51
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-001			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	376849	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	175434	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	156058	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.26	0.01	0.00	65	74357	9.25	93	76-114 OK	
1	Toluene-d8	7.49	0.00	0.00	98	402077	11.00	110	88-110 OK	
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	141830	9.22	92	86-115 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride	1.39		0.00	62	2647	0.2200	0.22	J	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40	0.01	0.00	43	1490	1.40	4.1	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	Methylene Chloride				84	0		0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene	3.00		0.00	96	2283	0.2100	0.21	J	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene	4.15		0.00	96	19128	1.76	1.8		
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F054.D			**Instrument:**	GC-MS 18
Acqu Date:	03/14/2007 02:14	**Quant Date:**	03/14/2007 16:11	**Vial:**	51
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-001			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0**d**		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)	6.06		0.00	95	5868	0.5500	0.55		
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene	7.57		0.00	92	1751	0.0600	0.11	U	
2	trans-1,3-Dichloropropene				75	0**d**		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0**d**		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

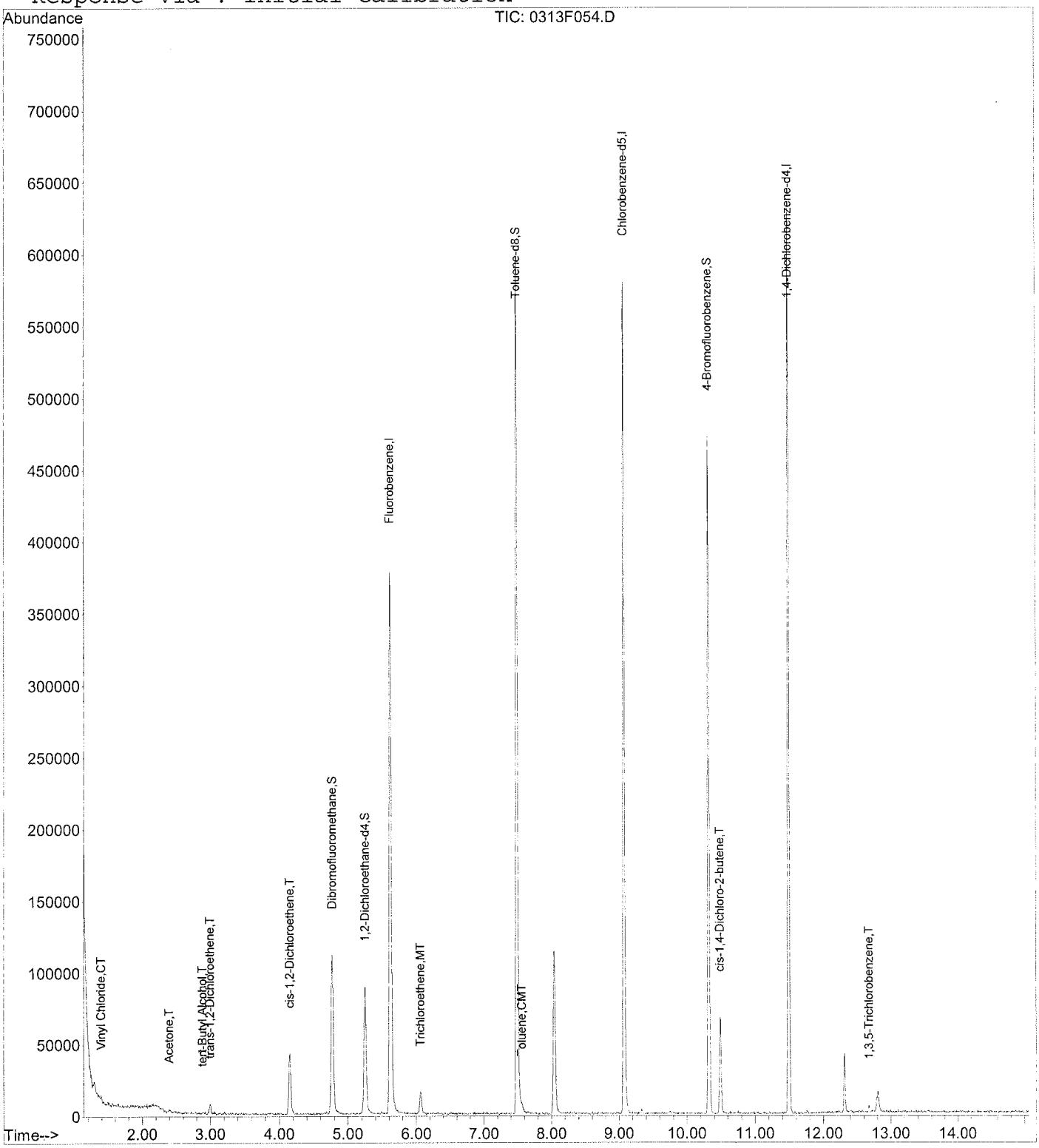
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

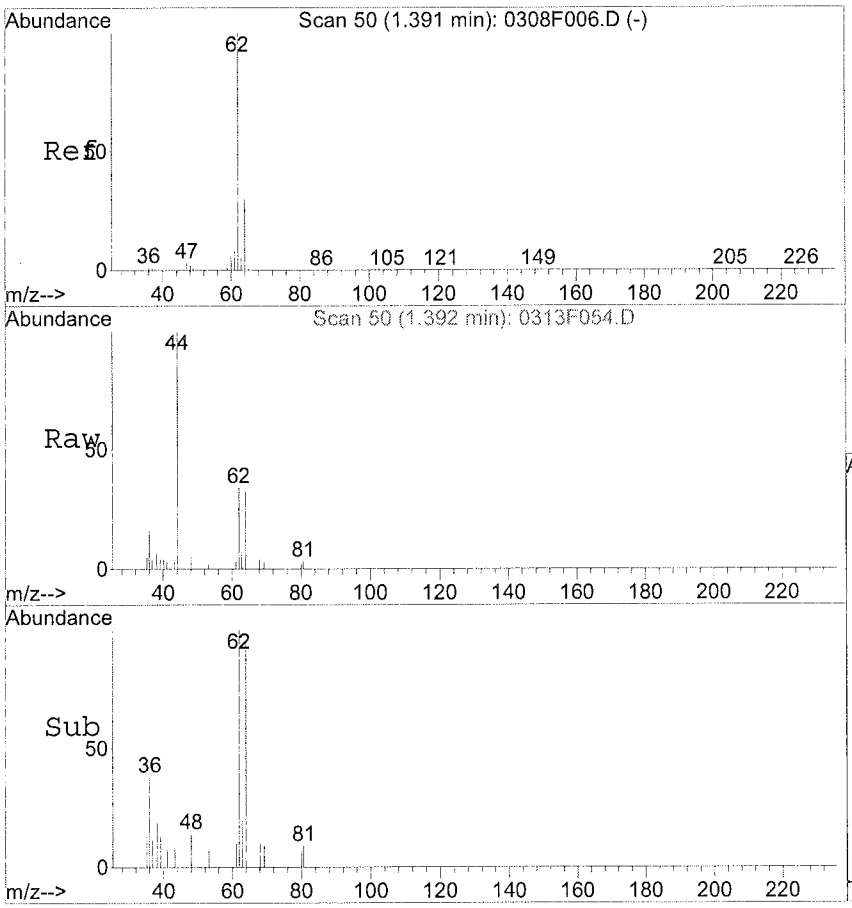
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F054.D Vial: 51
Acq On : 14 Mar 2007 2:14 am Operator:
Sample : K1816-001 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 16:11 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

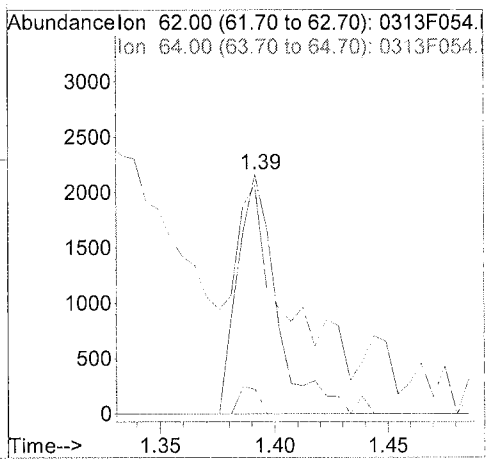


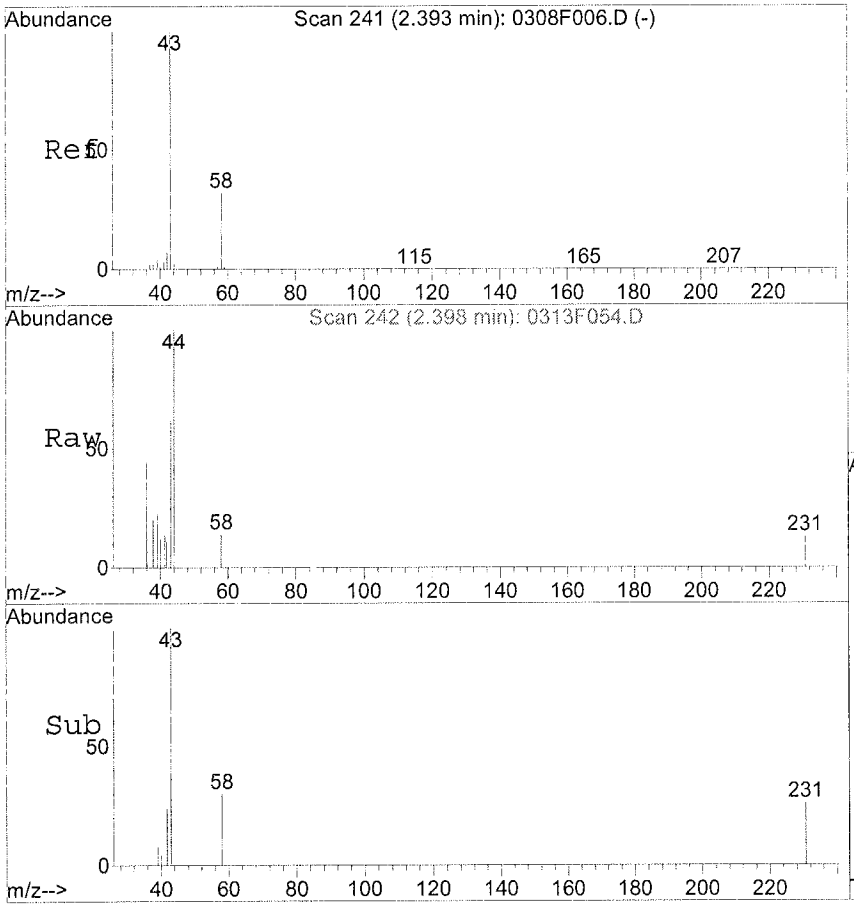


#4
Vinyl Chloride
Concen: 0.22 PPB
RT: 1.39 min Scan# 50
Delta R.T. 0.00 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 62 Resp: 2647

Ion	Ratio	Lower	Upper
62	100		
64	65.1	0.0	59.5#
61	10.2	0.0	37.6

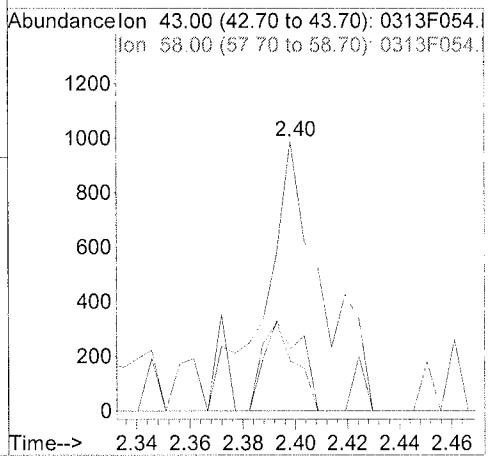


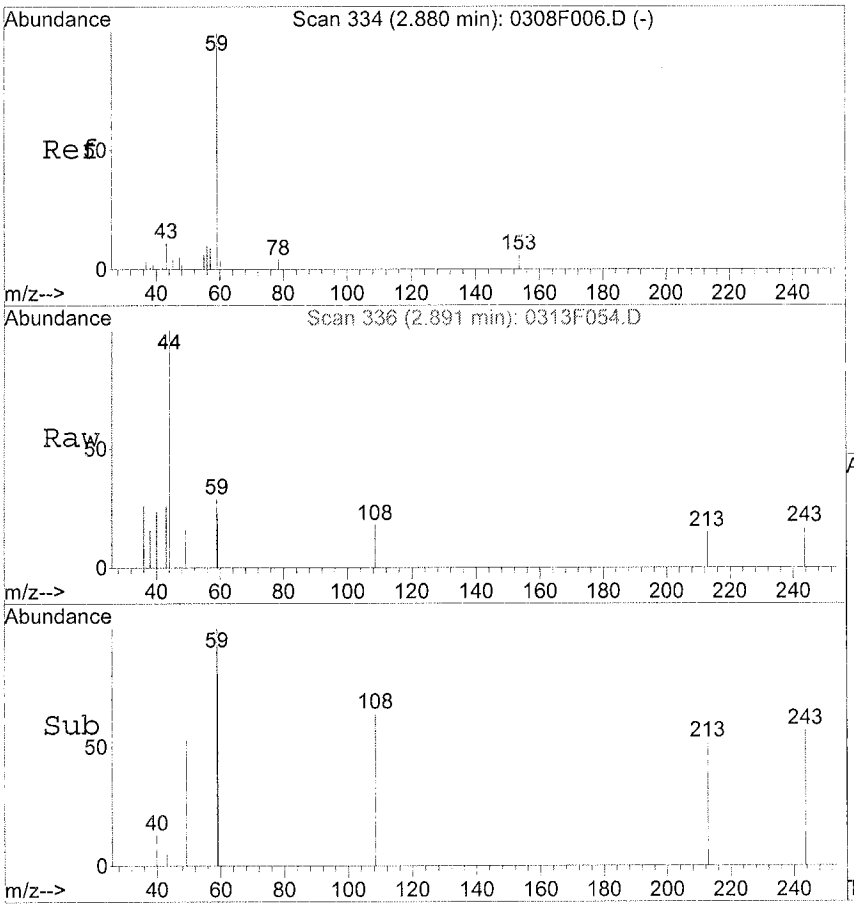


#13
Acetone
Concen: 1.40 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 43 Resp: 1490

Ion	Ratio	Lower	Upper
43	100		
58	23.2	1.7	61.7
42	18.4	0.0	36.8

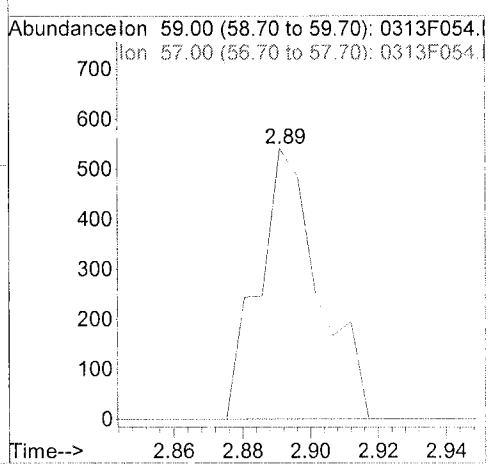


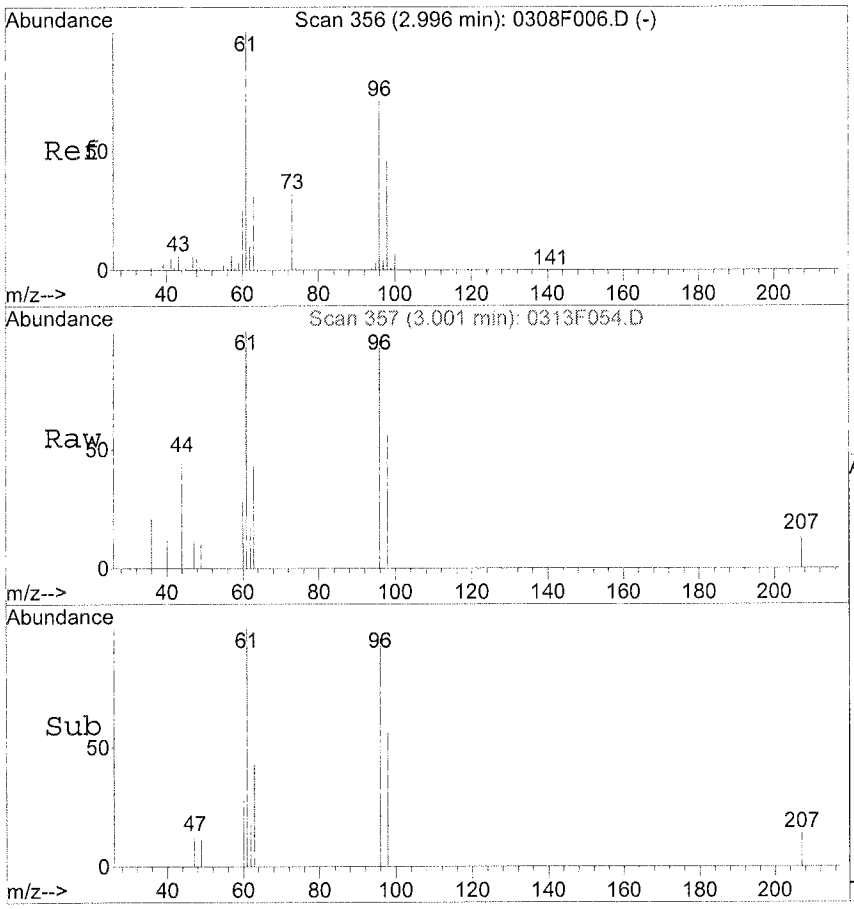


#19
tert-Butyl Alcohol
Concen: 3.15 PPB
RT: 2.89 min Scan# 336
Delta R.T. 0.01 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 59 Resp: 670

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	38.5
60	0.0	0.0	33.5

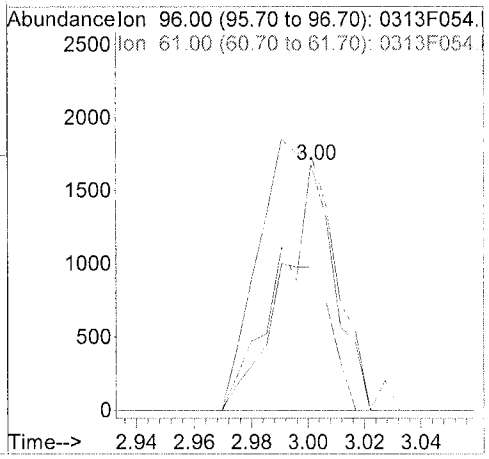


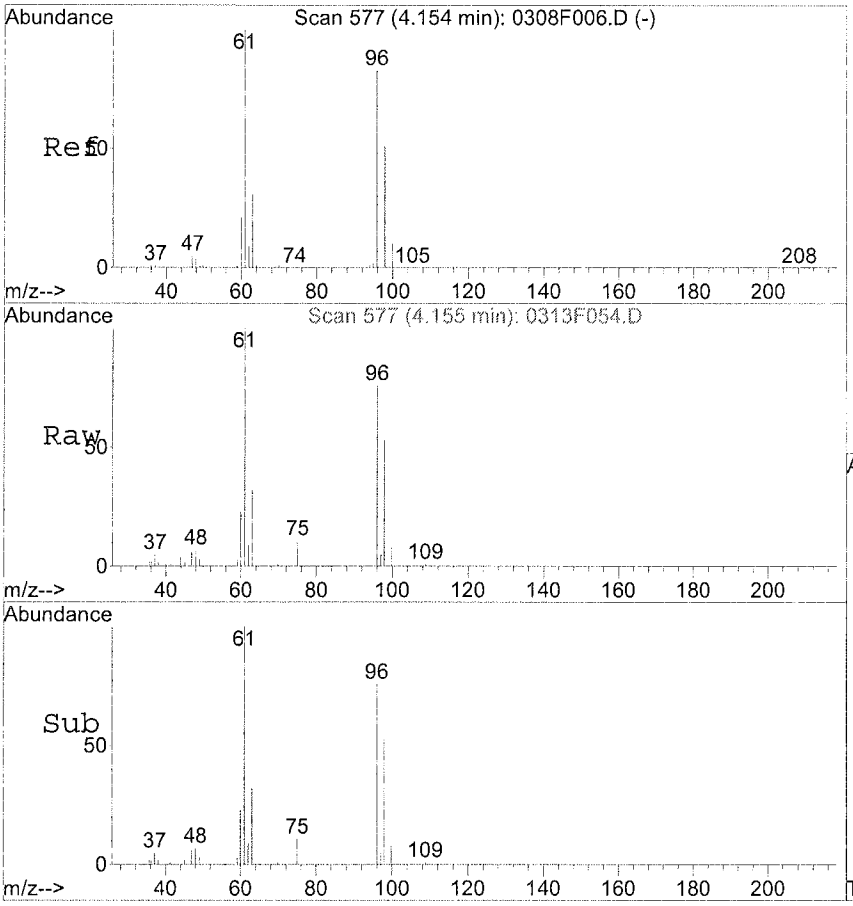


#22
trans-1,2-Dichloroethene
Concen: 0.21 PPB
RT: 3.00 min Scan# 357
Delta R.T. 0.01 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 96 Resp: 2283

Ion	Ratio	Lower	Upper
96	100		
61	104.3	111.0	171.0#
98	58.1	34.7	94.7

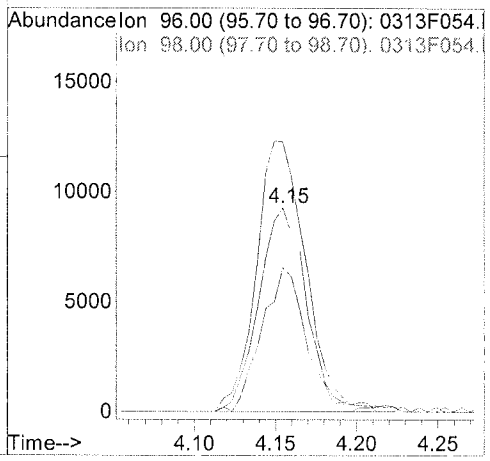


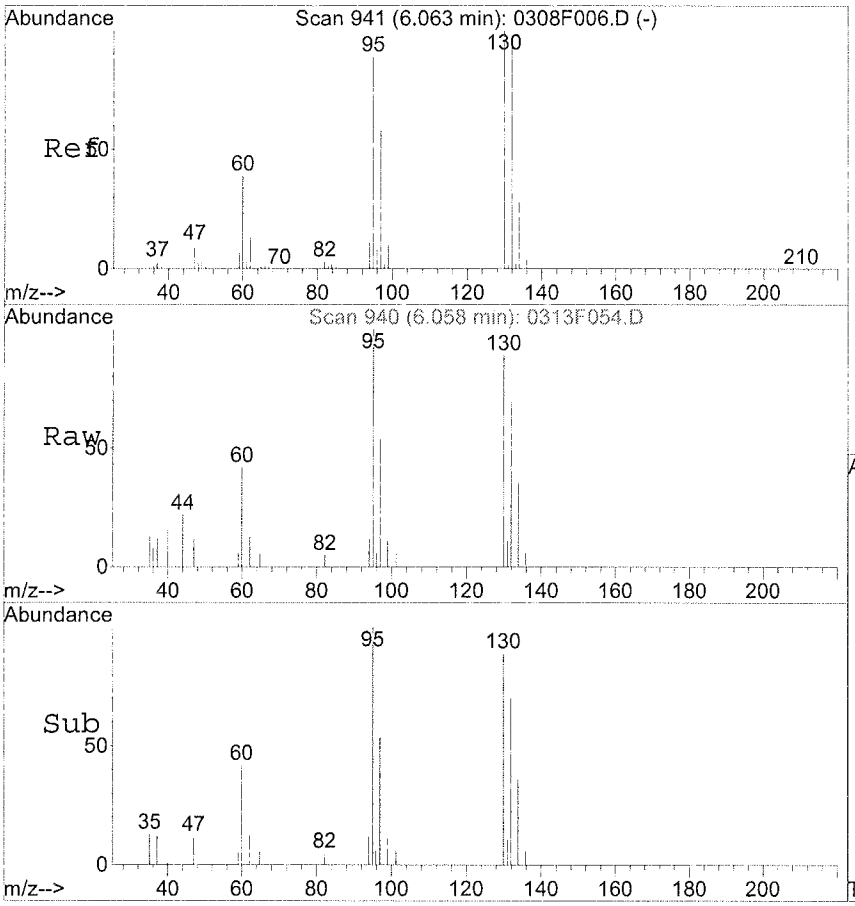


#30
cis-1,2-Dichloroethene
Concen: 1.76 PPB
RT: 4.15 min Scan# 577
Delta R.T. 0.00 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 96 Resp: 19128

Ion	Ratio	Lower	Upper
96	100		
98	70.7	31.2	91.2
61	132.3	90.0	150.0

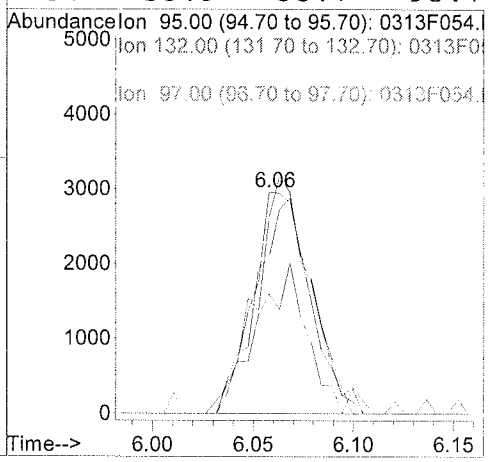


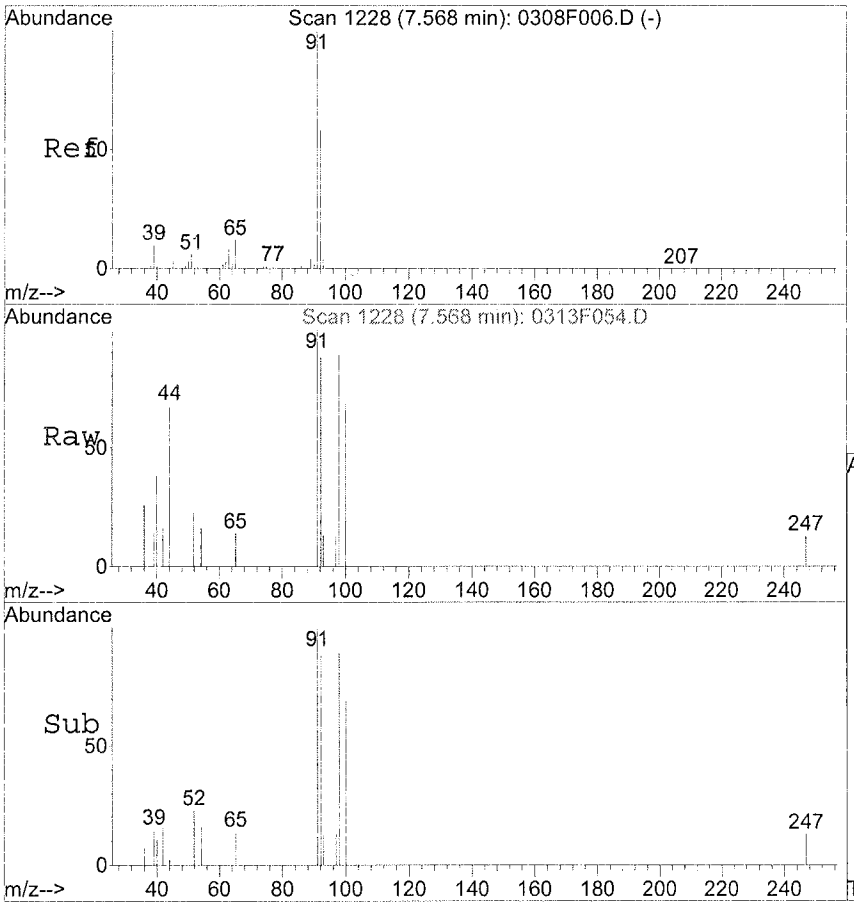


#48
Trichloroethene
Concen: 0.55 PPB
RT: 6.06 min Scan# 940
Delta R.T. -0.01 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 95 Resp: 5868

Ion	Ratio	Lower	Upper
95	100		
132	70.3	75.7	135.7#
130	88.5	82.6	142.6
97	53.9	35.7	95.7

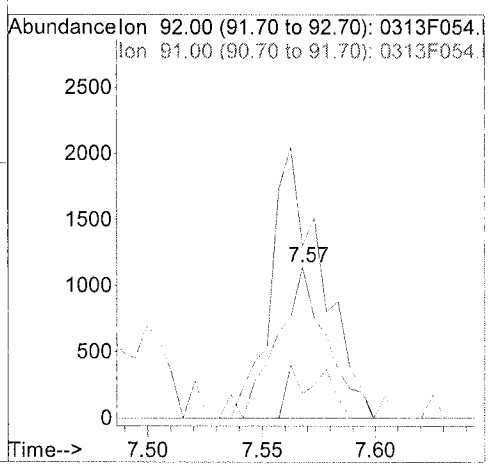


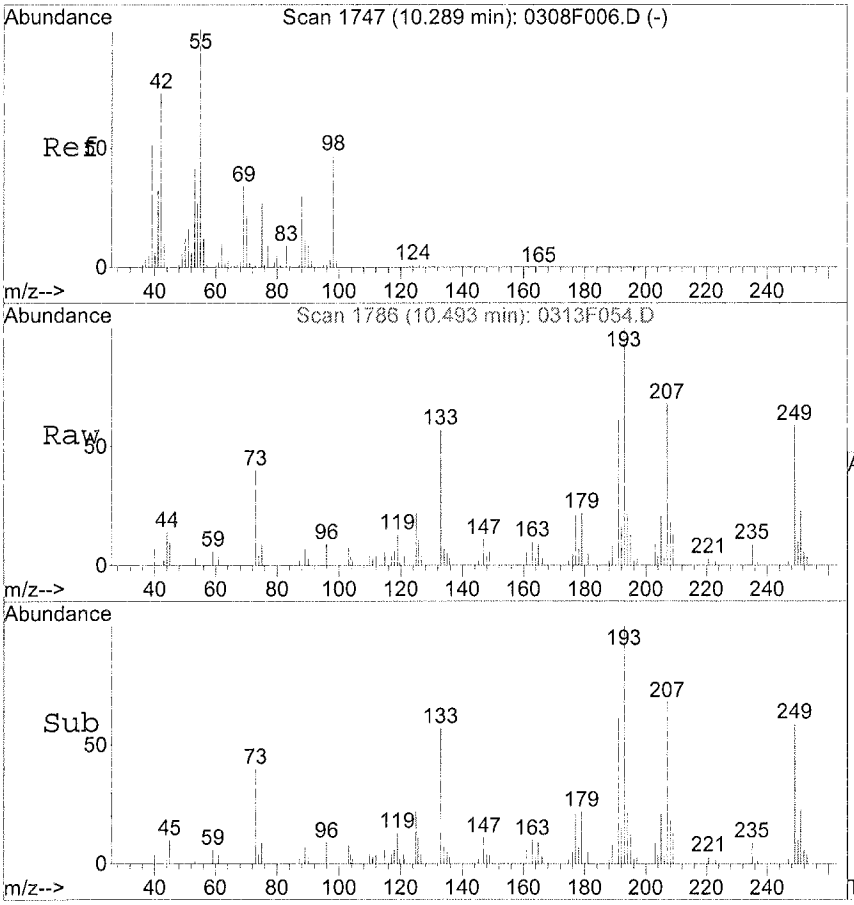


#59
Toluene
Concen: 0.06 PPB
RT: 7.57 min Scan# 1228
Delta R.T. 0.00 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion: 92 Resp: 1751

Ion	Ratio	Lower	Upper
92	100		
91	114.2	141.7	201.7#
65	16.1	0.0	50.4



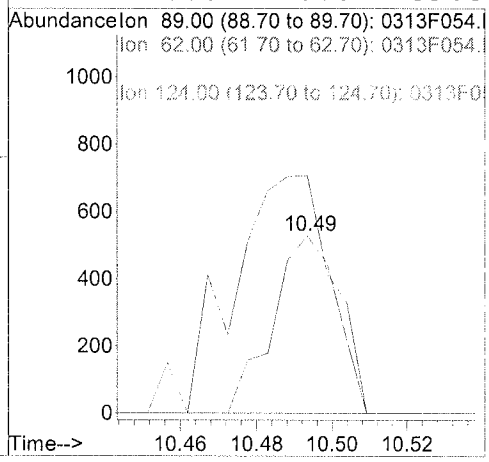


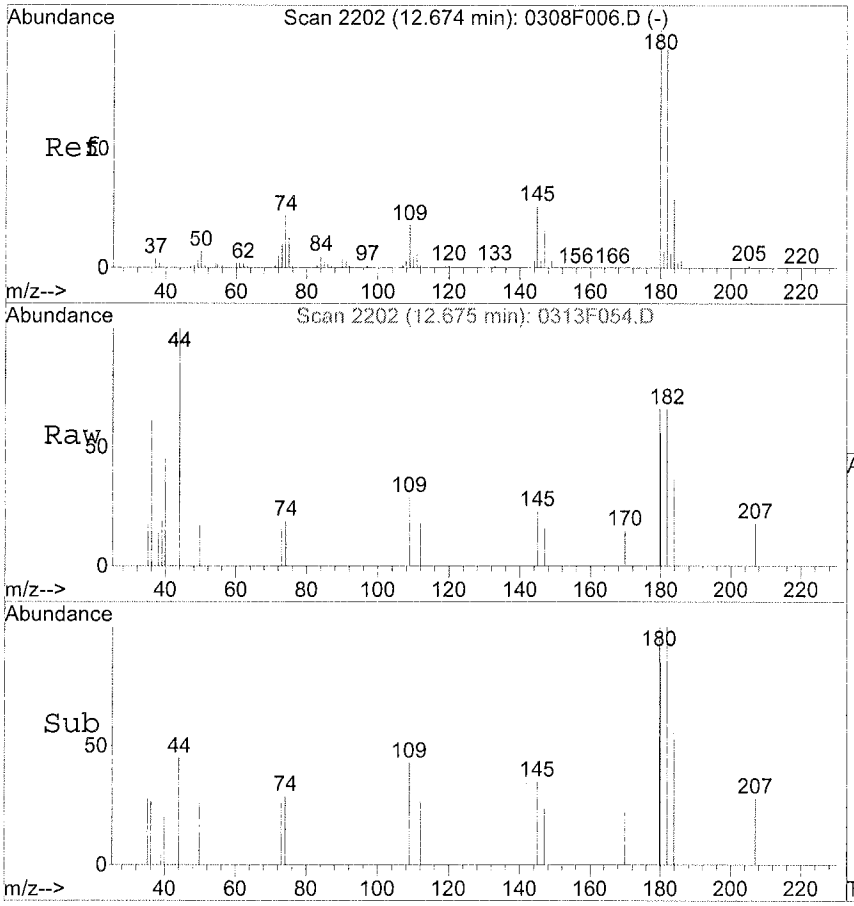
#79
cis-1,4-Dichloro-2-butene
Concen: 0.99 PPB
RT: 10.49 min Scan# 1786
Delta R.T. 0.20 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

NT
deleted
KR 3/15/07

Tgt Ion: 89 Resp: 624

Ion	Ratio	Lower	Upper
89	100		
62	0.0	48.0	108.0#
75	133.9	190.0	250.0#
124	0.0	0.0	39.8

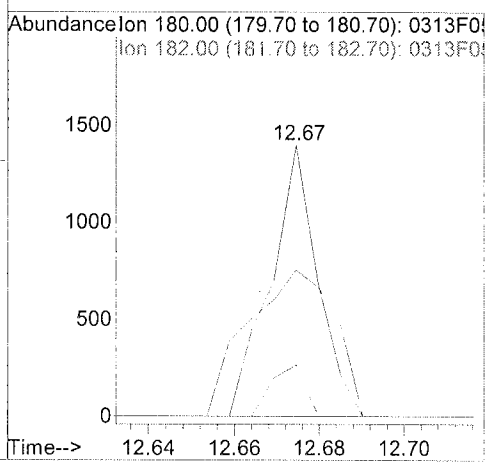




#99
1,3,5-Trichlorobenzene
Concen: 0.05 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F054.D
Acq: 14 Mar 2007 2:14 am

Tgt Ion:180 Resp: 1082

Ion	Ratio	Lower	Upper
180	100		
182	54.0	64.4	124.4#
145	19.0	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Acetone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/14/07	03/14/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/14/07	03/14/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Benzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Toluene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/14/07	03/14/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CL	**Units:**	ug/L
Lab Code:	K0701816-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
Styrene	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/14/07	03/14/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/14/07	03/14/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	94	76-114	03/14/07	Acceptable
Toluene-d8	108	88-110	03/14/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/14/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F055.D
Lab ID: K0701816-002
RunType: SMPL
Matrix: WATER

Date Acquired: 03/14/2007 02:34
Date Quantitated: 03/14/2007 16:12
Batch ID: KWG0703660
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MDL
Lab Control Spike	Methylene Chloride	127	62	122	acceptable

Primary Review: KR 3/15/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	K0701816
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583541	**Prep Date:**	03/14/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F055.D			**Instrument:**	GC-MS 18
Acqu Date:	03/14/2007 02:34	**Quant Date:**	03/14/2007 16:12	**Vial:**	52
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	373467	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	176296	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	158245	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	74781	9.38	94	76-114	OK
1	Toluene-d8	7.49	0.00	0.00	98	391227	10.80	108	88-110	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	144154	9.33	93	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0d		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40	0.01	0.00	43	980	0.9300	4.1	U	
1	Carbon Disulfide				76	0		0.16	U	
1	Methylene Chloride				84	0		0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F055.D			**Instrument:**	GC-MS 18
Acqu Date:	03/14/2007 02:34	**Quant Date:**	03/14/2007 16:12	**Vial:**	52
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0**d**		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)	8.12	-0.01	0.00	164	1341**m**	0.1100	0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

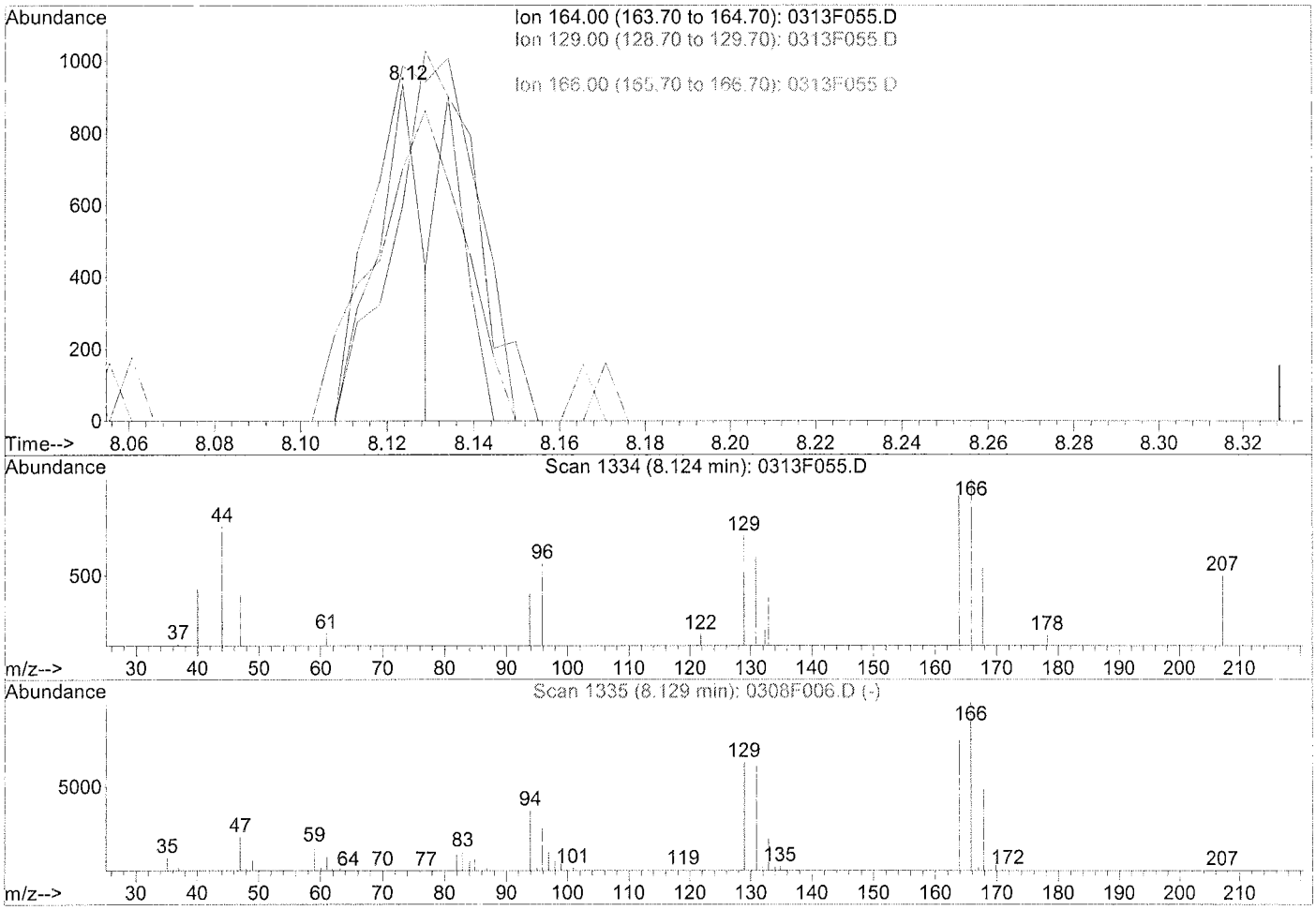
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F055.D
Acq On : 14 Mar 2007 2:34 am
Sample : K1816-002
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 16:12 2007

Vial: 52
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F055.D

(65) Tetrachloroethene (T)

8.12min 0.05PPB

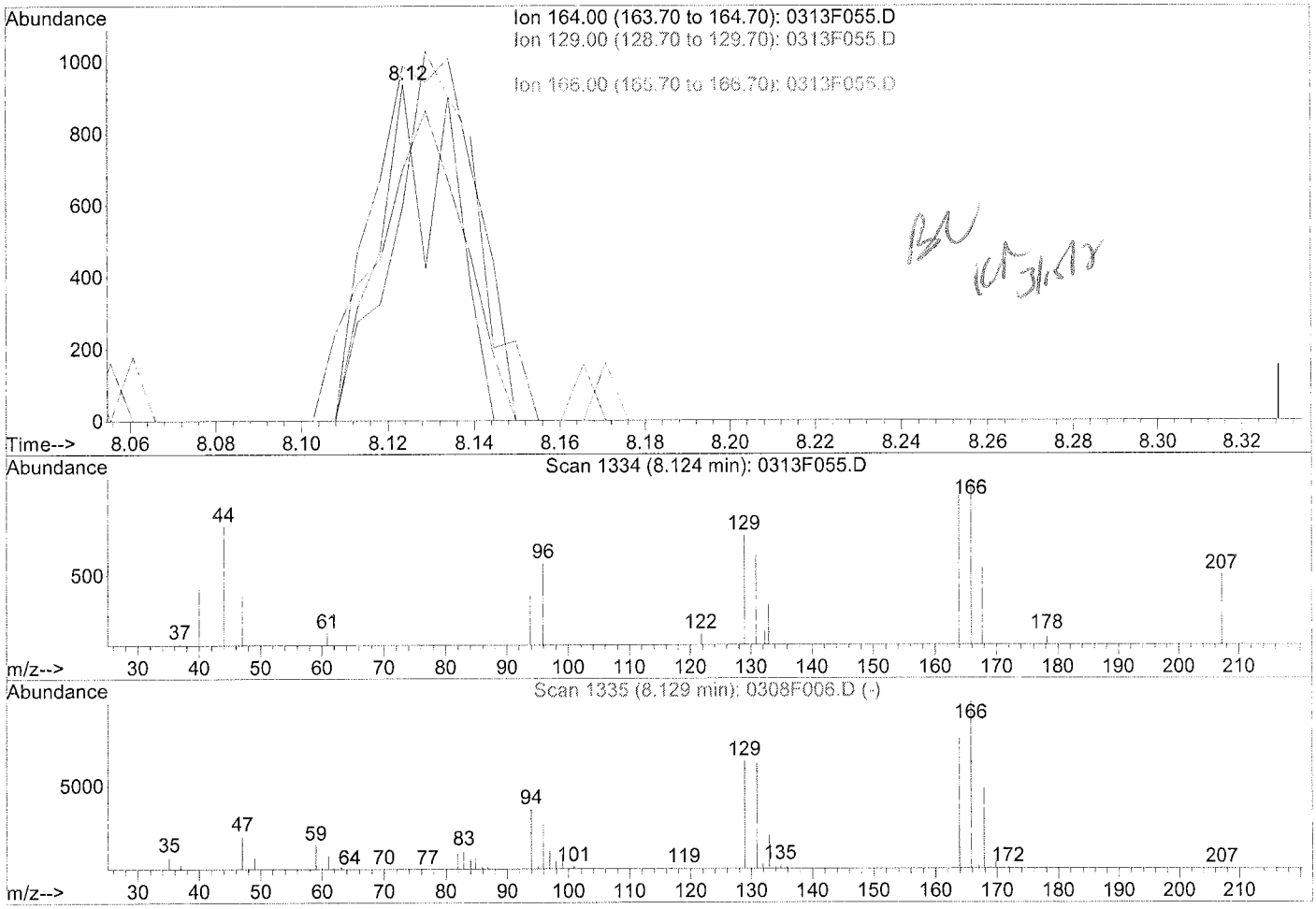
response 675

Ion	Exp%	Act%
164.00	100	100
129.00	83.20	74.68
131.00	81.70	63.89
166.00	128.40	105.45

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F055.D Vial: 52
Acq On : 14 Mar 2007 2:34 am Operator:
Sample : K1816-002 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 16:12 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



TIC: 0313F055.D

(65) Tetrachloroethene (T)

8.12min 0.11PPB m

response 1341

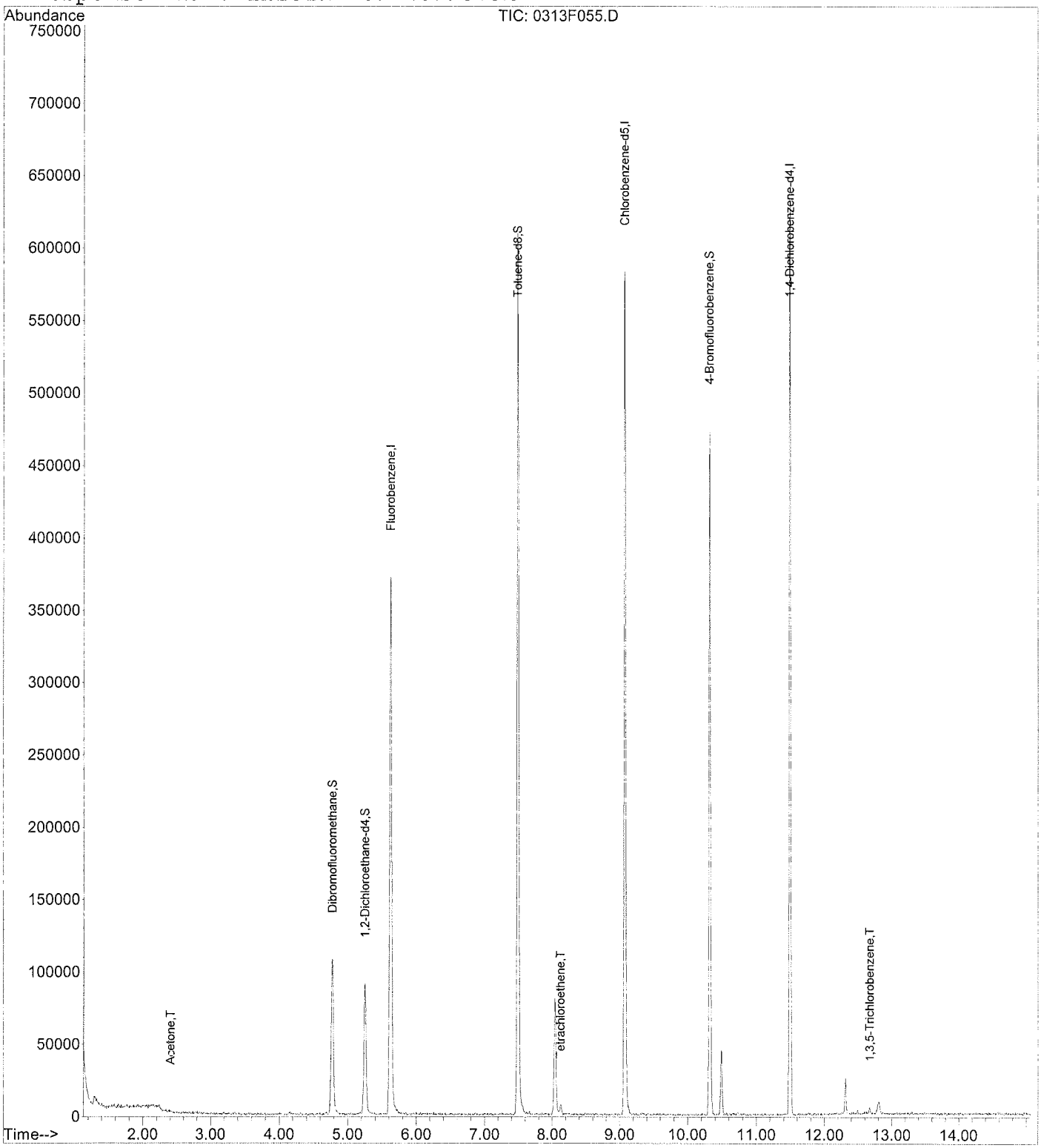
Ion	Exp%	Act%
164.00	100	100
129.00	83.20	74.68
131.00	81.70	63.89
166.00	128.40	105.45

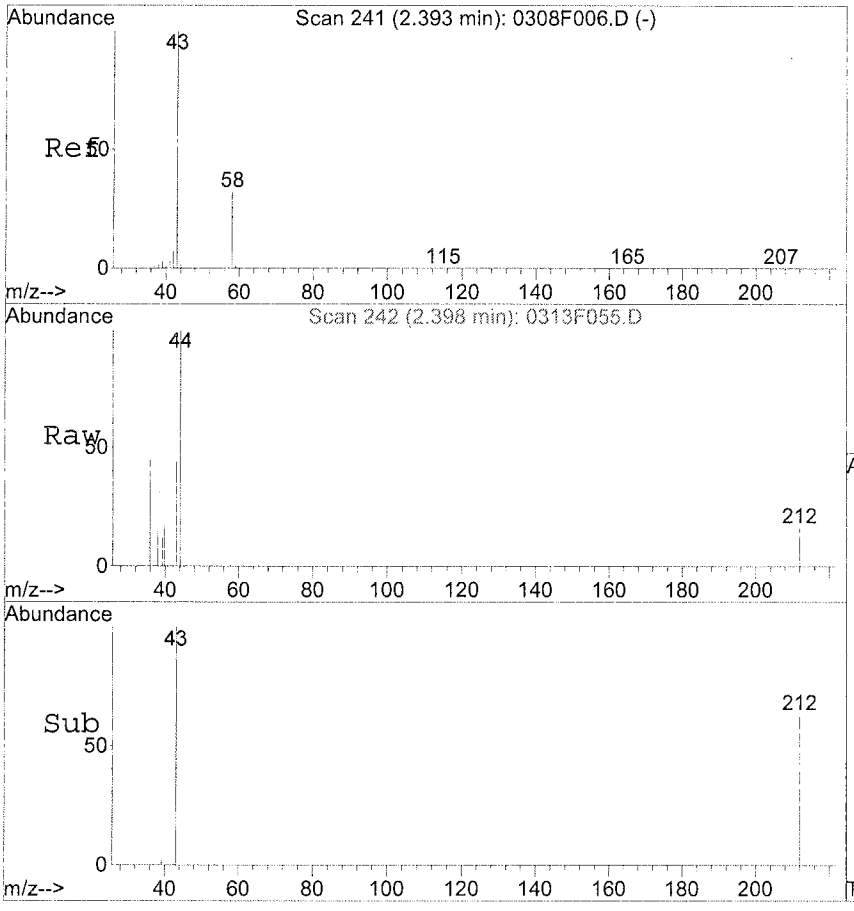
HL 3.15.07

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F055.D Vial: 52
Acq On : 14 Mar 2007 2:34 am Operator:
Sample : K1816-002 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 16:12 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

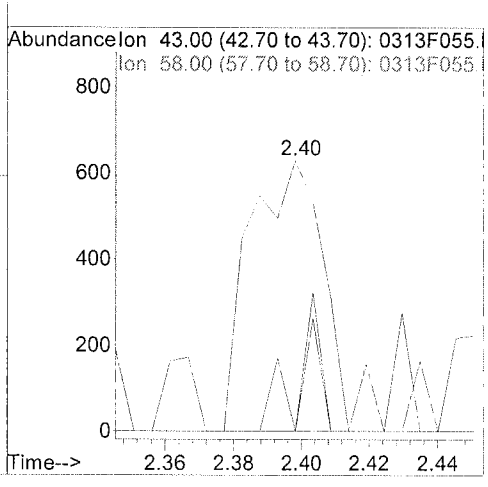


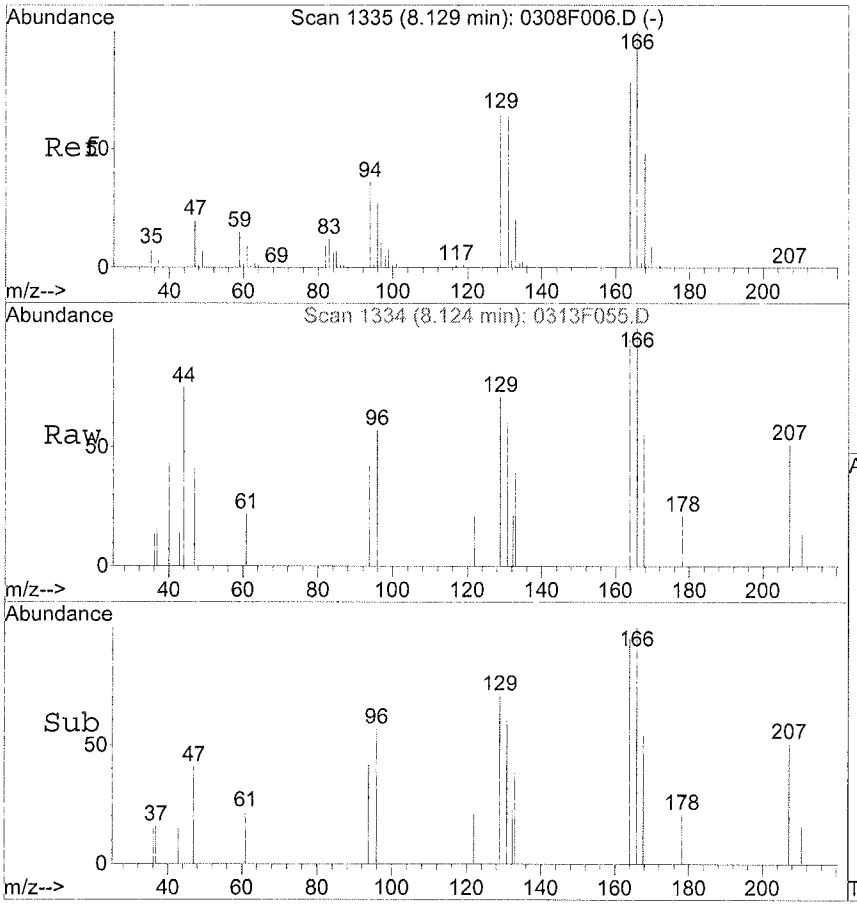


#13
Acetone
Concen: 0.93 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F055.D
Acq: 14 Mar 2007 2:34 am

Tgt Ion: 43 Resp: 980

Ion	Ratio	Lower	Upper
43	100		
58	0.0	1.7	61.7#
42	0.0	0.0	36.8

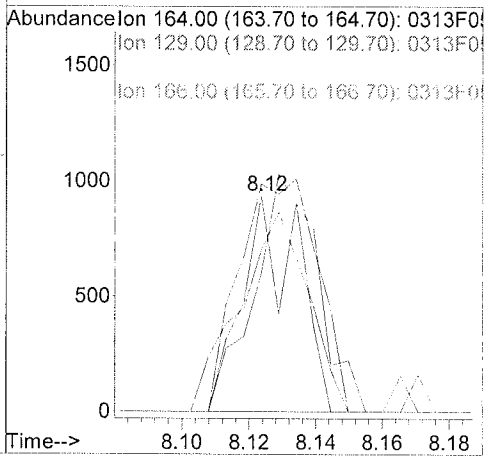


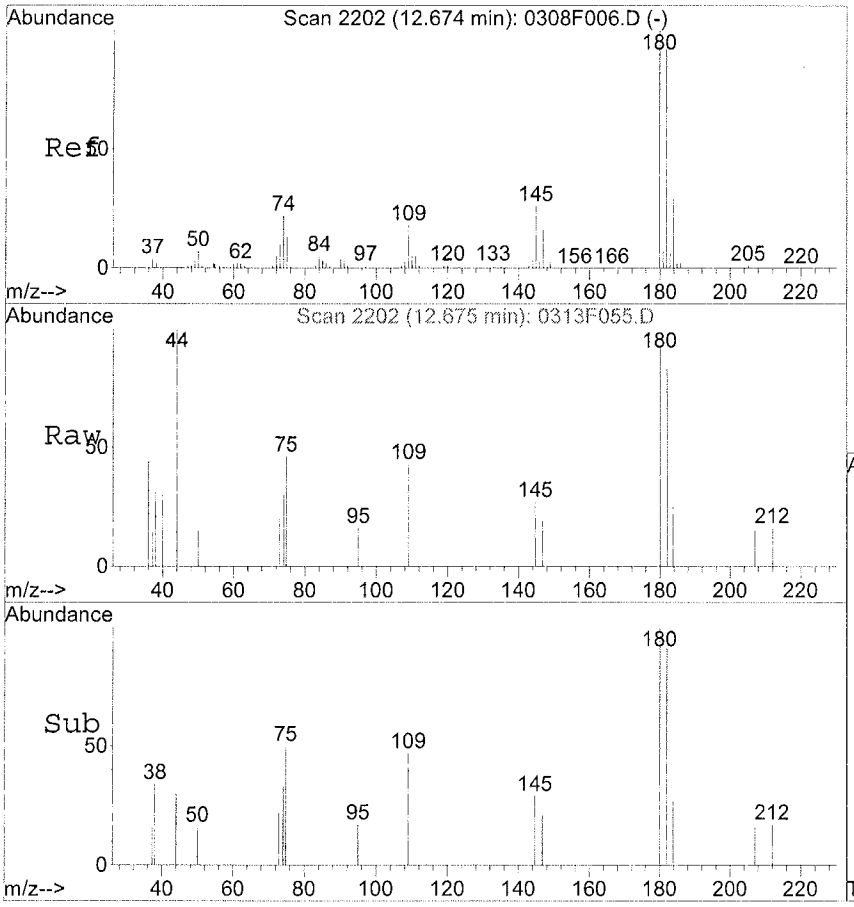


#65
Tetrachloroethene
Concen: 0.11 PPB m
RT: 8.12 min Scan# 1334
Delta R.T. -0.01 min
Lab File: 0313F055.D
Acq: 14 Mar 2007 2:34 am

Tgt Ion:164 Resp: 1341

Ion	Ratio	Lower	Upper
164	100		
129	74.7	53.2	113.2
131	63.9	51.7	111.7
166	105.4	98.4	158.4

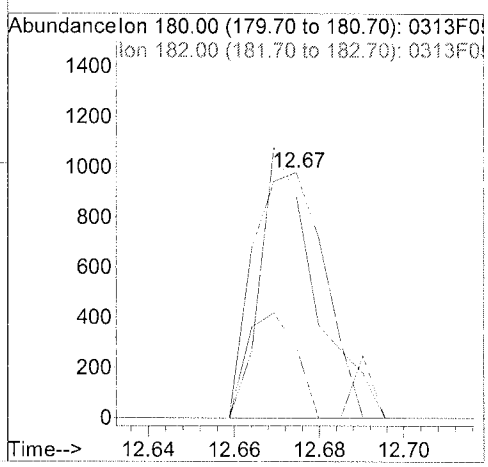




#99
1,3,5-Trichlorobenzene
Concen: 0.05 PPB
RT: 12.67 min Scan# 2202
Delta R.T. 0.00 min
Lab File: 0313F055.D
Acq: 14 Mar 2007 2:34 am

Tgt Ion:180 Resp: 1140

Ion	Ratio	Lower	Upper
180	100		
182	90.5	64.4	124.4
145	29.0	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	TB0306072A	**Units:**	ug/L
Lab Code:	K0701816-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	TB0306072A	**Units:**	ug/L
Lab Code:	K0701816-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	88	76-114	03/13/07	Acceptable
Toluene-d8	110	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F046.D
Lab ID: K0701816-003
RunType: SMPL
Matrix: WATER

Date Acquired: 03/13/2007 23:38
Date Quantitated: 03/14/2007 15:53
Batch ID: KWG0703660
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Lab Control Spike	Methylene Chloride	127	62	122	cab unspd

Primary Review: KR 3/15/07

Secondary Review: HC 03.15.07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	03/06/2007	**Receive Date:**	03/07/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	K0701816
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583542	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F046.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 23:38	**Quant Date:**	03/14/2007 15:53	**Vial:**	43
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-003			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	380770	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	173672	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	157065	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	71721	8.83	88	76-114	OK
1	Toluene-d8	7.49	0.00	0.00	98	405241	10.97	110	88-110	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	141903	9.32	93	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40	0.01	0.00	43	2562	2.38	4.1	U	
1	Carbon Disulfide				76	0		0.16	U	
1	Methylene Chloride				84	0		0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform	4.56	0.01	0.00	83	1074	0.0600	0.14	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F046.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 23:38	**Quant Date:**	03/14/2007 15:53	**Vial:**	43
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0701816-003			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0**d**		2.7	U	
1	Toluene	7.57		0.00	92	1992	0.0700	0.11	U	
2	trans-1,3-Dichloropropene				75	0**d**		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

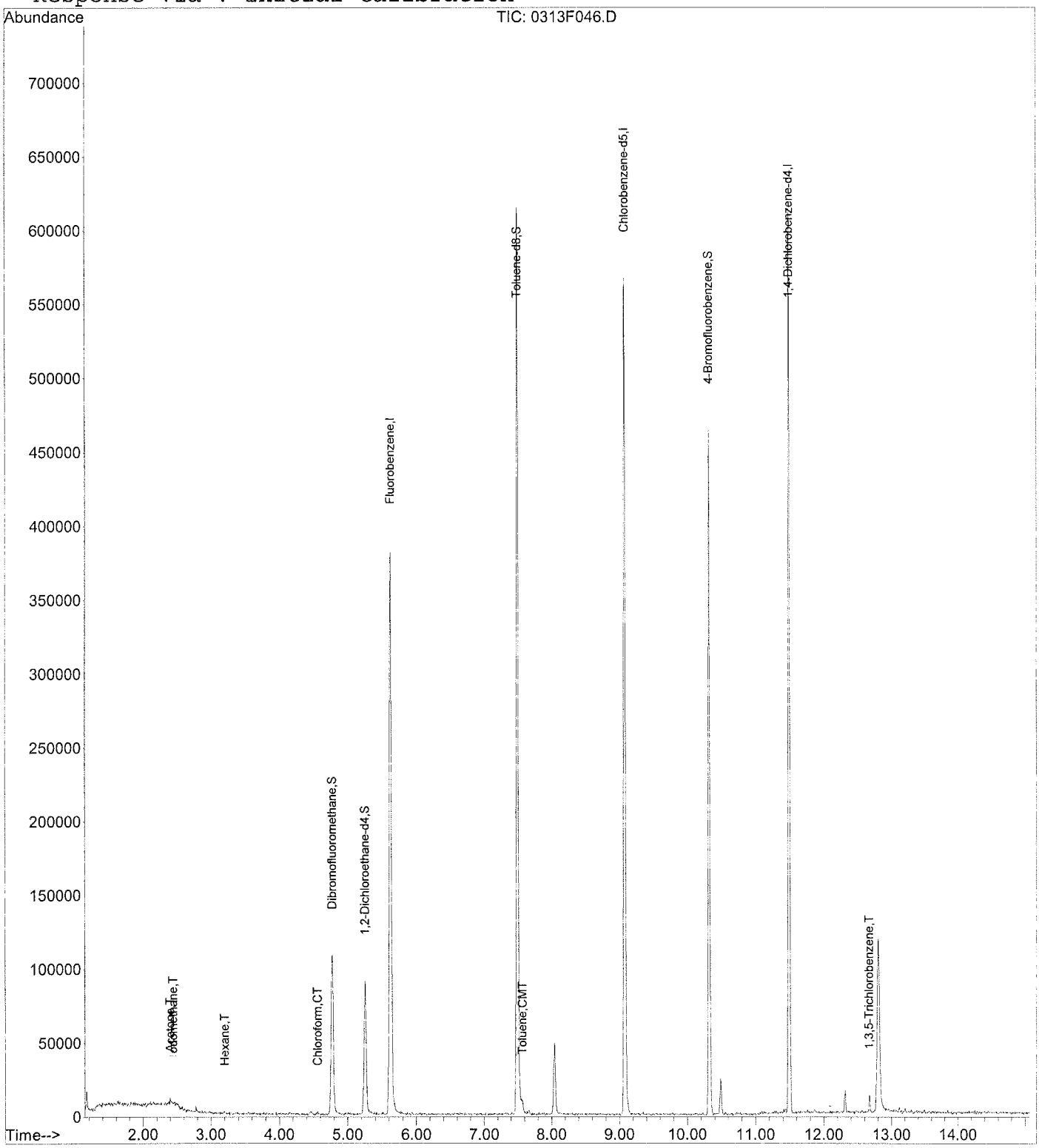
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

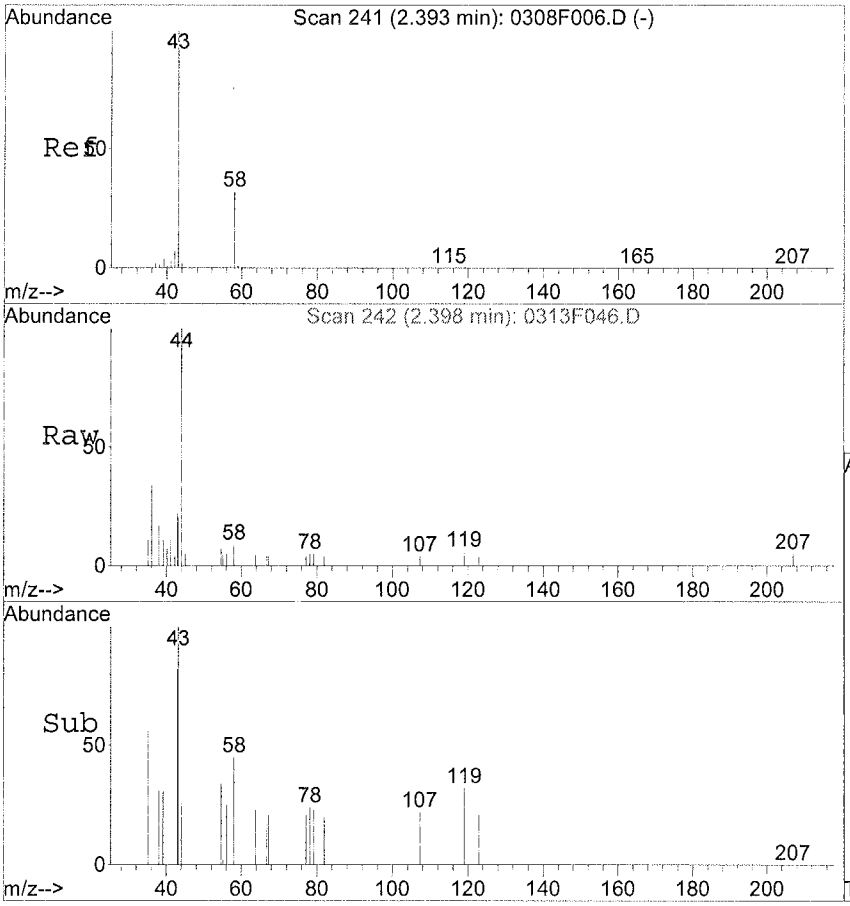
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F046.D Vial: 43
Acq On : 13 Mar 2007 11:38 pm Operator:
Sample : K1816-003 TB34433 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:53 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

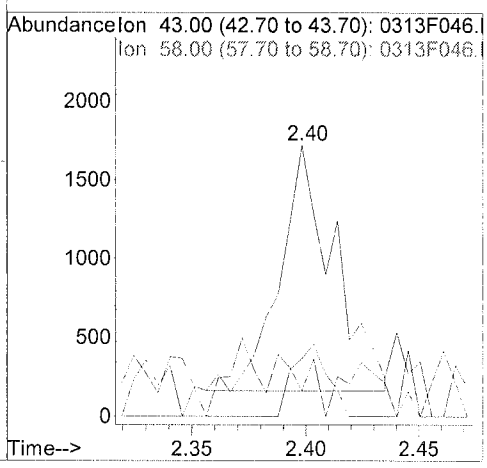


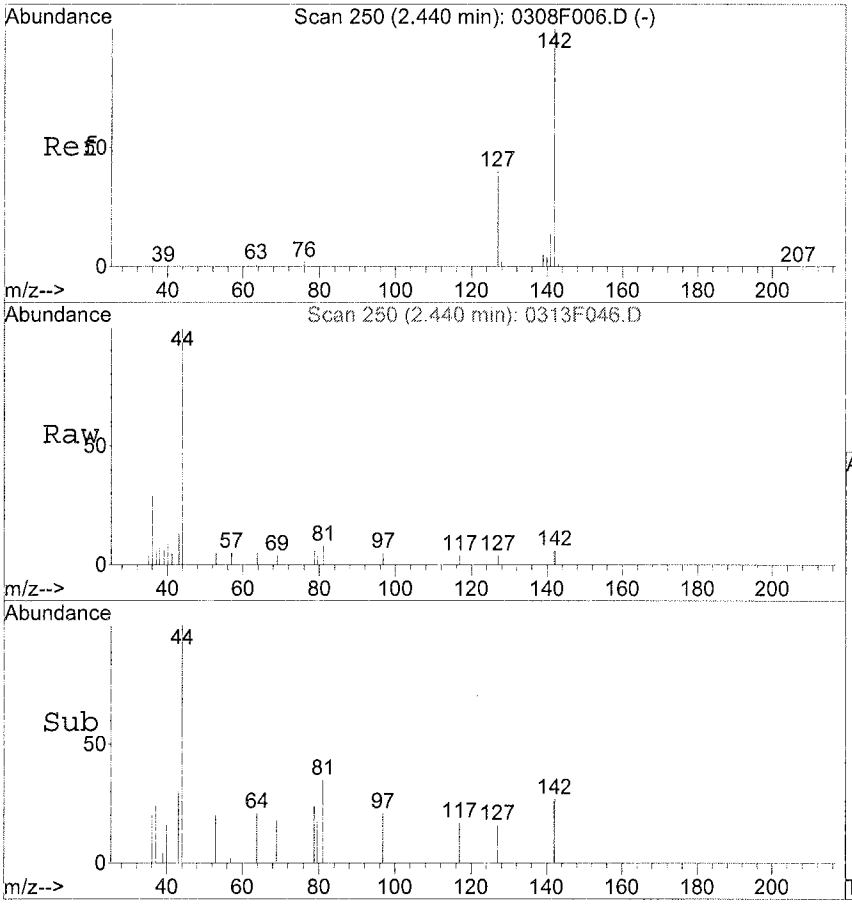


#13
Acetone
Concen: 2.38 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion: 43 Resp: 2562

Ion	Ratio	Lower	Upper
43	100		
58	23.7	1.7	61.7
42	10.5	0.0	36.8

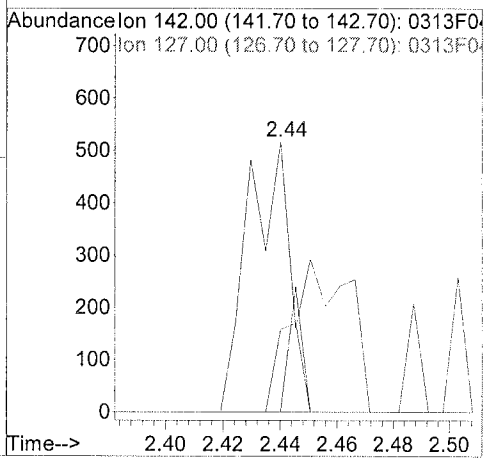


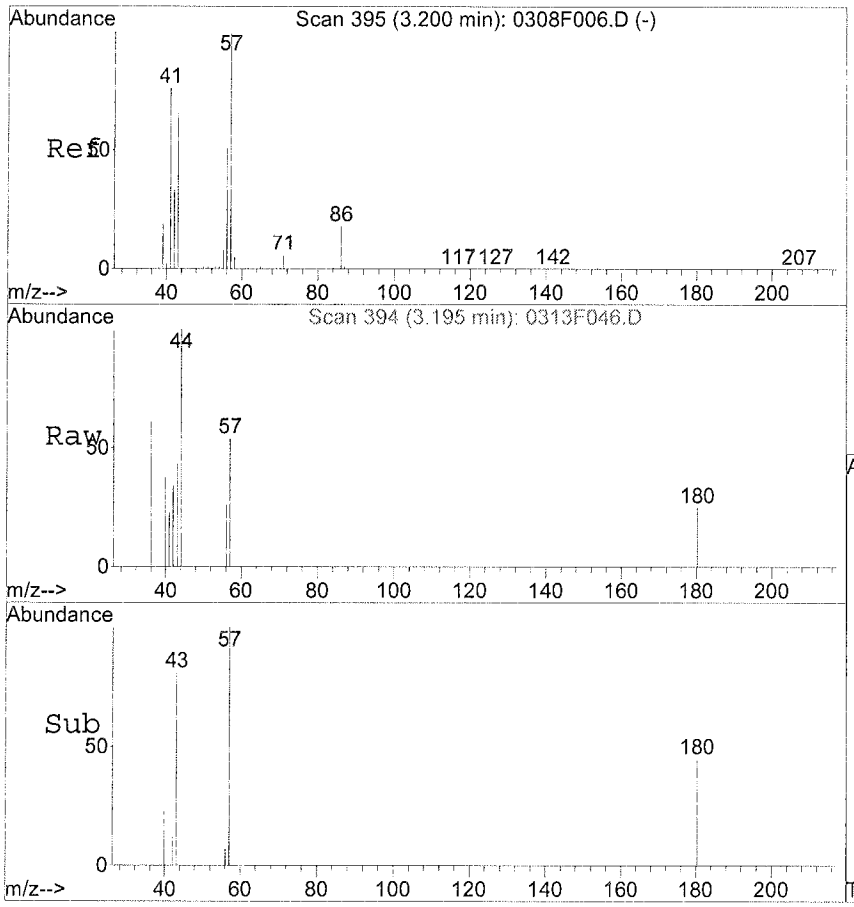


#14
Iodomethane
Concen: 0.08 PPB
RT: 2.44 min Scan# 250
Delta R.T. 0.00 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion:142 Resp: 828

Ion	Ratio	Lower	Upper
142	100		
127	30.6	9.7	69.7
141	0.0	0.0	44.1

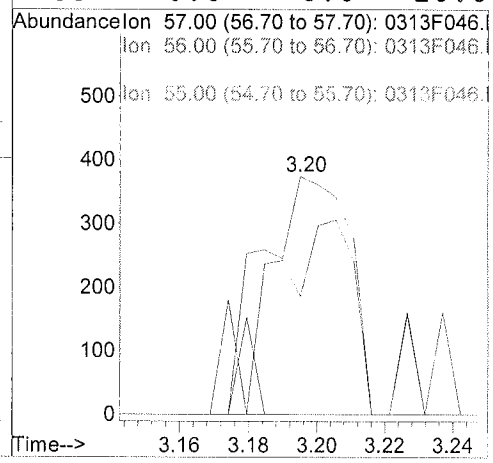


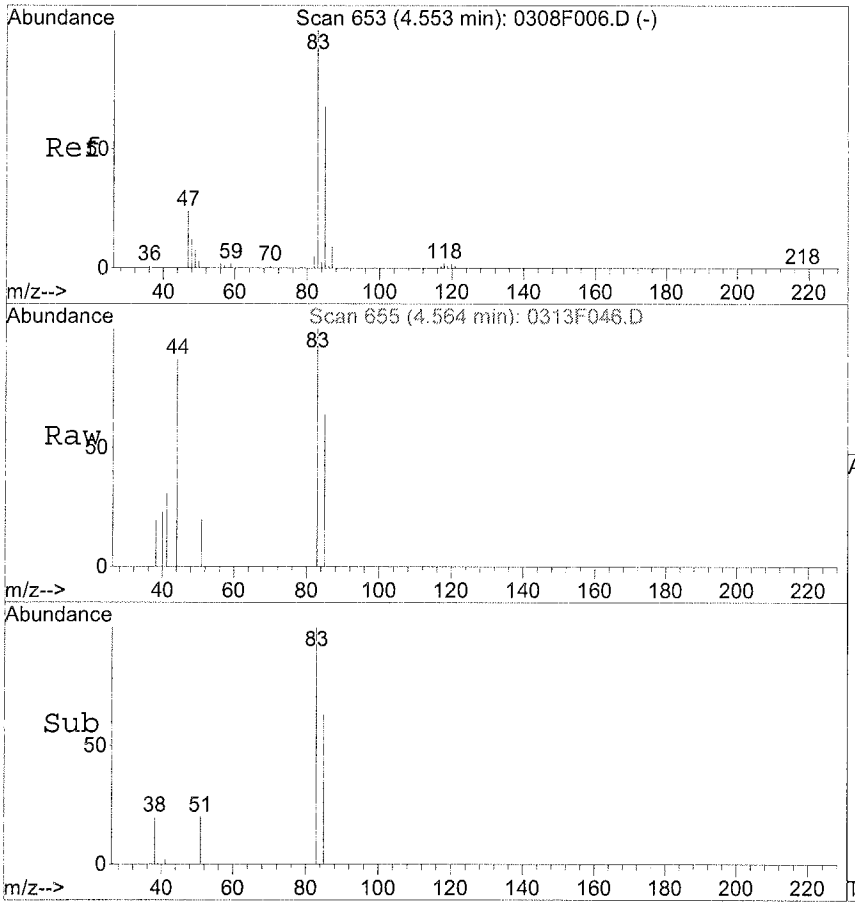


#23
Hexane
Concen: 0.06 PPB
RT: 3.20 min Scan# 394
Delta R.T. -0.01 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion: 57 Resp: 664

Ion	Ratio	Lower	Upper
57	100		
56	49.7	21.1	81.1
71	0.0	0.0	35.9
55	0.0	0.0	20.0

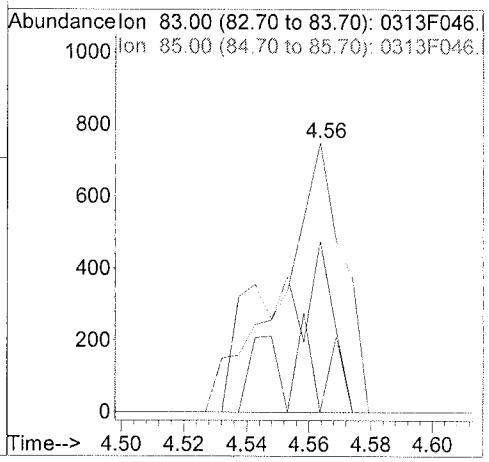


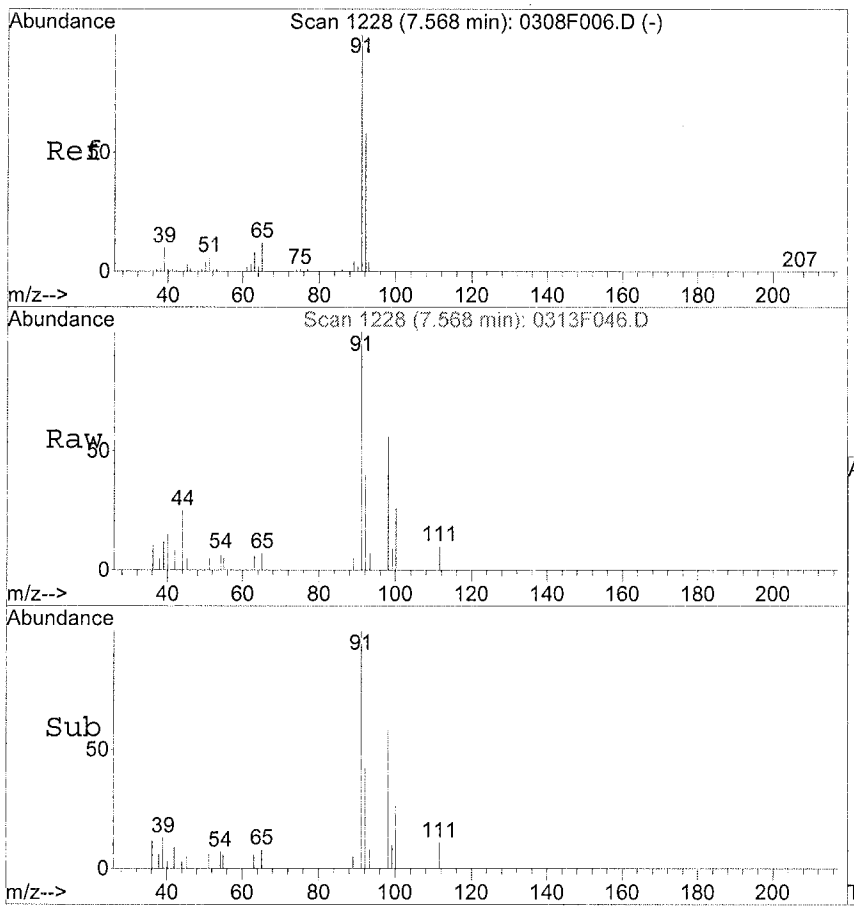


#37
Chloroform
Concen: 0.06 PPB
RT: 4.56 min Scan# 655
Delta R.T. 0.01 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion: 83 Resp: 1074

Ion	Ratio	Lower	Upper
83	100		
85	63.6	37.7	97.7
47	0.0	0.0	53.9

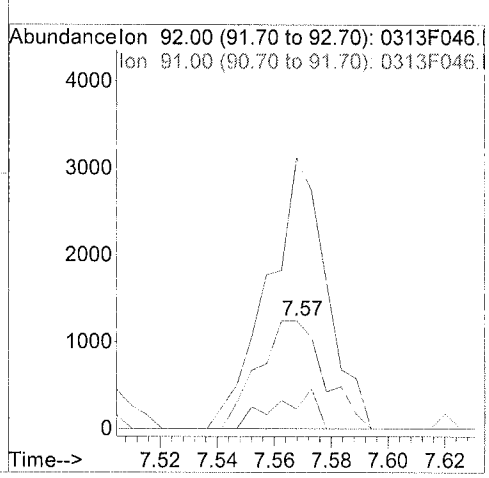


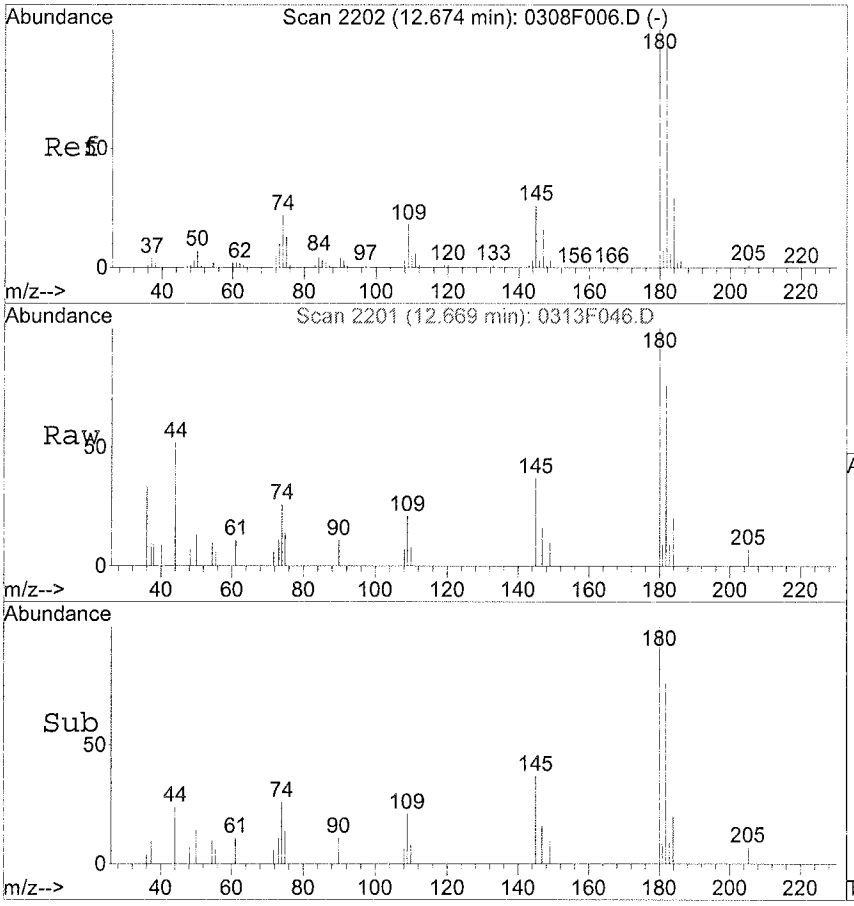


#59
Toluene
Concen: 0.07 PPB
RT: 7.57 min Scan# 1228
Delta R.T. 0.00 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion: 92 Resp: 1992

Ion	Ratio	Lower	Upper
92	100		
91	250.3	141.7	201.7#
65	18.0	0.0	50.4

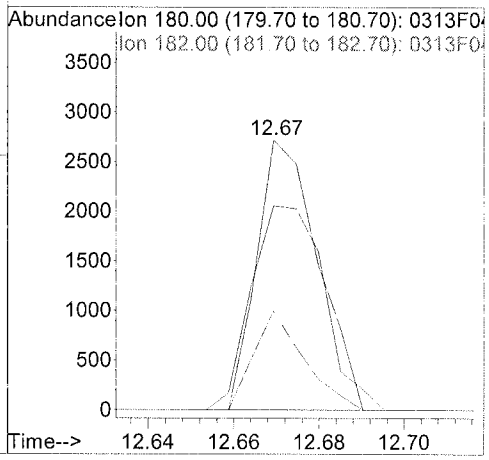




#99
1,3,5-Trichlorobenzene
Concen: 0.12 PPB
RT: 12.67 min Scan# 2201
Delta R.T. -0.01 min
Lab File: 0313F046.D
Acq: 13 Mar 2007 11:38 pm

Tgt Ion:180 Resp: 2710

Ion	Ratio	Lower	Upper
180	100		
182	75.6	64.4	124.4
145	36.7	0.0	55.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703662-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	ND	U	5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	ND	U	4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0703662-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	ND	U	1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	89	76-114	03/13/07	Acceptable
Toluene-d8	108	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	93	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F044.D
Lab ID: KWG0703662-4
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 22:59
Date Quantitated: 03/14/2007 15:48
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NA
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	NA
Continuing Calibration Recovery	1,3,5-Trichlorobenzene	-32.7	NA	30	NA
	cis-1,4-Dichloro-2-butene	-39.7	NA	30	NA
	tert-Butyl Formate	-74.5	NA	30	NA
	1,2-Dibromo-3-chloropropane	-32.9	NA	30	NA
Continuing Calibration Minimum RF	Acrolein	0.0072	0.01	NA	NA
	1,4-Dioxane	0.0008	0.01	NA	
	Acetonitrile	0.0076	0.01	NA	

Primary Review: KR 3/15/07

Secondary Review: HR 3.15.07

Exception Report

Data File: J:\MS18\DATA\031307\0313F044.D
Lab ID: KWG0703662-4
RunType: MB
Matrix: WATER

Date Acquired: 03/13/2007 22:59
Date Quantitated: 03/14/2007 15:48
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	tert-Butyl Alcohol	0.0057	0.01	NA	NR
	Isobutyl Alcohol	0.0026	0.01	NA	↓

Primary Review: KR 3/15/7

Secondary Review: HC 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583556	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F044.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:59	**Quant Date:**	03/14/2007 15:48	**Vial:**	40
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703662-4			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	388812	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	172200	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	151438	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	76464	9.30	93	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	73721	8.88	89	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	407036	10.79	108	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	140247	9.29	93	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.17	U	
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	Dichlorofluoromethane (CFC 21				67	0		0.40	U	
1	Trichlorofluoromethane				101	0		0.14	U	
1	Ethyl Ether				59	0		0.058	U	
1	Acrolein	2.26	-0.01	0.00	56	583	2.89	6.7	U	
1	Trichlorotrifluoroethane				151	0		0.14	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.40	0.01	0.00	43	1728	1.57	4.1	U	
1	Iodomethane	2.45	0.01	0.00	142	641	0.0600	0.38	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	3-Chloro-1-propene				76	0d		0.16	U	

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F044.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:59	**Quant Date:**	03/14/2007 15:48	**Vial:**	40
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703662-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile				40	0d		7.5	U	
1	Methylene Chloride	2.78		0.00	84	1016	0.1000	0.20	U	
1	tert-Butyl Alcohol				59	0		1.1	U	
1	Acrylonitrile				53	0		0.54	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	n-Hexane	3.20		0.00	57	1033	0.0900	0.19	U	
1	Diisopropyl Ether				45	0		0.25	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	Chloroprene				53	0		0.35	U	
1	tert-Butyl Ethyl Ether				59	0		0.075	U	
1	2,2-Dichloropropane				77	0		0.18	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Propionitrile				54	0		1.3	U	
1	Ethyl Acetate				61	0		0.62	U	
1	Methacrylonitrile				67	0		0.45	U	
1	Bromochloromethane				128	0		0.17	U	
1	Tetrahydrofuran				71	0		0.84	U	
1	Chloroform				83	0d		0.14	U	
1	tert-Butyl Formate				59	0		0.18	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	1,1-Dichloropropene				75	0		0.15	U	
1	Isobutyl Alcohol				43	0		7.8	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	tert-Amyl Methyl Ether				55	0		0.15	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Dibromomethane				93	0		0.12	U	
1	Methyl Methacrylate				69	0		0.36	U	
1	1,4-Dioxane				88	0		26	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Nitropropane				43	0d		2.0	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene				92	0		0.11	U	
2	n-Octane				85	0		0.29	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	Ethyl Methacrylate				69	0		0.12	U	

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F044.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:59	**Quant Date:**	03/14/2007 15:48	**Vial:**	40
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703662-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	1,3-Dichloropropane				76	0		0.15	U	
2	Dibromochloromethane				129	0		0.11	U	
2	1,2-Dibromoethane (EDB)				107	0		0.099	U	
2	1-Chlorohexane				91	0d		0.13	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	1,1,1,2-Tetrachloroethane				131	0		0.12	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
2	Isopropylbenzene				105	0d		0.11	U	
2	cis-1,4-Dichloro-2-butene				89	0		0.60	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	
3	trans-1,4-Dichloro-2-butene				53	0		0.60	U	
3	Bromobenzene				156	0		0.18	U	
3	n-Propylbenzene				91	0d		0.098	U	
3	1,2,3-Trichloropropane				110	0		0.22	U	
3	2-Chlorotoluene				91	0d		0.12	U	
3	1,3,5-Trimethylbenzene				105	0d		0.13	U	
3	4-Chlorotoluene				91	0d		0.12	U	
3	tert-Butylbenzene				119	0		0.13	U	
3	1,2,4-Trimethylbenzene				105	0d		0.15	U	
3	sec-Butylbenzene				105	0d		0.13	U	
3	4-Isopropyltoluene				119	0d		0.13	U	
3	1,3-Dichlorobenzene				146	0d		0.11	U	
3	1,4-Dichlorobenzene				146	0d		0.12	U	
3	n-Butylbenzene				91	0d		0.23	U	
3	1,2-Dichlorobenzene				146	0d		0.12	U	
3	1,2-Dibromo-3-chloropropane				155	0		1.0	U	
3	1,3,5-Trichlorobenzene	12.67		0.00	180	4414	0.2000	0.35	U	
3	1,2,4-Trichlorobenzene	13.11		0.00	180	1136	0.0700	0.22	U	
3	Hexachlorobutadiene	13.21		0.00	225	592	0.0600	0.28	U	
3	Naphthalene	13.29	-0.01	0.00	128	1578	0.0700	0.29	U	
3	1,2,3-Trichlorobenzene	13.49		0.00	180	651	0.0500	0.33	U	
	1,1,2-Trifluoroethane				0	0		1.0	U	NR
	1,1-Dichloropropane				0	0		1.0	U	NR

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c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F044.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:59	**Quant Date:**	03/14/2007 15:48	**Vial:**	40
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0703662-4			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

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D: Result from dilution
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d: Compound manually deleted
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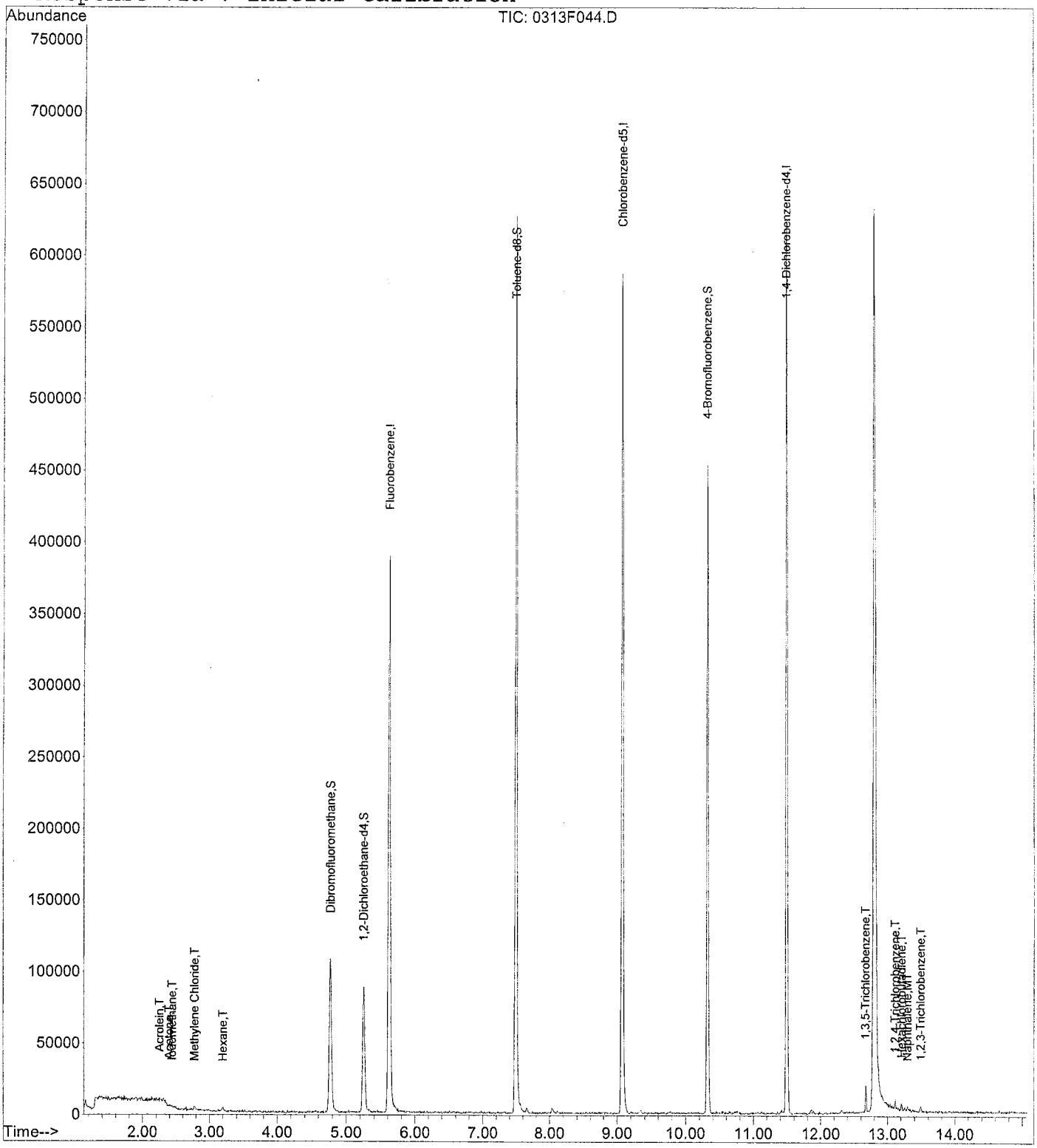
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

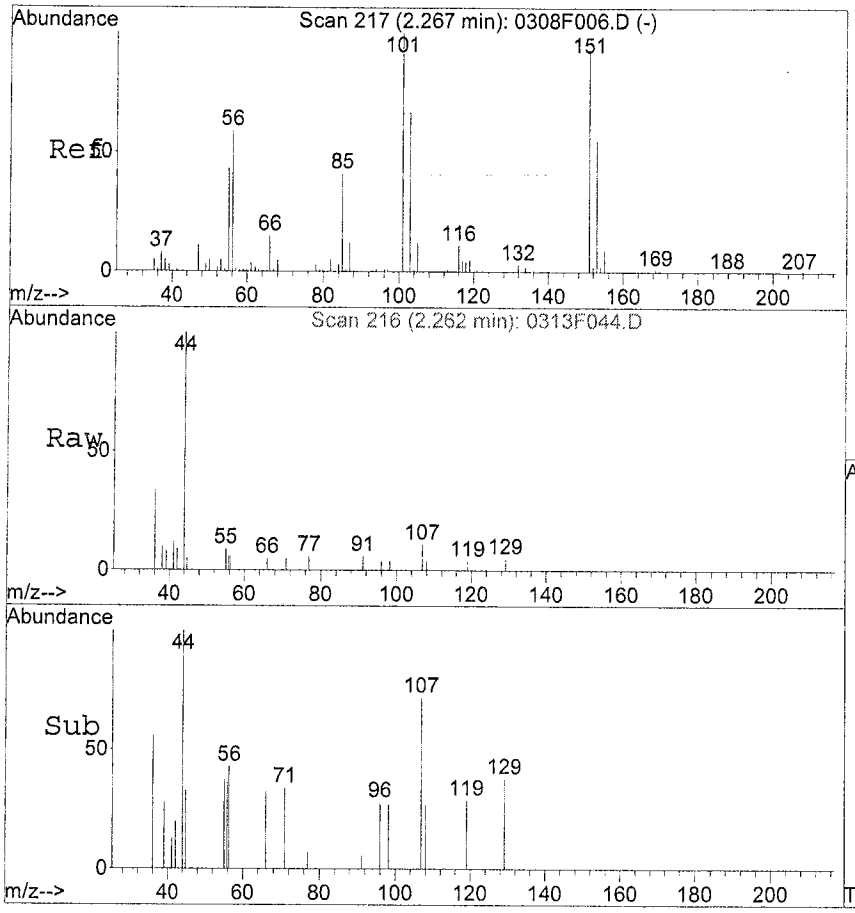
Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F044.D
Acq On : 13 Mar 2007 10:59 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:48 2007

Vial: 40
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration

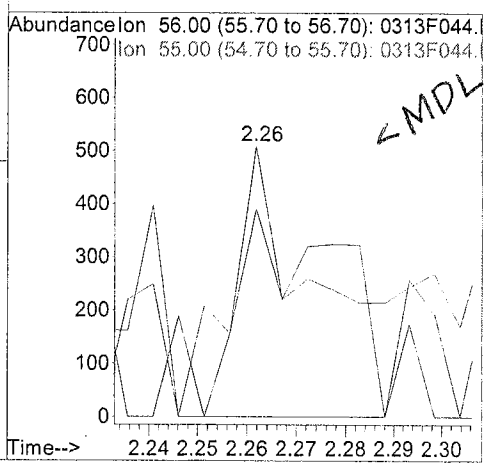


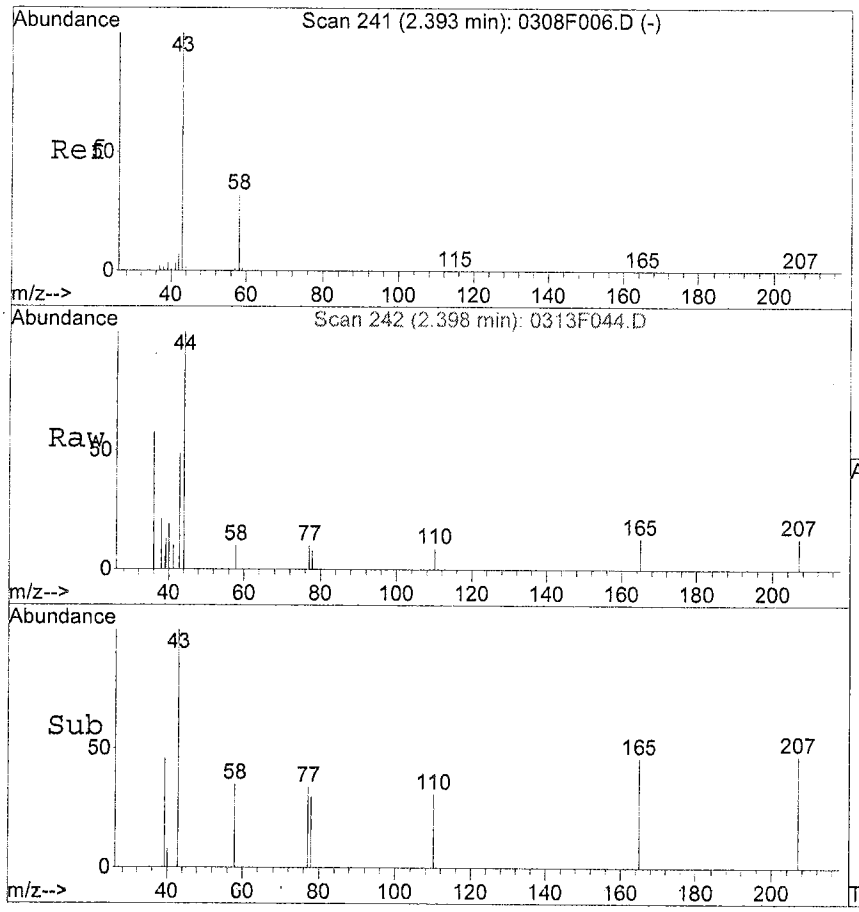


#10
Acrolein
Concen: 2.89 PPB
RT: 2.26 min Scan# 216
Delta R.T. -0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion: 56 Resp: 583

Ion	Ratio	Lower	Upper
56	100		
55	36.0	42.9	102.9#
53	0.0	0.0	37.7

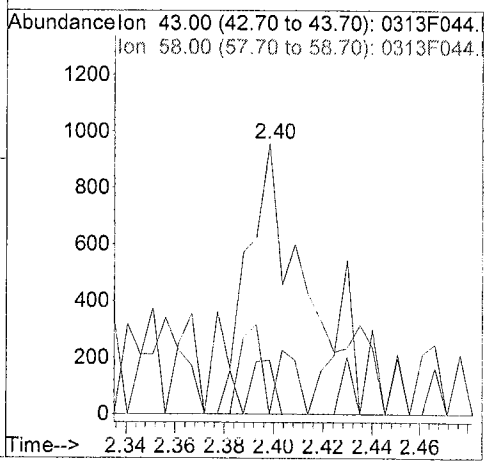


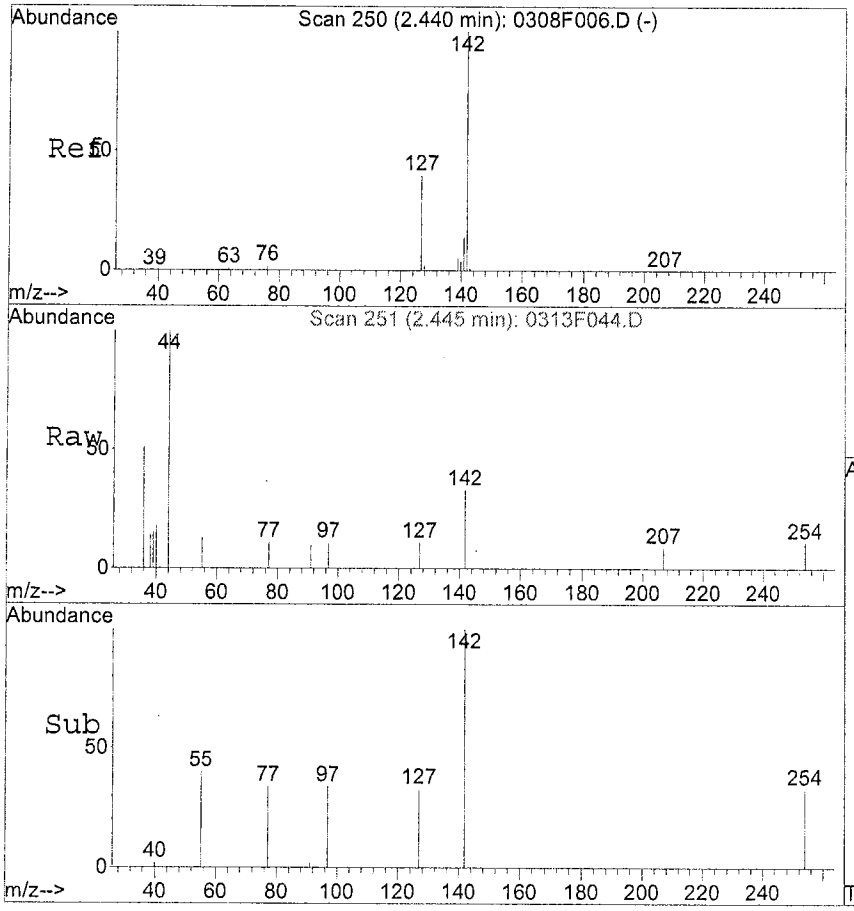


#13
Acetone
Concen: 1.57 PPB
RT: 2.40 min Scan# 242
Delta R.T. 0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion: 43 Resp: 1728

Ion	Ratio	Lower	Upper
43	100		
58	20.1	1.7	61.7
42	0.0	0.0	36.8

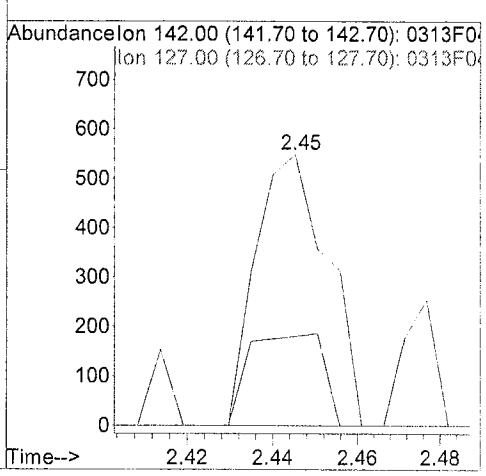


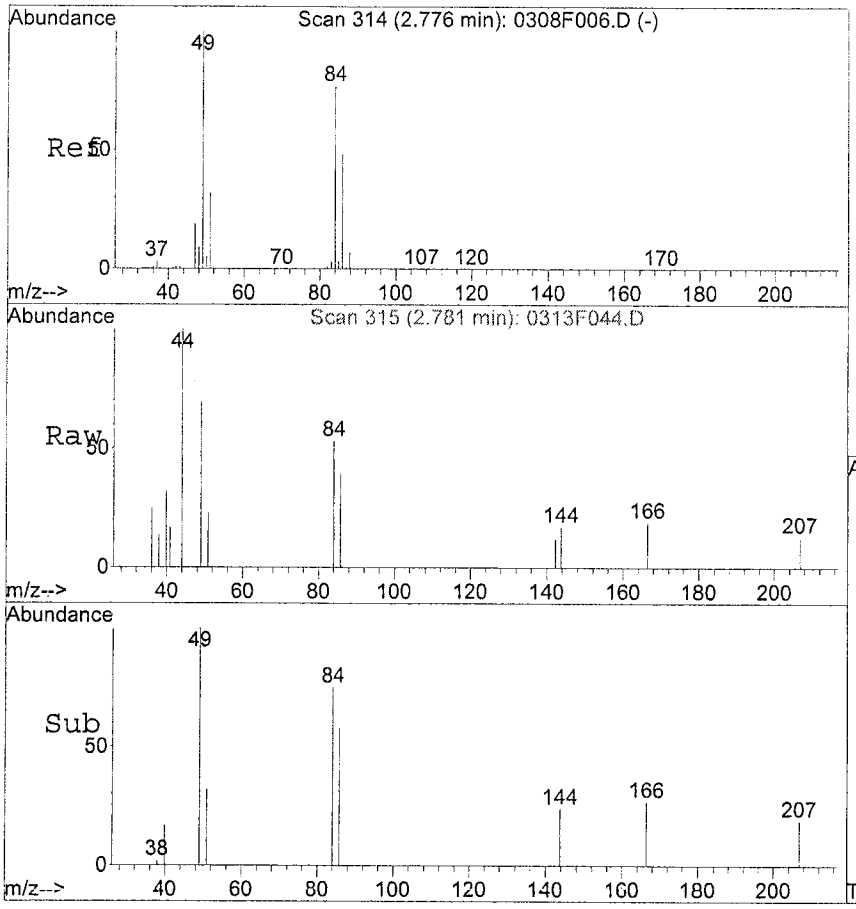


#14
Iodomethane
Concen: 0.06 PPB
RT: 2.45 min Scan# 251
Delta R.T. 0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:142 Resp: 641

Ion	Ratio	Lower	Upper
142	100		
127	32.8	9.7	69.7
141	0.0	0.0	44.1

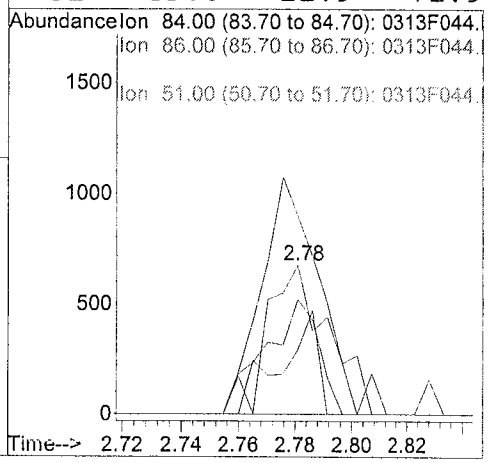


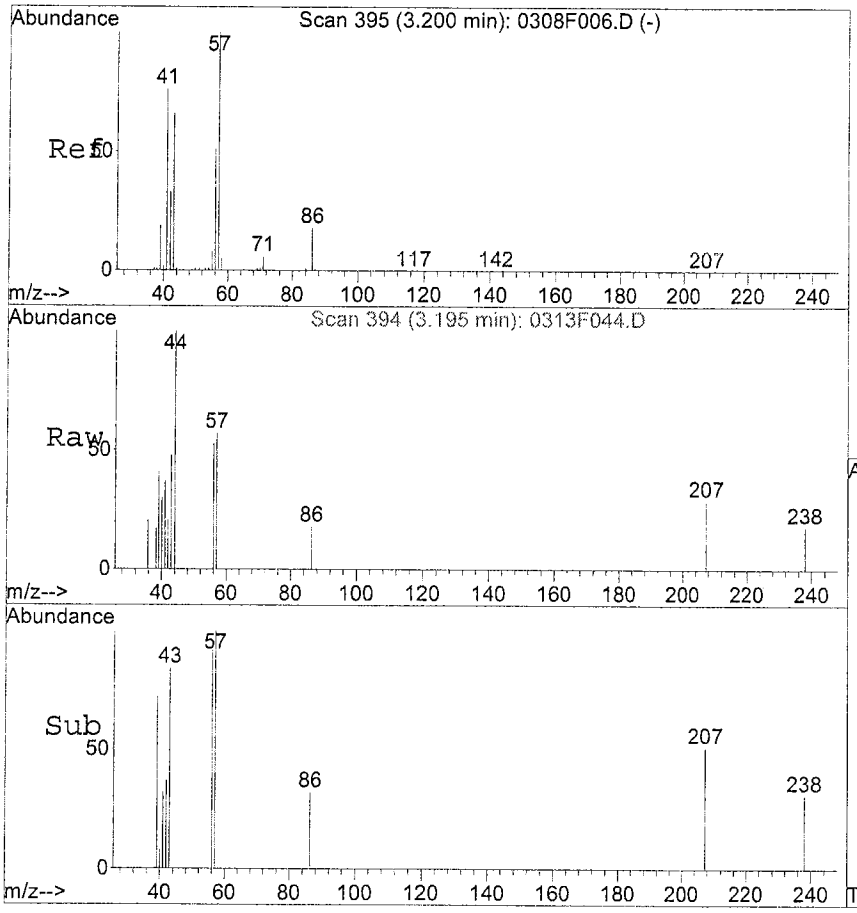


#18
Methylene Chloride
Concen: 0.10 PPB
RT: 2.78 min Scan# 315
Delta R.T. 0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion: 84 Resp: 1016

Ion	Ratio	Lower	Upper
84	100		
86	76.8	32.9	92.9
49	133.0	99.7	159.7
51	43.0	11.9	71.9

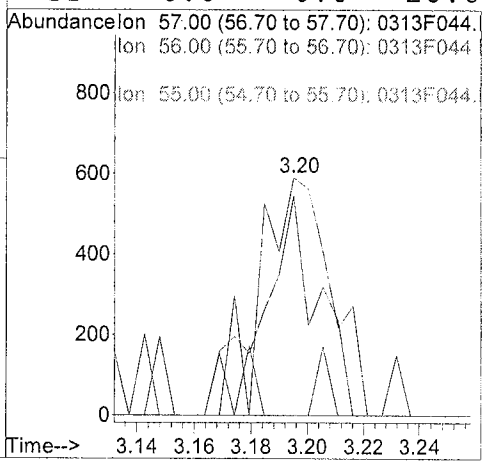


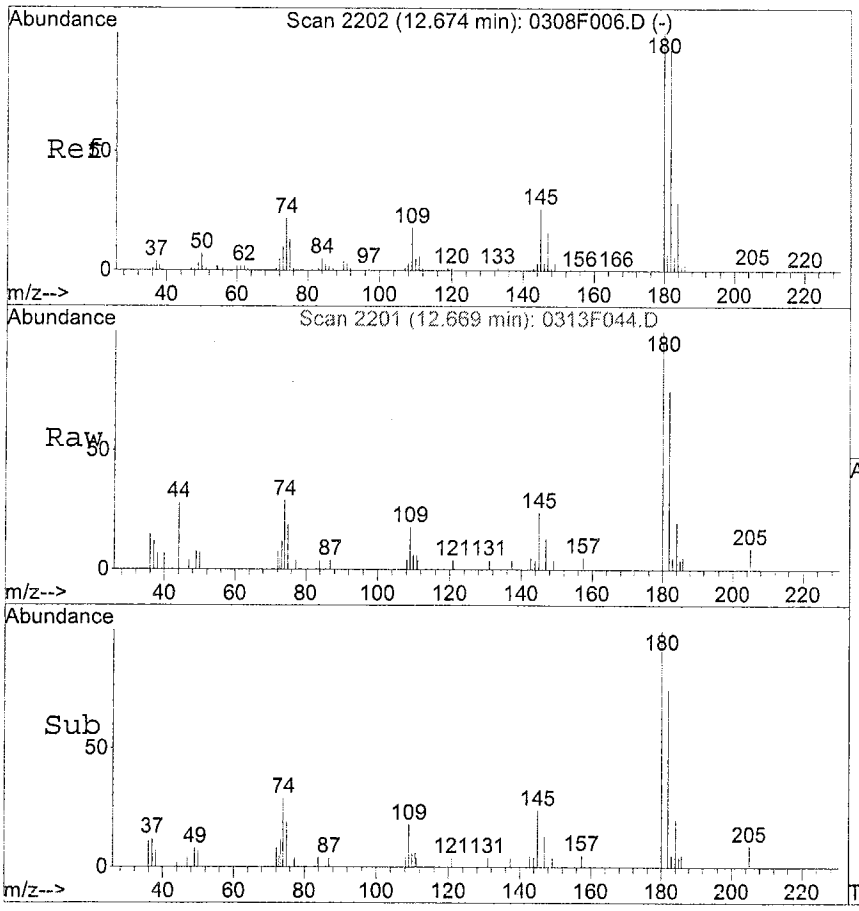


#23
Hexane
Concen: 0.09 PPB
RT: 3.20 min Scan# 394
Delta R.T. -0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion: 57 Resp: 1033

Ion	Ratio	Lower	Upper
57	100		
56	92.4	21.1	81.1#
71	0.0	0.0	35.9
55	0.0	0.0	20.0

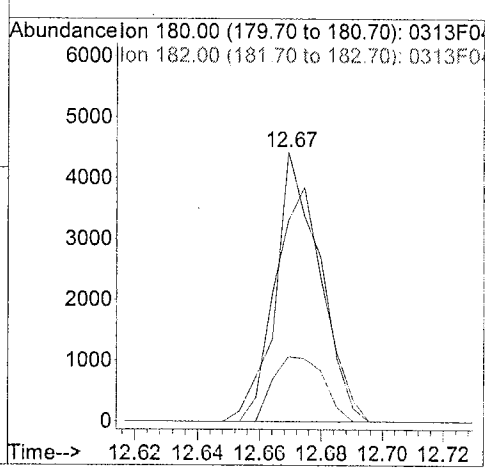


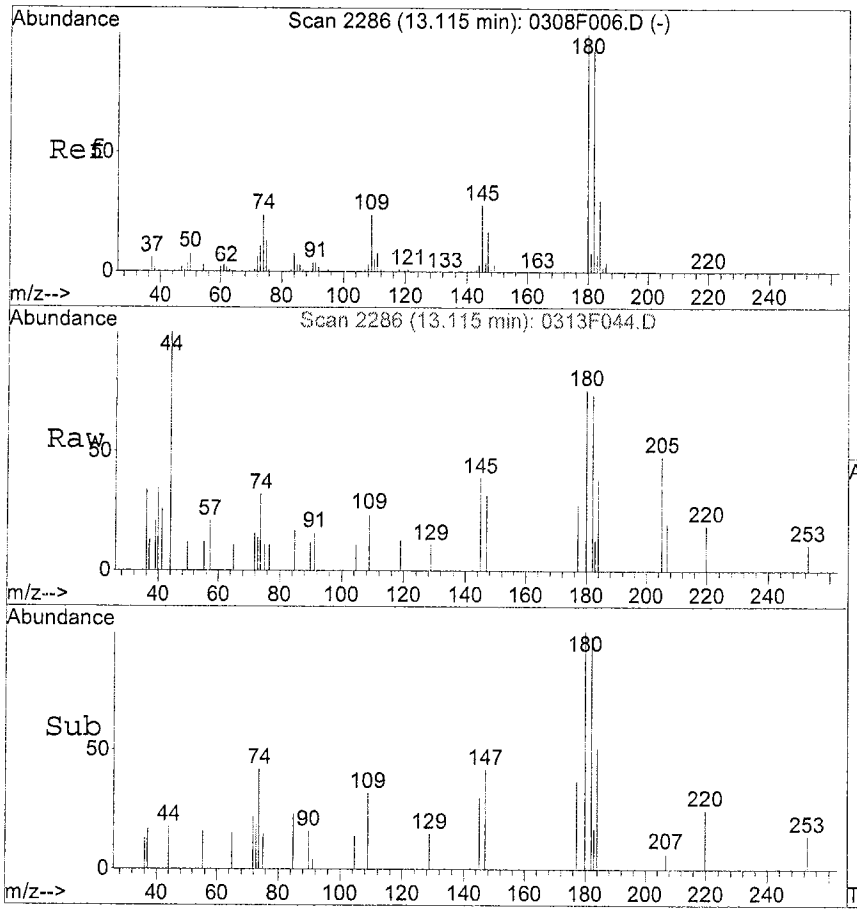


#99
1,3,5-Trichlorobenzene
Concen: 0.20 PPB
RT: 12.67 min Scan# 2201
Delta R.T. -0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:180 Resp: 4414

Ion	Ratio	Lower	Upper
180	100		
182	74.5	64.4	124.4
145	24.1	0.0	55.5

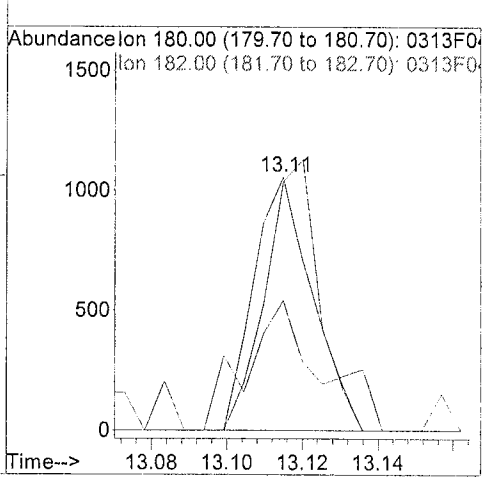


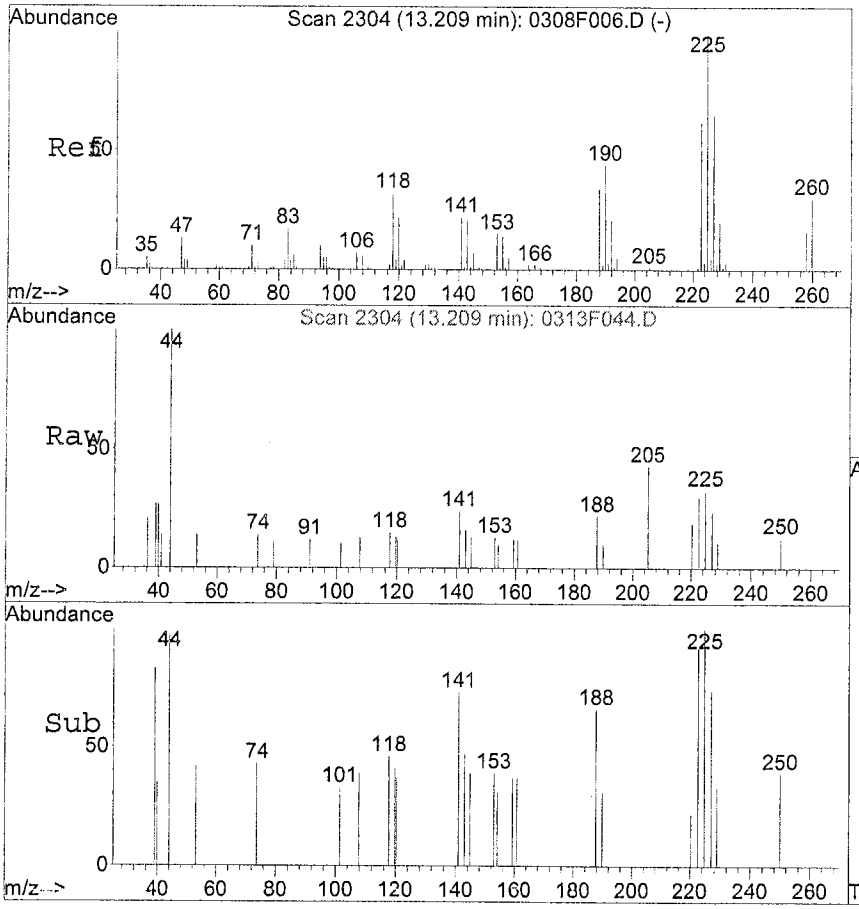


#100
1,2,4-Trichlorobenzene
Concen: 0.07 PPB
RT: 13.11 min Scan# 2286
Delta R.T. 0.00 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:180 Resp: 1136

Ion	Ratio	Lower	Upper
180	100		
182	97.9	66.5	126.5
145	51.3	0.0	58.1

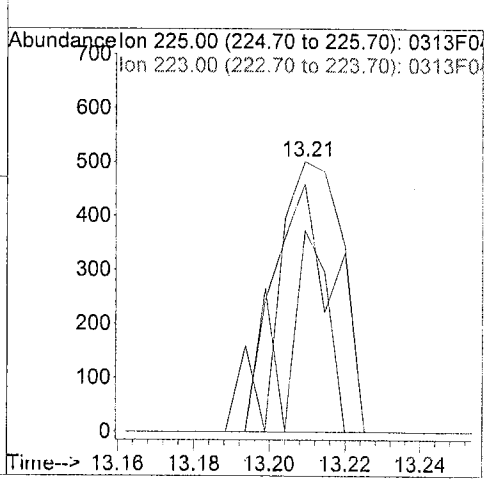


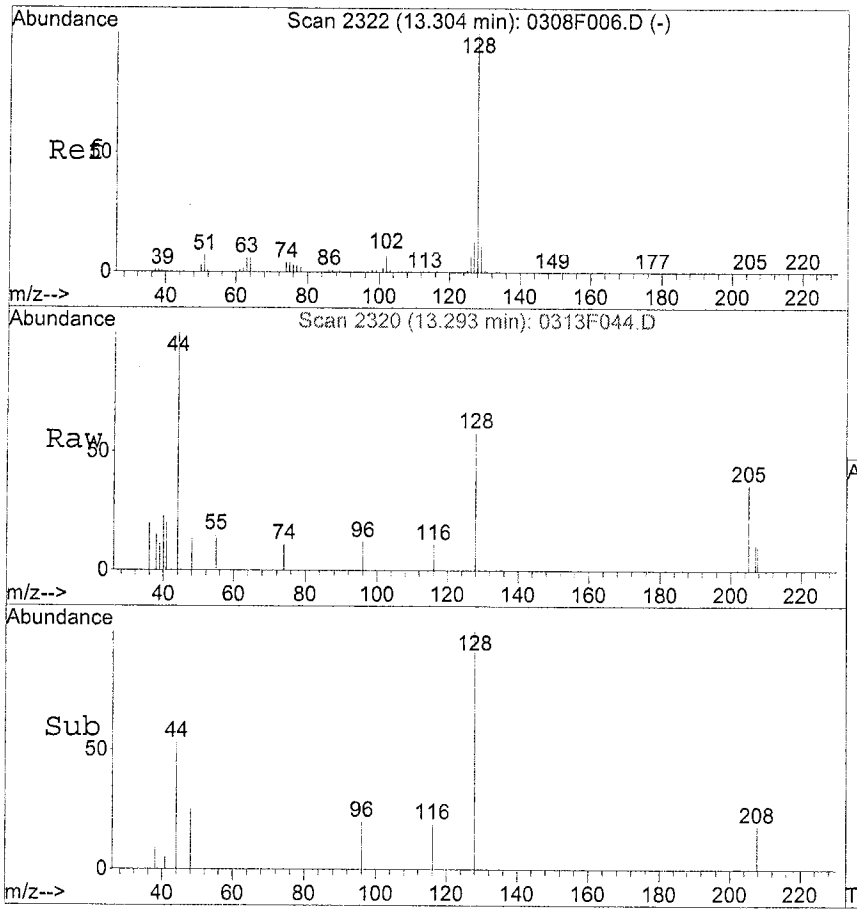


#101
Hexachlorobutadiene
Concen: 0.06 PPB
RT: 13.21 min Scan# 2304
Delta R.T. 0.00 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:225 Resp: 592

Ion	Ratio	Lower	Upper
225	100		
223	91.6	32.1	92.1
227	74.5	35.1	95.1

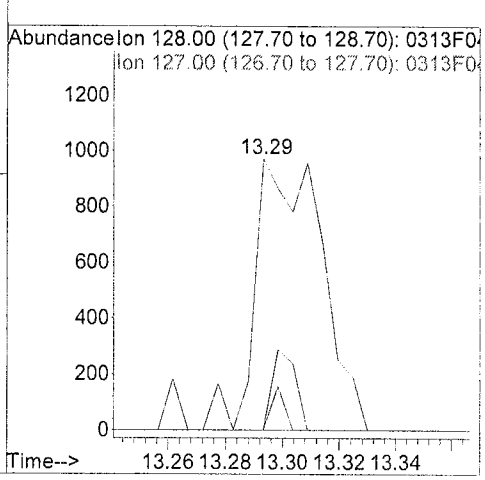


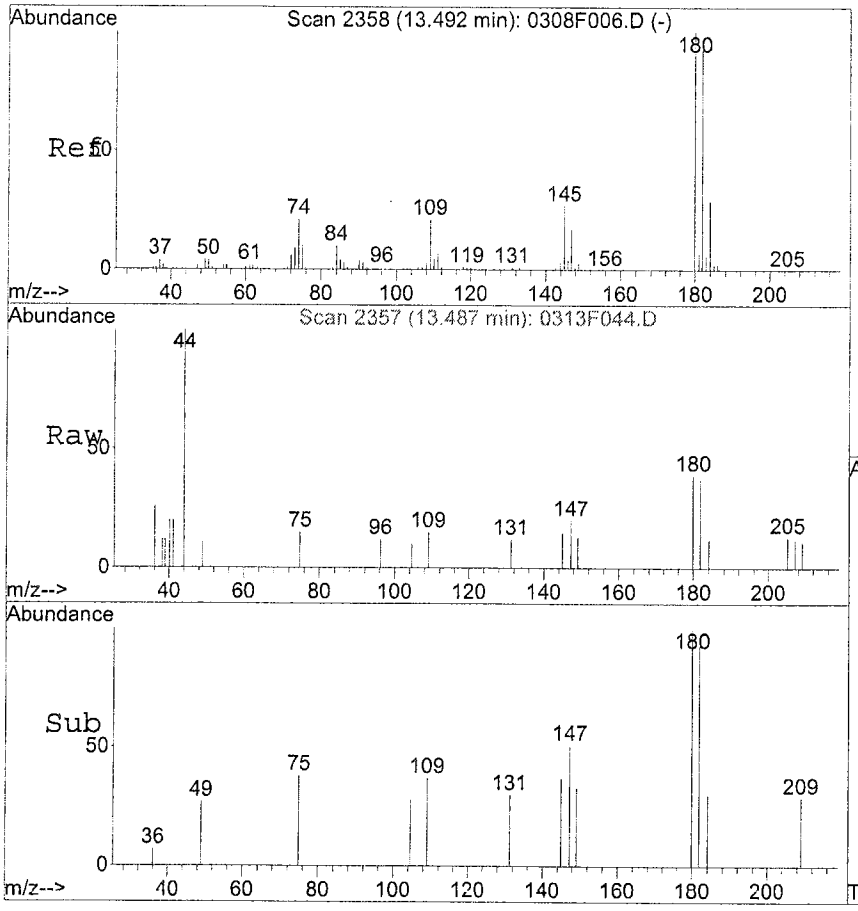


#102
Naphthalene
Concen: 0.07 PPB
RT: 13.29 min Scan# 2320
Delta R.T. -0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:128 Resp: 1578

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.7
102	0.0	0.0	38.4

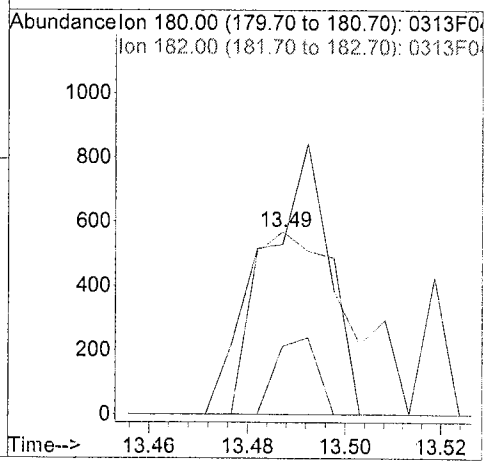




#103
1,2,3-Trichlorobenzene
Concen: 0.05 PPB
RT: 13.49 min Scan# 2357
Delta R.T. -0.01 min
Lab File: 0313F044.D
Acq: 13 Mar 2007 10:59 pm

Tgt Ion:180 Resp: 651

Ion	Ratio	Lower	Upper
180	100		
182	93.1	66.6	126.6
145	37.3	0.0	57.7



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CLMS	**Units:**	ug/L
Lab Code:	KWG0703662-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**11.3**		2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	**58.3**		10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	**0.320**		10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	**11.9**		1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	**12.1**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	**11.4**		1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	**10.6**		1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	**74.0**		10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	**12.1**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	**26.1**		5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	**15.2**		4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	**11.6**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	**12.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	**56.3**		10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	**12.1**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	**11.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	**12.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	**11.6**		0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	**11.4**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	**12.3**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	**44.5**		10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	**11.4**		0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	**12.6**		0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	**8.74**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	**9.88**		0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	**56.9**		10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	**8.53**		0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	**8.93**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	**9.27**		0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	**9.50**		0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CLMS	**Units:**	ug/L
Lab Code:	KWG0703662-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**28.7**		1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	**9.83**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	**8.41**		1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	91	76-114	03/13/07	Acceptable
Toluene-d8	113	88-110	03/13/07	Outside Control Limits
4-Bromofluorobenzene	98	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F040.D
Lab ID: KWG0703662-1 -- K0701816-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 21:41
Date Quantitated: 03/14/2007 15:46
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NR
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	NR
Continuing Calibration Recovery	1,3,5-Trichlorobenzene	-32.7	NA	30	NR
	cis-1,4-Dichloro-2-butene	-39.7	NA	30	NR
	tert-Butyl Formate	-74.5	NA	30	NR
	1,2-Dibromo-3-chloropropane	-32.9	NA	30	NR
Continuing Calibration Minimum RF	Acrolein	0.0072	0.01	NA	NR
	1,4-Dioxane	0.0008	0.01	NA	
	Acetonitrile	0.0076	0.01	NA	

Primary Review: KR 3/15/07

Secondary Review: HL 3.15.07

Exception Report

Data File: J:\MS18\DATA\031307\0313F040.D
Lab ID: KWG0703662-1 -- K0701816-002MS
RunType: MS
Matrix: WATER

Date Acquired: 03/13/2007 21:41
Date Quantitated: 03/14/2007 15:46
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	tert-Butyl Alcohol	0.0057	0.01	NA	NC
	Isobutyl Alcohol	0.0026	0.01	NA	

Primary Review: KL 3/15/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583553	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F040.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:41	**Quant Date:**	03/14/2007 15:46	**Vial:**	38
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703662-1 -- K0701816-002MS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	378884	10.00	OK
2	Chlorobenzene-d5	9.08	0.01	82	173178	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	163566	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	82147	10.25	103	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	73231	9.06	91	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	414972	11.29	113	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	149349	9.84	98	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	95269	8.28	8.28		
1	Chloromethane	1.31		0.00	50	159473	11.87	11.9		
1	Vinyl Chloride	1.39		0.00	62	149540	12.10	12.1		
1	Bromomethane	1.63		0.00	96	67782	11.39	11.4		
1	Chloroethane	1.70		0.00	64	88408	10.60	10.6		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	269633	13.46	13.5		
1	Trichlorofluoromethane	1.86		0.00	101	183504	10.86	10.9		
1	Ethyl Ether	2.10		0.00	59	68105	12.63	12.6		
1	Acrolein	2.26	-0.01	0.00	56	64554	328.79	329		
1	Trichlorotrifluoroethane	2.27		0.00	151	84222	10.78	10.8		
1	1,1-Dichloroethene	2.29		0.00	96	111339	12.14	12.1		
1	Acetone	2.39		0.00	43	79401	74.03	74.0		
1	Iodomethane	2.44		0.00	142	445828	41.94	41.9		
1	Carbon Disulfide	2.47		0.00	76	780433	26.13	26.1		
1	3-Chloro-1-propene	2.64		0.00	76	236952	47.45	47.5		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F040.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:41	**Quant Date:**	03/14/2007 15:46	**Vial:**	38
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703662-1 -- K0701816-002MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	102055	417.00	417		
1	Methylene Chloride	2.78		0.00	84	149253	15.23	15.2		
1	tert-Butyl Alcohol	2.88		0.00	59	32789	153.27	153		
1	Acrylonitrile	3.08		0.00	53	71627	51.40	51.4		
1	Methyl tert-Butyl Ether	2.97		0.00	73	191872	11.31	11.3		
1	trans-1,2-Dichloroethene	3.00		0.00	96	124405	11.61	11.6		
1	n-Hexane	3.20		0.00	57	410199	38.05	38.1		
1	Diisopropyl Ether	3.48	0.01	0.00	45	787601	25.71	25.7		
1	1,1-Dichloroethane	3.47	-0.01	0.00	63	224936	11.95	12.0		
1	Vinyl Acetate	3.53		0.00	86	62944	58.31	58.3		
1	Chloroprene	3.53		0.00	53	776394	38.14	38.1		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	542892	24.60	24.6		
1	2,2-Dichloropropane	4.11		0.00	77	141686	11.21	11.2		
1	cis-1,2-Dichloroethene	4.15		0.00	96	131630	12.07	12.1		
1	2-Butanone (MEK)	4.20	-0.01	0.00	72	20266	56.34	56.3		
1	Propionitrile	4.38	0.01	0.00	54	19337	40.42	40.4		
1	Ethyl Acetate	4.24		0.00	61	20931	44.09	44.1		
1	Methacrylonitrile	4.52		0.00	67	67627	40.29	40.3		
1	Bromochloromethane	4.45		0.00	128	43941	10.99	11.0		
1	Tetrahydrofuran	4.45	0.01	0.00	71	4371	11.24	11.2		
1	Chloroform	4.56	0.01	0.00	83	208327	11.17	11.2		
1	tert-Butyl Formate	4.71	0.13	0.02	59	2679	1.19	1.19		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	186285	12.03	12.0		
1	Carbon Tetrachloride	4.88		0.00	117	162379	11.78	11.8		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	175183	11.69	11.7		
1	Isobutyl Alcohol	5.25	-0.01	0.00	43	40027	399.53	400		
1	Benzene	5.21		0.00	78	521495	11.66	11.7		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	117012	11.62	11.6		
1	tert-Amyl Methyl Ether	5.37		0.00	55	128340	24.64	24.6		
1	Trichloroethene (TCE)	6.06		0.00	95	123065	11.44	11.4		
1	1,2-Dichloropropane	6.40	0.01	0.00	63	114358	12.34	12.3		
1	Dibromomethane	6.53		0.00	93	42467	11.59	11.6		
1	Methyl Methacrylate	6.57	0.01	0.00	69	124332	42.74	42.7		
1	1,4-Dioxane	6.55	-0.01	0.00	88	13081	385.43	385		
1	Bromodichloromethane	6.73		0.00	83	122862	12.15	12.2		
1	2-Nitropropane	7.10		0.00	43	30624	32.40	32.4		
1	2-Chloroethyl Vinyl Ether	7.27	0.13	0.02	63	1045	0.3200	0.320	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	129661	11.36	11.4		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	79820	56.92	56.9		
1	Toluene	7.57		0.00	92	347560	12.61	12.6		
2	n-Octane	7.66		0.00	85	53185	12.11	12.1		
2	trans-1,3-Dichloropropene	7.93		0.00	75	80566	8.74	8.74		
2	Ethyl Methacrylate	8.00		0.00	69	270517	37.82	37.8		

U: Undetected at or above MDL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F040.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:41	**Quant Date:**	03/14/2007 15:46	**Vial:**	38
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703662-1 -- K0701816-002MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	54511	9.88	9.88		
2	Tetrachloroethene (PCE)	8.13		0.00	164	106795	8.53	8.53		
2	2-Hexanone	8.39		0.00	57	22642	44.54	44.5		
2	1,3-Dichloropropane	8.29		0.00	76	119998	9.47	9.47		
2	Dibromochloromethane	8.49		0.00	129	66044	8.93	8.93		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	56074	9.40	9.40		
2	1-Chlorohexane	9.10		0.00	91	171745	9.48	9.48		
2	Chlorobenzene	9.10		0.00	112	330790	9.27	9.27		
2	Ethylbenzene	9.21		0.00	106	194041	9.50	9.50		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	97653	9.38	9.38		
2	m,p-Xylenes	9.34		0.00	106	485615	19.20	19.2		
2	o-Xylene	9.75		0.00	106	223696	9.54	9.54		
2	Styrene	9.78		0.00	103	160850m	9.83	9.83		
2	Bromoform	9.98		0.00	173	31073	8.41	8.41		
2	Isopropylbenzene	10.13		0.00	105	542832	8.46	8.46		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	17360	27.99	28.0		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	63733	10.52	10.5		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	54590	41.56	41.6		
3	Bromobenzene	10.45		0.00	156	122521	8.84	8.84		
3	n-Propylbenzene	10.55		0.00	91	719107	9.84	9.84		
3	1,2,3-Trichloropropane	10.57		0.00	110	18415	9.57	9.57		
3	2-Chlorotoluene	10.65		0.00	91	418472	9.75	9.75		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	492776	9.76	9.76		
3	4-Chlorotoluene	10.77		0.00	91	469153	9.55	9.55		
3	tert-Butylbenzene	11.06		0.00	119	439703	9.28	9.28		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	494887	9.73	9.73		
3	sec-Butylbenzene	11.29		0.00	105	633214	10.02	10.0		
3	4-Isopropyltoluene	11.44		0.00	119	510414	8.95	8.95		
3	1,3-Dichlorobenzene	11.42		0.00	146	249684	8.84	8.84		
3	1,4-Dichlorobenzene	11.52		0.00	146	251247	9.02	9.02		
3	n-Butylbenzene	11.86		0.00	91	444429	9.02	9.02		
3	1,2-Dichlorobenzene	11.89		0.00	146	217606	8.82	8.82		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	6107	7.64	7.64		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	848760	36.03	36.0		
3	1,2,4-Trichlorobenzene	13.11		0.00	180	149582	8.18	8.18		
3	Hexachlorobutadiene	13.21		0.00	225	75523	6.93	6.93		
3	Naphthalene	13.30		0.00	128	226428	9.83	9.83		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	125423	8.36	8.36		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

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N: Presumptive evidence of compound

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*: Result fails acceptance criteria
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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F040.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:41	**Quant Date:**	03/14/2007 15:46	**Vial:**	38
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0703662-1 -- K0701816-002MS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

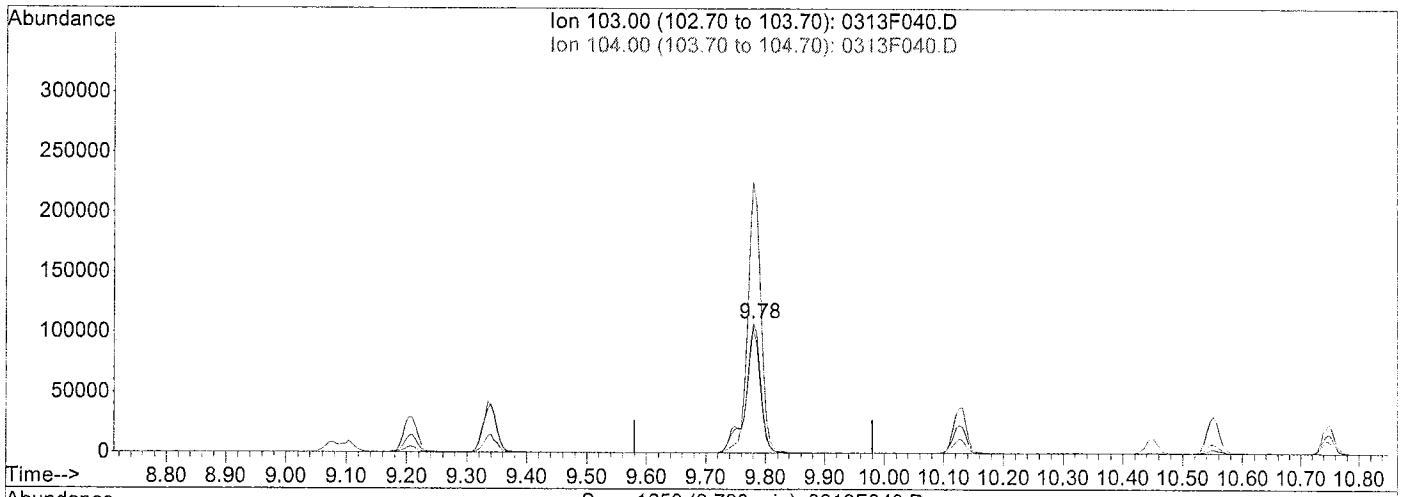
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

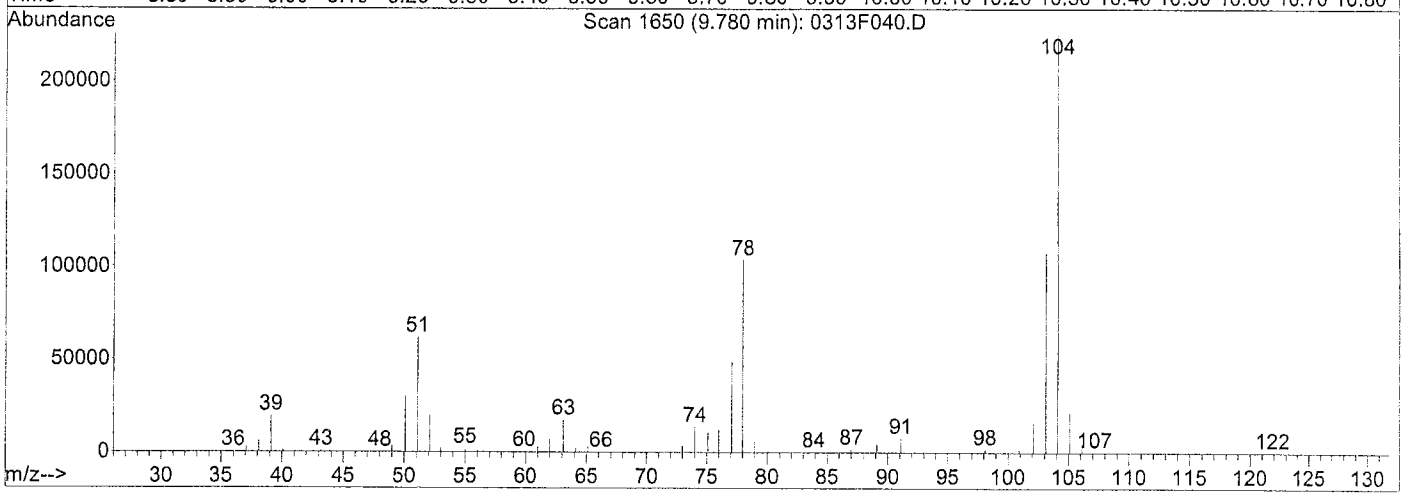
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F040.D
Acq On : 13 Mar 2007 9:41 pm
Sample : K1816-002MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:45 2007

Vial: 38
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F040.D

(76) Styrene (T)

9.78min 11.61PPB

response 189927

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	209.65
78.00	89.70	96.50
0.00	0.00	0.00

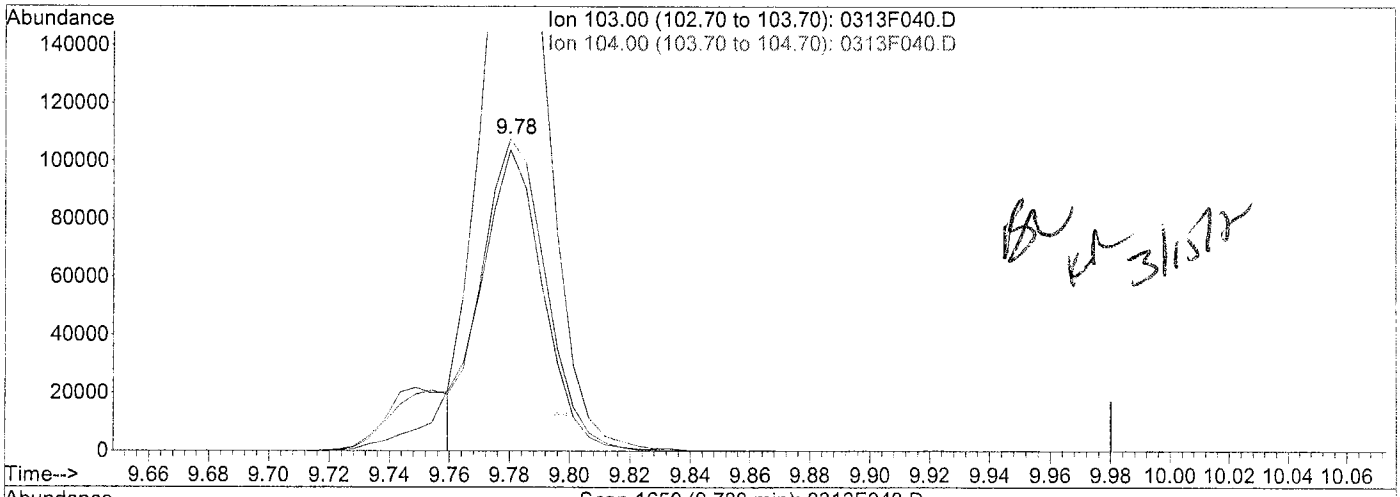
0313F040.D 022607.M Wed Mar 14 15:46:12 2007

Quantitation Report (Qedit)

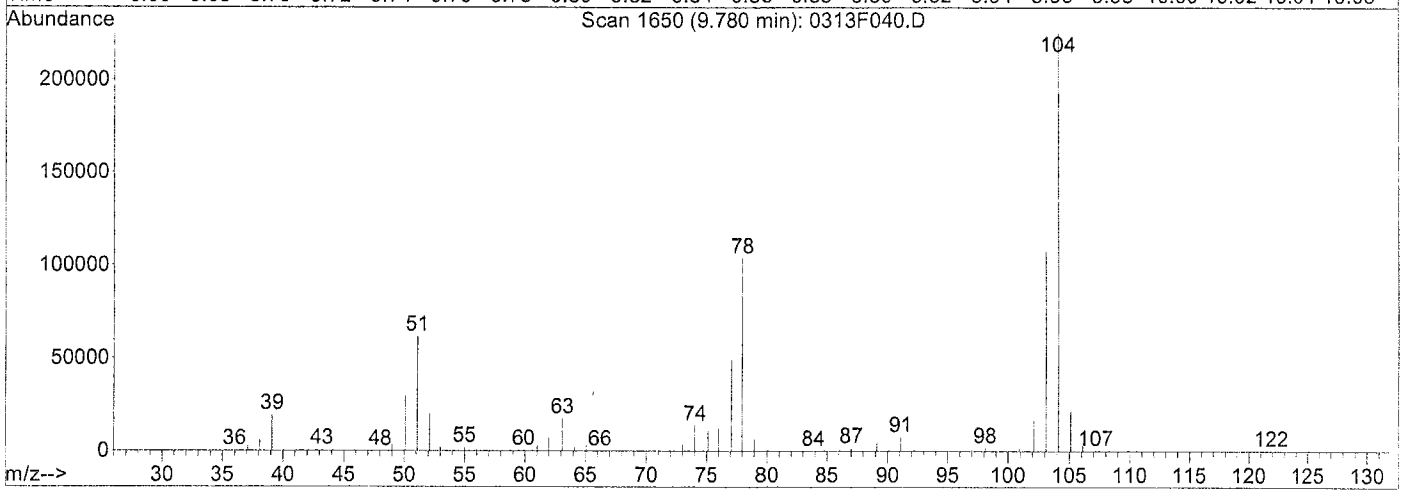
Data File : J:\MS18\DATA\031307\0313F040.D
Acq On : 13 Mar 2007 9:41 pm
Sample : K1816-002MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:46 2007

Vial: 38
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



BL KL 3/15/07



TIC: 0313F040.D

(76) Styrene (T)

9.78min 9.83PPB m

response 160850

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	209.65
78.00	89.70	96.50
0.00	0.00	0.00

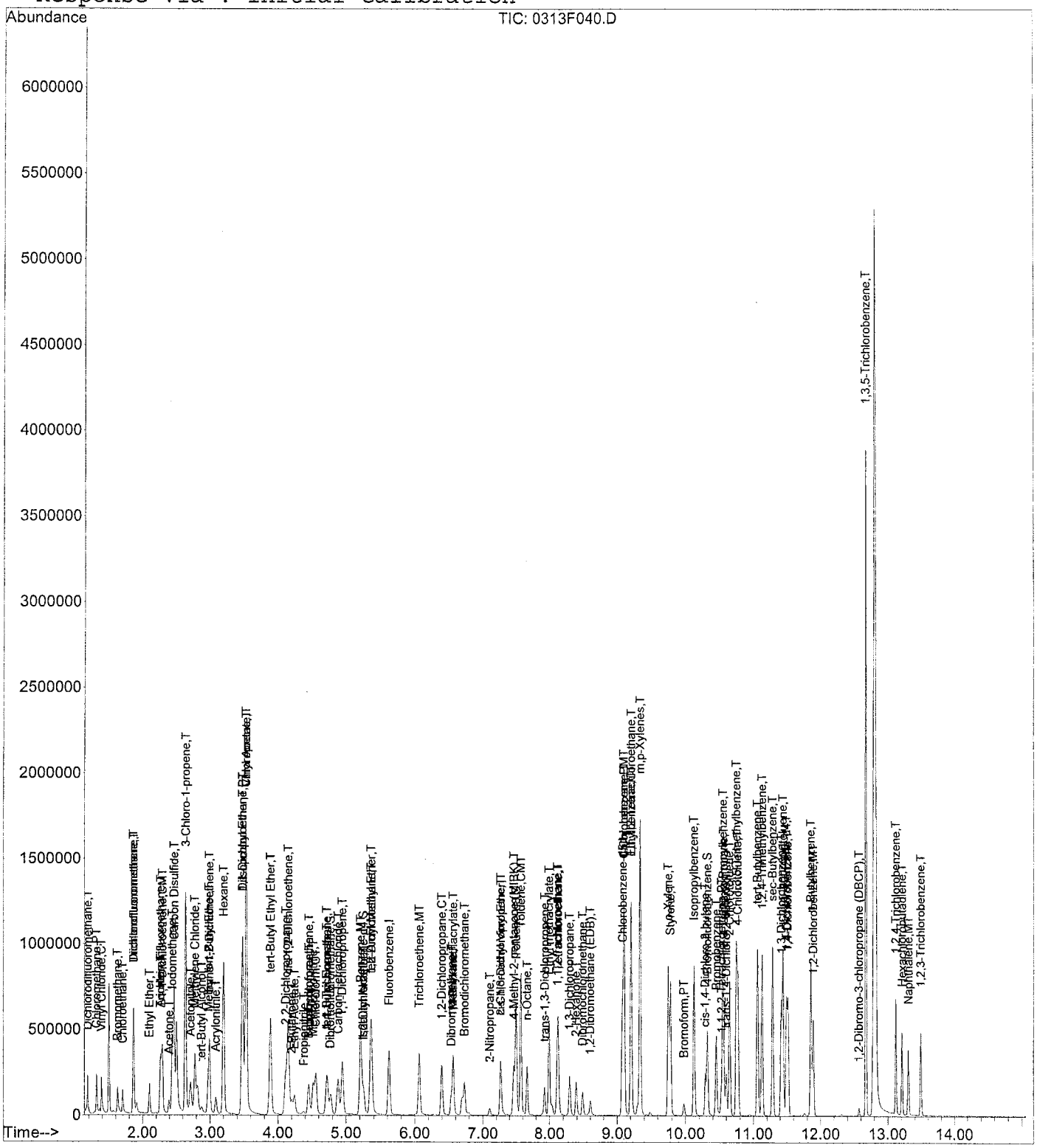
HL 3.15.07

0313F040.D 022607.M Wed Mar 14 15:46:21 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F040.D Vial: 38
Acq On : 13 Mar 2007 9:41 pm Operator:
Sample : K1816-002MS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:46 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CLDMS	**Units:**	ug/L
Lab Code:	KWG0703662-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**11.5**		2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	**58.7**		10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	**0.240**		10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	**11.7**		1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	**11.1**		1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	**10.7**		1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	**76.8**		10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	**12.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	**26.0**		5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	**15.5**		4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	**59.4**		10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	**12.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	**11.9**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	**11.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	**12.2**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	**46.5**		10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	**11.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	**12.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	**8.65**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	**9.68**		0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	**56.2**		10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	**8.42**		0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	**8.76**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	**9.16**		0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	**9.34**		0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	03/06/2007
Sample Matrix:	Water	**Date Received:**	03/07/2007

Volatile Organic Compounds

Sample Name:	NKGW02CLDMS	**Units:**	ug/L
Lab Code:	KWG0703662-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**28.2**		1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	**9.79**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	**8.39**		1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	95	76-114	03/13/07	Acceptable
Toluene-d8	114	88-110	03/13/07	Outside Control Limits
4-Bromofluorobenzene	97	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F041.D
Lab ID: KWG0703662-2 -- K0701816-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 22:00
Date Quantitated: 03/14/2007 15:47
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NR
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Continuing Calibration Recovery	1,3,5-Trichlorobenzene	-32.7	NA	30	NR
	cis-1,4-Dichloro-2-butene	-39.7	NA	30	MRL
	tert-Butyl Formate	-74.5	NA	30	NR
	1,2-Dibromo-3-chloropropane	-32.9	NA	30	MRL
Continuing Calibration Minimum RF	Acrolein	0.0072	0.01	NA	NR
	1,4-Dioxane	0.0008	0.01	NA	
	Acetonitrile	0.0076	0.01	NA	

Primary Review: KR 3/15/7

Secondary Review: HR 3.15.07

Exception Report

Data File: J:\MS18\DATA\031307\0313F041.D
Lab ID: KWG0703662-2 -- K0701816-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 03/13/2007 22:00
Date Quantitated: 03/14/2007 15:47
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	tert-Butyl Alcohol	0.0057	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	

Primary Review: KL 3/15/7

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583554	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F041.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:00	**Quant Date:**	03/14/2007 15:47	**Vial:**	38
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703662-2 -- K0701816-002DMS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	384233	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	180282	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	169111	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	84251	10.37	104	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	77873	9.50	95	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	423235	11.35	114	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	153526	9.71	97	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	98137	8.41	8.41		
1	Chloromethane	1.31		0.00	50	159554	11.71	11.7		
1	Vinyl Chloride	1.39		0.00	62	152452	12.17	12.2		
1	Bromomethane	1.63		0.00	96	66675	11.05	11.1		
1	Chloroethane	1.70		0.00	64	90191	10.66	10.7		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	276345	13.60	13.6		
1	Trichlorofluoromethane	1.86		0.00	101	184867	10.79	10.8		
1	Ethyl Ether	2.10		0.00	59	69476	12.71	12.7		
1	Acrolein	2.26	-0.01	0.00	56	62595	314.37	314		
1	Trichlorotrifluoroethane	2.27		0.00	151	86958	10.98	11.0		
1	1,1-Dichloroethene	2.29		0.00	96	111773	12.02	12.0		
1	Acetone	2.39		0.00	43	83560	76.82	76.8		
1	Iodomethane	2.44		0.00	142	444615	41.24	41.2		
1	Carbon Disulfide	2.47		0.00	76	788075	26.02	26.0		
1	3-Chloro-1-propene	2.64		0.00	76	234277	46.26	46.3		

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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F041.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:00	**Quant Date:**	03/14/2007 15:47	**Vial:**	38
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703662-2 -- K0701816-002DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	106410	428.74	429		
1	Methylene Chloride	2.78		0.00	84	153995	15.49	15.5		
1	tert-Butyl Alcohol	2.88		0.00	59	32876	151.53	152		
1	Acrylonitrile	3.09	0.01	0.00	53	73807	52.23	52.2		
1	Methyl tert-Butyl Ether	2.98	0.01	0.00	73	197220	11.46	11.5		
1	trans-1,2-Dichloroethene	3.00		0.00	96	127033	11.69	11.7		
1	n-Hexane	3.20		0.00	57	426502	39.02	39.0		
1	Diisopropyl Ether	3.48	0.01	0.00	45	827310	26.63	26.6		
1	1,1-Dichloroethane	3.47	-0.01	0.00	63	232924	12.21	12.2		
1	Vinyl Acetate	3.53		0.00	86	64276	58.71	58.7		
1	Chloroprene	3.53		0.00	53	801535	38.83	38.8		
1	tert-Butyl Ethyl Ether	3.88	-0.01	0.00	59	573350	25.61	25.6		
1	2,2-Dichloropropane	4.11		0.00	77	150608	11.75	11.8		
1	cis-1,2-Dichloroethene	4.15		0.00	96	135343	12.24	12.2		
1	2-Butanone (MEK)	4.20	-0.01	0.00	72	21660	59.37	59.4		
1	Propionitrile	4.37		0.00	54	19875	40.97	41.0		
1	Ethyl Acetate	4.25	0.01	0.00	61	20183	41.92	41.9		
1	Methacrylonitrile	4.52		0.00	67	71211	41.83	41.8		
1	Bromochloromethane	4.45		0.00	128	46168	11.39	11.4		
1	Tetrahydrofuran	4.45	0.01	0.00	71	9049	22.95	23.0		
1	Chloroform	4.55		0.00	83	213878	11.31	11.3		
1	tert-Butyl Formate	4.72	0.14	0.02	59	2306	1.01	1.01		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	188592	12.01	12.0		
1	Carbon Tetrachloride	4.88		0.00	117	165930	11.87	11.9		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	180387	11.87	11.9		
1	Isobutyl Alcohol	5.26		0.00	43	38458	378.52	379		
1	Benzene	5.21		0.00	78	530931	11.71	11.7		
1	1,2-Dichloroethane (EDC)	5.36		0.00	62	119527	11.71	11.7		
1	tert-Amyl Methyl Ether	5.37		0.00	55	131026	24.80	24.8		
1	Trichloroethene (TCE)	6.06		0.00	95	128351	11.77	11.8		
1	1,2-Dichloropropane	6.40	0.01	0.00	63	115008	12.23	12.2		
1	Dibromomethane	6.53		0.00	93	43574	11.73	11.7		
1	Methyl Methacrylate	6.56		0.00	69	126691	42.95	43.0		
1	1,4-Dioxane	6.55	-0.01	0.00	88	13210	383.81	384		
1	Bromodichloromethane	6.73		0.00	83	124783	12.17	12.2		
1	2-Nitropropane	7.10		0.00	43	31413	32.77	32.8		
1	2-Chloroethyl Vinyl Ether	7.27	0.13	0.02	63	784	0.2400	0.240	J	
1	cis-1,3-Dichloropropene	7.26		0.00	75	136587	11.80	11.8		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	79913	56.19	56.2		
1	Toluene	7.57		0.00	92	354740	12.69	12.7		
2	n-Octane	7.66		0.00	85	50913	11.13	11.1		
2	trans-1,3-Dichloropropene	7.93		0.00	75	83027	8.65	8.65		
2	Ethyl Methacrylate	8.00		0.00	69	289420	38.87	38.9		

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F041.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:00	**Quant Date:**	03/14/2007 15:47	**Vial:**	38
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703662-2 -- K0701816-002DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	55550	9.68	9.68		
2	Tetrachloroethene (PCE)	8.13		0.00	164	109851	8.42	8.42		
2	2-Hexanone	8.39		0.00	57	24600	46.48	46.5		
2	1,3-Dichloropropane	8.29		0.00	76	125728	9.53	9.53		
2	Dibromochloromethane	8.49		0.00	129	67415	8.76	8.76		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	58100	9.35	9.35		
2	1-Chlorohexane	9.10		0.00	91	175672	9.31	9.31		
2	Chlorobenzene	9.10		0.00	112	340362	9.16	9.16		
2	Ethylbenzene	9.21		0.00	106	198717	9.34	9.34		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	101568	9.37	9.37		
2	m,p-Xylenes	9.34		0.00	106	494213	18.77	18.8		
2	o-Xylene	9.75		0.00	106	229970	9.42	9.42		
2	Styrene	9.78		0.00	103	166809m	9.79	9.79		
2	Bromoform	9.98		0.00	173	32247	8.39	8.39		
2	Isopropylbenzene	10.13		0.00	105	563115	8.43	8.43		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	17961	27.82	27.8		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	65840	10.51	10.5		
3	trans-1,4-Dichloro-2-butene	10.59	-0.01	0.00	53	54286	39.97	40.0		
3	Bromobenzene	10.45		0.00	156	127549	8.90	8.90		
3	n-Propylbenzene	10.55		0.00	91	742345	9.82	9.82		
3	1,2,3-Trichloropropane	10.57		0.00	110	18896	9.50	9.50		
3	2-Chlorotoluene	10.65		0.00	91	427296	9.63	9.63		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	509205	9.76	9.76		
3	4-Chlorotoluene	10.77		0.00	91	480757	9.47	9.47		
3	tert-Butylbenzene	11.06		0.00	119	453295	9.25	9.25		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	506522	9.63	9.63		
3	sec-Butylbenzene	11.29		0.00	105	648284	9.92	9.92		
3	4-Isopropyltoluene	11.44		0.00	119	525122	8.90	8.90		
3	1,3-Dichlorobenzene	11.42		0.00	146	260992	8.94	8.94		
3	1,4-Dichlorobenzene	11.52		0.00	146	253719	8.81	8.81		
3	n-Butylbenzene	11.86		0.00	91	453243	8.90	8.90		
3	1,2-Dichlorobenzene	11.89		0.00	146	216137	8.47	8.47		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	6383	7.73	7.73		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	881927	36.21	36.2		
3	1,2,4-Trichlorobenzene	13.12	0.01	0.00	180	154196	8.15	8.15		
3	Hexachlorobutadiene	13.21		0.00	225	74624	6.63	6.63		
3	Naphthalene	13.30		0.00	128	231609	9.73	9.73		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	129703	8.37	8.37		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

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e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F041.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 22:00	**Quant Date:**	03/14/2007 15:47	**Vial:**	38
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0703662-2 -- K0701816-002DMS			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

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J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
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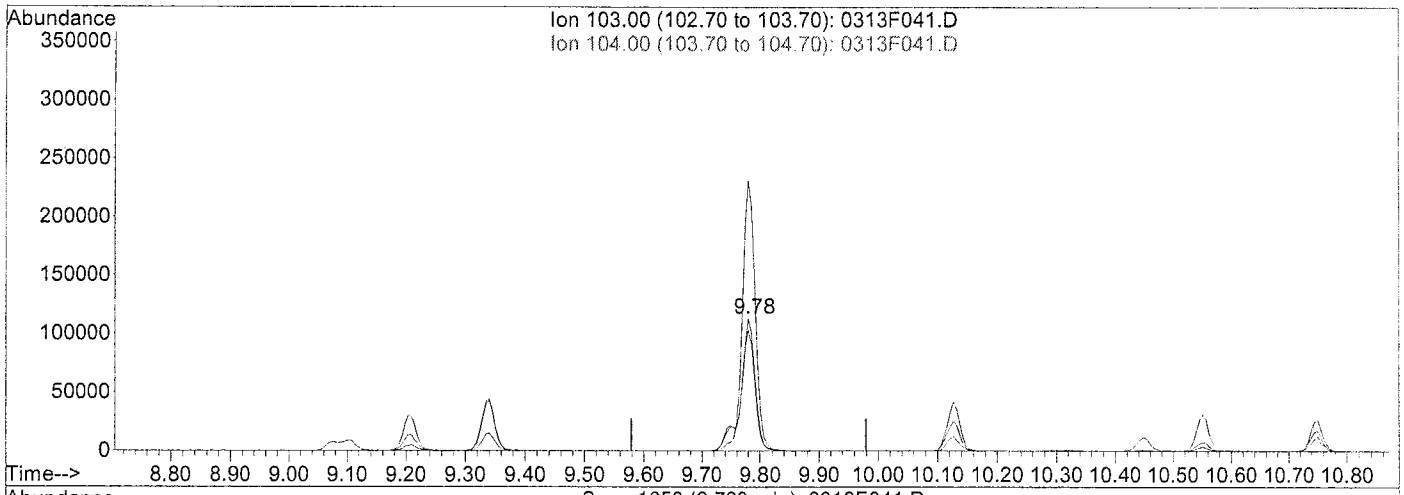
c: check for co-elution

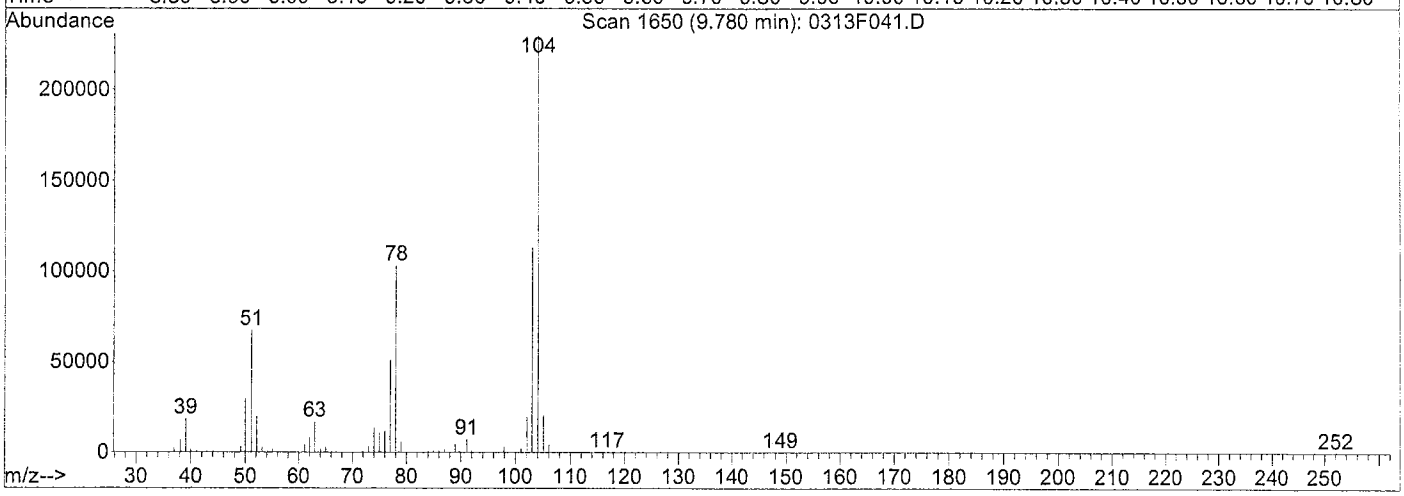
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F041.D
Acq On : 13 Mar 2007 10:00 pm
Sample : K1816-002DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:46 2007

Vial: 38
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F041.D

(76) Styrene (T)

9.78min 11.60PPB

response 197558

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	204.26
78.00	89.70	91.21
0.00	0.00	0.00

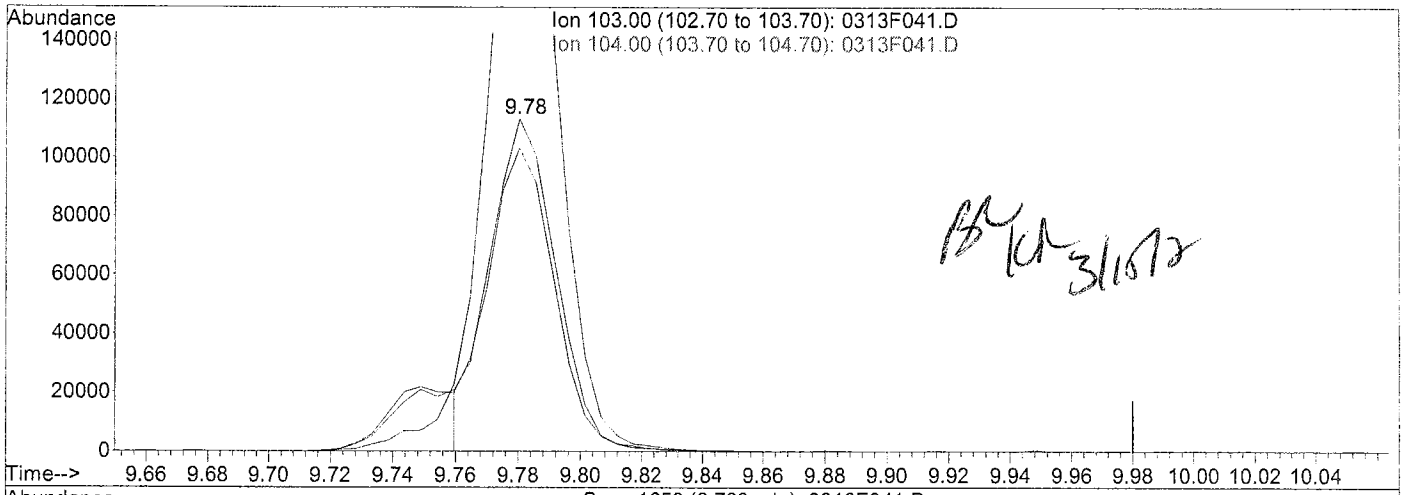
0313F041.D 022607.M Wed Mar 14 15:47:04 2007

Quantitation Report (Qedit)

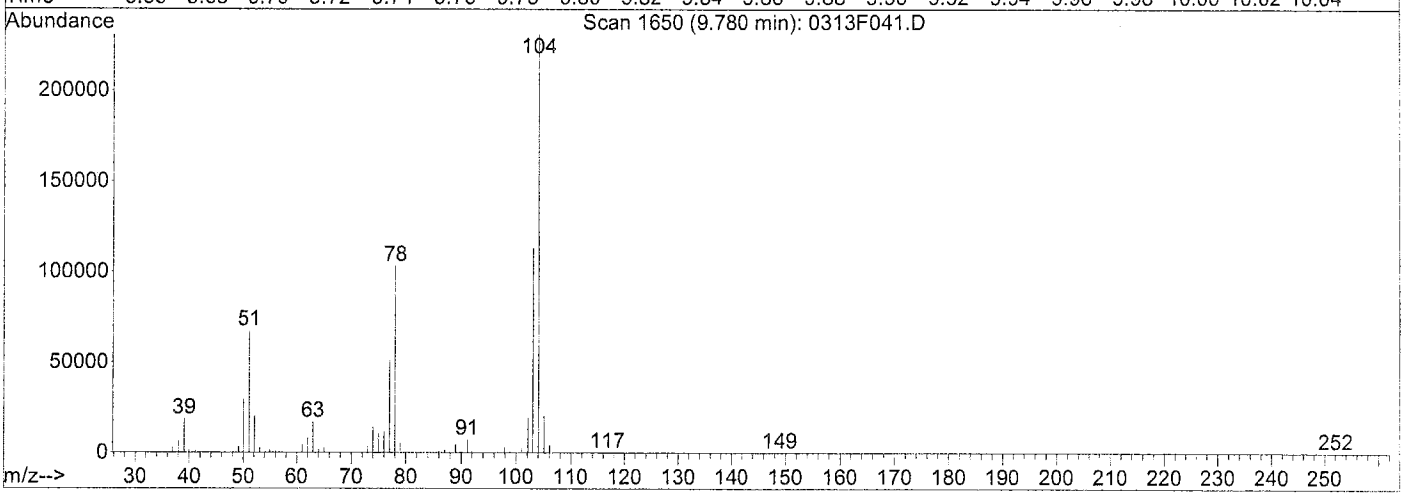
Data File : J:\MS18\DATA\031307\0313F041.D
Acq On : 13 Mar 2007 10:00 pm
Sample : K1816-002DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:47 2007

Vial: 38
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



BM 3/15/07



TIC: 0313F041.D

(76) Styrene (T)

9.78min 9.79PPB m

response 166809

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	204.26
78.00	89.70	91.21
0.00	0.00	0.00

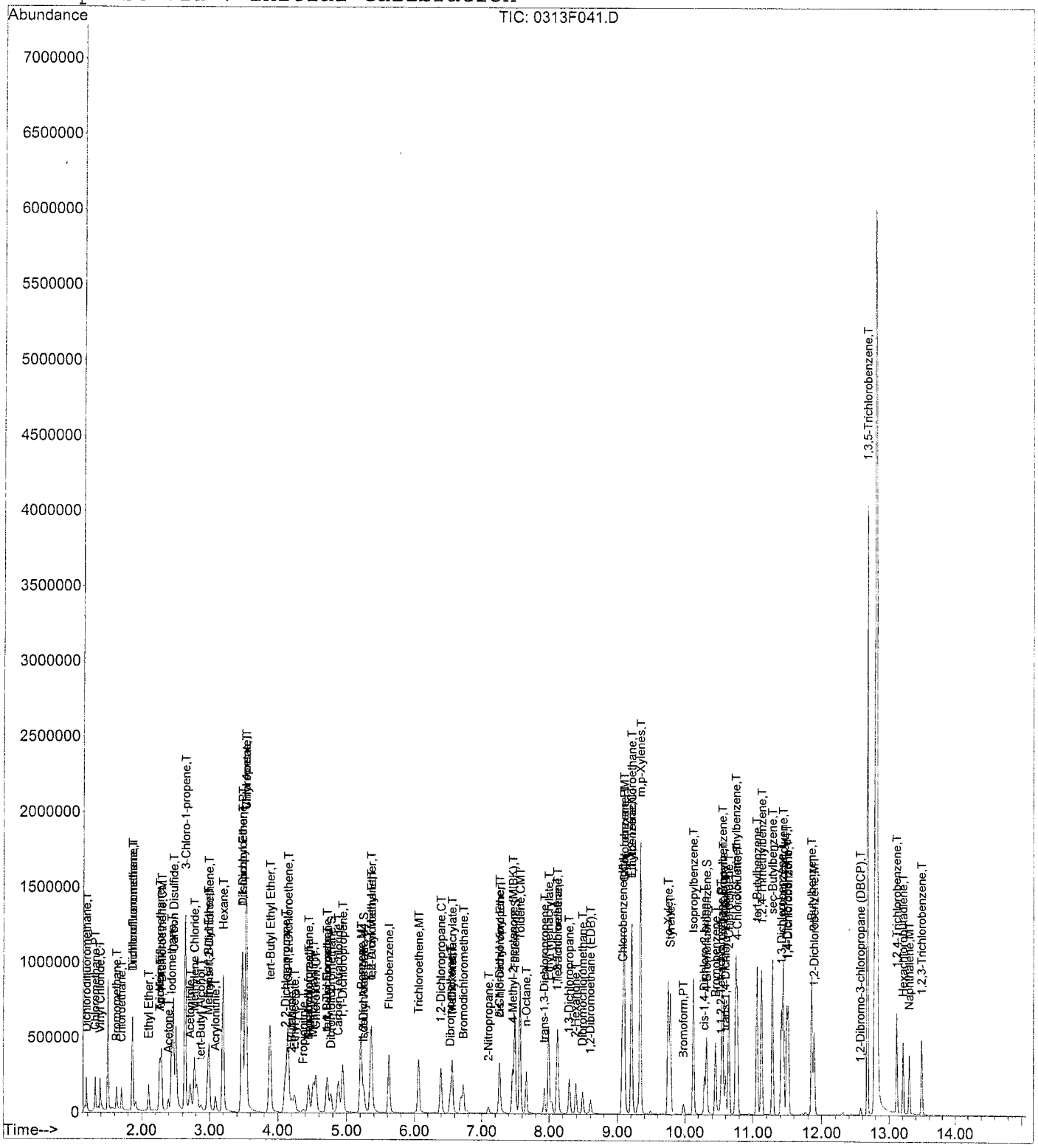
HC 3.15.07

0313F041.D 022607.M Wed Mar 14 15:47:11 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F041.D Vial: 38
Acq On : 13 Mar 2007 10:00 pm Operator:
Sample : K1816-002DMS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:47 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration


Abundance
TIC: 0313F041.D
7000000
6500000
6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Time-->
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
1,3,5-Trichlorobenzene,T
1,2-Dibromo-3-chloropropane (DBCP),T
1,2,3-Trichlorobenzene,T
Naphthalene,MT
Hexane,T
Fluorobenzene,I
Trichloroethene,MT
Bromoform,PT
Isopropylbenzene,T
n-Octane,T
m,p-Xylenes,T
Styrene,T
Chlorobenzene,MT
Ethylbenzene,T
Ethyl Ether,T
Acetone,T
Acrylonitrile,T
Acetonitrile,T
3-Chloro-1-propene,T
tert-Butyl Ethyl Ether,T
Bromodichloromethane,T
1,2-Dichloropropane,CT
2-Nitropropane,T
trans-1,3-Dichloropropene,T
cis-1,4-Dichlorobutene,T
4-Chlorotoluene,T
tert-Butylbenzene,T
sec-Butylbenzene,T
1,2-Dichlorobenzene,T
1,4-Dichlorobutane,T
1,2-Dichloroethane,T
1,2-Dibromoethane (EDB),T
2-Hexanone,T
1,3-Dichloropropane,T
Dibromochloromethane,T
Carbon Disulfide,T
Methylene Chloride,T
Vinyl Chloride,T
Bromomethane,T
Chloroethane,T
Chloroethane,T
Iodomethane,T
Dichlorodifluoromethane,T
Dichlorofluoromethane,T
Methyl Acrylate,T
Toluene,CMT
4-Methyl-2-pentanone,MT
Bromobenzene,T
Propylbenzene,T
Methacrylonitrile,T
Propionitrile,T
Methyl Methacrylate,T
Dibromomethane,T
Carbon Tetrachloride,T
1,1-Dichloroethane,T
1,1-Dichloroethene,T
Tetrachloroethene,T
Bromochloromethane,T
Chloroprene,T
Ethyl Methacrylate,T
Ethyl Acrylate,T
Methyl Acrylate,T
Methyl Methacrylate,T
Propionitrile,T
Methacrylonitrile,T
Acrylonitrile,T
Iodomethane,T
Methyl Ethyl Ketone,T
Methyl Tert-Butyl Ether,T
Methyl Iodide,T
Methyl Acrylate,T
Methyl Methacrylate,T
Propionitrile,T
Methacrylonitrile,T
Acrylonitrile

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703662-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**11.0**		2.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Acetate	**49.3**		10	1	03/13/07	03/13/07	KWG0703662	
2-Chloroethyl Vinyl Ether	**11.8**		10	1	03/13/07	03/13/07	KWG0703662	
Chloromethane	**10.2**		1.0	1	03/13/07	03/13/07	KWG0703662	
Vinyl Chloride	**11.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromomethane	**9.17**		1.0	1	03/13/07	03/13/07	KWG0703662	
Chloroethane	**9.25**		1.0	1	03/13/07	03/13/07	KWG0703662	
Acetone	**47.7**		10	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethene	**11.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Disulfide	**23.1**		5.0	1	03/13/07	03/13/07	KWG0703662	
Methylene Chloride	**12.7**		4.5	1	03/13/07	03/13/07	KWG0703662	*
trans-1,2-Dichloroethene	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1-Dichloroethane	**11.0**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Butanone (MEK)	**52.7**		10	1	03/13/07	03/13/07	KWG0703662	*
cis-1,2-Dichloroethene	**11.1**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chloroform	**10.3**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,1-Trichloroethane (TCA)	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
Carbon Tetrachloride	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloroethane (EDC)	**10.9**		0.50	1	03/13/07	03/13/07	KWG0703662	
Benzene	**10.5**		0.50	1	03/13/07	03/13/07	KWG0703662	
Trichloroethene (TCE)	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,2-Dichloropropane	**11.3**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromodichloromethane	**10.8**		0.50	1	03/13/07	03/13/07	KWG0703662	
2-Hexanone	**39.9**		10	1	03/13/07	03/13/07	KWG0703662	
cis-1,3-Dichloropropene	**10.4**		0.50	1	03/13/07	03/13/07	KWG0703662	
Toluene	**10.7**		0.50	1	03/13/07	03/13/07	KWG0703662	
trans-1,3-Dichloropropene	**8.33**		0.50	1	03/13/07	03/13/07	KWG0703662	
1,1,2-Trichloroethane	**9.35**		0.50	1	03/13/07	03/13/07	KWG0703662	
4-Methyl-2-pentanone (MIBK)	**51.1**		10	1	03/13/07	03/13/07	KWG0703662	
Tetrachloroethene (PCE)	**8.12**		0.50	1	03/13/07	03/13/07	KWG0703662	
Dibromochloromethane	**8.25**		0.50	1	03/13/07	03/13/07	KWG0703662	
Chlorobenzene	**8.58**		0.50	1	03/13/07	03/13/07	KWG0703662	
Ethylbenzene	**8.91**		0.50	1	03/13/07	03/13/07	KWG0703662	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0701816
Project:	Presidio of San Francisco	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0703662-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**26.6**		1.0	1	03/13/07	03/13/07	KWG0703662	
Styrene	**9.13**		0.50	1	03/13/07	03/13/07	KWG0703662	
Bromoform	**7.94**		1.0	1	03/13/07	03/13/07	KWG0703662	
1,1,2,2-Tetrachloroethane	**9.61**		0.50	1	03/13/07	03/13/07	KWG0703662	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	86	76-114	03/13/07	Acceptable
Toluene-d8	107	88-110	03/13/07	Acceptable
4-Bromofluorobenzene	95	86-115	03/13/07	Acceptable

Comments:

Exception Report

Data File: J:\MS18\DATA\031307\0313F039.D
Lab ID: KWG0703662-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 21:21
Date Quantitated: 03/14/2007 15:45
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NL
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MRL
Continuing Calibration Recovery	1,3,5-Trichlorobenzene	-32.7	NA	30	NT
	cis-1,4-Dichloro-2-butene	-39.7	NA	30	MRL
	tert-Butyl Formate	-74.5	NA	30	NT
	1,2-Dibromo-3-chloropropane	-32.9	NA	30	MRL
Continuing Calibration Minimum RF	Acrolein	0.0072	0.01	NA	NT
	1,4-Dioxane	0.0008	0.01	NA	
	Acetonitrile	0.0076	0.01	NA	

Primary Review: KR 3/15/07

Secondary Review: HL 3.15.07

Exception Report

Data File: J:\MS18\DATA\031307\0313F039.D
Lab ID: KWG0703662-3
RunType: LCS
Matrix: WATER

Date Acquired: 03/13/2007 21:21
Date Quantitated: 03/14/2007 15:45
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	tert-Butyl Alcohol	0.0057	0.01	NA	nc
	Isobutyl Alcohol	0.0026	0.01	NA	

Primary Review: KL 3/16/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**	KWG0703662	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	583555	**Prep Date:**	03/13/2007		

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\031307\0313F044.D	**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F039.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:21	**Quant Date:**	03/14/2007 15:45	**Vial:**	37
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703662-3			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	0.00	96	392095	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	175596	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	162667	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77	0.00	0.00	113	82385	9.93	99	80-120	OK
1	1,2-Dichloroethane-d4	5.25	0.00	0.00	65	72155	8.62	86	70-124	OK
1	Toluene-d8	7.49	0.00	0.00	98	407217	10.70	107	80-122	OK
2	4-Bromofluorobenzene	10.32	0.00	0.00	95	146703	9.53	95	73-116	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18		0.00	85	98204	8.25	8.25		
1	Chloromethane	1.31		0.00	50	141128	10.15	10.2		
1	Vinyl Chloride	1.39		0.00	62	140833	11.01	11.0		
1	Bromomethane	1.63		0.00	96	56458	9.17	9.17		
1	Chloroethane	1.70		0.00	64	79794	9.25	9.25		
1	Dichlorofluoromethane (CFC 21	1.86		0.00	67	251327	12.12	12.1		
1	Trichlorofluoromethane	1.86		0.00	101	175388	10.03	10.0		
1	Ethyl Ether	2.10		0.00	59	64312	11.53	11.5		
1	Acrolein	2.26	-0.01	0.00	56	52440	258.09	258		
1	Trichlorotrifluoroethane	2.27		0.00	151	86965	10.76	10.8		
1	1,1-Dichloroethene	2.29		0.00	96	103978	10.96	11.0		
1	Acetone	2.39		0.00	43	52982	47.73	47.7		
1	Iodomethane	2.44		0.00	142	345852	31.44	31.4		
1	Carbon Disulfide	2.47		0.00	76	713905	23.10	23.1		
1	3-Chloro-1-propene	2.64		0.00	76	183887	35.58	35.6		

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F039.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:21	**Quant Date:**	03/14/2007 15:45	**Vial:**	37
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703662-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.71	-0.01	0.00	40	82601	326.14	326		
1	Methylene Chloride	2.78		0.00	84	128398	12.66	12.7		
1	tert-Butyl Alcohol	2.88		0.00	59	25730	116.22	116		
1	Acrylonitrile	3.09	0.01	0.00	53	61769	42.84	42.8		
1	Methyl tert-Butyl Ether	2.97		0.00	73	192974	10.99	11.0		
1	trans-1,2-Dichloroethene	2.99	-0.01	0.00	96	116392	10.50	10.5		
1	n-Hexane	3.20		0.00	57	365709	32.78	32.8		
1	Diisopropyl Ether	3.48	0.01	0.00	45	777643	24.53	24.5		
1	1,1-Dichloroethane	3.47	-0.01	0.00	63	214171	11.00	11.0		
1	Vinyl Acetate	3.54	0.01	0.00	86	55124	49.34	49.3		
1	Chloroprene	3.53		0.00	53	600722	28.52	28.5		
1	tert-Butyl Ethyl Ether	3.89		0.00	59	539142	23.60	23.6		
1	2,2-Dichloropropane	4.11		0.00	77	125212	9.57	9.57		
1	cis-1,2-Dichloroethene	4.15		0.00	96	124829	11.06	11.1		
1	2-Butanone (MEK)	4.20	-0.01	0.00	72	19608	52.67	52.7		
1	Propionitrile	4.37		0.00	54	16026	32.37	32.4		
1	Ethyl Acetate	4.24		0.00	61	17500	35.62	35.6		
1	Methacrylonitrile	4.51	-0.01	0.00	67	55659	32.04	32.0		
1	Bromochloromethane	4.45		0.00	128	42020	10.16	10.2		
1	Tetrahydrofuran	4.45	0.01	0.00	71	8100	20.13	20.1		
1	Chloroform	4.56	0.01	0.00	83	198596	10.29	10.3		
1	tert-Butyl Formate	4.58		0.00	59	36022	15.42	15.4		
1	1,1,1-Trichloroethane (TCA)	4.72		0.00	97	172977	10.79	10.8		
1	Carbon Tetrachloride	4.88		0.00	117	149969	10.51	10.5		
1	1,1-Dichloropropene	4.94	-0.01	0.00	75	165394	10.66	10.7		
1	Isobutyl Alcohol	5.25	-0.01	0.00	43	29547	284.98	285		
1	Benzene	5.21		0.00	78	487649	10.54	10.5		
1	1,2-Dichloroethane (EDC)	5.35	-0.01	0.00	62	114050	10.94	10.9		
1	tert-Amyl Methyl Ether	5.37		0.00	55	131109	24.32	24.3		
1	Trichloroethene (TCE)	6.07	0.01	0.00	95	120664	10.84	10.8		
1	1,2-Dichloropropane	6.40	0.01	0.00	63	108587	11.32	11.3		
1	Dibromomethane	6.53		0.00	93	40403	10.66	10.7		
1	Methyl Methacrylate	6.56		0.00	69	97853	32.51	32.5		
1	1,4-Dioxane	6.55	-0.01	0.00	88	10799	307.47	307		
1	Bromodichloromethane	6.73		0.00	83	113022	10.80	10.8		
1	2-Nitropropane	7.10		0.00	43	23024	23.54	23.5		
1	2-Chloroethyl Vinyl Ether	7.14		0.00	63	39542	11.82	11.8		
1	cis-1,3-Dichloropropene	7.26		0.00	75	122696	10.39	10.4		
1	4-Methyl-2-pentanone (MIBK)	7.46		0.00	58	74144	51.09	51.1		
1	Toluene	7.56	-0.01	0.00	92	304055	10.66	10.7		
2	n-Octane	7.66		0.00	85	78232	17.56	17.6		
2	trans-1,3-Dichloropropene	7.93		0.00	75	77826	8.33	8.33		
2	Ethyl Methacrylate	7.99	-0.01	0.00	69	218709	30.16	30.2		

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*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F039.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:21	**Quant Date:**	03/14/2007 15:45	**Vial:**	37
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703662-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11		0.00	83	52290	9.35	9.35		
2	Tetrachloroethene (PCE)	8.13		0.00	164	103153	8.12	8.12		
2	2-Hexanone	8.39		0.00	57	20561	39.89	39.9		
2	1,3-Dichloropropane	8.29		0.00	76	114277	8.89	8.89		
2	Dibromochloromethane	8.49		0.00	129	61848	8.25	8.25		
2	1,2-Dibromoethane (EDB)	8.60		0.00	107	55496	9.17	9.17		
2	1-Chlorohexane	9.10		0.00	91	161751	8.81	8.81		
2	Chlorobenzene	9.10		0.00	112	310434	8.58	8.58		
2	Ethylbenzene	9.21		0.00	106	184585	8.91	8.91		
2	1,1,1,2-Tetrachloroethane	9.21		0.00	131	91078	8.62	8.62		
2	m,p-Xylenes	9.34		0.00	106	452821	17.65	17.7		
2	o-Xylene	9.75		0.00	106	213085	8.96	8.96		
2	Styrene	9.78		0.00	103	151454m	9.13	9.13		
2	Bromoform	9.98		0.00	173	29755	7.94	7.94		
2	Isopropylbenzene	10.13		0.00	105	518598	7.97	7.97		
2	cis-1,4-Dichloro-2-butene	10.29		0.00	89	14370	22.85	22.9		
3	1,1,2,2-Tetrachloroethane	10.52		0.00	83	57904	9.61	9.61		
3	trans-1,4-Dichloro-2-butene	10.60		0.00	53	45153	34.56	34.6		
3	Bromobenzene	10.45		0.00	156	114248	8.29	8.29		
3	n-Propylbenzene	10.55		0.00	91	680727	9.37	9.37		
3	1,2,3-Trichloropropane	10.57		0.00	110	18086	9.45	9.45		
3	2-Chlorotoluene	10.65		0.00	91	395943	9.28	9.28		
3	1,3,5-Trimethylbenzene	10.75		0.00	105	469797	9.36	9.36		
3	4-Chlorotoluene	10.77		0.00	91	447006	9.15	9.15		
3	tert-Butylbenzene	11.06		0.00	119	422416	8.96	8.96		
3	1,2,4-Trimethylbenzene	11.13		0.00	105	468041	9.25	9.25		
3	sec-Butylbenzene	11.29		0.00	105	608228	9.67	9.67		
3	4-Isopropyltoluene	11.44		0.00	119	493221	8.69	8.69		
3	1,3-Dichlorobenzene	11.42		0.00	146	240861	8.58	8.58		
3	1,4-Dichlorobenzene	11.52		0.00	146	236380	8.53	8.53		
3	n-Butylbenzene	11.86		0.00	91	434290	8.86	8.86		
3	1,2-Dichlorobenzene	11.89		0.00	146	203484	8.29	8.29		
3	1,2-Dibromo-3-chloropropane	12.57		0.00	155	5713	7.19	7.19		
3	1,3,5-Trichlorobenzene	12.67		0.00	180	725484	30.97	31.0		
3	1,2,4-Trichlorobenzene	13.12	0.01	0.00	180	142901	7.86	7.86		
3	Hexachlorobutadiene	13.21		0.00	225	86180	7.96	7.96		
3	Naphthalene	13.30		0.00	128	207626	9.07	9.07		
3	1,2,3-Trichlorobenzene	13.49		0.00	180	120452	8.08	8.08		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

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NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F039.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:21	**Quant Date:**	03/14/2007 15:45	**Vial:**	37
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0703662-3			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

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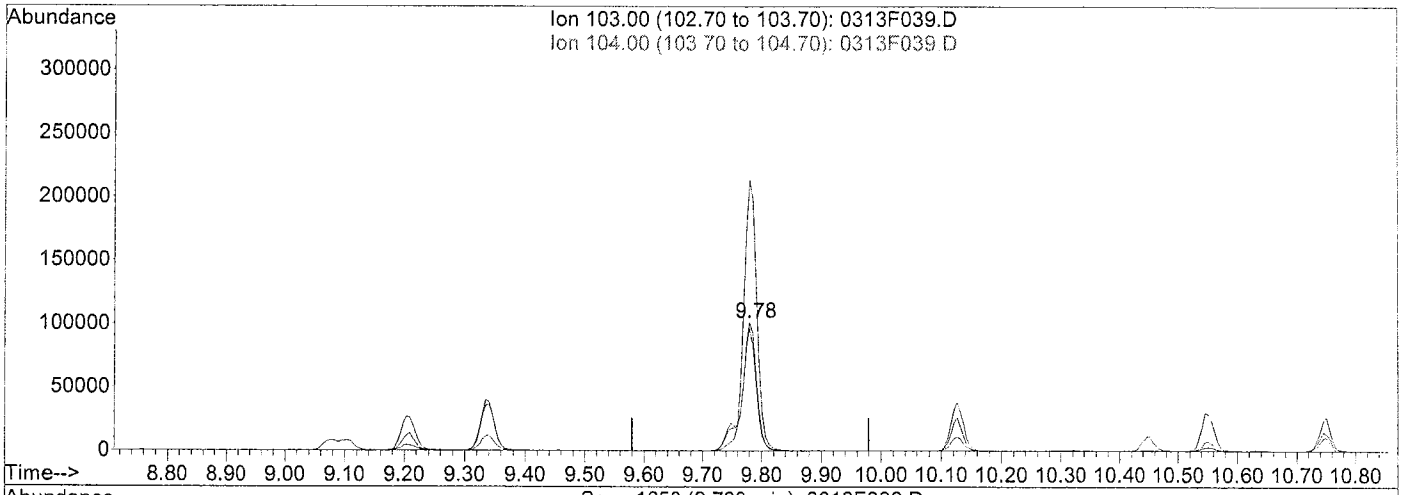
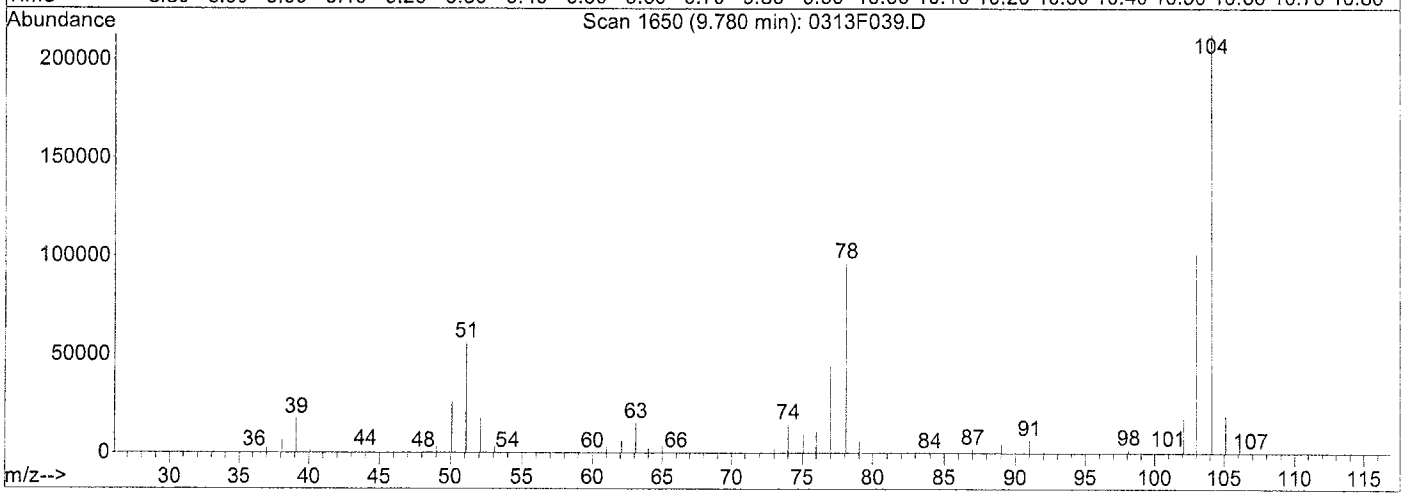
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F039.D
Acq On : 13 Mar 2007 9:21 pm
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:44 2007

Vial: 37
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F039.D

(76) Styrene (T)

9.78min 10.81PPB

response 179313

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	210.94
78.00	89.70	95.35
0.00	0.00	0.00

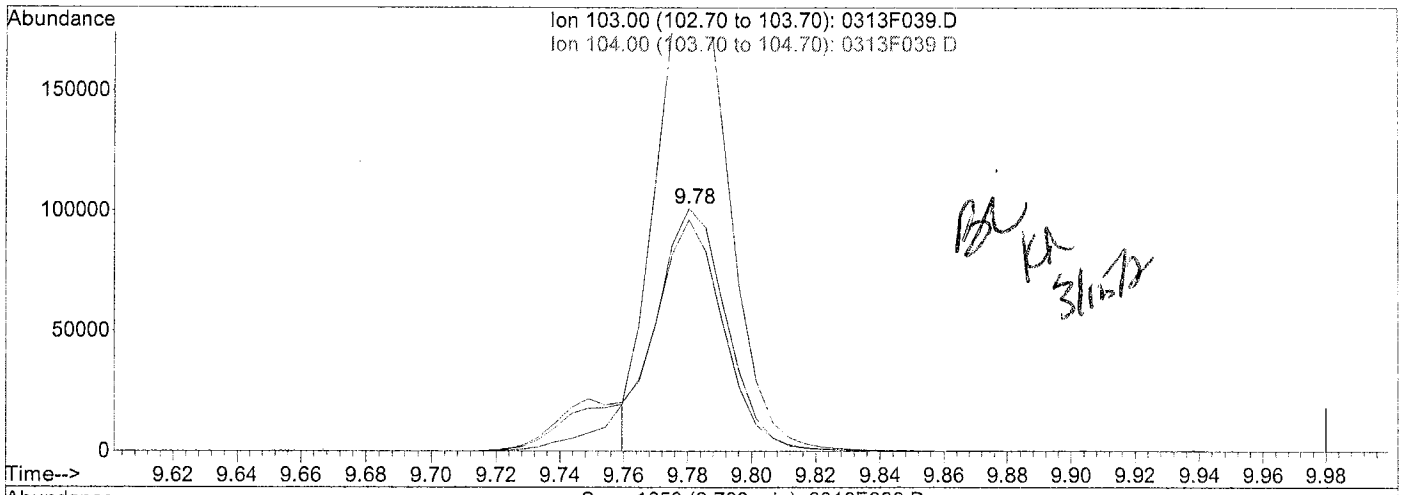
0313F039.D 022607.M Wed Mar 14 15:45:20 2007

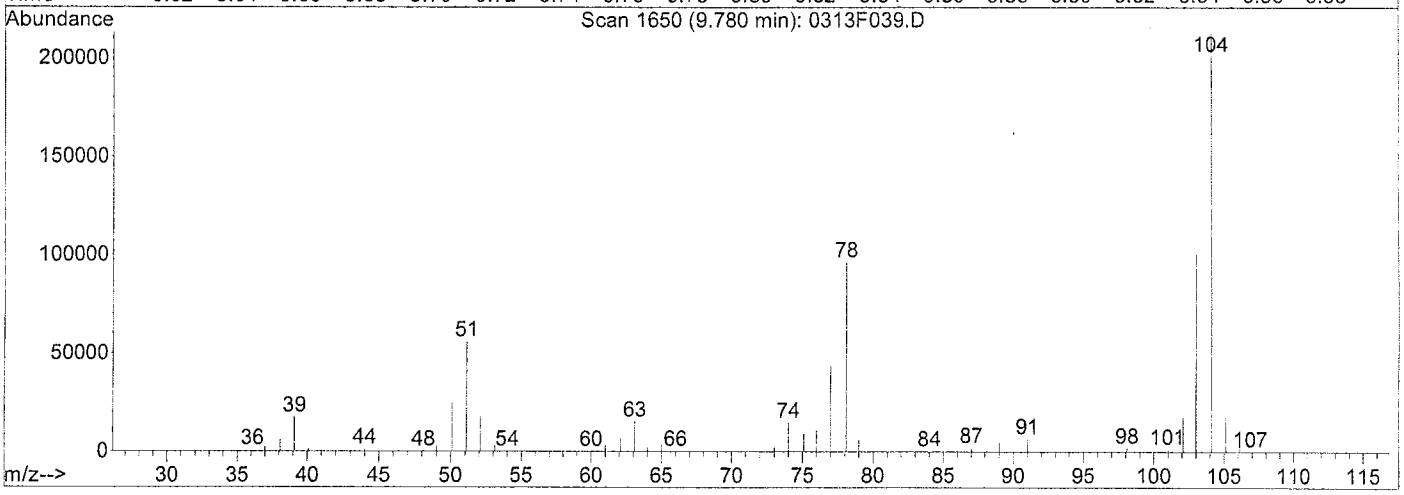
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F039.D
Acq On : 13 Mar 2007 9:21 pm
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:45 2007

Vial: 37
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F039.D

(76) Styrene (T)

9.78min 9.13PPB m

response 151454

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	210.94
78.00	89.70	95.35
0.00	0.00	0.00

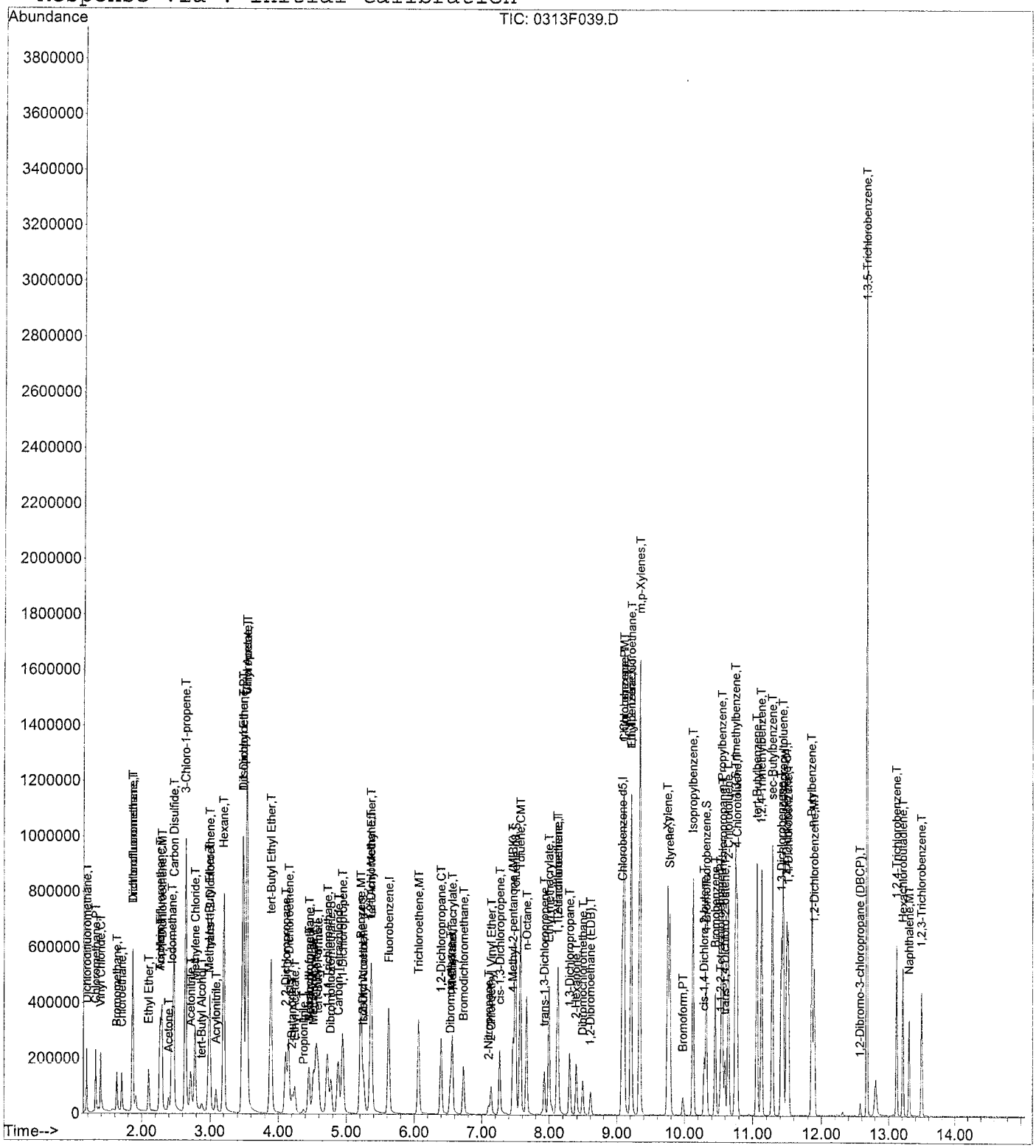
HL 3.15.07

0313F039.D 022607.M Wed Mar 14 15:45:28 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F039.D Vial: 37
Acq On : 13 Mar 2007 9:21 pm Operator:
Sample : LCS Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:45 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007
Time Analyzed: 20:42

Tune Summary
Volatile Organic Compounds

File ID: J:\MS18\DATA\031307\0313F037.D
Instrument ID: GC-MS 18
Column:

Analysis Method: 8260B
Analysis Lot: KWG0703660

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.6	7818	PASS
75	95	30	60	46.7	18616	PASS
95	95	100	100	100.0	39880	PASS
96	95	5	9	6.1	2439	PASS
173	174	0	2	0.4	115	PASS
174	95	50	120	76.9	30661	PASS
175	174	5	9	8.7	2673	PASS
176	174	95	101	96.1	29469	PASS
177	176	5	9	7.4	2169	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0703660-2	J:\MS18\DATA\031307\0313F038.D	03/13/2007	21:02	
Lab Control Sample	KWG0703662-3	J:\MS18\DATA\031307\0313F039.D	03/13/2007	21:21	
NKGW02CLMS	KWG0703662-1	J:\MS18\DATA\031307\0313F040.D	03/13/2007	21:41	
NKGW02CLDMS	KWG0703662-2	J:\MS18\DATA\031307\0313F041.D	03/13/2007	22:00	
Method Blank	KWG0703662-4	J:\MS18\DATA\031307\0313F044.D	03/13/2007	22:59	
TB0306072A	K0701816-003	J:\MS18\DATA\031307\0313F046.D	03/13/2007	23:38	
979GW115CL	K0701816-001	J:\MS18\DATA\031307\0313F054.D	03/14/2007	02:14	
NKGW02CL	K0701816-002	J:\MS18\DATA\031307\0313F055.D	03/14/2007	02:34	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS18\DATA\031307\0313F037.D
Lab ID: KWG0703660-1
RunType: BFB
Matrix: WATER

Date Acquired: 03/13/2007 20:42
Date Quantitated:
Batch ID: KWG0703660
Analysis Method: 8260B
ListJoinID: LJ800

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: KL 3/15/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS18\DATA\031307\0313F037.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 20:42	**Quant Date:**		**Vial:**	35
Run Type:	BFB			**Dilution:**	1.0
Lab ID:	KWG0703660-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	19.6	7818	Pass
75	95	30	60	46.7	18616	Pass
95	95	100	100	100.0	39880	Pass
96	95	5	9	6.1	2439	Pass
173	174	0	2	0.4	115	Pass
174	95	50	120	76.9	30661	Pass
175	174	5	9	8.7	2673	Pass
176	174	95	101	96.1	29469	Pass
177	176	5	9	7.4	2169	Pass

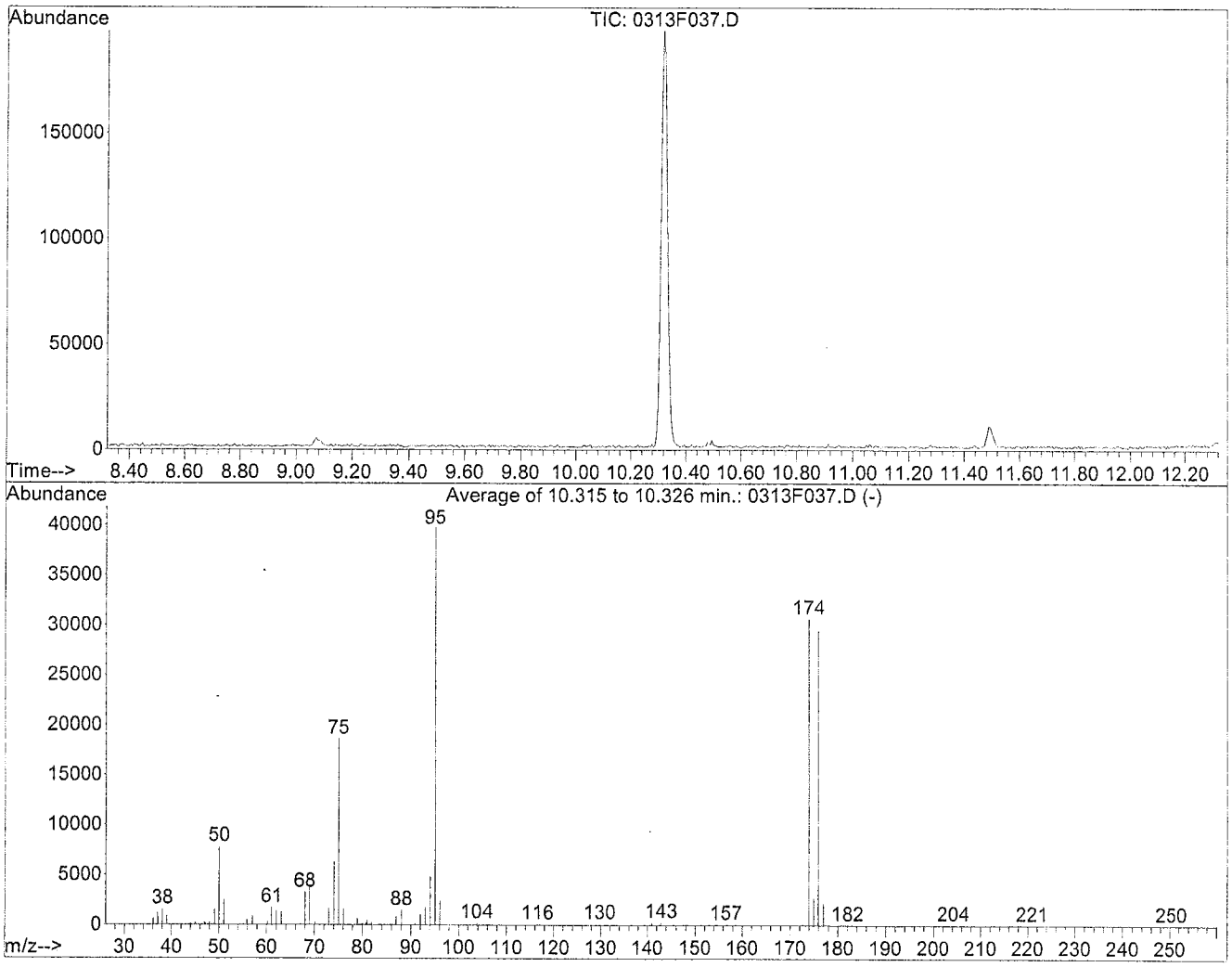
U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS18\DATA\031307\0313F037.D
Acq On : 13 Mar 2007 8:42 pm
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 35
Operator:
Inst : GC-MS 18
Multiplr: 1.00



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	7818	PASS
75	95	30	60	46.7	18616	PASS
95	95	100	100	100.0	39880	PASS
96	95	5	9	6.1	2439	PASS
173	174	0.00	2	0.4	115	PASS
174	95	50	120	76.9	30661	PASS
175	174	5	9	8.7	2673	PASS
176	174	95	101	96.1	29469	PASS
177	176	5	9	7.4	2169	PASS

HL 3.15.07

0313F037.D 022607.M Wed Mar 14 15:43:37 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS18\DATA\022607A\0226F062.D	F	J:\MS18\DATA\022607A\0226F067.D
B	J:\MS18\DATA\022607A\0226F063.D	G	J:\MS18\DATA\022607A\0226F068.D
C	J:\MS18\DATA\022607A\0226F064.D	H	J:\MS18\DATA\022607A\0226F069.D
D	J:\MS18\DATA\022607A\0226F065.D	I	J:\MS18\DATA\022607A\0226F070.D
E	J:\MS18\DATA\022607A\0226F066.D	J	J:\MS18\DATA\022607A\0226F071.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0270	D	2.0	0.0275	E	4.0	0.0248
	F	10	0.0293	G	20	0.0270	H	40	0.0304	I	80	0.0295	J	120	0.0324
2-Chloroethyl Vinyl Ether							C	0.50	0.0596	D	1.0	0.0836	E	2.0	0.0897
	F	5.0	0.0837	G	10	0.0856	H	20	0.0926	I	40	0.0913	J	60	0.0962
Methyl tert-Butyl Ether	A	0.20	0.512	B	0.40	0.445	C	1.0	0.376	D	2.0	0.455	E	4.0	0.422
	F	10	0.448	G	20	0.444	H	40	0.462	I	80	0.444	J	120	0.471
1,2-Dichloroethane-d4				B	4.0	0.215	C	5.0	0.210	D	6.0	0.203	E	7.0	0.200
	F	8.0	0.212	G	10	0.216	H	20	0.222	I	40	0.220	J	50	0.222
† Chloromethane				B	0.20	0.360	C	0.50	0.324	D	1.0	0.367	E	2.0	0.364
	F	5.0	0.349	G	10	0.347	H	20	0.357	I	40	0.357	J	60	0.366
‡ Vinyl Chloride	A	0.10	0.348	B	0.20	0.300	C	0.50	0.288	D	1.0	0.318	E	2.0	0.319
	F	5.0	0.331	G	10	0.342	H	20	0.338	I	40	0.335	J	60	0.342
Bromomethane	A	0.10	0.177	B	0.20	0.151	C	0.50	0.158	D	1.0	0.160	E	2.0	0.148
	F	5.0	0.147	G	10	0.151	H	20	0.161	I	40	0.160	J	60	0.157
Chloroethane	A	0.10	0.286	B	0.20	0.184	C	0.50	0.247	D	1.0	0.240	E	2.0	0.202
	F	5.0	0.208	G	10	0.209	H	20	0.210	I	40	0.210	J	60	0.205
Acetone	A	4.0	0.0347	B	8.0	0.0381	C	20	0.0248	D	40	0.0277	E	80	0.0254
	F	100	0.0264	G	200	0.0254	H	400	0.0272	I	800	0.0257	J	1600	0.0276
‡ 1,1-Dichloroethene	A	0.10	0.249	B	0.20	0.259	C	0.50	0.220	D	1.0	0.237	E	2.0	0.233
	F	5.0	0.236	G	10	0.242	H	20	0.245	I	40	0.248	J	60	0.251
Carbon Disulfide	A	0.10	0.902	B	0.20	0.819	C	0.50	0.715	D	1.0	0.735	E	2.0	0.754
	F	5.0	0.765	G	10	0.781	H	20	0.797	I	40	0.795	J	60	0.820
Methylene Chloride										D	1.0	0.304	E	2.0	0.274
	F	5.0	0.254	G	10	0.246	H	20	0.246	I	40	0.242	J	60	0.244
trans-1,2-Dichloroethene	A	0.10	0.297	B	0.20	0.268	C	0.50	0.267	D	1.0	0.280	E	2.0	0.273
	F	5.0	0.282	G	10	0.286	H	20	0.291	I	40	0.290	J	60	0.293
† 1,1-Dichloroethane	A	0.10	0.487	B	0.20	0.495	C	0.50	0.449	D	1.0	0.482	E	2.0	0.480
	F	5.0	0.497	G	10	0.519	H	20	0.525	I	40	0.514	J	60	0.517

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00886	B	8.0	0.0113	C	20	0.00833	D	40	0.00934	E	80	0.00914
	F	100	0.00922	G	200	0.00881	H	400	0.00991	I	800	0.00969	J	1600	0.0103
cis-1,2-Dichloroethene				B	0.20	0.309	C	0.50	0.268	D	1.0	0.272	E	2.0	0.289
	F	5.0	0.285	G	10	0.284	H	20	0.296	I	40	0.289	J	60	0.297
‡ Chloroform				B	0.20	0.551	C	0.50	0.441	D	1.0	0.465	E	2.0	0.577
	F	5.0	0.471	G	10	0.471	H	20	0.489	I	40	0.480	J	60	0.484
1,1,1-Trichloroethane (TCA)	A	0.10	0.368	B	0.20	0.366	C	0.50	0.365	D	1.0	0.381	E	2.0	0.378
	F	5.0	0.418	G	10	0.436	H	20	0.457	I	40	0.454	J	60	0.466
Carbon Tetrachloride				B	0.20	0.324	C	0.50	0.320	D	1.0	0.327	E	2.0	0.319
	F	5.0	0.354	G	10	0.387	H	20	0.405	I	40	0.415	J	60	0.424
1,2-Dichloroethane (EDC)	A	0.10	0.237	B	0.20	0.270	C	0.50	0.252	D	1.0	0.264	E	2.0	0.271
	F	5.0	0.266	G	10	0.268	H	20	0.279	I	40	0.272	J	60	0.280
Benzene	A	0.10	1.39	B	0.20	1.17	C	0.50	1.09	D	1.0	1.17	E	2.0	1.12
	F	5.0	1.15	G	10	1.18	H	20	1.19	I	40	1.17	J	60	1.18
Trichloroethene (TCE)	A	0.10	0.251	B	0.20	0.285	C	0.50	0.267	D	1.0	0.290	E	2.0	0.270
	F	5.0	0.286	G	10	0.298	H	20	0.298	I	40	0.296	J	60	0.298
‡ 1,2-Dichloropropane	A	0.10	0.231	B	0.20	0.257	C	0.50	0.207	D	1.0	0.248	E	2.0	0.234
	F	5.0	0.246	G	10	0.249	H	20	0.258	I	40	0.255	J	60	0.262
Bromodichloromethane				B	0.20	0.198	C	0.50	0.241	D	1.0	0.258	E	2.0	0.249
	F	5.0	0.270	G	10	0.280	H	20	0.296	I	40	0.300	J	60	0.311
2-Hexanone	A	4.0	0.0244	B	8.0	0.0354	C	20	0.0236	D	40	0.0284	E	80	0.0277
	F	100	0.0301	G	200	0.0296	H	400	0.0321	I	800	0.0302	J	1600	0.0320
cis-1,3-Dichloropropene							C	0.50	0.223	D	1.0	0.252	E	2.0	0.258
	F	5.0	0.297	G	10	0.316	H	20	0.344	I	40	0.352	J	60	0.368
‡ Toluene	A	0.10	0.708	B	0.20	0.743	C	0.50	0.688	D	1.0	0.703	E	2.0	0.699
	F	5.0	0.729	G	10	0.739	H	20	0.759	I	40	0.746	J	60	0.761
trans-1,3-Dichloropropene	A	0.10	0.410	B	0.20	0.455	C	0.50	0.398	D	1.0	0.424	E	2.0	0.453
	F	5.0	0.547	G	10	0.580	H	20	0.654	I	40	0.683	J	60	0.718
1,1,2-Trichloroethane				B	0.20	0.267	C	0.50	0.325	D	1.0	0.319	E	2.0	0.311
	F	5.0	0.336	G	10	0.321	H	20	0.335	I	40	0.323	J	60	0.330
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0329	B	8.0	0.0471	C	20	0.0305	D	40	0.0358	E	80	0.0351
	F	100	0.0373	G	200	0.0357	H	400	0.0390	I	800	0.0371	J	1600	0.0397
Tetrachloroethene (PCE)	A	0.10	0.844	B	0.20	0.807	C	0.50	0.782	D	1.0	0.680	E	2.0	0.643
	F	5.0	0.710	G	10	0.686	H	20	0.701	I	40	0.691	J	60	0.690

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.370	D	1.0	0.356	E	2.0	0.369
	F	5.0	0.431	G	10	0.436	H	20	0.476	I	40	0.482	J	60	0.497
† Chlorobenzene	A	0.10	2.27	B	0.20	2.19	C	0.50	1.94	D	1.0	2.01	E	2.0	1.90
	F	5.0	2.12	G	10	2.02	H	20	2.07	I	40	2.04	J	60	2.05
‡ Ethylbenzene	A	0.10	1.05	B	0.20	1.22	C	0.50	1.18	D	1.0	1.13	E	2.0	1.09
	F	5.0	1.21	G	10	1.21	H	20	1.23	I	40	1.23	J	60	1.24
m,p-Xylenes	A	0.20	1.50	B	0.40	1.47	C	1.0	1.36	D	2.0	1.42	E	4.0	1.34
	F	10	1.49	G	20	1.47	H	40	1.51	I	80	1.51	J	120	1.52
o-Xylene	A	0.10	1.42	B	0.20	1.31	C	0.50	1.26	D	1.0	1.25	E	2.0	1.28
	F	5.0	1.40	G	10	1.39	H	20	1.42	I	40	1.41	J	60	1.40
Styrene				B	0.20	0.923	C	0.50	0.883	D	1.0	0.846	E	2.0	0.856
	F	5.0	0.998	G	10	0.950	H	20	1.05	I	40	0.996	J	60	1.01
† Bromoform							C	0.50	0.165	D	1.0	0.173	E	2.0	0.190
	F	5.0	0.211	G	10	0.207	H	20	0.242	I	40	0.248	J	60	0.271
† 1,1,2,2-Tetrachloroethane				B	0.20	0.397	C	0.50	0.326	D	1.0	0.351	E	2.0	0.366
	F	5.0	0.386	G	10	0.363	H	20	0.392	I	40	0.363	J	60	0.390
Toluene-d8				B	4.0	0.929	C	5.0	0.964	D	6.0	0.864	E	7.0	0.841
	F	8.0	1.00	G	10	0.993	H	20	1.04	I	40	1.06	J	50	1.03
4-Bromofluorobenzene				B	4.0	0.852	C	5.0	0.885	D	6.0	0.807	E	7.0	0.802
	F	8.0	0.890	G	10	0.882	H	20	0.930	I	40	0.930	J	50	0.910

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6077
Instrument ID: GC-MS 18

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	8.3		≤ 15	0.0285		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	13.3		≤ 15	0.0853		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	7.7		≤ 15	0.448		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	3.7		≤ 15	0.213		0.01
† Chloromethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.355		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	6.0		≤ 15	0.326		0.01
Bromomethane	TRG	AverageRF	% RSD	5.5		≤ 15	0.157		0.01
Chloroethane	TRG	AverageRF	% RSD	13.3		≤ 15	0.220		0.01
Acetone	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.0283		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	4.5		≤ 15	0.242		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	6.7		≤ 15	0.788		0.01
Methylene Chloride	TRG	AverageRF	% RSD	8.8		≤ 15	0.259		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.7		≤ 15	0.283		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.7		≤ 15	0.497		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	9.1		≤ 15	0.00949	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	4.4		≤ 15	0.288		0.01
‡ Chloroform	TRG	AverageRF	% RSD	8.8		≤ 15	0.492		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	10.2		≤ 15	0.409		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	12.0		≤ 15	0.364		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 15	0.266		0.01
Benzene	MS	AverageRF	% RSD	6.8		≤ 15	1.18		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	5.7		≤ 15	0.284		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	6.8		≤ 15	0.245		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.267		0.01
2-Hexanone	TRG	AverageRF	% RSD	12.1		≤ 15	0.0294		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.301		0.01
‡ Toluene	MS	AverageRF	% RSD	3.6		≤ 15	0.727		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	22.7	*	≤ 15	0.532		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 15	0.318		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	12.1		≤ 15	0.0370		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	8.9		≤ 15	0.723		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	13.2		≤ 15	0.427		0.01
† Chlorobenzene	MS	AverageRF	% RSD	5.3		≤ 15	2.06		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	5.7		≤ 15	1.18		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	4.4		≤ 15	1.46		0.01
o-Xylene	TRG	AverageRF	% RSD	5.2		≤ 15	1.35		0.01
Styrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.945		0.01
† Bromoform	TRG	AverageRF	% RSD	17.6	*	≤ 15	0.213		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	6.2		≤ 15	0.370		0.30
Toluene-d8	SURR	AverageRF	% RSD	8.1		≤ 15	0.970		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	5.4		≤ 15	0.877		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Calibration Date: 02/26/2007
Date Analyzed: 02/26/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6077
Units: PPB

File ID: J:\MS18\DATA\022607A\0226F074.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	11	0.0853	0.0921	8	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	9.9	0.448	0.442	-1	NA	± 30 %	AverageRF
Vinyl Acetate	50	45	0.0285	0.0257	-10	NA	± 40 %	AverageRF
† Chloromethane	10	9.5	0.355	0.336	-5	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.326	0.347	6	NA	± 20 %	AverageRF
Bromomethane	10	10	0.157	0.159	1	NA	± 40 %	AverageRF
Chloroethane	10	9.5	0.220	0.210	-5	NA	± 40 %	AverageRF
Acetone	50	42	0.0283	0.0236	-17	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	9.9	0.242	0.240	-1	NA	± 20 %	AverageRF
Carbon Disulfide	20	22	0.788	0.869	10	NA	± 30 %	AverageRF
Methylene Chloride	10	12	0.259	0.299	16	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.8	0.283	0.276	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.497	0.502	1	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	49	0.00949	0.00926	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.288	0.296	3	NA	± 30 %	AverageRF
‡ Chloroform	10	9.6	0.492	0.474	-4	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	10	0.409	0.420	3	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.364	0.373	3	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	10	0.266	0.276	4	NA	± 30 %	AverageRF
Benzene	10	9.6	1.18	1.13	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.8	0.284	0.278	-2	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	10	0.245	0.253	3	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.267	0.288	8	NA	± 30 %	AverageRF
2-Hexanone	50	47	0.0294	0.0277	-6	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.301	0.313	4	NA	± 30 %	AverageRF
‡ Toluene	10	10	0.727	0.724	-1	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	10	0.532	0.554	4	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	11	0.318	0.335	5	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	46	0.0370	0.0342	-8	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.4	0.723	0.676	-7	NA	± 30 %	AverageRF
Dibromochloromethane	10	10	0.427	0.440	3	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	2.06	1.99	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.9	1.18	1.17	-1	NA	± 20 %	AverageRF
m,p-Xylenes	20	20	1.46	1.44	-1	NA	± 30 %	AverageRF
o-Xylene	10	10	1.35	1.37	1	NA	± 30 %	AverageRF
Styrene	10	11	0.945	0.992	5	NA	± 30 %	AverageRF
† Bromoform	10	10	0.213	0.223	5	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.370	0.388	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Date: 2/26/07

By: Kleessner

IS/SS Std. ID: 45VOA - 54C

CCV Std ID: 45WA 55B/55A/49C/54B

LCS/ICV Std ID: 45WA-54A/55C/52F/53A/51A/52B

BFB Std. ID: 45WA - 49F

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File: BFB4

New Tune: yes

ICAL Date: 2/26/07 Cal 6077

Second RV: 2/27/7

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	BFB	0226F016	8260.M	5µl-50ml			
2	IB	0226F061					
3	8260 Ical 0.1ppb	62					
4	0.2ppb	63					
5	0.5ppb	64					
6	1ppb	65					
7	2ppb	66					
8	5ppb	67					
9	10ppb	68					
10	20ppb	69					
11	40ppb	70					
12	60ppb	71					
13	IB	72					
14	IB	73					
15	ICV	74					
16	ICV						
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

INTIAL CALIBRATION CURVE

Date 2/26/7 Analysis: 8260/624

Prepared By KR Instrument: MS18

Matrix: Water

Stock Solution #1 45WA-54C Analytes: Surrogate Init. Concentration: 100ppm

Stock Solution #2 45WA 55B Analytes: Low 8260 Init. Concentration: 5/10/20/100/200ppm

Stock Solution #3 45WA 55A Analytes: 8260 Init. Concentration: 50/100/200/1000/2000p

Stock Solution #4 45WA-46C Analytes: Ketones Init. Concentration: 2000ppm

Stock Solution #5 45WA 56B Analytes: Low Ketones Init. Concentration: 200ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Aliquot of Stock Solution #4 (µL)	Final Conc. of #4 (µg/L)	Aliquot of Stock Solution #5 (µL)	Final Conc. of #5 (µg/L)
		1	0.1					1	4
2.0	4	2	0.2					2.5	10
2.5	5	5.0	0.5					5	20
3.0	6	10	1					10	40
3.5	7			2.0	2	2	80		
4.0	8			5.0	5	2.5	100		
5.0	10			10	10	5.0	200		
10	20			20	20	10	400		
20	40			40	40	20	800		
25	50			60	60	40	1600		

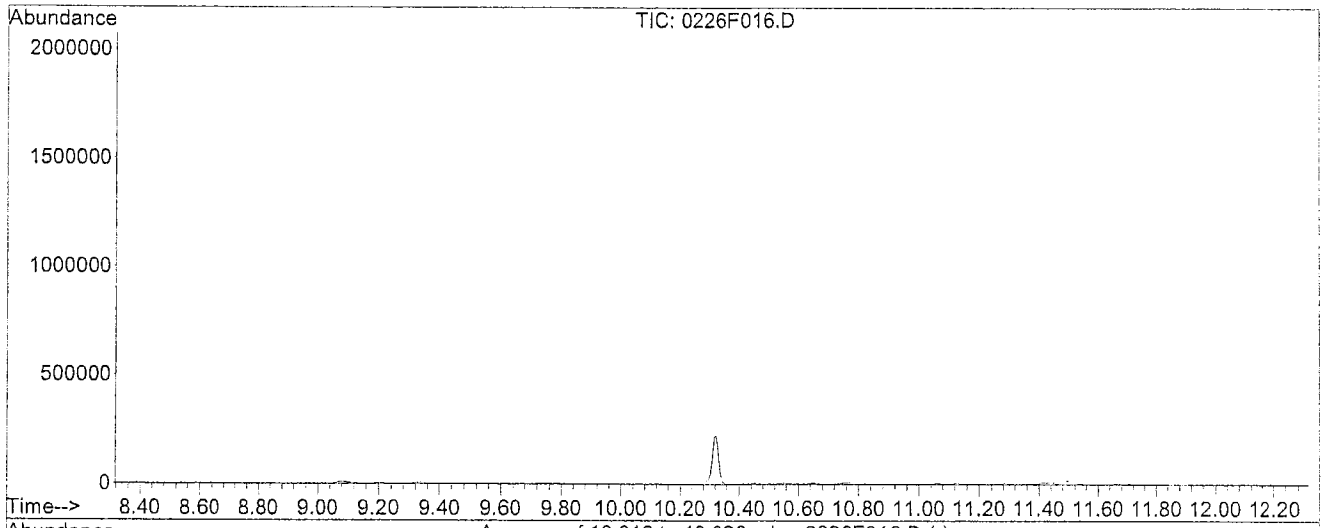
8260 ICV: 10uL of 50/250ppm Accustd ICV (45WA-54A) + 50uL of 100ppm Acrolein (45WA-55C) + 5uL of 100ppm Dichlorofluoromethane (45WA 52F) + 5uL of 200ppm n-Octane/TBF/Tetrahydrafuran (45WA 52A

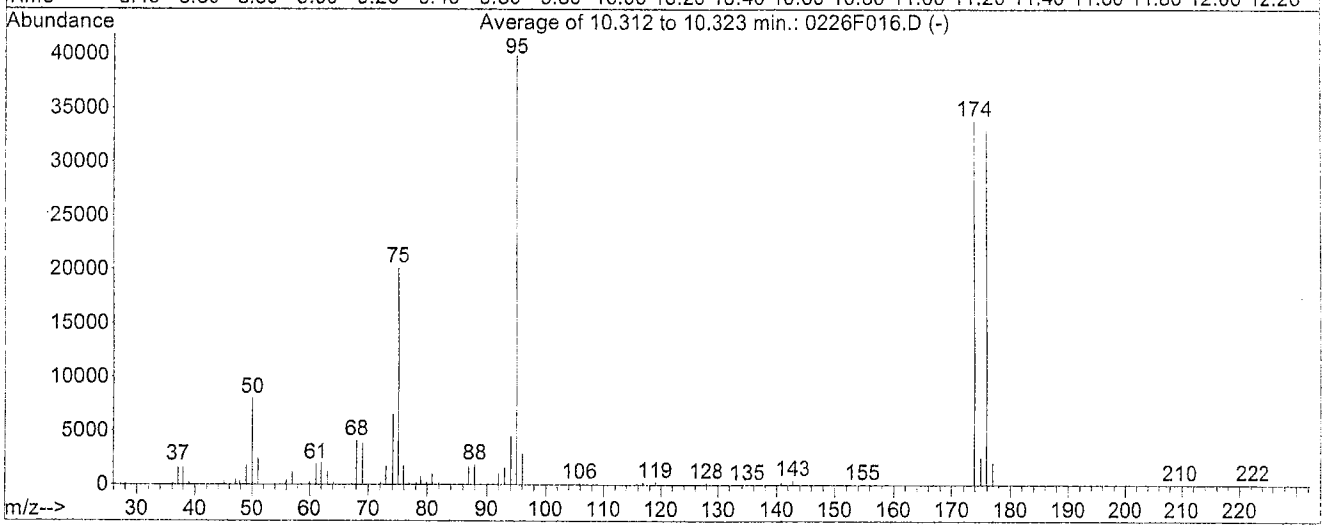
Oxygenat 45WA-51A 5µL Agp 45WA-52B 7.5µL

BFB

Data File : J:\MS18\DATA\022607\0226F016.D
Acq On : 26 Feb 2007 2:18 pm
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\021607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00





AutoFind: Scans 1761, 1762, 1763; Background Corrected with Scan 1754

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	8012	PASS
75	95	30	60	50.5	20137	PASS
95	95	100	100	100.0	39856	PASS
96	95	5	9	7.4	2934	PASS
173	174	0.00	2	0.2	60	PASS
174	95	50	120	84.9	33840	PASS
175	174	5	9	7.6	2560	PASS
176	174	95	101	97.9	33136	PASS
177	176	5	9	6.4	2111	PASS

KC 2/27/7

2/27/7

0226F016.D 021607.M Mon Feb 26 14:50:53 2007

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\022607A\0226F061.D
Acq On : 26 Feb 2007 7:11 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007

Vial: 9
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	408646	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	149796	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	143736	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery	=	0.00%	
58) Toluene-d8	7.49	98	2392	0.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.60%	
80) 4-Bromofluorobenzene	10.32	95	1356	0.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	0.90%	

Target Compounds							Qvalue
6) Chloroethane	1.72	64	576	0.07	PPB	#	48
10) Acrolein	2.28	56	1719	4.50	PPB		81
13) Acetone	2.41	43	2448	2.31	PPB		88
14) Iodomethane	2.44	142	1911	0.16	PPB		75
15) Carbon Disulfide	2.48	76	693	0.02	PPB		62
16) 3-Chloro-1-propene	2.48	76	693	0.13	PPB	#	1
18) Methylene Chloride	2.78	84	827	0.08	PPB	#	80
23) Hexane	3.19	57	691	0.06	PPB		90
37) Chloroform	4.57	83	867	0.05	PPB	#	54
45) Benzene	5.22	78	978	0.02	PPB		62
59) Toluene	7.56	92	582	0.02	PPB	#	10
61) n-Octane	7.65	85	840	0.20	PPB	#	72
70) 1-Chlorohexane	9.21	91	808	0.05	PPB		82
74) m,p-Xylenes	9.34	106	663	0.03	PPB		85
78) Isopropylbenzene	10.13	105	617	0.01	PPB		65
85) n-Propylbenzene	10.55	91	1624	0.02	PPB		83
87) 2-Chlorotoluene	10.65	91	772	0.02	PPB	#	10
88) 1,3,5-Trimethylbenzene	10.75	105	701	0.02	PPB	#	19
89) 4-Chlorotoluene	10.77	91	1404	0.03	PPB		73
91) 1,2,4-Trimethylbenzene	11.13	105	1093	0.03	PPB		70
92) sec-Butylbenzene	11.29	105	1135	0.02	PPB		47
93) p-Isopropyltoluene	11.44	119	1697	0.04	PPB		75
94) 1,3-Dichlorobenzene	11.42	146	1269	0.05	PPB		81
95) 1,4-Dichlorobenzene	11.52	146	1679	0.07	PPB		88
96) n-Butylbenzene	11.85	91	2428	0.06	PPB		84
97) 1,2-Dichlorobenzene	11.89	146	782	0.04	PPB	#	63
99) 1,3,5-Trichlorobenzene	12.68	180	3548	0.18	PPB		97
100) 1,2,4-Trichlorobenzene	13.12	180	1931	0.14	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:09 2007 Quant Results File: 022607.RES

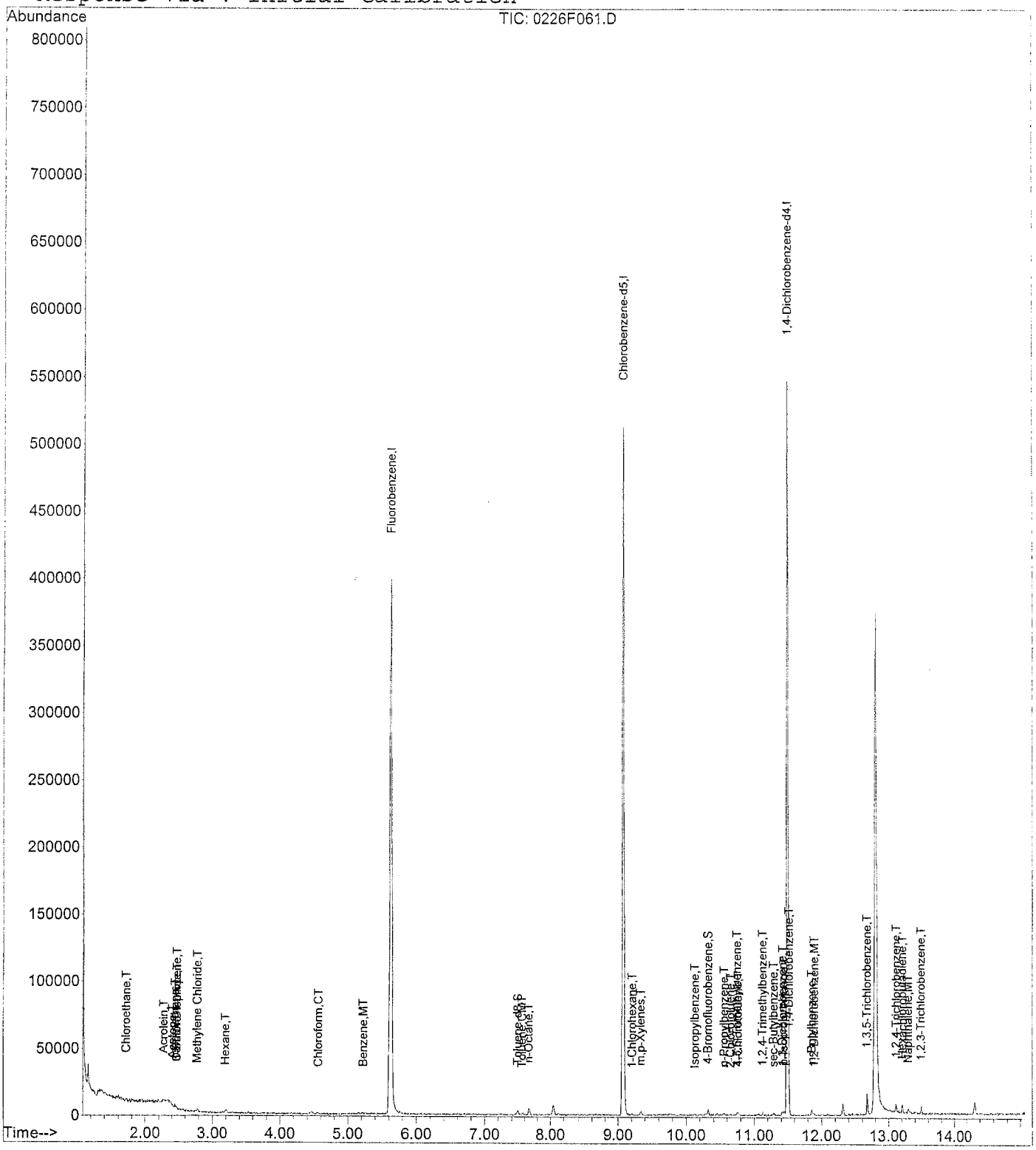
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
101) Hexachlorobutadiene	13.21	225	700	0.07 PPB	73
102) Naphthalene	13.30	128	1855	0.11 PPB	83
103) 1,2,3-Trichlorobenzene	13.49	180	1413	0.12 PPB	82

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F061.D Vial: 9
Acq On : 26 Feb 2007 7:11 pm Operator:
Sample : IB Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/27/07

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.63	96	404707	10.00 PPB	0.00
60) Chlorobenzene-d5	9.07	82	149144	10.00 PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	138643	10.00 PPB	0.00
System Monitoring Compounds					
40) Dibromofluoromethane	0.00	113	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
44) 1,2-Dichloroethane-d4	0.00	65	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
58) Toluene-d8	0.00	98	0d	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
80) 4-Bromofluorobenzene	0.00	95	0d	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.19	85	1486	0.13 PPB	91
3) Chloromethane	1.32	50	1681	0.11 PPB	85
4) Vinyl Chloride	1.39	62	1409	0.11 PPB	87
5) Bromomethane	1.64	96	716	0.09 PPB	90
6) Chloroethane	1.71	64	1156	0.13 PPB	89
7) Dichlorofluoromethane	1.87	67	2701	0.12 PPB	95
8) Trichlorofluoromethane	1.87	101	1797	0.10 PPB	87
9) Ethyl Ether	2.11	59	647	0.12 PPB #	66
10) Acrolein	2.27	56	2025	5.35 PPB	72
11) Trichlorotrifluoroethane	2.27	151	773	0.09 PPB	79
12) 1,1-Dichloroethene	2.30	96	1009	0.10 PPB	88
13) Acetone	2.41	43	5625	5.37 PPB	92
14) Iodomethane	2.44	142	5044	0.41 PPB	91
15) Carbon Disulfide	2.47	76	3650	0.12 PPB	97
16) 3-Chloro-1-propene	2.47	76	3650	0.67 PPB #	1
18) Methylene Chloride	2.78	84	4181	0.43 PPB	91
21) Methyl tert-Butyl Ether	2.98	73	4141	0.25 PPB	75
22) trans-1,2-Dichloroethene	3.00	96	1200	0.11 PPB	77
23) Hexane	3.20	57	1759	0.15 PPB	67
24) Diisopropyl Ether	3.49	45	3087	0.10 PPB	83
25) 1,1-Dichloroethane	3.48	63	1970	0.10 PPB	89
27) Chloroprene	3.54	53	7634	0.34 PPB	83
28) tert-Butyl Ethyl Ether	3.89	59	2188	0.10 PPB	78
29) 2,2-Dichloropropane	4.12	77	1119	0.08 PPB #	50
30) cis-1,2-Dichloroethene	4.15	96	1439	0.13 PPB #	40
31) 2-Butanone	4.22	72	1434	3.96 PPB #	69
34) Methacrylonitrile	4.52	67	842	0.49 PPB #	48
37) Chloroform	4.56	83	2994	0.16 PPB	92

(#) = qualifier out of range (m) = manual integration
0226F062.D 022607.M Tue Feb 27 06:30:50 2007

[illegible] 2/27/07

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
39)	1,1,1-Trichloroethane	4.72	97	1489	0.09	PPB	#	53
42)	1,1-Dichloropropene	4.95	75	1634	0.11	PPB		92
45)	Benzene	5.22	78	5633	0.13	PPB		93
46)	1,2-Dichloroethane	5.37	62	958	0.10	PPB	#	69
48)	Trichloroethene	6.07	95	1014	0.09	PPB	#	82
49)	1,2-Dichloropropane	6.40	63	933	0.10	PPB	#	70
53)	Bromodichloromethane	6.73	83	986	0.10	PPB		86
56)	cis-1,3-Dichloropropene	7.26	75	843	0.07	PPB		65
57)	4-Methyl-2-pentanone (MIBK	7.46	58	5331	3.80	PPB		89
59)	Toluene	7.56	92	2864	0.10	PPB		96
61)	n-Octane	7.67	85	806	0.19	PPB		83
62)	trans-1,3-Dichloropropene	7.93	75	611	0.08	PPB		90
63)	Ethyl methacrylate	8.00	69	619	0.10	PPB		81
65)	Tetrachloroethene	8.12	164	1259	0.13	PPB	#	71
66)	2-Hexanone	8.39	57	1458	3.51	PPB	#	67
67)	1,3-Dichloropropane	8.29	76	998	0.10	PPB		55
69)	1,2-Dibromoethane (EDB)	8.60	107	522	0.11	PPB		76
70)	1-Chlorohexane	9.10	91	2176	0.14	PPB		96
71)	Chlorobenzene	9.10	112	3379	0.12	PPB	#	67
72)	Ethylbenzene	9.21	106	1567	0.09	PPB		86
73)	1,1,1,2-Tetrachloroethane	9.22	131	981	0.12	PPB		83
74)	m,p-Xylenes	9.34	106	4477	0.22	PPB		93
75)	o-Xylene	9.75	106	2120	0.11	PPB	#	71
76)	Styrene	9.79	103	1872	0.14	PPB		95
78)	Isopropylbenzene	10.13	105	5625	0.11	PPB		95
79)	cis-1,4-Dichloro-2-butene	10.65	89	719	1.32	PPB	#	1
82)	1,1,2,2-Tetrachloroethane	10.52	83	651	0.13	PPB		82
84)	Bromobenzene	10.45	156	1387	0.13	PPB	#	67
85)	n-Propylbenzene	10.55	91	5803	0.09	PPB		87
87)	2-Chlorotoluene	10.65	91	3881	0.11	PPB		93
88)	1,3,5-Trimethylbenzene	10.75	105	3570	0.08	PPB		89
89)	4-Chlorotoluene	10.77	91	5046	0.12	PPB		82
90)	tert-Butylbenzene	11.07	119	4119	0.10	PPB		80
91)	1,2,4-Trimethylbenzene	11.12	105	4597	0.11	PPB		90
92)	sec-Butylbenzene	11.29	105	5344	0.10	PPB		88
93)	p-Isopropyltoluene	11.44	119	4930	0.11	PPB		79
94)	1,3-Dichlorobenzene	11.41	146	3435	0.15	PPB		91
95)	1,4-Dichlorobenzene	11.51	146	3508	0.15	PPB		91
96)	n-Butylbenzene	11.86	91	5380	0.14	PPB		91
97)	1,2-Dichlorobenzene	11.90	146	2536	0.13	PPB		91
99)	1,3,5-Trichlorobenzene	12.68	180	4101	0.21	PPB		92
100)	1,2,4-Trichlorobenzene	13.12	180	2726	0.20	PPB		80

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:27:47 2007 Quant Results File: 022607.RES

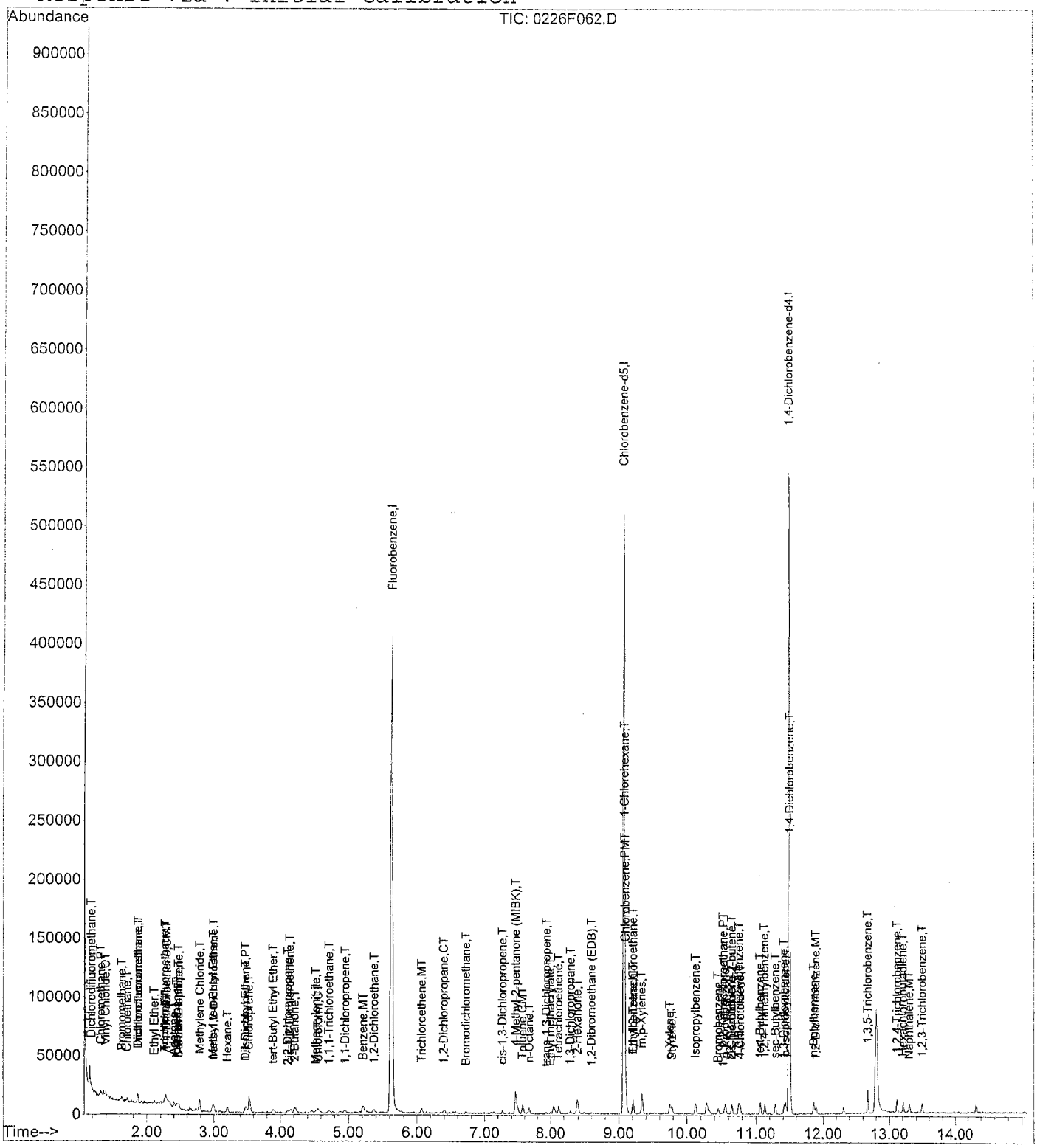
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
101) Hexachlorobutadiene	13.21	225	1633	0.17 PPB	92
102) Naphthalene	13.31	128	3166	0.20 PPB	89
103) 1,2,3-Trichlorobenzene	13.49	180	1994	0.18 PPB	96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F062.D Vial: 10
Acq On : 26 Feb 2007 7:31 pm Operator:
Sample : 8260 ICAL 0.1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:30 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	402827	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	150028	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140162	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	33005	4.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	41.80%	
44) 1,2-Dichloroethane-d4	5.25	65	34661	4.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	45.20%	
58) Toluene-d8	7.50	98	149658	3.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	39.10%	
80) 4-Bromofluorobenzene	10.32	95	51100	3.56	PPB	0.00
Spiked Amount 10.000			Recovery	=	35.60%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.19	85	2529	0.23	PPB	89
3) Chloromethane	1.32	50	2899	0.19	PPB	91
4) Vinyl Chloride	1.39	62	2415	0.19	PPB	89
5) Bromomethane	1.64	96	1220	0.15	PPB	87
6) Chloroethane	1.70	64	1483	0.17	PPB	89
7) Dichlorofluoromethane	1.86	67	4813	0.22	PPB	87
8) Trichlorofluoromethane	1.87	101	3253	0.17	PPB	83
9) Ethyl Ether	2.10	59	1198	0.22	PPB #	67
10) Acrolein	2.27	56	2649m	7.03	PPB	
11) Trichlorotrifluoroethane	2.27	151	1558	0.18	PPB #	71
12) 1,1-Dichloroethene	2.30	96	2090	0.21	PPB	82
13) Acetone	2.41	43	12279	11.77	PPB	92
14) Iodomethane	2.44	142	8758	0.72	PPB	98
15) Carbon Disulfide	2.47	76	6600	0.22	PPB	90
16) 3-Chloro-1-propene	2.64	76	1038	0.19	PPB #	52
17) Acetonitrile	2.73	40	2947	11.78	PPB	87
18) Methylene Chloride	2.78	84	4917	0.51	PPB	91
20) Acrylonitrile	3.09	53	1459	1.09	PPB	88
21) Methyl tert-Butyl Ether	2.98	73	7168	0.44	PPB	93
22) trans-1,2-Dichloroethene	2.99	96	2163	0.19	PPB	86
23) Hexane	3.20	57	2801	0.23	PPB	97
24) Diisopropyl Ether	3.48	45	6699	0.22	PPB	88
25) 1,1-Dichloroethane	3.48	63	3991	0.21	PPB	97
27) Chloroprene	3.53	53	16214	0.73	PPB	86
28) tert-Butyl Ethyl Ether	3.89	59	4484	0.20	PPB	83
29) 2,2-Dichloropropane	4.11	77	2137	0.15	PPB	83
30) cis-1,2-Dichloroethene	4.16	96	2492	0.23	PPB	83
31) 2-Butanone	4.22	72	3652	10.14	PPB	89

(#) = qualifier out of range (m) = manual integration
0226F063.D 022607.M Tue Feb 27 06:35:34 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	Methacrylonitrile	4.52	67	1368	0.80	PPB		88
35)	Bromochloromethane	4.46	128	776	0.20	PPB	#	71
37)	Chloroform	4.56	83	4439	0.23	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	2952	0.19	PPB		97
41)	Carbon Tetrachloride	4.89	117	2613	0.18	PPB		80
42)	1,1-Dichloropropene	4.94	75	2915	0.19	PPB		90
45)	Benzene	5.22	78	9393	0.22	PPB		72
46)	1,2-Dichloroethane	5.37	62	2173	0.22	PPB		86
47)	tert-Amyl Methyl Ether	5.37	55	1127	0.20	PPB	#	1
48)	Trichloroethene	6.07	95	2293	0.20	PPB		84
49)	1,2-Dichloropropane	6.40	63	2072	0.23	PPB		79
50)	Dibromomethane	6.54	93	786	0.22	PPB		89
53)	Bromodichloromethane	6.73	83	1596	0.16	PPB		86
55)	2-Chloroethyl Vinyl Ether	7.14	63	677	0.20	PPB	#	57
56)	cis-1,3-Dichloropropene	7.27	75	1931	0.17	PPB		84
57)	4-Methyl-2-pentanone (MIBK	7.46	58	15185	10.86	PPB		94
59)	Toluene	7.57	92	5988	0.21	PPB		90
61)	n-Octane	7.67	85	1467	0.34	PPB		76
62)	trans-1,3-Dichloropropene	7.94	75	1364	0.17	PPB		72
63)	Ethyl methacrylate	7.99	69	1260	0.21	PPB		79
64)	1,1,2-Trichloroethane	8.11	83	802	0.18	PPB	#	32
65)	Tetrachloroethene	8.13	164	2422	0.24	PPB		93
66)	2-Hexanone	8.39	57	4246	10.15	PPB	#	81
67)	1,3-Dichloropropane	8.29	76	2426	0.25	PPB		84
68)	Dibromochloromethane	8.48	129	930	0.16	PPB		67
69)	1,2-Dibromoethane (EDB)	8.60	107	936	0.20	PPB		85
70)	1-Chlorohexane	9.10	91	3666	0.24	PPB		69
71)	Chlorobenzene	9.10	112	6576	0.23	PPB		91
72)	Ethylbenzene	9.21	106	3650	0.21	PPB	#	77
73)	1,1,1,2-Tetrachloroethane	9.21	131	1499	0.18	PPB		91
74)	m,p-Xylenes	9.34	106	8837	0.42	PPB		91
75)	o-Xylene	9.75	106	3939	0.21	PPB		96
76)	Styrene	9.78	103	2771	0.21	PPB		91
78)	Isopropylbenzene	10.13	105	11039	0.21	PPB		90
82)	1,1,2,2-Tetrachloroethane	10.52	83	1113	0.22	PPB		71
84)	Bromobenzene	10.45	156	2517	0.23	PPB		90
85)	n-Propylbenzene	10.55	91	12117	0.19	PPB		96
87)	2-Chlorotoluene	10.65	91	7585	0.21	PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	8305	0.19	PPB		98
89)	4-Chlorotoluene	10.77	91	9009	0.22	PPB		94
90)	tert-Butylbenzene	11.06	119	8581	0.21	PPB		94
91)	1,2,4-Trimethylbenzene	11.12	105	8799	0.22	PPB		91

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:30:59 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
92)	sec-Butylbenzene	11.29	105	10728	0.20	PPB		92
93)	p-Isopropyltoluene	11.44	119	9536	0.20	PPB		93
94)	1,3-Dichlorobenzene	11.42	146	5521	0.24	PPB		96
95)	1,4-Dichlorobenzene	11.52	146	5691	0.25	PPB		87
96)	n-Butylbenzene	11.85	91	8534	0.22	PPB		92
97)	1,2-Dichlorobenzene	11.90	146	4687	0.24	PPB		93
99)	1,3,5-Trichlorobenzene	12.67	180	5402	0.28	PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	4009	0.30	PPB		84
101)	Hexachlorobutadiene	13.21	225	2468	0.25	PPB	#	51
102)	Naphthalene	13.30	128	4343	0.27	PPB		97
103)	1,2,3-Trichlorobenzene	13.49	180	3209	0.28	PPB		87

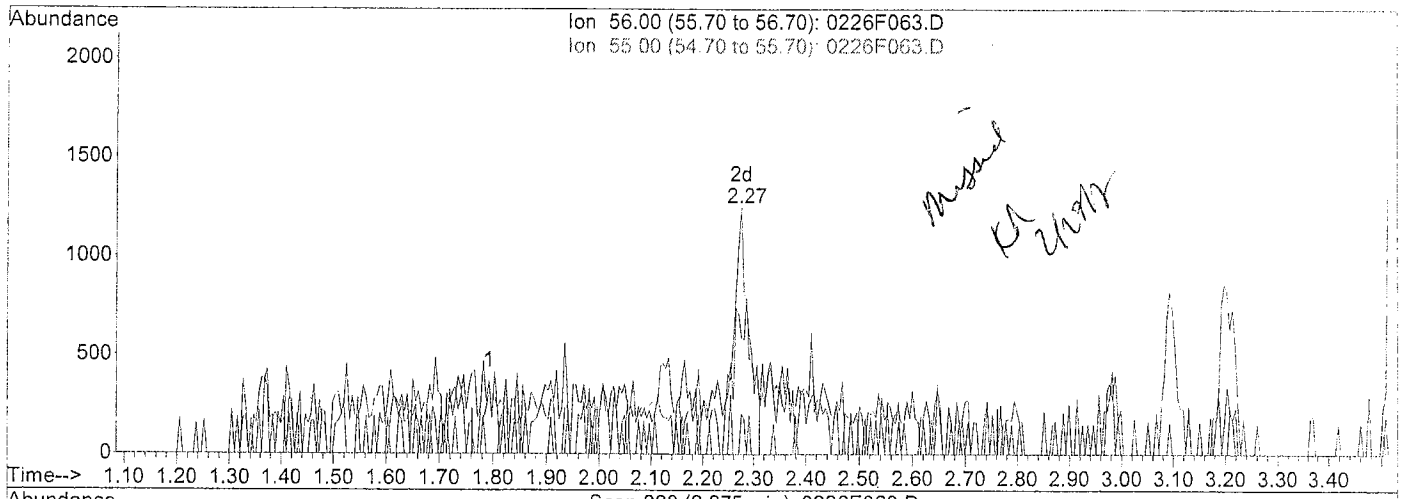
(#) = qualifier out of range (m) = manual integration

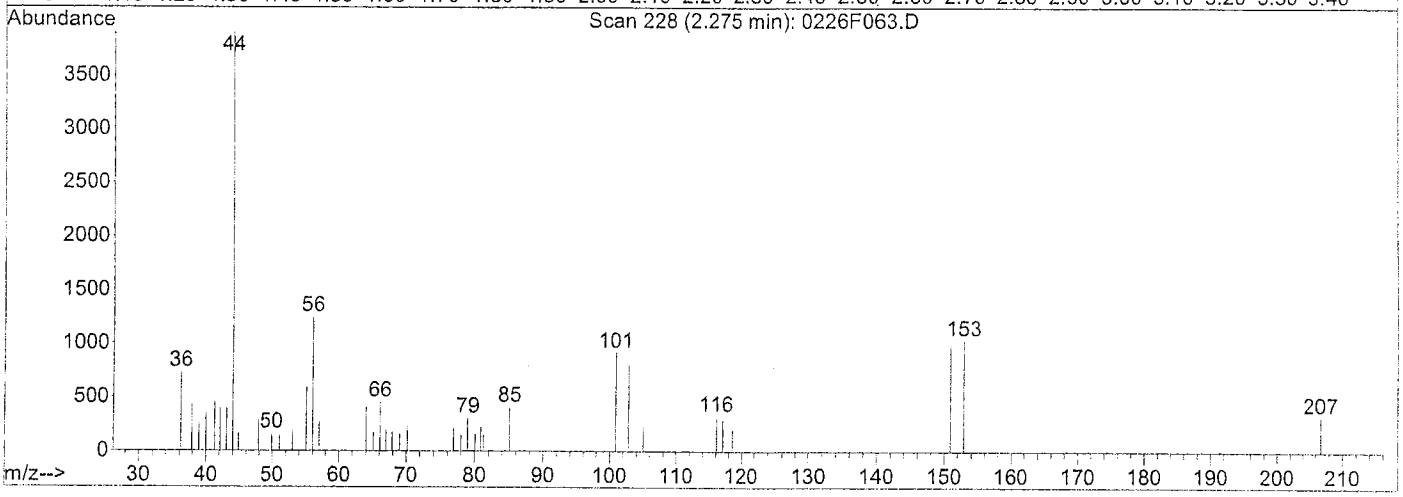
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F063.D
Acq On : 26 Feb 2007 7:50 pm
Sample : 8260 ICAL 0.2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:33 2007

Vial: 11
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F063.D

(10) Acrolein (T)

2.27min 7.03PPB m

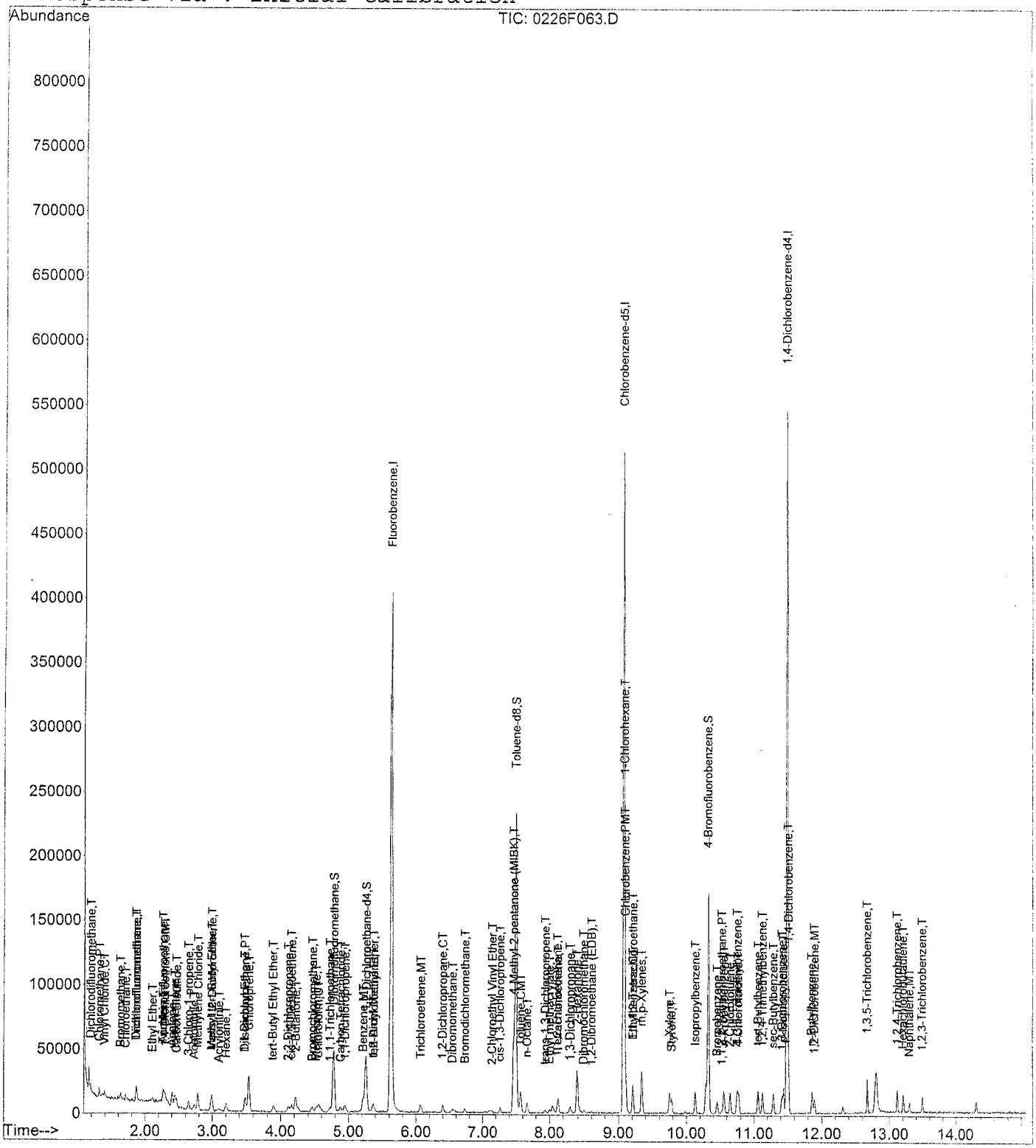
response 2649

Ion	Exp%	Act%
56.00	100	100
55.00	69.40	47.07
53.00	8.30	16.36
0.00	0.00	0.00

0226F063.D 022607.M Tue Feb 27 06:33:24 2007

Data File : J:\MS18\DATA\022607A\0226F063.D Vial: 11
Acq On : 26 Feb 2007 7:50 pm Operator:
Sample : 8260 ICAL 0.2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	407863	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145744	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140151	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	43506	5.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.40%	
44) 1,2-Dichloroethane-d4	5.26	65	42922	5.53	PPB	0.00
Spiked Amount 10.000			Recovery	=	55.30%	
58) Toluene-d8	7.50	98	196664	5.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.70%	
80) 4-Bromofluorobenzene	10.32	95	64515	4.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	46.20%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	5278	0.47	PPB	95
3) Chloromethane	1.32	50	6609	0.44	PPB	92
4) Vinyl Chloride	1.39	62	5880	0.46	PPB	98
5) Bromomethane	1.63	96	3223	0.39	PPB	95
6) Chloroethane	1.71	64	5033	0.58	PPB	97
7) Dichlorofluoromethane	1.87	67	9909	0.45	PPB	94
8) Trichlorofluoromethane	1.87	101	8561	0.45	PPB	88
9) Ethyl Ether	2.11	59	2620	0.47	PPB	94
10) Acrolein	2.27	56	2456	6.44	PPB	94
11) Trichlorotrifluoroethane	2.27	151	4093	0.46	PPB	97
12) 1,1-Dichloroethene	2.30	96	4494	0.44	PPB	91
13) Acetone	2.40	43	20231	19.16	PPB	95
14) Iodomethane	2.44	142	20153	1.64	PPB	95
15) Carbon Disulfide	2.47	76	14583	0.48	PPB	98
16) 3-Chloro-1-propene	2.65	76	2163	0.40	PPB	95
17) Acetonitrile	2.72	40	4251	16.78	PPB	89
18) Methylene Chloride	2.78	84	7631	0.77	PPB	90
19) tert-Butyl Alcohol	2.89	59	567	2.21	PPB	78
20) Acrylonitrile	3.08	53	2841	2.10	PPB	76
21) Methyl tert-Butyl Ether	2.98	73	15341	0.92	PPB	96
22) trans-1,2-Dichloroethene	3.00	96	5452	0.48	PPB	98
23) Hexane	3.20	57	5640	0.46	PPB	81
24) Diisopropyl Ether	3.49	45	15292	0.49	PPB	92
25) 1,1-Dichloroethane	3.49	63	9162	0.48	PPB	88
26) Vinyl Acetate	3.53	86	1102	1.02	PPB #	40
27) Chloroprene	3.54	53	37853	1.67	PPB	91
28) tert-Butyl Ethyl Ether	3.89	59	10463	0.47	PPB	94
29) 2,2-Dichloropropane	4.12	77	6271	0.45	PPB	90

(#) = qualifier out of range (m) = manual integration
0226F064.D 022607.M Tue Feb 27 06:38:43 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	5464	0.50	PPB		87
31)	2-Butanone	4.21	72	6794	18.63	PPB		92
33)	Ethyl Acetate	4.24	61	963	1.95	PPB	#	34
34)	Methacrylonitrile	4.52	67	3325	1.91	PPB	#	81
35)	Bromochloromethane	4.47	128	2132	0.55	PPB	#	45
37)	Chloroform	4.56	83	8989	0.47	PPB		88
38)	tert-Butyl Formate	4.58	59	1070	0.50	PPB		72
39)	1,1,1-Trichloroethane	4.72	97	7434	0.47	PPB		92
41)	Carbon Tetrachloride	4.89	117	6529	0.46	PPB		92
42)	1,1-Dichloropropene	4.94	75	8043	0.53	PPB		91
43)	Isobutyl Alcohol	5.27	43	2115	20.03	PPB		77
45)	Benzene	5.22	78	22228	0.51	PPB		94
46)	1,2-Dichloroethane	5.36	62	5131	0.51	PPB		87
47)	tert-Amyl Methyl Ether	5.37	55	2884	0.51	PPB	#	31
48)	Trichloroethene	6.07	95	5447	0.47	PPB		92
49)	1,2-Dichloropropane	6.40	63	4215	0.47	PPB		96
50)	Dibromomethane	6.54	93	1586	0.44	PPB		93
51)	Methyl methacrylate	6.57	69	1372	0.45	PPB		67
53)	Bromodichloromethane	6.73	83	4906	0.47	PPB		82
54)	2-Nitropropane	7.11	43	1899	1.97	PPB		76
55)	2-Chloroethyl Vinyl Ether	7.14	63	1215	0.36	PPB		84
56)	cis-1,3-Dichloropropene	7.26	75	4548	0.40	PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.47	58	24845	17.55	PPB		95
59)	Toluene	7.57	92	14022	0.48	PPB		85
61)	n-Octane	7.67	85	2166	0.52	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	2900	0.38	PPB		93
63)	Ethyl methacrylate	8.00	69	2396	0.41	PPB		98
64)	1,1,2-Trichloroethane	8.12	83	2368	0.54	PPB		84
65)	Tetrachloroethene	8.13	164	5698	0.58	PPB		94
66)	2-Hexanone	8.39	57	6875	16.92	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	4998	0.53	PPB		96
68)	Dibromochloromethane	8.49	129	2698	0.47	PPB		83
69)	1,2-Dibromoethane (EDB)	8.60	107	2149	0.46	PPB		92
70)	1-Chlorohexane	9.10	91	7325	0.49	PPB		82
71)	Chlorobenzene	9.10	112	14139	0.51	PPB		98
72)	Ethylbenzene	9.21	106	8631	0.52	PPB	#	78
73)	1,1,1,2-Tetrachloroethane	9.21	131	3600	0.45	PPB		96
74)	m,p-Xylenes	9.34	106	19892	0.98	PPB		94
75)	o-Xylene	9.75	106	9204	0.50	PPB		93
76)	Styrene	9.78	103	6435m	0.49	PPB		
77)	Bromoform	9.98	173	1203	0.41	PPB		92
78)	Isopropylbenzene	10.13	105	25318	0.49	PPB		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:35:44 2007 Quant Results File: 022607.RES

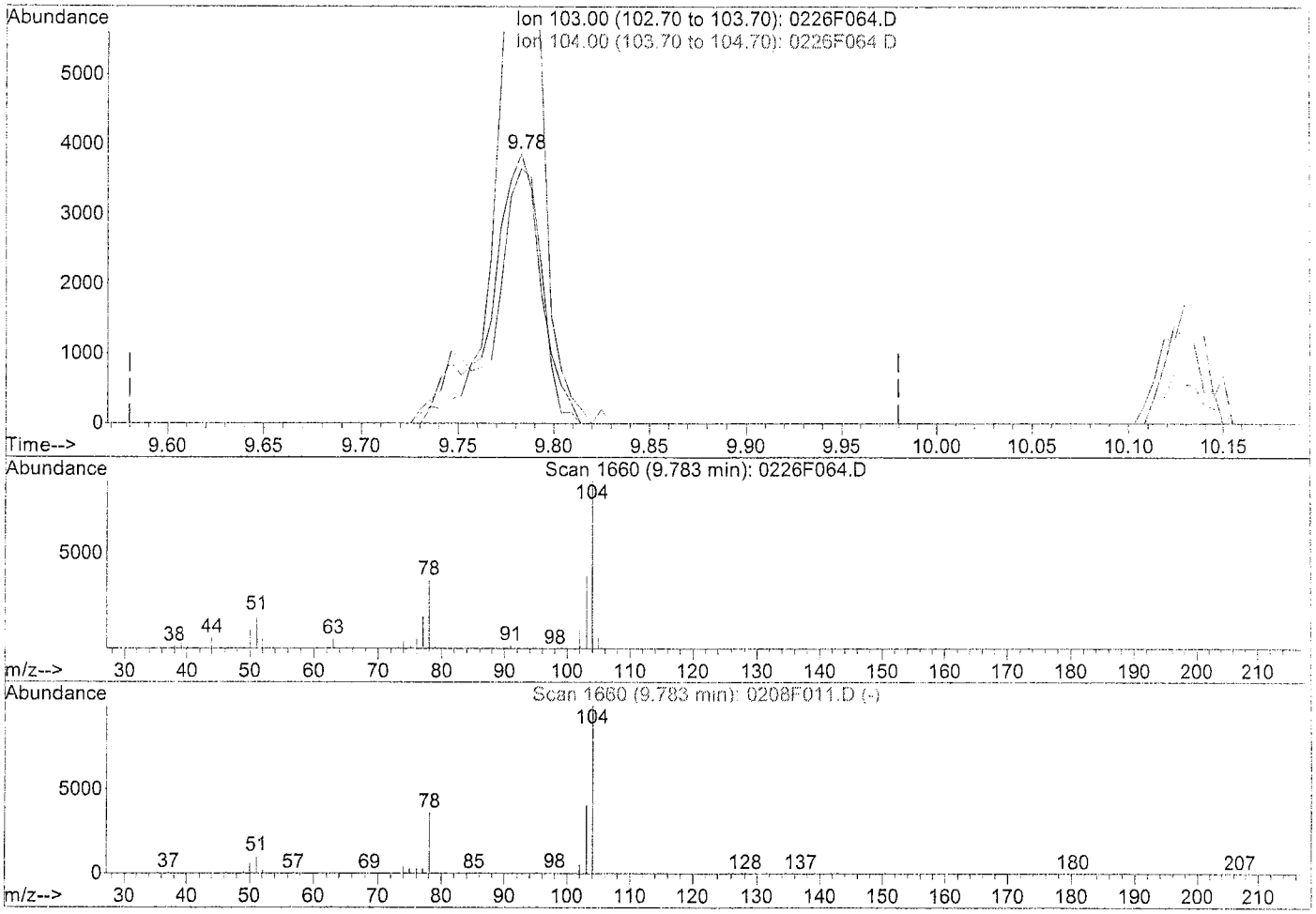
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.28	89	401m	0.75 PPB		
82)	1,1,2,2-Tetrachloroethane	10.52	83	2287	0.45 PPB		76
84)	Bromobenzene	10.45	156	5729	0.51 PPB		95
85)	n-Propylbenzene	10.55	91	29499	0.46 PPB		94
86)	1,2,3-Trichloropropane	10.57	110	795	0.48 PPB	#	31
87)	2-Chlorotoluene	10.65	91	18037	0.49 PPB		91
88)	1,3,5-Trimethylbenzene	10.75	105	19845	0.46 PPB		92
89)	4-Chlorotoluene	10.77	91	20353	0.49 PPB		93
90)	tert-Butylbenzene	11.06	119	18687	0.46 PPB		98
91)	1,2,4-Trimethylbenzene	11.13	105	19360	0.47 PPB		93
92)	sec-Butylbenzene	11.29	105	23947	0.45 PPB		92
93)	p-Isopropyltoluene	11.44	119	20958	0.44 PPB		99
94)	1,3-Dichlorobenzene	11.42	146	11414	0.49 PPB		93
95)	1,4-Dichlorobenzene	11.52	146	11852	0.52 PPB		97
96)	n-Butylbenzene	11.86	91	18986	0.48 PPB		95
97)	1,2-Dichlorobenzene	11.89	146	9824	0.50 PPB		91
98)	1,2-Dibromo-3-chloropropan	12.57	155	217m	0.34 PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	9975	0.51 PPB		93
100)	1,2,4-Trichlorobenzene	13.12	180	7755	0.57 PPB		92
101)	Hexachlorobutadiene	13.21	225	4438	0.46 PPB		96
102)	Naphthalene	13.31	128	8881	0.56 PPB		95
103)	1,2,3-Trichlorobenzene	13.49	180	6349	0.56 PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:35 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.55PPB

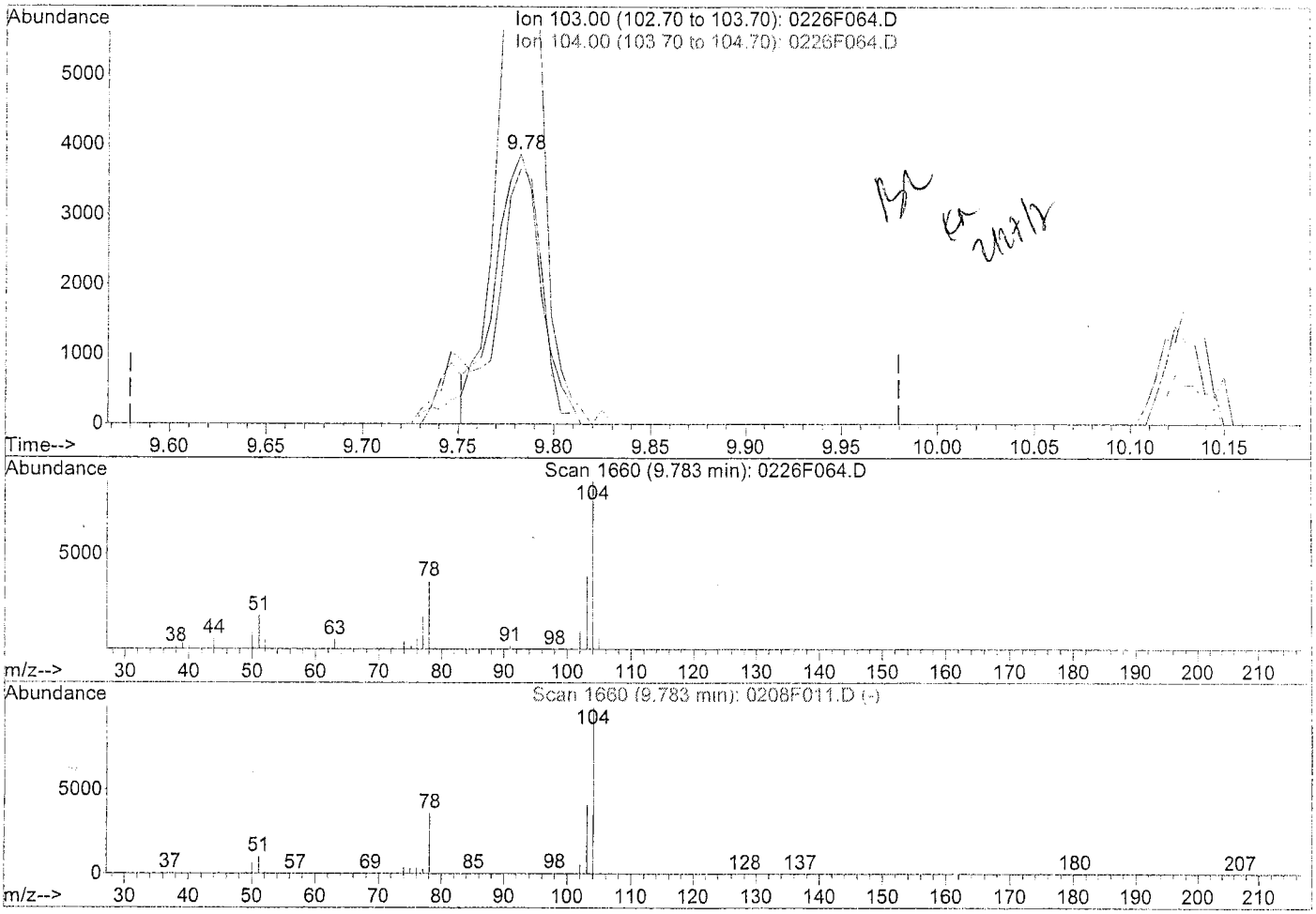
response 7208

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(76) Styrene (T)

9.78min 0.49PPB m

response 6435

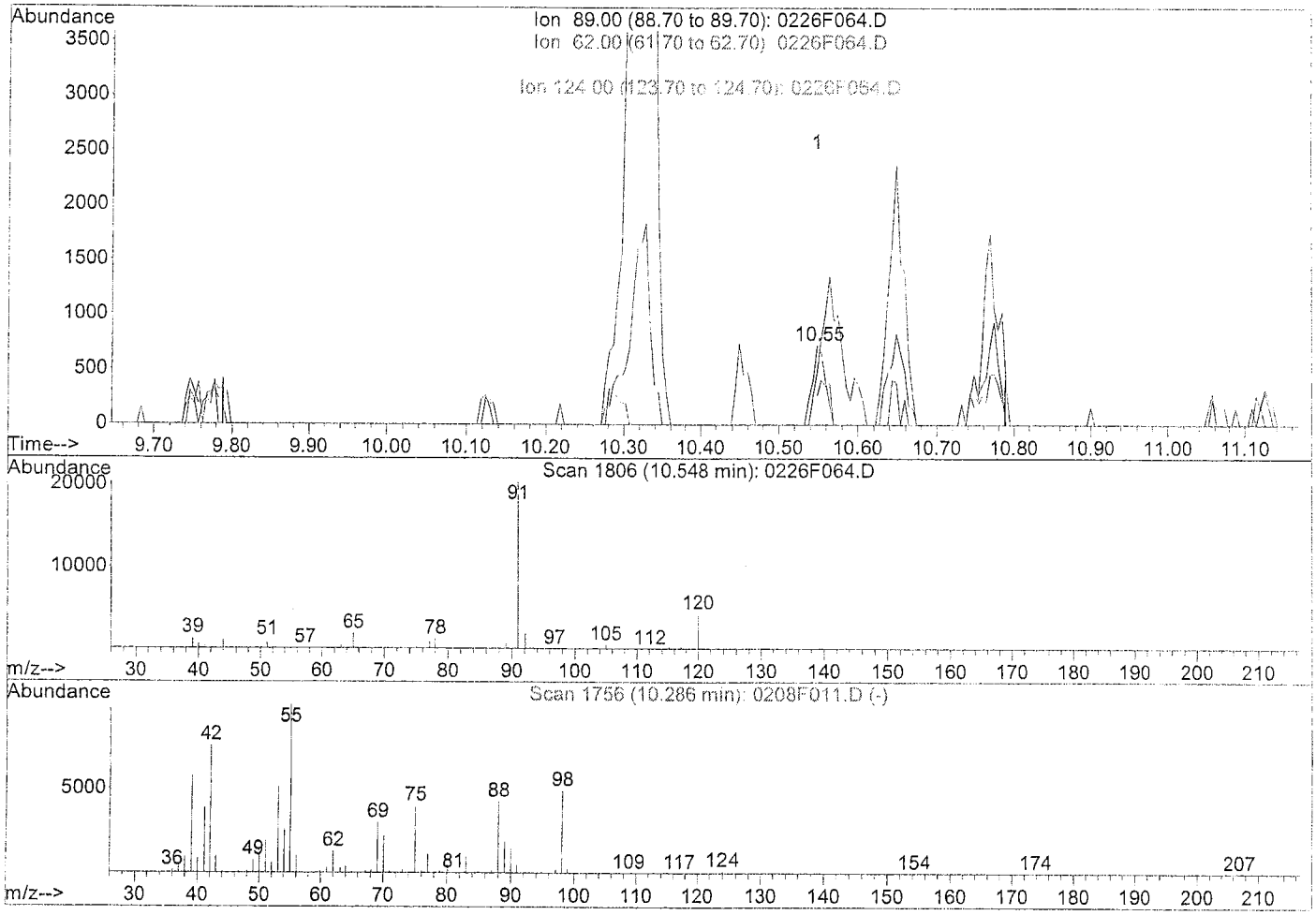
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	224.99
78.00	89.30	94.46
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:37:28 2007

Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.55min 1.54PPB

response 820

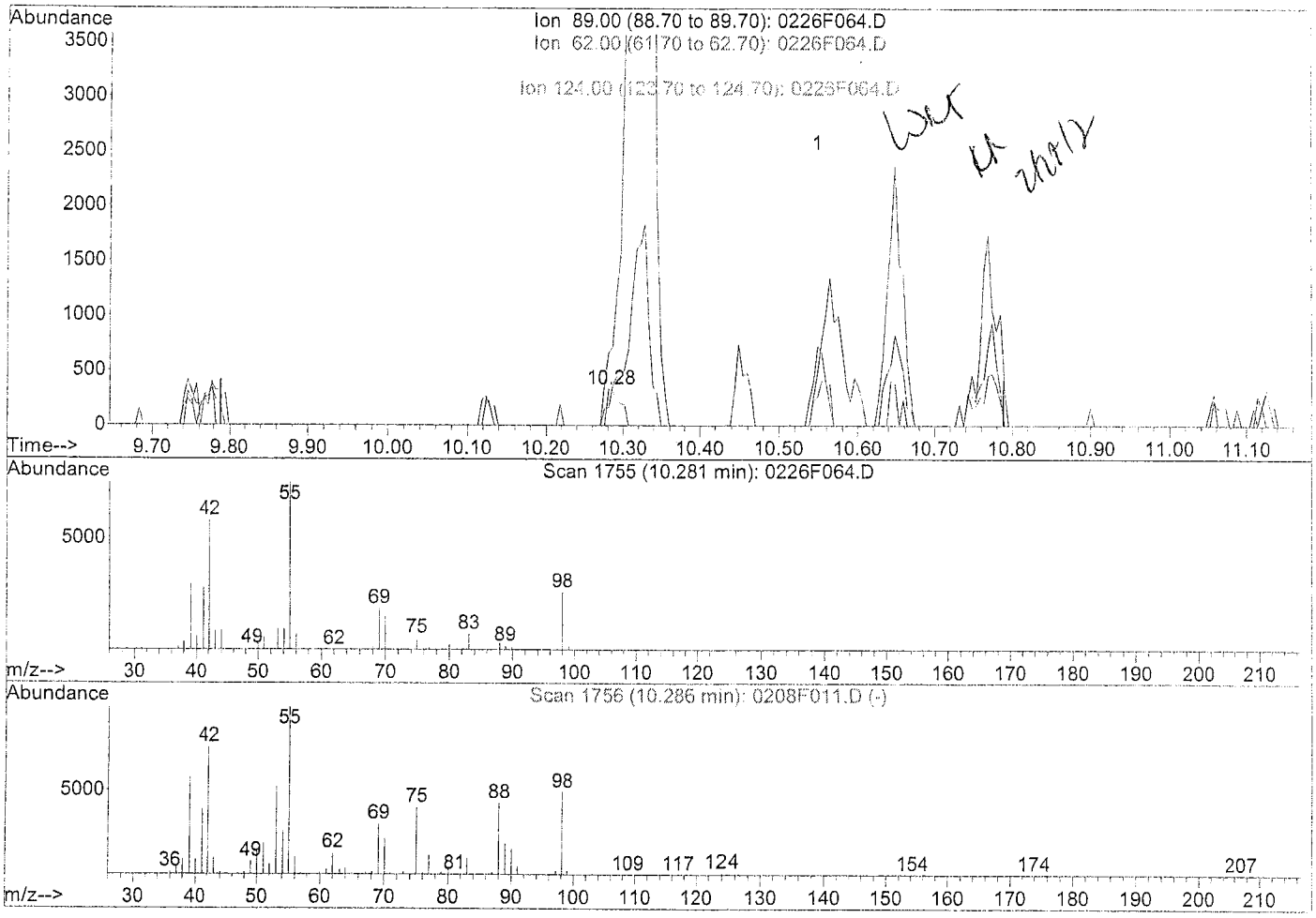
Ion	Exp%	Act%
89.00	100	100
62.00	69.80	36.84#
75.00	225.00	67.59#
124.00	9.50	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:37 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F064.D

(79) cis-1,4-Dichloro-2-butene (T)

10.28min 0.75PPB m

response 401

Ion	Exp%	Act%
89.00	100	100
62.00	69.80	49.40
75.00	225.00	201.20
124.00	9.50	0.00

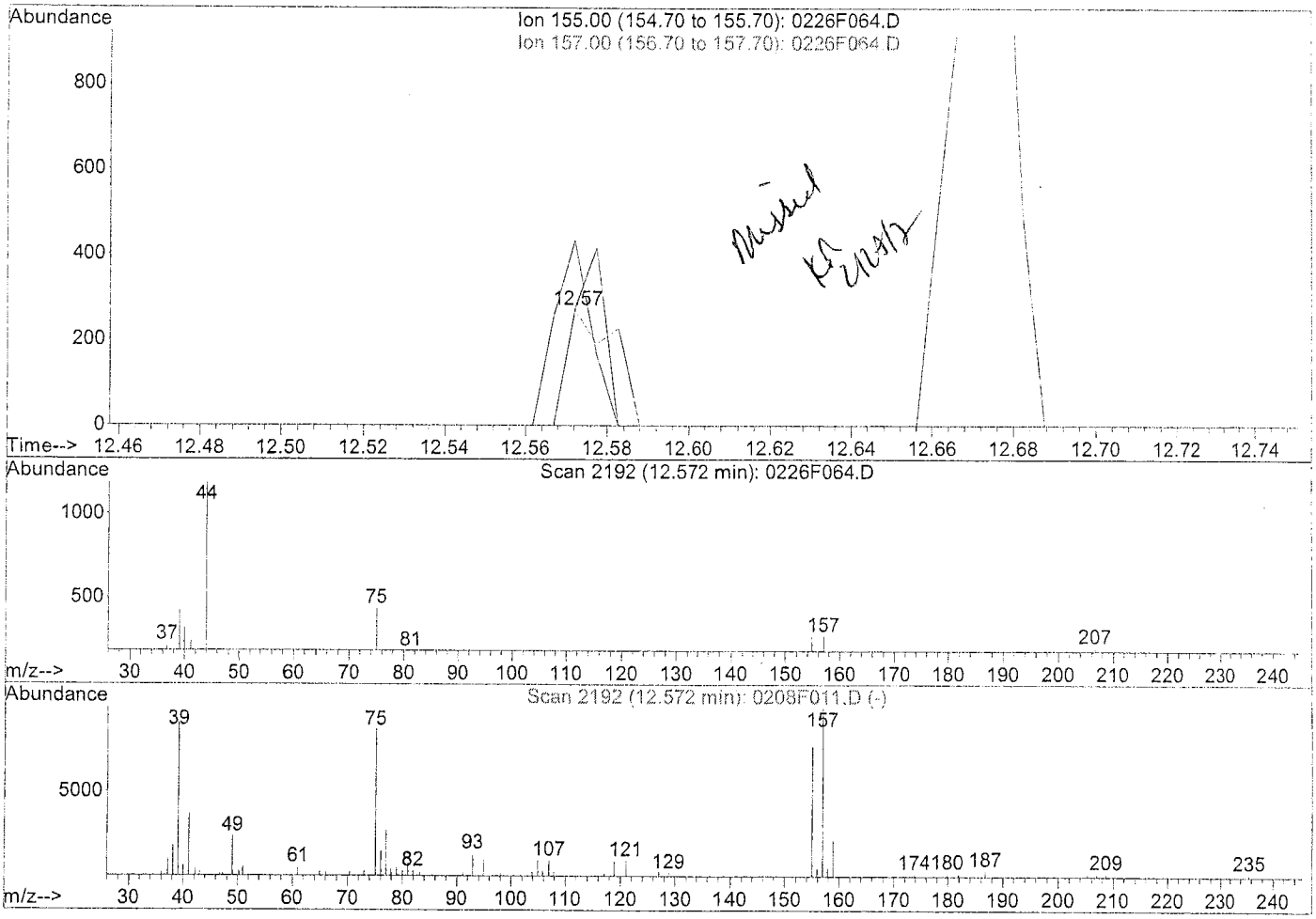
0226F064.D 022607.M Tue Feb 27 06:37:50 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F064.D
Acq On : 26 Feb 2007 8:10 pm
Sample : 8260 ICAL 0.5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007

Vial: 12
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration



TIC: 0226F064.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.57min 0.34PPB m

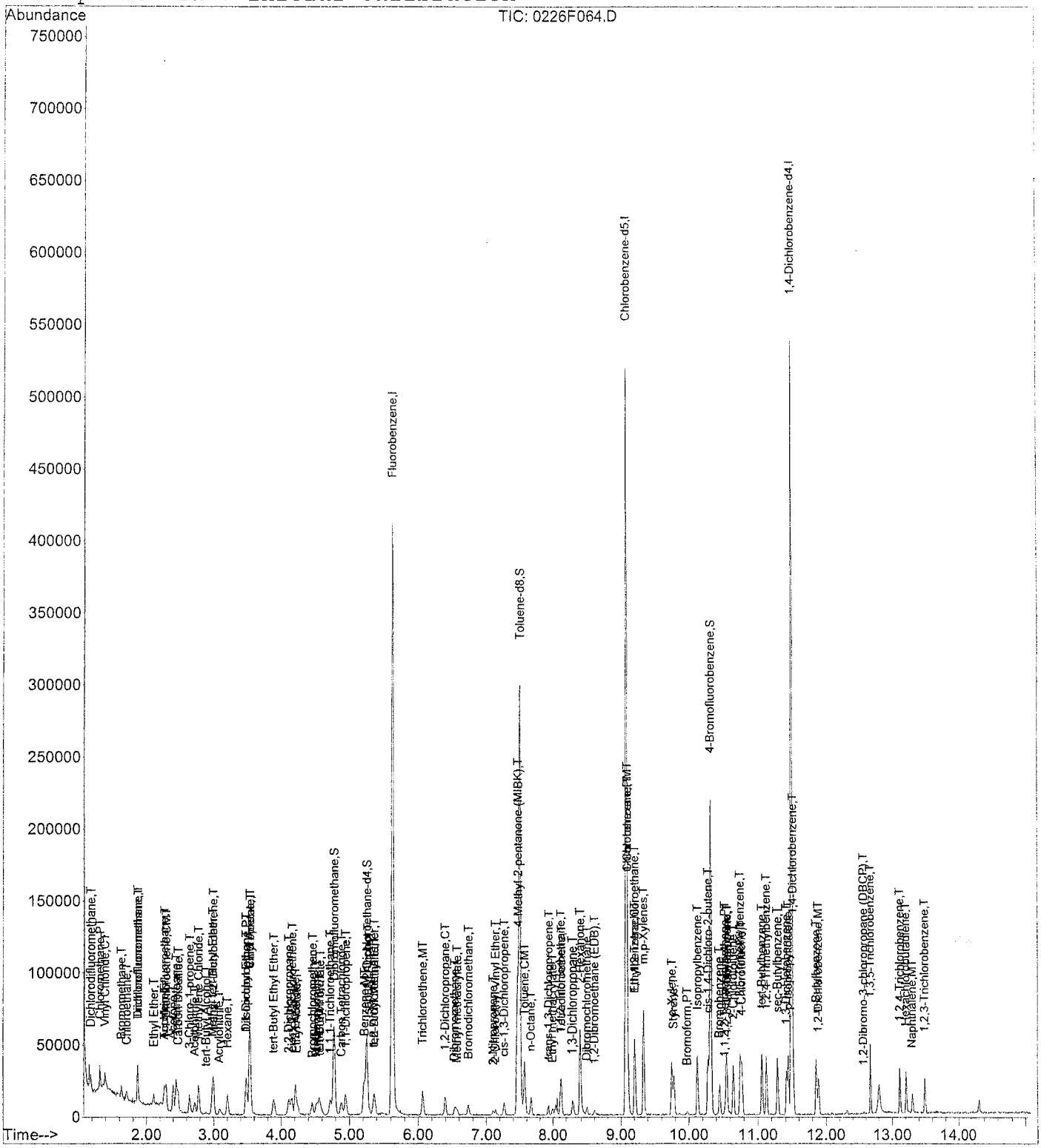
response 217

Ion	Exp%	Act%
155.00	100	100
157.00	130.70	100.37#
75.00	95.90	160.15#
0.00	0.00	0.00

0226F064.D 022607.M Tue Feb 27 06:38:33 2007

Data File : J:\MS18\DATA\022607A\0226F064.D Vial: 12
Acq On : 26 Feb 2007 8:10 pm Operator:
Sample : 8260 ICAL 0.5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398164	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	148958	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	140278	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	45979	5.89	PPB	0.00
Spiked Amount 10.000			Recovery	=	58.90%	
44) 1,2-Dichloroethane-d4	5.25	65	48590	6.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	64.20%	
58) Toluene-d8	7.49	98	206319	5.45	PPB	0.00
Spiked Amount 10.000			Recovery	=	54.50%	
80) 4-Bromofluorobenzene	10.32	95	72161	5.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	50.60%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.19	85	11097	1.00	PPB		97
3) Chloromethane	1.32	50	14619	0.99	PPB		97
4) Vinyl Chloride	1.39	62	12652	1.01	PPB		97
5) Bromomethane	1.63	96	6375	0.79	PPB		77
6) Chloroethane	1.71	64	9558	1.13	PPB		95
7) Dichlorofluoromethane	1.87	67	20051	0.93	PPB		95
8) Trichlorofluoromethane	1.87	101	17404	0.95	PPB		94
9) Ethyl Ether	2.11	59	5602	1.04	PPB		86
10) Acrolein	2.27	56	4248	11.41	PPB		84
11) Trichlorotrifluoroethane	2.27	151	8260	0.94	PPB		92
12) 1,1-Dichloroethene	2.30	96	9433	0.95	PPB		98
13) Acetone	2.40	43	44115	42.79	PPB		98
14) Iodomethane	2.44	142	41401	3.45	PPB		99
15) Carbon Disulfide	2.47	76	29280	0.98	PPB		92
16) 3-Chloro-1-propene	2.64	76	5368	1.01	PPB	#	70
17) Acetonitrile	2.72	40	10067	40.71	PPB		97
18) Methylene Chloride	2.78	84	12100	1.26	PPB		92
19) tert-Butyl Alcohol	2.89	59	1140	4.56	PPB		64
20) Acrylonitrile	3.09	53	5690	4.30	PPB		89
21) Methyl tert-Butyl Ether	2.98	73	36213	2.22	PPB		97
22) trans-1,2-Dichloroethene	2.99	96	11154	1.01	PPB		83
23) Hexane	3.20	57	11608	0.97	PPB		95
24) Diisopropyl Ether	3.48	45	30731	1.00	PPB		89
25) 1,1-Dichloroethane	3.48	63	19195	1.04	PPB		97
26) Vinyl Acetate	3.53	86	2192	2.07	PPB	#	61
27) Chloroprene	3.54	53	82999	3.76	PPB		91
28) tert-Butyl Ethyl Ether	3.89	59	23285	1.07	PPB		89
29) 2,2-Dichloropropane	4.11	77	12098	0.89	PPB		97

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	10839	1.02	PPB		87
31)	2-Butanone	4.21	72	14882	41.81	PPB	#	85
32)	Propionitrile	4.38	54	2026	4.44	PPB		80
33)	Ethyl Acetate	4.25	61	1853	3.85	PPB	#	39
34)	Methacrylonitrile	4.52	67	6658	3.93	PPB		90
35)	Bromochloromethane	4.45	128	4136	1.10	PPB		89
36)	Tetrahydrofuran	4.46	71	638	1.82	PPB		86
37)	Chloroform	4.56	83	18513	0.99	PPB		88
38)	tert-Butyl Formate	4.59	59	2180	1.05	PPB		84
39)	1,1,1-Trichloroethane	4.72	97	15156	0.97	PPB		98
41)	Carbon Tetrachloride	4.88	117	13014	0.93	PPB		95
42)	1,1-Dichloropropene	4.95	75	15772	1.07	PPB		94
43)	Isobutyl Alcohol	5.28	43	3571	34.65	PPB		78
45)	Benzene	5.22	78	46773	1.10	PPB		95
46)	1,2-Dichloroethane	5.35	62	10504	1.08	PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	5677	1.03	PPB	#	36
48)	Trichloroethene	6.07	95	11532	1.03	PPB		83
49)	1,2-Dichloropropane	6.40	63	9878	1.12	PPB		90
50)	Dibromomethane	6.53	93	3562	1.02	PPB		97
51)	Methyl methacrylate	6.57	69	2881	0.96	PPB		87
52)	1,4-Dioxane	6.56	88	1386	42.70	PPB		78
53)	Bromodichloromethane	6.73	83	10281	1.02	PPB		98
54)	2-Nitropropane	7.10	43	4313	4.57	PPB		92
55)	2-Chloroethyl Vinyl Ether	7.14	63	3328	1.01	PPB		95
56)	cis-1,3-Dichloropropene	7.26	75	10021	0.89	PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	56940	41.20	PPB		89
59)	Toluene	7.57	92	27973	0.99	PPB		96
61)	n-Octane	7.66	85	9952	2.35	PPB		85
62)	trans-1,3-Dichloropropene	7.93	75	6317	0.81	PPB		99
63)	Ethyl methacrylate	8.00	69	5479	0.91	PPB		94
64)	1,1,2-Trichloroethane	8.12	83	4747	1.06	PPB		90
65)	Tetrachloroethene	8.13	164	10122	1.01	PPB		92
66)	2-Hexanone	8.39	57	16941	40.80	PPB		98
67)	1,3-Dichloropropane	8.29	76	11084	1.14	PPB		94
68)	Dibromochloromethane	8.48	129	5302	0.90	PPB		93
69)	1,2-Dibromoethane (EDB)	8.60	107	5239	1.10	PPB		93
70)	1-Chlorohexane	9.10	91	15021	0.98	PPB		90
71)	Chlorobenzene	9.11	112	29952	1.06	PPB		99
72)	Ethylbenzene	9.21	106	16774	0.99	PPB		96
73)	1,1,1,2-Tetrachloroethane	9.22	131	8323	1.02	PPB		83
74)	m,p-Xylenes	9.34	106	42311	2.04	PPB		96
75)	o-Xylene	9.75	106	18605	0.99	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:38:51 2007 Quant Results File: 022607.RES

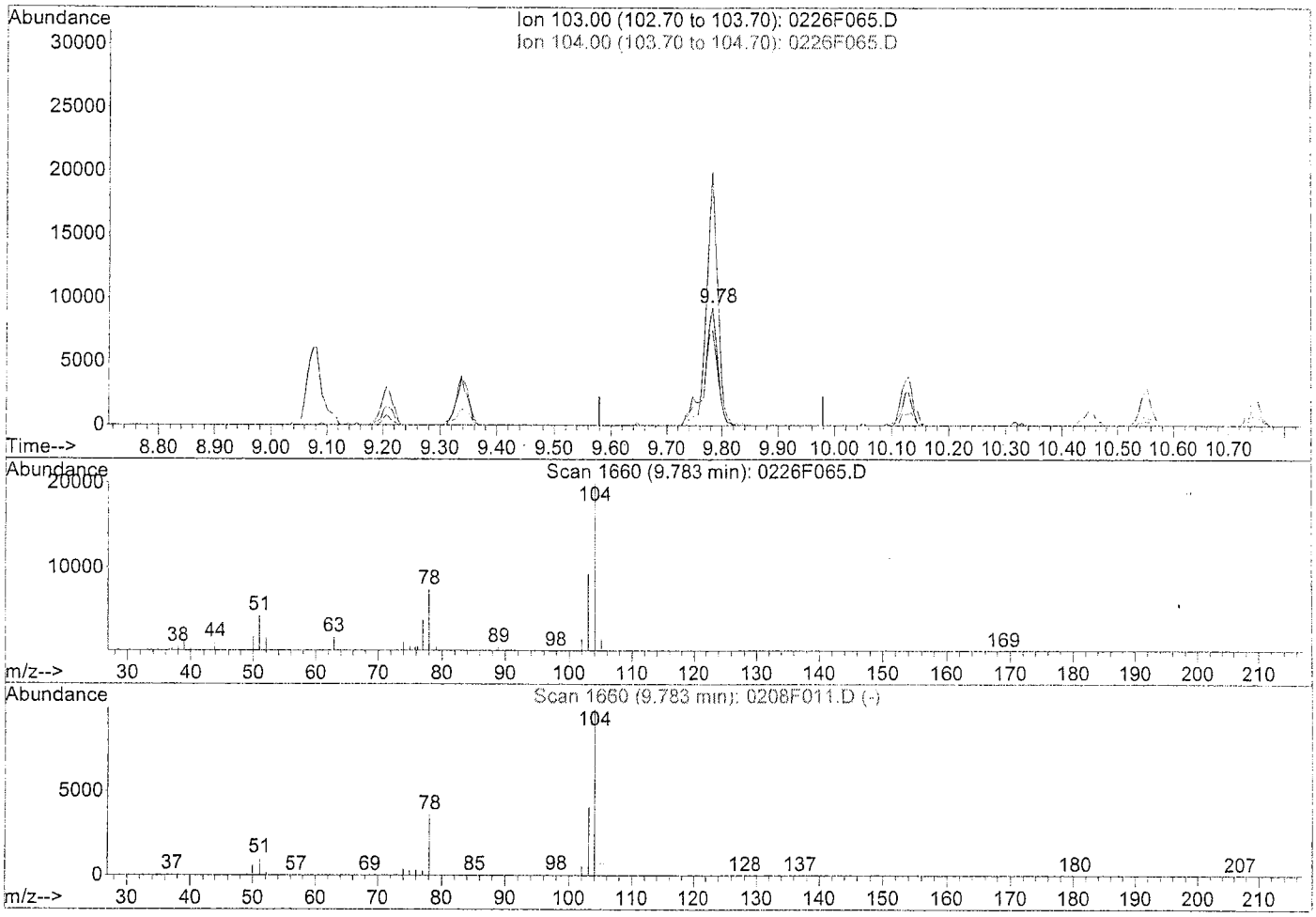
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	12601m	0.94	PPB		
77)	Bromoform	9.97	173	2579	0.86	PPB		72
78)	Isopropylbenzene	10.13	105	51807	0.99	PPB		97
79)	cis-1,4-Dichloro-2-butene	10.29	89	1315	2.41	PPB		87
82)	1,1,2,2-Tetrachloroethane	10.53	83	4923	0.98	PPB		95
83)	trans-1,4-Dichloro-2-buten	10.60	53	888	0.68	PPB	#	54
84)	Bromobenzene	10.45	156	10980	0.99	PPB		92
85)	n-Propylbenzene	10.55	91	60717	0.94	PPB		95
86)	1,2,3-Trichloropropane	10.56	110	1563	0.95	PPB		98
87)	2-Chlorotoluene	10.65	91	36180	0.98	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	42462	0.98	PPB		98
89)	4-Chlorotoluene	10.77	91	40621	0.97	PPB		95
90)	tert-Butylbenzene	11.06	119	38262	0.94	PPB		91
91)	1,2,4-Trimethylbenzene	11.13	105	41104	1.01	PPB		96
92)	sec-Butylbenzene	11.28	105	51713	0.96	PPB		96
93)	p-Isopropyltoluene	11.44	119	45163	0.96	PPB		93
94)	1,3-Dichlorobenzene	11.41	146	24426	1.04	PPB		90
95)	1,4-Dichlorobenzene	11.52	146	23058	1.00	PPB		98
96)	n-Butylbenzene	11.86	91	39779	1.00	PPB		98
97)	1,2-Dichlorobenzene	11.90	146	20285	1.04	PPB		97
98)	1,2-Dibromo-3-chloropropan	12.58	155	424m	0.66	PPB		
99)	1,3,5-Trichlorobenzene	12.67	180	19525	1.00	PPB		98
100)	1,2,4-Trichlorobenzene	13.12	180	15574	1.15	PPB		99
101)	Hexachlorobutadiene	13.21	225	8917	0.92	PPB		93
102)	Naphthalene	13.30	128	18417	1.16	PPB		89
103)	1,2,3-Trichlorobenzene	13.49	180	11894	1.05	PPB		93

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:38 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F065.D

(76) Styrene (T)

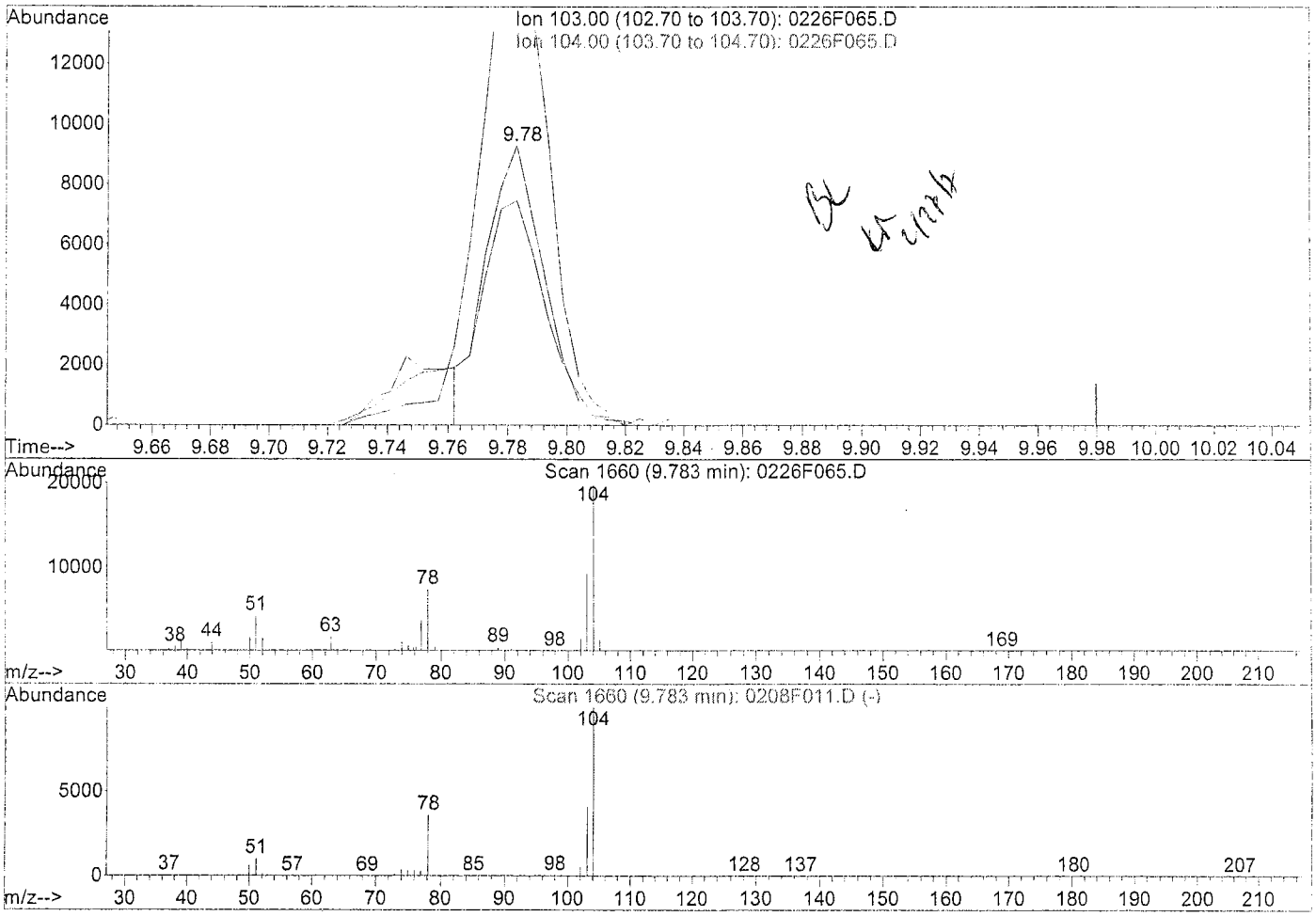
9.78min 1.15PPB

response 15467

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:39 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F065.D

(76) Styrene (T)

9.78min 0.94PPB m

response 12601

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	215.73
78.00	89.30	80.18
0.00	0.00	0.00

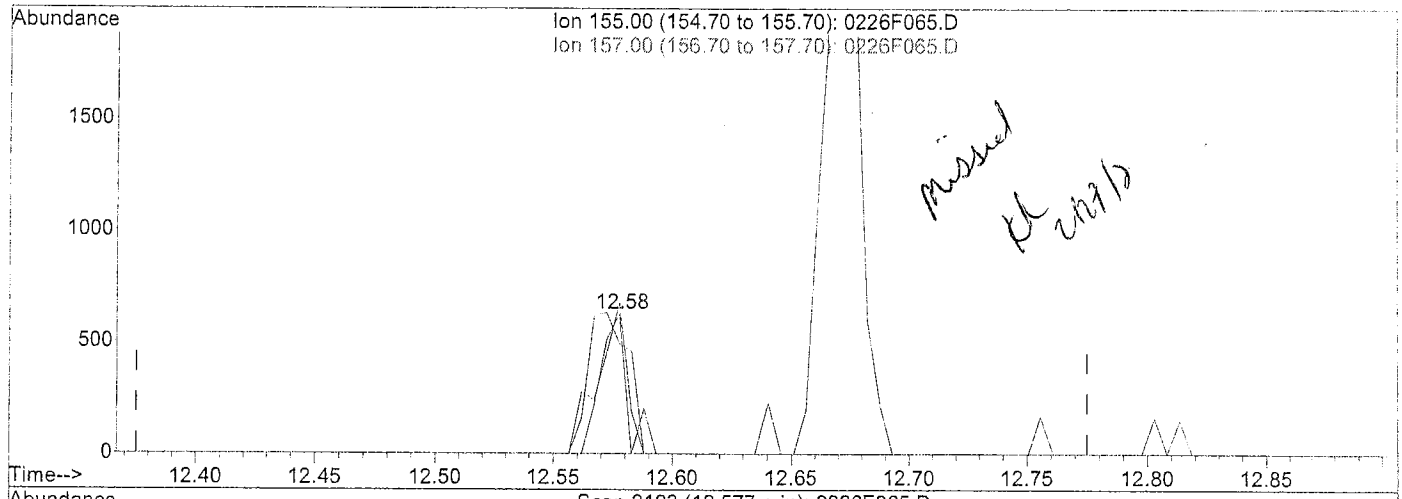
0226F065.D 022607.M Tue Feb 27 06:39:58 2007

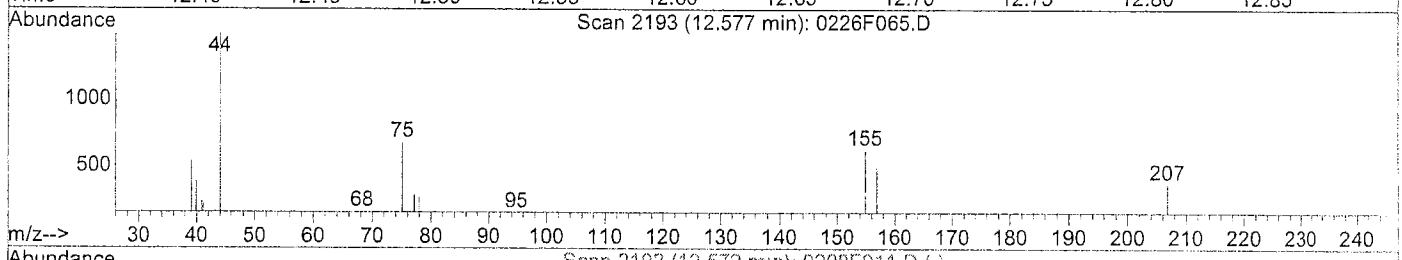
Quantitation Report (Qedit)

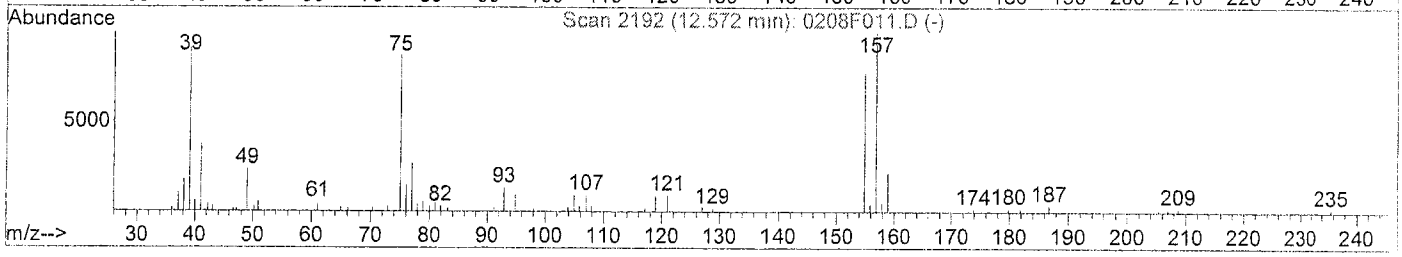
Data File : J:\MS18\DATA\022607A\0226F065.D
Acq On : 26 Feb 2007 8:29 pm
Sample : 8260 ICAL 1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007

Vial: 13
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Single Level Calibration







TIC: 0226F065.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.58min 0.66PPB m

response 424

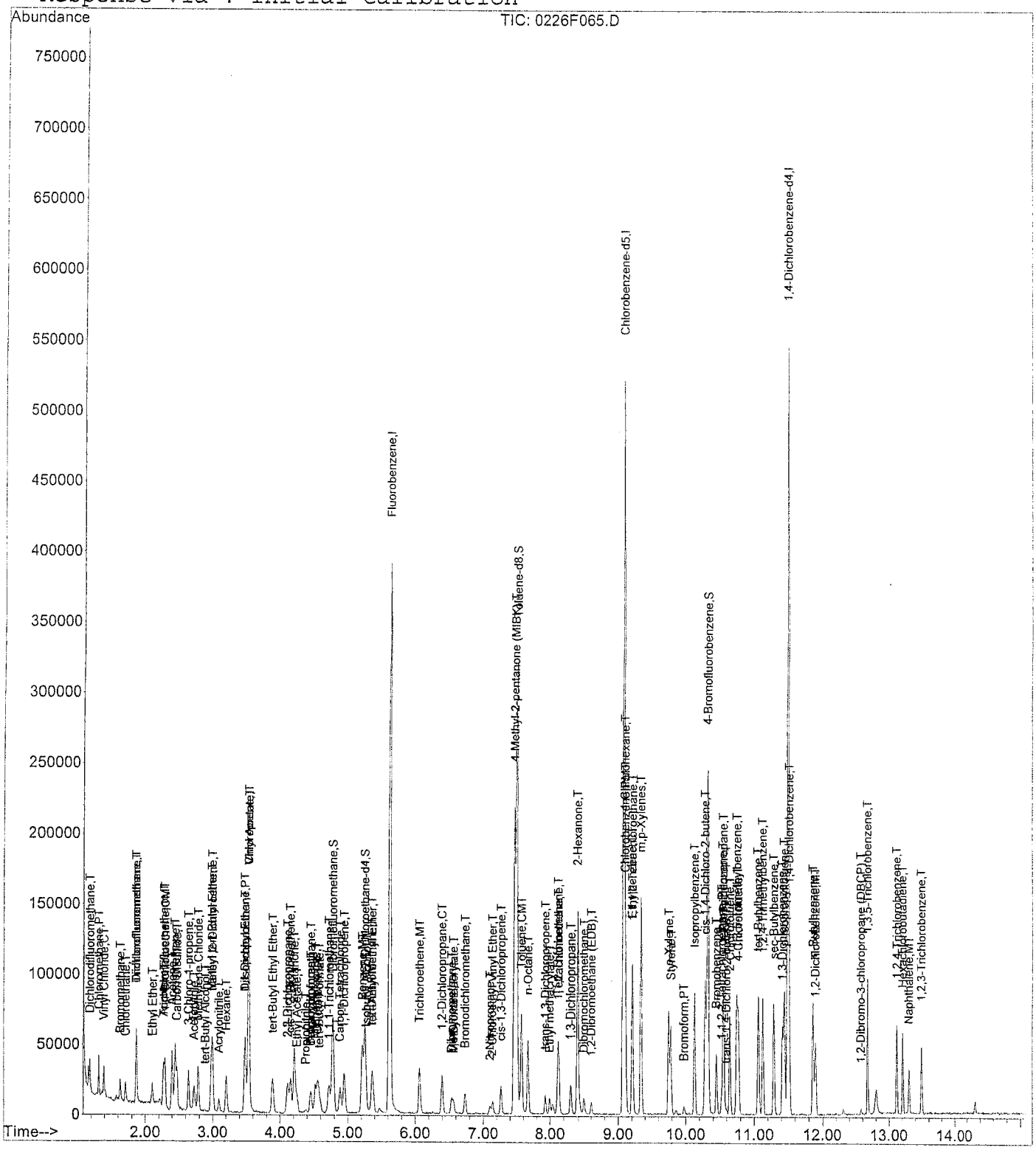
Ion	Exp%	Act%
155.00	100	100
157.00	130.70	78.75#
75.00	95.90	107.83
0.00	0.00	0.00

2/27/7

0226F065.D 022607.M Tue Feb 27 06:40:21 2007

Data File : J:\MS18\DATA\022607A\0226F065.D Vial: 13
Acq On : 26 Feb 2007 8:29 pm Operator:
Sample : 8260 ICAL 1 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	396471	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	150846	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	144820	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	54041	6.95	PPB	0.00
Spiked Amount 10.000			Recovery	=	69.50%	
44) 1,2-Dichloroethane-d4	5.26	65	55372	7.34	PPB	0.00
Spiked Amount 10.000			Recovery	=	73.40%	
58) Toluene-d8	7.50	98	233536	6.19	PPB	0.00
Spiked Amount 10.000			Recovery	=	61.90%	
80) 4-Bromofluorobenzene	10.32	95	84688	5.86	PPB	0.00
Spiked Amount 10.000			Recovery	=	58.60%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	22411	2.04	PPB	94
3) Chloromethane	1.32	50	28870	1.96	PPB	96
4) Vinyl Chloride	1.39	62	25302	2.03	PPB	95
5) Bromomethane	1.63	96	11775	1.46	PPB	94
6) Chloroethane	1.71	64	16043	1.91	PPB	94
7) Dichlorofluoromethane	1.87	67	38501	1.79	PPB	98
8) Trichlorofluoromethane	1.87	101	34095	1.86	PPB	94
9) Ethyl Ether	2.11	59	11073	2.07	PPB	89
10) Acrolein	2.27	56	7124	19.22	PPB	82
11) Trichlorotrifluoroethane	2.27	151	15594	1.78	PPB	87
12) 1,1-Dichloroethene	2.30	96	18502	1.88	PPB	94
13) Acetone	2.40	43	80636	78.55	PPB	99
14) Iodomethane	2.44	142	77598	6.50	PPB	99
15) Carbon Disulfide	2.47	76	59777	2.01	PPB	97
16) 3-Chloro-1-propene	2.64	76	9758	1.84	PPB	87
17) Acetonitrile	2.72	40	19964	81.08	PPB	84
18) Methylene Chloride	2.78	84	21730	2.27	PPB	89
19) tert-Butyl Alcohol	2.89	59	2211	8.88	PPB	82
20) Acrylonitrile	3.09	53	11143	8.46	PPB	87
21) Methyl tert-Butyl Ether	2.98	73	66985	4.13	PPB	99
22) trans-1,2-Dichloroethene	3.00	96	21614	1.96	PPB	96
23) Hexane	3.20	57	21927	1.85	PPB	93
24) Diisopropyl Ether	3.48	45	61770	2.02	PPB	93
25) 1,1-Dichloroethane	3.48	63	38085	2.07	PPB	99
26) Vinyl Acetate	3.54	86	3940	3.74	PPB	94
27) Chloroprene	3.54	53	160844	7.31	PPB	93
28) tert-Butyl Ethyl Ether	3.89	59	45445	2.09	PPB	97
29) 2,2-Dichloropropane	4.11	77	23840	1.75	PPB	95

(#) = qualifier out of range (m) = manual integration
0226F066.D 022607.M Tue Feb 27 06:41:44 2007 Page 1

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	22937	2.16	PPB		94
31)	2-Butanone	4.21	72	28988	81.78	PPB	#	84
32)	Propionitrile	4.38	54	4159	9.15	PPB		92
33)	Ethyl Acetate	4.25	61	3956	8.25	PPB		81
34)	Methacrylonitrile	4.52	67	13529	8.01	PPB		90
35)	Bromochloromethane	4.46	128	8482	2.26	PPB		86
36)	Tetrahydrofuran	4.46	71	1157	3.32	PPB	#	79
37)	Chloroform	4.56	83	45720	2.46	PPB		94
38)	tert-Butyl Formate	4.59	59	3846	1.86	PPB		85
39)	1,1,1-Trichloroethane	4.72	97	30003	1.93	PPB		99
41)	Carbon Tetrachloride	4.89	117	25325	1.82	PPB		95
42)	1,1-Dichloropropene	4.94	75	29117	1.98	PPB		96
43)	Isobutyl Alcohol	5.27	43	7434	72.43	PPB		81
45)	Benzene	5.22	78	88714	2.10	PPB		97
46)	1,2-Dichloroethane	5.36	62	21504	2.21	PPB		95
47)	tert-Amyl Methyl Ether	5.37	55	11736	2.13	PPB	#	33
48)	Trichloroethene	6.07	95	21446	1.92	PPB		95
49)	1,2-Dichloropropane	6.40	63	18583	2.12	PPB		94
50)	Dibromomethane	6.53	93	7716	2.22	PPB		95
51)	Methyl methacrylate	6.57	69	5777	1.93	PPB		90
52)	1,4-Dioxane	6.56	88	2890	89.42	PPB		96
53)	Bromodichloromethane	6.74	83	19712	1.96	PPB		97
54)	2-Nitropropane	7.10	43	8486	9.04	PPB		94
55)	2-Chloroethyl Vinyl Ether	7.13	63	7116	2.17	PPB		92
56)	cis-1,3-Dichloropropene	7.27	75	20481	1.83	PPB		93
57)	4-Methyl-2-pentanone (MIBK	7.46	58	111330	80.90	PPB		92
59)	Toluene	7.57	92	55429	1.96	PPB		98
61)	n-Octane	7.66	85	7047	1.64	PPB		86
62)	trans-1,3-Dichloropropene	7.93	75	13652	1.73	PPB		90
63)	Ethyl methacrylate	7.99	69	11494	1.88	PPB		98
64)	1,1,2-Trichloroethane	8.12	83	9383	2.07	PPB		94
65)	Tetrachloroethene	8.13	164	19395	1.92	PPB		92
66)	2-Hexanone	8.39	57	33468	79.60	PPB	#	79
67)	1,3-Dichloropropane	8.29	76	21550	2.19	PPB		95
68)	Dibromochloromethane	8.49	129	11119	1.87	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	9747	2.03	PPB		91
70)	1-Chlorohexane	9.10	91	27247	1.75	PPB		84
71)	Chlorobenzene	9.11	112	57379	2.01	PPB		96
72)	Ethylbenzene	9.21	106	32883	1.92	PPB		98
73)	1,1,1,2-Tetrachloroethane	9.22	131	16419	1.99	PPB		95
74)	m,p-Xylenes	9.34	106	80873	3.85	PPB		99
75)	o-Xylene	9.75	106	38511	2.02	PPB		94

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:40:39 2007 Quant Results File: 022607.RES

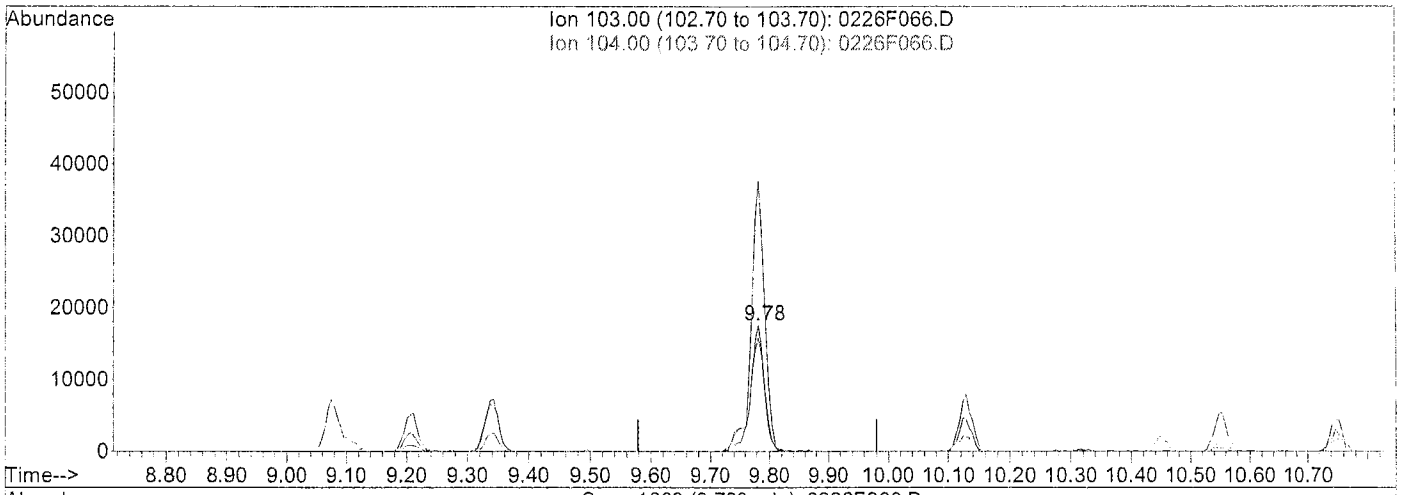
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

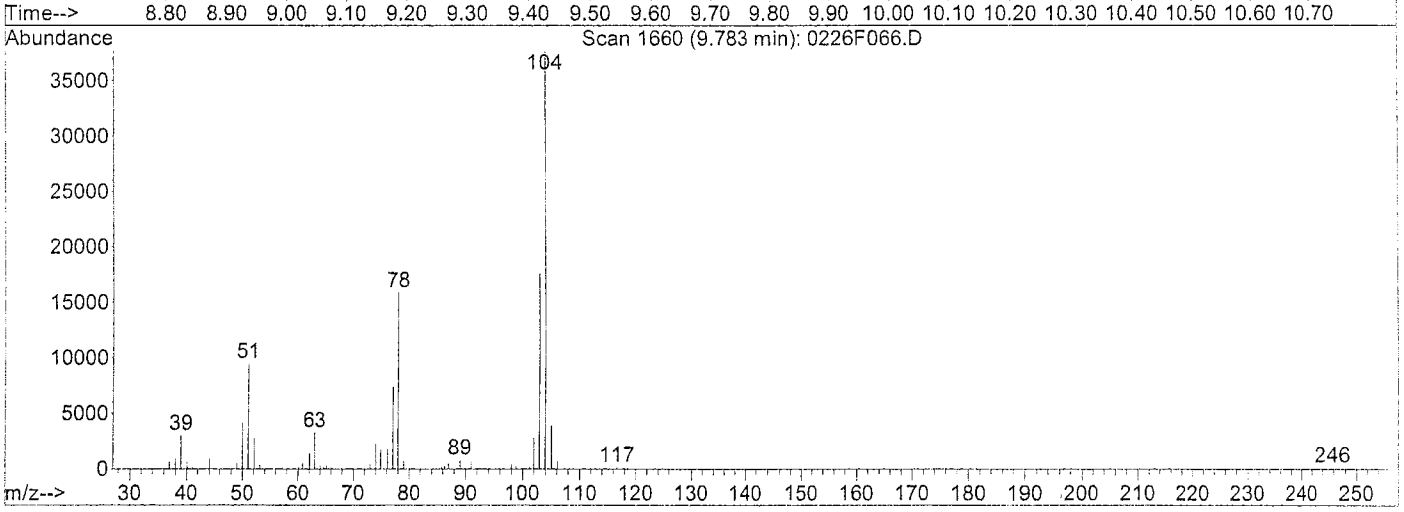
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	25822m	1.90	PPB		
77)	Bromoform	9.98	173	5718	1.89	PPB		87
78)	Isopropylbenzene	10.13	105	103479	1.94	PPB		100
79)	cis-1,4-Dichloro-2-butene	10.29	89	2572	4.65	PPB	#	75
82)	1,1,2,2-Tetrachloroethane	10.52	83	10590	2.03	PPB		87
83)	trans-1,4-Dichloro-2-buten	10.60	53	2081	1.54	PPB		68
84)	Bromobenzene	10.45	156	21998	1.91	PPB		100
85)	n-Propylbenzene	10.55	91	121574	1.83	PPB		98
86)	1,2,3-Trichloropropane	10.56	110	3337	1.97	PPB		96
87)	2-Chlorotoluene	10.65	91	71375	1.87	PPB		96
88)	1,3,5-Trimethylbenzene	10.75	105	86259	1.92	PPB		92
89)	4-Chlorotoluene	10.77	91	80240	1.86	PPB		93
90)	tert-Butylbenzene	11.06	119	77039	1.84	PPB		90
91)	1,2,4-Trimethylbenzene	11.12	105	81853	1.94	PPB		95
92)	sec-Butylbenzene	11.29	105	104295	1.88	PPB		98
93)	p-Isopropyltoluene	11.44	119	92903	1.91	PPB		98
94)	1,3-Dichlorobenzene	11.41	146	46241	1.91	PPB		94
95)	1,4-Dichlorobenzene	11.52	146	45755	1.93	PPB		98
96)	n-Butylbenzene	11.86	91	79219	1.94	PPB		97
97)	1,2-Dichlorobenzene	11.90	146	40425	2.01	PPB		98
98)	1,2-Dibromo-3-chloropropan	12.58	155	1261	1.90	PPB	#	52
99)	1,3,5-Trichlorobenzene	12.67	180	37725	1.88	PPB		97
100)	1,2,4-Trichlorobenzene	13.12	180	29607	2.12	PPB		97
101)	Hexachlorobutadiene	13.21	225	17404	1.73	PPB		93
102)	Naphthalene	13.31	128	36422	2.23	PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	24412	2.10	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:40 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F066.D

(76) Styrene (T)

9.78min 2.21PPB

response 29938

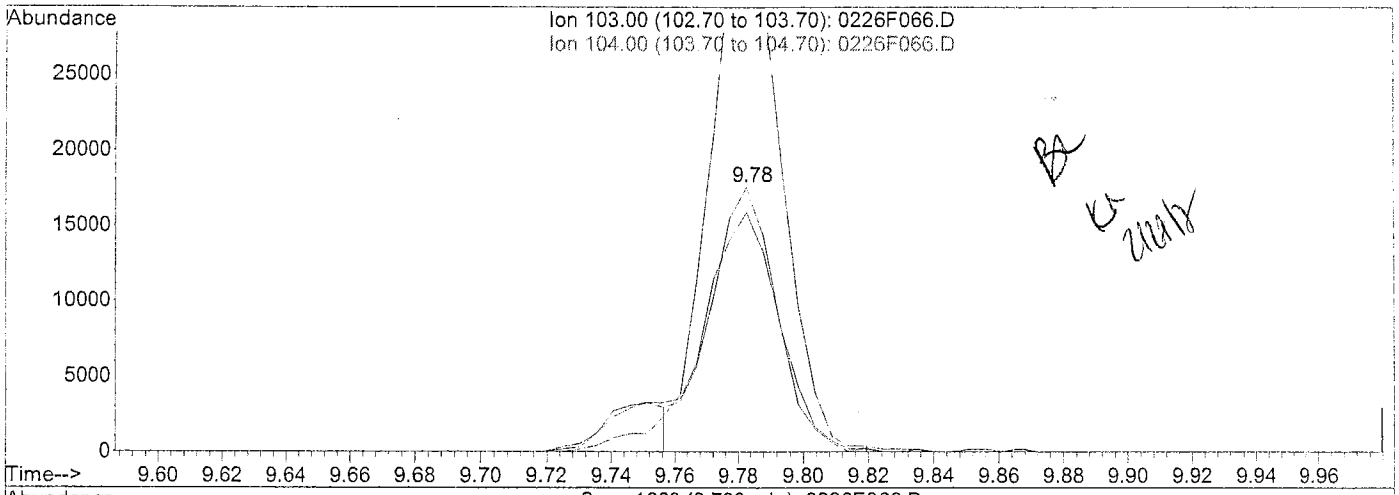
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	214.70
78.00	89.30	90.50
0.00	0.00	0.00

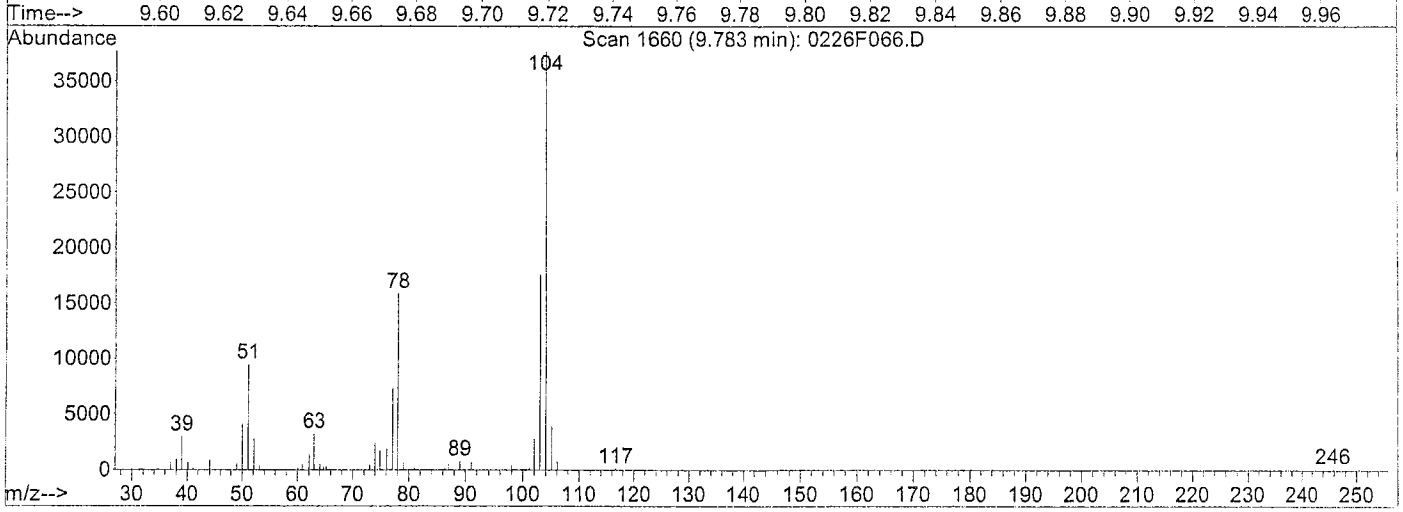
0226F066.D 022607.M Tue Feb 27 06:41:20 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F066.D

(76) Styrene (T)

9.78min 1.90PPB m

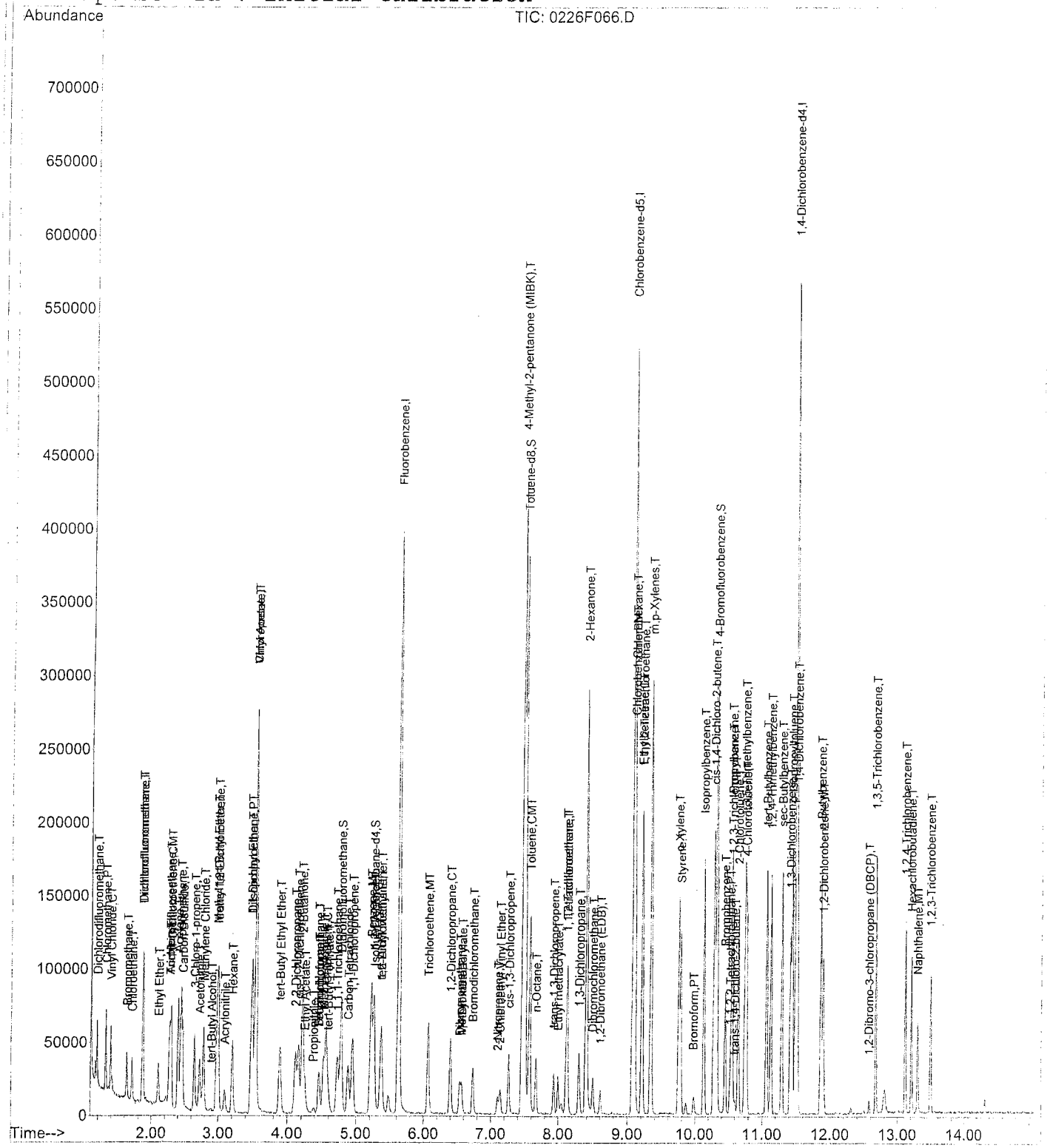
response 25822

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	214.70
78.00	89.30	90.50
0.00	0.00	0.00

0226F066.D 022607.M Tue Feb 27 06:41:26 2007

Data File : J:\MS18\DATA\022607A\0226F066.D Vial: 14
Acq On : 26 Feb 2007 8:49 pm Operator:
Sample : 8260 ICAL 2 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KT 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	398460	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	145687	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	141186	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	68519	8.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	87.70%	
44) 1,2-Dichloroethane-d4	5.26	65	67688	8.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	89.30%	
58) Toluene-d8	7.50	98	319855	8.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	84.40%	
80) 4-Bromofluorobenzene	10.32	95	103733	7.43	PPB	0.00
Spiked Amount 10.000			Recovery	=	74.30%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	60381	5.46	PPB	97
3) Chloromethane	1.32	50	69513	4.70	PPB	99
4) Vinyl Chloride	1.39	62	66034	5.28	PPB	98
5) Bromomethane	1.64	96	29211	3.61	PPB	98
6) Chloroethane	1.71	64	41374	4.91	PPB	96
7) Dichlorofluoromethane	1.87	67	100416	4.64	PPB	95
8) Trichlorofluoromethane	1.87	101	90199	4.90	PPB	98
9) Ethyl Ether	2.11	59	28350	5.26	PPB	92
10) Acrolein	2.27	56	15730	42.23	PPB	92
11) Trichlorotrifluoroethane	2.27	151	40851	4.65	PPB	94
12) 1,1-Dichloroethene	2.30	96	46986	4.75	PPB	87
13) Acetone	2.40	43	105369	102.13	PPB	97
14) Iodomethane	2.44	142	213329	17.77	PPB	97
15) Carbon Disulfide	2.47	76	152344	5.09	PPB	98
16) 3-Chloro-1-propene	2.64	76	23998	4.50	PPB #	63
17) Acetonitrile	2.72	40	52684	212.90	PPB	96
18) Methylene Chloride	2.78	84	50670	5.27	PPB	91
19) tert-Butyl Alcohol	2.88	59	5416	21.65	PPB	86
20) Acrylonitrile	3.09	53	28380	21.44	PPB	97
21) Methyl tert-Butyl Ether	2.98	73	178598	10.96	PPB	97
22) trans-1,2-Dichloroethene	3.00	96	56282	5.09	PPB	95
23) Hexane	3.20	57	57189	4.80	PPB	99
24) Diisopropyl Ether	3.48	45	166189	5.41	PPB	93
25) 1,1-Dichloroethane	3.48	63	98976	5.34	PPB	97
26) Vinyl Acetate	3.54	86	11692	11.03	PPB #	88
27) Chloroprene	3.54	53	427721	19.35	PPB	96
28) tert-Butyl Ethyl Ether	3.89	59	118361	5.42	PPB	98
29) 2,2-Dichloropropane	4.12	77	63108	4.62	PPB	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	56845	5.33	PPB		99
31)	2-Butanone	4.21	72	36741	103.14	PPB	#	80
32)	Propionitrile	4.38	54	9709	21.26	PPB		98
33)	Ethyl Acetate	4.25	61	11355	23.55	PPB		97
34)	Methacrylonitrile	4.52	67	36874	21.73	PPB		91
35)	Bromochloromethane	4.46	128	20382	5.40	PPB		89
36)	Tetrahydrofuran	4.46	71	2147	6.13	PPB	#	73
37)	Chloroform	4.56	83	93773	5.02	PPB		98
38)	tert-Butyl Formate	4.59	59	10422	5.00	PPB		86
39)	1,1,1-Trichloroethane	4.72	97	83254	5.33	PPB		95
41)	Carbon Tetrachloride	4.89	117	70450	5.03	PPB		95
42)	1,1-Dichloropropene	4.94	75	76745	5.19	PPB		97
43)	Isobutyl Alcohol	5.26	43	20452	198.27	PPB		86
45)	Benzene	5.22	78	228795	5.40	PPB		99
46)	1,2-Dichloroethane	5.35	62	52993	5.43	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	28054	5.07	PPB	#	65
48)	Trichloroethene	6.07	95	56955	5.08	PPB		92
49)	1,2-Dichloropropane	6.40	63	49049	5.57	PPB		95
50)	Dibromomethane	6.54	93	19441	5.57	PPB		89
51)	Methyl methacrylate	6.56	69	15596	5.18	PPB		95
52)	1,4-Dioxane	6.56	88	7116	219.09	PPB		98
53)	Bromodichloromethane	6.73	83	53787	5.32	PPB		94
54)	2-Nitropropane	7.10	43	25113	26.62	PPB		97
55)	2-Chloroethyl Vinyl Ether	7.14	63	16670	5.05	PPB		94
56)	cis-1,3-Dichloropropene	7.27	75	59157	5.27	PPB		92
57)	4-Methyl-2-pentanone (MIBK	7.46	58	148514	107.39	PPB		89
59)	Toluene	7.57	92	145312	5.12	PPB		98
61)	n-Octane	7.66	85	19316	4.66	PPB		81
62)	trans-1,3-Dichloropropene	7.93	75	39876	5.24	PPB		98
63)	Ethyl methacrylate	7.99	69	31284	5.29	PPB		89
64)	1,1,2-Trichloroethane	8.12	83	24441	5.57	PPB		98
65)	Tetrachloroethene	8.13	164	51694	5.30	PPB		94
66)	2-Hexanone	8.39	57	43817	107.90	PPB	#	85
67)	1,3-Dichloropropane	8.29	76	56397	5.94	PPB		98
68)	Dibromochloromethane	8.49	129	31402	5.47	PPB		97
69)	1,2-Dibromoethane (EDB)	8.60	107	26040	5.61	PPB		89
70)	1-Chlorohexane	9.10	91	74332	4.95	PPB		89
71)	Chlorobenzene	9.11	112	154591	5.60	PPB		99
72)	Ethylbenzene	9.21	106	88387	5.34	PPB		88
73)	1,1,1,2-Tetrachloroethane	9.21	131	45860	5.74	PPB		94
74)	m,p-Xylenes	9.34	106	216473	10.66	PPB		94
75)	o-Xylene	9.75	106	101783	5.52	PPB		93

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:41:51 2007 Quant Results File: 022607.RES

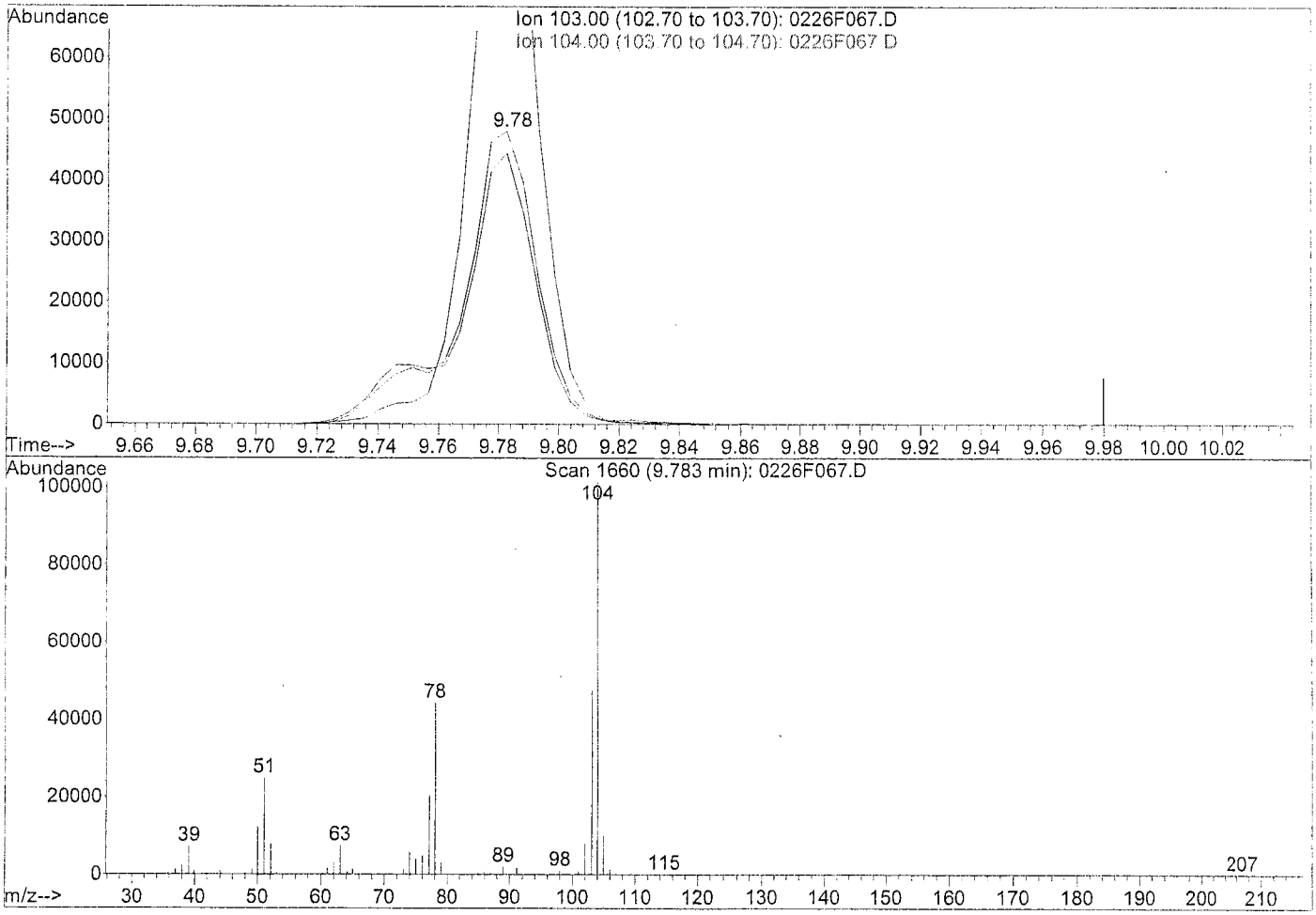
Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Styrene	9.78	103	72666m	5.54	PPB		
77)	Bromoform	9.98	173	15362	5.25	PPB		97
78)	Isopropylbenzene	10.13	105	275225	5.35	PPB		99
79)	cis-1,4-Dichloro-2-butene	10.29	89	8317	15.58	PPB		89
82)	1,1,2,2-Tetrachloroethane	10.53	83	27223	5.36	PPB		98
83)	trans-1,4-Dichloro-2-buten	10.60	53	5489	4.16	PPB	#	39
84)	Bromobenzene	10.45	156	59285	5.29	PPB		88
85)	n-Propylbenzene	10.55	91	323570	5.00	PPB		96
86)	1,2,3-Trichloropropane	10.56	110	8286	5.01	PPB		86
87)	2-Chlorotoluene	10.65	91	187663	5.05	PPB		100
88)	1,3,5-Trimethylbenzene	10.75	105	226630	5.17	PPB		100
89)	4-Chlorotoluene	10.77	91	217059	5.16	PPB		94
90)	tert-Butylbenzene	11.06	119	206764	5.07	PPB		99
91)	1,2,4-Trimethylbenzene	11.13	105	220843	5.37	PPB		95
92)	sec-Butylbenzene	11.29	105	278078	5.14	PPB		99
93)	p-Isopropyltoluene	11.44	119	251801	5.30	PPB		96
94)	1,3-Dichlorobenzene	11.41	146	119986	5.09	PPB		99
95)	1,4-Dichlorobenzene	11.52	146	119494	5.16	PPB		98
96)	n-Butylbenzene	11.86	91	217963	5.46	PPB		95
97)	1,2-Dichlorobenzene	11.90	146	104640	5.33	PPB		100
98)	1,2-Dibromo-3-chloropropan	12.57	155	3334	5.16	PPB	#	75
99)	1,3,5-Trichlorobenzene	12.67	180	97070	4.96	PPB		99
100)	1,2,4-Trichlorobenzene	13.12	180	76478	5.60	PPB		96
101)	Hexachlorobutadiene	13.21	225	47226	4.82	PPB		94
102)	Naphthalene	13.30	128	99252	6.24	PPB		98
103)	1,2,3-Trichlorobenzene	13.49	180	64471	5.68	PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F067.D Vial: 15
Acq On : 26 Feb 2007 9:08 pm Operator:
Sample : 8260 ICAL 5 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:41 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



TIC: 0226F067.D

(76) Styrene (T)

9.78min 6.45PPB

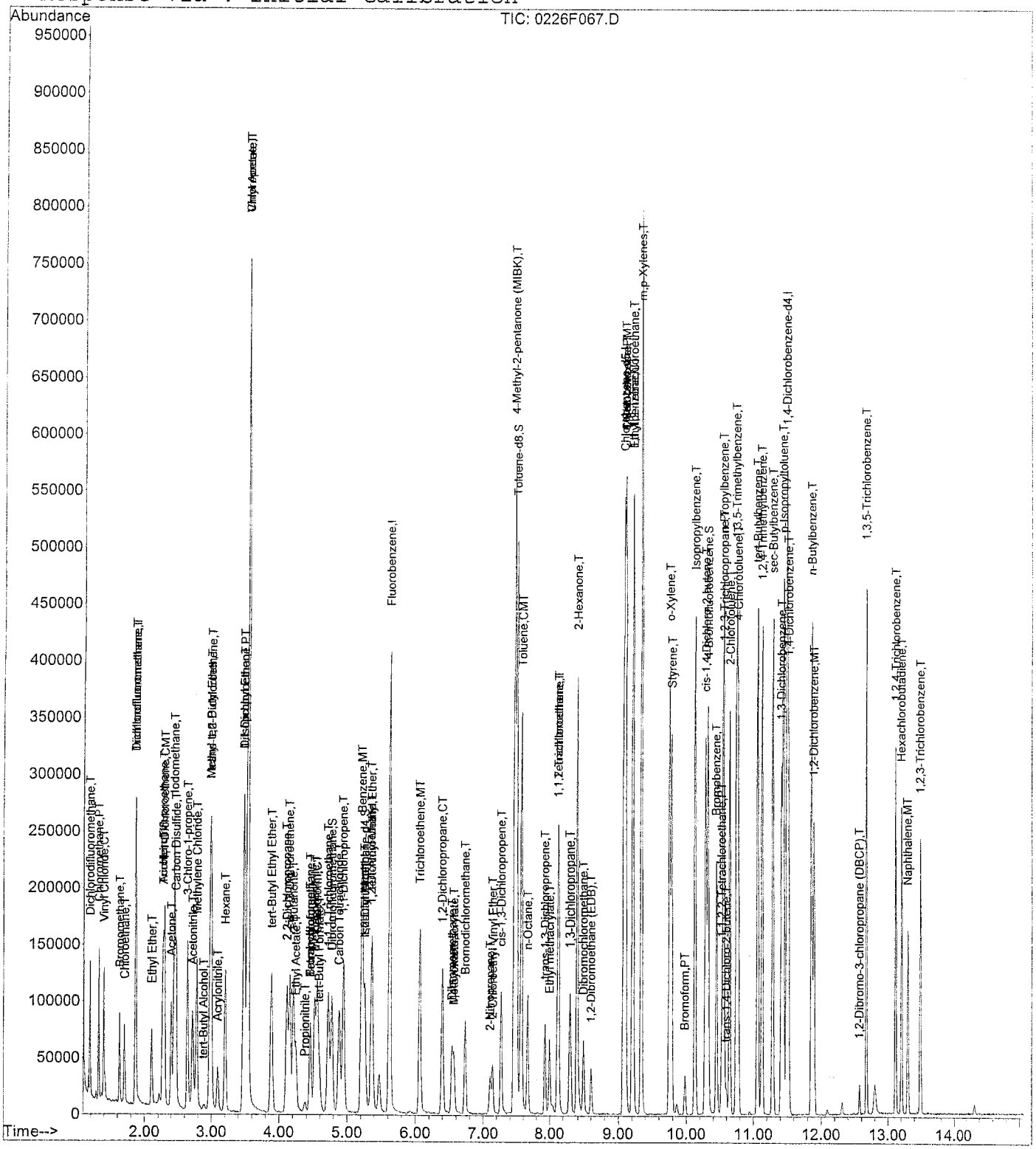
response 84560

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.67
78.00	89.30	92.47
0.00	0.00	0.00

Data File : J:\MS18\DATA\022607A\0226F067.D
Acq On : 26 Feb 2007 9:08 pm
Sample : 8260 ICAL 5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:42 2007

Vial: 15
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KT 2/27/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	403812	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	151762	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	144072	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89247	11.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	112.70%	
44) 1,2-Dichloroethane-d4	5.25	65	87121	11.35	PPB	0.00
Spiked Amount 10.000			Recovery	=	113.50%	
58) Toluene-d8	7.50	98	400788	10.44	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.40%	
80) 4-Bromofluorobenzene	10.32	95	133921	9.21	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.10%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	124571	11.11	PPB		98
3) Chloromethane	1.32	50	140240	9.36	PPB		98
4) Vinyl Chloride	1.39	62	137910	10.88	PPB		97
5) Bromomethane	1.64	96	60979	7.44	PPB		99
6) Chloroethane	1.71	64	84534	9.89	PPB		96
7) Dichlorofluoromethane	1.87	67	204448	9.31	PPB		98
8) Trichlorofluoromethane	1.87	101	184619	9.90	PPB		99
9) Ethyl Ether	2.10	59	55291	10.12	PPB		92
10) Acrolein	2.27	56	31411	83.21	PPB		97
11) Trichlorotrifluoroethane	2.27	151	85831	9.64	PPB		95
12) 1,1-Dichloroethene	2.30	96	97608	9.73	PPB		92
13) Acetone	2.40	43	205485	196.53	PPB		97
14) Iodomethane	2.44	142	467618	38.43	PPB		94
15) Carbon Disulfide	2.47	76	315439	10.40	PPB		99
16) 3-Chloro-1-propene	2.64	76	53781	9.95	PPB	#	71
17) Acetonitrile	2.72	40	106655	425.28	PPB		96
18) Methylene Chloride	2.78	84	99156	10.17	PPB		91
19) tert-Butyl Alcohol	2.88	59	11122	43.86	PPB		89
20) Acrylonitrile	3.09	53	56504	42.13	PPB		97
21) Methyl tert-Butyl Ether	2.98	73	358987	21.74	PPB		99
22) trans-1,2-Dichloroethene	3.00	96	115625	10.31	PPB		99
23) Hexane	3.20	57	113550	9.40	PPB		96
24) Diisopropyl Ether	3.48	45	336039	10.80	PPB		94
25) 1,1-Dichloroethane	3.48	63	209736	11.18	PPB		97
26) Vinyl Acetate	3.54	86	21789	20.28	PPB		97
27) Chloroprene	3.54	53	898643	40.12	PPB		95
28) tert-Butyl Ethyl Ether	3.89	59	240064	10.84	PPB		99
29) 2,2-Dichloropropane	4.12	77	137711	9.95	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	114712	10.60	PPB		95
31)	2-Butanone	4.21	72	71146	197.07	PPB	#	67
32)	Propionitrile	4.38	54	19596	42.34	PPB		94
33)	Ethyl Acetate	4.25	61	18216	37.28	PPB		99
34)	Methacrylonitrile	4.52	67	70776	41.16	PPB		92
35)	Bromochloromethane	4.46	128	42742	11.17	PPB		93
36)	Tetrahydrofuran	4.46	71	3458	9.74	PPB		93
37)	Chloroform	4.56	83	190349	10.05	PPB		95
38)	tert-Butyl Formate	4.59	59	23013	10.90	PPB		82
39)	1,1,1-Trichloroethane	4.72	97	176036	11.13	PPB		99
41)	Carbon Tetrachloride	4.89	117	156172	11.01	PPB		96
42)	1,1-Dichloropropene	4.95	75	163742	10.92	PPB		99
43)	Isobutyl Alcohol	5.26	43	41145	393.60	PPB		97
45)	Benzene	5.22	78	474612	11.05	PPB		98
46)	1,2-Dichloroethane	5.36	62	108267	10.95	PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	55333	9.87	PPB	#	53
48)	Trichloroethene	6.07	95	120226	10.57	PPB		97
49)	1,2-Dichloropropane	6.40	63	100503	11.26	PPB		96
50)	Dibromomethane	6.53	93	40829	11.54	PPB		92
51)	Methyl methacrylate	6.56	69	30518	10.01	PPB		94
52)	1,4-Dioxane	6.55	88	14576	442.82	PPB		99
53)	Bromodichloromethane	6.73	83	113038	11.04	PPB		98
54)	2-Nitropropane	7.10	43	52977	55.41	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	34585	10.35	PPB		97
56)	cis-1,3-Dichloropropene	7.27	75	127486	11.21	PPB		95
57)	4-Methyl-2-pentanone (MIBK	7.46	58	288359	205.74	PPB		94
59)	Toluene	7.57	92	298609	10.38	PPB		96
61)	n-Octane	7.66	85	40171	9.30	PPB		96
62)	trans-1,3-Dichloropropene	7.93	75	88093	11.10	PPB		95
63)	Ethyl methacrylate	7.99	69	63914	10.38	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	48667	10.65	PPB		97
65)	Tetrachloroethene	8.13	164	104117	10.25	PPB		90
66)	2-Hexanone	8.39	57	89907	212.53	PPB	#	84
67)	1,3-Dichloropropane	8.29	76	109377	11.07	PPB		99
68)	Dibromochloromethane	8.49	129	66110	11.05	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	52860	10.93	PPB		96
70)	1-Chlorohexane	9.10	91	157908	10.09	PPB		89
71)	Chlorobenzene	9.11	112	306994	10.67	PPB		97
72)	Ethylbenzene	9.21	106	184254	10.69	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	95270	11.45	PPB		97
74)	m,p-Xylenes	9.34	106	447160	21.14	PPB		93
75)	o-Xylene	9.75	106	210813	10.98	PPB		96

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:26:25 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

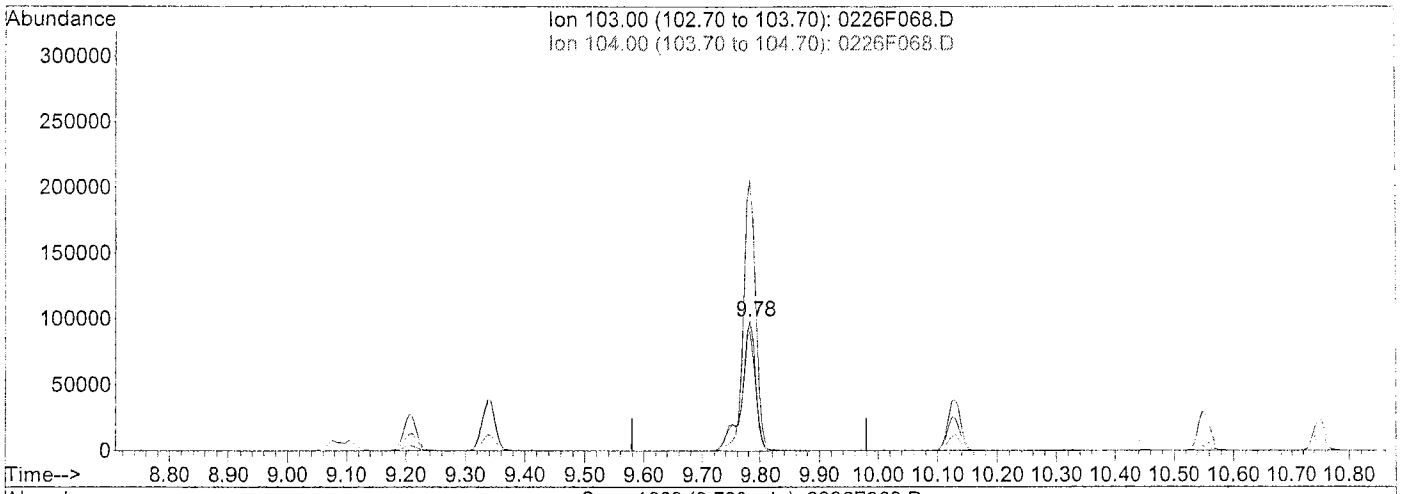
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
76)	Styrene	9.78	103	144112m	10.55 PPB		
77)	Bromoform	9.98	173	31459	10.32 PPB		96
78)	Isopropylbenzene	10.13	105	577931	10.79 PPB		98
79)	cis-1,4-Dichloro-2-butene	10.29	89	19460	35.00 PPB		90
82)	1,1,2,2-Tetrachloroethane	10.53	83	52286	10.09 PPB		93
83)	trans-1,4-Dichloro-2-buten	10.60	53	11625	8.63 PPB	#	55
84)	Bromobenzene	10.45	156	119850	10.47 PPB		99
85)	n-Propylbenzene	10.55	91	662757	10.04 PPB		99
86)	1,2,3-Trichloropropane	10.57	110	17336	10.27 PPB		97
87)	2-Chlorotoluene	10.65	91	379164	10.00 PPB		98
88)	1,3,5-Trimethylbenzene	10.75	105	468351	10.47 PPB		97
89)	4-Chlorotoluene	10.77	91	430835	10.04 PPB		98
90)	tert-Butylbenzene	11.06	119	422202	10.15 PPB		96
91)	1,2,4-Trimethylbenzene	11.13	105	459299	10.94 PPB		99
92)	sec-Butylbenzene	11.29	105	579322	10.49 PPB		99
93)	p-Isopropyltoluene	11.44	119	524015	10.81 PPB		100
94)	1,3-Dichlorobenzene	11.42	146	243972	10.13 PPB		96
95)	1,4-Dichlorobenzene	11.52	146	239462	10.14 PPB		98
96)	n-Butylbenzene	11.86	91	444455	10.92 PPB		98
97)	1,2-Dichlorobenzene	11.89	146	209640	10.47 PPB		97
98)	1,2-Dibromo-3-chloropropan	12.57	155	6502	9.86 PPB		85
99)	1,3,5-Trichlorobenzene	12.67	180	197683	9.89 PPB		95
100)	1,2,4-Trichlorobenzene	13.12	180	153394	11.02 PPB		99
101)	Hexachlorobutadiene	13.21	225	90689	9.08 PPB		98
102)	Naphthalene	13.30	128	208325	12.83 PPB		99
103)	1,2,3-Trichlorobenzene	13.49	180	128067	11.05 PPB		98

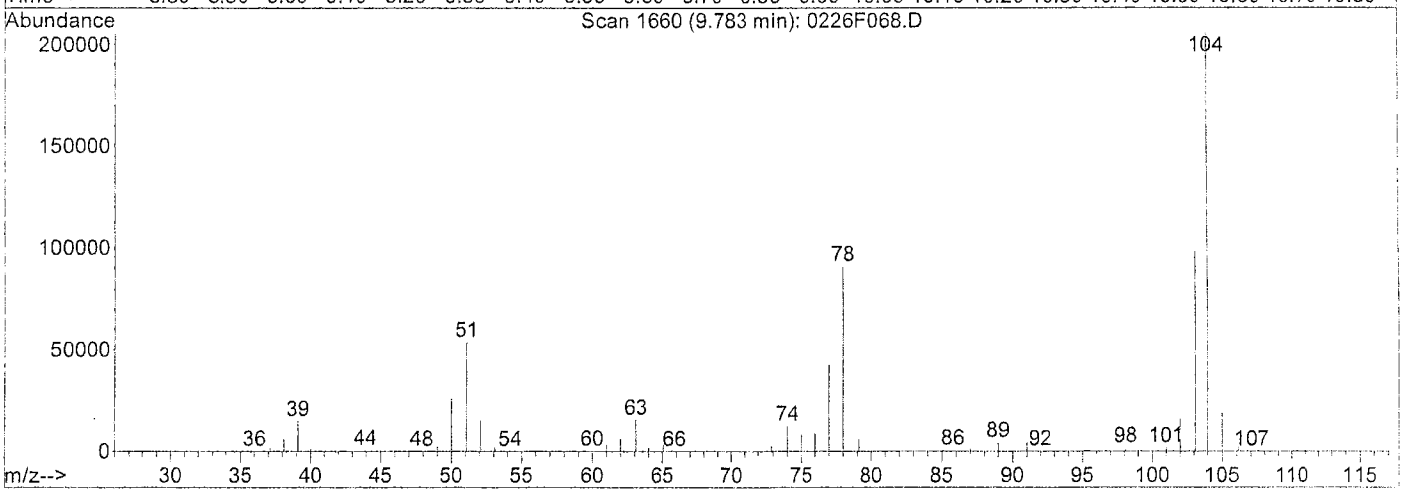
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:26 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F068.D

(76) Styrene (T)

9.78min 12.83PPB

response 175178

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

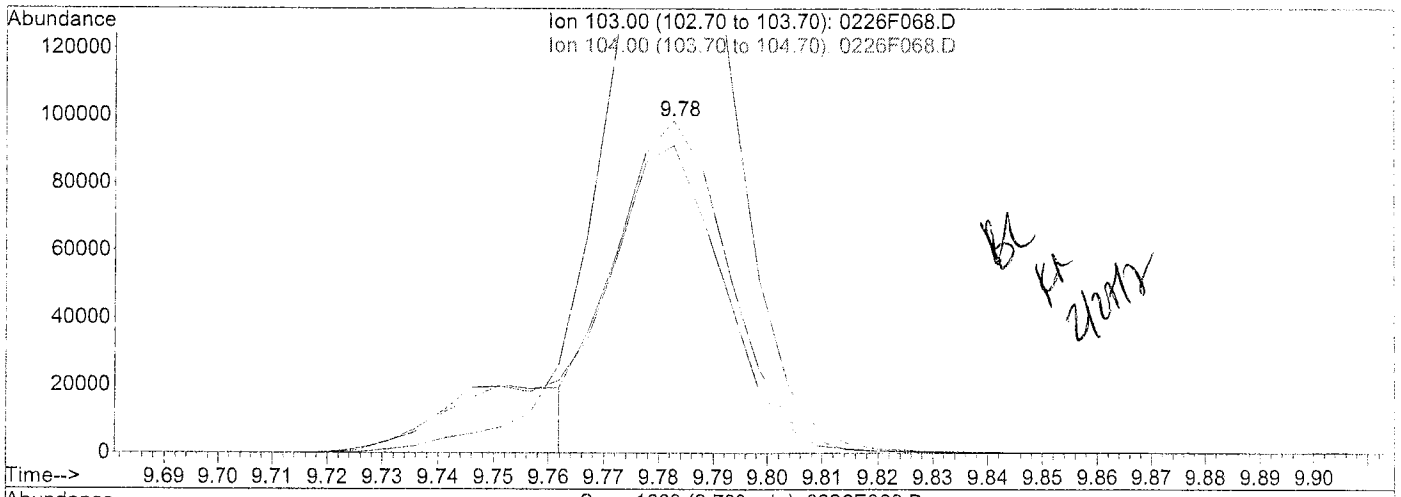
0226F068.D 022607.M Tue Feb 27 06:27:11 2007

Quantitation Report (Qedit)

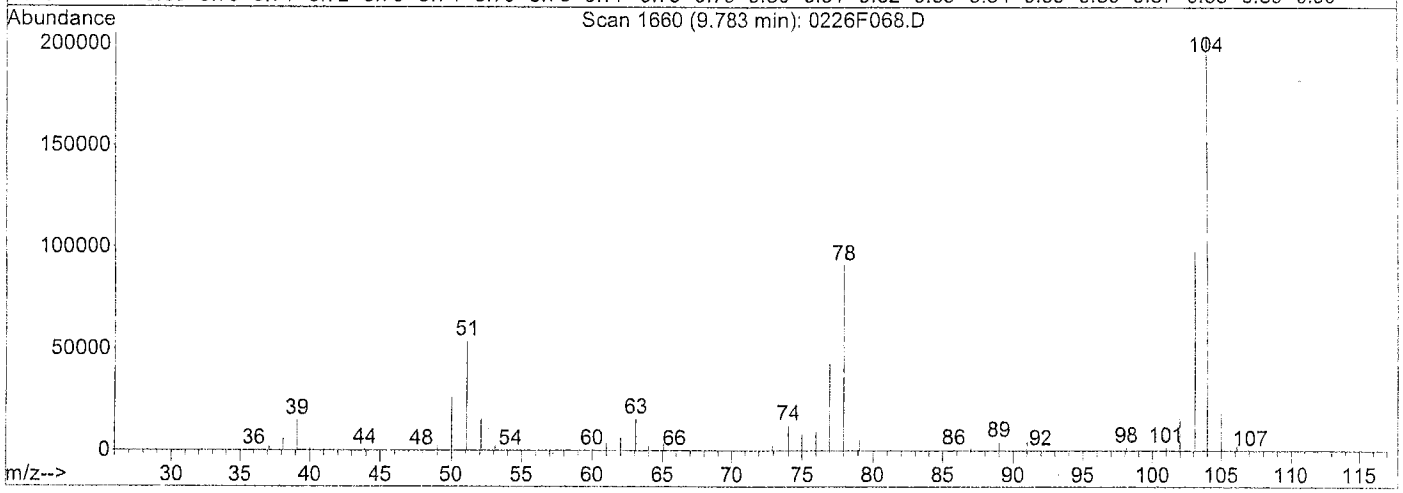
Data File : J:\MS18\DATA\022607A\0226F068.D
Acq On : 26 Feb 2007 9:28 pm
Sample : 8260 ICAL 10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007

Vial: 16
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration



BL KA 2/28/07



TIC: 0226F068.D

(76) Styrene (T)

9.78min 10.55PPB m

response 144112

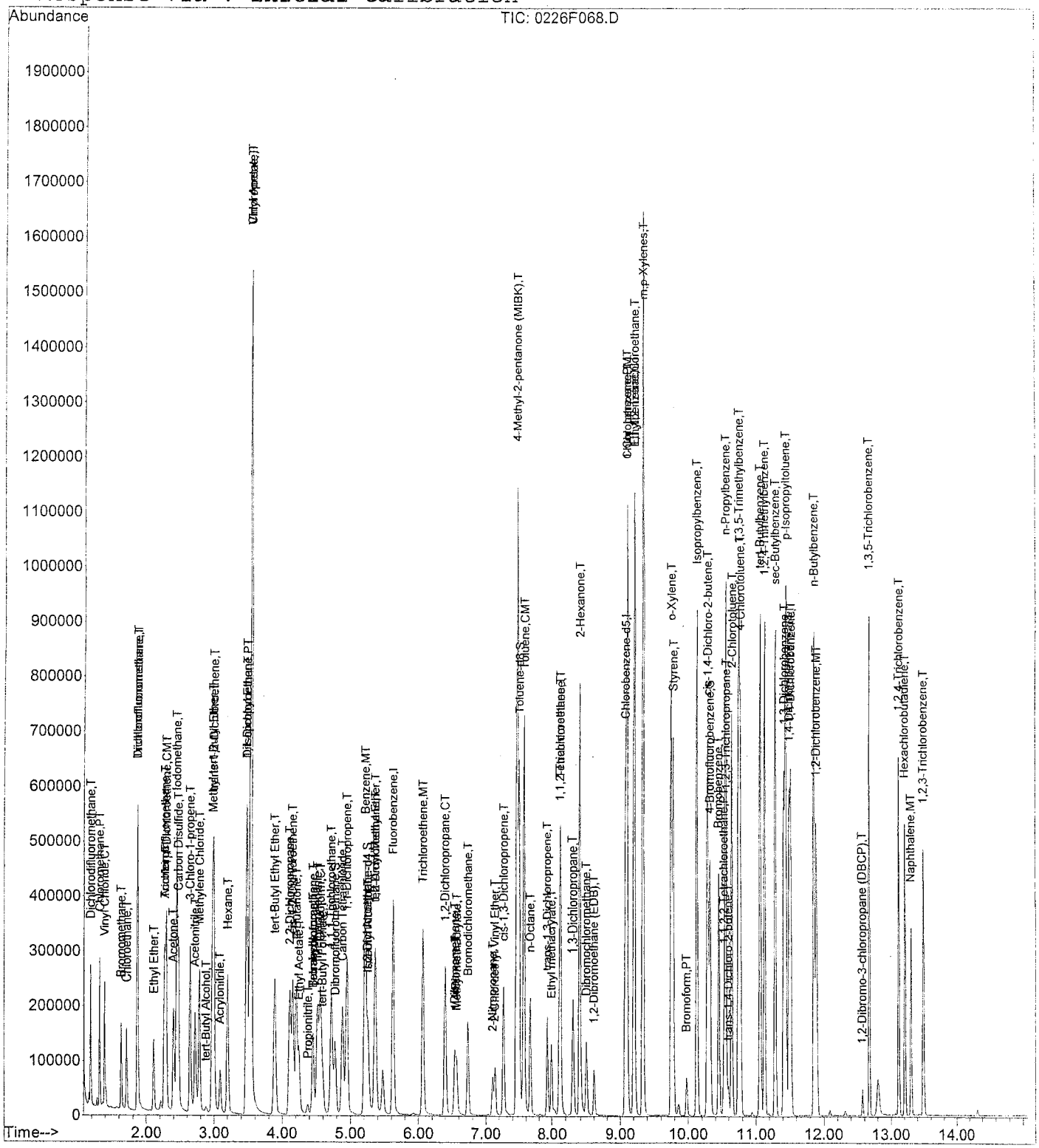
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	208.87
78.00	89.30	92.50
0.00	0.00	0.00

2/27/7

0226F068.D 022607.M Tue Feb 27 06:27:19 2007

Data File : J:\MS18\DATA\022607A\0226F068.D Vial: 16
Acq On : 26 Feb 2007 9:28 pm Operator:
Sample : 8260 ICAL 10 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:27 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KL 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	404000	10.00	PPB	0.00
60) Chlorobenzene-d5	9.08	82	152766	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	146402	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	188379	23.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	237.70%	
44) 1,2-Dichloroethane-d4	5.25	65	179179	23.32	PPB	0.00
Spiked Amount 10.000			Recovery	=	233.20%	
58) Toluene-d8	7.50	98	841502	21.90	PPB	0.00
Spiked Amount 10.000			Recovery	=	219.00%	
80) 4-Bromofluorobenzene	10.32	95	284208	19.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	194.20%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	251781	22.44	PPB		98
3) Chloromethane	1.32	50	288850	19.26	PPB		99
4) Vinyl Chloride	1.39	62	273300	21.56	PPB		99
5) Bromomethane	1.64	96	130110	15.88	PPB		100
6) Chloroethane	1.71	64	169615	19.83	PPB		96
7) Dichlorofluoromethane	1.87	67	413532	18.83	PPB		100
8) Trichlorofluoromethane	1.87	101	380748	20.42	PPB		99
9) Ethyl Ether	2.11	59	117224	21.45	PPB		94
10) Acrolein	2.27	56	73144	193.67	PPB		99
11) Trichlorotrifluoroethane	2.27	151	175629	19.71	PPB		98
12) 1,1-Dichloroethene	2.30	96	197800	19.72	PPB		86
13) Acetone	2.40	43	438861	419.54	PPB		97
14) Iodomethane	2.44	142	970573	79.73	PPB		97
15) Carbon Disulfide	2.47	76	643649	21.21	PPB		98
16) 3-Chloro-1-propene	2.64	76	110470	20.43	PPB	#	67
17) Acetonitrile	2.72	40	221617	883.27	PPB		97
18) Methylene Chloride	2.78	84	198973	20.39	PPB		93
19) tert-Butyl Alcohol	2.88	59	22854	90.09	PPB		98
20) Acrylonitrile	3.09	53	119423	89.00	PPB		96
21) Methyl tert-Butyl Ether	2.98	73	745870	45.15	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	235441	20.98	PPB		99
23) Hexane	3.20	57	230837	19.10	PPB		99
24) Diisopropyl Ether	3.48	45	678998	21.81	PPB		95
25) 1,1-Dichloroethane	3.48	63	424269	22.60	PPB		100
26) Vinyl Acetate	3.54	86	49076	45.67	PPB	#	86
27) Chloroprene	3.54	53	1843352	82.26	PPB		96
28) tert-Butyl Ethyl Ether	3.89	59	494037	22.30	PPB		98
29) 2,2-Dichloropropane	4.12	77	300852	21.72	PPB		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	239408	22.12	PPB		95
31)	2-Butanone	4.21	72	160136	443.36	PPB		90
32)	Propionitrile	4.38	54	41737	90.13	PPB		97
33)	Ethyl Acetate	4.25	61	39809	81.44	PPB		97
34)	Methacrylonitrile	4.52	67	151813	88.25	PPB		96
35)	Bromochloromethane	4.46	128	89077	23.26	PPB		92
36)	Tetrahydrofuran	4.45	71	7772	21.89	PPB	#	80
37)	Chloroform	4.56	83	395072	20.84	PPB		99
38)	tert-Butyl Formate	4.59	59	53775	25.46	PPB		96
39)	1,1,1-Trichloroethane	4.72	97	369336	23.34	PPB		99
41)	Carbon Tetrachloride	4.88	117	327305	23.06	PPB		99
42)	1,1-Dichloropropene	4.95	75	336645	22.45	PPB		100
43)	Isobutyl Alcohol	5.25	43	91945	879.15	PPB		94
45)	Benzene	5.22	78	958304	22.30	PPB		98
46)	1,2-Dichloroethane	5.36	62	225340	22.77	PPB		97
47)	tert-Amyl Methyl Ether	5.37	55	107401	19.15	PPB	#	66
48)	Trichloroethene	6.07	95	240905	21.18	PPB		96
49)	1,2-Dichloropropane	6.40	63	208455	23.33	PPB		98
50)	Dibromomethane	6.53	93	83298	23.53	PPB		95
51)	Methyl methacrylate	6.56	69	65492	21.47	PPB		94
52)	1,4-Dioxane	6.55	88	29639	900.01	PPB		97
53)	Bromodichloromethane	6.73	83	238884	23.32	PPB		99
54)	2-Nitropropane	7.10	43	122870	128.44	PPB		98
55)	2-Chloroethyl Vinyl Ether	7.14	63	74844	22.38	PPB		92
56)	cis-1,3-Dichloropropene	7.27	75	277916	24.43	PPB		97
57)	4-Methyl-2-pentanone (MIBK	7.46	58	630278	449.49	PPB		93
59)	Toluene	7.57	92	613345	21.31	PPB		96
61)	n-Octane	7.66	85	77478	17.81	PPB		95
62)	trans-1,3-Dichloropropene	7.93	75	199775	25.02	PPB		98
63)	Ethyl methacrylate	7.99	69	140803	22.71	PPB		91
64)	1,1,2-Trichloroethane	8.12	83	102351	22.25	PPB		96
65)	Tetrachloroethene	8.13	164	214152	20.94	PPB		96
66)	2-Hexanone	8.39	57	195901	460.05	PPB		92
67)	1,3-Dichloropropane	8.29	76	229985	23.11	PPB		98
68)	Dibromochloromethane	8.49	129	145562	24.18	PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	115379	23.70	PPB		99
70)	1-Chlorohexane	9.10	91	323339	20.53	PPB		89
71)	Chlorobenzene	9.11	112	632153	21.83	PPB		98
72)	Ethylbenzene	9.21	106	376732	21.71	PPB		93
73)	1,1,1,2-Tetrachloroethane	9.22	131	201867	24.11	PPB		98
74)	m,p-Xylenes	9.34	106	922761	43.33	PPB		94
75)	o-Xylene	9.75	106	434500	22.49	PPB		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:44:08 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

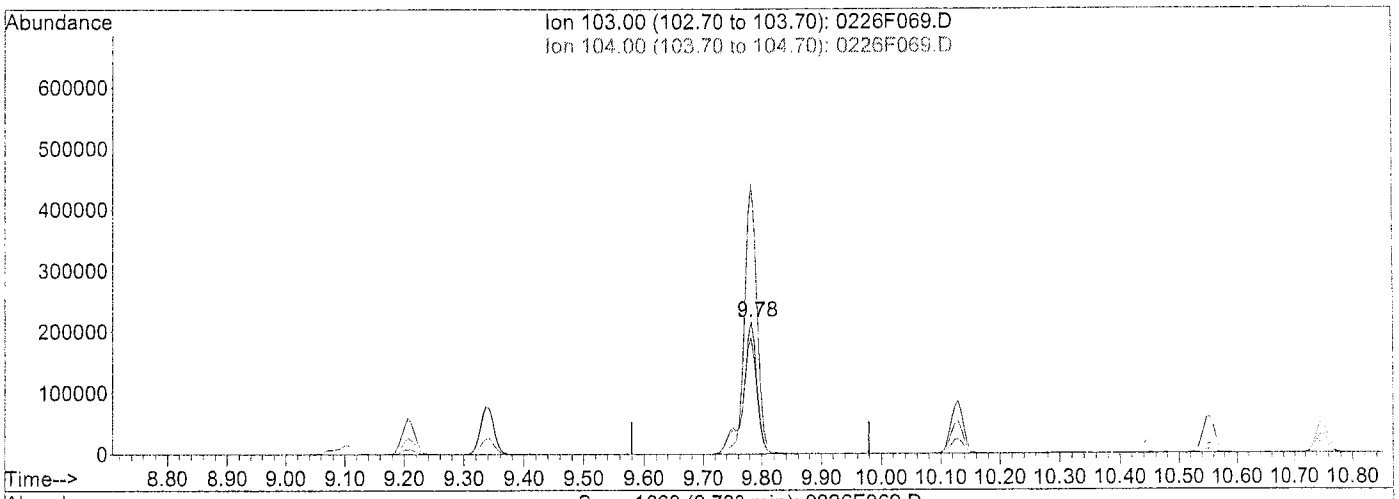
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	319396m	23.23	PPB	
77)	Bromoform	9.98	173	73841	24.07	PPB	99
78)	Isopropylbenzene	10.13	105	1180375	21.89	PPB	98
79)	cis-1,4-Dichloro-2-butene	10.29	89	48129	86.00	PPB	97
82)	1,1,2,2-Tetrachloroethane	10.53	83	114731	21.78	PPB	99
83)	trans-1,4-Dichloro-2-buten	10.60	53	25259	18.46	PPB	78
84)	Bromobenzene	10.45	156	248622	21.38	PPB	93
85)	n-Propylbenzene	10.55	91	1399366	20.87	PPB	99
86)	1,2,3-Trichloropropane	10.56	110	35736	20.84	PPB	91
87)	2-Chlorotoluene	10.65	91	789652	20.49	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	980089	21.57	PPB	99
89)	4-Chlorotoluene	10.77	91	901906	20.68	PPB	97
90)	tert-Butylbenzene	11.06	119	882711	20.89	PPB	95
91)	1,2,4-Trimethylbenzene	11.13	105	961827	22.54	PPB	97
92)	sec-Butylbenzene	11.29	105	1200545	21.39	PPB	99
93)	p-Isopropyltoluene	11.44	119	1104810	22.43	PPB	99
94)	1,3-Dichlorobenzene	11.41	146	513687	21.00	PPB	97
95)	1,4-Dichlorobenzene	11.52	146	497315	20.73	PPB	100
96)	n-Butylbenzene	11.86	91	942987	22.80	PPB	99
97)	1,2-Dichlorobenzene	11.90	146	434951	21.38	PPB	98
98)	1,2-Dibromo-3-chloropropan	12.57	155	15260	22.78	PPB	93
99)	1,3,5-Trichlorobenzene	12.67	180	406644	20.02	PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	320907	22.68	PPB	99
101)	Hexachlorobutadiene	13.21	225	190357	18.75	PPB	98
102)	Naphthalene	13.30	128	437530	26.52	PPB	99
103)	1,2,3-Trichlorobenzene	13.49	180	269904	22.92	PPB	98

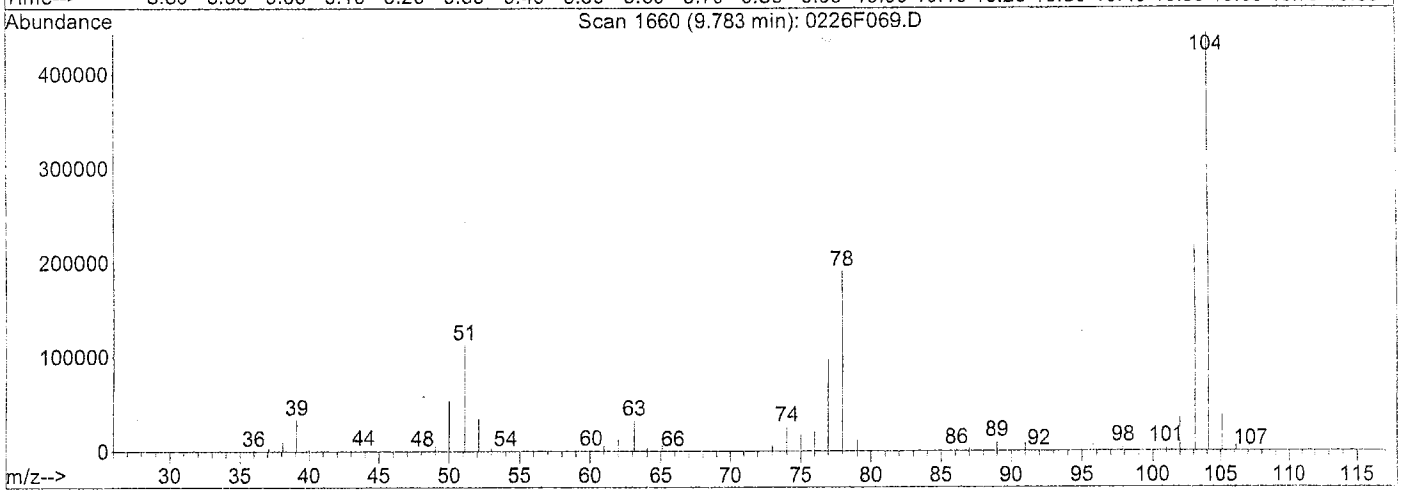
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 26.87PPB

response 369439

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

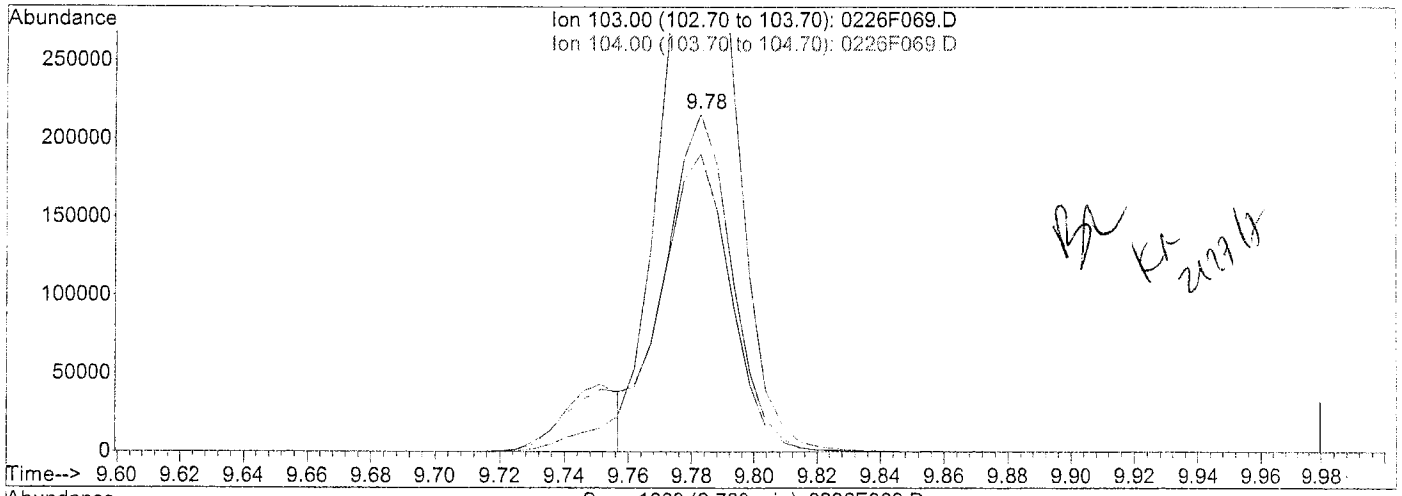
0226F069.D 022607.M Tue Feb 27 06:44:42 2007

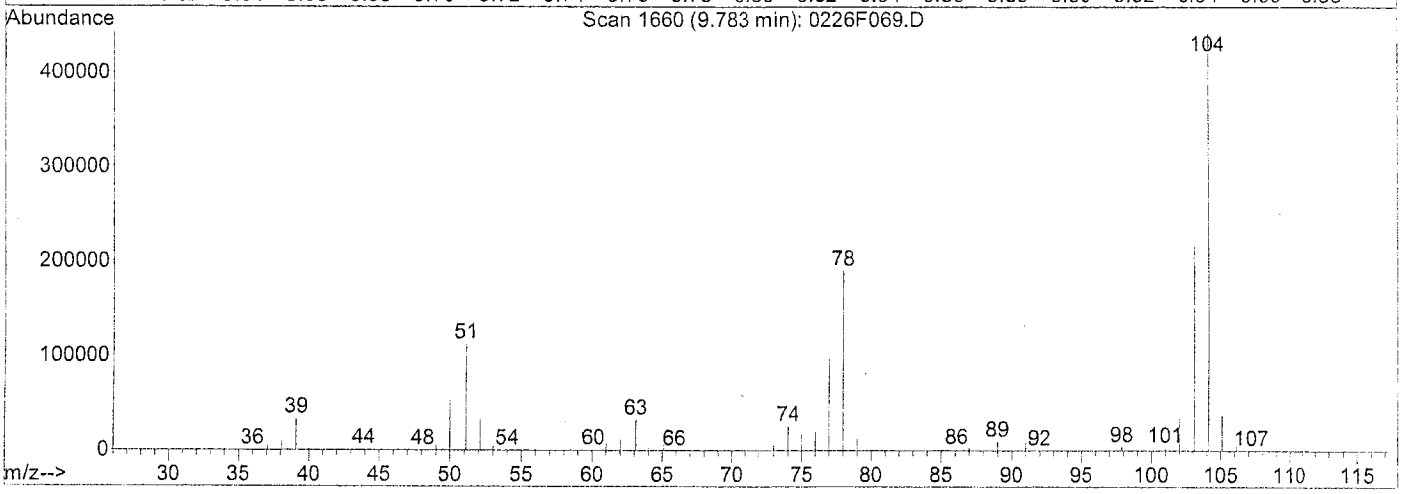
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F069.D
Acq On : 26 Feb 2007 9:47 pm
Sample : 8260 ICAL 20
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007

Vial: 17
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F069.D

(76) Styrene (T)

9.78min 23.23PPB m

response 319396

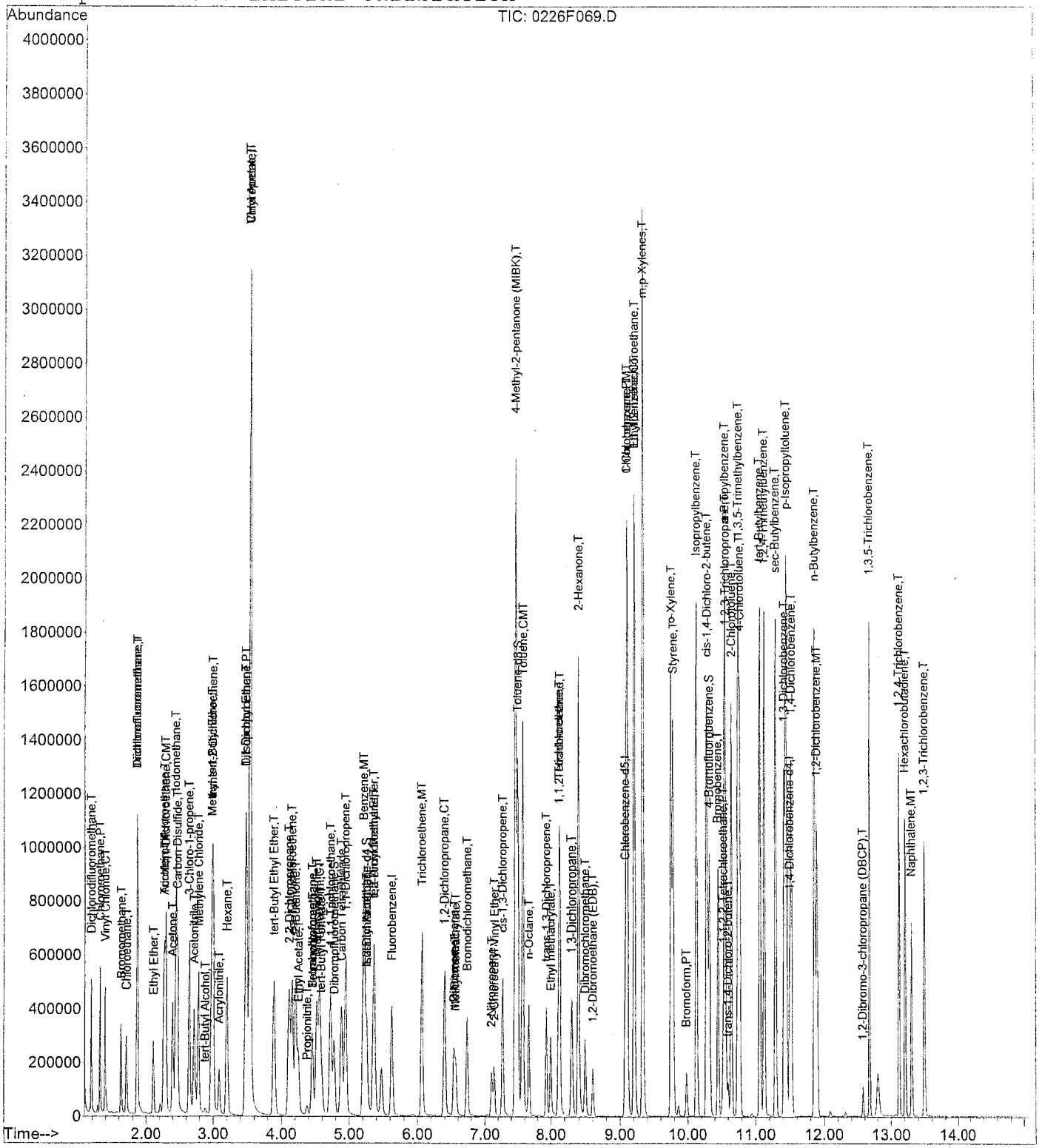
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	205.24
78.00	89.30	88.01
0.00	0.00	0.00

2/27/07

0226F069.D 022607.M Tue Feb 27 06:44:48 2007

Data File : J:\MS18\DATA\022607A\0226F069.D Vial: 17
Acq On : 26 Feb 2007 9:47 pm Operator:
Sample : 8260 ICAL 20 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:44 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KF 2/27/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	408340	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	154956	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	149638	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	383411	47.87	PPB	0.00
Spiked Amount 10.000			Recovery	=	478.70%	
44) 1,2-Dichloroethane-d4	5.25	65	359350	46.28	PPB	0.00
Spiked Amount 10.000			Recovery	=	462.80%	
58) Toluene-d8	7.50	98	1735727	44.70	PPB	0.00
Spiked Amount 10.000			Recovery	=	447.00%	
80) 4-Bromofluorobenzene	10.32	95	576553	38.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	388.40%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	494660	43.62	PPB		97
3) Chloromethane	1.32	50	583158	38.47	PPB		99
4) Vinyl Chloride	1.39	62	547371	42.72	PPB		100
5) Bromomethane	1.63	96	261612	31.59	PPB		99
6) Chloroethane	1.71	64	343613	39.75	PPB		97
7) Dichlorofluoromethane	1.87	67	834811	37.61	PPB		98
8) Trichlorofluoromethane	1.87	101	760627	40.35	PPB		99
9) Ethyl Ether	2.10	59	222343	40.26	PPB		91
10) Acrolein	2.26	56	168883	442.41	PPB		98
11) Trichlorotrifluoroethane	2.27	151	355258	39.45	PPB		98
12) 1,1-Dichloroethene	2.30	96	404508	39.90	PPB		86
13) Acetone	2.40	43	839861	794.36	PPB		98
14) Iodomethane	2.44	142	2090150	169.87	PPB		98
15) Carbon Disulfide	2.47	76	1298763	42.34	PPB		98
16) 3-Chloro-1-propene	2.64	76	245272	44.87	PPB	#	67
17) Acetonitrile	2.72	40	430769	1698.62	PPB		99
18) Methylene Chloride	2.78	84	395964	40.15	PPB		96
19) tert-Butyl Alcohol	2.88	59	45520	177.54	PPB		97
20) Acrylonitrile	3.09	53	229934	169.54	PPB		98
21) Methyl tert-Butyl Ether	2.98	73	1451099	86.91	PPB		100
22) trans-1,2-Dichloroethene	3.00	96	473012	41.71	PPB		99
23) Hexane	3.20	57	462591	37.87	PPB		96
24) Diisopropyl Ether	3.48	45	1354656	43.06	PPB		95
25) 1,1-Dichloroethane	3.48	63	840085	44.27	PPB		99
26) Vinyl Acetate	3.53	86	96291	88.65	PPB		99
27) Chloroprene	3.53	53	3687501	162.81	PPB		95
28) tert-Butyl Ethyl Ether	3.89	59	967085	43.18	PPB		99
29) 2,2-Dichloropropane	4.12	77	633257	45.23	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	472231	43.17	PPB		95
31)	2-Butanone	4.20	72	316468	866.88	PPB	#	78
32)	Propionitrile	4.37	54	79415	169.67	PPB		97
33)	Ethyl Acetate	4.25	61	80083	162.09	PPB		98
34)	Methacrylonitrile	4.52	67	293112	168.58	PPB		90
35)	Bromochloromethane	4.46	128	174712	45.13	PPB		92
36)	Tetrahydrofuran	4.45	71	14144	39.41	PPB	#	77
37)	Chloroform	4.56	83	784363	40.94	PPB		96
38)	tert-Butyl Formate	4.59	59	110313	51.67	PPB		90
39)	1,1,1-Trichloroethane	4.72	97	741046	46.32	PPB		98
41)	Carbon Tetrachloride	4.89	117	677066	47.19	PPB		99
42)	1,1-Dichloropropene	4.95	75	666225	43.95	PPB		98
43)	Isobutyl Alcohol	5.25	43	190308	1800.32	PPB		97
45)	Benzene	5.22	78	1904128	43.84	PPB		98
46)	1,2-Dichloroethane	5.36	62	444170	44.41	PPB		97
47)	tert-Amyl Methyl Ether	5.36	55	206493	36.42	PPB	#	72
48)	Trichloroethene	6.07	95	483438	42.05	PPB		96
49)	1,2-Dichloropropane	6.40	63	417005	46.18	PPB		96
50)	Dibromomethane	6.53	93	164695	46.03	PPB		96
51)	Methyl methacrylate	6.56	69	131319	42.60	PPB		94
52)	1,4-Dioxane	6.55	88	57475	1726.72	PPB		90
53)	Bromodichloromethane	6.73	83	489803	47.31	PPB		100
54)	2-Nitropropane	7.10	43	253942	262.64	PPB		99
55)	2-Chloroethyl Vinyl Ether	7.14	63	149151	44.13	PPB		95
56)	cis-1,3-Dichloropropene	7.27	75	575560	50.06	PPB		98
57)	4-Methyl-2-pentanone (MIBK	7.46	58	1210959	854.43	PPB		92
59)	Toluene	7.57	92	1217873	41.87	PPB		94
61)	n-Octane	7.66	85	155800	35.32	PPB		91
62)	trans-1,3-Dichloropropene	7.93	75	423202	52.24	PPB		97
63)	Ethyl methacrylate	7.99	69	275946	43.88	PPB		93
64)	1,1,2-Trichloroethane	8.12	83	200133	42.89	PPB		97
65)	Tetrachloroethene	8.13	164	428462	41.29	PPB		92
66)	2-Hexanone	8.39	57	374270	866.50	PPB	#	85
67)	1,3-Dichloropropane	8.29	76	443110	43.90	PPB		98
68)	Dibromochloromethane	8.49	129	298550	48.89	PPB		98
69)	1,2-Dibromoethane (EDB)	8.60	107	223907	45.34	PPB		94
70)	1-Chlorohexane	9.10	91	661499	41.40	PPB		87
71)	Chlorobenzene	9.11	112	1263933	43.02	PPB		97
72)	Ethylbenzene	9.21	106	763789	43.38	PPB		94
73)	1,1,1,2-Tetrachloroethane	9.22	131	414717	48.83	PPB		97
74)	m,p-Xylenes	9.34	106	1877827	86.94	PPB		97
75)	o-Xylene	9.75	106	871078	44.44	PPB		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:45:10 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

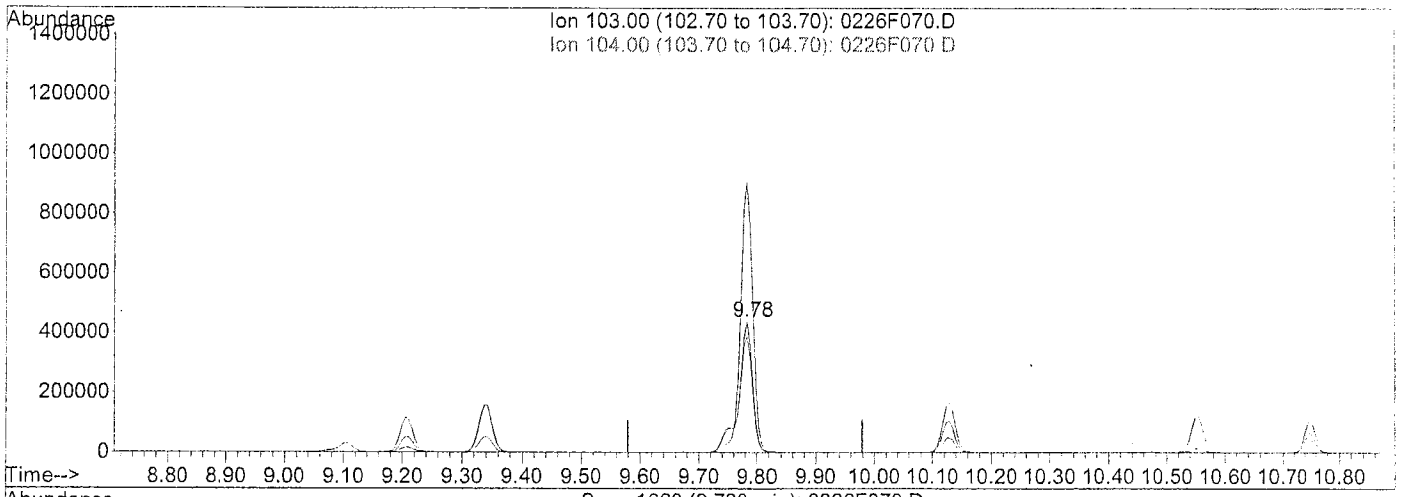
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	617063m	44.25	PPB	
77)	Bromoform	9.98	173	153674	49.38	PPB	99
78)	Isopropylbenzene	10.13	105	2400165	43.89	PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	109155	192.29	PPB	100
82)	1,1,2,2-Tetrachloroethane	10.53	83	217182	40.34	PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	51947	37.14	PPB	76
84)	Bromobenzene	10.45	156	505063	42.49	PPB	95
85)	n-Propylbenzene	10.55	91	2821346	41.16	PPB	99
86)	1,2,3-Trichloropropane	10.57	110	69664	39.74	PPB	96
87)	2-Chlorotoluene	10.65	91	1577210	40.04	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	1982759	42.69	PPB	98
89)	4-Chlorotoluene	10.77	91	1819917	40.82	PPB	97
90)	tert-Butylbenzene	11.06	119	1794894	41.56	PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	1940125	44.49	PPB	99
92)	sec-Butylbenzene	11.29	105	2439847	42.53	PPB	98
93)	p-Isopropyltoluene	11.44	119	2236777	44.44	PPB	99
94)	1,3-Dichlorobenzene	11.42	146	1024740	40.98	PPB	97
95)	1,4-Dichlorobenzene	11.52	146	985791	40.19	PPB	97
96)	n-Butylbenzene	11.86	91	1899413	44.93	PPB	99
97)	1,2-Dichlorobenzene	11.90	146	864664	41.57	PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	31100	45.41	PPB	89
99)	1,3,5-Trichlorobenzene	12.68	180	827481	39.85	PPB	100
100)	1,2,4-Trichlorobenzene	13.12	180	638434	44.14	PPB	100
101)	Hexachlorobutadiene	13.21	225	384198	37.03	PPB	98
102)	Naphthalene	13.30	128	867573	51.44	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	524588	43.59	PPB	98

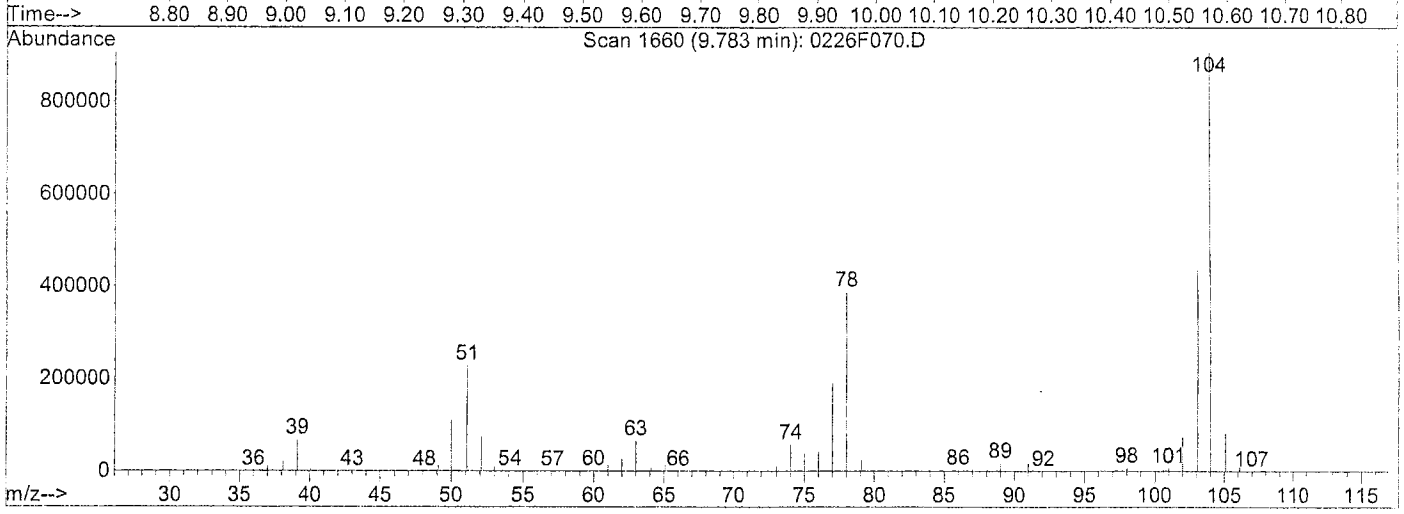
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 53.21PPB

response 741975

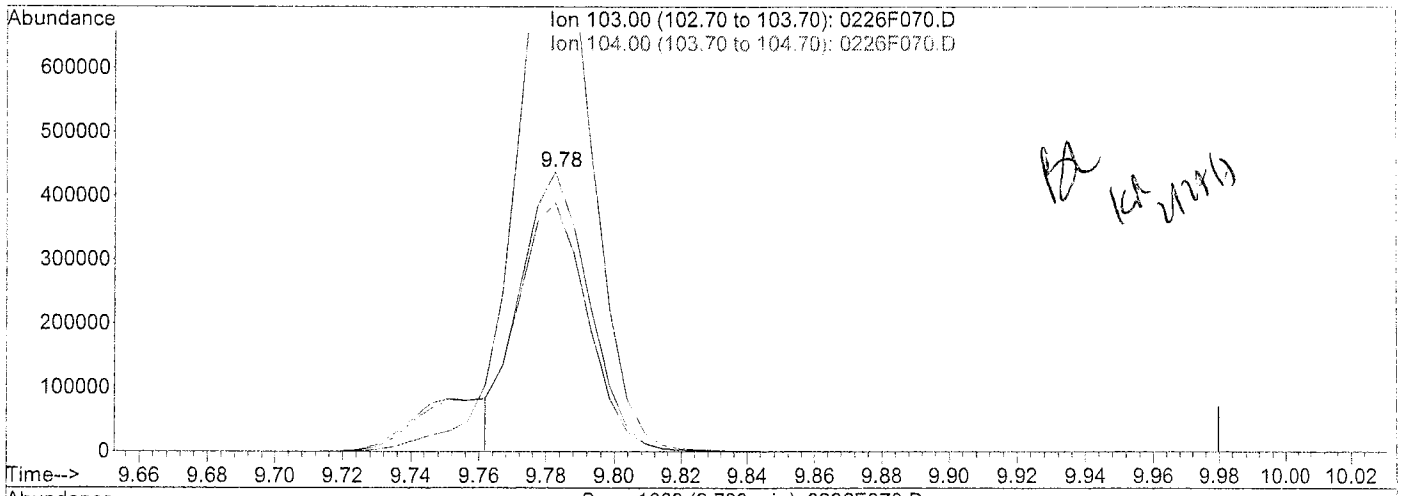
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

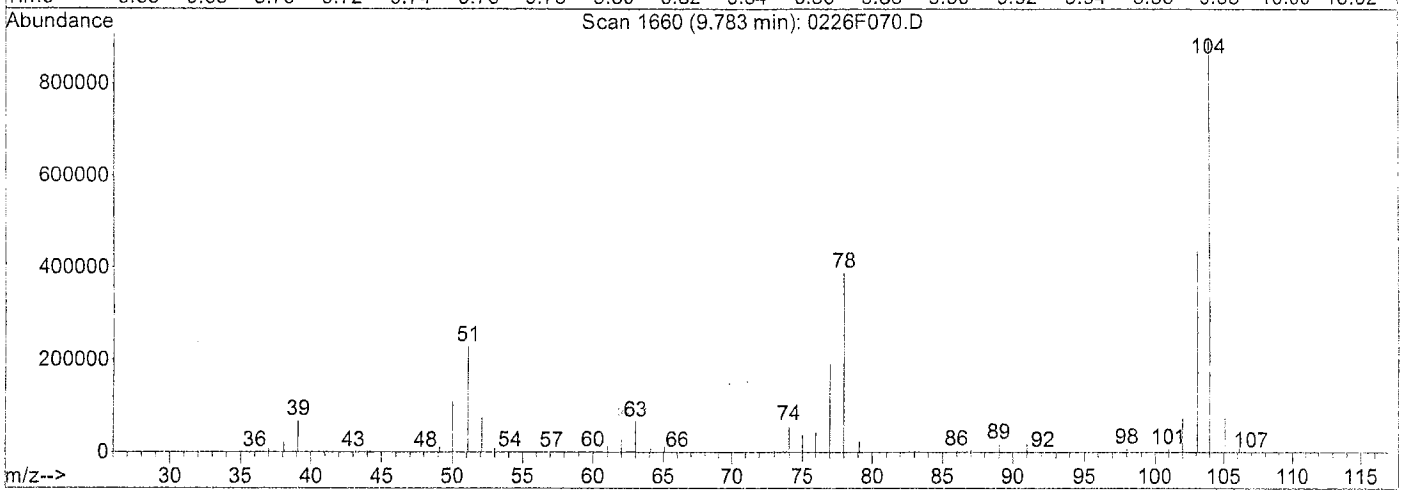
0226F070.D 022607.M Tue Feb 27 06:45:48 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F070.D

(76) Styrene (T)

9.78min 44.25PPB m

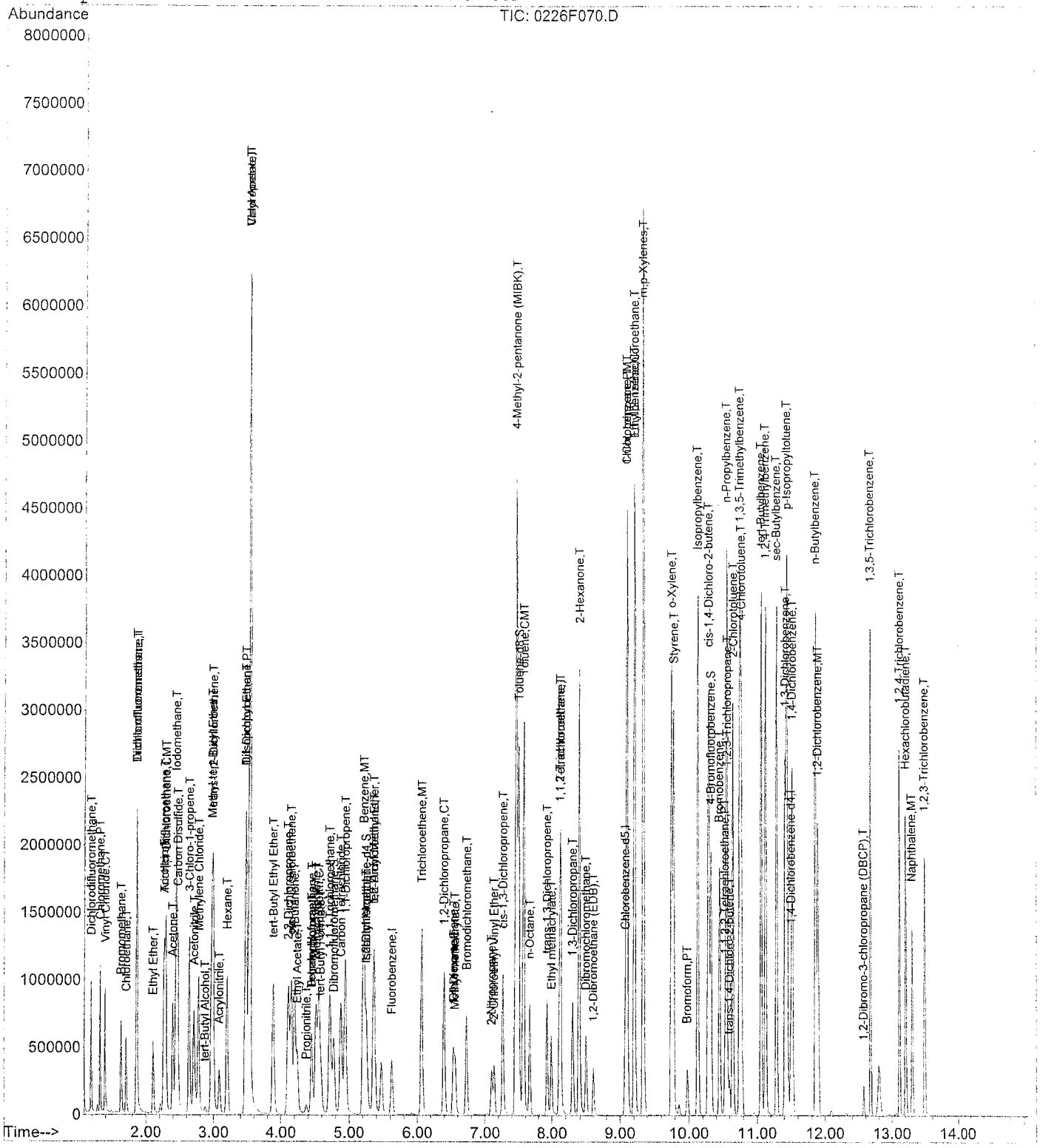
response 617063

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	207.43
78.00	89.30	88.85
0.00	0.00	0.00

0226F070.D 022607.M Tue Feb 27 06:45:54 2007

Data File : J:\MS18\DATA\022607A\0226F070.D Vial: 18
Acq On : 26 Feb 2007 10:07 pm Operator:
Sample : 8260 ICAL 40 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:45 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F071.D
Acq On : 26 Feb 2007 10:27 pm
Sample : 8260 ICAL 60
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007

Vial: 19
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.63	96	415821	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	160857	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	154573	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	485455	59.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	595.20%	
44) 1,2-Dichloroethane-d4	5.25	65	462401	58.48	PPB	0.00
Spiked Amount 10.000			Recovery	=	584.80%	
58) Toluene-d8	7.50	98	2150656	54.39	PPB	0.00
Spiked Amount 10.000			Recovery	=	543.90%	
80) 4-Bromofluorobenzene	10.32	95	732272	47.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	475.20%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.18	85	771161	66.78	PPB	98
3) Chloromethane	1.32	50	912514	59.11	PPB	99
4) Vinyl Chloride	1.39	62	853270	65.39	PPB	99
5) Bromomethane	1.63	96	391996	46.48	PPB	98
6) Chloroethane	1.71	64	511647	58.13	PPB	97
7) Dichlorofluoromethane	1.87	67	1285506	56.87	PPB	98
8) Trichlorofluoromethane	1.87	101	1192858	62.14	PPB	98
9) Ethyl Ether	2.10	59	362132	64.39	PPB	92
10) Acrolein	2.27	56	402935	1036.55	PPB	97
11) Trichlorotrifluoroethane	2.27	151	548307	59.80	PPB	97
12) 1,1-Dichloroethene	2.30	96	626435	60.67	PPB	87
13) Acetone	2.40	43	1833503	1702.96	PPB	97
14) Iodomethane	2.44	142	3236317	258.29	PPB	97
15) Carbon Disulfide	2.47	76	2047070	65.54	PPB	98
16) 3-Chloro-1-propene	2.64	76	381640	68.56	PPB #	70
17) Acetonitrile	2.72	40	717032	2776.55	PPB	98
18) Methylene Chloride	2.78	84	610000	60.75	PPB	91
19) tert-Butyl Alcohol	2.88	59	76488	292.95	PPB	97
20) Acrylonitrile	3.09	53	372157	269.47	PPB	97
21) Methyl tert-Butyl Ether	2.98	73	2349933	138.22	PPB	100
22) trans-1,2-Dichloroethene	3.00	96	731872	63.37	PPB	100
23) Hexane	3.20	57	734030	59.01	PPB	98
24) Diisopropyl Ether	3.48	45	2134700	66.63	PPB	95
25) 1,1-Dichloroethane	3.48	63	1289688	66.74	PPB	99
26) Vinyl Acetate	3.54	86	161541	146.04	PPB	94
27) Chloroprene	3.54	53	5767667	250.08	PPB	97
28) tert-Butyl Ethyl Ether	3.89	59	1555832	68.22	PPB	99
29) 2,2-Dichloropropane	4.12	77	1014659	71.16	PPB	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30) cis-1,2-Dichloroethene	4.16	96	739836	66.41	PPB		96
31) 2-Butanone	4.20	72	686351	1846.26	PPB	#	77
32) Propionitrile	4.38	54	131349	275.58	PPB		97
33) Ethyl Acetate	4.25	61	134819	267.96	PPB		97
34) Methacrylonitrile	4.52	67	472009	266.59	PPB		93
35) Bromochloromethane	4.46	128	280391	71.13	PPB		91
36) Tetrahydrofuran	4.45	71	23371	63.95	PPB	#	80
37) Chloroform	4.56	83	1207312	61.89	PPB		98
38) tert-Butyl Formate	4.59	59	193716	89.10	PPB		90
39) 1,1,1-Trichloroethane	4.72	97	1162545	71.37	PPB		99
41) Carbon Tetrachloride	4.89	117	1057872	72.40	PPB		97
42) 1,1-Dichloropropene	4.95	75	1040919	67.43	PPB		99
43) Isobutyl Alcohol	5.25	43	309754	2877.57	PPB		96
45) Benzene	5.22	78	2953716	66.78	PPB		97
46) 1,2-Dichloroethane	5.36	62	697690	68.50	PPB		97
47) tert-Amyl Methyl Ether	5.37	55	326295	56.51	PPB	#	78
48) Trichloroethene	6.07	95	743445	63.50	PPB		96
49) 1,2-Dichloropropane	6.40	63	652453	70.96	PPB		98
50) Dibromomethane	6.53	93	262921	72.16	PPB		96
51) Methyl methacrylate	6.56	69	215476	68.64	PPB		90
52) 1,4-Dioxane	6.55	88	89504	2640.59	PPB		92
53) Bromodichloromethane	6.73	83	777000	73.70	PPB		99
54) 2-Nitropropane	7.10	43	424171	430.81	PPB		100
55) 2-Chloroethyl Vinyl Ether	7.14	63	239992	69.73	PPB		95
56) cis-1,3-Dichloropropene	7.27	75	918958	78.50	PPB		95
57) 4-Methyl-2-pentanone (MIBK	7.46	58	2643593	1831.71	PPB		91
59) Toluene	7.57	92	1898584	64.10	PPB		95
61) n-Octane	7.66	85	244931	53.48	PPB		95
62) trans-1,3-Dichloropropene	7.93	75	692971	82.41	PPB		97
63) Ethyl methacrylate	7.99	69	453399	69.46	PPB		90
64) 1,1,2-Trichloroethane	8.12	83	318709	65.80	PPB		98
65) Tetrachloroethene	8.13	164	665882	61.82	PPB		94
66) 2-Hexanone	8.39	57	824666	1839.21	PPB	#	84
67) 1,3-Dichloropropane	8.29	76	708214	67.60	PPB		99
68) Dibromochloromethane	8.49	129	479455	75.64	PPB		99
69) 1,2-Dibromoethane (EDB)	8.60	107	361743	70.56	PPB		97
70) 1-Chlorohexane	9.10	91	1052218	63.43	PPB		95
71) Chlorobenzene	9.11	112	1977099	64.83	PPB		97
72) Ethylbenzene	9.21	106	1192950	65.27	PPB		98
73) 1,1,1,2-Tetrachloroethane	9.22	131	649223	73.64	PPB		99
74) m,p-Xylenes	9.34	106	2941646	131.20	PPB		97
75) o-Xylene	9.75	106	1355348	66.62	PPB		95

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 06:46:17 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260

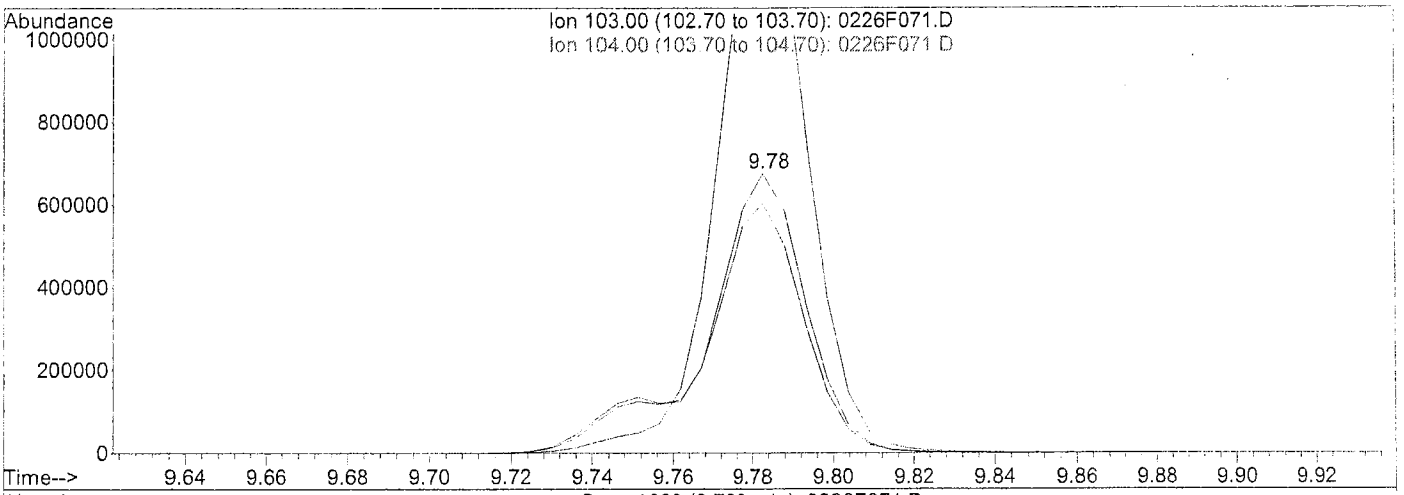
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	972150m	67.16	PPB	
77)	Bromoform	9.98	173	261396	80.92	PPB	100
78)	Isopropylbenzene	10.13	105	3753846	66.12	PPB	100
79)	cis-1,4-Dichloro-2-butene	10.29	89	191415	324.83	PPB	99
82)	1,1,2,2-Tetrachloroethane	10.53	83	362061	65.10	PPB	97
83)	trans-1,4-Dichloro-2-buten	10.60	53	88579	61.32	PPB	89
84)	Bromobenzene	10.45	156	790183	64.35	PPB	98
85)	n-Propylbenzene	10.55	91	4419561	62.42	PPB	98
86)	1,2,3-Trichloropropane	10.56	110	115913	64.02	PPB	92
87)	2-Chlorotoluene	10.65	91	2466712	60.62	PPB	99
88)	1,3,5-Trimethylbenzene	10.75	105	3117383	64.97	PPB	100
89)	4-Chlorotoluene	10.77	91	2836934	61.60	PPB	98
90)	tert-Butylbenzene	11.06	119	2795015	62.64	PPB	97
91)	1,2,4-Trimethylbenzene	11.13	105	3049204	67.69	PPB	98
92)	sec-Butylbenzene	11.29	105	3826843	64.58	PPB	99
93)	p-Isopropyltoluene	11.44	119	3513577	67.57	PPB	100
94)	1,3-Dichlorobenzene	11.42	146	1617764	62.63	PPB	98
95)	1,4-Dichlorobenzene	11.52	146	1564101	61.74	PPB	98
96)	n-Butylbenzene	11.86	91	2985569	68.37	PPB	98
97)	1,2-Dichlorobenzene	11.90	146	1367187	63.64	PPB	99
98)	1,2-Dibromo-3-chloropropan	12.57	155	49279	69.66	PPB	90
99)	1,3,5-Trichlorobenzene	12.67	180	1296708	60.46	PPB	98
100)	1,2,4-Trichlorobenzene	13.12	180	1006289	67.35	PPB	100
101)	Hexachlorobutadiene	13.21	225	605137	56.46	PPB	98
102)	Naphthalene	13.30	128	1380704	79.25	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	843695	67.87	PPB	99

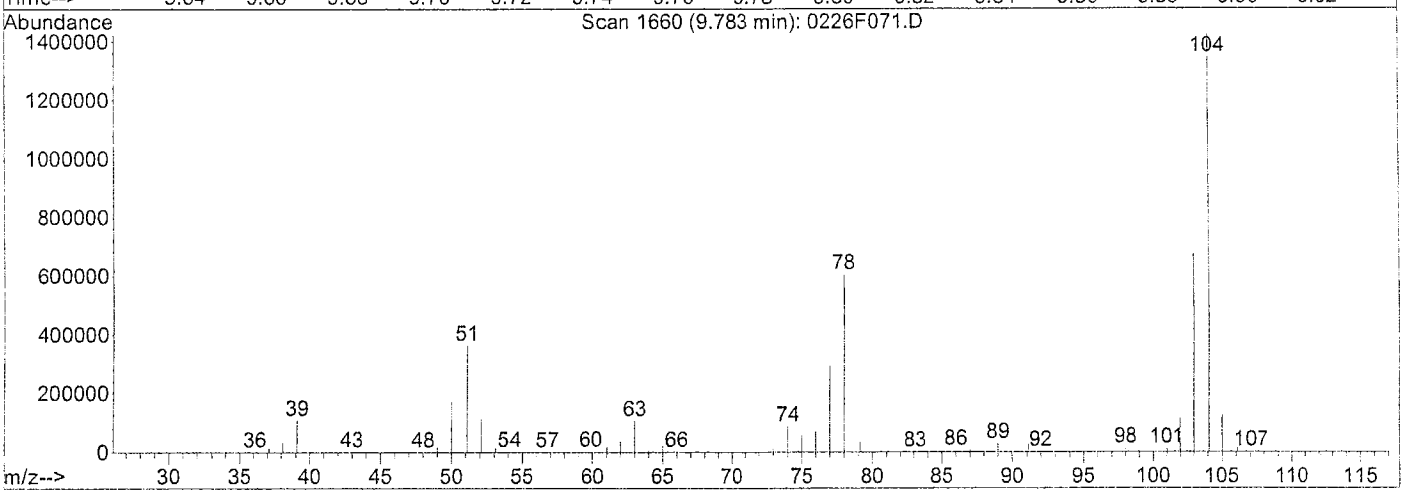
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 80.59PPB

response 1166585

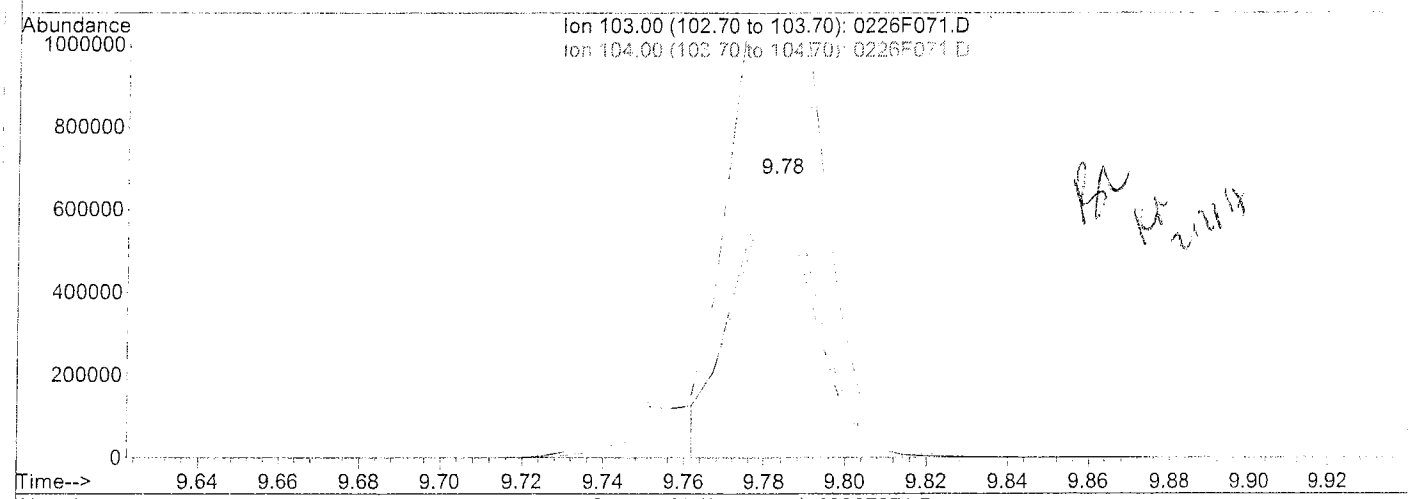
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

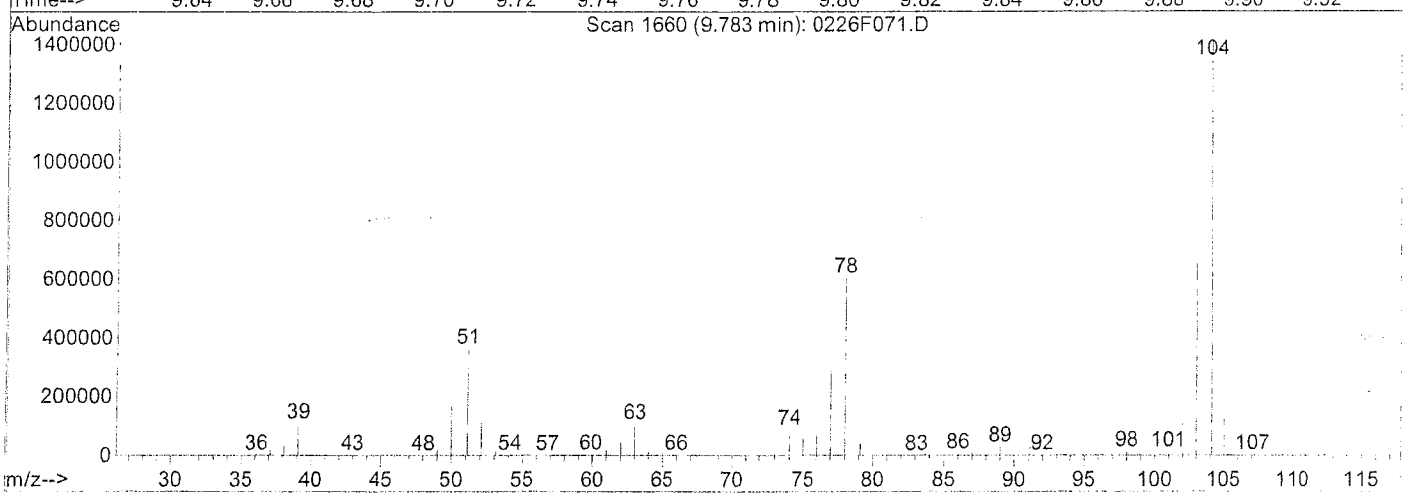
0226F071.D 022607.M Tue Feb 27 06:46:54 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Multiple Level Calibration





TIC: 0226F071.D

(76) Styrene (T)

9.78min 67.16PPB m

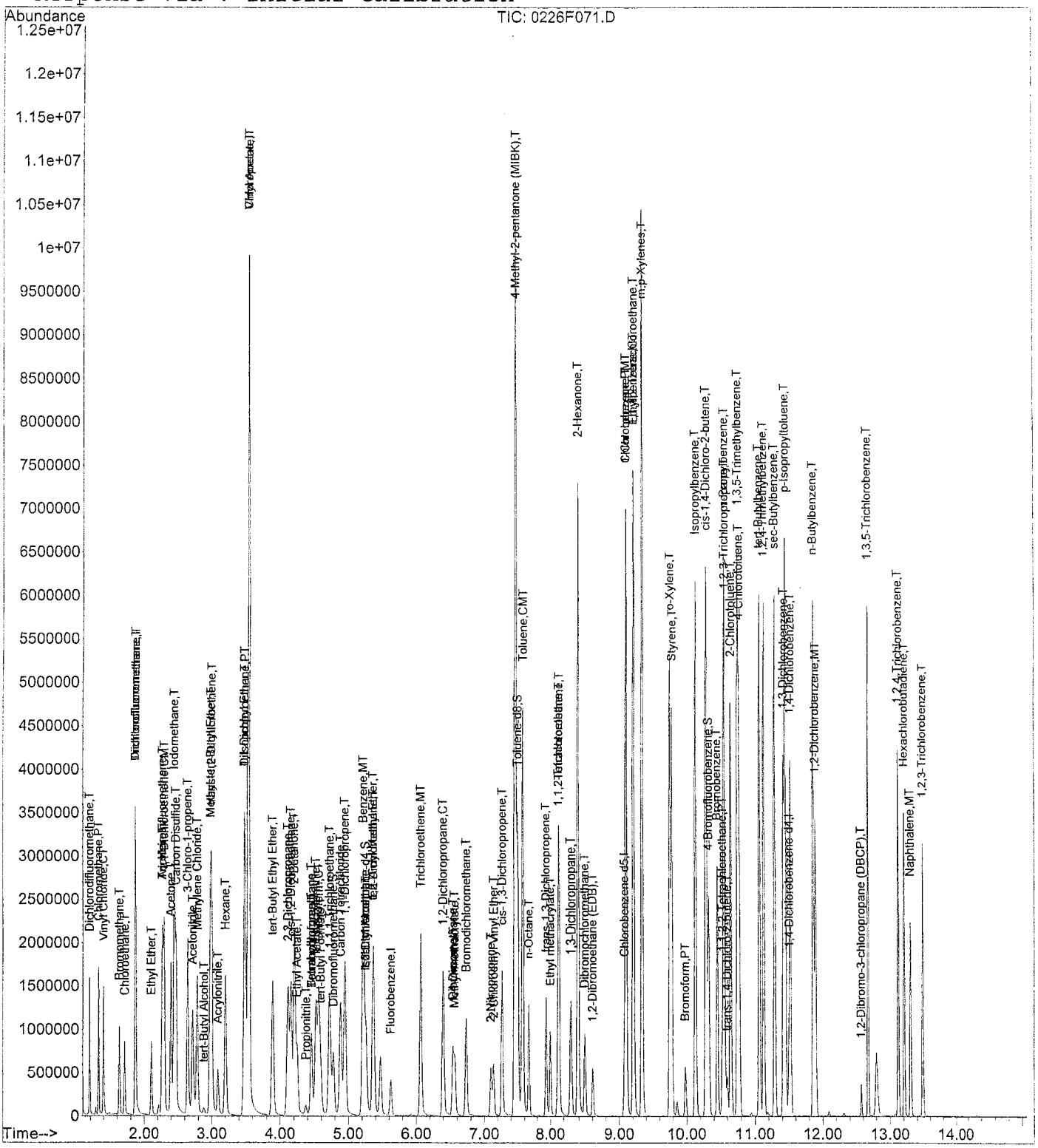
response 972150

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	211.20
78.00	89.30	89.42
0.00	0.00	0.00

0226F071.D 022607.M Tue Feb 27 06:46:59 2007

Data File : J:\MS18\DATA\022607A\0226F071.D Vial: 19
Acq On : 26 Feb 2007 10:27 pm Operator:
Sample : 8260 ICAL 60 Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 6:46 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 20 11:28:37 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KS 2/28/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	410307	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	155343	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.50	152	148210	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.78	113	89116	10.27	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.70%	
44) 1,2-Dichloroethane-d4	5.25	65	86935	9.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
58) Toluene-d8	7.50	98	401532	10.09	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.90%	
80) 4-Bromofluorobenzene	10.32	95	133839	9.83	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.30%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	122710	9.85	PPB		98
3) Chloromethane	1.32	50	137820	9.47	PPB		98
4) Vinyl Chloride	1.39	62	142259	10.63	PPB		98
5) Bromomethane	1.63	96	65113	10.10	PPB		96
6) Chloroethane	1.71	64	85996	9.52	PPB		99
7) Dichlorofluoromethane	1.87	67	247297	11.40	PPB		98
8) Trichlorofluoromethane	1.87	101	172201	9.41	PPB		98
9) Ethyl Ether	2.10	59	57795	9.90	PPB		91
10) Acrolein	2.26	56	29258	137.61	PPB		96
11) Trichlorotrifluoroethane	2.27	151	87195	10.31	PPB		97
12) 1,1-Dichloroethene	2.30	96	98452	9.91	PPB		81
13) Acetone	2.40	43	48375	41.65	PPB		97
14) Iodomethane	2.44	142	449235	39.02	PPB		98
15) Carbon Disulfide	2.47	76	713104	22.05	PPB		98
16) 3-Chloro-1-propene	2.64	76	187268	34.63	PPB	#	71
17) Acetonitrile	2.72	40	86406	326.02	PPB		96
18) Methylene Chloride	2.78	84	122777	11.57	PPB		98
19) tert-Butyl Alcohol	2.88	59	24669	106.48	PPB		96
20) Acrylonitrile	3.09	53	59864	39.67	PPB		96
21) Methyl tert-Butyl Ether	2.98	73	181364	9.87	PPB		99
22) trans-1,2-Dichloroethene	3.00	96	113433	9.78	PPB		97
23) Hexane	3.20	57	345542	29.60	PPB		99
24) Diisopropyl Ether	3.48	45	682437	20.57	PPB		96
25) 1,1-Dichloroethane	3.48	63	205873	10.10	PPB		99
26) Vinyl Acetate	3.53	86	52728	45.10	PPB	#	74
27) Chloroprene	3.53	53	594936	26.99	PPB		93
28) tert-Butyl Ethyl Ether	3.89	59	496262	20.76	PPB		97
29) 2,2-Dichloropropane	4.11	77	133531	9.76	PPB		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.16	96	121550	10.29 PPB		99
31)	2-Butanone	4.20	72	18998	48.77 PPB		94
32)	Propionitrile	4.38	54	15205	29.35 PPB		91
33)	Ethyl Acetate	4.25	61	16433	31.96 PPB		89
34)	Methacrylonitrile	4.51	67	54749	30.12 PPB		97
35)	Bromochloromethane	4.46	128	42612	9.84 PPB	#	85
36)	Tetrahydrofuran	4.46	71	7012	16.65 PPB	#	63
37)	Chloroform	4.56	83	194431	9.63 PPB		95
38)	tert-Butyl Formate	4.59	59	44560	18.22 PPB		88
39)	1,1,1-Trichloroethane	4.72	97	172247	10.27 PPB		96
41)	Carbon Tetrachloride	4.89	117	153126	10.26 PPB		95
42)	1,1-Dichloropropene	4.95	75	159938	9.85 PPB		97
43)	Isobutyl Alcohol	5.26	43	31174	287.33 PPB		94
45)	Benzene	5.22	78	463767	9.58 PPB		98
46)	1,2-Dichloroethane	5.36	62	113114	10.37 PPB		98
47)	tert-Amyl Methyl Ether	5.37	55	107846	19.12 PPB	#	74
48)	Trichloroethene	6.07	95	114213	9.81 PPB		98
49)	1,2-Dichloropropane	6.40	63	103777	10.34 PPB		98
50)	Dibromomethane	6.54	93	40529	10.22 PPB		95
51)	Methyl methacrylate	6.56	69	103223	32.77 PPB		93
52)	1,4-Dioxane	6.56	88	9940	270.45 PPB		99
53)	Bromodichloromethane	6.73	83	118043	10.78 PPB		98
54)	2-Nitropropane	7.10	43	29919	29.23 PPB		98
55)	2-Chloroethyl Vinyl Ether	7.13	63	37798	10.80 PPB		85
56)	cis-1,3-Dichloropropene	7.27	75	128603	10.40 PPB		97
57)	4-Methyl-2-pentanone (MIBK	7.46	58	70198	46.22 PPB		88
59)	Toluene	7.57	92	296954	9.95 PPB		95
61)	n-Octane	7.66	85	75941	19.27 PPB		90
62)	trans-1,3-Dichloropropene	7.93	75	86090	10.41 PPB		93
63)	Ethyl methacrylate	7.99	69	231415	36.07 PPB		91
64)	1,1,2-Trichloroethane	8.12	83	52038	10.52 PPB		96
65)	Tetrachloroethene	8.13	164	105028	9.35 PPB		95
66)	2-Hexanone	8.39	57	21544	47.24 PPB		91
67)	1,3-Dichloropropane	8.30	76	114260	10.05 PPB		97
68)	Dibromochloromethane	8.49	129	68418	10.31 PPB		99
69)	1,2-Dibromoethane (EDB)	8.60	107	55935	10.45 PPB		99
70)	1-Chlorohexane	9.10	91	159902	9.84 PPB		89
71)	Chlorobenzene	9.11	112	308610	9.64 PPB		97
72)	Ethylbenzene	9.21	106	181080	9.88 PPB		93
73)	1,1,1,2-Tetrachloroethane	9.22	131	95714	10.24 PPB		95
74)	m,p-Xylenes	9.34	106	447979	19.74 PPB		94
75)	o-Xylene	9.75	106	212281	10.09 PPB		98

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 07:16:38 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Styrene	9.78	103	154123m	10.50	PPB	
77)	Bromoform	9.98	173	34687	10.47	PPB	99
78)	Isopropylbenzene	10.13	105	507594	8.82	PPB	99
79)	cis-1,4-Dichloro-2-butene	10.29	89	17551	31.54	PPB	98
82)	1,1,2,2-Tetrachloroethane	10.53	83	57510	10.48	PPB	94
83)	trans-1,4-Dichloro-2-buten	10.60	53	45505	38.23	PPB	86
84)	Bromobenzene	10.45	156	123237	9.81	PPB	98
85)	n-Propylbenzene	10.55	91	662233	10.00	PPB	99
86)	1,2,3-Trichloropropane	10.56	110	19032	10.91	PPB	99
87)	2-Chlorotoluene	10.65	91	386757	9.95	PPB	98
88)	1,3,5-Trimethylbenzene	10.75	105	468167	10.24	PPB	98
89)	4-Chlorotoluene	10.77	91	439077	9.86	PPB	99
90)	tert-Butylbenzene	11.06	119	423884	9.87	PPB	98
91)	1,2,4-Trimethylbenzene	11.12	105	466823	10.13	PPB	99
92)	sec-Butylbenzene	11.29	105	610363	10.66	PPB	99
93)	p-Isopropyltoluene	11.44	119	502922	9.73	PPB	99
94)	1,3-Dichlorobenzene	11.42	146	248060	9.69	PPB	98
95)	1,4-Dichlorobenzene	11.52	146	250075	9.90	PPB	98
96)	n-Butylbenzene	11.86	91	437186	9.79	PPB	100
97)	1,2-Dichlorobenzene	11.90	146	217011	9.71	PPB	94
98)	1,2-Dibromo-3-chloropropan	12.58	155	6328	8.74	PPB	97
99)	1,3,5-Trichlorobenzene	12.68	180	829529	38.86	PPB	99
100)	1,2,4-Trichlorobenzene	13.12	180	157556	9.51	PPB	100
101)	Hexachlorobutadiene	13.21	225	95797	9.71	PPB	99
102)	Naphthalene	13.30	128	216028	10.35	PPB	98
103)	1,2,3-Trichlorobenzene	13.49	180	134149	9.87	PPB	97

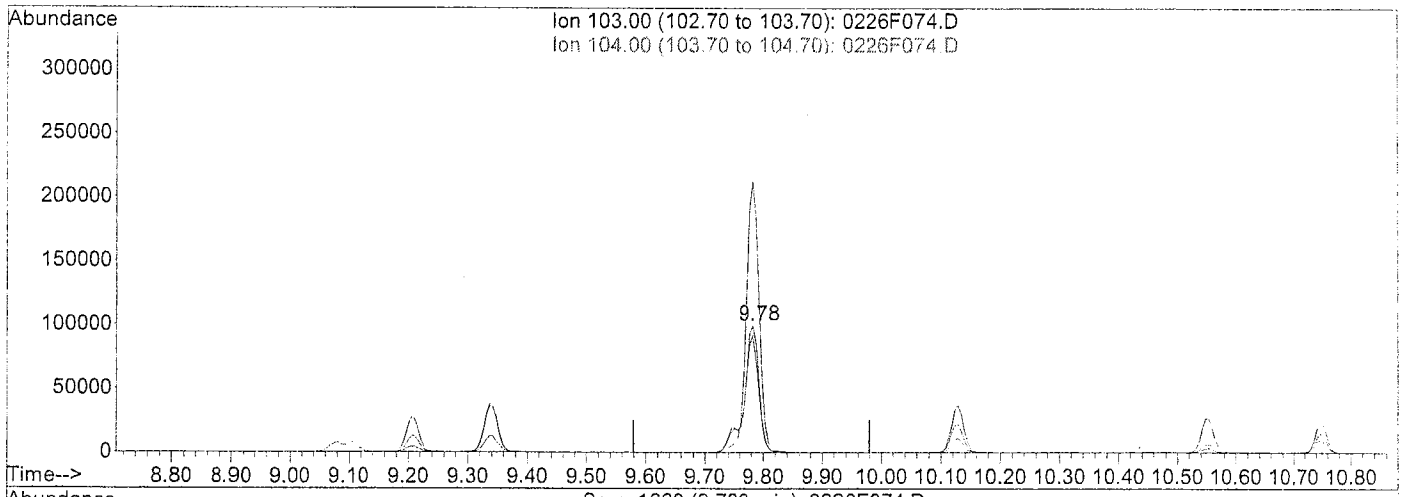
(#) = qualifier out of range (m) = manual integration

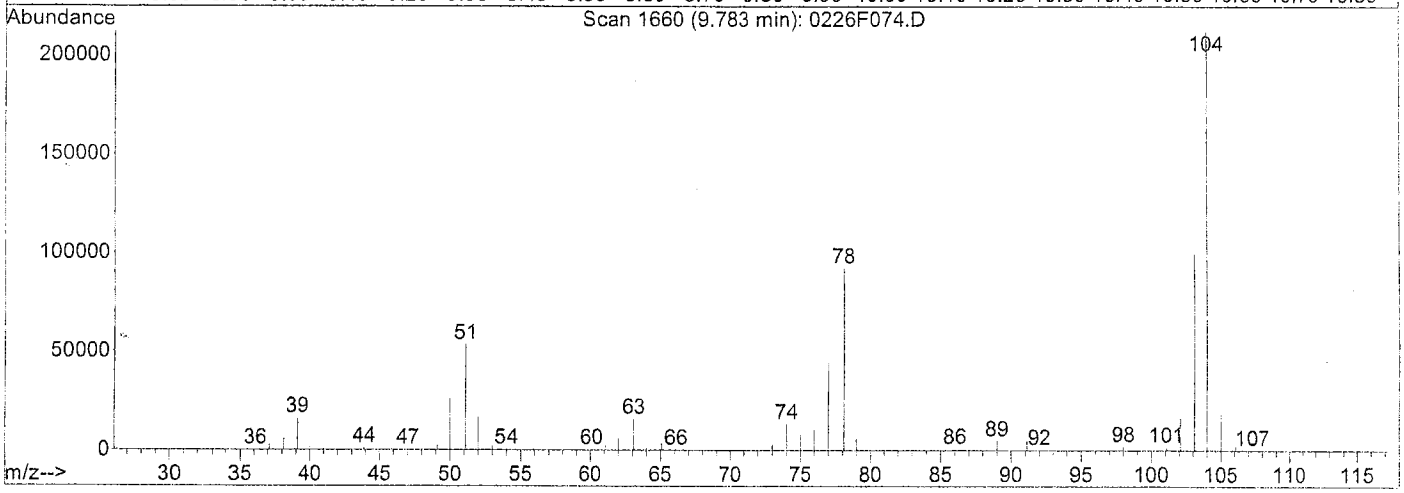
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D
Acq On : 26 Feb 2007 11:25 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007

Vial: 22
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 12.10PPB

response 177602

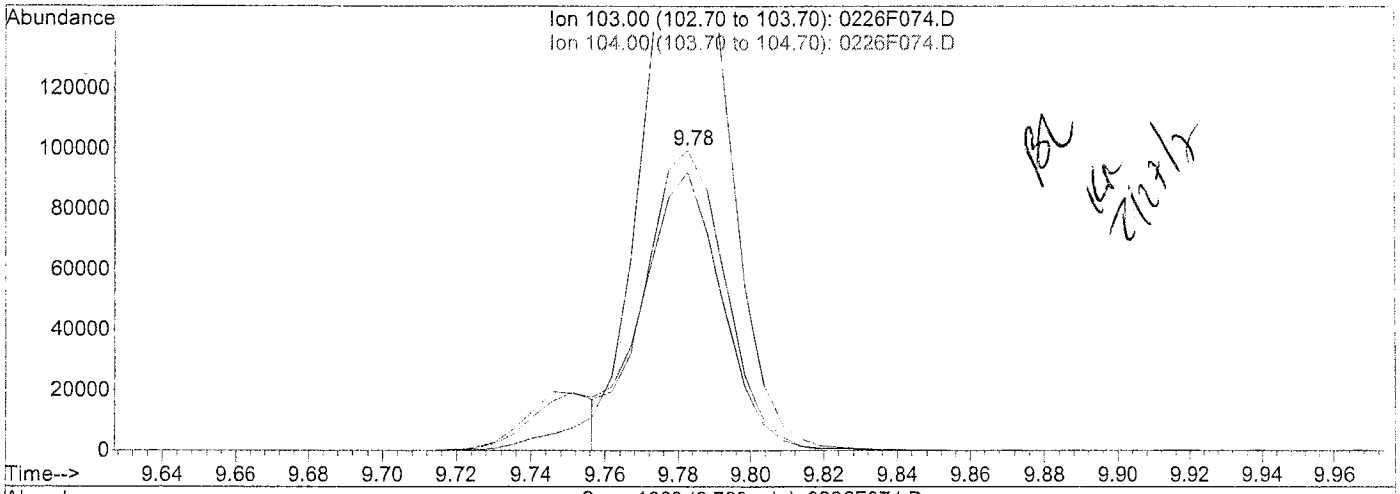
Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

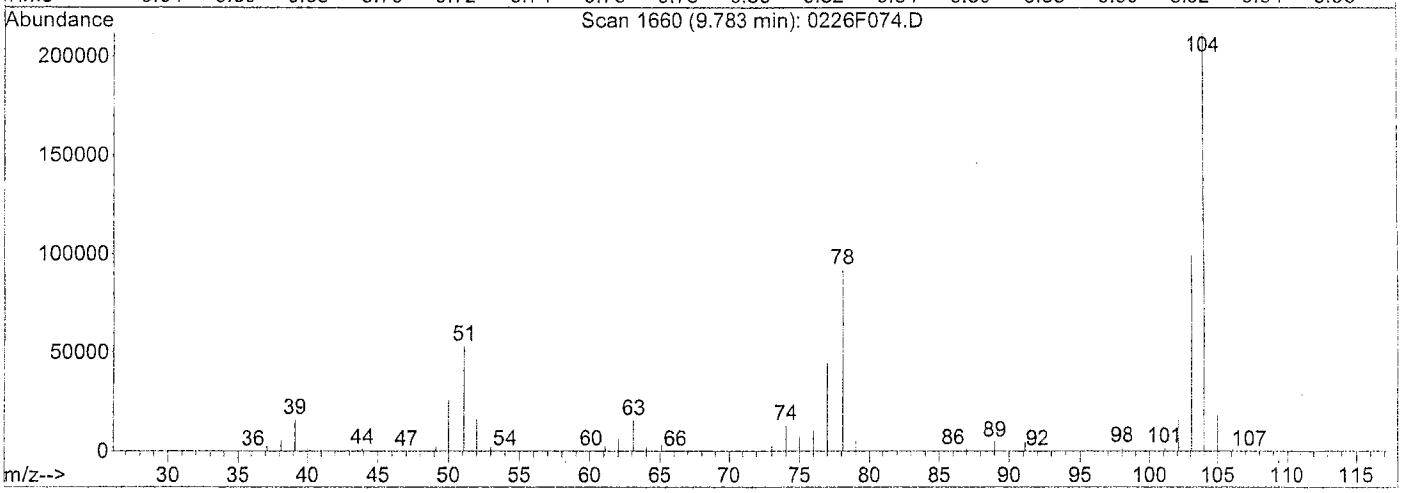
0226F074.D 022607.M Tue Feb 27 07:16:48 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Multiple Level Calibration





TIC: 0226F074.D

(76) Styrene (T)

9.78min 10.50PPB m

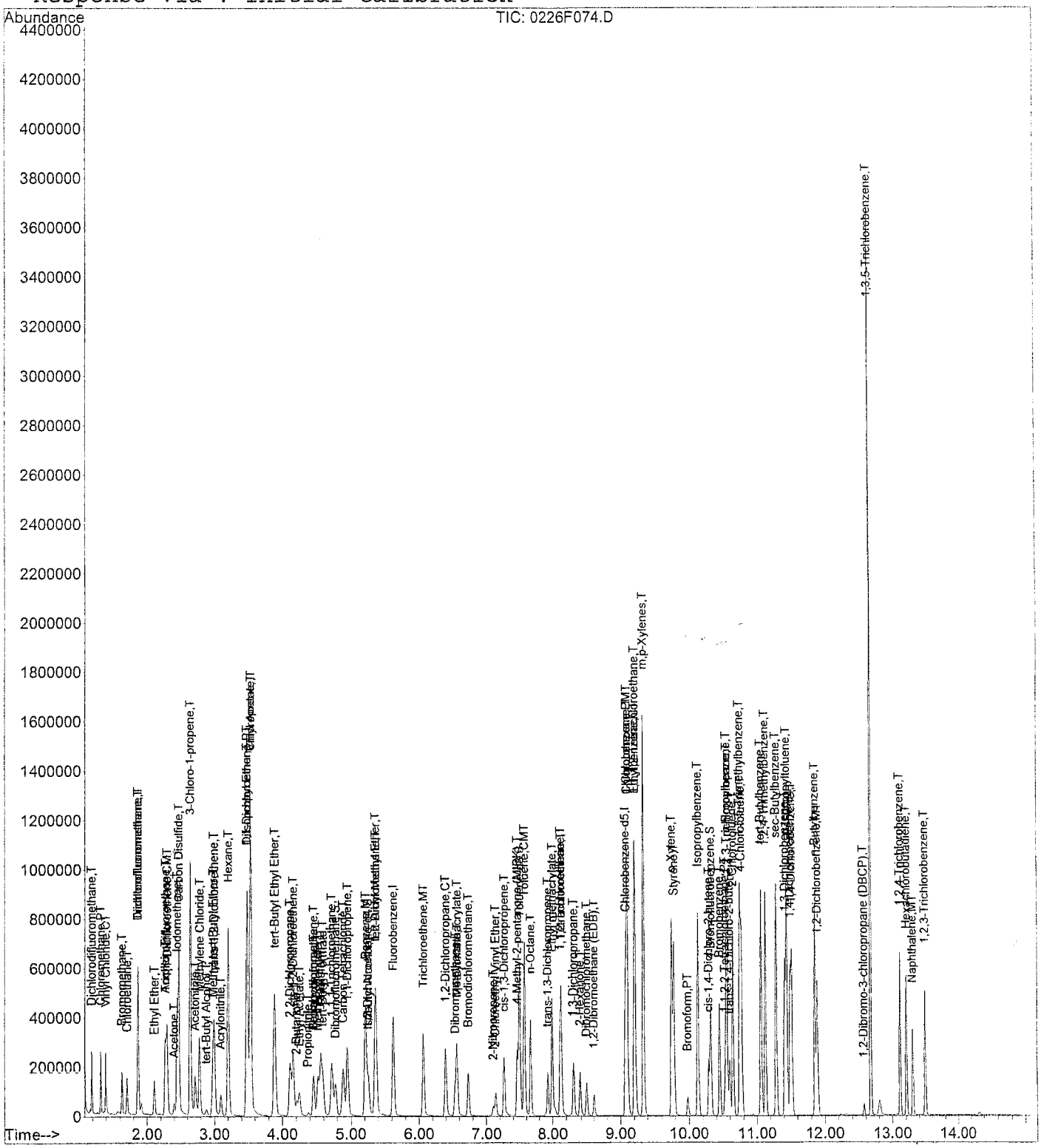
response 154123

Ion	Exp%	Act%
103.00	100	100
104.00	213.20	213.26
78.00	89.30	92.66
0.00	0.00	0.00

0226F074.D 022607.M Tue Feb 27 07:16:54 2007

Data File : J:\MS18\DATA\022607A\0226F074.D Vial: 22
Acq On : 26 Feb 2007 11:25 pm Operator:
Sample : ICV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 7:16 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Tue Feb 27 07:16:30 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703660
Units: PPB

File ID: J:\MS18\DATA\031307\0313F038.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	22	0.01	0.448	0.482	8	NA	± 30 %	AverageRF
Vinyl Acetate	20	13	0.01	0.0285	0.0185	-35	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	8.9	0.01	0.213	0.190	-11	NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.01	0.0853	0.0919	8	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.10	0.355	0.357	1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	9.9	0.01	0.326	0.321	-1	NA	± 20 %	AverageRF
Bromomethane	10	8.9	0.01	0.157	0.140	-11	NA	± 40 %	AverageRF
Chloroethane	10	9.6	0.01	0.220	0.211	-4	NA	± 40 %	AverageRF
Acetone	200	220	0.01	0.0283	0.0316	12	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	10	0.01	0.242	0.248	3	NA	± 20 %	AverageRF
Carbon Disulfide	10	11	0.01	0.788	0.870	10	NA	± 30 %	AverageRF
Methylene Chloride	10	10	0.01	0.259	0.261	1	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.283	0.306	8	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	11	0.10	0.497	0.556	12	NA	± 30 %	AverageRF
2-Butanone (MEK)	200	230	0.01	0.00949	0.0109	15	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.288	0.311	8	NA	± 30 %	AverageRF
‡ Chloroform	10	10	0.01	0.492	0.515	5	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.409	0.434	6	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	10	0.01	0.364	0.378	4	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.01	0.266	0.295	11	NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.18	1.27	8	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.284	0.319	12	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.245	0.271	11	NA	± 20 %	AverageRF
Bromodichloromethane	10	11	0.01	0.267	0.282	6	NA	± 30 %	AverageRF
2-Hexanone	200	210	0.01	0.0294	0.0304	3	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.01	0.301	0.306	1	NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.727	0.802	10	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	8.3	0.01	0.532	0.442	-17	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	9.0	0.01	0.318	0.286	-10	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	250	0.01	0.0370	0.0456	23	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	8.0	0.01	0.723	0.577	-20	NA	± 30 %	AverageRF
Dibromochloromethane	10	8.1	0.01	0.427	0.346	-19	NA	± 30 %	AverageRF
† Chlorobenzene	10	8.6	0.30	2.06	1.76	-14	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	9.0	0.01	1.18	1.06	-10	NA	± 20 %	AverageRF
m,p-Xylenes	20	18	0.01	1.46	1.28	-12	NA	± 30 %	AverageRF
o-Xylene	10	8.7	0.01	1.35	1.18	-13	NA	± 30 %	AverageRF
Styrene	10	9.1	0.01	0.945	0.864	-9	NA	± 30 %	AverageRF
† Bromoform	10	7.4	0.10	0.213	0.158	-26	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio of San Francisco

Service Request: K0701816
Date Analyzed: 03/13/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 02/26/2007
Calibration ID: CAL6077
Analysis Lot: KWG0703660
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	8.6	0.30	0.370	0.317	-14	NA	± 30 %	AverageRF
Toluene-d8	10	11	0.01	0.970	1.09	13	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	9.7	0.01	0.877	0.847	-3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Exception Report

Data File: J:\MS18\DATA\031307\0313F038.D
Lab ID: KWG0703660-2
RunType: CCV
Matrix: WATER

Date Acquired: 03/13/2007 21:02
Date Quantitated: 03/14/2007 15:44
Batch ID: KWG0703660
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	Acrolein	0.0052	0.01	NA	NR
	1,4-Dioxane	0.0009	0.01	NA	
	Acetonitrile	0.0065	0.01	NA	
	tert-Butyl Alcohol	0.0056	0.01	NA	
	Isobutyl Alcohol	0.0026	0.01	NA	
	2-Butanone (MEK)	0.0095	0.01	NA	MEL

Primary Review: KL 3/15/07

Secondary Review: HL 3.15.07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	03/15/2007

Analysis Lot:	KWG0703660	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\022607.M	**Calibration ID:**	CAL6077
Title:			
Tune Ref:	J:\MS18\DATA\031307\0313F037.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\031307\0313F038.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:02	**Quant Date:**	03/14/2007 15:44	**Vial:**	36
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703660-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.62	-0.01	96	376486	10.00	OK
2	Chlorobenzene-d5	9.07	0.00	82	172476	10.00	OK
3	1,4-Dichlorobenzene-d4	11.49	0.00	152	159407	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.77			113	79769	10.02		80-120	NA
1	1,2-Dichloroethane-d4	5.25			65	71358	8.88		70-124	NA
1	Toluene-d8	7.49			98	411691	11.27		80-122	NA
2	4-Bromofluorobenzene	10.32			95	146007	9.66		73-116	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.18			85	92806	8.12			
1	Chloromethane	1.31			50	134319	10.06			
1	Vinyl Chloride	1.39			62	120966	9.85			
1	Bromomethane	1.63			96	52603	8.89			
1	Chloroethane	1.70			64	79586	9.60			
1	Dichlorofluoromethane (CFC 21	1.86			67	208684	10.48			
1	Trichlorofluoromethane	1.86			101	177347	10.56			
1	Ethyl Ether	2.10			59	60150	11.23			
1	Acrolein	2.27			56	54446	279.07			
1	Trichlorotrifluoroethane	2.27			151	80926	10.43			
1	1,1-Dichloroethene	2.29			96	93523	10.26			
1	Acetone	2.39			43	237675	223.01			
1	Iodomethane	2.44			142	411943	39.00			
1	Carbon Disulfide	2.47			76	327358	11.03			
1	3-Chloro-1-propene	2.64			76	54719	11.03			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F038.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:02	**Quant Date:**	03/14/2007 15:44	**Vial:**	36
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703660-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.72			40	114061	469.02			
1	Methylene Chloride	2.78			84	98399	10.10			
1	tert-Butyl Alcohol	2.88			59	10763	50.63			
1	Acrylonitrile	3.08			53	56647	40.91			
1	Methyl tert-Butyl Ether	2.97			73	362704	21.51			
1	trans-1,2-Dichloroethene	3.00			96	115385	10.84			
1	n-Hexane	3.20			57	113116	10.56			
1	Diisopropyl Ether	3.47			45	350893	11.53			
1	1,1-Dichloroethane	3.48			63	209365	11.20			
1	Vinyl Acetate	3.53			86	13925	12.98			
1	Chloroprene	3.53			53	855059	42.27			
1	tert-Butyl Ethyl Ether	3.89			59	241512	11.01			
1	2,2-Dichloropropane	4.11			77	105460	8.40			
1	cis-1,2-Dichloroethene	4.15			96	117108	10.81			
1	2-Butanone (MEK)	4.21			72	82401	230.52			
1	Propionitrile	4.37			54	19112	40.21			
1	Ethyl Acetate	4.24			61	19773	41.91			
1	Methacrylonitrile	4.52			67	71199	42.68			
1	Bromochloromethane	4.45			128	41600	10.47			
1	Tetrahydrofuran	4.44			71	3923	10.15			
1	Chloroform	4.55			83	193853	10.46			
1	tert-Butyl Formate	4.58			59	5722	2.55			
1	1,1,1-Trichloroethane (TCA)	4.72			97	163467	10.62			
1	Carbon Tetrachloride	4.88			117	142426	10.40			
1	1,1-Dichloropropene	4.95			75	159796	10.73			
1	Isobutyl Alcohol	5.26			43	39453	396.31			
1	Benzene	5.21			78	477781	10.75			
1	1,2-Dichloroethane (EDC)	5.36			62	111112	11.11			
1	tert-Amyl Methyl Ether	5.37			55	59911	11.57			
1	Trichloroethene (TCE)	6.06			95	120054	11.24			
1	1,2-Dichloropropane	6.39			63	102004	11.07			
1	Dibromomethane	6.53			93	39445	10.84			
1	Methyl Methacrylate	6.56			69	31545	10.91			
1	1,4-Dioxane	6.56			88	12134	359.80			
1	Bromodichloromethane	6.73			83	106203	10.57			
1	2-Nitropropane	7.10			43	40300	42.90			
1	2-Chloroethyl Vinyl Ether	7.14			63	34611	10.78			
1	cis-1,3-Dichloropropene	7.26			75	115019	10.14			
1	4-Methyl-2-pentanone (MIBK)	7.46			58	343331	246.37			
1	Toluene	7.57			92	301909	11.02			
2	n-Octane	7.66			85	32049	7.32			
2	trans-1,3-Dichloropropene	7.93			75	76309	8.31			
2	Ethyl Methacrylate	8.00			69	64483	9.05			

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\031307\0313F038.D			**Instrument:**	GC-MS 18
Acqu Date:	03/13/2007 21:02	**Quant Date:**	03/14/2007 15:44	**Vial:**	36
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0703660-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	8.11			83	49351	8.98			
2	Tetrachloroethene (PCE)	8.13			164	99574	7.98			
2	2-Hexanone	8.39			57	104763	206.91			
2	1,3-Dichloropropane	8.29			76	112166	8.89			
2	Dibromochloromethane	8.49			129	59713	8.11			
2	1,2-Dibromoethane (EDB)	8.60			107	51857	8.73			
2	1-Chlorohexane	9.10			91	144058	7.98			
2	Chlorobenzene	9.10			112	304067	8.55			
2	Ethylbenzene	9.21			106	182220	8.96			
2	1,1,1,2-Tetrachloroethane	9.21			131	90720	8.75			
2	m,p-Xylenes	9.34			106	441499	17.52			
2	o-Xylene	9.75			106	203703	8.72			
2	Styrene	9.78			103	148942**m**	9.14			
2	Bromoform	9.98			173	27254	7.41			
2	Isopropylbenzene	10.13			105	560916	8.78			
2	cis-1,4-Dichloro-2-butene	10.29			89	14908	24.13			
3	1,1,2,2-Tetrachloroethane	10.52			83	50511	8.55			
3	trans-1,4-Dichloro-2-butene	10.60			53	11346	8.86			
3	Bromobenzene	10.45			156	112192	8.30			
3	n-Propylbenzene	10.55			91	652798	9.16			
3	1,2,3-Trichloropropane	10.57			110	17955	9.57			
3	2-Chlorotoluene	10.65			91	373398	8.93			
3	1,3,5-Trimethylbenzene	10.75			105	455121	9.25			
3	4-Chlorotoluene	10.77			91	430810	9.00			
3	tert-Butylbenzene	11.06			119	402792	8.72			
3	1,2,4-Trimethylbenzene	11.13			105	443888	8.95			
3	sec-Butylbenzene	11.29			105	548444	8.90			
3	4-Isopropyltoluene	11.44			119	489466	8.80			
3	1,3-Dichlorobenzene	11.42			146	230027	8.36			
3	1,4-Dichlorobenzene	11.52			146	222690	8.20			
3	n-Butylbenzene	11.86			91	409392	8.53			
3	1,2-Dichlorobenzene	11.89			146	192043	7.99			
3	1,2-Dibromo-3-chloropropane	12.57			155	5229	6.71			
3	1,3,5-Trichlorobenzene	12.67			180	154579	6.73			
3	1,2,4-Trichlorobenzene	13.11			180	128872	7.23			
3	Hexachlorobutadiene	13.21			225	75600	7.12			
3	Naphthalene	13.30			128	178801	7.97			
3	1,2,3-Trichlorobenzene	13.49			180	109199	7.47			

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

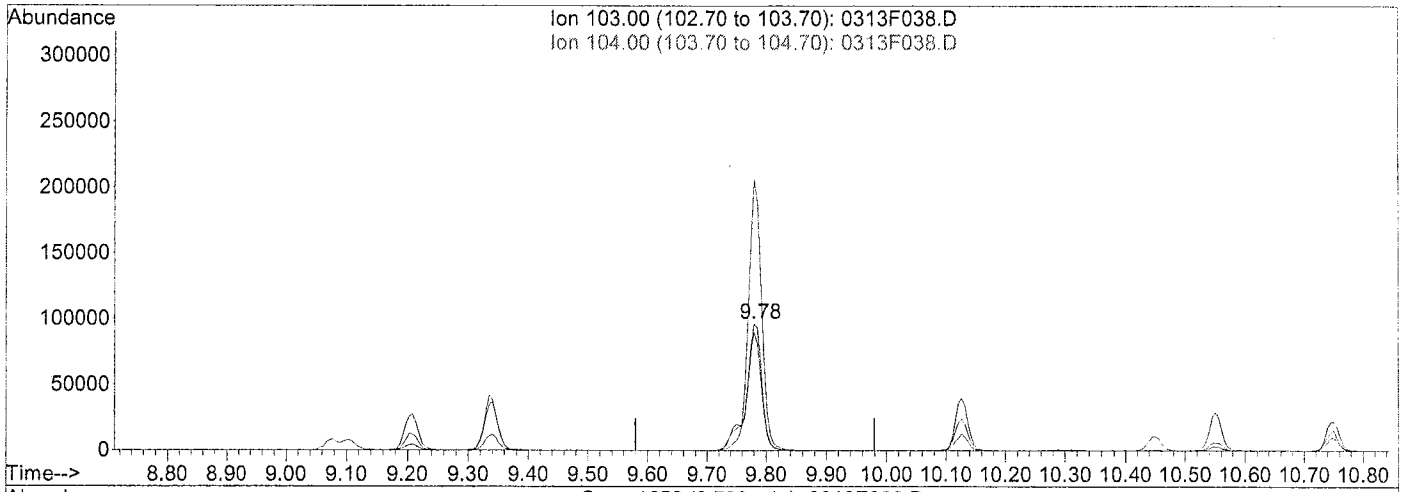
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

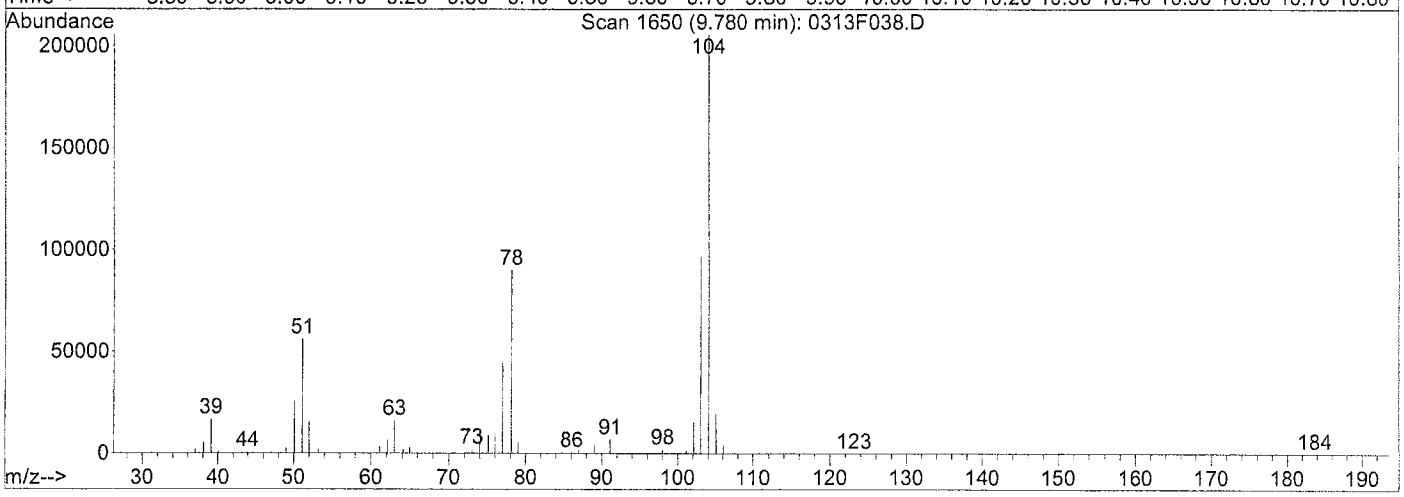
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F038.D
Acq On : 13 Mar 2007 9:02 pm
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 13 22:06 2007

Vial: 36
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration





TIC: 0313F038.D

(76) Styrene (T)

9.78min 10.76PPB

response 175416

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	213.31
78.00	89.70	93.29
0.00	0.00	0.00

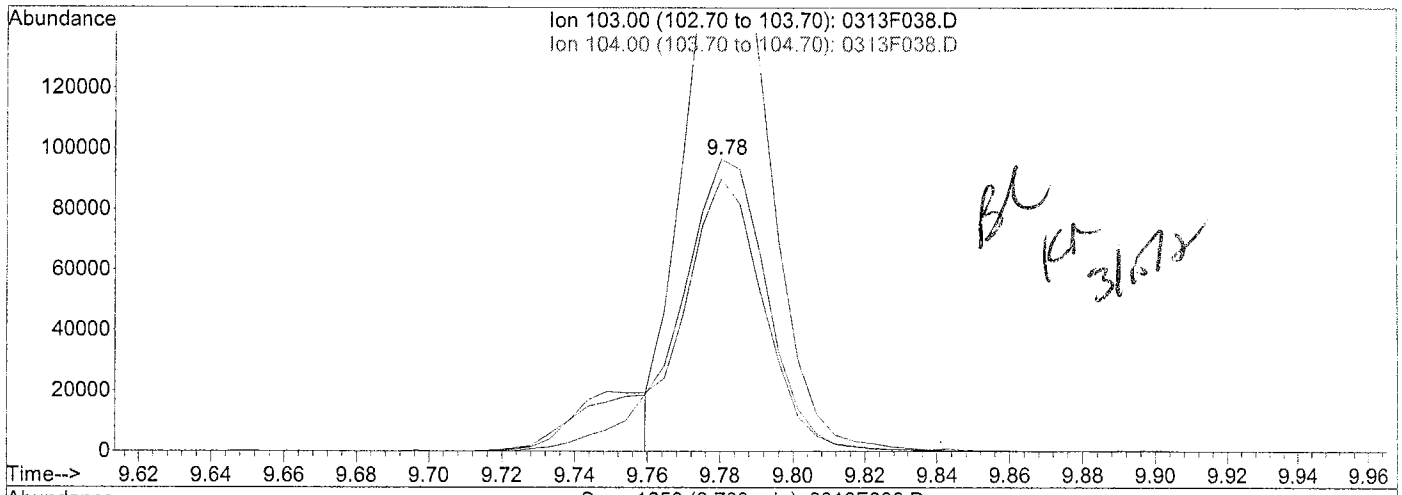
0313F038.D 022607.M Wed Mar 14 15:44:28 2007

Quantitation Report (Qedit)

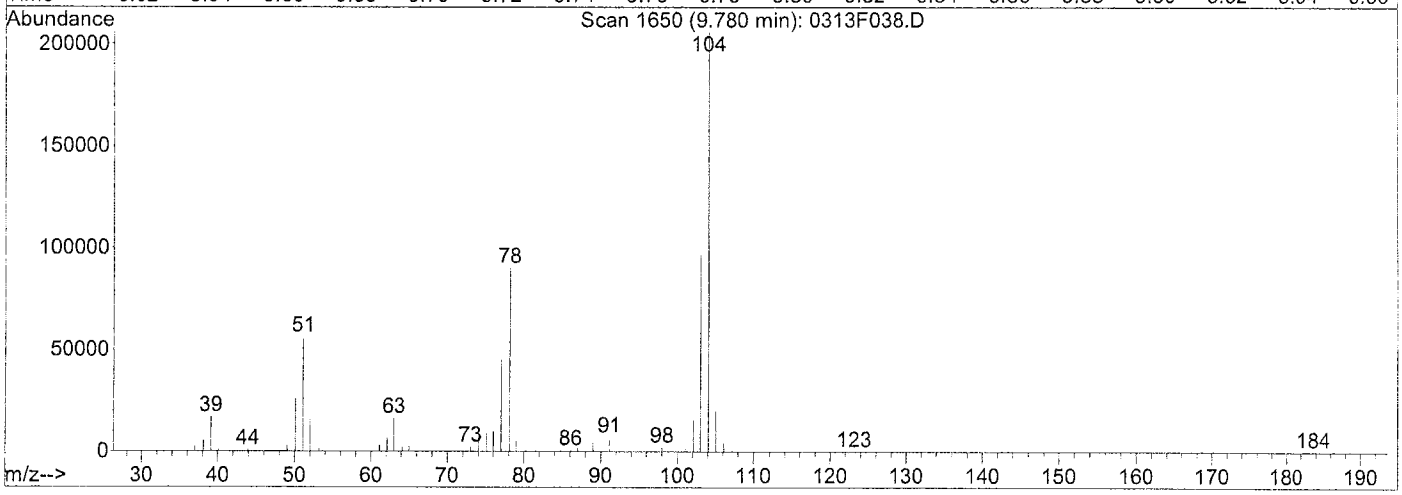
Data File : J:\MS18\DATA\031307\0313F038.D
Acq On : 13 Mar 2007 9:02 pm
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:44 2007

Vial: 36
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Multiple Level Calibration



BL KT 3/15/07



TIC: 0313F038.D

(76) Styrene (T)

9.78min 9.14PPB m

response 148942

Ion	Exp%	Act%
103.00	100	100
104.00	210.10	213.31
78.00	89.70	93.29
0.00	0.00	0.00

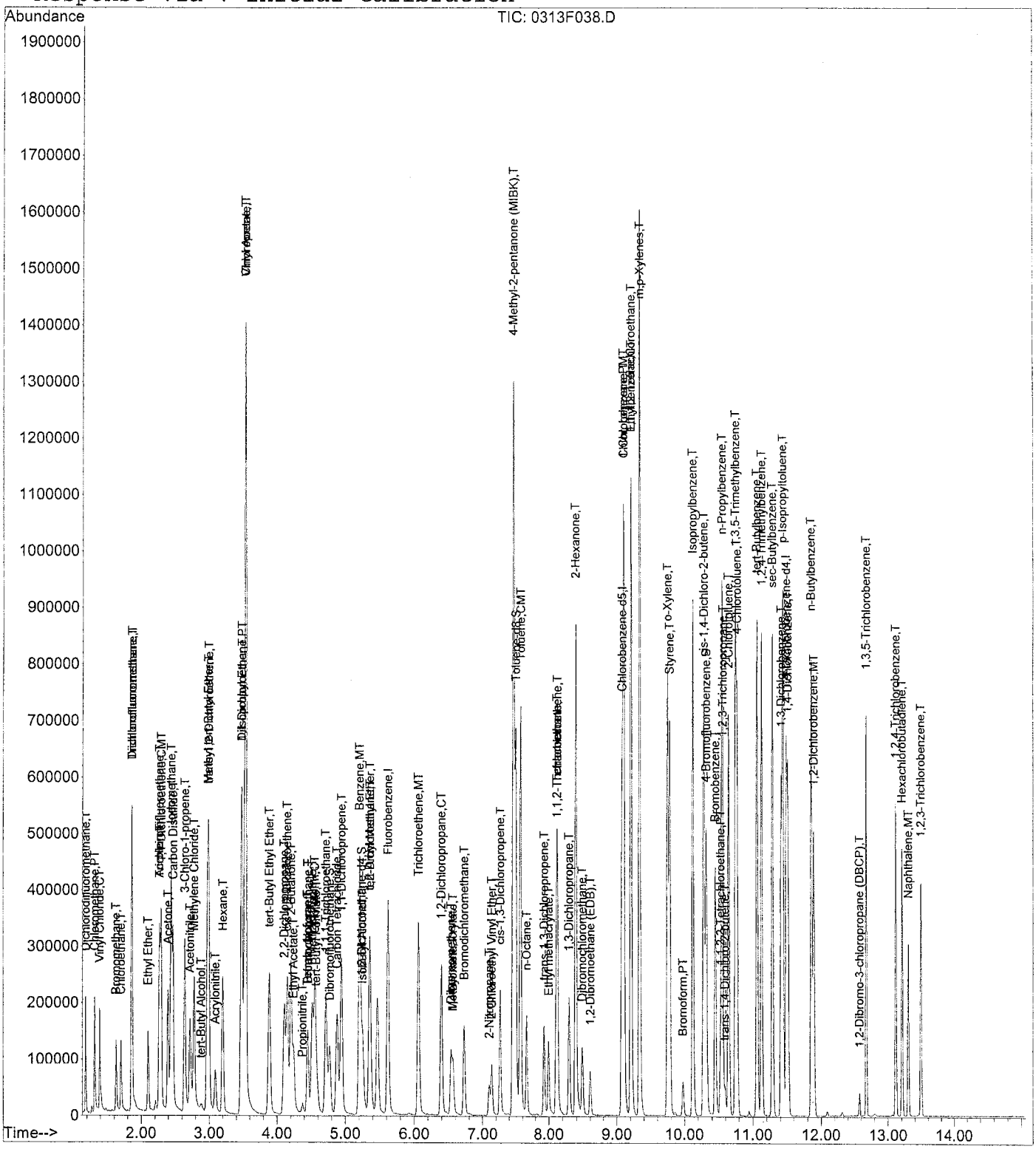
HL 3.15.07

0313F038.D 022607.M Wed Mar 14 15:44:35 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F038.D Vial: 36
Acq On : 13 Mar 2007 9:02 pm Operator:
Sample : CCV Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:44 2007 Quant Results File: 022607.RES

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

2nd Window

Date: 3/13/7

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File: BFB u

New Tune: NO

By: Kleeman

IS/SS Std. ID: 45ng/A - 55A

79944

CCV Std ID: 45ng/A - 20C / 67A

ICAL Date: 2/20/7 Cal 6077

LCS/ICV Std ID: 45ng/A - 67C/68C/69A/67D/68A/62-

Second RV: HL 3.15.07

BFB Std. ID: 45ng/A - 29F

LIMS ID: LWC070360103662

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	MB	0312F036	8260.M				
2	BFB	37		5µl→50ml			
3	CCV	38		5/5µl→50ml			
4	LCS	39		10/10/5/5/5/2.5µl→50ml			
5	K1816 - 2MS	40		0.5/1ml/4/1ml/4/1ml/4

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F043.D Vial: 40
Acq On : 13 Mar 2007 10:39 pm Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:47:31 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KT 3/15/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.62	96	385903	10.00	PPB	0.00
60) Chlorobenzene-d5	9.07	82	175951	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.49	152	154616	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.77	113	79312	9.72	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.20%	
44) 1,2-Dichloroethane-d4	5.25	65	72868	8.85	PPB	0.00
Spiked Amount 10.000			Recovery	=	88.50%	
58) Toluene-d8	7.49	98	402916	10.76	PPB	0.00
Spiked Amount 10.000			Recovery	=	107.60%	
80) 4-Bromofluorobenzene	10.32	95	144160	9.35	PPB	0.00
Spiked Amount 10.000			Recovery	=	93.50%	

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.18	85	3019	0.26	PPB		98
3) Chloromethane	1.31	50	5302	0.39	PPB		91
4) Vinyl Chloride	1.39	62	4112	0.33	PPB		88
5) Bromomethane	1.63	96	2325	0.38	PPB		91
6) Chloroethane	1.70	64	3214	0.38	PPB		93
7) Dichlorofluoromethane	1.86	67	8213	0.40	PPB		93
8) Trichlorofluoromethane	1.86	101	6645	0.39	PPB		92
9) Ethyl Ether	2.10	59	2231	0.41	PPB		84
10) Acrolein	2.27	56	1738	8.69	PPB		85
11) Trichlorotrifluoroethane	2.27	151	2739	0.34	PPB		86
12) 1,1-Dichloroethene	2.29	96	3117	0.33	PPB	#	76
13) Acetone	2.39	43	9985	9.14	PPB		88
14) Iodomethane	2.44	142	15058	1.39	PPB		98
15) Carbon Disulfide	2.47	76	11751	0.39	PPB		89
16) 3-Chloro-1-propene	2.64	76	1853	0.36	PPB		87
17) Acetonitrile	2.72	40	3739	15.00	PPB		84
18) Methylene Chloride	2.78	84	6931	0.69	PPB		99
19) tert-Butyl Alcohol	2.88	59	501	2.30	PPB		80
20) Acrylonitrile	3.10	53	2449	1.73	PPB		95
21) Methyl tert-Butyl Ether	2.97	73	13744	0.80	PPB		97
22) trans-1,2-Dichloroethene	2.99	96	4459	0.41	PPB	#	79
23) Hexane	3.20	57	5118	0.47	PPB		91
24) Diisopropyl Ether	3.49	45	14054	0.45	PPB		94
25) 1,1-Dichloroethane	3.48	63	8469	0.44	PPB		97
26) Vinyl Acetate	3.54	86	765	0.70	PPB	#	2
27) Chloroprene	3.53	53	28703	1.38	PPB		86
28) tert-Butyl Ethyl Ether	3.89	59	9816	0.44	PPB		90
29) 2,2-Dichloropropane	4.11	77	3914	0.30	PPB		93

(#) = qualifier out of range (m) = manual integration

HL 3.15.07

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F043.D Vial: 40
Acq On : 13 Mar 2007 10:39 pm Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:47:31 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	cis-1,2-Dichloroethene	4.15	96	4520	0.41 PPB		80
31)	2-Butanone	4.21	72	3265	8.91 PPB V=10		95
33)	Ethyl Acetate	4.25	61	577	1.19 PPB		70
34)	Methacrylonitrile	4.51	67	2933	1.72 PPB	#	61
35)	Bromochloromethane	4.45	128	1730	0.42 PPB		98
37)	Chloroform	4.56	83	8026	0.42 PPB		80
39)	1,1,1-Trichloroethane	4.72	97	5902	0.37 PPB		89
41)	Carbon Tetrachloride	4.88	117	4945	0.35 PPB		88
42)	1,1-Dichloropropene	4.94	75	6023	0.39 PPB		89
43)	Isobutyl Alcohol	5.27	43	1302	12.76 PPB	#	59
45)	Benzene	5.21	78	18102	0.40 PPB		87
46)	1,2-Dichloroethane	5.35	62	4306	0.42 PPB		88
47)	tert-Amyl Methyl Ether	5.37	55	2558	0.48 PPB	#	30
48)	Trichloroethene	6.07	95	4840	0.44 PPB	#	83
49)	1,2-Dichloropropane	6.40	63	3956	0.42 PPB		95
50)	Dibromomethane	6.53	93	1405	0.38 PPB	#	72
51)	Methyl methacrylate	6.56	69	1372	0.46 PPB	#	61
52)	1,4-Dioxane	6.56	88	604	17.47 PPB		74
53)	Bromodichloromethane	6.73	83	3823	0.37 PPB		82
54)	2-Nitropropane	7.10	43	1257	1.31 PPB	#	77
55)	2-Chloroethyl Vinyl Ether	7.14	63	1291	0.39 PPB	#	41
56)	cis-1,3-Dichloropropene	7.26	75	3820	0.33 PPB		93
57)	4-Methyl-2-pentanone (MIBK	7.46	58	13280	9.30 PPB	#	83
59)	Toluene	7.57	92	11744	0.42 PPB		89
61)	n-Octane	7.66	85	2170	0.49 PPB		93
62)	trans-1,3-Dichloropropene	7.92	75	2071	0.22 PPB		92
63)	Ethyl methacrylate	7.99	69	2468	0.34 PPB		80
64)	1,1,2-Trichloroethane	8.11	83	1927	0.34 PPB		84
65)	Tetrachloroethene	8.13	164	4253	0.33 PPB		92
66)	2-Hexanone	8.39	57	2580	4.99 PPB	#	51
67)	1,3-Dichloropropane	8.29	76	4189	0.33 PPB		91
68)	Dibromochloromethane	8.49	129	1946	0.26 PPB		80
69)	1,2-Dibromoethane (EDB)	8.61	107	1843	0.30 PPB		89
70)	1-Chlorohexane	9.09	91	5753	0.31 PPB		82
71)	Chlorobenzene	9.10	112	11413	0.31 PPB		88
72)	Ethylbenzene	9.20	106	7113	0.34 PPB		97
73)	1,1,1,2-Tetrachloroethane	9.21	131	2936	0.28 PPB		77
74)	m,p-Xylenes	9.34	106	16310	0.63 PPB		98
75)	o-Xylene	9.75	106	6947	0.29 PPB	#	77
76)	Styrene	9.79	103	6077	0.37 PPB		85
77)	Bromoform	9.97	173	899	0.24 PPB		91
78)	Isopropylbenzene	10.13	105	19135	0.29 PPB		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F043.D Vial: 40
Acq On : 13 Mar 2007 10:39 pm Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 14 15:47:31 2007 Quant Results File: 022607.RES

Quant Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration
DataAcq Meth : 8260

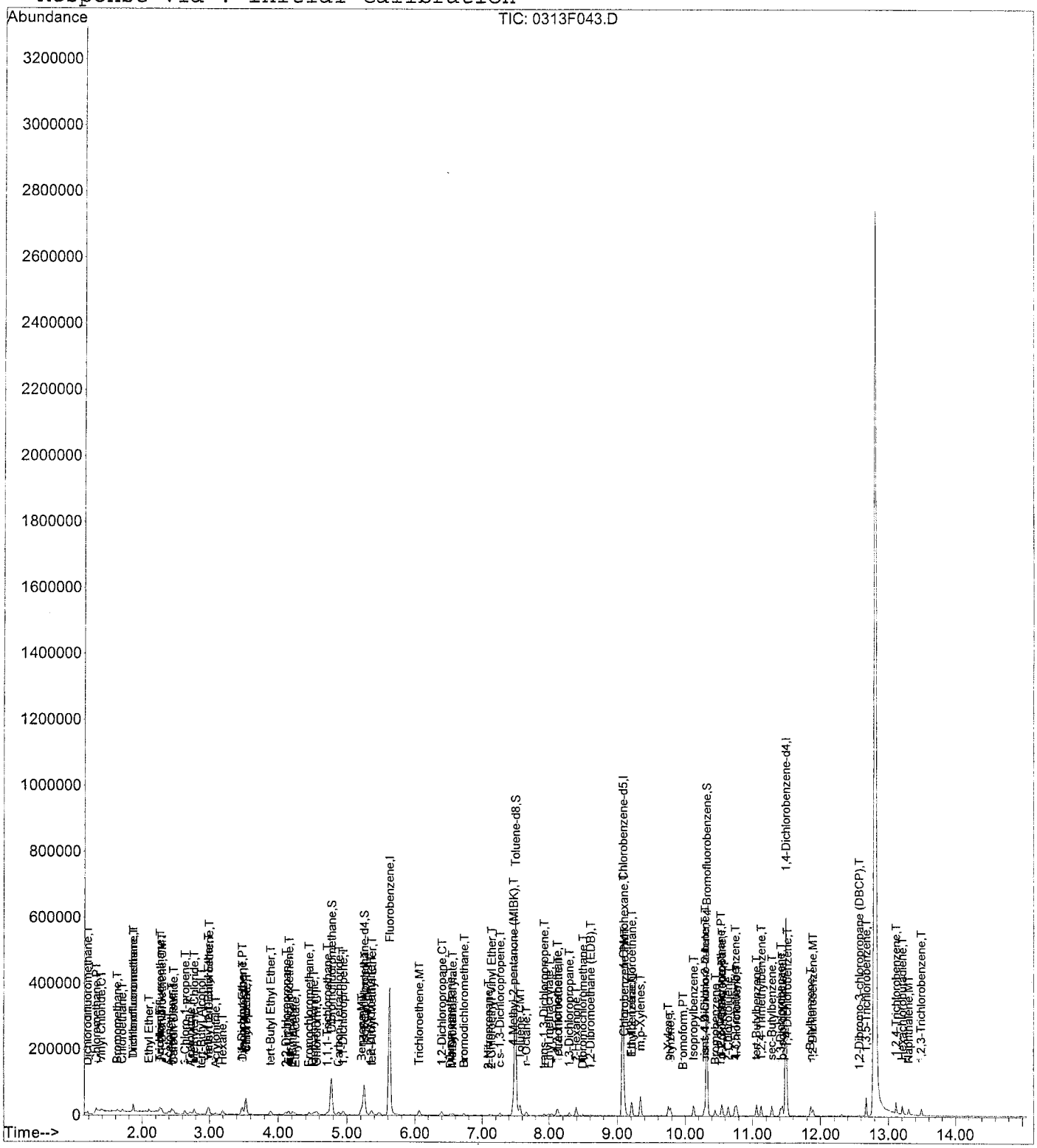
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.29	89	492m	0.78 PPB	RV: 2	
82)	1,1,2,2-Tetrachloroethane	10.53	83	1989	0.35 PPB		87
83)	trans-1,4-Dichloro-2-buten	10.29	53	2071	1.67 PPB		72
84)	Bromobenzene	10.45	156	4729	0.36 PPB	#	72
85)	n-Propylbenzene	10.55	91	22949	0.33 PPB		98
86)	1,2,3-Trichloropropane	10.55	110	848	0.47 PPB	#	20
87)	2-Chlorotoluene	10.65	91	14192	0.35 PPB		95
88)	1,3,5-Trimethylbenzene	10.75	105	15130	0.32 PPB		90
89)	4-Chlorotoluene	10.77	91	16185	0.35 PPB		94
90)	tert-Butylbenzene	11.06	119	13554	0.30 PPB		96
91)	1,2,4-Trimethylbenzene	11.13	105	15472	0.32 PPB		92
92)	sec-Butylbenzene	11.29	105	17490	0.29 PPB		92
93)	p-Isopropyltoluene	11.44	119	15905	0.29 PPB		92
94)	1,3-Dichlorobenzene	11.42	146	9158	0.34 PPB		93
95)	1,4-Dichlorobenzene	11.52	146	9473	0.36 PPB		88
96)	n-Butylbenzene	11.86	91	14796	0.32 PPB		94
97)	1,2-Dichlorobenzene	11.89	146	7854	0.34 PPB		83
98)	1,2-Dibromo-3-chloropropan	12.57	155	174m	0.23 PPB	RV: 0.5	
99)	1,3,5-Trichlorobenzene	12.67	180	11994	0.54 PPB		90
100)	1,2,4-Trichlorobenzene	13.11	180	6636	0.38 PPB		84
101)	Hexachlorobutadiene	13.21	225	3847	0.37 PPB		85
102)	Naphthalene	13.30	128	9681	0.44 PPB		96
103)	1,2,3-Trichlorobenzene	13.49	180	5159	0.36 PPB		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\031307\0313F043.D Vial: 40
Acq On : 13 Mar 2007 10:39 pm Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 15 10:37 2007 Quant Results File: 022607.RES

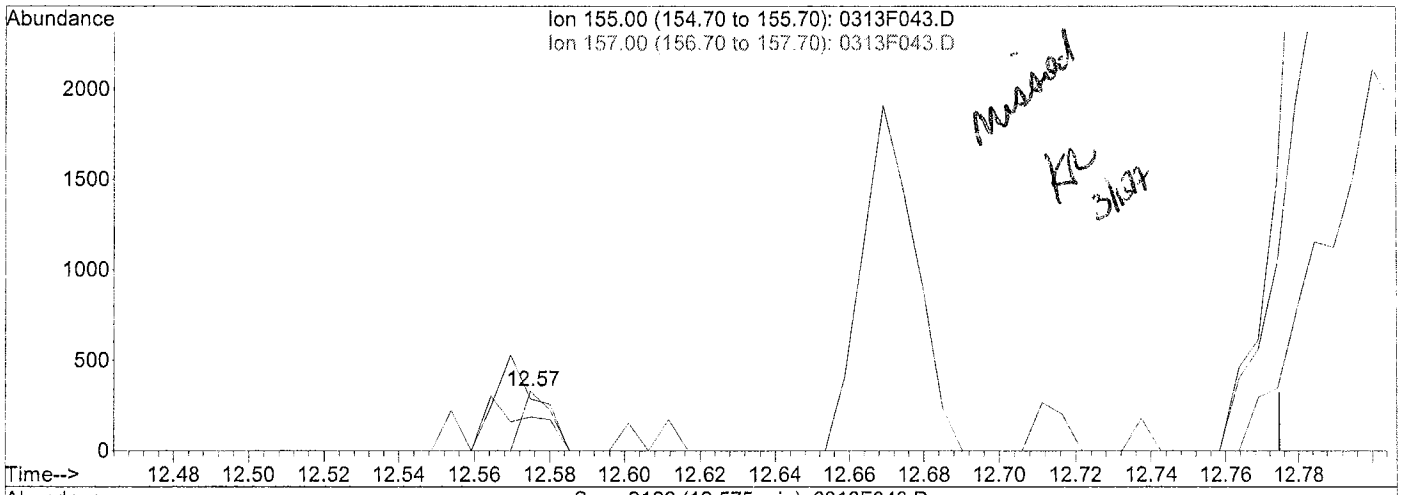
Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Initial Calibration



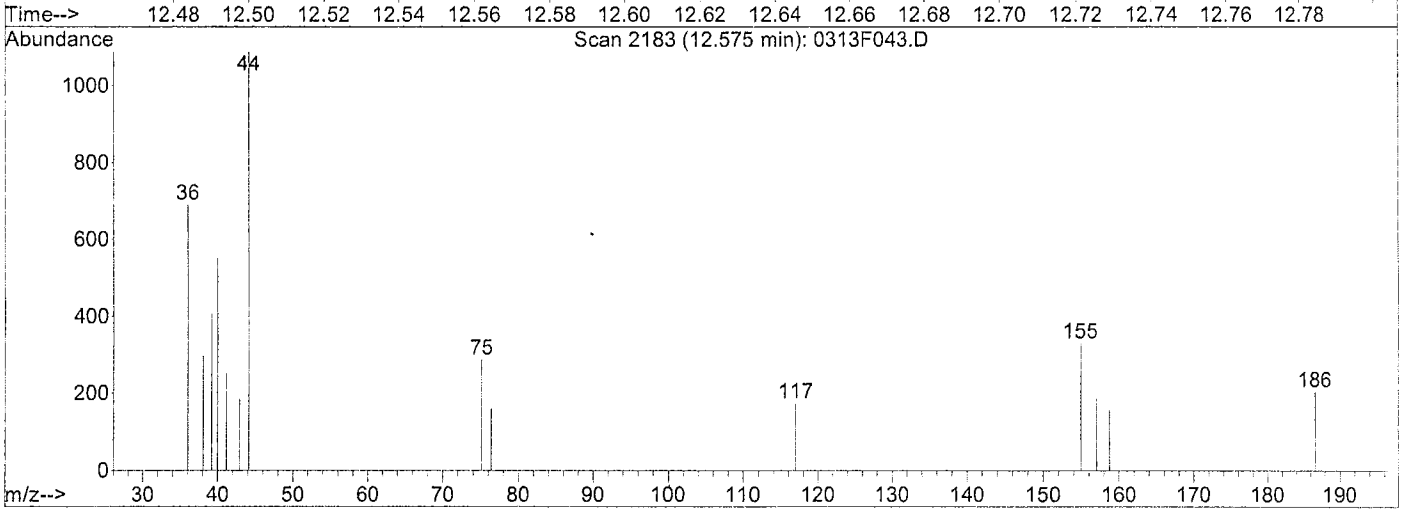
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F043.D Vial: 40
Acq On : 13 Mar 2007 10:39 pm Operator:
Sample : MRL Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 15 10:37 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Single Level Calibration



Manual
KC 3/13/07



TIC: 0313F043.D

(98) 1,2-Dibromo-3-chloropropane (DBCP) (T)

12.57min 0.23PPB m

response 174

Ion	Exp%	Act%
155.00	100	100
157.00	127.90	56.67#
75.00	96.30	86.97
0.00	0.00	0.00

HL 3.15.07

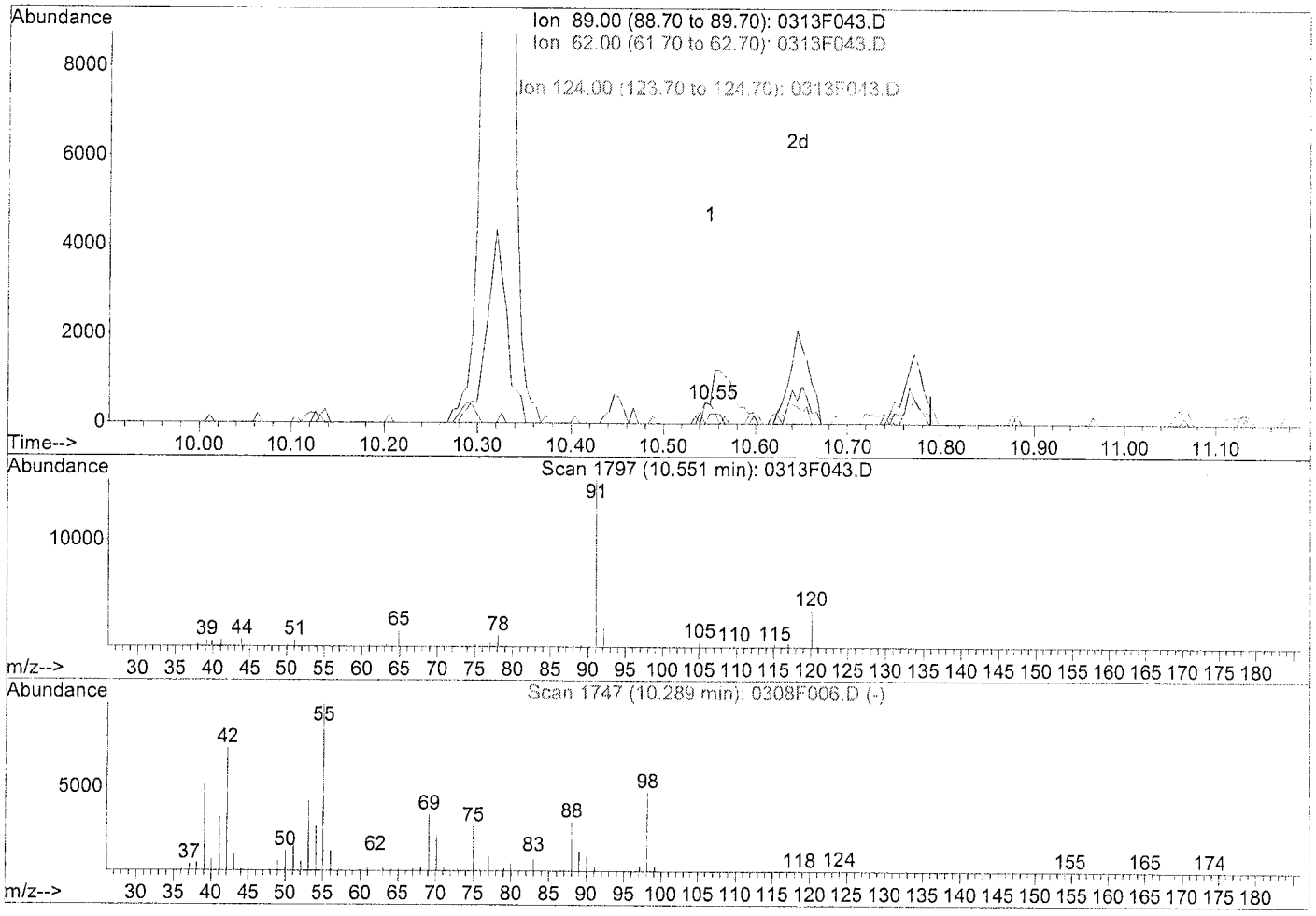
0313F043.D 022607.M Thu Mar 15 10:37:10 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F043.D
Acq On : 13 Mar 2007 10:39 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 15 10:37 2007

Vial: 40
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Single Level Calibration



TIC: 0313F043.D

(79) cis-1,4-Dichloro-2-butene (T)

10.55min 0.90PPB

response 566

Ion	Exp%	Act%
89.00	100	100
62.00	78.00	50.54
75.00	220.00	92.44#
124.00	9.80	0.00

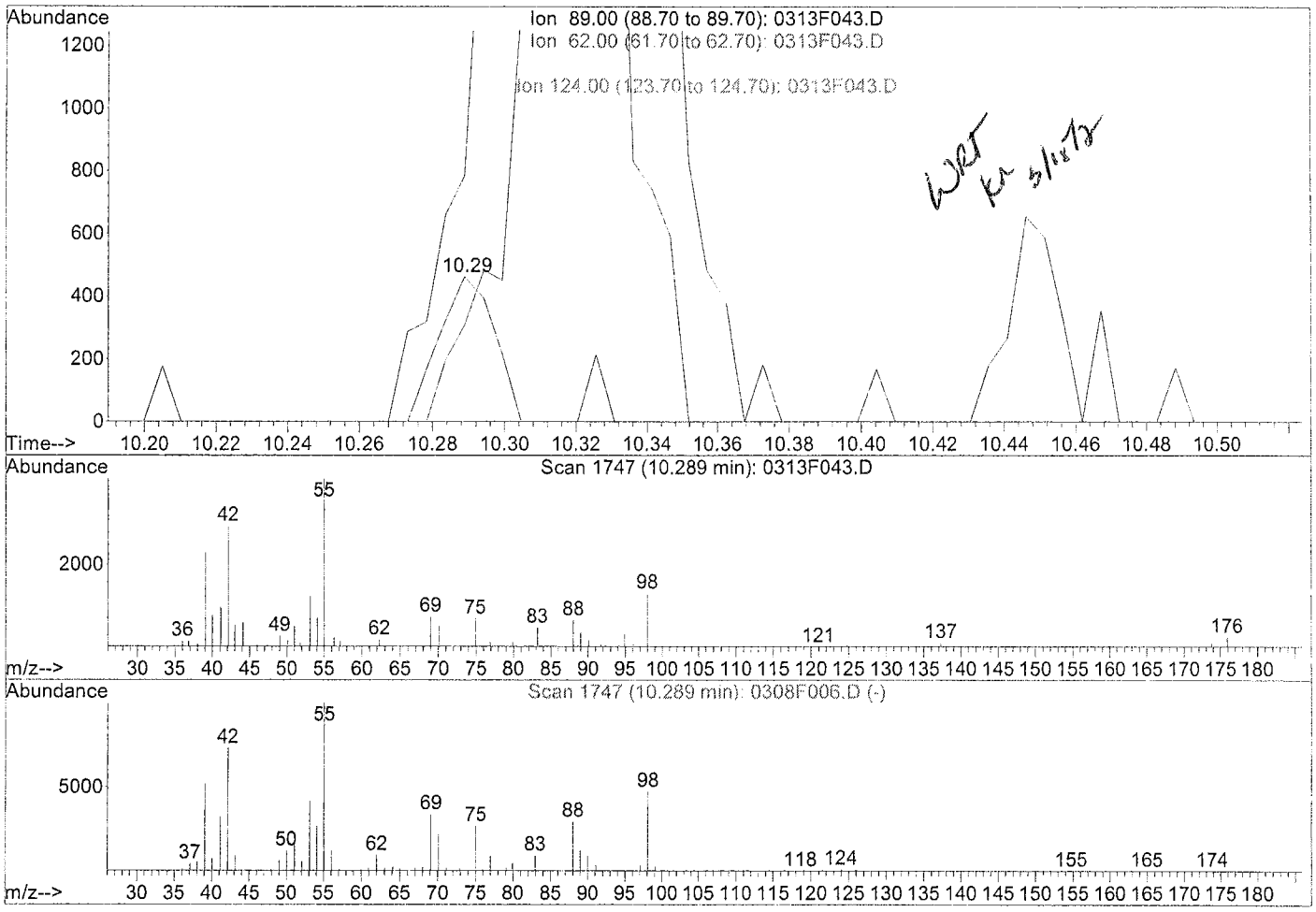
0313F043.D 022607.M Thu Mar 15 10:37:24 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\031307\0313F043.D
Acq On : 13 Mar 2007 10:39 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Mar 15 10:37 2007

Vial: 40
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\022607.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Fri Mar 09 09:57:33 2007
Response via : Single Level Calibration



TIC: 0313F043.D

(79) cis-1,4-Dichloro-2-butene (T)

10.29min 0.78PPB m

response 492

Ion	Exp%	Act%
89.00	100	100
62.00	78.00	66.67
75.00	220.00	169.70#
124.00	9.80	0.00

HC 3.15.07

MDL Studies

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	7470A			Instrument:	K-CVAA-01					
Extr./Dig. Method:	7470A			Analyst(s):	Stephanie Patterson					
Matrix:	Water									
Units:	ug/L									
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9
	Date Analyzed:	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07	3/2/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9
Mercury	0.20	0.21	0.22	0.22	0.21	0.21	0.2	0.21	0.20	0.21

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	7470A								
Extr./Dig. Method:	7470A								
Matrix:	Water								
Units:	ug/L								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Mercury	0.20	0.210	0.007	2.896	0.020	0.03	3%	105%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07	02/16/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Aluminum	80	73.8	62.4	50.9	50.1	58.9	68.8	66.1
Antimony	120	112.0	114.0	111.0	114.0	105.1	117.9	129.8
Arsenic	120	87.7	99.1	87.0	92.2	86.0	91.2	88.6
Barium	3.6	3.1	3.5	2.9	3.2	3.2	3.2	2.9
Beryllium	0.80	0.6	0.7	0.6	0.6	0.8	0.8	0.8
Boron	24	18.5	21.4	17.1	19.3	18.5	25.0	22.8
Cadmium	12	12.1	11.5	13.3	12.4	12.1	14.0	12.9
Calcium	20	26.9	24.8	20.8	22.4	25.9	24.2	24.4
Chromium	8.0	6.1	6.5	6.1	6.6	8.3	7.5	7.0
Cobalt	12	10.4	11.1	9.1	9.4	10.4	10.0	10.8
Copper	8.0	6.8	6.6	4.5	4.0	5.3	6.6	6.6
Iron	16	15.8	13.9	13.8	14.8	14.0	14.5	14.2
Lead	120	104.4	106.4	100.1	108.1	113.9	114.9	103.4
Lithium	16	14.8	15.7	12.1	10.9	14.2	13.3	13.0
Manganese	1.6	0.9	1.4	1.0	1.1	1.3	1.3	1.3
Molybdenum	16	14.0	13.2	15.1	15.8	15.8	17.3	18.0
Nickel	80	74.0	84.5	81.1	82.4	79.0	82.4	79.0
Phosphorus	280	266.5	274.9	287.8	311.8	218.0	314.3	293.0
Potassium	4000	2599	2473	2007	2012	2569	2634	2361
Selenium	120	80.7	111.6	101.5	103.9	104.9	109.2	114.5
Silicon	80	99.8	102.6	89.7	84.9	93.6	96.3	94.2
Silver	12	9.6	11.1	6.9	6.9	8.9	9.7	9.1
Sodium	280	280.0	274.6	249.3	255.7	272.0	282.9	282.9
Strontium	0.80	0.8	0.7	0.4	0.5	0.4	0.5	0.5
Thallium	200	138.3	163.3	161.7	160.0	180.0	151.7	143.3
Tin	80	78.0	80.6	80.1	79.2	76.1	84.6	73.1
Titanium	12	10.1	10.2	10.0	9.9	10.8	11.0	11.0
Vanadium	20	18.2	18.0	18.0	18.1	19.1	20.0	18.7

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method: 6010C / 200.7
Extr./Dig. Method: CLP
Matrix: WATER
Units: ug/L (ppb)

Sample ID:
Date Analyzed:

Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	80	61.571	8.903	3.143	27.983	30	14%	77%	Valid MDL Data
Antimony	120	114.829	7.662	3.143	24.082	30	7%	96%	Valid MDL Data
Arsenic	120	90.257	4.488	3.143	14.107	20	5%	75%	Valid MDL Data
Barium	3.6	3.143	0.207	3.143	0.651	0.7	7%	87%	Valid MDL Data
Beryllium	0.80	0.700	0.100	3.143	0.314	0.4	14%	88%	Valid MDL Data
Boron	24	20.371	2.806	3.143	8.819	9	14%	85%	Valid MDL Data
Cadmium	12	12.614	0.845	3.143	2.657	3	7%	105%	Valid MDL Data
Calcium	20	24.200	2.057	3.143	6.464	7	8%	121%	Valid MDL Data
Chromium	8.0	6.871	0.801	3.143	2.519	3	12%	86%	Valid MDL Data
Cobalt	12	10.171	0.723	3.143	2.272	3	7%	85%	Valid MDL Data
Copper	8.0	5.771	1.161	3.143	3.651	4	20%	72%	Valid MDL Data
Iron	16	14.429	0.699	3.143	2.198	3	5%	90%	Valid MDL Data
Lead	120	107.314	5.450	3.143	17.130	20	5%	89%	Valid MDL Data
Lithium	16	13.429	1.633	3.143	5.132	6	12%	84%	Valid MDL Data
Manganese	1.6	1.186	0.186	3.143	0.586	0.6	16%	74%	Valid MDL Data
Molybdenum	16	15.600	1.698	3.143	5.337	6	11%	98%	Valid MDL Data
Nickel	80	80.343	3.419	3.143	10.747	20	4%	100%	Valid MDL Data
Phosphorus	280	280.900	32.823	3.143	103.163	200	12%	100%	Valid MDL Data
Potassium	4000	2379.286	268.253	3.143	843.119	900	11%	59%	Valid MDL Data
Selenium	120	103.757	11.140	3.143	35.013	40	11%	86%	Valid MDL Data
Silicon	80	94.443	5.958	3.143	18.727	20	6%	118%	Valid MDL Data
Silver	12	8.886	1.528	3.143	4.802	5	17%	74%	Valid MDL Data
Sodium	280	271.057	13.436	3.143	42.229	50	5%	97%	Valid MDL Data
Strontium	0.80	0.543	0.151	3.143	0.475	0.5	28%	68%	Valid MDL Data
Thallium	200	156.900	13.935	3.143	43.799	50	9%	78%	Valid MDL Data
Tin	80	78.814	3.632	3.143	11.415	20	5%	99%	Valid MDL Data
Titanium	12	10.429	0.486	3.143	1.526	2	5%	87%	Valid MDL Data
Vanadium	20	18.586	0.747	3.143	2.348	3	4%	93%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7		Instrument:		K-ICP-AES-01			
Extr./Dig. Method:	CLP		Analyst(s):		MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07	3/15/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Magnesium	3	1.7	1.5	1.9	1.5	1.5	1.5	2.0

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Magnesium	3	1.657	0.215	3.143	0.675	0.7	13%	55%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	6010C / 200.7			Instrument:	K-ICP-AES-01			
Extr./Dig. Method:	CLP			Analyst(s):	MRITOLA			
Matrix:	WATER							
Units:	ug/L (ppb)							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07	3/19/07
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Zinc	5.0	7.9	5.9	5.0	5.6	6.1	6.5	6.7

Supervisor Approval

QA/QC Approval

Columbia Analytical Services									
Method Detection Limit Study									
Analytical Method:	6010C / 200.7								
Extr./Dig. Method:	CLP								
Matrix:	WATER								
Units:	ug/L (ppb)								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	5.0	6.243	0.924	3.143	2.903	3	15%	125%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02				
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan				
Matrix:		Water								
Units:		µg/L								
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Aluminum	27	2.00	2.5040	2.4890	2.4620	2.5550	2.4760	2.5170	2.3800	2.5000
Antimony	121	0.05	0.0576	0.0514	0.0570	0.0535	0.0512	0.0533	0.0504	0.0578
Antimony	123	0.05	0.0527	0.0482	0.0473	0.0495	0.0555	0.0525	0.0502	0.0527
Arsenic	75	0.50	0.5958	0.6457	0.5854	0.5623	0.5879	0.6215	0.6057	0.5972
Barium	135	0.05	0.0589	0.0578	0.0572	0.0594	0.0662	0.0593	0.0503	0.0617
Barium	137	0.05	0.0581	0.0510	0.0480	0.0605	0.0580	0.0569	0.0590	0.0575
Beryllium	9	0.02	0.0326	0.0295	0.0325	0.0300	0.0316	0.0266	0.0266	0.0289
Bismuth	209	0.02	0.0262	0.0276	0.0339	0.0259	0.0268	0.0285	0.0291	0.0274
Boron	10	0.50	0.5487	0.6324	0.5320	0.5301	0.5065	0.5822	0.4802	0.4783
Boron	11	0.50	0.6702	0.6156	0.5880	0.5868	0.5793	0.6853	0.5530	0.6403
Cadmium	114	0.02	0.0204	0.0209	0.0207	0.0167	0.0236	0.0234	0.0244	0.0185
Cobalt	59	0.02	0.0233	0.0246	0.0218	0.0248	0.0237	0.0230	0.0225	0.0218
Copper	63	0.10	0.0864	0.0932	0.0856	0.0874	0.0967	0.0814	0.1005	0.0959
Copper	65	0.10	0.0912	0.0990	0.0951	0.0930	0.1105	0.0920	0.1028	0.0950
Lead	208	0.02	0.0266	0.0219	0.0212	0.0198	0.0191	0.0179	0.0177	0.0189
Manganese	55	0.05	0.0461	0.0634	0.0551	0.0483	0.0553	0.0602	0.0492	0.0455
Molybdenum	95	0.05	0.0621	0.0635	0.0603	0.0590	0.0585	0.0547	0.0636	0.0567
Molybdenum	97	0.05	0.0567	0.0568	0.0545	0.0516	0.0587	0.0529	0.0528	0.0585
Molybdenum	98	0.05	0.0597	0.0597	0.0506	0.0607	0.0661	0.0488	0.0559	0.0523
Nickel	60	0.20	0.2042	0.1871	0.1884	0.1829	0.1951	0.2145	0.2154	0.2091
Nickel	62	0.20	0.2075	0.1138	0.1577	0.2120	0.2305	0.1776	0.1996	0.2680
Selenium	77	1.00	0.6827	0.7298	0.7267	0.9852	1.0390	0.6241	1.0710	1.0110
Selenium	82	1.00	1.1760	1.2980	1.1260	0.9936	1.1420	1.0700	1.2660	1.2370
Thallium	203	0.02	0.0237	0.0250	0.0205	0.0263	0.0207	0.0205	0.0209	0.0243
Thallium	205	0.02	0.0216	0.0230	0.0213	0.0214	0.0226	0.0217	0.0213	0.0210
Tin	118	0.05	0.0544	0.0557	0.0451	0.0495	0.0554	0.0535	0.0483	0.0520
Tin	120	0.05	0.0541	0.0481	0.0468	0.0517	0.0513	0.0522	0.0493	0.0446
Vanadium	51	0.20	0.2053	0.2123	0.1846	0.1611	0.1703	0.1618	0.1566	0.1405

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Aluminum	27	2.00	2.485	0.051	2.998	0.153	0.2	2%	124%	Valid MDL Data
Antimony	121	0.05	0.054	0.003	2.998	0.009	0.01	6%	108%	Valid MDL Data
Antimony	123	0.05	0.051	0.003	2.998	0.008	0.009	5%	102%	Valid MDL Data
Arsenic	75	0.50	0.600	0.025	2.998	0.075	0.08	4%	120%	Valid MDL Data
Barium	135	0.05	0.059	0.004	2.998	0.013	0.02	8%	118%	Valid MDL Data
Barium	137	0.05	0.056	0.004	2.998	0.013	0.02	8%	112%	Valid MDL Data
Beryllium	9	0.02	0.030	0.002	2.998	0.007	0.008	8%	149%	Valid MDL Data
Bismuth	209	0.02	0.028	0.003	2.998	0.008	0.008	9%	141%	Valid MDL Data
Boron	10	0.50	0.536	0.052	2.998	0.156	0.2	10%	107%	Valid MDL Data
Boron	11	0.50	0.615	0.047	2.998	0.140	0.2	8%	123%	Valid MDL Data
Cadmium	114	0.02	0.021	0.003	2.998	0.008	0.008	13%	105%	Valid MDL Data
Cobalt	59	0.02	0.023	0.001	2.998	0.003	0.004	5%	116%	Valid MDL Data
Copper	63	0.10	0.091	0.007	2.998	0.020	0.02	7%	91%	Valid MDL Data
Copper	65	0.10	0.097	0.007	2.998	0.020	0.02	7%	97%	Valid MDL Data
Lead	208	0.02	0.020	0.003	2.998	0.009	0.009	14%	102%	Valid MDL Data
Manganese	55	0.05	0.053	0.007	2.998	0.020	0.02	13%	106%	Valid MDL Data
Molybdenum	95	0.05	0.060	0.003	2.998	0.010	0.01	5%	120%	Valid MDL Data
Molybdenum	97	0.05	0.055	0.003	2.998	0.008	0.009	5%	111%	Valid MDL Data
Molybdenum	98	0.05	0.057	0.006	2.998	0.018	0.02	10%	113%	Valid MDL Data
Nickel	60	0.20	0.200	0.013	2.998	0.039	0.04	6%	100%	Valid MDL Data
Nickel	62	0.20	0.196	0.047	2.998	0.140	0.2	24%	98%	Valid MDL Data
Selenium	77	1.00	0.859	0.184	2.998	0.551	0.6	21%	86%	Valid MDL Data
Selenium	82	1.00	1.164	0.103	2.998	0.307	0.4	9%	116%	Valid MDL Data
Thallium	203	0.02	0.023	0.002	2.998	0.007	0.008	10%	114%	Valid MDL Data
Thallium	205	0.02	0.022	0.001	2.998	0.002	0.003	3%	109%	Valid MDL Data
Tin	118	0.05	0.052	0.004	2.998	0.011	0.02	7%	103%	Valid MDL Data
Tin	120	0.05	0.050	0.003	2.998	0.009	0.01	6%	100%	Valid MDL Data
Vanadium	51	0.20	0.174	0.025	2.998	0.074	0.08	14%	87%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8
Zinc	66	0.50	0.4113	0.4695	0.4795	0.4364	0.4888	0.4751	0.5023	0.4445
Zinc	67	0.50	0.3707	0.4172	0.3737	0.3673	0.4494	0.4436	0.3571	0.2864
Zinc	68	0.50	0.4309	0.5022	0.4405	0.4218	0.4711	0.4660	0.4063	0.4136

Supervisor Approval _____

QA/QC Approval _____

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Zinc	66	0.50	0.463	0.030	2.998	0.091	0.1	7%	93%	Valid MDL Data
Zinc	67	0.50	0.383	0.053	2.998	0.159	0.2	14%	77%	Valid MDL Data
Zinc	68	0.50	0.444	0.033	2.998	0.099	0.1	7%	89%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:		6020/200.8			Instrument:	K-ICP-MS-02						
Extr./Dig. Method:		CLAA			Analyst(s):	Jim Chan						
Matrix:		Water										
Units:		µg/L										
		Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7	MDL-8	MDL-9	MDL-10
		Date Analyzed:	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07	1/22/07
Analyte	Mass	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7	Result 8	Result 9	Result 10
Cadmium	111	0.02	0.0213	0.0241	0.0210	0.0221	0.0199	0.0204	0.0194	0.0232	0.0226	0.0243
Chromium	52	0.20	0.3890	0.4005	0.4359	0.4374	0.4120	0.4414	0.3894	0.3828	0.4116	0.3878
Silver	107	0.02	0.0203	0.0217	0.0227	0.0219	0.0210	0.0210	0.0213	0.0207	0.0200	0.0181
Silver	109	0.02	0.0223	0.0245	0.0209	0.0206	0.0200	0.0204	0.0205	0.0210	0.0188	0.0211
Uranium	238	0.02	0.0188	0.0211	0.0181	0.0193	0.0208	0.0207	0.0201	0.0213	0.0212	0.0199

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	6020/200.8
Extr./Dig. Method:	CLAA
Matrix:	Water
Units:	µg/L
Sample ID:	
Date Analyzed:	

Analyte	Mass	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Cadmium	111	0.02	0.022	0.002	2.821	0.005	0.005	8%	109%	Valid MDL Data
Chromium	52	0.20	0.409	0.023	2.821	0.064	0.07	6%	204%	Valid MDL Data
Silver	107	0.02	0.021	0.001	2.821	0.004	0.004	6%	104%	Valid MDL Data
Silver	109	0.02	0.021	0.002	2.821	0.004	0.005	7%	105%	Valid MDL Data
Uranium	238	0.02	0.020	0.001	2.821	0.003	0.004	5%	101%	Valid MDL Data

Supervisor Approval

QA/QC Approval

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1768

Analytical Method: 8015B
Extraction Method: EPA 3510C
Matrix: WATER
Instrument: gc21 **Column:** ZB-1 15 m

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	1028F010.D	J:\GC21\DATA\102806\	10/28/2006 17:45	E	1028F014.D	J:\GC21\DATA\102806\	10/28/2006 19:07
B	1028F011.D	J:\GC21\DATA\102806\	10/28/2006 18:06	F	1028F015.D	J:\GC21\DATA\102806\	10/28/2006 19:27
C	1028F012.D	J:\GC21\DATA\102806\	10/28/2006 18:26	G	1028F016.D	J:\GC21\DATA\102806\	10/28/2006 19:48
D	1028F013.D	J:\GC21\DATA\102806\	10/28/2006 18:47				

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C10 - C25 DRO	A	93.7	B	90.2	C	98.7	D	97.2	E	97.6	F	95.8	G	90.7		
Diesel Range Organics	A	136	B	131	C	143	D	139	E	141	F	139	G	131		
Diesel Range Organics (DRO)	A	97.8	B	93.9	C	102	D	101	E	101	F	98.9	G	93.6		
Motor Oil	A	167	B	157	C	170	D	165	E	167	F	167	G	154		
Residual Range Organics (RRO)	A	167	B	157	C	170	D	165	E	167	F	167	G	154		

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C10 - C25 DRO	80.0	94.8	3.40	3.143	11	ug/L	4	119	Valid MDL Data
Diesel Range Organics	80.0	137	4.72	3.143	15	ug/L	3	171	Valid MDL Data
Diesel Range Organics (DRO)	80.0	98.3	3.43	3.143	11	ug/L	3	123	Valid MDL Data
Motor Oil	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)
Residual Range Organics (RRO)	200	164	5.93	3.143	19	ug/L	4	82	Spike level too high (Spike>10*MDL)

Supervisor Approval: 11/8/07

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

Analytical Method: 8015B/NWTPH-GX/AK101
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC06 **Column:** DB-624

MDL Study ID: MDL1837

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0227R007.D	J:\GC06\DATA\022707.FID\	02/27/2007 12:34	E	0227R011.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:41
B	0227R008.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:06	F	0227R012.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:13
C	0227R009.D	J:\GC06\DATA\022707.FID\	02/27/2007 13:37	G	0227R013.D	J:\GC06\DATA\022707.FID\	02/27/2007 15:44
D	0227R010.D	J:\GC06\DATA\022707.FID\	02/27/2007 14:09	H	0227R014.D	J:\GC06\DATA\022707.FID\	02/27/2007 16:16

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
C6 - C10 GRO	A	81.5	B	94.0	C	97.4	D	112	E	110	F	80.8	G	102	H	115
Gasoline Range Organics (GRO)	A	80.0	B	92.2	C	95.6	D	111	E	108	F	78.8	G	101	H	113
Gasoline Range Organics-NWTPH	A	85.1	B	96.1	C	98.5	D	108	E	108	F	87.7	G	99.7	H	108

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
C6 - C10 GRO	100	99.1	13.2	2.998	40	ug/L	13	99	Valid MDL Data
Gasoline Range Organics (GRO)	100	97.4	13.2	2.998	40	ug/L	14	97	Valid MDL Data
Gasoline Range Organics-NWTPH	100	98.9	9.06	2.998	27	ug/L	9	99	Valid MDL Data

Supervisor Approval: 3/23/07 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,2-Dibromoethane (EDB)	A	0.210	B	0.230	C	0.210	D	0.180	E	0.190	F	0.150	G	0.190	H	0.200
1,2-Dichlorobenzene	A	0.250	B	0.210	C	0.200	D	0.220	E	0.180	F	0.210	G	0.180	H	0.220
1,2-Dichloroethane (EDC)	A	0.200	B	0.200	C	0.180	D	0.210	E	0.150	F	0.190	G	0.220	H	0.210
1,2-Dichloropropane	A	0.220	B	0.170	C	0.180	D	0.220	E	0.180	F	0.200	G	0.210	H	0.220
1,3,5-Trichlorobenzene	I	0.630	J	0.670	K	0.600	L	0.610	M	0.510	N	0.560	O	0.520	P	0.580
1,3,5-Trimethylbenzene	A	0.220	B	0.200	C	0.170	D	0.200	E	0.150	F	0.190	G	0.170	H	0.190
1,3-Dichlorobenzene	A	0.270	B	0.240	C	0.210	D	0.230	E	0.190	F	0.240	G	0.190	H	0.230
1,3-Dichloropropane	A	0.210	B	0.200	C	0.180	D	0.180	E	0.160	F	0.210	G	0.180	H	0.210
1,4-Dichlorobenzene	A	0.280	B	0.240	C	0.210	D	0.250	E	0.190	F	0.230	G	0.210	H	0.220
1,4-Dioxane	Q	38.2	R	58.5	S	47.5	T	32.2	U	49.0	V	37.5	W	43.9	X	37.9
1-Chlorohexane	A	0.280	B	0.220	C	0.230	D	0.250	E	0.140	F	0.250	G	0.210	H	0.230
2,2-Dichloropropane	A	0.190	B	0.190	C	0.160	D	0.180	E	0.140	F	0.210	G	0.180	H	0.230
2-Butanone (MEK)	A	9.54	B	10.1	C	10.3	D	9.58	E	8.64	F	8.74	G	10.5	H	10.6
2-Chloroethyl Vinyl Ether	I	0.550	J	0.550	K	0.470	L	0.510	M	0.560	N	0.590	O	0.540	P	0.450
2-Chlorotoluene	A	0.240	B	0.190	C	0.190	D	0.220	E	0.170	F	0.200	G	0.170	H	0.230
2-Hexanone	A	9.93	B	8.99	C	10.2	D	8.78	E	9.12	F	8.44	G	7.97	H	10.0
2-Nitropropane	I	2.07	J	1.88	K	1.87	L	2.03	M	2.01	N	2.02	O	2.04	P	2.28
3-Chloro-1-propene	A	0.220	B	0.230	C	0.190	D	0.210	E	0.170	F	0.180	G	0.220	H	0.210
4-Chlorotoluene	A	0.230	B	0.210	C	0.190	D	0.210	E	0.170	F	0.200	G	0.180	H	0.200
4-Isopropyltoluene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.160	F	0.170	G	0.160	H	0.190
4-Methyl-2-pentanone (MIBK)	A	11.2	B	11.6	C	12.0	D	11.1	E	11.8	F	11.2	G	11.3	H	12.5
Acetone	A	10.6	B	10.4	C	12.1	D	9.33	E	9.18	F	9.56	G	11.0	H	11.3
Acetonitrile	A	10.4	B	9.38	C	11.9	D	8.45	E	9.86	F	8.73	G	11.0	H	11.8
Acrolein	I	14.8	J	13.5	K	11.8	L	14.8	M	12.6	N	16.9	O	10.2	P	11.1
Acrylonitrile	A	1.13	B	1.03	C	1.03	D	1.05	E	0.870	F	0.830	G	1.01	H	1.14
Benzene	A	0.220	B	0.190	C	0.180	D	0.200	E	0.160	F	0.210	G	0.200	H	0.220
Bromobenzene	A	0.240	B	0.200	C	0.210	D	0.210	E	0.170	F	0.200	G	0.180	H	0.220
Bromochloromethane	A	0.230	B	0.210	C	0.150	D	0.210	E	0.180	F	0.240	G	0.160	H	0.220
Bromodichloromethane	A	0.200	B	0.160	C	0.170	D	0.180	E	0.140	F	0.170	G	0.190	H	0.180
Bromoform	A	0.220	B	0.120	C	0.160	D	0.160	E	0.130	F	0.130	G	0.140	H	0.180
Bromomethane	A	0.330	B	0.320	C	0.230	D	0.310	E	0.250	F	0.340	G	0.320	H	0.300

Supervisor Approval: 2/28/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

File ID	Data File	Data Path	AcqDate
A	1205F021.D	J:\MS18\DATA\120506\	12/05/2006 16:49
B	1205F022.D	J:\MS18\DATA\120506\	12/05/2006 17:08
C	1205F023.D	J:\MS18\DATA\120506\	12/05/2006 17:28
D	1205F024.D	J:\MS18\DATA\120506\	12/05/2006 17:48
E	1205F025.D	J:\MS18\DATA\120506\	12/05/2006 18:07
F	1205F026.D	J:\MS18\DATA\120506\	12/05/2006 18:27
G	1205F027.D	J:\MS18\DATA\120506\	12/05/2006 18:47
H	1205F028.D	J:\MS18\DATA\120506\	12/05/2006 19:06
I	1206F011.D	J:\MS18\DATA\120606\	12/06/2006 14:48
J	1206F012.D	J:\MS18\DATA\120606\	12/06/2006 15:07
K	1206F013.D	J:\MS18\DATA\120606\	12/06/2006 15:27
L	1206F014.D	J:\MS18\DATA\120606\	12/06/2006 15:46
M	1206F015.D	J:\MS18\DATA\120606\	12/06/2006 16:06
N	1206F016.D	J:\MS18\DATA\120606\	12/06/2006 16:26
O	1206F017.D	J:\MS18\DATA\120606\	12/06/2006 16:45
P	1206F018.D	J:\MS18\DATA\120606\	12/06/2006 17:05
Q	1206F019.D	J:\MS18\DATA\120606\	12/06/2006 17:25
R	1206F020.D	J:\MS18\DATA\120606\	12/06/2006 17:44
S	1206F021.D	J:\MS18\DATA\120606\	12/06/2006 18:04
T	1206F022.D	J:\MS18\DATA\120606\	12/06/2006 18:24
U	1206F023.D	J:\MS18\DATA\120606\	12/06/2006 18:43
V	1206F024.D	J:\MS18\DATA\120606\	12/06/2006 19:03
W	1206F025.D	J:\MS18\DATA\120606\	12/06/2006 19:22
X	1206F026.D	J:\MS18\DATA\120606\	12/06/2006 19:42
Y	0117F005.D	J:\MS18\DATA\011707\	01/17/2007 15:46
Z	0117F006.D	J:\MS18\DATA\011707\	01/17/2007 16:06
AA	0117F007.D	J:\MS18\DATA\011707\	01/17/2007 16:25
AB	0117F008.D	J:\MS18\DATA\011707\	01/17/2007 16:45
AC	0117F009.D	J:\MS18\DATA\011707\	01/17/2007 17:04
AD	0117F010.D	J:\MS18\DATA\011707\	01/17/2007 17:24
AE	0117F011.D	J:\MS18\DATA\011707\	01/17/2007 17:44

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
1,1,1,2-Tetrachloroethane	A	0.210	B	0.180	C	0.160	D	0.170	E	0.170	F	0.180	G	0.190	H	0.180
1,1,1-Trichloroethane (TCA)	A	0.210	B	0.200	C	0.200	D	0.200	E	0.150	F	0.190	G	0.200	H	0.220
1,1,2,2-Tetrachloroethane	A	0.210	B	0.220	C	0.160	D	0.160	E	0.160	F	0.210	G	0.220	H	0.220
1,1,2-Trichloroethane	A	0.240	B	0.190	C	0.160	D	0.240	E	0.180	F	0.210	G	0.240	H	0.230
1,1-Dichloroethane	A	0.210	B	0.190	C	0.190	D	0.210	E	0.150	F	0.190	G	0.190	H	0.210
1,1-Dichloroethene	A	0.240	B	0.170	C	0.190	D	0.230	E	0.170	F	0.200	G	0.210	H	0.230
1,1-Dichloropropene	A	0.210	B	0.200	C	0.190	D	0.210	E	0.160	F	0.230	G	0.190	H	0.210
1,2,3-Trichlorobenzene	I	0.510	J	0.520	K	0.540	L	0.510	M	0.480	N	0.490	O	0.450	P	0.520
1,2,3-Trichloropropane	I	0.510	J	0.520	K	0.510	L	0.490	M	0.510	N	0.660	O	0.580	P	0.650
1,2,4-Trichlorobenzene	A	0.410	B	0.310	C	0.300	D	0.290	E	0.220	F	0.270	G	0.250	H	0.240
1,2,4-Trimethylbenzene	A	0.220	B	0.180	C	0.170	D	0.200	E	0.150	F	0.190	G	0.180	H	0.190
1,2-Dibromo-3-chloropropane	I	0.590	J	0.710	L	0.680	M	0.430	N	0.280	O	0.460	P	0.380		

Supervisor Approval: 2/24/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Carbon Disulfide	A	0.210	B	0.200	C	0.170	D	0.210	E	0.150	F	0.220	G	0.190	H	0.210
Carbon Tetrachloride	A	0.190	B	0.180	C	0.170	D	0.190	E	0.160	F	0.200	G	0.190	H	0.210
Chlorobenzene	A	0.220	B	0.200	C	0.180	D	0.210	E	0.160	F	0.200	G	0.180	H	0.220
Chloroethane	A	0.310	B	0.190	C	0.190	D	0.230	E	0.210	F	0.280	G	0.250	H	0.230
Chloroform	A	0.240	B	0.200	C	0.160	D	0.220	E	0.170	F	0.180	G	0.200	H	0.220
Chloromethane	A	0.240	B	0.210	C	0.290	D	0.260	E	0.200	F	0.280	G	0.290	H	0.290
Chloroprene	A	0.820	B	0.690	C	0.670	D	0.780	E	0.570	F	0.750	G	0.720	H	0.790
cis-1,2-Dichloroethene	A	0.230	B	0.210	C	0.210	D	0.180	E	0.170	F	0.230	G	0.210	H	0.220
cis-1,3-Dichloropropene	A	0.210	B	0.180	C	0.180	D	0.170	E	0.150	F	0.200	G	0.190	H	0.180
cis-1,4-Dichloro-2-butene	I	1.69	J	1.58	K	1.78	L	1.53	M	1.60	N	1.59	O	1.57	P	1.80
Dibromochloromethane	A	0.180	B	0.160	C	0.170	D	0.180	E	0.140	F	0.220	G	0.170	H	0.150
Dibromomethane	A	0.230	B	0.210	C	0.230	D	0.240	E	0.200	F	0.220	G	0.230	H	0.120
Dichlorodifluoromethane	A	0.240	B	0.190	C	0.180	D	0.240	E	0.190	F	0.220	G	0.190	H	0.230
Dichlorofluoromethane (CFC 21)	A	0.200	B	0.210	C	0.170	D	0.220	E	0.190	F	0.200	G	0.210	H	0.230
Diisopropyl Ether	A	0.210	B	0.180	C	0.180	D	0.210	E	0.160	F	0.200	G	0.190	H	0.210
Ethyl Acetate	I	2.04	J	2.02	K	1.99	L	2.29	M	2.19	N	2.53	O	1.99	P	1.99
Ethyl Ether	A	0.230	B	0.190	C	0.190	D	0.200	E	0.210	F	0.180	G	0.220	H	0.230
Ethyl Methacrylate	A	0.240	B	0.160	C	0.180	D	0.210	E	0.130	F	0.160	G	0.230	H	0.210
Ethylbenzene	A	0.220	B	0.200	C	0.170	D	0.190	E	0.160	F	0.220	G	0.180	H	0.210
Hexachlorobutadiene	A	0.410	B	0.350	C	0.320	D	0.280	E	0.270	F	0.310	G	0.250	H	0.280
Iodomethane	A	0.720	B	0.710	C	0.660	D	0.730	E	0.580	F	0.740	G	0.720	H	0.820
Isobutyl Alcohol	I	24.9	J	27.7	K	21.8	L	20.2	M	23.8	N	27.0	O	22.5	P	23.3
Isopropylbenzene	A	0.210	B	0.190	C	0.170	D	0.210	E	0.140	F	0.200	G	0.170	H	0.210
m,p-Xylenes	A	0.420	B	0.390	C	0.340	D	0.370	E	0.300	F	0.400	G	0.350	H	0.380
Methacrylonitrile	A	1.00	B	0.740	C	0.960	D	0.910	E	0.640	F	0.940	G	0.890	H	0.910
Methyl Methacrylate	A	0.350	B	0.240	C	0.290	D	0.250	E	0.130	F	0.240	G	0.260	H	0.260
Methyl tert-Butyl Ether	A	0.390	B	0.360	C	0.370	D	0.380	E	0.350	F	0.360	G	0.370	H	0.440
Methylene Chloride	A	0.280	B	0.220	C	0.250	D	0.260	E	0.190	F	0.220	G	0.240	H	0.250
Naphthalene	I	0.500	J	0.540	K	0.470	L	0.540	M	0.450	N	0.510	O	0.490	P	0.480
n-Butylbenzene	A	0.260	B	0.220	C	0.210	D	0.210	E	0.160	F	0.200	G	0.190	H	0.200
n-Hexane	I	0.580	J	0.640	K	0.600	L	0.580	M	0.520	N	0.630	O	0.470		

Supervisor Approval: 2/2/07 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
n-Octane	I	0.690	J	0.750	K	0.630	L	0.640	M	0.630	N	0.680	O	0.520	P	0.620
n-Propylbenzene	A	0.220	B	0.190	C	0.180	D	0.210	E	0.160	F	0.190	G	0.180	H	0.210
o-Xylene	A	0.220	B	0.170	C	0.170	D	0.190	E	0.160	F	0.190	G	0.160	H	0.210
Propionitrile	I	2.16	J	2.49	K	3.10	L	2.08	M	1.90	N	2.41	O	2.10	P	2.55
sec-Butylbenzene	A	0.230	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.190
Styrene	A	0.220	B	0.180	C	0.190	D	0.170	E	0.140	F	0.170	G	0.210	H	0.200
tert-Amyl Methyl Ether	A	0.300	B	0.260	C	0.240	D	0.270	E	0.240	F	0.310	G	0.270	H	0.250
tert-Butyl Alcohol	I	3.35	J	3.36	K	2.72	L	3.26	M	2.52	N	3.45	O	3.07	P	2.92
tert-Butyl Ethyl Ether	A	0.210	B	0.180	C	0.180	D	0.190	E	0.150	F	0.190	G	0.180	H	0.200
tert-Butyl Formate	I	0.510	J	0.390	K	0.520	L	0.380	N	0.430	O	0.380	P	0.420		
tert-Butylbenzene	A	0.210	B	0.190	C	0.180	D	0.200	E	0.150	F	0.200	G	0.170	H	0.200
Tetrachloroethene (PCE)	A	0.270	B	0.230	C	0.190	D	0.230	E	0.160	F	0.230	G	0.220	H	0.230
Tetrahydrofuran	Q	1.33	R	1.25	S	1.67	T	0.780	U	1.33	V	1.11	W	1.36	X	0.920
Toluene	A	0.230	B	0.200	C	0.180	D	0.210	E	0.160	F	0.210	G	0.200	H	0.230
trans-1,2-Dichloroethene	A	0.260	B	0.240	C	0.230	D	0.230	E	0.210	F	0.190	G	0.210	H	0.250
trans-1,3-Dichloropropene	A	0.200	B	0.200	C	0.140	D	0.190	E	0.140	F	0.190	G	0.170	H	0.160
trans-1,4-Dichloro-2-butene	A	0.450	B	0.350	C	0.400	D	0.320	E	0.300	F	0.330	G	0.270	H	0.300
Trichloroethene (TCE)	A	0.210	B	0.180	C	0.210	D	0.220	E	0.160	F	0.230	G	0.200	H	0.230
Trichlorofluoromethane	A	0.240	B	0.190	C	0.190	D	0.230	E	0.140	F	0.220	G	0.190	H	0.230
Trichlorotrifluoroethane	A	0.270	B	0.230	C	0.200	D	0.210	E	0.160	F	0.230	G	0.240	H	0.220
Vinyl Acetate	I	1.11	J	1.09	K	0.930	L	0.890	M	0.740	N	0.920	O	0.710	P	0.970
Vinyl Chloride	Y	0.100	Z	0.110	AA	0.110	AB	0.100	AC	0.0900	AD	0.100	AE	0.110		

Supervisor Approval: 2/2/7

QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
1,1,1,2-Tetrachloroethane	0.200	0.180	0.0151	2.998	0.045	ug/L	8	90	Valid MDL Data
1,1,1-Trichloroethane (TCA)	0.200	0.196	0.0207	2.998	0.062	ug/L	11	98	Valid MDL Data
1,1,2,2-Tetrachloroethane	0.200	0.195	0.0293	2.998	0.088	ug/L	15	98	Valid MDL Data
1,1,2-Trichloroethane	0.200	0.211	0.0314	2.998	0.094	ug/L	15	106	Valid MDL Data
1,1-Dichloroethane	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
1,1-Dichloroethene	0.200	0.205	0.0273	2.998	0.082	ug/L	13	103	Valid MDL Data
1,1-Dichloropropene	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,2,3-Trichlorobenzene	0.500	0.503	0.0282	2.998	0.084	ug/L	6	101	Valid MDL Data
1,2,3-Trichloropropane	0.500	0.554	0.0678	2.998	0.20	ug/L	12	111	Valid MDL Data
1,2,4-Trichlorobenzene	0.200	0.286	0.0588	2.998	0.18	ug/L	21	143	Valid MDL Data
1,2,4-Trimethylbenzene	0.200	0.185	0.0207	2.998	0.062	ug/L	11	93	Valid MDL Data
1,2-Dibromo-3-chloropropane	0.500	0.504	0.160	3.143	0.50	ug/L	32	101	Valid MDL Data
1,2-Dibromoethane (EDB)	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
1,2-Dichlorobenzene	0.200	0.209	0.0230	2.998	0.069	ug/L	11	104	Valid MDL Data
1,2-Dichloroethane (EDC)	0.200	0.195	0.0220	2.998	0.066	ug/L	11	98	Valid MDL Data
1,2-Dichloropropane	0.200	0.200	0.0207	2.998	0.062	ug/L	10	100	Valid MDL Data
1,3,5-Trichlorobenzene	0.500	0.585	0.0542	2.998	0.16	ug/L	9	117	Valid MDL Data
1,3,5-Trimethylbenzene	0.200	0.186	0.0220	2.998	0.066	ug/L	12	93	Valid MDL Data
1,3-Dichlorobenzene	0.200	0.225	0.0273	2.998	0.082	ug/L	12	113	Valid MDL Data
1,3-Dichloropropane	0.200	0.191	0.0189	2.998	0.057	ug/L	10	96	Valid MDL Data
1,4-Dichlorobenzene	0.200	0.229	0.0280	2.998	0.084	ug/L	12	114	Valid MDL Data
1,4-Dioxane	40.0	43.1	8.39	2.998	25	ug/L	19	108	Valid MDL Data
1-Chlorohexane	0.200	0.226	0.0410	2.998	0.12	ug/L	18	113	Valid MDL Data
2,2-Dichloropropane	0.200	0.185	0.0278	2.998	0.083	ug/L	15	93	Valid MDL Data
2-Butanone (MEK)	8.00	9.76	0.767	2.998	2.3	ug/L	8	122	Valid MDL Data
2-Chloroethyl Vinyl Ether	0.500	0.528	0.0474	2.998	0.14	ug/L	9	106	Valid MDL Data
2-Chlorotoluene	0.200	0.201	0.0264	2.998	0.079	ug/L	13	101	Valid MDL Data
2-Hexanone	8.00	9.18	0.806	2.998	2.4	ug/L	9	115	Valid MDL Data
2-Nitropropane	2.50	2.03	0.127	2.998	0.38	ug/L	6	81	Valid MDL Data
3-Chloro-1-propene	0.200	0.204	0.0213	2.998	0.064	ug/L	10	102	Valid MDL Data
4-Chlorotoluene	0.200	0.199	0.0189	2.998	0.057	ug/L	9	99	Valid MDL Data

Supervisor Approval: 1/18/07 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4-Isopropyltoluene	0.200	0.185	0.0233	2.998	0.070	ug/L	13	93	Valid MDL Data
4-Methyl-2-pentanone (MIBK)	8.00	11.6	0.481	2.998	1.4	ug/L	4	145	Valid MDL Data
Acetone	8.00	10.4	1.01	2.998	3.0	ug/L	10	130	Valid MDL Data
Acetonitrile	8.00	10.2	1.32	2.998	4.0	ug/L	13	127	Valid MDL Data
Acrolein	10.0	13.2	2.22	2.998	6.6	ug/L	17	132	Valid MDL Data
Acrylonitrile	0.800	1.01	0.111	2.998	0.33	ug/L	11	126	Valid MDL Data
Benzene	0.200	0.198	0.0205	2.998	0.062	ug/L	10	99	Valid MDL Data
Bromobenzene	0.200	0.204	0.0220	2.998	0.066	ug/L	11	102	Valid MDL Data
Bromochloromethane	0.200	0.200	0.0330	2.998	0.099	ug/L	16	100	Valid MDL Data
Bromodichloromethane	0.200	0.174	0.0185	2.998	0.055	ug/L	11	87	Valid MDL Data
Bromoform	0.200	0.155	0.0330	2.998	0.099	ug/L	21	78	Valid MDL Data
Bromomethane	0.200	0.300	0.0393	2.998	0.12	ug/L	13	150	Valid MDL Data
Carbon Disulfide	0.200	0.195	0.0239	2.998	0.072	ug/L	12	98	Valid MDL Data
Carbon Tetrachloride	0.200	0.186	0.0160	2.998	0.048	ug/L	9	93	Valid MDL Data
Chlorobenzene	0.200	0.196	0.0213	2.998	0.064	ug/L	11	98	Valid MDL Data
Chloroethane	0.200	0.236	0.0424	2.998	0.13	ug/L	18	118	Valid MDL Data
Chloroform	0.200	0.199	0.0275	2.998	0.082	ug/L	14	99	Valid MDL Data
Chloromethane	0.200	0.258	0.0369	2.998	0.11	ug/L	14	129	Valid MDL Data
Chloroprene	0.800	0.724	0.0803	2.998	0.24	ug/L	11	90	Valid MDL Data
cis-1,2-Dichloroethene	0.200	0.208	0.0219	2.998	0.066	ug/L	11	104	Valid MDL Data
cis-1,3-Dichloropropene	0.200	0.183	0.0183	2.998	0.055	ug/L	10	91	Valid MDL Data
cis-1,4-Dichloro-2-butene	2.00	1.64	0.102	2.998	0.30	ug/L	6	82	Valid MDL Data
Dibromochloromethane	0.200	0.171	0.0242	2.998	0.072	ug/L	14	86	Valid MDL Data
Dibromomethane	0.200	0.210	0.0385	2.998	0.12	ug/L	18	105	Valid MDL Data
Dichlorodifluoromethane	0.200	0.210	0.0251	2.998	0.075	ug/L	12	105	Valid MDL Data
Dichlorofluoromethane (CFC 21)	0.200	0.204	0.0185	2.998	0.055	ug/L	9	102	Valid MDL Data
Diisopropyl Ether	0.200	0.193	0.0183	2.998	0.055	ug/L	10	96	Valid MDL Data
Ethyl Acetate	2.00	2.13	0.196	2.998	0.59	ug/L	9	107	Valid MDL Data
Ethyl Ether	0.200	0.206	0.0192	2.998	0.058	ug/L	9	103	Valid MDL Data
Ethyl Methacrylate	0.200	0.190	0.0385	2.998	0.12	ug/L	20	95	Valid MDL Data
Ethylbenzene	0.200	0.194	0.0226	2.998	0.068	ug/L	12	97	Valid MDL Data

Supervisor Approval: 2/28/7 QA/QC Approval:

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Hexachlorobutadiene	0.200	0.309	0.0517	2.998	0.15	ug/L	17	154	Valid MDL Data
Iodomethane	0.800	0.710	0.0687	2.998	0.21	ug/L	10	89	Valid MDL Data
Isobutyl Alcohol	20.0	23.9	2.58	2.998	7.7	ug/L	11	119	Valid MDL Data
Isopropylbenzene	0.200	0.188	0.0255	2.998	0.076	ug/L	14	94	Valid MDL Data
m,p-Xylenes	0.400	0.369	0.0380	2.998	0.11	ug/L	10	92	Valid MDL Data
Methacrylonitrile	0.800	0.874	0.121	2.998	0.36	ug/L	14	109	Valid MDL Data
Methyl Methacrylate	0.200	0.253	0.0614	2.998	0.18	ug/L	24	126	Valid MDL Data
Methyl tert-Butyl Ether	0.400	0.378	0.0282	2.998	0.084	ug/L	7	94	Valid MDL Data
Methylene Chloride	0.200	0.239	0.0280	2.998	0.084	ug/L	12	119	Valid MDL Data
Naphthalene	0.500	0.498	0.0320	2.998	0.096	ug/L	6	100	Valid MDL Data
n-Butylbenzene	0.200	0.206	0.0283	2.998	0.085	ug/L	14	103	Valid MDL Data
n-Hexane	0.500	0.574	0.0605	3.143	0.19	ug/L	11	115	Valid MDL Data
n-Octane	0.500	0.645	0.0665	2.998	0.20	ug/L	10	129	Valid MDL Data
n-Propylbenzene	0.200	0.193	0.0198	2.998	0.059	ug/L	10	96	Valid MDL Data
o-Xylene	0.200	0.184	0.0226	2.998	0.068	ug/L	12	92	Valid MDL Data
Propionitrile	2.00	2.35	0.378	2.998	1.1	ug/L	16	117	Valid MDL Data
sec-Butylbenzene	0.200	0.189	0.0236	2.998	0.071	ug/L	12	94	Valid MDL Data
Styrene	0.200	0.185	0.0256	2.998	0.077	ug/L	14	93	Valid MDL Data
tert-Amyl Methyl Ether	0.200	0.268	0.0260	2.998	0.078	ug/L	10	134	Valid MDL Data
tert-Butyl Alcohol	2.50	3.08	0.336	2.998	1.0	ug/L	11	123	Valid MDL Data
tert-Butyl Ethyl Ether	0.200	0.185	0.0177	2.998	0.053	ug/L	10	93	Valid MDL Data
tert-Butyl Formate	0.500	0.433	0.0594	3.143	0.19	ug/L	14	87	Valid MDL Data
tert-Butylbenzene	0.200	0.188	0.0198	2.998	0.059	ug/L	11	94	Valid MDL Data
Tetrachloroethene (PCE)	0.200	0.220	0.0325	2.998	0.097	ug/L	15	110	Valid MDL Data
Tetrahydrofuran	1.00	1.22	0.278	2.998	0.83	ug/L	23	122	Valid MDL Data
Toluene	0.200	0.203	0.0238	2.998	0.071	ug/L	12	101	Valid MDL Data
trans-1,2-Dichloroethene	0.200	0.228	0.0231	2.998	0.069	ug/L	10	114	Valid MDL Data
trans-1,3-Dichloropropene	0.200	0.174	0.0250	2.998	0.075	ug/L	14	87	Valid MDL Data
trans-1,4-Dichloro-2-butene	0.200	0.340	0.0590	2.998	0.18	ug/L	17	170	Valid MDL Data
Trichloroethene (TCE)	0.200	0.205	0.0245	2.998	0.073	ug/L	12	103	Valid MDL Data
Trichlorofluoromethane	0.200	0.204	0.0329	2.998	0.099	ug/L	16	102	Valid MDL Data

Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1788

Analytical Method: 8260B
Extraction Method: EPA 5030B
Matrix: WATER
Instrument: GC-MS 18 **Column:** MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Trichlorotrifluoroethane	0.200	0.220	0.0321	2.998	0.096	ug/L	15	110	Valid MDL Data
Vinyl Acetate	1.00	0.920	0.144	2.998	0.43	ug/L	16	92	Valid MDL Data
Vinyl Chloride	0.100	0.103	0.00756	3.143	0.024	ug/L	7	103	Valid MDL Data

Supervisor Approval: _____

QA/QC Approval: _____

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Columbia Analytical Services								
Method Detection Limit Study								
Analytical Method:	335.4 9012, 4500			Instrument:	Lachat			
Extr./Dig. Method:	N/A			Analyst(s):	BH			
Matrix:	H2O							
Units:	mg/L							
	Sample ID:	MDL-1	MDL-2	MDL-3	MDL-4	MDL-5	MDL-6	MDL-7
	Date Analyzed:	2/20/2007	2/20/2007	2/20/2007	2/20/2007	2/20/2007	2/20/2007	2/20/2007
Analyte	Spike Level	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	Result 7
Cyanide	0.0100	0.00368	0.00512	0.00497	0.00435	0.00502	0.00353	0.00502

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

Method Detection Limit Study

Analytical Method:	335.4 9012, 4500								
Extr./Dig. Method:	N/A								
Matrix:	H2O								
Units:	mg/L								
	Sample ID:								
	Date Analyzed:								
Analyte	Spike Level	Mean	Std Dev.	T-Value	MDL	MDL	% RSD	% Rec.	MDL Qualifier notes
Cyanide	0.0100	0.005	0.001	3.143	0.002	0.003	15%	45%	Valid MDL Data

Supervisor Approval _____

QA/QC Approval _____

Columbia Analytical Services

MDL Study Report

Analytical Method: 521
Extraction Method: METHOD
Matrix: DRINKING WATER
Instrument: MS16 **Column:** MS

MDL Study ID: MDL1663

File ID	Data File	Data Path	AcqDate
A	0713006.D	J:\MS16\DATA\071306A\	07/13/2006 21:11
B	0713007.D	J:\MS16\DATA\071306A\	07/13/2006 21:50
C	0713008.D	J:\MS16\DATA\071306A\	07/13/2006 22:29
D	0713009.D	J:\MS16\DATA\071306A\	07/13/2006 23:08
E	0713010.D	J:\MS16\DATA\071306A\	07/13/2006 23:47
F	0713011.D	J:\MS16\DATA\071306A\	07/14/2006 00:26
G	0713012.D	J:\MS16\DATA\071306A\	07/14/2006 01:05

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
N-Nitrosodiethylamine	A	1.64	B	1.92	C	2.32	D	1.92	E	2.18	F	1.64	G	3.08		
N-Nitrosodimethylamine	A	1.64	B	1.90	C	2.00	D	1.54	E	2.40	F	1.50	G	2.36		
N-Nitrosodi-n-butylamine	A	3.10	B	1.96	C	2.06	D	2.70	E	2.90	F	2.34	G	2.70		
N-Nitrosodi-n-propylamine	A	2.10	B	1.56	C	2.06	D	2.00	E	2.14	F	1.96	G	2.22		
N-Nitrosodiphenylamine	A	1.46	B	1.10	C	1.00	D	1.06	E	1.34	F	1.56	G	1.32		
N-Nitrosomethylethylamine	A	1.14	B	1.32	C	1.26	D	1.22	E	1.50	F	1.36	G	1.56		
N-Nitrosopiperidine	A	2.04	B	1.66	C	1.64	D	1.66	E	1.78	F	1.84	G	2.02		
N-Nitrosopyrrolidine	A	2.10	B	1.90	C	2.18	D	1.98	E	2.40	F	2.10	G	2.38		

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
N-Nitrosodiethylamine	2.00	2.10	0.501	3.143	1.6	ng/L	24	105	Valid MDL Data
N-Nitrosodimethylamine	2.00	1.91	0.372	3.143	1.2	ng/L	19	95	Valid MDL Data
N-Nitrosodi-n-butylamine	2.00	2.54	0.428	3.143	1.3	ng/L	17	127	Valid MDL Data
N-Nitrosodi-n-propylamine	2.00	2.01	0.215	3.143	0.67	ng/L	11	100	Valid MDL Data
N-Nitrosodiphenylamine	2.00	1.26	0.213	3.143	0.67	ng/L	17	63	Valid MDL Data
N-Nitrosomethylethylamine	2.00	1.34	0.150	3.143	0.47	ng/L	11	67	Valid MDL Data
N-Nitrosopiperidine	2.00	1.81	0.170	3.143	0.53	ng/L	9	90	Valid MDL Data
N-Nitrosopyrrolidine	2.00	2.15	0.188	3.143	0.59	ng/L	9	107	Valid MDL Data

Supervisor Approval: _____

QA/QC Approval: _____

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Second Quarter 2007

Table F-1
Columbia Analytical Services
Sample Delivery Group Index List
Second Quarter 2007
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	**Sample Date**	**SDG Number**
BHWGW01CL	6/6/2007	K0704852
1349MW100CL	6/6/2007	K0704852
231GW24CL	6/6/2007	K0704852
FM14GX07GW102CL	6/6/2007	K0704852
Trip Blanks		
TB0606071ACL	6/6/2007	K0704852

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 29, 2007 Analytical Report for Service Request No: K0704852

RECEIVED
JUL 05 2007
TREADWELL & ROLLO

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RE: Presidio

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on June 07, 2007. For your reference, these analyses have been assigned our service request number K0704852.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata, Ph.D.
Project Chemist

GS/lb

NELAP Accredited ACIL Seal of Excellence Award 100% Recycled

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Treadwell and Rollo, Inc.	**Service Request No.:**	K0704852
Project:	Presidio	**Date Received:**	06/07/07
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Five water samples were received for analysis at Columbia Analytical Services on 06/07/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Nitrite by EPA 300.0
Nitrate by EPA 300.0
Fluoride by EPA 300.0
The reporting limit is elevated for Nitrite in samples BHWGW01CL and 1349MW100CL and for Fluoride and Nitrite in sample 1349MW100CL. The chromatograms indicated the presence of Chloride. The matrix interference prevented adequate resolution of the target compounds at the reporting limit. The results are flagged to indicate the matrix interference.

No other anomalies associated with the analysis of these samples were observed.

Dissolved Metals

No anomalies associated with the analysis of these samples were observed.

Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Gasoline Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Organochlorine Pesticides by EPA Method 8081A

Continuing Calibration Verification Exceptions:
The primary evaluation criterion was exceeded for Toxaphene in CCV 0619F038 and 0621F022. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Approved by _____ **Date** 7/3/07

Elevated Method Reporting Limits:
The reporting limit is elevated for all analytes in sample 1349MW100CL. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The results are flagged to indicate the matrix interference.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

Initial Calibration (ICAL) Exceptions:
The primary evaluation criterion was exceeded for Bromomethane, Methylene Chloride, 2-Chloroethyl Vinyl Ether, 2-Hexanone, and Styrene in ICAL ID CAL6287. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 9.4%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

The CAS minimum relative response factor criterion for 2-Butanone (MEK) was not met in ICAL ID CAL6287. In accordance with CAS standard operating procedures, a Method Reporting Limit (MRL) check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, the data quality is not significantly affected. No further corrective action was appropriate.

Continuing Calibration Verification (CCV) Exceptions:
The upper control criterion was exceeded for Methyl tert-Butyl Ether, Vinyl Acetate, 2-Chloroethyl Vinyl Ether, Acetone, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), and Bromoform in CCV MS04\0620F010.D. The field samples analyzed in this sequence did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Surrogate Exceptions:
The client specific upper control criterion was exceeded for the Toluene-d8 surrogate in samples 1349MW100CL, 231GW29CL, FM14EX07GW102CL, TB0606071ACL, Method Blank KWG0706882-4, Matrix Spike 1349MW100CLMS, Duplicate Matrix Spike 1349MW100CLDMS, and Lab Control Sample KWG0706882-3. The surrogate recoveries are within CAS control charted acceptance limits. No target analytes were detected in samples 231GW29CL, FM14EX07GW102CL, TB0606071ACL, and Method Blank KWG0706882-4. The error associated with an elevated recovery equates to a high bias for these samples. Target analytes were detected in sample 1349MW100CL. The sample in question was reanalyzed one day past the recommended holding time. The results of the reanalysis confirmed the detections in the original analysis. The results of the original analysis are reported. The quality of the sample data is not significantly affected. No further corrective action was appropriate.

Lab Control Sample Exceptions:
The advisory criterion was exceeded for 4-Methyl-2-pentanone (MIBK), 2-Chloroethyl Vinyl Ether, 2-Hexanone, Acetone, and 2-Butanone (MEK) in Laboratory Control Sample (LCS) KWG0706882-3. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8310

Continuing Calibration Verification (CCV) Exceptions:
The upper control limit was exceeded for the analyte Dibenz(a,h)anthracene in the DAD signals for CCVs KWG0706622-1, KWG0706622-2 and KWG0706622-3. The elevated results appear to be due to an unresolved

Approved by _____ **Date** 7/2/07

artifact (it is present in the instrument blank analyses as well). The FLD signal results for the compound in the standards meet the primary evaluation criteria. The analyte was not detected in the FLD signals for the associated field samples, thus no secondary signal confirmation result was required. No further corrective action was necessary.

The upper control limit was exceeded for the analyte Benzo(g,h,i)perylene in the FLD signal for CCV KWG0706622-2. The DAD signal result for the compound in the standard meets the primary evaluation criteria. The analyte was not detected in the DAD signal for the associated field samples, thus no secondary signal confirmation result was required. No further corrective action was necessary.

Elevated Method Reporting Limits:

Sample 1349MW10CL required dilutions due to the presence of an elevated level of Fluorene, and to the presumptive presence of elevated levels of Phenanthrene and Fluoranthene. The reporting limits are adjusted to reflect the dilutions.

The reporting limits are elevated for Pyrene, Phenanthrene and Fluoranthene in sample 1349MW10CL. The chromatograms indicated the presence of non-target background interferences which prevented adequate resolution of the target compounds at their reporting limits. The results are flagged to indicate the matrix interferences.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 7/2/07

Chain of Custody Documentation

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2137
Page: 1 of 1
K0704852

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTS - Brown, P. Comish
Recorder (signature required): [illegible]
Sent to Laboratory (Name): CAS

PROJECT MANAGER: Joshua Graber
PROJECT NUMBER: 2893

TURNAROUND TIME: 10 Days

Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers and Preservation: HCl	H_2SO_4	HNO_3	NaOH/Zinc	Other	TPHg (8015M)	TPHd (8015M) [1]	TPHfo (8015M) [1]	VOCs (8260)	General Chemistry [2]	OCPs (8081)	Metals - Dissolved [3] (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total [3] (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Metals - Dissolved (23)	Metals - Dissolved (14)	Total Sulfide	BTEX/MTBE			COMMENTS / NOTES
BHWGW01CL	6-6-07	1340	1		X				1		1					X		X										
1349MW100CL	6-6-07	850	2		X		6		1		5	X	X	X	X	X	X			X	X	X						
2716GW29CL	6-6-07	1420	3		X		6		1	1	2	X	X	X	X	X				X			X	X				
FM14BX076W102CL	6-6-07	0916	4		X		6				3	X	X	X							X				X			
TB060607IACL	6-6-07	—	5		X		2								X													
												•			•													

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - **Indicate in the metals column (by number) which metals list is requested. Metals Lists** (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (**Other** -)

RELINQUISHED BY: [illegible]	DATE: 6/6/07	RECEIVED BY: UPS	DATE: 6/6/07
PRINT NAME: P. Comish FIRM: BTS	TIME: 1530	PRINT NAME: FIRM:	TIME: 1530
RELINQUISHED BY:	DATE:	RECEIVED BY: [illegible]	DATE: 6/7/07
PRINT NAME: FIRM:	TIME:	PRINT NAME: [illegible] FIRM: CAS	TIME: 1030

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original **Yellow Copy** - Laboratory **Pink Copy** - Field

10

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC Greg

Client / Project: Treadwell Service Request *K07* 04852

Received: 6-7-07 Opened: 6-7-07 By: A.J.

1. Samples were received via? *US Mail* *Fed Ex* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 17
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 1297365923100011 16 NA Y N
5. **Temperature of cooler(s) upon receipt (°C):** 5.4 8.8
   Temperature Blank (°C): 5.2 3.6
6. If applicable, list Chain of Custody Numbers:
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Packing material used. *Inserts* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other* _____
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* Y N
12. **Were the correct types of bottles used for the tests indicated?** NA Y N
13. Were all of the preserved bottles received at the lab with the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles checked for absence of air bubbles? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials
1349MW100CL	1	500K				✓	HNO3	1ml	CC22029	A.J.

Additional Notes, Discrepancies, & Resolutions:

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Alkalinity as CaCO3, Total

Analysis Method : SM 2320B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	2	1	06/11/07	505	
1349MW100CL	K0704852-002	2	1	06/11/07	972	
231GW29CL	K0704852-003	2	1	06/11/07	280	
Method Blank	K0704852-MB	2	1	06/11/07	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 6/6/2007
Date Received : 6/7/2007
Date Prepared : NA
Date Analyzed : 06/11/07

Duplicate Summary
Inorganic Parameters

Sample Name : BHWGW01CL
Lab Code : K0704852-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	SM 2320B	2	505	526	516	4	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/11/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	SM 2320B	94	94	100	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Bicarbonate as CaCO3

Analysis Method : SM 2320B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	2	1	06/11/07	505	
1349MW100CL	K0704852-002	2	1	06/11/07	972	
231GW29CL	K0704852-003	2	1	06/11/07	280	
Method Blank	K0704852-MB	2	1	06/11/07	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	6/6/2007
Project Number :	NA	**Date Received :**	6/7/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/11/07

Duplicate Summary
Inorganic Parameters

Sample Name : BHWGW01CL
Lab Code : K0704852-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Bicarbonate as CaCO3	SM 2320B	2	505	526	516	4	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/11/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity, Total as CaCO3	NONE	SM 2320B	94	94	100	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Carbonate as CaCO3

Analysis Method : SM 2320B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	2	1	06/11/07	ND	
1349MW100CL	K0704852-002	2	1	06/11/07	ND	
231GW29CL	K0704852-003	2	1	06/11/07	ND	
Method Blank	K0704852-MB	2	1	06/11/07	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	6/6/2007
Project Number :	NA	**Date Received :**	6/7/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/11/07

Duplicate Summary
Inorganic Parameters

Sample Name :	BHWGW01CL	Units :	mg/L
Lab Code :	K0704852-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbonate as CaCO3	SM 2320B	2	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/11/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity, Total as CaCO3	NONE	SM 2320B	94	94	100	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Chloride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	10	50	06/08/07	220	
1349MW100CL	K0704852-002	40	200	06/07/07	840	
231GW29CL	K0704852-003	2	10	06/08/07	49	
Method Blank	K0704852-MB	0.2	1	06/07/07	ND	
Method Blank	K0704852-MB	0.2	1	06/08/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 06/07/07

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0704754-014DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	0.2	1.0	1.1	1.1	10	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 06/07/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0704754-014MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	300.0	0.2	4.0	1.0	4.6	90	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.0	4.8	96	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.0	4.8	96	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Chloride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/7/2007	5.0	4.9	98
CCV3 Result	6/7/2007	5.0	4.9	98
CCV4 Result	6/7/2007	5.0	4.8	96
CCV5 Result	6/7/2007	5.0	4.8	96
CCV6 Result	6/7/2007	5.0	4.8	96
CCV1 Result	6/8/2007	5.0	4.9	98
CCV2 Result	6/8/2007	5.0	4.9	98
CCV3 Result	6/8/2007	5.0	4.9	98
CCV4 Result	6/8/2007	5.0	4.9	98
CCV5 Result	6/8/2007	5.0	4.8	96
CCV6 Result	6/8/2007	5.0	4.9	98

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/7/2007	0.2	ND
CCB3 Result	6/7/2007	0.2	ND
CCB4 Result	6/7/2007	0.2	ND
CCB5 Result	6/7/2007	0.2	ND
CCB6 Result	6/7/2007	0.2	ND
CCB1 Result	6/8/2007	0.2	ND
CCB2 Result	6/8/2007	0.2	ND
CCB3 Result	6/8/2007	0.2	ND
CCB4 Result	6/8/2007	0.2	ND
CCB5 Result	6/8/2007	0.2	ND
CCB6 Result	6/8/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Fluoride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	0.2	2	06/08/07	ND	
1349MW100CL	K0704852-002	1.0	5	06/07/07	ND	i
231GW29CL	K0704852-003	0.2	2	06/08/07	ND	
Method Blank	K0704852-MB	0.2	1	06/08/07	ND	
Method Blank	K0704852-MB	0.2	1	06/07/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	6/6/2007
Project Number :	NA	**Date Received :**	6/7/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Duplicate Summary
Inorganic Parameters

Sample Name :	BHWGW01CL	Units :	mg/L
Lab Code :	K0704754-026DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	0.2	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	6/6/2007
Project Number :	NA	**Date Received :**	6/7/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	BHWGW01CL	Units :	mg/L
Lab Code :	K0704754-026MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	300.0	0.2	4.0	ND	4.0	99	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	9.6	10.0	104	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	9.6	10.3	107	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Fluoride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/7/2007	5.0	5.4	108
CCV3 Result	6/7/2007	5.0	5.3	106
CCV4 Result	6/7/2007	5.0	5.3	106
CCV5 Result	6/7/2007	5.0	5.3	106
CCV6 Result	6/7/2007	5.0	5.4	108
CCV1 Result	6/8/2007	5.0	5.3	106
CCV2 Result	6/8/2007	5.0	5.3	106
CCV3 Result	6/8/2007	5.0	5.4	108
CCV4 Result	6/8/2007	5.0	5.5	110
CCV5 Result	6/8/2007	5.0	5.3	106
CCV6 Result	6/8/2007	5.0	5.5	110

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/7/2007	0.2	ND
CCB3 Result	6/7/2007	0.2	ND
CCB4 Result	6/7/2007	0.2	ND
CCB5 Result	6/7/2007	0.2	ND
CCB6 Result	6/7/2007	0.2	ND
CCB1 Result	6/8/2007	0.2	ND
CCB2 Result	6/8/2007	0.2	ND
CCB3 Result	6/8/2007	0.2	ND
CCB4 Result	6/8/2007	0.2	ND
CCB5 Result	6/8/2007	0.2	ND
CCB6 Result	6/8/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Nitrate as Nitrogen

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	0.1	2	06/08/07 11:12	6.0	
1349MW100CL	K0704852-002	0.5	5	06/07/07 20:42	ND	i
231GW29CL	K0704852-003	0.1	2	06/08/07 11:56	1.1	
Method Blank	K0704852-MB	0.1	1	06/07/07 09:28	ND	
Method Blank	K0704852-MB	0.1	1	06/08/07 09:29	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0704754-026DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	300.0	0.1	0.5	0.5	0.5	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Matrix Spike Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0704754-026MS	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	300.0	0.1	4.0	0.5	4.1	90	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	300.0	5.1	5.3	104	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	300.0	5.1	5.3	104	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/7/2007	2.0	1.9	95
CCV3 Result	6/7/2007	2.0	1.9	95
CCV4 Result	6/7/2007	2.0	1.9	95
CCV5 Result	6/7/2007	2.0	1.9	95
CCV6 Result	6/7/2007	2.0	2.1	105
CCV1 Result	6/8/2007	2.0	1.9	95
CCV2 Result	6/8/2007	2.0	1.9	95
CCV3 Result	6/8/2007	2.0	1.9	95
CCV4 Result	6/8/2007	2.0	1.9	95
CCV5 Result	6/8/2007	2.0	1.9	95
CCV6 Result	6/8/2007	2.0	1.9	95

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/7/2007	0.1	ND
CCB3 Result	6/7/2007	0.1	ND
CCB4 Result	6/7/2007	0.1	ND
CCB5 Result	6/7/2007	0.1	ND
CCB6 Result	6/7/2007	0.1	ND
CCB1 Result	6/8/2007	0.1	ND
CCB2 Result	6/8/2007	0.1	ND
CCB3 Result	6/8/2007	0.1	ND
CCB4 Result	6/8/2007	0.1	ND
CCB5 Result	6/8/2007	0.1	ND
CCB6 Result	6/8/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Nitrite as Nitrogen

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	0.5	5	06/08/07 11:27	ND	i
1349MW100CL	K0704852-002	2	20	06/07/07 20:57	ND	i
231GW29CL	K0704852-003	0.2	2	06/08/07 11:56	ND	
Method Blank	K0704852-MB	0.1	1	06/08/07 09:29	ND	
Method Blank	K0704852-MB	0.1	1	06/07/07 09:28	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0704754-026DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	300.0	0.1	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 06/08/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0704754-026MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	300.0	0.1	4.0	ND	3.6	90	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	300.0	100	95.9	96	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	300.0	100	96.5	97	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/7/2007	2.0	2.0	100
CCV3 Result	6/7/2007	2.0	2.0	100
CCV4 Result	6/7/2007	2.0	2.0	100
CCV5 Result	6/7/2007	2.0	2.0	100
CCV6 Result	6/7/2007	2.0	2.0	100
CCV1 Result	6/8/2007	2.0	2.0	100
CCV2 Result	6/8/2007	2.0	2.0	100
CCV3 Result	6/8/2007	2.0	2.0	100
CCV4 Result	6/8/2007	2.0	2.0	100
CCV5 Result	6/8/2007	2.0	2.0	100
CCV6 Result	6/8/2007	2.0	2.0	100

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/7/2007	0.1	ND
CCB3 Result	6/7/2007	0.1	ND
CCB4 Result	6/7/2007	0.1	ND
CCB5 Result	6/7/2007	0.1	ND
CCB6 Result	6/7/2007	0.1	ND
CCB1 Result	6/8/2007	0.1	ND
CCB2 Result	6/8/2007	0.1	ND
CCB3 Result	6/8/2007	0.1	ND
CCB4 Result	6/8/2007	0.1	ND
CCB5 Result	6/8/2007	0.1	ND
CCB6 Result	6/8/2007	0.1	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Sulfate

Units : mg/L
Analysis Method : 300.0
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
BHWGW01CL	K0704852-001	10	50	06/08/07	61	
1349MW100CL	K0704852-002	1	5	06/07/07	3.8	
231GW29CL	K0704852-003	2	10	06/08/07	68	
Method Blank	K0704852-MB	0.2	1	06/08/07	ND	
Method Blank	K0704852-MB	0.2	1	06/07/07	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K0704754-026DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate	300.0	0.2	3.4	3.4	3.4	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 06/08/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0704754-026MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	300.0	0.2	4.0	3.4	7.0	90	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/07/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.0	4.9	98	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/08/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.0	4.9	98	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Sulfate
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/7/2007	5.0	4.9	98
CCV3 Result	6/7/2007	5.0	4.9	98
CCV4 Result	6/7/2007	5.0	4.8	96
CCV5 Result	6/7/2007	5.0	4.8	96
CCV6 Result	6/7/2007	5.0	4.8	96
CCV1 Result	6/8/2007	5.0	4.9	98
CCV2 Result	6/8/2007	5.0	4.9	98
CCV3 Result	6/8/2007	5.0	4.8	96
CCV4 Result	6/8/2007	5.0	4.8	96
CCV5 Result	6/8/2007	5.0	4.8	96
CCV6 Result	6/8/2007	5.0	4.8	96

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/7/2007	0.2	ND
CCB3 Result	6/7/2007	0.2	ND
CCB4 Result	6/7/2007	0.2	ND
CCB5 Result	6/7/2007	0.2	ND
CCB6 Result	6/7/2007	0.2	ND
CCB1 Result	6/8/2007	0.2	ND
CCB2 Result	6/8/2007	0.2	ND
CCB3 Result	6/8/2007	0.2	ND
CCB4 Result	6/8/2007	0.2	ND
CCB5 Result	6/8/2007	0.2	ND
CCB6 Result	6/8/2007	0.2	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Total Sulfide

Units : mg/L
Basis : NA

Analysis Method : SM 4500-S2-D
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
231GW29CL	K0704852-003	0.05	1	06/13/07	ND	
Method Blank	K0704852-MB	0.05	1	06/13/07	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	6/6/2007
Project Number :	NA	**Date Received :**	6/7/2007
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/13/07

Duplicate Summary
Inorganic Parameters

Sample Name : 231GW29CL
Lab Code : K0704852-003DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Total Sulfide	SM 4500-S2-D	0.05	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 6/6/2007
Date Received : 6/7/2007
Date Prepared : NA
Date Analyzed : 06/13/07

Matrix Spike Summary
Inorganic Parameters

Sample Name : 231GW29CL
Lab Code : K0704852-003MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Total Sulfide	SM 4500-S2-D	0.05	1.81	ND	1.7	94	75-125	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/13/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Total Sulfide	NONE	SM 4500-S2-D	1.81	1.74	96	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 06/06/07
Date Received : 06/07/07

Solids, Total Dissolved

Analysis Method : SM 2540C
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1349MW100CL	K0704852-002	5	1	06/13/07	2360	
231GW29CL	K0704852-003	5	1	06/13/07	469	
Method Blank	K0704852-MB	5	1	06/13/07	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : Water

Service Request : K0704852
Date Collected : 6/6/2007
Date Received : 6/7/2007
Date Prepared : NA
Date Analyzed : 06/13/07

Duplicate Summary
Inorganic Parameters

Sample Name : 231GW29CL
Lab Code : K0704852-003DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved	SM 2540C	5	469	488	479	4	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Treadwell and Rollo, Inc.	**Service Request :**	K0704852
Project Name :	Presidio	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Prepared :**	NA
		Date Analyzed :	06/13/07

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K0704852-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved	NONE	SM 2540C	710	766	108	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : K0704852
Date Collected : NA
Date Received : NA

Total Sulfide
SM 4500-S2-D
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	6/13/2007	2.00	1.82	91
CCV2 Result	6/13/2007	2.00	1.82	91
CCV3 Result	6/13/2007	2.00	1.81	91

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	6/13/2007	0.05	ND
CCB2 Result	6/13/2007	0.05	ND
CCB3 Result	6/13/2007	0.05	ND

Work Request # Original (K4852) P0555 K4754 K4760 K4781 K4877

Tier: III II III I II I

Date Analyzed: 06/12/07

Analyst: lab

Analysis: Alk- SM 2320B

alk 86624
bicarb 86625
carb 86626
hydroxide 86627

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

P0555 is rush due 06/21/07

Final Approved by: [signature] Date: 6/12/07

DQREPORT

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB1	LCS1	K4852 1	K4852 1d	K4852 2	K4852 3	P0555 1
pH 12.63	Initial pH	5.66	9.04	7.89	7.89	6.53	7.53	7.25
	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.10	4.68	25.25	26.30	48.60	13.98	25.90
✓	Titrant used to pH 4.2	0.20						
pH 7.00	Sample Volume	50ml	50ml	50ml	50ml	50ml	50ml	50ml
✓	Alkalinity	<2	94	505	526	972	280	518
pH 4.00	Bicarbonate			505	526	972	280	
✓	Carbonate			<2	<2	<2	<2	
pH 4.00 Chk.	Hydroxide							
3.99								

Sample #	(*) P0555 2	K4754 2	K4754 3	buffer ✓	K4754 5	K4754 6	K4754 7	K4754 8
Initial pH	6.69	6.92	6.74	4.00	6.96	6.70	6.76	6.93
Titrant used to pH 8.3								
Titrant used to pH 4.5	11.00	8.45	3.85		3.65	23.10	3.80	5.05
Titrant used to pH 4.2								
Sample Volume	50ml	50ml	50ml		50ml	50ml	50ml	50ml
Alkalinity	1100							
Bicarbonate		169	77		73	462	76	101
Carbonate		<2	<2		<2	<2	<2	<2
Hydroxide		<2	<2		<2	<2	<2	<2

LCS : alk/1-5-0 **ERA** **Lot # =** S122-698 **True Value =** 94 **% Rec. =** 100, 98, 103, 96

Titrant: Manf: VWR **Lot # =** 6296 **Concentration:** 0.02N / 0.1N (Circle one)

Calculations : **Alkalinity =** $\frac{A \times N \times 50{,}000}{\text{Volume (mls)}}$ **A =** mls standard titrant used **N =** Normality of standard acid

Comments: (*) 0.1N HCl VWR lot 6300

K4852-1$\bar{x}$ = 516 RPD = 4

(*) P0555-2d$\bar{x}$ = 1090 RPD = 2

K4754-8d$\bar{x}$ = 102 RPD = <1

Analyzed By:	[illegible]	Date: 06/11/07	730a
Reveiwed By:	[illegible]	Date: 6/12/07	

Alk_CO_3_HCO_3 Benchsheet

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	K4754 8d	K4754 9	K4754 10	K4754 11	K4754 12	K4754 14	buffer ✓	K4754 15
Initial pH	6.91	6.82	6.91	6.80	6.79	7.20	4.02	6.86
Titrant used to pH 8.3								
Titrant used to pH 4.5	5.10	5.12	9.68	3.25	34.00	3.00		23.90
Titrant used to pH 4.2								
Sample Volume	50ml	50ml	50ml	50ml	50ml	50ml		50ml
Alkalinity								
Bicarbonate	102	102	194	65	680	60		478
Carbonate	<2	<2	<2	<2	<2	<2		<2
Hydroxide	<2	<2	<2	<2	<2	<2		<2

Sample #	K4754 16	K4754 17	K4754 18	K4754 19	K4754 20	K4754 ① ~~21~~ 23	K4754 ① ~~22~~ 24	K4754 25
Initial pH	7.17	7.18	6.65	7.24	6.72	7.19	6.76	6.99
Titrant used to pH 8.3								
Titrant used to pH 4.5	3.00	26.48	4.08	3.28	2.85	7.20	7.15	4.70
Titrant used to pH 4.2								
Sample Volume	50ml	50ml	50ml	50ml	50ml	50ml	50ml	50ml
Alkalinity								
Bicarbonate	60	530	82	66	57	144	143	94
Carbonate	<2	<2	<2	<2	<2	<2	<2	<2
Hydroxide	<2	<2	<2	<2	<2	<2	<2	<2

Sample #	K4754 26	buffer ✓	K4754 26d	K4754 27	K4754 28	K4754 29	K4760 1	K4781 1
Initial pH	7.18	4.01	7.18	7.23	7.17	6.84	3.87	5.49
Titrant used to pH 8.3								
Titrant used to pH 4.5	② ~~26~~ 3.82		3.70	3.60	4.00	5.40	<0.05	27.62
Titrant used to pH 4.2								
Sample Volume	50ml		50ml	50ml	50ml	50ml	50ml	50ml
Alkalinity	(76)							
Bicarbonate	76		74	72	80	108	<2	552
Carbonate	<2		<2	<2	<2	<2	<2	
Hydroxide	<2		<2	<2	<2	<2		

Comments:

K4754-26d $\bar{x}$ = 75 RPD = 3

K4781-1d $\bar{x}$ = 557 RPD = 2

① #21, 22 not assigned lbr 06/11/07

② wrong spot lbr 06/11/07

Analyzed By: lbr	Date: 06/11/07 7:30 a
Reveiwed By: [illegible]	Date: 6/12/07

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	K4788 1d	MB2	LCS2	K4877 1	buffer ✓	K4877 2	K4877 3	K4877 4
Initial pH	5.51	5.48	8.98	6.84	3.98	6.32	6.83	6.74
Titrant used to pH 8.3								
Titrant used to pH 4.5	28.10	0.10	4.60	3.50		1.10	8.50	7.50
Titrant used to pH 4.2		0.20						
Sample Volume	50ml	50ml	50ml	50ml		50ml	50ml	50ml
Alkalinity		<2	92					
Bicarbonate	562			70		22	170	150
Carbonate				<2		<2	<2	<2
Hydroxide								

Sample #	K4877 5	K4877 6	K4877 7	K4877 8	K4877 9	MB3	LCS3	buffer ✓
Initial pH	6.82	6.62	6.51	5.60	6.60	5.72	9.07	3.98
Titrant used to pH 8.3								
Titrant used to pH 4.5	17.30	4.00	3.60	0.10	17.50	0.10	4.82	
Titrant used to pH 4.2				0.20		0.20		
Sample Volume	50ml	50ml	50ml	50ml	50ml	50ml	50ml	
Alkalinity						<2	96	
Bicarbonate	346	80	72	<2	350			
Carbonate	<2	<2	<2	<2	<2			
Hydroxide								

Sample #	MB4 (X)	LCS4 (X)	POSSS 2d (X)	buffer ✓				
Initial pH	5.64	9.14	6.73	4.00				
Titrant used to pH 8.3								
Titrant used to pH 4.5	<0.05	0.90	10.80					
Titrant used to pH 4.2								
Sample Volume	50ml	50ml	50ml					
Alkalinity	<2	90	1080					
Bicarbonate								
Carbonate								
Hydroxide								

Comments:

Analyzed By: lkr	Date: 06/11/07 730
Reveiwed By: [illegible]	Date: 6/12/07

Work Request # Original K4948

Tier: V I

Date Analyzed: 6/13/07

Analyst: S. Hopkins

Analysis: SM 4500-S2-D

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
d.	Are results for methods blanks all ND?	yes/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 6/13/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

86816

Work Order #.: K4852, K4948 Method: SM 4500-s2-D

Analysis: Analysis for Total Sulfide

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
											(R) =	0.9996
Conc. (mg/L)	0.000	0.045	0.451	0.903	1.354	1.805	2.256				Slope =	0.6229
Absorbance	0.000	0.028	0.301	0.587	0.876	1.143	1.393				Y Int. =	0.0119

Date Prep'd	Sample #	Dil. Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
6/13/2007	ICV	1	1.272	2.0229	2.0229	40	40	2.02		2.02		
6/13/2007	ICB	1	0.000	-0.0192	<0.05	40	40	<0.05		<0.05		
6/13/2007	CCV	1	1.144	1.8174	1.8174	40	40	1.82		1.82		
6/13/2007	CCB	1	0.000	-0.0192	<0.05	40	40	<0.05		<0.05		
6/13/2007	CCV3	1	1.144	1.8174	1.8174	40	40	1.82		1.82		
6/13/2007	CCB3	1	-0.003	-0.0240	<0.05	40	40	<0.05		<0.05		
6/13/2007	MB	1	0.001	-0.0176	<0.05	20	20	<0.05		<0.05		
6/13/2007	LCS	1	1.096	1.7403	1.7403	20	20	1.74		1.74		
6/13/2007	K4852-3	1	0.003	-0.0143	<0.05	20	20	<0.05		<0.05		
6/13/2007	4852-3D	1	0.003	-0.0143	<0.05	20	20	<0.05		<0.05		
6/13/2007	4852-3MS	1	1.071	1.7002	1.7002	20	20	1.70		1.70		
6/13/2007	4852-3MSD	1	1.090	1.7307	1.7307	20	20	1.73		1.73		
6/13/2007	K4948-7	1	0.003	-0.0143	<0.05	20	20	<0.05		<0.05		
6/13/2007	CCV4	1	1.142	1.8142	1.8142	40	40	1.81		1.81		
6/13/2007	CCB4	1	-0.003	-0.0240	<0.05	40	40	<0.05		<0.05		

CCV =2ml*36.1mg/l/40ml=1.81mg/l %REC = 101, 101, 100

LCS =1ml*36.1mg/l/20ml = 1.81mg/L %REC = 96

ICV = 2.25ml*36.1mg/L/40ml = 2.03mg/L %REC = 100

MS/MSD = 1ml*36.1mg/L/20ml = 1.81mg/L %REC = 94, 96

K4852-3/3D X = ND RPD = --

STD ID# s2/2-1-H CONC. = 3610

Distilled by:	N/A	Date Distilled:	N/A
Analyzed By:	SAN	Date Analyzed:	6/13/07
Reviewed By:		Date Reviewed:	6/13/07

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Analysis: Analysis for Total Sulfide

Method: SM 4500-s2-D

Prep Date : 6/13/2007

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
Conc. (mg/L)	0.000	0.045	0.451	0.903	1.354	1.805	2.256					
Absorbance	0.000	0.028	0.301	0.587	0.876	1.143	1.393					

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
ICV	40	1	1.272		
ICB	40	1	0.000		
CCV	40	1	1.144		
CCB	40	1	0.000		
CCV3	40	1	1.144		
CCB3	40	1	-0.003		
MB	20	1	0.001		
LCS	20	1	1.096		
K4852-3	20	1	0.003		
4852-3D	20	1	0.003		
4852-3MS	20	1	1.071		
4852-3MSD	20	1	1.090		
K4948-7	20	1	0.003		
CCV4	40	1	1.142		
CCB4	40	1	-0.003		

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
		1			
		1			
		1			

9030M P0700518
376.2 K0704852, 4948

DU520 S/N: 0112U2001732 1.03
13-JUN-07 13:31:51 SCA
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0119 b: 0.6230

r2=0.999 Var=0.0003

mg/L	Net A
0.0000	-0.000
0.0450	0.028
0.4510	0.301
0.9030	0.587
1.3540	0.876
1.8050	1.143
2.2560	1.393

SAH 6/13/07

JA 6/13/07

DU520 S/N: 0112U2001732 1.03
13-JUN-07 13:32:41 SCA Group 6774
Wavelength: 670.0 nm
Formula: A=a+bC a: 0.0119 b: 0.6230

Sample		Net A	Dil X	mg/L
0001	ICB	0.000	1.0000	-0.02
0002	ICV	1.272	1.0000	2.02
0003	CCV	1.144	1.0000	1.82
0004	CCB	0.000	1.0000	-0.02
0005	MB	0.002	1.0000	-0.02
0006	LCS	0.888	1.0000	1.41
0007	P0518-1	0.301 2/20	1.0000	0.46
0008	-1d	0.315 2/20	1.0000	0.49
0009	-1ms	0.207 0.2/20	1.0000	0.31
0010	-1msd	0.328 0.2/20	1.0000	0.51
0011	CCV2	1.143	1.0000	1.82
0012	CCB2	0.002	1.0000	-0.02
0013	MB	0.000	1.0000	-0.02
0014	LCS	0.002	1.0000	-0.02
0015	P0518-1	0.310	1.0000	0.48
0016	-1d	0.473	1.0000	0.74
0017	-1ms	0.409	1.0000	0.64
0018	-1msd	0.406	1.0000	0.63
0019	CCV3	1.144	1.0000	1.82
0020	CCB3	0.003	1.0000	-0.02
0021	MB	0.001	1.0000	-0.02
0022	LCS	1.096	1.0000	1.74
0023	K4862-3	0.003	1.0000	-0.01
0024	-3d	0.003	1.0000	-0.01
0025	-3ms	1.071	1.0000	1.70
0026	-3msd	1.090	1.0000	1.73
0027	K4948-7	0.003	1.0000	-0.01
0028	CCV4	1.142	1.0000	1.81
0029	CCB4	0.003	1.0000	-0.02

9030M ATowers

9030M BTowers

376.2

6/13/07

6/13/07

Work Request # (Original K4927) K4857 [redacted] K4969 K4976 K4974 K4978

Tier: I II V I I V I

Date Analyzed: 6/13/07

Analyst: [illegible]

Analysis: TDS

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: [signature] Date: 6/18/07

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

86684

Work Order #.: K4927 K4857 K4852 K4969 K4976 K4974 K4978 Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	Blank	LCS	K4927-1	K4927-2	K4927-3	K4927-4	K4927-5
Crucible Number							
Conductivity							
Sample Volume (mL)	200	50	100	100	75	100	100
Wt. Cru. + Dry Sample (1)	123.5091	69.9623	65.9357	71.8300	69.0553	63.8795	70.7252
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	123.5092	69.9240	65.9008	71.8151	69.0036	63.8640	70.6661
Wt. Dry Sample (g)	-0.0001	0.0383	0.0349	0.0149	0.0517	0.0155	0.0591
Total Disolved Solids (mg/L)	<5	766	349	149	689	155	591

Sample Number	K4927-6	K4927-7	K4927-8	K4857-1	K4857-1d	K4852-2	K4852-3
Crucible Number							
Conductivity							
Sample Volume (mL)	100	50	50	100	100	50	100
Wt. Cru. + Dry Sample (1)	73.5406	75.9301	68.2484	78.9084	76.3125	66.1685	80.7534 9
Wt. Cru. + Dry Sample (2)							0
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	73.5260	75.8298	68.1846	78.8805	76.2872	66.0509	80.7070
Wt. Dry Sample (g)	0.0146	0.1003	0.0638	0.0279	0.0253	0.1176	0.0464 9
Total Disolved Solids (mg/L)	146	2010	1280	279	253	2360	464 9

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #:4033 Lot# ID#TDS/ T.V. = % Rec = 108%

Comments: 115626 1-19-U 710

Mean = RPD =

K4857-1 266 10%

K4852-3 ~~476~~ 479 ~~5%~~ 4%

Wt (1)	Start	0
	Stop	
Wt (1)	Start	
Temp	Stop	
Wt (2)	Start	
	Stop	
Wt (2)	Start	
Temp	Stop	
Wt (3)	Start	
	Stop	
Wt (3)	Start	
Temp	Stop	

6/18/07

Analyzed By: Date Prepared: 6/13/07

Reviewed By: Date Reviewed: 6/18/07

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	MB2	K4852-3d	K4969-1	K4969-2	K4976-1	K4974-1	K4974-2
Crucible Number							
Conductivity							
Sample Volume (mL)	200	100	100	100	50	100	100
Wt. Cru. + Dry Sample (1)	114.9437	65.6209	73.2947	78.7748	76.0948	77.7049	75.0963
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	114.9441	65.5721	73.2747	78.7550	75.8438	77.6714	75.0763
Wt. Dry Sample (g)	-0.0004	0.0488	0.0200	0.0198	0.2510	0.0335	0.0200
Total Disolved Solids (mg/L)	<5	488	200	198	5020	335	200

Sample Number	K4974-3	K4978-1					
Crucible Number							
Conductivity							
Sample Volume (mL)	100	75					
Wt. Cru. + Dry Sample (1)	79.8552	70.8881					
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)	79.8422	70.7926					
Wt. Dry Sample (g)	0.0130	0.0955	0.0000	0.0000	0.0000	0.0000	0.0000
Total Disolved Solids (mg/L)	130	1280	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Sample Number							
Crucible Number							
Conductivity							
Sample Volume (mL)							
Wt. Cru. + Dry Sample (1)							
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)							
Wt. Dry Sample (g)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total Disolved Solids (mg/L)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Analyzed By:	Date Prepared: 6/13/07
Reviewed By:	Date Reviewed: 6/18/07

COLUMBIA ANALYTICAL SERVICES, INC.

86684

Work Order #.: I K4927 II K4857 V K4852 I K4969 I K4976 V K4974 I K4978 Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	Blank	LCS	K4927-1	K4927-2	K4927-3	-4	-5
Crucible Number	R46	30	DISH	26	620	37	Critter
Conductivity	—	—	267	186	1128	185	889
Sample Volume (mL)	200	50	100	100	75	100	100
Wt. Cru. + Dry Sample (1)	123.5091	69.9623	② ~~65.9378~~	① ~~71.8310~~	69.0553	63.8795	70.7252
Wt. Cru. + Dry Sample (2)	123.5087	69.9618	65.9357	71.8300	69.0549	63.8798	70.7248
Wt. Cru. + Dry Sample (3)	123.5096	—	65.9353	71.8295	—	—	—
Wt. Crucible. (g)	123.5092	69.9240	65.9008	71.8151	69.0036	63.8640	70.6661
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Sample Number	-6	-7	-8	K4857-1	K4857-1 d	K4852-2	K4852-3
Crucible Number	17	28	-8x	Akita	32	Herbie	6
Conductivity	180	5708	4445	446	446	4055	756
Sample Volume (mL)	100	50	50	100	100	50	100
Wt. Cru. + Dry Sample (1)	73.5406	75.9301	68.2484	78.9084	76.3125	② ~~66.1722~~	80.7539
Wt. Cru. + Dry Sample (2)	73.5401	75.9297	68.2481	78.9081	76.3123	① 66.1685	80.7534
Wt. Cru. + Dry Sample (3)	—	—	—	—	—	66.1681	—
Wt. Crucible. (g)	73.5260	75.8298	68.1846	78.8805	76.2872	66.0509	80.7070
Wt. Dry Sample (g)							
Total Solids (mg/L)							

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

APG #: 4033 Lot #: ID#: T.V. = % Rec =

Comments: 115626 TDS/1-19-4 710

105 time Start	1024	6/13
Stop	0712	6/14
105 temp Start	105	
Stop	105	
Wt (1) Start	0712	6/14
Stop	1006	6/14
Wt(1) Start	180	
Temp Stop	180	
Wt (2) Start	1250	6/14
Stop	1350	6/14
Wt(2) Start	180	
Temp Stop	179	
Wt (3) Start	1534	6/14
Stop	0710	6/15
Wt(3) Start	179	
Temp Stop	180	

① AK 6/14/07 ② AK 6/15/07

Balance #

Analyzed By:	Date Prepared: 6/13/07
Reviewed By:	Date Reviewed: 6/18/07

TDS.BCH

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA 160.1

Analysis: Total Dissolved Solids

Sample Number	MB2	K4982 -3 d	K4969-1	K4969-2	K4976-1	K4974-1	K4974-2
Crucible Number	A10	LISA	(2)	(31)	(16)	22A	-94h
Conductivity	—	756	308	276	5673	613	305
Sample Volume (mL)	200	100	100	100	(1) ~~75~~ 50	100	100
Wt. Cru. + Dry Sample (1)	114.9437	65.6209	73.2947	78.7748	(2) ~~76.0977~~	(2) ~~77.7056~~	(2) ~~75.0972~~
Wt. Cru. + Dry Sample (2)	114.9439	65.6209	73.2943	78.7744	76.0948	77.7049	75.0963
Wt. Cru. + Dry Sample (3)	—	—	—	—	76.0945	77.7046	75.0958
Wt. Crucible. (g)	114.9441	65.5721	73.2747	78.7550	75.8438	77.6714	75.0763
Wt. Dry Sample (g)							
Total Disolved Solids (mg/L)							

Sample Number	K4974-3	K4978-1					
Crucible Number	(22)	A2					
Conductivity	181	2135					
Sample Volume (mL)	100	75					
Wt. Cru. + Dry Sample (1)	(2) ~~79.8561~~	70.8881					
Wt. Cru. + Dry Sample (2)	79.8552	70.8876					
Wt. Cru. + Dry Sample (3)	79.8549	—					
Wt. Crucible. (g)	79.8422	70.7926					
Wt. Dry Sample (g)							
Total Disolved Solids (mg/L)							

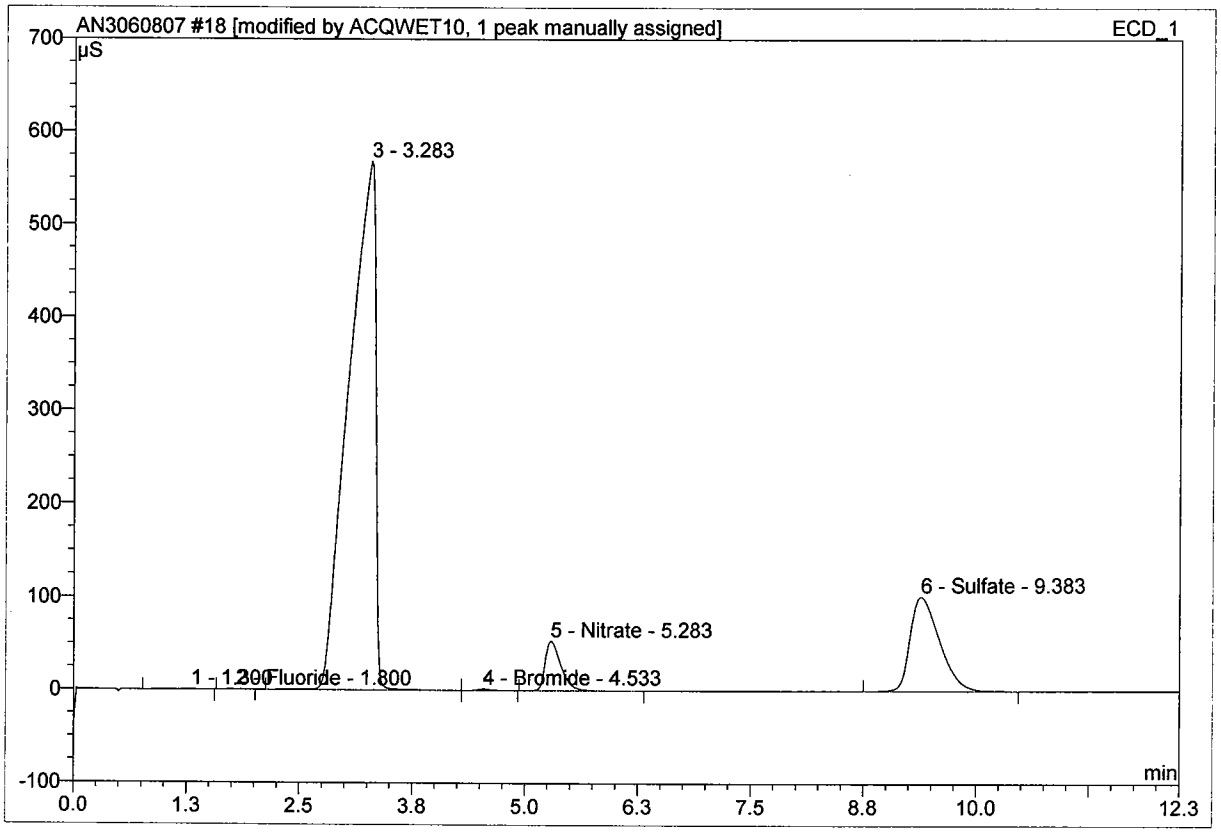
Sample Number							
Crucible Number							
Conductivity							
Sample Volume (mL)							
Wt. Cru. + Dry Sample (1)							
Wt. Cru. + Dry Sample (2)							
Wt. Cru. + Dry Sample (3)							
Wt. Crucible. (g)							
Wt. Dry Sample (g)							
Total Disolved Solids (mg/L)							

Analyzed By:	[signature]	Date Prepared:	6/13/07
Reviewed By:	[signature]	Date Reviewed:	6/18/07

(1) AK 6/13/07
(2) AK 6/15/07

18 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 11:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.30	n.a.	0.343	0.189	0.08	n.a.	BMB*
2	1.80	Fluoride <0.2	0.479	0.139	0.06	0.162	BM *
3	3.28	n.a.	567.883	192.988	79.39	n.a.	BM *
4	4.53	Bromide	1.546	0.259	0.11	0.975	MB*
5	5.28	Nitrate	53.276	10.893	4.48	6.009	BMB*
6	9.38	Sulfate	101.323	38.634	15.89	81.793	BMB*^
Total:			724.851	243.101	100.00	88.939	

After Initials JS

JUN 08 2007

6/12/07

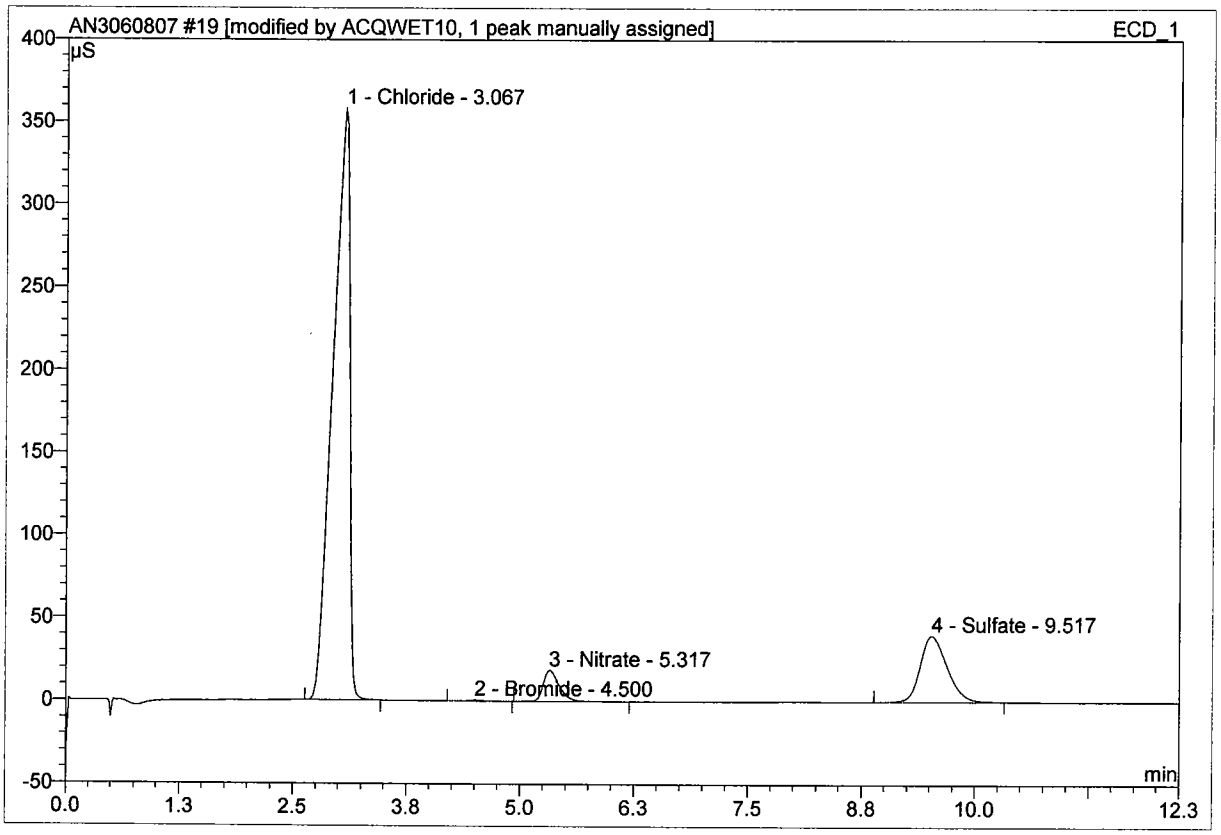
default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

19 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**6/8/2007 11:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.07	Chloride	358.025	76.071	81.19	245.012	BMB^
2	4.50	Bromide	0.589	0.102	0.11	0.958	BMB
3	5.32	Nitrate	18.541	3.762	4.01	5.188	BMB
4	9.52	Sulfate	39.778	13.766	14.69	72.861	BMB*
Total:			416.933	93.701	100.00	324.019	

① Nitrite <0.5 i

① elevated MRL due to Cl conc.

After Initials JS

JUN 08 2007

6/13/07

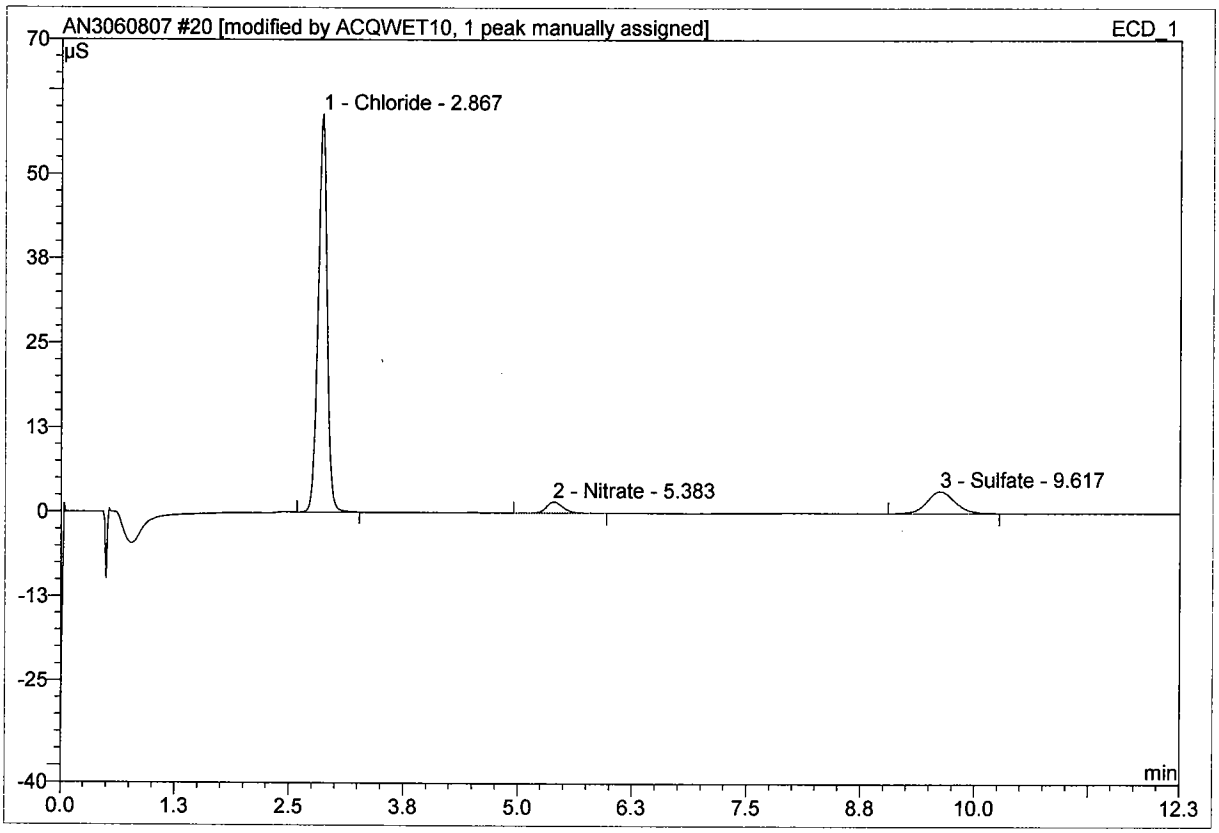
default/Integration

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

20 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**6/8/2007 11:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	58.909	6.715	81.68	216.292	BMB^
2	5.38	Nitrate	1.648	0.346	4.21	4.771	BMB
3	9.62	Sulfate	3.253	1.160	14.11	61.424	BMB*
Total:			63.809	8.222	100.00	282.487	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

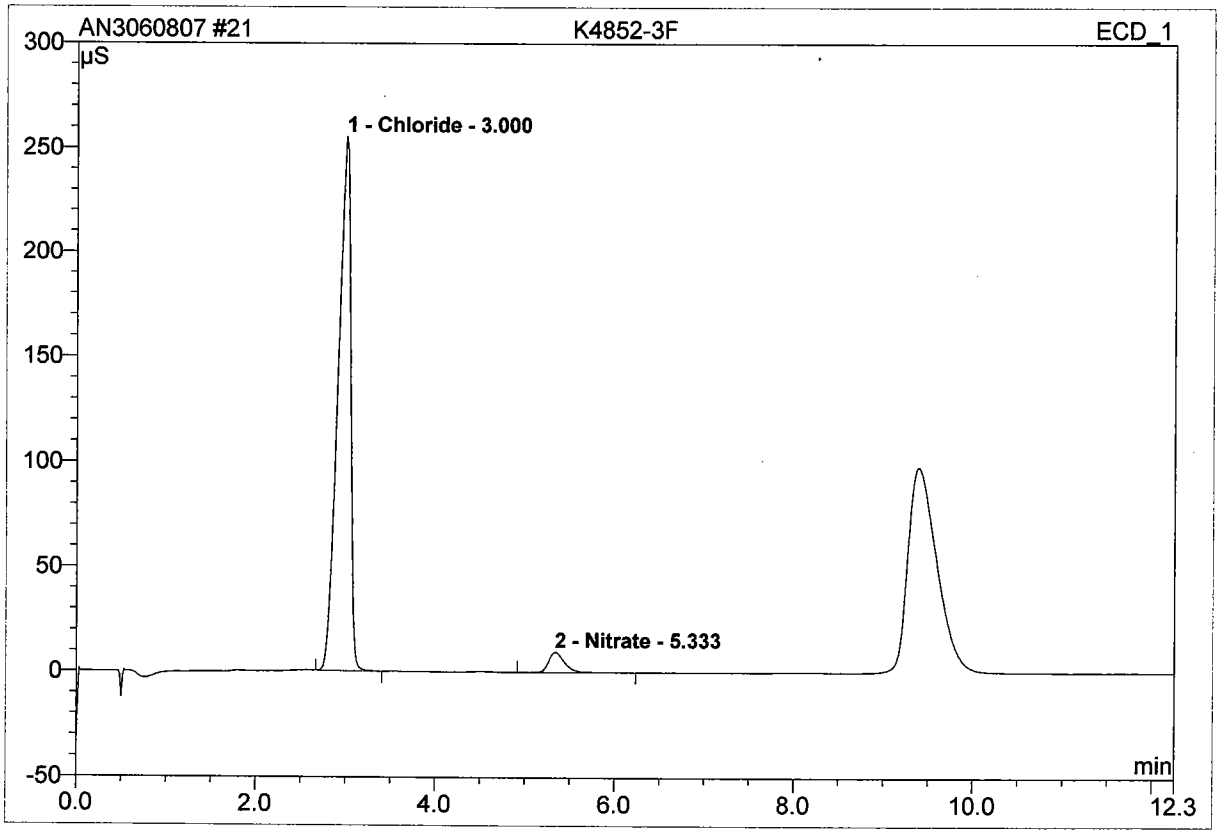
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

21 K4852-3F

Sample Name:	**K4852-3F**	*Injection Volume:*	**200.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 11:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



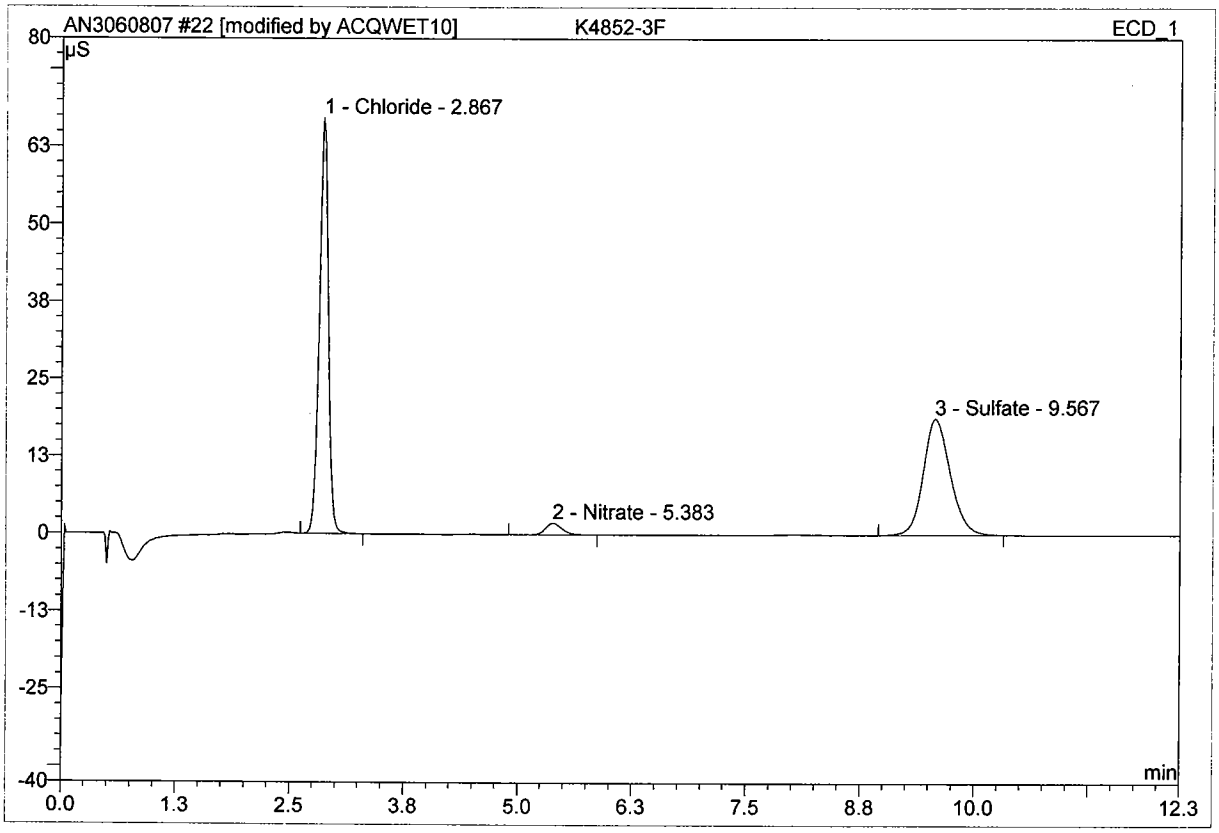
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.00	Chloride	255.049	41.257	95.40	53.153	BMB
2	5.33	Nitrate	9.747	1.988	4.60	1.097	BMB
Total:			264.796	43.245	100.00	54.250	

Fluoride <0.2
Nitrite <0.1

JH 6/13/07

22 K4852-3F

Sample Name:	**K4852-3F**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**6/8/2007 12:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	67.147	7.616	52.62	49.061	BMB
2	5.38	Nitrate	1.858	0.388	2.68	1.070	BMB
3	9.57	Sulfate	18.781	6.469	44.70	68.479	BMB*
Total:			87.787	14.473	100.00	118.611	

After Initials JS

JUN 08 2007

6/12/07

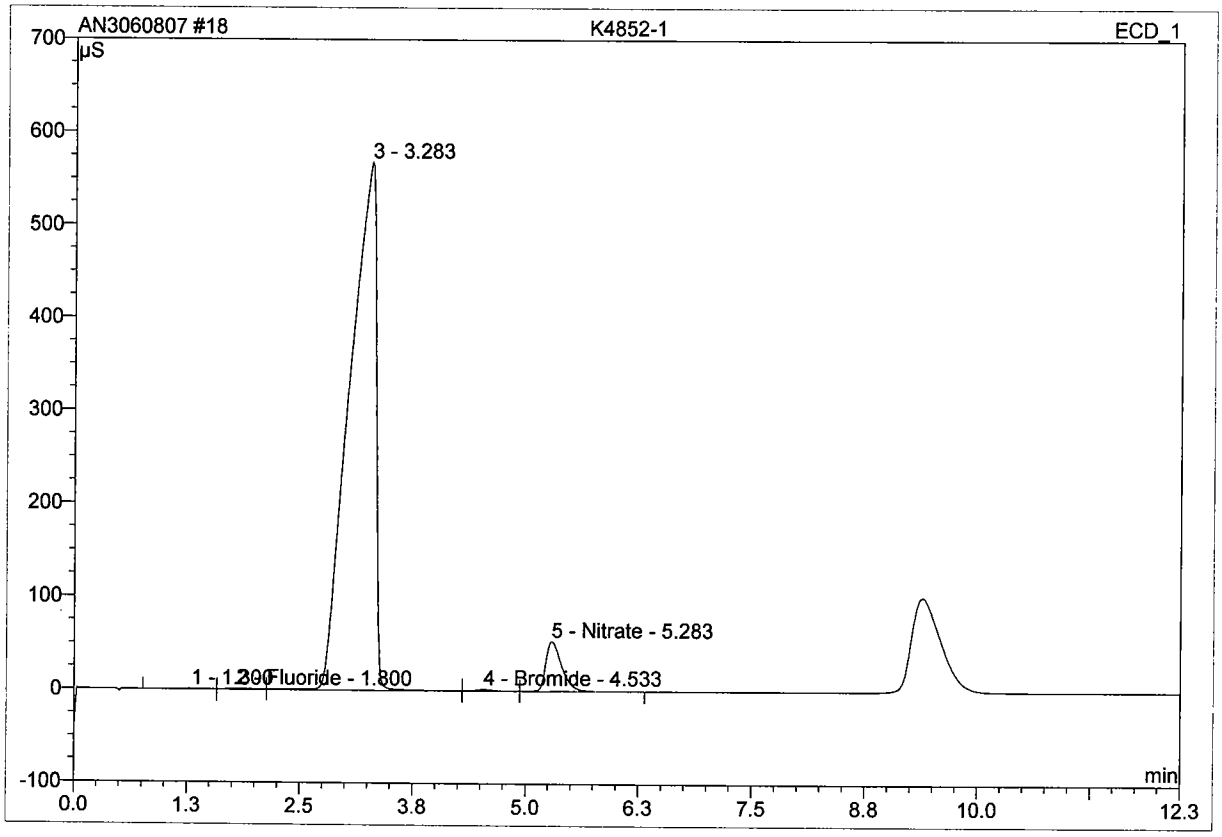
default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

18 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 11:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



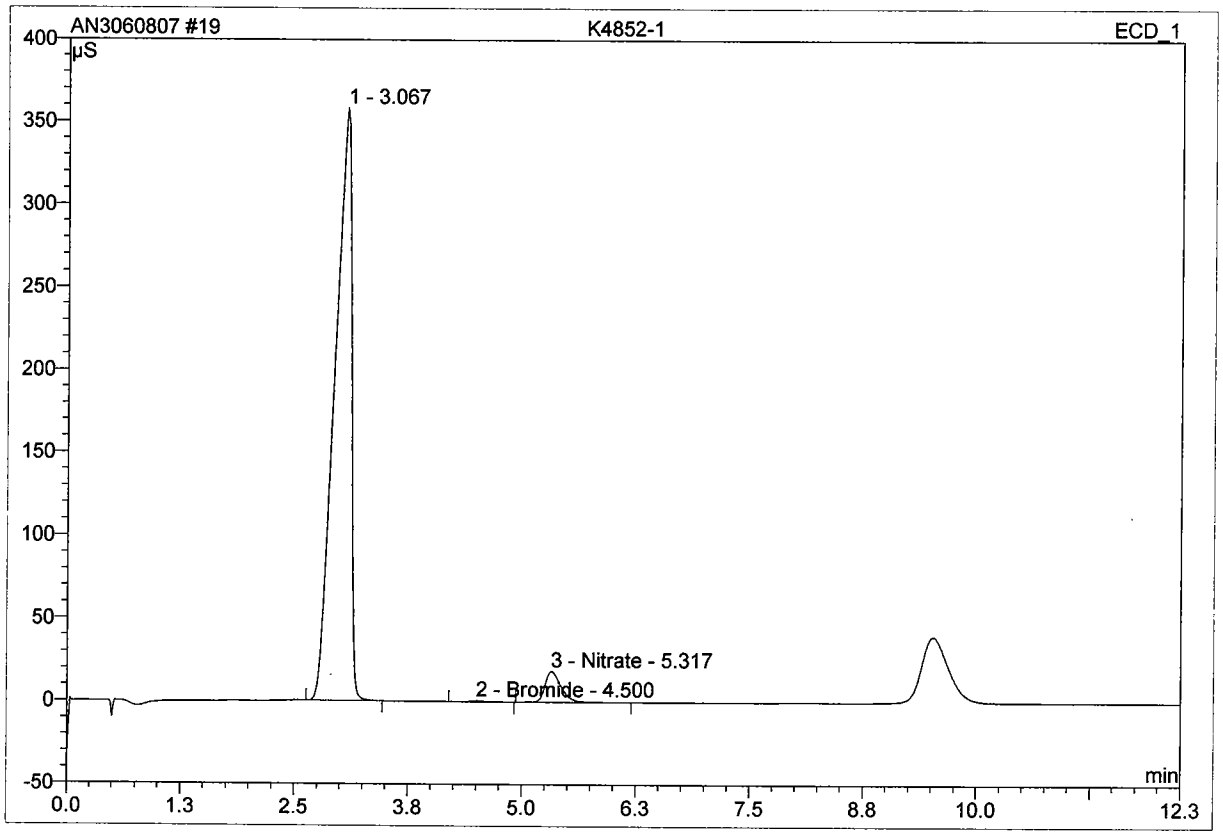
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.30	n.a.	0.530	0.306	0.15	n.a.	BM
2	1.80	Fluoride	0.734	0.299	0.15	0.349	M
3	3.28	n.a.	568.167	193.617	94.19	n.a.	M
4	4.53	Bromide	1.707	0.356	0.17	1.340	M
5	5.28	Nitrate	53.368	10.977	5.34	6.056	MB
Total:			624.505	205.555	100.00	7.744	

Before

8 2007

19 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**6/8/2007 11:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



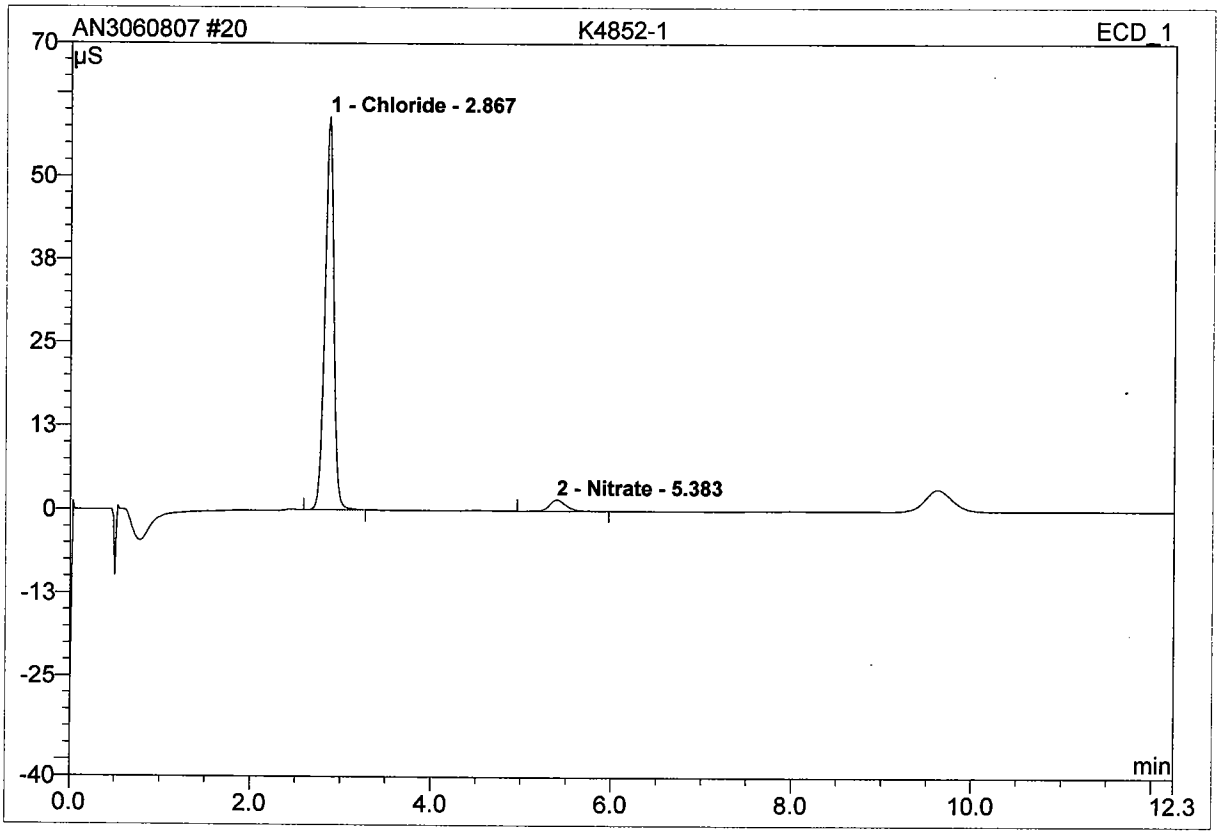
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.07	n.a.	358.025	76.071	95.17	n.a.	BMB
2	4.50	Bromide	0.589	0.102	0.13	0.958	BMB
3	5.32	Nitrate	18.541	3.762	4.71	5.188	BMB
Total:			377.155	79.935	100.00	6.146	

Before

JUN 0 8 2007

20 K4852-1

Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**6/8/2007 11:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



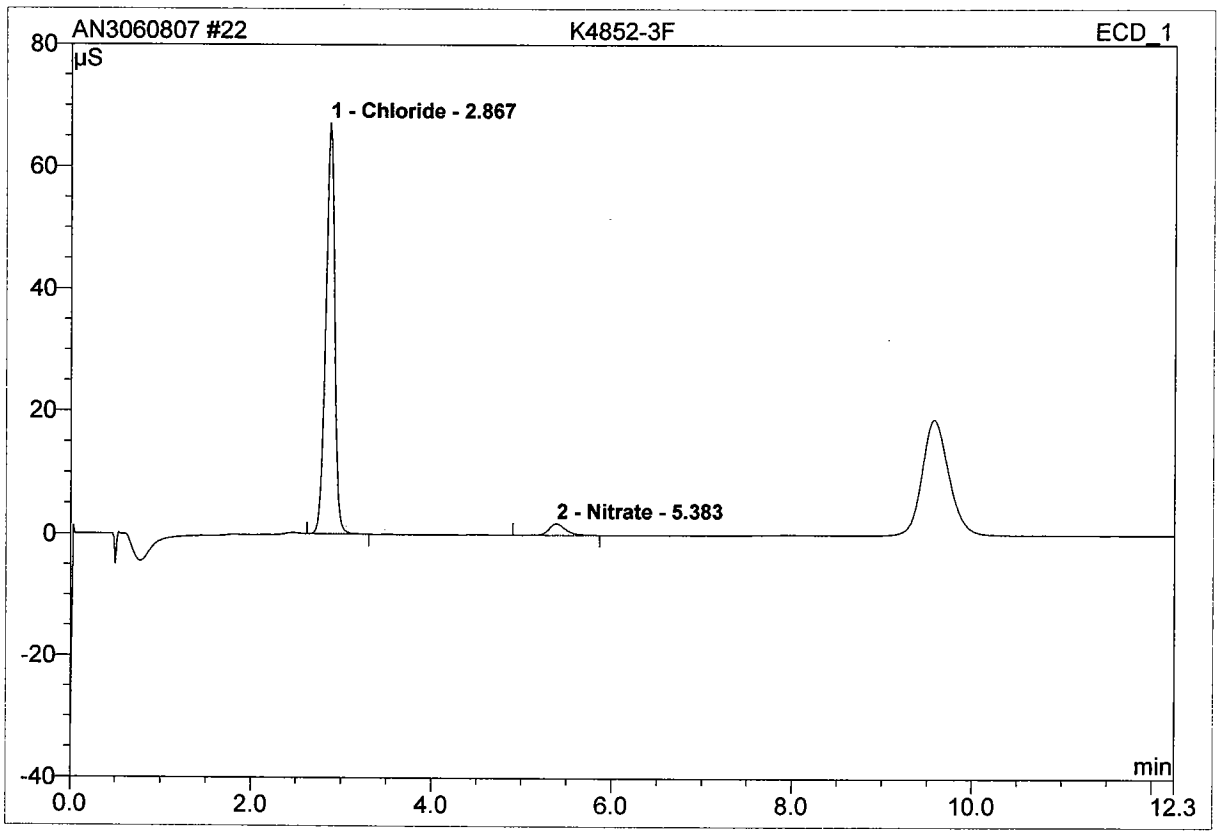
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	58.909	6.715	95.10	216.292	BMB
2	5.38	Nitrate	1.648	0.346	4.90	4.771	BMB
Total:			60.557	7.061	100.00	221.063	

Before

JUN 0 8 2007

22 K4852-3F

Sample Name:	**K4852-3F**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**6/8/2007 12:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	67.147	7.616	95.15	49.061	BMB
2	5.38	Nitrate	1.858	0.388	4.85	1.070	BMB
Total:			69.005	8.004	100.00	50.132	

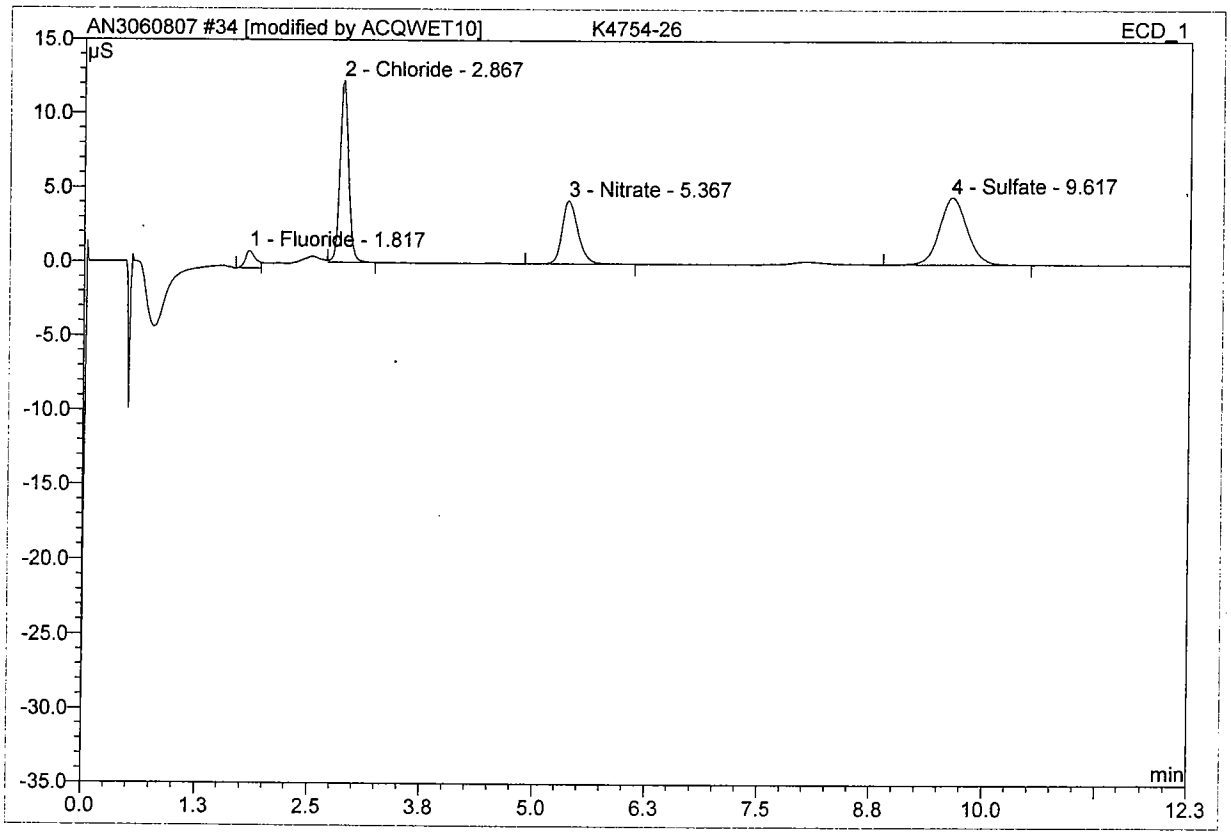
Before

JUN 0 8 2007

BQC

34 K4754-26

Sample Name:	**K4754-26**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride <0.2 x̄=ND RPD=--	1.181	0.159	3.95	0.185	BM *
2	2.87	Chloride x̄=1.8 RPD=<1	12.256	1.375	34.16	1.771	MB*
3	5.37	Nitrate x̄=0.5 RPD=<1	4.265	0.880	21.87	0.485	BMB
4	9.62	Sulfate x̄=3.4 RPD=<1	4.530	1.610	40.02	3.409	BMB*
Total:			22.232	4.024	100.00	5.850	

Nitrite <0.1 x̄=ND RPD=--

After Initials JB

JUN 08 2007

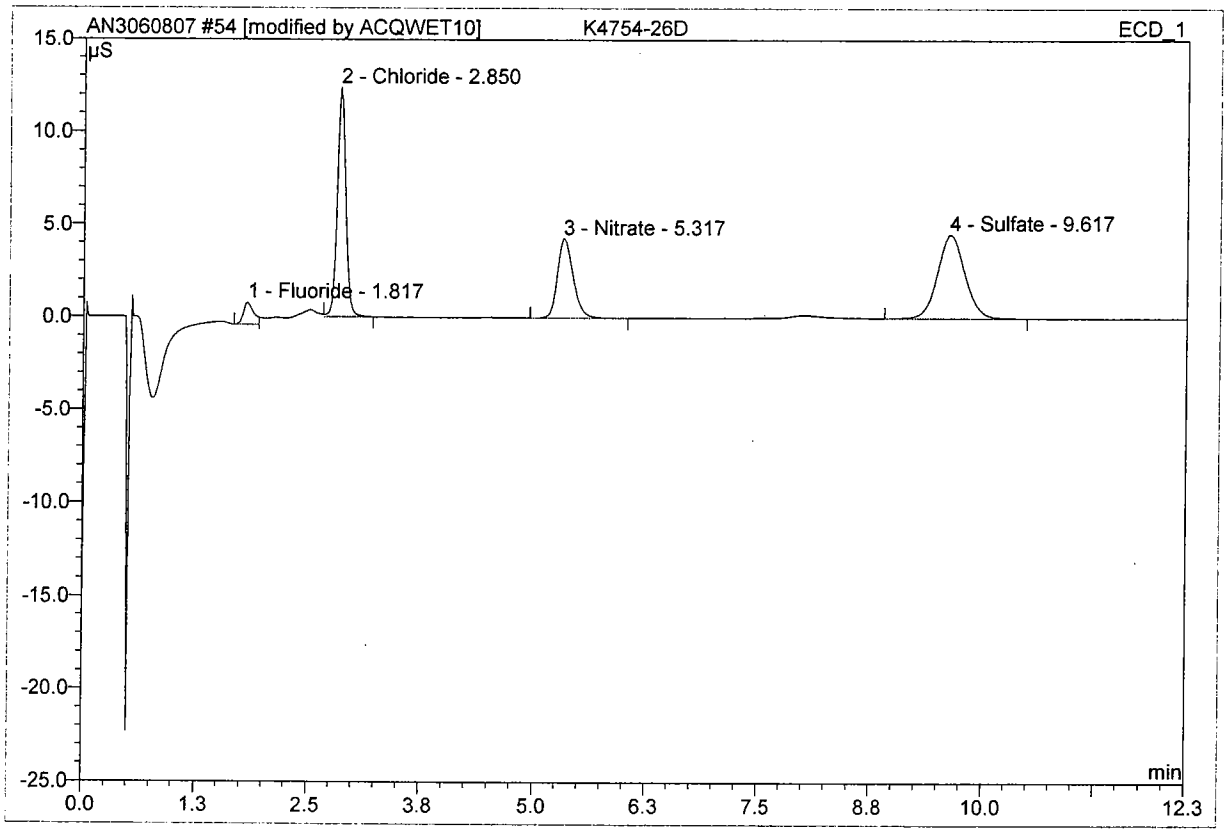
Qu 6/13/07

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

54 K4754-26D

Sample Name:	**K4754-26D**	*Injection Volume:*	**200.0**
Vial Number:	**82**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 20:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride <0.2	1.190	0.159	3.98	0.185	BM *
2	2.85	Chloride	12.360	1.365	34.15	1.758	MB*
3	5.32	Nitrate	4.270	0.876	21.92	0.483	BMB
4	9.62	Sulfate	4.518	1.596	39.95	3.380	BMB*
Total:			22.338	3.996	100.00	5.807	

Nitrite <0.1

After Initials JS

JUN 09 2007

6/12/07

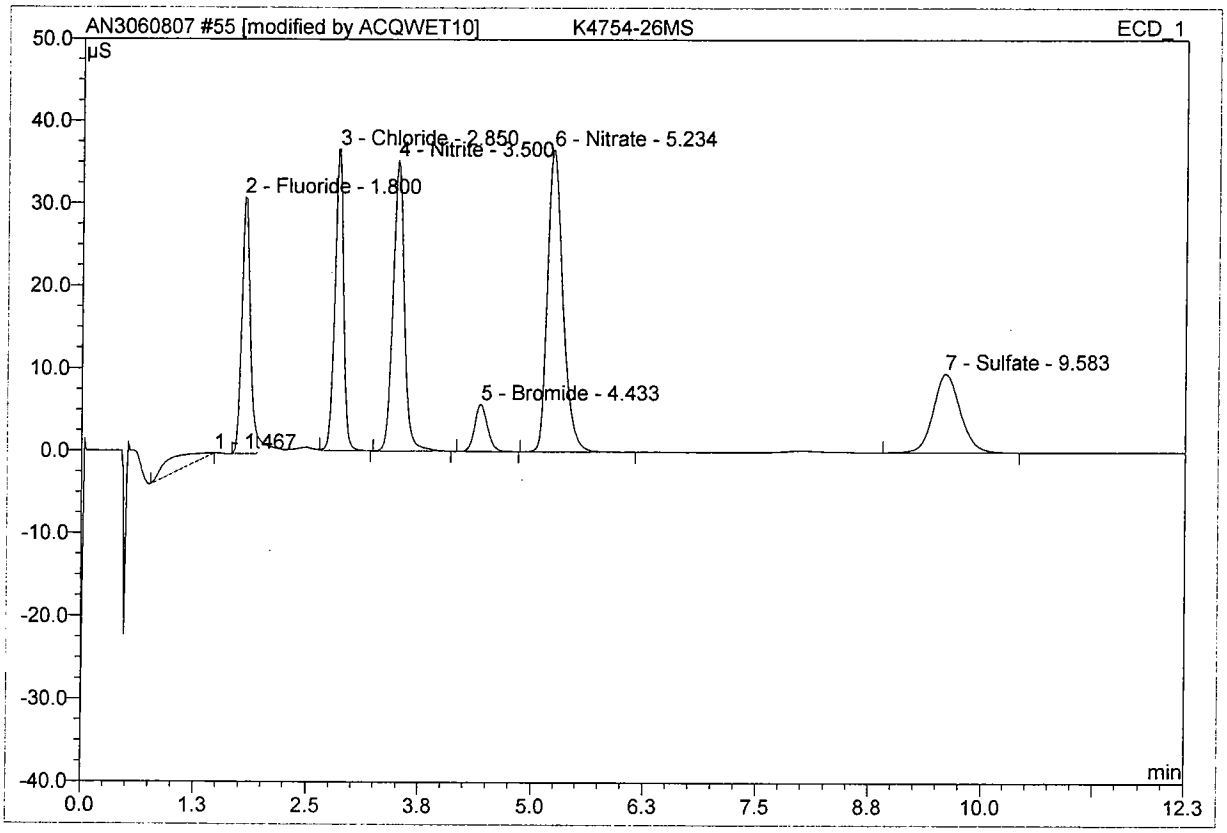
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

55 K4754-26MS

Sample Name:	**K4754-26MS**	*Injection Volume:*	**200.0**
Vial Number:	**83**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 20:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.47	n.a.	0.000	0.772	3.08	n.a.	BMB*
2	1.80	Fluoride %rec=100	31.088	3.399	13.57	3.959	BM *
3	2.85	Chloride %rec=88	36.587	4.095	16.35	5.276	MB*
4	3.50	Nitrite %rec=90	35.208	5.140	20.52	3.599	BMB
5	4.43	Bromide	5.735	0.945	3.77	3.560	BMB
6	5.23	Nitrate %rec=90	36.593	7.372	29.43	4.067	BMB
7	9.58	Sulfate %rec=90	9.515	3.325	13.27	7.039	BMB*
Total:			154.725	25.048	100.00	27.500	

SPK lvl 4ppm

After Initials JS

JUN 09 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

85

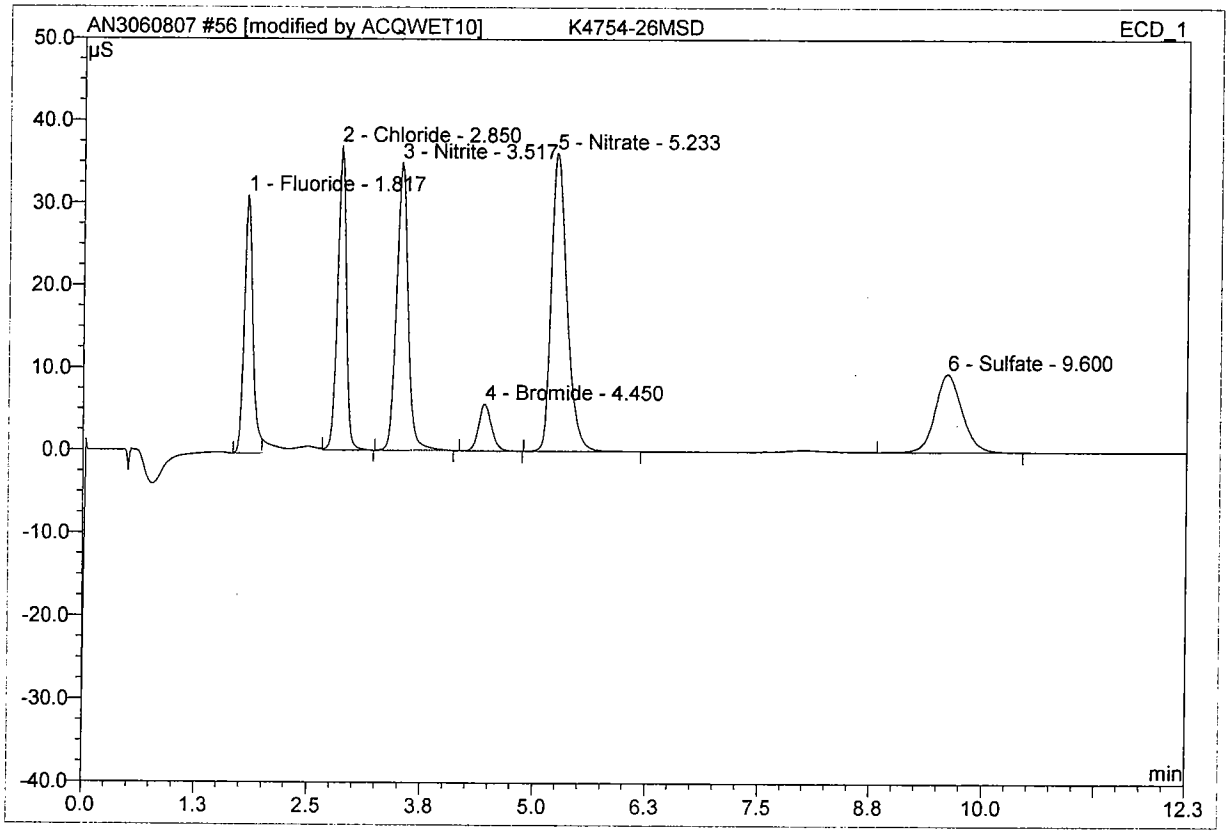
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

56 K4754-26MSD

Sample Name:	**K4754-26MSD**	*Injection Volume:*	**200.0**
Vial Number:	**84**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 20:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride %rec = 100	31.342	3.421	14.21	3.985	BM *
2	2.85	Chloride %rec = 85	36.895	4.063	16.88	5.235	MB*
3	3.52	Nitrite %rec = 90	34.934	5.093	21.16	3.566	BMB
4	4.45	Bromide	5.668	0.934	3.88	3.518	BMB
5	5.23	Nitrate %rec = 88	36.171	7.261	30.17	4.006	BMB
6	9.60	Sulfate %rec = 60	9.479	3.298	13.70	6.982	BMB*
Total:			154.489	24.070	100.00	27.291	

SPK lvl
4ppm

After
Initials JS

JUN 09 2007

6/13/07

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

F-86502 ✓
Cl-86503 ✓
NO_2-86504 ✓
NO_3-86505 ✓
SO_4-86506

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value = 9.6 ppm	CAS ID # = AN1-18-Y	Expires: 10/3/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 12/31/07
Nitrite	True Value = 100 ppm	CAS ID # = AN10-6-V	Expires: 6/8/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-BB	Expires: 11/3/07
Nitrate	True Value = 5.1 ppm	CAS ID # = AN1-18-AA	Expires: 11/1/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 12/31/07

CCV CAS ID # = AN10-40-J Expires 6/8/07

Fluoride	True Value = 5.0 ppm
Chloride	True Value = 5.0 ppm
Nitrite	True Value = 2.0 ppm
Bromide	True Value = 2.0 ppm
Nitrate	True Value = 2.0 ppm
Sulfate	True Value = 5.0 ppm

Spike
2.0ppm X dilution fact CAS ID# = AN10-69-U Expires 6/8/07

Analyst: JS Date: 6/8/07

First Review: JB Date: 6/9/07

Final Review: JM Date: 6/13/07

Comments: ~~K4119 and K4121 : G2 for F~~ ①

t:\wet\ic\icdqs.xls

K4121-1 : G2 for Fluoride.

DJM 6/12/07

Sequence: AN3060807
Operator: ACQWET10
Printed: 6/9/2007 10:15:33 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88

Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	5/25/2007 2:36:09 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	5/25/2007 2:51:38 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	5/25/2007 3:07:05 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	5/25/2007 3:22:33 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	5/25/2007 3:38:00 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	5/25/2007 3:53:28 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	5/25/2007 4:07:56 PM
8	CCV1 AN10-40-J	Unknown	26	200.0	epa300	epa300	Finished	6/8/2007 8:45:17 AM
9	CCB1	Unknown	29	200.0	epa300	epa300	Finished	6/8/2007 9:00:00 AM
10	AN10-6-V(NO2)1	Unknown	30	200.0	epa300	epa300	Finished	6/8/2007 9:14:40 AM
11	MB1	Unknown	30	200.0	epa300	epa300	Finished	6/8/2007 9:29:20 AM
12	AN1-18-AA(NO3)1	Unknown	31	200.0	epa300	epa300	Finished	6/8/2007 9:44:01 AM
13	ERA (CLSO4) 1	Unknown	43	200.0	epa300	epa300	Finished	6/8/2007 9:58:41 AM
14	AN1-18-Y(F)	Unknown	43	200.0	epa300	epa300	Finished	6/8/2007 10:13:25 AM
15	AN10-69-U(SPKCHK)	Unknown	44	200.0	epa300	epa300	Finished	6/8/2007 10:28:17 AM
16	CCV2 AN10-40-J	Unknown	44	200.0	epa300	epa300	Finished	6/8/2007 10:42:59 AM
17	CCB2	Unknown	45	200.0	epa300	epa300	Finished	6/8/2007 10:57:42 AM
18	K4852-1	Unknown	46	200.0	epa300	epa300	Finished	6/8/2007 11:12:23 AM
19	K4852-1	Unknown	47	200.0	epa300	epa300	Finished	6/8/2007 11:27:06 AM
20	K4852-1	Unknown	48	200.0	epa300	epa300	Finished	6/8/2007 11:41:49 AM
21	K4852-3F	Unknown	49	200.0	epa300	epa300	Finished	6/8/2007 11:56:32 AM
22	K4852-3F	Unknown	50	200.0	epa300	epa300	Finished	6/8/2007 12:11:13 PM
23	K4832-2	Unknown	51	200.0	epa300	epa300	Finished	6/8/2007 12:25:54 PM
24	K4440-6	Unknown	52	200.0	epa300	epa300	Finished	6/8/2007 12:40:35 PM
25	K4440-7	Unknown	53	200.0	epa300	epa300	Finished	6/8/2007 12:55:17 PM
26	K4440-8	Unknown	54	200.0	epa300	epa300	Finished	6/8/2007 1:10:05 PM
27	RB	Unknown	55	200.0	epa300	epa300	Finished	6/8/2007 1:24:53 PM
28	CCV3	Unknown	56	200.0	epa300	epa300	Finished	6/8/2007 1:39:36 PM
29	CCB3	Unknown	57	200.0	epa300	epa300	Finished	6/8/2007 1:54:18 PM
30	K4874-1	Unknown	58	200.0	epa300	epa300	Finished	6/8/2007 2:09:02 PM
31	K4869-1	Unknown	59	200.0	epa300	epa300	Finished	6/8/2007 2:23:42 PM
32	K4869-2	Unknown	60	200.0	epa300	epa300	Finished	6/8/2007 2:38:25 PM
33	K4754-15F	Unknown	61	200.0	epa300	epa300	Finished	6/8/2007 2:53:07 PM
34	K4754-26	Unknown	62	200.0	epa300	epa300	Finished	6/8/2007 3:07:50 PM
35	K4877-1	Unknown	63	200.0	epa300	epa300	Finished	6/8/2007 3:22:33 PM
36	K4877-2	Unknown	64	200.0	epa300	epa300	Finished	6/8/2007 3:37:15 PM
37	K4877-3	Unknown	65	200.0	epa300	epa300	Finished	6/8/2007 3:57:35 PM
38	K4877-4	Unknown	66	200.0	epa300	epa300	Finished	6/8/2007 4:12:18 PM
39	RB	Unknown	67	200.0	epa300	epa300	Finished	6/8/2007 4:27:01 PM
40	CCV4	Unknown	68	200.0	epa300	epa300	Finished	6/8/2007 4:41:43 PM
41	CCB4	Unknown	69	200.0	epa300	epa300	Finished	6/8/2007 4:56:25 PM
42	K4754-23	Unknown	70	200.0	epa300	epa300	Finished	6/8/2007 5:11:07 PM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88

Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K4877-5	Unknown	71	200.0	epa300	epa300	Finished	6/8/2007 5:25:50 PM
44	K4877-6F	Unknown	72	200.0	epa300	epa300	Finished	6/8/2007 5:40:33 PM
45	K4877-7F	Unknown	73	200.0	epa300	epa300	Finished	6/8/2007 5:55:17 PM
46	K4877-8	Unknown	74	200.0	epa300	epa300	Finished	6/8/2007 6:10:00 PM
47	K4877-9	Unknown	75	200.0	epa300	epa300	Finished	6/8/2007 6:24:43 PM
48	K4877-1	Unknown	76	200.0	epa300	epa300	Finished	6/8/2007 6:39:26 PM
49	K4877-2	Unknown	77	200.0	epa300	epa300	Finished	6/8/2007 6:54:06 PM
50	K4754-24	Unknown	78	200.0	epa300	epa300	Finished	6/8/2007 7:08:48 PM
51	RB	Unknown	79	200.0	epa300	epa300	Finished	6/8/2007 7:23:30 PM
52	CCV5	Unknown	80	200.0	epa300	epa300	Finished	6/8/2007 7:38:12 PM
53	CCB5	Unknown	81	200.0	epa300	epa300	Finished	6/8/2007 7:52:55 PM
54	K4754-26D	Unknown	82	200.0	epa300	epa300	Finished	6/8/2007 8:07:38 PM
55	K4754-26MS	Unknown	83	200.0	epa300	epa300	Finished	6/8/2007 8:22:22 PM
56	K4754-26MSD	Unknown	84	200.0	epa300	epa300	Finished	6/8/2007 8:37:10 PM
57	K4754-25	Unknown	85	200.0	epa300	epa300	Finished	6/8/2007 8:51:53 PM
58	K4754-27	Unknown	86	200.0	epa300	epa300	Finished	6/8/2007 9:06:35 PM
59	K4754-28	Unknown	87	200.0	epa300	epa300	Finished	6/8/2007 9:21:18 PM
60	K4754-29	Unknown	88	200.0	epa300	epa300	Finished	6/8/2007 9:36:01 PM
61	K4715-8	Unknown	89	200.0	epa300	epa300	Finished	6/8/2007 9:50:43 PM
62	K4715-8	Unknown	90	200.0	epa300	epa300	Finished	6/8/2007 10:05:26 PM
63	RB	Unknown	91	200.0	epa300	epa300	Finished	6/8/2007 10:20:09 PM
64	CCV6	Unknown	92	200.0	epa300	epa300	Finished	6/8/2007 10:34:51 PM
65	CCB6	Unknown	93	200.0	epa300	epa300	Finished	6/8/2007 10:49:34 PM
66	K4754-17F	Unknown	94	200.0	epa300	epa300	Finished	6/8/2007 11:04:17 PM
67	K4874-1	Unknown	95	200.0	epa300	epa300	Finished	6/8/2007 11:18:59 PM
68	K4877-3	Unknown	96	200.0	epa300	epa300	Finished	6/8/2007 11:33:42 PM
69	K4877-4	Unknown	97	200.0	epa300	epa300	Finished	6/8/2007 11:48:24 PM
70	K4121-1F	Unknown	98	200.0	epa300	epa300	Finished	6/9/2007 12:03:06 AM
71	K4121-3	Unknown	99	200.0	epa300	epa300	Finished	6/9/2007 12:17:49 AM
72	K4121-4	Unknown	100	200.0	epa300	epa300	Finished	6/9/2007 12:32:31 AM
73	K4119-1	Unknown	101	200.0	epa300	epa300	Finished	6/9/2007 12:47:15 AM
74	K4119-2	Unknown	102	200.0	epa300	epa300	Finished	6/9/2007 1:01:57 AM
75	RB	Unknown	103	200.0	epa300	epa300	Finished	6/9/2007 1:16:40 AM
76	CCV7	Unknown	104	200.0	epa300	epa300	Finished	6/9/2007 1:31:22 AM
77	CCB7	Unknown	105	200.0	epa300	epa300	Finished	6/9/2007 1:46:06 AM
78	K4119-4	Unknown	106	200.0	epa300	epa300	Finished	6/9/2007 2:00:49 AM
79	K4119-5	Unknown	107	200.0	epa300	epa300	Finished	6/9/2007 2:15:31 AM
80	K4754-23D	Unknown	108	200.0	epa300	epa300	Finished	6/9/2007 2:30:13 AM
81	K4754-23MS	Unknown	109	200.0	epa300	epa300	Finished	6/9/2007 2:44:56 AM
82	K4754-23MSD	Unknown	110	200.0	epa300	epa300	Finished	6/9/2007 2:59:39 AM
83	MB2	Unknown	111	200.0	epa300	epa300	Finished	6/9/2007 3:14:22 AM
84	(NO3)2	Unknown	112	200.0	epa300	epa300	Finished	6/9/2007 3:29:04 AM

Sequence: AN3060807
Operator: ACQWET10
Printed: 6/9/2007 10:15:33 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88

Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
85	(CLSO4)2	Unknown	113	200.0	epa300	epa300	Finished	6/9/2007 3:43:47 AM
86	RB	Unknown	114	200.0	epa300	epa300	Finished	6/9/2007 3:58:30 AM
87	CCV8	Unknown	115	200.0	epa300	epa300	Finished	6/9/2007 4:13:13 AM
88	CCB8	Unknown	116	200.0	epa300	epa300	Finished	6/9/2007 4:27:55 AM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88

Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	std2/lvl2	1.0000	1.0000	1.0000		03	
2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-40-J	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-6-V(NO2)1	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-AA(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA (CLSO4) 1	1.0000	1.0000	1.0000		08	
14	AN1-18-Y(F)	1.0000	2.0000	1.0000		08	
15	AN10-69-U(SPKCHK)	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-40-J	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	K4852-1	1.0000	2.0000	1.0000		08	
19	K4852-1	1.0000	5.0000	1.0000		08	
20	K4852-1	1.0000	50.0000	1.0000		08	
21	K4852-3F	1.0000	2.0000	1.0000		08	
22	K4852-3F	1.0000	10.0000	1.0000		08	
23	K4832-2	1.0000	2.0000	1.0000		08	
24	K4440-6	1.0000	5.0000	1.0000		08	
25	K4440-7	1.0000	5.0000	1.0000		08	
26	K4440-8	1.0000	2.0000	1.0000		08	
27	RB	1.0000	1.0000	1.0000		08	
28	CCV3	1.0000	1.0000	1.0000		08	
29	CCB3	1.0000	1.0000	1.0000		08	
30	K4874-1	1.0000	2.0000	1.0000		08	
31	K4869-1	1.0000	2.0000	1.0000		08	
32	K4869-2	1.0000	2.0000	1.0000		08	
33	K4754-15F	1.0000	5.0000	1.0000		08	
34	K4754-26	1.0000	2.0000	1.0000		08	
35	K4877-1	1.0000	5.0000	1.0000		08	
36	K4877-2	1.0000	5.0000	1.0000		08	
37	K4877-3	1.0000	2.0000	1.0000		08	
38	K4877-4	1.0000	2.0000	1.0000		08	
39	RB	1.0000	1.0000	1.0000		08	
40	CCV4	1.0000	1.0000	1.0000		08	
41	CCB4	1.0000	1.0000	1.0000		08	
42	K4754-23	1.0000	2.0000	1.0000		08	

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88
Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	K4877-5	1.0000	2.0000	1.0000		08	
44	K4877-6F	1.0000	2.0000	1.0000		08	
45	K4877-7F	1.0000	2.0000	1.0000		08	
46	K4877-8	1.0000	2.0000	1.0000		08	
47	K4877-9	1.0000	2.0000	1.0000		08	
48	K4877-1	1.0000	2.0000	1.0000		08	
49	K4877-2	1.0000	2.0000	1.0000		08	
50	K4754-24	1.0000	2.0000	1.0000		08	
51	RB	1.0000	1.0000	1.0000		08	
52	CCV5	1.0000	1.0000	1.0000		08	
53	CCB5	1.0000	1.0000	1.0000		08	
54	K4754-26D	1.0000	2.0000	1.0000		08	
55	K4754-26MS	1.0000	2.0000	1.0000		08	
56	K4754-26MSD	1.0000	2.0000	1.0000		08	
57	K4754-25	1.0000	2.0000	1.0000		08	
58	K4754-27	1.0000	2.0000	1.0000		08	
59	K4754-28	1.0000	2.0000	1.0000		08	
60	K4754-29	1.0000	2.0000	1.0000		08	
61	K4715-8	1.0000	10.0000	1.0000		08	
62	K4715-8	1.0000	2.0000	1.0000		08	
63	RB	1.0000	1.0000	1.0000		08	
64	CCV6	1.0000	1.0000	1.0000		08	
65	CCB6	1.0000	1.0000	1.0000		08	
66	K4754-17F	1.0000	5.0000	1.0000		08	
67	K4874-1	1.0000	5.0000	1.0000		08	
68	K4877-3	1.0000	5.0000	1.0000		08	
69	K4877-4	1.0000	5.0000	1.0000		08	
70	K4121-1F	1.0000	2.0000	1.0000		08	
71	K4121-3	1.0000	2.0000	1.0000		08	
72	K4121-4	1.0000	2.0000	1.0000		08	
73	K4119-1	1.0000	2.0000	1.0000		08	
74	K4119-2	1.0000	2.0000	1.0000		08	
75	RB	1.0000	1.0000	1.0000		08	
76	CCV7	1.0000	1.0000	1.0000		08	
77	CCB7	1.0000	1.0000	1.0000		08	
78	K4119-4	1.0000	2.0000	1.0000		08	
79	K4119-5	1.0000	2.0000	1.0000		08	
80	K4754-23D	1.0000	2.0000	1.0000		08	
81	K4754-23MS	1.0000	2.0000	1.0000		08	
82	K4754-23MSD	1.0000	2.0000	1.0000		08	
83	MB2	1.0000	1.0000	1.0000		08	
84	(NO3)2	1.0000	2.0000	1.0000		08	

Sequence: AN3060807
Operator: ACQWET10
Printed: 6/9/2007 10:15:33 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 88

Created: 6/8/2007 8:09:32 AM by acqwet10
Last Update: 6/8/2007 5:37:12 PM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
85	(CLSO4)2	1.0000	1.0000	1.0000		08	
86	RB	1.0000	1.0000	1.0000		08	
87	CCV8	1.0000	1.0000	1.0000		08	
88	CCB8	1.0000	1.0000	1.0000		08	

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AN506060 1

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K4852-1	III		6/8		F		0/5 2.5/5 •	✓
Treadwell					Cl		0.1/5	✓
					NO2		1/5	✓
					Br		•	
					NO3		2.5/5 •	✓
					SO4		0 ~~0.5/5~~ 0.1/5	✓
-3F					F		2.5/5	✓
					Cl		0.5/5 •	✓
					NO2		2.5/5	✓
					Br			
					NO3		2.5/5 •	✓
					SO4		0.5/5	✓
K4832-3F	II		6/8	6/24	F			
Pierce County					Cl			
					NO2		2.5/5 CHK •	✓
					Br			
					NO3		2.5/5 CHK	✓
					SO4			
K4440-6F	II				F			
Prowell					Cl		1/5 •	✓
					NO2			
					Br			
					NO3			
					SO4			
-7F					F			
					Cl		1/5 •	✓
					NO2			
					Br			
					NO3			
					SO4			
-8F					F			
					Cl		2.5/5 •	✓
					NO2			
					Br			
					NO3			
					SO4			
K4754-15F	III		6/8	6/23	F			
PSC					Cl		1/5 CHK •	✓
					NO2			
					Br			
					NO3			
					SO4			
-17F					F			
					Cl		1/5 •	✓
					NO2			
					Br			
					NO3			
					SO4			
K4874-1	I		6/10	6/19	F			
Boppwell Drilling					Cl	2.5/5 •		✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4		1/5 •	✓
K4715-8	I				F			
Wheelabrator					Cl		0.5/5 •	✓
					NO2			
					Br			
					NO3			
					SO4		2.5/5 •	✓

F - 18
Cl - 25
NO_2 - 10

NO_3 - 22
SO_4 - 20

MB2
Cl SO_4 2
NO_3 2

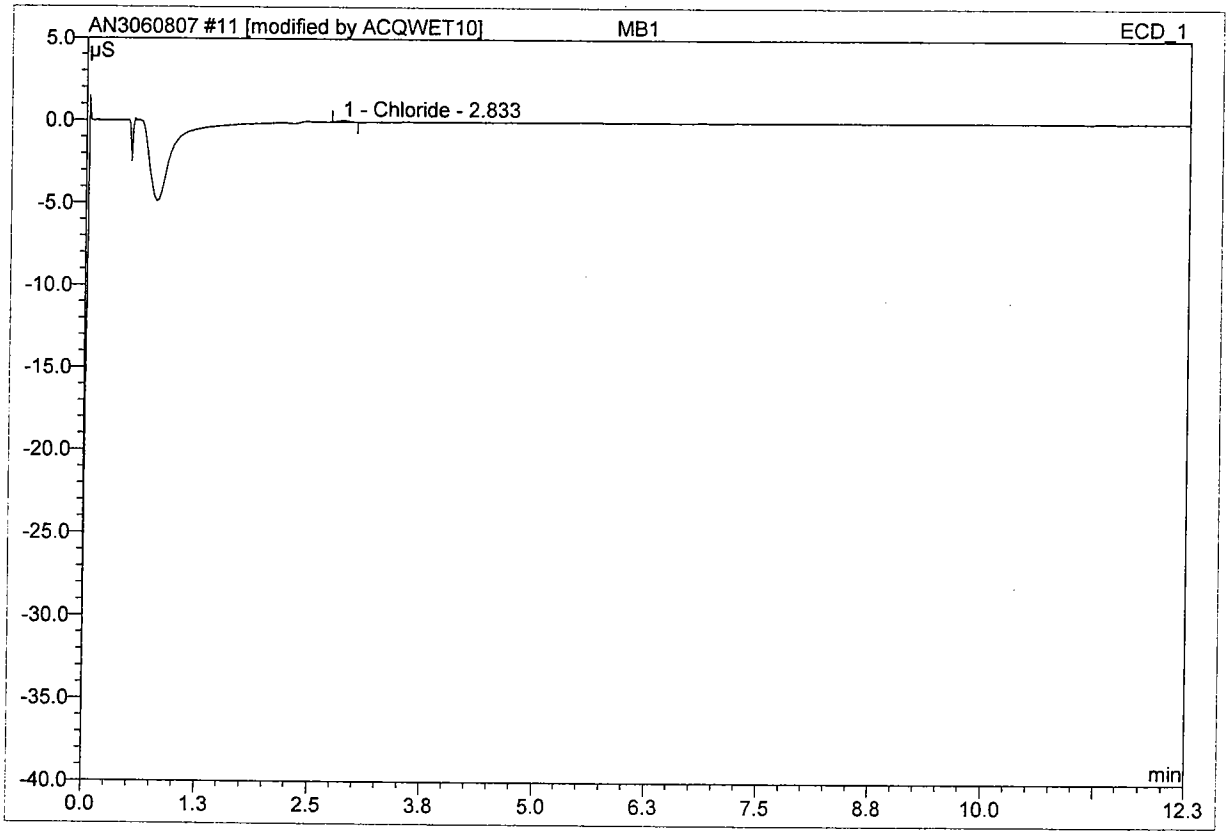
Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K4119-1	III				F	2.5/5		✓	
					Cl				
Shaw					NO2				
					Br				
					NO3				
					SO4				
-2					F	2.5/5		✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
-4					F	2.5/5		✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
-5					F	2.5		✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
K4192 -1F	III				F	2.5/5		✓	
					Cl				
Shaw					NO2				
					Br				
					NO3				
					SO4				
-3					F	2.5/5		✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
-4					F	2.5/5		✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K4869 – 1	I		6/9	6/24	F			
					Cl			
USDA					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			
-2					F			
					Cl			
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4			
K4754-23	III	X	6/9	6/23	F			
					Cl	2.5/5		✓✓✓✓
PSC		dup ms msd			NO2			✓✓✓✓
					Br			
					NO3	2.5/5		✓✓✓✓
					SO4			✓✓✓✓
-24					F			
					Cl			✓
					NO2			✓
					Br			
					NO3			✓
					SO4			✓
-25					F			
					Cl			✓
					NO2			✓
					Br			
					NO3			✓
					SO4			✓
-26		X			F		O.C.	✓✓✓✓
					Cl			✓✓✓✓
		dup ms msd			NO2			✓✓✓✓
					Br			
					NO3			✓✓✓✓
					SO4			✓✓✓✓
-27					F			
					Cl			✓
					NO2			✓
					Br			
					NO3			✓
					SO4			✓
-28					F			
					Cl			✓
					NO2			✓
					Br			
					NO3			✓
					SO4			✓
-29					F			
					Cl			✓
					NO2			✓
					Br			
					NO3			✓
					SO4			✓
					F			
					Cl			
					NO2			
					Br			
					NO3			
					SO4			

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?
K4877-1	I		6/19	6/19	F	1/5	2.5/5	✓
					Cl	↓	↓	✓
Symons					NO2			
					Br			
					NO3	1/5	2.5/5	✓
					SO4	↓	↓	✓
-2					F		2.5/5	✓
					Cl		↓	✓
					NO2			
					Br			
					NO3		2.5/5	✓
					SO4		↓	✓
-3					F	2.5/5		✓
					Cl	↓	1/5	✓
					NO2			
					Br			
					NO3	2.5/5		✓
					SO4	↓		✓
-4					F			✓
					Cl		1/5	✓
					NO2			
					Br			
					NO3			✓
					SO4			✓
-5					F			✓
					Cl			✓x
					NO2			
					Br			
					NO3			✓
					SO4			✓
-6F					F			✓
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			✓
-7F					F			✓
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			✓
-8					F			✓
					Cl			✓
					NO2			
					Br			
					NO3			✓
					SO4			✓
-9					F			✓
					Cl			✓2
					NO2			
					Br			
					NO3			✓
					SO4			✓
					F			
					Cl			
					NO2			
					Br			
					NO3			
					SO4			

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.101	0.012	100.00	0.007	BMB*
Total:			0.101	0.012	100.00	0.007	

After Initials JS 6/13/07

JUN 08 2007

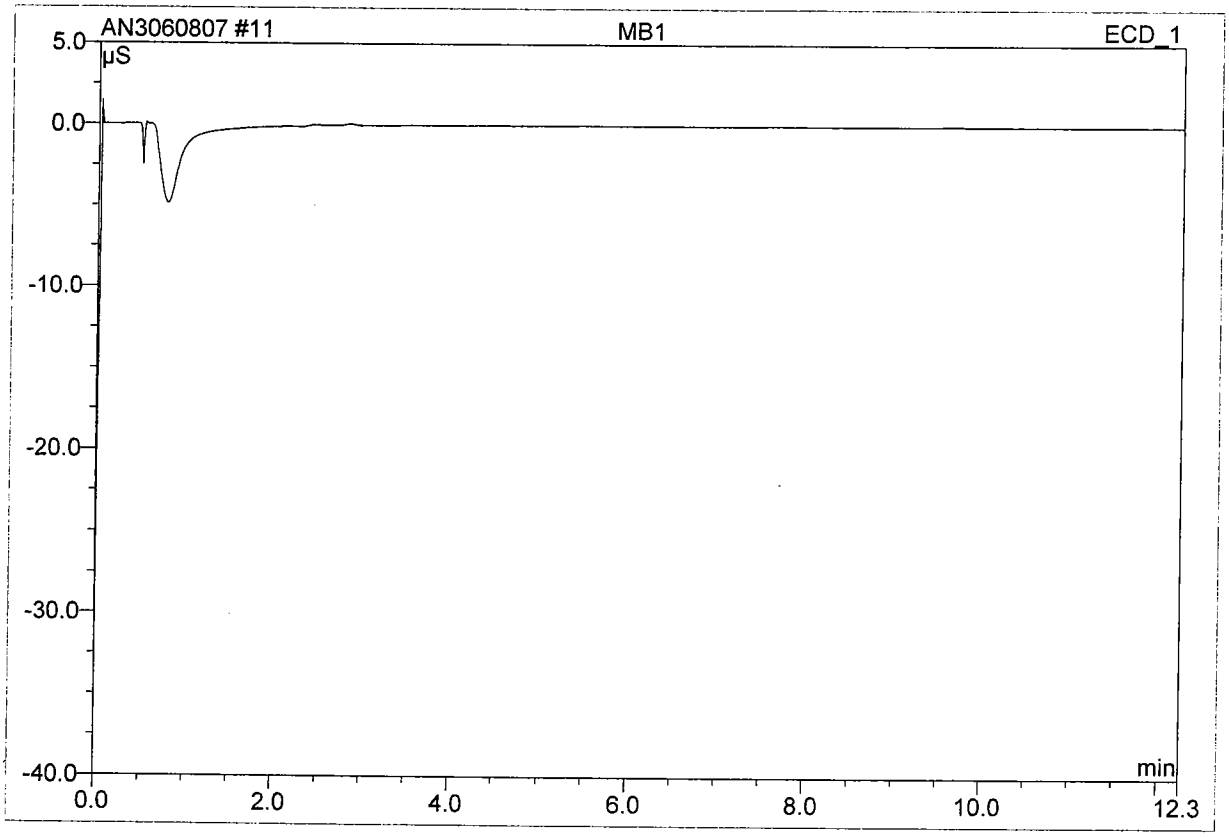
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



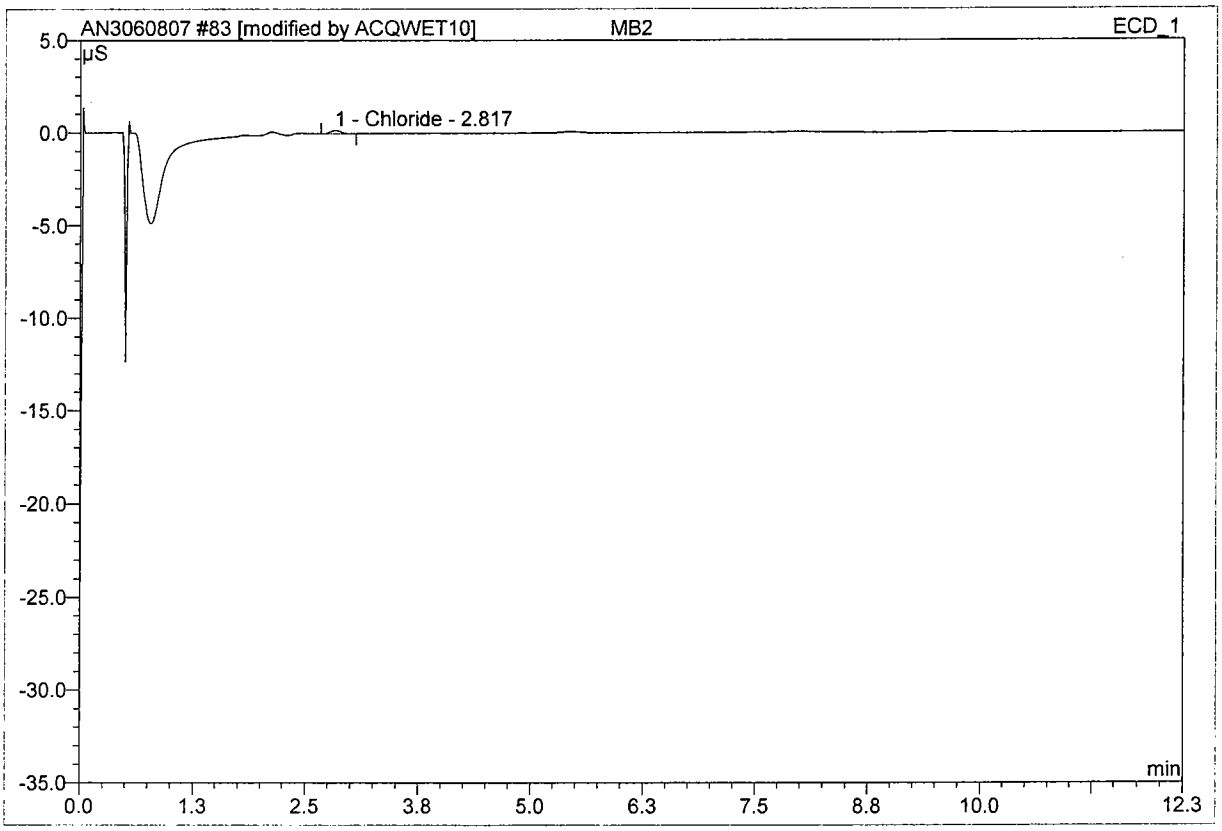
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

83 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**111**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 3:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride Co.2	0.183	0.022	100.00	0.014	BMB*
Total:			0.183	0.022	100.00	0.014	

6/12/07

After Initials JS

JUN 09 2007

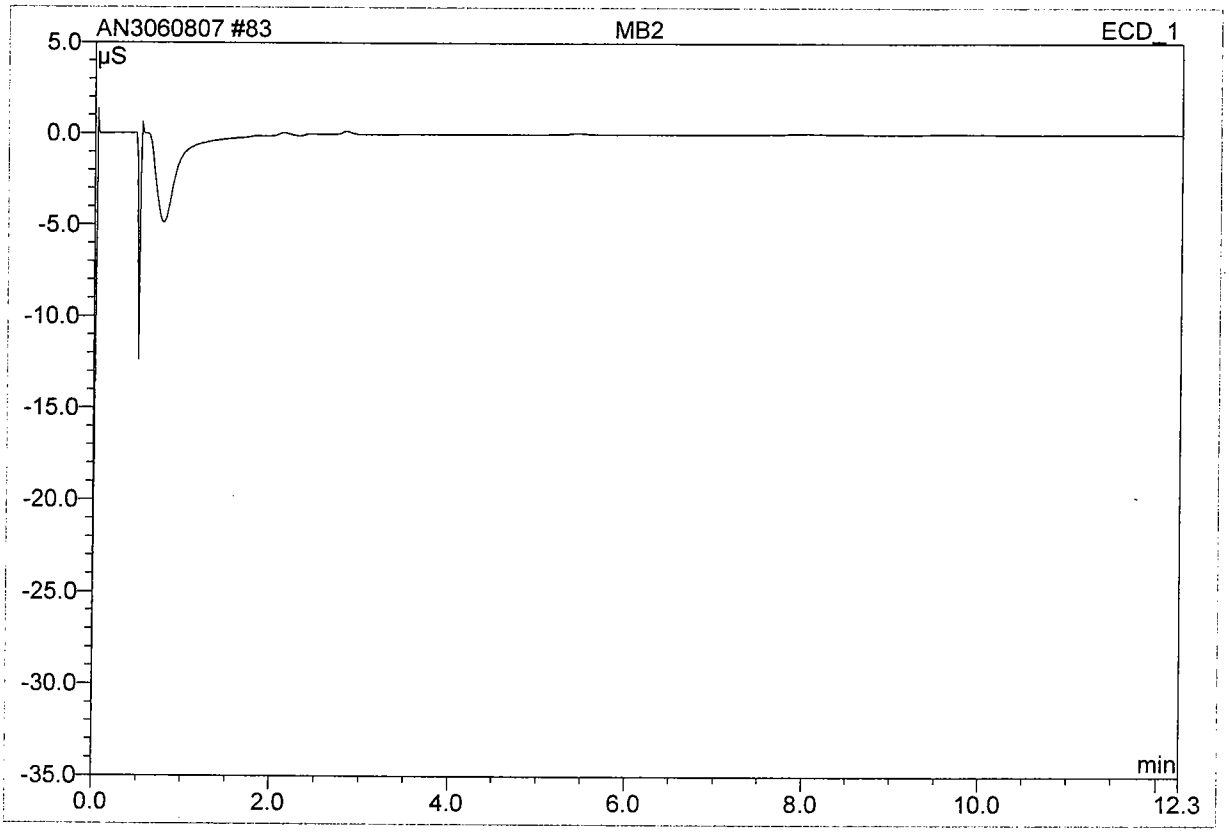
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

83 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**111**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 3:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



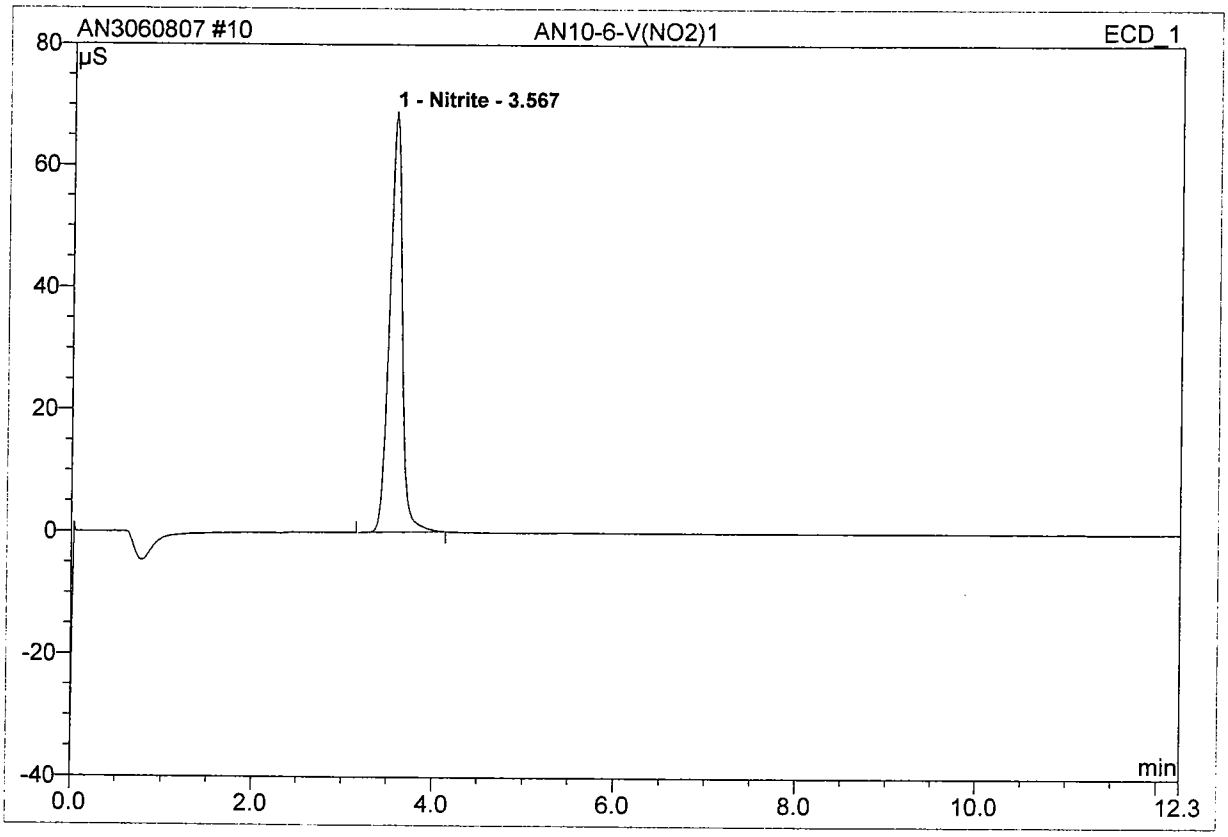
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 9 2007

10 AN10-6-V(NO2)1

Sample Name:	**AN10-6-V(NO2)1**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**6/8/2007 9:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

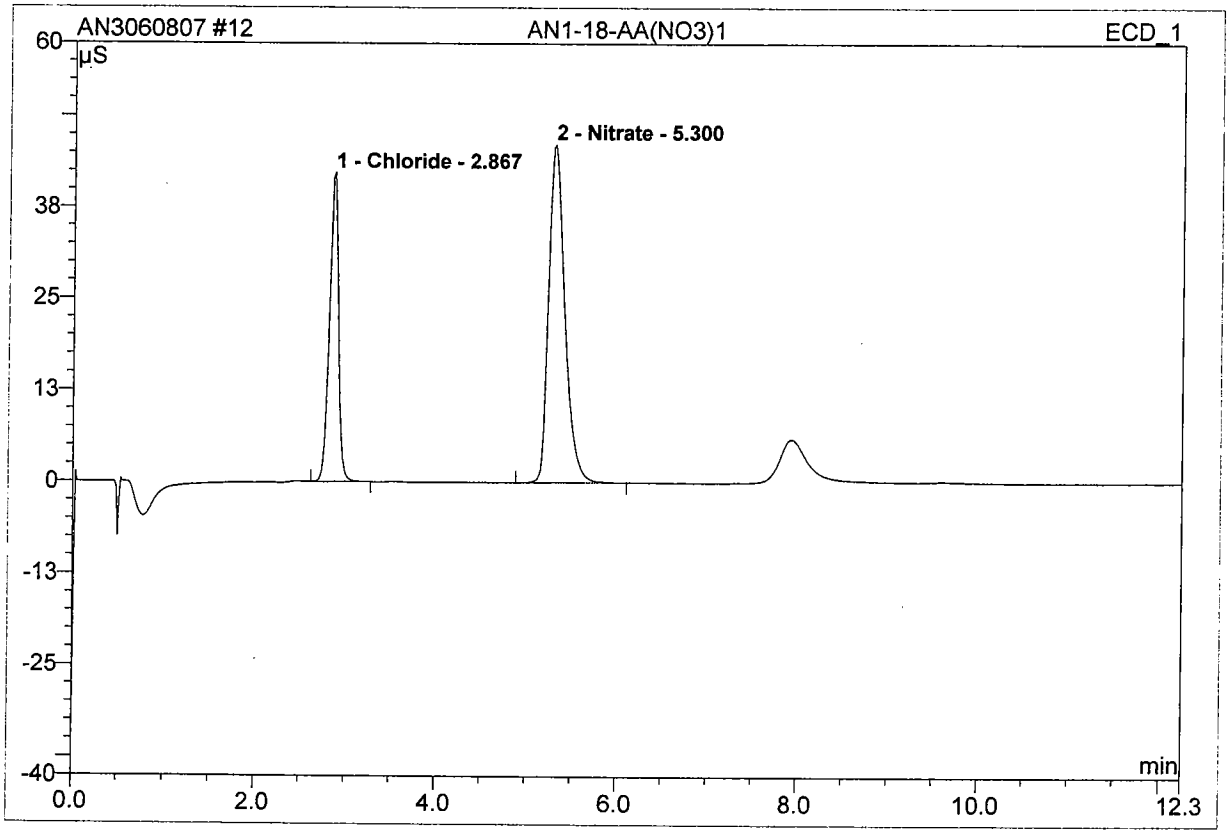


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.57	Nitrite	68.951	11.029	100.00 97%	96.522	BMB
Total:			68.951	11.029	100.00	96.522	

6/13/07

12 AN1-18-AA(NO3)1

Sample Name:	**AN1-18-AA(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 9:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

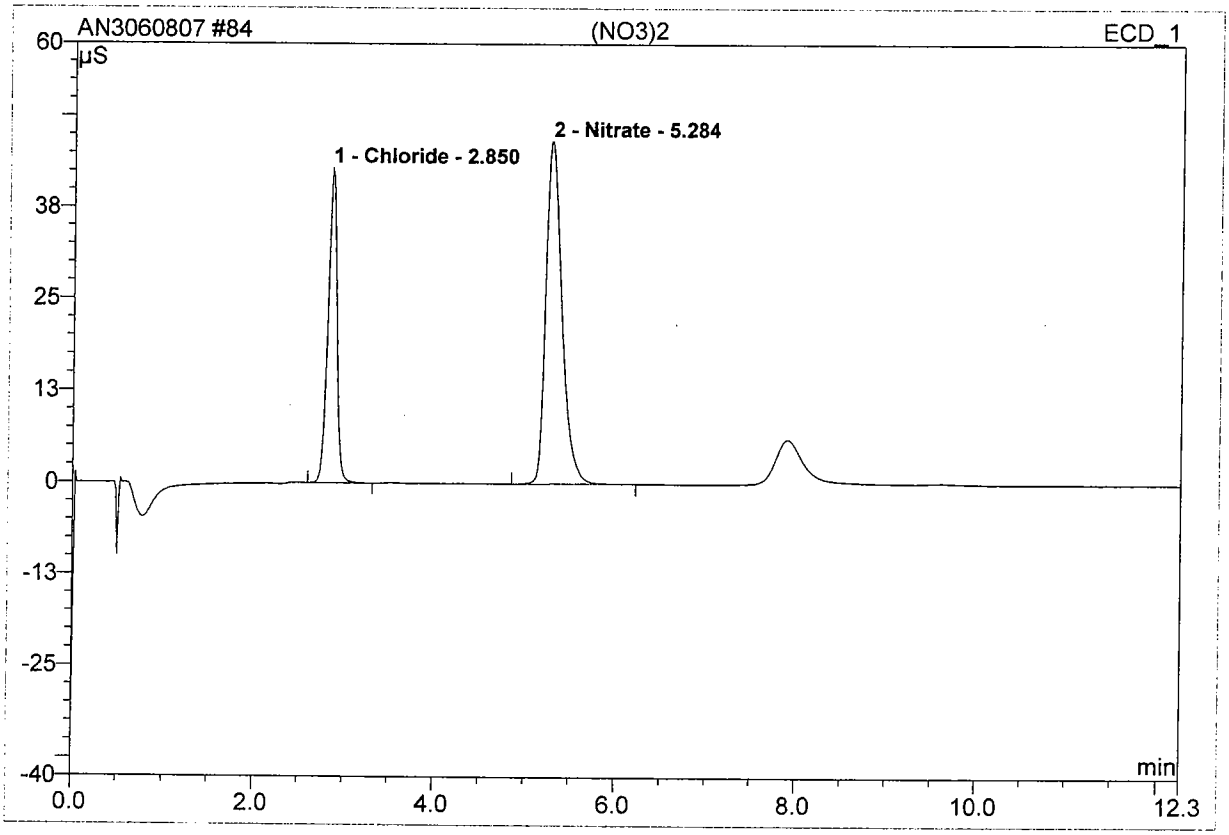


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	42.229	4.829	33.46	6.221	BMB
2	5.30	Nitrate	46.197	9.601	66.54	10% 5.296	BMB
Total:			88.426	14.429	100.00	11.517	

6/13/07

84 (NO3)2

Sample Name:	**(NO3)2**	*Injection Volume:*	**200.0**
Vial Number:	**112**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/9/2007 3:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

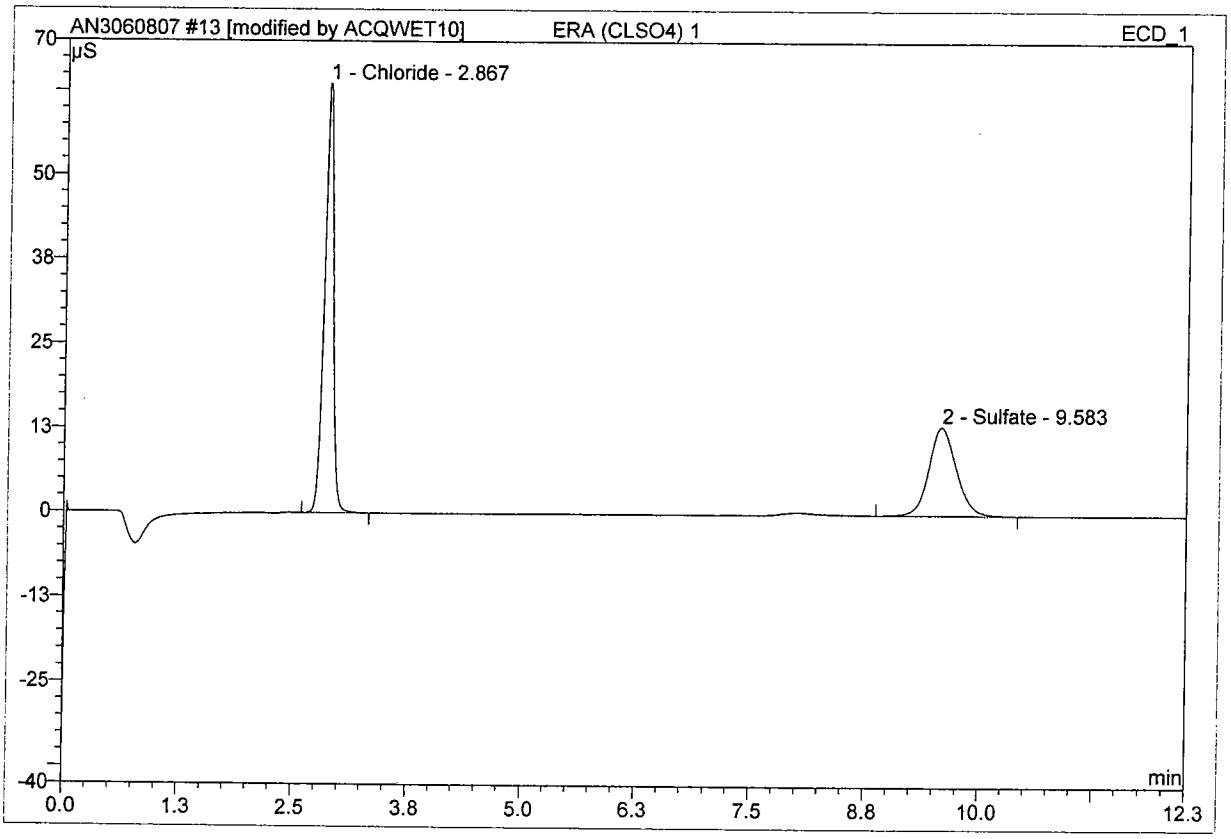


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.85	Chloride	42.962	4.897	33.53	6.309	BMB
2	5.28	Nitrate	46.686	9.708	66.47 1061	5.355	BMB
Total:			89.648	14.605	100.00	11.664	

6/12/07

13 ERA (CLSO4) 1

Sample Name:	**ERA (CLSO4) 1**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	63.686	7.443	61.79	96% 4.794	BMB
2	9.58	Sulfate	13.135	4.602	38.21	99% 4.871	BMB*
Total:			76.821	12.045	100.00	9.666	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

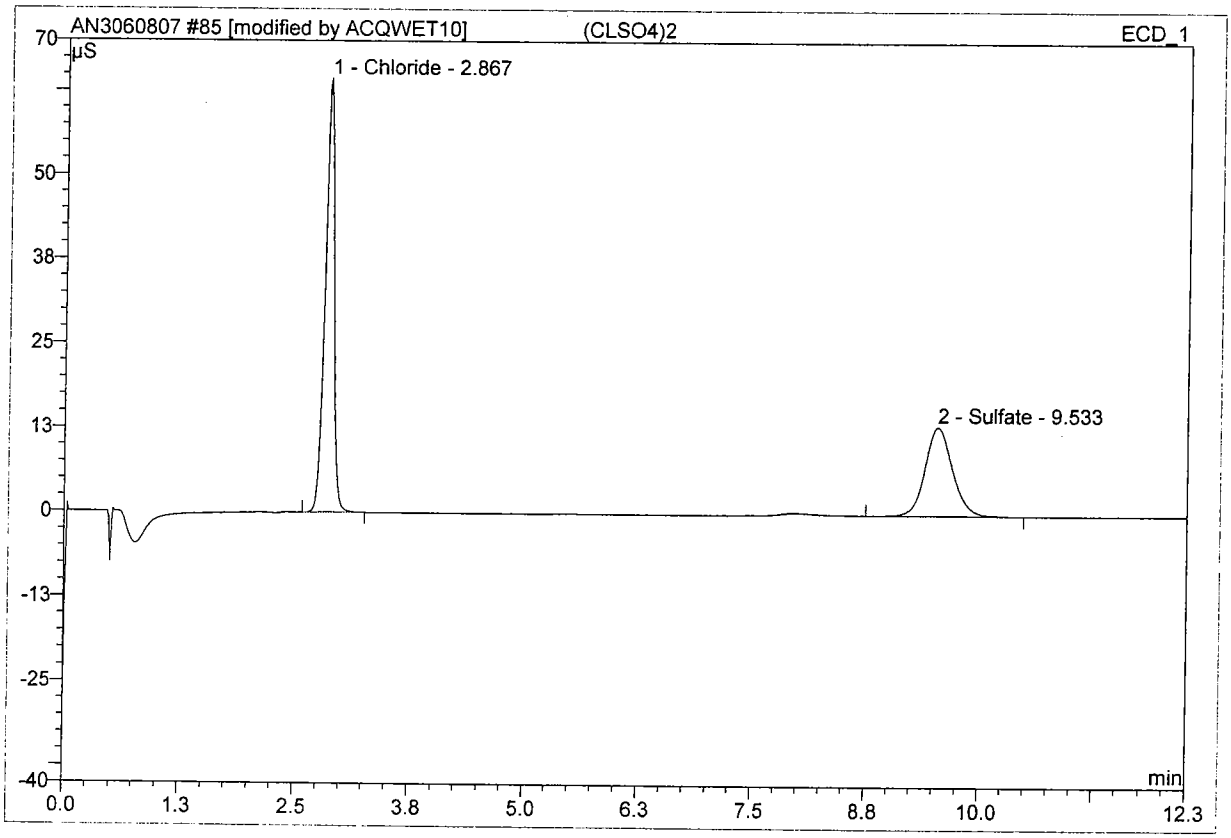
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

85 (CLSO4)2

Sample Name:	**(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**113**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 3:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	64.430	7.483	61.86	96% 4.820	BMB
2	9.53	Sulfate	13.197	4.613	38.14	96% 4.883	BMB*
Total:			77.628	12.096	100.00	9.704	

6/12/07

After Initials JS

JUN 09 2007

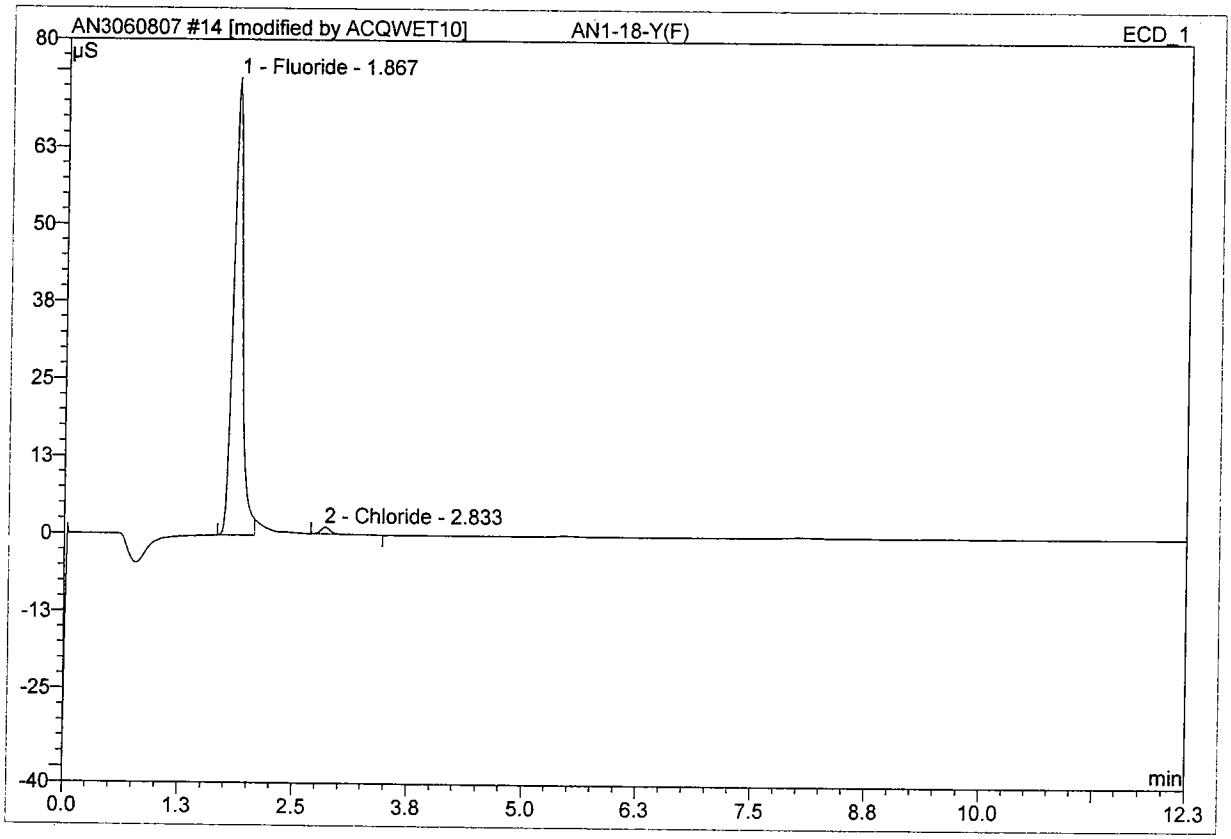
☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

14 AN1-18-Y(F)

Sample Name:	**AN1-18-Y(F)**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 10:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.87	Fluoride	74.015	8.807	98.73	10.258	BM *
2	2.83	Chloride	1.088	0.114	1.27	0.147	BMB*
Total:			75.102	8.921	100.00	10.404	

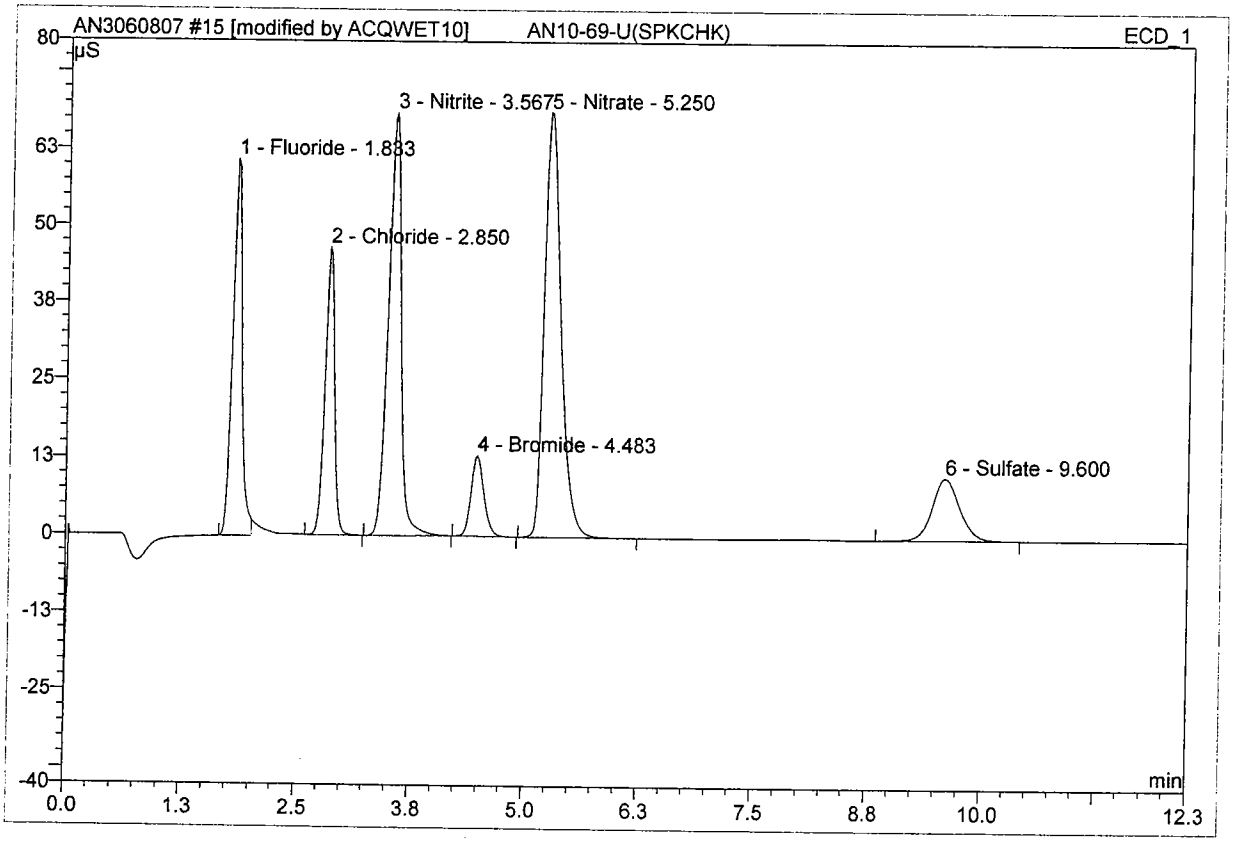
After Initials JS 6/13/07

JUN 08 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

15 AN10-69-U(SPKCHK)

Sample Name:	**AN10-69-U(SPKCHK)**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride %rec=105	60.974	7.170	16.29	4.175	BM *
2	2.85	Chloride %rec=90	46.496	5.585	12.69	3.598	BMB
3	3.57	Nitrite %rec=98	68.437	11.093	25.20	3.883	BMB*
4	4.48	Bromide %rec=100	12.980	2.126	4.83	4.006	BMB*
5	5.25	Nitrate %rec=100	68.656	14.541	33.04	4.011	BMB*
6	9.60	Sulfate %rec=93	9.998	3.499	7.95	3.704	BMB*
Total:			267.541	44.015	100.00	23.378	

After Initials JS

6/13/07

JUN 08 2007

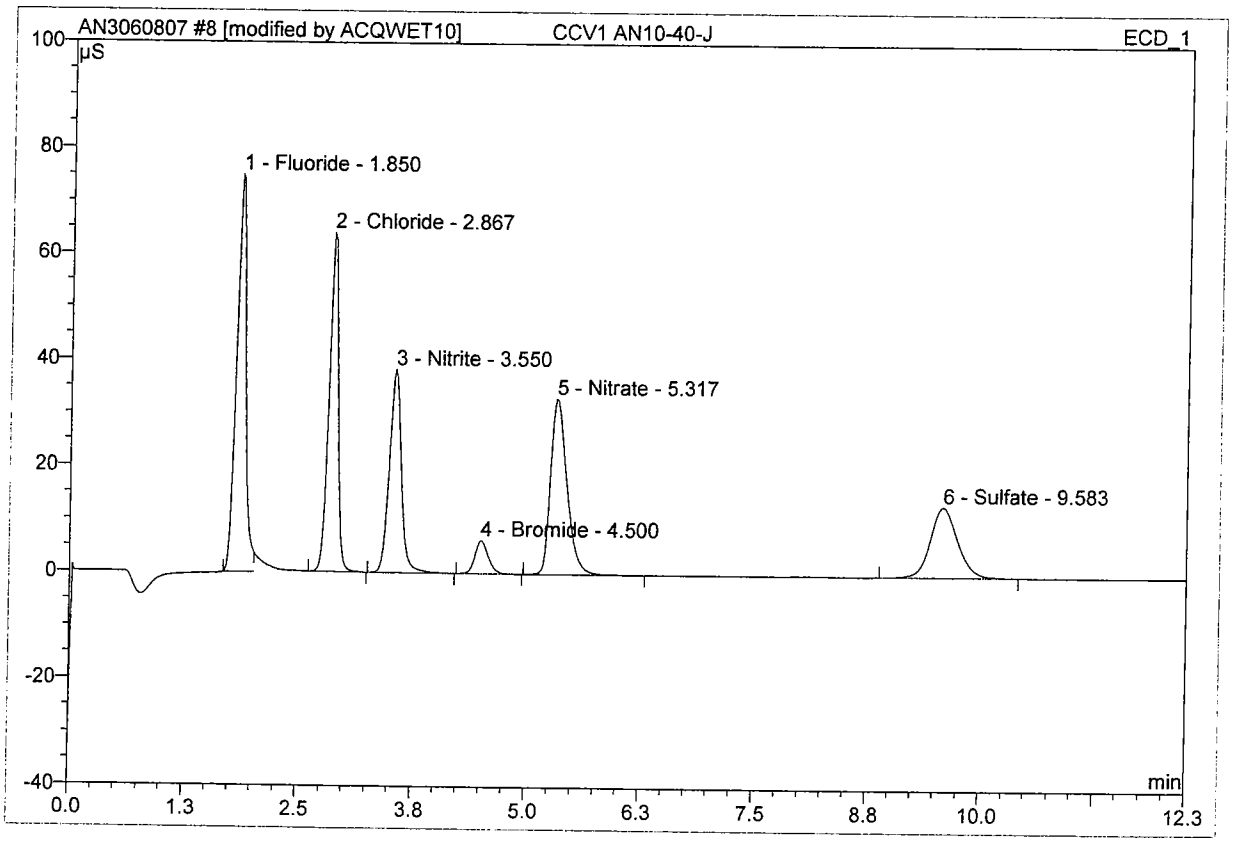
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

8 CCV1 AN10-40-J

Sample Name:	**CCV1 AN10-40-J**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 8:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.003	9.122	26.11	106% 5.312	BM *
2	2.87	Chloride	64.016	7.593	21.73	98% 4.891	BMB*
3	3.55	Nitrite	38.288	5.741	16.43	100% 2.010	BMB*
4	4.50	Bromide	6.264	1.052	3.01	100% 1.982	BMB*
5	5.32	Nitrate	33.074	6.849	19.60	95% 1.889	BMB*
6	9.58	Sulfate	13.137	4.582	13.12	98% 4.851	BMB*
Total:			229.782	34.938	100.00	20.934	

After Initials JS

JUN 08 2007

6/13/07

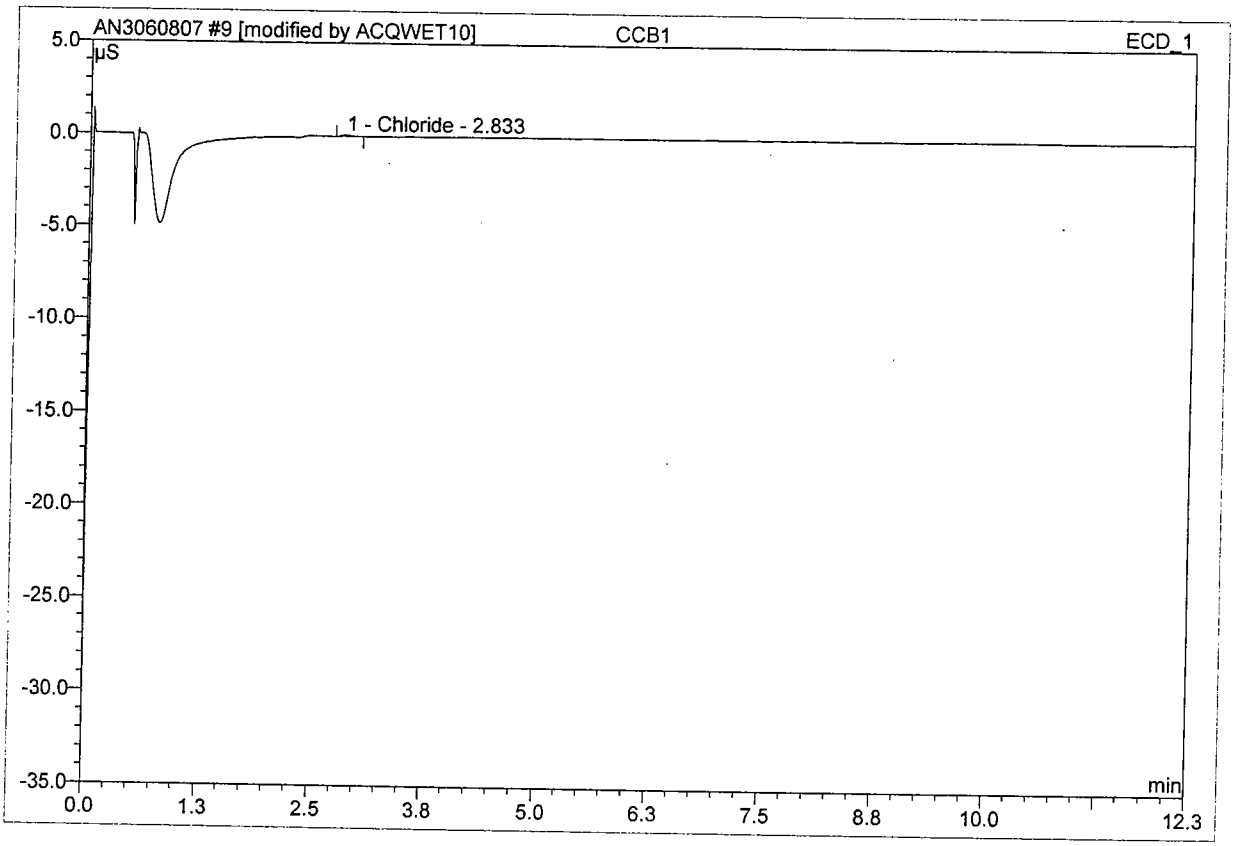
default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.072	0.008	100.00	0.005	BMB*
Total:			0.072	0.008	100.00	0.005	

After
Initials JS

6/13/07

JUN 08 2007

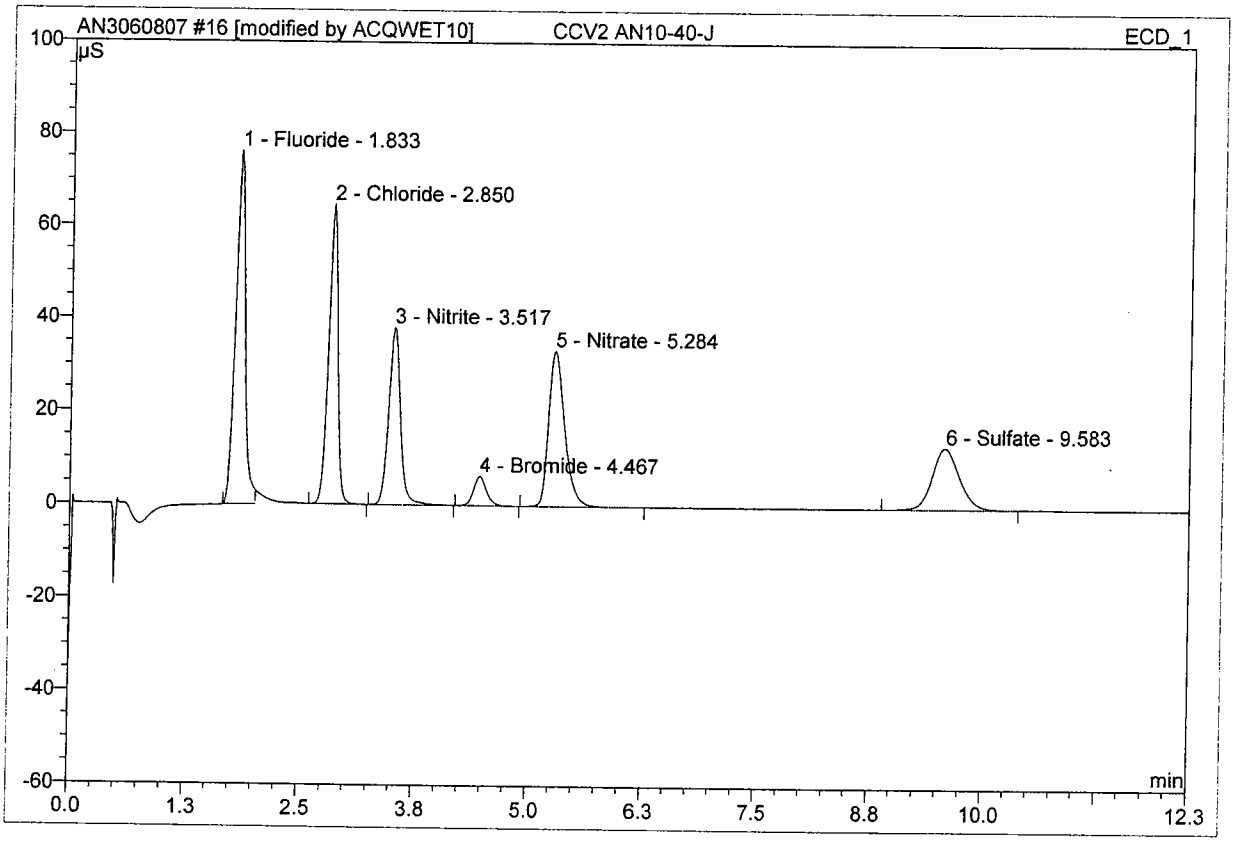
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

16 CCV2 AN10-40-J

Sample Name:	**CCV2 AN10-40-J**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	76.150	9.186	26.25	106% 5.349	BM *
2	2.85	Chloride	64.550	7.570	21.64	98% 4.877	BMB*
3	3.52	Nitrite	38.084	5.739	16.40	100% 2.009	BMB*
4	4.47	Bromide	6.298	1.050	3.00	100% 1.979	BMB*
5	5.28	Nitrate	33.388	6.830	19.52	95% 1.884	BMB*
6	9.58	Sulfate	13.211	4.615	13.19	98% 4.885	BMB*
Total:			231.681	34.990	100.00	20.983	

After
Initials JS

JUN 08 2007

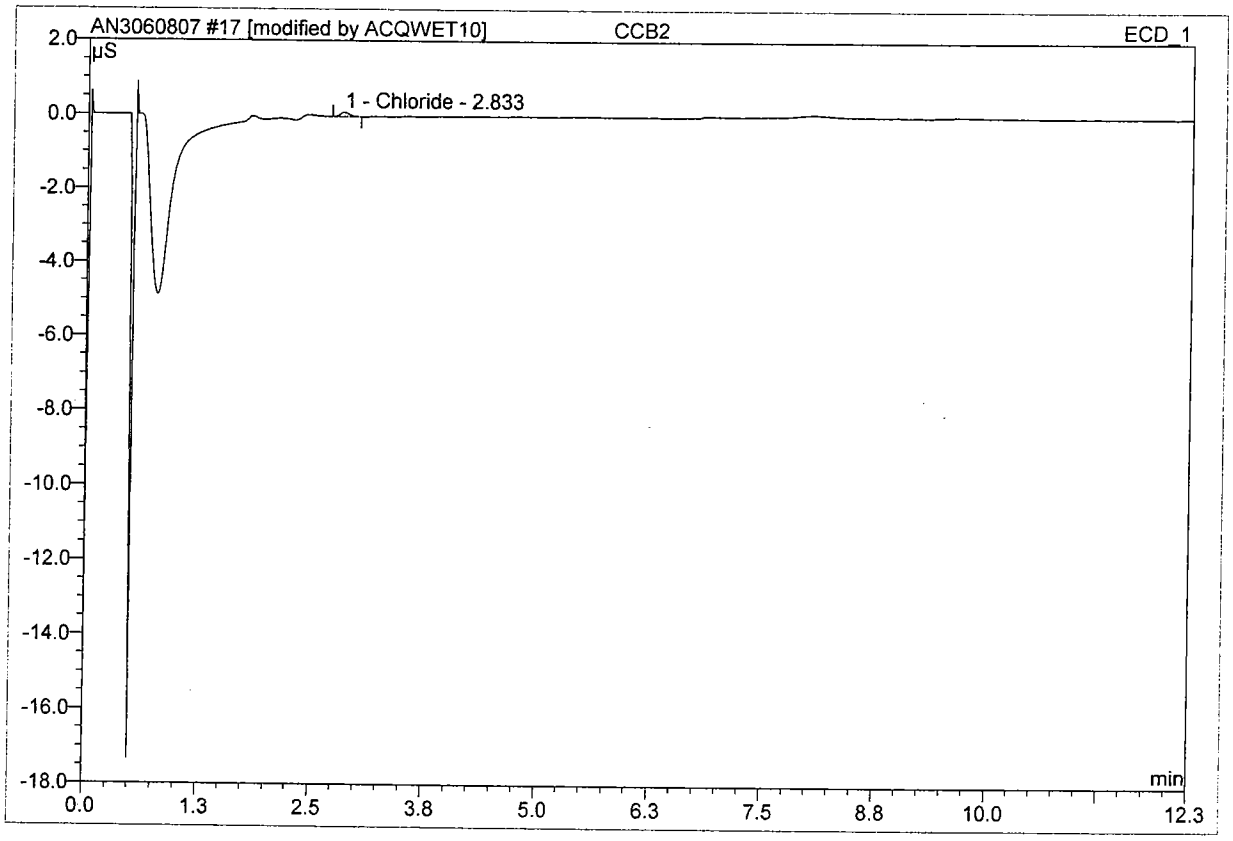
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

BM 6/13/07

default/Integration

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride CO.2	0.119	0.014	100.00	0.009	BMB*
Total:			0.119	0.014	100.00	0.009	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

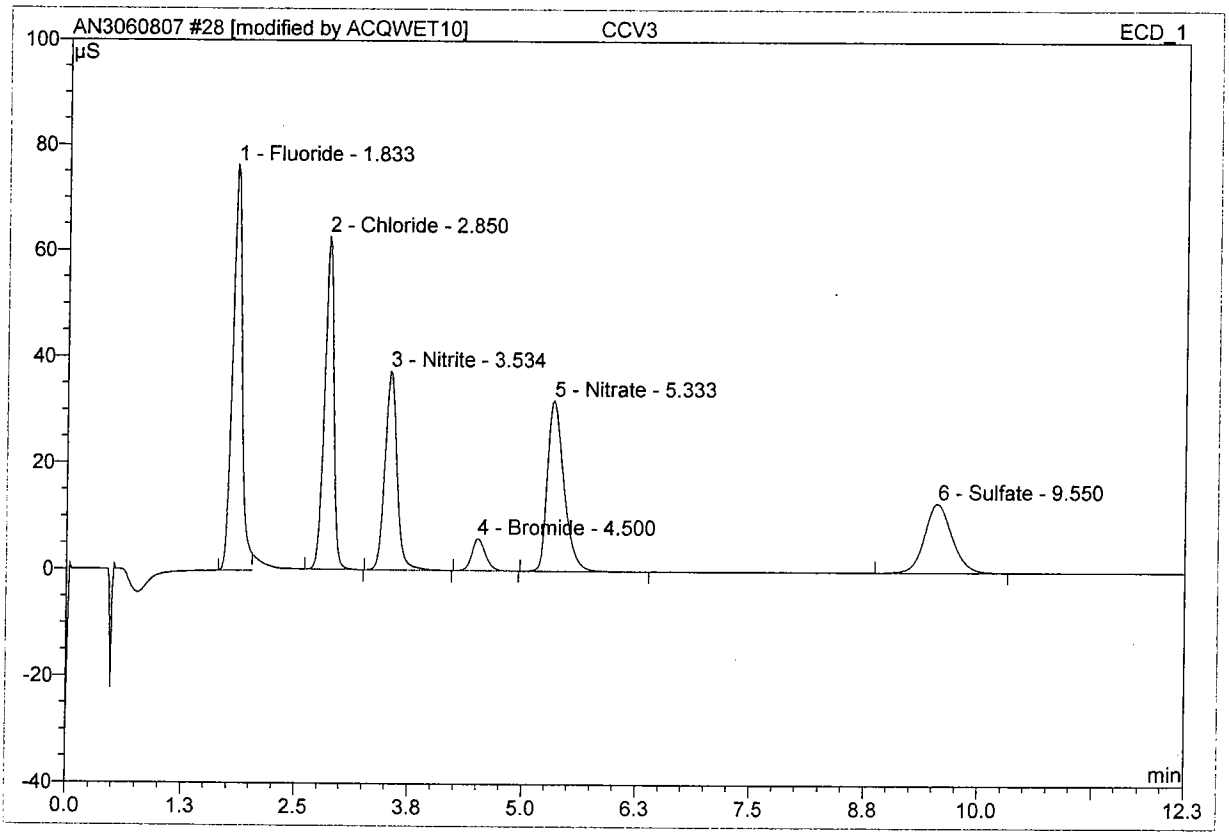
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**56**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 13:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	76.428	9.348	26.68	108% 5.444	BM *
2	2.85	Chloride	62.731	7.560	21.57	98% 4.870	BMB*
3	3.53	Nitrite	37.451	5.718	16.32	100% 2.002	BMB*
4	4.50	Bromide	6.042	1.042	2.97	100% 1.964	BMB*
5	5.33	Nitrate	32.074	6.825	19.48	95% 1.882	BMB*
6	9.55	Sulfate	12.934	4.547	12.98	96% 4.813	BMB*
Total:			227.659	35.040	100.00	20.975	

After Initials JS

JUN 08 2007

6/13/07

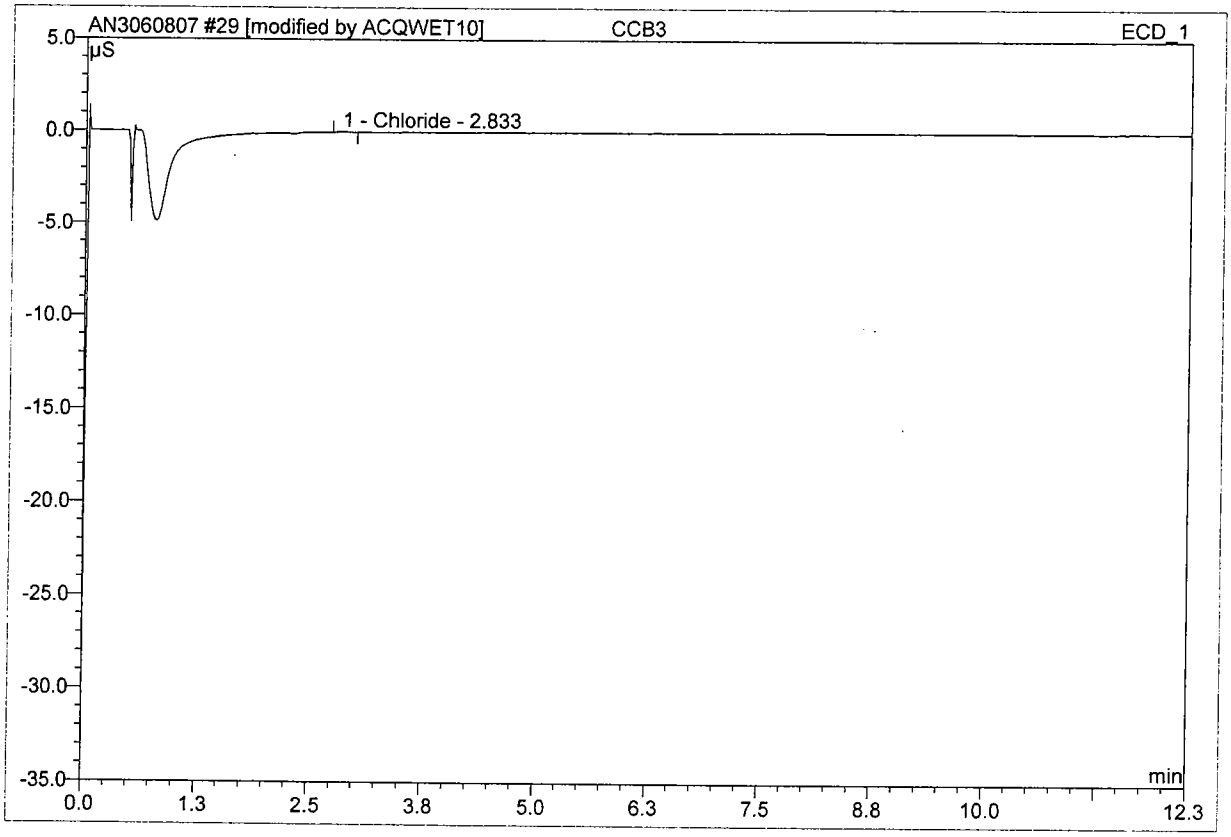
default/Integration

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

29 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**57**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 13:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.052	0.006	100.00	0.004	BMB*
Total:			0.052	0.006	100.00	0.004	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

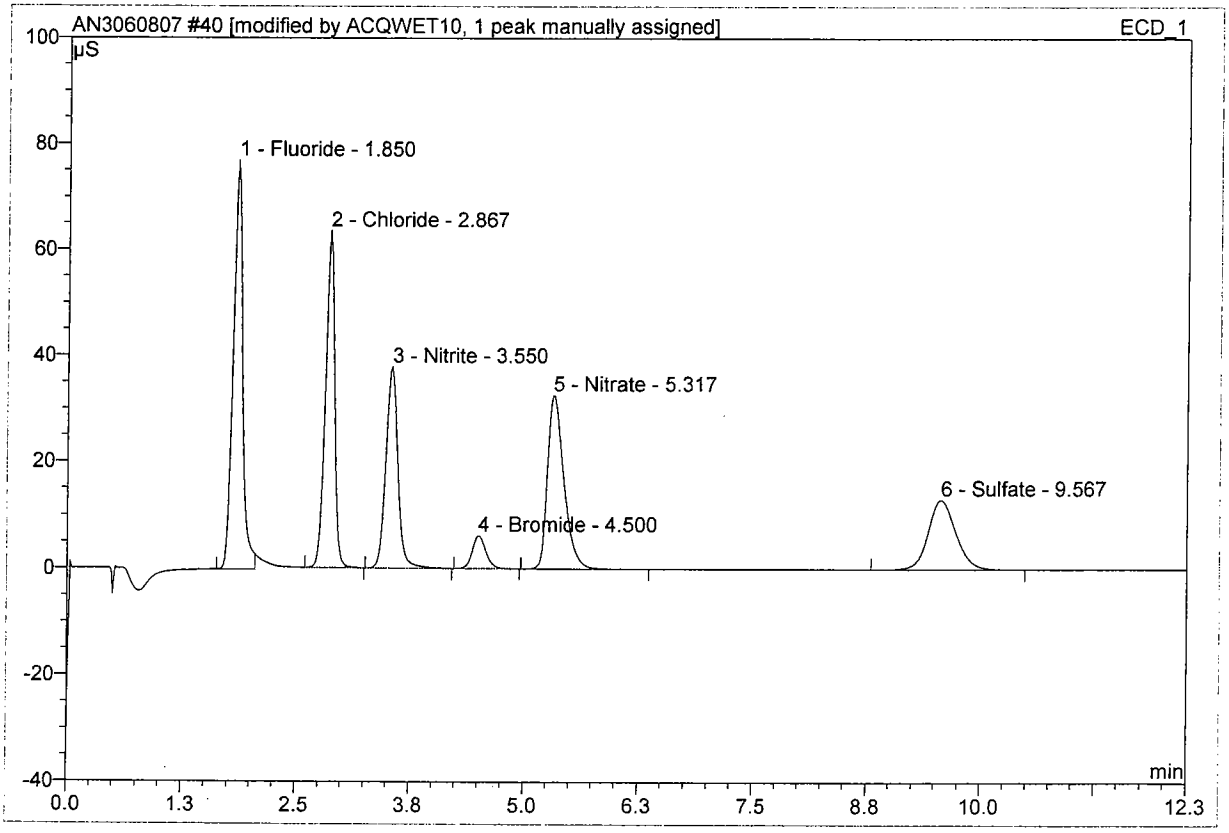
default/Integration

6/13/07

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**68**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 16:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	77.067	9.377	26.76	110% 5.461	BM *
2	2.87	Chloride	63.471	7.538	21.51	98% 4.856	BMB*
3	3.55	Nitrite	37.839	5.722	16.33	100% 2.003	BMB*
4	4.50	Bromide	6.116	1.036	2.96	100% 1.952	BMB*
5	5.32	Nitrate	32.583	6.812	19.44	95% 1.879	BMB*^
6	9.57	Sulfate	12.989	4.557	13.01	96% 4.824	BMB*
Total:			230.066	35.043	100.00	20.975	

After Initials JS

JUN 08 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

115

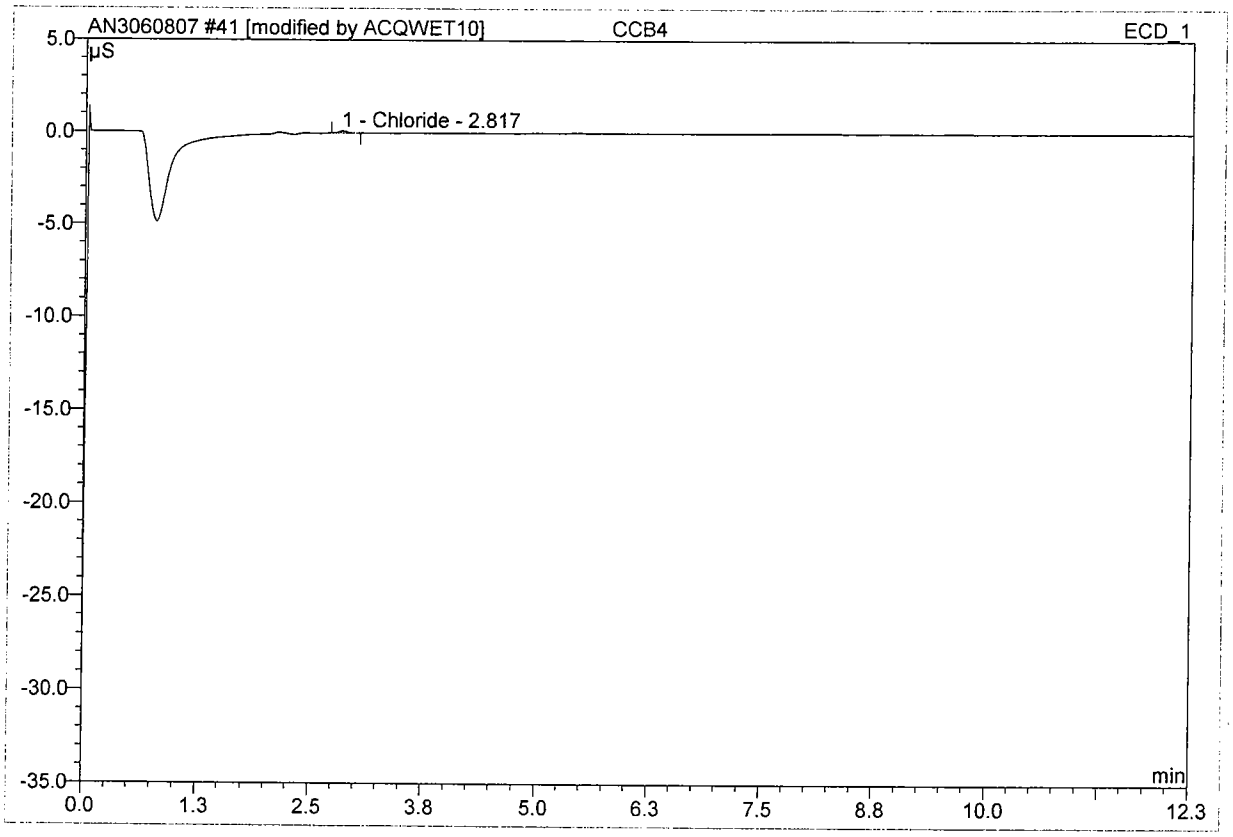
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 16:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride <0.2	0.106	0.012	100.00	0.008	BMB*
Total:			0.106	0.012	100.00	0.008	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

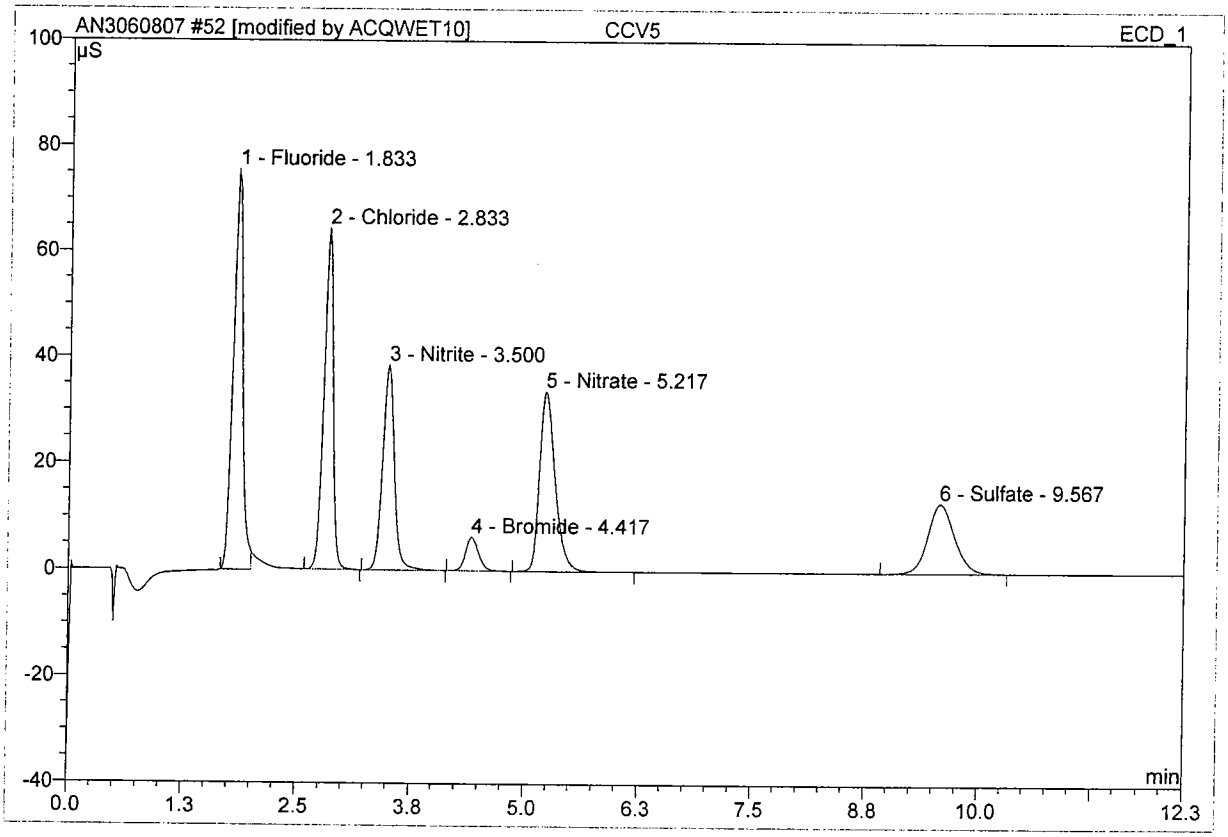
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**80**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 19:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	75.590	9.033	26.14	106% 5.260	BM *
2	2.83	Chloride	64.381	7.525	21.78	96% 4.848	BMB*
3	3.50	Nitrite	38.493	5.677	16.43	100% 4.988	BMB*
4	4.42	Bromide	6.317	1.037	3.00	98% 1.954 100%	BMB*
5	5.22	Nitrate	33.794	6.789	19.65	95% 1.873	BMB*
6	9.57	Sulfate	13.028	4.492	13.00	96% 4.755	BMB*
Total:			231.603	34.554	100.00	20.677	

JS 6/9/07

After Initials JS

JS 6/9/07

JUN 08 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

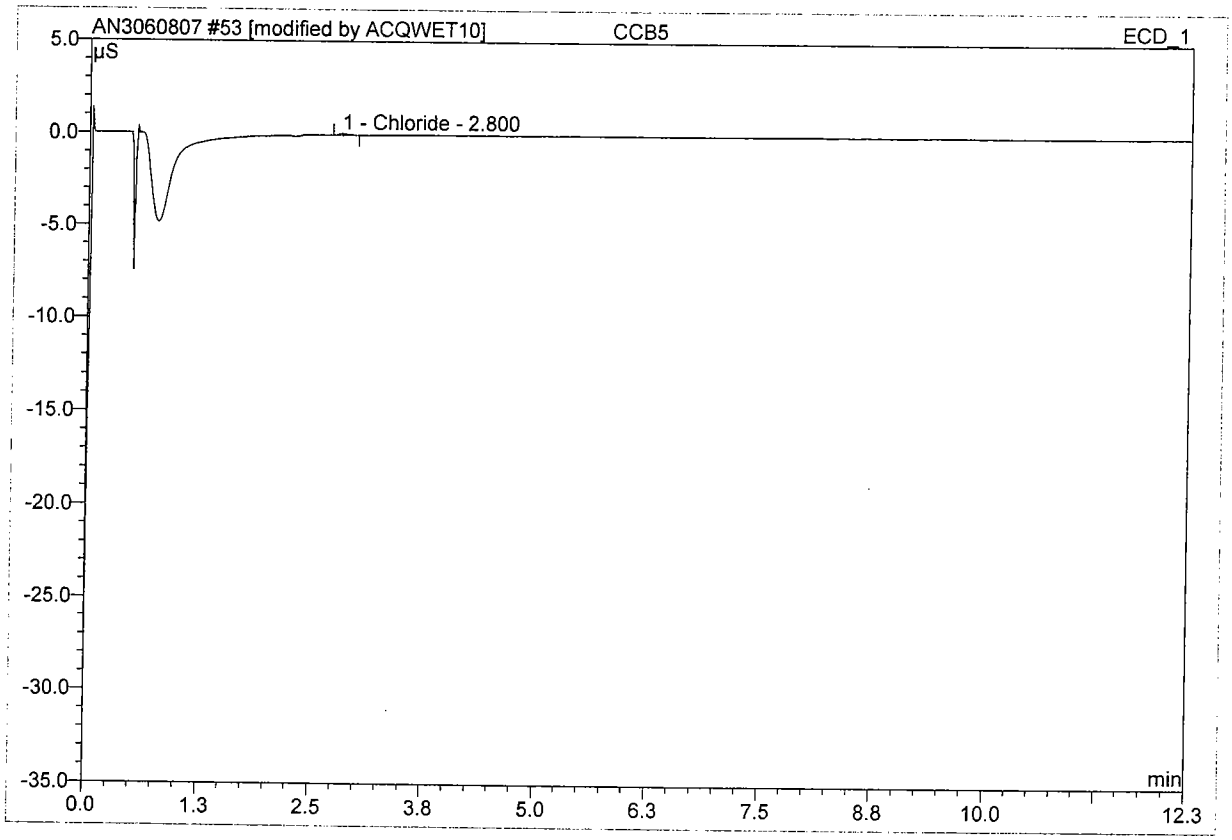
117

JS 6/13/07

default/Integration

53 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**81**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 19:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.80	Chloride CO2	0.071	0.008	100.00	0.005	BMB*
Total:			0.071	0.008	100.00	0.005	

After Initials JS
JS 6/9/07
JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

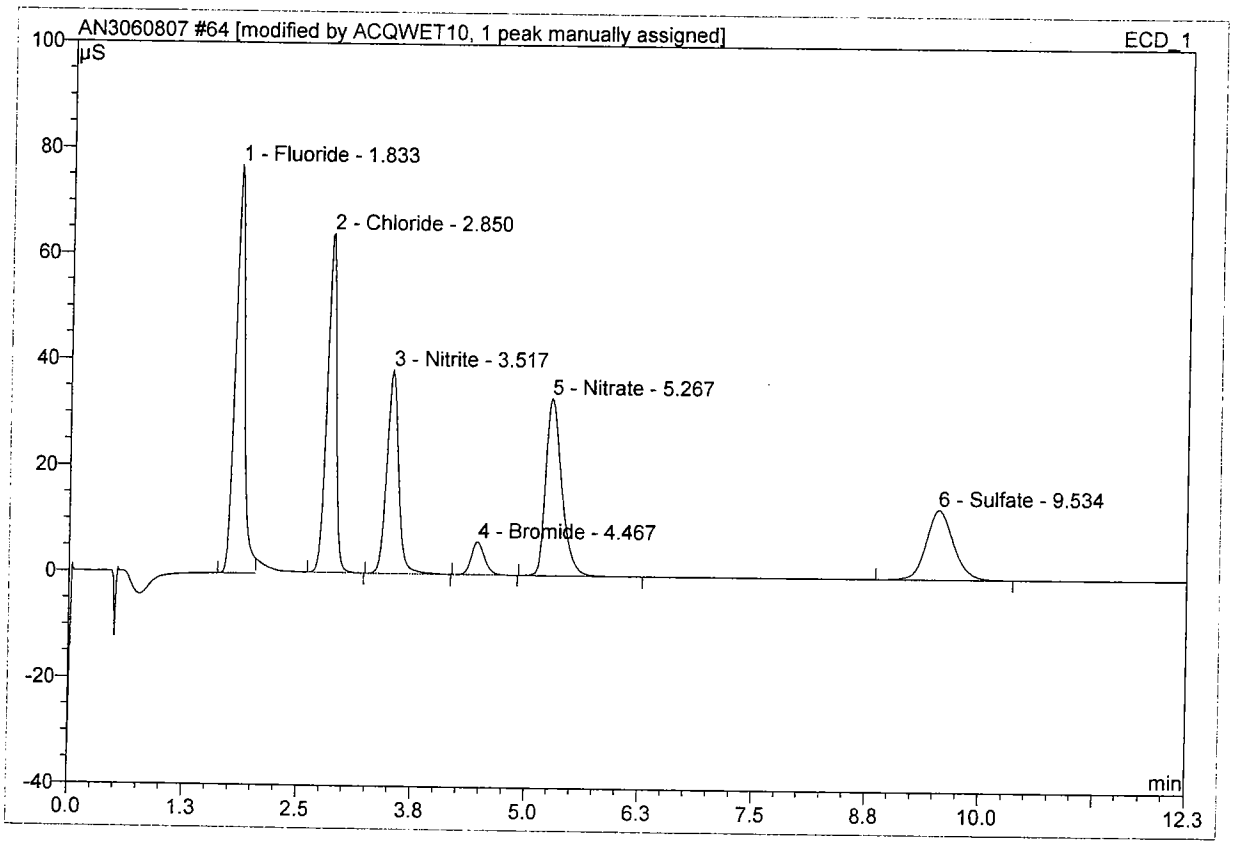
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**92**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 22:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	77.081	9.368	26.64	110% 5.455	BM *
2	2.85	Chloride	63.947	7.624	21.68	98% 4.911	BMB*^
3	3.52	Nitrite	38.326	5.719	16.26	100% 2.002	BMB*
4	4.47	Bromide	6.190	1.038	2.95	100% 1.955	BMB*
5	5.27	Nitrate	33.330	6.865	19.52	95% 1.894	BMB*
6	9.53	Sulfate	13.093	4.552	12.95	96% 4.819	BMB*
Total:			231.967	35.165	100.00	21.035	

After
Initials JS

JUN 08 2007 JS 6/11/07

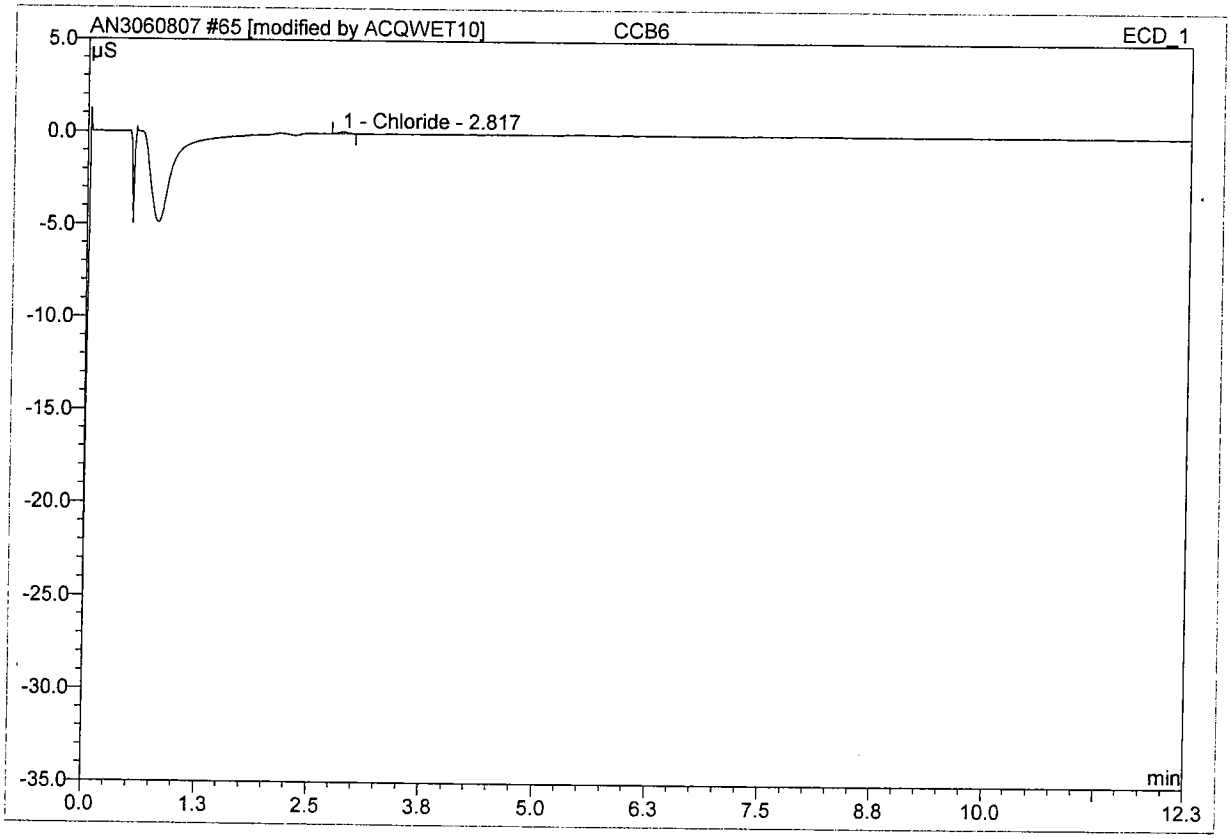
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect 19

6/13/07

default/Integration

65 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 22:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride <0.2	0.098	0.011	100.00	0.007	BMB*
Total:			0.098	0.011	100.00	0.007	

After Initials JS

JUN 08 2007 JS 6/9/07

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

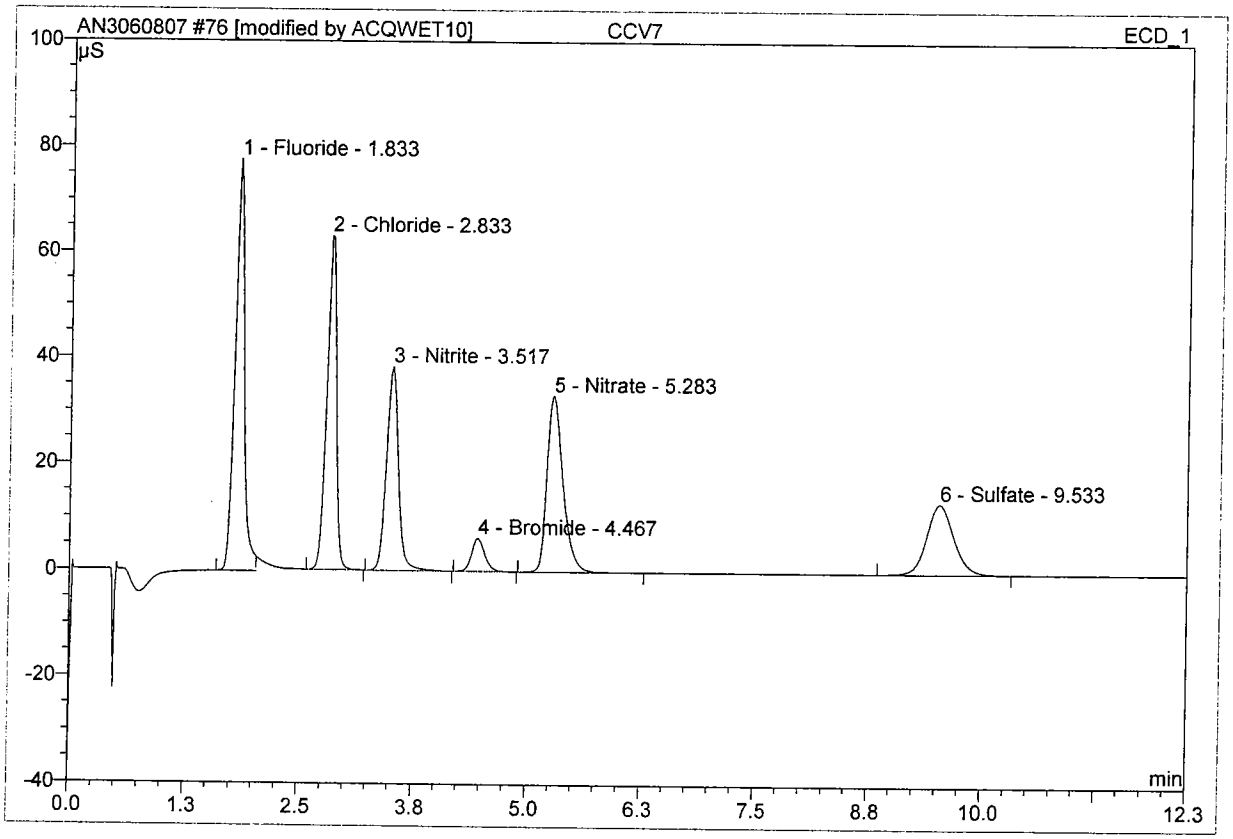
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

76 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**104**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 1:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	77.753	9.393	26.79	110% 5.470	BM *
2	2.83	Chloride	63.018	7.551	21.54	98% 4.864	BMB*
3	3.52	Nitrite	38.324	5.717	16.31	100% 2.001	BMB*
4	4.47	Bromide	6.192	1.038	2.96	100% 1.955	BMB*
5	5.28	Nitrate	33.035	6.820	19.45	95% 1.881	BMB*
6	9.53	Sulfate	13.088	4.543	12.96	96% 4.809	BMB*
Total:			231.408	35.062	100.00	20.981	

After Initials JS

JS 6/9/07

JUN 08 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

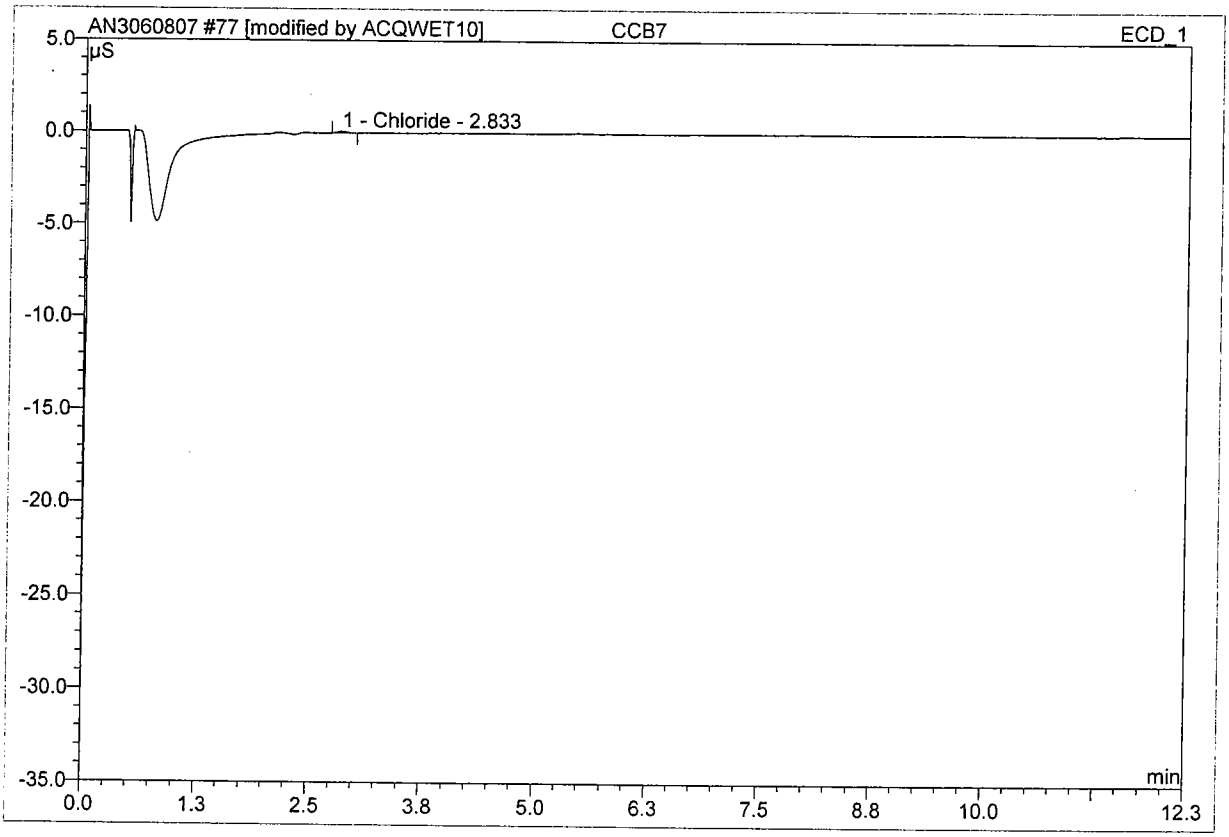
JS 6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

77 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 1:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.084	0.010	100.00	0.006	BMB*
Total:			0.084	0.010	100.00	0.006	

After Initials JS

JS 6/9/07

JUN 08 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

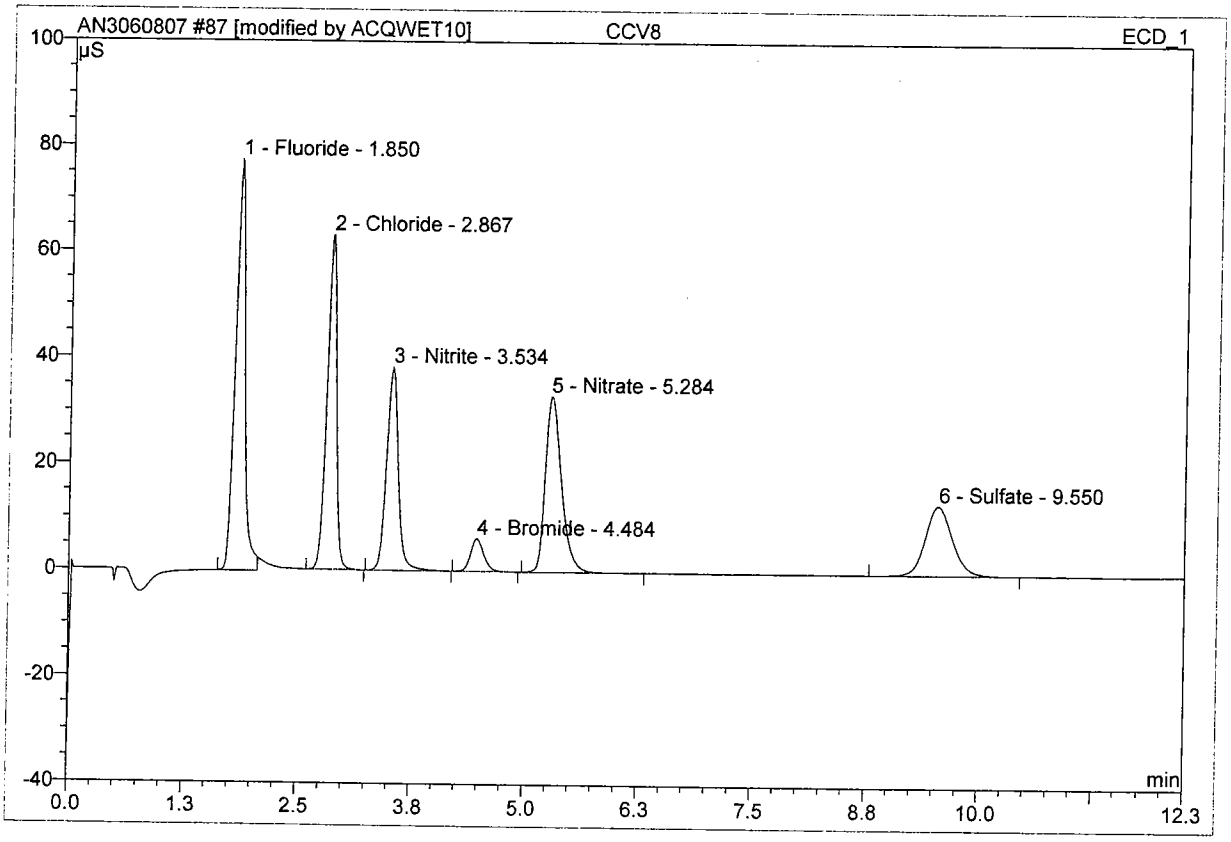
6/13/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

87 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**115**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 4:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	77.584	9.423	26.84	110% 5.487	BM *
2	2.87	Chloride	63.106	7.538	21.47	98% 4.856	BMB*
3	3.53	Nitrite	38.304	5.723	16.30	100% 2.003	BMB*
4	4.48	Bromide	6.179	1.033	2.94	95% 1.946	BMB*
5	5.28	Nitrate	33.069	6.824	19.44	95% 1.882	BMB*
6	9.55	Sulfate	13.075	4.562	13.00	96% 4.829	BMB*
Total:			231.318	35.102	100.00	21.003	

After
Initials JS

JUN 08 2007 6/9/07

JY 6/13/07

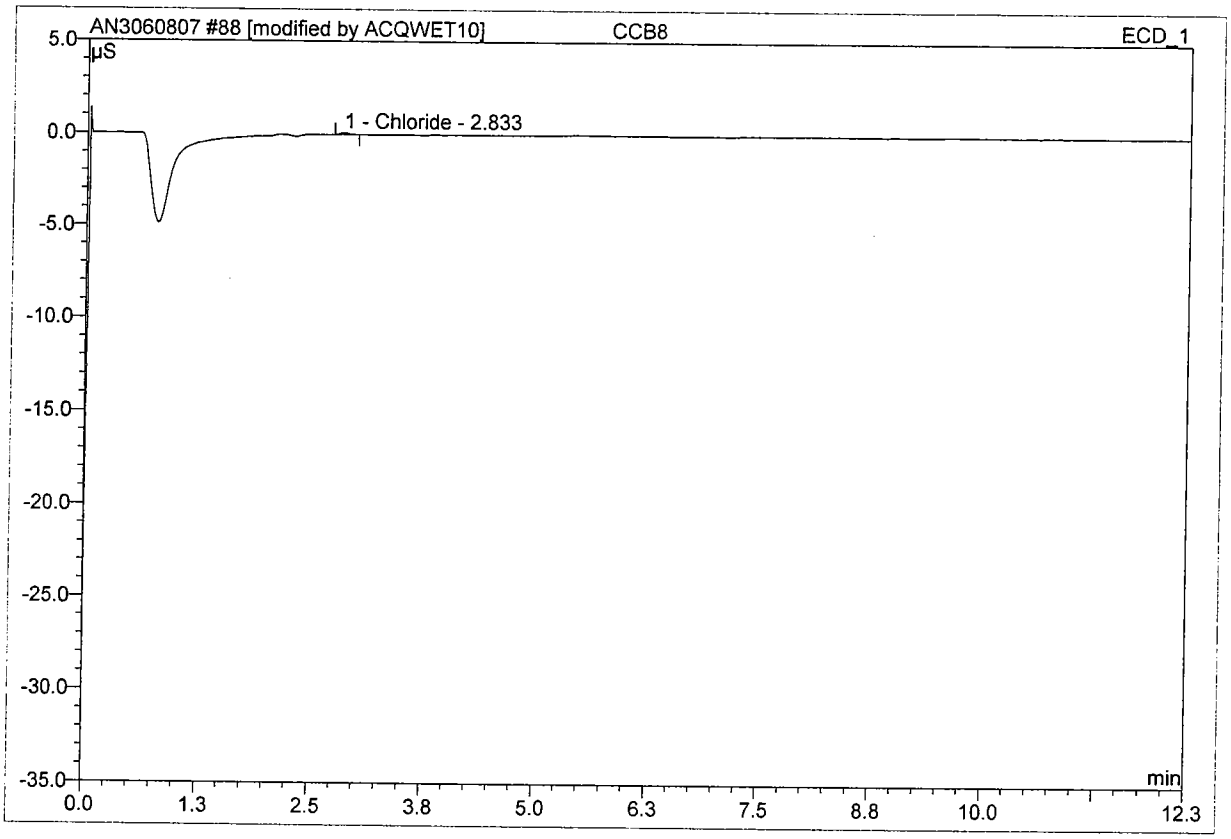
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

88 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**116**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 4:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride Co-2	0.096	0.010	100.00	0.007	BMB*
Total:			0.096	0.010	100.00	0.007	

6/12/07

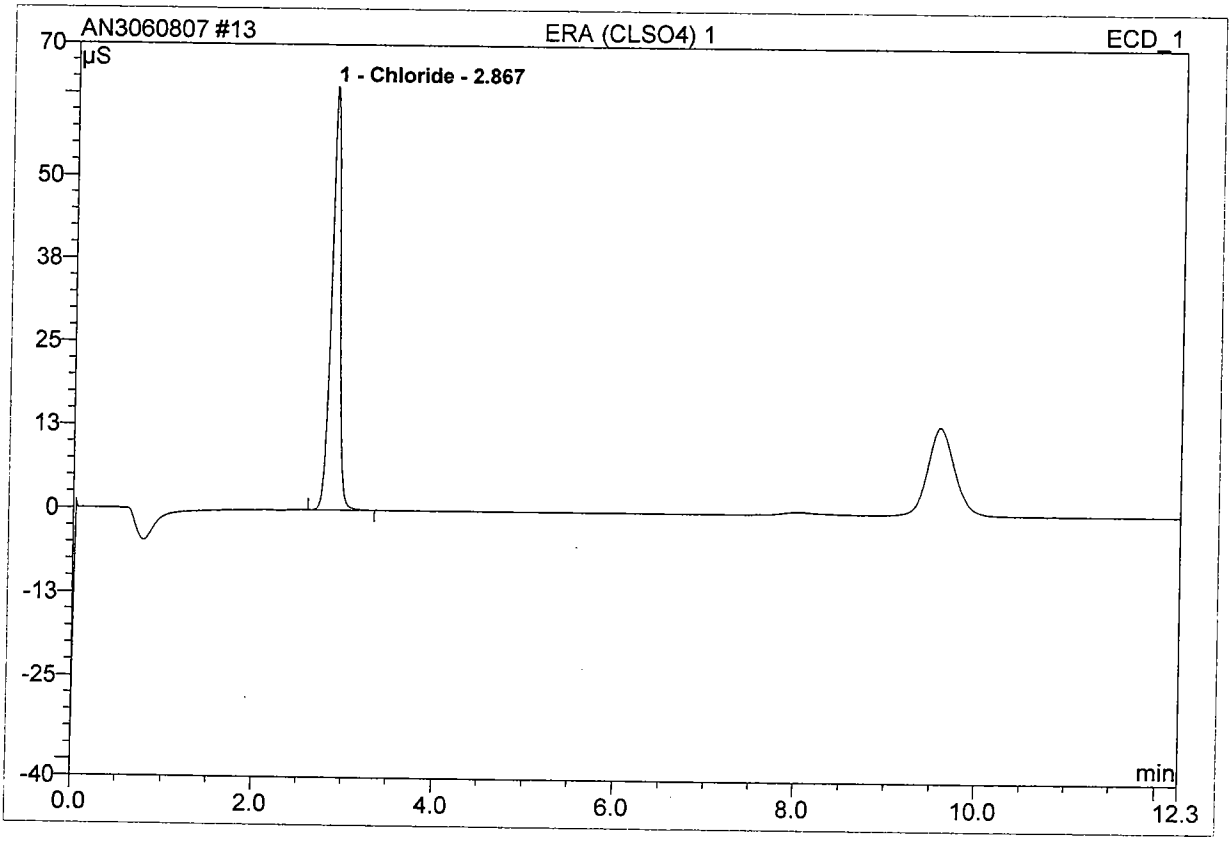
After Initials JS

JUN 08 2007 JS 6/19/07

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

13 ERA (CLSO4) 1

Sample Name:	**ERA (CLSO4) 1**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



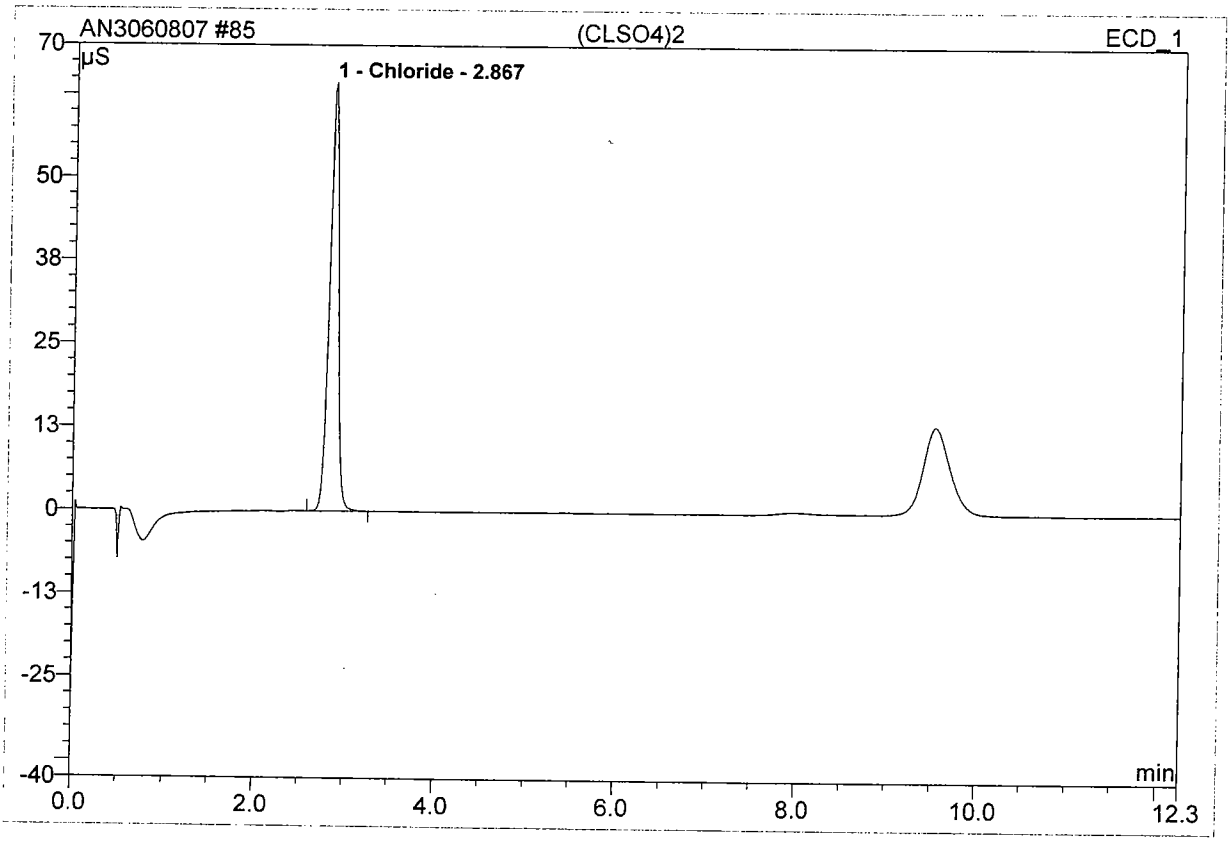
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	63.686	7.443	100.00	4.794	BMB
Total:			63.686	7.443	100.00	4.794	

Before

JUN 0 8 2007

85 (CLSO4)2

Sample Name:	**(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**113**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 3:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



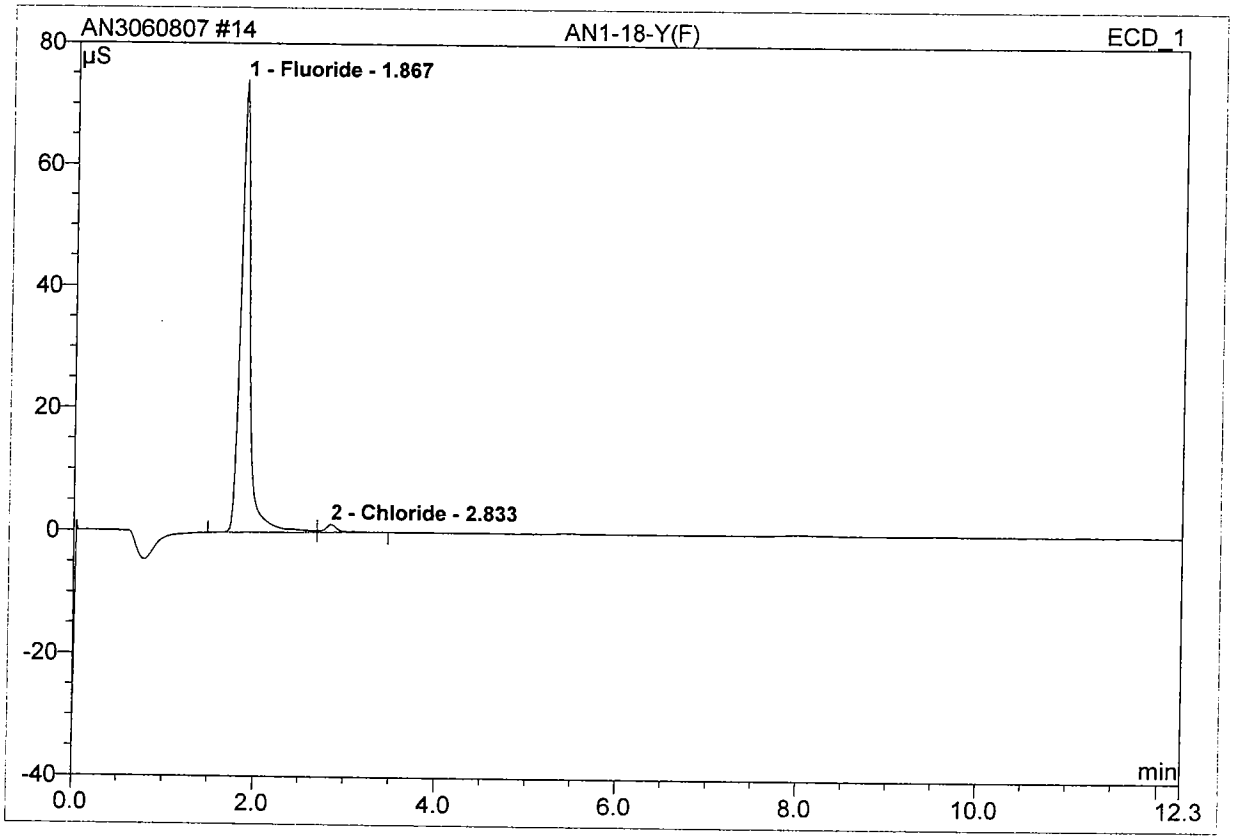
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	64.430	7.483	100.00	4.820	BMB
Total:			64.430	7.483	100.00	4.820	

Before

JUN 0 9 2007

14 AN1-18-Y(F)

Sample Name:	**AN1-18-Y(F)**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 10:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



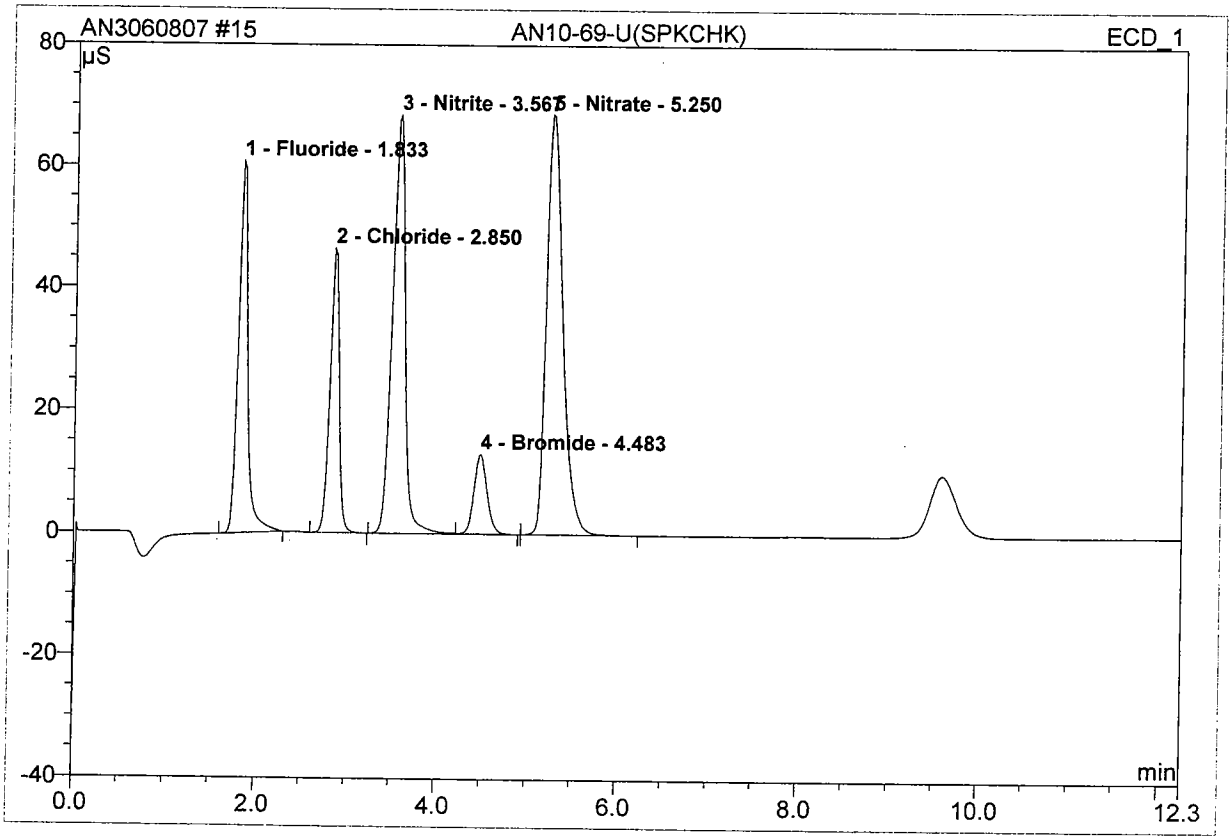
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.87	Fluoride	74.059	9.326	97.73	10.862	BM
2	2.83	Chloride	1.299	0.216	2.27	0.279	MB
Total:			75.358	9.542	100.00	11.140	

Before

JUN 0 8 2007

15 AN10-69-U(SPKCHK)

Sample Name:	**AN10-69-U(SPKCHK)**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



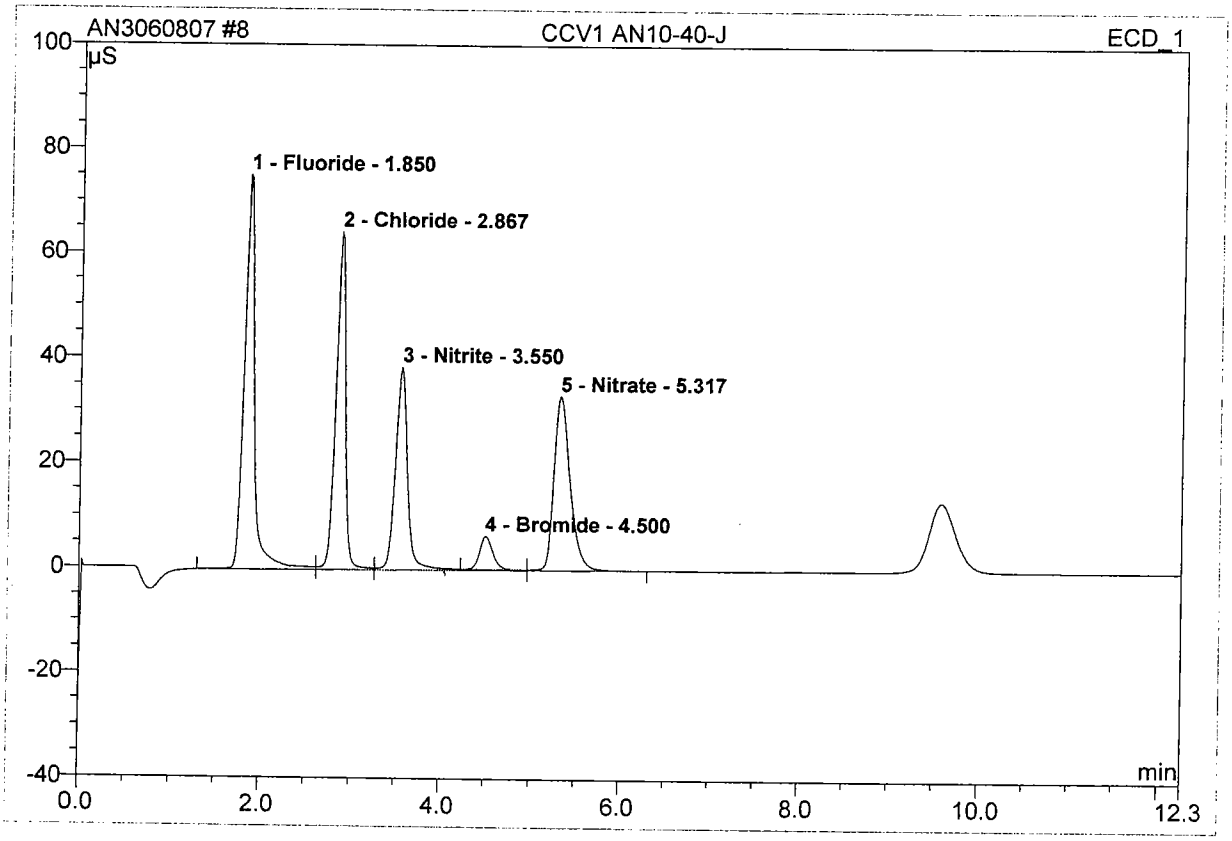
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	60.912	7.401	18.13	4.310	BMB
2	2.85	Chloride	46.496	5.585	13.68	3.598	BMB
3	3.57	Nitrite	68.470	11.174	27.37	3.912	BMb
4	4.48	Bromide	12.981	2.127	5.21	4.007	Rd
5	5.25	Nitrate	68.656	14.541	35.62	4.011	bMB
Total:			257.514	40.828	100.00	19.837	

Before

JUN 0 8 2007

8 CCV1 AN10-40-J

Sample Name:	**CCV1 AN10-40-J**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 8:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



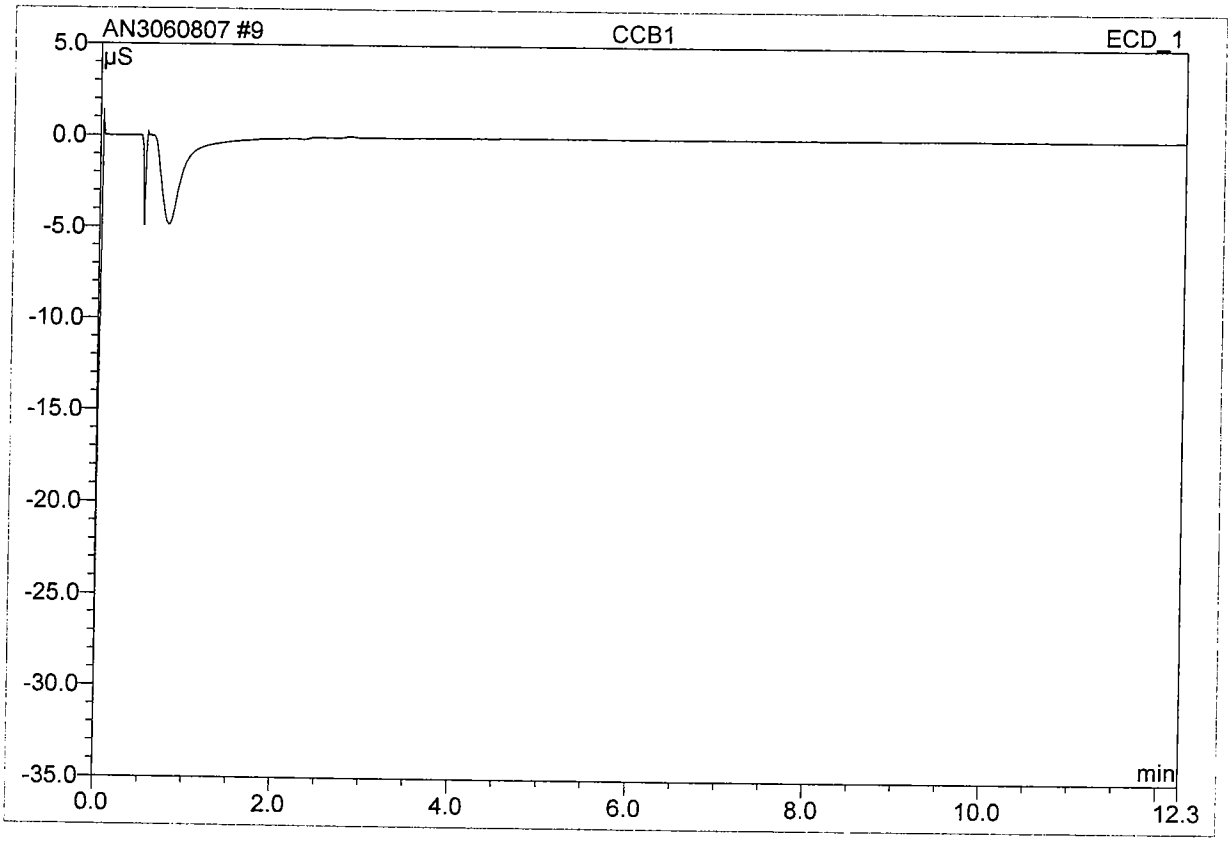
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.297	9.989	31.27	5.817	BM
2	2.87	Chloride	64.426	7.847	24.57	5.055	M
3	3.55	Nitrite	38.574	6.126	19.18	2.145	M
4	4.50	Bromide	6.264	1.052	3.29	1.982	Rd
5	5.32	Nitrate	33.163	6.930	21.69	1.912	MB
Total:			217.724	31.944	100.00	16.910	

Before

JUN 0 8 2007

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 9:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



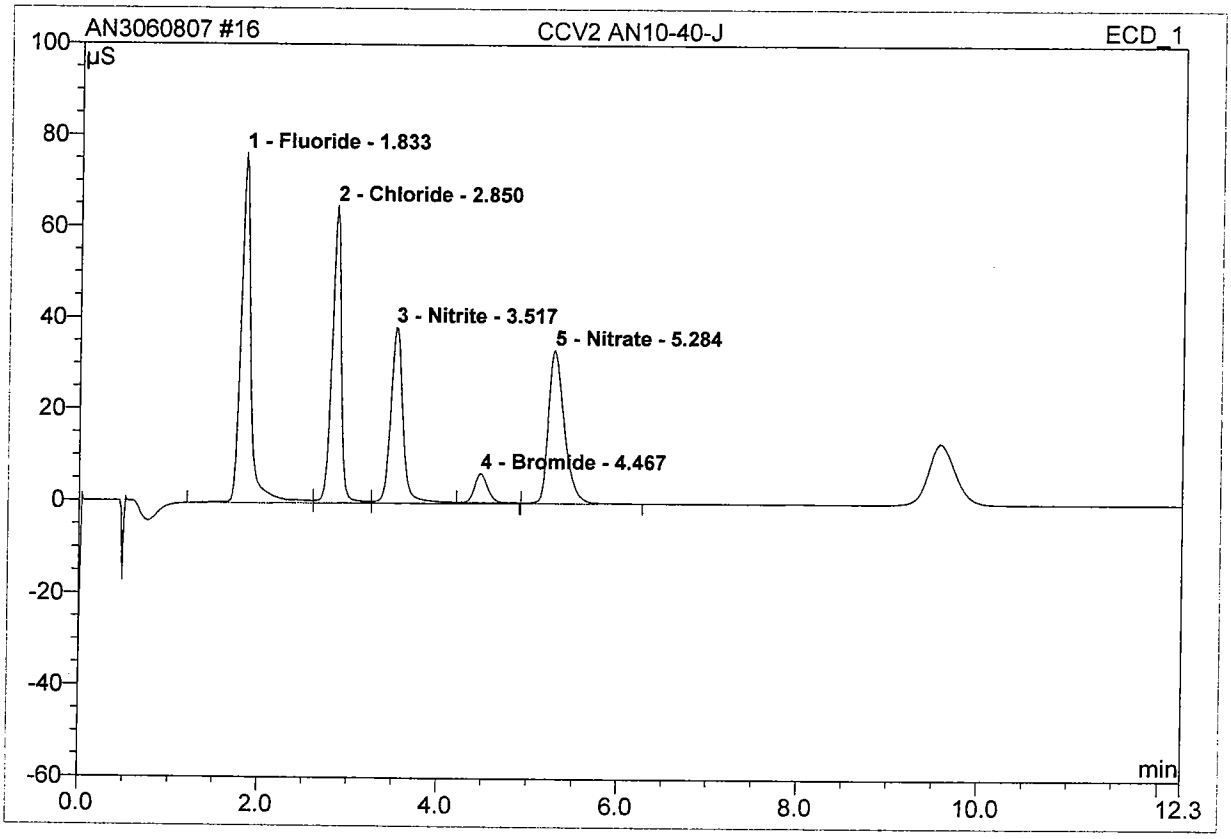
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

16 CCV2 AN10-40-J

Sample Name:	**CCV2 AN10-40-J**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



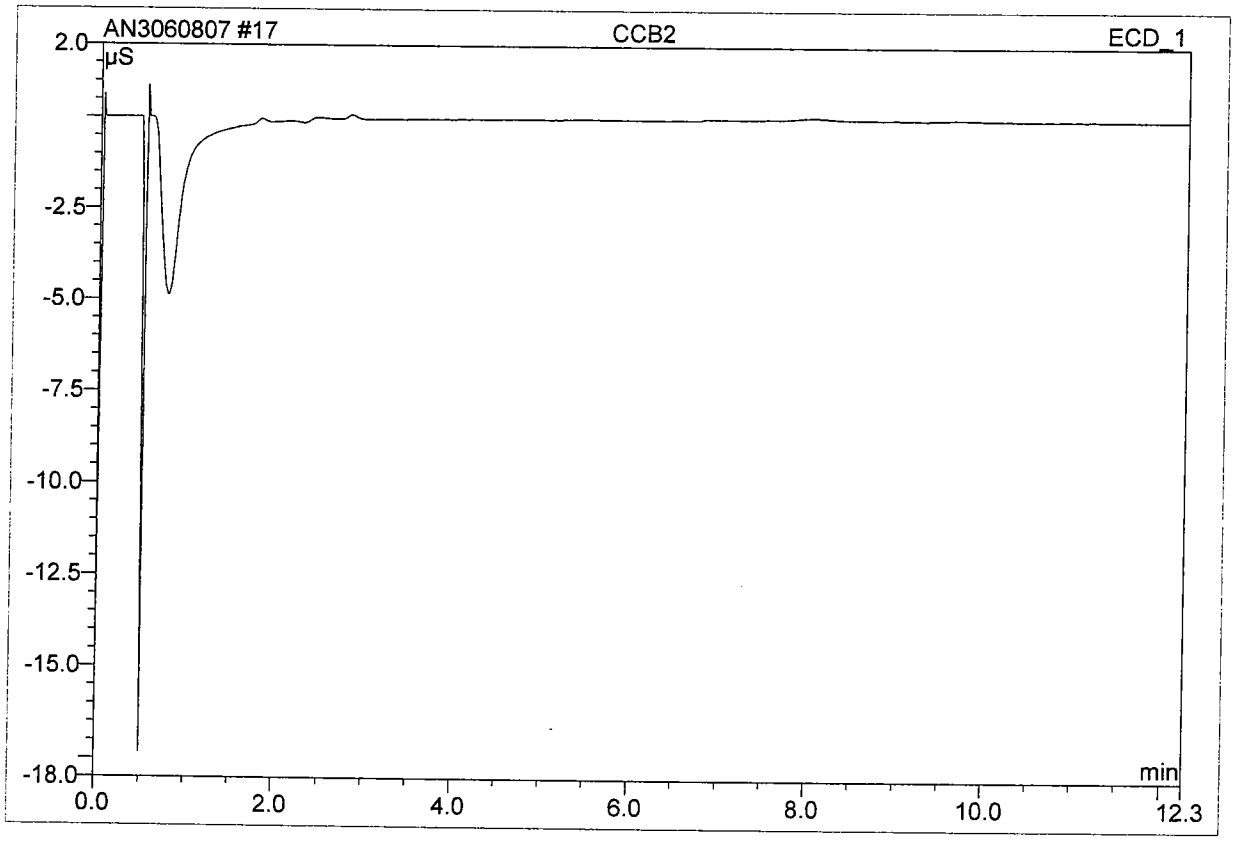
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	76.558	10.077	31.35	5.868	BM
2	2.85	Chloride	65.016	7.861	24.46	5.064	M
3	3.52	Nitrite	38.429	6.215	19.34	2.176	M
4	4.47	Bromide	6.298	1.050	3.27	1.979	Rd
5	5.28	Nitrate	33.504	6.937	21.58	1.914	MB
Total:			219.806	32.140	100.00	17.000	

Before

JUN 0 8 2007

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 10:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



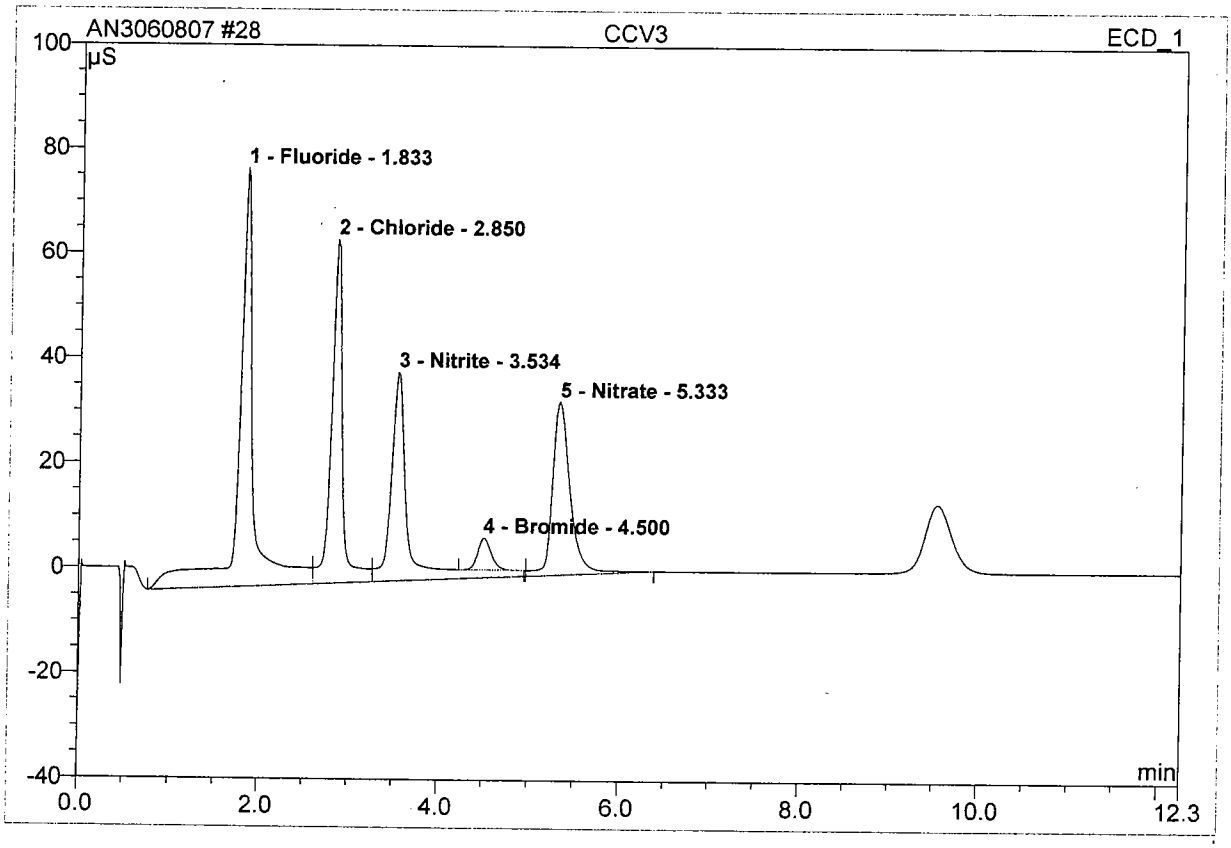
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

28 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**56**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 13:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



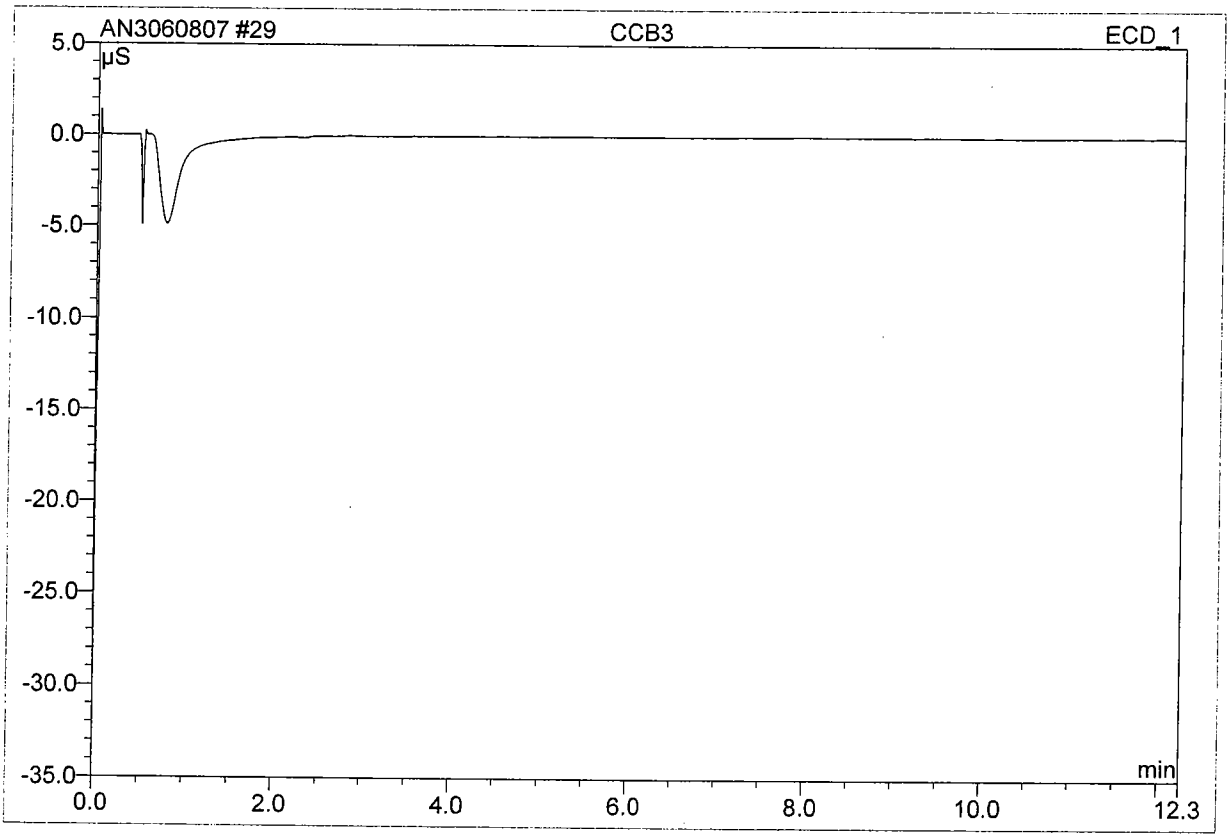
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	79.766	15.465	36.59	9.006	BM
2	2.85	Chloride	65.550	9.390	22.22	6.049	M
3	3.53	Nitrite	39.697	8.758	20.72	3.066	M
4	4.50	Bromide	6.042	1.042	2.47	1.964	Rd
5	5.33	Nitrate	32.894	7.608	18.00	2.099	MB
Total:			223.948	42.263	100.00	22.183	

Before

JUN 0 8 2007

29 CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**57**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 13:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



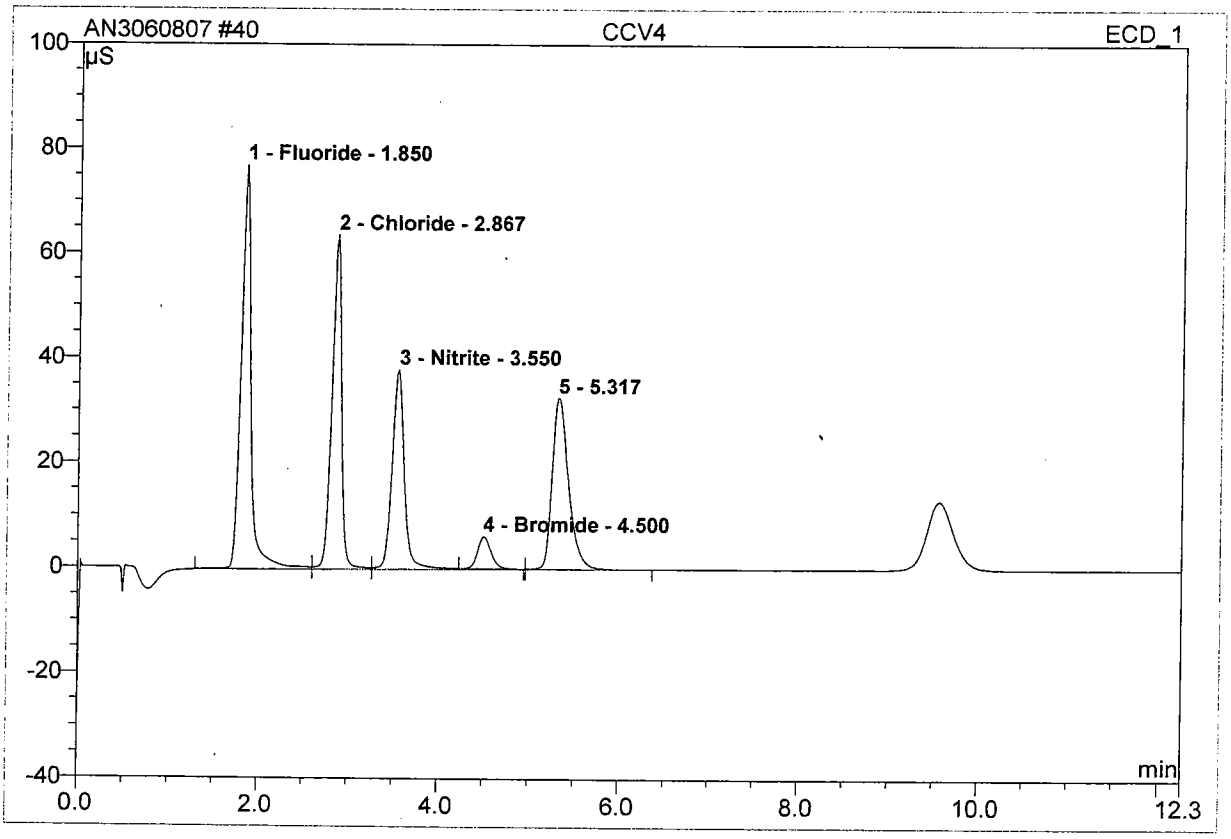
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

40 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**68**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 16:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



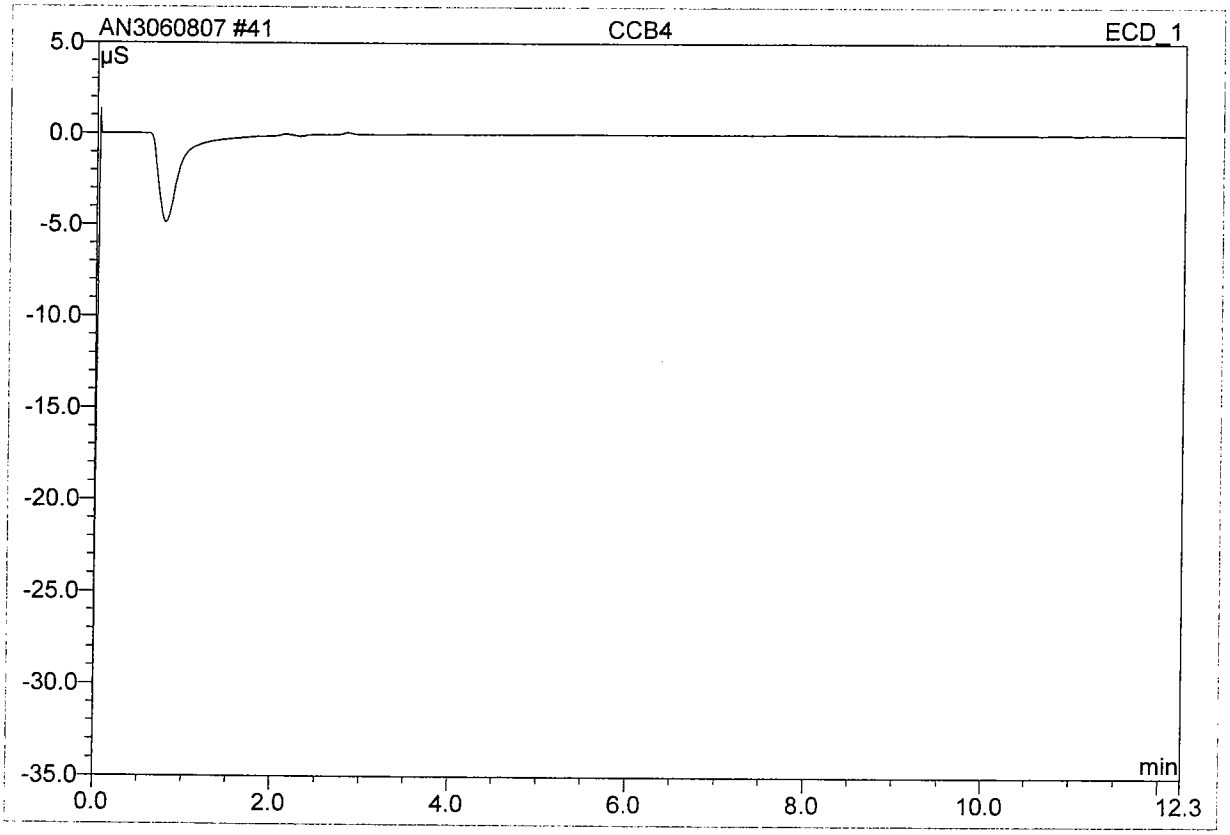
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	77.207	10.007	31.44	5.827	BM
2	2.87	Chloride	63.853	7.784	24.46	5.014	M
3	3.55	Nitrite	38.119	6.101	19.17	2.136	M
4	4.50	Bromide	6.116	1.036	3.26	1.952	Rd
5	5.32	n.a.	32.673	6.896	21.67	n.a.	MB
Total:			217.968	31.823	100.00	14.929	

Before

JUN 0 8 2007

41 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 16:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



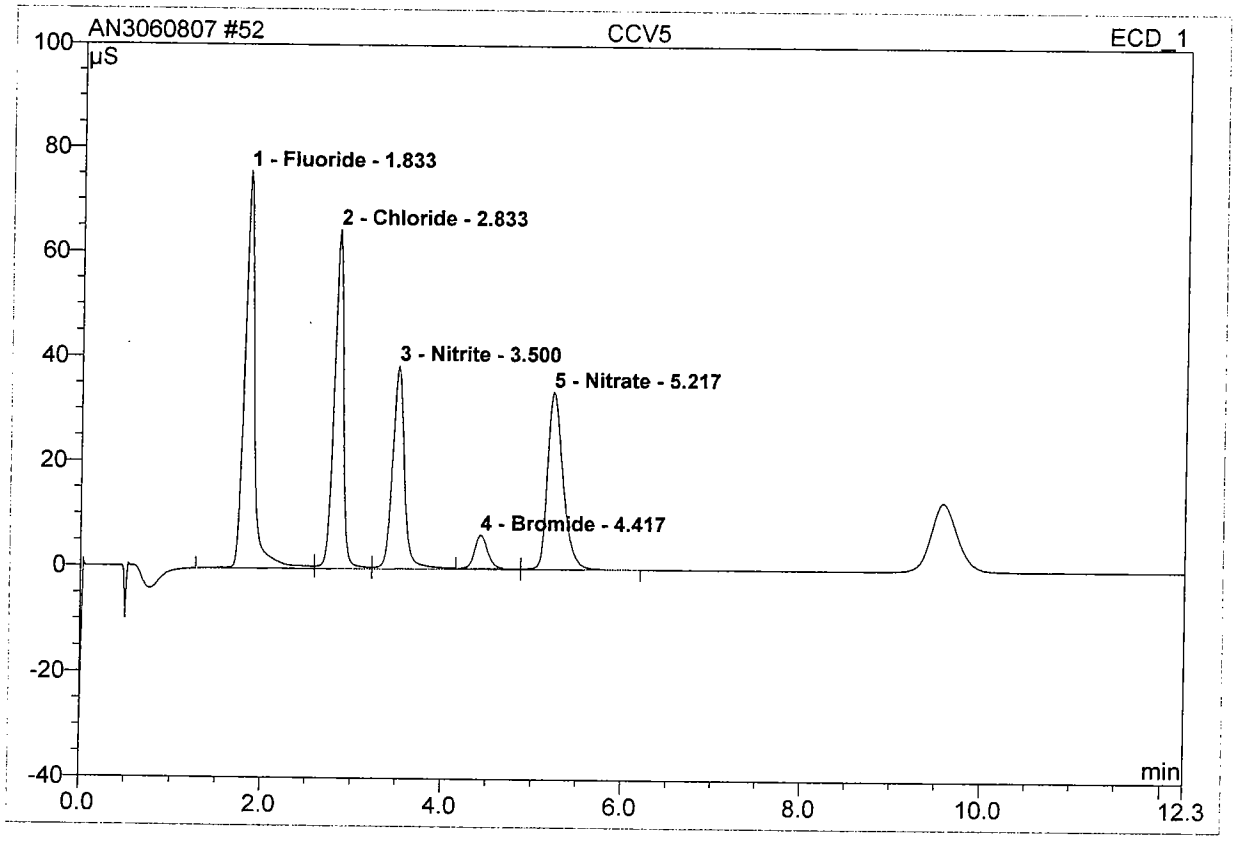
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

52 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**80**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 19:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	75.912	9.845	31.17	5.733	BM
2	2.83	Chloride	64.773	7.765	24.59	5.002	M
3	3.50	Nitrite	38.780	6.058	19.18	2.121	M
4	4.42	Bromide	6.318	1.037	3.29	1.955	Rd
5	5.22	Nitrate	33.889	6.875	21.77	1.896	MB
Total:			219.671	31.581	100.00	16.707	

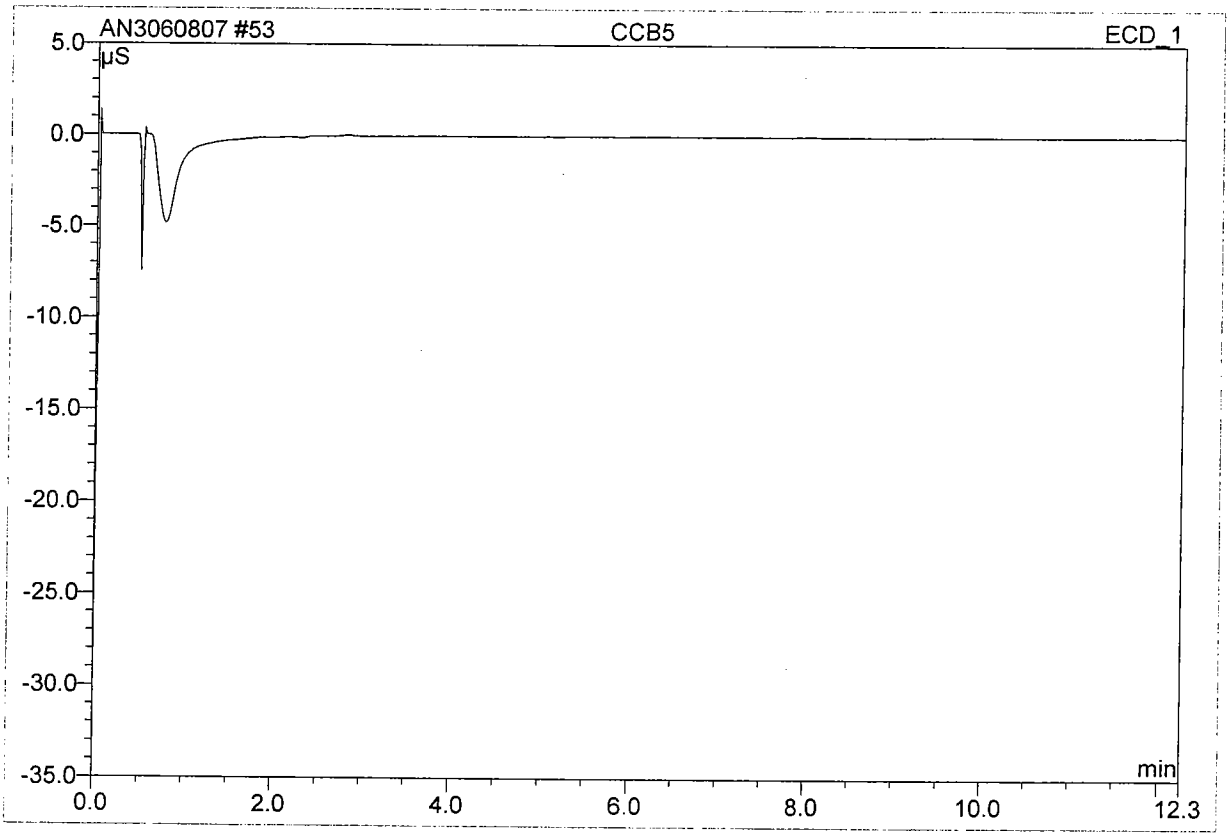
Before

JUN 0 9 2007

default/Integration

53 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**81**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 19:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



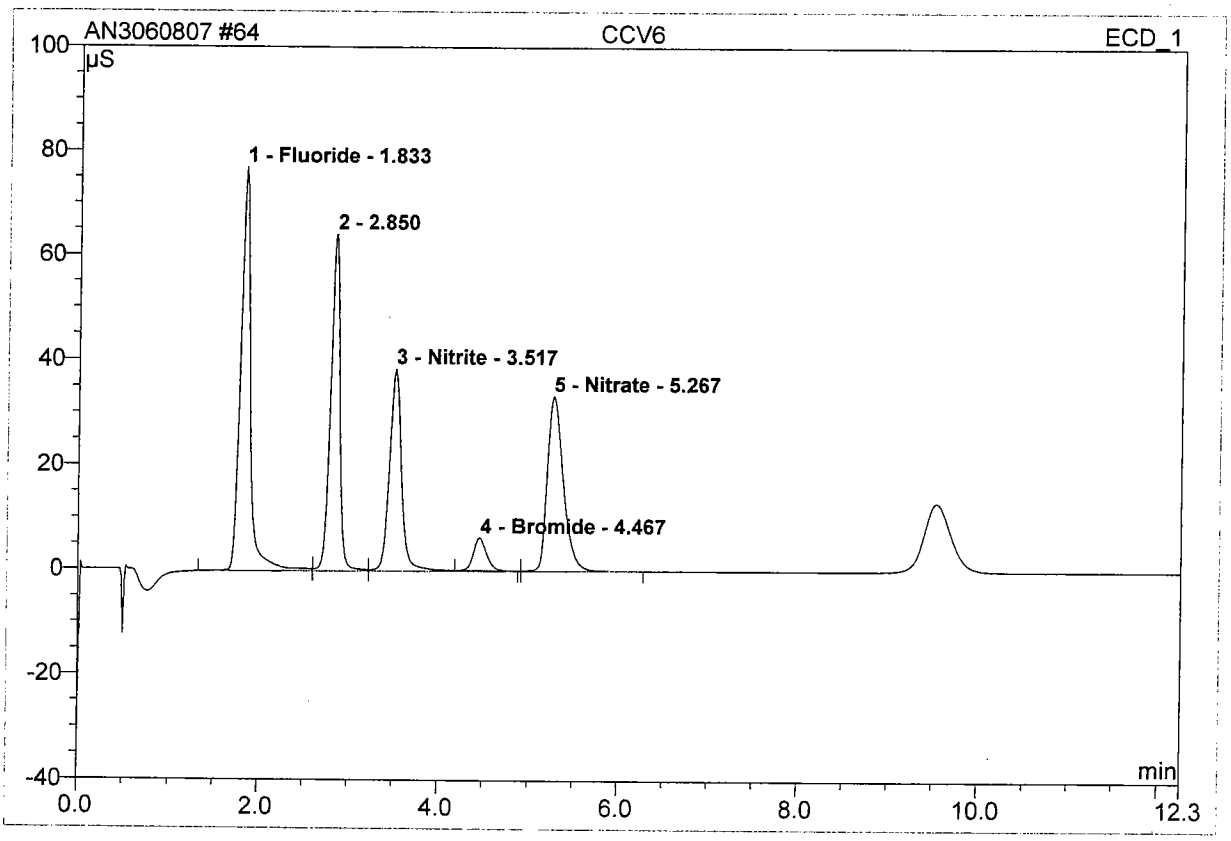
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 9 2007

64 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**92**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 22:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



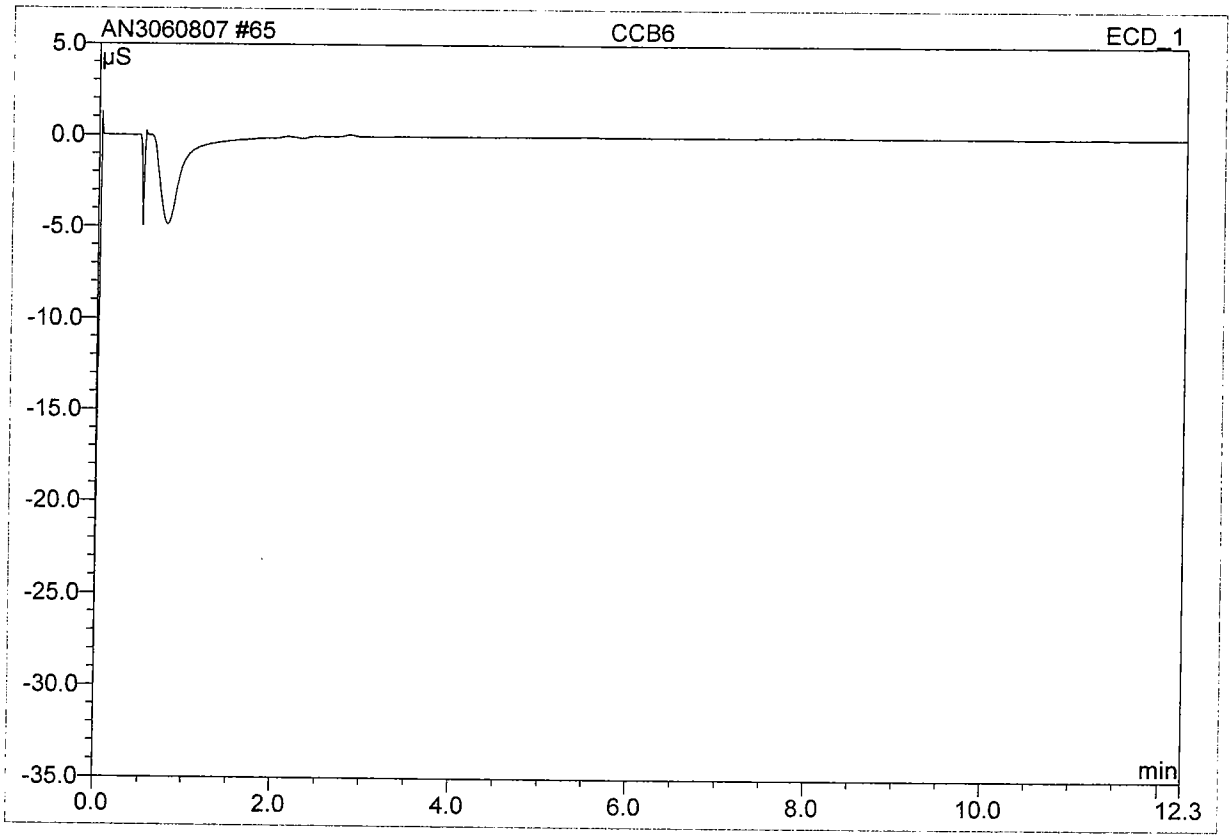
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	77.189	9.972	31.30	5.807	BM
2	2.85	n.a.	64.302	7.840	24.61	n.a.	M
3	3.52	Nitrite	38.584	6.066	19.04	2.124	M
4	4.47	Bromide	6.190	1.038	3.26	1.955	Rd
5	5.27	Nitrate	33.412	6.940	21.79	1.914	MB
Total:			219.677	31.856	100.00	11.800	

Before

JUN 0 9 2007

65 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 22:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



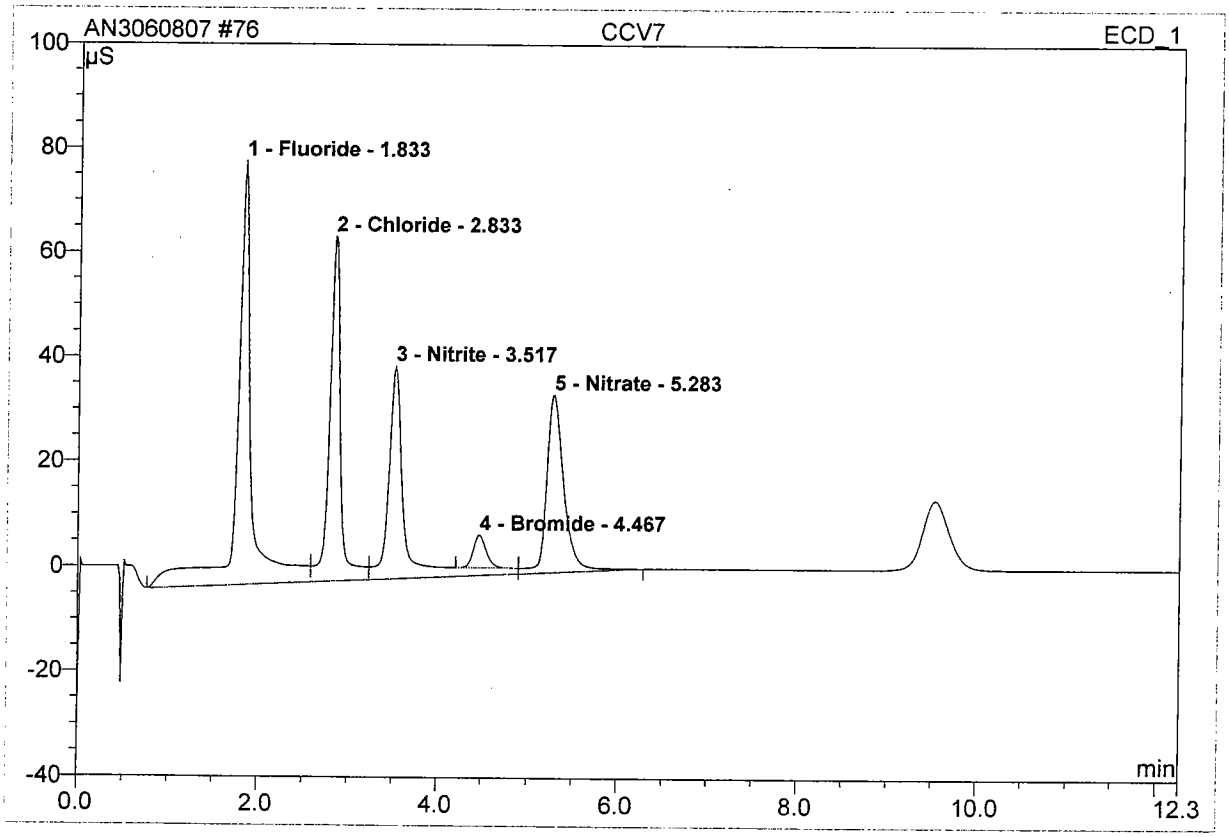
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 9 2007

76 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**104**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 1:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



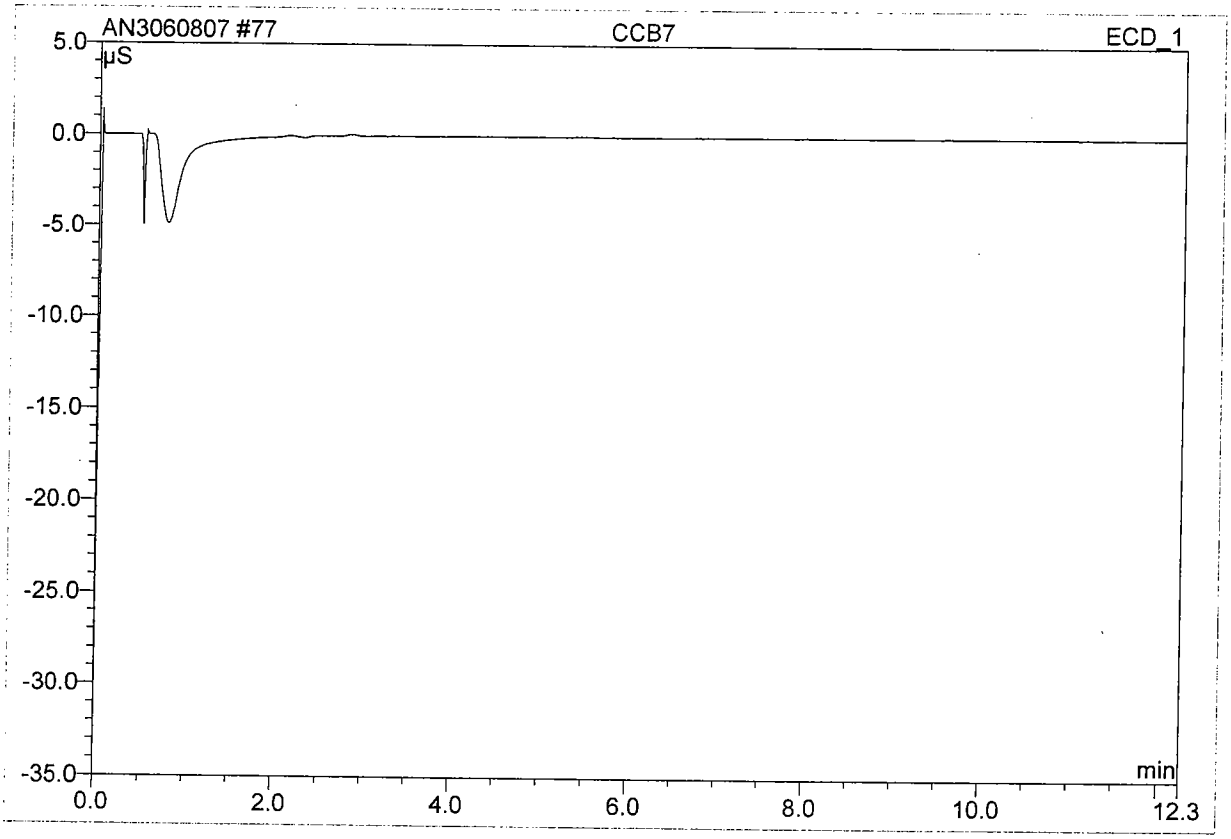
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	81.005	15.349	36.57	8.938	BM
2	2.83	Chloride	65.817	9.327	22.22	6.008	M
3	3.52	Nitrite	40.541	8.679	20.68	3.038	M
4	4.47	Bromide	6.192	1.038	2.47	1.955	Rd
5	5.28	Nitrate	33.826	7.577	18.05	2.090	MB
Total:			227.380	41.970	100.00	22.030	

Before

JUN 0 9 2007

77 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 1:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



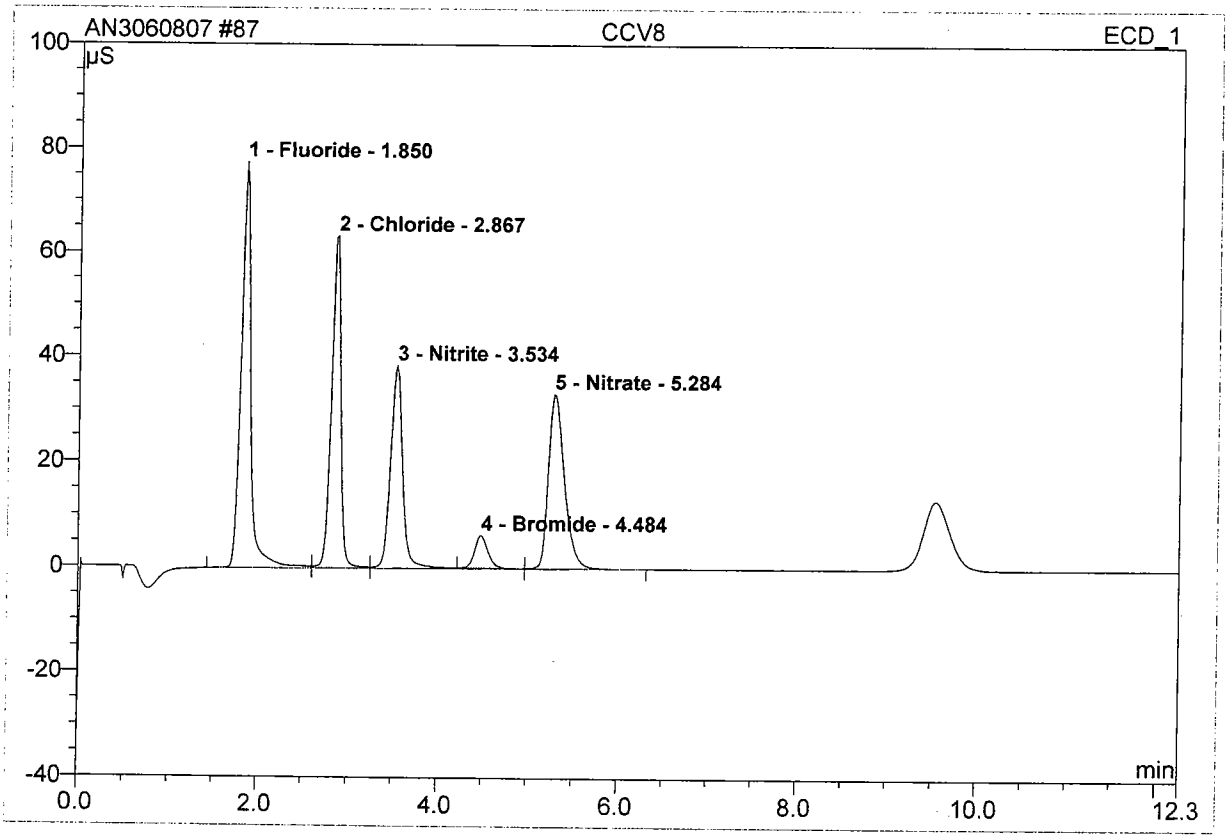
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 9 2007

87 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**115**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 4:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



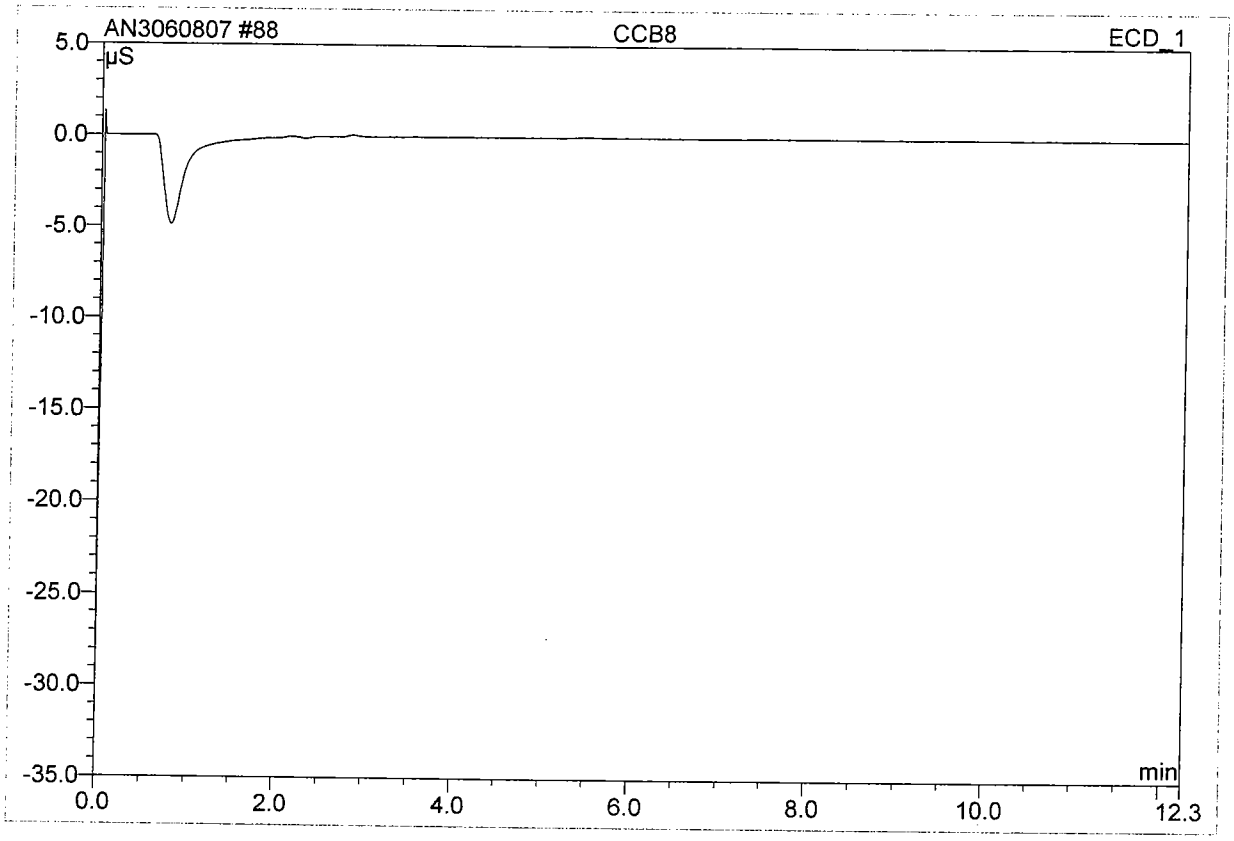
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	77.656	9.914	31.34	5.773	BM
2	2.87	Chloride	63.426	7.739	24.47	4.985	M
3	3.53	Nitrite	38.538	6.049	19.12	2.118	M
4	4.48	Bromide	6.180	1.033	3.27	1.947	Rd
5	5.28	Nitrate	33.151	6.897	21.80	1.902	MB
Total:			218.951	31.633	100.00	16.726	

Before

JUN 0 9 2007

88 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**116**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/9/2007 4:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 09 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-86-B

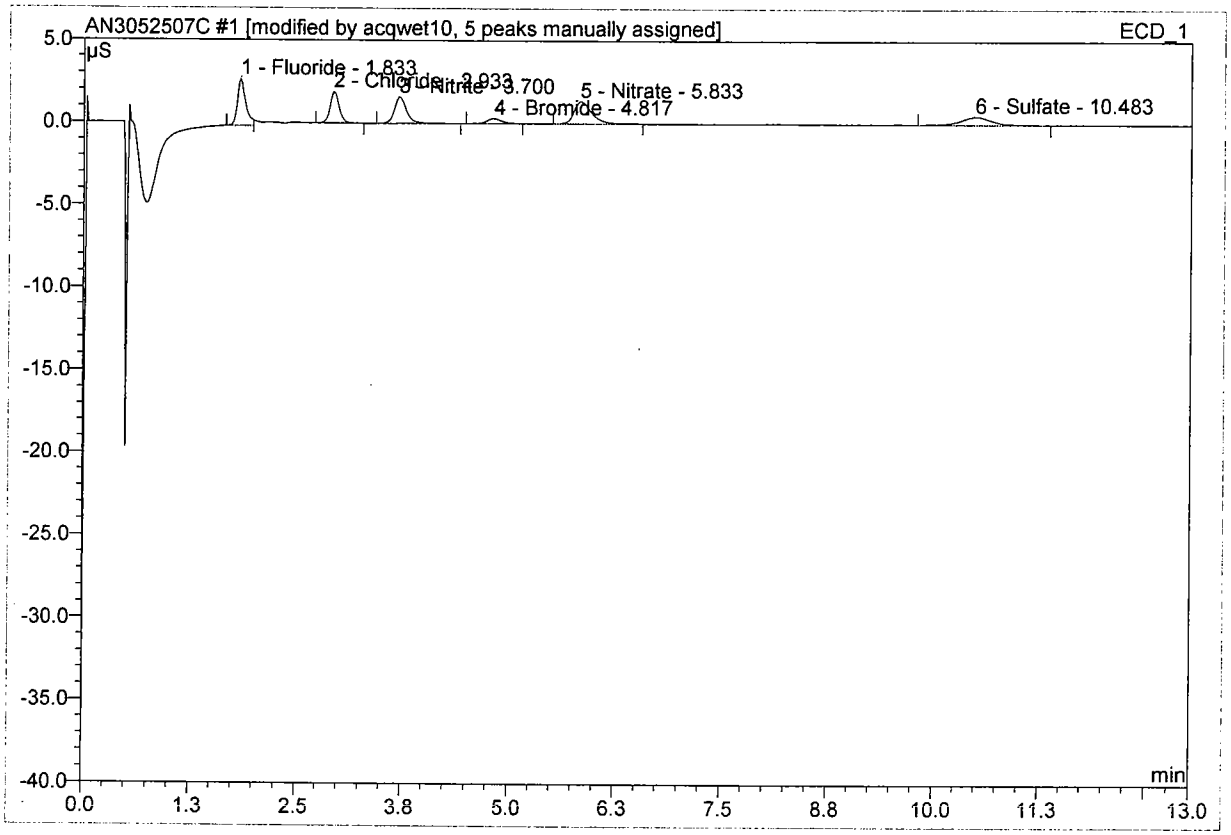
Sequence: AN3052507C **Date: 05/25/07**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9979	1.7172
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9247	1.5524
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9981	2.8565
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9416	0.5308
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8680	3.6254
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9276	0.9447

All calibration standard concentrations are in mg/L unless otherwise noted.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	2.819	0.319	23.25	0.186	BM *
2	2.93	Chloride	1.881	0.232	16.89	0.149	BMB^
3	3.70	Nitrite	1.580	0.258	18.81	0.090	BMB^
4	4.82	Bromide	0.292	0.055	4.00	0.104	BMB*^
5	5.83	Nitrate	1.318	0.317	23.08	0.087	BMB^
6	10.48	Sulfate	0.474	0.192	13.95	0.203	BMB*^
Total:			8.363	1.373	100.00	0.820	

After initials

MAY 29 2007

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

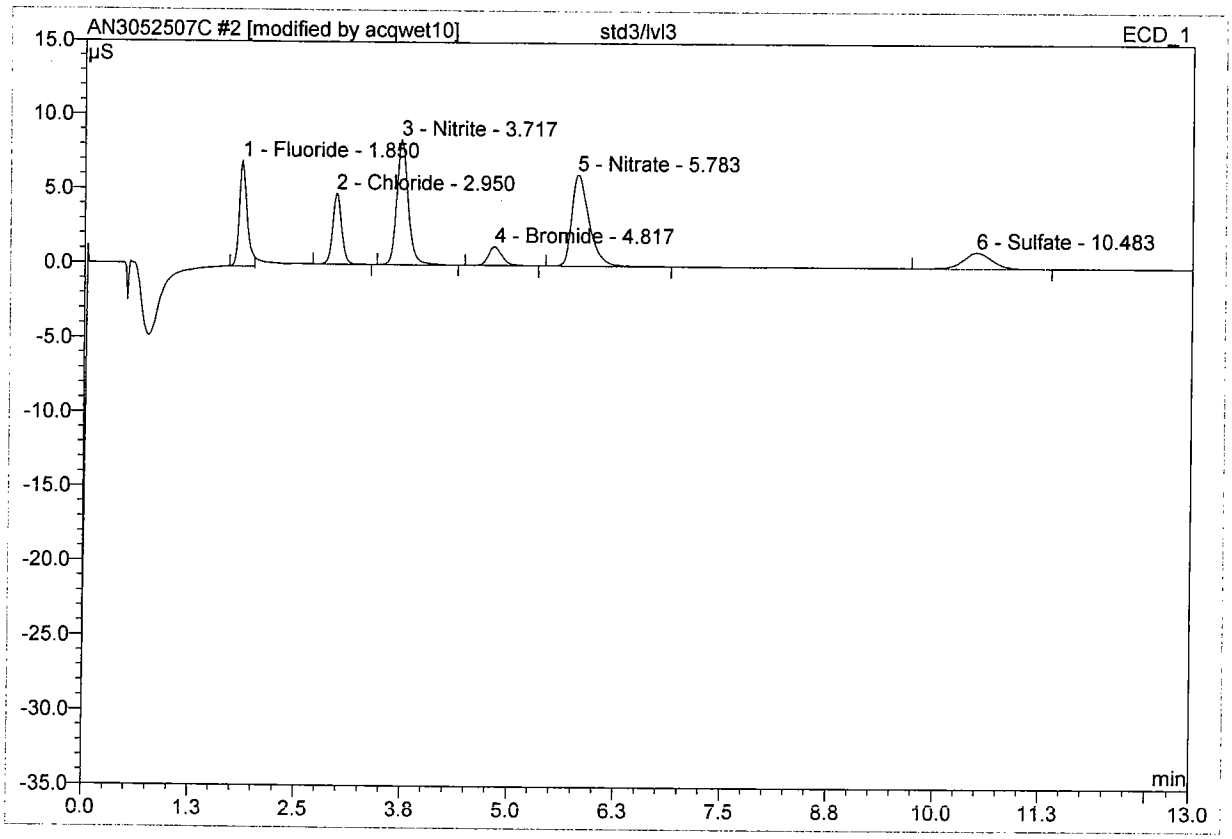
5/29/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	7.097	0.770	16.05	0.448	BM *
2	2.95	Chloride	4.754	0.584	12.17	0.376	BMB
3	3.72	Nitrite	8.408	1.312	27.34	0.459	BMB
4	4.82	Bromide	1.275	0.243	5.06	0.457	BMB
5	5.78	Nitrate	6.107	1.455	30.32	0.401	BMB
6	10.48	Sulfate	1.096	0.435	9.06	0.460	BMB*
Total:			28.738	4.799	100.00	2.603	

After Initials JS

MAY 29 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
Initials _____

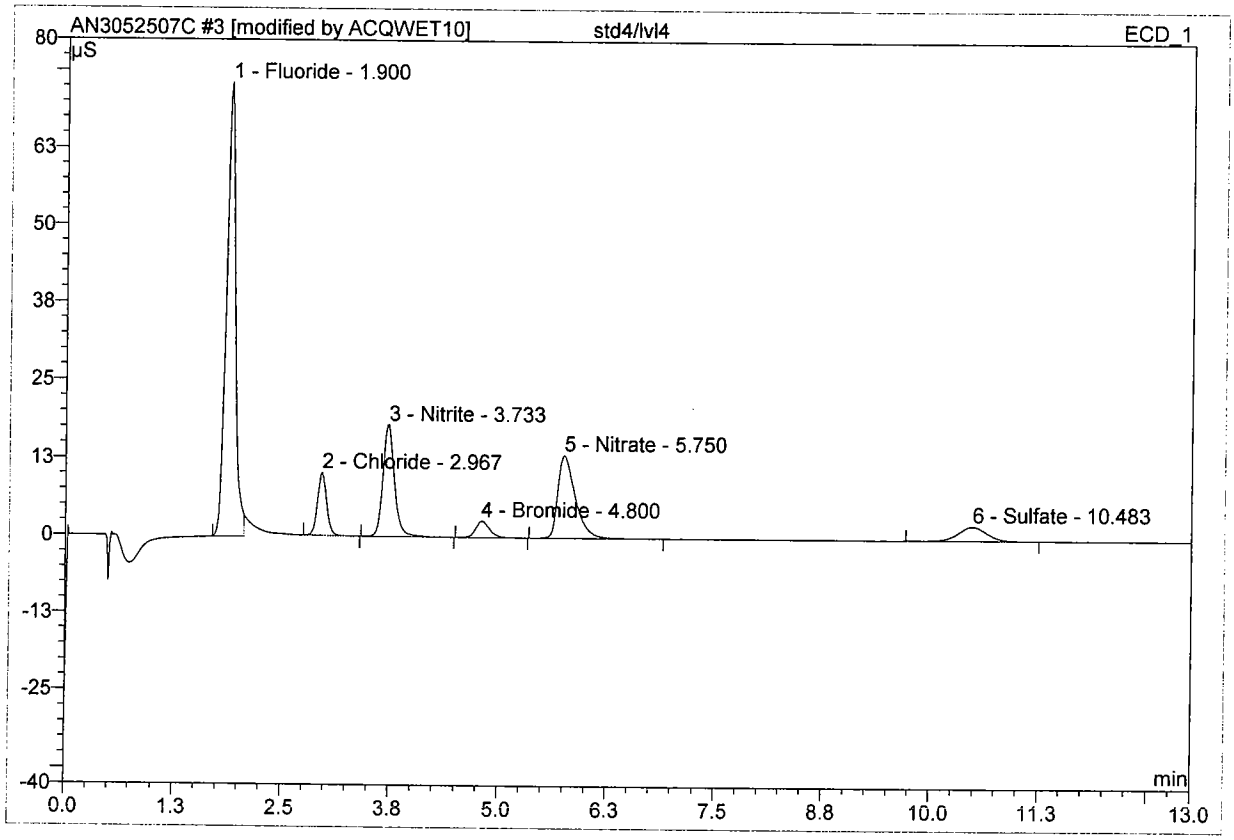
5/29/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.90	Fluoride	73.182	8.814	50.88	5.116	BM *
2	2.97	Chloride	10.144	1.217	7.03	0.784	BMB*
3	3.73	Nitrite	17.925	2.798	16.15	0.979	BMB*
4	4.80	Bromide	2.613	0.488	2.82	0.920	BMB*
5	5.75	Nitrate	13.314	3.109	17.95	0.857	BMB*
6	10.48	Sulfate	2.280	0.896	5.18	0.949	BMB
Total:			119.459	17.322	100.00	9.606	

After
Initials

5/29/07

MAY 29 2007

default/Integration

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

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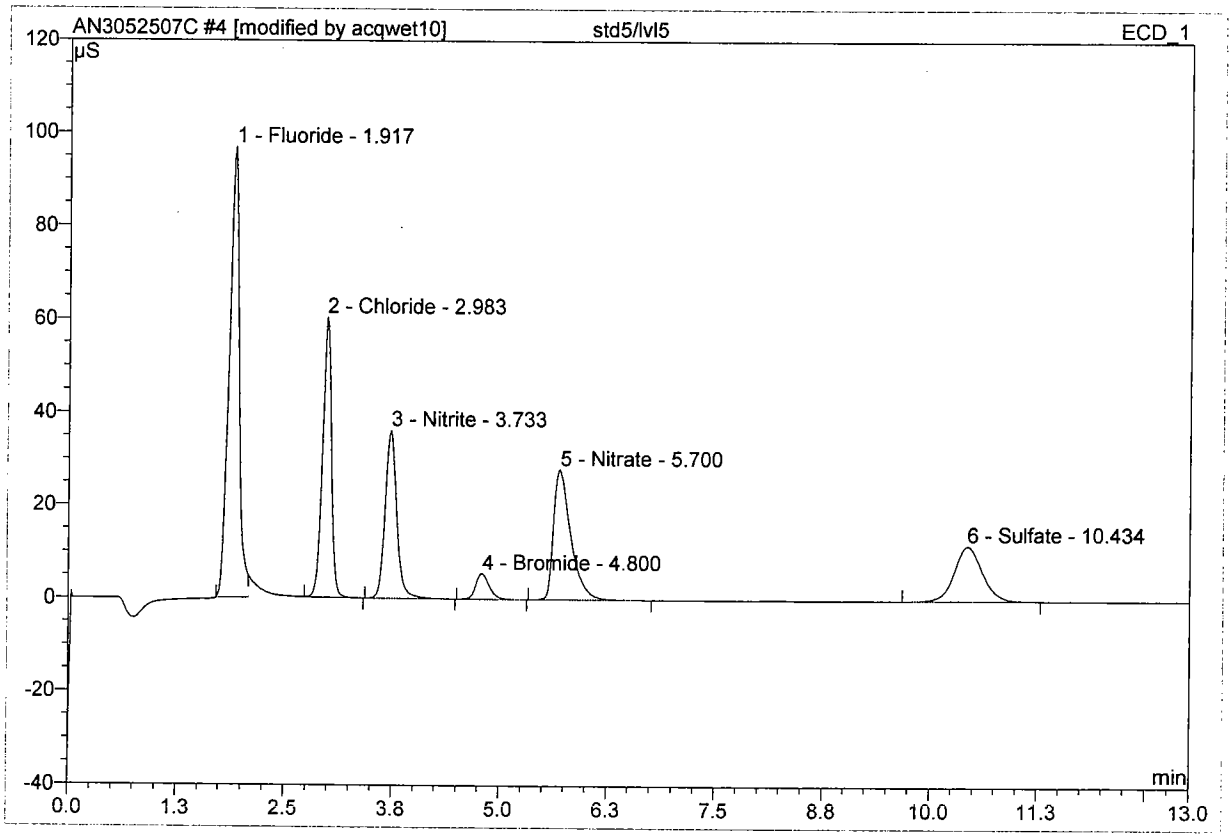
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	96.771	12.927	34.20	7.528	BM *
2	2.98	Chloride	60.250	7.272	19.24	4.684	BMB*
3	3.73	Nitrite	36.173	5.669	15.00	1.985	BMB*
4	4.80	Bromide	5.398	0.991	2.62	1.867	BMB*
5	5.70	Nitrate	27.953	6.487	17.16	1.789	BMB*
6	10.43	Sulfate	11.750	4.455	11.79	4.716	BMB*
Total:			238.294	37.802	100.00	22.570	

After
Initials JS

MAY 29 2007

5/29/07

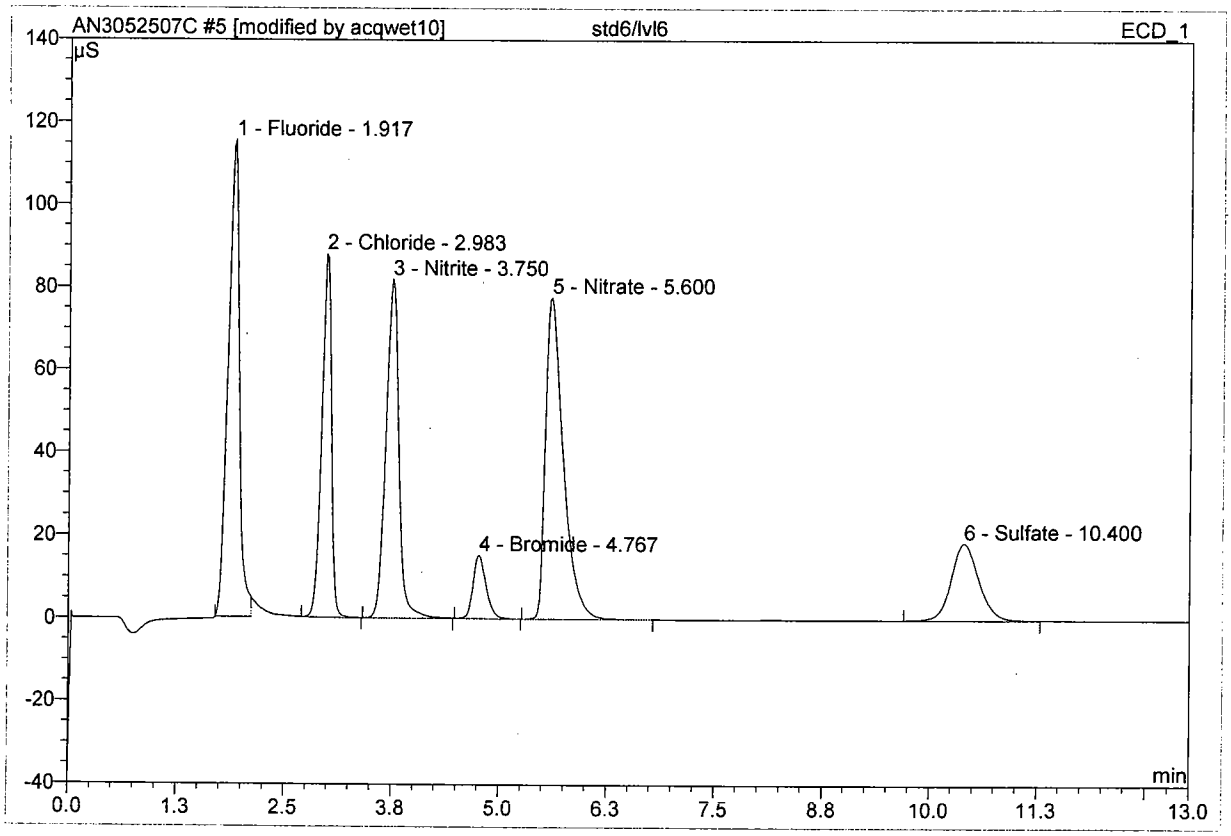
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	115.457	17.128	24.06	9.974	BM *
2	2.98	Chloride	87.900	11.493	16.15	7.403	BMB*
3	3.75	Nitrite	81.869	14.324	20.12	5.014	BMB*
4	4.77	Bromide	15.259	2.693	3.78	5.073	BMB*
5	5.60	Nitrate	77.701	18.573	26.09	5.123	BMB*
6	10.40	Sulfate	18.547	6.971	9.79	7.379	BMB*
Total:			396.732	71.181	100.00	39.968	

After
Initials JS

MAY 29 2007

Wrong Peak Peak not Found
Shoulder Incorrect

150

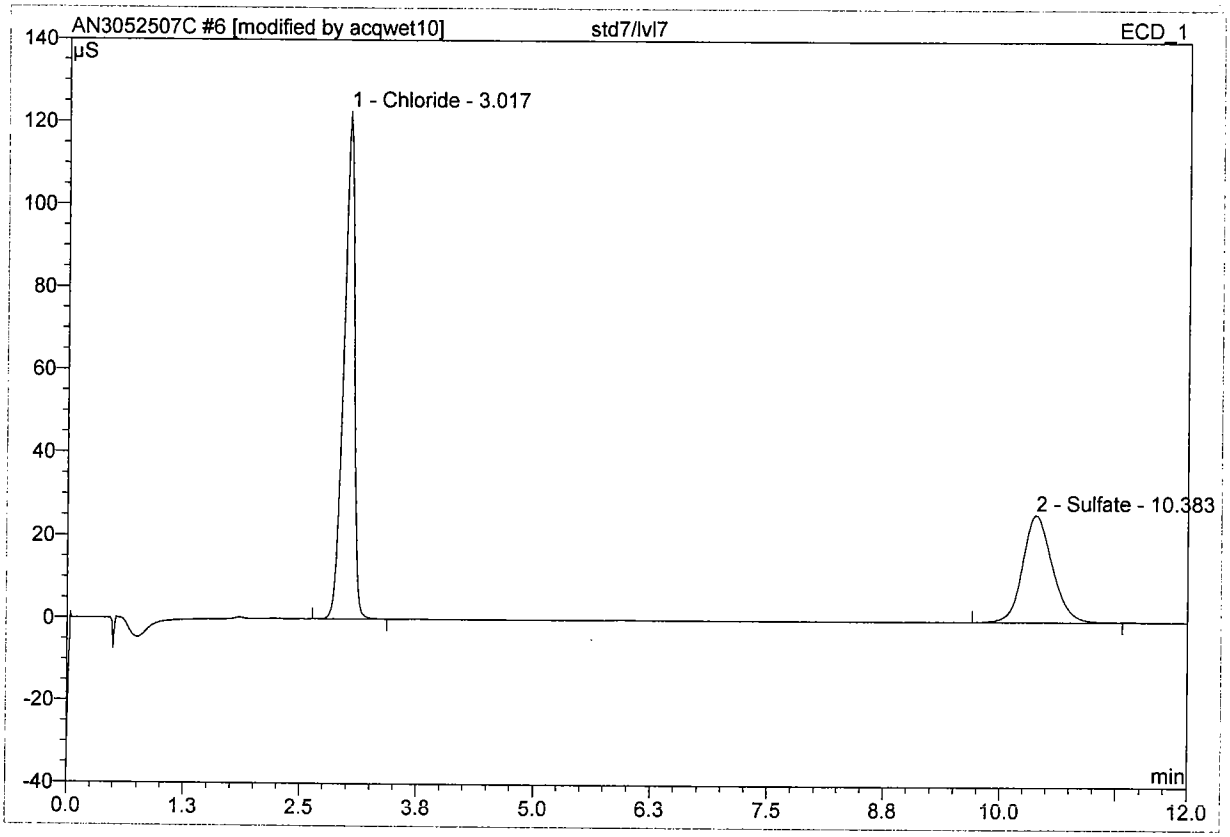
5/29/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.02	Chloride	122.744	15.926	62.21	10.259	BMB
2	10.38	Sulfate	25.854	9.673	37.79	10.240	BMB*
Total:			148.598	25.599	100.00	20.499	

After Initials JS

MAY 29 2007

5/29/07

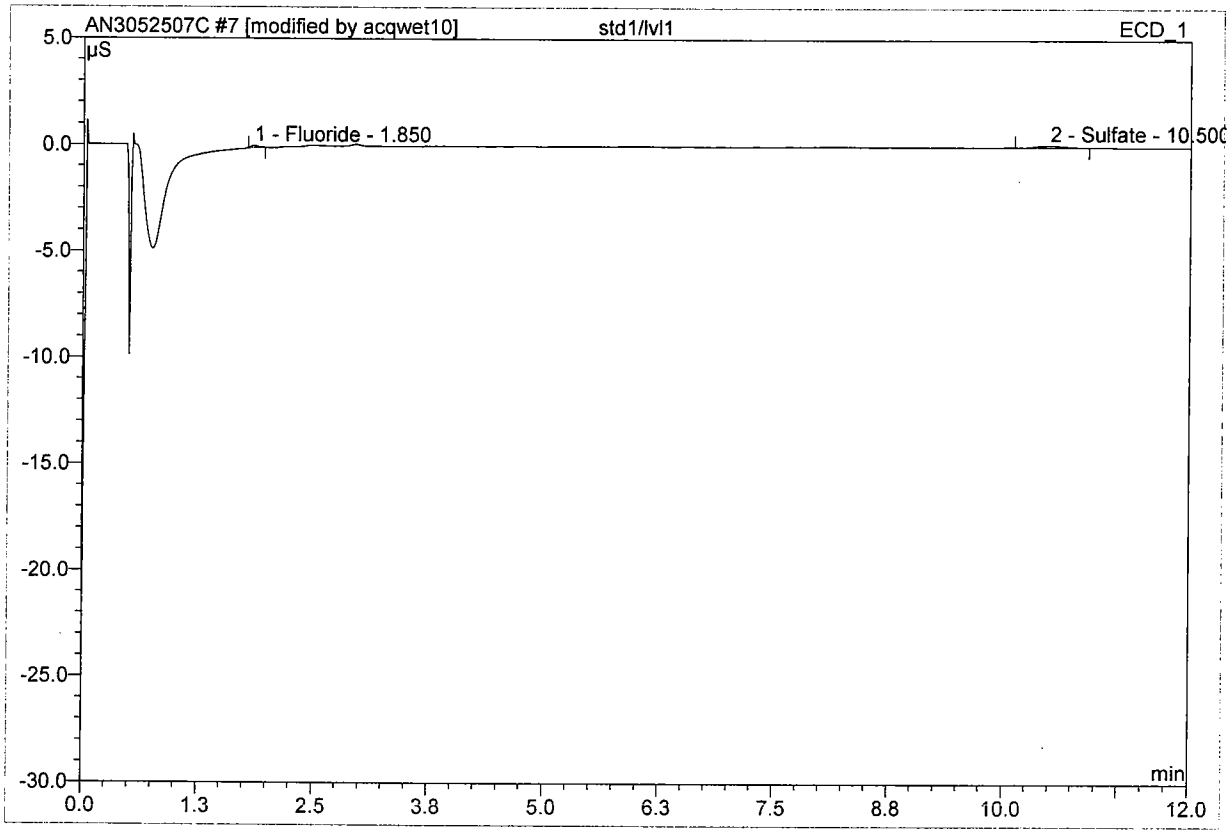
default/Integration

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 16:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	0.096	0.009	20.43	0.005	BMB*
2	10.50	Sulfate	0.093	0.033	79.57	0.035	BMB*
Total:			0.189	0.042	100.00	0.040	

After Initials JS

MAY 29 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect

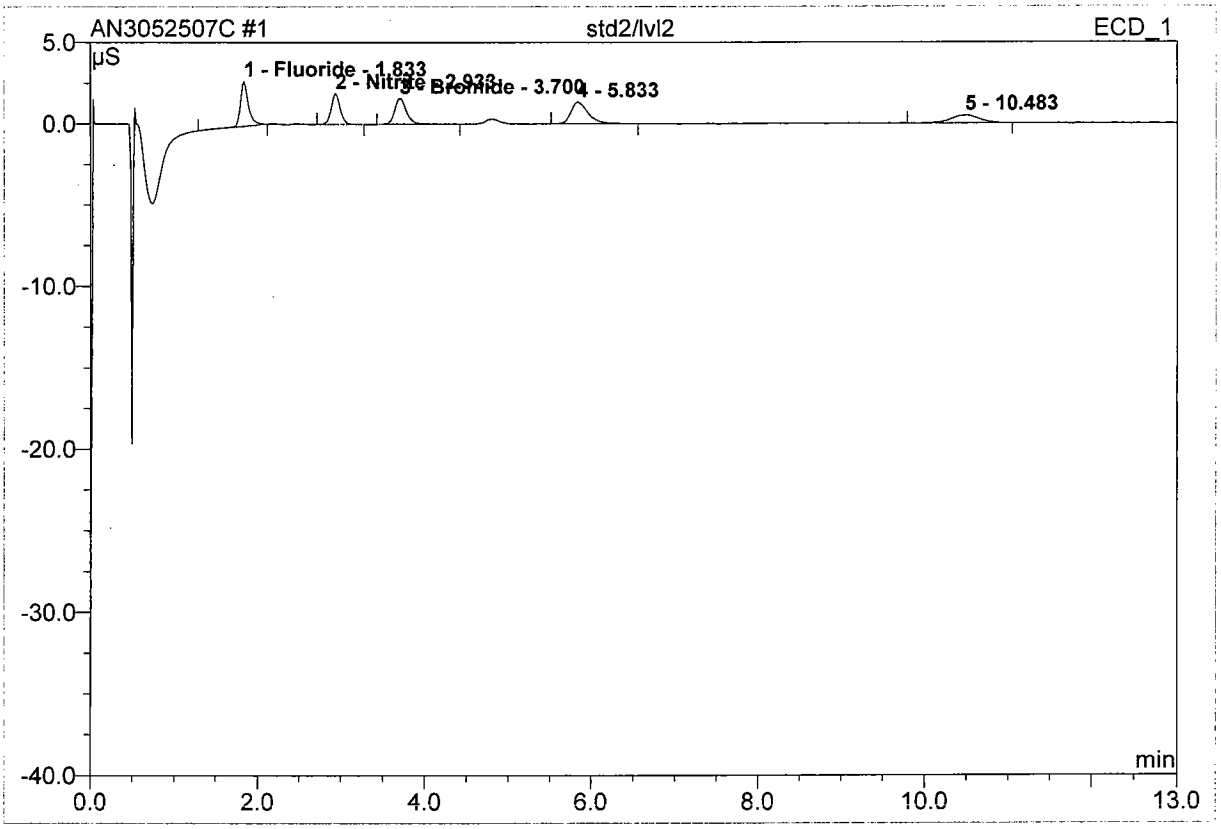
JS /29/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

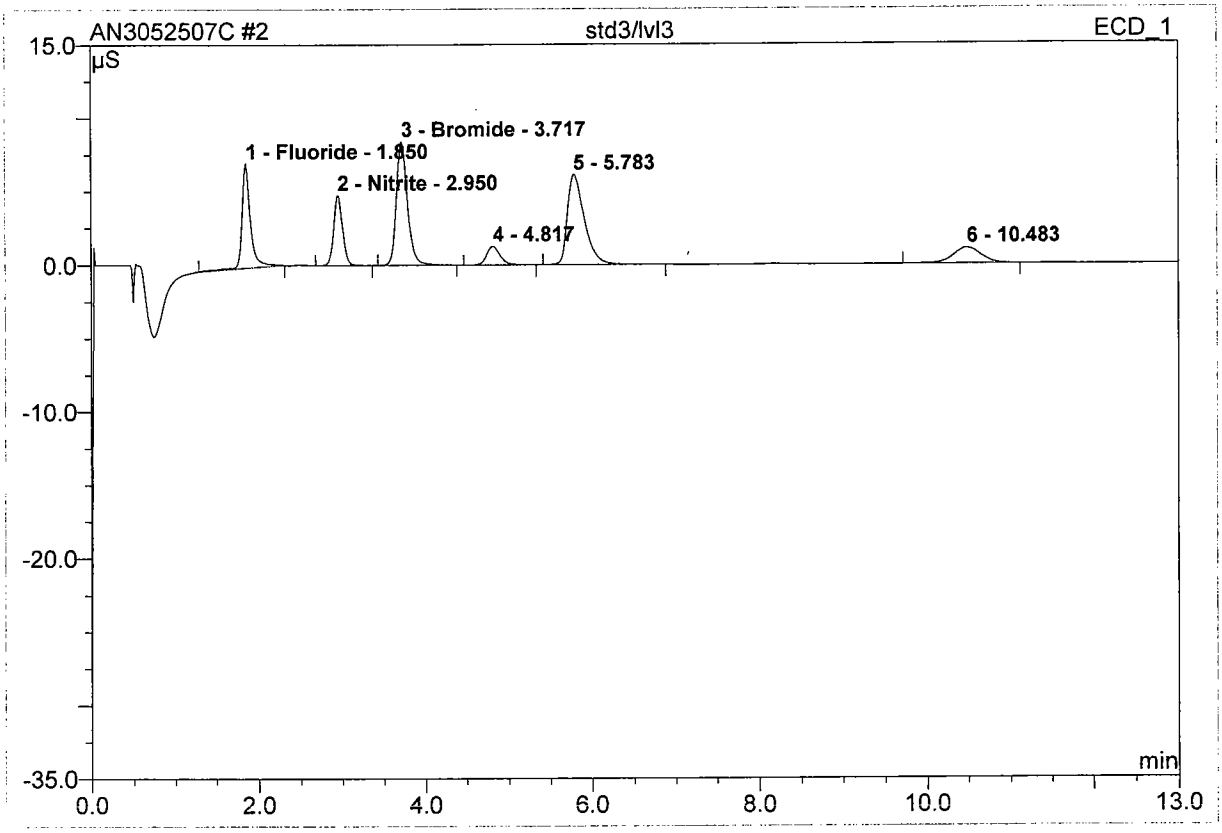


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	2.760	0.321	24.39	0.183	BMB
2	2.93	Nitrite	1.881	0.232	17.62	0.083	BMB
3	3.70	Bromide	1.580	0.258	19.63	0.484	BMB
4	5.83	n.a.	1.318	0.317	24.09	n.a.	BMB
5	10.48	n.a.	0.472	0.188	14.27	n.a.	BMB
Total:			8.011	1.316	100.00	0.750	

5/24/07

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

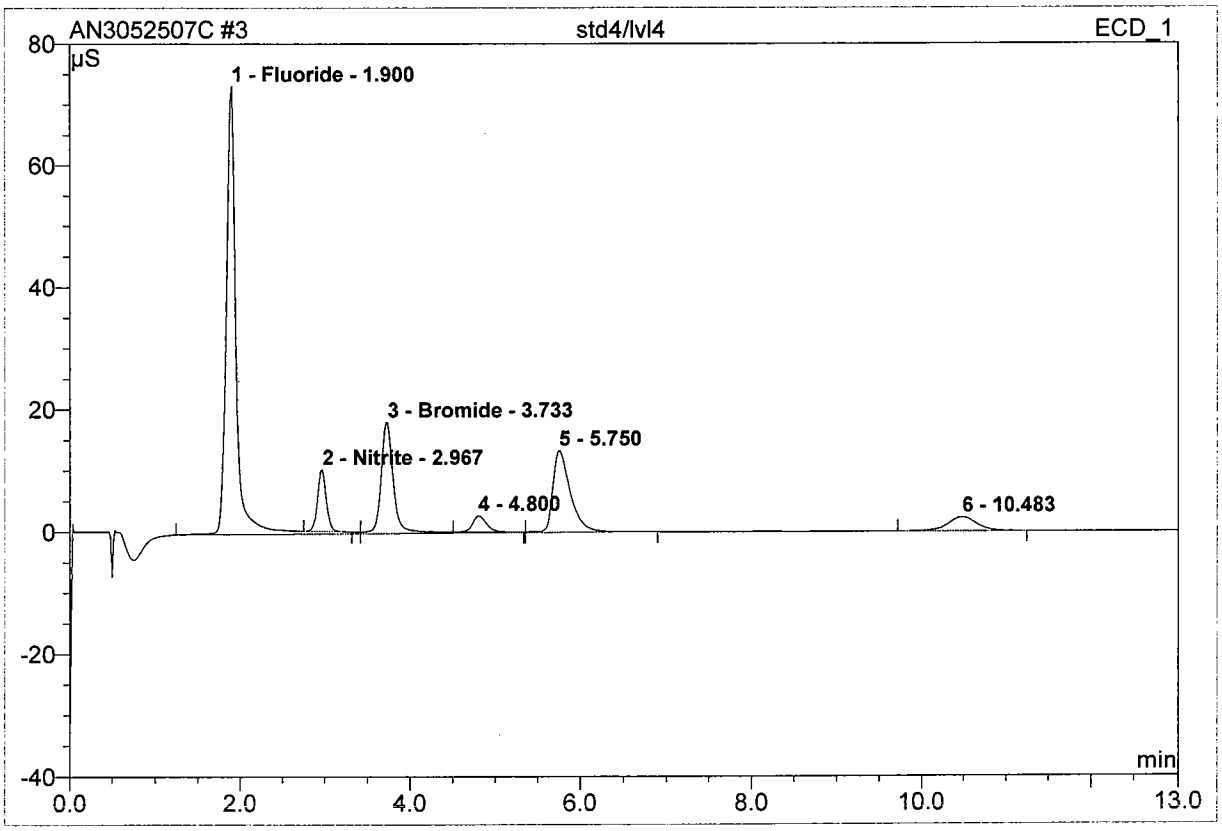


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	7.087	0.839	17.26	0.478	BMB
2	2.95	Nitrite	4.754	0.584	12.01	0.210	BMB
3	3.72	Bromide	8.408	1.312	26.98	2.371	BMB
4	4.82	n.a.	1.275	0.243	4.99	n.a.	BMB
5	5.78	n.a.	6.107	1.455	29.92	n.a.	BMB
6	10.48	n.a.	1.093	0.430	8.84	n.a.	BMB
Total:			28.725	4.863	100.00	3.059	

BL 7/29/07

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

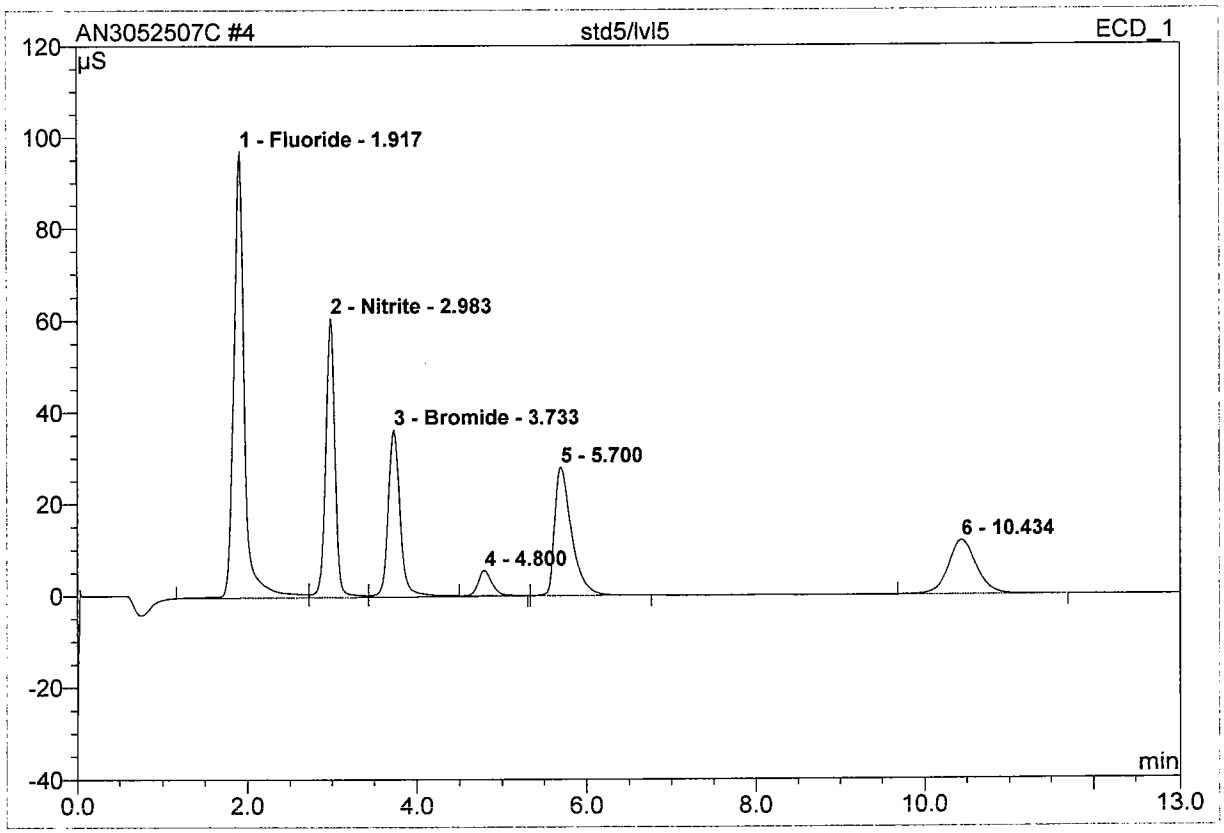


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.90	Fluoride	73.436	10.006	52.55	5.569	BM
2	2.97	Nitrite	10.146	1.219	6.40	0.448	Rd
3	3.73	Bromide	18.209	3.226	16.94	4.856	M
4	4.80	n.a.	2.613	0.488	2.56	n.a.	Rd
5	5.75	n.a.	13.408	3.207	16.84	n.a.	MB
6	10.48	n.a.	2.280	0.896	4.71	n.a.	BMB
Total:			120.093	19.043	100.00	10.873	

5/29/07

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

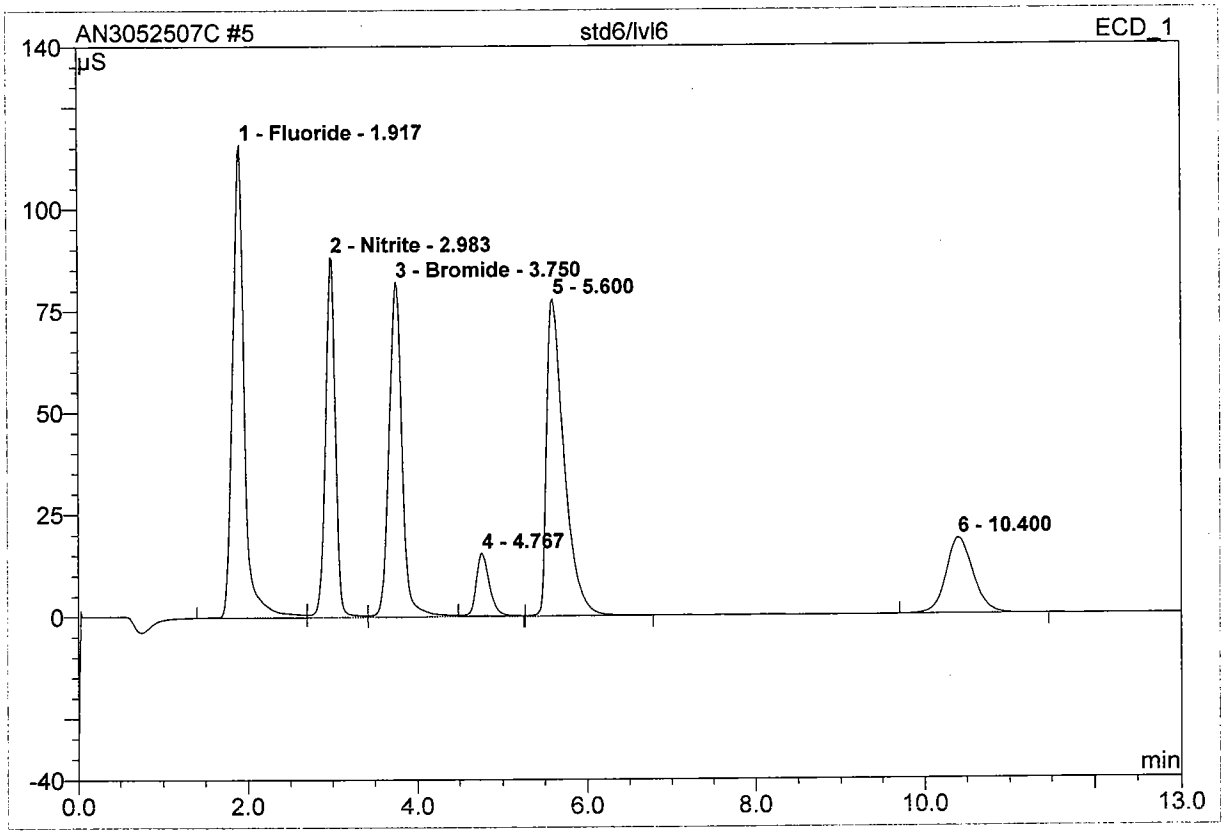


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	97.340	14.295	35.57	7.390	BM
2	2.98	Nitrite	60.811	7.640	19.01	2.390	M
3	3.73	Bromide	36.533	6.185	15.39	1.999	M
4	4.80	n.a.	5.398	0.991	2.47	n.a.	Rd
5	5.70	n.a.	28.060	6.589	16.40	n.a.	MB
6	10.43	n.a.	11.766	4.488	11.17	n.a.	BMB
Total:			239.907	40.189	100.00	11.779	

CM 5/29/07

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

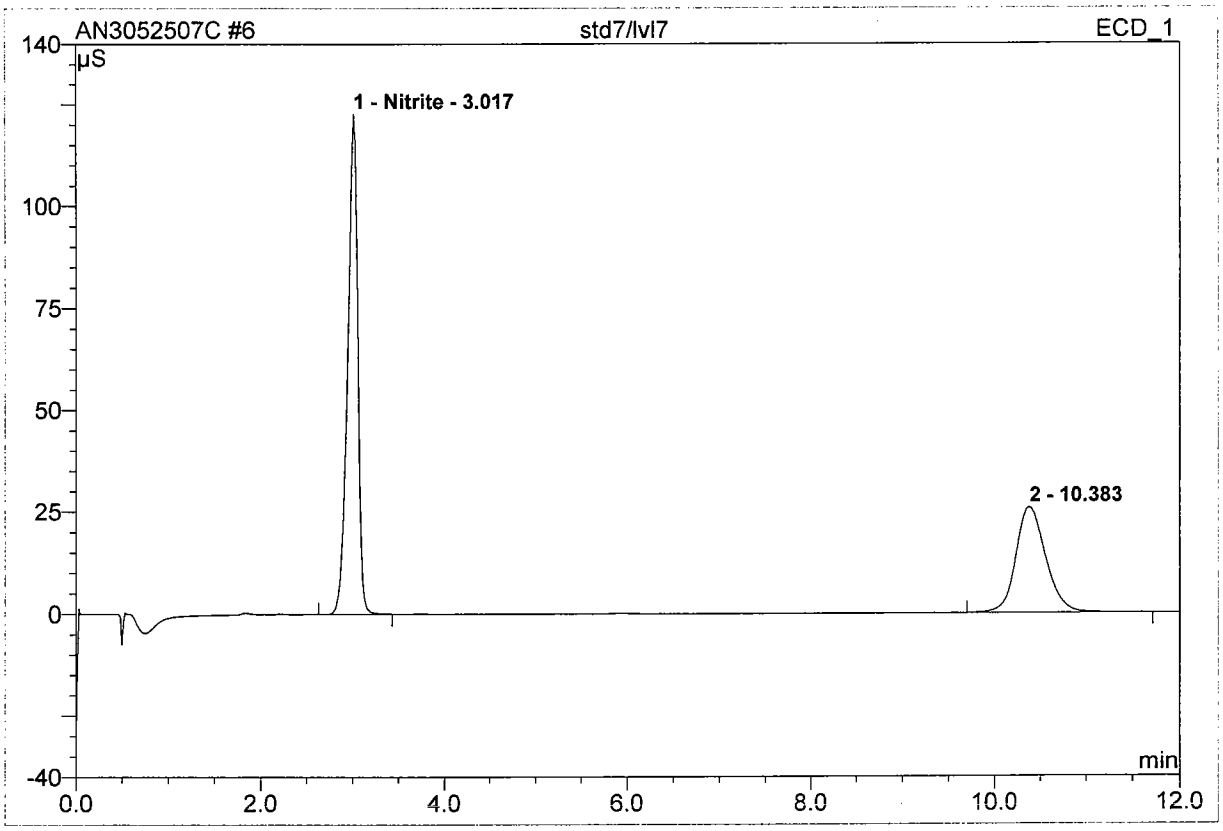


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	116.016	18.368	25.03	9.767	BM
2	2.98	Nitrite	88.389	11.822	16.11	4.712	M
3	3.75	Bromide	82.183	14.823	20.20	4.962	M
4	4.77	n.a.	15.259	2.693	3.67	n.a.	Rd
5	5.60	n.a.	77.804	18.673	25.45	n.a.	MB
6	10.40	n.a.	18.558	6.991	9.53	n.a.	BMB
Total:			398.208	73.370	100.00	19.441	

JU 5/29/07

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**

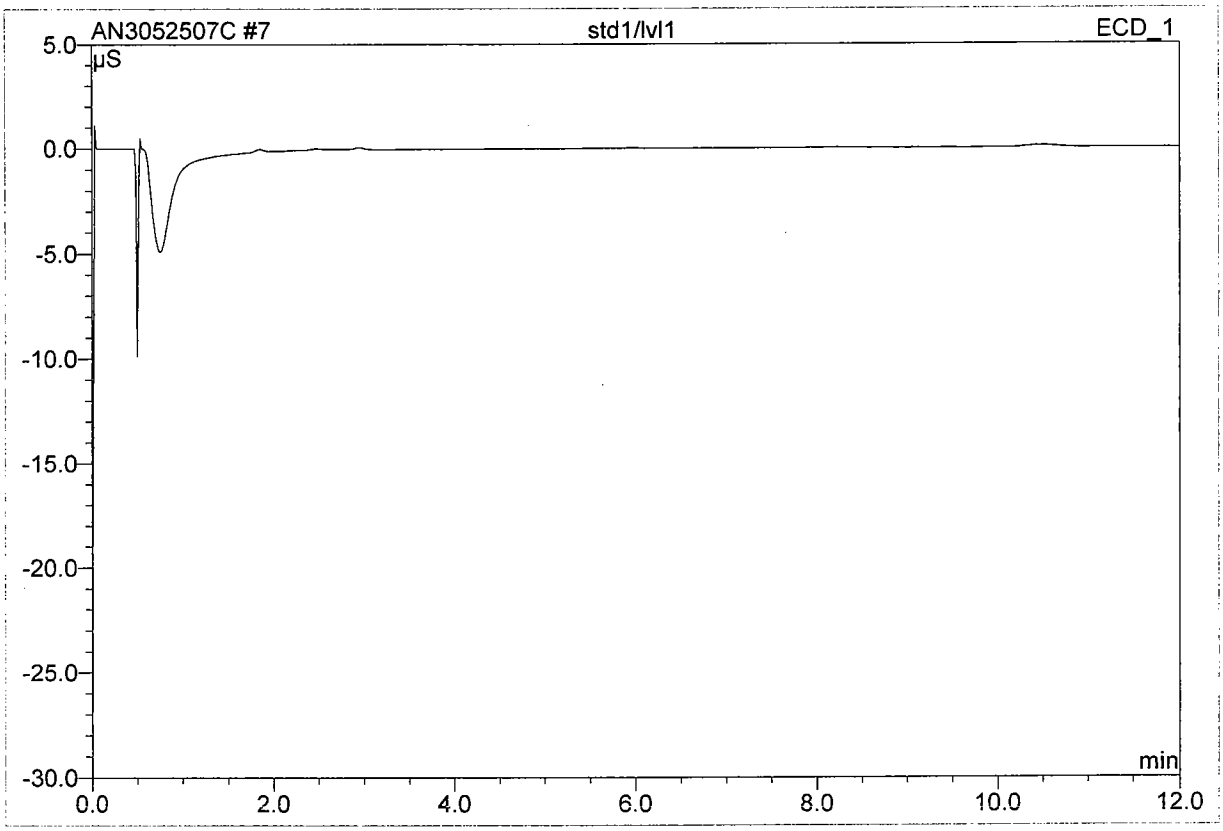


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.02	Nitrite	122.744	15.926	62.13	6.348	BMB
2	10.38	n.a.	25.869	9.706	37.87	n.a.	BMB
Total:			148.613	25.632	100.00	6.348	

JM 5/29/07

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 16:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**

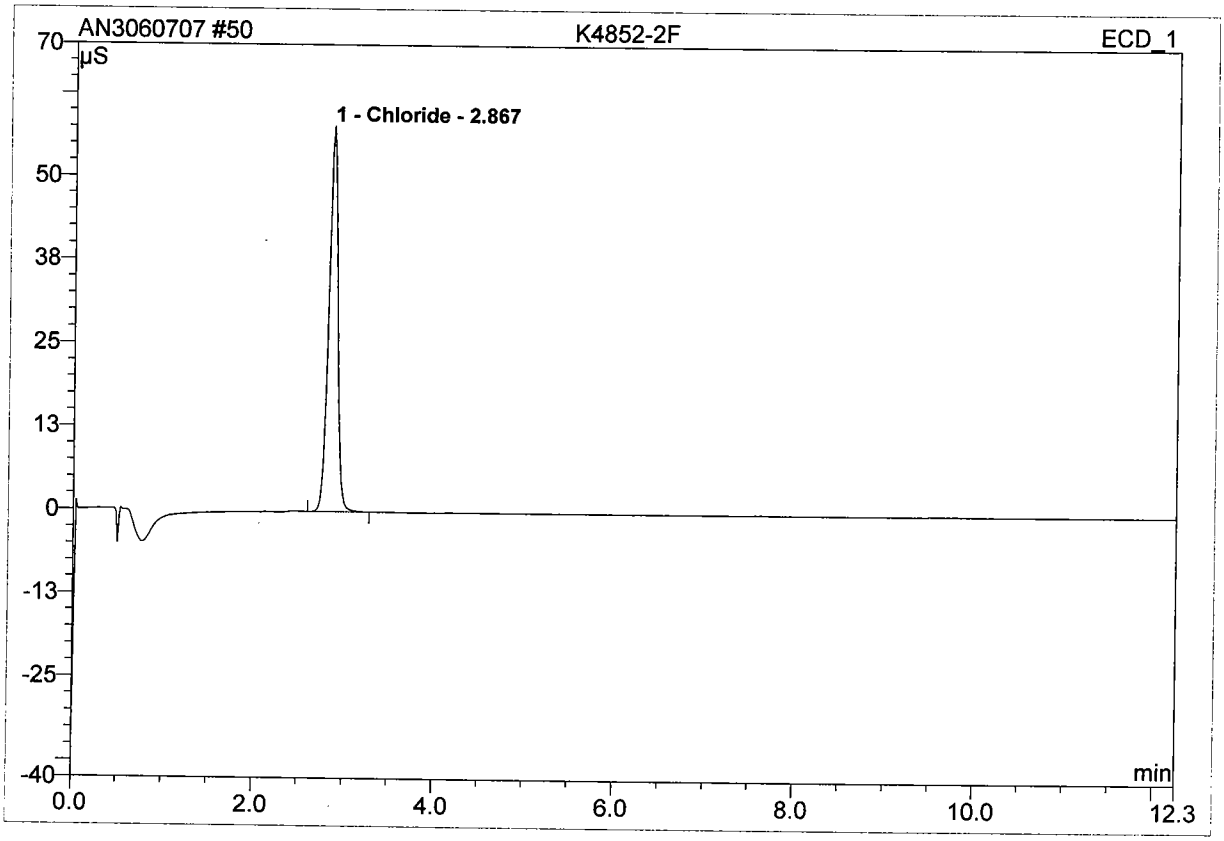


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

5/29/07

50 K4852-2F

Sample Name:	**K4852-2F**	*Injection Volume:*	**200.0**
Vial Number:	**78**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**200.0000**
Recording Time:	**6/7/2007 21:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

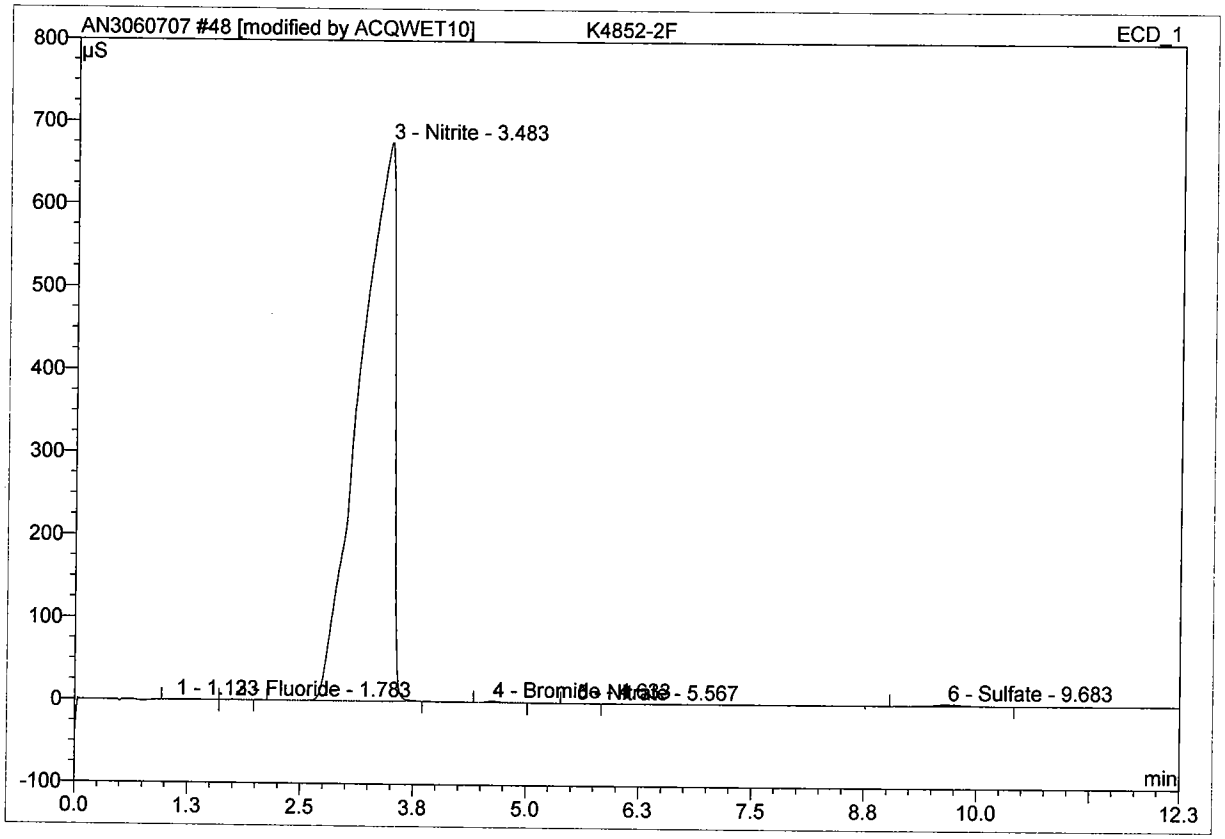


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	57.836	6.532	100.00	841.545	BMB
Total:			57.836	6.532	100.00	841.545	

6/12/07

48 K4852-2F

Sample Name:	**K4852-2F**	*Injection Volume:*	**200.0**
Vial Number:	**76**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**6/7/2007 20:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.13	n.a.	0.357	0.128	0.04	n.a.	BMb*
2	1.78	① Fluoride <1.0	0.368	0.095	0.03	0.277	bM *
3	3.48	Nitrite	675.028	301.382	99.60	527.534	BMB
4	4.63	Bromide	1.588	0.261	0.09	2.458	BMB
5	5.57	① Nitrate <0.5	0.033	0.007	0.00	0.009	BMB*
6	9.68	Sulfate	1.985	0.712	0.24	3.771	BMB*
Total:			679.360	302.585	100.00	534.049	

① elevated MRL due to Cl conc.

After Initials JS

JUN 08 2007

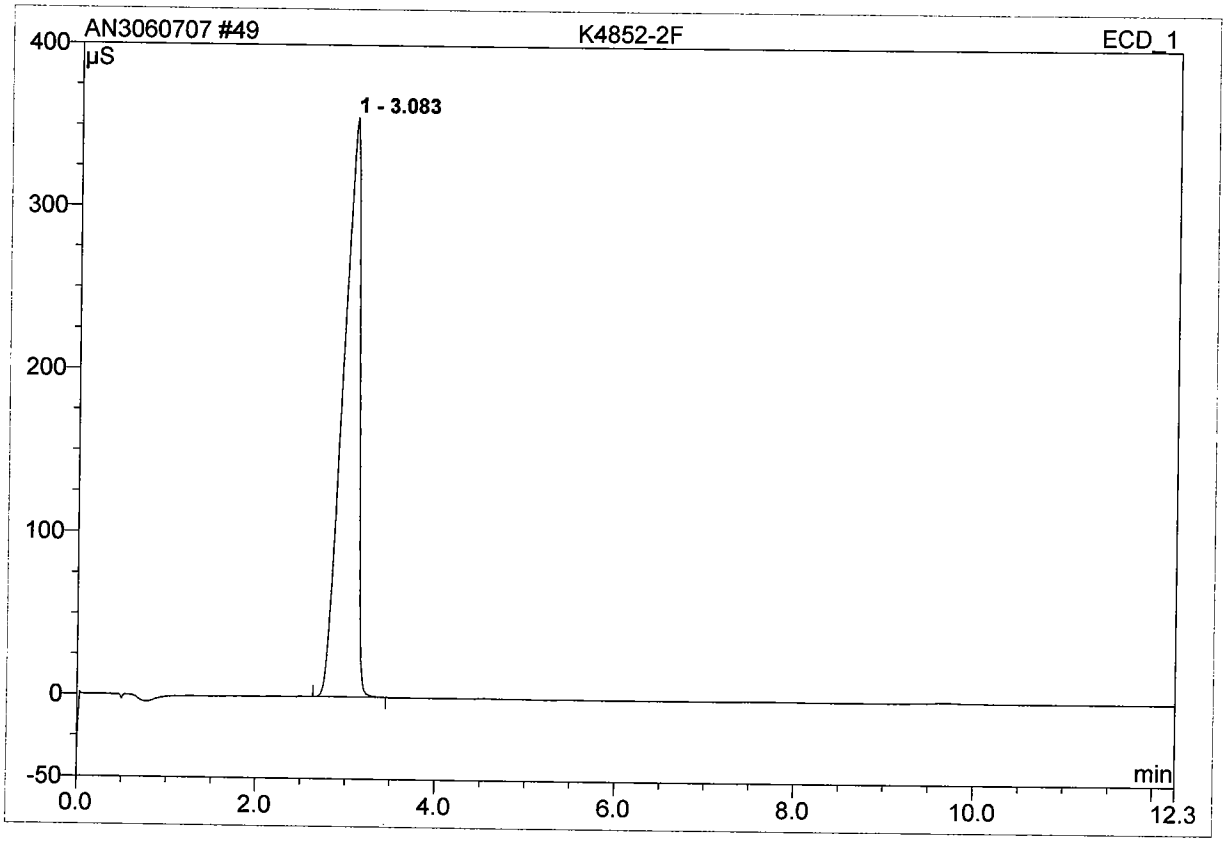
TU 6/12/07

default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 161

49 K4852-2F

Sample Name:	**K4852-2F**	*Injection Volume:*	**200.0**
Vial Number:	**77**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**6/7/2007 20:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



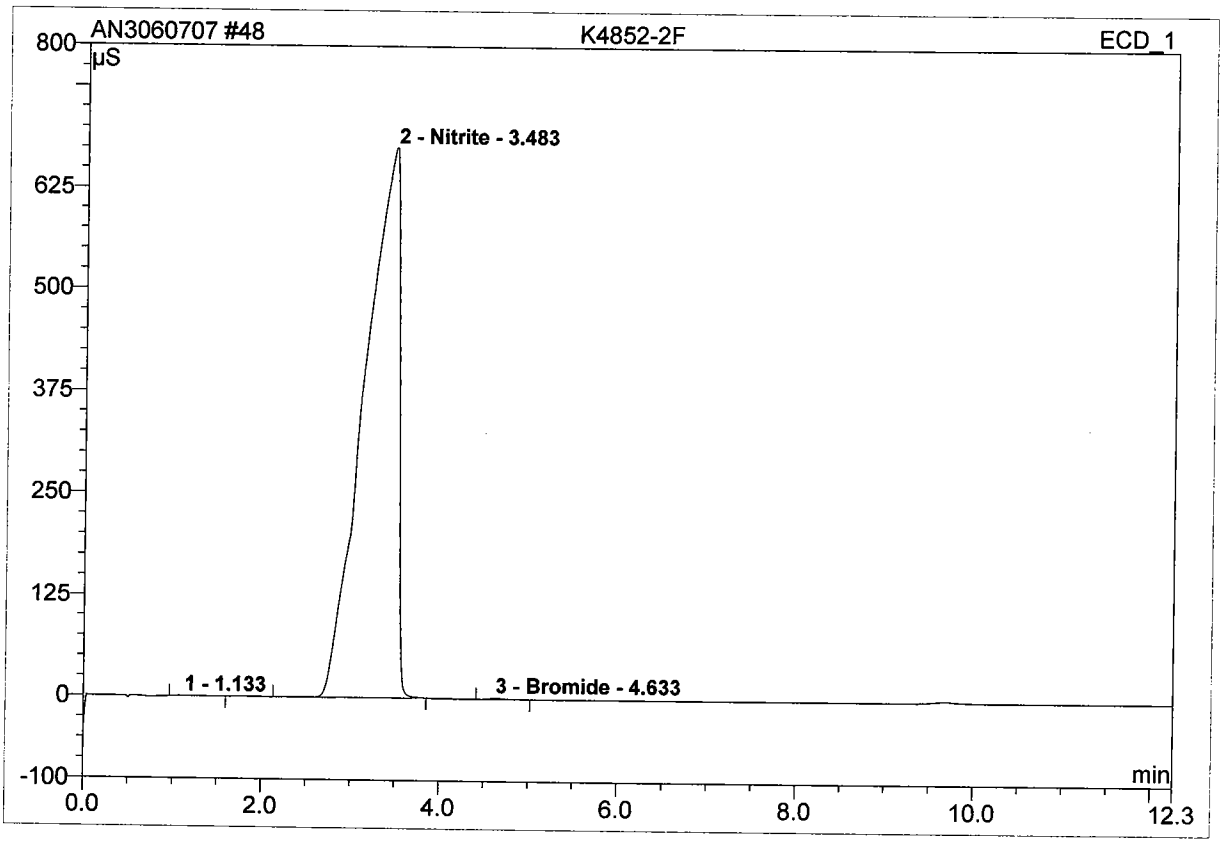
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.08	n.a.	355.661	75.525	100.00	n.a.	BMB
Total:			355.661	75.525	100.00	0.000	

① Nitrite <2.0; ② elevated MRL due to Cl interference

JM 6/12/07

48 K4852-2F

Sample Name:	**K4852-2F**	*Injection Volume:*	**200.0**
Vial Number:	**76**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**6/7/2007 20:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



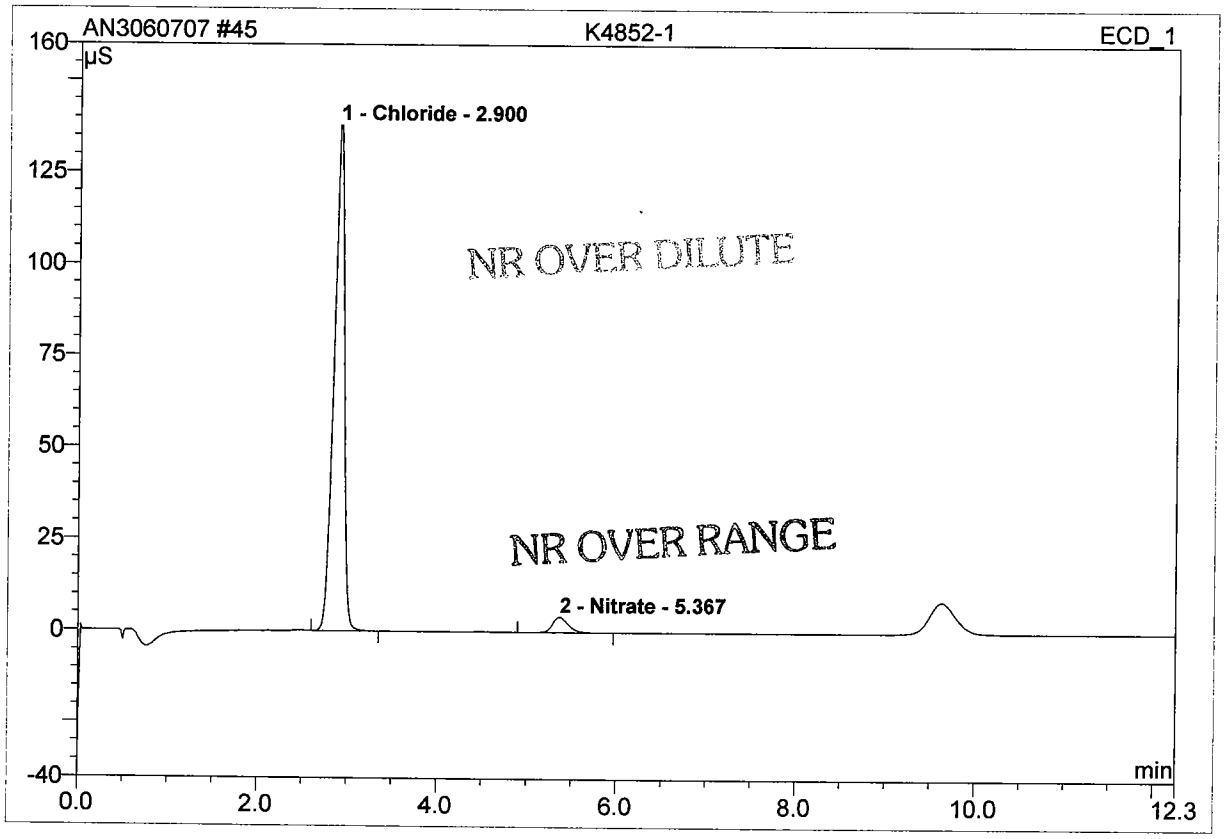
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.13	n.a.	0.357	0.128	0.04	n.a.	BMB
2	3.48	Nitrite	675.028	301.382	99.87	527.534	BMB
3	4.63	Bromide	1.588	0.261	0.09	2.458	BMB
Total:			676.974	301.771	100.00	529.992	

Before

JUN 0 8 2007

45 K4852-1

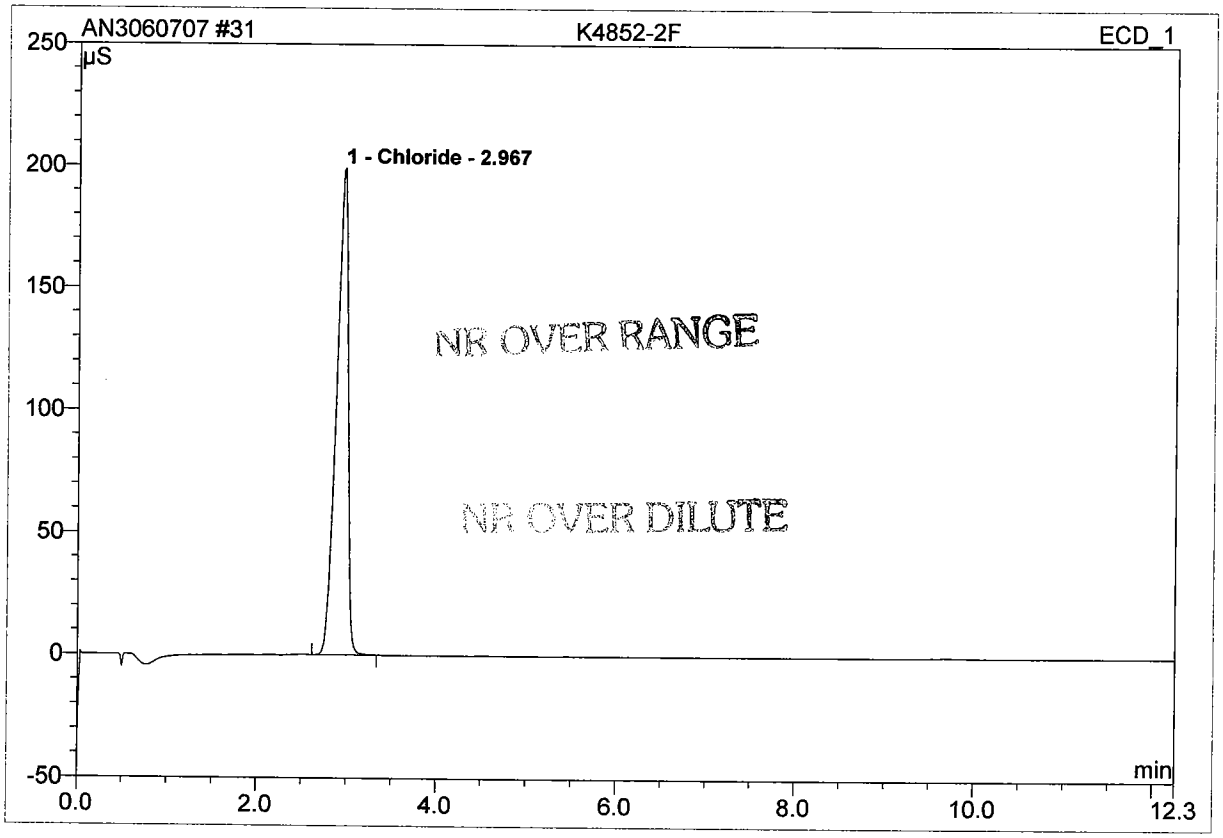
Sample Name:	**K4852-1**	*Injection Volume:*	**200.0**
Vial Number:	**73**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**6/7/2007 19:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.90	Chloride	137.885	18.095	95.46	233.128	BMB
2	5.37	Nitrate	4.155	0.860	4.54	4.746	BMB
Total:			142.039	18.956	100.00	237.874	

31 K4852-2F

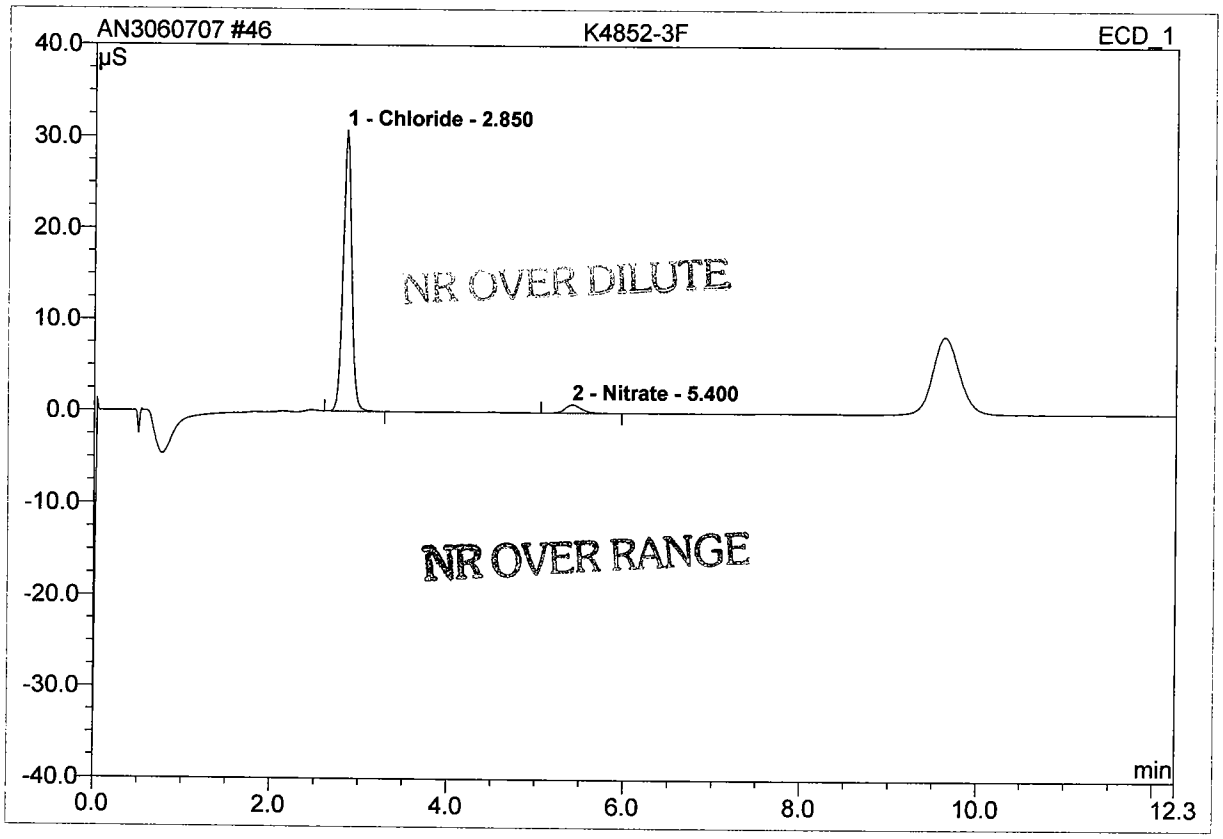
Sample Name:	**K4852-2F**	*Injection Volume:*	**200.0**
Vial Number:	**59**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**6/7/2007 16:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.97	Chloride	199.083	29.585	100.00	952.883	BMB
Total:			199.083	29.585	100.00	952.883	

46 K4852-3F

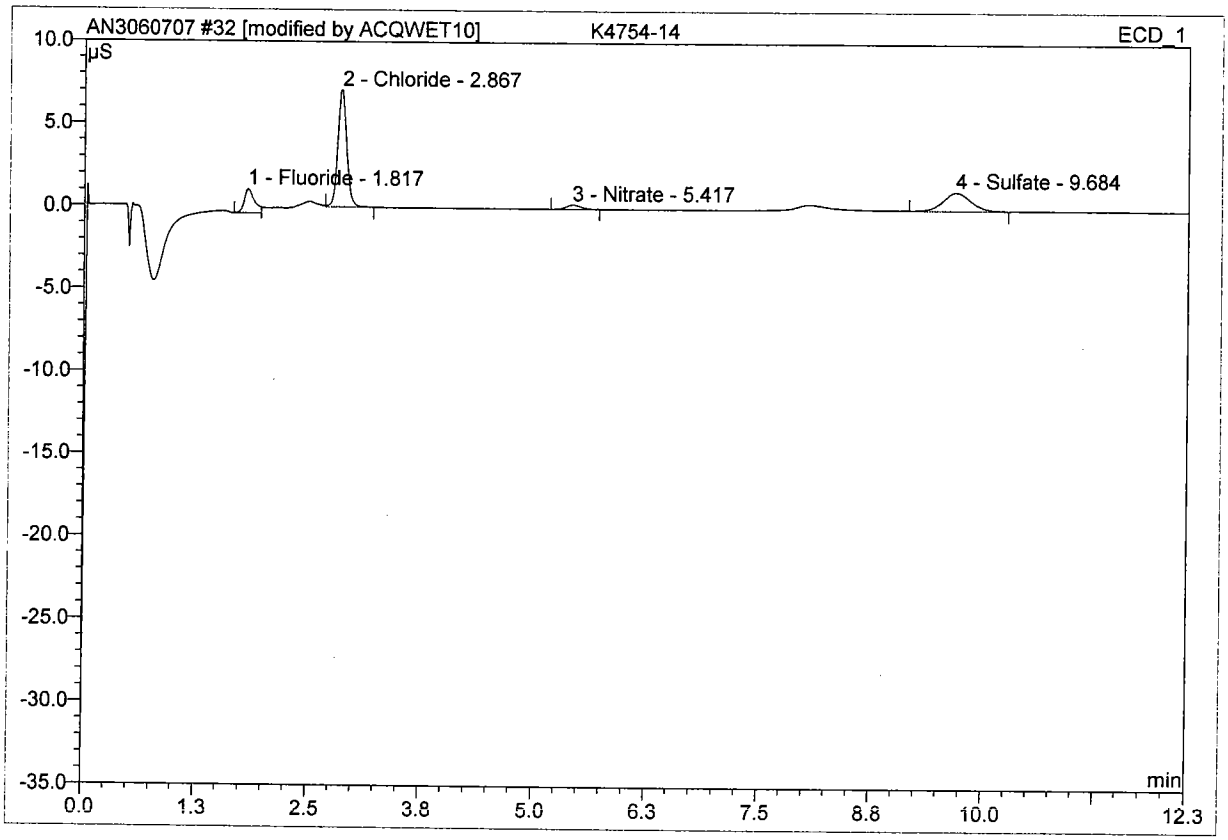
Sample Name:	**K4852-3F**	*Injection Volume:*	**200.0**
Vial Number:	**74**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**6/7/2007 20:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.85	Chloride	30.732	3.408	94.63	43.906	BMB
2	5.40	Nitrate	0.917	0.193	5.37	1.066	BMB
Total:			31.649	3.601	100.00	44.972	

32 K4754-14

Sample Name:	**K4754-14**	*Injection Volume:*	**200.0**
Vial Number:	**60**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 16:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride $\bar{x}$= 0.2 RPD=<1	1.467	0.192	13.17	0.223	BM *
2	2.87	Chloride $\bar{x}$= 1.1 RPD= 10	7.067	0.813	55.91	1.047	MB*
3	5.42	Nitrate <0.1 $\bar{x}$=ND RPD=—	0.260	0.052	3.55	0.029	BMB*
4	9.68	Sulfate $\bar{x}$=0.8 RPD=<1	1.108	0.398	27.37	0.843	BMB*
Total:			9.902	1.454	100.00	2.142	

Nitrite <0.1 $\bar{x}$=ND RPD=—

After Initials JS

JUN 08 2007

JL 6/12/07

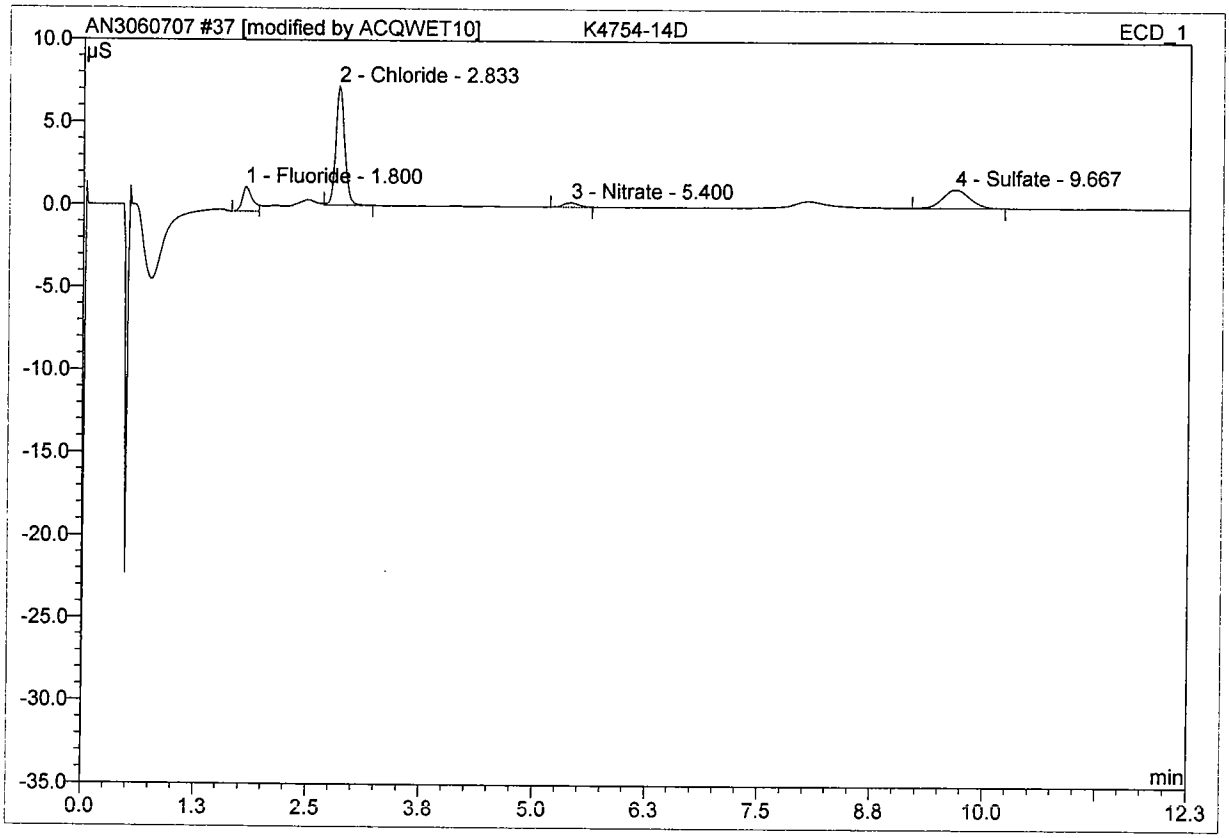
default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

37 K4754-14D

Sample Name:	**K4754-14D**	*Injection Volume:*	**200.0**
Vial Number:	**65**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 18:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	1.488	0.193	13.20	0.225	BM *
2	2.83	Chloride	7.208	0.819	55.97	1.055	MB*
3	5.40	Nitrate <0.1	0.262	0.051	3.48	0.028	BMB*
4	9.67	Sulfate	1.126	0.400	27.35	0.847	BMB*
Total:			10.084	1.464	100.00	2.156	

Nitrite <0.1

After Initials JS

JN 6/12/07

JUN 08 2007

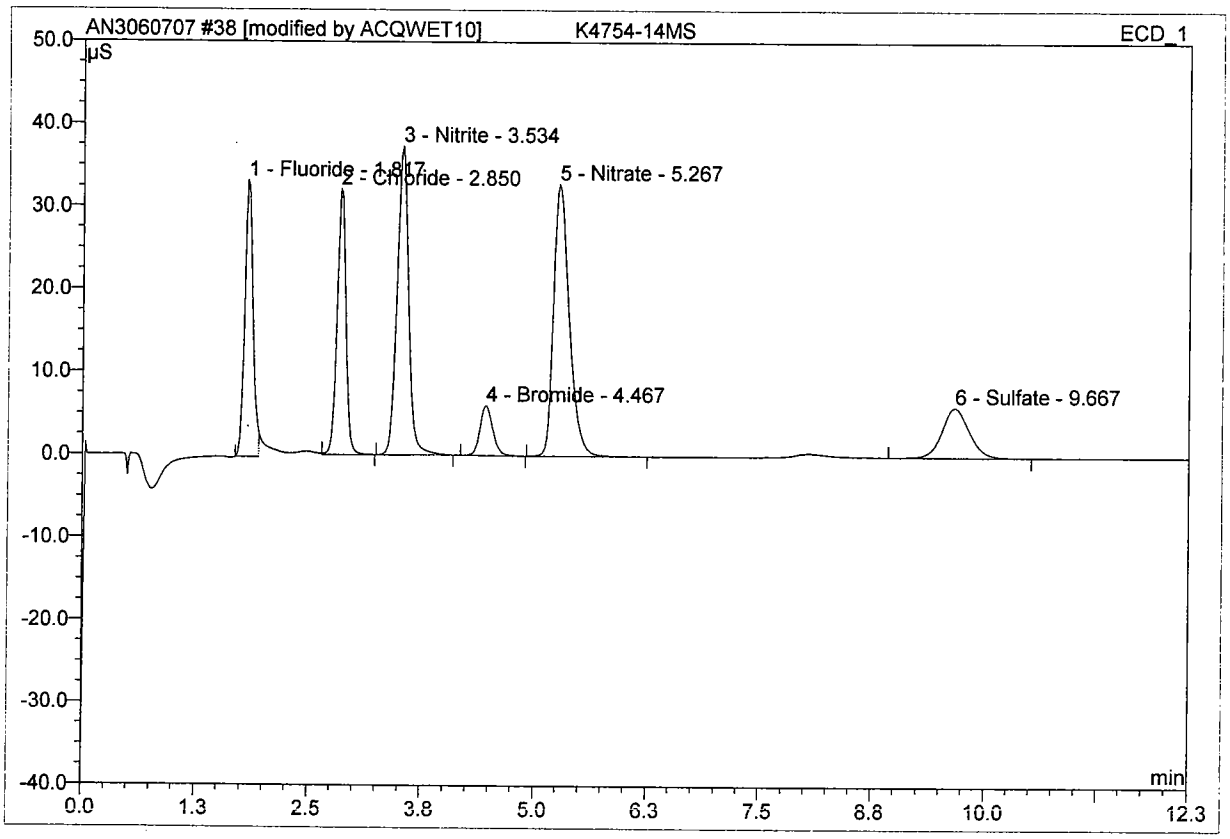
default/Integration

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

38 K4754-14MS

Sample Name:	**K4754-14MS**	*Injection Volume:*	**200.0**
Vial Number:	**66**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 18:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.82	Fluoride %rec = 100	33.417	3.577	16.01	4.166	BM *
2	2.85	Chloride %rec = 90	32.119	3.594	16.08	4.630	MB*
3	3.53	Nitrite %rec = 95	37.301	5.450	24.39	3.816	BMB
4	4.47	Bromide	5.982	0.990	4.43	3.731	BMB
5	5.27	Nitrate %rec = 93	32.840	6.624	29.64	3.654	BMB
6	9.67	Sulfate %rec = 93	5.960	2.112	9.45	4.471	BMB*
Total:			147.619	22.347	100.00	24.469	

SPK lvl
4 ppm

After Initials JS

JUN 08 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

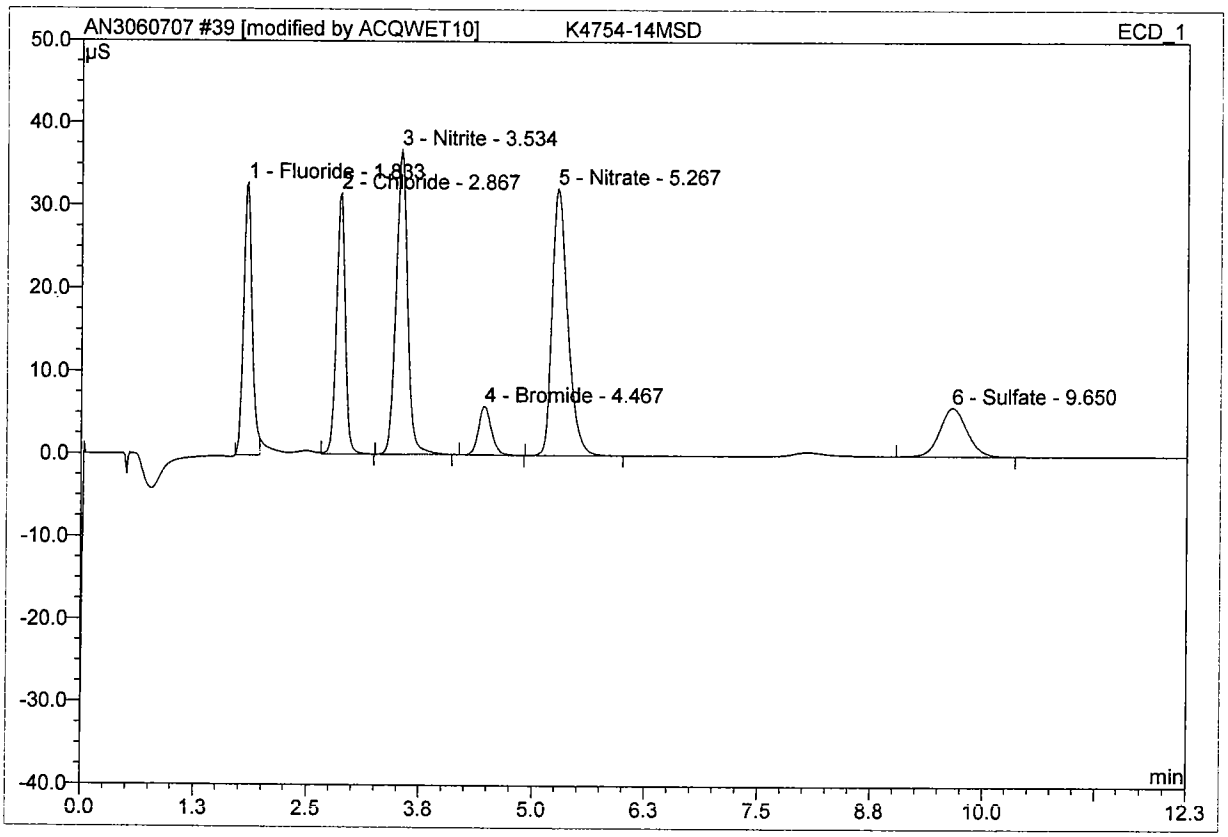
JR 6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

39 K4754-14MSD

Sample Name:	**K4754-14MSD**	*Injection Volume:*	**200.0**
Vial Number:	**67**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 18:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride Rec = 98	32.910	3.527	16.07	4.108	BM *
2	2.87	Chloride Rec = 88	31.489	3.523	16.05	4.539	MB*
3	3.53	Nitrite Rec = 95	36.797	5.368	24.45	3.758	BMB
4	4.47	Bromide	5.884	0.972	4.43	3.662	BMB*
5	5.27	Nitrate Rec = 90	32.214	6.502	29.61	3.587	BMB*
6	9.65	Sulfate Rec = 90	5.860	2.063	9.40	4.368	BMB*
Total:			145.154	21.955	100.00	24.022	

SPK lvl 4 ppm

After Initials JS

JUN 08 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

Cl-86417 ✓
NO_2-86418 ✓
NO_3-86419 ✓
F-86482 ✓
SO_4-86483 ✓

Ion Chromatography Data Quality Report
Inorganics

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value = 9.6 ppm	CAS ID # = AN1-18-Y	Expires: 10/3/07
Chloride	True Value = 5.0ppm	CAS ID # = ERA#092	Expires: 12/31/07
Nitrite	True Value = 100 ppm	CAS ID # = AN10-6-U	Expires: 6/7/07
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-18-BB	Expires: 11/3/07
Nitrate	True Value = 5.1 ppm	CAS ID # = AN1-18-AA	Expires: 11/1/07
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#092	Expires: 12/31/07

CCV CAS ID # = AN10-40-I Expires 6/7/07

Fluoride	True Value = 5.0 ppm
Chloride	True Value = 5.0 ppm
Nitrite	True Value = 2.0 ppm
Bromide	True Value = 2.0 ppm
Nitrate	True Value = 2.0 ppm
Sulfate	True Value = 5.0 ppm

Spike
2.0ppm X dilution fact CAS ID# = AN10-69-T Expires 6/7/07

Analyst: JS Date: 6/7/07
First Review: JS Date: 6/8/07
Final Review: [illegible] Date: 6/12/07

Comments: CCB9 did not inject sample were not affected
MDL 4, 6-9, MDLCHK will be reran 6/8/07

t:\wet\ic\icdqs.xls

Sequence: AN3060707
Operator: ACQWET10
Printed: 6/8/2007 11:48:29 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	3	200.0	epa300	epa300	Finished	5/25/2007 2:36:09 PM
2	std3/lvl3	Standard	4	200.0	epa300	epa300	Finished	5/25/2007 2:51:38 PM
3	std4/lvl4	Standard	5	200.0	epa300	epa300	Finished	5/25/2007 3:07:05 PM
4	std5/lvl5	Standard	6	200.0	epa300	epa300	Finished	5/25/2007 3:22:33 PM
5	std6/lvl6	Standard	7	200.0	epa300	epa300	Finished	5/25/2007 3:38:00 PM
6	std7/lvl7	Standard	8	200.0	epa300	epa300	Finished	5/25/2007 3:53:28 PM
7	std1/lvl1	Standard	8	200.0	epa300	epa300	Finished	5/25/2007 4:07:56 PM
8	CCV1 AN10-40-I	Unknown	26	200.0	epa300	epa300	Finished	6/7/2007 8:43:59 AM
9	CCB1	Unknown	29	200.0	epa300	epa300	Finished	6/7/2007 8:58:42 AM
10	AN10-6-U(NO2)1	Unknown	30	200.0	epa300	epa300	Finished	6/7/2007 9:13:25 AM
11	MB1	Unknown	30	200.0	epa300	epa300	Finished	6/7/2007 9:28:07 AM
12	AN1-18-AA(NO3)1	Unknown	31	200.0	epa300	epa300	Finished	6/7/2007 9:42:50 AM
13	ERA (CLSO4) 1	Unknown	43	200.0	epa300	epa300	Finished	6/7/2007 9:57:32 AM
14	AN1-18-Y(F)	Unknown	43	200.0	epa300	epa300	Finished	6/7/2007 10:12:15 AM
15	AN10-69-T(SPKCHK)	Unknown	44	200.0	epa300	epa300	Finished	6/7/2007 10:26:58 AM
16	CCV2 AN10-40-I	Unknown	44	200.0	epa300	epa300	Finished	~~6/7/2007 10:41:41 AM~~ ①
17	CCB2	Unknown	45	200.0	epa300	epa300	Finished	6/7/2007 10:56:23 AM
18	CCV3	Unknown	46	200.0	epa300	epa300	Finished	6/7/2007 11:17:36 AM
19	K4760-1F	Unknown	47	200.0	epa300	epa300	Finished	6/7/2007 11:32:19 AM
20	K4832-1F	Unknown	48	200.0	epa300	epa300	Finished	6/7/2007 11:47:02 AM
21	K4832-2F	Unknown	49	200.0	epa300	epa300	Finished	6/7/2007 12:01:44 PM
22	K4832-3F	Unknown	50	200.0	epa300	epa300	Finished	6/7/2007 12:16:27 PM
23	K4754-12F CHK	Unknown	51	200.0	epa300	epa300	Finished	6/7/2007 12:31:10 PM
24	K4440-6F	Unknown	52	200.0	epa300	epa300	Finished	6/7/2007 2:49:40 PM
25	K4440-7F	Unknown	53	200.0	epa300	epa300	Finished	6/7/2007 3:04:24 PM
26	K4440-8F	Unknown	54	200.0	epa300	epa300	Finished	6/7/2007 3:19:06 PM
27	K4756-1	Unknown	55	200.0	epa300	epa300	Finished	6/7/2007 3:33:49 PM
28	RB	Unknown	56	200.0	epa300	epa300	Finished	6/7/2007 3:48:32 PM
29	CCV4	Unknown	57	200.0	epa300	epa300	Finished	6/7/2007 4:03:14 PM
30	CCB4	Unknown	58	200.0	epa300	epa300	Finished	6/7/2007 4:17:57 PM
31	K4852-2F	Unknown	59	200.0	epa300	epa300	Finished	6/7/2007 4:32:41 PM
32	K4754-14	Unknown	60	200.0	epa300	epa300	Finished	6/7/2007 4:47:23 PM
33	K4754-15F	Unknown	61	200.0	epa300	epa300	Finished	6/7/2007 5:02:06 PM
34	K4754-16	Unknown	62	200.0	epa300	epa300	Finished	6/7/2007 5:16:48 PM
35	K4754-17F	Unknown	63	200.0	epa300	epa300	Finished	6/7/2007 5:31:31 PM
36	K4754-18	Unknown	64	200.0	epa300	epa300	Finished	6/7/2007 5:46:15 PM
37	K4754-14D	Unknown	65	200.0	epa300	epa300	Finished	6/7/2007 6:00:58 PM
38	K4754-14MS	Unknown	66	200.0	epa300	epa300	Finished	6/7/2007 6:15:41 PM
39	K4754-14MSD	Unknown	67	200.0	epa300	epa300	Finished	6/7/2007 6:30:24 PM
40	RB	Unknown	68	200.0	epa300	epa300	Finished	6/7/2007 6:45:05 PM
41	CCV5	Unknown	69	200.0	epa300	epa300	Finished	6/7/2007 6:59:48 PM
42	CCB5	Unknown	70	200.0	epa300	epa300	Finished	6/7/2007 7:14:30 PM

① Did not inject
EM 6/12/07

Chromeleon © Dionex Corporation, Version 6.50 SP1 Build 956

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K4754-19	Unknown	71	200.0	epa300	epa300	Finished	6/7/2007 7:29:13 PM
44	K4754-20	Unknown	72	200.0	epa300	epa300	Finished	6/7/2007 7:43:56 PM
45	K4852-1	Unknown	73	200.0	epa300	epa300	Finished	6/7/2007 7:58:40 PM
46	K4852-3F	Unknown	74	200.0	epa300	epa300	Finished	6/7/2007 8:13:22 PM
47	K4781-1F	Unknown	75	200.0	epa300	epa300	Finished	6/7/2007 8:28:05 PM
48	K4852-2F	Unknown	76	200.0	epa300	epa300	Finished	6/7/2007 8:42:48 PM
49	K4852-2F	Unknown	77	200.0	epa300	epa300	Finished	6/7/2007 8:57:31 PM
50	K4852-2F	Unknown	78	200.0	epa300	epa300	Finished	6/7/2007 9:12:14 PM
51	K4331-1	Unknown	79	200.0	epa300	epa300	Finished	6/7/2007 9:26:56 PM
52	RB	Unknown	80	200.0	epa300	epa300	Finished	6/7/2007 9:41:39 PM
53	CCV6	Unknown	81	200.0	epa300	epa300	Finished	6/7/2007 9:56:21 PM
54	CCB6	Unknown	82	200.0	epa300	epa300	Finished	6/7/2007 10:11:05 PM
55	K4715-3	Unknown	83	200.0	epa300	epa300	Finished	6/7/2007 10:25:46 PM
56	K4715-8F	Unknown	84	200.0	epa300	epa300	Finished	6/7/2007 10:40:29 PM
57	K4142-2	Unknown	85	200.0	epa300	epa300	Finished	6/7/2007 10:55:12 PM
58	K4142-3F	Unknown	86	200.0	epa300	epa300	Finished	6/7/2007 11:09:55 PM
59	K4142-7	Unknown	87	200.0	epa300	epa300	Finished	6/7/2007 11:24:37 PM
60	K4142-8	Unknown	88	200.0	epa300	epa300	Finished	6/7/2007 11:39:20 PM
61	K4142-13	Unknown	89	200.0	epa300	epa300	Finished	6/7/2007 11:54:03 PM
62	K4715-1	Unknown	90	200.0	epa300	epa300	Finished	6/8/2007 12:08:46 AM
63	BR	Unknown	91	200.0	epa300	epa300	Finished	6/8/2007 12:23:29 AM
64	RB	Unknown	92	200.0	epa300	epa300	Finished	6/8/2007 12:38:13 AM
65	CCV7	Unknown	93	200.0	epa300	epa300	Finished	6/8/2007 12:52:55 AM
66	CCB7	Unknown	94	200.0	epa300	epa300	Finished	6/8/2007 1:07:39 AM
67	MB2	Unknown	95	200.0	epa300	epa300	Finished	6/8/2007 1:22:21 AM
68	(CLSO4)2	Unknown	96	200.0	epa300	epa300	Finished	6/8/2007 1:37:04 AM
69	MB SOIL	Unknown	97	200.0	epa300	epa300	Finished	6/8/2007 1:51:48 AM
70	LCS SOIL	Unknown	98	200.0	epa300	epa300	Finished	6/8/2007 2:06:31 AM
71	MDL1	Unknown	99	200.0	epa300	epa300	Finished	6/8/2007 2:21:18 AM
72	MDL2	Unknown	100	200.0	epa300	epa300	Finished	6/8/2007 2:36:01 AM
73	MDL3	Unknown	101	200.0	epa300	epa300	Finished	6/8/2007 2:50:44 AM
74	MDL4	Unknown	102	200.0	epa300	epa300	Finished	6/8/2007 3:05:27 AM
75	MDL5	Unknown	103	200.0	epa300	epa300	Finished	6/8/2007 3:20:10 AM
76	RB	Unknown	104	200.0	epa300	epa300	Finished	6/8/2007 3:34:52 AM
77	CCV8	Unknown	105	200.0	epa300	epa300	Finished	6/8/2007 3:49:35 AM
78	CCB8	Unknown	106	200.0	epa300	epa300	Finished	6/8/2007 4:04:17 AM
79	MDL6	Unknown	107	200.0	epa300	epa300	Finished	6/8/2007 4:19:00 AM
80	MDL7	Unknown	108	200.0	epa300	epa300	Finished	6/8/2007 4:33:43 AM
81	MDL8	Unknown	109	200.0	epa300	epa300	Finished	6/8/2007 4:48:26 AM
82	MDL9	Unknown	110	200.0	epa300	epa300	Finished	6/8/2007 5:03:09 AM
83	MDL ?	Unknown	111	200.0	epa300	epa300	Finished	6/8/2007 5:17:51 AM
84	RB	Unknown	112	200.0	epa300	epa300	Finished	6/8/2007 5:32:34 AM

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Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
85	CCV9	Unknown	113	200.0	epa300	epa300	Finished	6/8/2007 5:47:17 AM
86	CCB9	Unknown	114	200.0	epa300	epa300	Finished	~~6/8/2007 6:01:59 AM~~ (1)

(1) CCB9 did not inject
EMG 1/12/07

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	std2/lvl2	1.0000	1.0000	1.0000		03	
2	std3/lvl3	1.0000	1.0000	1.0000		04	
3	std4/lvl4	1.0000	1.0000	1.0000		05	
4	std5/lvl5	1.0000	1.0000	1.0000		06	
5	std6/lvl6	1.0000	1.0000	1.0000		07	
6	std7/lvl7	1.0000	1.0000	1.0000		07	
7	std1/lvl1	1.0000	1.0000	1.0000		08	
8	CCV1 AN10-40-I	1.0000	1.0000	1.0000		08	
9	CCB1	1.0000	1.0000	1.0000		08	
10	AN10-6-U(NO2)1	1.0000	25.0000	1.0000		08	
11	MB1	1.0000	1.0000	1.0000		08	
12	AN1-18-AA(NO3)1	1.0000	2.0000	1.0000		08	
13	ERA (CLSO4) 1	1.0000	1.0000	1.0000		08	
14	AN1-18-Y(F)	1.0000	2.0000	1.0000		08	
15	AN10-69-T(SPKCHK)	1.0000	1.0000	1.0000		08	
16	CCV2 AN10-40-I	1.0000	1.0000	1.0000		08	
17	CCB2	1.0000	1.0000	1.0000		08	
18	CCV3	1.0000	1.0000	1.0000		08	
19	K4760-1F	1.0000	200.0000	1.0000		08	
20	K4832-1F	1.0000	2.0000	1.0000		08	
21	K4832-2F	1.0000	2.0000	1.0000		08	
22	K4832-3F	1.0000	2.0000	1.0000		08	
23	K4754-12F CHK	1.0000	5.0000	1.0000		08	
24	K4440-6F	1.0000	20.0000	1.0000		08	
25	K4440-7F	1.0000	20.0000	1.0000		08	
26	K4440-8F	1.0000	20.0000	1.0000		08	
27	K4756-1	1.0000	2.0000	1.0000		08	
28	RB	1.0000	1.0000	1.0000		08	
29	CCV4	1.0000	1.0000	1.0000		08	
30	CCB4	1.0000	1.0000	1.0000		08	
31	K4852-2F	1.0000	50.0000	1.0000		08	
32	K4754-14	1.0000	2.0000	1.0000		08	
33	K4754-15F	1.0000	2.0000	1.0000		08	
34	K4754-16	1.0000	2.0000	1.0000		08	
35	K4754-17F	1.0000	2.0000	1.0000		08	
36	K4754-18	1.0000	2.0000	1.0000		08	
37	K4754-14D	1.0000	2.0000	1.0000		08	
38	K4754-14MS	1.0000	2.0000	1.0000		08	
39	K4754-14MSD	1.0000	2.0000	1.0000		08	
40	RB	1.0000	1.0000	1.0000		08	
41	CCV5	1.0000	1.0000	1.0000		08	
42	CCB5	1.0000	1.0000	1.0000		08	

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	K4754-19	1.0000	2.0000	1.0000		08	
44	K4754-20	1.0000	2.0000	1.0000		08	
45	K4852-1	1.0000	20.0000	1.0000		08	
46	K4852-3F	1.0000	20.0000	1.0000		08	
47	K4781-1F	1.0000	500.0000	1.0000		08	
48	K4852-2F	1.0000	5.0000	1.0000		08	
49	K4852-2F	1.0000	20.0000	1.0000		08	
50	K4852-2F	1.0000	200.0000	1.0000		08	
51	K4331-1	1.0000	5.0000	1.0000		08	
52	RB	1.0000	1.0000	1.0000		08	
53	CCV6	1.0000	1.0000	1.0000		08	
54	CCB6	1.0000	1.0000	1.0000		08	
55	K4715-3	1.0000	2.0000	1.0000		08	
56	K4715-8F	1.0000	5.0000	1.0000		08	
57	K4142-2	1.0000	20.0000	1.0000		08	
58	K4142-3F	1.0000	20.0000	1.0000		08	
59	K4142-7	1.0000	20.0000	1.0000		08	
60	K4142-8	1.0000	20.0000	1.0000		08	
61	K4142-13	1.0000	20.0000	1.0000		08	
62	K4715-1	1.0000	5.0000	1.0000		08	
63	BR	1.0000	2.0000	1.0000		08	
64	RB	1.0000	1.0000	1.0000		08	
65	CCV7	1.0000	1.0000	1.0000		08	
66	CCB7	1.0000	1.0000	1.0000		08	
67	MB2	1.0000	1.0000	1.0000		08	
68	(CLSO4)2	1.0000	1.0000	1.0000		08	
69	MB SOIL	1.0000	1.0000	1.0000		08	
70	LCS SOIL	1.0000	5.0000	1.0000		08	
71	MDL1	1.0000	1.0000	1.0000		08	
72	MDL2	1.0000	1.0000	1.0000		08	
73	MDL3	1.0000	1.0000	1.0000		08	
74	MDL4	1.0000	1.0000	1.0000		08	
75	MDL5	1.0000	1.0000	1.0000		08	
76	RB	1.0000	1.0000	1.0000		08	
77	CCV8	1.0000	1.0000	1.0000		08	
78	CCB8	1.0000	1.0000	1.0000		08	
79	MDL6	1.0000	1.0000	1.0000		08	
80	MDL7	1.0000	1.0000	1.0000		08	
81	MDL8	1.0000	1.0000	1.0000		08	
82	MDL9	1.0000	1.0000	1.0000		08	
83	MDL ?	1.0000	1.0000	1.0000		08	
84	RB	1.0000	1.0000	1.0000		08	

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Sequence: AN3060707
Operator: ACQWET10
Printed: 6/8/2007 11:48:29 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 86

Created: 6/7/2007 8:05:02 AM by ACQWET10
Last Update: 6/8/2007 11:24:40 AM by ACQWET10

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
85	CCV9	1.0000	1.0000	1.0000		08	
86	CCB9	1.0000	1.0000	1.0000		08	

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AN3060101

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K4754-14	III	X	6/8	6/23	F				
					Cl	2.5/5			
PSC		dup ms msd			NO2				
					Br				
					NO3	2.5/5			
					SO4				
-15F					F				
					Cl	2.5/5			5CK
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
-16					F				
					Cl	2.5/5			
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
-17F					F				
					Cl	2.5/5			5x
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
-18					F				
					Cl	2.5/5			
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
-19					F				
					Cl	2.5/5			
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
-20					F				
					Cl	2.5/5			
					NO2				
					Br				
					NO3	2.5/5			
					SO4				
K4852-1	III		6/8	6/24	F	0.25/5			1340 5x 50x 5x
					Cl				
Treadwell Rollo					NO2				
					Br				
					NO3	0.25/5			5x 10x
					SO4				
-2F					F	0.1/5	0.25/5 1/5		
					Cl		200x		
					NO2		0.25/5		
					Br				
					NO3	0.1/5	1/5		
					SO4				1420
-3F					F	0.25/5			10x
					Cl				2x
					NO2				
					Br				2x
					NO3	0.25/5			10x
					SO4				

Cl-19
F-17
NO2-13
NO3-13

SO4-16

Br 1
ClSO4 2
MB 2 478

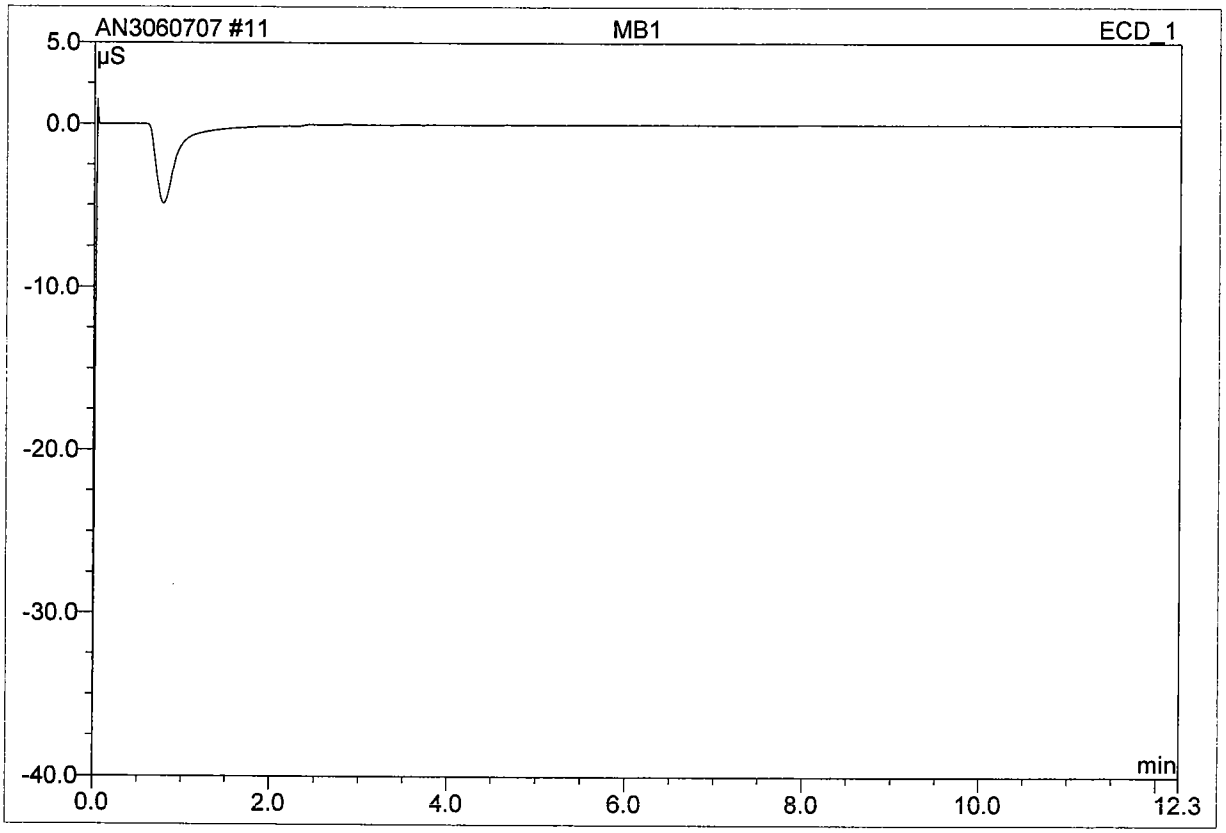
Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K4760-1F	I			6/16	F				
					Cl		(0.5/200)	✓	
Symons					NO2				
					Br				
					NO3				
					SO4				
K4832-1F	II		6/8	6/24	F				
					Cl				
Pierce County					NO2	2.5/5		✓	
					Br				
					NO3	2.5/5		✓	
					SO4				
-2F					F				
					Cl				
					NO2	2.5/5		✓	
					Br				
					NO3	2.5/5		✓	
					SO4				
-3F					F				
					Cl				1445
					NO2	2.5/5		✓	✓ 2x Cl
					Br				
					NO3	2.5/5		✓	
					SO4				
K4781-1F					F				
					Cl		(1/100)·(1/5)	✓	
Morstarch					NO2				
					Br				
					NO3				
					SO4				
K4715-1	I				F				
					Cl	1/5		✓	
Wheelabrator					NO2				
					Br				
					NO3				
					SO4				
-3					F		6/8/07		
					Cl	2.5/5			
					NO2				
					Br				
					NO3				
					SO4	2.5/5		✓	
-8					F				
					Cl	1/5			✓ 10x
					NO2				
					Br				
					NO3				
					SO4	1/5			✓ 2x
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
K4142-2				6/2	F				
					Cl				
Barr					NO2				
					Br				
					NO3				
					SO4	0.25/5		✓	
-3					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	0.25/5		✓	
-7					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	0.25/5		✓	
-8					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	0.25/5		✓	
-13					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4	0.25/5		✓	
K4331-1	I			6/12	F				
					Cl	1/5		✓	
Wheelabrator					NO2				
					Br				
					NO3				
					SO4				
K4440-6					F				
					Cl	0.25/5			✓5x
Prowell					NO2				
					Br				
					NO3				
					SO4				
-7					F				
					Cl	0.25/5			✓5x
					NO2				
					Br				
					NO3				
					SO4				
-8					F				
					Cl	0.25/5			✓2x
					NO2				
					Br				
					NO3				
					SO4				
K4756-1	I				F	2.5/5		✓	
					Cl				
Kelso					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anions	Initial	Final	Done?	
MDL1					F	5/5		✓	
					Cl	↓		✓	
					NO2				
					Br	5/5		✓	
					NO3				
					SO4	5/5		✓	
MDL2					F			✓	
					Cl			✓	
					NO2				
					Br			✓	
					NO3				
					SO4			✓	
MDL3					F			✓	
					Cl				
					NO2				
					Br			✓	
					NO3				
					SO4			✓	
MDL4					F				✓
					Cl				✓
					NO2				CHK
					Br				✓
					NO3				
					SO4				✓
MDL5					F			✓	
					Cl			✓	
					NO2				
					Br			✓	
					NO3				
					SO4			✓	
MDL6					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
MDL7					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
MDL8					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
MDL9					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
MDL✓					F				
					Cl				
					NO2				
					Br	✓			
					NO3				
					SO4				

11 MB1

Sample Name:	**MB1**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 9:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

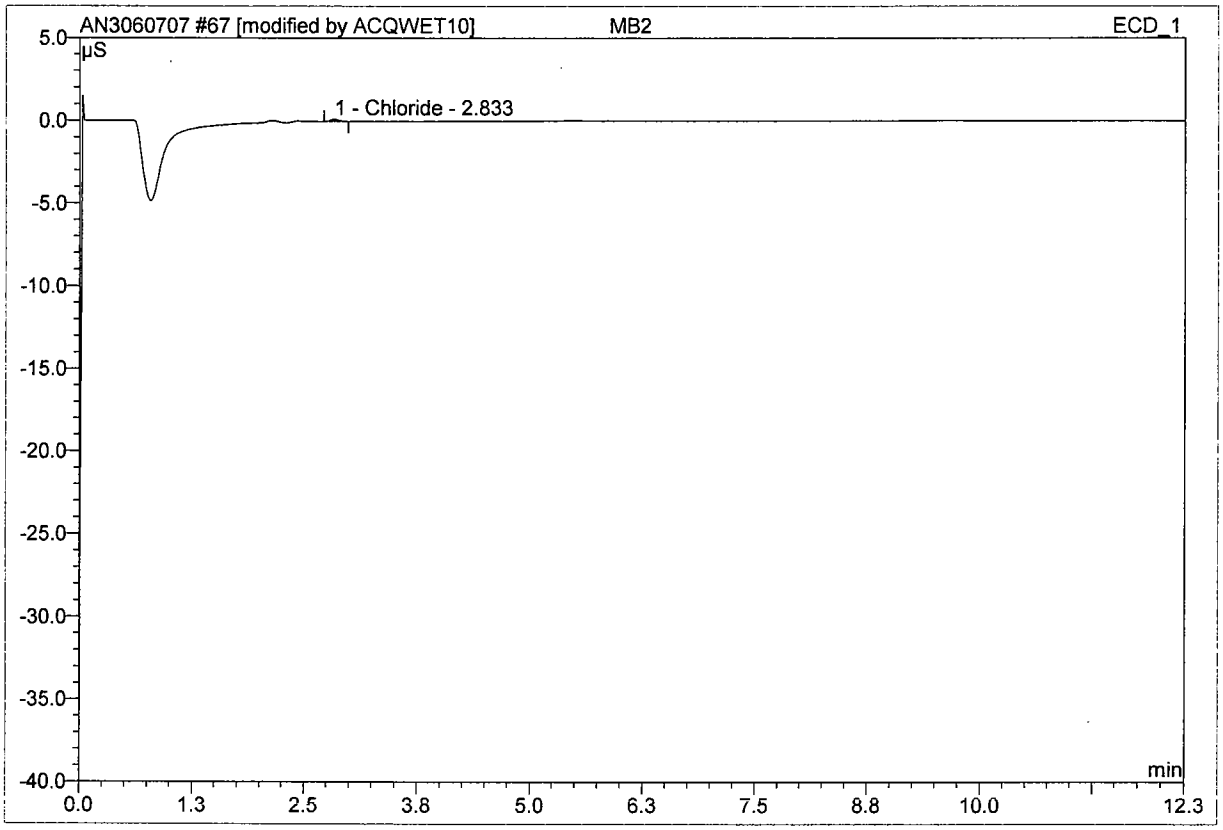


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

SKG 6/12/07

67 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**95**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.126	0.014	100.00	0.009	BMB*
Total:			0.126	0.014	100.00	0.009	

After
Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

6/12/07

default/Integration

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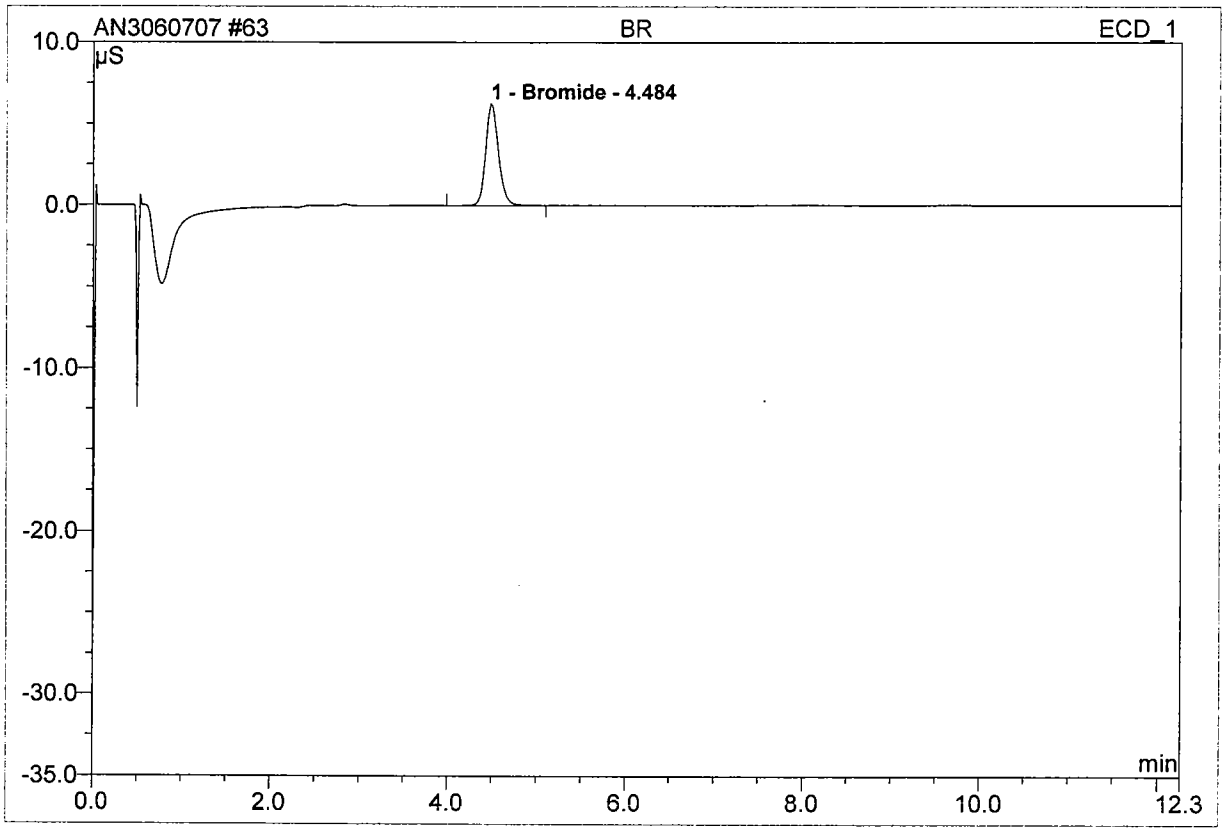
63 BR

Sample Name:	**BR**	*Injection Volume:*	**200.0**
Vial Number:	**91**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/8/2007 0:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

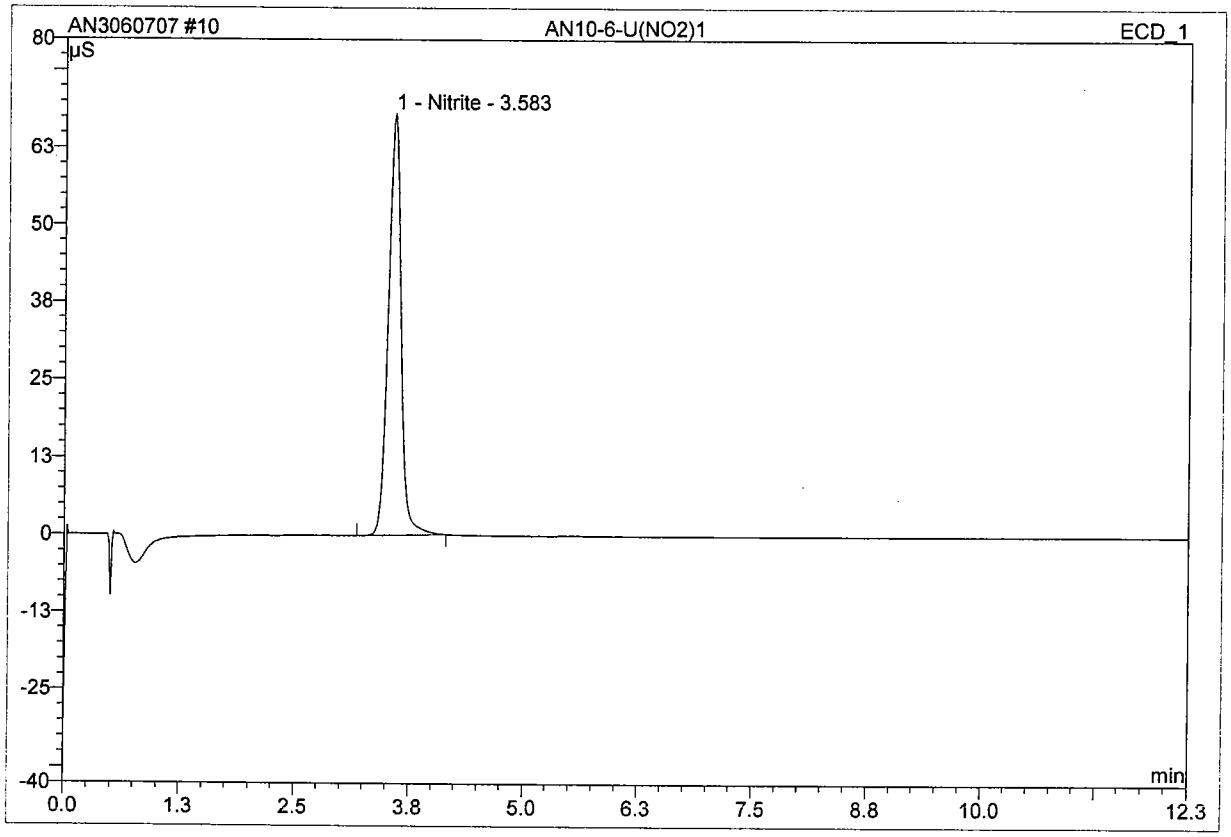


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	4.48	Bromide	6.248	1.056	100.00 100%	3.980	BMB
Total:			6.248	1.056	100.00	3.980	

6/12/07

10 AN10-6-U(NO2)1

Sample Name:	**AN10-6-U(NO2)1**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**6/7/2007 9:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

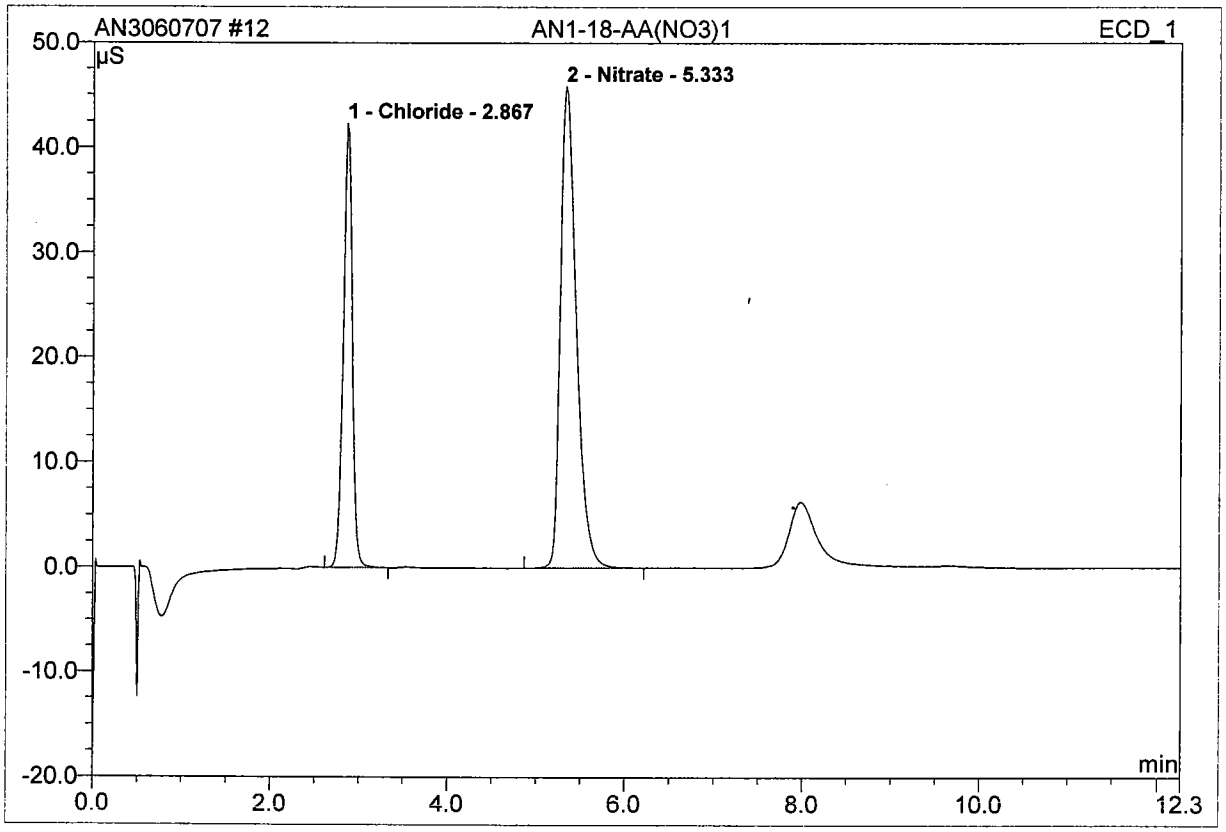


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.58	Nitrite	68.120	10.959	100.00	96% 95.912	BMB
Total:			68.120	10.959	100.00	95.912	

JU 6/12/07

12 AN1-18-AA(NO3)1

Sample Name:	**AN1-18-AA(NO3)1**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 9:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

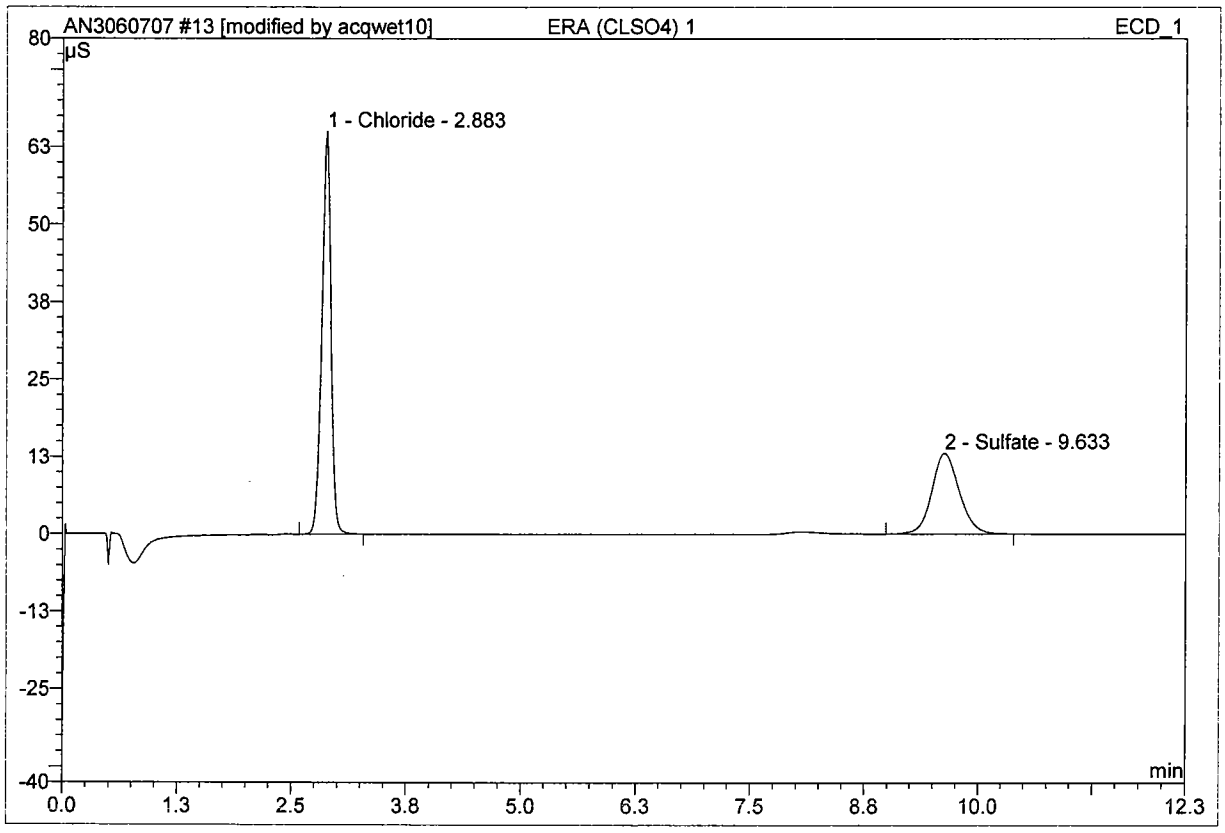


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.87	Chloride	42.300	4.836	33.55	6.231	BMB
2	5.33	Nitrate	45.859	9.579	66.45	104% 5.284	BMB
Total:			88.159	14.415	100.00	11.515	

6/12/07

13 ERA (CLSO4) 1

Sample Name:	**ERA (CLSO4) 1**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 9:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.88	Chloride	65.066	7.463	61.86	4.808	BMB
2	9.63	Sulfate	13.077	4.602	38.14	4.871	BMB*
Total:			78.142	12.065	100.00	9.679	

After Initials JS

JUN 07 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

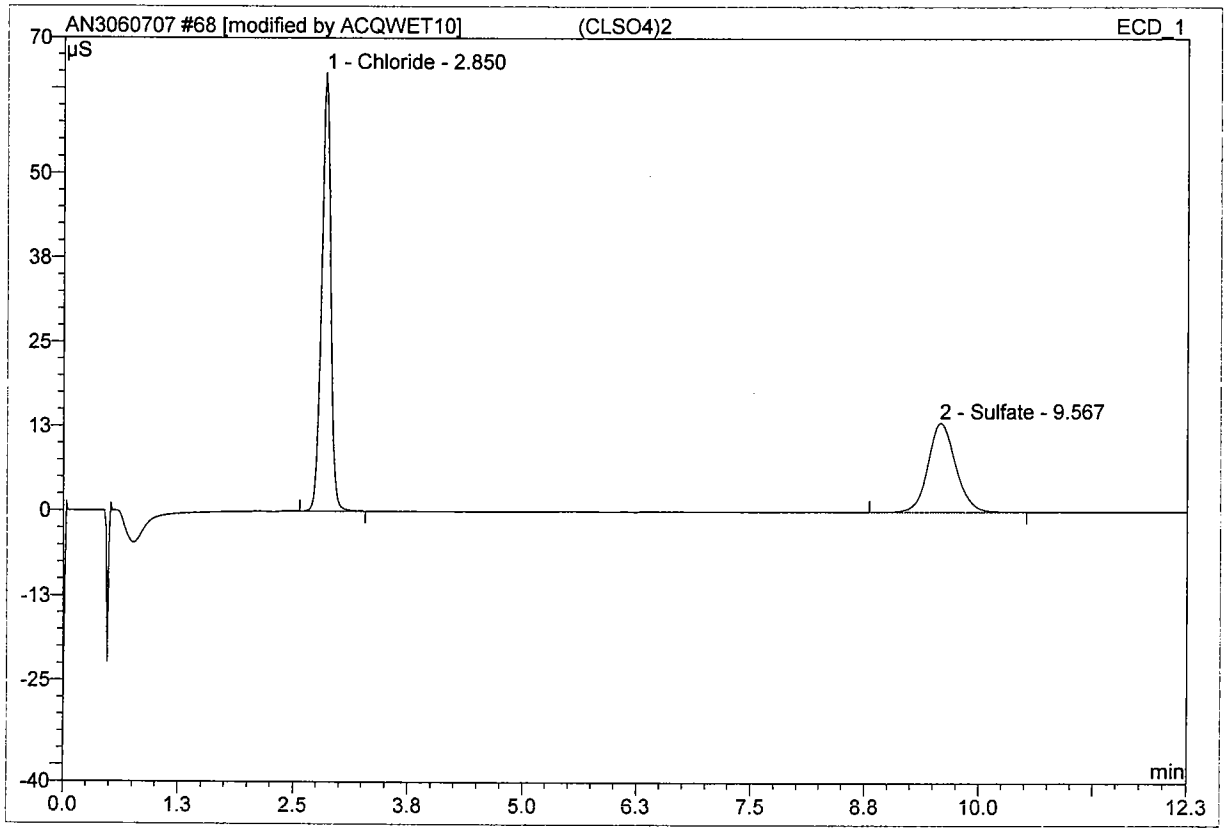
06/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

68 (CLSO4)2

Sample Name:	**(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**96**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.85	Chloride	64.816	7.451	61.71	96% 4.800	BMB
2	9.57	Sulfate	13.146	4.624	38.29	98% 4.895	BMB*
Total:			77.962	12.075	100.00	9.694	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

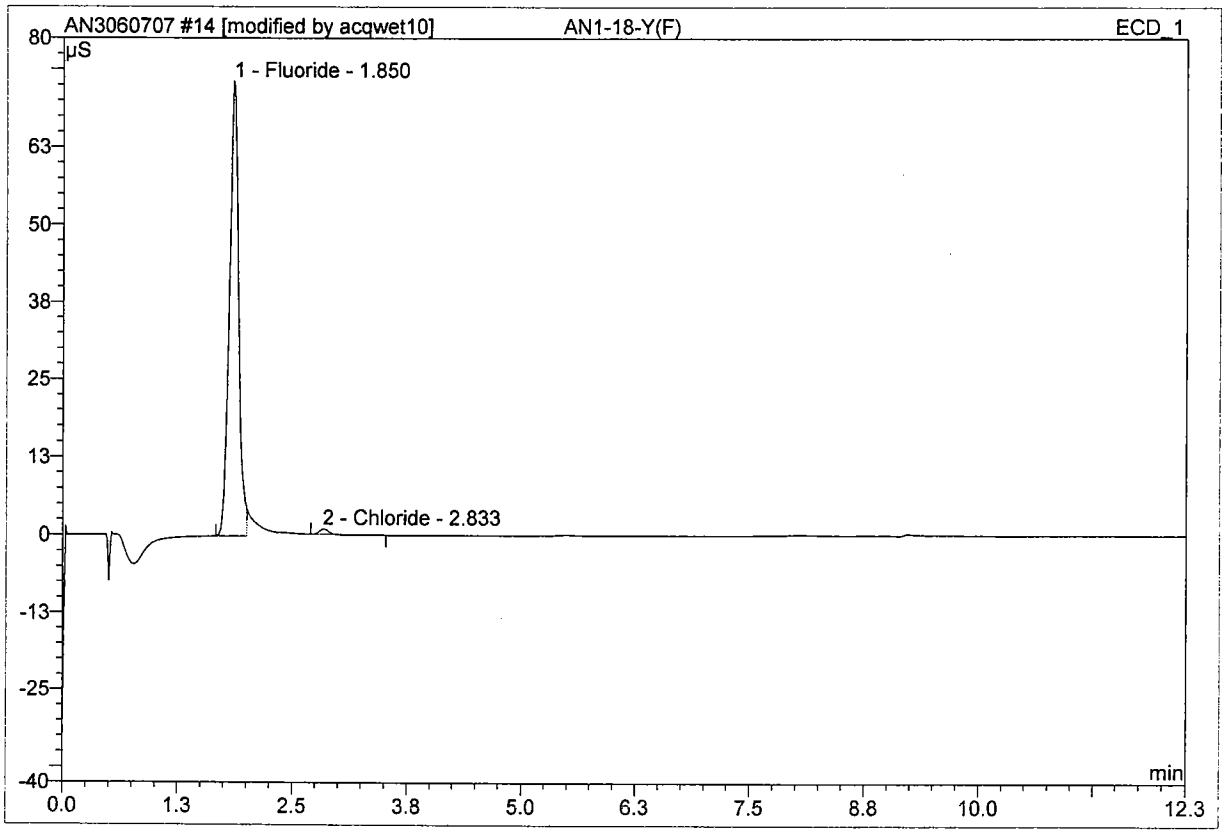
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

14 AN1-18-Y(F)

Sample Name:	**AN1-18-Y(F)**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 10:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	73.214	8.591	99.03	10% 10.006	BM *
2	2.83	Chloride	0.877	0.084	0.97	0.108	BMB*
Total:			74.091	8.675	100.00	10.114	

After
Initials JS

JUN 0 7 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

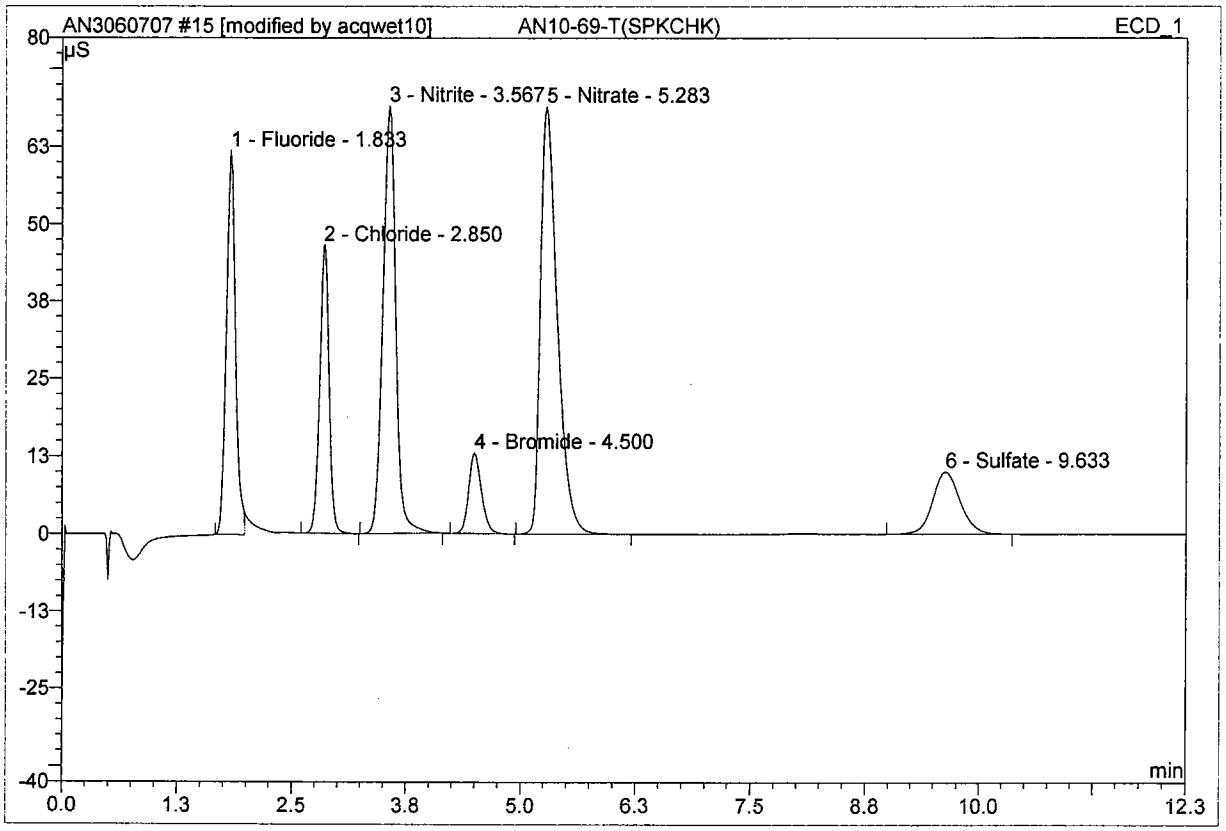
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

15 AN10-69-T(SPKCHK)

Sample Name:	**AN10-69-T(SPKCHK)**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 10:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride %rec=105	62.034	7.140	16.13	4.158	BM *
2	2.85	Chloride %rec=90	46.522	5.622	12.70	3.622	BMB*
3	3.57	Nitrite %rec=98	68.967	11.165	25.23	3.909	BMB*
4	4.50	Bromide %rec=100	12.945	2.128	4.81	4.009	BMB
5	5.28	Nitrate %rec=103	68.901	14.696	33.20	4.054	BMB
6	9.63	Sulfate %rec=93	9.987	3.508	7.93	3.714	BMB*
Total:			269.357	44.259	100.00	23.465	

After Initials JS

JUN 07 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

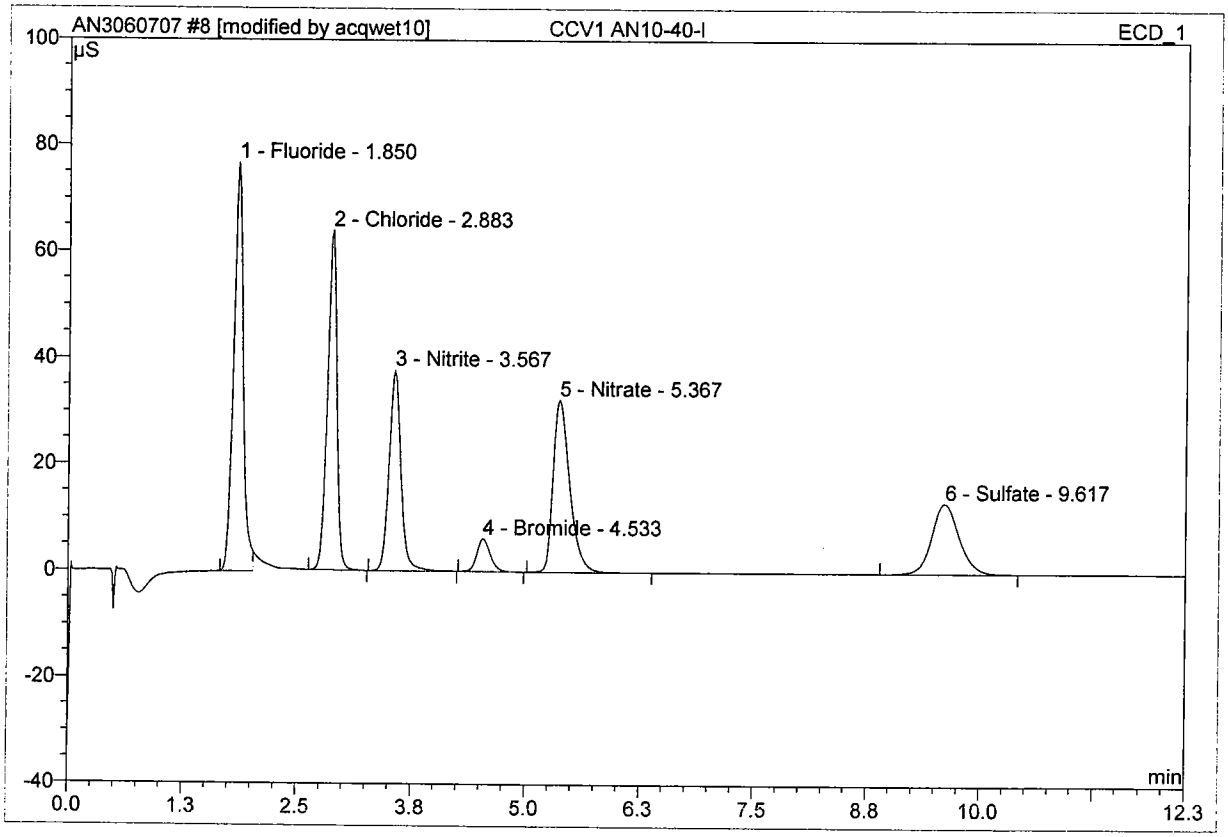
190

6/12/07

default/Integration

8 CCV1 AN10-40-I

Sample Name:	**CCV1 AN10-40-I**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 8:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	76.827	9.221	26.43	108% 5.369	BM *
2	2.88	Chloride	63.818	7.573	21.71	98% 4.878	BMB*
3	3.57	Nitrite	37.800	5.688	16.31	100% 1.991	BMB*
4	4.53	Bromide	6.095	1.034	2.96	95% 1.948	BMB*
5	5.37	Nitrate	32.348	6.758	19.37	95% 1.864	BMB*
6	9.62	Sulfate	13.120	4.610	13.22	98% 4.880	BMB*
Total:			230.009	34.883	100.00	20.930	

After
Initials JS

JUN 0 7 2007

6/12/07

default/Integration

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

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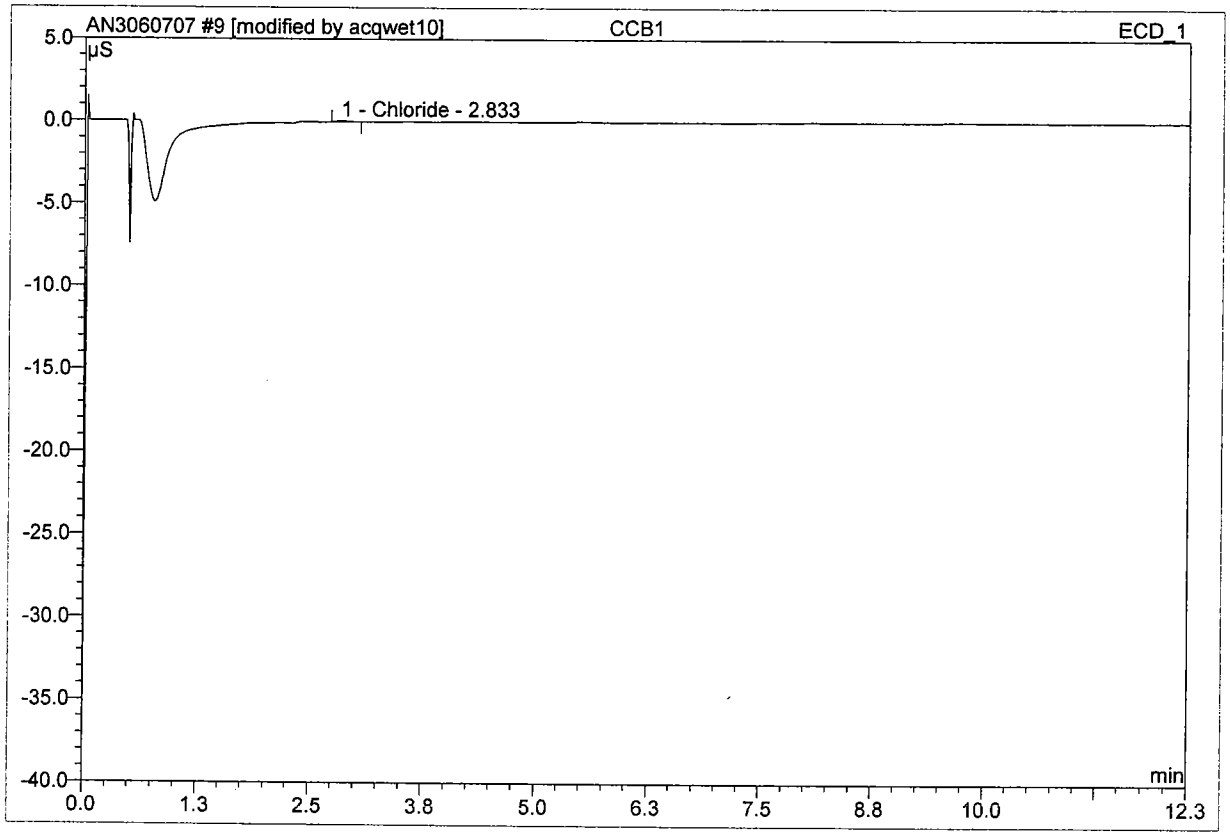
Version 6.50 SP1 Build 956

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 8:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride <0.2	0.070	0.008	100.00	0.005	BMB*
Total:			0.070	0.008	100.00	0.005	

After
Initials JS

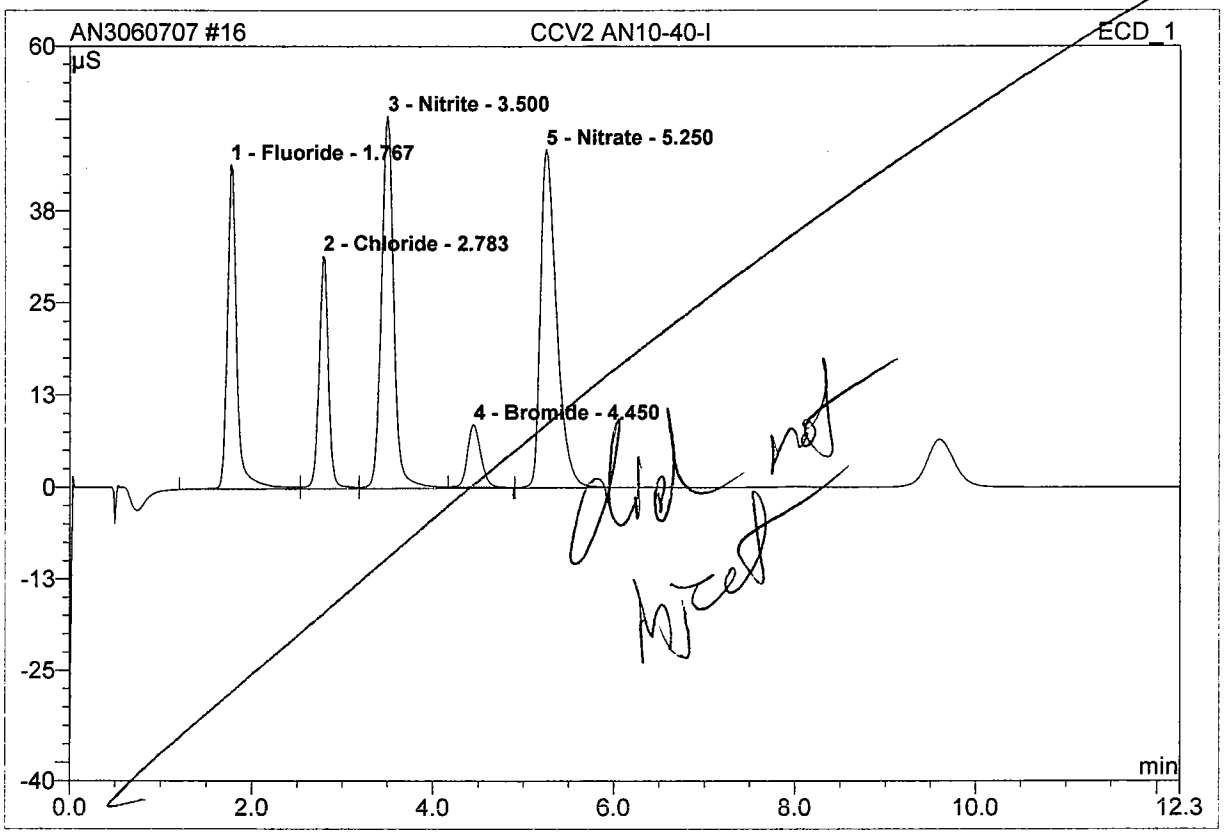
JUN 07 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

6/12/07

16 CCV2 AN10-40-I

Sample Name:	**CCV2 AN10-40-I**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 10:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



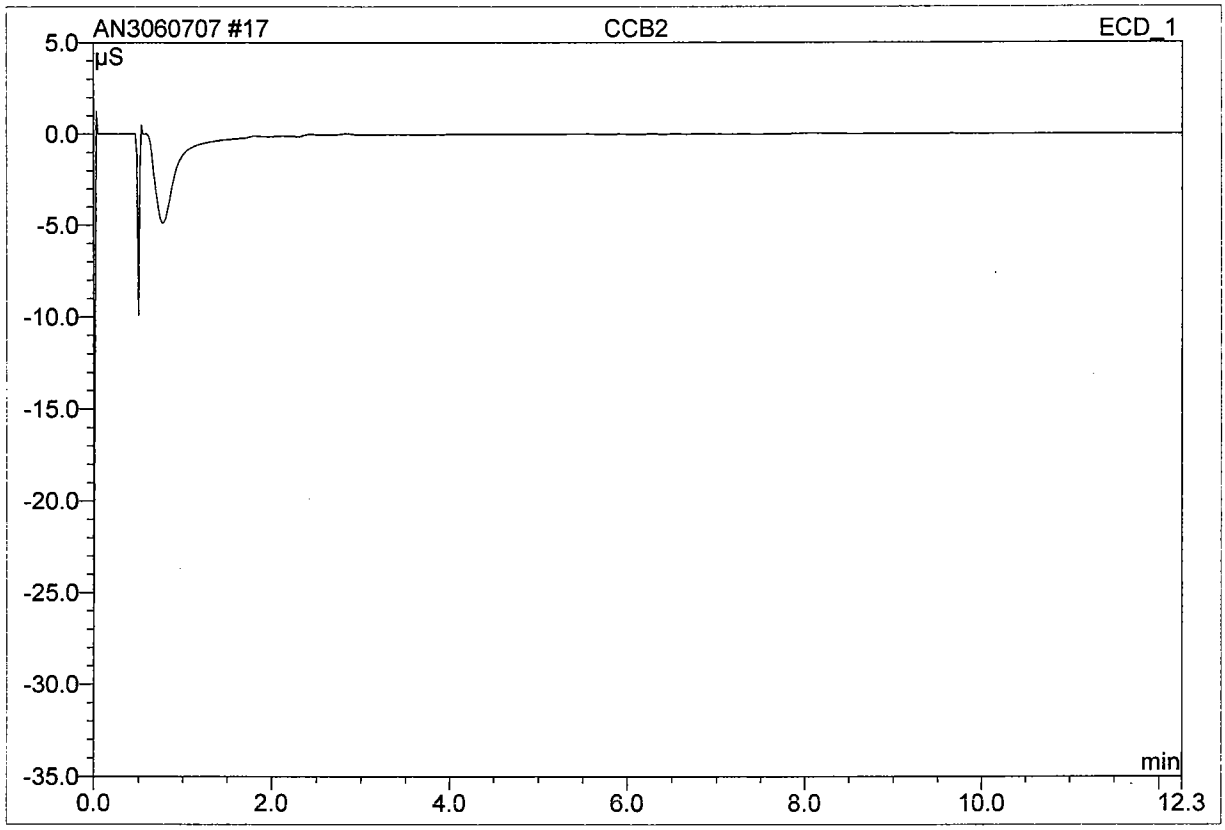
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.77	Fluoride	44.144	5.337	18.85	3.108	BM
2	2.78	Chloride	31.614	3.839	13.56	2.473	M
3	3.50	Nitrite	50.658	8.072	28.51	2.826	M
4	4.45	Bromide	8.462	1.417	5.01	2.670	Rd
5	5.25	Nitrate	46.007	9.647	34.07	2.661	MB
Total:			180.885	28.311	100.00	13.737	

Before

JUN 0 7 2007

17 CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 10:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**

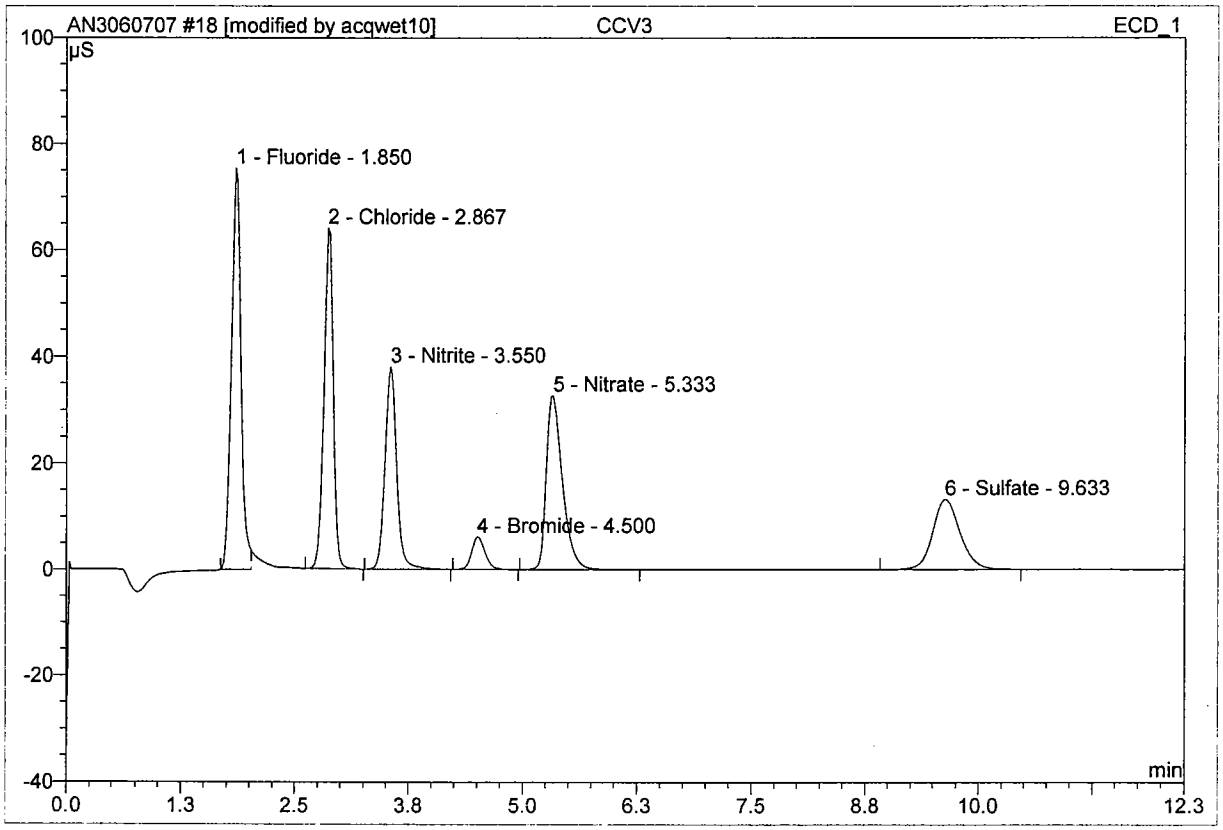


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

JL 6/12/07

18 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 11:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.418	9.089	26.20	100% 5.293	BM *
2	2.87	Chloride	64.056	7.564	21.80	98% 4.872	BMB*
3	3.55	Nitrite	38.036	5.665	16.33	100% 1.983	BMB*
4	4.50	Bromide	6.124	1.032	2.97	95% 1.944	BMB*
5	5.33	Nitrate	32.725	6.738	19.42	95% 1.859	BMB*
6	9.63	Sulfate	13.216	4.606	13.28	98% 4.876	BMB*
Total:			229.575	34.694	100.00	20.827	

After Initials JS

JUN 07 2007

06/12/07

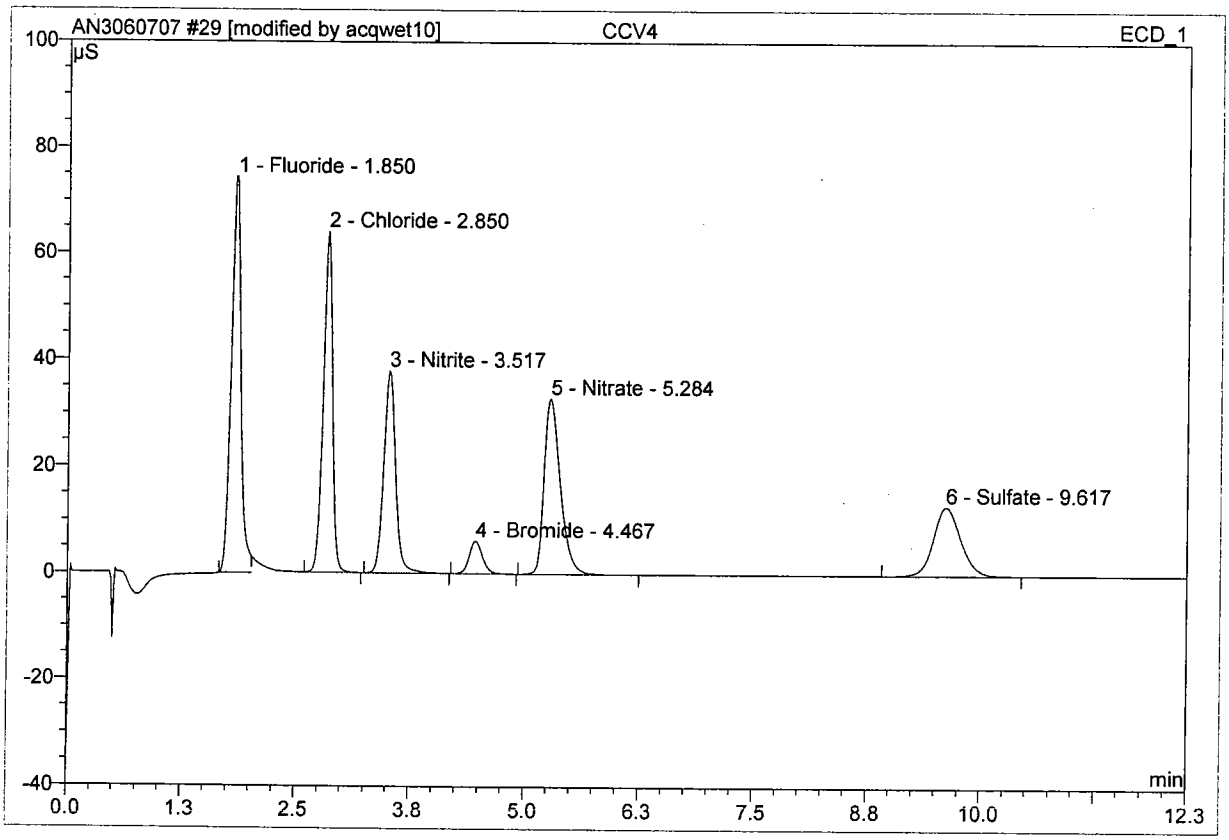
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

29 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**57**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 16:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	74.507	9.103	26.39	106% 5.301	BM *
2	2.85	Chloride	64.029	7.491	21.71	96% 4.825	BMB*
3	3.52	Nitrite	37.871	5.658	16.40	100% 1.981	BMB*
4	4.47	Bromide	6.130	1.016	2.94	95% 1.914	BMB*
5	5.28	Nitrate	32.922	6.728	19.50	95% 1.856	BMB*
6	9.62	Sulfate	12.949	4.501	13.05	96% 4.765	BMB*
Total:			228.408	34.497	100.00	20.642	

After
Initials JS

JUN 0 7 2007

06/12/07

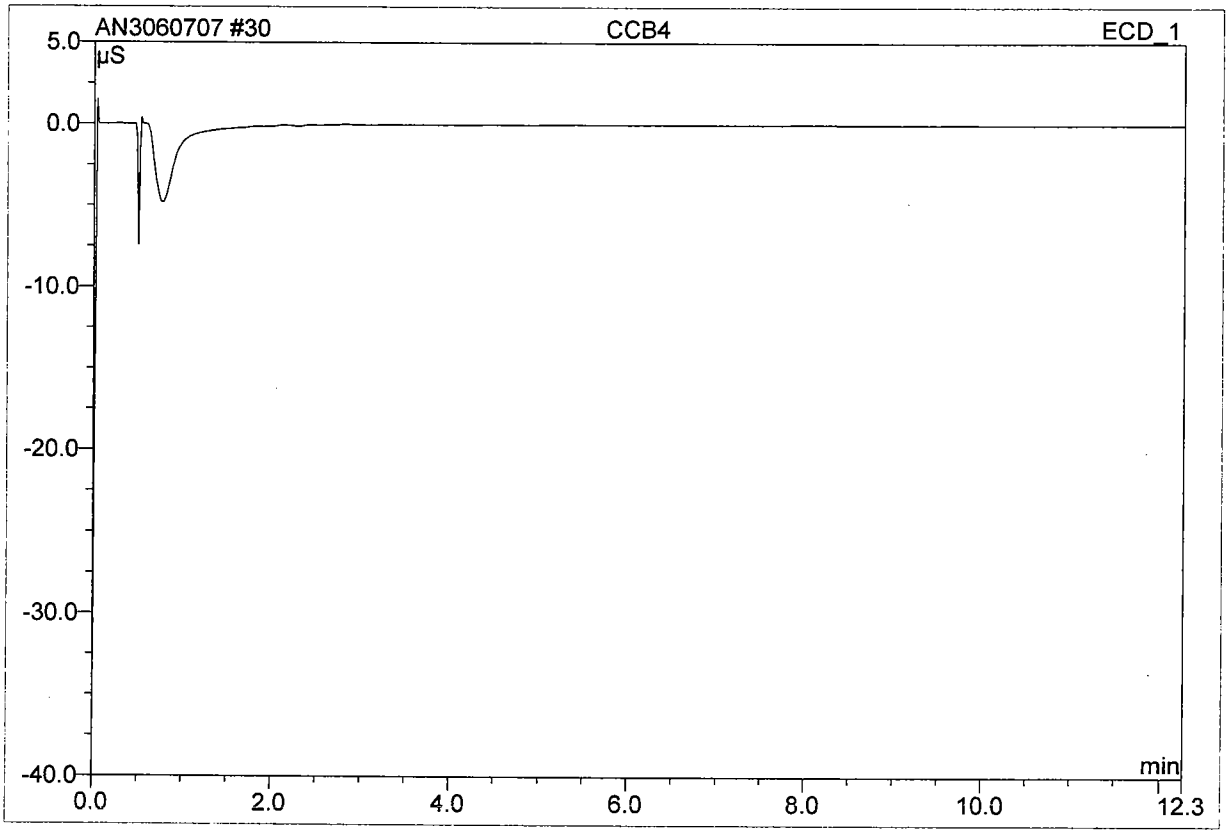
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

30 CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**58**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 16:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

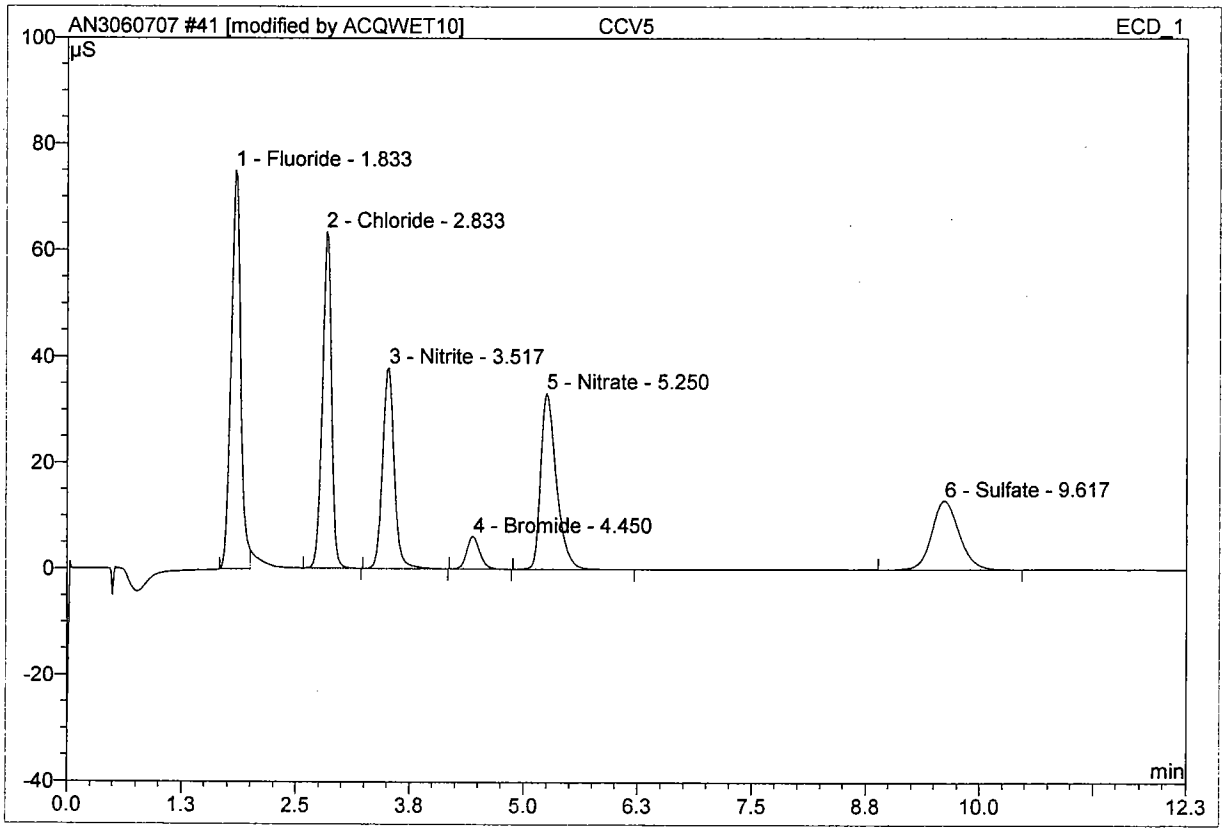
GV 6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

41 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 18:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	75.059	9.060	26.33	106% 5.276	BM *
2	2.83	Chloride	63.389	7.479	21.74	96% 4.818	BMB*
3	3.52	Nitrite	37.937	5.632	16.37	100% 1.972	BMB*
4	4.45	Bromide	6.130	1.018	2.96	95% 1.918	BMB*
5	5.25	Nitrate	33.239	6.690	19.45	90% 1.845	BMB*
6	9.62	Sulfate	12.972	4.524	13.15	96% 4.789	BMB*
Total:			228.726	34.404	100.00	20.618	

After Initials JS

JUN 08 2007

06/12/07

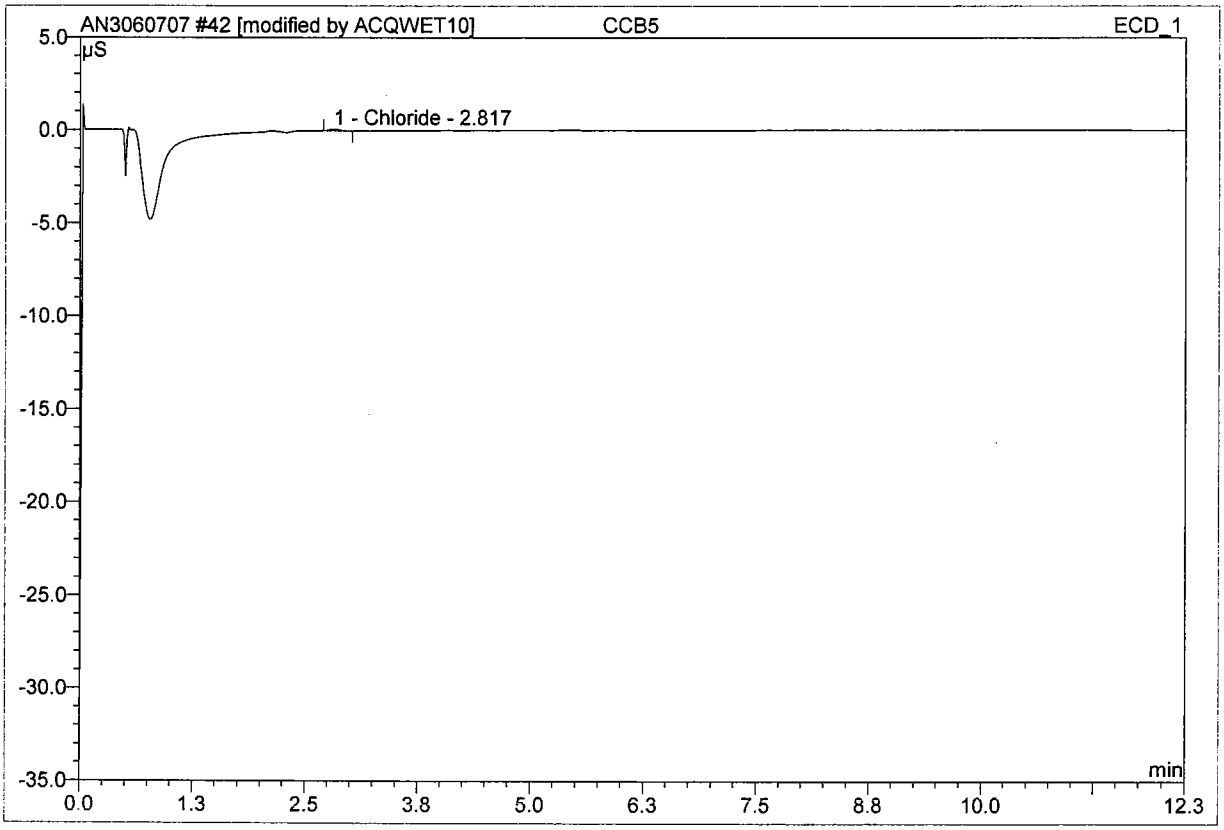
default/Integration

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

42 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**70**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 19:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride <0.2	0.094	0.011	100.00	0.007	BMB*
Total:			0.094	0.011	100.00	0.007	

After
Initials LS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

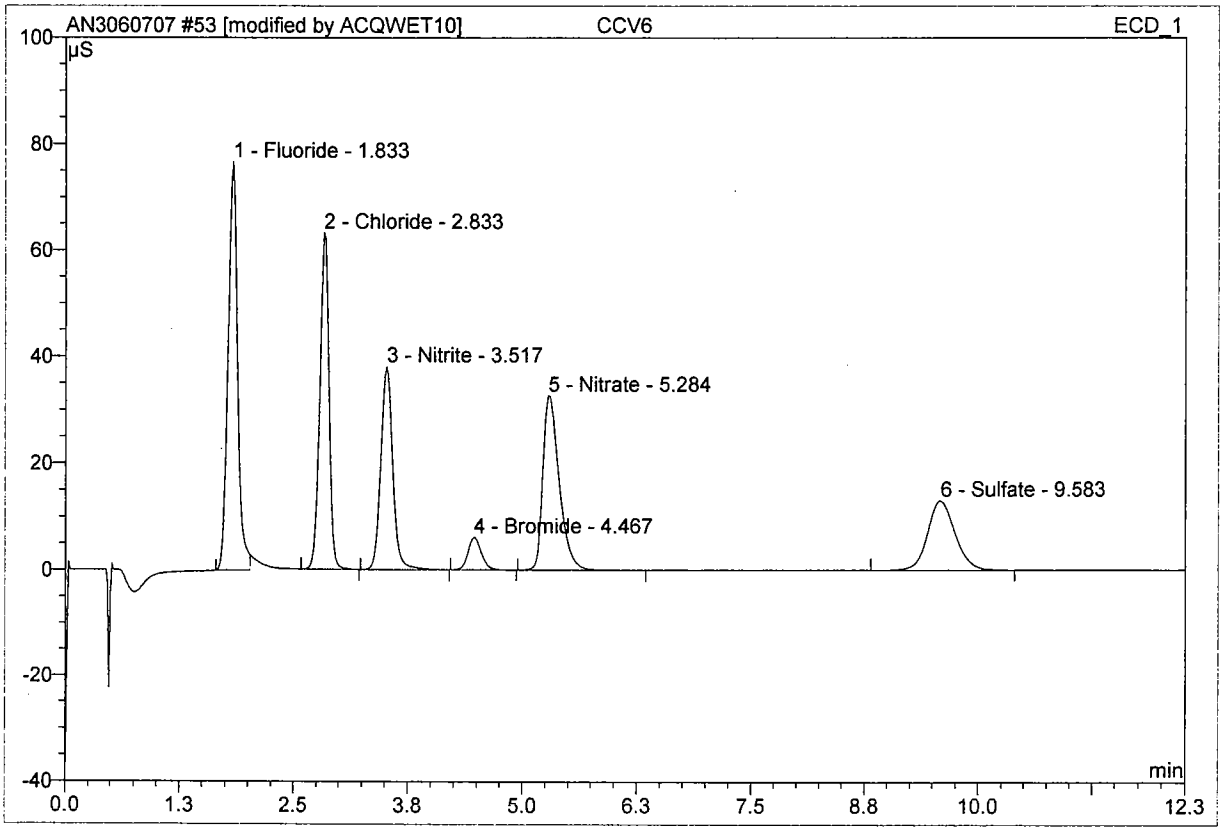
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

53 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**81**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 21:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	76.746	9.272	26.67	108% 5.399	BM *
2	2.83	Chloride	63.231	7.495	21.56	96% 4.828	BMB*
3	3.52	Nitrite	38.056	5.693	16.37	100% 1.993	BMB*
4	4.47	Bromide	6.102	1.024	2.94	95% 1.928	BMB*
5	5.28	Nitrate	32.670	6.759	19.44	95% 1.864	BMB*
6	9.58	Sulfate	13.013	4.529	13.03	98% 4.795	BMB*
Total:			229.819	34.772	100.00	20.808	

After Initials JS

JUN 08 2007

6/12/07

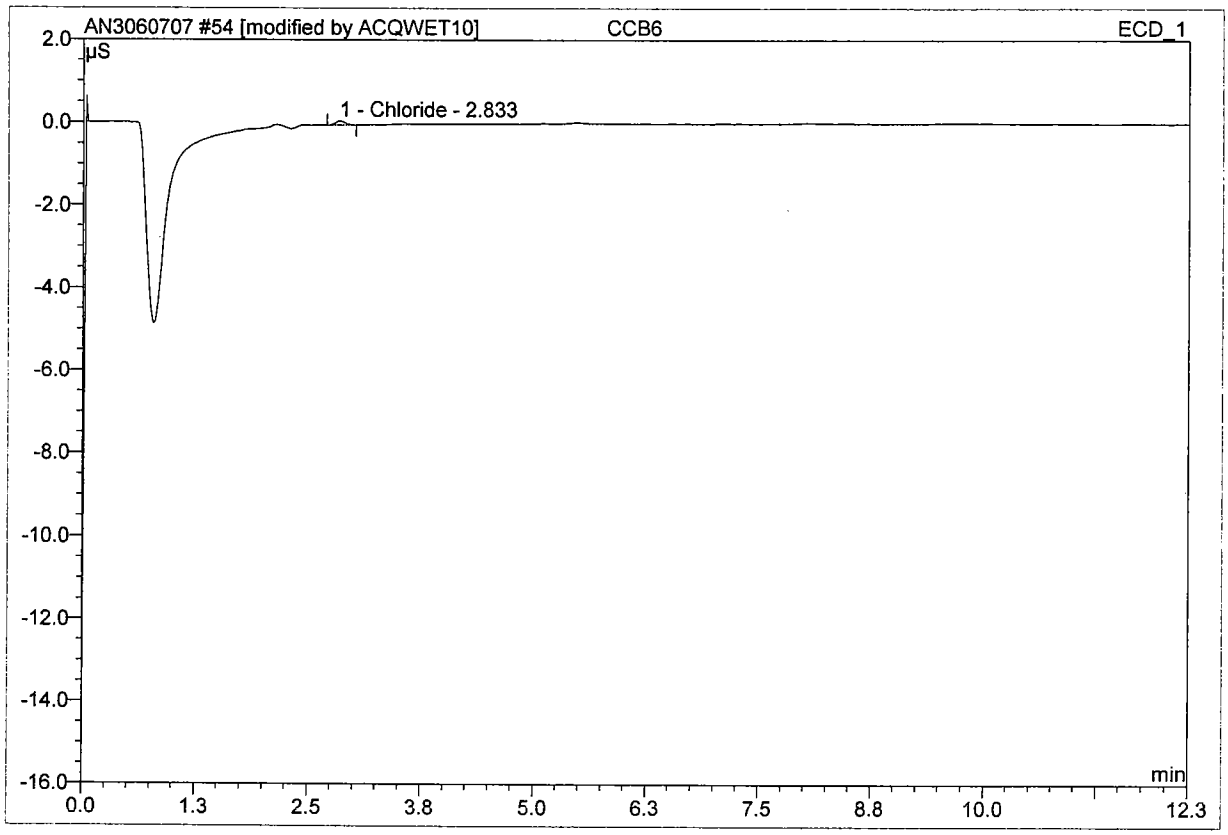
default/Integration

☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

54 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**82**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 22:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride Cor	0.101	0.012	100.00	0.008	BMB*
Total:			0.101	0.012	100.00	0.008	

After Initials JS

JUN 08 2007

6/12/07

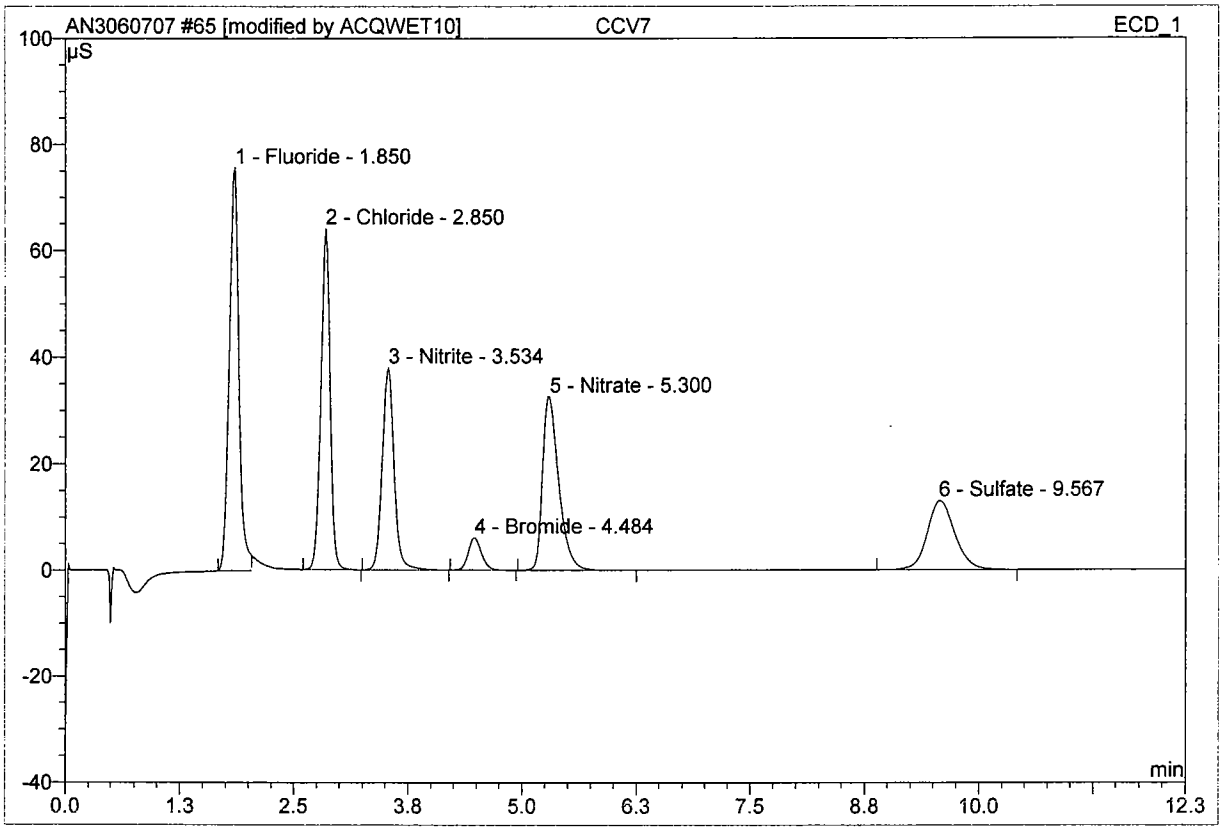
default/Integration

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

65 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 0:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.702	9.205	26.53	106% 5.361	BM *
2	2.85	Chloride	64.049	7.528	21.69	96% 4.849	BMB*
3	3.53	Nitrite	37.977	5.676	16.36	100% 1.987	BMB*
4	4.48	Bromide	6.075	1.020	2.94	95% 1.921	BMB*
5	5.30	Nitrate	32.625	6.739	19.42	95% 1.859	BMB*
6	9.57	Sulfate	12.997	4.535	13.07	96% 4.800	BMB*
Total:			229.425	34.703	100.00	20.777	

After
Initials JS

JUN 08 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

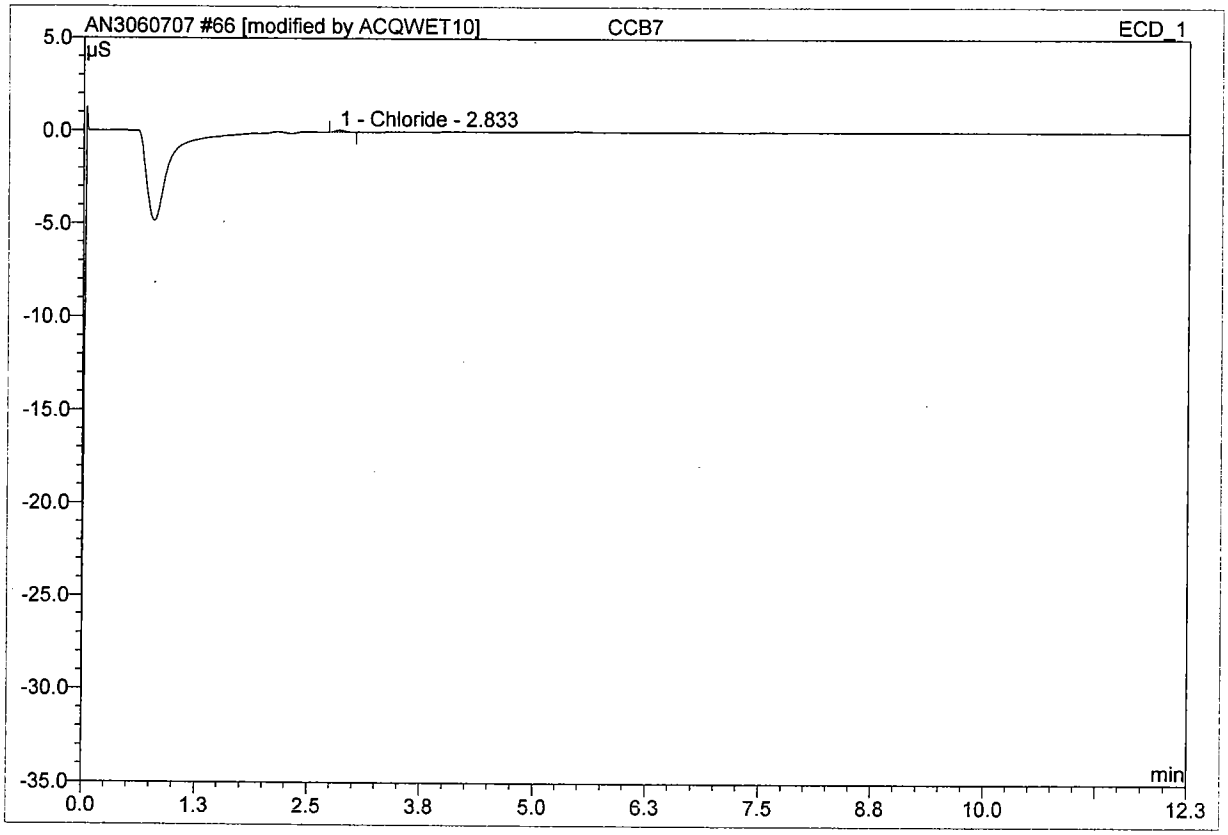
06/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

66 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**94**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.83	Chloride 20.2	0.101	0.012	100.00	0.007	BMB*
Total:			0.101	0.012	100.00	0.007	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

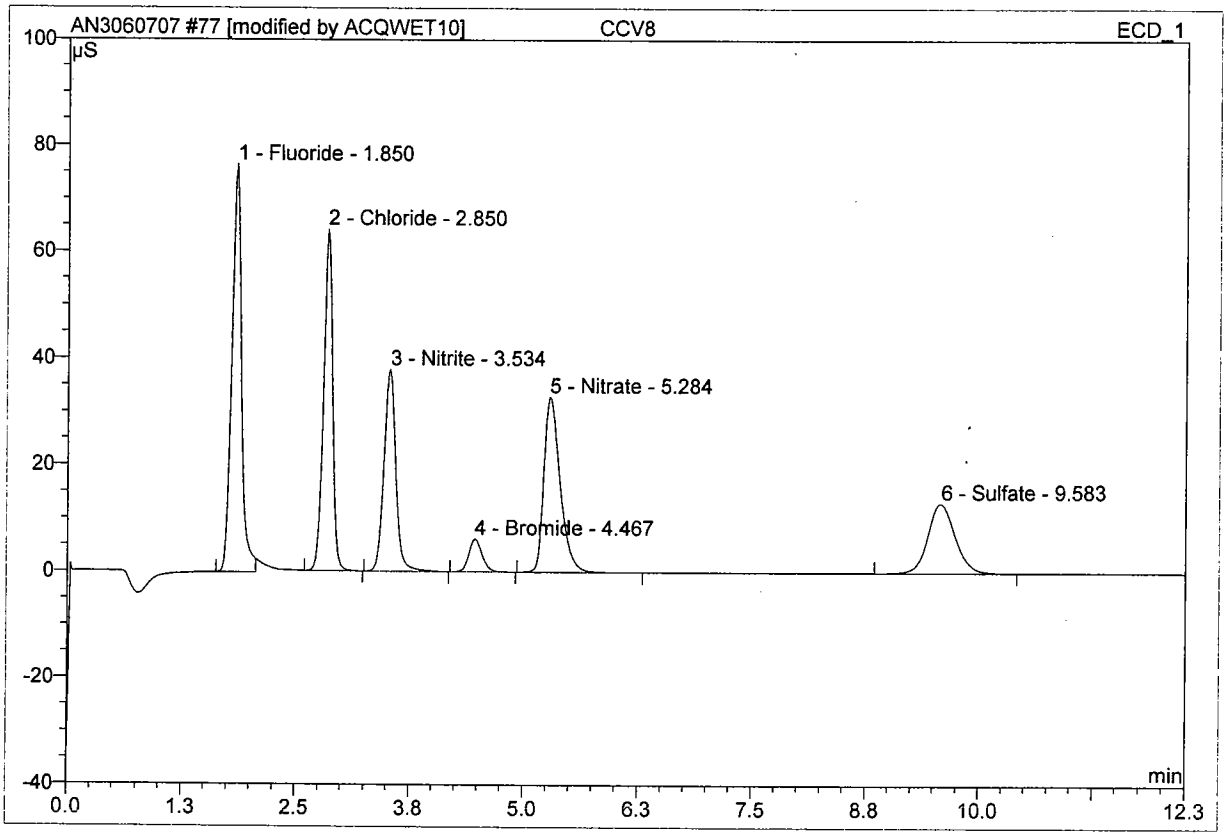
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

77 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 3:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	76.562	9.366	26.87	110% 5.454	BM *
2	2.85	Chloride	64.120	7.527	21.59	96% 4.848	BMB*
3	3.53	Nitrite	37.903	5.656	16.22	100% 1.980	BMB*
4	4.47	Bromide	6.108	1.022	2.93	98% 1.925	BMB*
5	5.28	Nitrate	32.856	6.761	19.39	95% 1.865	BMB*
6	9.58	Sulfate	13.014	4.532	13.00	96% 4.797	BMB*
Total:			230.561	34.862	100.00	20.869	

After Initials JS

JUN 08 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

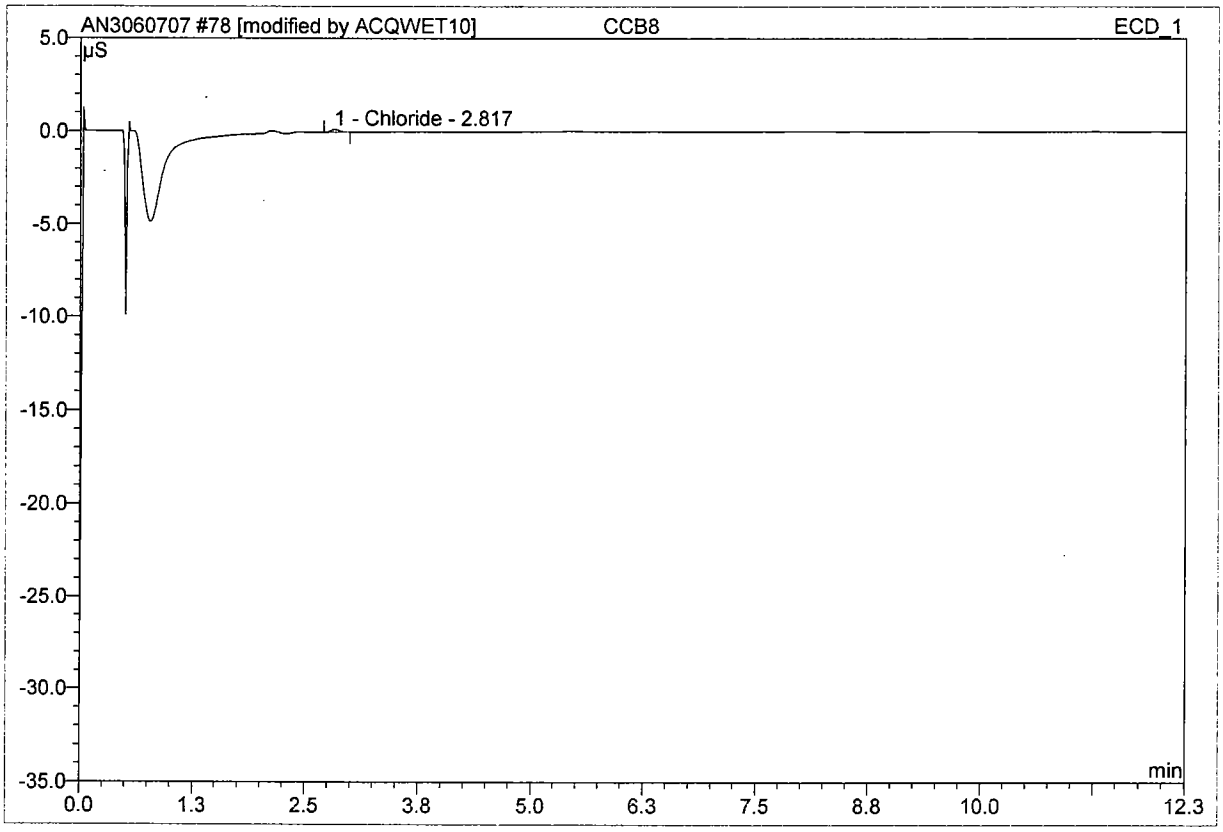
JH 6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

78 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**106**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 4:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.82	Chloride <0.2	0.143	0.016	100.00	0.011	BMB*
Total:			0.143	0.016	100.00	0.011	

After Initials JS

JUN 08 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

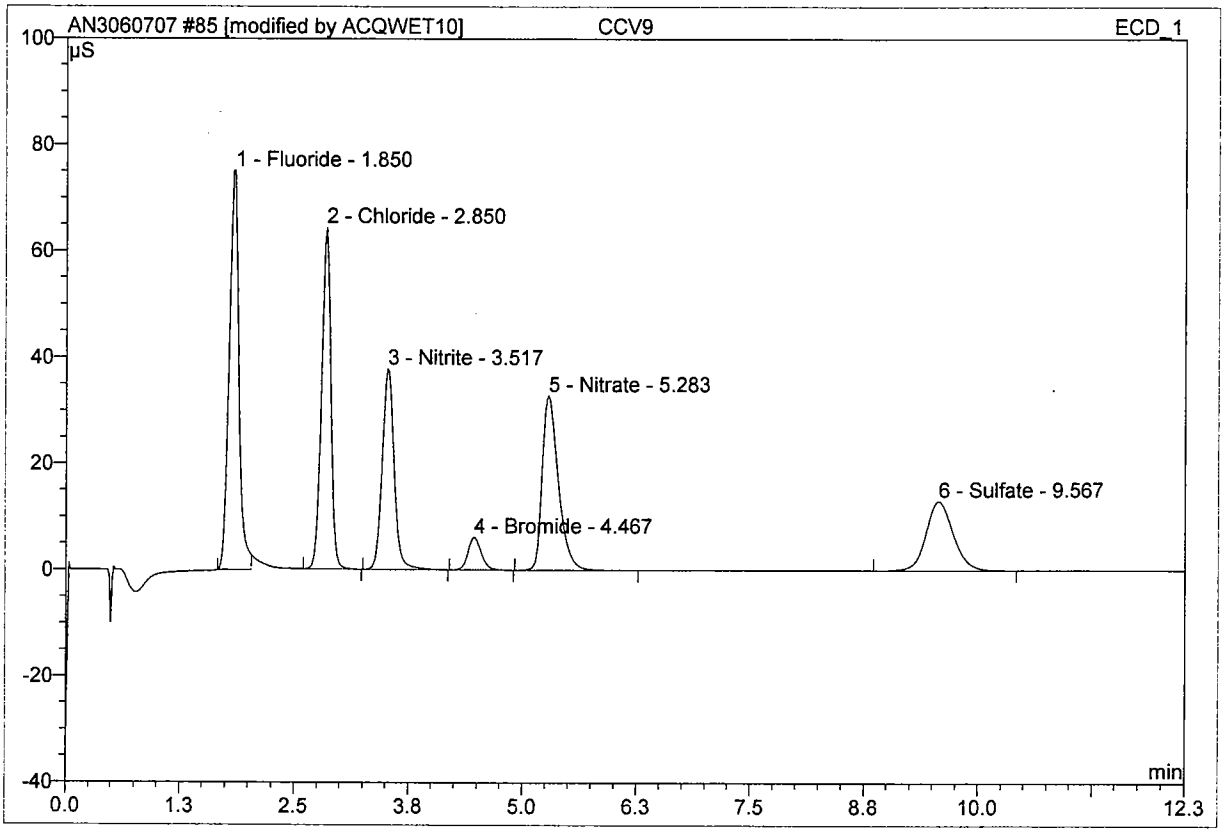
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

85 CCV9

Sample Name:	**CCV9**	*Injection Volume:*	**200.0**
Vial Number:	**113**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 5:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.151	9.253	26.65	108% 5.388	BM *
2	2.85	Chloride	64.339	7.538	21.71	96% 4.856	BMB*
3	3.52	Nitrite	37.842	5.662	16.31	100% 1.982	BMB*
4	4.47	Bromide	6.125	1.022	2.94	95% 1.926	BMB*
5	5.28	Nitrate	32.866	6.734	19.39	95% 1.858	BMB*
6	9.57	Sulfate	13.008	4.515	13.00	96% 4.780	BMB*
Total:			229.332	34.725	100.00	20.789	

After Initials JS

JUN 08 2007

6/12/07

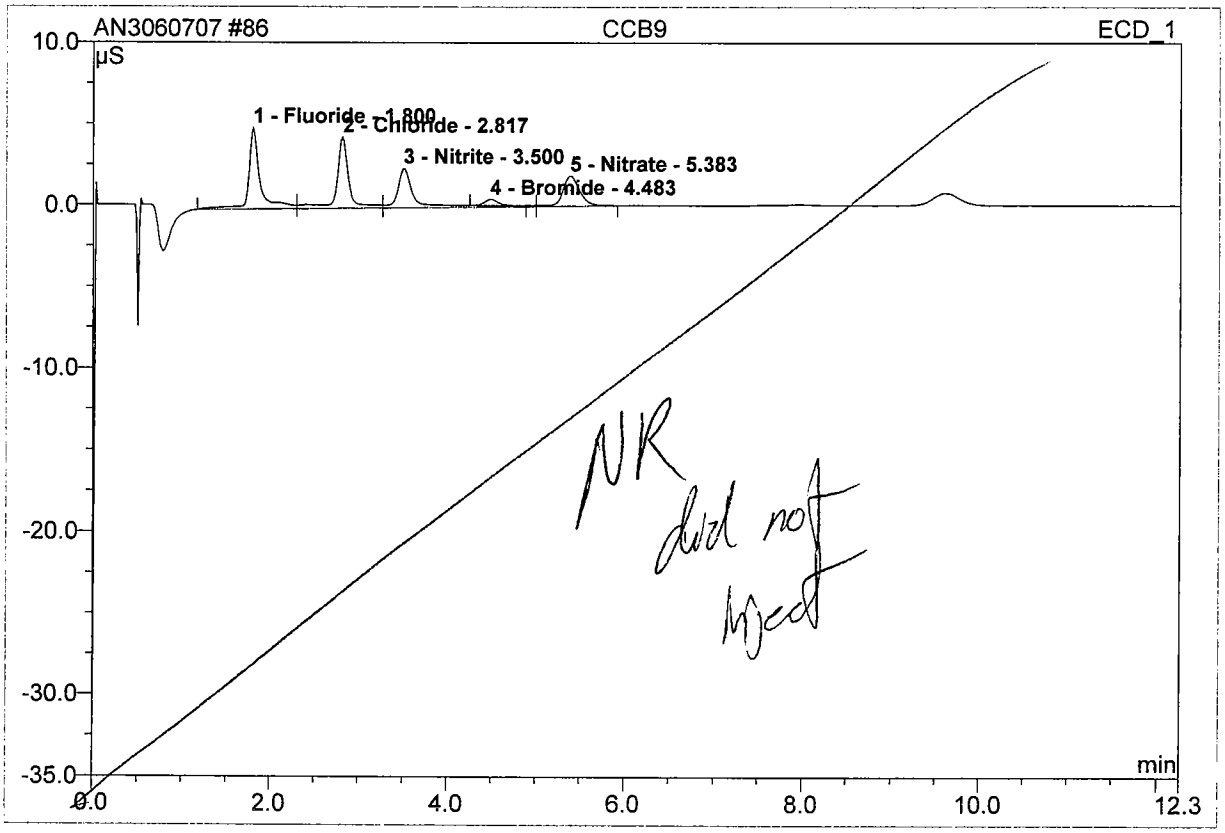
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

86 CCB9

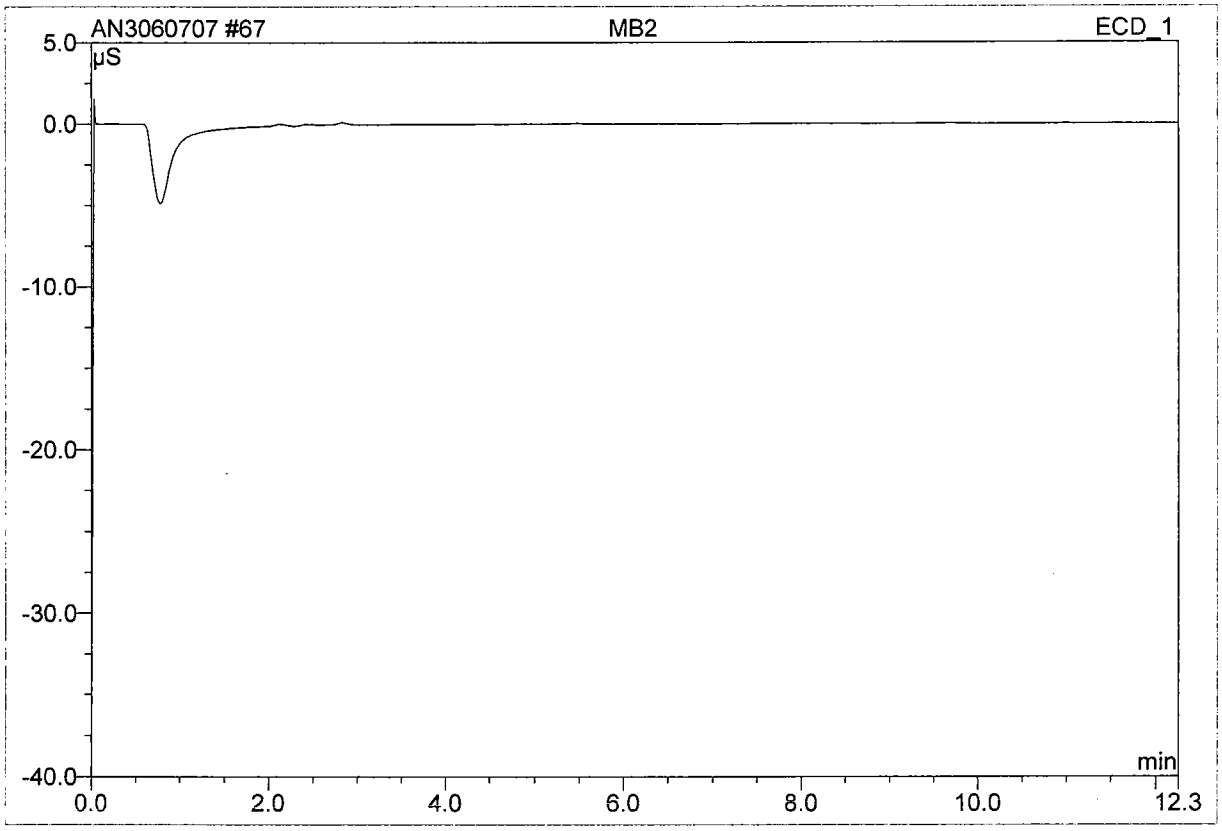
Sample Name:	**CCB9**	*Injection Volume:*	**200.0**
Vial Number:	**114**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 6:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.80	Fluoride	5.006	0.755	30.84	0.440	BM
2	2.82	Chloride	4.380	0.686	28.01	0.442	M
3	3.50	Nitrite	2.411	0.529	21.62	0.185	M
4	4.48	Bromide	0.388	0.069	2.80	0.129	Rd
5	5.38	Nitrate	1.859	0.410	16.73	0.113	MB
Total:			14.044	2.448	100.00	1.309	

67 MB2

Sample Name:	**MB2**	*Injection Volume:*	**200.0**
Vial Number:	**95**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



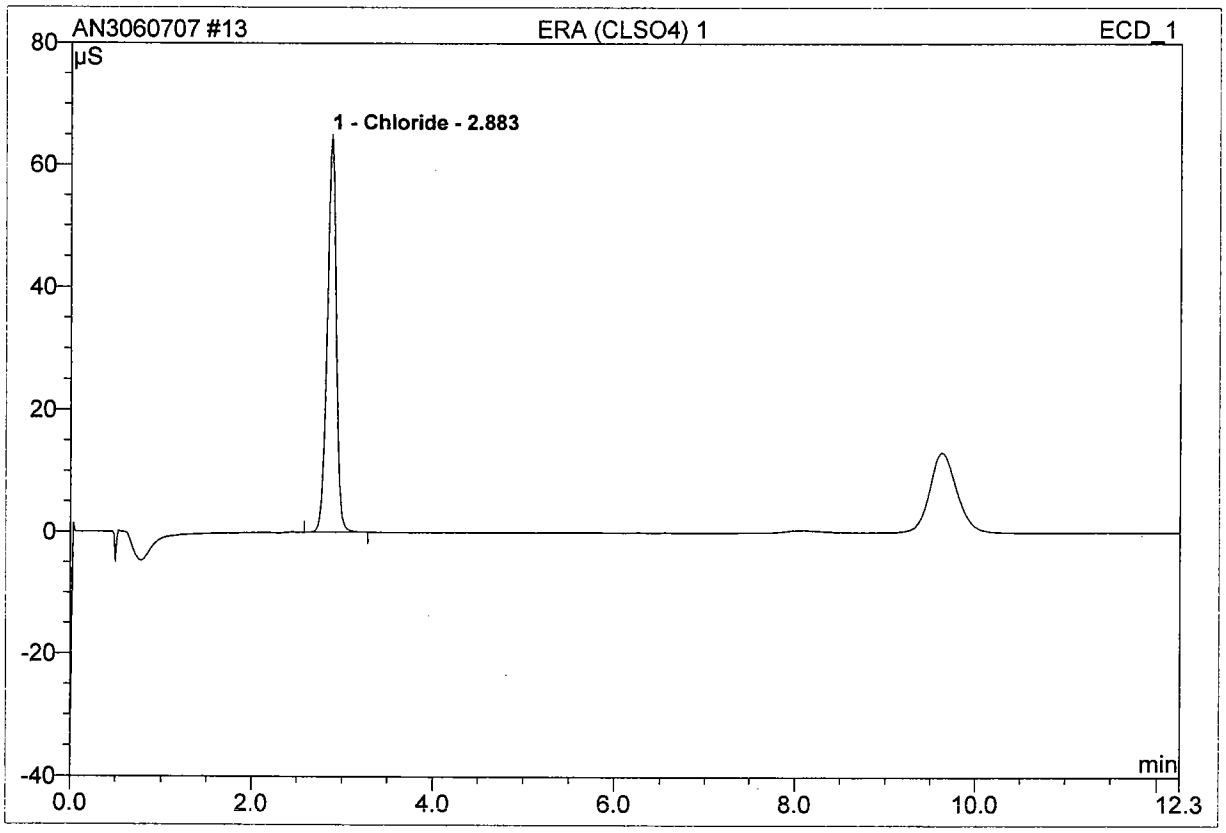
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

13 ERA (CLSO4) 1

Sample Name:	**ERA (CLSO4) 1**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 9:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



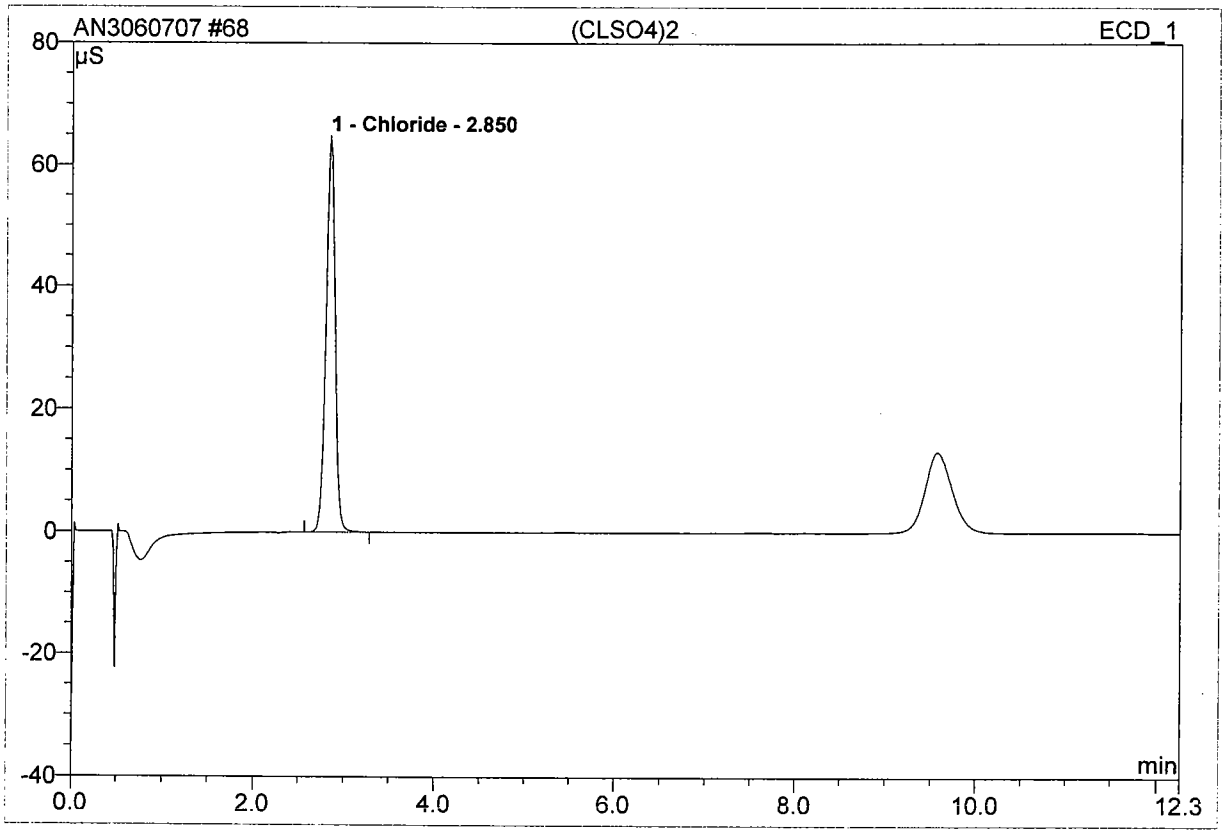
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.88	Chloride	65.066	7.463	100.00	4.808	BMB
Total:			65.066	7.463	100.00	4.808	

Before

JUN 0 7 2007

68 (CLSO4)2

Sample Name:	**(CLSO4)2**	*Injection Volume:*	**200.0**
Vial Number:	**96**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



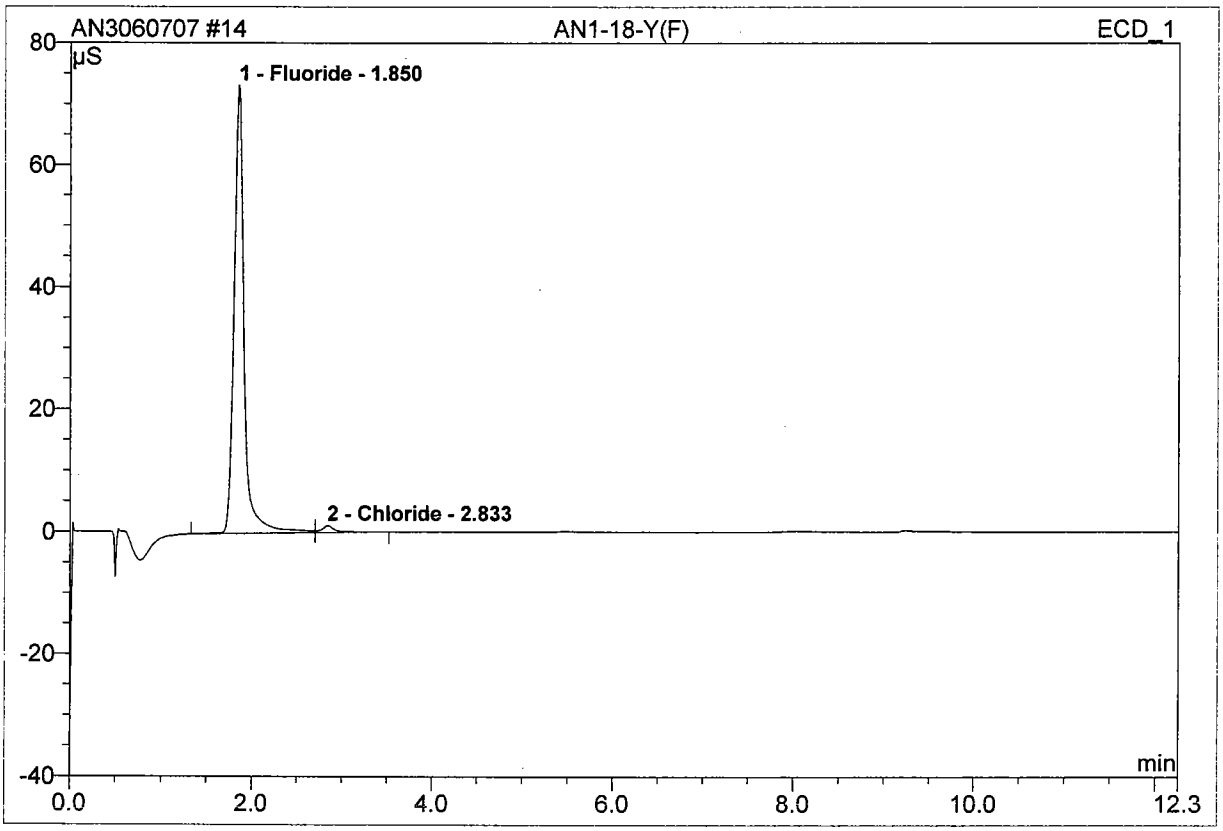
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.85	Chloride	64.816	7.451	100.00	4.800	BMB
Total:			64.816	7.451	100.00	4.800	

Before

JUN 0 8 2007

14 AN1-18-Y(F)

Sample Name:	**AN1-18-Y(F)**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**6/7/2007 10:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	73.322	9.386	97.92	10.932	BM
2	2.83	Chloride	1.113	0.199	2.08	0.257	MB
Total:			74.435	9.585	100.00	11.189	

Before

JUN 0 7 2007

JS 6/7/07

After Initials

JUN 0 7 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

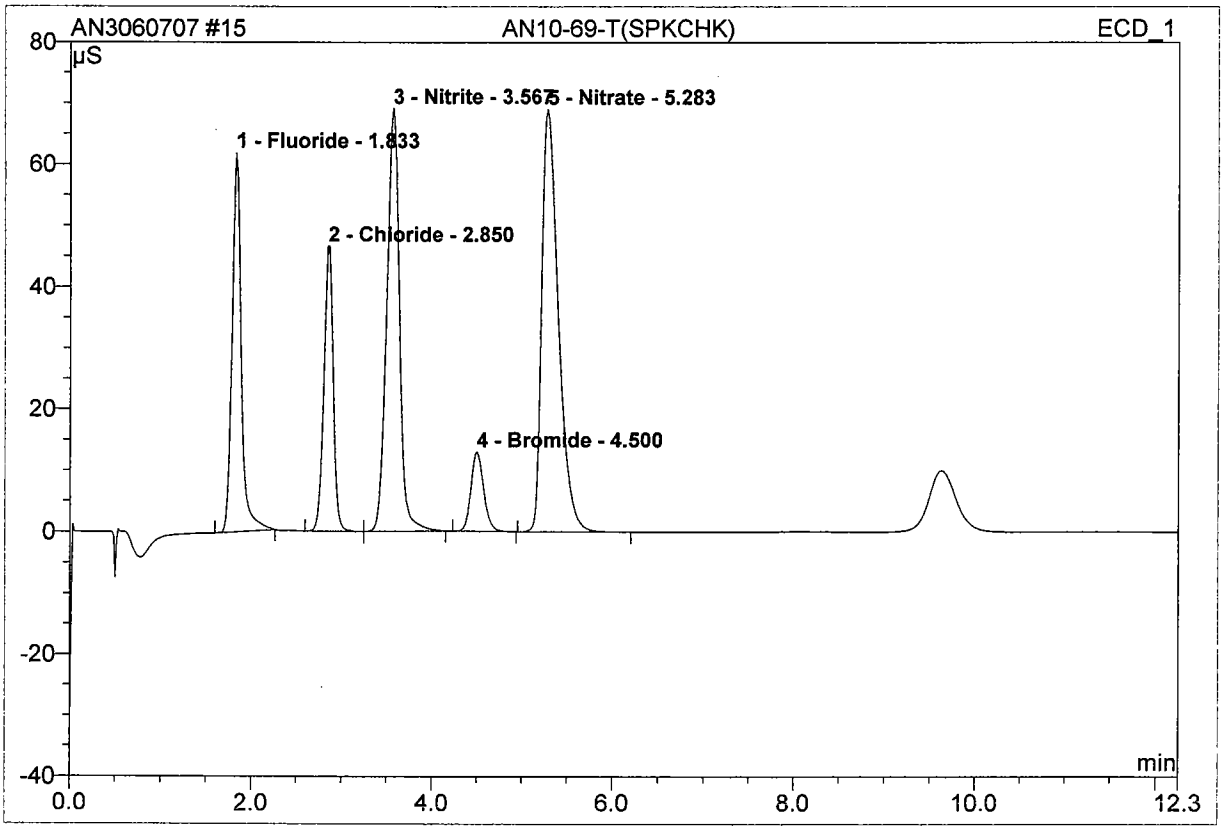
6/12/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

15 AN10-69-T(SPKCHK)

Sample Name:	**AN10-69-T(SPKCHK)**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 10:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



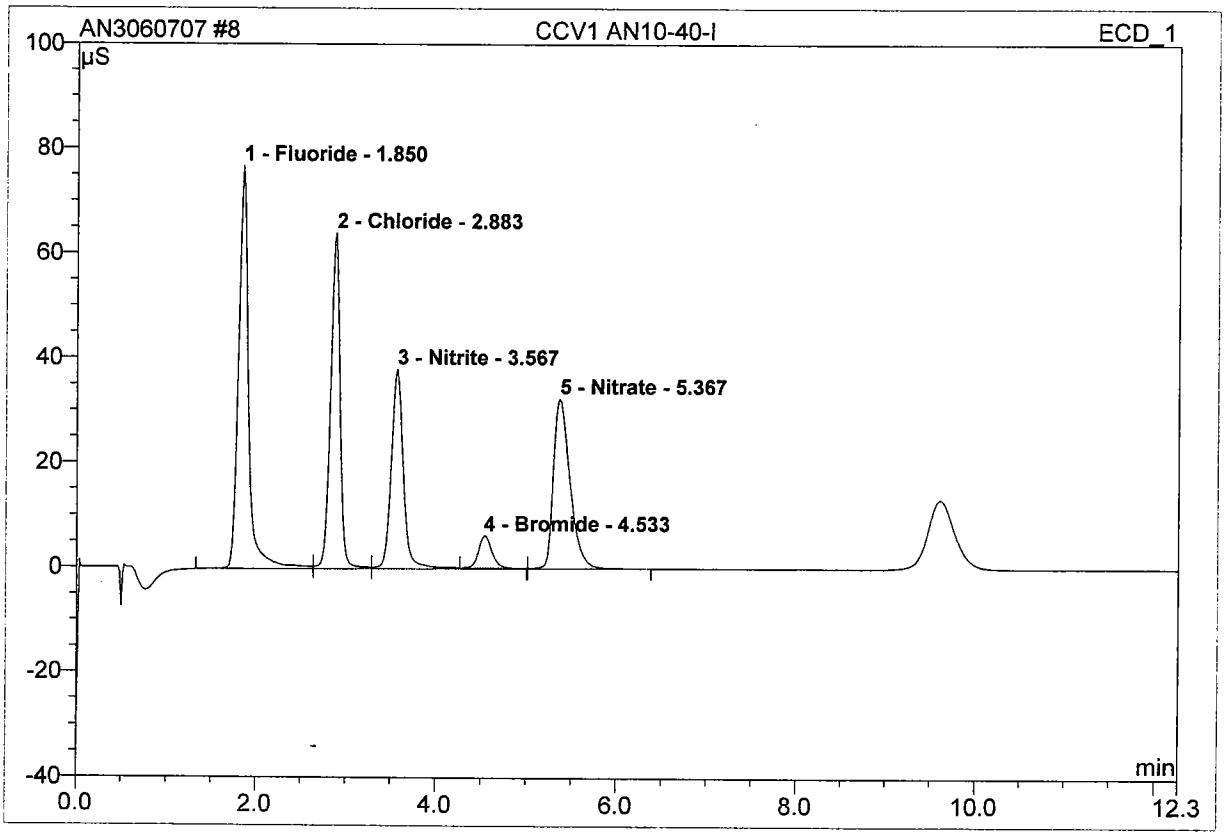
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	61.915	7.421	18.09	4.322	BMB
2	2.85	Chloride	46.522	5.622	13.70	3.622	BMb
3	3.57	Nitrite	68.967	11.165	27.21	3.909	bMB
4	4.50	Bromide	12.945	2.128	5.19	4.009	BMB
5	5.28	Nitrate	68.901	14.696	35.82	4.054	BMB
Total:			259.251	41.033	100.00	19.915	

Before

JUN 0 7 2007

8 CCV1 AN10-40-I

Sample Name:	**CCV1 AN10-40-I**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 8:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



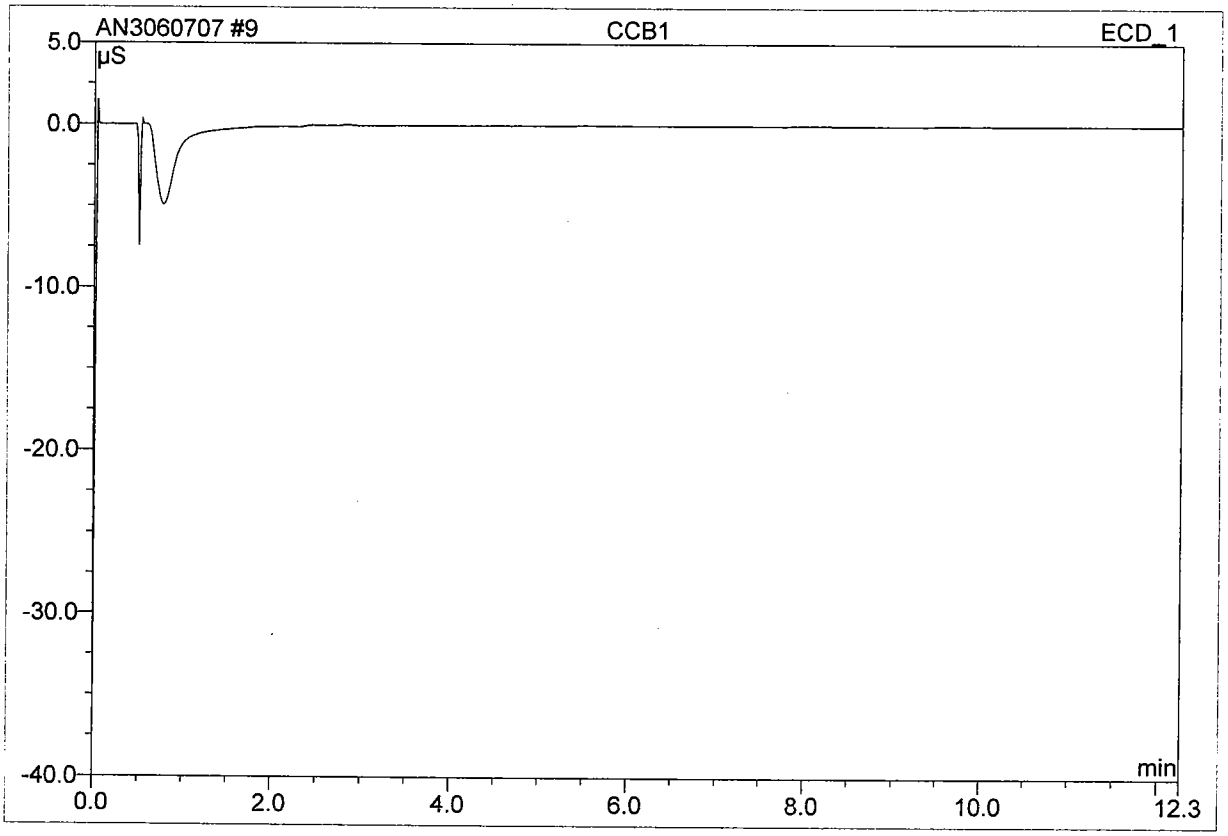
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	77.025	10.044	31.55	5.849	BM
2	2.88	Chloride	64.222	7.824	24.57	5.040	M
3	3.57	Nitrite	38.088	6.095	19.14	2.134	M
4	4.53	Bromide	6.096	1.034	3.25	1.948	Rd
5	5.37	Nitrate	32.442	6.843	21.49	1.888	MB
Total:			217.873	31.840	100.00	16.858	

Before

JUN 0 7 2007

9 CCB1

Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 8:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



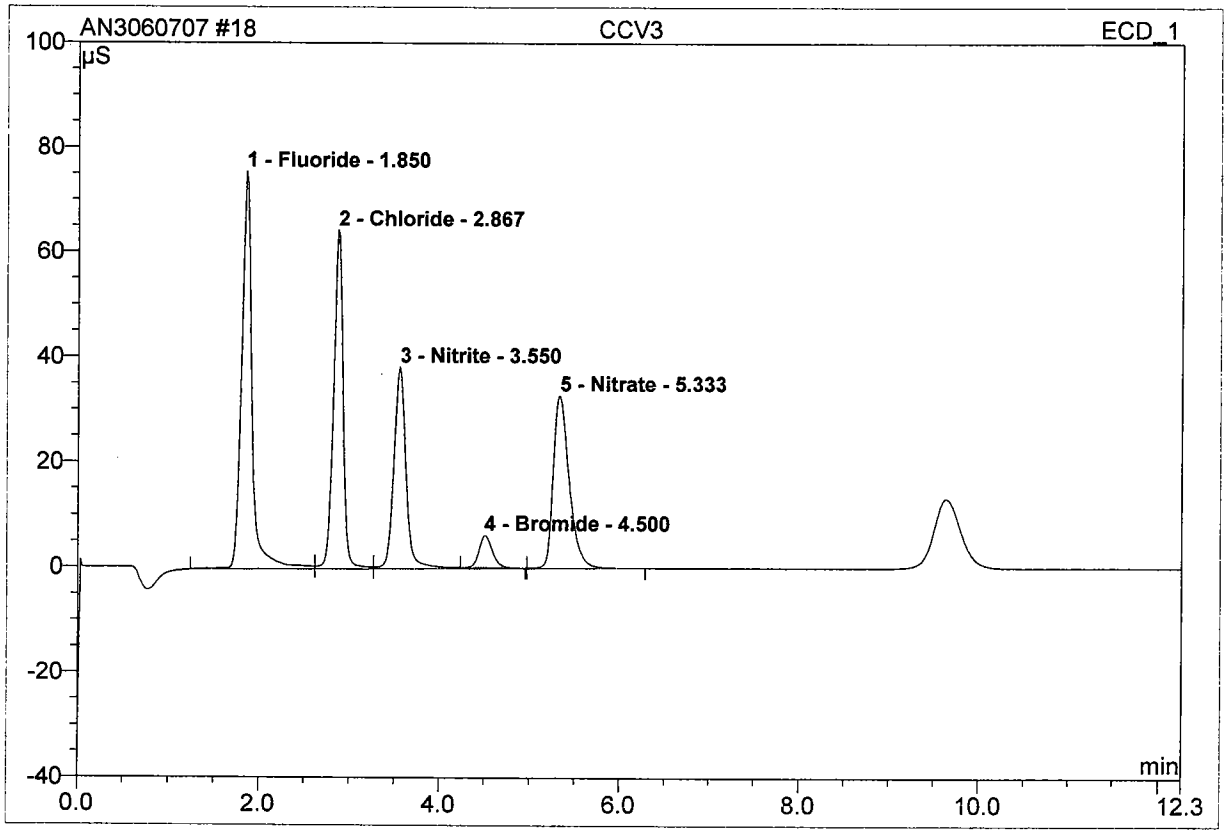
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 7 2007

18 CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 11:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



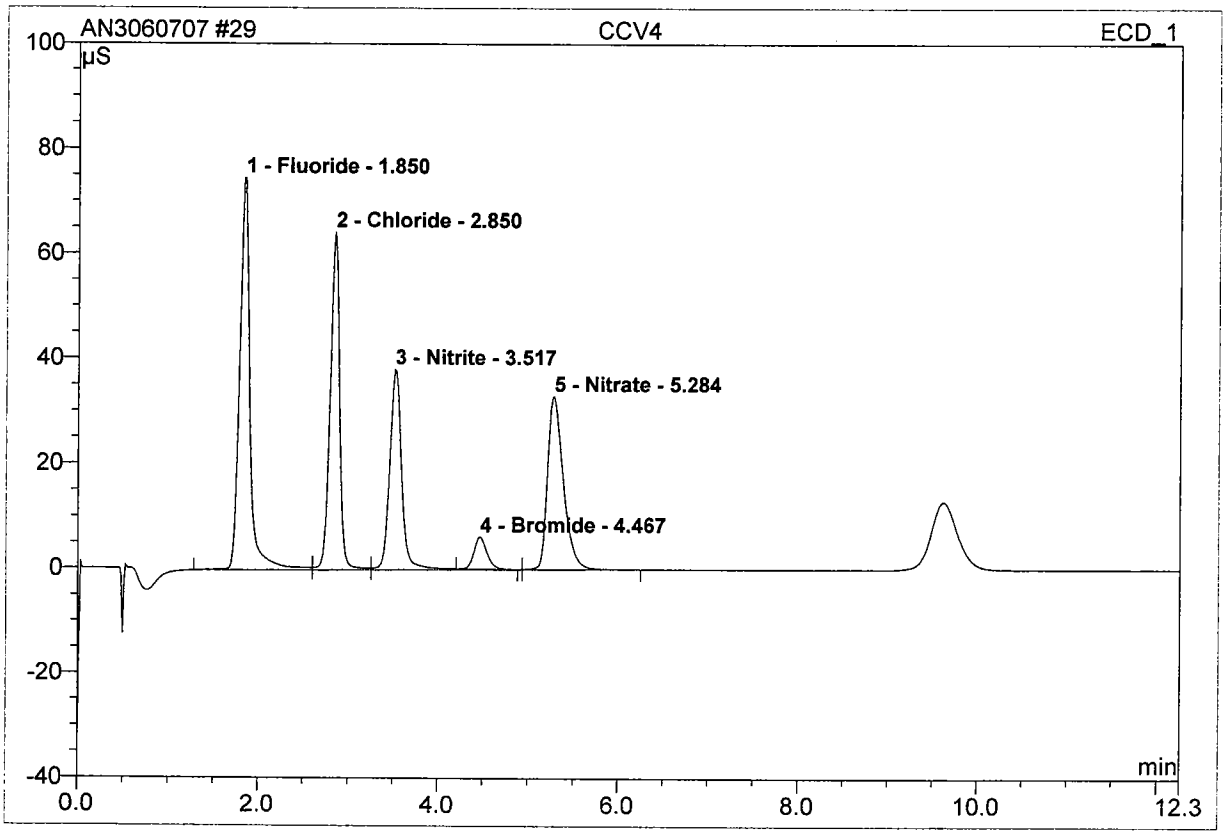
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.766	10.010	31.48	5.829	BM
2	2.87	Chloride	64.508	7.845	24.67	5.054	M
3	3.55	Nitrite	38.351	6.085	19.14	2.130	M
4	4.50	Bromide	6.124	1.032	3.24	1.944	Rd
5	5.33	Nitrate	32.821	6.826	21.47	1.883	MB
Total:			217.570	31.798	100.00	16.840	

Before

JUN 0 7 2007

29 CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**57**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 16:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



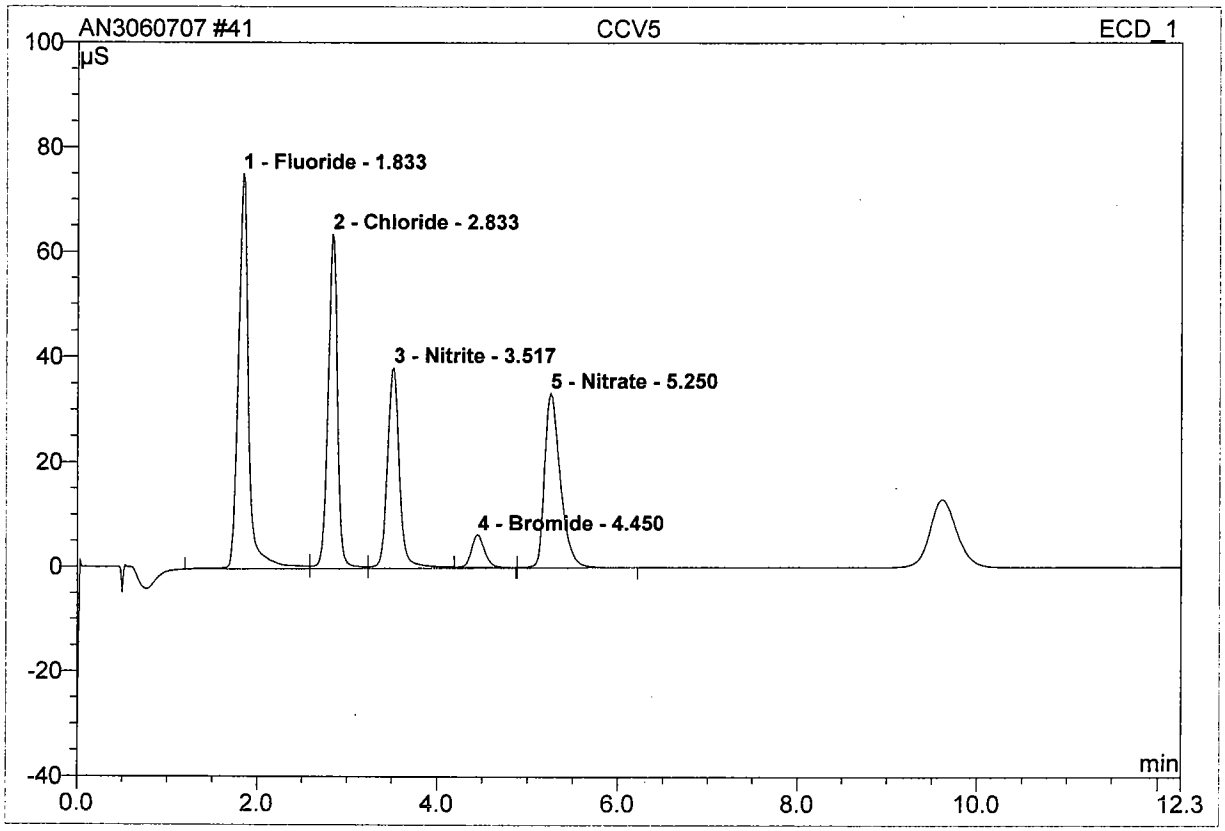
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	74.789	9.874	31.37	5.750	BM
2	2.85	Chloride	64.424	7.737	24.58	4.984	M
3	3.52	Nitrite	38.155	6.037	19.18	2.113	M
4	4.47	Bromide	6.131	1.016	3.23	1.915	Rd
5	5.28	Nitrate	33.011	6.808	21.63	1.878	MB
Total:			216.510	31.472	100.00	16.640	

Before

JUN 0 7 2007

41 CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 18:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



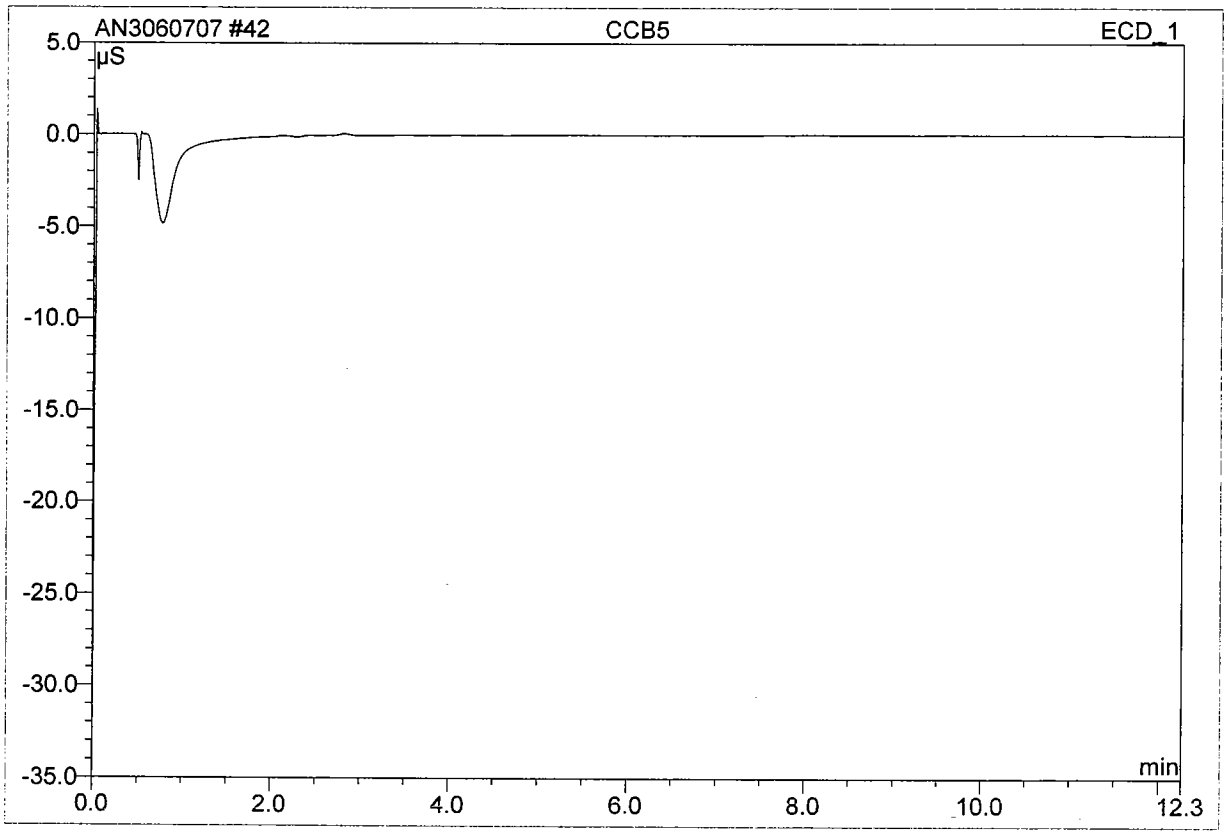
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	75.428	9.965	31.55	5.803	BM
2	2.83	Chloride	63.831	7.755	24.55	4.996	M
3	3.52	Nitrite	38.259	6.062	19.19	2.122	M
4	4.45	Bromide	6.130	1.018	3.22	1.918	Rd
5	5.25	Nitrate	33.344	6.787	21.49	1.872	MB
Total:			216.992	31.588	100.00	16.711	

Before

JUN 0 8 2007

42 CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**70**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 19:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



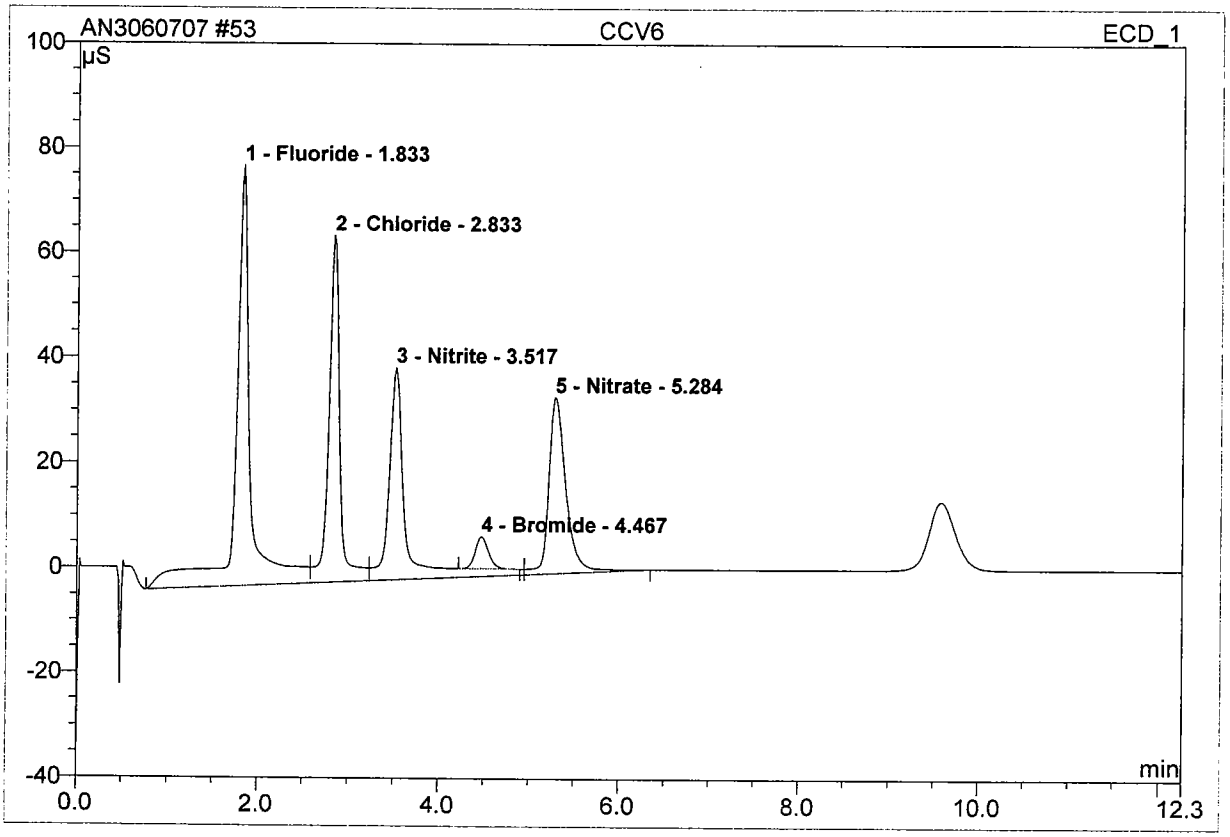
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

53 CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**81**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 21:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



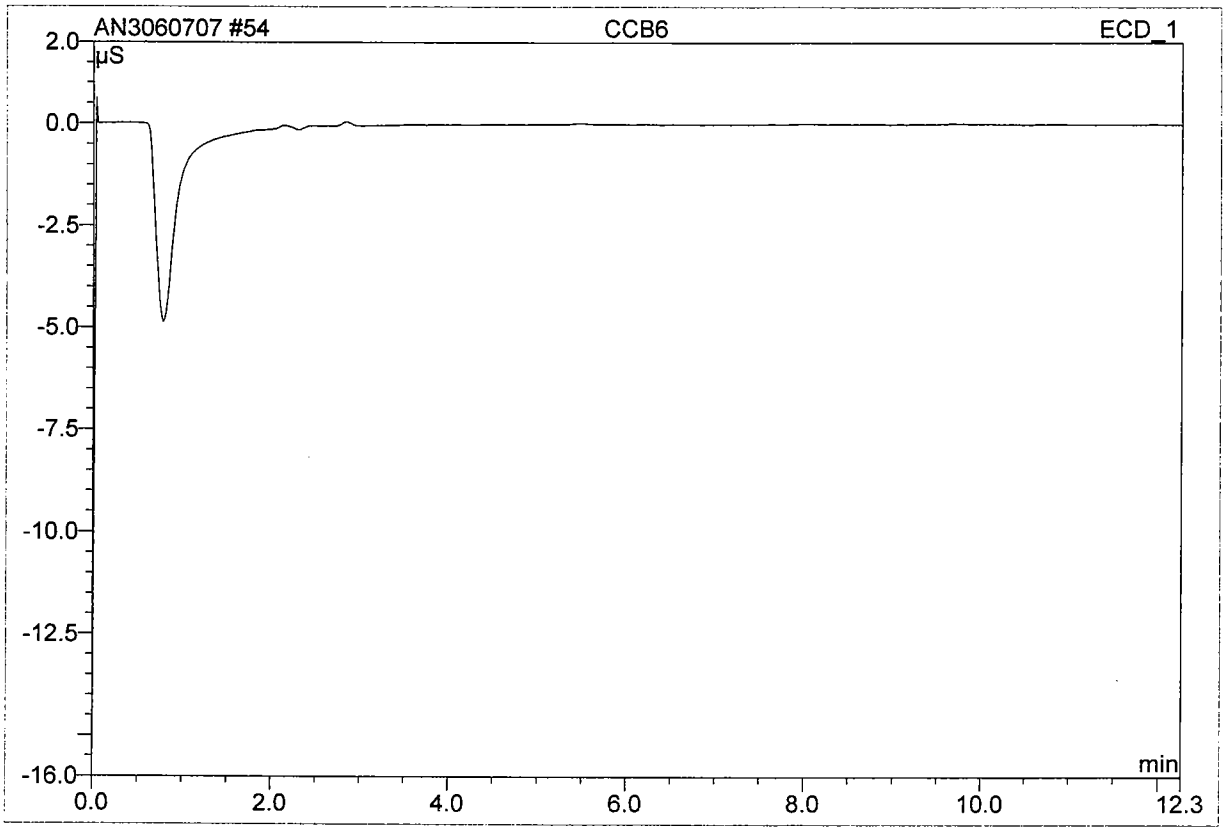
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	80.073	15.296	36.55	8.907	BM
2	2.83	Chloride	66.034	9.273	22.16	5.974	M
3	3.52	Nitrite	40.281	8.740	20.88	3.060	M
4	4.47	Bromide	6.102	1.024	2.45	1.928	Rd
5	5.28	Nitrate	33.500	7.521	17.97	2.075	MB
Total:			225.990	41.854	100.00	21.943	

Before

JUN 0 8 2007

54 CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**82**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/7/2007 22:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



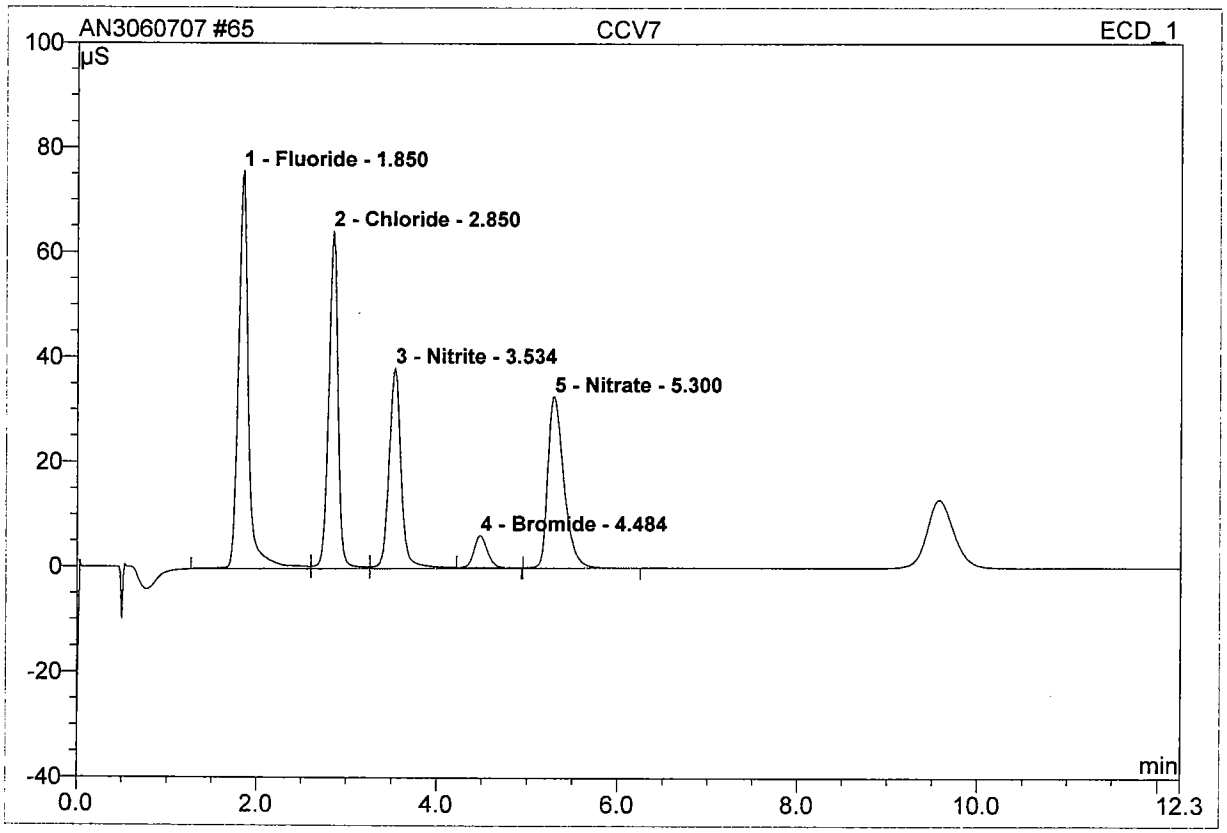
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

65 CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**93**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 0:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



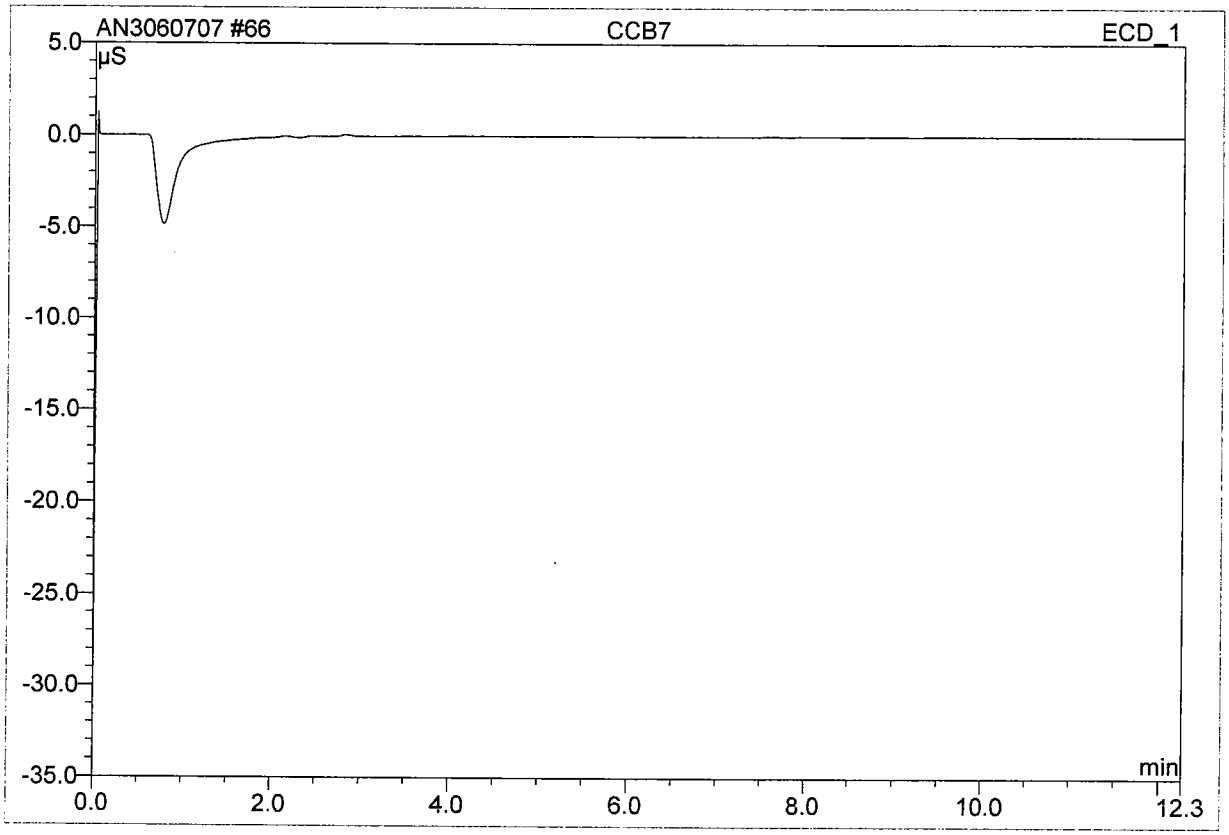
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.981	9.936	31.43	5.786	BM
2	2.85	Chloride	64.443	7.774	24.59	5.008	M
3	3.53	Nitrite	38.261	6.061	19.17	2.122	M
4	4.48	Bromide	6.075	1.020	3.23	1.921	Rd
5	5.30	Nitrate	32.718	6.822	21.58	1.882	MB
Total:			217.478	31.613	100.00	16.718	

Before

JUN 0 8 2007

66 CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**94**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 1:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



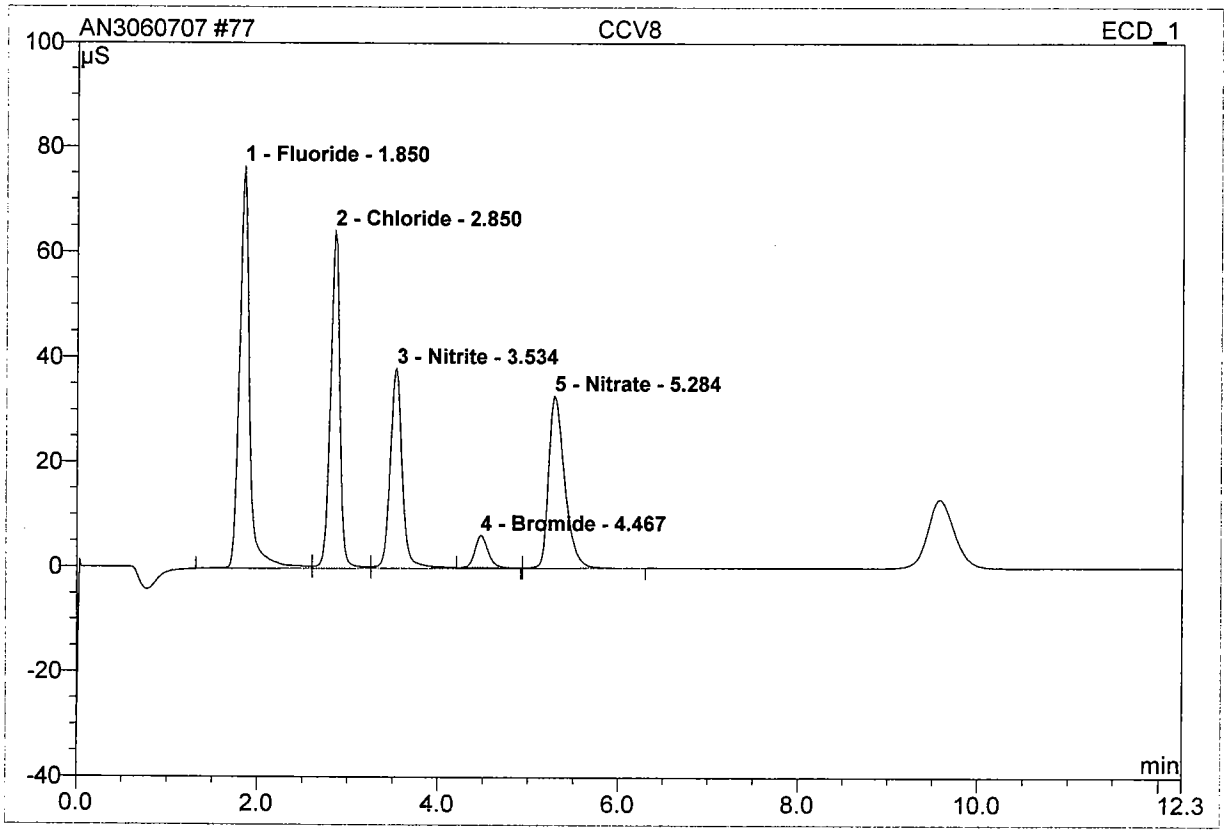
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

77 CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**105**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 3:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	76.693	9.935	31.46	5.786	BM
2	2.85	Chloride	64.495	7.760	24.58	4.999	M
3	3.53	Nitrite	38.172	6.019	19.06	2.107	M
4	4.47	Bromide	6.108	1.022	3.24	1.925	Rd
5	5.28	Nitrate	32.944	6.842	21.67	1.887	MB
Total:			218.411	31.578	100.00	16.704	

Before

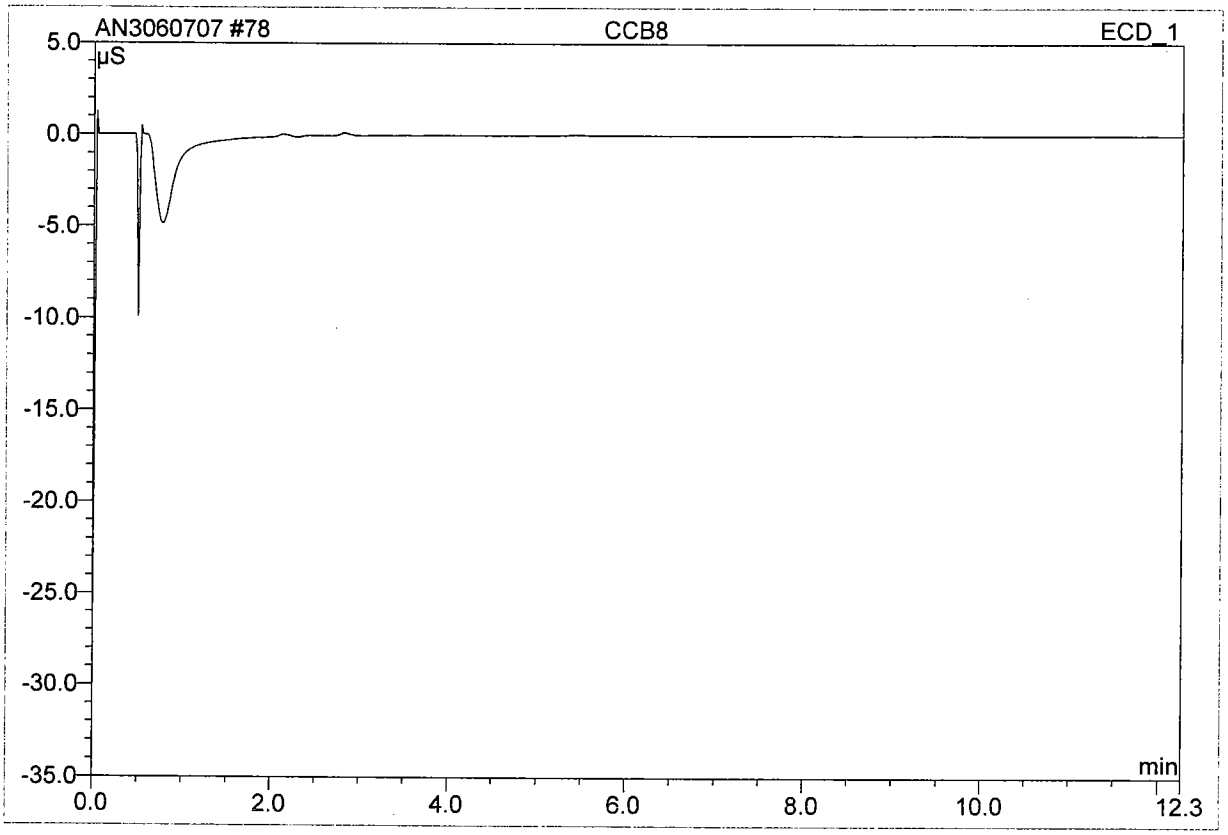
JUN 0 8 2007

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

78 CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**106**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 4:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



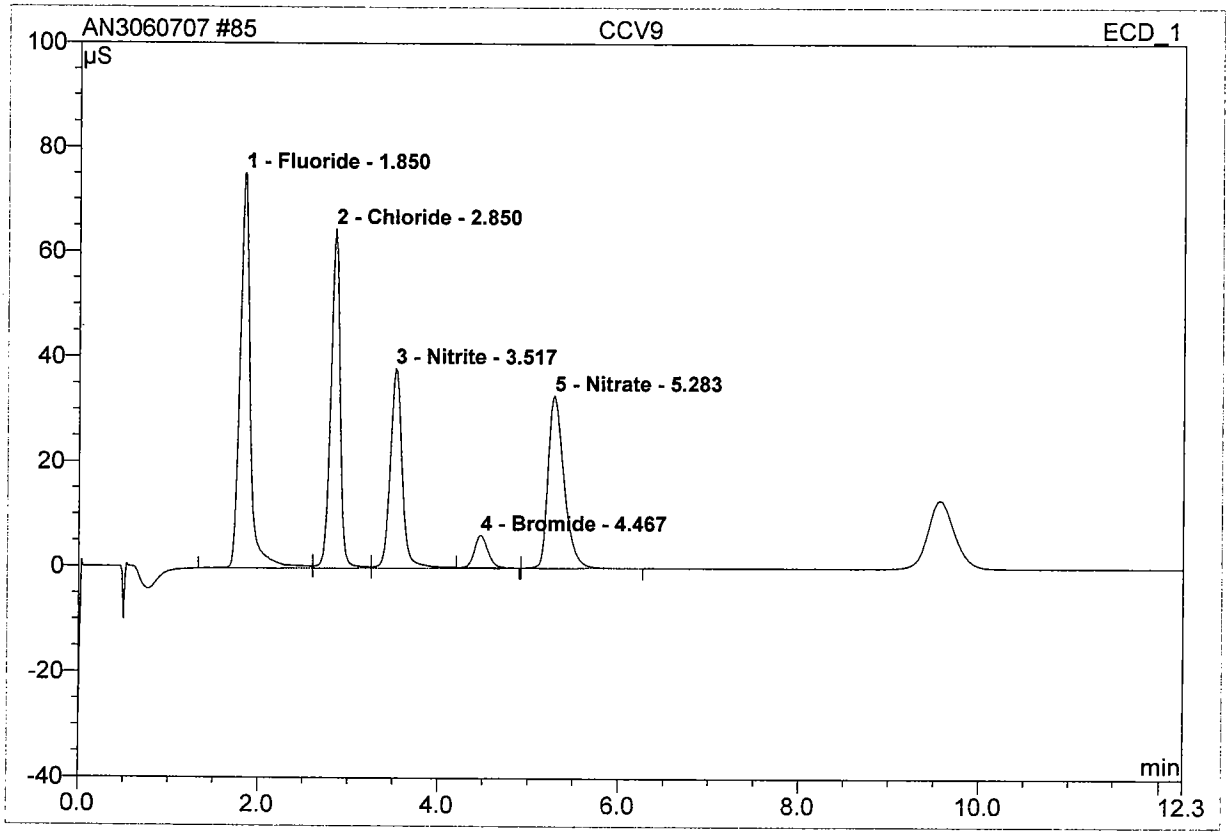
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Before

JUN 0 8 2007

85 CCV9

Sample Name:	**CCV9**	*Injection Volume:*	**200.0**
Vial Number:	**113**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**6/8/2007 5:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.25**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	75.403	9.934	31.47	5.785	BM
2	2.85	Chloride	64.711	7.770	24.61	5.005	M
3	3.52	Nitrite	38.113	6.024	19.08	2.109	M
4	4.47	Bromide	6.125	1.022	3.24	1.926	Rd
5	5.28	Nitrate	32.955	6.816	21.59	1.880	MB
Total:			217.306	31.567	100.00	16.705	

Before

JUN 0 8 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

ICAL ID#-AN10-86-B

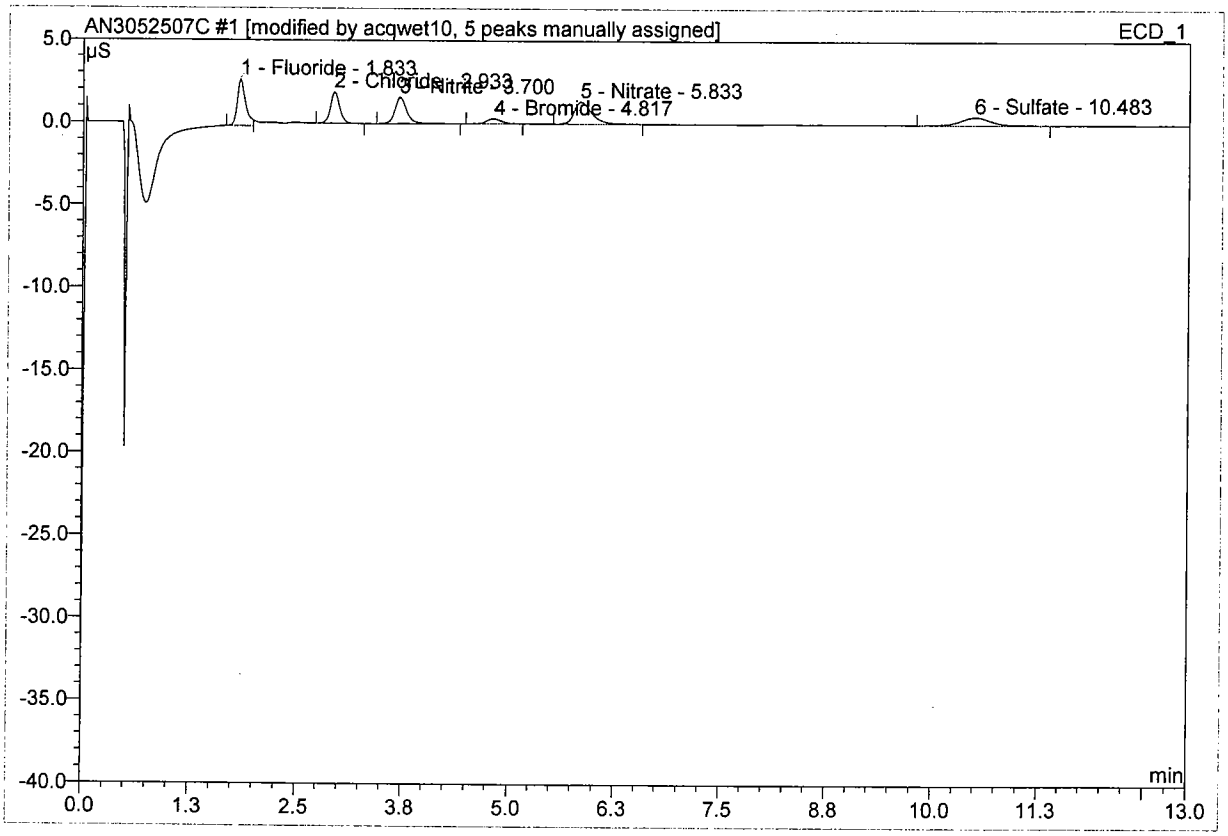
Sequence: AN3052507C **Date: 05/25/07**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	5.0	7.5	10.0	-	99.9979	1.7172
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9247	1.5524
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9981	2.8565
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9416	0.5308
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.8680	3.6254
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9276	0.9447

All calibration standard concentrations are in mg/L unless otherwise noted.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	2.819	0.319	23.25	0.186	BM *
2	2.93	Chloride	1.881	0.232	16.89	0.149	BMB^
3	3.70	Nitrite	1.580	0.258	18.81	0.090	BMB^
4	4.82	Bromide	0.292	0.055	4.00	0.104	BMB*^
5	5.83	Nitrate	1.318	0.317	23.08	0.087	BMB^
6	10.48	Sulfate	0.474	0.192	13.95	0.203	BMB*^
Total:			8.363	1.373	100.00	0.820	

After Initials JS

MAY 29 2007

JS 5/29/07

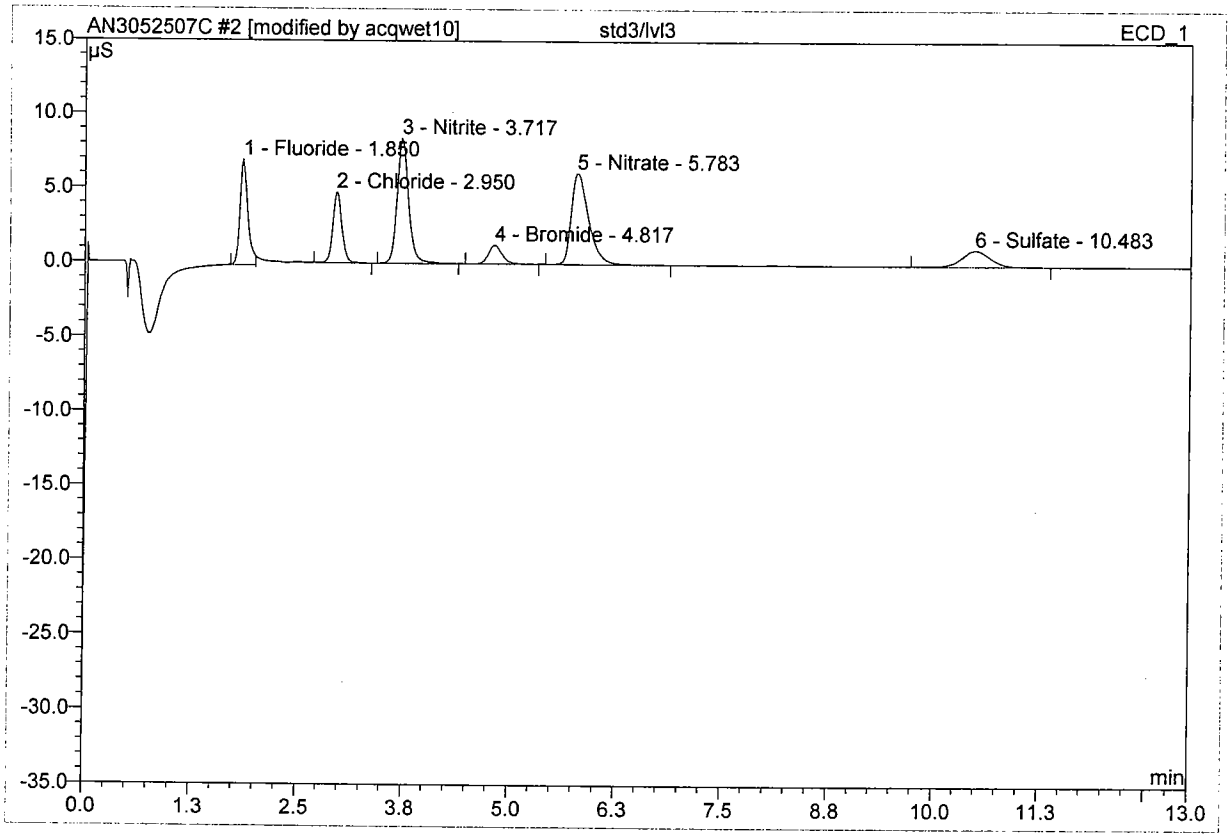
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	7.097	0.770	16.05	0.448	BM *
2	2.95	Chloride	4.754	0.584	12.17	0.376	BMB
3	3.72	Nitrite	8.408	1.312	27.34	0.459	BMB
4	4.82	Bromide	1.275	0.243	5.06	0.457	BMB
5	5.78	Nitrate	6.107	1.455	30.32	0.401	BMB
6	10.48	Sulfate	1.096	0.435	9.06	0.460	BMB*
Total:			28.738	4.799	100.00	2.603	

After
Initials JS

MAY 29 2007

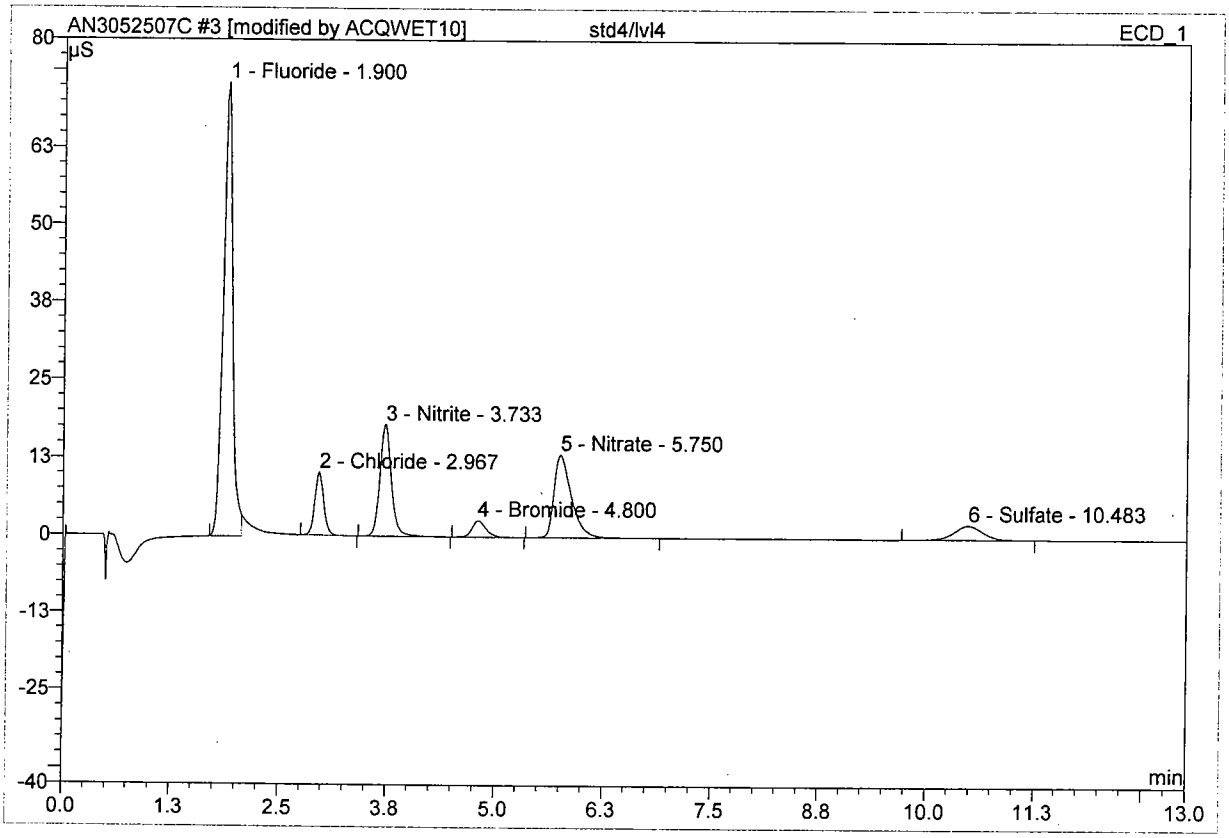
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other 228

JS 5/29/07

default/Integration

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.90	Fluoride	73.182	8.814	50.88	5.116	BM *
2	2.97	Chloride	10.144	1.217	7.03	0.784	BMB*
3	3.73	Nitrite	17.925	2.798	16.15	0.979	BMB*
4	4.80	Bromide	2.613	0.488	2.82	0.920	BMB*
5	5.75	Nitrate	13.314	3.109	17.95	0.857	BMB*
6	10.48	Sulfate	2.280	0.896	5.18	0.949	BMB
Total:			119.459	17.322	100.00	9.606	

After
Initials

5/29/07

MAY 29 2007

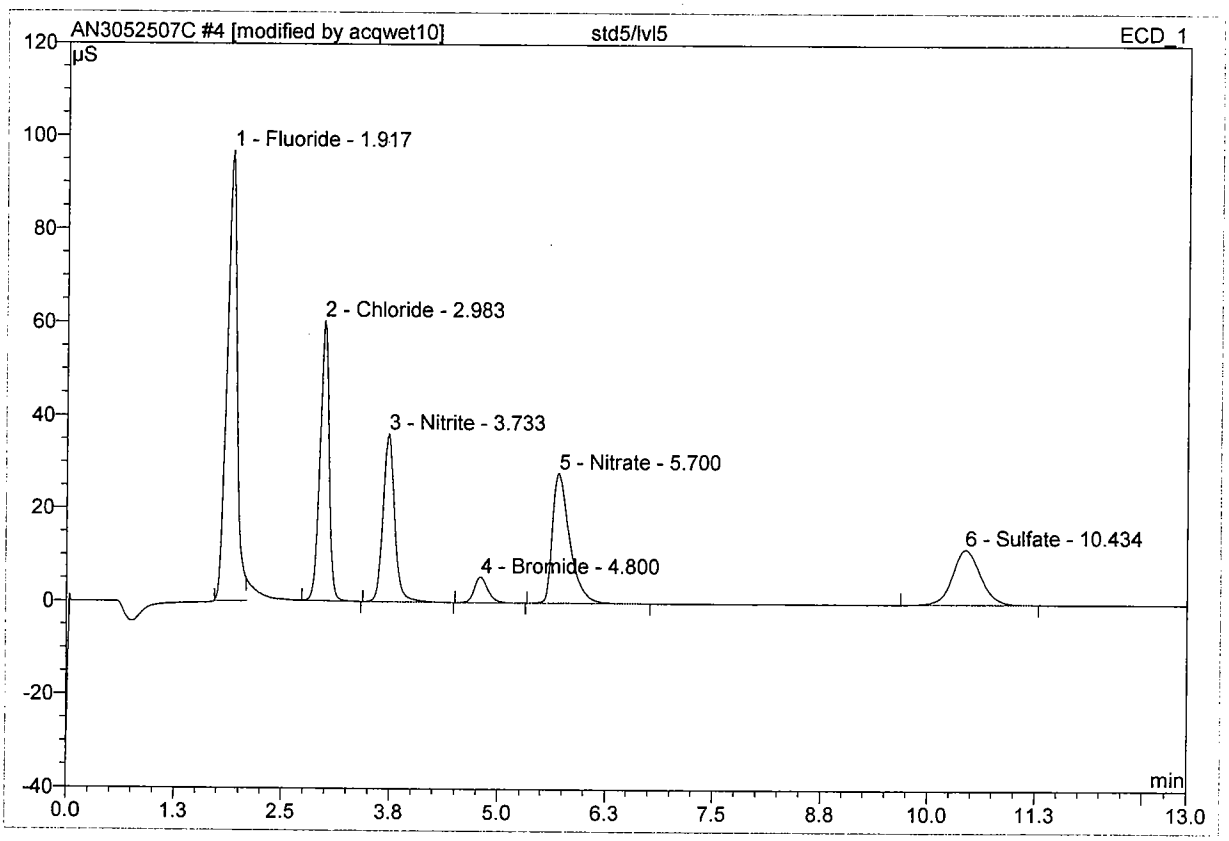
Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

229

default/Integration

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	96.771	12.927	34.20	7.528	BM *
2	2.98	Chloride	60.250	7.272	19.24	4.684	BMB*
3	3.73	Nitrite	36.173	5.669	15.00	1.985	BMB*
4	4.80	Bromide	5.398	0.991	2.62	1.867	BMB*
5	5.70	Nitrate	27.953	6.487	17.16	1.789	BMB*
6	10.43	Sulfate	11.750	4.455	11.79	4.716	BMB*
Total:			238.294	37.802	100.00	22.570	

After
Initials JS

MAY 2 9 2007

5/29/07

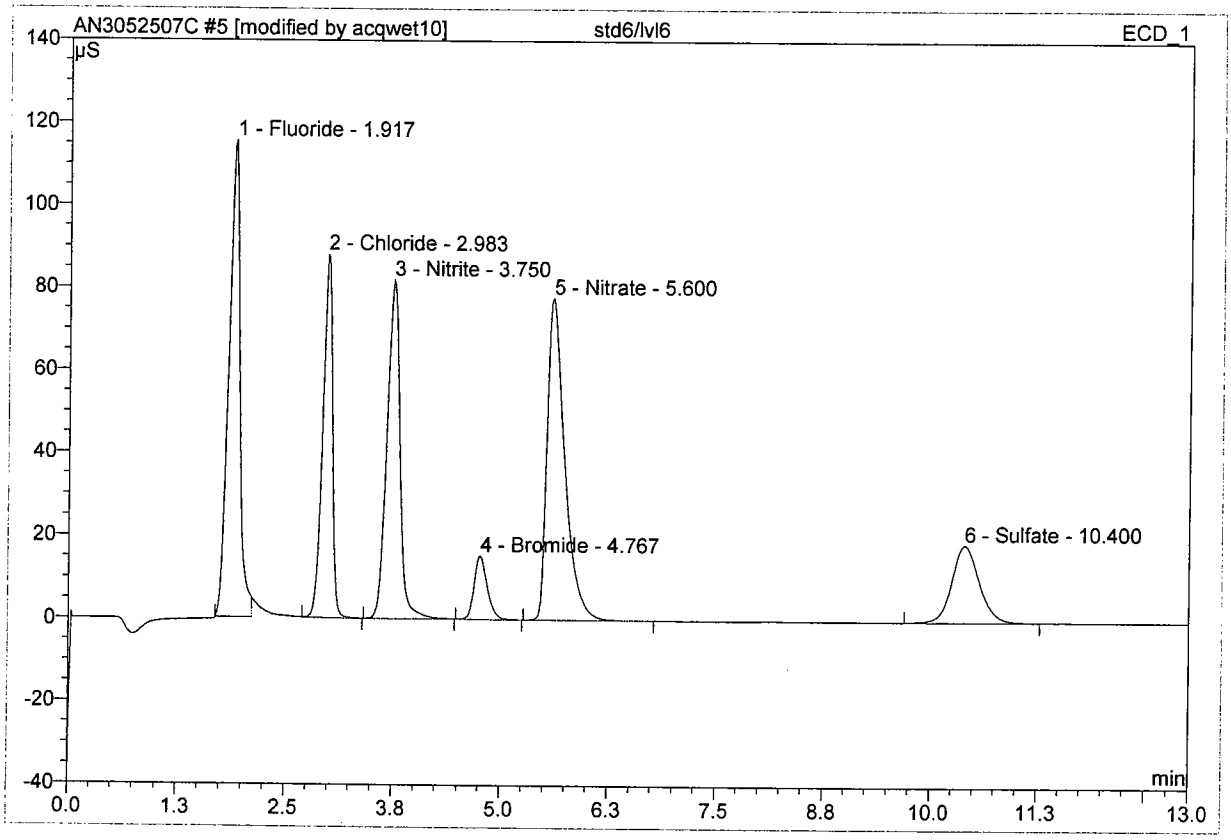
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	115.457	17.128	24.06	9.974	BM *
2	2.98	Chloride	87.900	11.493	16.15	7.403	BMB*
3	3.75	Nitrite	81.869	14.324	20.12	5.014	BMB*
4	4.77	Bromide	15.259	2.693	3.78	5.073	BMB*
5	5.60	Nitrate	77.701	18.573	26.09	5.123	BMB*
6	10.40	Sulfate	18.547	6.971	9.79	7.379	BMB*
Total:			396.732	71.181	100.00	39.968	

After
Initials JS

MAY 29 2007

Wrong Peak Peak not Found
Shoulder Incorrect

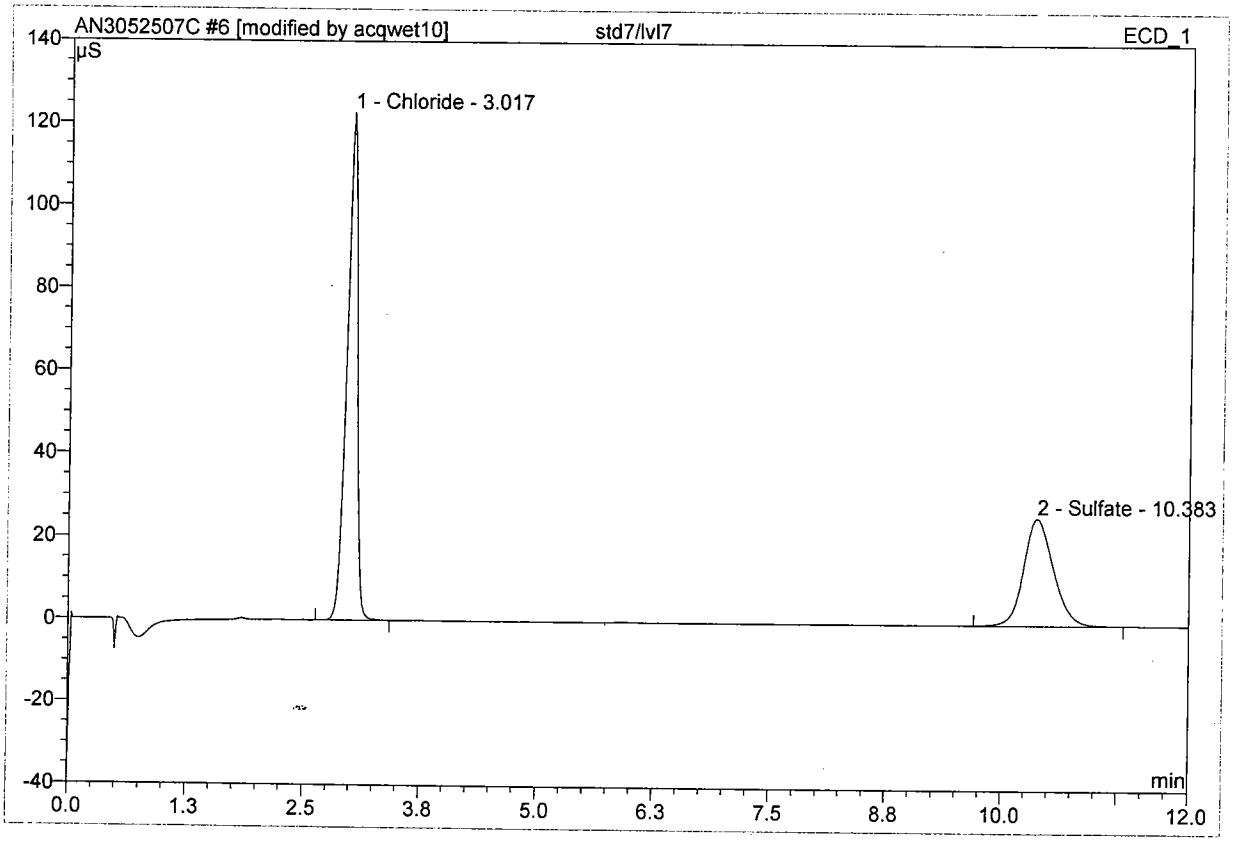
231

5/29/07

default/Integration

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.02	Chloride	122.744	15.926	62.21	10.259	BMB
2	10.38	Sulfate	25.854	9.673	37.79	10.240	BMB*
Total:			148.598	25.599	100.00	20.499	

After Initials JS

MAY 29 2007

PA 5/29/07

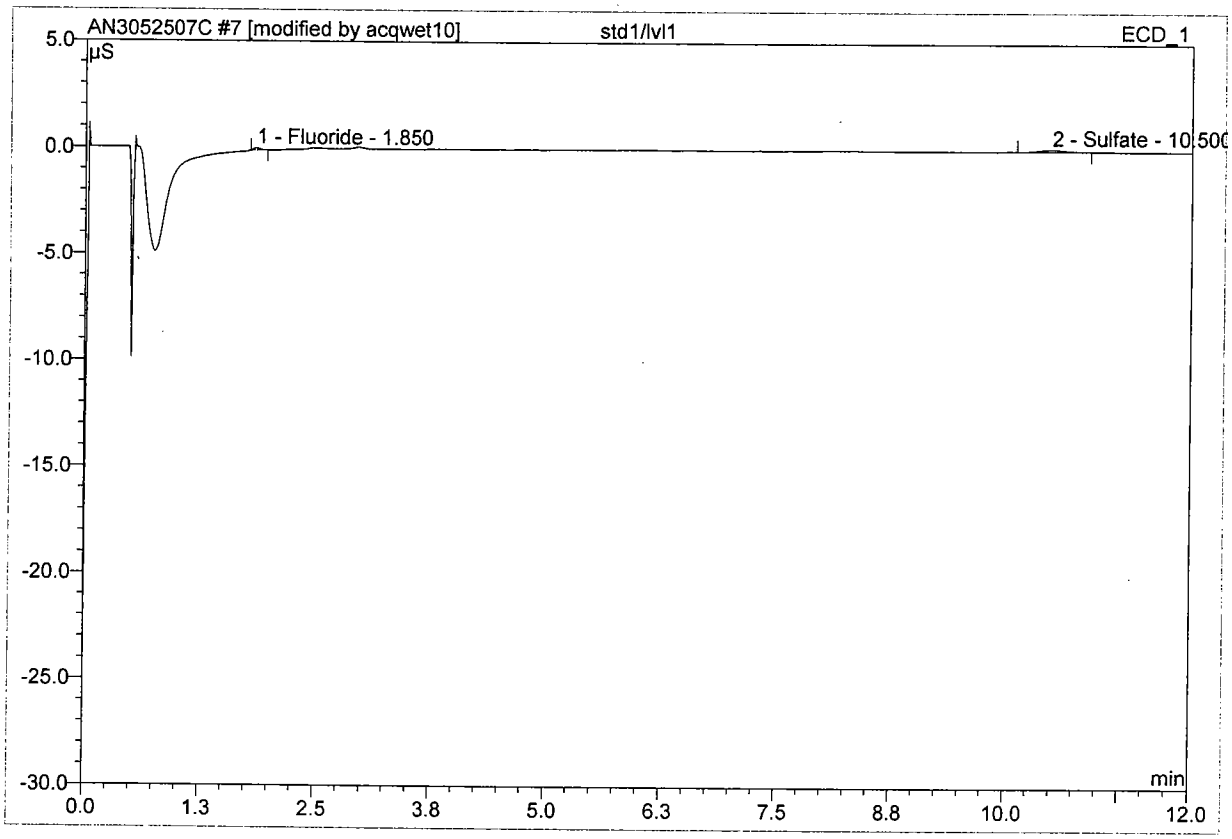
default/Integration

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Incorrect
☐ Other

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 16:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	0.096	0.009	20.43	0.005	BMB*
2	10.50	Sulfate	0.093	0.033	79.57	0.035	BMB*
Total:			0.189	0.042	100.00	0.040	

After Initials JS

MAY 29 2007

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

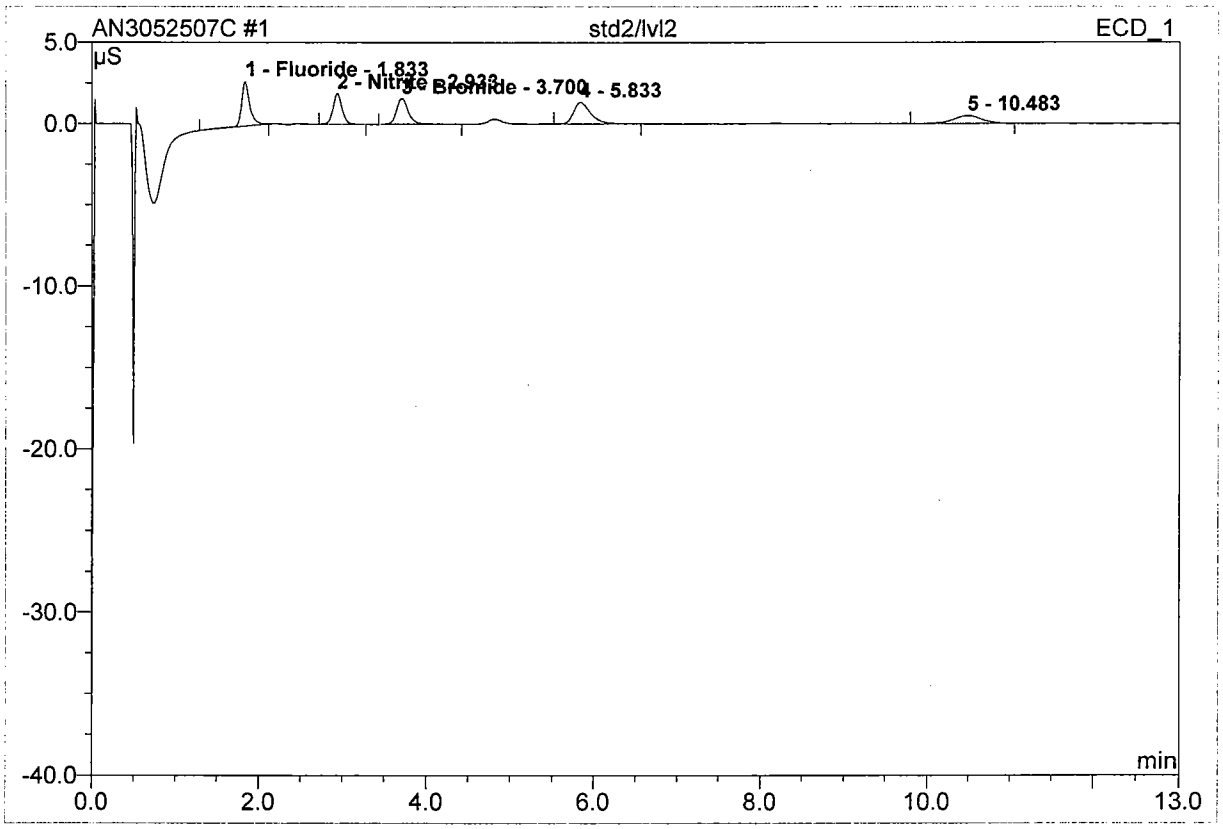
B /29/07

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

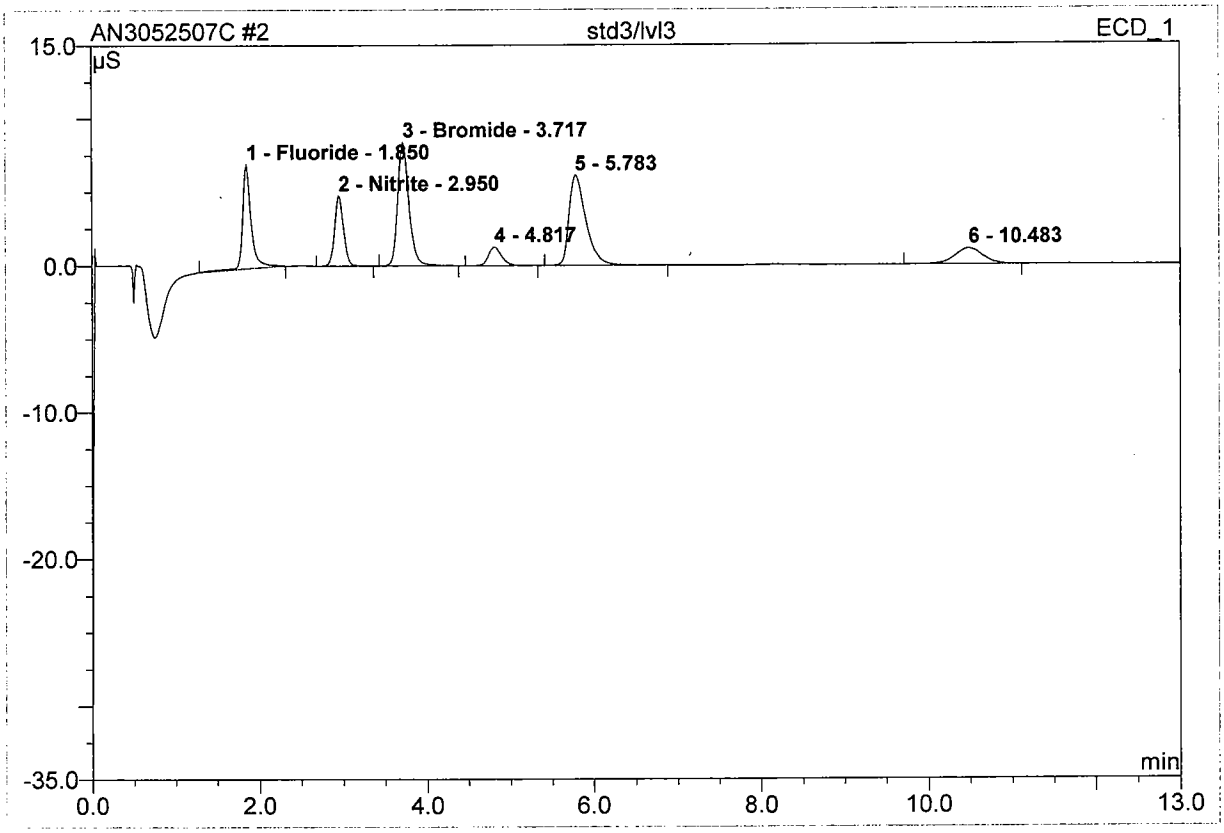


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.83	Fluoride	2.760	0.321	24.39	0.183	BMB
2	2.93	Nitrite	1.881	0.232	17.62	0.083	BMB
3	3.70	Bromide	1.580	0.258	19.63	0.484	BMB
4	5.83	n.a.	1.318	0.317	24.09	n.a.	BMB
5	10.48	n.a.	0.472	0.188	14.27	n.a.	BMB
Total:			8.011	1.316	100.00	0.750	

5/29/07

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

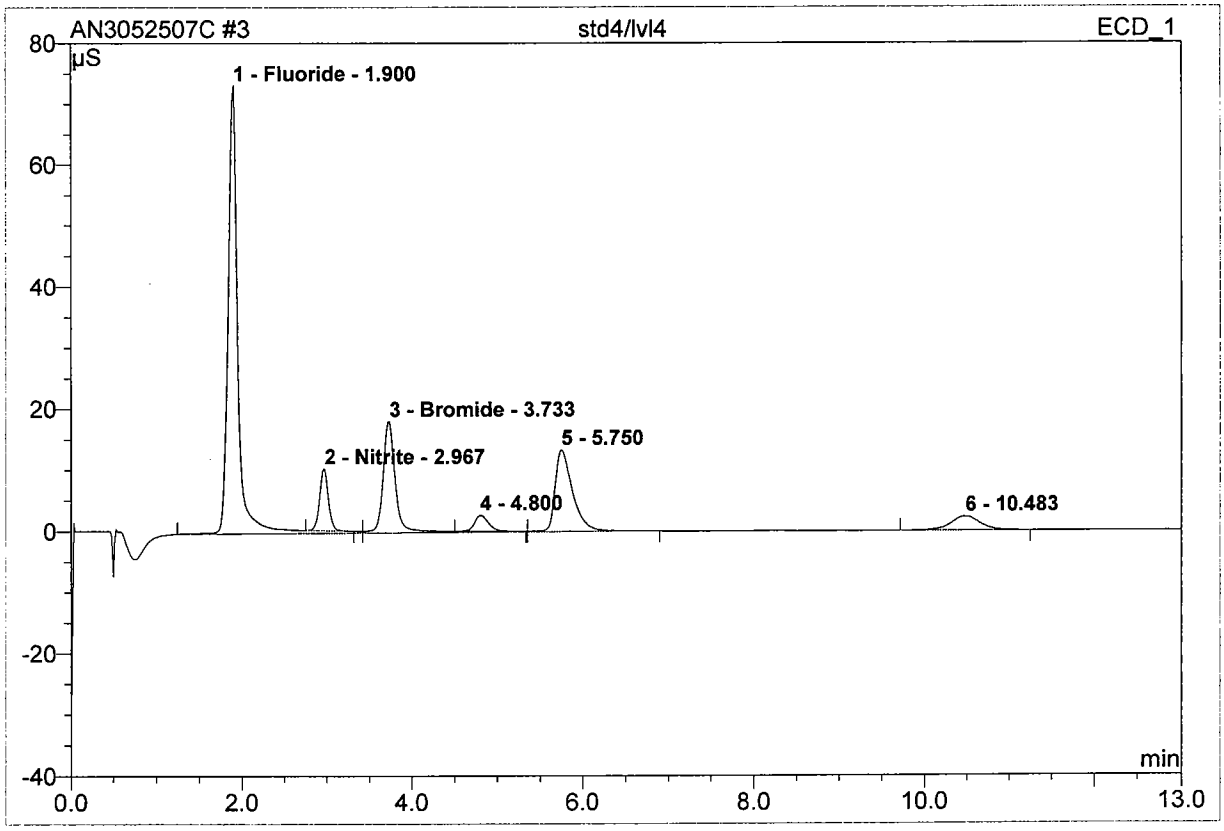


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	7.087	0.839	17.26	0.478	BMB
2	2.95	Nitrite	4.754	0.584	12.01	0.210	BMB
3	3.72	Bromide	8.408	1.312	26.98	2.371	BMB
4	4.82	n.a.	1.275	0.243	4.99	n.a.	BMB
5	5.78	n.a.	6.107	1.455	29.92	n.a.	BMB
6	10.48	n.a.	1.093	0.430	8.84	n.a.	BMB
Total:			28.725	4.863	100.00	3.059	

BL 5/29/07

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

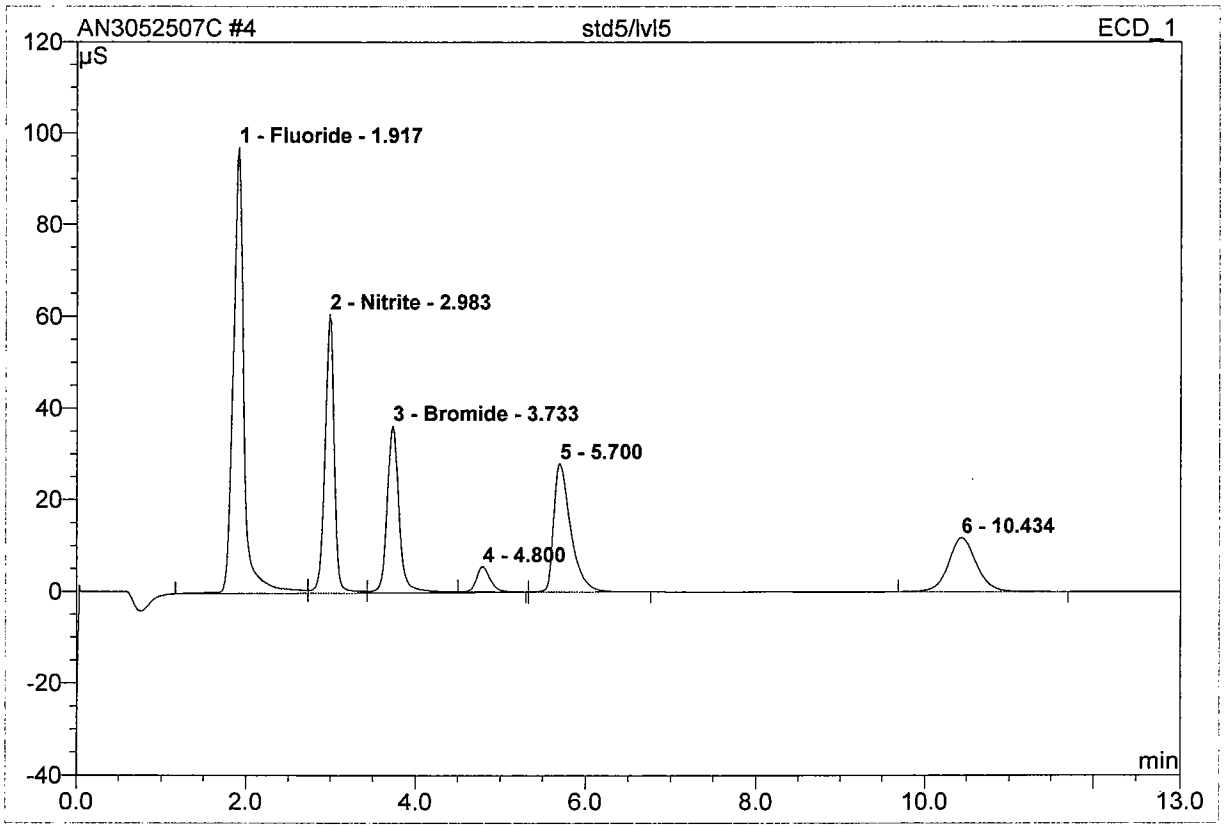


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.90	Fluoride	73.436	10.006	52.55	5.569	BM
2	2.97	Nitrite	10.146	1.219	6.40	0.448	Rd
3	3.73	Bromide	18.209	3.226	16.94	4.856	M
4	4.80	n.a.	2.613	0.488	2.56	n.a.	Rd
5	5.75	n.a.	13.408	3.207	16.84	n.a.	MB
6	10.48	n.a.	2.280	0.896	4.71	n.a.	BMB
Total:			120.093	19.043	100.00	10.873	

5/29/07

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

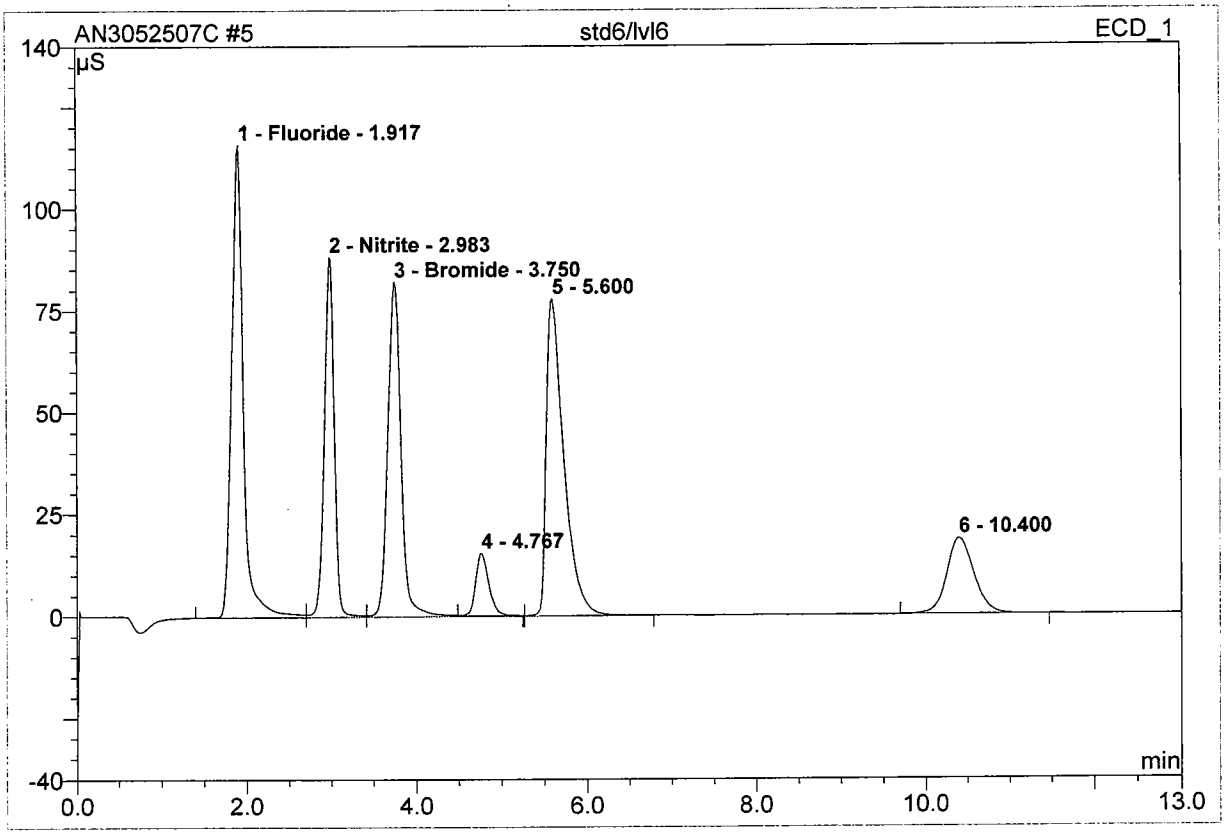


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	97.340	14.295	35.57	7.390	BM
2	2.98	Nitrite	60.811	7.640	19.01	2.390	M
3	3.73	Bromide	36.533	6.185	15.39	1.999	M
4	4.80	n.a.	5.398	0.991	2.47	n.a.	Rd
5	5.70	n.a.	28.060	6.589	16.40	n.a.	MB
6	10.43	n.a.	11.766	4.488	11.17	n.a.	BMB
Total:			239.907	40.189	100.00	11.779	

JM 5/29/07

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.00**	*Sample Amount:*	**1.0000**

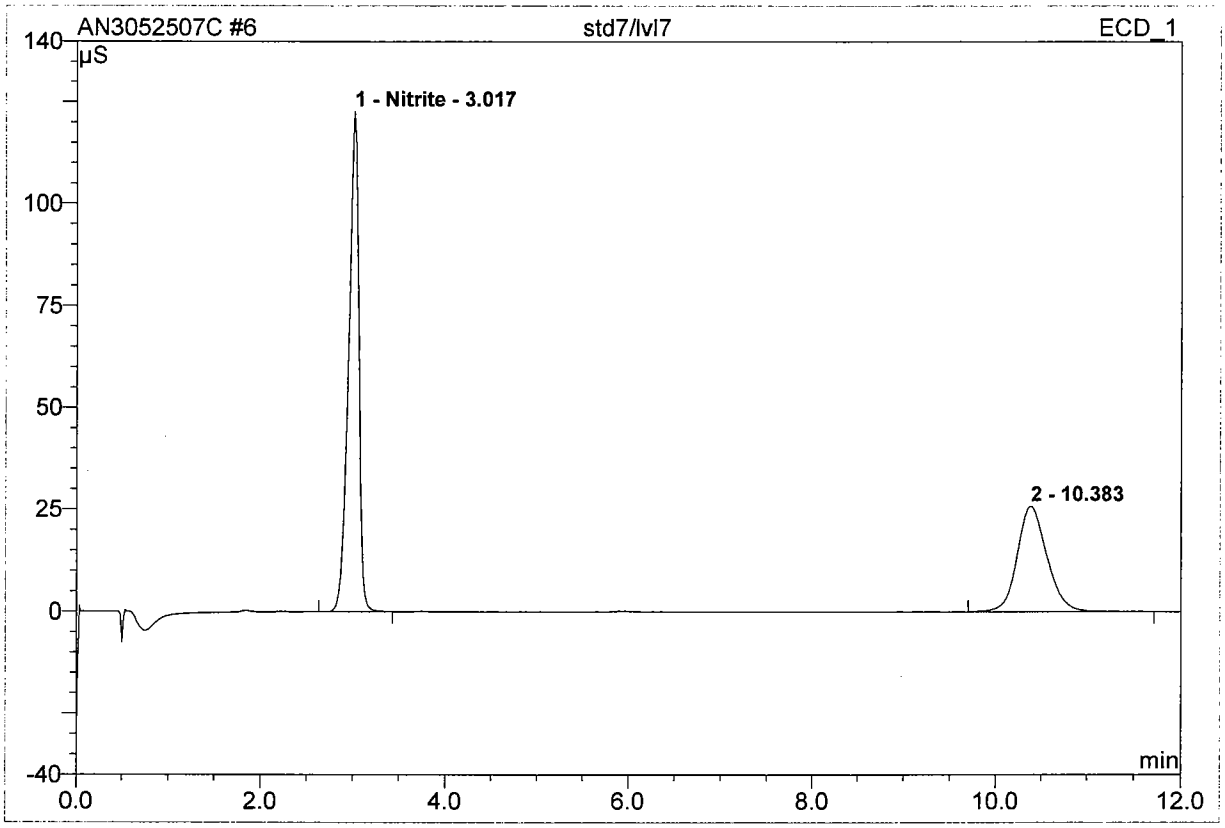


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	Fluoride	116.016	18.368	25.03	9.767	BM
2	2.98	Nitrite	88.389	11.822	16.11	4.712	M
3	3.75	Bromide	82.183	14.823	20.20	4.962	M
4	4.77	n.a.	15.259	2.693	3.67	n.a.	Rd
5	5.60	n.a.	77.804	18.673	25.45	n.a.	MB
6	10.40	n.a.	18.558	6.991	9.53	n.a.	BMB
Total:			398.208	73.370	100.00	19.441	

JU 5/29/07

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 15:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**

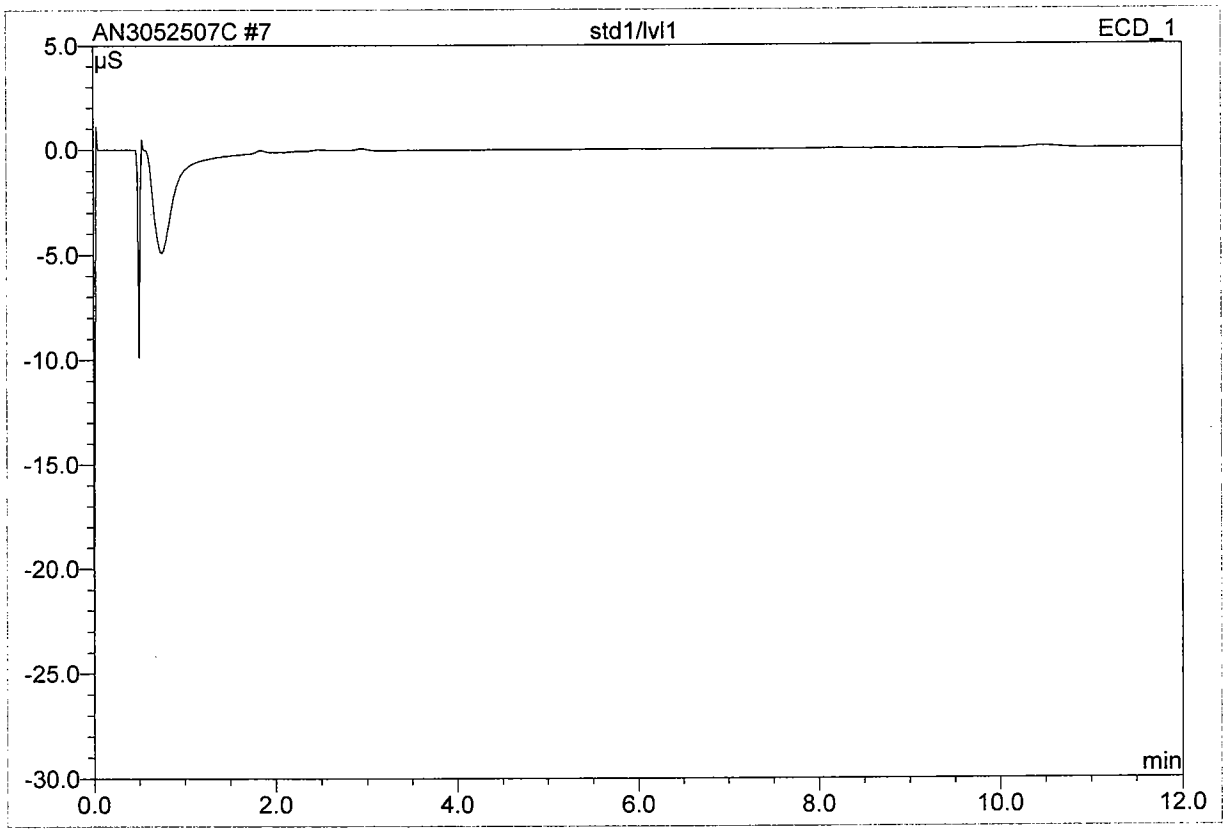


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.02	Nitrite	122.744	15.926	62.13	6.348	BMB
2	10.38	n.a.	25.869	9.706	37.87	n.a.	BMB
Total:			148.613	25.632	100.00	6.348	

JM 5/29/07

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/25/2007 16:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

5/29/07

Metals

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.
Project Name: Presidio
Project No.:

Service Request: K0704852

Sample Name:	Lab Code:
BHWGW01CL	K0704852-001
BHWGW01CLD	K0704852-001D
BHWGW01CLS	K0704852-001S
1349MW100CL	K0704852-002
1349MW100CLD	K0704852-002D
1349MW100CLS	K0704852-002S
231GW29CL	K0704852-003
Method Blank	K0704852-MB

Comments:

Approved By: _____ **Date:** 6/25/07

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio
Matrix: WATER

Service Request: K0704852
Date Collected: 6/6/07
Date Received: 6/7/07
Units: ug/L
Basis: N/A

Sample Name: BHWGW01CL
Lab Code: K0704852-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1.0	06/12/07	06/15/07	50	U	
Antimony	6020	0.05	1.0	06/12/07	06/19/07	0.05	U	
Arsenic	6020	0.5	1.0	06/12/07	06/19/07	1.6		
Barium	6010B	5.0	1.0	06/12/07	06/15/07	49.8		
Beryllium	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Cadmium	6020	0.02	1.0	06/12/07	06/19/07	0.03		
Calcium	6010B	50	1.0	06/12/07	06/15/07	17900		
Chromium	6010B	5.0	1.0	06/12/07	06/15/07	116		
Cobalt	6020	0.02	1.0	06/12/07	06/19/07	0.13		
Copper	6020	0.1	1.0	06/12/07	06/19/07	0.5		
Iron	6010B	20	1.0	06/12/07	06/15/07	20	U	
Lead	6020	0.05	1.0	06/12/07	06/19/07	0.14		
Magnesium	6010B	20	1.0	06/12/07	06/15/07	87900		
Manganese	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Nickel	6020	0.2	1.0	06/12/07	06/19/07	3.7		
Potassium	6010B	2000	1.0	06/12/07	06/15/07	2000	U	
Selenium	7740	5.0	1.0	06/12/07	06/21/07	5.0	U	
Silver	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Sodium	6010B	100	1.0	06/12/07	06/15/07	244000		
Thallium	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Vanadium	6010B	10	1.0	06/12/07	06/15/07	10	U	
Zinc	6010B	10	1.0	06/12/07	06/15/07	10	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio
Matrix: WATER

Service Request: K0704852
Date Collected: 6/6/07
Date Received: 6/7/07
Units: ug/L
Basis: N/A

Sample Name: 1349MW100CL
Lab Code: K0704852-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1.0	06/12/07	06/15/07	50	U	
Antimony	6020	0.10	2.0	06/12/07	06/19/07	0.10	U	
Arsenic	6020	1.0	2.0	06/12/07	06/19/07	18		
Barium	6010B	5.0	1.0	06/12/07	06/15/07	710		
Beryllium	6020	0.04	2.0	06/12/07	06/19/07	0.04	U	
Cadmium	6020	0.04	2.0	06/12/07	06/19/07	0.04	U	
Calcium	6010B	50	1.0	06/12/07	06/15/07	145000		
Chromium	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Cobalt	6020	0.04	2.0	06/12/07	06/19/07	0.98		
Copper	6020	0.2	2.0	06/12/07	06/19/07	1.0		
Iron	6010B	20	1.0	06/12/07	06/15/07	39300		
Lead	6020	0.10	2.0	06/12/07	06/19/07	0.10	U	
Magnesium	6010B	20	1.0	06/12/07	06/15/07	213000		
Manganese	6010B	50.0	10.0	06/12/07	06/15/07	15300		
Mercury	7470A	0.20	1.0	06/20/07	06/21/07	0.20	U	
Nickel	6020	0.4	2.0	06/12/07	06/19/07	9.7		
Potassium	6010B	2000	1.0	06/12/07	06/15/07	2000	U	
Selenium	7740	5.0	1.0	06/12/07	06/21/07	5.0	U	
Silver	6020	0.04	2.0	06/12/07	06/19/07	0.04	U	
Sodium	6010B	100	1.0	06/12/07	06/15/07	405000		
Thallium	6020	0.04	2.0	06/12/07	06/19/07	0.04	U	
Vanadium	6010B	10	1.0	06/12/07	06/15/07	10	U	
Zinc	6010B	10	1.0	06/12/07	06/15/07	10	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio
Matrix: WATER

Service Request: K0704852
Date Collected: 6/6/07
Date Received: 6/7/07
Units: ug/L
Basis: N/A

Sample Name: 231GW29CL
Lab Code: K0704852-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1.0	06/12/07	06/15/07	50	U	
Antimony	6020	0.05	1.0	06/12/07	06/19/07	0.24		
Arsenic	6020	0.5	1.0	06/12/07	06/19/07	4.0		
Cadmium	6020	0.02	1.0	06/12/07	06/19/07	0.13		
Calcium	6010B	50	1.0	06/12/07	06/15/07	27400		
Chromium	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Copper	6020	0.1	1.0	06/12/07	06/19/07	0.6		
Iron	6010B	20	1.0	06/12/07	06/15/07	20	U	
Lead	6020	0.05	1.0	06/12/07	06/19/07	0.05	U	
Magnesium	6010B	20	1.0	06/12/07	06/15/07	56800		
Manganese	6010B	5.0	1.0	06/12/07	06/15/07	161		
Nickel	6020	0.2	1.0	06/12/07	06/19/07	2.9		
Potassium	6010B	2000	1.0	06/12/07	06/15/07	4690		
Selenium	7740	5.0	1.0	06/12/07	06/21/07	5.0	U	
Sodium	6010B	100	1.0	06/12/07	06/15/07	51400		
Zinc	6010B	10	1.0	06/12/07	06/15/07	10	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Treadwell and Rollo, Inc.
Project No.: NA
Project Name: Presidio
Matrix: WATER

Service Request: K0704852
Date Collected: N/A
Date Received: N/A
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0704852-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	50	1.0	06/12/07	06/15/07	50	U	
Antimony	6020	0.05	1.0	06/12/07	06/19/07	0.05	U	
Arsenic	6020	0.5	1.0	06/12/07	06/19/07	0.5	U	
Barium	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Beryllium	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Cadmium	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Calcium	6010B	50	1.0	06/12/07	06/15/07	50	U	
Chromium	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Cobalt	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Copper	6020	0.1	1.0	06/12/07	06/19/07	0.1	U	
Iron	6010B	20.0	1.0	06/12/07	06/15/07	20.0	U	
Lead	6020	0.05	1.0	06/12/07	06/19/07	0.05	U	
Magnesium	6010B	20.0	1.0	06/12/07	06/15/07	20.0	U	
Manganese	6010B	5.0	1.0	06/12/07	06/15/07	5.0	U	
Mercury	7470A	0.20	1.0	06/20/07	06/21/07	0.20	U	
Nickel	6020	0.2	1.0	06/12/07	06/19/07	0.2	U	
Potassium	6010B	2000	1.0	06/12/07	06/15/07	2000	U	
Selenium	7740	5.0	1.0	06/12/07	06/21/07	5.0	U	
Silver	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Sodium	6010B	100	1.0	06/12/07	06/15/07	100	U	
Thallium	6020	0.02	1.0	06/12/07	06/19/07	0.02	U	
Vanadium	6010B	10.0	1.0	06/12/07	06/15/07	10.0	U	
Zinc	6010B	10.0	1.0	06/12/07	06/15/07	10.0	U	

% Solids: 0.0

Comments:

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4859	97	5000	4890	98	4856	97	6010B
Antimony	25.0	25.4	102	25.0	25.0	100	25.1	100	6020
Arsenic	25.0	25.7	103	25.0	24.5	98	24.9	100	6020
Barium	5000	4895	98	500	492	98	486	97	6010B
Beryllium	2.5	2.7	108	25.0	26.4	106	25.1	100	6020
Cadmium	12.5	13.0	104	25.0	25.0	100	25.1	100	6020
Calcium	12500	12104	97	5000	4926	99	4877	98	6010B
Chromium	500	495	99	5000	4954	99	4910	98	6010B
Cobalt	25.0	25.8	103	25.0	24.7	99	26.1	104	6020
Copper	12.5	12.8	102	25.0	25.1	100	24.8	99	6020
Iron	2500	2410	96	5000	4917	98	4868	97	6010B
Lead	25.0	25.5	102	25.0	25.1	100	25.5	102	6020
Magnesium	12500	12062	96	5000	4928	99	4841	97	6010B
Magnesium	12500	12251	98	5000	4984	100	5061	101	6010B
Manganese	1250	1222	98	500	492	98	487	97	6010B
Mercury	5.00	5.20	104	5.00	4.94	99	5.11	102	7470A
Nickel	25.0	25.4	102	25.0	24.5	98	25.4	102	6020
Potassium	12500	12430	99	25000	25070	100	24776	99	6010B
Selenium	25.0	25.2	101	20.0	19.7	98	19.2	96	7740
Silver	12.5	12.7	102	25.0	25.2	101	25.7	103	6020
Sodium	12500	12282	98	25000	24803	99	24653	99	6010B
Thallium	25.0	25.6	102	25.0	25.0	100	25.6	102	6020
Vanadium	1250	1234	99	500	489	98	485	97	6010B
Zinc	1250	1221	98	2500	2454	98	2430	97	6010B

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4796	96	4821	96	6010B
Antimony				25.0	25.2	101			6020
Arsenic				25.0	25.6	102			6020
Barium				500	482	96	480	96	6010B
Beryllium				25.0	24.8	99			6020
Cadmium				25.0	25.1	100			6020
Calcium				5000	4828	97	4836	97	6010B
Chromium				5000	4877	98	4869	97	6010B
Cobalt				25.0	27.4	110			6020
Copper				25.0	25.2	101			6020
Iron				5000	4843	97	4840	97	6010B
Lead				25.0	25.7	103			6020
Magnesium				5000	4807	96	4801	96	6010B
Magnesium				5000	5008	100	4919	98	6010B
Manganese				500	482	96	483	97	6010B
Mercury				5.00	5.00	100	4.97	99	7470A
Nickel				25.0	26.7	107			6020
Potassium				25000	24517	98	25108	100	6010B
Selenium				20.0	19.6	98			7740
Silver				25.0	25.8	103			6020
Sodium				25000	24366	97	24394	98	6010B
Thallium				25.0	25.4	102			6020
Vanadium				500	481	96	480	96	6010B
Zinc				2500	2420	97	2416	97	6010B

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4770	95	4855	97	6010B
Barium				500	482	96	487	97	6010B
Calcium				5000	4804	96	4886	98	6010B
Chromium				5000	4852	97	4919	98	6010B
Iron				5000	4822	96	4884	98	6010B
Magnesium				5000	4791	96	4864	97	6010B
Magnesium				5000	4833	97	5079	102	6010B
Manganese				500	480	96	489	98	6010B
Potassium				25000	24098	96	24305	97	6010B
Sodium				25000	24377	98	24691	99	6010B
Vanadium				500	478	96	486	97	6010B
Zinc				2500	2408	96	2428	97	6010B

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4795	96			6010B
Barium				500	486	97			6010B
Calcium				5000	4846	97			6010B
Chromium				5000	4887	98			6010B
Iron				5000	4854	97			6010B
Magnesium				5000	4818	96			6010B
Magnesium				5000	4961	99			6010B
Manganese				500	484	97			6010B
Potassium				25000	24070	96			6010B
Sodium				25000	24584	98			6010B
Vanadium				500	483	97			6010B
Zinc				2500	2417	97			6010B

Metals
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50.0	32.6	65		
Antimony				0.05	0.06	120		
Arsenic				0.50	0.59	118		
Barium				5.0	5.1	102		
Beryllium				0.020	0.020	100		
Cadmium				0.02	0.02	100		
Calcium				50.0	54.1	108		
Chromium				5.0	6.9	138		
Cobalt				0.020	0.022	110		
Copper				0.10	0.11	110		
Iron				20	19.1	96		
Lead				0.020	0.022	110		
Magnesium				20.0	20.7	104		
Manganese				5.0	4.7	94		
Mercury	0.20	0.20	100					
Nickel				0.20	0.22	110		
Potassium				2000.0	1660.5	83		
Selenium	5.0	4.9	98					
Silver				0.020	0.025	125		
Sodium				100.0	121.2	121		
Thallium				0.020	0.022	110		
Vanadium				10.0	12.1	121		
Zinc				10.0	10.1	101		

Metals

BLANKS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Aluminum	50	U	50	U	50	U	50	U	6010B
Antimony	0.05	U	0.05	U	0.05	U	0.05	U	6020
Arsenic	0.5	U	0.5	U	0.5	U	0.5	U	6020
Barium	5.0	U	5.0	U	5.0	U	5.0	U	6010B
Beryllium	0.02	U	0.02	U	0.02	U	0.02	U	6020
Cadmium	0.02	U	0.02	U	0.02	U	0.02	U	6020
Calcium	50	U	50	U	50	U	50	U	6010B
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	6010B
Cobalt	0.02	U	0.02	U	0.02	U	0.02	U	6020
Copper	0.1	U	0.1	U	0.1	U	0.1	U	6020
Iron	20	U	20	U	20	U	20	U	6010B
Lead	0.05	U	0.05	U	0.05	U	0.05	U	6020
Magnesium	20	U	20	U	20	U	20	U	6010B
Manganese	5.0	U	5.0	U	5.0	U	5.0	U	6010B
Mercury	0.20	U	0.20	U	0.20	U	0.20	U	7470A
Nickel	0.2	U	0.2	U	0.2	U	0.2	U	6020
Potassium	2000	U	2000	U	2000	U	2000	U	6010B
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	7740
Silver	0.02	U	0.02	U	0.02	U	0.02	U	6020
Sodium	100	U	100	U	100	U	100	U	6010B
Thallium	0.02	U	0.02	U	0.02	U	0.02	U	6020
Vanadium	10	U	10	U	10	U	10	U	6010B
Zinc	10	U	10	U	10	U	10	U	6010B

Metals

BLANKS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Aluminum			50	U	50	U	50	U	6010B
Barium			5.0	U	5.0	U	5.0	U	6010B
Calcium			50	U	50	U	50	U	6010B
Chromium			5.0	U	5.0	U	5.0	U	6010B
Iron			20	U	20	U	20	U	6010B
Magnesium			20	U	20	U	20	U	6010B
Manganese			5.0	U	5.0	U	5.0	U	6010B
Mercury			0.20	U					7470A
Potassium			2000	U	2000	U	2000	U	6010B
Sodium			100	U	100	U	100	U	6010B
Vanadium			10	U	10	U	10	U	6010B
Zinc			10	U	10	U	10	U	6010B

Metals

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BLANKS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Aluminum			50	U					6010B
Barium			5.0	U					6010B
Calcium			50	U					6010B
Chromium			5.0	U					6010B
Iron			20	U					6010B
Magnesium			20	U					6010B
Manganese			5.0	U					6010B
Potassium			2000	U					6010B
Sodium			100	U					6010B
Vanadium			10	U					6010B
Zinc			10	U					6010B

Metals

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-AES-01 **ICS Source:** Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	491283	487914	98			
Barium		500	1.2	470.2	94			
Calcium	500000	500000	451460	448844	90			
Chromium		500	-1.6	437.1	87			
Iron	200000	200000	174318	173350	87			
Magnesium	500000	500000	473876	470628	94			
Manganese		500	-1.0	440.4	88			
Potassium			-199.6	-35.9				
Sodium			-50.6	-32.2				
Vanadium		500	2.6	446.5	89			
Zinc		1000	8.5	906.0	91			

Metals

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-MS-02 **ICS Source:** Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony			0	0.1				
Arsenic		25	0	26.4	106			
Beryllium			0	0.0				
Cadmium		25	2	25.9	104			
Cobalt		50	0	50.9	102			
Copper		50	1	47.1	94			
Lead			0.1	0.1				
Nickel		50	2	50.0	100			
Silver	0.0	12.5	0	11.7	94			
Thallium			0	0.0				

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Metals

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SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA **Units:** UG/L

Project Name: Presidio **Basis:** N/A

Matrix: WATER **% Solids:** 0.0

Sample Name: BHWGW01CLS **Lab Code:** K0704852-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	83 - 119	1940		50	U	2000.00	97.0		6010B
Antimony	63 - 131	20		0.05	U	20.00	100.0		6020
Arsenic	68 - 128	22		1.6		20.00	102.0		6020
Barium	76 - 127	2010		49.8		2000.00	98.0		6010B
Beryllium	56 - 134	21		0.02	U	20.00	105.0		6020
Cadmium	82 - 114	19		0.03		20.00	94.8		6020
Chromium	85 - 119	313		116		200.00	98.5		6010B
Cobalt	80 - 119	21		0.13		20.00	104.4		6020
Copper	52 - 129	19		0.5		20.00	92.5		6020
Iron	58 - 142	965		20	U	1000.00	96.5		6010B
Lead	72 - 116	18		0.14		20.00	89.3		6020
Manganese	82 - 122	487		5.0	U	500.00	97.4		6010B
Nickel	66 - 121	23		3.7		20.00	96.5		6020
Selenium	31 - 138	16.7		5.0	U	20.00	83.5		7740
Silver	46 - 136	19		0.02	U	20.00	95.0		6020
Thallium	79 - 112	19		0.02	U	20.00	95.0		6020
Vanadium	87 - 116	501		10	U	500.00	100.2		6010B
Zinc	93 - 117	476		10	U	500.00	95.2		6010B

An empty field in the Control Limit column indicates the control limit is not applicable

Columbia Analytical Services

Metals

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SPIKE SAMPLE RECOVERY

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project No.:	NA	**Units:**	UG/L
Project Name:	Presidio	**Basis:**	As Rec
Matrix:	WATER	**% Solids:**	0.0

Sample Name: 1349MW100CLS **Lab Code:** K0704852-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	79 - 118	0.80		0.20	U	1.00	80.0		7470A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

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DUPLICATES

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA **Units:** UG/L

Project Name: Presidio **Basis:** N/A

Matrix: WATER **% Solids:** 0.0

Sample Name: BHWGW01CLD **Lab Code:** K0704852-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		50	U	50	U			6010B
Antimony		0.05	U	0.05	U			6020
Arsenic		1.64		1.75		6		6020
Barium	20	50.0		50.0		0		6010B
Beryllium		0.020	U	0.020	U			6020
Cadmium		0.03		0.03		0		6020
Calcium	20	17900		17700		1		6010B
Chromium	20	116		117		1		6010B
Cobalt	20	0.130		0.140		7		6020
Copper		0.47		0.47		0		6020
Iron		20	U	20	U			6010B
Lead		0.137		0.139		1		6020
Magnesium	20	87900		87200		1		6010B
Manganese		5.0	U	5.0	U			6010B
Nickel	20	3.65		3.73		2		6020
Potassium		2000	U	2000	U			6010B
Selenium		5.0	U	5.0	U			7740
Silver		0.020	U	0.020	U			6020
Sodium	20	244000		242000		1		6010B
Thallium		0.020	U	0.020	U			6020
Vanadium		10	U	10	U			6010B
Zinc		10	U	10	U			6010B

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

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DUPLICATES

Client: Treadwell and Rollo, Inc.
Service Request: K0704852
Project No.: NA
Units: UG/L
Project Name: Presidio
Basis: As Rec
Matrix: WATER
% Solids: 0.0

Sample Name: 1349MW100CLD
Lab Code: K0704852-002D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.20	U	0.20	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

LABORATORY CONTROL SAMPLE

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Aluminum	5000	4950	99.0					
Antimony	20	20.5	102.5					
Arsenic	20	20.4	102.0					
Barium	5000	4940	98.8					
Beryllium	20	19.9	99.5					
Cadmium	20	20.3	101.5					
Calcium	12500	12300	98.4					
Chromium	500	500	100.0					
Cobalt	20	20.7	103.5					
Copper	20	19.9	99.5					
Iron	2500	2450	98.0					
Lead	20	20.6	103.0					
Magnesium	12500	12200	97.6					
Magnesium	12500	12300	98.4					
Manganese	1250	1240	99.2					
Mercury	5	4.79	95.8					
Nickel	20	20.1	100.5					
Potassium	12500	13000	104.0					
Selenium	20	20.3	101.5					
Silver	20	20.1	100.5					
Sodium	12500	12500	100.0					
Thallium	20	20.8	104.0					
Vanadium	1250	1240	99.2					
Zinc	1250	1240	99.2					

Metals

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ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA **Units:** UG/L

Project Name: Presidio

Sample Name: BHWGW01CLL **Lab Code:** K0704852-001L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Antimony	0.03		0.25	U	100.0		MS
Arsenic	1.6		2.5	U	100.0		MS
Beryllium	0.01		0.10	U	100.0		MS
Cadmium	0.03		0.10	U	100.0		MS
Cobalt	0.13		0.13		0		MS
Copper	0.5		0.5		0		MS
Lead	0.14		0.25	U	100.0		MS
Nickel	3.7		3.3		11		MS
Silver	0.02	U	0.10	U			MS
Thallium	0.02	U	0.10	U			MS

Metals

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ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA **Units:** UG/L

Project Name: Presidio

Sample Name: 1349MW100CLL **Lab Code:** K0704852-002L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	50	U	250	U			P
Barium	709.6		701.8		1.1		P
Calcium	145490.0		147427.5		1.3		P
Chromium	5.0	U	25.0	U			P
Iron	39327.6		40094.8		2		P
Magnesium	213175.3		209137.6		1.9		P
Manganese	1530.1		1453.5		5.0		P
Potassium	1740		10000	U	100.0		P
Sodium	405358		397664		1.9		P
Vanadium	2.2		50.0	U	100.0		P
Zinc	10.0	U	50.0	U			P

Metals

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DETECTION LIMITS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP/ICP-MS ID #: K-ICP-MS-02

GFAA ID #:

AA ID #:

Analyte	Isotope	Back-ground	MRL ug/L	MRL ug/L	M
Antimony	123		0.05	0.05	MS
Arsenic	75		0.5	0.5	MS
Beryllium	9		0.02	0.02	MS
Cadmium	111		0.02	0.02	MS
Cobalt	59		0.02	0.02	MS
Copper	65		0.1	0.1	MS
Lead	208		0.05	0.05	MS
Nickel	60		0.2	0.2	MS
Silver	107		0.02	0.02	MS
Thallium	205		0.02	0.02	MS

Comments:

Metals

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DETECTION LIMITS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP/ICP-MS ID #: K-ICP-AES-01

GFAA ID #: **AA ID #:**

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MRL ug/L	M
Aluminum	308.20		50	50	P
Barium	493.60		5.0	5.0	P
Calcium	317.90		50.0	50.0	P
Chromium	267.70		5.0	5.0	P
Iron	259.90		20.0	20.0	P
Magnesium	279.50		20.0	20.0	P
Manganese	257.60		5.0	5.0	P
Potassium	766.50		2000	2000	P
Sodium	588.90		100	100	P
Vanadium	292.40		10.0	10.0	P
Zinc	213.80		10.0	10.0	P

Comments:

Metals

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DETECTION LIMITS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP/ICP-MS ID #:

GFAA ID #: **AA ID #:** K-CVAA-01

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MRL ug/L	M
Mercury	253.70		0.2	0.2	CV

Comments:

Metals

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DETECTION LIMITS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP/ICP-MS ID #:

GFAA ID #: K-GFAA-06 **AA ID #:**

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MRL ug/L	M
Selenium	196.00		5.0	5.0	F

Comments:

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Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-AES-01

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0056024	0.0000000	0.0005641	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	0.0039540	0.0002602	0.0000000
Cadmium	228.802	0.0000000	0.0000000	-0.0000832	0.0000000	0.0133369
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	-0.0000111	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000445	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	0.0001384	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0010222	0.0000000	0.0013860	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000197	0.0000000	-0.0001303	0.0000189	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	-0.0000971	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0005893	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0002641	0.0000000	-0.0020079	0.0000000	0.0000000
Silicon	228.158	0.0000000	0.0000000	0.0000000	0.0002101	0.0000000
Silver	320.8	0.0000000	0.0000000	-0.0001609	0.0000000	0.0000000
Sodium	588.995	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	-0.0002373	0.0000000	0.0055750	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	-0.0002763	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0002101	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000201	0.0000000	0.0000000
Zinc	213.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

Columbia Analytical Services

Metals

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-AES-01

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.215	-0.0185825	0.0000000	0.0000000	0.0182228	0.0000000
Antimony	206.838	-0.0016409	-0.0016409	0.0000000	0.0083442	-0.0035358
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.678	0.0020908	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.802	-0.0061753	0.0000000	0.0000000	0.0000000	-0.0008028
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0001857	-0.0004563	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0008270
Copper	324.754	0.0000000	0.0000000	0.0000000	-0.0005165	0.0000000
Iron	259.94	0.0000000	0.0000000	-0.0061327	0.0007141	0.0000000
Lead	220.353	-0.0181781	-0.0181781	0.0000000	-0.0007692	0.0008065
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	-0.0003871	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002074
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0053967	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	228.158	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	320.8	0.0000000	0.0000000	0.0001579	0.0000000	0.0000000
Sodium	588.995	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0059539	0.0000000	8,985.0000000	-0.0061970	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	-0.0002758	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	-0.0357838	0.0000000
Zinc	213.856	0.0000000	0.0000000	0.0000000	-0.0003370	0.0037972

Comments:

Columbia Analytical Services

Metals

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-AES-01

Analyte	Wave-length (nm)	Interelement Correction Factors for: Sb	Sn	Ti	V
Aluminum	308.215	0.0000000	0.0000000	0.0000000	-0.0213209
Antimony	206.838	0.0000000	0.0000000	0.0014564	-0.0091684
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0184930
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0038028
Boron	249.678	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.802	0.0000000	0.0000000	0.0000000	0.0000605
Calcium	317.933	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0006326
Cobalt	228.616	0.0000000	-0.0039455	0.0014511	0.0000000
Copper	324.754	0.0000000	0.0000000	-0.0007775	-0.0002223
Iron	259.94	0.0000000	0.0000000	-0.0008630	0.0003442
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	-0.0001060
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	228.158	0.0000000	0.0000000	0.0112565	-0.0036595
Silver	320.8	0.0000000	0.0000000	0.0000000	-0.0096279
Sodium	588.995	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0030874
Tin	189.989	0.0000000	0.0000000	0.0037243	0.0000000
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0003002	0.0000000
Zinc	213.856	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-MS-02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.000	1000	6020
Arsenic	15.000	1000	6020
Beryllium	15.000	1000	6020
Cadmium	15.000	1000	6020
Cobalt	15.000	1000	6020
Copper	15.000	1000	6020
Lead	15.000	1000	6020
Nickel	15.000	1000	6020
Silver	15.000	300	6020
Thallium	15.000	1000	6020

Comments:

Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

ICP ID Number: K-ICP-MS-02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	900000	6010B
Barium	5.00	180000	6010B
Calcium	5.00	450000	6010B
Chromium	5.00	180000	6010B
Iron	5.00	450000	6010B
Magnesium	5.00	720000	6010B
Manganese	5.00	8100	6010B
Potassium	5.00	450000	6010B
Sodium	5.00	1080000	6010B
Vanadium	5.00	90000	6010B
Zinc	5.00	180000	6010B

Comments:

Metals
-13-
PREPARATION LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
K0704852-001	6/12/07	50.0	50.0
K0704852-001D	6/12/07	50.0	50.0
K0704852-001S	6/12/07	50.0	50.0
K0704852-002	6/12/07	50.0	50.0
K0704852-003	6/12/07	50.0	50.0
K0704852-MB	6/12/07	50.0	50.0
LCSW	6/12/07	50.0	50.0

Metals
-13-
PREPARATION LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Method: MS

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
CCB2	6/12/07	50.0	50.0
K0704852-001	6/12/07	50.0	50.0
K0704852-001	6/12/07	50.0	50.0
K0704852-001D	6/12/07	50.0	50.0
K0704852-001D	6/12/07	50.0	50.0
K0704852-001S	6/12/07	50.0	50.0
K0704852-001S	6/12/07	50.0	50.0
K0704852-002	6/12/07	50.0	50.0
K0704852-002	6/12/07	50.0	50.0
K0704852-003	6/12/07	50.0	50.0
K0704852-003	6/12/07	50.0	50.0
K0704852-MB	6/12/07	50.0	50.0
K0704852-MB	6/12/07	50.0	50.0
LCSW	6/12/07	50.0	50.0
LCSW	6/12/07	50.0	50.0

Metals
-13-
PREPARATION LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Method: CV

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
K0704852-002	6/20/07	20.0	20.0
K0704852-002D	6/20/07	20.0	20.0
K0704852-002S	6/20/07	20.0	20.0
K0704852-MB	6/20/07	20.0	20.0
LCSW	6/20/07	20.0	20.0

Columbia Analytical Services

Metals
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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-ICP-AES-01 **Method:** P

Start Date: 6/15/07 **End Date:** 6/15/07

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
STD1-Blank	1.00	08:38		X			X			X	X			X		X	X			X			X		X	X	
STD3	1.00	08:40		X						X				X		X	X								X	X	
STD2	1.00	08:42					X				X									X			X				
ICV1	1.00	08:46		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	08:48																									
ICB1	1.00	08:57		X			X			X	X			X		X	X			X			X		X	X	
CCV1	1.00	08:59		X			X			X	X			X		X	X			X			X		X	X	
CCB1	1.00	09:05		X			X			X	X			X		X	X			X			X		X	X	
CRDL1	1.00	09:09		X			X			X	X			X		X	X			X			X		X	X	
ICS-A1	1.00	09:11		X			X			X	X			X		X	X			X			X		X	X	
ICS-AB1	1.00	09:13		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	09:16																									
ZZZZZZ	1.00	09:18																									
ZZZZZZ	1.00	09:20																									
ZZZZZZ	1.00	09:22																									
ZZZZZZ	1.00	09:24																									
ZZZZZZ	1.00	09:26																									
ZZZZZZ	1.00	09:28																									
CCV2	1.00	09:30		X			X			X	X			X		X	X			X			X		X	X	
CCB2	1.00	09:34		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	09:42																									
ZZZZZZ	1.00	09:43																									
ZZZZZZ	1.00	09:45																									
ZZZZZZ	1.00	09:47																									
ZZZZZZ	1.00	09:49																									
ZZZZZZ	1.00	09:51																									
ZZZZZZ	1.00	09:53																									
ZZZZZZ	1.00	09:55																									
ZZZZZZ	1.00	09:56																									
ZZZZZZ	1.00	09:58																									
CCV3	1.00	10:00		X			X			X	X			X		X	X			X			X		X	X	
CCB3	1.00	10:03		X			X			X	X			X		X	X			X			X		X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-ICP-AES-01 **Method:** P

Start Date: 6/15/07 **End Date:** 6/15/07

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:04																									
ZZZZZZ	1.00	10:06																									
ZZZZZZ	1.00	10:08																									
ZZZZZZ	1.00	10:10																									
ZZZZZZ	1.00	10:12																									
ZZZZZZ	1.00	10:14																									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	5.00	10:17																									
K0704852-MB	1.00	10:20		X			X			X	X			X		X	X			X			X		X	X	
LCSW	1.00	10:22		X			X			X	X			X		X	X			X			X		X	X	
CCV4	1.00	10:24		X			X			X	X			X		X	X			X			X		X	X	
CCB4	1.00	10:27		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	10:46																									
ZZZZZZ	1.00	10:47																									
ZZZZZZ	1.00	10:49																									
ZZZZZZ	1.00	10:51																									
ZZZZZZ	1.00	10:53																									
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:01																									
ZZZZZZ	1.00	11:03																									
CCV5	1.00	11:05		X			X			X	X			X		X	X			X			X		X	X	
CCB5	1.00	11:07		X			X			X	X			X		X	X			X			X		X	X	
ZZZZZZ	1.00	11:09																									
ZZZZZZ	1.00	11:14																									
ZZZZZZ	1.00	11:16																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:20																									
K0704852-001	1.00	11:22		X			X			X	X			X		X	X			X			X		X	X	
K0704852-001D	1.00	11:24		X			X			X	X			X		X	X			X			X		X	X	
K0704852-001S	1.00	11:26		X			X				X			X			X								X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-ICP-AES-01 **Method:** P

Start Date: 6/15/07 **End Date:** 6/15/07

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K0704852-002	1.00	11:27		X			X			X	X			X		X				X			X		X	X	
K0704852-003	1.00	11:29		X						X	X			X		X	X			X			X			X	
CCV6	1.00	11:31		X			X			X	X			X		X	X			X			X		X	X	
CCB6	1.00	11:33		X			X			X	X			X		X	X			X			X		X	X	
K0704852-002L	5.00	11:39		X			X			X	X			X		X				X			X		X	X	
K0704852-002	10.00	11:41															X										
K0704852-002L	5.00	11:43															X										
CCV7	1.00	11:44		X			X			X	X			X		X	X			X			X		X	X	
CCB7	1.00	11:48		X			X			X	X			X		X	X			X			X		X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-ICP-MS-02 **Method:** MS

Start Date: 6/19/07 **End Date:** 6/19/07

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank	1.00	15:30			X	X		X	X			X	X		X				X			X		X			
	1.00	15:33			X	X		X	X			X	X		X				X			X		X			
ICV1	1.00	15:36			X	X		X	X			X	X		X				X			X		X			
CCV1	1.00	15:40			X	X		X	X			X	X		X				X			X		X			
ICB1	1.00	15:45			X	X		X	X			X	X		X				X			X		X			
CCB1	1.00	15:48			X	X		X	X			X	X		X				X			X		X			
CRA WATER MS10-81-H	1.00	15:51			X	X		X	X			X	X		X				X			X		X			
ICS-A1	1.00	15:54			X	X		X	X			X	X		X				X			X		X			
ICS-AB1	1.00	15:57			X	X		X	X			X	X		X				X			X		X			
K0704852-MB	1.00	16:03			X	X		X	X			X	X		X				X			X		X			
K0704852-001	1.00	16:07			X	X		X	X			X	X		X				X			X		X			
K0704852-001D	1.00	16:10			X	X		X	X			X	X		X				X			X		X			
K0704852-001L	5.00	16:18			X	X		X	X			X	X		X				X			X		X			
K0704852-001A	1.00	16:21			X	X		X	X			X	X		X				X			X		X			
K0704852-001S	1.00	16:24			X	X		X	X			X	X		X				X			X		X			
LCSW	1.00	16:26			X	X		X	X			X	X		X				X			X		X			
CCV2	1.00	16:34			X	X		X	X			X	X		X				X			X		X			
CCB2	1.00	16:40			X	X		X	X			X	X		X				X			X		X			
ZK0704852-002	1.00	16:43																									
K0704852-003	1.00	16:47			X	X			X				X		X				X								
K0704852-002	2.00	16:52			X	X		X	X			X	X		X				X			X		X			
CCV3	1.00	16:56			X	X		X	X			X	X		X				X			X		X			
CCB3	1.00	17:04			X	X		X	X			X	X		X				X			X		X			

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

Metals
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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-CVAA-01 **Method:** CV

Start Date: 6/21/07 **End Date:** 6/21/07

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Zero	1.00	16:11																X									
Standard #1	1.00	16:13																X									
Standard #2	1.00	16:15																X									
Standard #3	1.00	16:17																X									
Standard #4	1.00	16:18																X									
Standard #5	1.00	16:20																X									
ICV1	1.00	16:22																X									
ICB1	1.00	16:24																X									
CCV1	1.00	16:25																X									
CCB1	1.00	16:27																X									
CRDL	1.00	16:29																X									
K0704852-MB	1.00	16:31																X									
LCSW	1.00	16:33																X									
ZZZZZZ	1.00	16:34																									
ZZZZZZ	1.00	16:36																									
ZZZZZZ	1.00	16:38																									
ZZZZZZ	1.00	16:40																									
ZZZZZZ	1.00	16:41																									
ZZZZZZ	1.00	16:43																									
ZZZZZZ	1.00	16:45																									
CCV2	1.00	16:47																X									
CCB2	1.00	16:48																X									
ZZZZZZ	1.00	16:50																									
ZZZZZZ	1.00	16:52																									
ZZZZZZ	1.00	16:54																									
ZZZZZZ	1.00	16:56																									
ZZZZZZ	1.00	16:57																									
ZZZZZZ	1.00	16:59																									
ZZZZZZ	1.00	17:01																									
ZZZZZZ	1.00	17:03																									
ZZZZZZ	1.00	17:05																									
K0704852-002	1.00	17:06																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-CVAA-01 **Method:** CV

Start Date: 6/21/07 **End Date:** 6/21/07

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	17:08																X									
CCB3	1.00	17:10																X									
K0704852-002D	1.00	17:12																X									
K0704852-002S	1.00	17:13																X									
ZZZZZZ	1.00	17:15																									
ZZZZZZ	1.00	17:17																									
ZZZZZZ	1.00	17:19																									
ZZZZZZ	1.00	17:21																									
ZZZZZZ	1.00	17:22																									
ZZZZZZ	1.00	17:24																									
ZZZZZZ	1.00	17:33																									
ZZZZZZ	1.00	17:35																									
CCV4	1.00	17:36																X									
CCB4	1.00	17:38																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-GFAA-06 **Method:** F

Start Date: 6/21/07 **End Date:** 6/21/07

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:46																									
CAL ZERO	1.00	10:53																			X						
STANDARD 1	1.00	10:58																			X						
STANDARD 2	1.00	11:02																			X						
STANDARD 3	1.00	11:06																			X						
STANDARD 4	1.00	11:11																			X						
STANDARD 5	1.00	11:15																			X						
ICV1	1.00	11:19																			X						
ICB1	1.00	11:24																			X						
CRDL	1.00	11:28																			X						
CCV1	1.00	11:32																			X						
CCB1	1.00	11:36																			X						
ZZZZZZ	1.00	11:41																									
ZZZZZZ	1.00	11:45																									
ZZZZZZ	1.00	11:49																									
ZZZZZZ	1.00	11:54																									
ZZZZZZ	1.00	11:58																									
ZZZZZZ	1.00	12:02																									
ZZZZZZ	1.00	12:07																									
ZZZZZZ	1.00	12:11																									
K0704852-MB	1.00	12:15																			X						
LCSW	1.00	12:20																			X						
CCV2	1.00	12:24																			X						
CCB2	1.00	12:28																			X						
K0704852-001	1.00	12:33																			X						
K0704852-001A	1.00	12:37	87.5																		X						
K0704852-001D	1.00	12:41																			X						
K0704852-001S	1.00	12:46																			X						
K0704852-002	1.00	12:50																			X						
K0704852-003	1.00	12:54																			X						
ZZZZZZ	1.00	12:59																									
ZZZZZZ	1.00	13:03																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852

Project No.: NA

Project Name: Presidio

Instrument ID Number: K-GFAA-06 **Method:** F

Start Date: 6/21/07 **End Date:** 6/21/07

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	13:07																									
ZZZZZZ	1.00	13:12																									
CCV3	1.00	13:16																			X						
CCB3	1.00	13:20																			X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0704754 K0704810 K0704852

Star Lims Run No.: 50260

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
KDK 6/12/07 ~~K0704754~~ -Blank			x	50	50	1% HNO_3, 5% HCl
-LCSW						
K0704754 -26						
-26D						
-26S						
-27						
-28						
-29						
K0704810 -1						
-2						
-4						
-5						
-6						
-4D						
-4S						
K0704852 -1						
-2						
-3						
-1D						
-1S						
						KDK 6/12/07

Time Digestion Started:

Lot # Acids Used: HNO3 C47031 **HCl** 47050 **H2O2**

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added

ICP LCSW = QCP-CICV-1, MET1-52-I, 0.25 mls. added
QCP CICV-2, MET1-54-Q, 0.25 mls. added
QCP CICV-3, MET1-51-U, 0.25 mls. added
SS6, MET1-56-B, 0.5 mls. added

TCLP Spike/LCSE
TSS1 MET1-54-N _____ mls. added

SPIKE INFO
SS1-MET1-55-H, 0.5 mls added SS4-MET1-56-D, _____ mls added
SS5-MET1-56-A, 0.5 mls added 200.8 1000ppb Stock (MS10-68-A) _____ mls added
SS6-MET1-56-B, 0.5 mls added Ag 1000ppb Stock (MS10-58-H) _____ mls added

Additional spikes:

Comments:

Analyst Kay Klar **Date** 6/12/07
Reviewer [illegible] **Date** 6/13/07

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METALS SPIKE FORM

Service Request # K0704754 K0704810 K0704852
Q.C. Sample # 4754-26, 4810-4, 4852-1

Circle type of digest: GFAA (ICP) FAA ICP-MS Other:_____ Initials / Date: KDK / 6/12/07
Circle type of sample: Soil (Water) Misc. Sludge Oil Other:_____

Solution Name	Element	mls of 1000ppm Solution	Final Volume	Source	Lot#	Exp. Date	Solution Conc. mg/L	Enter mls Added	
SS1-MET1-55-H	HNO3	50.0	1000ml	JT Baker	C47031	-	-	0.5	Expires:7/1/07
	Al	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	200		
	Ag	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	5		
	Ba	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	200		
	Be	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	5		
	Cd	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	5		
	Co	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
	Cr	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	20		
	Cu	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	25		
	Fe	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	100		
	Pb	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
	Mn	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
	Ni	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
	Sb	50*	1000ml	MET1-50-J	Z-SB02097	7/1/2007	50		
	V	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
	Zn	100	1000ml	MET1-54-D	Z-MEB226030	1/1/2008	50		
SS4-MET1-56-D	HNO3	25.0	500ml	JT BAKER	A48046	-	-		Expires:7/1/07
	As	2.0	500ml	MET1-49-I	611407	12/15/2007	4		
	Cd	2.0	500ml	MET1-51-D	Y-CD01136	7/1/2007	4		
	Pb	2.0	500ml	MET1-50-C	611804	12/15/2007	4		
	Se	2.0	500ml	MET1-51-M	Y-SE01113	7/1/2007	4		
	Tl	2.0	500ml	MET1-54-M	Z-TL01097	2/1/2008	4		
	Cu	2.0	500ml	MET1-55-O	Z-CU02084	5/1/2008	4		
SS5-MET1-56-A	HNO3	25.0	500ml	JT BAKER	C47031	-	-	0.5	Expires:12/15/07
	As	50.0	500ml	MET1-49-I	611407	12/15/2007	100		
	Se	50.0	500ml	MET1-49-M	616519	12/15/2007	100		
	Tl	50.0	500ml	MET1-54-M	Z-TL01097	2/1/2008	100		
SS6-MET1-56-B	HNO3	25	500ml	JT BAKER	C28025	-	-	0.5	Expires: 7/01/07
	B	50	500ml	MET1-51-C	Z-QB02041	7/1/2007	100		
	Mo	50	500ml	MET1-54-K	Z-MO02012	2/1/2008	100		
GFLCSW (MET1-52-W)	HNO3	10.0	1000ml	JT BAKER	C28025	-	-		Expires: 8/1/07
	As, Pb, Se, Tl	5.0	1000ml	QCP-CICV-3	Y-MEB194030	8/1/2007	2.5		
	Cd	-	-	QCP-CICV-3	Y-MEB194030	8/1/2007	1.25		
	Cu	2.5	1000ml	MET1-50-E	611815	12/15/2007	2.5		
QCP-CICV-1 (MET1-52-I)	Ca, Mg, Na, K	no dilution	-	IV	Z-MEB194088	9/1/2007	2500	0.25	Expires:9/1/07
	Al, Ba	no dilution	-	IV	Z-MEB194088	9/1/2007	1000		
	Fe	no dilution	-	IV	Z-MEB194088	9/1/2007	500		
	Co, Mn, Ni, V, Zn	no dilution	-	IV	Z-MEB194088	9/1/2007	250		
	Cu, Ag	no dilution	-	IV	Z-MEB194088	9/1/2007	125		
	Cr	no dilution	-	IV	Z-MEB194088	9/1/2007	100		
	Be	no dilution	-	IV	Z-MEB194088	9/1/2007	25		
QCP-CICV-2 (MET1-54-Q)	Sb	no dilution	-	IV	Z-CICP19033	3/1/2008	500	0.25	Expires: 3/1/08
QCP-CICV-3 (MET1-51-U)	As, Pb, Se, Tl	no dilution	-	IV	Y- MEB194030	8/1/2007	500	0.25	Expires: 08/01/07
	Cd	no dilution	-	IV	Y- MEB194030	8/1/2007	250		

* Denotes volume of 1000 ppm stock standard.

Element	mls of	ppm	Source	Lot# / Lab Code	Exp. Date

Columbia Analytical Services
Metals Digestion Sheet

Service Request Number(s) : K0704754 K0704831 K0704852

Star Lims Run No.: 50263

Method : CLP 3010A 3020A 3005A 3050B CLP Hot Block Other-

Analysis for : ICP ICP-MS GFAA Flame AA Other

Sample	Initial Weight (g)	Dry	Wet	Initial Volume(ml)	Final Volume (ml)	Matrix
K0704754 - Blank			x	50	50	1% HNO3
-LCSW						
K0704754 -26						
-26D						
-26S						
-27						
-28						
-29						
K0704831 -1						
-2						
-1D						
-1S						
K0704852 -1						
-2						
-3						
-1D						
-1S						

KBR 6/12/07

Time Digestion Started:_____

Lot # Acids Used: HNO3 462760 **HCl** _____ **H2O2** _____

LCSS (circle appropriate) ERA CLP Soil Lot # D045540 Other:_____

GFAA LCSW = GFLCSW, MET1-52-W, _____ mls. added

ICP LCSW = QCP-CICV-1, MET1-52-I, _____ mls. added

QCP CICV-2, MET1-54-Q, _____ mls. added

QCP CICV-3, MET1-51-U, _____ mls. added

SS6, MET1-56-B, _____ mls. added

TCLP Spike/LCSE

TSS1 MET1-54-N _____ mls. added

SPIKE INFO

SS1-MET1-55-H, _____ mls added SS4-MET1-56-D, _____ mls added

SS5-MET1-56-A, _____ mls added 200.8 1000ppb Stock (MS10-68-A) 1.0 mls added

SS6-MET1-56-B, _____ mls added Ag 1000ppb Stock (MS10-58-H) 1.0 mls added

Additional spikes:_____

Comments: _____

Analyst _____ **Date** 6/12/07

Reviewer _____ **Date** 6/13/07

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Element Analyzed Se Instrument K-GFAA-06

Service Request # K4712, [redacted], K4274, K4868, K4957

Batch QC SR's #

Calibration Std. GFI-77-Z

Starlims # 87553

Modifier # $Pd/Mg(NO_3)$: GFI-72-E

Analysis Lot #

Analytical Batch
KA0627932

GFAA Data Review Form

		Yes	No	NA
1	ICV within 10% of true Value	✓		
2.	Calibration data included	✓		
3.	CCV's in control	✓		
4.	CCB's and/or ICB's below MRL	✓		
5.	All reported Results within Cal. Range	✓		
6.	All Calculations are Correct	✓		

Comments

Primary Reviewed by RV Date 6-22-07

Secondary Reviewed by [illegible] Date 6/22/07

COLUMBIA ANALYTICAL SERVICES, INC.
GFAA Run Log

Method: (Circle Method(s) Used)	**Service Request # :**
As: 7060A Pb: 7421 Se: 7740 Tl: 7841 Cr: 7191 Sb: 7041 Cu: 7211 Se 200.9 Other:	K4712, K4852, K4274, K4957 K4868

	SAMPLE NUMBER	Measured (ug/l)	Dilution factor	Recoveries (ICV, CCV, CRA, LCS Post-Spk., Matrix Spk.)	200 series (x)	Comments
1	~ICV	25.2145		101%		
2	~ICB	-0.1975				
3	~CRDL	4.8946		98%		
4	~CCV	19.6786		98%		
5	~CCB	-0.2531				
6	PBW K0704712	-0.1951	-			
7	LCSW	23.541	-	94%		
8	K0704712-002	-0.1991	1/5			Cx=-0.343ug/l
9	K0704712-002A	11.5816	1/5	58%		single Pt. MSA
10	K0704712-002D	-0.4072	1/5			Cx=-0.754ug/l
11	K0704712-002DA	10.8892	1/5	54%		single Pt. MSA
12	K0704712-002S	3.5795	1/5	76%		Cx=6.07ug/l
13	K0704712-002SA	15.3768	1/5	59%		single Pt. MSA
14	PBW K0704852	-0.427	-			
15	LCSW MS	20.3096	-	102%		
16	~CCV	19.2242		96%		
17	~CCB	-0.403				
18	K0704852-001	-0.1526	-			
19	K0704852-001A	17.5499	-	88%		
20	K0704852-001D	0.1135	-			
21	K0704852-001S	16.7497	-	84%		
22	K0704852-002	-0.4907	-			
23	K0704852-003	-0.5581	-			
24	K0704957-006	-0.4197	1/5			
25	K0704868-001	-0.3555	1/5			
26	K0704868-001A	20.0104	1/5	100%		
27	PBW 0704274	0.0338	-			
28	~CCV	19.6181		98%		
29	~CCB	-0.2687				
30	LCSW MS	20.599	-	103%		

True Values/QC Limits: 7000 series listed	LCSW (200 series ± 15%)	Water Spike (200 series ± 30%)	LCSS (ERA D045540) (7000 & 200 series)	Soil Spike (200 series ± 30%)
Arsenic:	25.0ppb (79-115%)	40.0ppb (55-138%)	146mg/kg (77-122%)	80ppb (41-137%)
Lead:	25.0ppb (78-112%)	40.0ppb (54-138%)	67.5mg/kg (67-132%)	80ppb (41-140%)
Selenium:	25.0ppb (81-116%)	40.0ppb (31-138%)	70.5mg/kg (76-136%)	80ppb (45-132%)
Thallium:	25.0ppb (88-117%)	40.0ppb (40-136%)	82.1mg/kg (80-120%)	80ppb (39-132%)

Analyst	**Date:**		**Page Number:**
[signature]	22 6-~~29~~-07		1

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COLUMBIA ANALYTICAL SERVICES, INC.
GFAA Run Log

Method: (Circle Method(s) Used)	**Service Request # :**
As: 7060A Pb: 7421 Se: 7740 Tl: 7841 Cr: 7191 Sb: 7041 Cu: 7211 200.9 Other:	K4274

	SAMPLE NUMBER	Measured (ug/l)	Dilution factor	Recoveries (ICV, CCV, CRA, LCS Post-Spk., Matrix Spk.)	200 series (x)	Comments
1	K0704274-001 total	0.337	-			Cx=0.732ug/l
2	K0704274-001A	9.2111	-	46%		Single Pt. MSA
3	K0704274-001D	-0.1247	-			Cx=-0.277ug/l
4	K0704274-001DA	8.9377	-	45%		Single Pt. MSA
5	K0704274-001S	4.136	-	42%		Cx=8.45ug/l
6	K0704274-001SA	13.8748	-	49%		Single Pt. MSA
7	K0704274-002	-0.1078	-			Cx=-0.245ug/l
8	K0704274-002A	8.8771	-	44%		Single Pt. MSA
9	K0704274-003	-0.3791	-			Cx=-0.583ug/l
10	~CCV	19.1158		96%		
11	~CCB	-0.0648				
12	K0704274-003A	12.9927	-	65%		Single Pt. MSA
13	K0704274-004	-0.4742	-			Cx=-0.718ug/l
14	K0704274-004A	13.1054	-	66%		Single Pt. MSA
15	K0704274-005	0.1761	-			Cx=-0.259ug/l
16	K0704274-005A	13.51	-	68%		Single Pt. MSA
17	K0704274-006	0.4312	-			Cx=0.62ug/l
18	K0704274-006A	13.7573	-	69%		Single Pt. MSA
19	K0704274-007	-0.379	-			Cx=-1.58ug/l
20	K0704274-007A	4.7522	-	24%		Single Pt. MSA
21	K0704274-009	-0.2434	-			Cx=-0.406ug/l
22	~CCV	19.2729		96%		
23	~CCB	0.2515				
24	K0704274-009A	12.0608	-	60%		Single Pt. MSA
25	K0704274-001 diss.	-0.1394	-			Cx=-0.290ug/l
26	K0704274-001A	9.6447	-	48%		Single Pt. MSA
27	K0704274-002	-0.2105	-			Cx=-0.478ug/l
28	K0704274-002A	8.7106	-	44%		Single Pt. MSA
29	K0704274-003	-0.5075	-			Cx=-0.793ug/l
30	K0704274-003A	12.8748	-	64%		Single Pt. MSA

True Values/QC Limits: 7000 series listed	LCSW (200 series ± 15%)	Water Spike (200 series ± 30%)	LCSS (ERA D045540) (7000 & 200 series)	Soil Spike (200 series ± 30%)
Arsenic:	25.0ppb (79-115%)	40.0ppb (55-138%)	146mg/kg (77-122%)	80ppb (41-137%)
Lead:	25.0ppb (78-112%)	40.0ppb (54-138%)	67.5mg/kg (67-132%)	80ppb (41-140%)
Selenium:	25.0ppb (81-116%)	40.0ppb (31-138%)	70.5mg/kg (76-136%)	80ppb (45-132%)
Thallium:	25.0ppb (88-117%)	40.0ppb (40-136%)	82.1mg/kg (80-120%)	80ppb (39-132%)

Analyst	**Date:**		**Page Number:**
[signature]	6-22-07		2

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COLUMBIA ANALYTICAL SERVICES, INC.
GFAA Run Log

Method: (Circle Method(s) Used)	**Service Request # :**
As: 7060A Pb: 7421 Se: 7740 Tl: 7841 Cr: 7191 Sb: 7041 Cu: 7211 se 200.9 Other:	K4274

	SAMPLE NUMBER	Measured (ug/l)	Dilution factor	Recoveries (ICV, CCV, CRA, LCS Post-Spk., Matrix Spk.)	200 series (x)	Comments
1	K0704274-004	-0.4098	-			Cx=-0.650ug/l
2	K0704274-004A	12.5463	-	63%		Single Pt. MSA
3	K0704274-005	0.1926	-			Cx=0.279ug/l
4	~CCV	18.9		95%		
5	~CCB	0.0853				
6	K0704274-005A	13.7814	-	69%		Single Pt. MSA
7	K0704274-006	0.1826	-			Cx=0.265ug/l
8	K0704274-006A	13.8275	-	69%		Single Pt. MSA
9	K0704274-007	-0.2102	-			Cx=-0.876ug/l
10	K0704274-007A	4.7426	-	24%		Single Pt. MSA
11	K0704274-009	-0.1546	-			Cx=-0.271ug/l
12	K0704274-009A	11.3433	-	57%		Single Pt. MSA
13	~CRDL	4.829				
14	~CCV	19.3858		97%		
15	~CCB	0.3532				
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

True Values/QC Limits: 7000 series listed	LCSW (200 series ± 15%)	Water Spike (200 series ± 30%)	LCSS (ERA D045540) (7000 & 200 series)	Soil Spike (200 series ± 30%)
Arsenic:	25.0ppb (79-115%)	40.0ppb (55-138%)	146mg/kg (77-122%)	80ppb (41-137%)
Lead:	25.0ppb (78-112%)	40.0ppb (54-138%)	67.5mg/kg (67-132%)	80ppb (41-140%)
Selenium:	25.0ppb (81-116%)	40.0ppb (31-138%)	70.5mg/kg (76-136%)	80ppb (45-132%)
Thallium:	25.0ppb (88-117%)	40.0ppb (40-136%)	82.1mg/kg (80-120%)	80ppb (39-132%)

Analyst	**Date:**		**Page Number:**
Robert Nakai	6-21-07		3

R:\ICP\WIP\DATA\K-GFAA-06 (Varian-6)\Run Logs\KA0627932Se LOG

Analyst rnorris
Date Started 9:53 AM 06/21/2007
Worksheet Se 6-21-07
Comment K-GFAA-06
Methods Se

Varian 6 (K-GFAA-06)
Columbia Analytical Services
1317 S. 13TH Ave.
Kelso, WA 98626

Method: Se (Furnace)

W4502: Sample uncalibrated

Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings			
RSD check	UNCALm	1.0	0.1895	0.2007	0.1881	0.1908	/21/2007	6:00 AM
CAL ZERO	0.00	70.6	0.0012	0.0562	0.0006	0.0019	/21/2007	3:44 AM
STANDARD 1	5.00	2.0	0.0166	0.0594	0.0169	0.0164	/21/2007	8:06 AM
STANDARD 2	10.00	10.9	0.0414	0.0727	0.0446	0.0382	/21/2007	2:28 AM
STANDARD 3	20.00	0.8	0.0935	0.0777	0.0941	0.0930	/21/2007	6:48 AM
STANDARD 4	30.00	0.1	0.1393	0.0805	0.1393	0.1392	/21/2007	1:08 AM
	QC Test: Correlation coefficient 0.9987 w ithin 0.9950 limit							
STANDARD 5	40.00	0.4	0.1824	0.0902	0.1819	0.1830	/21/2007	5:28 AM
	Curve Fit	= Linear Origin						
	Characteristic Conc	= 1.92 µg/L						
	r	= 0.9987						
	Calculated Conc	= 0.27 3.63 9.05 20.43 30.43 39.86						
	Residuals	= -0.27 1.37 0.95 -0.43 -0.43 0.14						
	QC Test: ICV recovery 100.8%R - w ithin limits							
~ICV	25.21	0.3	0.1154	0.0753	0.1152	0.1156	/21/2007	9:48 AM
	QC Test: ICB Concentration -0.20 less than limit							
~ICB	-0.20	92.5	-0.0009	0.0622	-0.0015	-0.0003	/21/2007	4:00 AM
	QC Test: CRDL recovery 97.9%R - w ithin limits							
~CRDL	4.89	0.8	0.0224	0.0573	0.0223	0.0225	/21/2007	8:20 AM
	QC Test: CCV recovery 98.4%R - w ithin limits							
~CCV	19.68	3.9	0.0901	0.0774	0.0926	0.0876	/21/2007	2:42 AM
	QC Test: CCB Concentration -0.25 less than limit							
~CCB	-0.25	15.9	-0.0012	0.0573	-0.0010	-0.0013	/21/2007	6:54 AM
PBW K0704712	-0.20	>100	-0.0009	0.0605	-0.0020	0.0002	/21/2007	1:14 AM
LCSW	23.54	3.3	0.1077	0.0812	0.1103	0.1052	/21/2007	5:34 AM
K0704712-002 VS	-0.20	48.9	-0.0009	0.0498	-0.0006	-0.0012	/21/2007	9:54 AM
K0704712-002A RW 6-27-07	11.58	3.5	0.0530	0.0682	0.0543	0.0517	/21/2007	4:12 AM
K0704712-002D	-0.41	68.6	-0.0019	0.0580	-0.0010	-0.0028	/21/2007	8:32 AM
K0704712-002DA	10.89	1.9	0.0498	0.0659	0.0505	0.0492	/21/2007	02:50 PM
K0704712-002S	3.58	5.2	0.0164	0.0616	0.0170	0.0158	/21/2007	07:10 PM
K0704712-002SA	15.38	2.0	0.0704	0.0627	0.0694	0.0714	/21/2007	11:28 PM
PBW K0704852	-0.43	21.6	-0.0020	0.0587	-0.0017	-0.0023	/21/2007	15:48 PM
LCSW MS	20.31	2.3	0.0929	0.0812	0.0944	0.0914	/21/2007	20:10 PM
	QC Test: CCV recovery 96.1%R - w ithin limits							
~CCV	19.22	2.9	0.0880	0.0784	0.0898	0.0862	/21/2007	24:32 PM
	QC Test: CCB Concentration -0.40 less than limit							
~CCB	-0.40	76.0	-0.0018	0.0639	-0.0009	-0.0028	/21/2007	28:44 PM
K0704852-001	-0.15	88.5	-0.0007	0.0864	-0.0011	-0.0003	/21/2007	33:06 PM
K0704852-001A	17.55	0.2	0.0803	0.1192	0.0802	0.0804	/21/2007	37:26 PM
K0704852-001D	0.11	45.3	0.0005	0.1027	0.0007	0.0004	/21/2007	41:46 PM
K0704852-001S	16.75	0.4	0.0767	0.1036	0.0769	0.0764	/21/2007	46:08 PM
K0704852-002	-0.49	97.6	-0.0022	0.0704	-0.0007	-0.0038	/21/2007	50:30 PM
K0704852-003	-0.56	16.0	-0.0026	0.0864	-0.0028	-0.0023	/21/2007	54:52 PM
K0704957-006 1/	-0.42	4.1	-0.0019	0.0622	-0.0020	-0.0019	/21/2007	59:12 PM

Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings			
K0704868-001 1/	-0.36	>100	-0.0016	0.0537	-0.0004	-0.0028	/21/2007	03:32 PM
K0704868-001A	20.01	1.0	0.0916	0.0770	0.0922	0.0909	/21/2007	07:54 PM
PBW 0704274	0.03	>100	0.0002	0.0595	0.0000	0.0003	/21/2007	12:12 PM
QC Test: CCV recovery 98.1%R - within limits								
~CCV	19.62	1.2	0.0898	0.0713	0.0905	0.0890	/21/2007	16:34 PM
QC Test: CCB Concentration -0.27 less than limit								
~CCB	-0.27	41.7	-0.0012	0.0591	-0.0009	-0.0016	/21/2007	20:46 PM
LCSW MS	20.60	9.7	0.0943	0.0761	0.1007	0.0878	/21/2007	25:06 PM
K0704274-001 tot	0.34	>100	0.0015	0.1100	0.0043	-0.0012	/21/2007	29:26 PM
K0704274-001A	9.21	2.7	0.0422	0.1196	0.0430	0.0413	/21/2007	33:44 PM
K0704274-001D	-0.12	31.1	-0.0006	0.1129	-0.0004	-0.0007	/21/2007	38:04 PM
K0704274-001DA	8.94	1.8	0.0409	0.1175	0.0404	0.0414	/21/2007	42:22 PM
K0704274-001S	4.14	2.9	0.0189	0.1164	0.0185	0.0193	/21/2007	46:42 PM
K0704274-001SA	13.87	0.7	0.0635	0.1183	0.0632	0.0638	/21/2007	51:02 PM
K0704274-002	-0.11	81.4	-0.0005	0.1126	-0.0008	-0.0002	/21/2007	55:20 PM
K0704274-002A	8.88	2.7	0.0406	0.1084	0.0414	0.0399	/21/2007	59:40 PM
K0704274-003	-0.38	16.7	-0.0017	0.1657	-0.0015	-0.0019	/21/2007	04:00 PM
QC Test: CCV recovery 95.6%R - within limits								
~CCV	19.12	0.5	0.0875	0.0738	0.0878	0.0872	/21/2007	08:22 PM
QC Test: CCB Concentration -0.06 less than limit								
~CCB	-0.06	>100	-0.0003	0.0619	0.0001	-0.0007	/21/2007	12:34 PM
K0704274-003A	12.99	1.7	0.0595	0.1690	0.0602	0.0587	/21/2007	16:56 PM
K0704274-004	-0.47	53.4	-0.0022	0.1477	-0.0014	-0.0030	/21/2007	21:16 PM
K0704274-004A	13.11	2.4	0.0600	0.1704	0.0610	0.0589	/21/2007	25:38 PM
K0704274-005	0.18	56.5	0.0008	0.1074	0.0011	0.0005	/21/2007	29:58 PM
K0704274-005A	13.51	1.0	0.0618	0.1119	0.0614	0.0623	/21/2007	34:20 PM
K0704274-006	0.43	5.2	0.0020	0.1006	0.0019	0.0020	/21/2007	40:24 PM
K0704274-006A	13.76	3.4	0.0630	0.1081	0.0645	0.0614	/21/2007	44:46 PM
K0704274-007	-0.38	40.2	-0.0017	0.1157	-0.0022	-0.0012	/21/2007	49:04 PM
K0704274-007A	4.75	3.8	0.0217	0.1176	0.0223	0.0212	/21/2007	53:24 PM
K0704274-009	-0.24	19.3	-0.0011	0.0915	-0.0013	-0.0010	/21/2007	57:42 PM
QC Test: CCV recovery 96.3%R - within limits								
~CCV	19.27	0.8	0.0882	0.0707	0.0887	0.0877	/21/2007	02:02 PM
QC Test: CCB Concentration 0.25 less than limit								
~CCB	0.25	70.1	0.0012	0.0614	0.0017	0.0006	/21/2007	06:14 PM
K0704274-009A	12.06	1.9	0.0552	0.0962	0.0560	0.0544	/21/2007	10:36 PM
K0704274-001 di	-0.14	29.7	-0.0006	0.1064	-0.0008	-0.0005	/21/2007	14:54 PM
K0704274-001A	9.64	2.8	0.0441	0.1065	0.0450	0.0433	/21/2007	19:14 PM
K0704274-002	-0.21	>100	-0.0010	0.0808	0.0005	-0.0025	/21/2007	23:32 PM
K0704274-002A	8.71	0.9	0.0399	0.0975	0.0401	0.0396	/21/2007	27:52 PM
K0704274-003	-0.51	53.8	-0.0023	0.1741	-0.0014	-0.0032	/21/2007	32:12 PM
K0704274-003A	12.87	1.5	0.0589	0.1709	0.0596	0.0583	/21/2007	36:32 PM
K0704274-004	-0.41	27.8	-0.0019	0.1478	-0.0015	-0.0022	/21/2007	40:52 PM
K0704274-004A	12.55	0.2	0.0574	0.1416	0.0573	0.0575	/21/2007	45:14 PM
K0704274-005	0.19	21.0	0.0009	0.1079	0.0010	0.0008	/21/2007	49:36 PM
QC Test: CCV recovery 94.5%R - within limits								
~CCV	18.90	3.7	0.0865	0.0736	0.0842	0.0888	/21/2007	54:00 PM
QC Test: CCB Concentration 0.09 less than limit								
~CCB	0.09	40.1	0.0004	0.0580	0.0005	0.0003	/21/2007	58:12 PM
K0704274-005A	13.78	5.6	0.0631	0.1037	0.0656	0.0606	/21/2007	02:32 PM
K0704274-006	0.18	24.2	0.0008	0.1037	0.0010	0.0007	/21/2007	06:54 PM
K0704274-006A	13.83	3.5	0.0633	0.1073	0.0649	0.0617	/21/2007	11:16 PM
K0704274-007	-0.21	45.7	-0.0010	0.1170	-0.0007	-0.0013	/21/2007	15:38 PM
K0704274-007A	4.74	1.0	0.0217	0.1112	0.0218	0.0216	/21/2007	20:00 PM

Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings			
K0704274-009	-0.15	75.6	-0.0007	0.0807	-0.0003	-0.0011	/21/2007	24:20 PM
K0704274-009A	11.34	1.5	0.0519	0.0947	0.0525	0.0513	/21/2007	28:40 PM
	QC Test: CRDL recovery 96.6%R - within limits							
~CRDL	4.83	0.4	0.0221	0.0596	0.0222	0.0220	/21/2007	33:02 PM
	QC Test: CCV recovery 96.9%R - within limits							
~CCV	19.39	1.7	0.0887	0.0642	0.0898	0.0876	/21/2007	37:22 PM
	QC Test: CCB Concentration 0.35 less than limit							
~CCB	0.35	5.3	0.0016	0.0495	0.0017	0.0016	/21/2007	41:34 PM

Worksheet created from template 9:53:36 AM 06/21/2007
Worksheet details:
Name: Se 6-21-07
Analyst: rnorris
Comments:K-GFAA-06

Optimize stopped 9:53:54 AM 06/21/2007

Optimize started [Se] 9:53:54 AM 06/21/2007

Optimize stopped 10:12:44 AM 06/21/2007
Worksheet Saved

(AA Online)

Method: Se (Furnace)

Instrument settings:
Wavelength:196.0 nm, Slit Width:1.0 nm, Lamp Current:15.0 mA, Background Correction:BC On

Measurement settings:
Calibration Mode: Concentration, Measurement Mode: Peak Area, Smoothing: 5 point
Replicates Standard: 2, Replicates Sample: 2

Furnace settings:
Multiple Inject: Off
Hot Inject: On, Hot Inject Temp.: 100 Deg C, Hot Inject Rate: 2
Modifier 1 Co Inject, Modifier 1 Volume: 8 uL
Modifier 2 Co Inject, Modifier 2 Volume: 2 uL
Workhead Height: 0.0 mm, Pre Last Dry Step: 2, Post Last Dry Step: 3

Step No	Temp deg C	Time sec	Gas Flow L/min	Gas Type	Read	Store
1	100	5.0	3.0	Normal	No	No
2	300	40.0	3.0	Normal	No	No
3	600	10.0	3.0	Alternate	No	No
4	900	15.0	3.0	Alternate	No	No
5	890	2.0	3.0	Alternate	No	No
6	890	2.0	0.0	Alternate	No	Yes
7	2600	0.8	0.0	Alternate	Yes	Yes
8	2600	2.0	0.0	Alternate	Yes	Yes
9	2600	2.0	3.0	Alternate	No	Yes

Instrument Zero [Postread=0.0117Abs, Gain=55%]

Tube	Sample ID	Conc µg/L	%RSD	Mean Abs	BG Abs	Readings	
1:1	RSD check	UNCALm	4.5	0.1964	0.2334	0.2026	0.1903

10:20:04 AM 06/21/2007

W4502: Sample uncalibrated

1:1	RSD check	UNCALm	1.2	0.1882	0.1972	0.1898	0.1867
						10:27:56 AM 06/21/2007	
W4502: Sample uncalibrated							
1:1	RSD check	UNCALm	0.1	0.1874	0.1945	0.1876	0.1873
						10:32:30 AM 06/21/2007	
W4502: Sample uncalibrated							
1:1	RSD check	UNCALm	2.0	0.1847	0.2080	0.1873	0.1820
						10:41:16 AM 06/21/2007	
W4502: Sample uncalibrated							
1:1	RSD check	UNCALm	1.0	0.1895	0.2007	0.1881	0.1908
						10:46:00 AM 06/21/2007	

RSD = 2.31 %

Atomic Absorption Data Review Form

Element: Hg

Analysis Lot #: 87499

Cal. STD/CCV Source: HG1-60-H

Service Request Numbers:

K4502 K4852 K4960 K5000 K4550 K4527
K4569 K4608 K4681

	Yes	No	NA
1) Appropriate standardization completed	✓		
2) ICV within 10% of true value	✓		
3) CCVs in control	✓		
4) CCBs and or ICBs below MRL	✓		
5) All reported samples within calibration range	✓		
6) Calculations correct	✓		

Comments:

Primary Reviewed By: SPatterson Date: 6-21-07

Secondary Reviewed By: EmA Date: 6/22/07

COLUMBIA ANALYTICAL SERVICES, INC. PRINTOUT WITH:_____
ANALYTICAL WORKSHEET

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
1	ICV	—	—	—	5.20		104%	
2	ICB	—	—	—	0.06		<0.2	
3	CCV1	—	—	—	4.94		99%	
4	CCB1	—	—	—	-0.01		<0.2	
5	CRA	—	—	—	0.20		0.20	
6	PBW (506062)	20ml	20ml	—	0.00		<0.2	
7	LCSW ↓			—	4.79		4.8	96%
8	K0704502-001			—	0.01		<0.2	
9	-002			—	0.01		<0.2	X=ND
10	-002d			—	0.01 ~~1.04~~ SP	6-21-07	<0.2	RPD= -
11	-002S			—	1.04 ~~0.01~~ SP	6-21-07	1.0	104%
12	-003			—	0.01		<0.2	
13	-004			—	0.01		<0.2	
14	↓ -005	↓	↓	—	0.01		<0.2	
15	CCV2	—	—	—	5.11		102%	
16	CCB2	—	—	—	-0.00		<0.2	
17	K0704502-006	20ml	20ml	—	0.01		<0.2	
18	↓ -008			—	0.02		<0.2	
19	K4502Diss-001			—	0.08		<0.2	
20	-002			—	-0.00		<0.2	
21	-003			—	0.01		<0.2	
22	-004			—	0.01		<0.2	
23	-005			—	0.01		<0.2	
24	-006			—	0.01		<0.2	
25	↓ -008	↓	↓	—	0.02		<0.2	

Comments: Reporting Levels:

Waters - 0.2 µg/L	TIME STARTED:
Soil - 0.02 mg/kg	
TCLP - 1 µg/L	
Water Spike Level : 1.0 µg/L	
Soil Spike Level : 5.0 µg/L = mg/kg	
TCLP Spike Level : 5.0 µg/L	

Analyst:	Date:	Page Number:
S Patterson	6-21-07	1 of 4

[HGFORM] HG1.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
26	K0704852-002	20ml	20ml	–	-0.00		<0.2	$\bar{x}$=ND RPD=–
27	CCV3	–	–	–	5.00		100%	
28	CCB3	–	–	–	0.00		<0.2	80%
29	K0704852-002d	20ml	20ml	–	-0.01		<0.2	
30	-002s			–	0.80		0.8	
31	K0704960-005			–	-0.00		<0.2	$\bar{x}$=ND RPD=–
32	-005d			–	0.01		<0.2	
33	-005s			–	0.98		0.98	98%
34	K0705000-002			–	0.02		<0.2	$\bar{x}$=ND
35	-002d			–	0.02		<0.2	RPD=–
36	-002s			–	0.97		0.97	97%
37	-002A			–	0.90		(88%)	
38	PBW (50464)			–	0.00		<0.2	
39	CCV4	–	–	–	4.97		99%	
40	CCB4	–	–	–	-0.00		<0.2	
41	LCSW (50464)	20ml	20ml	–	4.78		4.8	96%
42	K0704550-001			–	-0.01		<0.2	
43	-002			–	0.00		<0.2	
44	-003			–	0.03		<0.2	
45	-004			–	0.00		<0.2	
46	-005			–	0.03		<0.2	$\bar{x}$=ND
47	-005d			–	0.03		<0.2	RPD=–
48	-005s			–	0.99		0.99	99%
49	-006			–	0.02		<0.2	
50	-007			–	0.00		<0.2	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
J Patterson	6-21-07	2 of 4

[HGFORM] HG2.XLS

COLUMBIA ANALYTICAL SERVICES, INC. PRINTOUT WITH:_____
ANALYTICAL WORKSHEET

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)	
51	CCV5	—	—	—	5.04		101%	
52	CCB5	—	—	—	-0.00		<0.2	
53	K4550Diss-001	20ml	20ml	–	0.01		< 0.2	
54	-002			–	0.01		< 0.2	
55	-003			–	0.01		<0.2	
56	-004			–	0.01		<0.2	$\bar{X}$=ND
57	-005			–	0.03		< 0.2	RSD=–
58	-005d			–	0.03		<0.2	
59	-005s			–	0.97		0.97	97%
60	K4550Diss-006			–	0.04		<0.2	
61	-007			–	0.00		<0.2	
62	K0704527-018			–	0.00		<0.2	
63	CCV6	—	—	—	4.88		98%	
64	CCB6	—	—	—	-0.01		<0.2	
65	K0704569-019	20ml	20ml	–	0.00		<0.2	$\bar{X}$=ND
66	-019d			–	0.01		< 0.2	RSD=–
67	-019s			–	0.99	SPK-21-07	0.99	99%
68	K0704608-010			–	0.00		<0.2	
69	K0704681-001			–	0.01		<0.2	
70	-004			–	0.00		<0.2	
~~71~~	~~K0704550-005A~~			–	0.83			SPK-21-07
72	CCV7	—	—	–	4.79		96%	
73	CCB7	—	—	–	-0.01		<0.2	
74	K0704550-005A	20ml	20ml	–	0.99		(96%)	
75	~~CCB~~ CCV8 SPK-21-07	–	–	–	4.94		99%	

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
Patterson	6-21-07	3 of 4

[HGFORM] HG3.XLS

COLUMBIA ANALYTICAL SERVICES, INC.
ANALYTICAL WORKSHEET

PRINTOUT WITH:_____

Method: (Circle One) 7470A 7471A 245.1	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	(µg/L) Measured	Sample Actual (mg/kg)	Sample Actual (µg/L)
76	CCB8	—	—	—	-0.01		<0.2
77							
78							
79							
80							
81							
82							
83							
84							
85							
86							
87							
88							
89							
90							
91							
92							
93							
94							
95							
96							
97							
98							
99							
100							

SP 6-21-07

Comments: Reporting Levels:
Waters - 0.2 µg/L
Soil - 0.02 mg/kg
TCLP - 1 µg/L

Water Spike Level : 1.0 µg/L
Soil Spike Level : 5.0 µg/L = mg/kg
TCLP Spike Level : 5.0 µg/L

Analyst:	Date:	Page Number:
JPatton	6-21-07	4 of 4

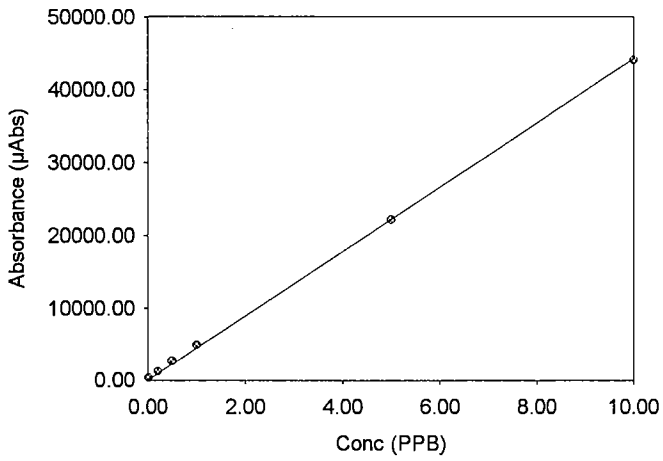
[HGFORM] HG4.XLS

CETAC Hg Analysis Report - 07062103.DB - Thursday, June 21, 2007, 7:47:54 PM

Analyst S. Patterson
Date Started Thursday, June 21, 2007, 16:11:46
Worksheet Hg 06/21/07 Run 2
Comment 87499

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
Calibration Zero	21-Jun-2007, 16:11	0.00	4.19	397.00	398	409	407	373	
Standard #1	21-Jun-2007, 16:13	0.20	0.66	1320.00	1317	1324	1317	1335	
Standard #2	21-Jun-2007, 16:15	0.50	1.14	2710.00	2671	2704	2733	2738	
Standard #3	21-Jun-2007, 16:17	1.00	0.95	4930.00	4872	4919	4970	4970	
Standard #4	21-Jun-2007, 16:18	5.00	0.81	22200.00	21999	22397	22336	22168	
Standard #5	21-Jun-2007, 16:20	10.00	0.81	44200.00	43766	44156	44539	44489	

Calibration Data



Int.	0.000
Slope	4434.647
Correlation	0.99972

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICV	21-Jun-2007, 16:22	5.20	2.09	23100.00	22760	22698	23011	23750	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICB	21-Jun-2007, 16:24	0.06	5.25	257.00	262	240	254	272	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV1	21-Jun-2007, 16:25	4.94	0.66	21900.00	21989	21701	22024	21893	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB1	21-Jun-2007, 16:27	-0.01	29.80	-60.00	-63	-76	-66	-35	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CRA	21-Jun-2007, 16:29	0.20	0.43	867.00	866	865	865	873	
PBW (50662)	21-Jun-2007, 16:31	0.00	59.50	13.50	14	11	5	24	
LCSW (50662)	21-Jun-2007, 16:33	4.79	1.18	21200.00	21016	21048	21261	21560	
K0704502-001	21-Jun-2007, 16:34	0.07	2.43	319.00	308	325	322	323	
K0704502-002	21-Jun-2007, 16:36	0.01	34.90	35.60	32	51	38	21	
K0704502-002D	21-Jun-2007, 16:38	0.01	10.60	61.70	62	70	61	54	
K0704502-002S	21-Jun-2007, 16:40	1.04	0.50	4610.00	4620	4641	4587	4604	
K0704502-003	21-Jun-2007, 16:41	0.01	33.80	37.60	35	28	31	56	
K0704502-004	21-Jun-2007, 16:43	0.01	67.70	28.80	29	47	37	2	
K0704502-005	21-Jun-2007, 16:45	0.01	25.20	37.10	33	27	49	40	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV2	21-Jun-2007, 16:47	5.11	0.92	22700.00	22434	22611	22708	22936	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB2	21-Jun-2007, 16:48	-0.00	8570.00	-0.10	-7	9	-8	5	

CETAC Hg Analysis Report - 07062103.DB - Thursday, June 21, 2007, 7:47:54 PM

Analyst S. Patterson
Date Started Thursday, June 21, 2007, 16:50:45
Worksheet Hg 06/21/07 Run 2
Comment 87499

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704502-006	21-Jun-2007, 16:50	0.01	41.10	50.10	38	55	30	77	
K0704502-008	21-Jun-2007, 16:52	0.02	11.40	78.10	76	67	83	87	
K0704502-001 DISS	21-Jun-2007, 16:54	0.08	7.05	367.00	328	380	383	376	
K0704502-002 DISS	21-Jun-2007, 16:56	-0.00	509.00	-2.44	-14	-12	11	6	
K0704502-003 DISS	21-Jun-2007, 16:57	0.01	27.30	61.90	73	66	37	72	
K0704502-004 DISS	21-Jun-2007, 16:59	0.01	24.70	26.20	34	23	29	19	
K0704502-005 DISS	21-Jun-2007, 17:01	0.01	46.90	28.80	21	25	49	21	
K0704502-006 DISS	21-Jun-2007, 17:03	0.01	39.70	45.90	49	34	30	71	
K0704502-008 DISS	21-Jun-2007, 17:05	0.02	5.38	89.50	88	93	83	94	
K0704852-002	21-Jun-2007, 17:06	-0.00	67.40	-14.20	-17	-24	-1	-14	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV3	21-Jun-2007, 17:08	5.00	1.21	22200.00	22119	22122	21871	22517	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB3	21-Jun-2007, 17:10	0.00	117.00	4.27	7	3	-2	9	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704852-002D	21-Jun-2007, 17:12	-0.01	54.00	-31.60	-55	-29	-15	-26	
K0704852-002S	21-Jun-2007, 17:13	0.80	1.25	3540.00	3510	3537	3609	3522	
K0704960-005	21-Jun-2007, 17:15	-0.00	43.00	-15.00	-16	-14	-7	-23	
K0704960-005D	21-Jun-2007, 17:17	0.01	39.60	36.90	23	57	37	31	
K0704960-005S	21-Jun-2007, 17:19	0.98	1.85	4350.00	4254	4317	4388	4437	
K0705000-002	21-Jun-2007, 17:21	0.02	6.98	79.20	79	77	87	74	
K0705000-002D	21-Jun-2007, 17:22	0.02	46.60	71.20	25	71	87	102	
K0705000-002S	21-Jun-2007, 17:24	0.97	3.79	4290.00	4077	4244	4397	4432	
K0705000-002A	21-Jun-2007, 17:33	0.90	0.52	3990.00	3965	3999	4015	3992	
PBW (50664)	21-Jun-2007, 17:35	0.00	1320.00	1.58	2	21	10	-27	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV4	21-Jun-2007, 17:36	4.97	0.41	22100.00	22031	21963	22055	22180	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB4	21-Jun-2007, 17:38	-0.00	134.00	-6.05	-11	6	-11	-8	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
LCSW (50664)	21-Jun-2007, 17:40	4.78	0.81	21200.00	20997	21182	21277	21408	
K0704550-001	21-Jun-2007, 17:42	-0.01	48.10	-31.40	-27	-49	-37	-13	
K0704550-002	21-Jun-2007, 17:43	0.00	41.60	15.10	11	18	22	9	
K0704550-003	21-Jun-2007, 17:45	0.03	6.54	141.00	132	152	147	135	
K0704550-004	21-Jun-2007, 17:47	0.00	407.00	7.87	-21	-10	52	11	
K0704550-005	21-Jun-2007, 17:49	0.03	20.90	130.00	93	128	156	145	
K0704550-005D	21-Jun-2007, 17:51	0.03	6.13	122.00	114	132	124	119	
K0704550-005S	21-Jun-2007, 17:53	0.99	1.09	4390.00	4429	4426	4358	4334	
K0704550-006	21-Jun-2007, 17:54	0.02	4.94	100.00	106	96	102	96	
K0704550-007	21-Jun-2007, 17:56	0.00	18.10	14.70	18	16	12	13	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV5	21-Jun-2007, 17:58	5.04	2.02	22300.00	22936	22165	21870	22400	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB5	21-Jun-2007, 18:00	-0.00	55.90	-9.14	-3	-14	-7	-13	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704550-001 DISS	21-Jun-2007, 18:01	0.01	50.10	35.30	43	43	46	9	
K0704550-002 DISS	21-Jun-2007, 18:03	0.01	13.70	52.50	42	58	57	53	
K0704550-003 DISS	21-Jun-2007, 18:05	0.01	49.00	29.70	24	13	36	46	
K0704550-004 DISS	21-Jun-2007, 18:07	0.01	48.60	29.90	34	19	17	48	
K0704550-005 DISS	21-Jun-2007, 18:09	0.03	8.79	119.00	128	120	104	125	

CETAC Hg Analysis Report - 07062103.DB - Thursday, June 21, 2007, 7:47:55 PM

Analyst S. Patterson
Date Started Thursday, June 21, 2007, 18:10:56
Worksheet Hg 06/21/07 Run 2
Comment 87499

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704550-005D DISS	21-Jun-2007, 18:10	0.03	18.20	124.00	105	105	138	149	
K0704550-005S DISS	21-Jun-2007, 18:12	0.97	3.19	4310.00	4196	4203	4387	4473	
K0704550-006 DISS	21-Jun-2007, 18:14	0.04	12.20	161.00	135	159	181	171	
K0704550-007 DISS	21-Jun-2007, 18:16	0.00	181.00	12.70	-14	1	29	34	
K0704527-018	21-Jun-2007, 18:18	0.00	48.80	13.40	20	17	5	12	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV6	21-Jun-2007, 18:19	4.88	1.37	21600.00	21257	21514	21899	21829	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB6	21-Jun-2007, 18:21	-0.01	39.40	-52.60	-83	-39	-39	-50	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704569-019	21-Jun-2007, 18:23	0.00	60.60	21.50	7	25	38	17	
K0704569-019D	21-Jun-2007, 18:25	0.01	29.50	26.50	20	22	38	26	
K0704569-019S	21-Jun-2007, 18:27	0.99	1.17	4390.00	4395	4455	4340	4356	
K0704608-010	21-Jun-2007, 18:28	0.00	130.00	8.83	-7	17	17	9	
K0704681-001	21-Jun-2007, 18:30	0.01	43.40	32.70	15	29	47	41	
K0704681-004	21-Jun-2007, 18:32	0.00	259.00	9.09	-18	-4	25	32	
~~K0704550-005A~~	~~21-Jun-2007, 19:28~~	~~0.83~~	~~1.32~~	~~3700.00~~	~~3757~~	~~3674~~	~~3646~~	~~3716~~	SP 6-21-07

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV7	21-Jun-2007, 19:30	4.79	1.22	21200.00	20935	21157	21321	21548	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB7	21-Jun-2007, 19:32	-0.01	15.90	-56.50	-68	-58	-50	-49	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K0704550-005A	21-Jun-2007, 19:42	0.99	0.67	4380.00	4342	4392	4387	4412	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV8	21-Jun-2007, 19:44	4.94	0.41	21900.00	21821	21876	22029	21940	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB8	21-Jun-2007, 19:46	-0.01	41.50	-54.20	-74	-73	-39	-31	

Columbia Analytical Services

EPA METHOD 7470A

Prep Run: 500662

Service Request Number(s): K4502, K4852, K4960, K5000

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBW	20ml	20ml	K0705000-002d	20ml	20ml
LCSW			-002s		
K0704502-001					
-002					
-003					
-004					
-005					
-006					
-008					
-002d					
-002s					
K4502 Diss -001					
-002					
-003					
-004					
-005					
-006					
-008					
K0704852-002					
-002d					
-002s					
K0704960-005					
-005d					
-005s					
K0705000-002				SB 6-20-07	
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

Lot # Reagents Used:

HNO3: C47031 **K2S2O8: T44H13** **NaCl : C51581**

H2SO4: 45318 **KMnO4: C23603** **NH2OH-HCL: C50638**

HCL: 47050 **SnCl2: C46596**

LCSS = **ERA CLP Soil Lot # D045540** **Water Bath Temp.:** 95°C

LCSW= 0.1ml **ICV Intermediate stock solution.**

*** Source Standard:** HG1-60-H **100 ppb** **Time Started:** 6:30pm **Time Finished:** 8:30pm

**** Sorce Standard: ICV** HG1-59-X **1000 ppb**

Comments: 0.2ml 100ppb source std to spikes

Analyst: S Patterson

Date: 6-20-07

[HGFORM] 7470

Columbia Analytical Services

EPA METHOD 7470A

PrepRun: 50664

Service Request Number(s) : K4550, K4527, K4569, K4608, K4681

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
PBW	20ml	20ml	K4550-Diss-005d	20ml	20ml
LCSW			005S		
K0704550-001					
-002					
-003					
-004					
-005					
-005d					
-005S					
-006					
-007					
K4550 Diss-001					
-002					
-003					
-004					
-005					
-006					
-007					
K0704527-018					
K0704569-019					
-019d					
-019S					
K0704608-010					
K0704681-001					
-004				8 6-20-07	
Std. 0.2	0.2 *				100
Std. 0.5	0.5 *				100
Std. 1.0	1.0 *				100
Std. 5.0	5.0 *				100
Std. 10.0	10.0 *				100
ICV	0.5 **				100

Lot # of Reagents Used:

HNO3: C47031 **K2S2O8: T44H13** **NaCl : C51581**

H2SO4: 45318 **KMnO4: C23603** **NH2OH-HCL: C50638**

HCL: 47050 **SnCl2: C46596**

LCSS = **ERA CLP Soil Lot # D045540** **Water Bath Temp.:** 95°C

LCSW= 0.1ml **ICV Intermediate stock solution.**

*** Source Standard:** HG1-60-H **100 ppb** **Time Started:** 6:30pm **Time Finished:** 8:30pm

**** Sorce Standard: ICV** HG1-59-X **1000 ppb**

Comments: 0.2ml 100ppb source std to spikes

Analyst: Patterson

Date: 6-20-07

[HGFORM] 7470

Service Request # K0704852
Instrument ID# K-ICP-AES-01

ICP-OES Data Review Form

		Yes	No
1.	Standardization completed	✓	
2.	ICV within 10 % of true value	✓	
3.	ICB below MRL	✓	
4.	CRI standard analyzed.	✓	
5.	ICS standards within 20% of true value	✓	
6.	All preceding CCVs within 10 % of true value	✓	
7.	Following CCV within 10 % of true value	✓	
8.	Bracketing CCBs below MRL	✓	
9.	Method Blank below MRL	✓	
10.	MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11.	All analytes within instrument linear range	✓	
12.	Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments

Primary Review by [illegible] Date 6/15/07

Secondary Review by [illegible] Date 6/18/7

Method: CUMNCD Sample Name: CUMNCD Operator: MMR
Run Time: 06/15/07 08:36:22
Comment: ICP3-96-E
Mode: IR Corr. Factor: 1

Elem	Cd2288	Mn2576
Avge	858.1	7.837
SDev	5.1	.011
%RSD	.5954	.1387
#1	861.0	7.841
#2	853.0	7.838
#3	850.0	7.818
#4	857.0	7.832
#5	857.0	7.835
#6	856.0	7.828
#7	858.0	7.835
#8	869.0	7.839
#9	859.0	7.847
#10	861.0	7.859

IntStd	1	2	3	4	5	6	7
Mode	*Counts	None	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Cu	--	--	--	--	--	--
Wavlen	324.754	--	--	--	--	--	--
Avge	1267	1	--	--	--	--	--
SDev	10.95242	.0000000	--	--	--	--	--
%RSD	.8643010	.0000000	--	--	--	--	--
#1	1274	1	--	--	--	--	--
#2	1253	1	--	--	--	--	--
#3	1250	1	--	--	--	--	--
#4	1264	1	--	--	--	--	--
#5	1256	1	--	--	--	--	--
#6	1273	1	--	--	--	--	--
#7	1270	1	--	--	--	--	--
#8	1282	1	--	--	--	--	--
#9	1272	1	--	--	--	--	--
#10	1278	1	--	--	--	--	--

Method: 20072 Standard: STD1-Blank
Run Time: 06/15/07 08:38:29

86948

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Avge	.0291	.0028	-.0006	.0000	.0029	-.0002	.0001
#1	.0306	.0033	-.0026	.0000	.0029	-.0006	.0000
#2	.0277	.0023	.0014	.0000	.0029	.0001	.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Avge	-.0023	.0005	.0009	.0024	.0022	.0048	.0003
#1	-.0024	-.0001	.0006	.0024	.0019	.0047	.0003
#2	-.0023	.0011	.0011	.0023	.0026	.0049	.0003

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Avge	-.0021	.0018	.0013	.0001	.0226	-.0012	-.0023
#1	-.0040	.0020	.0013	-.0001	.0213	-.0027	-.0019
#2	-.0001	.0016	.0013	.0004	.0240	.0003	-.0027

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Avge	.0846	-.0011	-.0008	.0024	-.0102	.0199	.0018
#1	.0873	-.0011	-.0010	.0024	-.0107	.0214	.0016
#2	.0819	-.0011	-.0006	.0024	-.0097	.0183	.0020

Elem	Tl1908	Li6707	Sr4215
Avge	-.0027	.0001	.0000
#1	-.0021	-.0003	.0000
#2	-.0033	.0004	.0000

LMMR 6/15/07

Method: 20072 Standard: STD3
Run Time: 06/15/07 08:40:25 ICP4-26-D 86948

Elem	Al3082	As1936	Be3130	Ca3179	Co2286	Cu3247	Fe2599
Avge	1.369	.5314	.6684	4.485	.2435	.2087	4.370
#1	1.381	.5310	.6719	4.504	.2450	.2106	4.388
#2	1.357	.5319	.6649	4.466	.2420	.2069	4.351

Elem	Pb2203	Mg2795	Mg3832	Mn2576	Mo2020	Se1960	V_2924
Avge	2.479	4.482	.2397	1.915	.1406	.4786	.3308
#1	2.491	4.498	.2417	1.924	.1409	.4810	.3330
#2	2.467	4.466	.2377	1.907	.1404	.4763	.3286

Elem	Zn2138	Ti3349
Avge	.9464	.3773
#1	.9504	.3800
#2	.9423	.3746

Method: 20072 Standard: STD2
Run Time: 06/15/07 08:42:24 ICP4-28-B 86648

Elem	Sb2068	Ba4934	B_2496	Cd2288	Cr2677	Ni2316	K_7665
Avge	1.299	.2028	.6133	.1567	5.562	1.173	.9174
#1	1.283	.1993	.6026	.1546	5.490	1.155	.9250
#2	1.314	.2063	.6240	.1589	5.633	1.191	.9097

Elem	Ag3280	Na5889	Sn1899	P_2149	Si2881	Tl1908	Li6707
Avge	.2325	9.188	3.116	2.013	2.902	.3084	.4069
#1	.2297	9.054	3.093	1.986	2.862	.3053	.4004
#2	.2353	9.321	3.139	2.039	2.943	.3114	.4135

Elem	Sr4215
Avge	.3714
#1	.3654
#2	.3773

Analysis Report QC Standard 06/15/07 08:48:00 AM page 1

Method: 20072 Sample Name: ICV Operator: MMR
Run Time: 06/15/07 08:46:04
Comment: ICP4-27-A
Mode: CONC Corr. Factor: 1

8L948

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.859	2.419	2.439	4.895	.1209	.0133	1.228
#1	4.871	2.417	2.450	4.925	.1215	.0063	1.226
#2	4.847	2.421	2.429	4.865	.1203	.0203	1.230

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.10	.4953	1.242	.6136	2.410	2.461	12.06
#1	12.13	.4949	1.245	.6150	2.420	2.449	12.11
#2	12.07	.4957	1.238	.6122	2.401	2.472	12.01

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.25	1.222	2.006	1.219	12.43	2.501	.6059
#1	12.18	1.226	2.011	1.226	12.11	2.532	.6050
#2	12.32	1.217	2.001	1.211	12.75	2.470	.6068

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.28	-.0024	1.234	1.221	.0475	-.0067	1.999
#1	12.32	-.0017	1.237	1.222	.0334	-.0174	2.013
#2	12.24	-.0030	1.231	1.221	.0616	.0040	1.986

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.462	-.0048	.0002
#1	2.425	-.0079	.0000
#2	2.499	-.0018	.0004

Method: 20072 Sample Name: ICV STD 4 Operator: MMR
Run Time: 06/15/07 08:48:18
Comment: ICP4-22-D
Mode: CONC Corr. Factor: 1

86148

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0133	.0089	.0037	.0018	-.0001	4.951	.0031
#1	-.0130	-.0006	-.0032	.0018	-.0002	4.991	.0028
#2	.0395	.0184	.0106	.0018	-.0000	4.910	.0035

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0167	.0006	-.0002	.0010	.0043	.0205	.0056
#1	.0127	-.0022	-.0022	-.0017	.0022	.0124	.0067
#2	.0207	.0035	.0018	.0038	.0065	.0285	.0045

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0504	.0008	.0036	.0006	.5509	-.0059	-.0006
#1	-.1454	.0002	.0072	-.0061	.0679	-.0208	-.0043
#2	.2462	.0014	.0000	.0073	1.034	.0089	.0031

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.166	4.937	.0022	.0008	5.035	4.957	.0027
#1	8.203	4.950	-.0009	.0015	5.044	4.955	.0017
#2	8.129	4.924	.0053	-.0000	5.027	4.959	.0036

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.877	4.810	4.953
#1	4.822	4.873	4.992
#2	4.932	4.747	4.914

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Method: 20072 Sample Name: ICB Operator: MMR
Run Time: 06/15/07 08:57:01
Comment:
Mode: CONC Corr. Factor: 1

86948

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0267	-.0212	-.0103	-.0002	-.0001	.0093	.0011
#1	-.0416	-.0307	-.0205	-.0004	-.0002	.0082	-.0006
#2	-.0117	-.0117	-.0000	.0000	-.0000	.0105	.0027

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0009	-.0027	-.0031	-.0023	.0260	-.0002
#1	-.0028	-.0009	-.0048	-.0031	-.0032	.0061	-.0003
#2	.0031	.0027	-.0006	-.0031	-.0014	.0459	-.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1068	.0003	.0005	.0037	-.3872	.0160	-.0042
#1	-.0682	-.0005	-.0000	.0000	-.2275	.0101	-.0055
#2	Q.2818	.0011	.0010	.0073	-.5469	.0220	-.0030

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0051	-.0096	.0019	-.0000	.0706	-.0124	.0019
#1	-.0282	-.0092	-.0002	-.0008	.0899	-.0187	.0017
#2	.0180	-.0101	.0040	.0007	.0512	-.0060	.0021

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0115	-.0022	-.0002
#1	.0230	-.0026	-.0004
#2	.0000	-.0018	.0000

Method: 20072 Sample Name: CCV1 Operator: MMR
Run Time: 06/15/07 08:59:18
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.890	4.932	1.934	.4921	.4898	4.927	.4933
#1	4.900	4.954	1.959	.4942	.4918	4.949	.4922
#2	4.881	4.963	1.918	.4949	.4929	4.960	.4956
#3	4.873	4.876	1.936	.4868	.4841	4.867	.4907
#4	4.905	4.936	1.923	.4924	.4905	4.932	.4947

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.926	4.954	.4919	.4888	4.917	4.884	4.928
#1	4.932	4.966	.4927	.4898	4.929	4.876	4.943
#2	4.941	4.979	.4916	.4884	4.939	4.914	4.952
#3	4.886	4.908	.4880	.4843	4.873	4.852	4.881
#4	4.944	4.962	.4954	.4926	4.928	4.895	4.936

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.984	.4916	.4887	4.935	25.07	1.954	.4925
#1	4.877	.4923	.4897	4.934	24.49	1.919	.4942
#2	5.049	.4930	.4928	4.961	25.06	1.990	.4899
#3	4.919	.4882	.4795	4.897	25.97	1.952	.4880
#4	5.091	.4929	.4928	4.949	24.76	1.954	.4978

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.80	5.097	.4891	2.454	24.90	4.959	.4938
#1	24.85	5.078	.4899	2.460	24.97	4.970	.4945
#2	24.95	5.095	.4938	2.463	25.15	4.960	.4979
#3	24.53	5.079	.4839	2.431	24.74	4.931	.4865
#4	24.88	5.138	.4891	2.460	24.75	4.974	.4964

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.938	2.471	.4911
#1	4.875	2.478	.4932
#2	4.972	2.493	.4943
#3	4.990	2.430	.4851
#4	4.917	2.484	.4916

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Method: 20072 Sample Name: CCB1 Operator: MMR
Run Time: 06/15/07 09:05:18
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0276	-.0156	-.0174	-.0005	-.0001	.0116	.0007
#1	-.0298	-.0173	-.0043	-.0007	-.0000	.0128	.0019
#2	-.0255	-.0139	-.0305	-.0004	-.0002	.0105	-.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0014	-.0024	-.0041	-.0021	.0156	.0003
#1	.0028	.0040	-.0024	-.0052	-.0019	.0240	.0006
#2	-.0003	-.0012	-.0024	-.0031	-.0024	.0072	-.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1632	.0001	-.0020	.0061	-.4311	.0238	-.0051
#1	Q.2640	.0006	.0000	.0097	-.2515	.0600	-.0061
#2	.0623	-.0003	-.0041	.0024	-.6107	-.0125	-.0042

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0090	-.0087	.0031	-.0000	-.0230	-.0109	.0006
#1	.0118	-.0005	.0040	-.0000	.0052	-.0104	.0009
#2	.0063	-.0170	.0022	-.0000	-.0512	-.0114	.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0275	-.0022	-.0004
#1	-.0275	.0018	-.0004
#2	-.0276	-.0061	-.0004

Analysis Report QC Standard 06/15/07 09:11:08 AM page 1

Method: 20072 Sample Name: CRI Operator: MMR
Run Time: 06/15/07 09:09:03
Comment: ICP4-28-A 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0326	.0446	.0854	.0051	.0050	.0710	.0063
#1	.0225	.0396	.0914	.0053	.0049	.0664	.0066
#2	.0427	.0497	.0794	.0049	.0051	.0757	.0059

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0541	.0069	.0088	.0062	.0191	.0852	.0207
#1	.0548	.0083	.0091	.0066	.0191	.0875	.0207
#2	.0534	.0055	.0085	.0059	.0191	.0829	.0207

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.1156	.0047	.0113	.0244	1.661	.0981	.0050
#1	Q.1393	.0046	.0123	.0219	1.473	.1088	.0056
#2	Q.0919	.0048	.0102	.0268	1.848	.0874	.0043

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1212	.0506	.0121	.0101	.2190	.4544	.0093
#1	.1224	.0476	.0136	.0097	.2384	.4537	.0101
#2	.1201	.0536	.0106	.0105	.1996	.4552	.0086

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.2227	.0092	.0094
#1	.2296	.0079	.0092
#2	.2158	.0105	.0096

Analysis Report QC Standard 06/15/07 09:13:12 AM

Method: 20072 Sample Name: ICSA Operator: MMR
Run Time: 06/15/07 09:11:22
Comment: ICP4-26-B 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	491.3	.0139	-.3656	.0012	-.0000	-.0294	.0067
#1	492.4	.0139	-.3955	.0014	-.0000	-.0317	.0068
#2	490.1	.0139	-.3357	.0011	-.0000	-.0272	.0067

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	451.5	-.0016	-.0118	-.0005	174.3	-.0029	239.4
#1	452.2	-.0016	-.0106	-.0015	174.6	-.0016	239.7
#2	450.7	-.0016	-.0130	.0006	174.1	-.0041	239.0

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	473.9	-.0010	.0015	-.0122	-.1996	.0636	-.0005
#1	475.6	-.0017	.0015	-.0195	-.1158	.0679	.0002
#2	472.2	-.0004	.0015	-.0049	-.2834	.0592	-.0012

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0506	-.0280	.0026	.0085	.4260	-.0217	.0084
#1	-.0526	-.0204	.0028	.0085	.4272	-.0226	.0086
#2	-.0486	-.0356	.0023	.0086	.4248	-.0208	.0082

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0550	.0009	.0052
#1	-.0378	-.0009	.0054
#2	-.0721	.0026	.0050

Method: 20072 Sample Name: ICSAB Operator: MMR
Run Time: 06/15/07 09:13:19
Comment: ICP4-18-B 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	487.9	.9373	-.3964	.4702	.4449	-.0296	.9279
#1	494.4	.9540	-.3421	.4780	.4508	-.0323	.9353
#2	481.4	.9205	-.4507	.4625	.4390	-.0269	.9206

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	448.8	.4371	.4207	.4657	173.4	.8445	238.3
#1	452.9	.4400	.4242	.4717	175.3	.8360	239.0
#2	444.8	.4343	.4172	.4598	171.4	.8529	237.6

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	470.6	.4404	.0010	.8328	-.0359	.0783	.9080
#1	477.6	.4459	.0037	.8462	-.3313	.0529	.9178
#2	463.6	.4349	-.0017	.8194	.2595	.1037	.8981

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0322	-.0369	.4465	.9060	.2939	-.0224	.0096
#1	-.0510	-.0363	.4505	.9152	.2784	-.0211	.0103
#2	-.0133	-.0376	.4424	.8968	.3094	-.0238	.0088

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0868	-.0009	.0054
#1	.0936	-.0009	.0054
#2	.0799	-.0009	.0054

Analysis Report 06/15/07 09:18:32 AM page 1

Method: 20072 Sample Name: PBW Operator: MMR
Run Time: 06/15/07 09:16:35
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0191	L-.0145	L-.0164	L.0004	L-.0000	L.0070	L.0021
#1	L-.0288	L-.0173	L-.0338	L.0000	L-.0000	.0105	L.0015
#2	L-.0095	L-.0117	L.0010	.0007	L-.0000	L.0035	L.0027

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0073	L.0023	L-.0041	L-.0024	L.0007	.0225	.0029
#1	L.0063	L.0017	L-.0071	L-.0031	L-.0001	L.0199	.0041
#2	L.0084	L.0029	L-.0011	L-.0017	L.0014	.0251	.0016

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2611	.0007	L-.0026	L.0073	L.5788	L-.0042	L-.0033
#1	.2344	L-.0001	L-.0020	L.0061	L.0519	L-.0137	L-.0067
#2	.2877	.0014	L-.0031	L.0085	1.106	L.0054	L.0001

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0082	L.0009	L.0046	L-.0012	L.0053	L-.0077	L.0025
#1	L-.0306	L-.0041	L.0031	L-.0015	L-.0053	L-.0178	L.0017
#2	L.0141	L.0059	.0061	L-.0008	L.0159	L.0024	.0032

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0000	L.0009	L-.0002
#1	L.0046	L-.0044	L-.0004
#2	L-.0046	.0061	L.0000

Analysis Report 06/15/07 09:20:25 AM

Method: 20072 Sample Name: LCSW Operator: MMR
Run Time: 06/15/07 09:18:34
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.906	2.419	2.434	4.973	.1223	.9996	1.219
#1	4.948	2.442	2.436	5.001	.1228	1.009	1.220
#2	4.864	2.397	2.431	4.945	.1218	.9902	1.218

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.17	.4944	1.251	.6192	2.437	2.441	12.12
#1	12.21	.4963	1.256	.6248	2.447	2.439	12.16
#2	12.13	.4925	1.246	.6137	2.428	2.443	12.07

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.20	1.238	1.003	1.222	12.35	2.455	.6144
#1	12.21	1.243	1.005	1.226	12.23	2.468	.6178
#2	12.19	1.234	1.000	1.217	12.48	2.443	.6110

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.48	-.0102	1.235	1.232	.0473	-.0137	.0015
#1	12.54	-.0132	1.239	1.237	.0139	-.0058	.0009
#2	12.42	-.0072	1.230	1.227	.0807	-.0216	.0020

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.414	.0061	-.0002
#1	2.435	.0035	.0000
#2	2.394	.0088	-.0004

Method: 20072 Sample Name: K0704754-008 Operator: MMR
Run Time: 06/15/07 09:20:31
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0176	L-.0072	L-.0009	.0403	L-.0001	.0283	L.0029
#1	L.0085	L-.0050	L.0071	.0409	L-.0000	.0329	.0037
#2	L-.0437	L-.0095	L-.0090	.0398	L-.0002	.0236	L.0022

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.40	.0030	L-.0015	L-.0016	3.585	.0381	7.202
#1	22.44	.0040	L-.0001	L.0026	3.595	.0447	7.215
#2	22.35	L.0020	L-.0030	L-.0057	3.575	.0315	7.189

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.541	1.326	L.0034	L.0110	2.814	L.0181	L-.0034
#1	7.642	1.329	.0064	L.0122	3.022	.0401	L.0018
#2	7.440	1.324	L.0003	L.0097	2.607	L-.0039	L-.0086

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.023	L.0079	.0061	.0099	.3452	17.54	.0030
#1	5.042	L.0054	.0077	.0103	.3718	17.60	.0036
#2	5.004	L.0104	L.0046	.0096	.3187	17.48	L.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0129	.0083	.1241
#1	L-.0083	.0123	.1246
#2	L-.0174	L.0044	.1235

Method: 20072 Sample Name: K0704754-008D Operator: MMR
Run Time: 06/15/07 09:22:28
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0384	L-.0111	L-.0014	.0402	L-.0001	.0271	L.0020
#1	L-.0555	L-.0273	L.0064	.0402	L-.0000	.0236	L.0001
#2	L-.0213	L.0050	L-.0091	.0402	L-.0002	.0306	.0040

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.78	L.0006	L-.0013	L-.0047	3.647	.0260	7.333
#1	22.95	L.0022	L-.0048	L-.0064	3.673	.0228	7.388
#2	22.62	L-.0011	L.0023	L-.0030	3.621	.0292	7.277

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.475	1.351	L.0039	L.0055	L.8023	L.0062	L-.0064
#1	7.546	1.360	L.0034	L.0110	L.5948	L.0187	L-.0092
#2	7.404	1.341	L.0044	L-.0000	1.010	L-.0063	L-.0037

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.105	L.0018	L.0029	.0107	.3382	17.83	L.0011
#1	5.128	L.0008	L.0025	.0096	.3188	17.92	L.0006
#2	5.082	L.0027	L.0034	.0119	.3576	17.73	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0015	L-.0018	.1264
#1	L.0145	L-.0009	.1273
#2	L-.0176	L-.0026	.1254

Method: 20072 Sample Name: K0704754-008S Operator: MMR
Run Time: 06/15/07 09:24:24
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.974	.4683	.9237	2.076	.0500	1.057	.0511
#1	1.983	.4656	.9187	2.086	.0503	1.056	.0516
#2	1.966	.4711	.9287	2.066	.0497	1.058	.0506

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.45	.2011	.5062	.2478	4.607	.5035	7.243
#1	22.49	.2004	.5059	.2492	4.618	.5058	7.262
#2	22.41	.2019	.5065	.2464	4.597	.5012	7.224

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.154	1.847	1.018	.5101	L.7704	.9376	.0399
#1	7.252	1.850	1.019	.5162	L.5069	.9513	.0396
#2	7.056	1.843	1.018	.5040	1.034	.9240	.0401

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.034	L.0013	.5093	.5032	.2777	17.59	L.0004
#1	5.052	L-.0031	.5110	.5036	.2601	17.62	L-.0005
#2	5.017	L.0056	.5076	.5029	.2953	17.56	L.0014

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.8950	L-.0048	.1246
#1	.8697	L-.0026	.1250
#2	.9202	L-.0070	.1243

Method: 20072 Sample Name: K0704754-002 Operator: MMR
Run Time: 06/15/07 09:26:15
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0297	L-.0211	L-.0135	.0932	L.0001	.0221	L.0009
#1	L-.0275	L-.0205	L-.0157	.0933	L-.0000	.0256	L.0005
#2	L-.0318	L-.0216	L-.0113	.0930	L.0002	.0186	L.0014

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.90	L.0010	.0050	L-.0034	19.71	.0281	18.49
#1	45.95	L.0002	.0059	L-.0024	19.71	.0315	18.50
#2	45.85	L.0018	.0041	L-.0045	19.70	.0246	18.48

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.16	3.402	L.0010	.0244	2.088	L.0220	L-.0065
#1	19.17	3.404	L.0005	.0256	1.888	L.0256	L-.0050
#2	19.16	3.401	L.0016	.0231	2.287	L.0185	L-.0080

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.024	L-.0042	L.0043	L.0027	1.082	25.64	L.0021
#1	9.027	L-.0037	L.0035	L.0031	1.086	25.65	L.0025
#2	9.021	L-.0046	.0052	L.0024	1.078	25.63	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0288	L-.0022	.2397
#1	.0747	L-.0044	.2397
#2	L-.0171	L.0000	.2397

Method: 20072 Sample Name: K0704754-003 Operator: MMR
Run Time: 06/15/07 09:28:05
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0223	L-.0061	L.0004	.0338	L-.0001	.0431	L.0005
#1	L.0096	L.0095	L.0128	.0338	L-.0000	.0372	L.0012
#2	L-.0542	L-.0217	L-.0120	.0338	L-.0002	.0489	L-.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.36	L.0010	L-.0011	L-.0035	8.503	L.0165	5.446
#1	17.25	L.0016	L.0016	L-.0000	8.437	.0280	5.403
#2	17.46	L.0005	L-.0038	L-.0069	8.569	L.0049	5.489

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.518	.9358	L-.0029	L.0091	1.908	L-.0075	L-.0051
#1	5.545	.9289	L.0007	L.0110	2.016	L.0150	L.0010
#2	5.491	.9427	L-.0065	L.0073	1.800	L-.0300	L-.0112

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.957	L.0063	L.0023	L.0013	.6801	21.17	.0030
#1	4.930	L.0088	L.0033	L.0021	.6520	21.04	.0044
#2	4.983	L.0038	L.0014	L.0006	.7083	21.29	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0050	L.0053	.1027
#1	L.0160	.0114	.1019
#2	L-.0259	L-.0009	.1035

Method: 20072 Sample Name: CCV2 Operator: MMR
Run Time: 06/15/07 09:30:06
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.856	4.880	1.929	.4859	.4837	4.869	.4895
#1	4.846	4.854	1.926	.4854	.4828	4.858	.4827
#2	4.867	4.907	1.932	.4864	.4847	4.881	.4963

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.877	4.910	.4895	.4856	4.868	4.873	4.841
#1	4.871	4.900	.4880	.4843	4.859	4.880	4.833
#2	4.884	4.921	.4910	.4870	4.877	4.867	4.849

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.061	.4871	.4841	4.879	24.78	1.968	.4911
#1	4.996	.4859	.4805	4.873	24.20	1.948	.4868
#2	5.127	.4883	.4877	4.884	25.35	1.989	.4953

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.65	5.090	.4850	2.430	24.61	4.945	.4916
#1	24.59	5.089	.4838	2.426	24.49	4.922	.4914
#2	24.72	5.092	.4862	2.434	24.73	4.968	.4918

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.853	2.452	.4853
#1	4.848	2.447	.4847
#2	4.857	2.457	.4859

Method: 20072 Sample Name: CCB2 Operator: MMR
Run Time: 06/15/07 09:34:00
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0017	-.0022	-.0170	.0011	-.0000	.0081	.0026
#1	.0065	.0039	-.0001	.0011	-.0000	.0105	.0027
#2	-.0031	-.0084	-.0339	.0011	-.0000	.0058	.0024

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0066	.0027	-.0003	.0000	.0006	.0335	.0013
#1	.0091	.0022	.0012	.0003	.0011	.0367	.0022
#2	.0040	.0032	-.0018	-.0003	.0001	.0303	.0003

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.2106	.0012	-.0020	.0024	.6227	.0166	.0000
#1	.1750	.0012	-.0020	-.0012	.2116	.0042	.0025
#2	Q.2462	.0012	-.0020	.0061	1.034	.0291	-.0024

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0330	.0027	.0038	-.0008	.0283	.0150	.0002
#1	.0510	.0041	.0036	-.0008	.0265	.0276	.0002
#2	.0149	.0014	.0040	-.0008	.0300	.0024	.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0253	.0026	.0002
#1	-.0138	.0070	.0004
#2	.0643	-.0018	.0000

Method: 20072 Sample Name: K0704754-005 Operator: MMR
Run Time: 06/15/07 09:42:05
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0159	L-.0240	L-.0172	.0298	L-.0000	.0182	L.0008
#1	L.0053	L-.0251	L-.0160	.0296	L-.0000	.0135	L.0004
#2	L.0266	L-.0229	L-.0184	.0299	L-.0000	.0228	L.0013

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.06	L.0014	L-.0036	L-.0069	1.675	L.0141	6.295
#1	12.15	L.0004	L-.0054	L-.0086	1.687	.0216	6.351
#2	11.97	L.0025	L-.0017	L-.0051	1.663	L.0066	6.238

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.368	.3935	L.0001	L.0073	3.656	L.0143	L-.0076
#1	6.344	.3971	L-.0009	L.0097	2.463	.0410	L-.0094
#2	6.392	.3898	L.0012	L.0049	4.850	L-.0125	L-.0058

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.868	L.0047	L.0028	L.0017	.4044	24.30	.0038
#1	7.926	L-.0056	L.0019	L.0005	.3585	24.50	.0051
#2	7.811	L.0150	L.0037	L.0028	.4503	24.10	L.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0015	L-.0035	.0490
#1	L-.0330	L-.0088	.0496
#2	L.0359	L.0018	.0485

Method: 20072 Sample Name: K0704754-006 Operator: MMR
Run Time: 06/15/07 09:43:55
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0197	L-.0033	L.0181	.0993	L-.0000	.0221	L.0025
#1	L-.0223	L-.0033	.0221	.0986	L-.0002	.0244	L.0019
#2	L-.0170	L-.0033	L.0142	.1000	L.0002	.0199	L.0030

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	106.9	L.0021	L-.0007	L-.0023	39.54	.0372	H41.19
#1	106.5	L.0021	L-.0004	L-.0044	39.36	.0354	H41.03
#2	107.2	L.0021	L-.0011	L-.0003	39.72	.0389	H41.35

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	44.12	H8.392	L.0011	.1273	3.405	L.0133	L-.0032
#1	43.84	H8.347	L.0011	.1279	3.668	L.0220	L-.0041
#2	44.39	H8.437	L.0011	.1267	3.141	L.0045	L-.0022

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.15	L-.0026	.0052	L.0031	1.573	30.74	L.0029
#1	14.06	L.0150	L.0043	L.0027	1.575	30.61	.0040
#2	14.24	L-.0202	.0060	L.0034	1.572	30.86	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0586	L.0031	.5584
#1	.0592	L-.0018	.5547
#2	.0581	.0079	.5620

Method: 20072 Sample Name: K0704754-007 Operator: MMR
Run Time: 06/15/07 09:45:44
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0420	L-.0173	L.0124	.0410	L.0001	.0165	L.0019
#1	L-.0468	L-.0217	.0206	.0412	L.0002	.0223	L.0027
#2	L-.0373	L-.0128	L.0041	.0409	L-.0000	.0107	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.97	.0036	L-.0025	L-.0053	6.108	.0231	6.721
#1	17.91	.0043	L-.0019	L-.0050	6.087	.0234	6.698
#2	18.02	L.0028	L-.0031	L-.0057	6.130	.0228	6.744

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.008	1.047	L-.0005	L.0122	1.361	L.0151	L-.0074
#1	6.931	1.042	L-.0005	L.0183	1.800	L.0145	L-.0080
#2	7.085	1.051	L-.0005	L.0061	.9221	L.0157	L-.0068

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.703	L.0092	L.0050	L.0024	.2955	18.39	L.0011
#1	3.670	L.0133	.0058	L.0027	.2902	18.30	L.0025
#2	3.737	L.0051	L.0041	L.0020	.3009	18.48	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0120	L.0000	.1025
#1	L.0006	L.0000	.1019
#2	L.0234	L.0000	.1031

Method: 20072 Sample Name: K0704754-009 Operator: MMR
Run Time: 06/15/07 09:47:36
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0132	L.0000	L.0033	.0414	L-.0002	.0284	L.0011
#1	L-.0010	L.0084	L.0005	.0416	L-.0002	.0307	L.0020
#2	L-.0255	L-.0084	L.0061	.0412	L-.0002	.0261	L.0001

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.12	L.0016	L-.0013	L-.0016	3.949	L.0150	7.435
#1	23.23	L.0010	L.0011	L-.0002	3.972	L.0153	7.476
#2	23.00	L.0023	L-.0036	L-.0030	3.926	L.0147	7.394

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.581	1.381	L-.0022	L.0018	2.706	L.0153	L-.0039
#1	7.640	1.388	L-.0017	L.0049	3.014	L.0154	L-.0018
#2	7.522	1.373	L-.0028	L-.0012	2.399	L.0153	L-.0061

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.209	L.0014	L.0028	.0104	.3506	18.23	L.0017
#1	5.242	L-.0028	L.0028	.0103	.3718	18.33	L.0013
#2	5.176	L.0055	L.0028	.0104	.3293	18.13	L.0021

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0201	.0070	.1283
#1	L.0086	.0061	.1293
#2	L.0317	.0079	.1273

Method: 20072 Sample Name: K0704754-010 Operator: MMR
Run Time: 06/15/07 09:49:24
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0057	L-.0150	L-.0182	.0294	L.0001	.0210	.0030
#1	L.0205	L-.0128	L-.0342	.0299	L-.0000	.0175	.0042
#2	L-.0319	L-.0173	L-.0023	.0289	L.0002	.0245	L.0018

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	36.57	.0045	L-.0009	L-.0003	.0162	.0393	18.57
#1	36.50	.0037	L.0018	L.0024	.0177	.0320	18.52
#2	36.63	.0053	L-.0035	L-.0031	.0146	.0465	18.62

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.34	.0320	L.0015	L.0043	6.175	L.0089	L.0001
#1	19.29	.0320	L-.0010	L.0037	6.327	L.0113	L.0038
#2	19.39	.0320	L.0041	L.0049	6.023	L.0065	L-.0035

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.49	L.0030	.0153	L-.0014	.2179	24.14	.0034
#1	13.44	L.0041	.0137	L-.0014	L.1967	24.10	.0044
#2	13.54	L.0018	.0168	L-.0014	.2390	24.17	L.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0093	.0079	.1416
#1	L.0093	.0123	.1416
#2	L.0094	L.0035	.1416

Method: 20072 Sample Name: K0704754-011 Operator: MMR
Run Time: 06/15/07 09:51:13
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0453	L-.0173	L-.0052	.0280	L.0001	.0213	L.0018
#1	L-.0266	L-.0128	L-.0113	.0282	L.0002	.0201	L.0024
#2	L-.0640	L-.0218	L.0009	.0278	L-.0000	.0225	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.61	L.0018	L-.0049	L-.0053	6.464	.0300	4.343
#1	14.59	L.0020	L-.0026	L-.0029	6.456	.0338	4.338
#2	14.63	L.0015	L-.0073	L-.0077	6.471	.0263	4.349

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.539	1.003	L-.0005	L-.0018	1.581	L.0196	L-.0082
#1	4.544	1.002	L-.0005	L.0000	1.976	L-.0030	L-.0055
#2	4.533	1.003	L-.0005	L-.0037	1.186	.0421	L-.0110

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.458	L-.0017	L.0033	L.0002	.9701	20.02	L.0023
#1	3.464	L-.0031	L.0037	L.0006	.9772	20.01	L.0025
#2	3.452	L-.0004	L.0028	L-.0001	.9630	20.03	L.0021

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0382	.0061	.0808
#1	L-.0658	.0070	.0808
#2	L-.0107	L.0053	.0808

Method: 20072 Sample Name: K0704754-012 Operator: MMR
Run Time: 06/15/07 09:53:02
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0131	L.0073	L-.0055	.0949	L.0001	L.0051	L.0019
#1	L-.0318	L-.0072	L-.0201	.0948	L-.0000	L.0016	L.0026
#2	L.0055	L.0218	L.0092	.0951	L.0002	L.0086	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	130.5	L-.0000	.0048	L-.0008	6.645	.0289	H59.94
#1	130.1	L.0005	L.0028	L-.0029	6.627	.0315	H59.82
#2	130.8	L-.0005	.0068	L.0013	6.663	.0263	H60.06

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	66.34	.6430	L-.0015	L.0024	8.442	L-.0118	L-.0030
#1	66.28	.6420	L-.0015	L-.0012	8.586	L-.0172	L-.0060
#2	66.39	.6440	L-.0015	L.0061	8.299	L-.0065	L.0001

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.07	L-.0026	.0053	L-.0020	.2278	23.73	.0030
#1	19.02	L.0033	.0061	L-.0027	.2364	23.68	L.0025
#2	19.12	L-.0086	L.0045	L-.0013	.2191	23.79	.0036

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0324	.0079	.5511
#1	L-.0599	.0070	.5505
#2	L-.0050	.0088	.5516

Method: 20072 Sample Name: K0704754-014 Operator: MMR
Run Time: 06/15/07 09:55:08
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0069	L-.0089	L.0067	.0174	L-.0000	.0225	L.0022
#1	L.0289	L.0084	.0213	.0180	L-.0000	.0248	L.0015
#2	L-.0426	L-.0261	L-.0078	.0169	L-.0000	.0202	L.0029

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.12	L.0005	L-.0012	L-.0013	.8521	L.0167	4.288
#1	13.00	L.0030	L.0024	L.0025	.8450	.0245	4.239
#2	13.24	L-.0019	L-.0048	L-.0052	.8593	L.0089	4.337

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.360	.4595	L-.0010	L.0091	1.740	L-.0053	L-.0038
#1	4.455	.4547	L.0011	L.0134	2.790	L.0060	L.0014
#2	4.265	.4644	L-.0030	L.0049	L.6906	L-.0166	L-.0090

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.032	L-.0026	L.0036	L.0006	.4054	16.19	L.0015
#1	3.023	L.0112	.0058	L.0013	.4443	16.04	.0032
#2	3.041	L-.0163	L.0014	L-.0001	.3665	16.35	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0082	L.0026	.0687
#1	.0541	.0105	.0681
#2	L-.0377	L-.0053	.0692

Method: 20072 Sample Name: K0704754-015 Operator: MMR
Run Time: 06/15/07 09:56:58
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0318	L-.0022	L-.0328	.1249	L-.0000	L.0078	L.0029
#1	L-.0328	L-.0083	L-.0252	.1254	L-.0000	L.0055	.0032
#2	L-.0308	L.0040	L-.0404	.1243	L-.0000	.0101	L.0026

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.01	L.0021	.0049	L-.0039	16.16	.0362	H43.95
#1	88.29	.0043	.0049	L-.0046	16.21	.0483	H44.07
#2	87.74	L-.0001	.0048	L-.0032	16.11	.0240	H43.83

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.14	2.180	L.0003	L.0122	6.403	L.0308	L-.0058
#1	47.52	2.185	L-.0008	L.0110	6.622	L.0243	L-.0055
#2	46.77	2.174	L.0013	L.0134	6.183	L.0373	L-.0062

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.56	L.0046	L.0042	L-.0018	.4909	22.84	.0030
#1	14.58	L.0092	.0072	L-.0022	.4487	22.91	.0036
#2	14.53	L.0000	L.0013	L-.0015	.5332	22.78	L.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0192	L.0031	.3568
#1	L.0190	L-.0009	.3581
#2	L.0194	.0070	.3555

Method: 20072 Sample Name: K0704754-016 Operator: MMR
Run Time: 06/15/07 09:58:46
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0565	L-.0307	L-.0151	.0248	L-.0001	.0134	L.0017
#1	L-.0352	L-.0173	L-.0267	.0247	L-.0000	.0158	L.0023
#2	L-.0779	L-.0441	L-.0035	.0250	L-.0002	.0111	L.0010

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.23	L.0014	L-.0071	L-.0072	1.496	.0205	4.395
#1	13.11	L.0030	L-.0053	L-.0058	1.478	.0297	4.349
#2	13.35	L-.0001	L-.0089	L-.0086	1.514	L.0113	4.441

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.521	.5256	L-.0009	L.0030	1.182	L.0005	L-.0101
#1	4.565	.5211	L.0001	L.0097	1.217	L.0183	L-.0076
#2	4.476	.5300	L-.0019	L-.0037	1.146	L-.0173	L-.0125

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.996	L.0013	L.0030	L-.0001	.5726	16.51	L.0013
#1	2.957	L.0003	L.0049	L-.0009	.5179	16.36	L.0017
#2	3.034	L.0022	L.0011	L.0006	.6273	16.66	L.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0312	L-.0013	.0700
#1	L-.0725	L.0035	.0692
#2	L.0101	L-.0061	.0708

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Method: 20072 Sample Name: CCV3 Operator: MMR
Run Time: 06/15/07 10:00:39
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.796	4.856	1.921	.4820	.4808	4.818	.4869
#1	4.785	4.830	1.921	.4794	.4774	4.792	.4810
#2	4.807	4.881	1.921	.4847	.4843	4.844	.4928

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.828	4.877	.4860	.4787	4.843	4.839	4.807
#1	4.808	4.847	.4866	.4787	4.811	4.844	4.774
#2	4.848	4.906	.4854	.4787	4.874	4.834	4.840

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.008	.4817	.4815	4.826	24.52	1.925	.4834
#1	5.020	.4783	.4764	4.805	24.62	1.919	.4862
#2	4.996	.4851	.4866	4.847	24.41	1.931	.4807

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.37	4.935	.4814	2.420	24.59	4.882	.4779
#1	24.17	4.936	.4793	2.408	24.58	4.867	.4743
#2	24.57	4.935	.4836	2.433	24.61	4.896	.4815

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.802	2.421	.4811
#1	4.724	2.380	.4774
#2	4.880	2.463	.4847

Method: 20072 Sample Name: CCB3 Operator: MMR
Run Time: 06/15/07 10:03:01
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0384	-.0201	-.0064	.0000	-.0002	.0058	-.0004
#1	-.0448	-.0083	.0035	-.0004	-.0002	.0058	-.0010
#2	-.0320	-.0318	-.0162	.0004	-.0002	.0058	.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	-.0008	-.0027	-.0035	-.0024	.0176	.0002
#1	-.0005	-.0009	-.0024	-.0038	-.0029	.0228	.0003
#2	-.0014	-.0006	-.0029	-.0031	-.0019	.0124	-.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0534	-.0007	.0000	.0030	-.1796	-.0232	-.0055
#1	.0208	-.0007	.0000	.0049	-.7704	-.0208	-.0061
#2	-.1276	-.0007	.0000	.0012	.4111	-.0256	-.0049

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0220	-.0005	.0004	-.0015	-.0036	-.0131	.0002
#1	-.0235	-.0050	.0011	-.0023	.0299	-.0128	-.0010
#2	-.0204	.0041	-.0002	-.0008	-.0372	-.0133	.0013

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0092	-.0026	-.0004
#1	.0000	-.0053	-.0004
#2	.0184	.0000	-.0004

Method: 20072 Sample Name: K0704754-017 Operator: MMR
Run Time: 06/15/07 10:04:50
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0239	L-.0016	L-.0086	.1265	L-.0001	.0163	L.0021
#1	L-.0223	L-.0082	L-.0189	.1261	L.0000	.0152	L.0022
#2	L-.0254	L.0051	L.0018	.1268	L-.0002	.0175	L.0019

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	98.74	L-.0007	.0040	L-.0028	17.06	L.0159	H51.67
#1	98.73	L-.0042	.0030	L-.0032	17.06	L.0090	H51.68
#2	98.76	L.0027	.0049	L-.0025	17.07	.0229	H51.67

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.09	3.935	L-.0007	.0219	9.472	L.0373	L-.0032
#1	55.86	3.936	L-.0007	.0207	9.384	.0451	L-.0044
#2	56.31	3.934	L-.0007	.0231	9.560	L.0296	L-.0019

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.34	L.0028	L.0005	L.0005	1.074	23.56	.0030
#1	24.36	L-.0057	L-.0033	L.0013	1.116	23.54	L.0013
#2	24.32	L.0112	L.0043	L-.0003	1.031	23.57	.0048

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0214	L.0018	.4543
#1	L-.0374	L-.0026	.4547
#2	L-.0053	.0061	.4539

Method: 20072 Sample Name: K0704754-018 Operator: MMR
Run Time: 06/15/07 10:06:45
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0383	L-.0234	L-.0026	.0430	L-.0003	.0268	L.0009
#1	L-.0202	L-.0128	L.0121	.0437	L-.0004	.0291	L-.0002
#2	L-.0564	L-.0340	L-.0173	.0423	L-.0002	.0245	L.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.23	L.0004	L-.0041	L-.0041	.0148	L.0159	2.966
#1	26.55	L-.0024	L-.0035	L-.0024	.0158	L.0037	3.004
#2	25.91	.0032	L-.0047	L-.0059	.0139	.0280	2.929

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.076	.0085	L-.0020	L.0012	2.052	L-.0012	L-.0091
#1	2.987	.0085	L-.0031	L-.0037	1.904	L.0054	L-.0067
#2	3.165	.0085	L-.0010	L.0061	2.199	L-.0077	L-.0115

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.982	L.0050	L.0029	L.0029	L.0458	13.75	L.0017
#1	7.082	L.0005	L.0010	L.0037	L.0160	13.93	L.0017
#2	6.882	L.0096	L.0049	L.0021	L.0757	13.58	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0184	L.0004	.1068
#1	L.0367	L.0009	.1085
#2	L.0000	L.0000	.1050

Method: 20072 Sample Name: K0704754-019 Operator: MMR
Run Time: 06/15/07 10:08:36
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0488	L-.0200	L-.0252	.0137	L-.0000	.0093	L-.0000
#1	L-.0339	L-.0217	L-.0144	.0144	L.0002	.0105	L.0020
#2	L-.0637	L-.0182	L-.0359	.0130	L-.0003	L.0082	L-.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.86	L.0006	L-.0050	L-.0059	L.0026	L.0118	7.088
#1	12.83	.0045	L-.0035	L-.0031	.0044	.0303	7.063
#2	12.88	L-.0032	L-.0065	L-.0086	L.0008	L-.0066	7.113

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.173	.0042	L-.0036	L.0006	2.982	L.0012	L-.0093
#1	7.336	.0048	L.0010	L.0049	3.605	L.0232	L-.0071
#2	7.010	.0037	L-.0082	L-.0037	2.359	L-.0208	L-.0114

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.187	L.0007	.0175	L-.0006	L.1676	25.94	L-.0008
#1	7.174	L.0101	.0214	L-.0010	.2224	25.86	L-.0002
#2	7.200	L-.0087	.0135	L-.0002	L.1129	26.03	L-.0013

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0482	L-.0022	.0431
#1	L.0184	L.0053	.0431
#2	L-.1148	L-.0097	.0431

Method: 20072 Sample Name: K0704754-020 Operator: MMR
Run Time: 06/15/07 10:10:24
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0607	L-.0329	L-.0126	.0291	L-.0002	.0118	L.0001
#1	L-.0298	L-.0351	L-.0176	.0296	L-.0002	.0153	L-.0003
#2	L-.0916	L-.0307	L-.0075	.0285	L-.0002	L.0083	L.0004

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.77	L.0009	L-.0046	L-.0084	5.913	L.0156	4.469
#1	11.82	L.0010	L-.0031	L-.0057	5.941	L.0153	4.491
#2	11.71	L.0007	L-.0060	L-.0112	5.884	L.0159	4.447

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.556	.5702	L-.0031	L-.0012	1.186	L-.0028	L-.0113
#1	4.570	.5739	L-.0036	L.0024	1.170	L-.0177	L-.0080
#2	4.541	.5665	L-.0026	L-.0049	1.202	L.0120	L-.0147

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.039	L.0078	L.0023	L-.0005	L.1731	17.82	L.0011
#1	4.072	L.0087	L.0023	L-.0009	.2173	17.89	L.0006
#2	4.005	L.0068	L.0023	L-.0001	L.1289	17.74	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0064	L-.0013	.0666
#1	L-.0203	L.0026	.0673
#2	L.0075	L-.0053	.0658

Method: 20072 Sample Name: K0704754-023 Operator: MMR
Run Time: 06/15/07 10:12:16
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0377	L-.0061	L-.0125	.0271	L-.0000	.0140	L-.0003
#1	L-.0297	L-.0039	L-.0142	.0275	L-.0000	.0105	L.0002
#2	L-.0458	L-.0083	L-.0108	.0268	L-.0000	.0175	L-.0007

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.64	L.0006	L-.0041	L.0007	L.0020	L.0078	12.67
#1	25.59	L.0022	L-.0036	L.0017	.0036	L.0107	12.63
#2	25.68	L-.0009	L-.0047	L-.0003	L.0003	L.0049	12.71

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.87	.0177	L-.0026	L.0012	3.397	L.0030	L-.0069
#1	12.95	.0179	L-.0041	L.0000	3.589	L-.0018	L-.0036
#2	12.79	.0176	L-.0010	L.0024	3.205	L.0077	L-.0103

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.41	L-.0032	.0084	L.0030	L.1586	20.19	L.0009
#1	14.37	L-.0083	.0094	L.0026	.2204	20.14	L.0021
#2	14.46	L.0018	.0074	L.0034	L.0968	20.24	L-.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0114	L.0009	.1152
#1	L-.0045	L.0044	.1146
#2	L-.0182	L-.0026	.1158

Method: 20072 Sample Name: K0704754-024 Operator: MMR
Run Time: 06/15/07 10:14:05
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0426	L-.0033	L-.0055	.0530	L-.0002	.0233	L.0015
#1	L-.0298	L-.0038	L.0065	.0532	L-.0004	.0163	L.0013
#2	L-.0554	L-.0028	L-.0176	.0528	L-.0000	.0303	L.0017

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	32.11	L-.0007	L-.0033	L-.0056	8.600	L.0153	11.45
#1	32.04	L-.0020	L-.0027	L-.0028	8.577	L.0038	11.42
#2	32.18	L.0005	L-.0039	L-.0083	8.624	.0269	11.48

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.66	1.677	L-.0009	L.0030	2.255	L-.0009	L-.0070
#1	11.51	1.673	L-.0034	L.0073	2.718	L-.0015	L-.0046
#2	11.81	1.681	L.0017	L-.0012	1.792	L-.0003	L-.0094

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.353	L-.0152	L.0020	L.0000	.5871	19.21	L.0017
#1	5.336	L-.0136	L-.0006	L.0011	.6013	19.16	.0032
#2	5.371	L-.0168	L.0046	L-.0011	.5730	19.26	L.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0141	L.0013	.1681
#1	L.0112	L.0035	.1677
#2	L-.0395	L-.0009	.1685

Method: 20072 Sample Name: K0704754-025 Operator: MMR
Run Time: 06/15/07 10:15:54
Comment: K0704754 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0394	L-.0150	L.0103	.0368	L-.0001	.0246	L.0013
#1	L-.0256	L-.0128	.0239	.0373	L-.0000	.0258	L.0016
#2	L-.0532	L-.0173	L-.0032	.0363	L-.0002	.0234	L.0011

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.25	L-.0007	L-.0024	L-.0054	3.169	L.0061	6.658
#1	22.39	L.0002	L-.0018	L-.0058	3.190	L.0118	6.703
#2	22.10	L-.0016	L-.0030	L-.0051	3.148	L.0003	6.614

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.777	1.097	L-.0003	L-.0012	.9221	L.0017	L-.0056
#1	6.878	1.104	L.0013	L.0024	L.6666	L.0148	L-.0050
#2	6.676	1.091	L-.0018	L-.0049	1.178	L-.0114	L-.0062

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.958	L.0060	L.0018	L.0006	.4708	19.08	L.0006
#1	3.979	L.0076	L.0016	L.0005	.5097	19.20	L.0002
#2	3.937	L.0044	L.0019	L.0006	.4319	18.95	L.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0151	L-.0040	.1248
#1	L-.0033	L-.0026	.1258
#2	L.0335	L-.0053	.1239

Method: 20072 Sample Name: K0704754-006L Operator: MMR
Run Time: 06/15/07 10:17:51
Comment: K0704754 1/5 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0143	L.0007	L-.0067	.0204	L-.0001	.0185	L.0010
#1	L-.0340	L.0007	L-.0109	.0208	L-.0002	.0139	L.0016
#2	L.0054	L.0007	L-.0024	.0201	L-.0000	.0232	L.0005

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.24	L.0010	L-.0017	L-.0011	8.258	L.0196	9.003
#1	22.38	L.0000	L-.0025	L-.0028	8.312	L.0124	9.066
#2	22.10	L.0021	L-.0008	L.0007	8.204	.0268	8.941

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.218	1.716	L-.0029	.0274	1.425	L.0001	L-.0022
#1	9.230	1.727	L-.0045	.0256	1.585	L-.0160	L-.0046
#2	9.207	1.704	L-.0014	.0292	1.265	L.0161	L.0002

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.901	L-.0006	L.0026	L-.0000	.3275	6.304	.0030
#1	2.915	L.0074	L.0007	L-.0011	.2833	6.349	L.0025
#2	2.887	L-.0087	L.0046	L.0011	.3716	6.260	.0036

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0199	L.0053	.1139
#1	L-.0009	.0088	.1146
#2	L.0408	L.0018	.1131

Method: 20072 Sample Name: PBW Operator: MMR
Run Time: 06/15/07 10:20:07
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0122	L-.0100	L.0028	L-.0004	L.0002	L.0058	L.0004
#1	L-.0192	L-.0117	L.0056	L-.0007	L.0002	L.0058	L-.0001
#2	L-.0052	L-.0084	L-.0001	L.0000	L.0002	L.0058	L.0009

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0065	L.0004	L-.0021	L-.0041	L-.0015	.0329	.0008
#1	L.0016	L-.0048	L-.0036	L-.0052	L-.0025	.0205	.0010
#2	L.0114	.0055	L-.0006	L-.0031	L-.0006	.0453	L.0006

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0771	.0011	L-.0020	L-.0012	L-.1916	L.0083	L-.0046
#1	L-.2581	.0012	L-.0031	L-.0049	L-.6826	L-.0006	L-.0061
#2	.4124	.0010	L-.0010	L.0024	L.2994	L.0172	L-.0030

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0114	L-.0055	L.0012	L.0030	L.0335	L-.0091	L-.0000
#1	L.0078	L-.0115	L-.0045	L.0046	L-.0159	L-.0133	L-.0010
#2	L.0149	L.0005	.0070	L.0015	L.0830	L-.0050	L.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0253	L-.0035	L-.0004
#1	L.0276	L-.0044	L-.0004
#2	L.0230	L-.0026	L-.0004

Method: 20072 Sample Name: LCSW Operator: MMR
Run Time: 06/15/07 10:22:06
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.945	2.435	2.424	4.941	.1229	.9902	1.229
#1	4.984	2.434	2.441	5.034	.1249	1.007	1.244
#2	4.907	2.436	2.407	4.848	.1209	.9739	1.213

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.27	.4995	1.263	.6165	2.450	2.458	12.17
#1	12.41	.5025	1.275	.6220	2.482	2.464	12.34
#2	12.13	.4966	1.251	.6109	2.419	2.452	12.00

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.30	1.245	1.002	1.222	13.02	2.460	.6132
#1	12.36	1.261	1.013	1.228	12.45	2.499	.6161
#2	12.25	1.228	.9898	1.216	13.60	2.421	.6103

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.54	-.0118	1.238	1.240	.0581	-.0245	.0013
#1	12.69	-.0210	1.254	1.253	.0176	-.0491	-.0006
#2	12.38	-.0027	1.222	1.228	.0985	.0000	.0032

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	2.444	.0009	-.0002
#1	2.472	-.0070	-.0008
#2	2.417	.0088	.0004

Method: 20072 Sample Name: CCV4 Operator: MMR
Run Time: 06/15/07 10:24:06
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.821	4.861	1.936	.4803	.4792	4.819	.4884
#1	4.875	4.898	1.937	.4843	.4845	4.874	.4916
#2	4.768	4.824	1.934	.4762	.4740	4.765	.4852

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.836	4.869	.4868	.4798	4.840	4.839	4.801
#1	4.872	4.912	.4897	.4843	4.884	4.875	4.848
#2	4.799	4.826	.4838	.4753	4.795	4.803	4.754

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.919	.4832	.4830	4.812	25.11	1.921	.4846
#1	4.877	.4878	.4866	4.859	24.68	1.943	.4892
#2	4.961	.4786	.4794	4.765	25.53	1.899	.4800

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.39	5.034	.4804	2.416	24.46	4.891	.4842
#1	24.59	5.089	.4836	2.434	24.63	4.933	.4903
#2	24.20	4.979	.4771	2.397	24.30	4.848	.4781

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.876	2.419	.4793
#1	4.912	2.444	.4843
#2	4.839	2.394	.4743

Method: 20072 Sample Name: CCB4 Operator: MMR
Run Time: 06/15/07 10:27:23
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0309	-.0106	-.0064	-.0005	-.0001	.0058	.0019
#1	Q-.0576	-.0218	-.0107	-.0014	-.0000	.0035	.0020
#2	-.0042	.0006	-.0022	.0004	-.0002	.0082	.0018

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0006	-.0053	-.0035	-.0024	.0190	-.0000
#1	-.0009	.0014	-.0083	-.0059	-.0043	.0257	-.0000
#2	.0015	-.0001	-.0023	-.0010	-.0004	.0124	-.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1424	.0003	-.0015	.0012	-.2195	.0190	-.0061
#1	.1691	-.0006	.0010	.0037	-1.385	.0113	-.0097
#2	.1157	.0012	-.0041	-.0012	.9460	.0267	-.0024

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0059	.0037	.0029	-.0008	.0158	-.0156	.0011
#1	-.0275	.0009	.0032	-.0008	.0511	-.0271	-.0002
#2	.0392	.0064	.0027	-.0008	-.0194	-.0040	.0025

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0229	-.0035	-.0002
#1	-.0275	-.0088	-.0004
#2	-.0184	.0018	.0000

Method: 20072 Sample Name: K0704754-026 Operator: MMR
Run Time: 06/15/07 10:46:00
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0098	L.0050	L.0056	.0169	L-.0001	.0268	L.0022
#1	.0461	L.0229	.0202	.0176	L-.0001	.0268	.0033
#2	L-.0264	L-.0129	L-.0089	.0162	L-.0001	.0268	L.0011

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.94	.0080	L.0009	L.0010	.0046	.0505	6.333
#1	12.99	.0071	.0036	L.0052	.0068	.0586	6.355
#2	12.89	.0089	L-.0017	L-.0031	L.0024	.0424	6.312

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.888	.0015	L.0026	L.0085	3.976	.0416	L.0023
#1	6.921	.0017	L.0031	L.0146	3.525	.0565	.0062
#2	6.856	.0013	L.0020	L.0024	4.427	L.0267	L-.0017

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.174	L.0096	.0197	L.0001	L.1854	19.35	.0046
#1	8.190	L.0091	.0197	L.0005	L.1343	19.43	.0048
#2	8.159	L.0101	.0197	L-.0002	.2365	19.27	.0044

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0184	.0119	.0560
#1	L.0183	.0132	.0565
#2	L.0184	.0105	.0554

Method: 20072 Sample Name: K0704754-026D Operator: MMR
Run Time: 06/15/07 10:47:59
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0271	L-.0089	L-.0116	.0166	L.0002	.0186	L.0020
#1	L-.0254	L-.0172	L-.0164	.0162	L.0002	.0151	L.0012
#2	L-.0287	L-.0006	L-.0067	.0169	L.0002	.0221	L.0028

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.12	.0046	L-.0023	L-.0017	L.0026	.0355	6.428
#1	13.05	L.0017	L-.0018	L-.0003	L.0025	.0257	6.400
#2	13.18	.0076	L-.0029	L-.0031	L.0027	.0453	6.456

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.710	.0013	L.0020	L.0061	3.545	L.0273	L-.0041
#1	6.506	.0013	L-.0010	L.0037	3.405	L.0232	L-.0036
#2	6.915	.0013	L.0051	L.0085	3.684	L.0315	L-.0047

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.283	L.0048	.0142	L.0002	.2472	19.60	L.0023
#1	8.246	L-.0023	.0112	L.0005	L.1871	19.51	L.0017
#2	8.321	L.0119	.0172	L-.0002	.3072	19.70	L.0029

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0000	.0061	.0565
#1	L.0276	.0061	.0565
#2	L-.0275	.0061	.0565

Method: 20072 Sample Name: K0704754-026S Operator: MMR
Run Time: 06/15/07 10:49:51
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.937	.4718	.9450	2.008	.0494	1.007	.0514
#1	1.913	.4668	.9435	2.012	.0494	.9982	.0518
#2	1.961	.4767	.9465	2.004	.0494	1.017	.0509

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.98	.1999	.4998	.2415	.9969	.5070	6.373
#1	12.98	.1975	.4966	.2401	.9969	.5041	6.377
#2	12.97	.2024	.5030	.2428	.9970	.5099	6.370

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.496	.5048	.9953	.4900	3.074	1.005	.0396
#1	6.371	.5056	.9958	.4942	2.854	1.005	.0360
#2	6.620	.5039	.9948	.4857	3.293	1.005	.0433

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.184	L.0027	.5117	.4897	L.1372	19.37	L.0010
#1	8.167	L.0190	.5108	.4886	L.1177	19.38	L-.0002
#2	8.201	L-.0135	.5125	.4909	L.1567	19.37	L.0021

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.9974	L-.0004	.0556
#1	.9377	L-.0035	.0554
#2	1.057	L.0026	.0558

Method: 20072 Sample Name: K0704754-027 Operator: MMR
Run Time: 06/15/07 10:51:43
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0495	L-.0083	L-.0054	.0166	L-.0001	.0140	L.0005
#1	L-.0319	L-.0127	L.0164	.0169	L-.0000	.0151	L-.0012
#2	L-.0671	L-.0039	L-.0272	.0162	L-.0002	.0128	L.0023

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.29	L-.0008	L-.0050	L-.0035	L.0013	.0257	6.525
#1	13.30	L-.0009	L-.0035	L-.0031	L.0007	.0315	6.530
#2	13.28	L-.0006	L-.0065	L-.0038	L.0019	L.0199	6.521

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.601	.0013	L.0010	L.0006	3.385	L.0036	L-.0084
#1	6.529	.0013	L.0020	L.0073	3.157	L.0053	L-.0072
#2	6.672	.0012	L-.0000	L-.0061	3.612	L.0018	L-.0096

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.367	L.0057	.0104	L-.0010	L.1289	19.81	L.0000
#1	8.403	L.0073	.0091	L.0005	L.1589	19.83	L-.0002
#2	8.332	L.0041	.0116	L-.0024	L.0988	19.80	L.0002

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0069	L.0040	.0571
#1	L-.0092	L.0044	.0573
#2	L-.0046	L.0035	.0569

Method: 20072 Sample Name: K0704754-028 Operator: MMR
Run Time: 06/15/07 10:53:29
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0265	L-.0022	L-.0199	.0208	L.0002	.0141	L.0026
#1	L-.0223	L-.0005	L-.0221	.0211	L.0002	.0106	.0031
#2	L-.0308	L-.0039	L-.0177	.0204	L.0002	.0176	L.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.51	.0035	L-.0012	L-.0041	.3950	.0367	8.837
#1	17.45	.0042	L-.0001	L-.0052	.3919	.0453	8.795
#2	17.57	L.0027	L-.0024	L-.0031	.3981	.0280	8.879

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.192	.0906	L.0021	L.0024	2.870	L.0009	L-.0041
#1	9.186	.0905	L.0031	L.0061	3.293	L.0092	L-.0035
#2	9.198	.0907	L.0011	L-.0012	2.447	L-.0074	L-.0047

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.849	L-.0045	.0125	L.0001	L.1568	18.36	L.0019
#1	8.801	L-.0095	.0134	L-.0003	L.1709	18.29	L.0029
#2	8.897	L.0005	.0117	L.0005	L.1427	18.43	L.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0194	L.0048	.0721
#1	L.0309	.0088	.0716
#2	L.0079	L.0009	.0727

Method: 20072 Sample Name: K0704754-029 Operator: MMR
Run Time: 06/15/07 10:55:17
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0187	L.0056	L-.0169	.0238	L-.0002	.0254	L.0009
#1	L.0171	L.0061	L-.0153	.0240	L-.0002	.0231	L.0013
#2	L.0203	L.0051	L-.0185	.0236	L-.0002	.0277	L.0005

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.57	L-.0001	L-.0018	L-.0016	2.339	L.0150	6.685
#1	18.51	.0038	L-.0018	L-.0003	2.327	.0360	6.656
#2	18.63	L-.0039	L-.0019	L-.0030	2.351	L-.0061	6.714

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.757	1.098	L-.0029	L.0061	2.862	L.0112	L-.0060
#1	6.852	1.093	L-.0008	L.0037	3.365	L.0177	L-.0039
#2	6.662	1.104	L-.0049	L.0085	2.359	L.0047	L-.0082

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.265	L-.0020	L.0028	.6623	.2706	13.35	.0042
#1	3.244	L.0010	.0058	.6604	.2371	13.31	.0044
#2	3.285	L-.0050	L-.0002	.6641	.3042	13.40	.0040

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0191	.0061	.0937
#1	L.0100	.0088	.0931
#2	L.0283	L.0035	.0942

Method: 20072 Sample Name: K0704754-029L Operator: MMR
Run Time: 06/15/07 10:57:15
Comment: K0704754 4810 4852 1/5 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0538	L-.0201	L-.0011	.0041	L.0001	L.0060	L.0018
#1	L-.0415	L-.0095	L.0109	.0042	L.0002	L.0083	L.0007
#2	L-.0661	L-.0307	L-.0130	.0039	L-.0000	L.0037	L.0029

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.636	L.0012	L-.0047	L-.0066	.4558	.0289	1.319
#1	3.629	.0032	L-.0024	L-.0052	.4533	.0378	1.314
#2	3.644	L-.0009	L-.0071	L-.0079	.4584	L.0199	1.325

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.428	.2140	L-.0025	L-.0018	L-.0758	L.0081	L-.0115
#1	1.496	.2134	L-.0020	L.0012	L.0200	L.0259	L-.0084
#2	1.360	.2146	L-.0030	L-.0049	L-.1716	L-.0098	L-.0145

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6011	L-.0022	L.0031	.1290	L.0610	2.555	L.0008
#1	.6097	L-.0040	L.0036	.1286	L.0840	2.552	L.0006
#2	.5924	L-.0004	L.0027	.1294	L.0381	2.558	L.0009

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0099	L-.0044	.0179
#1	L-.0191	L.0000	.0181
#2	L-.0007	L-.0088	.0177

Method: 20072 Sample Name: K0704810-001 Operator: MMR
Run Time: 06/15/07 10:59:13
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.466	L.0025	L.0053	.9132	.0004	.0108	L.0026
#1	4.499	L-.0042	L.0106	.9218	L.0003	L.0015	L.0011
#2	4.434	L.0091	L-.0001	.9045	.0005	.0201	.0040

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.00	.0205	L.0007	.0266	6.506	.0302	3.861
#1	12.07	.0154	L.0001	.0249	6.553	L.0129	3.888
#2	11.93	.0257	L.0014	.0284	6.458	.0476	3.834

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.099	.1716	L.0010	L.0110	4.698	L-.0042	L.0001
#1	3.886	.1725	L-.0015	L.0085	4.060	L-.0172	L-.0009
#2	4.313	.1708	L.0036	L.0134	5.337	L.0088	L.0010

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	28.75	L-.0038	.0347	.0717	.6254	5.420	.1407
#1	29.01	L-.0092	.0302	.0725	.5884	5.448	.1401
#2	28.49	L.0017	.0392	.0709	.6624	5.392	.1413

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0143	.0097	.1177
#1	L-.0398	.0070	.1185
#2	L.0112	.0123	.1169

Method: 20072 Sample Name: K0704810-002 Operator: MMR
Run Time: 06/15/07 11:01:17
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.456	L.0019	L-.0226	.9141	L.0003	L.0085	L.0017
#1	4.437	L-.0043	L-.0219	.9148	L.0003	L.0085	L.0026
#2	4.475	L.0080	L-.0232	.9133	L.0003	L.0085	L.0008

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.04	.0195	L.0017	.0253	6.570	.0389	3.895
#1	12.07	.0205	L-.0010	.0228	6.588	.0441	3.905
#2	12.01	.0185	.0043	.0277	6.552	.0337	3.886

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.135	.1718	L.0015	L.0104	4.123	L.0149	L-.0009
#1	4.140	.1725	L.0036	L.0146	3.828	L.0256	L-.0051
#2	4.129	.1711	L-.0005	L.0061	4.419	L.0042	L.0034

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	28.85	L.0079	.0330	.0744	.6412	5.421	.1451
#1	28.95	L.0118	.0337	.0747	.6023	5.407	.1458
#2	28.76	L.0040	.0324	.0740	.6801	5.434	.1443

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0038	L.0057	.1179
#1	L.0106	L-.0018	.1177
#2	L-.0031	.0132	.1181

Method: 20072 Sample Name: K0704810-004 Operator: MMR
Run Time: 06/15/07 11:03:18
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4520	L-.0002	L-.0080	.1444	L-.0000	.0240	L.0011
#1	.4558	L-.0096	L-.0162	.1448	L-.0000	.0252	L.0004
#2	.4482	L.0093	L.0002	.1441	L-.0000	.0229	L.0019

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.75	.0098	L-.0022	L.0049	1.752	.0257	2.235
#1	22.84	.0094	L-.0007	L.0053	1.760	.0280	2.244
#2	22.67	.0102	L-.0037	L.0046	1.744	.0234	2.226

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.449	.1381	L.0037	L.0055	.9899	L.0025	L-.0036
#1	2.416	.1391	L.0022	L.0061	L.8981	L-.0053	L-.0026
#2	2.482	.1372	L.0053	L.0049	1.082	L.0102	L-.0045

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.52	L-.0068	.0067	.0604	L.0478	5.477	.0209
#1	43.69	L-.0024	.0071	.0604	L.0779	5.498	.0215
#2	43.36	L-.0112	.0063	.0604	L.0178	5.455	.0203

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0063	.0250	1.802
#1	L-.0213	.0272	1.810
#2	L.0338	.0228	1.794

Method: 20072 Sample Name: CCV5 Operator: MMR
Run Time: 06/15/07 11:05:20
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.770	4.831	1.908	.4817	.4790	4.823	.4830
#1	4.800	4.839	1.926	.4826	.4793	4.818	.4827
#2	4.740	4.824	1.889	.4808	.4787	4.827	.4833

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.804	4.852	.4823	.4770	4.822	4.799	4.791
#1	4.806	4.853	.4816	.4787	4.823	4.805	4.793
#2	4.802	4.851	.4830	.4753	4.820	4.794	4.789

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.833	.4803	.4779	4.814	24.10	1.923	.4761
#1	4.753	.4805	.4764	4.821	24.02	1.930	.4801
#2	4.913	.4801	.4795	4.807	24.18	1.915	.4721

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.38	4.904	.4778	2.408	24.38	4.839	.4802
#1	24.36	4.877	.4780	2.409	24.37	4.856	.4823
#2	24.40	4.931	.4777	2.407	24.39	4.822	.4781

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.752	2.453	.4805
#1	4.756	2.441	.4812
#2	4.747	2.464	.4797

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Method: 20072 Sample Name: CCB5 Operator: MMR
Run Time: 06/15/07 11:07:15
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0400	-.0128	-.0108	.0002	-.0002	.0058	.0006
#1	Q-.0565	-.0307	-.0139	-.0004	-.0002	.0058	-.0016
#2	-.0234	.0050	-.0076	.0007	-.0002	.0058	.0029

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0017	-.0039	-.0055	-.0031	.0124	.0002
#1	-.0019	-.0004	-.0066	-.0080	-.0048	.0026	.0003
#2	.0034	.0037	-.0013	-.0031	-.0014	.0222	-.0000

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0949	.0003	-.0010	.0024	-.2834	-.0024	-.0064
#1	-.0385	-.0006	-.0031	-.0012	-.8183	-.0054	-.0097
#2	Q.2284	.0011	.0010	.0061	.2515	.0006	-.0030

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0016	-.0133	.0025	-.0027	-.0124	-.0227	.0017
#1	-.0282	-.0119	.0001	-.0030	-.0301	-.0350	.0017
#2	.0251	-.0147	.0049	-.0023	.0053	-.0104	.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0000	-.0022	-.0004
#1	-.0229	-.0079	-.0004
#2	.0230	.0035	-.0004

Method: 20072 Sample Name: K0704810-004D Operator: MMR
Run Time: 06/15/07 11:09:51
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4653	L.0054	L-.0010	.1441	L-.0000	.0264	L.0015
#1	.4749	L.0060	L.0066	.1437	L-.0000	.0322	L.0027
#2	.4557	L.0048	L-.0086	.1444	L-.0000	.0205	L.0002

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.79	.0098	L-.0004	L.0035	1.790	.0347	2.242
#1	22.72	.0091	L.0005	L.0053	1.786	.0367	2.236
#2	22.85	.0104	L-.0012	L.0018	1.794	.0326	2.249

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.407	.1374	.0063	L.0012	1.609	L.0269	L-.0042
#1	2.517	.1376	.0073	L.0061	1.553	L.0352	L-.0008
#2	2.298	.1372	L.0053	L-.0037	1.665	L.0185	L-.0075

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	43.54	L.0072	.0074	.0601	L.1132	5.529	.0245
#1	43.40	L.0044	.0080	.0612	L.0531	5.528	.0249
#2	43.67	L.0099	.0067	.0590	L.1732	5.531	.0241

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0077	.0277	1.802
#1	L-.0261	.0316	1.798
#2	L.0106	.0237	1.806

Method: 20072 Sample Name: K0704810-004S Operator: MMR
Run Time: 06/15/07 11:14:50
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.665	.4491	.9702	2.070	.0477	.9770	.0487
#1	2.673	.4531	.9839	2.065	.0478	.9712	.0467
#2	2.657	.4452	.9566	2.074	.0477	.9828	.0508

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.20	.2084	.4896	.2530	3.267	.5178	2.331
#1	22.17	.2073	.4881	.2547	3.261	.5123	2.328
#2	22.23	.2096	.4910	.2513	3.273	.5233	2.334

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.641	.6231	.9858	.4857	1.237	.9688	.0460
#1	2.600	.6222	.9776	.4784	1.433	.9384	.0497
#2	2.683	.6240	.9940	.4930	1.042	.9991	.0424

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.36	L-.0100	.4946	.5394	L.1374	6.012	.0365
#1	42.20	L-.0086	.4932	.5394	L.1498	6.002	.0363
#2	42.52	L-.0113	.4961	.5394	L.1250	6.022	.0367

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.9596	.0250	1.749
#1	.9826	.0272	1.746
#2	.9367	.0228	1.751

Method: 20072 Sample Name: K0704810-005 Operator: MMR
Run Time: 06/15/07 11:16:42
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.275	L-.0099	L-.0182	.4570	L.0002	.0111	L.0009
#1	2.272	L-.0133	L-.0226	.4586	L.0002	.0112	L.0005
#2	2.278	L-.0065	L-.0138	.4554	L.0002	.0111	L.0013

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.26	.0945	L-.0018	.0501	18.50	.0383	1.188
#1	15.32	.0950	L-.0024	.0501	18.58	.0224	1.193
#2	15.19	.0940	L-.0012	.0501	18.43	.0542	1.183

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.418	.4438	.0220	L.0195	2.483	L.0223	L-.0056
#1	1.385	.4460	.0199	L.0122	2.519	L.0093	L-.0059
#2	1.451	.4415	.0240	.0268	2.447	L.0354	L-.0053

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.703	L-.0091	.0181	.2019	.6825	2.164	.0125
#1	1.699	L-.0091	.0168	.2035	.7019	2.170	.0127
#2	1.707	L-.0091	.0194	.2004	.6631	2.158	.0123

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0007	L.0035	.0767
#1	L.0233	.0070	.0773
#2	L-.0219	L.0000	.0762

Method: 20072 Sample Name: K0704810-006 Operator: MMR
Run Time: 06/15/07 11:18:31
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0011	L-.0201	L-.0187	.0033	L-.0001	L.0048	L.0017
#1	L-.0161	L-.0139	L-.0121	.0035	L-.0002	L.0013	L.0011
#2	L.0138	L-.0262	L-.0254	.0032	L-.0000	L.0083	L.0022

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.052	L.0005	L-.0056	L-.0059	.3041	L.0173	.3049
#1	1.059	L-.0022	L-.0059	L-.0059	.3073	L.0066	.3076
#2	1.045	.0032	L-.0053	L-.0059	.3009	.0279	.3022

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4200	.0061	L.0010	L-.0006	L-.0998	L.0091	L-.0103
#1	.2924	.0060	L.0000	L-.0037	L-.1637	L.0056	L-.0103
#2	.5476	.0062	L.0021	L.0024	L-.0359	L.0127	L-.0102

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7498	L.0008	L.0034	L.0011	L-.0439	L.0201	L.0011
#1	.7556	L-.0008	L.0010	L.0008	L-.0546	L.0177	L.0006
#2	.7439	L.0024	.0058	L.0015	L-.0333	L.0226	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0221	L-.0061	.0069
#1	L-.0198	L-.0088	.0069
#2	L-.0244	L-.0035	.0069

Method: 20072 Sample Name: K0704810-005L Operator: MMR
Run Time: 06/15/07 11:20:26
Comment: K0704754 4810 4852 1/5 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4201	L-.0126	L-.0075	.0907	L-.0000	.0143	L-.0010
#1	.4366	L-.0087	L-.0103	.0912	L-.0000	.0167	L-.0014
#2	.4035	L-.0165	L-.0047	.0902	L-.0000	.0120	L-.0006

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.016	.0188	L-.0016	.0098	3.664	L.0165	.2351
#1	3.018	.0192	L-.0020	.0109	3.671	.0246	.2356
#2	3.015	.0184	L-.0013	.0088	3.657	L.0085	.2346

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3674	.0879	L.0034	L.0006	L.3114	L.0098	L-.0029
#1	.3970	.0883	L.0023	L.0000	L.4351	L.0080	L-.0023
#2	.3377	.0874	L.0044	L.0012	L.1876	L.0116	L-.0035

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3645	L-.0077	L.0046	.0386	L.1248	.4024	.0030
#1	.3672	L-.0157	.0054	.0393	L.0648	.4064	.0040
#2	.3617	L.0004	L.0038	.0378	L.1848	.3985	L.0021

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0035	L-.0004	.0150
#1	L.0196	L-.0035	.0150
#2	L-.0125	L.0026	.0150

Method: 20072 Sample Name: K0704852-001 Operator: MMR
Run Time: 06/15/07 11:22:21
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0735	L-.0275	L-.0299	.0498	L-.0003	.0408	L.0014
#1	L-.0361	L-.0191	L-.0383	.0507	L-.0004	.0431	L.0016
#2	L-.1109	L-.0359	L-.0215	.0490	L-.0002	.0384	L.0012

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.87	.1162	L-.0077	L-.0073	.0037	.0211	H77.96
#1	17.87	.1173	L-.0042	L-.0010	.0055	L.0188	H77.93
#2	17.87	.1152	L-.0113	L-.0135	L.0019	.0234	H77.98

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.93	L-.0006	L-.0036	L.0110	L-.2395	L-.0018	L-.0118
#1	88.02	L-.0005	L-.0041	L.0146	L.7544	L.0089	L-.0036
#2	87.84	L-.0007	L-.0031	L.0073	L-1.233	L-.0125	L-.0201

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	244.4	L-.0037	L.0039	L-.0008	L.0247	21.98	L-.0002
#1	243.9	L.0014	.0058	L-.0012	L.0160	22.02	L.0002
#2	245.0	L-.0087	L.0020	L-.0004	L.0335	21.93	L-.0006

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0436	L-.0031	.1733
#1	.0734	L.0035	.1735
#2	L.0138	L-.0097	.1731

Method: 20072 Sample Name: K0704852-001D Operator: MMR
Run Time: 06/15/07 11:24:13
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0383	L-.0108	L-.0279	.0493	L.0001	.0419	L.0018
#1	L-.0287	L-.0024	L-.0351	.0493	L.0002	.0408	L.0015
#2	L-.0479	L-.0192	L-.0208	.0493	L-.0000	.0431	L.0021

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.73	.1170	L-.0051	L-.0045	L.0021	.0237	H77.44
#1	17.69	.1168	L-.0048	L-.0052	L.0017	.0280	H77.27
#2	17.76	.1173	L-.0054	L-.0038	L.0025	L.0193	H77.60

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.16	L-.0006	L-.0026	L.0030	L-.0838	L-.0006	L-.0070
#1	86.97	L-.0005	L-.0041	L.0049	L.0758	L-.0077	L-.0073
#2	87.36	L-.0007	L-.0010	L.0012	L-.2435	L.0065	L-.0067

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	242.1	L-.0154	L.0050	L-.0004	L.1007	21.77	L.0003
#1	241.4	L-.0156	.0058	L-.0004	L.1219	21.71	L.0002
#2	242.8	L-.0151	L.0042	L-.0004	L.0795	21.83	L.0005

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0390	L-.0018	.1723
#1	L-.0138	L-.0035	.1716
#2	.0918	L.0000	.1731

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Method: 20072 Sample Name: K0704852-001S Operator: MMR
Run Time: 06/15/07 11:26:03
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.939	.4938	.9729	2.006	.0481	1.023	.0508
#1	1.938	.4916	.9609	1.995	.0477	1.026	.0524
#2	1.939	.4960	.9849	2.017	.0484	1.019	.0492

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.96	.3127	.4844	.2394	.9651	.5169	H74.48
#1	16.87	.3128	.4835	.2394	.9611	.5218	H74.14
#2	17.05	.3126	.4854	.2394	.9690	.5120	H74.82

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	83.62	.4872	.9825	.4790	L-.2754	1.008	.0459
#1	83.40	.4853	.9743	.4748	L.0040	.9950	.0468
#2	83.83	.4892	.9907	.4833	L-.5548	1.021	.0450

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	230.4	L.0064	.5008	.4757	L.0859	20.87	L.0025
#1	229.1	L-.0044	.5000	.4735	L.1371	20.79	.0032
#2	231.6	L.0172	.5016	.4780	L.0347	20.95	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.9354	L.0009	.1641
#1	.9055	.0079	.1631
#2	.9653	L-.0061	.1650

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Method: 20072 Sample Name: K0704852-002 Operator: MMR
Run Time: 06/15/07 11:27:54
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0667	L-.0106	L-.0268	.7096	L-.0000	4.687	.0045
#1	L-.0650	L-.0084	L-.0279	.7066	L-.0000	4.672	L.0018
#2	L-.0684	L-.0128	L-.0257	.7126	L.0000	4.702	.0072

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	145.5	L.0005	L-.0053	L-.0072	39.33	.0332	H154.9
#1	145.1	L.0021	L-.0048	L-.0072	39.20	.0373	H154.7
#2	145.9	L-.0012	L-.0059	L-.0072	39.46	.0292	H155.2

Elem	Mg3832	Mn2576 *	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	213.2	H14.90	L.0021	L.0061	1.740	L.0054	L-.0096
#1	212.3	H14.85	L-.0010	L.0012	2.064	L.0219	L-.0081
#2	214.0	H14.96	L.0052	L.0110	1.417	L-.0112	L-.0112

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	405.4	L-.0123	L.0022	L-.0038	.9323	17.71	L.0027
#1	403.5	L-.0125	L.0044	L-.0049	.8846	17.67	.0044
#2	407.2	L-.0120	L-.0001	L-.0027	.9800	17.75	L.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0285	.0377	1.046
#1	L-.0195	.0395	1.041
#2	.0765	.0360	1.050

* dilute
LMMR
6/15/07

Method: 20072 Sample Name: K0704852-003 Operator: MMR
Run Time: 06/15/07 11:29:49
Comment: K0704754 4810 4852 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0077	L-.0060	L-.0166	.0028	L-.0000	.0920	L.0007
#1	L-.0285	L-.0127	L-.0230	.0025	L-.0000	.0943	L.0004
#2	L.0131	L.0007	L-.0102	.0032	L-.0000	.0896	L.0011

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	27.35	L-.0003	L.0003	L-.0017	L.0027	L.0159	H52.58
#1	27.37	L-.0017	L-.0005	L-.0031	L.0024	L.0182	H52.64
#2	27.33	L.0011	L.0011	L-.0003	.0030	L.0136	H52.52

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	56.79	.1607	L-.0036	L.0030	4.694	L-.0071	L-.0032
#1	56.77	.1609	L-.0041	L.0061	4.523	L-.0065	L-.0054
#2	56.80	.1605	L-.0031	L-.0000	4.866	L-.0077	L-.0011

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.38	L-.0035	.0153	L.0013	L.1347	23.78	.0030
#1	51.46	L.0082	.0132	L.0013	L.1188	23.79	L.0025
#2	51.31	L-.0151	.0175	L.0013	L.1507	23.77	.0036

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0080	L.0031	.2652
#1	L-.0265	L-.0018	.2654
#2	L.0424	.0079	.2651

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Method: 20072 Sample Name: CCV6 Operator: MMR
Run Time: 06/15/07 11:31:46
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.855	4.883	1.919	.4866	.4859	4.876	.4878
#1	4.848	4.884	1.895	.4850	.4849	4.874	.4860
#2	4.862	4.882	1.943	.4882	.4869	4.879	.4897

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.886	4.919	.4862	.4856	4.884	4.848	4.864
#1	4.884	4.911	.4859	.4843	4.873	4.831	4.860
#2	4.887	4.928	.4865	.4870	4.895	4.865	4.869

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.079	.4886	.4831	4.869	24.31	1.948	.4859
#1	5.049	.4880	.4805	4.844	24.15	1.956	.4856
#2	5.109	.4891	.4856	4.893	24.46	1.939	.4862

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.69	5.153	.4863	2.428	24.43	4.922	.4973
#1	24.63	5.154	.4869	2.424	24.43	4.916	.4979
#2	24.75	5.152	.4858	2.432	24.43	4.929	.4967

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.912	2.486	.4859
#1	4.885	2.474	.4847
#2	4.940	2.497	.4870

Method: 20072 Sample Name: CCB6 Operator: MMR
Run Time: 06/15/07 11:33:44
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0101	-.0122	-.0224	.0005	-.0000	.0140	.0013
#1	.0234	-.0128	-.0242	.0011	.0002	.0105	.0031
#2	-.0437	-.0117	-.0205	.0000	-.0002	.0175	-.0006

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0003	-.0021	-.0031	-.0008	.0162	.0010
#1	.0050	.0035	-.0012	-.0003	.0014	.0204	.0013
#2	-.0054	-.0030	-.0030	-.0059	-.0030	.0119	.0006

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0148	.0010	-.0005	.0079	.2714	.0048	-.0036
#1	Q.2225	.0013	.0021	.0122	.6506	.0101	-.0006
#2	-.1928	.0006	-.0031	.0037	-.1078	-.0006	-.0067

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0212	-.0016	.0015	-.0004	-.0124	-.0076	.0006
#1	.0384	.0032	.0045	-.0001	-.0511	.0010	.0002
#2	.0039	-.0064	-.0016	-.0008	.0264	-.0163	.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	.0253	.0009	-.0004
#1	.0000	.0026	.0000
#2	.0505	-.0009	-.0008

Method: 20072 Sample Name: K0704852-002L Operator: MMR
Run Time: 06/15/07 11:39:16
Comment: K0704754 4810 4852 1/5 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0432	L-.0217	L-.0075	.1404	L.0002	.9289	L.0024
#1	L-.0448	L-.0217	L-.0151	.1402	L.0002	.9382	.0034
#2	L-.0416	L-.0217	L.0002	.1405	L.0002	.9196	L.0013

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.49	L-.0008	L-.0047	L-.0056	8.019	L.0193	H39.66
#1	29.54	L-.0008	L-.0032	L-.0056	8.034	L.0182	H39.73
#2	29.43	L-.0008	L-.0062	L-.0056	8.004	.0205	H39.58

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.83	2.910	L-.0009	L.0055	L-.1397	L-.0114	L-.0082
#1	41.96	2.914	L-.0014	L.0024	L-.3313	L-.0007	L-.0073
#2	41.70	2.906	L-.0004	L.0085	L.0519	L-.0221	L-.0091

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	79.53	L-.0069	L.0002	L-.0001	L.1610	3.472	L.0013
#1	79.69	L-.0046	L.0000	L-.0005	.2193	3.472	L.0010
#2	79.38	L-.0092	L.0004	L.0002	L.1027	3.472	L.0017

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L-.0190	L-.0009	.2070
#1	L-.0098	L-.0026	.2070
#2	L-.0281	L.0009	.2070

Method: 20072 Sample Name: K0704852-002 Operator: MMR
Run Time: 06/15/07 11:41:11
Comment: K0704754 4810 4852 1/10 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0000	L.0045	L-.0171	.0745	L-.0000	.4907	L.0010
#1	L.0214	L.0128	L-.0107	.0750	L-.0000	.4919	L.0022
#2	L-.0213	L-.0039	L-.0235	.0740	L-.0000	.4896	L-.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.61	.0030	L-.0018	L-.0009	4.241	.0332	21.55
#1	15.63	.0051	L-.0019	L.0005	4.248	.0331	21.58
#2	15.58	L.0010	L-.0018	L-.0023	4.234	.0332	21.52

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.19	1.530	L-.0002	L.0067	L.7824	L.0013	L-.0021
#1	22.43	1.532	L-.0007	L.0122	1.273	L.0179	L-.0011
#2	21.94	1.528	L.0003	L.0012	L.2914	L-.0154	L-.0030

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.61	L.0113	L.0035	L-.0007	L.1037	1.837	L.0021
#1	41.66	L.0037	.0063	L-.0007	L.1391	1.850	.0032
#2	41.57	L.0188	L.0008	L-.0007	L.0683	1.823	L.0010

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0244	.0088	.1087
#1	L-.0101	.0149	.1089
#2	.0588	L.0026	.1085

Method: 20072 Sample Name: K0704852-002L Operator: MMR
Run Time: 06/15/07 11:43:06
Comment: K0704754 4810 4852 1/50 DILUTION 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0490	L-.0084	L-.0122	.0141	L.0001	.0970	L.0016
#1	L-.0405	L-.0073	L-.0100	.0141	L.0002	.0993	L.0029
#2	L-.0575	L-.0095	L-.0143	.0141	L-.0000	.0946	L.0003

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.971	.0032	L-.0027	L-.0052	.8050	.0399	4.205
#1	2.964	.0040	L-.0018	L-.0052	.8015	.0471	4.193
#2	2.977	L.0025	L-.0036	L-.0052	.8084	.0327	4.217

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.426	.2907	L.0001	L.0018	L-.2635	L.0220	L-.0071
#1	4.438	.2905	L.0011	L.0049	L.0040	L.0285	L-.0053
#2	4.414	.2909	L-.0010	L-.0012	L-.5309	L.0154	L-.0090

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.877	L-.0049	L.0045	L-.0009	L.0287	.3132	L.0008
#1	7.838	L-.0007	L.0049	L-.0002	L.0870	.3186	L.0010
#2	7.916	L-.0090	L.0040	L-.0016	L-.0296	.3077	L.0006

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	L.0073	L-.0004	.0202
#1	L.0119	L.0018	.0200
#2	L.0027	L-.0026	.0204

Method: 20072 Sample Name: CCV7 Operator: MMR
Run Time: 06/15/07 11:44:59
Comment: ICP4-28-C 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.795	4.860	1.924	.4857	.4827	4.869	.4864
#1	4.839	4.884	1.963	.4875	.4843	4.900	.4848
#2	4.751	4.837	1.886	.4840	.4811	4.839	.4879

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.846	4.887	.4855	.4825	4.854	4.827	4.818
#1	4.861	4.902	.4859	.4870	4.867	4.823	4.830
#2	4.832	4.872	.4851	.4780	4.841	4.831	4.806

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.961	.4841	.4805	4.841	24.07	1.949	.4838
#1	4.931	.4853	.4784	4.875	23.83	1.940	.4899
#2	4.990	.4829	.4825	4.807	24.31	1.958	.4777

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.58	5.006	.4827	2.417	24.56	4.886	.4888
#1	24.59	5.022	.4838	2.426	24.53	4.914	.4914
#2	24.57	4.991	.4816	2.408	24.60	4.858	.4861

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	4.834	2.470	.4834
#1	4.843	2.459	.4843
#2	4.825	2.481	.4824

Method: 20072 Sample Name: CCB7 Operator: MMR
Run Time: 06/15/07 11:48:43
Comment: 86948
Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1936	Ba4934	Be3130	B_2496	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0325	-.0246	-.0223	.0000	-.0000	.0105	.0022
#1	Q-.0639	-.0318	-.0358	.0000	-.0002	.0105	.0006
#2	-.0011	-.0173	-.0089	.0000	.0002	.0105	.0038

Elem	Ca3179	Cr2677	Co2286	Cu3247	Fe2599	Pb2203	Mg2795
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0018	.0039	-.0038	-.0031	-.0015	.0323	.0005
#1	-.0016	.0017	-.0053	-.0059	-.0024	.0182	.0006
#2	.0052	Q.0060	-.0023	-.0003	-.0007	.0465	.0003

Elem	Mg3832	Mn2576	Mo2020	Ni2316	K_7665	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1780	.0010	.0000	.0067	.5429	-.0030	-.0051
#1	.0920	.0006	-.0031	.0061	.2914	-.0089	-.0085
#2	Q.2640	.0014	.0031	.0073	.7943	.0030	-.0018

Elem	Na5889	Sn1899	V_2924	Zn2138	P_2149	Si2881	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0145	.0094	.0047	-.0008	-.0230	-.0212	.0015
#1	-.0031	-.0005	.0023	-.0015	-.0337	-.0365	.0002
#2	.0322	.0192	.0071	-.0000	-.0123	-.0060	.0029

Elem	Tl1908	Li6707	Sr4215
Units	ppm	ppm	ppm
Avge	-.0138	-.0018	-.0006
#1	-.0229	-.0044	-.0008
#2	-.0046	.0009	-.0004

Service Request # _K0704852_____
Calibration _06-19-07D_____
QC in calibration__06-19-07D_____
QC Service Request #_K0704852_____
Star Lims Run # ___87279~~X~~ SC 6/19/07

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL	X		
13. CRA run	X		
14. ICSA and ICSAB in control	X		
15. Serial dilution run	X		
16. Post spike in control	X		

Comments: Report Se by GFAA

Primary Review by SC Date 6/19/07
Secondary Review by [illegible] Date 6/20/07
R:\icp\misc\data review forms\PQ ExCell review form

Sample List

Num	Label	Type	Weight	Volume	Dilution
1	Calibration Blank	Blank	0 kg	0 ml	1.00
2	Calibration Std. MS10-82-B	Fully Quant Standard	0 kg	0 ml	1.00
3	ICV MS10-81-F	Unknown	0 kg	0 ml	1.00
4	CCV1 MS10-10-82-B	Unknown	0 kg	0 ml	1.00
5	ICB	Unknown	0 kg	0 ml	1.00
6	CCB1	Unknown	0 kg	0 ml	1.00
7	CRA WATER MS10-81-H	Unknown	0 kg	0 ml	1.00
8	ICSA MS10-78-H	Unknown	0 kg	0 ml	1.00
9	ICSAB MS10-78-I	Unknown	0 kg	0 ml	1.00
10	PBW K0704852	Unknown	0 kg	0 ml	1.00
11	K0704852-001	Unknown	0 kg	0 ml	1.00
12	K0704852-001D	Unknown	0 kg	0 ml	1.00
13	K0704852-001L 1/5	Unknown	0 kg	0 ml	1.00
14	K0704852-001A +20 +10Ag	Unknown	0 kg	0 ml	1.00
15	K0704852-001S	Unknown	0 kg	0 ml	1.00
16	LCSW K0704852	Unknown	0 kg	0 ml	1.00
17	CCV2 MS10-82-B	Unknown	0 kg	0 ml	1.00
18	CCB2	Unknown	0 kg	0 ml	1.00
19	K0704852-002	Unknown	0 kg	0 ml	1.00
20	K0704852-003	Unknown	0 kg	0 ml	1.00
21	K0704852-002 1/2	Unknown	0 kg	0 ml	1.00
22	CCV3 MS10-82-B	Unknown	0 kg	0 ml	1.00
23	CCB3	Unknown	0 kg	0 ml	1.00

Instrument Setup - Sample Configuration

Sample	Configuration	Date
All Samples	acqmet11	10:14:20 6/19/07

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 10:14:20 6/19/07
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-486.00
Lens1	5.00
Lens2	-30.70
Lens3	2.70
Pole Bias	1.00
Sampling Depth	364.00
Horizontal	19.00
Vertical	88.00
Cool	13.00
Auxiliary	0.83
Nebuliser	0.78
Forward power	1,390.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-36.10
Focus	12.60

ExCell Mass Calibration **Date: 6/19/2007**

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include
7.016	1588	0.563	0.003	TRUE
23.985	5903	0.614	0.012	TRUE
26.982	6663	0.665	0.006	TRUE
43.956	10980	0.665	0.011	TRUE
45.953	11474	0.562	-0.044	TRUE
53.949	13522	0.716	0.013	TRUE
55.935	14029	0.716	0.02	TRUE
56.935	14282	0.664	0.014	TRUE
57.934	14529	0.664	-0.013	TRUE
58.933	14783	0.715	-0.014	TRUE
75.92	19105	0.766	-0.014	TRUE
114.904	29030	0.766	-0.011	TRUE
137.906	34893	0.765	0	TRUE
202.972	51488	0.713	0.013	TRUE
204.972	52001	0.662	0.023	TRUE
205.974	52255	0.611	0.016	TRUE
206.976	52508	0.662	0.006	TRUE
207.977	52755	0.662	-0.027	TRUE
208.98	53022	0.611	0.015	TRUE
238.051	60432	0.611	-0.03	TRUE

Excluded In Calib | Excluded In Results | [illegible] | Multi Element | Semi Quant | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	[redacted]	7Li	9Be	59Co	115In	208Pb
1	Stability 6/19/07	6/19/2007 7:31:17 A	(P)0.167	(P)6730.088	(P)3138.012	(P)23320.187	(P)41720.525	(P)18312.065
2	Stability 6/19/07	6/19/2007 7:32:19 A	(P)0.000	(P)7128.447	(P)3219.030	(P)22567.813	(P)40964.000	(P)18365.800
3	Stability 6/19/07	6/19/2007 7:33:22 A	(P)0.000	(P)7218.826	(P)3238.367	(P)22348.134	(P)40897.308	(P)18261.499
4	Stability 6/19/07	6/19/2007 7:34:24 A	(P)0.000	(P)7230.832	(P)3179.854	(P)22475.500	(P)40777.312	(P)18400.677
5	Stability 6/19/07	6/19/2007 7:35:26 A	(P)0.000	(P)7046.074	(P)3135.844	(P)22622.734	(P)41082.014	(P)18476.941
	Mean of Stability 6/1	6/19/2007 7:30:41 A	(P)0.033	(P)7070.854	(P)3182.221	(P)22666.874	(P)41088.232	(P)18363.396
	SD of Stability 6/19/07		(P)0.075	(P)204.659	(P)46.417	(P)379.736	(P)370.267	(P)82.623
	%RSD of Stability 6/		(P)223.607	(P)2.894	(P)1.459	(P)1.675	(P)0.901	(P)0.450

Run	Label	TimeStamp	209Bi	[redacted]	238U
1	Stability 6/19/07	6/19/2007 7:31:17 A	(P)28880.339	(P)0.000	(P)31263.540
2	Stability 6/19/07	6/19/2007 7:32:19 A	(P)29382.863	(P)0.000	(P)31218.427
3	Stability 6/19/07	6/19/2007 7:33:22 A	(P)28983.712	(P)0.333	(P)31368.596
4	Stability 6/19/07	6/19/2007 7:34:24 A	(P)29555.215	(P)0.000	(P)31602.444
5	Stability 6/19/07	6/19/2007 7:35:26 A	(P)29628.530	(P)0.167	(P)31494.526
	Mean of Stability 6/1	6/19/2007 7:30:41 A	(P)29286.132	(P)0.100	(P)31389.506
	SD of Stability 6/19/07		(P)337.315	(P)0.149	(P)159.644
	%RSD of Stability 6/		(P)1.152	(P)149.071	(P)0.509

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**Calibration Blank**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:30**					
Antimony	121	-0.0001	-0.0001	0.0003	**0**	0.0002	0
Antimony	123	-0.0003	0.0006	-0.0003	**0**	0.0006	0
Arsenic	75	-0.0188	0.0274	-0.0086	**0**	0.0243	0
Beryllium	9	-0.0018	0.0025	-0.0008	**0**	0.0023	0
Cadmium	111	0.0002	-0.0008	0.0007	**0**	0.0007	0
Cadmium	114	0.0004	0	-0.0004	**0**	0.0004	0
Chromium	52	-0.0156	-0.0042	0.0198	**0**	0.0181	0
Chromium	53	-0.0016	0.0066	-0.0051	**0**	0.006	0
Cobalt	59	-0.0005	-0.0003	0.0007	**0**	0.0007	0
Copper	63	-0.0044	0.0024	0.002	**0**	0.0039	0
Copper	65	0.0007	-0.0016	0.0009	**0**	0.0014	0
Lead	206	-0.0011	0.0023	-0.0013	**0**	0.002	0
Lead	207	-0.0002	-0.0007	0.0009	**0**	0.0008	0
Lead	208	-0.0006	0.0005	0	**0**	0.0006	0
Molybdenum	95	-0.0004	-0.001	0.0014	**0**	0.0012	0
Molybdenum	97	-0.0013	0.0011	0.0002	**0**	0.0012	0
Molybdenum	98	-0.0005	0.001	-0.0005	**0**	0.0008	0
Nickel	60	0.0176	-0.009	-0.0086	**0**	0.0153	0
Nickel	62	-0.049	0.0499	-0.0009	**0**	0.0495	0
Selenium	77	-0.0046	0.0103	-0.0056	**0**	0.0089	0
Selenium	78	0.1485	-0.1274	-0.0211	**0**	0.1392	0
Selenium	82	-0.0727	0.1051	-0.0324	**0**	0.0932	0
Silver	107	0.0004	-0.0004	-0.0001	**0**	0.0004	0
Silver	109	-0.0003	-0.0002	0.0005	**0**	0.0004	0
Thallium	203	0.0005	-0.0006	0.0001	**0**	0.0006	0
Thallium	205	0.0004	-0.0001	-0.0002	**0**	0.0003	0

6/19/07

Internal Standard Factors:

Lithium	6	1.006	0.995	1	**1.006**	n/a	n/a
Gallium	71	0.985	0.999	1.016	**0.985**	n/a	n/a
Indium	115	1.003	0.99	1.008	**1.003**	n/a	n/a
Lutetium	175	0.994	1.009	0.997	**0.994**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**Calibration Std. MS10-82-B**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:33**					
Antimony	121	25.52	24.74	24.74	**25**	0.4544	1.818
Antimony	123	25.12	25.02	24.86	**25**	0.1306	0.5226
Arsenic	75	24.73	24.96	25.3	**25**	0.2881	1.152
Beryllium	9	24.43	24.19	26.37	**25**	1.194	4.776
Cadmium	111	24.9	24.93	25.17	**25**	0.1484	0.5937
Cadmium	114	25.15	24.86	24.99	**25**	0.1436	0.5742
Chromium	52	24.63	24.58	25.79	**25**	0.6857	2.743
Chromium	53	24.49	24.63	25.88	**25**	0.7644	3.057
Cobalt	59	24.65	24.63	25.71	**25**	0.6184	2.474
Copper	63	24.78	24.94	25.28	**25**	0.2535	1.014
Copper	65	24.99	24.57	25.44	**25**	0.4321	1.728
Lead	206	24.76	25.19	25.05	**25**	0.2219	0.8875
Lead	207	24.86	25.18	24.95	**25**	0.1642	0.6566
Lead	208	24.81	25.16	25.03	**25**	0.177	0.7078
Molybdenum	95	24.9	25.05	25.05	**25**	0.0907	0.3628
Molybdenum	97	24.94	25.02	25.04	**25**	0.0541	0.2164
Molybdenum	98	25	24.93	25.08	**25**	0.0746	0.2986
Nickel	60	24.7	24.61	25.68	**25**	0.5944	2.378
Nickel	62	24.78	24.92	25.29	**25**	0.2621	1.048
Selenium	77	25.14	24.41	25.45	**25**	0.5374	2.149
Selenium	78	25.4	24.66	24.94	**25**	0.3763	1.505
Selenium	82	24.79	24.87	25.34	**25**	0.2978	1.191
Silver	107	24.93	24.92	25.15	**25**	0.13	0.5202
Silver	109	24.71	25.21	25.07	**25**	0.2589	1.036
Thallium	203	25.17	25.15	24.69	**25**	0.2709	1.083
Thallium	205	25.35	24.84	24.81	**25**	0.3005	1.202

Internal Standard Factors:

Lithium	6	0.938	0.974	0.997	**0.938**	n/a	n/a
Gallium	71	0.95	0.952	0.989	**0.95**	n/a	n/a
Indium	115	0.952	0.961	0.967	**0.952**	n/a	n/a
Lutetium	175	0.958	0.973	0.99	**0.958**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**ICV MS10-81-F**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:36**					
Antimony	121	25.12	25.41	25.36	**25.3**	0.1561	0.6169
Antimony	123	25.36	25.47	25.23	**25.35**	0.1202	0.4742
Arsenic	75	26.03	25.67	25.26	**25.65**	0.3844	1.499
Beryllium	9	2.722	2.652	2.652	**2.676**	0.0402	1.501
Cadmium	111	13.2	13.03	12.85	**13.03**	0.1778	1.364
Cadmium	114	13.33	13.26	13.28	**13.29**	0.0376	0.2825
Chromium	52	10.18	9.928	10.14	**10.08**	0.1363	1.352
Chromium	53	11.02	10.71	10.89	**10.87**	0.1583	1.456
Cobalt	59	25.99	25.6	25.87	**25.82**	0.1961	0.7595
Copper	63	12.77	12.64	12.79	**12.73**	0.0818	0.6422
Copper	65	12.88	12.63	13	**12.84**	0.1873	1.459
Lead	206	24.82	25.05	24.06	**24.65**	0.5191	2.106
Lead	207	25.89	26.25	25.36	**25.84**	0.4472	1.731
Lead	208	25.53	25.85	25.07	**25.48**	0.3944	1.548
Molybdenum	95	26.21	25.98	26.65	**26.28**	0.3398	1.293
Molybdenum	97	26.72	26.35	26.9	**26.66**	0.2782	1.044
Molybdenum	98	26.62	26.37	26.39	**26.46**	0.1367	0.5166
Nickel	60	25.68	25.06	25.57	**25.44**	0.3344	1.315
Nickel	62	25.76	25.37	25.64	**25.59**	0.1974	0.7713
Selenium	77	25.97	27.17	26.51	**26.55**	0.5999	2.26
Selenium	78	25.99	25.96	26.76	**26.24**	0.453	1.726
Selenium	82	26.14	26.44	26.13	**26.23**	0.1743	0.6644
Silver	107	12.78	12.75	12.68	**12.74**	0.0485	0.381
Silver	109	12.87	12.77	12.75	**12.79**	0.0669	0.523
Thallium	203	25.21	25.8	25.12	**25.38**	0.3724	1.467
Thallium	205	25.7	25.95	25.26	**25.63**	0.3484	1.359

Internal Standard Factors:

Lithium	6	0.954	0.92	0.957	**0.954**	n/a	n/a
Gallium	71	0.981	0.984	0.994	**0.981**	n/a	n/a
Indium	115	0.984	0.993	0.995	**0.984**	n/a	n/a
Lutetium	175	0.988	1.016	0.996	**0.988**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCV1 MS10-10-82-B**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:40**					
Antimony	121	25.41	24.85	25.55	**25.27**	0.3713	1.469
Antimony	123	25.13	24.73	25.05	**24.97**	0.2098	0.8403
Arsenic	75	24.57	24.68	24.38	**24.54**	0.1487	0.6059
Beryllium	9	26	26.76	26.38	**26.38**	0.3792	1.438
Cadmium	111	25.03	24.98	25.04	**25.01**	0.0305	0.122
Cadmium	114	24.81	24.75	25.37	**24.98**	0.3416	1.367
Chromium	52	24.44	24.91	25.13	**24.83**	0.3538	1.425
Chromium	53	23.9	24.69	24.93	**24.51**	0.5407	2.206
Cobalt	59	24.4	24.8	24.87	**24.69**	0.251	1.017
Copper	63	24.39	24.94	24.61	**24.65**	0.275	1.116
Copper	65	24.97	25.04	25.29	**25.1**	0.1719	0.6849
Lead	206	25.13	25.15	25.16	**25.15**	0.0122	0.0486
Lead	207	24.97	25.03	24.76	**24.92**	0.146	0.5857
Lead	208	25.27	25.09	25.04	**25.13**	0.1237	0.492
Molybdenum	95	24.92	25.05	25.21	**25.06**	0.1456	0.581
Molybdenum	97	25.13	25.24	25.2	**25.19**	0.0571	0.2269
Molybdenum	98	25.2	25.06	25.13	**25.13**	0.0743	0.2955
Nickel	60	24.42	24.52	24.67	**24.54**	0.1283	0.5229
Nickel	62	24.92	24.25	24.87	**24.68**	0.3711	1.504
Selenium	77	24.29	25.33	25.22	**24.95**	0.5723	2.294
Selenium	78	24.97	25.18	24.9	**25.02**	0.1454	0.5812
Selenium	82	24.24	25.01	24.54	**24.6**	0.3882	1.578
Silver	107	25.39	25.06	25.23	**25.23**	0.1641	0.6506
Silver	109	24.89	24.87	25.19	**24.99**	0.1787	0.7152
Thallium	203	25.11	25.09	24.47	**24.89**	0.365	1.467
Thallium	205	25.08	25.1	24.75	**24.98**	0.1988	0.7958

Internal Standard Factors:

Lithium	6	0.929	0.985	0.978	**0.929**	n/a	n/a
Gallium	71	0.967	0.986	0.987	**0.967**	n/a	n/a
Indium	115	0.981	0.979	0.989	**0.981**	n/a	n/a
Lutetium	175	0.99	1.01	1.001	**0.99**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**ICB**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:45**					
Antimony	121	0.011	0.014	0.0071	**0.0107**	0.0035	32.65
Antimony	123	0.0097	0.0115	0.0105	**0.0106**	0.0009	8.331
Arsenic	75	0.0756	0.0028	0.012	**0.0301**	0.0397	131.6
Beryllium	9	0.0066	-0.0001	0.0078	**0.0048**	0.0043	89.75
Cadmium	111	0.0011	0.0002	0.0011	**0.0008**	0.0006	69.33
Cadmium	114	0.002	0.0023	0.001	**0.0018**	0.0007	36.72
Chromium	52	-0.0257	-0.0164	0.0045	**-0.0125**	0.0155	123.6
Chromium	53	0.0012	0.037	0.0208	**0.0197**	0.0179	91.14
Cobalt	59	0.0014	-0.0005	0.0001	**0.0003**	0.0009	274.5
Copper	63	0.0038	0.0027	-0.0007	**0.002**	0.0024	120.4
Copper	65	0.0012	0.0001	0.0037	**0.0017**	0.0018	108
Lead	206	-0.0012	-0.0001	0.0006	**-0.0002**	0.0009	380.5
Lead	207	0.0002	-0.0007	-0.0012	**-0.0006**	0.0007	121.2
Lead	208	0.0013	0.0001	0.0003	**0.0006**	0.0006	112.7
Molybdenum	95	0.015	0.0156	0.007	**0.0125**	0.0048	38.37
Molybdenum	97	0.0202	0.0128	0.0149	**0.016**	0.0038	24.01
Molybdenum	98	0.0178	0.0137	0.0152	**0.0155**	0.0021	13.42
Nickel	60	-0.0196	-0.016	-0.0257	**-0.0205**	0.0049	23.83
Nickel	62	-0.0172	-0.1017	-0.1608	**-0.0932**	0.0722	77.43
Selenium	77	-0.1598	0.0018	-0.0179	**-0.0586**	0.0882	150.4
Selenium	78	-0.1434	-0.6438	-0.26	**-0.3491**	0.2618	75.01
Selenium	82	0.1047	0.0132	0.0306	**0.0495**	0.0486	98.17
Silver	107	0.0081	0.0077	0.0078	**0.0079**	0.0002	2.683
Silver	109	0.007	0.006	0.005	**0.006**	0.001	16.26
Thallium	203	0.002	0.0024	0.0028	**0.0024**	0.0004	15.93
Thallium	205	0.002	0.0028	0.0012	**0.002**	0.0008	40.59

Internal Standard Factors:

Lithium	6	0.916	0.938	0.931	**0.916**	n/a	n/a
Gallium	71	0.981	0.98	1.009	**0.981**	n/a	n/a
Indium	115	1.002	1.007	1.008	**1.002**	n/a	n/a
Lutetium	175	1.011	1.003	1.013	**1.011**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCB1**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:48**					
Antimony	121	0.008	0.0065	0.0067	**0.0071**	0.0008	11.29
Antimony	123	0.007	0.0065	0.0063	**0.0066**	0.0004	5.949
Arsenic	75	0.0068	-0.0002	0.0981	**0.0349**	0.0548	157
Beryllium	9	0.0035	0.0018	0.0079	**0.0044**	0.0031	72.1
Cadmium	111	0.0002	-0.0008	0.0022	**0.0005**	0.0015	298.5
Cadmium	114	0.0012	0.0021	0.0007	**0.0013**	0.0007	55.19
Chromium	52	-0.0314	-0.0077	-0.0205	**-0.0198**	0.0119	59.86
Chromium	53	0.0187	0.0077	-0.0041	**0.0075**	0.0114	153
Cobalt	59	0.0003	-0.0004	0.0011	**0.0003**	0.0008	239.2
Copper	63	0.0051	-0.0023	-0.0004	**0.0008**	0.0038	491.5
Copper	65	-0.0001	-0.0041	-0.0023	**-0.0022**	0.002	92.32
Lead	206	-0.001	-0.0012	-0.0023	**-0.0015**	0.0007	47.79
Lead	207	-0.001	0.0038	0.0002	**0.001**	0.0025	253.2
Lead	208	0.0003	0.0024	0.0001	**0.0009**	0.0013	138
Molybdenum	95	0.0099	0.0062	0.0107	**0.0089**	0.0024	26.9
Molybdenum	97	0.0096	0.0098	0.0089	**0.0095**	0.0005	5.22
Molybdenum	98	0.0067	0.0104	0.0082	**0.0084**	0.0019	22.26
Nickel	60	-0.0229	-0.0254	-0.0466	**-0.0316**	0.013	41.19
Nickel	62	-0.0928	0.0104	-0.0648	**-0.0491**	0.0534	108.7
Selenium	77	-0.1158	-0.095	-0.0577	**-0.0895**	0.0294	32.87
Selenium	78	-0.2836	-0.2623	-0.4328	**-0.3263**	0.0929	28.48
Selenium	82	-0.0688	-0.0764	0.3391	**0.0646**	0.2377	367.6
Silver	107	0.0027	0.0041	0.0035	**0.0034**	0.0007	20.1
Silver	109	0.0049	0.0038	0.0022	**0.0036**	0.0013	36.63
Thallium	203	0.0014	0.0014	0.0008	**0.0012**	0.0004	30.04
Thallium	205	0.0007	0.0006	0.0008	**0.0007**	0.0001	11.75

Internal Standard Factors:

Lithium	6	0.957	0.946	0.891	**0.957**	n/a	n/a
Gallium	71	1.005	1.009	1.014	**1.005**	n/a	n/a
Indium	115	1.005	1.034	1.034	**1.005**	n/a	n/a
Lutetium	175	1.005	1.049	1.049	**1.005**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CRA WATER MS10-81-H**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:51**					
Antimony	121	0.0617	0.0603	0.0566	**0.0595**	0.0026	4.401
Antimony	123	0.0594	0.0606	0.0635	**0.0611**	0.0021	3.481
Arsenic	75	0.5907	0.6247	0.5532	**0.5895**	0.0358	6.069
Beryllium	9	0.0234	0.0146	0.0225	**0.0202**	0.0048	24.05
Cadmium	111	0.0252	0.0193	0.0227	**0.0224**	0.003	13.28
Cadmium	114	0.0232	0.0188	0.0272	**0.0231**	0.0042	18.25
Chromium	52	0.223	0.1975	0.2046	**0.2084**	0.0132	6.323
Chromium	53	0.1953	0.2072	0.2259	**0.2095**	0.0154	7.37
Cobalt	59	0.0226	0.0223	0.0217	**0.0222**	0.0004	1.992
Copper	63	0.105	0.0942	0.103	**0.1007**	0.0057	5.707
Copper	65	0.1031	0.1053	0.1077	**0.1054**	0.0023	2.219
Lead	206	0.0183	0.0179	0.0194	**0.0185**	0.0008	4.225
Lead	207	0.0187	0.0251	0.0242	**0.0227**	0.0035	15.45
Lead	208	0.0211	0.0231	0.0212	**0.0218**	0.0011	5.084
Molybdenum	95	0.0623	0.0591	0.0555	**0.059**	0.0034	5.777
Molybdenum	97	0.0456	0.0574	0.0612	**0.0547**	0.0081	14.82
Molybdenum	98	0.0647	0.0501	0.0614	**0.0588**	0.0077	13.06
Nickel	60	0.2039	0.2388	0.215	**0.2192**	0.0178	8.139
Nickel	62	0.1204	0.1503	0.1709	**0.1472**	0.0254	17.26
Selenium	77	1.01	0.7812	0.9881	**0.9263**	0.1261	13.61
Selenium	78	0.5433	0.8355	0.7141	**0.6976**	0.1468	21.04
Selenium	82	1.134	1.24	1.095	**1.156**	0.0747	6.465
Silver	107	0.0246	0.0258	0.0235	**0.0246**	0.0011	4.627
Silver	109	0.0224	0.0219	0.0238	**0.0227**	0.001	4.308
Thallium	203	0.0225	0.0234	0.0228	**0.0229**	0.0005	2.142
Thallium	205	0.0228	0.0235	0.0188	**0.0217**	0.0025	11.65

Internal Standard Factors:

Lithium	6	0.971	0.97	0.97	**0.971**	n/a	n/a
Gallium	71	1.012	1.004	1.012	**1.012**	n/a	n/a
Indium	115	1.02	1.019	1.04	**1.02**	n/a	n/a
Lutetium	175	1.038	1.038	1.045	**1.038**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**ICSA MS10-78-H**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:54**					
Antimony	121	0.0572	0.0586	0.0664	**0.0607**	0.0049	8.129
Antimony	123	0.0534	0.0583	0.0505	**0.0541**	0.0039	7.298
Arsenic	75	-0.1481	-0.0942	-0.1954	**-0.1459**	0.0507	34.72
Beryllium	9	0.0154	0.0096	0.0063	**0.0104**	0.0046	43.99
Cadmium	111	1.609	1.576	1.594	**1.593**	0.0167	1.05
Cadmium	114	1.108	1.047	1.098	**1.084**	0.0329	3.039
Chromium	52	0.7523	0.7726	0.7484	**0.7578**	0.013	1.718
Chromium	53	18.15	17.75	17.51	**17.8**	0.3218	1.807
Cobalt	59	0.2163	0.2285	0.2118	**0.2188**	0.0087	3.955
Copper	63	0.7184	0.7115	0.7034	**0.7111**	0.0075	1.055
Copper	65	0.6751	0.7163	0.6794	**0.6902**	0.0227	3.284
Lead	206	0.0608	0.0559	0.0612	**0.0593**	0.0029	4.942
Lead	207	0.0716	0.0586	0.0657	**0.0653**	0.0065	9.948
Lead	208	0.0677	0.0634	0.0647	**0.0653**	0.0022	3.364
Molybdenum	95	612.1	634.9	609.7	**618.9**	13.93	2.251
Molybdenum	97	627.5	644.9	632.5	**635**	8.936	1.407
Molybdenum	98	608.1	617.8	610.9	**612.3**	4.976	0.8128
Nickel	60	2.163	2.065	2.117	**2.115**	0.0491	2.324
Nickel	62	2.815	2.738	2.692	**2.748**	0.0622	2.265
Selenium	77	4.62	4.424	4.621	**4.555**	0.1134	2.489
Selenium	78	1.781	1.336	1.273	**1.464**	0.2766	18.9
Selenium	82	-0.157	-0.0208	-0.247	**-0.1416**	0.1139	80.45
Silver	107	0.0216	0.0193	0.0184	**0.0198**	0.0017	8.373
Silver	109	0.0224	0.022	0.0185	**0.021**	0.0021	10.13
Thallium	203	0.0093	0.007	0.0052	**0.0072**	0.0021	28.86
Thallium	205	0.0081	0.0071	0.0053	**0.0068**	0.0014	20.53

Internal Standard Factors:

Lithium	6	1.206	1.208	1.202	**1.206**	n/a	n/a
Gallium	71	1.252	1.305	1.31	**1.252**	n/a	n/a
Indium	115	1.257	1.293	1.293	**1.257**	n/a	n/a
Lutetium	175	1.227	1.252	1.264	**1.227**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**ICSAB MS10-78-I**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 15:57**					
Antimony	121	0.0701	0.0628	0.0641	**0.0657**	0.0039	5.953
Antimony	123	0.0677	0.0712	0.0664	**0.0684**	0.0025	3.59
Arsenic	75	26.41	26.2	26.69	**26.43**	0.2437	0.922
Beryllium	9	0.0062	0.0088	0.0042	**0.0064**	0.0023	36.77
Cadmium	111	25.47	26.1	26.16	**25.91**	0.3817	1.473
Cadmium	114	24.86	25.01	25.47	**25.12**	0.3197	1.273
Chromium	52	53.37	52.91	52.28	**52.85**	0.5457	1.032
Chromium	53	69.11	68.14	66.82	**68.02**	1.151	1.691
Cobalt	59	51.28	51.24	50.19	**50.9**	0.6149	1.208
Copper	63	46.34	47.02	45.84	**46.4**	0.5944	1.281
Copper	65	46.92	47.58	46.91	**47.14**	0.3829	0.8123
Lead	206	0.0853	0.0798	0.0721	**0.0791**	0.0066	8.402
Lead	207	0.093	0.0919	0.0848	**0.0899**	0.0045	4.983
Lead	208	0.0892	0.0886	0.0823	**0.0867**	0.0039	4.449
Molybdenum	95	622	633.8	631.7	**629.1**	6.291	0.9999
Molybdenum	97	643.1	650.1	637	**643.4**	6.576	1.022
Molybdenum	98	624.2	627.7	630	**627.3**	2.94	0.4687
Nickel	60	50.38	50.37	49.35	**50.04**	0.5928	1.185
Nickel	62	50.31	50.64	49.9	**50.28**	0.3681	0.7321
Selenium	77	29.49	29.45	28.72	**29.22**	0.436	1.492
Selenium	78	26.38	27.06	27.37	**26.94**	0.5032	1.868
Selenium	82	26.4	25.57	25.73	**25.9**	0.4369	1.687
Silver	107	11.6	11.73	11.66	**11.66**	0.0674	0.578
Silver	109	11.58	11.66	11.67	**11.63**	0.0473	0.4064
Thallium	203	0.0066	0.0082	0.0063	**0.007**	0.0011	14.94
Thallium	205	0.0073	0.0075	0.0106	**0.0085**	0.0019	21.88

Internal Standard Factors:

Lithium	6	1.253	1.249	1.166	**1.253**	n/a	n/a
Gallium	71	1.295	1.335	1.319	**1.295**	n/a	n/a
Indium	115	1.29	1.346	1.335	**1.29**	n/a	n/a
Lutetium	175	1.221	1.296	1.295	**1.221**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**PBW K0704852**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:03**					
Antimony	121	0.002	0.001	0.001	**0.0013**	0.0006	44.06
Antimony	123	0.0026	0.0018	0.0005	**0.0017**	0.0011	64.37
Arsenic	75	0.0344	0.0305	0.0191	**0.028**	0.0079	28.32
Beryllium	9	-0.0006	0.0005	0.0057	**0.0019**	0.0034	181.3
Cadmium	111	0.0018	0.0013	0.0002	**0.0011**	0.0008	71.99
Cadmium	114	0.0032	0.0019	0.003	**0.0027**	0.0007	26.52
Chromium	52	-0.0257	-0.0041	0.0007	**-0.0097**	0.0141	145.2
Chromium	53	0.7008	0.6871	0.5799	**0.6559**	0.0662	10.1
Cobalt	59	0.001	-0.0005	-0.0007	**-0.0001**	0.001	1190
Copper	63	0.007	0.008	0.0105	**0.0085**	0.0018	21.69
Copper	65	0.0095	0.0095	0.0032	**0.0074**	0.0036	49.38
Lead	206	-0.0012	-0.0017	-0.0004	**-0.0011**	0.0007	60.49
Lead	207	-0.0013	0.0004	-0.0006	**-0.0005**	0.0009	172.8
Lead	208	0.001	0.0002	0.001	**0.0007**	0.0005	65.15
Molybdenum	95	0.1124	0.1076	0.0901	**0.1034**	0.0117	11.35
Molybdenum	97	0.1061	0.1055	0.101	**0.1042**	0.0028	2.686
Molybdenum	98	0.1067	0.1023	0.089	**0.0994**	0.0092	9.269
Nickel	60	-0.099	-0.0839	-0.085	**-0.0893**	0.0084	9.426
Nickel	62	-0.1784	-0.0473	-0.1722	**-0.1326**	0.074	55.78
Selenium	77	0.0927	0.0686	-0.0343	**0.0423**	0.0674	159.2
Selenium	78	-0.4247	0.0295	-0.3174	**-0.2375**	0.2374	99.96
Selenium	82	0.1733	0.1283	-0.0108	**0.0969**	0.096	99.04
Silver	107	0.0041	0.0034	0.002	**0.0031**	0.0011	33.73
Silver	109	0.0036	0.0021	0.0025	**0.0027**	0.0008	28.31
Thallium	203	0.001	0	-0.0002	**0.0003**	0.0006	217.2
Thallium	205	0.0006	0.001	0.0008	**0.0008**	0.0002	23.96

Internal Standard Factors:

Lithium	6	1.064	1.055	1.06	**1.064**	n/a	n/a
Gallium	71	1.053	1.077	1.057	**1.053**	n/a	n/a
Indium	115	1.091	1.091	1.088	**1.091**	n/a	n/a
Lutetium	175	1.044	1.078	1.064	**1.044**	n/a	n/a

Instrument ID: K-ICP-MS-02 | **Method: EPA 6020A**
Experiment: 06-19-07D | **Analyst: Jim Chan**
Units: µg/L (ppb) | **Analysis Lot # : 87279**

Sample Name:		**K0704852-001**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:07**					
Antimony	121	0.0245	0.0273	0.0298	**0.0272**	0.0026	9.657
Antimony	123	0.0273	0.0314	0.0265	**0.0284**	0.0026	9.309
Arsenic	75	1.6	1.773	1.55	**1.641**	0.1172	7.145
Beryllium	9	0.004	0.009	0.0058	**0.0063**	0.0025	40.14
Cadmium	111	0.0386	0.028	0.0321	**0.0329**	0.0054	16.34
Cadmium	114	0.0357	0.034	0.0431	**0.0376**	0.0048	12.79
Chromium	52	129.3	134.3	132.2	**131.9**	2.543	1.927
Chromium	53	124.2	130.1	130.3	**128.2**	3.449	2.691
Cobalt	59	0.1293	0.1344	0.1258	**0.1298**	0.0044	3.355
Copper	63	2.089	2.119	2.086	**2.098**	0.0183	0.8726
Copper	65	0.4562	0.4656	0.4773	**0.4664**	0.0106	2.266
Lead	206	0.1225	0.1288	0.1254	**0.1256**	0.0031	2.491
Lead	207	0.157	0.1308	0.1471	**0.1449**	0.0133	9.15
Lead	208	0.1392	0.1345	0.1387	**0.1374**	0.0026	1.865
Molybdenum	95	0.4028	0.3886	0.3916	**0.3943**	0.0074	1.887
Molybdenum	97	0.4444	0.4648	0.4601	**0.4564**	0.0107	2.341
Molybdenum	98	0.3488	0.3595	0.3301	**0.3461**	0.0149	4.3
Nickel	60	3.588	3.627	3.744	**3.653**	0.0814	2.227
Nickel	62	3.622	3.486	3.271	**3.46**	0.1771	5.119
Selenium	77	1.995	2.215	2.253	**2.154**	0.1394	6.47
Selenium	78	1.977	1.968	2.092	**2.012**	0.0687	3.413
Selenium	82	5.157	5.759	4.988	**5.301**	0.405	7.639
Silver	107	0.0024	0.0031	0.0007	**0.0021**	0.0012	59.64
Silver	109	0.0032	0.0037	0.0022	**0.003**	0.0008	25.58
Thallium	203	0.002	0.0045	0.0022	**0.0029**	0.0014	46.75
Thallium	205	0.0037	0.0031	0.0038	**0.0035**	0.0004	11.76

Internal Standard Factors:

Lithium	6	1.279	1.338	1.338	**1.279**	n/a	n/a
Gallium	71	1.304	1.352	1.381	**1.304**	n/a	n/a
Indium	115	1.322	1.359	1.393	**1.322**	n/a	n/a
Lutetium	175	1.22	1.259	1.284	**1.22**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-001D**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:10**					
Antimony	121	0.0308	0.028	0.0292	**0.0293**	0.0014	4.617
Antimony	123	0.0328	0.0248	0.0324	**0.03**	0.0045	15.02
Arsenic	75	1.861	1.745	1.647	**1.751**	0.1073	6.128
Beryllium	9	0.0045	0.0059	0	**0.0034**	0.0031	89.41
Cadmium	111	0.0303	0.0308	0.0423	**0.0345**	0.0068	19.78
Cadmium	114	0.0328	0.0346	0.0322	**0.0332**	0.0013	3.786
Chromium	52	134	135.6	137	**135.6**	1.478	1.09
Chromium	53	133.1	133.6	133.9	**133.5**	0.3683	0.2758
Cobalt	59	0.1467	0.1421	0.1322	**0.1404**	0.0074	5.27
Copper	63	2.119	2.069	2.007	**2.065**	0.056	2.712
Copper	65	0.455	0.4782	0.4725	**0.4686**	0.0121	2.575
Lead	206	0.1271	0.1287	0.1393	**0.1317**	0.0066	5.03
Lead	207	0.1501	0.1486	0.1318	**0.1435**	0.0101	7.075
Lead	208	0.1387	0.1403	0.1377	**0.1389**	0.0013	0.9459
Molybdenum	95	0.3903	0.4255	0.3968	**0.4042**	0.0187	4.621
Molybdenum	97	0.4353	0.432	0.4505	**0.4392**	0.0099	2.252
Molybdenum	98	0.3365	0.3143	0.3237	**0.3248**	0.0111	3.423
Nickel	60	3.749	3.733	3.701	**3.728**	0.0242	0.6486
Nickel	62	3.629	3.627	3.5	**3.585**	0.0741	2.067
Selenium	77	1.856	2.208	2.127	**2.063**	0.1843	8.931
Selenium	78	2.008	2.363	1.947	**2.106**	0.2251	10.69
Selenium	82	5.497	5.278	5.254	**5.343**	0.134	2.508
Silver	107	0.003	0.0039	0.0011	**0.0026**	0.0014	53.6
Silver	109	0.0019	0.0022	0.0012	**0.0017**	0.0005	29.67
Thallium	203	0.0046	0.0032	0.0018	**0.0032**	0.0014	42.89
Thallium	205	0.0033	0.0029	0.004	**0.0034**	0.0005	16.03

Internal Standard Factors:

Lithium	6	1.391	1.363	1.392	**1.391**	n/a	n/a
Gallium	71	1.359	1.389	1.397	**1.359**	n/a	n/a
Indium	115	1.377	1.394	1.4	**1.377**	n/a	n/a
Lutetium	175	1.279	1.3	1.319	**1.279**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-001L 1/5**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:18**					
Antimony	121	0.0066	0.0051	0.0058	**0.0058**	0.0008	13.73
Antimony	123	0.0058	0.0077	0.0065	**0.0067**	0.0009	14.12
Arsenic	75	0.5788	0.4563	0.4046	**0.4799**	0.0894	18.64
Beryllium	9	0.0033	0.0034	0.0044	**0.0037**	0.0006	17.18
Cadmium	111	0.0034	0.0046	0.0106	**0.0062**	0.0039	62.6
Cadmium	114	0.0045	0.0076	0.0064	**0.0062**	0.0015	24.97
Chromium	52	22.39	22.53	22.48	**22.47**	0.0691	0.3075
Chromium	53	23.65	23.77	23.86	**23.76**	0.106	0.4463
Cobalt	59	0.0273	0.0253	0.0238	**0.0255**	0.0018	6.967
Copper	63	0.3948	0.396	0.4033	**0.398**	0.0046	1.165
Copper	65	0.1093	0.0964	0.1017	**0.1025**	0.0065	6.357
Lead	206	0.0248	0.0233	0.0312	**0.0264**	0.0042	15.78
Lead	207	0.0352	0.0374	0.0344	**0.0357**	0.0015	4.335
Lead	208	0.0321	0.0309	0.0327	**0.0319**	0.0009	2.784
Molybdenum	95	0.0751	0.0837	0.0841	**0.081**	0.0051	6.263
Molybdenum	97	0.0735	0.0839	0.0951	**0.0842**	0.0108	12.85
Molybdenum	98	0.0726	0.0666	0.0723	**0.0705**	0.0034	4.812
Nickel	60	0.6651	0.6391	0.6547	**0.653**	0.0131	2.011
Nickel	62	0.721	0.7537	0.7802	**0.7516**	0.0296	3.941
Selenium	77	0.211	0.3579	0.5056	**0.3582**	0.1473	41.13
Selenium	78	-0.1626	0.4919	0.5026	**0.2773**	0.381	137.4
Selenium	82	1.321	0.9932	0.8718	**1.062**	0.2324	21.88
Silver	107	-0.0001	0.0007	-0.0002	**0.0002**	0.0005	297.5
Silver	109	0.0004	0.0009	0	**0.0004**	0.0005	102.2
Thallium	203	0.0026	0.0029	0.0033	**0.0029**	0.0004	12.18
Thallium	205	0.0048	0.0041	0.0033	**0.0041**	0.0007	17.54

Internal Standard Factors:

Lithium	6	1.242	1.219	1.28	**1.242**	n/a	n/a
Gallium	71	1.203	1.218	1.217	**1.203**	n/a	n/a
Indium	115	1.246	1.25	1.254	**1.246**	n/a	n/a
Lutetium	175	1.186	1.207	1.2	**1.186**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-001A +20,+10Ag**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:21**					
Antimony	121	20.23	20.13	19.38	**19.91**	0.4652	2.336
Antimony	123	20.37	19.58	19.49	**19.81**	0.4868	2.457
Arsenic	75	22.58	22.01	21.42	**22.01**	0.5819	2.644
Beryllium	9	20.31	20.14	20.19	**20.21**	0.0864	0.4273
Cadmium	111	19.1	18.12	18.78	**18.67**	0.5024	2.691
Cadmium	114	18.59	17.57	17.98	**18.05**	0.5128	2.842
Chromium	52	155.3	158.4	154.8	**156.2**	1.974	1.264
Chromium	53	151.1	155.1	150.6	**152.3**	2.467	1.62
Cobalt	59	21.13	20.81	20.47	**20.81**	0.3297	1.584
Copper	63	20.66	20.29	19.96	**20.31**	0.3511	1.729
Copper	65	19.12	18.59	18.46	**18.73**	0.3503	1.871
Lead	206	18.39	17.4	17.54	**17.78**	0.5318	2.991
Lead	207	18.19	17.47	17.48	**17.71**	0.4079	2.302
Lead	208	18.4	17.74	17.53	**17.89**	0.4532	2.533
Molybdenum	95	23.21	22.13	22.08	**22.47**	0.6383	2.841
Molybdenum	97	23.26	22.28	22.26	**22.6**	0.5726	2.534
Molybdenum	98	22.75	22.26	22.07	**22.36**	0.3514	1.572
Nickel	60	23.18	22.88	22.65	**22.91**	0.2632	1.149
Nickel	62	22.81	21.95	21.79	**22.18**	0.5463	2.463
Selenium	77	21.39	21.07	21.44	**21.3**	0.2002	0.9401
Selenium	78	21.95	22.09	21.95	**22**	0.0785	0.3569
Selenium	82	25.63	25.84	25.4	**25.62**	0.2226	0.8687
Silver	107	9.119	8.928	8.914	**8.987**	0.1145	1.274
Silver	109	9.057	8.921	8.817	**8.931**	0.1201	1.345
Thallium	203	18.87	17.63	17.68	**18.06**	0.6994	3.873
Thallium	205	18.87	17.94	18.01	**18.28**	0.5187	2.838

Internal Standard Factors:

Lithium	6	1.425	1.436	1.431	**1.425**	n/a	n/a
Gallium	71	1.429	1.48	1.467	**1.429**	n/a	n/a
Indium	115	1.425	1.455	1.467	**1.425**	n/a	n/a
Lutetium	175	1.328	1.36	1.359	**1.328**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-001S**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:24**					
Antimony	121	20.33	20.3	20.35	**20.33**	0.0276	0.1358
Antimony	123	20.38	20.23	20.55	**20.39**	0.1612	0.7905
Arsenic	75	21.91	22.21	22.82	**22.31**	0.4626	2.073
Beryllium	9	19.75	20.19	21.61	**20.51**	0.9706	4.732
Cadmium	111	19.38	18.47	18.6	**18.82**	0.4925	2.617
Cadmium	114	18.1	18.46	18.47	**18.34**	0.2114	1.152
Chromium	52	153.3	160	155	**156.1**	3.53	2.261
Chromium	53	149.5	155.7	152.7	**152.7**	3.079	2.017
Cobalt	59	21	21.27	21.49	**21.26**	0.2487	1.17
Copper	63	20.28	20.37	20.5	**20.39**	0.1095	0.5372
Copper	65	18.77	18.99	18.96	**18.91**	0.1199	0.6343
Lead	206	18.14	18.37	18.59	**18.37**	0.226	1.231
Lead	207	17.8	18.11	18.37	**18.09**	0.2851	1.576
Lead	208	18.01	18.24	18.4	**18.22**	0.1945	1.068
Molybdenum	95	22.65	22.9	22.83	**22.79**	0.1286	0.5644
Molybdenum	97	22.78	22.79	23.46	**23.01**	0.3884	1.688
Molybdenum	98	22.74	22.55	22.91	**22.73**	0.1765	0.7762
Nickel	60	23.07	23.15	23.28	**23.17**	0.1042	0.4499
Nickel	62	22.33	22.92	22.55	**22.6**	0.297	1.314
Selenium	77	22.47	22	22.24	**22.23**	0.2382	1.071
Selenium	78	22.72	22.46	23.2	**22.8**	0.3739	1.64
Selenium	82	24.79	25.83	26.23	**25.62**	0.7431	2.9
Silver	107	19.1	19.43	19.48	**19.34**	0.205	1.06
Silver	109	19.34	19.32	19.26	**19.31**	0.0432	0.2235
Thallium	203	18.69	18.33	18.41	**18.48**	0.1899	1.028
Thallium	205	18.89	18.59	18.57	**18.68**	0.1785	0.9552

Internal Standard Factors:

Lithium	6	1.446	1.405	1.283	**1.446**	n/a	n/a
Gallium	71	1.401	1.477	1.516	**1.401**	n/a	n/a
Indium	115	1.402	1.458	1.477	**1.402**	n/a	n/a
Lutetium	175	1.321	1.377	1.387	**1.321**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**LCSW K0704852**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:26**					
Antimony	121	20.69	20.45	20.48	**20.54**	0.1326	0.6456
Antimony	123	20.41	20.32	20.77	**20.5**	0.2348	1.145
Arsenic	75	20.33	20.13	20.86	**20.44**	0.3765	1.842
Beryllium	9	19.08	19.59	20.91	**19.86**	0.9417	4.742
Cadmium	111	20.04	20.43	20.35	**20.27**	0.2037	1.005
Cadmium	114	19.39	19.93	19.7	**19.67**	0.2686	1.366
Chromium	52	21.77	21.33	21.1	**21.4**	0.3412	1.594
Chromium	53	22.66	22.22	21.82	**22.23**	0.4192	1.886
Cobalt	59	20.72	20.7	20.7	**20.71**	0.0147	0.071
Copper	63	19.91	19.91	19.86	**19.89**	0.0311	0.1562
Copper	65	20.06	19.72	19.89	**19.89**	0.171	0.8597
Lead	206	20.9	20.41	20.41	**20.57**	0.2848	1.384
Lead	207	20.85	20.37	20.15	**20.46**	0.3626	1.772
Lead	208	20.97	20.36	20.41	**20.58**	0.3379	1.642
Molybdenum	95	20.72	21.46	21.16	**21.12**	0.3729	1.766
Molybdenum	97	20.63	21.29	21.12	**21.01**	0.3403	1.62
Molybdenum	98	20.48	20.81	21.03	**20.77**	0.2724	1.311
Nickel	60	20.29	19.8	20.15	**20.08**	0.252	1.255
Nickel	62	20.05	19.64	20.05	**19.91**	0.2358	1.184
Selenium	77	20.89	21.28	20.92	**21.03**	0.2169	1.031
Selenium	78	21.44	21.39	21.51	**21.45**	0.0619	0.2884
Selenium	82	21.35	21.1	21.17	**21.21**	0.1294	0.6103
Silver	107	19.91	20.26	20.26	**20.14**	0.2015	1
Silver	109	20.01	20.21	20.39	**20.2**	0.1905	0.9428
Thallium	203	20.74	20.23	20.54	**20.5**	0.2537	1.238
Thallium	205	21.42	20.42	20.72	**20.85**	0.5113	2.452

Internal Standard Factors:

Lithium	6	1.346	1.366	1.284	**1.346**	n/a	n/a
Gallium	71	1.168	1.158	1.18	**1.168**	n/a	n/a
Indium	115	1.182	1.207	1.214	**1.182**	n/a	n/a
Lutetium	175	1.218	1.202	1.225	**1.218**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCV2 MS10-82-B**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:34**					
Antimony	121	25.09	25.31	24.87	**25.09**	0.221	0.8808
Antimony	123	25.12	24.94	25.12	**25.06**	0.1048	0.4183
Arsenic	75	24.41	25.08	25.19	**24.89**	0.4228	1.698
Beryllium	9	24.63	25.2	25.54	**25.12**	0.4642	1.848
Cadmium	111	24.93	25.16	25.29	**25.13**	0.18	0.7164
Cadmium	114	24.86	25.1	24.97	**24.98**	0.1194	0.4779
Chromium	52	25.74	26.21	26.45	**26.13**	0.3619	1.385
Chromium	53	26.67	27.03	27.07	**26.92**	0.2204	0.8187
Cobalt	59	25.68	26.26	26.44	**26.13**	0.3963	1.517
Copper	63	24.26	24.62	25.27	**24.72**	0.5124	2.073
Copper	65	24.57	24.69	25.13	**24.79**	0.2917	1.177
Lead	206	25.88	25.91	25.33	**25.71**	0.3275	1.274
Lead	207	25.46	25.33	25.5	**25.43**	0.0865	0.3401
Lead	208	25.65	25.6	25.34	**25.53**	0.1672	0.6552
Molybdenum	95	25.86	26.28	26.33	**26.16**	0.2556	0.9771
Molybdenum	97	25.81	26.27	26.32	**26.13**	0.2836	1.085
Molybdenum	98	25.73	26.05	26.25	**26.01**	0.2618	1.007
Nickel	60	25.07	25.3	25.85	**25.4**	0.3989	1.57
Nickel	62	24.79	24.87	25	**24.89**	0.1097	0.4408
Selenium	77	25.46	26.01	25.41	**25.63**	0.3346	1.306
Selenium	78	25.34	26.26	26.2	**25.93**	0.5152	1.987
Selenium	82	24.95	26.88	25.91	**25.91**	0.964	3.721
Silver	107	25.78	25.64	25.71	**25.71**	0.073	0.284
Silver	109	25.51	25.7	25.78	**25.66**	0.1406	0.5477
Thallium	203	25.53	25.27	25.62	**25.47**	0.1835	0.7203
Thallium	205	25.93	25.62	25.36	**25.64**	0.2831	1.104

Internal Standard Factors:

Lithium	6	1.255	1.292	1.309	**1.255**	n/a	n/a
Gallium	71	1.163	1.179	1.217	**1.163**	n/a	n/a
Indium	115	1.206	1.226	1.254	**1.206**	n/a	n/a
Lutetium	175	1.231	1.247	1.262	**1.231**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCB2**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:40**					
Antimony	121	0.0051	0.0063	0.0039	**0.0051**	0.0012	22.68
Antimony	123	0.0029	0.0041	0.0035	**0.0035**	0.0006	17.39
Arsenic	75	0.0881	0.0582	0.0485	**0.0649**	0.0206	31.77
Beryllium	9	0.0044	0.0046	0.0193	**0.0094**	0.0085	90.41
Cadmium	111	-0.0008	0.0004	0.0004	**0**	0.0007	37360
Cadmium	114	0.0031	0.0038	0.0018	**0.0029**	0.001	35.23
Chromium	52	0.0035	-0.0002	0.0088	**0.004**	0.0045	112.6
Chromium	53	0.6315	0.6168	0.556	**0.6014**	0.04	6.657
Cobalt	59	-0.0005	0.0011	0.001	**0.0005**	0.0009	168.8
Copper	63	0.0073	0.0137	0.0147	**0.0119**	0.004	33.85
Copper	65	0.0011	-0.0007	-0.0015	**-0.0003**	0.0013	389.4
Lead	206	0.0015	0.0024	-0.0029	**0.0003**	0.0028	813.1
Lead	207	0.0066	0.0001	-0.0013	**0.0018**	0.0042	233.6
Lead	208	0.0038	0.0019	-0.0005	**0.0017**	0.0022	126
Molybdenum	95	0.0238	0.0235	0.0185	**0.0219**	0.003	13.69
Molybdenum	97	0.0323	0.0195	0.0231	**0.025**	0.0066	26.43
Molybdenum	98	0.0243	0.0214	0.0192	**0.0216**	0.0025	11.79
Nickel	60	-0.1697	-0.1633	-0.1715	**-0.1681**	0.0043	2.568
Nickel	62	-0.1181	-0.102	-0.11	**-0.11**	0.0081	7.331
Selenium	77	-0.1592	0.0175	-0.0478	**-0.0632**	0.0893	141.5
Selenium	78	-0.3072	-0.0783	-0.2393	**-0.2083**	0.1176	56.45
Selenium	82	0.1746	0.2063	0.0834	**0.1548**	0.0638	41.22
Silver	107	0.0097	0.0066	0.0064	**0.0076**	0.0018	24.06
Silver	109	0.0078	0.0049	0.0072	**0.0066**	0.0015	22.78
Thallium	203	0.0008	0.0015	0.0027	**0.0016**	0.001	58.68
Thallium	205	0.0036	0.002	0.0017	**0.0024**	0.001	41.03

Internal Standard Factors:

Lithium	6	1.29	1.28	1.271	**1.29**	n/a	n/a
Gallium	71	1.221	1.238	1.235	**1.221**	n/a	n/a
Indium	115	1.257	1.252	1.26	**1.257**	n/a	n/a
Lutetium	175	1.274	1.276	1.28	**1.274**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-002**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:43**					
Antimony	121	0.1037	0.1197	0.1083	**0.1106**	0.0082	7.442
Antimony	123	0.1021	0.1041	0.1109	**0.1057**	0.0046	4.362
Arsenic	75	16.26	16.06	16.83	**16.38**	0.4041	2.467
Beryllium	9	0.0335	0.0213	0.0451	**0.0333**	0.0119	35.75
Cadmium	111	0.0061	0.017	0.0045	**0.0092**	0.0068	74.03
Cadmium	114	0.0074	0.0077	0.0095	**0.0082**	0.0011	13.65
Chromium	52	0.877	0.8565	0.8919	**0.8751**	0.0177	2.029
Chromium	53	30.4	30.97	31.82	**31.06**	0.7154	2.303
Cobalt	59	0.8848	0.9037	0.91	**0.8995**	0.0131	1.458
Copper	63	2.569	2.54	2.585	**2.565**	0.0226	0.8795
Copper	65	0.9449	0.8955	0.8985	**0.913**	0.0277	3.033
Lead	206	0.0184	0.0116	0.0111	**0.0137**	0.0041	29.91
Lead	207	0.0148	0.0125	0.0127	**0.0133**	0.0013	9.535
Lead	208	0.0173	0.0144	0.014	**0.0152**	0.0018	11.74
Molybdenum	95	1.883	1.847	1.809	**1.846**	0.037	2.003
Molybdenum	97	1.865	1.914	1.762	**1.847**	0.0773	4.187
Molybdenum	98	1.507	1.509	1.504	**1.507**	0.0029	0.1894
Nickel	60	8.81	8.808	8.825	**8.814**	0.0096	0.1084
Nickel	62	4.771	4.774	4.675	**4.74**	0.0565	1.192
Selenium	77	7.549	8.805	7.892	**8.082**	0.6493	8.034
Selenium	78	1.06	1.327	1.633	**1.34**	0.2866	21.39
Selenium	82	13.23	13.21	13.32	**13.25**	0.0591	0.4458
Silver	107	0.019	0.017	0.0176	**0.0179**	0.0011	5.897
Silver	109	0.0164	0.0136	0.0132	**0.0144**	0.0018	12.24
Thallium	203	0.0005	0.0016	0.0006	**0.0009**	0.0006	63.6
Thallium	205	0.0045	0.0021	0.0026	**0.0031**	0.0013	41.71

Int. Std out
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6/19/07

Internal Standard Factors:

Lithium	6	1.424	1.445	1.404	**1.424**	n/a	n/a
Gallium	71	1.654	1.683	1.711	**1.654**	n/a	n/a
Indium	115	1.808	1.868	1.848	**1.808**	n/a	n/a
Lutetium	175	1.696	1.746	1.767	**1.696**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-003**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:47**					
Antimony	121	0.2471	0.2449	0.2508	**0.2476**	0.003	1.203
Antimony	123	0.249	0.2334	0.2287	**0.237**	0.0106	4.484
Arsenic	75	3.992	4.015	3.924	**3.977**	0.0469	1.179
Beryllium	9	0.0073	0.0088	0.0071	**0.0077**	0.0009	11.97
Cadmium	111	0.1288	0.1261	0.1375	**0.1308**	0.0059	4.533
Cadmium	114	0.1238	0.128	0.1371	**0.1296**	0.0068	5.246
Chromium	52	0.384	0.4283	0.3768	**0.3964**	0.0279	7.028
Chromium	53	6.932	6.393	6.166	**6.497**	0.3934	6.055
Cobalt	59	0.3696	0.3604	0.3496	**0.3599**	0.01	2.776
Copper	63	0.835	0.8664	0.8273	**0.8429**	0.0207	2.455
Copper	65	0.6338	0.6193	0.6723	**0.6418**	0.0274	4.269
Lead	206	0.0173	0.0193	0.0165	**0.0177**	0.0014	7.979
Lead	207	0.0208	0.0147	0.0187	**0.018**	0.0031	17.11
Lead	208	0.0191	0.0199	0.0206	**0.0199**	0.0008	3.883
Molybdenum	95	0.5354	0.5232	0.5429	**0.5339**	0.0099	1.859
Molybdenum	97	0.5129	0.5716	0.5387	**0.5411**	0.0294	5.437
Molybdenum	98	0.4927	0.5171	0.4826	**0.4975**	0.0177	3.567
Nickel	60	2.992	2.967	2.85	**2.936**	0.0758	2.583
Nickel	62	2.203	2.087	2.14	**2.143**	0.058	2.707
Selenium	77	0.8717	1.123	0.6532	**0.8828**	0.2354	26.66
Selenium	78	2.151	1.449	1.457	**1.685**	0.4029	23.9
Selenium	82	1.361	1.205	1.118	**1.228**	0.1233	10.04
Silver	107	0.0029	0.0033	0.0022	**0.0028**	0.0006	20.58
Silver	109	0.0032	0.0028	0.0022	**0.0027**	0.0005	19.24
Thallium	203	0.0032	0.0046	0.0043	**0.004**	0.0007	17.41
Thallium	205	0.0039	0.0044	0.0027	**0.0037**	0.0009	23.95

Internal Standard Factors:

Lithium	6	1.448	1.378	1.404	**1.448**	n/a	n/a
Gallium	71	1.41	1.441	1.395	**1.41**	n/a	n/a
Indium	115	1.424	1.422	1.431	**1.424**	n/a	n/a
Lutetium	175	1.382	1.394	1.394	**1.382**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**K0704852-002 1/2**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:52**					
Antimony	121	0.0532	0.0504	0.0624	**0.0553**	0.0063	11.39
Antimony	123	0.0508	0.0531	0.0438	**0.0492**	0.0048	9.762
Arsenic	75	8.851	9.033	8.827	**8.904**	0.1124	1.263
Beryllium	9	0.0186	0.0246	0.0152	**0.0195**	0.0047	24.32
Cadmium	111	0.0022	0.0031	0.0063	**0.0039**	0.0022	55.88
Cadmium	114	0.0037	0.0052	0.004	**0.0043**	0.0008	18.6
Chromium	52	0.4354	0.5235	0.5357	**0.4982**	0.0547	10.98
Chromium	53	18.52	18.89	18.53	**18.65**	0.2102	1.127
Cobalt	59	0.5106	0.4959	0.4619	**0.4894**	0.025	5.101
Copper	63	1.426	1.42	1.439	**1.429**	0.0094	0.6557
Copper	65	0.5148	0.5027	0.494	**0.5038**	0.0105	2.08
Lead	206	0.0087	0.0071	0.0103	**0.0087**	0.0016	18.29
Lead	207	0.0157	0.0088	0.009	**0.0112**	0.0039	35.3
Lead	208	0.0132	0.0107	0.0101	**0.0113**	0.0017	14.77
Molybdenum	95	0.9437	0.9613	0.9752	**0.9601**	0.0158	1.647
Molybdenum	97	0.9543	0.9762	0.9858	**0.9721**	0.0162	1.666
Molybdenum	98	0.7866	0.7912	0.825	**0.8009**	0.021	2.619
Nickel	60	4.912	4.822	4.8	**4.845**	0.0595	1.228
Nickel	62	2.564	2.762	2.671	**2.666**	0.0989	3.709
Selenium	77	4.134	3.874	4.036	**4.015**	0.1312	3.269
Selenium	78	2.058	1.675	1.831	**1.855**	0.1926	10.39
Selenium	82	6.309	6.542	6.047	**6.299**	0.2478	3.933
Silver	107	0.006	0.0058	0.0069	**0.0062**	0.0006	9.586
Silver	109	0.0038	0.0063	0.0067	**0.0056**	0.0015	27.55
Thallium	203	0.0034	0.0015	0.0004	**0.0018**	0.0015	86.66
Thallium	205	0.0021	0.0032	0.0013	**0.0022**	0.001	43.25

Internal Standard Factors:

Lithium	6	1.385	1.499	1.46	**1.385**	n/a	n/a
Gallium	71	1.517	1.556	1.552	**1.517**	n/a	n/a
Indium	115	1.558	1.619	1.642	**1.558**	n/a	n/a
Lutetium	175	1.511	1.546	1.561	**1.511**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCV3 MS10-82-B**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 16:56**					
Antimony	121	24.86	25.27	24.81	**24.98**	0.2512	1.006
Antimony	123	24.98	25.82	24.83	**25.21**	0.537	2.13
Arsenic	75	26.14	25.51	25.24	**25.63**	0.4587	1.79
Beryllium	9	24.26	25.14	25.11	**24.83**	0.5003	2.014
Cadmium	111	25	25.44	24.8	**25.08**	0.3272	1.305
Cadmium	114	24.94	25.24	25.1	**25.1**	0.1476	0.5881
Chromium	52	27.14	27.92	27.21	**27.42**	0.4349	1.586
Chromium	53	31.24	30.6	30.21	**30.69**	0.522	1.701
Cobalt	59	27.53	27.52	27.08	**27.38**	0.2548	0.9306
Copper	63	25.42	25.67	25.17	**25.42**	0.2516	0.9899
Copper	65	25.48	25.38	24.86	**25.24**	0.3339	1.323
Lead	206	25.62	25.78	25.58	**25.66**	0.1056	0.4116
Lead	207	25.01	25.77	25.11	**25.3**	0.4134	1.634
Lead	208	25.62	25.76	25.57	**25.65**	0.0981	0.3825
Molybdenum	95	26.62	26.88	26.61	**26.71**	0.1546	0.5788
Molybdenum	97	26.46	26.85	26.36	**26.55**	0.2592	0.976
Molybdenum	98	26.53	27.26	26.39	**26.73**	0.4681	1.752
Nickel	60	26.64	27.04	26.54	**26.74**	0.2642	0.9882
Nickel	62	25.78	25.66	25.1	**25.51**	0.3635	1.425
Selenium	77	26.03	26.99	25.32	**26.11**	0.8371	3.205
Selenium	78	27.72	27.34	26.77	**27.27**	0.4801	1.76
Selenium	82	26.96	27.42	25.81	**26.73**	0.8277	3.096
Silver	107	25.44	26.28	25.63	**25.78**	0.443	1.718
Silver	109	25.57	25.4	25.42	**25.46**	0.0927	0.3643
Thallium	203	25.5	25.09	25.46	**25.35**	0.2215	0.8739
Thallium	205	25.66	25.21	25.35	**25.41**	0.2282	0.8983

Internal Standard Factors:

Lithium	6	1.373	1.344	1.37	**1.373**	n/a	n/a
Gallium	71	1.222	1.265	1.239	**1.222**	n/a	n/a
Indium	115	1.25	1.276	1.26	**1.25**	n/a	n/a
Lutetium	175	1.294	1.315	1.313	**1.294**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 06-19-07D
Units: µg/L (ppb)

Method: EPA 6020A
Analyst: Jim Chan
Analysis Lot # : 87279

Sample Name:		**CCB3**			**Mean**	**SD**	**%RSD**
TimeStamp		**6/19/07 17:04**					
Antimony	121	0.002	0.0032	0.0028	**0.0027**	0.0006	22.25
Antimony	123	0.0044	0.0038	0.0039	**0.004**	0.0003	8.394
Arsenic	75	-0.037	0.0207	-0.0892	**-0.0352**	0.055	156.4
Beryllium	9	0.0032	0.0003	0.0166	**0.0067**	0.0087	130.4
Cadmium	111	-0.0008	0.0046	0.001	**0.0016**	0.0028	171.6
Cadmium	114	0.0063	0.0013	0.0034	**0.0037**	0.0026	69.8
Chromium	52	-0.0162	0.0179	0.0026	**0.0015**	0.0171	1178
Chromium	53	1.587	1.695	1.604	**1.629**	0.058	3.56
Cobalt	59	-0.0001	0.0008	0	**0.0003**	0.0005	193
Copper	63	0.0273	0.0199	0.0213	**0.0228**	0.0039	17.1
Copper	65	0.0215	0.0149	0.008	**0.0148**	0.0068	45.73
Lead	206	0.0037	0.0028	-0.0005	**0.002**	0.0022	111.4
Lead	207	0.0084	0.0058	0.0062	**0.0068**	0.0014	20.76
Lead	208	0.0071	0.0074	0.0039	**0.0061**	0.0019	31.52
Molybdenum	95	0.0127	0.0089	0.0078	**0.0098**	0.0026	26.4
Molybdenum	97	0.0088	0.0118	0.0118	**0.0108**	0.0018	16.21
Molybdenum	98	0.0092	0.0075	0.0107	**0.0091**	0.0016	17.55
Nickel	60	-0.1043	-0.0899	-0.1057	**-0.1**	0.0087	8.732
Nickel	62	0.0034	-0.0881	-0.0636	**-0.0494**	0.0474	95.79
Selenium	77	-0.065	0.1688	0.1399	**0.0812**	0.1274	156.9
Selenium	78	-0.2823	0.0826	-0.7843	**-0.328**	0.4353	132.7
Selenium	82	-0.2976	0.0985	-0.3393	**-0.1794**	0.2416	134.6
Silver	107	0.0042	0.0048	0.0039	**0.0043**	0.0005	11.1
Silver	109	0.0042	0.0039	0.0028	**0.0036**	0.0007	20.55
Thallium	203	0.0011	0.0001	-0.0009	**0.0001**	0.001	932.9
Thallium	205	0.0013	0.0011	0.0012	**0.0012**	0.0001	6.672

Internal Standard Factors:

Lithium	6	1.375	1.422	1.386	**1.375**	n/a	n/a
Gallium	71	1.191	1.221	1.203	**1.191**	n/a	n/a
Indium	115	1.252	1.25	1.267	**1.252**	n/a	n/a
Lutetium	175	1.302	1.333	1.305	**1.302**	n/a	n/a

Diesel & Residual Range Organics

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Cover Page - Organic Analysis Data Package
Diesel and Residual Range Organics

Sample Name	Lab Code	Date Collected	Date Received
1349MW100CL	K0704852-002	06/06/2007	06/07/2007
231GW29CL	K0704852-003	06/06/2007	06/07/2007
FM14EX07GW102CL	K0704852-004	06/06/2007	06/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: Mike Erickson

Date: 7/23/07

Title: Supervisor

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**29000**	Y	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	**700**	L	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	129	65-135	06/12/07	Acceptable
n-Triacontane	71	65-135	06/12/07	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	06/12/07	Acceptable
n-Triacontane	99	65-135	06/12/07	Acceptable

Comments:

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Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	65	65-135	06/12/07	Acceptable
n-Triacontane	66	65-135	06/12/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706512-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	70	65-135	06/12/07	Acceptable
n-Triacontane	73	65-135	06/12/07	Acceptable

Comments:

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW100CL	K0704852-002	129	71
231GW29CL	K0704852-003	97	99
FM14EX07GW102CL	K0704852-004	65	66
Method Blank	KWG0706512-3	70	73
Lab Control Sample	KWG0706512-1	88	90
Duplicate Lab Control Sample	KWG0706512-2	100	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/11/2007
Date Analyzed: 06/12/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0706512

	Lab Control Sample KWG0706512-1 Lab Control Spike			Duplicate Lab Control Sample KWG0706512-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1120	1600	70	1320	1600	82	65-135	16	35
C24 - C36 RRO	682	800	85	787	800	98	65-135	14	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/11/2007
Date Analyzed: 06/12/2007
Time Analyzed: 23:32

Method Blank Summary
Diesel and Residual Range Organics

Sample Name: Method Blank
Lab Code: KWG0706512-3

File ID: J:\GC21\DATA\061207.TAR\0612F082.D
Instrument ID: GC21

Extraction Method: EPA 3510C
Analysis Method: 8015B

Level: Low
Extraction Lot: KWG0706512

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CL	K0704852-002	J:\GC21\DATA\061207.TAR\0612F072.D	06/12/07	21:49
231GW29CL	K0704852-003	J:\GC21\DATA\061207.TAR\0612F074.D	06/12/07	22:10
FM14EX07GW102CL	K0704852-004	J:\GC21\DATA\061207.TAR\0612F076.D	06/12/07	22:30
Lab Control Sample	KWG0706512-1	J:\GC21\DATA\061207.TAR\0612F078.D	06/12/07	22:51
Duplicate Lab Control Sample	KWG0706512-2	J:\GC21\DATA\061207.TAR\0612F080.D	06/12/07	23:12

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706512-1	**Lab Code:**	KWG0706512-2
File ID:	J:\GC21\DATA\061207.TAR\0612F078.D	**File ID:**	J:\GC21\DATA\061207.TAR\0612F080.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	06/11/2007	**Date Extracted:**	06/11/2007
Date Analyzed:	06/12/2007	**Date Analyzed:**	06/12/2007
Time Analyzed:	22:51	**Time Analyzed:**	23:12

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0706512

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CL	K0704852-002	J:\GC21\DATA\061207.TAR\0612F072.D	06/12/07	21:49
231GW29CL	K0704852-003	J:\GC21\DATA\061207.TAR\0612F074.D	06/12/07	22:10
FM14EX07GW102CL	K0704852-004	J:\GC21\DATA\061207.TAR\0612F076.D	06/12/07	22:30
Method Blank	KWG0706512-3	J:\GC21\DATA\061207.TAR\0612F082.D	06/12/07	23:32

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6445
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\061207.TAR\0601F054.D	H	J:\GC21\DATA\061207.TAR\0601F068.D
B	J:\GC21\DATA\061207.TAR\0601F056.D	I	J:\GC21\DATA\061207.TAR\0601F070.D
C	J:\GC21\DATA\061207.TAR\0601F058.D	J	J:\GC21\DATA\061207.TAR\0601F072.D
D	J:\GC21\DATA\061207.TAR\0601F060.D	K	J:\GC21\DATA\061207.TAR\0601F074.D
E	J:\GC21\DATA\061207.TAR\0601F062.D	L	J:\GC21\DATA\061207.TAR\0601F076.D
F	J:\GC21\DATA\061207.TAR\0601F064.D	M	J:\GC21\DATA\061207.TAR\0601F078.D
G	J:\GC21\DATA\061207.TAR\0601F066.D	N	J:\GC21\DATA\061207.TAR\0601F082.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl				B	2.5	1730				D	10	1770			
	F	25	1750				H	100	1820				J	250	1760
										N	1.0	1720			
n-Triacontane				B	2.5	1450				D	10	1590			
	F	25	1640				H	100	1600				J	250	1590
										N	1.0	1670			
C12 - C24 DRO				B	50	1280				D	200	1310			
	F	500	1310				H	2000	1370				J	5000	1330
				L	20000	1380	M	50000	1340	N	20	1260			
C24 - C36 RRO	A	20	877				C	50	949				E	200	994
				G	500	1030				I	2000	1030			
	K	5000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6445
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	2.1		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	4.8		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	3.0		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	6.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007
Date Analyzed: 06/01/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6445
Units: ppm

File ID: J:\GC21\DATA\061207.TAR\0601F086.D
J:\GC21\DATA\061207.TAR\0601F088.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	930	1320	1230	-7	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	920	982	905	-8	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 06/01/2007
Calibration ID: CAL6445
Analysis Lot: KWG0707881
Units: ppm
Column ID: ZB-1 15m

File ID: J:\GC21\DATA\061207.TAR\0612F066.D
J:\GC21\DATA\061207.TAR\0612F068.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1760	1790	2	NA	± 15 %	AverageRF
n-Triacontane	50	49	1590	1570	-1	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1320	1370	3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	982	1010	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007 - 06/13/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 06/01/2007
Calibration ID: CAL6445
Analysis Lot: KWG0707881
Units: ppm

File ID: J:\GC21\DATA\061207.TAR\0612F084.D
J:\GC21\DATA\061207.TAR\0612F086.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1760	1810	3	NA	± 15 %	AverageRF
n-Triacontane	50	50	1590	1580	-1	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1100	1320	1400	6	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	982	1040	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Analysis Run Log
Diesel and Residual Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0707881
Instrument ID: GC21
Column: ZB-1 15m

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0612F066.D	Continuing Calibration Verification	KWG0707881-3	6/12/2007	20:47		6/12/2007	21:01
0612F068.D	Continuing Calibration Verification	KWG0707881-3	6/12/2007	21:08		6/12/2007	21:22
0612F070.D	Instrument Blank	KWG0707881-1	6/12/2007	21:28		6/12/2007	21:42
0612F072.D	1349MW100CL	K0704852-002	6/12/2007	21:49		6/12/2007	22:03
0612F074.D	231GW29CL	K0704852-003	6/12/2007	22:10		6/12/2007	22:24
0612F076.D	FM14EX07GW102CL	K0704852-004	6/12/2007	22:30		6/12/2007	22:44
0612F078.D	Lab Control Sample	KWG0706512-1	6/12/2007	22:51		6/12/2007	23:05
0612F080.D	Duplicate Lab Control Sample	KWG0706512-2	6/12/2007	23:12		6/12/2007	23:26
0612F082.D	Method Blank	KWG0706512-3	6/12/2007	23:32		6/12/2007	23:46
0612F084.D	Continuing Calibration Verification	KWG0707881-4	6/12/2007	23:53		6/13/2007	00:07
0612F086.D	Continuing Calibration Verification	KWG0707881-4	6/13/2007	00:13		6/13/2007	00:27
0612F088.D	Instrument Blank	KWG0707881-2	6/13/2007	00:34		6/13/2007	00:48

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/11/2007

Extraction Prep Log
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: KWG0706512
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW100CL	K0704852-002	06/06/07	06/07/07	1050ml	2.0ml	NA	
231GW29CL	K0704852-003	06/06/07	06/07/07	1050ml	2.0ml	NA	
FM14EX07GW102CL	K0704852-004	06/06/07	06/07/07	1050ml	2.0ml	NA	
Method Blank	KWG0706512-3	NA	NA	1000ml	2.0ml	NA	
Lab Control Sample	KWG0706512-1	NA	NA	1000ml	2.0ml	NA	
Duplicate Lab Control Sample	KWG0706512-2	NA	NA	1000ml	2.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW100CL	K0704852-002	129	71
231GW29CL	K0704852-003	97	99
FM14EX07GW102CL	K0704852-004	65	66
Method Blank	KWG0706512-3	70	73
Lab Control Sample	KWG0706512-1	88	90
Duplicate Lab Control Sample	KWG0706512-2	100	100

Surrogate Recovery Control Limits (%)

Sur1 =	o-Terphenyl	65-135
Sur2 =	n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/11/2007
Date Analyzed: 06/12/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel and Residual Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0706512

	Lab Control Sample KWG0706512-1 Lab Control Spike			Duplicate Lab Control Sample KWG0706512-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C12 - C24 DRO	1120	1600	70	1320	1600	82	65-135	16	35
C24 - C36 RRO	682	800	85	787	800	98	65-135	14	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/11/2007
Sample Matrix:	Water	**Date Analyzed:**	06/12/2007
		Time Analyzed:	23:32

Method Blank Summary
Diesel and Residual Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC21\DATA\061207.TAR\0612F082.D
Lab Code:	KWG0706512-3	**Instrument ID:**	GC21
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0706512

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CL	K0704852-002	J:\GC21\DATA\061207.TAR\0612F072.D	06/12/07	21:49
231GW29CL	K0704852-003	J:\GC21\DATA\061207.TAR\0612F074.D	06/12/07	22:10
FM14EX07GW102CL	K0704852-004	J:\GC21\DATA\061207.TAR\0612F076.D	06/12/07	22:30
Lab Control Sample	KWG0706512-1	J:\GC21\DATA\061207.TAR\0612F078.D	06/12/07	22:51
Duplicate Lab Control Sample	KWG0706512-2	J:\GC21\DATA\061207.TAR\0612F080.D	06/12/07	23:12

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706512-1	**Lab Code:**	KWG0706512-2
File ID:	J:\GC21\DATA\061207.TAR\0612F078.D	**File ID:**	J:\GC21\DATA\061207.TAR\0612F080.D
Instrument ID:	GC21	**Instrument ID:**	GC21
Date Extracted:	06/11/2007	**Date Extracted:**	06/11/2007
Date Analyzed:	06/12/2007	**Date Analyzed:**	06/12/2007
Time Analyzed:	22:51	**Time Analyzed:**	23:12

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0706512

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CL	K0704852-002	J:\GC21\DATA\061207.TAR\0612F072.D	06/12/07	21:49
231GW29CL	K0704852-003	J:\GC21\DATA\061207.TAR\0612F074.D	06/12/07	22:10
FM14EX07GW102CL	K0704852-004	J:\GC21\DATA\061207.TAR\0612F076.D	06/12/07	22:30
Method Blank	KWG0706512-3	J:\GC21\DATA\061207.TAR\0612F082.D	06/12/07	23:32

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**29000**	Y	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	**700**	L	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	129	65-135	06/12/07	Acceptable
n-Triacontane	71	65-135	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F072.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 21:49
Date Quantitated: 07/19/2007 14:59
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMG

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Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0707881	**Prep Lot:**	KWG0706512	**Report Group:**	K0704852
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	607757	**Prep Date:**	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\061207.TAR\0612F082.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\061207.TAR\0612F072.D			**Instrument:**	GC21
Acqu Date:	06/12/2007 21:49	**Quant Date:**	07/19/2007 14:59	**Vial:**	83
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.53	0.01	56793	32.27	129	65-135	OK
n-Triacontane	7.70	0.00	28330	17.80	71	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	20250699	15,310	29000	Y	
C24 - C36 RRO	6.45	?	360712	367.37	700	L	

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

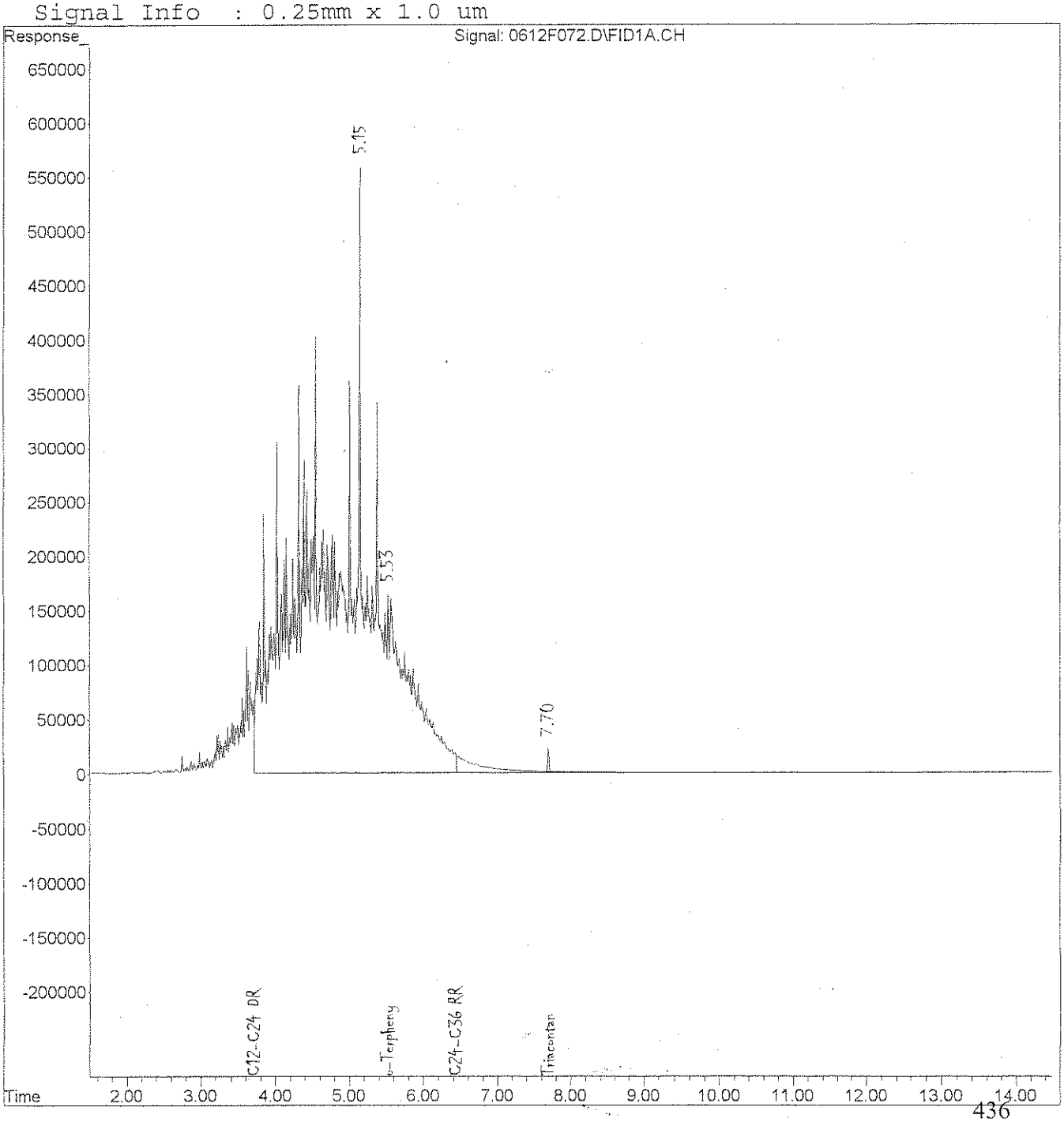
435

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F072.D Vial: 83
Acq On : 12 Jun 2007 9:49 pm Operator: pm
Sample : K0704852-002 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



436

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	97	65-135	06/12/07	Acceptable
n-Triacontane	99	65-135	06/12/07	Acceptable

Comments:

437

Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F074.D	**Date Acquired:**	06/12/2007 22:10
Lab ID:	K0704852-003	**Date Quantitated:**	07/19/2007 15:38
RunType:	SMPL	**Batch ID:**	KWG0707881
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMh

Quantitation Report

Bottle ID:		Tier:	V	Matrix:	WATER
Prod Code:	8015B DRO_RRO	Collect Date:	06/06/2007	Receive Date:	06/07/2007

Analysis Lot:	KWG0707881	Prep Lot:	KWG0706512	Report Group:	K0704852
Analysis Method:	8015B	Prep Method:	EPA 3510C		
Prep Ref:	607758	Prep Date:	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:	Diesel and Residual Range Organics	Report List ID:	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\061207.TAR\0612F082.D	Quant based on Report List	

Data File:	J:\GC21\DATA\061207.TAR\0612F074.D			Instrument:	GC21
Acqu Date:	06/12/2007 22:10	Quant Date:	07/19/2007 15:38	Vial:	84
Run Type:	SMPL			Dilution:	1.0
Lab ID:	K0704852-003			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52	0.00	42862	24.36	97	65-135	OK
n-Triacontane	7.70	0.00	39209m	24.64	99	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	3316	2.51	50	U	
C24 - C36 RRO	6.45	?	9372	9.55	300	U	

Prep Amount:	1050 ml	Dilution:	1.0
Prep Final Vol:	2.0 ml	Unit Factor:	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

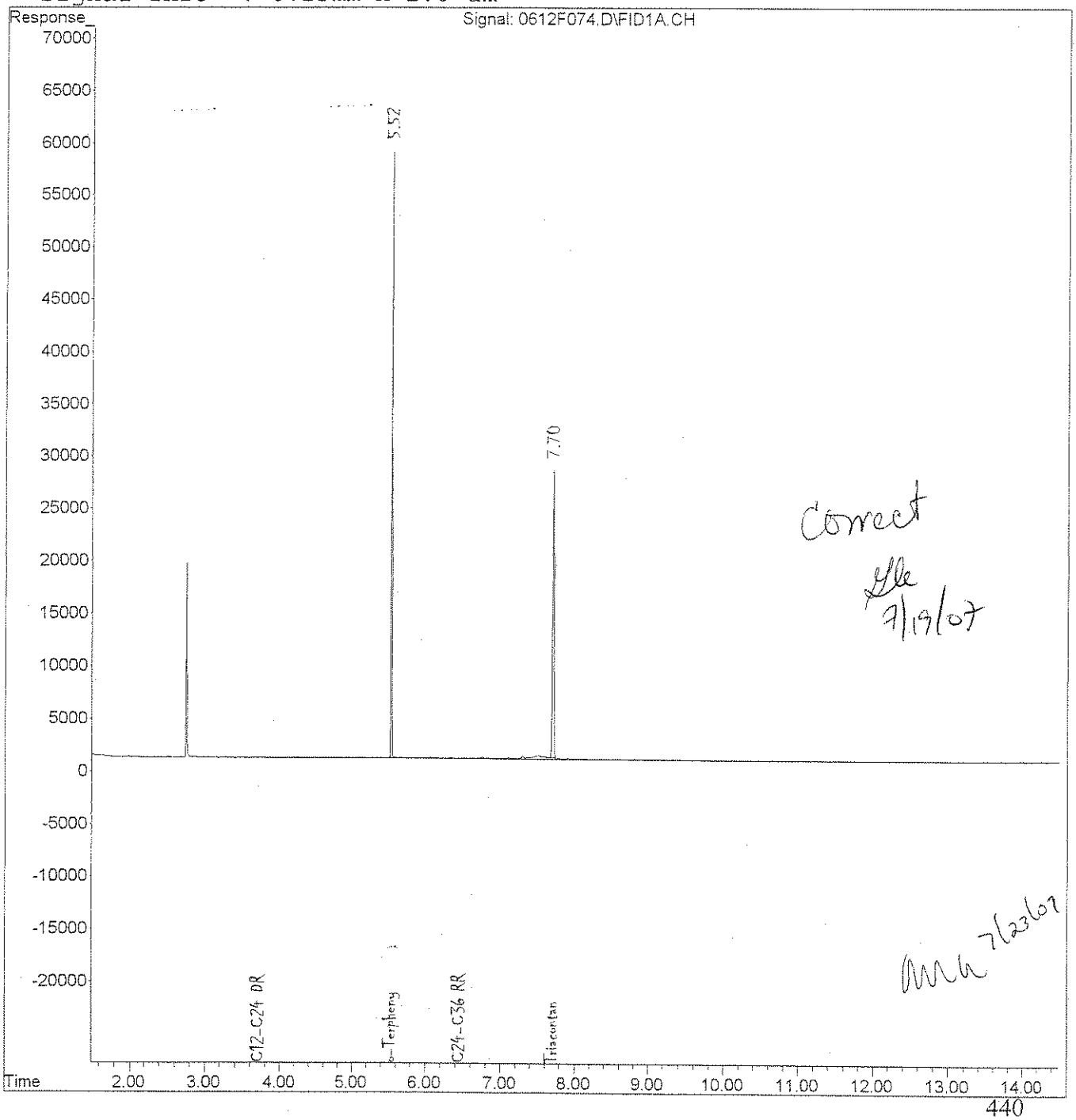
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F074.D Vial: 84
Acq On : 12 Jun 2007 10:10 pm Operator: pm
Sample : K0704852-003 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 15:38 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



440

0612F074.D 0719TAR.M Thu Jul 19 15:55:19 2007 Page 1

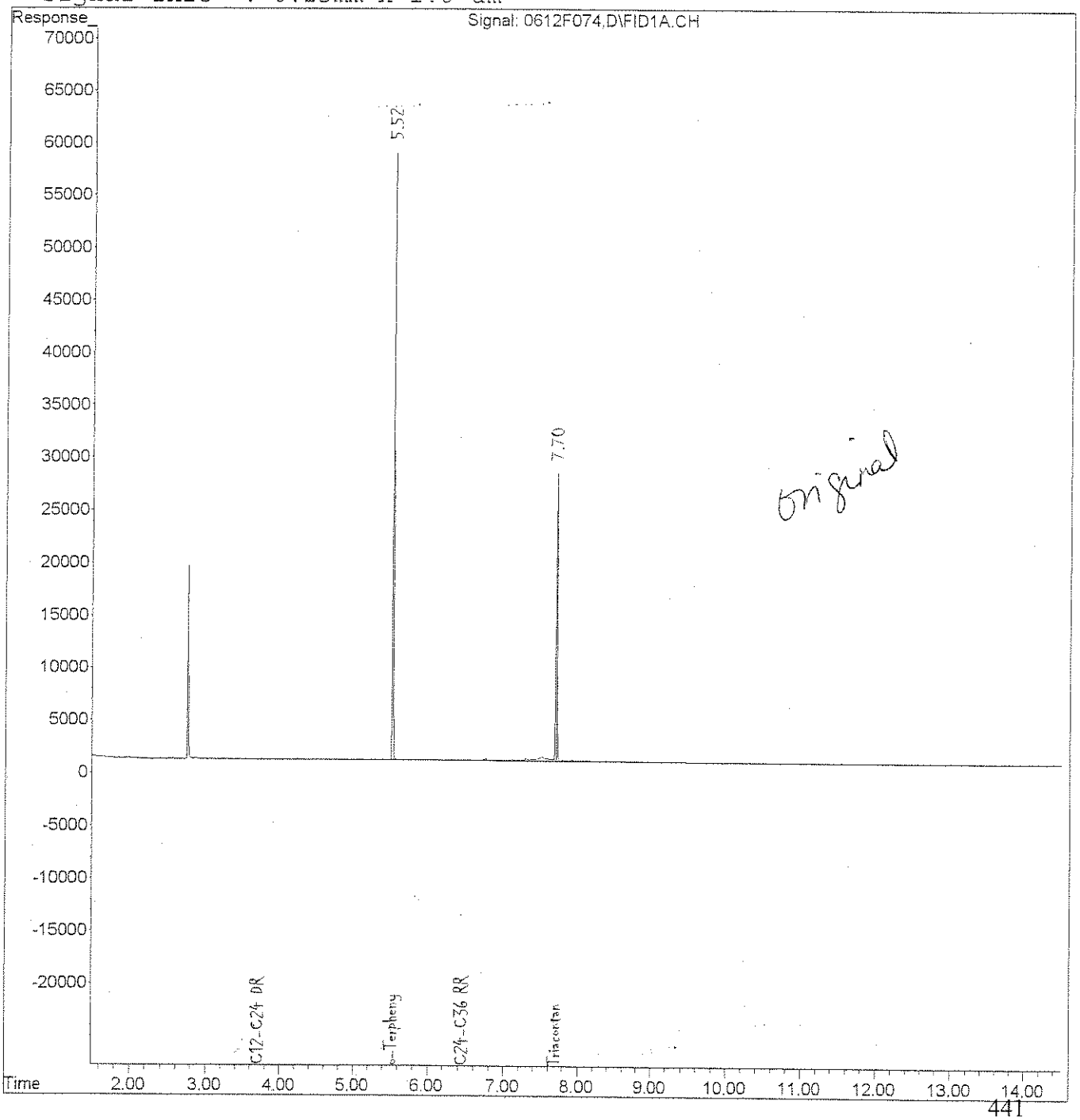
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F074.D
Acq On : 12 Jun 2007 10:10 pm
Sample : K0704852-003
Misc :
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Vial: 84
Operator: pm
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

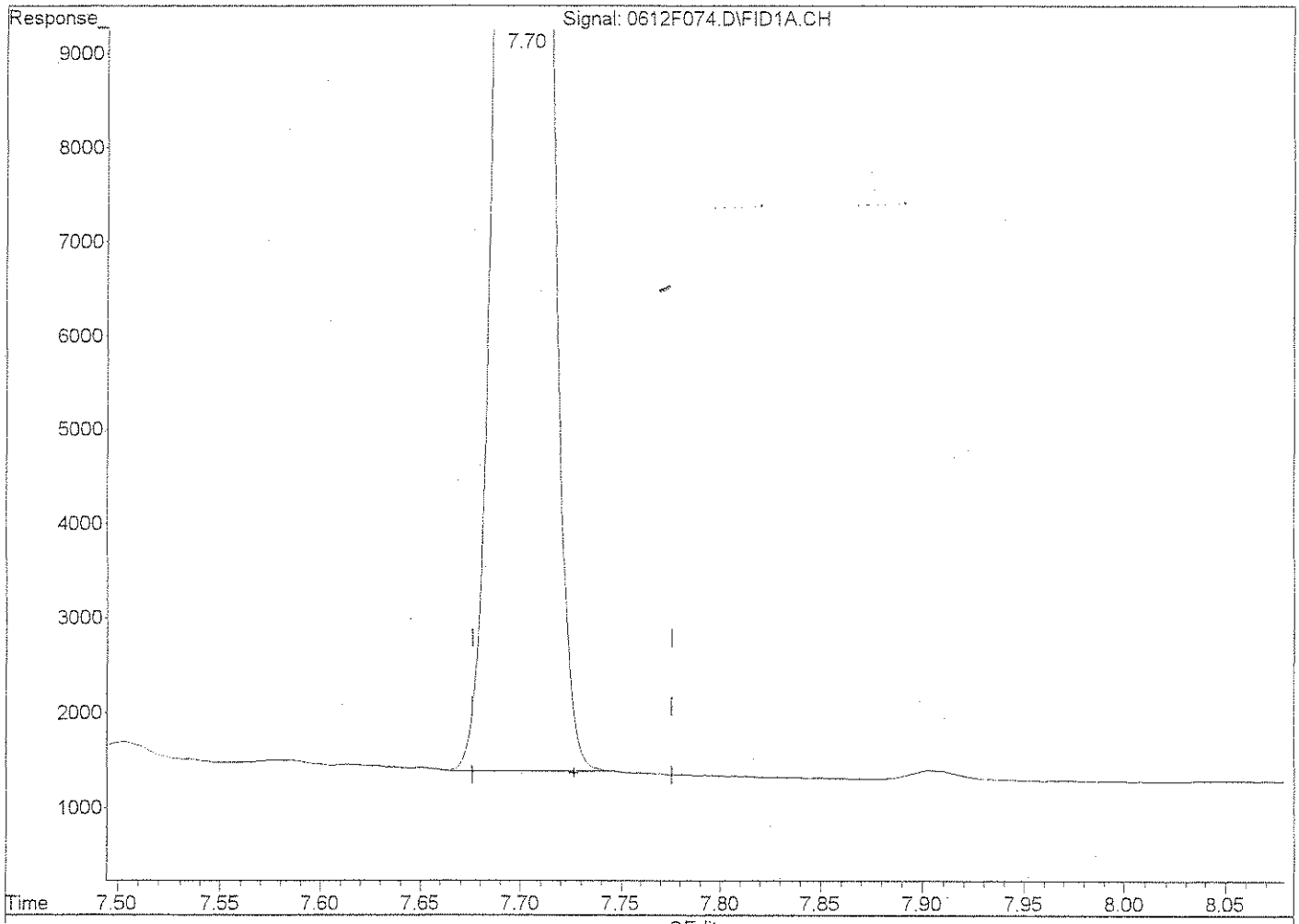


441

Quantitation Report (Qedit)

Data File : J:\GC21\DATA\061207.TAR\0612F074.D Vial: 84
Acq On : 12 Jun 2007 10:10 pm Operator: pm
Sample : K0704852-003 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Multiple Level Calibration



(2) Triacontane (C-30) (S)

7.70min 24.636ppm m

response 39209

Correct
7/19/07

7/23/07

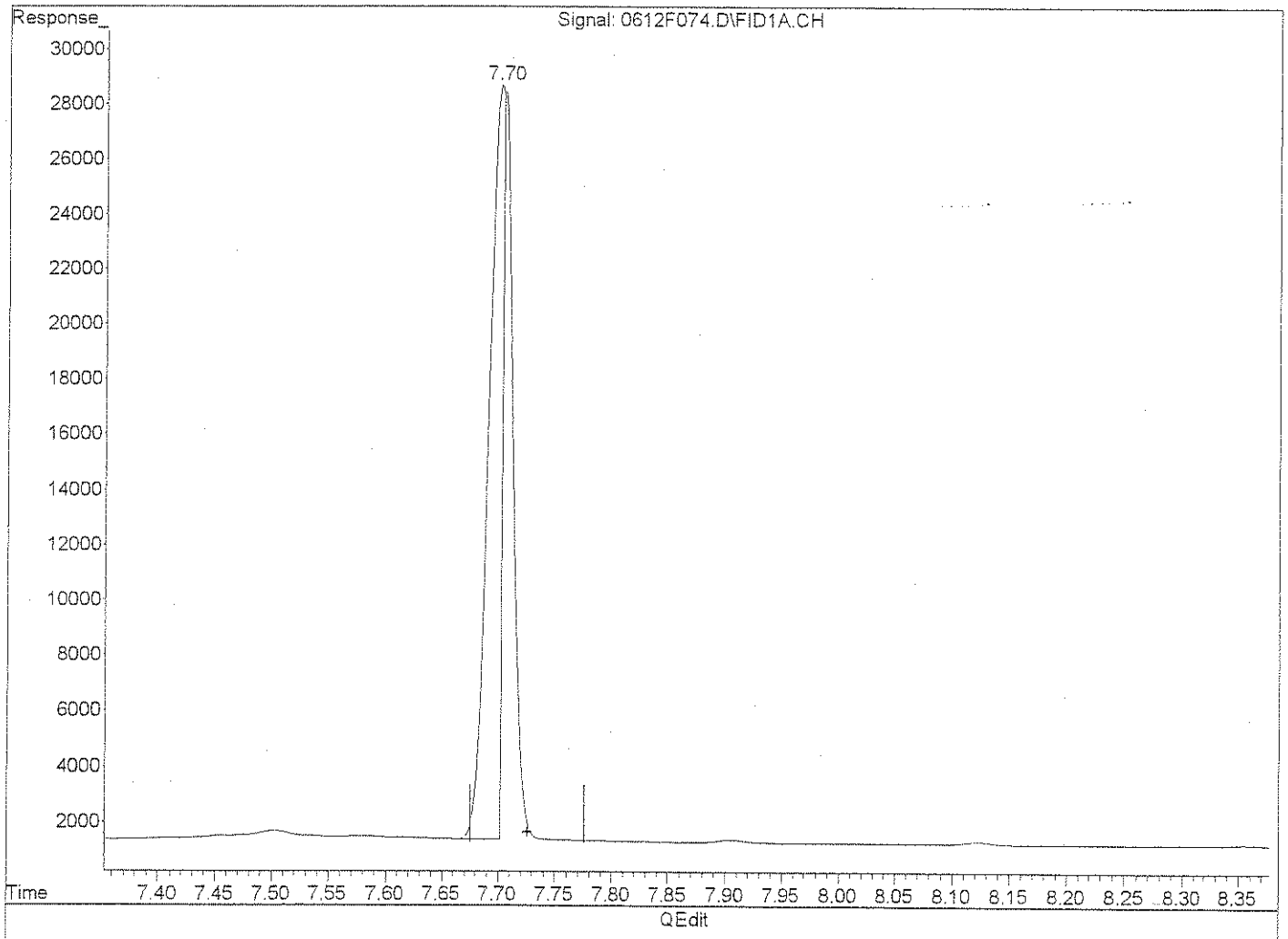
(+) = Expected Retention Time 442

0612F074.D 0719TAR.M Thu Jul 19 15:38:29 2007

Quantitation Report (Qedit)

Data File : J:\GC21\DATA\061207.TAR\0612F074.D Vial: 84
Acq On : 12 Jun 2007 10:10 pm Operator: pm
Sample : K0704852-003 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Multiple Level Calibration



(2) Triacontane (C-30) (S)

7.70min 14.567ppm

response 23183

under integrated
7/19/07

7/23/07

(+) = Expected Retention Time 443

0612F074.D 0719TAR.M Thu Jul 19 15:38:14 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Diesel and Residual Range Organics

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	65	65-135	06/12/07	Acceptable
n-Triacontane	66	65-135	06/12/07	Acceptable

Comments:

444

Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F076.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 22:30
Date Quantitated: 07/19/2007 15:38
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 7/17/07

Secondary Review:

445

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0707881	**Prep Lot:**	KWG0706512	**Report Group:**	K0704852
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	607756	**Prep Date:**	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:	Diesel and Residual Range Organics	**Report List ID:**	LJ7895
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\061207.TAR\0612F082.D	**Quant based on Report List**	

Data File:	J:\GC21\DATA\061207.TAR\0612F076.D			**Instrument:**	GC21
Acqu Date:	06/12/2007 22:30	**Quant Date:**	07/19/2007 15:38	**Vial:**	85
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-004			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52	0.00	28511	16.20	65	65-135	OK
n-Triacontane	7.70	0.00	26068m	16.38	66	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	1763	1.33	50	U	
C24 - C36 RRO	6.45	?	3392	3.46	300	U	

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

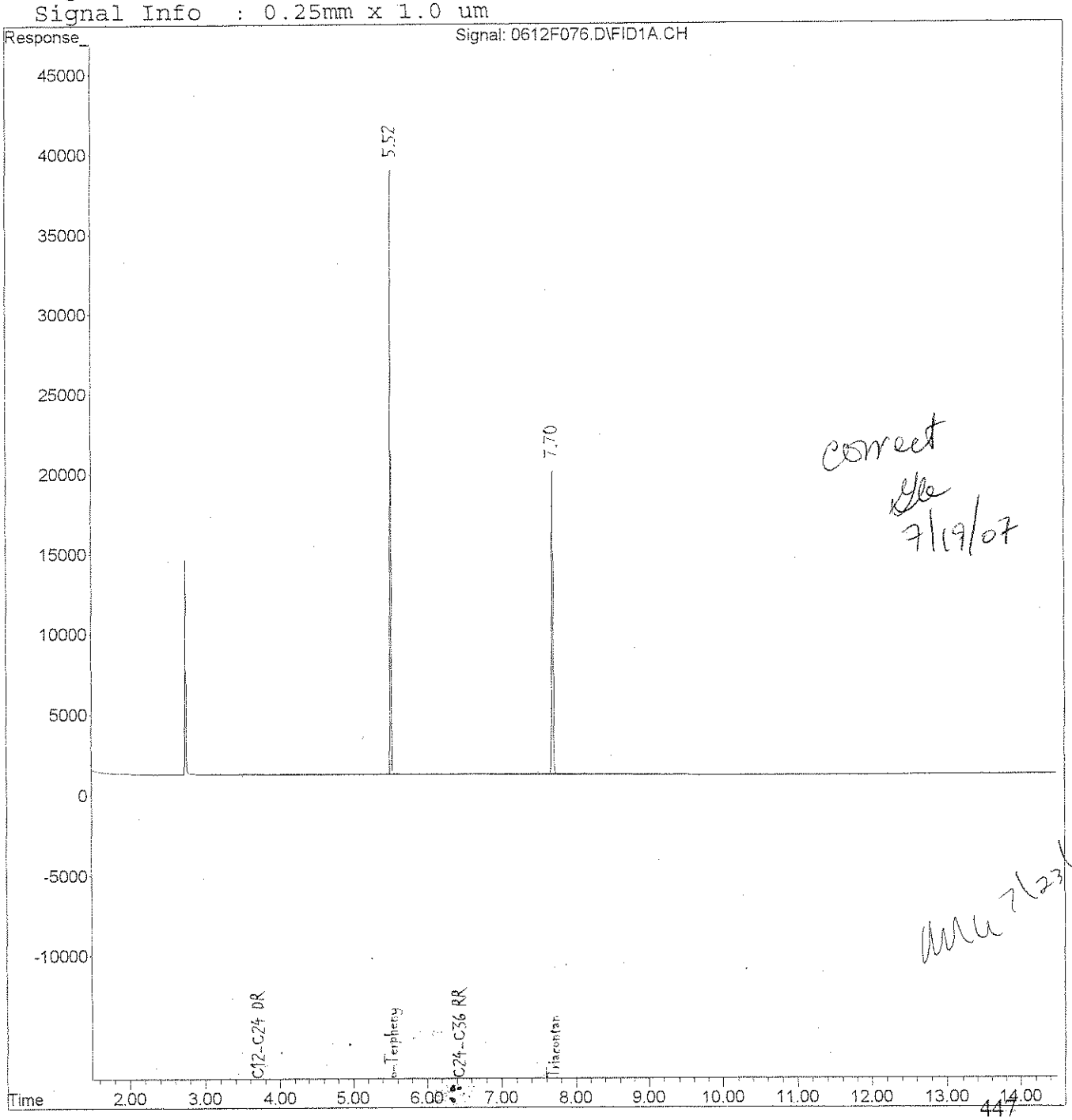
Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F076.D
Acq On : 12 Jun 2007 10:30 pm
Sample : K0704852-004
Misc :
IntFile : rteint.p
Quant Time: Jul 19 15:38 2007 Quant Results File: 0719TAR.RES

Vial: 85
Operator: pm
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



correct
7/19/07

7/23/07

447

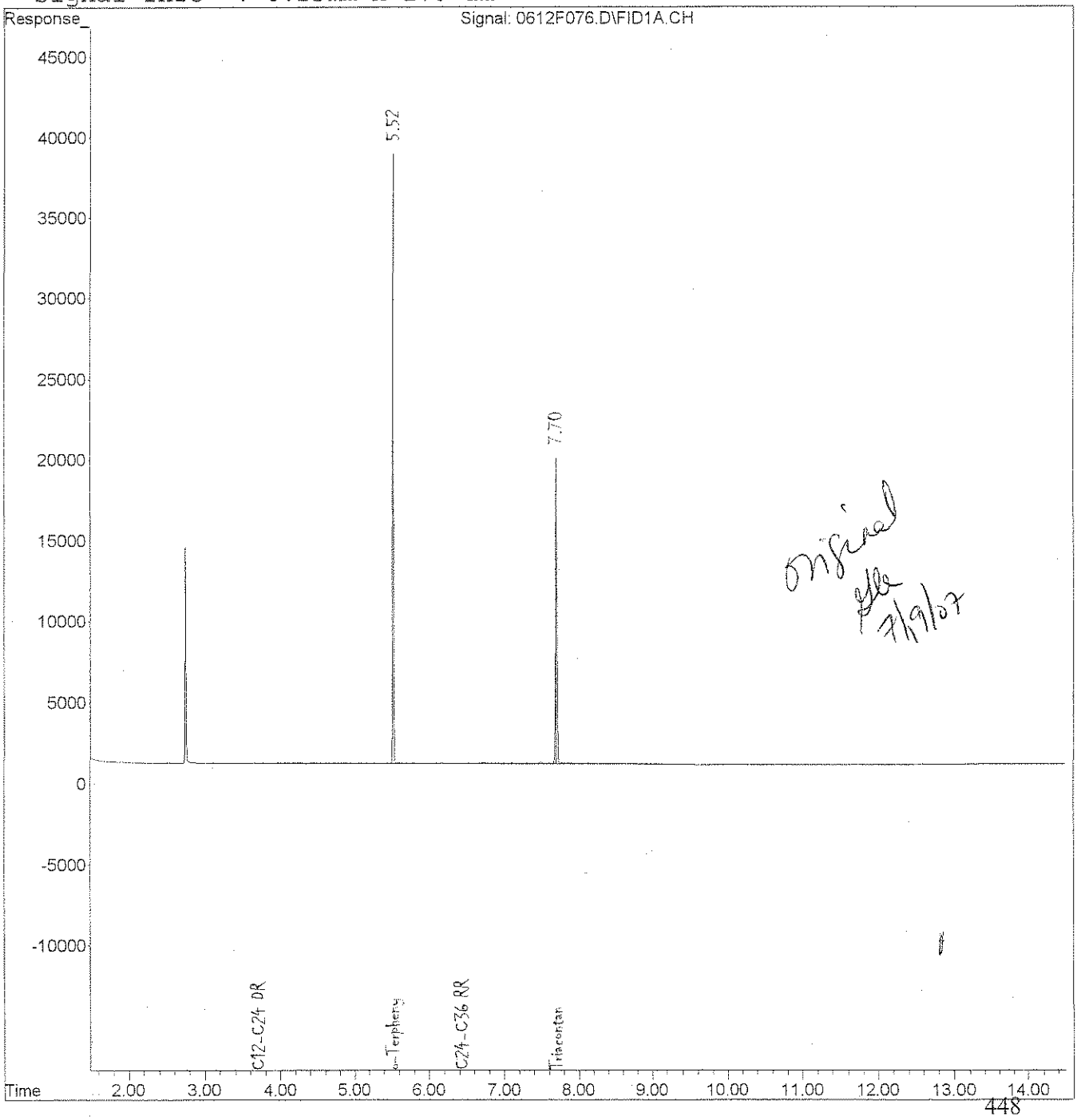
0612F076.D 0719TAR.M Thu Jul 19 15:55:21 2007 Page 1

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F076.D Vial: 85
Acq On : 12 Jun 2007 10:30 pm Operator: pm
Sample : K0704852-004 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



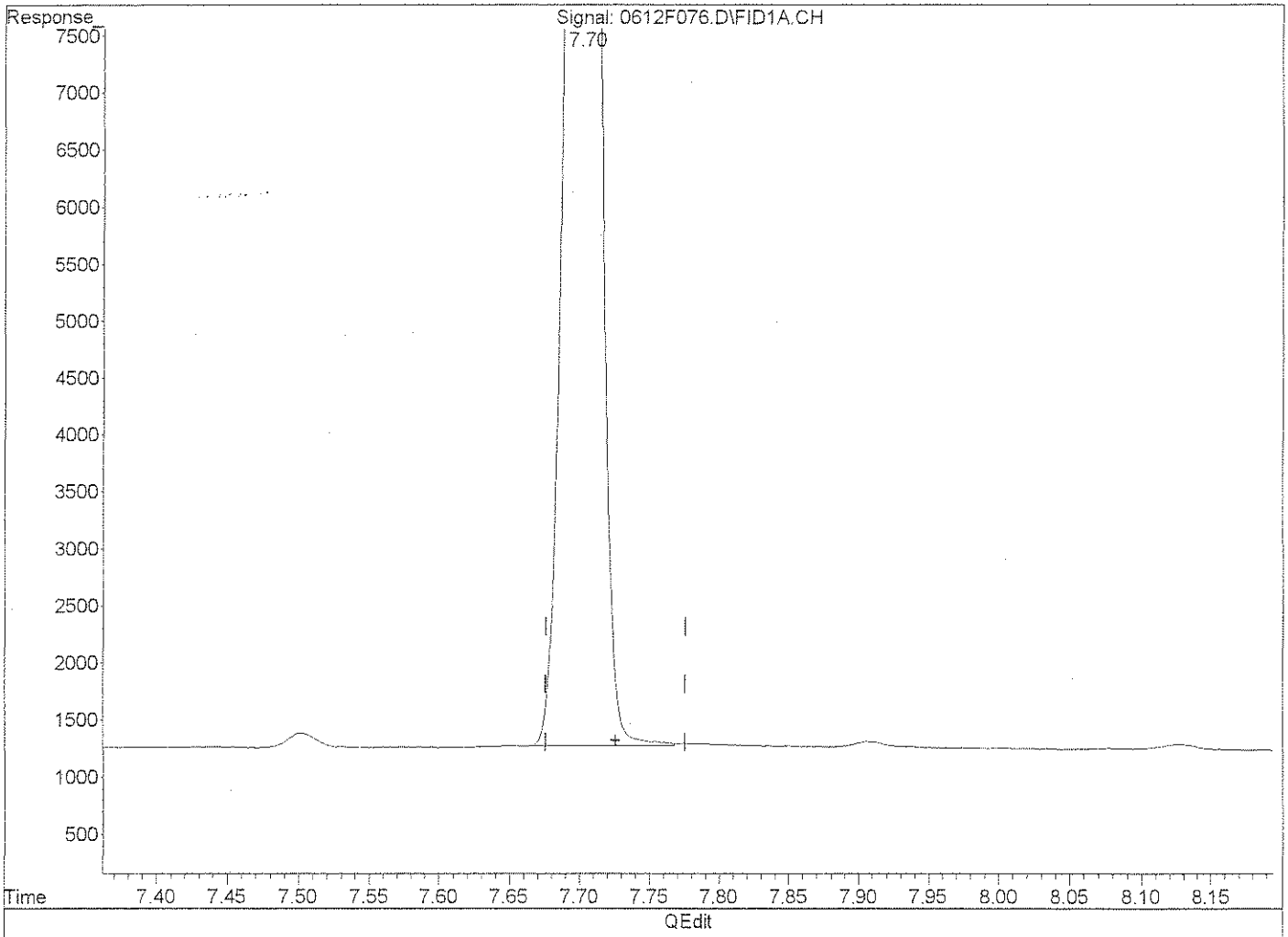
original file 7/9/07

448

Quantitation Report (Qedit)

Data File : J:\GC21\DATA\061207.TAR\0612F076.D Vial: 85
Acq On : 12 Jun 2007 10:30 pm Operator: pm
Sample : K0704852-004 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Multiple Level Calibration



(2) Triacontane (C-30) (S)

7.70min 16.379ppm m

response 26068

Correct
7/19/07

(+) = Expected Retention Time

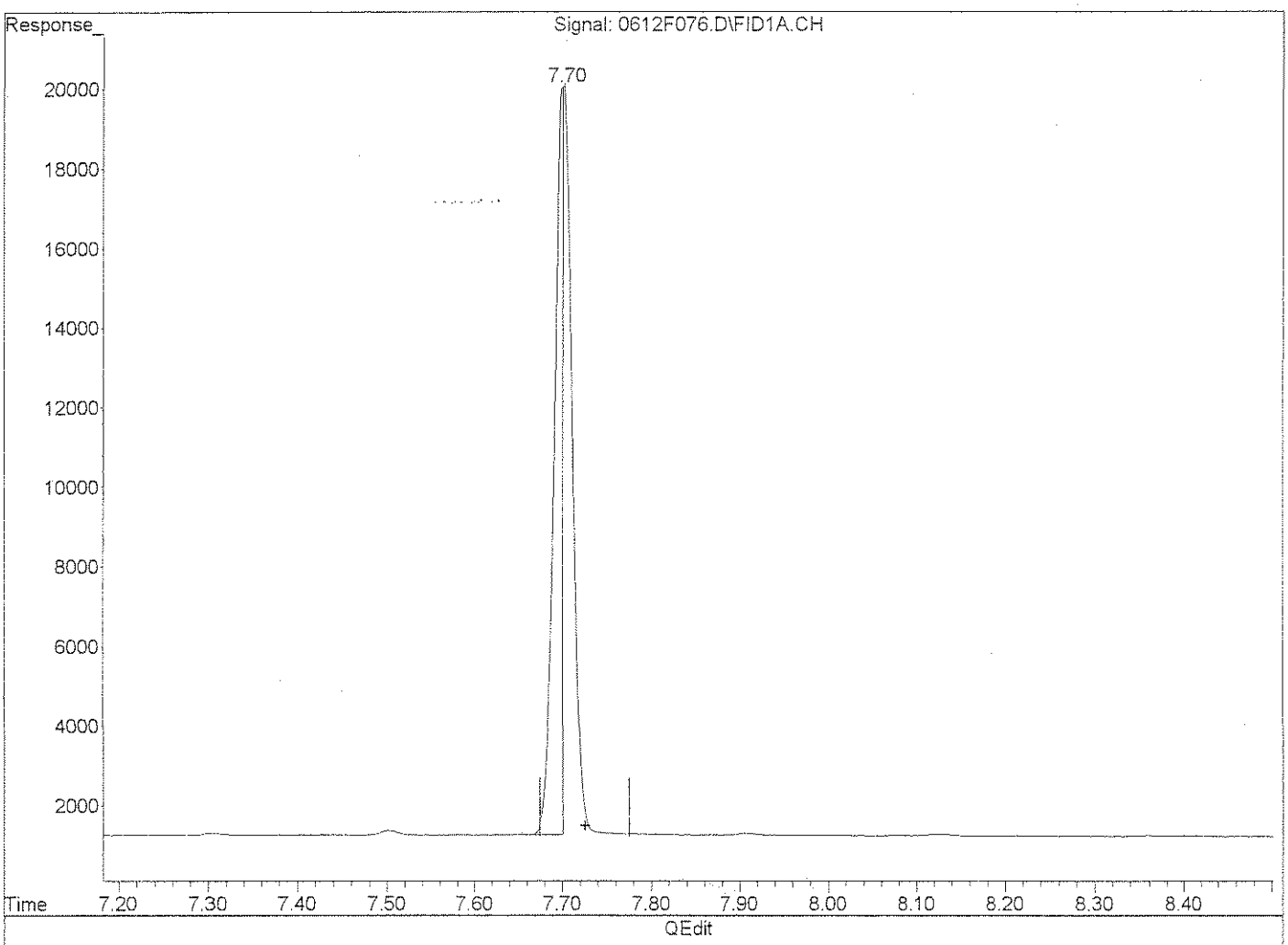
449

0612F076.D 0719TAR.M Thu Jul 19 15:39:04 2007

Quantitation Report (Qedit)

Data File : J:\GC21\DATA\061207.TAR\0612F076.D Vial: 85
Acq On : 12 Jun 2007 10:30 pm Operator: pm
Sample : K0704852-004 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Multiple Level Calibration



(2) Triacontane (C-30) (S)

7.70min 7.813ppm

response 12434

Under-integrated
Sle
7/19/07

MLL 7/23/07

450

(+) = Expected Retention Time

0612F076.D 0719TAR.M Thu Jul 19 15:38:49 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706512-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	ND	U	50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	ND	U	300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	70	65-135	06/12/07	Acceptable
n-Triacontane	73	65-135	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F082.D
Lab ID: KWG0706512-3
RunType: MB
Matrix: WATER

Date Acquired: 06/12/2007 23:32
Date Quantitated: 07/19/2007 14:59
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review: 452

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0707881	**Prep Lot:**	KWG0706512	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	607761	**Prep Date:**	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\061207.TAR\0612F082.D			**Instrument:**	GC21
Acqu Date:	06/12/2007 23:32	**Quant Date:**	07/19/2007 14:59	**Vial:**	88
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706512-3			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52	0.00	30597	17.39	70	65-135	OK
n-Triacontane	7.70	0.00	28941	18.19	73	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	2621	1.98	50	U	
C24 - C36 RRO	6.45	?	3564	3.63	300	U	

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

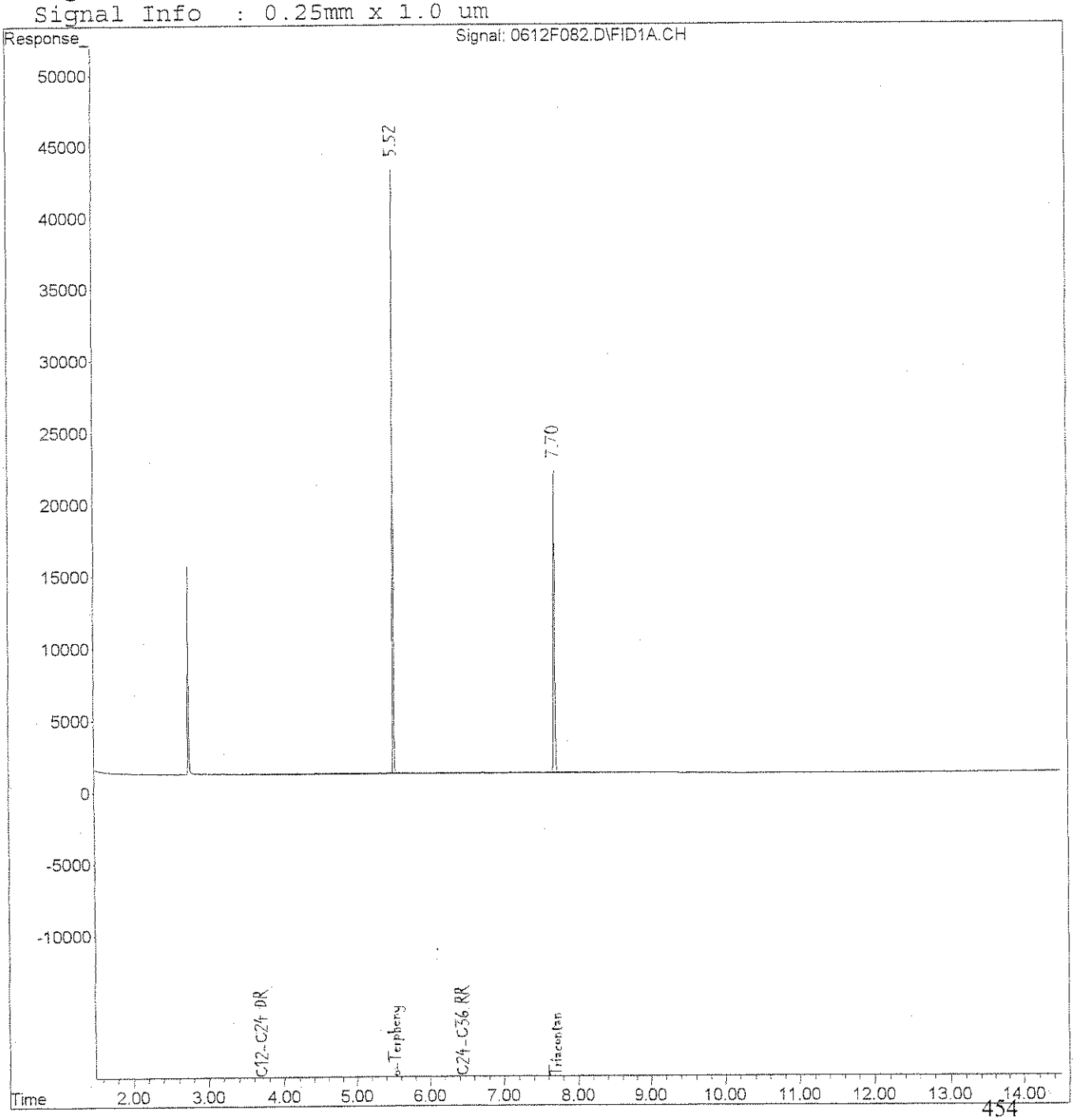
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F082.D
Acq On : 12 Jun 2007 11:32 pm
Sample : KWG6512-MBSGT
Misc :
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Vial: 88
Operator: pm
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



454

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706512-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1120**		50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	**682**		300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	88	65-135	06/12/07	Acceptable
n-Triacontane	90	65-135	06/12/07	Acceptable

Comments:

455

Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F078.D	**Date Acquired:**	06/12/2007 22:51
Lab ID:	KWG0706512-1	**Date Quantitated:**	07/19/2007 14:59
RunType:	LCS	**Batch ID:**	KWG0707881
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review:

456

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0707881	**Prep Lot:**	KWG0706512	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	607759	**Prep Date:**	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\061207.TAR\0612F082.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\061207.TAR\0612F078.D			**Instrument:**	GC21
Acqu Date:	06/12/2007 22:51	**Quant Date:**	07/19/2007 14:59	**Vial:**	86
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706512-1			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl	5.52	0.00	38896	22.10	88	65-135	OK	
n-Triacontane	7.70	0.00	35710	22.44	90	65-135	OK	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	743620	562.21	1120		
C24 - C36 RRO	6.45	?	335056	341.24	682		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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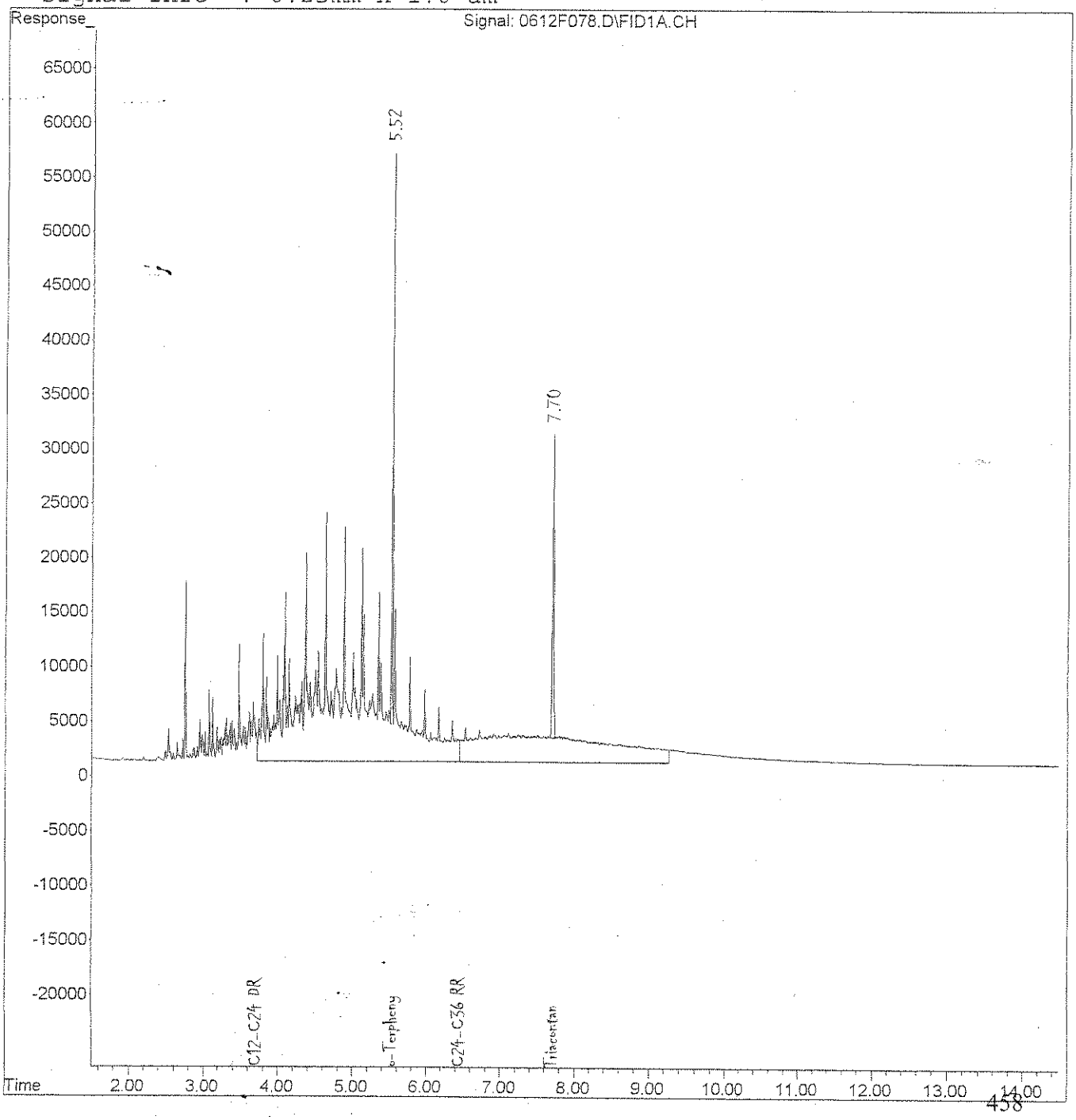
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F078.D Vial: 86
Acq On : 12 Jun 2007 10:51 pm Operator: pm
Sample : KWG6512-LCSSGT Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Diesel and Residual Range Organics

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706512-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C12 - C24 DRO	**1320**		50	1	06/11/07	06/12/07	KWG0706512	
C24 - C36 RRO	**787**		300	1	06/11/07	06/12/07	KWG0706512	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
o-Terphenyl	100	65-135	06/12/07	Acceptable
n-Triacontane	100	65-135	06/12/07	Acceptable

Comments:

Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F080.D	**Date Acquired:**	06/12/2007 23:12
Lab ID:	KWG0706512-2	**Date Quantitated:**	07/19/2007 14:59
RunType:	DLCS	**Batch ID:**	KWG0707881
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review:

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Printed: 07/19/2007 15:50:52

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0707881	**Prep Lot:**	KWG0706512	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 3510C		
Prep Ref:	607760	**Prep Date:**	06/11/2007		

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:	J:\GC21\DATA\061207.TAR\0612F082.D	**Quant based on Method**	

Data File:	J:\GC21\DATA\061207.TAR\0612F080.D			**Instrument:**	GC21
Acqu Date:	06/12/2007 23:12	**Quant Date:**	07/19/2007 14:59	**Vial:**	87
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0706512-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52	0.00	44181	25.11	100	65-135	OK
n-Triacontane	7.70	0.00	39963	25.11	100	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	871502	658.89	1320		
C24 - C36 RRO	6.45	?	386566	393.70	787		

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2.0 ml	**Unit Factor:**	1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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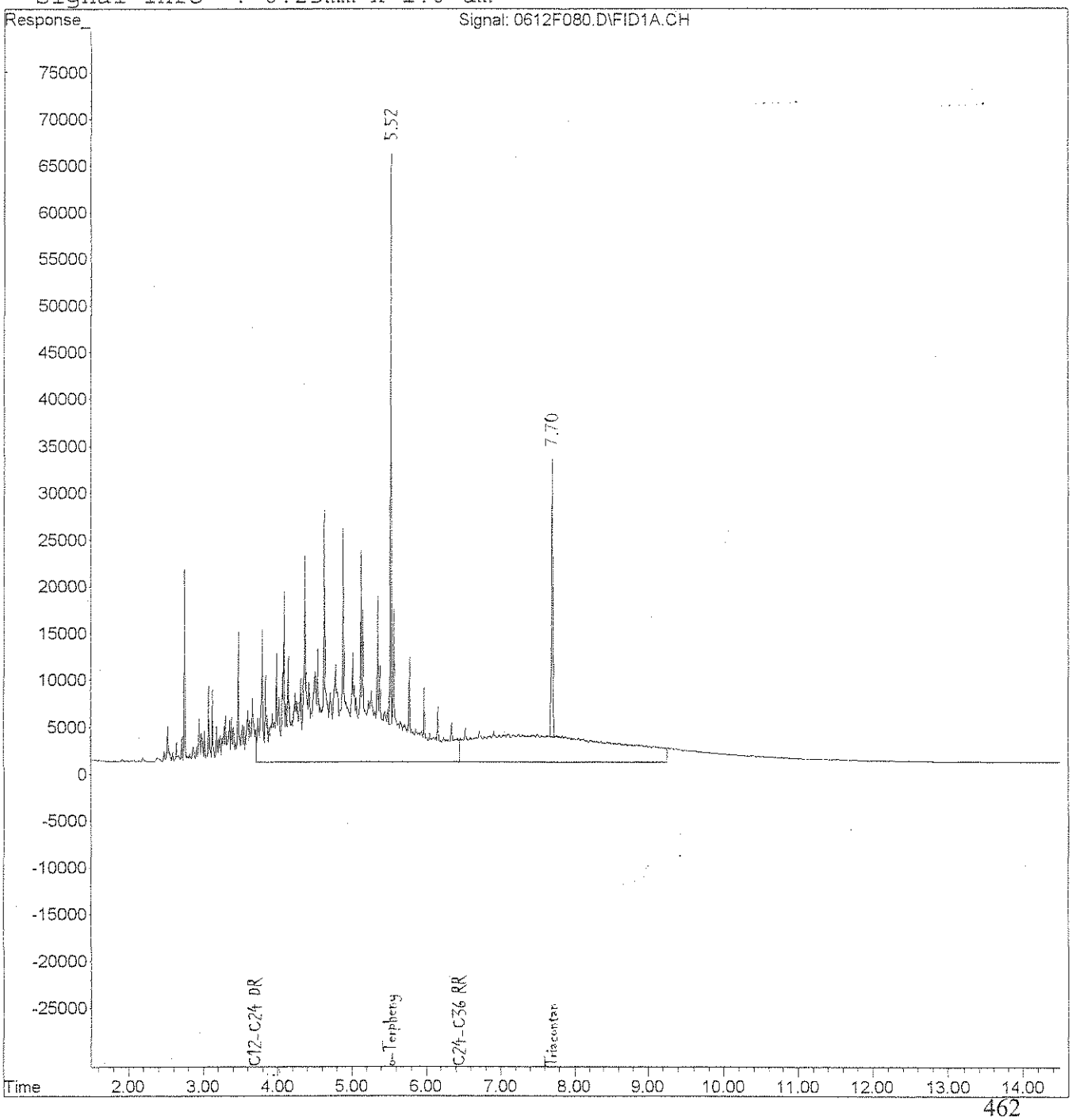
Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F080.D Vial: 87
Acq On : 12 Jun 2007 11:12 pm Operator: pm
Sample : KWG6512-DLCSSGT Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6445
Instrument ID: GC21

Column: ZB-1 15m

Level ID	File ID	Level ID	File ID
A	J:\GC21\DATA\061207.TAR\0601F054.D	H	J:\GC21\DATA\061207.TAR\0601F068.D
B	J:\GC21\DATA\061207.TAR\0601F056.D	I	J:\GC21\DATA\061207.TAR\0601F070.D
C	J:\GC21\DATA\061207.TAR\0601F058.D	J	J:\GC21\DATA\061207.TAR\0601F072.D
D	J:\GC21\DATA\061207.TAR\0601F060.D	K	J:\GC21\DATA\061207.TAR\0601F074.D
E	J:\GC21\DATA\061207.TAR\0601F062.D	L	J:\GC21\DATA\061207.TAR\0601F076.D
F	J:\GC21\DATA\061207.TAR\0601F064.D	M	J:\GC21\DATA\061207.TAR\0601F078.D
G	J:\GC21\DATA\061207.TAR\0601F066.D	N	J:\GC21\DATA\061207.TAR\0601F082.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
o-Terphenyl				B	2.5	1730				D	10	1770			
	F	25	1750				H	100	1820				J	250	1760
										N	1.0	1720			
n-Triacontane				B	2.5	1450				D	10	1590			
	F	25	1640				H	100	1600				J	250	1590
										N	1.0	1670			
C12 - C24 DRO				B	50	1280				D	200	1310			
	F	500	1310				H	2000	1370				J	5000	1330
				L	20000	1380	M	50000	1340	N	20	1260			
C24 - C36 RRO	A	20	877				C	50	949				E	200	994
				G	500	1030				I	2000	1030			
	K	5000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007

Initial Calibration Summary
Diesel and Residual Range Organics

Calibration ID: CAL6445
Instrument ID: GC21

Column: ZB-1 15m

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
o-Terphenyl	SURR	AverageRF	% RSD	2.1		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	4.8		≤ 20
C12 - C24 DRO	MS	AverageRF	% RSD	3.0		≤ 20
C24 - C36 RRO	MS	AverageRF	% RSD	6.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/01/2007
Date Analyzed: 06/01/2007

Second Source Calibration Verification
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6445
Units: ppm

File ID: J:\GC21\DATA\061207.TAR\0601F086.D
J:\GC21\DATA\061207.TAR\0601F088.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C12 - C24 DRO	1000	930	1320	1230	-7	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	920	982	905	-8	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

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DATA ANALYSIS PARAMETERS

Method Name: J:\GC21\METHODS\0719TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: Yes
File: No

Generate Report During Run Method: No

7/19/07

0719TAR aka CAL6445
Calibration Last Updated: Thu Jul 19 14:15:07 2007

Reference Window: 10.00 Minutes
Non-Reference Window: 5.00 Minutes
Correlation Window: 0.02 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

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1) o-Terphenyl ( )
Ret. Time 5.54 min., Extract & Integrate from 5.49 to 5.59 min.

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Lvl	ID	Conc (ppm)	Response
D/S		50.000	-1

G/O	not used for this compound	
1	1.000	1723
2	2.500	4321
3	10.000	17725
4	25.000	43664
5	100.000	182315
6	250.000	441244
7	not used for this compound	
8	not used for this compound	

Curve Fit: Avg. RF

---

2) Triacontane (C-30) ( )

Ret. Time 7.73 min., Extract & Integrate from 7.68 to 7.78 min.

Lvl	ID	Conc (ppm)	Response
D/S		50.000	-1
G/O		not used for this compound	
1		1.000	1672
2		2.500	3624
3		10.000	15919
4		25.000	40995
5		100.000	160259
6		250.000	398298
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

3) C12-C24 DRO ( )

Ret. Time 3.72 min., Extract & Integrate from 3.72 to 6.45 min.

Lvl	ID	Conc (ppm)	Response
D/S		1000.000	-1
G/O		not used for this compound	
1		20.000	25219
2		50.000	64079
3		200.000	262525
4		500.000	655701
5		2000.000	2734927
6		5000.000	6662158
7		20000.000	27523114
8		50000.000	66940546

9/19/07

Curve Fit: Avg. RF

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4) C24-C36 RRO ( )

Ret. Time 6.45 min., Extract & Integrate from 6.45 to 9.26 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		1000.000	-1
1		20.000	17539
2		50.000	47430
3		200.000	198776
4		500.000	516853
5		2000.000	2057447
6		5000.000	5046848

7 not used for this compound
8 not used for this compound

Curve Fit: Avg. RF

---

5) Ethylbenzene ( )
Ret. Time 2.49 min., Extract & Integrate from 2.44 to 2.54 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

6) p,m-Xylenes ( )
Ret. Time 2.53 min., Extract & Integrate from 2.48 to 2.58 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Gle 7/19/07

Curve Fit: Avg. RF

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7) o-Xylene ( )
Ret. Time 2.62 min., Extract & Integrate from 2.57 to 2.67 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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8) a-Pinene ( )
Ret. Time 2.83 min., Extract & Integrate from 2.78 to 2.88 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

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9) b-Pinene ( )
Ret. Time 2.99 min., Extract & Integrate from 2.94 to 3.04 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

10) 1,2,3-Trimethylbenzene ( )
Ret. Time 3.12 min., Extract & Integrate from 3.07 to 3.17 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

11) Fluoranthene ( )
Ret. Time 5.84 min., Extract & Integrate from 5.79 to 5.89 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	

2 not used for this compound
3 not used for this compound
4 not used for this compound
5 not used for this compound
6 not used for this compound
7 not used for this compound
8 not used for this compound

Curve Fit: Avg. RF

---

12) Pyrene ( )
Ret. Time 5.95 min., Extract & Integrate from 5.90 to 6.00 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

Curve Fit: Avg. RF

---

13) Pristane ( )
Ret. Time 5.07 min., Extract & Integrate from 5.02 to 5.12 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

YB 7/19/07

Curve Fit: Avg. RF

---

14) Phytane ( )
Ret. Time 5.31 min., Extract & Integrate from 5.26 to 5.36 min.

Lvl	ID	Conc (ppm)	Response
D/S		not used for this compound	
G/O		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	
8		not used for this compound	

END OF DATA ANALYSIS PARAMETERS

Thu Jul 19 14:54:20 2007

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F054.D Vial: 12
Acq On : 01 Jun 2007 3:07 pm Operator: PM
Sample : 20 HCSV8-14J Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:03 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.45	17539	35.776 ppm

Ale 7/19/07

MH

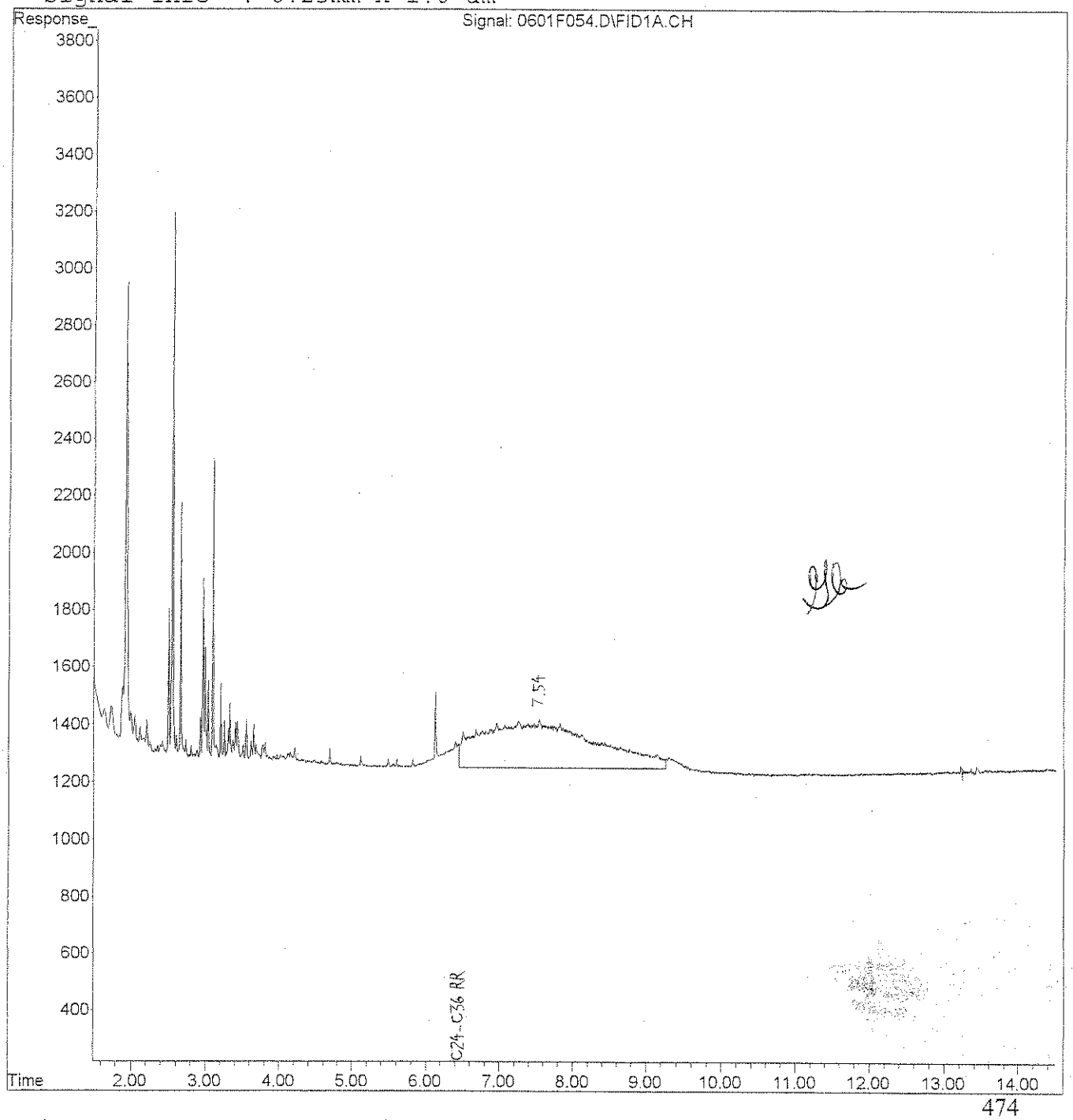
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F054.D Vial: 12
Acq On : 01 Jun 2007 3:07 pm Operator: PM
Sample : 20 HCSV8-14J Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:40 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



474

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F056.D Vial: 13
Acq On : 01 Jun 2007 3:27 pm Operator: PM
Sample : 50/2.5 HCSV8-13Q Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:34:56 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	4321	3.152 ppm
Spiked Amount 50.000	Recovery	=	6.30%
2) S Triacontane (C-30)	7.73	3624	3.408 ppm
Spiked Amount 50.000	Recovery	=	6.82%
Target Compounds			
3) H C12-C24 DRO	3.72	64079	57.905 ppm

7/19/07

MLG

475

(f)=RT Delta > 1/2 Window (m)=manual int.

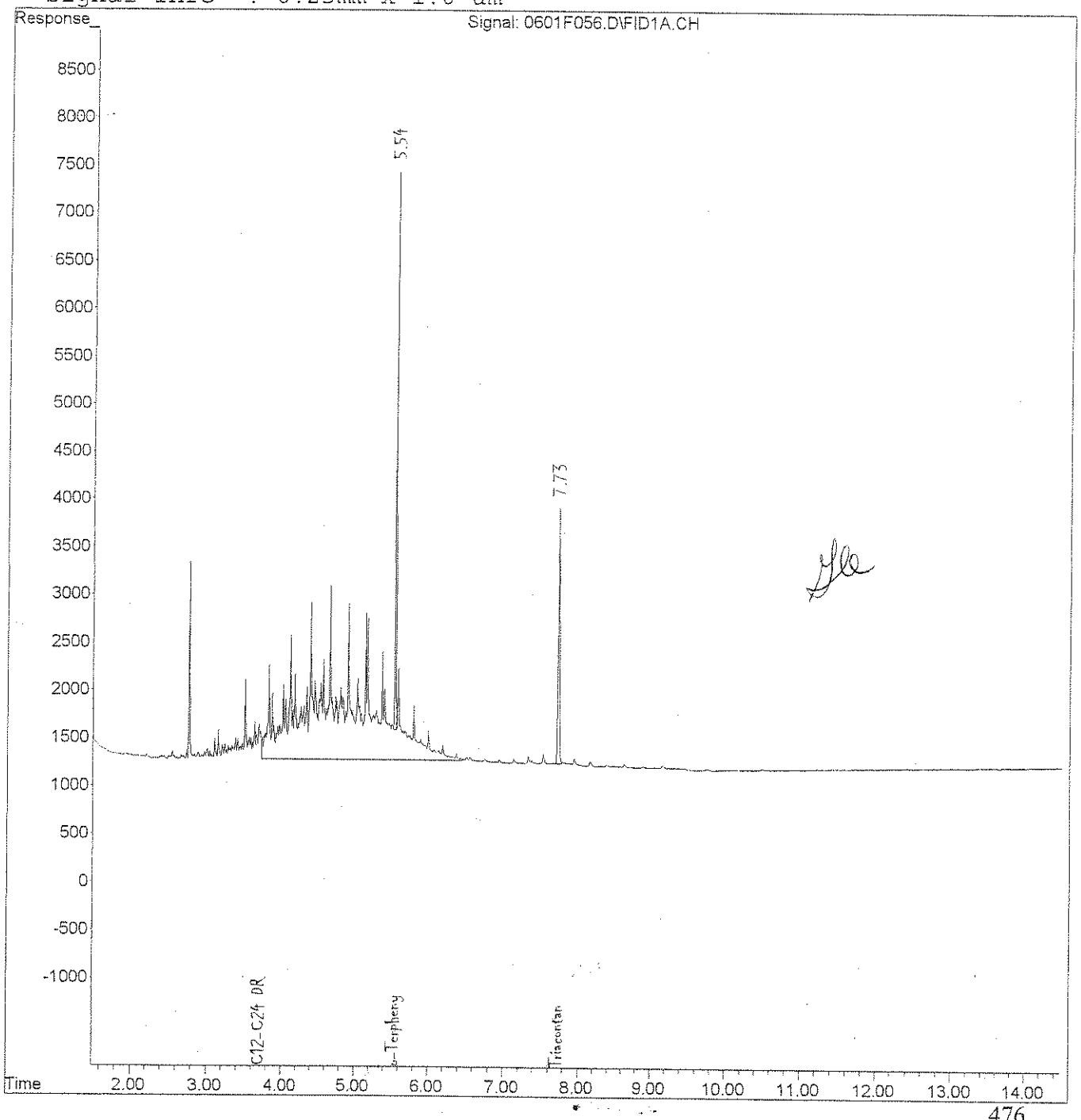
Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F056.D
Acq On : 01 Jun 2007 3:27 pm
Sample : 50/2.5 HCSV8-13Q
Misc :
IntFile : rteint.p
Quant Time: Jul 19 13:39 2007 Quant Results File: 0719TAR.RES

Vial: 13
Operator: PM
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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0601F056.D 0719TAR.M Thu Jul 19 14:50:41 2007 Page 2

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F058.D Vial: 14
Acq On : 01 Jun 2007 3:48 pm Operator: PM
Sample : 50 HCSV8-14I Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:11 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.45	47430	96.748 ppm

Gle
7/19/07

MLG

(f)=RT Delta > 1/2 Window (m)=manual int.

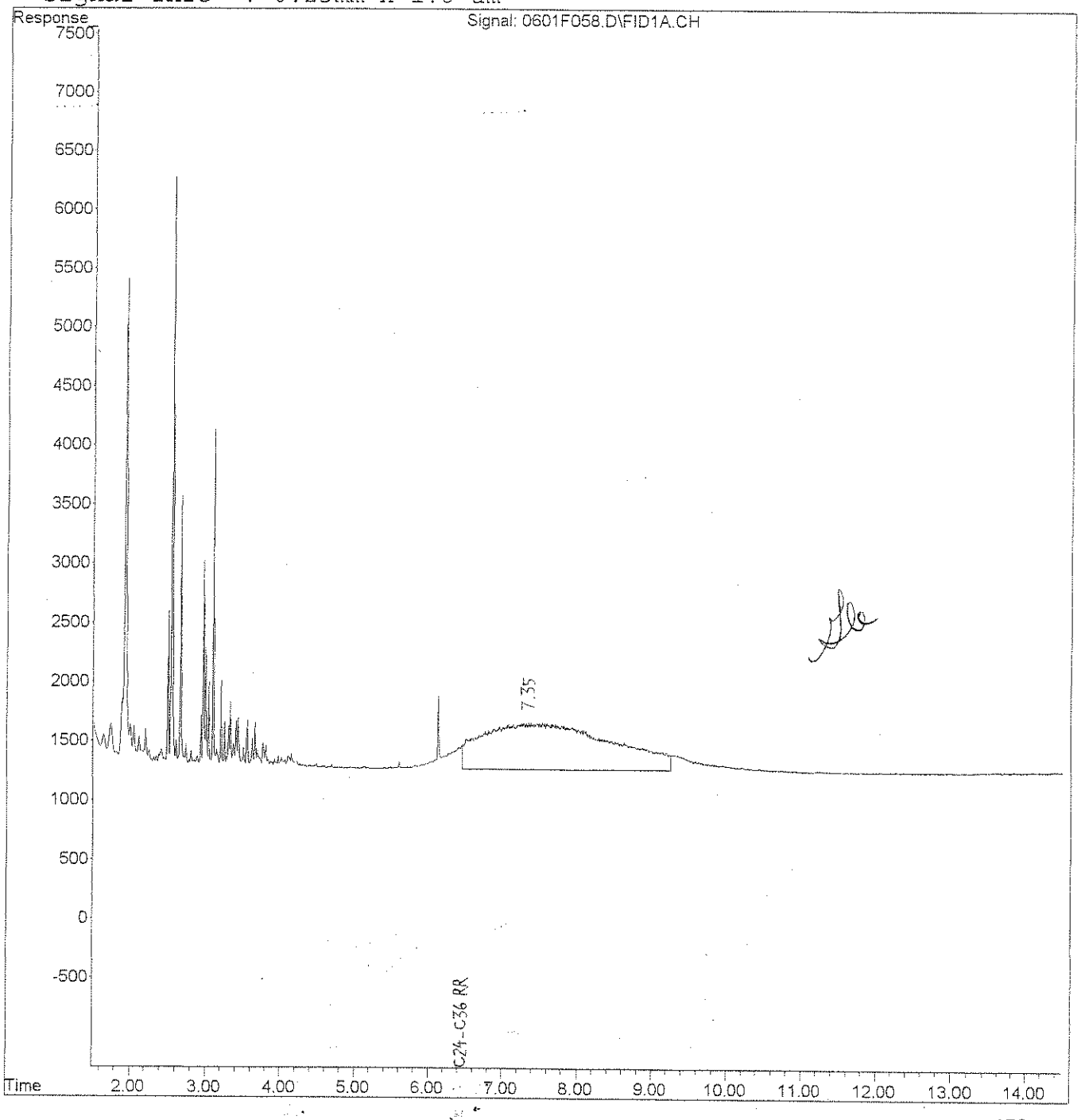
Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F058.D
Acq On : 01 Jun 2007 3:48 pm
Sample : 50 HCSV8-14I
Misc :
IntFile : rteint.p
Quant Time: Jul 19 13:40 2007 Quant Results File: 0719TAR.RES

Vial: 14
Operator: PM
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F060.D Vial: 15
Acq On : 01 Jun 2007 4:08 pm Operator: PM
Sample : 200/10 HCSV8-13P Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:34:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	17725	12.931 ppm
Spiked Amount 50.000		Recovery =	25.86%
2) S Triacontane (C-30)	7.73	15919	14.972 ppm
Spiked Amount 50.000		Recovery =	29.94%
Target Compounds			
3) H C12-C24 DRO	3.72	262525	237.230 ppm

Ale 7/19/07

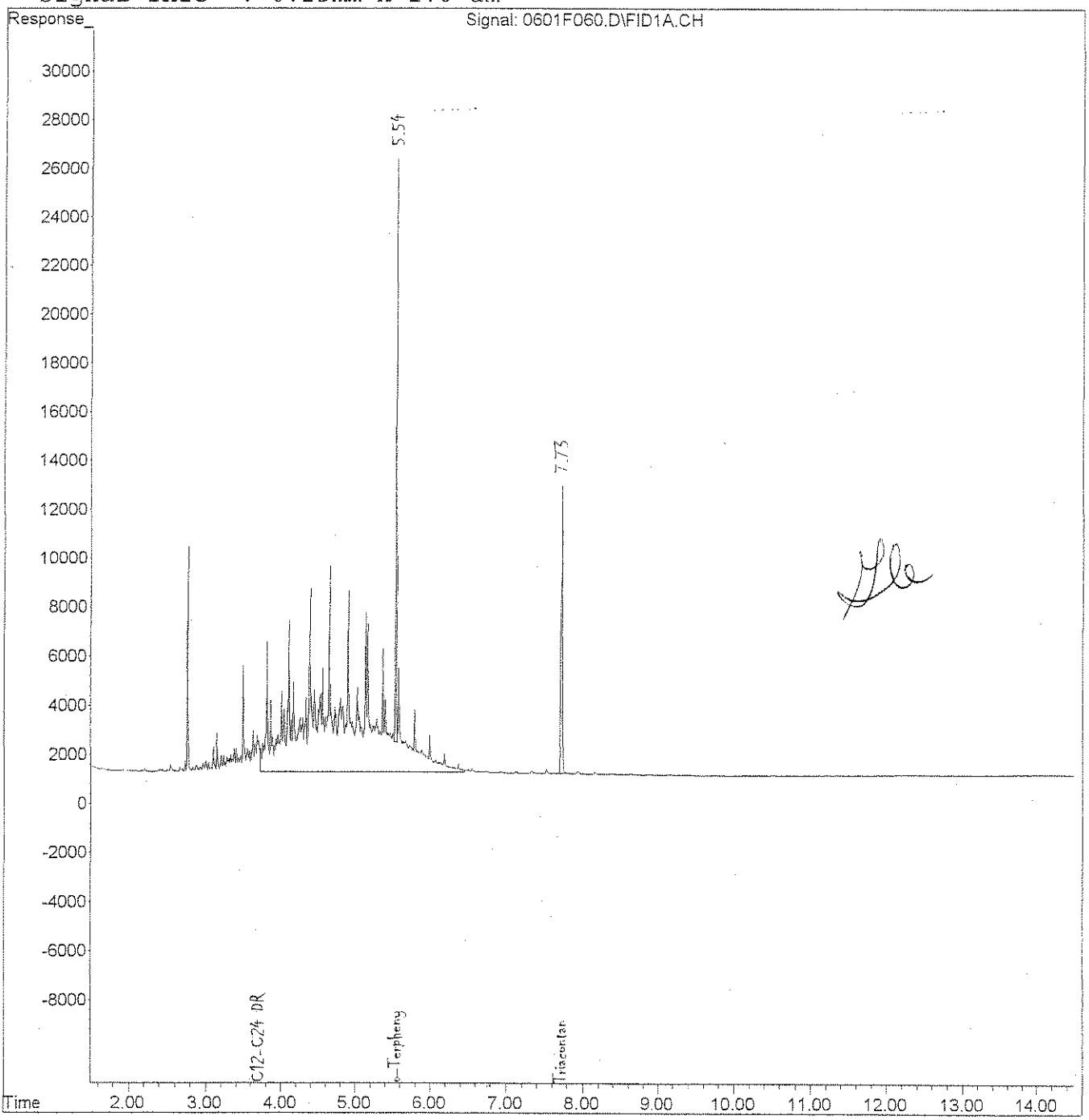
MG

(f)=RT Delta > 1/2 Window (m)=manual int.
0601F060.D 0719TAR.M Thu Jul 19 14:50:44 2007 Page 1

Data File : J:\GC21\DATA\061207.TAR\0601F060.D Vial: 15
Acq On : 01 Jun 2007 4:08 pm Operator: PM
Sample : 200/10 HCSV8-13P Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:40 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F062.D Vial: 16
Acq On : 01 Jun 2007 4:28 pm Operator: PM
Sample : 200 HCSV8-14H Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:15 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
4) H C24-C36 RRO	6.45	198776	405.466 ppm

7/19/07

mm

481

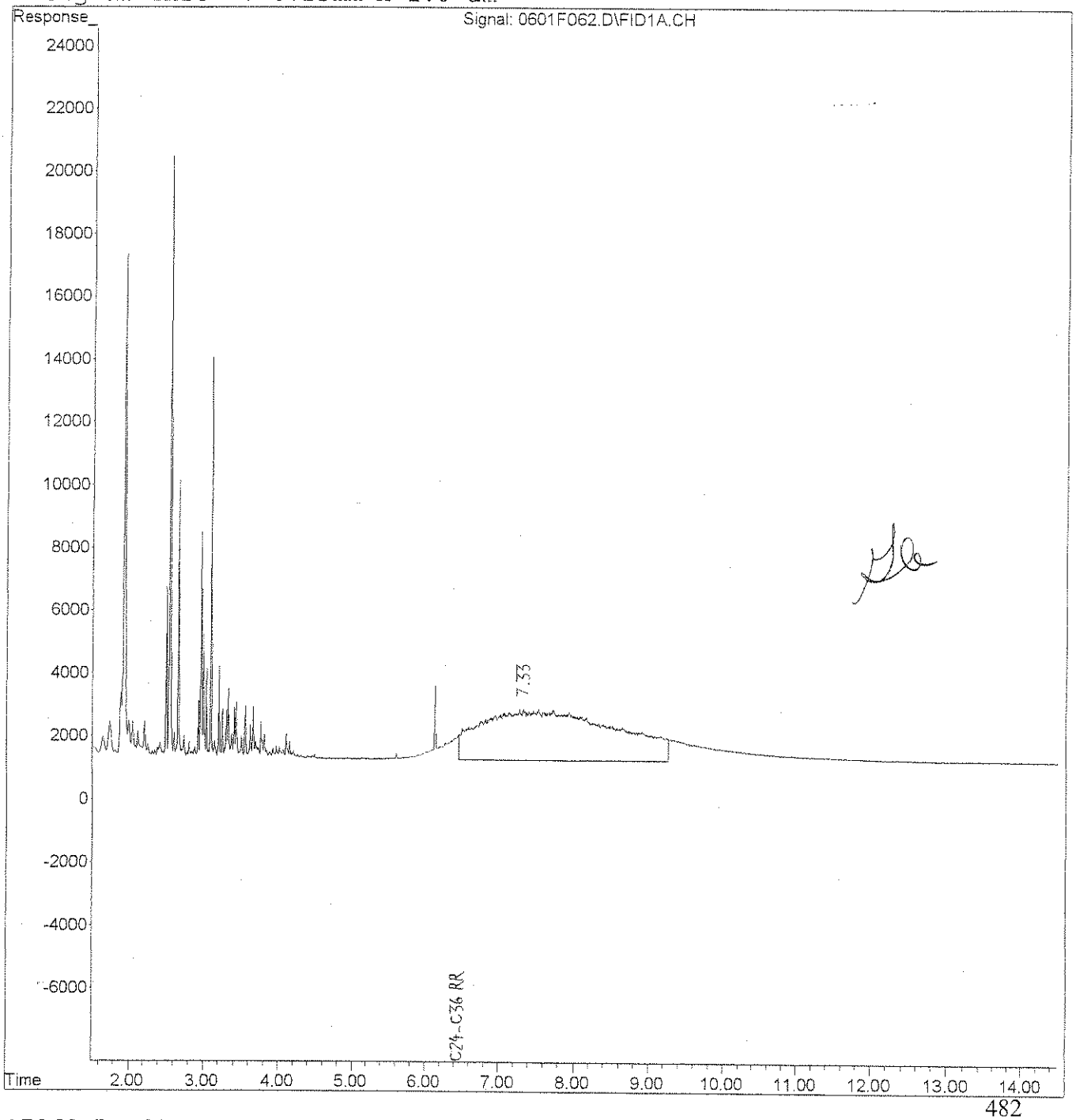
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F062.D Vial: 16
Acq On : 01 Jun 2007 4:28 pm Operator: PM
Sample : 200 HCSV8-14H Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:41 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



482

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F064.D Vial: 17
Acq On : 01 Jun 2007 4:49 pm Operator: PM
Sample : 500/25 HCSV8-13O Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:35:01 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	43664	31.855 ppm
Spiked Amount 50.000	Recovery	=	63.71%
2) S Triacontane (C-30)	7.72	40995	38.556 ppm
Spiked Amount 50.000	Recovery	=	77.11%
Target Compounds			
3) H C12-C24 DRO	3.72	655701	592.523 ppm
4) H C24-C36 RRO	6.45	7454	15.205 ppm

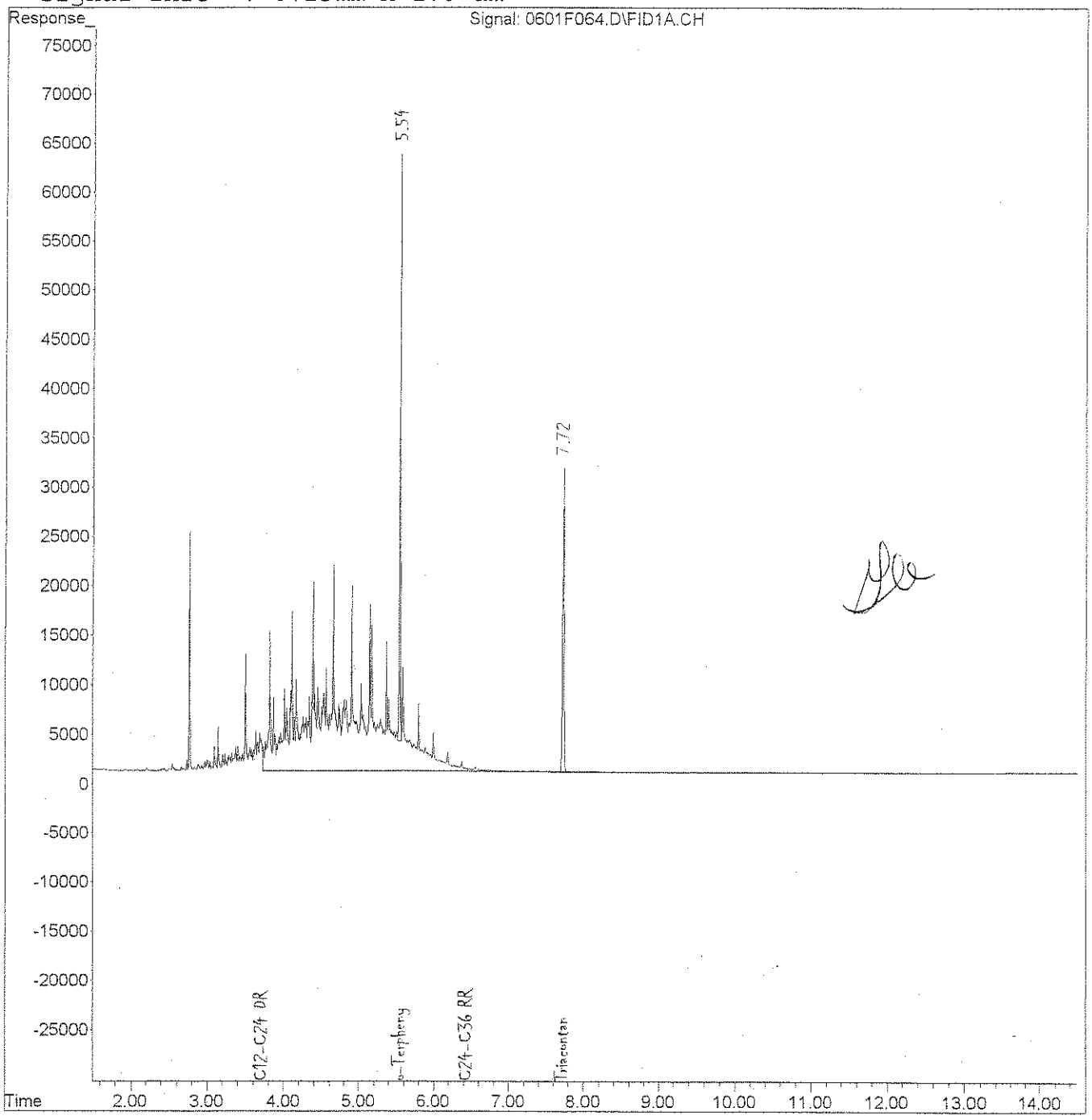
7/19/07

(f)=RT Delta > 1/2 Window (m)=manual int.
0601F064.D 0719TAR.M Thu Jul 19 14:50:48 2007 Page 1

Data File : J:\GC21\DATA\061207.TAR\0601F064.D Vial: 17
Acq On : 01 Jun 2007 4:49 pm Operator: PM
Sample : 500/25 HCSV8-130 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:35 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F066.D Vial: 18
Acq On : 01 Jun 2007 5:09 pm Operator: PM
Sample : 500 HCSV8-14G Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:20 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.45	516853	1054.284	ppm

7/19/07

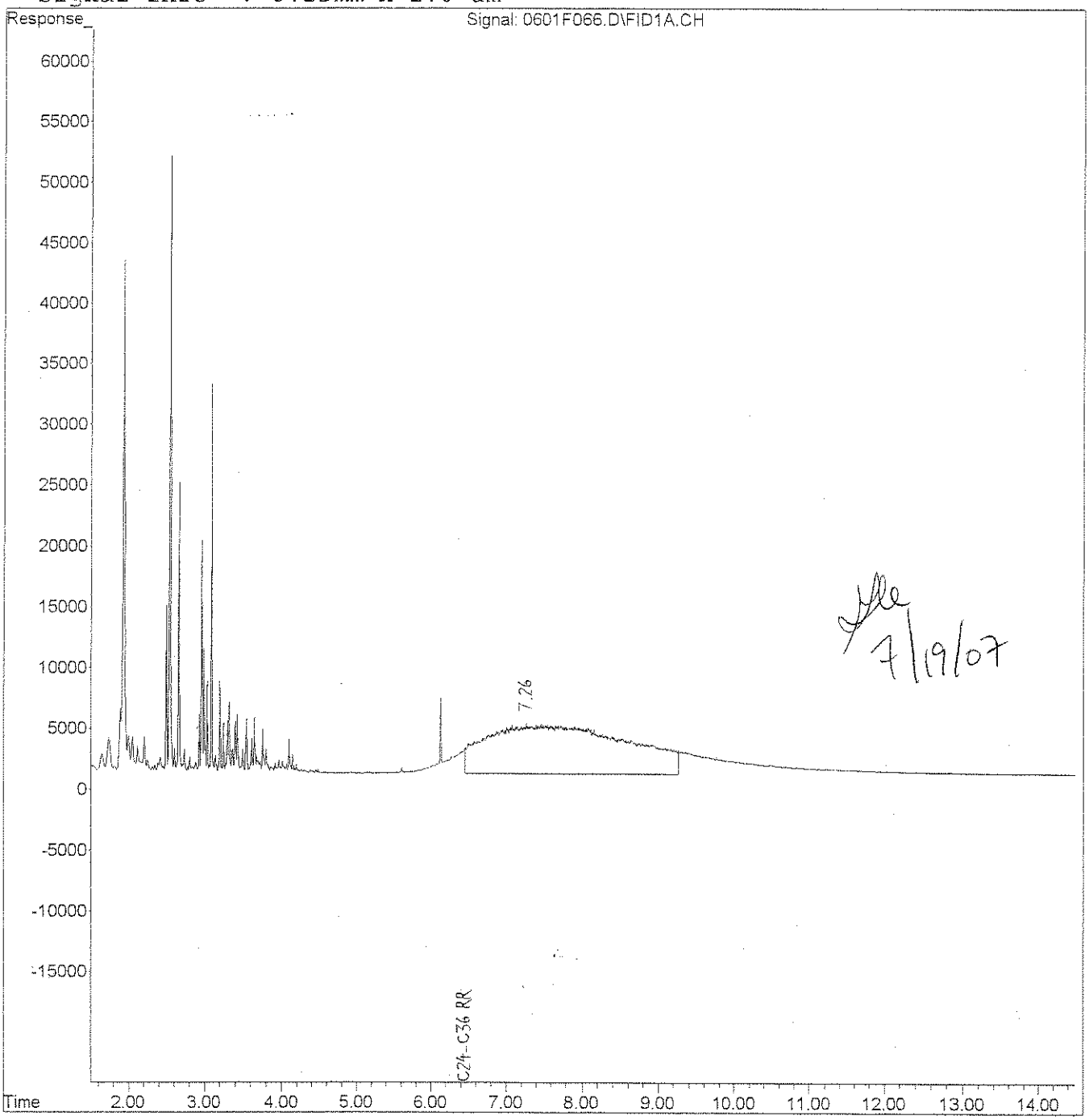
mg

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F066.D Vial: 18
Acq On : 01 Jun 2007 5:09 pm Operator: PM
Sample : 500 HCSV8-14G Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:42 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F068.D
Acq On : 01 Jun 2007 5:29 pm
Sample : 2000/100 HCSV8-13N
Misc :
IntFile : rteint.p
Quant Time: Jul 19 13:35:04 2007 Quant Results File: 0719TAR.RES

Vial: 19
Operator: PM
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	182315	133.006 ppm
Spiked Amount 50.000		Recovery =	266.01%
2) S Triacontane (C-30)	7.73	160259	150.726 ppm
Spiked Amount 50.000		Recovery =	301.45%
Target Compounds			
3) H C12-C24 DRO	3.72	2734927	2471.414 ppm
4) H C24-C36 RRO	6.45	19747	40.280 ppm

Dle 7/19/07

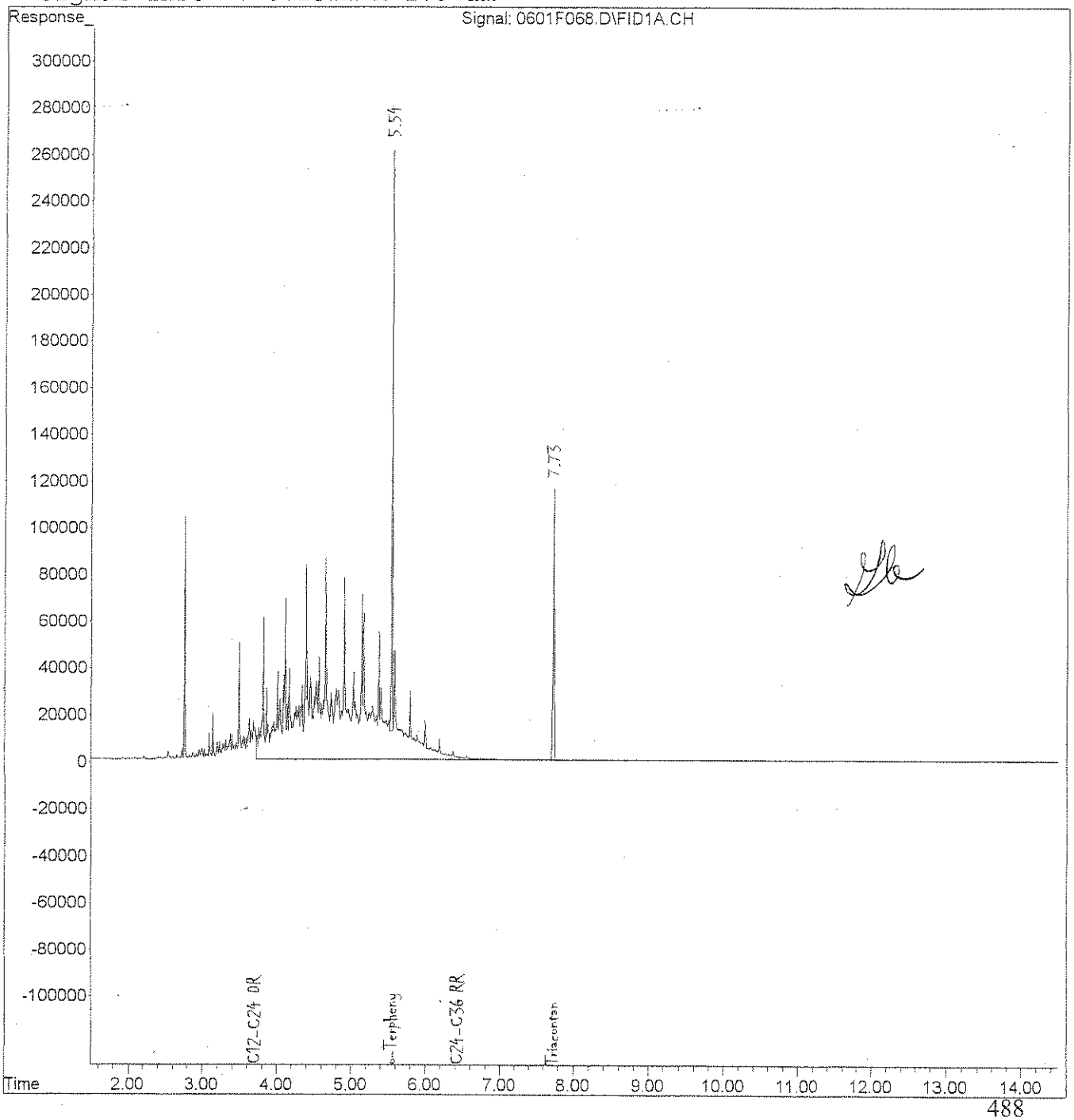
MMh

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC21\DATA\061207.TAR\0601F068.D Vial: 19
Acq On : 01 Jun 2007 5:29 pm Operator: PM
Sample : 2000/100 HCSV8-13N Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:35 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



488

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F070.D Vial: 20
Acq On : 01 Jun 2007 5:50 pm Operator: PM
Sample : 2000 HCSV8-14F Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:25 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.45	2057447	4196.811	ppm

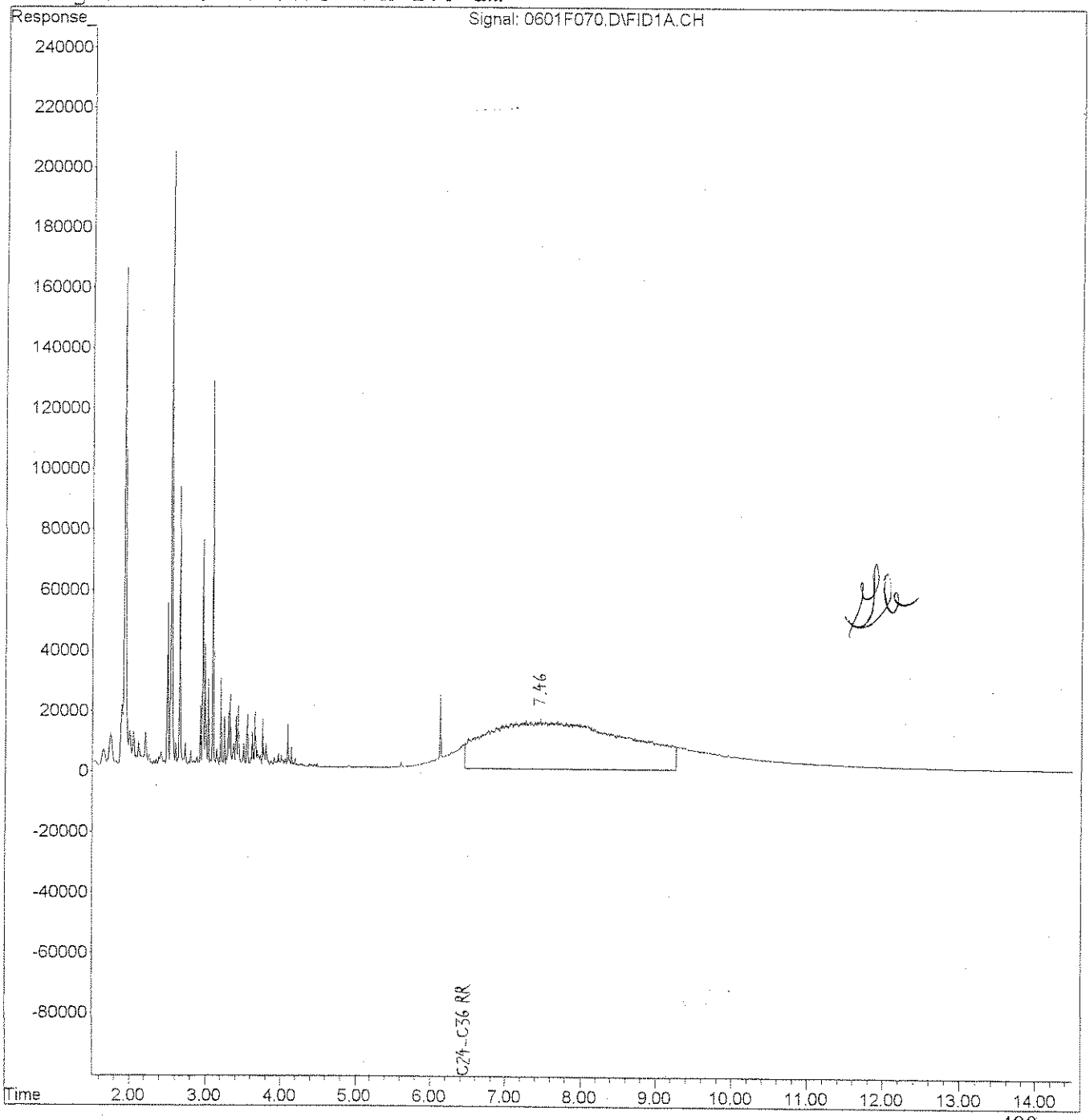
Gle
7/19/07

(f)=RT Delta > 1/2 Window (m)=manual int.
0601F070.D 0719TAR.M Thu Jul 19 14:50:54 2007 Page 1

Data File : J:\GC21\DATA\061207.TAR\0601F070.D Vial: 20
Acq On : 01 Jun 2007 5:50 pm Operator: PM
Sample : 2000 HCSV8-14F Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:42 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



490

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F072.D Vial: 21
Acq On : 01 Jun 2007 6:10 pm Operator: PM
Sample : 5000/250 HCSV8-13M Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:35:06 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	441244	321.904 ppm
Spiked Amount 50.000		Recovery =	643.81%
2) S Triacontane (C-30)	7.73	398298	374.606 ppm
Spiked Amount 50.000		Recovery =	749.21%
Target Compounds			
3) H C12-C24 DRO	3.72	6662158	6020.251 ppm

7/19/07

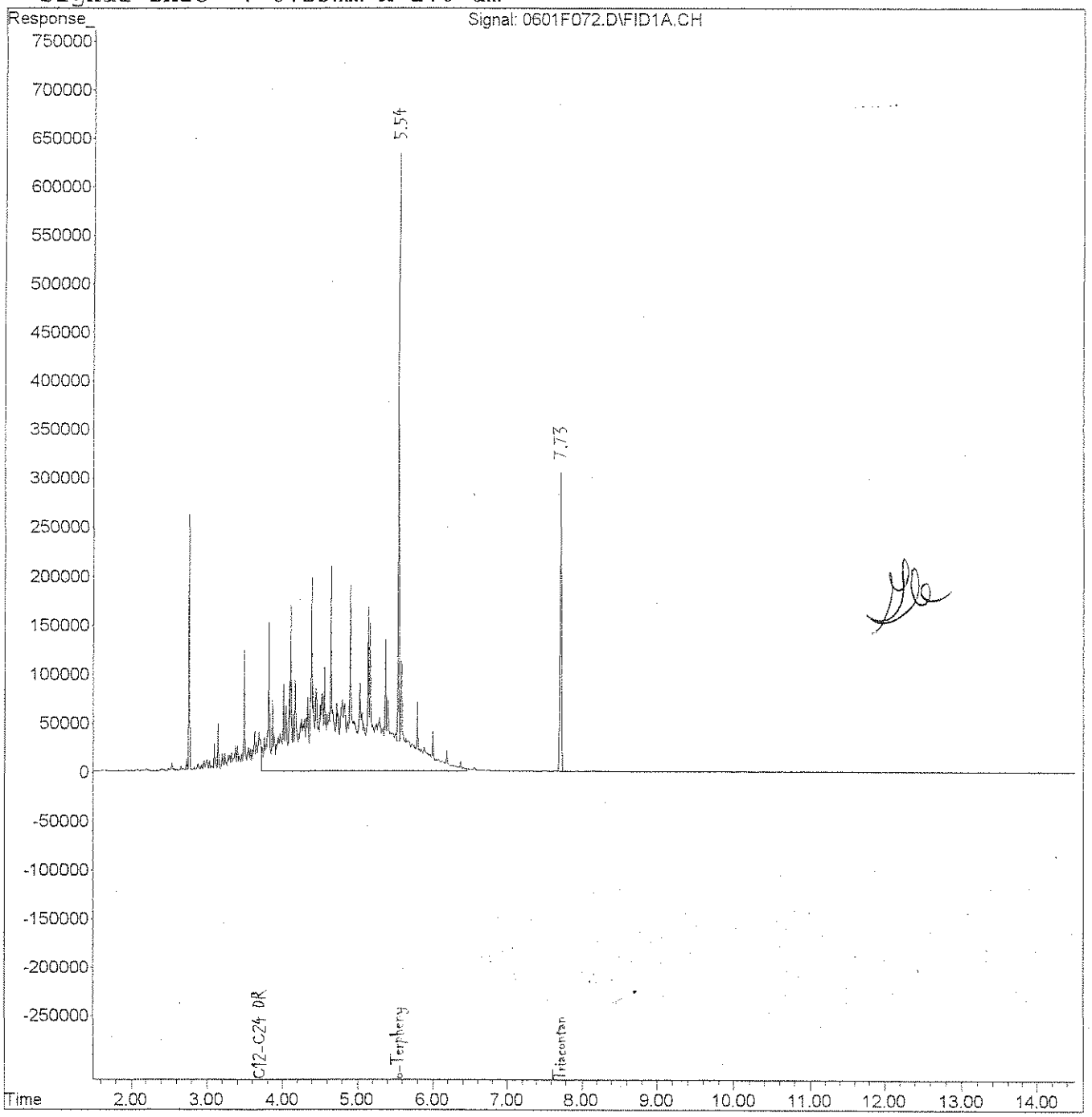
(f)=RT Delta > 1/2 Window (m)=manual int.
0601F072.D 0719TAR.M Thu Jul 19 14:50:56 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F072.D Vial: 21
Acq On : 01 Jun 2007 6:10 pm Operator: PM
Sample : 5000/250 HCSV8-13M Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:43 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



492

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F074.D Vial: 22
Acq On : 01 Jun 2007 6:30 pm Operator: PM
Sample : 5000 HCSV8-14E Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:30 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C24-C36 RRO	6.45	5046848	10294.635	ppm

7/19/07

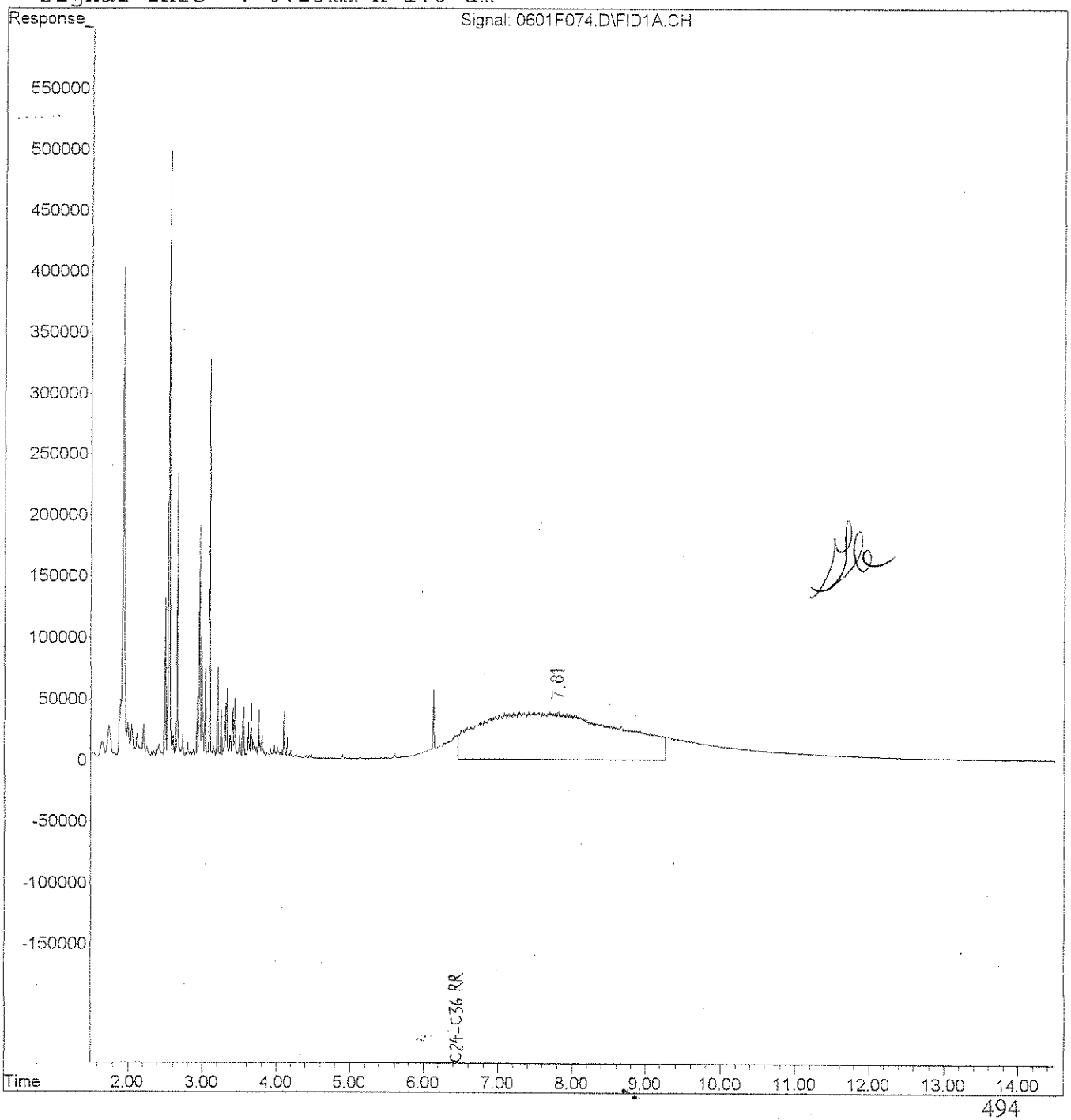
(f)=RT Delta > 1/2 Window (m)=manual int.
0601F074.D 0719TAR.M Thu Jul 19 14:50:57 2007 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F074.D Vial: 22
Acq On : 01 Jun 2007 6:30 pm Operator: PM
Sample : 5000 HCSV8-14E Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:44 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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0601F074.D 0719TAR.M Thu Jul 19 14:50:58 2007 Page 2

Data File : J:\GC21\DATA\061207.TAR\0601F076.D Vial: 23
Acq On : 01 Jun 2007 6:50 pm Operator: PM
Sample : 20000 HCSV8-14A Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:33 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
3) H C12-C24 DRO	3.72	27523114	24871.230	ppm

YL
7/19/07

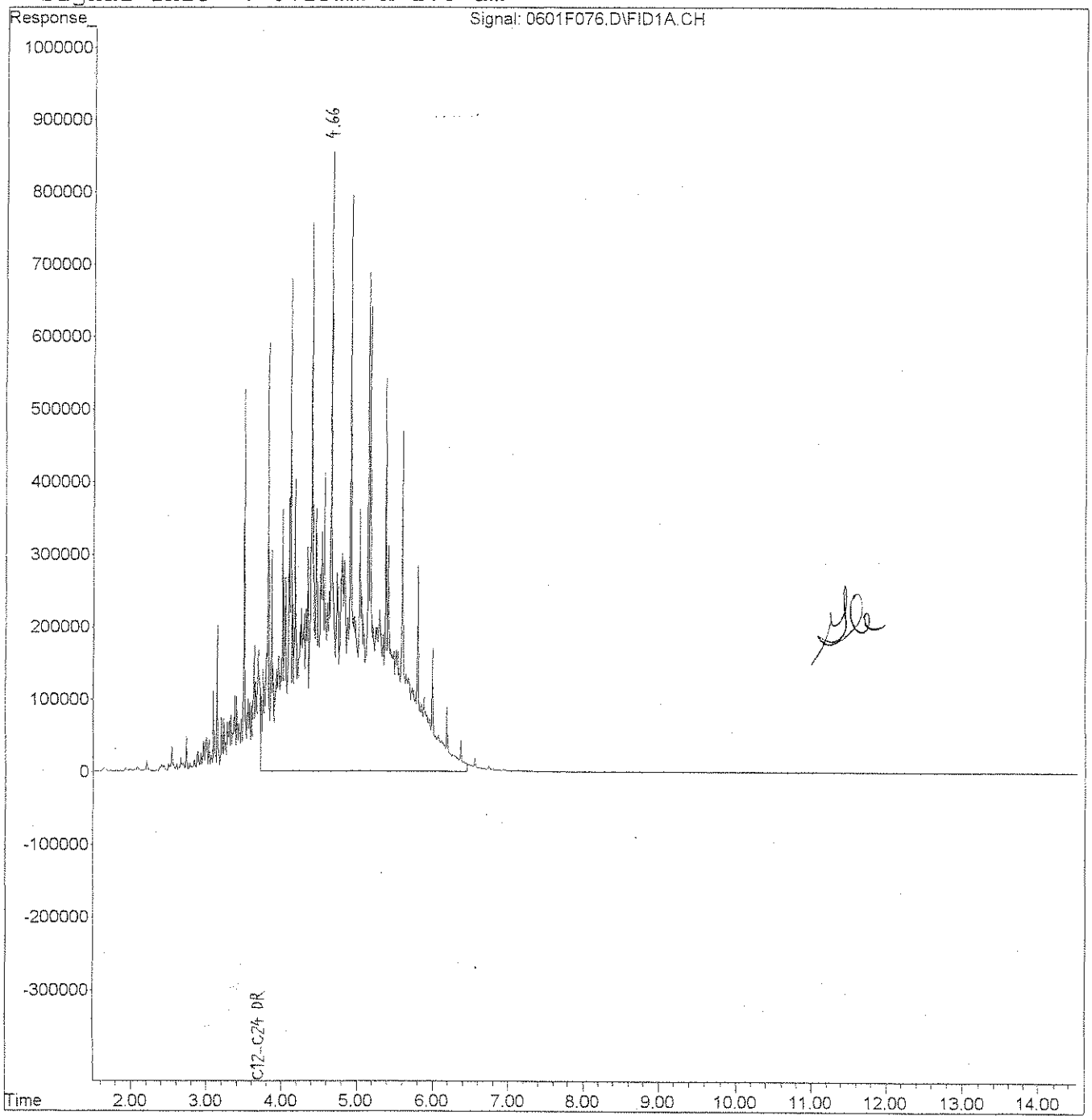
MM

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC21\DATA\061207.TAR\0601F076.D Vial: 23
Acq On : 01 Jun 2007 6:50 pm Operator: PM
Sample : 20000 HCSV8-14A Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:44 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F078.D Vial: 24
Acq On : 01 Jun 2007 7:10 pm Operator: PM
Sample : 50000 HCSV8-13S Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:29:35 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
3) H C12-C24 DRO	3.72	66940546	60490.746	ppm

7/19/07

MLG

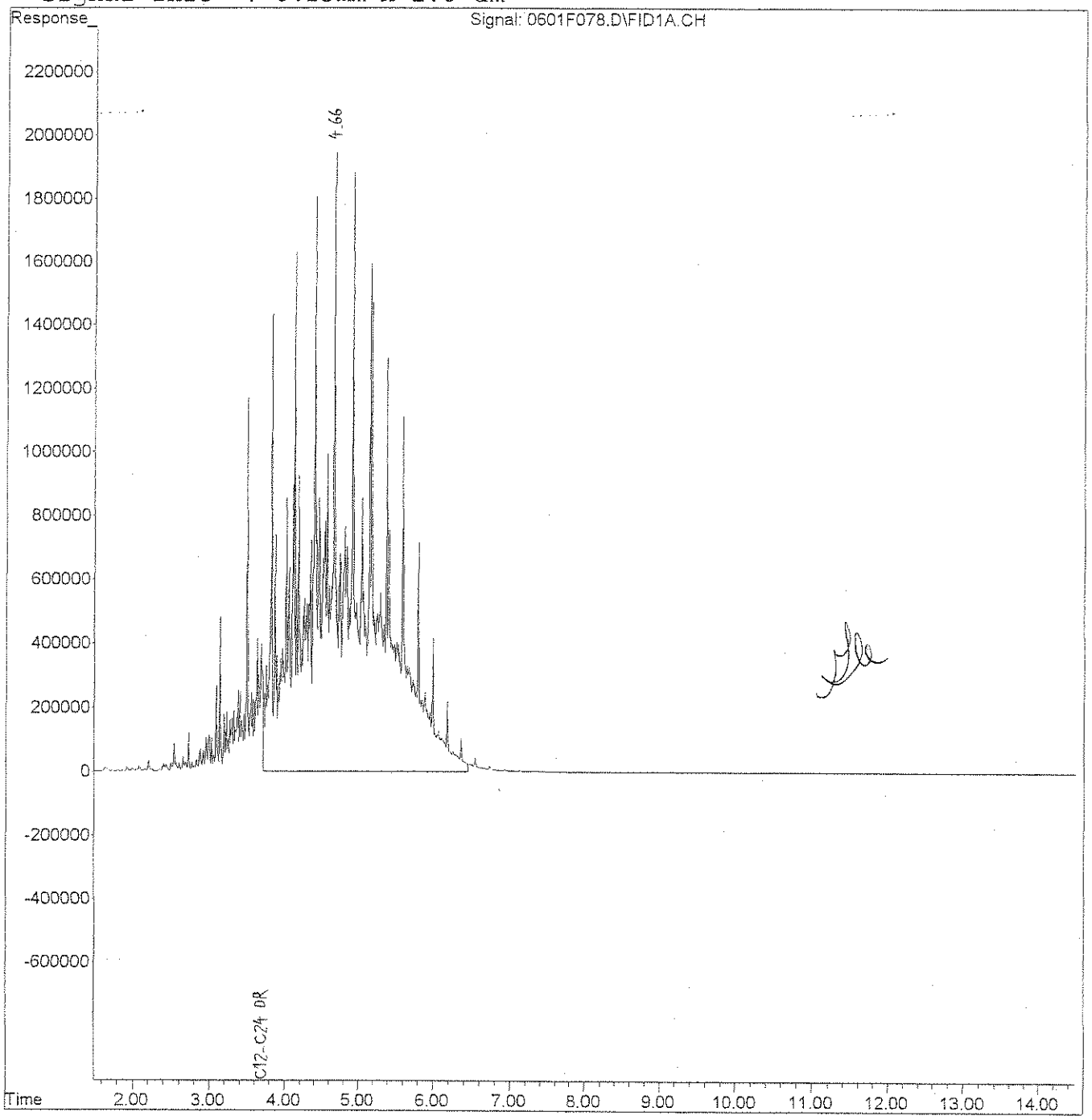
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F078.D Vial: 24
Acq On : 01 Jun 2007 7:10 pm Operator: PM
Sample : 50000 HCSV8-13S Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:44 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:21:23 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



498

Quantitation Report (QT Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F082.D Vial: 11
Acq On : 01 Jun 2007 9:44 pm Operator: PM
Sample : 20/1 HCSV8-13R Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:47:39 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.54	1723	1.257 ppm
Spiked Amount 50.000	Recovery	=	2.51%
2) S Triacontane (C-30)	7.73	1672	1.573 ppm
Spiked Amount 50.000	Recovery	=	3.15%
Target Compounds			
3) H C12-C24 DRO	3.72	25219	22.789 ppm

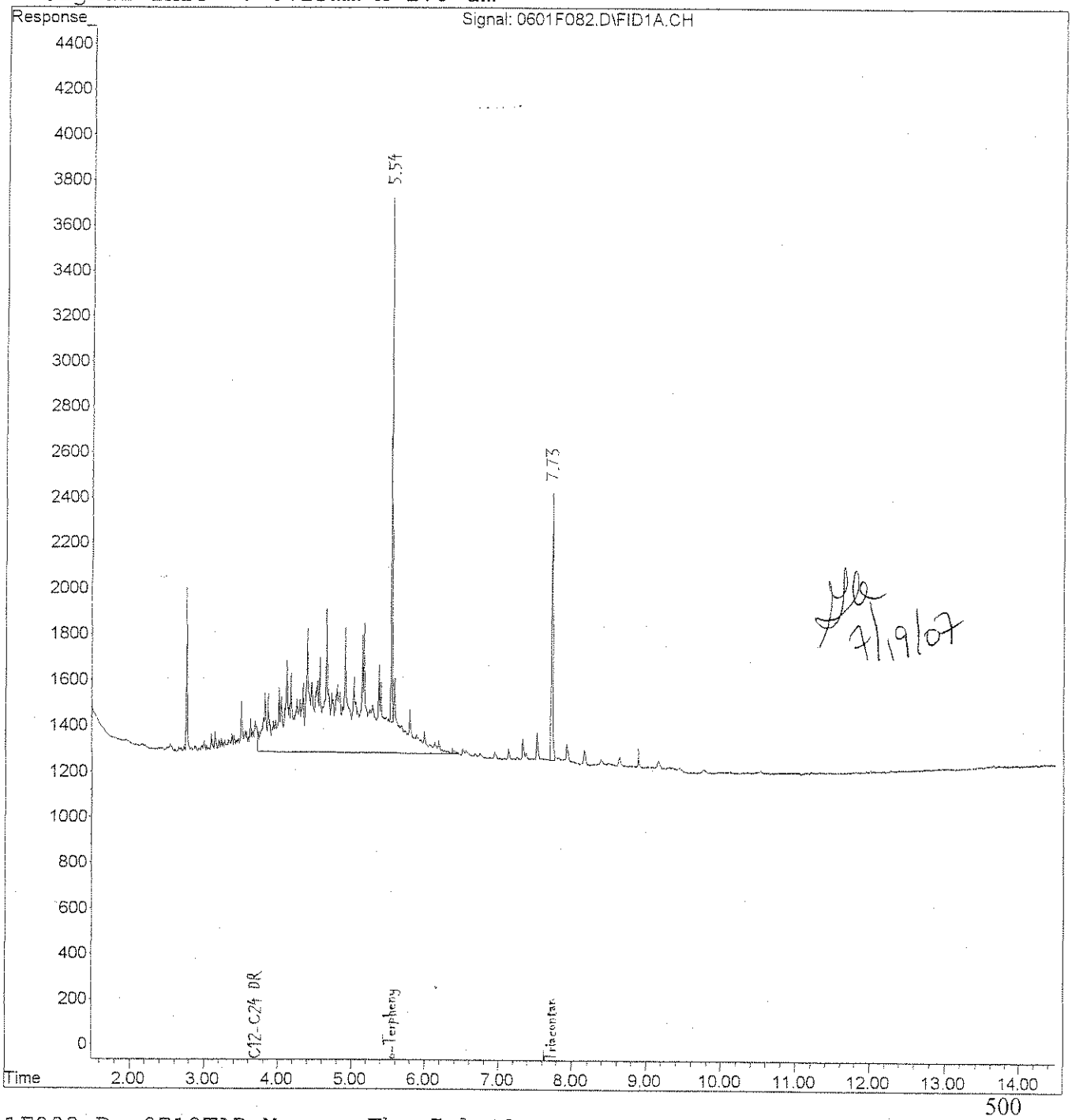
7/19/07

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC21\DATA\061207.TAR\0601F082.D Vial: 11
Acq On : 01 Jun 2007 9:44 pm Operator: PM
Sample : 20/1 HCSV8-13R Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 13:53 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 13:31:33 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



500

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F086.D Vial: 25
Acq On : 01 Jun 2007 11:00 pm Operator: PM
Sample : 1000 HCSV8-14D ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:15:52 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 14:15:07 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S o-Terphenyl	5.53	1335	0.759 ppm
Spiked Amount 50.000		Recovery =	1.52%
Target Compounds			
3) H C12-C24 DRO	3.72	1227246	927.850 ppm
4) H C24-C36 RRO	6.45	33443	34.060 ppm

Gb 7/19/07

MMq

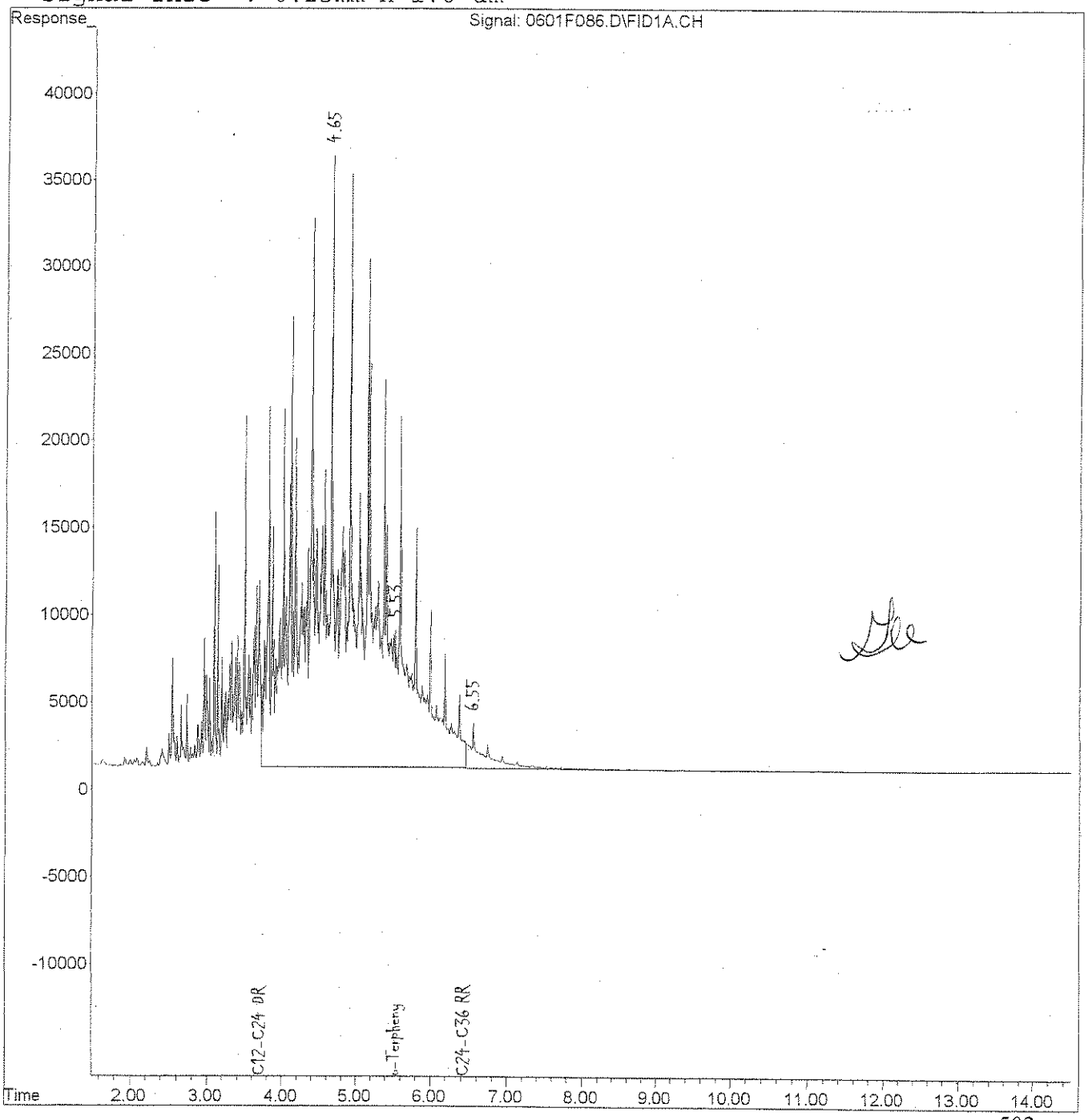
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC21\DATA\061207.TAR\0601F086.D
Acq On : 01 Jun 2007 11:00 pm
Sample : 1000 HCSV8-14D ICV
Misc :
IntFile : rteint.p
Quant Time: Jul 19 14:15 2007 Quant Results File: 0719TAR.RES

Vial: 25
Operator: PM
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0601F088.D Vial: 26
Acq On : 01 Jun 2007 11:20 pm Operator: PM
Sample : 1000 HCSV8-14S ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:15:56 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 14:15:07 2007
Response via : Initial Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
2) S Triacontane (C-30)	7.68f	74	0.046 ppm
Spiked Amount 50.000	Recovery	=	0.09%
Target Compounds			
3) H C12-C24 DRO	3.72	97244	73.521 ppm
4) H C24-C36 RRO	6.45	905440	922.157 ppm

7/19/07

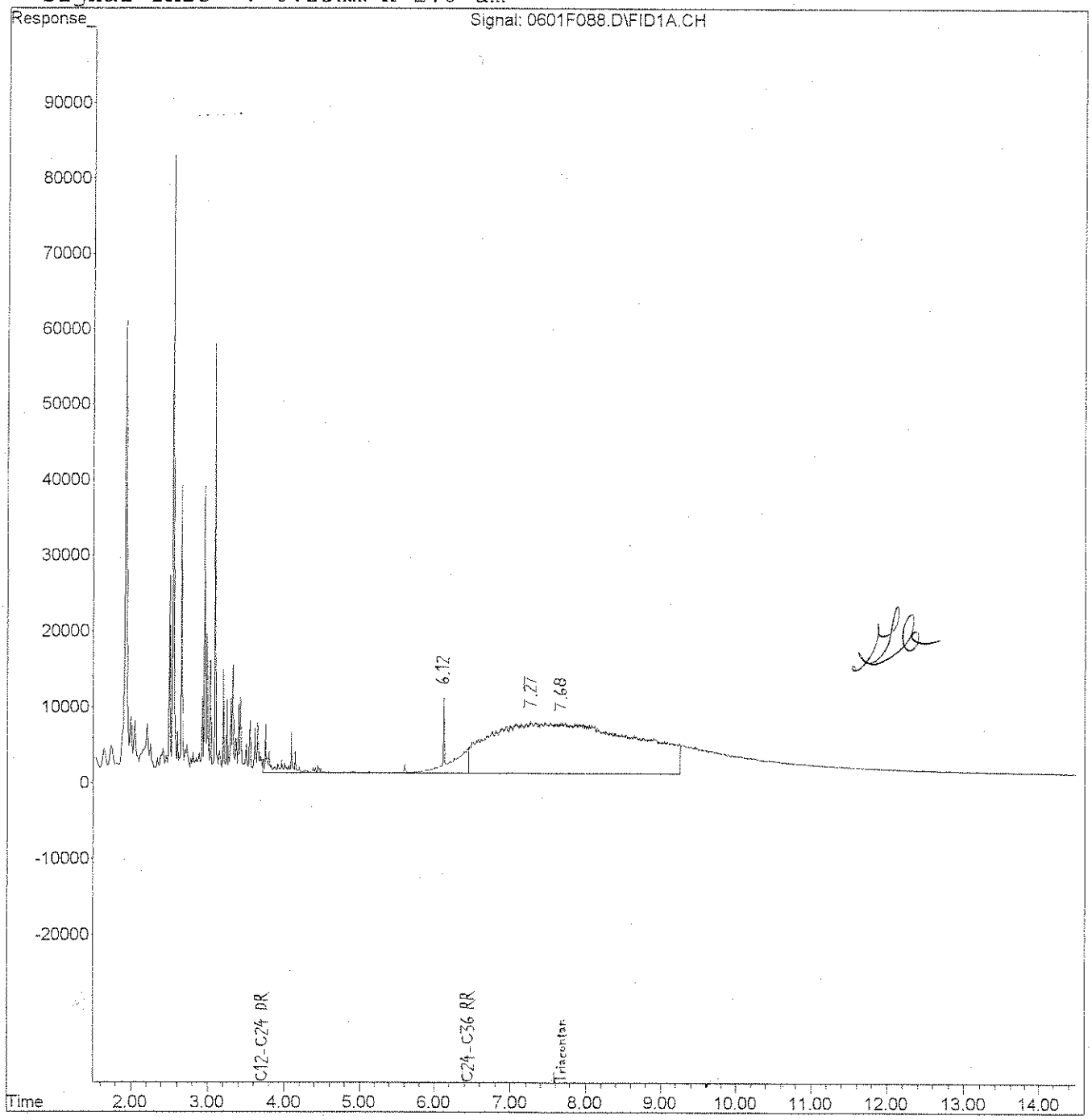
MMh

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC21\DATA\061207.TAR\0601F088.D Vial: 26
Acq On : 01 Jun 2007 11:20 pm Operator: PM
Sample : 1000 HCSV8-14S ICV Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:15 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0313TAR aka CAL6131
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 06/01/2007
Calibration ID: CAL6445
Analysis Lot: KWG0707881
Units: ppm

File ID: J:\GC21\DATA\061207.TAR\0612F066.D
J:\GC21\DATA\061207.TAR\0612F068.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1760	1790	2	NA	± 15 %	AverageRF
n-Triacontane	50	49	1590	1570	-1	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1000	1320	1370	3	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1000	982	1010	3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F066.D	**Date Acquired:**	06/12/2007 20:47
Lab ID:	KWG0707881-3	**Date Quantitated:**	07/19/2007 14:59
RunType:	CCV	**Batch ID:**	KWG0707881
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MM

506

Printed: 07/19/2007 15:50:30

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	8015B DRO_RRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707881	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\061207.TAR\0612F066.D			Instrument:	GC21
Acqu Date:	06/12/2007 20:47	Quant Date:	07/19/2007 14:59	Vial:	2
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707881-3			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52		89554	50.89		65-135	NA
n-Triacontane	7.70		78744	49.48		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	1367528	1,034			
C24 - C36 RRO	6.45	?	11979	12.20			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

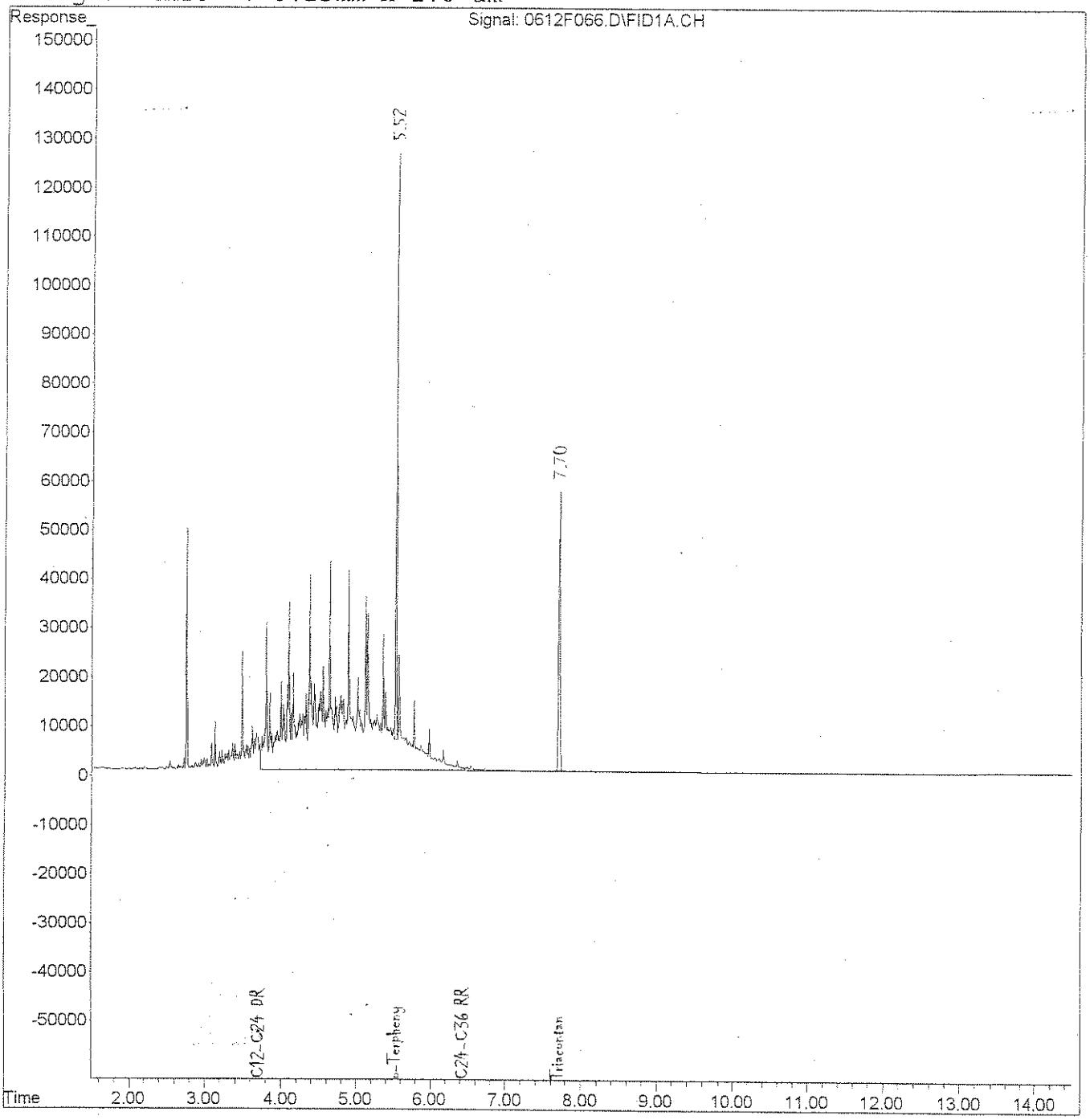
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F066.D Vial: 2
Acq On : 12 Jun 2007 8:47 pm Operator: pm
Sample : HCSV8-8D D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F068.D
Lab ID: KWG0707881-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 06/12/2007 21:08
Date Quantitated: 07/19/2007 14:59
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMG

509

Printed: 07/19/2007 15:50:33
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	8015B DRO_RRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707881	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\061207.TAR\0612F068.D			Instrument:	GC21
Acqu Date:	06/12/2007 21:08	Quant Date:	07/19/2007 14:59	Vial:	3
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707881-3			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl	5.58		546	0.3100		65-135	NA	NR
n-Triacontane	7.70		510	0.3200		65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	113851	86.08			NR
C24 - C36 RRO	6.45	?	1009285	1,028			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

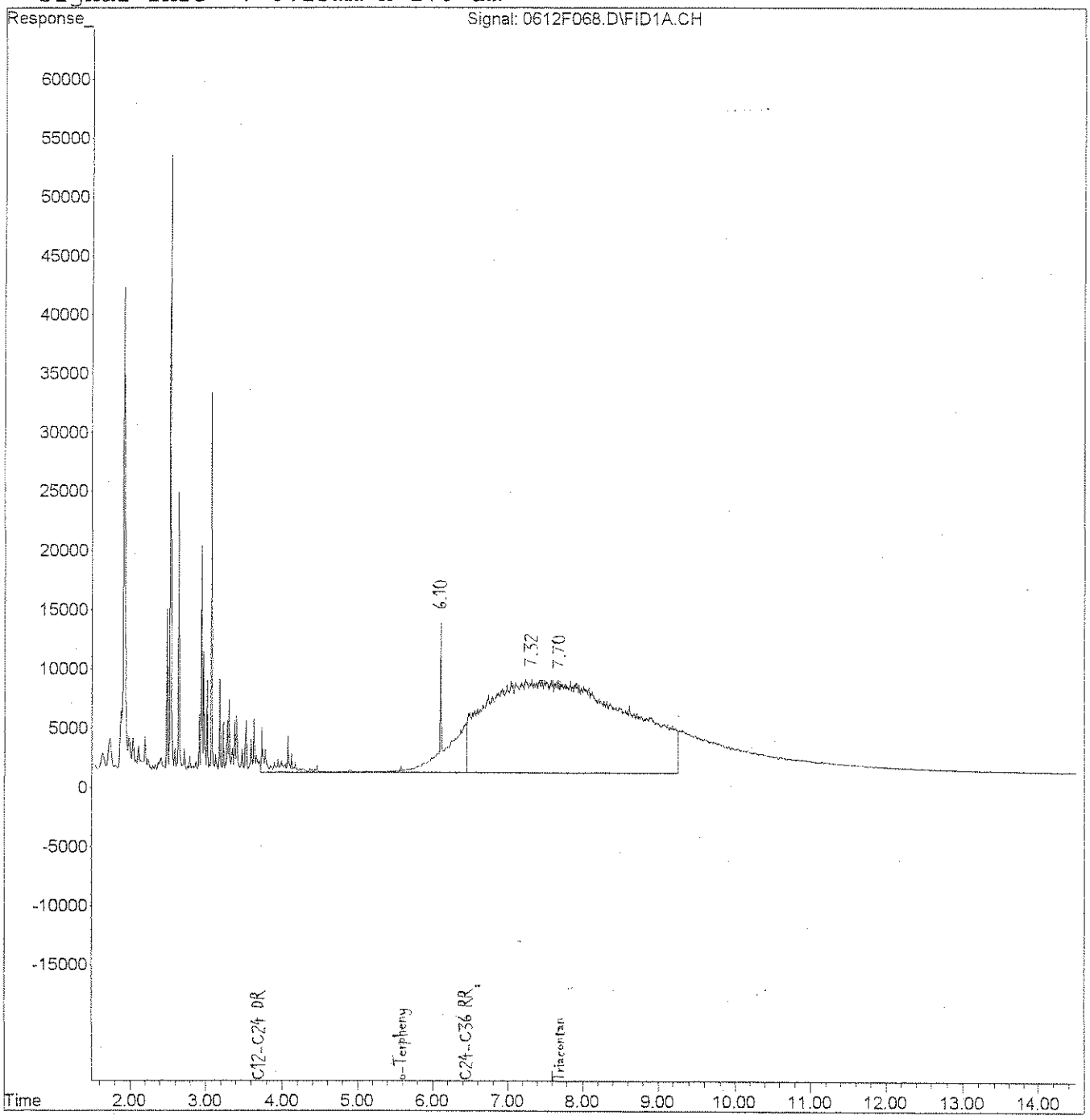
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

510

Data File : J:\GC21\DATA\061207.TAR\0612F068.D Vial: 3
Acq On : 12 Jun 2007 9:08 pm Operator: pm
Sample : HCSV8-13J G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007 - 06/13/2007

Continuing Calibration Verification Summary
Diesel and Residual Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 06/01/2007
Calibration ID: CAL6445
Analysis Lot: KWG0707881
Units: ppm

File ID: J:\GC21\DATA\061207.TAR\0612F084.D
J:\GC21\DATA\061207.TAR\0612F086.D

Column ID: ZB-1 15m

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
o-Terphenyl	50	51	1760	1810	3	NA	± 15 %	AverageRF
n-Triacontane	50	50	1590	1580	-1	NA	± 15 %	AverageRF
C12 - C24 DRO	1000	1100	1320	1400	6	NA	± 15 %	AverageRF
C24 - C36 RRO	1000	1100	982	1040	6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F084.D	**Date Acquired:**	06/12/2007 23:53
Lab ID:	KWG0707881-4	**Date Quantitated:**	07/19/2007 14:59
RunType:	CCV	**Batch ID:**	KWG0707881
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review:

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	8015B DRO_RRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707881	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\061207.TAR\0612F084.D			Instrument:	GC21
Acqu Date:	06/12/2007 23:53	Quant Date:	07/19/2007 14:59	Vial:	2
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707881-4			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl	5.52		90292	51.31		65-135	NA
n-Triacontane	7.70		78956	49.61		65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	1395517	1,055			
C24 - C36 RRO	6.45	?	12494	12.73			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

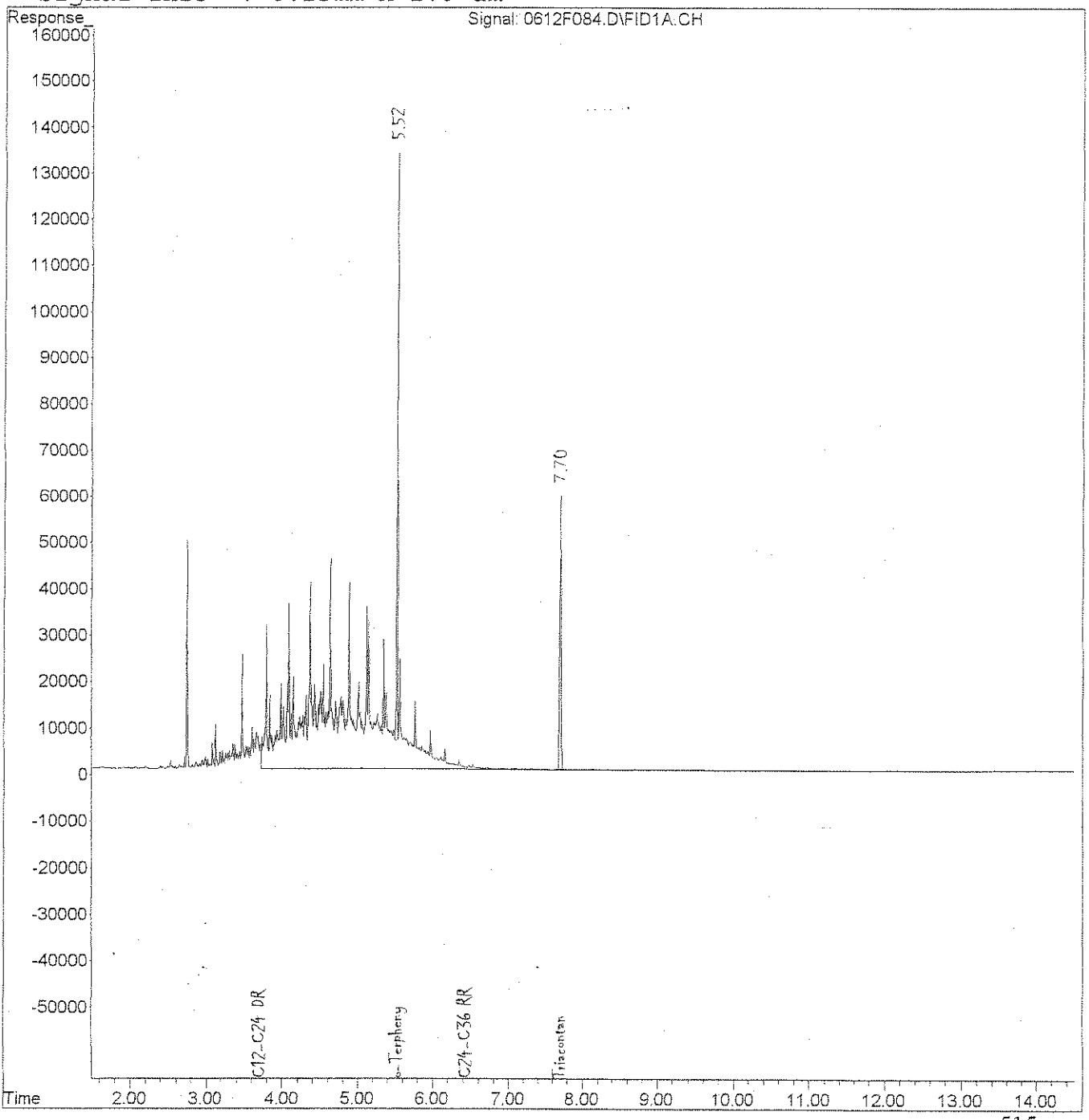
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F084.D Vial: 2
Acq On : 12 Jun 2007 11:53 pm Operator: pm
Sample : HCSV8-8D D/S @ 1000/50 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File:	J:\GC21\DATA\061207.TAR\0612F086.D	**Date Acquired:**	06/13/2007 00:13
Lab ID:	KWG0707881-4	**Date Quantitated:**	07/19/2007 14:59
RunType:	CCV	**Batch ID:**	KWG0707881
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review:

516

Printed: 07/19/2007 15:51:01

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	8015B DRO_RRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707881	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:			
		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\061207.TAR\0612F086.D			Instrument:	GC21
Acqu Date:	06/13/2007 00:13	Quant Date:	07/19/2007 14:59	Vial:	3
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707881-4			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
o-Terphenyl	5.58		592	0.3360		65-135	NA	NR
n-Triacontane	7.68		193	0.1210		65-135	NA	NR

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	117172	88.59			NR
C24 - C36 RRO	6.45	?	1038259	1,057			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

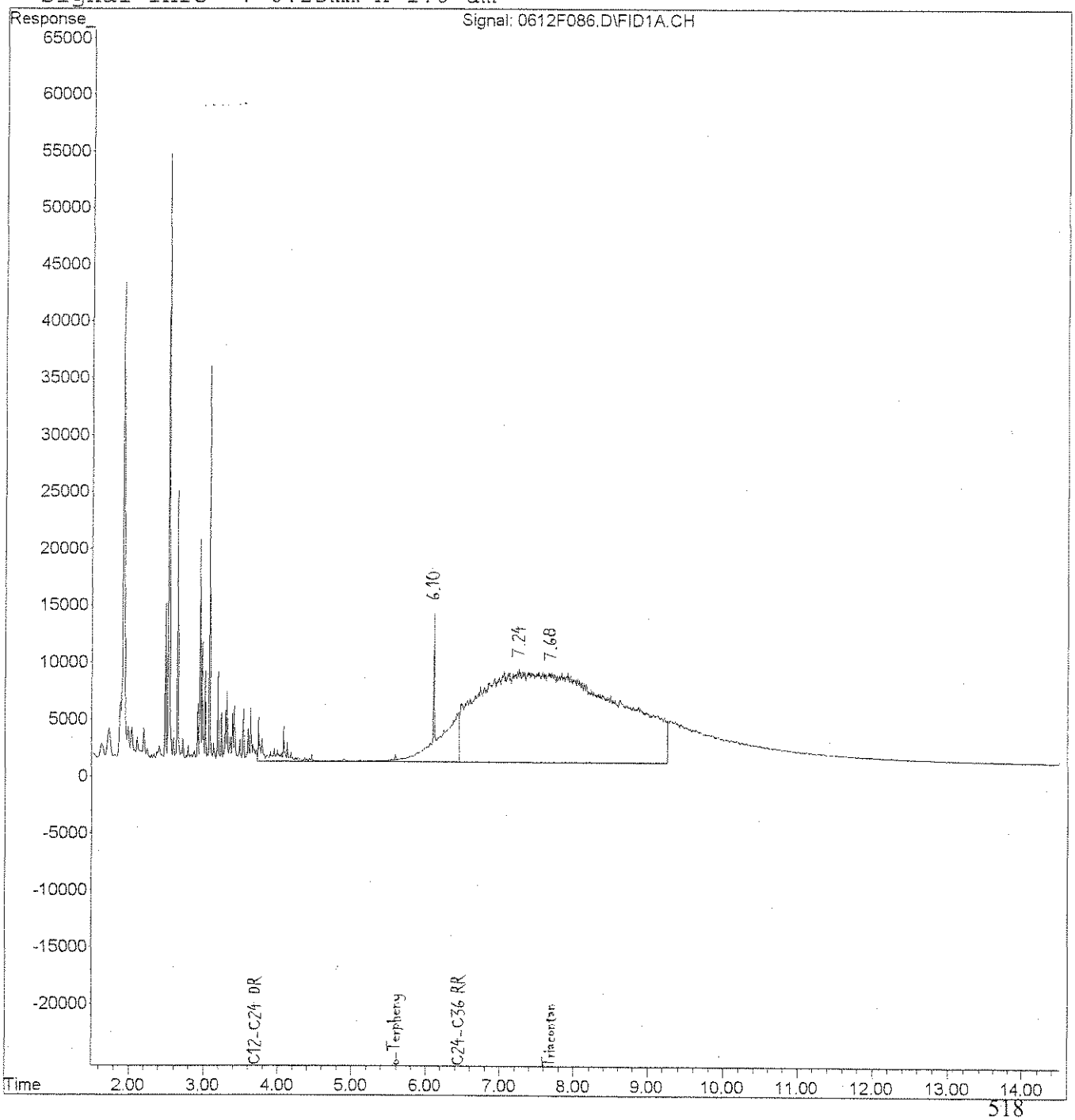
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC21\DATA\061207.TAR\0612F086.D Vial: 3
Acq On : 13 Jun 2007 12:13 am Operator: pm
Sample : HCSV8-13J G/O @ 500/1000 ppm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



518

Organic Analysis:
Diesel and Residual Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0706512	**Prep Method:**	EPA 3510C	**Prep Date:**	06/11/07 10:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0704852-002	1349MW100CL	8015B DRO_RR	WATER	1050ml	2.0ml
K0704852-003	231GW29CL	8015B DRO_RR	WATER	1050ml	2.0ml
K0704852-004	FM14EX07GW102CL	8015B DRO_RR	WATER	1050ml	2.0ml
KWG0706512-1	Lab Control Sample	8015B DRO_RR	WATER	1000ml	2.0ml
KWG0706512-2	Duplicate Lab Control Sampl	8015B DRO_RR	WATER	1000ml	2.0ml
KWG0706512-3	Method Blank	8015B DRO_RR	WATER	1000ml	2.0ml

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0704852-002	607757	HCSV8-16O	100uL			SJones
K0704852-003	607758	HCSV8-16O	100uL			SJones
K0704852-004	607756	HCSV8-16O	100uL			SJones
KWG0706512-1	607759	HCSV8-16O	100uL	HCSV8-18U	100uL	SJones
KWG0706512-2	607760	HCSV8-16O	100uL	HCSV8-18U	100uL	SJones
KWG0706512-3	607761	HCSV8-16O	100uL			SJones

Comments:

Started By: AMillard Assisted By: — Training Yes No

Completed By: AReagan Assisted By: — Yes No

Reviewed By: [illegible] Date: 7/19/07 Storage: —

Chain of Custody

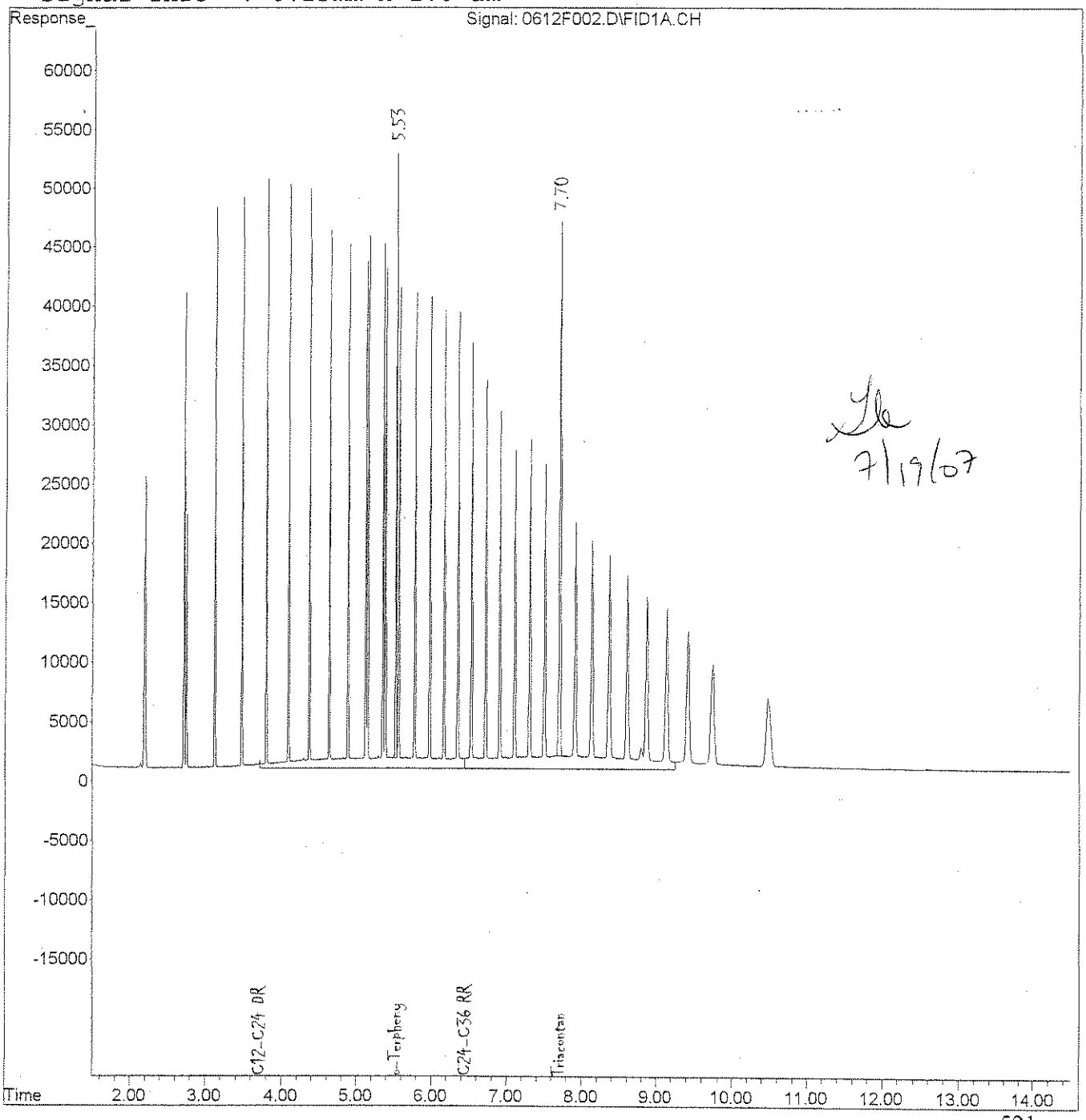
Relinquished By: [illegible] for AR Date: 7/19/07 Extracts Examined

Received By: [illegible] Date: [illegible] Yes No

Data File : J:\GC21\DATA\061207.TAR\0612F002.D Vial: 4
Acq On : 12 Jun 2007 9:30 am Operator: pm
Sample : 7-62N n-Alkanes marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 15:57 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



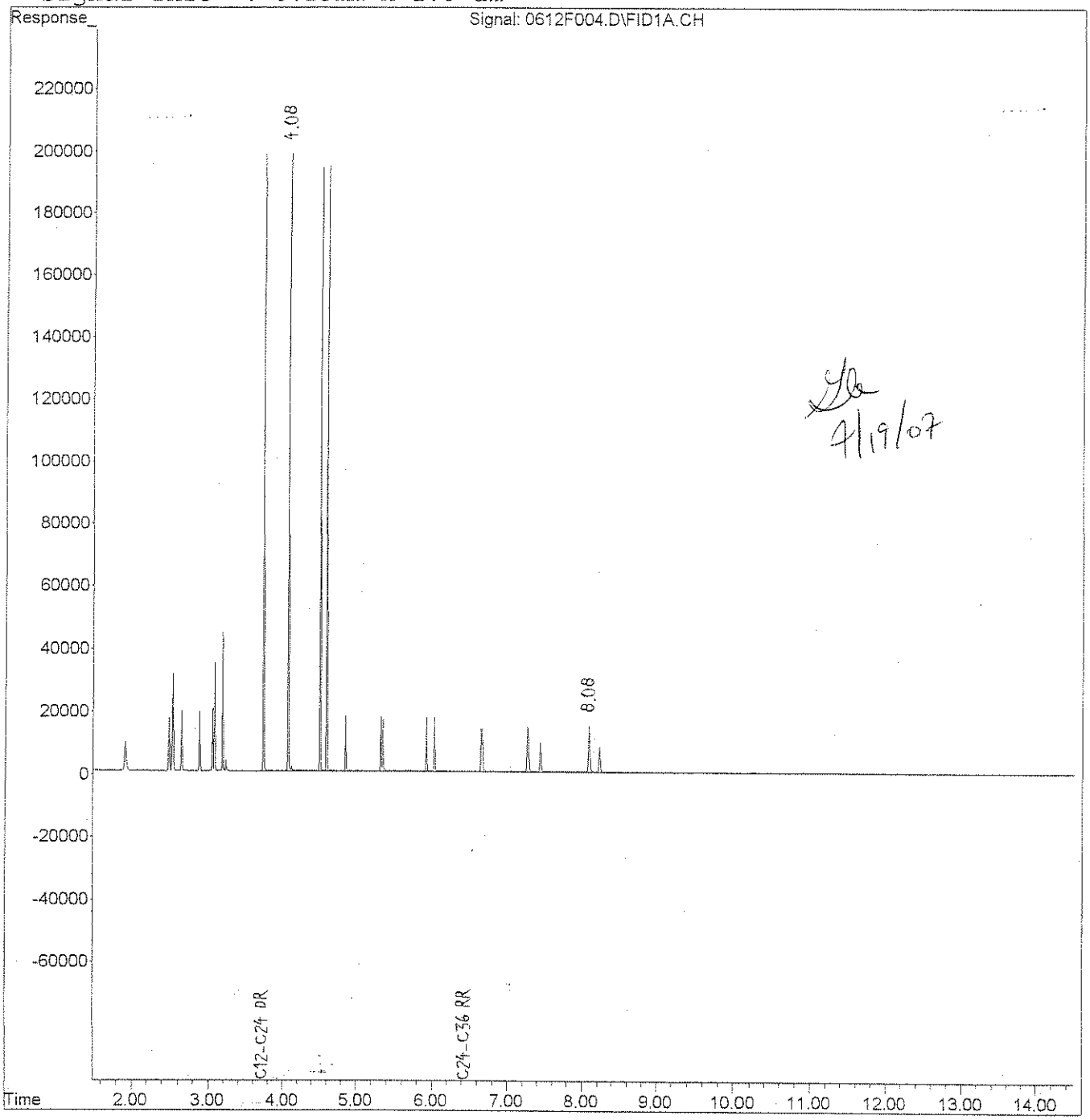
7/19/07

521

Data File : J:\GC21\DATA\061207.TAR\0612F004.D Vial: 5
Acq On : 12 Jun 2007 9:51 am Operator: pm
Sample : 8-7A MAHs/PAHs marker Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 15:57 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 15:35:40 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F070.D
Lab ID: KWG0707881-1
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 06/12/2007 21:28
Date Quantitated: 07/19/2007 14:59
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: AMC

523

Printed: 07/19/2007 15:50:36
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	8015B DRO_RRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707881	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC21\METHODS\0719TAR.M	Calibration ID:	CAL6445
Title:		Method ID:	MJ828
MB Ref:		Quant based on Method	

Data File:	J:\GC21\DATA\061207.TAR\0612F070.D			Instrument:	GC21
Acqu Date:	06/12/2007 21:28	Quant Date:	07/19/2007 14:59	Vial:	1
Run Type:	IB			Dilution:	1.0
Lab ID:	KWG0707881-1			Soln Conc. Units:	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	3661	2.77			
C24 - C36 RRO	6.45	?	7254	7.39			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

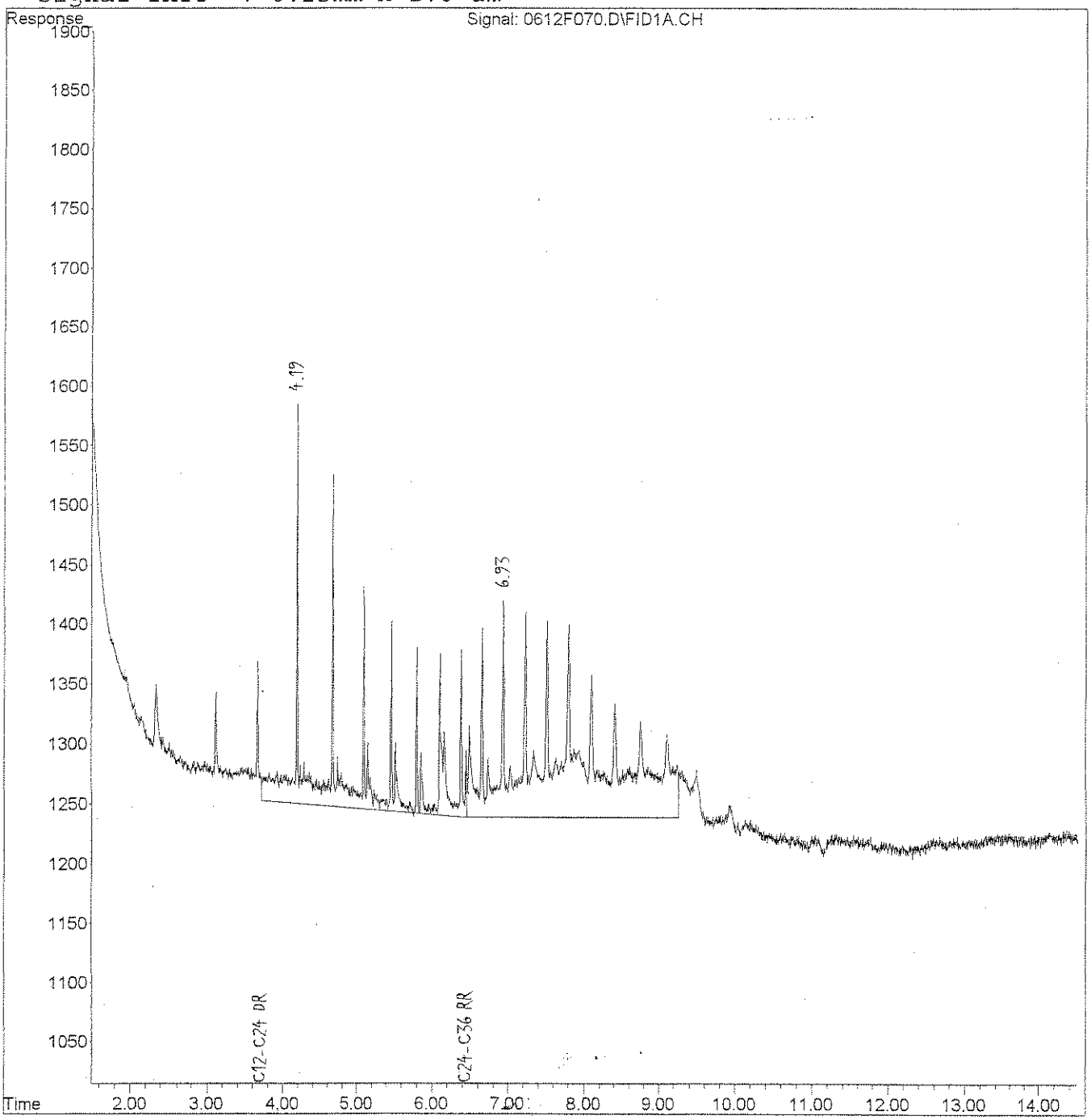
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC21\DATA\061207.TAR\0612F070.D Vial: 1
Acq On : 12 Jun 2007 9:28 pm Operator: pm
Sample : dcm Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



Exception Report

Data File: J:\GC21\DATA\061207.TAR\0612F088.D
Lab ID: KWG0707881-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 06/13/2007 00:34
Date Quantitated: 07/19/2007 14:59
Batch ID: KWG0707881
Analysis Method: 8015B
MethodJoinID: MJ828

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Lee 7/19/07

Secondary Review: MMh

Printed: 07/19/2007 15:51:04
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	8015B DRO_RRO	**Collect Date:**		**Receive Date:**	07/19/2007

Analysis Lot:	KWG0707881	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC21\METHODS\0719TAR.M	**Calibration ID:**	CAL6445
Title:		**Method ID:**	MJ828
MB Ref:		**Quant based on Method**	

Data File:	J:\GC21\DATA\061207.TAR\0612F088.D			**Instrument:**	GC21
Acqu Date:	06/13/2007 00:34	**Quant Date:**	07/19/2007 14:59	**Vial:**	1
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0707881-2			**Soln Conc. Units:**	ppm

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
o-Terphenyl			0			65-135	NA
n-Triacontane			0			65-135	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C12 - C24 DRO	3.72	?	3908	2.96			
C24 - C36 RRO	6.45	?	6413	6.53			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

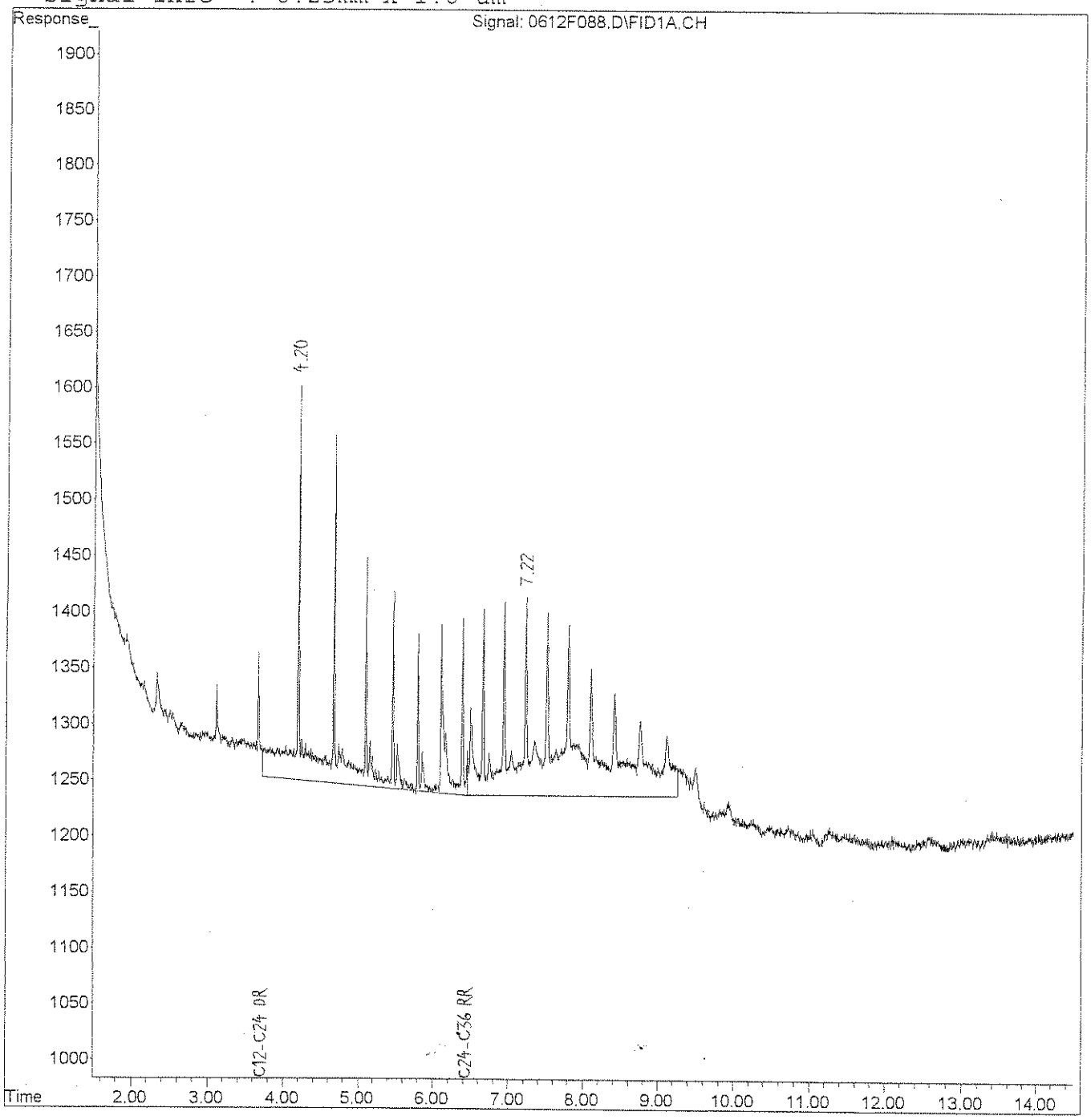
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC21\DATA\061207.TAR\0612F088.D
Acq On : 13 Jun 2007 12:34 am
Sample : dcm
Misc :
IntFile : rteint.p
Quant Time: Jul 19 14:59 2007 Quant Results File: 0719TAR.RES

Vial: 1
Operator: pm
Inst : GC21
Multiplr: 1.00

Quant Method : J:\GC21\METHODS\0719TAR.M (RTE Integrator)
Title : 0719TAR aka CAL6445
Last Update : Thu Jul 19 14:15:07 2007
Response via : Single Level Calibration
DataAcq Meth : BOTH.M

Volume Inj. : 1 uL
Signal Phase : ZB-1 15m
Signal Info : 0.25mm x 1.0 um



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Organic Analysis:
Gasoline Range Organics

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Cover Page - Organic Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
1349MW100CL	K0704852-002	06/06/2007	06/07/2007
231GW29CL	K0704852-003	06/06/2007	06/07/2007
FM14EX07GW102CL	K0704852-004	06/06/2007	06/07/2007
231GW29CLMS	KWG0707859-1	06/06/2007	06/07/2007
231GW29CLDMS	KWG0707859-2	06/06/2007	06/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: MU Erickson

Name: Mike Erickson

Date: 7/23/07

Title: SuperVisor

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**580**	H	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	65-135	06/13/07	Acceptable

Comments:

534

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	95	65-135	06/13/07	Acceptable

Comments:

535

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	65-135	06/13/07	Acceptable

Comments:

536

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0707859-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/14/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	65-135	06/14/07	Acceptable

Comments:

537

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1349MW100CL	K0704852-002	91
231GW29CL	K0704852-003	95
FM14EX07GW102CL	K0704852-004	97
Method Blank	KWG0707859-4	98
231GW29CLMS	KWG0707859-1	101
231GW29CLDMS	KWG0707859-2	101
Lab Control Sample	KWG0707859-3	103

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

		231GW29CLMS KWG0707859-1 Matrix Spike			231GW29CLDMS KWG0707859-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	539	500	108	535	500	107	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

539

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/13/2007
Date Analyzed: 06/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0707859

	Lab Control Sample KWG0707859-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	523	500	105	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

540

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/14/2007
		Time Analyzed:	00:54

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\061307.TAR\0613R026.D
Lab Code:	KWG0707859-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0707859-3	J:\GC06\DATA\061307.TAR\0613R003.D	06/13/07	11:29
231GW29CLMS	KWG0707859-1	J:\GC06\DATA\061307.TAR\0613R004.D	06/13/07	12:00
231GW29CLDMS	KWG0707859-2	J:\GC06\DATA\061307.TAR\0613R005.D	06/13/07	12:32
231GW29CL	K0704852-003	J:\GC06\DATA\061307.TAR\0613R007.D	06/13/07	14:37
1349MW100CL	K0704852-002	J:\GC06\DATA\061307.TAR\0613R008.D	06/13/07	15:09
FM14EX07GW102CL	K0704852-004	J:\GC06\DATA\061307.TAR\0613R010.D	06/13/07	16:27

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/13/2007
		Time Analyzed:	11:29

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\061307.TAR\0613R003.D
Lab Code:	KWG0707859-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
231GW29CLMS	KWG0707859-1	J:\GC06\DATA\061307.TAR\0613R004.D	06/13/07	12:00
231GW29CLDMS	KWG0707859-2	J:\GC06\DATA\061307.TAR\0613R005.D	06/13/07	12:32
231GW29CL	K0704852-003	J:\GC06\DATA\061307.TAR\0613R007.D	06/13/07	14:37
1349MW100CL	K0704852-002	J:\GC06\DATA\061307.TAR\0613R008.D	06/13/07	15:09
FM14EX07GW102CL	K0704852-004	J:\GC06\DATA\061307.TAR\0613R010.D	06/13/07	16:27
Method Blank	KWG0707859-4	J:\GC06\DATA\061307.TAR\0613R026.D	06/14/07	00:54

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

544

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R002.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5790	-4	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10500	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	490	6000	5840	-3	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10400	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

547

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R027.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	450	6000	5430	-9	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10300	1	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Analysis Run Log
Gasoline Range Organics

Analysis Method: 8015B

Analysis Lot: KWG0707865
Instrument ID: GC06
Column: DB-624

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0613R002.D	Continuing Calibration Verification	KWG0707865-4	6/13/2007	09:38		6/13/2007	09:54
0613R003.D	Lab Control Sample	KWG0707859-3	6/13/2007	11:29		6/13/2007	11:45
0613R004.D	231GW29CLMS	KWG0707859-1	6/13/2007	12:00		6/13/2007	12:16
0613R005.D	231GW29CLDMS	KWG0707859-2	6/13/2007	12:32		6/13/2007	12:48
0613R006.D	Instrument Blank	KWG0707865-1	6/13/2007	13:54		6/13/2007	14:10
0613R007.D	231GW29CL	K0704852-003	6/13/2007	14:37		6/13/2007	14:53
0613R008.D	1349MW100CL	K0704852-002	6/13/2007	15:09		6/13/2007	15:25
0613R010.D	FM14EX07GW102CL	K0704852-004	6/13/2007	16:27		6/13/2007	16:43
0613R014.D	Continuing Calibration Verification	KWG0707865-5	6/13/2007	18:34		6/13/2007	18:50
0613R018.D	Instrument Blank	KWG0707865-2	6/13/2007	20:41		6/13/2007	20:57
0613R026.D	Method Blank	KWG0707859-4	6/14/2007	00:54		6/14/2007	01:10
0613R027.D	Continuing Calibration Verification	KWG0707865-6	6/14/2007	01:26		6/14/2007	01:42
0613R028.D	Instrument Blank	KWG0707865-3	6/14/2007	01:57		6/14/2007	02:13

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/13/2007

Extraction Prep Log
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Extraction Lot: KWG0707859
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW100CL	K0704852-002	06/06/07	06/07/07	10ml	10ml	NA	
231GW29CL	K0704852-003	06/06/07	06/07/07	10ml	10ml	NA	
FM14EX07GW102CL	K0704852-004	06/06/07	06/07/07	10ml	10ml	NA	
Method Blank	KWG0707859-4	NA	NA	10ml	10ml	NA	
231GW29CLMS	KWG0707859-1	06/06/07	06/07/07	10ml	10ml	NA	
231GW29CLDMS	KWG0707859-2	06/06/07	06/07/07	10ml	10ml	NA	
Lab Control Sample	KWG0707859-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Gasoline Range Organics

Validation Package

Organic Analysis:
Gasoline Range Organics

Validation Package

QC Reports

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Gasoline Range Organics

Extraction Method: EPA 5030B
Analysis Method: 8015B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
1349MW100CL	K0704852-002	91
231GW29CL	K0704852-003	95
FM14EX07GW102CL	K0704852-004	97
Method Blank	KWG0707859-4	98
231GW29CLMS	KWG0707859-1	101
231GW29CLDMS	KWG0707859-2	101
Lab Control Sample	KWG0707859-3	103

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Difluorobenzene 65-135

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

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Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/13/2007

Matrix Spike/Duplicate Matrix Spike Summary
Gasoline Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

		231GW29CLMS KWG0707859-1 Matrix Spike			231GW29CLDMS KWG0707859-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
C7 - C12 GRO	ND	539	500	108	535	500	107	65-135	1	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/13/2007

Lab Control Spike Summary
Gasoline Range Organics

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8015B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0707859

	Lab Control Sample KWG0707859-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
C7 - C12 GRO	523	500	105	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/14/2007
		Time Analyzed:	00:54

Method Blank Summary
Gasoline Range Organics

Sample Name:	Method Blank	**File ID:**	J:\GC06\DATA\061307.TAR\0613R026.D
Lab Code:	KWG0707859-4	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0707859-3	J:\GC06\DATA\061307.TAR\0613R003.D	06/13/07	11:29
231GW29CLMS	KWG0707859-1	J:\GC06\DATA\061307.TAR\0613R004.D	06/13/07	12:00
231GW29CLDMS	KWG0707859-2	J:\GC06\DATA\061307.TAR\0613R005.D	06/13/07	12:32
231GW29CL	K0704852-003	J:\GC06\DATA\061307.TAR\0613R007.D	06/13/07	14:37
1349MW100CL	K0704852-002	J:\GC06\DATA\061307.TAR\0613R008.D	06/13/07	15:09
FM14EX07GW102CL	K0704852-004	J:\GC06\DATA\061307.TAR\0613R010.D	06/13/07	16:27

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/13/2007
		Time Analyzed:	11:29

Lab Control Sample Summary
Gasoline Range Organics

Sample Name:	Lab Control Sample	**File ID:**	J:\GC06\DATA\061307.TAR\0613R003.D
Lab Code:	KWG0707859-3	**Instrument ID:**	GC06
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B	**Extraction Lot:**	KWG0707859

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
231GW29CLMS	KWG0707859-1	J:\GC06\DATA\061307.TAR\0613R004.D	06/13/07	12:00
231GW29CLDMS	KWG0707859-2	J:\GC06\DATA\061307.TAR\0613R005.D	06/13/07	12:32
231GW29CL	K0704852-003	J:\GC06\DATA\061307.TAR\0613R007.D	06/13/07	14:37
1349MW100CL	K0704852-002	J:\GC06\DATA\061307.TAR\0613R008.D	06/13/07	15:09
FM14EX07GW102CL	K0704852-004	J:\GC06\DATA\061307.TAR\0613R010.D	06/13/07	16:27
Method Blank	KWG0707859-4	J:\GC06\DATA\061307.TAR\0613R026.D	06/14/07	00:54

Organic Analysis:
Gasoline Range Organics

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**580**	H	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	91	65-135	06/13/07	Acceptable

Comments:

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R008.D	**Date Acquired:**	06/13/2007 15:09
Lab ID:	K0704852-002	**Date Quantitated:**	07/19/2007 09:34
RunType:	SMPL	**Batch ID:**	KWG0707865
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMn 560

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0707865	**Prep Lot:**	KWG0707859	**Report Group:**	K0704852
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	619719	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\061307.TAR\0613R008.D			**Instrument:**	GC06
Acqu Date:	06/13/2007 15:09	**Quant Date:**	07/19/2007 09:34	**Vial:**	17
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	921971	90.96	91	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3488850	581.57	580	H	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank *
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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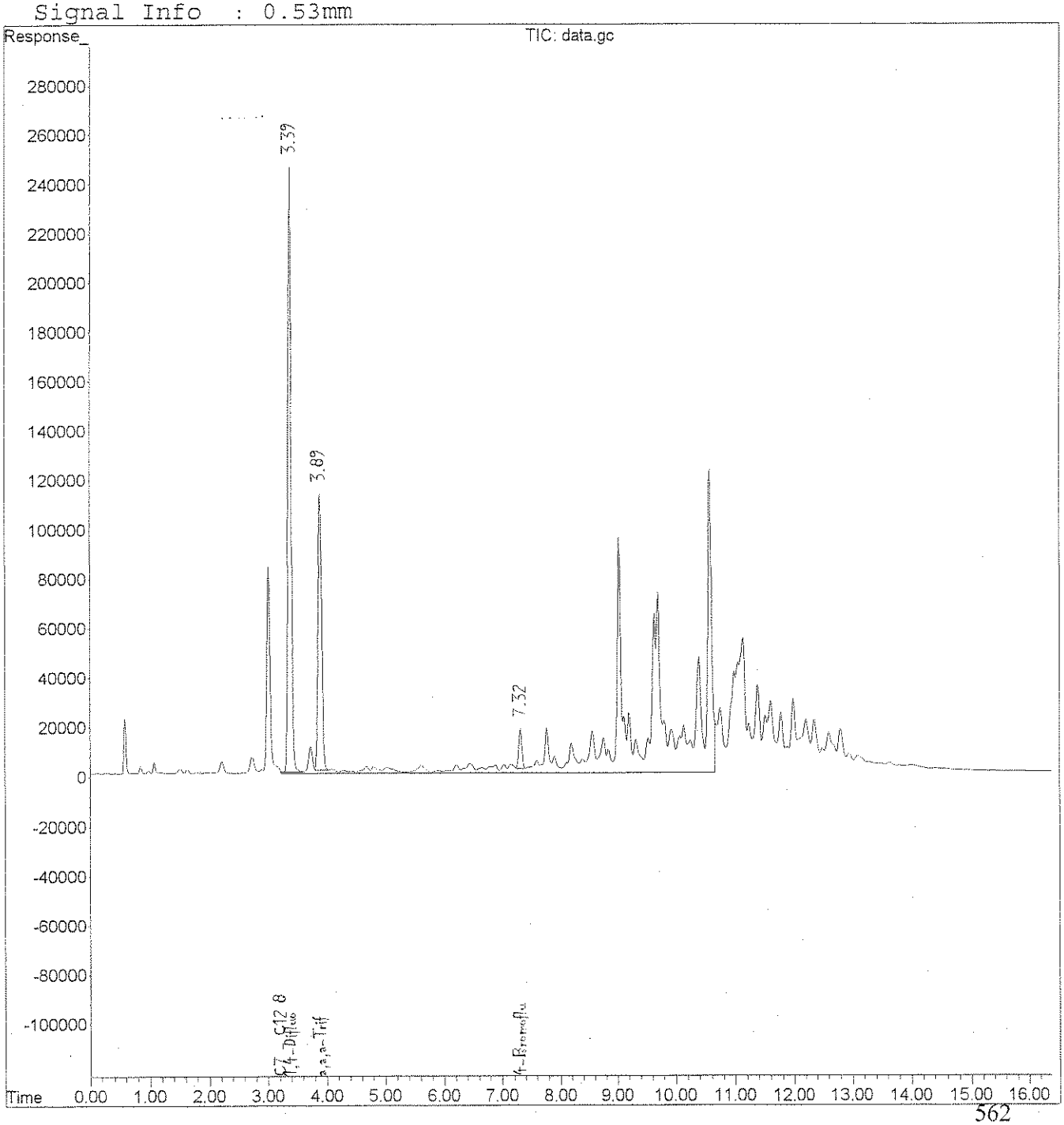
Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R008.D Vial: 17
Acq On : 13 Jun 2007 03:09 pm Operator: GR
Sample : K0704852-002 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	95	65-135	06/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R007.D
Lab ID: K0704852-003
RunType: SMPL
Matrix: WATER

Date Acquired: 06/13/2007 14:37
Date Quantitated: 07/19/2007 09:34
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Hee 7/19/07

Secondary Review: MMh

564

Printed: 07/19/2007 10:32:18
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:	V	Matrix:	WATER
Prod Code:	8015B VOC_GRO	Collect Date:	06/06/2007	Receive Date:	06/07/2007

Analysis Lot:	KWG0707865	Prep Lot:	KWG0707859	Report Group:	K0704852
Analysis Method:	8015B	Prep Method:	EPA 5030B		
Prep Ref:	619720	Prep Date:	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:	Gasoline Range Organics	Report List ID:	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	Quant based on Report List	

Data File:	J:\GC06\DATA\061307.TAR\0613R007.D			Instrument:	GC06
Acqu Date:	06/13/2007 14:37	Quant Date:	07/19/2007 09:34	Vial:	16
Run Type:	SMPL			Dilution:	1.0
Lab ID:	K0704852-003			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	966438	95.34	95	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	65935	10.99	50	U	

Prep Amount:	10 ml	Dilution:	1.0
Prep Final Vol:	10 ml	Unit Factor:	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

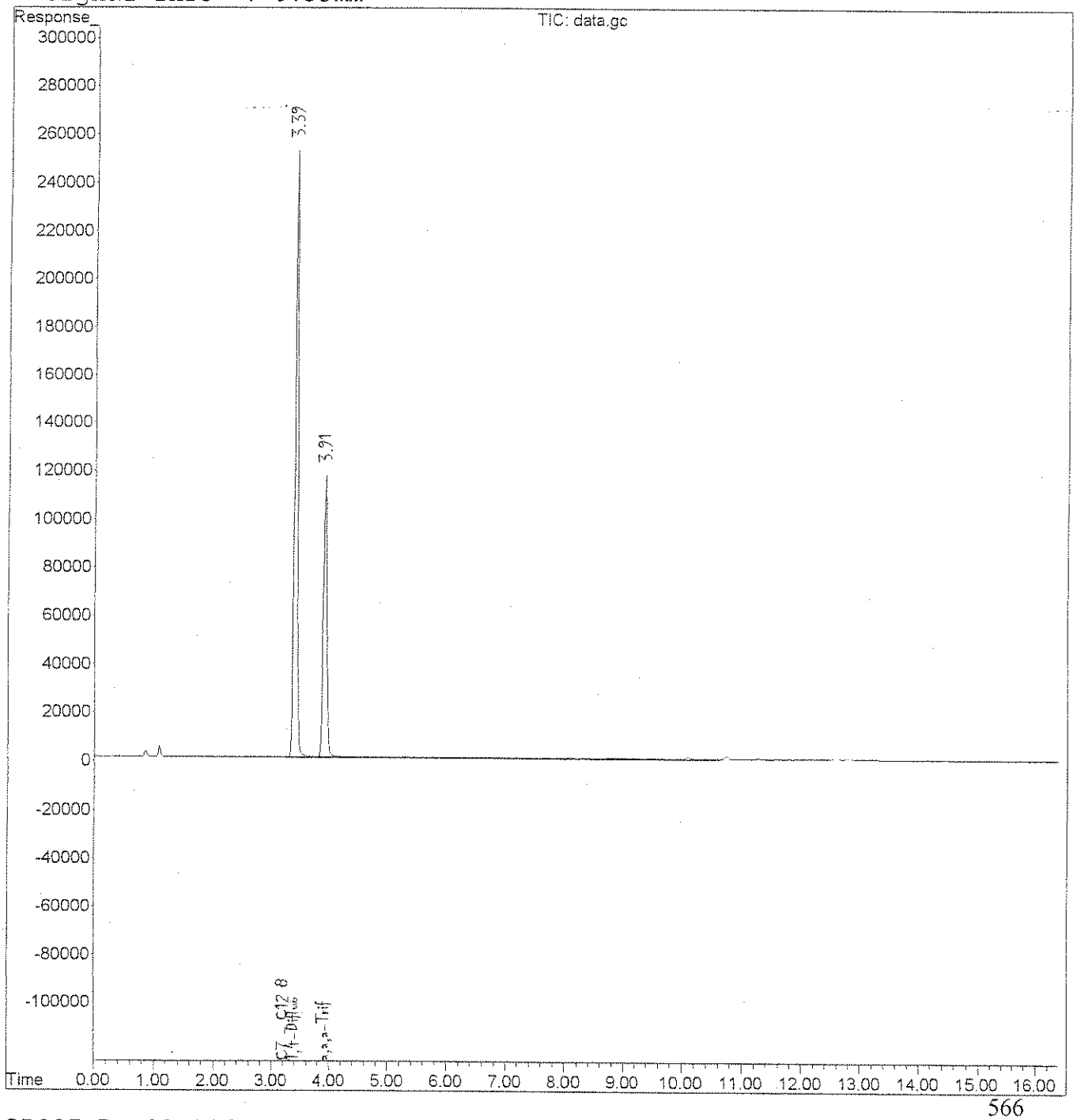
Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R007.D
Acq On : 13 Jun 2007 02:37 pm
Sample : K0704852-003
Misc :
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Vial: 16
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	97	65-135	06/13/07	Acceptable

Comments:

Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R010.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/13/2007 16:27
Date Quantitated: 07/19/2007 09:34
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: 568

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0707865	**Prep Lot:**	KWG0707859	**Report Group:**	K0704852
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	619721	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:	Gasoline Range Organics	**Report List ID:**	LJ7889
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	**Quant based on Report List**	

Data File:	J:\GC06\DATA\061307.TAR\0613R010.D			**Instrument:**	GC06
Acqu Date:	06/13/2007 16:27	**Quant Date:**	07/19/2007 09:34	**Vial:**	10
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-004			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	985556	97.23	97	65-135	OK

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	84942	14.16	50	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

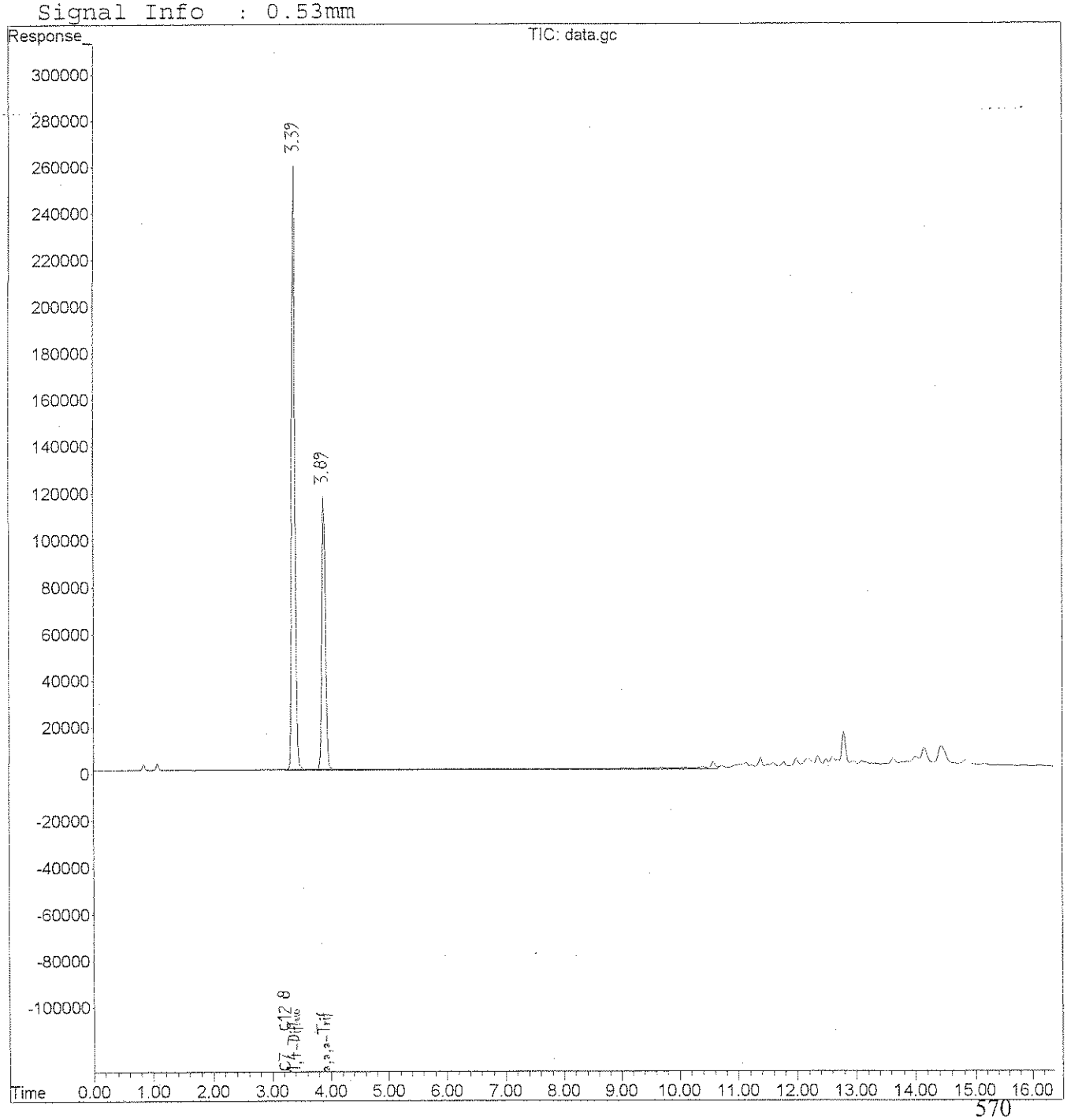
569

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R010.D Vial: 10
Acq On : 13 Jun 2007 04:27 pm Operator: GR
Sample : K0704852-004 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



570

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0707859-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	ND	U	50	1	06/13/07	06/14/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	98	65-135	06/14/07	Acceptable

Comments:

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R026.D	**Date Acquired:**	06/14/2007 00:54
Lab ID:	KWG0707859-4	**Date Quantitated:**	07/19/2007 09:34
RunType:	MB	**Batch ID:**	KWG0707865
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Lee 7/19/07

Secondary Review: [illegible]

572

Printed: 07/19/2007 10:32:33

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	WATER
Prod Code:	8015B VOC_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:	KWG0707859	Report Group:
Analysis Method:	8015B	Prep Method:	EPA 5030B	
Prep Ref:	619725	Prep Date:	06/13/2007	

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R026.D			Instrument:	GC06
Acqu Date:	06/14/2007 00:54	Quant Date:	07/19/2007 09:34	Vial:	26
Run Type:	MB			Dilution:	1.0
Lab ID:	KWG0707859-4			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.00	989339	97.60	98	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	34143	5.69	50	U	

Prep Amount:	10 ml	Dilution:	1.0
Prep Final Vol:	10 ml	Unit Factor:	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

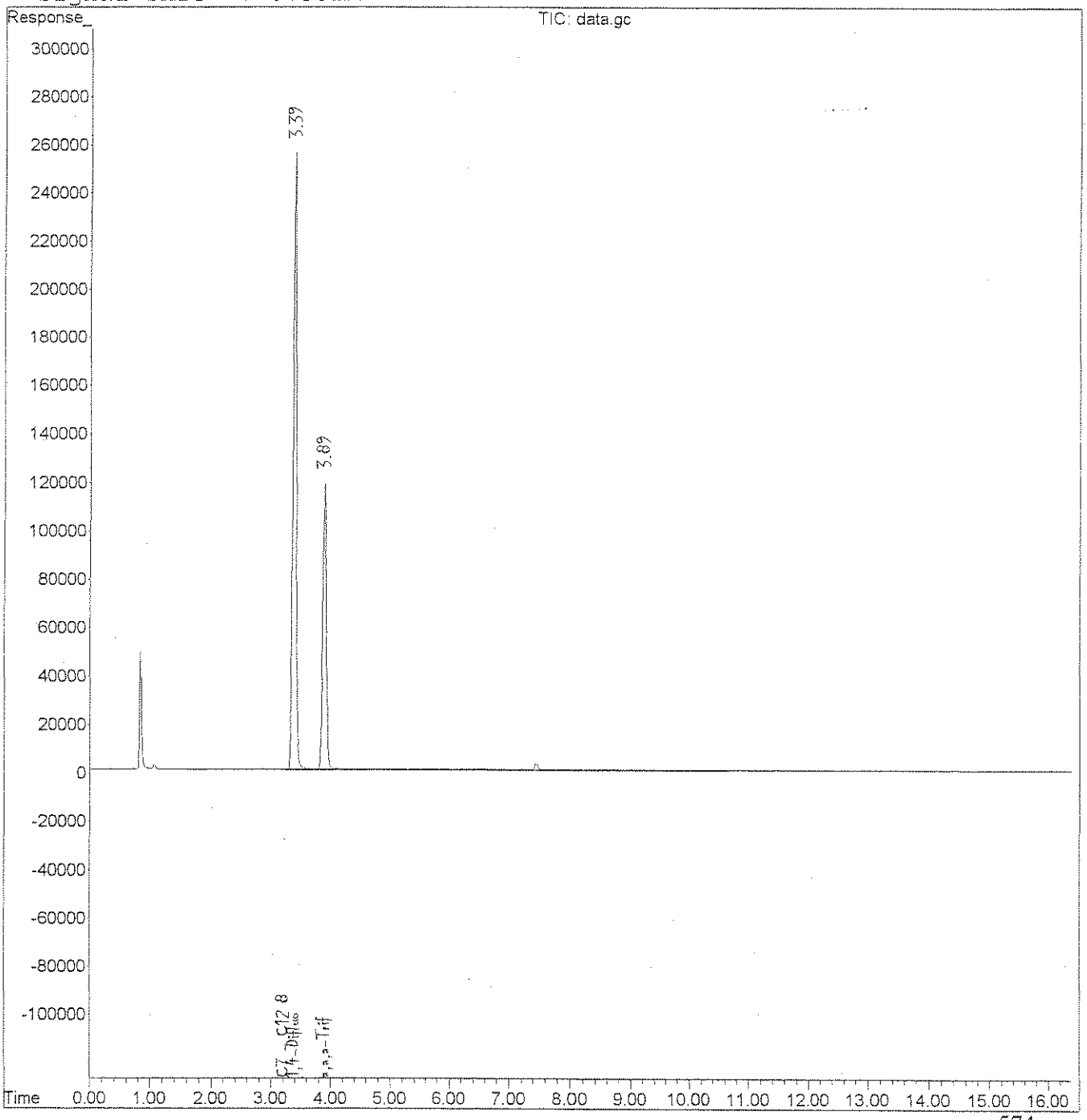
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R026.D Vial: 26
Acq On : 14 Jun 2007 00:54 am Operator: GR
Sample : J2671/4852 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



574

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	231GW29CLMS	**Units:**	ug/L
Lab Code:	KWG0707859-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**539**		50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	101	65-135	06/13/07	Acceptable

Comments:

575

Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R004.D
Lab ID: KWG0707859-1 -- K0704852-003MS
RunType: MS
Matrix: WATER

Date Acquired: 06/13/2007 12:00
Date Quantitated: 07/19/2007 09:34
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: dlee 7/19/07

Secondary Review: [illegible]

576

Printed: 07/19/2007 10:32:09
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	07/19/2007

Analysis Lot:	KWG0707865	**Prep Lot:**	KWG0707859	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	619722	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\061307.TAR\0613R004.D			**Instrument:**	GC06
Acqu Date:	06/13/2007 12:00	**Quant Date:**	07/19/2007 09:34	**Vial:**	13
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0707859-1 -- K0704852-003MS			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	1019355	100.56	101	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3233114	538.94	539		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

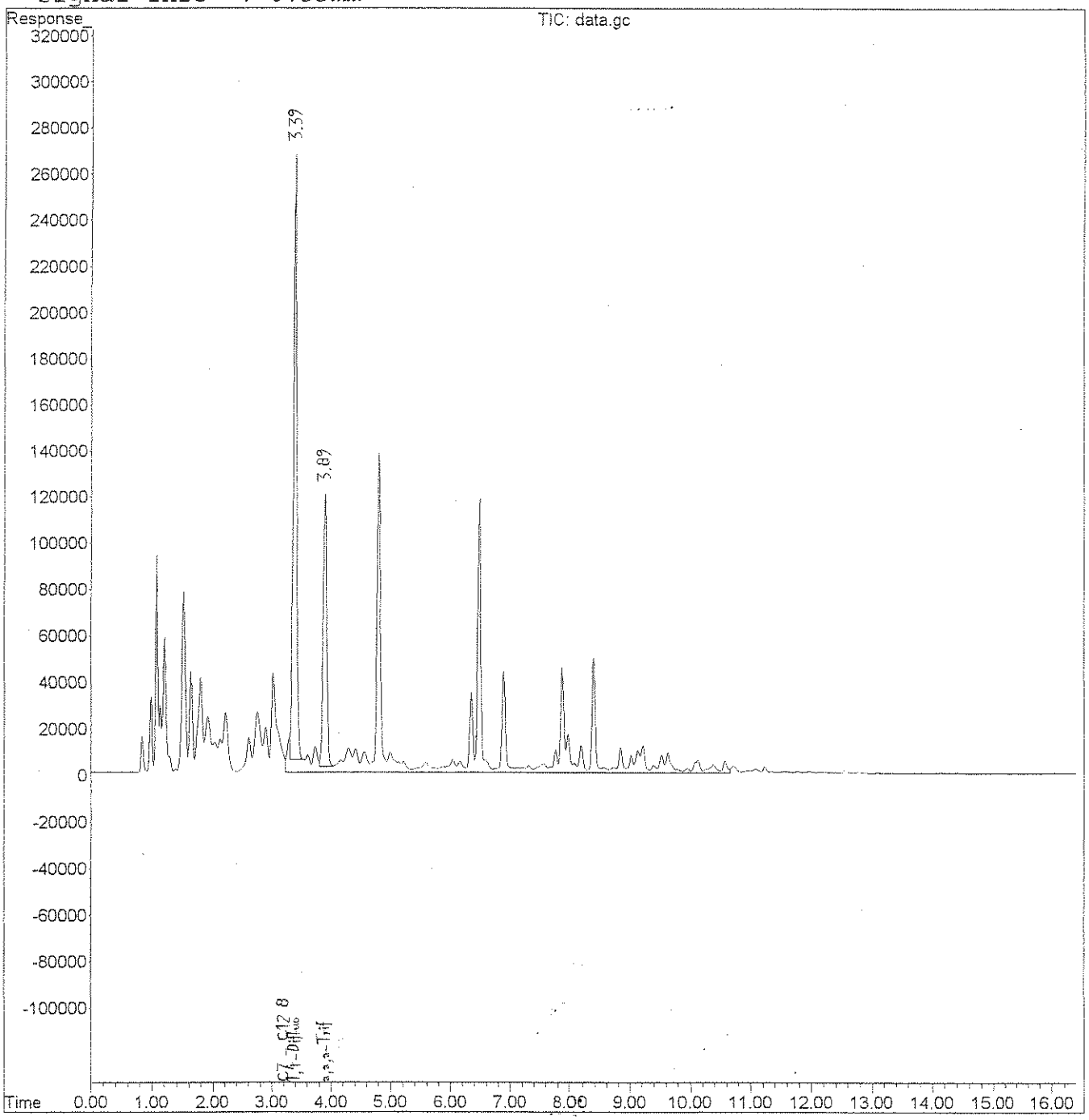
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R004.D Vial: 13
Acq On : 13 Jun 2007 12:00 pm Operator: GR
Sample : K0704852-003MS Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Gasoline Range Organics

Sample Name:	231GW29CLDMS	**Units:**	ug/L
Lab Code:	KWG0707859-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**535**		50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	101	65-135	06/13/07	Acceptable

Comments:

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R005.D	**Date Acquired:**	06/13/2007 12:32
Lab ID:	KWG0707859-2 -- K0704852-003DMS	**Date Quantitated:**	07/19/2007 09:34
RunType:	DMS	**Batch ID:**	KWG0707865
Matrix:	WATER	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	N/A

Primary Review: Ale 7/19/07

Secondary Review: [illegible]

580

Printed: 07/19/2007 10:32:12

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Quantitation Report

Bottle ID:		Tier:		Matrix:	WATER
Prod Code:	8015B VOC_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:	KWG0707859	Report Group:	
Analysis Method:	8015B	Prep Method:	EPA 5030B		
Prep Ref:	619723	Prep Date:	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R005.D			Instrument:	GC06
Acqu Date:	06/13/2007 12:32	Quant Date:	07/19/2007 09:34	Vial:	14
Run Type:	DMS			Dilution:	1.0
Lab ID:	KWG0707859-2 -- K0704852-003DMS			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	1019800	100.61	101	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3208803	534.89	535		

Prep Amount:	10 ml	Dilution:	1.0
Prep Final Vol:	10 ml	Unit Factor:	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

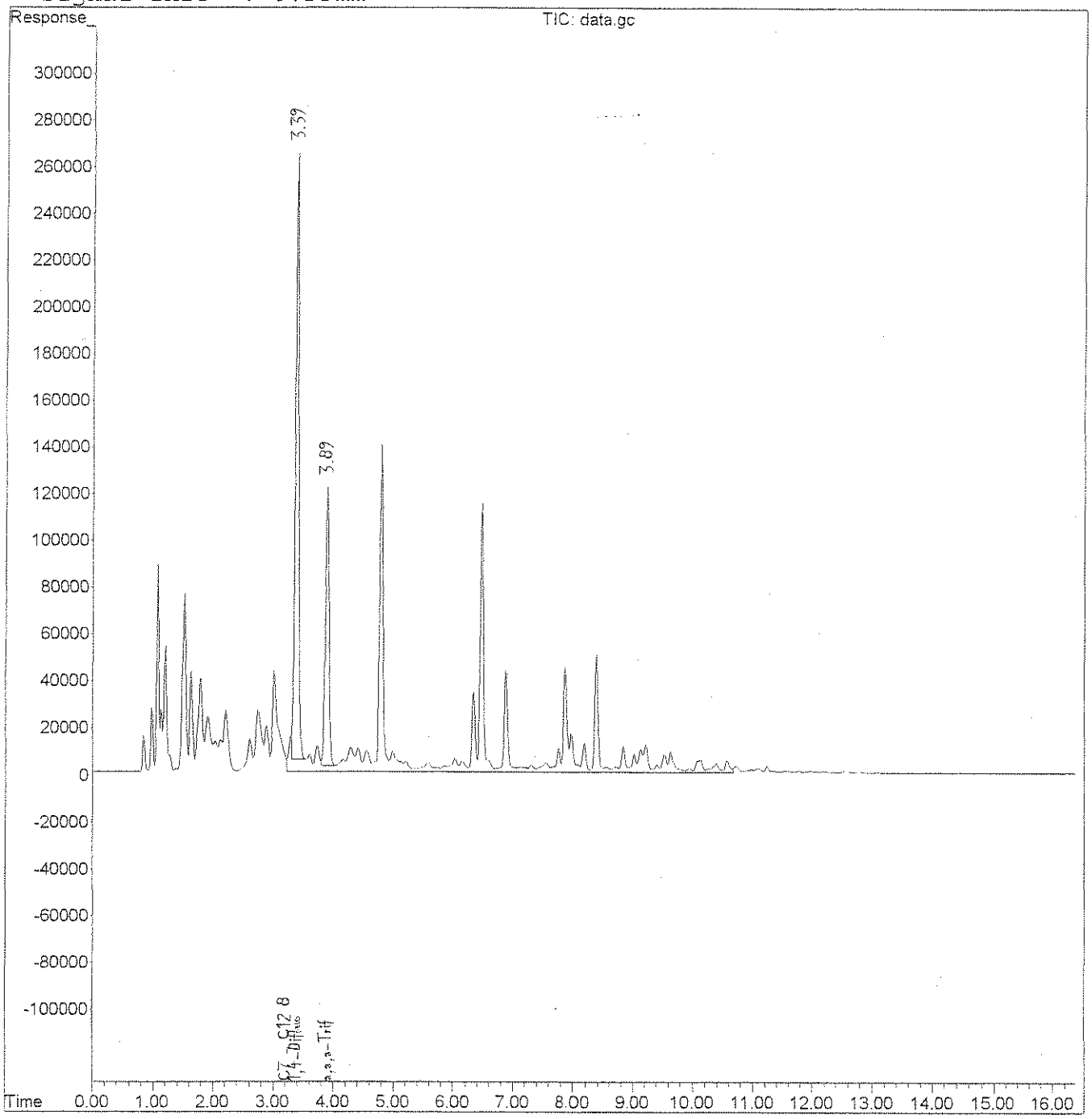
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R005.D Vial: 14
Acq On : 13 Jun 2007 12:32 pm Operator: GR
Sample : K0704852-003DMS Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Gasoline Range Organics

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0707859-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8015B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
C7 - C12 GRO	**523**		50	1	06/13/07	06/13/07	KWG0707859	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,4-Difluorobenzene	103	65-135	06/13/07	Acceptable

Comments:

583

Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R003.D
Lab ID: KWG0707859-3
RunType: LCS
Matrix: WATER

Date Acquired: 06/13/2007 11:29
Date Quantitated: 07/19/2007 09:34
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	4-Bromofluorobenzene	0	70	130	NH

Primary Review: 7/19/07 7/19/07

Secondary Review: MMh

584

Printed: 07/19/2007 10:32:06
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8015B VOC_GRO	**Collect Date:**		**Receive Date:**	07/19/2007

Analysis Lot:	KWG0707865	**Prep Lot:**	KWG0707859	**Report Group:**	
Analysis Method:	8015B	**Prep Method:**	EPA 5030B		
Prep Ref:	619724	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC06\METHODS\091806TAR.M	**Calibration ID:**	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:	J:\GC06\DATA\061307.TAR\0613R026.D	**Quant based on Method**	

Data File:	J:\GC06\DATA\061307.TAR\0613R003.D			**Instrument:**	GC06
Acqu Date:	06/13/2007 11:29	**Quant Date:**	07/19/2007 09:34	**Vial:**	12
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0707859-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39	0.02	1043394	102.93	103	65-135	OK
4-Bromofluorobenzene			0		0	70-130	*

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	3140102	523.43	523		

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

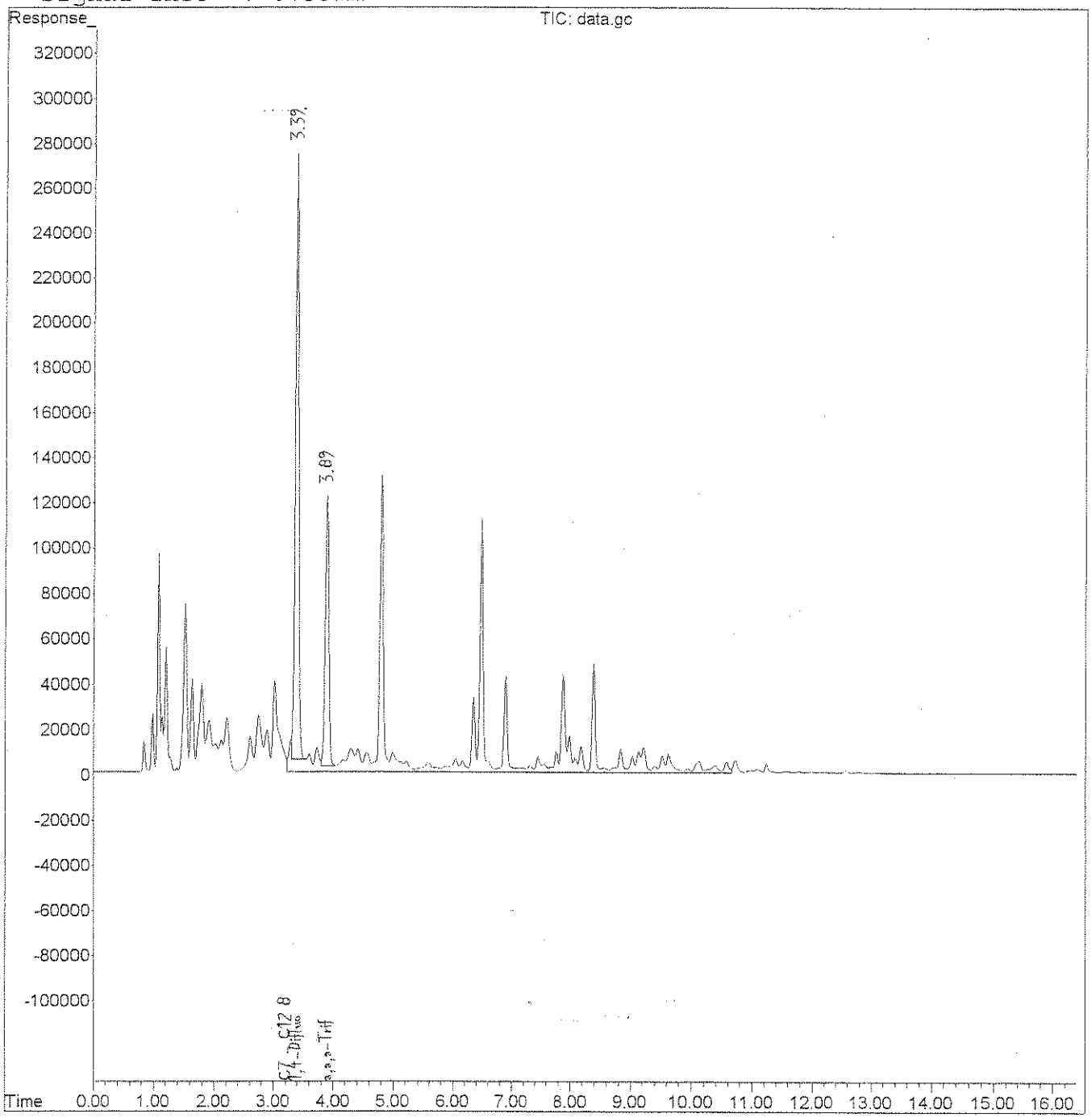
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R003.D Vial: 12
Acq On : 13 Jun 2007 11:29 am Operator: GR
Sample : LCS 4852/J2671 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Standards Data

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Level ID	File ID	Level ID	File ID
A	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D	E	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D
B	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D	F	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D
C	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D	G	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D
D	J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
C7 - C12 GRO	A	50	6030	B	100	5790	C	200	5920	D	500	5900	E	1000	5930
	F	5000	6110	G	10000	6330									
1,4-Difluorobenzene	A	20	10400	B	25	10000	C	50	9160	D	100	10400	E	150	10800

Results flagged with an asterisk (*) indicate values outside control criteria.

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006

Initial Calibration Summary
Gasoline Range Organics

Calibration ID: CAL6128
Instrument ID: GC06

Column: DB-624

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
C7 - C12 GRO	MS	AverageRF	% RSD	3.0		≤ 20
1,4-Difluorobenzene	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 09/18/2006
Date Analyzed: 09/18/2006

Second Source Calibration Verification
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration ID: CAL6128
Units: ug/L

File ID: J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5800	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

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DATA ANALYSIS PARAMETERS

Method Name: J:\GC06\METHODS\091806TAR.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: Yes
Printer: Yes
File: No

Generate Report During Run Method: No

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CAL 6128 aka 091806tar
Calibration Last Updated: Tue Mar 13 13:10:15 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) a,a,a-Trifluorotoluene ( )

Ret. Time 3.93 min., Extract & Integrate from 3.73 to 4.13 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	533357
2		50.000	535446
3		50.000	534830
4		50.000	547317
5		50.000	560294
6		not used for this compound	
7		not used for this compound	
w_cc		50.000	-1
s_cc		50.000	-1

Curve Fit: Avg. RF

---

2) 1,4-Difluorobenzene ( )
Ret. Time 3.43 min., Extract & Integrate from 3.23 to 3.63 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	207154
2		25.000	250434
3		50.000	458000
4		100.000	1035010
5		150.000	1619666
6		not used for this compound	
7		not used for this compound	
w_cc		100.000	-1
s_cc		not used for this compound	

Curve Fit: Avg. RF

---

3) 4-Bromofluorobenzene ( )
Ret. Time 7.49 min., Extract & Integrate from 7.29 to 7.69 min.

Lvl	ID	Conc (ug/L)	Response
1		20.000	129026
2		25.000	154244
3		50.000	297734
4		100.000	650155
5		150.000	961375
6		not used for this compound	
7		not used for this compound	
w_cc		not used for this compound	
s_cc		100.000	-1

jm 03 Ke07

Curve Fit: Avg. RF

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4) C7 - C12 8015 ( )
Ret. Time 3.22 min., Extract & Integrate from 3.22 to 10.67 min.

Lvl	ID	Conc (ug/L)	Response
1		50.000	301387
2		100.000	578840
3		200.000	1183046

592

4	500.000	2948011
5	1000.000	5926881
6	5000.000	30557187
7	10000.000	63275902
w_cc	500.000	-1
s_cc	500.000	-1

Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Wed Mar 14 16:36:04 2007

PM03/6/07

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	533357	49.180 ug/L
2) S 1,4-Difluorobenzene	3.49	207154	20.436 ug/L
3) S 4-Bromofluorobenzene	7.57	129026	20.489 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	301387	44.582 ug/L

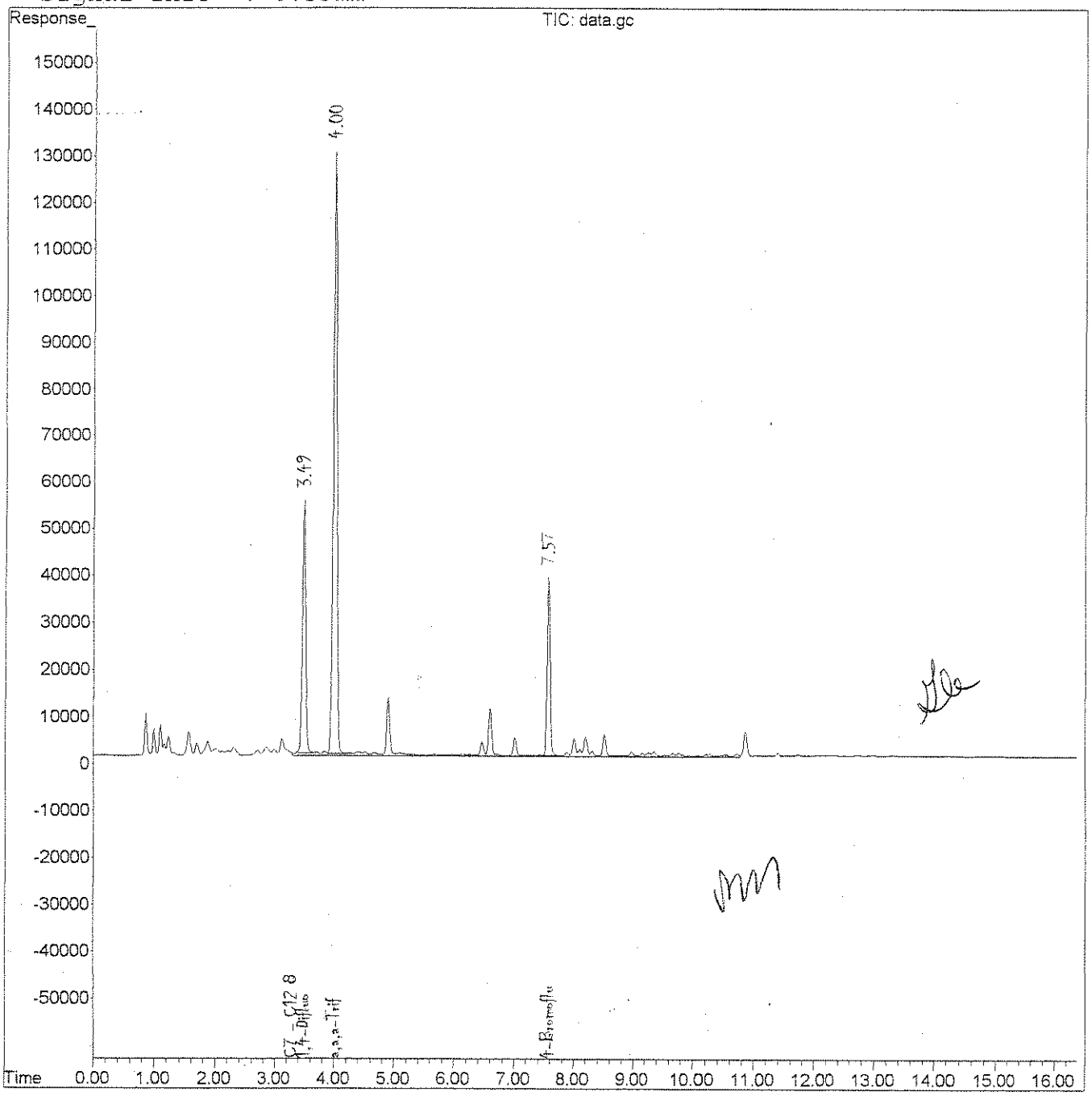
3/14/07

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R004.D Vial: 5
Acq On : 18 Sep 2006 12:40 pm Operator: GR
Sample : gas hcv3-70n 50/20 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:36:59 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	535446	49.373 ug/L
2) S 1,4-Difluorobenzene	3.48	250434	24.706 ug/L
3) S 4-Bromofluorobenzene	7.57	154244	24.494 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	578840	85.623 ug/L

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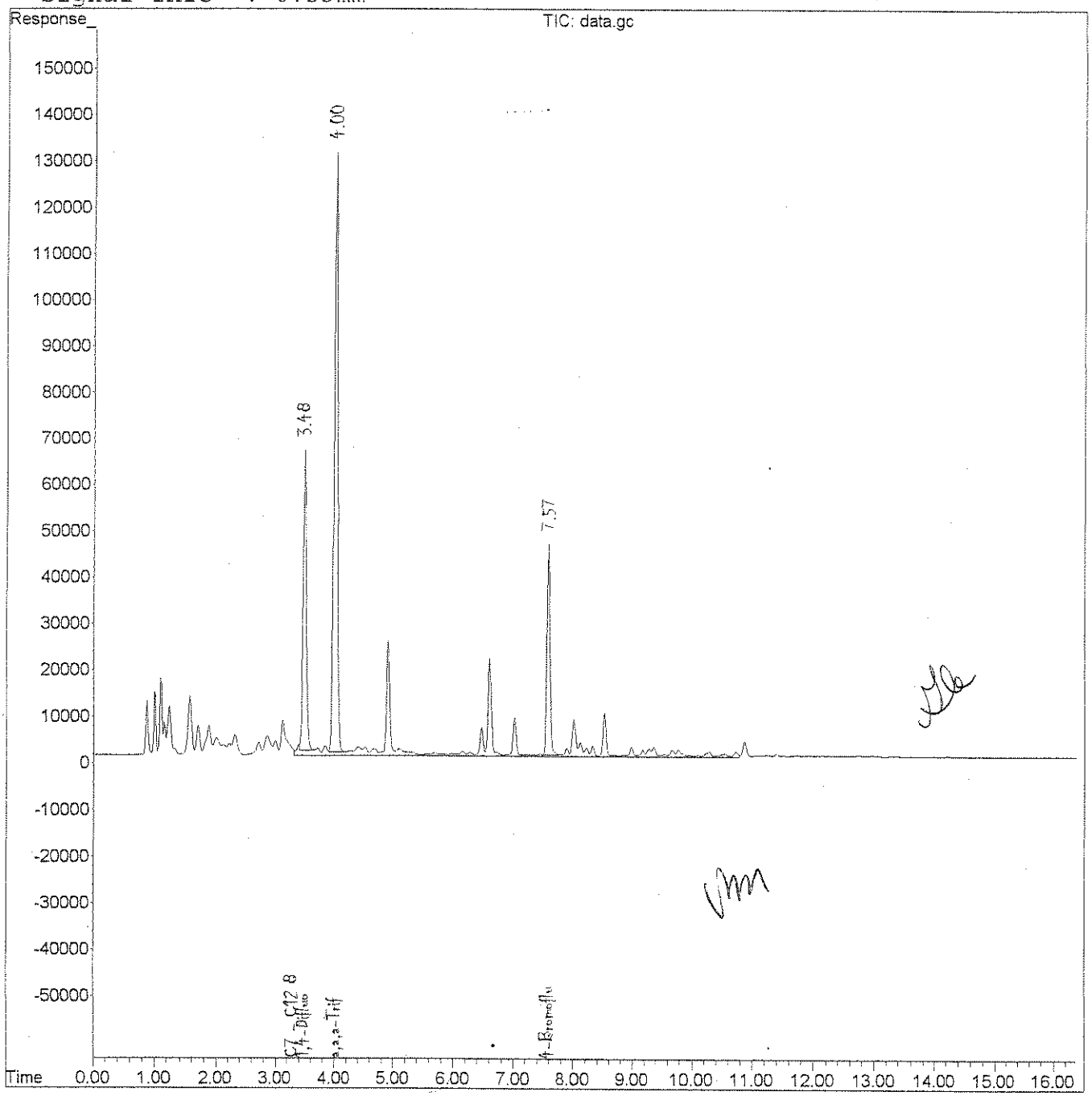
VMM

(f)=RT Delta > 1/2 Window (m)=manual int
0918R005.D 091806TAR.M Tue Mar 13 10:37:00 2007 Page 1

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R005.D Vial: 6
Acq On : 18 Sep 2006 01:12 pm Operator: GR
Sample : gas hcv3-70o 100/25 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:01 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	534830	49.316 ug/L
2) S 1,4-Difluorobenzene	3.49	458000	45.183 ug/L
3) S 4-Bromofluorobenzene	7.59	297734	47.280 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	1183046	174.998 ug/L

Lee 3/14/07

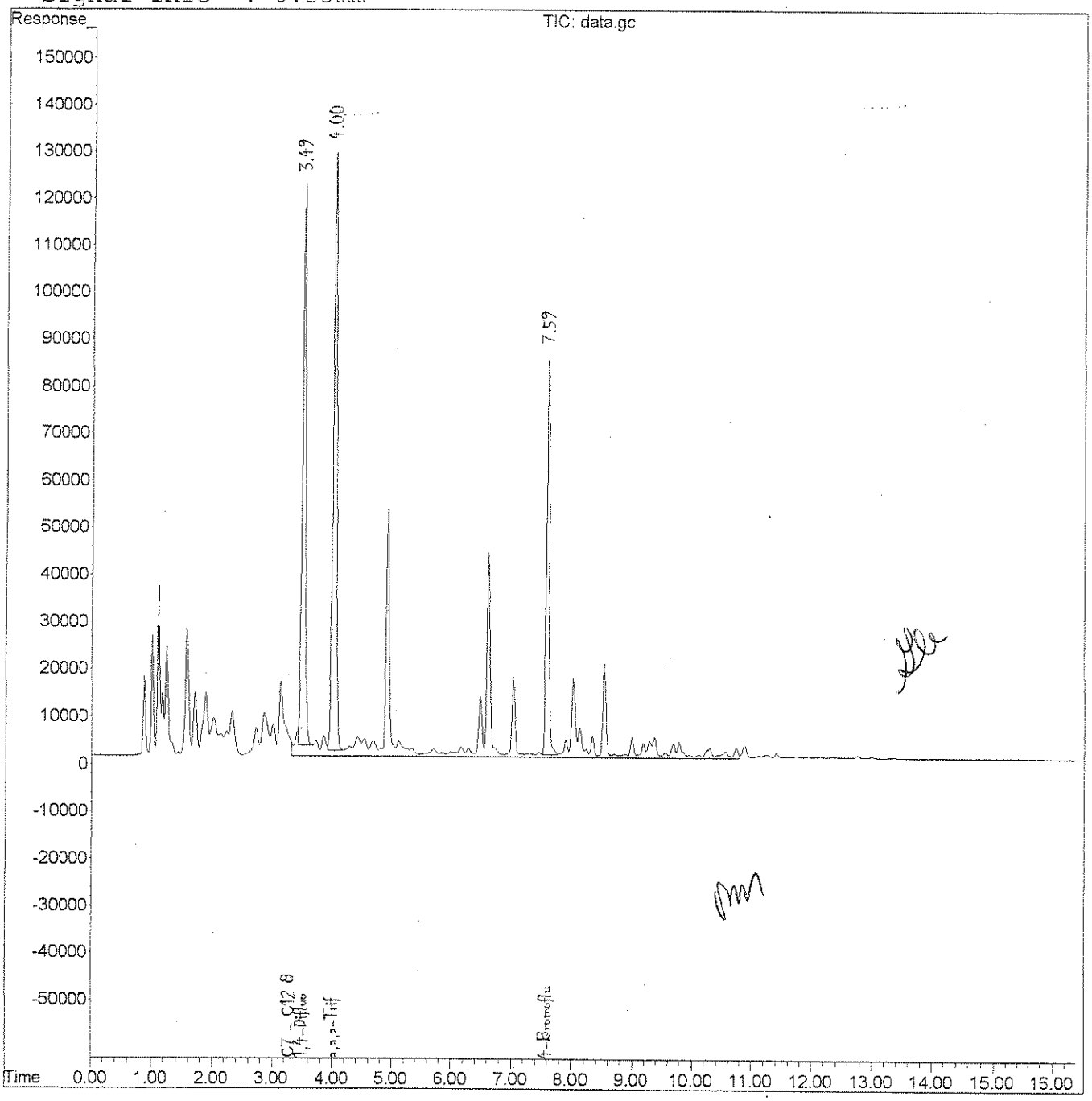
MM

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R006.D Vial: 7
Acq On : 18 Sep 2006 01:43 pm Operator: GR
Sample : gas hcv3-70p 200/50 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:02 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	547317	50.467 ug/L
2) S 1,4-Difluorobenzene	3.49	1035010	102.106 ug/L
3) S 4-Bromofluorobenzene	7.59	650155	103.244 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2948011	436.075 ug/L

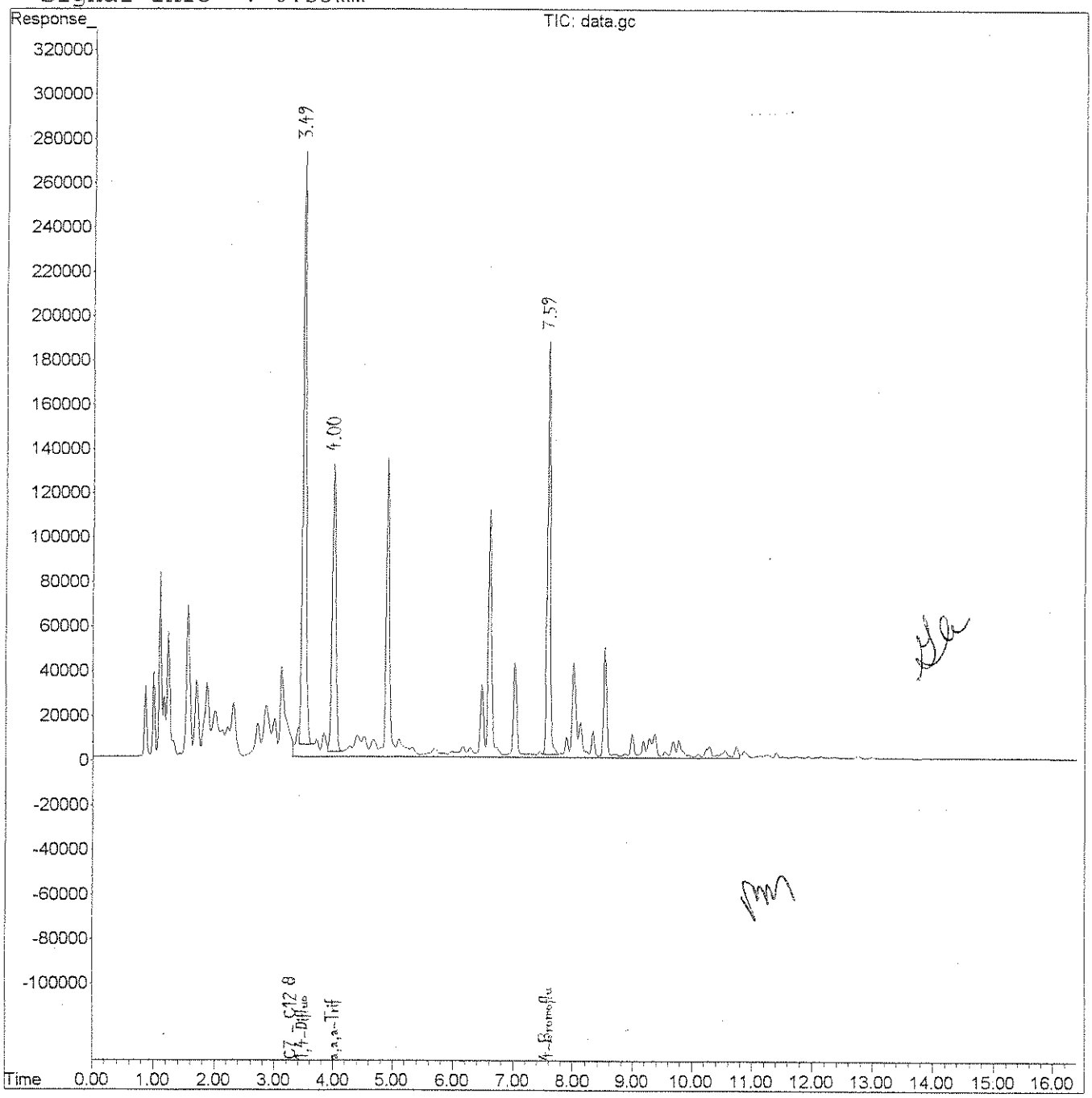
3/14/07

(f)=RT Delta > 1/2 Window (m)=manual int

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R007.D Vial: 8
Acq On : 18 Sep 2006 02:15 pm Operator: GR
Sample : gas hcv3-70q 500/100 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:04 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.00	560294	51.664 ug/L
2) S 1,4-Difluorobenzene	3.49	1619666	159.784 ug/L
3) S 4-Bromofluorobenzene	7.59	961375	152.665 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	5926881	876.715 ug/L

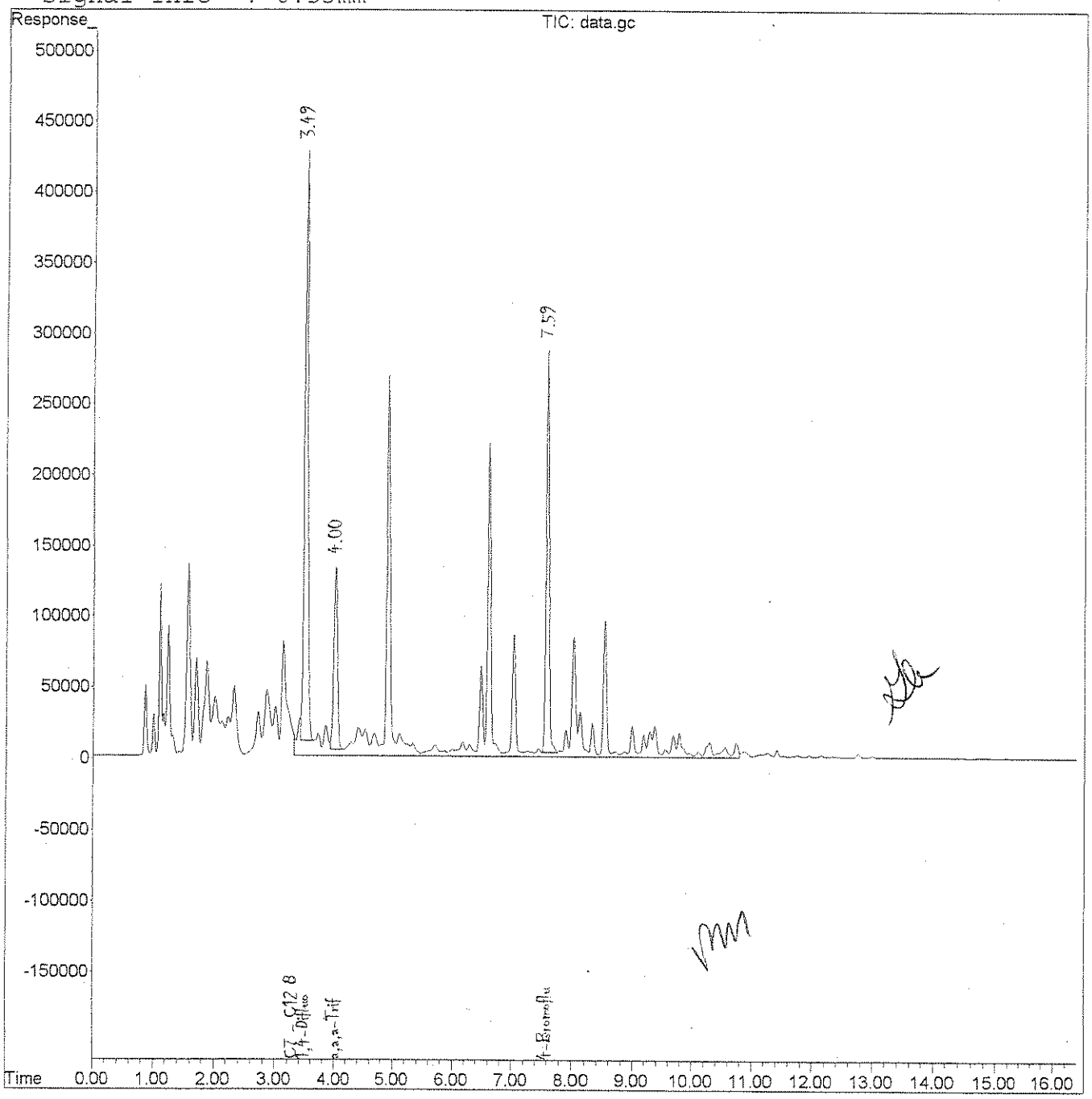
3/14/07

(f)=RT Delta > 1/2 Window (m)=manual int
0918R008.D 091806TAR.M Tue Mar 13 10:37:04 2007 Page 1

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R008.D Vial: 9
Acq On : 18 Sep 2006 02:47 pm Operator: GR
Sample : gas hcv3-70r 1000/150 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:05 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	30557187	4520.076	ug/L

YLe 3/14/07

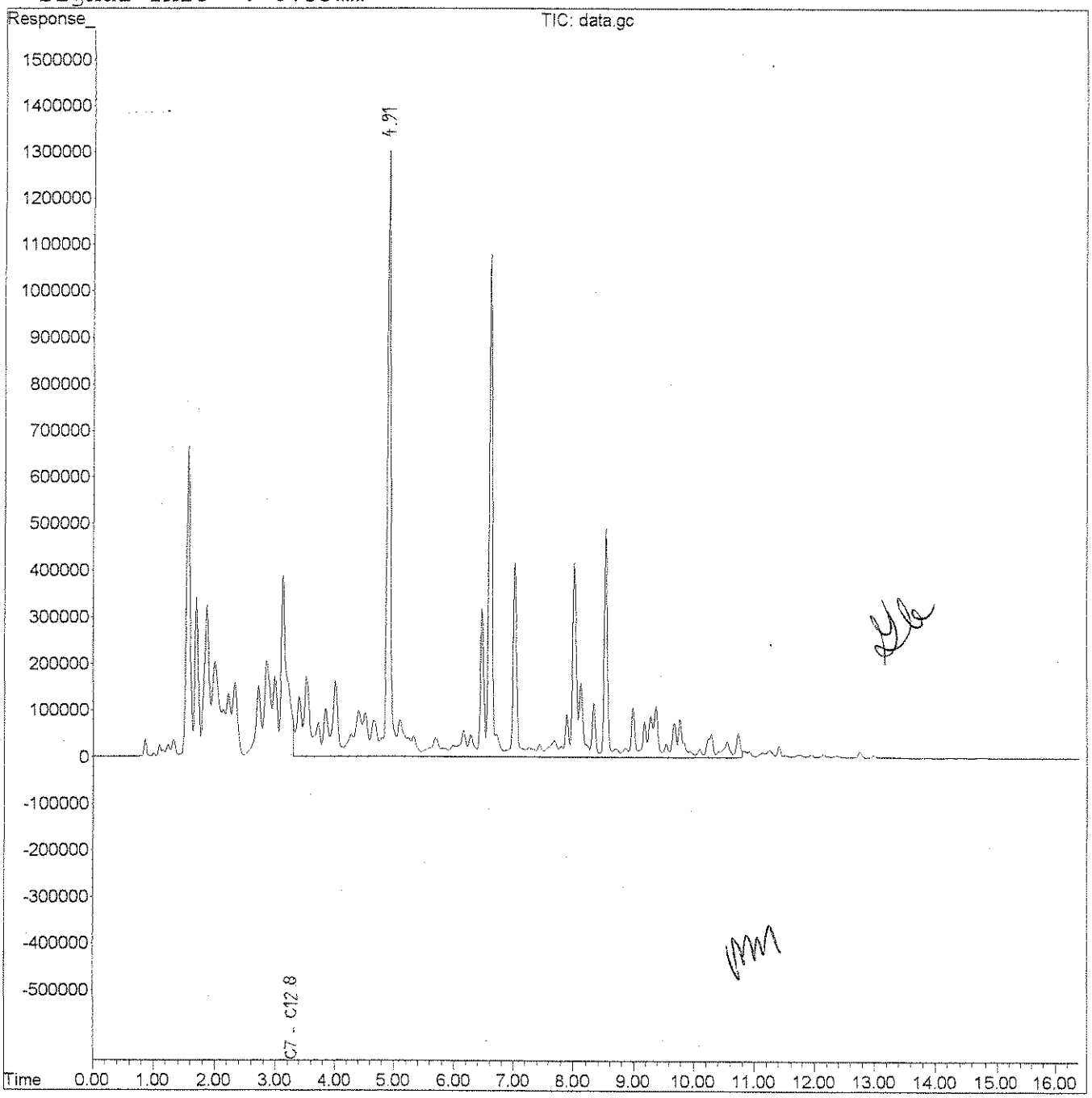
(f)=RT Delta > 1/2 Window (m)=manual int

Quantification Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R009.D Vial: 10
Acq On : 18 Sep 2006 03:18 pm Operator: GR
Sample : gas hcv3-70s 5000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37:06 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
4) H C7 - C12 8015	3.30	63275902	9359.889	ug/L

3/14/07

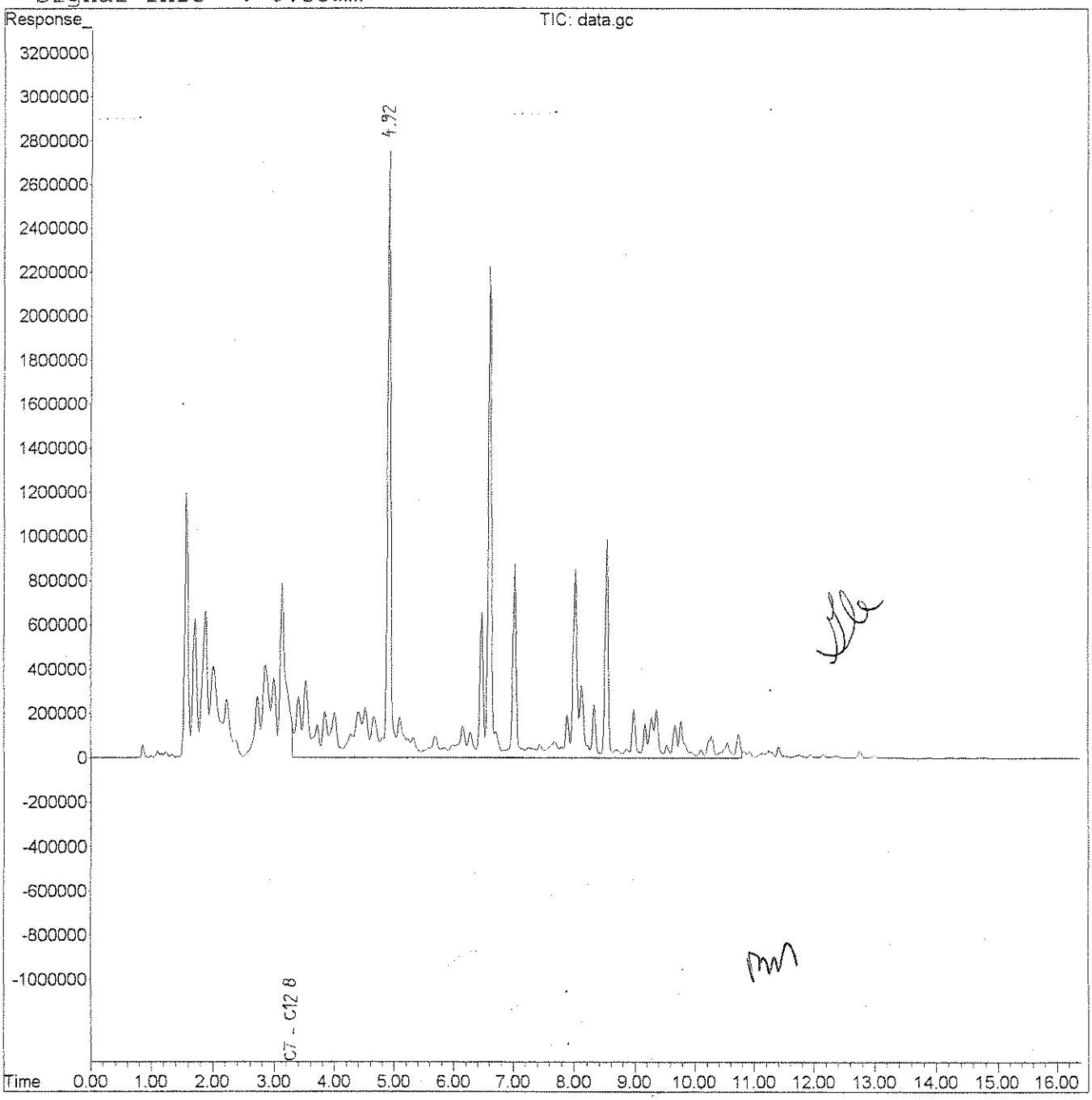
pm

(f)=RT Delta > 1/2 Window (m)=manual in 606
0918R010.D 091806TAR.M Tue Mar 13 10:37:07 2007 Page 1

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R010.D Vial: 11
Acq On : 18 Sep 2006 03:50 pm Operator: GR
Sample : gas hcv3-70t 10000 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:37 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:36:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42:56 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Initial Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S a,a,a-Trifluorotoluene	4.01	558695	51.516 ug/L
2) S 1,4-Difluorobenzene	3.49	1001454	98.796 ug/L
3) S 4-Bromofluorobenzene	7.59	628554	99.813 ug/L
Target Compounds			
4) H C7 - C12 8015	3.30	2898371	483.139 ug/L

3/14/07

mm

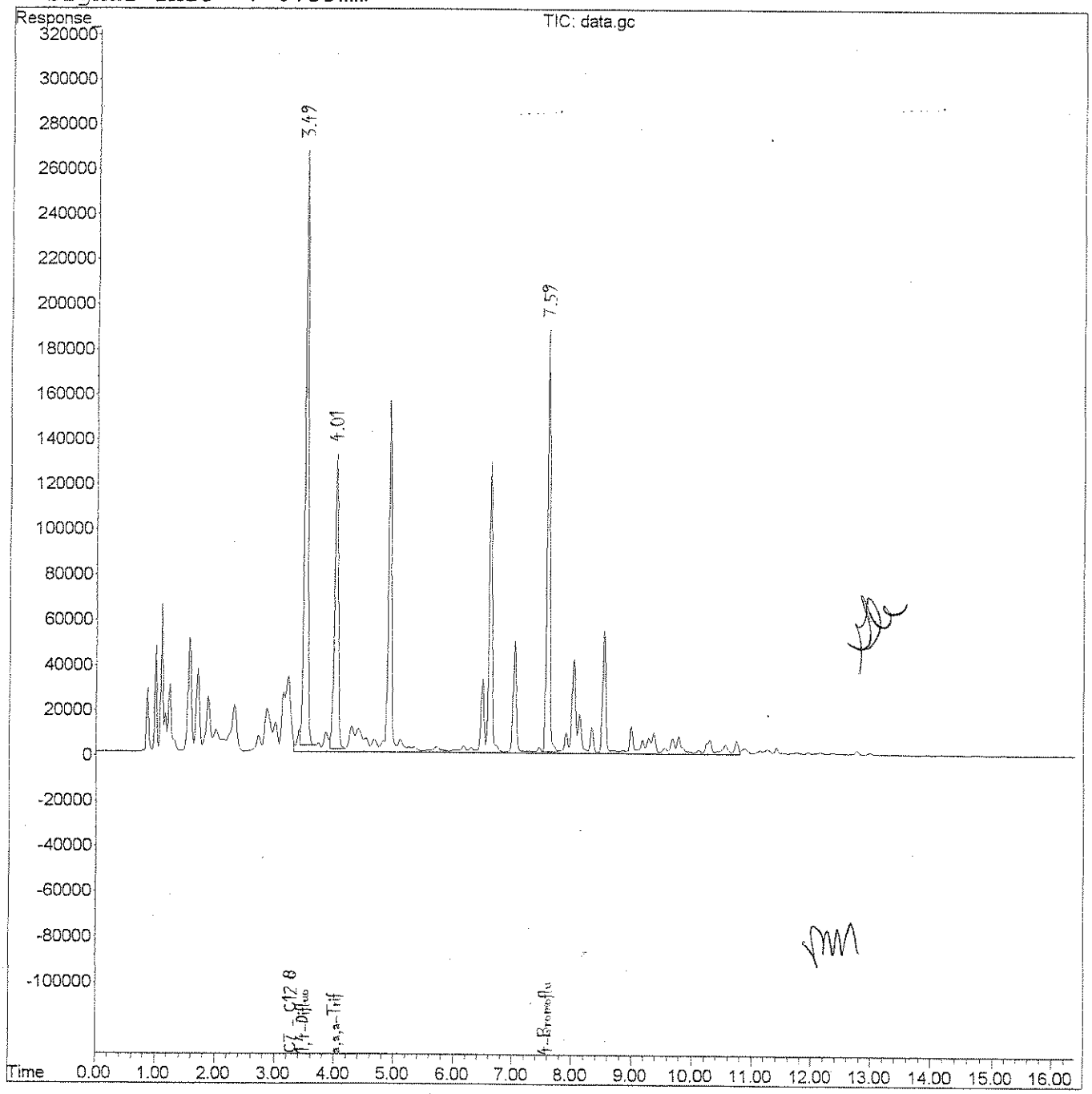
(f)=RT Delta > 1/2 Window (m)=manual int
0918R014.D 091806TAR.M Tue Mar 13 10:42:58 2007 Page 1

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\CALIBRAT\031307GX.TAR\0918R014.D Vial: 12
Acq On : 18 Sep 2006 05:56 pm Operator: GR
Sample : gas hcv3-71a 500/100 icv Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Mar 13 10:42 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL aka 091806tar
Last Update : Tue Mar 13 10:39:28 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R002.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	480	6000	5790	-4	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10500	4	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R002.D
Lab ID: KWG0707865-4
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 06/13/2007 09:38
Date Quantitated: 07/19/2007 09:46
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review:

611

Printed: 07/19/2007 10:32:02
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R002.D			Instrument:	GC06
Acqu Date:	06/13/2007 09:38	Quant Date:	07/19/2007 09:46	Vial:	11
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707865-4			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.37		1050105	103.60		65-135	NA
4-Bromofluorobenzene	7.44		561634	89.19		70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	2892680	482.19			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

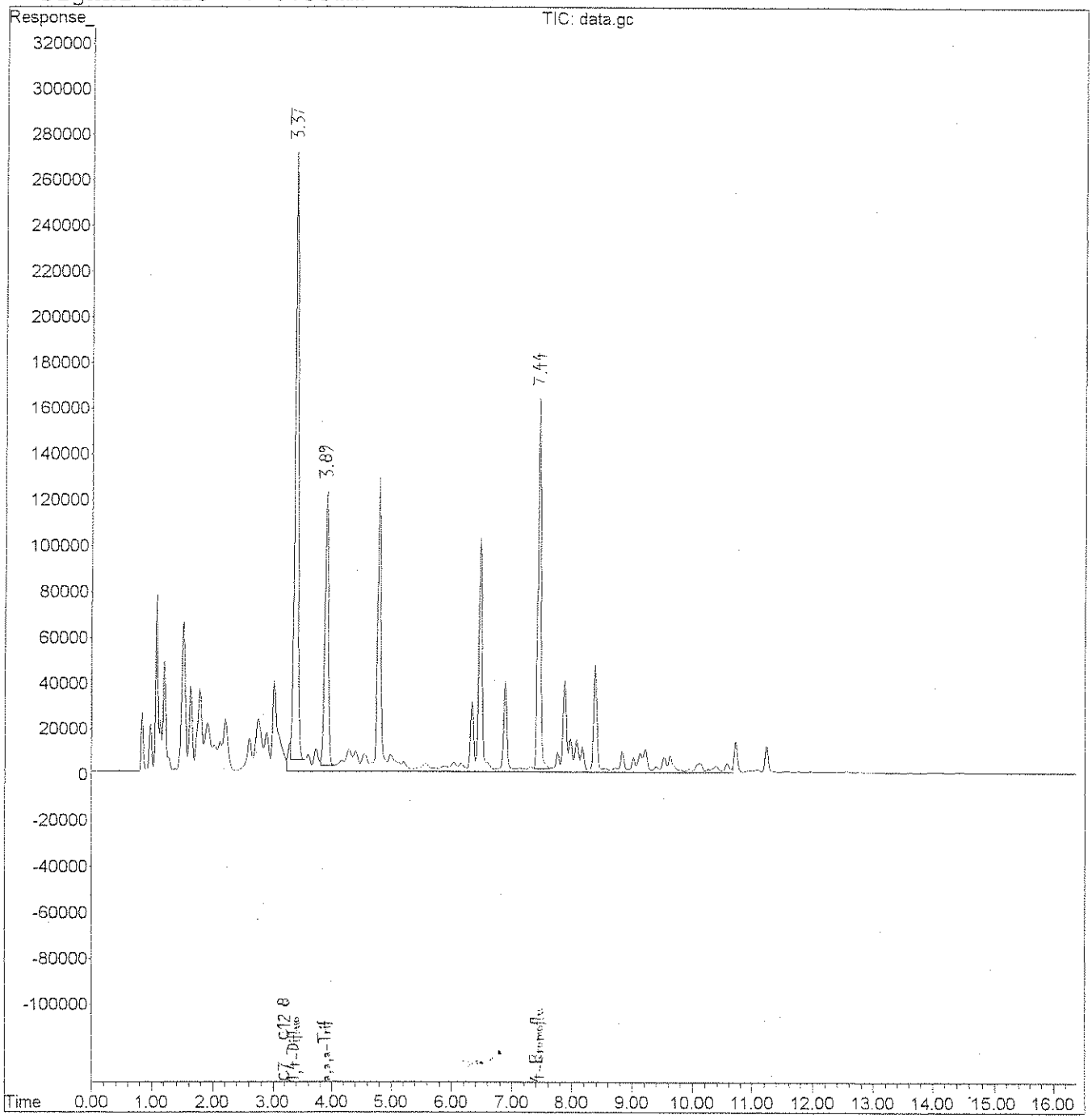
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R002.D
Acq On : 13 Jun 2007 09:38 am
Sample : GAS/BFB HCV3-970
Misc :
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Vial: 11
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/13/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R014.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	490	6000	5840	-3	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10400	2	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R014.D	**Date Acquired:**	06/13/2007 18:34
Lab ID:	KWG0707865-5	**Date Quantitated:**	07/19/2007 09:34
RunType:	CCV	**Batch ID:**	KWG0707865
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gee 7/19/07

Secondary Review: MMG

615

Printed: 07/19/2007 10:32:27

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R014.D			Instrument:	GC06
Acqu Date:	06/13/2007 18:34	Quant Date:	07/19/2007 09:34	Vial:	14
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707865-5			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		1037513	102.35		65-135	NA
4-Bromofluorobenzene	7.44		589430	93.60		70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	2920782	486.88			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

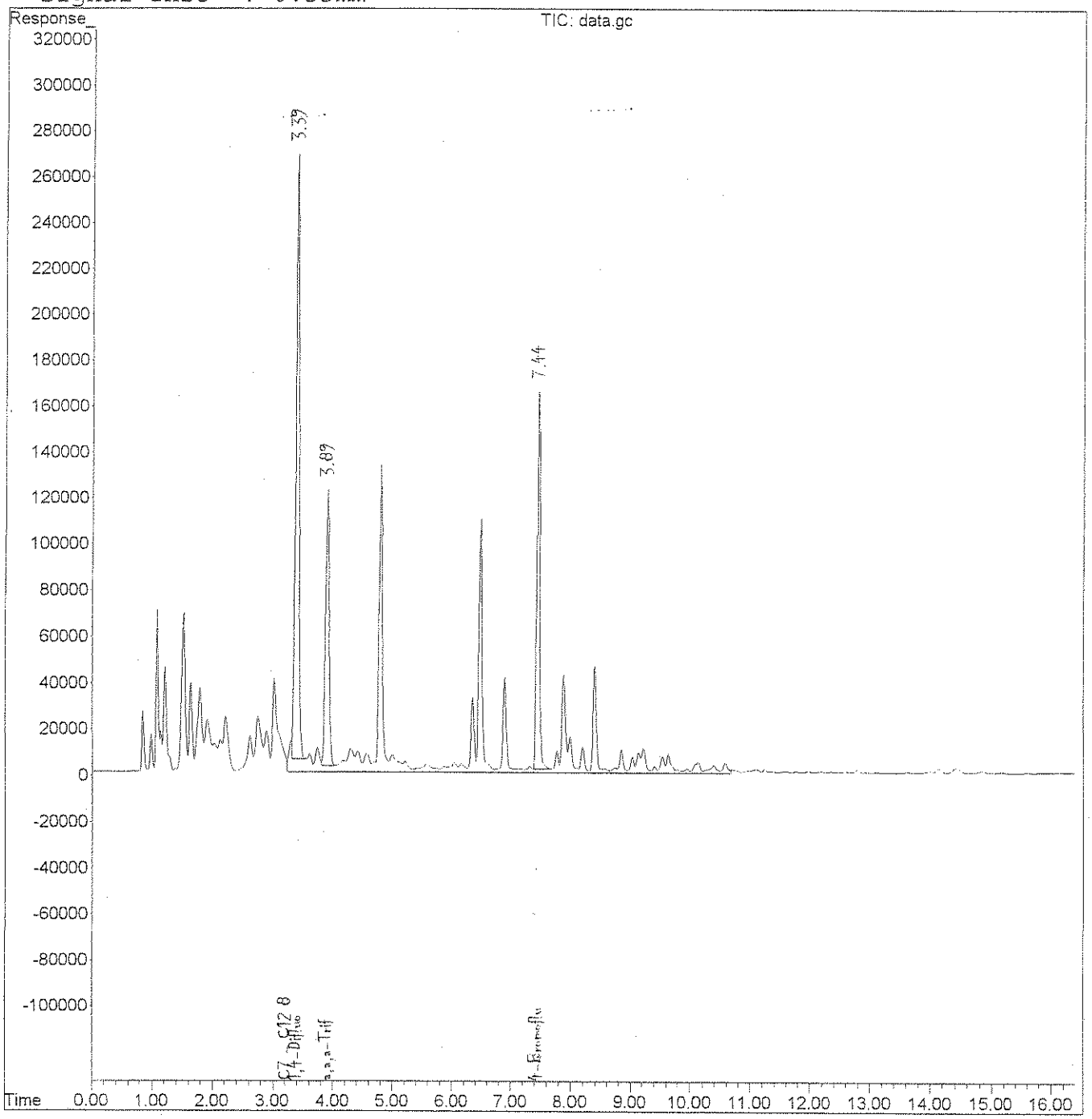
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R014.D
Acq On : 13 Jun 2007 06:34 pm
Sample : GAS/BFB HCV3-97O
Misc :
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Vial: 14
Operator: GR
Inst : GC06
Multiplr: 1.00

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Gasoline Range Organics

Calibration Type: External Standard
Analysis Method: 8015B

Calibration Date: 09/18/2006
Calibration ID: CAL6128
Analysis Lot: KWG0707865
Units: ug/L

File ID: J:\GC06\DATA\061307.TAR\0613R027.D

Column ID: DB-624

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
C7 - C12 GRO	500	450	6000	5430	-9	NA	± 15 %	AverageRF
1,4-Difluorobenzene	100	100	10100	10300	1	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R027.D	**Date Acquired:**	06/14/2007 01:26
Lab ID:	KWG0707865-6	**Date Quantitated:**	07/19/2007 09:34
RunType:	CCV	**Batch ID:**	KWG0707865
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 7/19/07

Secondary Review: AMH

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R027.D			Instrument:	GC06
Acqu Date:	06/14/2007 01:26	Quant Date:	07/19/2007 09:34	Vial:	27
Run Type:	CCV			Dilution:	1.0
Lab ID:	KWG0707865-6			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		1025180	101.14		65-135	NA
4-Bromofluorobenzene	7.45		550757	87.46		70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	2715675	452.69			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

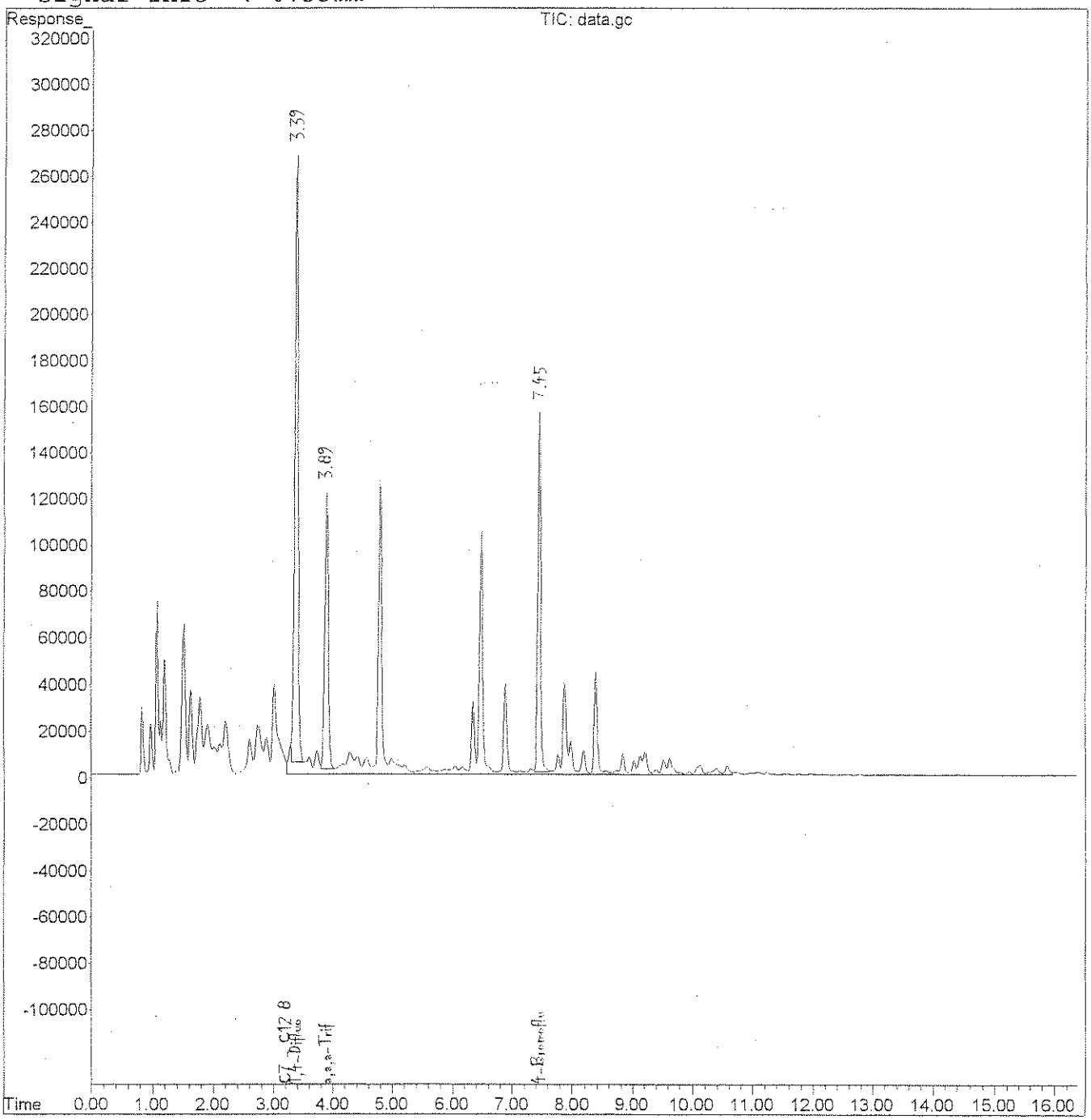
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R027.D Vial: 27
Acq On : 14 Jun 2007 01:26 am Operator: GR
Sample : GAS/BFB HCV3-970 Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organic Analysis:
Gasoline Range Organics

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0707859	**Prep Method:**	EPA 5030B	**Prep Date:**	06/13/07 00:00
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol. pH
K0704852-002	1349MW100CL	8015B VOC_GR	WATER	10ml	10ml <2
K0704852-003	231GW29CL	8015B VOC_GR	WATER	10ml	10ml
K0704852-004	FM14EX07GW102CL	8015B VOC_GR	WATER	10ml	10ml
KWG0707859-1	Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0707859-2	Duplicate Matrix Spike	8015B VOC_GR	WATER	10ml	10ml
KWG0707859-3	Lab Control Sample	8015B VOC_GR	WATER	10ml	10ml
KWG0707859-4	Method Blank	8015B VOC_GR	WATER	10ml	10ml

Lab Code	Parent Lab Code	Comments
KWG0707859-1	K0704852-003	
KWG0707859-2	K0704852-003	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0704852-002	619719	HCV3-94B				
K0704852-003	619720	HCV3-94B				
K0704852-004	619721	HCV3-94B				
KWG0707859-1	619722	HCV3-94B		HCV3-97M	21.5uL	
KWG0707859-2	619723	HCV3-94B		HCV3-97M	21.5uL	
KWG0707859-3	619724	HCV3-94B		HCV3-97M	25uL	
KWG0707859-4	619725	HCV3-94B				

Comments:

Started By: GRoettge Assisted By: Training Yes No

Completed By: GRoettge Assisted By: Yes No

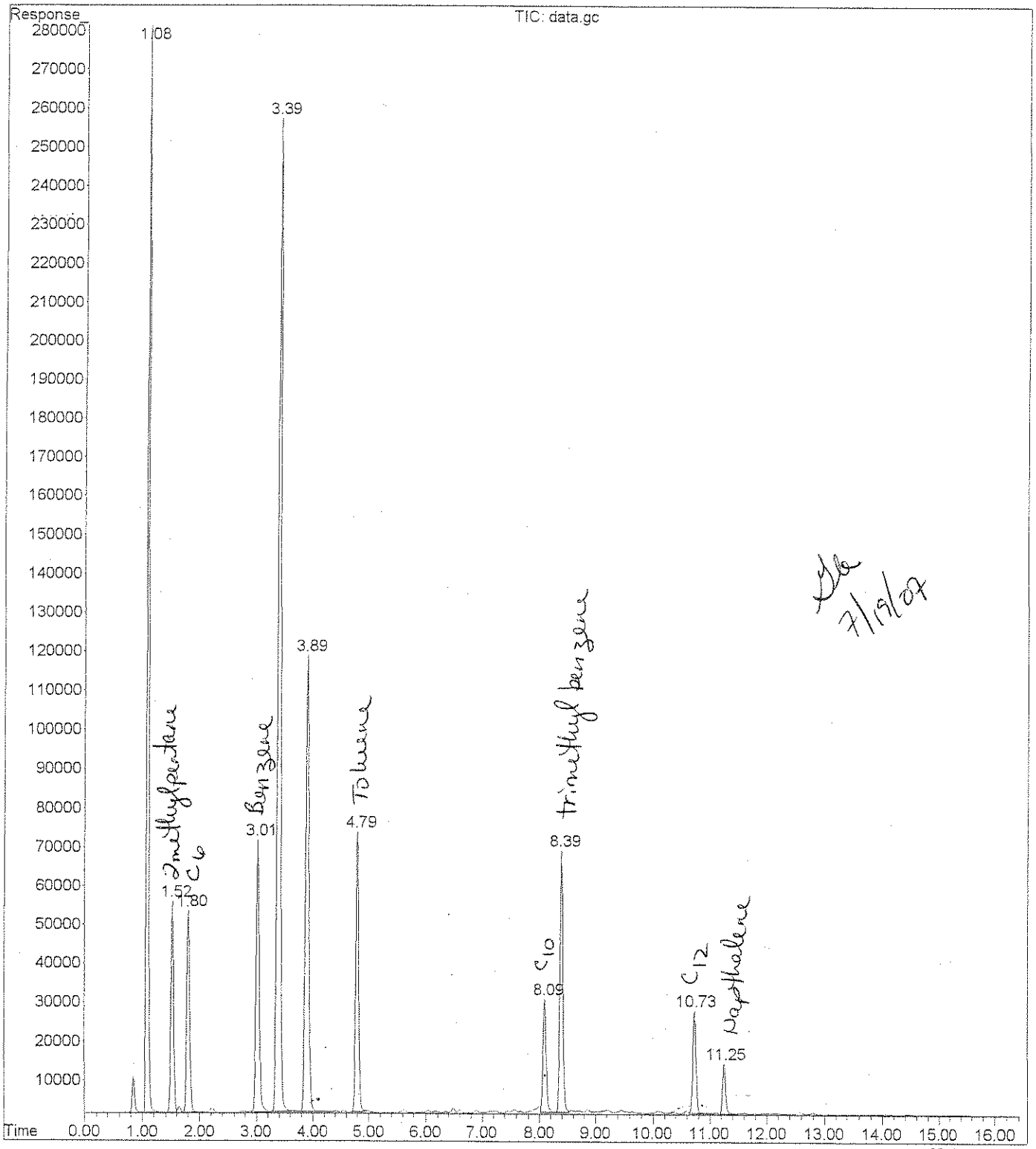
Reviewed By: [signature] Date: 7/23/07 Storage:

Chain of Custody

Relinquished By: [signature] Date: 7/19/07 Extracts Examined

Received By: Date: Yes No

File : J:\GC06\DATA\061307.TAR\0613R001.D
Operator : GR
Acquired : 13 Jun 2007 09:07 am using AcqMethod TPH1.MTH
Instrument : GC06
Sample Name: MARKER HCV3-97N
Misc Info :
Vial Number: 12



DL 7/19/07

624

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R006.D	**Date Acquired:**	06/13/2007 13:54
Lab ID:	KWG0707865-1	**Date Quantitated:**	07/19/2007 09:34
RunType:	IB	**Batch ID:**	KWG0707865
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Lee 7/19/07

Secondary Review: MMC

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R006.D			Instrument:	GC06
Acqu Date:	06/13/2007 13:54	Quant Date:	07/19/2007 09:34	Vial:	15
Run Type:	IB			Dilution:	1.0
Lab ID:	KWG0707865-1			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		985098	97.18		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	234978	39.17			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

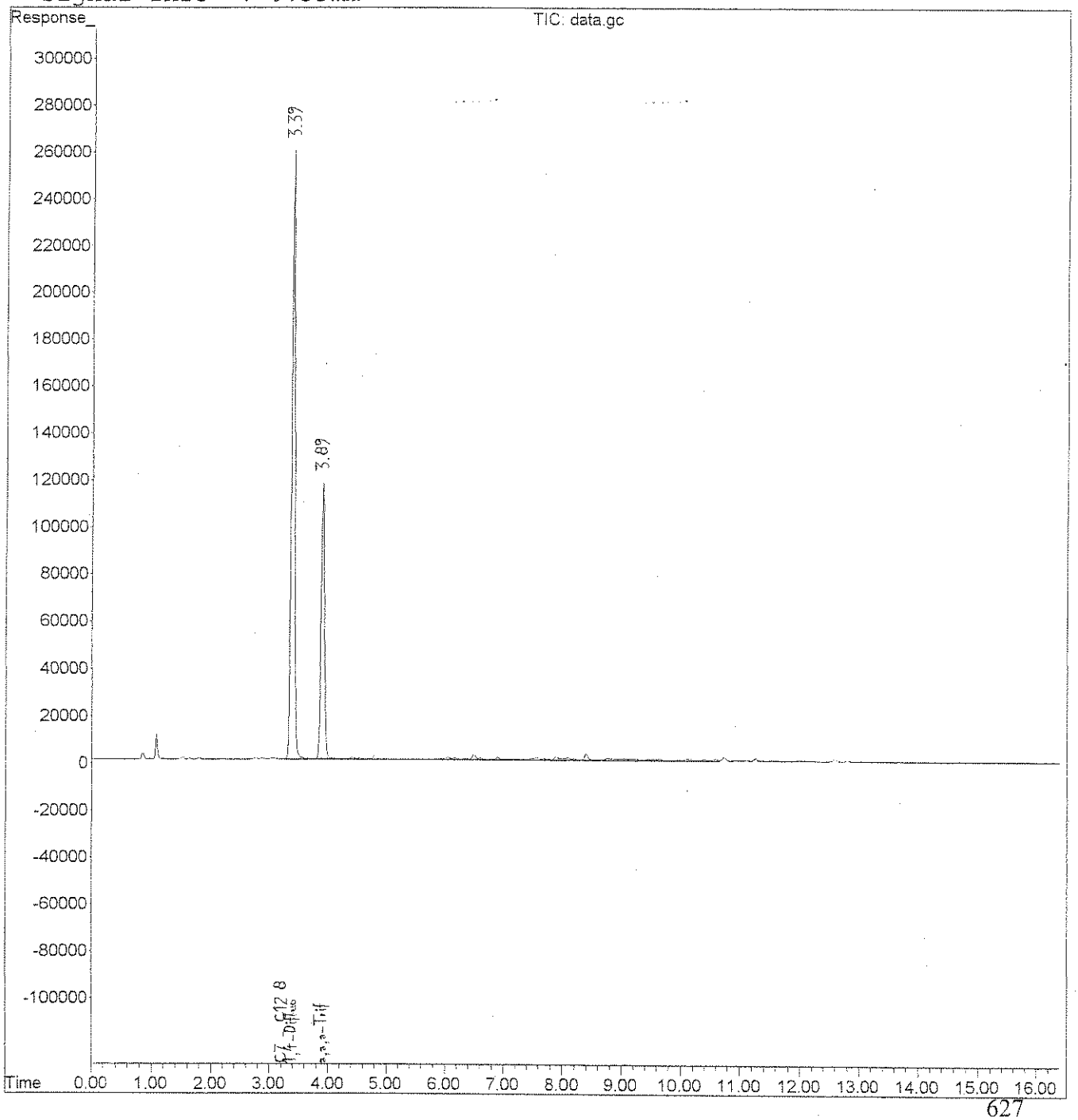
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.TAR\0613R006.D Vial: 15
Acq On : 13 Jun 2007 01:54 pm Operator: GR
Sample : IB Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



627

Exception Report

Data File:	J:\GC06\DATA\061307.TAR\0613R018.D	**Date Acquired:**	06/13/2007 20:41
Lab ID:	KWG0707865-2	**Date Quantitated:**	07/19/2007 09:34
RunType:	IB	**Batch ID:**	KWG0707865
Matrix:	NOT APPLICABLE	**Analysis Method:**	8015B
		MethodJoinID:	MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMG

628

Printed: 07/19/2007 10:32:30

u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R018.D			Instrument:	GC06
Acqu Date:	06/13/2007 20:41	Quant Date:	07/19/2007 09:34	Vial:	18
Run Type:	IB			Dilution:	1.0
Lab ID:	KWG0707865-2			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		1001693	98.82		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	165339	27.56			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

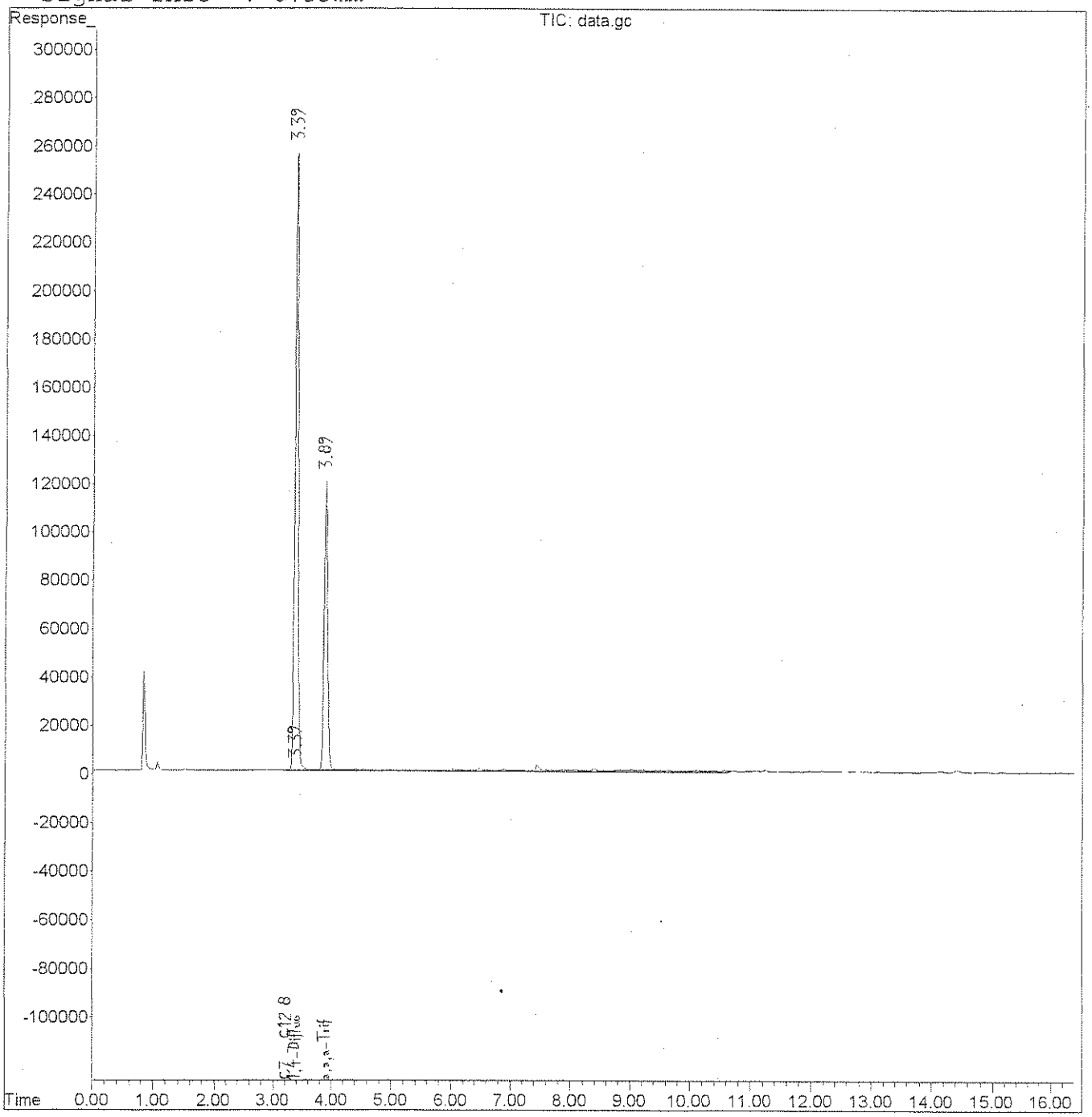
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R018.D Vial: 18
Acq On : 13 Jun 2007 08:41 pm Operator: GR
Sample : IB Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Exception Report

Data File: J:\GC06\DATA\061307.TAR\0613R028.D
Lab ID: KWG0707865-3
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 06/14/2007 01:57
Date Quantitated: 07/19/2007 09:34
Batch ID: KWG0707865
Analysis Method: 8015B
MethodJoinID: MJ832

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Gle 7/19/07

Secondary Review: MMK

631

Printed: 07/19/2007 10:32:39
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		Tier:		Matrix:	NOT APPLICABL
Prod Code:	AK101 AK_GRO	Collect Date:		Receive Date:	07/19/2007

Analysis Lot:	KWG0707865	Prep Lot:		Report Group:	
Analysis Method:	8015B	Prep Method:			
Prep Ref:		Prep Date:			

Quant Method:	J:\GC06\METHODS\091806TAR.M	Calibration ID:	CAL6128
Title:			
		Method ID:	MJ832
MB Ref:		Quant based on Method	

Data File:	J:\GC06\DATA\061307.TAR\0613R028.D			Instrument:	GC06
Acqu Date:	06/14/2007 01:57	Quant Date:	07/19/2007 09:34	Vial:	28
Run Type:	IB			Dilution:	1.0
Lab ID:	KWG0707865-3			Soln Conc. Units:	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		983950	97.07		65-135	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C7 - C12 GRO	3.22	?	184348	30.73			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

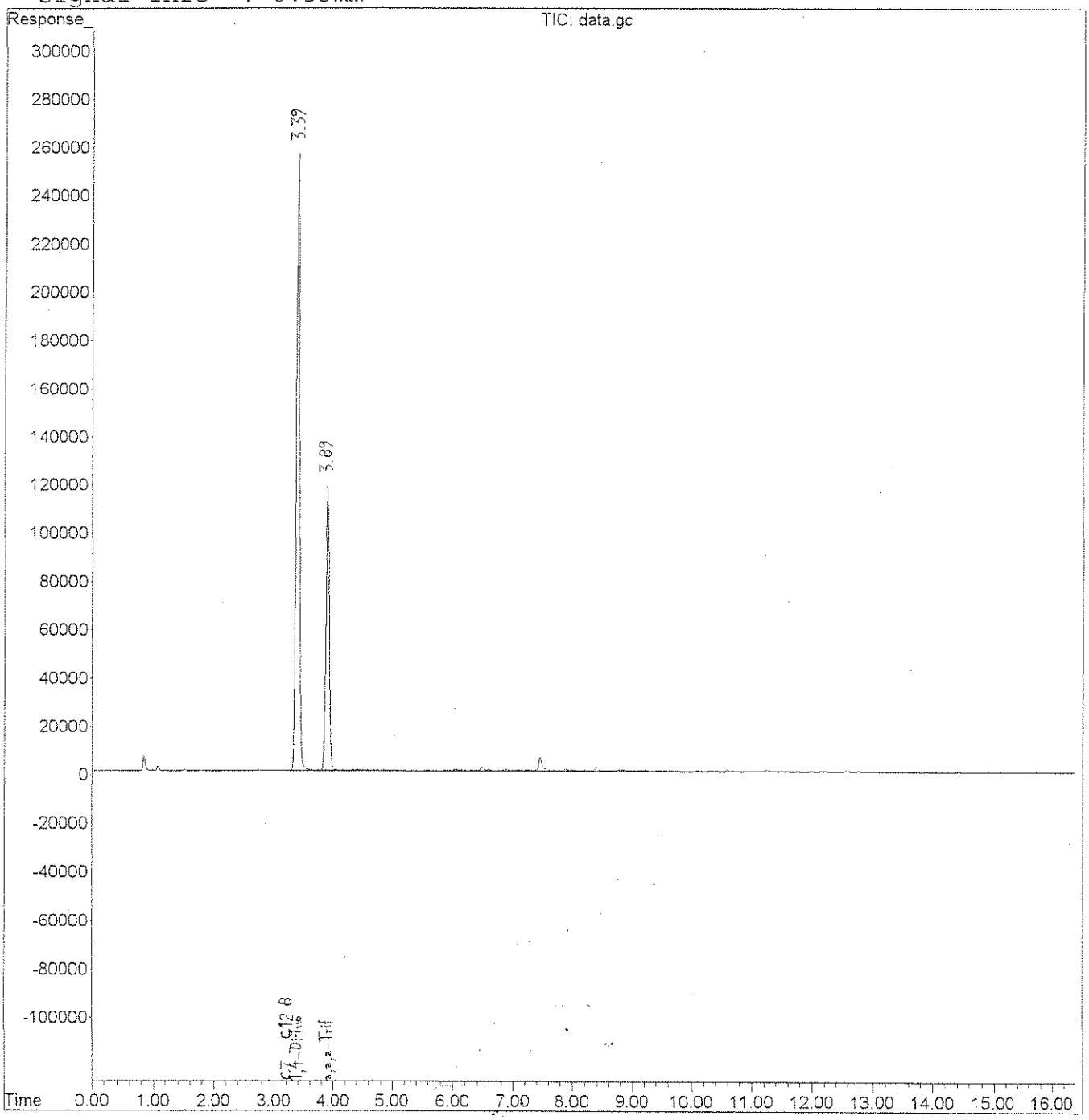
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\GC06\DATA\061307.TAR\0613R028.D Vial: 28
Acq On : 14 Jun 2007 01:57 am Operator: GR
Sample : IB Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jul 19 9:34 2007 Quant Results File: 091806TAR.RES

Quant Method : J:\GC06\METHODS\091806TAR.M (RTE Integrator)
Title : CAL 6128 aka 091806tar
Last Update : Tue Mar 13 13:10:15 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Exception Report

Data File: J:\GC06\DATA\061307.FID\0613R028.D
Lab ID: KWG0706628-3
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 06/14/2007 01:57
Date Quantitated: 06/14/2007 07:26
Batch ID: KWG0706628
Analysis Method: 8015B
MethodJoinID: MJ183

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA		x

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Enviroquant/Stealth Calibration Check	1,4-Difluorobenzene	Calc	0.000	97.069	Okay
	Gasoline Range Organics-NWTPH	Calc	0.000	33.68	N/A

Primary Review: Gle 6/14/07

Secondary Review: DMM

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABL
Prod Code:	AK101 AK_GRO	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706628	**Prep Lot:**		**Report Group:**	
Analysis Method:	8015B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC06\METHODS\091806GX.M	**Calibration ID:**	CAL5635
Title:			
		Method ID:	MJ183
MB Ref:		**Quant based on Method**	

Data File:	J:\GC06\DATA\061307.FID\0613R028.D			**Instrument:**	GC06
Acqu Date:	06/14/2007 01:57	**Quant Date:**	06/14/2007 07:26	**Vial:**	28
Run Type:	IB			**Dilution:**	1.0
Lab ID:	KWG0706628-3			**Soln Conc. Units:**	ug/L

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1,4-Difluorobenzene	3.39		983950	97.07		81-122	NA
4-Bromofluorobenzene			0			70-130	NA

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
C6 - C10 GRO	1.69		131094	19.39			
Gasoline Range Organics (GRO	1.41		150864	18.44			
Gasoline Range Organics-NWTF	4.67		173890	33.68			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

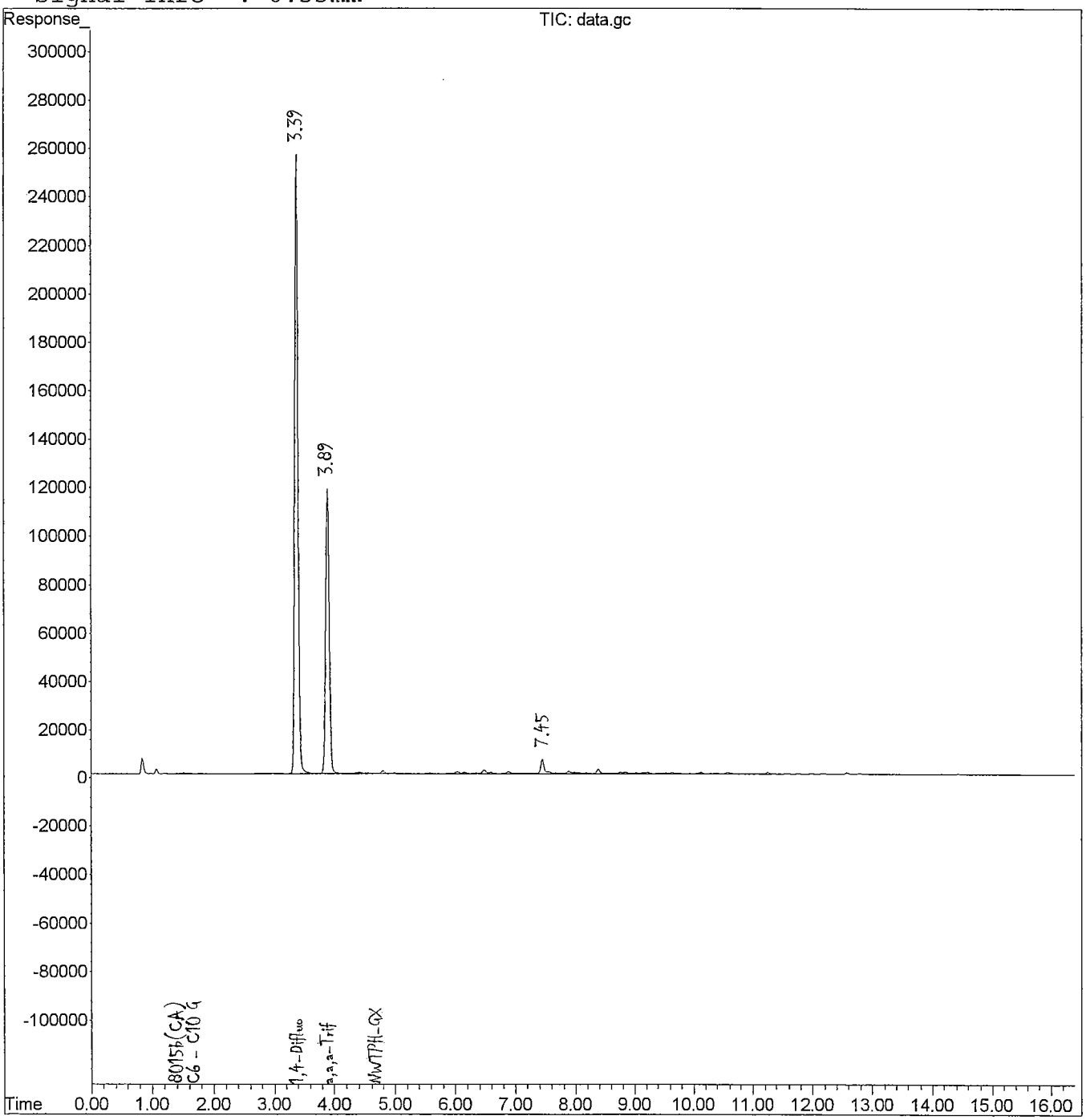
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Data File : J:\GC06\DATA\061307.FID\0613R028.D Vial: 28
Acq On : 14 Jun 2007 01:57 am Operator: GR
Sample : IB Inst : GC06
Misc : Multiplr: 1.00
IntFile : RTEINT.P
Quant Time: Jun 14 7:26 2007 Quant Results File: 091806GX.RES

Quant Method : J:\GC06\METHODS\091806GX.M (RTE Integrator)
Title : CAL 5635
Last Update : Thu Jun 07 09:44:23 2007
Response via : Multiple Level Calibration
DataAcq Meth : TPH1.MTH

Volume Inj. : 5mL
Signal Phase : DB-624
Signal Info : 0.53mm



Organochlorine Pesticides
EPA Method 8081

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047.D	J:\GC23\DATA\092906\	09/30/2006 13:15	E	0929F051.D	J:\GC23\DATA\092906\	09/30/2006 15:00
B	0929F048.D	J:\GC23\DATA\092906\	09/30/2006 13:41	F	0929F052.D	J:\GC23\DATA\092906\	09/30/2006 15:26
C	0929F049.D	J:\GC23\DATA\092906\	09/30/2006 14:07	G	0929F059.D	J:\GC23\DATA\092906\	09/30/2006 18:30
D	0929F050.D	J:\GC23\DATA\092906\	09/30/2006 14:33	H	0929F060.D	J:\GC23\DATA\092906\	09/30/2006 18:56

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0759	B	0.0703	C	0.0773	D	0.0687	E	0.0783	F	0.0773	G	0.0740	H	0.0639
Toxaphene	A	0.179	B	0.175	C	0.169	D	0.178	E	0.188	F	0.178	G	0.165	H	0.166

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0732	0.00510	2.998	0.015	ug/L	7	73	Valid MDL Data
Toxaphene	0.200	0.175	0.00753	2.998	0.023	ug/L	4	87	Valid MDL Data

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Supervisor Approval: _____

QA/QC Approval: _____

Printed: 10/02/2006 17:15:35
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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1744

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0929F047c.d	J:\GC23\DATA\092906\0929F047.D\	09/30/2006 13:15	E	0929F051c.d	J:\GC23\DATA\092906\0929F051.D\	09/30/2006 15:00
B	0929F048c.d	J:\GC23\DATA\092906\0929F048.D\	09/30/2006 13:41	F	0929F052c.d	J:\GC23\DATA\092906\0929F052.D\	09/30/2006 15:26
C	0929F049c.d	J:\GC23\DATA\092906\0929F049.D\	09/30/2006 14:07	G	0929F059c.d	J:\GC23\DATA\092906\0929F059.D\	09/30/2006 18:30
D	0929F050c.d	J:\GC23\DATA\092906\0929F050.D\	09/30/2006 14:33	H	0929F060c.d	J:\GC23\DATA\092906\0929F060.D\	09/30/2006 18:56

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
Chlordane	A	0.0746	B	0.0705	C	0.0732	D	0.0707	E	0.0756	F	0.0743	G	0.0673	H	0.0659
Toxaphene	A	0.141	B	0.142	C	0.137	D	0.132	E	0.160	F	0.154	G	0.147	H	0.140

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
Chlordane	0.100	0.0715	0.00354	2.998	0.011	ug/L	5	72	Valid MDL Data
Toxaphene	0.200	0.144	0.00924	2.998	0.028	ug/L	6	72	Valid MDL Data

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Supervisor Approval: _____ QA/QC Approval: _____

Printed: 10/02/2006 17:13:23
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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088.D	J:\GC23\DATA\081006\	08/12/2006 06:05	E	0810F092.D	J:\GC23\DATA\081006\	08/12/2006 07:51
B	0810F089.D	J:\GC23\DATA\081006\	08/12/2006 06:31	F	0810F093.D	J:\GC23\DATA\081006\	08/12/2006 08:17
C	0810F090.D	J:\GC23\DATA\081006\	08/12/2006 06:58	G	0810F094.D	J:\GC23\DATA\081006\	08/12/2006 08:44
D	0810F091.D	J:\GC23\DATA\081006\	08/12/2006 07:24	H	0810F095.D	J:\GC23\DATA\081006\	08/12/2006 09:10

Analyte Name	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00192	B	0.00262	C	0.00154	D	0.00318	E	0.00207	F	0.0024	G	0.00233	H	0.00262
4,4'-DDE	A	0.00179	B	0.00157	C	0.00153	D	0.00185	E	0.00182	F	0.0017	G	0.00177	H	0.00168
4,4'-DDT	A	0.00175	B	0.00173	C	0.00169	D	0.00180	E	0.00176	F	0.0019	G	0.00160	H	0.00171
Aldrin	A	0.00091	B	0.00090	C	0.00075	D	0.00078	E	0.00068	F	0.0007	G	0.000616	H	0.00078
alpha-BHC	A	0.00166	B	0.00152	C	0.00136	D	0.00160	E	0.00171	F	0.0016	G	0.00151	H	0.00161
~~alpha-Chlordane~~	~~A~~	~~0.00191~~	~~B~~	~~0.00181~~	~~C~~	~~0.00167~~	~~D~~	~~0.00192~~	~~E~~	~~0.00179~~	~~F~~	~~0.0018~~	~~G~~	~~0.00177~~	~~H~~	~~0.00187~~
beta-BHC	A	0.00216	B	0.00209	C	0.00176	D	0.00183	E	0.00213	F	0.0022	G	0.00186	H	0.00195
delta-BHC	A	0.00194	B	0.00190	C	0.00176	D	0.00187	E	0.00173	F	0.0018	G	0.00162	H	0.00186
Dieldrin	A	0.00203	B	0.00189	C	0.00169	D	0.00191	E	0.00184	F	0.0018	G	0.00166	H	0.00181
Endosulfan I	A	0.00165	B	0.00158	C	0.00146	D	0.00185	E	0.00158	F	0.0018	G	0.00150	H	0.00179
Endosulfan II	A	0.00181	B	0.00175	C	0.00158	D	0.00182	E	0.00204	F	0.0018	G	0.00176	H	0.00167
Endosulfan Sulfate	A	0.00236	B	0.00245	C	0.00215	D	0.00260	E	0.00232	F	0.0025	G	0.00221	H	0.00249
Endrin	A	0.00209	B	0.00198	C	0.00205	D	0.00189	E	0.00189	F	0.0018	G	0.00210	H	0.00181
Endrin Aldehyde	A	0.00191	B	0.00187	C	0.00161	D	0.00178	E	0.00201	F	0.0018	G	0.00211	H	0.00179
Endrin Ketone	A	0.00252	B	0.00231	C	0.00210	D	0.00232	E	0.00225	F	0.0024	G	0.00229	H	0.00283
gamma-BHC (Lindane)	A	0.00167	B	0.00176	C	0.00144	D	0.00179	E	0.00193	F	0.0016	G	0.00158	H	0.00169
gamma-Chlordane	A	0.00208	B	0.00194	C	0.00177	D	0.00187	E	0.00179	F	0.0019	G	0.00176	H	0.00183
Heptachlor	A	0.00167	B	0.00155	C	0.00165	D	0.00181	E	0.00162	F	0.0016	G	0.00173	H	0.00154
Heptachlor Epoxide	A	0.00215	B	0.00198	C	0.00184	D	0.00196	E	0.00186	F	0.0018	G	0.00181	H	0.00191
Hexachlorobenzene	A	0.00172	B	0.00161	C	0.00147	D	0.00159	E	0.00158	F	0.0017	G	0.00165	H	0.00160
Isodrin	A	0.00118	B	0.00095	C	0.00080	D	0.00071	E	0.00067	F	0.0008	G	0.000574	H	0.00082
Methoxychlor	A	0.00271	B	0.00233	C	0.00216	D	0.00222	E	0.00217	F	0.0022	G	0.00230	H	0.00248

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Supervisor Approval: _____ QA/QC Approval: _____

Printed: 08/17/2006 13:58:20
u:\Stealth\Crystal.rpt\MDLStudy.rpt

Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB XLB

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00235	0.000505	2.998	0.0015	ug/L	22	94	Valid MDL Data
4,4'-DDE	0.00250	0.00172	0.000120	2.998	0.00036	ug/L	7	69	Valid MDL Data
4,4'-DDT	0.00250	0.00175	0.000107	2.998	0.00032	ug/L	6	70	Valid MDL Data
Aldrin	0.00250	0.000774	0.000101	2.998	0.00030	ug/L	13	31	Valid MDL Data
alpha-BHC	0.00250	0.00158	0.000112	2.998	0.00033	ug/L	7	63	Valid MDL Data
~~alpha-Chlordane~~	~~0.00250~~	~~0.00182~~	~~0.0000816~~	~~2.998~~	~~0.00024~~	~~ug/L~~	~~4~~	~~73~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00200	0.000182	2.998	0.00054	ug/L	9	80	Valid MDL Data
delta-BHC	0.00250	0.00182	0.000105	2.998	0.00031	ug/L	6	73	Valid MDL Data
Dieldrin	0.00250	0.00183	0.000117	2.998	0.00035	ug/L	6	73	Valid MDL Data
Endosulfan I	0.00250	0.00165	0.000146	2.998	0.00044	ug/L	9	66	Valid MDL Data
Endosulfan II	0.00250	0.00178	0.000133	2.998	0.00040	ug/L	7	71	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00239	0.000157	2.998	0.00047	ug/L	7	96	Valid MDL Data
Endrin	0.00250	0.00196	0.000108	2.998	0.00032	ug/L	5	79	Valid MDL Data
Endrin Aldehyde	0.00250	0.00186	0.000152	2.998	0.00046	ug/L	8	75	Valid MDL Data
Endrin Ketone	0.00250	0.00238	0.000220	2.998	0.00066	ug/L	9	95	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00168	0.000146	2.998	0.00044	ug/L	9	67	Valid MDL Data
gamma-Chlordane	0.00250	0.00187	0.000108	2.998	0.00032	ug/L	6	75	Valid MDL Data
Heptachlor	0.00250	0.00165	0.0000924	2.998	0.00028	ug/L	6	66	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00192	0.000108	2.998	0.00032	ug/L	6	77	Valid MDL Data
Hexachlorobenzene	0.00250	0.00161	0.0000780	2.998	0.00023	ug/L	5	65	Spike level too high (Spike>10*MDL) *
Isodrin	0.00250	0.000815	0.000185	2.998	0.00056	ug/L	23	33	Valid MDL Data
Methoxychlor	0.00250	0.00232	0.000190	2.998	0.00057	ug/L	8	93	Valid MDL Data

* other column ok

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Supervisor Approval: _____ QA/QC Approval: _____

Printed: 08/17/2006 13:58:20
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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

File ID	Data File	Data Path	AcqDate	File ID	Data File	Data Path	AcqDate
A	0810F088c.d	J:\GC23\DATA\081006\0810F088.D\	08/12/2006 06:05	E	0810F092c.d	J:\GC23\DATA\081006\0810F092.D\	08/12/2006 07:51
B	0810F089c.d	J:\GC23\DATA\081006\0810F089.D\	08/12/2006 06:31	F	0810F093c.d	J:\GC23\DATA\081006\0810F093.D\	08/12/2006 08:17
C	0810F090c.d	J:\GC23\DATA\081006\0810F090.D\	08/12/2006 06:58	G	0810F094c.d	J:\GC23\DATA\081006\0810F094.D\	08/12/2006 08:44
D	0810F091c.d	J:\GC23\DATA\081006\0810F091.D\	08/12/2006 07:24	H	0810F095c.d	J:\GC23\DATA\081006\0810F095.D\	08/12/2006 09:10

	MDL 1		MDL 2		MDL 3		MDL 4		MDL 5		MDL 6		MDL 7		MDL 8	
Analyte Name	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value	File	Value
4,4'-DDD	A	0.00234	B	0.00233	C	0.00219	D	0.00218	E	0.00204	F	0.0021	G	0.00218	H	0.00223
4,4'-DDE	A	0.00211	B	0.00210	C	0.00201	D	0.00217	E	0.00211	F	0.0021	G	0.00210	H	0.00191
4,4'-DDT	A	0.00402	B	0.00380	C	0.00375	D	0.00418	E	0.00377	F	0.0041	G	0.00418	H	0.00378
Aldrin	A	0.00122	B	0.00101	C	0.00093	D	0.00103	E	0.00085	F	0.0009	G	0.000778	H	0.00093
alpha-BHC	A	0.00190	B	0.00190	C	0.00166	D	0.00180	E	0.00186	F	0.0018	G	0.00181	H	0.00176
~~alpha-Chlordane~~	~~A~~	~~0.00216~~	~~B~~	~~0.00218~~	~~C~~	~~0.00207~~	~~D~~	~~0.00223~~	~~E~~	~~0.00214~~	~~F~~	~~0.0022~~	~~G~~	~~0.00209~~	~~H~~	~~0.00215~~
beta-BHC	A	0.00323	B	0.00363	C	0.00302	D	0.00354	E	0.00320	F	0.0029	G	0.00309	H	0.00364
delta-BHC	A	0.00209	B	0.00212	C	0.00189	D	0.00245	E	0.00234	F	0.0022	G	0.00242	H	0.00231
Dieldrin	A	0.00221	B	0.00218	C	0.00201	D	0.00204	E	0.00199	F	0.0021	G	0.00191	H	0.00200
Endosulfan I	A	0.00194	B	0.00193	C	0.00181	D	0.00194	E	0.00190	F	0.0018	G	0.00187	H	0.00191
Endosulfan II	A	0.00206	B	0.00201	C	0.00189	D	0.00208	E	0.00226	F	0.0020	G	0.00197	H	0.00207
Endosulfan Sulfate	A	0.00236	B	0.00242	C	0.00219	D	0.00235	E	0.00247	F	0.0022	G	0.00247	H	0.00221
Endrin	A	0.00236	B	0.00275	C	0.00214	D	0.00258	E	0.00247	F	0.0025	G	0.00207	H	0.00231
Endrin Aldehyde	A	0.00198	B	0.00205	C	0.00191	D	0.00190	E	0.00205	F	0.0018	G	0.00190	H	0.00178
Endrin Ketone	A	0.00227	B	0.00222	C	0.00187	D	0.00213	E	0.00224	F	0.0022	G	0.00212	H	0.00232
gamma-BHC (Lindane)	A	0.00209	B	0.00205	C	0.00184	D	0.00201	E	0.00208	F	0.0021	G	0.00195	H	0.00214
gamma-Chlordane	A	0.00223	B	0.00228	C	0.00208	D	0.00225	E	0.00232	F	0.0022	G	0.00233	H	0.00225
Heptachlor	A	0.00203	B	0.00181	C	0.00179	D	0.00194	E	0.00184	F	0.0021	G	0.00181	H	0.00184
Heptachlor Epoxide	A	0.00221	B	0.00229	C	0.00200	D	0.00222	E	0.00225	F	0.0023	G	0.00208	H	0.00218
Hexachlorobenzene	A	0.00215	B	0.00204	C	0.00205	D	0.00200	E	0.00199	F	0.0022	G	0.00196	H	0.00198
Isodrin	A	0.00132	B	0.00104	C	0.00098	D	0.00088	E	0.00086	F	0.0008	G	0.000788	H	0.00087
Methoxychlor	A	0.00268	B	0.00251	C	0.00172	D	0.00216	E	0.00229	F	0.0026	G	0.00220	H	0.00223

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Supervisor Approval: _____ QA/QC Approval: _____

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Columbia Analytical Services

MDL Study Report

MDL Study ID: MDL1705

Analytical Method: 8081
Extraction Method: EPA 3535
Matrix: WATER
Instrument: GC23 **Column:** DB-35MS

Analyte Name	True Value	Mean	Standard Deviation	T-Value	MDL Value	Units	%RSD	Average Recovery	MDL Qualifier notes
4,4'-DDD	0.00250	0.00220	0.0000990	2.998	0.00030	ug/L	4	88	Valid MDL Data
4,4'-DDE	0.00250	0.00208	0.0000836	2.998	0.00025	ug/L	4	83	Valid MDL Data
4,4'-DDT	0.00250	0.00395	0.000194	2.998	0.00058	ug/L	5	158	Valid MDL Data
Aldrin	0.00250	0.000960	0.000134	2.998	0.00040	ug/L	14	38	Valid MDL Data
alpha-BHC	0.00250	0.00181	0.0000789	2.998	0.00024	ug/L	4	72	Spike level too high (Spike>10*MDL)*
~~alpha-Chlordane~~	~~0.00250~~	~~0.00216~~	~~0.0000577~~	~~2.998~~	~~0.00017~~	~~ug/L~~	~~3~~	~~86~~	~~Spike level too high (Spike>10*MDL)~~
beta-BHC	0.00250	0.00329	0.000277	2.998	0.00083	ug/L	8	132	Valid MDL Data
delta-BHC	0.00250	0.00223	0.000191	2.998	0.00057	ug/L	9	89	Valid MDL Data
Dieldrin	0.00250	0.00206	0.000101	2.998	0.00030	ug/L	5	82	Valid MDL Data
Endosulfan I	0.00250	0.00190	0.0000436	2.998	0.00013	ug/L	2	76	Spike level too high (Spike>10*MDL)*
Endosulfan II	0.00250	0.00205	0.000108	2.998	0.00032	ug/L	5	82	Valid MDL Data
Endosulfan Sulfate	0.00250	0.00234	0.000113	2.998	0.00034	ug/L	5	94	Valid MDL Data
Endrin	0.00250	0.00240	0.000227	2.998	0.00068	ug/L	9	96	Valid MDL Data
Endrin Aldehyde	0.00250	0.00193	0.0000922	2.998	0.00028	ug/L	5	77	Valid MDL Data
Endrin Ketone	0.00250	0.00218	0.000142	2.998	0.00043	ug/L	7	87	Valid MDL Data
gamma-BHC (Lindane)	0.00250	0.00204	0.000103	2.998	0.00031	ug/L	5	81	Valid MDL Data
gamma-Chlordane	0.00250	0.00225	0.0000781	2.998	0.00023	ug/L	3	90	Spike level too high (Spike>10*MDL)*
Heptachlor	0.00250	0.00190	0.000122	2.998	0.00036	ug/L	6	76	Valid MDL Data
Heptachlor Epoxide	0.00250	0.00220	0.000105	2.998	0.00031	ug/L	5	88	Valid MDL Data
Hexachlorobenzene	0.00250	0.00205	0.000102	2.998	0.00031	ug/L	5	82	Valid MDL Data
Isodrin	0.00250	0.000955	0.000166	2.998	0.00050	ug/L	17	38	Valid MDL Data
Methoxychlor	0.00250	0.00230	0.000310	2.998	0.00093	ug/L	13	92	Valid MDL Data

* other column OK

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Supervisor Approval: _____ QA/QC Approval: _____

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Organic Analysis:
Organochlorine Pesticides

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Cover Page - Organic Analysis Data Package
Organochlorine Pesticides

Sample Name	Lab Code	Date Collected	Date Received
1349MW100CL	K0704852-002	06/06/2007	06/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Janet L. Hestom

Name: Janet L. Hestom

Date: 6-29-07

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Organochlorine Pesticides

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
beta-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
delta-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Heptachlor	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Aldrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
gamma-Chlordane†	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan I	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
alpha-Chlordane	**0.17**	D	0.096	10	06/13/07	06/21/07	KWG0706602	
Dieldrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDE	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan II	ND	Ui	0.31	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDD	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endrin Aldehyde	**0.61**	D	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan Sulfate	ND	Ui	0.18	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDT	ND	Ui	0.30	10	06/13/07	06/21/07	KWG0706602	
Endrin Ketone	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Methoxychlor	**0.15**	PD	0.096	10	06/13/07	06/21/07	KWG0706602	
Toxaphene	ND	Ui	7.2	10	06/13/07	06/21/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	55	16-111	06/21/07	Acceptable
Decachlorobiphenyl	72	14-145	06/21/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706602-7	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Aldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	ND	U	0.48	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	16-111	06/20/07	Acceptable
Decachlorobiphenyl	84	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW100CL	K0704852-002	55 D	72 D
Method Blank	KWG0706602-7	71	84
Batch QC	K0704934-001	38	65
Batch QC	K0704934-004	72	84
Batch QCMS	KWG0706602-1	71	81
Batch QCMS	KWG0706602-4	74	82
Lab Control Sample	KWG0706602-2	68	85
Duplicate Lab Control Sample	KWG0706602-3	71	86

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	16-111
Sur2 =	Decachlorobiphenyl	14-145

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike Summary
Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

Analyte Name	Sample Result	Batch QCMS KWG0706602-1 Matrix Spike Result	Expected	%Rec	%Rec Limits
alpha-BHC	ND	0.168	0.190	88	29-128
beta-BHC	ND	0.167	0.190	88	26-124
gamma-BHC (Lindane)	ND	0.171	0.190	90	30-128
delta-BHC	ND	0.194	0.190	102	32-141
Heptachlor	ND	0.160	0.190	84	18-130
Aldrin	ND	0.102	0.190	54	10-130
Heptachlor Epoxide	ND	0.162	0.190	85	24-137
gamma-Chlordane	ND	0.161	0.190	85	34-122
Endosulfan I	ND	0.135	0.190	71	19-112
alpha-Chlordane	ND	0.166	0.190	87	33-123
Dieldrin	ND	0.161	0.190	84	22-141
4,4'-DDE	ND	0.156	0.190	82	27-141
Endrin	ND	0.173	0.190	91	37-140
Endosulfan II	ND	0.143	0.190	75	29-113
4,4'-DDD	ND	0.164	0.190	86	21-150
Endrin Aldehyde	ND	0.141	0.190	74	10-134
Endosulfan Sulfate	ND	0.159	0.190	84	21-137
4,4'-DDT	ND	0.173	0.190	91	42-133
Endrin Ketone	ND	0.160	0.190	84	37-120
Methoxychlor	ND	0.161	0.190	84	43-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike Summary
Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-004	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

		Batch QCMS KWG0706602-4 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Toxaphene	ND	1.48	2.11	70	41-142

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8081A	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706602

	Lab Control Sample KWG0706602-2 Lab Control Spike			Duplicate Lab Control Sample KWG0706602-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.178	0.200	89	0.183	0.200	92	40-135	3	30
beta-BHC	0.174	0.200	87	0.176	0.200	88	40-129	1	30
gamma-BHC (Lindane)	0.178	0.200	89	0.183	0.200	92	38-138	3	30
delta-BHC	0.199	0.200	99	0.206	0.200	103	45-147	3	30
Heptachlor	0.163	0.200	81	0.172	0.200	86	36-130	6	30
Aldrin	0.0867	0.200	43	0.0890	0.200	45	10-128	3	30
Heptachlor Epoxide	0.170	0.200	85	0.175	0.200	87	47-126	3	30
gamma-Chlordane	0.170	0.200	85	0.175	0.200	87	44-126	3	30
Endosulfan I	0.141	0.200	71	0.146	0.200	73	27-119	3	30
alpha-Chlordane	0.170	0.200	85	0.175	0.200	88	45-127	3	30
Dieldrin	0.170	0.200	85	0.174	0.200	87	48-126	3	30
4,4'-DDE	0.160	0.200	80	0.167	0.200	83	38-137	4	30
Endrin	0.181	0.200	91	0.188	0.200	94	50-139	4	30
Endosulfan II	0.148	0.200	74	0.153	0.200	77	31-128	3	30
4,4'-DDD	0.167	0.200	83	0.174	0.200	87	41-139	4	30
Endrin Aldehyde	0.135	0.200	67	0.149	0.200	75	32-113	10	30
Endosulfan Sulfate	0.160	0.200	80	0.166	0.200	83	42-126	3	30
4,4'-DDT	0.175	0.200	87	0.182	0.200	91	49-136	4	30
Endrin Ketone	0.169	0.200	84	0.175	0.200	87	43-133	3	30
Methoxychlor	0.176	0.200	88	0.181	0.200	91	43-143	3	30
Toxaphene	1.43	2.00	72	1.44	2.00	72	46-158	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	19:19

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\061907\0619F024.D
Lab Code:	KWG0706602-7	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0706602-2	J:\GC23\DATA\061907\0619F025.D	06/20/07	19:46
Duplicate Lab Control Sample	KWG0706602-3	J:\GC23\DATA\061907\0619F026.D	06/20/07	20:12
Lab Control Sample	KWG0706602-2	J:\GC23\DATA\061907\0619F027.D	06/20/07	20:39
Duplicate Lab Control Sample	KWG0706602-3	J:\GC23\DATA\061907\0619F028.D	06/20/07	21:05
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706602-2	**Lab Code:**	KWG0706602-3
File ID:	J:\GC23\DATA\061907\0619F025.D	**File ID:**	J:\GC23\DATA\061907\0619F026.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	06/13/2007	**Date Extracted:**	06/13/2007
Date Analyzed:	06/20/2007	**Date Analyzed:**	06/20/2007
Time Analyzed:	19:46	**Time Analyzed:**	20:12

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0706602-7	J:\GC23\DATA\061907\0619F024.D	06/20/07	19:19
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706602-2	**Lab Code:**	KWG0706602-3
File ID:	J:\GC23\DATA\061907\0619F027.D	**File ID:**	J:\GC23\DATA\061907\0619F026.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	06/13/2007	**Date Extracted:**	06/13/2007
Date Analyzed:	06/20/2007	**Date Analyzed:**	06/20/2007
Time Analyzed:	20:39	**Time Analyzed:**	20:12

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0706602-7	J:\GC23\DATA\061907\0619F024.D	06/20/07	19:19
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\061107\0611F011.D	P	J:\GC23\DATA\061107\0611F028.D
B	J:\GC23\DATA\061107\0611F012.D	Q	J:\GC23\DATA\061107\0611F029.D
C	J:\GC23\DATA\061107\0611F013.D	R	J:\GC23\DATA\061107\0611F030.D
D	J:\GC23\DATA\061107\0611F014.D	S	J:\GC23\DATA\061107\0611F032.D
E	J:\GC23\DATA\061107\0611F015.D	T	J:\GC23\DATA\061107\0611F033.D
F	J:\GC23\DATA\061107\0611F016.D	U	J:\GC23\DATA\061107\0611F034.D
G	J:\GC23\DATA\061107\0611F018.D	V	J:\GC23\DATA\061107\0611F035.D
H	J:\GC23\DATA\061107\0611F019.D	W	J:\GC23\DATA\061107\0611F036.D
I	J:\GC23\DATA\061107\0611F020.D	X	J:\GC23\DATA\061107\0611F037.D
J	J:\GC23\DATA\061107\0611F021.D	Y	J:\GC23\DATA\061107\0611F040.D
K	J:\GC23\DATA\061107\0611F022.D	Z	J:\GC23\DATA\061107\0611F041.D
L	J:\GC23\DATA\061107\0611F023.D	AA	J:\GC23\DATA\061107\0611F042.D
M	J:\GC23\DATA\061107\0611F025.D	AB	J:\GC23\DATA\061107\0611F043.D
N	J:\GC23\DATA\061107\0611F026.D	AC	J:\GC23\DATA\061107\0611F044.D
O	J:\GC23\DATA\061107\0611F027.D	AD	J:\GC23\DATA\061107\0611F045.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene															
													Y	2.0	2.22E+5
	Z	5.0	1.99E+5	AA	20	2.07E+5	AB	50	1.96E+5	AC	100	1.87E+5	AD	200	1.90E+5
Decachlorobiphenyl															
													Y	2.0	3.15E+5
	Z	5.0	2.99E+5	AA	20	3.01E+5	AB	50	2.72E+5	AC	100	2.46E+5	AD	200	2.32E+5
alpha-BHC															
													Y	2.0	2.04E+5
	Z	5.0	2.05E+5	AA	20	2.29E+5	AB	50	2.38E+5	AC	100	2.43E+5	AD	200	2.63E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC															
													Y	2.0	1.07E+5
	Z	5.0	1.10E+5	AA	20	1.13E+5	AB	50	1.08E+5	AC	100	1.03E+5	AD	200	1.02E+5
gamma-BHC (Lindane)															
													Y	2.0	2.00E+5
	Z	5.0	2.03E+5	AA	20	2.18E+5	AB	50	2.22E+5	AC	100	2.23E+5	AD	200	2.36E+5
delta-BHC															
													Y	2.0	1.79E+5
	Z	5.0	1.79E+5	AA	20	1.96E+5	AB	50	2.02E+5	AC	100	2.06E+5	AD	200	2.22E+5
Heptachlor															
													Y	2.0	1.97E+5
	Z	5.0	1.94E+5	AA	20	2.07E+5	AB	50	2.05E+5	AC	100	2.00E+5	AD	200	2.05E+5
Aldrin															
													Y	2.0	1.64E+5
	Z	5.0	1.63E+5	AA	20	1.78E+5	AB	50	1.78E+5	AC	100	1.76E+5	AD	200	1.83E+5

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide															
													Y	2.0	1.67E+5
	Z	5.0	1.69E+5	AA	20	1.77E+5	AB	50	1.72E+5	AC	100	1.67E+5	AD	200	1.69E+5
gamma-Chlordane															
													Y	2.0	1.72E+5
	Z	5.0	1.66E+5	AA	20	1.71E+5	AB	50	1.66E+5	AC	100	1.63E+5	AD	200	1.68E+5
Endosulfan I															
													Y	2.0	1.50E+5
	Z	5.0	1.58E+5	AA	20	1.59E+5	AB	50	1.53E+5	AC	100	1.49E+5	AD	200	1.52E+5
alpha-Chlordane															
													Y	2.0	1.68E+5
	Z	5.0	1.67E+5	AA	20	1.73E+5	AB	50	1.66E+5	AC	100	1.62E+5	AD	200	1.65E+5
Dieldrin															
													Y	2.0	1.63E+5
	Z	5.0	1.58E+5	AA	20	1.67E+5	AB	50	1.66E+5	AC	100	1.63E+5	AD	200	1.72E+5

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE															
													Y	2.0	1.55E+5
	Z	5.0	1.44E+5	AA	20	1.53E+5	AB	50	1.53E+5	AC	100	1.52E+5	AD	200	1.61E+5
Endrin															
													Y	2.0	1.44E+5
	Z	5.0	1.46E+5	AA	20	1.59E+5	AB	50	1.59E+5	AC	100	1.54E+5	AD	200	1.63E+5
Endosulfan II															
													Y	2.0	1.84E+5
	Z	5.0	1.84E+5	AA	20	1.91E+5	AB	50	1.86E+5	AC	100	1.78E+5	AD	200	1.78E+5
4,4'-DDD															
													Y	2.0	1.44E+5
	Z	5.0	1.43E+5	AA	20	1.52E+5	AB	50	1.53E+5	AC	100	1.49E+5	AD	200	1.59E+5
Endrin Aldehyde															
													Y	2.0	1.71E+5
	Z	5.0	1.64E+5	AA	20	1.72E+5	AB	50	1.68E+5	AC	100	1.58E+5	AD	200	1.61E+5

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate															
													Y	2.0	2.36E+5
	Z	5.0	2.23E+5	AA	20	2.34E+5	AB	50	2.25E+5	AC	100	2.13E+5	AD	200	2.17E+5
4,4'-DDT															
													Y	2.0	1.70E+5
	Z	5.0	1.69E+5	AA	20	1.90E+5	AB	50	1.92E+5	AC	100	1.87E+5	AD	200	1.98E+5
Endrin Ketone															
													Y	2.0	2.88E+5
	Z	5.0	2.95E+5	AA	20	3.16E+5	AB	50	3.06E+5	AC	100	2.92E+5	AD	200	2.93E+5
Methoxychlor															
													Y	2.0	1.40E+5
	Z	5.0	1.35E+5	AA	20	1.44E+5	AB	50	1.36E+5	AC	100	1.27E+5	AD	200	1.27E+5
Toxaphene {1}	A	100	1390	B	250	1340	C	500	1320	D	1000	1620	E	2000	1390
	F	5000	1420												

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Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}	A	100	1300	B	250	1150	C	500	990	D	1000	1290	E	2000	1110
	F	5000	1110												
Toxaphene {3}	A	100	2190	B	250	1950	C	500	1730	D	1000	2200	E	2000	2000
	F	5000	2000												
Toxaphene {4}	A	100	2660	B	250	2470	C	500	2340	D	1000	3610	E	2000	3210
	F	5000	3230												
Toxaphene {5}	A	100	1680	B	250	1410	C	500	1320	D	1000	1980	E	2000	1730
	F	5000	1680												
Toxaphene {6}	A	100	1660	B	250	1580	C	500	1540	D	1000	2200	E	2000	2050
	F	5000	1870												

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Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	6.4		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	12.0		≤ 20
alpha-BHC	MS	AverageRF	% RSD	10.0		≤ 20
beta-BHC	MS	AverageRF	% RSD	3.9		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	6.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	2.6		≤ 20
Aldrin	MS	AverageRF	% RSD	4.7		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	2.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	2.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	2.6		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	2.1		≤ 20
Dieldrin	MS	AverageRF	% RSD	2.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.6		≤ 20
Endrin	MS	AverageRF	% RSD	5.0		≤ 20
Endosulfan II	MS	AverageRF	% RSD	2.6		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.0		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	4.0		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	6.5		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	3.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	5.0		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	7.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	10.2		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	8.6		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	17.2		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	14.7		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	14.7		≤ 20

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007
Date Analyzed: 06/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6343
Units: ug/L

File ID: J:\GC23\DATA\061107\0611F017.D
J:\GC23\DATA\061107\0611F024.D
J:\GC23\DATA\061107\0611F031.D
J:\GC23\DATA\061107\0611F038.D
J:\GC23\DATA\061107\0611F046.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	230000	223000	-3	NA	± 15 %	AverageRF
beta-BHC	40	39	107000	104000	-3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	39	217000	209000	-3	NA	± 15 %	AverageRF
delta-BHC	40	40	197000	199000	1	NA	± 15 %	AverageRF
Heptachlor	40	39	201000	198000	-2	NA	± 15 %	AverageRF
Aldrin	40	39	174000	169000	-3	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	39	170000	164000	-3	NA	± 15 %	AverageRF
gamma-Chlordane	40	39	168000	162000	-3	NA	± 15 %	AverageRF
Endosulfan I	40	39	153000	149000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	39	167000	161000	-3	NA	± 15 %	AverageRF
Dieldrin	40	38	165000	155000	-6	NA	± 15 %	AverageRF
4,4'-DDE	40	39	153000	149000	-3	NA	± 15 %	AverageRF
Endrin	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Endosulfan II	40	40	184000	182000	-1	NA	± 15 %	AverageRF
4,4'-DDD	40	39	150000	145000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	40	166000	167000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	39	225000	221000	-2	NA	± 15 %	AverageRF
4,4'-DDT	40	40	184000	184000	0	NA	± 15 %	AverageRF
Endrin Ketone	40	41	298000	308000	3	NA	± 15 %	AverageRF
Methoxychlor	40	40	135000	136000	1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	870	1410	1230	-13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	940	1160	1080	-6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	860	2010	1740	-14	NA	± 100 %	AverageRF
Toxaphene {4}	1000	970	2920	2850	-3	NA	± 100 %	AverageRF
Toxaphene {5}	1000	890	1630	1450	-11	NA	± 100 %	AverageRF
Toxaphene {6}	1000	970	1820	1770	-3	NA	± 100 %	AverageRF
Toxaphene	1000	920	NA	NA	NA	8	± 15 %	NA

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† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\061107\0611F011.D\0611F011c.d	P	J:\GC23\DATA\061107\0611F028.D\0611F028c.d
B	J:\GC23\DATA\061107\0611F012.D\0611F012c.d	Q	J:\GC23\DATA\061107\0611F029.D\0611F029c.d
C	J:\GC23\DATA\061107\0611F013.D\0611F013c.d	R	J:\GC23\DATA\061107\0611F030.D\0611F030c.d
D	J:\GC23\DATA\061107\0611F014.D\0611F014c.d	S	J:\GC23\DATA\061107\0611F032.D\0611F032c.d
E	J:\GC23\DATA\061107\0611F015.D\0611F015c.d	T	J:\GC23\DATA\061107\0611F033.D\0611F033c.d
F	J:\GC23\DATA\061107\0611F016.D\0611F016c.d	U	J:\GC23\DATA\061107\0611F034.D\0611F034c.d
G	J:\GC23\DATA\061107\0611F018.D\0611F018c.d	V	J:\GC23\DATA\061107\0611F035.D\0611F035c.d
H	J:\GC23\DATA\061107\0611F019.D\0611F019c.d	W	J:\GC23\DATA\061107\0611F036.D\0611F036c.d
I	J:\GC23\DATA\061107\0611F020.D\0611F020c.d	X	J:\GC23\DATA\061107\0611F037.D\0611F037c.d
J	J:\GC23\DATA\061107\0611F021.D\0611F021c.d	Y	J:\GC23\DATA\061107\0611F040.D\0611F040c.d
K	J:\GC23\DATA\061107\0611F022.D\0611F022c.d	Z	J:\GC23\DATA\061107\0611F041.D\0611F041c.d
L	J:\GC23\DATA\061107\0611F023.D\0611F023c.d	AA	J:\GC23\DATA\061107\0611F042.D\0611F042c.d
M	J:\GC23\DATA\061107\0611F025.D\0611F025c.d	AB	J:\GC23\DATA\061107\0611F043.D\0611F043c.d
N	J:\GC23\DATA\061107\0611F026.D\0611F026c.d	AC	J:\GC23\DATA\061107\0611F044.D\0611F044c.d
O	J:\GC23\DATA\061107\0611F027.D\0611F027c.d	AD	J:\GC23\DATA\061107\0611F045.D\0611F045c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene															
													Y	2.0	1.70E+5
	Z	5.0	1.69E+5	AA	20	1.86E+5	AB	50	1.84E+5	AC	100	1.80E+5	AD	200	1.87E+5
Decachlorobiphenyl															
													Y	2.0	1.99E+5
	Z	5.0	1.95E+5	AA	20	1.99E+5	AB	50	1.83E+5	AC	100	1.69E+5	AD	200	1.65E+5
alpha-BHC															
													Y	2.0	1.92E+5
	Z	5.0	1.97E+5	AA	20	2.33E+5	AB	50	2.48E+5	AC	100	2.60E+5	AD	200	2.82E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC															
													Y	2.0	1.10E+5
	Z	5.0	1.03E+5	AA	20	1.12E+5	AB	50	1.09E+5	AC	100	1.05E+5	AD	200	1.08E+5
gamma-BHC (Lindane)															
													Y	2.0	1.89E+5
	Z	5.0	1.95E+5	AA	20	2.23E+5	AB	50	2.33E+5	AC	100	2.38E+5	AD	200	2.56E+5
delta-BHC															
													Y	2.0	1.75E+5
	Z	5.0	1.80E+5	AA	20	2.12E+5	AB	50	2.23E+5	AC	100	2.30E+5	AD	200	2.50E+5
Heptachlor															
													Y	2.0	2.17E+5
	Z	5.0	2.15E+5	AA	20	2.31E+5	AB	50	2.31E+5	AC	100	2.29E+5	AD	200	2.38E+5
Aldrin															
													Y	2.0	1.73E+5
	Z	5.0	1.81E+5	AA	20	2.03E+5	AB	50	2.07E+5	AC	100	2.09E+5	AD	200	2.21E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide															
													Y	2.0	1.89E+5
	Z	5.0	1.90E+5	AA	20	2.09E+5	AB	50	2.07E+5	AC	100	2.03E+5	AD	200	2.08E+5
gamma-Chlordane															
													Y	2.0	1.90E+5
	Z	5.0	1.90E+5	AA	20	2.09E+5	AB	50	2.08E+5	AC	100	2.06E+5	AD	200	2.15E+5
Endosulfan I															
													Y	2.0	1.76E+5
	Z	5.0	1.78E+5	AA	20	1.93E+5	AB	50	1.89E+5	AC	100	1.86E+5	AD	200	1.90E+5
alpha-Chlordane															
													Y	2.0	1.81E+5
	Z	5.0	1.85E+5	AA	20	2.06E+5	AB	50	2.03E+5	AC	100	2.00E+5	AD	200	2.07E+5
Dieldrin															
													Y	2.0	1.72E+5
	Z	5.0	1.78E+5	AA	20	2.00E+5	AB	50	2.02E+5	AC	100	2.03E+5	AD	200	2.13E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE															
													Y	2.0	1.65E+5
	Z	5.0	1.65E+5	AA	20	1.87E+5	AB	50	1.92E+5	AC	100	1.95E+5	AD	200	2.06E+5
Endrin															
													Y	2.0	1.62E+5
	Z	5.0	1.59E+5	AA	20	1.79E+5	AB	50	1.81E+5	AC	100	1.81E+5	AD	200	1.90E+5
Endosulfan II															
													Y	2.0	1.76E+5
	Z	5.0	1.75E+5	AA	20	1.91E+5	AB	50	1.85E+5	AC	100	1.82E+5	AD	200	1.79E+5
4,4'-DDD															
													Y	2.0	1.35E+5
	Z	5.0	1.36E+5	AA	20	1.56E+5	AB	50	1.59E+5	AC	100	1.60E+5	AD	200	1.69E+5
Endrin Aldehyde															
													Y	2.0	1.48E+5
	Z	5.0	1.46E+5	AA	20	1.59E+5	AB	50	1.54E+5	AC	100	1.49E+5	AD	200	1.50E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate															
													Y	2.0	1.78E+5
	Z	5.0	1.77E+5	AA	20	1.90E+5	AB	50	1.85E+5	AC	100	1.78E+5	AD	200	1.81E+5
4,4'-DDT															
													Y	2.0	1.44E+5
	Z	5.0	1.44E+5	AA	20	1.67E+5	AB	50	1.71E+5	AC	100	1.71E+5	AD	200	1.81E+5
Endrin Ketone															
													Y	2.0	1.91E+5
	Z	5.0	2.02E+5	AA	20	2.21E+5	AB	50	2.19E+5	AC	100	2.12E+5	AD	200	2.15E+5
Methoxychlor															
													Y	2.0	91000
	Z	5.0	87500	AA	20	1.01E+5	AB	50	97500	AC	100	93400	AD	200	93700
Toxaphene {1}	A	100	1100	B	250	1130	C	500	1150	D	1000	1310	E	2000	1200
	F	5000	1280												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}	A	100	4360	B	250	4030	C	500	4010	D	1000	4620	E	2000	4050
	F	5000	4040												
Toxaphene {3}	A	100	2710	B	250	2400	C	500	2420	D	1000	2850	E	2000	2570
	F	5000	2590												
Toxaphene {4}	A	100	782	B	250	630	C	500	656	D	1000	741	E	2000	651
	F	5000	640												
Toxaphene {5}	A	100	3920	B	250	3600	C	500	3730	D	1000	4370	E	2000	3940
	F	5000	4070												
Toxaphene {6}	A	100	5660	B	250	5170	C	500	5010	D	1000	5980	E	2000	5270
	F	5000	5290												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	4.3		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	8.2		≤ 20
alpha-BHC	MS	AverageRF	% RSD	15.0		≤ 20
beta-BHC	MS	AverageRF	% RSD	2.8		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	11.7		≤ 20
delta-BHC	MS	AverageRF	% RSD	13.9		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.0		≤ 20
Aldrin	MS	AverageRF	% RSD	9.4		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	4.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	3.7		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	5.6		≤ 20
Dieldrin	MS	AverageRF	% RSD	8.2		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	9.0		≤ 20
Endrin	MS	AverageRF	% RSD	6.8		≤ 20
Endosulfan II	MS	AverageRF	% RSD	3.2		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	9.0		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	3.1		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	2.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	9.4		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	5.5		≤ 20
Methoxychlor	MS	AverageRF	% RSD	5.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	7.0		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	6.0		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	6.6		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	9.1		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	6.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007
Date Analyzed: 06/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6343
Units: ug/L

File ID: J:\GC23\DATA\061107\0611F017.D\0611F017c.d
J:\GC23\DATA\061107\0611F024.D\0611F024c.d
J:\GC23\DATA\061107\0611F031.D\0611F031c.d
J:\GC23\DATA\061107\0611F038.D\0611F038c.d
J:\GC23\DATA\061107\0611F046.D\0611F046c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	40	235000	237000	1	NA	± 15 %	AverageRF
beta-BHC	40	39	108000	105000	-3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	40	223000	220000	-1	NA	± 15 %	AverageRF
delta-BHC	40	41	212000	219000	4	NA	± 15 %	AverageRF
Heptachlor	40	39	227000	219000	-4	NA	± 15 %	AverageRF
Aldrin	40	40	199000	198000	0	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	39	201000	197000	-2	NA	± 15 %	AverageRF
gamma-Chlordane	40	39	203000	200000	-2	NA	± 15 %	AverageRF
Endosulfan I	40	40	185000	183000	-1	NA	± 15 %	AverageRF
alpha-Chlordane	40	40	197000	196000	-1	NA	± 15 %	AverageRF
Dieldrin	40	39	195000	187000	-4	NA	± 15 %	AverageRF
4,4'-DDE	40	40	185000	186000	1	NA	± 15 %	AverageRF
Endrin	40	40	175000	176000	0	NA	± 15 %	AverageRF
Endosulfan II	40	40	181000	180000	-1	NA	± 15 %	AverageRF
4,4'-DDD	40	39	153000	150000	-2	NA	± 15 %	AverageRF
Endrin Aldehyde	40	40	151000	151000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	39	181000	178000	-2	NA	± 15 %	AverageRF
4,4'-DDT	40	40	163000	165000	1	NA	± 15 %	AverageRF
Endrin Ketone	40	41	210000	217000	4	NA	± 15 %	AverageRF
Methoxychlor	40	42	94100	97600	4	NA	± 15 %	AverageRF
Toxaphene {1}	1000	950	1200	1130	-5	NA	± 100 %	AverageRF
Toxaphene {2}	1000	850	4190	3550	-15	NA	± 100 %	AverageRF
Toxaphene {3}	1000	840	2590	2180	-16	NA	± 100 %	AverageRF
Toxaphene {4}	1000	870	683	598	-13	NA	± 100 %	AverageRF
Toxaphene {5}	1000	860	3940	3400	-14	NA	± 100 %	AverageRF
Toxaphene {6}	1000	790	5400	4270	-21	NA	± 100 %	AverageRF
Toxaphene	1000	860	NA	NA	NA	14	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F021.D
J:\GC23\DATA\061907\0619F022.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	278000	262000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	54	230000	248000	7	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	229000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	210000	6	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	180000	4	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	51	170000	173000	2	NA	± 15 %	AverageRF
gamma-Chlordane	50	50	168000	167000	0	NA	± 15 %	AverageRF
Endosulfan I	50	49	153000	152000	-1	NA	± 15 %	AverageRF
alpha-Chlordane	50	50	167000	166000	-1	NA	± 15 %	AverageRF
Dieldrin	50	49	165000	160000	-3	NA	± 15 %	AverageRF
4,4'-DDE	50	49	153000	150000	-2	NA	± 15 %	AverageRF
Endrin	50	47	154000	145000	-6	NA	± 15 %	AverageRF
Endosulfan II	50	45	184000	164000	-11	NA	± 15 %	AverageRF
4,4'-DDD	50	45	150000	135000	-10	NA	± 15 %	AverageRF
Endrin Aldehyde	50	44	166000	146000	-12	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	43	225000	194000	-14	NA	± 15 %	AverageRF
4,4'-DDT	50	46	184000	169000	-8	NA	± 15 %	AverageRF
Endrin Ketone	50	44	298000	263000	-12	NA	± 15 %	AverageRF
Methoxychlor	50	46	135000	125000	-7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1410	1560	11	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	1160	1230	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2010	2080	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	2920	3250	11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	1630	1720	5	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	1820	1920	6	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F021.D\0619F021C.D
J:\GC23\DATA\061907\0619F022.D\0619F022C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	190000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	46	185000	169000	-9	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	255000	8	NA	± 15 %	AverageRF
beta-BHC	50	51	108000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	223000	240000	8	NA	± 15 %	AverageRF
delta-BHC	50	55	212000	233000	10	NA	± 15 %	AverageRF
Heptachlor	50	52	227000	237000	5	NA	± 15 %	AverageRF
Aldrin	50	53	199000	210000	5	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	207000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	203000	207000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	187000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	197000	203000	3	NA	± 15 %	AverageRF
Dieldrin	50	51	195000	200000	3	NA	± 15 %	AverageRF
4,4'-DDE	50	52	185000	191000	3	NA	± 15 %	AverageRF
Endrin	50	52	175000	181000	3	NA	± 15 %	AverageRF
Endosulfan II	50	50	181000	180000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	52	153000	159000	4	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	151000	151000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	50	181000	182000	0	NA	± 15 %	AverageRF
4,4'-DDT	50	53	163000	171000	5	NA	± 15 %	AverageRF
Endrin Ketone	50	50	210000	208000	-1	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	101000	7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1290	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4610	10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2750	6	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	719	5	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4210	7	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	5400	5580	3	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F037.D
J:\GC23\DATA\061907\0619F038.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	278000	265000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	54	230000	248000	8	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	112000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	231000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	211000	7	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	182000	5	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	170000	177000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	168000	171000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	153000	155000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	167000	170000	2	NA	± 15 %	AverageRF
Dieldrin	50	51	165000	169000	2	NA	± 15 %	AverageRF
4,4'-DDE	50	51	153000	156000	2	NA	± 15 %	AverageRF
Endrin	50	51	154000	158000	2	NA	± 15 %	AverageRF
Endosulfan II	50	49	184000	181000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	51	150000	152000	1	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	166000	164000	-1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	50	225000	224000	0	NA	± 15 %	AverageRF
4,4'-DDT	50	52	184000	192000	4	NA	± 15 %	AverageRF
Endrin Ketone	50	50	298000	298000	0	NA	± 15 %	AverageRF
Methoxychlor	50	51	135000	137000	1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1200	1410	1650	17	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1200	1160	1340	16	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2010	2230	11	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1200	2920	3650	25	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1200	1630	1900	16	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1300	1820	2270	25	NA	± 100 %	AverageRF
Toxaphene	1000	1200	NA	NA	NA	18 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F037.D\0619F037C.D
J:\GC23\DATA\061907\0619F038.D\0619F038C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	189000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	185000	174000	-6	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	255000	8	NA	± 15 %	AverageRF
beta-BHC	50	52	108000	112000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	223000	241000	8	NA	± 15 %	AverageRF
delta-BHC	50	55	212000	232000	10	NA	± 15 %	AverageRF
Heptachlor	50	53	227000	240000	6	NA	± 15 %	AverageRF
Aldrin	50	53	199000	212000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	211000	5	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	211000	4	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	190000	3	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	197000	207000	5	NA	± 15 %	AverageRF
Dieldrin	50	52	195000	204000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	53	185000	198000	7	NA	± 15 %	AverageRF
Endrin	50	52	175000	184000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	2	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	162000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	151000	154000	2	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	186000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	175000	7	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	217000	3	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	102000	8	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1350	13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4580	9	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2790	8	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	780	14	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4360	11	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5930	10	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	11	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F004.D
J:\GC23\DATA\062107\0621F005.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	278000	271000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	230000	245000	6	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	111000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	229000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	209000	6	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	181000	4	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	170000	175000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	168000	171000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	153000	155000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	167000	169000	1	NA	± 15 %	AverageRF
Dieldrin	50	50	165000	166000	1	NA	± 15 %	AverageRF
4,4'-DDE	50	51	153000	155000	1	NA	± 15 %	AverageRF
Endrin	50	49	154000	151000	-2	NA	± 15 %	AverageRF
Endosulfan II	50	46	184000	168000	-8	NA	± 15 %	AverageRF
4,4'-DDD	50	48	150000	143000	-5	NA	± 15 %	AverageRF
Endrin Aldehyde	50	46	166000	152000	-8	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	45	225000	201000	-10	NA	± 15 %	AverageRF
4,4'-DDT	50	48	184000	177000	-4	NA	± 15 %	AverageRF
Endrin Ketone	50	48	298000	285000	-5	NA	± 15 %	AverageRF
Methoxychlor	50	47	135000	128000	-5	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1410	1610	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	1160	1230	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2010	2070	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	2920	3310	13	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	1630	1720	5	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	1820	2050	13	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	9	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F004.D\0621F004C.D
J:\GC23\DATA\062107\0621F005.D\0621F005C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	179000	187000	4	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	185000	179000	-3	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	252000	7	NA	± 15 %	AverageRF
beta-BHC	50	51	108000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	223000	238000	7	NA	± 15 %	AverageRF
delta-BHC	50	54	212000	228000	8	NA	± 15 %	AverageRF
Heptachlor	50	53	227000	239000	5	NA	± 15 %	AverageRF
Aldrin	50	53	199000	211000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	209000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	209000	3	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	189000	2	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	197000	206000	5	NA	± 15 %	AverageRF
Dieldrin	50	52	195000	204000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	52	185000	194000	5	NA	± 15 %	AverageRF
Endrin	50	52	175000	183000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	161000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	52	151000	156000	3	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	186000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	176000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	218000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	94100	103000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1370	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4620	10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2760	7	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	722	6	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4460	13	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5970	11	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	10	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F021.D
J:\GC23\DATA\062107\0621F022.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	51	200000	204000	2	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	278000	270000	-3	NA	± 15 %	AverageRF
alpha-BHC	50	55	230000	253000	10	NA	± 15 %	AverageRF
beta-BHC	50	54	107000	115000	7	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	217000	236000	9	NA	± 15 %	AverageRF
delta-BHC	50	55	197000	216000	9	NA	± 15 %	AverageRF
Heptachlor	50	54	201000	217000	8	NA	± 15 %	AverageRF
Aldrin	50	53	174000	185000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	53	170000	179000	6	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	168000	175000	5	NA	± 15 %	AverageRF
Endosulfan I	50	52	153000	160000	4	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	167000	174000	5	NA	± 15 %	AverageRF
Dieldrin	50	53	165000	176000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	53	153000	161000	5	NA	± 15 %	AverageRF
Endrin	50	53	154000	164000	7	NA	± 15 %	AverageRF
Endosulfan II	50	52	184000	192000	4	NA	± 15 %	AverageRF
4,4'-DDD	50	53	150000	160000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	53	166000	175000	6	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	225000	235000	5	NA	± 15 %	AverageRF
4,4'-DDT	50	55	184000	202000	10	NA	± 15 %	AverageRF
Endrin Ketone	50	51	298000	307000	3	NA	± 15 %	AverageRF
Methoxychlor	50	52	135000	141000	5	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1200	1410	1680	19	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1200	1160	1390	20	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2010	2290	14	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1300	2920	3840	31	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1200	1630	2000	22	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1300	1820	2290	26	NA	± 100 %	AverageRF
Toxaphene	1000	1200	NA	NA	NA	22 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F021.D\0621F021C.D
J:\GC23\DATA\062107\0621F022.D\0621F022C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	191000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	185000	176000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	55	235000	259000	10	NA	± 15 %	AverageRF
beta-BHC	50	53	108000	114000	5	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	55	223000	245000	10	NA	± 15 %	AverageRF
delta-BHC	50	56	212000	236000	11	NA	± 15 %	AverageRF
Heptachlor	50	54	227000	244000	7	NA	± 15 %	AverageRF
Aldrin	50	54	199000	215000	8	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	53	201000	212000	6	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	212000	4	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	191000	3	NA	± 15 %	AverageRF
alpha-Chlordane	50	53	197000	207000	5	NA	± 15 %	AverageRF
Dieldrin	50	53	195000	205000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	54	185000	201000	9	NA	± 15 %	AverageRF
Endrin	50	53	175000	184000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	162000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	52	151000	157000	4	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	187000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	176000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	217000	3	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	102000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1300	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4760	14	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2840	10	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	728	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4400	12	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5970	11	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	10	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852
Project: Presidio

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A

Analysis Lot: KWG0706830
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0619FX02.D	Instrument Blank	KWG0706830-1	6/20/2007	09:33		6/20/2007	09:52
0619F003.D	Performance Evaluation Mixture	KWG0706830-2	6/20/2007	10:00		6/20/2007	10:19
0619F004.D	Continuing Calibration Verification	KWG0706830-3	6/20/2007	10:26		6/20/2007	10:45
0619F005.D	Continuing Calibration Verification	KWG0706830-3	6/20/2007	10:52		6/20/2007	11:12
0619F006.D	Continuing Calibration Verification	KWG0706830-3	6/20/2007	11:19		6/20/2007	11:38
0619F019.D	Instrument Blank	KWG0706830-4	6/20/2007	17:05		6/20/2007	17:24
0619F020.D	Performance Evaluation Mixture	KWG0706830-5	6/20/2007	17:32		6/20/2007	17:51
0619F021.D	Continuing Calibration Verification	KWG0706830-6	6/20/2007	17:59		6/20/2007	18:19
0619F022.D	Continuing Calibration Verification	KWG0706830-6	6/20/2007	18:26		6/20/2007	18:46
0619F023.D	Continuing Calibration Verification	KWG0706830-6	6/20/2007	18:52		6/20/2007	19:11
0619F024.D	Method Blank	KWG0706602-7	6/20/2007	19:19		6/20/2007	19:39
0619F025.D	Lab Control Sample	KWG0706602-2	6/20/2007	19:46		6/20/2007	20:06
0619F026.D	Duplicate Lab Control Sample	KWG0706602-3	6/20/2007	20:12		6/20/2007	20:32
0619F027.D	Lab Control Sample	KWG0706602-2	6/20/2007	20:39		6/20/2007	20:58
0619F028.D	Duplicate Lab Control Sample	KWG0706602-3	6/20/2007	21:05		6/20/2007	21:24
0619F030.D	Batch QC	K0704934-001	6/20/2007	21:58		6/20/2007	22:17
0619F031.D	Batch QCMS	KWG0706602-1	6/20/2007	22:25		6/20/2007	22:44
0619F032.D	Batch QC	K0704934-004	6/20/2007	22:51		6/20/2007	23:10
0619F033.D	Batch QCMS	KWG0706602-4	6/20/2007	23:17		6/20/2007	23:36
0619F035.D	Instrument Blank	KWG0706830-7	6/21/2007	00:09		6/21/2007	00:28
0619F036.D	Performance Evaluation Mixture	KWG0706830-8	6/21/2007	00:35		6/21/2007	00:54
0619F037.D	Continuing Calibration Verification	KWG0706830-9	6/21/2007	01:02		6/21/2007	01:22
0619F038.D	Continuing Calibration Verification	KWG0706830-9	6/21/2007	01:28		6/21/2007	01:47
0619F049.D	Instrument Blank	KWG0706830-10	6/21/2007	06:18		6/21/2007	06:37
0619F050.D	Performance Evaluation Mixture	KWG0706830-11	6/21/2007	06:44		6/21/2007	07:03
0619F051.D	Continuing Calibration Verification	KWG0706830-12	6/21/2007	07:10		6/21/2007	07:29
0619F052.D	Continuing Calibration Verification	KWG0706830-12	6/21/2007	07:37		6/21/2007	07:56

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852
Project: Presidio

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A **Analysis Lot:** KWG0706945
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0621F002.D	Instrument Blank	KWG0706945-1	6/21/2007	16:43		6/21/2007	17:03
0621F003.D	Performance Evaluation Mixture	KWG0706945-2	6/21/2007	17:09		6/21/2007	17:28
0621F004.D	Continuing Calibration Verification	KWG0706945-3	6/21/2007	17:36		6/21/2007	17:55
0621F005.D	Continuing Calibration Verification	KWG0706945-3	6/21/2007	18:02		6/21/2007	18:21
0621F006.D	Continuing Calibration Verification	KWG0706945-3	6/21/2007	18:29		6/21/2007	18:48
0621F007.D	ZZZZZZ	ZZZZZZ	6/21/2007	18:55		6/21/2007	19:15
0621F008.D	ZZZZZZ	ZZZZZZ	6/21/2007	19:22		6/21/2007	19:41
0621F009.D	1349MW100CL	K0704852-002	6/21/2007	19:48		6/21/2007	20:07
0621F010.D	ZZZZZZ	ZZZZZZ	6/21/2007	20:15		6/21/2007	20:35
0621F034.D	ZZZZZZ	ZZZZZZ	6/22/2007	06:45		6/22/2007	07:04
0621F035.D	ZZZZZZ	ZZZZZZ	6/22/2007	07:11		6/22/2007	07:30
0621F037.D	Instrument Blank	KWG0706945-7	6/22/2007	08:04		6/22/2007	08:24
0621F038.D	Performance Evaluation Mixture	KWG0706945-8	6/22/2007	08:31		6/22/2007	08:50
0621F039.D	Continuing Calibration Verification	KWG0706945-9	6/22/2007	08:57		6/22/2007	09:16
0621F040.D	Continuing Calibration Verification	KWG0706945-9	6/22/2007	09:24		6/22/2007	09:44
0621F041.D	ZZZZZZ	ZZZZZZ	6/22/2007	09:50		6/22/2007	10:09
0621F042.D	ZZZZZZ	ZZZZZZ	6/22/2007	10:16		6/22/2007	10:35
0621F019.D	Instrument Blank	KWG0706945-4	6/22/2007	00:12		6/22/2007	00:31
0621F020.D	Performance Evaluation Mixture	KWG0706945-5	6/22/2007	00:38		6/22/2007	00:57
0621F021.D	Continuing Calibration Verification	KWG0706945-6	6/22/2007	01:04		6/22/2007	01:23
0621F022.D	Continuing Calibration Verification	KWG0706945-6	6/22/2007	01:30		6/22/2007	01:49
0621F023.D	Continuing Calibration Verification	KWG0706945-6	6/22/2007	01:57		6/22/2007	02:16
0621F024.D	ZZZZZZ	ZZZZZZ	6/22/2007	02:23		6/22/2007	02:42
0621F025.D	ZZZZZZ	ZZZZZZ	6/22/2007	02:49		6/22/2007	03:09
0621F026.D	ZZZZZZ	ZZZZZZ	6/22/2007	03:15		6/22/2007	03:34
0621F027.D	ZZZZZZ	ZZZZZZ	6/22/2007	03:41		6/22/2007	04:00
0621F028.D	ZZZZZZ	ZZZZZZ	6/22/2007	04:08		6/22/2007	04:27
0621F029.D	ZZZZZZ	ZZZZZZ	6/22/2007	04:34		6/22/2007	04:53
0621F030.D	ZZZZZZ	ZZZZZZ	6/22/2007	05:00		6/22/2007	05:20
0621F031.D	ZZZZZZ	ZZZZZZ	6/22/2007	05:26		6/22/2007	05:45
0621F032.D	ZZZZZZ	ZZZZZZ	6/22/2007	05:53		6/22/2007	06:12
0621F033.D	ZZZZZZ	ZZZZZZ	6/22/2007	06:19		6/22/2007	06:38
0621F043.D	ZZZZZZ	ZZZZZZ	6/22/2007	10:43		6/22/2007	11:02
0621F044.D	ZZZZZZ	ZZZZZZ	6/22/2007	11:09		6/22/2007	11:29

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Analysis Run Log
Organochlorine Pesticides

Analysis Method: 8081A

Analysis Lot: KWG0706945
Instrument ID: GC23
Column: DB XLB

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0621F045.D	ZZZZZZ	ZZZZZZ	6/22/2007	12:02		6/22/2007	12:22
0621F046.D	ZZZZZZ	ZZZZZZ	6/22/2007	12:29		6/22/2007	12:48
0621F047.D	ZZZZZZ	ZZZZZZ	6/22/2007	12:55		6/22/2007	13:15
0621F048.D	ZZZZZZ	ZZZZZZ	6/22/2007	13:22		6/22/2007	13:42
0621F049.D	ZZZZZZ	ZZZZZZ	6/22/2007	13:48		6/22/2007	14:07
0621F051.D	Instrument Blank	KWG0706945-10	6/22/2007	14:41		6/22/2007	15:00
0621F052.D	Performance Evaluation Mixture	KWG0706945-11	6/22/2007	15:08		6/22/2007	15:28
0621F053.D	Continuing Calibration Verification	KWG0706945-12	6/22/2007	15:34		6/22/2007	15:54
0621F054.D	Continuing Calibration Verification	KWG0706945-12	6/22/2007	16:01		6/22/2007	16:20

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/13/2007

Extraction Prep Log
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Extraction Lot: KWG0706602
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW100CL	K0704852-002	06/06/07	06/07/07	1050ml	2ml	NA	
Method Blank	KWG0706602-7	NA	NA	1050ml	2ml	NA	
Batch QC	K0704934-001	NA	NA	1050ml	2ml	NA	
Batch QC	K0704934-004	NA	NA	1050ml	2ml	NA	
Batch QCMS	KWG0706602-1	NA	NA	1050ml	2ml	NA	
Batch QCMS	KWG0706602-4	NA	NA	950ml	2ml	NA	
Lab Control Sample	KWG0706602-2	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0706602-3	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007
		Date Extracted:	06/13/2007

Organochlorine Pesticides

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
		Level:	Low
Extraction Method:	EPA 3535		
Analysis Method:	8081A		

Analyte Name	MRL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
alpha-Chlordane	0.096	0.17	0.15	12.5	D	10	06/21/07
Endrin Aldehyde	0.096	0.61	0.58	5.0	D	10	06/21/07
Methoxychlor	0.096	0.15	0.37	84.6	PD	10	06/21/07

Organic Analysis:
Organochlorine Pesticides

Validation Package

Organic Analysis:
Organochlorine Pesticides

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Organochlorine Pesticides

Extraction Method: EPA 3535
Analysis Method: 8081A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2
1349MW100CL	K0704852-002	55 D	72 D
Method Blank	KWG0706602-7	71	84
Batch QC	K0704934-001	38	65
Batch QC	K0704934-004	72	84
Batch QCMS	KWG0706602-1	71	81
Batch QCMS	KWG0706602-4	74	82
Lab Control Sample	KWG0706602-2	68	85
Duplicate Lab Control Sample	KWG0706602-3	71	86

Surrogate Recovery Control Limits (%)

Sur1 =	Tetrachloro-m-xylene	16-111
Sur2 =	Decachlorobiphenyl	14-145

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike Summary
Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

Analyte Name	Sample Result	Batch QCMS KWG0706602-1 Matrix Spike Result	Expected	%Rec	%Rec Limits
alpha-BHC	ND	0.168	0.190	88	29-128
beta-BHC	ND	0.167	0.190	88	26-124
gamma-BHC (Lindane)	ND	0.171	0.190	90	30-128
delta-BHC	ND	0.194	0.190	102	32-141
Heptachlor	ND	0.160	0.190	84	18-130
Aldrin	ND	0.102	0.190	54	10-130
Heptachlor Epoxide	ND	0.162	0.190	85	24-137
gamma-Chlordane	ND	0.161	0.190	85	34-122
Endosulfan I	ND	0.135	0.190	71	19-112
alpha-Chlordane	ND	0.166	0.190	87	33-123
Dieldrin	ND	0.161	0.190	84	22-141
4,4'-DDE	ND	0.156	0.190	82	27-141
Endrin	ND	0.173	0.190	91	37-140
Endosulfan II	ND	0.143	0.190	75	29-113
4,4'-DDD	ND	0.164	0.190	86	21-150
Endrin Aldehyde	ND	0.141	0.190	74	10-134
Endosulfan Sulfate	ND	0.159	0.190	84	21-137
4,4'-DDT	ND	0.173	0.190	91	42-133
Endrin Ketone	ND	0.160	0.190	84	37-120
Methoxychlor	ND	0.161	0.190	84	43-133

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike Summary
Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-004	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

		Batch QCMS KWG0706602-4 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Toxaphene	ND	1.48	2.11	70	41-142

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Organochlorine Pesticides

Extraction Method:	EPA 3535	**Units:**	ug/L
Analysis Method:	8081A	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706602

	Lab Control Sample KWG0706602-2 Lab Control Spike			Duplicate Lab Control Sample KWG0706602-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.178	0.200	89	0.183	0.200	92	40-135	3	30
beta-BHC	0.174	0.200	87	0.176	0.200	88	40-129	1	30
gamma-BHC (Lindane)	0.178	0.200	89	0.183	0.200	92	38-138	3	30
delta-BHC	0.199	0.200	99	0.206	0.200	103	45-147	3	30
Heptachlor	0.163	0.200	81	0.172	0.200	86	36-130	6	30
Aldrin	0.0867	0.200	43	0.0890	0.200	45	10-128	3	30
Heptachlor Epoxide	0.170	0.200	85	0.175	0.200	87	47-126	3	30
gamma-Chlordane	0.170	0.200	85	0.175	0.200	87	44-126	3	30
Endosulfan I	0.141	0.200	71	0.146	0.200	73	27-119	3	30
alpha-Chlordane	0.170	0.200	85	0.175	0.200	88	45-127	3	30
Dieldrin	0.170	0.200	85	0.174	0.200	87	48-126	3	30
4,4'-DDE	0.160	0.200	80	0.167	0.200	83	38-137	4	30
Endrin	0.181	0.200	91	0.188	0.200	94	50-139	4	30
Endosulfan II	0.148	0.200	74	0.153	0.200	77	31-128	3	30
4,4'-DDD	0.167	0.200	83	0.174	0.200	87	41-139	4	30
Endrin Aldehyde	0.135	0.200	67	0.149	0.200	75	32-113	10	30
Endosulfan Sulfate	0.160	0.200	80	0.166	0.200	83	42-126	3	30
4,4'-DDT	0.175	0.200	87	0.182	0.200	91	49-136	4	30
Endrin Ketone	0.169	0.200	84	0.175	0.200	87	43-133	3	30
Methoxychlor	0.176	0.200	88	0.181	0.200	91	43-143	3	30
Toxaphene	1.43	2.00	72	1.44	2.00	72	46-158	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/13/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	19:19

Method Blank Summary
Organochlorine Pesticides

Sample Name:	Method Blank	**File ID:**	J:\GC23\DATA\061907\0619F024.D
Lab Code:	KWG0706602-7	**Instrument ID:**	GC23
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0706602-2	J:\GC23\DATA\061907\0619F025.D	06/20/07	19:46
Duplicate Lab Control Sample	KWG0706602-3	J:\GC23\DATA\061907\0619F026.D	06/20/07	20:12
Lab Control Sample	KWG0706602-2	J:\GC23\DATA\061907\0619F027.D	06/20/07	20:39
Duplicate Lab Control Sample	KWG0706602-3	J:\GC23\DATA\061907\0619F028.D	06/20/07	21:05
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706602-2	**Lab Code:**	KWG0706602-3
File ID:	J:\GC23\DATA\061907\0619F025.D	**File ID:**	J:\GC23\DATA\061907\0619F026.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	06/13/2007	**Date Extracted:**	06/13/2007
Date Analyzed:	06/20/2007	**Date Analyzed:**	06/20/2007
Time Analyzed:	19:46	**Time Analyzed:**	20:12

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0706602-7	J:\GC23\DATA\061907\0619F024.D	06/20/07	19:19
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706602-2	**Lab Code:**	KWG0706602-3
File ID:	J:\GC23\DATA\061907\0619F027.D	**File ID:**	J:\GC23\DATA\061907\0619F026.D
Instrument ID:	GC23	**Instrument ID:**	GC23
Date Extracted:	06/13/2007	**Date Extracted:**	06/13/2007
Date Analyzed:	06/20/2007	**Date Analyzed:**	06/20/2007
Time Analyzed:	20:39	**Time Analyzed:**	20:12

Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A	**Extraction Lot:**	KWG0706602

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0706602-7	J:\GC23\DATA\061907\0619F024.D	06/20/07	19:19
Batch QC	K0704934-001	J:\GC23\DATA\061907\0619F030.D	06/20/07	21:58
Batch QCMS	KWG0706602-1	J:\GC23\DATA\061907\0619F031.D	06/20/07	22:25
Batch QC	K0704934-004	J:\GC23\DATA\061907\0619F032.D	06/20/07	22:51
Batch QCMS	KWG0706602-4	J:\GC23\DATA\061907\0619F033.D	06/20/07	23:17
1349MW100CL	K0704852-002	J:\GC23\DATA\062107\0621F009.D	06/21/07	19:48

Organic Analysis:
Organochlorine Pesticides

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Organochlorine Pesticides

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
beta-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
delta-BHC	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Heptachlor	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Aldrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
gamma-Chlordane†	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan I	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
alpha-Chlordane	**0.17**	D	0.096	10	06/13/07	06/21/07	KWG0706602	
Dieldrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDE	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endrin	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan II	ND	Ui	0.31	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDD	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Endrin Aldehyde	**0.61**	D	0.096	10	06/13/07	06/21/07	KWG0706602	
Endosulfan Sulfate	ND	Ui	0.18	10	06/13/07	06/21/07	KWG0706602	
4,4'-DDT	ND	Ui	0.30	10	06/13/07	06/21/07	KWG0706602	
Endrin Ketone	ND	U	0.096	10	06/13/07	06/21/07	KWG0706602	
Methoxychlor	**0.15**	PD	0.096	10	06/13/07	06/21/07	KWG0706602	
Toxaphene	ND	Ui	7.2	10	06/13/07	06/21/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	55	16-111	06/21/07	Acceptable
Decachlorobiphenyl	72	14-145	06/21/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File:	J:\GC23\DATA\062107\0621F009.D	**Date Acquired:**	06/21/2007 19:48
Lab ID:	K0704852-002	**Date Quantitated:**	06/25/2007 16:54
RunType:	SMPL	**Batch ID:**	KWG0706945
Matrix:	WATER	**Analysis Method:**	8081A
		MethodJoinID:	MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	*	NA	NA		x

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	Toxaphene	21.9	NA	15	CWG
Analyte Co-elution	Endrin Ketone	14.91	NA	NA	CWG
	Toxaphene {6}	14.91	NA	NA	

Primary Review: 6/26/07

Secondary Review: 6/28/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F009.D\0621F009C.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/21/2007 19:48
Date Quantitated: 06/25/2007 16:54
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	*	NA	NA		x

Primary Review: 6/26/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706945	**Prep Lot:**	KWG0706602	**Report Group:**	K0704852
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608552	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ8064
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\062107\0621F009.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F009.D\0621F009c.d			**Vial:**	9
Acqu Date:	06/21/2007 19:48	**Quant Date:**	06/25/2007 16:54	**Dilution:**	10.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704852-002				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51		7.40		767722	987478m	3.84	5.51			55OK
					%Recovery =		38OK	55OK	Limits =	16-111	
Decachlorobiphenyl	17.12	-0.01	15.99	-0.01	2002528	1287861	7.22	6.97			72OK
					%Recovery =		72OK	70OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.24	+0.03	8.45	+0.01	236974	331827	1.03	1.41	0.020JD	0.027JD	**0.027**JD
beta-BHC	10.27	+0.05	9.46	+0.01	134471	54339	1.25	0.5040	0.024JD	0.0096JD	**0.024**JPD
gamma-BHC (Lindane)	9.75		9.08	+0.03	139669	5132673	0.6440	23.07	0.012JD	0.44D	0.096Ui
delta-BHC	10.64	+0.01	9.93	+0.03	2748441m	824831	13.93	3.90	0.27D	0.074JD	0.096Ui
Heptachlor	10.74	+0.01	9.65	+0.03	957797	277192	4.76	1.22	0.091JD	0.023JD	0.096Ui
Aldrin	11.24	-0.01	10.13	+0.01	1395905	433279m	8.04	2.18	0.15D	0.041JD	0.096Ui
Heptachlor Epoxide	11.94		10.94	-0.03	330656	1224729	1.95	6.10	0.037JD	0.12D	0.096Ui
gamma-Chlordane					0d	0	0.0000	0.0000	0.0032U	0.0032U	0.0032U
Endosulfan I					0d	0d	0.0000	0.0000	0.0044U	0.0044U	0.0044U
alpha-Chlordane	12.49	-0.02	11.48		1345778	1808260	8.07	9.17	0.15D	0.17D	**0.17**D
Dieldrin	12.96	-0.01	11.97	-0.03	246635	6674165m	1.50	34.30	0.028JD	0.65D	0.096Ui
4,4'-DDE	12.79	+0.04	11.78	-0.01	735439	710351	4.81	3.84	0.092JD	0.073JD	**0.092**JD
Endrin					0d	0d	0.0000	0.0000	0.0068U	0.0068U	0.0068U
Endosulfan II	13.74	+0.02	12.83	-0.04	4860244	2928457m	26.47	16.14	0.50D	0.31D	**0.50**PD
4,4'-DDD					0	0d	0.0000	0.0000	0.015U	0.015U	0.015U
Endrin Aldehyde	13.88		13.20	-0.01	5317308	4599316	32.08	30.45	0.61D	0.58D	**0.61**D
Endosulfan Sulfate	14.32	+0.01	13.49	-0.02	10080817	1675644	44.83	9.24	0.85D	0.18D	0.18Ui
4,4'-DDT	13.99		13.10	+0.03	2821191	13625900	15.32	83.57	0.29D	1.6D	0.30Ui

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F009.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F009.D\0621F009c.d			**Vial:**	9
Acqu Date:	06/21/2007 19:48	**Quant Date:**	06/25/2007 16:54	**Dilution:**	10.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704852-002				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endrin Ketone	14.91 -0.02 c	14.41 +0.01	1086958	460418	3.64	2.19	0.069JD	0.042JD *	**0.042**JPD
Methoxychlor	14.64	14.09 +0.01	2588505	734057	19.19	7.80	0.37D	0.15D	**0.37**PD
Toxaphene			0	0	480.03 CCV	375.90	9.1D	7.2D	**9.1**D
Toxaphene {1}			0d	0d	0.0000	0.0000	0.28U	0.28U	
Toxaphene {2}		12.72 +0.01	0d	207023	0.0000	49.44	0.28U	0.94JD	
Toxaphene {3}	13.40 +0.02	13.56 -0.01	229553	631011	114.05	243.72	2.2JD	4.6JD	
Toxaphene {4}	14.05	13.69	1075434	496148	368.20	725.97	7.0D	14D	
Toxaphene {5}	14.41 +0.04	13.91 -0.01	1371758	1329820	839.49	337.50	16D	6.4D	
Toxaphene {6}	14.91 +0.02 c	14.13 +0.02	1086958	2821848	598.38	522.86	11D	10D	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	10.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:20 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	767722	987478	3.837	5.510m#
24)	s	Decachlorobiphen	17.12f	15.99	2002528	1287861	7.216	6.973
		Target Compounds						
2)		alpha-BHC	9.24	8.45	236974	331827	1.029	1.410 #
4)		beta-BHC	10.27f	9.46	134471	54339	1.254	0.504 #
5)		gamma-BHC (Linda	9.75	9.08	139669	5132673	0.644	23.065 #
6)		delta-BHC	10.64	9.93	2748441	824831	13.926m	3.896 #
7)		Heptachlor	10.74	9.65	957797	277192	4.757	1.222 #
8)		Aldrin	11.24	10.13	1395905	433279	8.037	2.176m#
10)		Heptachlor Epoxi	11.94	10.94f	330656	1224729	1.946	6.098 #
13)		alpha-Chlordane	12.49f	11.48	1345778	1808260	8.073	9.172
14)		Dieldrin	12.96	11.97f	246635	6674165	1.496	34.300m#
15)		4,4'-DDE	12.79f	11.78	735439	710351	4.812	3.840
17)		Endosulfan II	13.74	12.83f	4860244	2928457	26.474	16.141m#
19)		Endrin Aldehyde	13.88	13.20	5317308	4599316	32.081	30.451
20)		Endosulfan Sulfa	14.32	13.49f	10080817	1675644	44.834	9.235 #
21)		4,4'-DDT	13.99	13.10	2821191	13625900	15.316	83.574 #
22)		Endrin Ketone	14.91f	14.41	1086958	460418	3.643	2.192 #
23)		Methoxychlor	14.64	14.09	2588505	734057	19.194	7.804 #
26)		Toxaphene {2}	0.00	12.72	0	207023	N.D. d	49.444
27)		Toxaphene {3}	13.40	13.56	229553	631011	114.045	243.724 #
28)		Toxaphene {4}	14.05	13.69	1075434	496148	368.197	725.971 #
29)		Toxaphene {5}	14.41f	13.91	1371758	1329820	839.494	337.499 #
30)		Toxaphene {6}	14.91	14.13	1086958	2821848	598.383	522.861

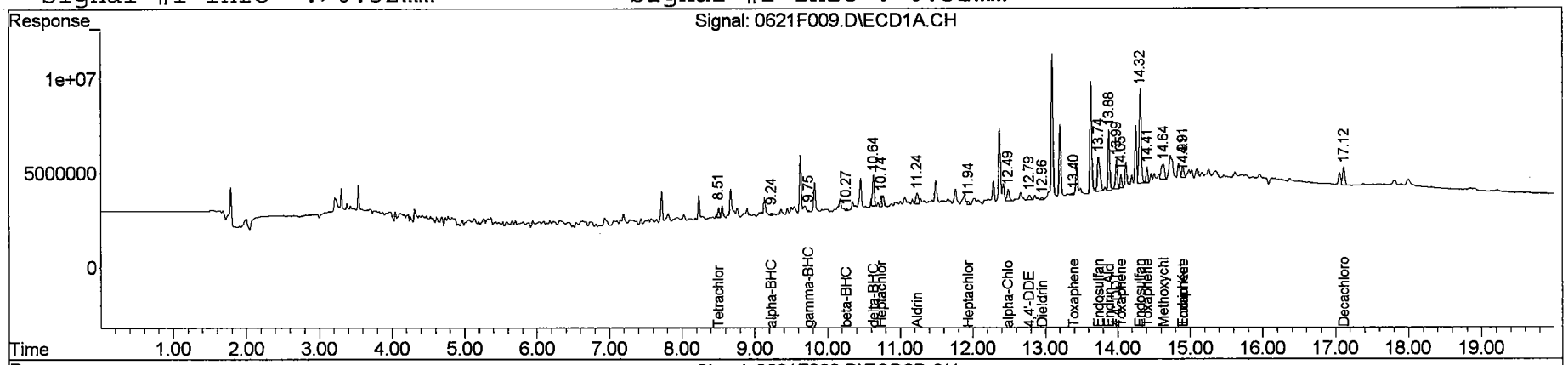
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

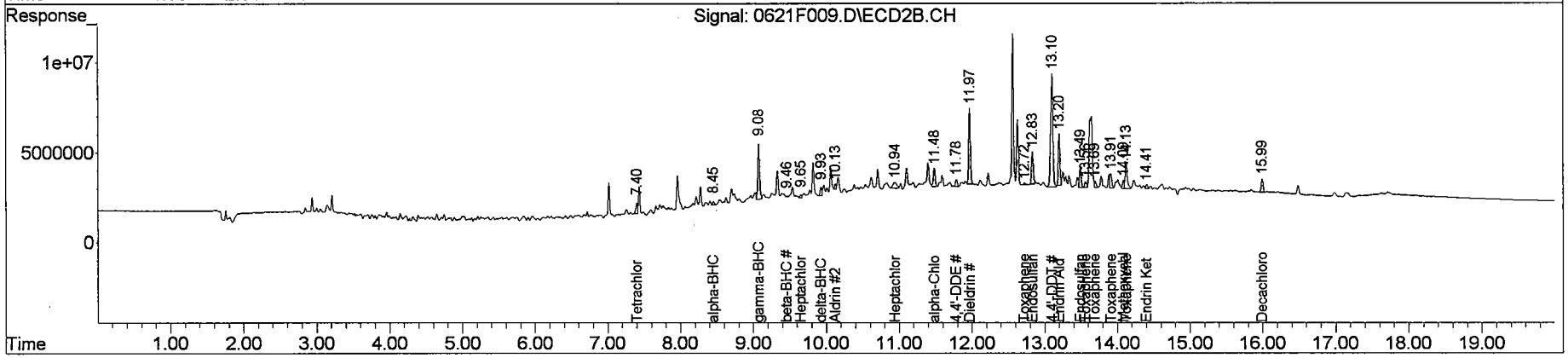
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 25 16:54 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



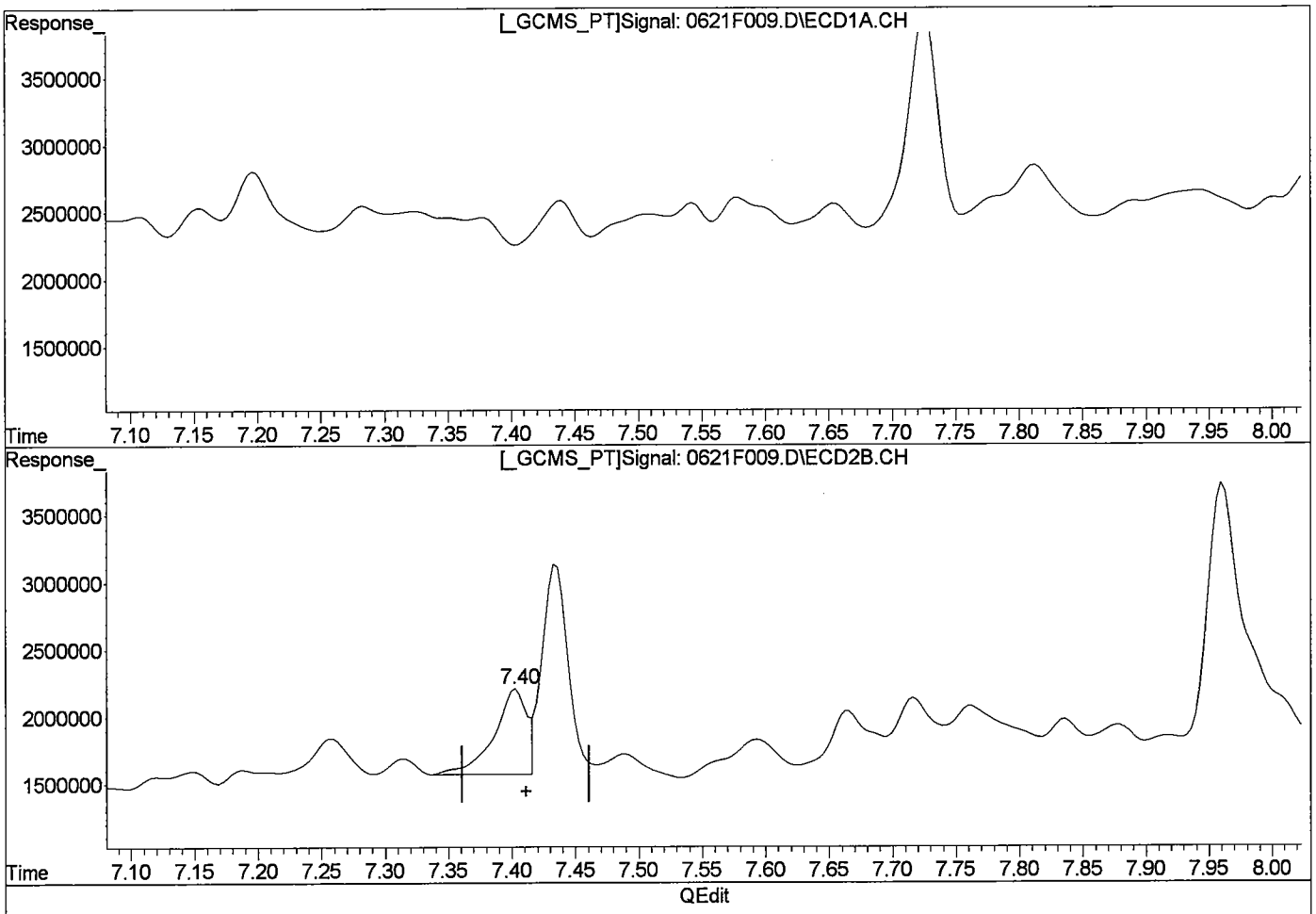


700

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(1) Tetrachloro-m-xylene (s)

8.51min 3.837ug/L

response 767722

(1) Tetrachloro-m-xylene #2 (s)

7.40min 6.596ug/L

response 1182082

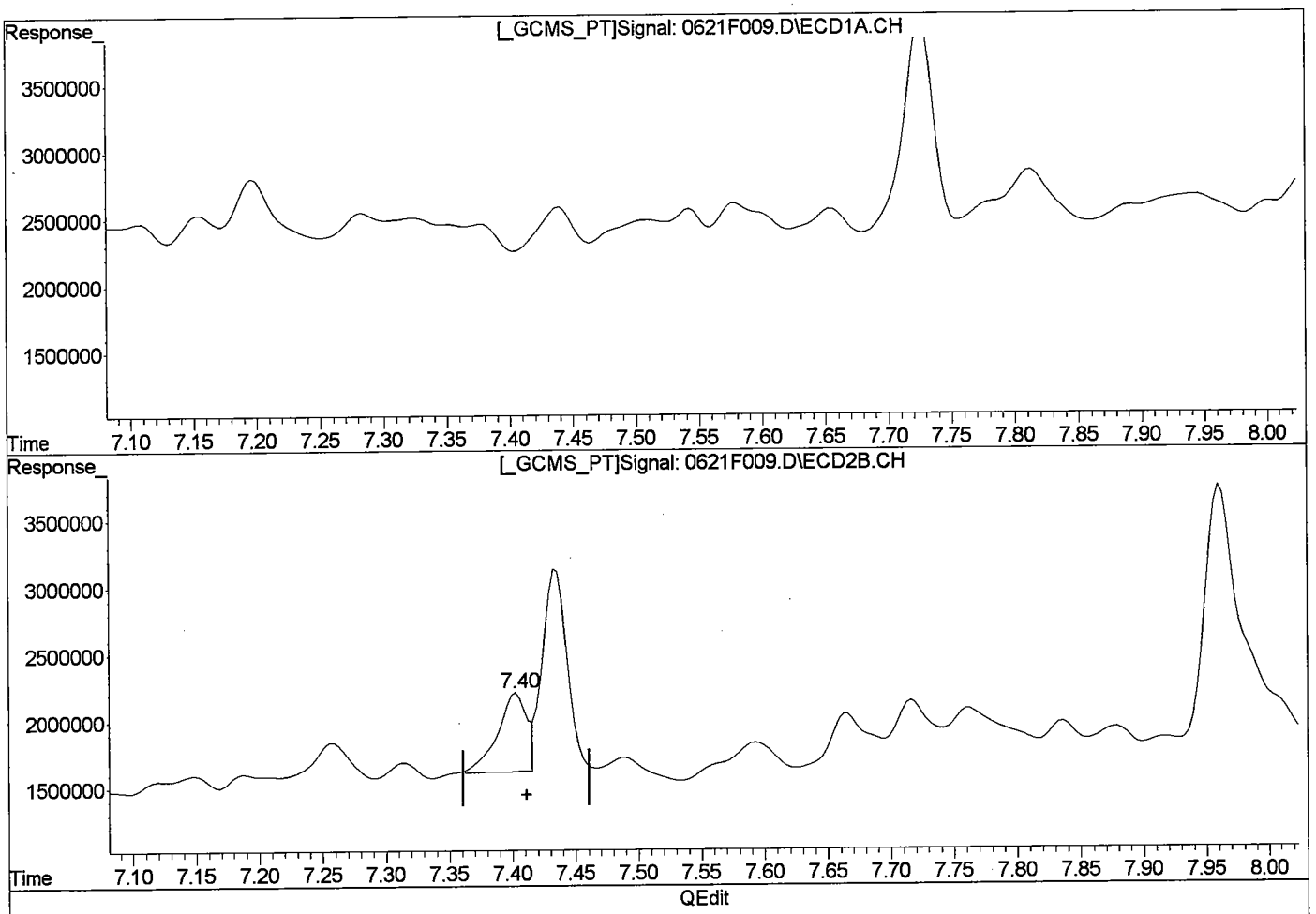
Before
JUN 26 2007

(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:50:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(1) Tetrachloro-m-xylene (s)

8.51min 3.837ug/L

response 767722

(1) Tetrachloro-m-xylene #2 (s)

7.40min 5.510ug/L m

response 987478

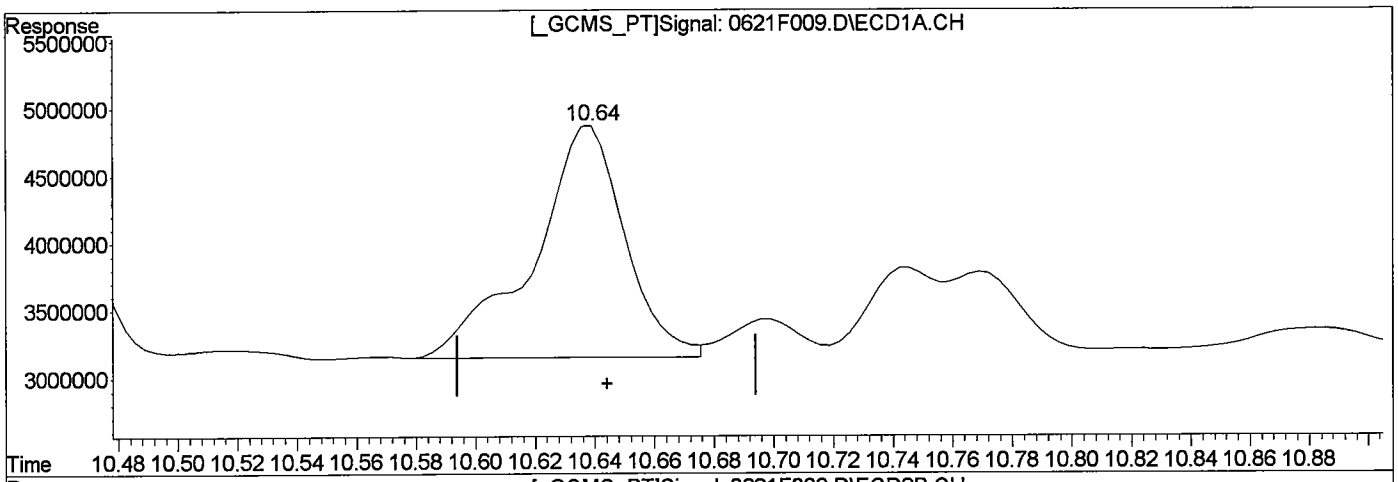
After
Initials [illegible] 6/28/07
JUN 28 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

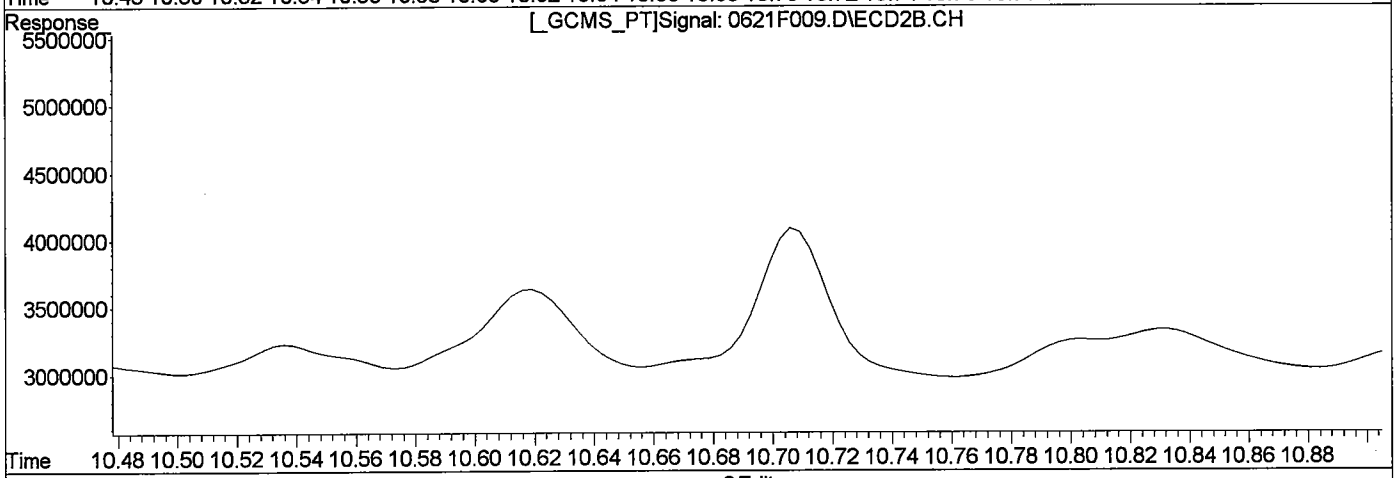
(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:50:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(6) delta-BHC

10.64min 18.513ug/L

response 3653751

Before

JUN 2 6 2007

(6) delta-BHC #2

9.93min 3.896ug/L

response 824831

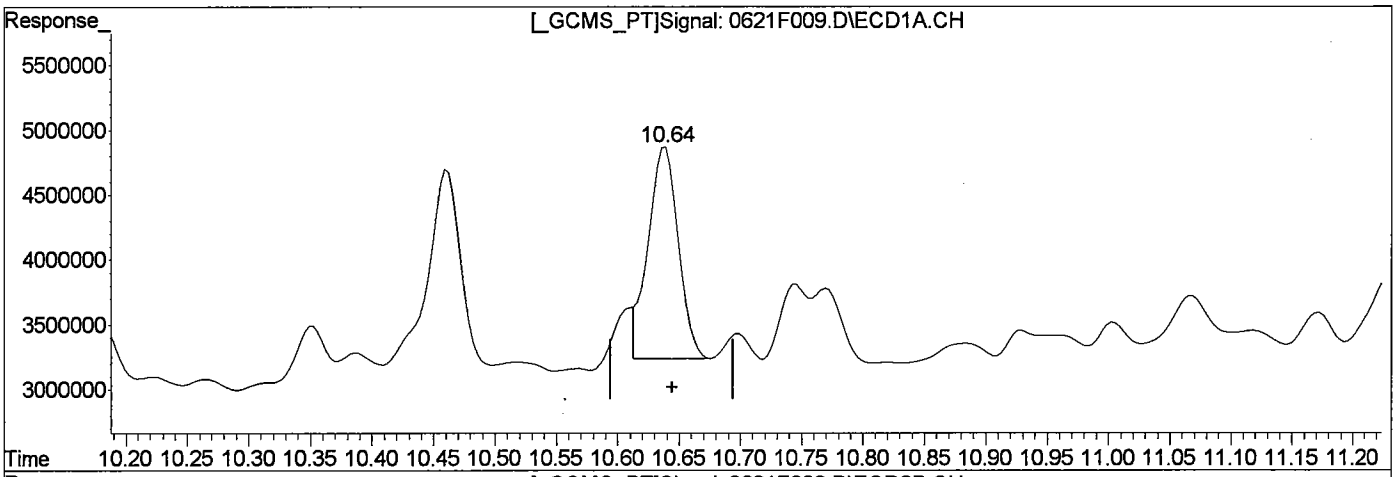
(+) = Expected Retention Time

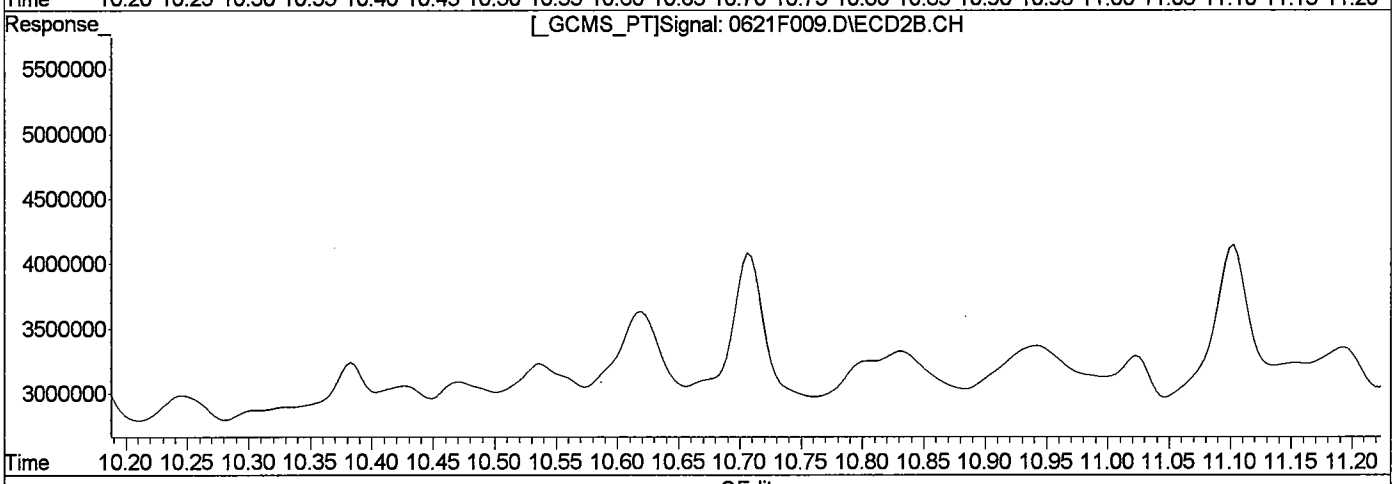
0621F009.D 061107-8081.M Mon Jun 25 16:51:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 25 16:54 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(6) delta-BHC

10.64min 13.926ug/L m

response 2748441

(6) delta-BHC #2

9.93min 3.896ug/L

response 824831

After
Initials

JUN 26 2007

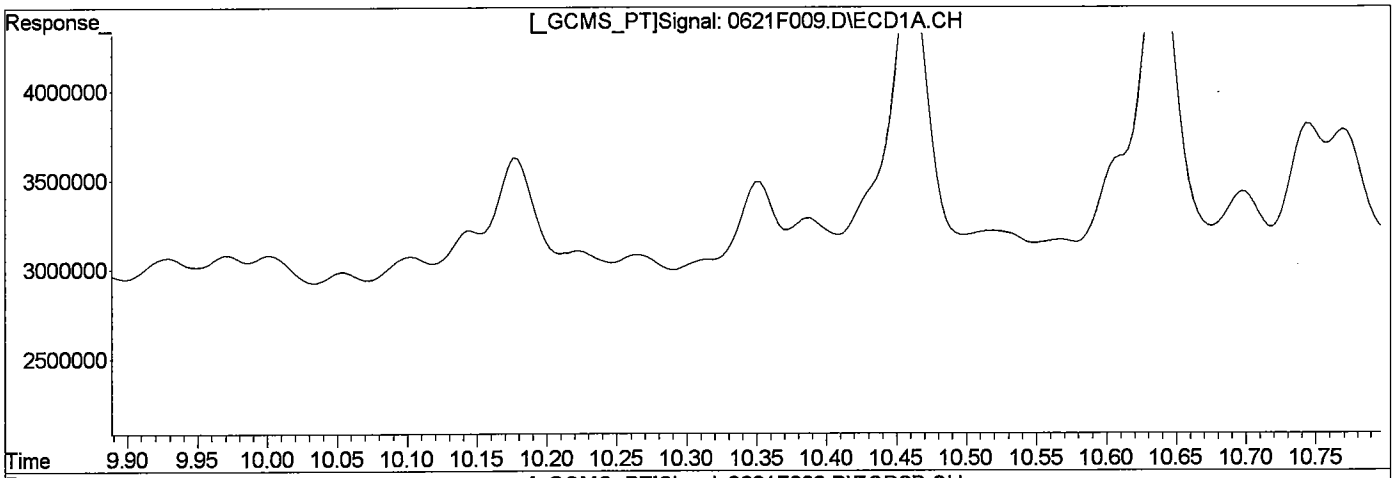
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

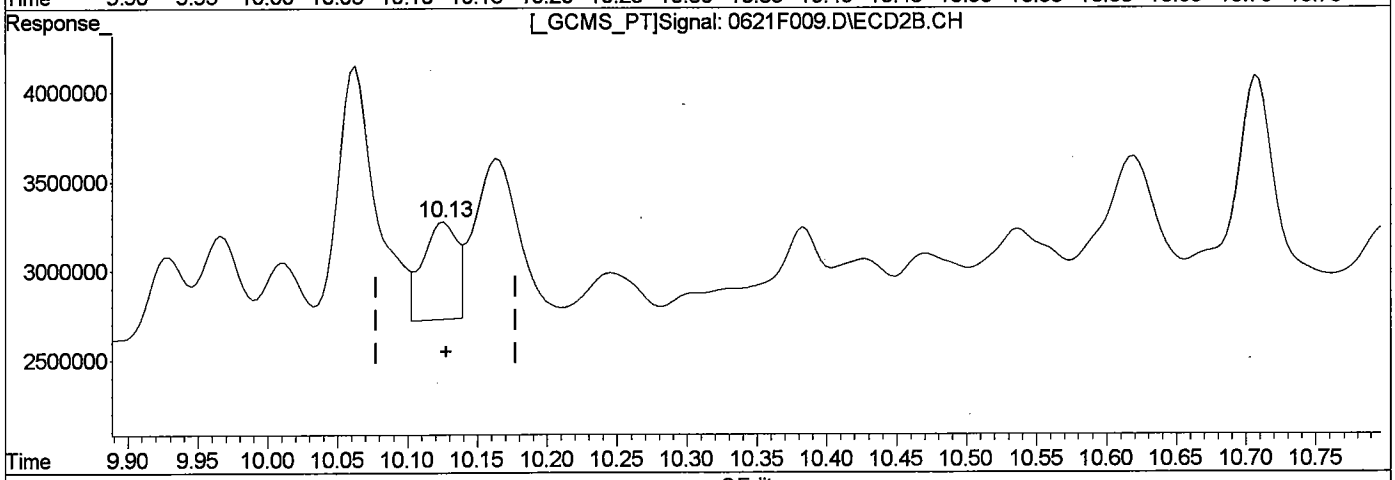
(+) = Expected Retention Time
0621F009.D 061107-8081.M Tue Jun 26 14:11:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(8) Aldrin

11.24min 8.037ug/L

response 1395905

(8) Aldrin #2

10.13min 4.810ug/L

response 957785

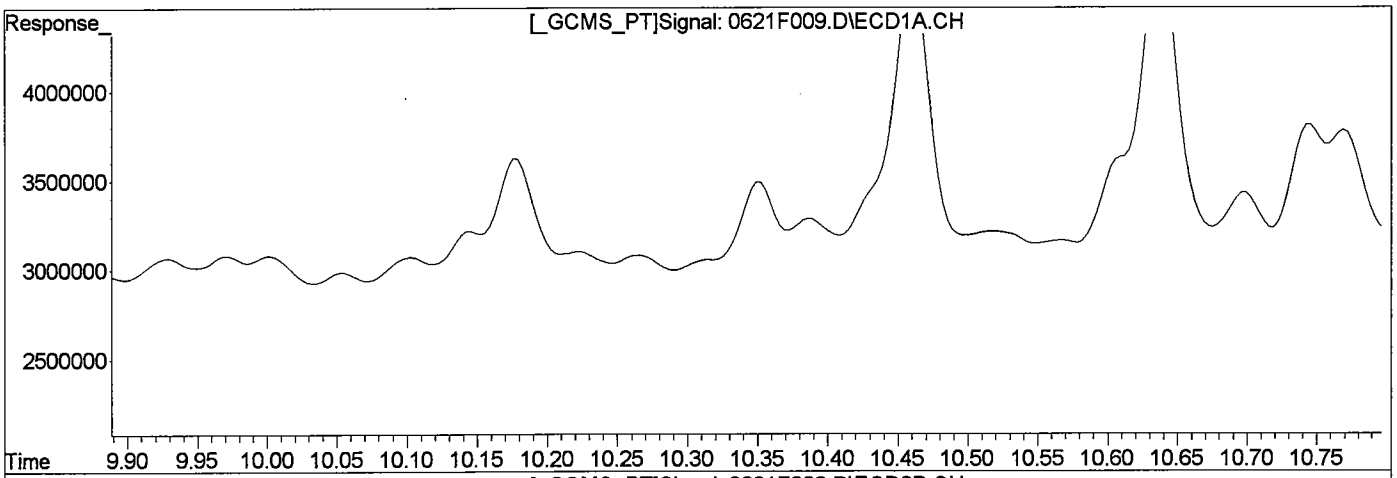
Before
JUN 26 2007

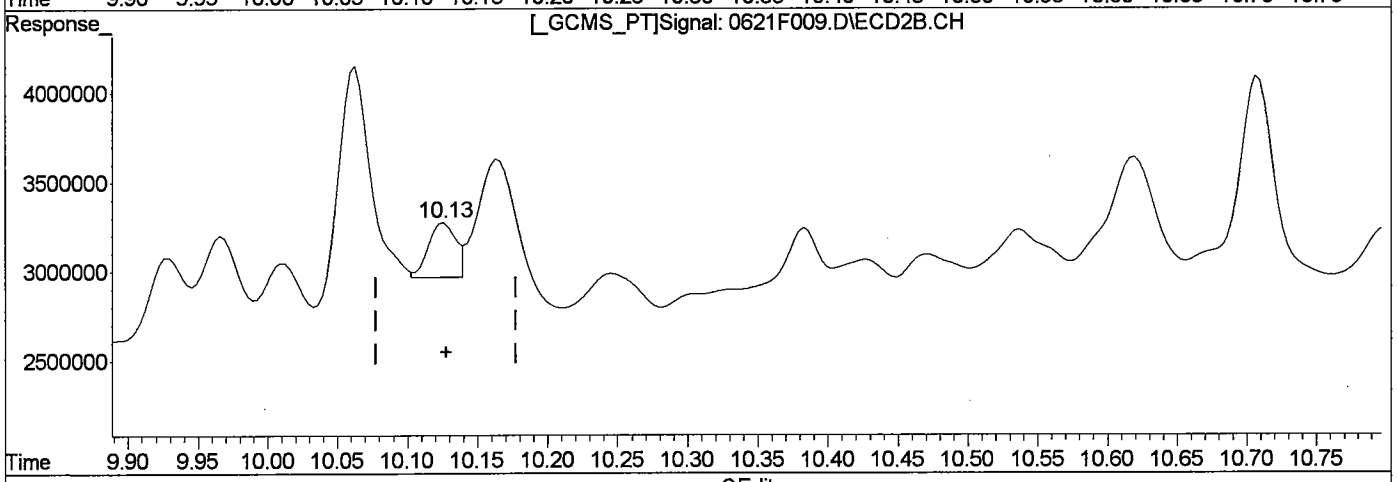
(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:51:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(8) Aldrin

11.24min 8.037ug/L

response 1395905

(8) Aldrin #2

10.13min 2.176ug/L m

response 433279

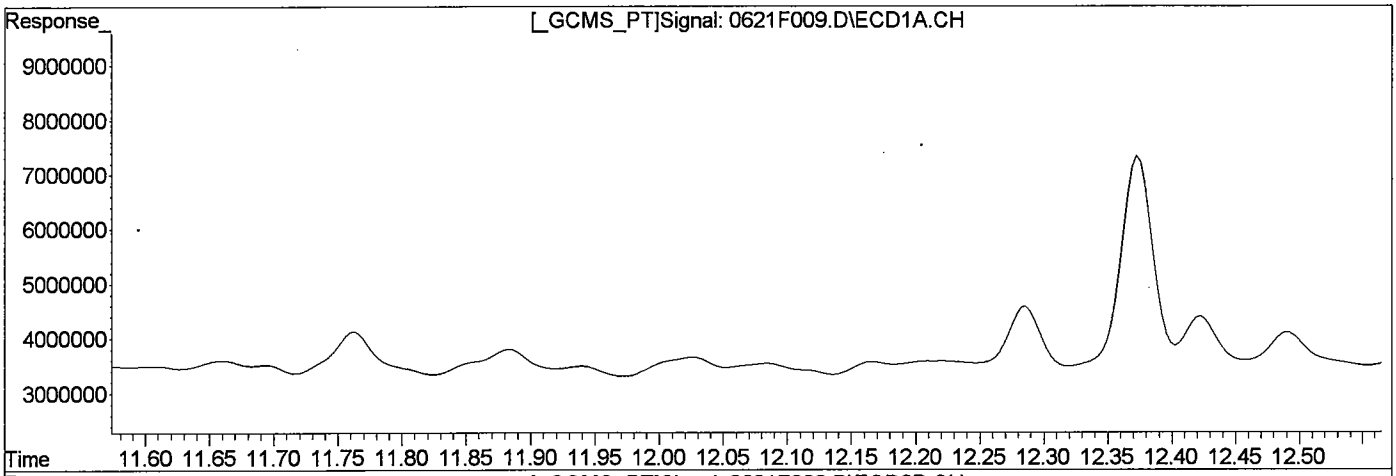
After
Initials
JUN 26 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

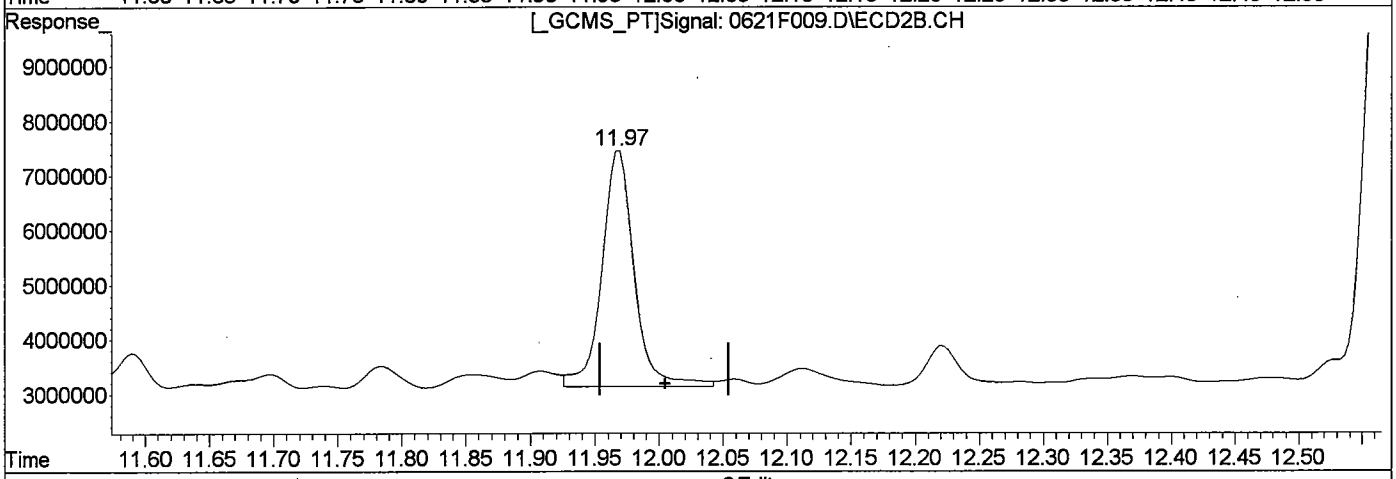
(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:51:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(14) Dieldrin

12.96min 1.496ug/L

response 246635

Before

JUN 28 2007

(14) Dieldrin #2

11.97min 38.853ug/L

response 7559909

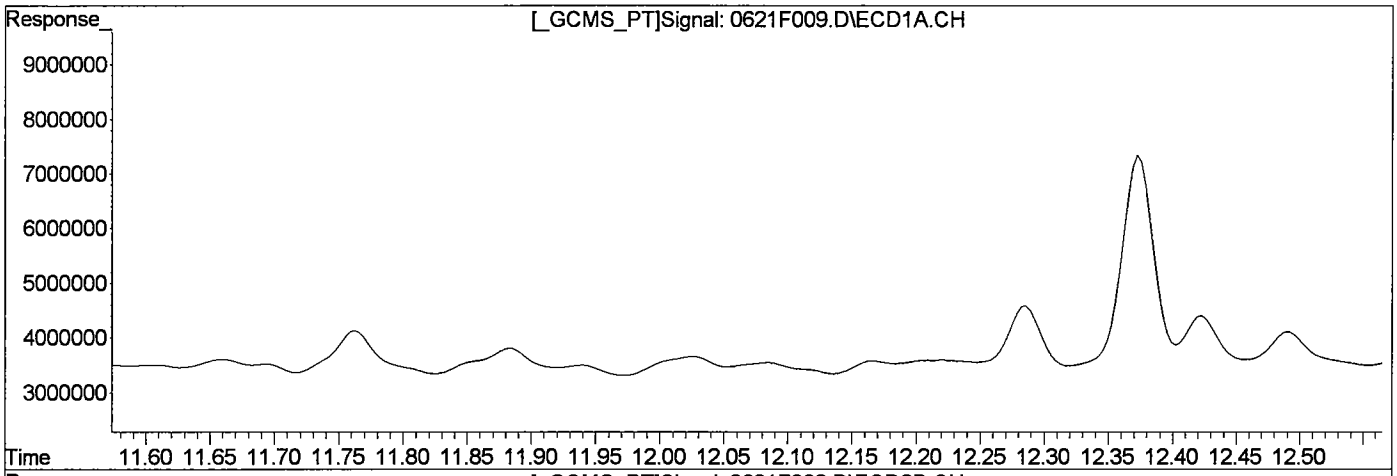
(+) = Expected Retention Time

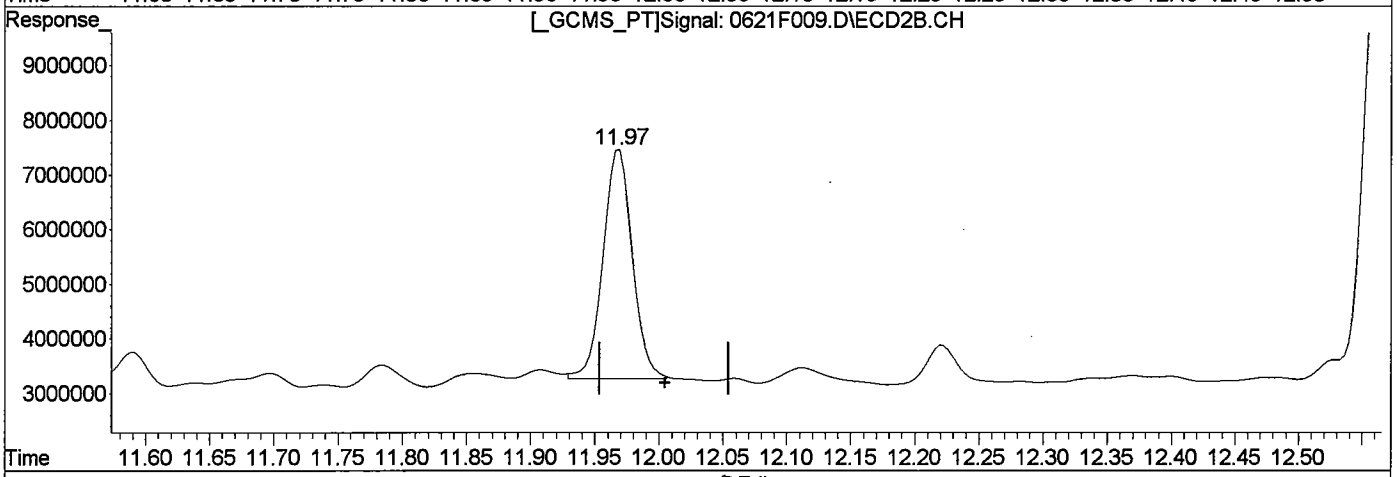
0621F009.D 061107-8081.M Mon Jun 25 16:52:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(14) Dieldrin

12.96min 1.496ug/L

response 246635

(14) Dieldrin #2

11.97min 34.300ug/L m

response 6674165

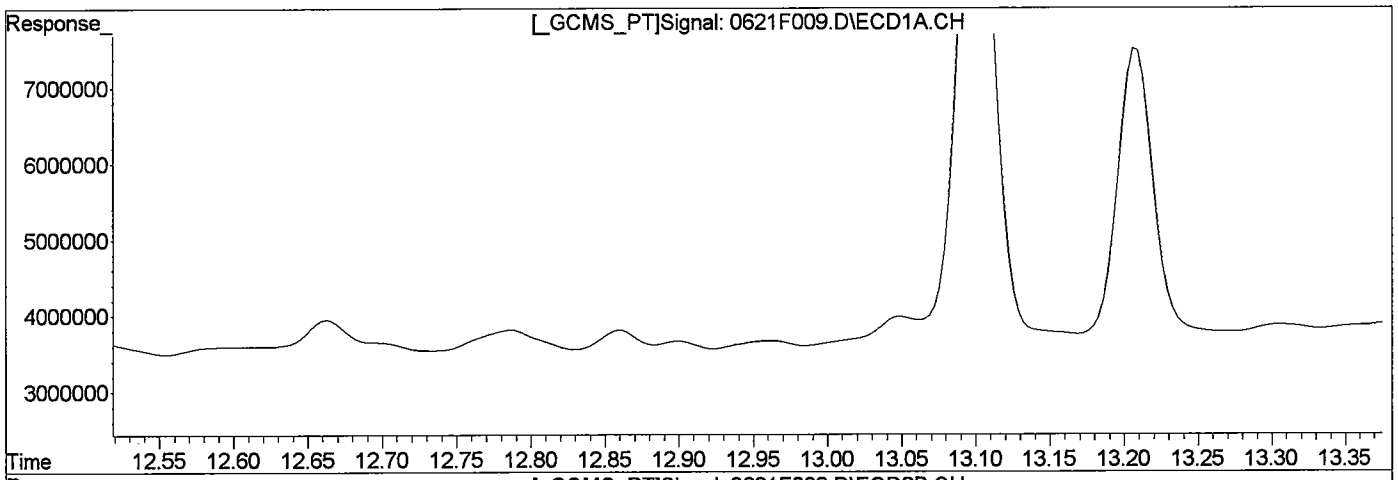
QEdit
After
Initials
JUN 26 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

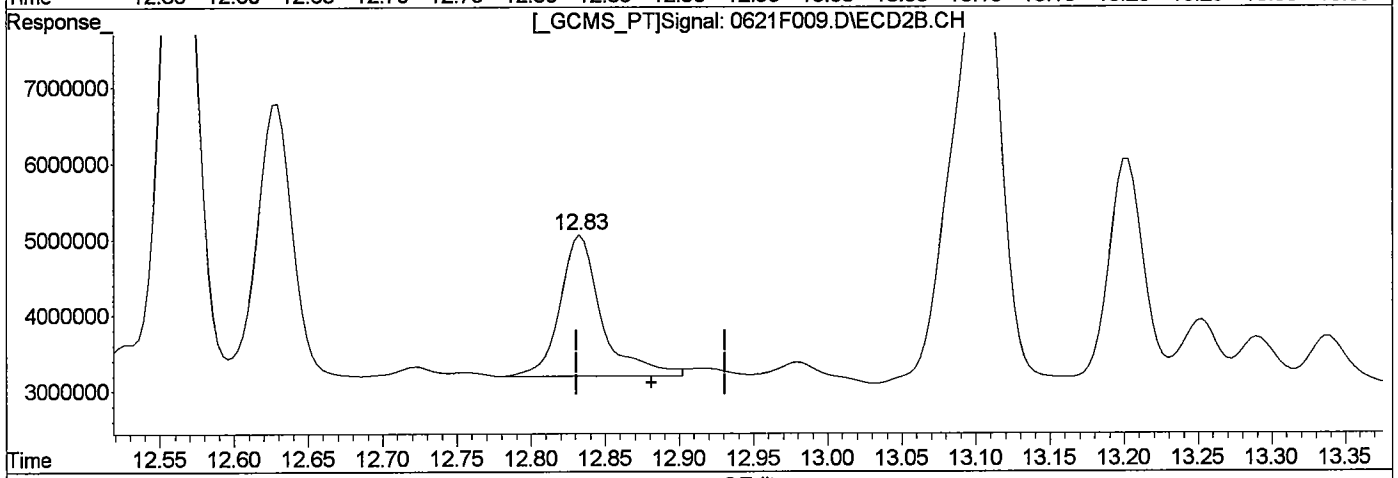
(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:52:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

Before

JUN 2 6 2007

(17) Endosulfan II

13.74min 26.474ug/L

response 4860244

(17) Endosulfan II #2

12.83min 20.095ug/L

response 3645881

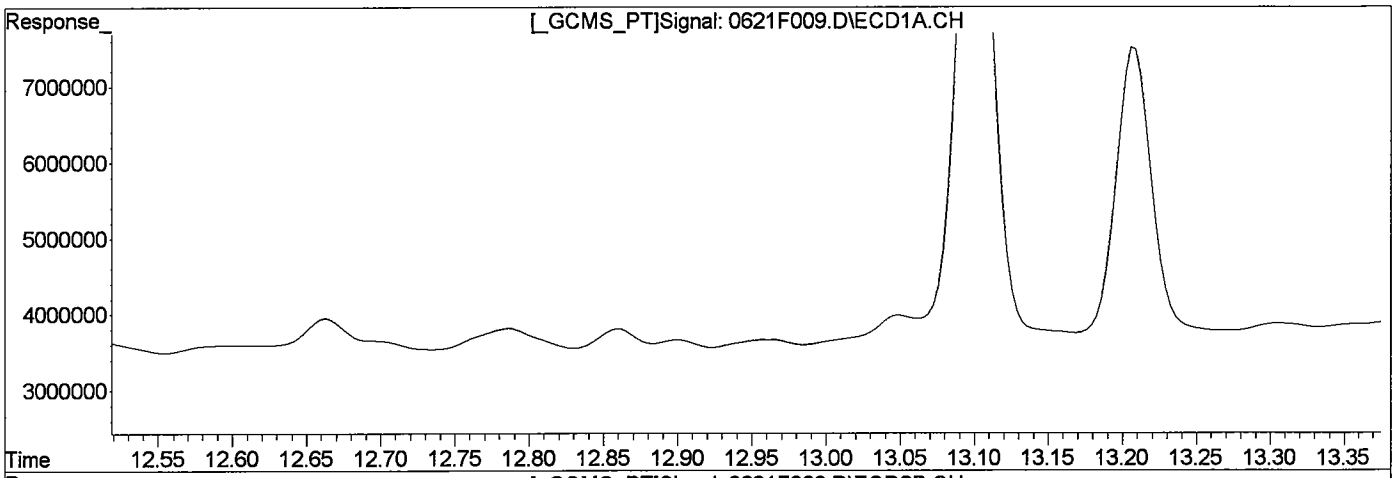
(+) = Expected Retention Time

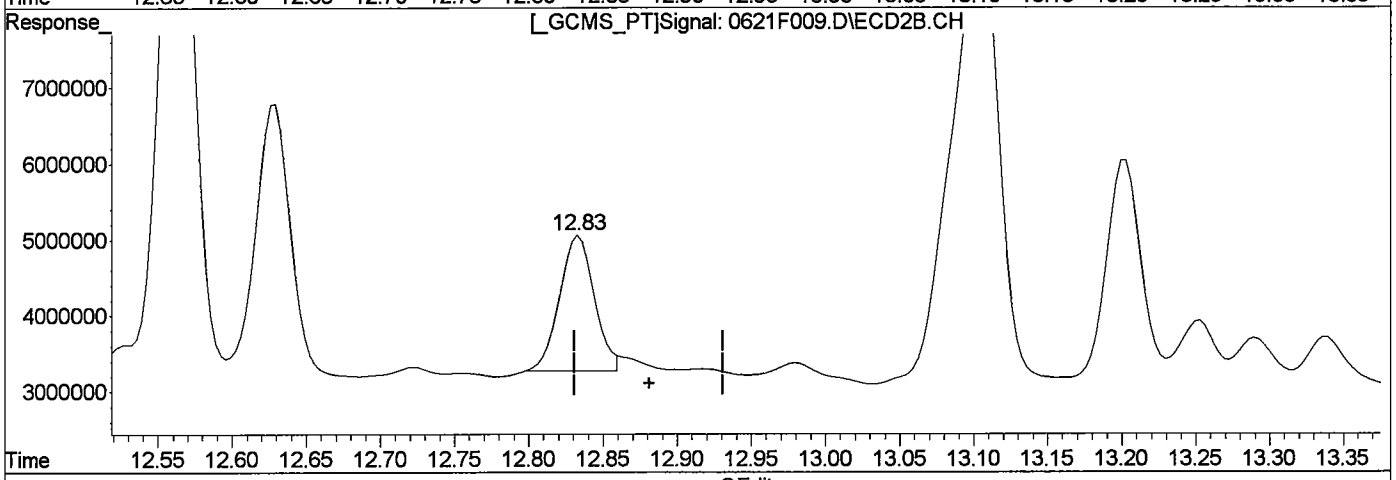
0621F009.D 061107-8081.M Mon Jun 25 16:53:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F009.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\062107\0621F009.D\ECD2B.CH
Acq On : 21 Jun 2007 7:48 pm Operator: AKamawal
Sample : K0704852-002 | 1349MW100CL Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04852002. Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(17) Endosulfan II

13.74min 26.474ug/L

response 4860244

(17) Endosulfan II #2

12.83min 16.141ug/L m

response 2928457

After
Initials
JUN 26 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F009.D 061107-8081.M Mon Jun 25 16:53:23 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706602-7	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Aldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	ND	U	0.48	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	16-111	06/20/07	Acceptable
Decachlorobiphenyl	84	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F024.D
Lab ID: KWG0706602-7
RunType: MB
Matrix: WATER

Date Acquired: 06/20/2007 19:19
Date Quantitated: 06/21/2007 11:43
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	NW

Primary Review: LL 6/21/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\061907\0619F024.D\0619F024C.D
Lab ID: KWG0706602-7
RunType: MB
Matrix: WATER

Date Acquired: 06/20/2007 19:19
Date Quantitated: 06/21/2007 11:43
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/27/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608560	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F024.D\0619F024c.d			**Vial:**	18
Acqu Date:	06/20/2007 19:19	**Quant Date:**	06/21/2007 11:43	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-7				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.41		13293513	12721185	66.44	70.98			71OK
						%Recovery =	66OK	71OK	Limits =	16-111	
Decachlorobiphenyl	17.13	-0.01	16.00	-0.01	23326894	14771755	84.06	79.98			84OK
						%Recovery =	84OK	80OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC					0	0	0.0000	0.0000	0.00033U	0.00033U	0.00033U
Hexachlorobenzene					0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC					0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
gamma-BHC (Lindane)					0	0	0.0000	0.0000	0.00044U	0.00044U	0.00044U
delta-BHC					0	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
Heptachlor					0	0d	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Aldrin					0	0	0.0000	0.0000	0.00040U	0.00040U	0.00040U
Isodrin					0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide					0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
gamma-Chlordane					0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
Endosulfan I					0	0d	0.0000	0.0000	0.00044U	0.00044U	0.00044U
alpha-Chlordane					0	0d	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin	12.96	-0.01	11.98	-0.02	34498	45759	0.2090	0.2350	0.000398J	0.000448J	**0.000448J**
4,4'-DDE					0	0	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Endrin					0	0d	0.0000	0.0000	0.00068U	0.00068U	0.00068U
Endosulfan II	13.74	+0.01	12.88		35981	29776	0.1960	0.1640	0.00040U	0.00040U	0.00040U
4,4'-DDD					0d	0	0.0000	0.0000	0.0015U	0.0015U	0.0015U
Endrin Aldehyde					0	0	0.0000	0.0000	0.00046U	0.00046U	0.00046U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F024.D\0619F024c.d			**Vial:**	18
Acqu Date:	06/20/2007 19:19	**Quant Date:**	06/21/2007 11:43	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-7				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0	0	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT			0	0d	0.0000	0.0000	0.00058U	0.00058U	0.00058U
Endrin Ketone			0d	0d	0.0000	0.0000	0.00066U	0.00066U	0.00066U
Methoxychlor			0	0	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F024.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\061907\0619F024.D\ECD2B.CH
Acq On : 20 Jun 2007 7:19 pm Operator: AKamawal
Sample : KWG0706602-7 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0706602\7-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:08 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.41	13293513	12721185	66.436	70.982
24)	s	Decachlorobiphen	17.13	16.00	23326894	14771755	84.057	79.984
		Target Compounds						
14)		Dieldrin	12.96	11.98	34498	45759	0.209	0.235
17)		Endosulfan II	13.74	12.88	35981	29776	0.196	0.164

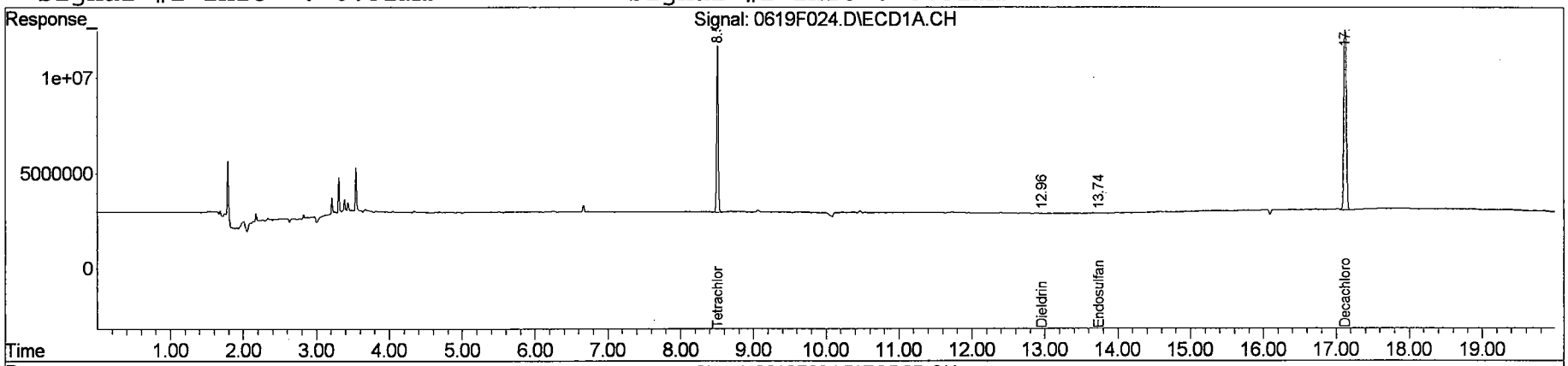
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

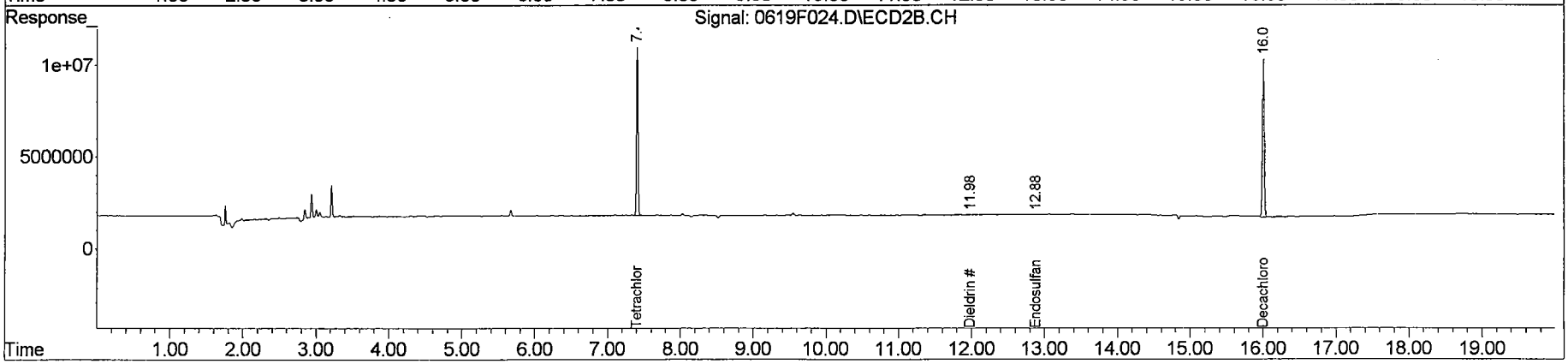
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F024.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\061907\0619F024.D\ECD2B.CH
Acq On : 20 Jun 2007 7:19 pm Operator: AKamawal
Sample : KWG0706602-7 | MB | 8081A PEST_OC | WATE Inst : GC23
Misc : SEMIVOA GC\W0706602\7-MB.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:43 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-001	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Aldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	ND	U	0.48	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	38	16-111	06/20/07	Acceptable
Decachlorobiphenyl	65	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F030.D
Lab ID: K0704934-001
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 21:58
Date Quantitated: 06/21/2007 11:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	Toxaphene	18.3	NA	15	

Primary Review: 6/21/07

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F030.D\0619F030C.D
Lab ID: K0704934-001
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 21:58
Date Quantitated: 06/21/2007 11:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Analyte Co-elution	4,4'-DDD	12.68	NA	NA	Cmd
	Toxaphene {2}	12.68	NA	NA	

Primary Review: 6/21/07

Secondary Review: 6/22/07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**	06/08/2007	**Receive Date:**	06/09/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	K0704934
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608553	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ8064
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\061907\0619F030.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F030.D\0619F030c.d			**Vial:**	24
Acqu Date:	06/20/2007 21:58	**Quant Date:**	06/21/2007 11:55	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704934-001				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.41		6948148	6826031	34.72	38.09			38OK
						%Recovery =	35OK	38OK	Limits =	16-111	
Decachlorobiphenyl	17.13	-0.01	16.01		16362531	12090936	58.96	65.47			65OK
						%Recovery =	59OK	65OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC					0	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
beta-BHC					0	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
gamma-BHC (Lindane)					0d	0d	0.0000	0.0000	0.00044U	0.00044U	0.00044U
delta-BHC	10.66	+0.02	9.96	+0.05	891975	310236	4.52	1.47	0.0086J	0.0028J	0.0091Ui
Heptachlor	10.76	+0.02	9.64	+0.01	251229	174602	1.25	0.7700	0.0024J	0.0015J	**0.0024**JP
Aldrin					0d	0	0.0000	0.0000	0.00040U	0.00040U	0.00040U
Heptachlor Epoxide					0d	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
gamma-Chlordane					0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
Endosulfan I					0	0	0.0000	0.0000	0.00044U	0.00044U	0.00044U
alpha-Chlordane					0	0d	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin					0	0d	0.0000	0.0000	0.00035U	0.00035U	0.00035U
4,4'-DDE					0	0d	0.0000	0.0000	0.00036U	0.00036U	0.00036U
Endrin					0d	0d	0.0000	0.0000	0.00068U	0.00068U	0.00068U
Endosulfan II	13.76	+0.03	12.88		180201	91059	0.9820	0.5020	0.0019J	0.00096J	**0.0019**JP
4,4'-DDD	13.54		12.68	+0.01c	108938	54438	0.7260	0.3570	0.0015U	0.0015U	0.0015U
Endrin Aldehyde	13.88	-0.01	13.25	+0.03	273883	97423m	1.65	0.6450	0.0031J	0.0012J	**0.0031**JP
Endosulfan Sulfate					0d	0d	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT	14.02	+0.02	13.06	-0.02	196347	350122	1.07	2.15	0.0020J	0.0041J	**0.0041**JP

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F030.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F030.D\0619F030c.d			**Vial:**	24
Acqu Date:	06/20/2007 21:58	**Quant Date:**	06/21/2007 11:55	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704934-001				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endrin Ketone	14.98 +0.04	14.45 +0.04	291054m	443791	0.9750	2.11	0.0019J	0.0040J	**0.0040**JP
Methoxychlor			0	0	0.0000	0.0000	0.00093U	0.00093U	0.00093U
Toxaphene			0	0	34.58CCV	38.83	0.066J	0.074J	**0.074J**
Toxaphene {1}	13.17 +0.01	12.61 -0.01	55649	88746	39.37	74.13	0.075J	0.14J	
Toxaphene {2}		12.68 -0.03 c	0	54438	0.0000	13.00	0.028U	0.028U	
Toxaphene {3}	13.36 -0.01	13.58 +0.01	73924	76005	36.73	29.36	0.070J	0.056J	
Toxaphene {4}	14.06 +0.01		62301	0d	21.33	0.0000	0.041J	0.028U	
Toxaphene {5}			0d	0	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}	14.85 -0.04		74292	0d	40.90	0.0000	0.078J	0.028U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm Operator: AKamawal
Sample : K0704934-001 | 060807-SW Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:16 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.41	6948148	6826031	34.724	38.088
24)	s	Dečachlorobiphen	17.13	16.01	16362531	12090936	58.962	65.468
		Target Compounds						
6)		delta-BHC	10.66	9.96f	891975	310236	4.520	1.465 #
7)		Heptachlor	10.76	9.64	251229	174602	1.248	0.770 #
17)		Endosulfan II	13.76f	12.88	180201	91059	0.982	0.502 #
18)		4,4'-DDD	13.54	12.68	108938	54438	0.726	0.357 #
19)		Endrin Aldehyde	13.88	13.25f	273883	97423	1.652	0.645m#
21)		4,4'-DDT	14.02f	13.06	196347	350122	1.066	2.147 #
22)		Endrin Ketone	14.98f	14.45f	291054	443791	0.975m	2.113 #
25)		Toxaphene	13.17	12.61	55649	88746	39.367	74.131 #
26)		Toxaphene {2}	0.00	12.68f	0	54438	N.D.	13.002 #
27)		Toxaphene {3}	13.36	13.58	73924	76005	36.726	29.357
28)		Toxaphene {4}	14.06	0.00	62301	0	21.330	N.D. d#
30)		Toxaphene {6}	14.85f	0.00	74292	0	40.899	N.D. d#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm
Sample : K0704934-001 | 060807-SW
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001.
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:55 2007 Quant Results File: 061107-8081.RES

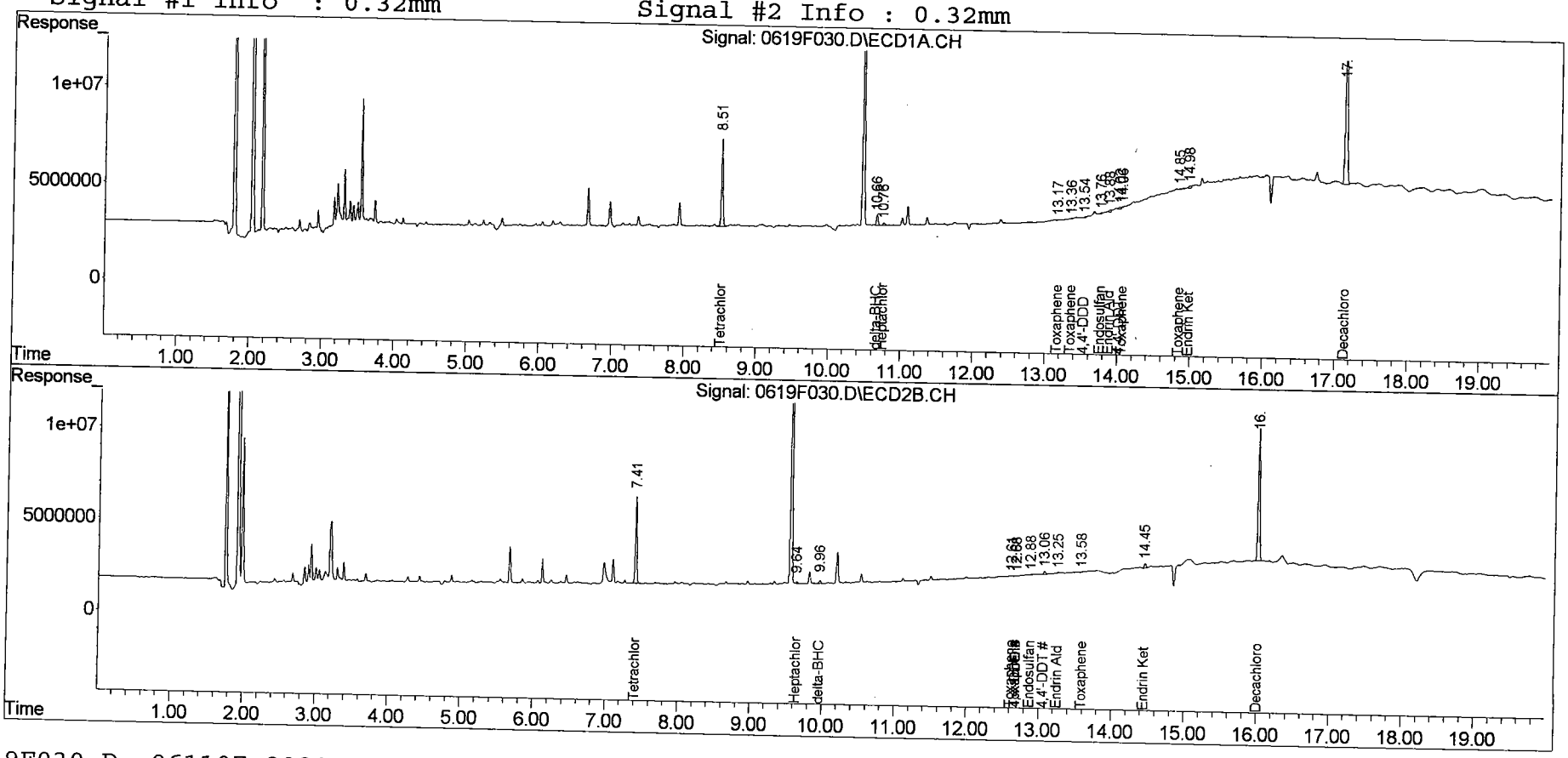
Vial: 24

Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB
Signal #1 Info : 0.32mm

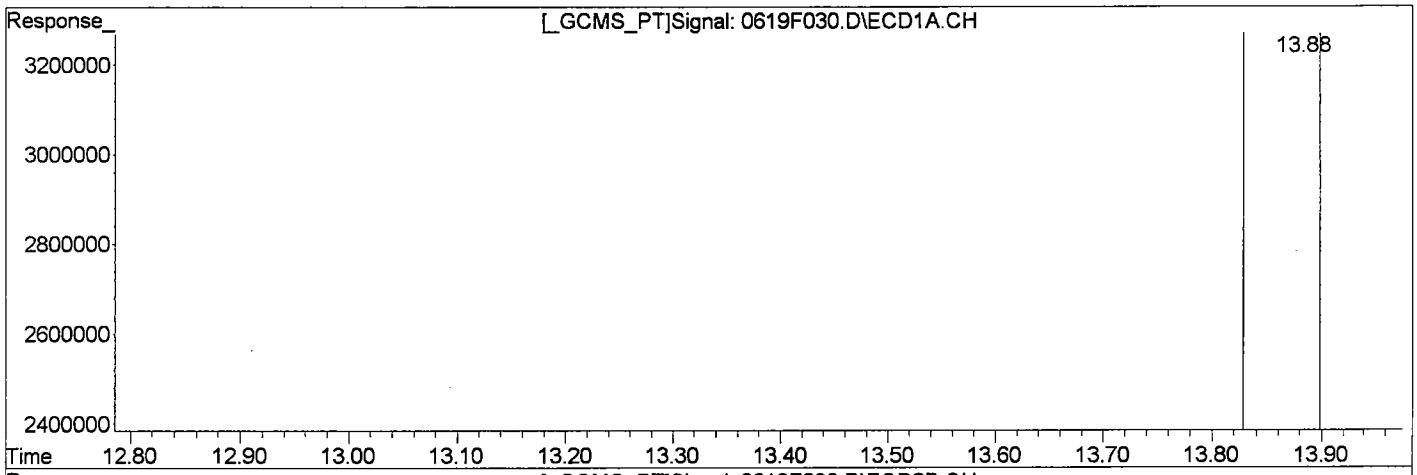
Signal #2 Phase: DB-35MS
Signal #2 Info : 0.32mm

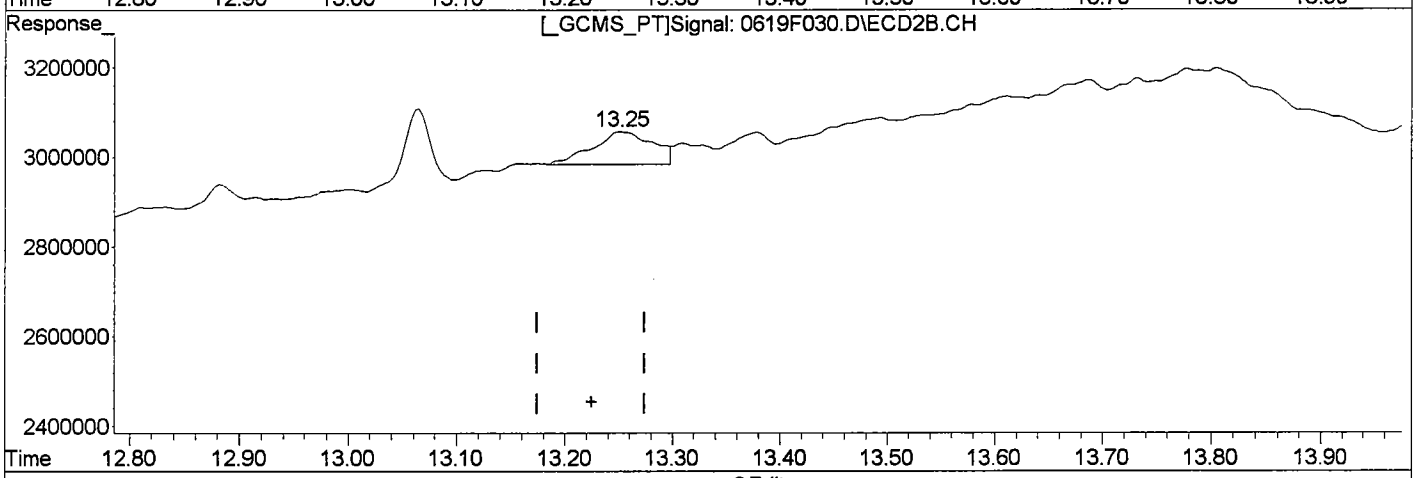


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm Operator: AKamawal
Sample : K0704934-001 | 060807-SW Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.88min 1.652ug/L

response 273883

(19) Endrin Aldehyde #2

13.25min 1.910ug/L

response 288487

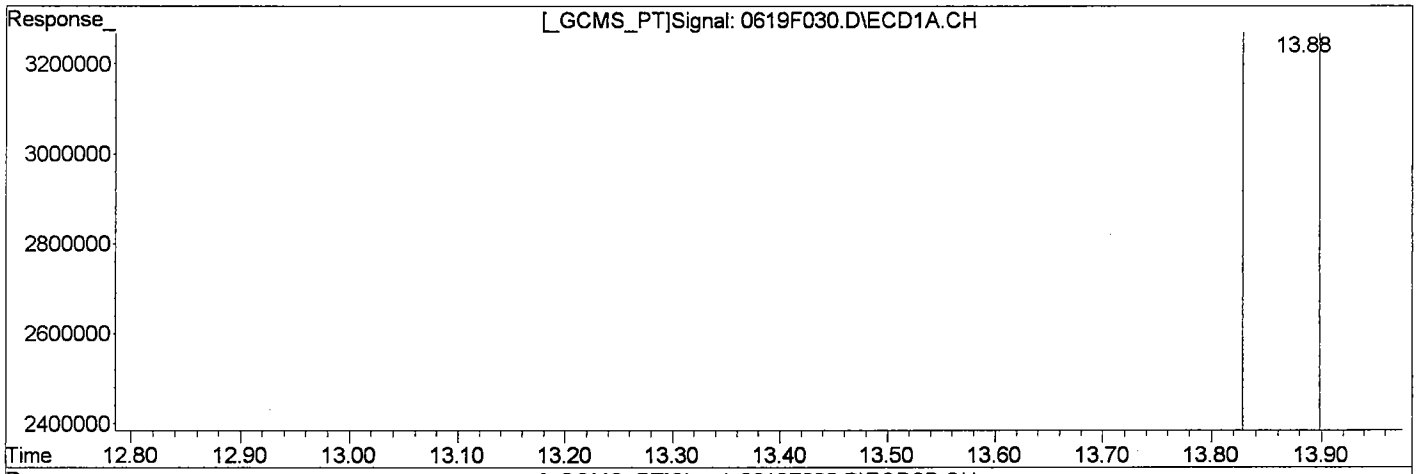
(+) = Expected Retention Time

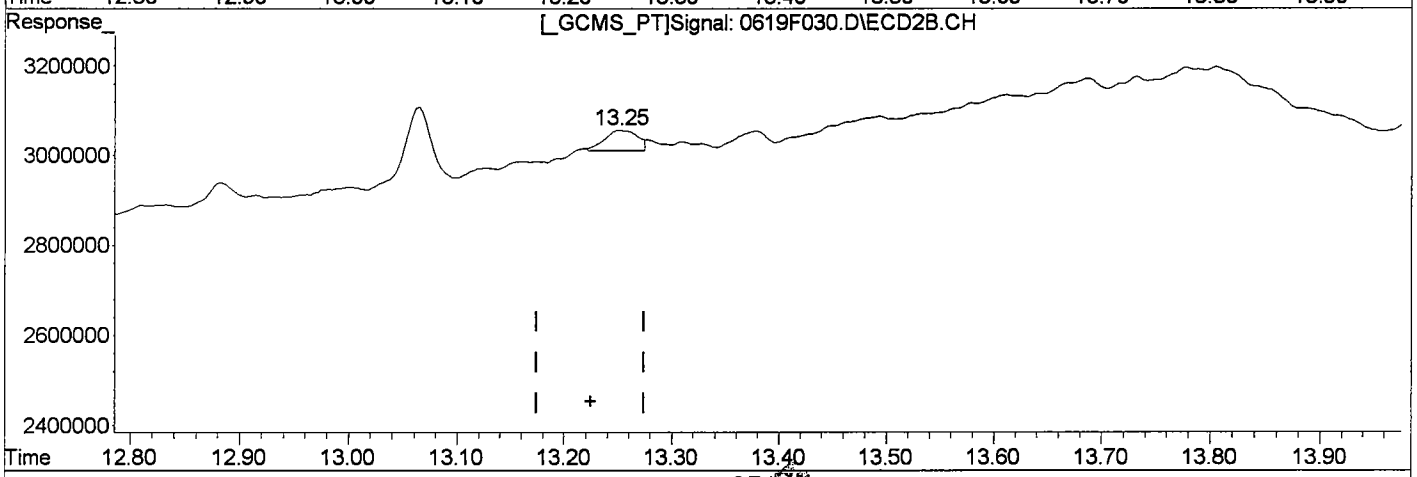
0619F030.D 061107-8081.M Thu Jun 21 11:54:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm Operator: AKamawal
Sample : K0704934-001 | 060807-SW Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.88min 1.652ug/L

response 273883

(19) Endrin Aldehyde #2

13.25min 0.645ug/L m

response 97423

Analyst Initials LL 6/21/07

JUN 21 2007

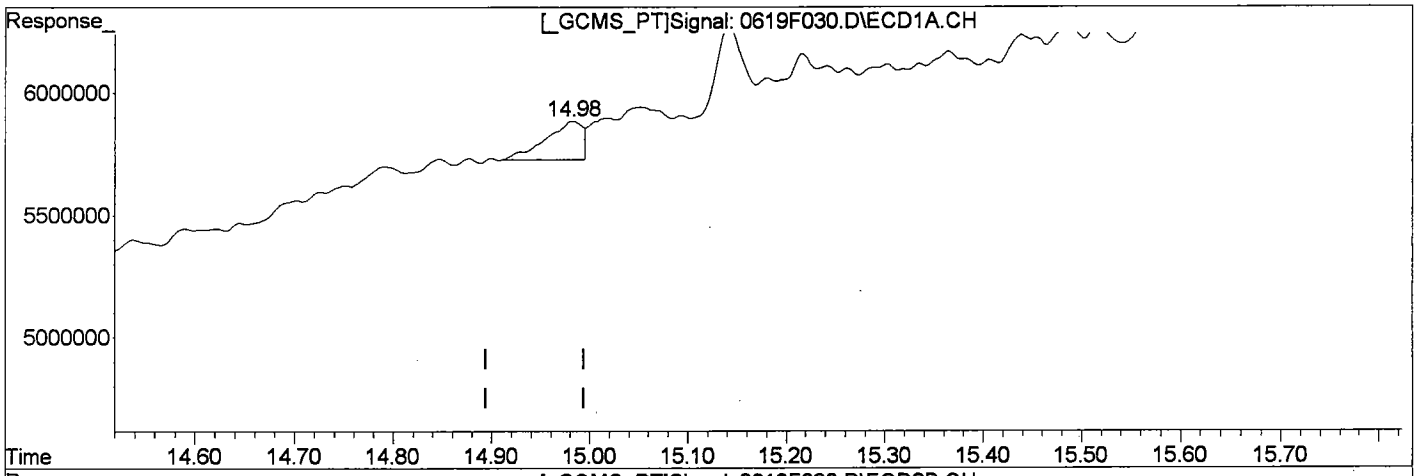
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

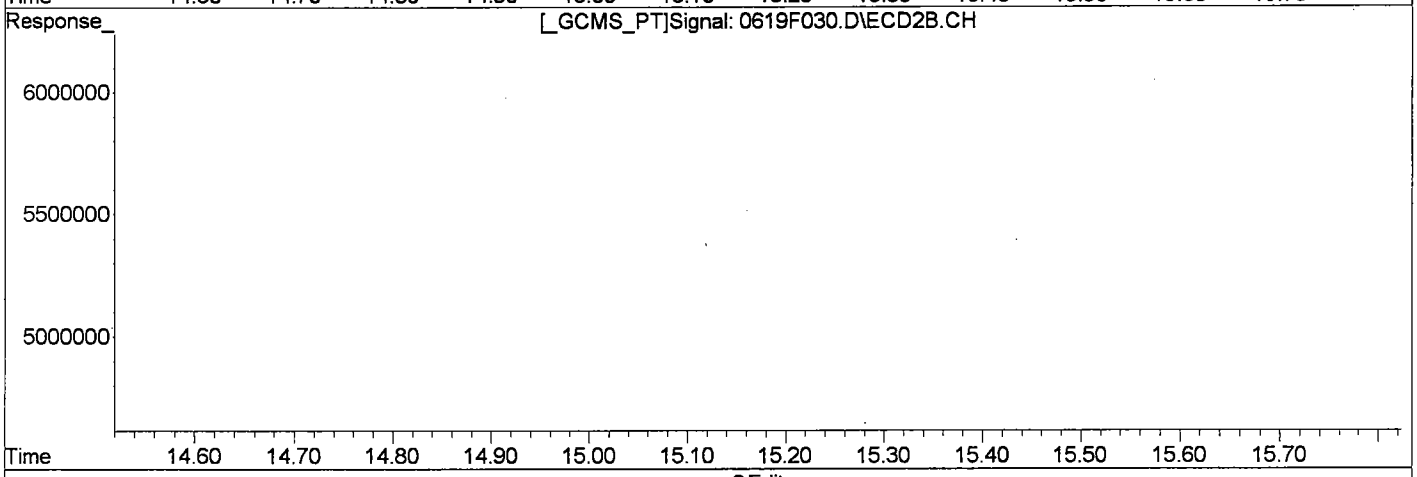
(+) = Expected Retention Time
0619F030.D 061107-8081.M Thu Jun 21 11:54:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm Operator: AKamawal
Sample : K0704934-001 | 060807-SW Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone

14.98min 1.397ug/L

response 416925

(22) Endrin Ketone #2

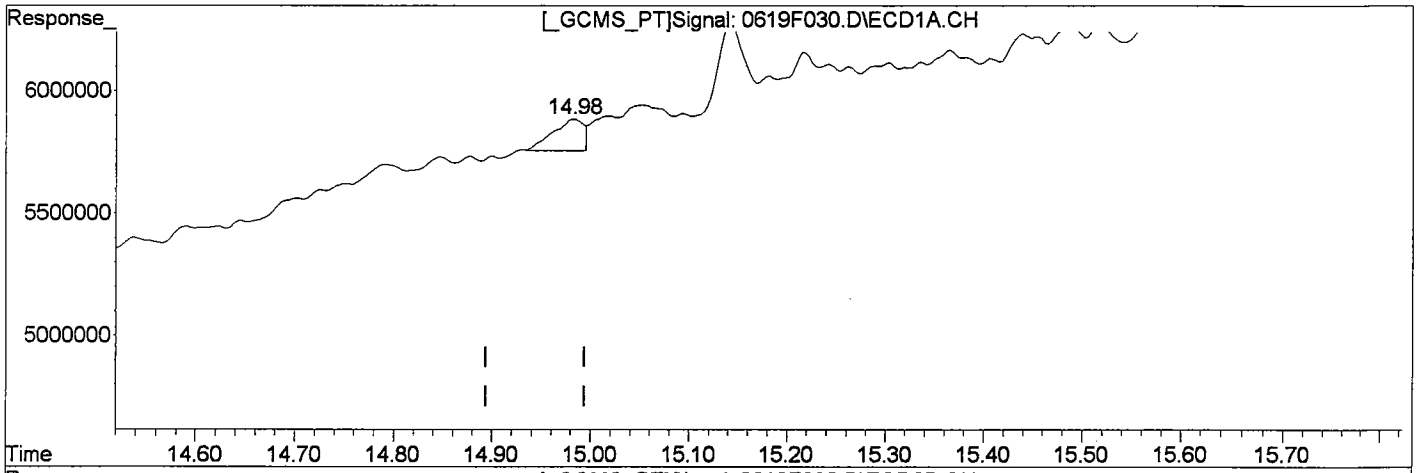
14.45min 2.113ug/L

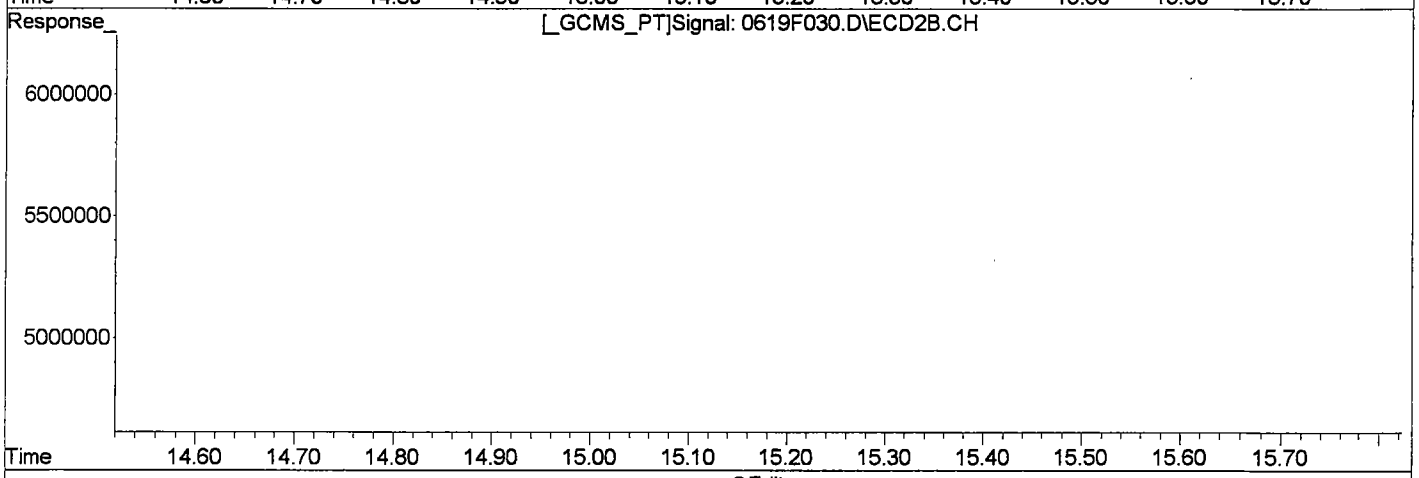
response 443791

(+) = Expected Retention Time
0619F030.D 061107-8081.M Thu Jun 21 11:55:03 2007

Signal #1 : J:\GC23\DATA\061907\0619F030.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061907\0619F030.D\ECD2B.CH
Acq On : 20 Jun 2007 9:58 pm Operator: AKamawal
Sample : K0704934-001 | 060807-SW Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934001. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone
14.98min 0.975ug/L m
response 291054

(22) Endrin Ketone #2
14.45min 2.113ug/L
response 443791

After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F030.D 061107-8081.M Thu Jun 21 11:55:09 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K0704934-004	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Aldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	ND	U	0.0096	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	ND	U	0.48	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	72	16-111	06/20/07	Acceptable
Decachlorobiphenyl	84	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F032.D
Lab ID: K0704934-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 22:51
Date Quantitated: 06/21/2007 11:59
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	Toxaphene	18.3	NA	15	[illegible]
Analyte Co-elution	4,4'-DDT	14.02	NA	NA	[illegible]
	Toxaphene {4}	14.02	NA	NA	

Primary Review: [illegible] 6/21/07

Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\061907\0619F032.D\0619F032C.D
Lab ID: K0704934-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 22:51
Date Quantitated: 06/21/2007 11:59
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA		x
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Analyte Co-elution	4,4'-DDD	12.68	NA	NA	
	Toxaphene {2}	12.68	NA	NA	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**	06/08/2007	**Receive Date:**	06/09/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	K0704934
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608551	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ8064
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\061907\0619F032.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F032.D\0619F032c.d			**Vial:**	26
Acqu Date:	06/20/2007 22:51	**Quant Date:**	06/21/2007 11:59	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704934-004				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.41		13323670	12987690	66.59	72.47			72OK
						%Recovery =	67OK	72OK	Limits =	16-111	
Decachlorobiphenyl	17.13	-0.01	16.01		21647719	15517117	78.01	84.02			84OK
						%Recovery =	78OK	84OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC					0d	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
beta-BHC	10.24	+0.01	9.49	+0.03	57619	247692	0.5370	2.30	0.0010J	0.0044J	0.0049Ui
gamma-BHC (Lindane)					0	0d	0.0000	0.0000	0.00044U	0.00044U	0.00044U
delta-BHC	10.66	+0.02	9.96	+0.05	1078385	383701	5.46	1.81	0.010	0.0035J	**0.010**P
Heptachlor	10.76	+0.02	9.63		262567	88431	1.30	0.3900	0.0025J	0.00074J	0.0030Ui
Aldrin					0	0d	0.0000	0.0000	0.00040U	0.00040U	0.00040U
Heptachlor Epoxide					0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
gamma-Chlordane					0	0d	0.0000	0.0000	0.00032U	0.00032U	0.00032U
Endosulfan I					0	0d	0.0000	0.0000	0.00044U	0.00044U	0.00044U
alpha-Chlordane					0	0d	0.0000	0.0000	0.0040U	0.0040U	0.0040U
Dieldrin					0	0d	0.0000	0.0000	0.00035U	0.00035U	0.00035U
4,4'-DDE	12.76		11.83	+0.03	28395	65004	0.1860	0.3510	0.00036U	0.00067J	0.00036U
Endrin	13.33	+0.01	12.51	+0.03	88095	79013	0.5710	0.4510	0.0011J	0.00086J	**0.0011**J
Endosulfan II					0	0d	0.0000	0.0000	0.00040U	0.00040U	0.00040U
4,4'-DDD	13.53	-0.01	12.68	+0.01c	75474	59617	0.5030	0.3910	0.0015U	0.0015U	0.0015U
Endrin Aldehyde	13.86	-0.03	13.19	-0.03	71247m	35640	0.4300	0.2360	0.00082J	0.00046U	0.00046U
Endosulfan Sulfate					0d	0	0.0000	0.0000	0.00047U	0.00047U	0.00047U
4,4'-DDT	14.02	+0.02c	13.06	-0.02	132633	290632m	0.7200	1.78	0.0014J	0.0034J	**0.0034**JP

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F032.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F032.D\0619F032c.d			**Vial:**	26
Acqu Date:	06/20/2007 22:51	**Quant Date:**	06/21/2007 11:59	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/L
Lab ID:	K0704934-004				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endrin Ketone			0d	0	0.0000	0.0000	0.00066U	0.00066U	0.00066U
Methoxychlor			0	0	0.0000	0.0000	0.00093U	~~0.00093U~~	0.00093U
Toxaphene			0	0	33.07[CCV]	30.52	0.063J	0.058J	**0.063**J
Toxaphene {1}			0d	0	0.0000	0.0000	0.028U	~~0.028U~~	
Toxaphene {2}	13.24 +0.02	12.68 -0.03 c	29545	59617	25.49	14.24	0.049J	0.028U	
Toxaphene {3}	13.41 +0.04		49483	0	24.58	0.0000	0.047J	0.028U	npm
Toxaphene {4}	14.02 -0.03 c		132633	0	45.41	0.0000	0.086J	0.028U	
Toxaphene {5}		13.96 +0.05	0d	184386	0.0000	46.80	0.028U	0.089J	
Toxaphene {6}	14.89		66826	0	36.79	0.0000	0.070J	0.028U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:19 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
1)	s	Tetrachloro-m-xy	8.51	7.41	13323670	12987690	66.587	72.469	
24)	s	Decachlorobiphen	17.13	16.01	21647719	15517117	78.007	84.020	
		Target Compounds							
4)		beta-BHC	10.24	9.49f	57619	247692	0.537	2.298	#
6)		delta-BHC	10.66	9.96f	1078385	383701	5.464	1.812	#
7)		Heptachlor	10.76	9.63	262567	88431	1.304	0.390	#
15)		4,4'-DDE	12.76	11.83	28395	65004	0.186	0.351	#
16)		Endrin	13.33	12.51	88095	79013	0.571	0.451	
18)		4,4'-DDD	13.53	12.68	75474	59617	0.503	0.391	
19)		Endrin Aldehyde	13.86f	13.19f	71247	35640	0.430m	0.236	#
21)		4,4'-DDT	14.02	13.06	132633	290632	0.720	1.783m	#
26)		Toxaphene {2}	13.24	12.68f	29545	59617	25.493	14.239	#
27)		Toxaphene {3}	13.41f	0.00	49483	0	24.584	N.D.	#
28)		Toxaphene {4}	14.02f	0.00	132633	0	45.410	N.D.	#
29)		Toxaphene {5}	0.00	13.96f	0	184386	N.D. d	46.796	
30)		Toxaphene {6}	14.89	0.00	66826	0	36.788	N.D.	#

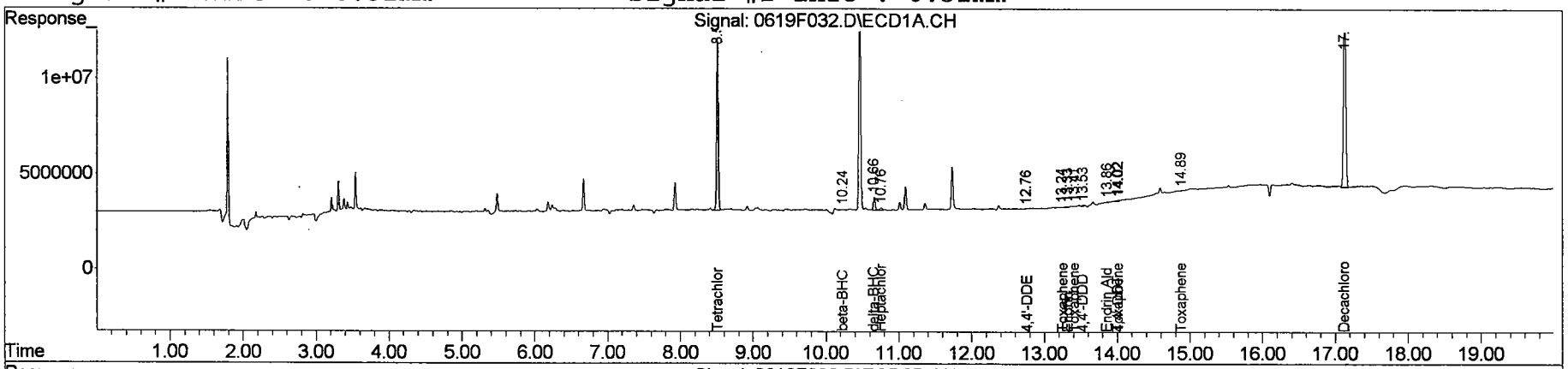
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

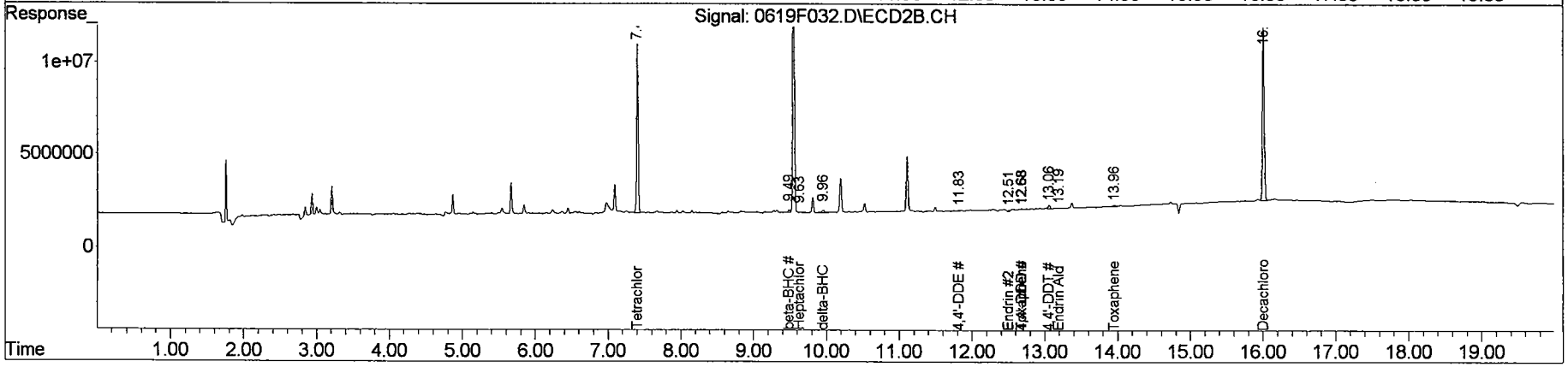
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:59 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

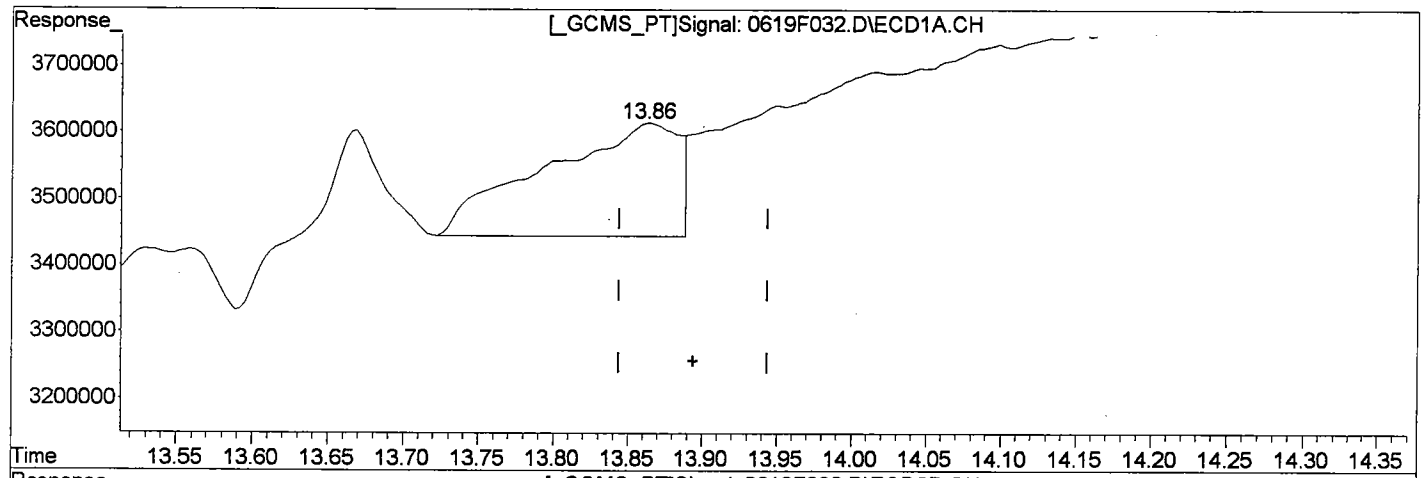


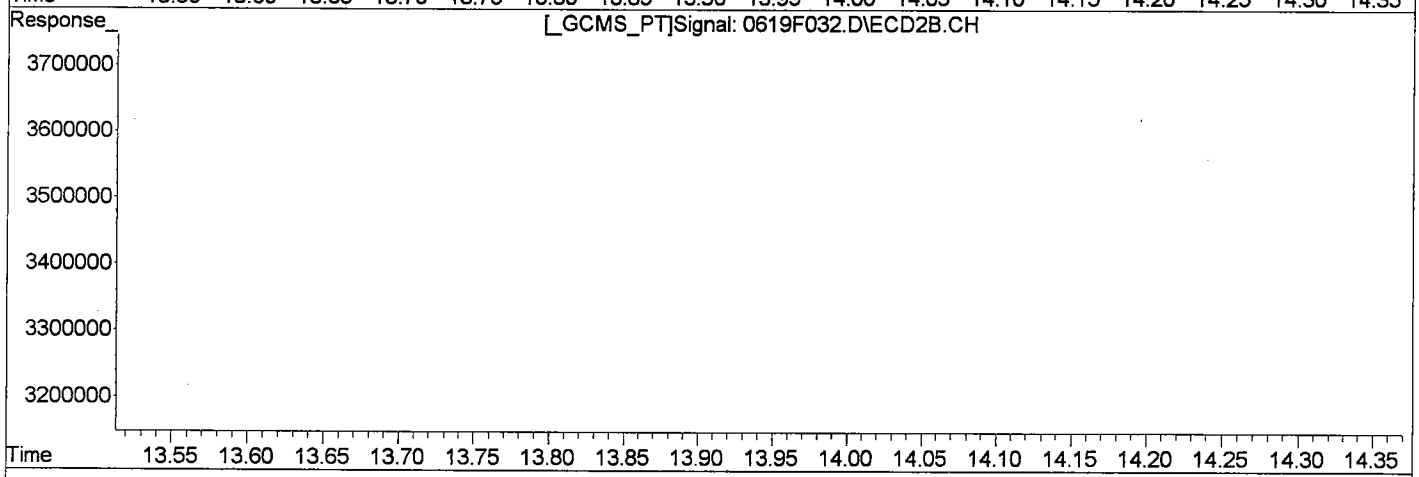


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.86min 6.508ug/L

response 1078731

(19) Endrin Aldehyde #2

13.19min 0.236ug/L

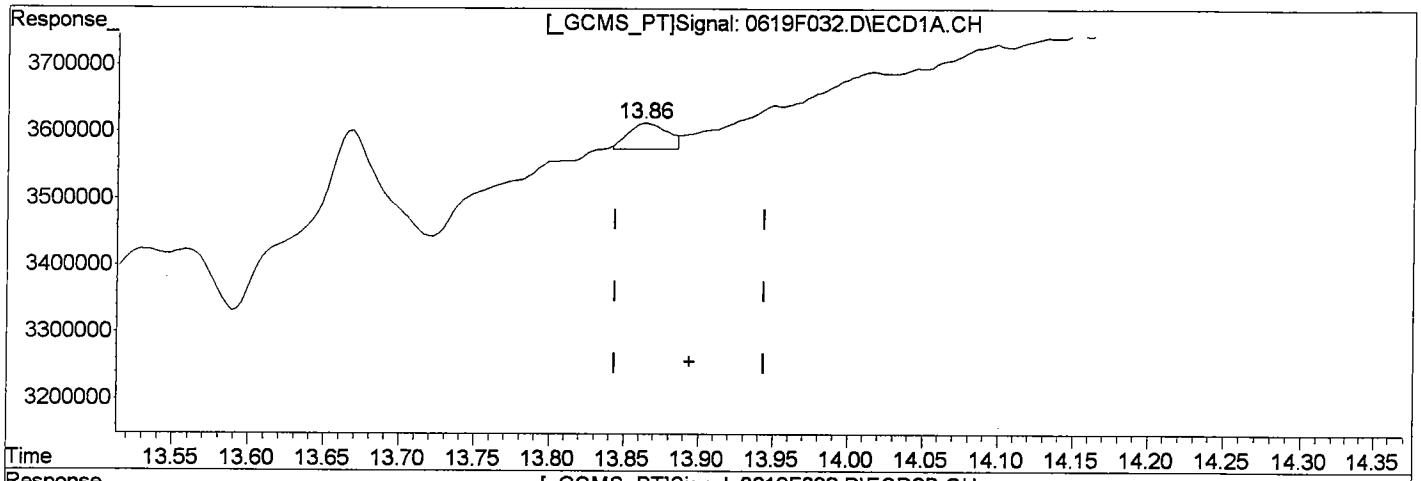
response 35640

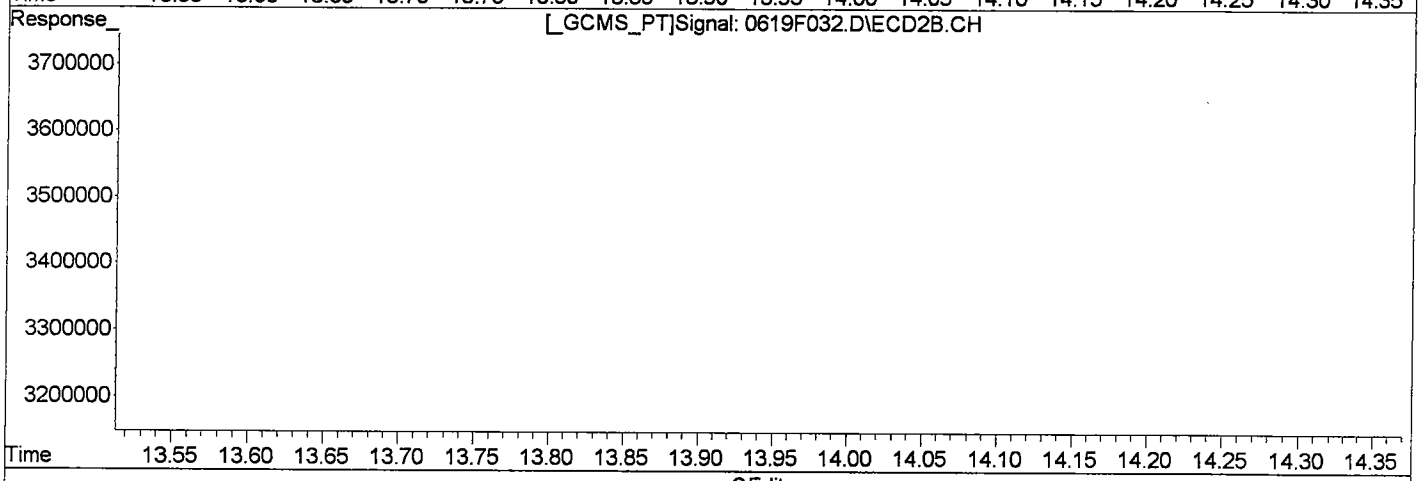
(+) = Expected Retention Time

0619F032.D 061107-8081.M Thu Jun 21 11:59:18 2007

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde
13.86min 0.430ug/L m
response 71247

(19) Endrin Aldehyde #2
13.19min 0.236ug/L
response 35640

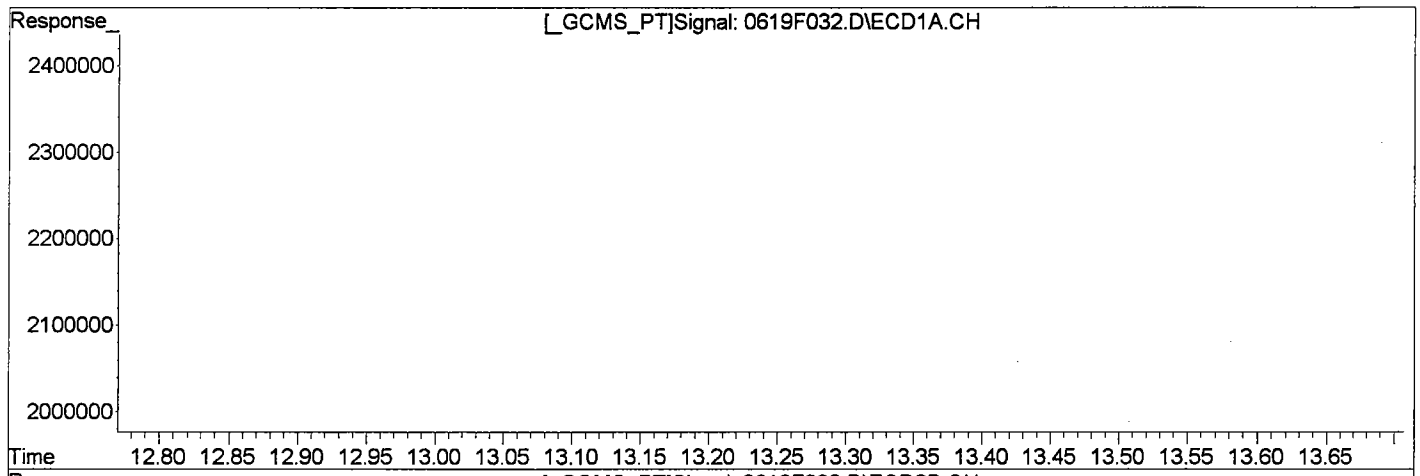
After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

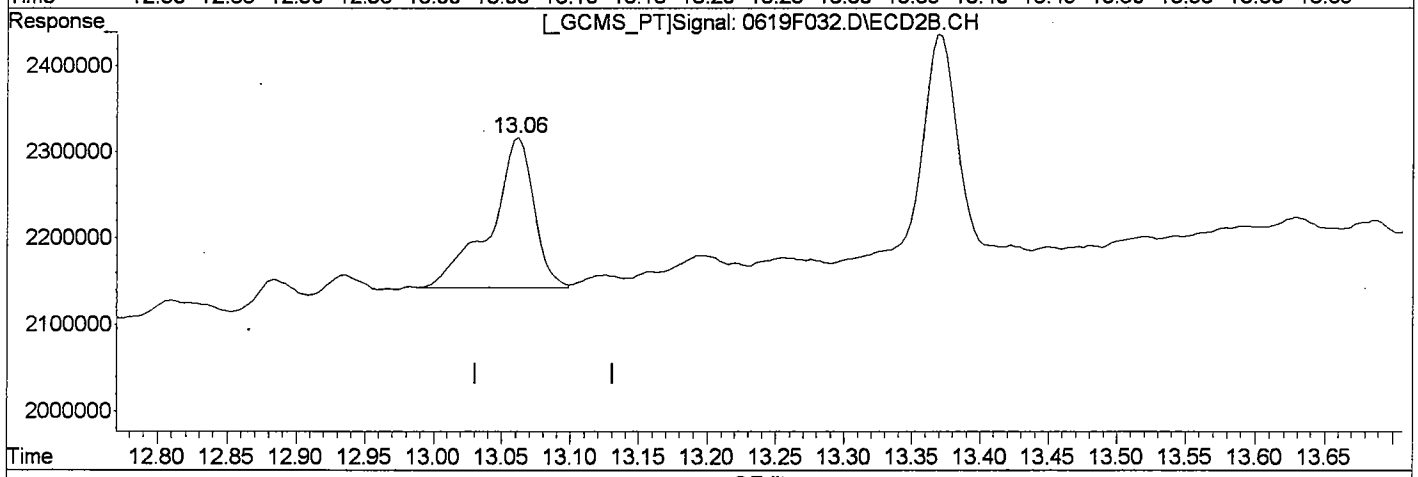
(+) = Expected Retention Time
0619F032.D 061107-8081.M Thu Jun 21 11:59:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

14.02min 0.720ug/L

response 132633

(21) 4,4'-DDT #2

13.06min 2.321ug/L

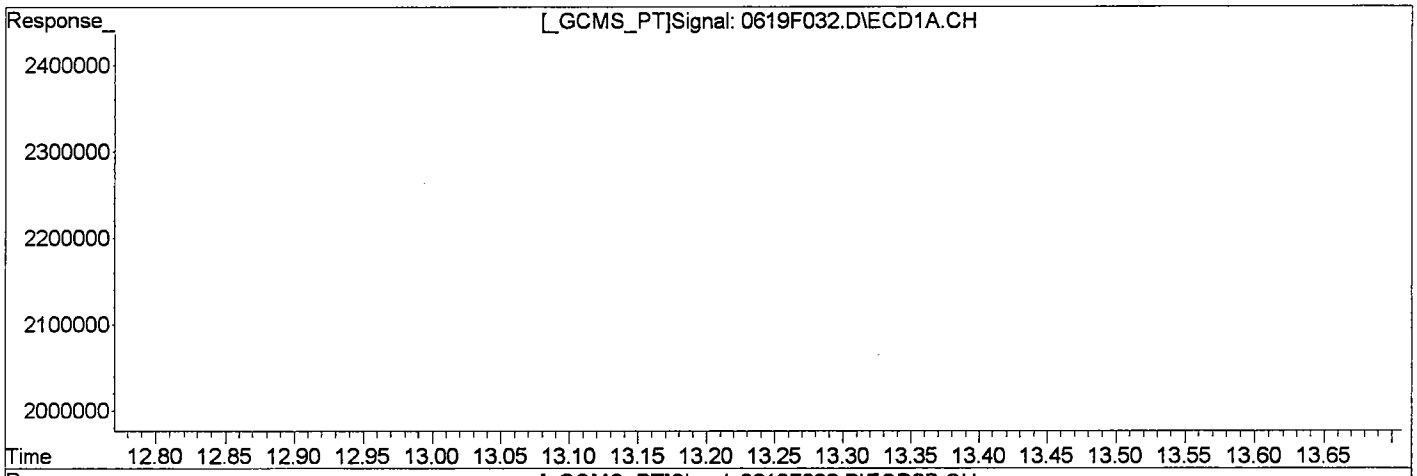
response 378347

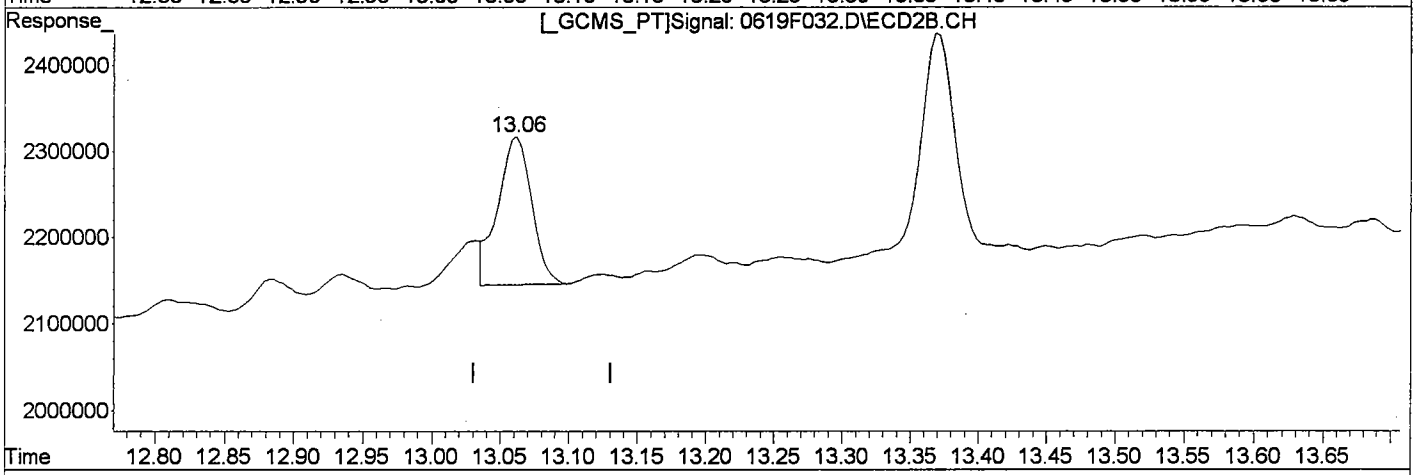
(+) = Expected Retention Time
0619F032.D 061107-8081.M Thu Jun 21 11:59:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F032.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061907\0619F032.D\ECD2B.CH
Acq On : 20 Jun 2007 10:51 pm Operator: AKamawal
Sample : K0704934-004 | 060807-ER Inst : GC23
Misc : KELSO\SEMIVOA GC\8081A-PEST_OC\04934004. Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT
14.02min 0.720ug/L
response 132633

(21) 4,4'-DDT #2
13.06min 1.783ug/L m
response 290632

After Initials LC 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☒ Baseline/Shoulder Incorrect
☐ Other

(+) = Expected Retention Time
0619F032.D 061107-8081.M Thu Jun 21 11:59:41 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0706602-1	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.168**		0.0096	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	**0.167**		0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	**0.171**		0.0096	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	**0.194**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	**0.160**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Aldrin	**0.102**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	**0.162**		0.0096	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	**0.161**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	**0.135**		0.0096	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	**0.166**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	**0.161**		0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	**0.156**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin	**0.173**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	**0.143**		0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	**0.164**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	**0.141**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	**0.159**		0.0096	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	**0.173**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	**0.160**		0.0096	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	**0.161**		0.0096	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	16-111	06/20/07	Acceptable
Decachlorobiphenyl	81	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F031.D
Lab ID: KWG0706602-1 -- K0704934-001MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 22:25
Date Quantitated: 06/21/2007 11:57
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F031.D\0619F031C.D
Lab ID: KWG0706602-1 -- K0704934-001MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 22:25
Date Quantitated: 06/21/2007 11:57
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608554	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F031.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F031.D\0619F031c.d			**Vial:**	25
Acqu Date:	06/20/2007 22:25	**Quant Date:**	06/21/2007 11:57	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-1 -- K0704934-001MS				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.52	7.41	12870617	12772896	64.32	71.27			71OK
				%Recovery =	64OK	71OK	Limits =	16-111	
Decachlorobiphenyl	17.13 -0.01	16.01	21311476	15017736	76.80	81.32			81OK
				%Recovery =	77OK	81OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.22	8.44	20029372	20726627	86.95	88.08	0.166	0.168	0.168
Hexachlorobenzene	9.35	8.28	15016273	14924514	61.10	60.80	0.116	0.116	0.116
beta-BHC	10.22 -0.01	9.46	8667112m	9471049	80.84	87.86	0.154	0.167	0.167
gamma-BHC (Lindane)	9.76	9.06	18592830	20009619	85.77	89.92	0.163	0.171	0.171
delta-BHC	10.64	9.91	20124749	21080496	101.97	99.56	0.194	0.190	0.194
Heptachlor	10.73 -0.01	9.63	16895084	18920592	83.90	83.41	0.160	0.159	0.160
Aldrin	11.25	10.12 -0.01	8906353	10712899	51.28	53.80	0.0977	0.102	0.102
Isodrin	11.78	10.77	6932507	8287863	46.79	48.00	0.0891	0.0914	0.0914
Heptachlor Epoxide	11.95	10.98	13978354	17110049	82.25	85.19	0.157	0.162	0.162
gamma-Chlordane	12.44 -0.01	11.34	13824323	17211323	82.51	84.75	0.157	0.161	0.161
Endosulfan I	12.58	11.57	10712559	13133296	69.83	70.88	0.133	0.135	0.135
alpha-Chlordane	12.52	11.49	13709127	17167291	82.24	87.08	0.157	0.166	0.166
Dieldrin	12.97	12.00	13697738	16436491	83.06	84.47	0.158	0.161	0.161
4,4'-DDE	12.75 -0.01	11.80	12248991	15163520	80.15	81.97	0.153	0.156	0.156
Endrin	13.32	12.48	13832468	15947392	89.66	90.96	0.171	0.173	0.173
Endosulfan II	13.72 -0.01	12.88	13783505m	13558091	75.08	74.73	0.143	0.142	0.143
4,4'-DDD	13.54	12.66 -0.01	12857617	13170814	85.67	86.30	0.163	0.164	0.164
Endrin Aldehyde	13.89	13.22	12305246	10543738m	74.24	69.81	0.141	0.133	0.141

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F031.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F031.D\0619F031c.d			**Vial:**	25
Acqu Date:	06/20/2007 22:25	**Quant Date:**	06/21/2007 11:57	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-1 -- K0704934-001MS				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.31 -0.01	13.52	18790957	14795841	83.57	81.55	0.159	0.155	0.159
4,4'-DDT	13.99 -0.01	13.08	16659624	14802430	90.45	90.79	0.172	0.173	0.173
Endrin Ketone	14.94	14.41	24988444	13109489m	83.75	62.41	0.160	0.119	0.160
Methoxychlor	14.65	14.08 -0.01	11381239	6745009m	84.39	71.70	0.161	0.137	0.161
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	0.028U
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Matrix Spike Summary Report

Matrix Spike Information — *ListJoinID :* LJ4912

Data File:	J:\GC23\DATA\061907\0619F031.D\0619F031C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-1	**Dilution:**	1.0
Client ID:	Matrix Spike	**Units:**	PERCENT
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 22:25
Matrix:	WATER	**Quant Date:**	06/21/2007 11:57

Sample Reference Information

Data File:	J:\GC23\DATA\061907\0619F030.D\0619F030C.D	**Instrument:**	GC23
Lab ID:	K0704934-001	**Dilution:**	1.0
Client ID:	060807-SW	**Units:**	PERCENT
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 21:58
Matrix:	WATER	**Quant Date:**	06/21/2007 11:55

Parameter Name	Sample Result	Matrix Spike Result	Matrix Spike Expected	Matrix Spike %Rec	%Rec Limits
Tetrachloro-m-xylene				71	16-111
Decachlorobiphenyl				81	14-145
alpha-BHC	ND	0.168	0.190	88	29-128
beta-BHC	ND	0.167	0.190	88	26-124
gamma-BHC (Lindane)	ND	0.171	0.190	90	30-128
delta-BHC	ND	0.194	0.190	102	32-141
Heptachlor	0.0024	0.160	0.190	83	18-130
Aldrin	ND	0.102	0.190	54	10-130
Heptachlor Epoxide	ND	0.162	0.190	85	24-137
gamma-Chlordane	ND	0.161	0.190	85	34-122
Endosulfan I	ND	0.135	0.190	71	19-112
alpha-Chlordane	ND	0.166	0.190	87	33-123
Dieldrin	ND	0.161	0.190	84	22-141
4,4'-DDE	ND	0.156	0.190	82	27-141
Endrin	ND	0.173	0.190	91	37-140
Endosulfan II	ND	0.143	0.190	75	29-113
4,4'-DDD	ND	0.164	0.190	86	21-150
Endrin Aldehyde	ND	0.141	0.190	74	10-134
Endosulfan Sulfate	ND	0.159	0.190	84	21-137
4,4'-DDT	ND	0.173	0.190	91	42-133
Endrin Ketone	ND	0.160	0.190	84	37-120
Methoxychlor	ND	0.161	0.190	84	43-133

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:17 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.52	7.41	12870617	12772896	64.323	71.271
24)	s	Decachlorobiphen	17.13	16.01	21311476	15017736	76.795	81.316
		Target Compounds						
2)		alpha-BHC	9.22	8.44	20029372	20726627	86.952	88.084
3)		Hexachlorobenzen	9.35	8.28	15016273	14924514	61.101	60.796
4)		beta-BHC	10.22	9.46	8667112	9471049	80.840m	87.855
5)		gamma-BHC (Linda	9.76	9.06	18592830	20009619	85.769	89.920
6)		delta-BHC	10.64	9.91	20124749	21080496	101.971	99.560
7)		Heptachlor	10.73	9.63	16895084	18920592	83.903	83.409
8)		Aldrin	11.25	10.12	8906353	10712899	51.279	53.798
9)		Isodrin	11.78	10.77	6932507	8287863	46.789	47.997
10)		Heptachlor Epoxi	11.95	10.98	13978354	17110049	82.249	85.188
11)		gamma-Chlordane	12.44	11.34	13824323	17211323	82.507	84.748
12)		Endosulfan I	12.58	11.57	10712559	13133296	69.826	70.883
13)		alpha-Chlordane	12.52	11.49	13709127	17167291	82.241	87.077
14)		Dieldrin	12.97	12.00	13697738	16436491	83.062	84.472
15)		4,4'-DDE	12.75	11.80	12248991	15163520	80.151	81.970
16)		Endrin	13.32	12.48	13832468	15947392	89.662	90.956
17)		Endosulfan II	13.72	12.88	13783505	13558091	75.078m	74.728
18)		4,4'-DDD	13.54	12.66	12857617	13170814	85.669	86.302
19)		Endrin Aldehyde	13.89	13.22	12305246	10543738	74.242	69.808m
20)		Endosulfan Sulfa	14.31	13.52	18790957	14795841	83.571	81.546
21)		4,4'-DDT	13.99	13.08	16659624	14802430	90.445	90.790
22)		Endrin Ketone	14.94	14.41	24988444	13109489	83.749	62.405m#
23)		Methoxychlor	14.65	14.08	11381239	6745009	84.392	71.704m

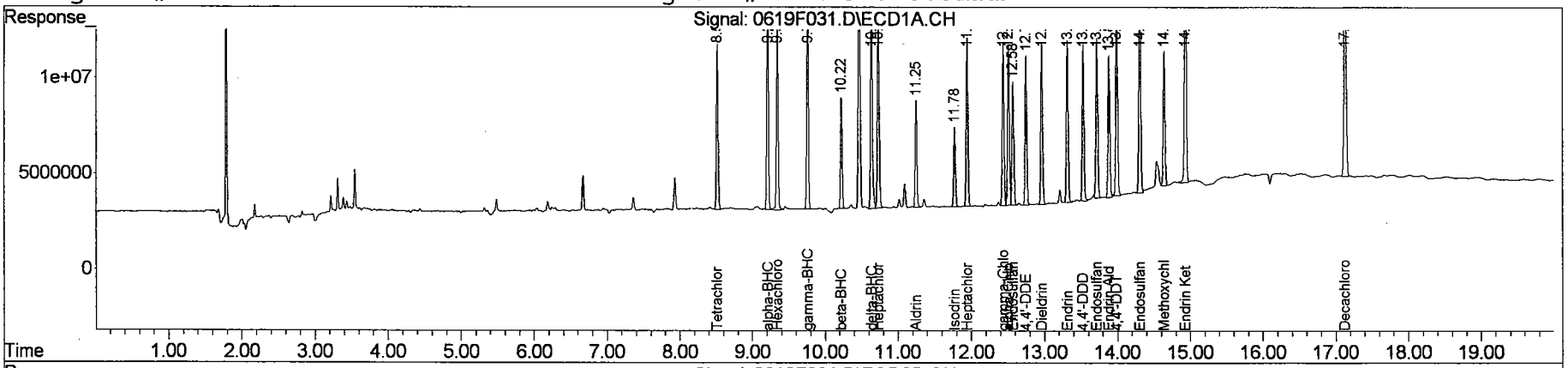
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

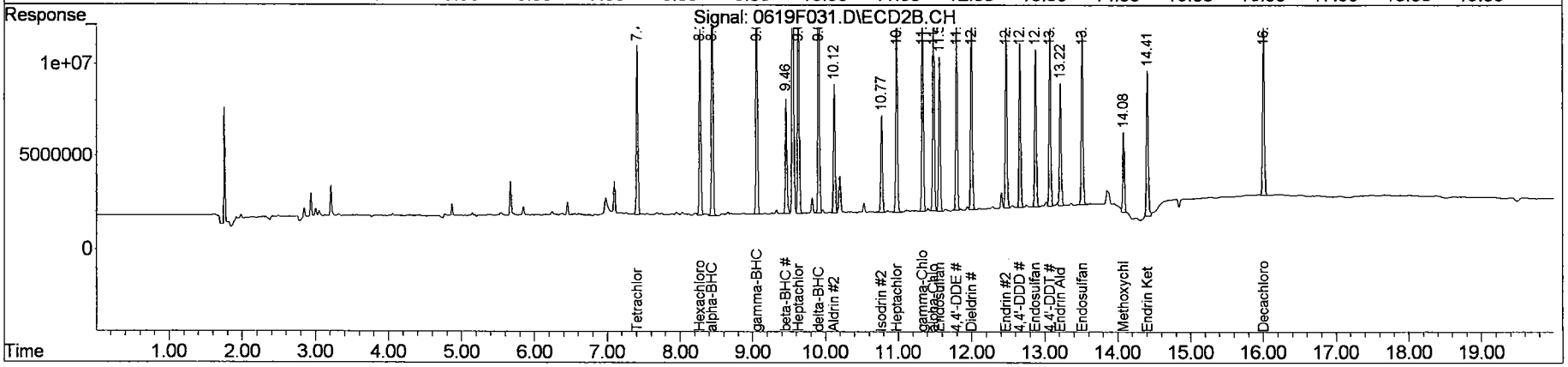
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:57 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

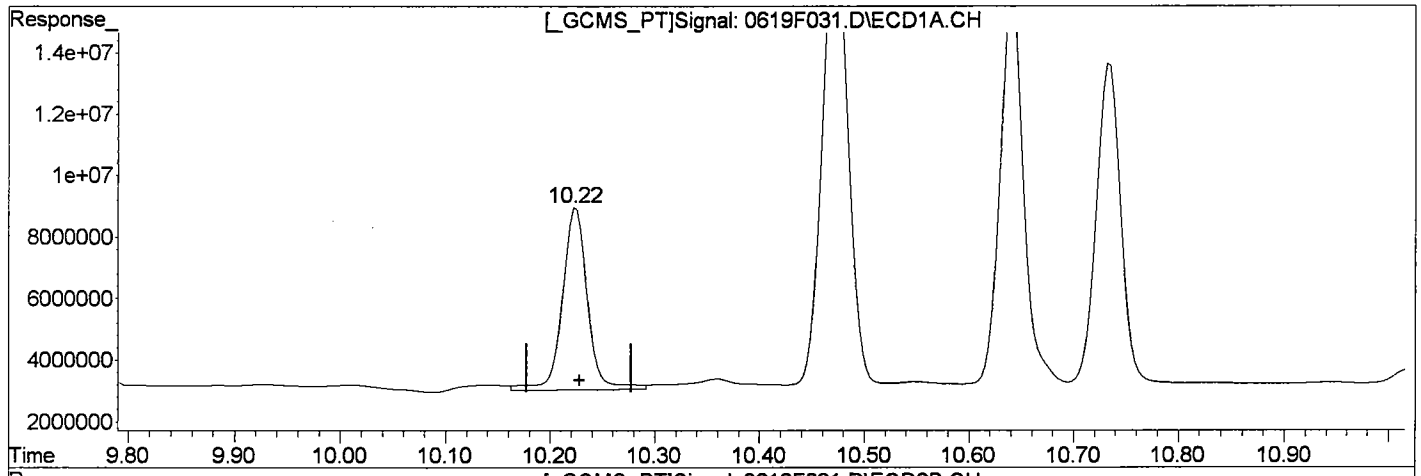


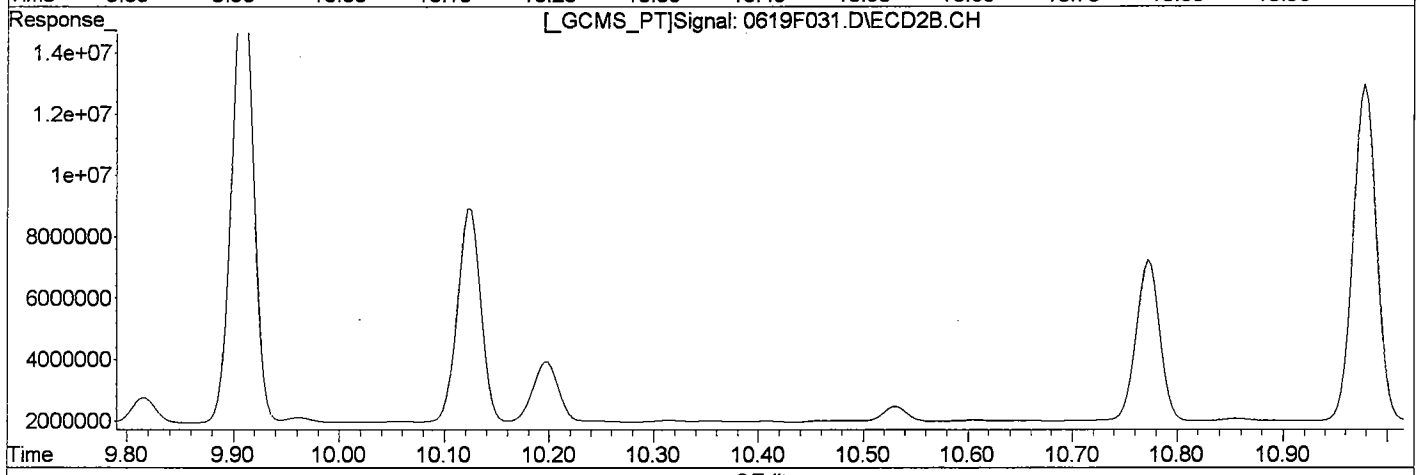


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(4) beta-BHC

10.22min 92.758ug/L

response 9944889

(4) beta-BHC #2

9.46min 87.855ug/L

response 9471049

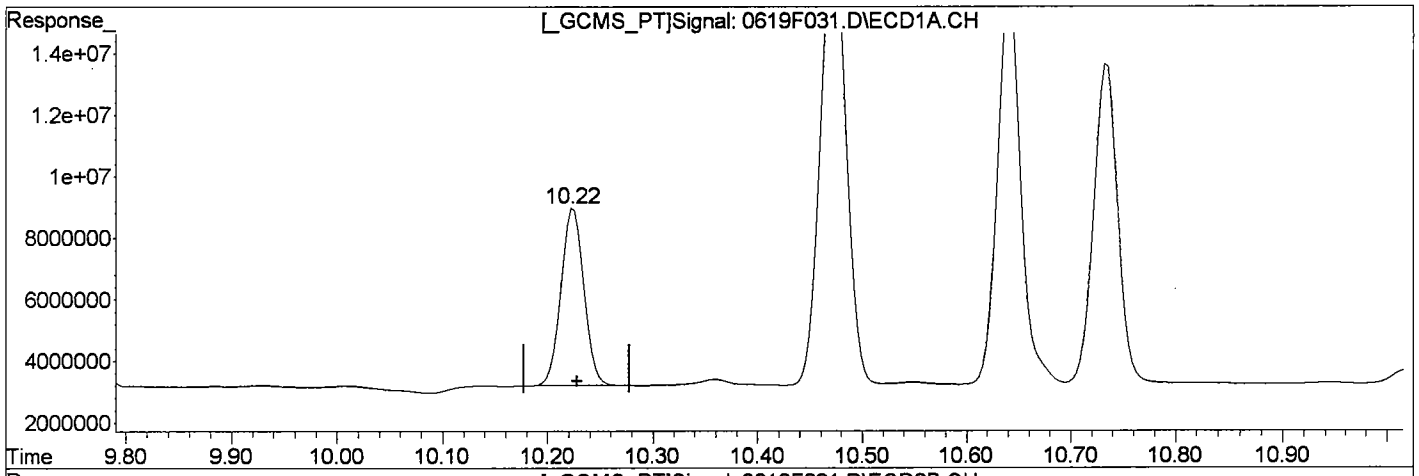
(+) = Expected Retention Time

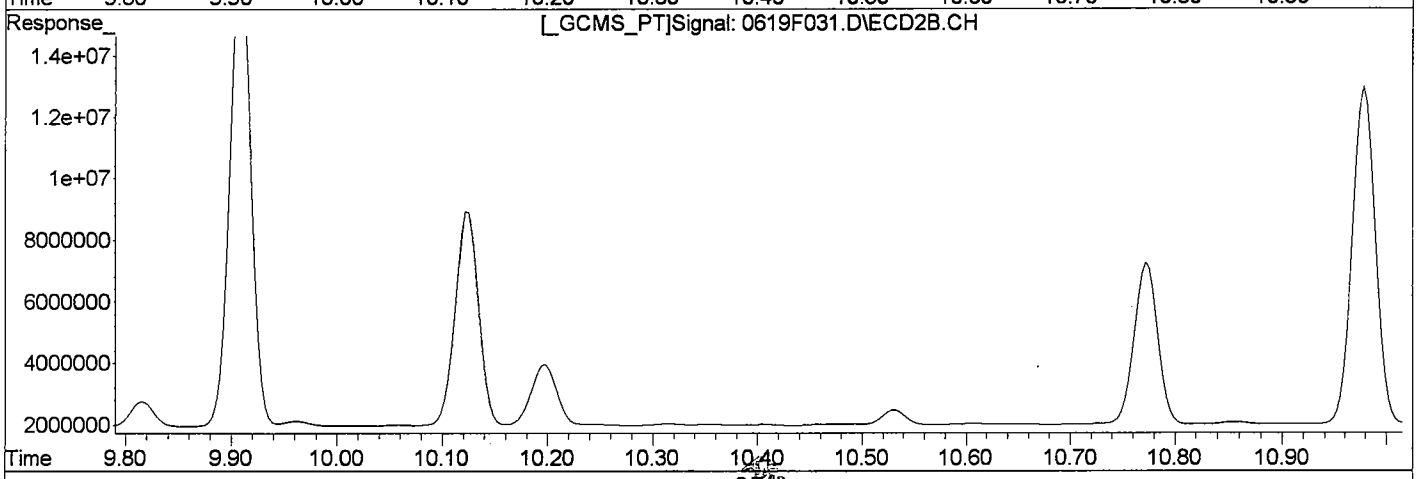
0619F031.D 061107-8081.M Thu Jun 21 11:55:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(4) beta-BHC

10.22min 80.840ug/L m

response 8667112

(4) beta-BHC #2

9.46min 87.855ug/L

response 9471049

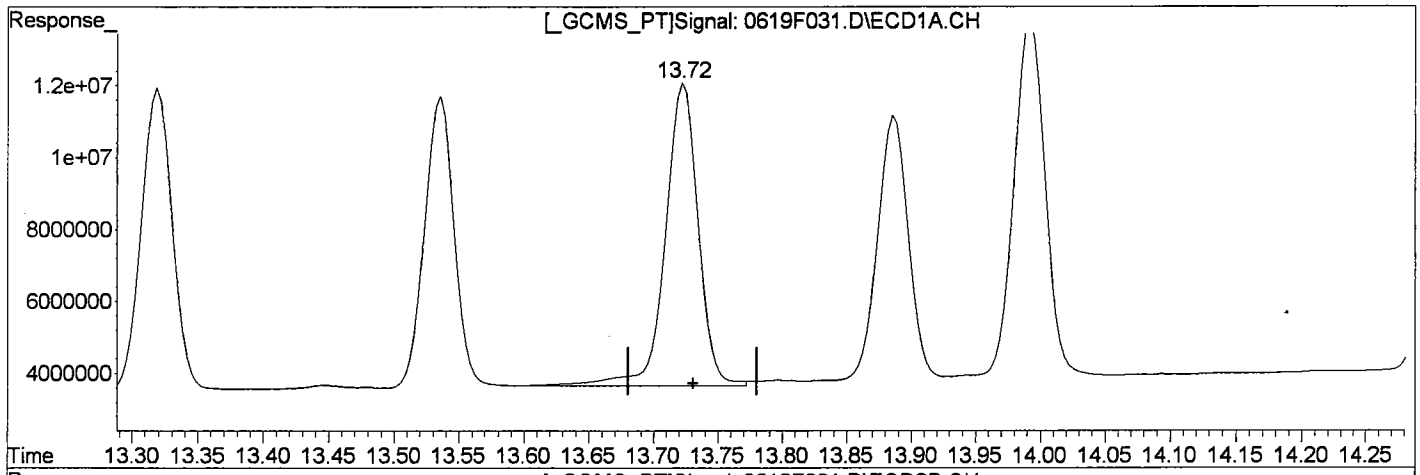
QEdit
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

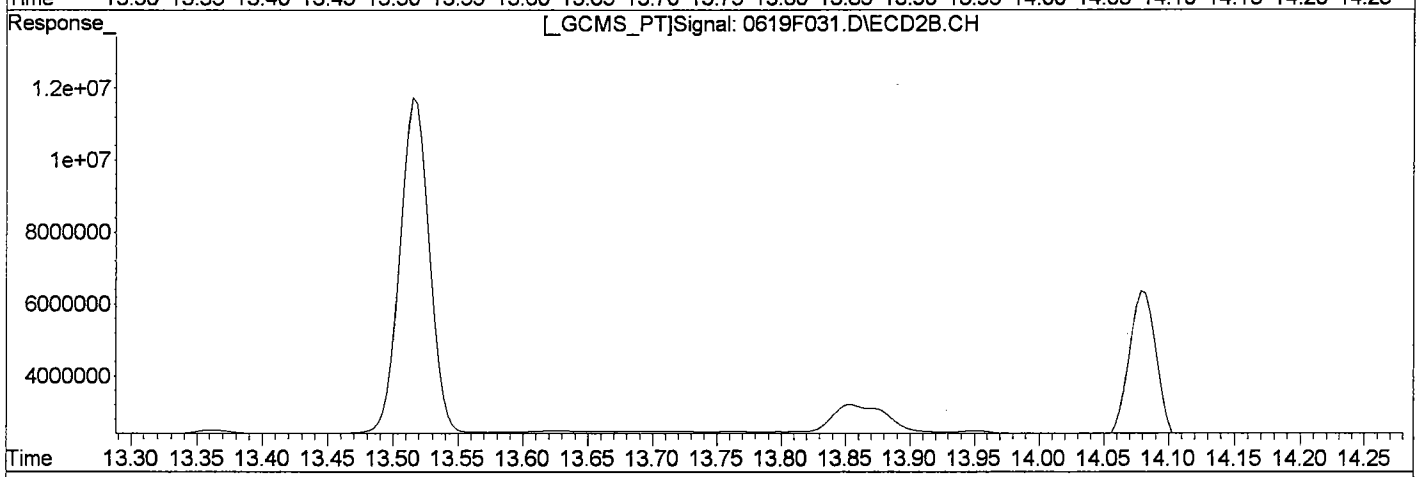
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:56:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 81.217ug/L

response 14910556

(17) Endosulfan II #2

12.88min 74.728ug/L

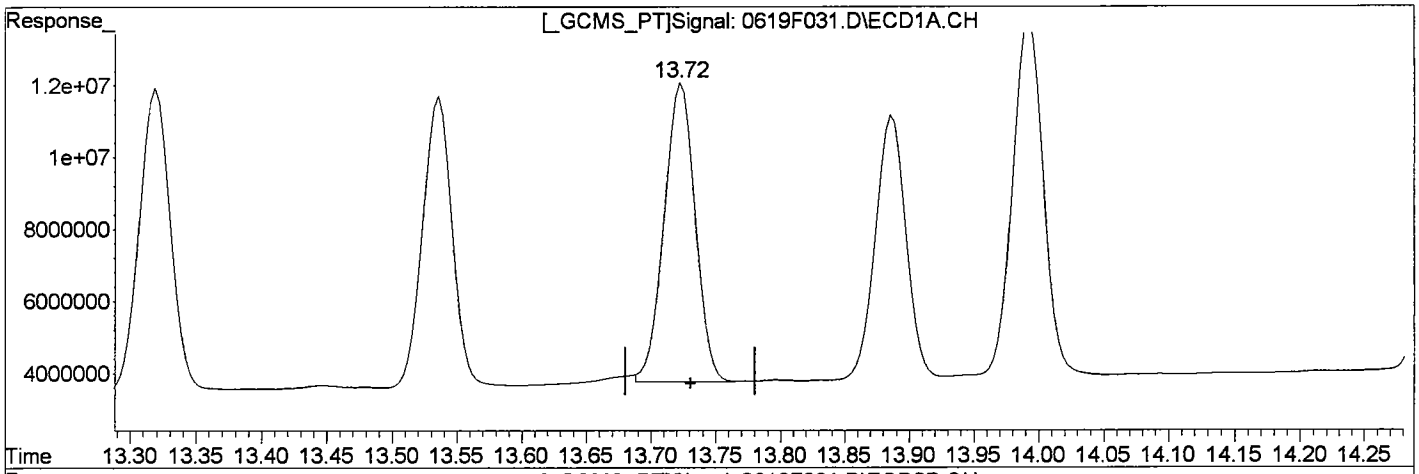
response 13558091

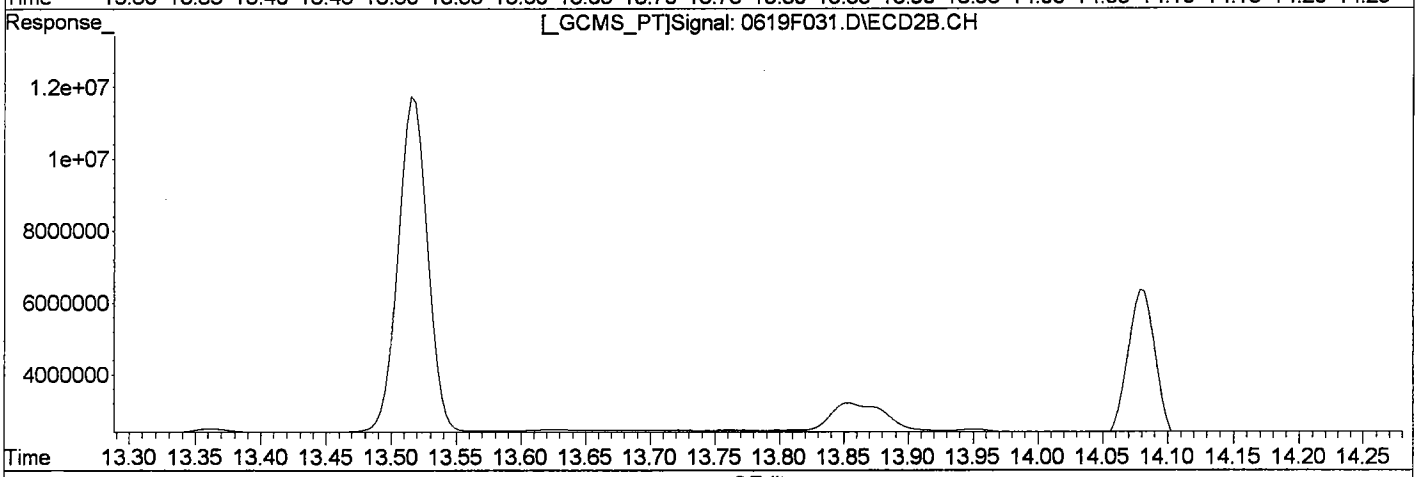
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:56:47 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 75.078ug/L m

response 13783505

(17) Endosulfan II #2

12.88min 74.728ug/L

response 13558091

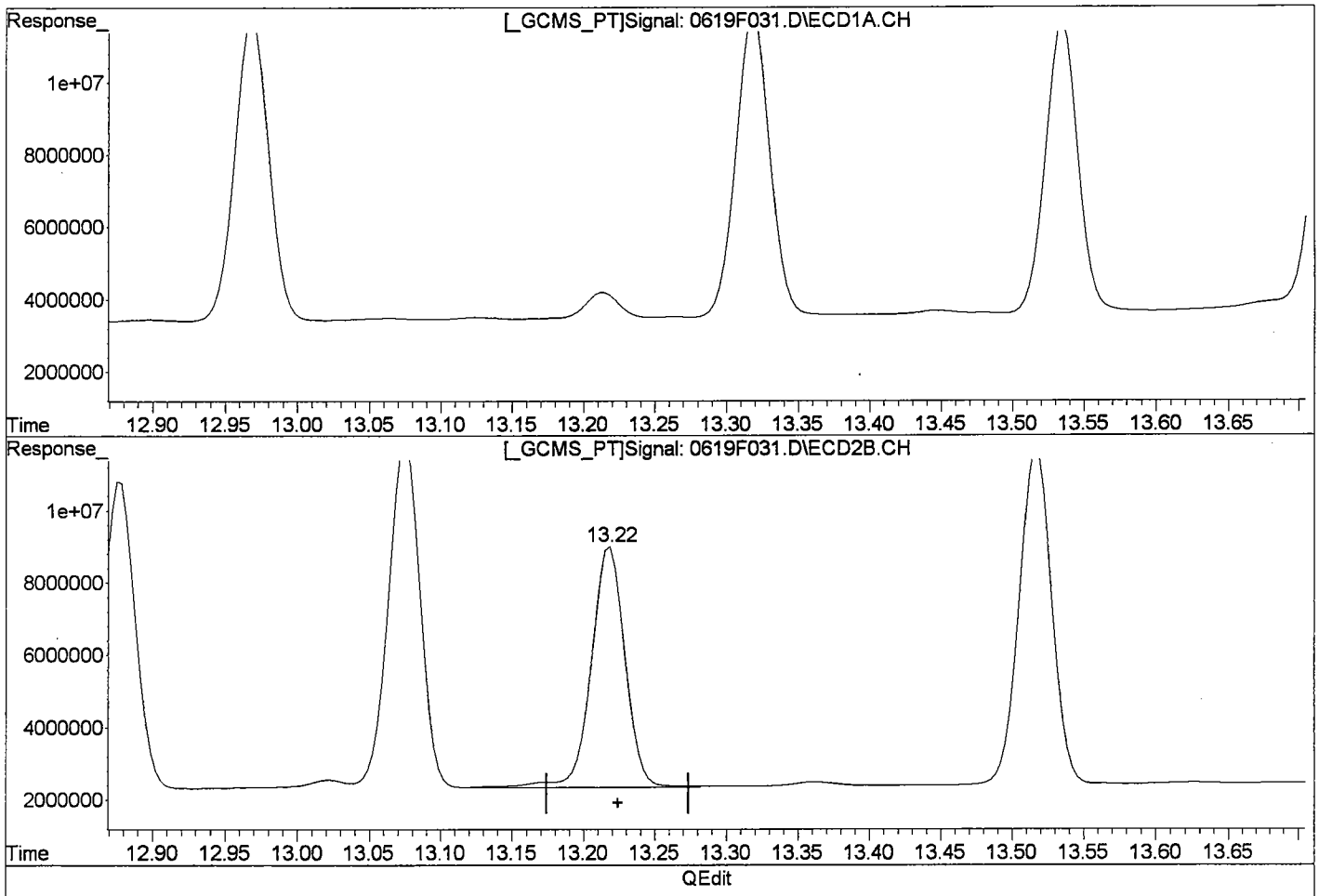
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:57:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(19) Endrin Aldehyde

13.89min 74.242ug/L

response 12305246

(19) Endrin Aldehyde #2

13.22min 72.877ug/L

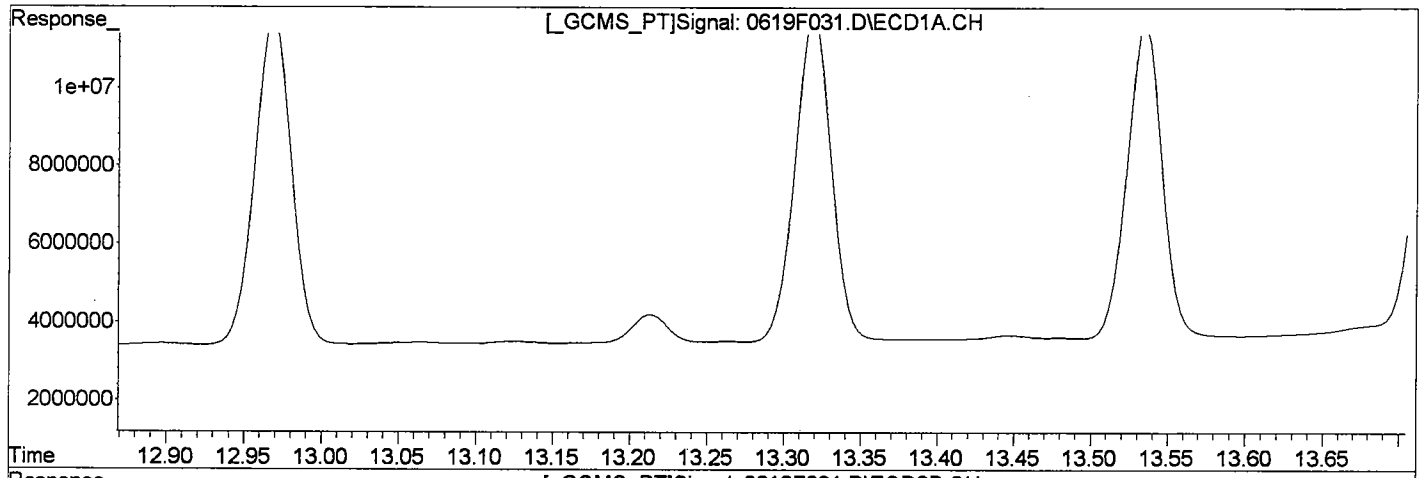
response 11007272

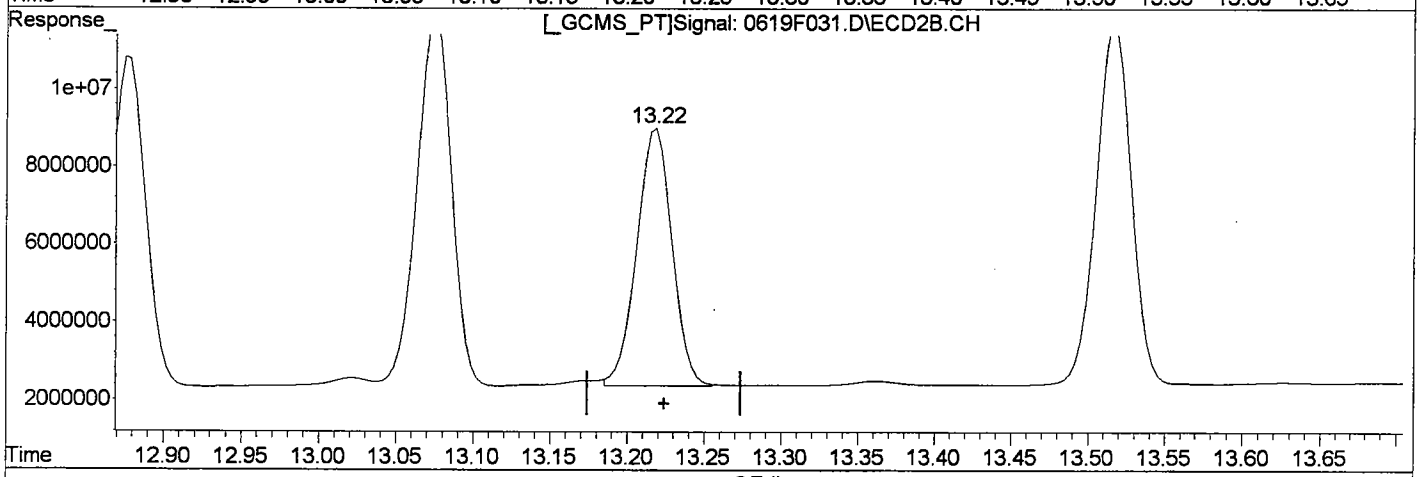
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:57:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.89min 74.242ug/L

response 12305246

(19) Endrin Aldehyde #2

13.22min 69.808ug/L m

response 10543738

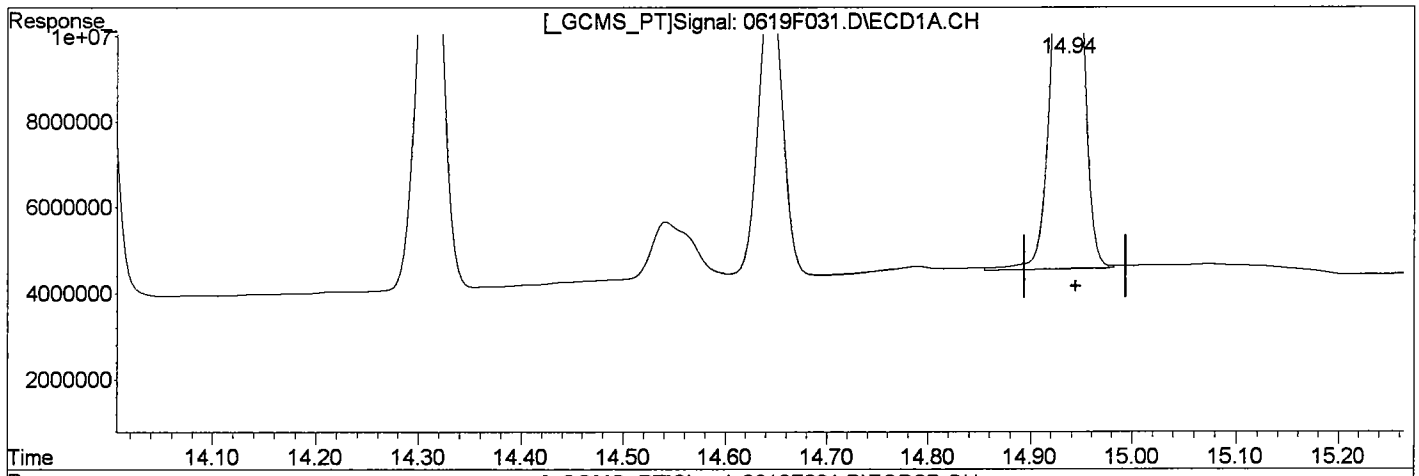
ARef Initials LL 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

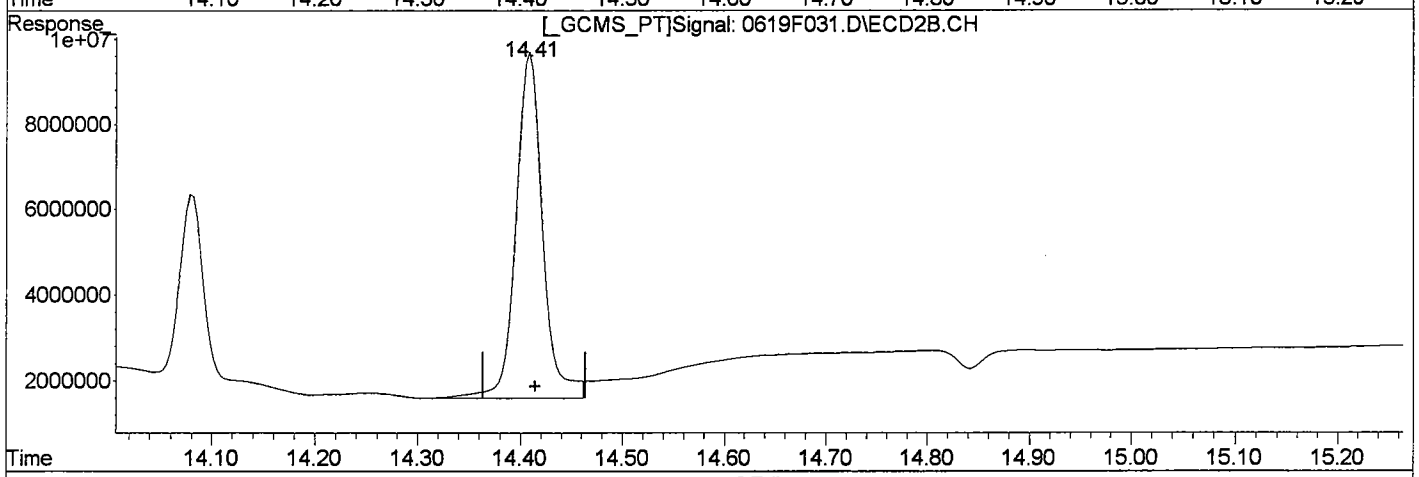
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:57:16 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone

14.94min 83.749ug/L

response 24988444

(22) Endrin Ketone #2

14.41min 69.955ug/L

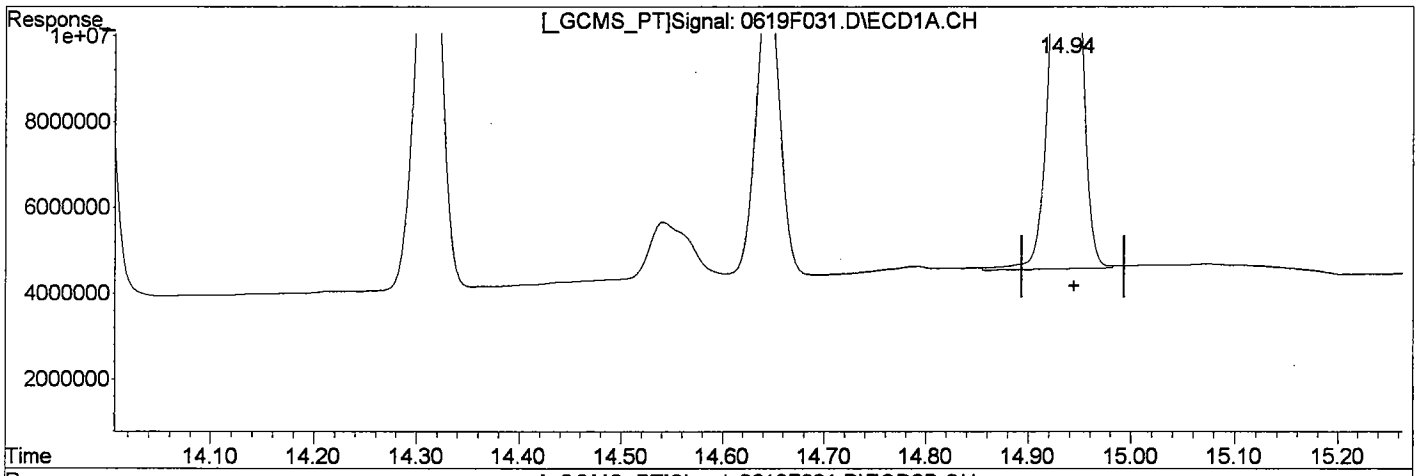
response 14695572

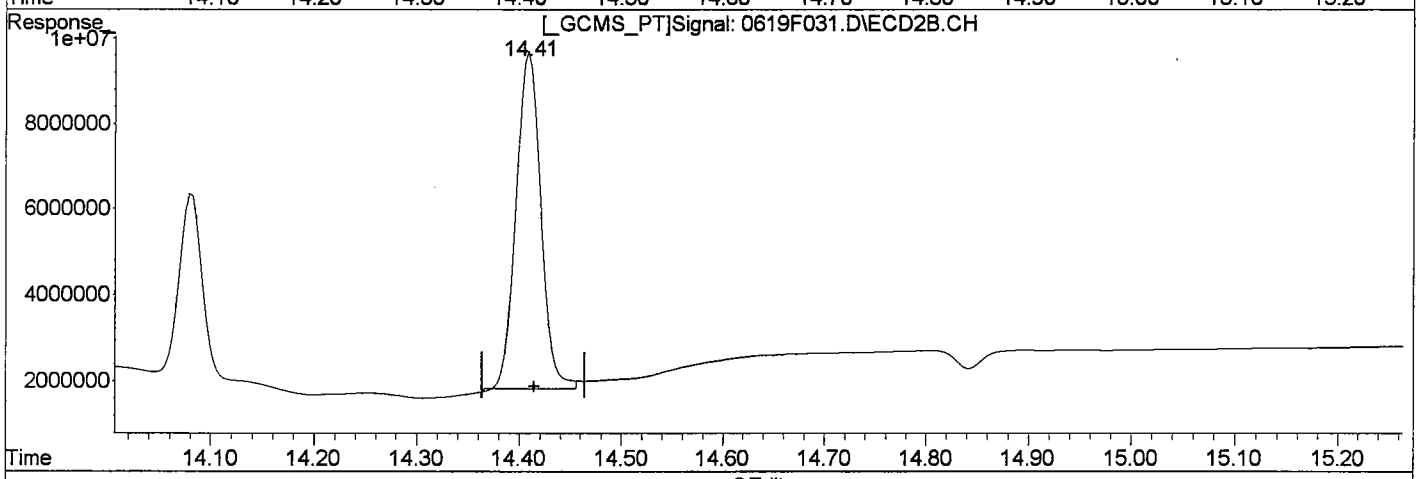
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:57:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(22) Endrin Ketone

14.94min 83.749ug/L

response 24988444

(22) Endrin Ketone #2

14.41min 62.405ug/L m

response 13109489

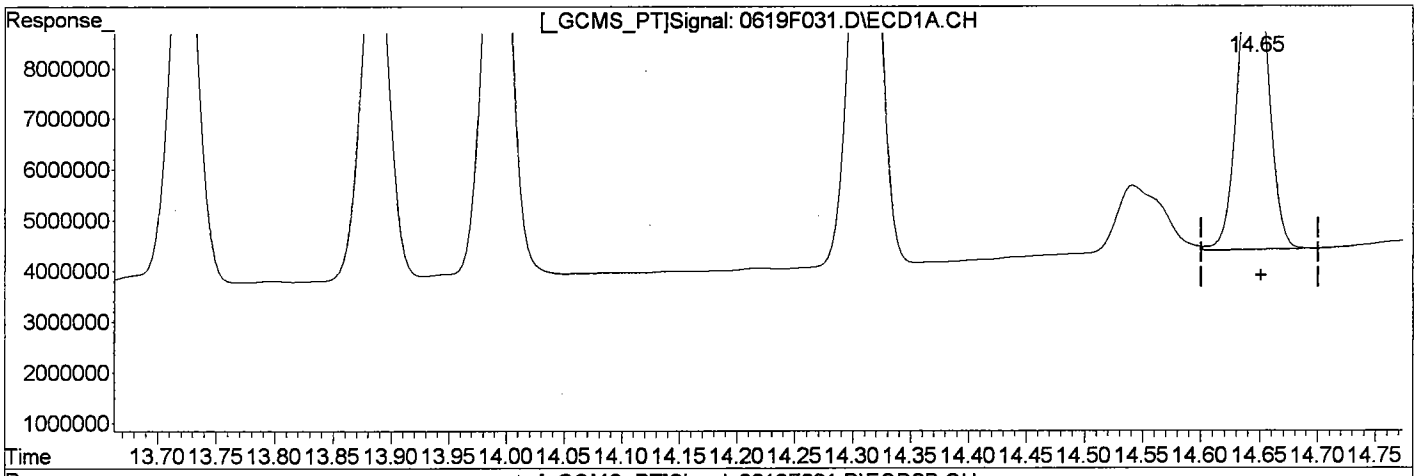
After Initials 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

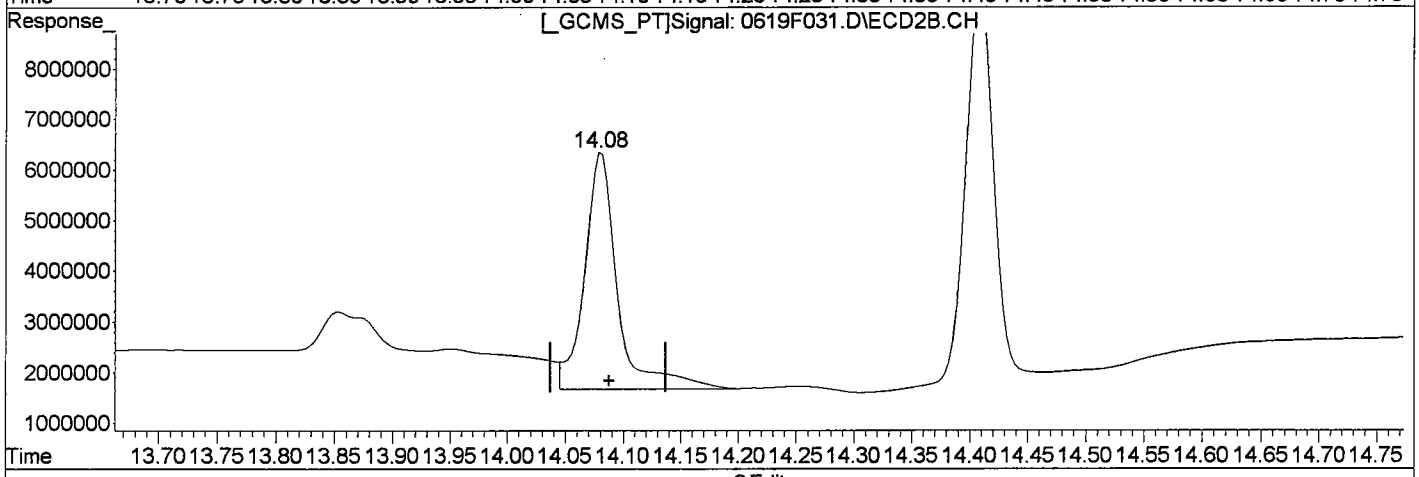
(+) = Expected Retention Time
0619F031.D 061107-8081.M Thu Jun 21 11:57:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.65min 84.392ug/L

response 11381239

(23) Methoxychlor #2

14.08min 97.486ug/L

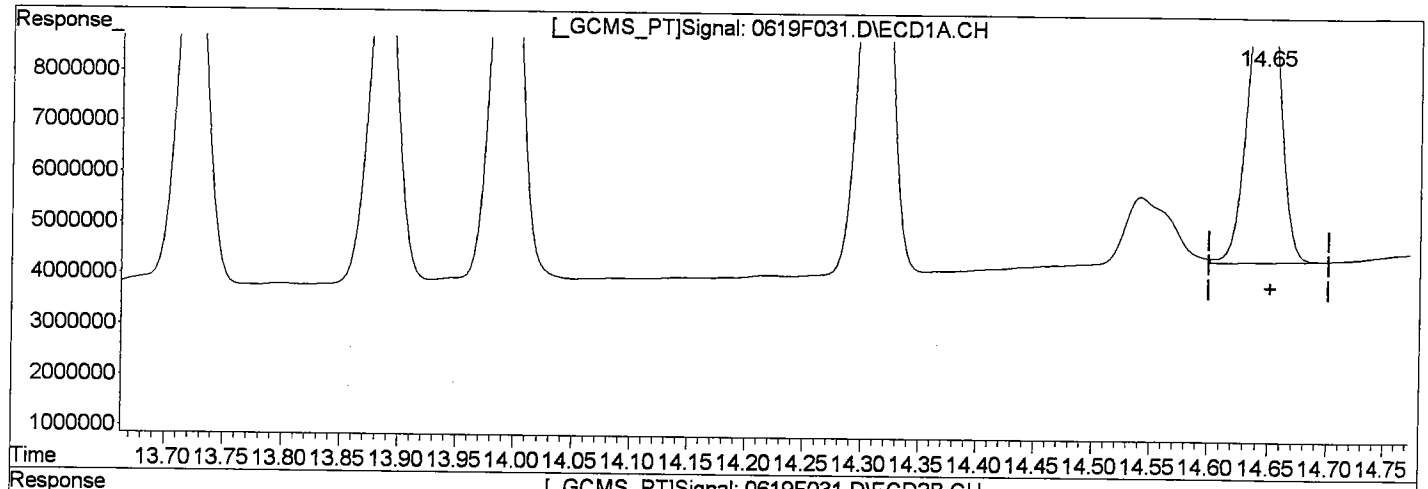
response 9170241

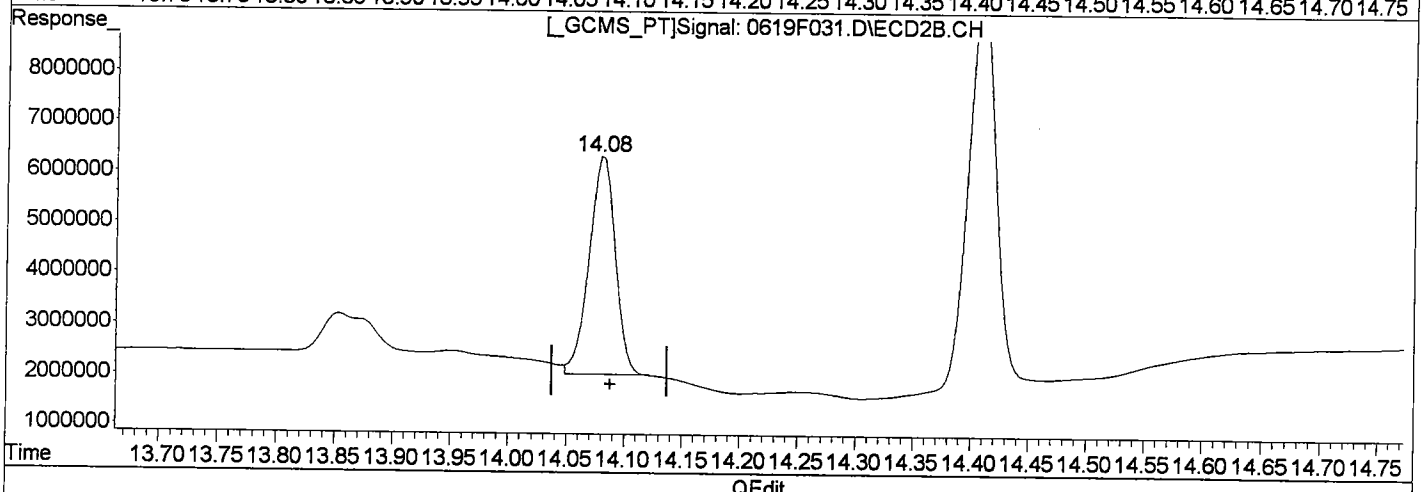
(+) = Expected Retention Time

0619F031.D 061107-8081.M Thu Jun 21 11:57:41 2007

Signal #1 : J:\GC23\DATA\061907\0619F031.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061907\0619F031.D\ECD2B.CH
Acq On : 20 Jun 2007 10:25 pm Operator: AKamawal
Sample : KWG0706602-1 | K0704934-001MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\1-MS.H | F=2 D=1 A=1 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(23) Methoxychlor

14.65min 84.392ug/L

response 11381239

(23) Methoxychlor #2

14.08min 71.704ug/L m

response 6745009

After initials L 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0619F031.D 061107-8081.M Thu Jun 21 11:57:47 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG0706602-4	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Toxaphene	**1.48**		0.53	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	74	16-111	06/20/07	Acceptable
Decachlorobiphenyl	82	14-145	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F033.D
Lab ID: KWG0706602-4 -- K0704934-004MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 23:17
Date Quantitated: 06/21/2007 12:01
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	[illegible]
Continuing Calibration Recovery (Closing)	Toxaphene	18.3	NA	15	[illegible]

Primary Review: [illegible] 6/21/07

Secondary Review: [illegible] 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F033.D\0619F033C.D
Lab ID: KWG0706602-4 -- K0704934-004MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 23:17
Date Quantitated: 06/21/2007 12:01
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

ID:		Tier:		Matrix:	WATER
d Code:	ST_OC	Collect Date:		Receive Date:	06/14/2007
Analysis Lot:	6830	Prep Lot:	KWG0	Report Group:	
Analysis Method:		Prep Method:	EPA 3		
Prep Ref:		Prep Date:	06/13		
Quant Method:	23\METHODS\061107-8081.			Calibration ID:	CAL6343
Title:					
MB Ref:	23\DATA\061907\0619F024.D			Method ID:	MJ580
				Quant based on Method	
Data File #1:	C23\DATA\061907\0619F033.D			Instrument:	GC23
Data File #2:	C23\DATA\061907\0619F033.D\0619F033c.d			Vial:	27
Acqu Date:	0/2007 23:17	Quant Date:	5/21/2007 12:01	Dilution:	1.0
Run Type:				Soln Conc. Units:	ug/L
Lab ID:	WG0706602-4 -- K0704934-004MS				
Signal #1:	DB XLB	Signal #2:	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.40	-0.01	13692292	13283848	68.43	74.12			
					%Recovery =		68OK	74OK	Limits =	16-111	74O
Decachlorobiphenyl	17.12	-0.02	16.00	-0.01	20245609	15088880	72.95	81.70			
					%Recovery =		73OK	82OK	Limits =	14-145	82O

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000	0.00035U	0.00035U	0.00035U
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00033U	0.00033U	0.00033U
beta-BHC			0d	0d	0.0000	0.0000	0.00088U	0.00088U	0.00088U
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000	0.00047U	0.00047U	0.00047U
delta-BHC			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
Heptachlor			0d	0d	0.0000	0.0000	0.00038U	0.00038U	0.00038U
Aldrin			0d	0d	0.0000	0.0000	0.00043U	0.00043U	0.00043U
Isodrin			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Heptachlor Epoxide			0d	0d	0.0000	0.0000	0.00034U	0.00034U	0.00034U
gamma-Chlordane			0d	0d	0.0000	0.0000	0.00034U	0.00034U	0.00034U
Endosulfan I			0d	0d	0.0000	0.0000	0.00047U	0.00047U	0.00047U
alpha-Chlordane			0d	0d	0.0000	0.0000	0.0043U	0.0043U	0.0043U
Dieldrin			0d	0d	0.0000	0.0000	0.00037U	0.00037U	0.00037U
4,4'-DDE			0d	0d	0.0000	0.0000	0.00038U	0.00038U	0.00038U
Endrin			0d	0d	0.0000	0.0000	0.00072U	0.00072U	0.00072U
Endosulfan II			0d	0d	0.0000	0.0000	0.00043U	0.00043U	0.00043U
4,4'-DDD			0d	0d	0.0000	0.0000	0.0016U	0.0016U	0.0016U
Endrin Aldehyde			0d	0d	0.0000	0.0000	0.00049U	0.00049U	0.00049U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F033.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F033.D\0619F033c.d			**Vial:**	27
Acqu Date:	06/20/2007 23:17	**Quant Date:**	06/21/2007 12:01	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-4 -- K0704934-004MS				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
4,4'-DDT			0d	0d	0.0000	0.0000	0.00062U	0.00062U	0.00062U
Endrin Ketone			0d	0d	0.0000	0.0000	0.00070U	0.00070U	0.00070U
Methoxychlor			0d	0d	0.0000	0.0000	0.00098U	0.00098U	0.00098U
Toxaphene			0	0	964.98 CCV	702.51	2.0	1.5	**2.0**
Toxaphene {1}	13.15 -0.01	12.62	1017155	805998	719.54	673.26	1.51	1.42	
Toxaphene {2}	13.22	12.71	1298883	3383327	1,121	808.06	2.36	1.70	
Toxaphene {3}	13.37	13.56 -0.01	2029378m	1876934	1,008	724.96	2.12	1.53	
Toxaphene {4}	14.04 -0.01	13.68 -0.01	3181761m	525743	1,089	769.28	2.29	1.62	
Toxaphene {5}	14.36 -0.01	13.92 +0.01	1452117m	2561888	888.67	650.19	1.87	1.37	
Toxaphene {6}	14.88 -0.01	14.11	1749938m	3180394	963.36	589.30	2.03	1.24	
Chlordane			0	0	0.0000	0.0000	0.016U	0.016U	0.016U
Chlordane {1}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.016U	0.016U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00088U	0.00088U	0.00088U
Oxychlordane			0d	0d	0.0000	0.0000	0.0011U	0.0011U	0.0011U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00053U	0.00053U	0.00053U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00064U	0.00064U	0.00064U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00097U	0.00097U	0.00097U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00063U	0.00063U	0.00063U
Mirex			0d	0d	0.0000	0.0000	0.00086U	0.00086U	0.00086U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0013U	0.0013U	0.0013U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0020U	0.0020U	0.0020U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	950 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Matrix Spike Summary Report

Matrix Spike Information ***ListJoinID :*** LJ4916

Data File:	J:\GC23\DATA\061907\0619F033.D\0619F033C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-4	**Dilution:**	1.0
Client ID:	Matrix Spike	**Units:**	PERCENT
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 23:17
Matrix:	WATER	**Quant Date:**	06/21/2007 12:01

Sample Reference Information

Data File:	J:\GC23\DATA\061907\0619F032.D\0619F032C.D	**Instrument:**	GC23
Lab ID:	K0704934-004	**Dilution:**	1.0
Client ID:	060807-ER	**Units:**	PERCENT
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 22:51
Matrix:	WATER	**Quant Date:**	06/21/2007 11:59

Parameter Name	**Sample Result**	**Matrix Spike**			**%Rec Limits**
		Result	**Expected**	**%Rec**	
Tetrachloro-m-xylene				74	16-111
Decachlorobiphenyl				82	14-145
Toxaphene	0.063	1.48	2.11	67	41-142

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:20 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
1)	s	Tetrachloro-m-xy	8.51	7.40	13692292	13283848	68.429	74.122	
24)	s	Decachlorobiphen	17.12	16.00	20245609	15088880	72.954	81.701	
		Target Compounds							
25)		Toxaphene	13.15	12.62	1017155	805998	719.544	673.262	
26)		Toxaphene {2}	13.22	12.71	1298883	3383327	1120.760	808.058	#
27)		Toxaphene {3}	13.37	13.56	2029378	1876934	1008.222m	724.955	#
28)		Toxaphene {4}	14.04	13.68	3181761	525743	1089.342m	769.275	#
29)		Toxaphene {5}	14.36	13.92	1452117	2561888	888.672m	650.189	#
30)		Toxaphene {6}	14.88	14.11	1749938	3180394	963.360m	589.297	#

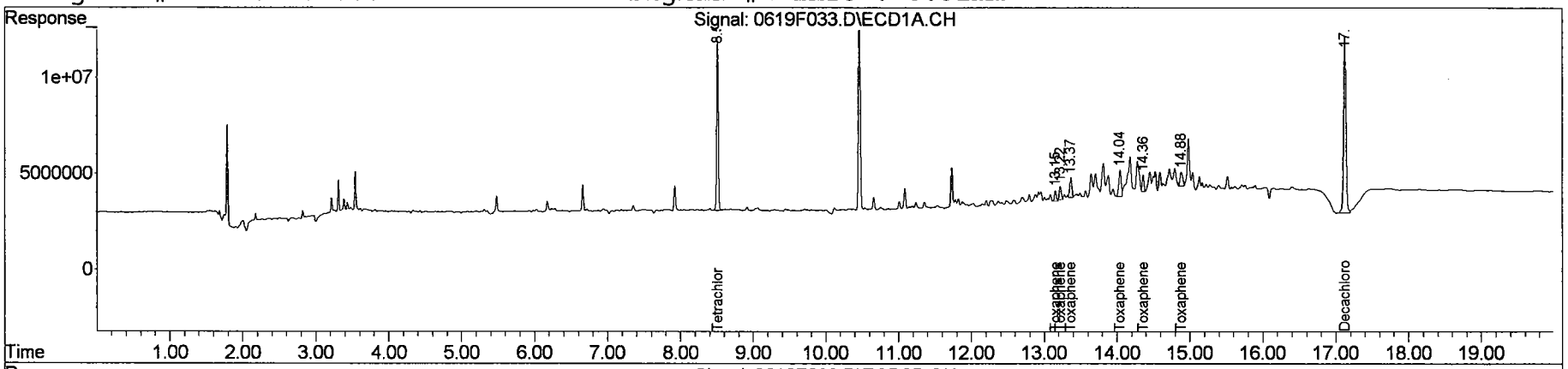
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

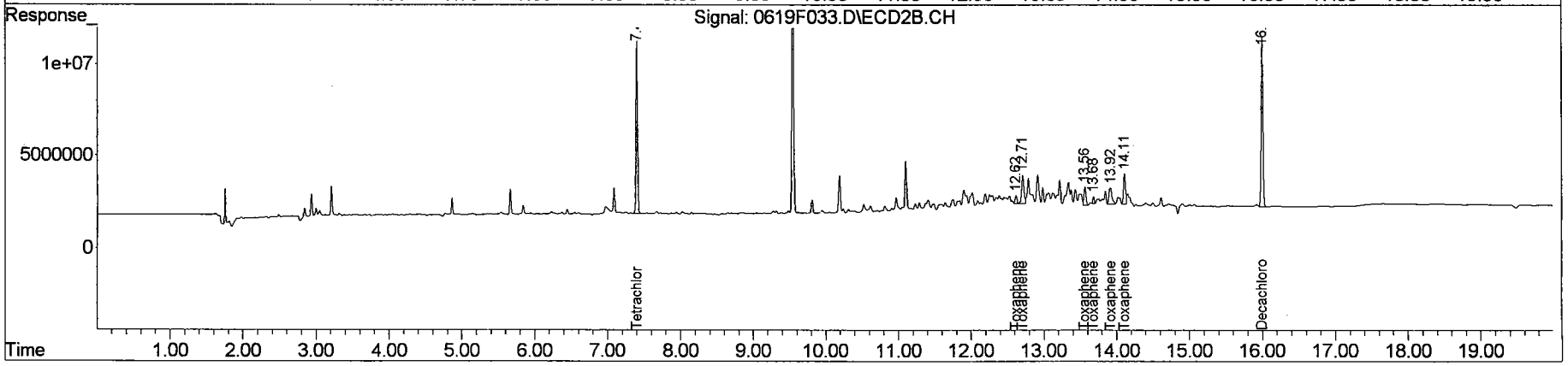
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 12:01 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

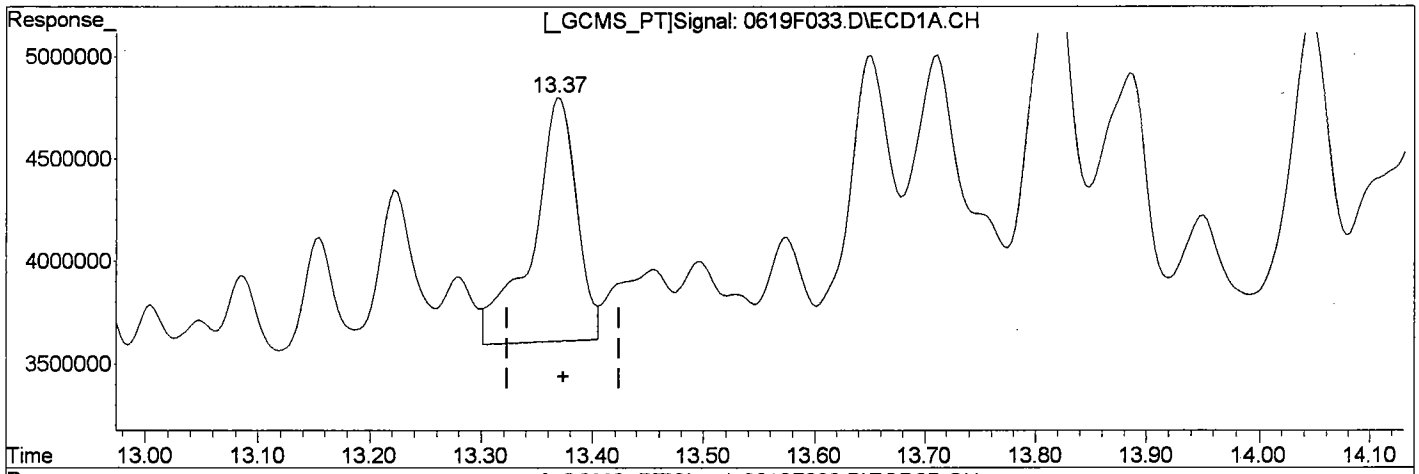


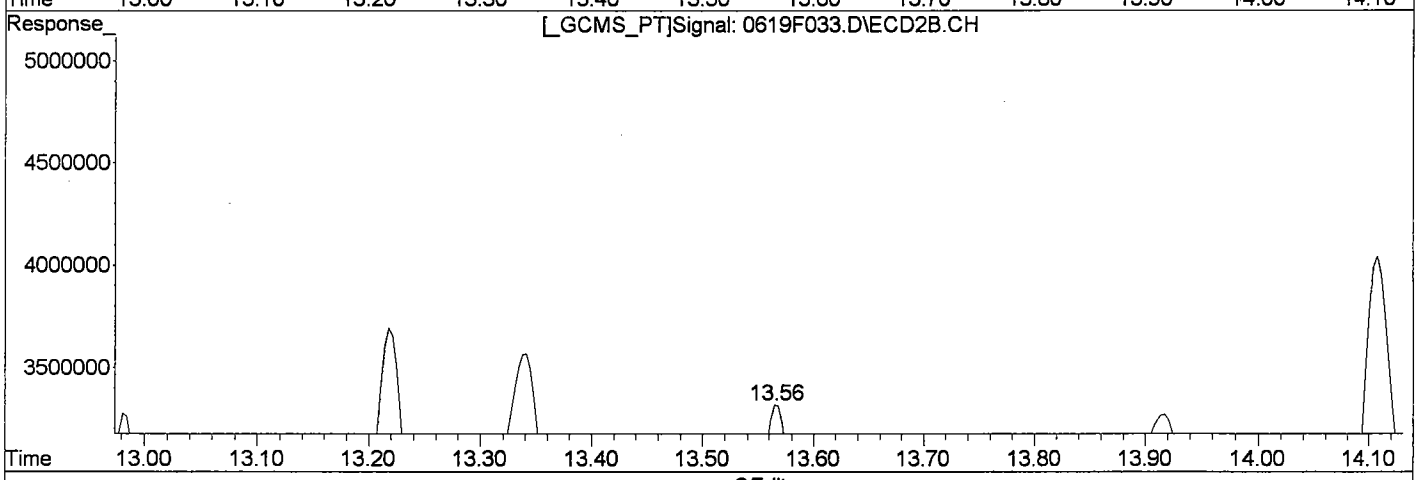


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(27) Toxaphene {3}

13.37min 1625.981ug/L

response 3272821

(27) Toxaphene {3} #2

13.56min 724.955ug/L

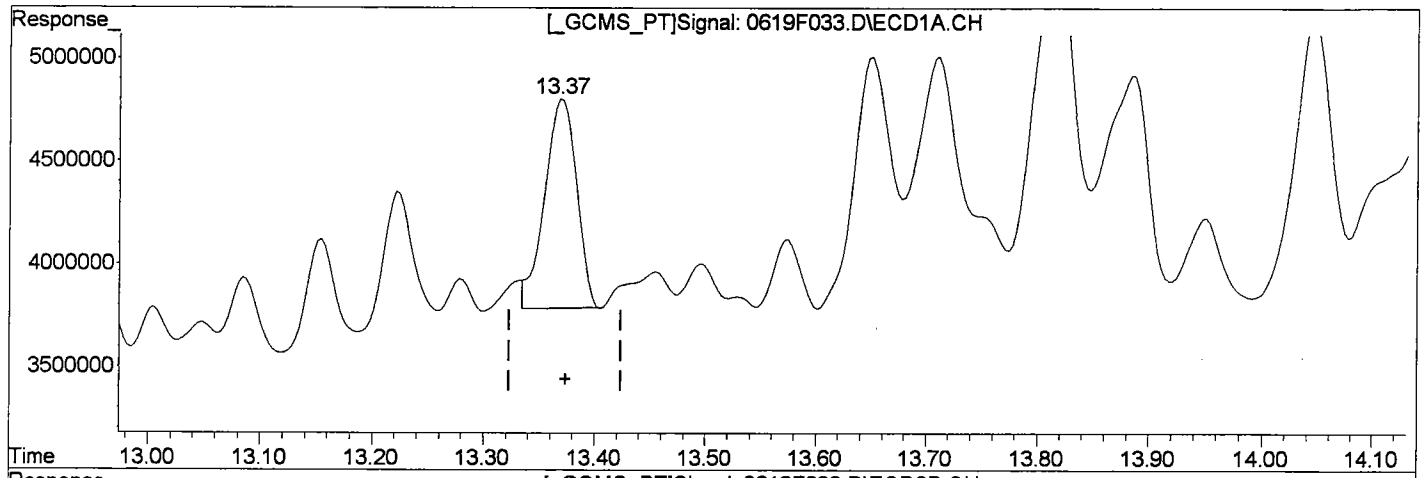
response 1876934

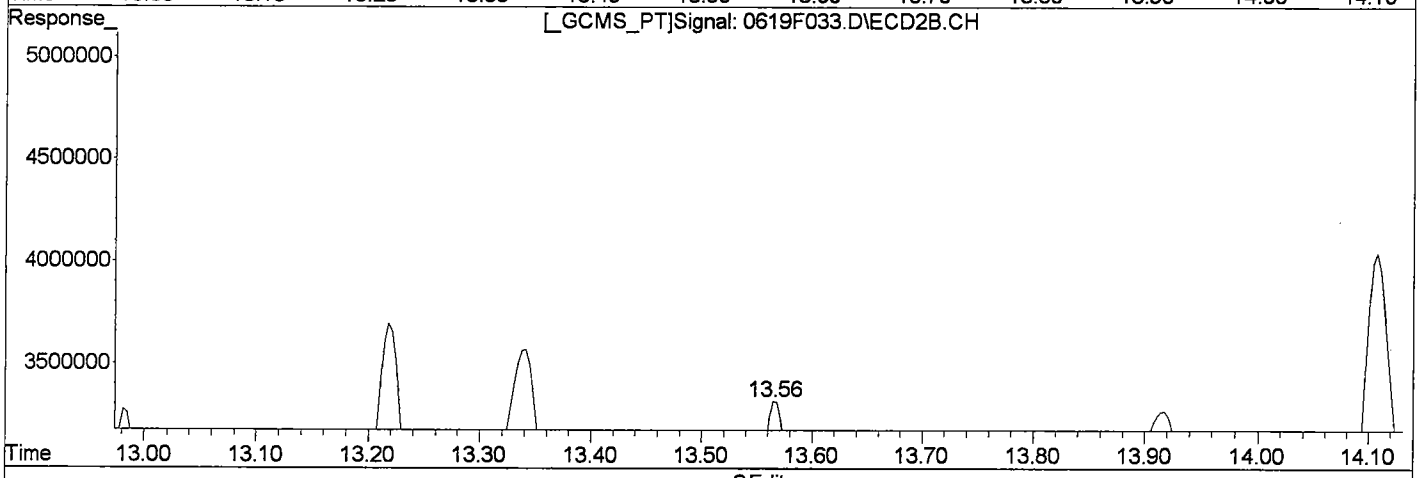
(+) = Expected Retention Time

0619F033.D 061107-8081.M Thu Jun 21 12:00:38 2007

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1008.222ug/L m

response 2029378

(27) Toxaphene {3} #2

13.56min 724.955ug/L

response 1876934

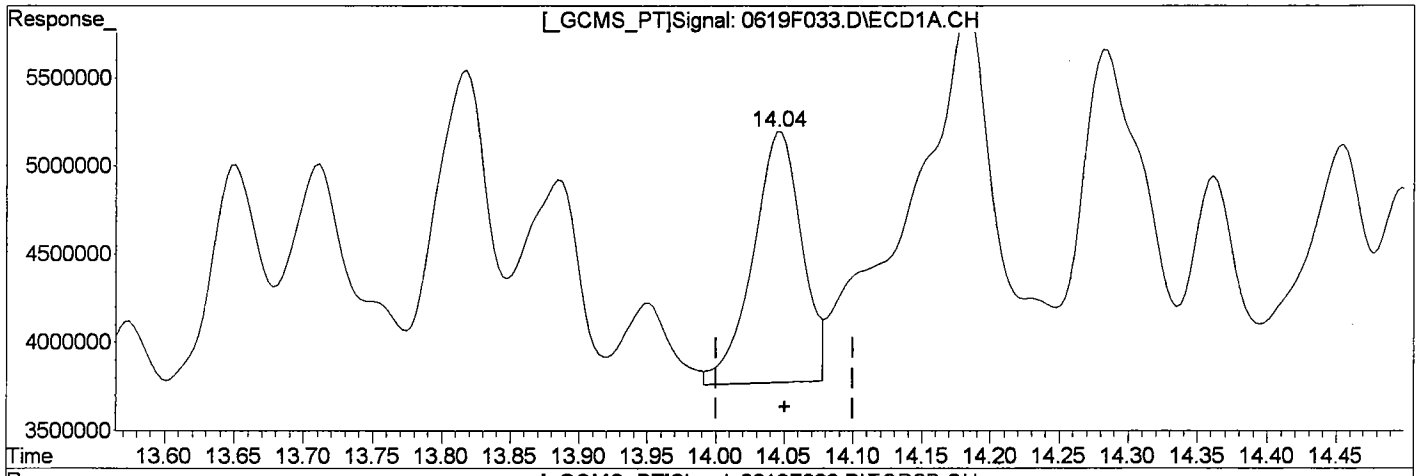
After
Initials
JUN 21
☐ Wrong Peak/Peak not found
☐ Baseline/shoulder incorrect
☐ Other

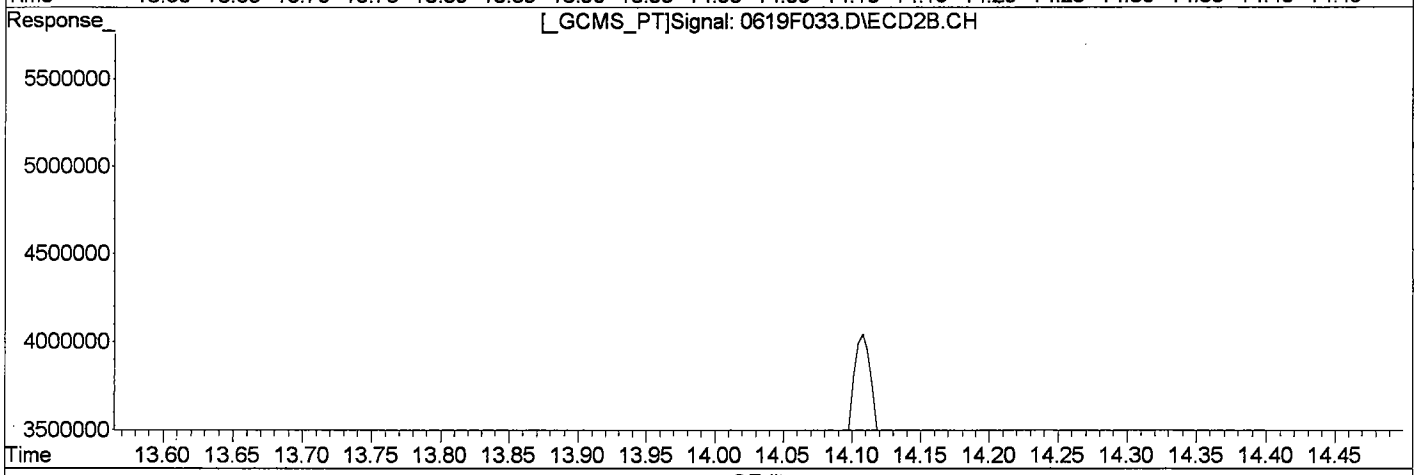
(+) = Expected Retention Time
0619F033.D 061107-8081.M Thu Jun 21 12:00:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 1209.548ug/L

response 3532859

(28) Toxaphene {4} #2

13.68min 769.275ug/L

response 525743

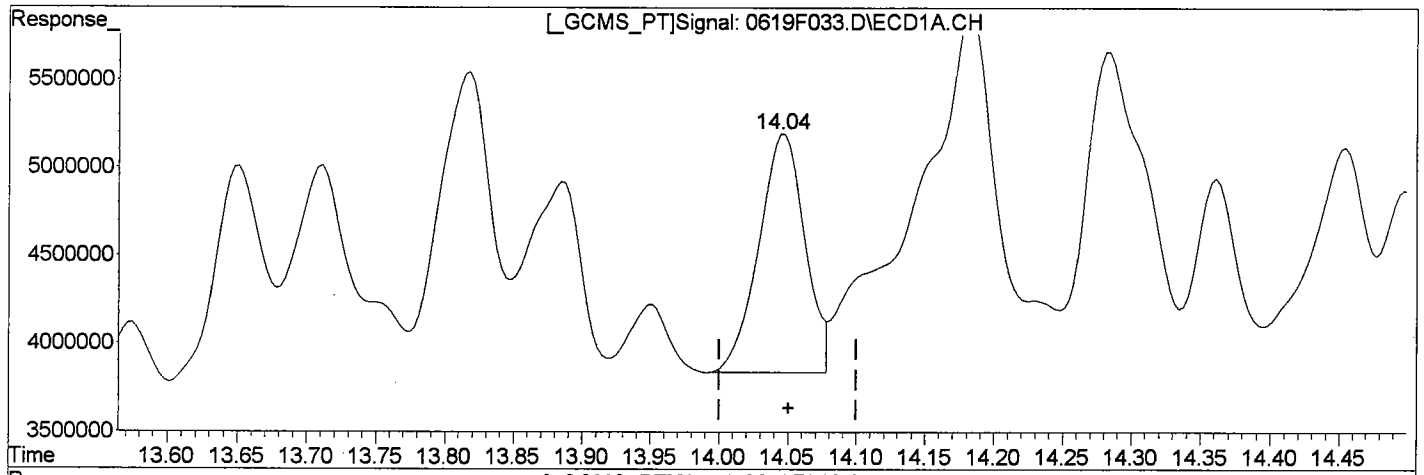
(+) = Expected Retention Time

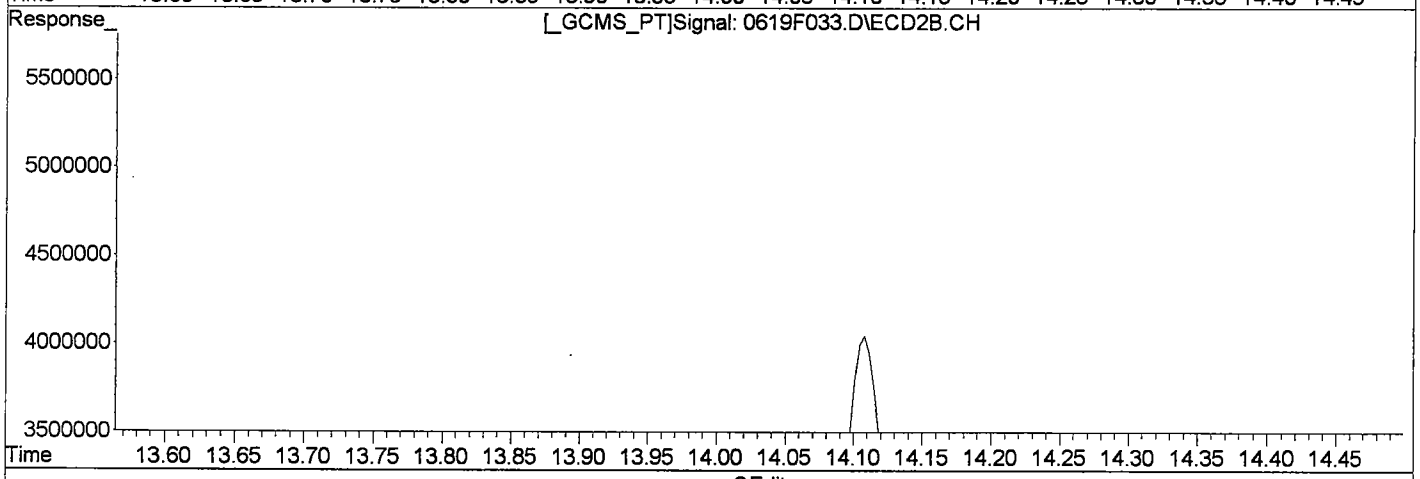
0619F033.D 061107-8081.M Thu Jun 21 12:00:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 1089.342ug/L m

response 3181761

(28) Toxaphene {4} #2

13.68min 769.275ug/L

response 525743

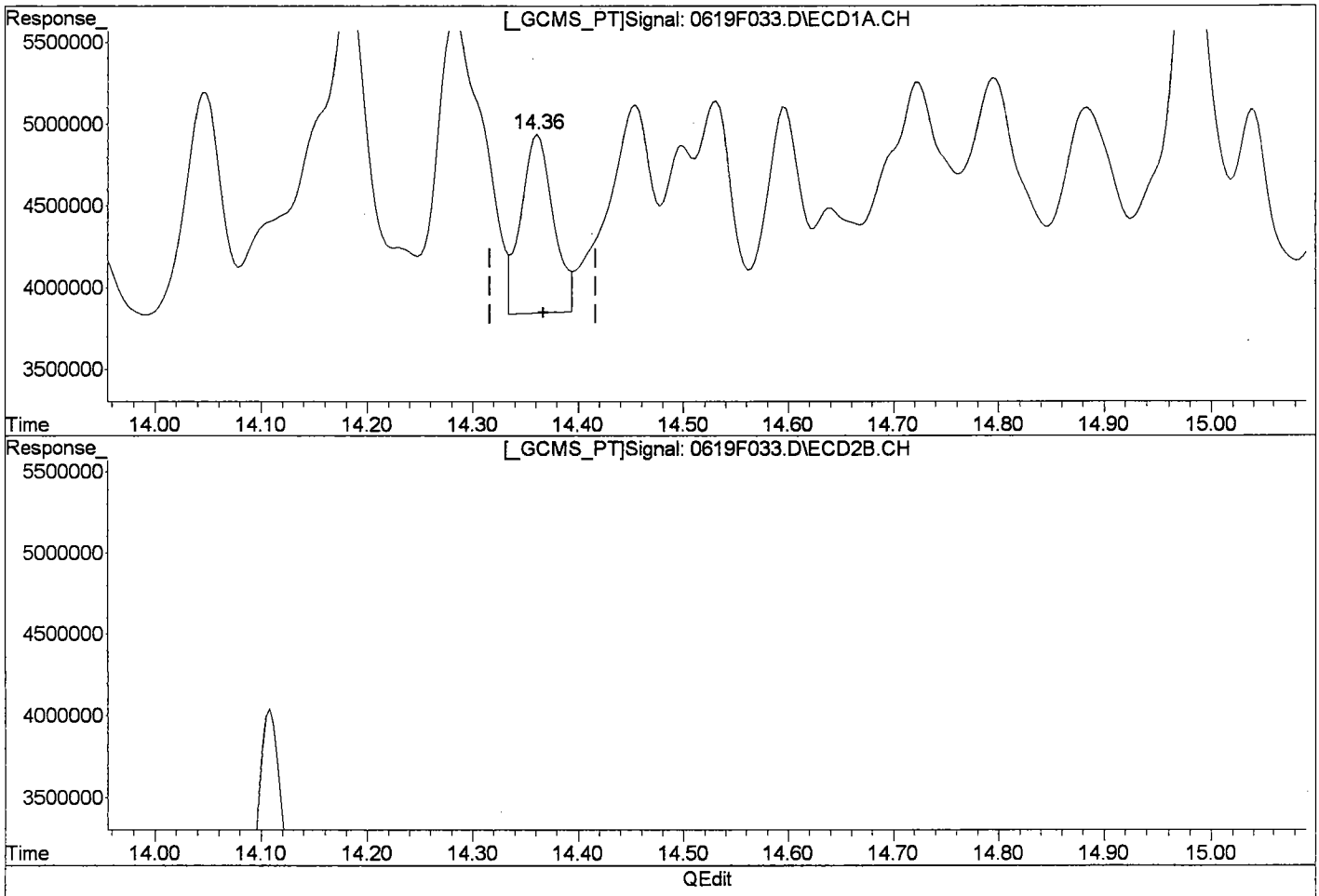
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak Not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F033.D 061107-8081.M Thu Jun 21 12:00:55 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 1419.139ug/L

response 2318916

(29) Toxaphene {5} #2

13.92min 650.189ug/L

response 2561888

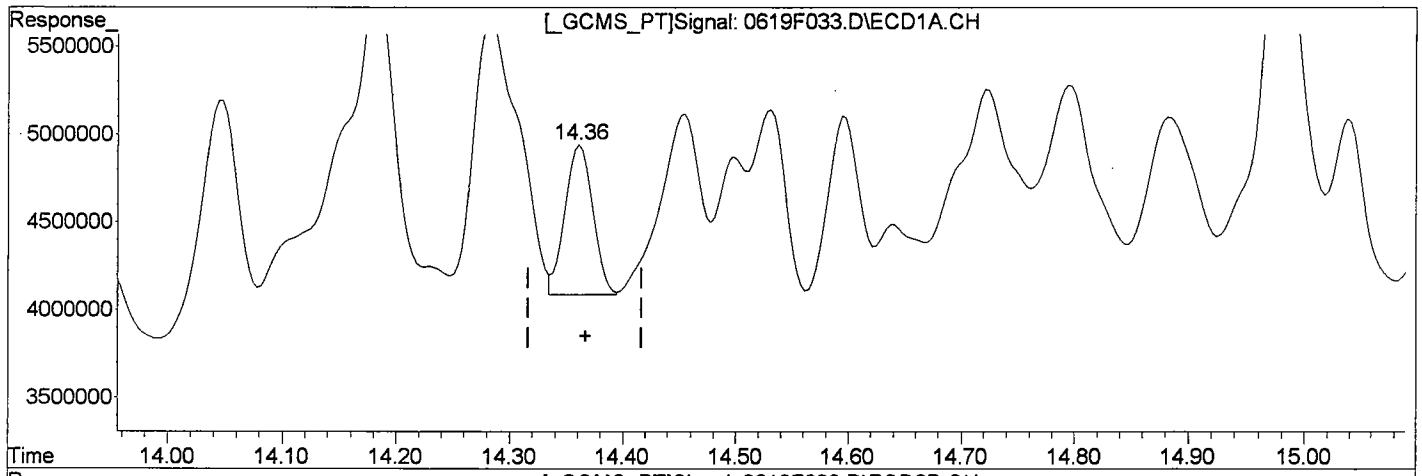
(+) = Expected Retention Time

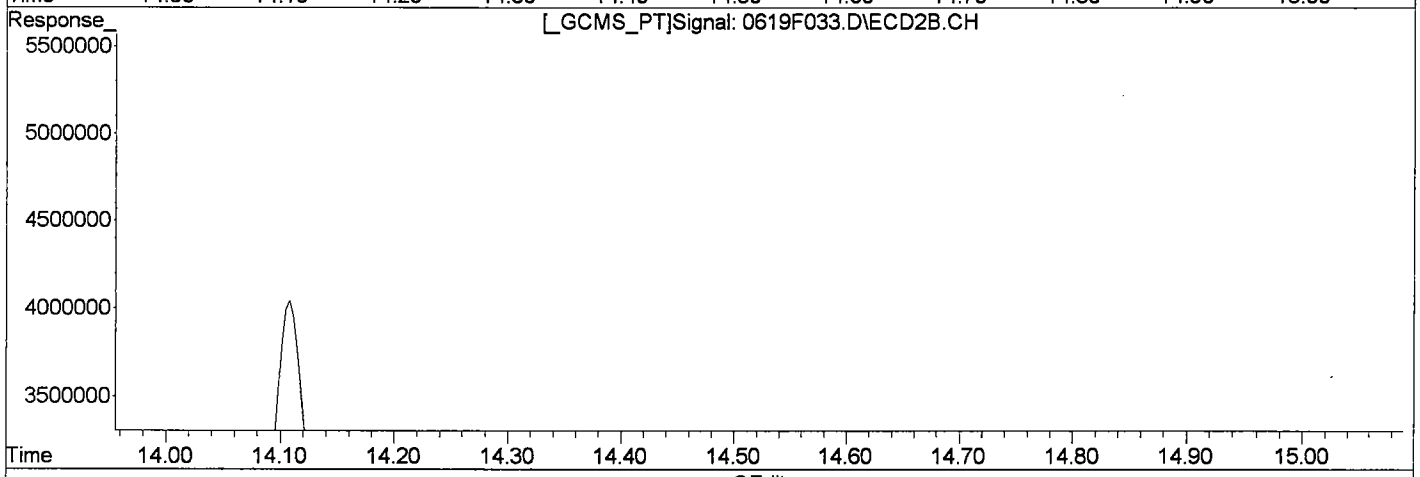
0619F033.D 061107-8081.M Thu Jun 21 12:01:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 888.672ug/L m

response 1452117

(29) Toxaphene {5} #2

13.92min 650.189ug/L

response 2561888

After Initials

☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder Incorrect
☐ Other

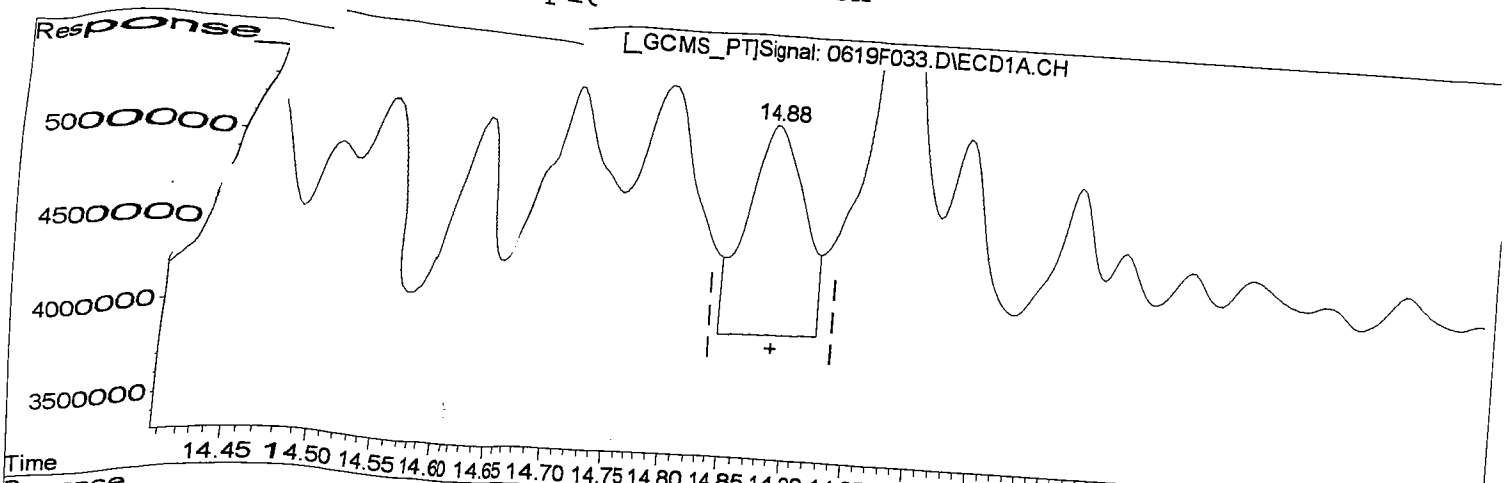
(+) = Expected Retention Time

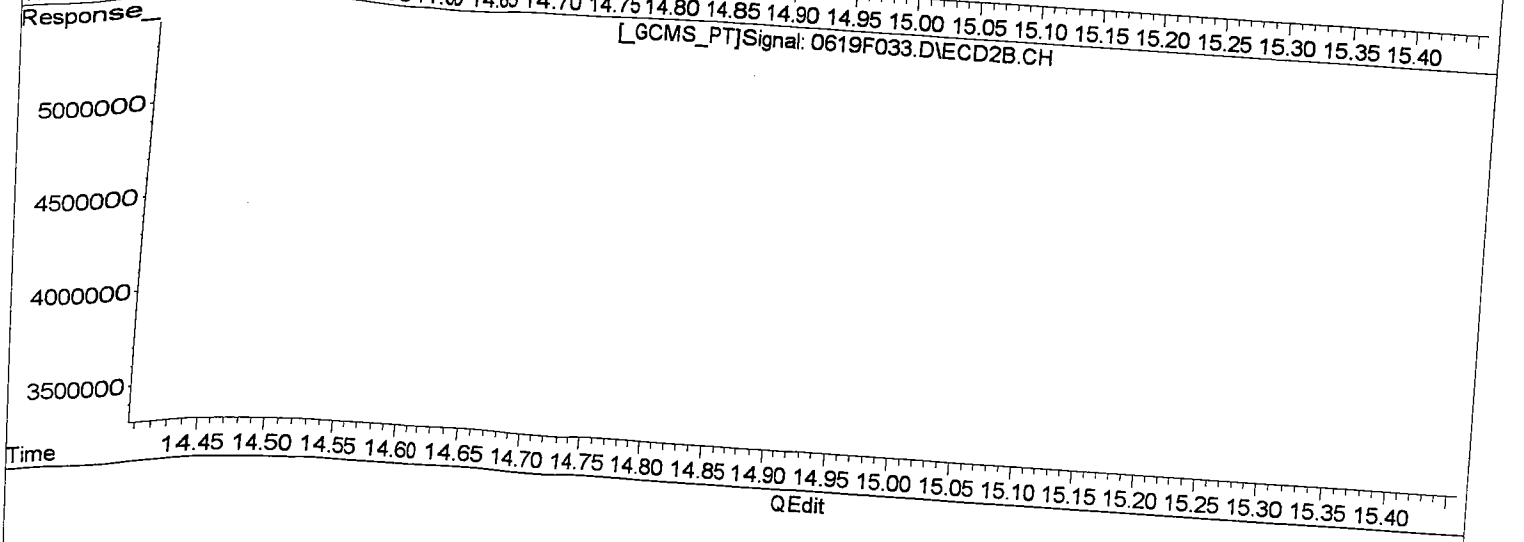
0619F033.D 061107-8081.M Thu Jun 21 12:01:07 2007

Qu ion Report (Qedit)

Sal #1 GC23\DATA\0 0619F033.D\ECD1A.CH
Shal #2 GC23\DATA\0 0619F033.D\ECD2B.CH
f On Jun 2007 Vial: 27
Sample G0706602-4 1934-004MS | 8081A PE Inst Operator: AKamawal
Disc EMIVOA GC\W0 \4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
Int File Sig 1 #1: RTEINT IntFile Signal #2: RTEINT2.P
Quant Time Jun 21 10:49 Quant Results File: 061107-8081.RES

Method : J:\GC23\ S\061107-8081.M (RTE Integrator)
Title : Organoch e Pesticides
Last Upda : Thu Jun :48:13 2007
Response : Multiple l Calibration





(30) Toxaphene {6}

14.88min 2049.454ug/L

response 3722820

(30) Toxaphene {6} #2

14.11min 589.297ug/L

response 3180394

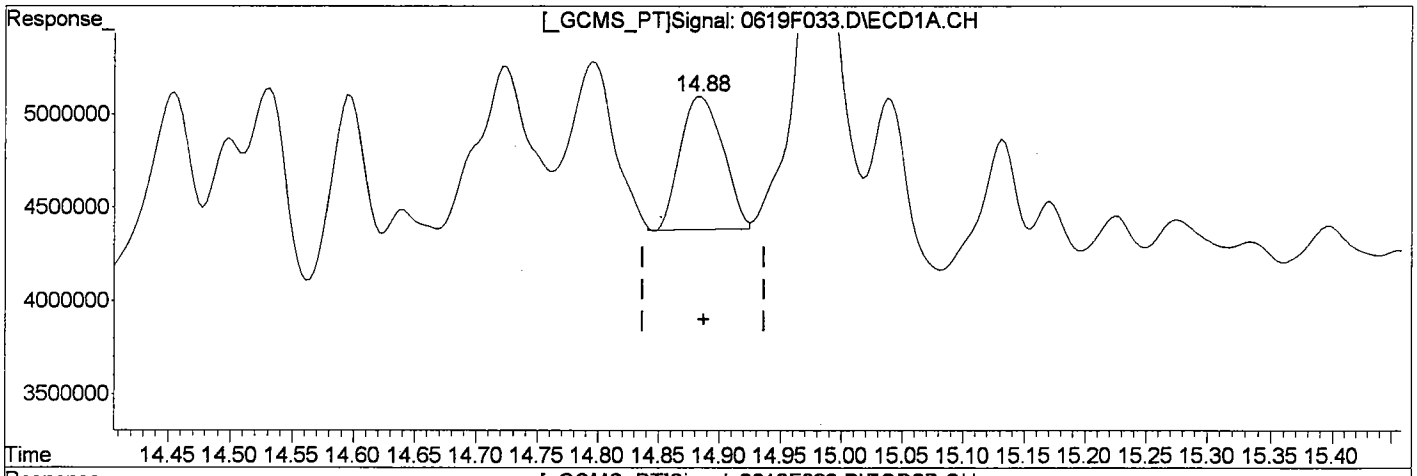
(+) = Expected Retention Time

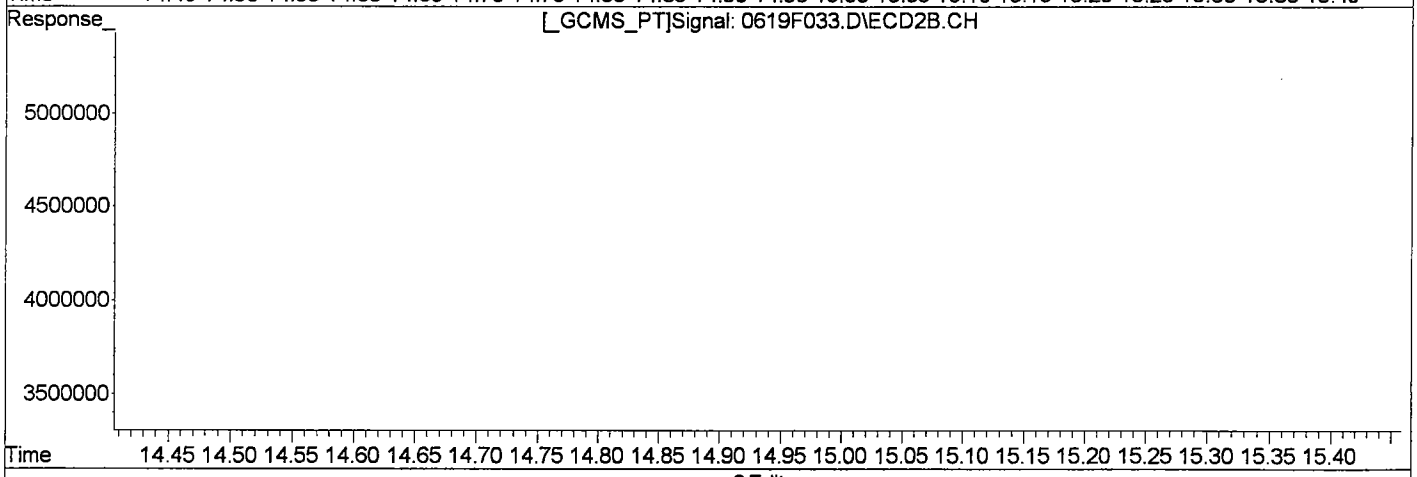
0619F033.D 061107-8081.M Thu Jun 21 12:01:22 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061907\0619F033.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061907\0619F033.D\ECD2B.CH
Acq On : 20 Jun 2007 11:17 pm Operator: AKamawal
Sample : KWG0706602-4 | K0704934-004MS | 8081A PE Inst : GC23
Misc : SEMIVOA GC\W0706602\4-MS.H | F=2 D=1 A=9 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.88min 963.360ug/L m

response 1749938

(30) Toxaphene {6} #2

14.11min 589.297ug/L

response 3180394

After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F033.D 061107-8081.M Thu Jun 21 12:01:27 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706602-2	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.178**		0.010	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	**0.174**		0.010	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	**0.178**		0.010	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	**0.199**		0.010	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	**0.163**		0.010	1	06/13/07	06/20/07	KWG0706602	
Aldrin	**0.0867**		0.010	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	**0.170**		0.010	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	**0.170**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	**0.141**		0.010	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	**0.170**		0.010	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	**0.170**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	**0.160**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin	**0.181**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	**0.148**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	**0.167**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	**0.135**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	**0.160**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	**0.175**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	**0.169**		0.010	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	**0.176**		0.010	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	**1.43**		0.50	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	68	16-111	06/20/07	Acceptable
Decachlorobiphenyl	85	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F025.D
Lab ID: KWG0706602-2
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 19:46
Date Quantitated: 06/21/2007 11:46
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: LC 06/21/07
Secondary Review: [illegible]

Exception Report

Data File: J:\GC23\DATA\061907\0619F025.D\0619F025C.D
Lab ID: KWG0706602-2
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 19:46
Date Quantitated: 06/21/2007 11:46
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608555	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F025.D\0619F025c.d			**Vial:**	19
Acqu Date:	06/20/2007 19:46	**Quant Date:**	06/21/2007 11:46	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.41		12777938	12242846	63.86	68.31			68OK
						%Recovery =	64OK	68OK	Limits =	16-111	
Decachlorobiphenyl	17.13	-0.01	16.00	-0.01	22445864	15624810	80.88	84.60			85OK
						%Recovery =	81OK	85OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.21	-0.01	8.44		20313334	20963682m	88.18	89.09	0.176	0.178	0.178
Hexachlorobenzene	9.34	-0.01	8.27	-0.01	14071729	14127115	57.26	57.55	0.115	0.115	0.115
beta-BHC	10.22	-0.01	9.46		8955723m	9396936	83.53	87.17	0.167	0.174	0.174
gamma-BHC (Lindane)	9.76		9.05	-0.01	18779942	19852117	86.63	89.21	0.173	0.178	0.178
delta-BHC	10.64		9.90	-0.01	19078745	21067035	96.67	99.50	0.193	0.199	0.199
Heptachlor	10.73	-0.01	9.63		16425938	18453366	81.57	81.35	0.163	0.163	0.163
Aldrin	11.25		10.12	-0.01	7277261	8632659	41.90	43.35	0.0838	0.0867	0.0867
Isodrin	11.77	-0.01	10.77		5218394	6194278	35.22	35.87	0.0704	0.0717	0.0717
Heptachlor Epoxide	11.94	-0.01	10.98		14119923	17085032	83.08	85.06	0.166	0.170	0.170
gamma-Chlordane	12.44	-0.01	11.33	-0.01	13756635	17232914	82.10	84.85	0.164	0.170	0.170
Endosulfan I	12.57	-0.01	11.56	-0.01	10603867	13101016	69.12	70.71	0.138	0.141	0.141
alpha-Chlordane	12.51	-0.01	11.48	-0.01	13651169	16747096	81.89	84.95	0.164	0.170	0.170
Dieldrin	12.97		12.00		13306916	16506084	80.69	84.83	0.161	0.170	0.170
4,4'-DDE	12.75	-0.01	11.80		11779589	14821418	77.08	80.12	0.154	0.160	0.160
Endrin	13.32		12.47	-0.01	12878687	15881742	83.48	90.58	0.167	0.181	0.181
Endosulfan II	13.72	-0.01	12.87	-0.01	13243639m	13435031	72.14	74.05	0.144	0.148	0.148
4,4'-DDD	13.53	-0.01	12.66	-0.01	11734467	12736867	78.19	83.46	0.156	0.167	0.167
Endrin Aldehyde	13.88	-0.01	13.21	-0.01	10894889	10178382	65.73	67.39	0.131	0.135	0.135

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F025.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F025.D\0619F025c.d			**Vial:**	19
Acqu Date:	06/20/2007 19:46	**Quant Date:**	06/21/2007 11:46	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.31	-0.01	13.51	-0.01	16761530	14551353	74.55	80.20	0.149	0.160	0.160
4,4'-DDT	13.99	-0.01	13.07	-0.01	14892219	14234043	80.85	87.30	0.162	0.175	0.175
Endrin Ketone	14.93	-0.01	14.41		23525943	17724666	78.85	84.37	0.158	0.169	0.169
Methoxychlor	14.64	-0.01	14.08	-0.01	10741381	8268854	79.65	87.90	0.159	0.176	0.176
Toxaphene					0	0	0.0000	0.0000	0.028U	0.028U	NR
Toxaphene {1}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}					0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane					0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}					0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos					0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane					0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE					0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor					0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD					0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor					0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT					0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex					0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane					0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene					0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Lab Control Spike Summary Report

Lab Control Spike Information — *ListJoinID :* LJ8064

Data File:	J:\GC23\DATA\061907\0619F025.D\0619F025C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-2	**Dilution:**	1
Client ID:	Lab Control Sample	**Units:**	ug/L
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 19:46
Matrix:	WATER	**Quant Date:**	06/21/2007 11:46

Duplicate Lab Control Spike Information

Data File:	J:\GC23\DATA\061907\0619F026.D\0619F026C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-3	**Dilution:**	1
Client ID:	Duplicate Lab Control Sample	**Units:**	ug/L
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 20:12
Matrix:	WATER	**Quant Date:**	06/21/2007 11:47

	LCS			DLCS					
Parameter Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.178	0.200	89	0.183	0.200	92	40-135	3	30
beta-BHC	0.174	0.200	87	0.176	0.200	88	40-129	1	30
gamma-BHC (Lindane)	0.178	0.200	89	0.183	0.200	92	38-138	3	30
delta-BHC	0.199	0.200	99	0.206	0.200	103	45-147	3	30
Heptachlor	0.163	0.200	81	0.172	0.200	86	36-130	6	30
Aldrin	0.0867	0.200	43	0.0890	0.200	45	10-128	3	30
Heptachlor Epoxide	0.170	0.200	85	0.175	0.200	87	47-126	3	30
gamma-Chlordane	0.170	0.200	85	0.175	0.200	87	44-126	3	30
Endosulfan I	0.141	0.200	71	0.146	0.200	73	27-119	3	30
alpha-Chlordane	0.170	0.200	85	0.175	0.200	88	45-127	3	30
Dieldrin	0.170	0.200	85	0.174	0.200	87	48-126	3	30
4,4'-DDE	0.160	0.200	80	0.167	0.200	83	38-137	4	30
Endrin	0.181	0.200	91	0.188	0.200	94	50-139	4	30
Endosulfan II	0.148	0.200	74	0.153	0.200	77	31-128	3	30
4,4'-DDD	0.167	0.200	83	0.174	0.200	87	41-139	4	30
Endrin Aldehyde	0.135	0.200	67	0.149	0.200	75	32-113	10	30
Endosulfan Sulfate	0.160	0.200	80	0.166	0.200	83	42-126	3	30
4,4'-DDT	0.175	0.200	87	0.182	0.200	91	49-136	4	30
Endrin Ketone	0.169	0.200	84	0.175	0.200	87	43-133	3	30
Methoxychlor	0.176	0.200	88	0.181	0.200	91	43-143	3	30
Toxaphene	1.43	2.00	72	1.44	2.00	72	46-158	1	30

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:09 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.41	12777938	12242846	63.860	68.313
24)	s	Decachlorobiphen	17.13	16.00	22445864	15624810	80.883	84.603
		Target Compounds						
2)		alpha-BHC	9.21	8.44	20313334	20963682	88.184	89.091m
3)		Hexachlorobenzen	9.34	8.27	14071729	14127115	57.258	57.548
4)		beta-BHC	10.22	9.46	8955723	9396936	83.532m	87.167
5)		gamma-BHC (Linda	9.76	9.05	18779942	19852117	86.632	89.212
6)		delta-BHC	10.64	9.90	19078745	21067035	96.671	99.497
7)		Heptachlor	10.73	9.63	16425938	18453366	81.573	81.349
8)		Aldrin	11.25	10.12	7277261	8632659	41.899	43.352
9)		Isodrin	11.77	10.77	5218394	6194278	35.220	35.872
10)		Heptachlor Epoxi	11.94	10.98	14119923	17085032	83.082	85.064
11)		gamma-Chlordane	12.44	11.33	13756635	17232914	82.103	84.854
12)		Endosulfan I	12.57	11.56	10603867	13101016	69.118	70.709
13)		alpha-Chlordane	12.51	11.48	13651169	16747096	81.893	84.946
14)		Dieldrin	12.97	12.00	13306916	16506084	80.692	84.830
15)		4,4'-DDE	12.75	11.80	11779589	14821418	77.079	80.121
16)		Endrin	13.32	12.47	12878687	15881742	83.480	90.582
17)		Endosulfan II	13.72	12.87	13243639	13435031	72.138m	74.050
18)		4,4'-DDD	13.53	12.66	11734467	12736867	78.186	83.459
19)		Endrin Aldehyde	13.88	13.21	10894889	10178382	65.733	67.389
20)		Endosulfan Sulfa	14.31	13.51	16761530	14551353	74.546	80.198
21)		4,4'-DDT	13.99	13.07	14892219	14234043	80.850	87.304
22)		Endrin Ketone	14.93	14.41	23525943	17724666	78.848	84.374
23)		Methoxychlor	14.64	14.08	10741381	8268854	79.648	87.904

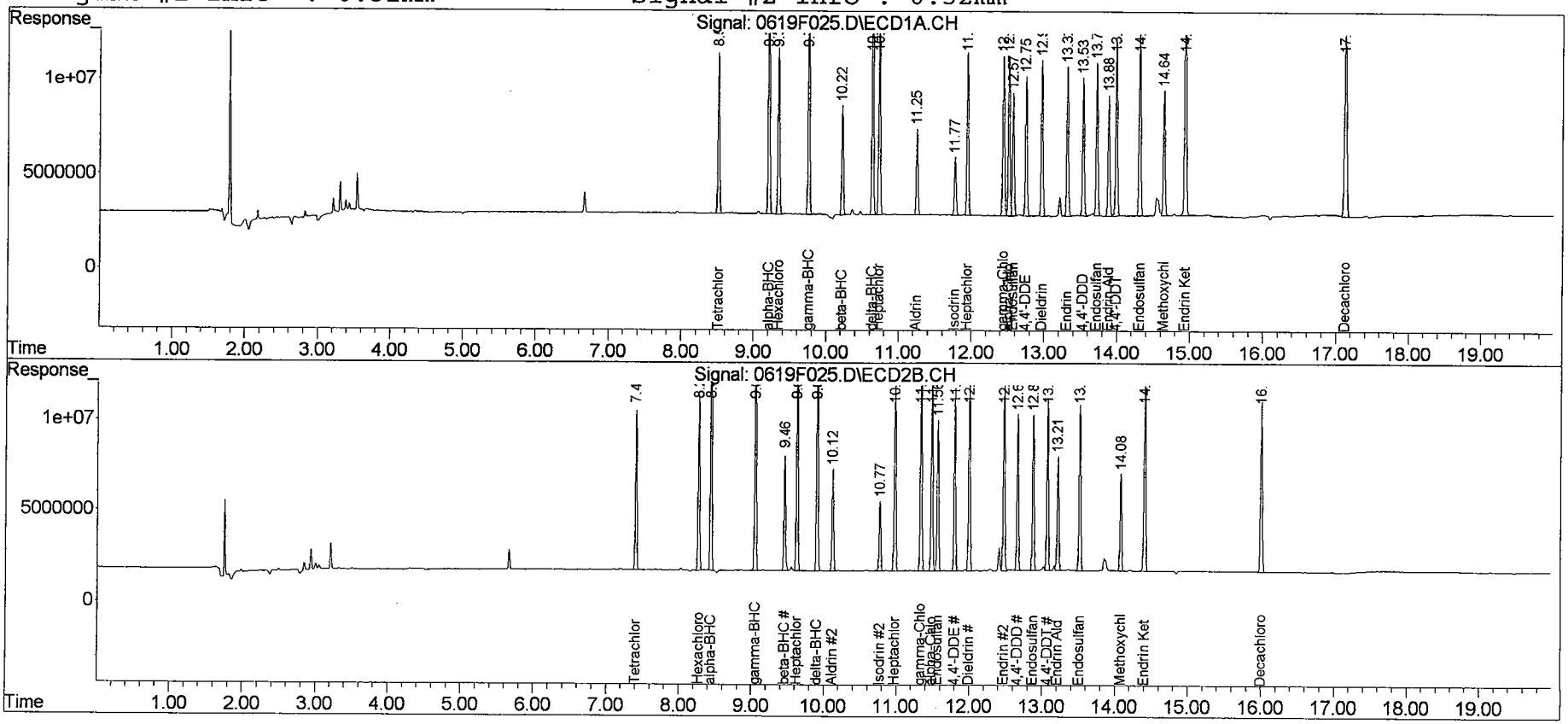
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:46 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

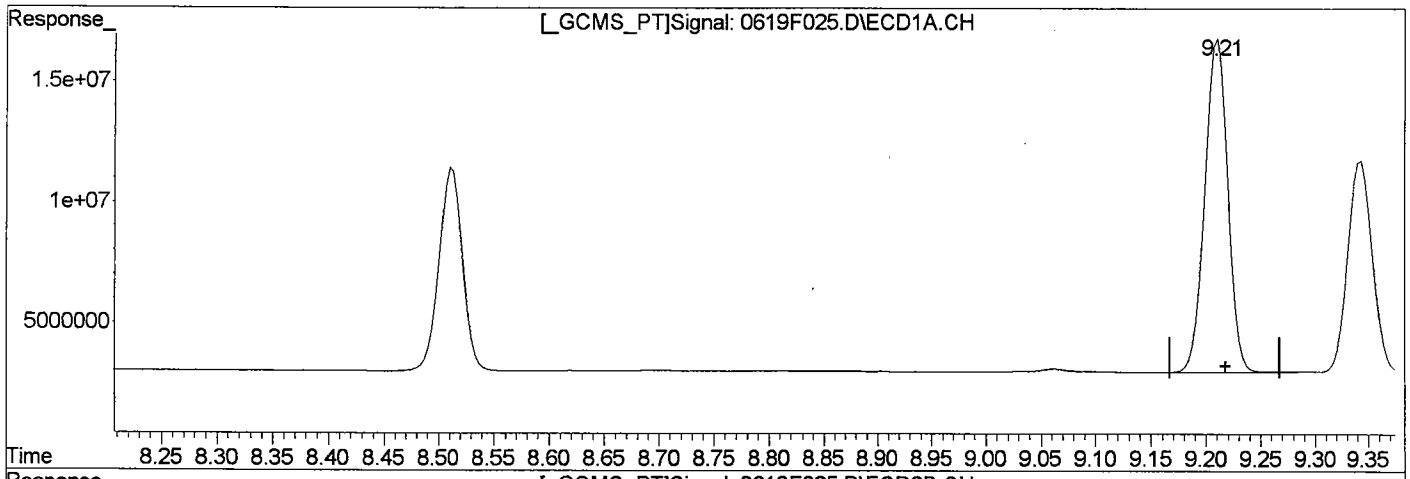
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

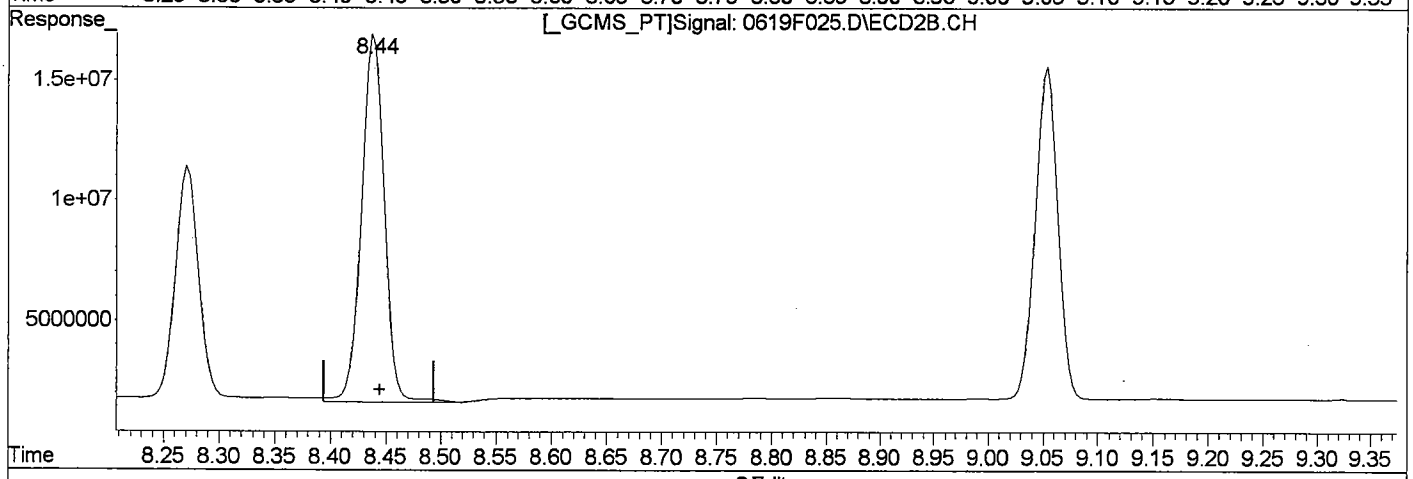


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC

9.21min 88.184ug/L

response 20313334

(2) alpha-BHC #2

8.44min 92.778ug/L

response 21831282

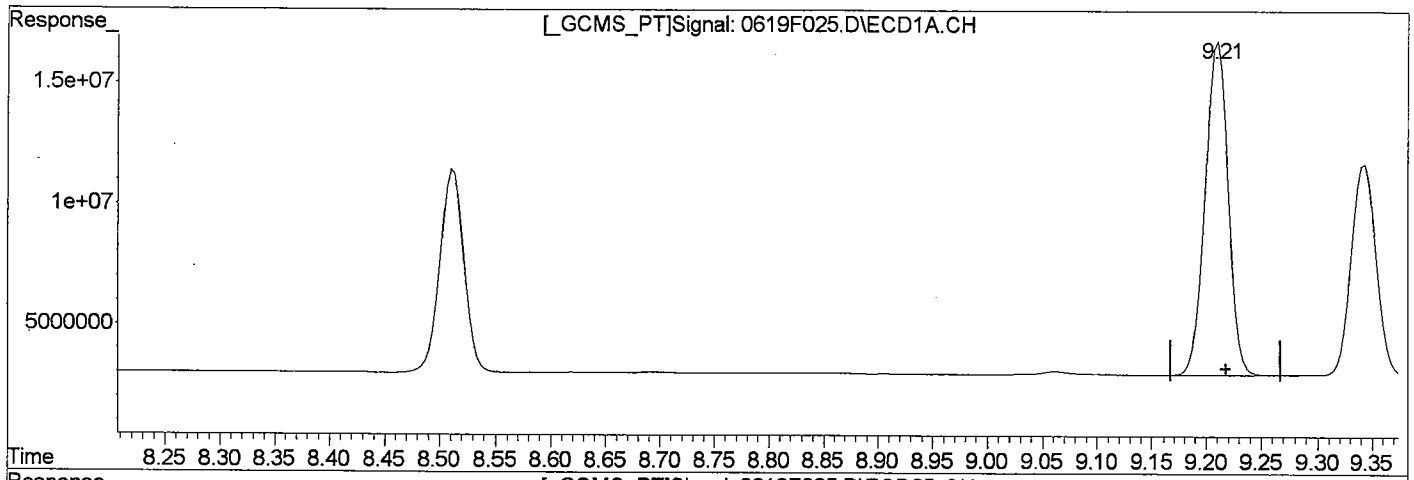
JUN 2 2007

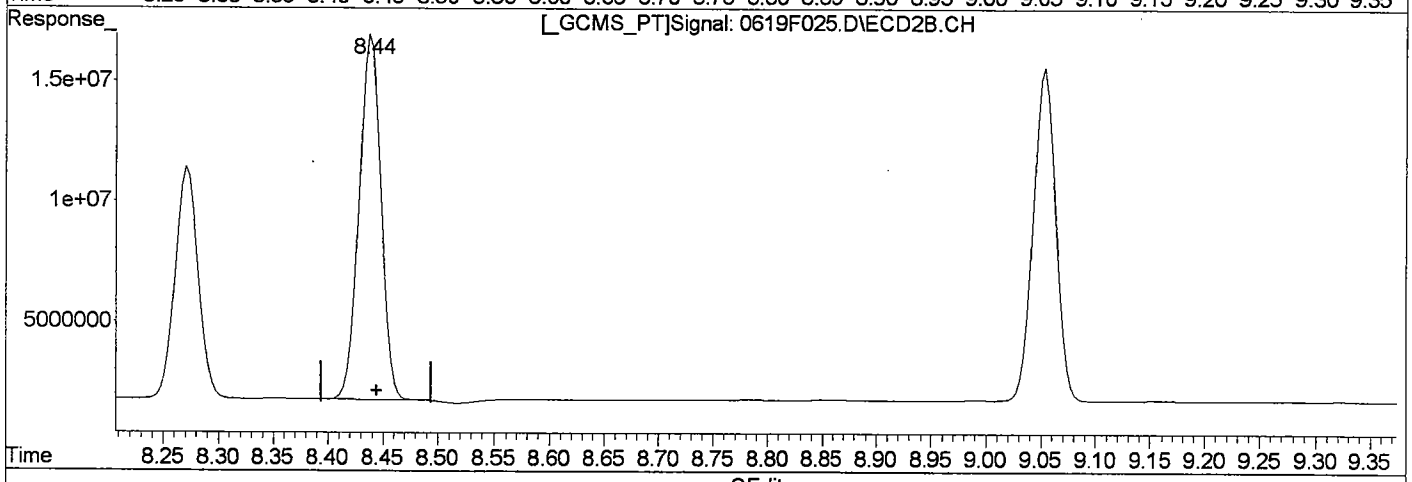
(+) = Expected Retention Time
0619F025.D 061107-8081.M Thu Jun 21 11:45:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC
9.21min 88.184ug/L
response 20313334

(2) alpha-BHC #2
8.44min 89.091ug/L m
response 20963682

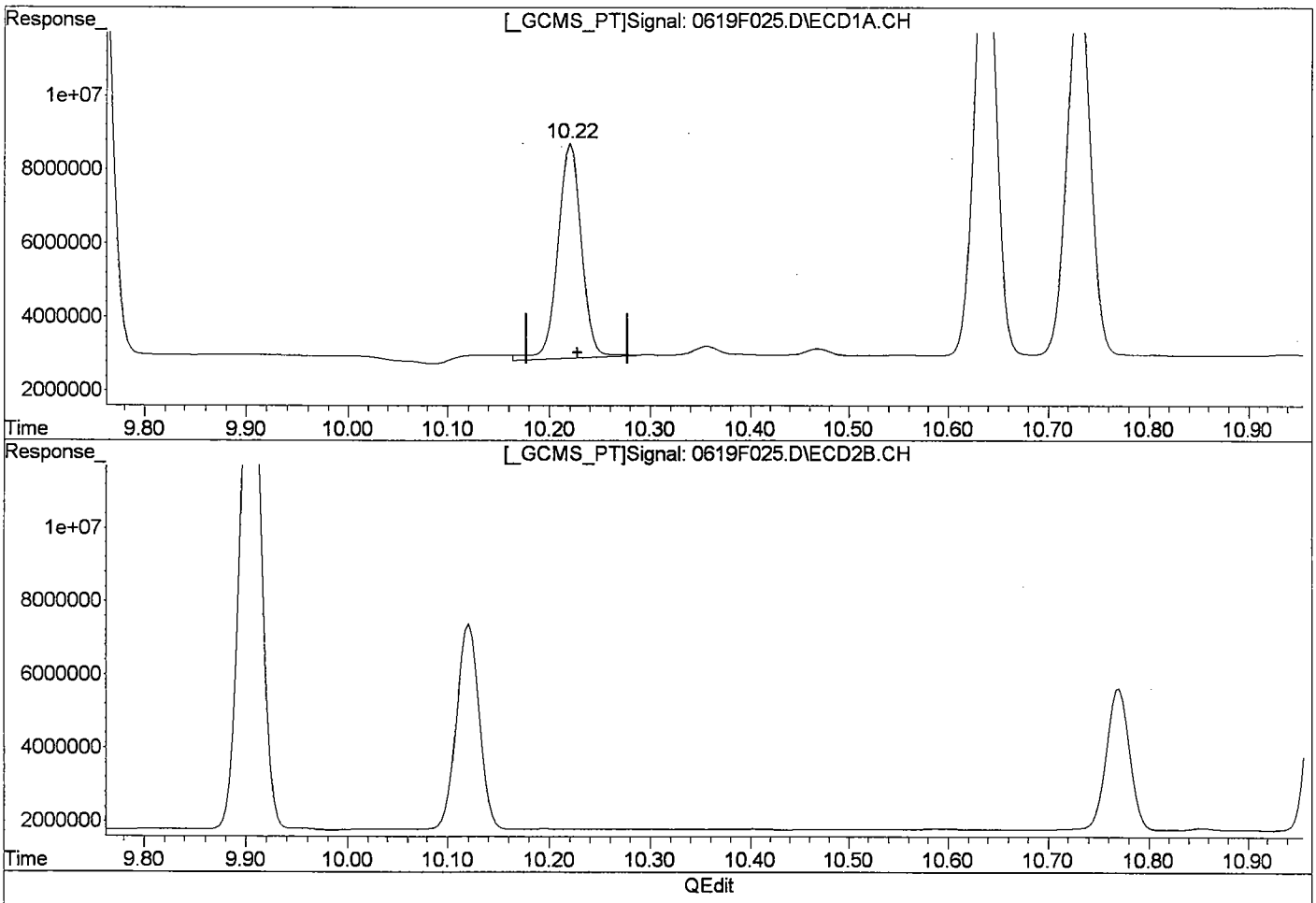
After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F025.D 061107-8081.M Thu Jun 21 11:45:29 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(4) beta-BHC

10.22min 88.128ug/L

response 9448478

(4) beta-BHC #2

9.46min 87.167ug/L

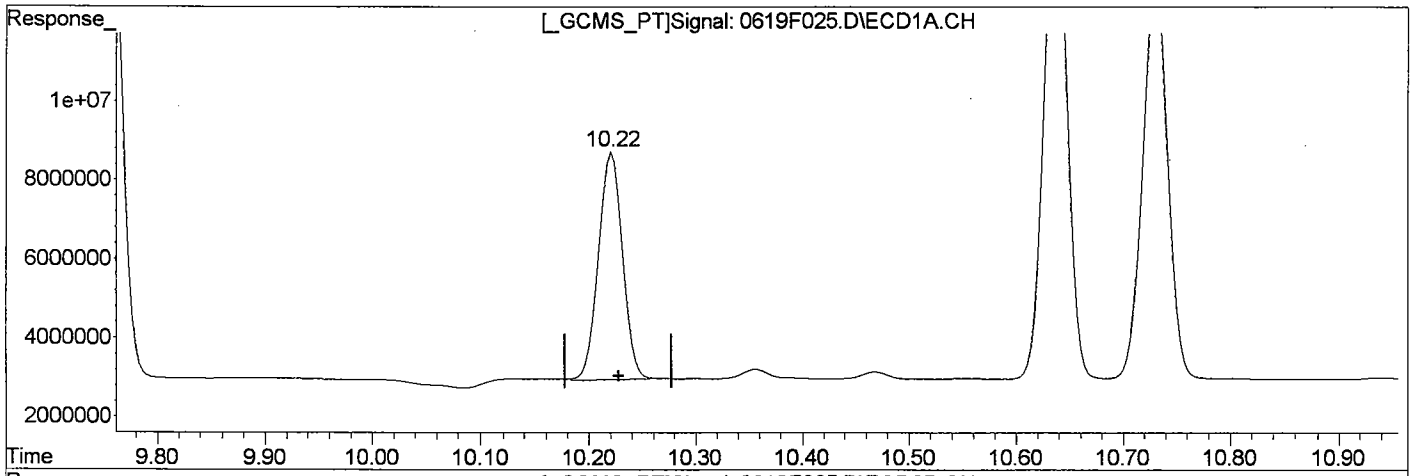
response 9396936

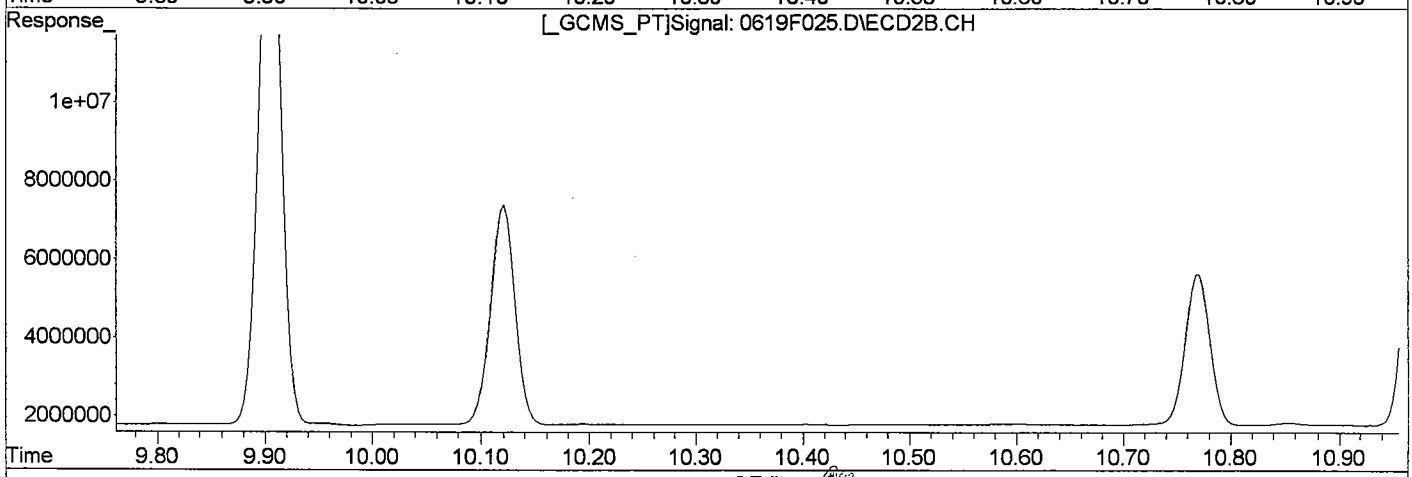
(+) = Expected Retention Time
0619F025.D 061107-8081.M Thu Jun 21 11:45:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

After initials

JUN 21 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(4) beta-BHC

10.22min 83.532ug/L m

response 8955723

(4) beta-BHC #2

9.46min 87.167ug/L

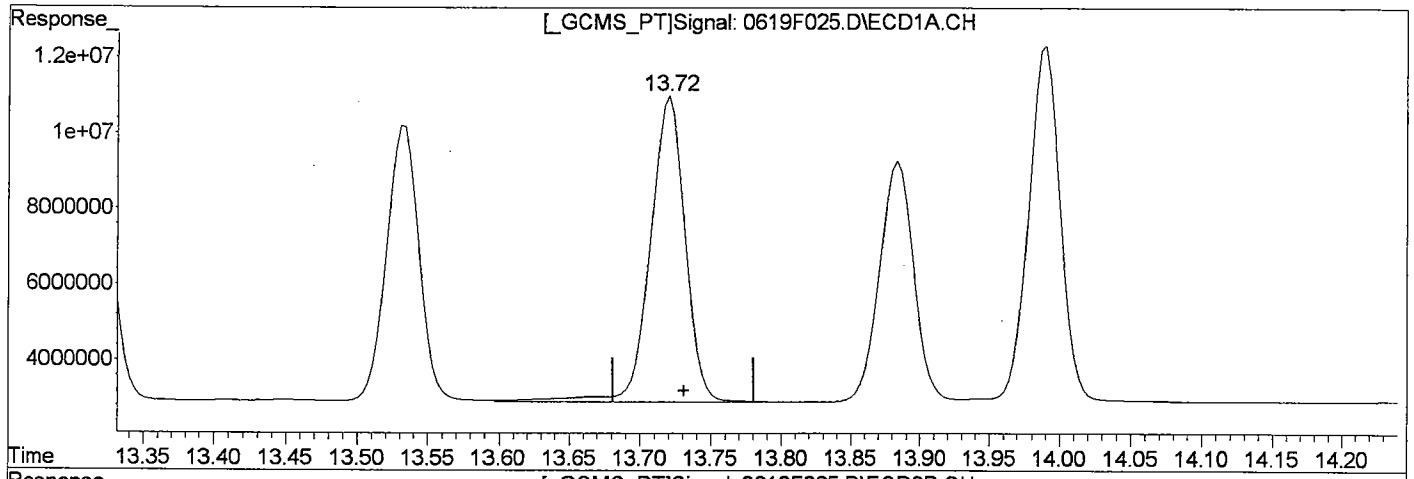
response 9396936

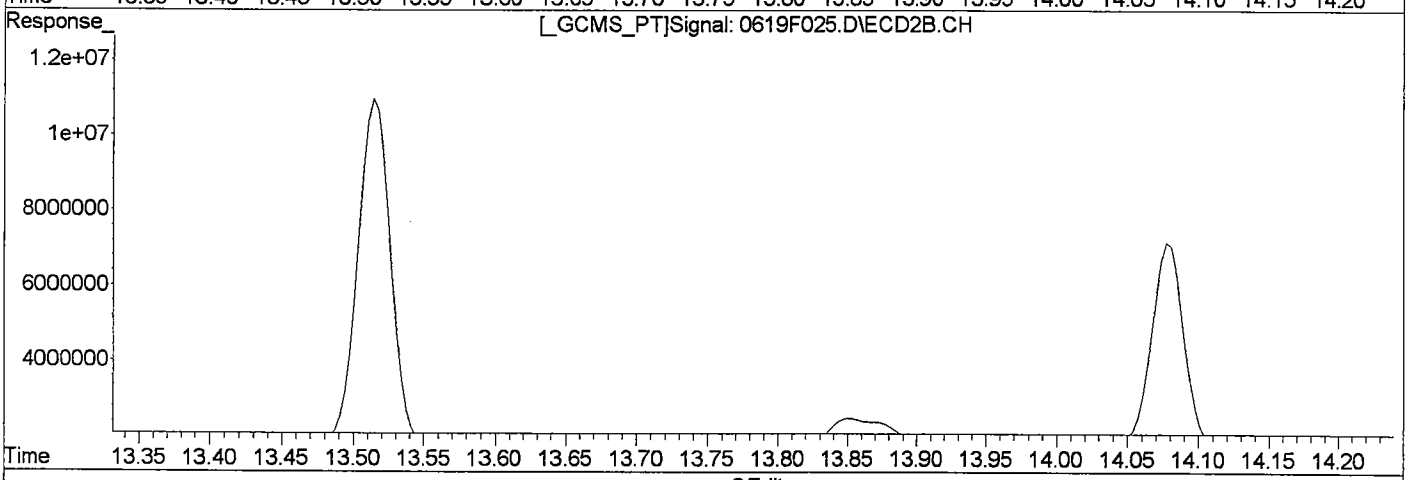
(+) = Expected Retention Time
0619F025.D 061107-8081.M Thu Jun 21 11:45:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 75.557ug/L

response 13871309

(17) Endosulfan II #2

12.87min 74.050ug/L

response 13435031

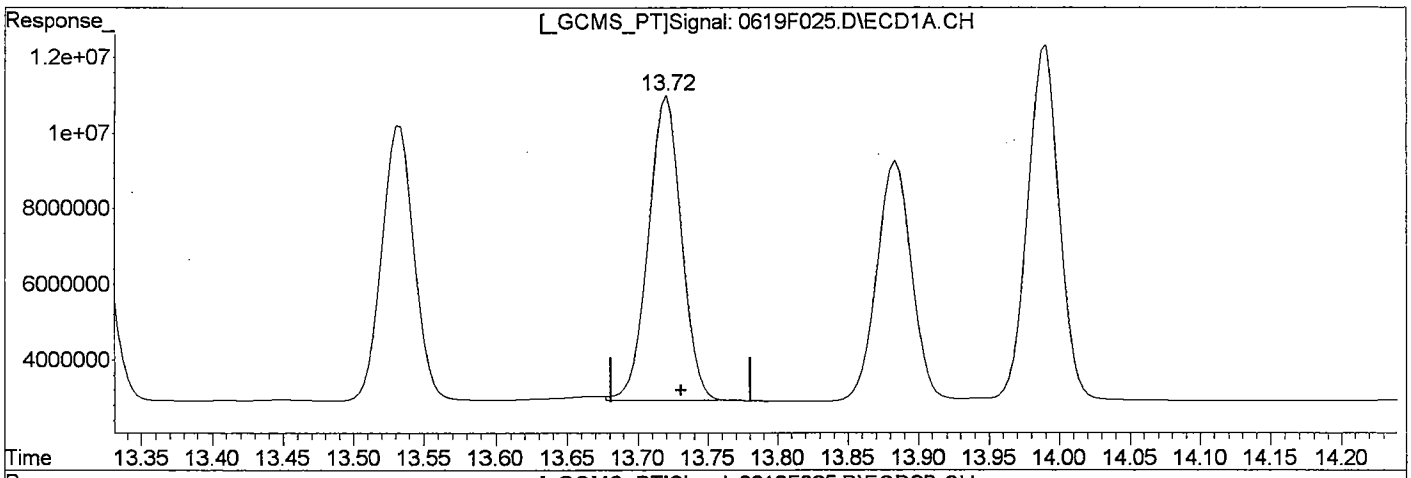
(+) = Expected Retention Time

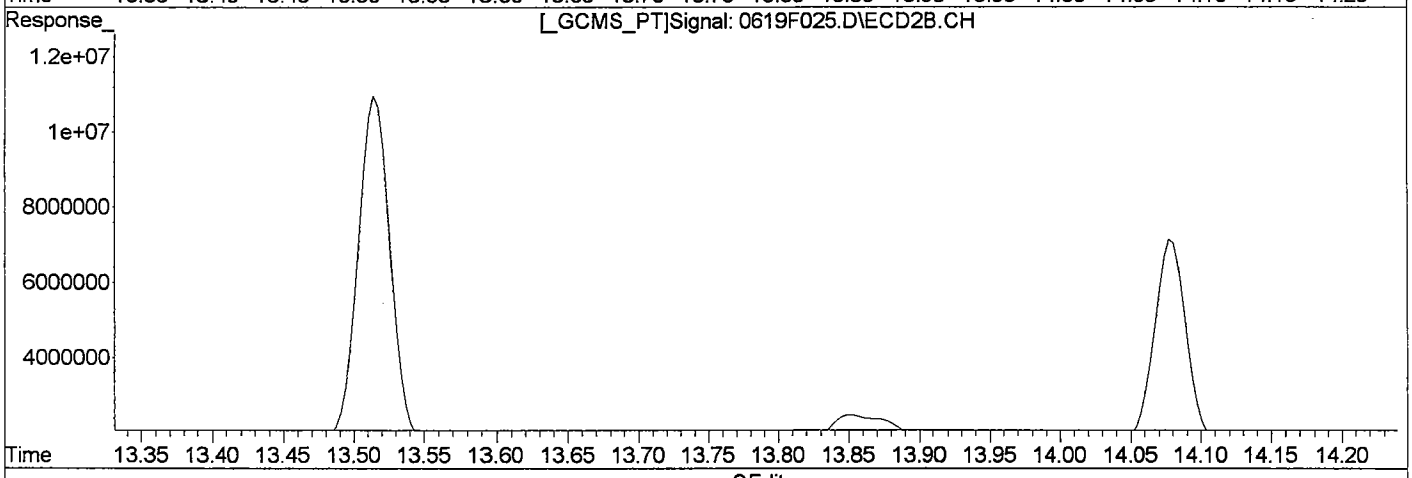
0619F025.D 061107-8081.M Thu Jun 21 11:46:13 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F025.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061907\0619F025.D\ECD2B.CH
Acq On : 20 Jun 2007 7:46 pm Operator: AKamawal
Sample : KWG0706602-2 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\2-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 72.138ug/L m

response 13243639

(17) Endosulfan II #2

12.87min 74.050ug/L

response 13435031

After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F025.D 061107-8081.M Thu Jun 21 11:46:24 2007

Exception Report

Data File: J:\GC23\DATA\061907\0619F027.D
Lab ID: KWG0706602-2
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 20:39
Date Quantitated: 06/21/2007 11:50
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	JW
Continuing Calibration Recovery (Closing)	Toxaphene	18.3	NA	15	[illegible]

Primary Review: LC 6/21/07
Secondary Review: [illegible] 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F027.D\0619F027C.D
Lab ID: KWG0706602-2
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 20:39
Date Quantitated: 06/21/2007 11:50
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: CC 6/21/07

Secondary Review: MO 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608555	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F027.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F027.D\0619F027c.d			**Vial:**	21
Acqu Date:	06/20/2007 20:39	**Quant Date:**	06/21/2007 11:50	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.52	7.41	13030134	12371344	65.12	69.03			NR
				%Recovery =	65OK	69OK	Limits =	16-111	
Decachlorobiphenyl	17.13 -0.01	16.01	23074908	16070139	83.15	87.01			NR
				%Recovery =	83OK	87OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000	0.00033U	0.00033U	NR
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC			0d	0d	0.0000	0.0000	0.00083U	0.00083U	NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000	0.00044U	0.00044U	NR
delta-BHC			0d	0d	0.0000	0.0000	0.00057U	0.00057U	NR
Heptachlor			0d	0d	0.0000	0.0000	0.00036U	0.00036U	NR
Aldrin			0d	0d	0.0000	0.0000	0.00040U	0.00040U	NR
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide			0d	0d	0.0000	0.0000	0.00032U	0.00032U	NR
gamma-Chlordane			0d	0d	0.0000	0.0000	0.00032U	0.00032U	NR
Endosulfan I			0d	0d	0.0000	0.0000	0.00044U	0.00044U	NR
alpha-Chlordane			0d	0d	0.0000	0.0000	0.0040U	0.0040U	NR
Dieldrin			0d	0d	0.0000	0.0000	0.00035U	0.00035U	NR
4,4'-DDE			0d	0d	0.0000	0.0000	0.00036U	0.00036U	NR
Endrin			0d	0d	0.0000	0.0000	0.00068U	0.00068U	NR
Endosulfan II			0d	0d	0.0000	0.0000	0.00040U	0.00040U	NR
4,4'-DDD			0d	0d	0.0000	0.0000	0.0015U	0.0015U	NR
Endrin Aldehyde			0d	0d	0.0000	0.0000	0.00046U	0.00046U	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F027.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F027.D\0619F027c.d			**Vial:**	21
Acqu Date:	06/20/2007 20:39	**Quant Date:**	06/21/2007 11:50	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000	0.00047U	0.00047U	NR
4,4'-DDT			0d	0d	0.0000	0.0000	0.00058U	0.00058U	NR
Endrin Ketone			0d	0d	0.0000	0.0000	0.00066U	0.00066U	NR
Methoxychlor			0d	0d	0.0000	0.0000	0.00093U	0.00093U	NR
Toxaphene			0	0	923.32ccv	715.43	1.8	1.4	**1.8**
Toxaphene {1}	13.16	12.62	1105003m	838338	781.69	700.28	1.56	1.40	
Toxaphene {2}	13.23 +0.01	12.71	1202081m	3408938	1,037	814.18	2.07	1.63	
Toxaphene {3}	13.37	13.57	2017150m	1946063	1,002	751.66	2.00	1.50	
Toxaphene {4}	14.05	13.69	2895044m	564124m	991.18	825.43	1.98	1.65	
Toxaphene {5}	14.37	13.92 +0.01	1359251m	2565490m	831.84	651.10	1.66	1.30	
Toxaphene {6}	14.89	14.11	1627258m	2968000m	895.82	549.94	1.79	1.10	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Lab Control Spike Summary Report

Lab Control Spike Information — *ListJoinID :* LJ8064

Data File:	J:\GC23\DATA\061907\0619F025.D\0619F025C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-2	**Dilution:**	1
Client ID:	Lab Control Sample	**Units:**	ug/L
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 19:46
Matrix:	WATER	**Quant Date:**	06/21/2007 11:46

Duplicate Lab Control Spike Information

Data File:	J:\GC23\DATA\061907\0619F026.D\0619F026C.D	**Instrument:**	GC23
Lab ID:	KWG0706602-3	**Dilution:**	1
Client ID:	Duplicate Lab Control Sample	**Units:**	ug/L
Prod Code:	8081A PEST_OC	**Acqu Date:**	06/20/2007 20:12
Matrix:	WATER	**Quant Date:**	06/21/2007 11:47

	LCS			DLCS					
Parameter Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
alpha-BHC	0.178	0.200	89	0.183	0.200	92	40-135	3	30
beta-BHC	0.174	0.200	87	0.176	0.200	88	40-129	1	30
gamma-BHC (Lindane)	0.178	0.200	89	0.183	0.200	92	38-138	3	30
delta-BHC	0.199	0.200	99	0.206	0.200	103	45-147	3	30
Heptachlor	0.163	0.200	81	0.172	0.200	86	36-130	6	30
Aldrin	0.0867	0.200	43	0.0890	0.200	45	10-128	3	30
Heptachlor Epoxide	0.170	0.200	85	0.175	0.200	87	47-126	3	30
gamma-Chlordane	0.170	0.200	85	0.175	0.200	87	44-126	3	30
Endosulfan I	0.141	0.200	71	0.146	0.200	73	27-119	3	30
alpha-Chlordane	0.170	0.200	85	0.175	0.200	88	45-127	3	30
Dieldrin	0.170	0.200	85	0.174	0.200	87	48-126	3	30
4,4'-DDE	0.160	0.200	80	0.167	0.200	83	38-137	4	30
Endrin	0.181	0.200	91	0.188	0.200	94	50-139	4	30
Endosulfan II	0.148	0.200	74	0.153	0.200	77	31-128	3	30
4,4'-DDD	0.167	0.200	83	0.174	0.200	87	41-139	4	30
Endrin Aldehyde	0.135	0.200	67	0.149	0.200	75	32-113	10	30
Endosulfan Sulfate	0.160	0.200	80	0.166	0.200	83	42-126	3	30
4,4'-DDT	0.175	0.200	87	0.182	0.200	91	49-136	4	30
Endrin Ketone	0.169	0.200	84	0.175	0.200	87	43-133	3	30
Methoxychlor	0.176	0.200	88	0.181	0.200	91	43-143	3	30
Toxaphene	1.43	2.00	72	1.44	2.00	72	46-158	1	30

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:12 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.52	7.41	13030134	12371344	65.120	69.030
24)	s	Decachlorobiphen	17.13	16.01	23074908	16070139	83.149	87.014
		Target Compounds						
25)		Toxaphene	13.16	12.62	1105003	838338	781.689m	700.276
26)		Toxaphene {2}	13.23	12.71	1202081	3408938	1037.233m	814.175
27)		Toxaphene {3}	13.37	13.57	2017150	1946063	1002.147m	751.656
28)		Toxaphene {4}	14.05	13.69	2895044	564124	991.178m	825.434m
29)		Toxaphene {5}	14.37	13.92	1359251	2565490	831.840m	651.103m
30)		Toxaphene {6}	14.89	14.11	1627258	2968000	895.824m	549.942m#

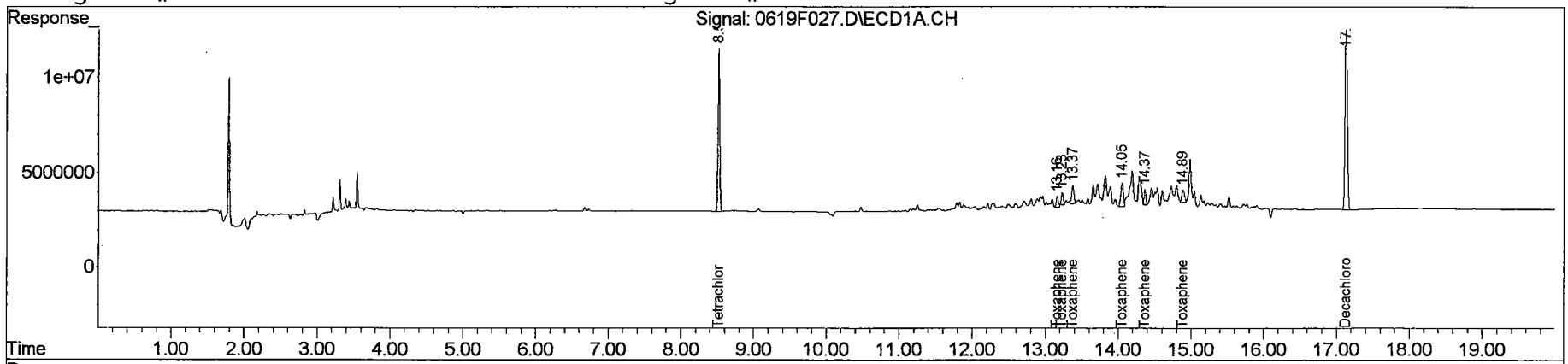
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

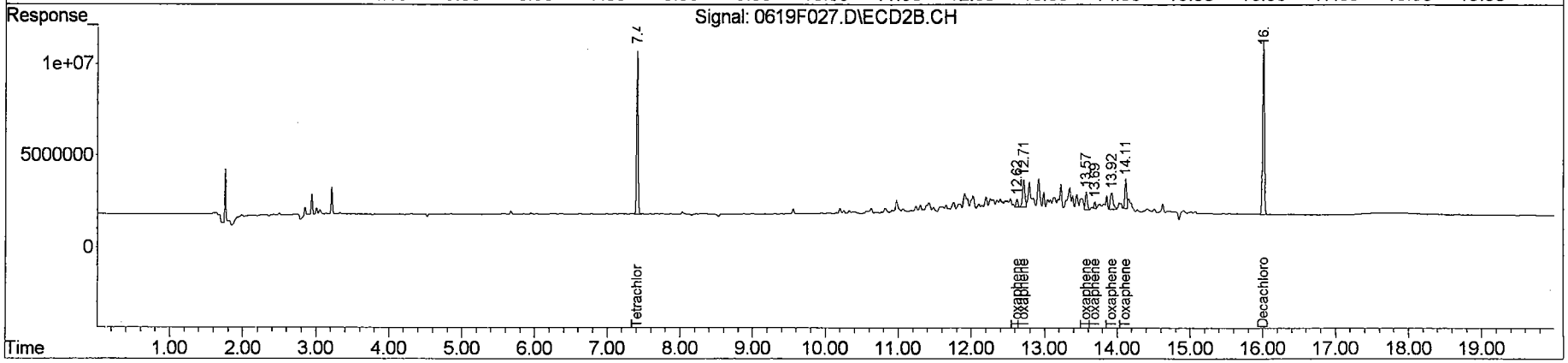
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:50 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

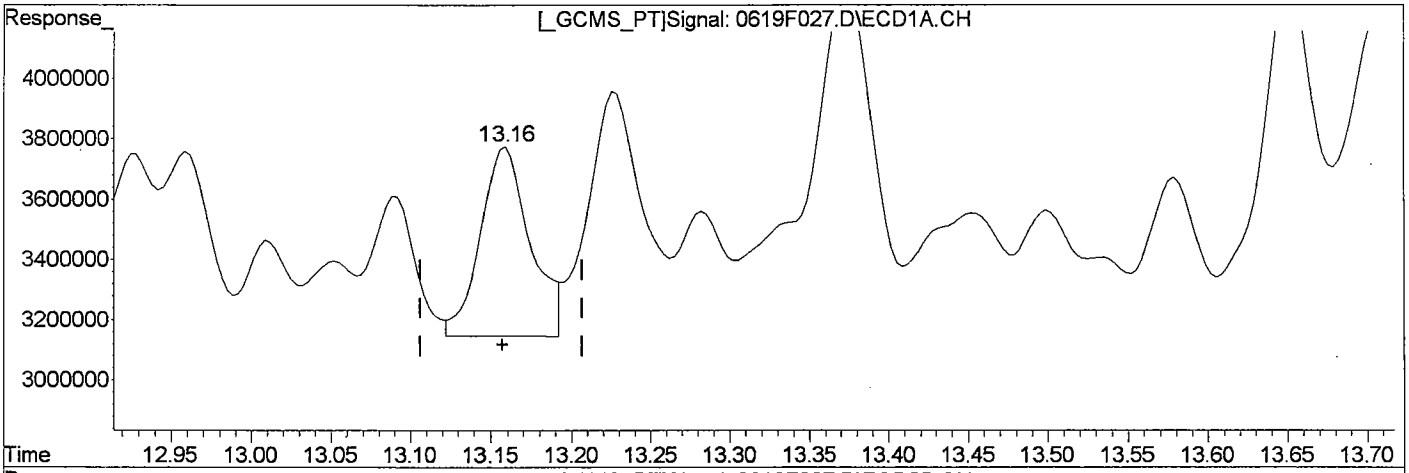


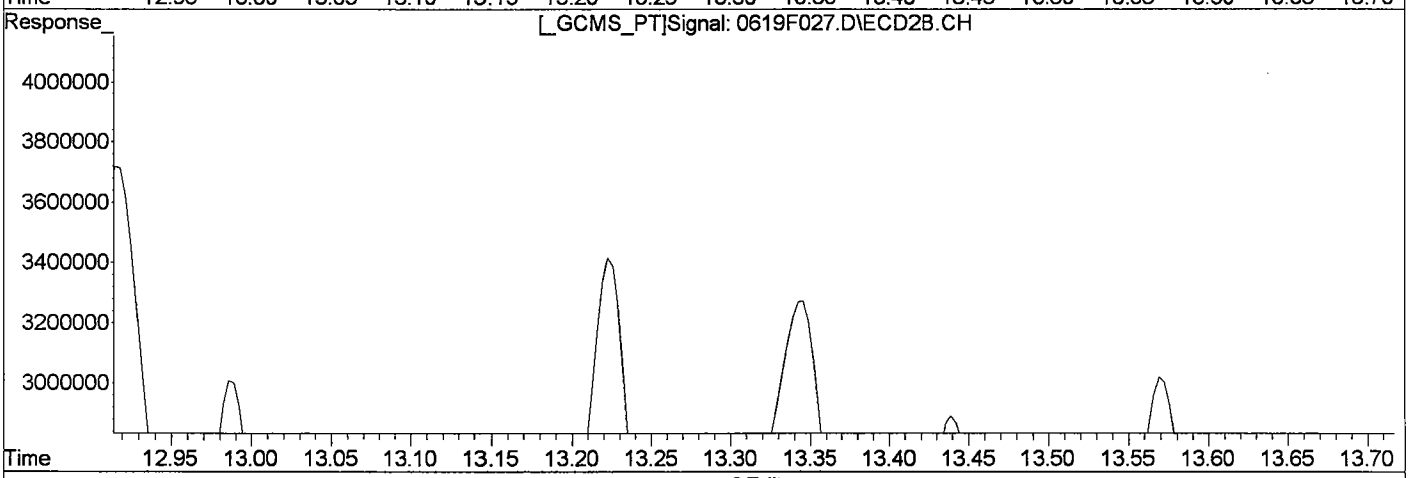


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 941.369ug/L

response 1330729

(25) Toxaphene #2

12.62min 700.276ug/L

response 838338

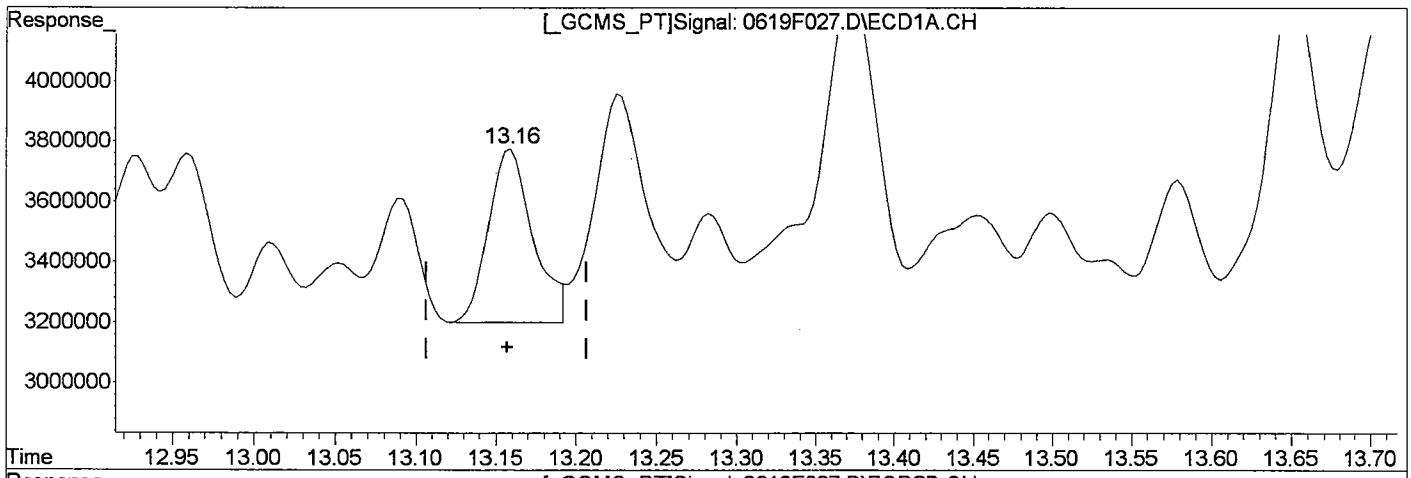
(+) = Expected Retention Time

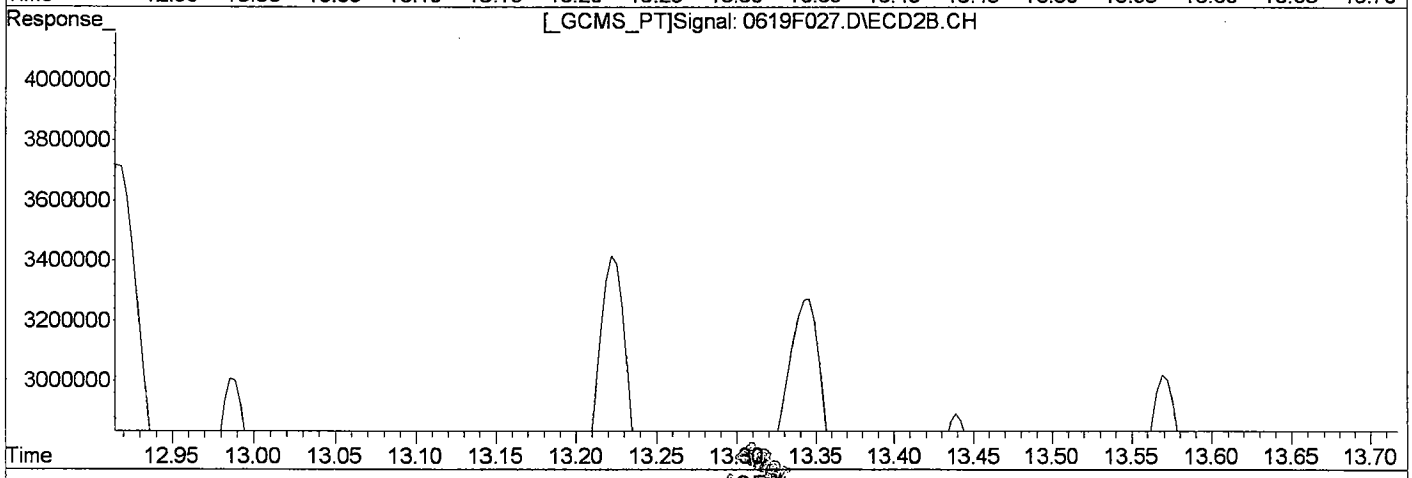
0619F027.D 061107-8081.M Thu Jun 21 11:48:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(25) Toxaphene

13.16min 781.689ug/L m

response 1105003

(25) Toxaphene #2

12.62min 700.276ug/L

response 838338

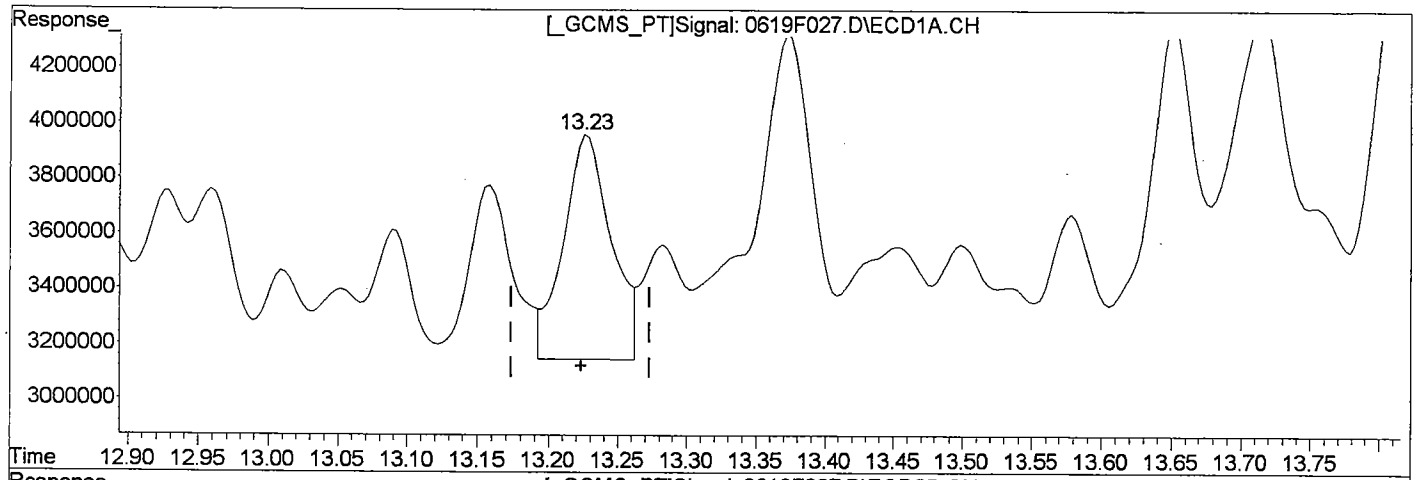
QEdit
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

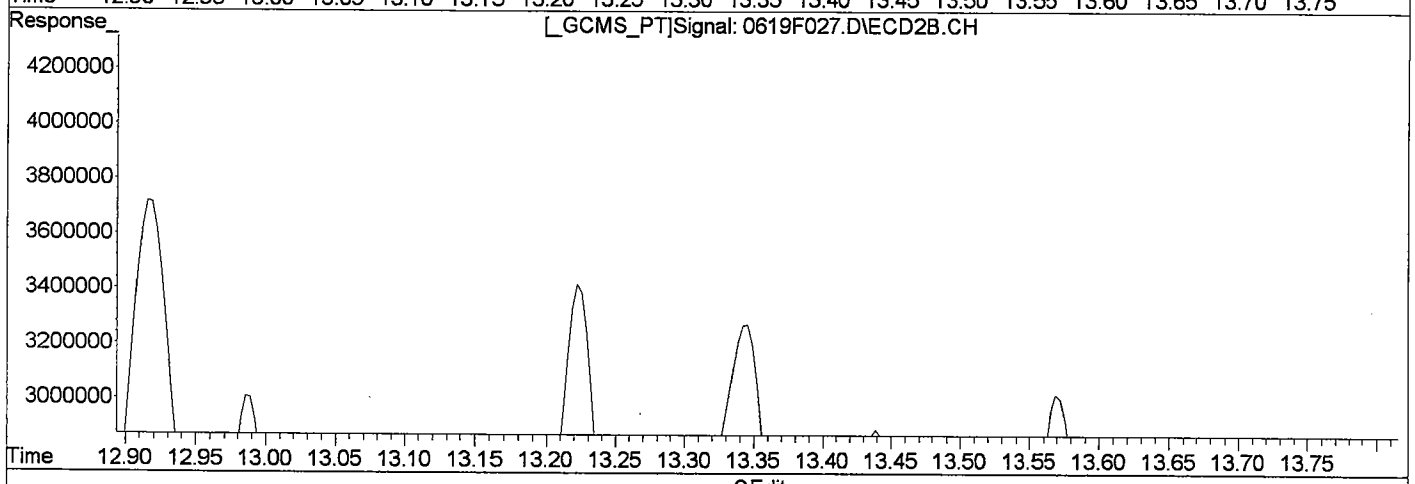
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:48:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 1695.455ug/L

response 1964914

(26) Toxaphene {2} #2

12.71min 814.175ug/L

response 3408938

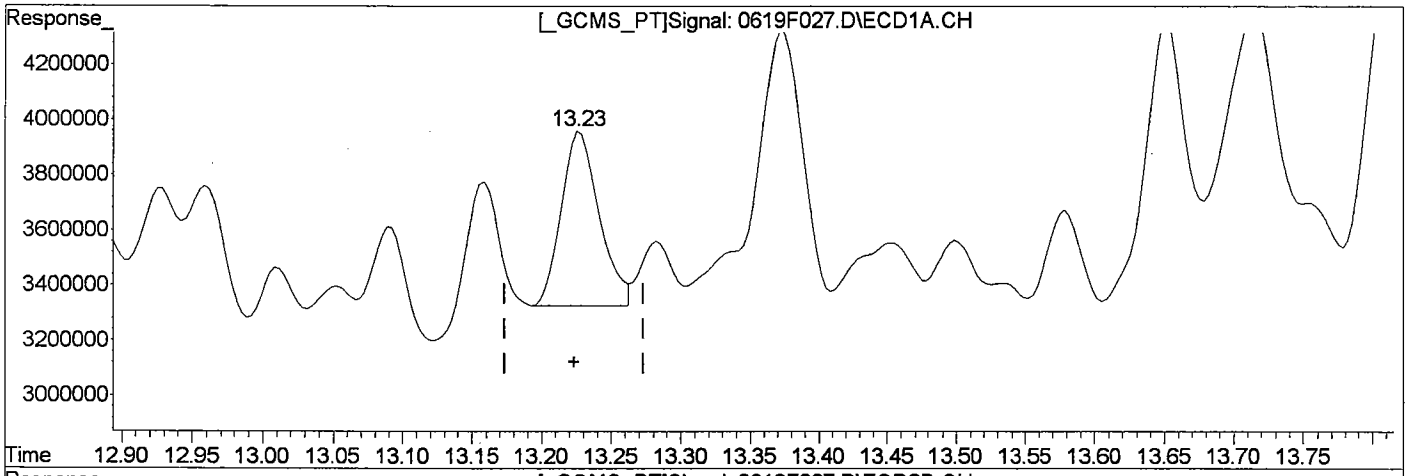
(+) = Expected Retention Time

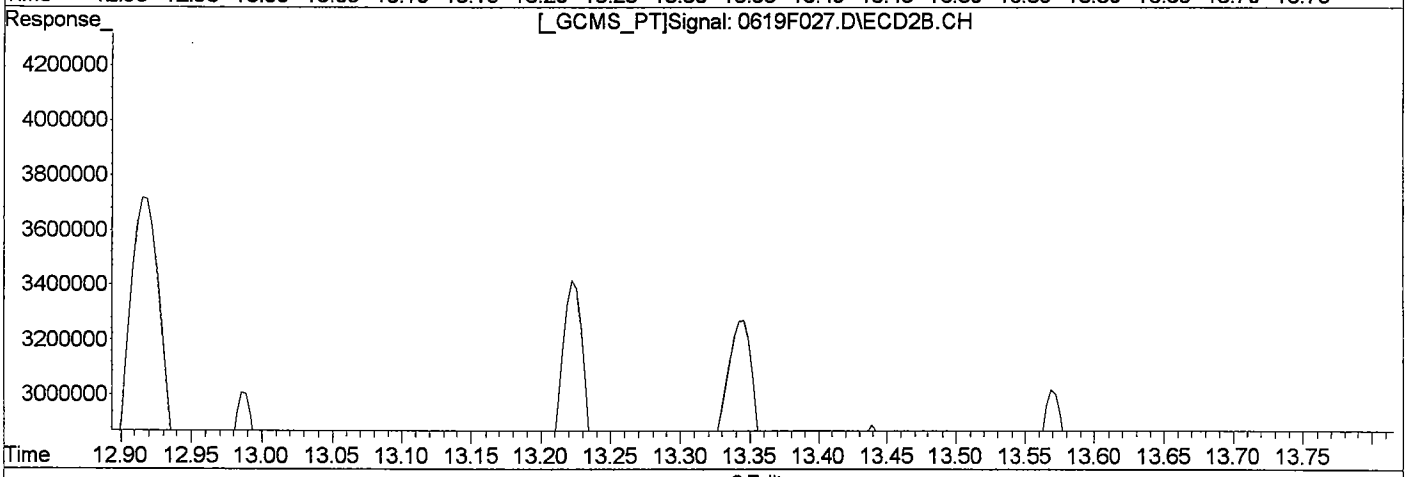
0619F027.D 061107-8081.M Thu Jun 21 11:48:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 1037.233ug/L m

response 1202081

(26) Toxaphene {2} #2

12.71min 814.175ug/L

response 3408938

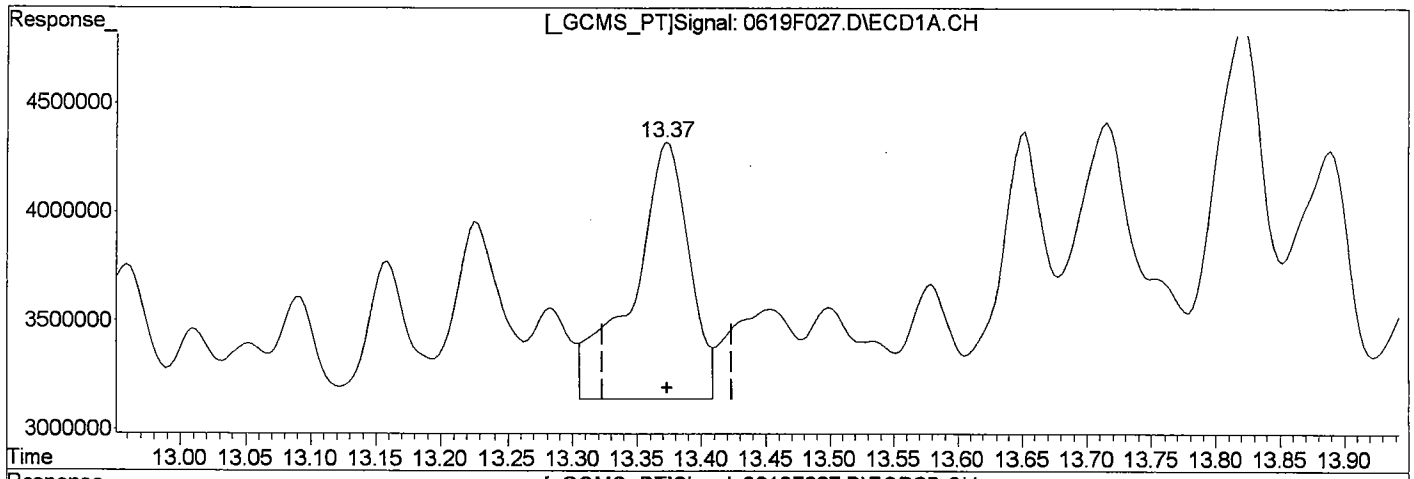
AReT
Initials LL 1m0240
JUN 21 2007
☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder incorrect
☐ Other

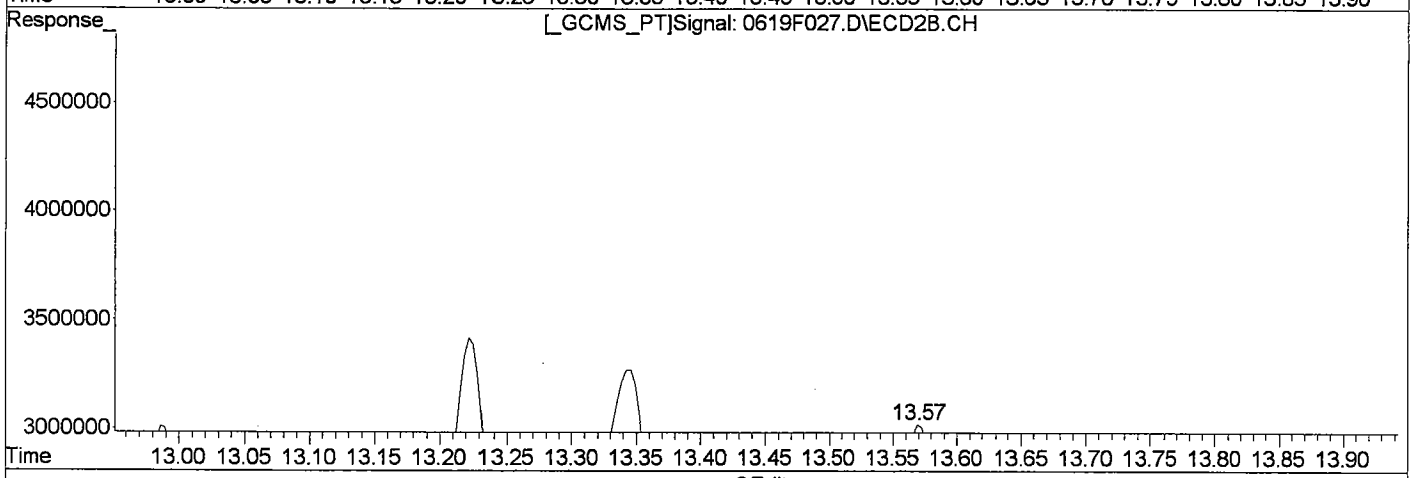
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:48:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1789.049ug/L

response 3601048

(27) Toxaphene {3} #2

13.57min 751.656ug/L

response 1946063

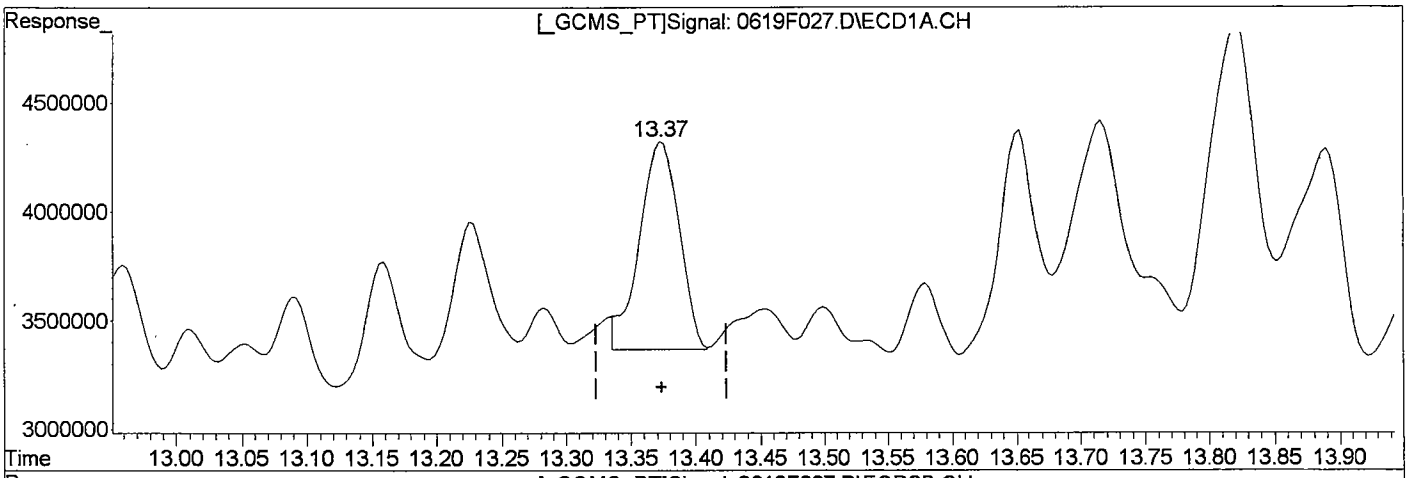
(+) = Expected Retention Time

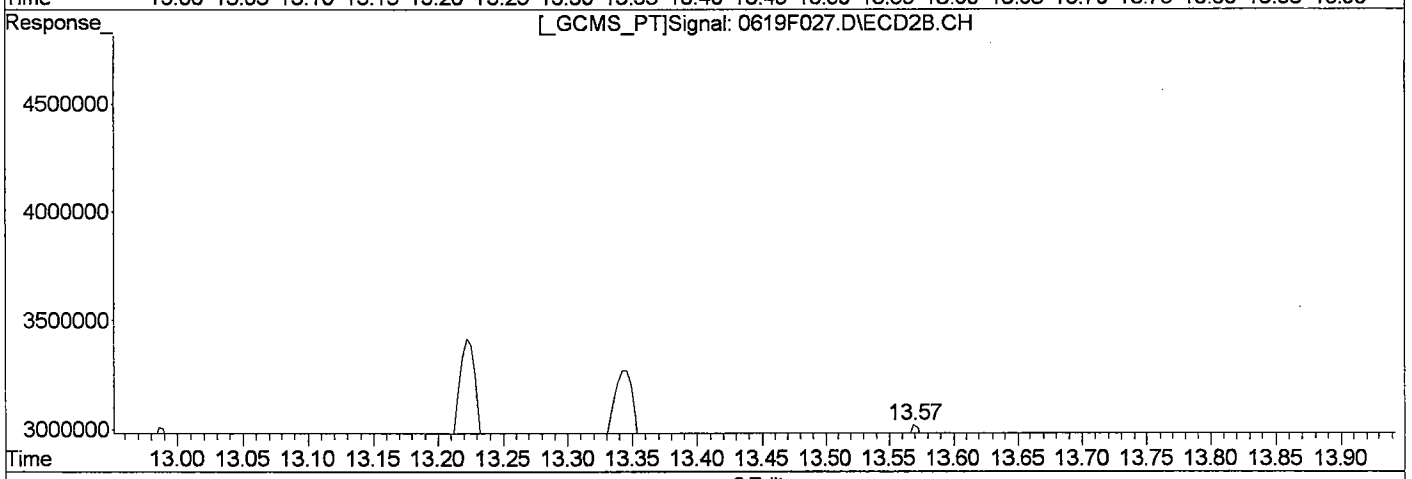
0619F027.D 061107-8081.M Thu Jun 21 11:48:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1002.147ug/L m

response 2017150

(27) Toxaphene {3} #2

13.57min 751.656ug/L

response 1946063

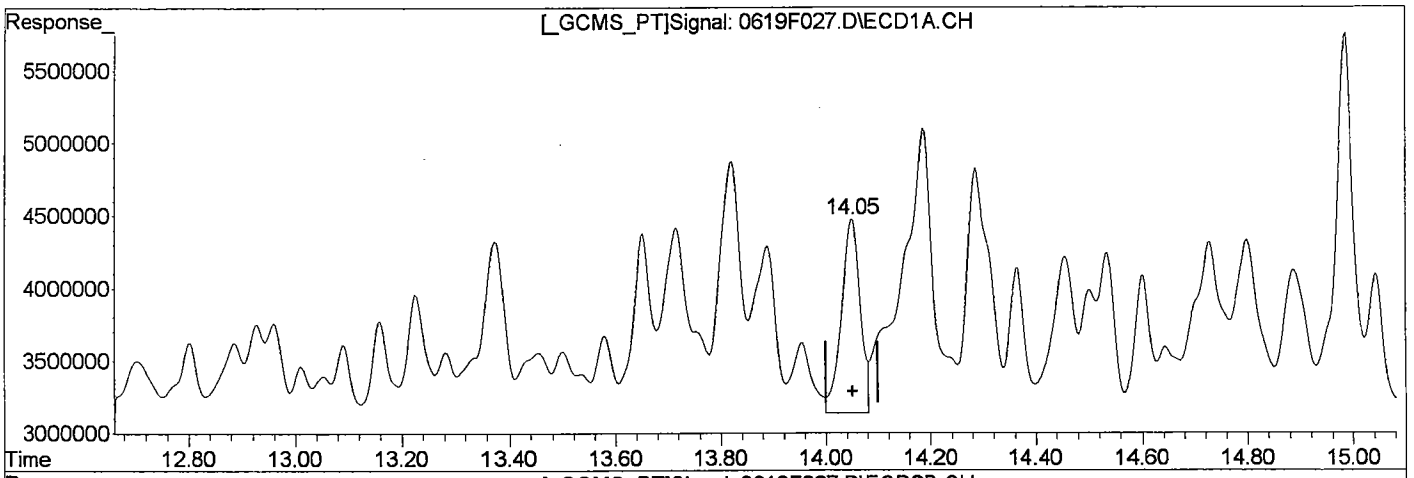
After Initials LC 6/21/07
JUN 21 2007
☐ Wrong Peak/Peaks not Found
☐ Baseline/Shoulder Incorrect
☐ Other

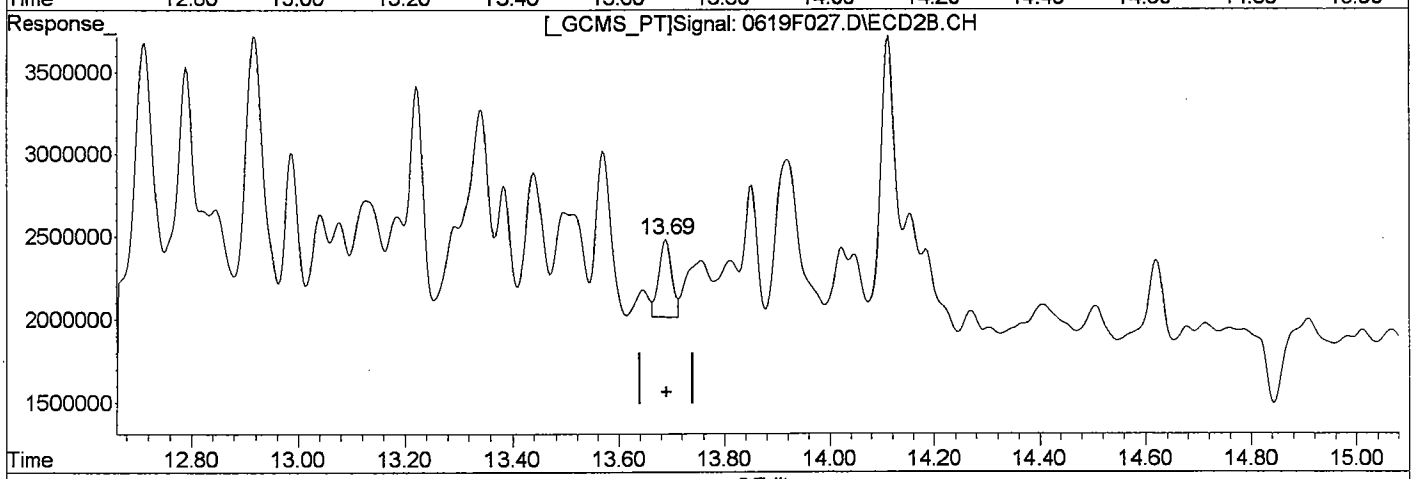
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:48:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1171.566ug/L

response 3421921

(28) Toxaphene {4} #2

13.69min 1185.083ug/L

response 809918

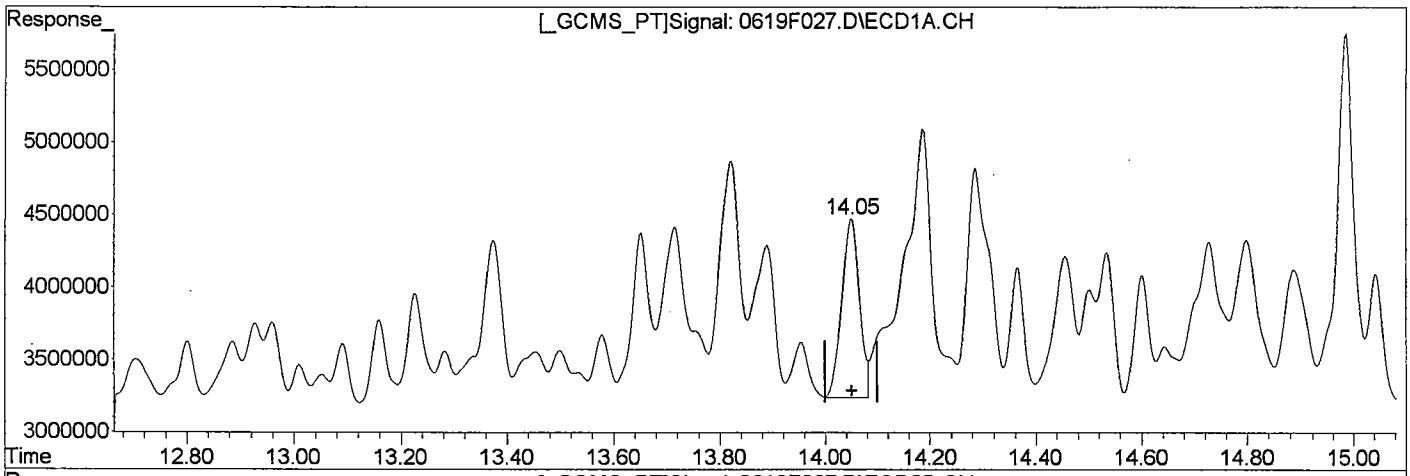
(+) = Expected Retention Time

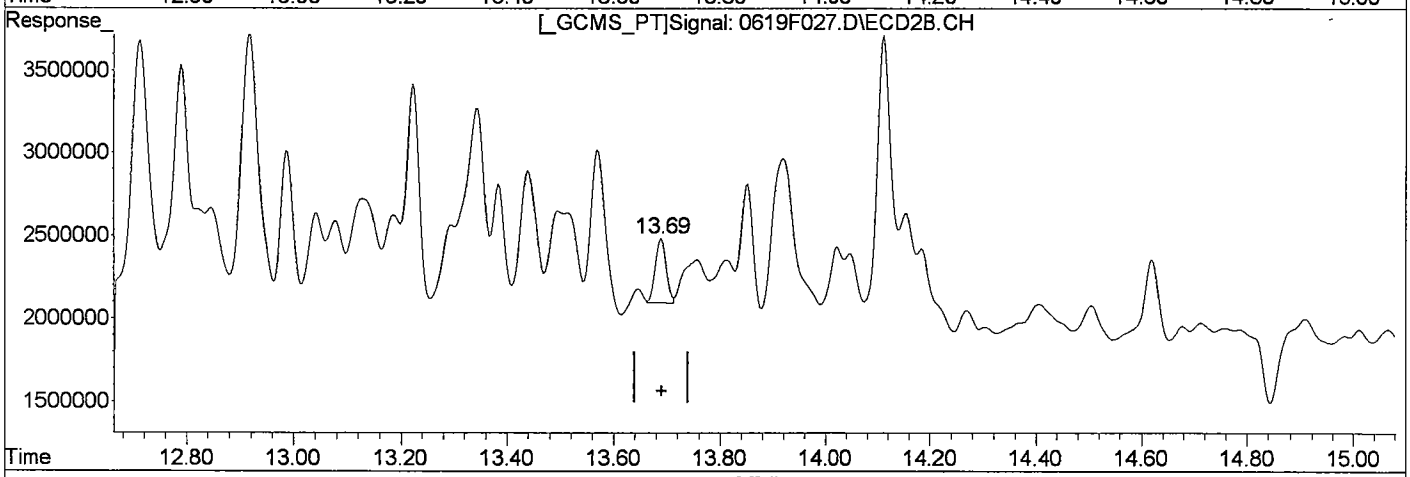
0619F027.D 061107-8081.M Thu Jun 21 11:49:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 991.178ug/L m

response 2895044

(28) Toxaphene {4} #2

13.69min 825.434ug/L m

response 564124

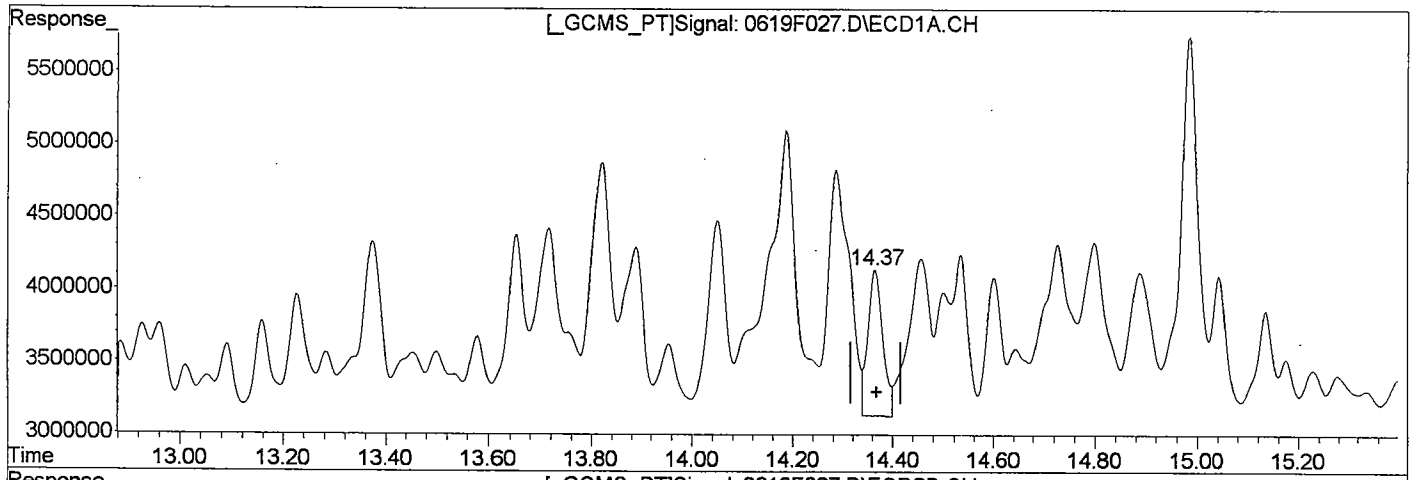
After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/Integration incorrect
☐ Other

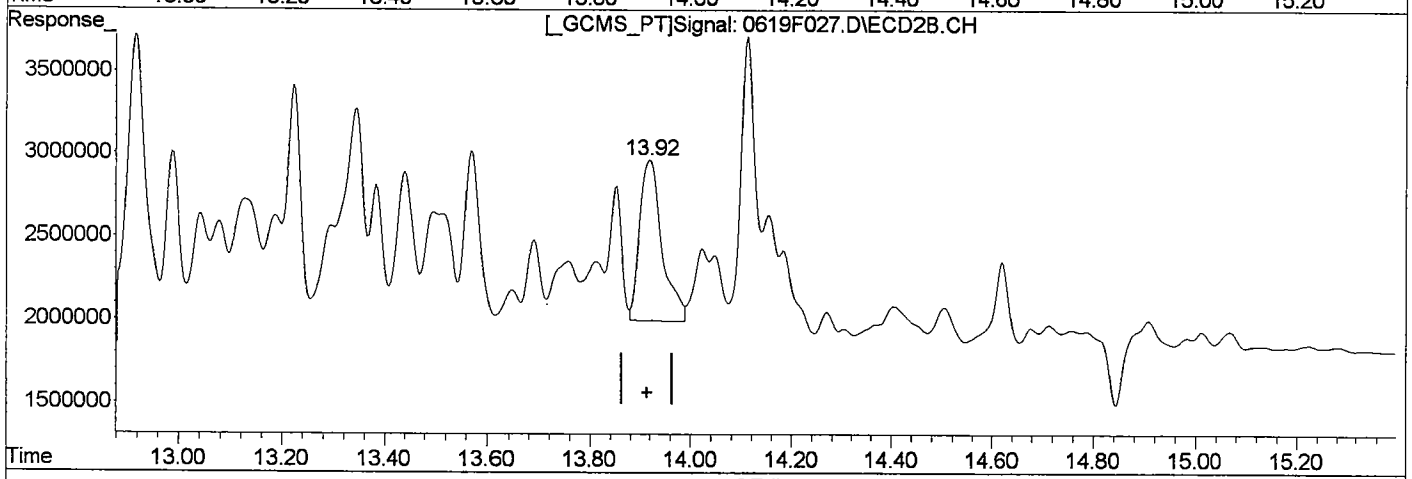
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:49:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 1274.169ug/L

response 2082030

(29) Toxaphene {5} #2

13.92min 762.451ug/L

response 3004225

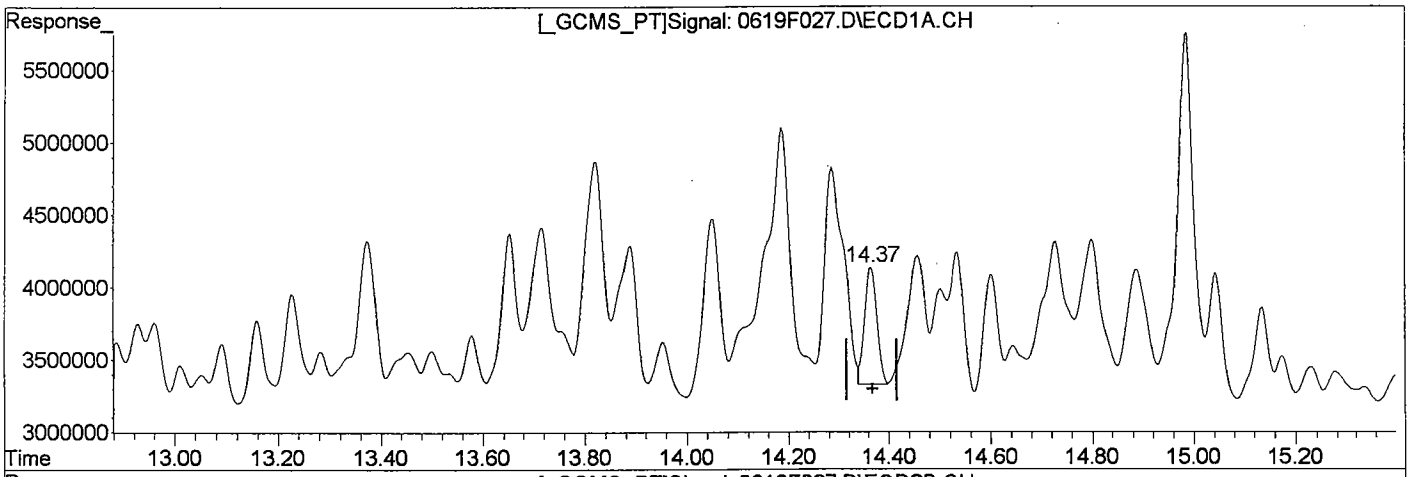
(+) = Expected Retention Time

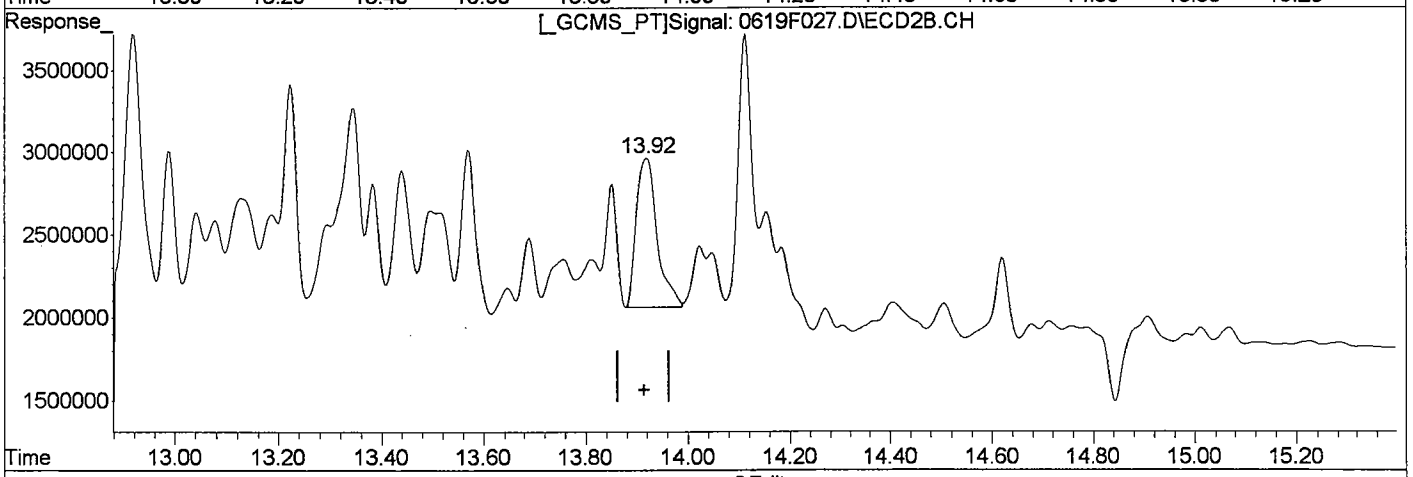
0619F027.D 061107-8081.M Thu Jun 21 11:49:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 831.840ug/L m

response 1359251

(29) Toxaphene {5} #2

13.92min 651.103ug/L m

response 2565490

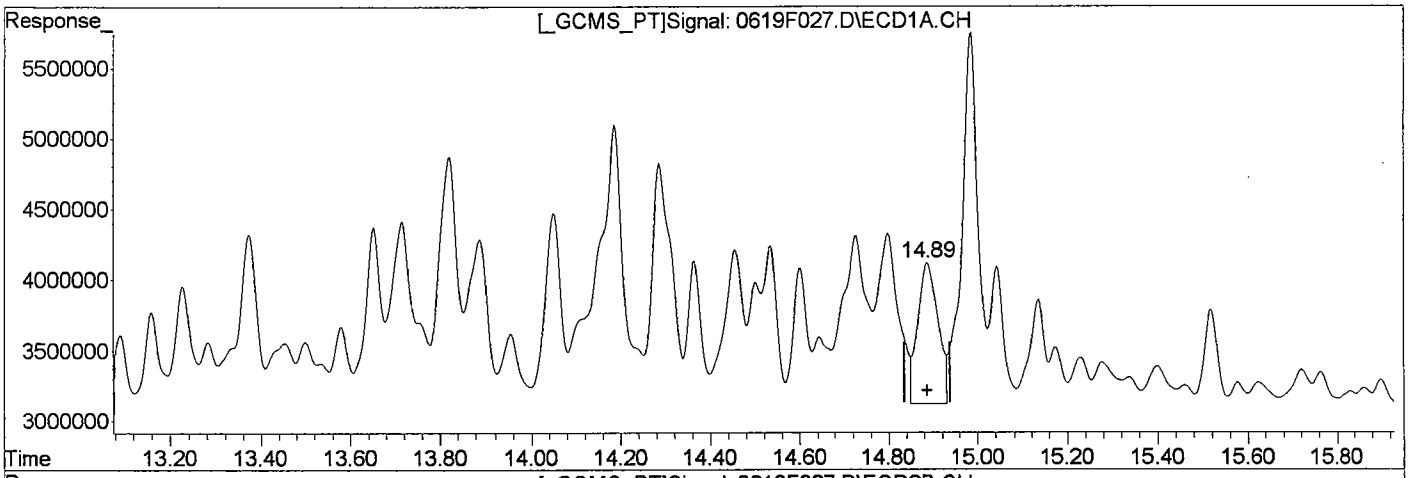
After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/Integration Incorrect
☐ Other

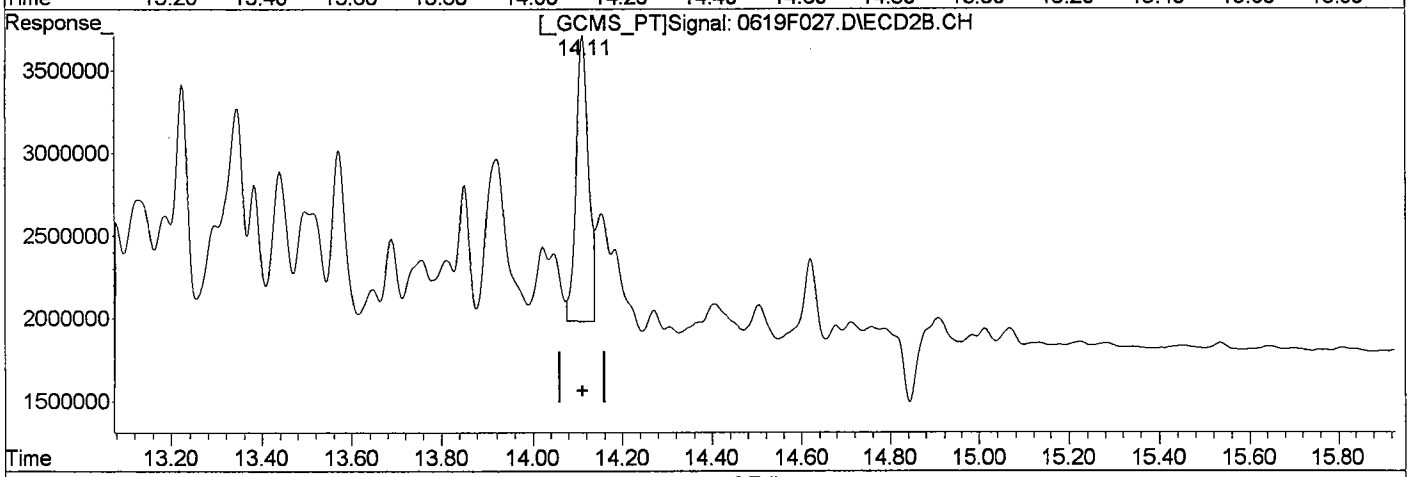
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:49:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1762.301ug/L

response 3201209

(30) Toxaphene {6} #2

14.11min 630.079ug/L

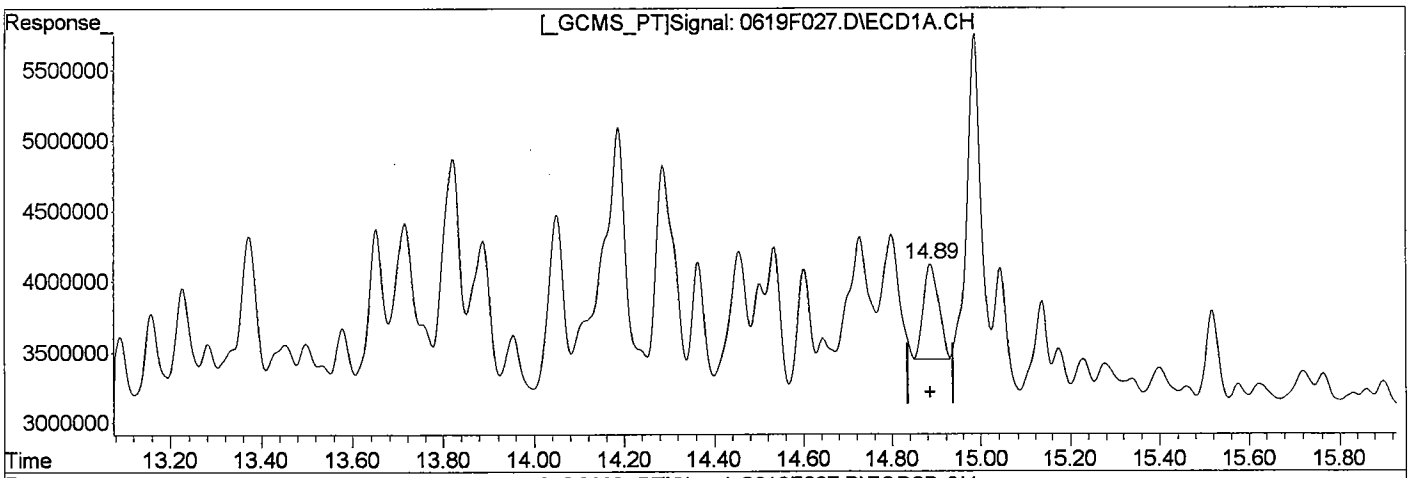
response 3400492

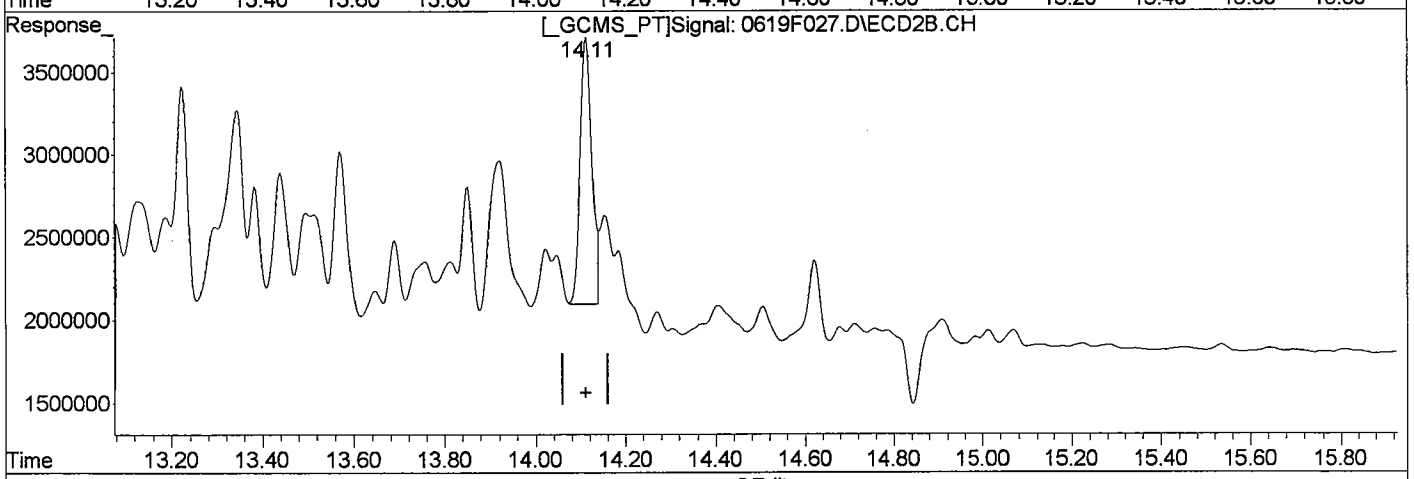
(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:49:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F027.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061907\0619F027.D\ECD2B.CH
Acq On : 20 Jun 2007 8:39 pm Operator: AKamawal
Sample : KWG0706602-5 | LCS | 8081A PEST_OC | WAT Inst : GC23
Misc : SEMIVOA GC\W0706602\5-LCS.H | F=2 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 895.824ug/L m

response 1627258

(30) Toxaphene {6} #2

14.11min 549.942ug/L m

response 2968000

After Initials LU 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F027.D 061107-8081.M Thu Jun 21 11:50:14 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Organochlorine Pesticides

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706602-3	**Basis:**	NA
Extraction Method:	EPA 3535	**Level:**	Low
Analysis Method:	8081A		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
alpha-BHC	**0.183**		0.010	1	06/13/07	06/20/07	KWG0706602	
beta-BHC	**0.176**		0.010	1	06/13/07	06/20/07	KWG0706602	
gamma-BHC (Lindane)	**0.183**		0.010	1	06/13/07	06/20/07	KWG0706602	
delta-BHC	**0.206**		0.010	1	06/13/07	06/20/07	KWG0706602	
Heptachlor	**0.172**		0.010	1	06/13/07	06/20/07	KWG0706602	
Aldrin	**0.0890**		0.010	1	06/13/07	06/20/07	KWG0706602	
Heptachlor Epoxide	**0.175**		0.010	1	06/13/07	06/20/07	KWG0706602	
gamma-Chlordane†	**0.175**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan I	**0.146**		0.010	1	06/13/07	06/20/07	KWG0706602	
alpha-Chlordane	**0.175**		0.010	1	06/13/07	06/20/07	KWG0706602	
Dieldrin	**0.174**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDE	**0.167**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin	**0.188**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan II	**0.153**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDD	**0.174**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin Aldehyde	**0.149**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endosulfan Sulfate	**0.166**		0.010	1	06/13/07	06/20/07	KWG0706602	
4,4'-DDT	**0.182**		0.010	1	06/13/07	06/20/07	KWG0706602	
Endrin Ketone	**0.175**		0.010	1	06/13/07	06/20/07	KWG0706602	
Methoxychlor	**0.181**		0.010	1	06/13/07	06/20/07	KWG0706602	
Toxaphene	**1.44**		0.50	1	06/13/07	06/20/07	KWG0706602	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tetrachloro-m-xylene	71	16-111	06/20/07	Acceptable
Decachlorobiphenyl	86	14-145	06/20/07	Acceptable

† Analyte Comments

gamma-Chlordane	For this analyte (CAS Registry No. 5103-74-2), USEPA has corrected the name to be beta-Chlordane, also known as trans-Chlordane.

Comments:

Exception Report

Data File: J:\GC23\DATA\061907\0619F026.D
Lab ID: KWG0706602-3
RunType: DLCS
Matrix: WATER

Date Acquired: 06/20/2007 20:12
Date Quantitated: 06/21/2007 11:47
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	AN

Primary Review: 6/21/07

Secondary Review: 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F026.D\0619F026C.D
Lab ID: KWG0706602-3
RunType: DLCS
Matrix: WATER

Date Acquired: 06/20/2007 20:12
Date Quantitated: 06/21/2007 11:47
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: CL 6/21/07

Secondary Review: MC 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608556	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F026.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F026.D\0619F026c.d			**Vial:**	20
Acqu Date:	06/20/2007 20:12	**Quant Date:**	06/21/2007 11:47	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.50	-0.02	7.40	-0.01	13235940	12713930	66.15	70.94			71OK
						%Recovery =	66OK	71OK	Limits =	16-111	
Decachlorobiphenyl	17.12	-0.02	15.99	-0.02	23500711	15918393	84.68	86.19			86OK
						%Recovery =	85OK	86OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.20	-0.02	8.43	-0.01	20793448	21579457m	90.27	91.71	0.181	0.183	0.183
Hexachlorobenzene	9.33	-0.02	8.26	-0.02	14826194	14911587	60.33	60.74	0.121	0.121	0.121
beta-BHC	10.21	-0.02	9.45	-0.01	9176328	9504510	85.59	88.17	0.171	0.176	0.176
gamma-BHC (Lindane)	9.75	-0.01	9.04	-0.02	19288835	20387456	88.98	91.62	0.178	0.183	0.183
delta-BHC	10.63	-0.01	9.89	-0.02	19583339	21816385	99.23	103.04	0.198	0.206	0.206
Heptachlor	10.72	-0.02	9.62	-0.01	17346838	19354876	86.15	85.32	0.172	0.171	0.172
Aldrin	11.24	-0.01	10.11	-0.02	7493574	8866115	43.14	44.52	0.0863	0.0890	0.0890
Isodrin	11.76	-0.02	10.76	-0.01	5533988	6443502	37.35	37.32	0.0747	0.0746	0.0747
Heptachlor Epoxide	11.93	-0.02	10.97	-0.01	14608046	17546759	85.95	87.36	0.172	0.175	0.175
gamma-Chlordane	12.43	-0.02	11.32	-0.02	14360243	17736247	85.71	87.33	0.171	0.175	0.175
Endosulfan I	12.56	-0.02	11.55	-0.02	11079502	13494162	72.22	72.83	0.144	0.146	0.146
alpha-Chlordane	12.50	-0.02	11.47	-0.02	14108386	17262834	84.64	87.56	0.169	0.175	0.175
Dieldrin	12.95	-0.02	11.99	-0.01	13832535	16962189	83.88	87.17	0.168	0.174	0.174
4,4'-DDE	12.74	-0.02	11.79	-0.01	12412212	15445374	81.22	83.49	0.162	0.167	0.167
Endrin	13.31	-0.01	12.46	-0.02	13475772	16479681	87.35	93.99	0.175	0.188	0.188
Endosulfan II	13.71	-0.02	12.86	-0.02	13769803	13909589	75.00	76.67	0.150	0.153	0.153
4,4'-DDD	13.52	-0.02	12.65	-0.02	12141141	13308479	80.90	87.20	0.162	0.174	0.174
Endrin Aldehyde	13.87	-0.02	13.20	-0.02	12382616	11010420	74.71	72.90	0.149	0.146	0.149

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F026.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F026.D\0619F026c.d			**Vial:**	20
Acqu Date:	06/20/2007 20:12	**Quant Date:**	06/21/2007 11:47	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.30 -0.02	13.50 -0.02	17850753	15056197	79.39	82.98	0.159	0.166	0.166
4,4'-DDT	13.98 -0.02	13.06 -0.02	15909579	14825438	86.37	90.93	0.173	0.182	0.182
Endrin Ketone	14.92 -0.02	14.39 -0.02	24628887	18355600	82.54	87.38	0.165	0.175	0.175
Methoxychlor	14.63 -0.02	14.07 -0.02	11384691	8535835	84.42	90.74	0.169	0.181	0.181
Toxaphene			0	0	0.0000	0.0000	0.028U	0.028U	NR
Toxaphene {1}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {2}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {3}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {4}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {5}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Toxaphene {6}			0d	0d	0.0000	0.0000	0.028U	0.028U	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F026.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061907\0619F026.D\ECD2B.CH
Acq On : 20 Jun 2007 8:12 pm Operator: AKamawal
Sample : KWG0706602-3 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\3-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:11 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.50	7.40	13235940	12713930	66.149	70.942
24)	s	Decachlorobiphen	17.12	15.99	23500711	15918393	84.684	86.193
		Target Compounds						
2)		alpha-BHC	9.20	8.43	20793448	21579457	90.269	91.708m
3)		Hexachlorobenzen	9.33	8.26	14826194	14911587	60.328	60.744
4)		beta-BHC	10.21	9.45	9176328	9504510	85.589	88.165
5)		gamma-BHC (Linda	9.75	9.04	19288835	20387456	88.980	91.618
6)		delta-BHC	10.63	9.89	19583339	21816385	99.228	103.036
7)		Heptachlor	10.72	9.62	17346838	19354876	86.147	85.323
8)		Aldrin	11.24	10.11	7493574	8866115	43.144	44.524
9)		Isodrin	11.76	10.76	5533988	6443502	37.350	37.315
10)		Heptachlor Epoxi	11.93	10.97	14608046	17546759	85.954	87.362
11)		gamma-Chlordane	12.43	11.32	14360243	17736247	85.705	87.333
12)		Endosulfan I	12.56	11.55	11079502	13494162	72.218	72.831
13)		alpha-Chlordane	12.50	11.47	14108386	17262834	84.636	87.562
14)		Dieldrin	12.95	11.99	13832535	16962189	83.880	87.174
15)		4,4'-DDE	12.74	11.79	12412212	15445374	81.219	83.494
16)		Endrin	13.31	12.46	13475772	16479681	87.350	93.992
17)		Endosulfan II	13.71	12.86	13769803	13909589	75.004	76.666
18)		4,4'-DDD	13.52	12.65	12141141	13308479	80.895	87.204
19)		Endrin Aldehyde	13.87	13.20	12382616	11010420	74.708	72.898
20)		Endosulfan Sulfa	14.30	13.50	17850753	15056197	79.390	82.981
21)		4,4'-DDT	13.98	13.06	15909579	14825438	86.373	90.931
22)		Endrin Ketone	14.92	14.39	24628887	18355600	82.544	87.377
23)		Methoxychlor	14.63	14.07	11384691	8535835	84.418	90.742

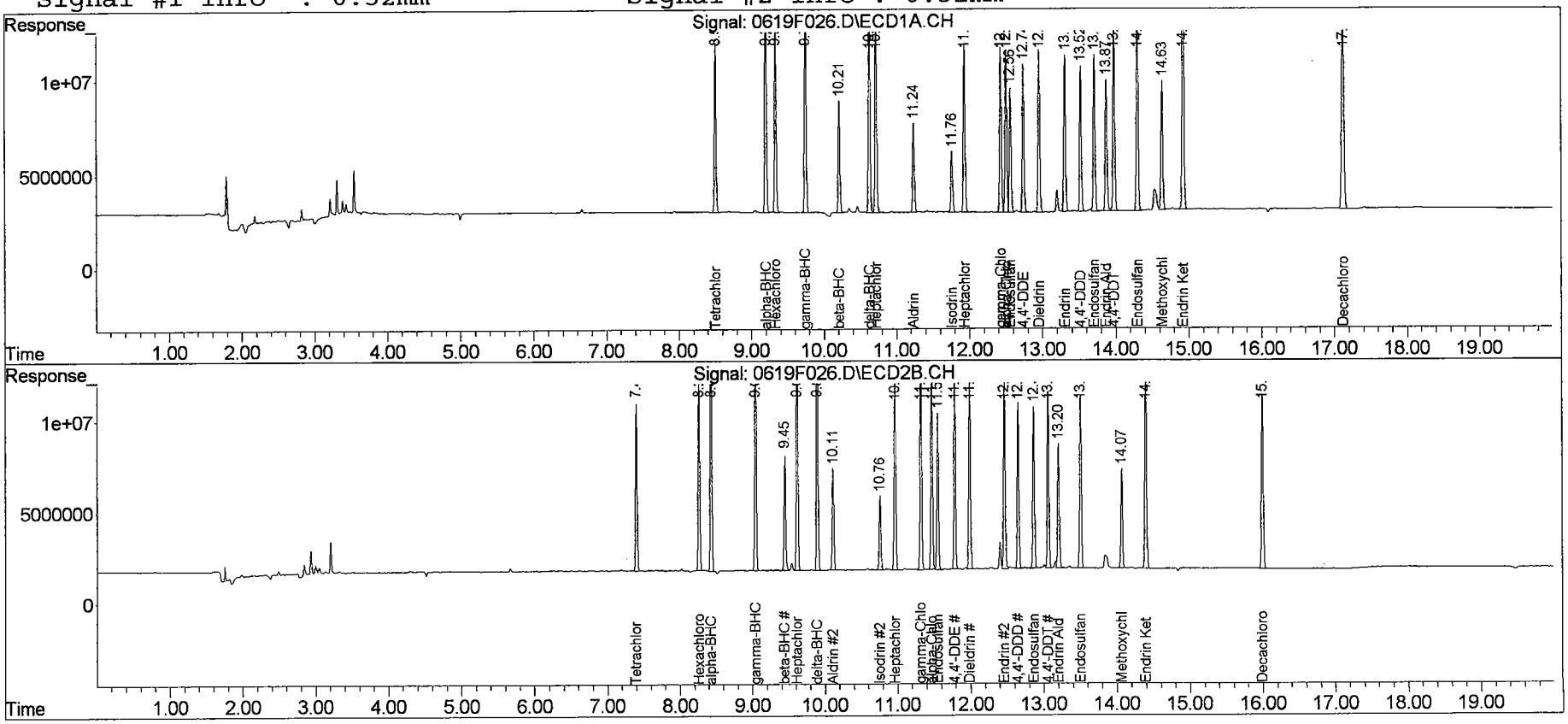
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F026.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061907\0619F026.D\ECD2B.CH
Acq On : 20 Jun 2007 8:12 pm Operator: AKamawal
Sample : KWG0706602-3 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\3-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:47 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

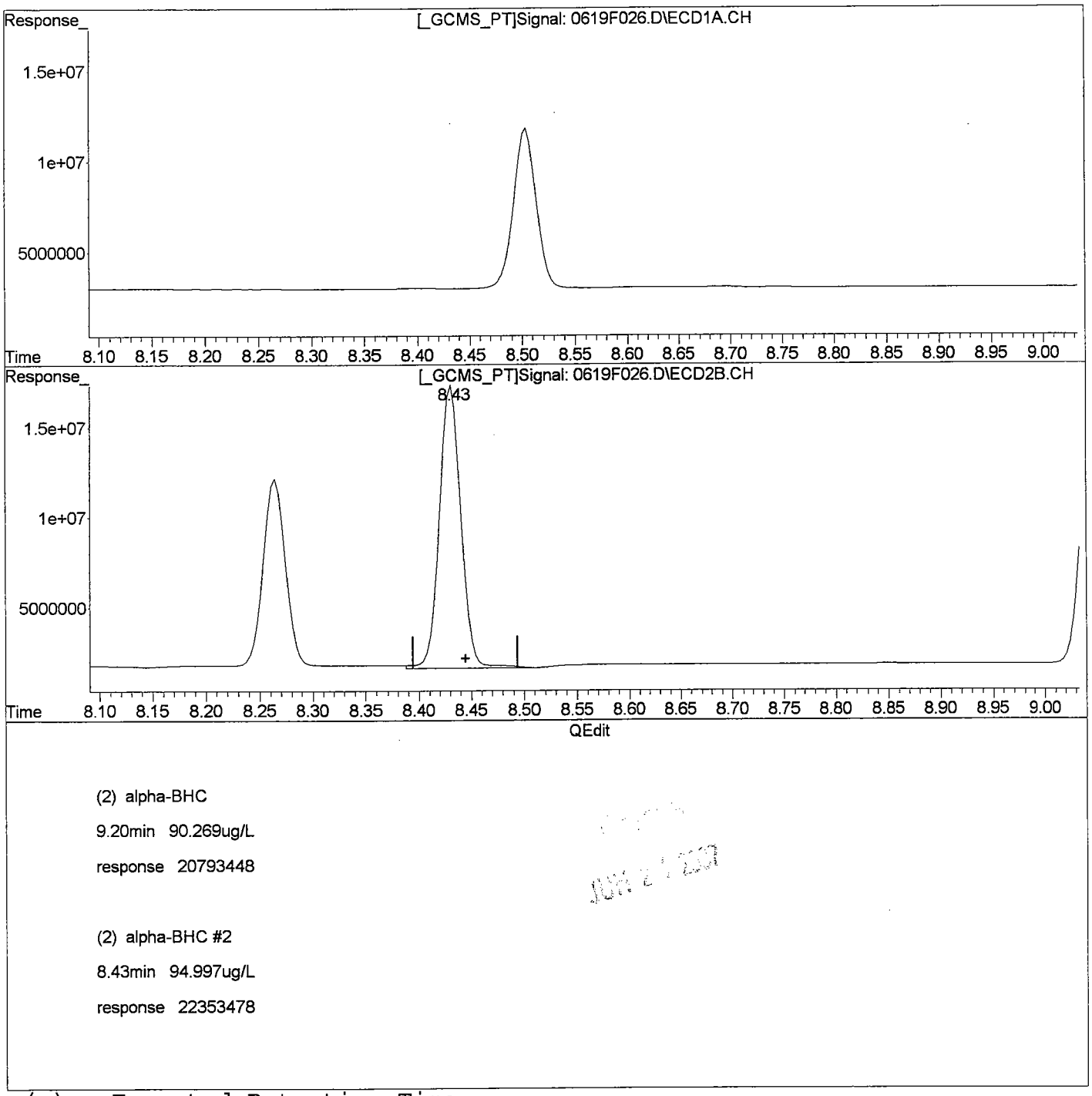
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F026.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061907\0619F026.D\ECD2B.CH
Acq On : 20 Jun 2007 8:12 pm Operator: AKamawal
Sample : KWG0706602-3 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\3-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration

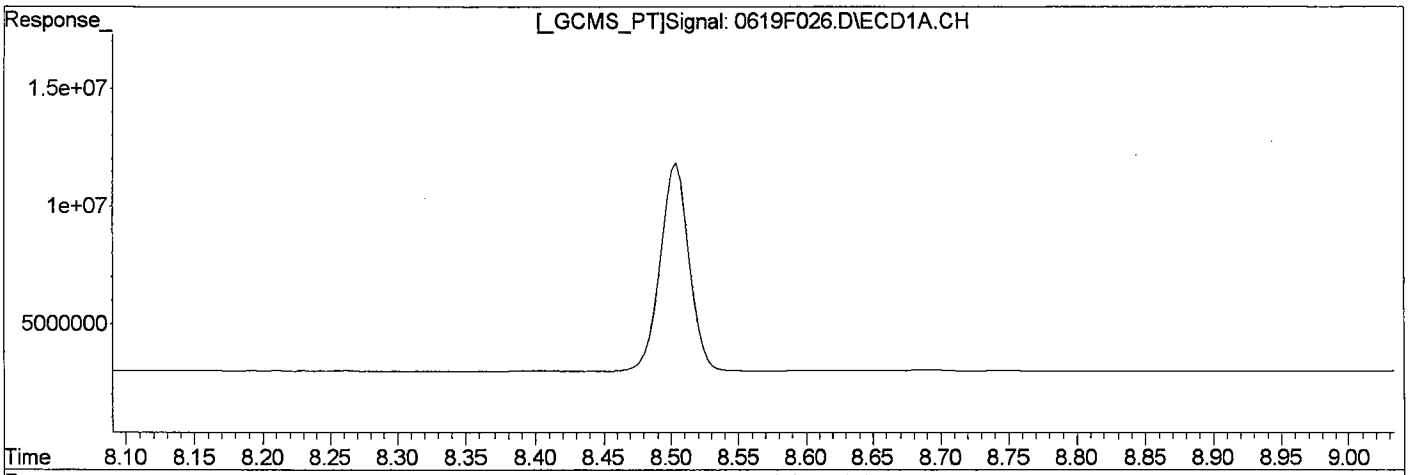


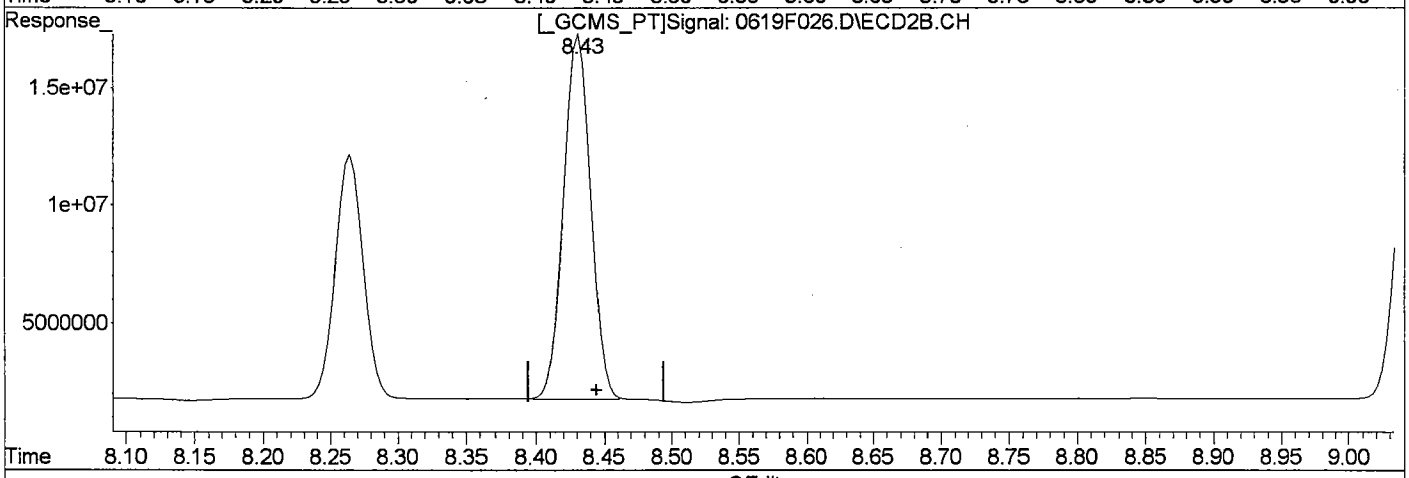
(+) = Expected Retention Time
0619F026.D 061107-8081.M Thu Jun 21 11:47:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F026.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061907\0619F026.D\ECD2B.CH
Acq On : 20 Jun 2007 8:12 pm Operator: AKamawal
Sample : KWG0706602-3 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\3-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(2) alpha-BHC
9.20min 90.269ug/L
response 20793448

(2) alpha-BHC #2
8.43min 91.708ug/L m
response 21579457

After initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F026.D 061107-8081.M Thu Jun 21 11:47:07 2007

Exception Report

Data File: J:\GC23\DATA\061907\0619F028.D
Lab ID: KWG0706602-3
RunType: DLCS
Matrix: WATER

Date Acquired: 06/20/2007 21:05
Date Quantitated: 06/21/2007 11:52
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	
Continuing Calibration Recovery (Closing)	Toxaphene	18.3	NA	15	

Primary Review: 6/21/07

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\061907\0619F028.D\0619F028C.D
Lab ID: KWG0706602-3
RunType: DLCS
Matrix: WATER

Date Acquired: 06/20/2007 21:05
Date Quantitated: 06/21/2007 11:52
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: CC 6/21/07

Secondary Review: hw 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/14/2007

Analysis Lot:	KWG0706830	**Prep Lot:**	KWG0706602	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3535		
Prep Ref:	608556	**Prep Date:**	06/13/2007		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:	J:\GC23\DATA\061907\0619F024.D	**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F028.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F028.D\0619F028c.d			**Vial:**	22
Acqu Date:	06/20/2007 21:05	**Quant Date:**	06/21/2007 11:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	-0.01	7.40	-0.01	12772137	12145870	63.83	67.77			NR
						%Recovery =	64OK	68OK	Limits =	16-111	
Decachlorobiphenyl	17.13	-0.01	16.01		24083933	16332809	86.79	88.44			NR
						%Recovery =	87OK	88OK	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000	0.00033U	0.00033U	NR
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.00031U	0.00031U	0.00031U
beta-BHC			0d	0d	0.0000	0.0000	0.00083U	0.00083U	NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000	0.00044U	0.00044U	NR
delta-BHC			0d	0d	0.0000	0.0000	0.00057U	0.00057U	NR
Heptachlor			0d	0d	0.0000	0.0000	0.00036U	0.00036U	NR
Aldrin			0d	0d	0.0000	0.0000	0.00040U	0.00040U	NR
Isodrin			0d	0d	0.0000	0.0000	0.00056U	0.00056U	0.00056U
Heptachlor Epoxide			0d	0d	0.0000	0.0000	0.00032U	0.00032U	NR
gamma-Chlordane			0d	0d	0.0000	0.0000	0.00032U	0.00032U	NR
Endosulfan I			0d	0d	0.0000	0.0000	0.00044U	0.00044U	NR
alpha-Chlordane			0d	0d	0.0000	0.0000	0.0040U	0.0040U	NR
Dieldrin			0d	0d	0.0000	0.0000	0.00035U	0.00035U	NR
4,4'-DDE			0d	0d	0.0000	0.0000	0.00036U	0.00036U	NR
Endrin			0d	0d	0.0000	0.0000	0.00068U	0.00068U	NR
Endosulfan II			0d	0d	0.0000	0.0000	0.00040U	0.00040U	NR
4,4'-DDD			0d	0d	0.0000	0.0000	0.0015U	0.0015U	NR
Endrin Aldehyde			0d	0d	0.0000	0.0000	0.00046U	0.00046U	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F028.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F028.D\0619F028c.d			**Vial:**	22
Acqu Date:	06/20/2007 21:05	**Quant Date:**	06/21/2007 11:52	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706602-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000	0.00047U	0.00047U	NR
4,4'-DDT			0d	0d	0.0000	0.0000	0.00058U	0.00058U	NR
Endrin Ketone			0d	0d	0.0000	0.0000	0.00066U	0.00066U	NR
Methoxychlor			0d	0d	0.0000	0.0000	0.00093U	0.00093U	NR
Toxaphene			0	0	951.59CCV	720.16	1.9	1.4	1.9
Toxaphene {1}	13.16	12.62	1158390	871419m	819.46	727.91	1.64	1.46	
Toxaphene {2}	13.23 +0.01	12.71	1242181m	3204625m	1,072	765.38	2.14	1.53	
Toxaphene {3}	13.37	13.57	2018261m	1966100m	1,003	759.40	2.01	1.52	
Toxaphene {4}	14.05	13.69	3049761	570786m	1,044	835.18	2.09	1.67	
Toxaphene {5}	14.36 -0.01	13.92 +0.01	1348425m	2673937m	825.21	678.63	1.65	1.36	
Toxaphene {6}	14.89	14.11	1718750m	2992586m	946.19	554.50	1.89	1.11	
Chlordane			0	0	0.0000	0.0000	0.015U	0.015U	0.015U
Chlordane {1}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {2}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {3}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {4}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {5}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlordane {6}			0d	0d	0.0000	0.0000	0.015U	0.015U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.00083U	0.00083U	0.00083U
Oxychlordane			0d	0d	0.0000	0.0000	0.0010U	0.0010U	0.0010U
2,4'-DDE			0d	0d	0.0000	0.0000	0.00050U	0.00050U	0.00050U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.00060U	0.00060U	0.00060U
2,4'-DDD			0d	0d	0.0000	0.0000	0.00057U	0.00057U	0.00057U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.00092U	0.00092U	0.00092U
2,4'-DDT			0d	0d	0.0000	0.0000	0.00059U	0.00059U	0.00059U
Mirex			0d	0d	0.0000	0.0000	0.00081U	0.00081U	0.00081U
Hexachloroethane			0d	0d	0.0000	0.0000	0.0012U	0.0012U	0.0012U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.0019U	0.0019U	0.0019U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 ml	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:13 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	12772137	12145870	63.831	67.772
24)	s	Decachlorobiphen	17.13	16.01	24083933	16332809	86.785	88.437
		Target Compounds						
25)		Toxaphene	13.16	12.62	1158390	871419	819.455	727.909m
26)		Toxaphene {2}	13.23	12.71	1242181	3204625	1071.834m	765.378m#
27)		Toxaphene {3}	13.37	13.57	2018261	1966100	1002.699m	759.395m
28)		Toxaphene {4}	14.05	13.69	3049761	570786	1044.149	835.182m
29)		Toxaphene {5}	14.36	13.92	1348425	2673937	825.214m	678.627m
30)		Toxaphene {6}	14.89	14.11	1718750	2992586	946.191m	554.498m#

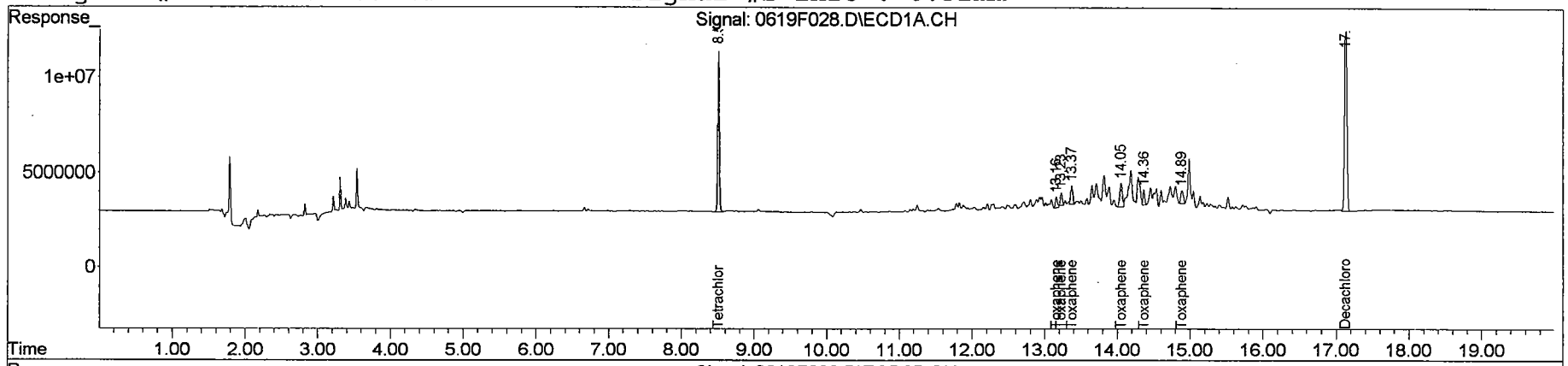
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

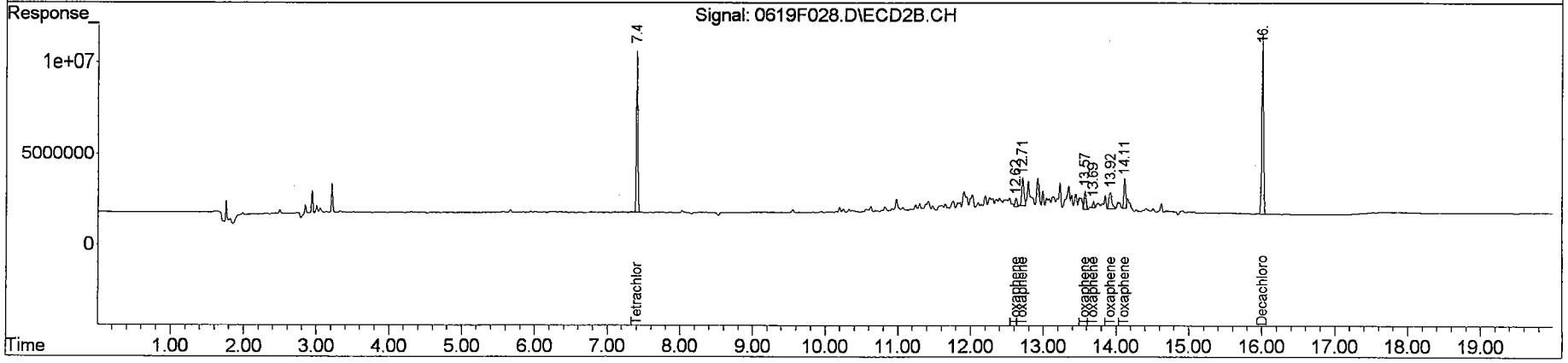
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:52 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

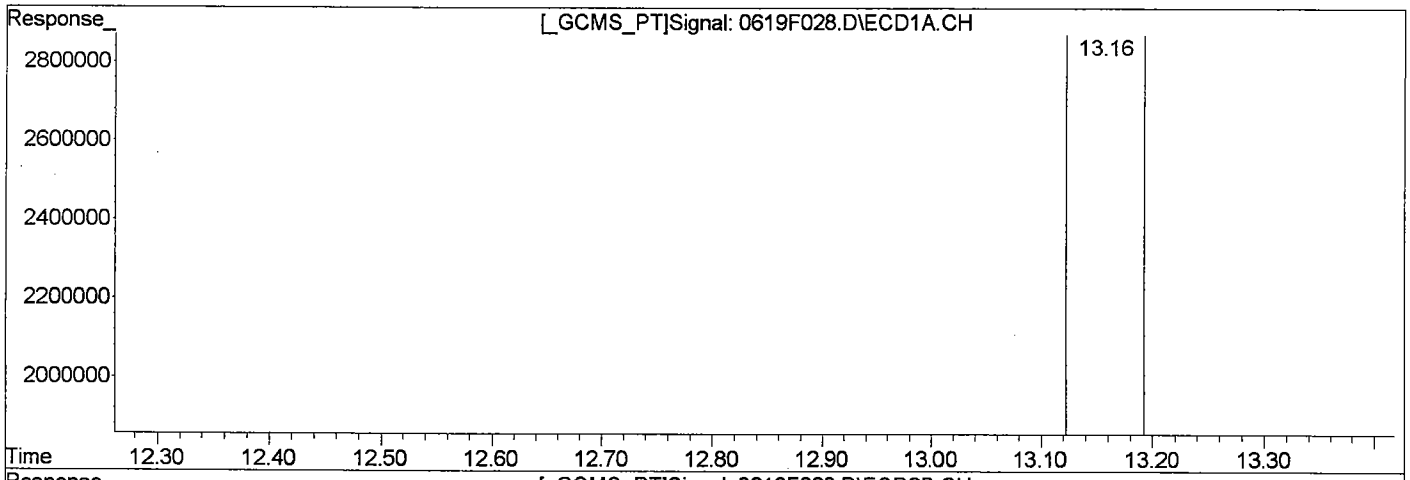


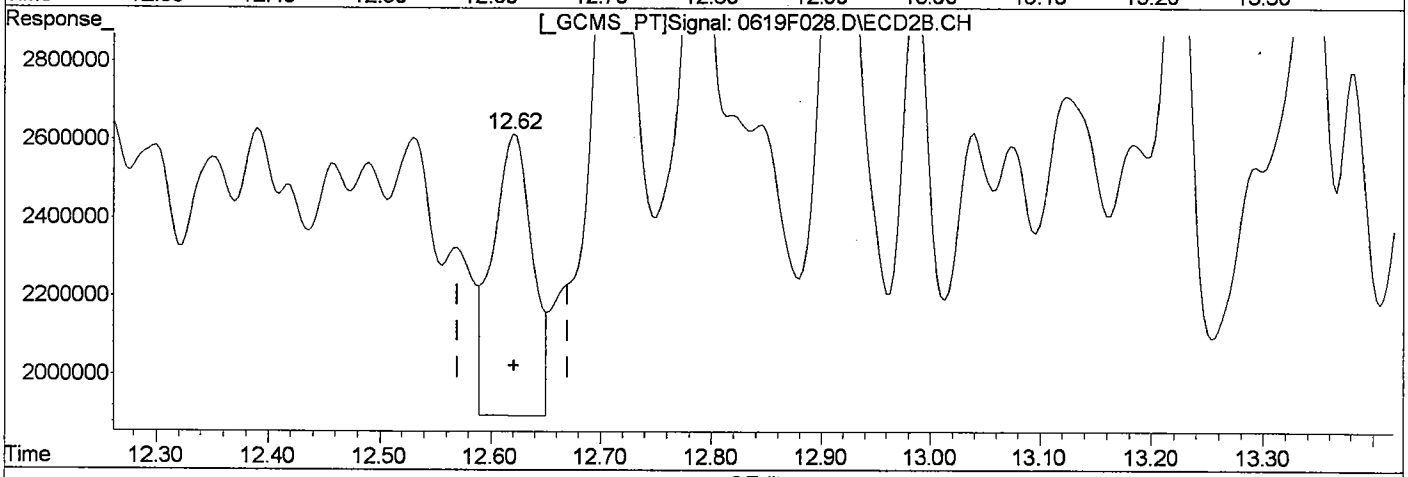


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 819.455ug/L

response 1158390

(25) Toxaphene #2

12.62min 1485.267ug/L

response 1778093

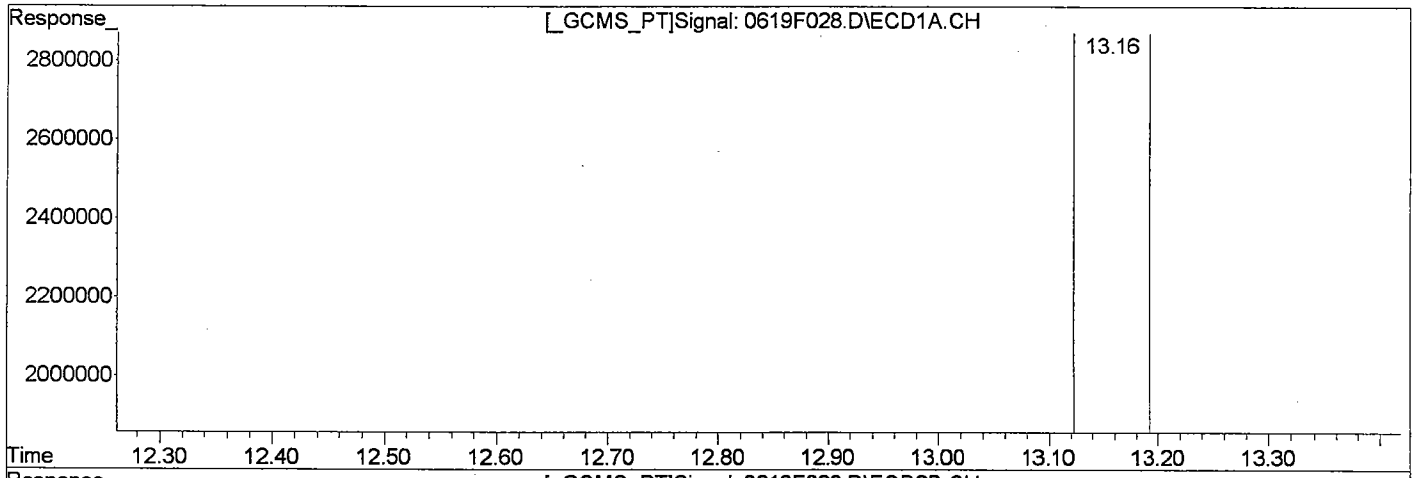
(+) = Expected Retention Time

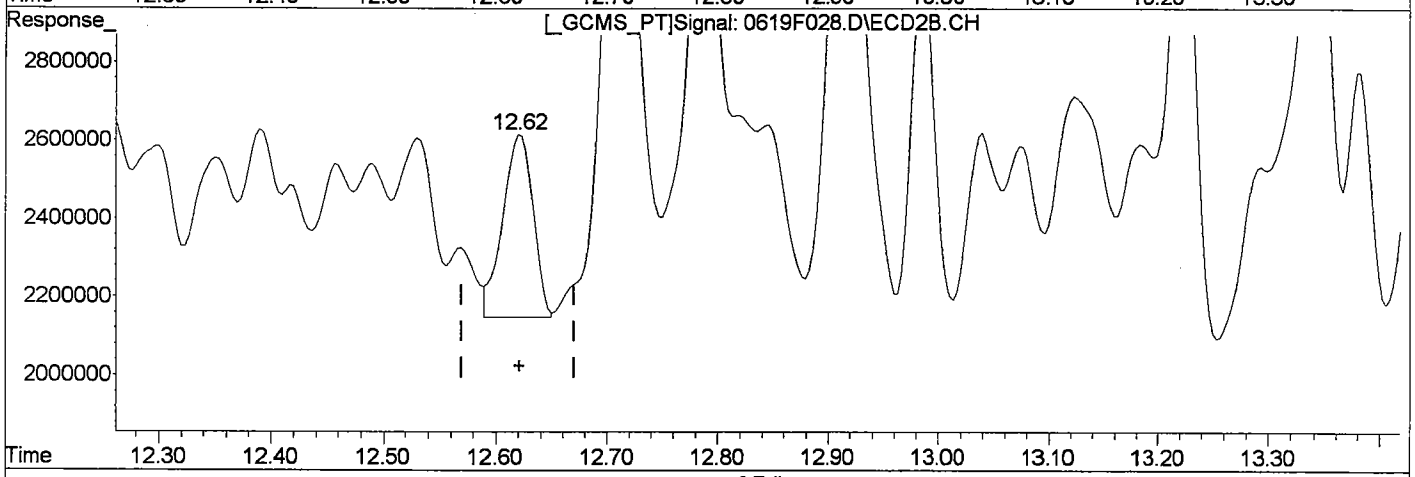
0619F028.D 061107-8081.M Thu Jun 21 11:50:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 819.455ug/L

response 1158390

(25) Toxaphene #2

12.62min 727.909ug/L m

response 871419

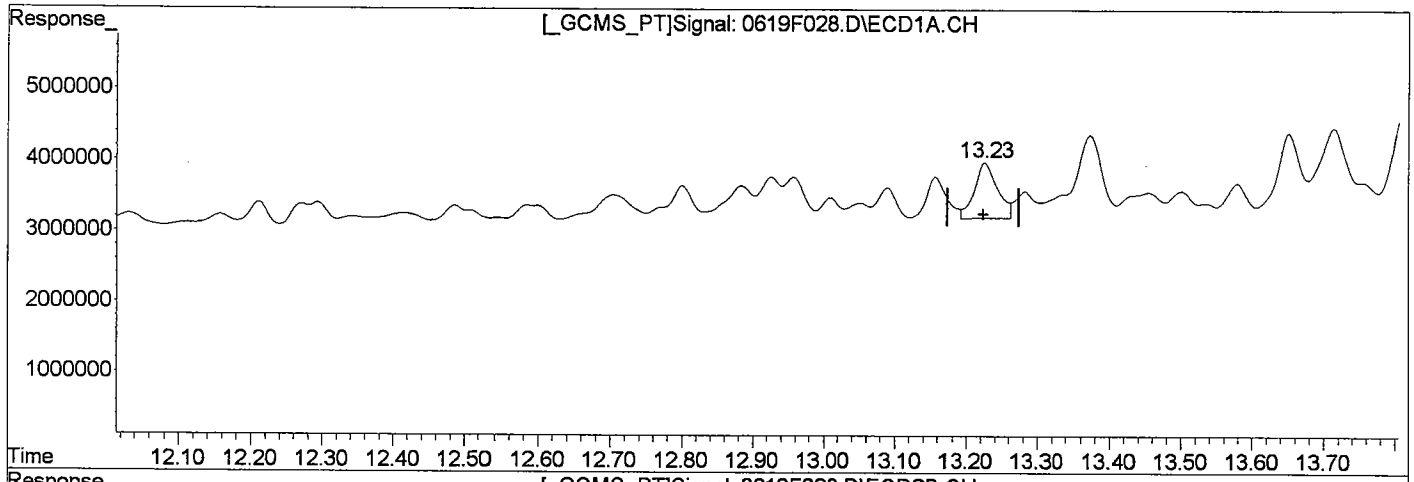
After Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

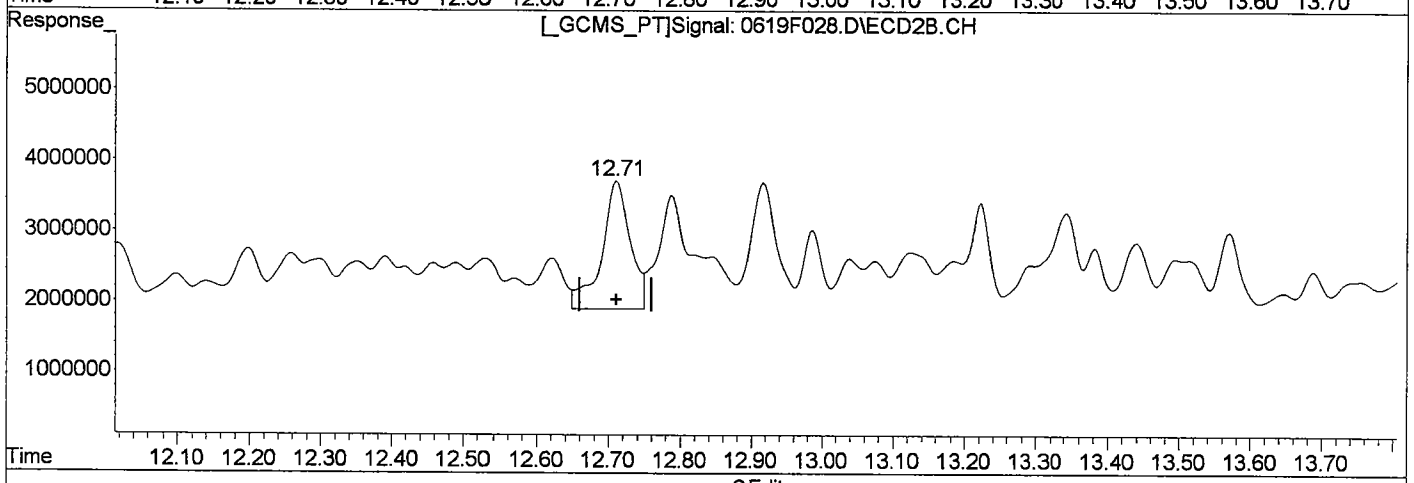
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:50:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 1540.911ug/L

response 1785808

(26) Toxaphene {2} #2

12.71min 1202.987ug/L

response 5036887

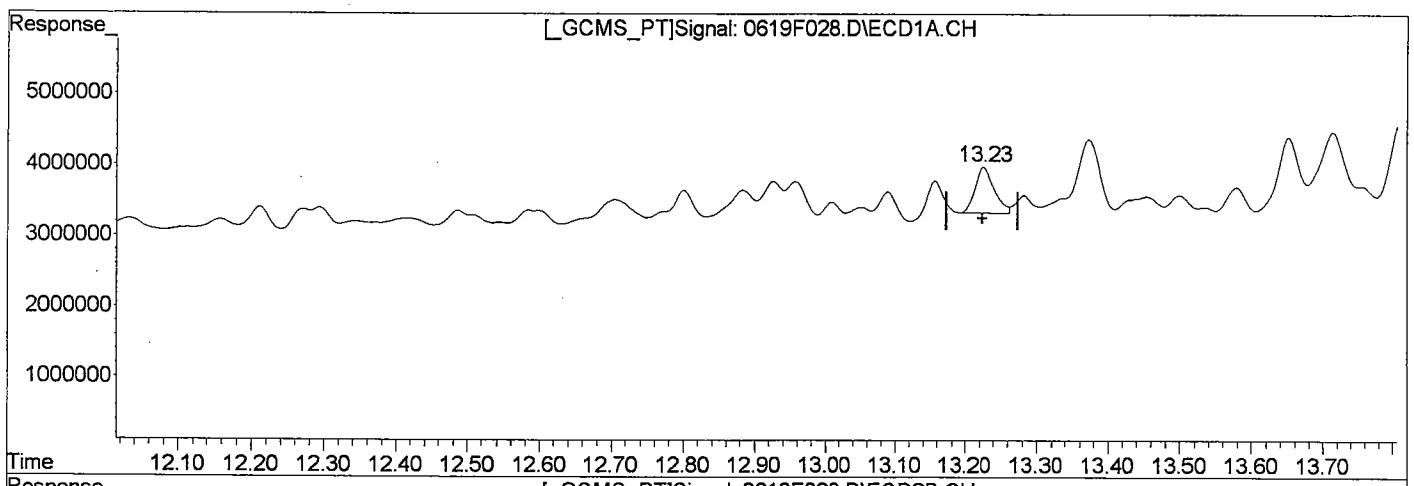
(+) = Expected Retention Time

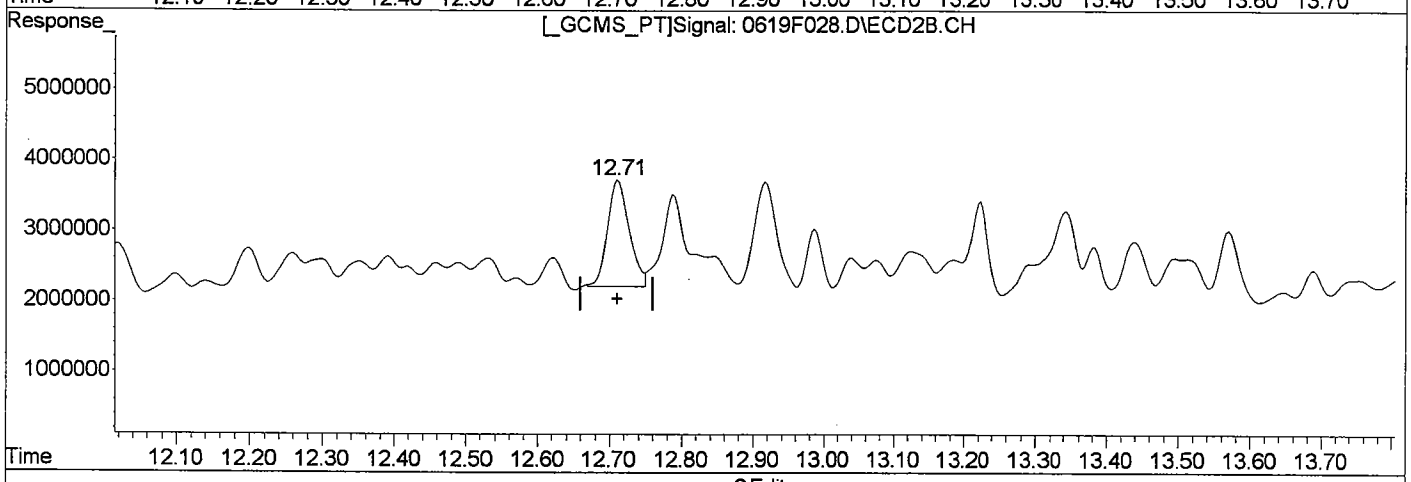
0619F028.D 061107-8081.M Thu Jun 21 11:51:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 1071.834ug/L m

response 1242181

(26) Toxaphene {2} #2

12.71min 765.378ug/L m

response 3204625

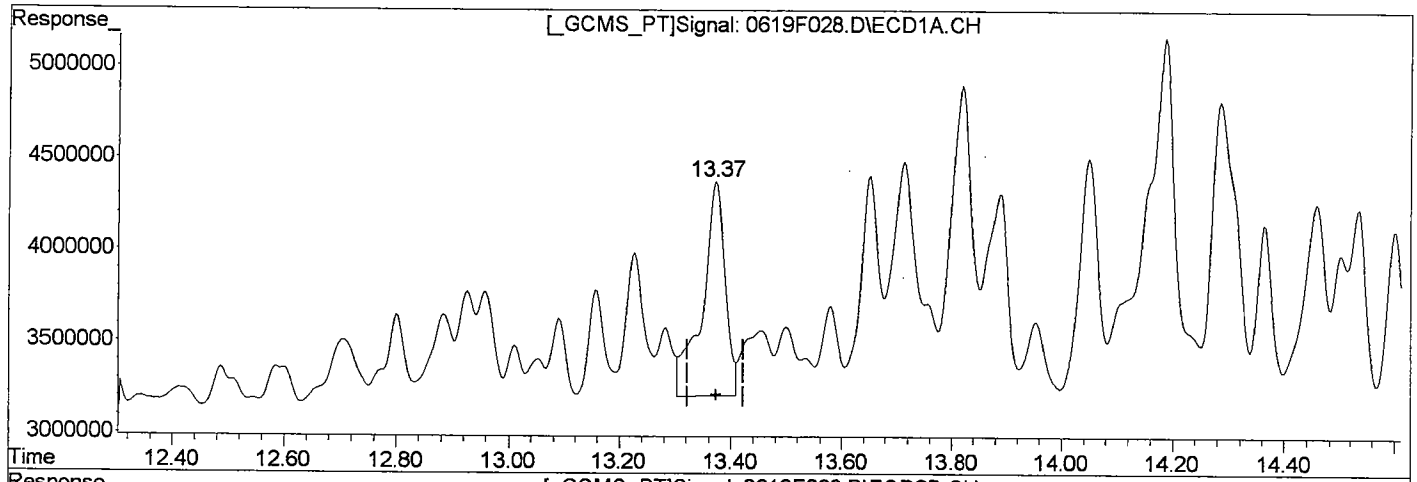
After Initials (C) 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder incorrect
☐ Other

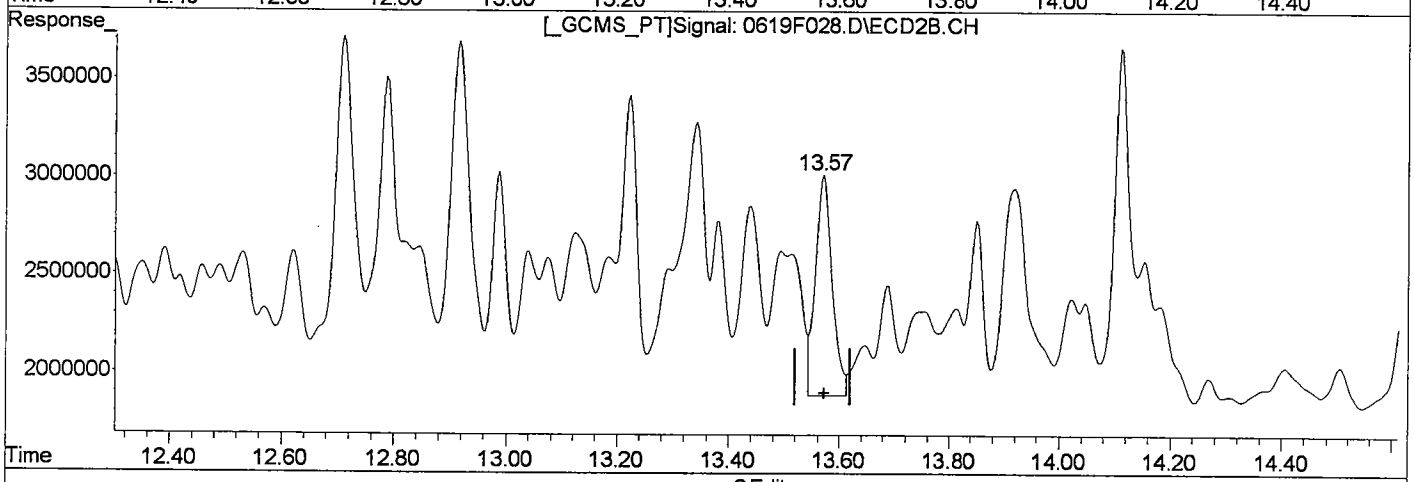
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:51:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1679.514ug/L

response 3380574

(27) Toxaphene {3} #2

13.57min 925.766ug/L

response 2396840

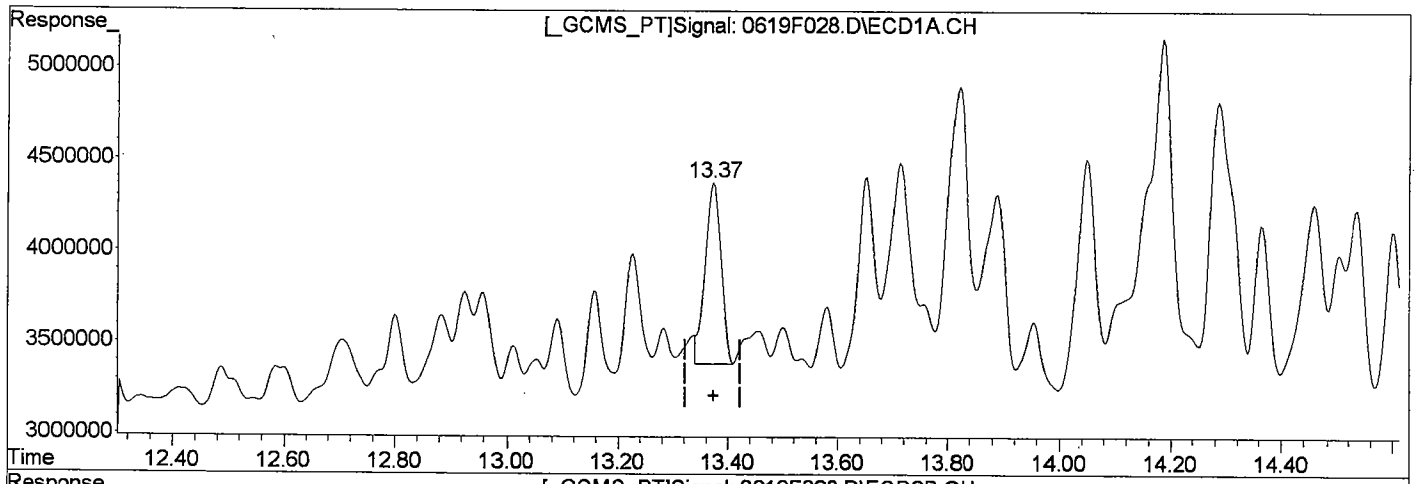
(+) = Expected Retention Time

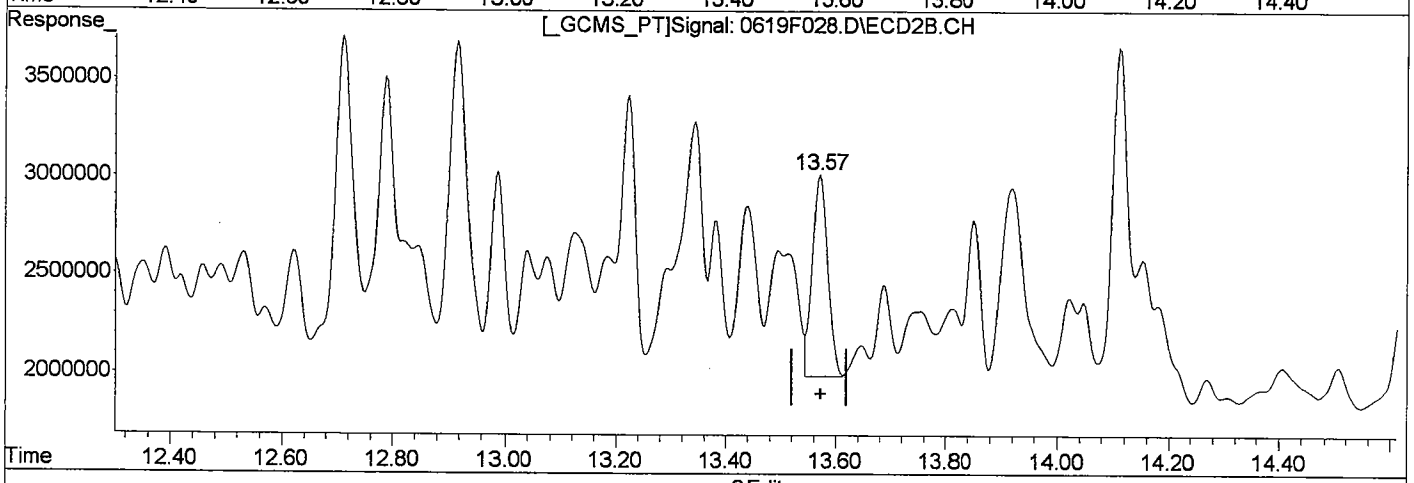
0619F028.D 061107-8081.M Thu Jun 21 11:51:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1002.699ug/L m

response 2018261

(27) Toxaphene {3} #2

13.57min 759.395ug/L m

response 1966100

After Initials JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

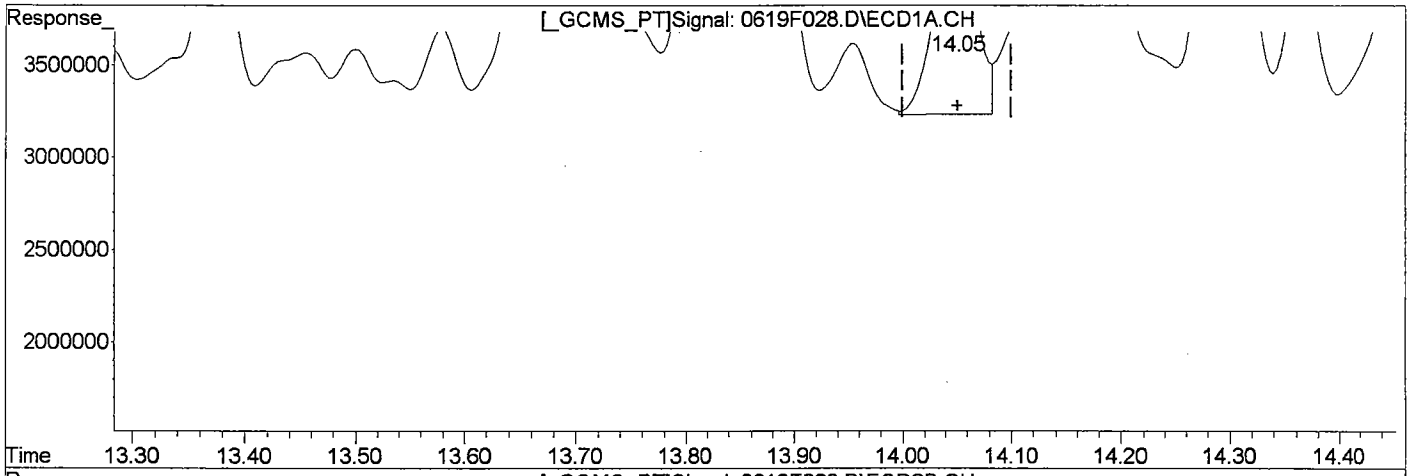
(+) = Expected Retention Time

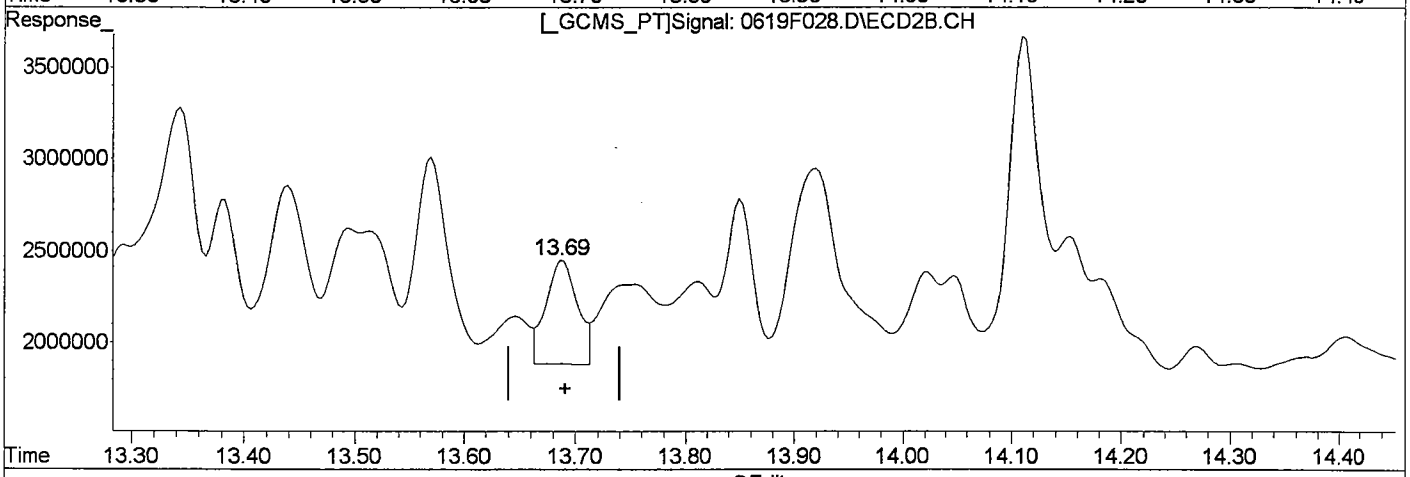
0619F028.D 061107-8081.M Thu Jun 21 11:51:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1044.149ug/L

response 3049761

(28) Toxaphene {4} #2

13.69min 1642.285ug/L

response 1122382

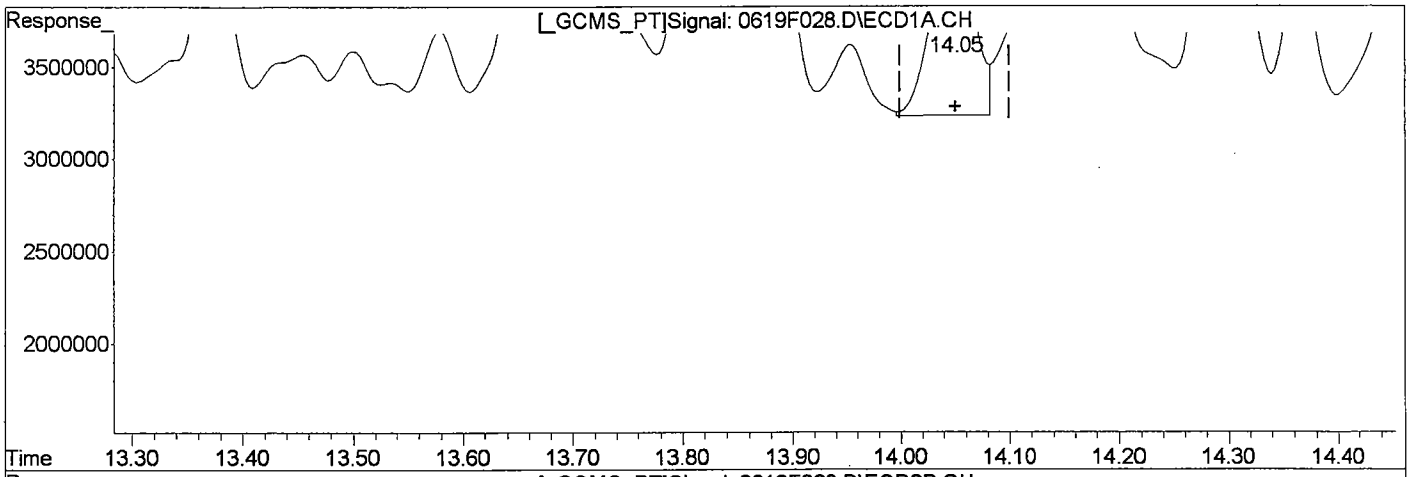
(+) = Expected Retention Time

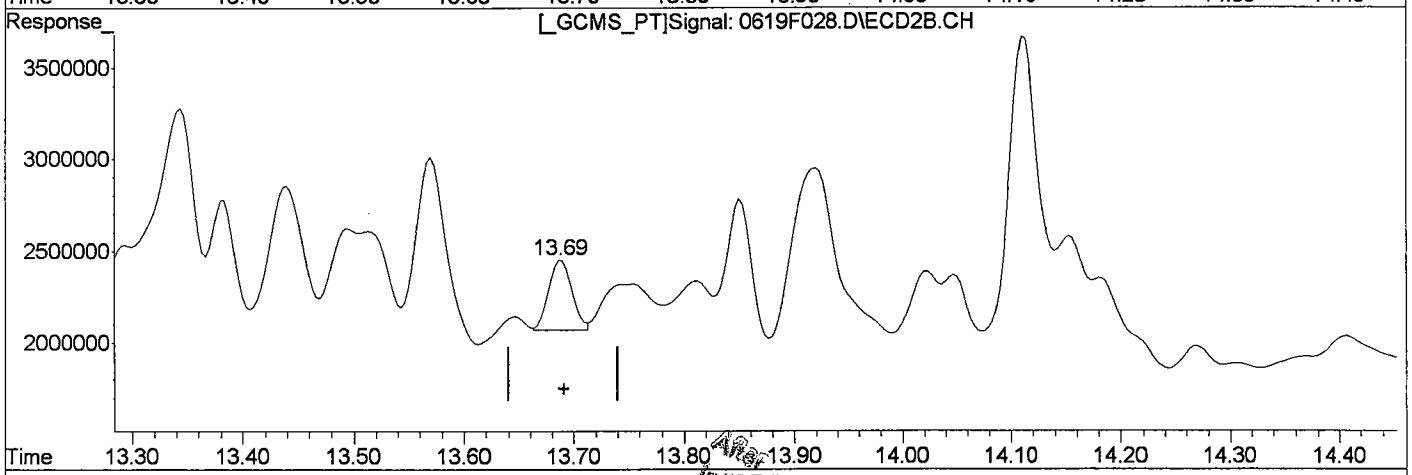
0619F028.D 061107-8081.M Thu Jun 21 11:52:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(28) Toxaphene {4}

14.05min 1044.149ug/L

response 3049761

(28) Toxaphene {4} #2

13.69min 835.182ug/L m

response 570786

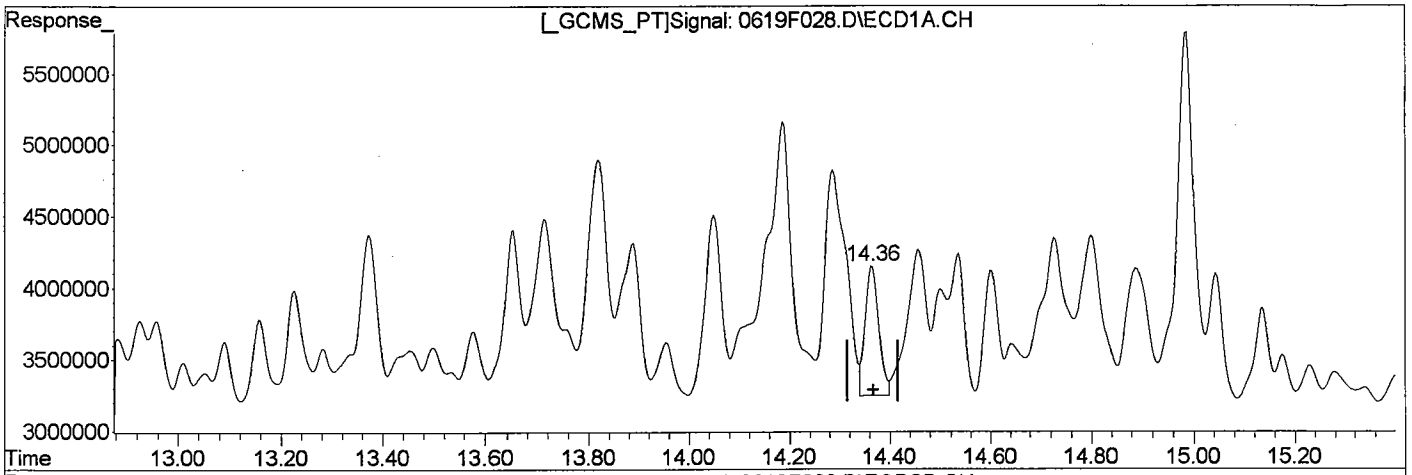
After QEdit
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

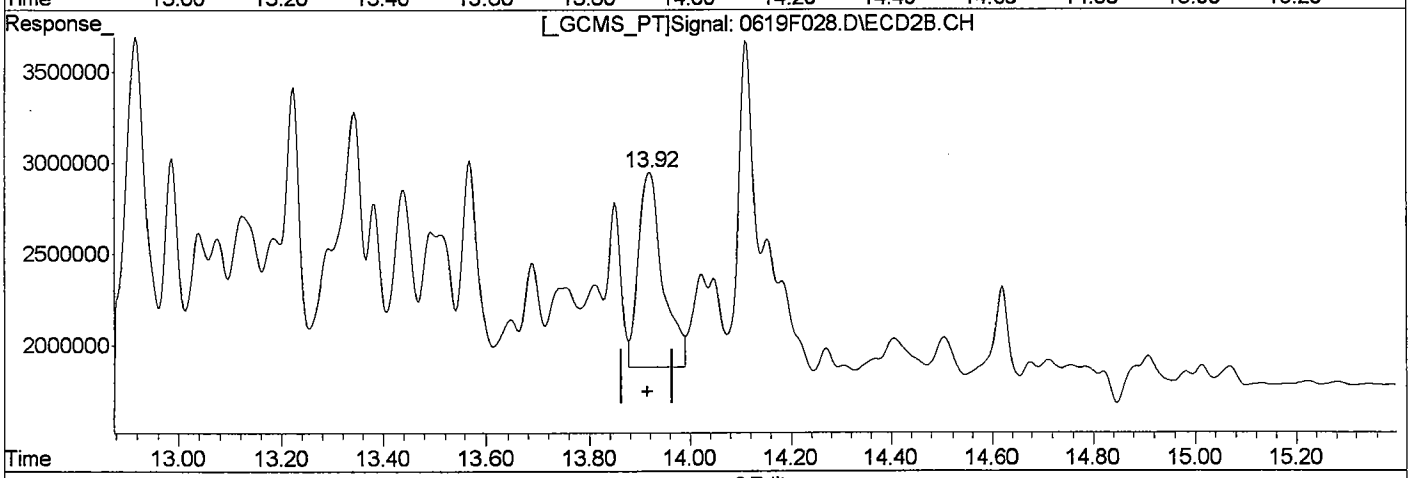
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:52:08 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 1043.259ug/L

response 1704717

(29) Toxaphene {5} #2

13.92min 906.323ug/L

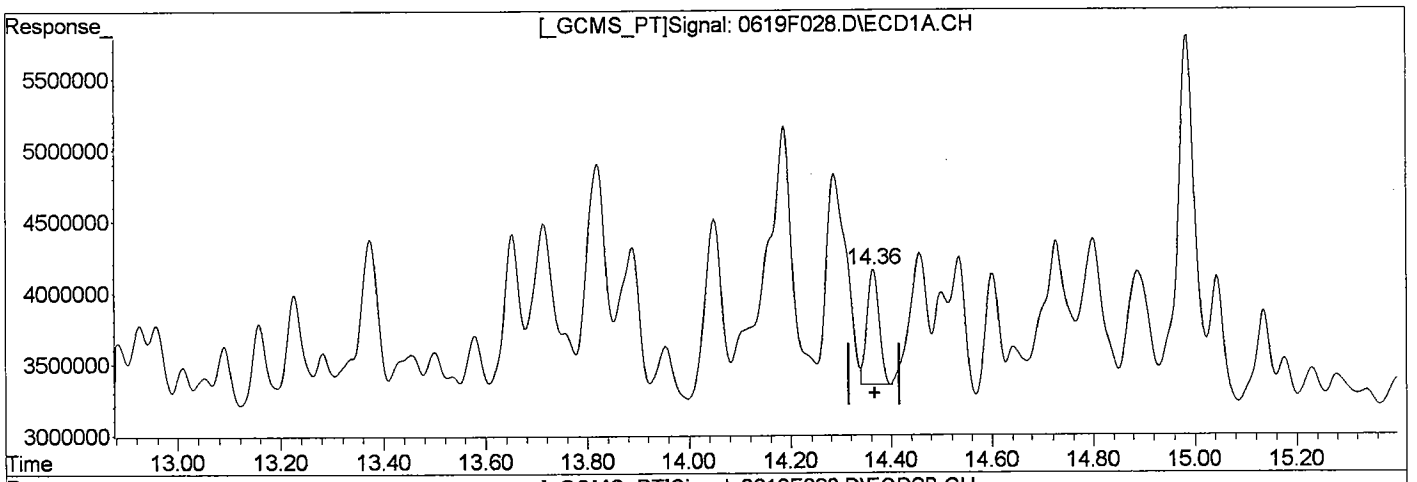
response 3571112

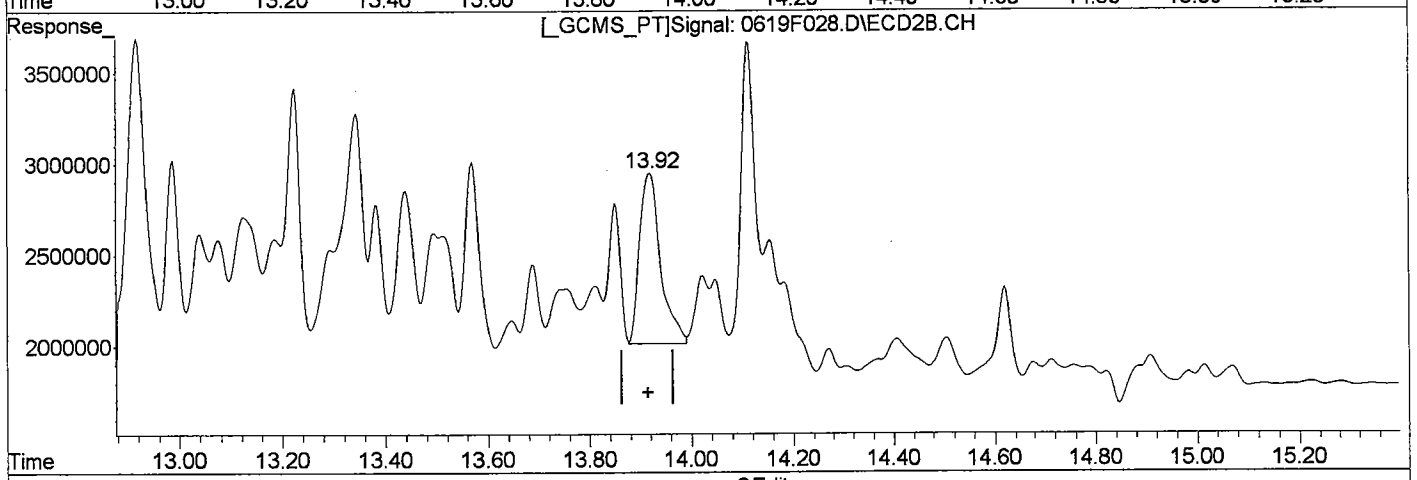
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:52:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 825.214ug/L m

response 1348425

(29) Toxaphene {5} #2

13.92min 678.627ug/L m

response 2673937

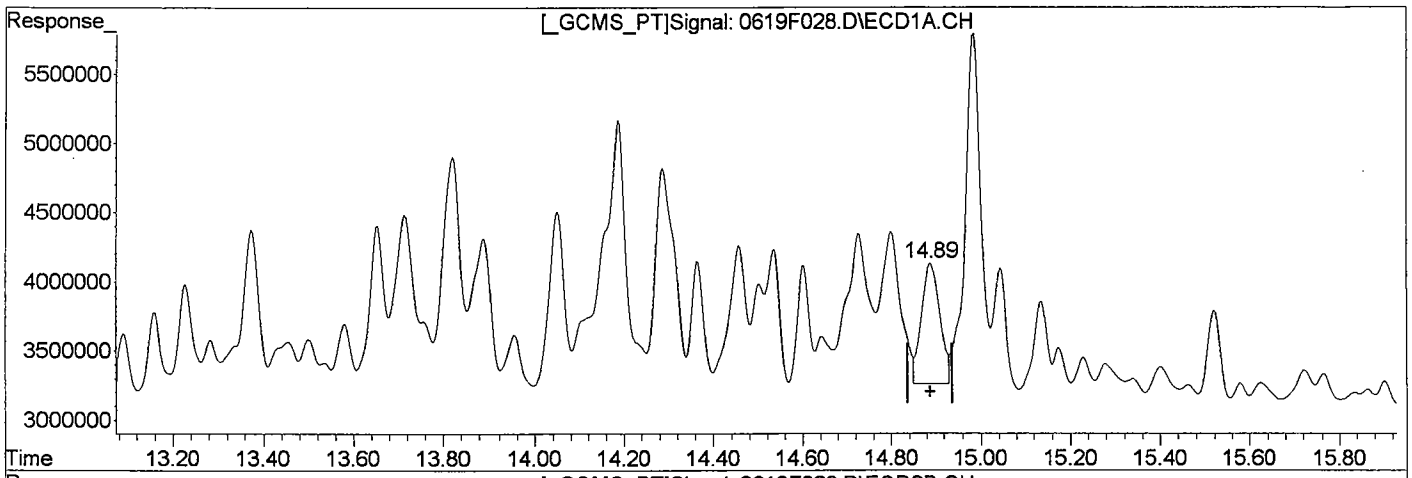
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

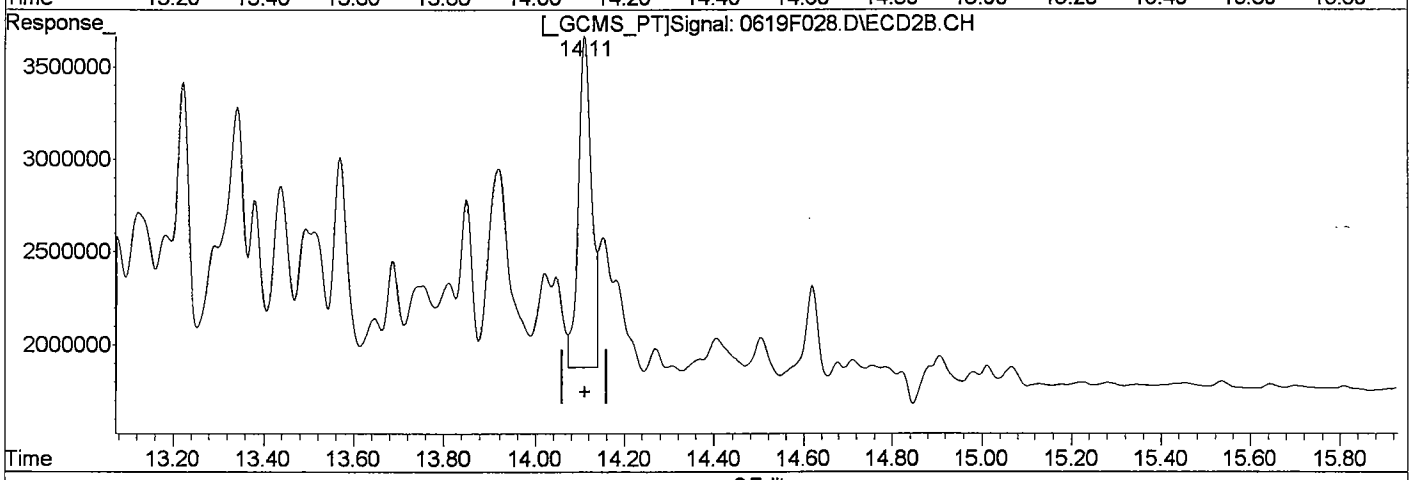
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:52:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1420.672ug/L

response 2580641

(30) Toxaphene {6} #2

14.11min 686.958ug/L

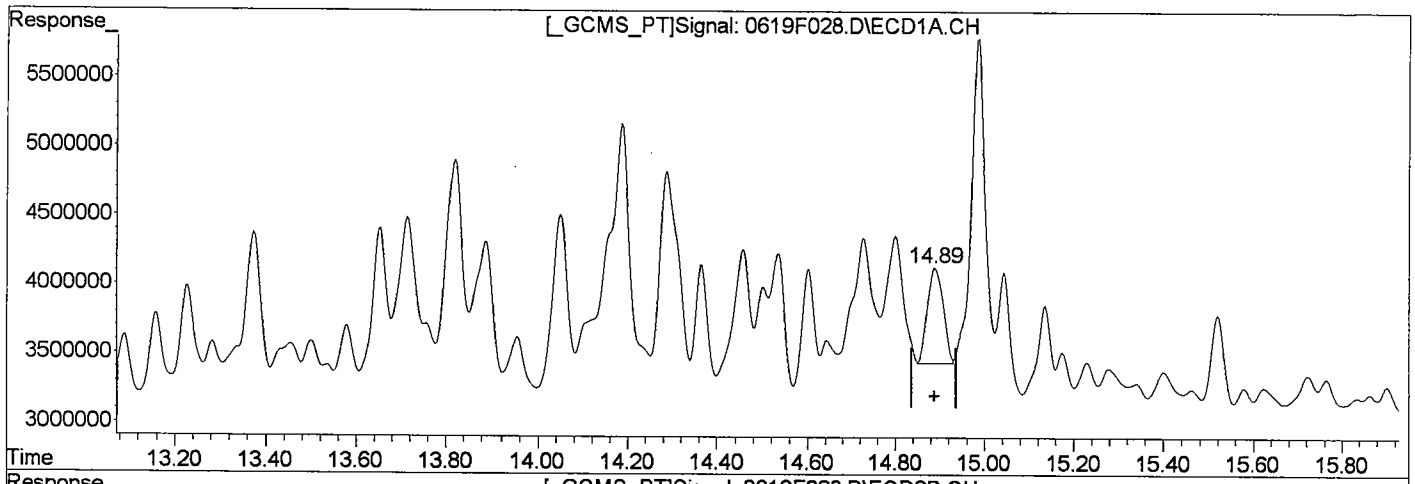
response 3707468

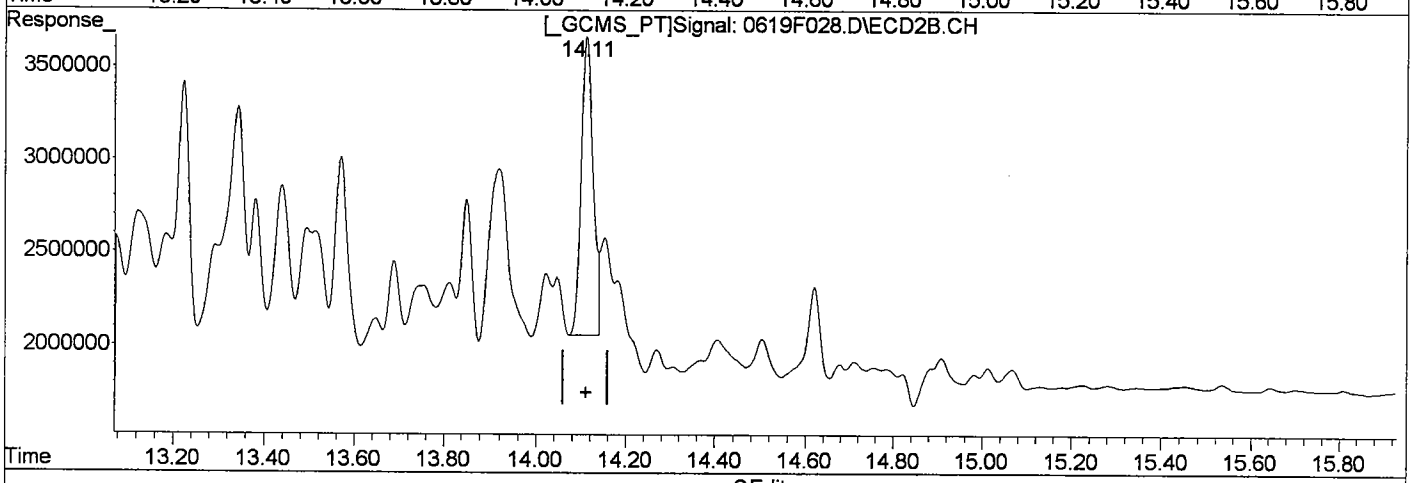
(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:52:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F028.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061907\0619F028.D\ECD2B.CH
Acq On : 20 Jun 2007 9:05 pm Operator: AKamawal
Sample : KWG0706602-6 | DLCS | 8081A PEST_OC | WA Inst : GC23
Misc : SEMIVOA GC\W0706602\6-DLCS.H | F=2 D=1 A Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 946.191ug/L m

response 1718750

(30) Toxaphene {6} #2

14.11min 554.498ug/L m

response 2992586

After Initials LC 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F028.D 061107-8081.M Thu Jun 21 11:52:51 2007

Organic Analysis:
Organochlorine Pesticides

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\061107\0611F011.D	P	J:\GC23\DATA\061107\0611F028.D
B	J:\GC23\DATA\061107\0611F012.D	Q	J:\GC23\DATA\061107\0611F029.D
C	J:\GC23\DATA\061107\0611F013.D	R	J:\GC23\DATA\061107\0611F030.D
D	J:\GC23\DATA\061107\0611F014.D	S	J:\GC23\DATA\061107\0611F032.D
E	J:\GC23\DATA\061107\0611F015.D	T	J:\GC23\DATA\061107\0611F033.D
F	J:\GC23\DATA\061107\0611F016.D	U	J:\GC23\DATA\061107\0611F034.D
G	J:\GC23\DATA\061107\0611F018.D	V	J:\GC23\DATA\061107\0611F035.D
H	J:\GC23\DATA\061107\0611F019.D	W	J:\GC23\DATA\061107\0611F036.D
I	J:\GC23\DATA\061107\0611F020.D	X	J:\GC23\DATA\061107\0611F037.D
J	J:\GC23\DATA\061107\0611F021.D	Y	J:\GC23\DATA\061107\0611F040.D
K	J:\GC23\DATA\061107\0611F022.D	Z	J:\GC23\DATA\061107\0611F041.D
L	J:\GC23\DATA\061107\0611F023.D	AA	J:\GC23\DATA\061107\0611F042.D
M	J:\GC23\DATA\061107\0611F025.D	AB	J:\GC23\DATA\061107\0611F043.D
N	J:\GC23\DATA\061107\0611F026.D	AC	J:\GC23\DATA\061107\0611F044.D
O	J:\GC23\DATA\061107\0611F027.D	AD	J:\GC23\DATA\061107\0611F045.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene															
													Y	2.0	2.22E+5
	Z	5.0	1.99E+5	AA	20	2.07E+5	AB	50	1.96E+5	AC	100	1.87E+5	AD	200	1.90E+5
Decachlorobiphenyl															
													Y	2.0	3.15E+5
	Z	5.0	2.99E+5	AA	20	3.01E+5	AB	50	2.72E+5	AC	100	2.46E+5	AD	200	2.32E+5
alpha-BHC															
													Y	2.0	2.04E+5
	Z	5.0	2.05E+5	AA	20	2.29E+5	AB	50	2.38E+5	AC	100	2.43E+5	AD	200	2.63E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC															
													Y	2.0	1.07E+5
	Z	5.0	1.10E+5	AA	20	1.13E+5	AB	50	1.08E+5	AC	100	1.03E+5	AD	200	1.02E+5
gamma-BHC (Lindane)															
													Y	2.0	2.00E+5
	Z	5.0	2.03E+5	AA	20	2.18E+5	AB	50	2.22E+5	AC	100	2.23E+5	AD	200	2.36E+5
delta-BHC															
													Y	2.0	1.79E+5
	Z	5.0	1.79E+5	AA	20	1.96E+5	AB	50	2.02E+5	AC	100	2.06E+5	AD	200	2.22E+5
Heptachlor															
													Y	2.0	1.97E+5
	Z	5.0	1.94E+5	AA	20	2.07E+5	AB	50	2.05E+5	AC	100	2.00E+5	AD	200	2.05E+5
Aldrin															
													Y	2.0	1.64E+5
	Z	5.0	1.63E+5	AA	20	1.78E+5	AB	50	1.78E+5	AC	100	1.76E+5	AD	200	1.83E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide															
													Y	2.0	1.67E+5
	Z	5.0	1.69E+5	AA	20	1.77E+5	AB	50	1.72E+5	AC	100	1.67E+5	AD	200	1.69E+5
gamma-Chlordane															
													Y	2.0	1.72E+5
	Z	5.0	1.66E+5	AA	20	1.71E+5	AB	50	1.66E+5	AC	100	1.63E+5	AD	200	1.68E+5
Endosulfan I															
													Y	2.0	1.50E+5
	Z	5.0	1.58E+5	AA	20	1.59E+5	AB	50	1.53E+5	AC	100	1.49E+5	AD	200	1.52E+5
alpha-Chlordane															
													Y	2.0	1.68E+5
	Z	5.0	1.67E+5	AA	20	1.73E+5	AB	50	1.66E+5	AC	100	1.62E+5	AD	200	1.65E+5
Dieldrin															
													Y	2.0	1.63E+5
	Z	5.0	1.58E+5	AA	20	1.67E+5	AB	50	1.66E+5	AC	100	1.63E+5	AD	200	1.72E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE															
													Y	2.0	1.55E+5
	Z	5.0	1.44E+5	AA	20	1.53E+5	AB	50	1.53E+5	AC	100	1.52E+5	AD	200	1.61E+5
Endrin															
													Y	2.0	1.44E+5
	Z	5.0	1.46E+5	AA	20	1.59E+5	AB	50	1.59E+5	AC	100	1.54E+5	AD	200	1.63E+5
Endosulfan II															
													Y	2.0	1.84E+5
	Z	5.0	1.84E+5	AA	20	1.91E+5	AB	50	1.86E+5	AC	100	1.78E+5	AD	200	1.78E+5
4,4'-DDD															
													Y	2.0	1.44E+5
	Z	5.0	1.43E+5	AA	20	1.52E+5	AB	50	1.53E+5	AC	100	1.49E+5	AD	200	1.59E+5
Endrin Aldehyde															
													Y	2.0	1.71E+5
	Z	5.0	1.64E+5	AA	20	1.72E+5	AB	50	1.68E+5	AC	100	1.58E+5	AD	200	1.61E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate															
													Y	2.0	2.36E+5
	Z	5.0	2.23E+5	AA	20	2.34E+5	AB	50	2.25E+5	AC	100	2.13E+5	AD	200	2.17E+5
4,4'-DDT															
													Y	2.0	1.70E+5
	Z	5.0	1.69E+5	AA	20	1.90E+5	AB	50	1.92E+5	AC	100	1.87E+5	AD	200	1.98E+5
Endrin Ketone															
													Y	2.0	2.88E+5
	Z	5.0	2.95E+5	AA	20	3.16E+5	AB	50	3.06E+5	AC	100	2.92E+5	AD	200	2.93E+5
Methoxychlor															
													Y	2.0	1.40E+5
	Z	5.0	1.35E+5	AA	20	1.44E+5	AB	50	1.36E+5	AC	100	1.27E+5	AD	200	1.27E+5
Toxaphene {1}	A	100	1390	B	250	1340	C	500	1320	D	1000	1620	E	2000	1390
	F	5000	1420												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}	A	100	1300	B	250	1150	C	500	990	D	1000	1290	E	2000	1110
	F	5000	1110												
Toxaphene {3}	A	100	2190	B	250	1950	C	500	1730	D	1000	2200	E	2000	2000
	F	5000	2000												
Toxaphene {4}	A	100	2660	B	250	2470	C	500	2340	D	1000	3610	E	2000	3210
	F	5000	3230												
Toxaphene {5}	A	100	1680	B	250	1410	C	500	1320	D	1000	1980	E	2000	1730
	F	5000	1680												
Toxaphene {6}	A	100	1660	B	250	1580	C	500	1540	D	1000	2200	E	2000	2050
	F	5000	1870												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	6.4		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	12.0		≤ 20
alpha-BHC	MS	AverageRF	% RSD	10.0		≤ 20
beta-BHC	MS	AverageRF	% RSD	3.9		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	6.3		≤ 20
delta-BHC	MS	AverageRF	% RSD	8.4		≤ 20
Heptachlor	MS	AverageRF	% RSD	2.6		≤ 20
Aldrin	MS	AverageRF	% RSD	4.7		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	2.2		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	2.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	2.6		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	2.1		≤ 20
Dieldrin	MS	AverageRF	% RSD	2.8		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	3.6		≤ 20
Endrin	MS	AverageRF	% RSD	5.0		≤ 20
Endosulfan II	MS	AverageRF	% RSD	2.6		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	4.0		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	3.5		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	4.0		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	6.5		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	3.6		≤ 20
Methoxychlor	MS	AverageRF	% RSD	5.0		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	7.7		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	10.2		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	8.6		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	17.2		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	14.7		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	14.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007
Date Analyzed: 06/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6343
Units: ug/L

File ID:
J:\GC23\DATA\061107\0611F017.D
J:\GC23\DATA\061107\0611F024.D
J:\GC23\DATA\061107\0611F031.D
J:\GC23\DATA\061107\0611F038.D
J:\GC23\DATA\061107\0611F046.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	39	230000	223000	-3	NA	± 15 %	AverageRF
beta-BHC	40	39	107000	104000	-3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	39	217000	209000	-3	NA	± 15 %	AverageRF
delta-BHC	40	40	197000	199000	1	NA	± 15 %	AverageRF
Heptachlor	40	39	201000	198000	-2	NA	± 15 %	AverageRF
Aldrin	40	39	174000	169000	-3	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	39	170000	164000	-3	NA	± 15 %	AverageRF
gamma-Chlordane	40	39	168000	162000	-3	NA	± 15 %	AverageRF
Endosulfan I	40	39	153000	149000	-3	NA	± 15 %	AverageRF
alpha-Chlordane	40	39	167000	161000	-3	NA	± 15 %	AverageRF
Dieldrin	40	38	165000	155000	-6	NA	± 15 %	AverageRF
4,4'-DDE	40	39	153000	149000	-3	NA	± 15 %	AverageRF
Endrin	40	40	154000	152000	-1	NA	± 15 %	AverageRF
Endosulfan II	40	40	184000	182000	-1	NA	± 15 %	AverageRF
4,4'-DDD	40	39	150000	145000	-4	NA	± 15 %	AverageRF
Endrin Aldehyde	40	40	166000	167000	1	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	39	225000	221000	-2	NA	± 15 %	AverageRF
4,4'-DDT	40	40	184000	184000	0	NA	± 15 %	AverageRF
Endrin Ketone	40	41	298000	308000	3	NA	± 15 %	AverageRF
Methoxychlor	40	40	135000	136000	1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	870	1410	1230	-13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	940	1160	1080	-6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	860	2010	1740	-14	NA	± 100 %	AverageRF
Toxaphene {4}	1000	970	2920	2850	-3	NA	± 100 %	AverageRF
Toxaphene {5}	1000	890	1630	1450	-11	NA	± 100 %	AverageRF
Toxaphene {6}	1000	970	1820	1770	-3	NA	± 100 %	AverageRF
Toxaphene	1000	920	NA	NA	NA	8	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC23\DATA\061107\0611F011.D\0611F011c.d	P	J:\GC23\DATA\061107\0611F028.D\0611F028c.d
B	J:\GC23\DATA\061107\0611F012.D\0611F012c.d	Q	J:\GC23\DATA\061107\0611F029.D\0611F029c.d
C	J:\GC23\DATA\061107\0611F013.D\0611F013c.d	R	J:\GC23\DATA\061107\0611F030.D\0611F030c.d
D	J:\GC23\DATA\061107\0611F014.D\0611F014c.d	S	J:\GC23\DATA\061107\0611F032.D\0611F032c.d
E	J:\GC23\DATA\061107\0611F015.D\0611F015c.d	T	J:\GC23\DATA\061107\0611F033.D\0611F033c.d
F	J:\GC23\DATA\061107\0611F016.D\0611F016c.d	U	J:\GC23\DATA\061107\0611F034.D\0611F034c.d
G	J:\GC23\DATA\061107\0611F018.D\0611F018c.d	V	J:\GC23\DATA\061107\0611F035.D\0611F035c.d
H	J:\GC23\DATA\061107\0611F019.D\0611F019c.d	W	J:\GC23\DATA\061107\0611F036.D\0611F036c.d
I	J:\GC23\DATA\061107\0611F020.D\0611F020c.d	X	J:\GC23\DATA\061107\0611F037.D\0611F037c.d
J	J:\GC23\DATA\061107\0611F021.D\0611F021c.d	Y	J:\GC23\DATA\061107\0611F040.D\0611F040c.d
K	J:\GC23\DATA\061107\0611F022.D\0611F022c.d	Z	J:\GC23\DATA\061107\0611F041.D\0611F041c.d
L	J:\GC23\DATA\061107\0611F023.D\0611F023c.d	AA	J:\GC23\DATA\061107\0611F042.D\0611F042c.d
M	J:\GC23\DATA\061107\0611F025.D\0611F025c.d	AB	J:\GC23\DATA\061107\0611F043.D\0611F043c.d
N	J:\GC23\DATA\061107\0611F026.D\0611F026c.d	AC	J:\GC23\DATA\061107\0611F044.D\0611F044c.d
O	J:\GC23\DATA\061107\0611F027.D\0611F027c.d	AD	J:\GC23\DATA\061107\0611F045.D\0611F045c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetrachloro-m-xylene															
													Y	2.0	1.70E+5
	Z	5.0	1.69E+5	AA	20	1.86E+5	AB	50	1.84E+5	AC	100	1.80E+5	AD	200	1.87E+5
Decachlorobiphenyl															
													Y	2.0	1.99E+5
	Z	5.0	1.95E+5	AA	20	1.99E+5	AB	50	1.83E+5	AC	100	1.69E+5	AD	200	1.65E+5
alpha-BHC															
													Y	2.0	1.92E+5
	Z	5.0	1.97E+5	AA	20	2.33E+5	AB	50	2.48E+5	AC	100	2.60E+5	AD	200	2.82E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
beta-BHC															
													Y	2.0	1.10E+5
	Z	5.0	1.03E+5	AA	20	1.12E+5	AB	50	1.09E+5	AC	100	1.05E+5	AD	200	1.08E+5
gamma-BHC (Lindane)															
													Y	2.0	1.89E+5
	Z	5.0	1.95E+5	AA	20	2.23E+5	AB	50	2.33E+5	AC	100	2.38E+5	AD	200	2.56E+5
delta-BHC															
													Y	2.0	1.75E+5
	Z	5.0	1.80E+5	AA	20	2.12E+5	AB	50	2.23E+5	AC	100	2.30E+5	AD	200	2.50E+5
Heptachlor															
													Y	2.0	2.17E+5
	Z	5.0	2.15E+5	AA	20	2.31E+5	AB	50	2.31E+5	AC	100	2.29E+5	AD	200	2.38E+5
Aldrin															
													Y	2.0	1.73E+5
	Z	5.0	1.81E+5	AA	20	2.03E+5	AB	50	2.07E+5	AC	100	2.09E+5	AD	200	2.21E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Heptachlor Epoxide															
													Y	2.0	1.89E+5
	Z	5.0	1.90E+5	AA	20	2.09E+5	AB	50	2.07E+5	AC	100	2.03E+5	AD	200	2.08E+5
gamma-Chlordane															
													Y	2.0	1.90E+5
	Z	5.0	1.90E+5	AA	20	2.09E+5	AB	50	2.08E+5	AC	100	2.06E+5	AD	200	2.15E+5
Endosulfan I															
													Y	2.0	1.76E+5
	Z	5.0	1.78E+5	AA	20	1.93E+5	AB	50	1.89E+5	AC	100	1.86E+5	AD	200	1.90E+5
alpha-Chlordane															
													Y	2.0	1.81E+5
	Z	5.0	1.85E+5	AA	20	2.06E+5	AB	50	2.03E+5	AC	100	2.00E+5	AD	200	2.07E+5
Dieldrin															
													Y	2.0	1.72E+5
	Z	5.0	1.78E+5	AA	20	2.00E+5	AB	50	2.02E+5	AC	100	2.03E+5	AD	200	2.13E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
4,4'-DDE															
													Y	2.0	1.65E+5
	Z	5.0	1.65E+5	AA	20	1.87E+5	AB	50	1.92E+5	AC	100	1.95E+5	AD	200	2.06E+5
Endrin															
													Y	2.0	1.62E+5
	Z	5.0	1.59E+5	AA	20	1.79E+5	AB	50	1.81E+5	AC	100	1.81E+5	AD	200	1.90E+5
Endosulfan II															
													Y	2.0	1.76E+5
	Z	5.0	1.75E+5	AA	20	1.91E+5	AB	50	1.85E+5	AC	100	1.82E+5	AD	200	1.79E+5
4,4'-DDD															
													Y	2.0	1.35E+5
	Z	5.0	1.36E+5	AA	20	1.56E+5	AB	50	1.59E+5	AC	100	1.60E+5	AD	200	1.69E+5
Endrin Aldehyde															
													Y	2.0	1.48E+5
	Z	5.0	1.46E+5	AA	20	1.59E+5	AB	50	1.54E+5	AC	100	1.49E+5	AD	200	1.50E+5

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Endosulfan Sulfate															
													Y	2.0	1.78E+5
	Z	5.0	1.77E+5	AA	20	1.90E+5	AB	50	1.85E+5	AC	100	1.78E+5	AD	200	1.81E+5
4,4'-DDT															
													Y	2.0	1.44E+5
	Z	5.0	1.44E+5	AA	20	1.67E+5	AB	50	1.71E+5	AC	100	1.71E+5	AD	200	1.81E+5
Endrin Ketone															
													Y	2.0	1.91E+5
	Z	5.0	2.02E+5	AA	20	2.21E+5	AB	50	2.19E+5	AC	100	2.12E+5	AD	200	2.15E+5
Methoxychlor															
													Y	2.0	91000
	Z	5.0	87500	AA	20	1.01E+5	AB	50	97500	AC	100	93400	AD	200	93700
Toxaphene {1}	A	100	1100	B	250	1130	C	500	1150	D	1000	1310	E	2000	1200
	F	5000	1280												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Toxaphene {2}	A	100	4360	B	250	4030	C	500	4010	D	1000	4620	E	2000	4050
	F	5000	4040												
Toxaphene {3}	A	100	2710	B	250	2400	C	500	2420	D	1000	2850	E	2000	2570
	F	5000	2590												
Toxaphene {4}	A	100	782	B	250	630	C	500	656	D	1000	741	E	2000	651
	F	5000	640												
Toxaphene {5}	A	100	3920	B	250	3600	C	500	3730	D	1000	4370	E	2000	3940
	F	5000	4070												
Toxaphene {6}	A	100	5660	B	250	5170	C	500	5010	D	1000	5980	E	2000	5270
	F	5000	5290												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007

Initial Calibration Summary
Organochlorine Pesticides

Calibration ID: CAL6343
Instrument ID: GC23

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetrachloro-m-xylene	SURR	AverageRF	% RSD	4.3		≤ 20
Decachlorobiphenyl	SURR	AverageRF	% RSD	8.2		≤ 20
alpha-BHC	MS	AverageRF	% RSD	15.0		≤ 20
beta-BHC	MS	AverageRF	% RSD	2.8		≤ 20
gamma-BHC (Lindane)	MS	AverageRF	% RSD	11.7		≤ 20
delta-BHC	MS	AverageRF	% RSD	13.9		≤ 20
Heptachlor	MS	AverageRF	% RSD	4.0		≤ 20
Aldrin	MS	AverageRF	% RSD	9.4		≤ 20
Heptachlor Epoxide	MS	AverageRF	% RSD	4.5		≤ 20
gamma-Chlordane	MS	AverageRF	% RSD	5.1		≤ 20
Endosulfan I	MS	AverageRF	% RSD	3.7		≤ 20
alpha-Chlordane	MS	AverageRF	% RSD	5.6		≤ 20
Dieldrin	MS	AverageRF	% RSD	8.2		≤ 20
4,4'-DDE	MS	AverageRF	% RSD	9.0		≤ 20
Endrin	MS	AverageRF	% RSD	6.8		≤ 20
Endosulfan II	MS	AverageRF	% RSD	3.2		≤ 20
4,4'-DDD	MS	AverageRF	% RSD	9.0		≤ 20
Endrin Aldehyde	MS	AverageRF	% RSD	3.1		≤ 20
Endosulfan Sulfate	MS	AverageRF	% RSD	2.7		≤ 20
4,4'-DDT	MS	AverageRF	% RSD	9.4		≤ 20
Endrin Ketone	MS	AverageRF	% RSD	5.5		≤ 20
Methoxychlor	MS	AverageRF	% RSD	5.2		≤ 20
Toxaphene {1}	MULTI	AverageRF	% RSD	7.0		≤ 20
Toxaphene {2}	MULTI	AverageRF	% RSD	6.0		≤ 20
Toxaphene {3}	MULTI	AverageRF	% RSD	6.6		≤ 20
Toxaphene {4}	MULTI	AverageRF	% RSD	9.1		≤ 20
Toxaphene {5}	MULTI	AverageRF	% RSD	6.8		≤ 20
Toxaphene {6}	MULTI	AverageRF	% RSD	6.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 06/11/2007
Date Analyzed: 06/12/2007

Second Source Calibration Verification
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A

Calibration ID: CAL6343
Units: ug/L

File ID: J:\GC23\DATA\061107\0611F017.D\0611F017c.d
J:\GC23\DATA\061107\0611F024.D\0611F024c.d
J:\GC23\DATA\061107\0611F031.D\0611F031c.d
J:\GC23\DATA\061107\0611F038.D\0611F038c.d
J:\GC23\DATA\061107\0611F046.D\0611F046c.d

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
alpha-BHC	40	40	235000	237000	1	NA	± 15 %	AverageRF
beta-BHC	40	39	108000	105000	-3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	40	40	223000	220000	-1	NA	± 15 %	AverageRF
delta-BHC	40	41	212000	219000	4	NA	± 15 %	AverageRF
Heptachlor	40	39	227000	219000	-4	NA	± 15 %	AverageRF
Aldrin	40	40	199000	198000	0	NA	± 15 %	AverageRF
Heptachlor Epoxide	40	39	201000	197000	-2	NA	± 15 %	AverageRF
gamma-Chlordane	40	39	203000	200000	-2	NA	± 15 %	AverageRF
Endosulfan I	40	40	185000	183000	-1	NA	± 15 %	AverageRF
alpha-Chlordane	40	40	197000	196000	-1	NA	± 15 %	AverageRF
Dieldrin	40	39	195000	187000	-4	NA	± 15 %	AverageRF
4,4'-DDE	40	40	185000	186000	1	NA	± 15 %	AverageRF
Endrin	40	40	175000	176000	0	NA	± 15 %	AverageRF
Endosulfan II	40	40	181000	180000	-1	NA	± 15 %	AverageRF
4,4'-DDD	40	39	153000	150000	-2	NA	± 15 %	AverageRF
Endrin Aldehyde	40	40	151000	151000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	40	39	181000	178000	-2	NA	± 15 %	AverageRF
4,4'-DDT	40	40	163000	165000	1	NA	± 15 %	AverageRF
Endrin Ketone	40	41	210000	217000	4	NA	± 15 %	AverageRF
Methoxychlor	40	42	94100	97600	4	NA	± 15 %	AverageRF
Toxaphene {1}	1000	950	1200	1130	-5	NA	± 100 %	AverageRF
Toxaphene {2}	1000	850	4190	3550	-15	NA	± 100 %	AverageRF
Toxaphene {3}	1000	840	2590	2180	-16	NA	± 100 %	AverageRF
Toxaphene {4}	1000	870	683	598	-13	NA	± 100 %	AverageRF
Toxaphene {5}	1000	860	3940	3400	-14	NA	± 100 %	AverageRF
Toxaphene {6}	1000	790	5400	4270	-21	NA	± 100 %	AverageRF
Toxaphene	1000	860	NA	NA	NA	14	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Sequence Name: C:\GC23\SEQUENCE\061107.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\061107\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6343

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	2	0611F002	PESTA	HEX
3	PEM	3	0611F003	PESTA	PEM @ 50-100ppb GCPS5-89F
4	ICAL	4	0611F004	PESTA	8081 @ 2ppb GCPS5-91D NR
5	ICAL	5	0611F005	PESTA	8081 @ 5ppb GCPS5-91D
6	ICAL	6	0611F006	PESTA	8081 @ 20ppb GCPS5-91D
7	ICAL	7	0611F007	PESTA	8081 @ 50ppb GCPS5-91D
8	ICAL	8	0611F008	PESTA	8081 @ 100ppb GCPS5-91D
9	ICAL	9	0611F009	PESTA	8081 @ 200ppb GCPS5-91D
10	ICV	10	0611F010	PESTA	8081 ICV @ 40ppb GCPS5-91A
11	ICAL	11	0611F011	PESTA	TOX @ 100ppb GCPS5-87E
12	ICAL	12	0611F012	PESTA	TOX @ 250ppb GCPS5-87E
13	ICAL	13	0611F013	PESTA	TOX @ 500ppb GCPS5-87E
14	ICAL	14	0611F014	PESTA	TOX @ 1000ppb GCPS5-89E
15	ICAL	15	0611F015	PESTA	TOX @ 2000ppb GCPS5-89E
16	ICAL	16	0611F016	PESTA	TOX @ 5000ppb GCPS5-89E
17	ICV	17	0611F017	PESTA	TOX ICV @ 1000ppb GCPS5-79b
18	ICAL	18	0611F018	PESTA	CHLOR@ 25PPB GCPS5-86F
19	ICAL	19	0611F019	PESTA	CHLOR@ 50PPB GCPS5-86F
20	ICAL	20	0611F020	PESTA	CHLOR@ 100PPB GCPS5-86F
21	ICAL	21	0611F021	PESTA	CHLOR@ 500PPB GCPS5-86F
22	ICAL	22	0611F022	PESTA	CHLOR@ 1000PPB GCPS5-86F
23	ICAL	23	0611F023	PESTA	CHLOR@ 2000PPB GCPS5-86F
24	ICV	24	0611F024	PESTA	CHLOR ICV @ 800ppb GCPS5-76H
25	ICAL	25	0611F025	PESTA	MISC @ 2ppb GCPS5-88M
26	ICAL	26	0611F026	PESTA	MISC @ 5ppb GCPS5-88M
27	ICAL	27	0611F027	PESTA	MISC @ 20ppb GCPS5-88M
28	ICAL	28	0611F028	PESTA	MISC @ 50ppb GCPS5-88M
29	ICAL	29	0611F029	PESTA	MISC @ 100ppb GCPS5-88M
30	ICAL	30	0611F030	PESTA	MISC @ 200ppb GCPS5-88M
31	ICV	31	0611F031	PESTA	MISC ICV @ 40ppb GCPS5-80P
32	ICAL	32	0611F032	PESTA	2,4'-DDx @ 2ppb GCPS5-91B
33	ICAL	33	0611F033	PESTA	2,4'-DDx @ 5ppb GCPS5-91B
34	ICAL	34	0611F034	PESTA	2,4'-DDx @ 20ppb GCPS5-91B
35	ICAL	35	0611F035	PESTA	2,4'-DDx @ 50ppb GCPS5-90H
36	ICAL	36	0611F036	PESTA	2,4'-DDx @ 100ppb GCPS5-91B
37	ICAL	37	0611F037	PESTA	2,4'-DDx @ 200ppb GCPS5-91B
38	ICV	38	0611F038	PESTA	2,4DDx ICV @ 40ppb GCPS5-85P
39	ICV	10	0611F039	PESTA	8081 ICV @ 40ppb GCPS5-91A NR
40	ICAL	4	0611F040	PESTA	8081 @ 2ppb GCPS5-91D
41	ICAL	5	0611F041	PESTA	8081 @ 5ppb GCPS5-91D
42	ICAL	6	0611F042	PESTA	8081 @ 20ppb GCPS5-91D
43	ICAL	7	0611F043	PESTA	8081 @ 50ppb GCPS5-91D

Sequence Name: C:\GC23\SEQUENCE\061107.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\061107\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6343

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	2	0611F002	PESTA	HEX
3	PEM	3	0611F003	PESTA	PEM @ 50-100ppb GCPS5-89F
4	ICAL	4	0611F004	PESTA	8081 @ 2ppb GCPS5-91D NR
5	ICAL	5	0611F005	PESTA	8081 @ 5ppb GCPS5-91D
6	ICAL	6	0611F006	PESTA	8081 @ 20ppb GCPS5-91D
7	ICAL	7	0611F007	PESTA	8081 @ 50ppb GCPS5-91D
8	ICAL	8	0611F008	PESTA	8081 @ 100ppb GCPS5-91D
9	ICAL	9	0611F009	PESTA	8081 @ 200ppb GCPS5-91D
10	ICV	10	0611F010	PESTA	8081 ICV @ 40ppb GCPS5-91A
11	ICAL	11	0611F011	PESTA	TOX @ 100ppb GCPS5-87E
12	ICAL	12	0611F012	PESTA	TOX @ 250ppb GCPS5-87E
13	ICAL	13	0611F013	PESTA	TOX @ 500ppb GCPS5-87E
14	ICAL	14	0611F014	PESTA	TOX @ 1000ppb GCPS5-89E
15	ICAL	15	0611F015	PESTA	TOX @ 2000ppb GCPS5-89E
16	ICAL	16	0611F016	PESTA	TOX @ 5000ppb GCPS5-89E
17	ICV	17	0611F017	PESTA	TOX ICV @ 1000ppb GCPS5-79b
18	ICAL	18	0611F018	PESTA	CHLOR@ 25PPB GCPS5-86F
19	ICAL	19	0611F019	PESTA	CHLOR@ 50PPB GCPS5-86F
20	ICAL	20	0611F020	PESTA	CHLOR@ 100PPB GCPS5-86F
21	ICAL	21	0611F021	PESTA	CHLOR@ 500PPB GCPS5-86F
22	ICAL	22	0611F022	PESTA	CHLOR@ 1000PPB GCPS5-86F
23	ICAL	23	0611F023	PESTA	CHLOR@ 2000PPB GCPS5-86F
24	ICV	24	0611F024	PESTA	CHLOR ICV @ 800ppb GCPS5-76H
25	ICAL	25	0611F025	PESTA	MISC @ 2ppb GCPS5-88M
26	ICAL	26	0611F026	PESTA	MISC @ 5ppb GCPS5-88M
27	ICAL	27	0611F027	PESTA	MISC @ 20ppb GCPS5-88M
28	ICAL	28	0611F028	PESTA	MISC @ 50ppb GCPS5-88M
29	ICAL	29	0611F029	PESTA	MISC @ 100ppb GCPS5-88M
30	ICAL	30	0611F030	PESTA	MISC @ 200ppb GCPS5-88M
31	ICV	31	0611F031	PESTA	MISC ICV @ 40ppb GCPS5-80P
32	ICAL	32	0611F032	PESTA	2,4'-DDx @ 2ppb GCPS5-91B
33	ICAL	33	0611F033	PESTA	2,4'-DDx @ 5ppb GCPS5-91B
34	ICAL	34	0611F034	PESTA	2,4'-DDx @ 20ppb GCPS5-91B
35	ICAL	35	0611F035	PESTA	2,4'-DDx @ 50ppb GCPS5-90H
36	ICAL	36	0611F036	PESTA	2,4'-DDx @ 100ppb GCPS5-91B
37	ICAL	37	0611F037	PESTA	2,4'-DDx @ 200ppb GCPS5-91B
38	ICV	38	0611F038	PESTA	2,4DDx ICV @ 40ppb GCPS5-85P
39	ICV	10	0611F039	PESTA	8081 ICV @ 40ppb GCPS5-91A NR
40	ICAL	4	0611F040	PESTA	8081 @ 2ppb GCPS5-91D
41	ICAL	5	0611F041	PESTA	8081 @ 5ppb GCPS5-91D
42	ICAL	6	0611F042	PESTA	8081 @ 20ppb GCPS5-91D
43	ICAL	7	0611F043	PESTA	8081 @ 50ppb GCPS5-91D

Sequence Name: C:\GC23\SEQUENCE\061107.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\061107\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6343

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	IB	2	0611F002	PESTA	HEX
3	PEM	3	0611F003	PESTA	PEM @ 50-100ppb GCPS5-89F
4	ICAL	4	0611F004	PESTA	8081 @ 2ppb GCPS5-91D NR
5	ICAL	5	0611F005	PESTA	8081 @ 5ppb GCPS5-91D
6	ICAL	6	0611F006	PESTA	8081 @ 20ppb GCPS5-91D
7	ICAL	7	0611F007	PESTA	8081 @ 50ppb GCPS5-91D
8	ICAL	8	0611F008	PESTA	8081 @ 100ppb GCPS5-91D
9	ICAL	9	0611F009	PESTA	8081 @ 200ppb GCPS5-91D
10	ICV	10	0611F010	PESTA	8081 ICV @ 40ppb GCPS5-91A
11	ICAL	11	0611F011	PESTA	TOX @ 100ppb GCPS5-87E
12	ICAL	12	0611F012	PESTA	TOX @ 250ppb GCPS5-87E
13	ICAL	13	0611F013	PESTA	TOX @ 500ppb GCPS5-87E
14	ICAL	14	0611F014	PESTA	TOX @ 1000ppb GCPS5-89E
15	ICAL	15	0611F015	PESTA	TOX @ 2000ppb GCPS5-89E
16	ICAL	16	0611F016	PESTA	TOX @ 5000ppb GCPS5-89E
17	ICV	17	0611F017	PESTA	TOX ICV @ 1000ppb GCPS5-79b
18	ICAL	18	0611F018	PESTA	CHLOR@ 25PPB GCPS5-86F
19	ICAL	19	0611F019	PESTA	CHLOR@ 50PPB GCPS5-86F
20	ICAL	20	0611F020	PESTA	CHLOR@ 100PPB GCPS5-86F
21	ICAL	21	0611F021	PESTA	CHLOR@ 500PPB GCPS5-86F
22	ICAL	22	0611F022	PESTA	CHLOR@ 1000PPB GCPS5-86F
23	ICAL	23	0611F023	PESTA	CHLOR@ 2000PPB GCPS5-86F
24	ICV	24	0611F024	PESTA	CHLOR ICV @ 800ppb GCPS5-76H
25	ICAL	25	0611F025	PESTA	MISC @ 2ppb GCPS5-88M
26	ICAL	26	0611F026	PESTA	MISC @ 5ppb GCPS5-88M
27	ICAL	27	0611F027	PESTA	MISC @ 20ppb GCPS5-88M
28	ICAL	28	0611F028	PESTA	MISC @ 50ppb GCPS5-88M
29	ICAL	29	0611F029	PESTA	MISC @ 100ppb GCPS5-88M
30	ICAL	30	0611F030	PESTA	MISC @ 200ppb GCPS5-88M
31	ICV	31	0611F031	PESTA	MISC ICV @ 40ppb GCPS5-80P
32	ICAL	32	0611F032	PESTA	2,4'-DDx @ 2ppb GCPS5-91B
33	ICAL	33	0611F033	PESTA	2,4'-DDx @ 5ppb GCPS5-91B
34	ICAL	34	0611F034	PESTA	2,4'-DDx @ 20ppb GCPS5-91B
35	ICAL	35	0611F035	PESTA	2,4'-DDx @ 50ppb GCPS5-90H
36	ICAL	36	0611F036	PESTA	2,4'-DDx @ 100ppb GCPS5-91B
37	ICAL	37	0611F037	PESTA	2,4'-DDx @ 200ppb GCPS5-91B
38	ICV	38	0611F038	PESTA	2,4DDx ICV @ 40ppb GCPS5-85P
39	ICV	10	0611F039	PESTA	8081 ICV @ 40ppb GCPS5-91A - NR
40	ICAL	4	0611F040	PESTA	8081 @ 2ppb GCPS5-91D
41	ICAL	5	0611F041	PESTA	8081 @ 5ppb GCPS5-91D
42	ICAL	6	0611F042	PESTA	8081 @ 20ppb GCPS5-91D
43	ICAL	7	0611F043	PESTA	8081 @ 50ppb GCPS5-91D

Sequence Name: C:\GC23\SEQUENCE\061207.S

Line	Type	Vial	DataFile	Method	Sample Name
44	ICAL	8	0611F044	PESTA 8081	@ 100ppb GCPS5-91D
45	ICAL	9	0611F045	PESTA 8081	@ 200ppb GCPS5-91D
46	ICV	10	0611F046	PESTA 8081	ICV @ 40ppb GCPS5-91A

Signal #1 : J:\GC23\DATA\061107\0611F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\061107\0611F002.D\ECD2B.CH
Acq On : 11 Jun 2007 6:45 pm Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:40:45 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

AC 6/12/07
Initial 14:17

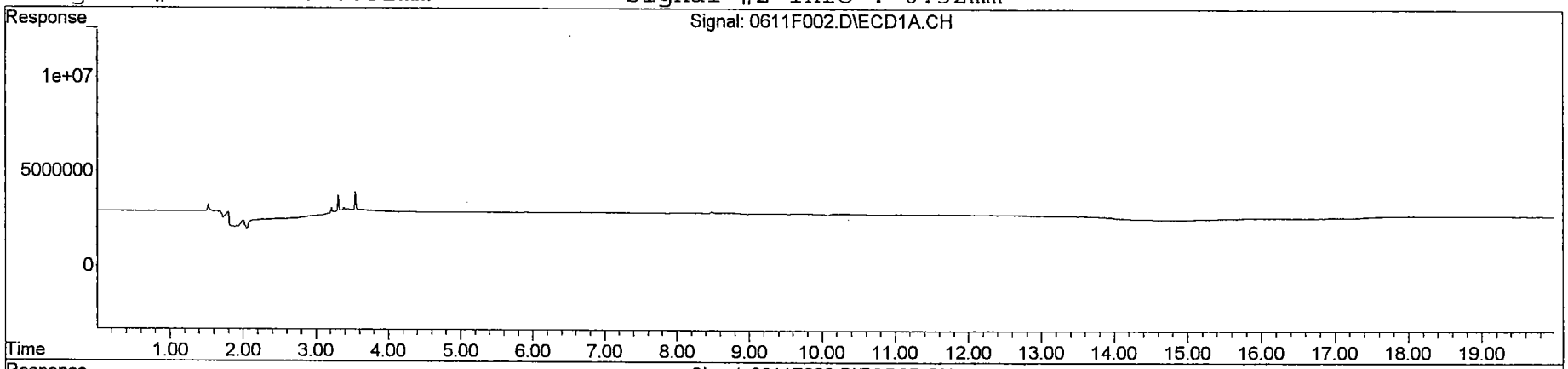
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

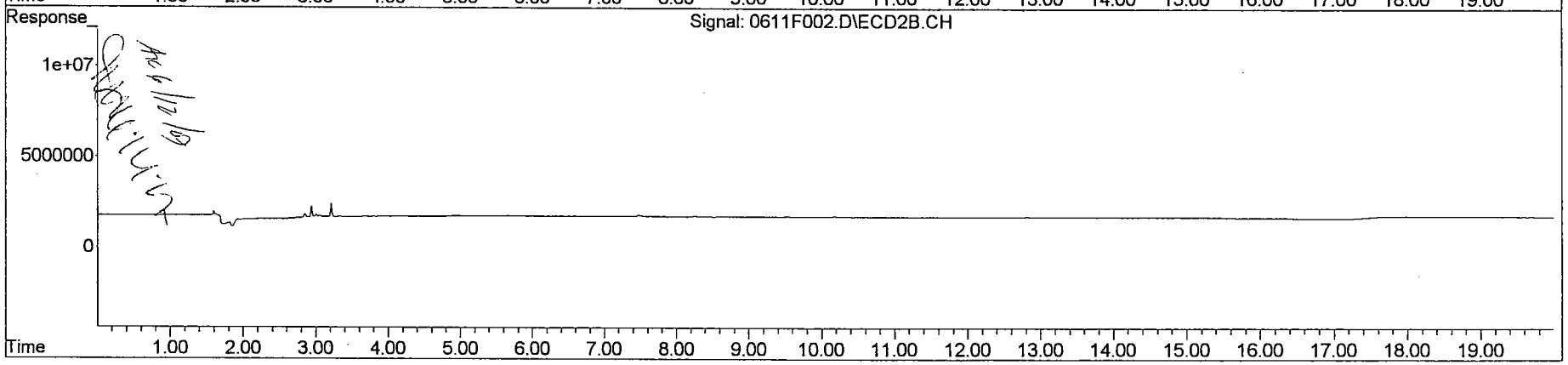
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\061107\0611F002.D\ECD2B.CH
Acq On : 11 Jun 2007 6:45 pm Operator: AKamawal
Sample : HEX Inst : GC23
Misc : SVG\W0308345\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:46 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





856

Signal #1 : J:\GC23\DATA\061107\0611F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061107\0611F003.D\ECD2B.CH
Acq On : 11 Jun 2007 7:12 pm Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-89F Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:46:49 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.75	11.79	92913	92696	0.630	0.502	
16)	Endrin	13.32	12.47	6633847	8467634	48.851	48.091	
18)	4,4'-DDD	13.54	12.66	92483	162899	0.726m	1.062	#
19)	Endrin Aldehyde	13.89	13.21	62675	75579	0.485	0.508	
21)	4,4'-DDT	13.99	13.07	13554456	16143485	96.993	99.264	
22)	Endrin Ketone	14.93	14.40	183227	165725	0.777	0.800	

AC 6/12/07
[illegible]

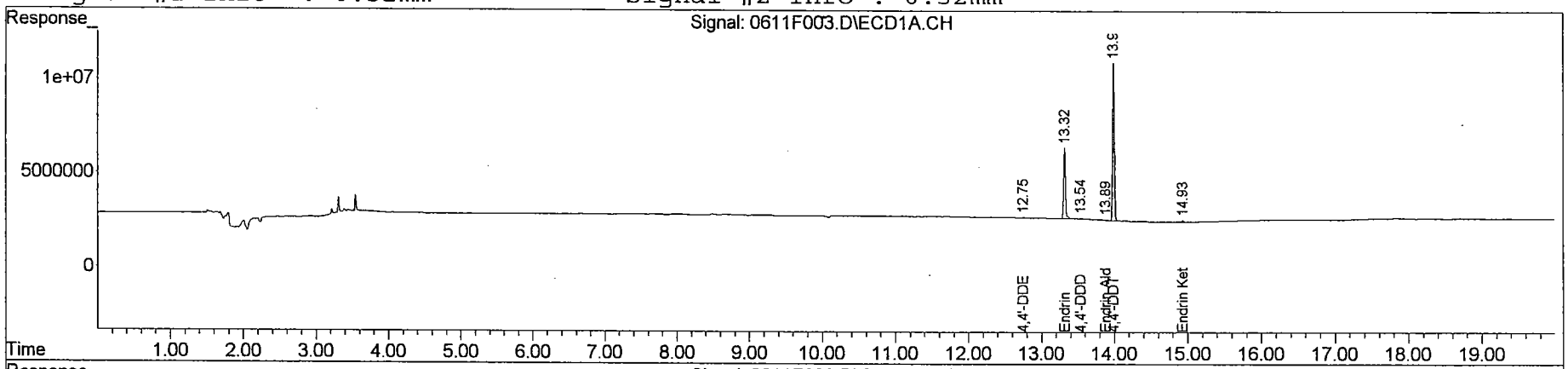
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

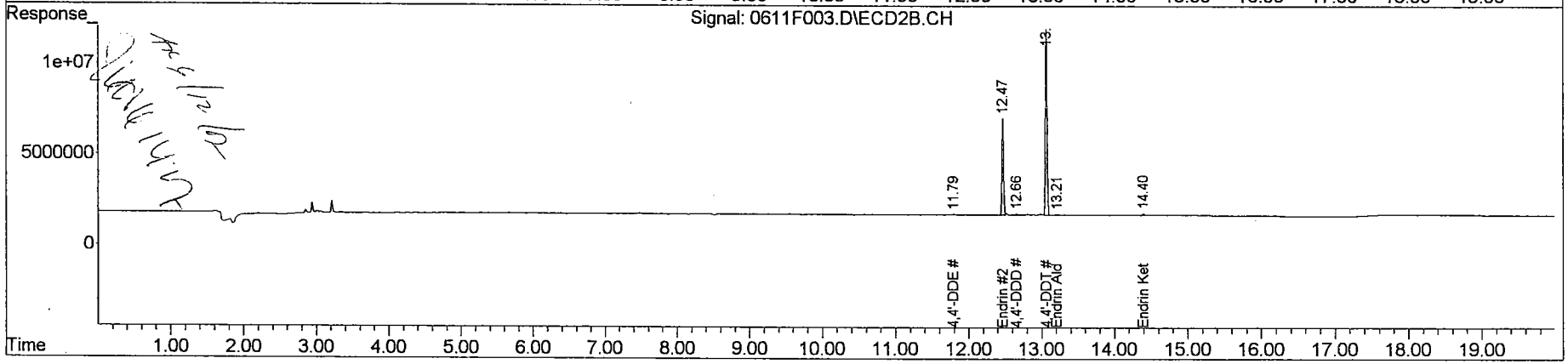
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061107\0611F003.D\ECD2B.CH
Acq On : 11 Jun 2007 7:12 pm Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-89F Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:47 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



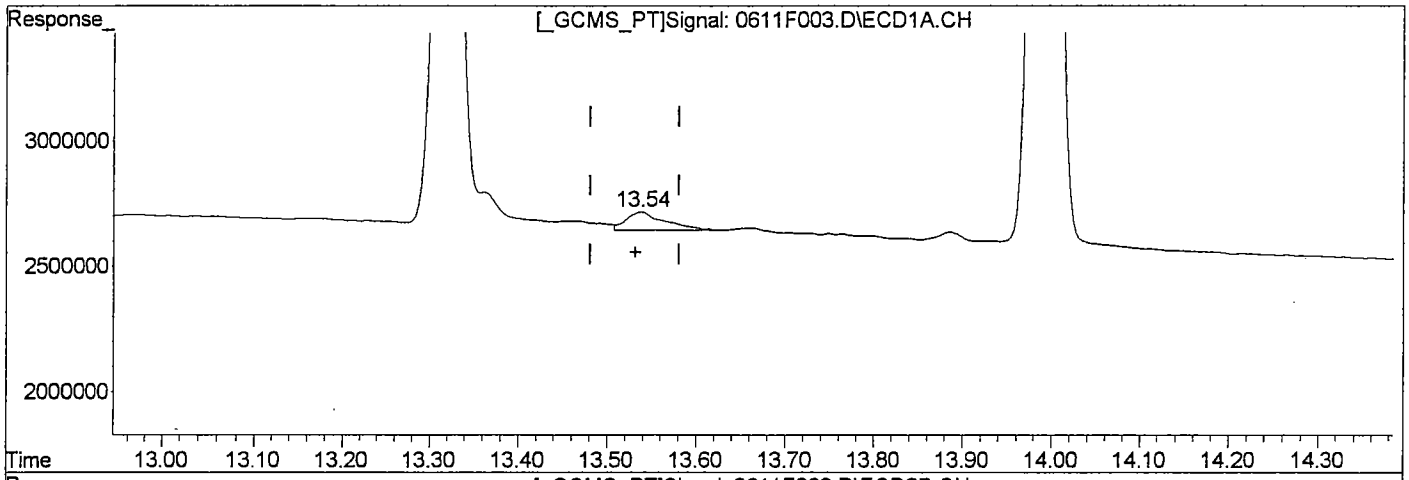


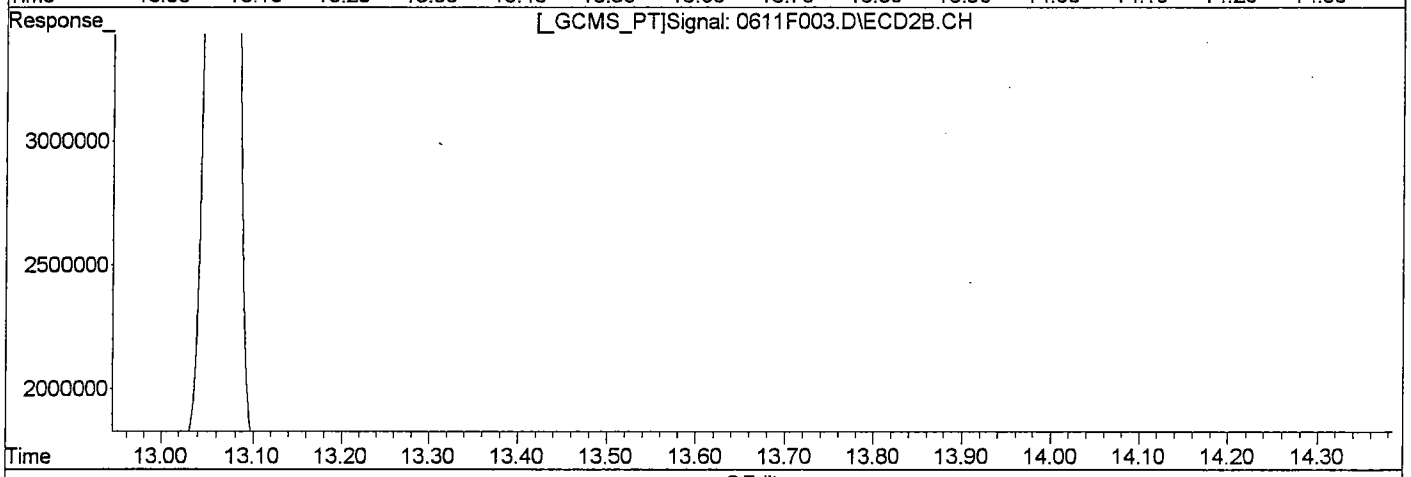
858

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061107\0611F003.D\ECD2B.CH
Acq On : 11 Jun 2007 7:12 pm Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-89F Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:46 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.54min 1.793ug/L

response 228398

(18) 4,4'-DDD #2

12.66min 1.062ug/L

response 162899

(+) = Expected Retention Time

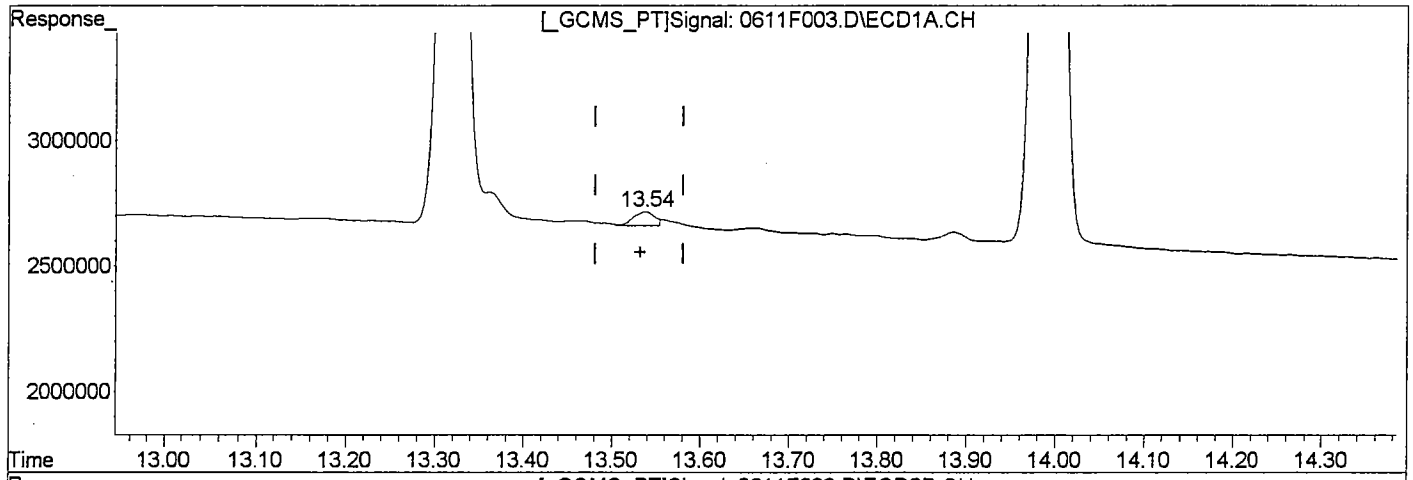
0611F003.D 061107-8081.M Tue Jun 12 10:47:20 2007

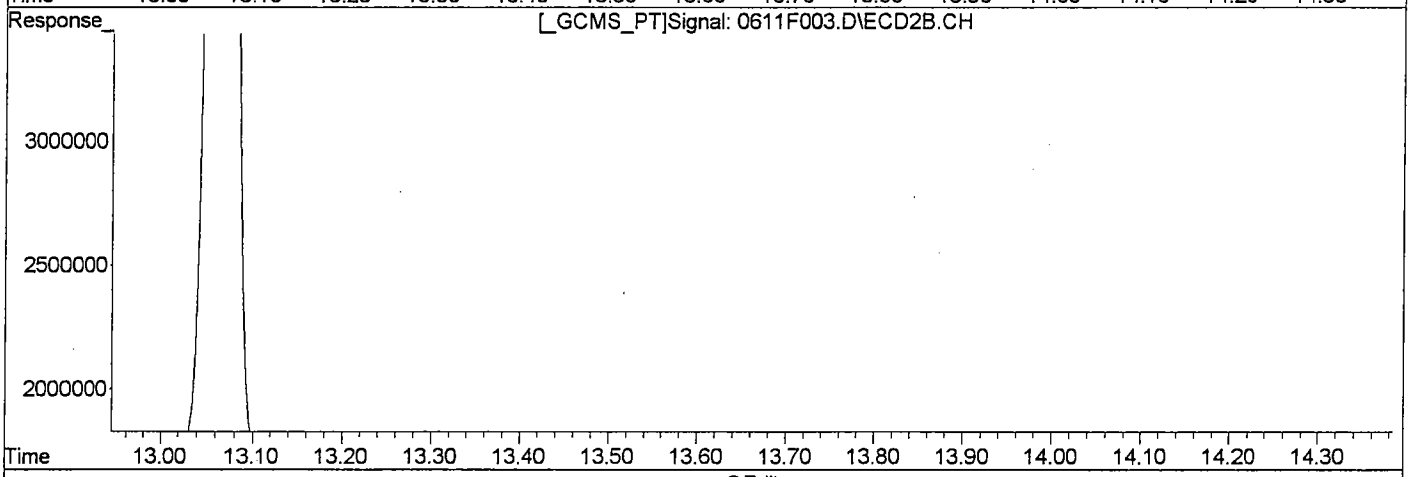
Quantitation Report (Qedit)

098

Signal #1 : J:\GC23\DATA\061107\0611F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061107\0611F003.D\ECD2B.CH
Acq On : 11 Jun 2007 7:12 pm Operator: AKamawal
Sample : PEM @ 50-100ppb GCPS5-89F Inst : GC23
Misc : SVG\W0308345\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:46 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.54min 0.726ug/L m

response 92483

(18) 4,4'-DDD #2

12.66min 1.062ug/L

response 162899

After
Initials AK

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0611F003.D 061107-8081.M Tue Jun 12 10:47:27 2007

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:35 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.61	139311	110241	71.835	91.829 #
26)	Toxaphene {2}	13.22	12.70	130101	435615	85.104m	102.019
27)	Toxaphene {3}	13.37	13.56	218956	270638	82.623m	102.967
28)	Toxaphene {4}	14.05	13.67	266414	78176	70.494	114.470m#
29)	Toxaphene {5}	14.36	13.90	168305	392477	89.234	97.878m
30)	Toxaphene {6}	14.89	14.10	166336	565760	83.877	101.393m

AC 6/12/07

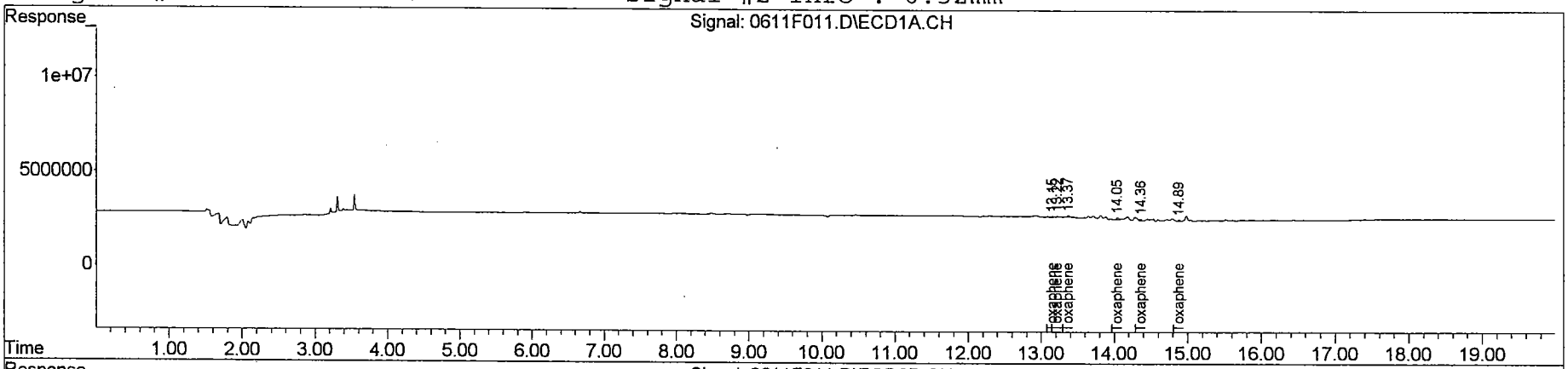
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

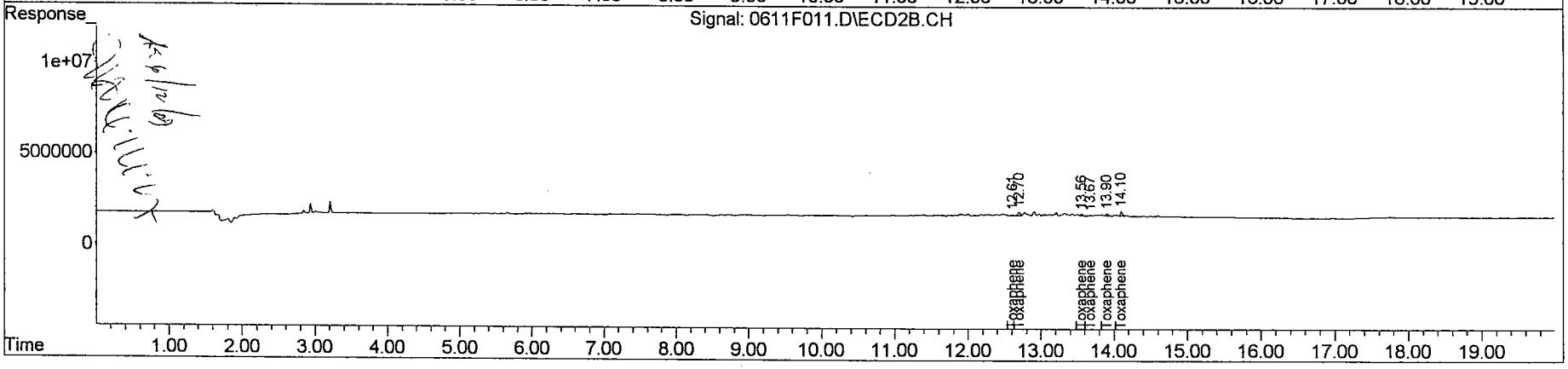
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:31 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



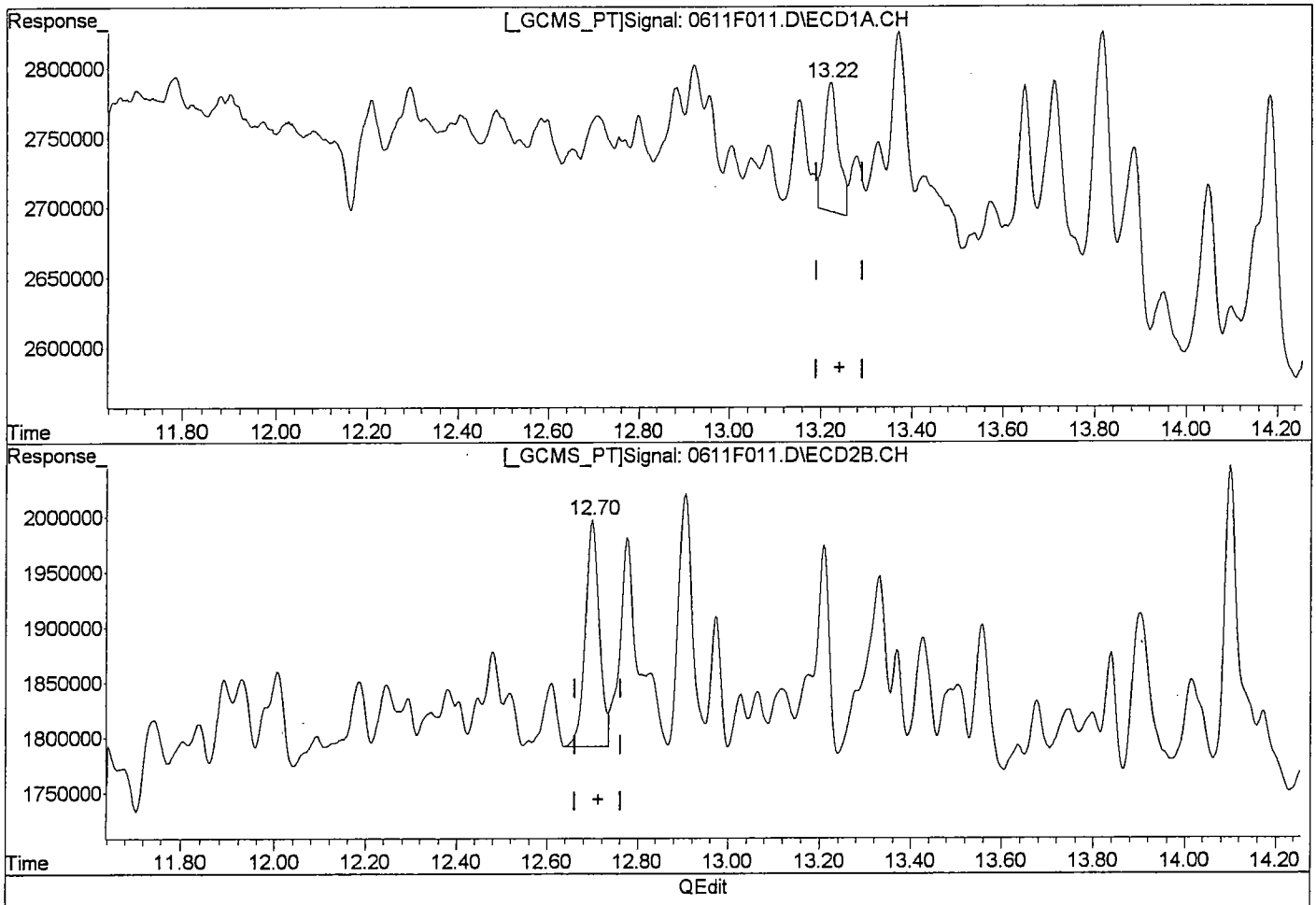


862

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.22min 130.893ug/L

response 200099

(26) Toxaphene {2} #2

12.70min 102.019ug/L

response 435615

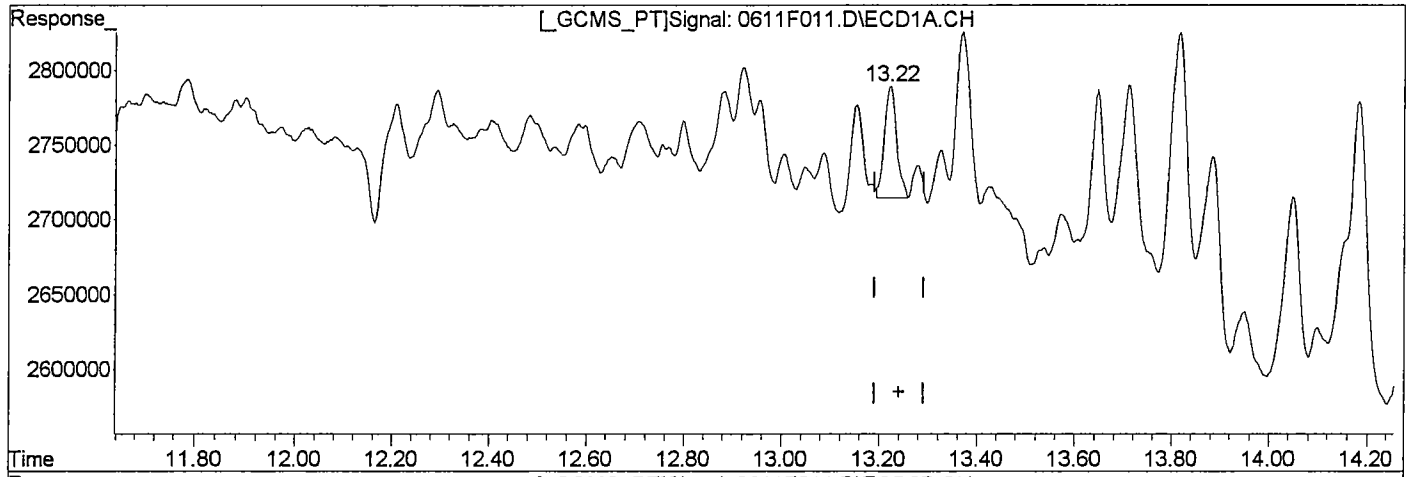
(+) = Expected Retention Time

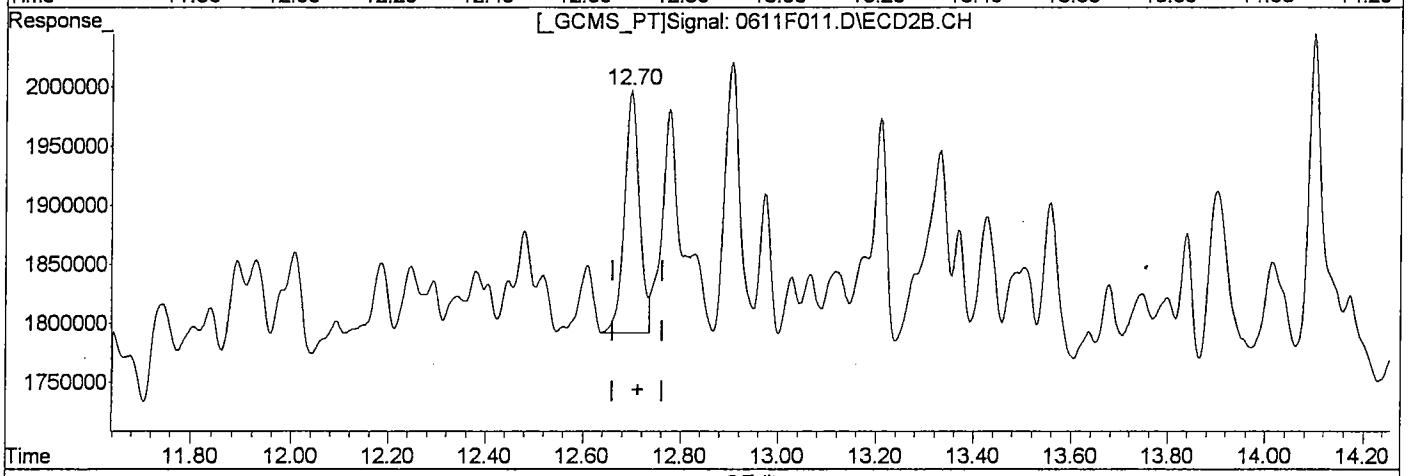
0611F011.D 061107-8081.M Tue Jun 12 08:30:15 2007

Quantitation Report (Qedit) 798

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 85.104ug/L m

response 130101

(26) Toxaphene {2} #2

12.70min 102.019ug/L

response 435615

After
Initials AK

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

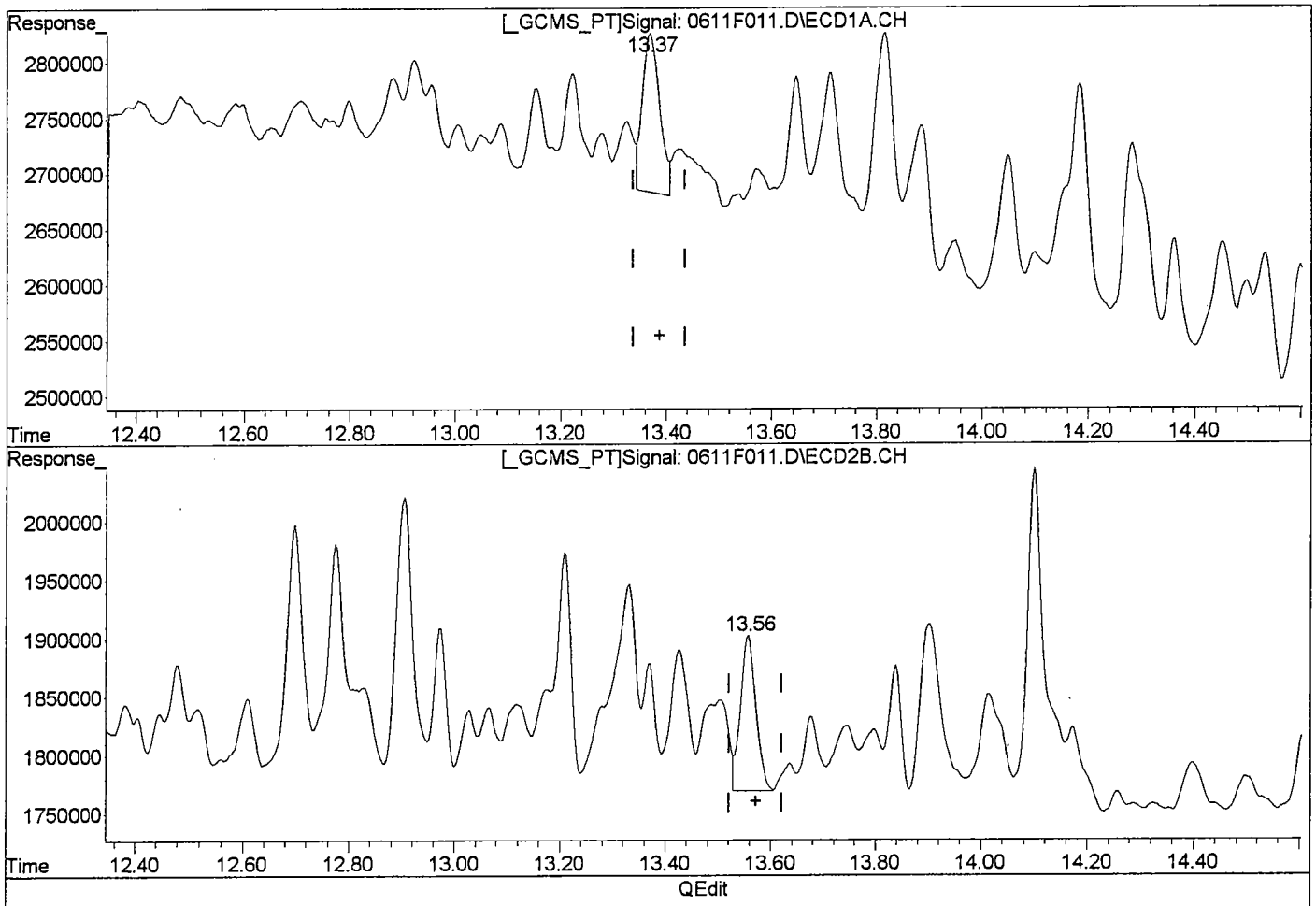
(+) = Expected Retention Time

0611F011.D 061107-8081.M Tue Jun 12 08:30:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.37min 123.178ug/L

response 326427

(27) Toxaphene {3} #2

13.56min 102.967ug/L

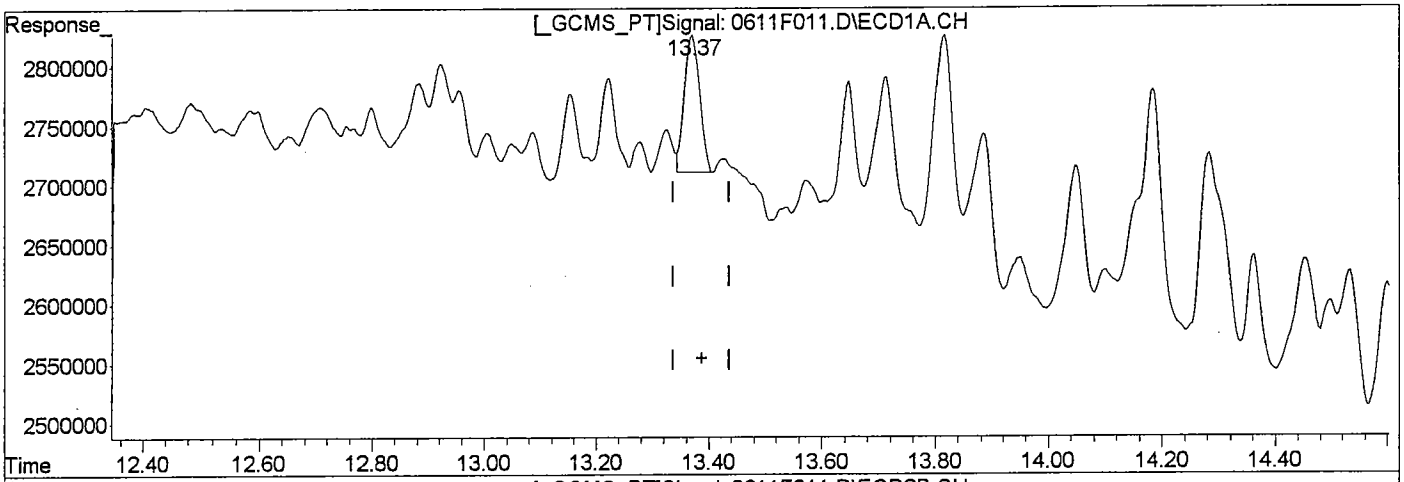
response 270638

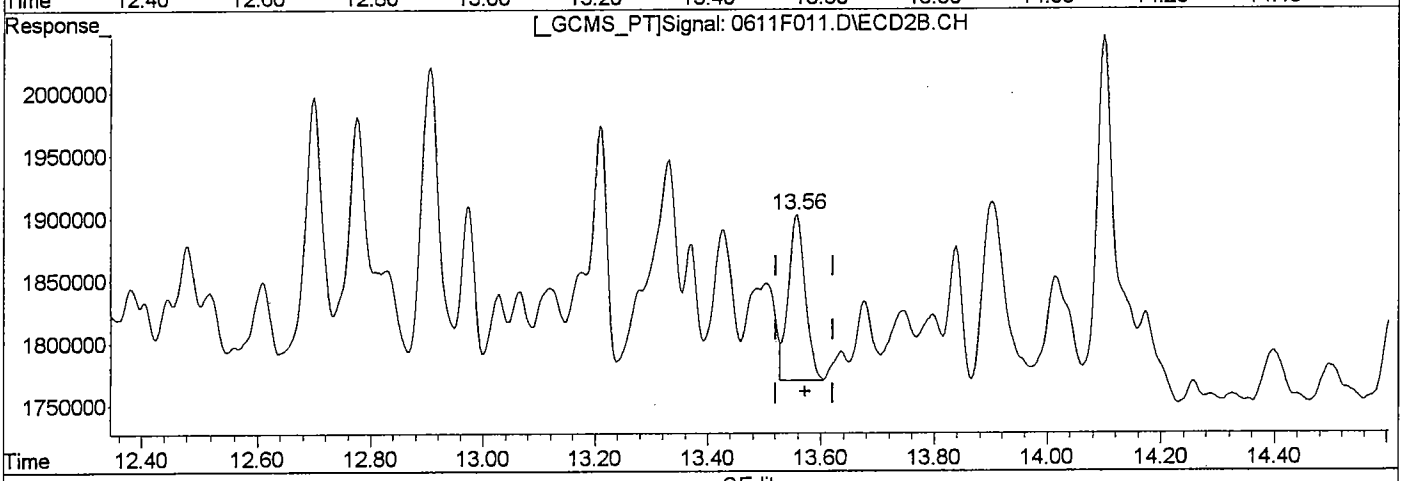
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 82.623ug/L m

response 218956

(27) Toxaphene {3} #2

13.56min 102.967ug/L

response 270638

After
Initials

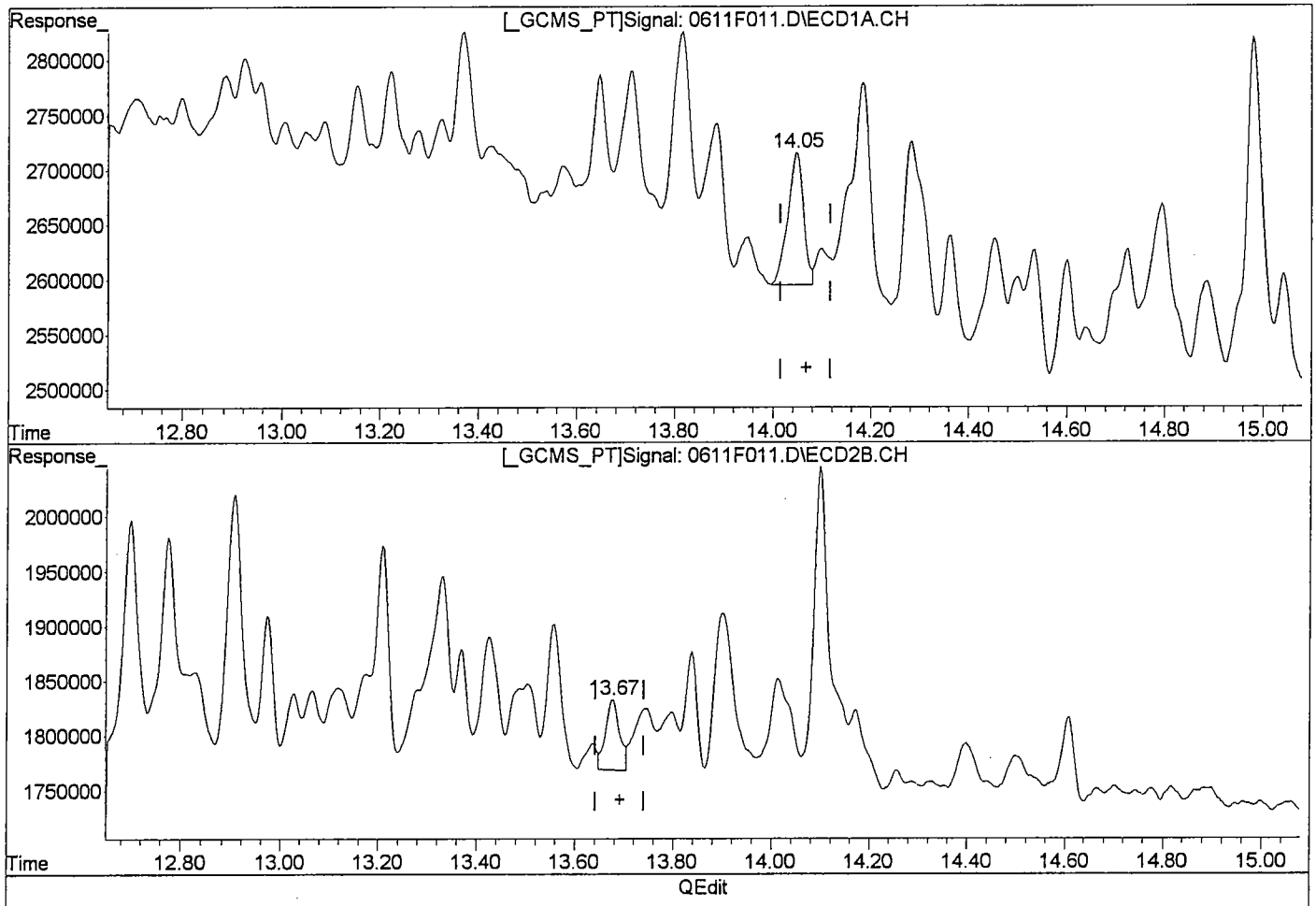
JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F011.D 061107-8081.M Tue Jun 12 08:30:34 2007

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



QEdit

(28) Toxaphene {4}

14.05min 70.494ug/L

response 266414

(28) Toxaphene {4} #2

13.67min 187.069ug/L

response 127757

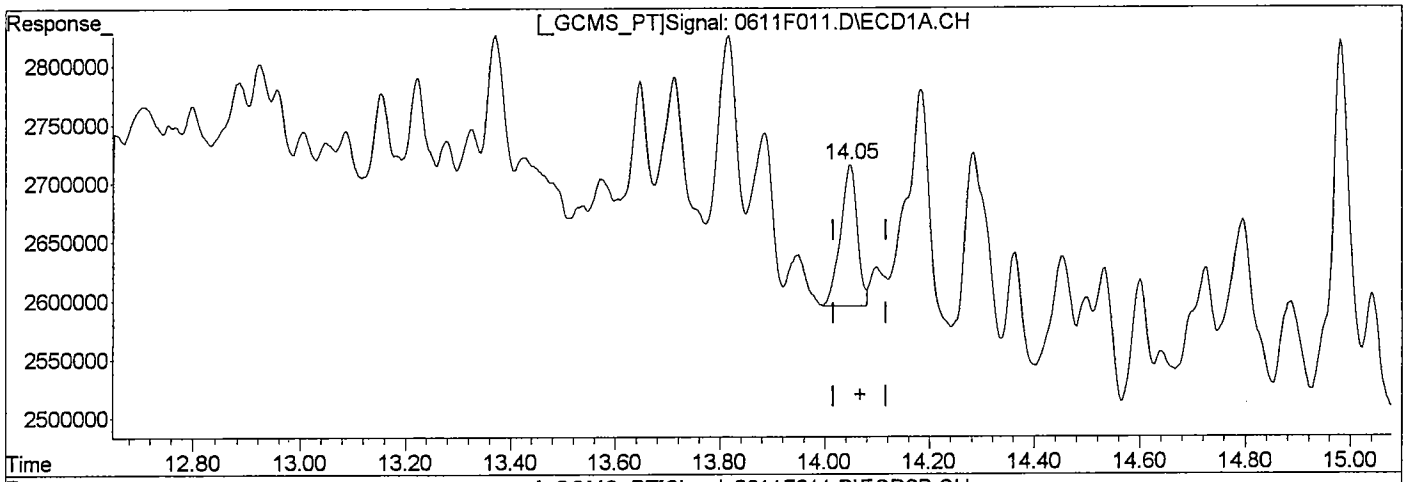
(+) = Expected Retention Time

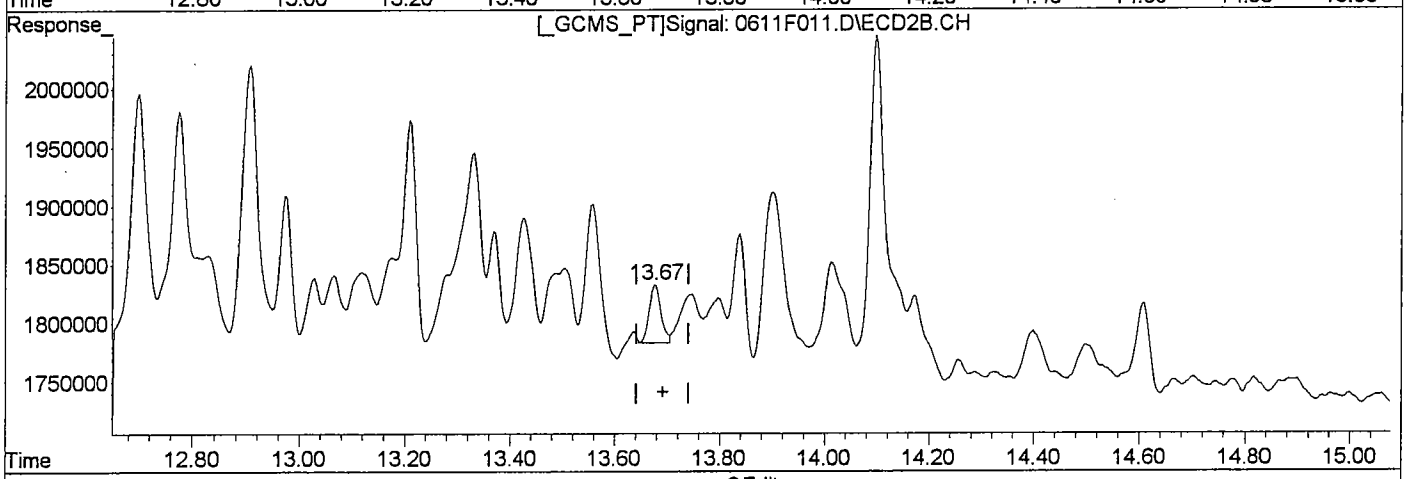
0611F011.D 061107-8081.M Tue Jun 12 08:30:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 70.494ug/L

response 266414

(28) Toxaphene {4} #2

13.67min 114.470ug/L m

response 78176

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

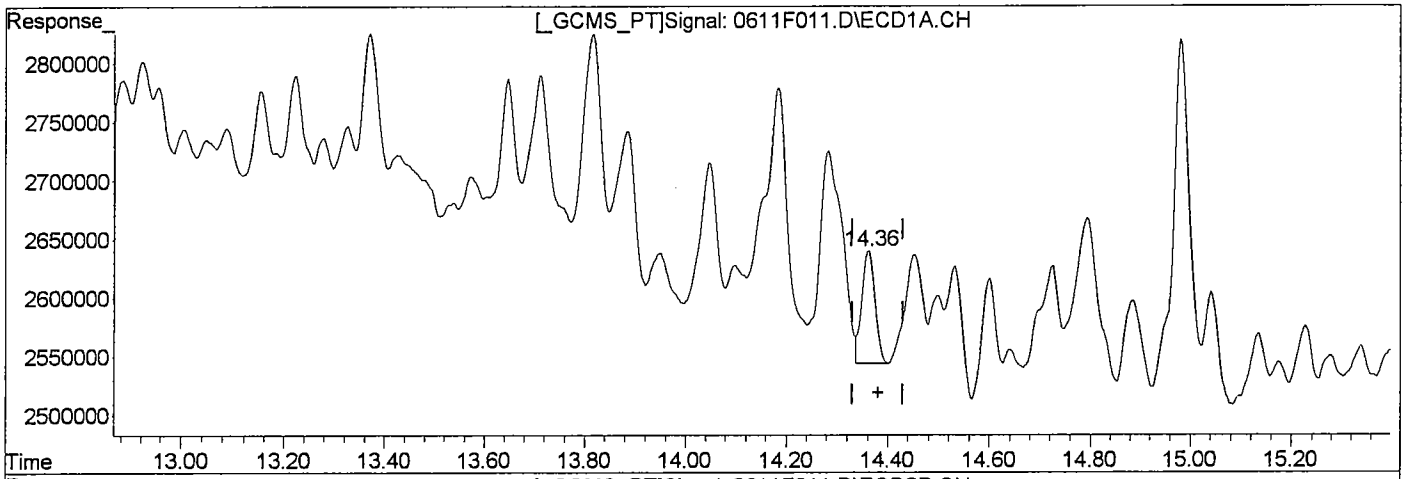
(+) = Expected Retention Time

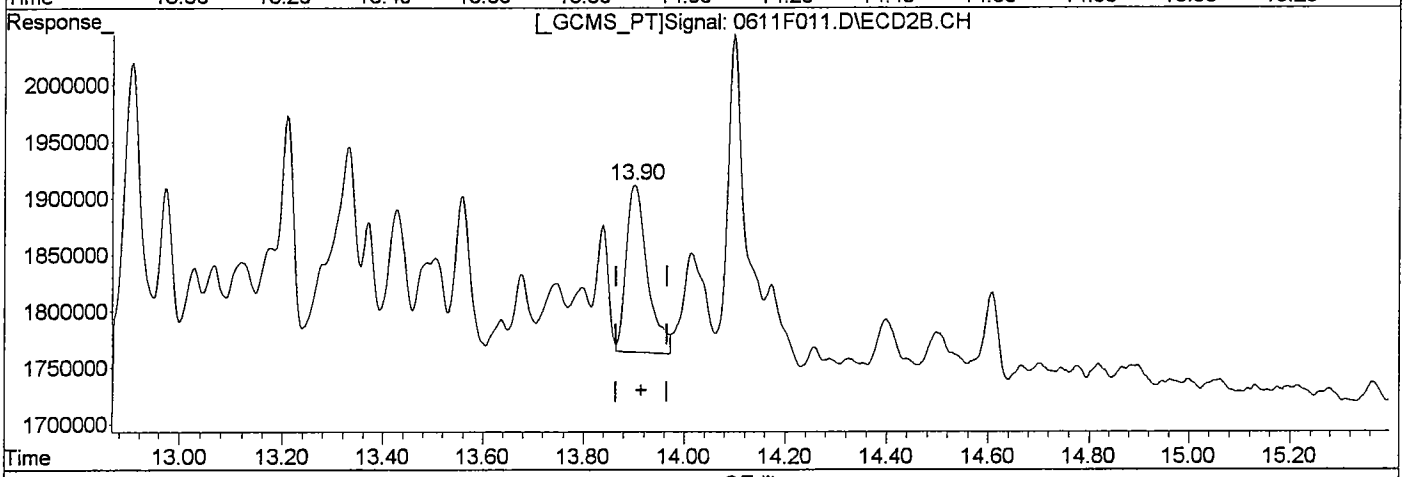
0611F011.D 061107-8081.M Tue Jun 12 08:30:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 89.234ug/L

response 168305

(29) Toxaphene {5} #2

13.90min 107.114ug/L

response 429510

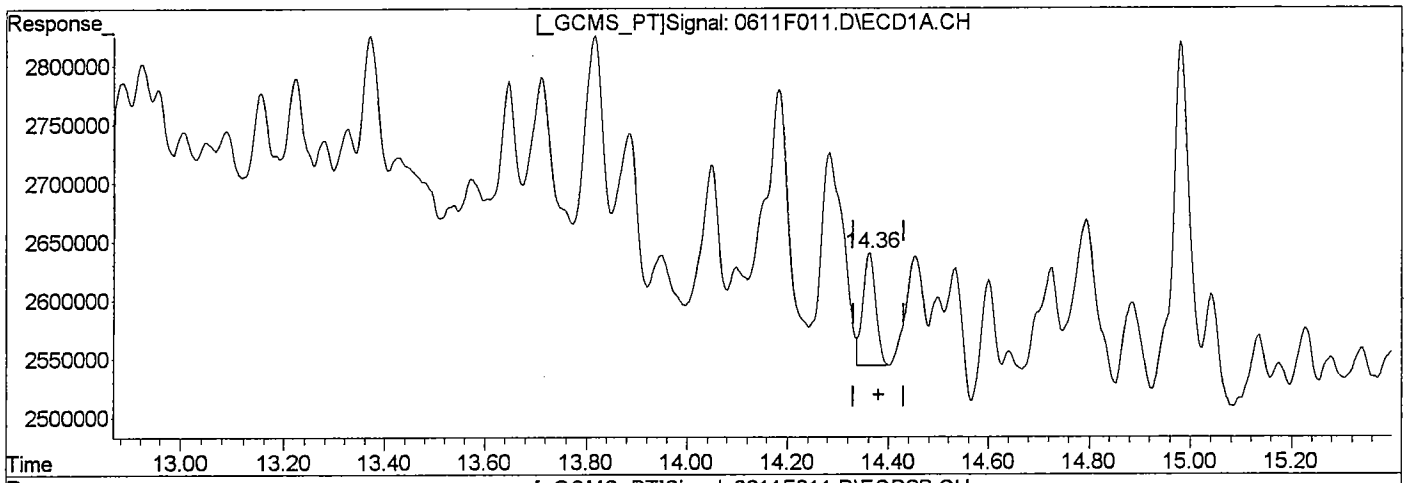
(+) = Expected Retention Time

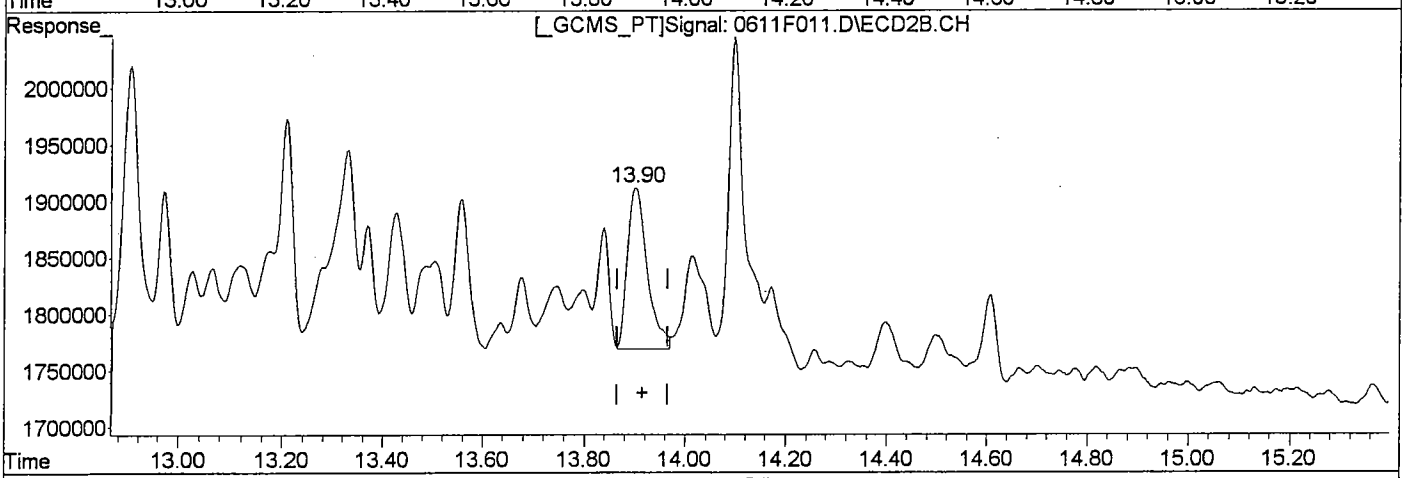
0611F011.D 061107-8081.M Tue Jun 12 08:30:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 89.234ug/L

response 168305

(29) Toxaphene {5} #2

13.90min 97.878ug/L m

response 392477

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

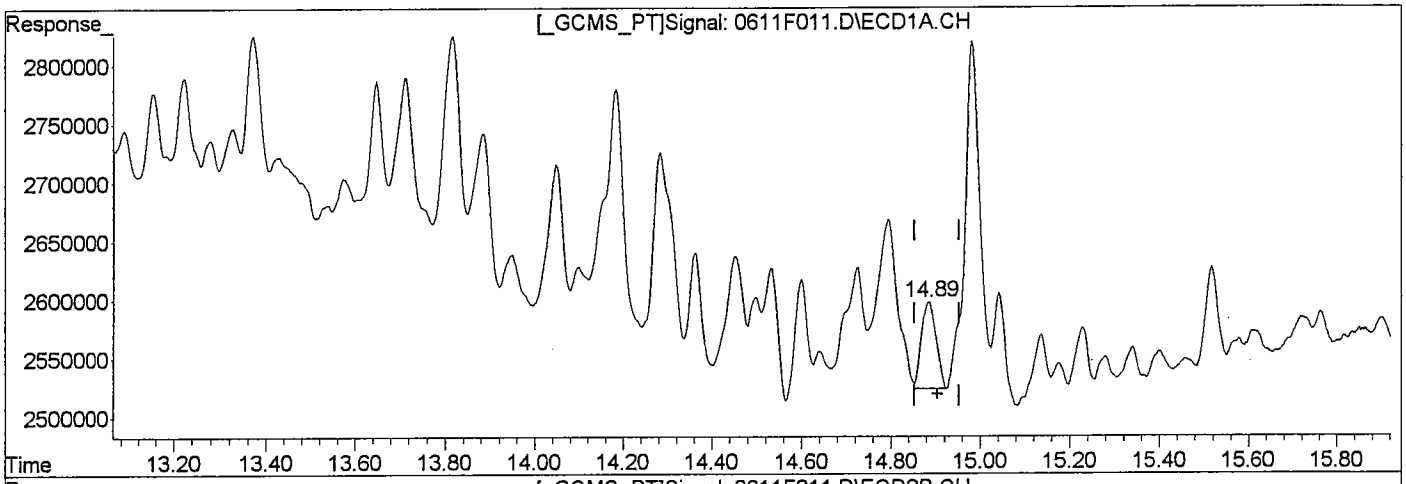
(+) = Expected Retention Time

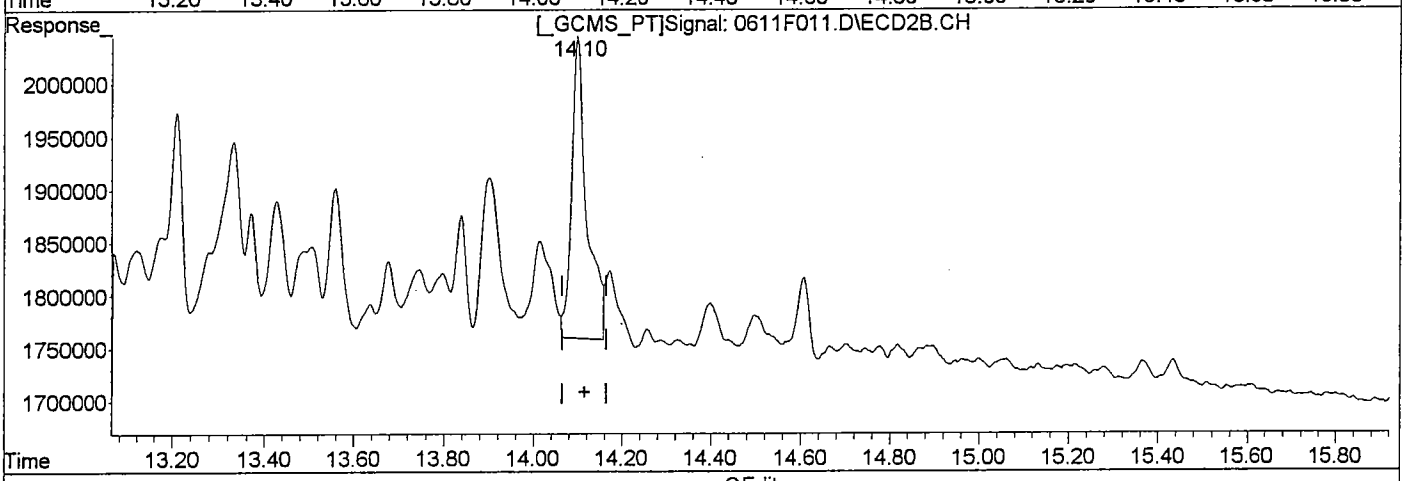
0611F011.D 061107-8081.M Tue Jun 12 08:30:55 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 83.877ug/L

response 166336

(30) Toxaphene {6} #2

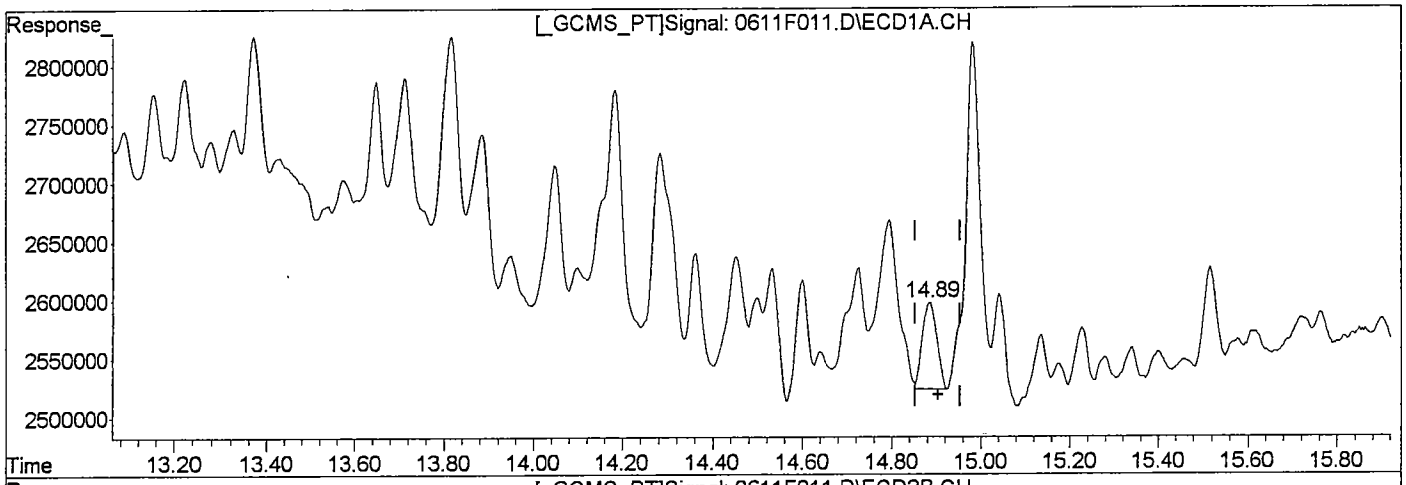
14.10min 122.226ug/L

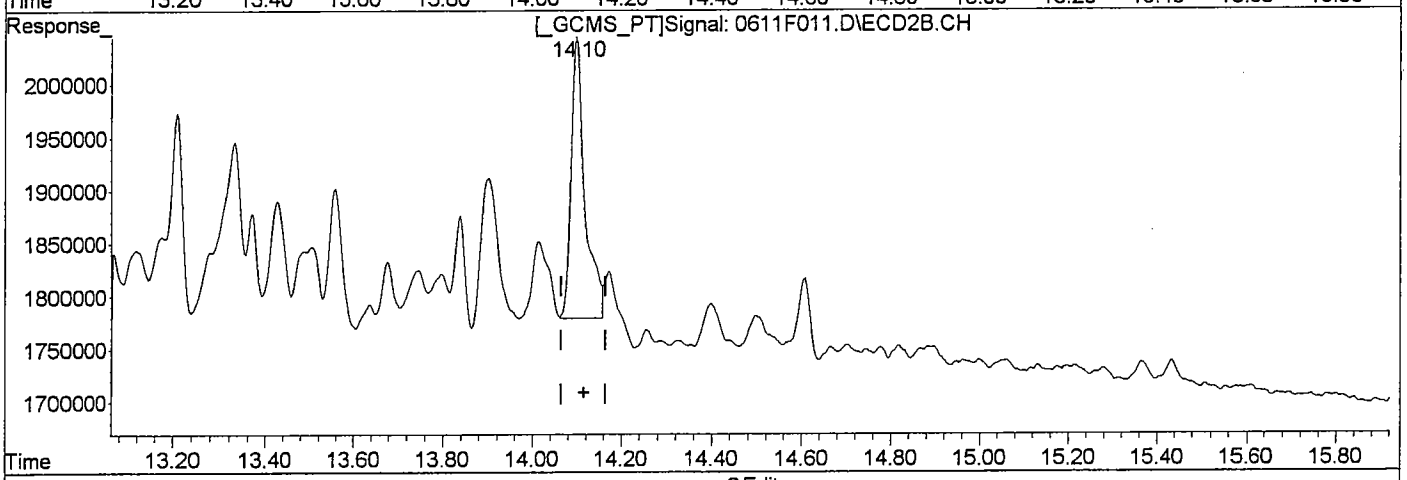
response 682007

(+) = Expected Retention Time

Signal #1 : J:\GC23\DATA\061107\0611F011.D\ECD1A.CH Vial: 11
Signal #2 : J:\GC23\DATA\061107\0611F011.D\ECD2B.CH
Acq On : 11 Jun 2007 10:44 pm Operator: AKamawal
Sample : TOX @ 100ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:29 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 83.877ug/L

response 166336

(30) Toxaphene {6} #2

14.10min 101.393ug/L m

response 565760

After
Initials AK

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F011.D 061107-8081.M Tue Jun 12 08:31:05 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:36 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.61	335942	283558	173.227	236.198 #
26)	Toxaphene {2}	13.22	12.69	287274	1008413	187.917m	236.167m#
27)	Toxaphene {3}	13.37	13.55	487206	599499	183.848m	228.087
28)	Toxaphene {4}	14.04	13.67	617785	157458	163.468	230.559m#
29)	Toxaphene {5}	14.36	13.89	351872	900639	186.559	224.606m
30)	Toxaphene {6}	14.88f	14.09	394928	1292100	199.146	231.564m

A 6/12/07

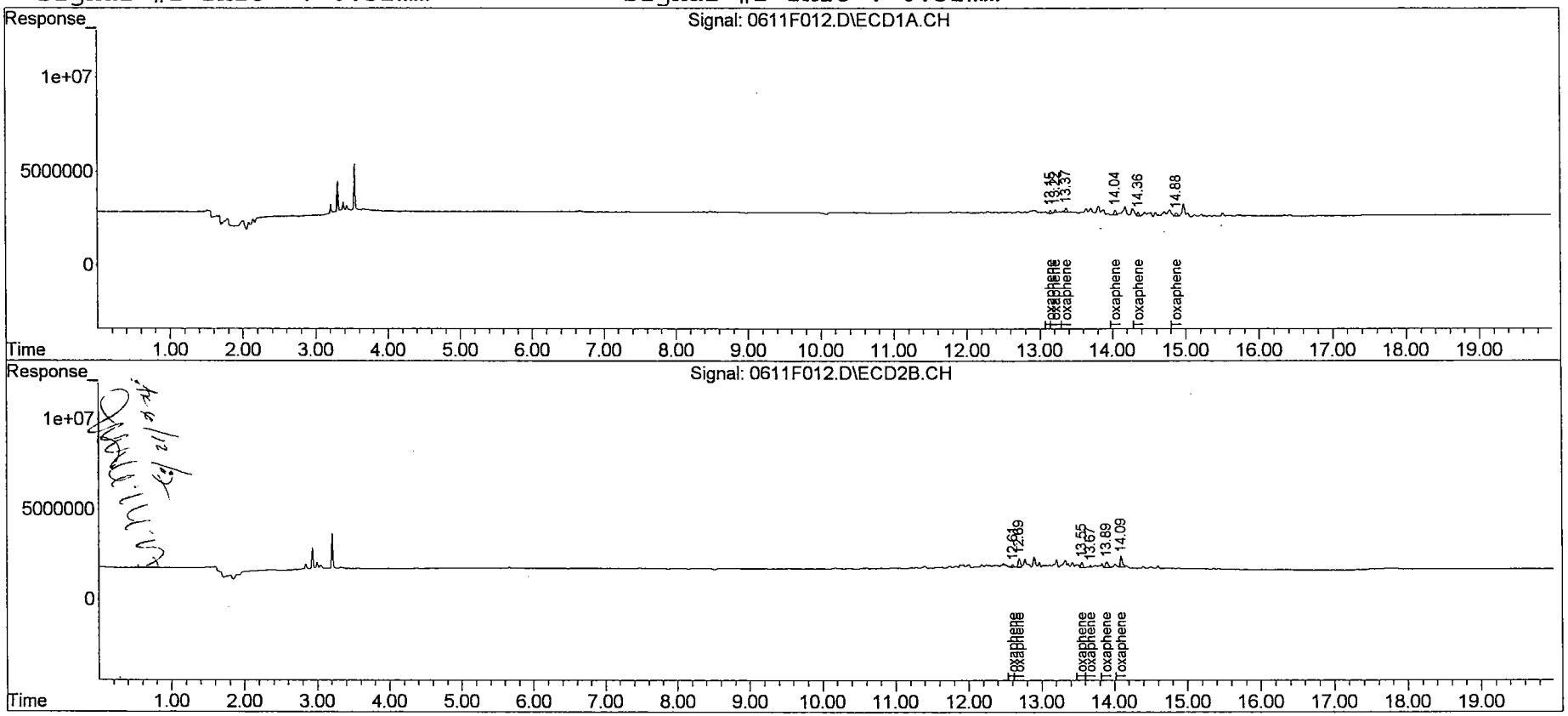
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:32 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

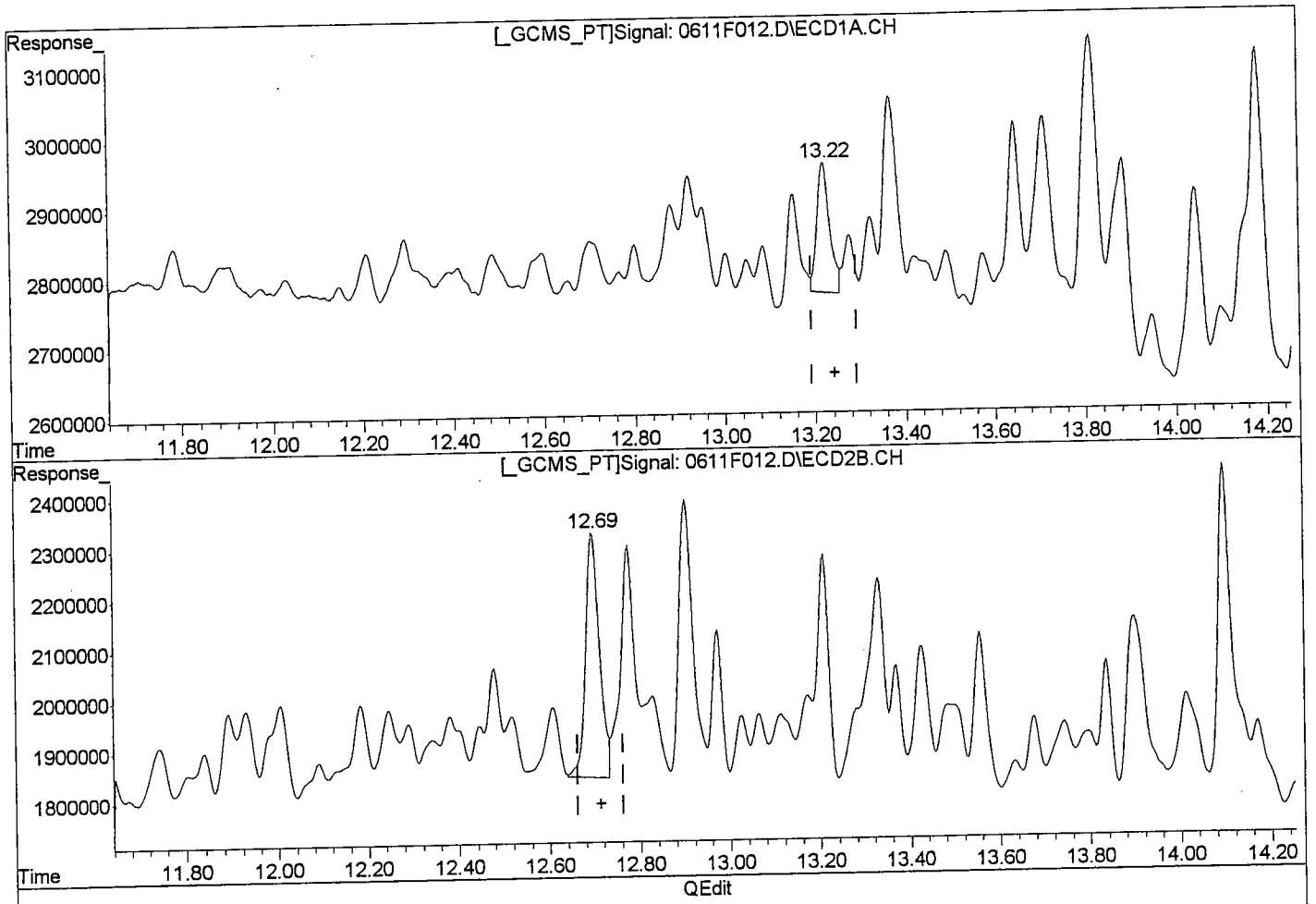


874

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.22min 237.393ug/L

response 362909

(26) Toxaphene {2} #2

12.69min 244.670ug/L

response 1044721

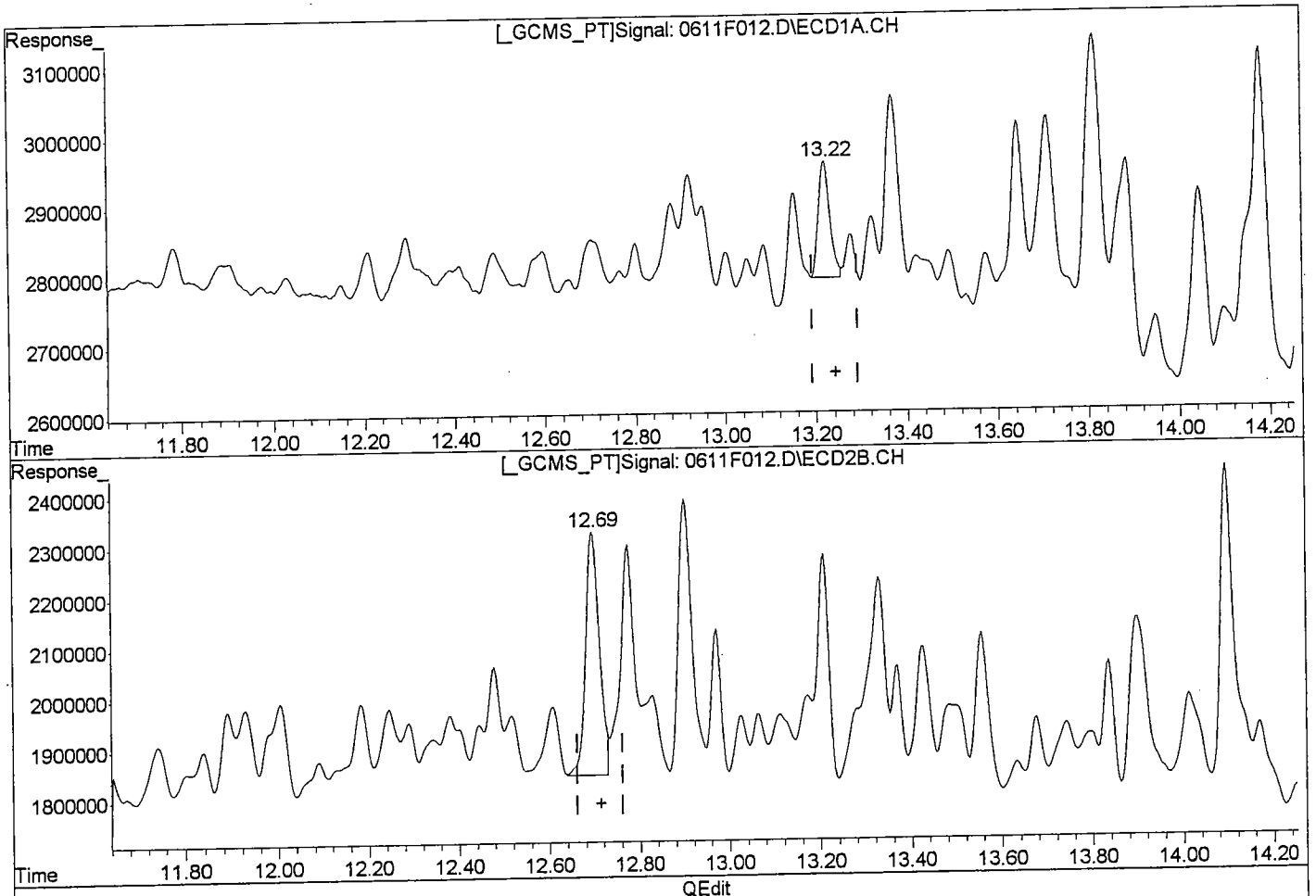
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm
Sample : TOX @ 250ppb GCPS5-87E
Misc : SVG\W0308345\4-ICAL.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Vial: 12
Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.22min 187.917ug/L m

response 287274

(26) Toxaphene {2} #2

12.69min 236.167ug/L m

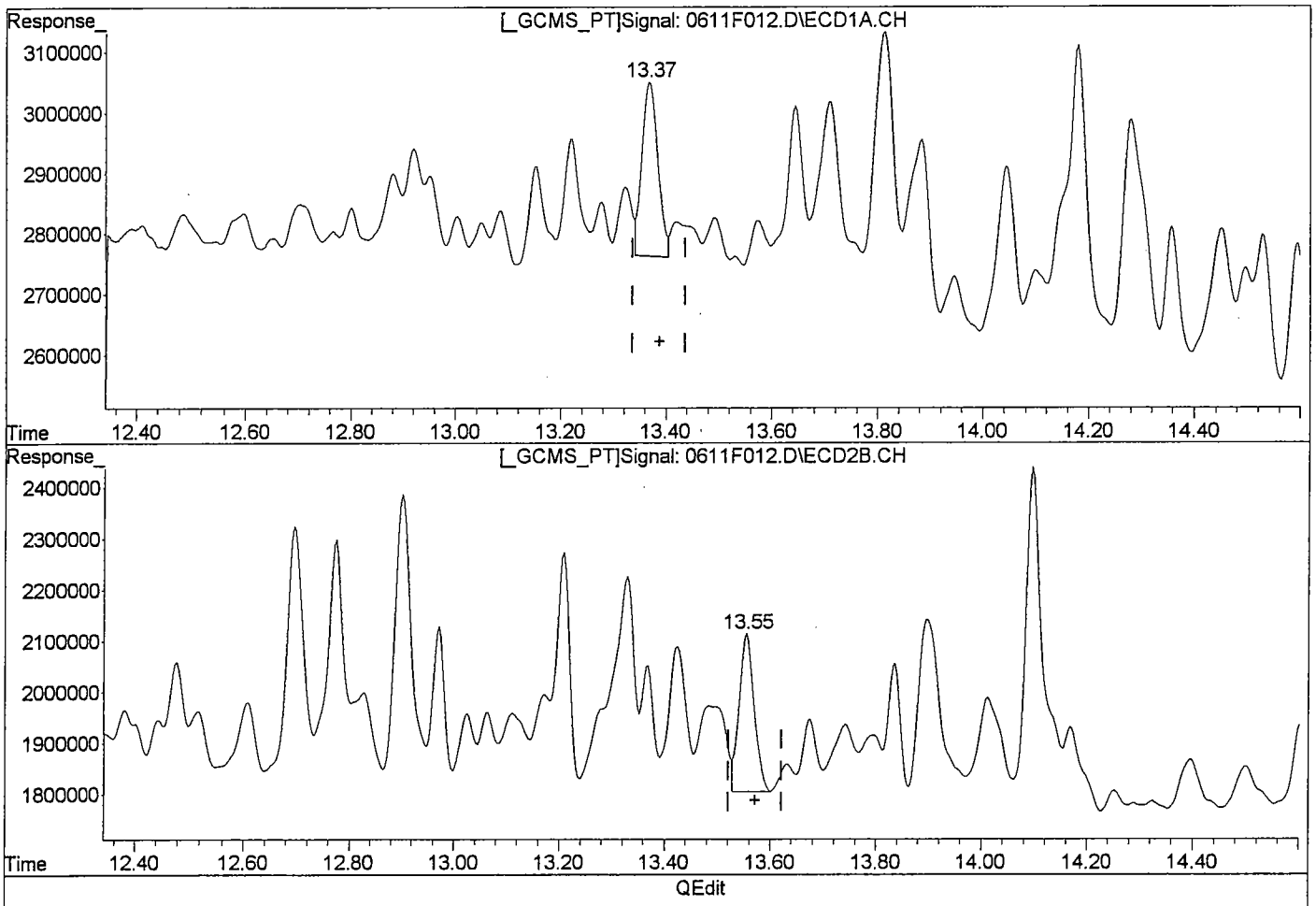
response 1008413

After
Initials
JUN 12 2007
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other

(+) = Expected Retention Time

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.37min 229.655ug/L

response 608598

(27) Toxaphene {3} #2

13.55min 228.087ug/L

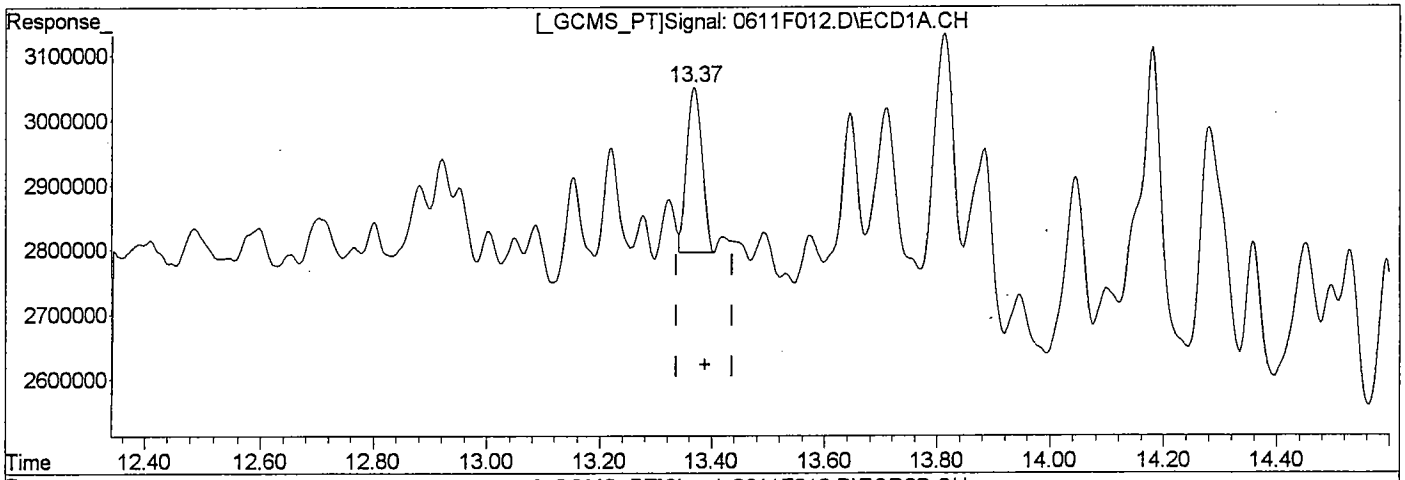
response 599499

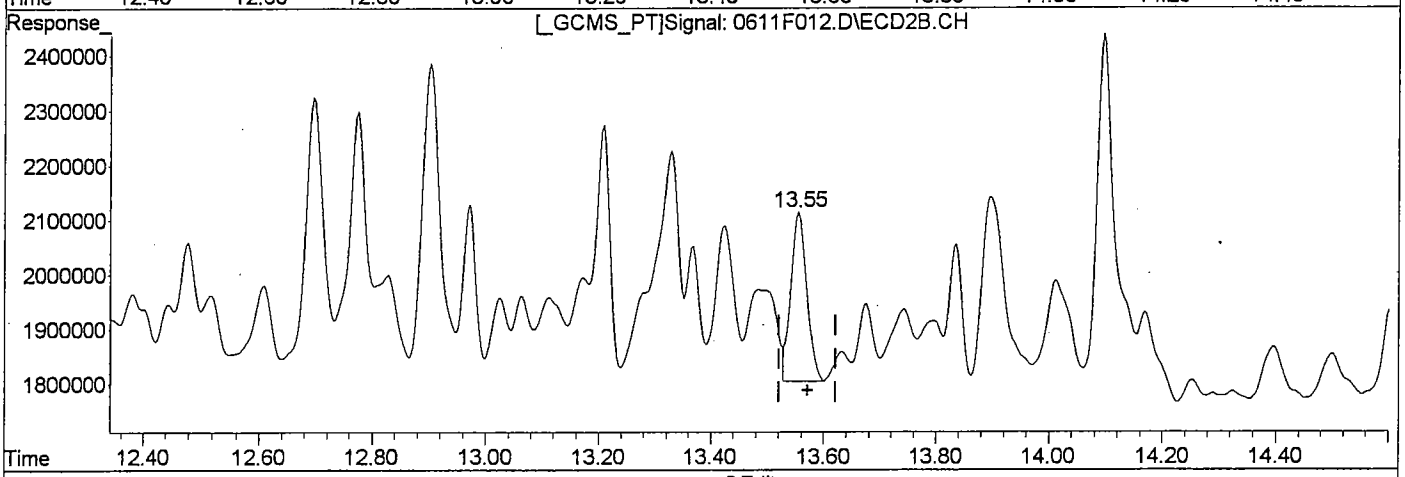
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 183.848ug/L m

response 487206

(27) Toxaphene {3} #2

13.55min 228.087ug/L

response 599499

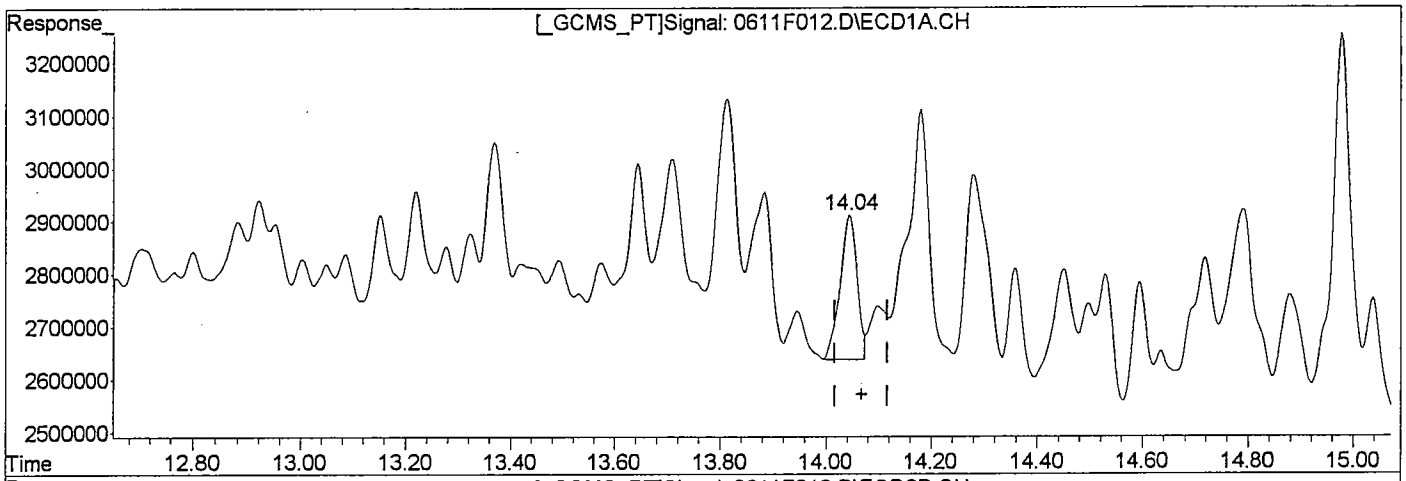
After
Initials
JUN 12 2007
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other

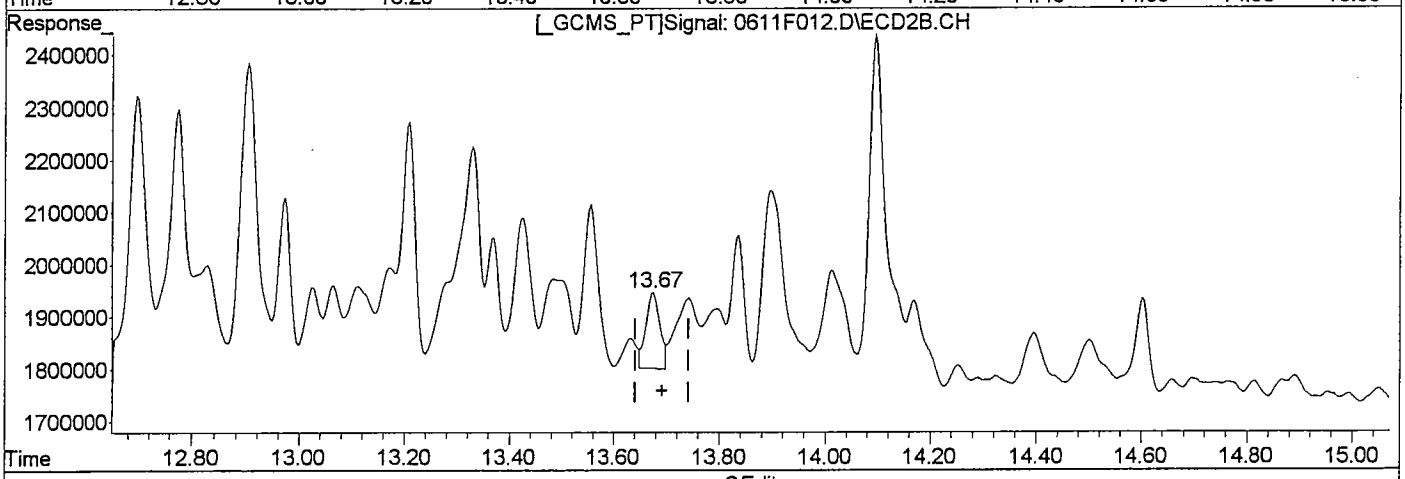
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 163.468ug/L

response 617785

(28) Toxaphene {4} #2

13.67min 391.588ug/L

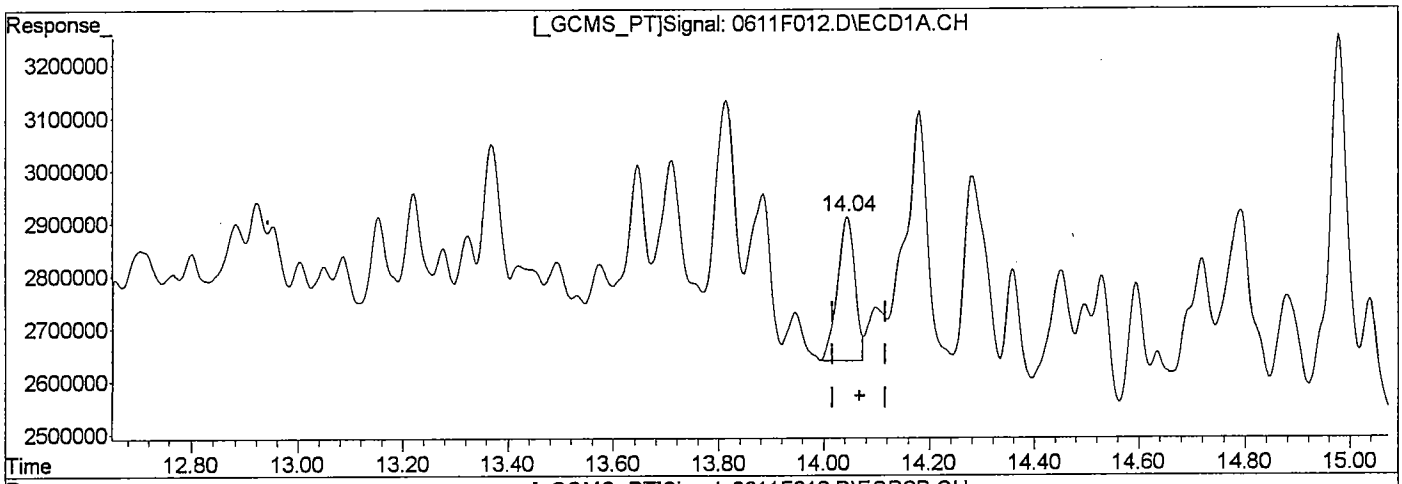
response 267431

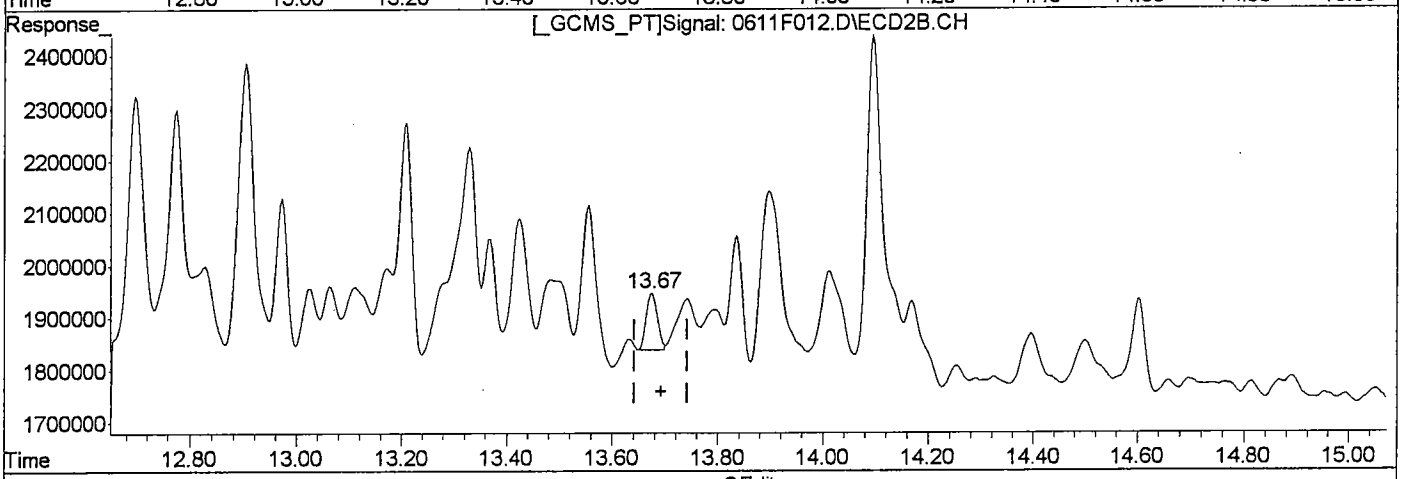
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 163.468ug/L

response 617785

(28) Toxaphene {4} #2

13.67min 230.559ug/L m

response 157458

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

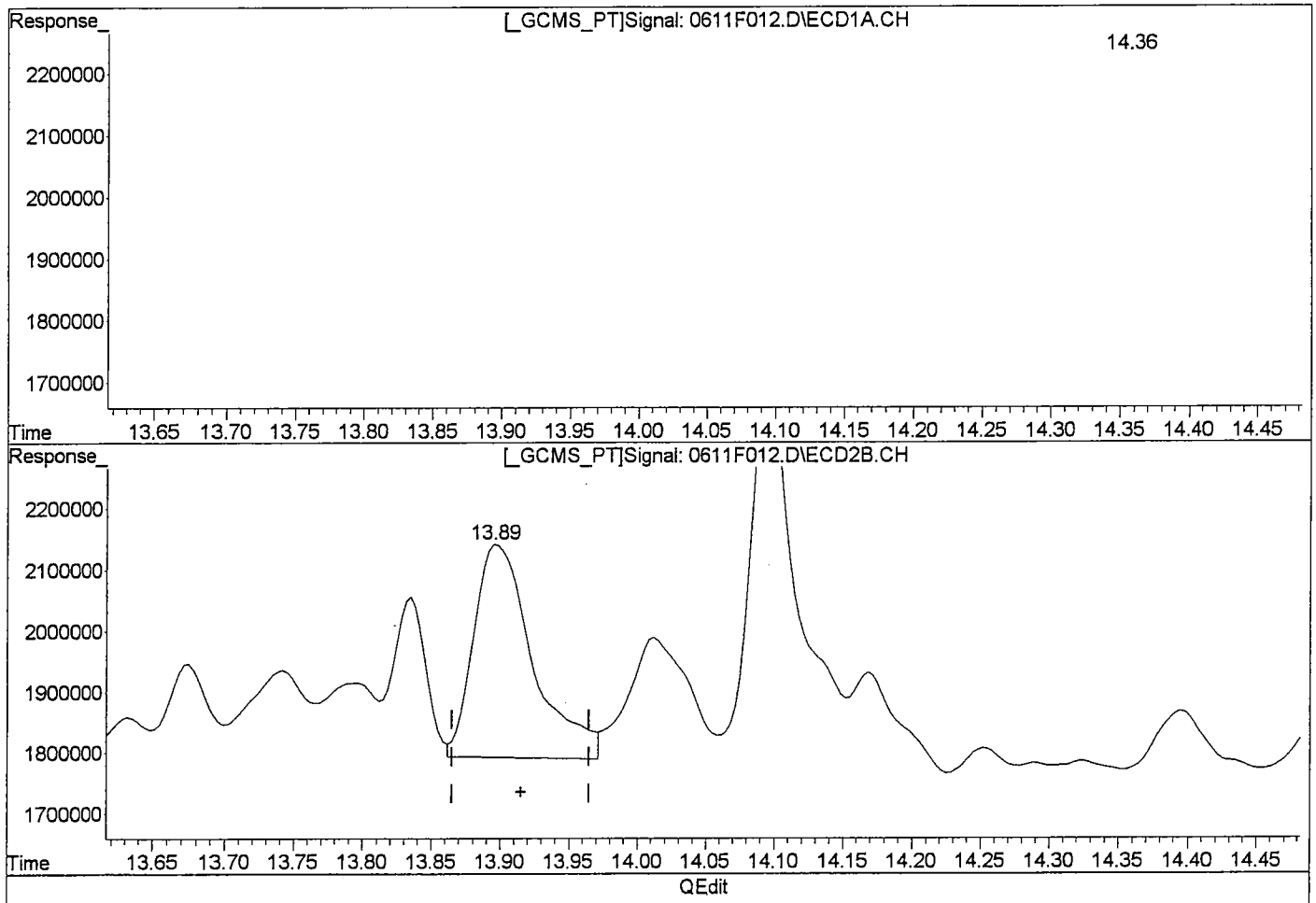
(+) = Expected Retention Time

0611F012.D 061107-8081.M Tue Jun 12 08:32:33 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 186.559ug/L

response 351872

(29) Toxaphene {5} #2

13.89min 261.159ug/L

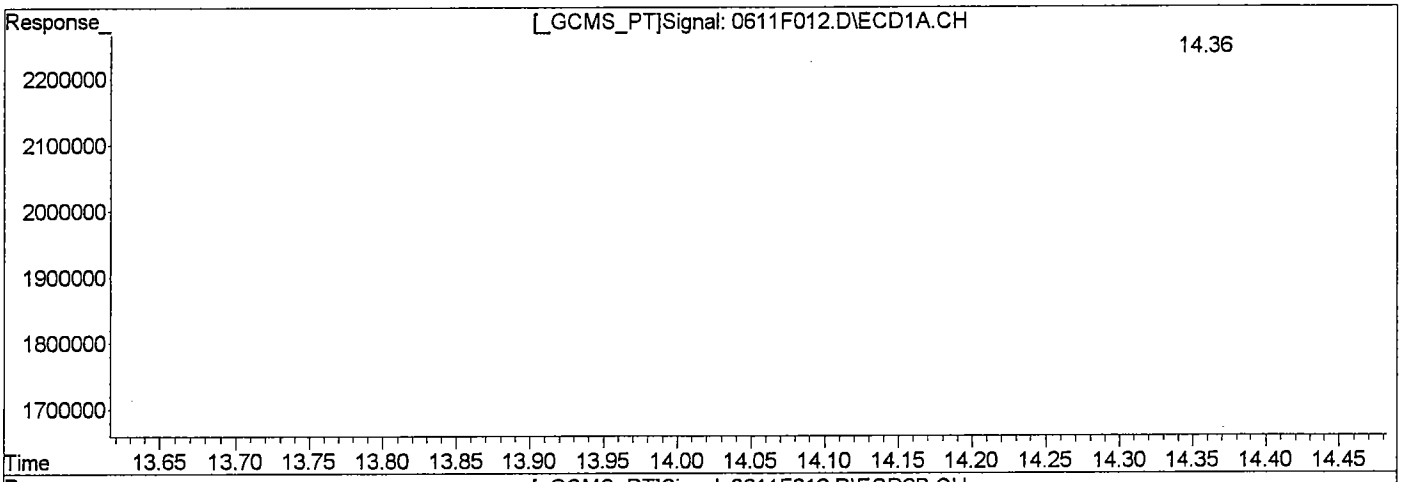
response 1047211

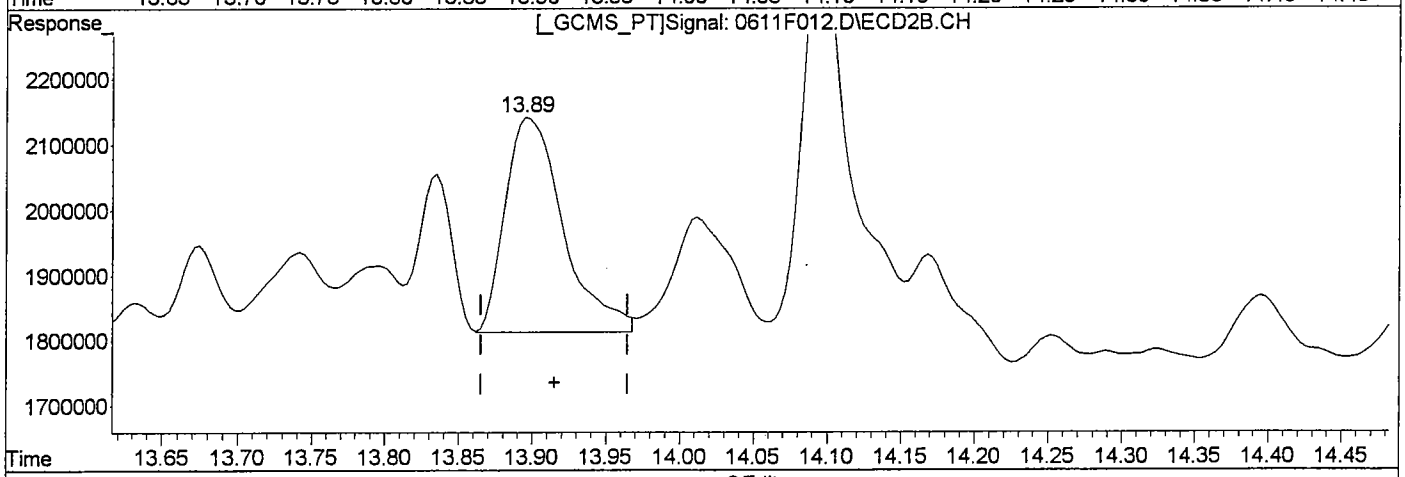
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 186.559ug/L

response 351872

(29) Toxaphene {5} #2

13.89min 224.606ug/L m

response 900639

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

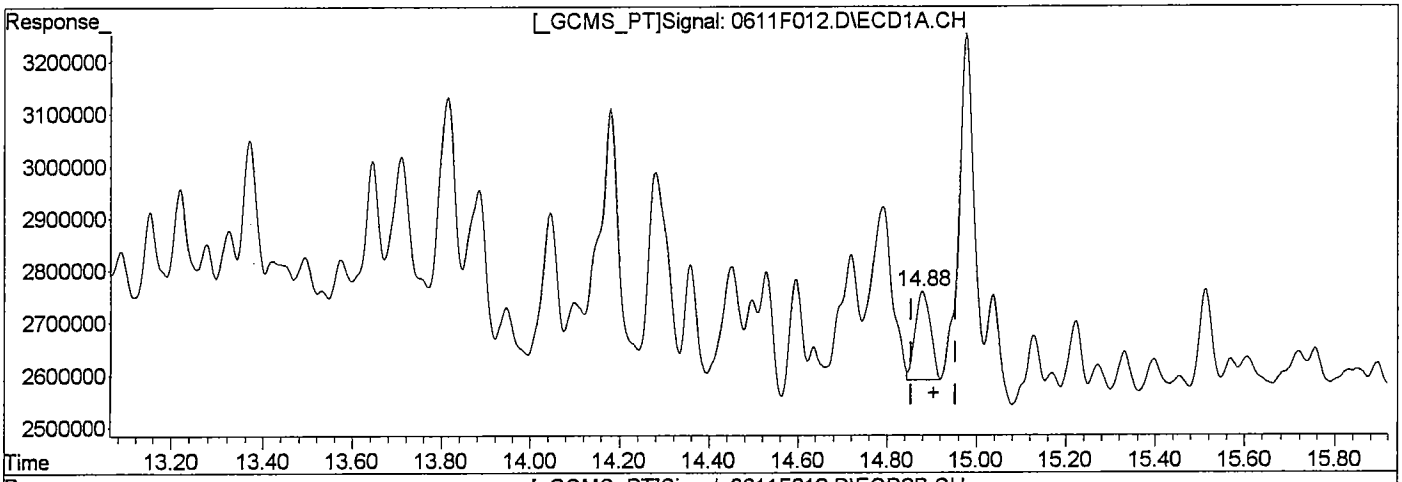
(+) = Expected Retention Time

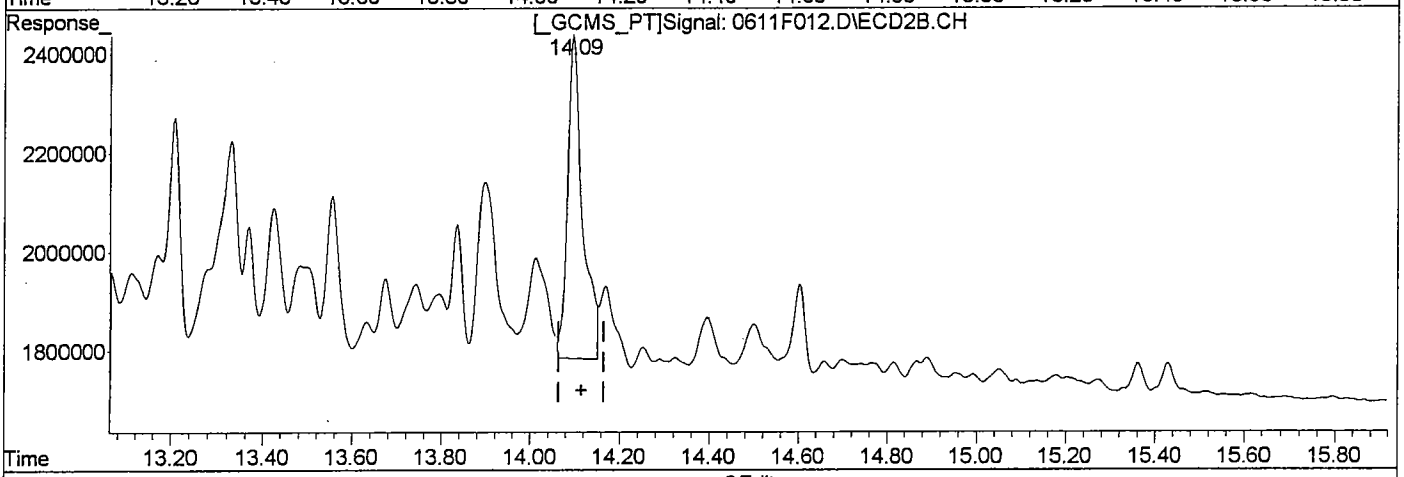
0611F012.D 061107-8081.M Tue Jun 12 08:32:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.88min 199.146ug/L

response 394928

(30) Toxaphene {6} #2

14.09min 273.478ug/L

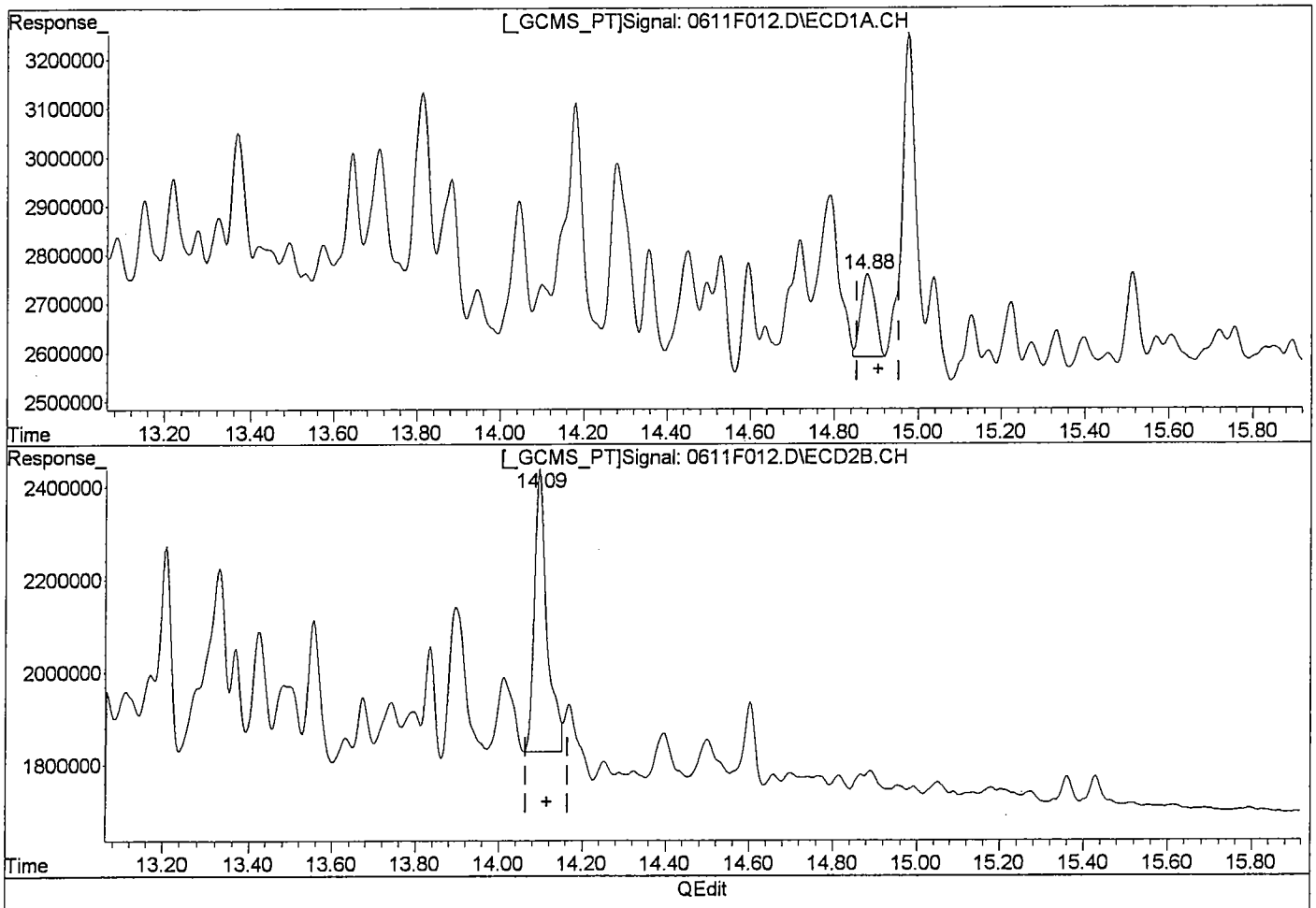
response 1525975

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F012.D\ECD1A.CH Vial: 12
Signal #2 : J:\GC23\DATA\061107\0611F012.D\ECD2B.CH
Acq On : 11 Jun 2007 11:11 pm Operator: AKamawal
Sample : TOX @ 250ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.88min 199.146ug/L

response 394928

(30) Toxaphene {6} #2

14.09min 231.564ug/L m

response 1292100

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F012.D 061107-8081.M Tue Jun 12 08:33:00 2007

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:37 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.61	658555	576654	339.581	480.342 #
26)	Toxaphene {2}	13.22	12.70	494784	2004943	323.658m	469.551 #
27)	Toxaphene {3}	13.37	13.56	867386	1211594	327.309m	460.965 #
28)	Toxaphene {4}	14.05	13.68	1168582	328030	309.211	480.320m#
29)	Toxaphene {5}	14.36	13.90	658100	1865836	348.918	465.312m#
30)	Toxaphene {6}	14.88	14.10	770549	2507364	388.557	449.359m

AK 6/12/07

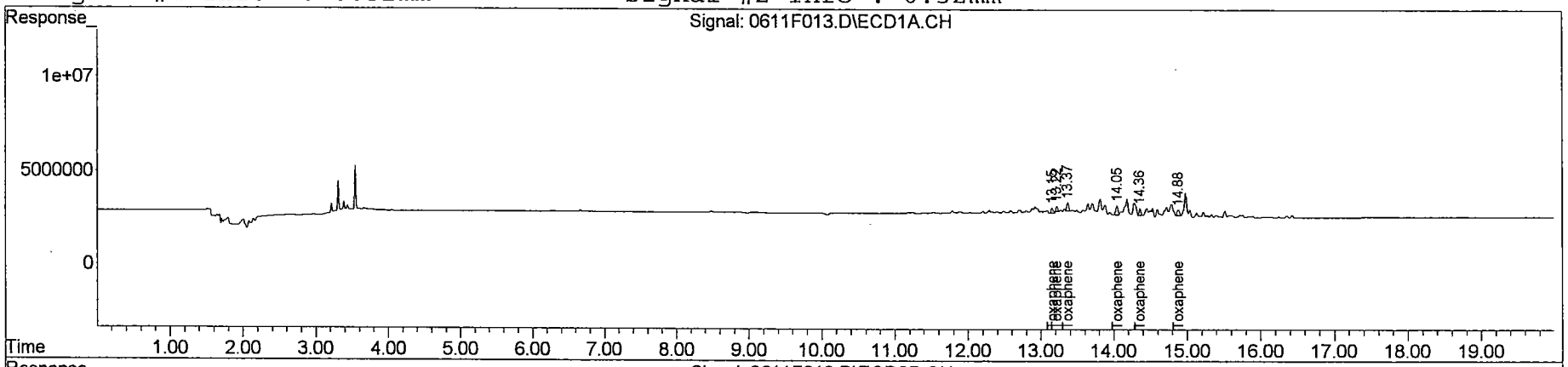
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

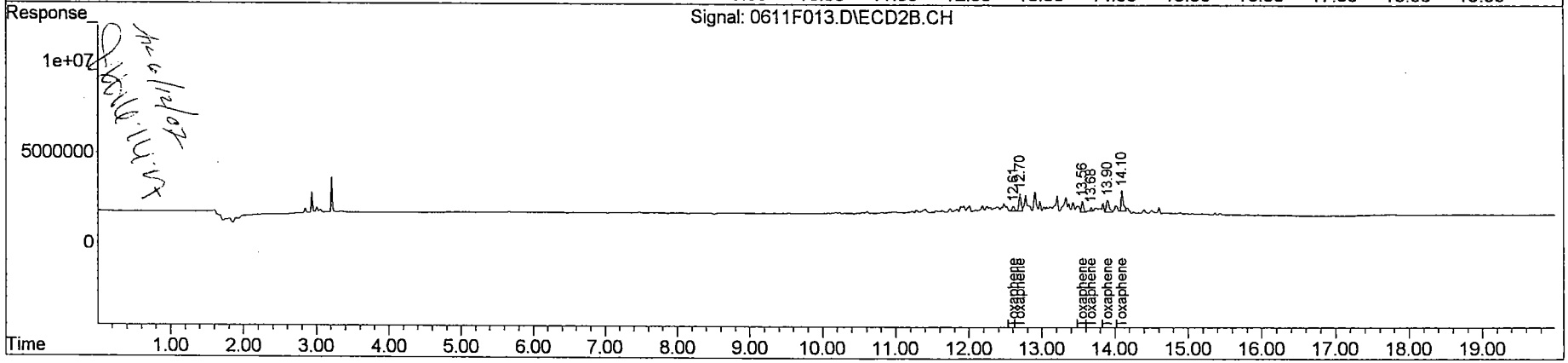
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:35 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



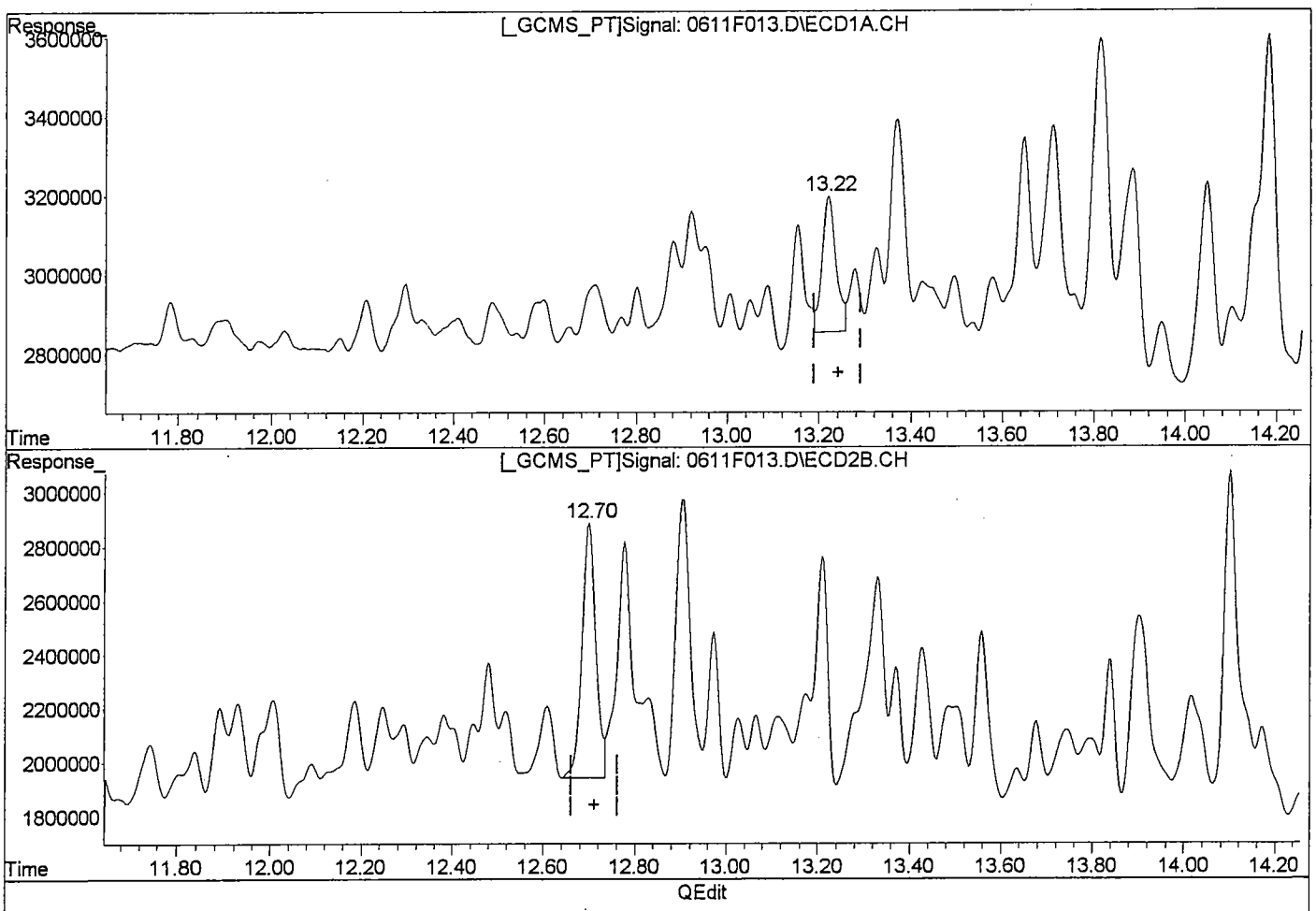


886

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.22min 462.204ug/L

response 706583

(26) Toxaphene {2} #2

12.70min 469.551ug/L

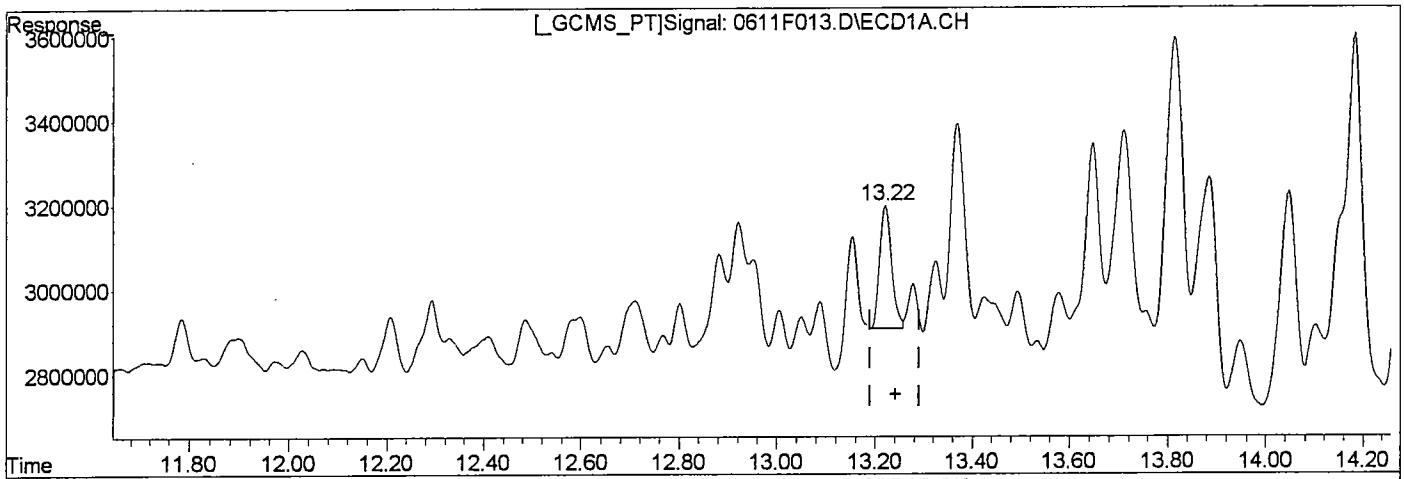
response 2004943

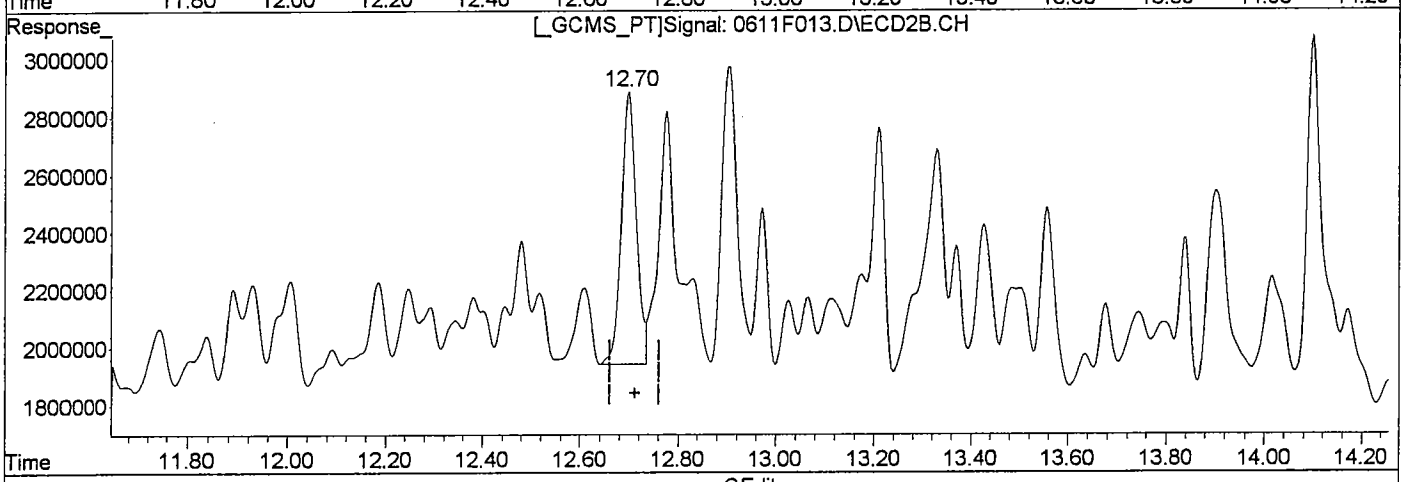
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 323.658ug/L m

response 494784

(26) Toxaphene {2} #2

12.70min 469.551ug/L

response 2004943

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

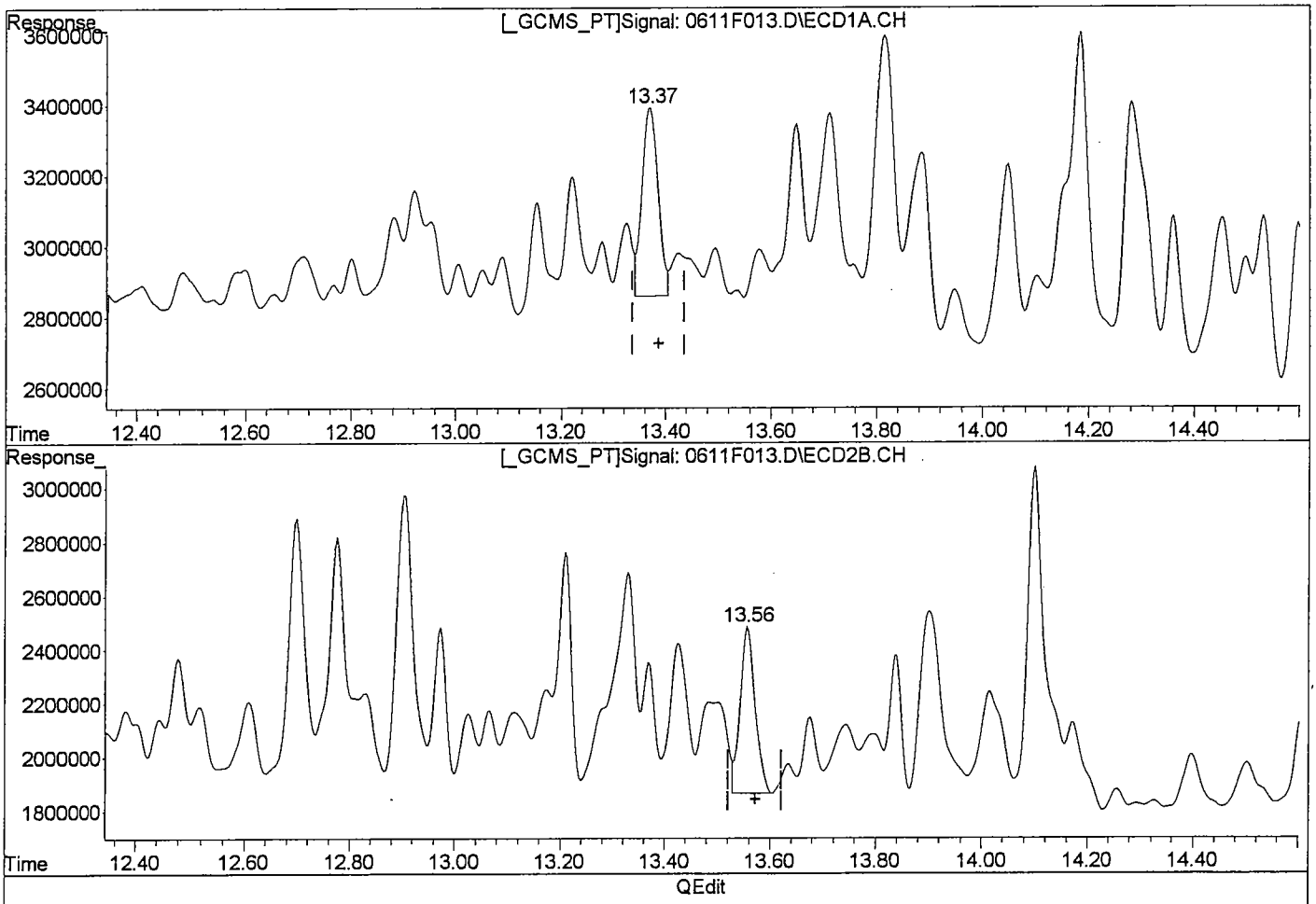
(+) = Expected Retention Time

0611F013.D 061107-8081.M Tue Jun 12 08:34:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.37min 432.294ug/L

response 1145599

(27) Toxaphene {3} #2

13.56min 460.965ug/L

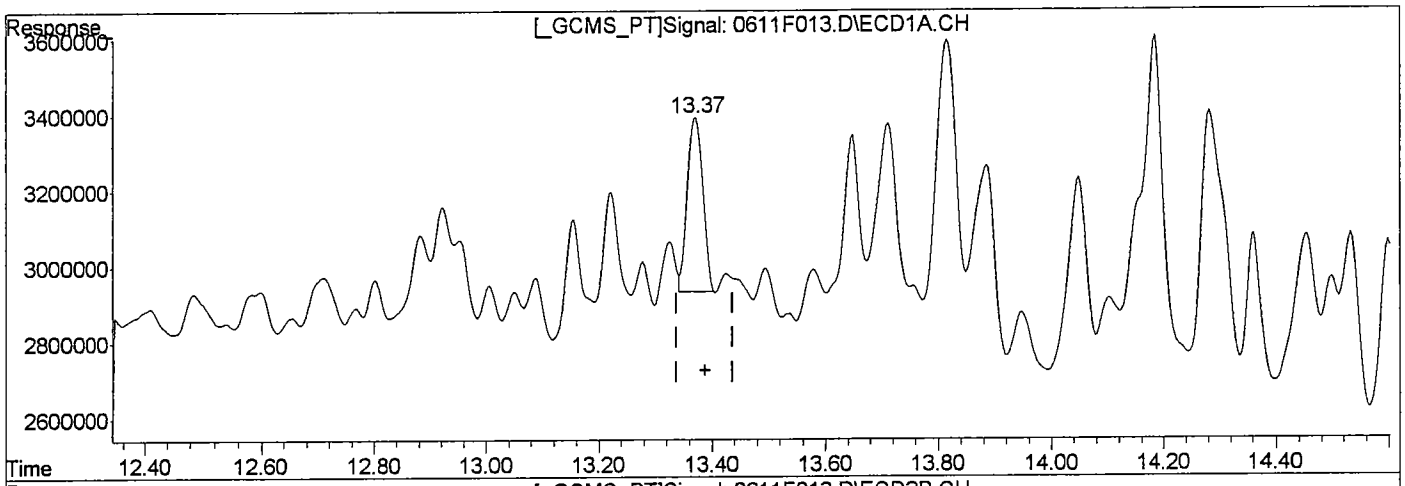
response 1211594

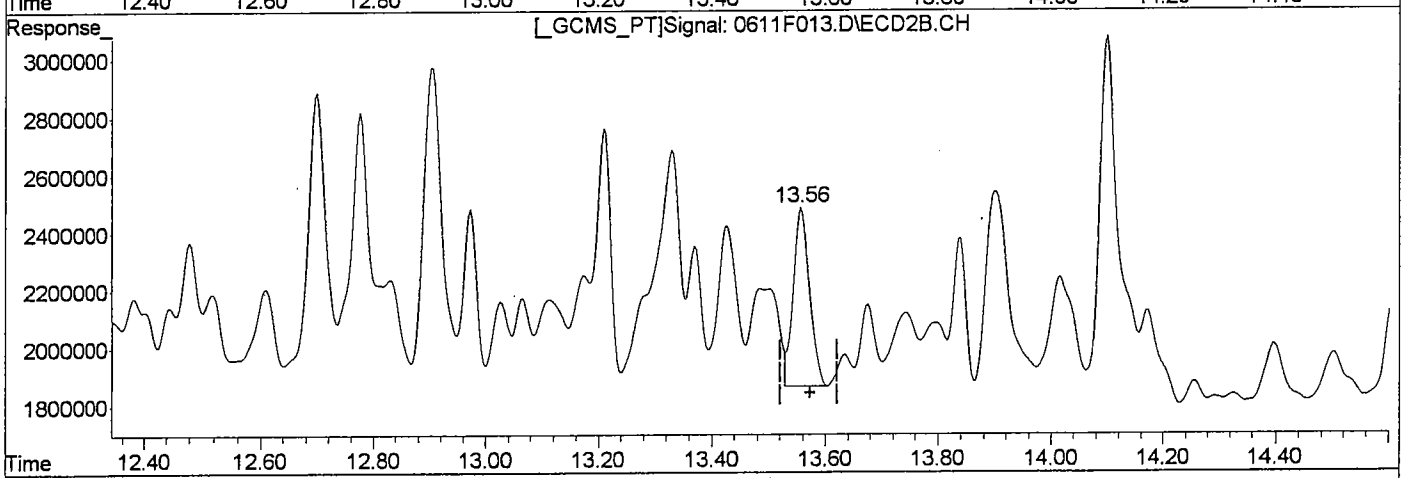
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 327.309ug/L m

response 867386

(27) Toxaphene {3} #2

13.56min 460.965ug/L

response 1211594

After
Initials

JUN 12 2007

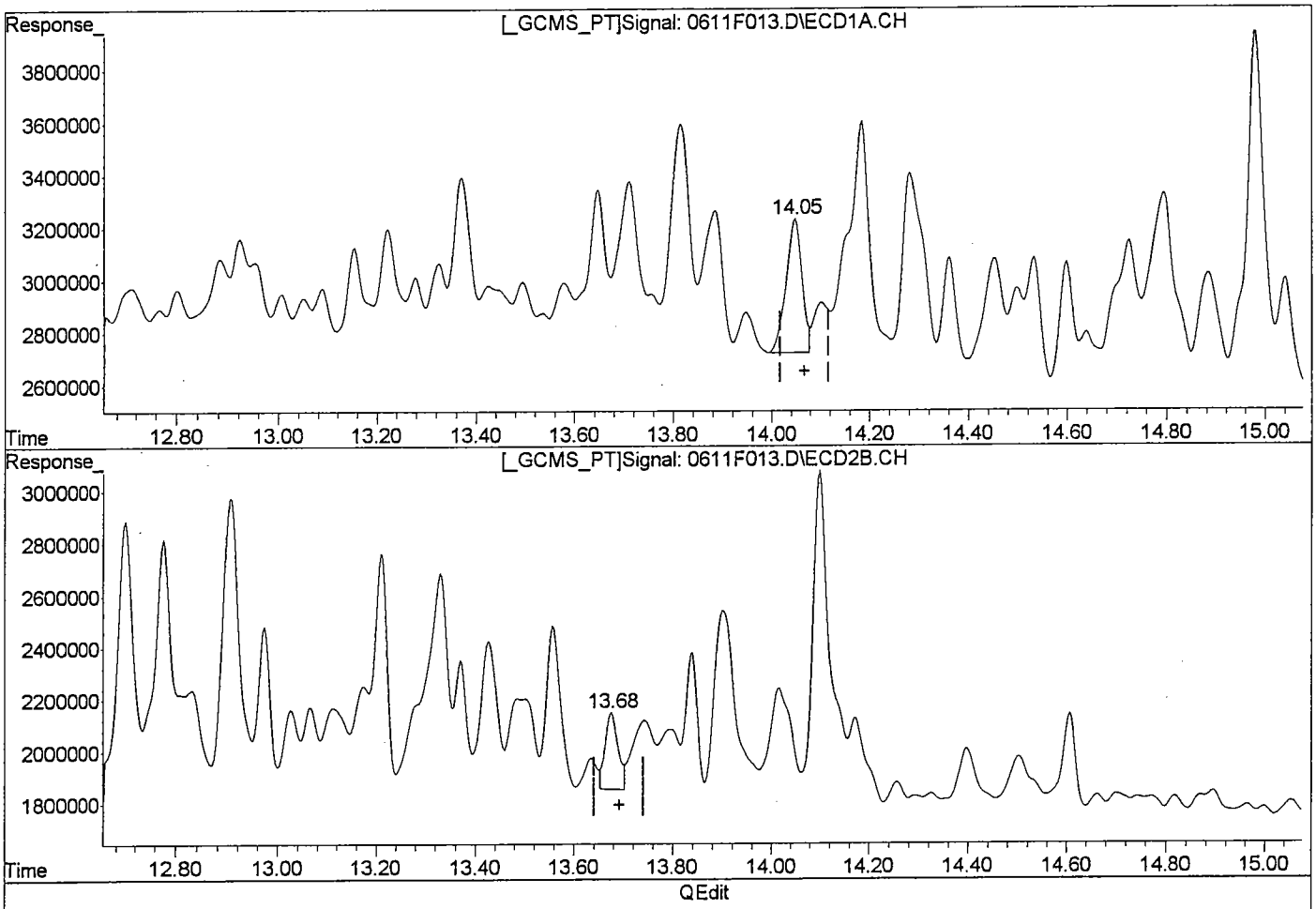
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



QEdit

(28) Toxaphene {4}

14.05min 309.211ug/L

response 1168582

(28) Toxaphene {4} #2

13.68min 793.117ug/L

response 541651

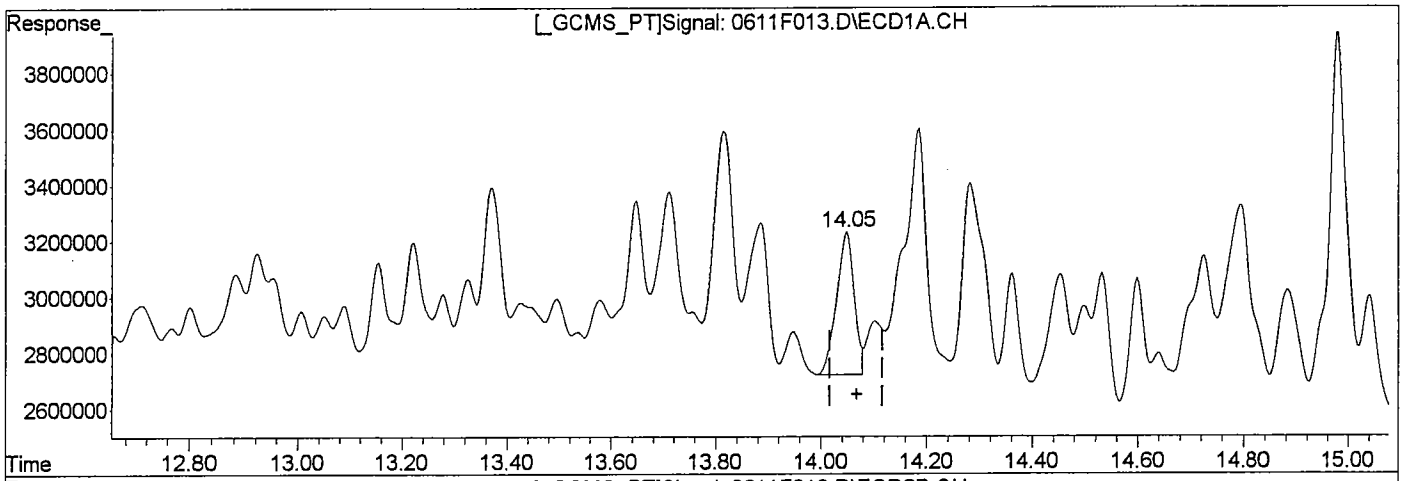
(+) = Expected Retention Time

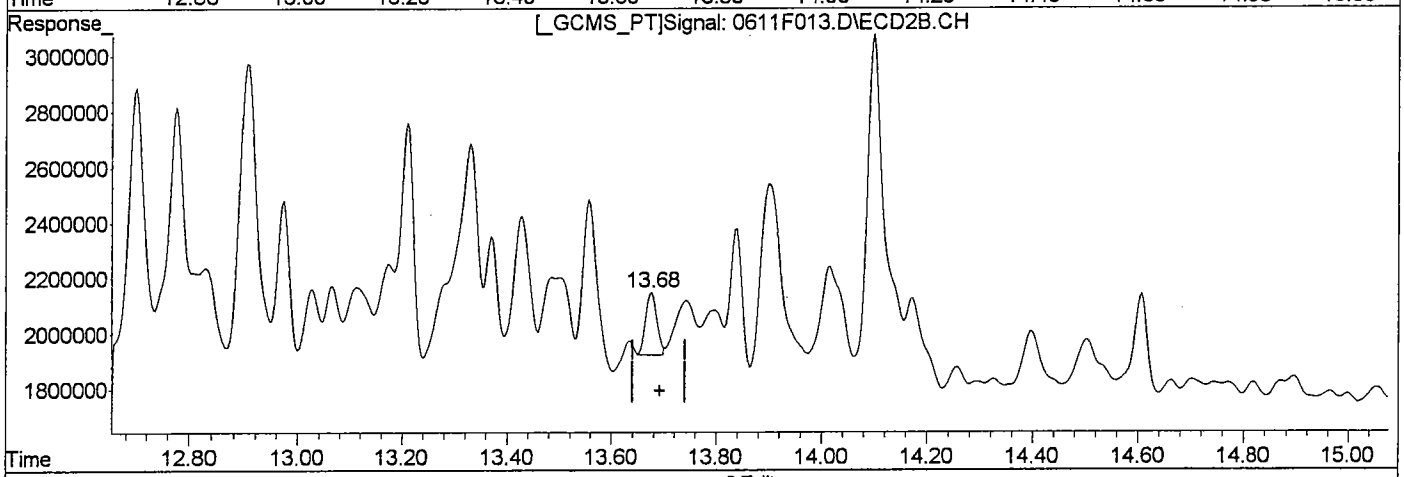
0611F013.D 061107-8081.M Tue Jun 12 08:34:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 309.211ug/L

response 1168582

(28) Toxaphene {4} #2

13.68min 480.320ug/L m

response 328030

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

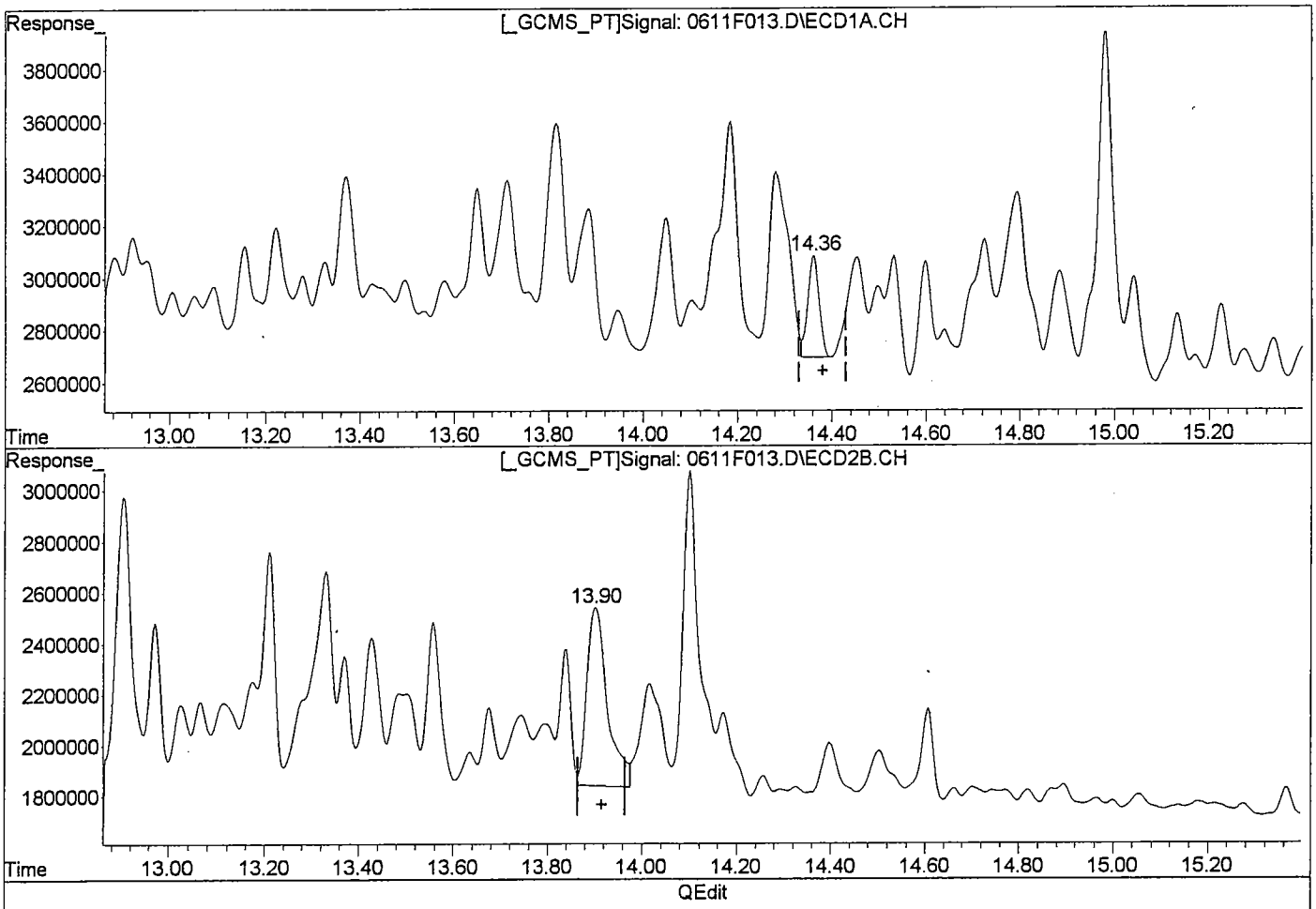
(+) = Expected Retention Time

0611F013.D 061107-8081.M Tue Jun 12 08:34:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 348.918ug/L

response 658100

(29) Toxaphene {5} #2

13.90min 531.046ug/L

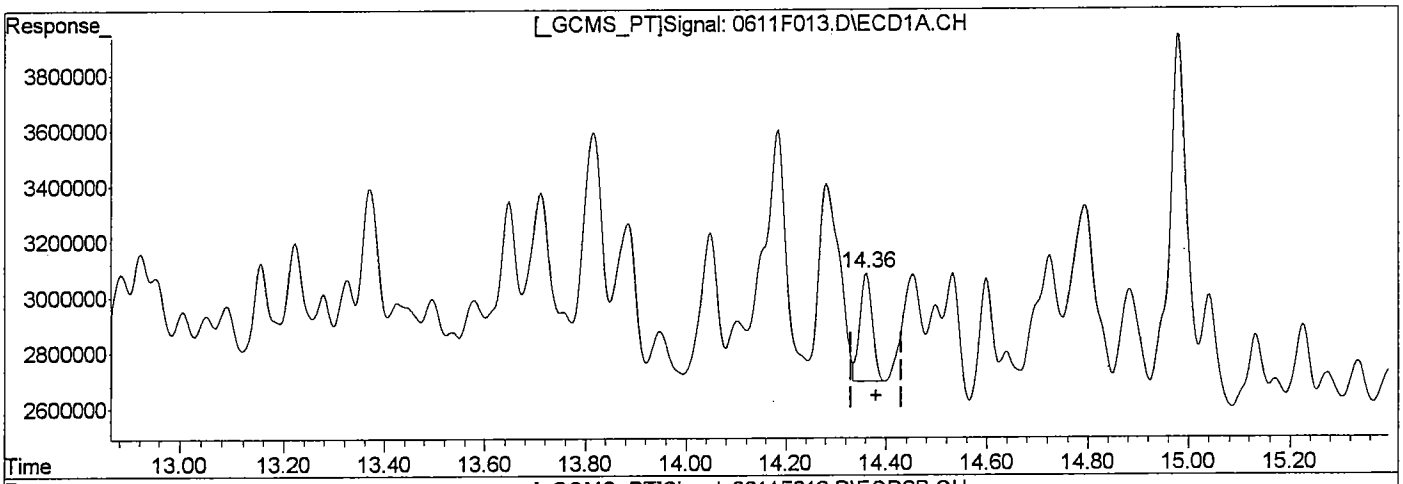
response 2129420

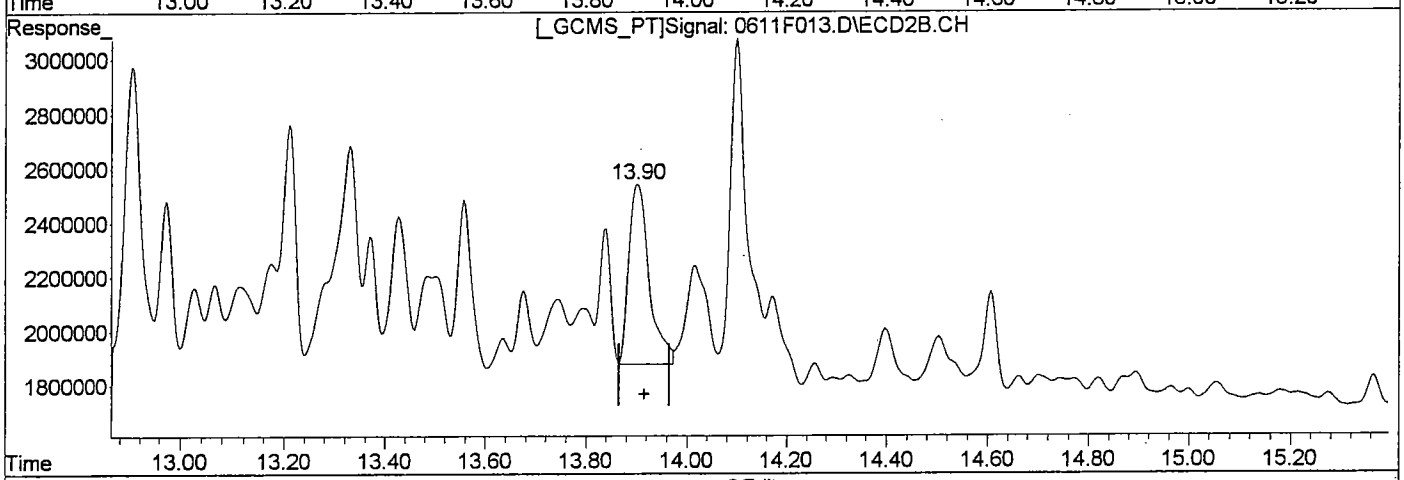
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 348.918ug/L

response 658100

(29) Toxaphene {5} #2

13.90min 465.312ug/L m

response 1865836

After
Initials

JUN 12 2007

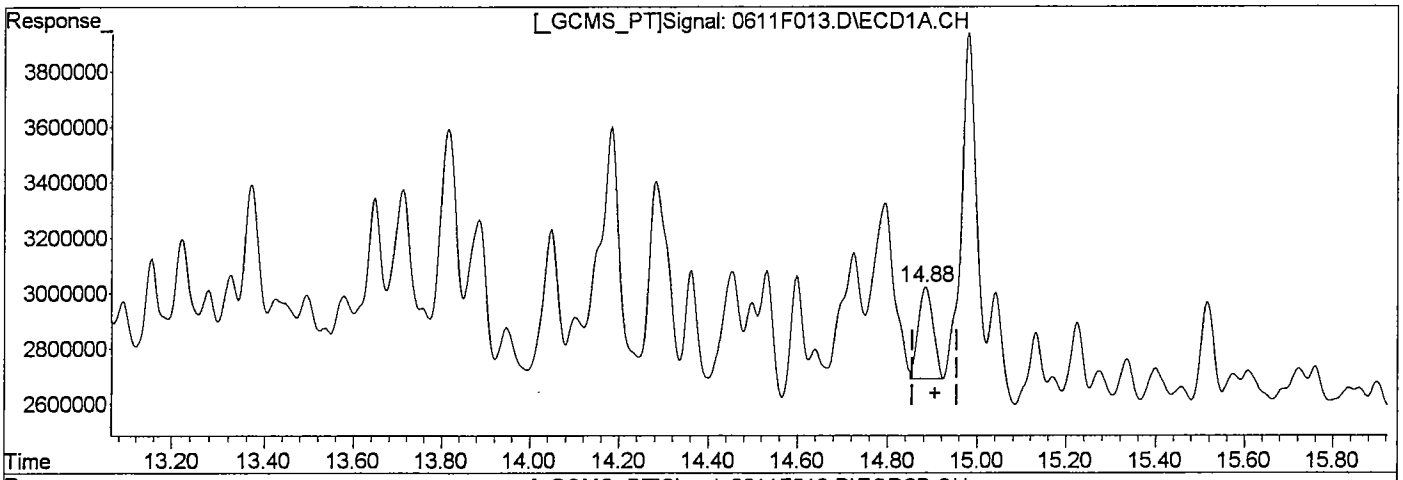
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

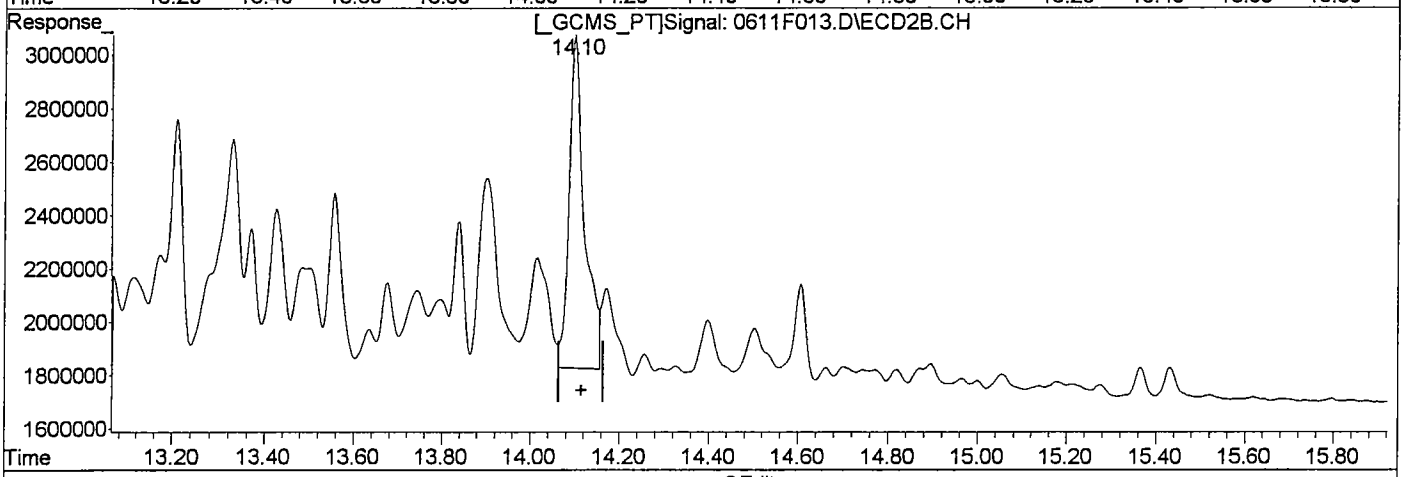
(+) = Expected Retention Time
0611F013.D 061107-8081.M Tue Jun 12 08:35:08 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.88min 388.557ug/L

response 770549

(30) Toxaphene {6} #2

14.10min 543.575ug/L

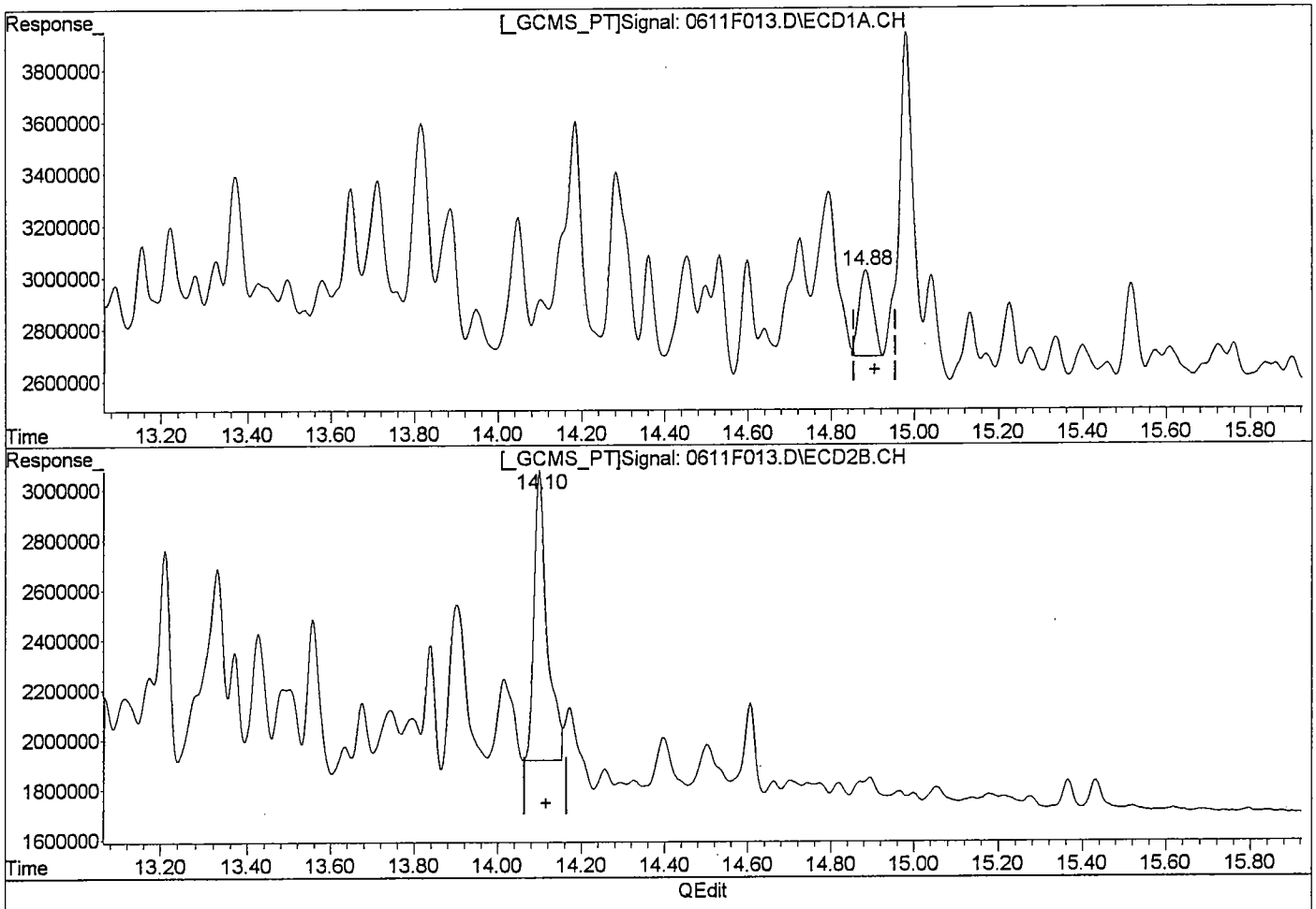
response 3033080

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F013.D\ECD1A.CH Vial: 13
Signal #2 : J:\GC23\DATA\061107\0611F013.D\ECD2B.CH
Acq On : 11 Jun 2007 11:37 pm Operator: AKamawal
Sample : TOX @ 500ppb GCPS5-87E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.88min 388.557ug/L

response 770549

(30) Toxaphene {6} #2

14.10min 449.359ug/L m

response 2507364

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0611F013.D 061107-8081.M Tue Jun 12 08:35:19 2007

Quantitation Report (QT Reviewed)

Z68

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:38 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.16	12.61	1622941	1312534	836.861	1093.316 #
26)	Toxaphene {2}	13.23	12.70	1287882	4624373	842.455m	1083.012 #
27)	Toxaphene {3}	13.37	13.56	2200836	2847379	830.489m	1083.320 #
28)	Toxaphene {4}	14.05	13.68	3611666	741350	955.661m	1085.527m
29)	Toxaphene {5}	14.37	13.90	1981513	4373541	1050.580m	1090.697m
30)	Toxaphene {6}	14.89	14.10	2195448	5978942	1107.076m	1071.519m

AK 6/12/07

6/14/07

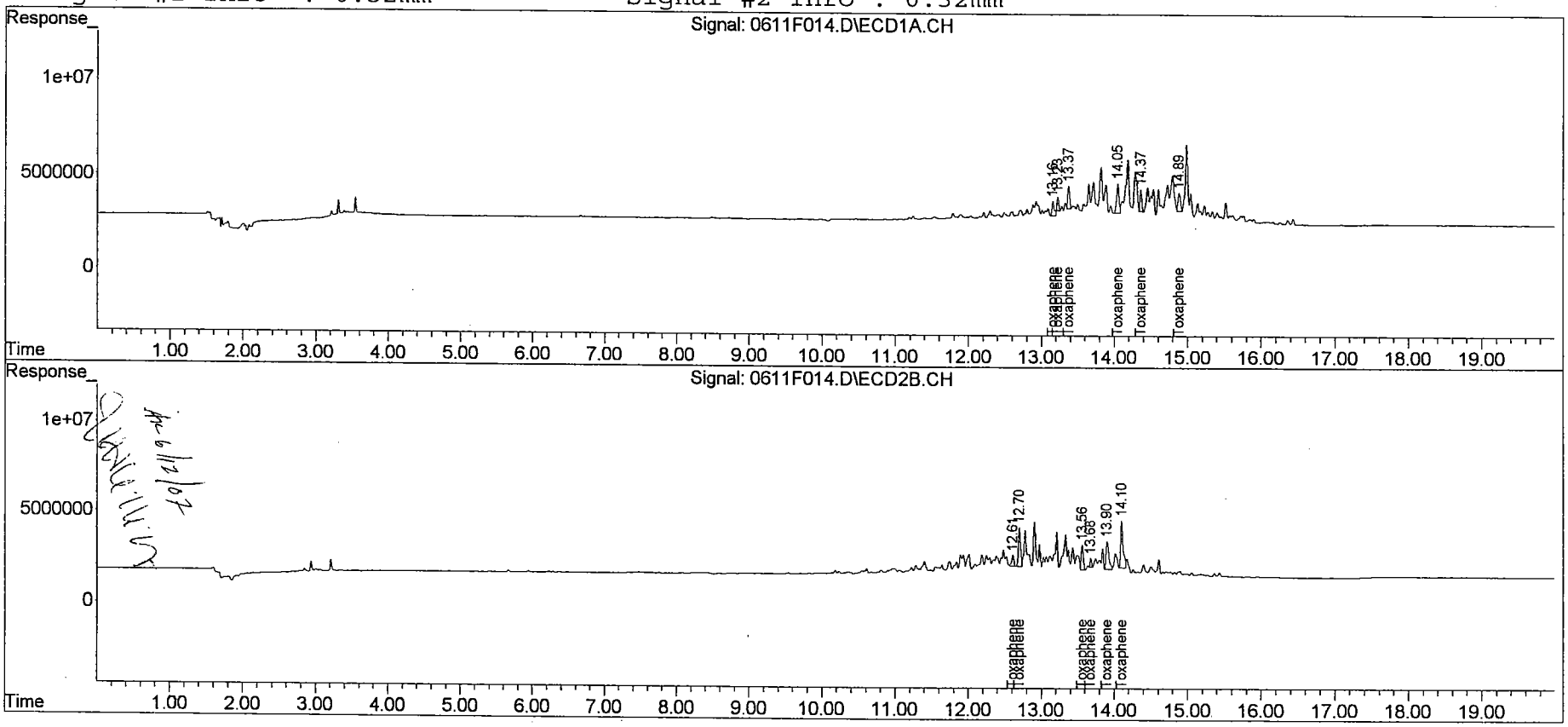
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:36 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

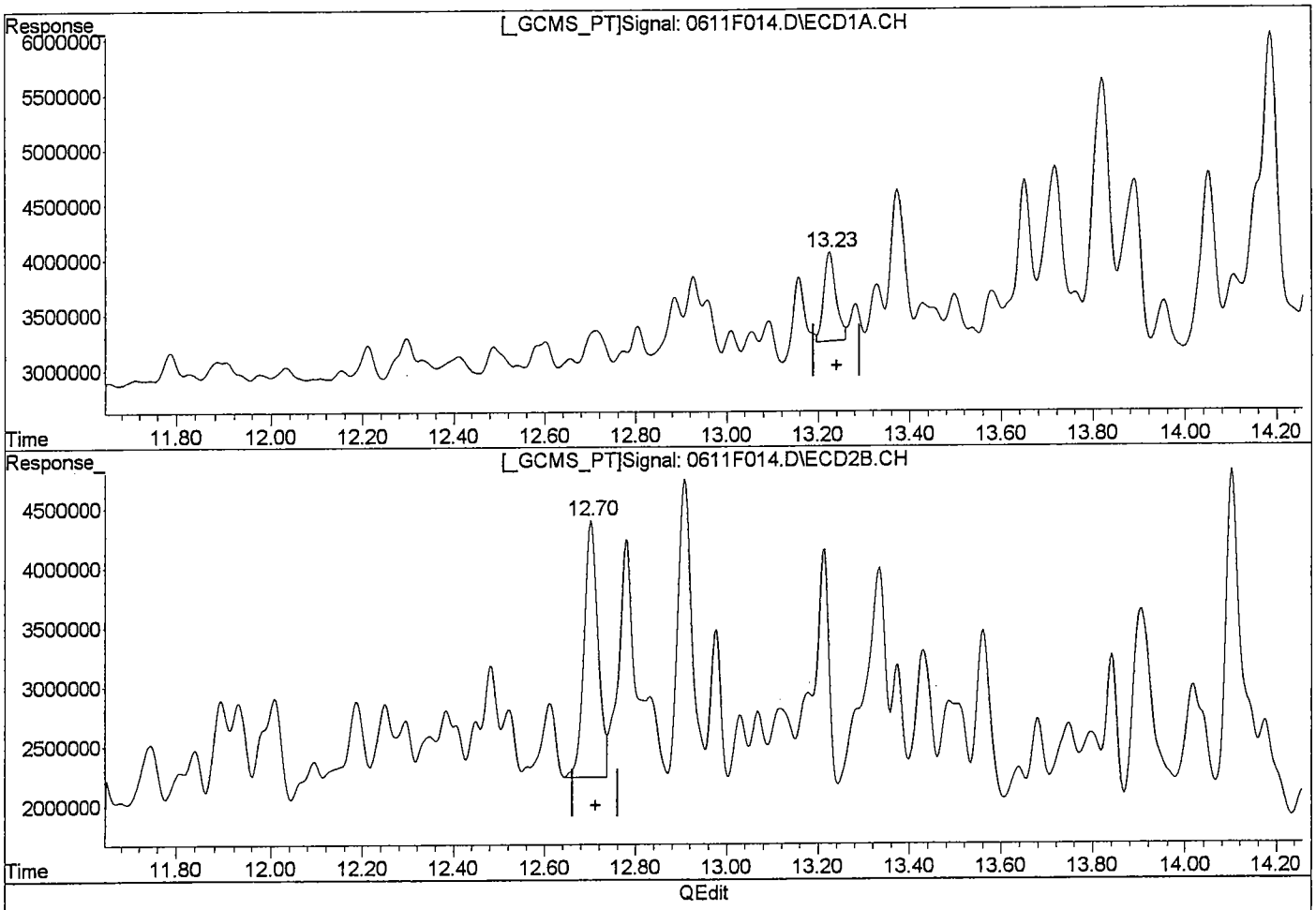


898

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.23min 974.837ug/L

response 1490258

(26) Toxaphene {2} #2

12.70min 1083.012ug/L

response 4624373

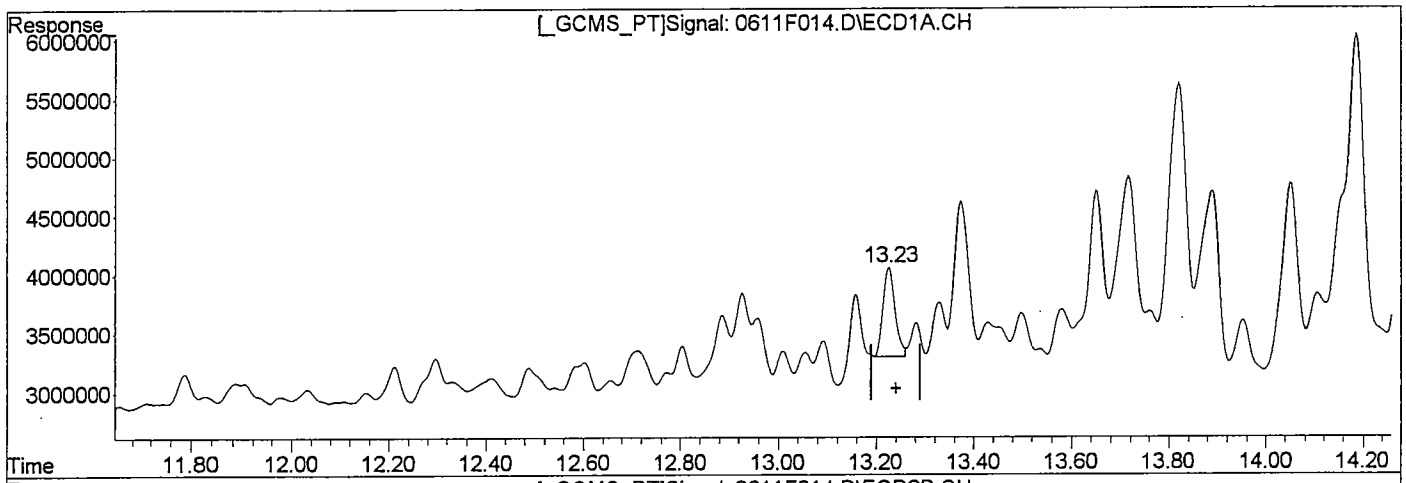
(+) = Expected Retention Time

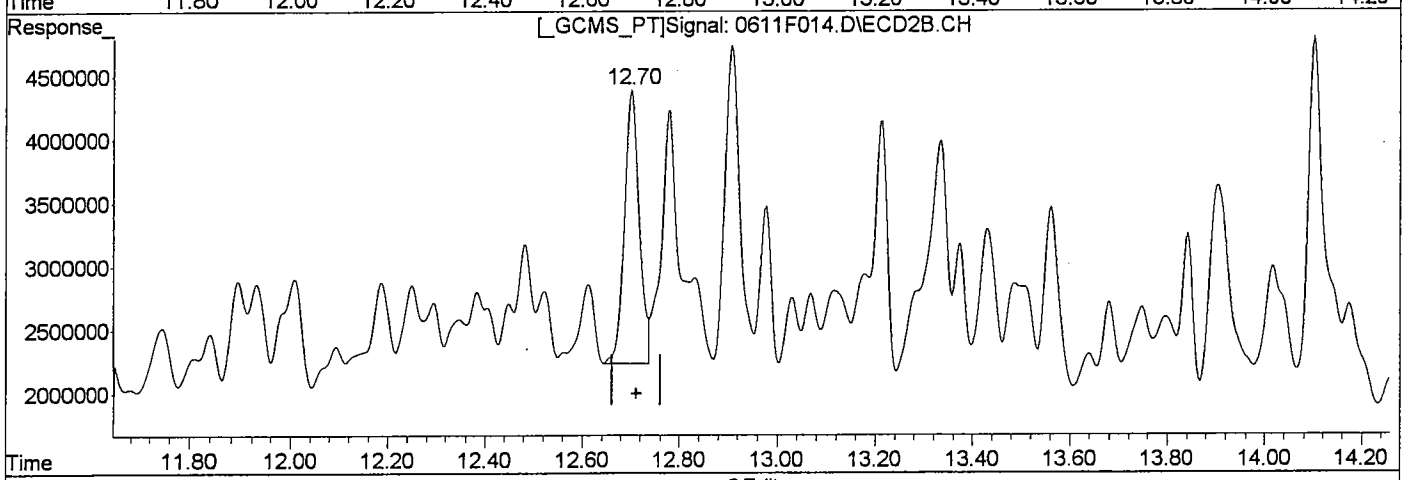
0611F014.D 061107-8081.M Tue Jun 12 08:35:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 842.455ug/L m

response 1287882

(26) Toxaphene {2} #2

12.70min 1083.012ug/L

response 4624373

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

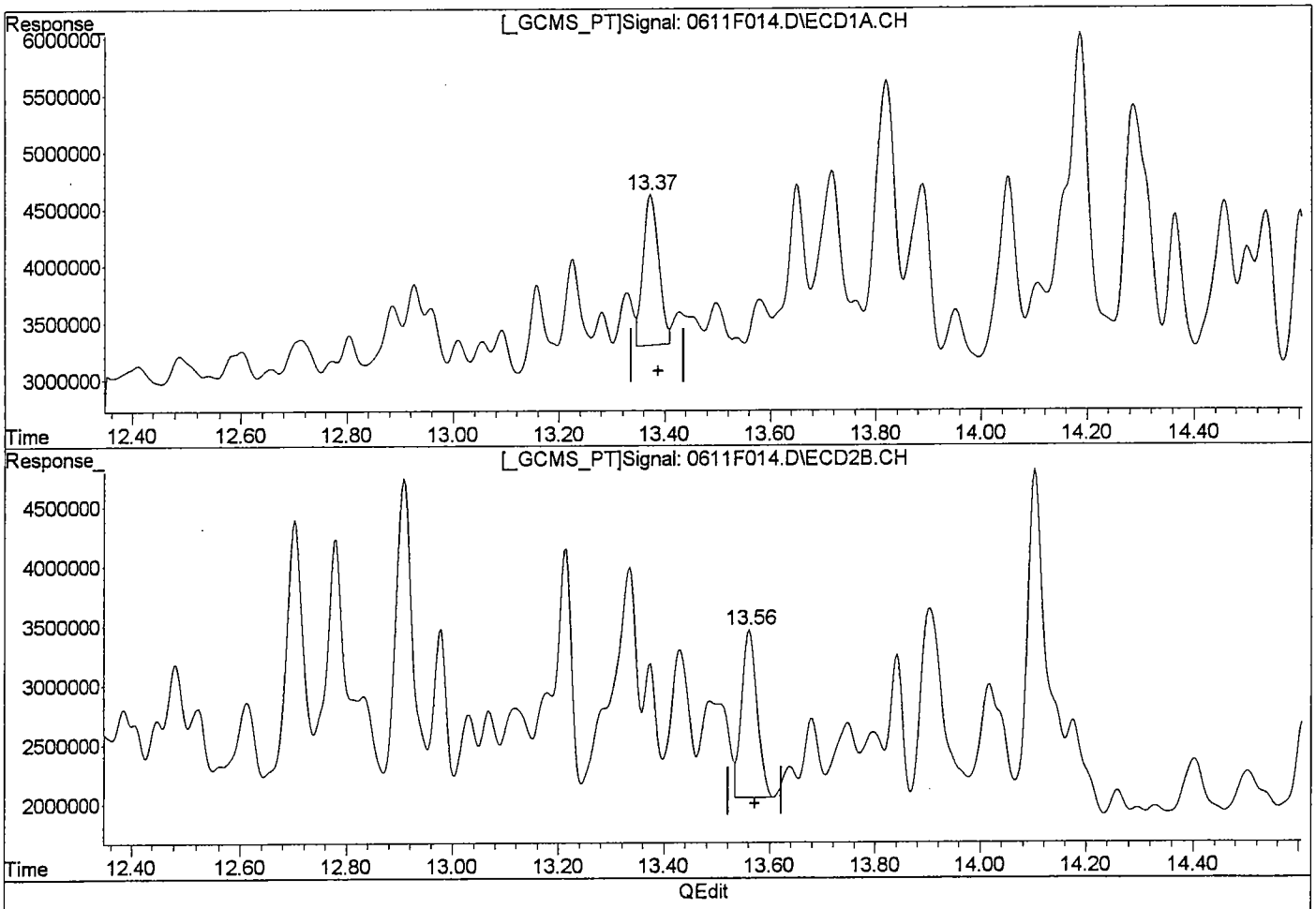
(+) = Expected Retention Time

0611F014.D 061107-8081.M Tue Jun 12 08:35:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.37min 1027.928ug/L

response 2724059

(27) Toxaphene {3} #2

13.56min 1083.320ug/L

response 2847379

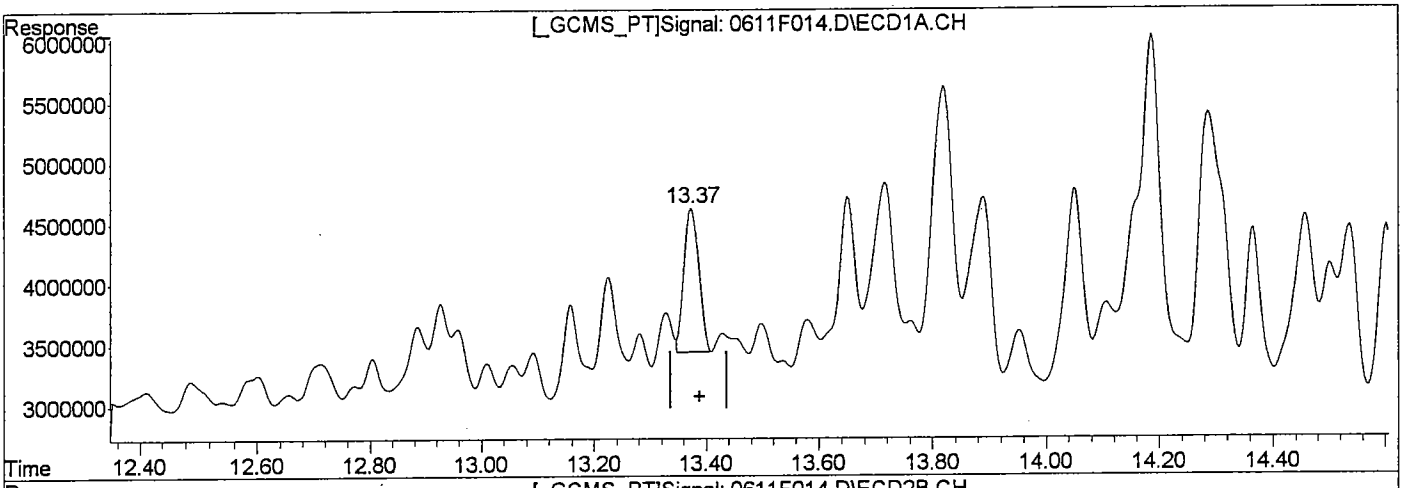
(+) = Expected Retention Time

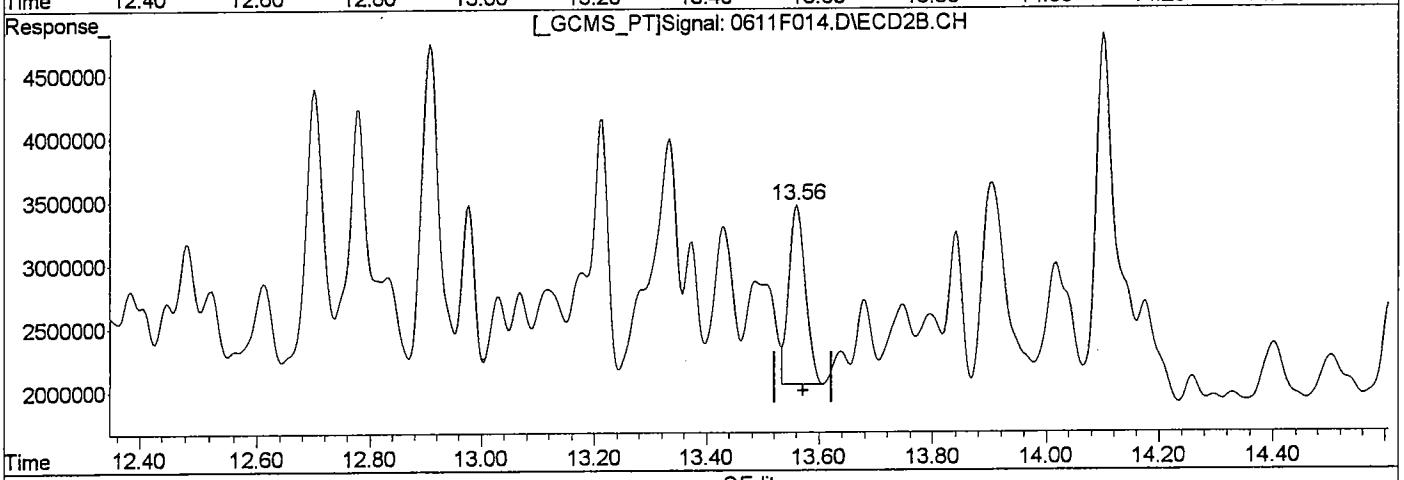
0611F014.D 061107-8081.M Tue Jun 12 08:35:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





(27) Toxaphene {3}

13.37min 830.489ug/L m

response 2200836

(27) Toxaphene {3} #2

13.56min 1083.320ug/L

response 2847379

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

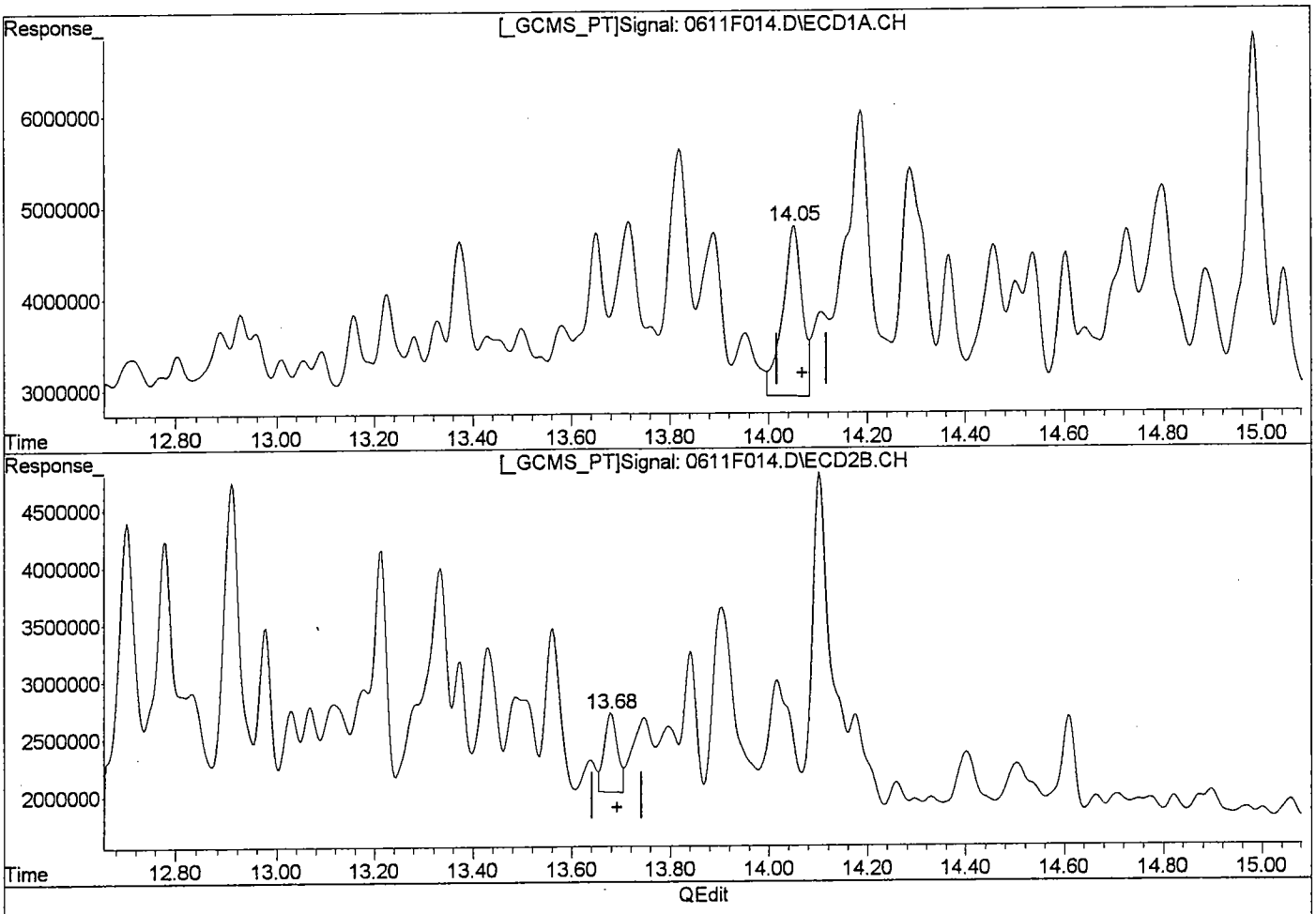
(+) = Expected Retention Time

0611F014.D 061107-8081.M Tue Jun 12 08:35:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.05min 1339.710ug/L

response 5063077

(28) Toxaphene {4} #2

13.68min 1869.965ug/L

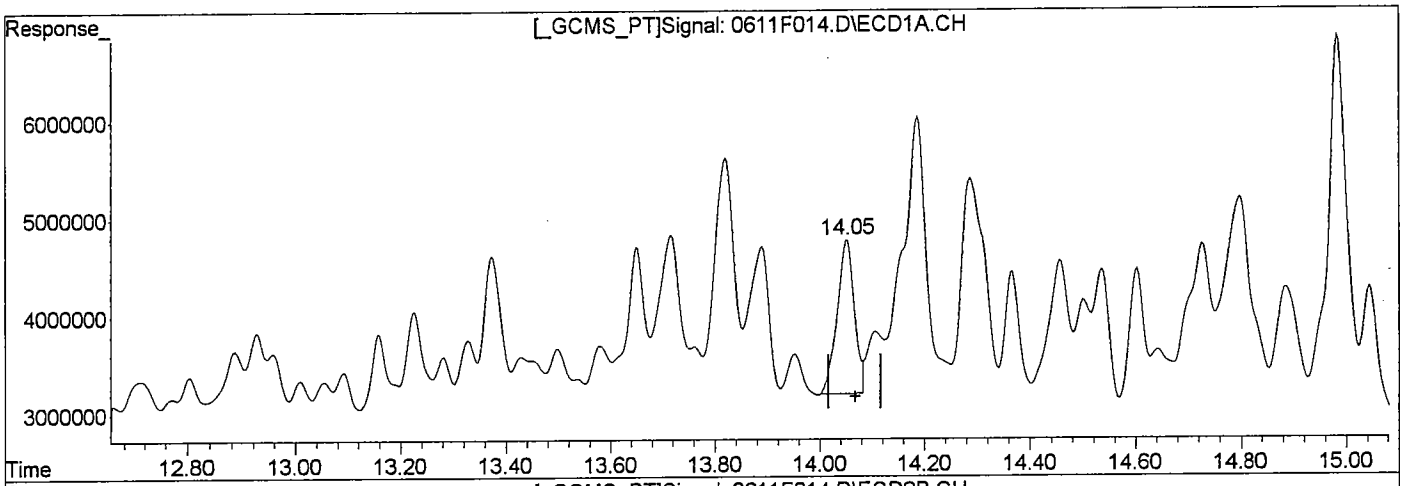
response 1277074

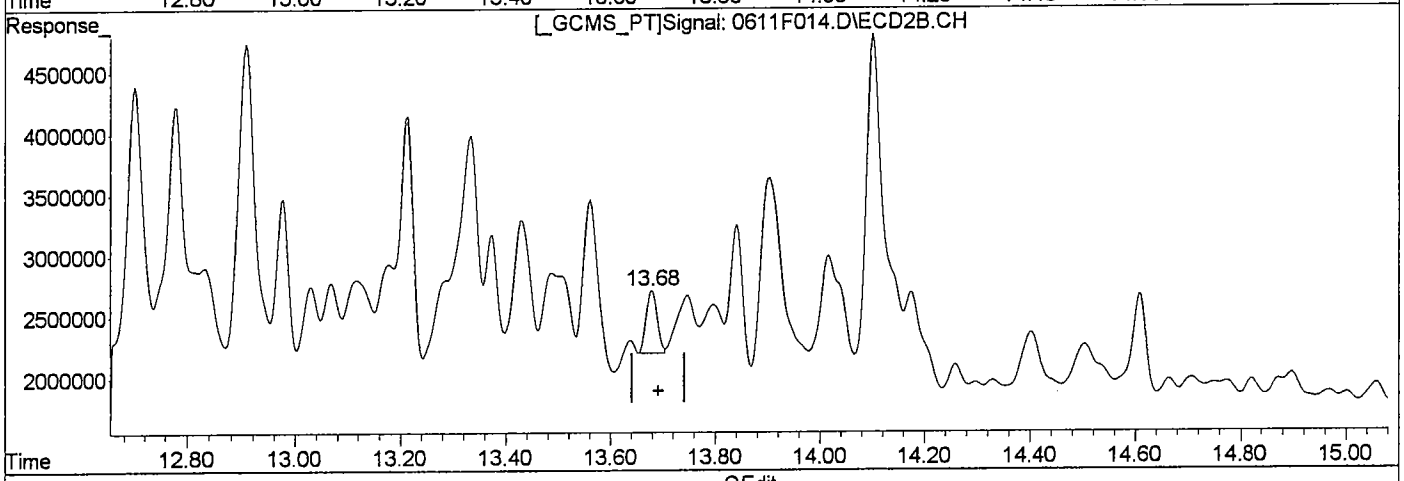
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 955.661ug/L m

response 3611666

(28) Toxaphene {4} #2

13.68min 1085.527ug/L m

response 741350

After
Initials AK

JUN 12 2007

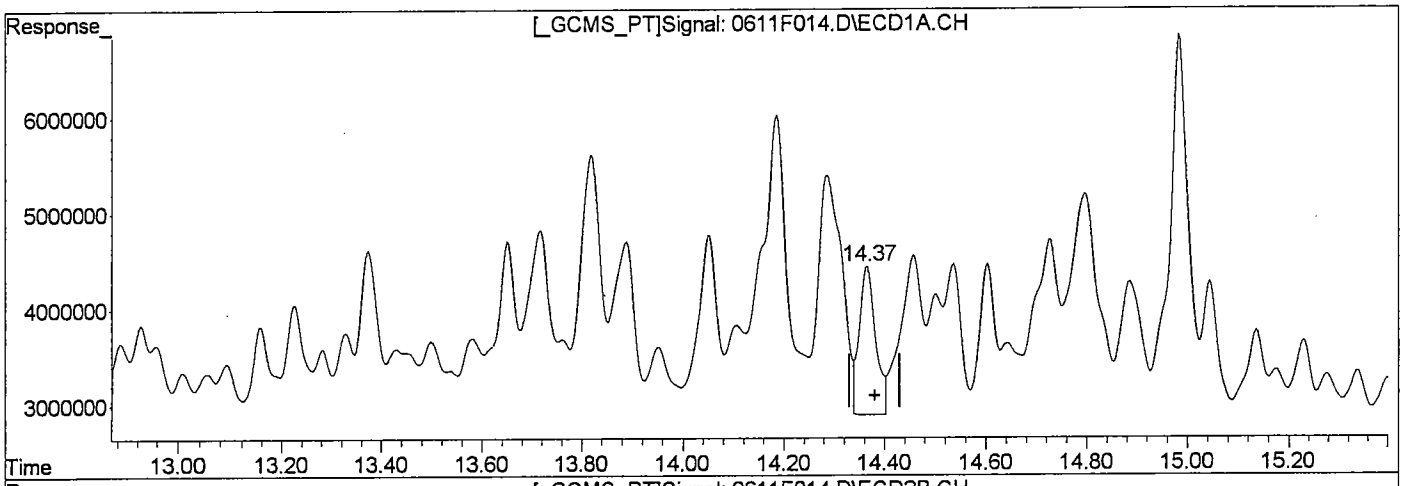
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

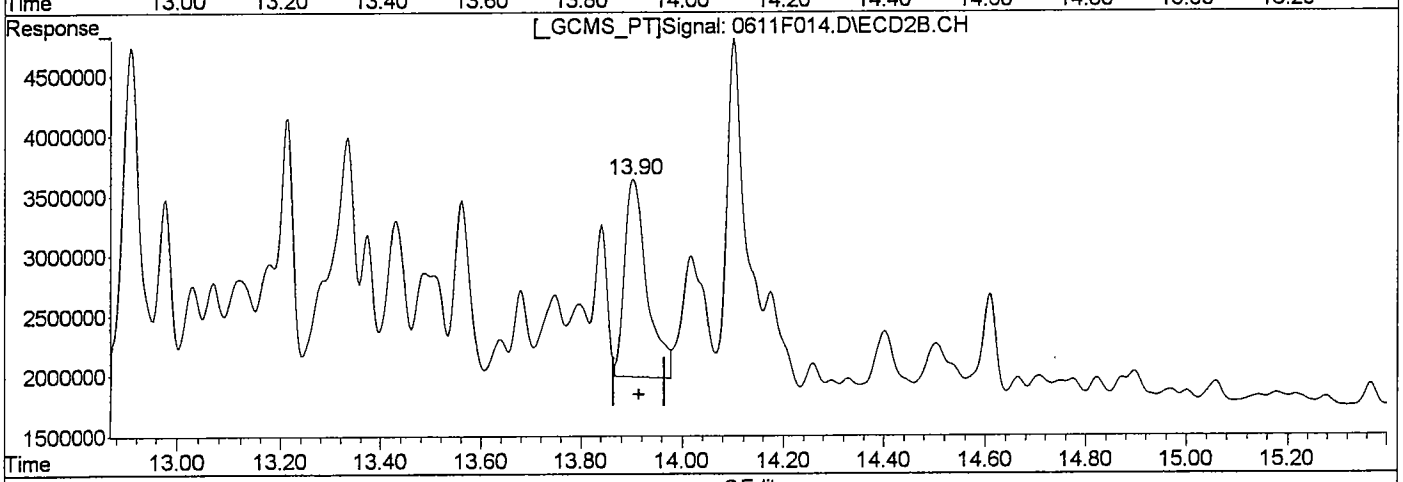
(+) = Expected Retention Time
0611F014.D 061107-8081.M Tue Jun 12 08:36:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 1834.350ug/L

response 3459793

(29) Toxaphene {5} #2

13.90min 1257.232ug/L

response 5041323

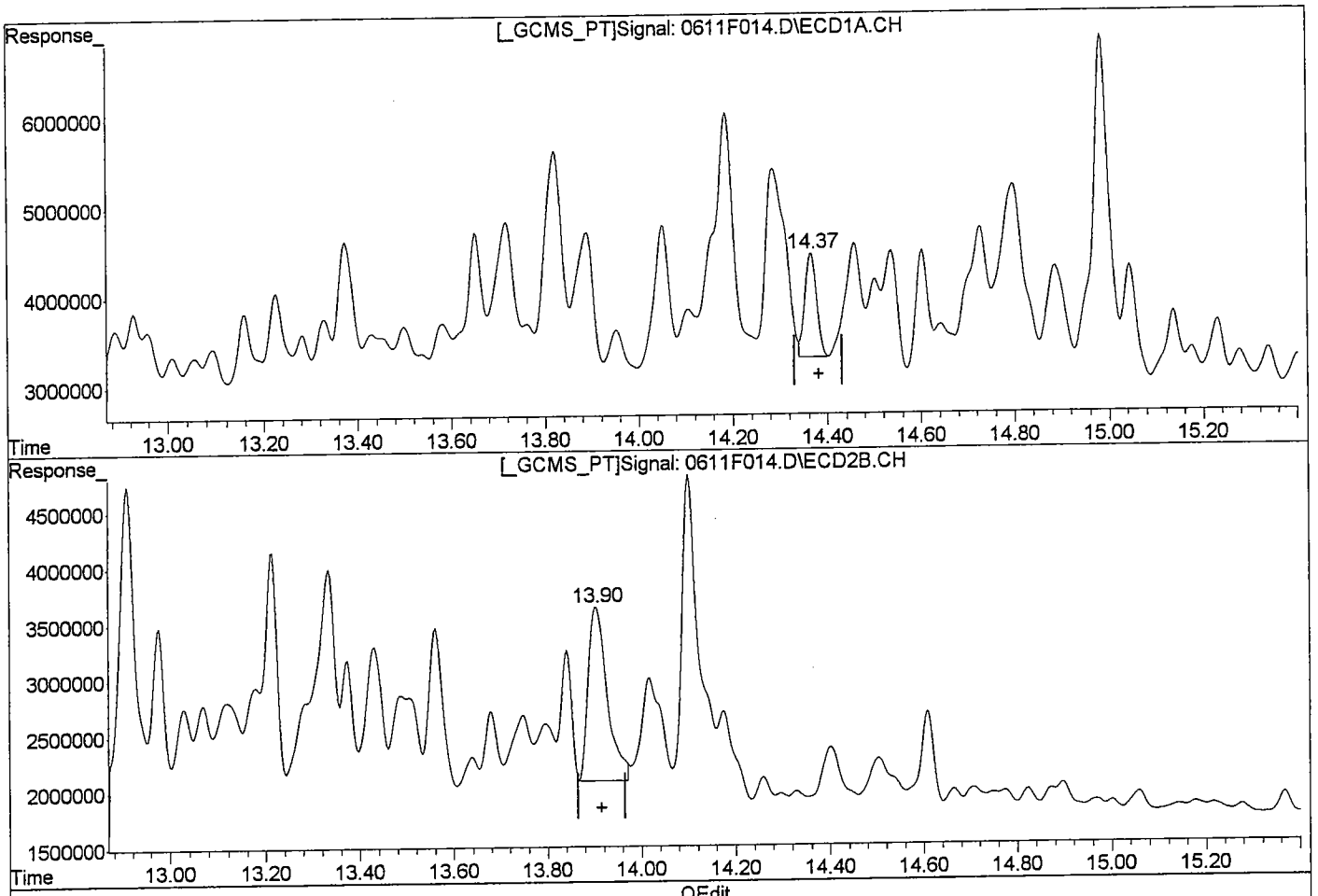
(+) = Expected Retention Time

0611F014.D 061107-8081.M Tue Jun 12 08:36:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



QEdit

(29) Toxaphene {5}

14.37min 1050.580ug/L m

response 1981513

(29) Toxaphene {5} #2

13.90min 1090.697ug/L m

response 4373541

After
Initials

JUN 12 2007

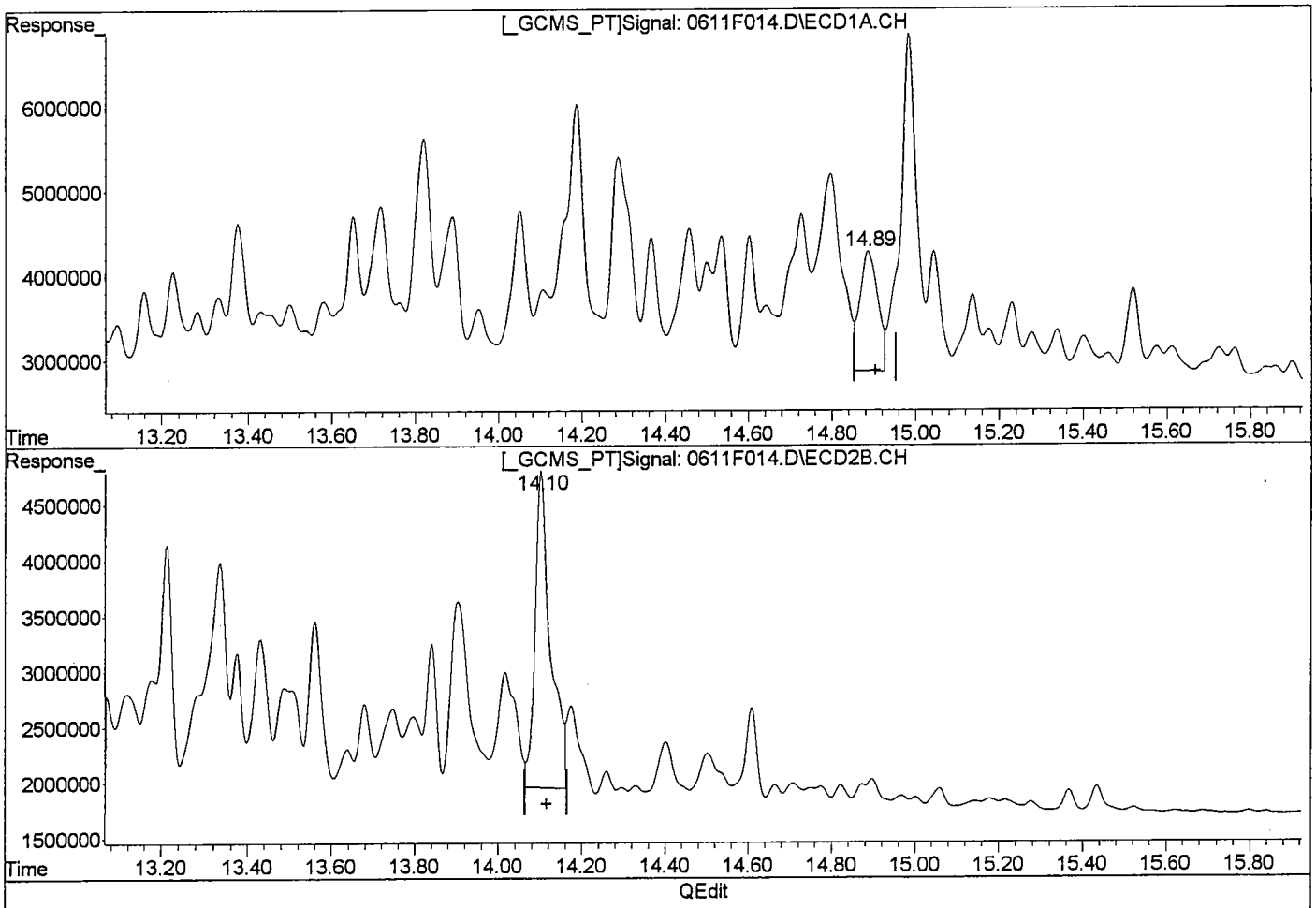
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F014.D 061107-8081.M Tue Jun 12 08:36:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.89min 2168.984ug/L

response 4301325

(30) Toxaphene {6} #2

14.10min 1317.141ug/L

response 7349478

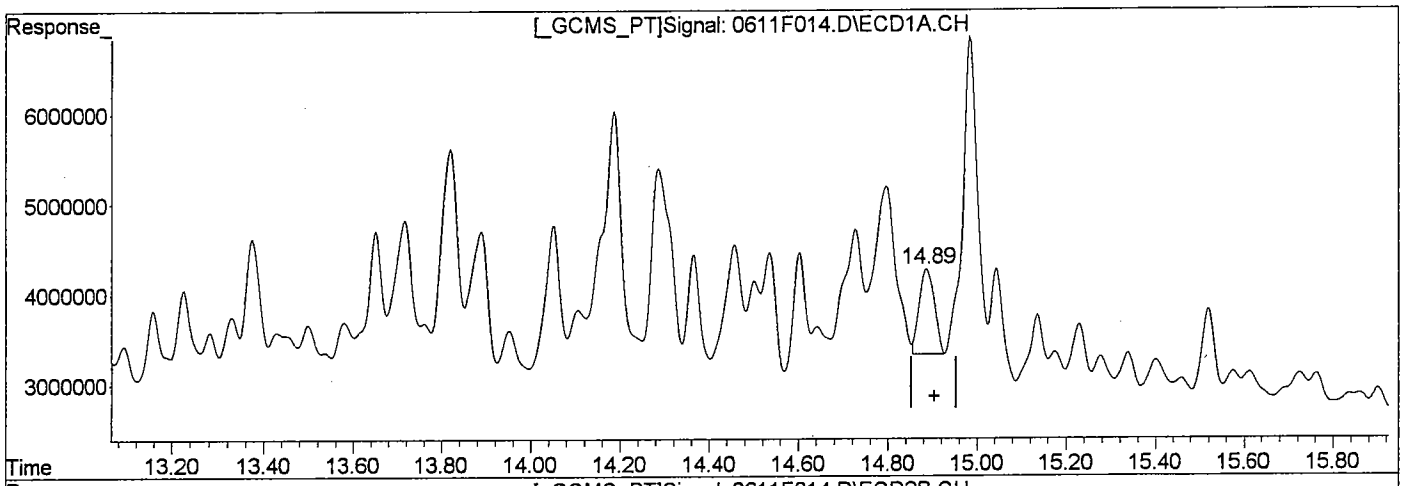
(+) = Expected Retention Time

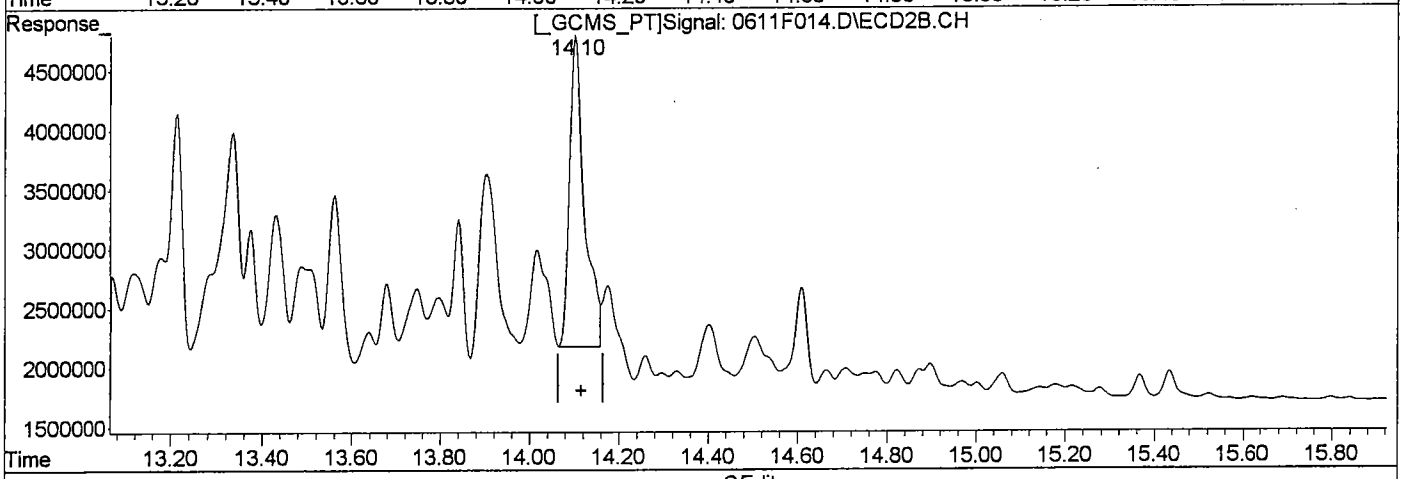
0611F014.D 061107-8081.M Tue Jun 12 08:36:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F014.D\ECD1A.CH Vial: 14
Signal #2 : J:\GC23\DATA\061107\0611F014.D\ECD2B.CH
Acq On : 12 Jun 2007 12:04 am Operator: AKamawal
Sample : TOX @ 1000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1107.076ug/L m

response 2195448

(30) Toxaphene {6} #2

14.10min 1071.519ug/L m

response 5978942

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F014.D 061107-8081.M Tue Jun 12 08:36:53 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:39 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.61	2777693	2396576	1432.304m	1996.303m#
26)	Toxaphene {2}	13.22	12.70	2227210	8107550	1456.907m	1898.760m#
27)	Toxaphene {3}	13.37	13.56	4006656	5143168	1511.918m	1956.780m#
28)	Toxaphene {4}	14.05	13.68	6411538	1302569	1696.519m	1907.296m
29)	Toxaphene {5}	14.36	13.90	3463133	7870152	1836.121m	1962.701m
30)	Toxaphene {6}	14.88	14.10	4098876	10533897	2066.897m	1887.838m

ACG 12/07

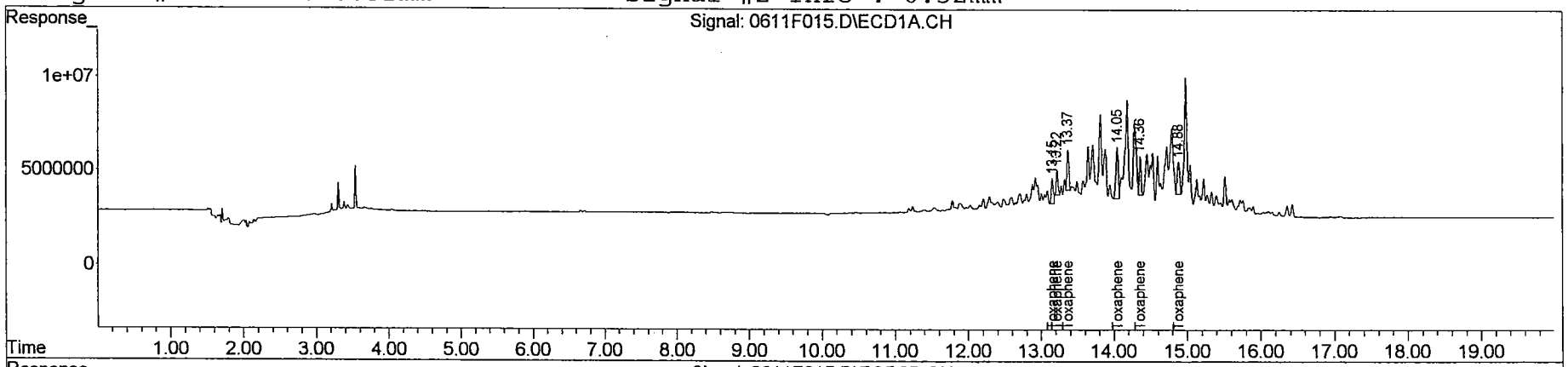
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

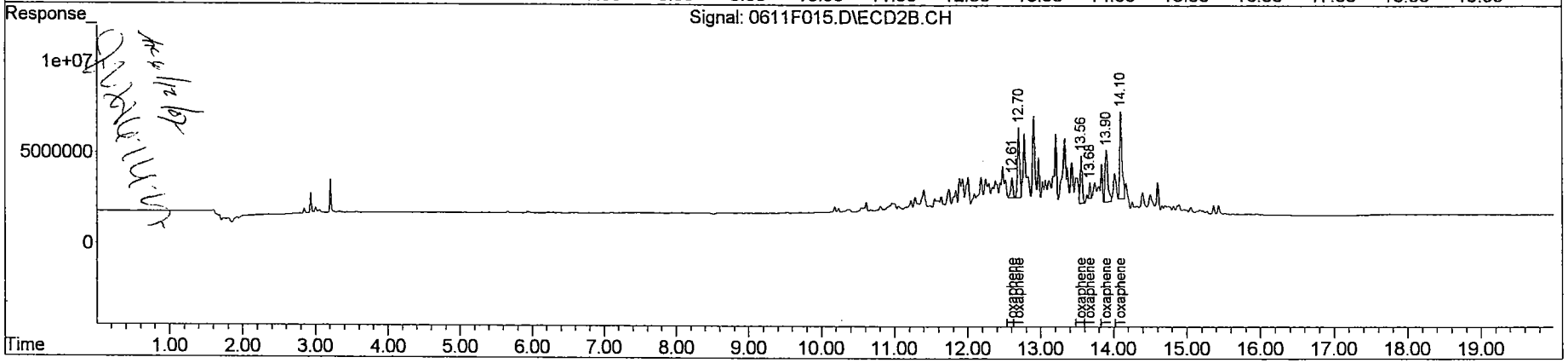
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:38 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



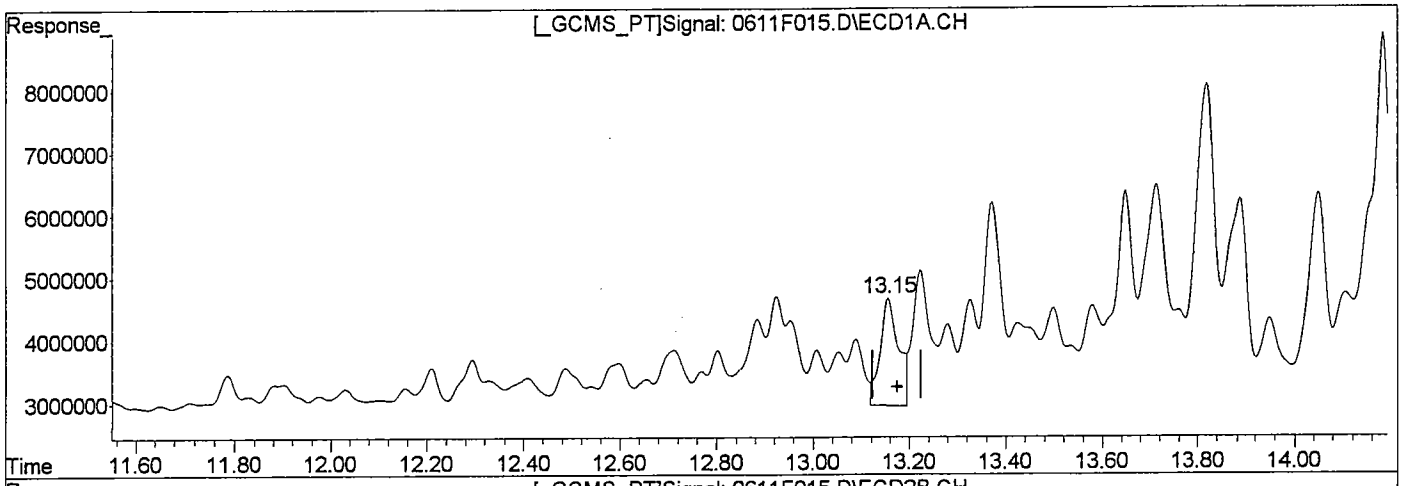


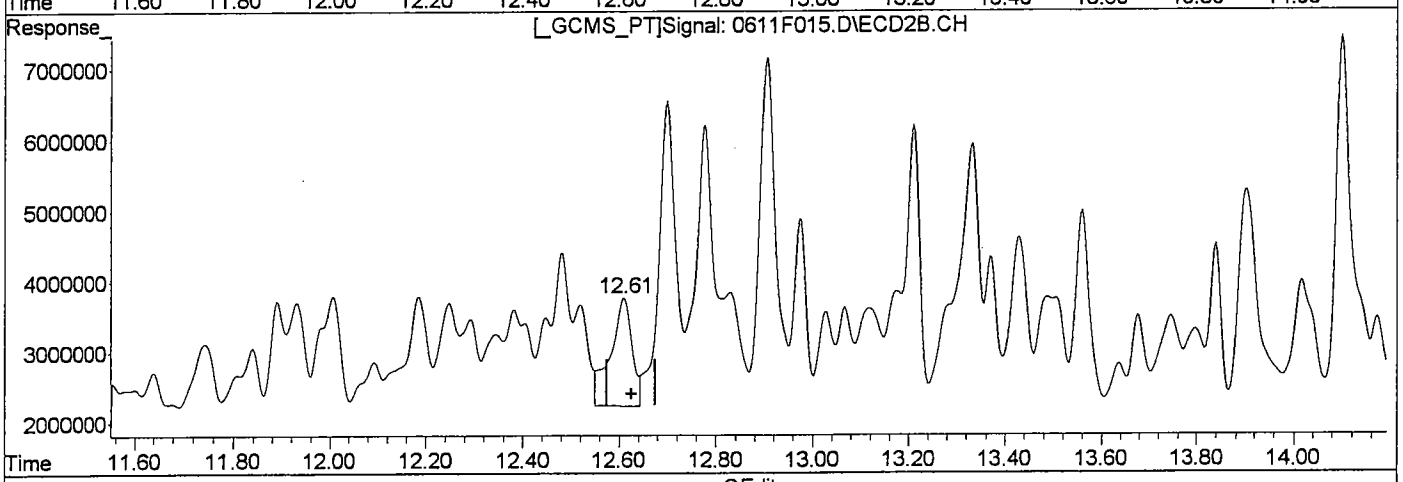
910

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.15min 2388.131ug/L

response 4631346

(25) Toxaphene #2

12.61min 3965.443ug/L

response 4760544

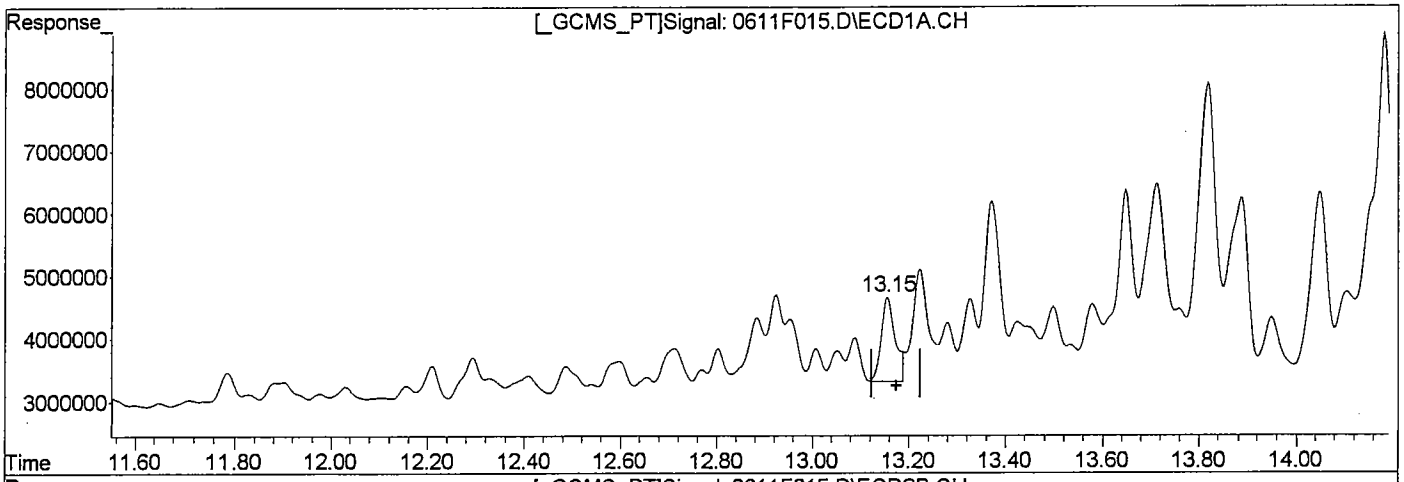
(+) = Expected Retention Time

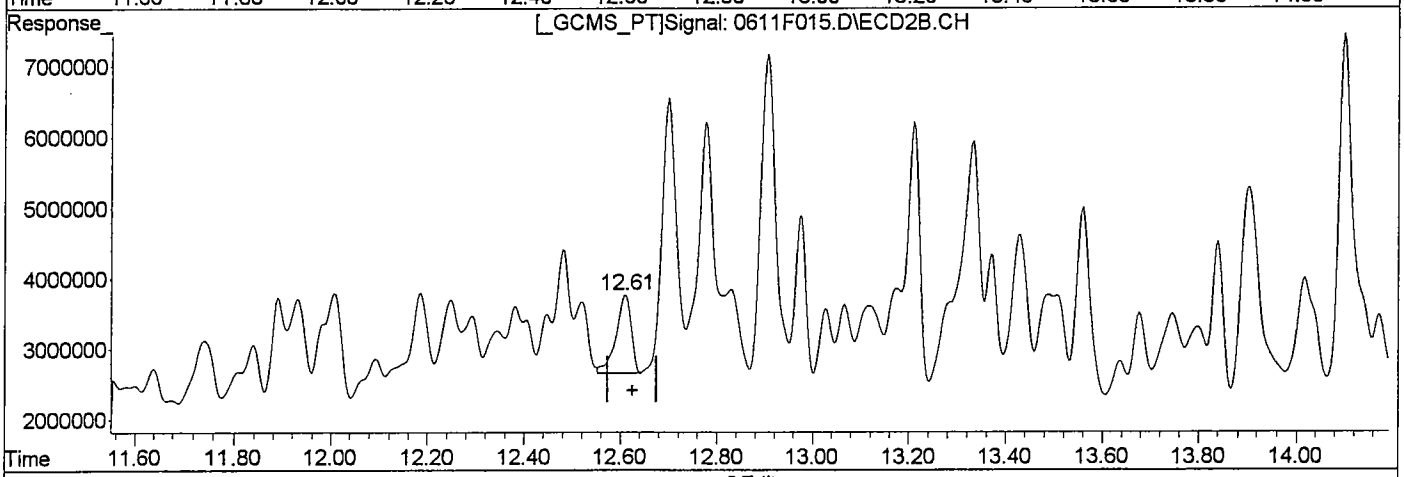
0611F015.D 061107-8081.M Tue Jun 12 08:37:09 2007

Quantitation Report (Qedit) 216

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.15min 1432.304ug/L m

response 2777693

(25) Toxaphene #2

12.61min 1996.303ug/L m

response 2396576

After
Initials

JUN 12 2007

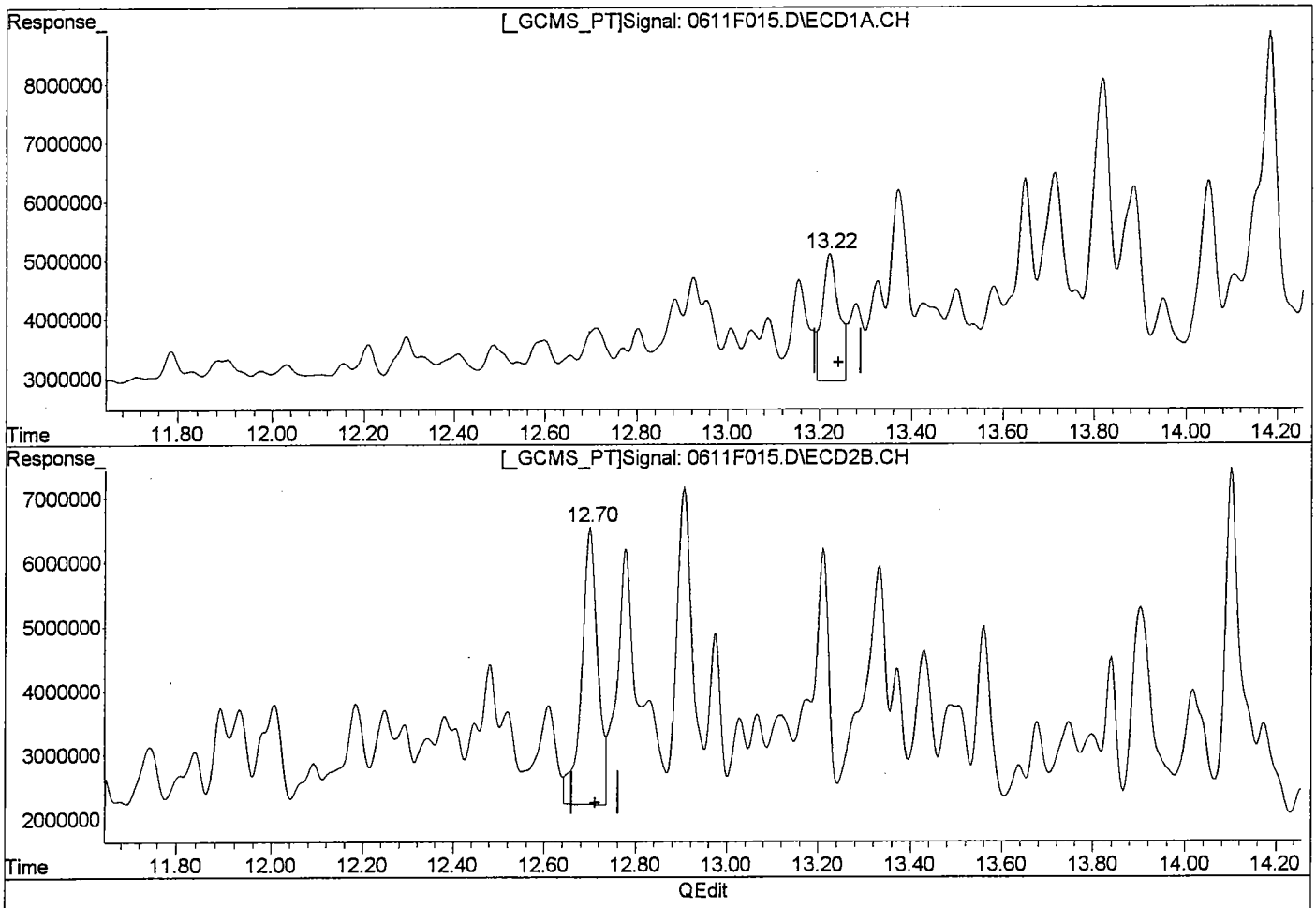
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F015.D 061107-8081.M Tue Jun 12 08:37:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.22min 3546.714ug/L

response 5421952

(26) Toxaphene {2} #2

12.70min 2502.330ug/L

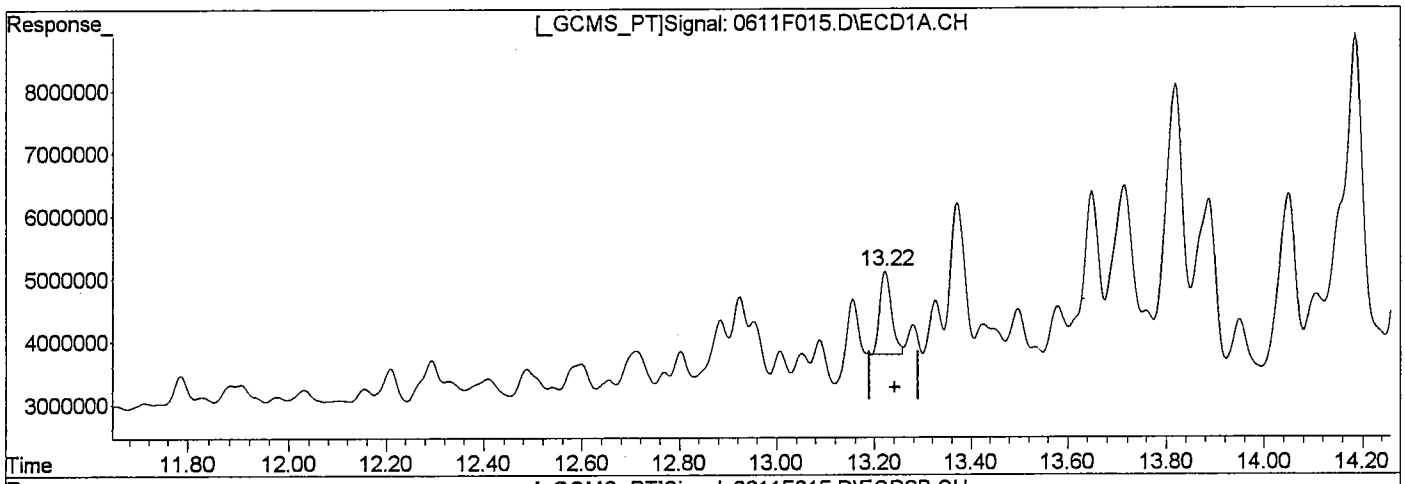
response 10684747

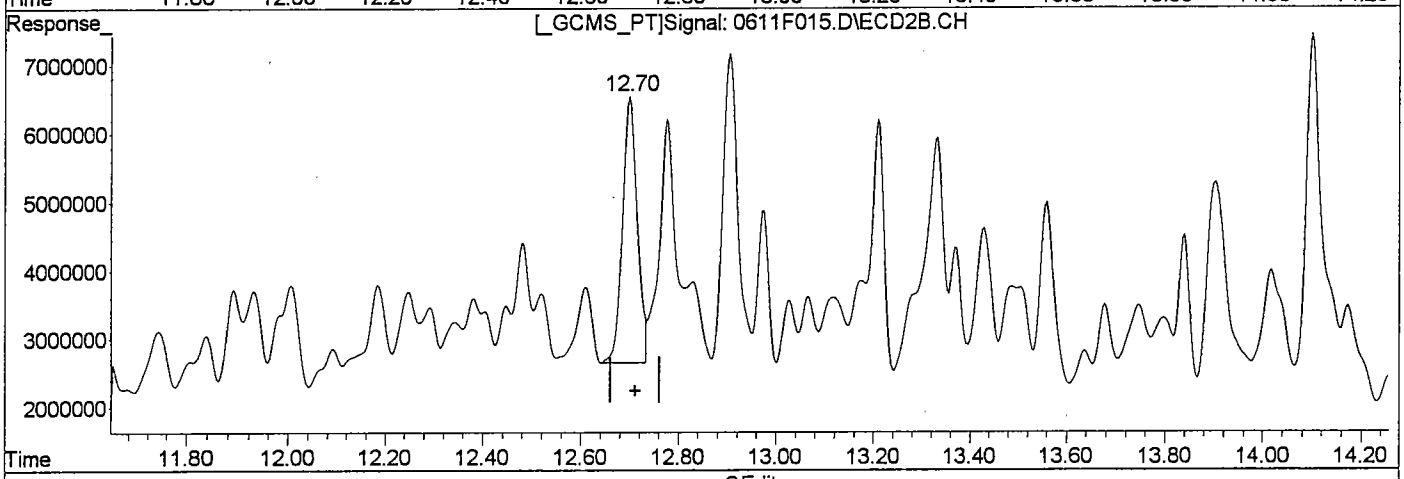
(+) = Expected Retention Time

Quantitation Report (Qedit) 116

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1456.907ug/L m

response 2227210

(26) Toxaphene {2} #2

12.70min 1898.760ug/L m

response 8107550

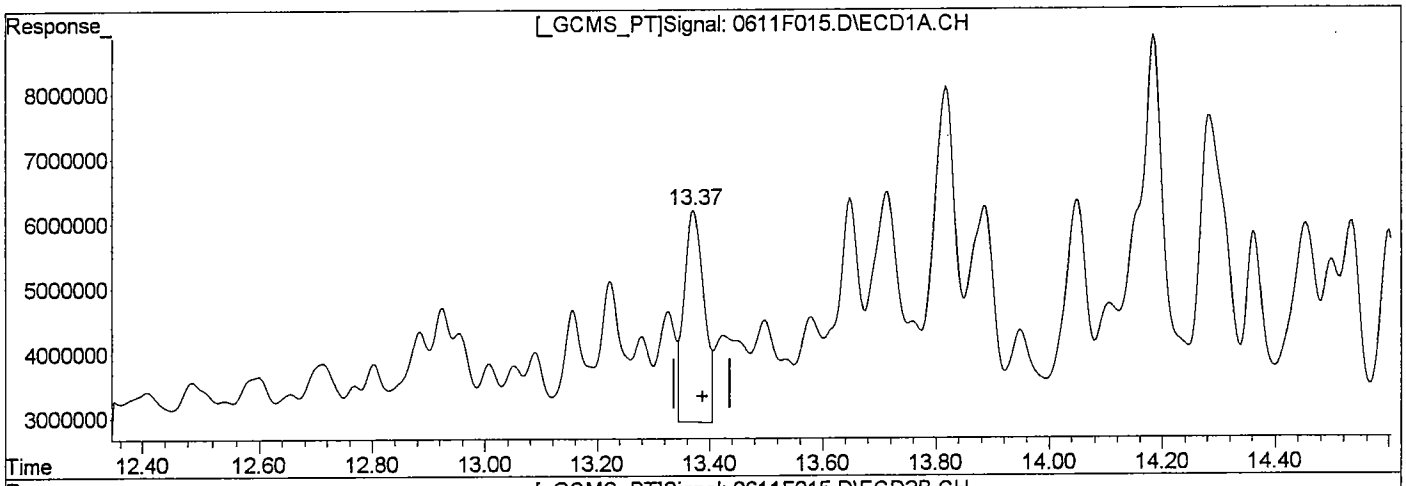
After
Initials
JUN 12 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

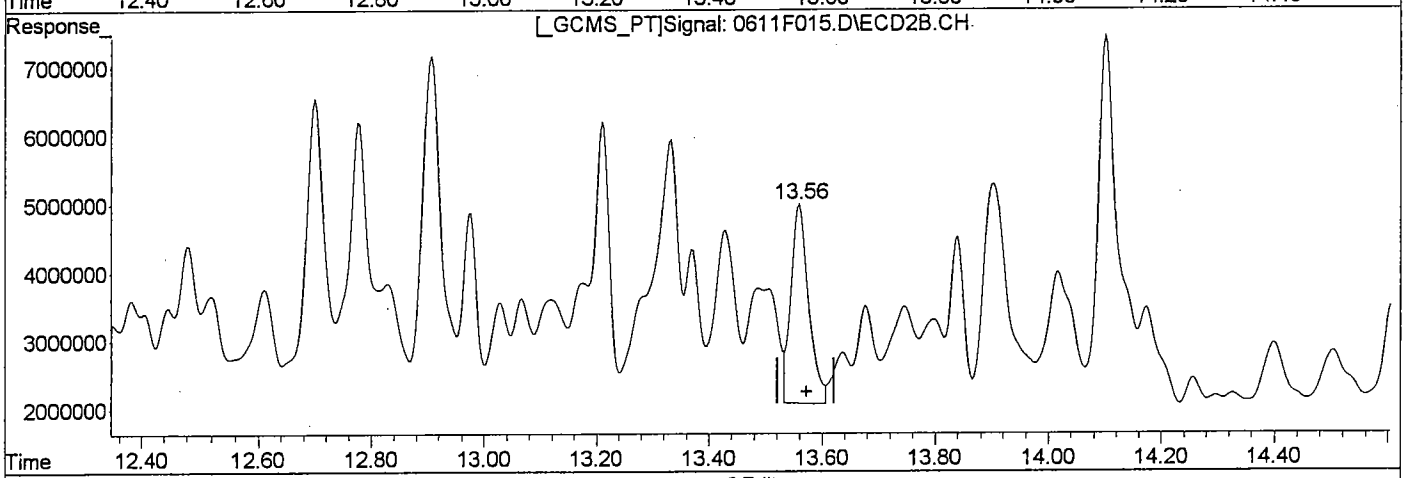
(+) = Expected Retention Time
0611F015.D 061107-8081.M Tue Jun 12 08:37:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 2996.302ug/L

response 7940346

(27) Toxaphene {3} #2

13.56min 2393.533ug/L

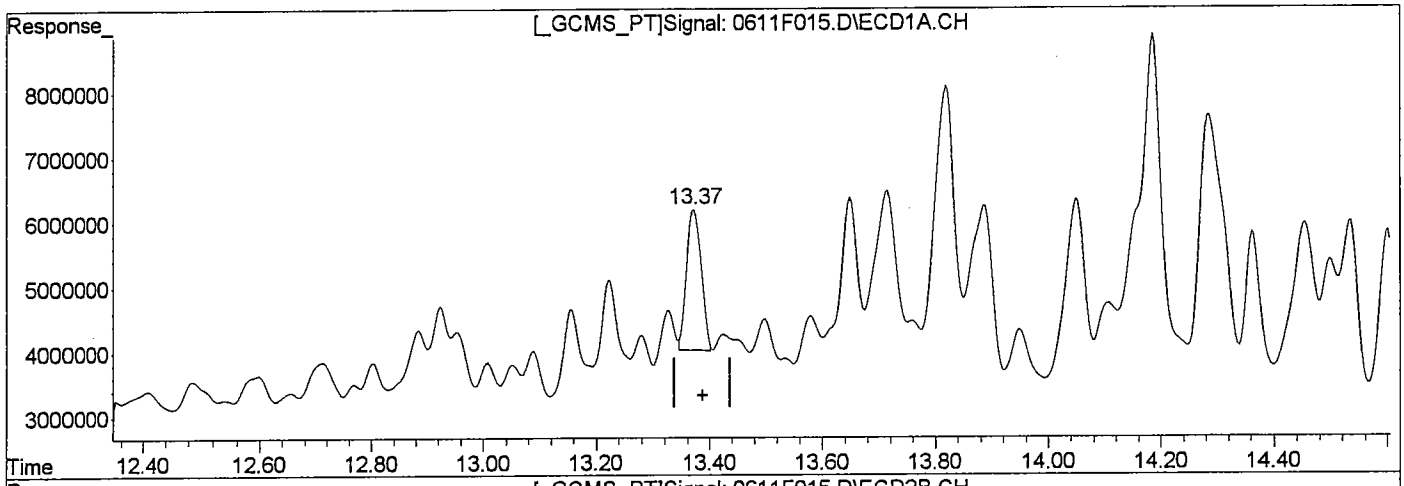
response 6291122

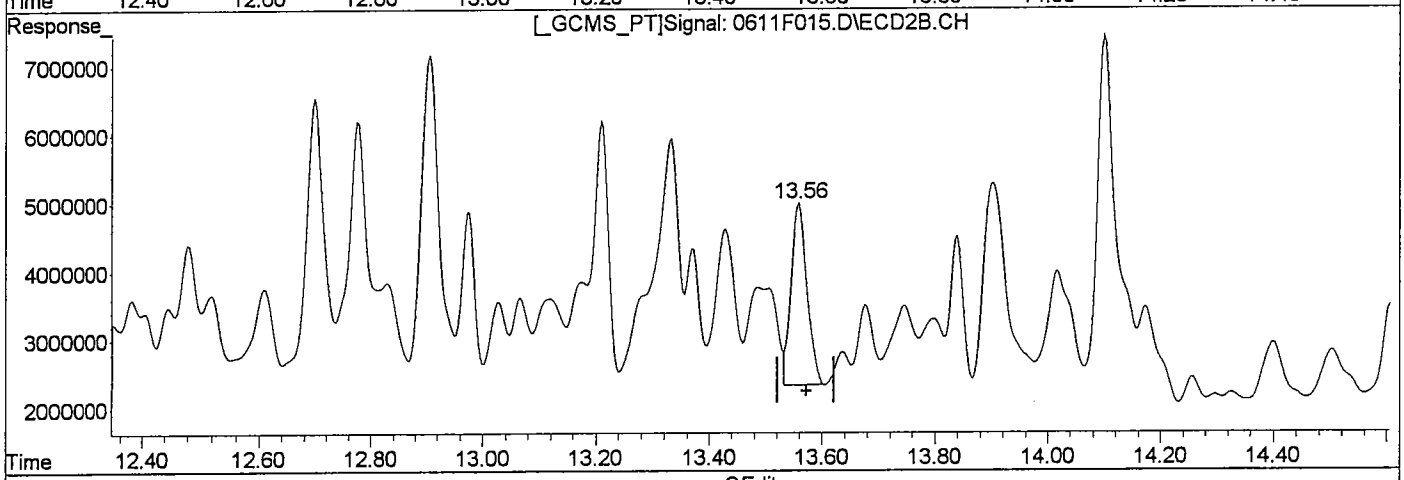
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1511.918ug/L m

response 4006656

(27) Toxaphene {3} #2

13.56min 1956.780ug/L m

response 5143168

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

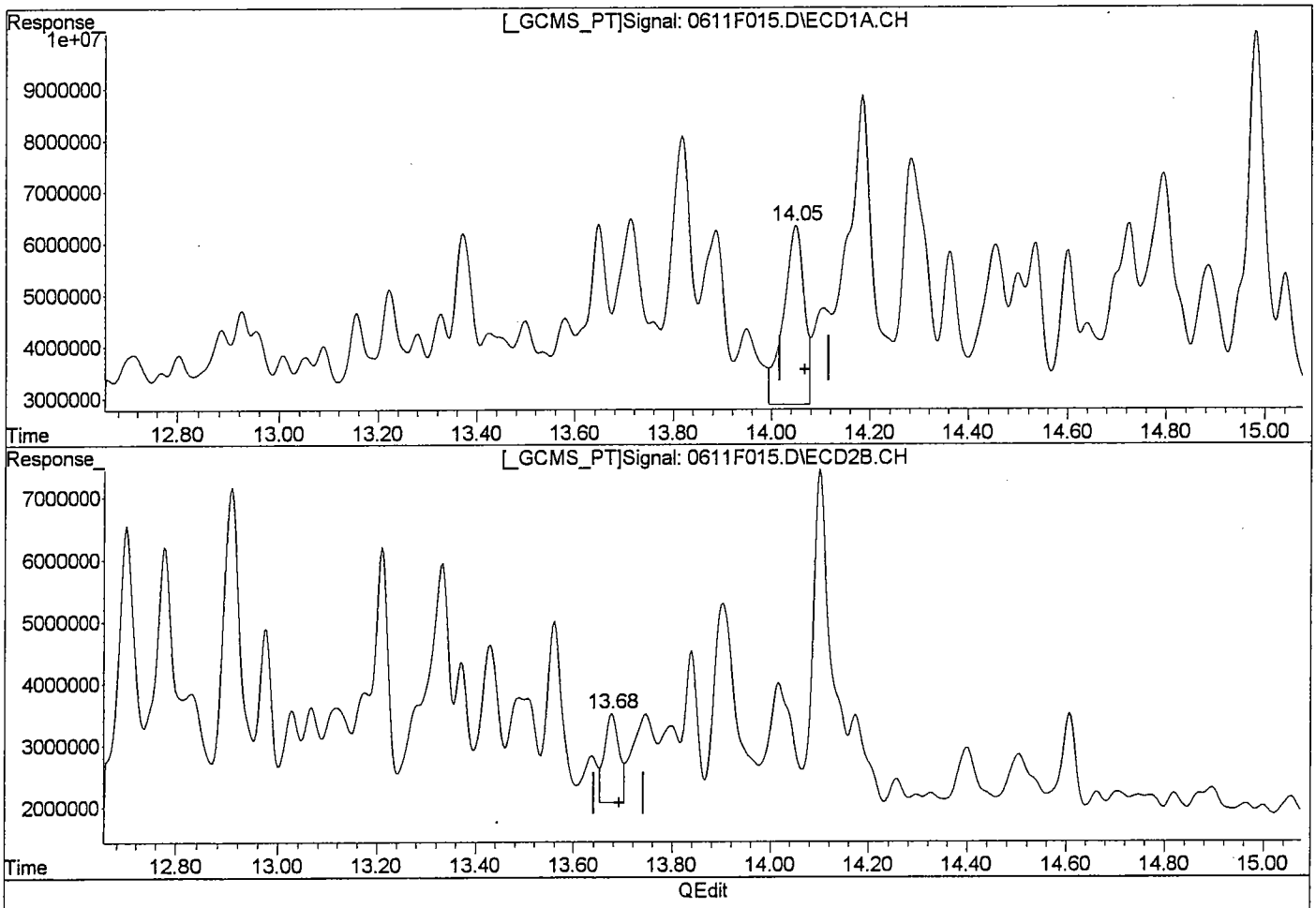
(+) = Expected Retention Time

0611F015.D 061107-8081.M Tue Jun 12 08:37:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.05min 2646.682ug/L

response 10002425

(28) Toxaphene {4} #2

13.68min 4372.270ug/L

response 2985998

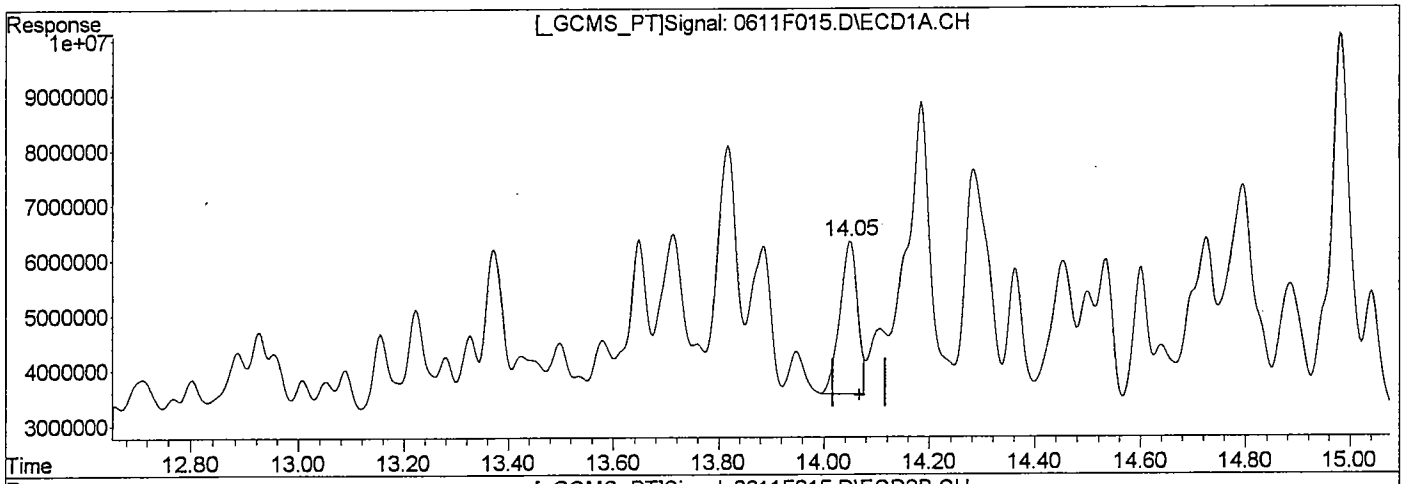
(+) = Expected Retention Time

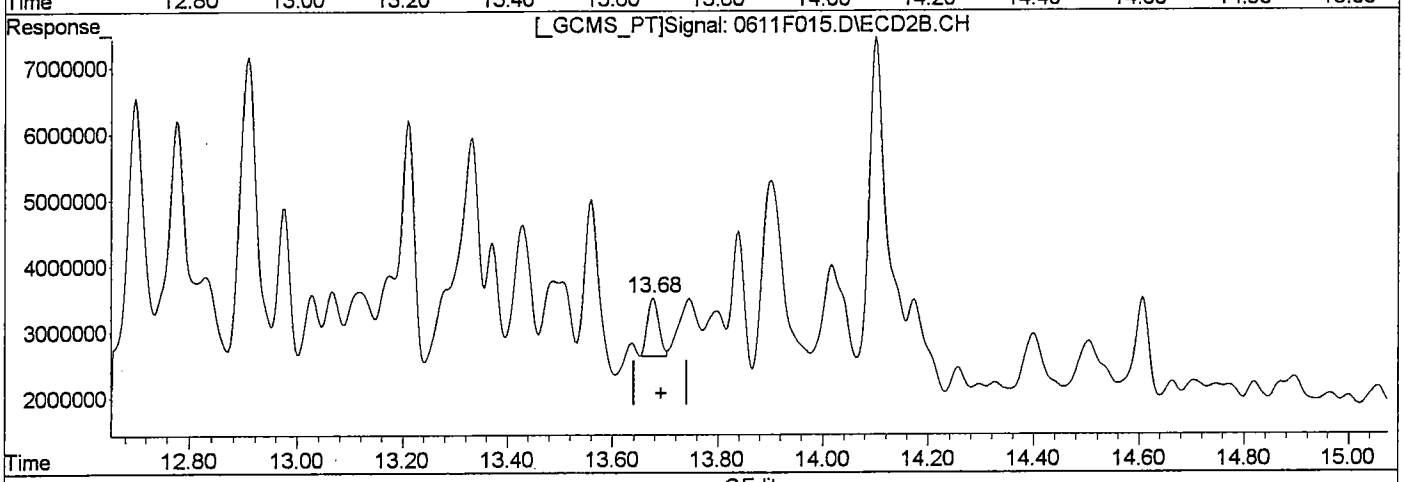
0611F015.D 061107-8081.M Tue Jun 12 08:38:01 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1696.519ug/L m

response 6411538

After
Initials

JUN 12 2007

(28) Toxaphene {4} #2

13.68min 1907.296ug/L m

response 1302569

☐ Wrong Peak/Peak not Found
☐ Baseline/angular incorrect
☑ Other

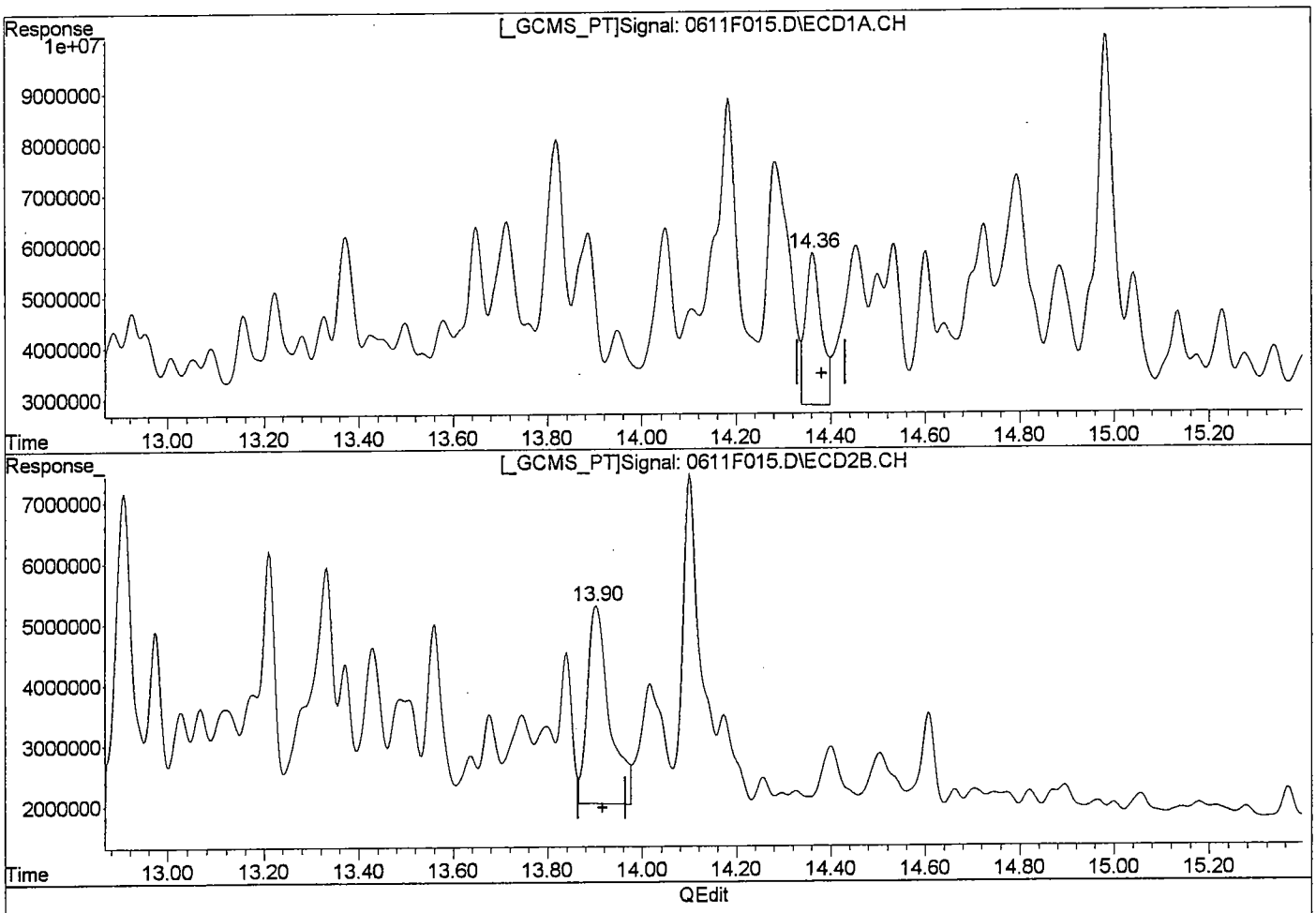
(+) = Expected Retention Time

0611F015.D 061107-8081.M Tue Jun 12 08:38:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 3625.075ug/L

response 6837305

(29) Toxaphene {5} #2

13.90min 2646.072ug/L

response 10610373

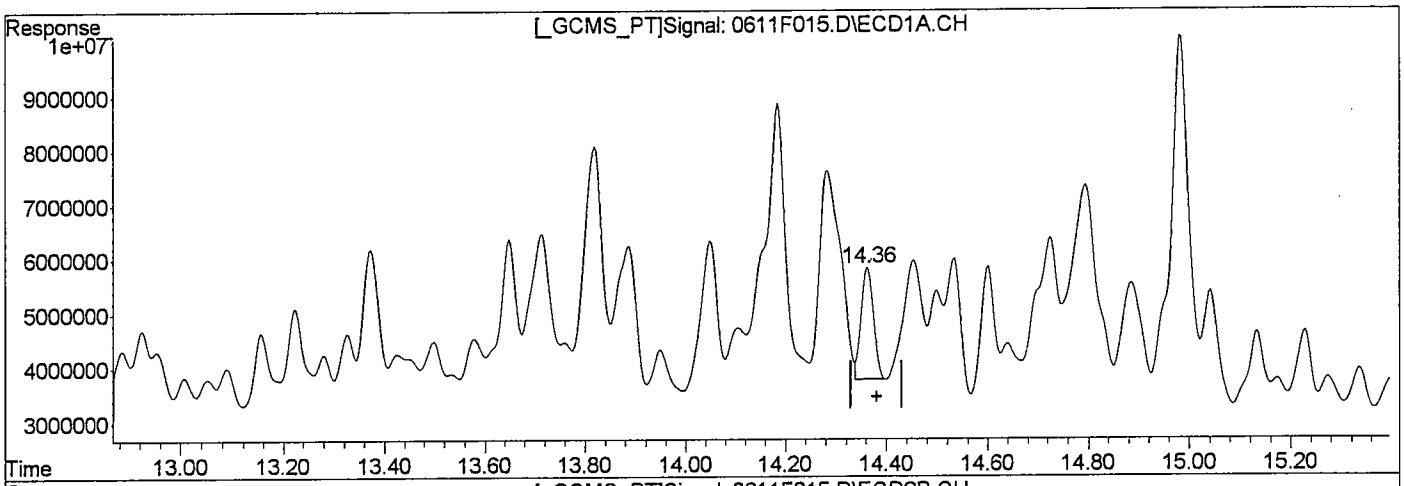
(+) = Expected Retention Time

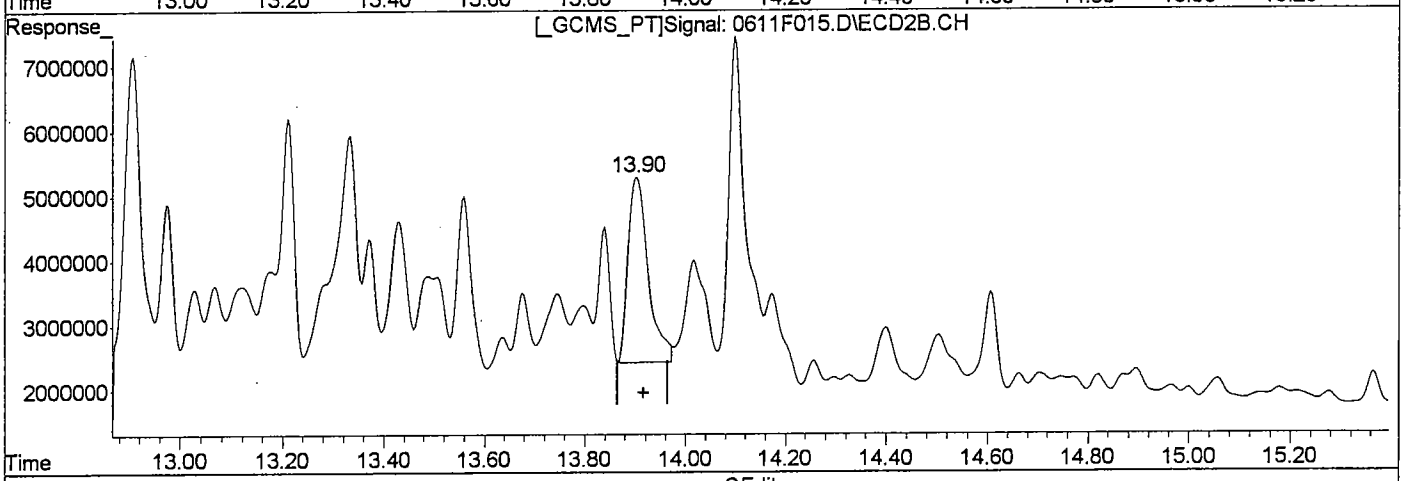
0611F015.D 061107-8081.M Tue Jun 12 08:38:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 1836.121ug/L m

response 3463133

(29) Toxaphene {5} #2

13.90min 1962.701ug/L m

response 7870152

After
Initials

JUN 12 2007

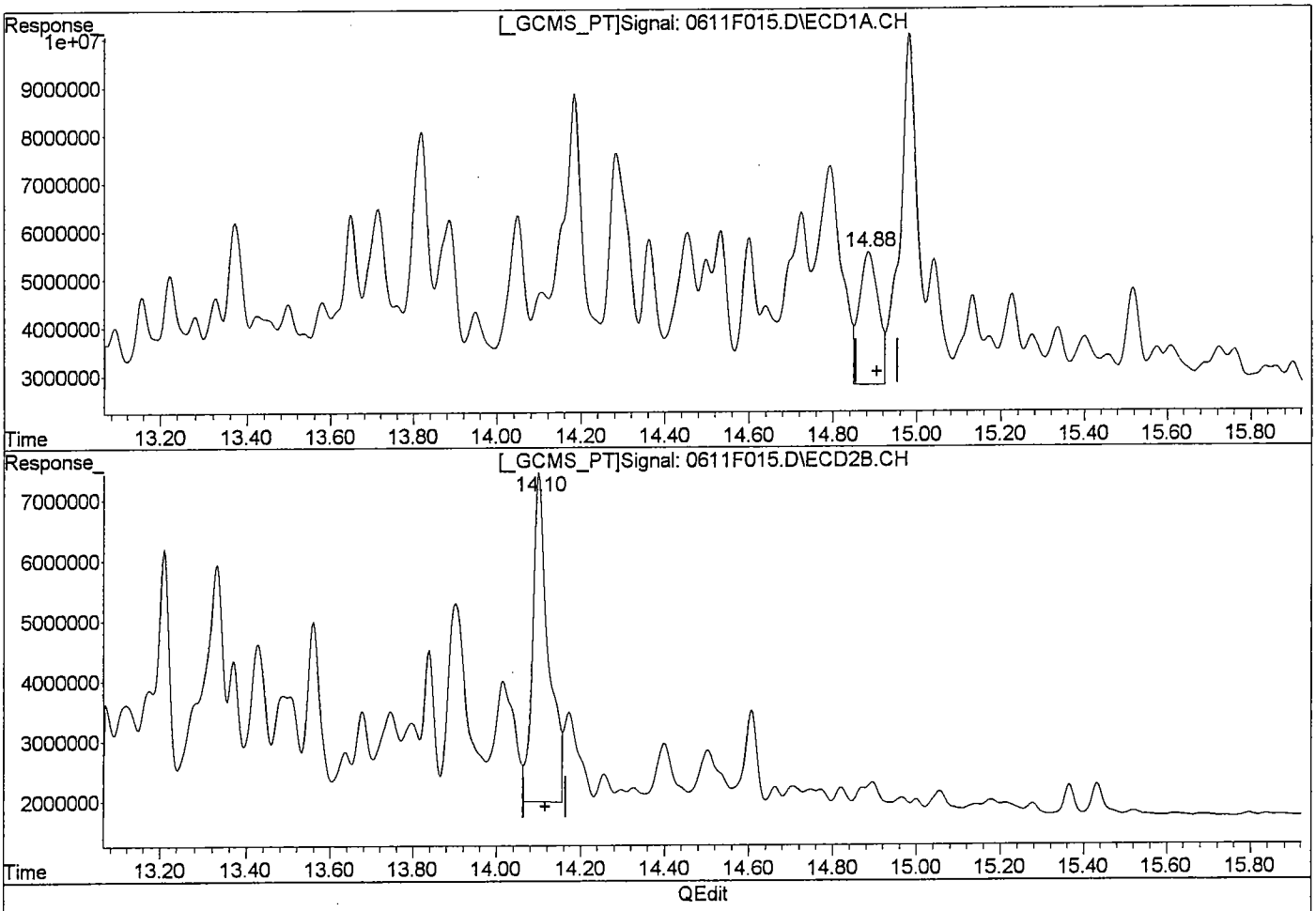
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F015.D 061107-8081.M Tue Jun 12 08:38:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.88min 4509.976ug/L

response 8943758

(30) Toxaphene {6} #2

14.10min 2523.424ug/L

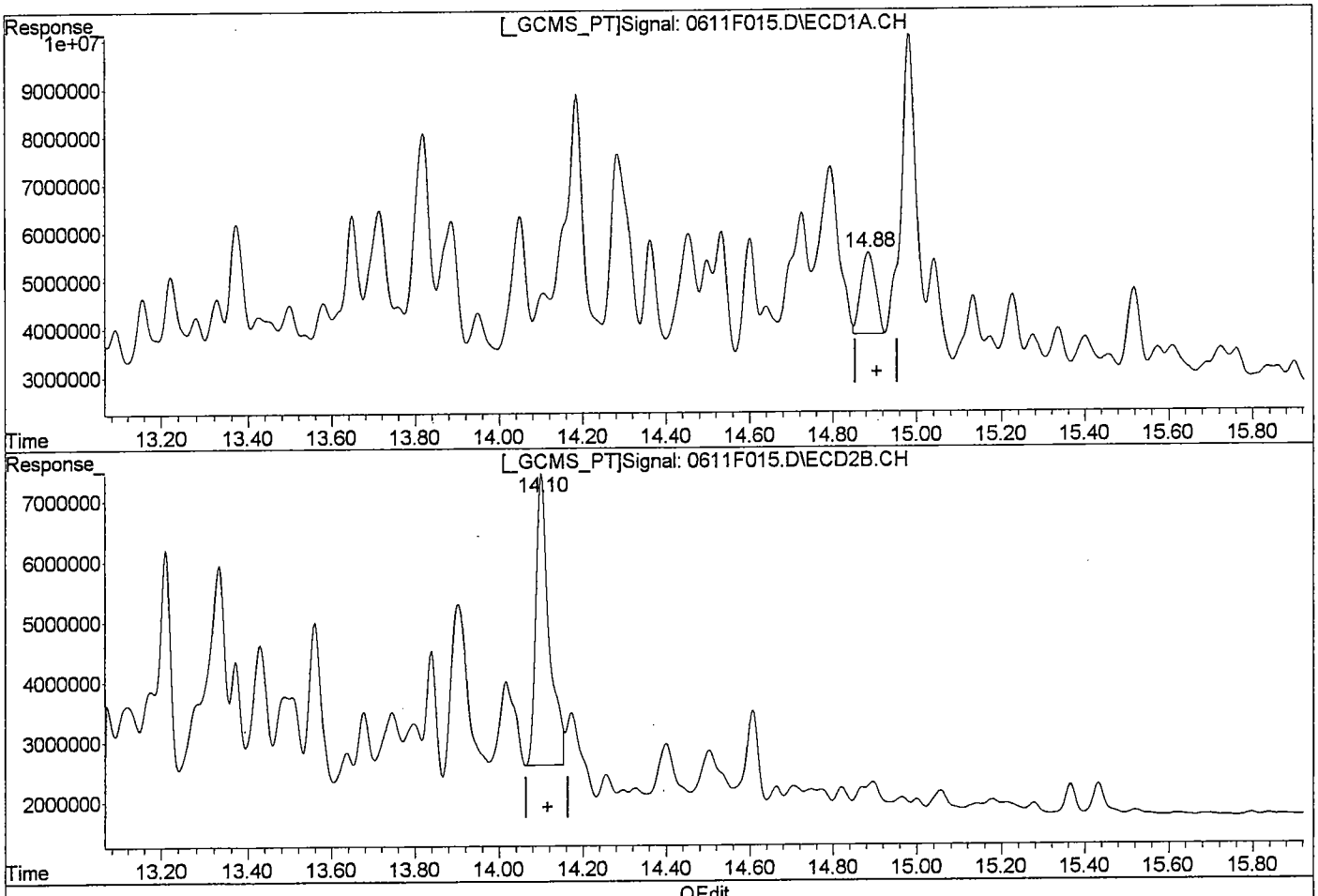
response 14080386

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F015.D\ECD1A.CH Vial: 15
Signal #2 : J:\GC23\DATA\061107\0611F015.D\ECD2B.CH
Acq On : 12 Jun 2007 12:30 am Operator: AKamawal
Sample : TOX @ 2000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



QEdit

(30) Toxaphene {6}

14.88min 2066.897ug/L m

response 4098876

(30) Toxaphene {6} #2

14.10min 1887.838ug/L m

response 10533897

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0611F015.D 061107-8081.M Tue Jun 12 08:38:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:41 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.16	12.62	7079433	6410752	3650.475m	5340.036m#
26)	Toxaphene {2}	13.23	12.71	5562098	20220327	3638.389m	4735.529m#
27)	Toxaphene {3}	13.38	13.57	9998257	12938401	3772.858m	4922.570m#
28)	Toxaphene {4}	14.06	13.69	16174915	3201378	4279.947m	4687.642m
29)	Toxaphene {5}	14.37	13.91	8421820	20368484	4465.170m	5079.602m
30)	Toxaphene {6}	14.89	14.11	9349524	26474870	4714.587m	4744.709m

AK 6/12/07

6/14/07

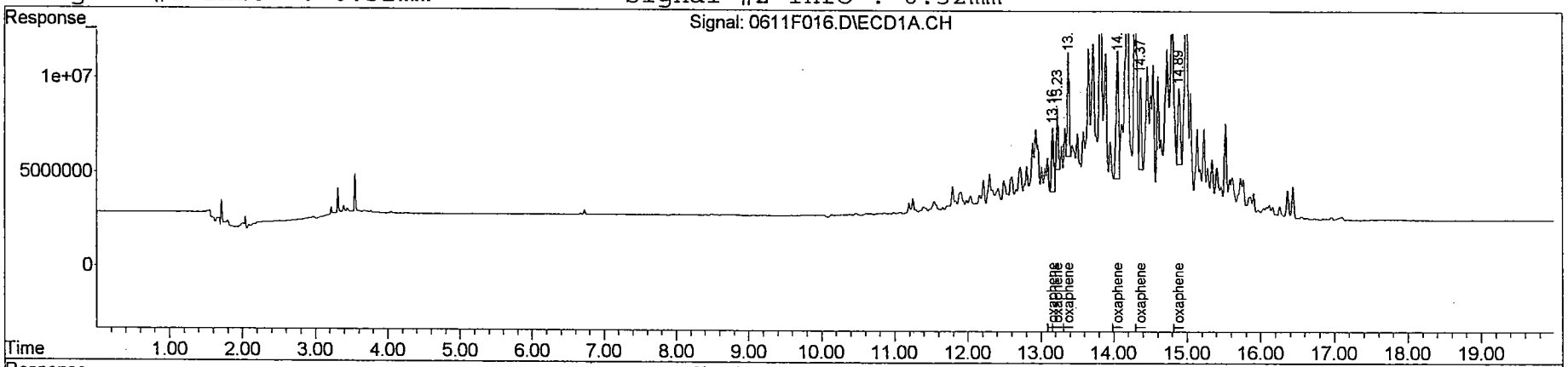
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

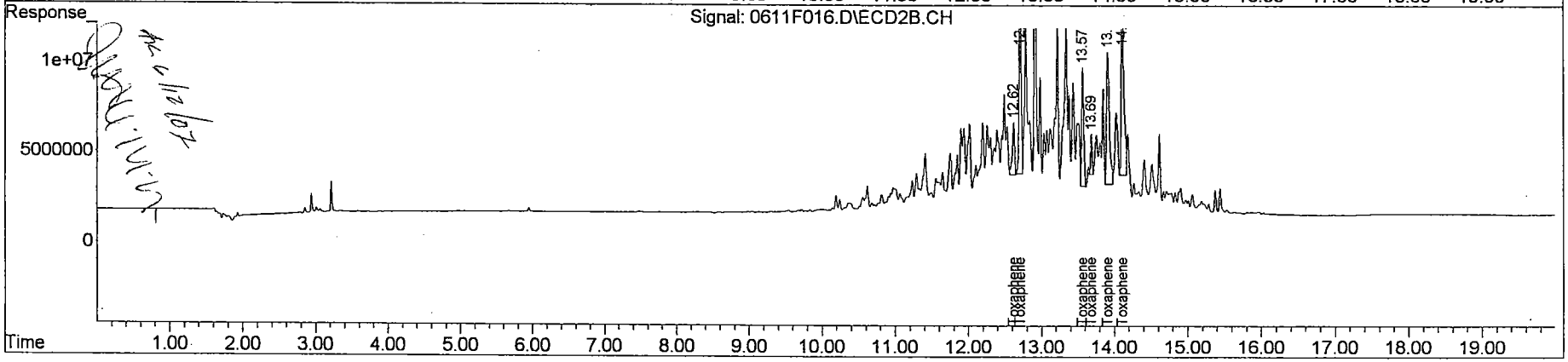
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:41 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



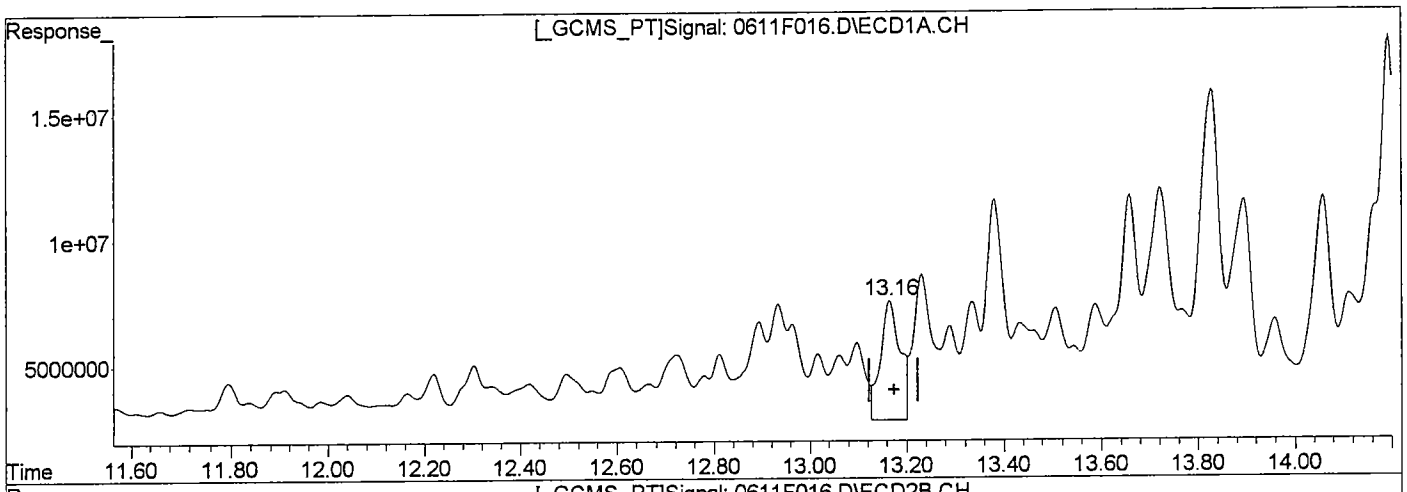


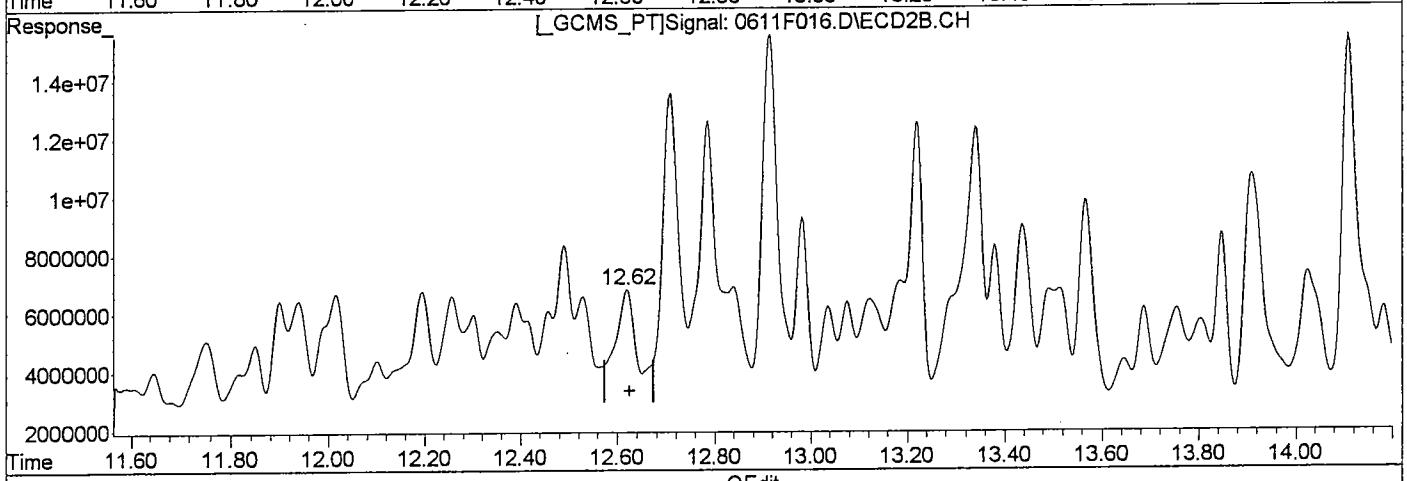
924

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 6792.795ug/L

response 13173394

(25) Toxaphene #2

12.62min 14062.503ug/L

response 16882139

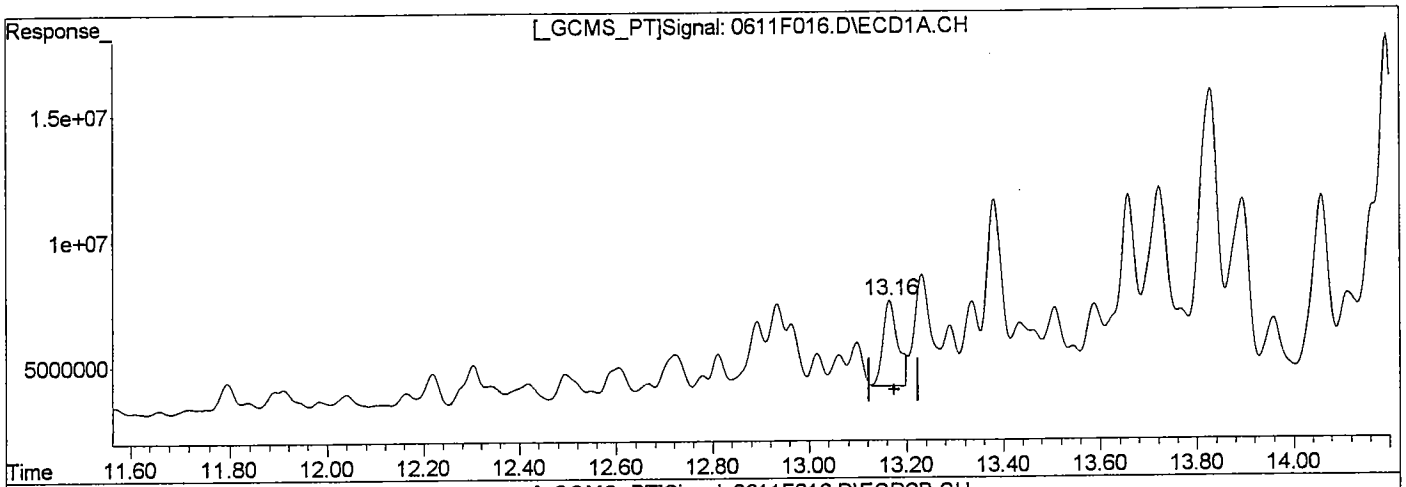
(+) = Expected Retention Time

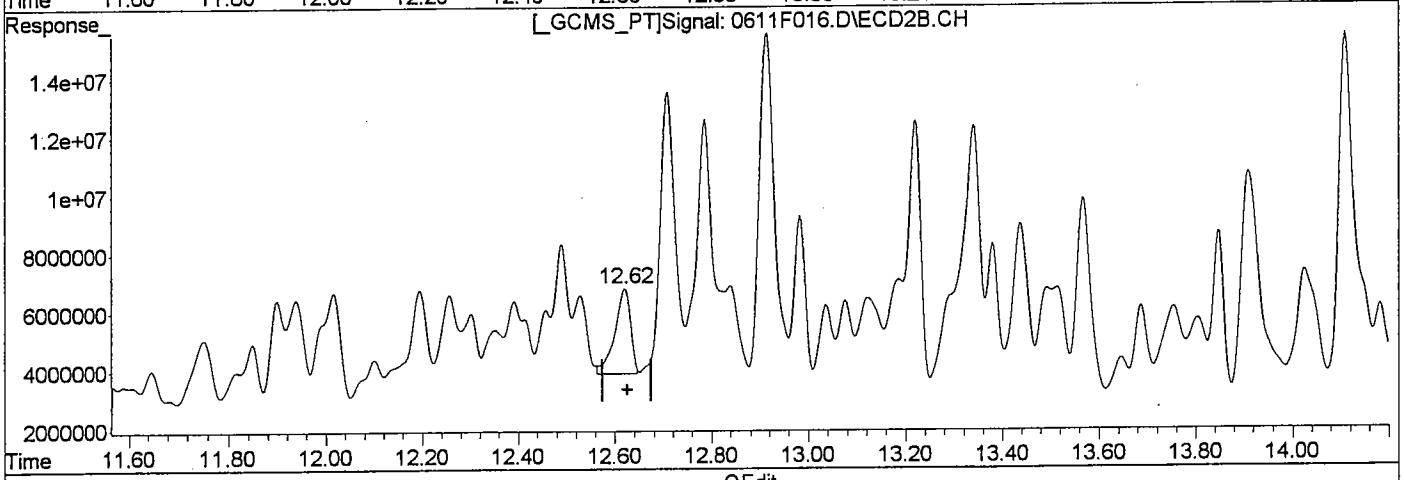
0611F016.D 061107-8081.M Tue Jun 12 08:39:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 3650.475ug/L m

response 7079433

(25) Toxaphene #2

12.62min 5340.036ug/L m

response 6410752

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

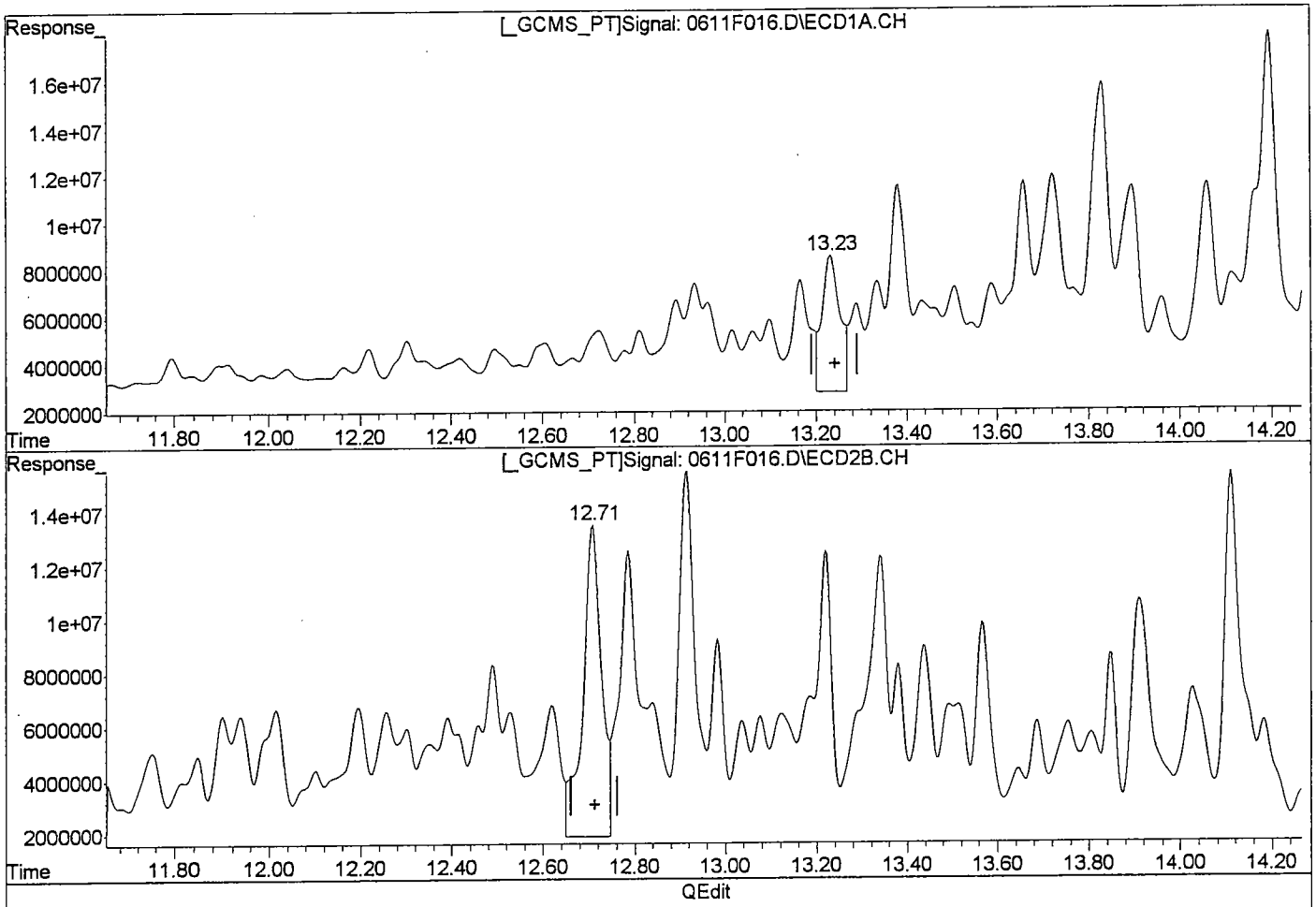
(+) = Expected Retention Time

0611F016.D 061107-8081.M Tue Jun 12 08:39:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.23min 10202.999ug/L

response 15597582

(26) Toxaphene {2} #2

12.71min 7625.569ug/L

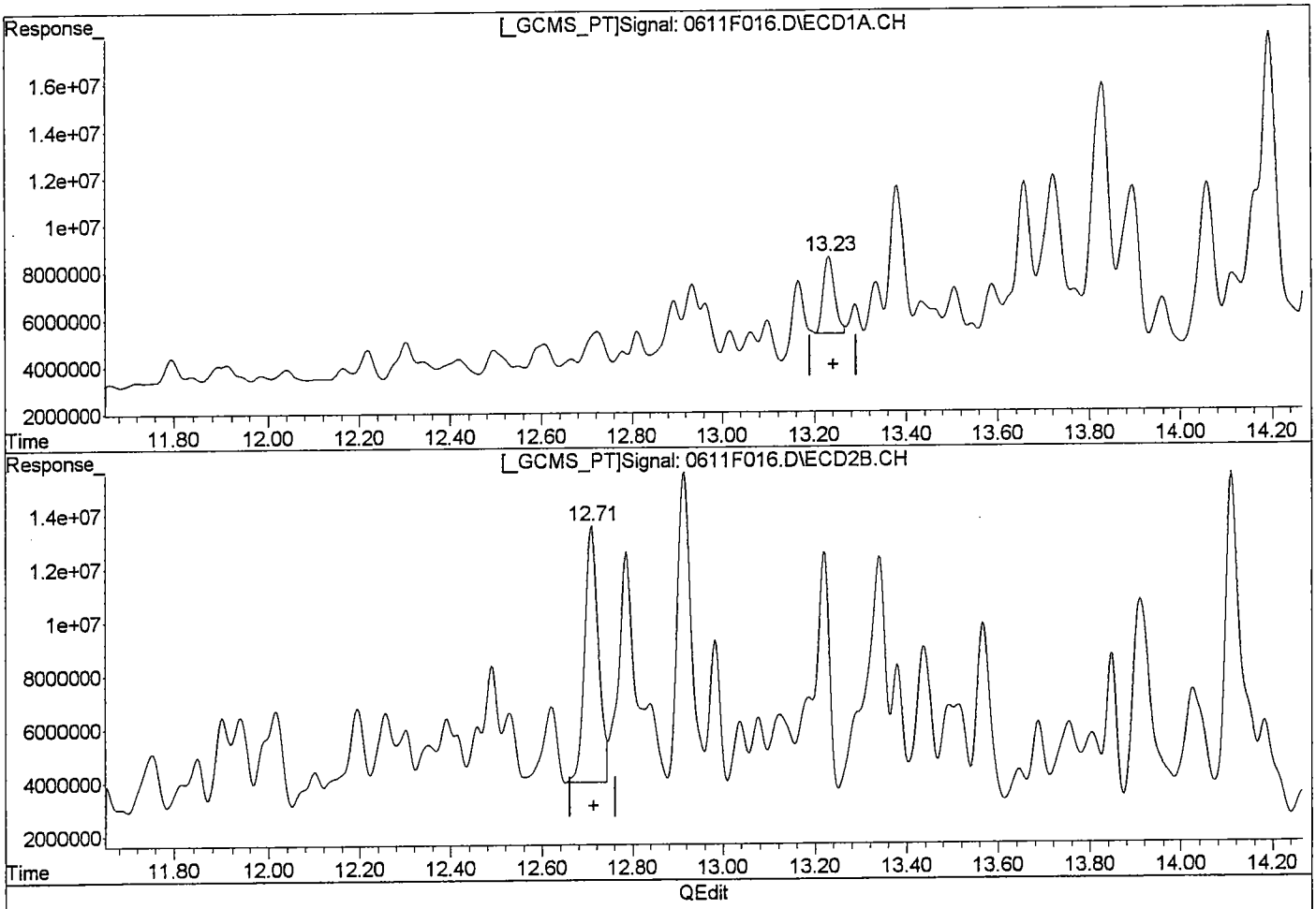
response 32560563

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(26) Toxaphene {2}

13.23min 3638.389ug/L m

response 5562098

(26) Toxaphene {2} #2

12.71min 4735.529ug/L m

response 20220327

After
Initials

JUN 12 2007

☑ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

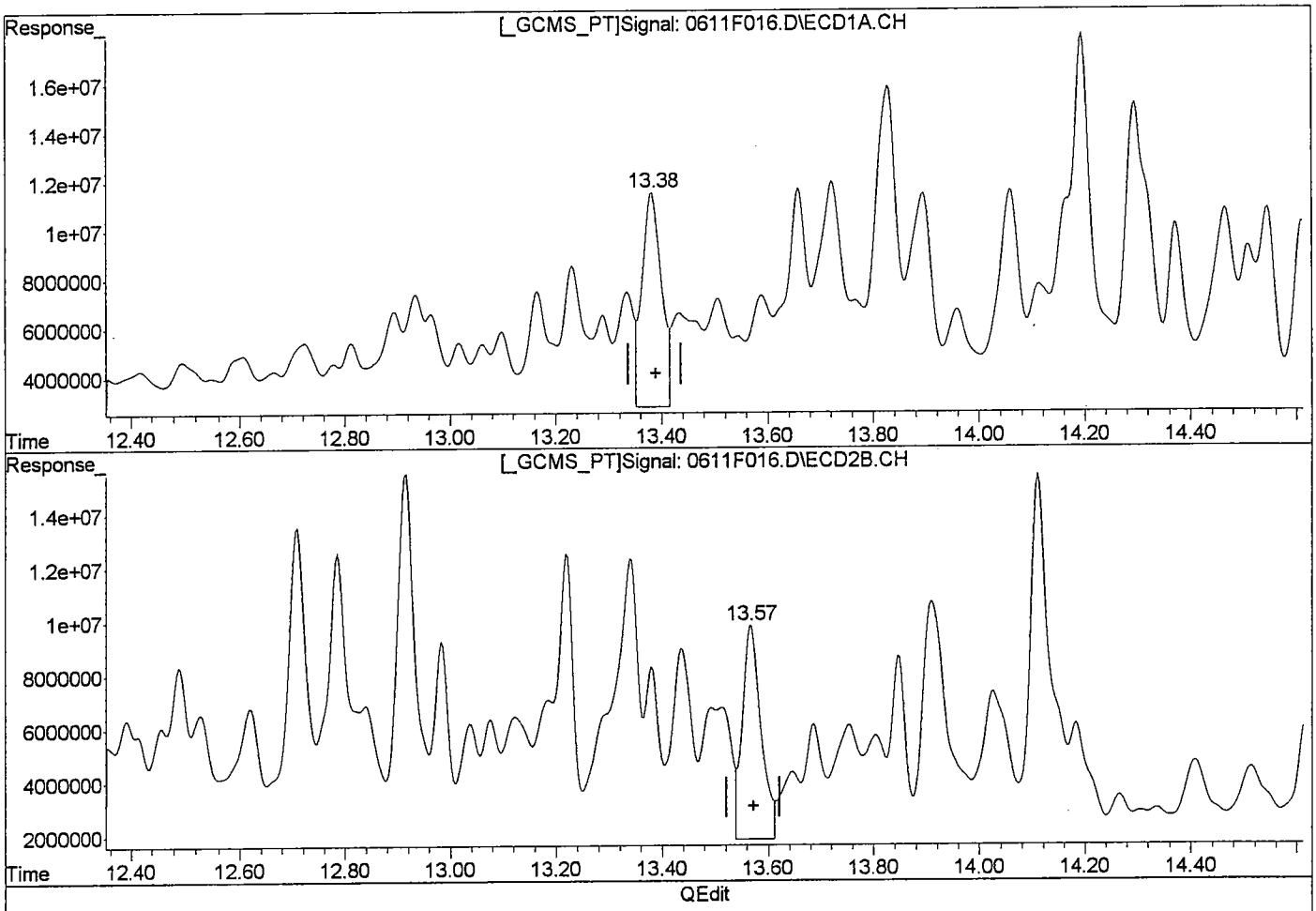
(+) = Expected Retention Time

0611F016.D 061107-8081.M Tue Jun 12 08:39:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.38min 8346.636ug/L

response 22118990

(27) Toxaphene {3} #2

13.57min 7299.666ug/L

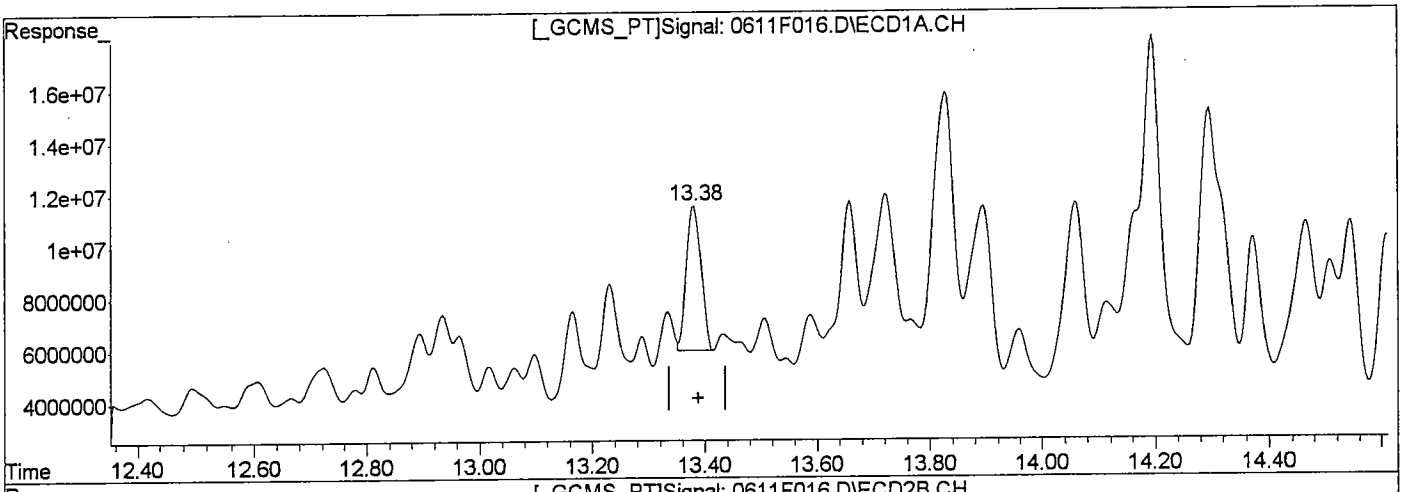
response 19186320

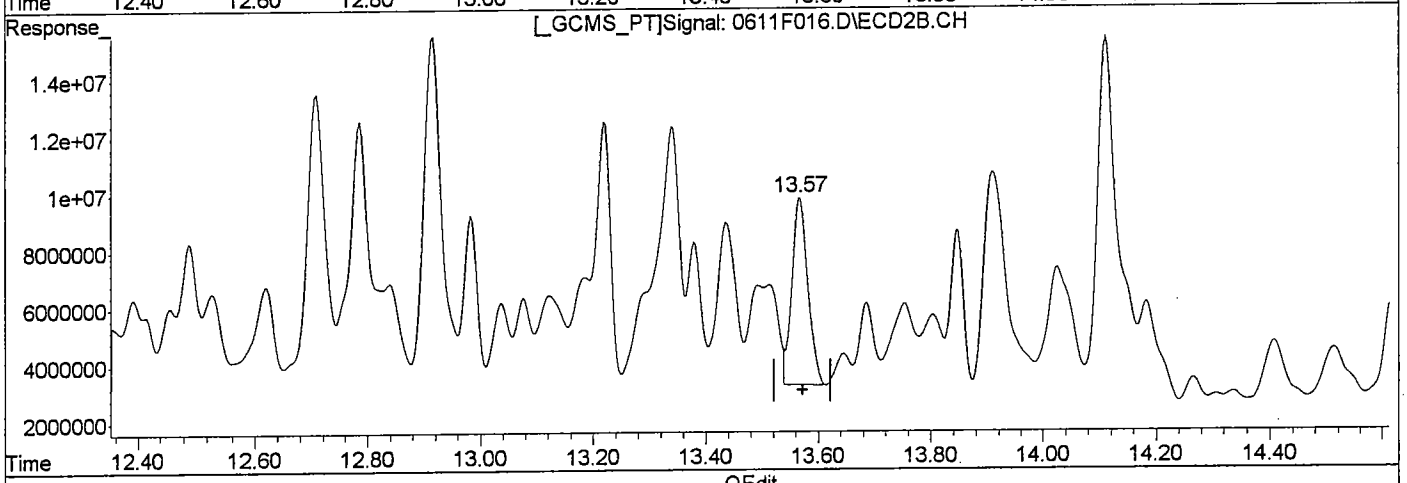
(+) = Expected Retention Time

Quantitation Report (Qedit) QC6

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.38min 3772.858ug/L m

response 9998257

(27) Toxaphene {3} #2

13.57min 4922.570ug/L m

response 12938401

After
Initials

JUN 12 2007

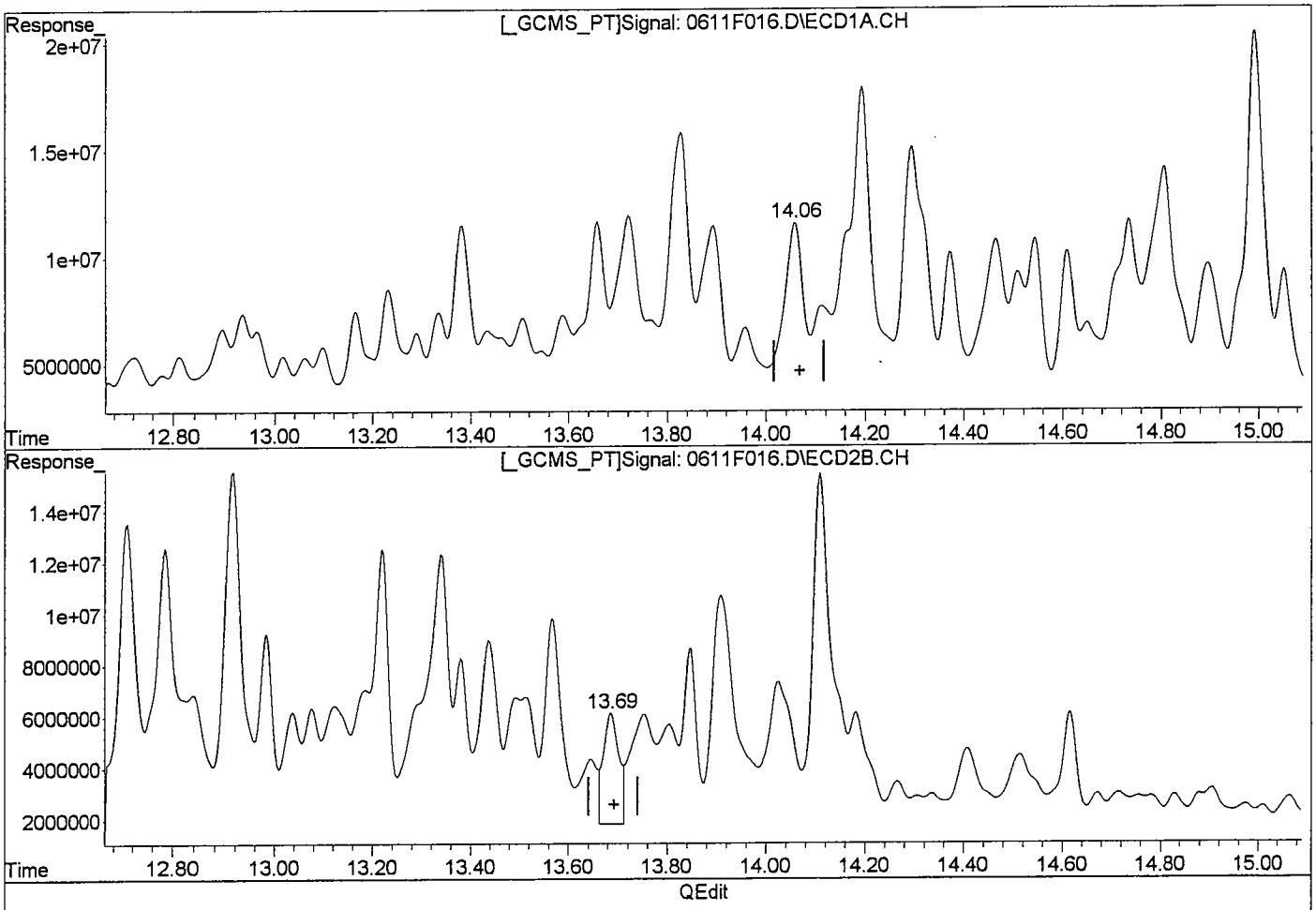
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F016.D 061107-8081.M Tue Jun 12 08:40:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.06min 7256.183ug/L

response 27422801

(28) Toxaphene {4} #2

13.69min 13861.058ug/L

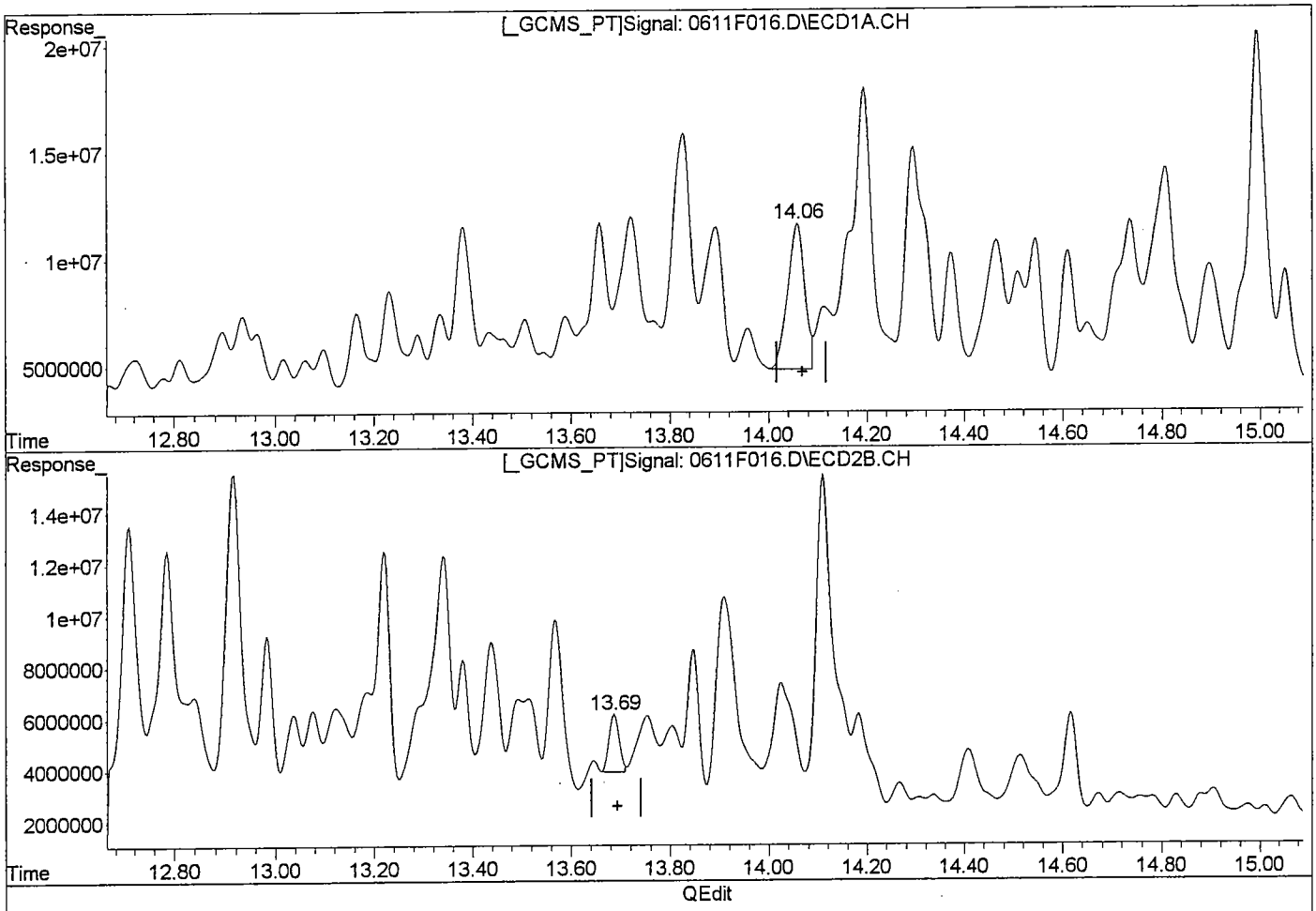
response 9466271

(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.06min 4279.947ug/L m

response 16174915

(28) Toxaphene {4} #2

13.69min 4687.642ug/L m

response 3201378

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

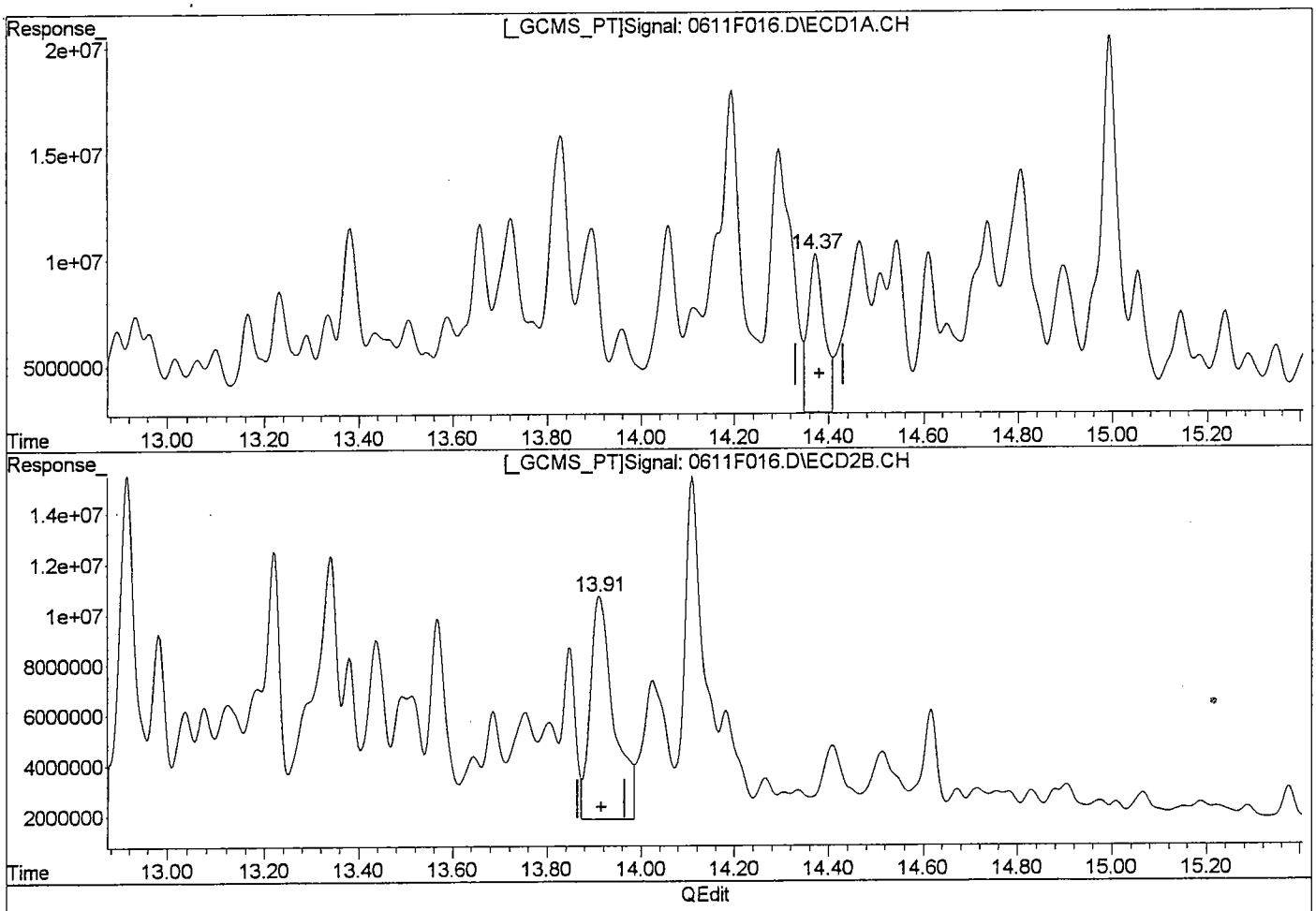
(+) = Expected Retention Time

0611F016.D 061107-8081.M Tue Jun 12 08:40:37 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.37min 9331.379ug/L

response 17600045

(29) Toxaphene {5} #2

13.91min 7736.742ug/L

response 31023237

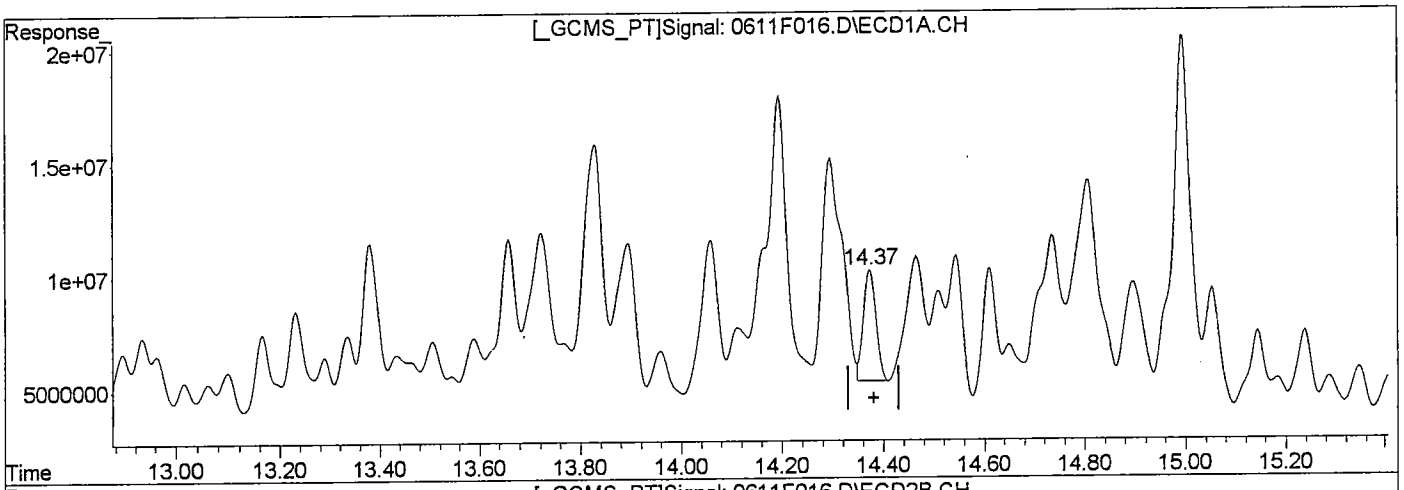
(+) = Expected Retention Time

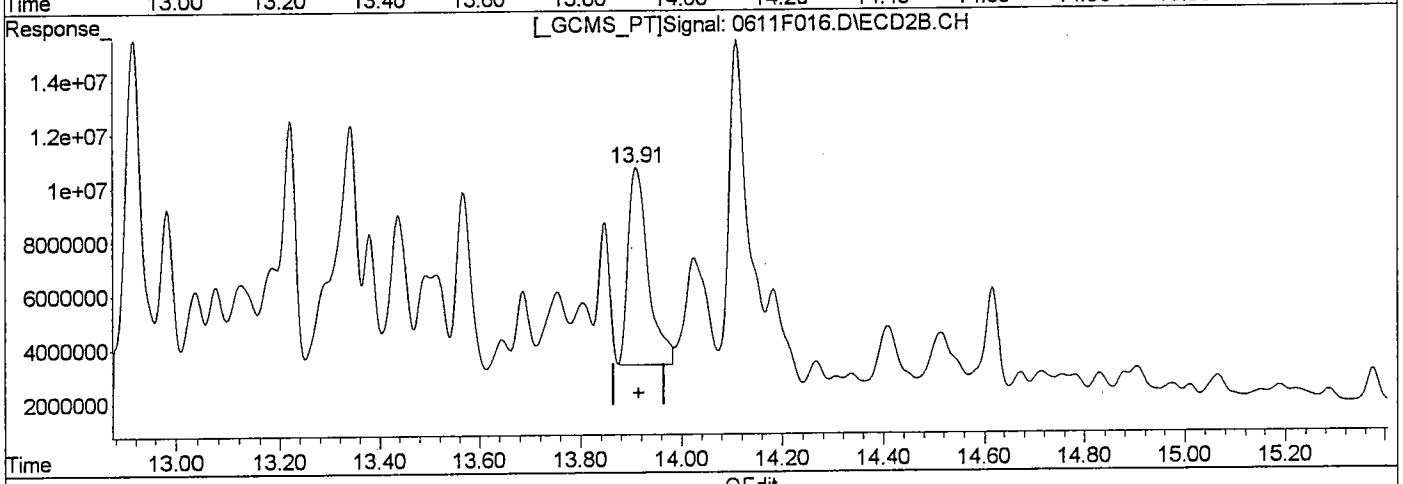
0611F016.D 061107-8081.M Tue Jun 12 08:40:40 2007

Quantitation Report (Qedit) LCS

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





(29) Toxaphene {5}

14.37min 4465.170ug/L m

response 8421820

(29) Toxaphene {5} #2

13.91min 5079.602ug/L m

response 20368484

After
Initials

JUN 12 2007

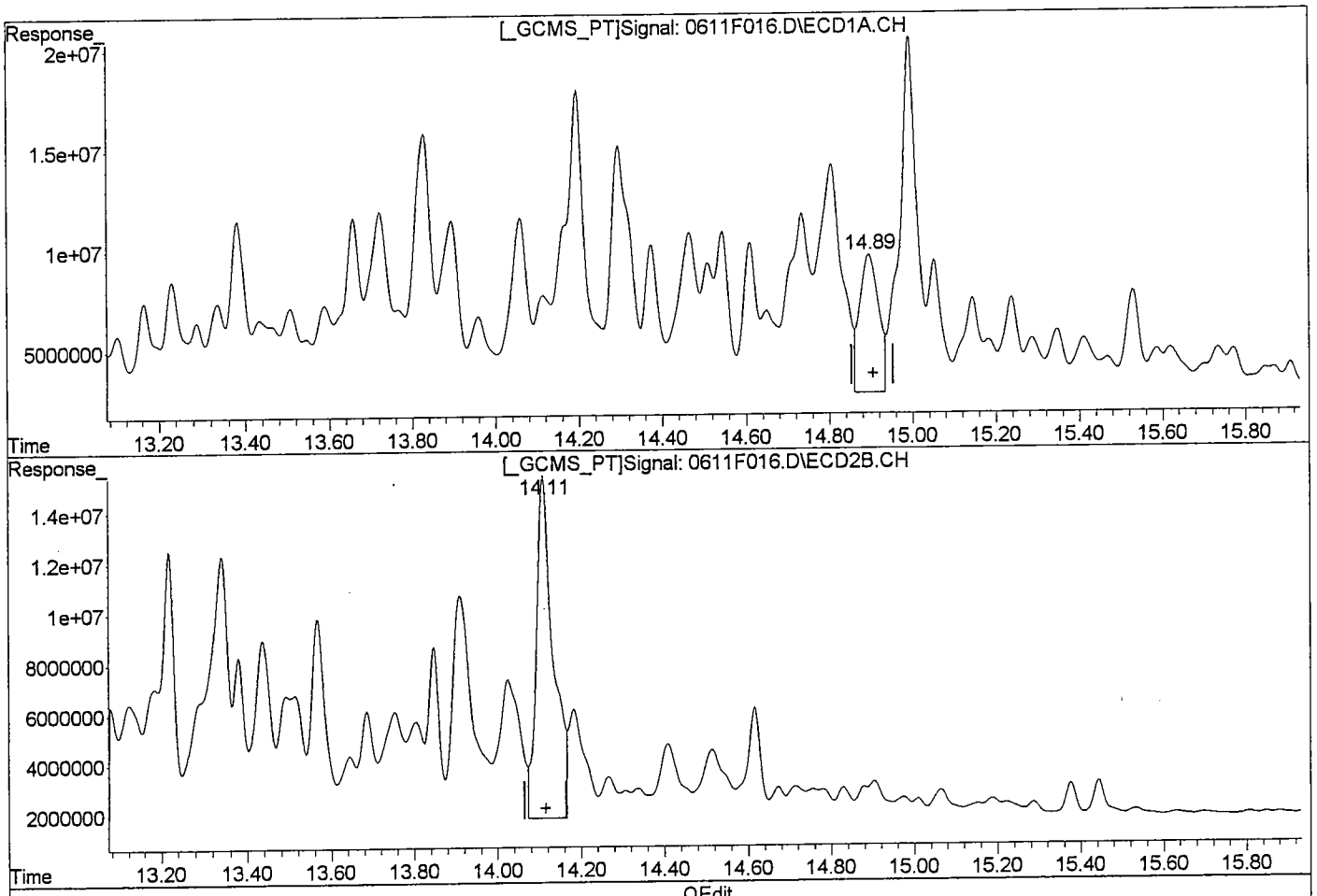
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F016.D 061107-8081.M Tue Jun 12 08:40:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.89min 11018.662ug/L

response 21851170

(30) Toxaphene {6} #2

14.11min 6835.230ug/L

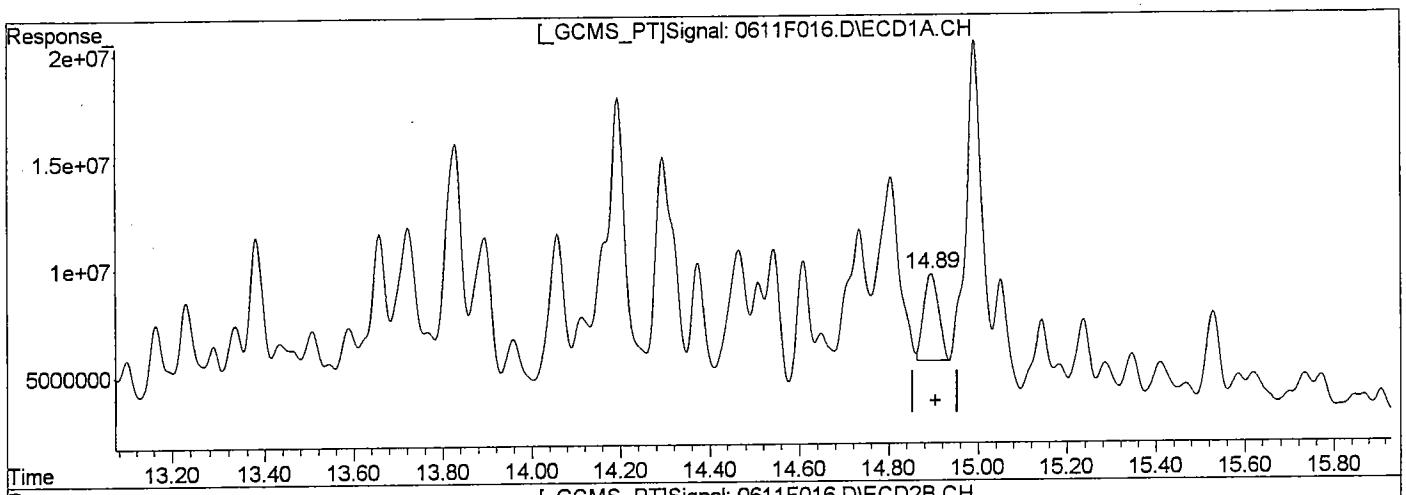
response 38139710

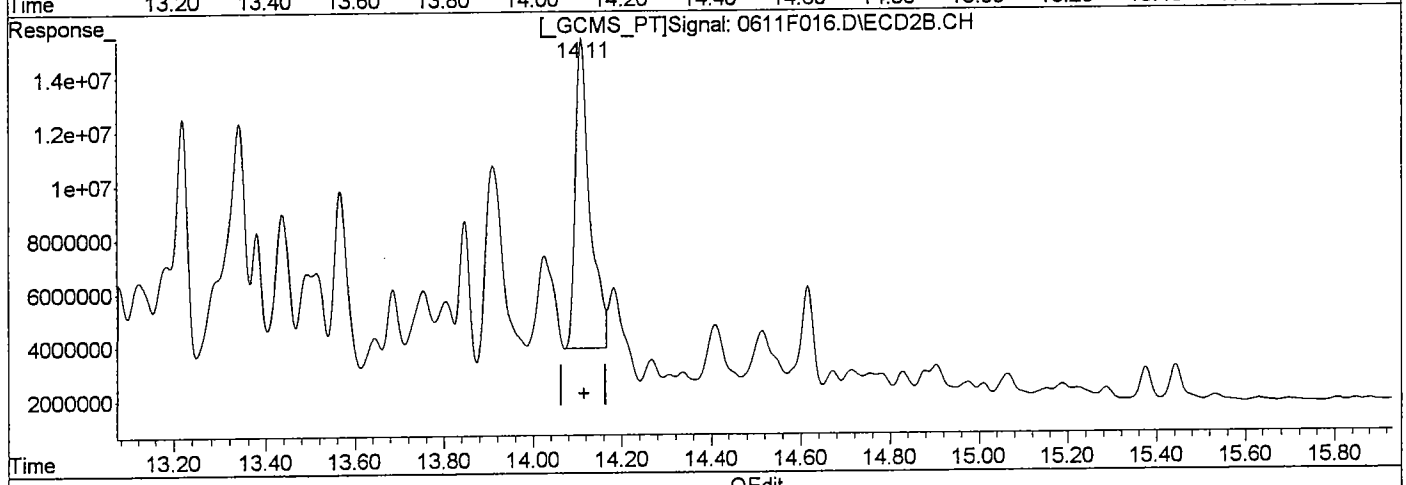
(+) = Expected Retention Time

Quantitation Report (Qedit) QC6

Signal #1 : J:\GC23\DATA\061107\0611F016.D\ECD1A.CH Vial: 16
Signal #2 : J:\GC23\DATA\061107\0611F016.D\ECD2B.CH
Acq On : 12 Jun 2007 12:57 am Operator: AKamawal
Sample : TOX @ 5000ppb GCPS5-89E Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 7:27 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:41:33 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 4714.587ug/L m

response 9349524

(30) Toxaphene {6} #2

14.11min 4744.709ug/L m

response 26474870

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0611F016.D 061107-8081.M Tue Jun 12 08:41:20 2007

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:43:06 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.60	1232241	1134517	871.698m	947.679m
26)	Toxaphene {2}	13.22	12.69	1083675	3549317	935.065m	847.703m
27)	Toxaphene {3}	13.36	13.55	1736712	2180459	862.822m	842.190m
28)	Toxaphene {4}	14.04f	13.67	2845370	597731	974.171m	874.608m
29)	Toxaphene {5}	14.36	13.90	1447488	3396213	885.839m	861.935m
30)	Toxaphene {6}	14.88f	14.09	1769737	4265298	974.260m	790.319m

AK 6/12/07

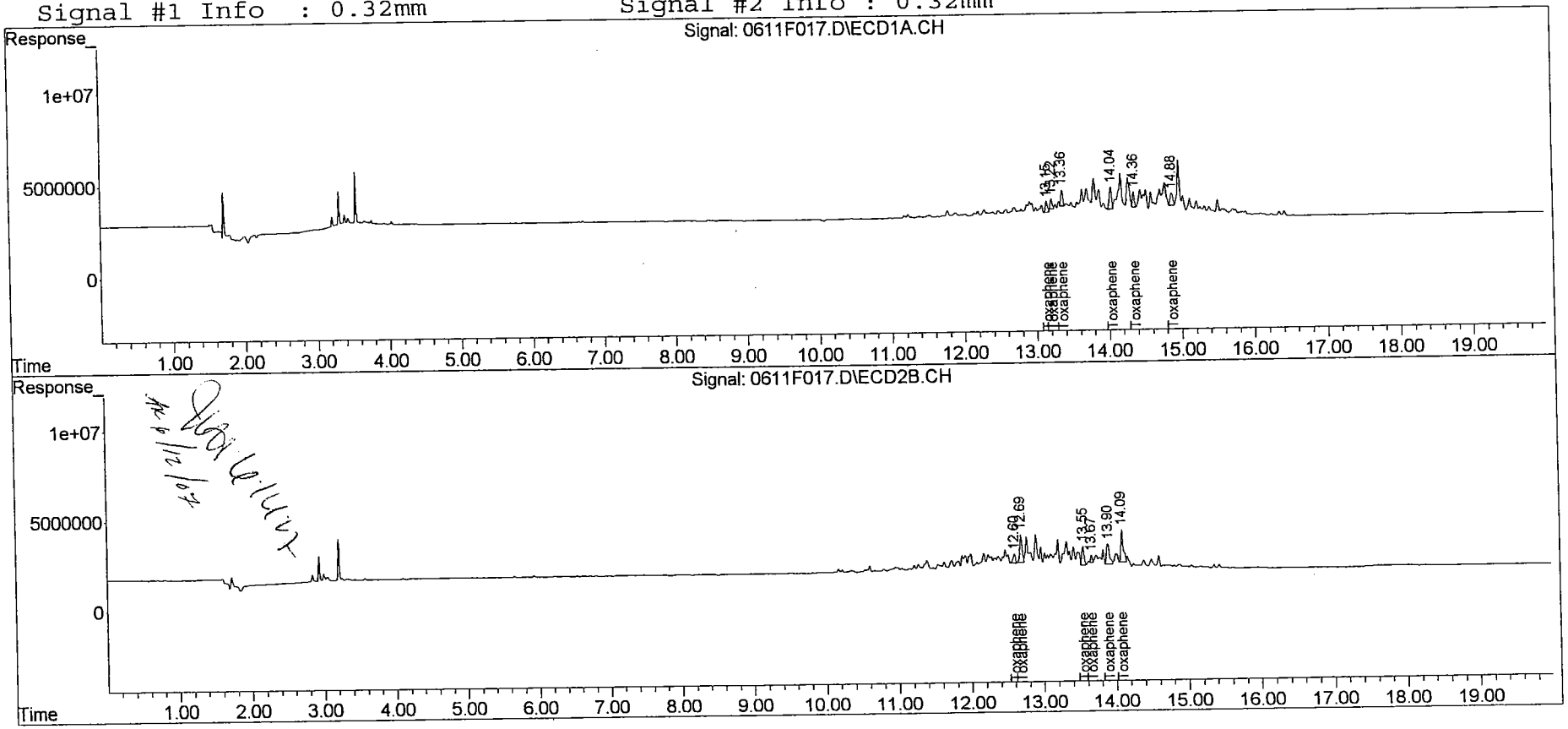
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:45 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

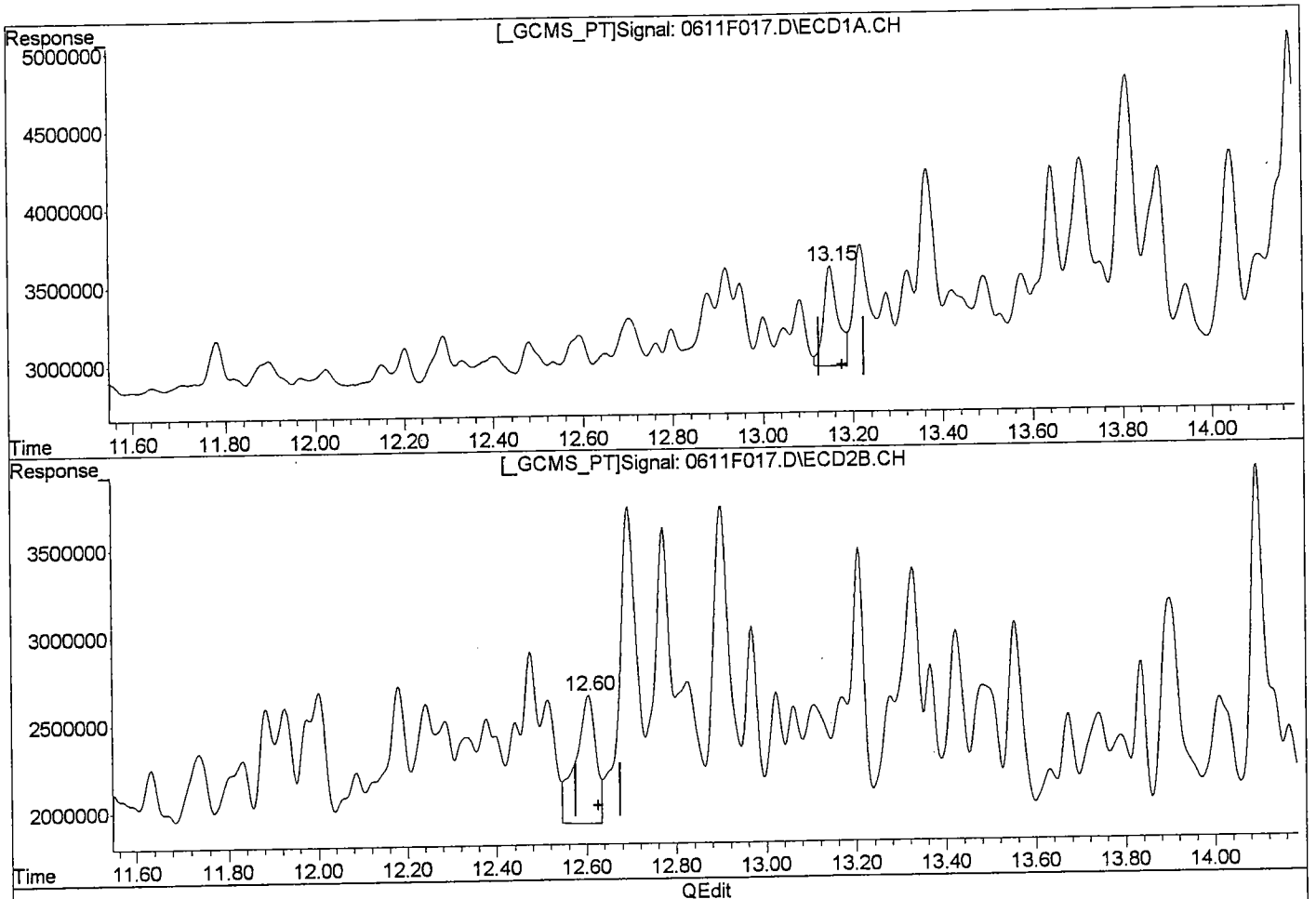


938

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration



(25) Toxaphene

13.15min 1011.203ug/L

response 1429447

(25) Toxaphene #2

12.60min 1950.993ug/L

response 2335639

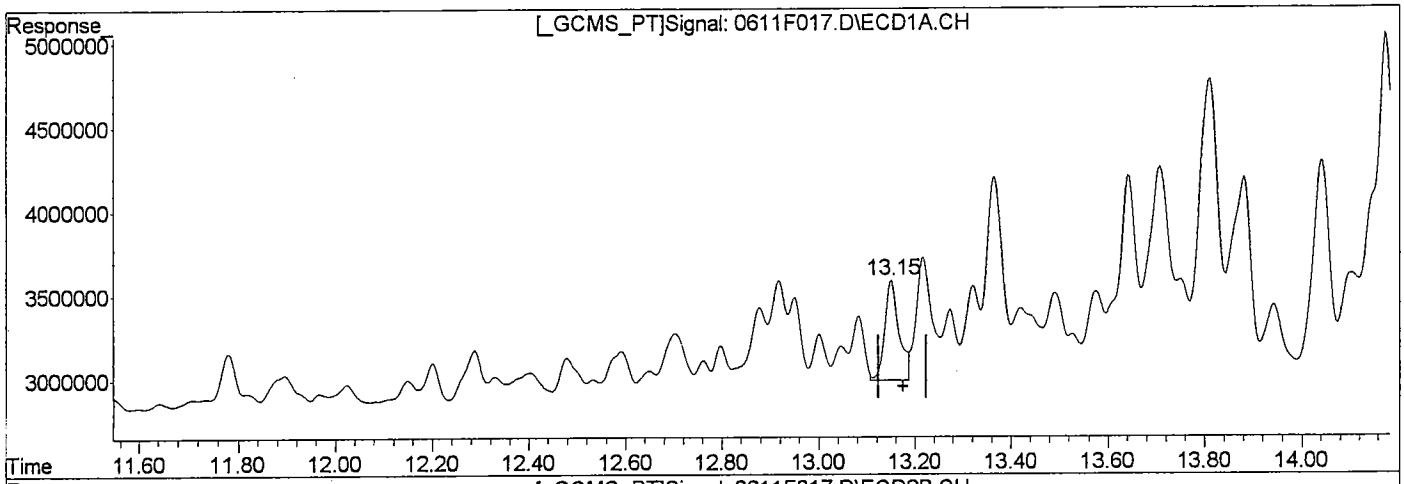
(+) = Expected Retention Time

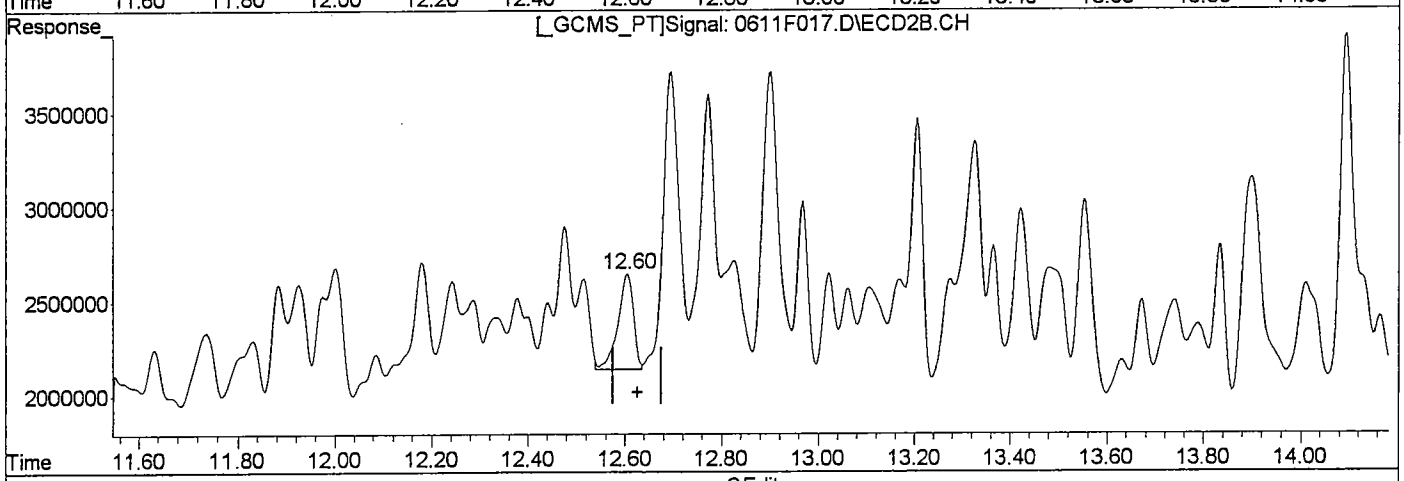
0611F017.D 061107-8081.M Tue Jun 12 08:43:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.15min 871.698ug/L m

response 1232241

(25) Toxaphene #2

12.60min 947.679ug/L m

response 1134517

After

Initials

JUN 12 2007

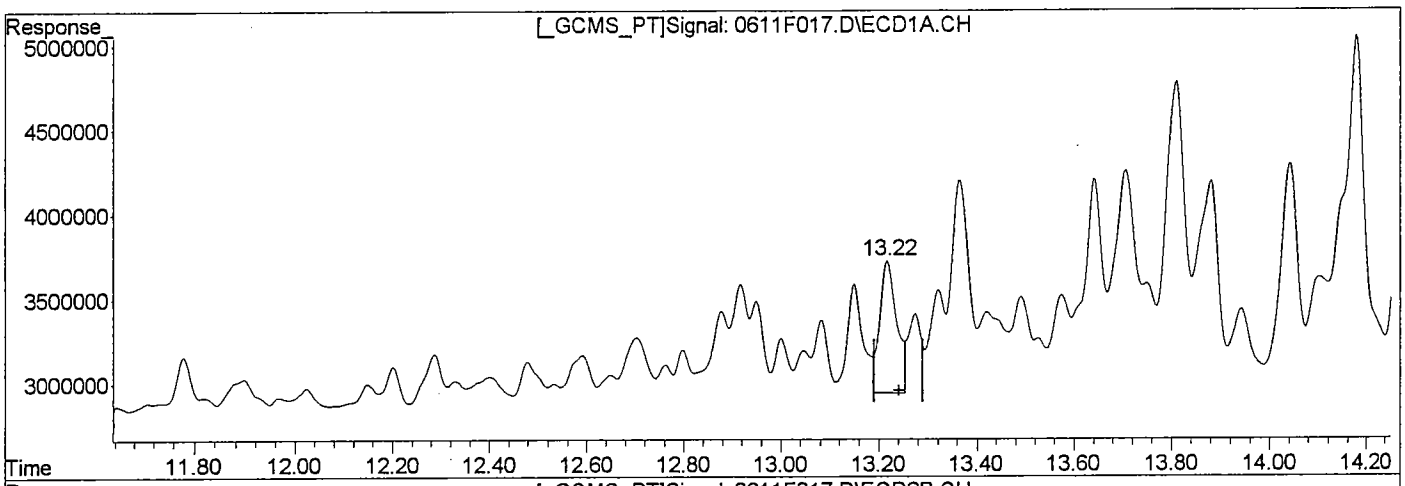
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

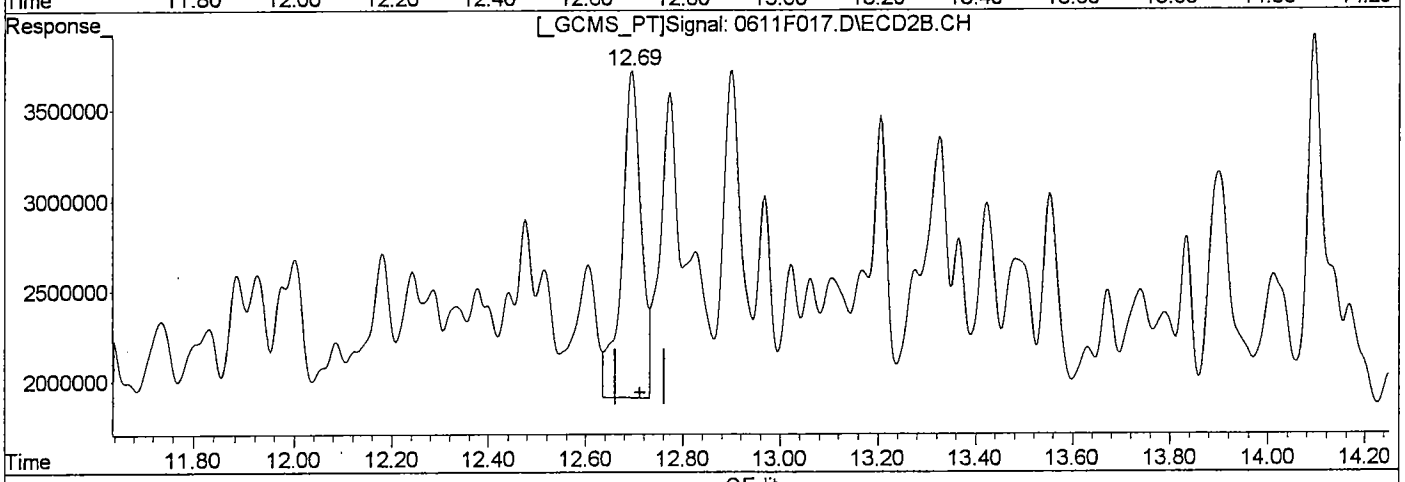
(+) = Expected Retention Time
0611F017.D 061107-8081.M Tue Jun 12 08:43:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1642.418ug/L

response 1903448

(26) Toxaphene {2} #2

12.69min 1182.291ug/L

response 4950231

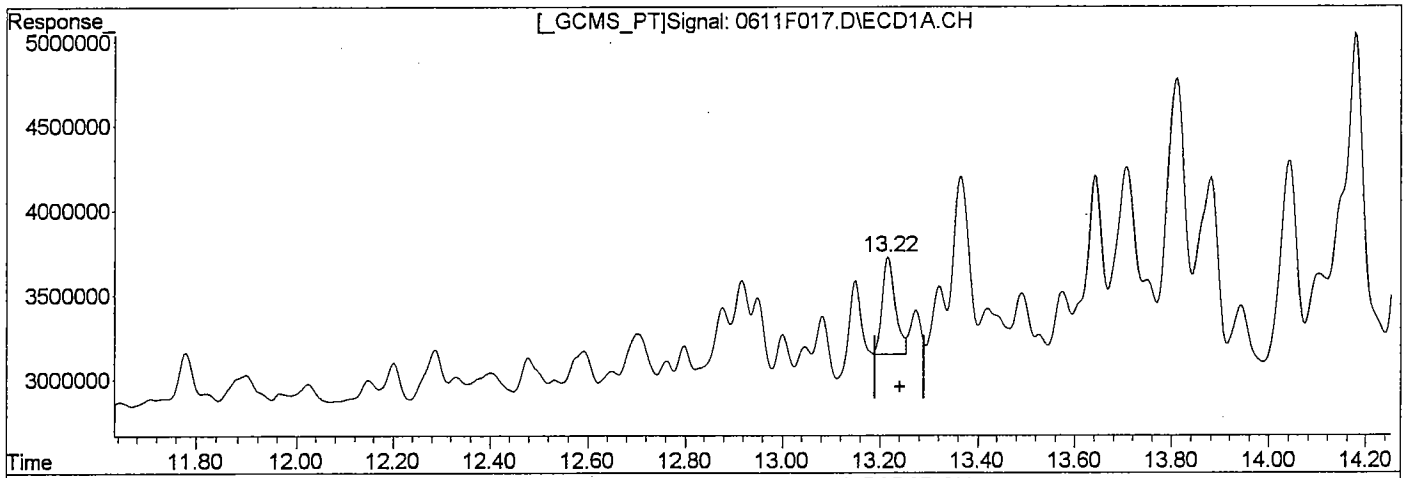
(+) = Expected Retention Time

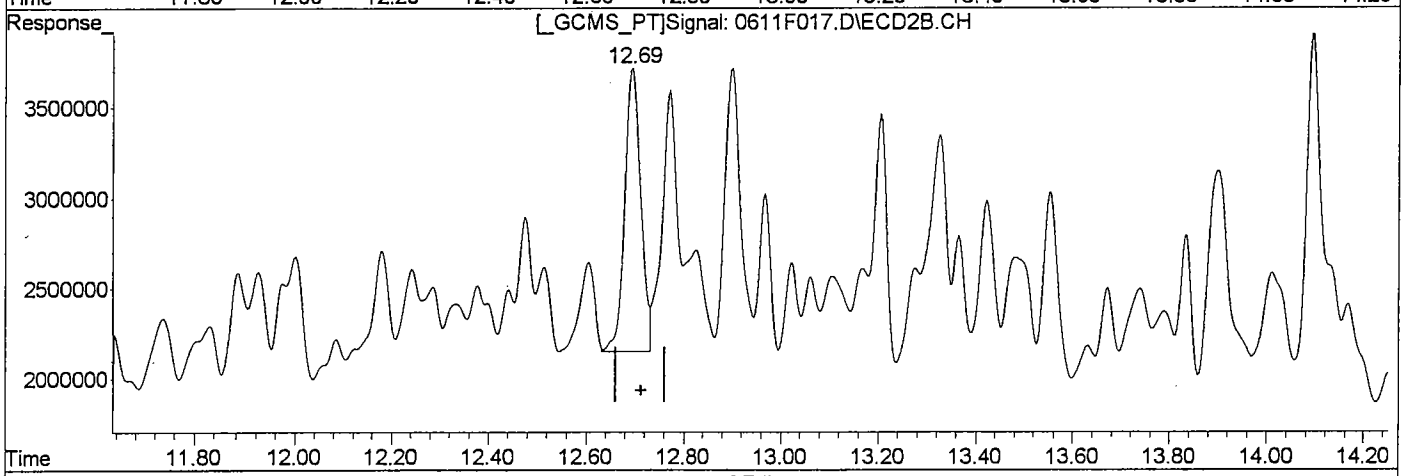
0611F017.D 061107-8081.M Tue Jun 12 08:43:45 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 935.065ug/L m

response 1083675

(26) Toxaphene {2} #2

12.69min 847.703ug/L m

response 3549317

After
Initials AK

JUN 12 2007

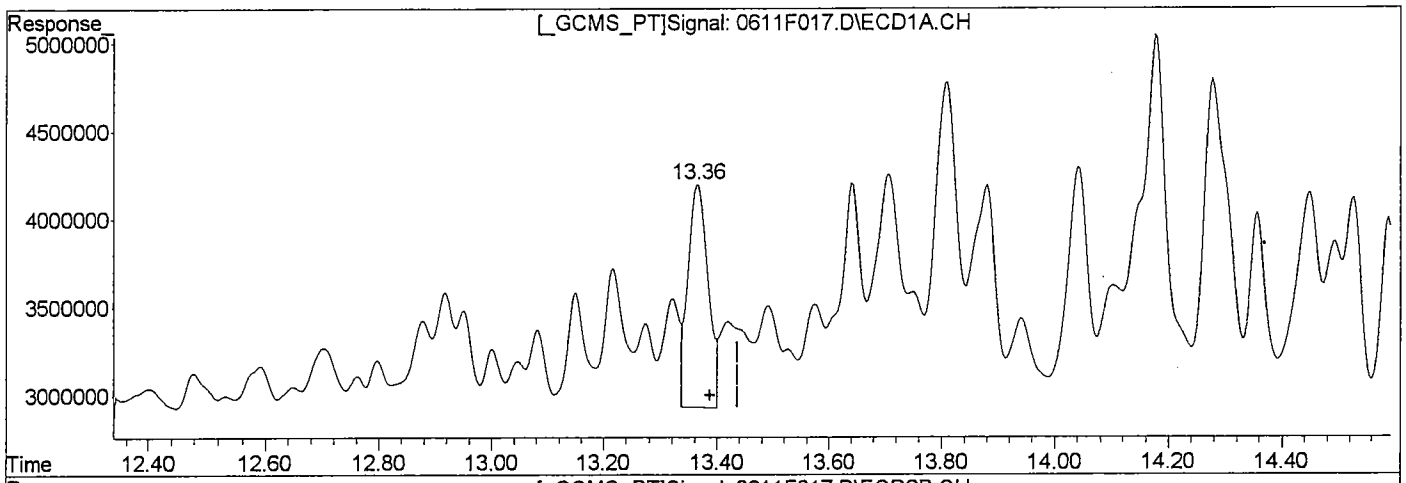
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

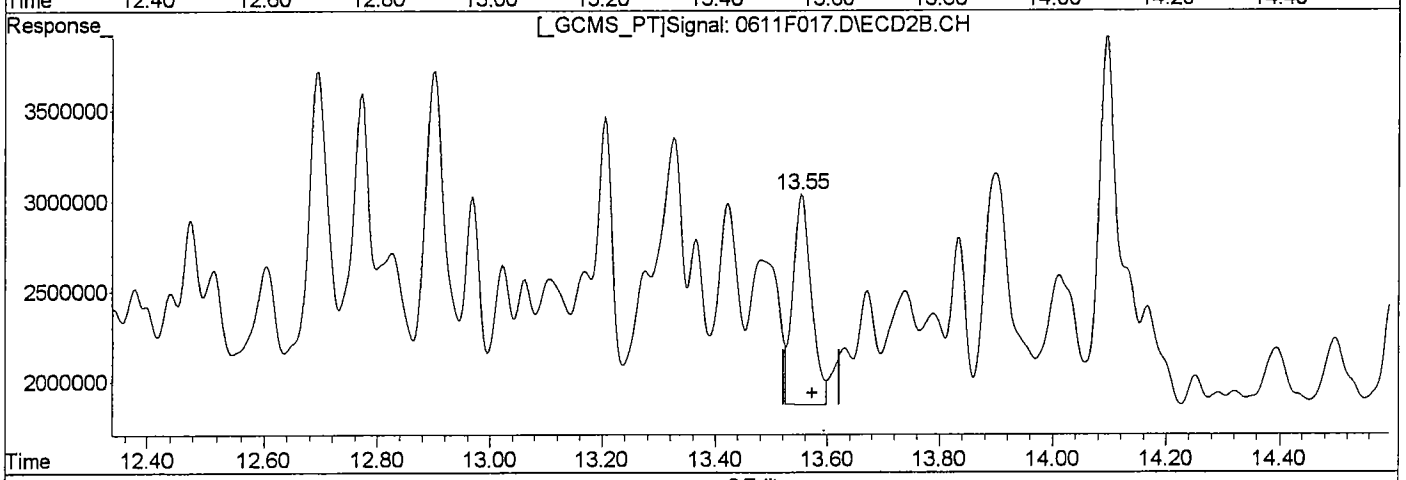
(+) = Expected Retention Time
0611F017.D 061107-8081.M Tue Jun 12 08:44:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.36min 1552.852ug/L

response 3125625

(27) Toxaphene {3} #2

13.55min 1021.680ug/L

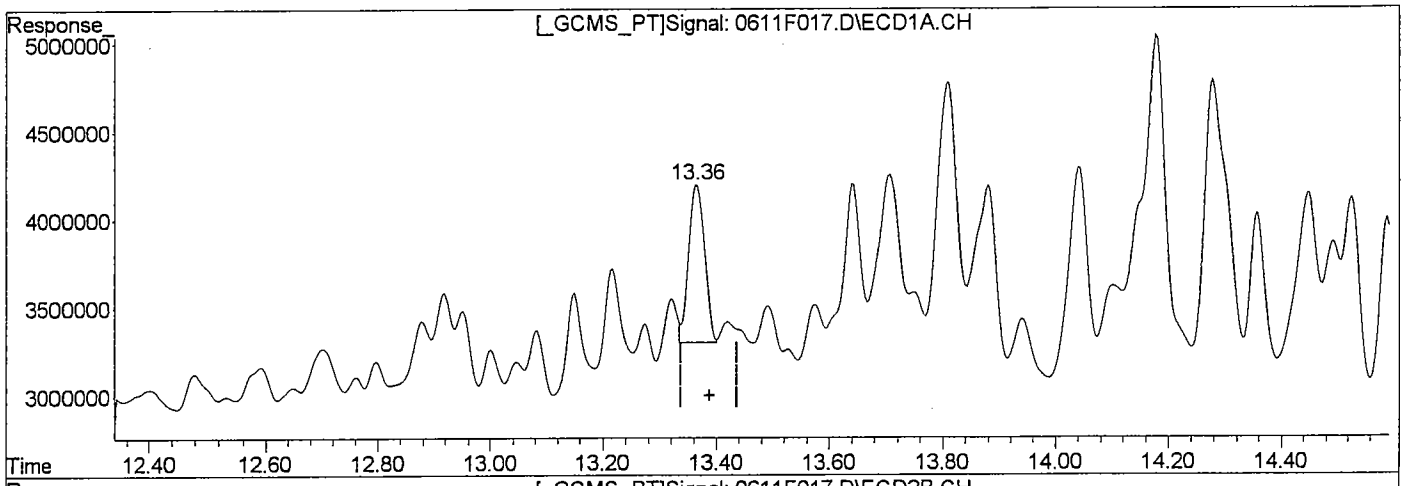
response 2645166

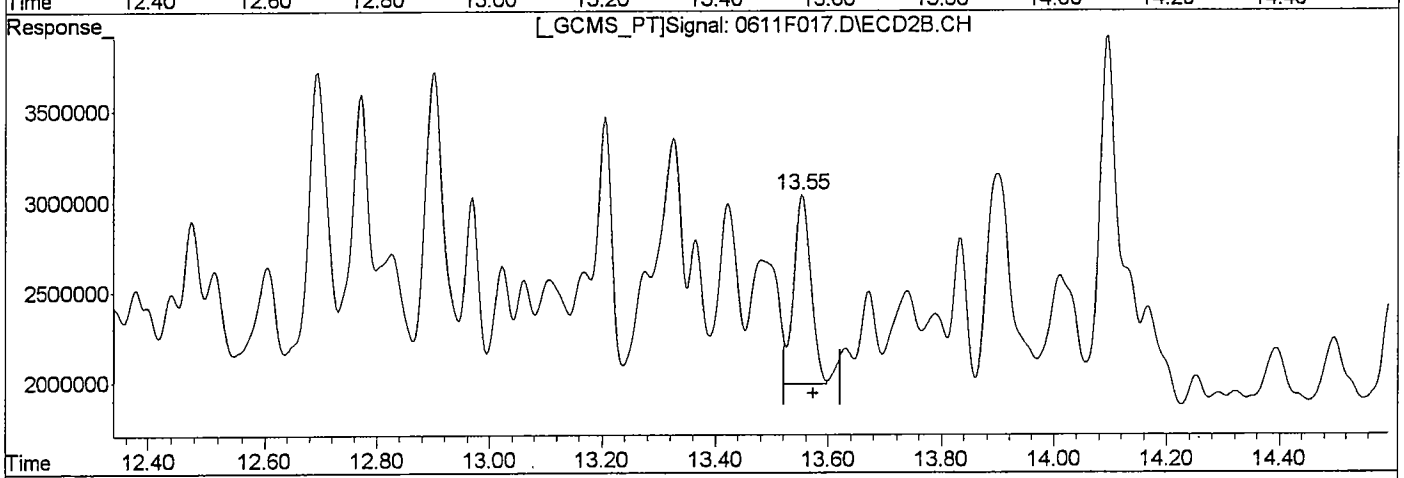
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.36min 862.822ug/L m

response 1736712

(27) Toxaphene {3} #2

13.55min 842.190ug/L m

response 2180459

After
Initials

JUN 12 2007

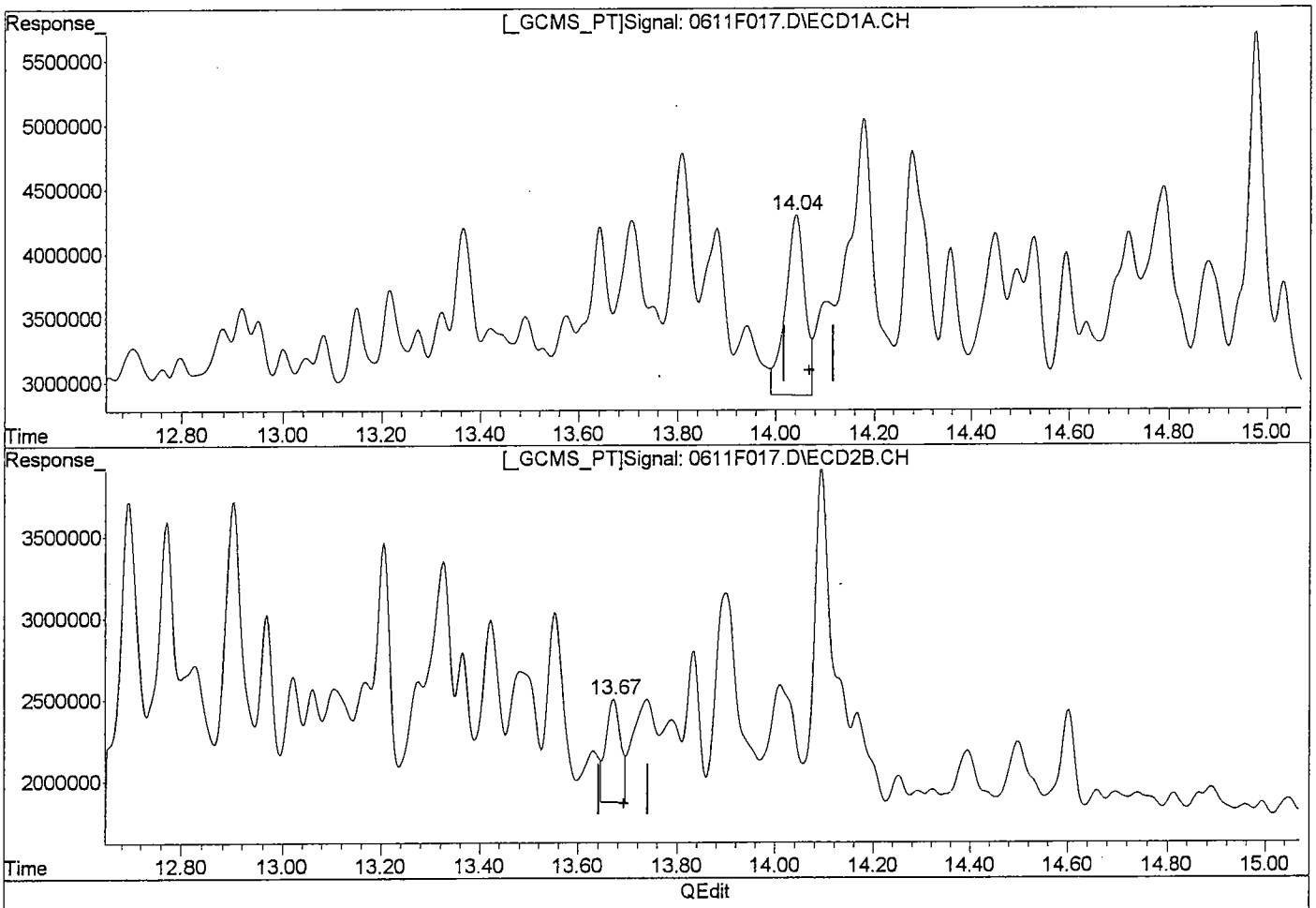
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F017.D 061107-8081.M Tue Jun 12 08:44:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.04min 1306.206ug/L

response 3815180

(28) Toxaphene {4} #2

13.67min 1921.872ug/L

response 1313459

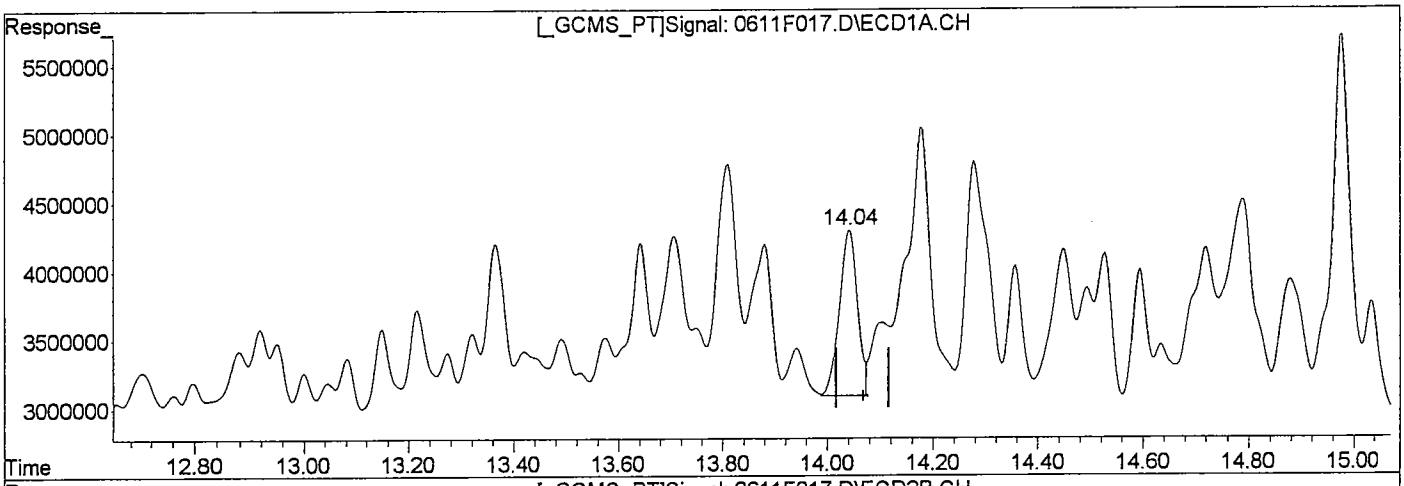
(+) = Expected Retention Time

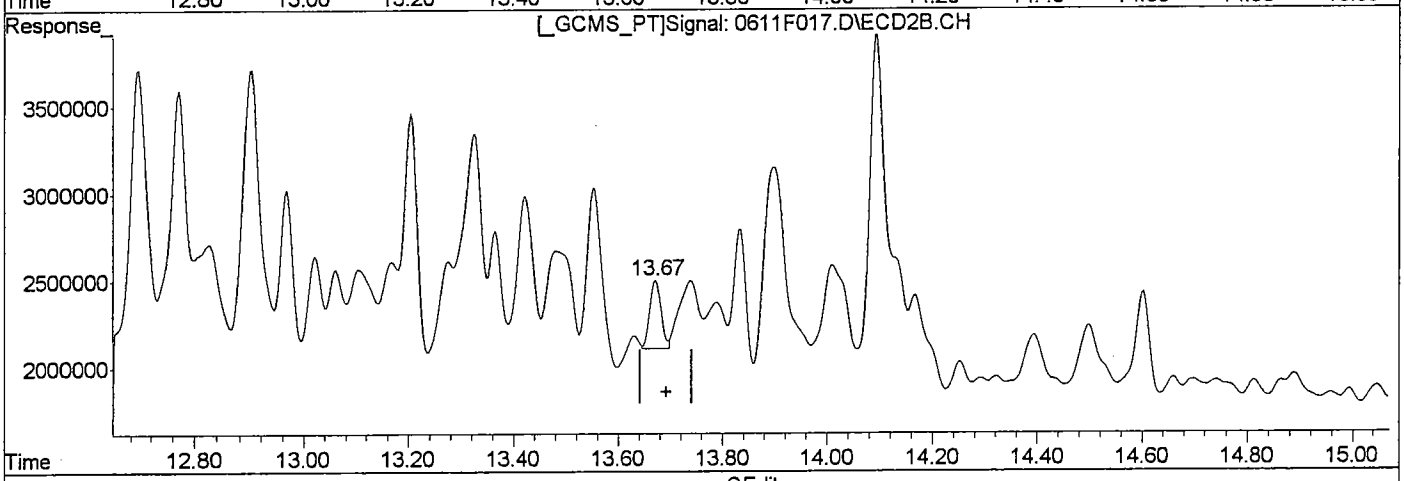
0611F017.D 061107-8081.M Tue Jun 12 08:44:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





(28) Toxaphene {4}

14.04min 974.171ug/L m

response 2845370

(28) Toxaphene {4} #2

13.67min 874.608ug/L m

response 597731

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

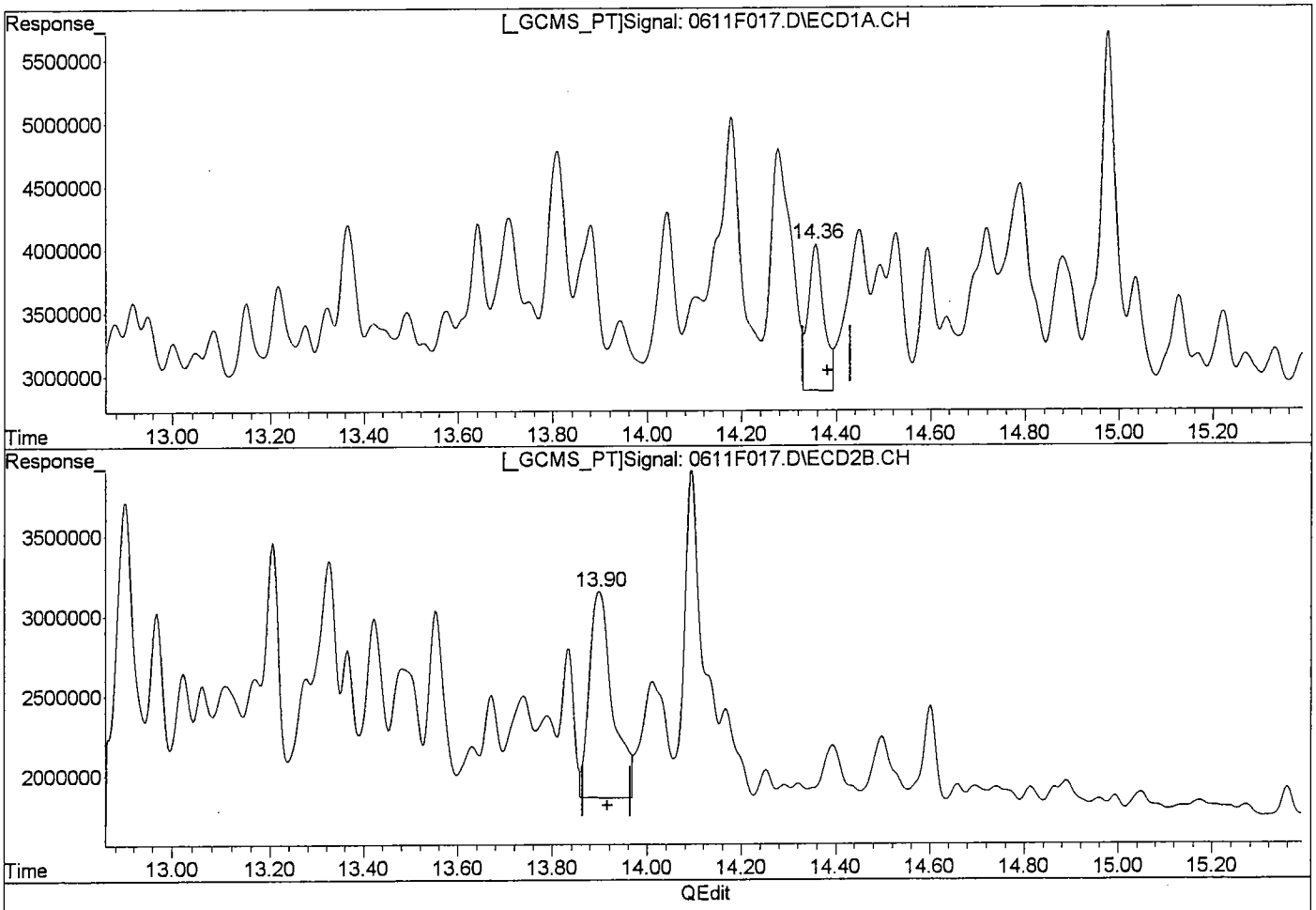
(+) = Expected Retention Time

0611F017.D 061107-8081.M Tue Jun 12 08:45:02 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 1609.741ug/L

response 2630366

(29) Toxaphene {5} #2

13.90min 1108.621ug/L

response 4368208

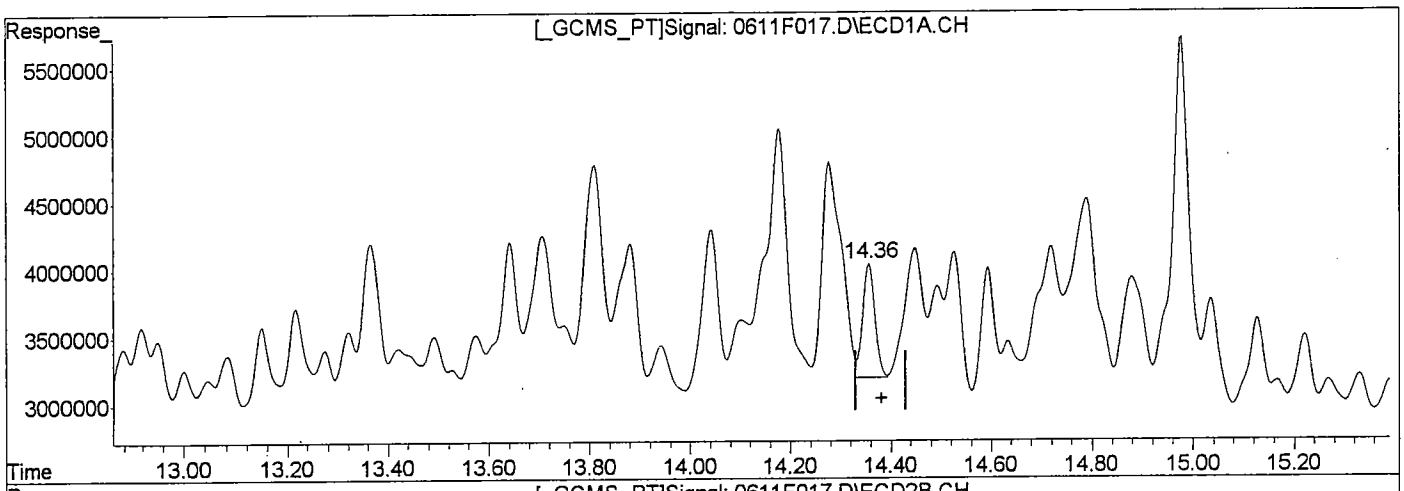
(+) = Expected Retention Time

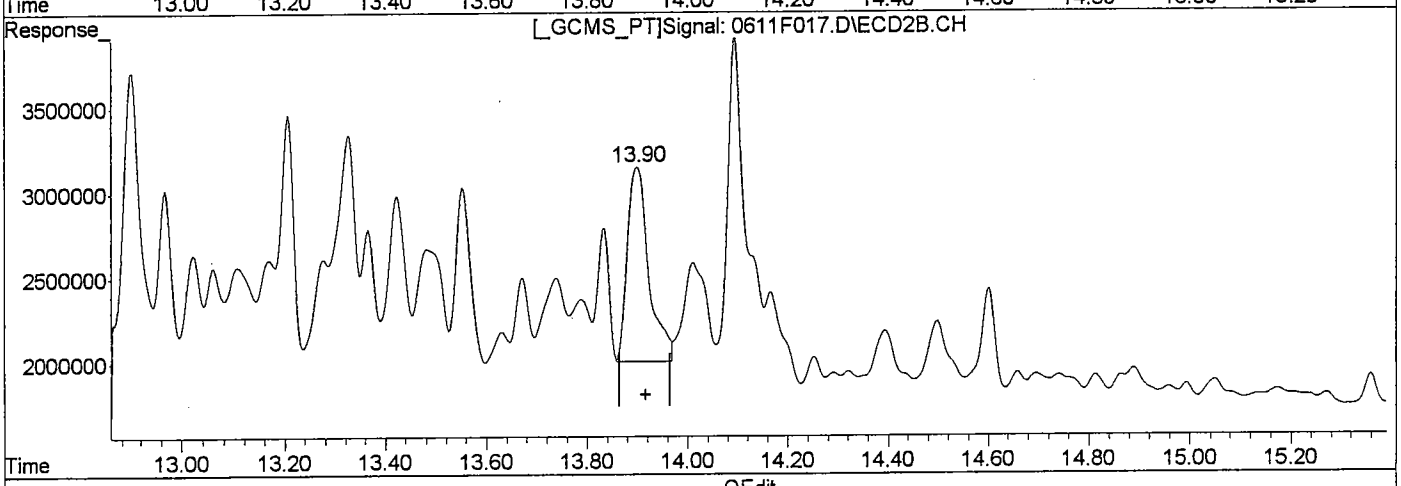
0611F017.D 061107-8081.M Tue Jun 12 08:45:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 885.839ug/L m

response 1447488

(29) Toxaphene {5} #2

13.90min 861.935ug/L m

response 3396213

After
Initials
JUN 12 2007

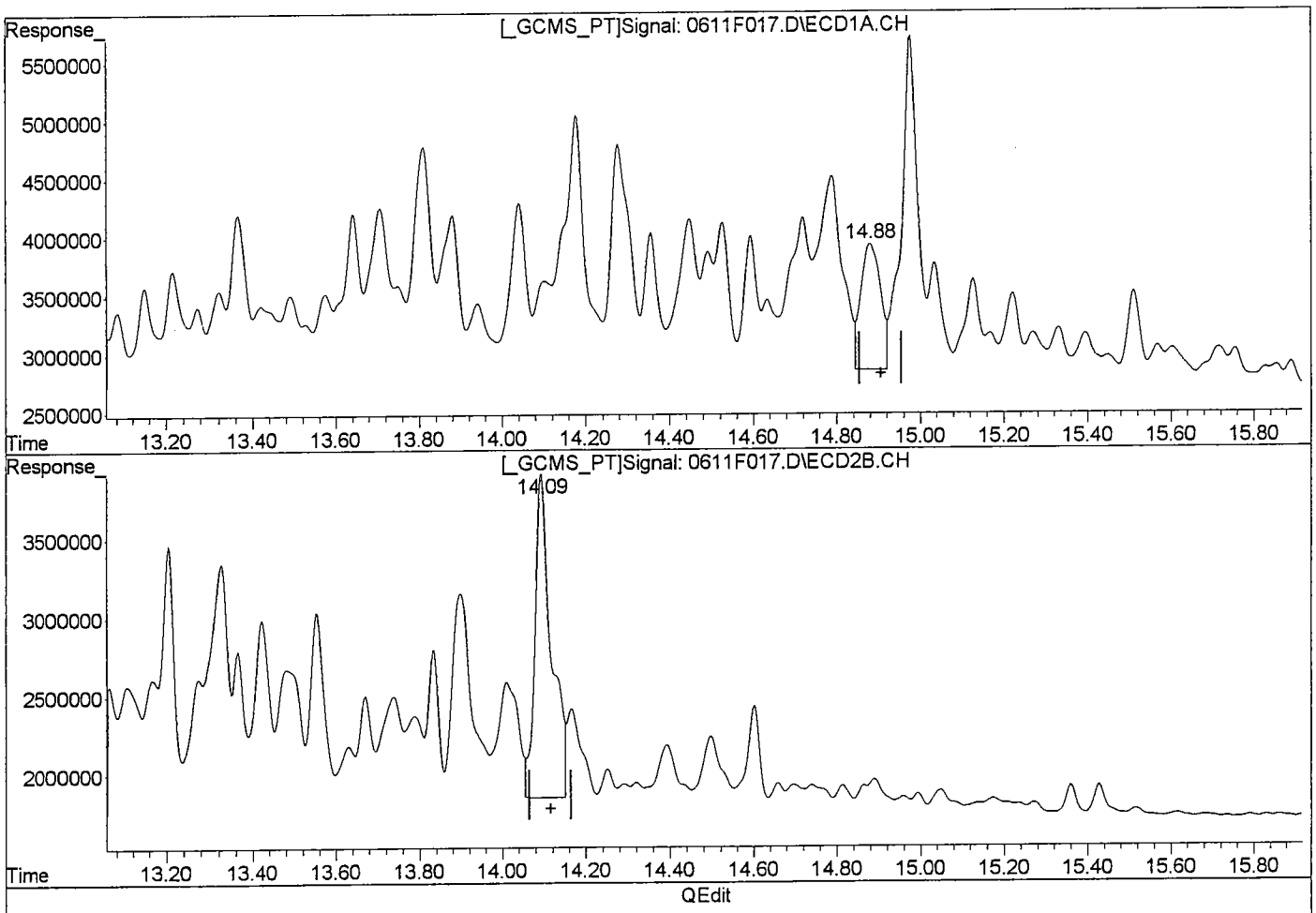
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F017.D 061107-8081.M Tue Jun 12 08:45:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.88min 1953.987ug/L

response 3549405

(30) Toxaphene {6} #2

14.09min 1040.738ug/L

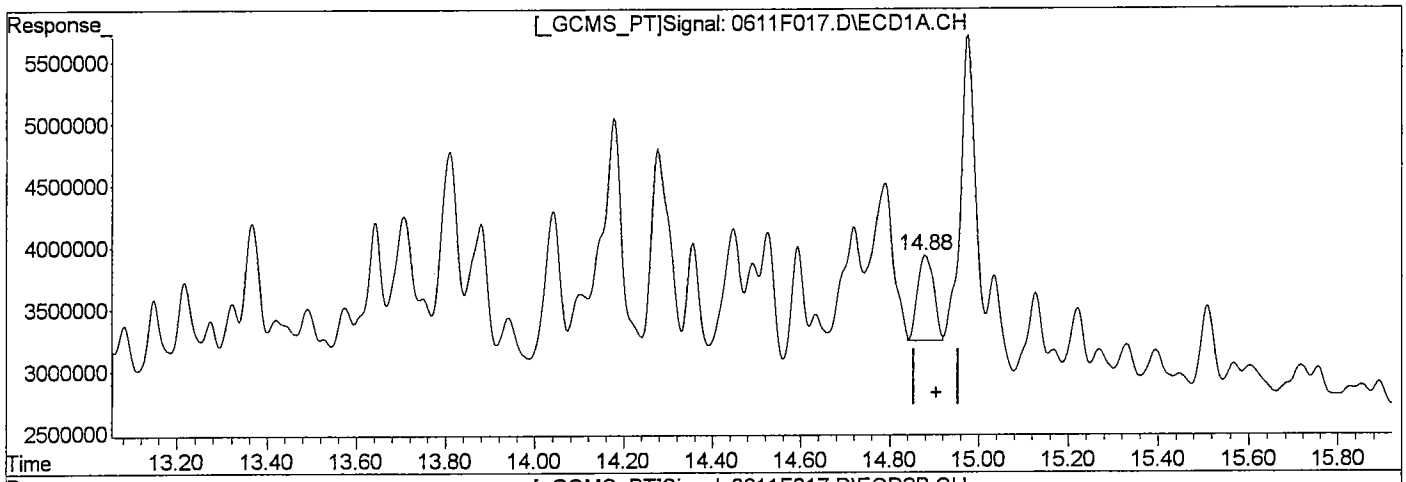
response 5616795

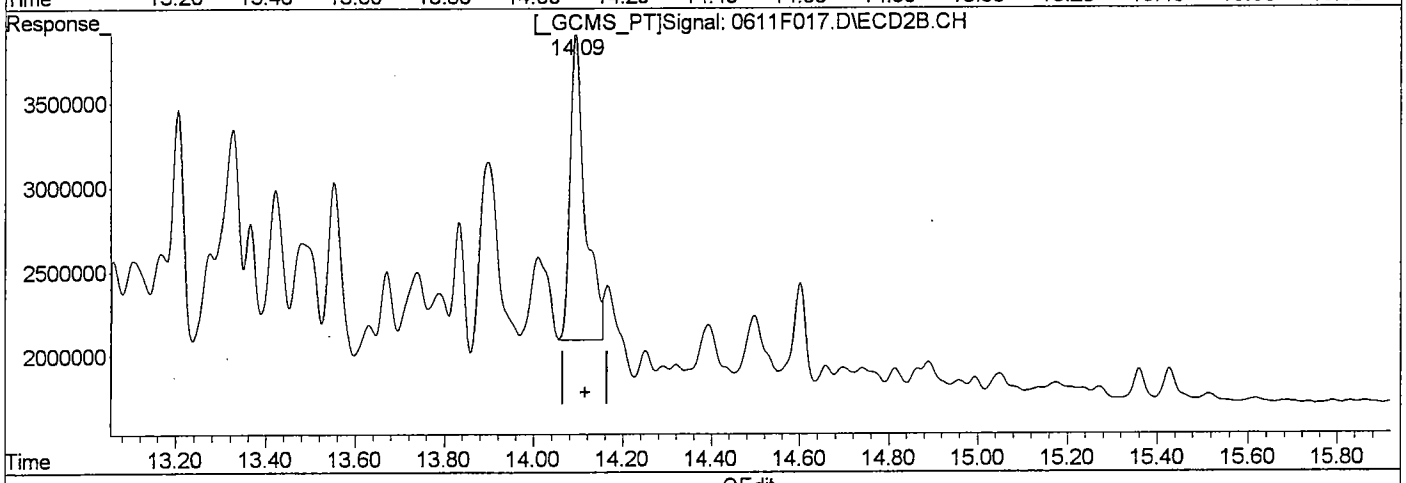
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F017.D\ECD1A.CH Vial: 17
Signal #2 : J:\GC23\DATA\061107\0611F017.D\ECD2B.CH
Acq On : 12 Jun 2007 1:23 am Operator: AKamawal
Sample : TOX ICV @ 1000ppb GCPS5-79b Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:42:34 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.88min 974.260ug/L m

response 1769737

(30) Toxaphene {6} #2

14.09min 790.319ug/L m

response 4265298

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F017.D 061107-8081.M Tue Jun 12 08:45:42 2007

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\061107\0611F018.D\ECD2B.CH
Acq On : 12 Jun 2007 1:50 am Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:43 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.73	9.62	289546	312602	21.849	23.831
32)	Chlordane {2}	12.01	11.32	140074	443898	21.474	20.780
33)	Chlordane {3}	12.44	11.36	498222	252575	17.905	20.655
34)	Chlordane {4}	12.51	11.41	383980	124262	21.343	19.816
35)	Chlordane {5}	12.58	11.47	290694	365191	20.941	23.101
36)	Chlordane {6}	13.82	12.91	196246	191339	19.249	21.871

AK 6/12/07
6/14/07

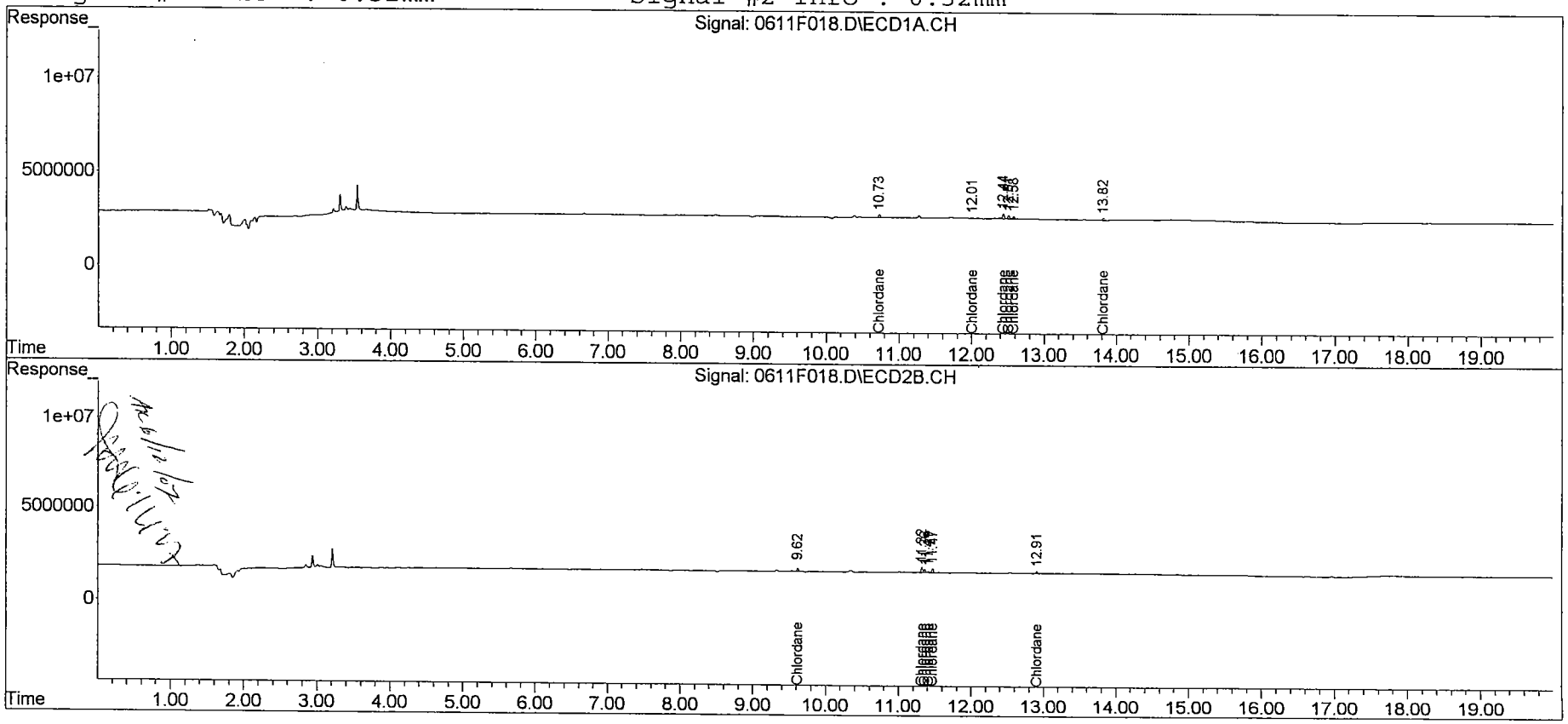
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F018.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\061107\0611F018.D\ECD2B.CH
Acq On : 12 Jun 2007 1:50 am Operator: AKamawal
Sample : CHLOR@ 25PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:50 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061107\0611F019.D\ECD2B.CH
Acq On : 12 Jun 2007 2:17 am Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:44 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.73	9.62	605300	602379	45.676	45.922	
32)	Chlordane {2}	12.00	11.32	278164	984185	42.645	46.073	
33)	Chlordane {3}	12.44	11.36	1003727	593232	36.072	48.512	#
34)	Chlordane {4}	12.51	11.41	722341	283539	40.150	45.216	
35)	Chlordane {5}	12.58	11.47	568995	762021	40.990	48.203	
36)	Chlordane {6}	13.82	12.90	411709	405096	40.384	46.304	

AK 6/12/07

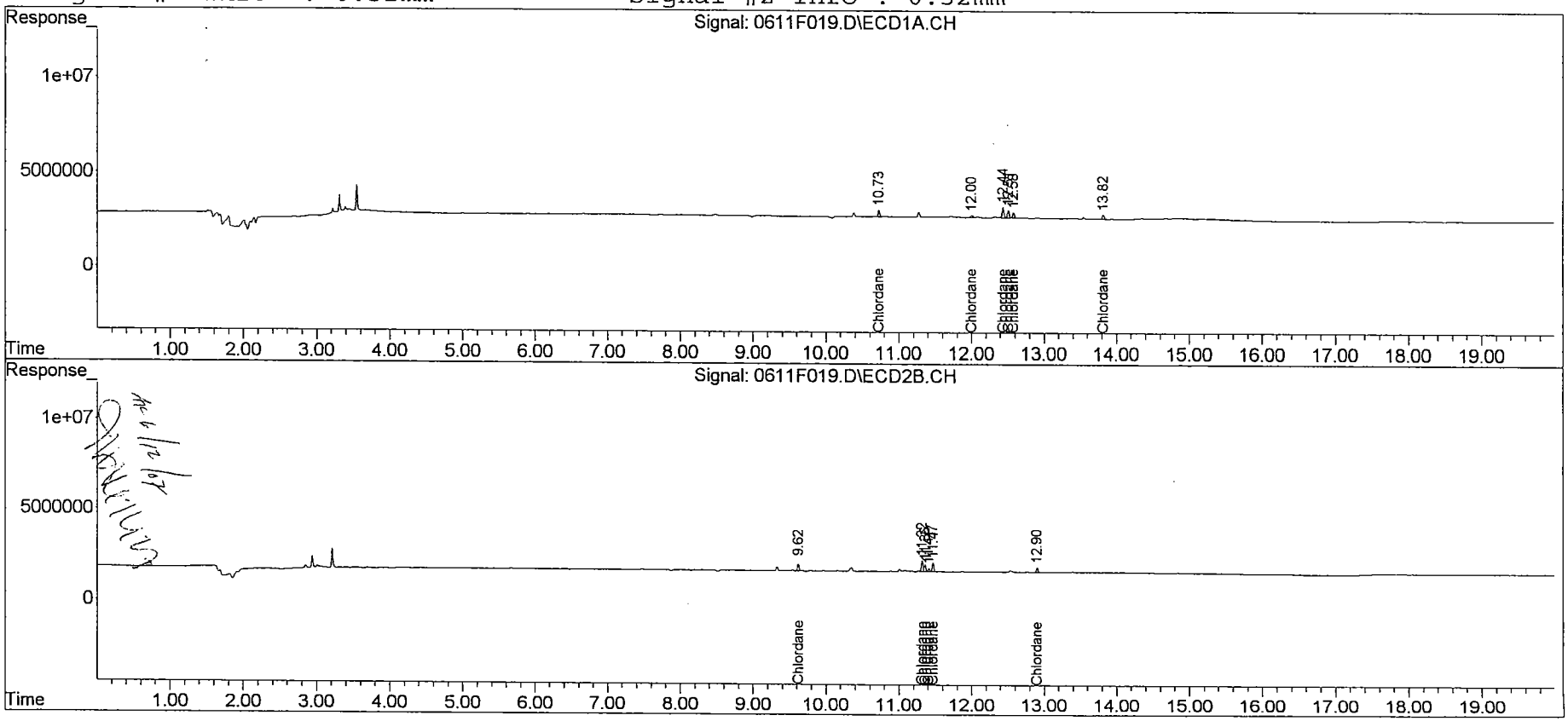
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F019.D\ECD1A.CH Vial: 19
Signal #2 : J:\GC23\DATA\061107\0611F019.D\ECD2B.CH
Acq On : 12 Jun 2007 2:17 am Operator: AKamawal
Sample : CHLOR@ 50PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:50 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061107\0611F020.D\ECD2B.CH
Acq On : 12 Jun 2007 2:43 am Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:45 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.72	9.62	1158038	1180272	87.385	89.977	
32)	Chlordane {2}	12.00	11.32	527685	1945555	80.898	91.077	
33)	Chlordane {3}	12.43	11.36	2038052	1138368	73.243	93.091	#
34)	Chlordane {4}	12.51	11.41	1351563	545699	75.124	87.023	
35)	Chlordane {5}	12.58	11.47	1057817	1492448	76.204	94.408	
36)	Chlordane {6}	13.82	12.91	814243	803438	79.867	91.836	

AK 6/12/07

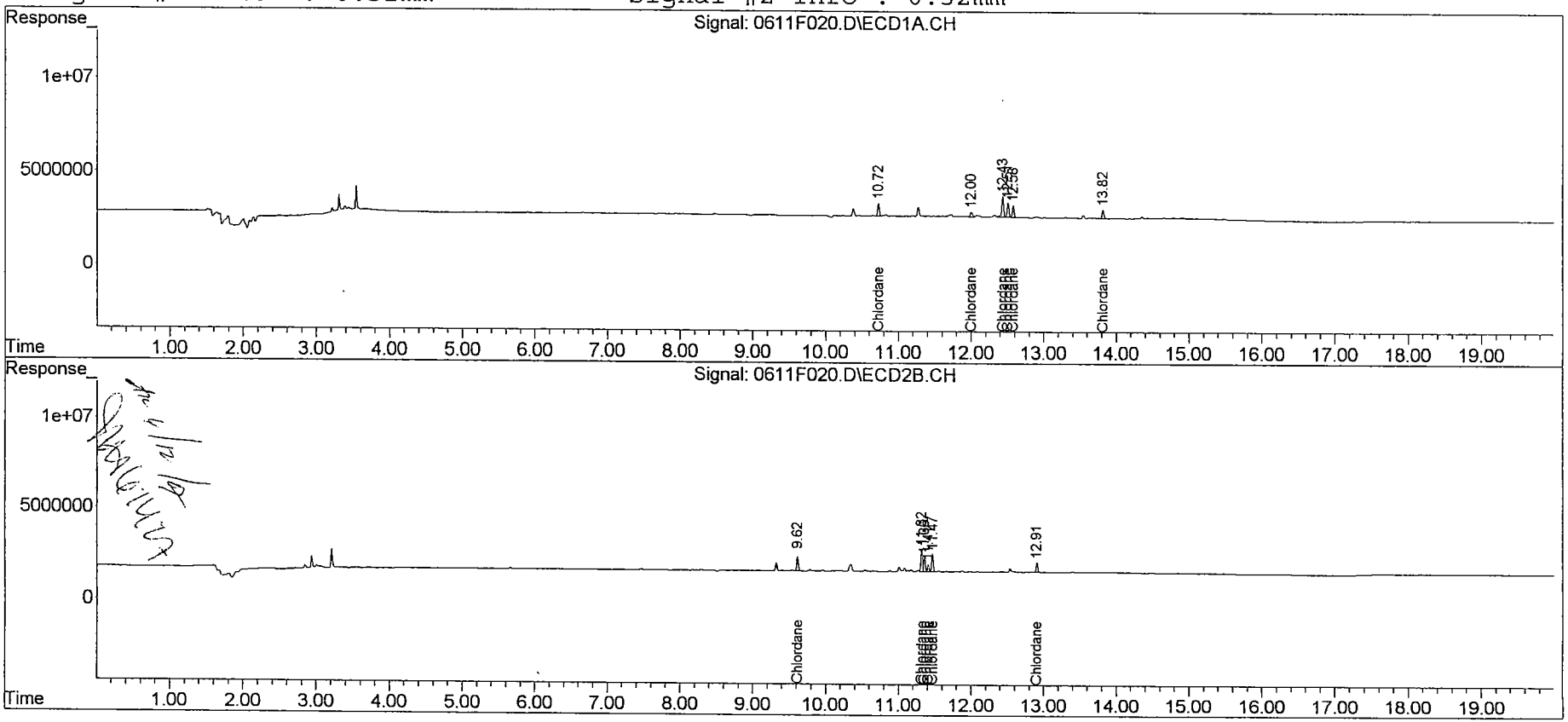
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F020.D\ECD1A.CH Vial: 20
Signal #2 : J:\GC23\DATA\061107\0611F020.D\ECD2B.CH
Acq On : 12 Jun 2007 2:43 am Operator: AKamawal
Sample : CHLOR@ 100PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:51 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



956

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061107\0611F021.D\ECD2B.CH
Acq On : 12 Jun 2007 3:10 am Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:46 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.73	9.62	6589574	6849484	497.248	522.162	
32)	Chlordane {2}	12.01	11.32	2989598	11484362	458.328	537.617	
33)	Chlordane {3}	12.44	11.36	10853431	6395312	390.047	522.981	#
34)	Chlordane {4}	12.51	11.41	7636072	3186078	424.436	508.088	
35)	Chlordane {5}	12.58	11.47	5689213	8676014	409.843	548.820	#
36)	Chlordane {6}	13.82	12.91	4587032	4712605	449.932	538.671	

AK 6/12/07

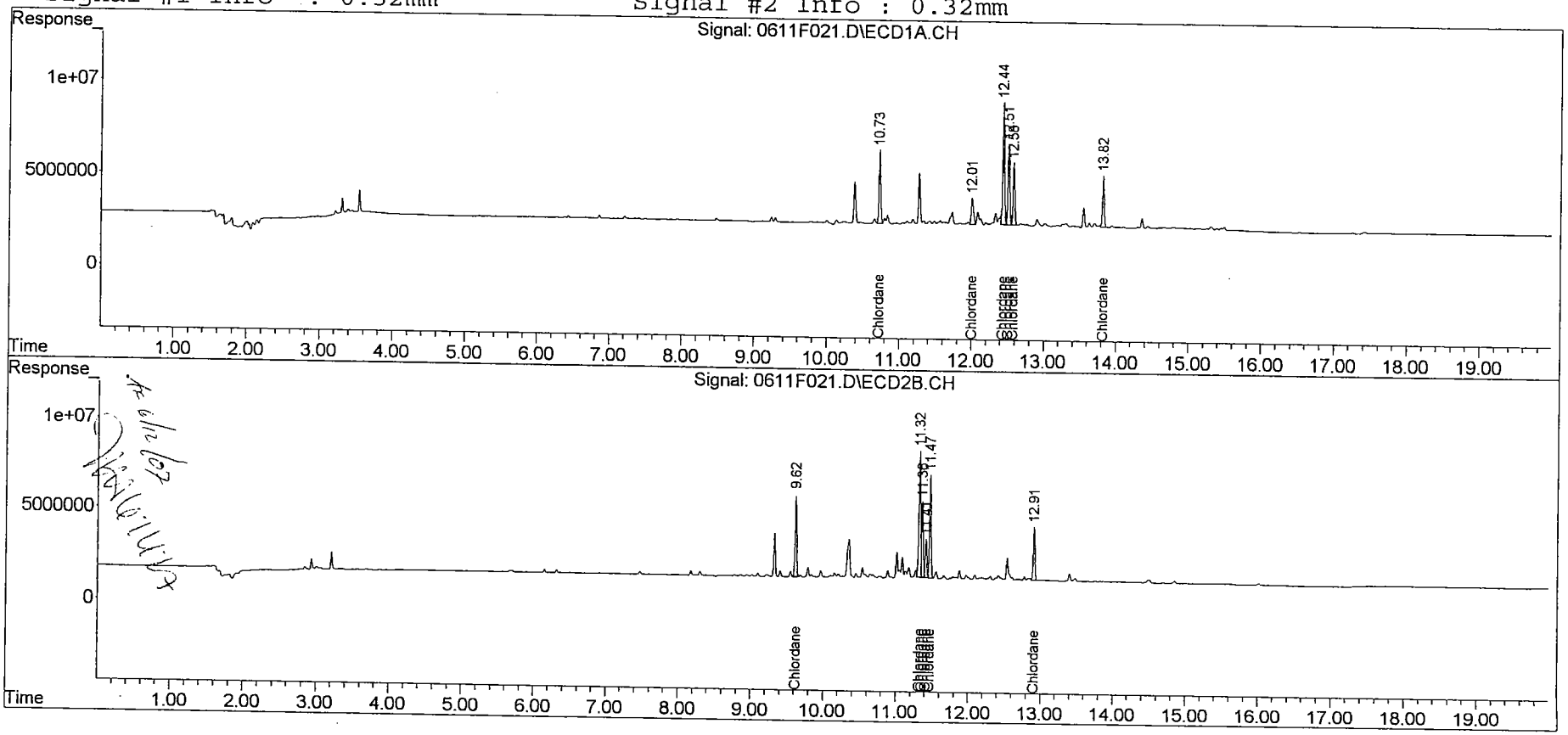
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F021.D\ECD1A.CH Vial: 21
Signal #2 : J:\GC23\DATA\061107\0611F021.D\ECD2B.CH
Acq On : 12 Jun 2007 3:10 am Operator: AKamawal
Sample : CHLOR@ 500PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:51 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



958

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F022.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061107\0611F022.D\ECD2B.CH
Acq On : 12 Jun 2007 3:36 am Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:47 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.73	9.62	11936789	12657312	900.748	964.915	
32)	Chlordane {2}	12.01	11.32	5578691	21570410	855.256	1009.774	
33)	Chlordane {3}	12.44	11.36	20124260	11803295	723.220	965.223	#
34)	Chlordane {4}	12.51	11.41	13943699	6067899	775.033	967.656	
35)	Chlordane {5}	12.58	11.47	10282856	15991158	740.762	1011.554	#
36)	Chlordane {6}	13.82	12.91	8295228	8676278	813.662	991.735	

AK 6/12/07

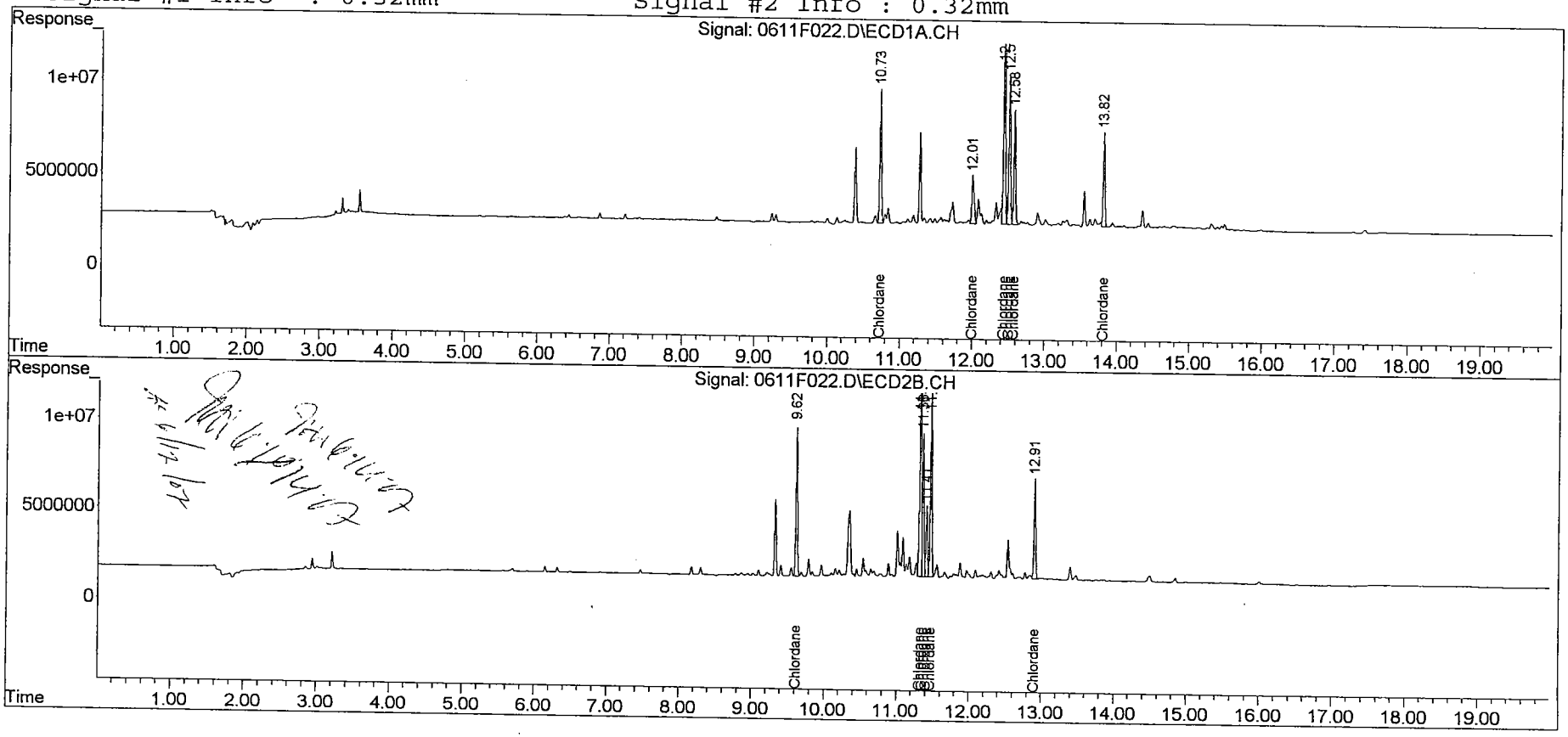
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F022.D\ECD1A.CH Vial: 22
Signal #2 : J:\GC23\DATA\061107\0611F022.D\ECD2B.CH
Acq On : 12 Jun 2007 3:36 am Operator: AKamawal
Sample : CHLOR@ 1000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H . Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:51 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F023.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\061107\0611F023.D\ECD2B.CH
Acq On : 12 Jun 2007 4:03 am Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 07:27:48 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.73	9.62	23681257	25712723	1786.983	1960.179	
32)	Chlordane {2}	12.00	11.32	11000534	44002401	1686.466	2059.882	
33)	Chlordane {3}	12.44	11.36	40776319	23397560	1465.407	1913.353	#
34)	Chlordane {4}	12.51	11.41	28036666	12383131	1558.364	1974.754	#
35)	Chlordane {5}	12.58	11.47	20621947	32171241	1485.576	2035.060	#
36)	Chlordane {6}	13.82	12.91	16748676	17735160	1642.843	2027.204	

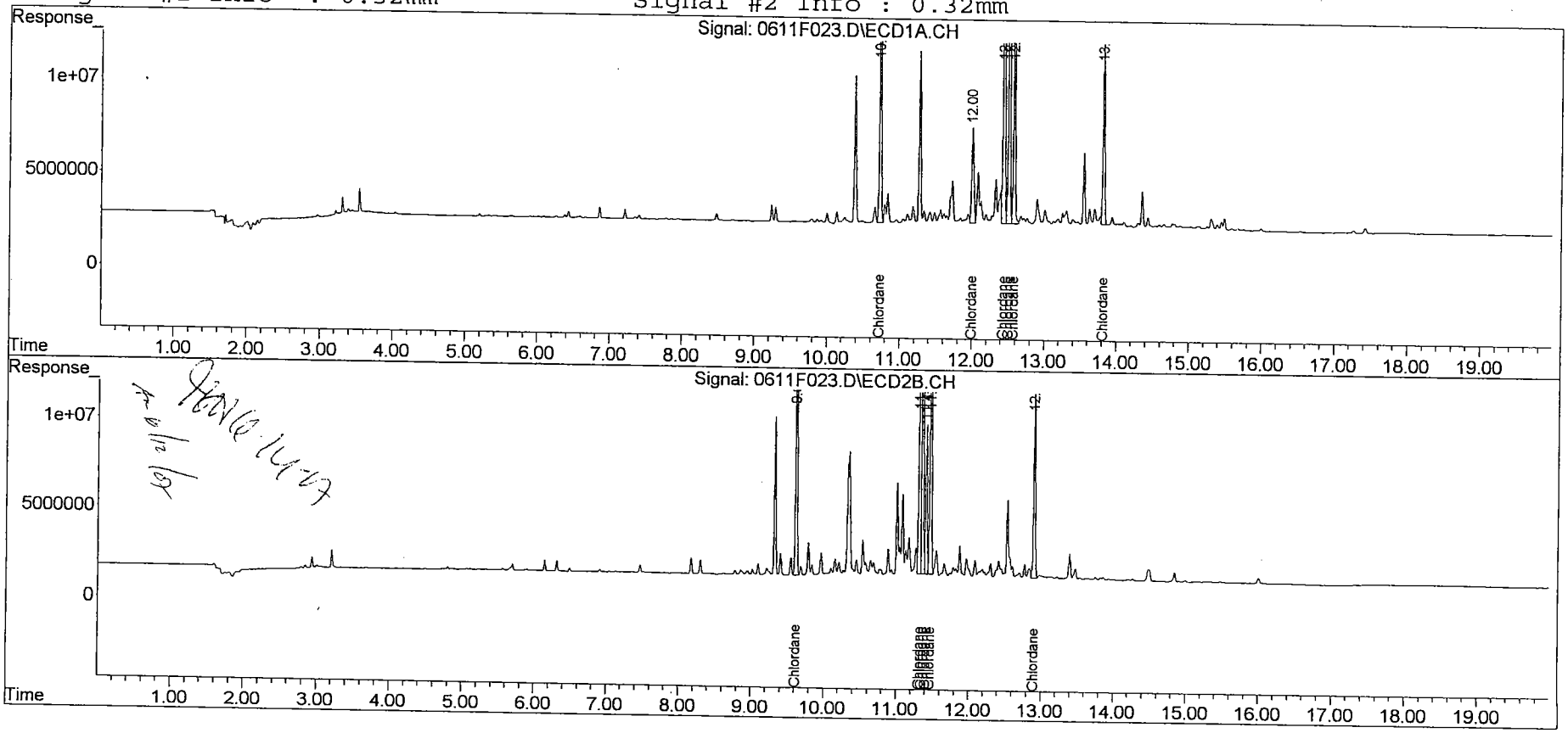
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F023.D\ECD1A.CH Vial: 23
Signal #2 : J:\GC23\DATA\061107\0611F023.D\ECD2B.CH
Acq On : 12 Jun 2007 4:03 am Operator: AKamawal
Sample : CHLOR@ 2000PPB GCPS5-86F Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:52 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 07:27:00 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



962

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F024.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061107\0611F024.D\ECD2B.CH
Acq On : 12 Jun 2007 4:29 am Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:54:08 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:53:30 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
31)	Chlordane	10.74	9.62	8490750	9027792	705.360	716.804	
32)	Chlordane {2}	12.01	11.33	3831271	17337006	686.172	842.724	
33)	Chlordane {3}	12.44	11.37	17291092	13176018	846.198	1135.146	#
34)	Chlordane {4}	12.52	11.42	11291136	5452739	782.695	942.026	
35)	Chlordane {5}	12.59	11.48	11220149	12753867	1026.889	812.337	
36)	Chlordane {6}	13.83	12.91	4910235	5192429	588.403	613.775	

AK 6/12/07
JB 6/16/07

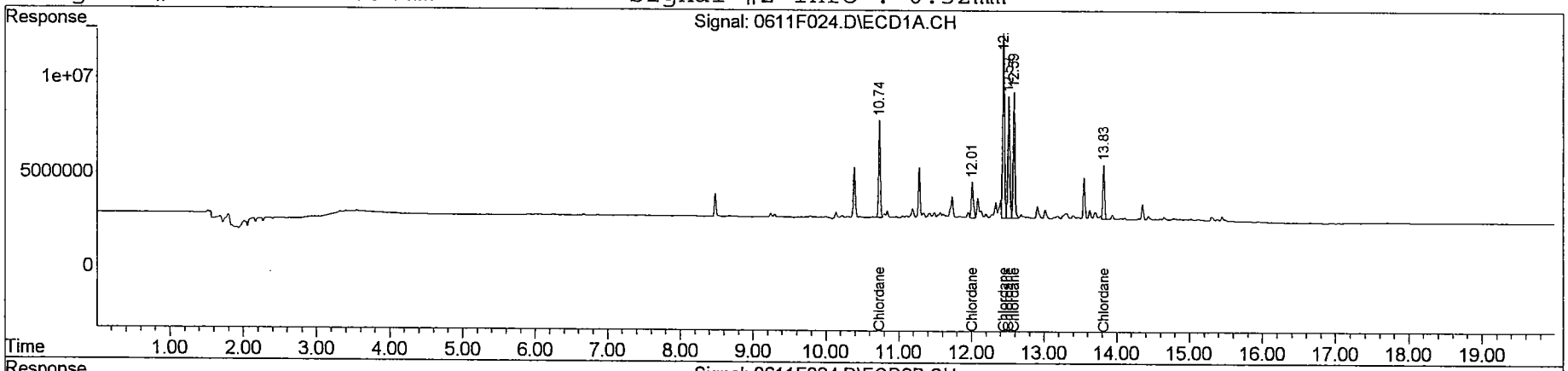
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

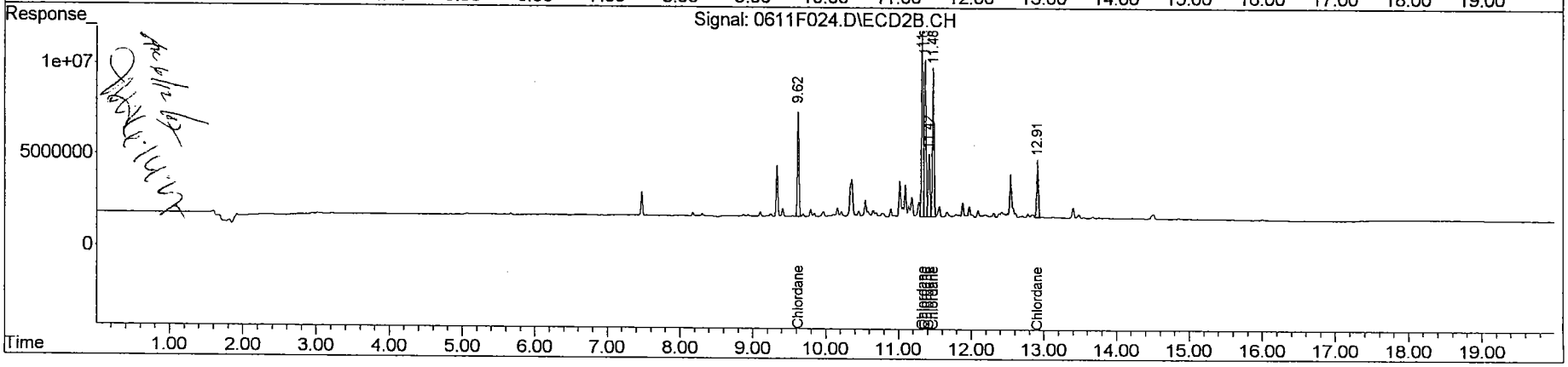
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F024.D\ECD1A.CH Vial: 24
Signal #2 : J:\GC23\DATA\061107\0611F024.D\ECD2B.CH
Acq On : 12 Jun 2007 4:29 am Operator: AKamawal
Sample : CHLOR ICV @ 800ppb GCPS5-76H Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:54 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:53:30 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





964

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:11 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	11.12	10.33	236548	258472	2.054	2.165
38)	Oxychlordane	11.91	10.79	325746	376378	1.780	2.054
40)	cis-Nonachlor	13.55	12.54	517580	406212	2.033m	1.910
42)	trans-Nonachlor	12.59	11.36	350436	395001	1.685m	1.921
44)	Mirex	15.68	14.59	544348	374099	2.487m	2.166m
46)	HCE	4.25	3.76	758875	671198	2.007m	1.641
47)	HCBD	4.99	4.33	635103	562576	2.104	1.826

AC 6/12/07
6/14/07

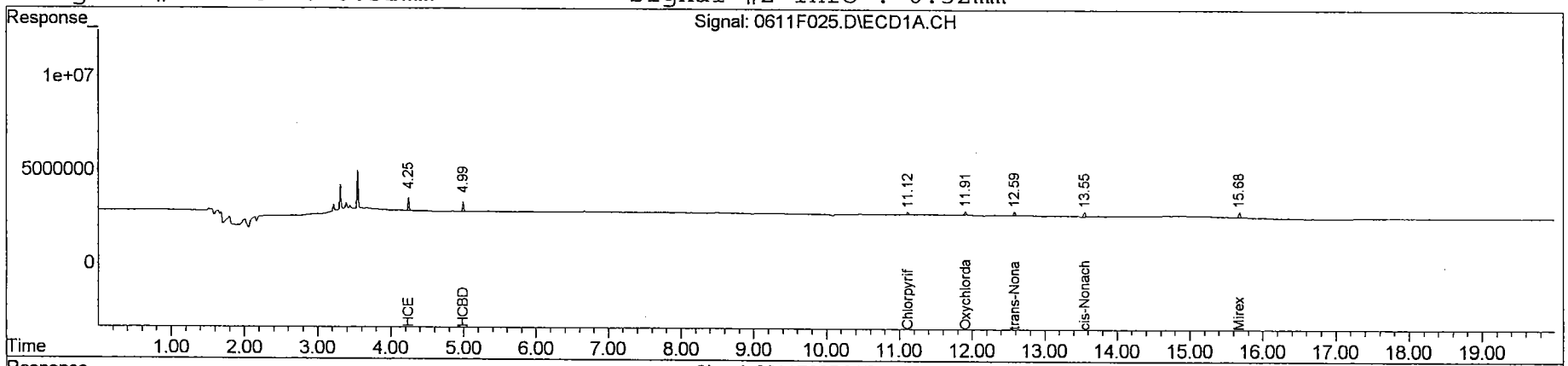
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

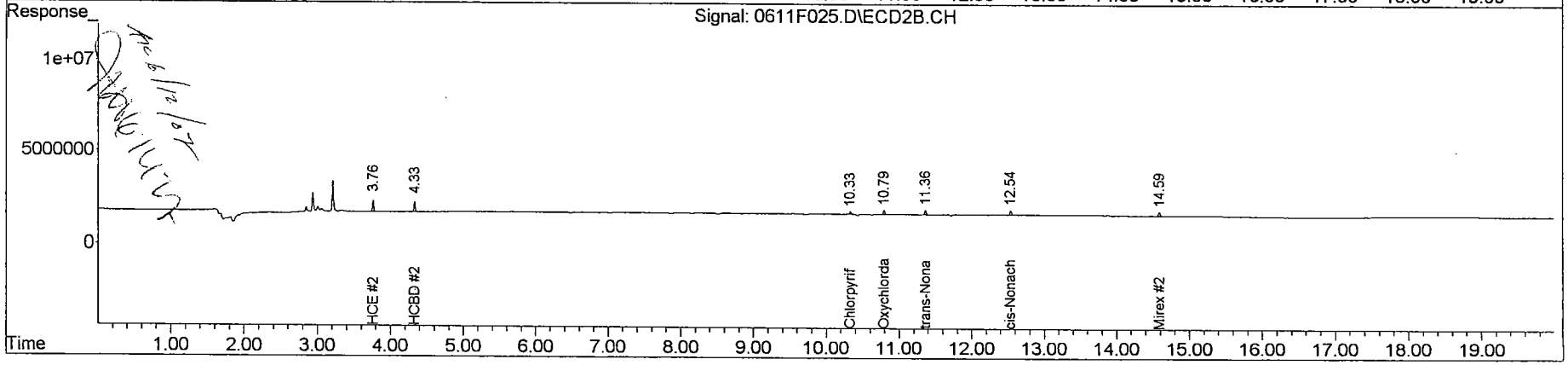
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:01 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

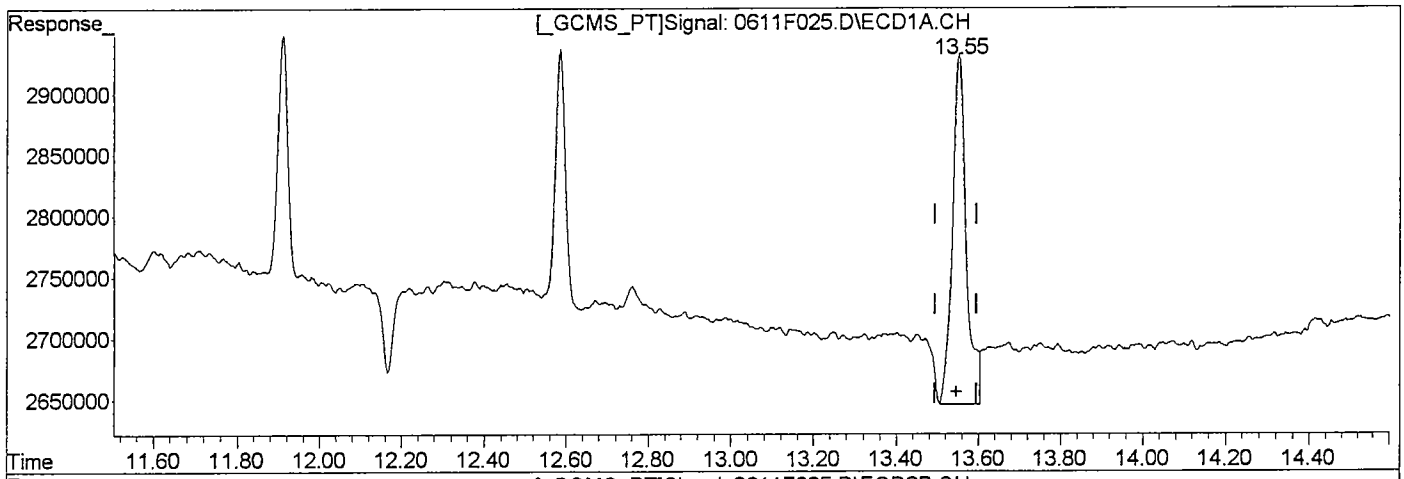


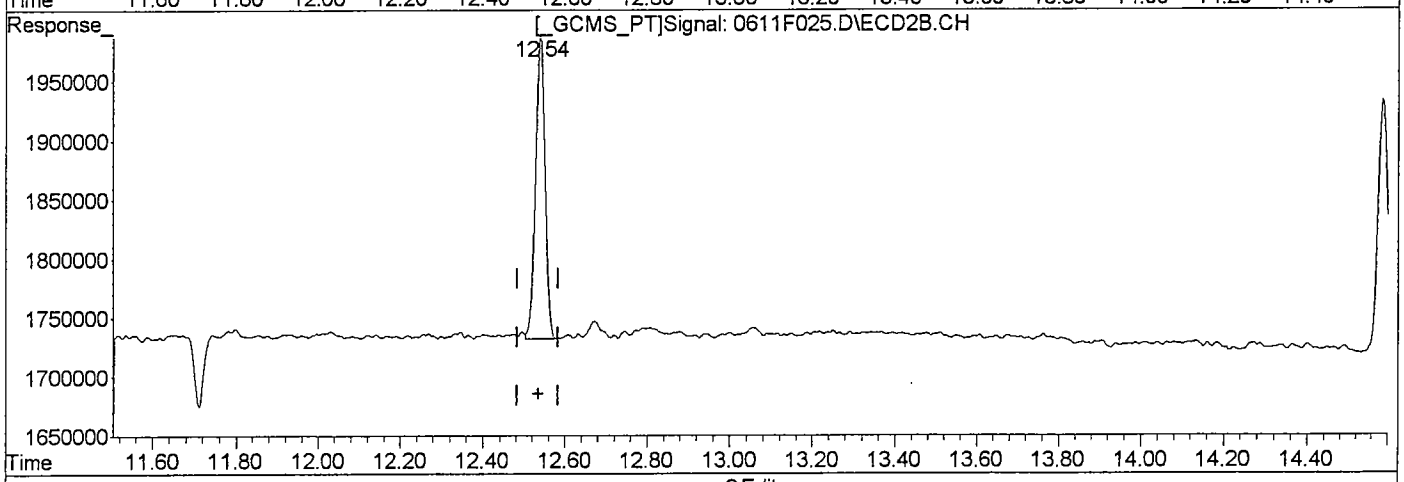


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(40) cis-Nonachlor

13.55min 2.538ug/L

response 646223

(40) cis-Nonachlor #2

12.54min 1.910ug/L

response 406212

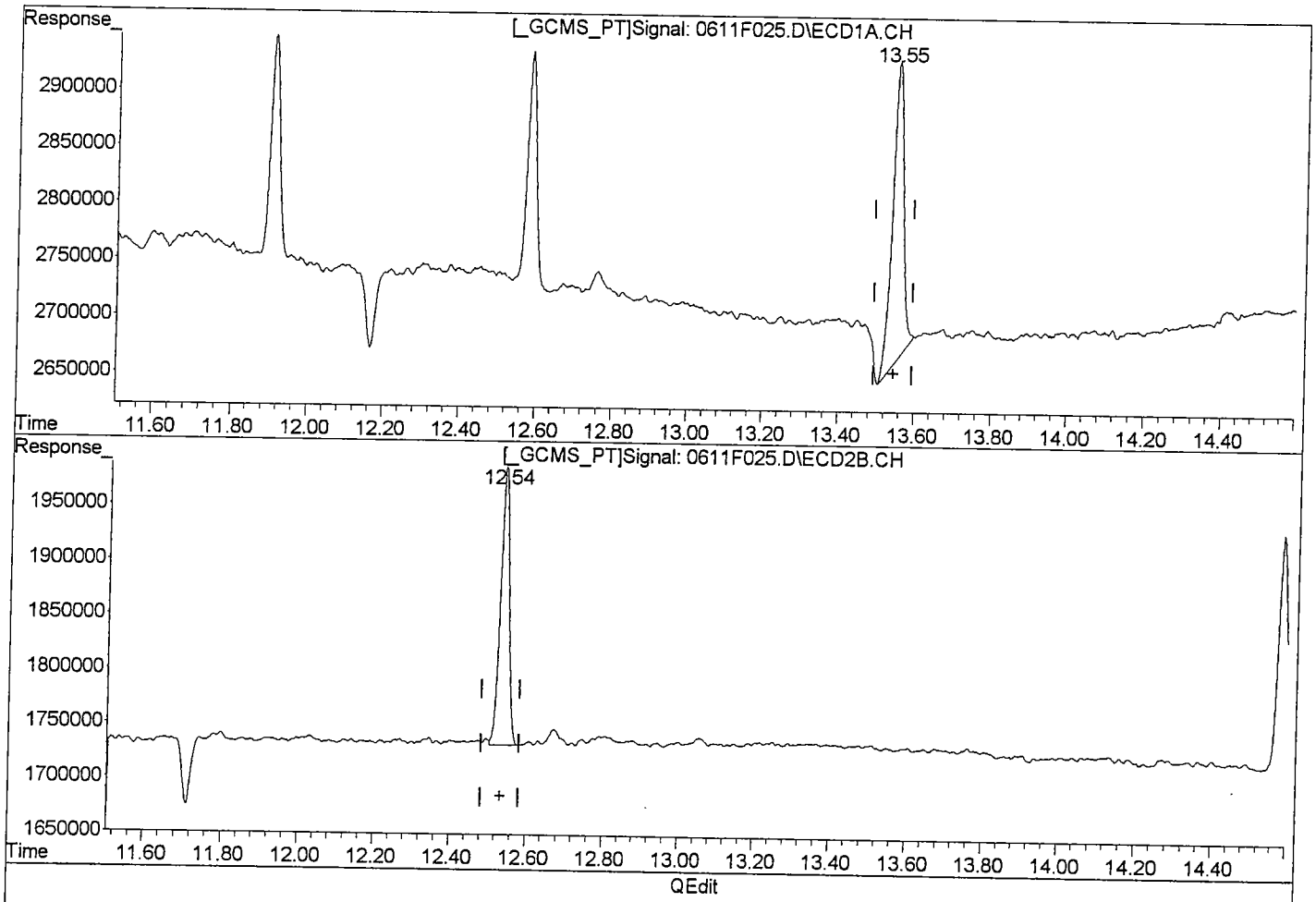
(+) = Expected Retention Time

0611F025.D 061107-8081.M Tue Jun 12 09:00:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(40) cis-Nonachlor

13.55min 2.033ug/L m

response 517580

(40) cis-Nonachlor #2

12.54min 1.910ug/L

response 406212

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

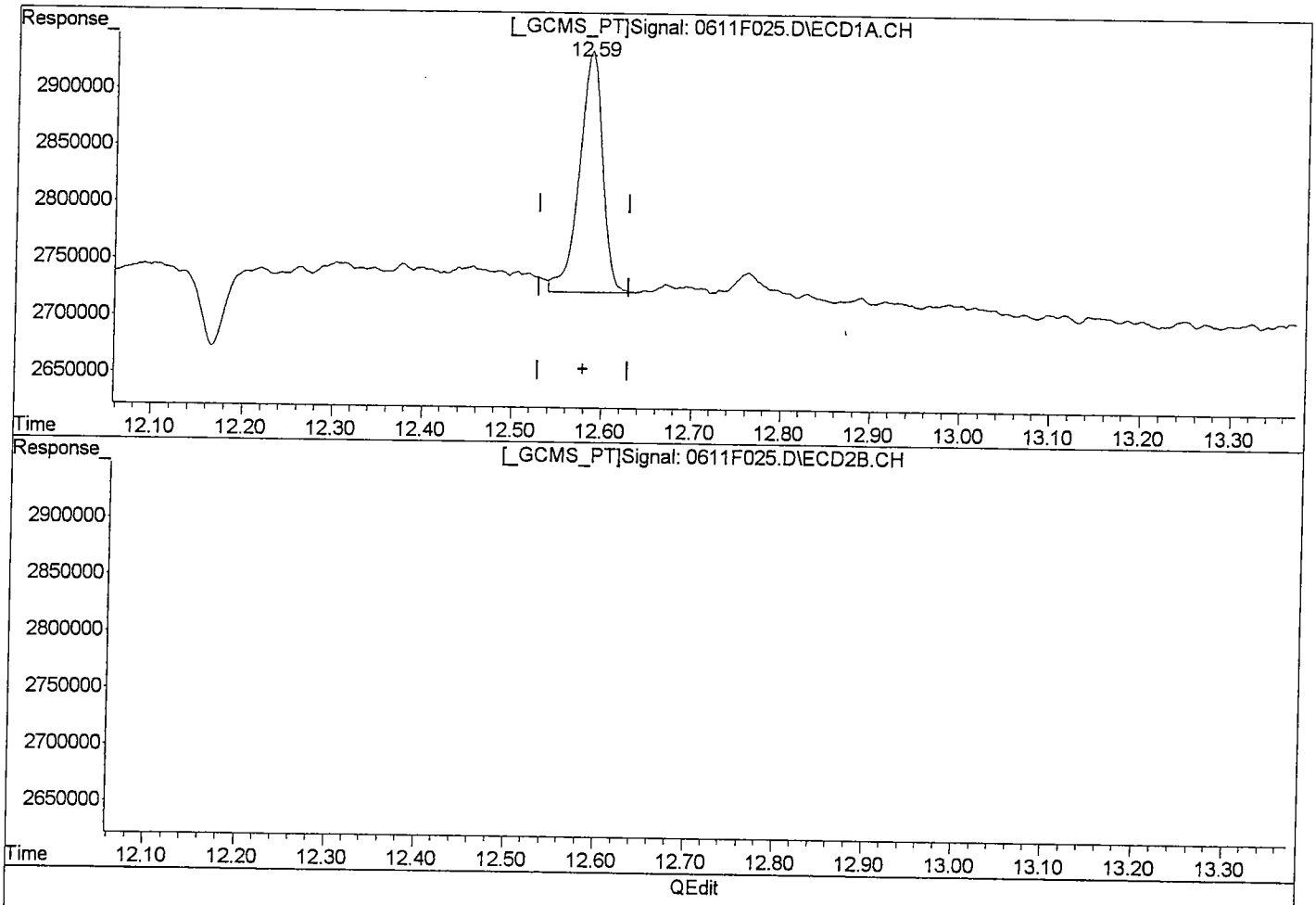
(+) = Expected Retention Time

0611F025.D 061107-8081.M Tue Jun 12 09:00:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(42) trans-Nonachlor

12.59min 1.828ug/L

response 380233

(42) trans-Nonachlor #2

11.36min 1.921ug/L

response 395001

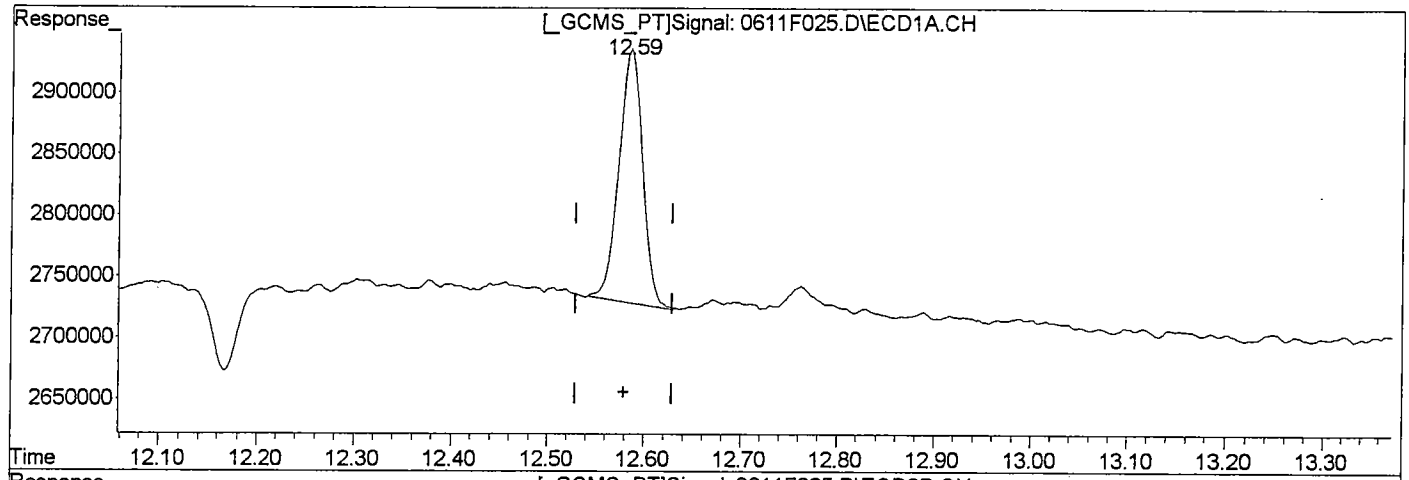
(+) = Expected Retention Time

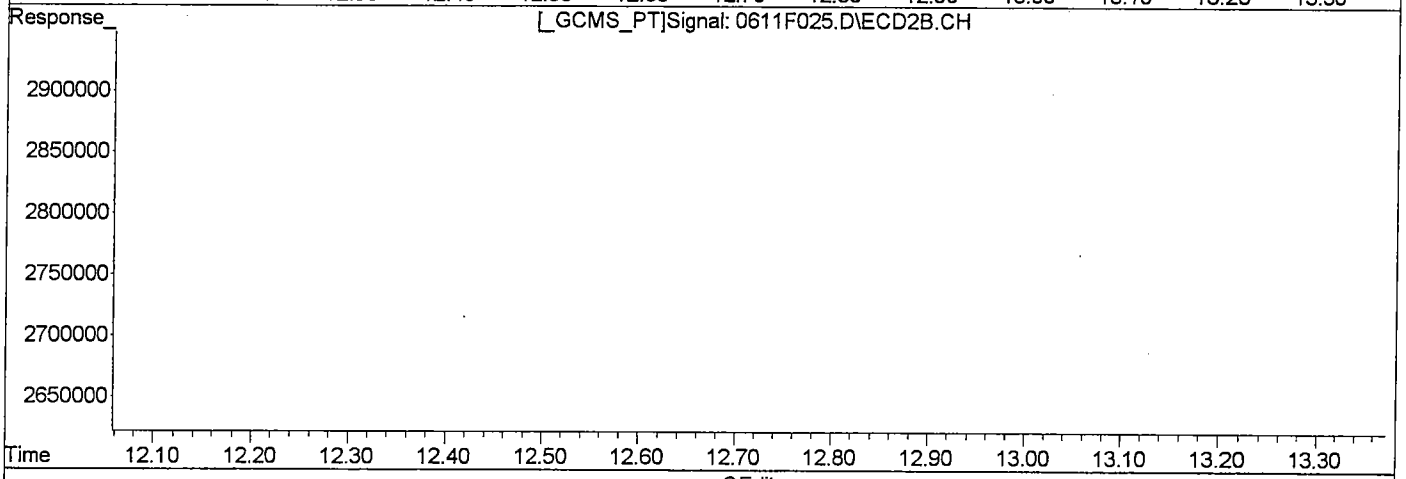
0611F025.D 061107-8081.M Tue Jun 12 09:00:19 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor

12.59min 1.685ug/L m

response 350436

(42) trans-Nonachlor #2

11.36min 1.921ug/L

response 395001

After
Initials

JUN 12 2007

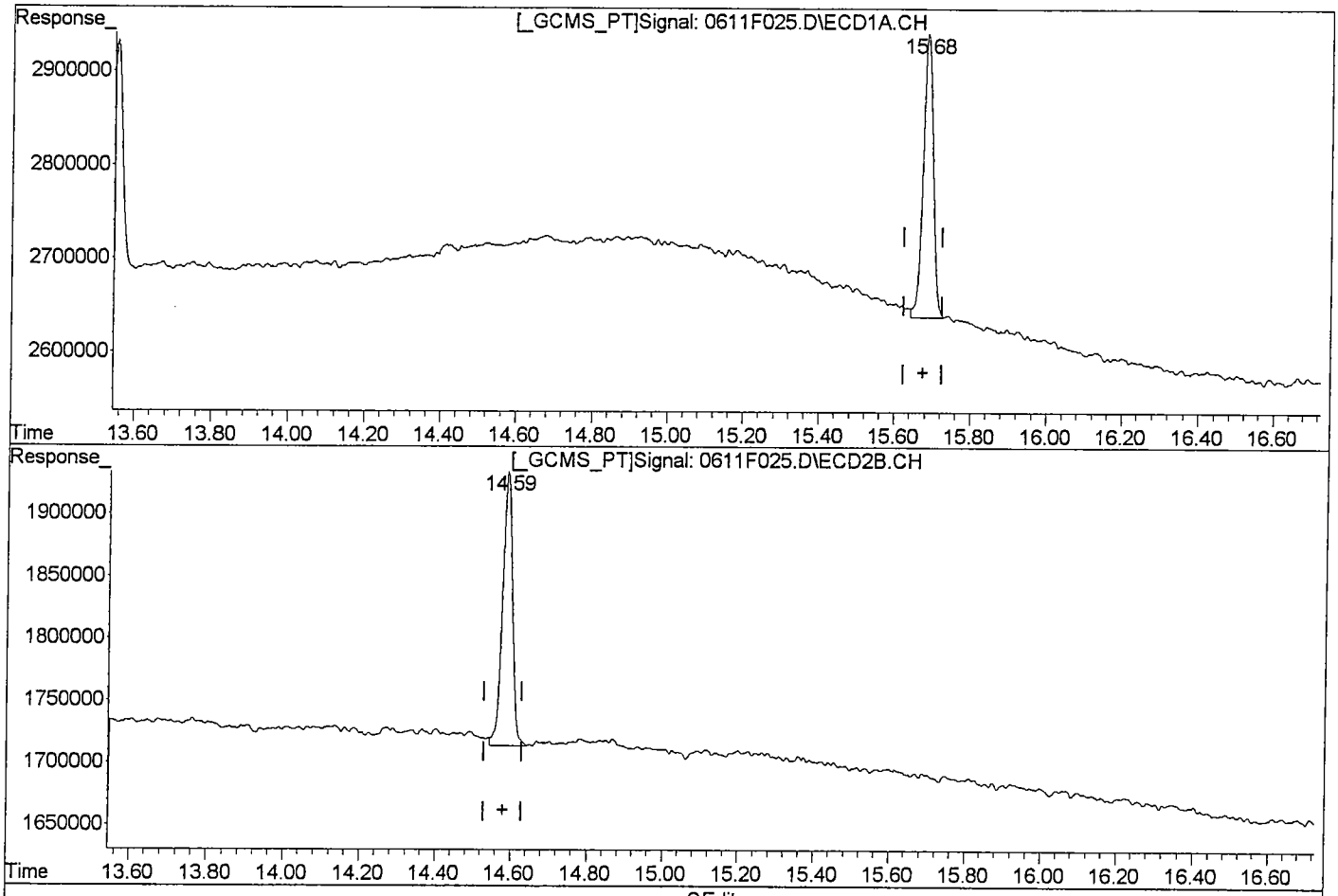
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F025.D 061107-8081.M Tue Jun 12 09:00:25 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(44) Mirex

15.68min 2.563ug/L

response 561014

(44) Mirex #2

14.59min 2.275ug/L

response 392790

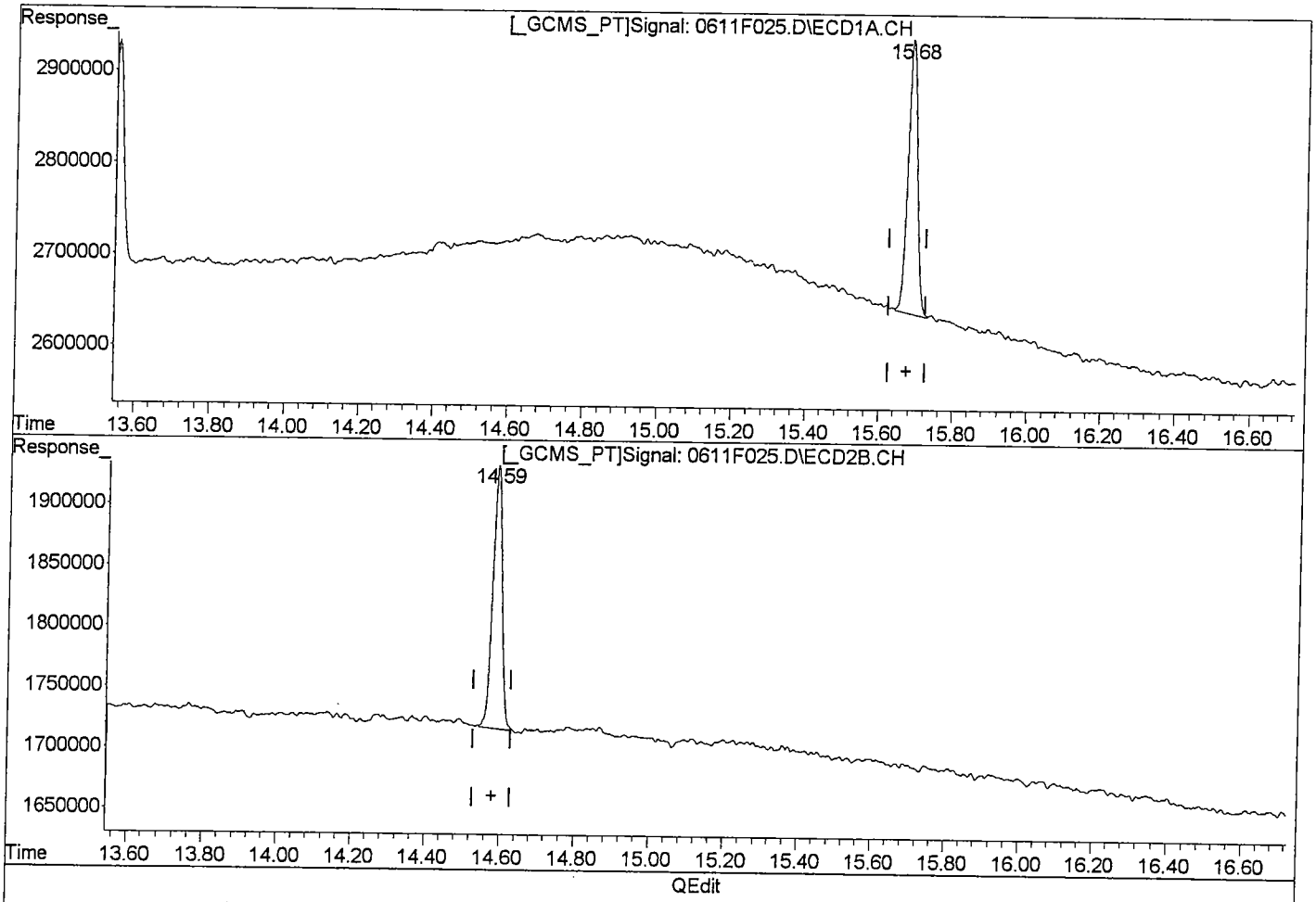
(+) = Expected Retention Time

0611F025.D 061107-8081.M Tue Jun 12 09:00:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(44) Mirex

15.68min 2.487ug/L m

response 544348

(44) Mirex #2

14.59min 2.166ug/L m

response 374099

After
Initials

JUN 12 2007

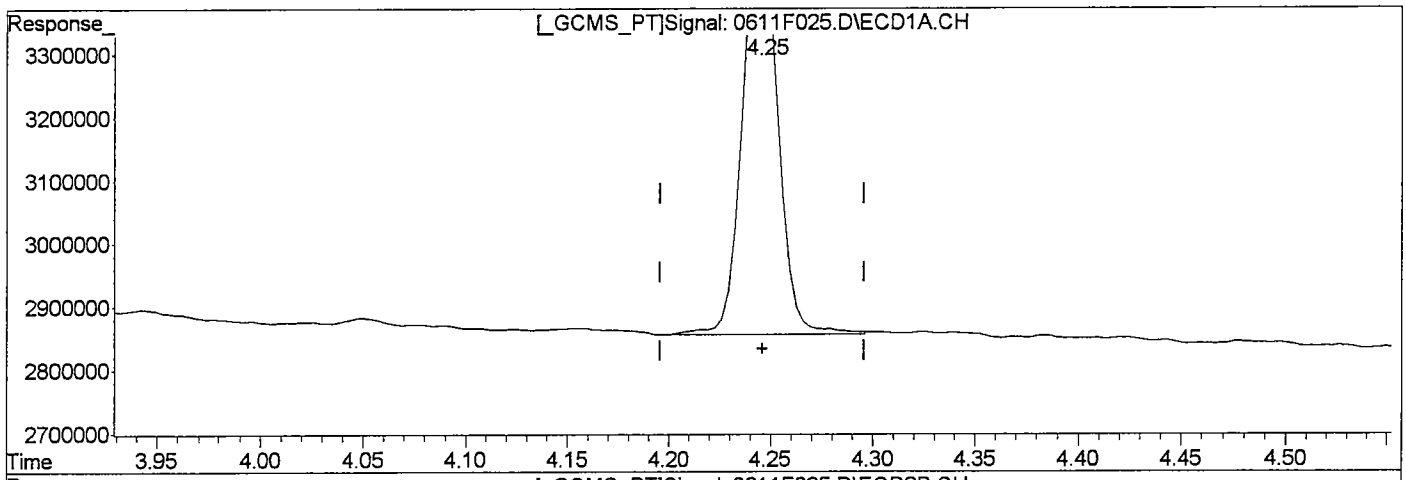
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

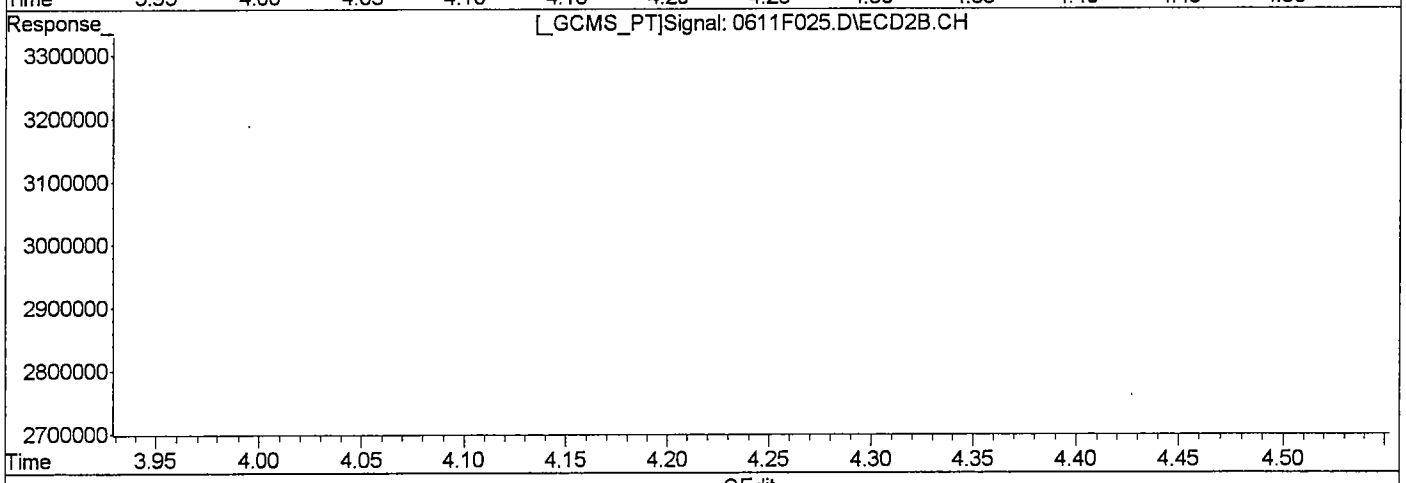
(+) = Expected Retention Time
0611F025.D 061107-8081.M Tue Jun 12 09:00:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(46) HCE

4.25min 2.077ug/L

response 785195

(46) HCE #2

3.76min 1.641ug/L

response 671198

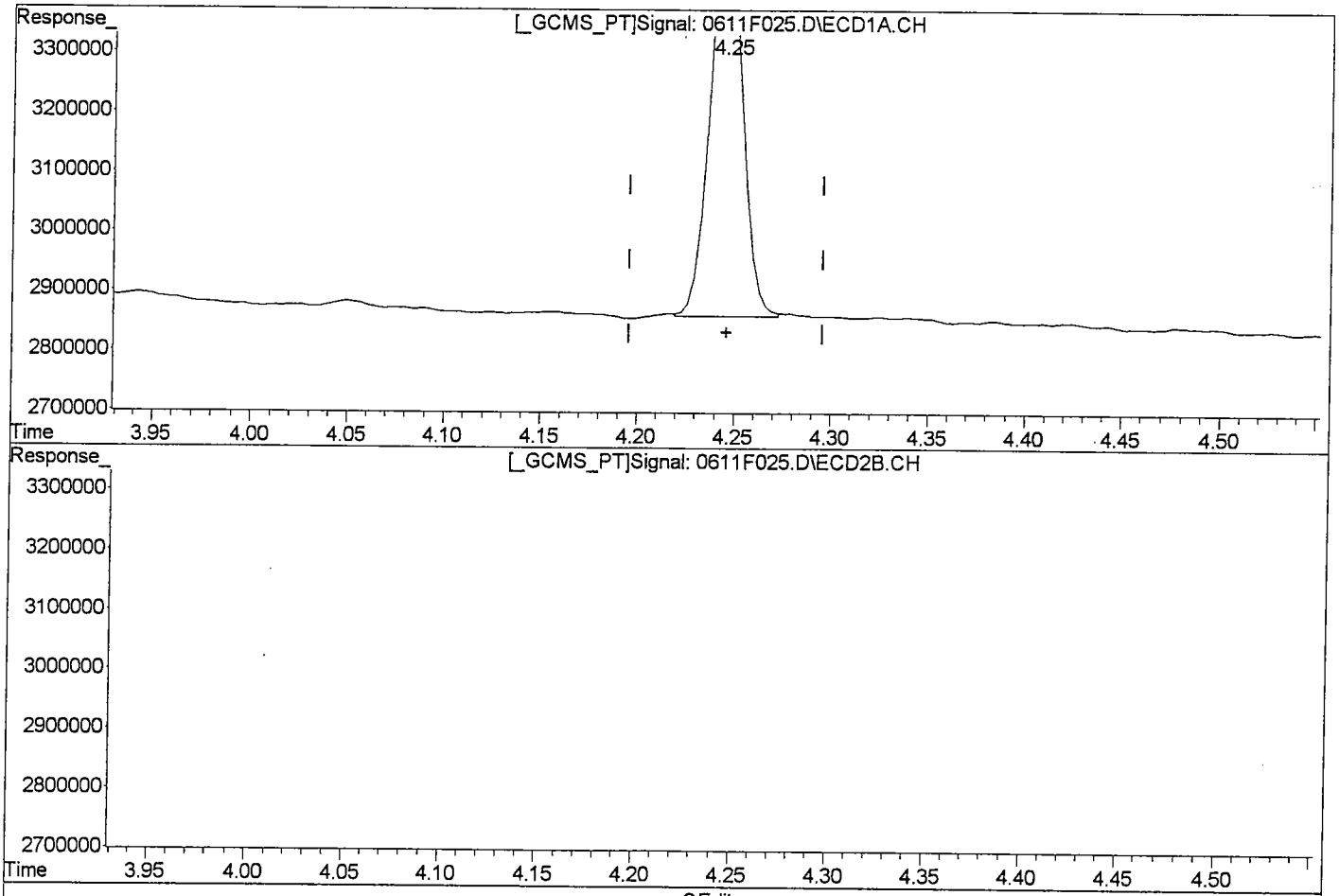
(+) = Expected Retention Time

0611F025.D 061107-8081.M Tue Jun 12 09:00:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F025.D\ECD1A.CH Vial: 25
Signal #2 : J:\GC23\DATA\061107\0611F025.D\ECD2B.CH
Acq On : 12 Jun 2007 4:56 am Operator: AKamawal
Sample : MISC @ 2ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(46) HCE

4.25min 2.007ug/L m

response 758875

(46) HCE #2

3.76min 1.641ug/L

response 671198

After
initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F025.D 061107-8081.M Tue Jun 12 09:01:06 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:12 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	11.11	10.32	563752	580645	4.896	4.863
38)	Oxychlordane	11.90	10.79	795952	913053	4.348m	4.982
40)	cis-Nonachlor	13.55	12.53	976979	1025926	3.838	4.825 #
42)	trans-Nonachlor	12.58	11.36	832315	982073	4.001m	4.777m
44)	Mirex	15.68	14.58	1284447	927791	5.868m	5.373
46)	HCE	4.24	3.76	1829731	1707909	4.840m	4.175
47)	HCBD	4.99	4.33	1481261	1398635	4.906	4.539

AK 6/12/07

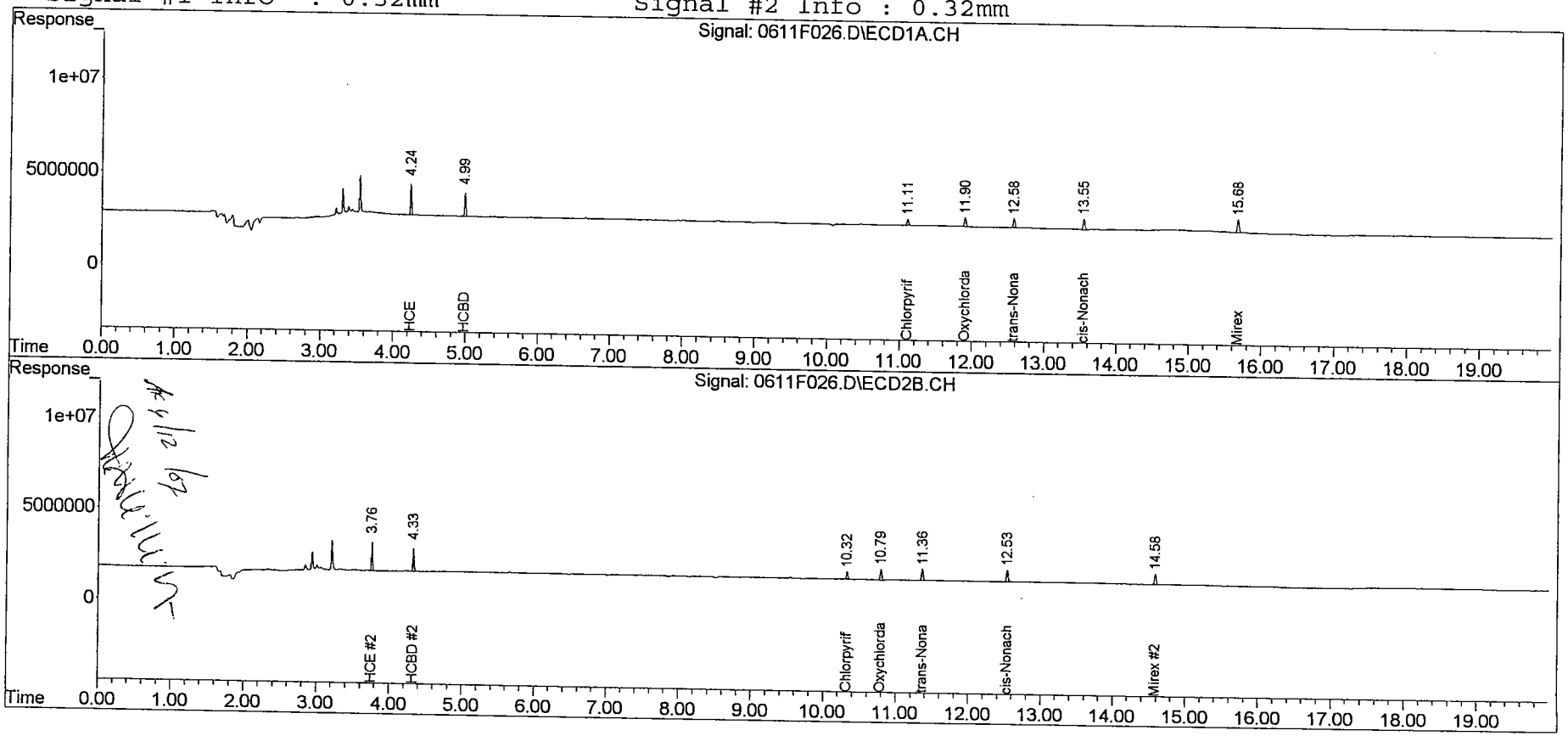
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:02 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

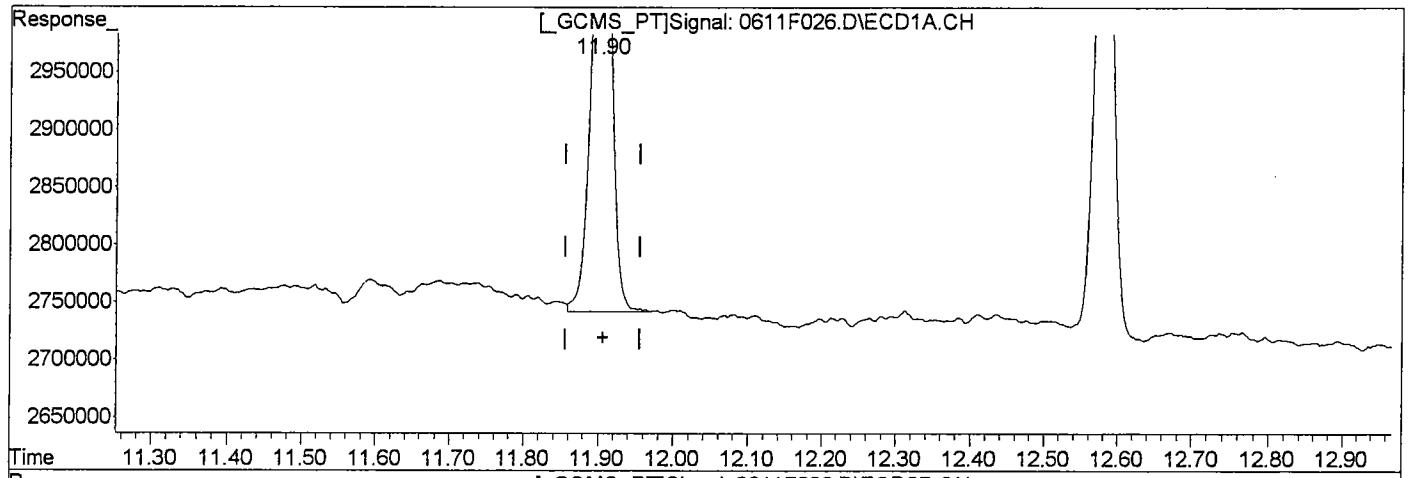


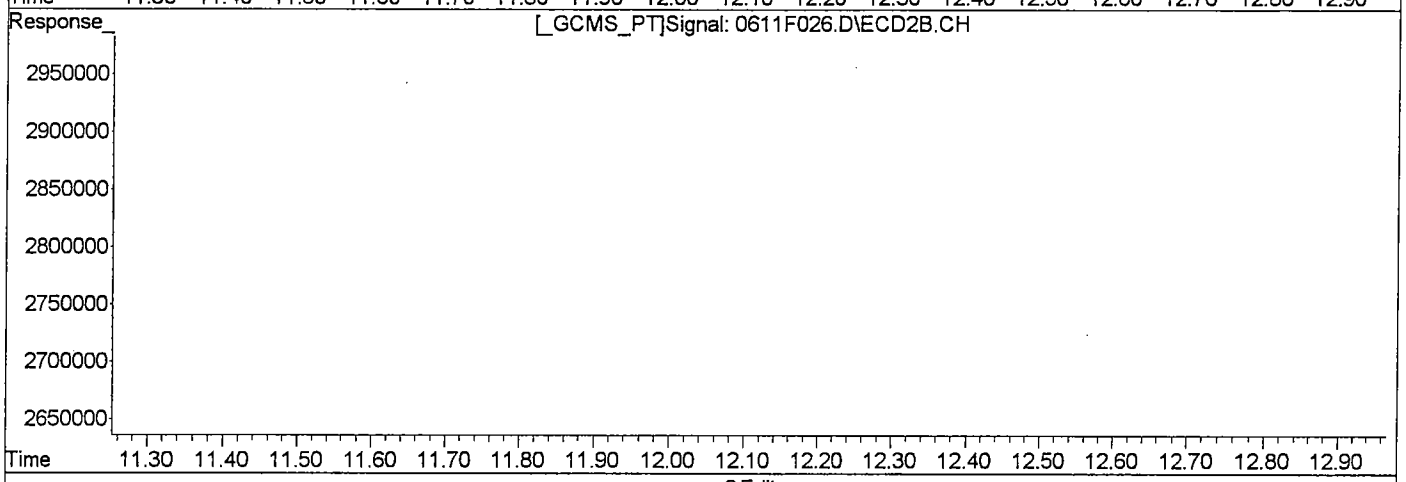
0611F026.D 061107-8081.M Tue Jun 12 10:50:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(38) Oxychlordane

11.90min 4.465ug/L

response 817337

(38) Oxychlordane #2

10.79min 4.982ug/L

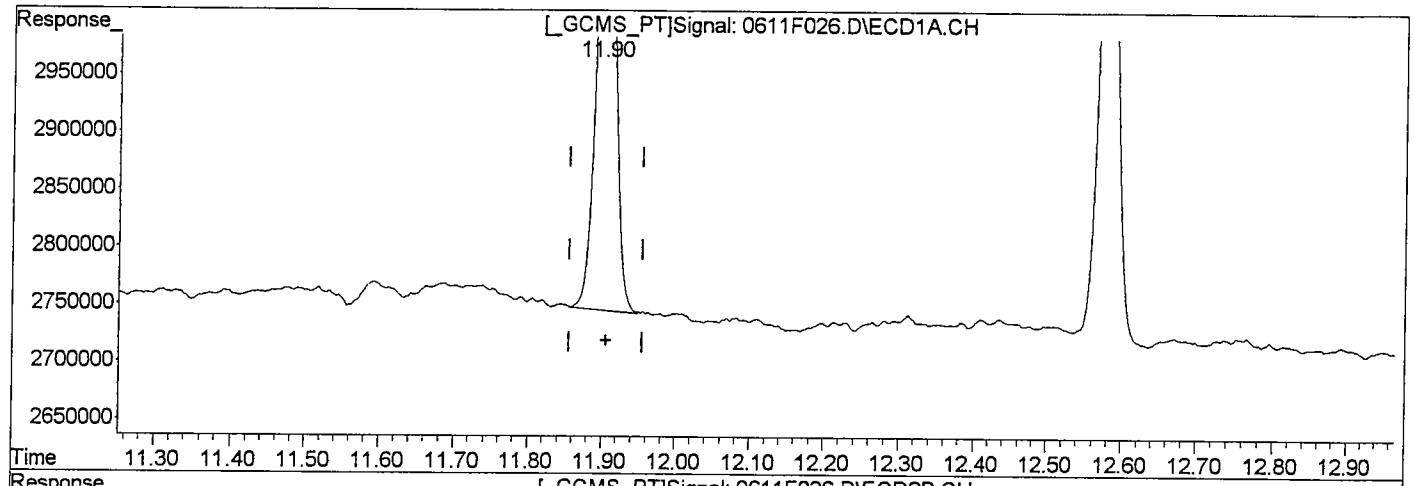
response 913053

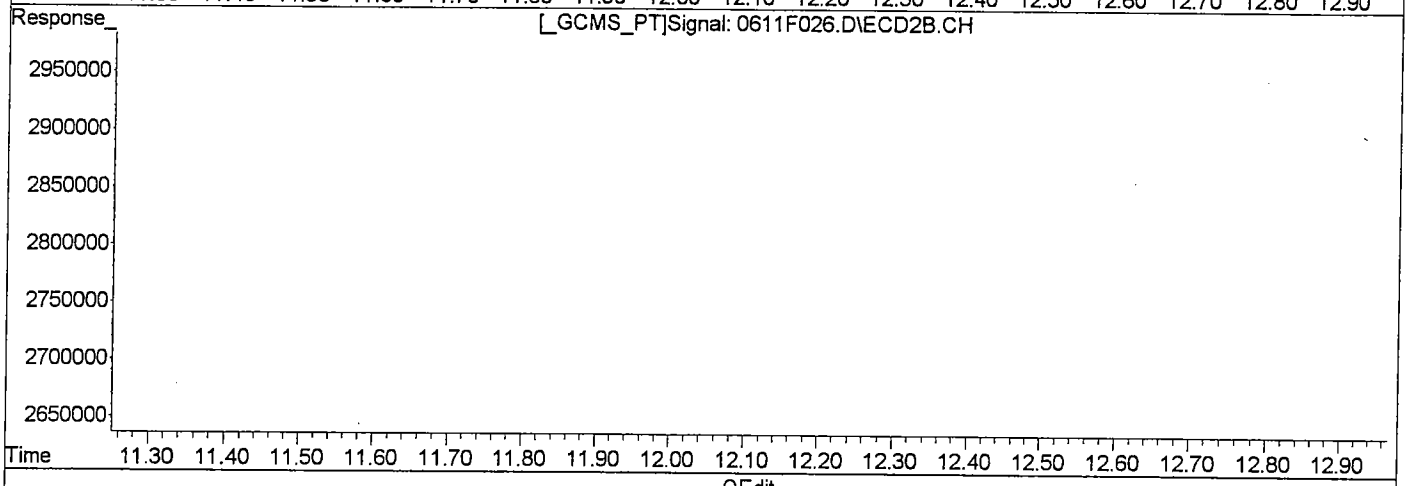
(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:01:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(38) Oxychlordane

11.90min 4.348ug/L m

response 795952

(38) Oxychlordane #2

10.79min 4.982ug/L

response 913053

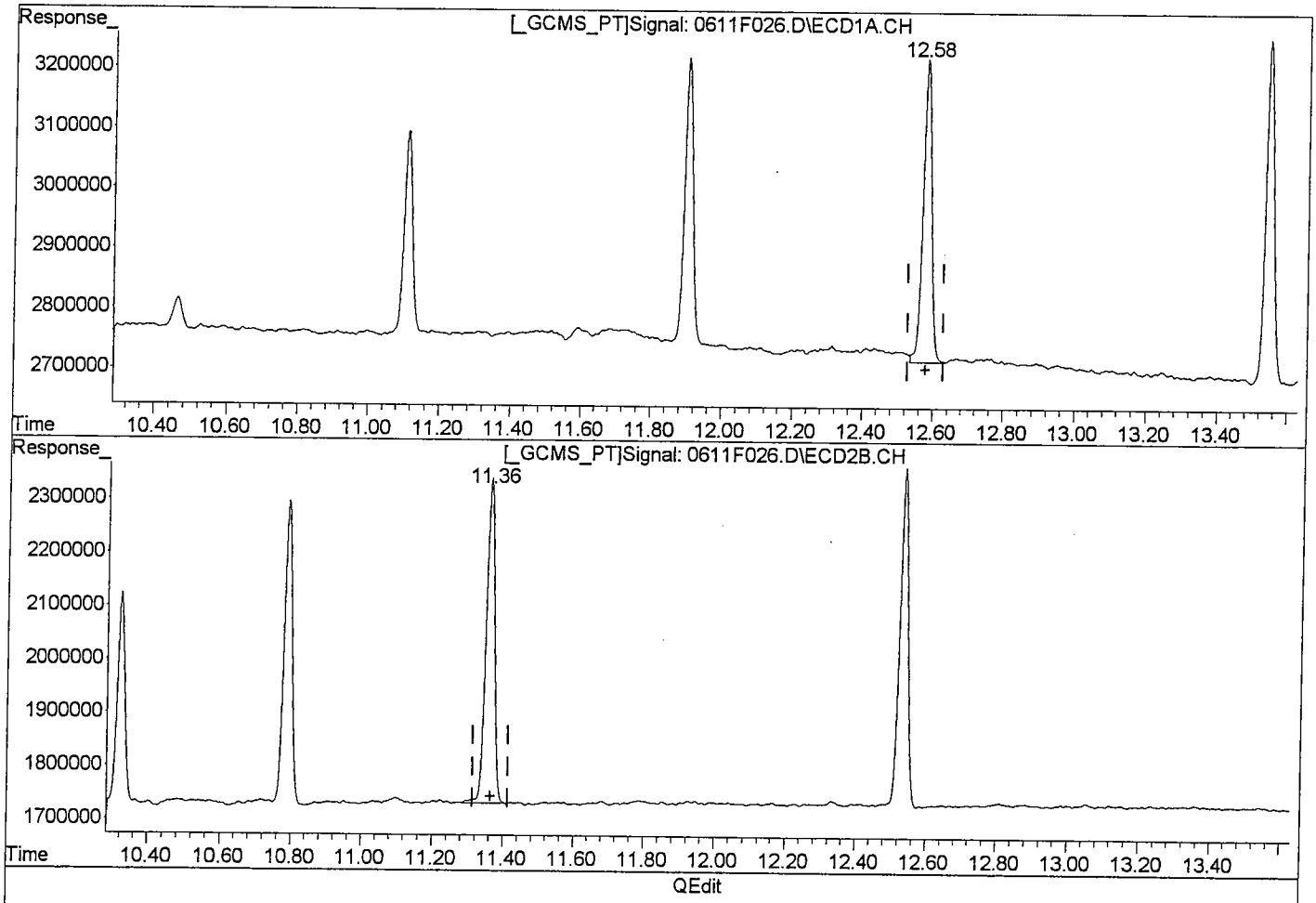
After
Initials
JUN 12 2007
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other

(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:01:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration



(42) trans-Nonachlor

12.58min 4.172ug/L

response 867995

(42) trans-Nonachlor #2

11.36min 4.901ug/L

response 1007492

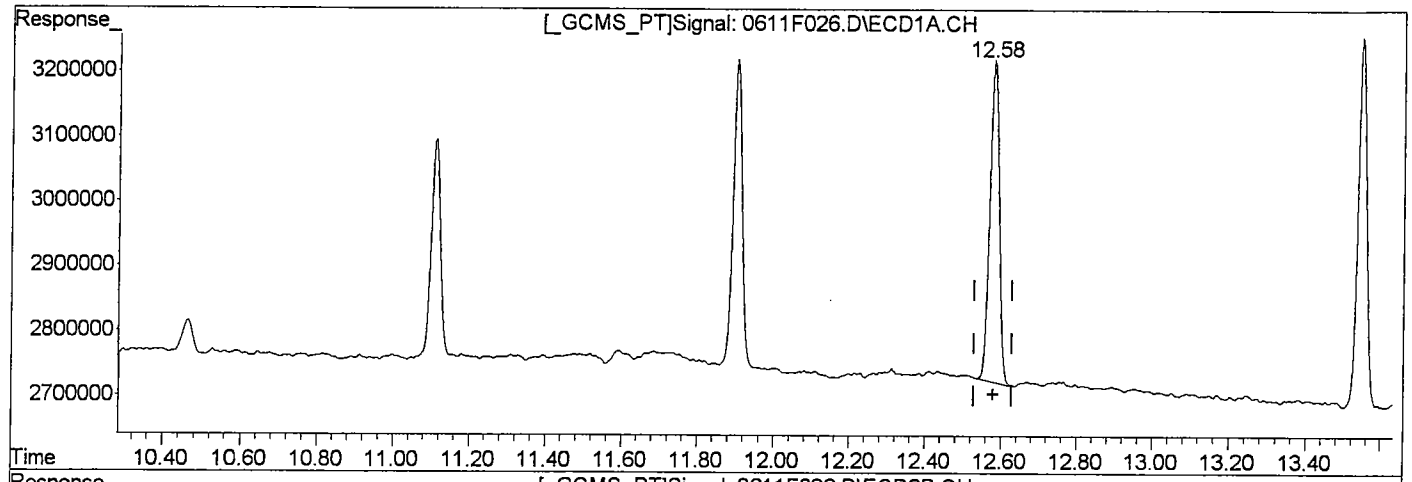
(+) = Expected Retention Time

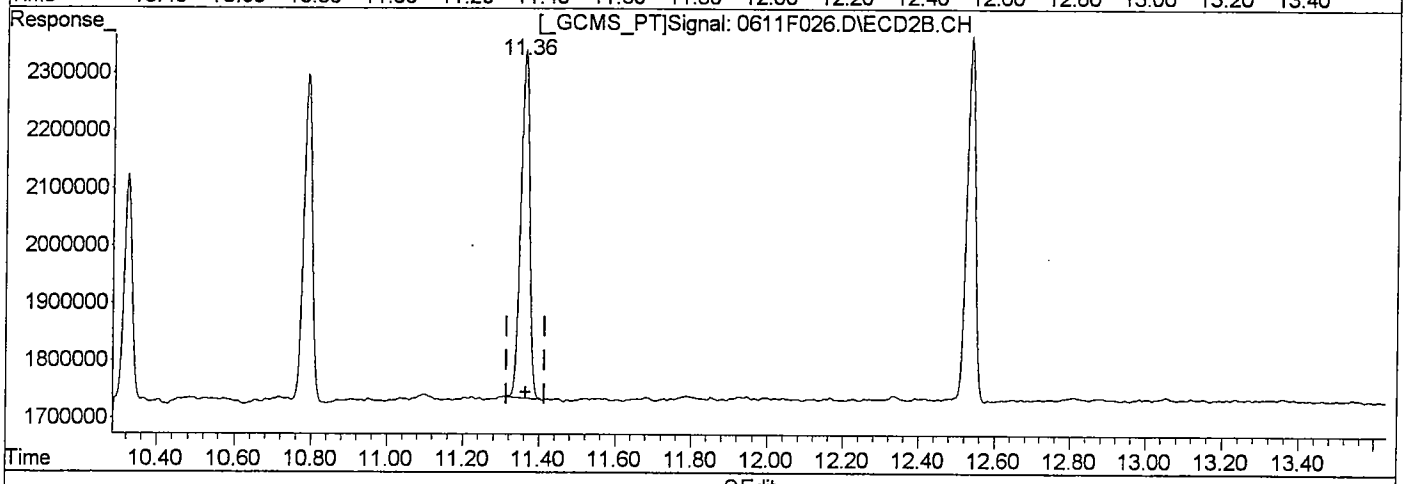
0611F026.D 061107-8081.M Tue Jun 12 09:02:10 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(42) trans-Nonachlor

12.58min 4.001ug/L m

response 832315

(42) trans-Nonachlor #2

11.36min 4.777ug/L m

response 982073

After

Initials

JUN 12 2007

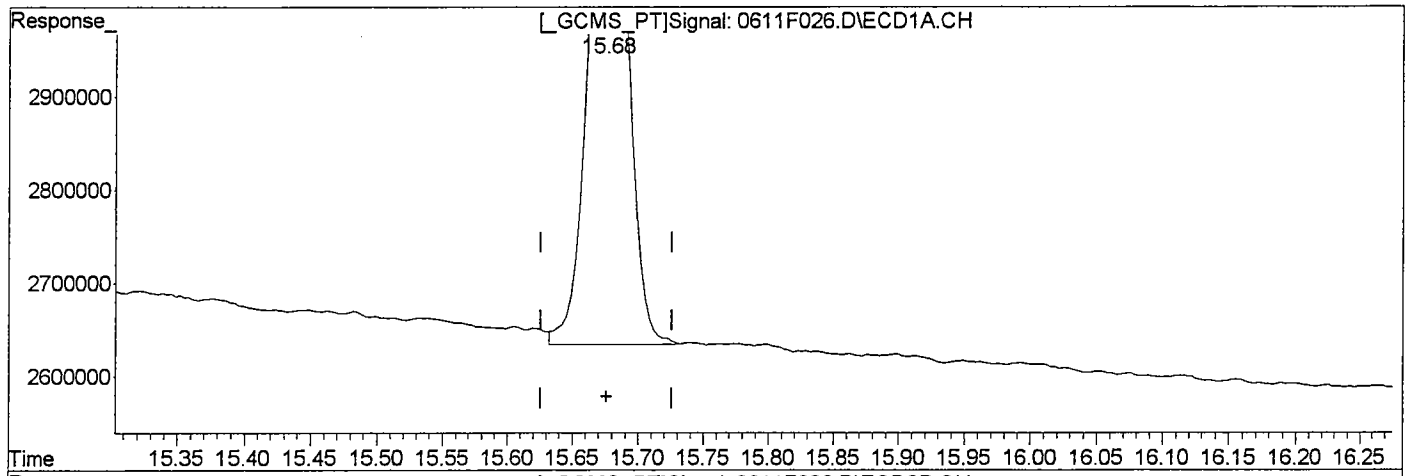
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

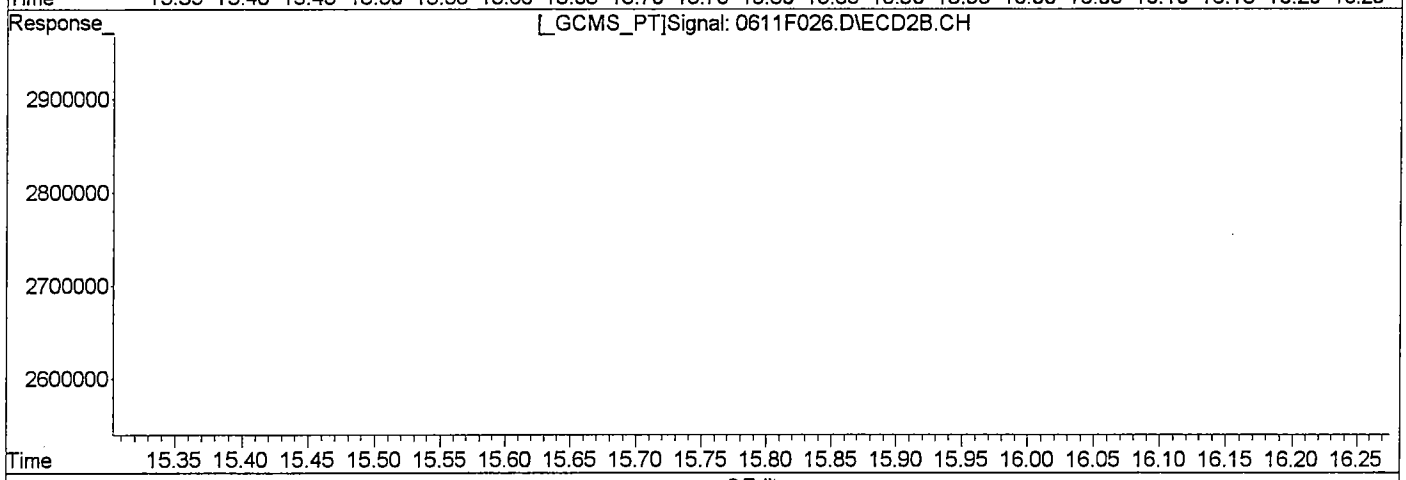
(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:02:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(44) Mirex

15.68min 6.022ug/L

response 1318013

(44) Mirex #2

14.58min 5.373ug/L

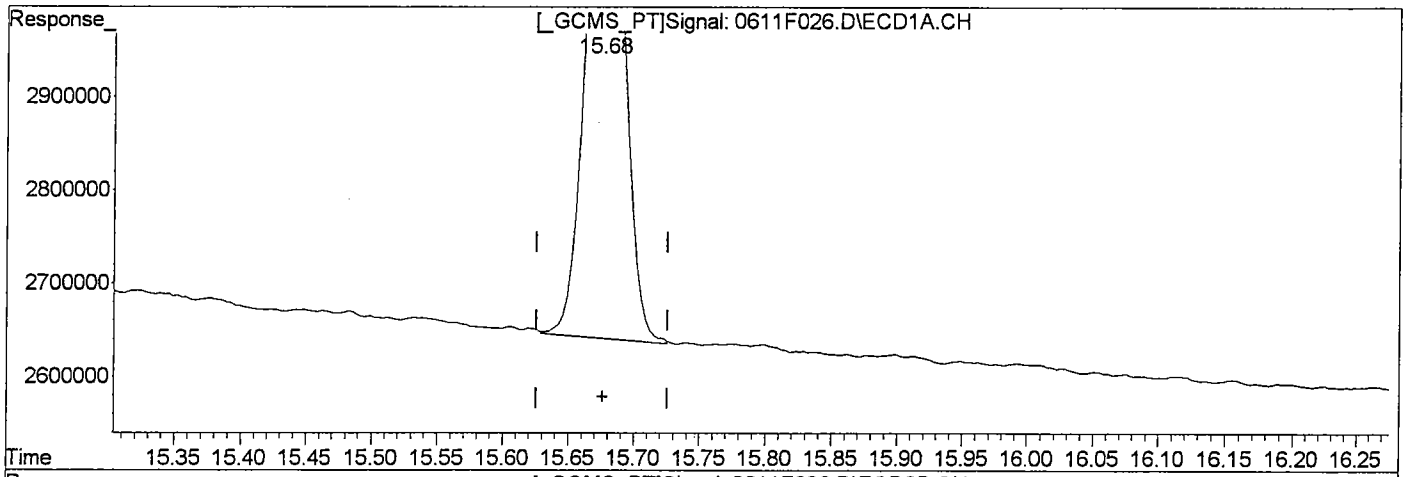
response 927791

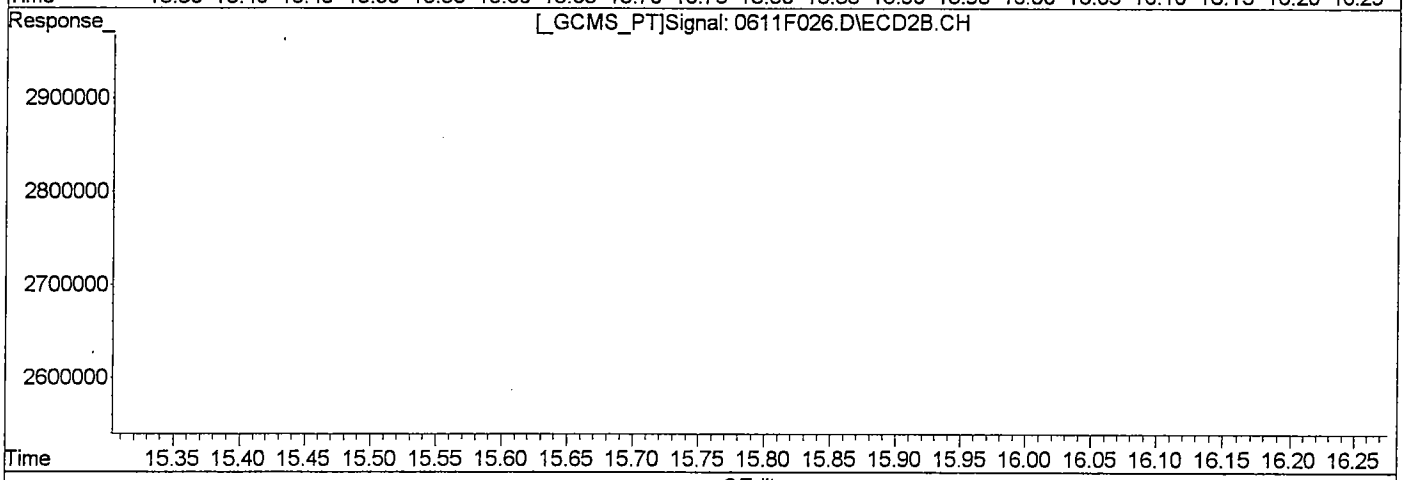
(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:02:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(44) Mirex

15.68min 5.868ug/L m

response 1284447

(44) Mirex #2

14.58min 5.373ug/L

response 927791

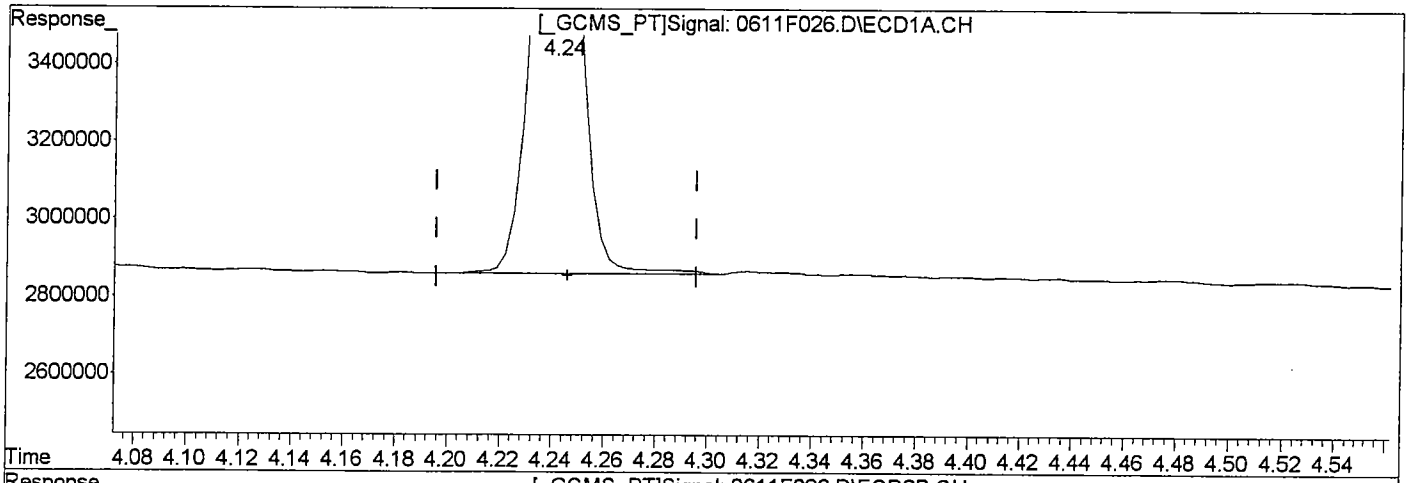
After
Initials
JUN 12 2007
☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder incorrect
☐ Other

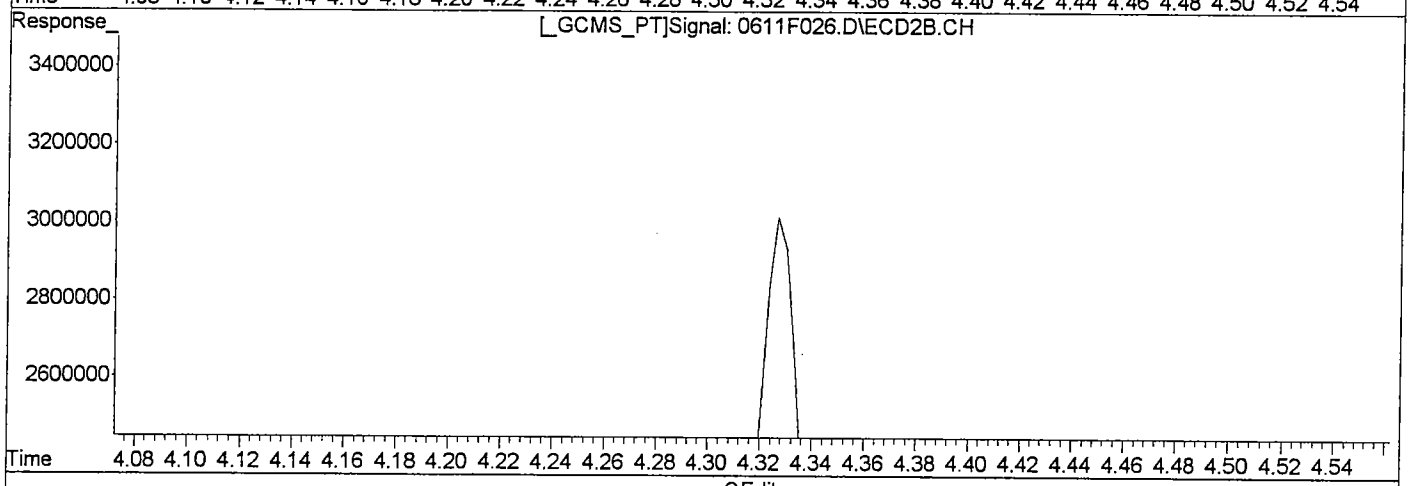
(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:02:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





(46) HCE

4.24min 4.901ug/L

response 1852985

(46) HCE #2

3.76min 4.175ug/L

response 1707909

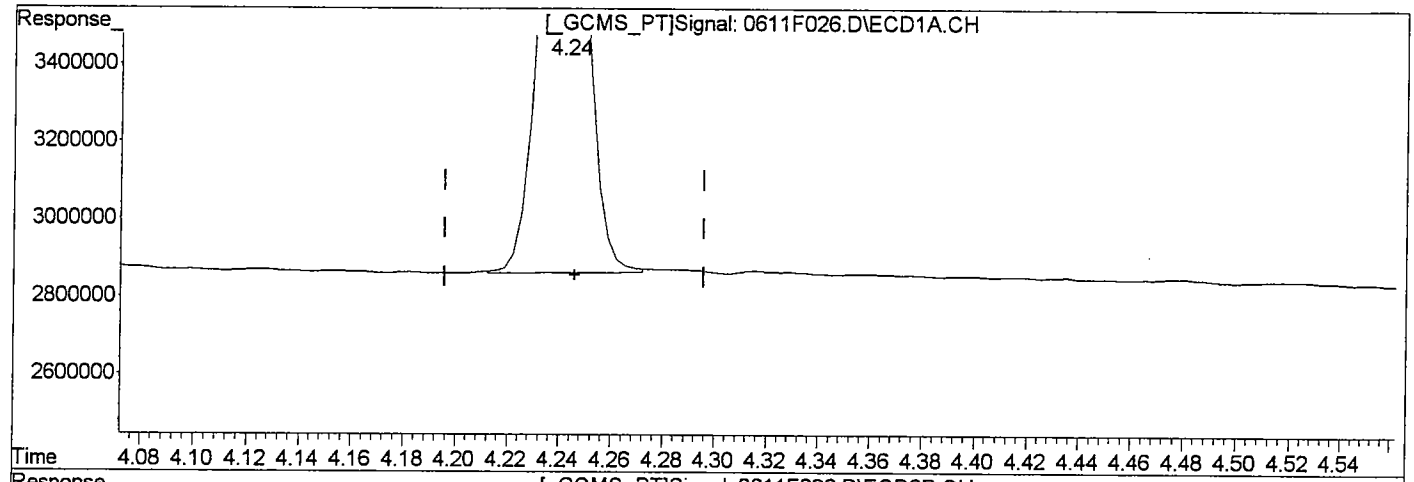
(+) = Expected Retention Time

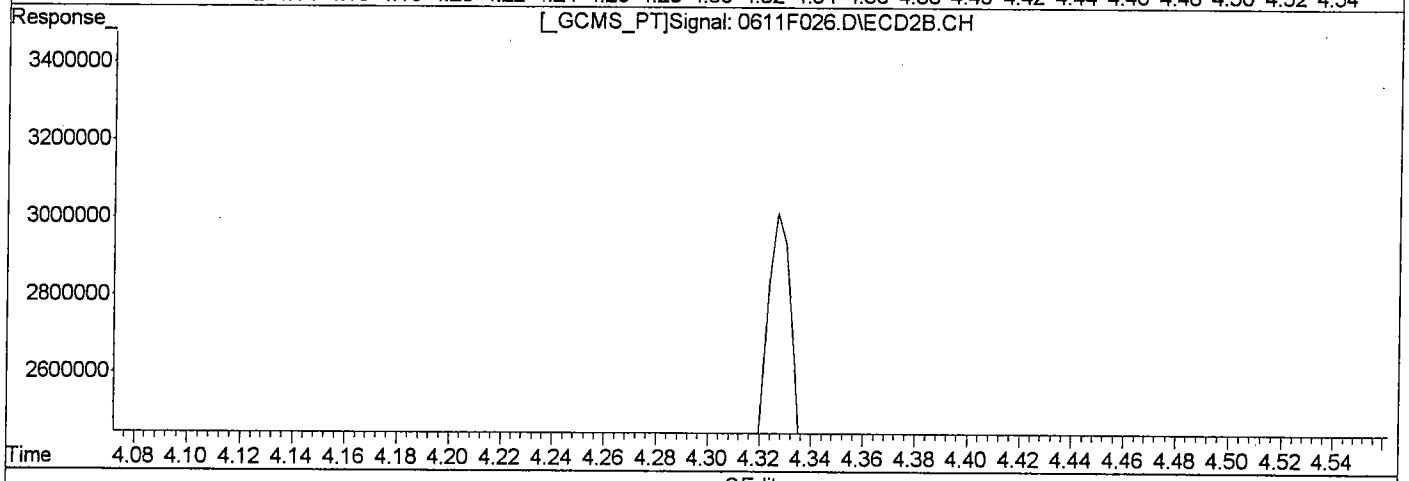
0611F026.D 061107-8081.M Tue Jun 12 09:02:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F026.D\ECD1A.CH Vial: 26
Signal #2 : J:\GC23\DATA\061107\0611F026.D\ECD2B.CH
Acq On : 12 Jun 2007 5:22 am Operator: AKamawal
Sample : MISC @ 5ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 8:56 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration





QEdit

(46) HCE

4.24min 4.840ug/L m

response 1829731

(46) HCE #2

3.76min 4.175ug/L

response 1707909

After
Initials
JUN 12 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

(+) = Expected Retention Time
0611F026.D 061107-8081.M Tue Jun 12 09:02:48 2007

Signal #1 : J:\GC23\DATA\061107\0611F027.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061107\0611F027.D\ECD2B.CH
Acq On : 12 Jun 2007 5:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:13 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
37)	Chlorpyrifos	11.11	10.33	2282711	2482865	19.824	20.794	
38)	Oxychlordane	11.90	10.79	3293652	3879012	17.993	21.164	
40)	cis-Nonachlor	13.55	12.54	4177583	4446795	16.410	20.913	#
42)	trans-Nonachlor	12.58	11.36	3475458	4314866	16.707	20.988	#
44)	Mirex	15.68	14.59	5223925	3814649	23.867	22.090	
46)	HCE	4.24	3.76	8424535	8201451	22.283	20.047	
47)	HCBD	4.99	4.33	6420463	6370490	21.266	20.676	

AK 6/12/07

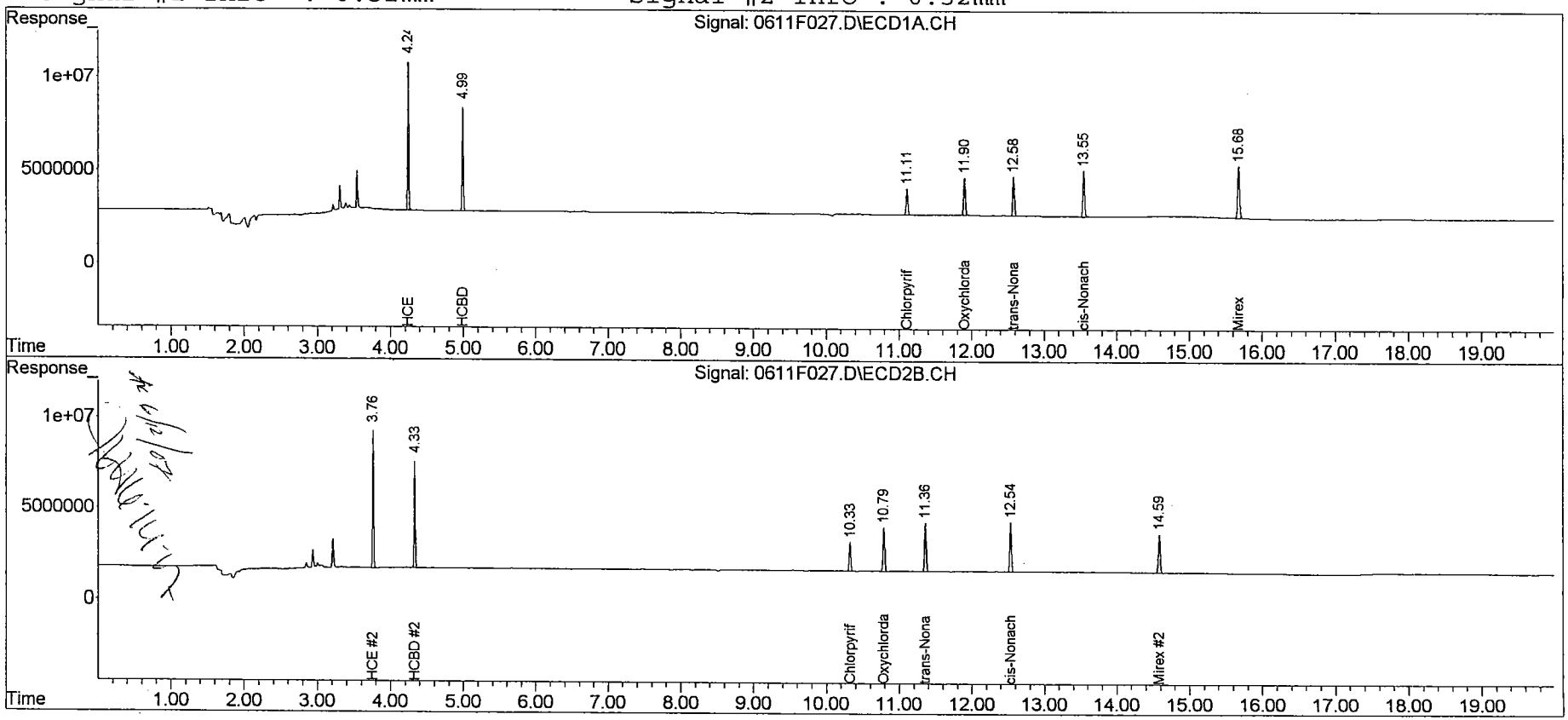
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F027.D\ECD1A.CH Vial: 27
Signal #2 : J:\GC23\DATA\061107\0611F027.D\ECD2B.CH
Acq On : 12 Jun 2007 5:49 am Operator: AKamawal
Sample : MISC @ 20ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:03 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



986

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F028.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\061107\0611F028.D\ECD2B.CH
Acq On : 12 Jun 2007 6:15 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:14 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
37)	Chlorpyrifos	11.12	10.33	5212934	5675900	45.271	47.536	
38)	Oxychlordane	11.91	10.79	7667460	9104132	41.887	49.674	
40)	cis-Nonachlor	13.55	12.53	9670492	10542094	37.987	49.580	#
42)	trans-Nonachlor	12.58	11.36	8062889	10230488	38.759	49.763	#
44)	Mirex	15.68	14.58	11438945	8419371	52.261	48.754	
46)	HCE	4.25	3.76	21360110	21217569	56.497	51.863	
47)	HCBD	5.00	4.33	15709816	15752741	52.035	51.127	

AC 6/12/07

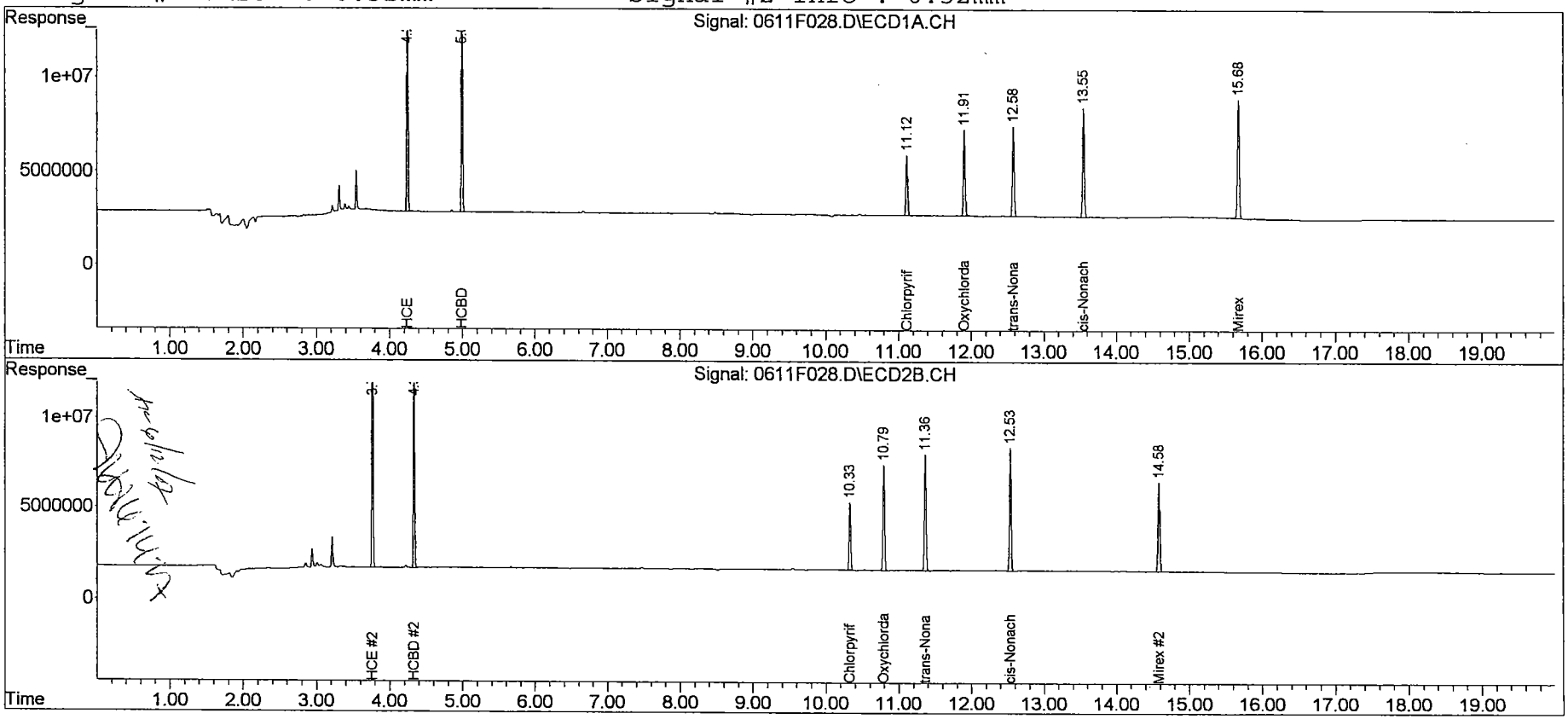
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F028.D\ECD1A.CH Vial: 28
Signal #2 : J:\GC23\DATA\061107\0611F028.D\ECD2B.CH
Acq On : 12 Jun 2007 6:15 am Operator: AKamawal
Sample : MISC @ 50ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:03 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



988

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F029.D\ECD1A.CH Vial: 29
Signal #2 : J:\GC23\DATA\061107\0611F029.D\ECD2B.CH
Acq On : 12 Jun 2007 6:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:15 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
37)	Chlorpyrifos	11.11	10.32	9628080	10612894	83.614	88.883	
38)	Oxychlordane	11.90	10.79	14667512	17782746	80.127	97.025	
40)	cis-Nonachlor	13.55	12.53	18991540	20897061	74.602	98.280	#
42)	trans-Nonachlor	12.58	11.36	15683073	20133293	75.389	97.932	#
44)	Mirex	15.68	14.58	20956216	15745991	95.743	91.181	
46)	HCE	4.24	3.76	44038270	43944779	116.480	107.415	
47)	HCBD	4.99	4.33	31366672	31564684	103.894	102.446	

AK 6/12/07
[illegible] 6.14.07

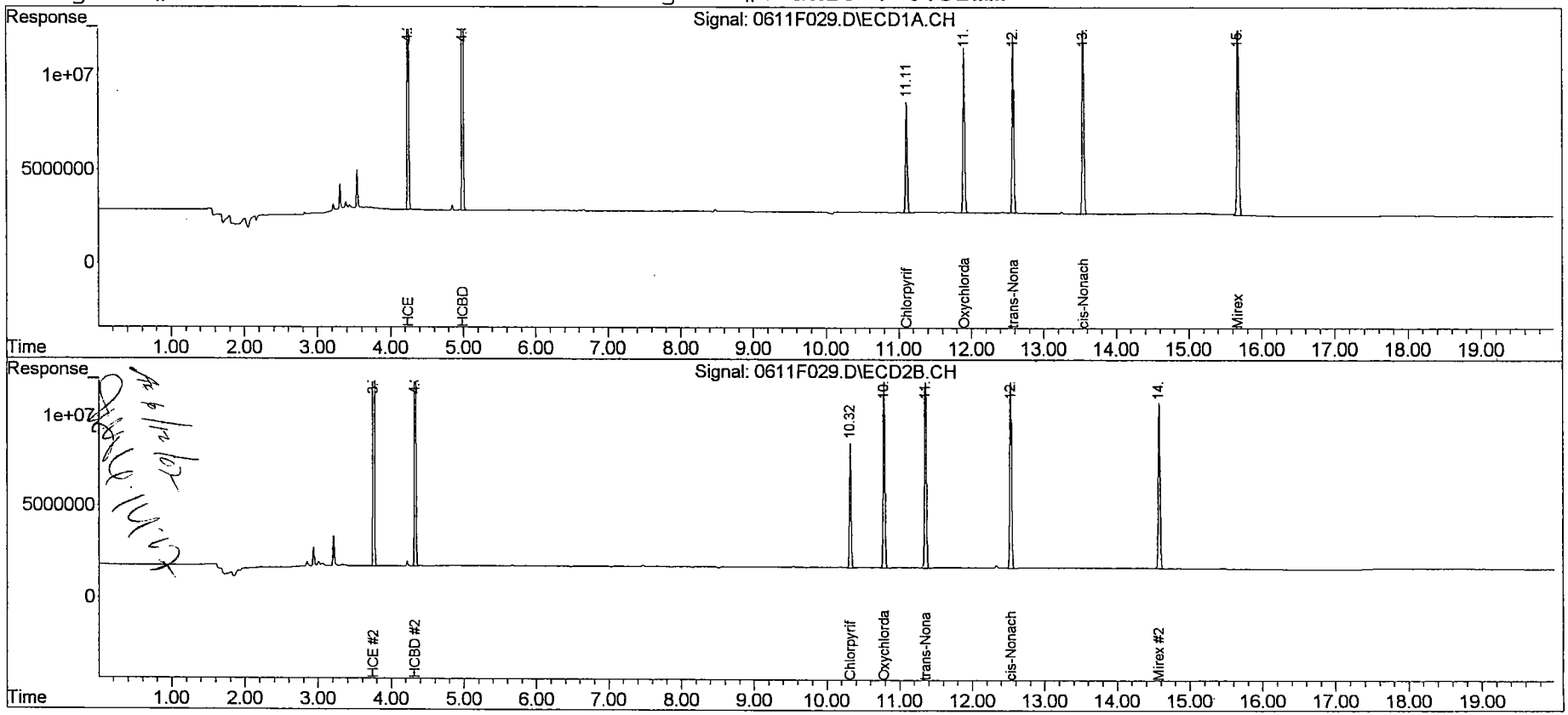
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F029.D\ECD1A.CH Vial: 29
Signal #2 : J:\GC23\DATA\061107\0611F029.D\ECD2B.CH
Acq On : 12 Jun 2007 6:42 am Operator: AKamawal
Sample : MISC @ 100ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:04 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



066

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F030.D\ECD1A.CH Vial: 30
Signal #2 : J:\GC23\DATA\061107\0611F030.D\ECD2B.CH
Acq On : 12 Jun 2007 7:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 08:56:16 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
37)	Chlorpyrifos	11.11	10.33	18296299	20727469	158.892	173.593	
38)	Oxychlordane	11.91	10.79	29181621	35707279	159.416	194.824	
40)	cis-Nonachlor	13.55	12.54	38273808	42907670	150.346	201.796	#
42)	trans-Nonachlor	12.59	11.36	31413560	40893026	151.006	198.910	#
44)	Mirex	15.68	14.59	39460153	30176443	180.283	174.744	
46)	HCE	4.25	3.76	92068680	92200866	243.520	225.369	
47)	HCBD	5.00	4.33	64201445	64950872	212.651	210.804	

Ac 6/12/07

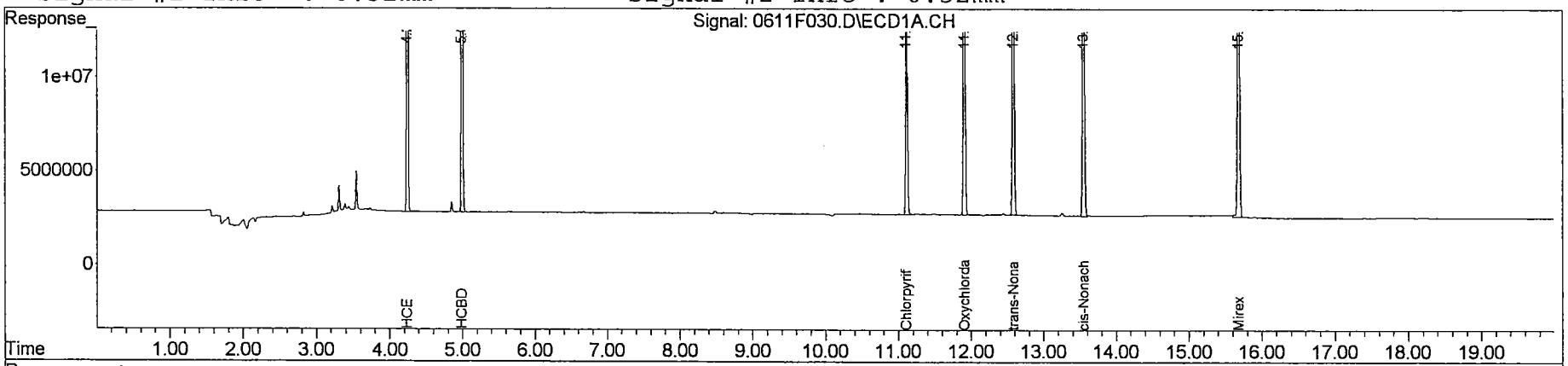
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

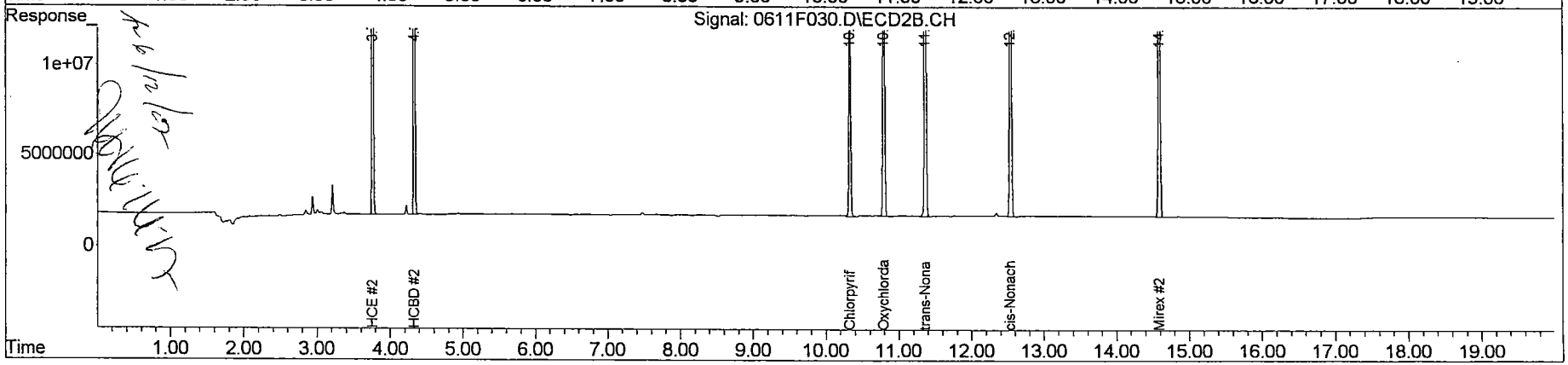
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F030.D\ECD1A.CH Vial: 30
Signal #2 : J:\GC23\DATA\061107\0611F030.D\ECD2B.CH
Acq On : 12 Jun 2007 7:08 am Operator: AKamawal
Sample : MISC @ 200ppb GCPS5-88M Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:04 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 08:55:43 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F031.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\061107\0611F031.D\ECD2B.CH
Acq On : 12 Jun 2007 7:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 09:07:58 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
37)	Chlorpyrifos	11.11	10.32	4174212	4556276	39.306	39.460
38)	Oxychlordane	11.91	10.79	5637077	6666201	36.264	36.256
40)	cis-Nonachlor	13.55	12.53	7470125	8039375	36.211	38.132
42)	trans-Nonachlor	12.58	11.36	6116289	7734870	37.046	38.038
44)	Mirex	15.68	14.58	8869316	6498502	37.321	37.489
46)	HCE	4.25	3.76	15670314	15291490	37.691	38.038
47)	HCBD	4.99	4.33	11310451	11257392	36.026	36.809

6/12/07

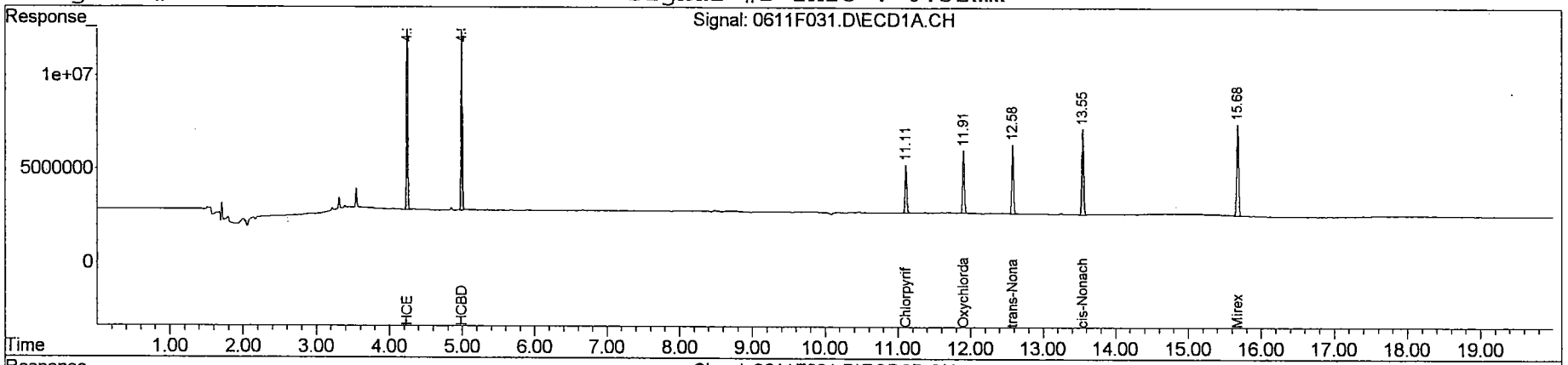
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

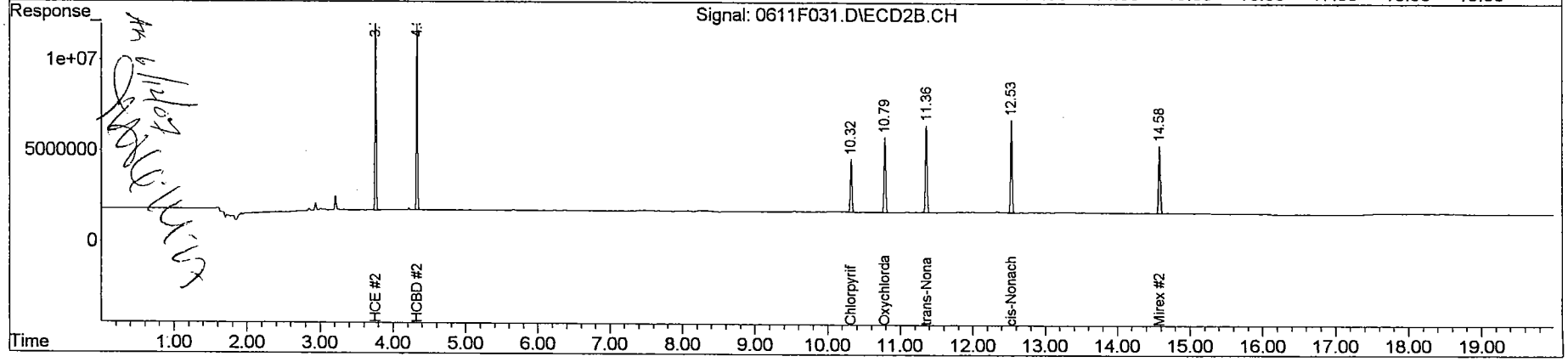
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F031.D\ECD1A.CH Vial: 31
Signal #2 : J:\GC23\DATA\061107\0611F031.D\ECD2B.CH
Acq On : 12 Jun 2007 7:35 am Operator: AKamawal
Sample : MISC ICV @ 40ppb GCPS5-80P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:08 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Signal #1 : J:\GC23\DATA\061107\0611F032.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\061107\0611F032.D\ECD2B.CH
Acq On : 12 Jun 2007 8:02 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 09:10:33 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.20	11.33	242737	263570	1.799m	2.001
41)	2,4'-DDD	12.90	12.09	216798	227057	1.648	1.929
43)	2,4'-DDT	13.36	12.51	279045	282754	1.585	1.874

AK 6/12/07

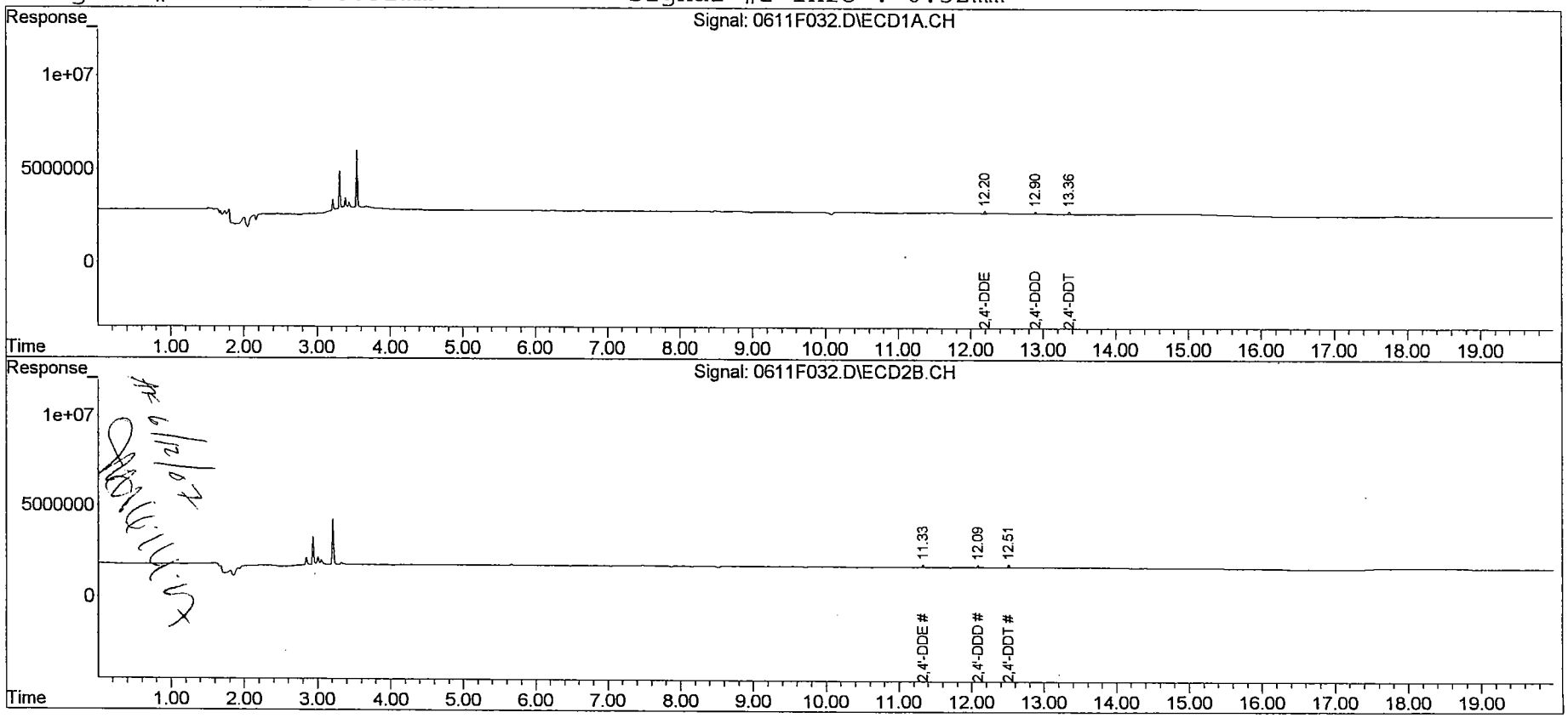
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F032.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\061107\0611F032.D\ECD2B.CH
Acq On : 12 Jun 2007 8:02 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:31 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

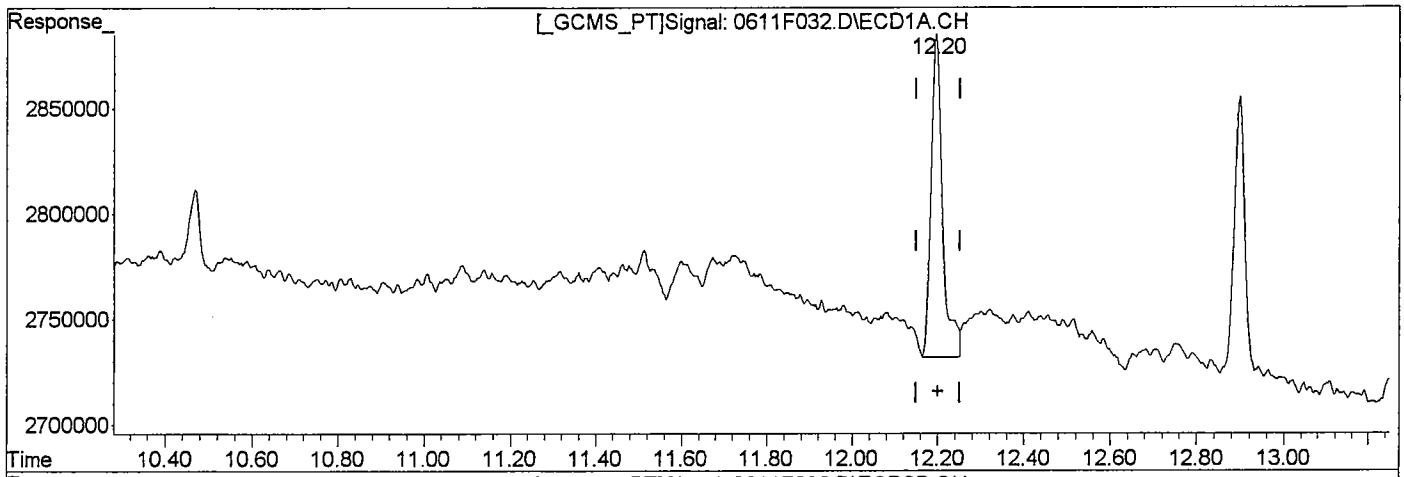
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

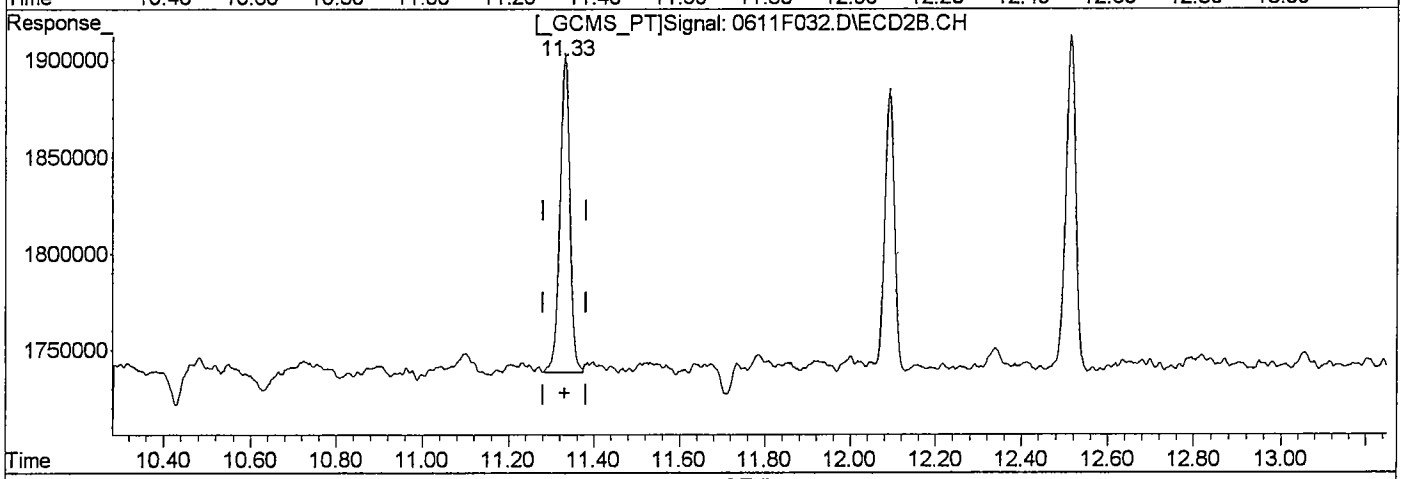


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F032.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\061107\0611F032.D\ECD2B.CH
Acq On : 12 Jun 2007 8:02 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:10 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE

12.20min 2.095ug/L

response 282689

(39) 2,4'-DDE #2

11.33min 2.001ug/L

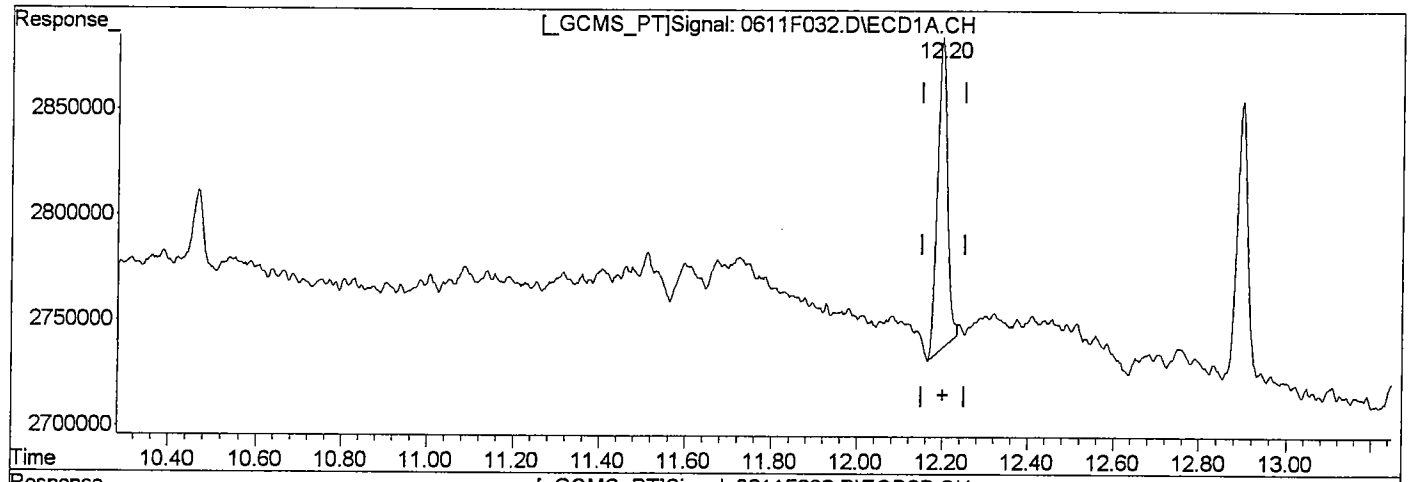
response 263570

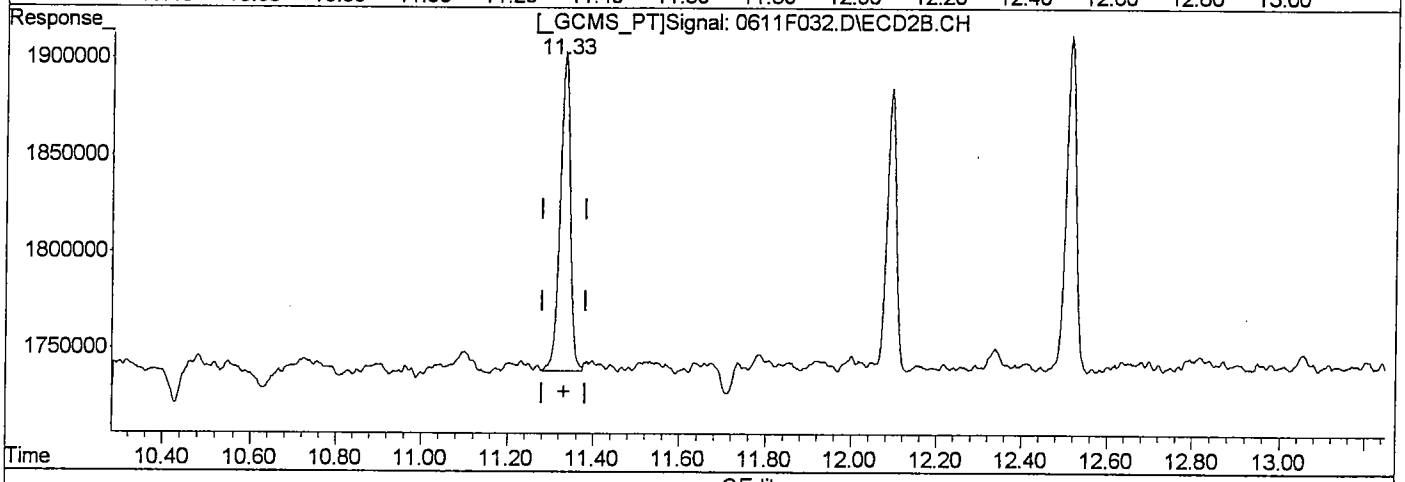
(+) = Expected Retention Time
0611F032.D 061107-8081.M Tue Jun 12 10:31:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F032.D\ECD1A.CH Vial: 32
Signal #2 : J:\GC23\DATA\061107\0611F032.D\ECD2B.CH
Acq On : 12 Jun 2007 8:02 am Operator: AKamawal
Sample : 2,4'-DDx @ 2ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:10 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration





(39) 2,4'-DDE

12.20min 1.799ug/L m

response 242737

(39) 2,4'-DDE #2

11.33min 2.001ug/L

response 263570

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F032.D 061107-8081.M Tue Jun 12 10:31:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F033.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\061107\0611F033.D\ECD2B.CH
Acq On : 12 Jun 2007 8:28 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 09:10:34 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.19	11.33	598654	614479	4.436m	4.666
41)	2,4'-DDD	12.89	12.09	497098	546526	3.778	4.642
43)	2,4'-DDT	13.36	12.51	660722	683191	3.753	4.528

6/12/07

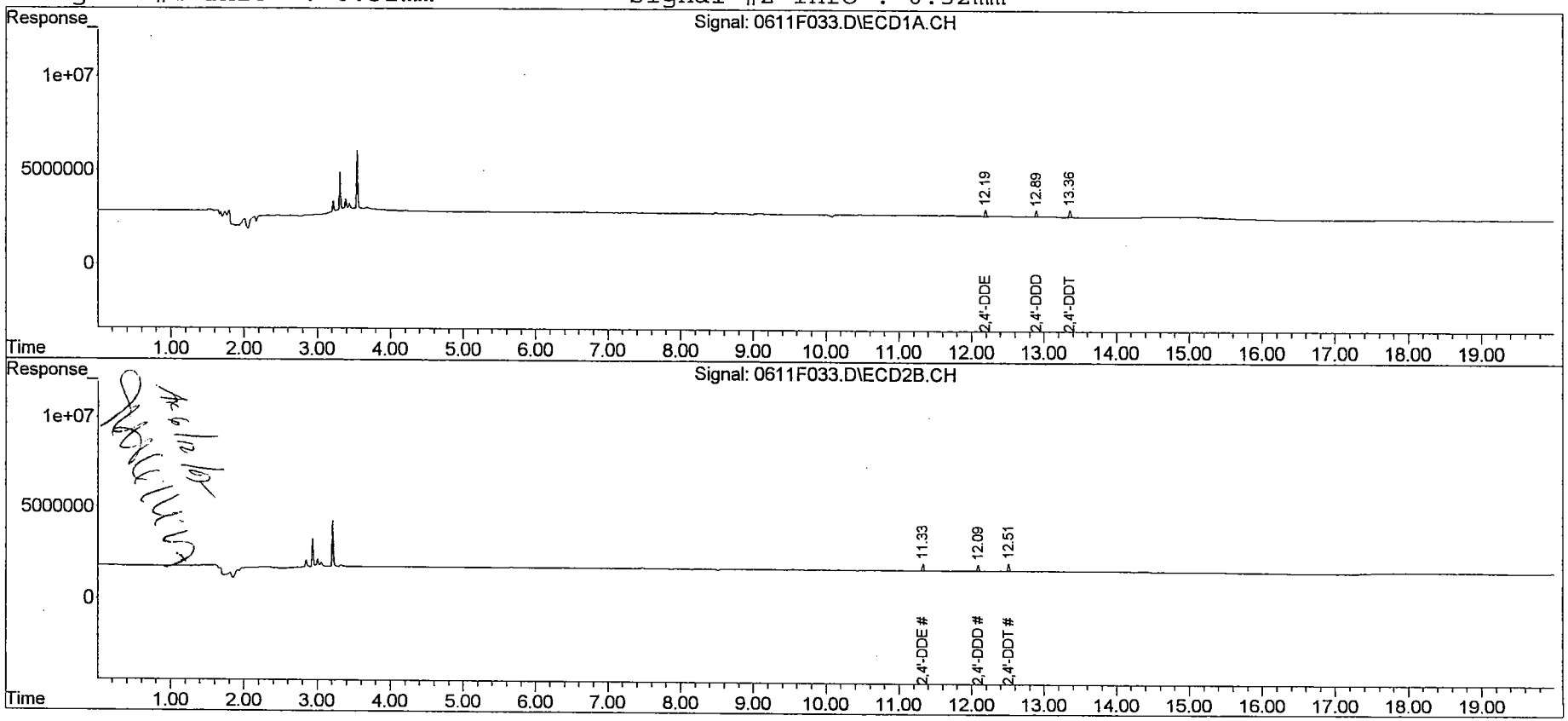
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F033.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\061107\0611F033.D\ECD2B.CH
Acq On : 12 Jun 2007 8:28 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:32 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

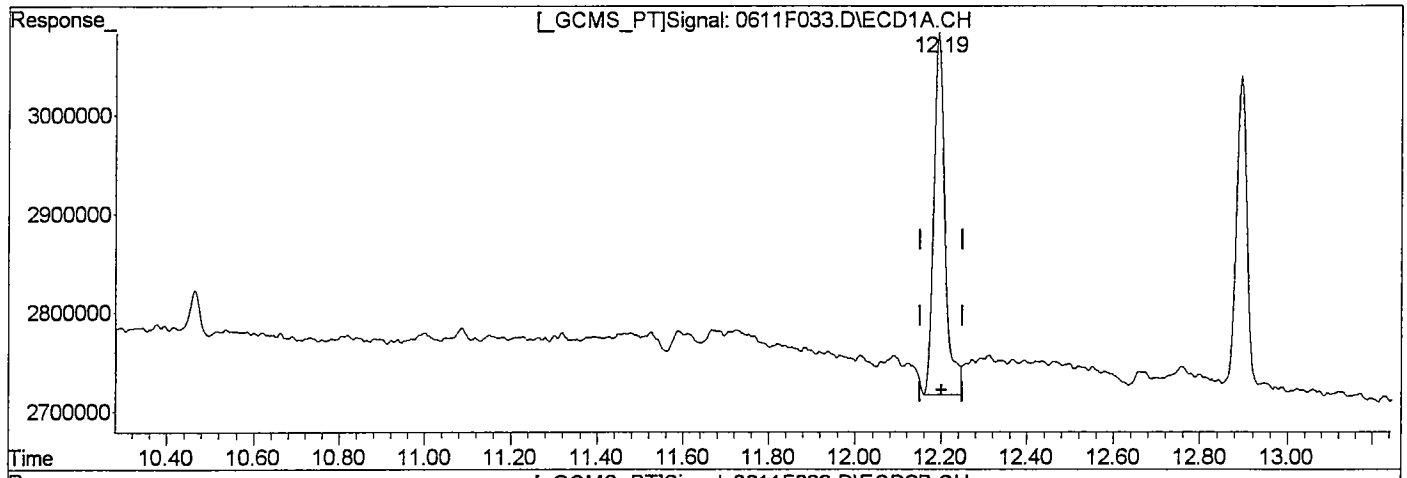


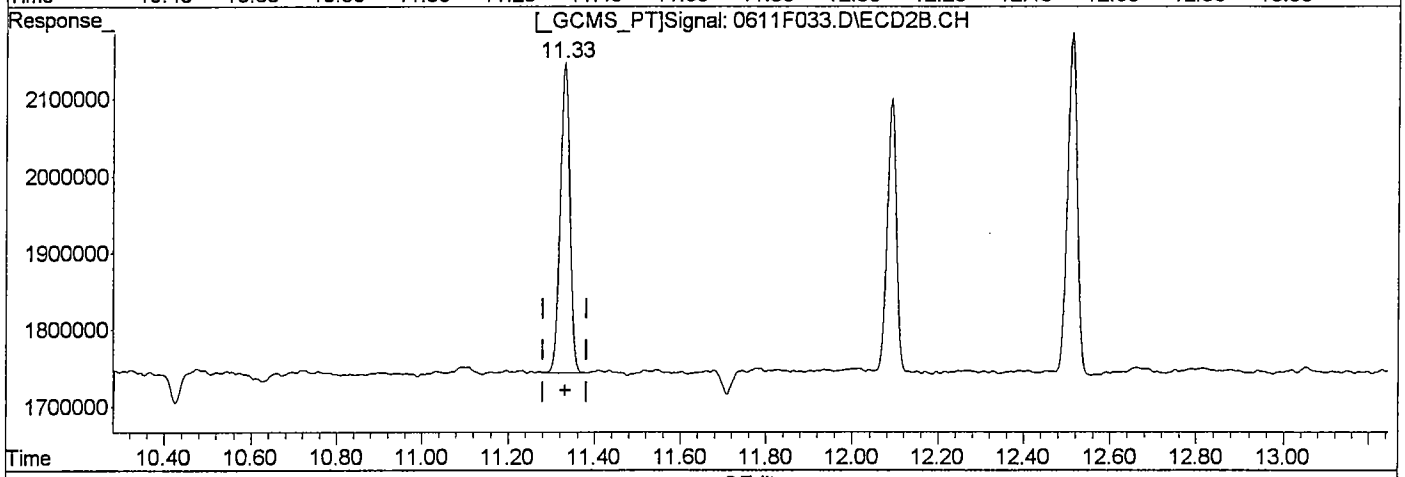
1000

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F033.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\061107\0611F033.D\ECD2B.CH
Acq On : 12 Jun 2007 8:28 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:32 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE

12.19min 4.932ug/L

response 665640

(39) 2,4'-DDE #2

11.33min 4.666ug/L

response 614479

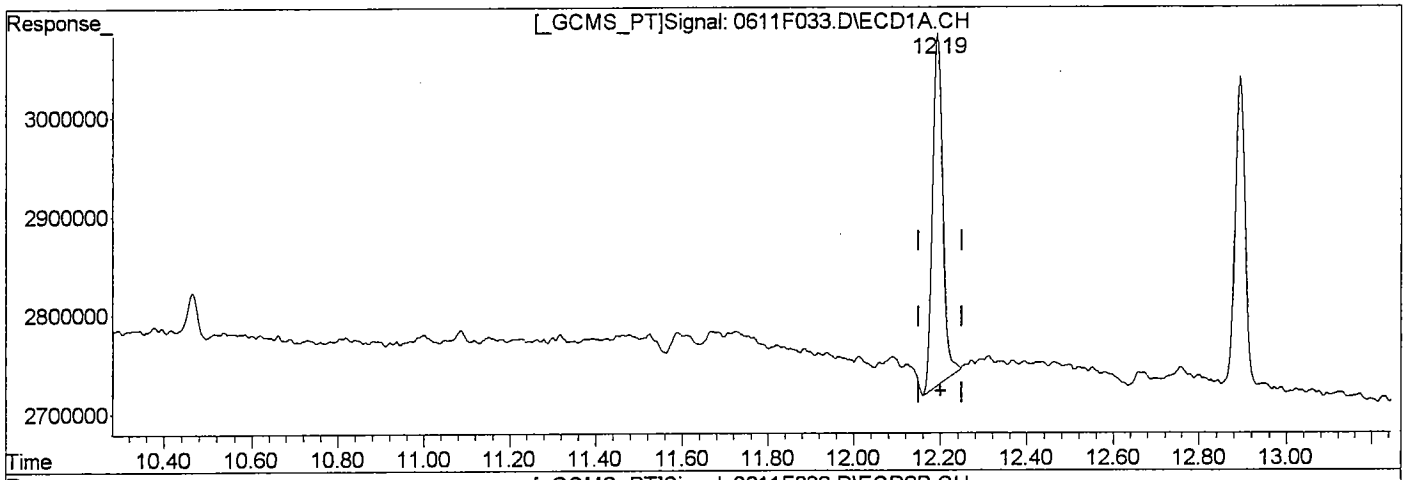
(+) = Expected Retention Time

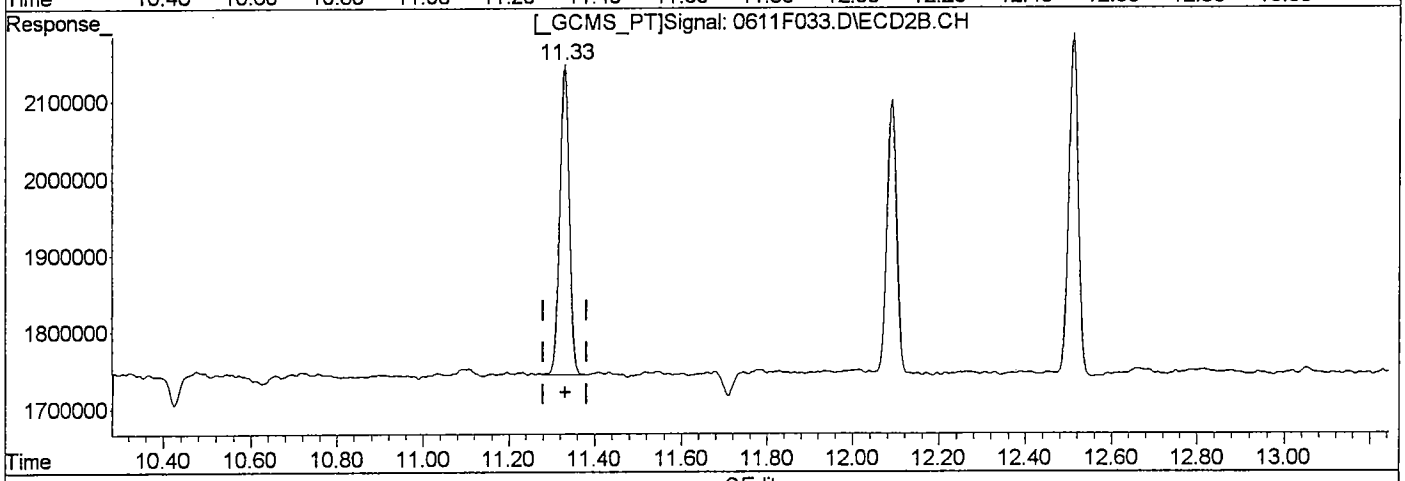
0611F033.D 061107-8081.M Tue Jun 12 10:32:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F033.D\ECD1A.CH Vial: 33
Signal #2 : J:\GC23\DATA\061107\0611F033.D\ECD2B.CH
Acq On : 12 Jun 2007 8:28 am Operator: AKamawal
Sample : 2,4'-DDx @ 5ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:32 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE

12.19min 4.436ug/L m

response 598654

(39) 2,4'-DDE #2

11.33min 4.666ug/L

response 614479

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F033.D 061107-8081.M Tue Jun 12 10:32:58 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F034.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\061107\0611F034.D\ECD2B.CH
Acq On : 12 Jun 2007 8:55 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 09:14:50 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
39)	2,4'-DDE	12.20	11.33	2328804	2781276	17.257m	21.120	
41)	2,4'-DDD	12.89	12.09	2138825	2536085	16.254	21.542	#
43)	2,4'-DDT	13.36	12.51	2762195	3114515	15.690	20.644	#

6/12/07

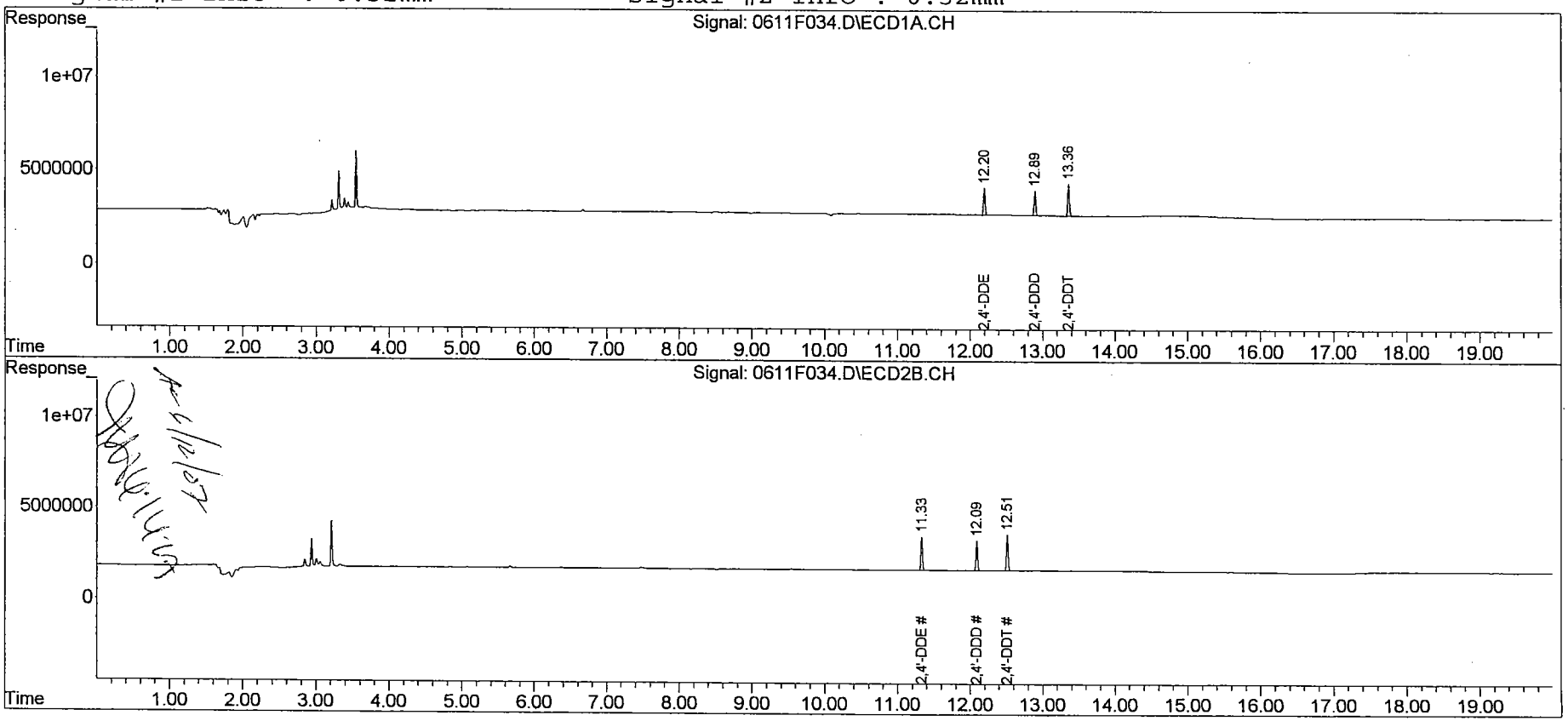
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F034.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\061107\0611F034.D\ECD2B.CH
Acq On : 12 Jun 2007 8:55 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:33 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

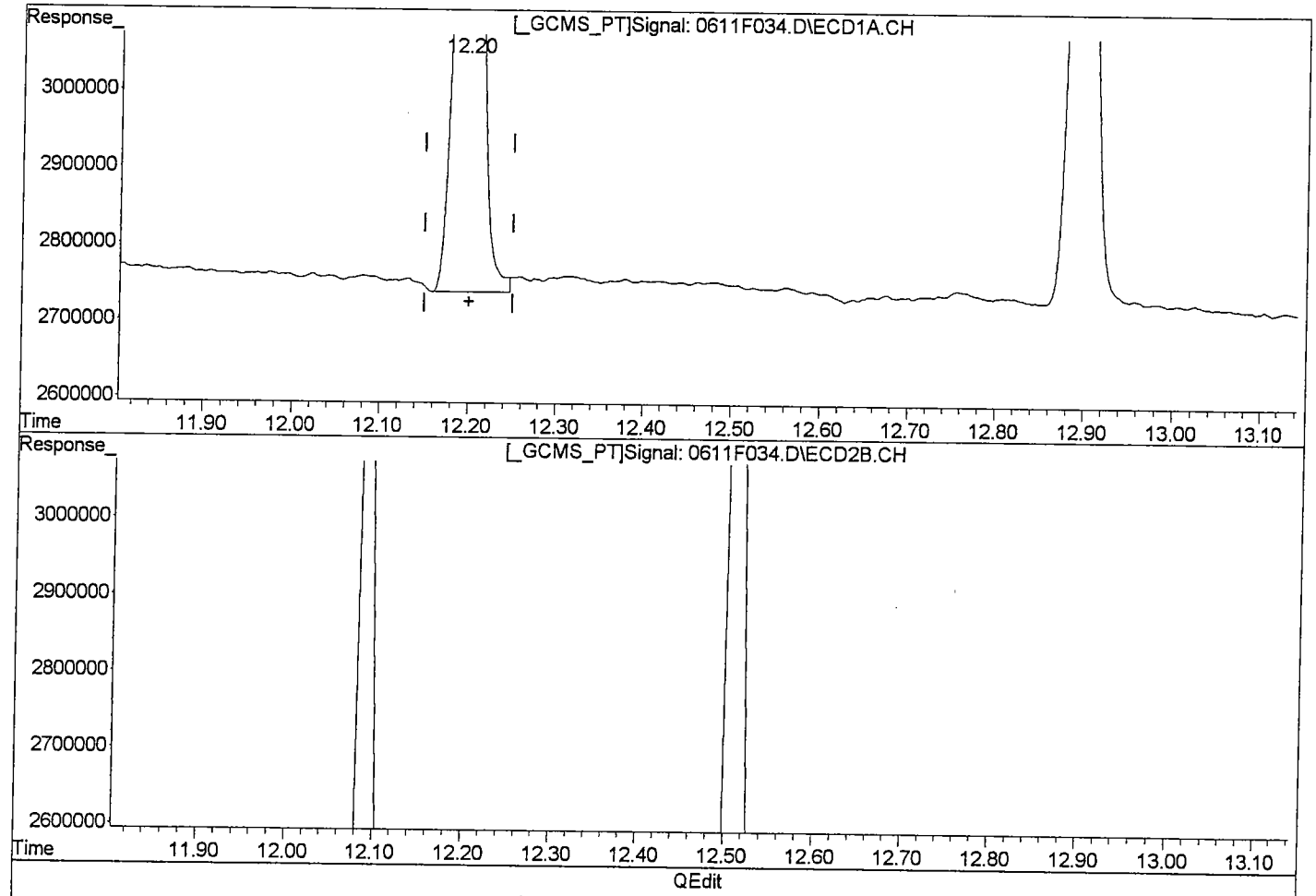


1004

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F034.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\061107\0611F034.D\ECD2B.CH
Acq On : 12 Jun 2007 8:55 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:14 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration



(39) 2,4'-DDE

12.20min 17.624ug/L

response 2378365

(39) 2,4'-DDE #2

11.33min 21.120ug/L

response 2781276

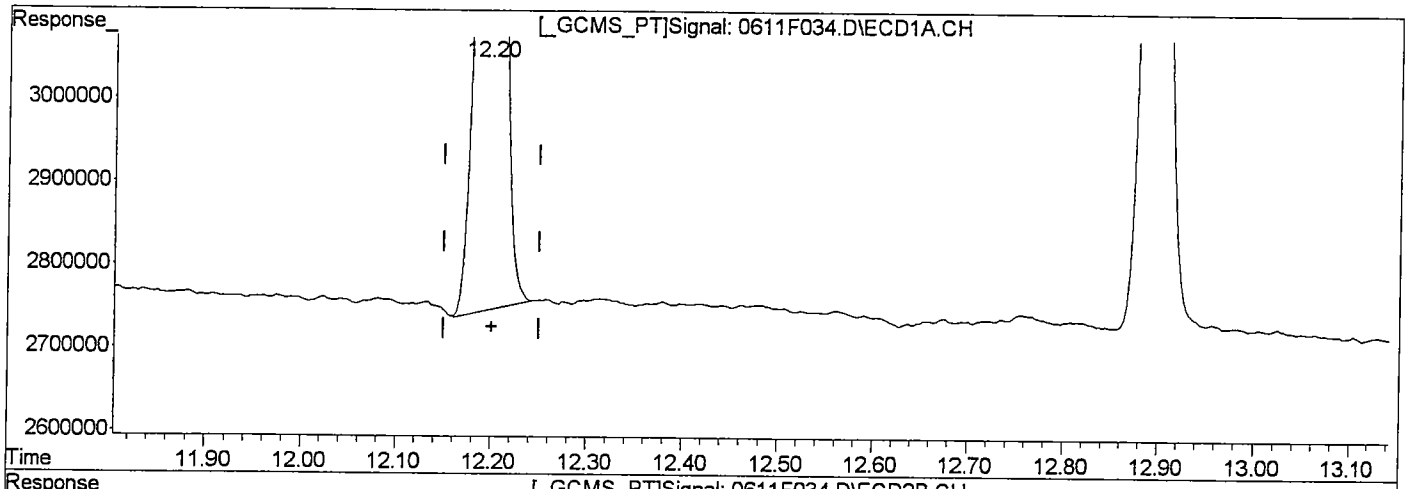
(+) = Expected Retention Time

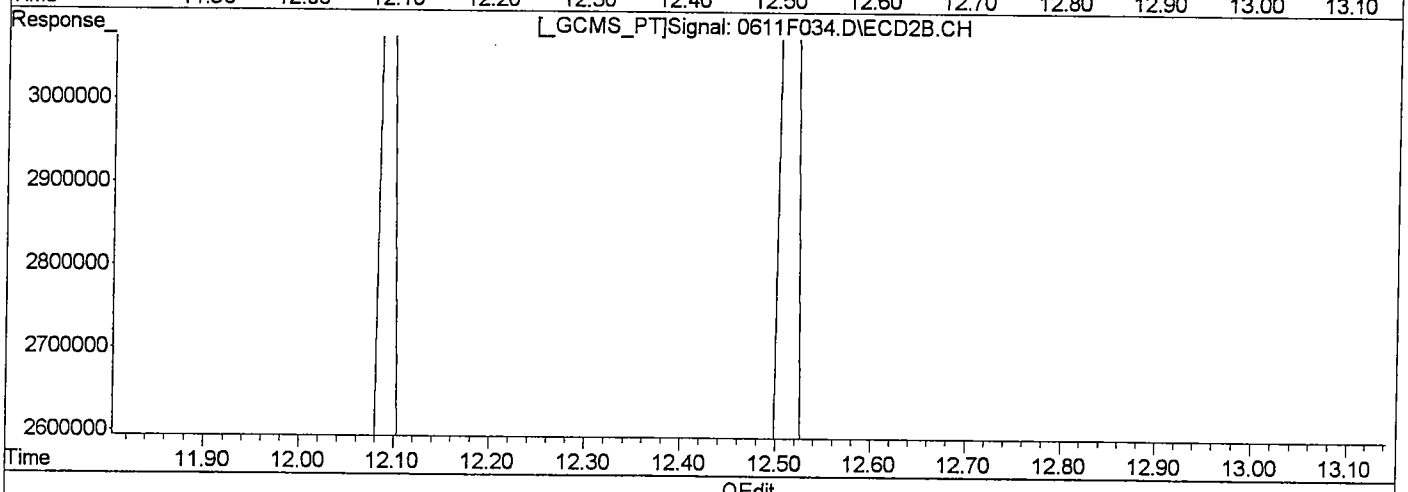
0611F034.D 061107-8081.M Tue Jun 12 10:33:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F034.D\ECD1A.CH Vial: 34
Signal #2 : J:\GC23\DATA\061107\0611F034.D\ECD2B.CH
Acq On : 12 Jun 2007 8:55 am Operator: AKamawal
Sample : 2,4'-DDx @ 20ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 9:14 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration





QEdit

(39) 2,4'-DDE

12.20min 17.257ug/L m

response 2328804

(39) 2,4'-DDE #2

11.33min 21.120ug/L

response 2781276

After
Initials
JUN 12 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F034.D 061107-8081.M Tue Jun 12 10:33:32 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F035.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\061107\0611F035.D\ECD2B.CH
Acq On : 12 Jun 2007 9:22 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-90H Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 09:47:07 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.19	11.33	5444096	6529072	40.341	49.580
41)	2,4'-DDD	12.89	12.09	4987969	5906116	37.906	50.168 #
43)	2,4'-DDT	13.36	12.51	6489440	7372689	36.862	48.870 #

AK 6/12/07

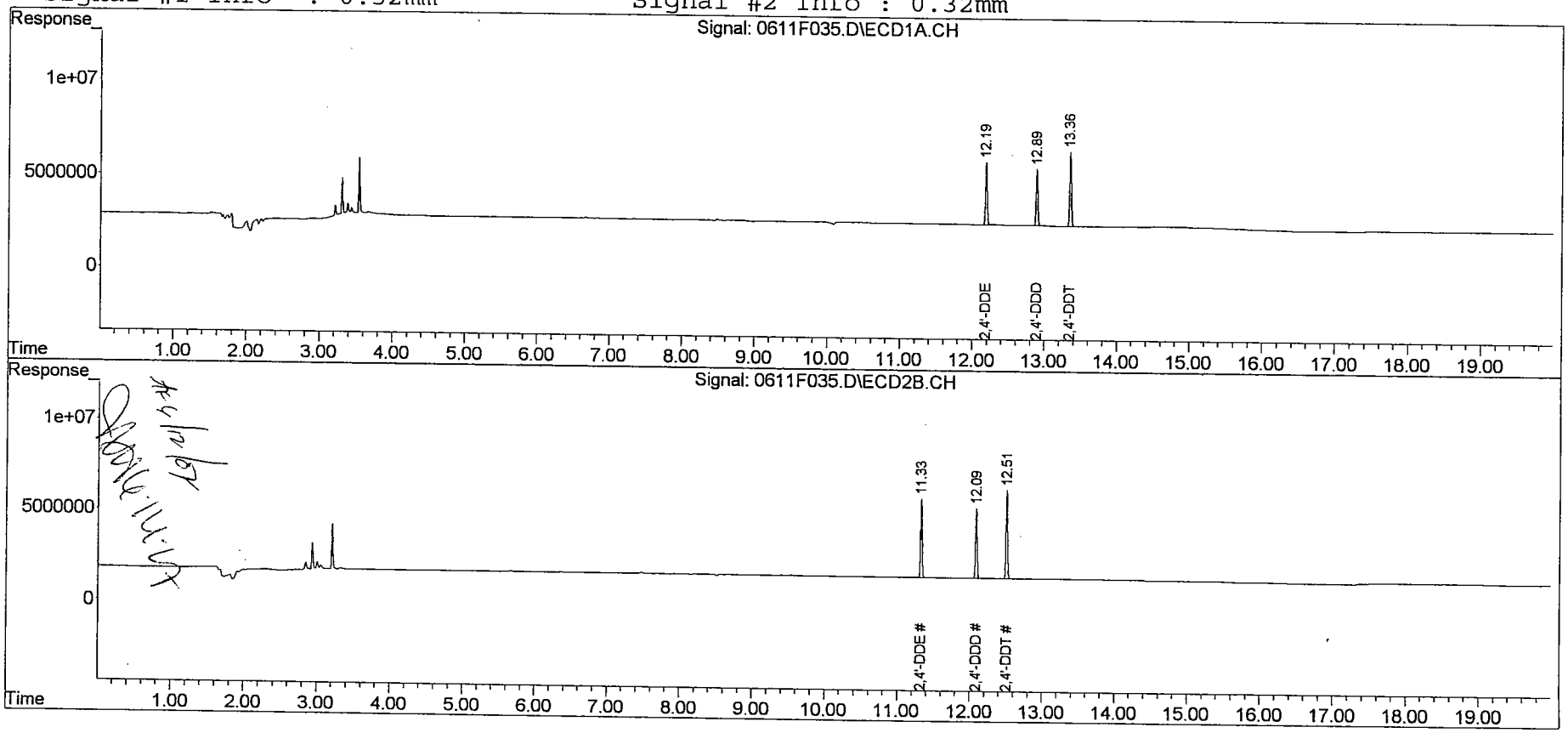
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F035.D\ECD1A.CH Vial: 35
Signal #2 : J:\GC23\DATA\061107\0611F035.D\ECD2B.CH
Acq On : 12 Jun 2007 9:22 am Operator: AKamawal
Sample : 2,4'-DDx @ 50ppb GCPS5-90H Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:33 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



1008

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F036.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\061107\0611F036.D\ECD2B.CH
Acq On : 12 Jun 2007 9:49 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:09:26 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.20	11.33	10561864	12823833	78.265	97.380
41)	2,4'-DDD	12.90	12.09	9647889	11560711	73.319	98.199 #
43)	2,4'-DDT	13.36	12.51	12482571	14490520	70.905	96.050 #

AK 6/12/07

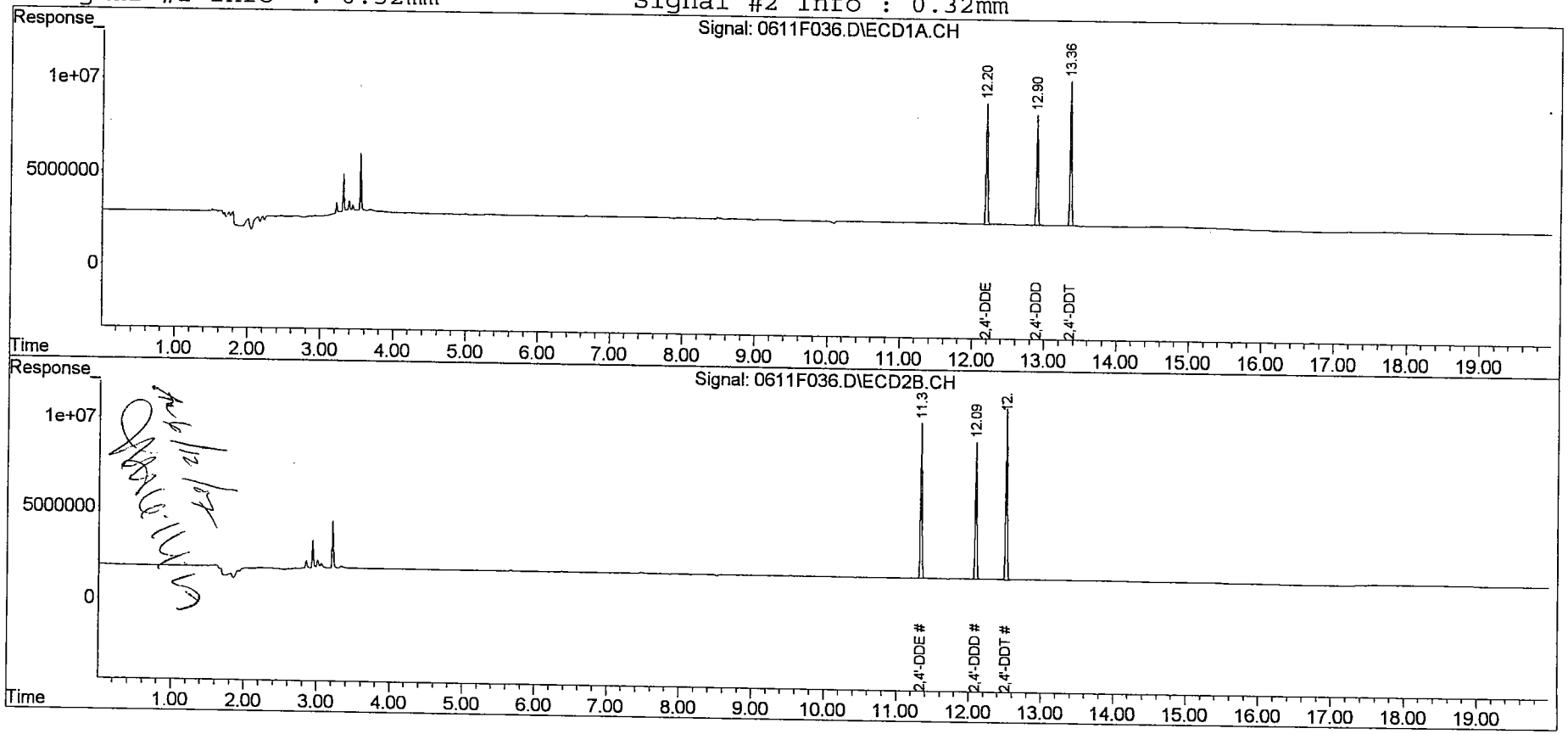
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F036.D\ECD1A.CH Vial: 36
Signal #2 : J:\GC23\DATA\061107\0611F036.D\ECD2B.CH
Acq On : 12 Jun 2007 9:49 am Operator: AKamawal
Sample : 2,4'-DDx @ 100ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:34 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



1010

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F037.D\ECD1A.CH Vial: 37
Signal #2 : J:\GC23\DATA\061107\0611F037.D\ECD2B.CH
Acq On : 12 Jun 2007 10:15 am Operator: AKamawal
Sample : 2,4'-DDx @ 200ppb GCPS5-91B Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:34:47 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
39)	2,4'-DDE	12.20	11.33	21451000	26516377	158.954	201.357	#
41)	2,4'-DDD	12.90	12.10	19543744	23775992	148.522	201.958	#
43)	2,4'-DDT	13.36	12.52	25873213	30007394	146.968	198.903	#

Ac 6/12/07

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F037.D\ECD1A.CH
Signal #2 : J:\GC23\DATA\061107\0611F037.D\ECD2B.CH
Acq On : 12 Jun 2007 10:15 am
Sample : 2,4'-DDx @ 200ppb GCPS5-91B
Misc : SVG\W0308345\4-ICAL.H
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 10:35 2007 Quant Results File: 061107-8081.RES

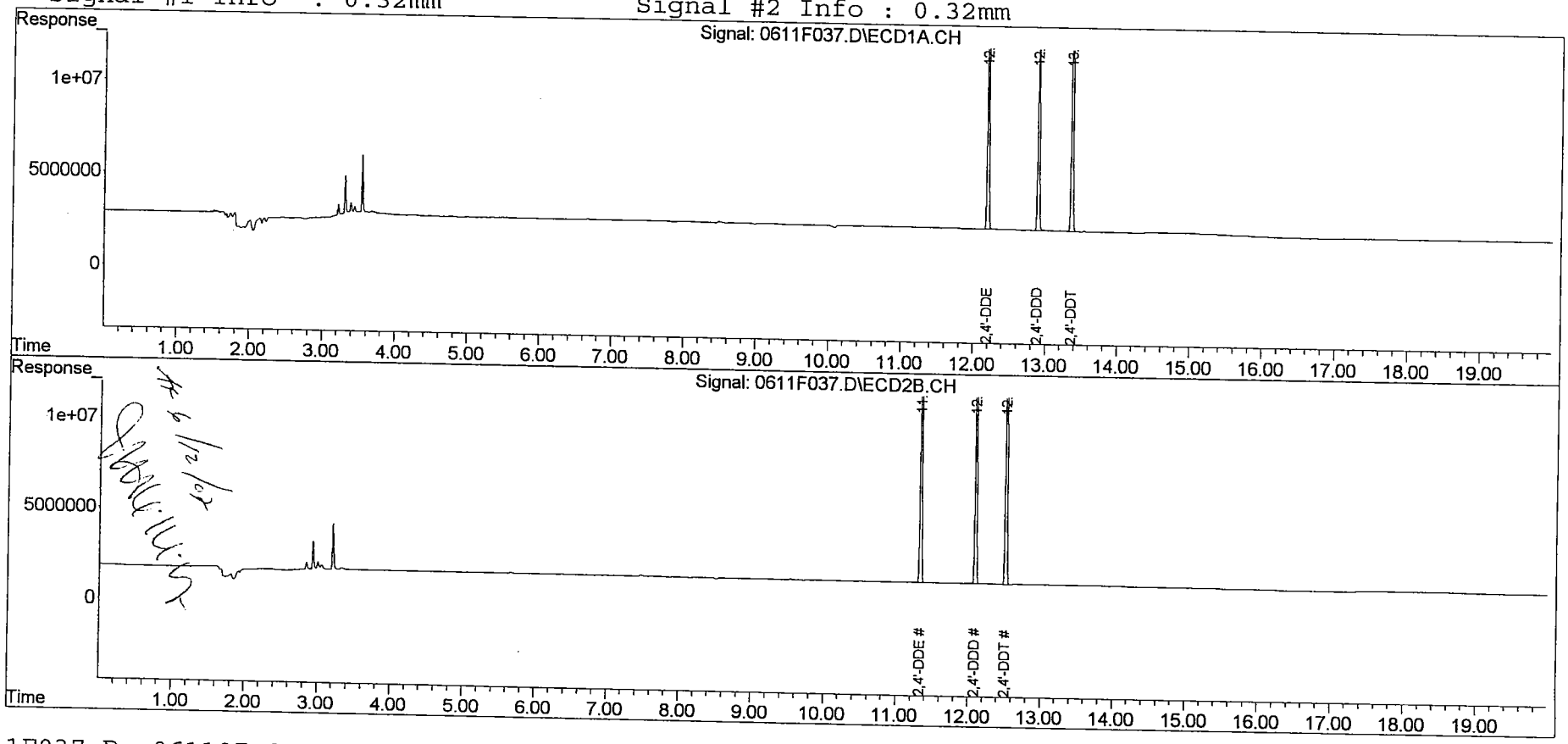
Vial: 37

Operator: AKamawal
Inst : GC23
Multiplr: 1.00

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 09:06:52 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB
Signal #1 Info : 0.32mm

Signal #2 Phase: DB-35MS
Signal #2 Info : 0.32mm



1012

0611F037.D 061107-8081.M Tue Jun 12 10:50:31 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F038.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\061107\0611F038.D\ECD2B.CH
Acq On : 12 Jun 2007 10:42 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 11:01:24 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
39)	2,4'-DDE	12.20	11.33	4160692	4934880	36.750	37.712
41)	2,4'-DDD	12.90	12.09	3830893	4514456	37.760	38.572
43)	2,4'-DDT	13.36	12.51	4852706	5488880	36.682	37.589

pr 6/12/07

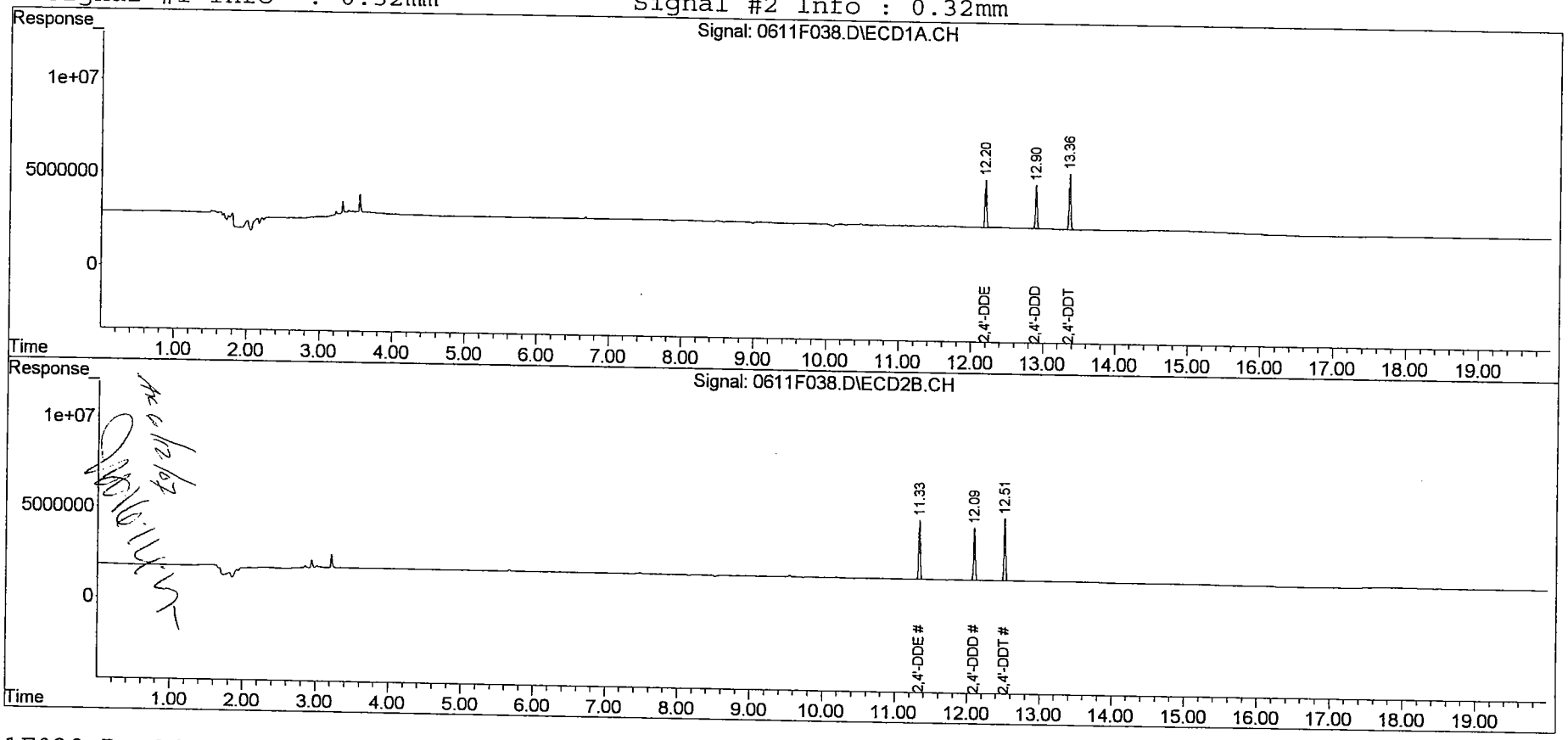
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F038.D\ECD1A.CH Vial: 38
Signal #2 : J:\GC23\DATA\061107\0611F038.D\ECD2B.CH
Acq On : 12 Jun 2007 10:42 am Operator: AKamawal
Sample : 2,4DDx ICV @ 40ppb GCPS5-85P Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 11:01 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



1014

0611F038.D 061107-8081.M Tue Jun 12 11:02:06 2007

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45:50 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	443626	340969	2.208m	1.886
24)	s	Decachlorobiphen	17.13	15.99	630804	397538	2.334	2.195
		Target Compounds						
2)		alpha-BHC	9.21	8.43	407119	384107	1.765m	1.617m
3)		Hexachlorobenzen	9.34	8.27	522942	485415	2.135	1.962
4)		beta-BHC	10.22	9.45	213081	219172	1.985	2.058
5)		gamma-BHC (Linda	9.76	9.05	399099	377602	1.848	1.680
6)		delta-BHC	10.63	9.90	358747	350095	1.814	1.635
7)		Heptachlor	10.73	9.62	393808	434413	1.933	1.905m
8)		Aldrin	11.25	10.11	328539	345071	1.879	1.728m
9)		Isodrin	11.77	10.76	304453	328851	2.051	1.906
10)		Heptachlor Epoxi	11.94	10.97	334051	377838	1.913m	1.875
11)		gamma-Chlordane	12.44	11.32	343885	379987	2.064m	1.869
12)		Endosulfan I	12.57	11.55	300809	351955	1.963m	1.900
13)		alpha-Chlordane	12.51	11.47	335636	362839	2.037m	1.840
14)		Dieldrin	12.97	11.99	326362	343450	2.093	1.768
15)		4,4'-DDE	12.75	11.79	309604	329568	2.100	1.785
16)		Endrin	13.31	12.46	287649	324120	2.118	1.841
17)		Endosulfan II	13.72	12.86	367061	352461	2.474m	1.957
18)		4,4'-DDD	13.53	12.65	288784	270777	2.267m	1.765
19)		Endrin Aldehyde	13.88	13.21	342755	295112	2.654m	1.985 #
20)		Endosulfan Sulfa	14.31	13.50	471946	356195	2.815	1.964 #
21)		4,4'-DDT	13.99	13.06	339801	288298	2.432m	1.773 #
22)		Endrin Ketone	14.93	14.39	575810	382357	2.441m	1.846
23)		Methoxychlor	14.64	14.07	279777	182031	2.685	1.886 #

AK 6/12/07

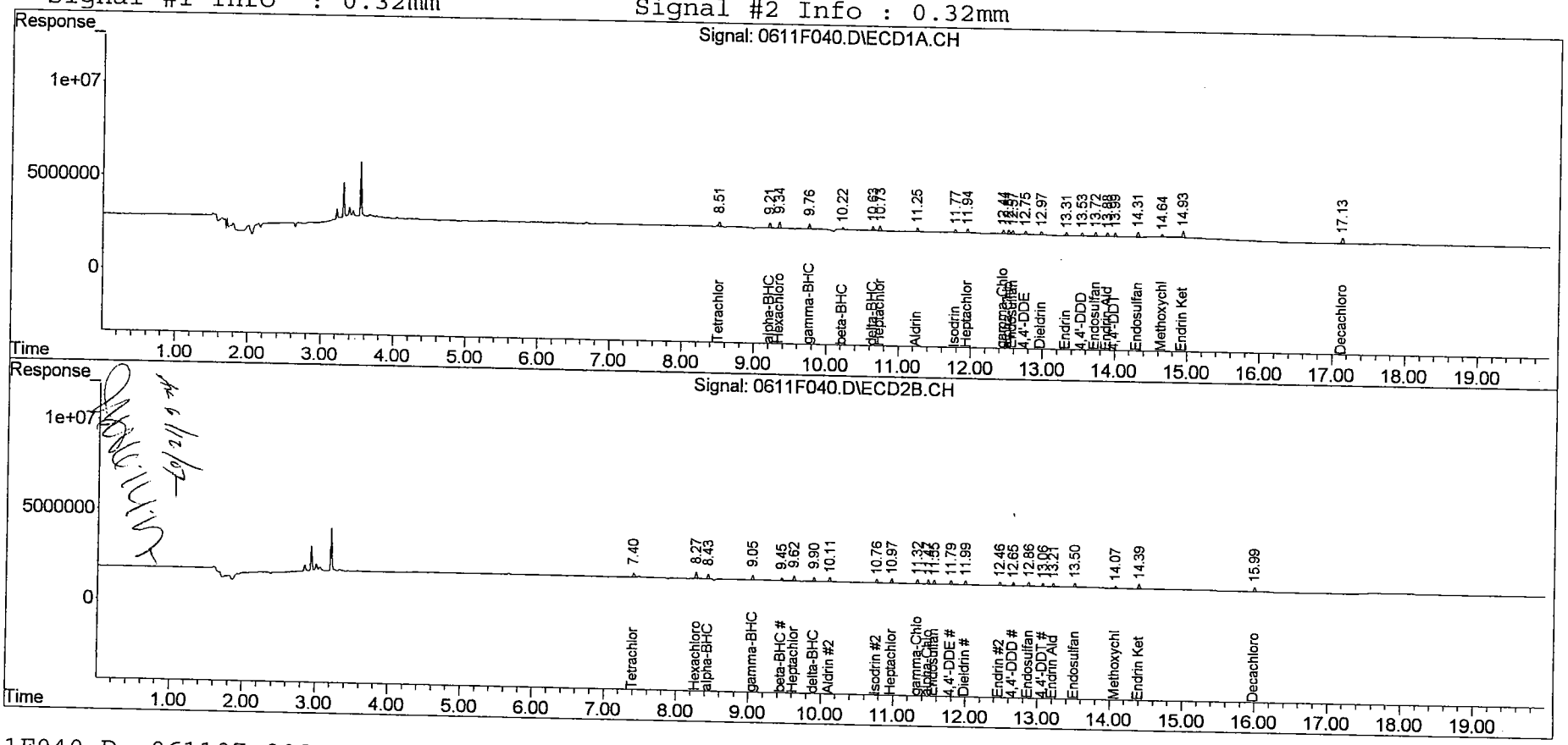
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:54 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

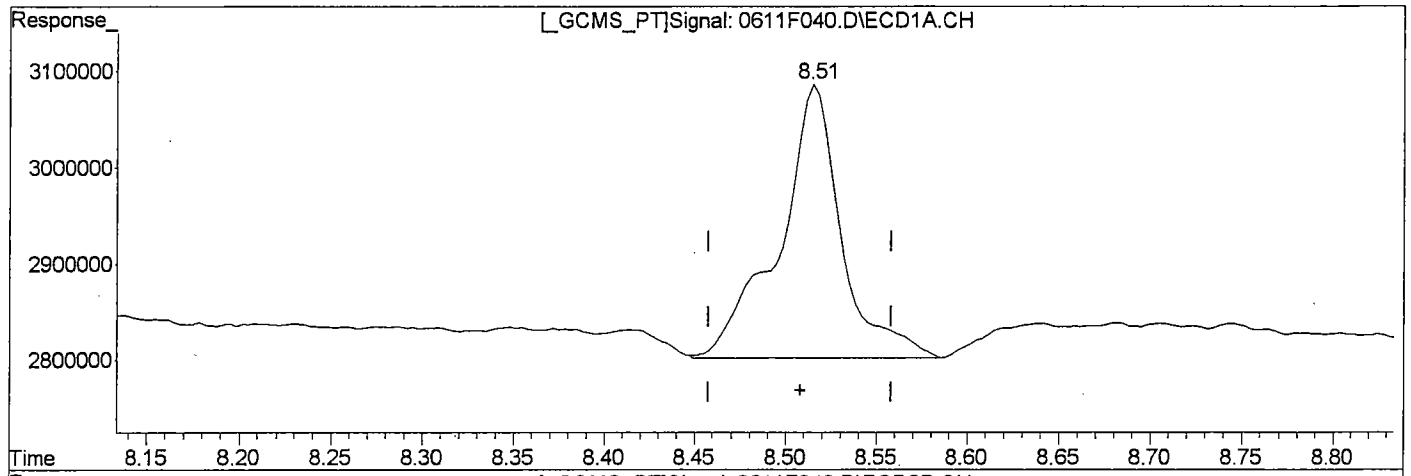


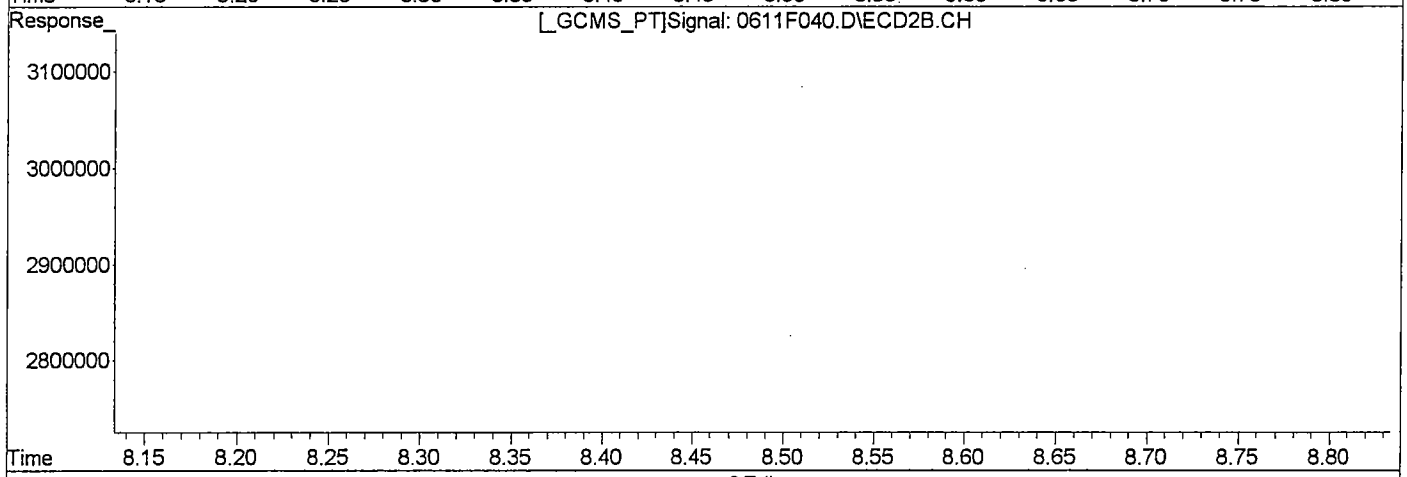
1016

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(1) Tetrachloro-m-xylene (s)

8.51min 3.340ug/L

response 671068

(1) Tetrachloro-m-xylene #2 (s)

7.40min 1.886ug/L

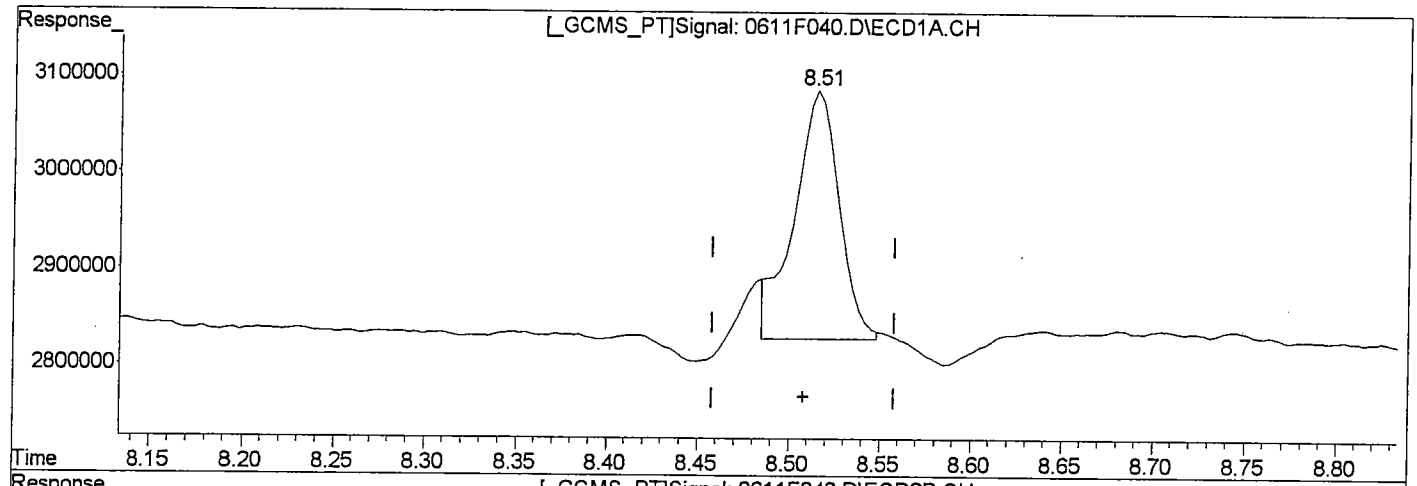
response 340969

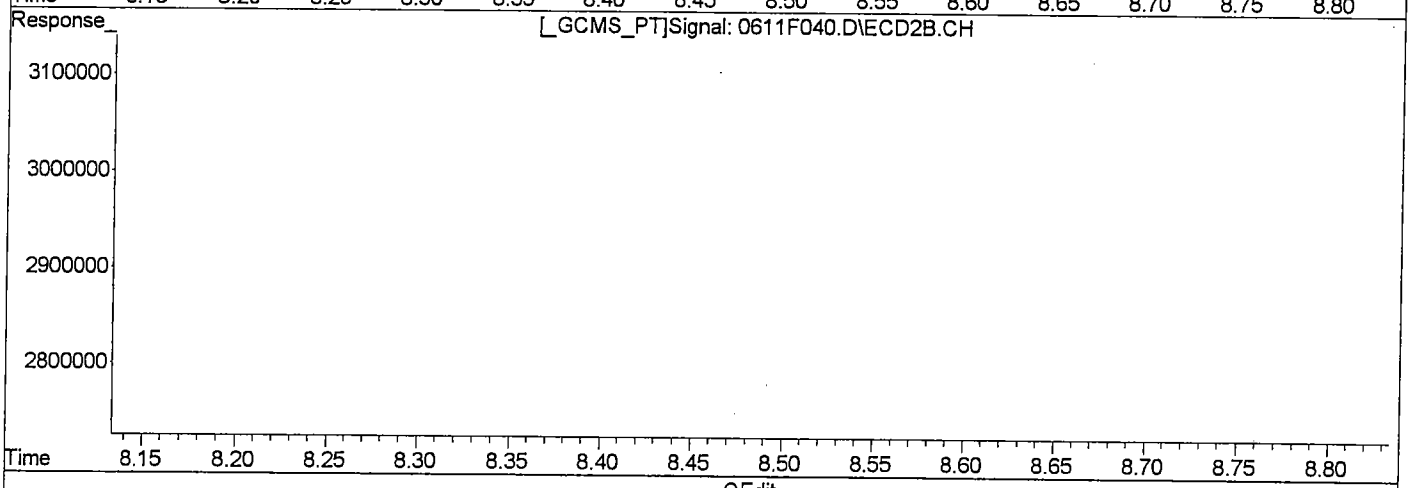
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:48:10 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(1) Tetrachloro-m-xylene (s)

8.51min 2.208ug/L m

response 443626

(1) Tetrachloro-m-xylene #2 (s)

7.40min 1.886ug/L

response 340969

After
Initials AK

JUN 12 2007

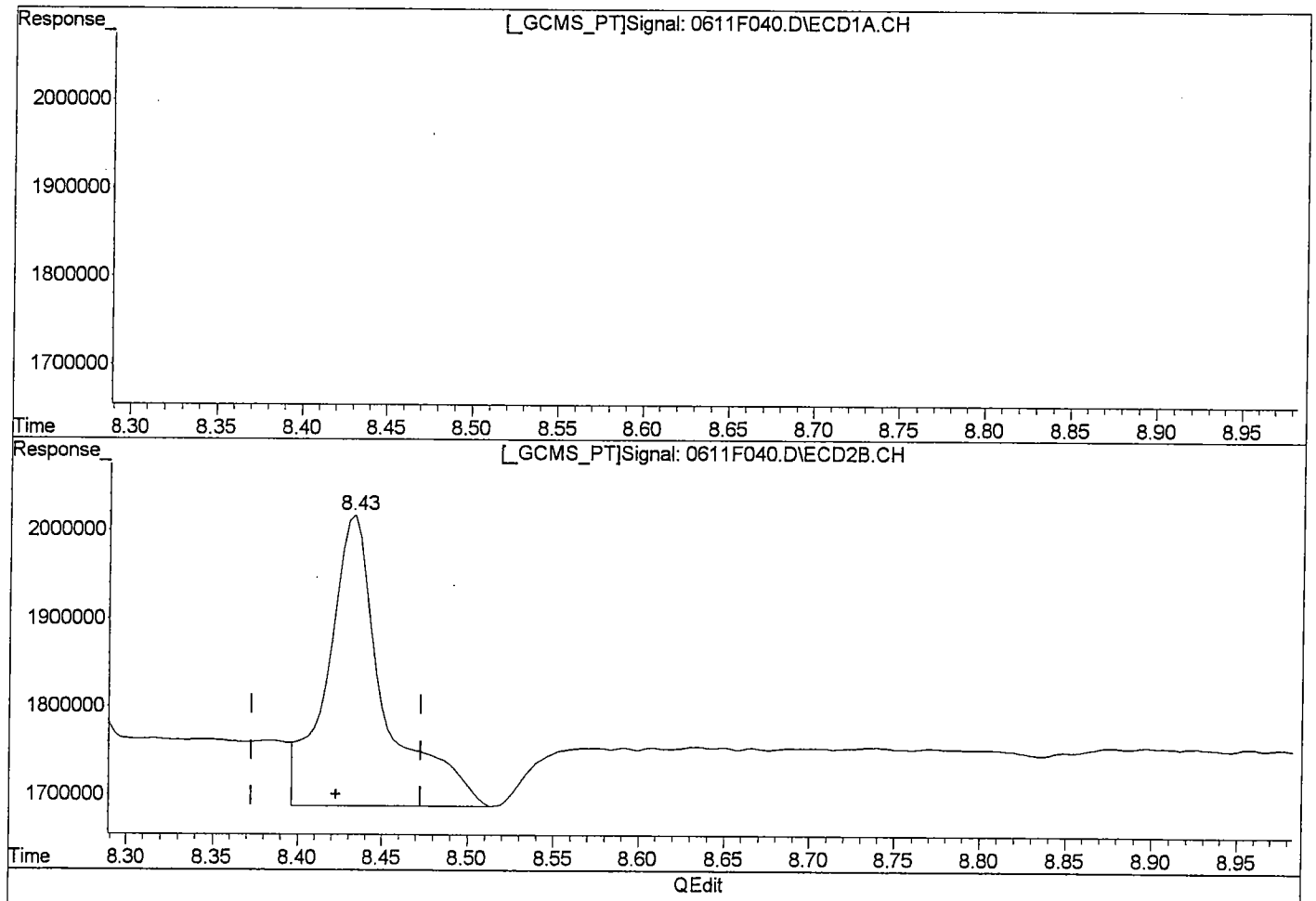
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:49:51 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.21min 1.833ug/L

response 422766

(2) alpha-BHC #2

8.43min 3.227ug/L

response 766503

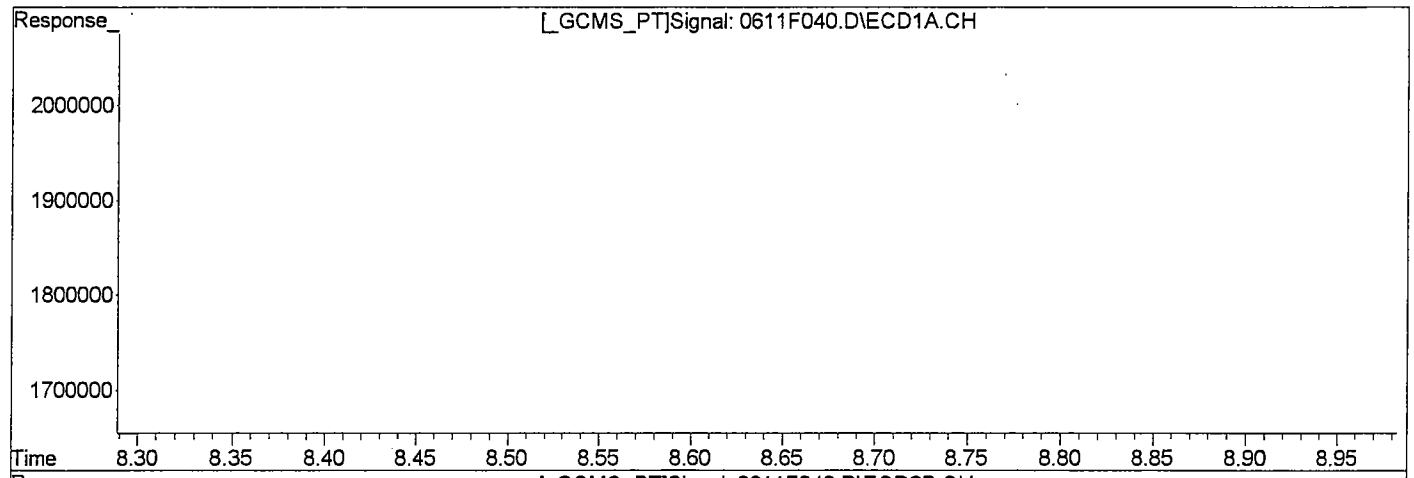
(+) = Expected Retention Time

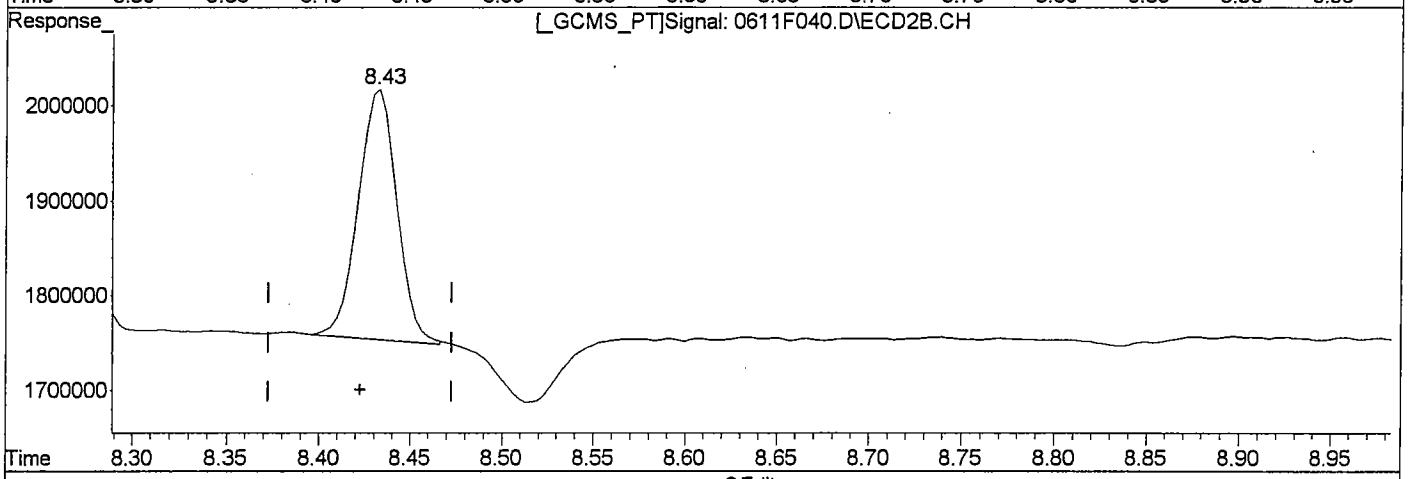
0611F040.D 061107-8081.M Tue Jun 12 13:50:08 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC
9.21min 1.833ug/L
response 422766

(2) alpha-BHC #2
8.43min 1.617ug/L m
response 384107

After
Initials

JUN 12 2007

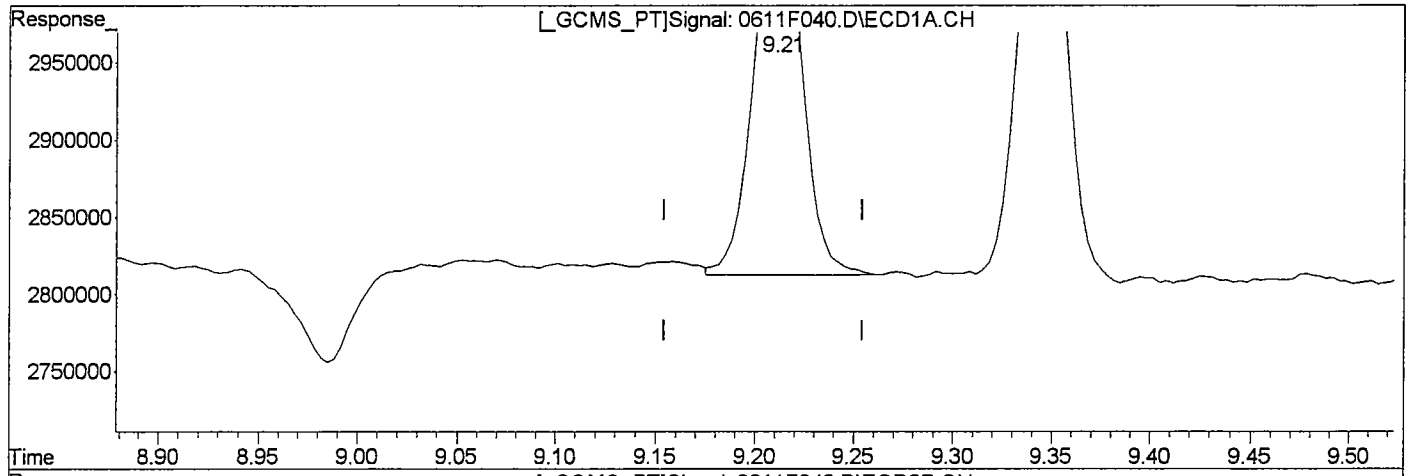
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

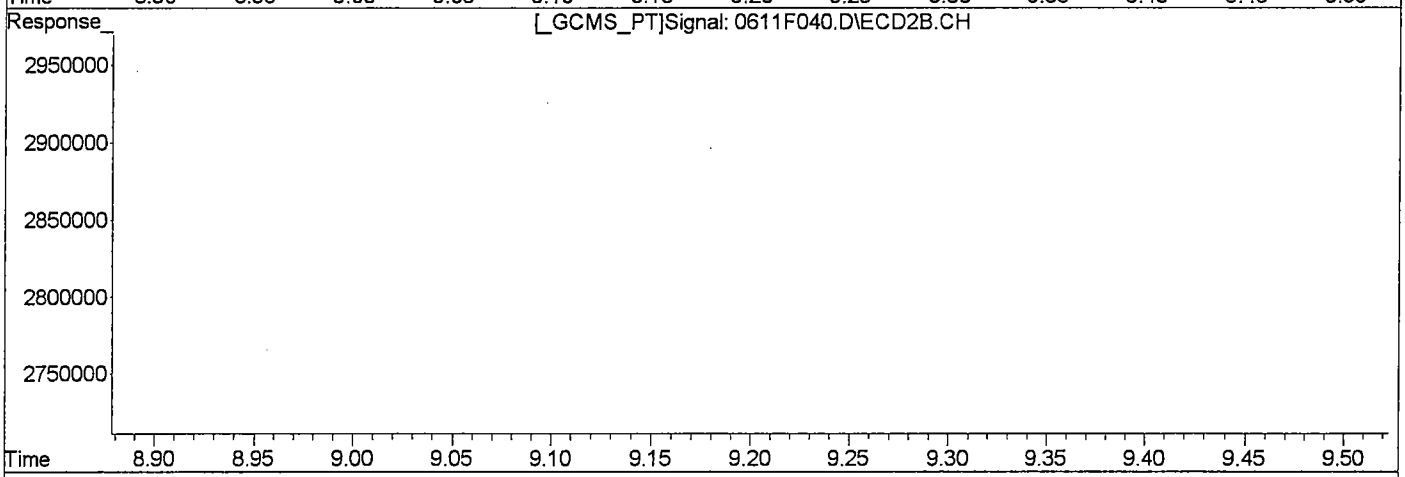
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:50:15 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC

9.21min 1.833ug/L

response 422766

(2) alpha-BHC #2

8.43min 1.617ug/L m

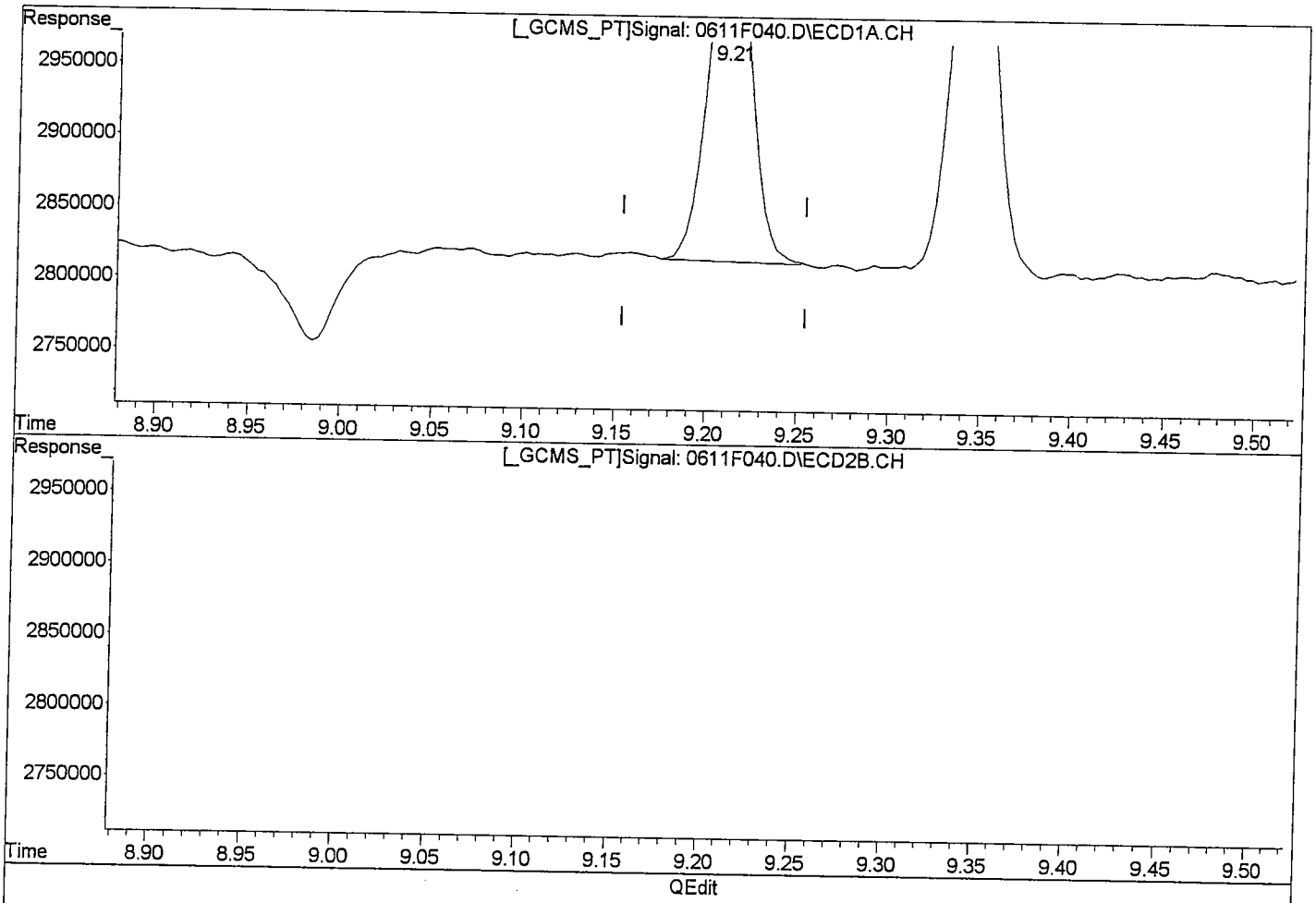
response 384107

(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:50:22 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(2) alpha-BHC
9.21min 1.765ug/L m
response 407119

(2) alpha-BHC #2
8.43min 1.617ug/L m
response 384107

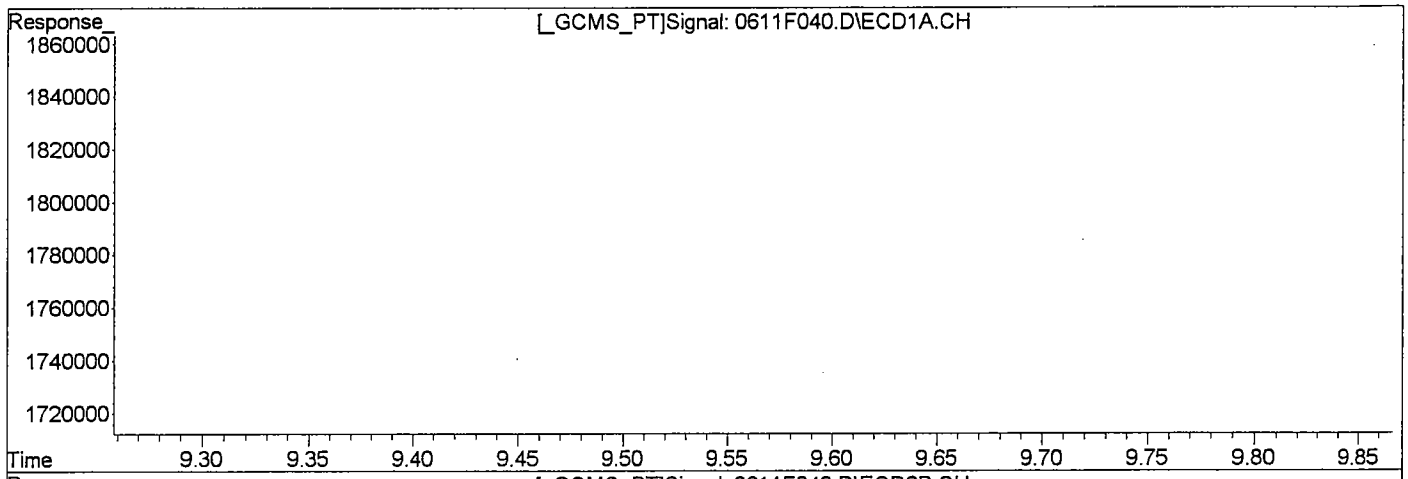
After
Initials
JUN 12 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

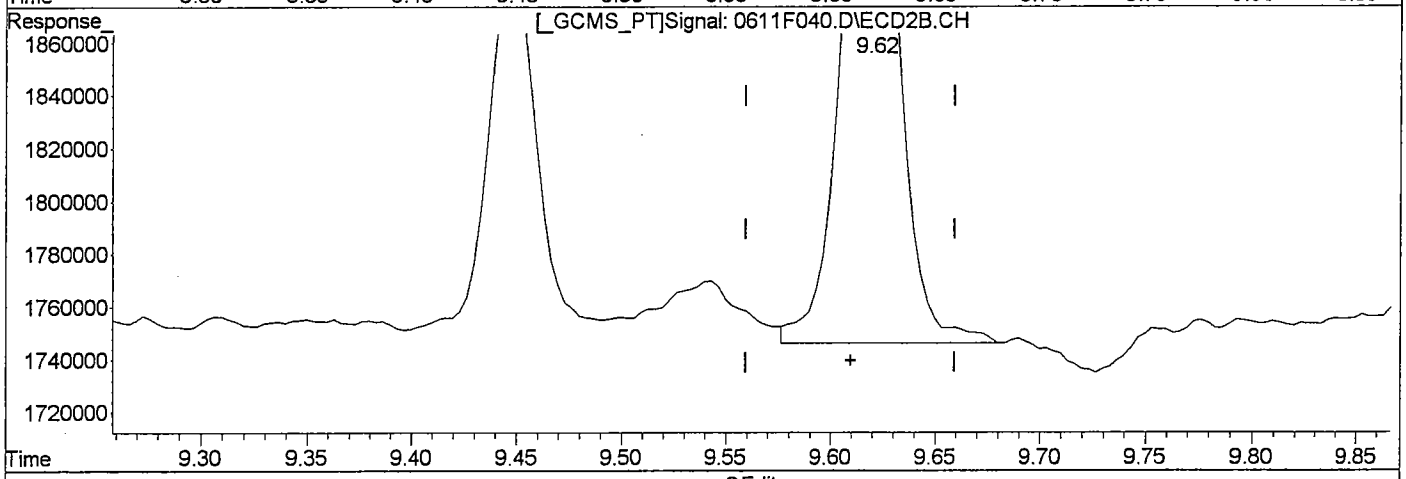
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:50:26 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(7) Heptachlor

10.73min 1.933ug/L

response 393808

(7) Heptachlor #2

9.62min 1.989ug/L

response 453523

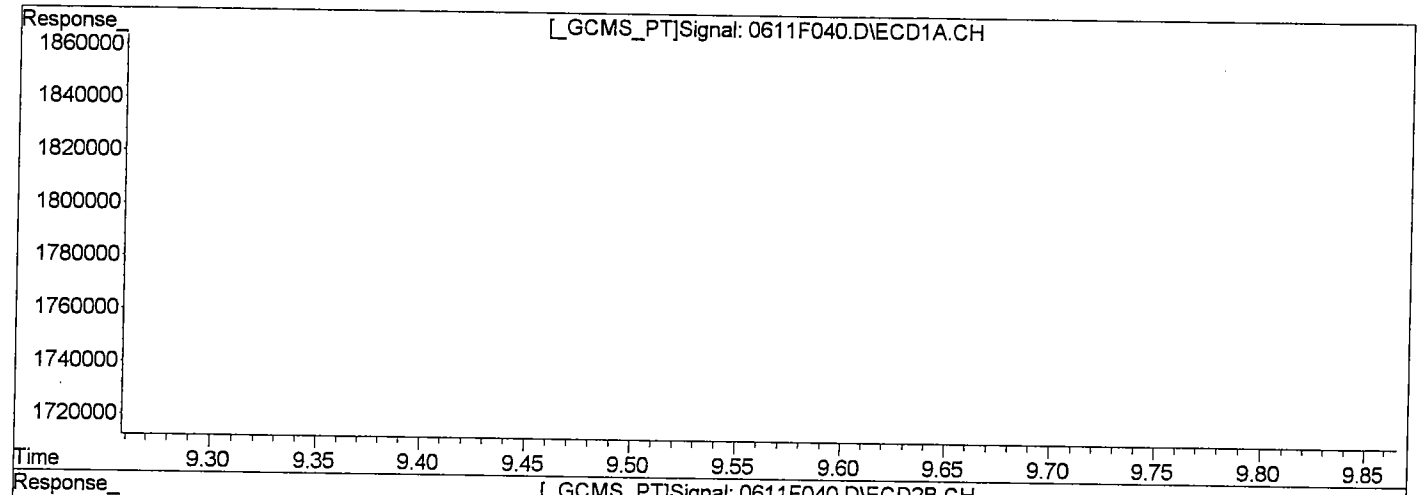
(+) = Expected Retention Time

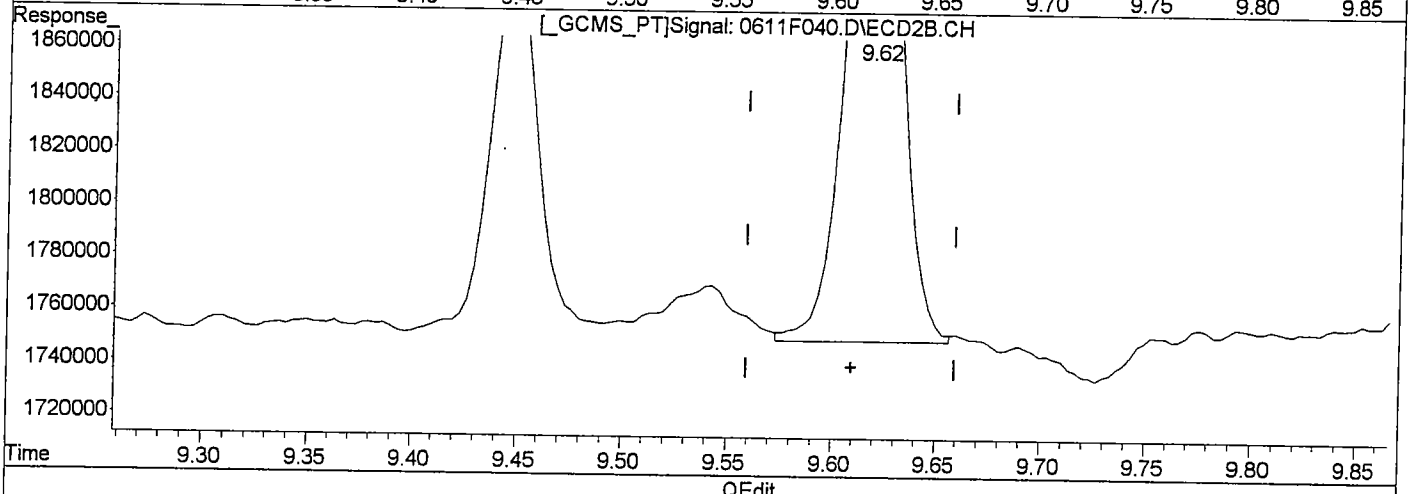
0611F040.D 061107-8081.M Tue Jun 12 13:50:36 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





(7) Heptachlor

10.73min 1.933ug/L

response 393808

(7) Heptachlor #2

9.62min 1.905ug/L m

response 434413

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

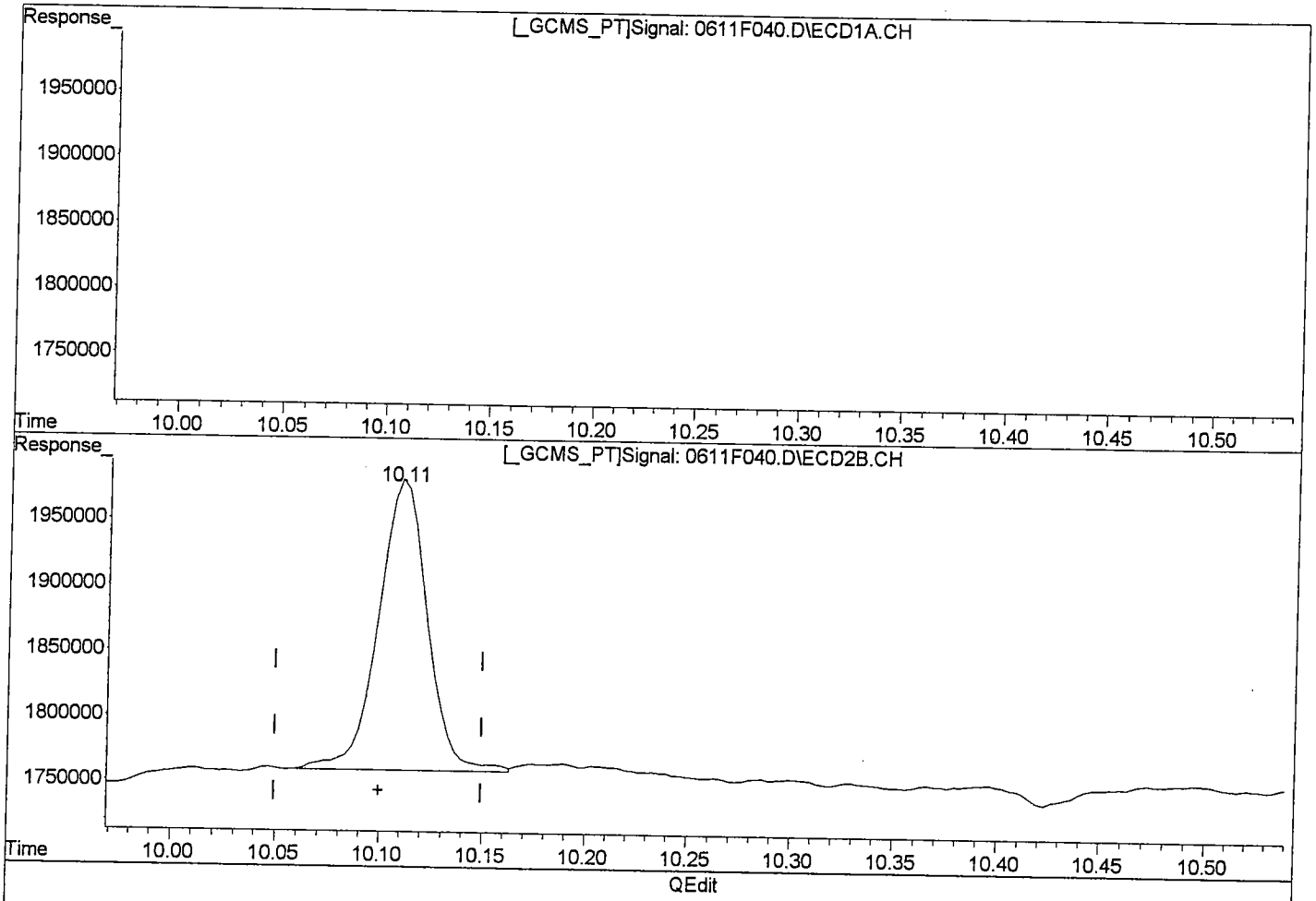
(+) = Expected Retention Time

0611F040.D 061107-8081.M Tue Jun 12 13:50:51 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(8) Aldrin

11.25min 1.879ug/L

response 328539

(8) Aldrin #2

10.11min 1.845ug/L

response 368262

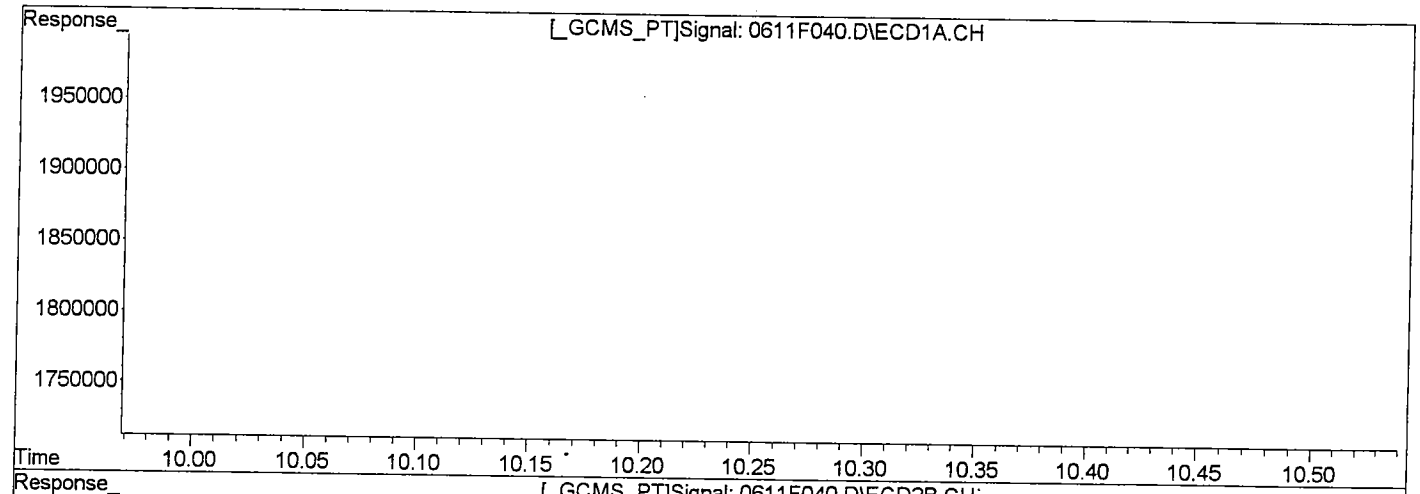
(+) = Expected Retention Time

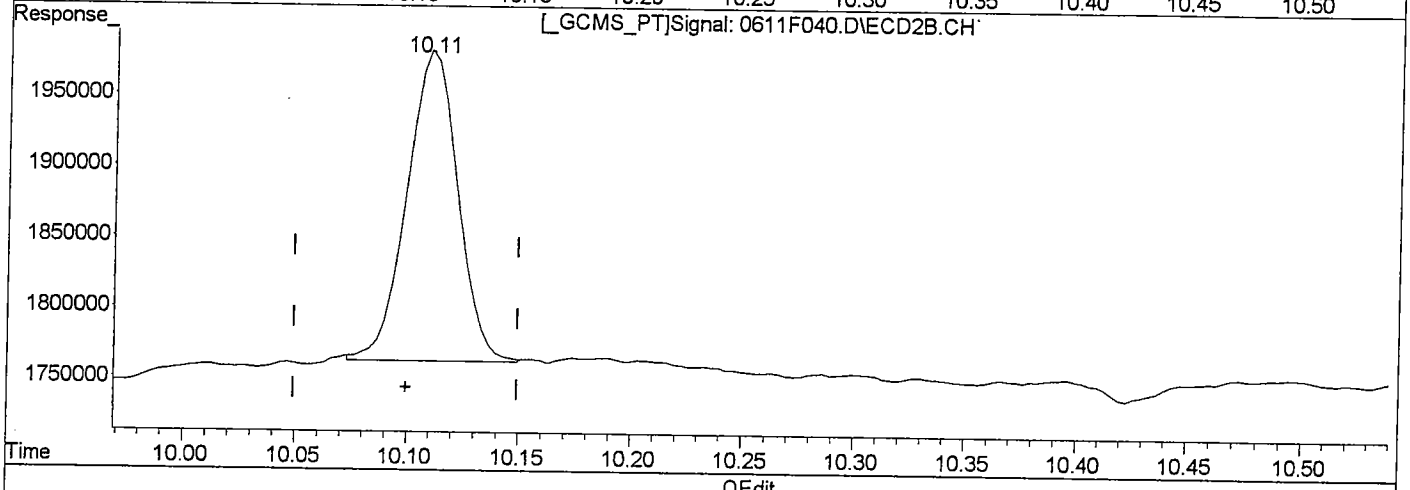
0611F040.D 061107-8081.M Tue Jun 12 13:51:01 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(8) Aldrin

11.25min 1.879ug/L

response 328539

(8) Aldrin #2

10.11min 1.728ug/L m

response 345071

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

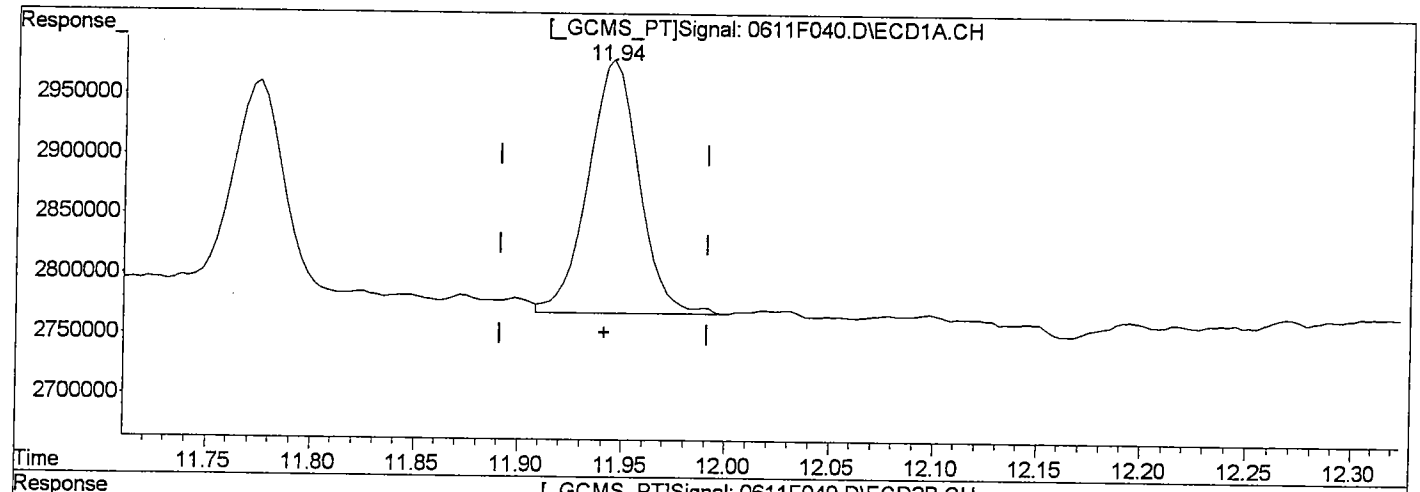
(+) = Expected Retention Time

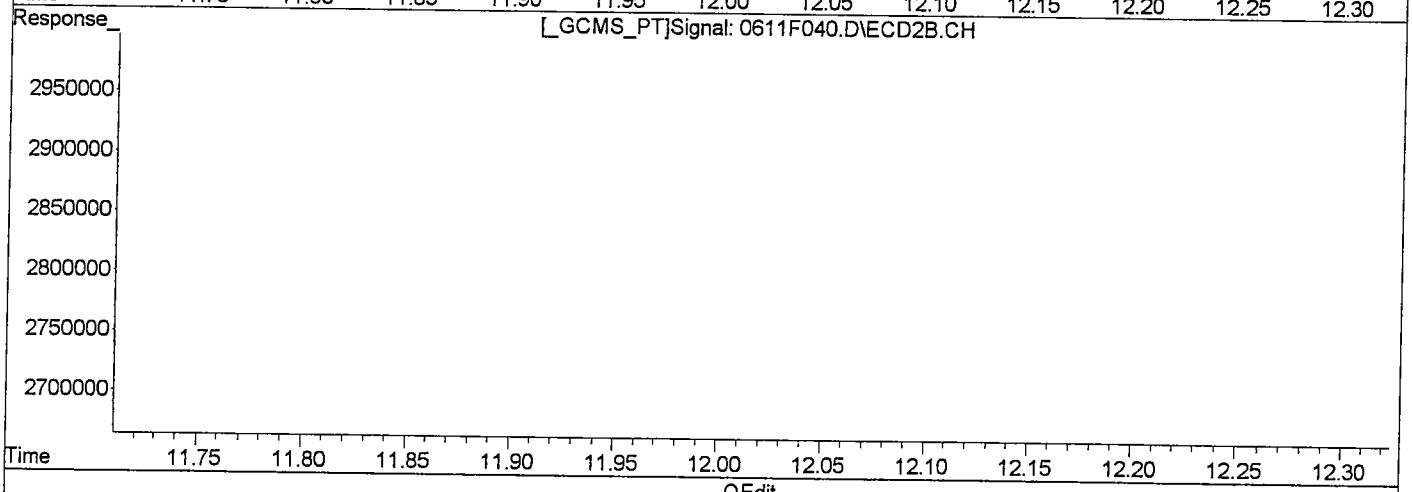
0611F040.D 061107-8081.M Tue Jun 12 13:51:11 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(10) Heptachlor Epoxide

11.94min 2.064ug/L

response 360371

(10) Heptachlor Epoxide #2

10.97min 1.875ug/L

response 377838

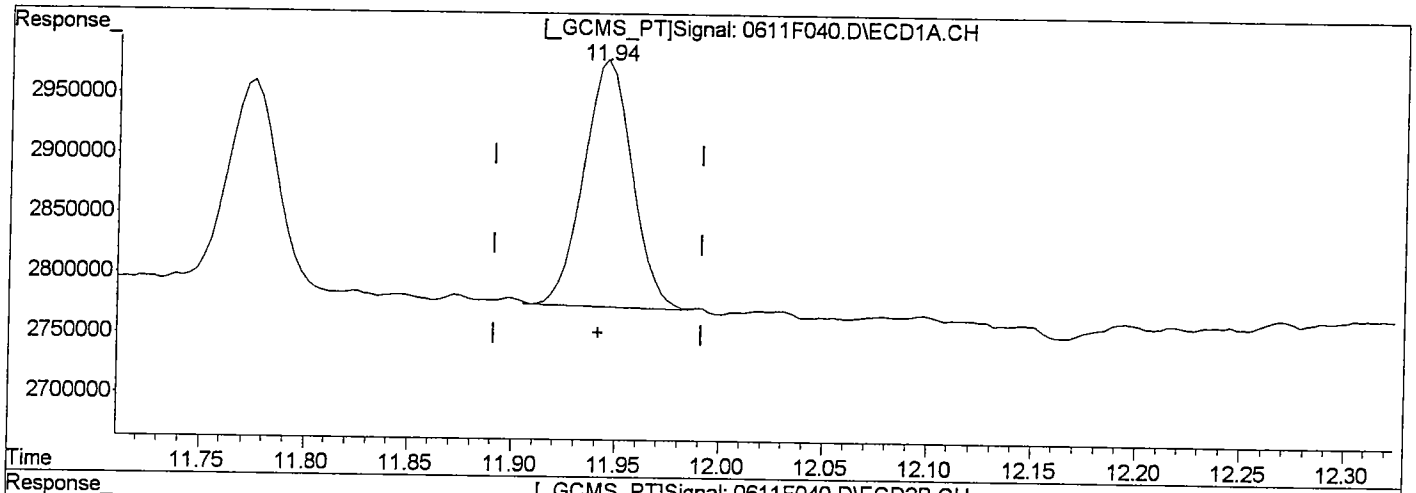
(+) = Expected Retention Time

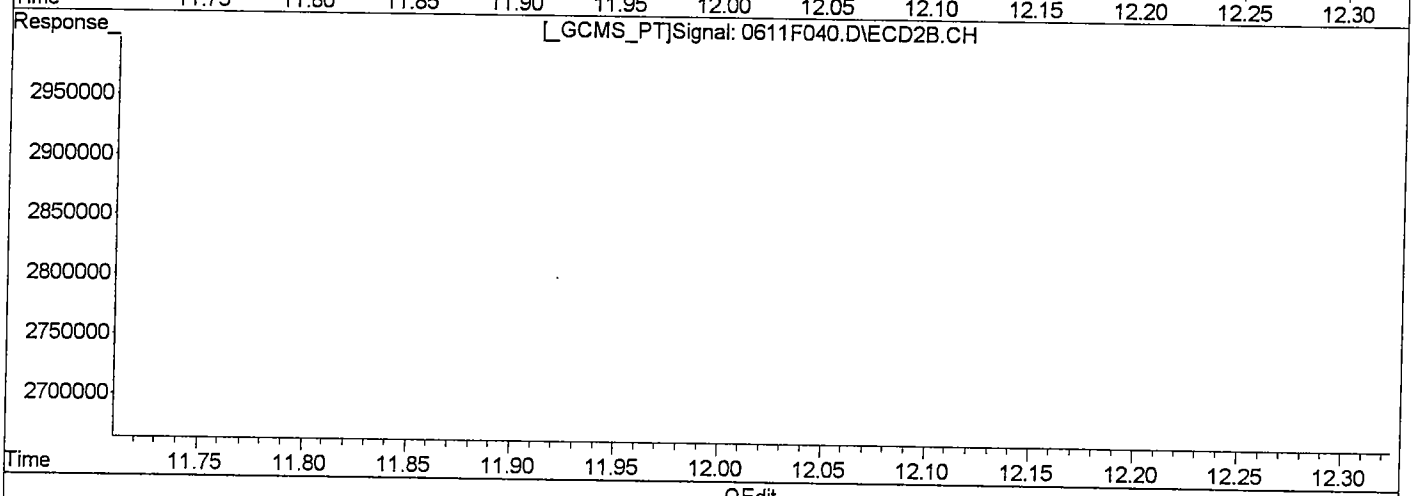
0611F040.D 061107-8081.M Tue Jun 12 13:51:23 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(10) Heptachlor Epoxide

11.94min 1.913ug/L m

response 334051

(10) Heptachlor Epoxide #2

10.97min 1.875ug/L

response 377838

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

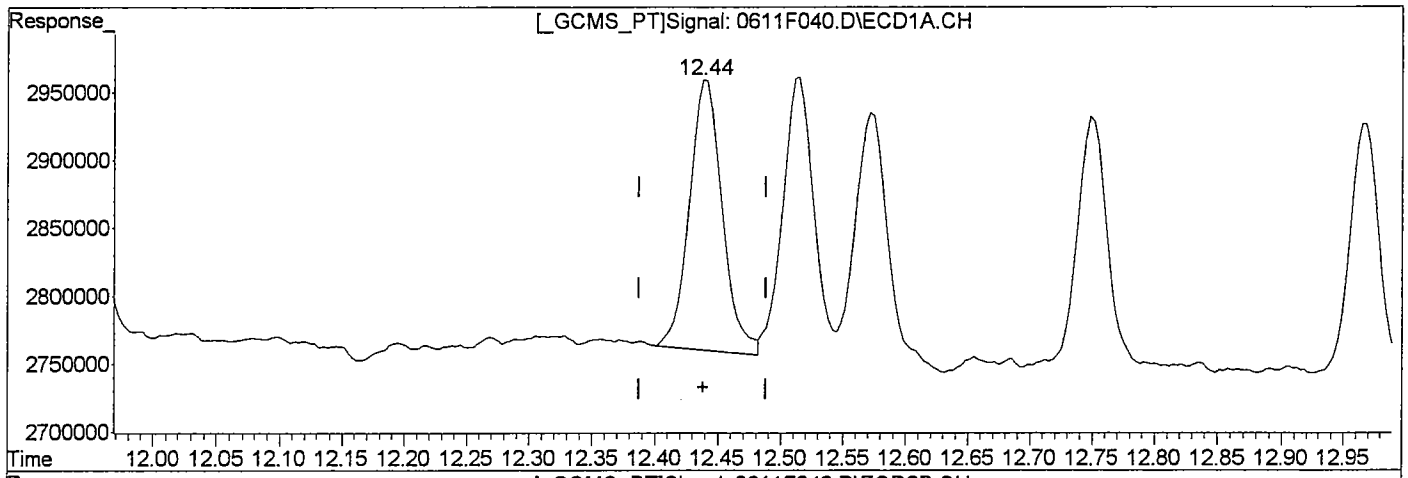
(+) = Expected Retention Time

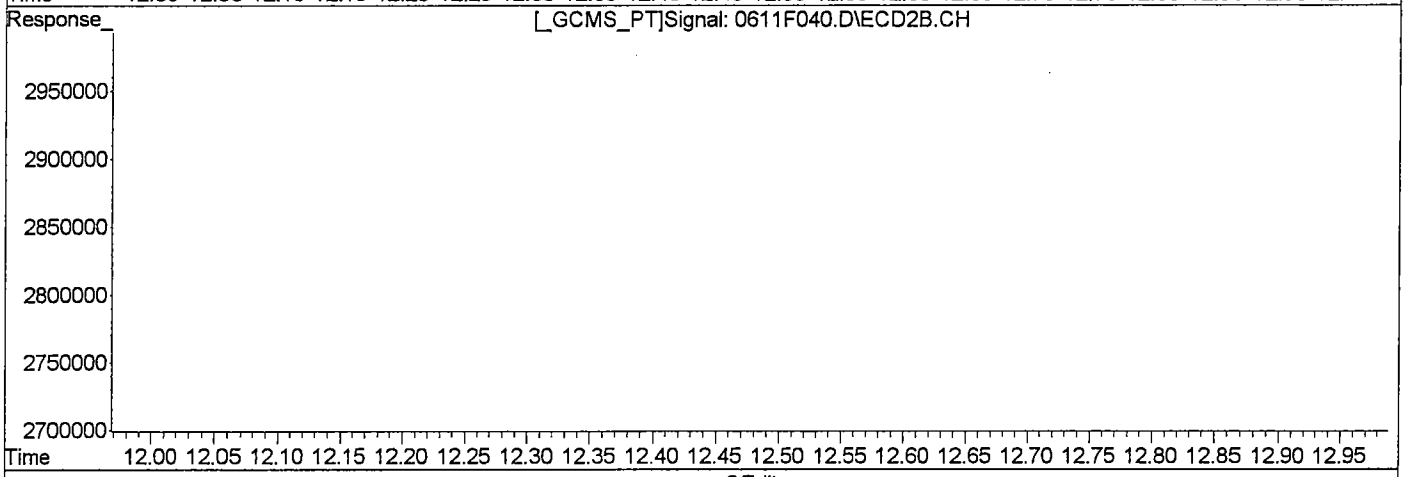
0611F040.D 061107-8081.M Tue Jun 12 13:51:49 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(11) gamma-Chlordane

12.44min 2.160ug/L

response 359930

(11) gamma-Chlordane #2

11.32min 1.869ug/L

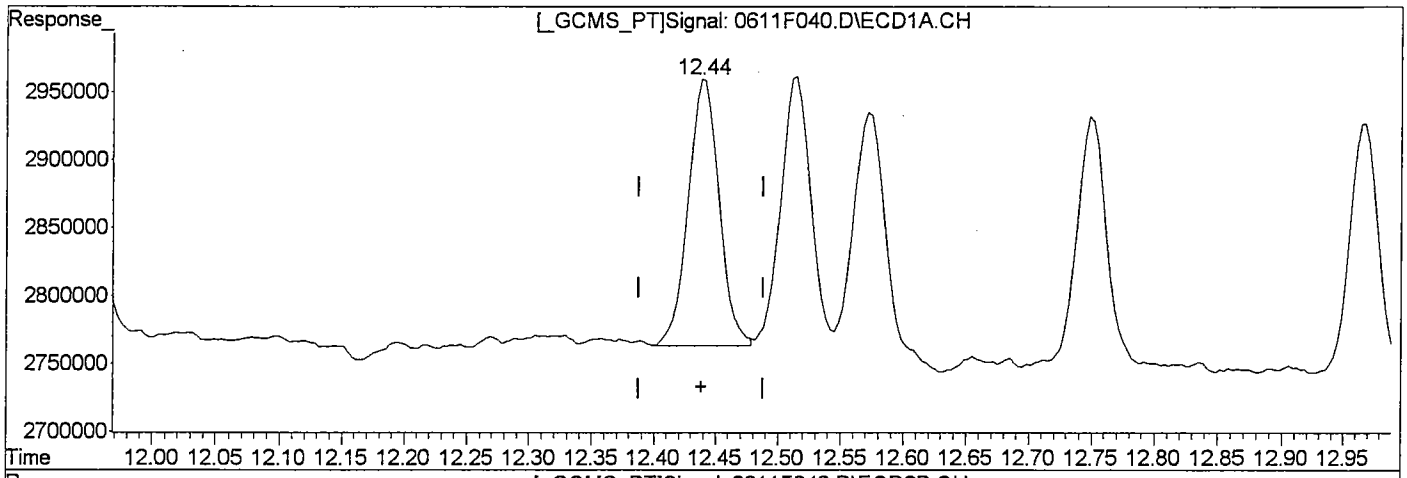
response 379987

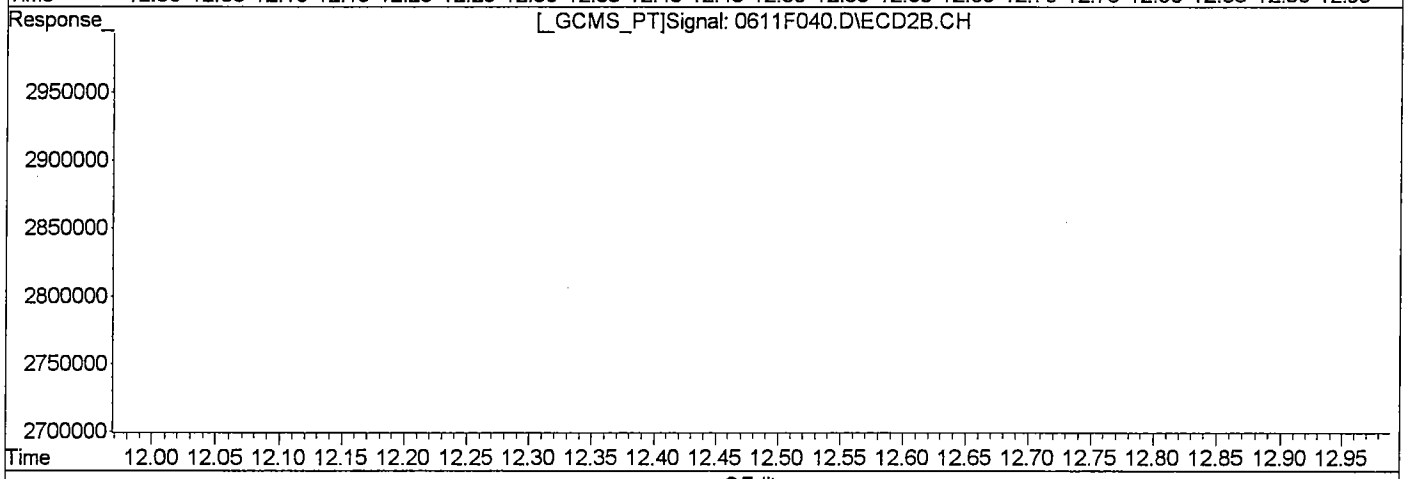
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:52:02 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(11) gamma-Chlordane
12.44min 2.064ug/L m
response 343885

(11) gamma-Chlordane #2
11.32min 1.869ug/L
response 379987

After
Initials A

JUN 12 2007

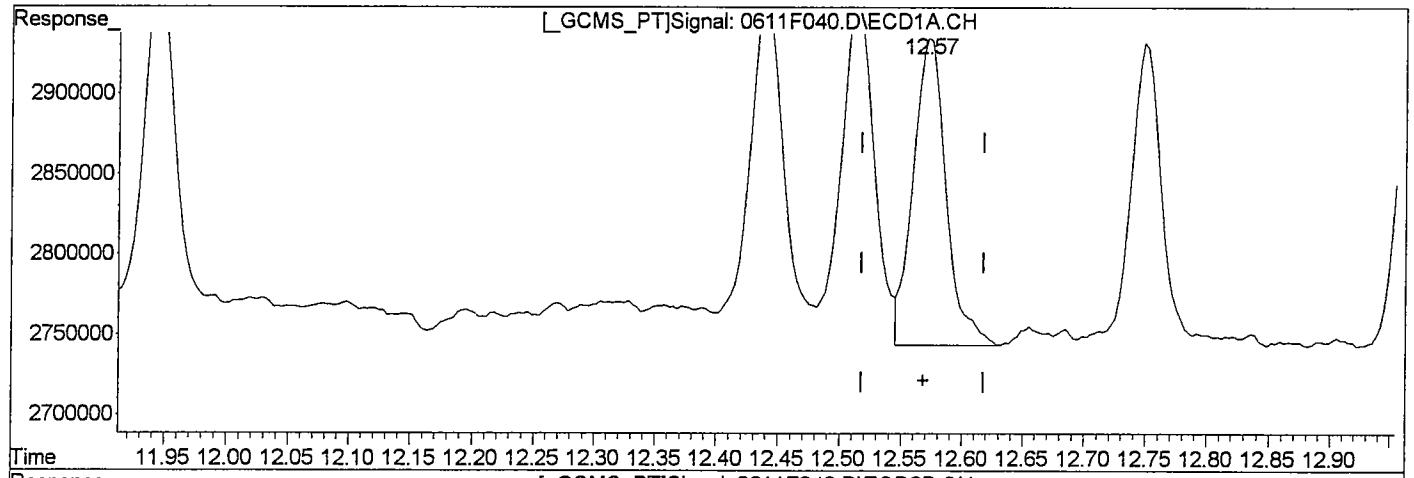
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

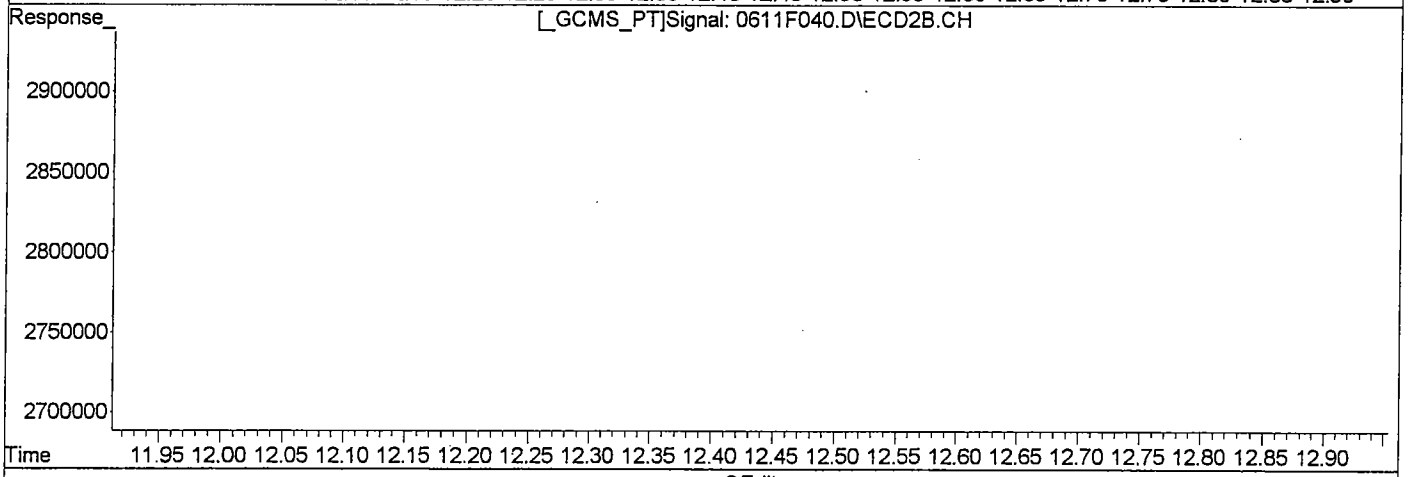
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:52:22 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(12) Endosulfan I

12.57min 2.338ug/L

response 358231

(12) Endosulfan I #2

11.55min 1.900ug/L

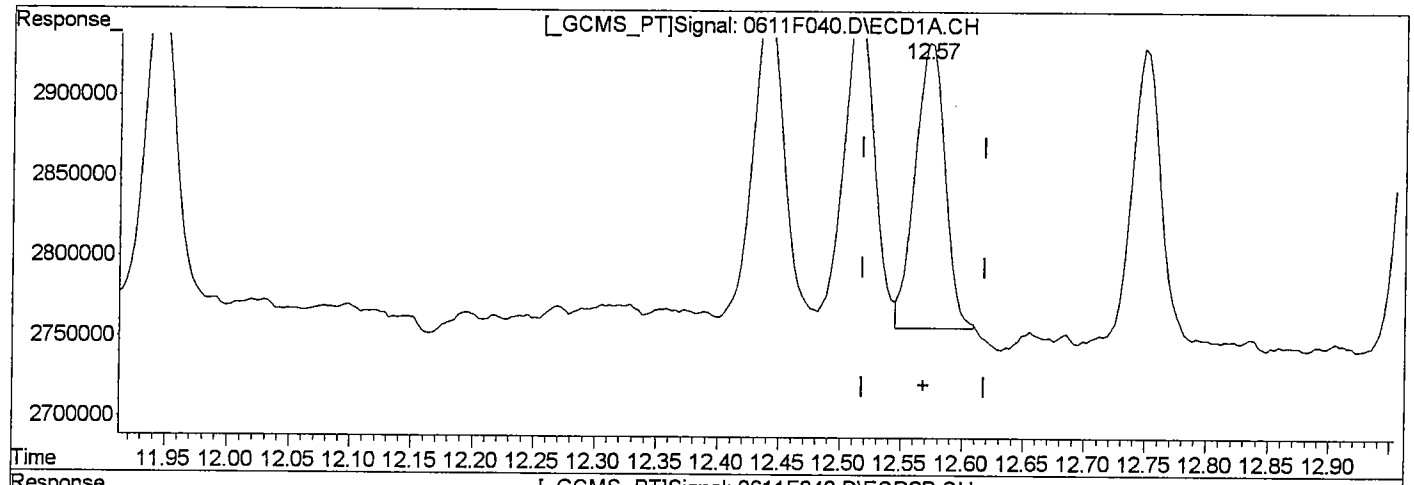
response 351955

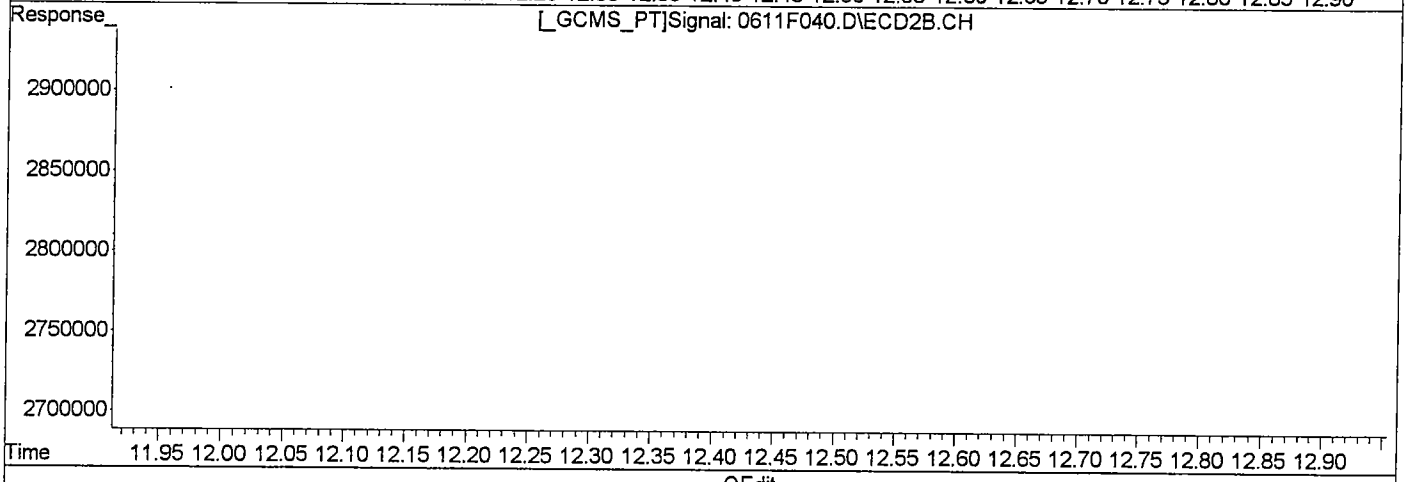
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:52:45 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(12) Endosulfan I

12.57min 1.963ug/L m

response 300809

(12) Endosulfan I #2

11.55min 1.900ug/L

response 351955

After
Initials

JUN 12 2007

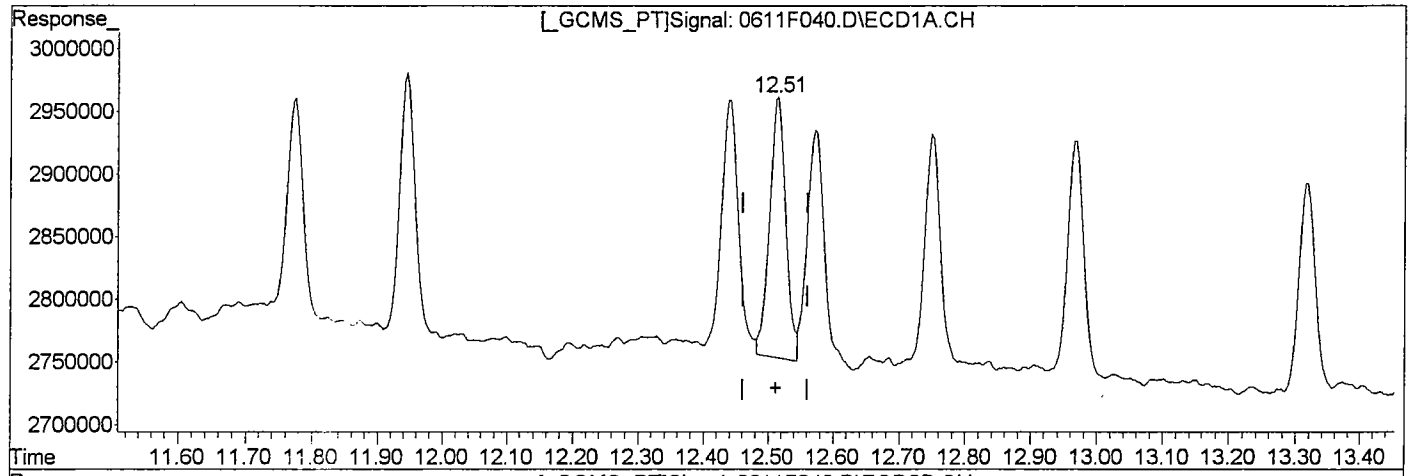
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

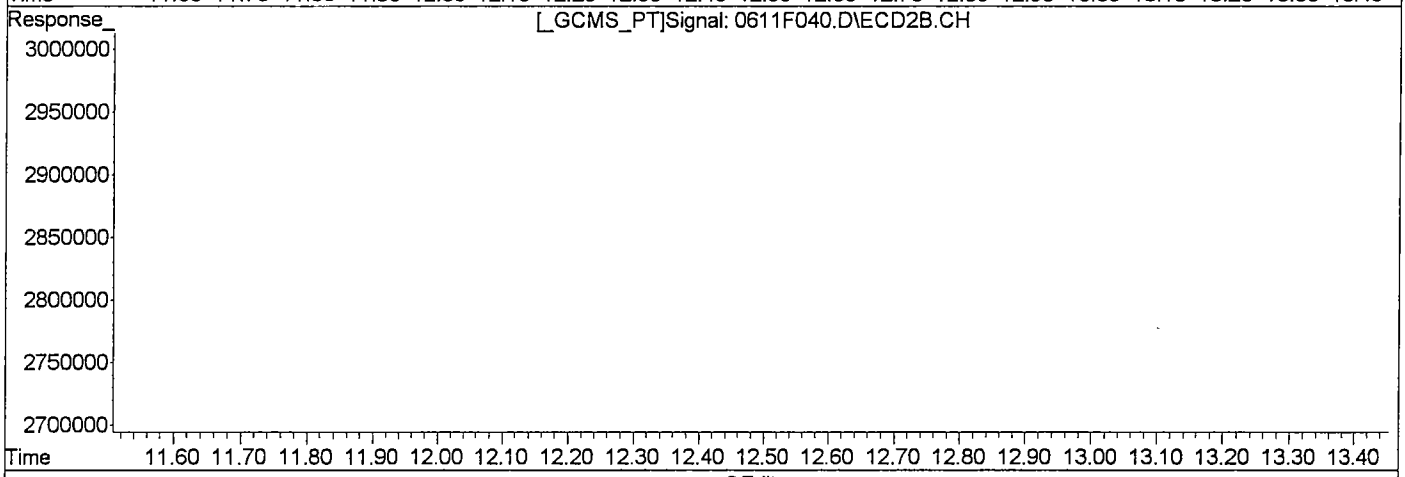
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:03 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(13) alpha-Chlordane

12.51min 2.222ug/L

response 366162

(13) alpha-Chlordane #2

11.47min 1.840ug/L

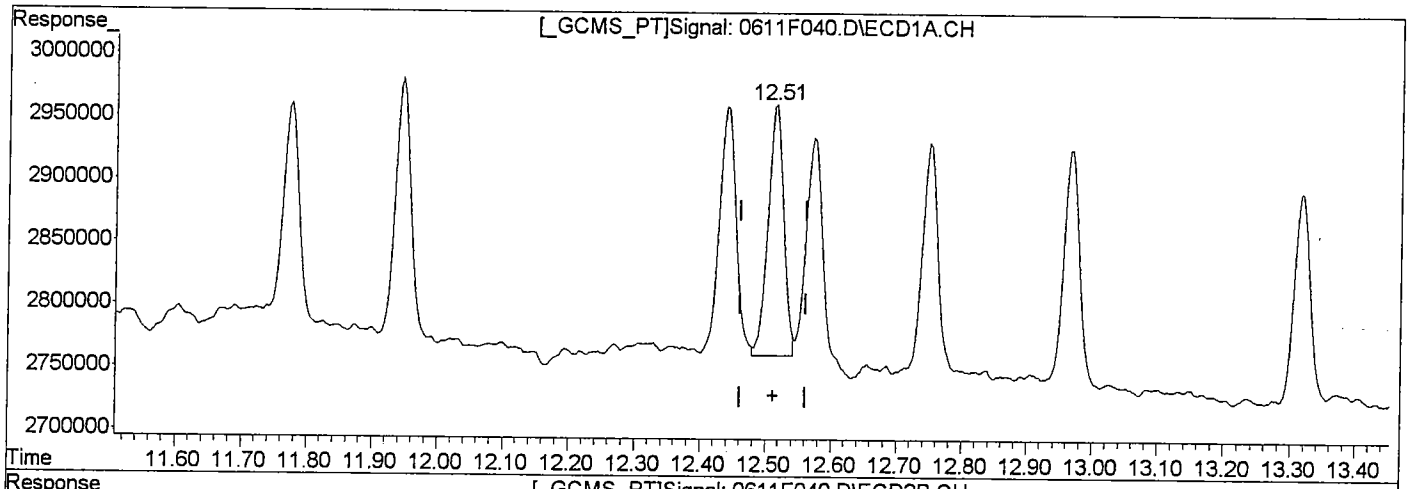
response 362839

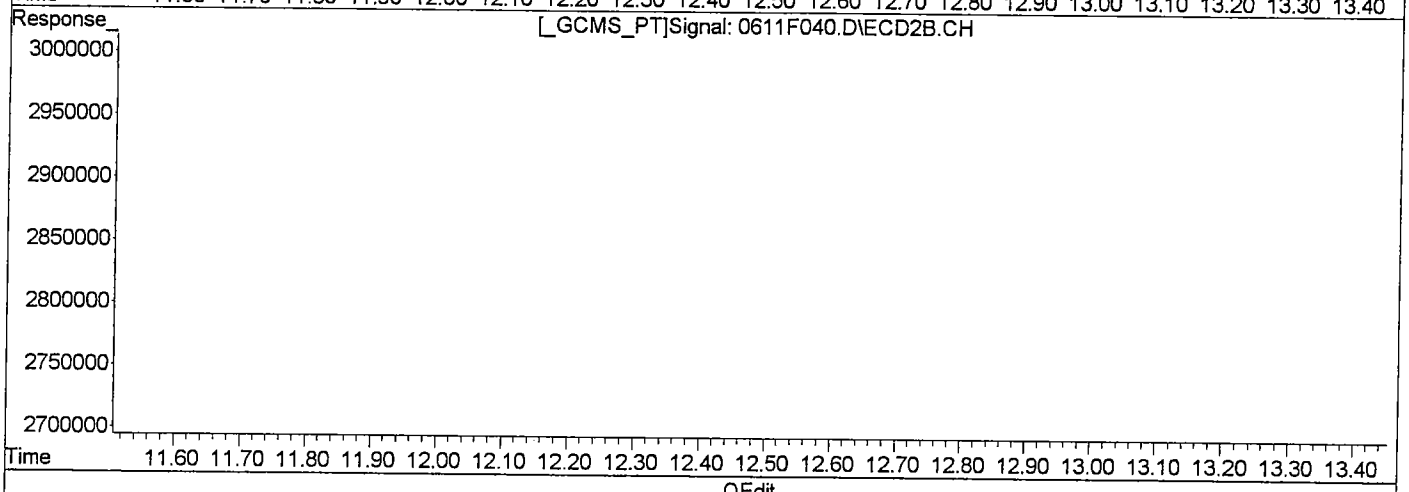
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(13) alpha-Chlordane
12.51min 2.037ug/L m
response 335636

(13) alpha-Chlordane #2
11.47min 1.840ug/L
response 362839

After
Initials

JUN 12 2007

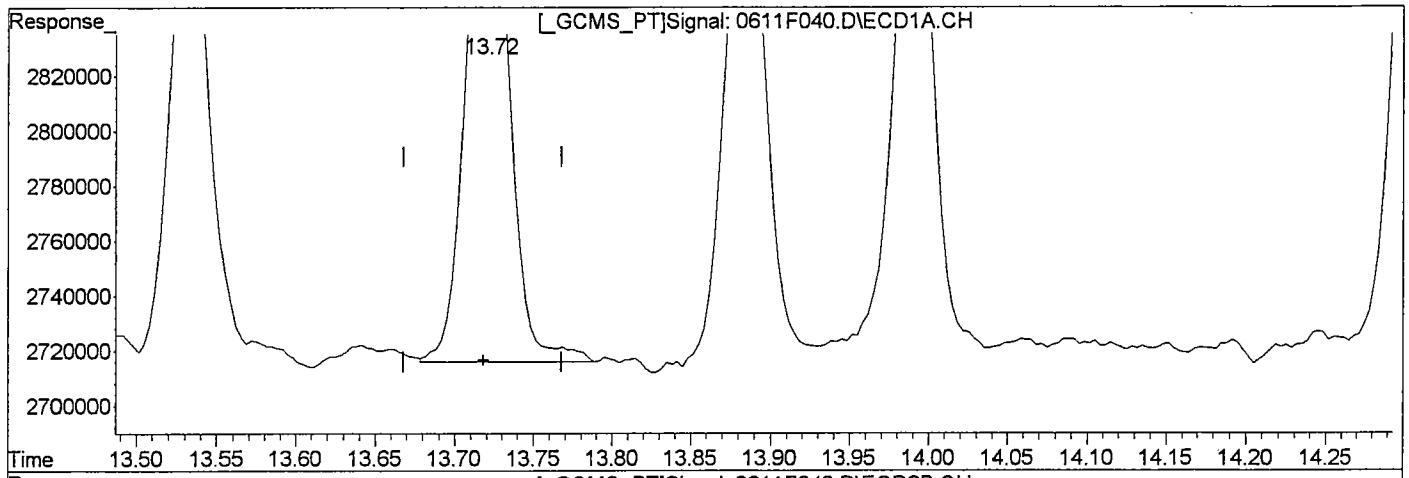
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

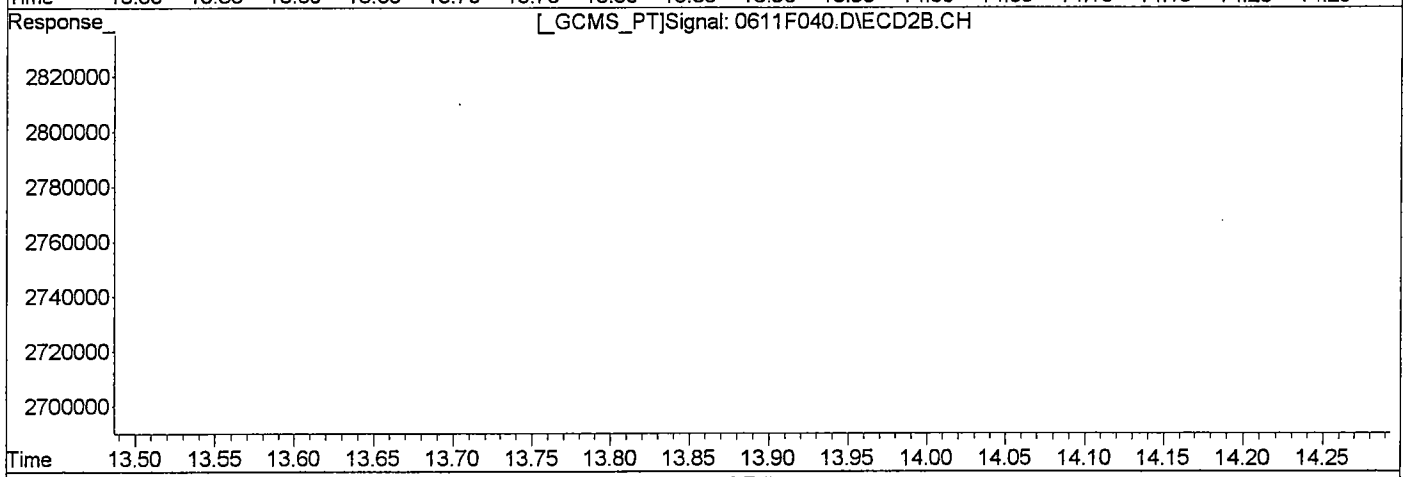
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:22 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 2.544ug/L

response 377448

(17) Endosulfan II #2

12.86min 1.957ug/L

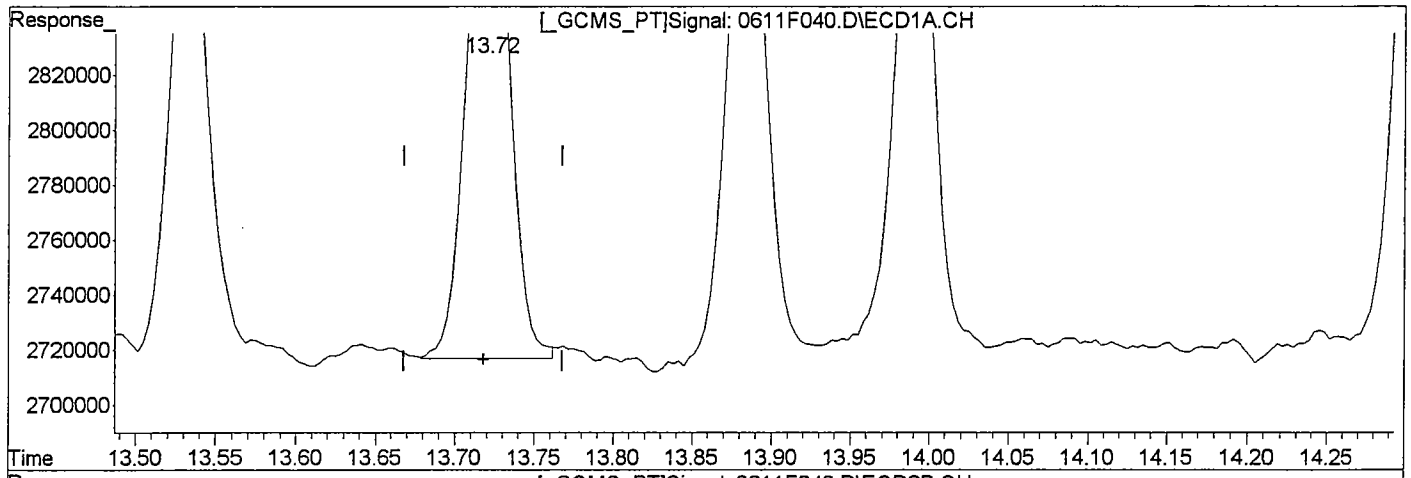
response 352461

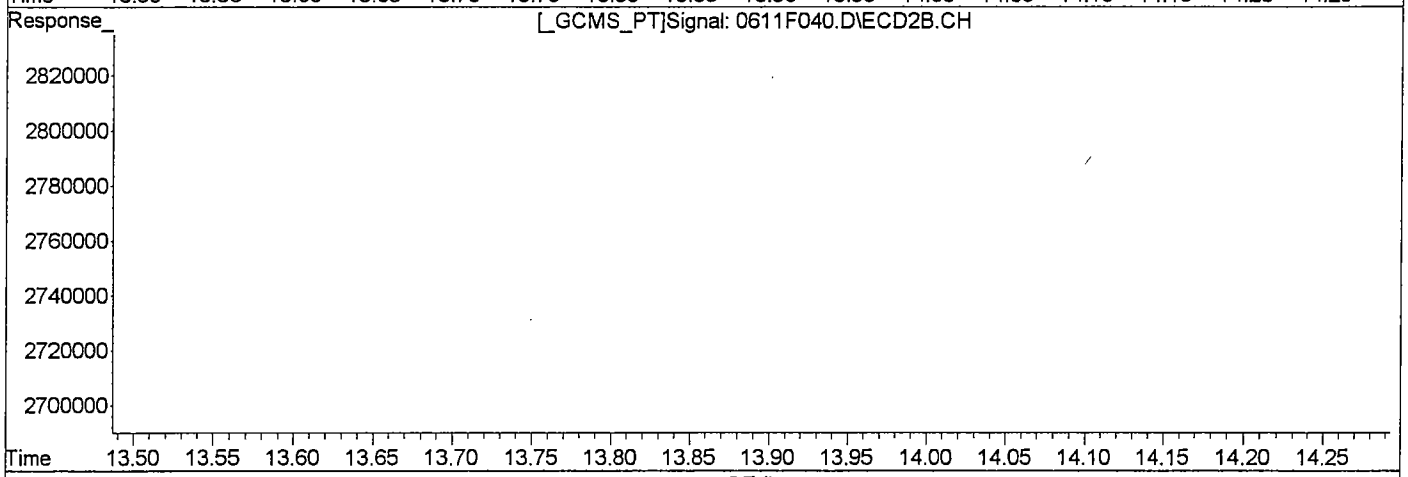
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(17) Endosulfan II

13.72min 2.474ug/L m

response 367061

(17) Endosulfan II #2

12.86min 1.957ug/L

response 352461

After

Initials AK

JUN 12 2007

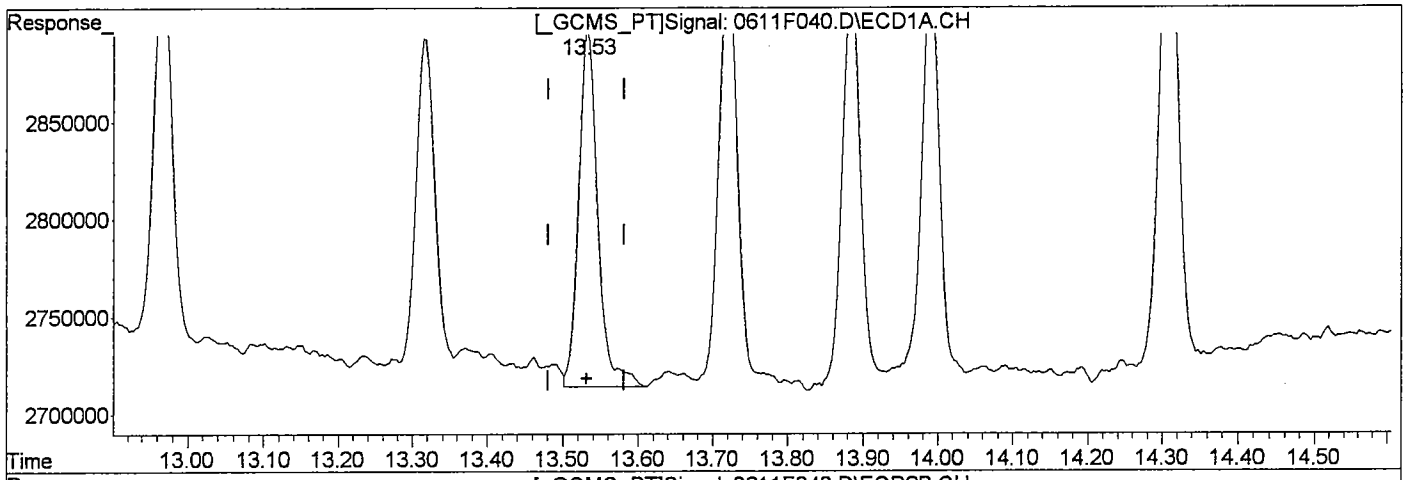
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

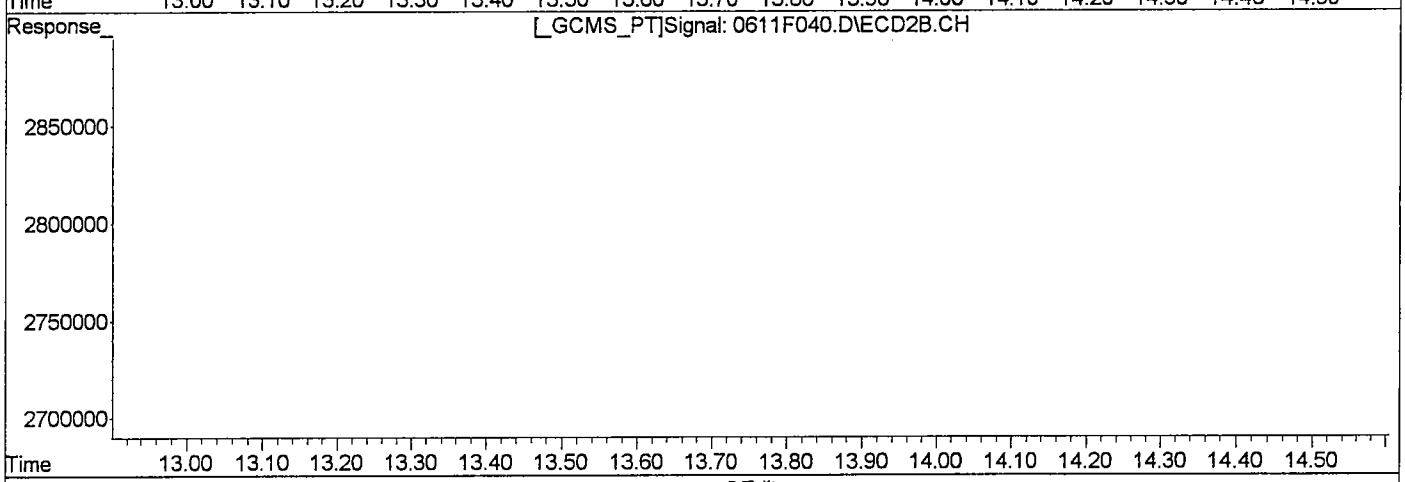
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:42 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 2.532ug/L

response 322615

(18) 4,4'-DDD #2

12.65min 1.765ug/L

response 270777

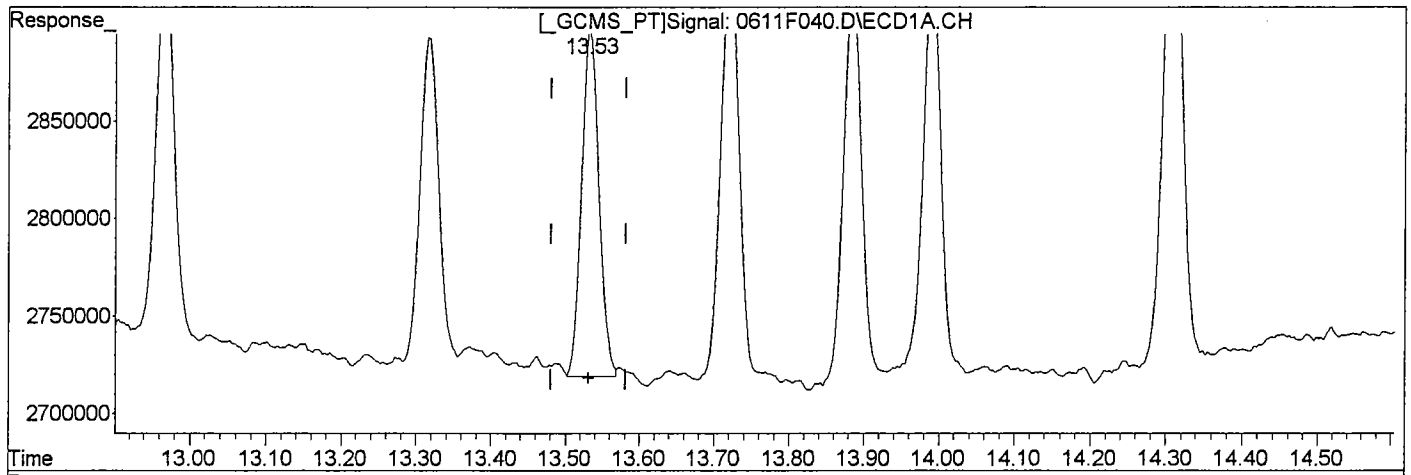
(+) = Expected Retention Time

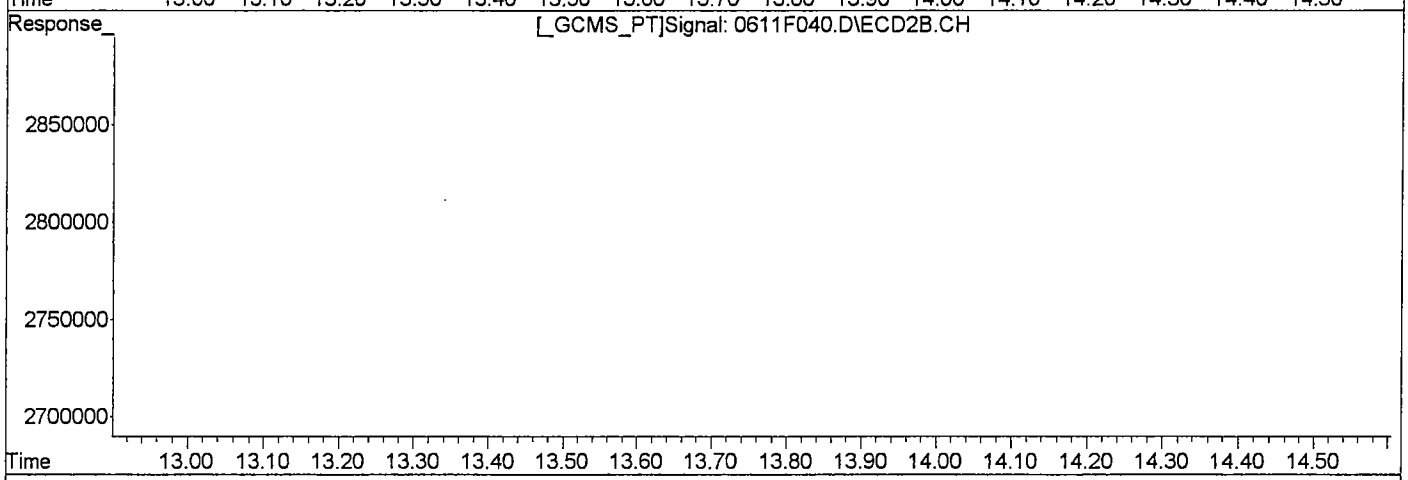
0611F040.D 061107-8081.M Tue Jun 12 13:53:47 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 2.267ug/L m

response 288784

(18) 4,4'-DDD #2

12.65min 1.765ug/L

response 270777

After
Initials

JUN 12 2007

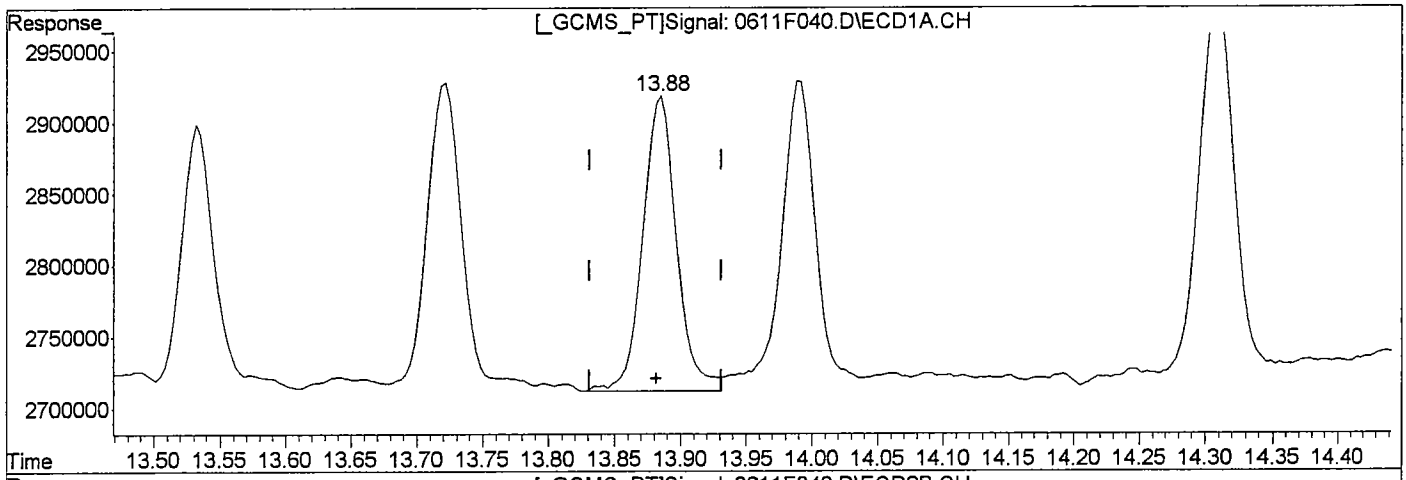
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

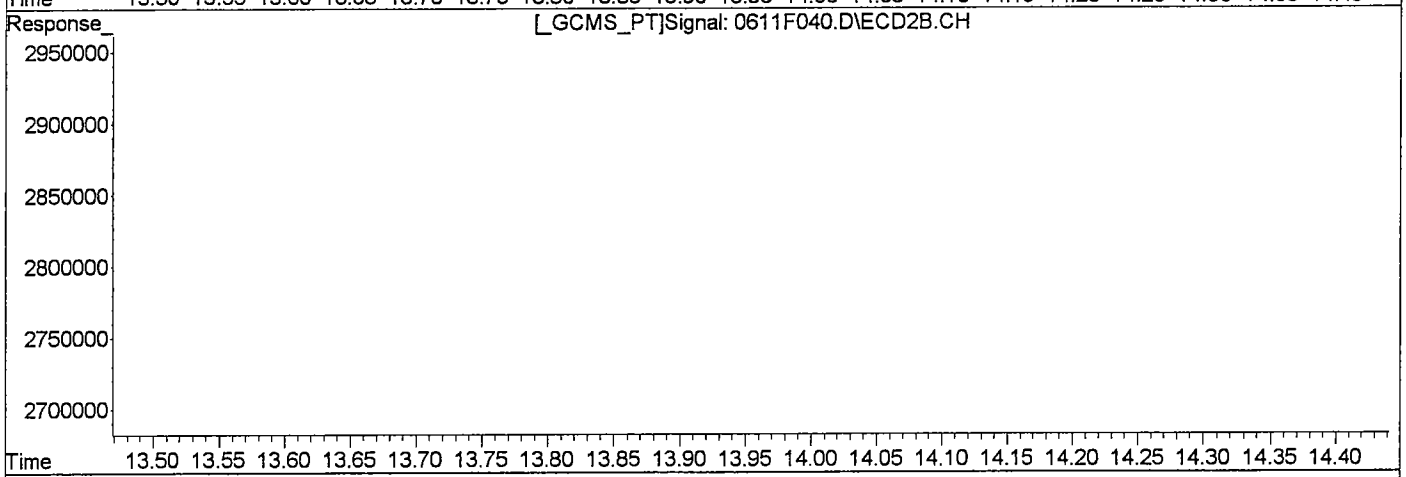
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:53:56 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.88min 2.841ug/L

response 366988

(19) Endrin Aldehyde #2

13.21min 1.985ug/L

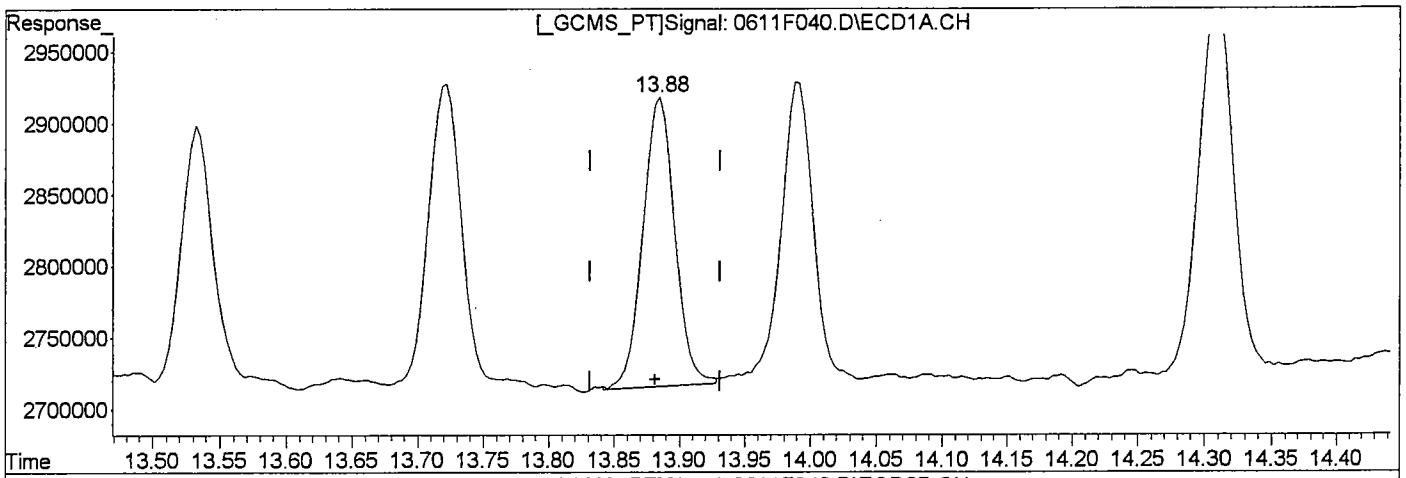
response 295112

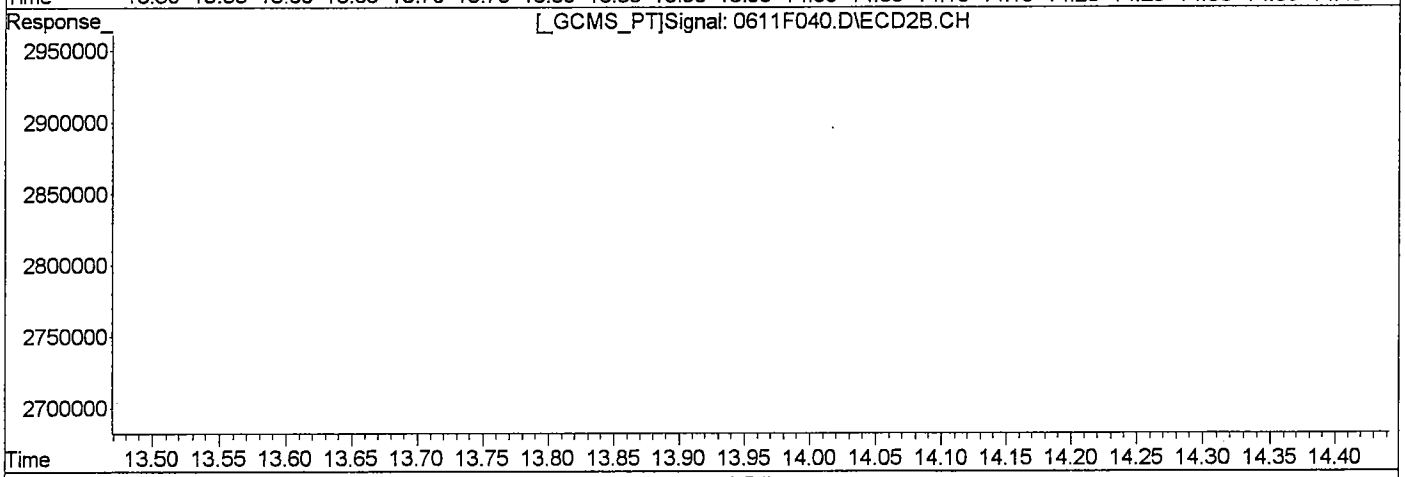
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:54:01 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde

13.88min 2.654ug/L m

response 342755

(19) Endrin Aldehyde #2

13.21min 1.985ug/L

response 295112

After
Initials

JUN 12 2007

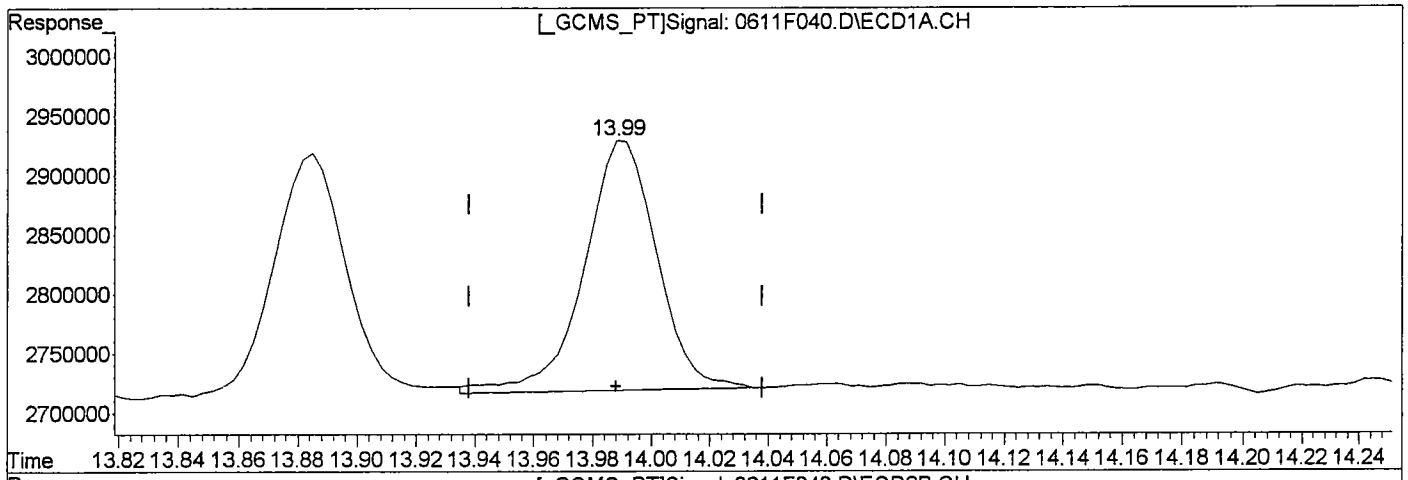
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

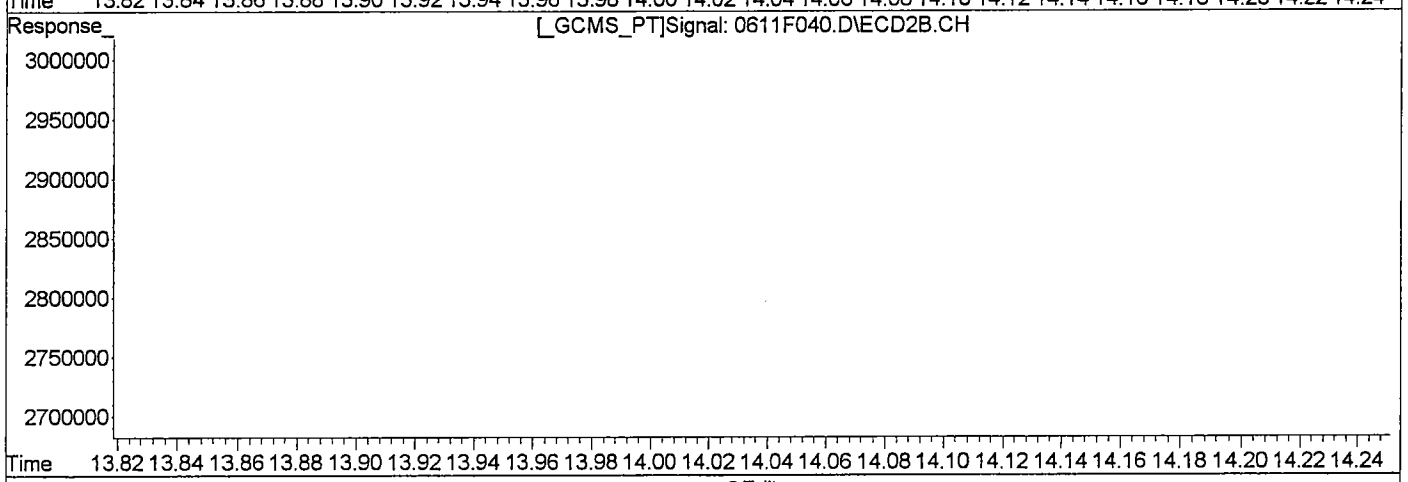
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:54:07 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

13.99min 2.582ug/L

response 360819

(21) 4,4'-DDT #2

13.06min 1.773ug/L

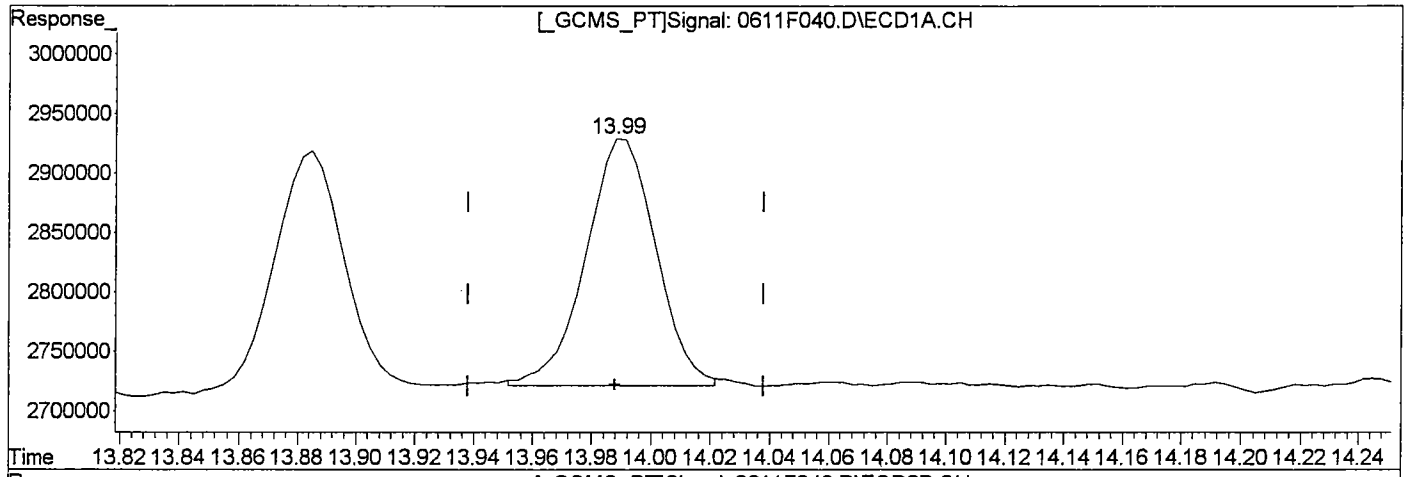
response 288298

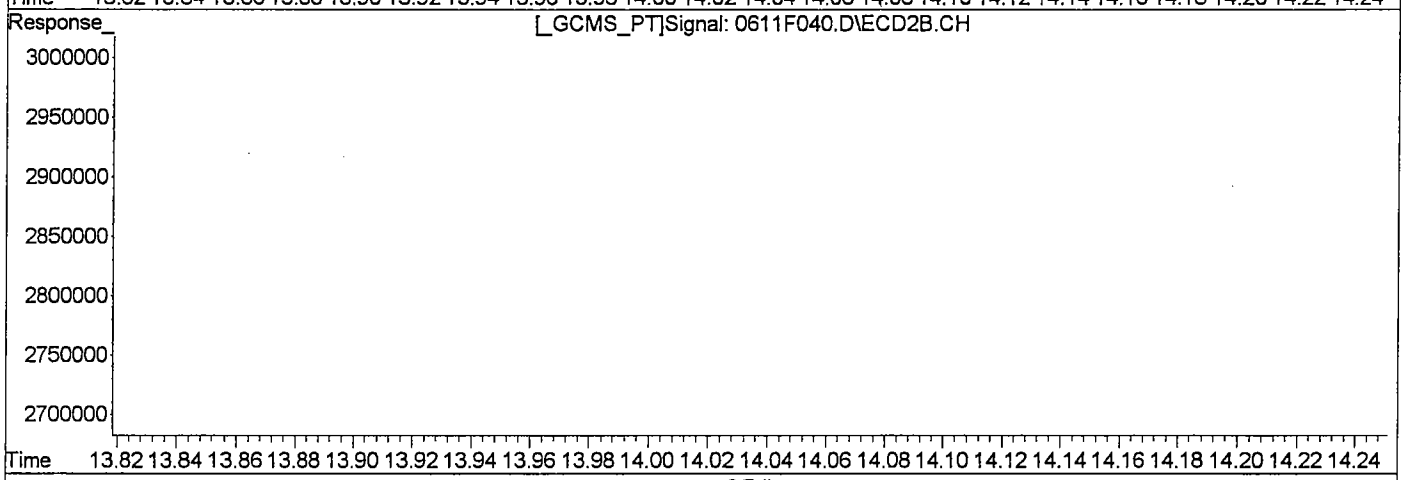
(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:54:18 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(21) 4,4'-DDT

13.99min 2.432ug/L m

response 339801

(21) 4,4'-DDT #2

13.06min 1.773ug/L

response 288298

After

Initials

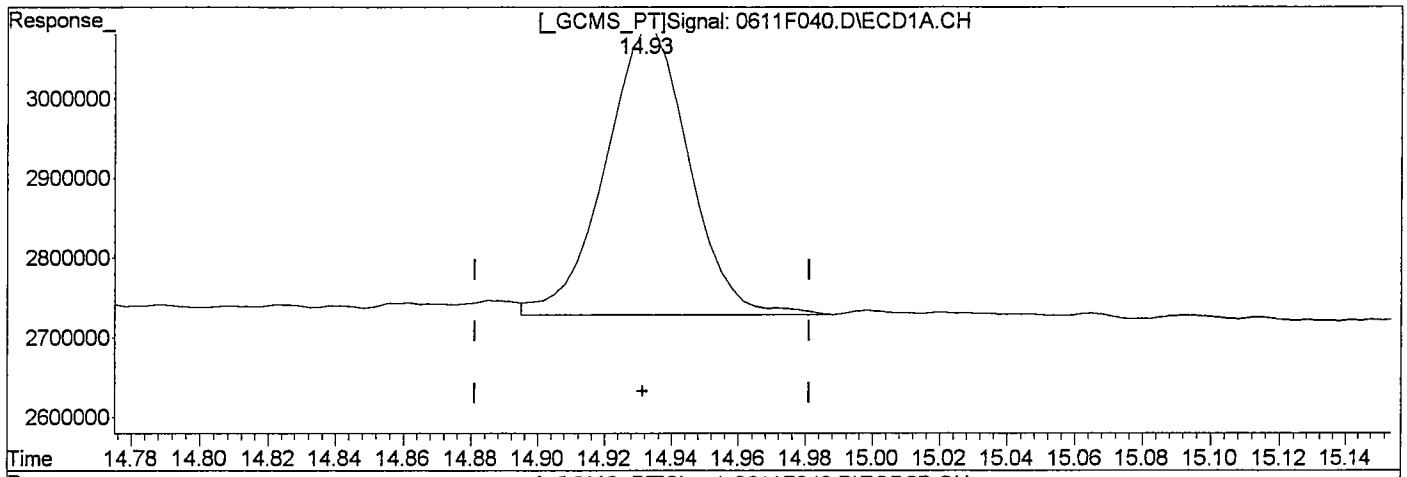
JUN 12 2007

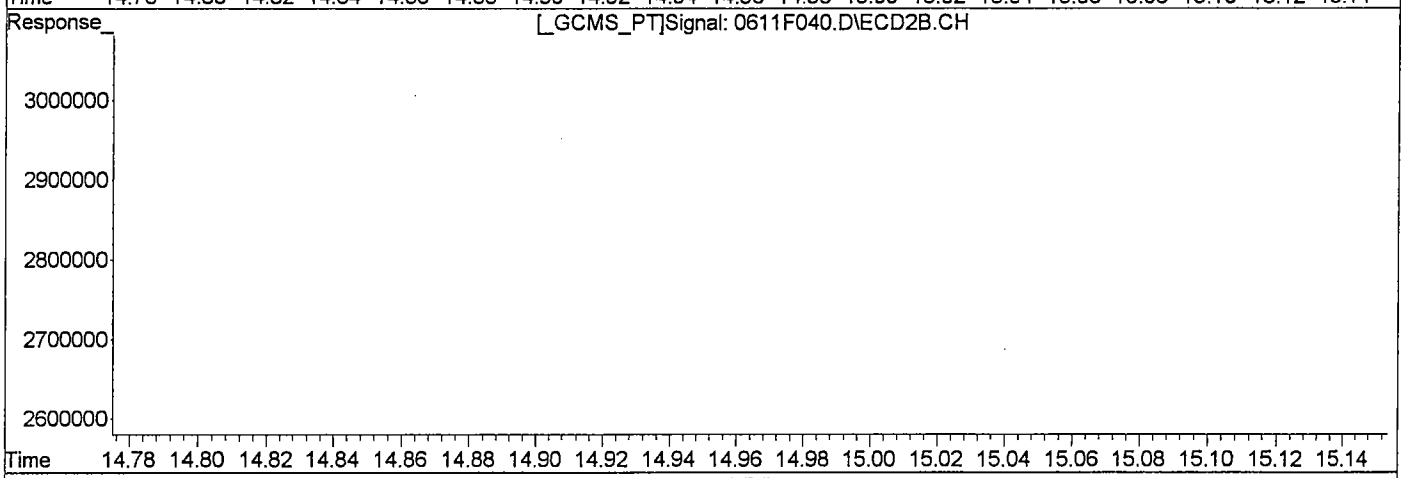
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:54:24 2007

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone

14.93min 2.648ug/L

response 624627

(22) Endrin Ketone #2

14.39min 1.846ug/L

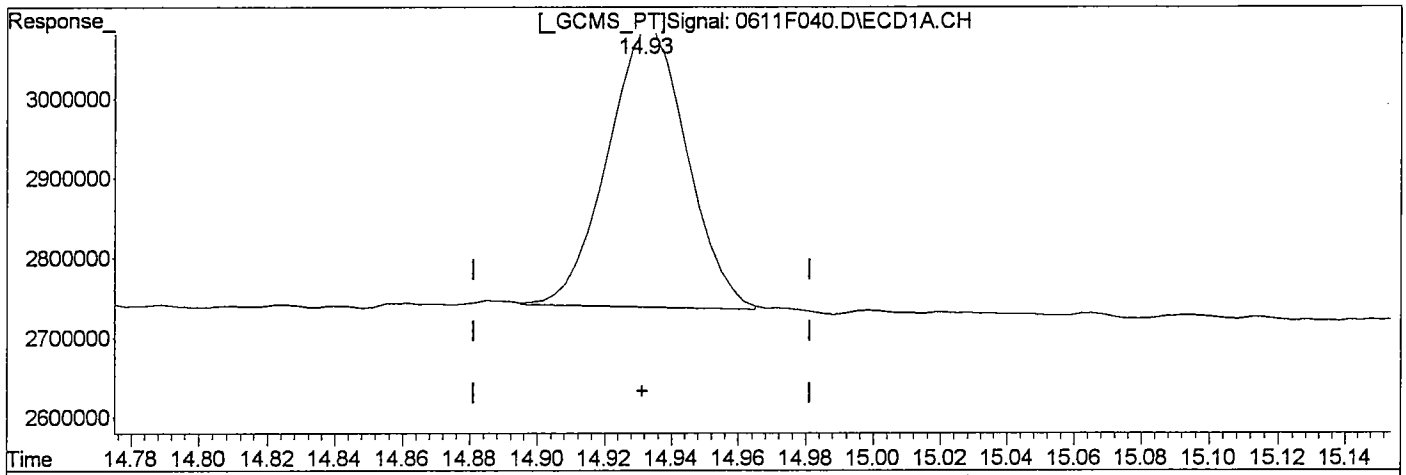
response 382357

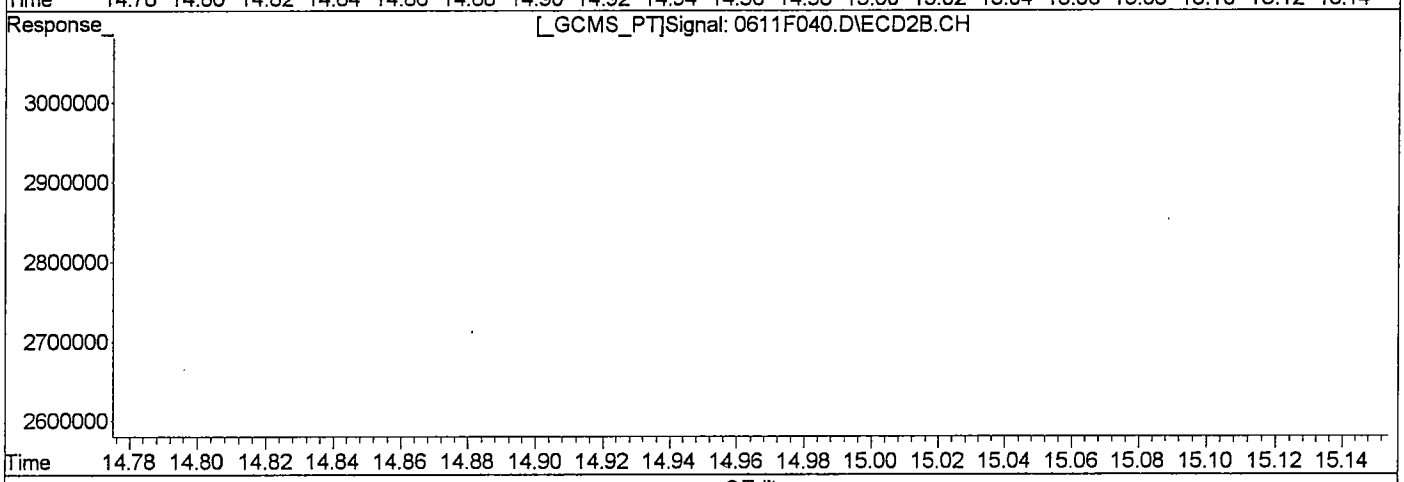
(+) = Expected Retention Time

0611F040.D 061107-8081.M Tue Jun 12 13:54:30 2007

Signal #1 : J:\GC23\DATA\061107\0611F040.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061107\0611F040.D\ECD2B.CH
Acq On : 12 Jun 2007 11:39 am Operator: AKamawal
Sample : 8081 @ 2ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(22) Endrin Ketone
14.93min 2.441ug/L m
response 575810

(22) Endrin Ketone #2
14.39min 1.846ug/L
response 382357

After
Initials AK
JUN 12 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F040.D 061107-8081.M Tue Jun 12 13:54:36 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45:51 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
1)	s	Tetrachloro-m-xy	8.51	7.40	992704	843642	4.941m	4.666	
24)	s	Decachlorobiphen	17.13	15.99	1493123	973333	5.526	5.374	
		Target Compounds							
2)		alpha-BHC	9.21	8.43	1025906	986726	4.447	4.154m	
3)		Hexachlorobenzen	9.34	8.27	1248749	1230848	5.097	4.976m	
4)		beta-BHC	10.22	9.45	551650	517011	5.138	4.855	
5)		gamma-BHC (Linda	9.75	9.05	1013184	975157	4.692	4.339	
6)		delta-BHC	10.63	9.90	894038	897912	4.520	4.192m	
7)		Heptachlor	10.73	9.62	970959	1074314	4.766	4.711	
8)		Aldrin	11.25	10.11	815767	903824	4.665	4.527	
9)		Isodrin	11.77	10.76	734745	798904	4.950	4.631	
10)		Heptachlor Epoxi	11.94	10.97	845114	948946	4.841	4.709	
11)		gamma-Chlordane	12.44	11.32	827859	952363	4.968	4.684	
12)		Endosulfan I	12.57	11.55	787830	889152	5.141	4.801	
13)		alpha-Chlordane	12.51	11.47	834233	926760	5.063	4.699	
14)		Dieldrin	12.97	11.99	789940	891469	5.066	4.590	
15)		4,4'-DDE	12.75	11.79	718533	825828	4.873	4.474	
16)		Endrin	13.32	12.47	731079	797157	5.384	4.527m	
17)		Endosulfan II	13.72	12.87	920069	877270	6.201	4.870	
18)		4,4'-DDD	13.53	12.65	713393	680940	5.599m	4.439	
19)		Endrin Aldehyde	13.88	13.21	822375	732171	6.367	4.925	
20)		Endosulfan Sulfa	14.31	13.51	1117479	884601	6.665	4.877	#
21)		4,4'-DDT	13.99	13.06	844458	720885	6.043	4.433	#
22)		Endrin Ketone	14.93	14.40	1472905	1008697	6.245	4.869	
23)		Methoxychlor	14.64	14.07	676537	437285	6.494	4.530	#

AK 6/12/07 [illegible]
[illegible] 6/12/07
JM

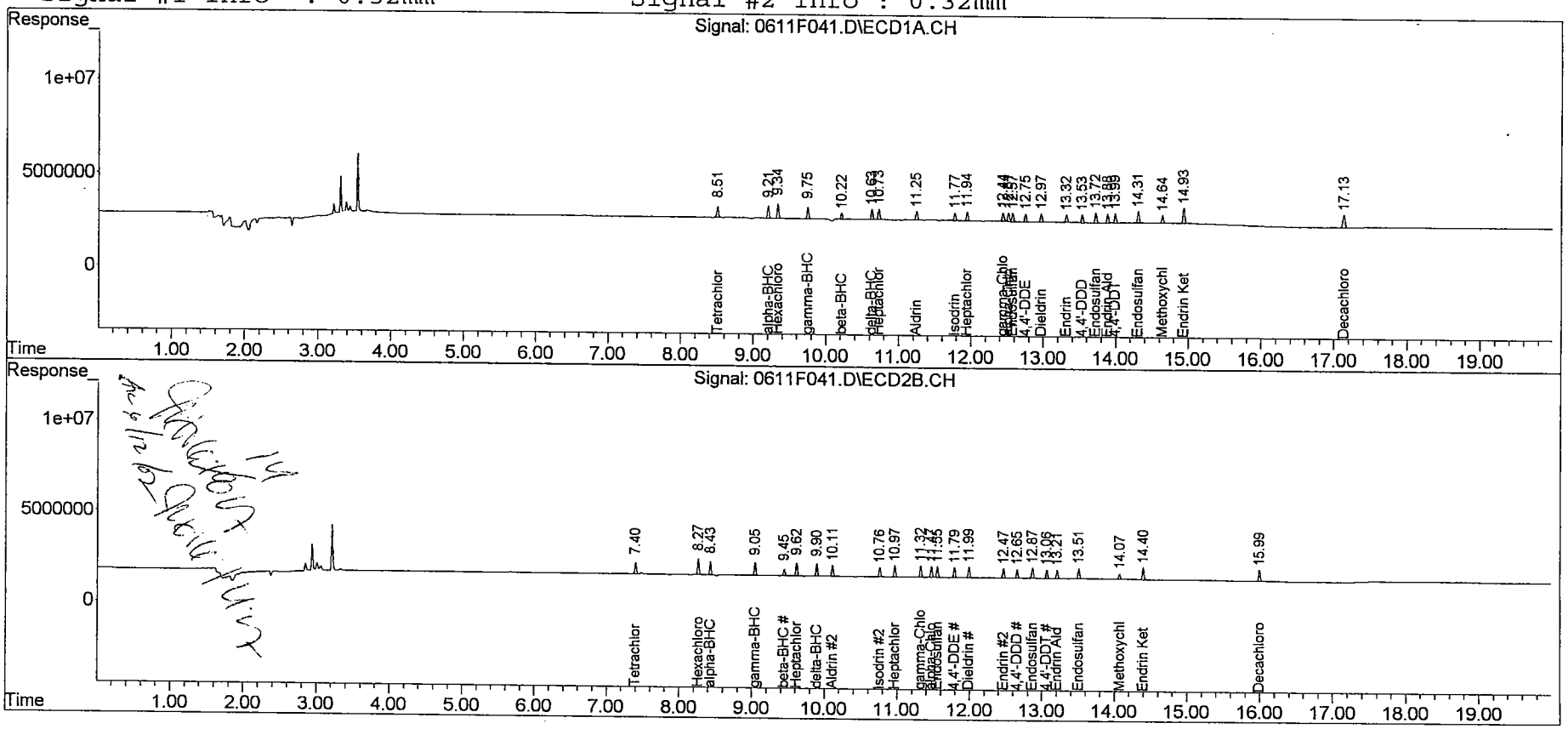
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:57 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

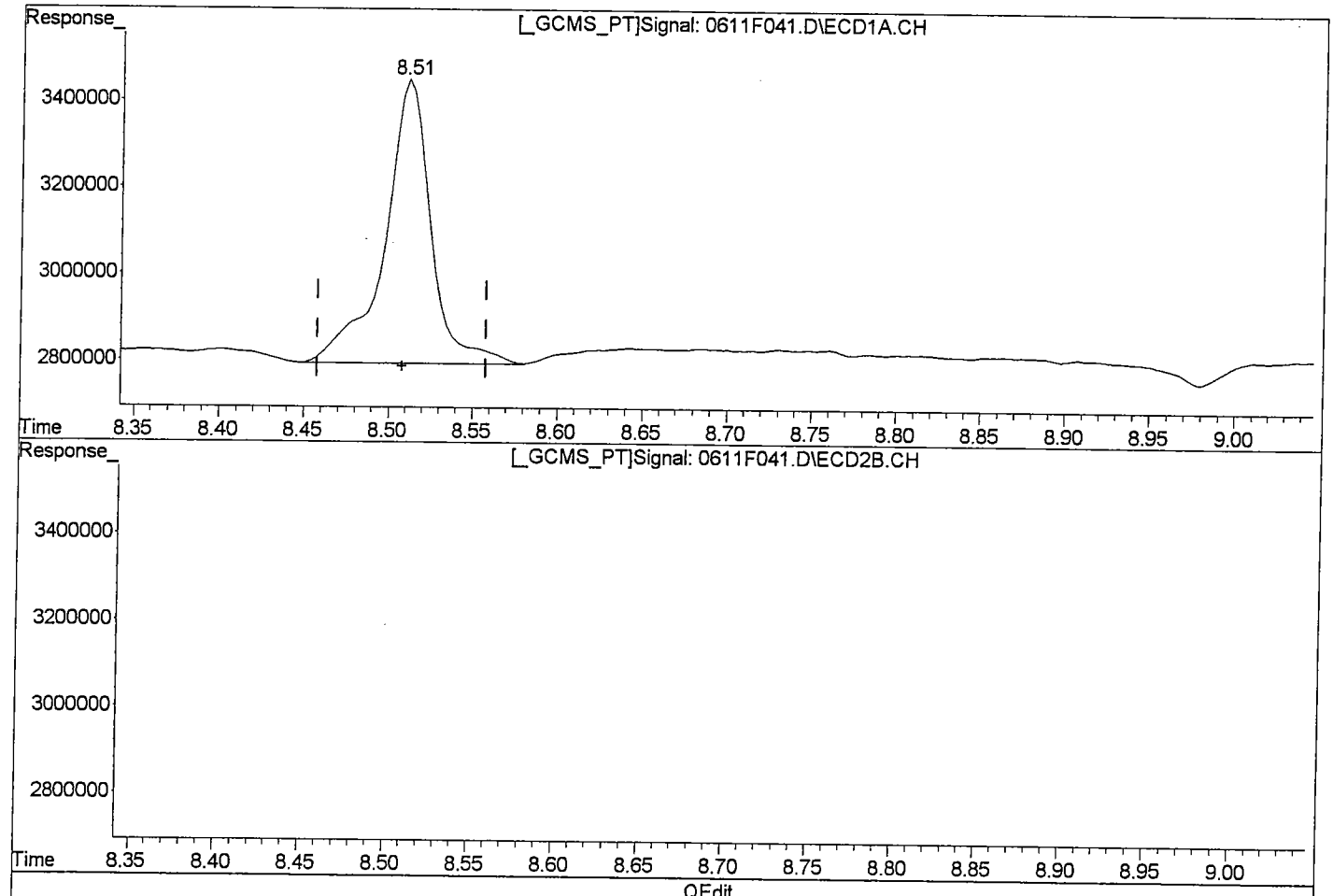
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(1) Tetrachloro-m-xylene (s)

8.51min 6.248ug/L

response 1255340

(1) Tetrachloro-m-xylene #2 (s)

7.40min 4.666ug/L

response 843642

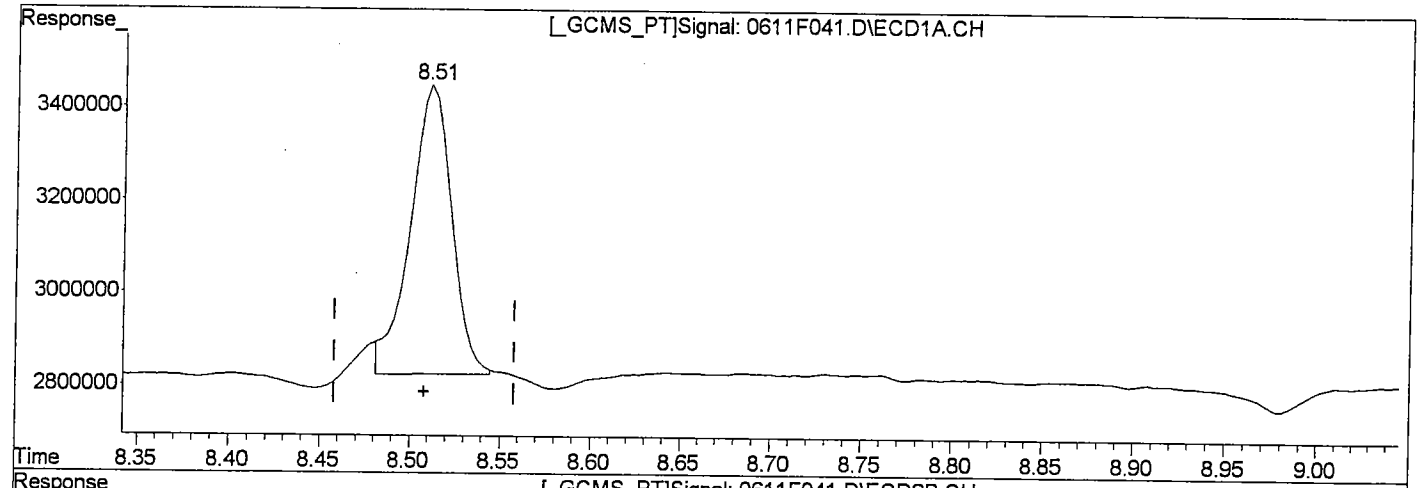
(+) = Expected Retention Time

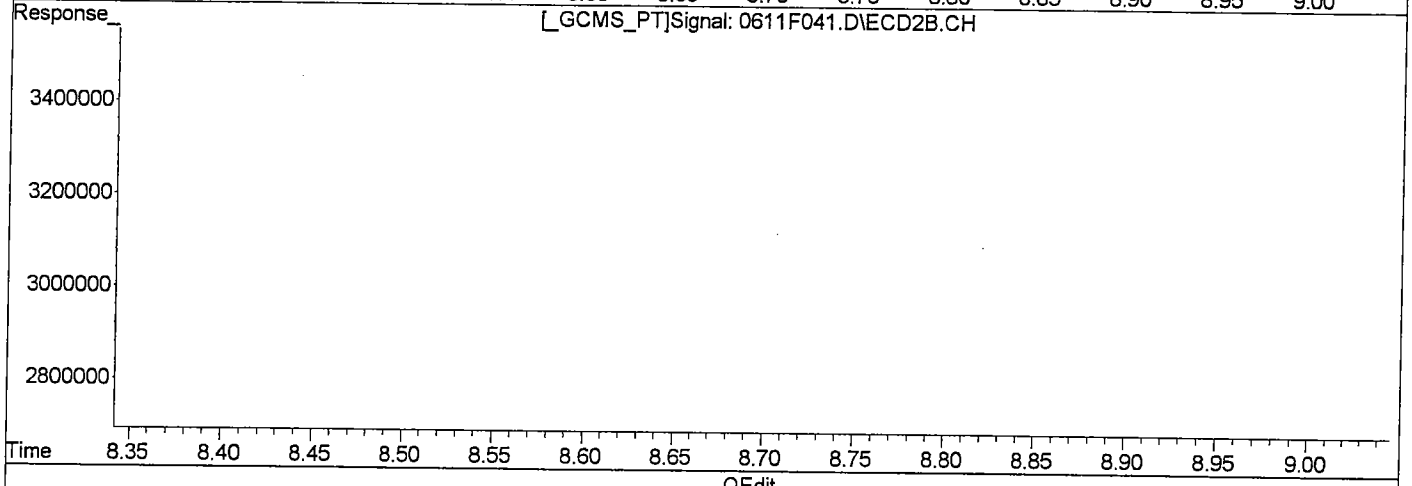
0611F041.D 061107-8081.M Tue Jun 12 13:54:58 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(1) Tetrachloro-m-xylene (s)

8.51min 4.941ug/L m

response 992704

(1) Tetrachloro-m-xylene #2 (s)

7.40min 4.666ug/L

response 843642

After
Initials AK

JUN 12 2007

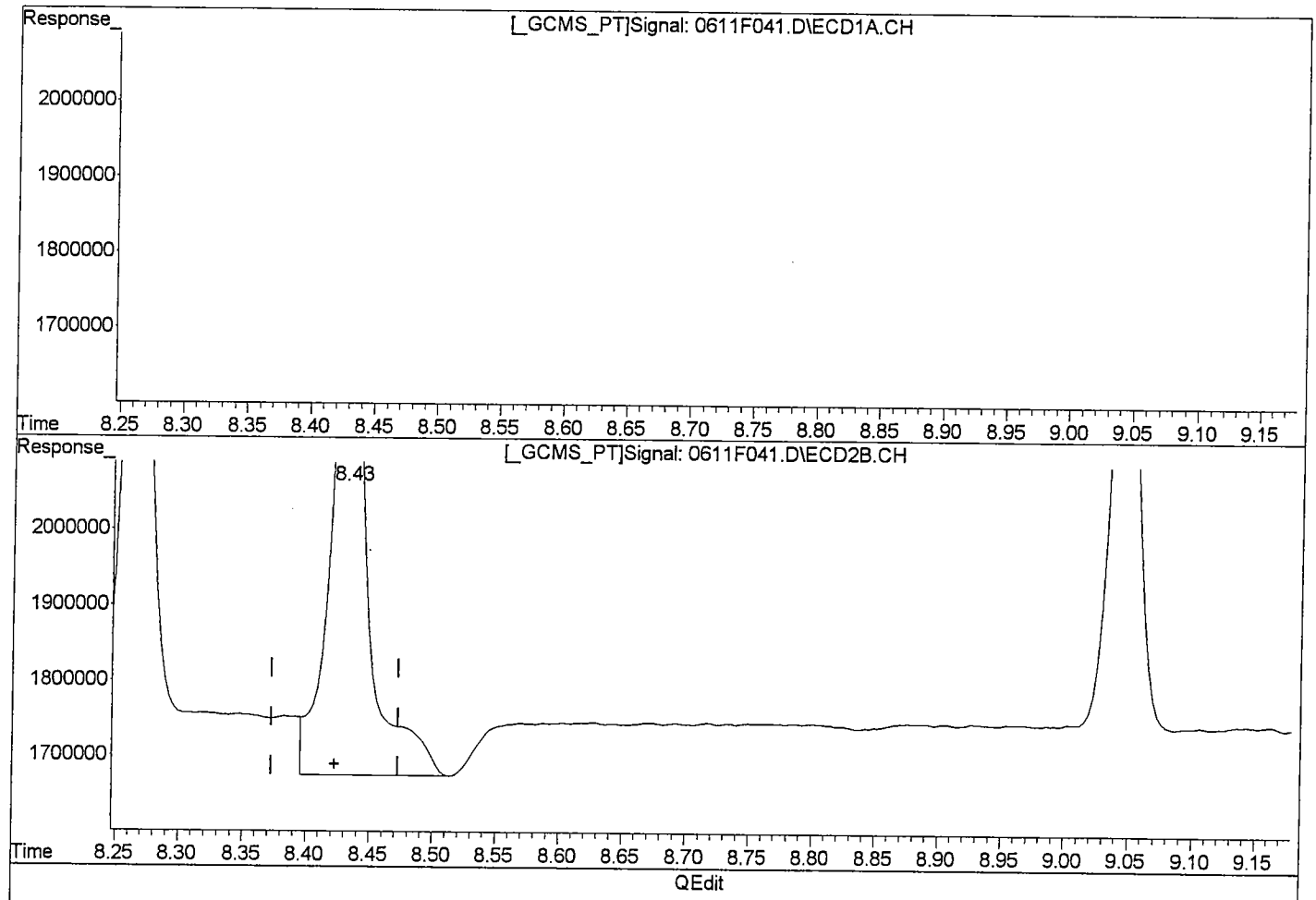
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F041.D 061107-8081.M Tue Jun 12 13:55:17 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.21min 4.447ug/L

response 1025906

(2) alpha-BHC #2

8.43min 5.878ug/L

response 1396178

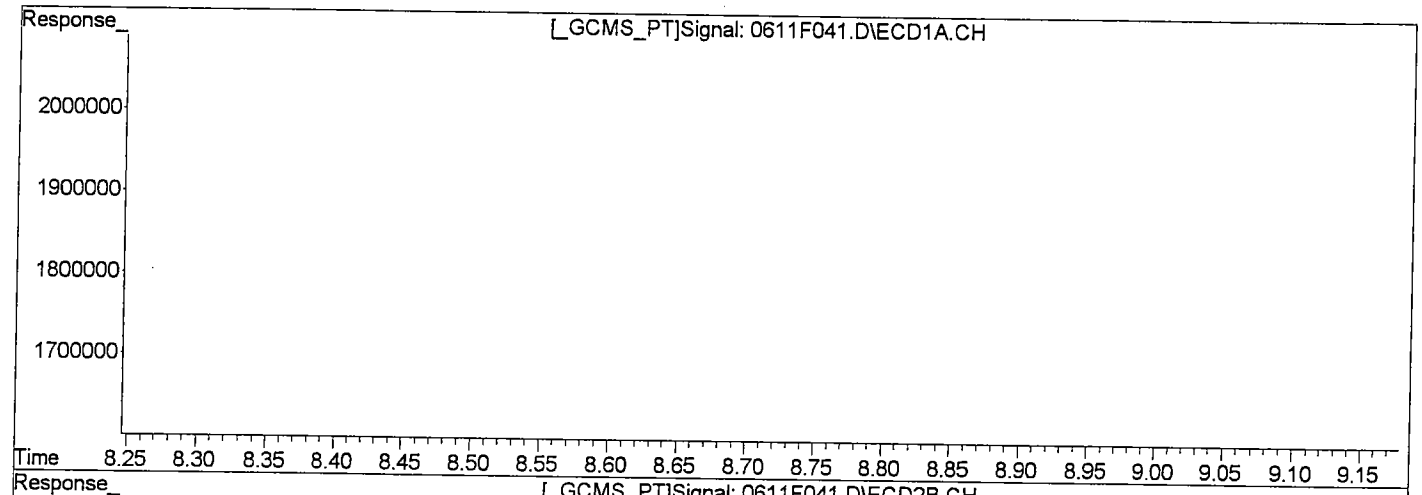
(+) = Expected Retention Time

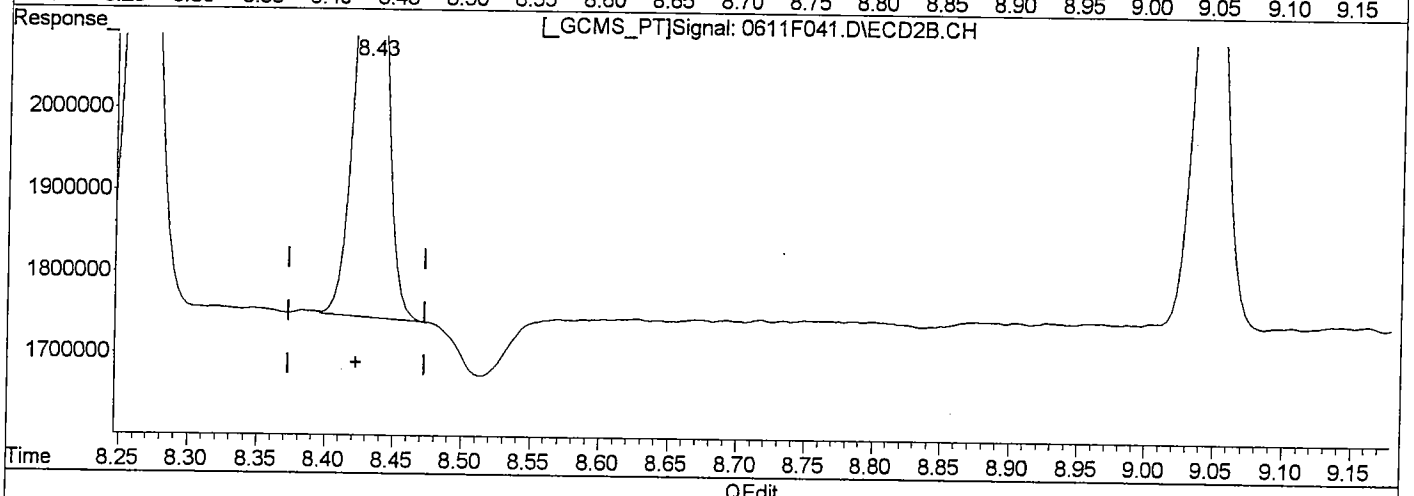
0611F041.D 061107-8081.M Tue Jun 12 13:55:33 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





(2) alpha-BHC
9.21min 4.447ug/L
response 1025906

(2) alpha-BHC #2
8.43min 4.154ug/L m
response 986726

After
Initials AC

JUN 12 2007

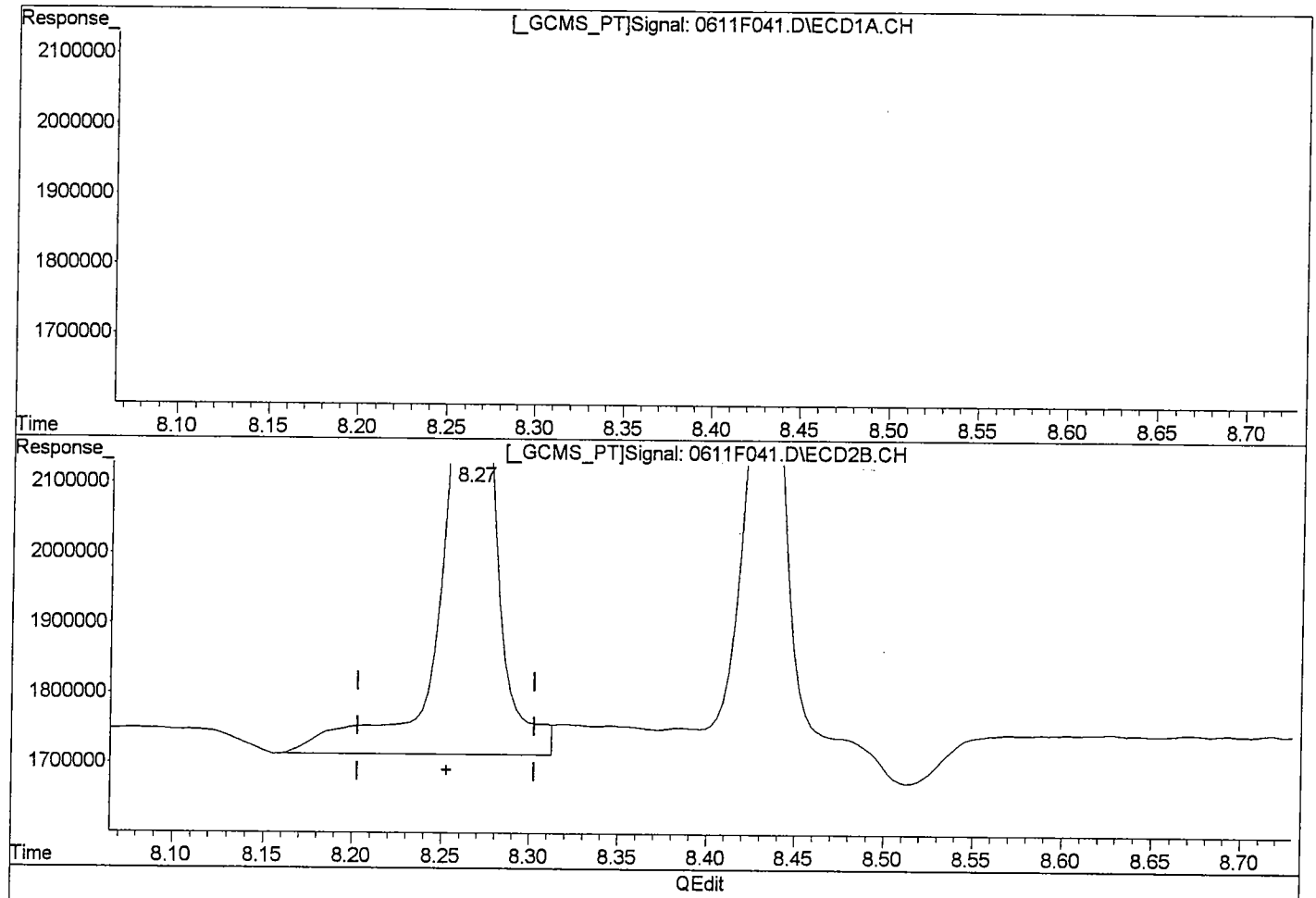
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F041.D 061107-8081.M Tue Jun 12 13:55:46 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.34min 5.097ug/L

response 1248749

(3) Hexachlorobenzene #2

8.27min 6.298ug/L

response 1558045

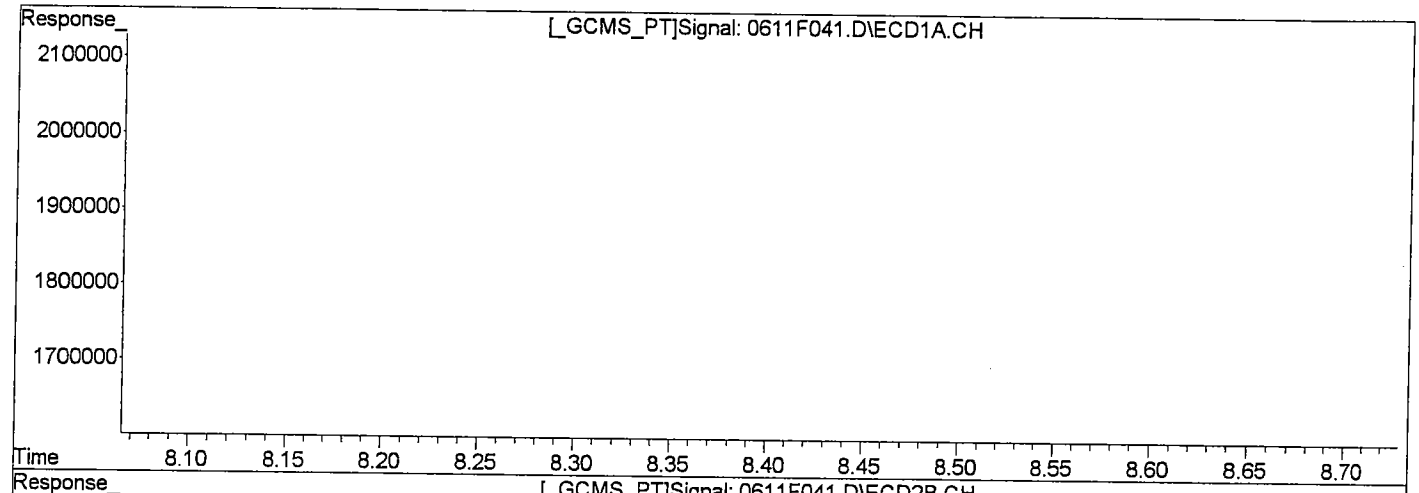
(+) = Expected Retention Time

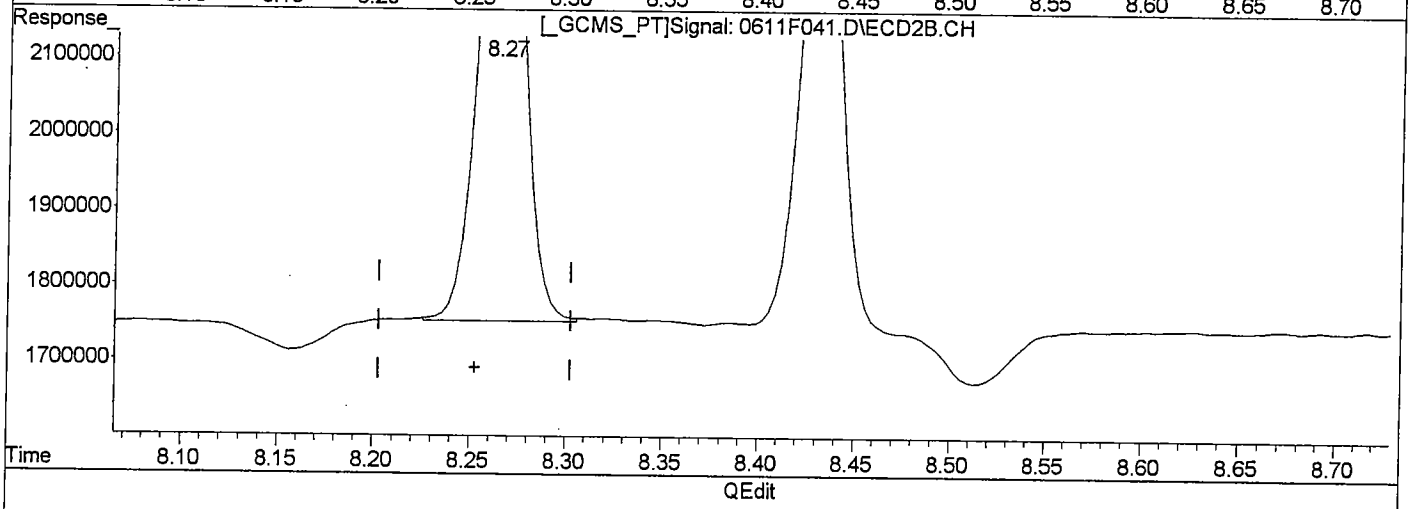
0611F041.D 061107-8081.M Tue Jun 12 13:55:55 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





(3) Hexachlorobenzene

9.34min 5.097ug/L

response 1248749

(3) Hexachlorobenzene #2

8.27min 4.976ug/L m

response 1230848

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

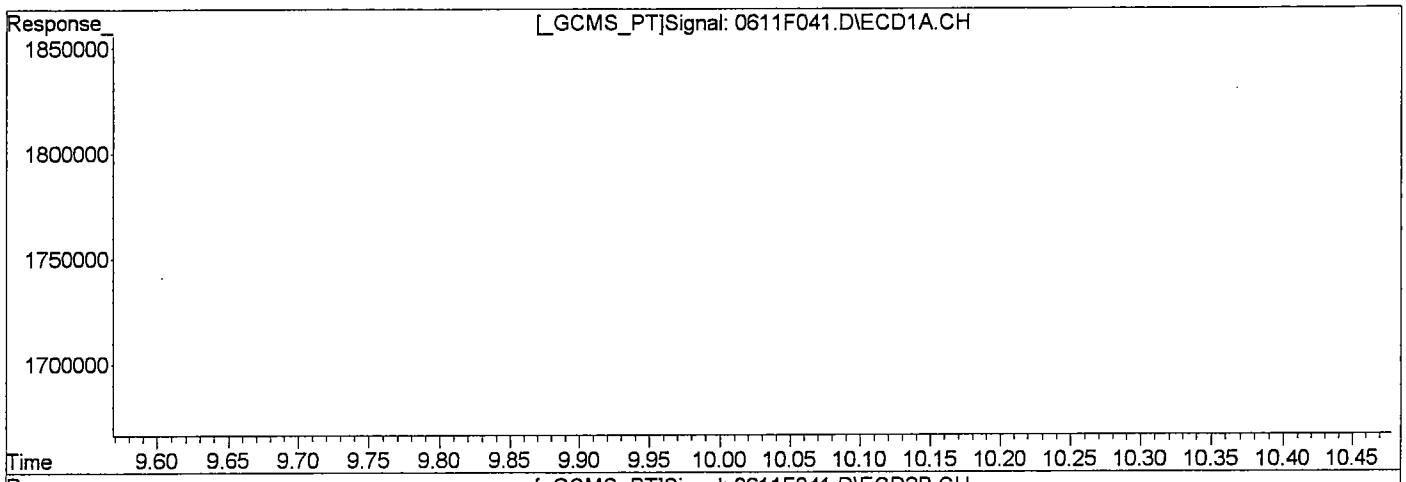
(+) = Expected Retention Time

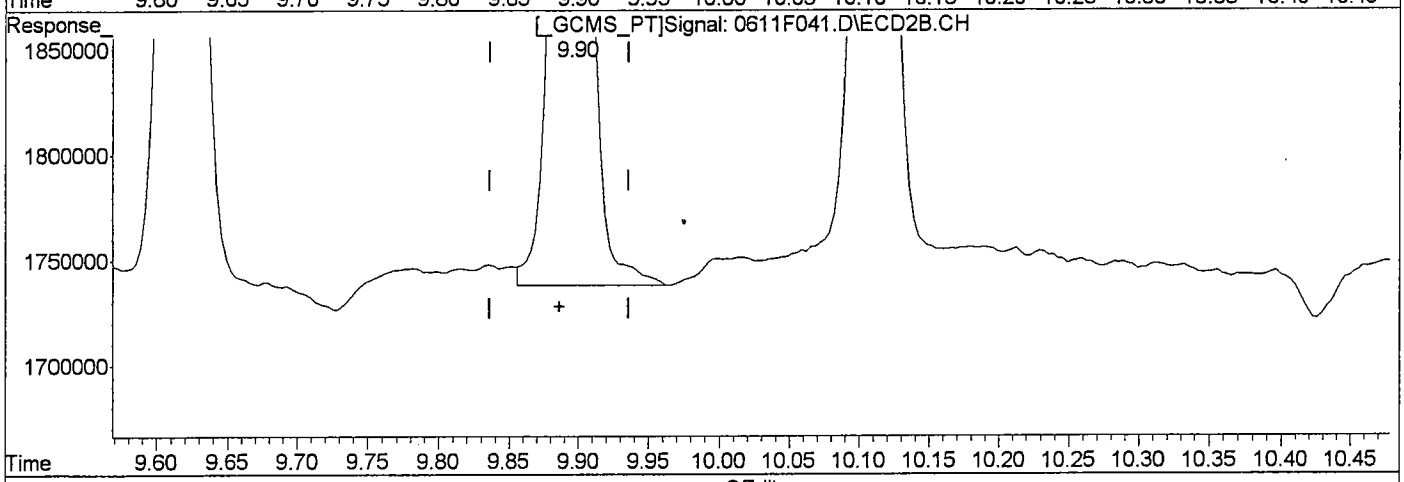
0611F041.D 061107-8081.M Tue Jun 12 13:56:05 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(6) delta-BHC

10.63min 4.520ug/L

response 894038

(6) delta-BHC #2

9.90min 4.376ug/L

response 937252

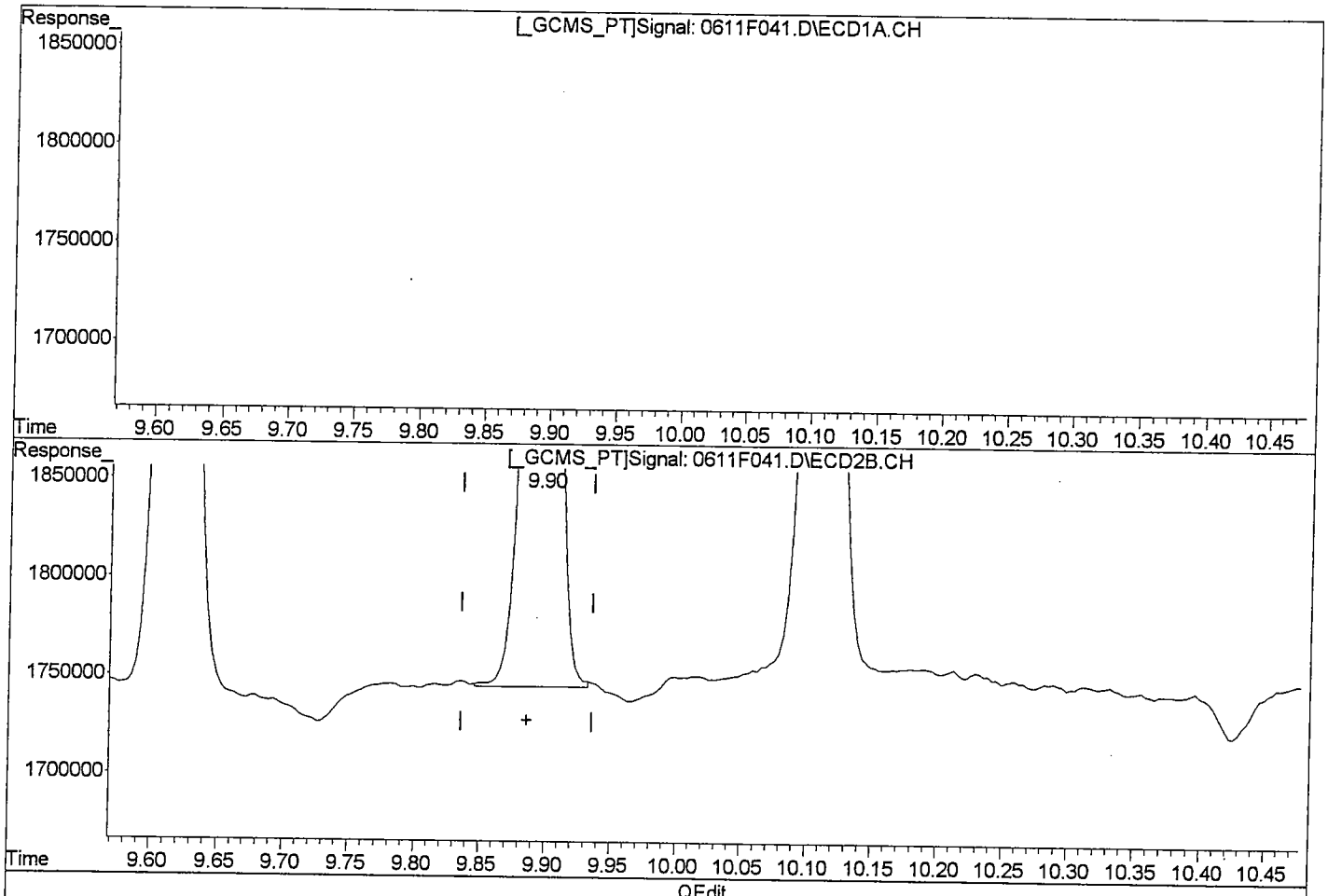
(+) = Expected Retention Time

0611F041.D 061107-8081.M Tue Jun 12 13:56:18 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(6) delta-BHC

10.63min 4.520ug/L

response 894038

(6) delta-BHC #2

9.90min 4.192ug/L m

response 897912

After
Initials AK

JUN 12 2007

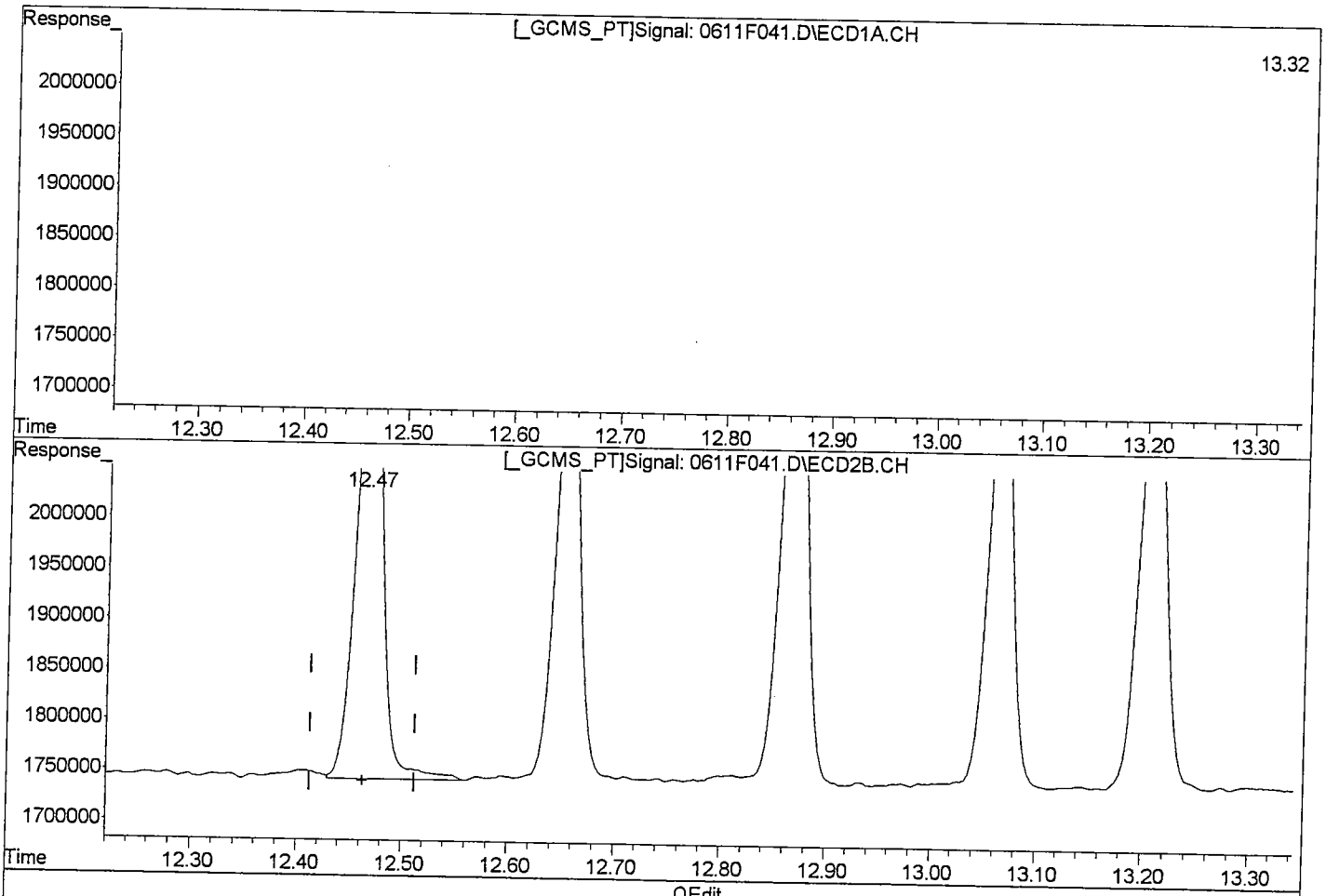
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F041.D 061107-8081.M Tue Jun 12 13:56:24 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(16) Endrin

13.32min 5.384ug/L

response 731079

(16) Endrin #2

12.47min 4.695ug/L

response 826629

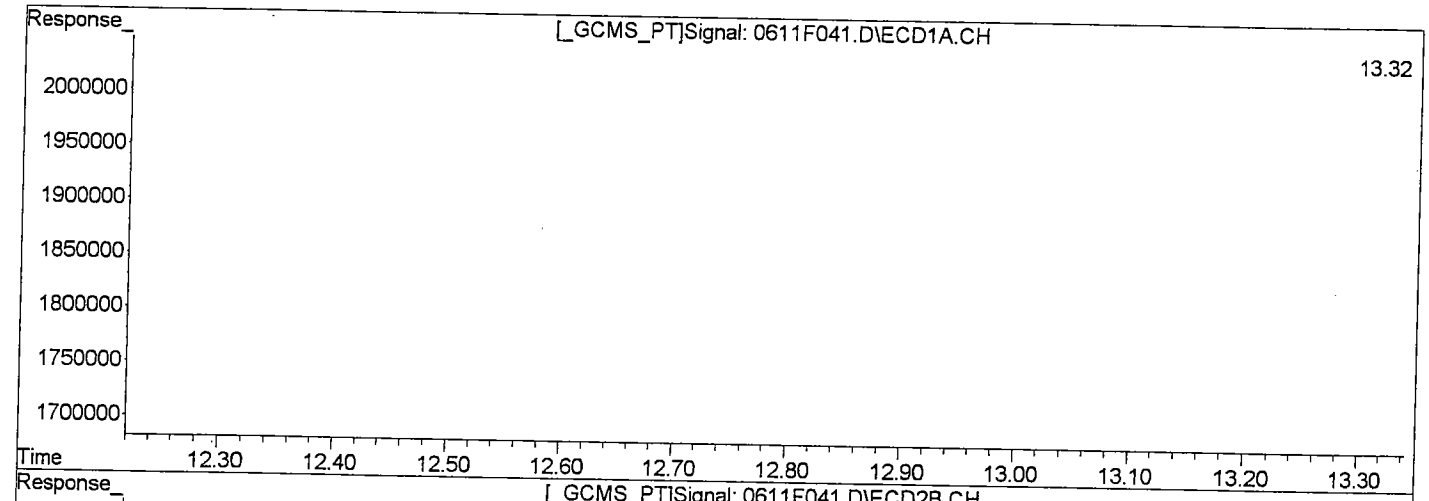
(+) = Expected Retention Time

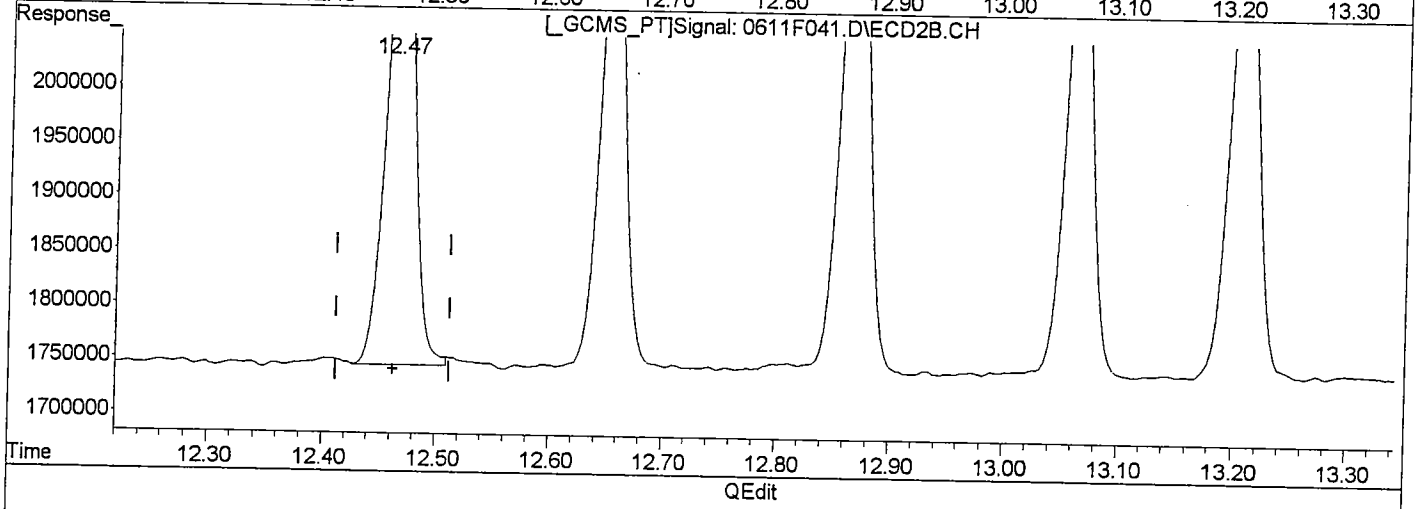
0611F041.D 061107-8081.M Tue Jun 12 13:56:47 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





(16) Endrin

13.32min 5.384ug/L

response 731079

(16) Endrin #2

12.47min 4.527ug/L m

response 797157

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

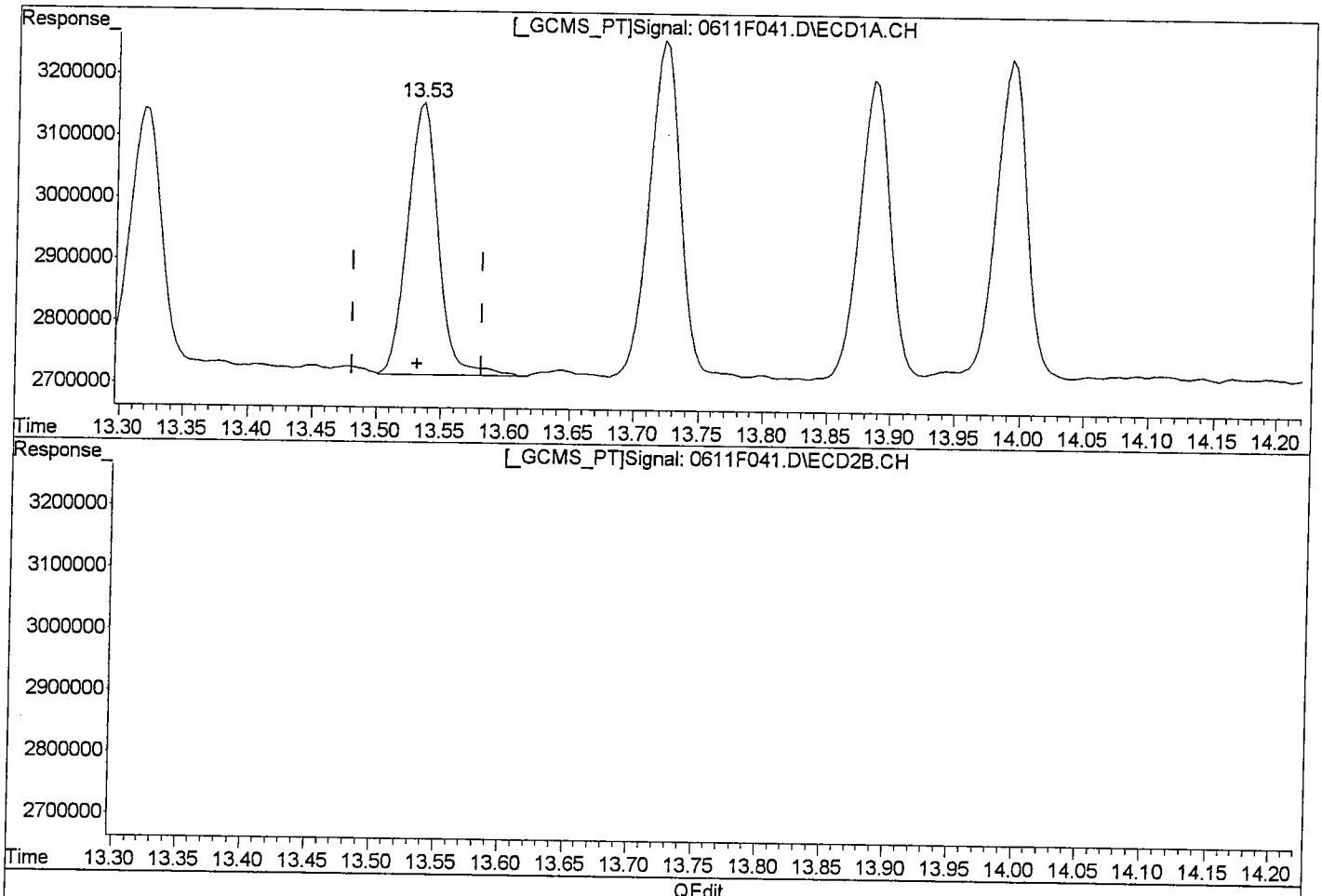
(+) = Expected Retention Time

0611F041.D 061107-8081.M Tue Jun 12 13:56:53 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



QEdit

(18) 4,4'-DDD

13.53min 5.739ug/L

response 731198

(18) 4,4'-DDD #2

12.65min 4.439ug/L

response 680940

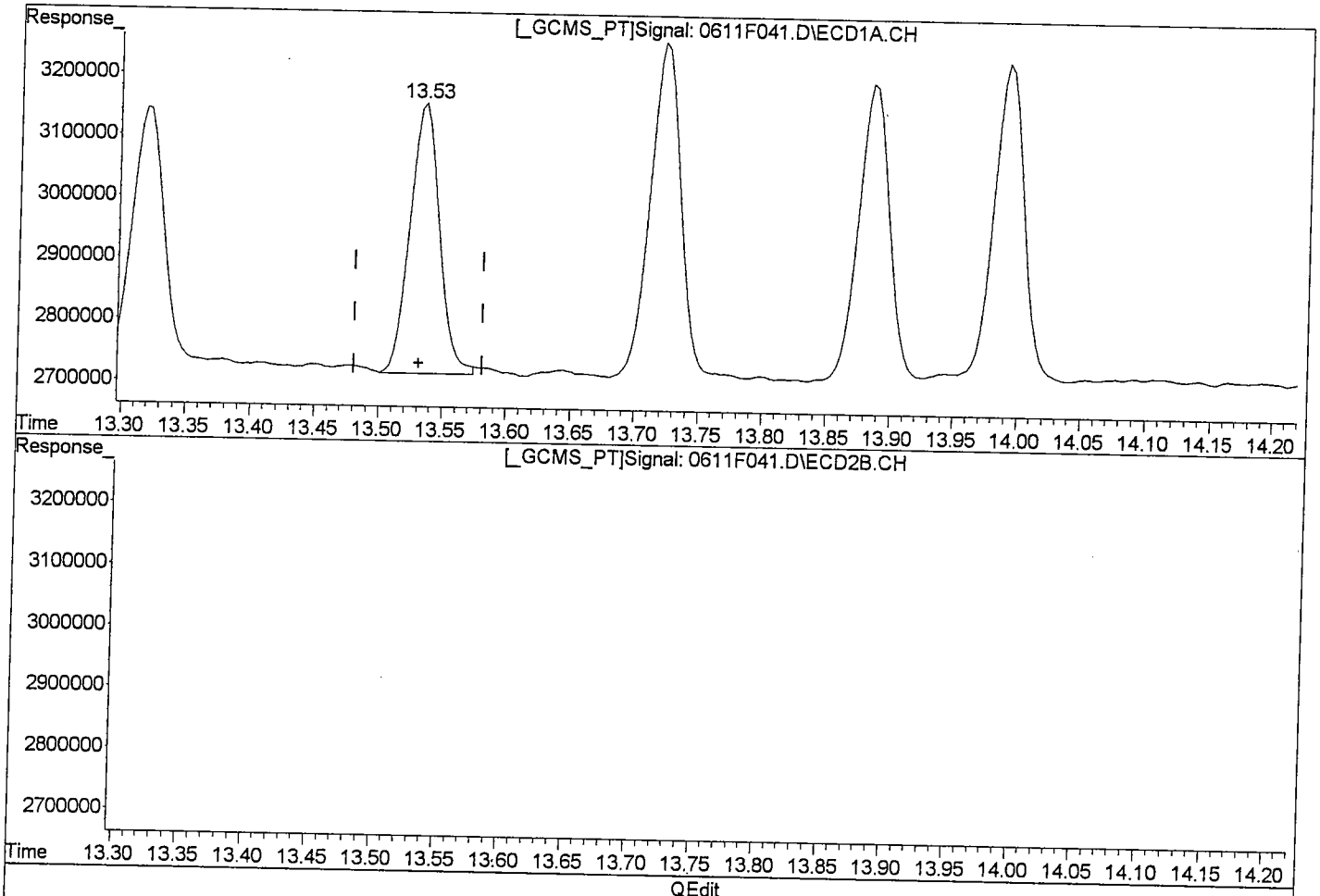
(+) = Expected Retention Time

0611F041.D 061107-8081.M Tue Jun 12 13:57:01 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F041.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061107\0611F041.D\ECD2B.CH
Acq On : 12 Jun 2007 12:05 pm Operator: AKamawal
Sample : 8081 @ 5ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(18) 4,4'-DDD

13.53min 5.599ug/L m

response 713393

(18) 4,4'-DDD #2

12.65min 4.439ug/L

response 680940

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time

0611F041.D 061107-8081.M Tue Jun 12 13:57:08 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45:51 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.50	7.39	4137634	3713058	20.593	20.534
24)	s	Decachlorobiphen	17.12	15.98	6023283	3973444	22.290	21.940
		Target Compounds						
2)		alpha-BHC	9.20	8.42	4573186	4652971	19.825	19.588m
3)		Hexachlorobenzen	9.33	8.26	5161464	5123522	21.068	20.712m
4)		beta-BHC	10.21	9.44	2262157	2230875	21.068	20.949
5)		gamma-BHC (Linda	9.74	9.04	4359253	4466300	20.189	19.872
6)		delta-BHC	10.62	9.89	3914672	4240520	19.791	19.799
7)		Heptachlor	10.72	9.61	4146456	4622626	20.352	20.273
8)		Aldrin	11.24	10.10	3558403	4063674	20.351	20.355
9)		Isodrin	11.76	10.75	3038952	3582217	20.475	20.765
10)		Heptachlor Epoxi	11.93	10.96	3531043	4178018	20.225	20.734
11)		gamma-Chlordane	12.43	11.31	3423984	4181656	20.548	20.566
12)		Endosulfan I	12.56	11.54	3179973	3851863	20.750	20.799
13)		alpha-Chlordane	12.50	11.46	3451694	4118250	20.949	20.879
14)		Dieldrin	12.96	11.98	3331793	3994334	21.367	20.565
15)		4,4'-DDE	12.74	11.78	3056504	3746256	20.727m	20.295m
16)		Endrin	13.31	12.46	3182736	3584037	23.437	20.355
17)		Endosulfan II	13.71	12.86	3813229	3819722	25.699	21.205
18)		4,4'-DDD	13.52	12.64	3049588	3126945	23.936	20.384
19)		Endrin Aldehyde	13.87	13.20	3447395	3176332	26.689	21.366
20)		Endosulfan Sulfa	14.30	13.50	4682871	3795629	27.931	20.926 #
21)		4,4'-DDT	13.98	13.06	3794203	3343649	27.150	20.560
22)		Endrin Ketone	14.92	14.39	6320040	4429835	26.796	21.382
23)		Methoxychlor	14.63	14.06	2870468	2027950	27.552	21.009

AK 6/12/07

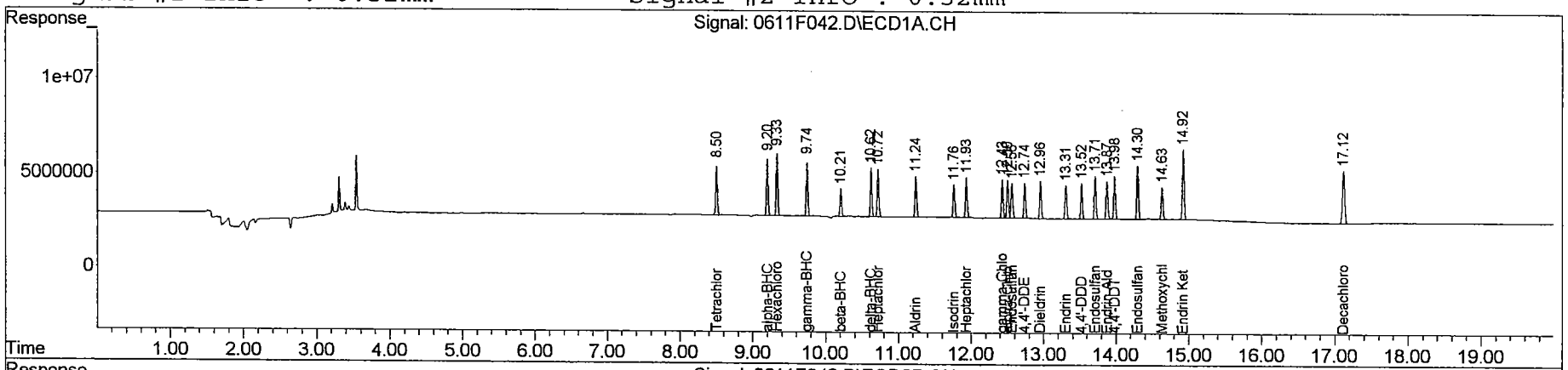
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

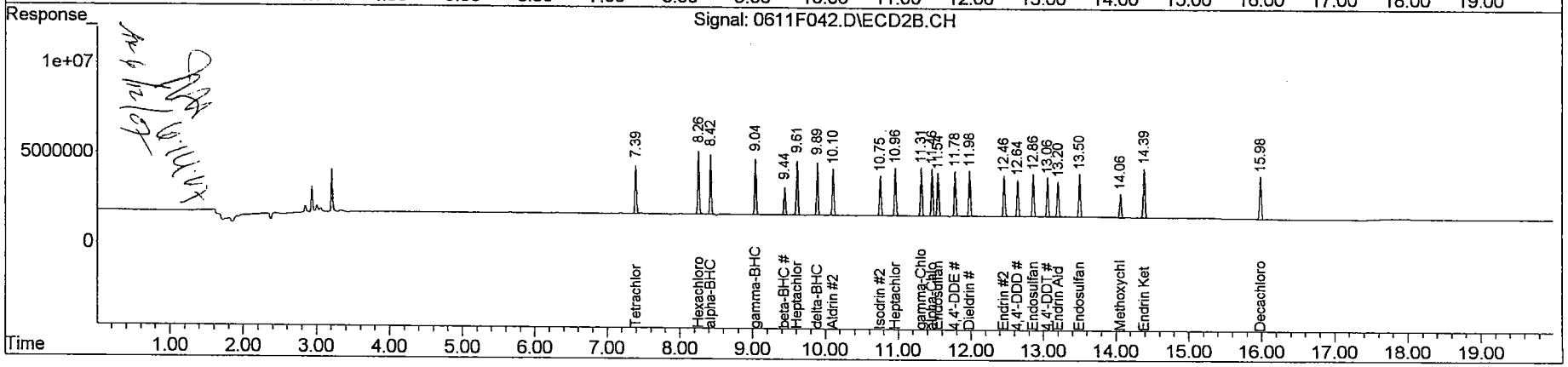
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:00 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



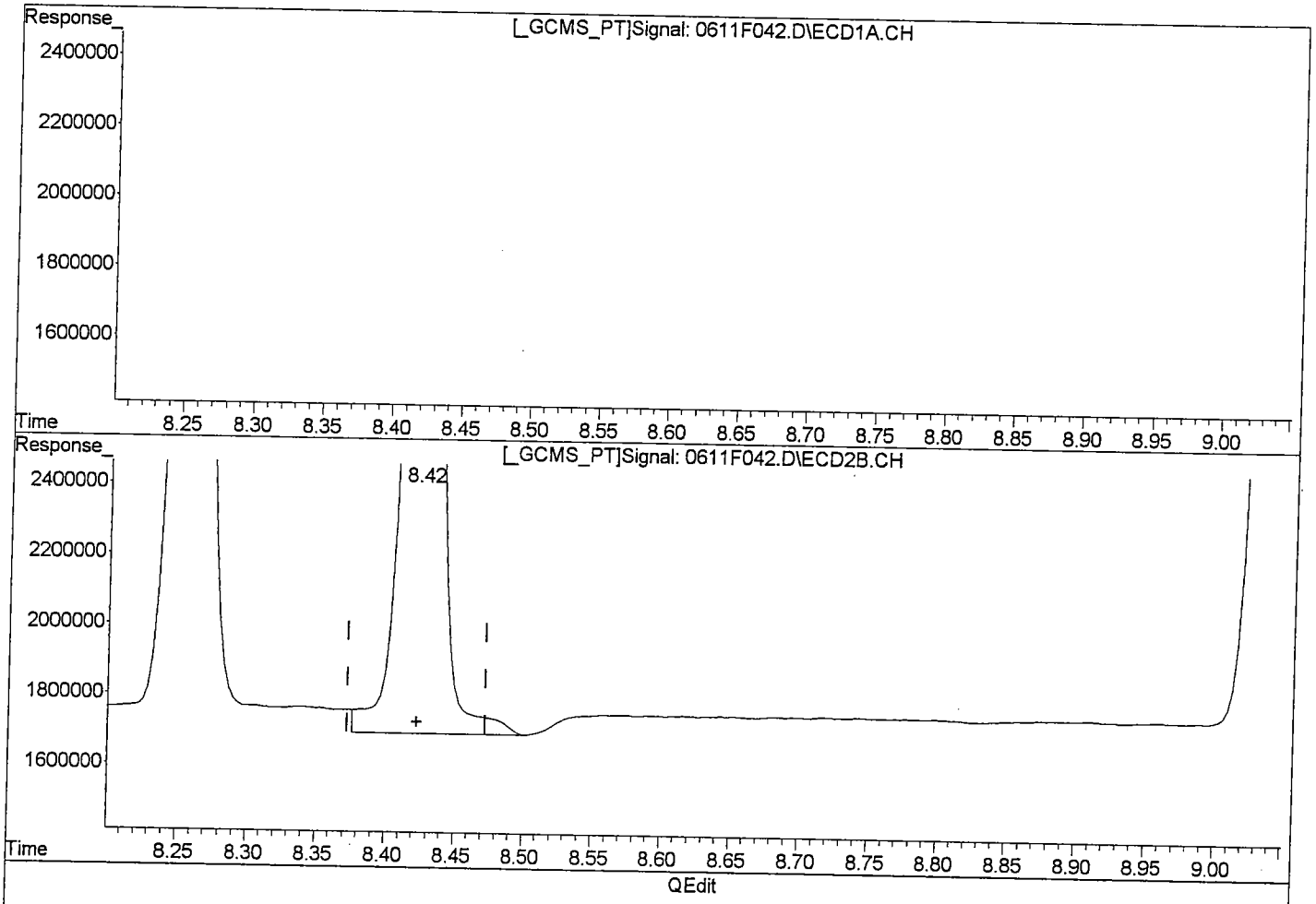


1060

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.20min 19.825ug/L

response 4573186

(2) alpha-BHC #2

8.42min 21.038ug/L

response 4997275

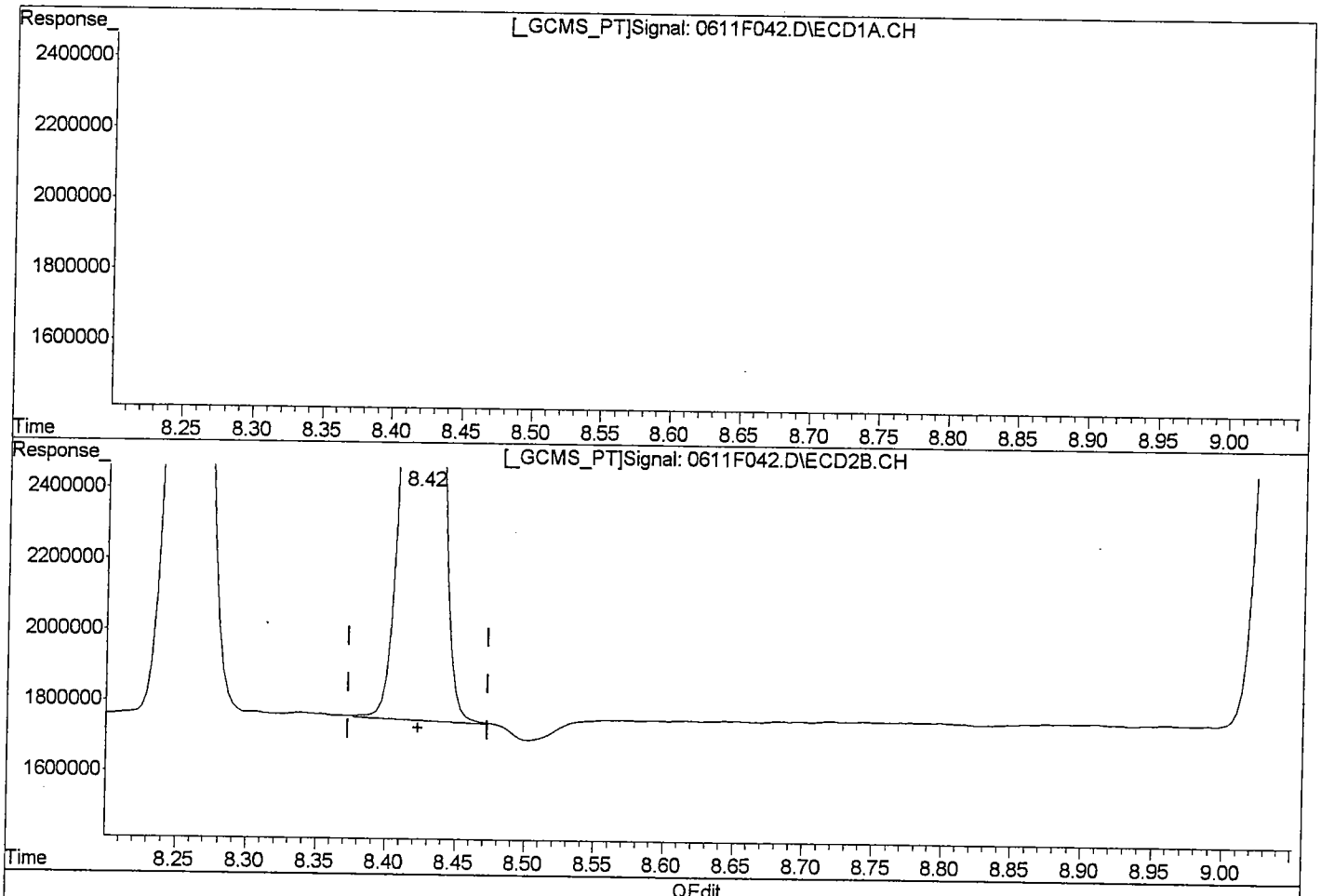
(+) = Expected Retention Time

0611F042.D 061107-8081.M Tue Jun 12 13:58:21 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.20min 19.825ug/L

response 4573186

(2) alpha-BHC #2

8.42min 19.588ug/L m

response 4652971

After

Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

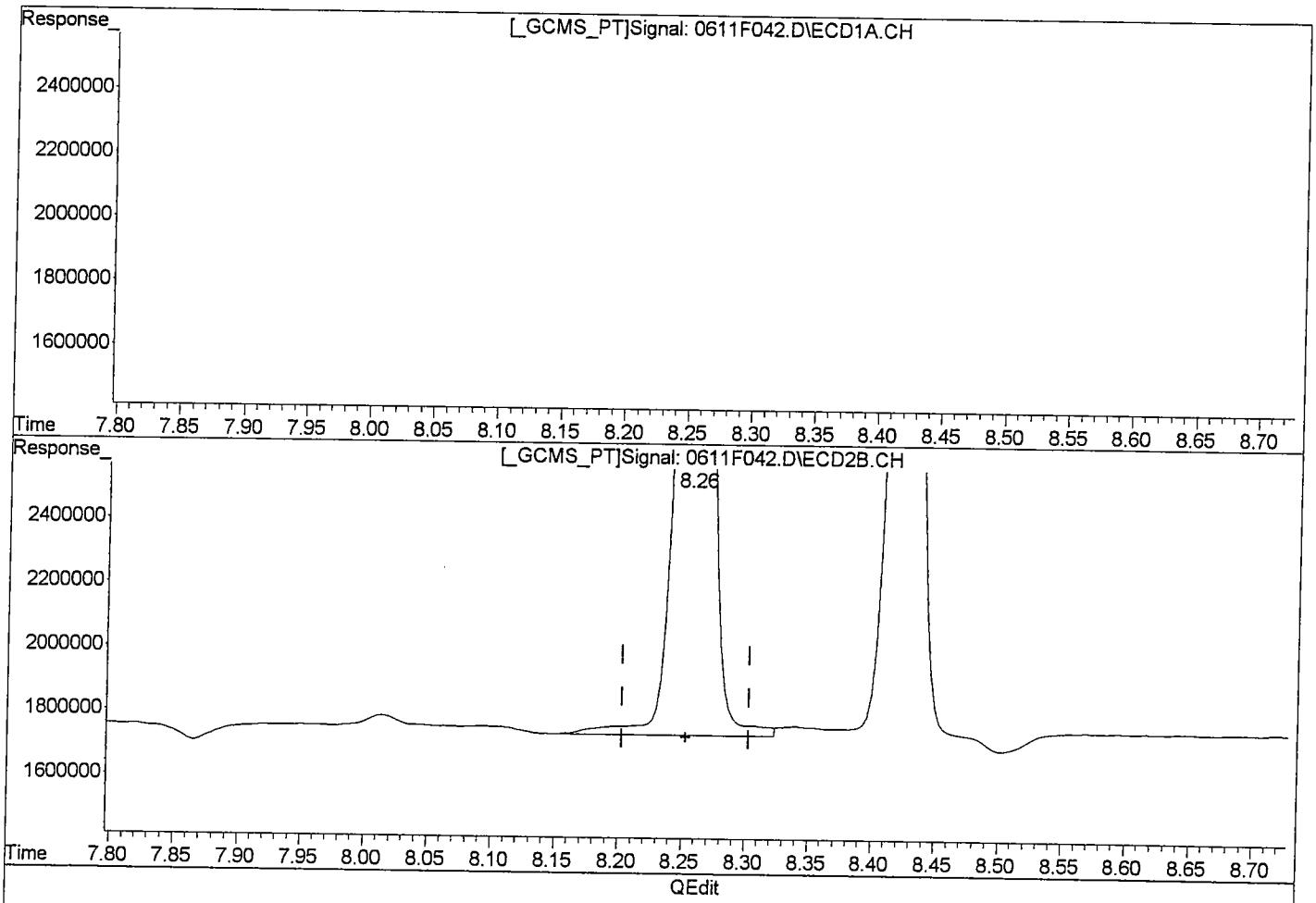
(+) = Expected Retention Time

0611F042.D 061107-8081.M Tue Jun 12 13:59:24 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.33min 21.068ug/L

response 5161464

(3) Hexachlorobenzene #2

8.26min 21.615ug/L

response 5346891

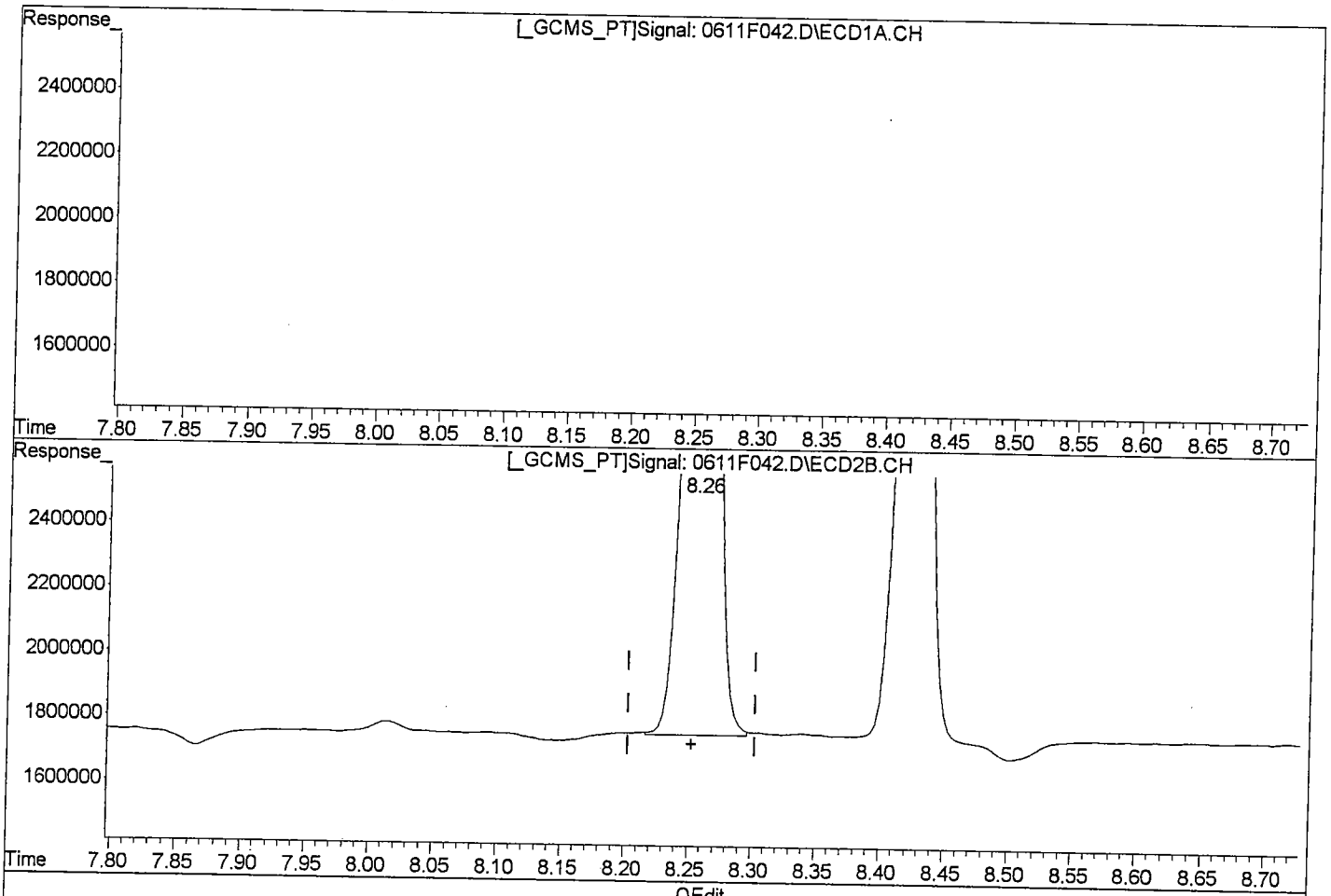
(+) = Expected Retention Time

0611F042.D 061107-8081.M Tue Jun 12 13:59:31 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.33min 21.068ug/L

response 5161464

(3) Hexachlorobenzene #2

8.26min 20.712ug/L m

response 5123522

After
Initials AK

JUN 12 2007

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

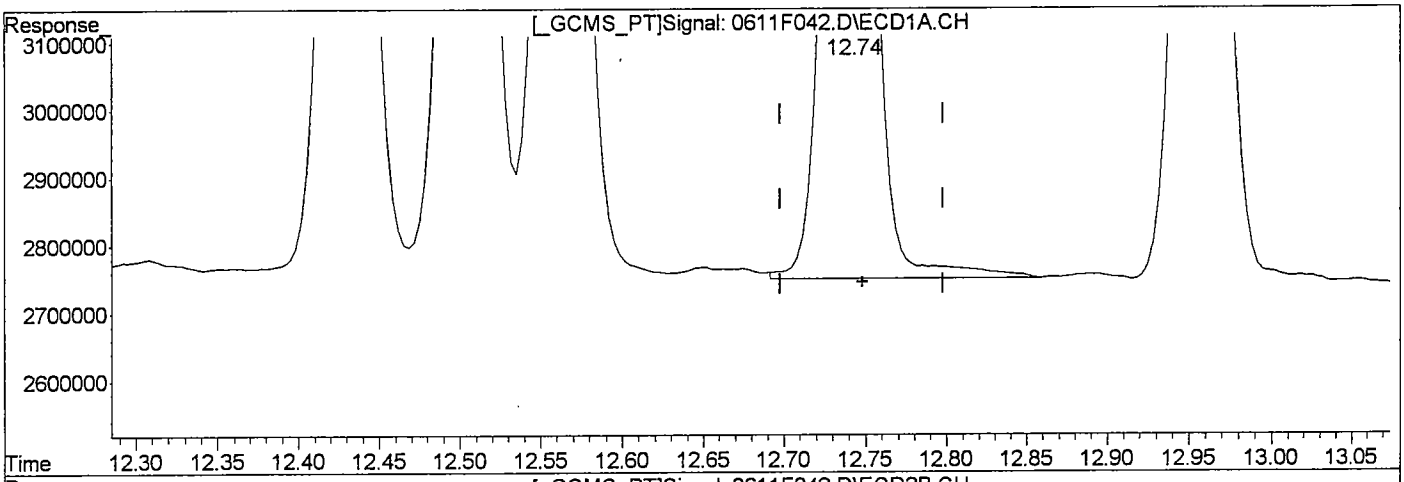
(+) = Expected Retention Time

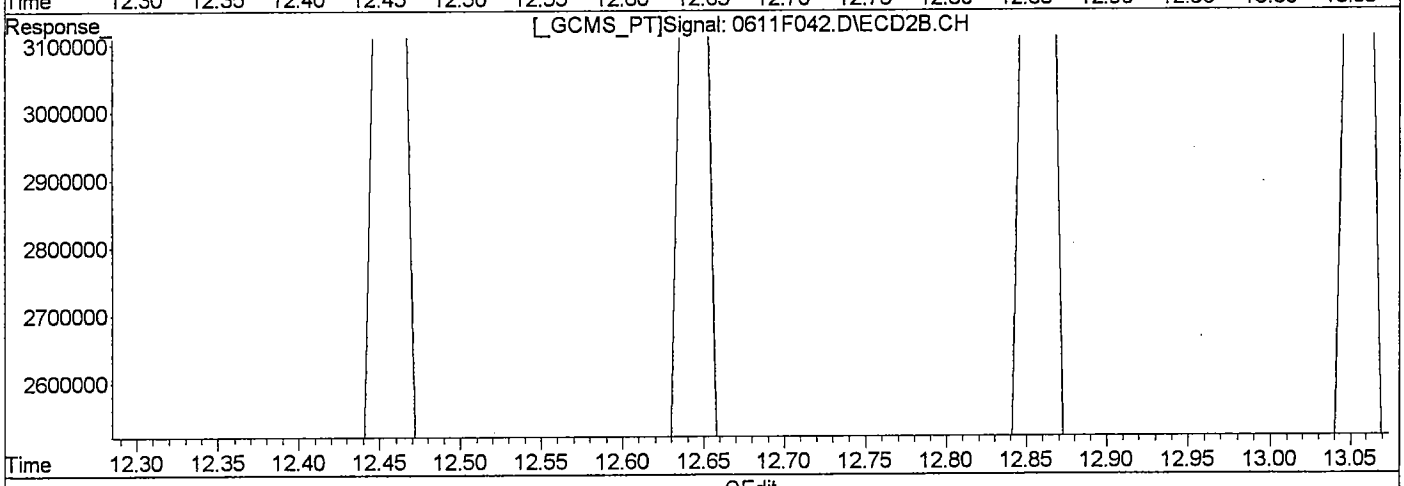
0611F042.D 061107-8081.M Tue Jun 12 13:59:37 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 21.378ug/L

response 3152469

(15) 4,4'-DDE #2

11.78min 21.217ug/L

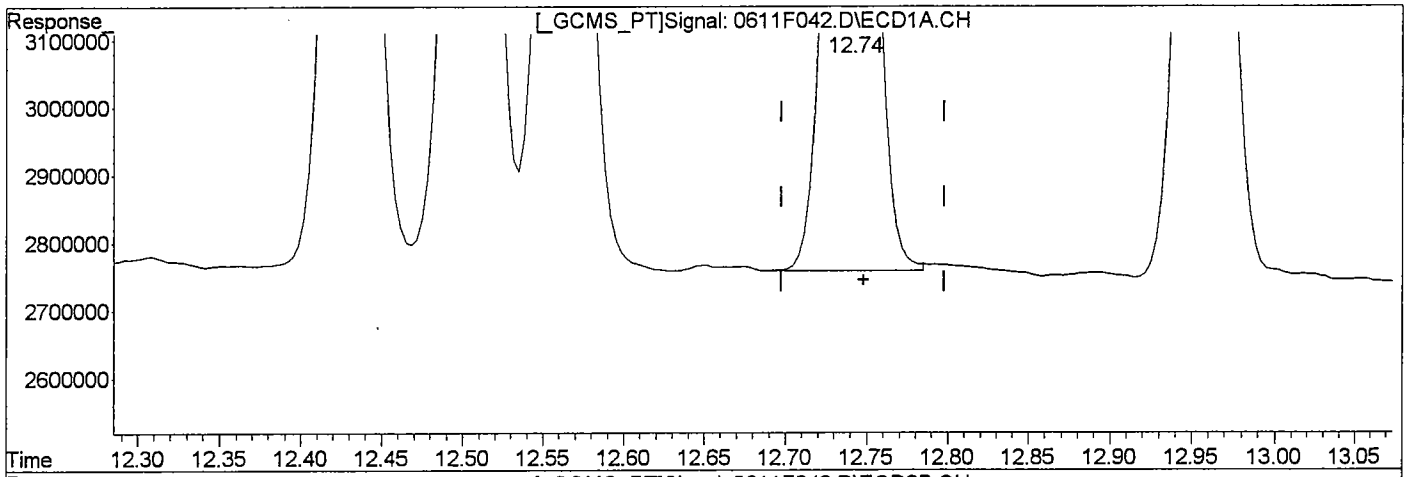
response 3916537

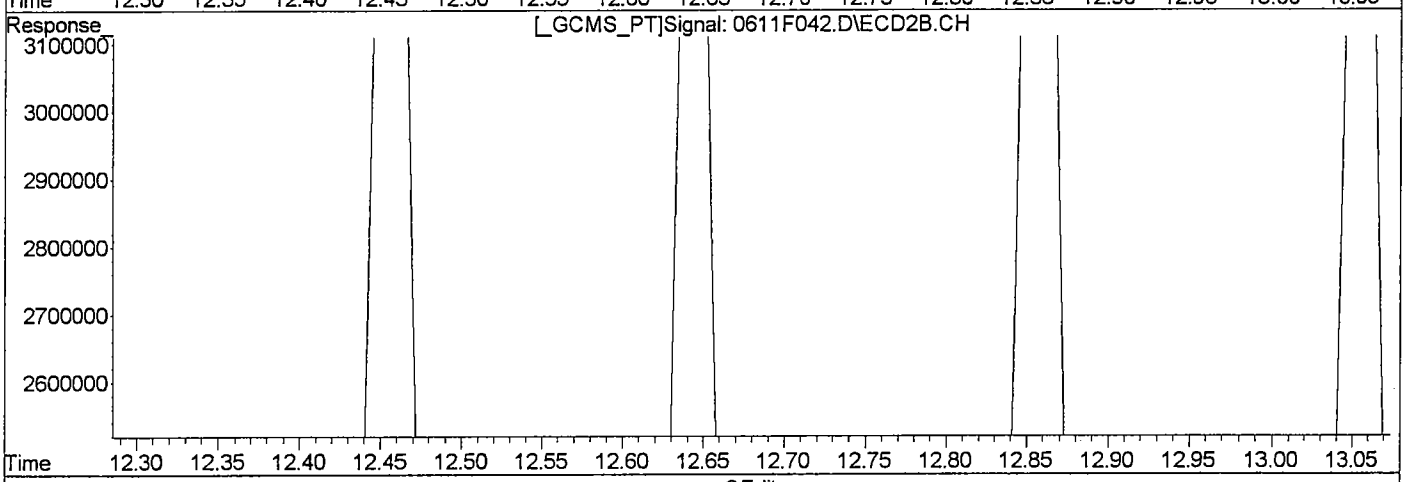
(+) = Expected Retention Time
0611F042.D 061107-8081.M Tue Jun 12 14:00:26 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 20.727ug/L m

response 3056504

(15) 4,4'-DDE #2

11.78min 21.217ug/L

response 3916537

After
Initials

JUN 12 2007

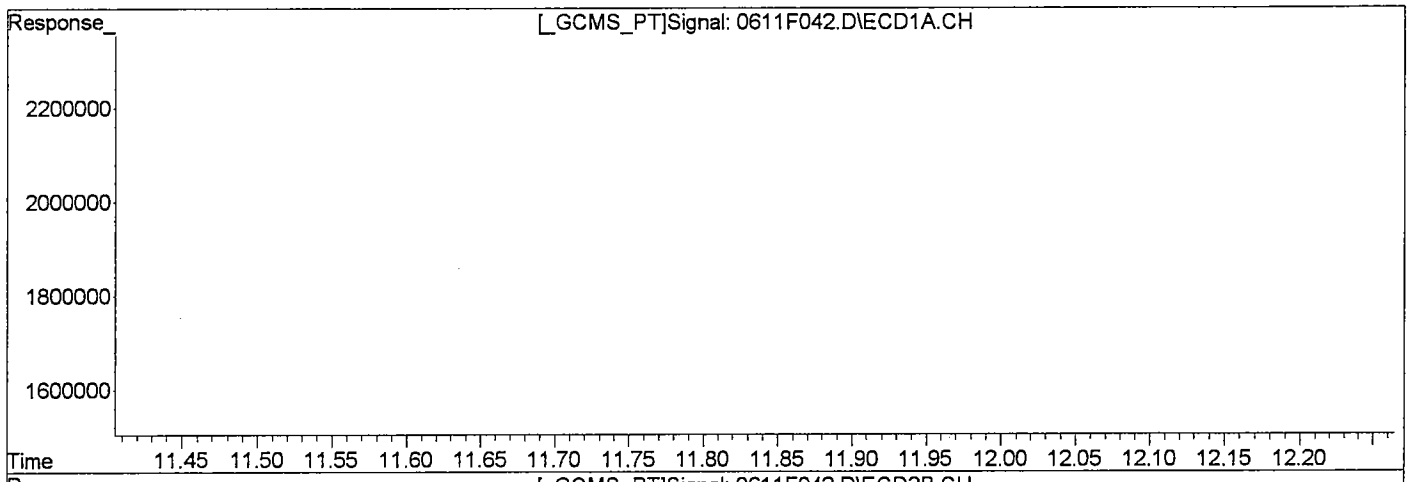
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

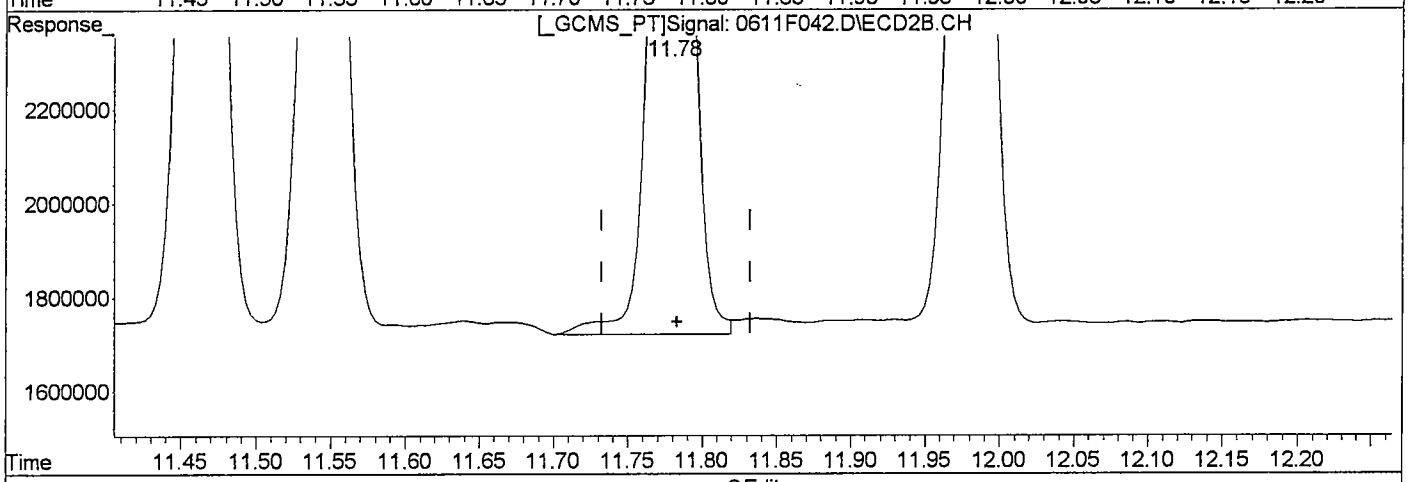
(+) = Expected Retention Time
0611F042.D 061107-8081.M Tue Jun 12 14:00:37 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 20.727ug/L m

response 3056504

(15) 4,4'-DDE #2

11.78min 21.217ug/L

response 3916537

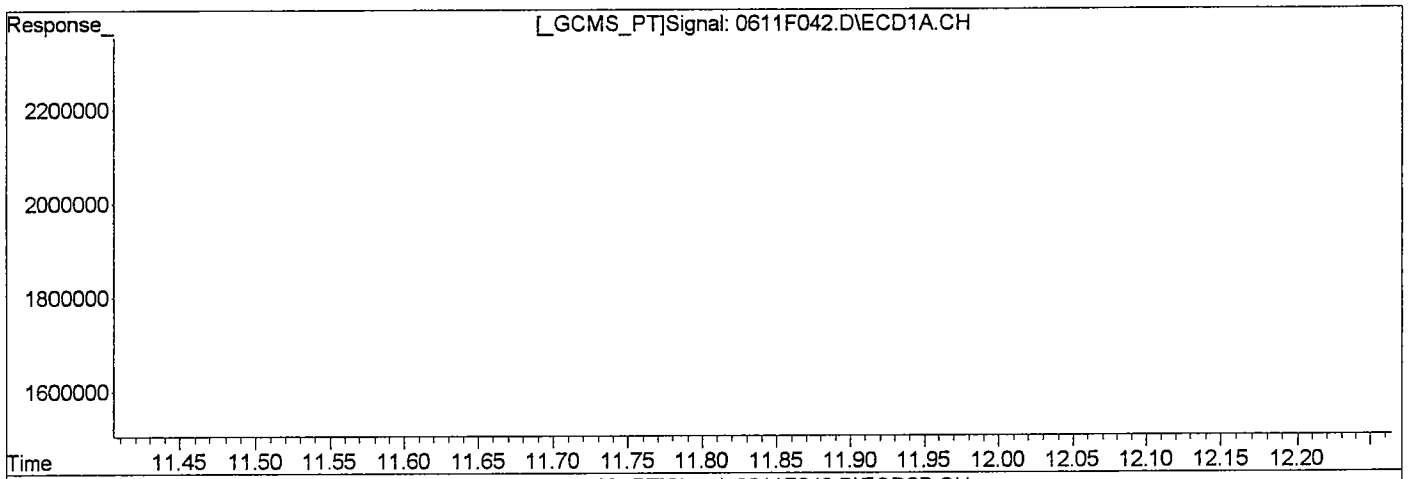
(+) = Expected Retention Time

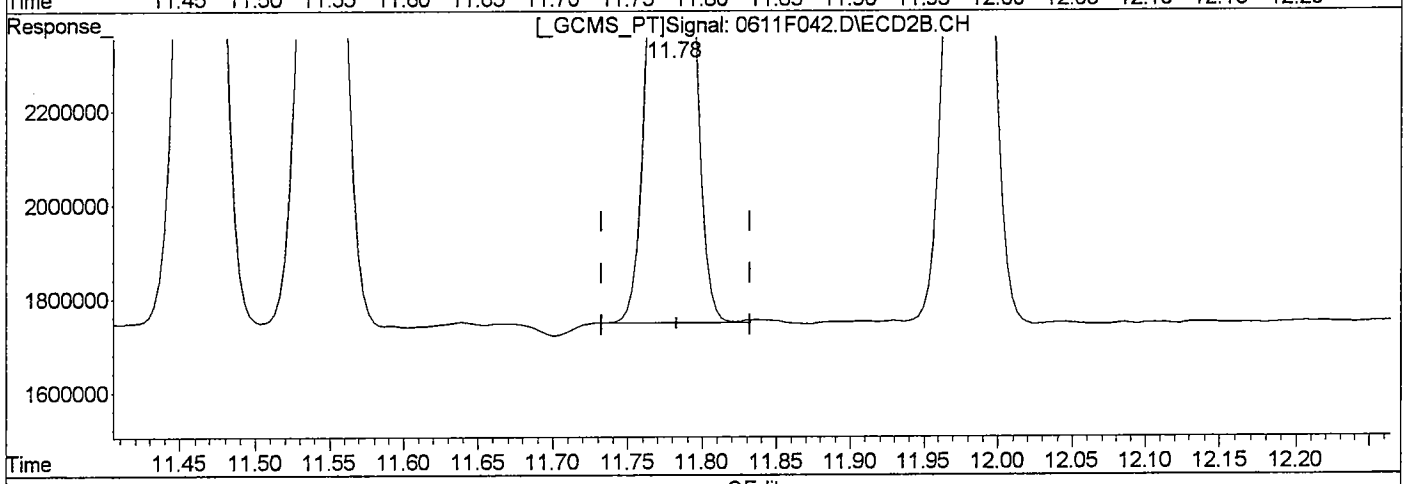
0611F042.D 061107-8081.M Tue Jun 12 14:00:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061107\0611F042.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061107\0611F042.D\ECD2B.CH
Acq On : 12 Jun 2007 12:32 pm Operator: AKamawal
Sample : 8081 @ 20ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 20.727ug/L m

response 3056504

(15) 4,4'-DDE #2

11.78min 20.295ug/L m

response 3746256

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F042.D 061107-8081.M Tue Jun 12 14:00:57 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45:52 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	9816540	9178017	48.858	50.757
24)	s	Decachlorobiphen	17.13	15.99	13616434	9126139	50.390	50.392
		Target Compounds						
2)		alpha-BHC	9.21	8.43	11911143	12393670	51.634	52.176m
3)		Hexachlorobenzen	9.34	8.27	12219840	12425643	49.879	50.230
4)		beta-BHC	10.22	9.45	5405984	5455247	50.348	51.227
5)		gamma-BHC (Linda	9.75	9.05	11077809	11674216	51.305	51.943
6)		delta-BHC	10.63	9.90	10124332	11162031	51.184	52.115
7)		Heptachlor	10.73	9.62	10229765	11532283	50.212	50.575
8)		Aldrin	11.25	10.11	8876654	10368185	50.766	51.935
9)		Isodrin	11.77	10.76	7376736	8875859	49.700	51.452
10)		Heptachlor Epoxi	11.94	10.97	8575366	10325788	49.119	51.242
11)		gamma-Chlordane	12.44	11.32	8321485	10395280	49.938	51.126
12)		Endosulfan I	12.57	11.55	7643585	9427805	49.877	50.907
13)		alpha-Chlordane	12.51	11.47	8317664	10153142	50.481	51.475
14)		Dieldrin	12.96	11.99	8323023	10087072	53.376	51.933
15)		4,4'-DDE	12.75	11.79	7651301	9578046	51.886	51.887m
16)		Endrin	13.31	12.46	7952076	9033658	58.559	51.306
17)		Endosulfan II	13.72	12.86	9324905	9246745	62.844	51.334
18)		4,4'-DDD	13.53	12.65	7636652	7933369	59.940	51.716
19)		Endrin Aldehyde	13.88	13.20	8380717	7710727	64.882	51.868
20)		Endosulfan Sulfa	14.31	13.50	11251305	9227780	67.108	50.874
21)		4,4'-DDT	13.99	13.06	9587647	8525519	68.607	52.422
22)		Endrin Ketone	14.93	14.40	15315343	10927337	64.936	52.745
23)		Methoxychlor	14.64	14.07	6823369	4874095	65.494	50.494

tc 6/12/07
6/14/07

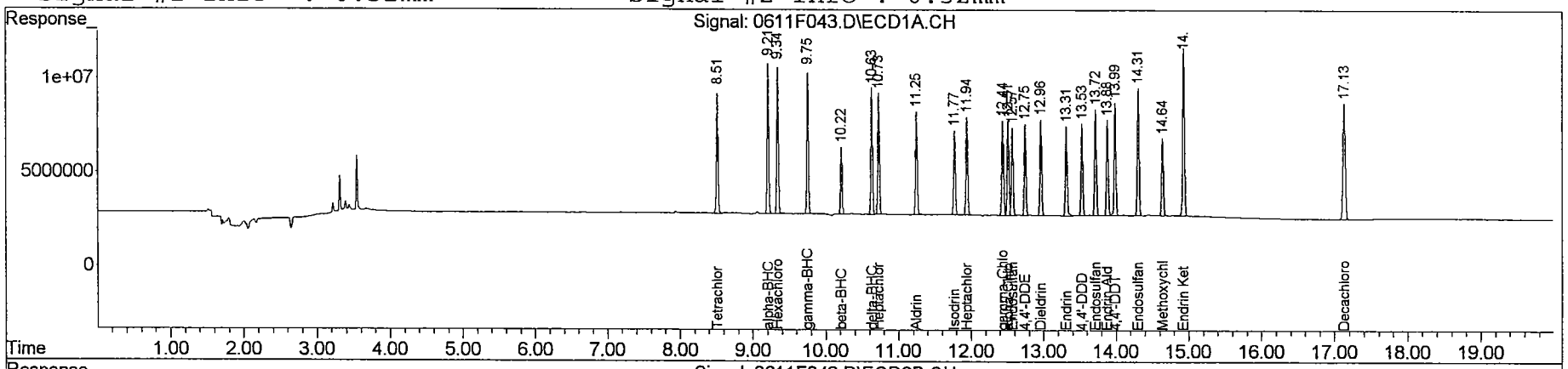
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

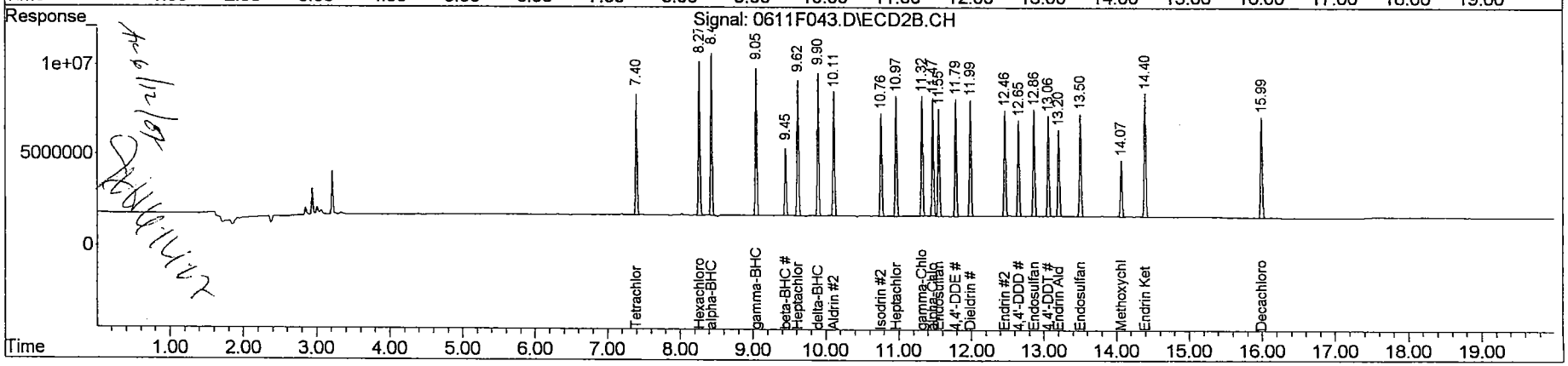
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:03 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



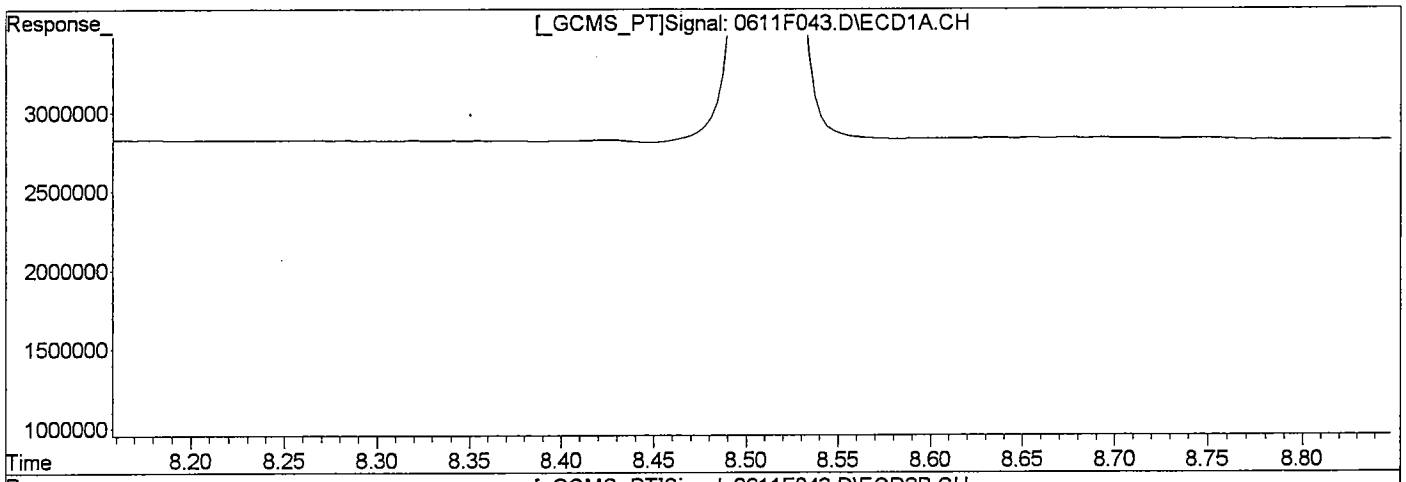


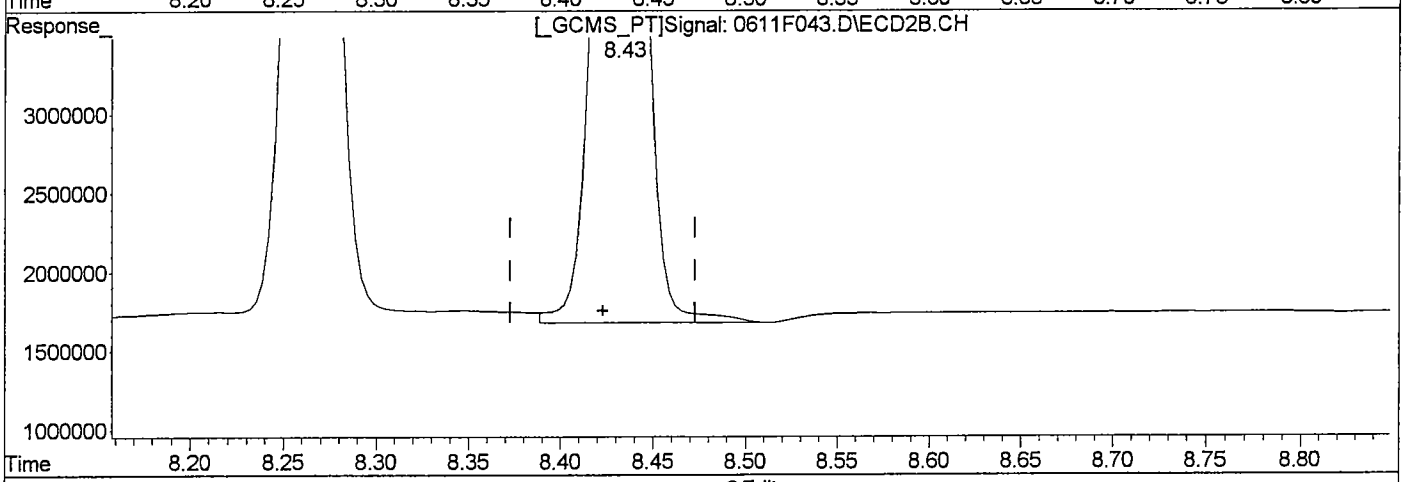
1070

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC
9.21min 51.634ug/L
response 11911143

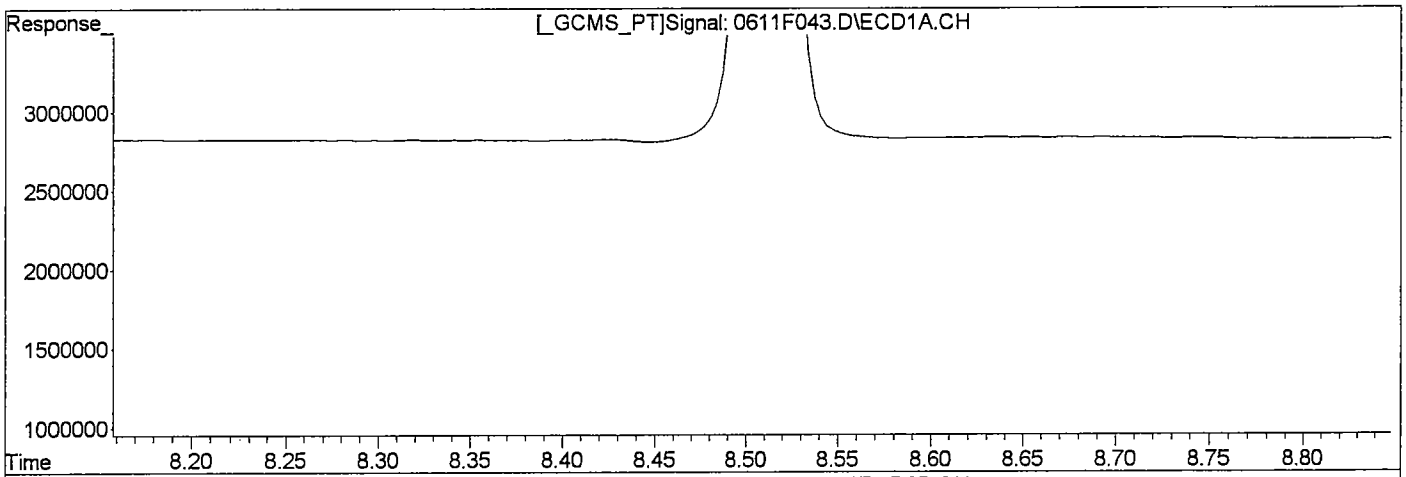
(2) alpha-BHC #2
8.43min 53.602ug/L
response 12732436

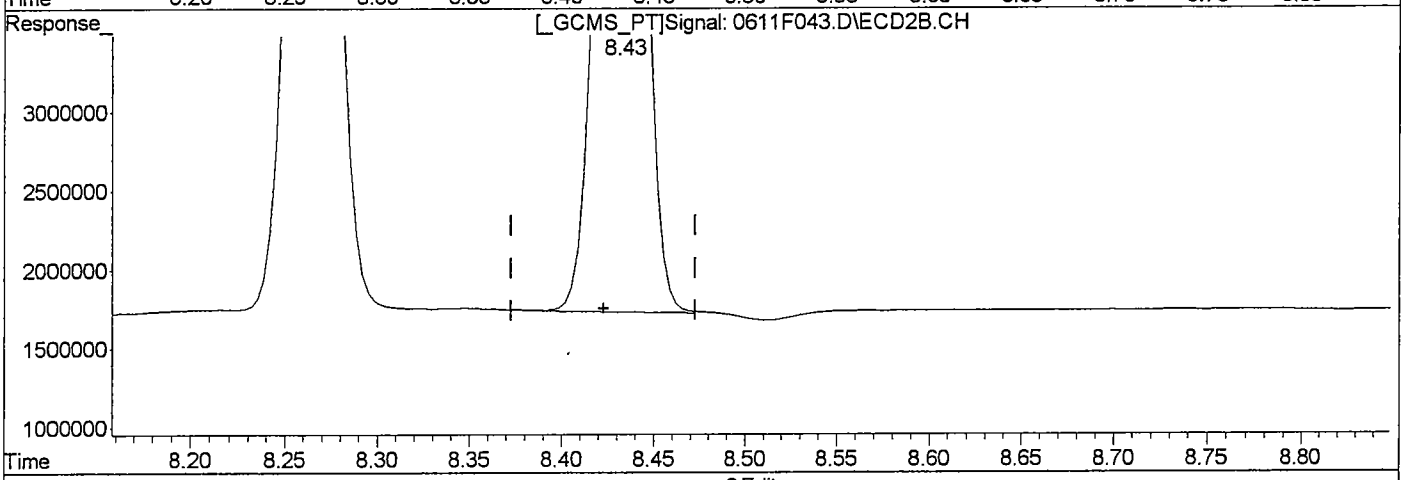
(+) = Expected Retention Time
0611F043.D 061107-8081.M Tue Jun 12 14:02:04 2007

Quantitation Report (QEdit)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC

9.21min 51.634ug/L

response 11911143

(2) alpha-BHC #2

8.43min 52.176ug/L m

response 12393670

After
Initials

JUN 12 2007

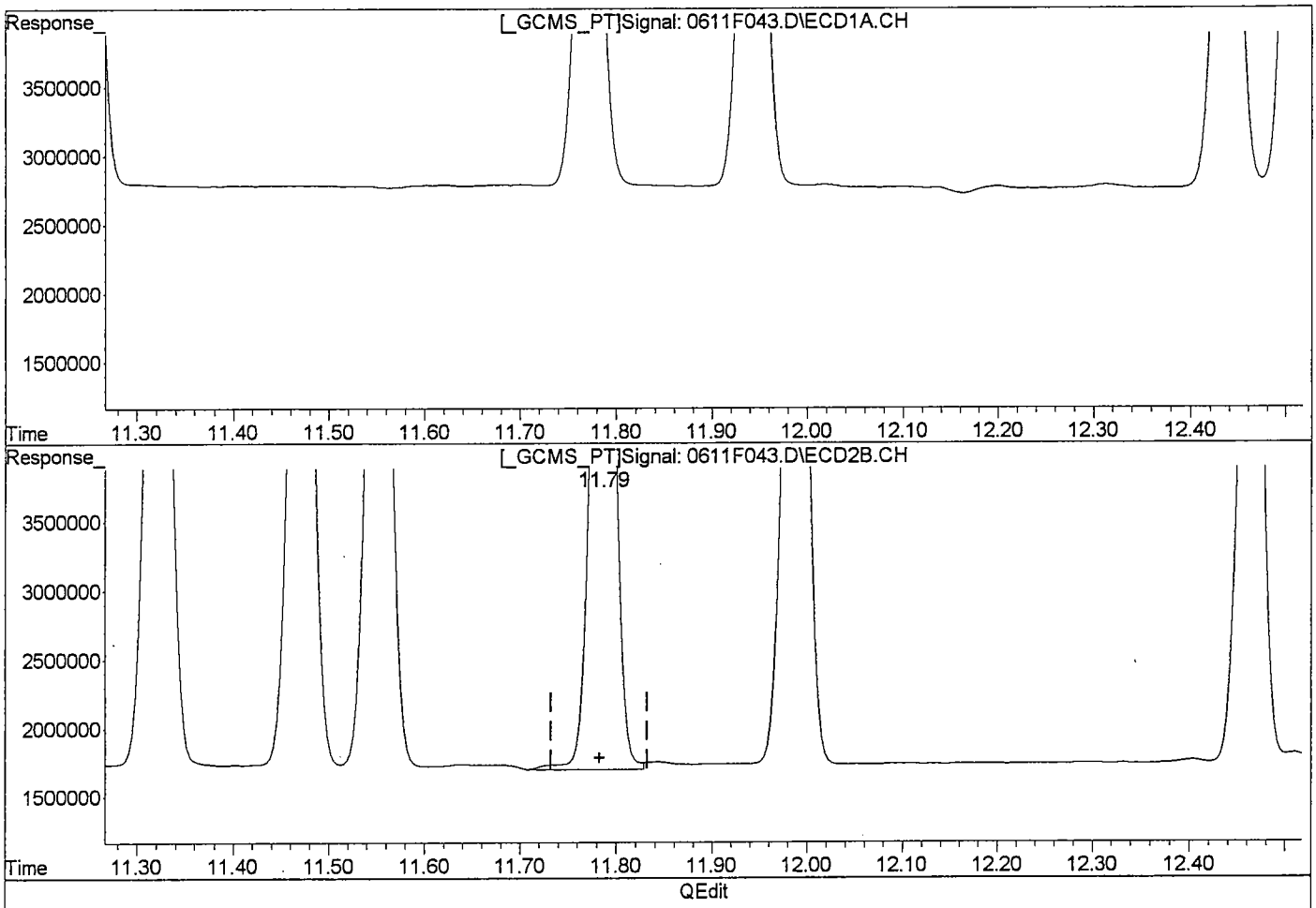
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F043.D 061107-8081.M Tue Jun 12 14:02:21 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration



(15) 4,4'-DDE

12.75min 51.886ug/L

response 7651301

(15) 4,4'-DDE #2

11.79min 53.030ug/L

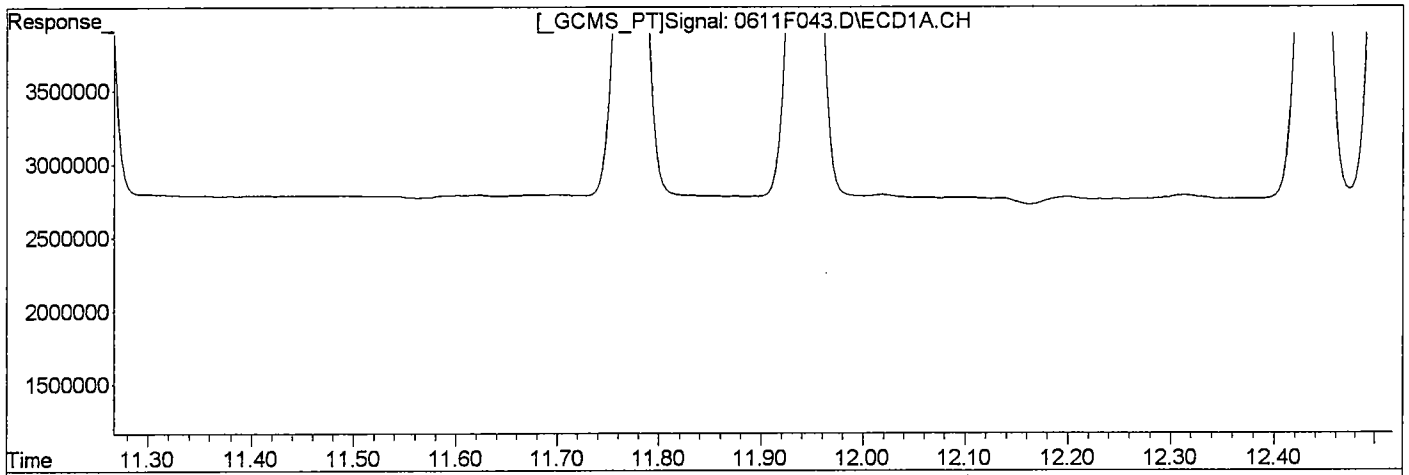
response 9788993

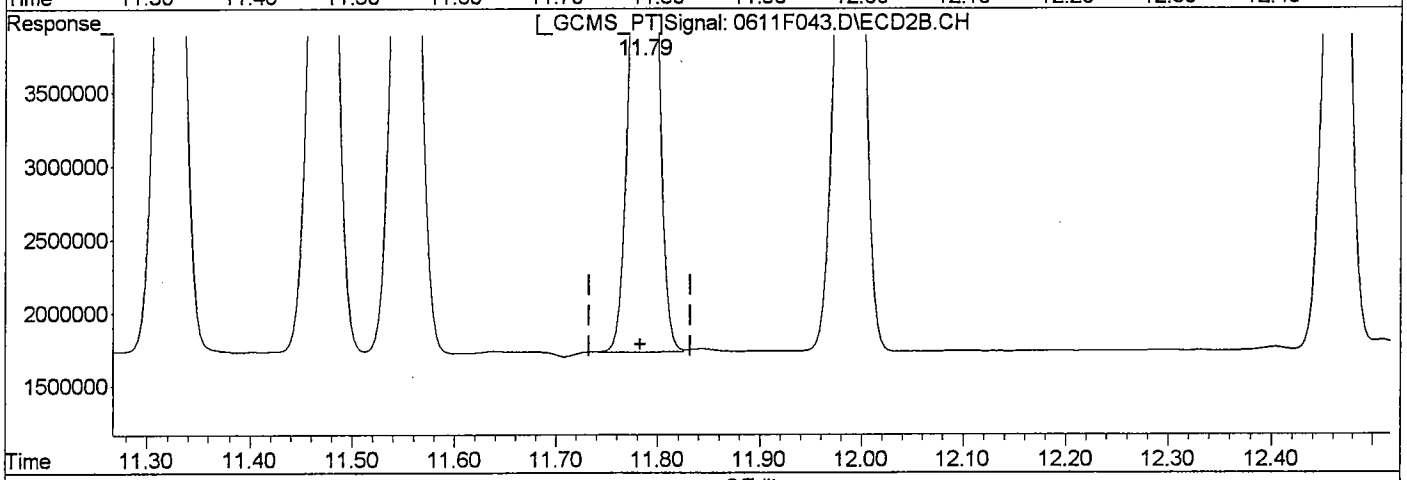
(+) = Expected Retention Time
0611F043.D 061107-8081.M Tue Jun 12 14:03:02 2007

Quantitation Report (QedIt)

Signal #1 : J:\GC23\DATA\061107\0611F043.D\ECD1A.CH Vial: 7
Signal #2 : J:\GC23\DATA\061107\0611F043.D\ECD2B.CH
Acq On : 12 Jun 2007 12:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.75min 51.886ug/L

response 7651301

(15) 4,4'-DDE #2

11.79min 51.887ug/L m

response 9578046

After
Initials

JUN 12 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0611F043.D 061107-8081.M Tue Jun 12 14:03:36 2007

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F044.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\061107\0611F044.D\ECD2B.CH
Acq On : 12 Jun 2007 1:25 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 13:45:53 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	18706692	18028928	93.104	99.706
24)	s	Decachlorobiphen	17.12	15.99	24572346	16891583	90.935	93.270
		Target Compounds						
2)		alpha-BHC	9.20	8.43	24337118	26006198	105.501	109.482
3)		Hexachlorobenzen	9.33	8.26	23027839	23836909	93.995	96.360
4)		beta-BHC	10.21	9.44	10277709	10513816	95.721	98.730
5)		gamma-BHC (Linda	9.75	9.04	22259306	23848199	103.091	106.110
6)		delta-BHC	10.63	9.89	20604810	23048538	104.168	107.612
7)		Heptachlor	10.72	9.61	20002845	22882276	98.181	100.351
8)		Aldrin	11.24	10.11	17585104	20949533	100.570	104.938
9)		Isodrin	11.77	10.75	14372378	17503476	96.833	101.465
10)		Heptachlor Epoxi	11.94	10.96	16651905	20296152	95.380	100.720
11)		gamma-Chlordane	12.43	11.32	16255724	20622856	97.553	101.427
12)		Endosulfan I	12.56	11.55	14887362	18647410	97.145	100.689
13)		alpha-Chlordane	12.51	11.47	16180200	20025902	98.200	101.528
14)		Dieldrin	12.96	11.98	16338002	20304757	104.777	104.538
15)		4,4'-DDE	12.74	11.78	15182977	19533728	102.960	105.820
16)		Endrin	13.31	12.46	15437656	18051850	113.682	102.524
17)		Endosulfan II	13.71	12.86	17843786	18180889	120.256	100.932
18)		4,4'-DDD	13.52	12.65	14924966	16018334	117.146	104.421
19)		Endrin Aldehyde	13.88	13.20	15778480	14886943	122.154	100.140
20)		Endosulfan Sulfa	14.30	13.50	21332035	17828351	127.235	98.290
21)		4,4'-DDT	13.98	13.06	18679028	17139704	133.663	105.389
22)		Endrin Ketone	14.93	14.39	29203274	21233164	123.820	102.491
23)		Methoxychlor	14.63	14.06	12702075	9337391	121.921	96.733

Ac 6/12/07

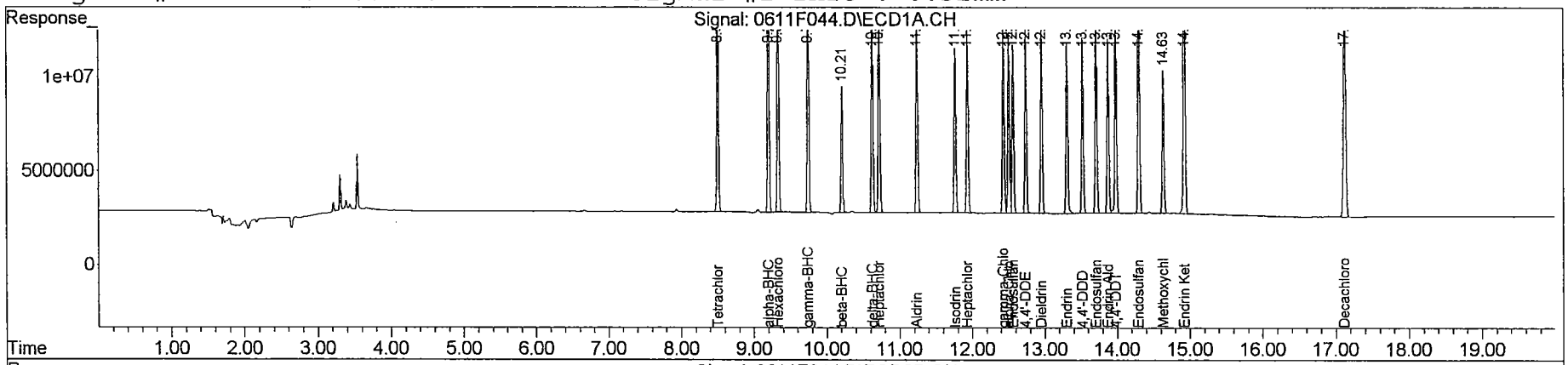
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

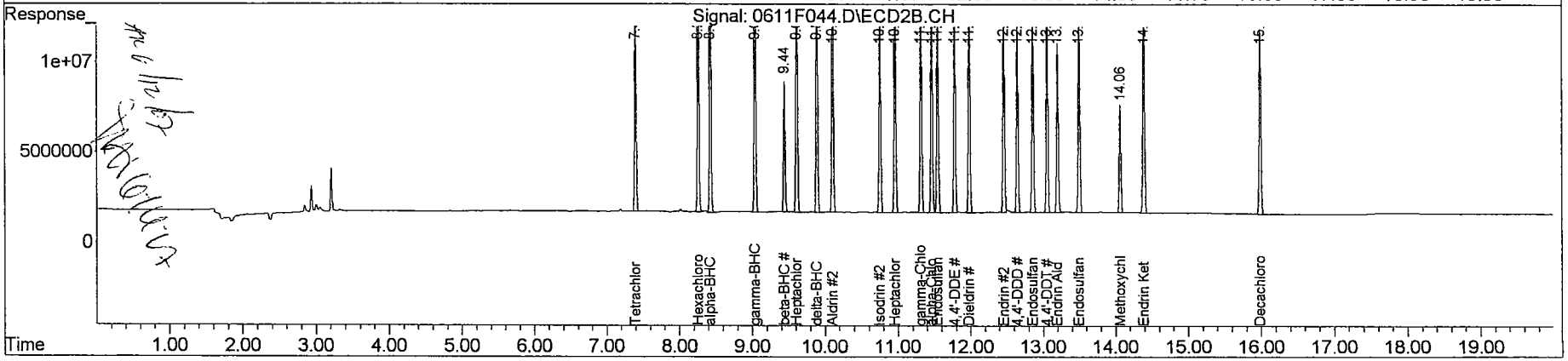
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F044.D\ECD1A.CH Vial: 8
Signal #2 : J:\GC23\DATA\061107\0611F044.D\ECD2B.CH
Acq On : 12 Jun 2007 1:25 pm Operator: AKamawal
Sample : 8081 @ 100ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:05 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F045.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\061107\0611F045.D\ECD2B.CH
Acq On : 12 Jun 2007 1:51 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:28:44 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.39	37986365	37317333	189.061	206.377
24)	s	Decachlorobiphen	17.12	15.99	46365255	32910958	171.584	181.724
		Target Compounds						
2)		alpha-BHC	9.21	8.43	52621804	56370643	228.114	237.313
3)		Hexachlorobenzen	9.34	8.26	46119263	48193882	188.250	194.822
4)		beta-BHC	10.21	9.44	20481367	21609382	190.751	202.922
5)		gamma-BHC (Linda	9.75	9.04	47273106	51210159	218.938	227.854
6)		delta-BHC	10.63	9.89	44338166	50006359	224.153	233.477
7)		Heptachlor	10.72	9.61	41028719	47676920	201.384	209.089
8)		Aldrin	11.24	10.11	36677633	44288959	209.761	221.847
9)		Isodrin	11.77	10.76	29322778	36037797	197.559	208.905
10)		Heptachlor Epoxi	11.94	10.96	33816900	41603010	193.700	206.457
11)		gamma-Chlordane	12.43	11.32	33524349	42969186	201.184	211.331
12)		Endosulfan I	12.57	11.55	30358049	38051365	198.096	205.463
13)		alpha-Chlordane	12.51	11.47	32953033	41378969	199.996	209.785
14)		Dieldrin	12.96	11.98	34371087	42590428	220.425	219.276
15)		4,4'-DDE	12.74	11.78	32150837	41153791	218.024	222.942
16)		Endrin	13.31	12.46	32608830	38019826	240.130	215.931
17)		Endosulfan II	13.71	12.86	35677493	35835392	240.444	198.941
18)		4,4'-DDD	13.53	12.65	31795298	33780913	249.561	220.212
19)		Endrin Aldehyde	13.88	13.20	32170701	30068890	249.060	202.264
20)		Endosulfan Sulfa	14.30	13.50	43427582	36202416	259.024	199.588
21)		4,4'-DDT	13.98	13.06	39625700	36165772	283.552	222.378
22)		Endrin Ketone	14.93	14.39	58680645	43029596	248.802	207.700
23)		Methoxychlor	14.64	14.06	25391606	18735151	243.721	194.092

Ac 6/12/07

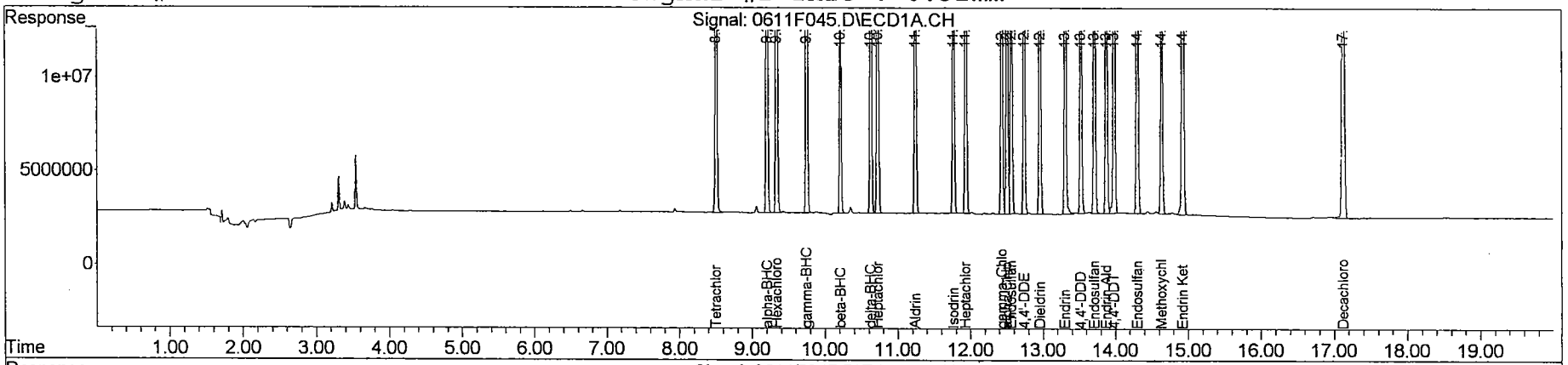
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

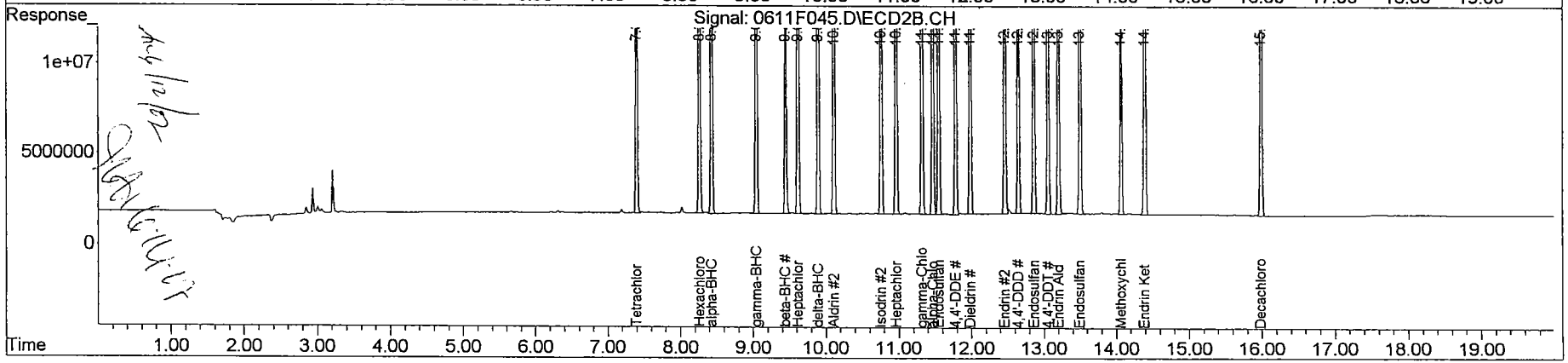
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F045.D\ECD1A.CH Vial: 9
Signal #2 : J:\GC23\DATA\061107\0611F045.D\ECD2B.CH
Acq On : 12 Jun 2007 1:51 pm Operator: AKamawal
Sample : 8081 @ 200ppb GCPS5-91D Inst : GC23
Misc : SVG\W0308345\4-ICAL.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:29 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 10:36:35 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F046.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\061107\0611F046.D\ECD2B.CH
Acq On : 12 Jun 2007 2:17 pm Operator: AKamawal
Sample : 8081 ICV @ 40ppb GCPS5-91A Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:38:13 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 14:32:40 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
2)	alpha-BHC	9.21	8.43	8915017	9485484	38.702	40.311
3)	Hexachlorobenzen	9.34	8.26	8264181	8512037	33.627	34.674
4)	beta-BHC	10.21	9.44	4173394	4190701	38.926	38.873
5)	gamma-BHC (Linda	9.75	9.04	8369530	8810024	38.609	39.591
6)	delta-BHC	10.63	9.89	7978628	8770372	40.427	41.421
7)	Heptachlor	10.72	9.61	7900729	8755324	39.236	38.597
8)	Aldrin	11.24	10.11	6766772	7938129	38.960	39.864
9)	Isodrin	11.77	10.76	6045295	7223467	40.801	41.832
10)	Heptachlor Epoxi	11.94	10.96	6578814	7879584	38.710	39.231
11)	gamma-Chlordane	12.43	11.32	6468774	7980676	38.607	39.297
12)	Endosulfan I	12.57	11.55	5977831	7322581	38.964	39.521
13)	alpha-Chlordane	12.51	11.47	6459511	7829909	38.750	39.715
14)	Dieldrin	12.96	11.98	6215310	7493960	37.689	38.514
15)	4,4'-DDE	12.74	11.78	5944035	7441456	38.895	40.227
16)	Endrin	13.31	12.46	6099858	7042673	39.539	40.168
17)	Endosulfan II	13.71	12.86	7288173	7208768	39.698	39.733
18)	4,4'-DDD	13.52	12.64	5792991	5994241	38.598	39.277
19)	Endrin Aldehyde	13.88	13.20	6696215	6059436	40.401	40.118
20)	Endosulfan Sulfa	14.30	13.50	8845600	7102350	39.340	39.144
21)	4,4'-DDT	13.98	13.05	7355915	6595907	39.935	40.456
22)	Endrin Ketone	14.92	14.39	12321900	8699252	41.297	41.411
23)	Methoxychlor	14.63	14.06	5450510	3905738	40.416	41.521

6/12/07

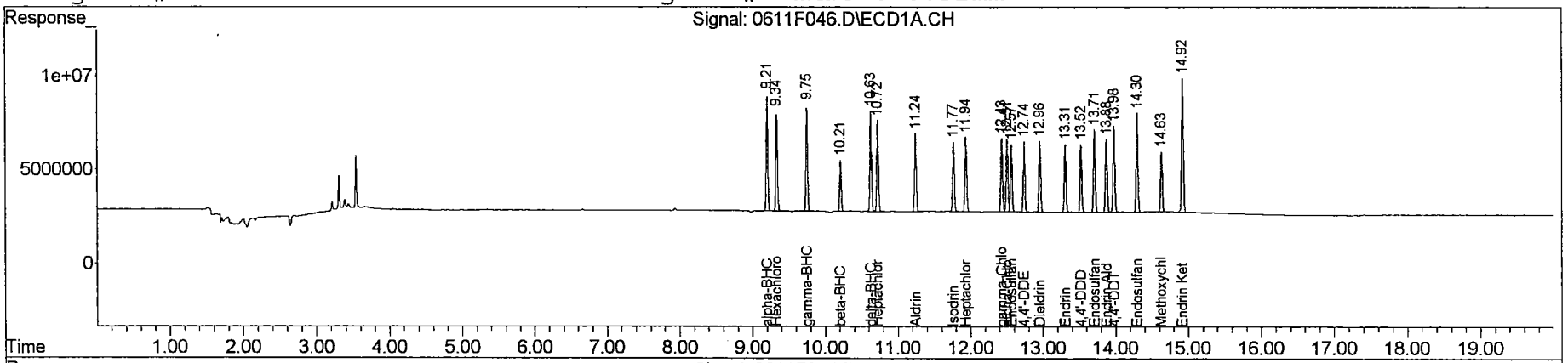
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

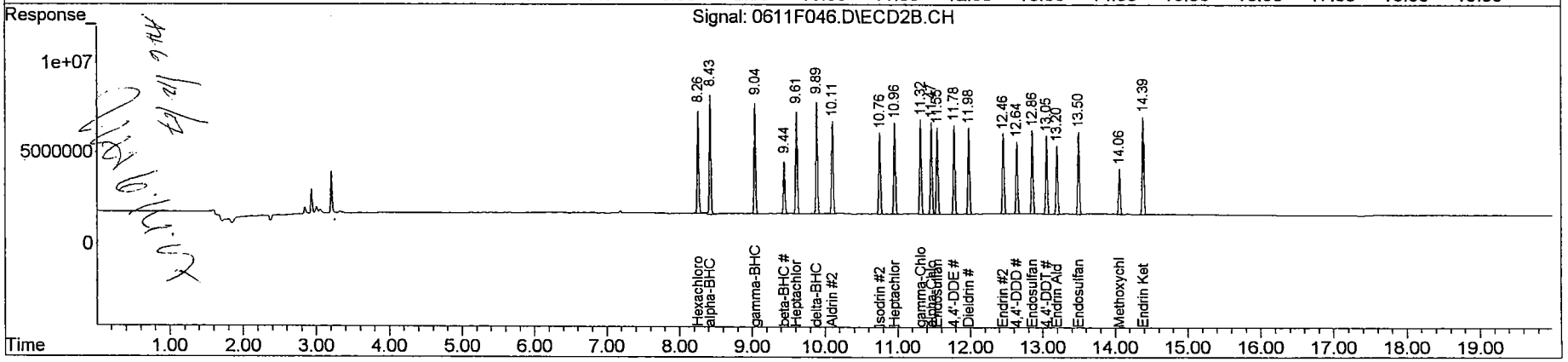
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061107\0611F046.D\ECD1A.CH Vial: 10
Signal #2 : J:\GC23\DATA\061107\0611F046.D\ECD2B.CH
Acq On : 12 Jun 2007 2:17 pm Operator: AKamawal
Sample : 8081 ICV @ 40ppb GCPS5-91A Inst : GC23
Misc : SVG\W0308345\3-ICV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 12 14:38 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Tue Jun 12 14:32:40 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F021.D
J:\GC23\DATA\061907\0619F022.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	278000	262000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	54	230000	248000	7	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	229000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	210000	6	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	180000	4	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	51	170000	173000	2	NA	± 15 %	AverageRF
gamma-Chlordane	50	50	168000	167000	0	NA	± 15 %	AverageRF
Endosulfan I	50	49	153000	152000	-1	NA	± 15 %	AverageRF
alpha-Chlordane	50	50	167000	166000	-1	NA	± 15 %	AverageRF
Dieldrin	50	49	165000	160000	-3	NA	± 15 %	AverageRF
4,4'-DDE	50	49	153000	150000	-2	NA	± 15 %	AverageRF
Endrin	50	47	154000	145000	-6	NA	± 15 %	AverageRF
Endosulfan II	50	45	184000	164000	-11	NA	± 15 %	AverageRF
4,4'-DDD	50	45	150000	135000	-10	NA	± 15 %	AverageRF
Endrin Aldehyde	50	44	166000	146000	-12	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	43	225000	194000	-14	NA	± 15 %	AverageRF
4,4'-DDT	50	46	184000	169000	-8	NA	± 15 %	AverageRF
Endrin Ketone	50	44	298000	263000	-12	NA	± 15 %	AverageRF
Methoxychlor	50	46	135000	125000	-7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1410	1560	11	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	1160	1230	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2010	2080	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	2920	3250	11	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	1630	1720	5	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	1820	1920	6	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F021.D\0619F021C.D
J:\GC23\DATA\061907\0619F022.D\0619F022C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	190000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	46	185000	169000	-9	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	255000	8	NA	± 15 %	AverageRF
beta-BHC	50	51	108000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	223000	240000	8	NA	± 15 %	AverageRF
delta-BHC	50	55	212000	233000	10	NA	± 15 %	AverageRF
Heptachlor	50	52	227000	237000	5	NA	± 15 %	AverageRF
Aldrin	50	53	199000	210000	5	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	207000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	203000	207000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	187000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	197000	203000	3	NA	± 15 %	AverageRF
Dieldrin	50	51	195000	200000	3	NA	± 15 %	AverageRF
4,4'-DDE	50	52	185000	191000	3	NA	± 15 %	AverageRF
Endrin	50	52	175000	181000	3	NA	± 15 %	AverageRF
Endosulfan II	50	50	181000	180000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	52	153000	159000	4	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	151000	151000	0	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	50	181000	182000	0	NA	± 15 %	AverageRF
4,4'-DDT	50	53	163000	171000	5	NA	± 15 %	AverageRF
Endrin Ketone	50	50	210000	208000	-1	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	101000	7	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1290	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4610	10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2750	6	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	719	5	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4210	7	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1000	5400	5580	3	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	7	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\061907\0619F021.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 17:59
Date Quantitated: 06/21/2007 10:54
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\061907\0619F021.D\0619F021C.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 17:59
Date Quantitated: 06/21/2007 10:54
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: LC 6/21/07

Secondary Review: SMB 21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F021.D\0619F021c.d			**Vial:**	4
Acqu Date:	06/20/2007 17:59	**Quant Date:**	06/21/2007 10:54	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.52	7.41	10089462	9498384	50.42	53.00			NA
				%Recovery =	NA	NA	Limits =	16-111	
Decachlorobiphenyl	17.14	16.01	13113414	8446020	47.25	45.73			NA
				%Recovery =	NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.22	8.44	12380667	12750220m	53.75	54.19			
Hexachlorobenzene	9.35	8.28	12556965	12648483m	51.09	51.53			
beta-BHC	10.23	9.46	5543397	5551020	51.70	51.49			
gamma-BHC (Lindane)	9.76	9.06	11455954	12002170	52.85	53.94			
delta-BHC	10.64	9.91	10498594	11644621	53.20	55.00			
Heptachlor	10.74	9.63	10580013	11872068	52.54	52.34			
Aldrin	11.25	10.13	9007285	10482817	51.86	52.64			
Isodrin	11.78	10.77	7449248	8915661	50.28	51.63			
Heptachlor Epoxide	11.95	10.98	8672177	10369038	51.03	51.63			
gamma-Chlordane	12.45	11.34	8364852	10328975	49.92	50.86			
Endosulfan I	12.58	11.57	7575962	9362616	49.38	50.53			
alpha-Chlordane	12.52	11.49	8291882	10130300	49.74	51.38			
Dieldrin	12.97	12.00	8024015	9987305	48.66	51.33			
4,4'-DDE	12.76	11.80	7504286	9567667m	49.10	51.72			
Endrin	13.32	12.48	7242524m	9056020	46.95	51.65			
Endosulfan II	13.73	12.88	8197298	8996524	44.65	49.59			
4,4'-DDD	13.54	12.67	6760049m	7954649	45.04	52.12			
Endrin Aldehyde	13.89	13.22	7319540	7564867	44.16	50.09			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F021.D\0619F021c.d			**Vial:**	4
Acqu Date:	06/20/2007 17:59	**Quant Date:**	06/21/2007 10:54	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.32	13.52	9723118	9088159	43.24	50.09			
4,4'-DDT	14.00	13.08	8447312	8572916	45.86	52.58			
Endrin Ketone	14.94	14.41	13129408	10401894	44.00	49.52			
Methoxychlor	14.65	14.09	6253506	5037600	46.37	53.55			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F021.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		2.0E+5	2.0E+5	0.8			
alpha-BHC		MS	AverageRF	15		2.3E+5	2.5E+5	7.5			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.5E+5	2.2			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.3E+5	5.7			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	3.4			
delta-BHC		MS	AverageRF	15		2.0E+5	2.1E+5	6.4			
Heptachlor		MS	AverageRF	15		2.0E+5	2.1E+5	5.1			
Aldrin		MS	AverageRF	15		1.7E+5	1.8E+5	3.7			
Isodrin		MS	AverageRF	15		1.5E+5	1.5E+5	0.6			
Heptachlor Epoxide		MS	AverageRF	15		1.7E+5	1.7E+5	2.1			
gamma-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	-0.2			
alpha-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	-0.5			
Endosulfan I		MS	AverageRF	15		1.5E+5	1.5E+5	-1.2			
4,4'-DDE		MS	AverageRF	15		1.5E+5	1.5E+5	-1.8			
Dieldrin		MS	AverageRF	15		1.6E+5	1.6E+5	-2.7			
Endrin		MS	AverageRF	15		1.5E+5	1.4E+5	-6.1			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.4E+5	-9.9			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.6E+5	-10.7			
Endrin Aldehyde		MS	AverageRF	15		1.7E+5	1.5E+5	-11.7			
4,4'-DDT		MS	AverageRF	15		1.8E+5	1.7E+5	-8.3			
Endosulfan Sulfate		MS	AverageRF	15		2.2E+5	1.9E+5	-13.5			
Methoxychlor		MS	AverageRF	15		1.3E+5	1.3E+5	-7.3			
Endrin Ketone		MS	AverageRF	15		3.0E+5	2.6E+5	-12.0			
Decachlorobiphenyl		SURR	AverageRF	15		2.8E+5	2.6E+5	-5.5			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	5.4

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F021.D\0619F021C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		1.8E+5	1.9E+5	6.0			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.5E+5	3.0			
alpha-BHC		MS	AverageRF	15		2.4E+5	2.6E+5	8.4			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.4E+5	7.9			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	3.0			
Heptachlor		MS	AverageRF	15		2.3E+5	2.4E+5	4.7			
delta-BHC		MS	AverageRF	15		2.1E+5	2.3E+5	10.0			
Aldrin		MS	AverageRF	15		2.0E+5	2.1E+5	5.3			
Isodrin		MS	AverageRF	15		1.7E+5	1.8E+5	3.3			
Heptachlor Epoxide		MS	AverageRF	15		2.0E+5	2.1E+5	3.3			
gamma-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	1.7			
alpha-Chlordane		MS	AverageRF	15		2.0E+5	2.0E+5	2.8			
Endosulfan I		MS	AverageRF	15		1.9E+5	1.9E+5	1.1			
4,4'-DDE		MS	AverageRF	15		1.8E+5	1.9E+5	3.4			
Dieldrin		MS	AverageRF	15		1.9E+5	2.0E+5	2.7			
Endrin		MS	AverageRF	15		1.8E+5	1.8E+5	3.3			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.6E+5	4.2			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.8E+5	-0.8			
4,4'-DDT		MS	AverageRF	15		1.6E+5	1.7E+5	5.2			
Endrin Aldehyde		MS	AverageRF	15		1.5E+5	1.5E+5	0.2			
Endosulfan Sulfate		MS	AverageRF	15		1.8E+5	1.8E+5	0.2			
Methoxychlor		MS	AverageRF	15		9.4E+4	1.0E+5	7.1			
Endrin Ketone		MS	AverageRF	15		2.1E+5	2.1E+5	-1.0			
Decachlorobiphenyl		SURR	AverageRF	15		1.8E+5	1.7E+5	-8.5			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.0

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:04 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.52	7.41	10089462	9498384	50.424	52.999
24)	s	Decachlorobiphen	17.14	16.01	13113414	8446020	47.254	45.732
		Target Compounds						
2)		alpha-BHC	9.22	8.44	12380667	12750220	53.747	54.186m
3)		Hexachlorobenzen	9.35	8.28	12556965	12648483	51.094	51.525m
4)		beta-BHC	10.23	9.46	5543397	5551020	51.704	51.492
5)		gamma-BHC (Linda	9.76	9.06	11455954	12002170	52.847	53.936
6)		delta-BHC	10.64	9.91	10498594	11644621	53.196	54.996
7)		Heptachlor	10.74	9.63	10580013	11872068	52.542	52.336
8)		Aldrin	11.25	10.13	9007285	10482817	51.860	52.643
9)		Isodrin	11.78	10.77	7449248	8915661	50.276	51.632
10)		Heptachlor Epoxi	11.95	10.98	8672177	10369038	51.027	51.626
11)		gamma-Chlordane	12.45	11.34	8364852	10328975	49.923	50.860
12)		Endosulfan I	12.58	11.57	7575962	9362616	49.381	50.532
13)		alpha-Chlordane	12.52	11.49	8291882	10130300	49.743	51.384
14)		Dieldrin	12.97	12.00	8024015	9987305	48.657	51.328
15)		4,4'-DDE	12.76	11.80	7504286	9567667	49.104	51.720m
16)		Endrin	13.32	12.48	7242524	9056020	46.946m	51.651
17)		Endosulfan II	13.73	12.88	8197298	8996524	44.650	49.586
18)		4,4'-DDD	13.54	12.67	6760049	7954649	45.042m	52.123
19)		Endrin Aldehyde	13.89	13.22	7319540	7564867	44.161	50.085
20)		Endosulfan Sulfa	14.32	13.52	9723118	9088159	43.243	50.089
21)		4,4'-DDT	14.00	13.08	8447312	8572916	45.861	52.581
22)		Endrin Ketone	14.94	14.41	13129408	10401894	44.004	49.516
23)		Methoxychlor	14.65	14.09	6253506	5037600	46.370	53.553

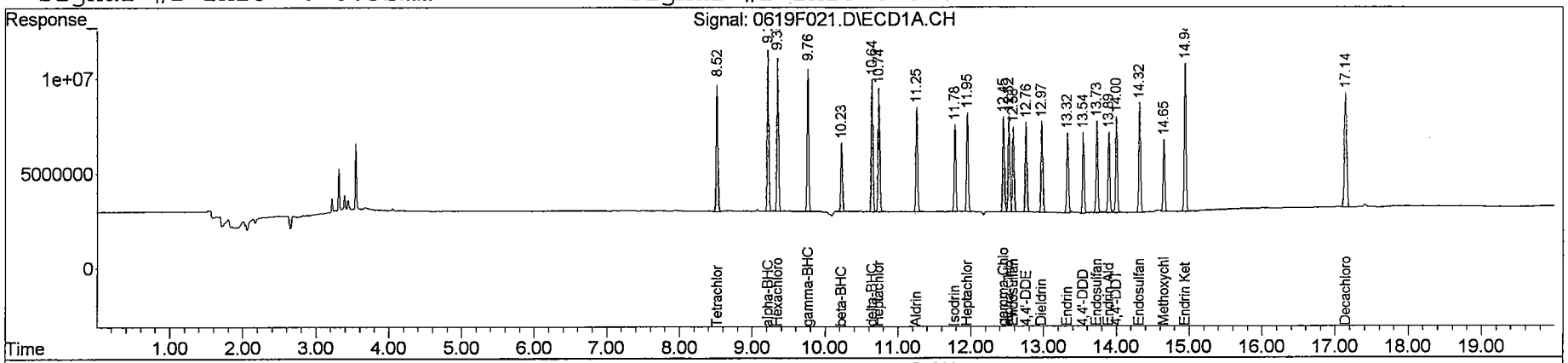
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

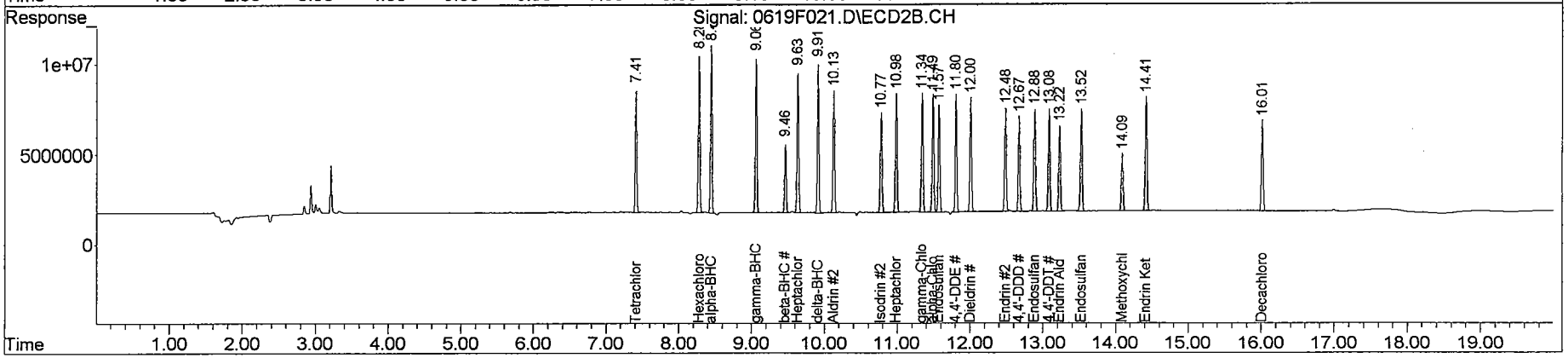
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:54 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

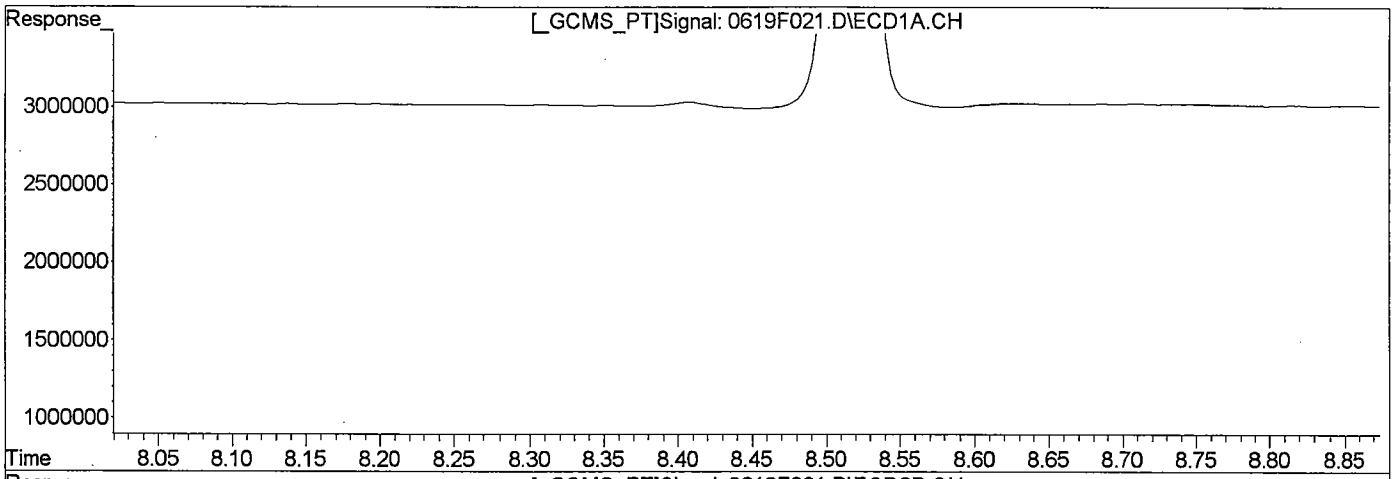


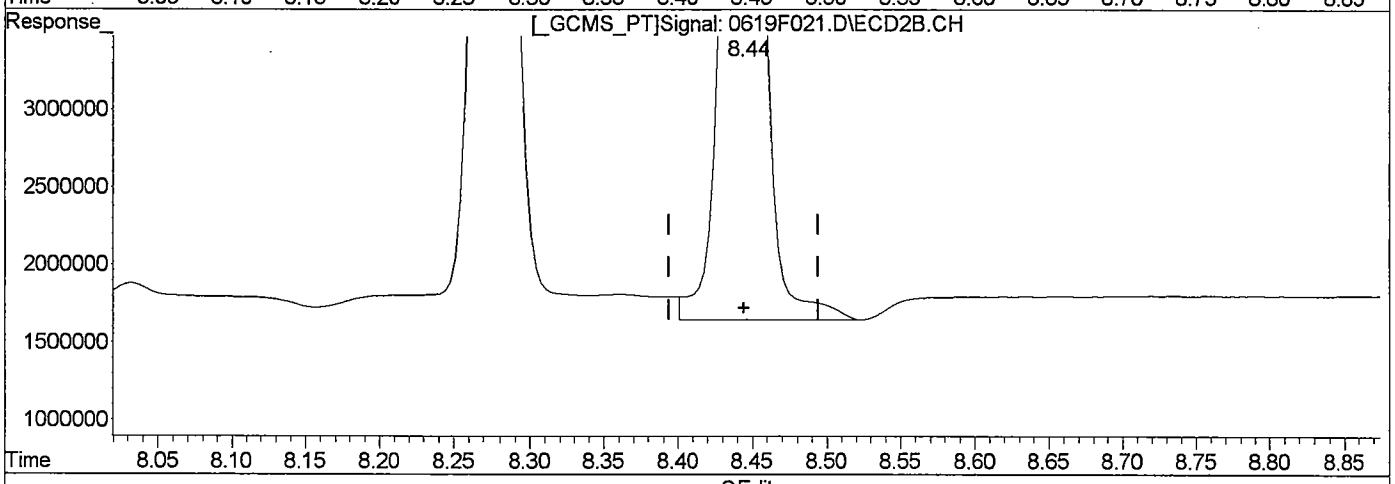


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(2) alpha-BHC

9.22min 53.747ug/L

response 12380667

(2) alpha-BHC #2

8.44min 57.452ug/L

response 13518894

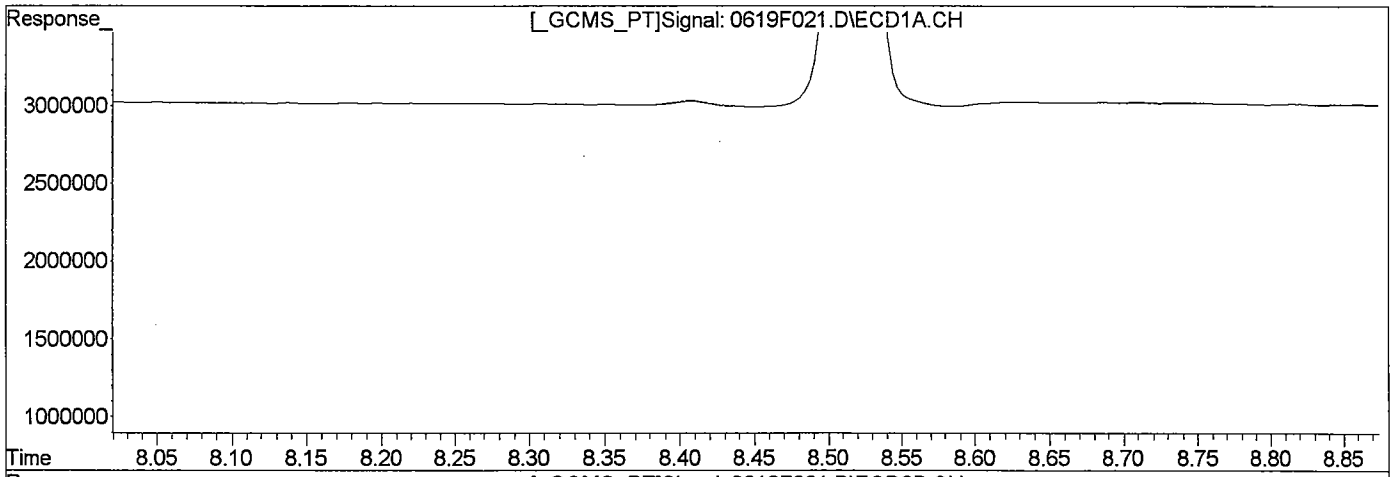
(+) = Expected Retention Time

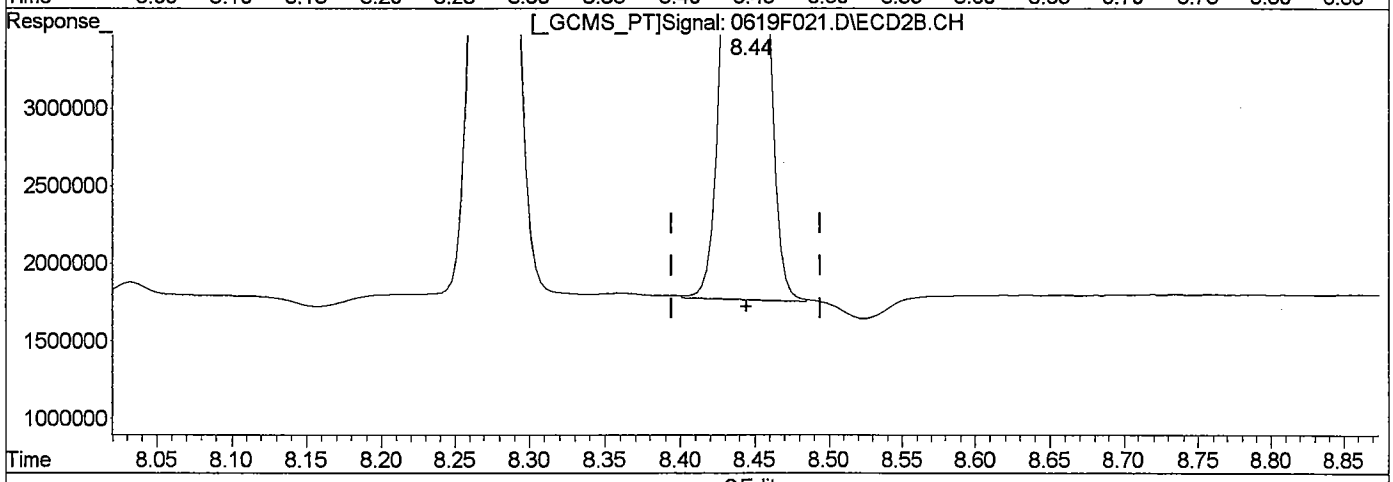
0619F021.D 061107-8081.M Thu Jun 21 10:52:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(2) alpha-BHC

9.22min 53.747ug/L

response 12380667

(2) alpha-BHC #2

8.44min 54.186ug/L m

response 12750220

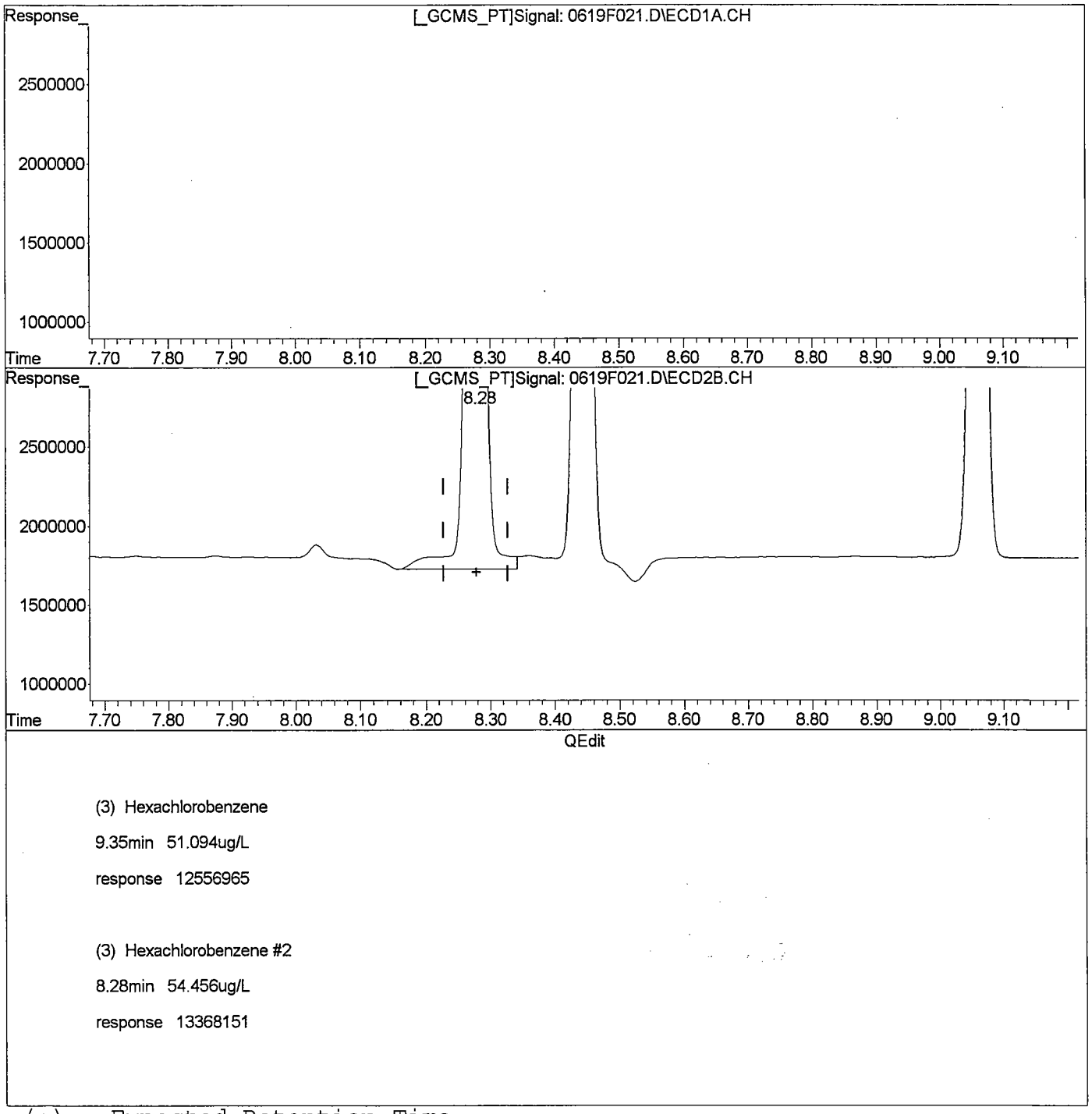
After
Initials [illegible]
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:53:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.35min 51.094ug/L

response 12556965

(3) Hexachlorobenzene #2

8.28min 54.456ug/L

response 13368151

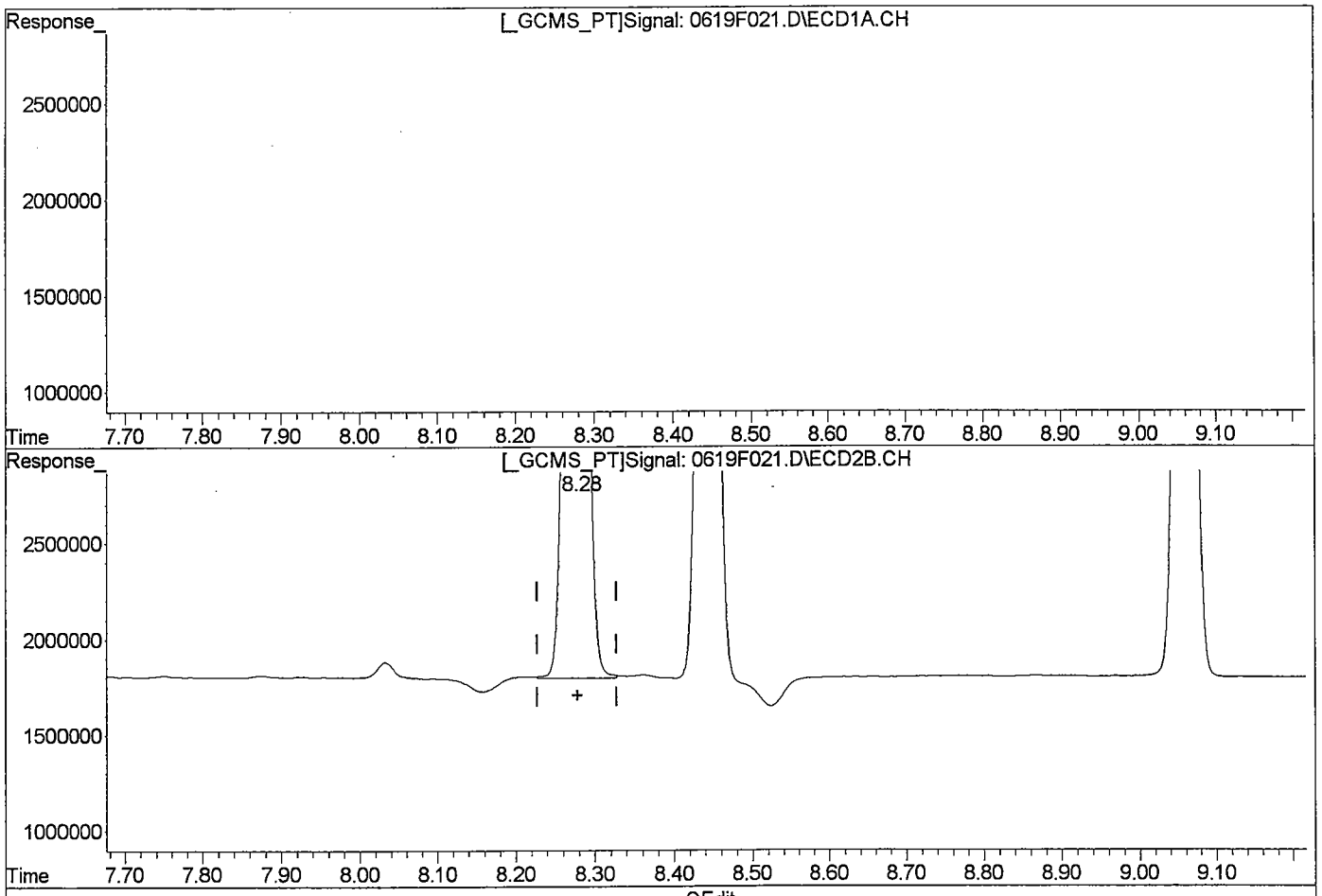
(+) = Expected Retention Time

0619F021.D 061107-8081.M Thu Jun 21 10:53:09 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.35min 51.094ug/L

response 12556965

(3) Hexachlorobenzene #2

8.28min 51.525ug/L m

response 12648483

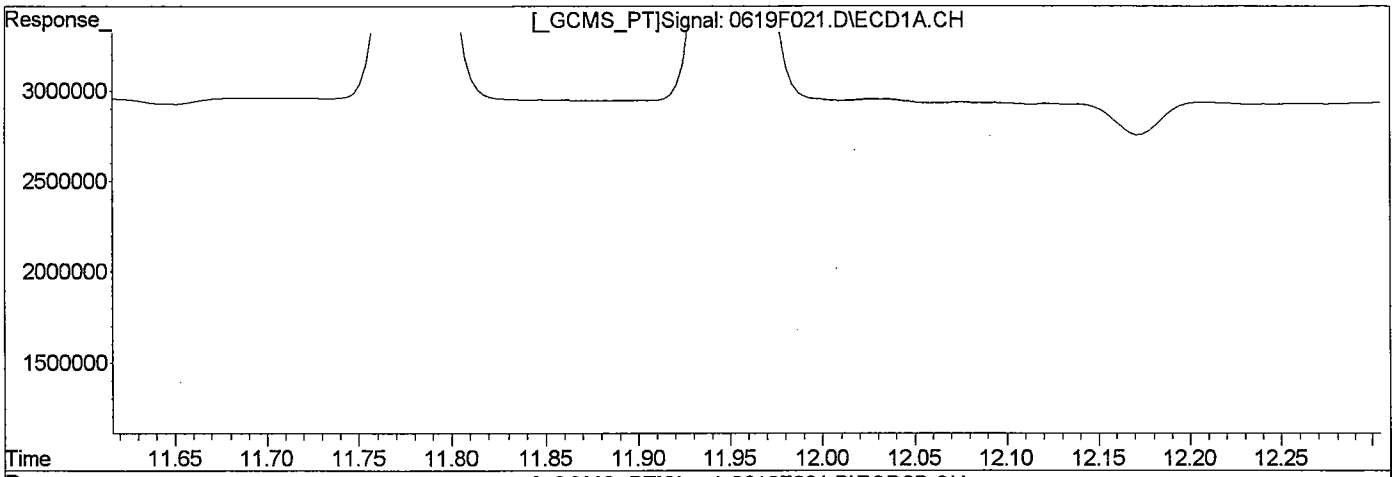
After
Initials
JUN 21 2007
Wrong Peak Picked or Found
Peak Not Found or Missed
Other

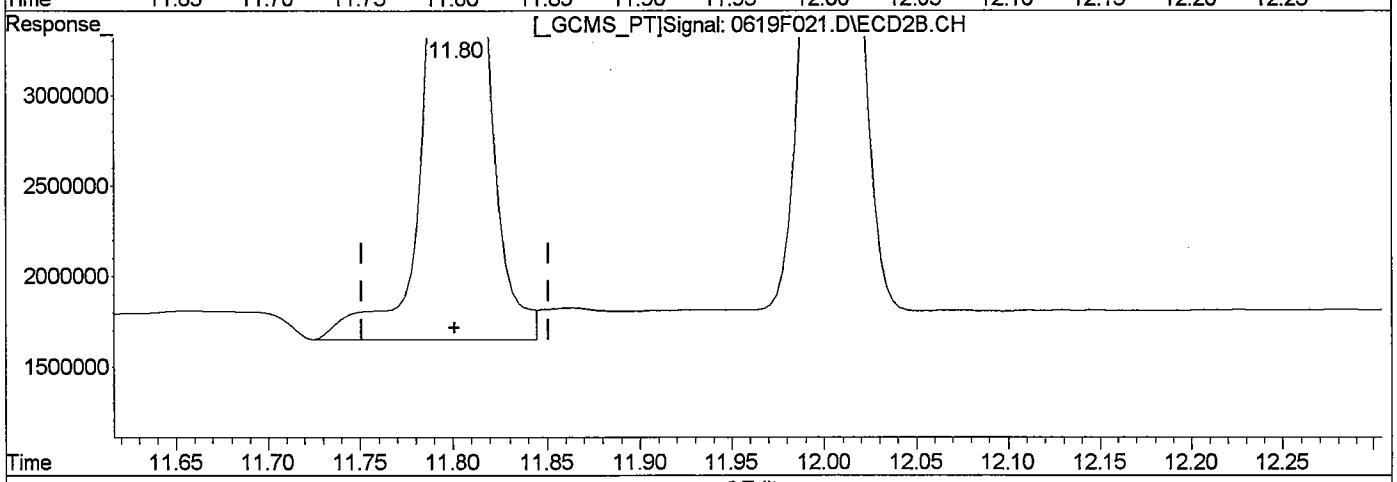
(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:53:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.76min 49.104ug/L

response 7504286

(15) 4,4'-DDE #2

11.80min 57.113ug/L

response 10565196

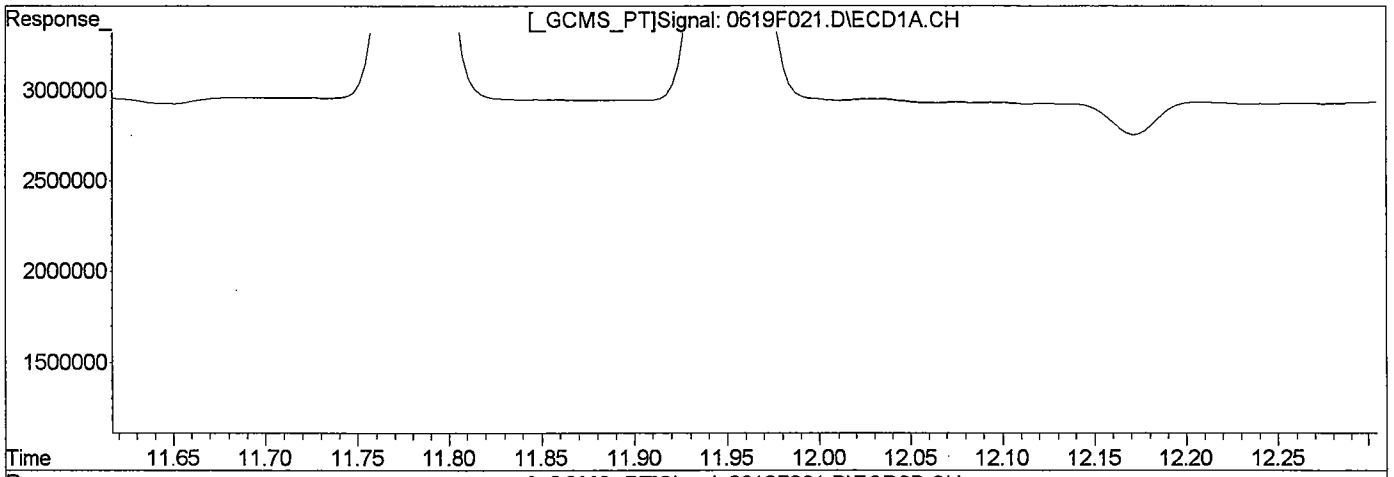
(+) = Expected Retention Time

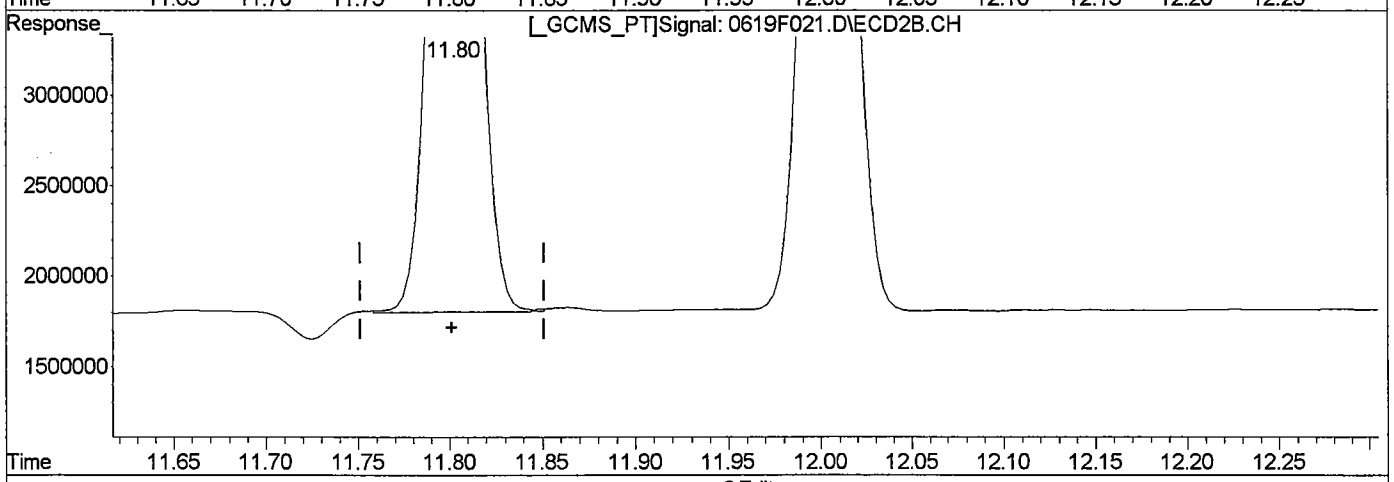
0619F021.D 061107-8081.M Thu Jun 21 10:53:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(15) 4,4'-DDE

12.76min 49.104ug/L

response 7504286

(15) 4,4'-DDE #2

11.80min 51.720ug/L m

response 9567667

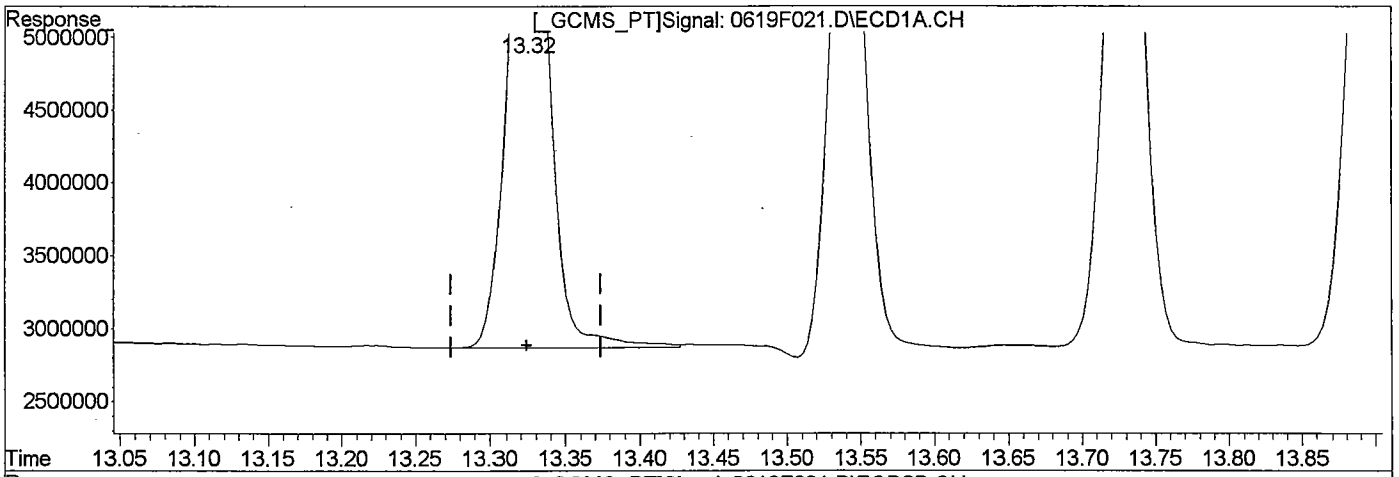
After
initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

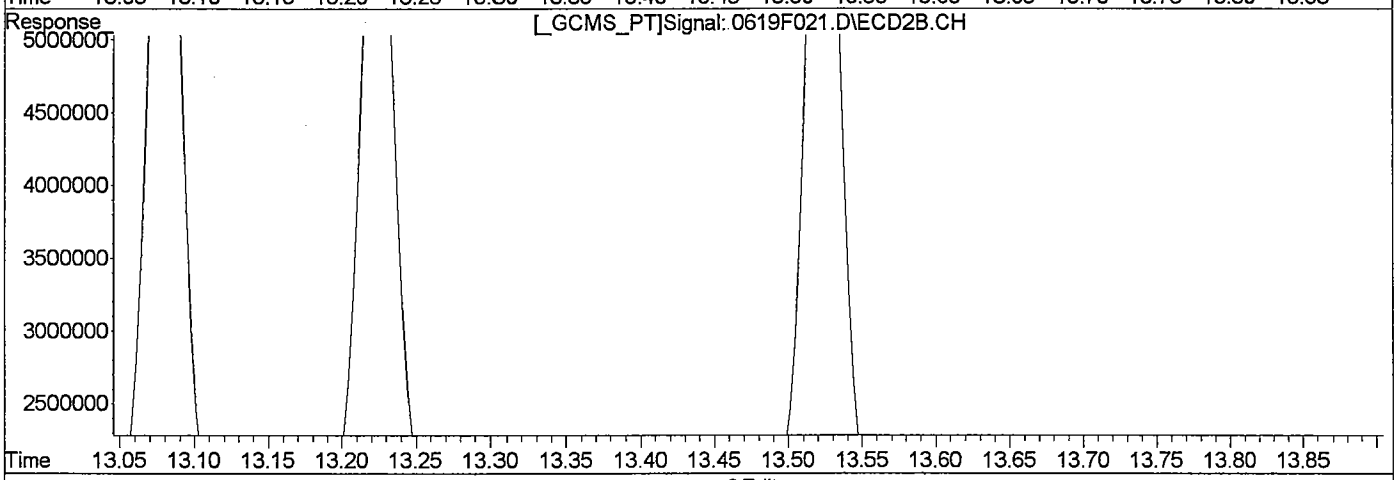
(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:53:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.32min 47.872ug/L

response 7385418

(16) Endrin #2

12.48min 51.651ug/L

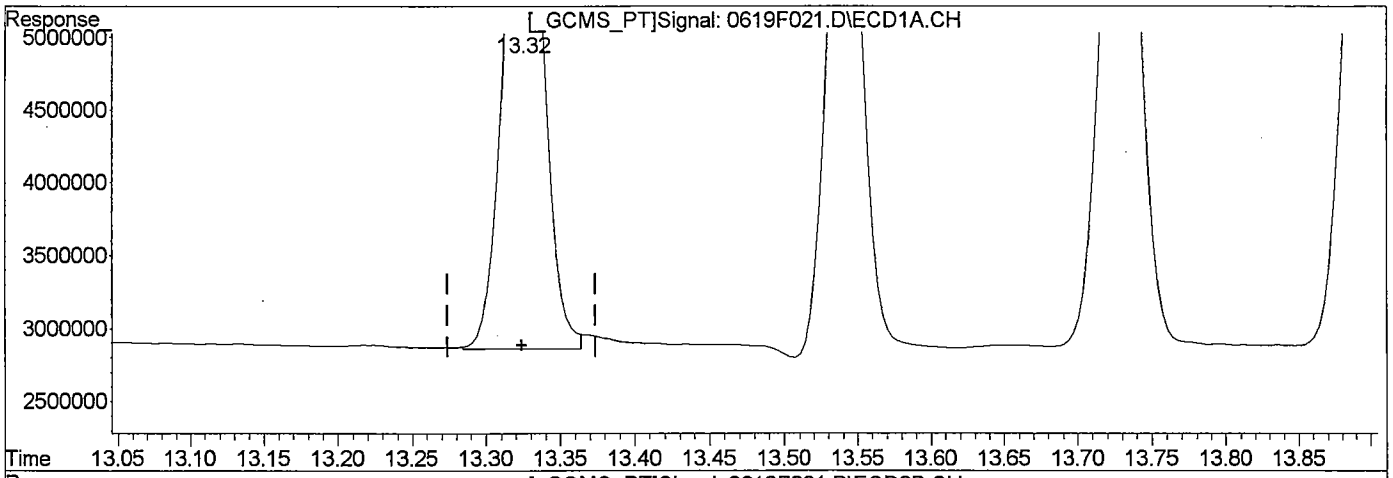
response 9056020

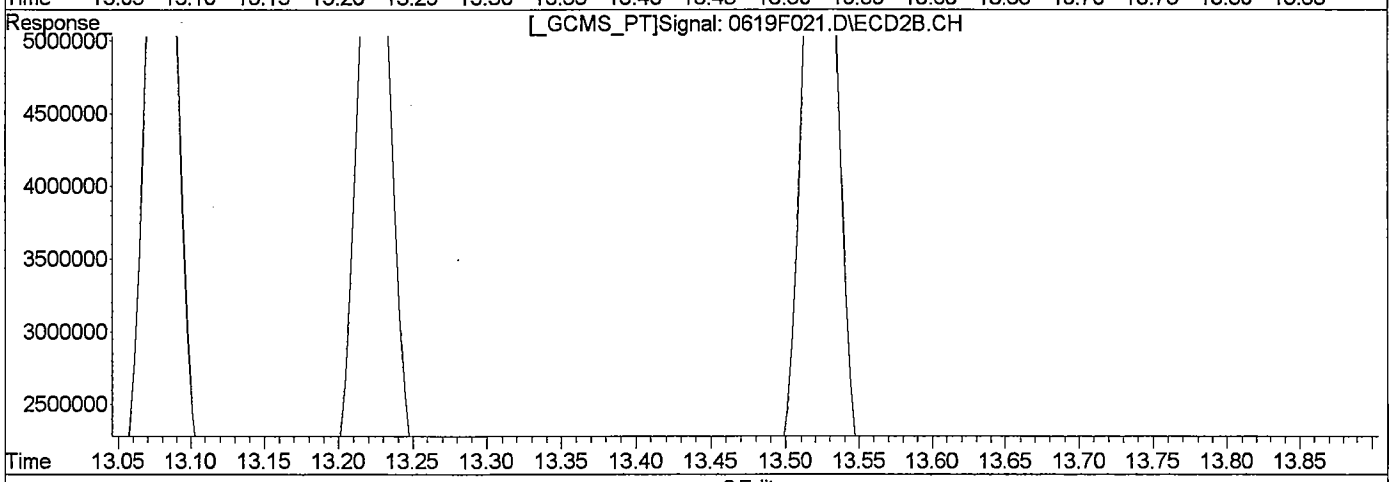
(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:53:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.32min 46.946ug/L m

response 7242524

(16) Endrin #2

12.48min 51.651ug/L

response 9056020

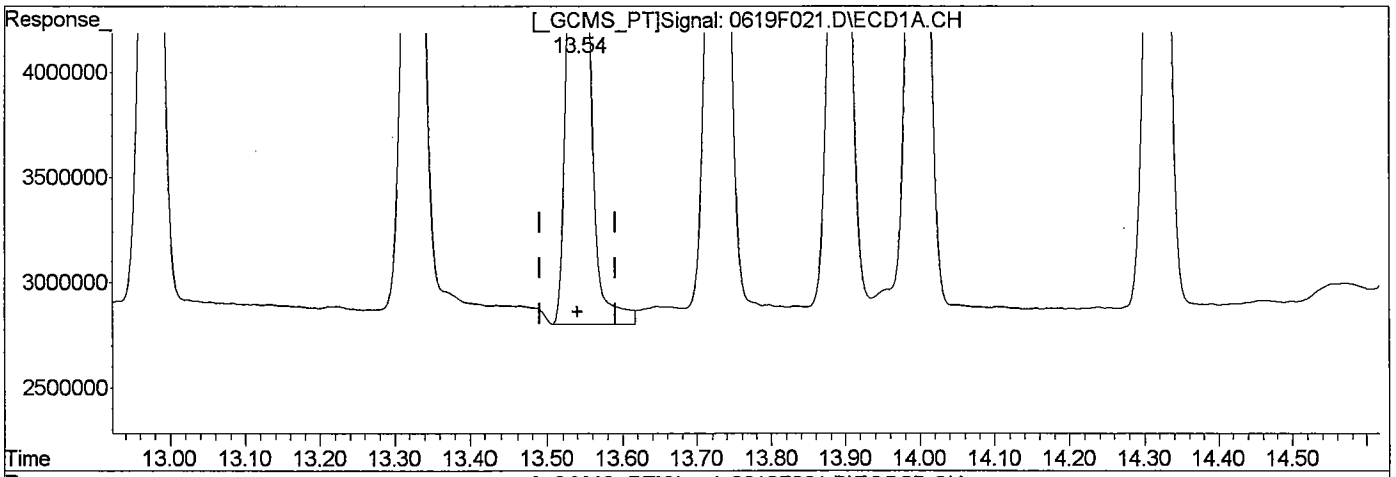
After
Initials [illegible]
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

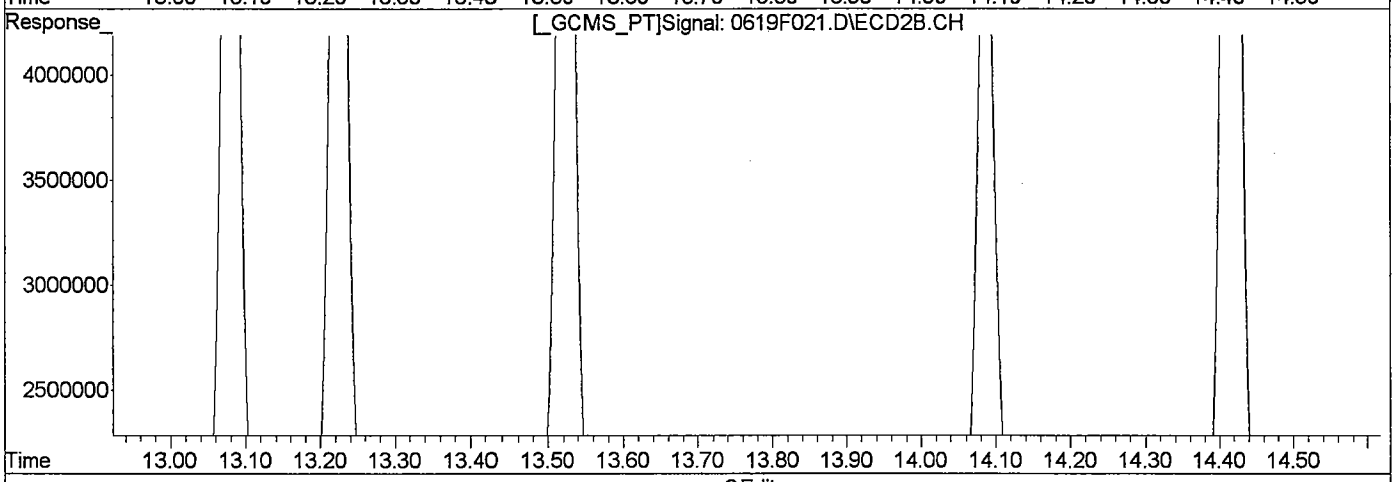
(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:53:55 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(18) 4,4'-DDD

13.54min 46.757ug/L

response 7017582

(18) 4,4'-DDD #2

12.67min 52.123ug/L

response 7954649

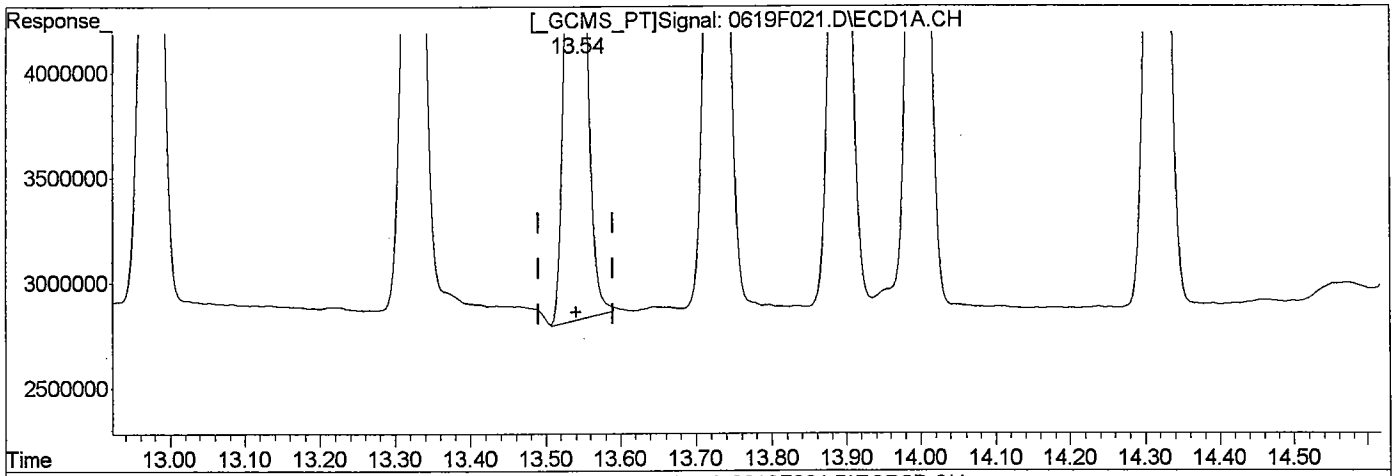
(+) = Expected Retention Time

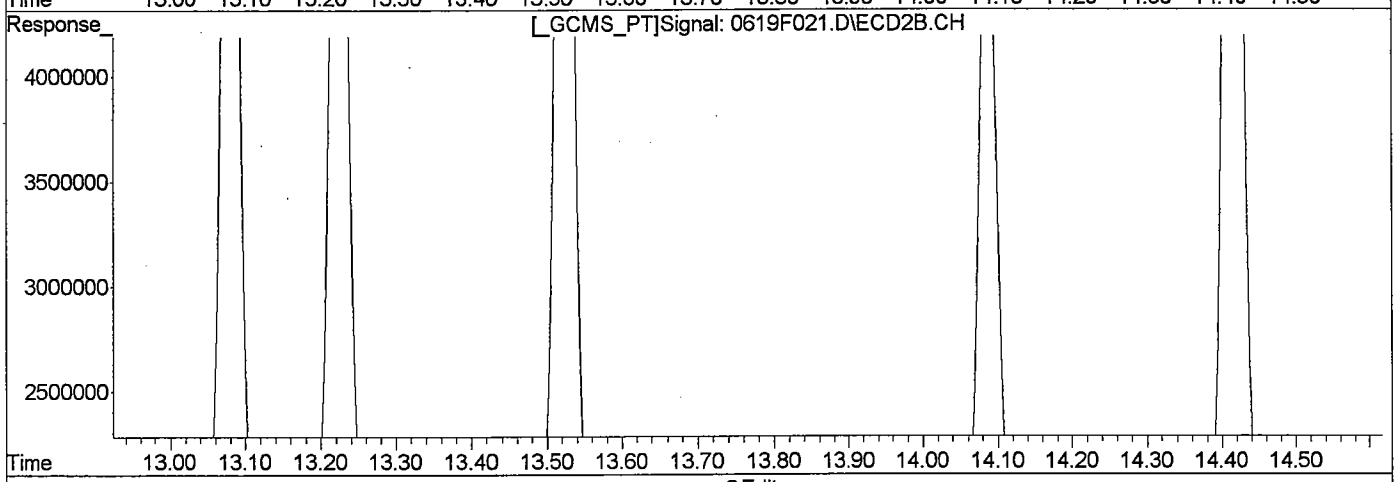
0619F021.D 061107-8081.M Thu Jun 21 10:54:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\061907\0619F021.D\ECD2B.CH
Acq On : 20 Jun 2007 5:59 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.54min 45.042ug/L m

response 6760049

(18) 4,4'-DDD #2

12.67min 52.123ug/L

response 7954649

After
initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F021.D 061107-8081.M Thu Jun 21 10:54:13 2007

Exception Report

Data File: J:\GC23\DATA\061907\0619F022.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 18:26
Date Quantitated: 06/21/2007 10:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\061907\0619F022.D\0619F022C.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 18:26
Date Quantitated: 06/21/2007 10:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: CC 6/21/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F022.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F022.D\0619F022c.d			**Vial:**	5
Acqu Date:	06/20/2007 18:26	**Quant Date:**	06/21/2007 10:55	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F022.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F022.D\0619F022c.d			**Vial:**	5
Acqu Date:	06/20/2007 18:26	**Quant Date:**	06/21/2007 10:55	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,070	1,066			
Toxaphene {1}	13.16	12.62	1563546	1287724	1,106	1,076			
Toxaphene {2}	13.22	12.71	1228417	4608386m	1,060	1,101			
Toxaphene {3}	13.37	13.57	2075686	2751220	1,031	1,063			
Toxaphene {4}	14.05	13.69	3246934	719481m	1,112	1,053			
Toxaphene {5}	14.37	13.91	1723672m	4211622m	1,055	1,069			
Toxaphene {6}	14.89	14.11	1922133m	5582833m	1,058	1,034			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F022.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,070	1,000	7.0
Toxaphene {1}		MULTI	AverageRF	100		1.4E+3	1.6E+3	10.6			
Toxaphene {2}		MULTI	AverageRF	100		1.2E+3	1.2E+3	6.0			
Toxaphene {3}		MULTI	AverageRF	100		2.0E+3	2.1E+3	3.1			
Toxaphene {4}		MULTI	AverageRF	100		2.9E+3	3.2E+3	11.2			
Toxaphene {5}		MULTI	AverageRF	100		1.6E+3	1.7E+3	5.5			
Toxaphene {6}		MULTI	AverageRF	100		1.8E+3	1.9E+3	5.8			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	7.0

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F022.D\0619F022C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,066	1,000	6.6
Toxaphene {1}		MULTI	AverageRF	100		1.2E+3	1.3E+3	7.6			
Toxaphene {2}		MULTI	AverageRF	100		4.2E+3	4.6E+3	10.1			
Toxaphene {3}		MULTI	AverageRF	100		2.6E+3	2.8E+3	6.3			
Toxaphene {4}		MULTI	AverageRF	100		6.8E+2	7.2E+2	5.3			
Toxaphene {5}		MULTI	AverageRF	100		3.9E+3	4.2E+3	6.9			
Toxaphene {6}		MULTI	AverageRF	100		5.4E+3	5.6E+3	3.4			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	6.6

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:05 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.16	12.62	1563546	1287724	1106.066	1075.655
26)	Toxaphene {2}	13.22	12.71	1228417	4608386	1059.958	1100.646m
27)	Toxaphene {3}	13.37	13.57	2075686	2751220	1031.228	1062.643
28)	Toxaphene {4}	14.05	13.69	3246934	719481	1111.655	1052.755m
29)	Toxaphene {5}	14.37	13.91	1723672	4211622	1054.859m	1068.880m
30)	Toxaphene {6}	14.89	14.11	1922133	5582833	1058.156m	1034.446m

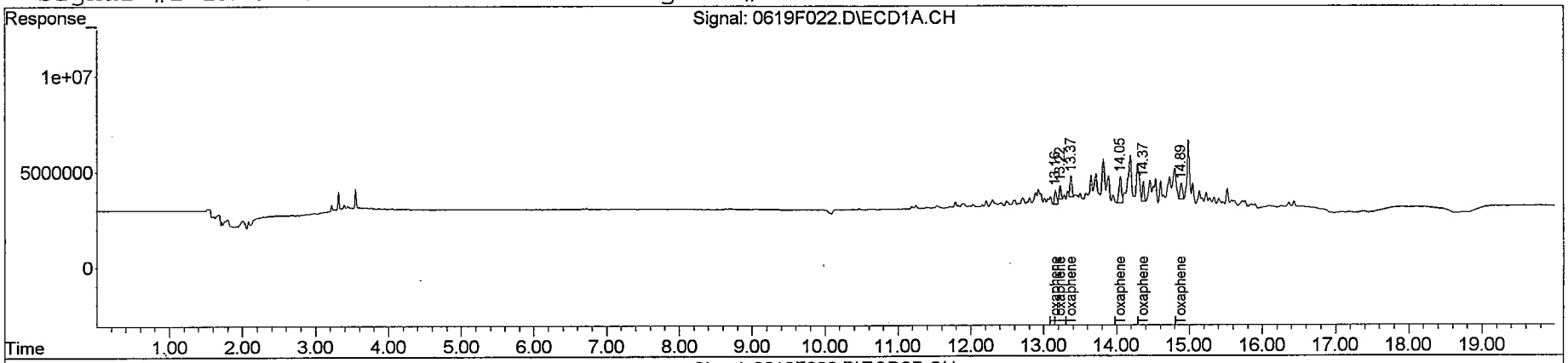
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

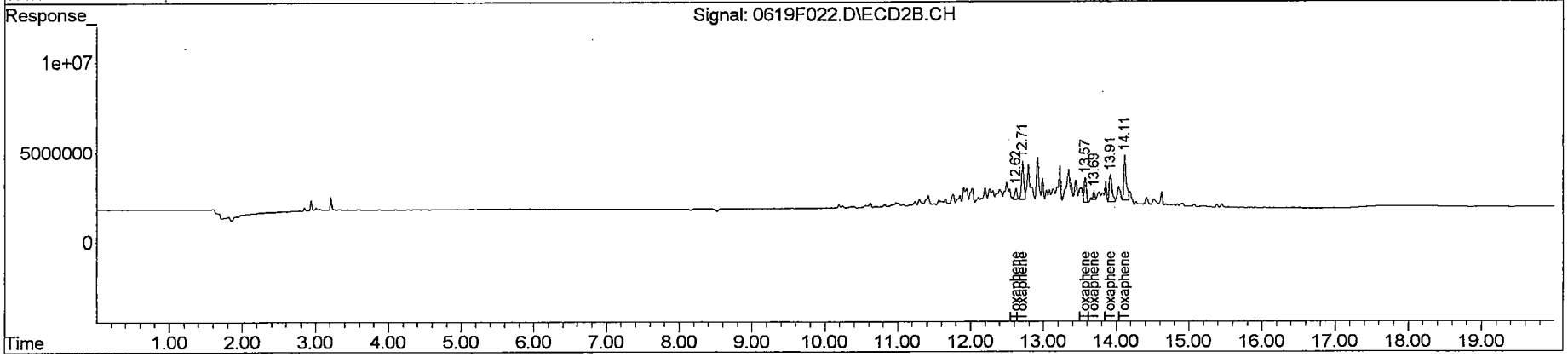
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:55 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

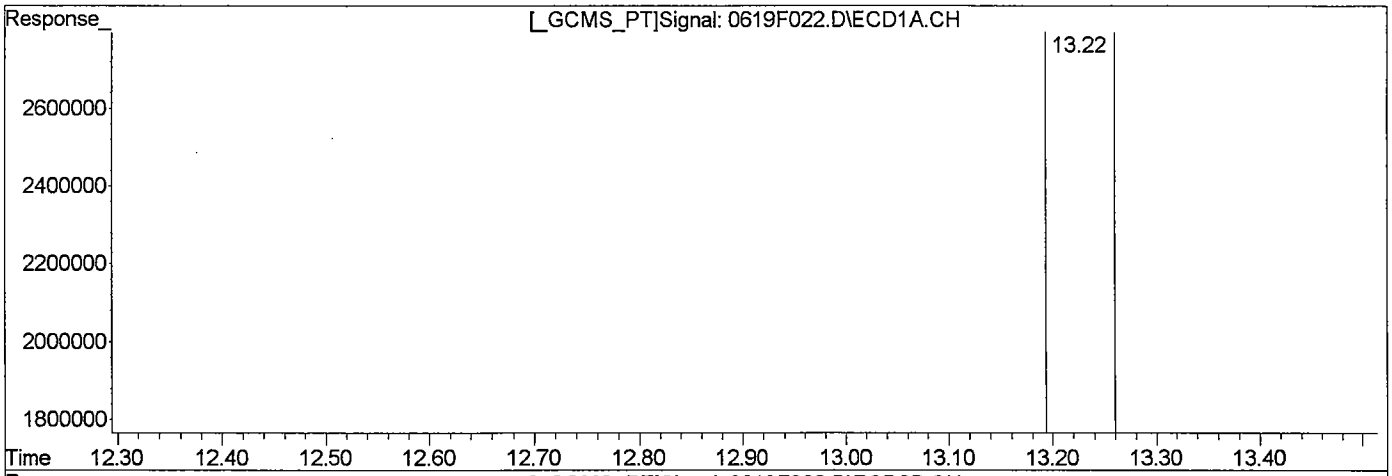


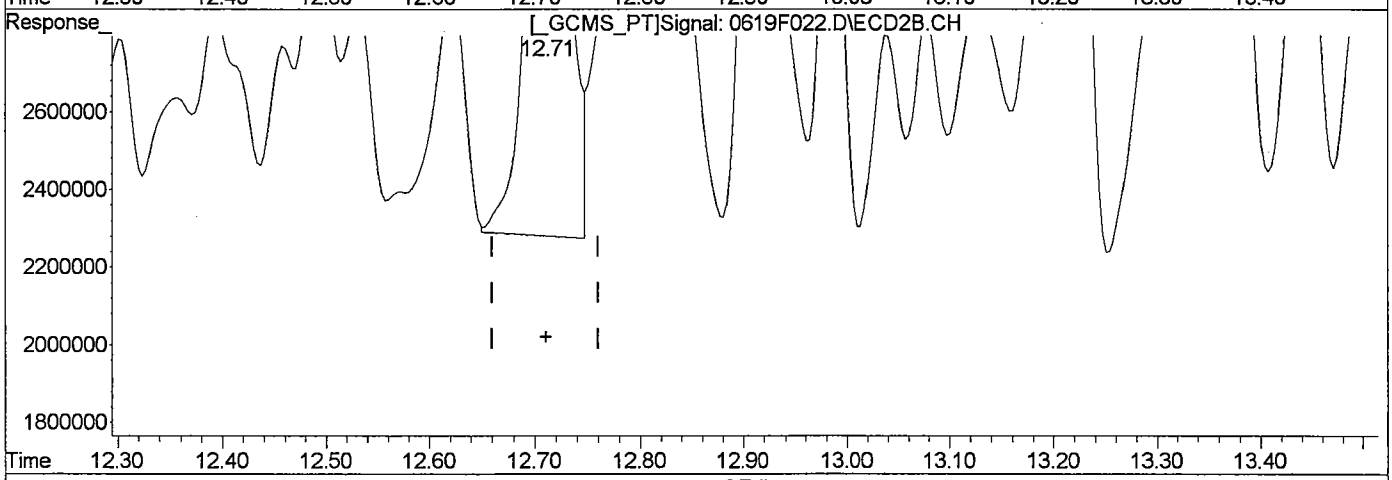


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1059.958ug/L

response 1228417

(26) Toxaphene {2} #2

12.71min 1117.531ug/L

response 4679083

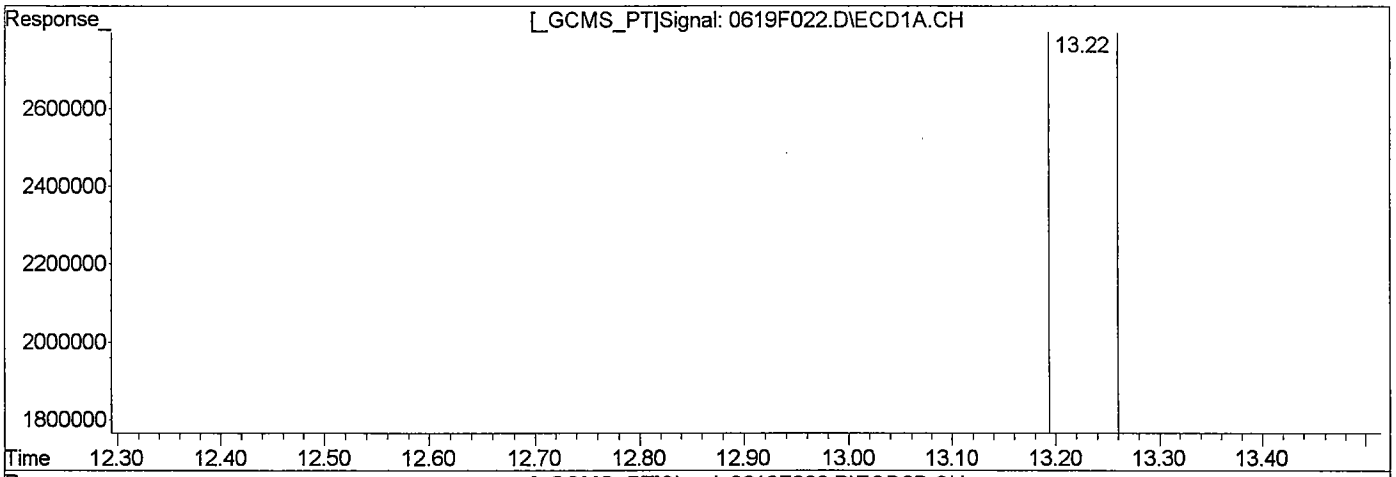
(+) = Expected Retention Time

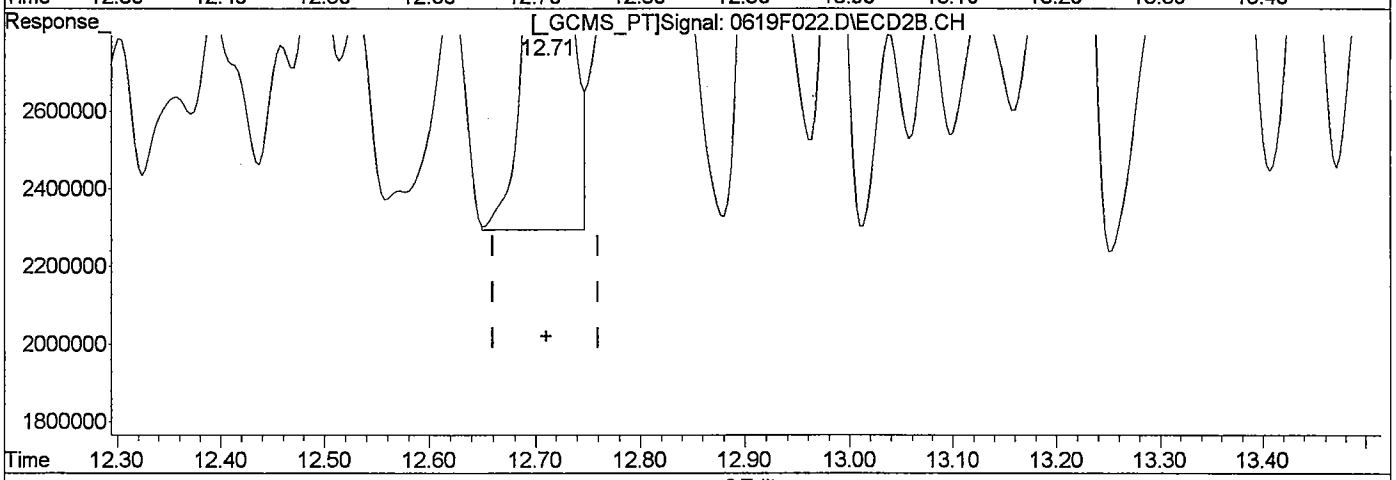
0619F022.D 061107-8081.M Thu Jun 21 10:54:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1059.958ug/L

response 1228417

(26) Toxaphene {2} #2

12.71min 1100.646ug/L m

response 4608386

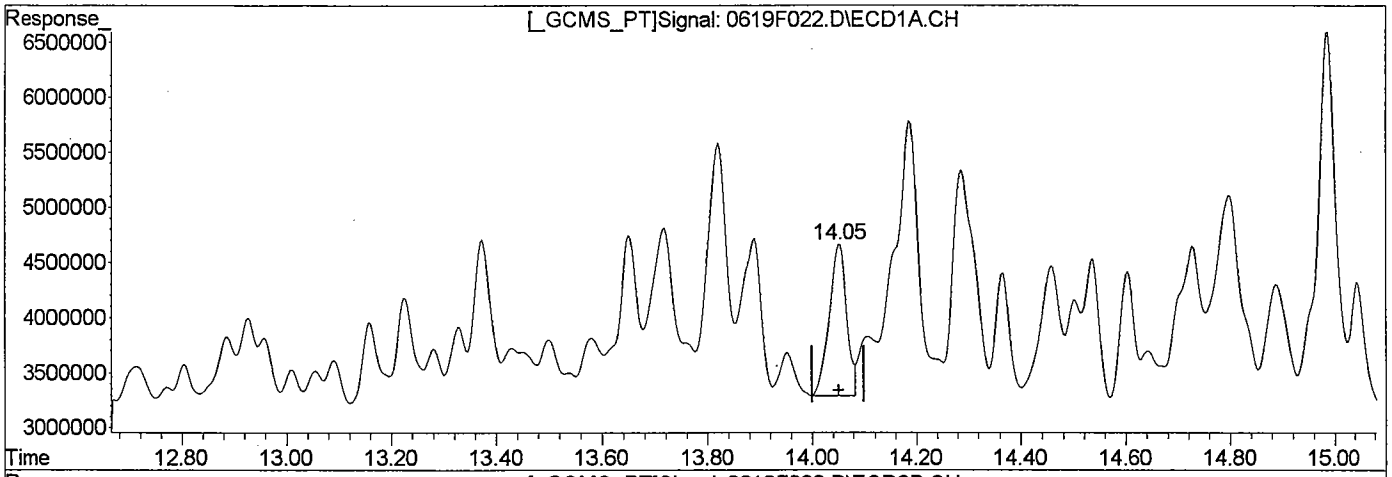
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/Shoulder Incorrect
☐ Other

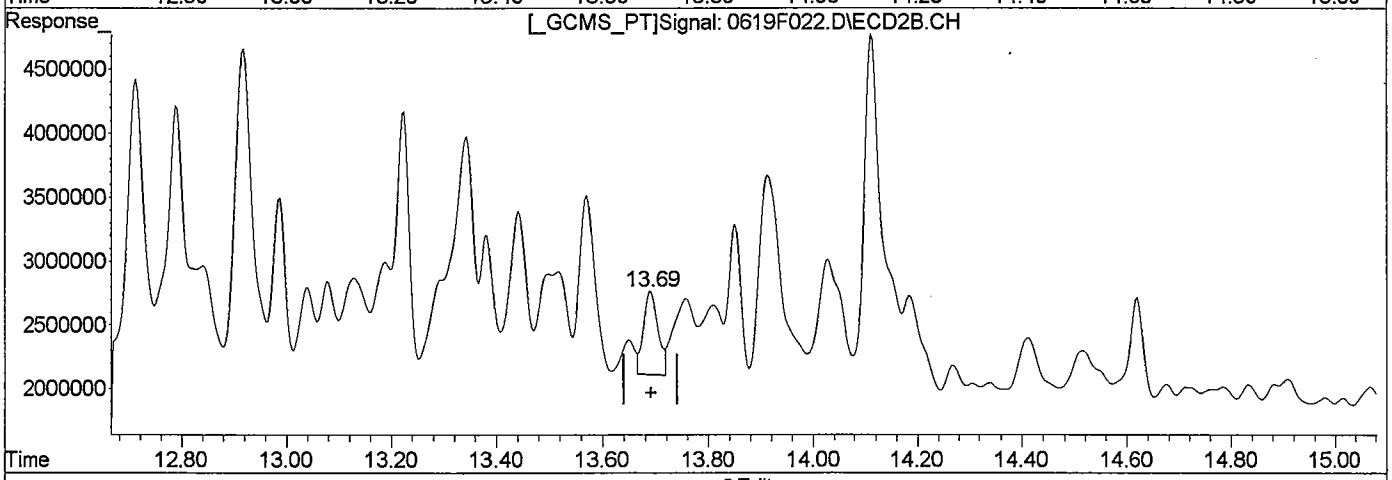
(+) = Expected Retention Time
0619F022.D 061107-8081.M Thu Jun 21 10:54:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1111.655ug/L

response 3246934

(28) Toxaphene {4} #2

13.69min 1810.379ug/L

response 1237262

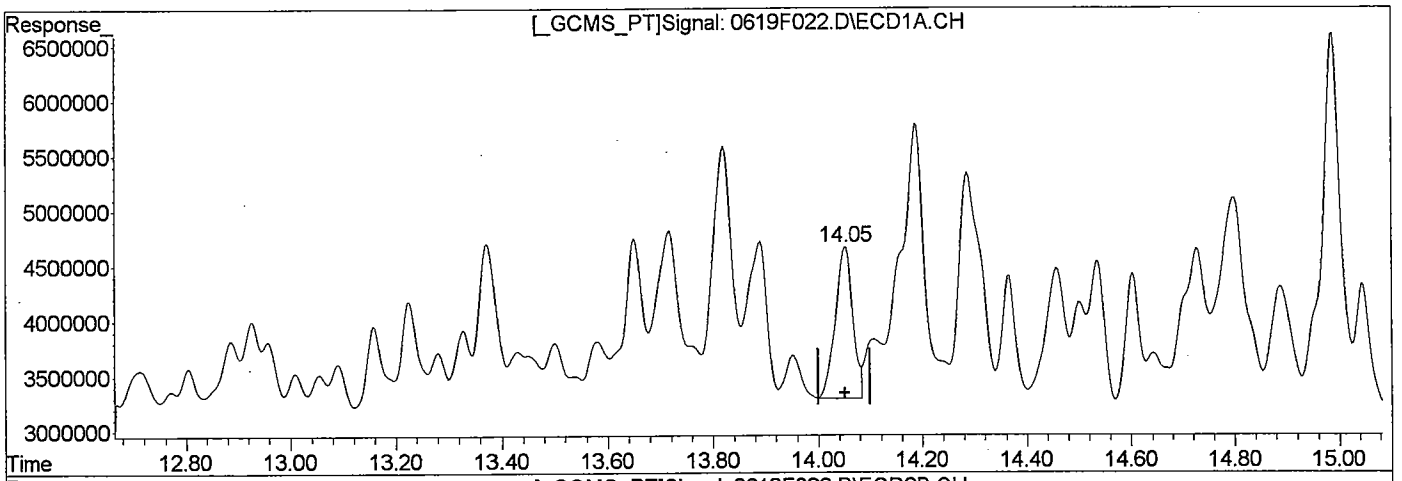
(+) = Expected Retention Time

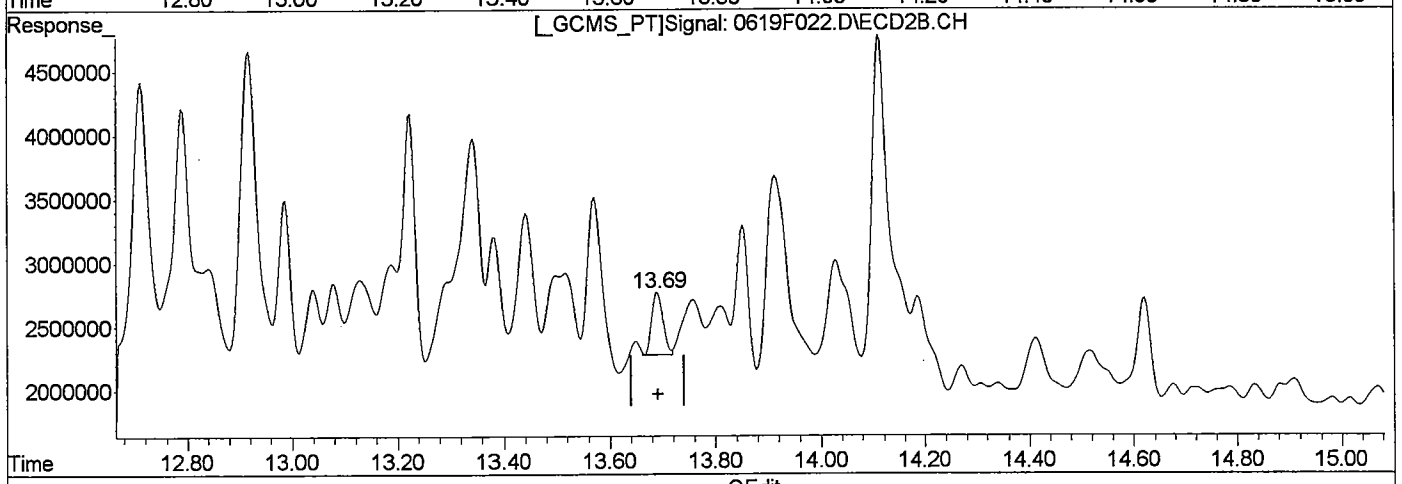
0619F022.D 061107-8081.M Thu Jun 21 10:54:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1111.655ug/L

response 3246934

(28) Toxaphene {4} #2

13.69min 1052.755ug/L m

response 719481

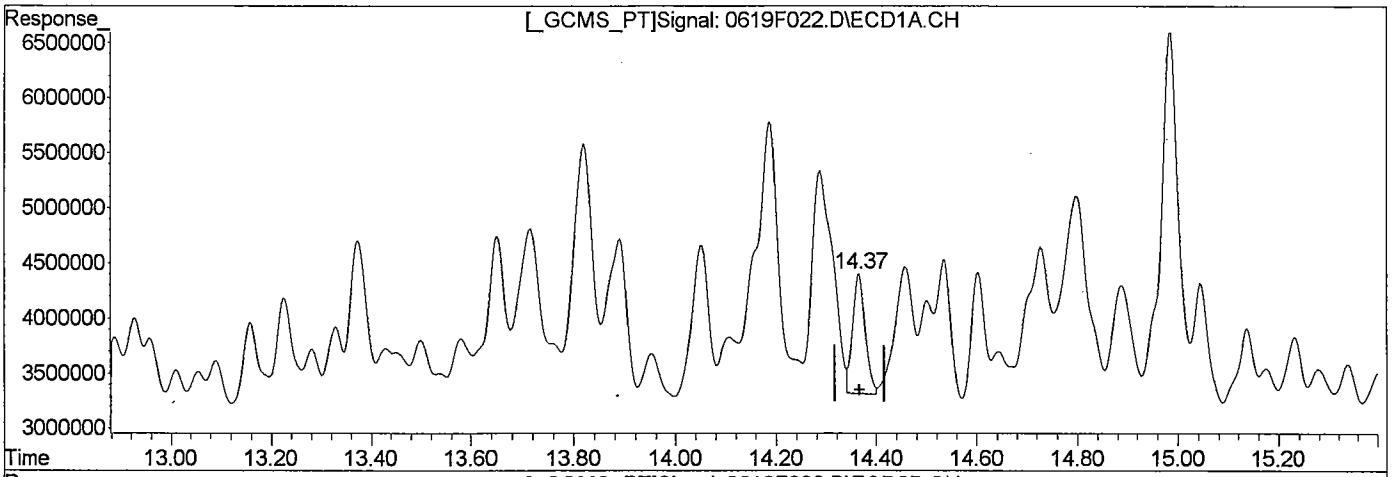
After
Initials [illegible]
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/Integration Incorrect
☐ Other

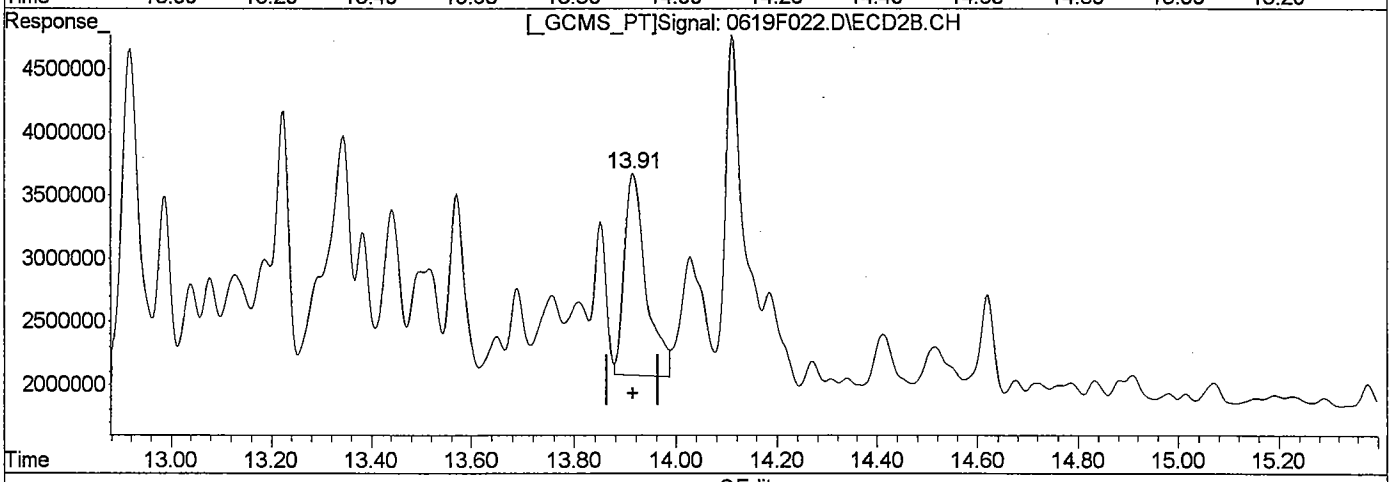
(+) = Expected Retention Time
0619F022.D 061107-8081.M Thu Jun 21 10:55:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 1163.799ug/L

response 1901683

(29) Toxaphene {5} #2

13.91min 1216.619ug/L

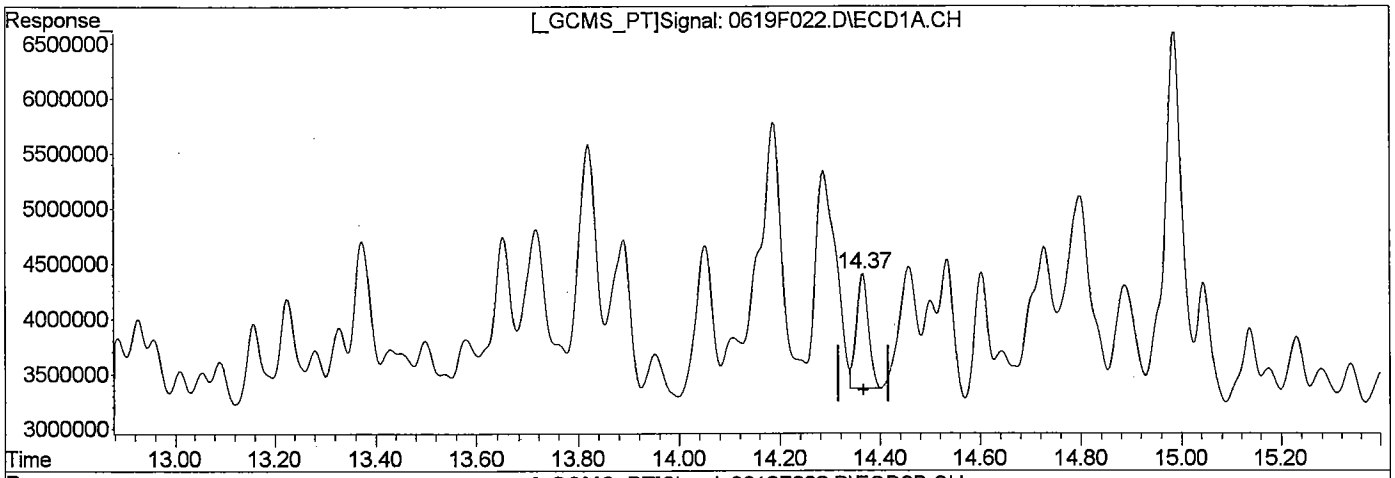
response 4793746

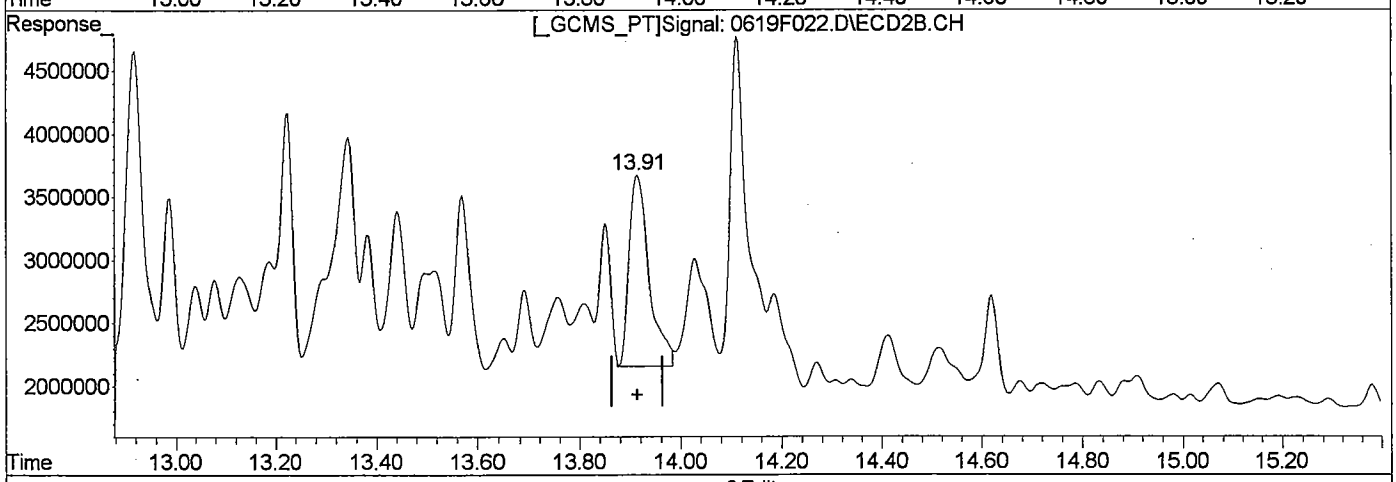
(+) = Expected Retention Time
0619F022.D 061107-8081.M Thu Jun 21 10:55:08 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 1054.859ug/L m

response 1723672

(29) Toxaphene {5} #2

13.91min 1068.880ug/L m

response 4211622

After
Initials

JUN 21 2007

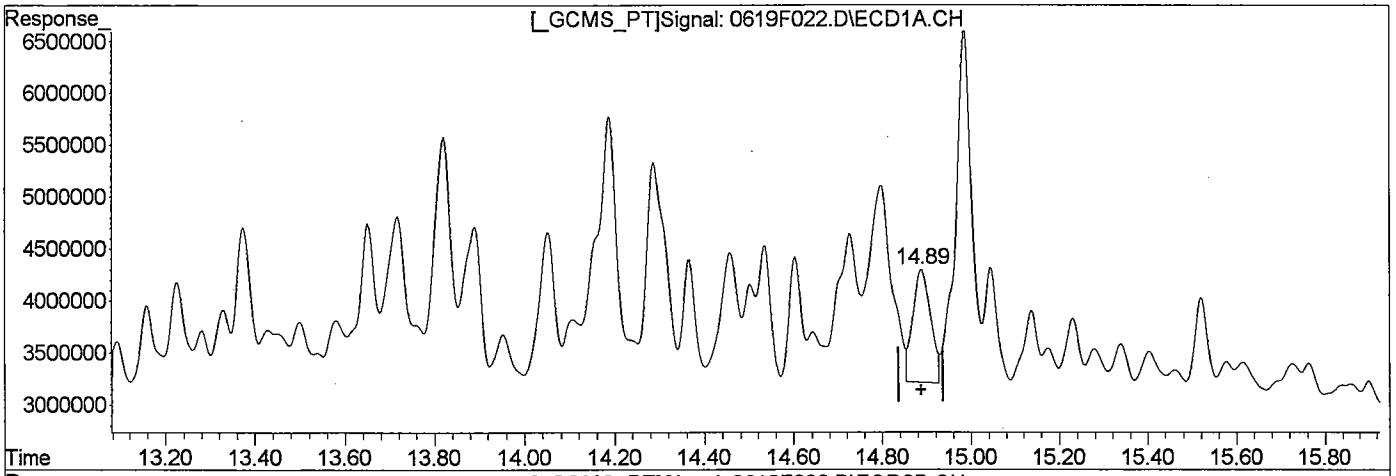
☐ Wrong Peak/Peak not Found
☑ Modify/circuitar incorrect
☐ Other

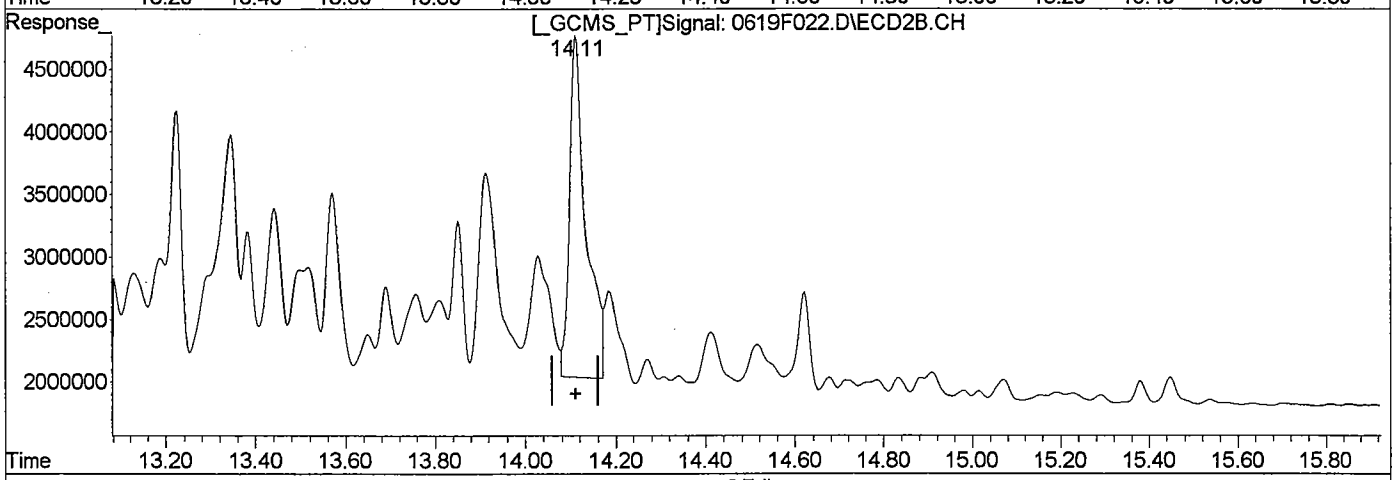
(+) = Expected Retention Time
0619F022.D 061107-8081.M Thu Jun 21 10:55:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1692.013ug/L

response 3073531

(30) Toxaphene {6} #2

14.11min 1274.110ug/L

response 6876287

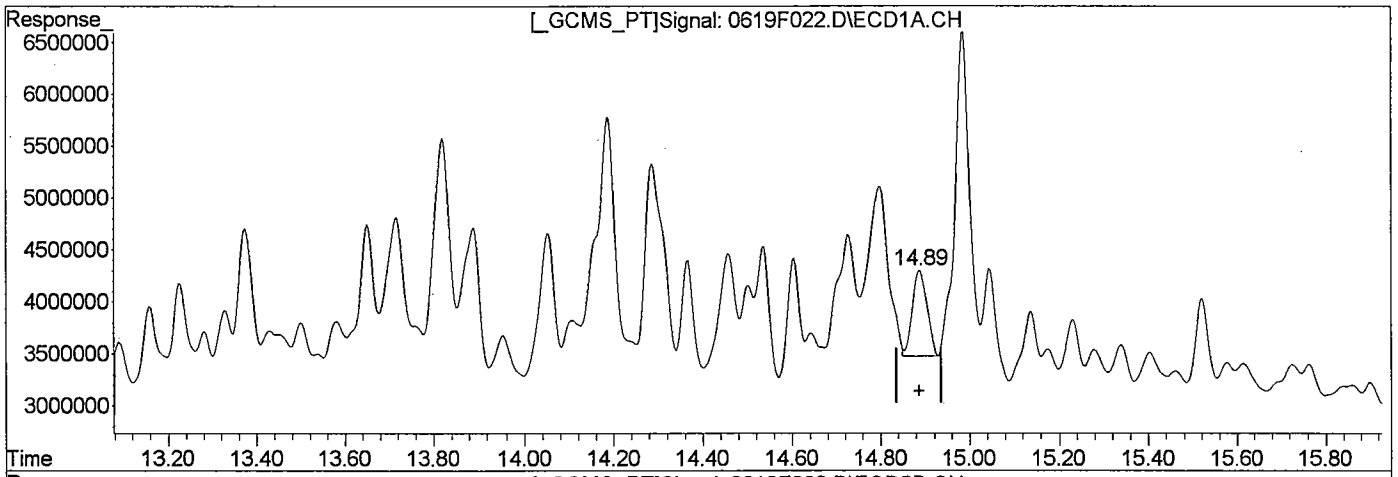
(+) = Expected Retention Time

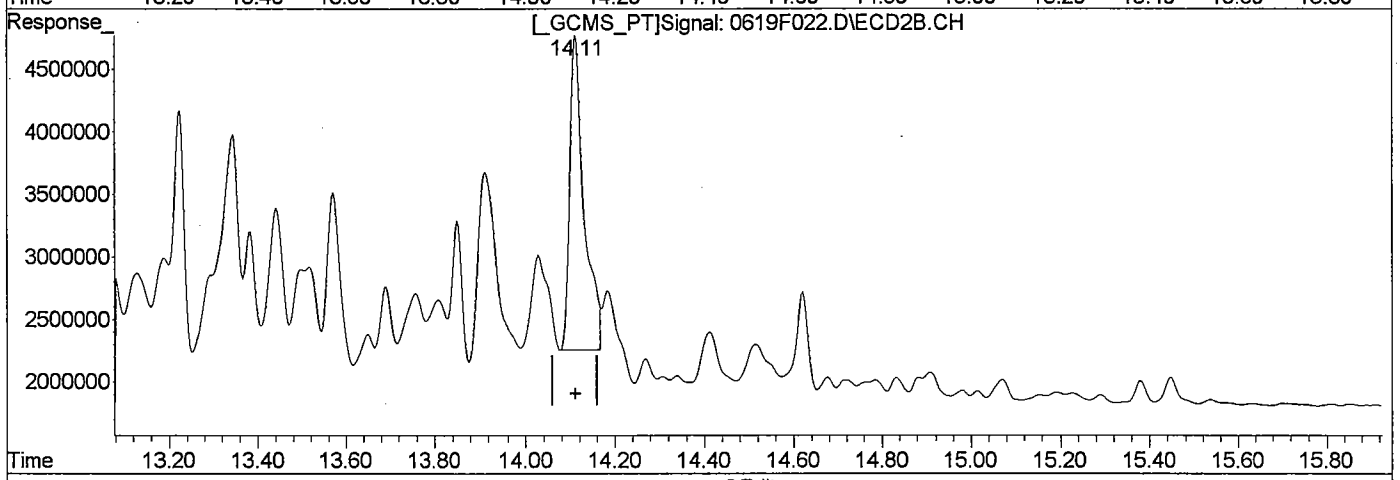
0619F022.D 061107-8081.M Thu Jun 21 10:55:22 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\061907\0619F022.D\ECD2B.CH
Acq On : 20 Jun 2007 6:26 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-6 Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1058.156ug/L m

response 1922133

(30) Toxaphene {6} #2

14.11min 1034.446ug/L m

response 5582833

After
Initials
JUN 21 2007
Wrong Peak/Peak not Found
Integration/Peak Incorrect
Other

(+) = Expected Retention Time
0619F022.D 061107-8081.M Thu Jun 21 10:55:39 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F037.D
J:\GC23\DATA\061907\0619F038.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	278000	265000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	54	230000	248000	8	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	112000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	231000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	211000	7	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	182000	5	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	170000	177000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	168000	171000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	153000	155000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	167000	170000	2	NA	± 15 %	AverageRF
Dieldrin	50	51	165000	169000	2	NA	± 15 %	AverageRF
4,4'-DDE	50	51	153000	156000	2	NA	± 15 %	AverageRF
Endrin	50	51	154000	158000	2	NA	± 15 %	AverageRF
Endosulfan II	50	49	184000	181000	-1	NA	± 15 %	AverageRF
4,4'-DDD	50	51	150000	152000	1	NA	± 15 %	AverageRF
Endrin Aldehyde	50	50	166000	164000	-1	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	50	225000	224000	0	NA	± 15 %	AverageRF
4,4'-DDT	50	52	184000	192000	4	NA	± 15 %	AverageRF
Endrin Ketone	50	50	298000	298000	0	NA	± 15 %	AverageRF
Methoxychlor	50	51	135000	137000	1	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1200	1410	1650	17	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1200	1160	1340	16	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2010	2230	11	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1200	2920	3650	25	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1200	1630	1900	16	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1300	1820	2270	25	NA	± 100 %	AverageRF
Toxaphene	1000	1200	NA	NA	NA	18 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706830
Units: ug/L

File ID: J:\GC23\DATA\061907\0619F037.D\0619F037C.D
J:\GC23\DATA\061907\0619F038.D\0619F038C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	189000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	47	185000	174000	-6	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	255000	8	NA	± 15 %	AverageRF
beta-BHC	50	52	108000	112000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	223000	241000	8	NA	± 15 %	AverageRF
delta-BHC	50	55	212000	232000	10	NA	± 15 %	AverageRF
Heptachlor	50	53	227000	240000	6	NA	± 15 %	AverageRF
Aldrin	50	53	199000	212000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	211000	5	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	211000	4	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	190000	3	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	197000	207000	5	NA	± 15 %	AverageRF
Dieldrin	50	52	195000	204000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	53	185000	198000	7	NA	± 15 %	AverageRF
Endrin	50	52	175000	184000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	2	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	162000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	51	151000	154000	2	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	186000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	175000	7	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	217000	3	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	102000	8	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1350	13	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4580	9	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2790	8	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	780	14	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4360	11	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5930	10	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	11	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\061907\0619F037.D
Lab ID: KWG0706830-9
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 01:02
Date Quantitated: 06/21/2007 10:58
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	JW

Primary Review: 6/21/07

Secondary Review: 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F037.D\0619F037C.D
Lab ID: KWG0706830-9
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 01:02
Date Quantitated: 06/21/2007 10:58
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: CC 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F037.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F037.D\0619F037c.d			**Vial:**	99
Acqu Date:	06/21/2007 01:02	**Quant Date:**	06/21/2007 10:58	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	7.40	10085908	9468665	50.41	52.83			NA
				%Recovery =	NA	NA	**Limits =**	16-111	
Decachlorobiphenyl	17.12	15.99	13226459	8718663	47.66	47.21			NA
				%Recovery =	NA	NA	**Limits =**	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.21	8.44	12415679	12738026m	53.90	54.13			
Hexachlorobenzene	9.34	8.27	12618875	12915013	51.35	52.61			
beta-BHC	10.21	9.45	5576407	5594462	52.01	51.90			
gamma-BHC (Lindane)	9.75	9.05	11540398	12055634	53.24	54.18			
delta-BHC	10.63	9.90	10549428	11617279	53.45	54.87			
Heptachlor	10.72	9.62	10588646	12020608	52.59	52.99			
Aldrin	11.24	10.11	9106790	10598974	52.43	53.23			
Isodrin	11.76	10.76	7557104	9039324	51.00	52.35			
Heptachlor Epoxide	11.94	10.97	8836712	10538034	52.00	52.47			
gamma-Chlordane	12.43	11.32	8549358	10536109	51.03	51.88			
Endosulfan I	12.56	11.55	7770034	9514107	50.65	51.35			
alpha-Chlordane	12.50	11.47	8489263	10332952	50.93	52.41			
Dieldrin	12.96	11.99	8445188	10211386	51.21	52.48			
4,4'-DDE	12.74	11.79	7806889	9896042	51.08	53.50			
Endrin	13.31	12.46	7882314m	9199214	51.09	52.47			
Endosulfan II	13.71	12.86	9062654	9219376	49.36	50.82			
4,4'-DDD	13.52	12.65	7585093	8083236	50.54	52.97			
Endrin Aldehyde	13.87	13.20	8219082	7723211	49.59	51.13			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F037.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F037.D\0619F037c.d			**Vial:**	99
Acqu Date:	06/21/2007 01:02	**Quant Date:**	06/21/2007 10:58	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.30	13.50	11209899	9310664	49.86	51.32			
4,4'-DDT	13.98	13.06	9592511	8744051	52.08	53.63			
Endrin Ketone	14.92	14.40	14902364	10854531	49.95	51.67			
Methoxychlor	14.63	14.07	6841093	5087850	50.73	54.09			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F037.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		2.0E+5	2.0E+5	0.8			
alpha-BHC		MS	AverageRF	15		2.3E+5	2.5E+5	7.8			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.5E+5	2.7			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.3E+5	6.5			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	4.0			
delta-BHC		MS	AverageRF	15		2.0E+5	2.1E+5	6.9			
Heptachlor		MS	AverageRF	15		2.0E+5	2.1E+5	5.2			
Aldrin		MS	AverageRF	15		1.7E+5	1.8E+5	4.9			
Isodrin		MS	AverageRF	15		1.5E+5	1.5E+5	2.0			
Heptachlor Epoxide		MS	AverageRF	15		1.7E+5	1.8E+5	4.0			
gamma-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	2.0			
alpha-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	1.9			
Endosulfan I		MS	AverageRF	15		1.5E+5	1.6E+5	1.3			
4,4'-DDE		MS	AverageRF	15		1.5E+5	1.6E+5	2.2			
Dieldrin		MS	AverageRF	15		1.6E+5	1.7E+5	2.4			
Endrin		MS	AverageRF	15		1.5E+5	1.6E+5	2.2			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.5E+5	1.1			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.8E+5	-1.3			
Endrin Aldehyde		MS	AverageRF	15		1.7E+5	1.6E+5	-0.8			
4,4'-DDT		MS	AverageRF	15		1.8E+5	1.9E+5	4.2			
Endosulfan Sulfate		MS	AverageRF	15		2.2E+5	2.2E+5	-0.3			
Methoxychlor		MS	AverageRF	15		1.3E+5	1.4E+5	1.5			
Endrin Ketone		MS	AverageRF	15		3.0E+5	3.0E+5	-0.1			
Decachlorobiphenyl		SURR	AverageRF	15		2.8E+5	2.6E+5	-4.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	2.9

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F037.D\0619F037C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		1.8E+5	1.9E+5	5.7			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.6E+5	5.2			
alpha-BHC		MS	AverageRF	15		2.4E+5	2.5E+5	8.3			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.4E+5	8.4			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	3.8			
Heptachlor		MS	AverageRF	15		2.3E+5	2.4E+5	6.0			
delta-BHC		MS	AverageRF	15		2.1E+5	2.3E+5	9.7			
Aldrin		MS	AverageRF	15		2.0E+5	2.1E+5	6.5			
Isodrin		MS	AverageRF	15		1.7E+5	1.8E+5	4.7			
Heptachlor Epoxide		MS	AverageRF	15		2.0E+5	2.1E+5	4.9			
gamma-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	3.8			
alpha-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	4.8			
Endosulfan I		MS	AverageRF	15		1.9E+5	1.9E+5	2.7			
4,4'-DDE		MS	AverageRF	15		1.8E+5	2.0E+5	7.0			
Dieldrin		MS	AverageRF	15		1.9E+5	2.0E+5	5.0			
Endrin		MS	AverageRF	15		1.8E+5	1.8E+5	4.9			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.6E+5	5.9			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.8E+5	1.6			
4,4'-DDT		MS	AverageRF	15		1.6E+5	1.7E+5	7.3			
Endrin Aldehyde		MS	AverageRF	15		1.5E+5	1.5E+5	2.3			
Endosulfan Sulfate		MS	AverageRF	15		1.8E+5	1.9E+5	2.6			
Methoxychlor		MS	AverageRF	15		9.4E+4	1.0E+5	8.2			
Endrin Ketone		MS	AverageRF	15		2.1E+5	2.2E+5	3.3			
Decachlorobiphenyl		SURR	AverageRF	15		1.8E+5	1.7E+5	-5.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	5.3

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:26 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	10085908	9468665	50.406	52.834
24)	s	Decachlorobiphen	17.12	15.99	13226459	8718663	47.661	47.209
		Target Compounds						
2)		alpha-BHC	9.21	8.44	12415679	12738026	53.899	54.134m
3)		Hexachlorobenzen	9.34	8.27	12618875	12915013	51.346	52.610
4)		beta-BHC	10.21	9.45	5576407	5594462	52.012	51.895
5)		gamma-BHC (Linda	9.75	9.05	11540398	12055634	53.236	54.176
6)		delta-BHC	10.63	9.90	10549428	11617279	53.454	54.867
7)		Heptachlor	10.72	9.62	10588646	12020608	52.585	52.991
8)		Aldrin	11.24	10.11	9106790	10598974	52.433	53.226
9)		Isodrin	11.76	10.76	7557104	9039324	51.004	52.348
10)		Heptachlor Epoxi	11.94	10.97	8836712	10538034	51.995	52.467
11)		gamma-Chlordane	12.43	11.32	8549358	10536109	51.025	51.879
12)		Endosulfan I	12.56	11.55	7770034	9514107	50.646	51.350
13)		alpha-Chlordane	12.50	11.47	8489263	10332952	50.927	52.412
14)		Dieldrin	12.96	11.99	8445188	10211386	51.211	52.479
15)		4,4'-DDE	12.74	11.79	7806889	9896042	51.084	53.496
16)		Endrin	13.31	12.46	7882314	9199214	51.093m	52.468
17)		Endosulfan II	13.71	12.86	9062654	9219376	49.364	50.815
18)		4,4'-DDD	13.52	12.65	7585093	8083236	50.539	52.966
19)		Endrin Aldehyde	13.87	13.20	8219082	7723211	49.588	51.134
20)		Endosulfan Sulfa	14.30	13.50	11209899	9310664	49.855	51.315
21)		4,4'-DDT	13.98	13.06	9592511	8744051	52.078	53.631
22)		Endrin Ketone	14.92	14.40	14902364	10854531	49.946	51.670
23)		Methoxychlor	14.63	14.07	6841093	5087850	50.727	54.088

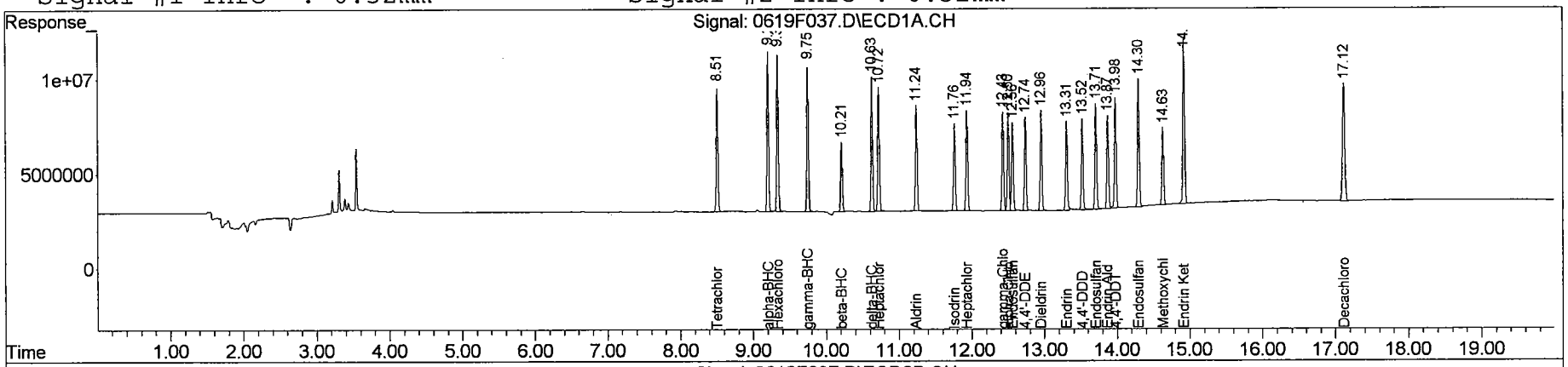
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

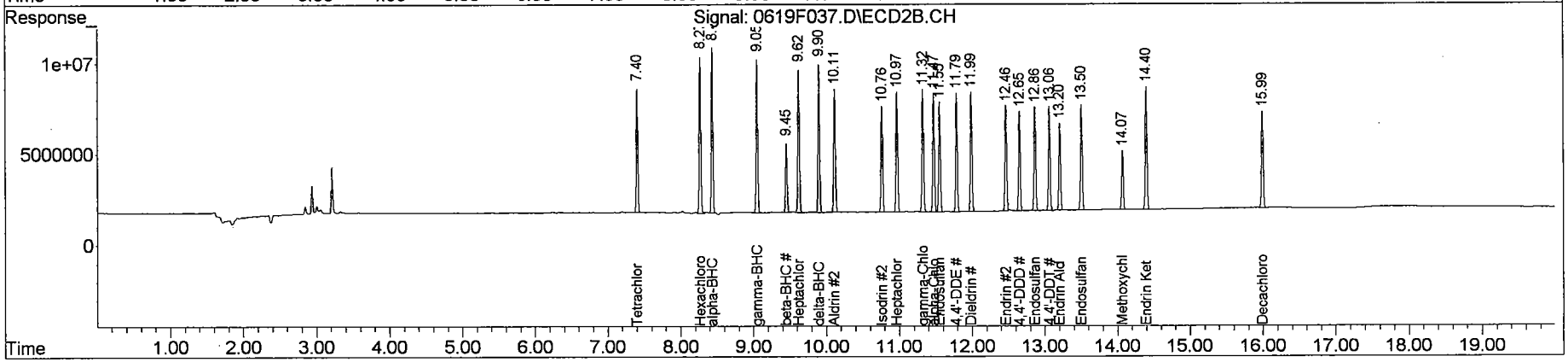
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:58 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

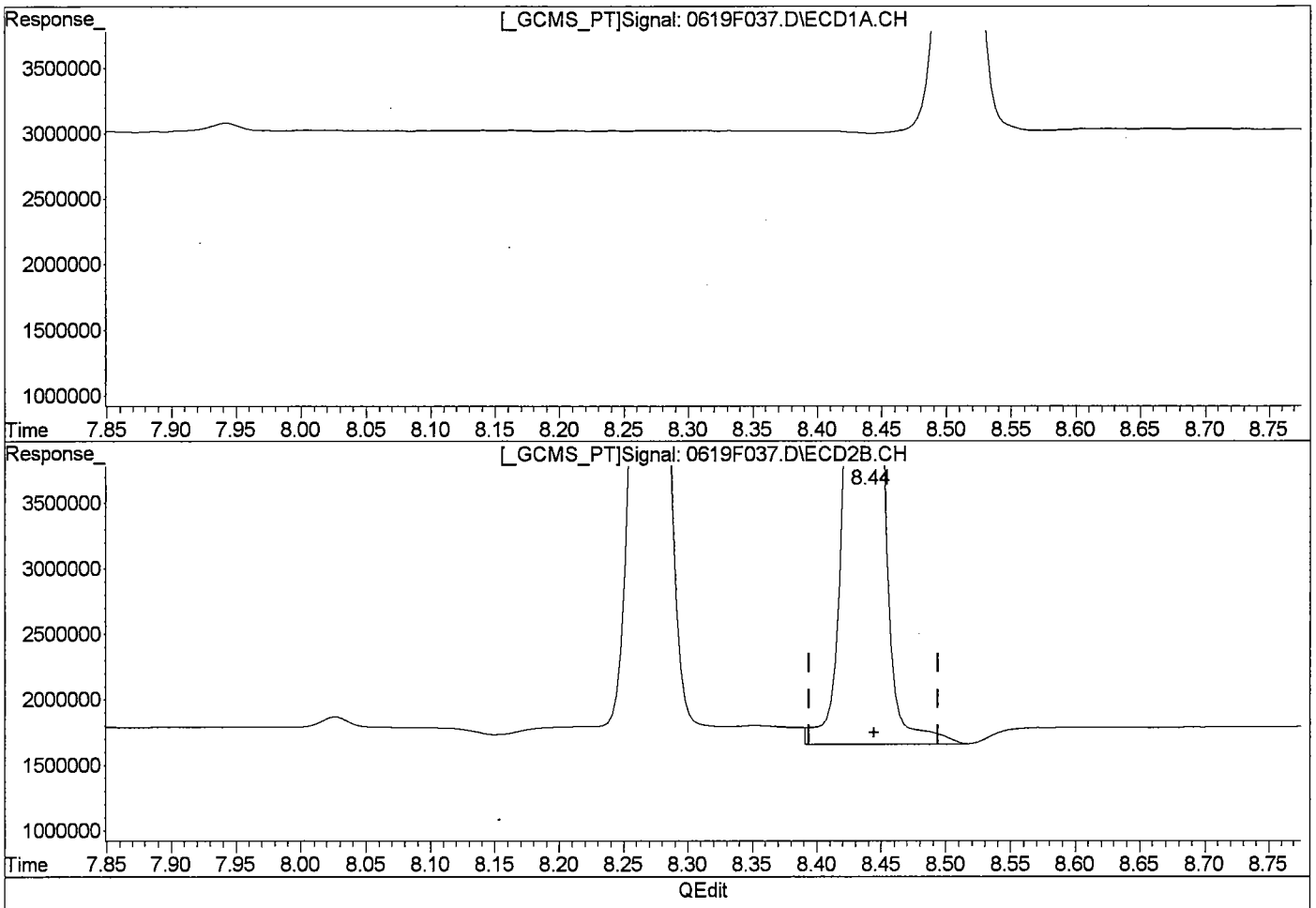




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



QEdit

(2) alpha-BHC

9.21min 53.899ug/L

response 12415679

(2) alpha-BHC #2

8.44min 57.170ug/L

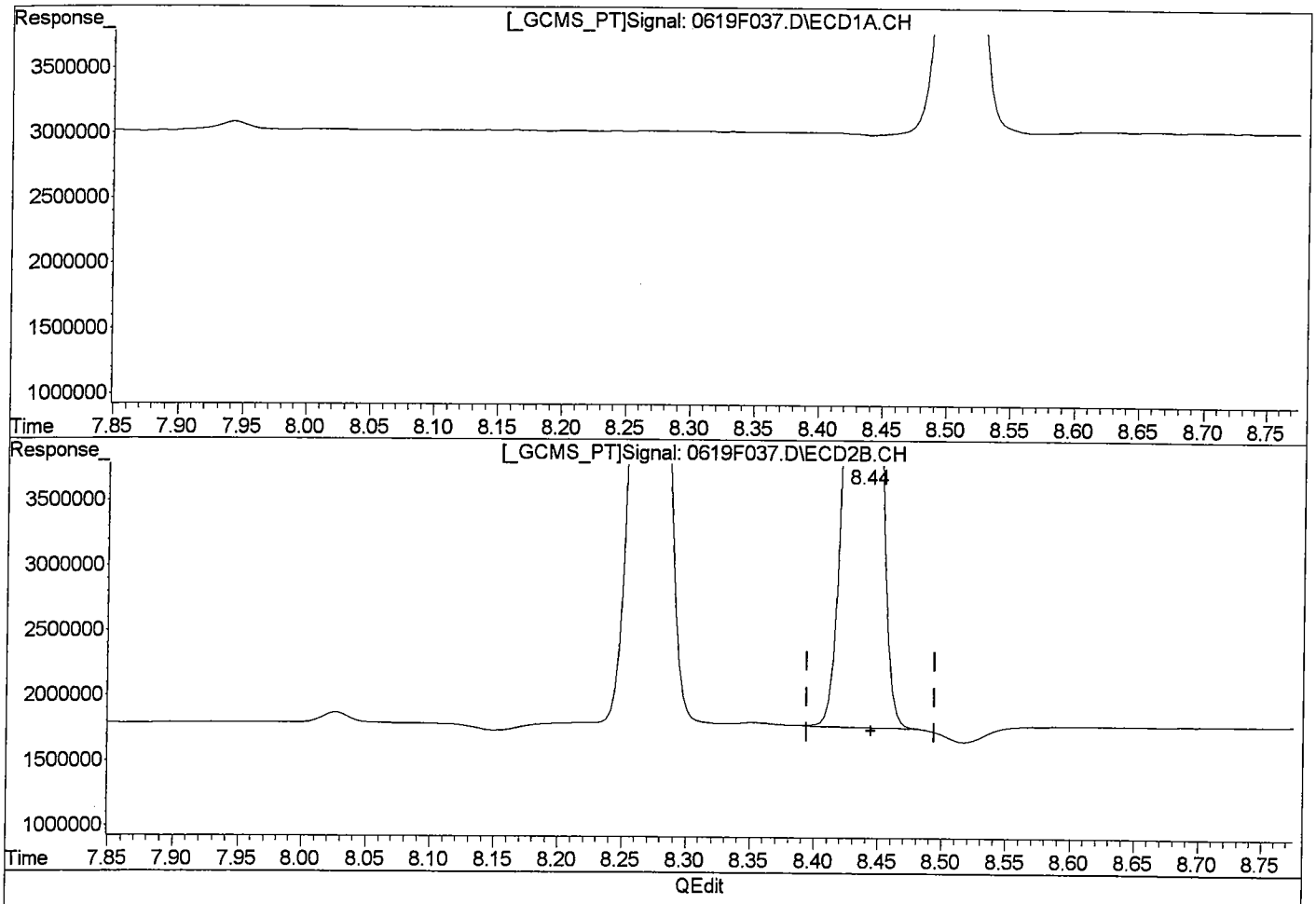
response 13452528

(+) = Expected Retention Time

0619F037.D 061107-8081.M Thu Jun 21 10:57:34 2007

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(2) alpha-BHC
9.21min 53.899ug/L
response 12415679

(2) alpha-BHC #2
8.44min 54.134ug/L m
response 12738026

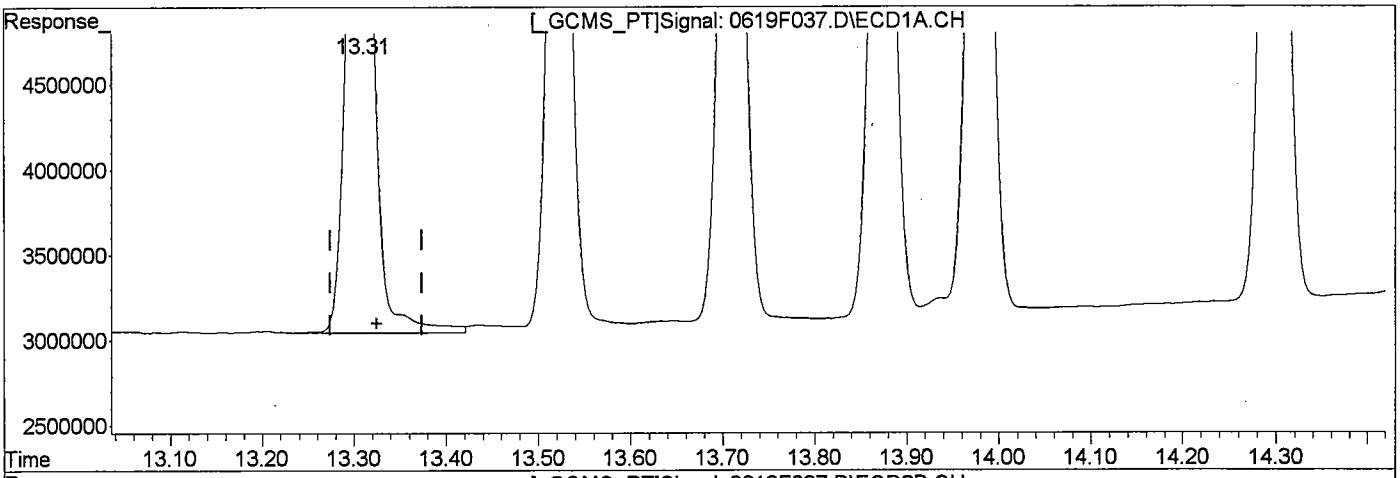
After
Initials Ln 6/10
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

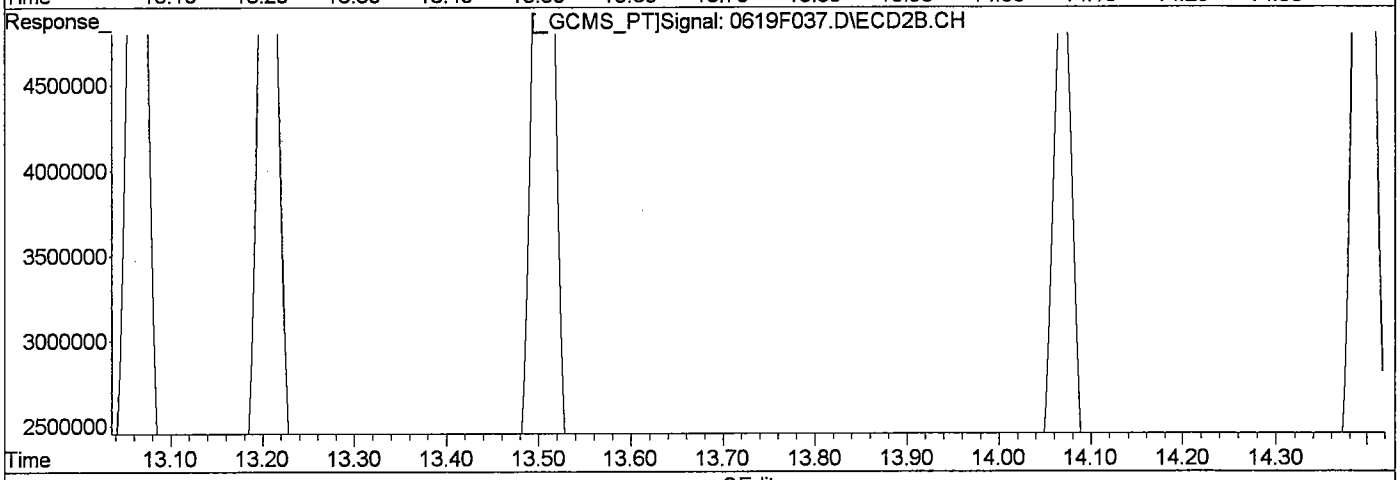
(+) = Expected Retention Time
0619F037.D 061107-8081.M Thu Jun 21 10:57:40 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.31min 52.601ug/L

response 8114871

(16) Endrin #2

12.46min 52.468ug/L

response 9199214

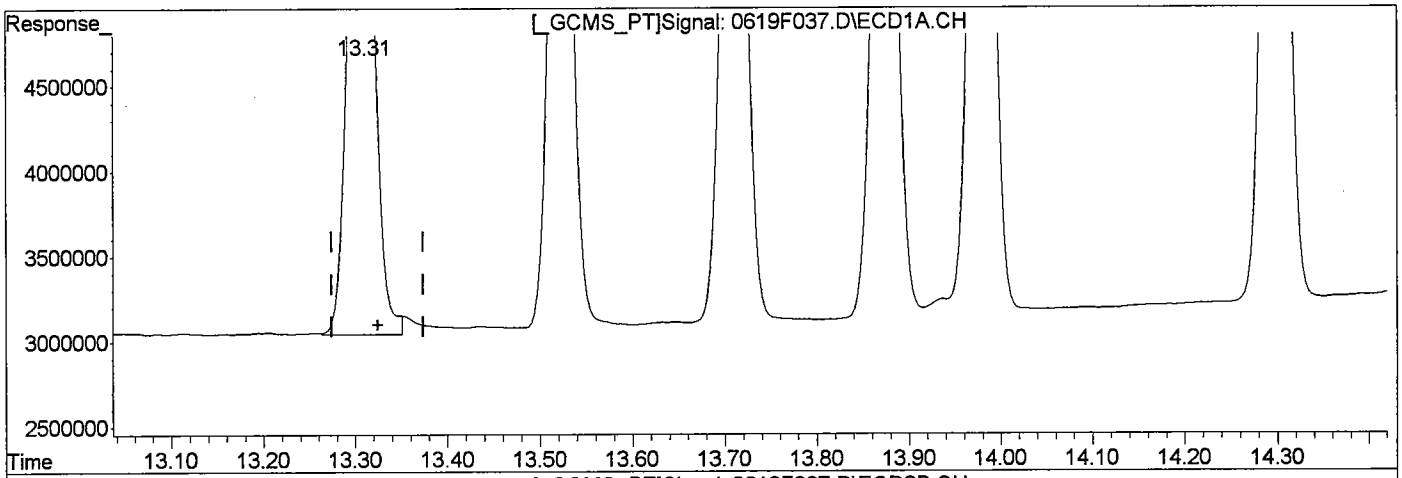
(+) = Expected Retention Time

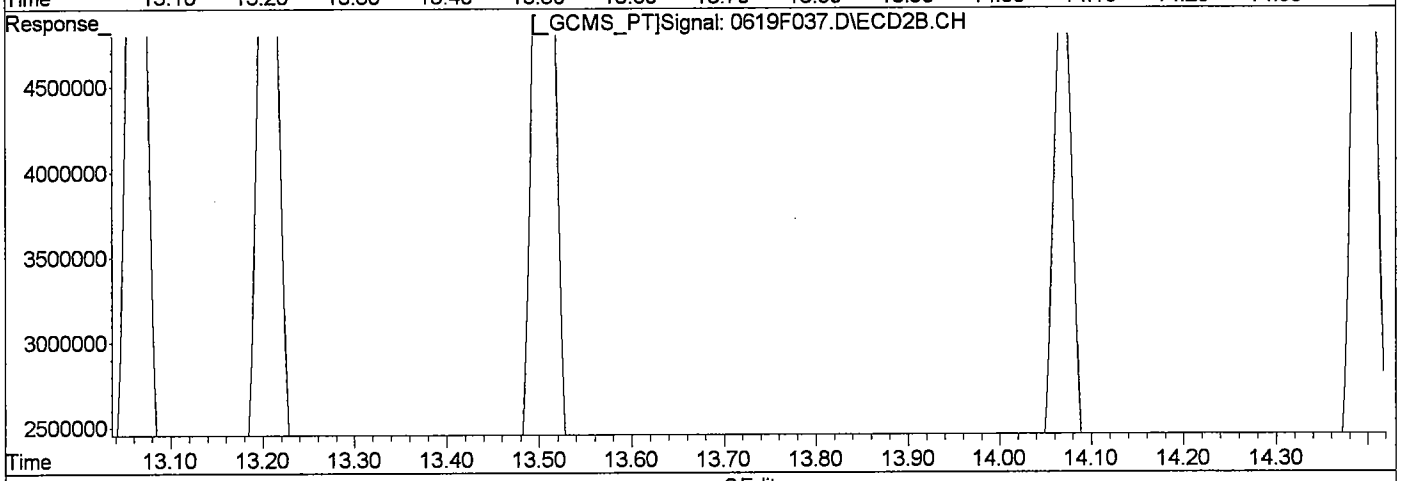
0619F037.D 061107-8081.M Thu Jun 21 10:57:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F037.D\ECD1A.CH Vial: 99
Signal #2 : J:\GC23\DATA\061907\0619F037.D\ECD2B.CH
Acq On : 21 Jun 2007 1:02 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.31min 51.093ug/L m

response 7882314

(16) Endrin #2

12.46min 52.468ug/L

response 9199214

After
Initials
JUN 21 2007

(+) = Expected Retention Time
0619F037.D 061107-8081.M Thu Jun 21 10:58:05 2007

Exception Report

Data File: J:\GC23\DATA\061907\0619F038.D\0619F038C.D
Lab ID: KWG0706830-9
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 01:28
Date Quantitated: 06/21/2007 11:00
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: CC 6/21/07

Secondary Review: MB 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F038.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F038.D\0619F038c.d			**Vial:**	100
Acqu Date:	06/21/2007 01:28	**Quant Date:**	06/21/2007 11:00	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F038.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F038.D\0619F038c.d			**Vial:**	100
Acqu Date:	06/21/2007 01:28	**Quant Date:**	06/21/2007 11:00	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-9				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,183	1,108			
Toxaphene {1}	13.15	12.62	1651503	1352172m	1,168	1,129			
Toxaphene {2}	13.22	12.71	1342112m	4578218m	1,158	1,093			
Toxaphene {3}	13.37	13.57	2229618m	2791878m	1,108	1,078			
Toxaphene {4}	14.04	13.69	3648508m	779812m	1,249	1,141			
Toxaphene {5}	14.36	13.91	1897711m	4360681m	1,161	1,107			
Toxaphene {6}	14.88	14.11	2272793m	5932225m	1,251	1,099			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F038.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,183	1,000	18.3 *
Toxaphene {1}		MULTI	AverageRF	100		1.4E+3	1.7E+3	16.8			
Toxaphene {2}		MULTI	AverageRF	100		1.2E+3	1.3E+3	15.8			
Toxaphene {3}		MULTI	AverageRF	100		2.0E+3	2.2E+3	10.8			
Toxaphene {4}		MULTI	AverageRF	100		2.9E+3	3.6E+3	24.9			
Toxaphene {5}		MULTI	AverageRF	100		1.6E+3	1.9E+3	16.1			
Toxaphene {6}		MULTI	AverageRF	100		1.8E+3	2.3E+3	25.1			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	18.3

1 Compounds Failed CCV Criteria

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F038.D\0619F038C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,108	1,000	10.8
Toxaphene {1}		MULTI	AverageRF	100		1.2E+3	1.4E+3	12.9			
Toxaphene {2}		MULTI	AverageRF	100		4.2E+3	4.6E+3	9.3			
Toxaphene {3}		MULTI	AverageRF	100		2.6E+3	2.8E+3	7.8			
Toxaphene {4}		MULTI	AverageRF	100		6.8E+2	7.8E+2	14.1			
Toxaphene {5}		MULTI	AverageRF	100		3.9E+3	4.4E+3	10.7			
Toxaphene {6}		MULTI	AverageRF	100		5.4E+3	5.9E+3	9.9			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	10.8

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:27 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.15	12.62	1651503	1352172	1168.287	1129.489m
26)	Toxaphene {2}	13.22	12.71	1342112	4578218	1158.061m	1093.441m
27)	Toxaphene {3}	13.37	13.57	2229618	2791878	1107.704m	1078.347m
28)	Toxaphene {4}	14.04	13.69	3648508	779812	1249.142m	1141.032m
29)	Toxaphene {5}	14.36	13.91	1897711	4360681	1161.368m	1106.710m
30)	Toxaphene {6}	14.88	14.11	2272793	5932225	1251.198m	1099.185m

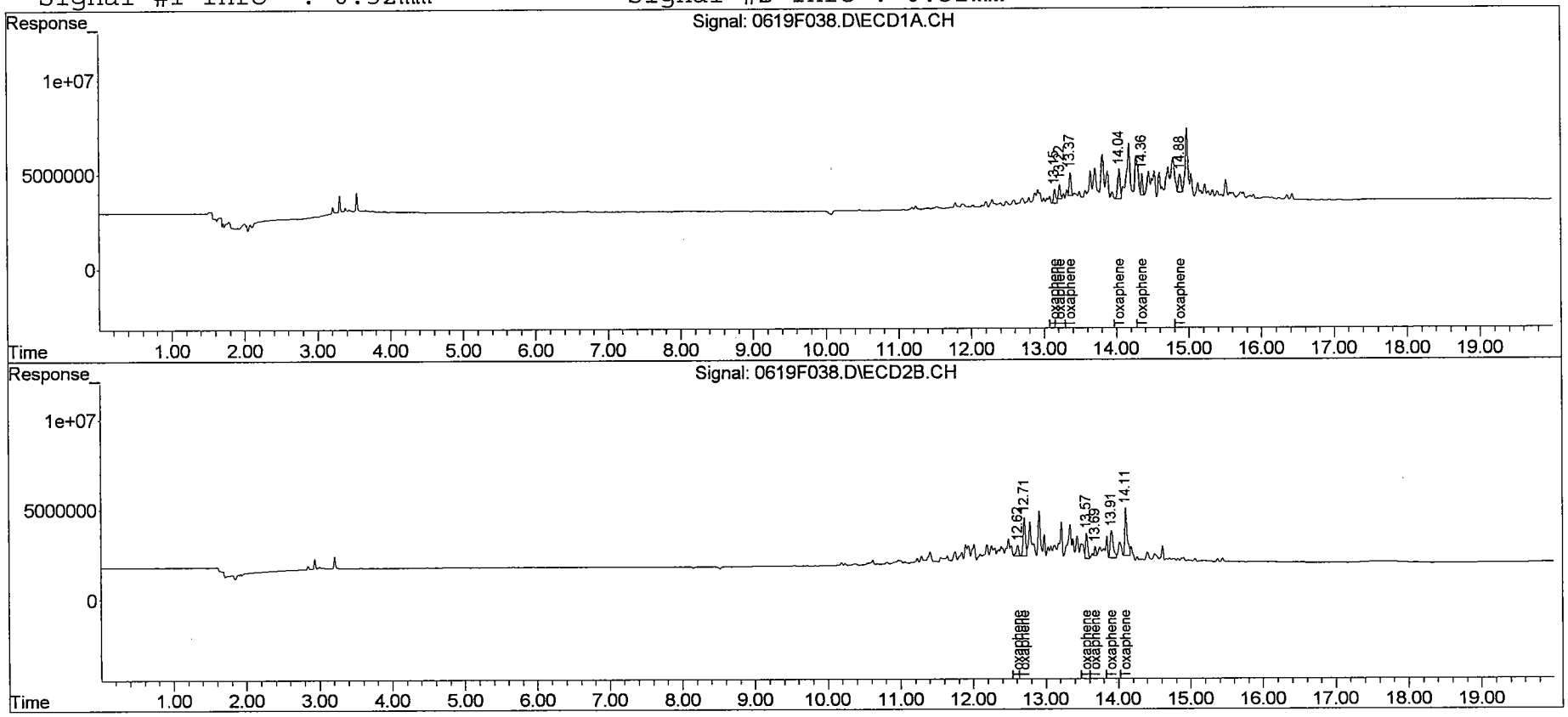
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 11:00 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

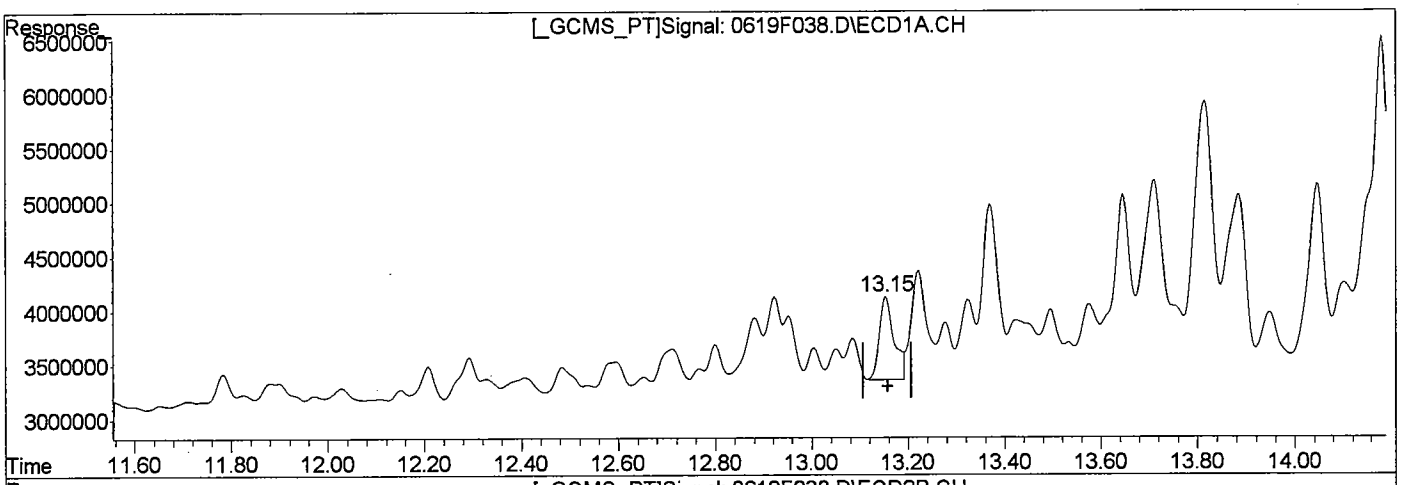
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

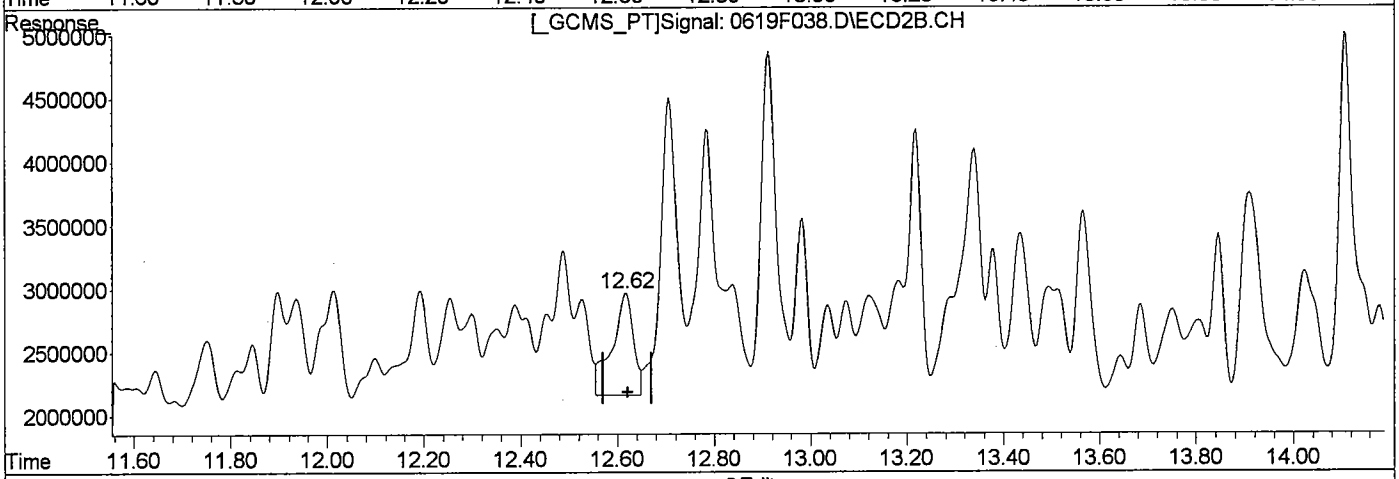


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.15min 1168.287ug/L

response 1651503

(25) Toxaphene #2

12.62min 2037.803ug/L

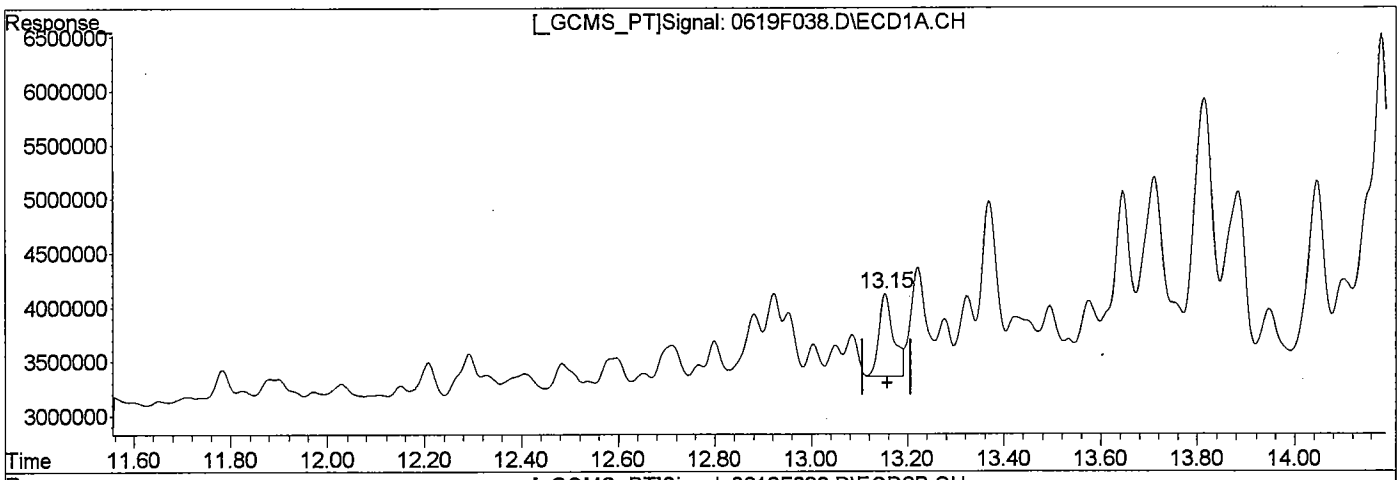
response 2439563

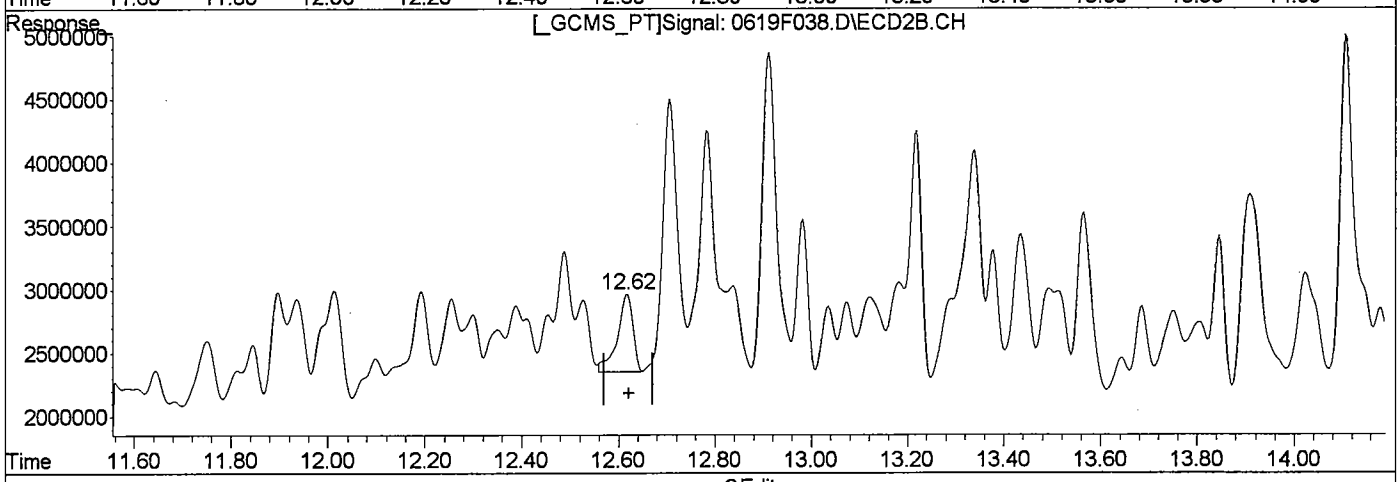
(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:58:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.15min 1168.287ug/L

response 1651503

(25) Toxaphene #2

12.62min 1129.489ug/L m

response 1352172

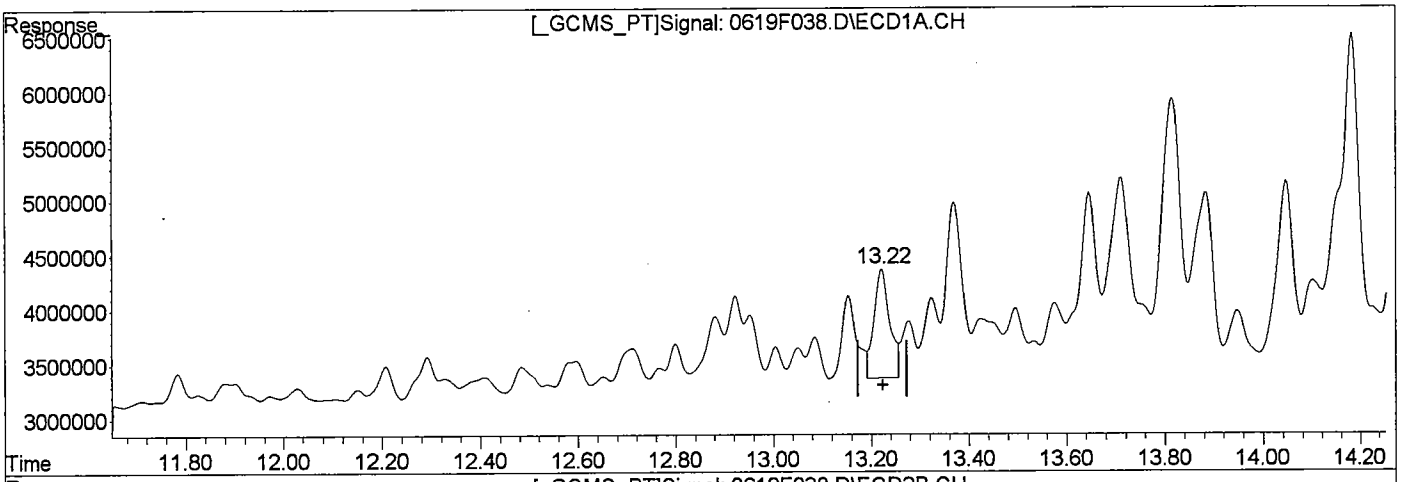
After
Initials
JUN 21 2007
Wrong Peak/Peak not Found
Baseline/Peak/Int Integrat
Other

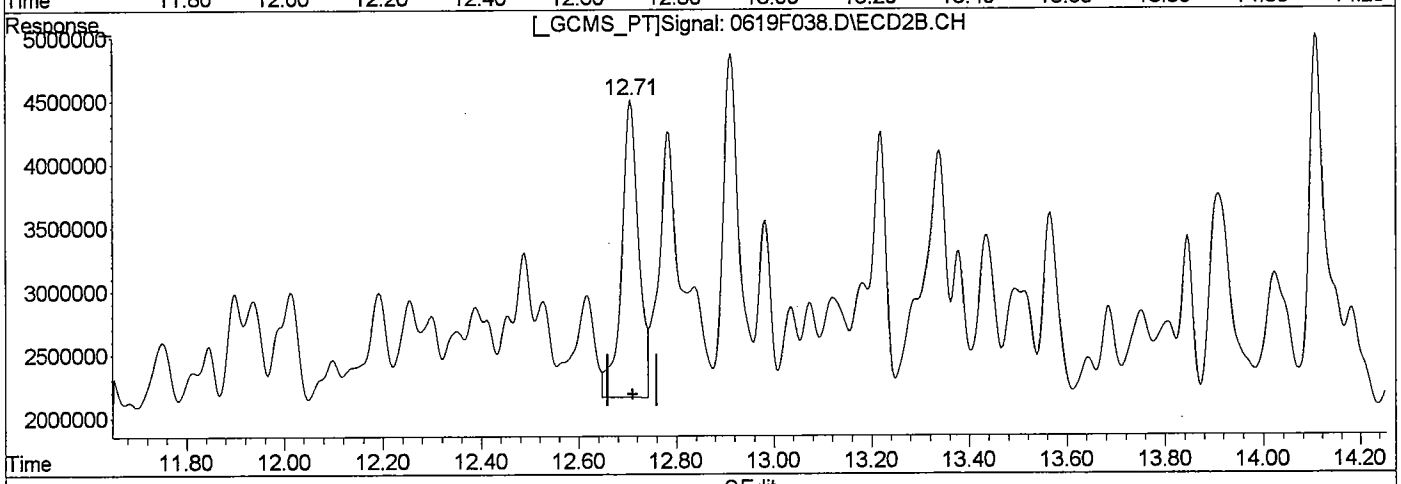
(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:58:54 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1907.274ug/L

response 2210397

(26) Toxaphene {2} #2

12.71min 1355.665ug/L

response 5676148

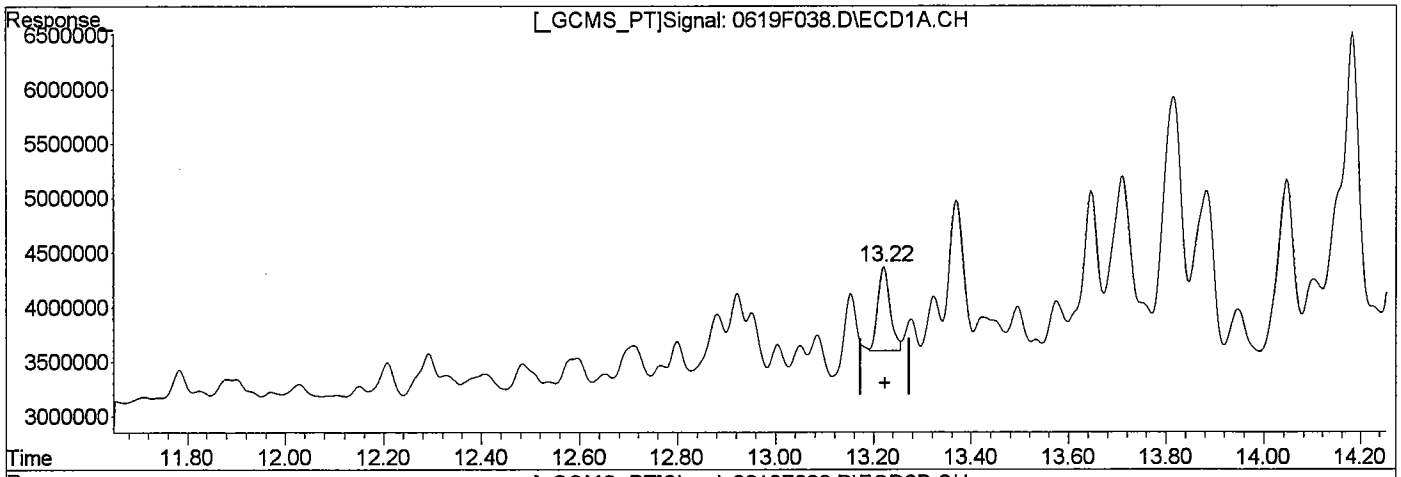
(+) = Expected Retention Time

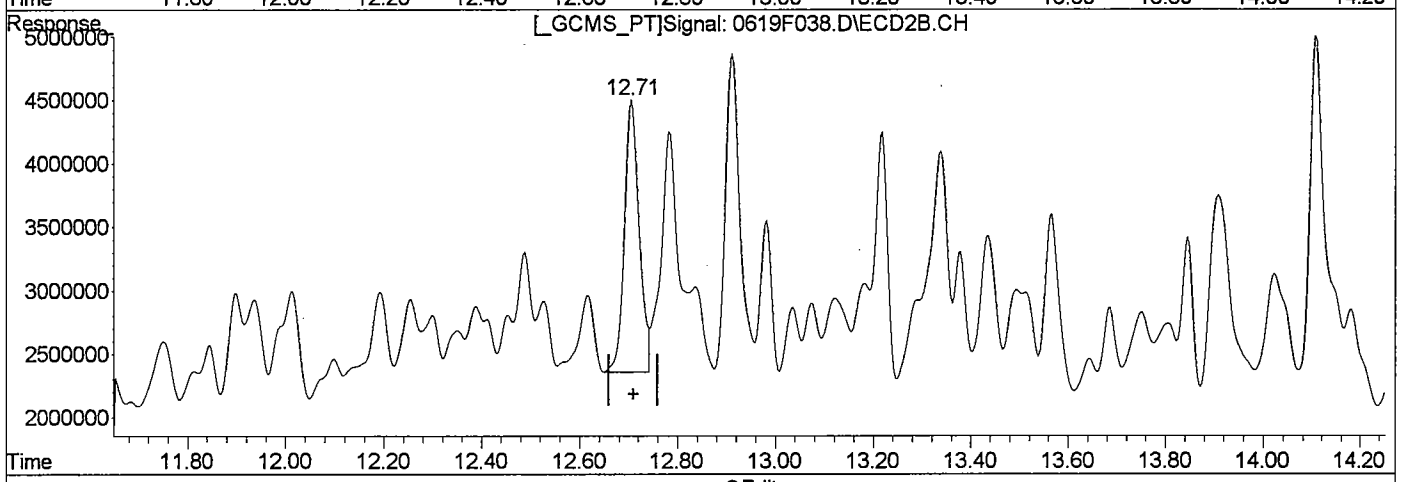
0619F038.D 061107-8081.M Thu Jun 21 10:59:05 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.22min 1158.061ug/L m

response 1342112

(26) Toxaphene {2} #2

12.71min 1093.441ug/L m

response 4578218

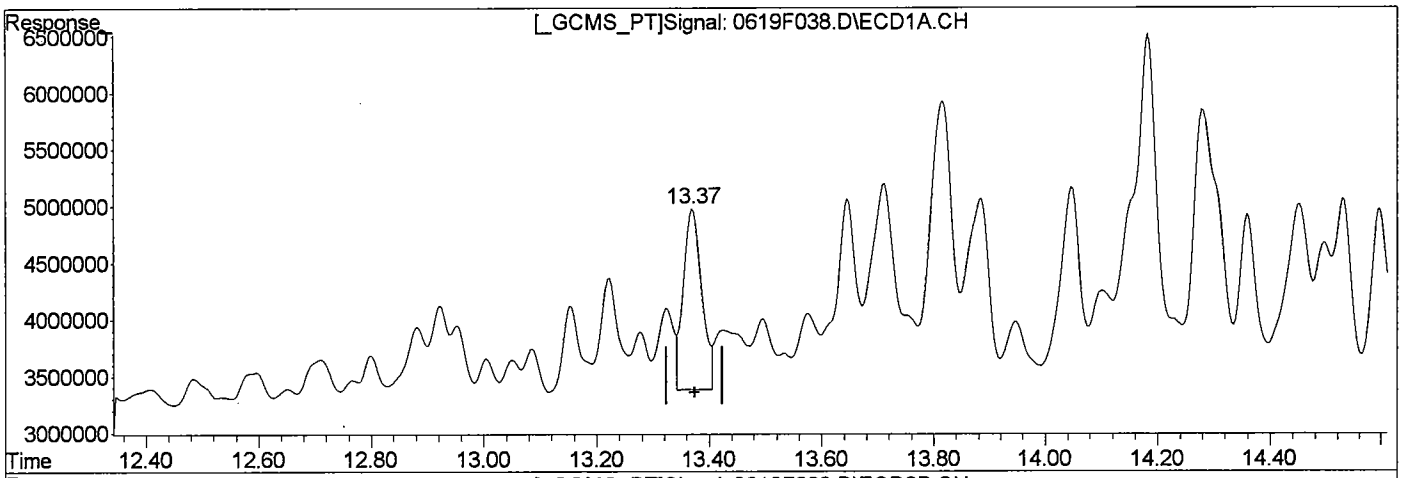
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

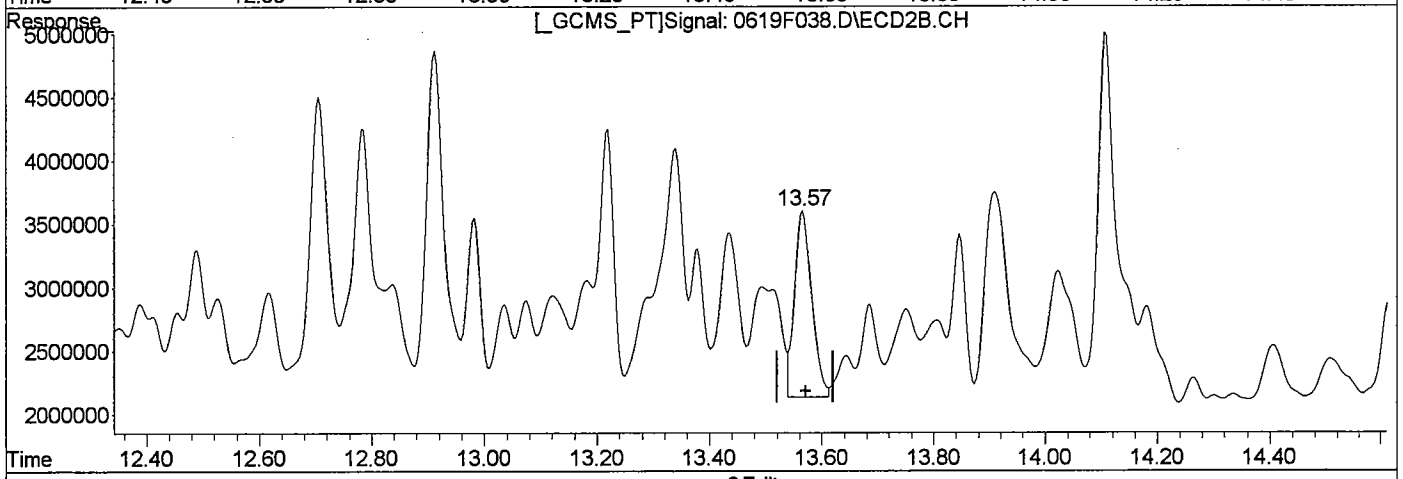
(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:59:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1816.771ug/L

response 3656848

(27) Toxaphene {3} #2

13.57min 1200.963ug/L

response 3109334

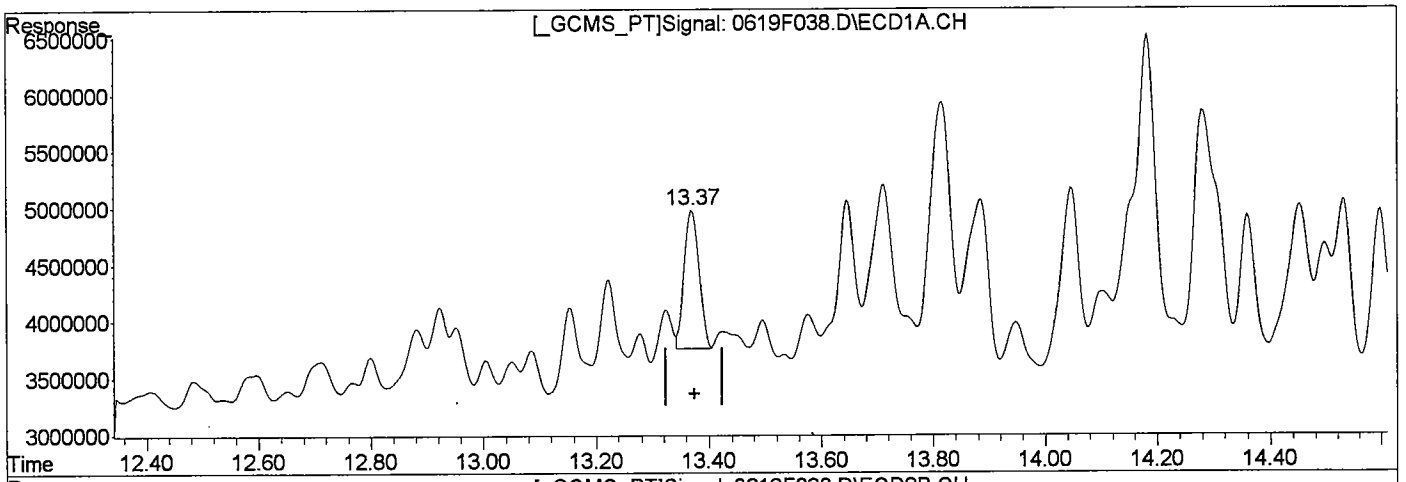
(+) = Expected Retention Time

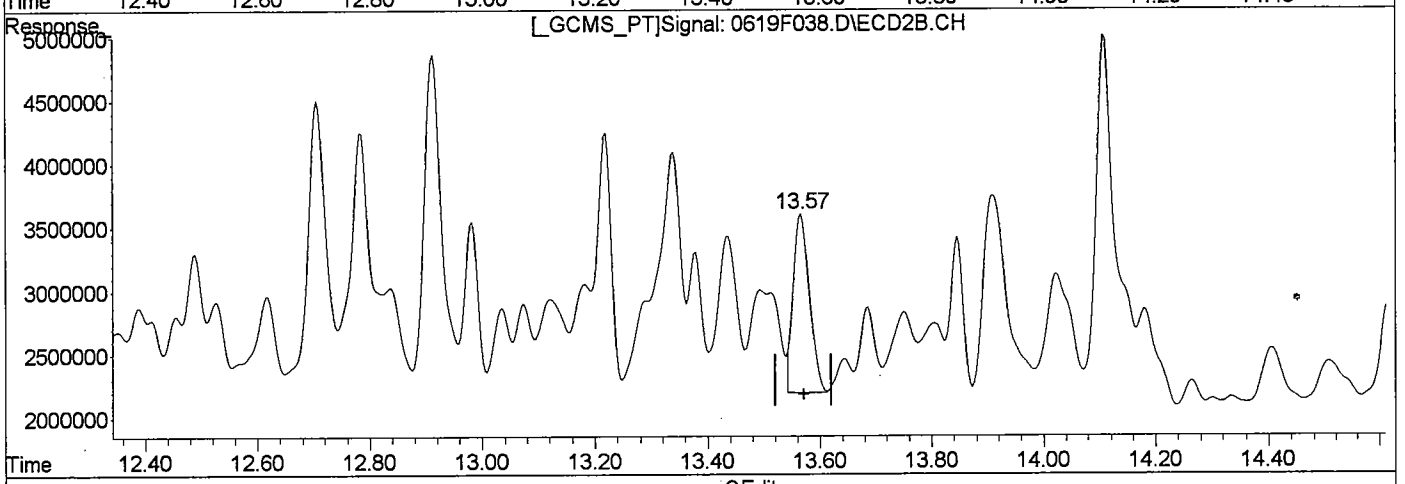
0619F038.D 061107-8081.M Thu Jun 21 10:59:21 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.37min 1107.704ug/L m

response 2229618

(27) Toxaphene {3} #2

13.57min 1078.347ug/L m

response 2791878

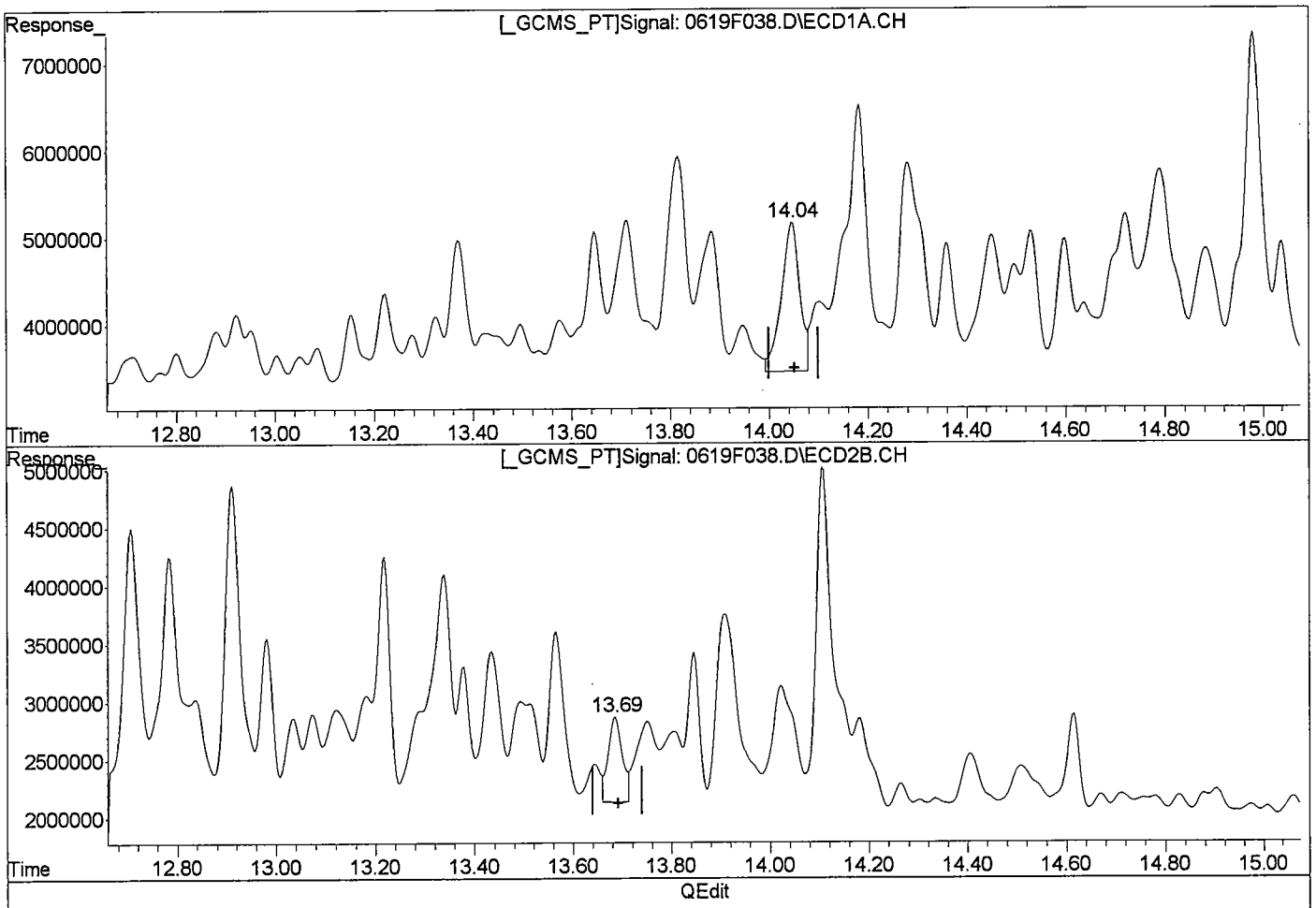
After
Initials [illegible] 6/21/07
JUN 21 2007
☐ Wrong Peak/Peak not Found
☐ Baseline/Int. Ident. incorrect
☐ Other

(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:59:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.04min 1512.309ug/L

response 4417169

(28) Toxaphene {4} #2

13.69min 2140.523ug/L

response 1462891

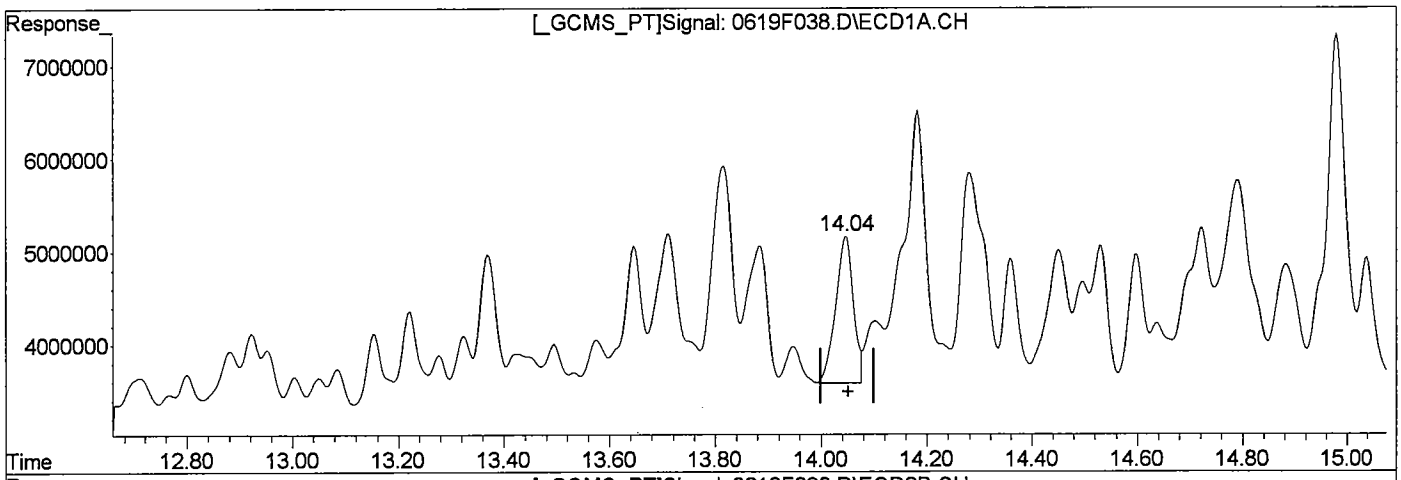
(+) = Expected Retention Time

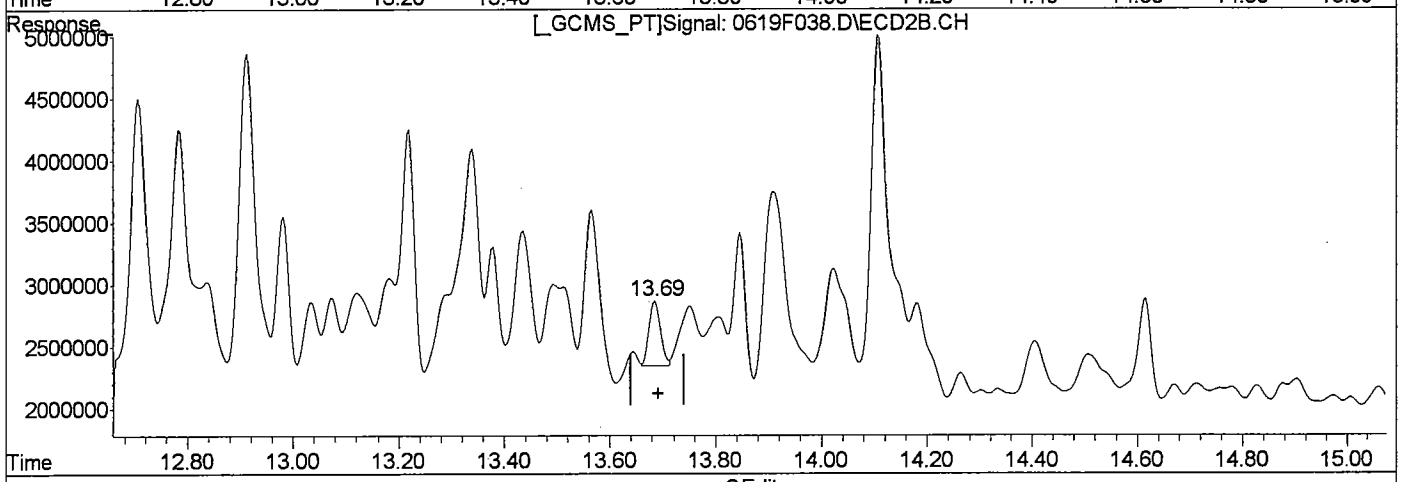
0619F038.D 061107-8081.M Thu Jun 21 10:59:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 1249.142ug/L m

response 3648508

(28) Toxaphene {4} #2

13.69min 1141.032ug/L m

response 779812

After
Initials [illegible]
JUN 21 2007

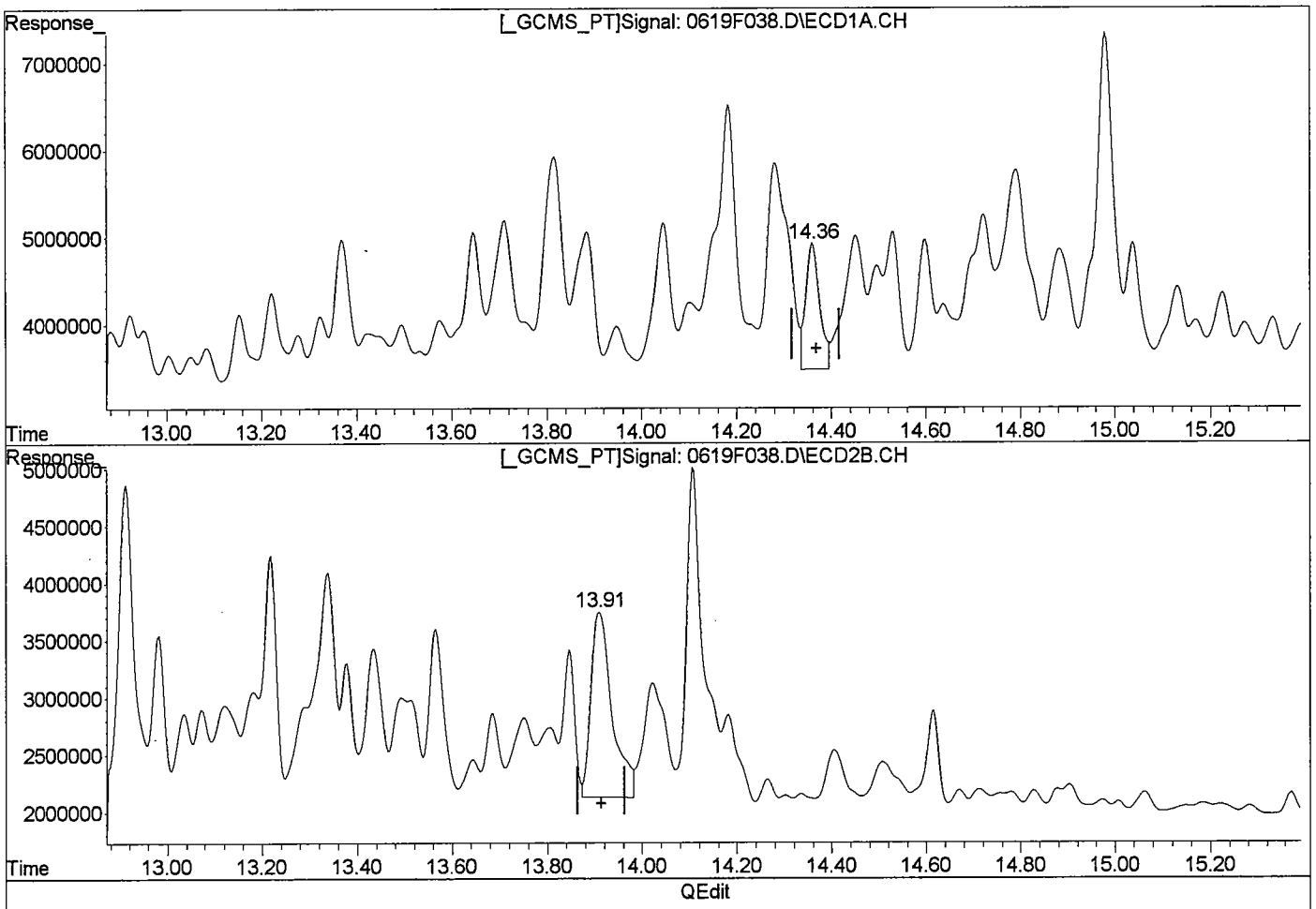
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:59:48 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.36min 1826.359ug/L

response 2984326

(29) Toxaphene {5} #2

13.91min 1295.798ug/L

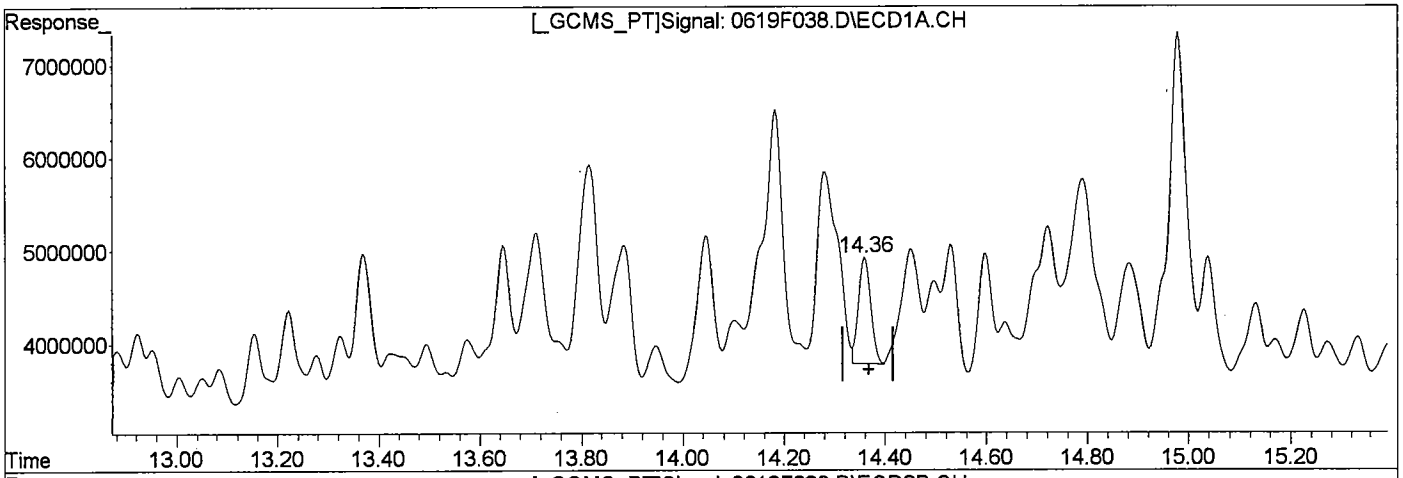
response 5105726

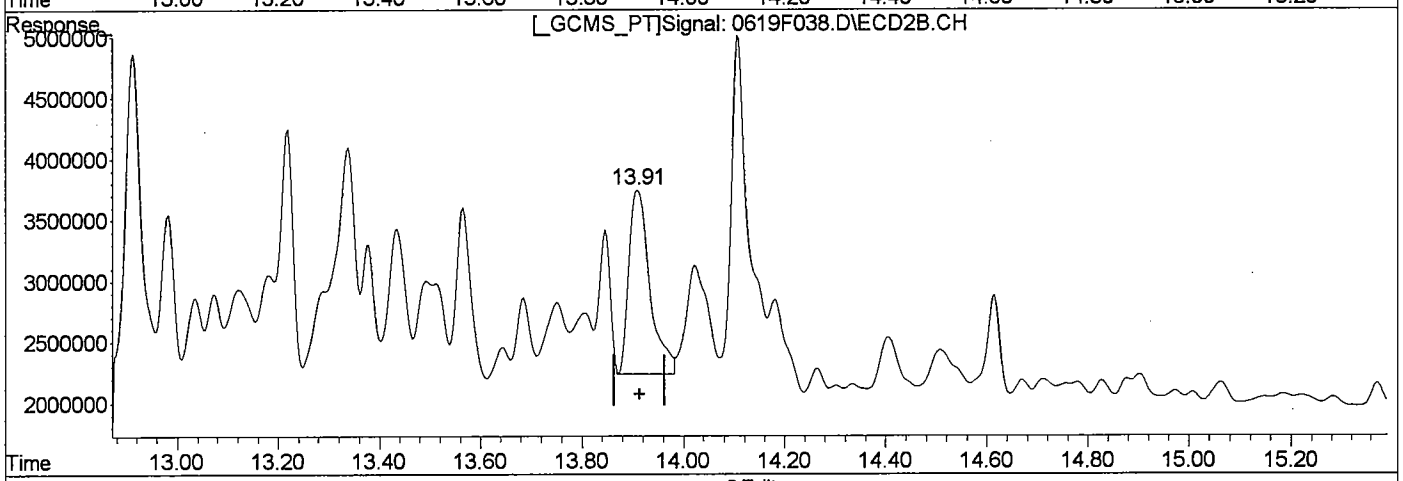
(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 10:59:51 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.36min 1161.368ug/L m

response 1897711

(29) Toxaphene {5} #2

13.91min 1106.710ug/L m

response 4360681

After
Initials

JUN 21 2007

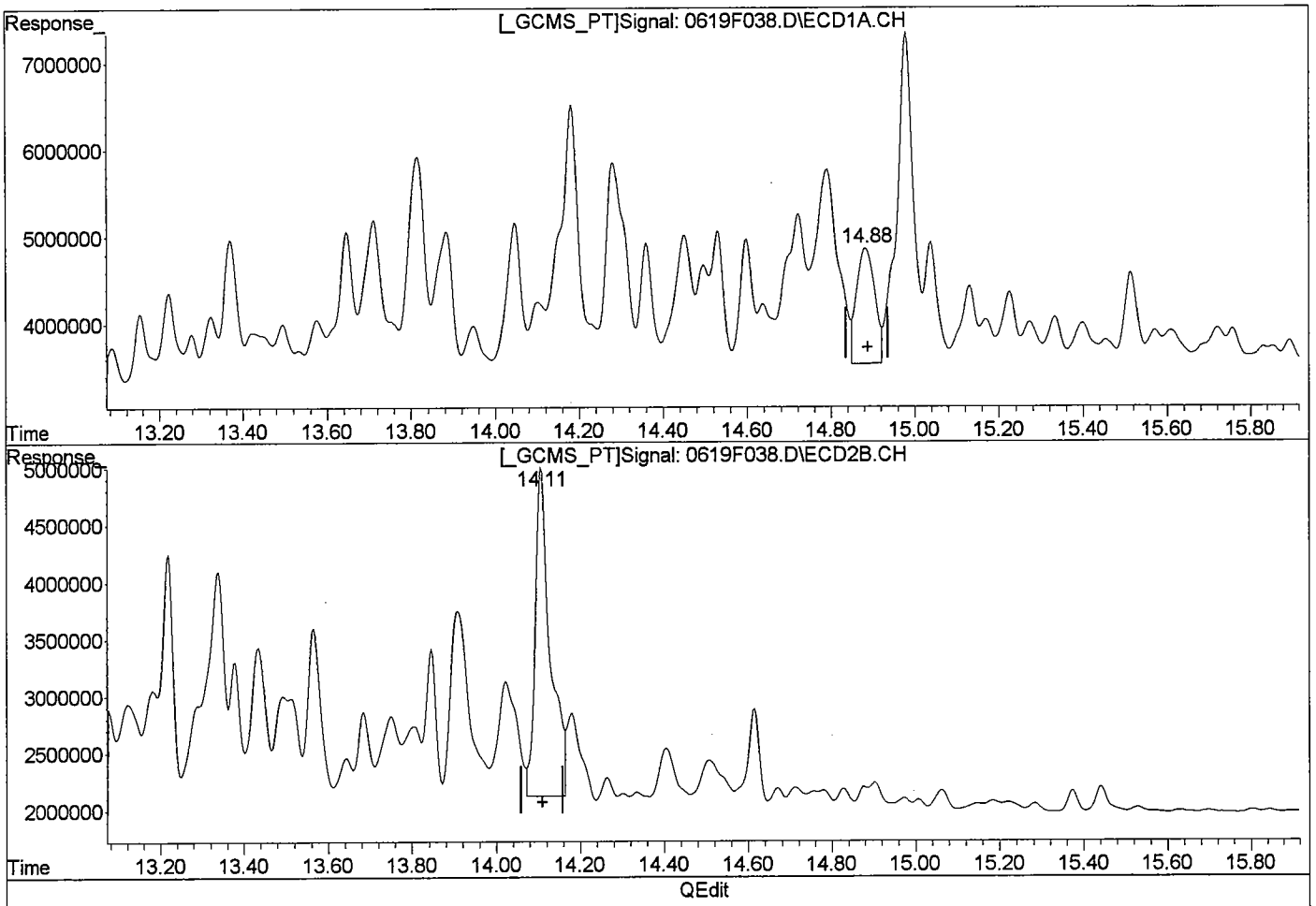
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 11:00:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.88min 2218.078ug/L

response 4029125

(30) Toxaphene {6} #2

14.11min 1340.472ug/L

response 7234437

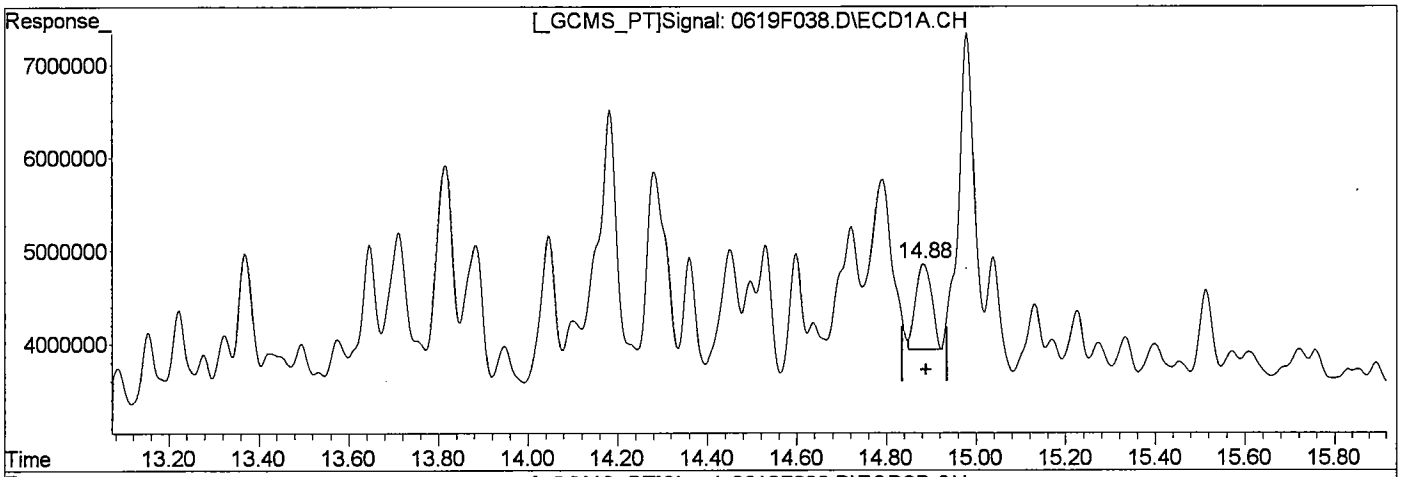
(+) = Expected Retention Time

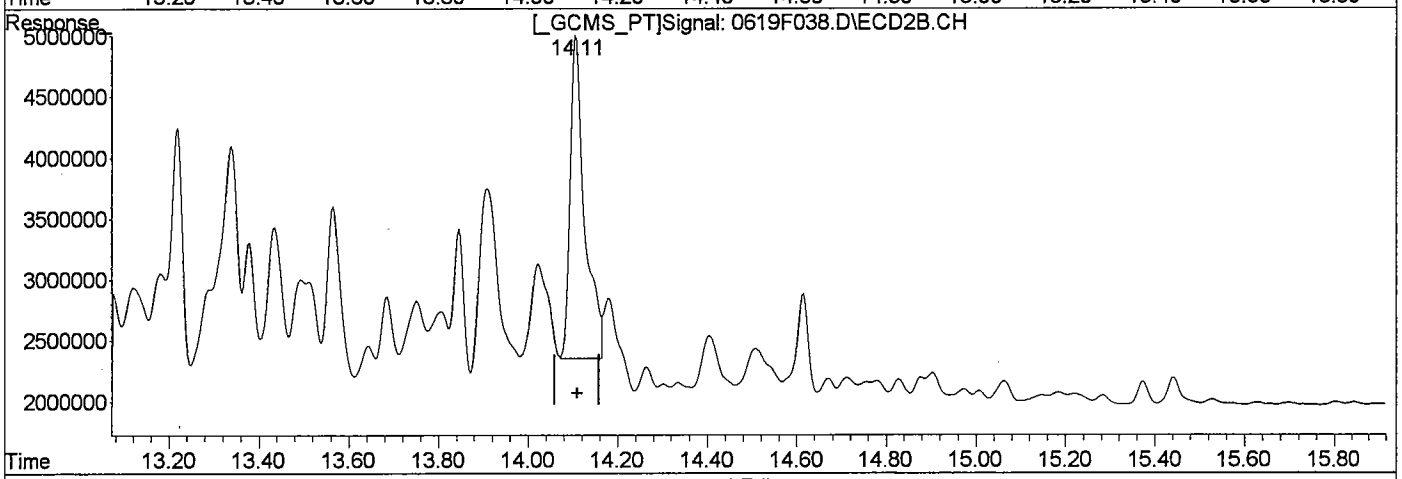
0619F038.D 061107-8081.M Thu Jun 21 11:00:14 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F038.D\ECD1A.CH Vial: 100
Signal #2 : J:\GC23\DATA\061907\0619F038.D\ECD2B.CH
Acq On : 21 Jun 2007 1:28 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706830-9 Inst : GC23
Misc : SEMIVOA GC\W0706830\9-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.88min 1251.198ug/L m

response 2272793

(30) Toxaphene {6} #2

14.11min 1099.185ug/L m

response 5932225

After
Initials [illegible]

JUN 21 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

(+) = Expected Retention Time
0619F038.D 061107-8081.M Thu Jun 21 11:00:25 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F004.D
J:\GC23\DATA\062107\0621F005.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	50	200000	202000	1	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	278000	271000	-2	NA	± 15 %	AverageRF
alpha-BHC	50	53	230000	245000	6	NA	± 15 %	AverageRF
beta-BHC	50	52	107000	111000	4	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	217000	229000	6	NA	± 15 %	AverageRF
delta-BHC	50	53	197000	209000	6	NA	± 15 %	AverageRF
Heptachlor	50	53	201000	212000	5	NA	± 15 %	AverageRF
Aldrin	50	52	174000	181000	4	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	170000	175000	3	NA	± 15 %	AverageRF
gamma-Chlordane	50	51	168000	171000	2	NA	± 15 %	AverageRF
Endosulfan I	50	51	153000	155000	1	NA	± 15 %	AverageRF
alpha-Chlordane	50	51	167000	169000	1	NA	± 15 %	AverageRF
Dieldrin	50	50	165000	166000	1	NA	± 15 %	AverageRF
4,4'-DDE	50	51	153000	155000	1	NA	± 15 %	AverageRF
Endrin	50	49	154000	151000	-2	NA	± 15 %	AverageRF
Endosulfan II	50	46	184000	168000	-8	NA	± 15 %	AverageRF
4,4'-DDD	50	48	150000	143000	-5	NA	± 15 %	AverageRF
Endrin Aldehyde	50	46	166000	152000	-8	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	45	225000	201000	-10	NA	± 15 %	AverageRF
4,4'-DDT	50	48	184000	177000	-4	NA	± 15 %	AverageRF
Endrin Ketone	50	48	298000	285000	-5	NA	± 15 %	AverageRF
Methoxychlor	50	47	135000	128000	-5	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1410	1610	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	1160	1230	6	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1000	2010	2070	3	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	2920	3310	13	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	1630	1720	5	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	1820	2050	13	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	9	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/21/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L
Column ID: DB-35MS

File ID: J:\GC23\DATA\062107\0621F004.D\0621F004C.D
J:\GC23\DATA\062107\0621F005.D\0621F005C.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	52	179000	187000	4	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	185000	179000	-3	NA	± 15 %	AverageRF
alpha-BHC	50	54	235000	252000	7	NA	± 15 %	AverageRF
beta-BHC	50	51	108000	111000	3	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	53	223000	238000	7	NA	± 15 %	AverageRF
delta-BHC	50	54	212000	228000	8	NA	± 15 %	AverageRF
Heptachlor	50	53	227000	239000	5	NA	± 15 %	AverageRF
Aldrin	50	53	199000	211000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	52	201000	209000	4	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	209000	3	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	189000	2	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	197000	206000	5	NA	± 15 %	AverageRF
Dieldrin	50	52	195000	204000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	52	185000	194000	5	NA	± 15 %	AverageRF
Endrin	50	52	175000	183000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	161000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	52	151000	156000	3	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	186000	2	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	176000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	218000	4	NA	± 15 %	AverageRF
Methoxychlor	50	55	94100	103000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1370	14	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4620	10	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2760	7	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	722	6	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4460	13	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5970	11	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	10	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\062107\0621F004.D
Lab ID: KWG0706945-3
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 17:36
Date Quantitated: 06/22/2007 08:34
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/07

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F004.D\0621F004C.D
Lab ID: KWG0706945-3
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 17:36
Date Quantitated: 06/22/2007 08:34
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/26/07

Secondary Review: MGB

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F004.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F004.D\0621F004c.d			**Vial:**	4
Acqu Date:	06/21/2007 17:36	**Quant Date:**	06/22/2007 08:34	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	7.40	10080127	9360822	50.38	52.23			NA
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	17.13	16.00	13564340	8942826	48.88	48.42			NA
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.21	8.44	12251387	12619359m	53.19	53.63			
Hexachlorobenzene	9.34	8.27	12470587	12482758m	50.74	50.85			
beta-BHC	10.22	9.45	5566330	5537324	51.92	51.37			
gamma-BHC (Lindane)	9.75	9.05	11445272	11899305	52.80	53.47			
delta-BHC	10.63	9.90	10432856	11418222m	52.86	53.93			
Heptachlor	10.73	9.62	10596399	11956730	52.62	52.71			
Aldrin	11.25	10.12	9063905	10541873m	52.19	52.94			
Isodrin	11.77	10.77	7595178m	8957929	51.26	51.88			
Heptachlor Epoxide	11.94	10.97	8762835	10425068	51.56	51.91			
gamma-Chlordane	12.44	11.33	8548099	10471774	51.02	51.56			
Endosulfan I	12.57	11.56	7761628	9428032	50.59	50.89			
alpha-Chlordane	12.51	11.48	8453855	10319156	50.72	52.34			
Dieldrin	12.97	12.00	8297775	10195117	50.32	52.40			
4,4'-DDE	12.75	11.79	7750891	9696550	50.72	52.42			
Endrin	13.32	12.47	7550632m	9161204	48.94	52.25			
Endosulfan II	13.72	12.87	8423694	9190997	45.88	50.66			
4,4'-DDD	13.53	12.66	7131757	8074870	47.52	52.91			
Endrin Aldehyde	13.88	13.21	7603830	7783647	45.88	51.53			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F004.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F004.D\0621F004c.d			**Vial:**	4
Acqu Date:	06/21/2007 17:36	**Quant Date:**	06/22/2007 08:34	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.31	13.51	10067256	9297112	44.77	51.24			
4,4'-DDT	13.99	13.07	8825589	8806579	47.91	54.02			
Endrin Ketone	14.93	14.40	14238368	10912609	47.72	51.95			
Methoxychlor	14.64	14.08	6404572	5148134	47.49	54.73			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F004.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		2.0E+5	2.0E+5	0.8			
alpha-BHC		MS	AverageRF	15		2.3E+5	2.5E+5	6.4			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.5E+5	1.5			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.3E+5	5.6			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	3.8			
delta-BHC		MS	AverageRF	15		2.0E+5	2.1E+5	5.7			
Heptachlor		MS	AverageRF	15		2.0E+5	2.1E+5	5.2			
Aldrin		MS	AverageRF	15		1.7E+5	1.8E+5	4.4			
Isodrin		MS	AverageRF	15		1.5E+5	1.5E+5	2.5			
Heptachlor Epoxide		MS	AverageRF	15		1.7E+5	1.8E+5	3.1			
gamma-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	2.0			
alpha-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	1.4			
Endosulfan I		MS	AverageRF	15		1.5E+5	1.6E+5	1.2			
4,4'-DDE		MS	AverageRF	15		1.5E+5	1.6E+5	1.4			
Dieldrin		MS	AverageRF	15		1.6E+5	1.7E+5	0.6			
Endrin		MS	AverageRF	15		1.5E+5	1.5E+5	-2.1			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.4E+5	-5.0			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.7E+5	-8.2			
Endrin Aldehyde		MS	AverageRF	15		1.7E+5	1.5E+5	-8.2			
4,4'-DDT		MS	AverageRF	15		1.8E+5	1.8E+5	-4.2			
Endosulfan Sulfate		MS	AverageRF	15		2.2E+5	2.0E+5	-10.5			
Methoxychlor		MS	AverageRF	15		1.3E+5	1.3E+5	-5.0			
Endrin Ketone		MS	AverageRF	15		3.0E+5	2.8E+5	-4.6			
Decachlorobiphenyl		SURR	AverageRF	15		2.8E+5	2.7E+5	-2.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.0

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F004.D\0621F004C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		1.8E+5	1.9E+5	4.5			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.5E+5	1.7			
alpha-BHC		MS	AverageRF	15		2.4E+5	2.5E+5	7.3			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.4E+5	6.9			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	2.7			
Heptachlor		MS	AverageRF	15		2.3E+5	2.4E+5	5.4			
delta-BHC		MS	AverageRF	15		2.1E+5	2.3E+5	7.9			
Aldrin		MS	AverageRF	15		2.0E+5	2.1E+5	5.9			
Isodrin		MS	AverageRF	15		1.7E+5	1.8E+5	3.8			
Heptachlor Epoxide		MS	AverageRF	15		2.0E+5	2.1E+5	3.8			
gamma-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	3.1			
alpha-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	4.7			
Endosulfan I		MS	AverageRF	15		1.9E+5	1.9E+5	1.8			
4,4'-DDE		MS	AverageRF	15		1.8E+5	1.9E+5	4.8			
Dieldrin		MS	AverageRF	15		1.9E+5	2.0E+5	4.8			
Endrin		MS	AverageRF	15		1.8E+5	1.8E+5	4.5			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.6E+5	5.8			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.8E+5	1.3			
4,4'-DDT		MS	AverageRF	15		1.6E+5	1.8E+5	8.0			
Endrin Aldehyde		MS	AverageRF	15		1.5E+5	1.6E+5	3.1			
Endosulfan Sulfate		MS	AverageRF	15		1.8E+5	1.9E+5	2.5			
Methoxychlor		MS	AverageRF	15		9.4E+4	1.0E+5	9.5			
Endrin Ketone		MS	AverageRF	15		2.1E+5	2.2E+5	3.9			
Decachlorobiphenyl		SURR	AverageRF	15		1.8E+5	1.8E+5	-3.2			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.6

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:15 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	10080127	9360822	50.377	52.232
24)	s	Decachlorobiphen	17.13	16.00	13564340	8942826	48.878	48.422
		Target Compounds						
2)		alpha-BHC	9.21	8.44	12251387	12619359	53.186	53.630m
3)		Hexachlorobenzen	9.34	8.27	12470587	12482758	50.743	50.850m
4)		beta-BHC	10.22	9.45	5566330	5537324	51.918	51.365
5)		gamma-BHC (Linda	9.75	9.05	11445272	11899305	52.797	53.473
6)		delta-BHC	10.63	9.90	10432856	11418222	52.863	53.927m
7)		Heptachlor	10.73	9.62	10596399	11956730	52.623	52.709
8)		Aldrin	11.25	10.12	9063905	10541873	52.186	52.939m
9)		Isodrin	11.77	10.77	7595178	8957929	51.261m	51.877
10)		Heptachlor Epoxi	11.94	10.97	8762835	10425068	51.561	51.905
11)		gamma-Chlordane	12.44	11.33	8548099	10471774	51.017	51.563
12)		Endosulfan I	12.57	11.56	7761628	9428032	50.592	50.885
13)		alpha-Chlordane	12.51	11.48	8453855	10319156	50.715	52.342
14)		Dieldrin	12.97	12.00	8297775	10195117	50.317	52.396
15)		4,4'-DDE	12.75	11.79	7750891	9696550	50.718	52.417
16)		Endrin	13.32	12.47	7550632	9161204	48.943m	52.251
17)		Endosulfan II	13.72	12.87	8423694	9190997	45.884	50.658
18)		4,4'-DDD	13.53	12.66	7131757	8074870	47.518	52.911
19)		Endrin Aldehyde	13.88	13.21	7603830	7783647	45.876	51.534
20)		Endosulfan Sulfa	14.31	13.51	10067256	9297112	44.773	51.240
21)		4,4'-DDT	13.99	13.07	8825589	8806579	47.914	54.015
22)		Endrin Ketone	14.93	14.40	14238368	10912609	47.720	51.947
23)		Methoxychlor	14.64	14.08	6404572	5148134	47.490	54.728

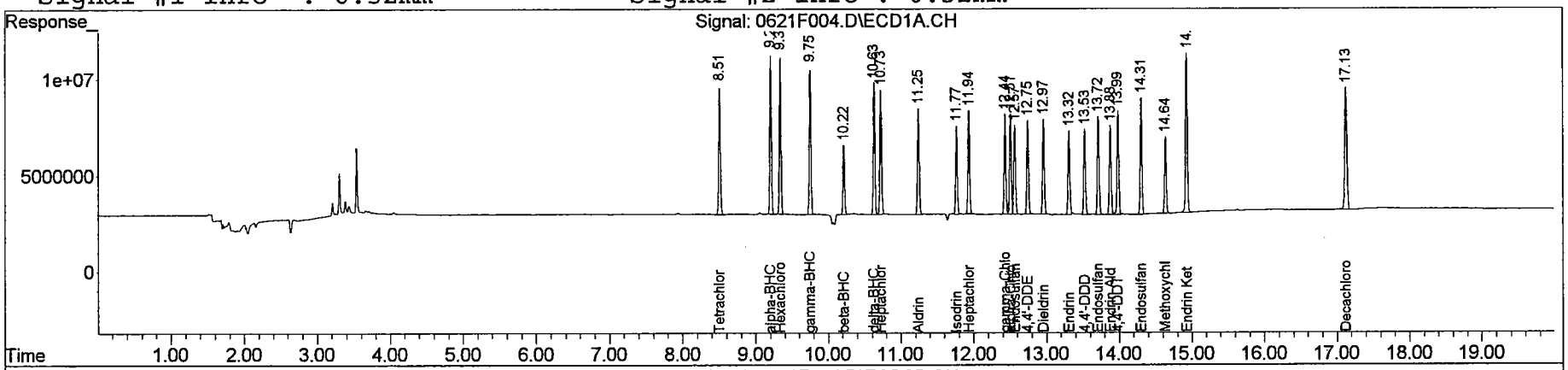
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

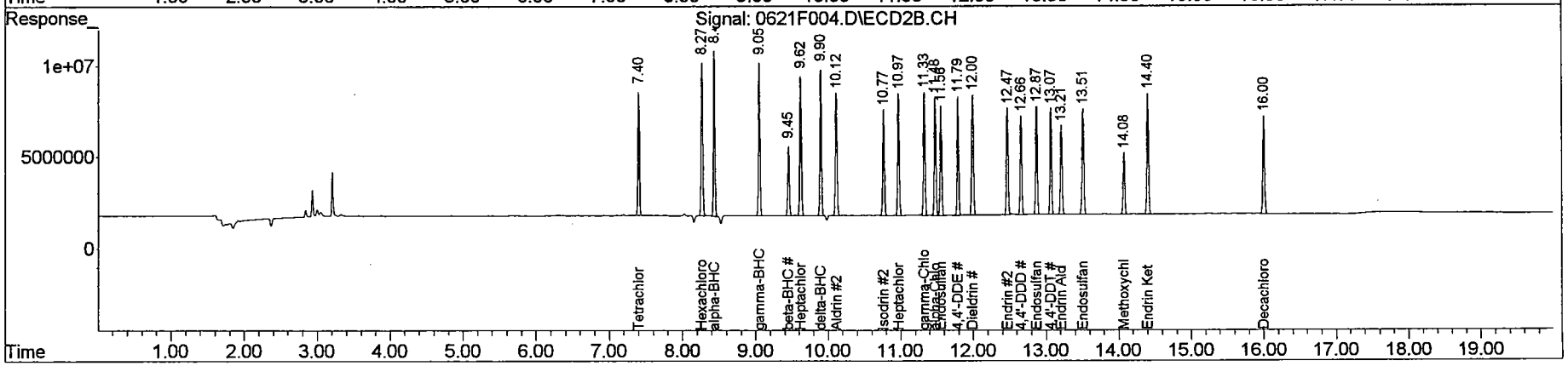
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:34 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

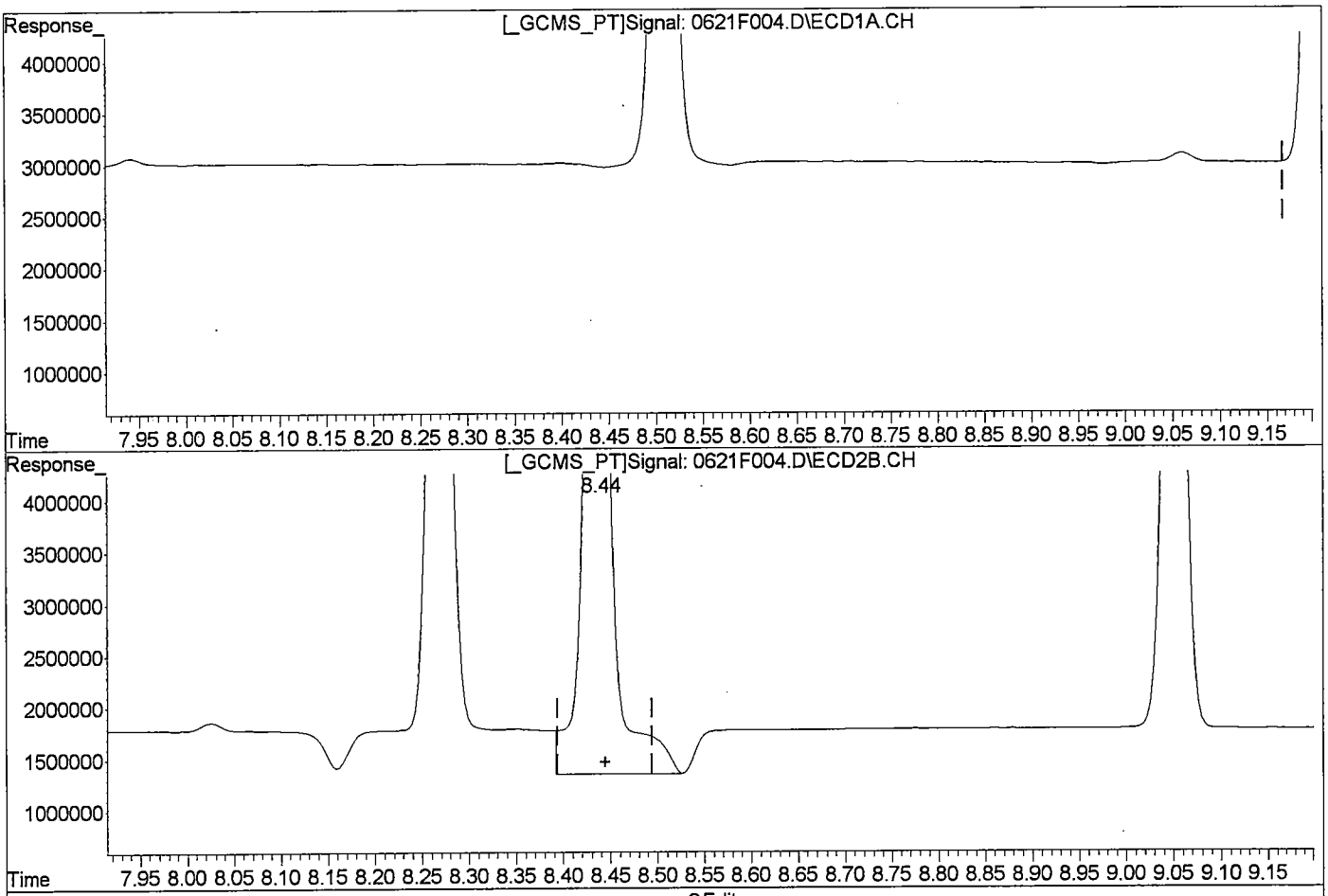




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(2) alpha-BHC

9.21min 53.186ug/L

response 12251387

(2) alpha-BHC #2

8.44min 65.080ug/L

response 15313790

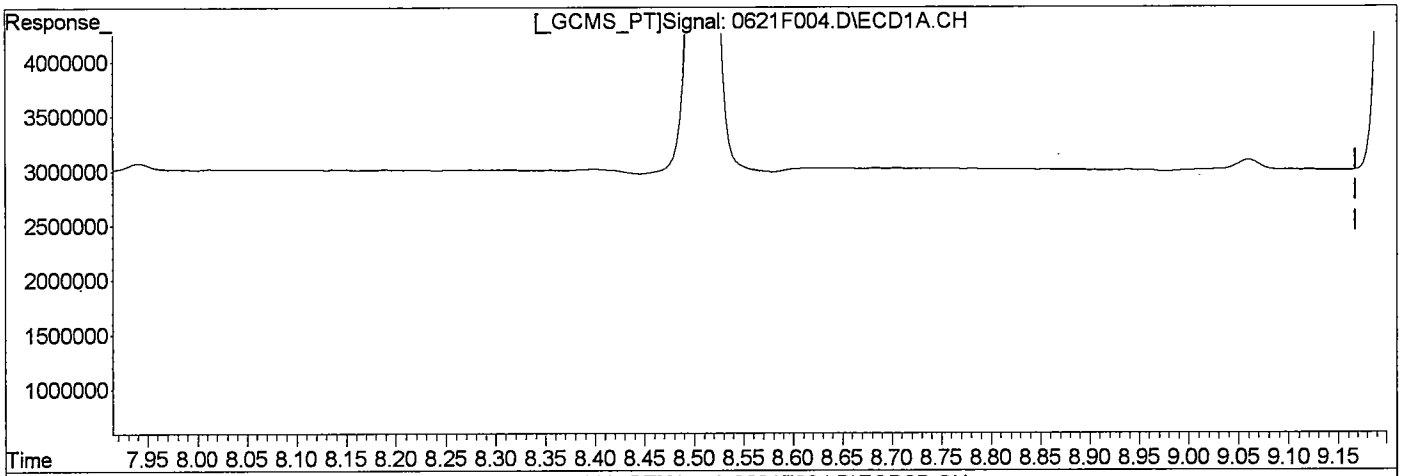
(+) = Expected Retention Time

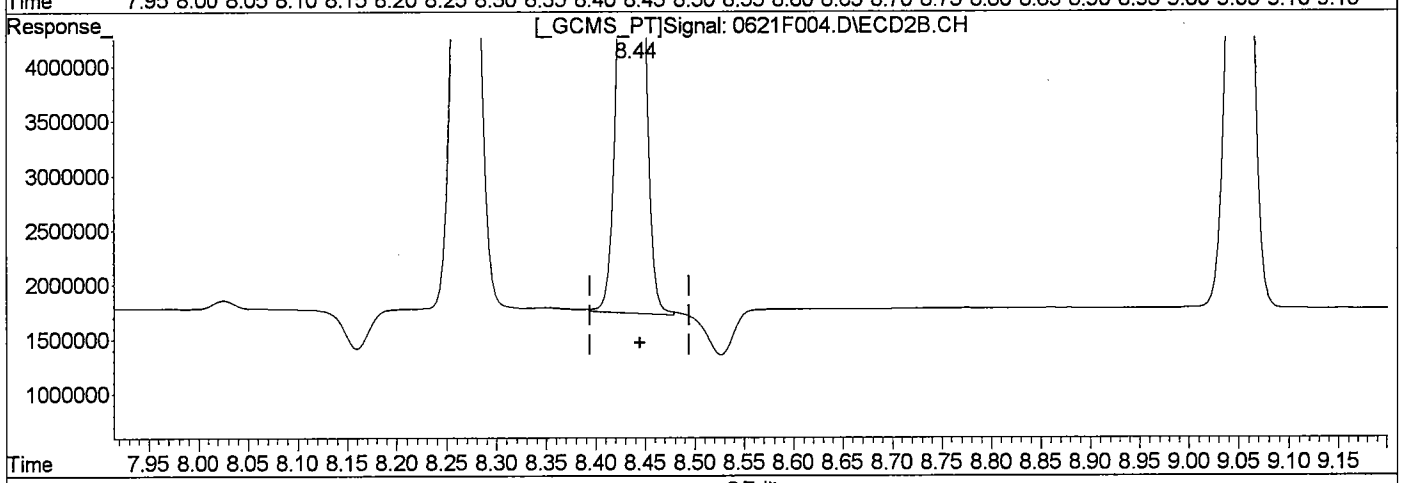
0621F004.D 061107-8081.M Fri Jun 22 08:33:17 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(2) alpha-BHC

9.21min 53.186ug/L

response 12251387

(2) alpha-BHC #2

8.44min 53.630ug/L m

response 12619359

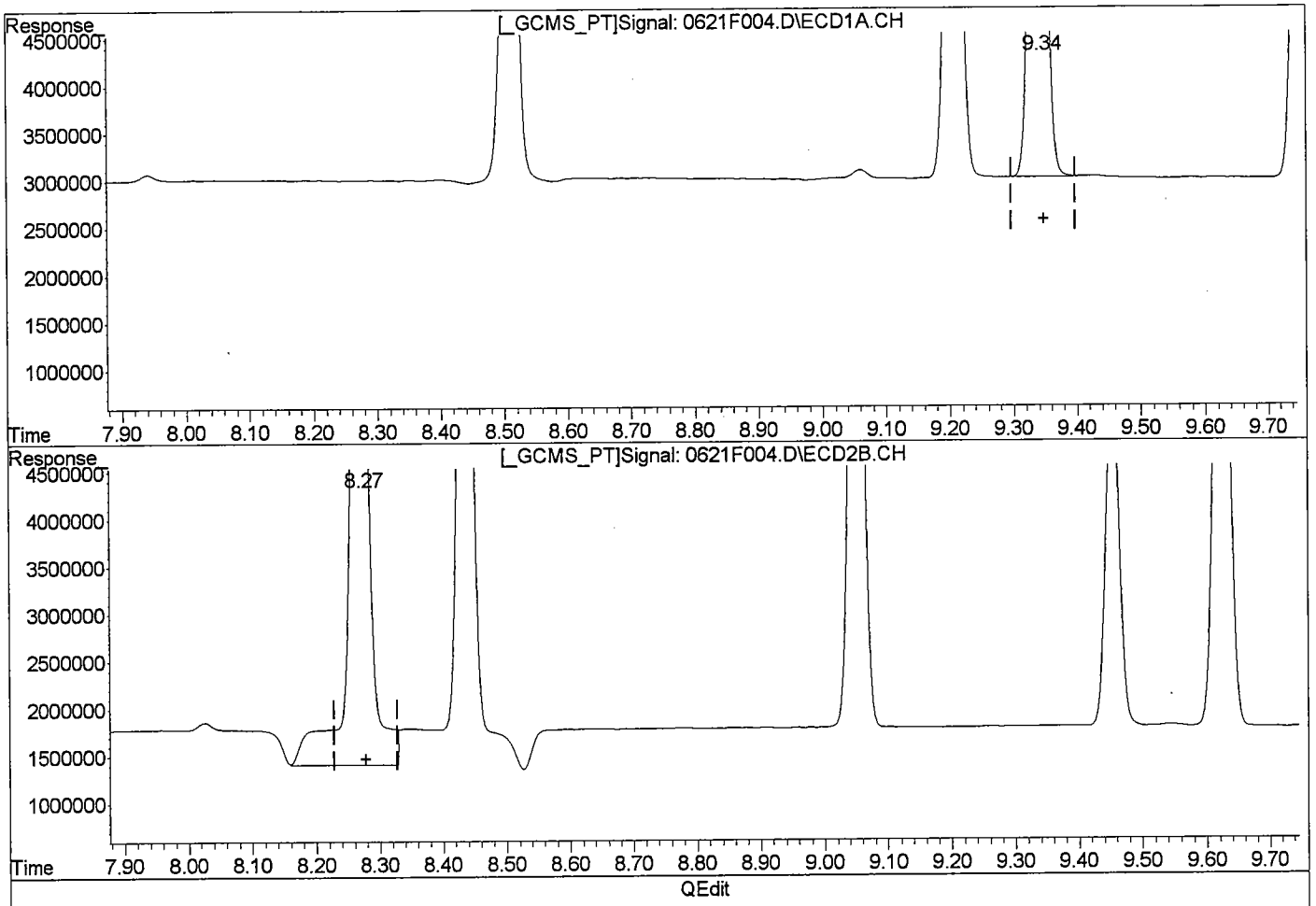
(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:33:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(3) Hexachlorobenzene

9.34min 50.743ug/L

response 12470587

(3) Hexachlorobenzene #2

8.27min 64.670ug/L

response 15875444

Before

JUN 2 2 2007

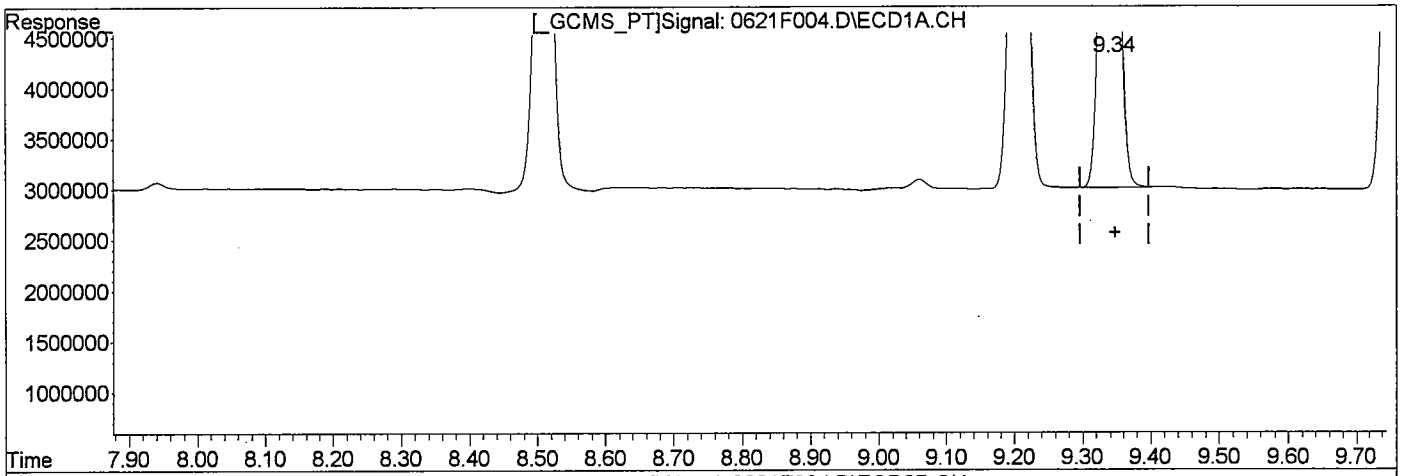
(+) = Expected Retention Time

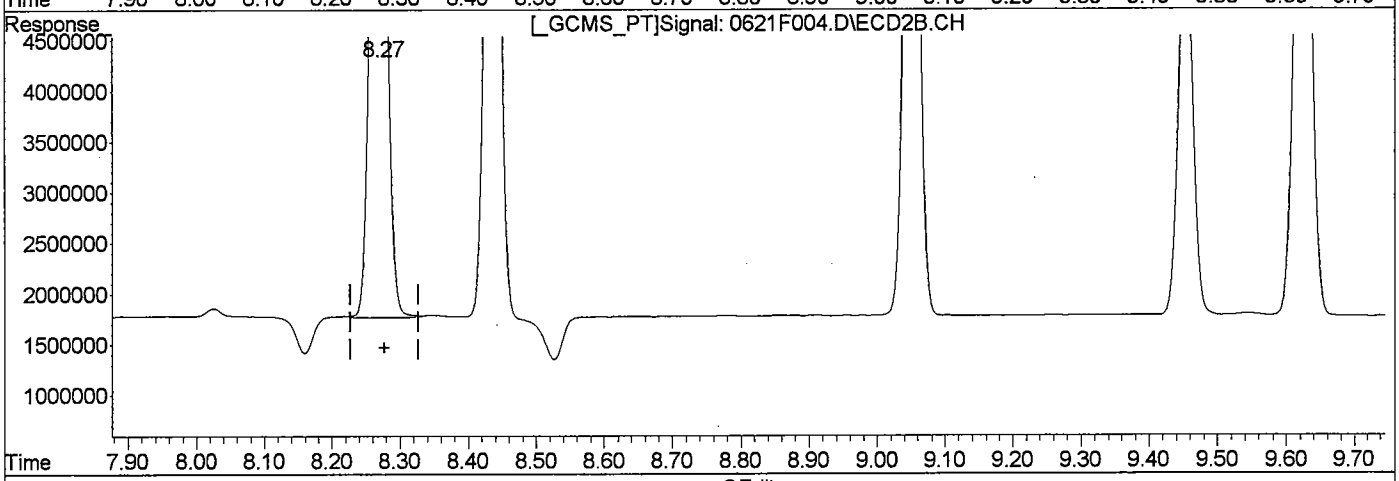
0621F004.D 061107-8081.M Fri Jun 22 08:33:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(3) Hexachlorobenzene

9.34min 50.743ug/L

response 12470587

(3) Hexachlorobenzene #2

8.27min 50.850ug/L m

response 12482758

After
Initials

JUN 22 2007

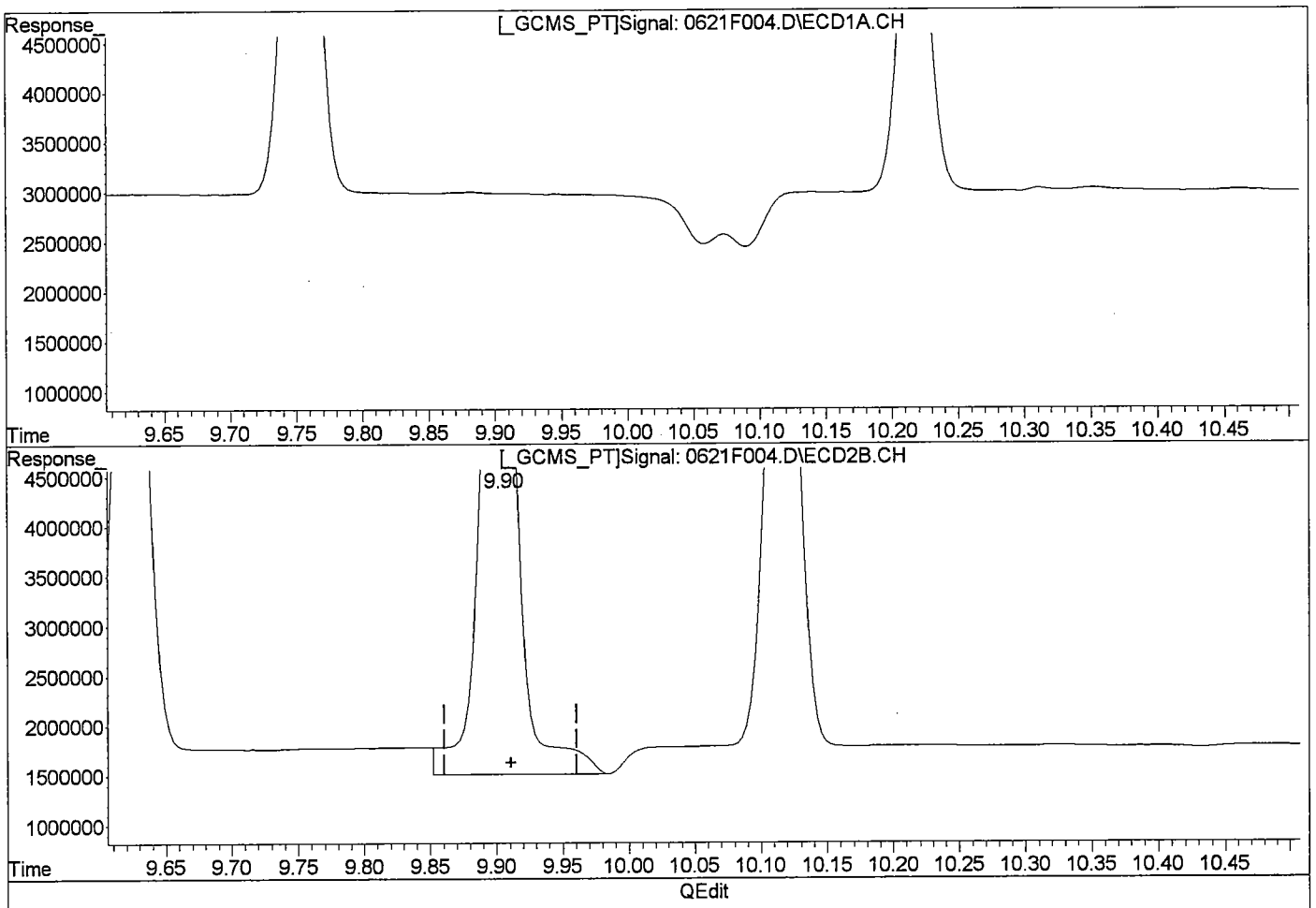
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F004.D 061107-8081.M Fri Jun 22 08:33:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(6) delta-BHC

10.63min 52.863ug/L

response 10432856

(6) delta-BHC #2

9.90min 62.617ug/L

response 13258183

Before

JUN 2 2 2007

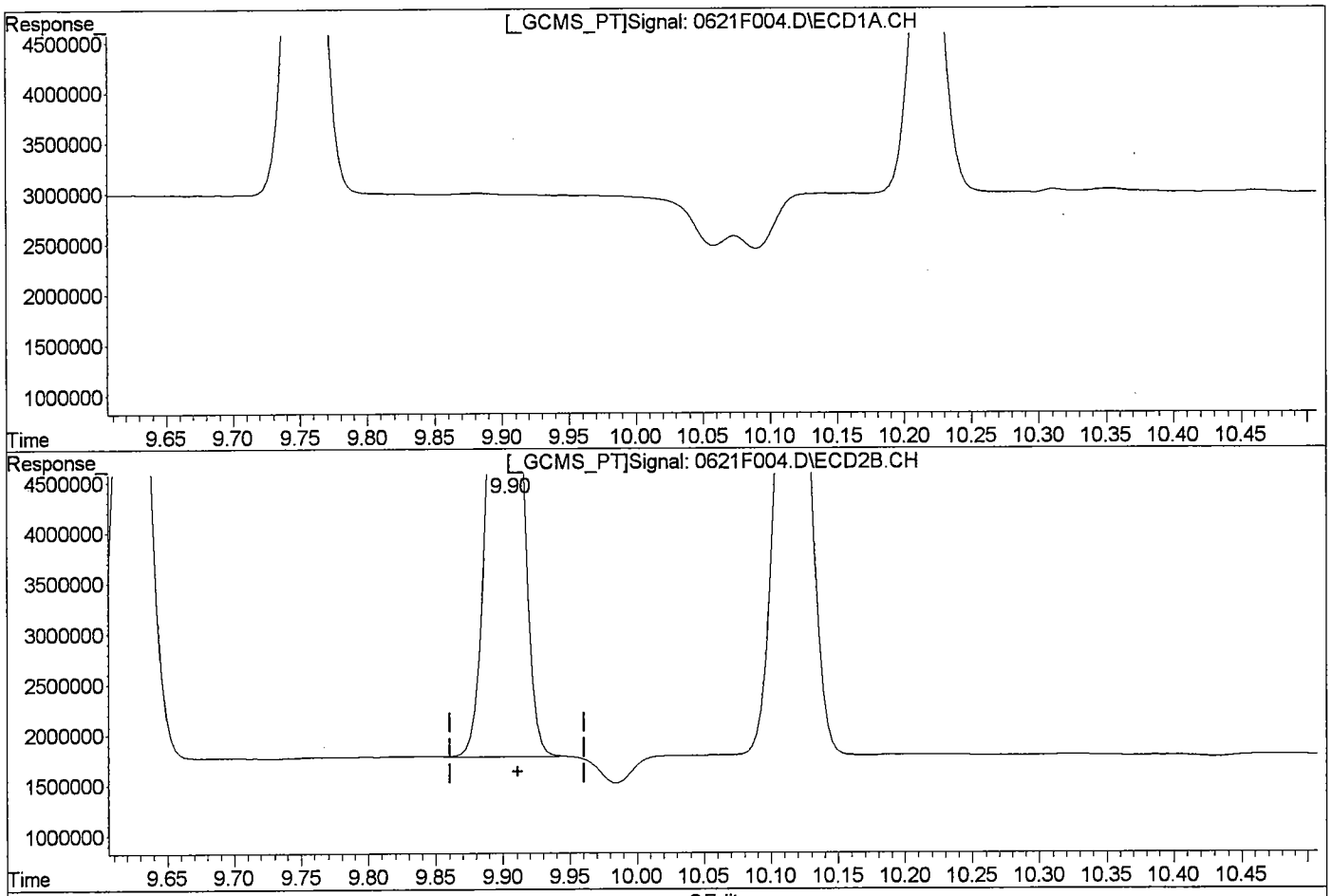
(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:33:44 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(6) delta-BHC

10.63min 52.863ug/L

response 10432856

(6) delta-BHC #2

9.90min 53.927ug/L m

response 11418222

After
Initials

JUN 22 2007

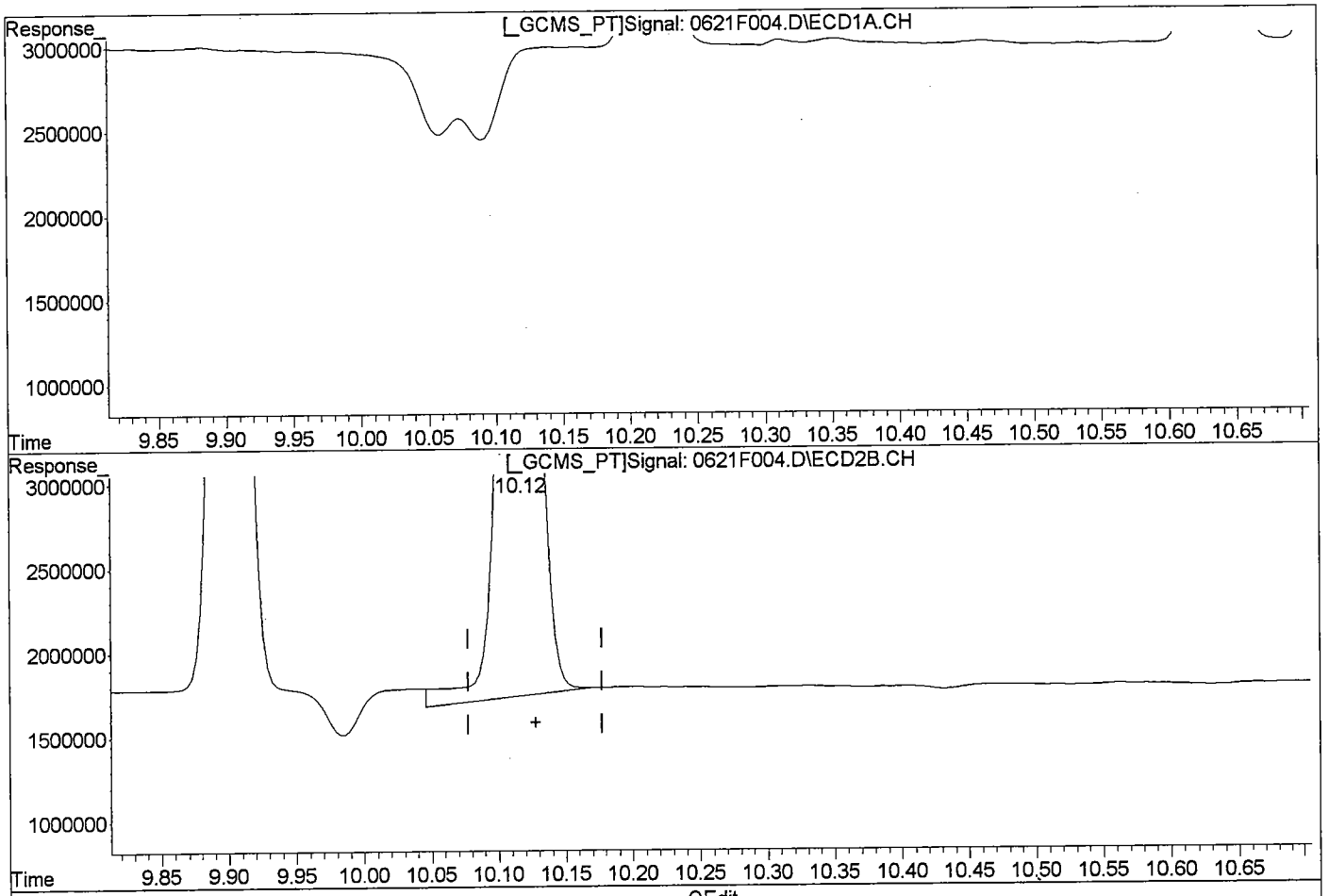
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F004.D 061107-8081.M Fri Jun 22 08:33:53 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(8) Aldrin

11.25min 52.186ug/L

response 9063905

(8) Aldrin #2

10.12min 54.817ug/L

response 10915789

Before

JUN 2 2 2007

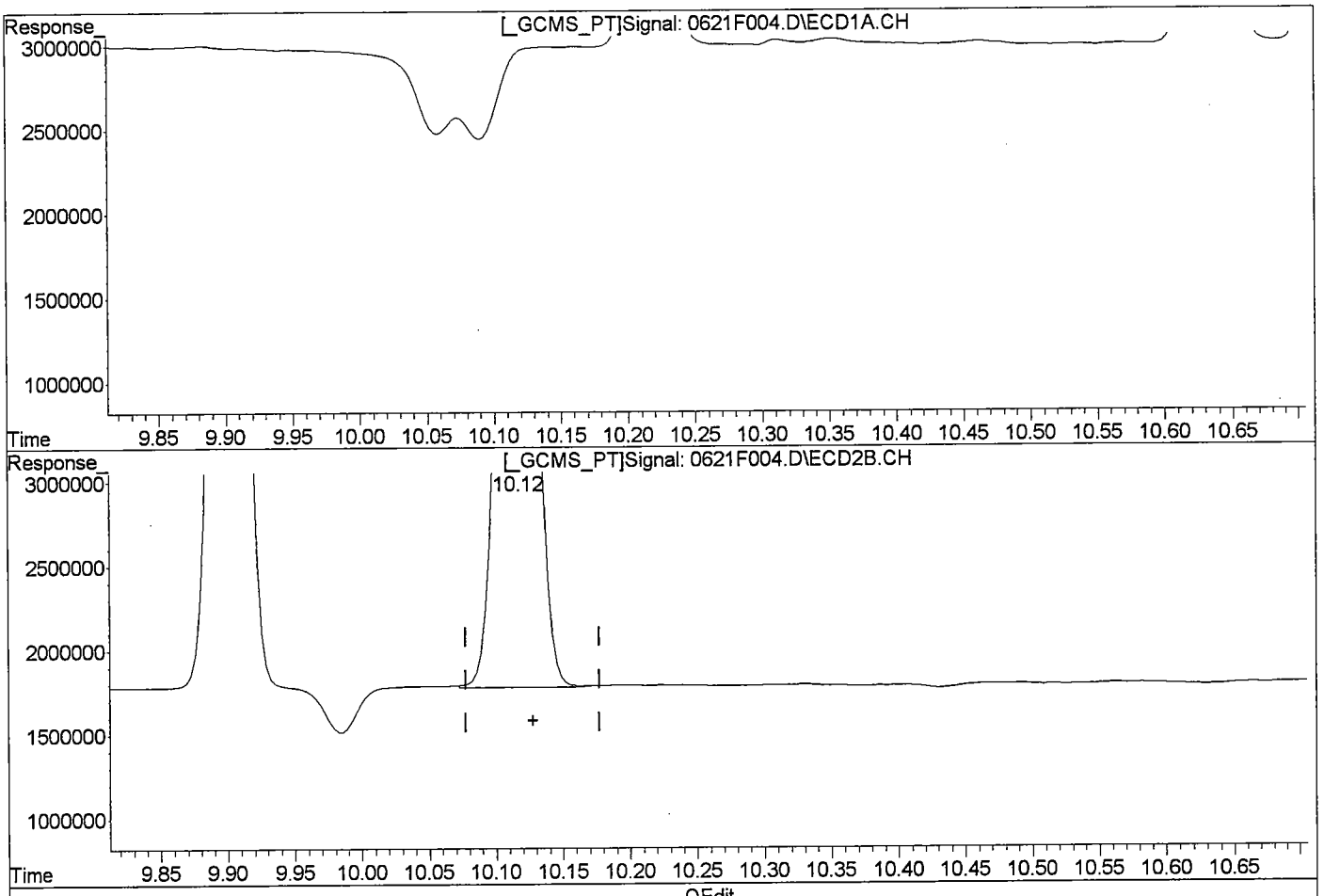
(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:34:00 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(8) Aldrin

11.25min 52.186ug/L

response 9063905

(8) Aldrin #2

10.12min 52.939ug/L m

response 10541873

After
Initials
JUN 22 2007

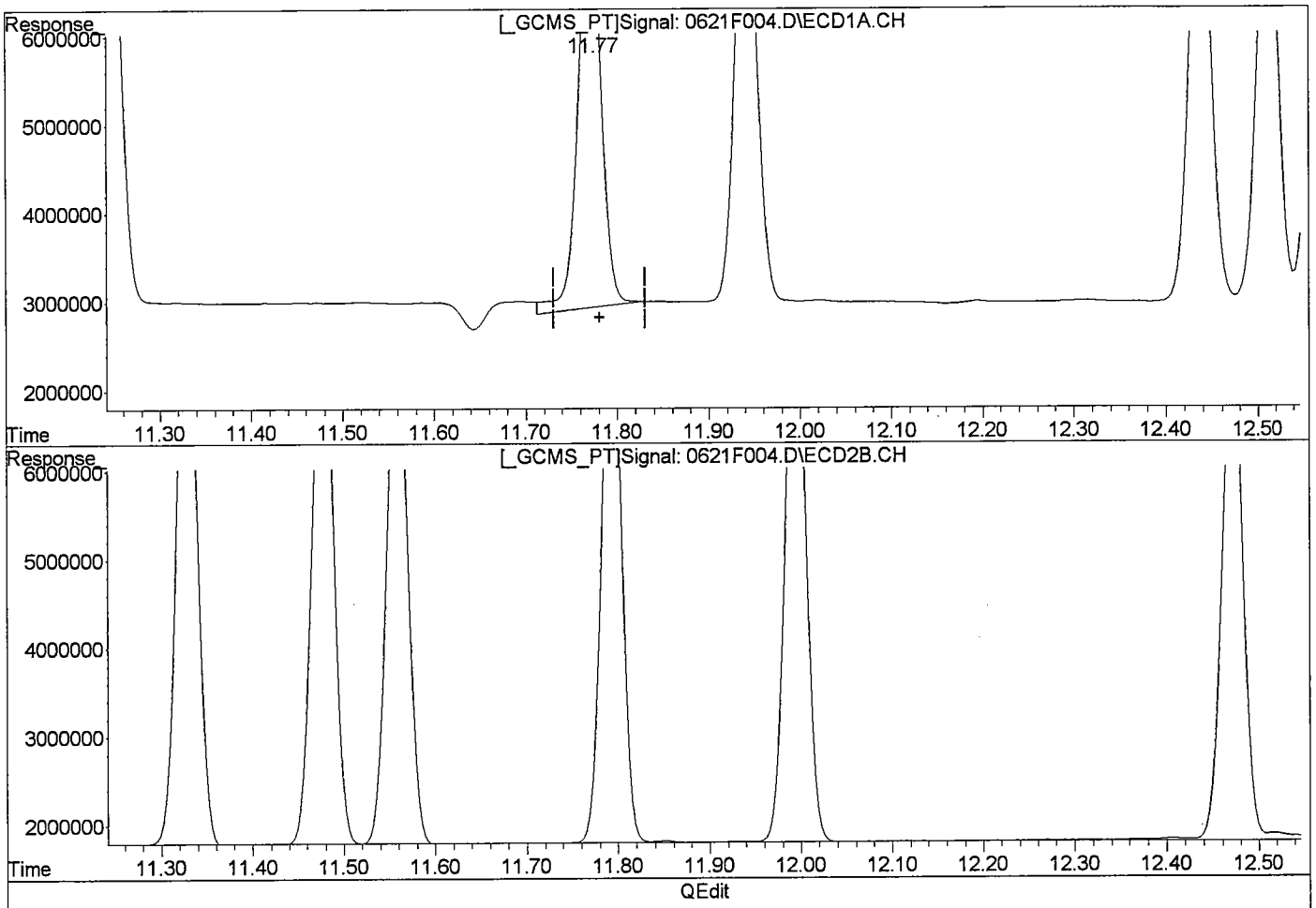
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder Integral
☐ Other

(+) = Expected Retention Time
0621F004.D 061107-8081.M Fri Jun 22 08:34:06 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(9) Isodrin

11.77min 53.972ug/L

response 7996809

(9) Isodrin #2

10.77min 51.877ug/L

response 8957929

Before

JUN 2 2 2007

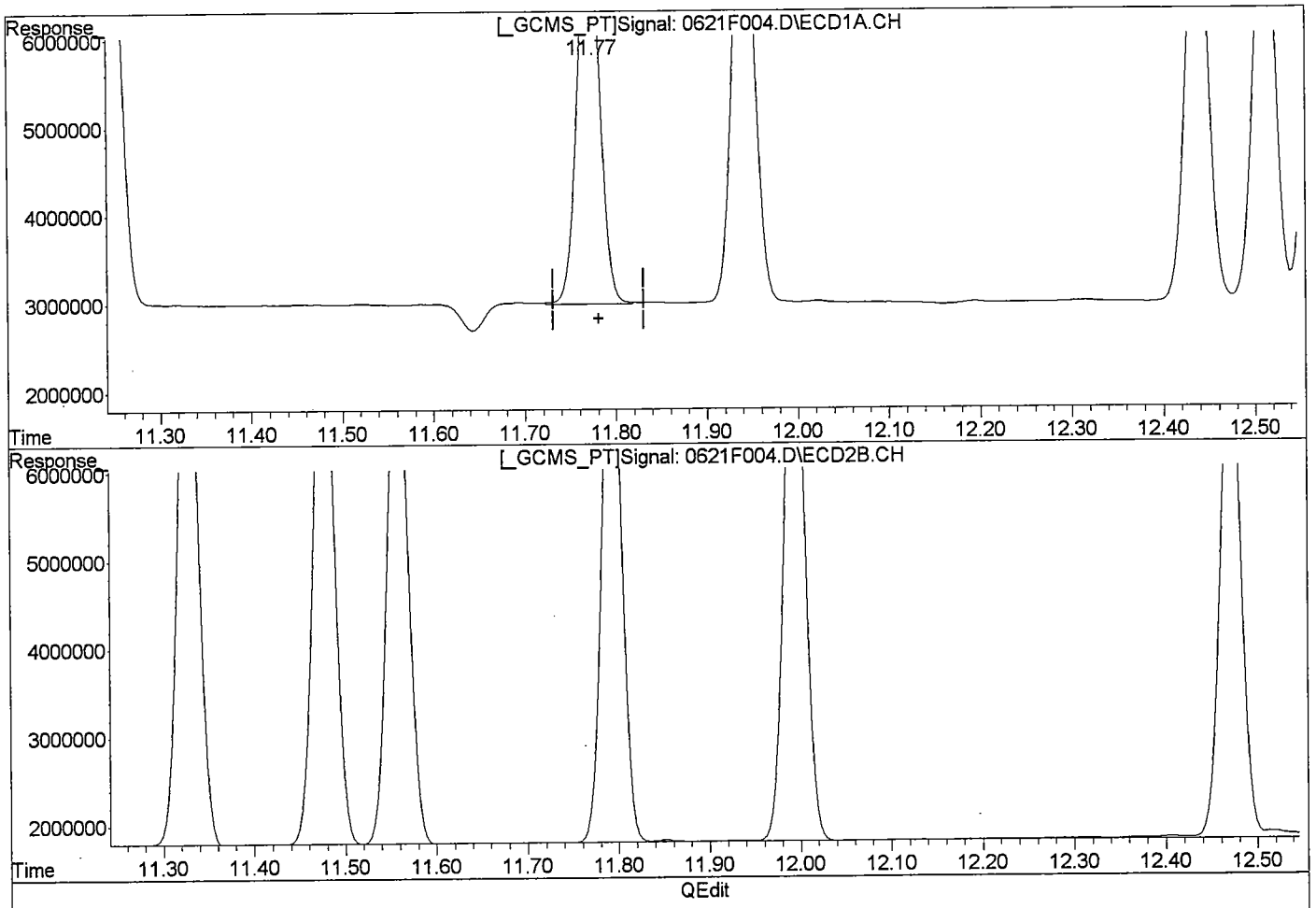
(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:34:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(9) Isodrin

11.77min 51.261ug/L m

response 7595178

(9) Isodrin #2

10.77min 51.877ug/L

response 8957929

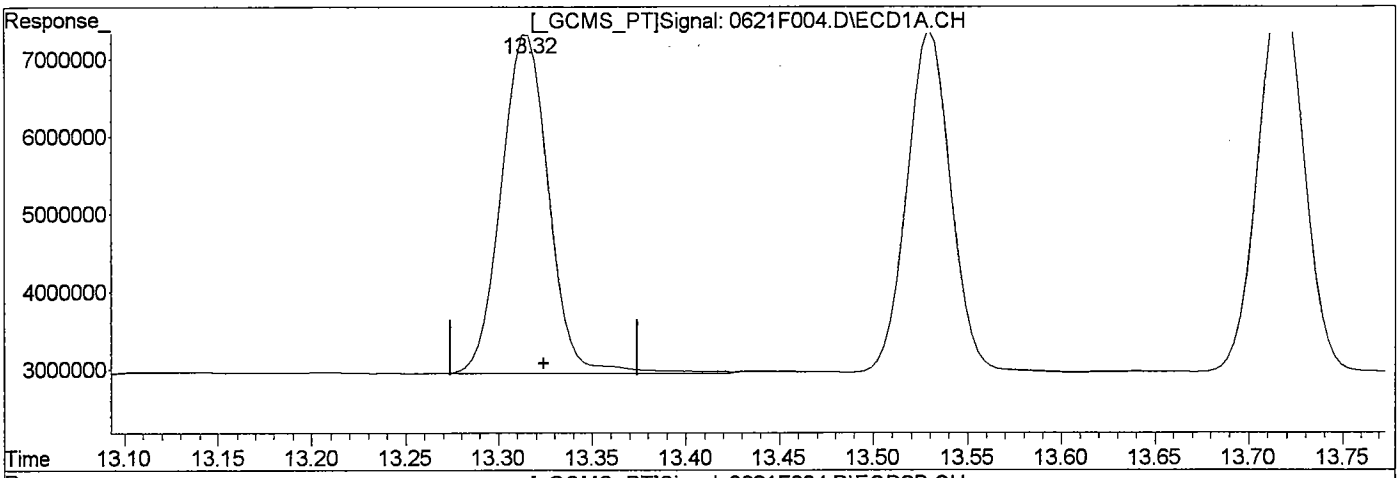
Amer
Initials
JUN 22 2007
Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect
Other

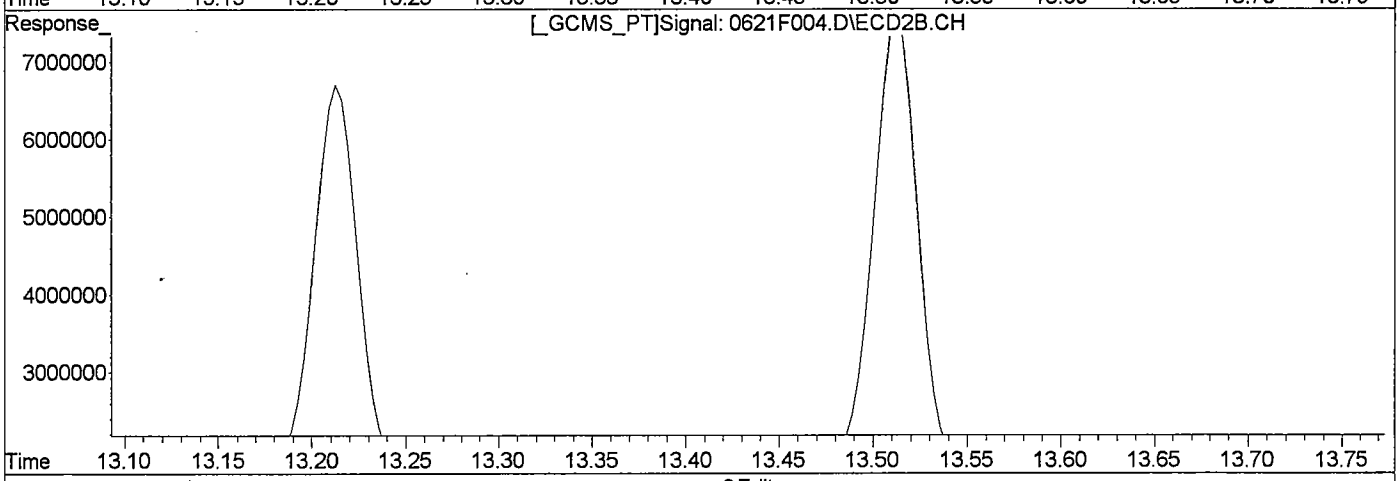
(+) = Expected Retention Time
0621F004.D 061107-8081.M Fri Jun 22 08:34:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(16) Endrin

13.32min 49.982ug/L

response 7710907

(16) Endrin #2

12.47min 52.251ug/L

response 9161204

Before

JUN 2 2 2007

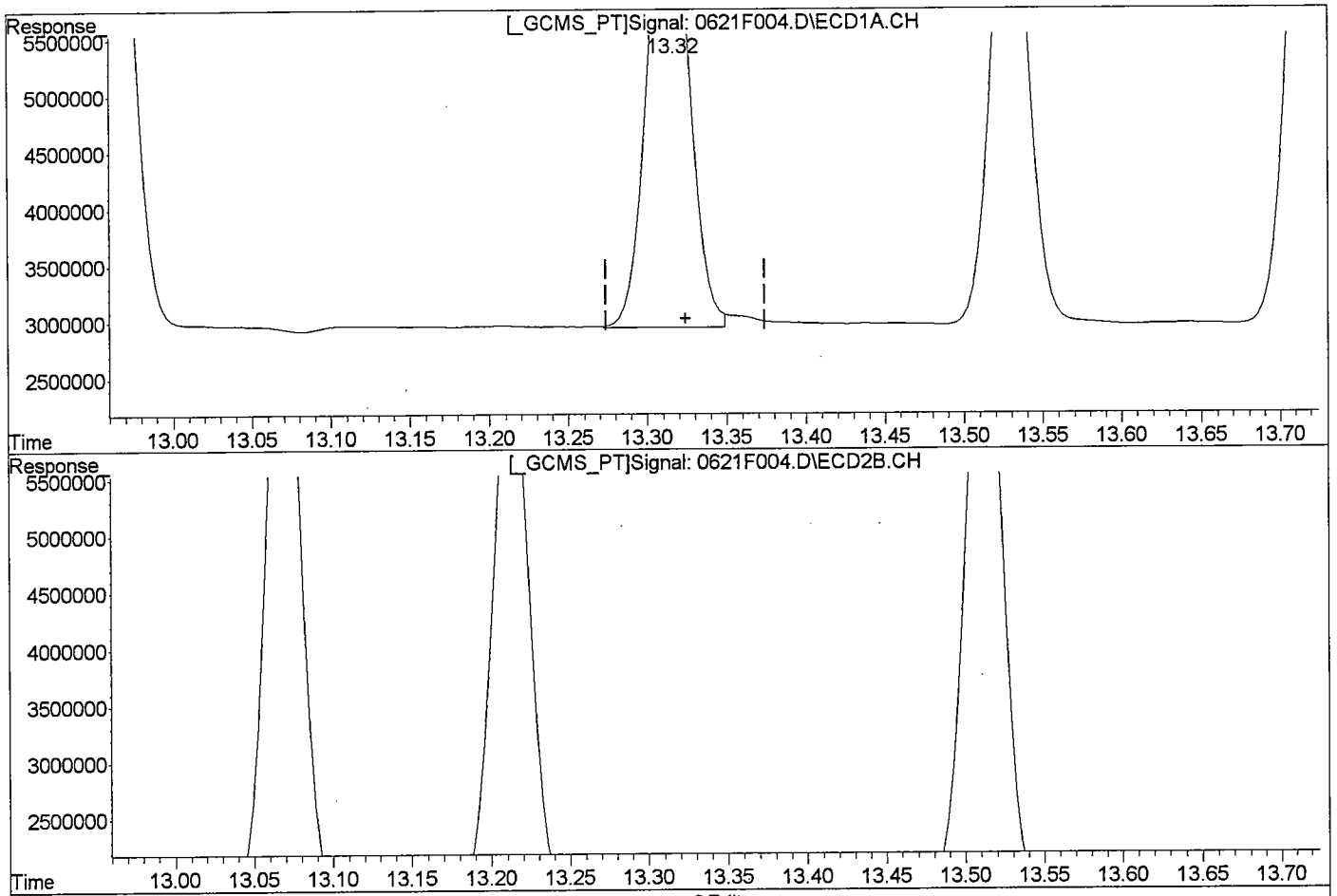
(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:34:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F004.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F004.D\ECD2B.CH
Acq On : 21 Jun 2007 5:36 pm Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(16) Endrin

13.32min 48.943ug/L m

response 7550632

(16) Endrin #2

12.47min 52.251ug/L

response 9161204

After Initials [illegible]

JUN 22 2007

☐ Wrong Peak/Peak not Found
☒ Baseline/Shoulder Incorrect
☐ Other

(+) = Expected Retention Time

0621F004.D 061107-8081.M Fri Jun 22 08:34:42 2007

Exception Report

Data File: J:\GC23\DATA\062107\0621F005.D
Lab ID: KWG0706945-3
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 18:02
Date Quantitated: 06/22/2007 08:36
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/2007

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\062107\0621F005.D\0621F005C.D
Lab ID: KWG0706945-3
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 18:02
Date Quantitated: 06/22/2007 08:36
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/26/07

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F005.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F005.D\0621F005c.d			**Vial:**	5
Acqu Date:	06/21/2007 18:02	**Quant Date:**	06/22/2007 08:36	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F005.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F005.D\0621F005c.d			**Vial:**	5
Acqu Date:	06/21/2007 18:02	**Quant Date:**	06/22/2007 08:36	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,091	1,101			
Toxaphene {1}	13.16	12.62	1614735m	1369118	1,142	1,144			
Toxaphene {2}	13.23	12.71	1231961m	4620657	1,063	1,104			
Toxaphene {3}	13.38	13.57	2072277m	2762212m	1,030	1,067			
Toxaphene {4}	14.05	13.69	3314626m	722206m	1,135	1,057			
Toxaphene {5}	14.37	13.92	1717676m	4455010m	1,051	1,131			
Toxaphene {6}	14.89	14.11	2046847m	5974159m	1,127	1,107			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F005.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,091	1,000	9.1
Toxaphene {1}		MULTI	AverageRF	100		1.4E+3	1.6E+3	14.2			
Toxaphene {2}		MULTI	AverageRF	100		1.2E+3	1.2E+3	6.3			
Toxaphene {3}		MULTI	AverageRF	100		2.0E+3	2.1E+3	3.0			
Toxaphene {4}		MULTI	AverageRF	100		2.9E+3	3.3E+3	13.5			
Toxaphene {5}		MULTI	AverageRF	100		1.6E+3	1.7E+3	5.1			
Toxaphene {6}		MULTI	AverageRF	100		1.8E+3	2.0E+3	12.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	9.1

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F005.D\0621F005C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,101	1,000	10.1
Toxaphene {1}		MULTI	AverageRF	100		1.2E+3	1.4E+3	14.4			
Toxaphene {2}		MULTI	AverageRF	100		4.2E+3	4.6E+3	10.4			
Toxaphene {3}		MULTI	AverageRF	100		2.6E+3	2.8E+3	6.7			
Toxaphene {4}		MULTI	AverageRF	100		6.8E+2	7.2E+2	5.7			
Toxaphene {5}		MULTI	AverageRF	100		3.9E+3	4.5E+3	13.1			
Toxaphene {6}		MULTI	AverageRF	100		5.4E+3	6.0E+3	10.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	10.1

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:16 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.16	12.62	1614735	1369118	1142.277m	1143.644
26)	Toxaphene {2}	13.23	12.71	1231961	4620657	1063.016m	1103.577
27)	Toxaphene {3}	13.38	13.57	2072277	2762212	1029.535m	1066.889m
28)	Toxaphene {4}	14.05	13.69	3314626	722206	1134.831m	1056.742m
29)	Toxaphene {5}	14.37	13.92	1717676	4455010	1051.190m	1130.650m
30)	Toxaphene {6}	14.89	14.11	2046847	5974159	1126.812m	1106.955m

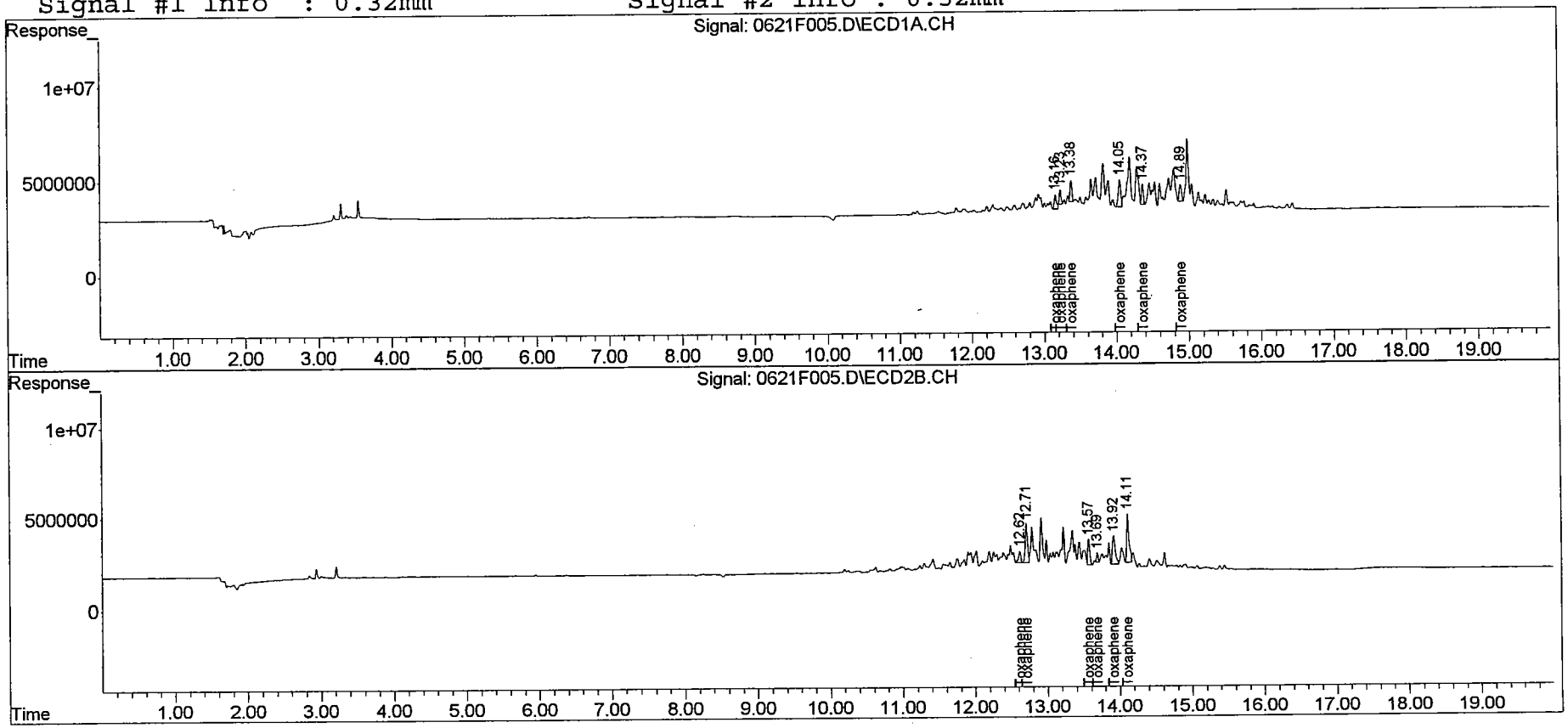
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:36 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

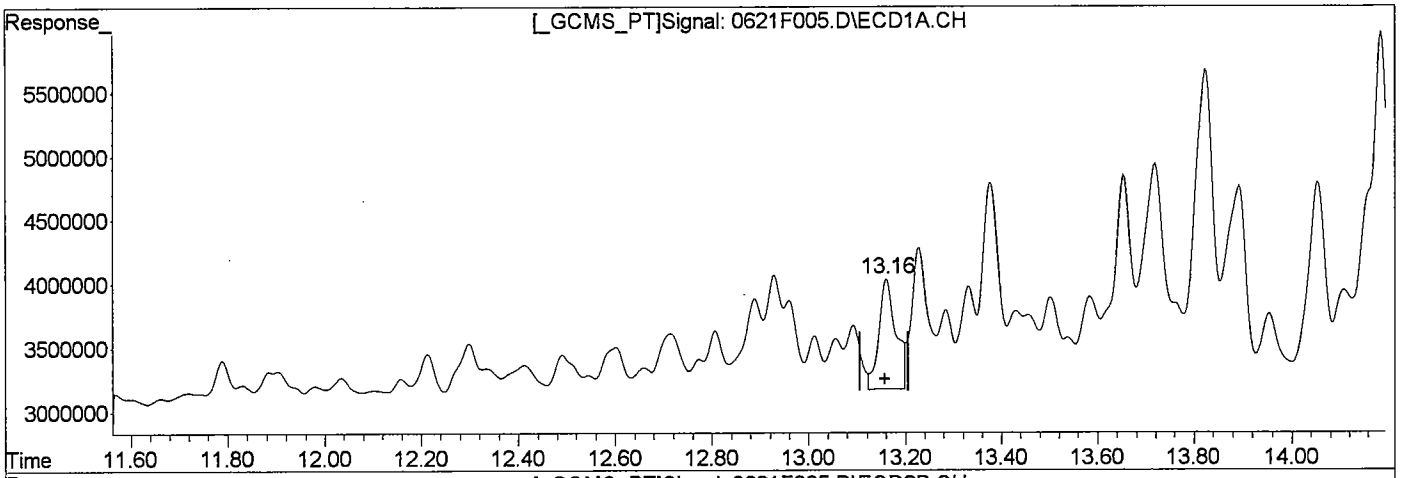
Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

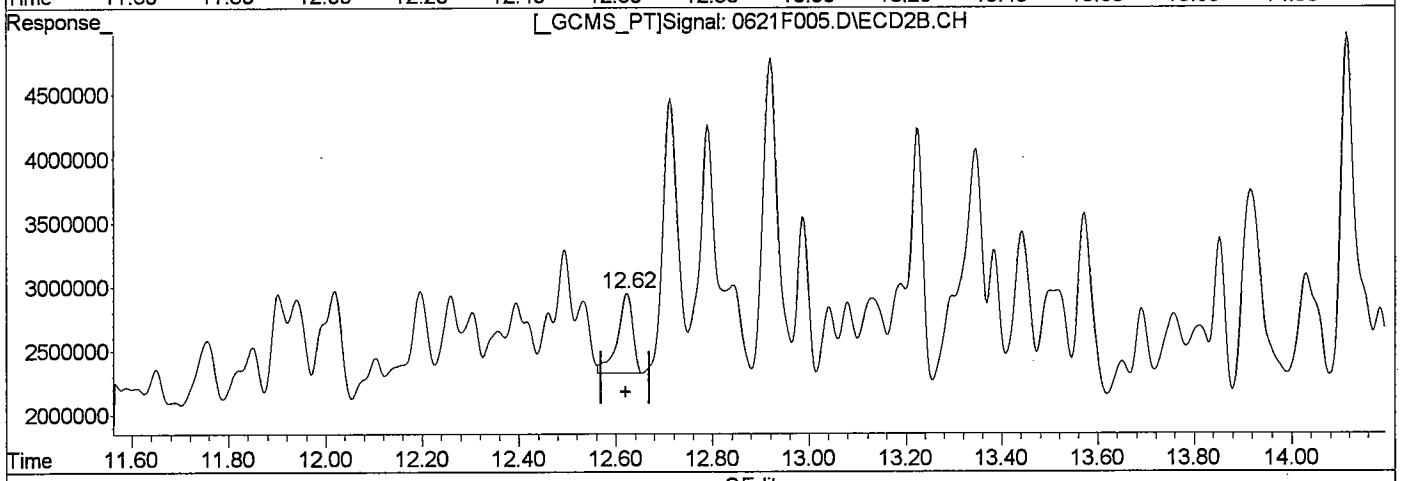


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 1515.401ug/L

response 2142187

(25) Toxaphene #2

12.62min 1143.644ug/L

response 1369118

Before

JUN 2 2 2007

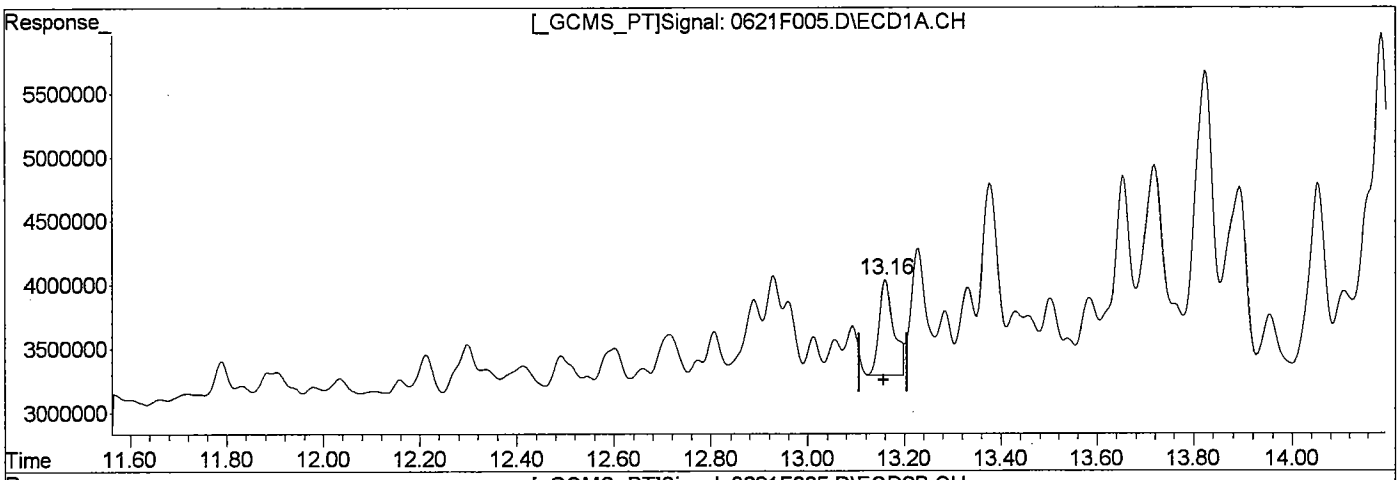
(+) = Expected Retention Time

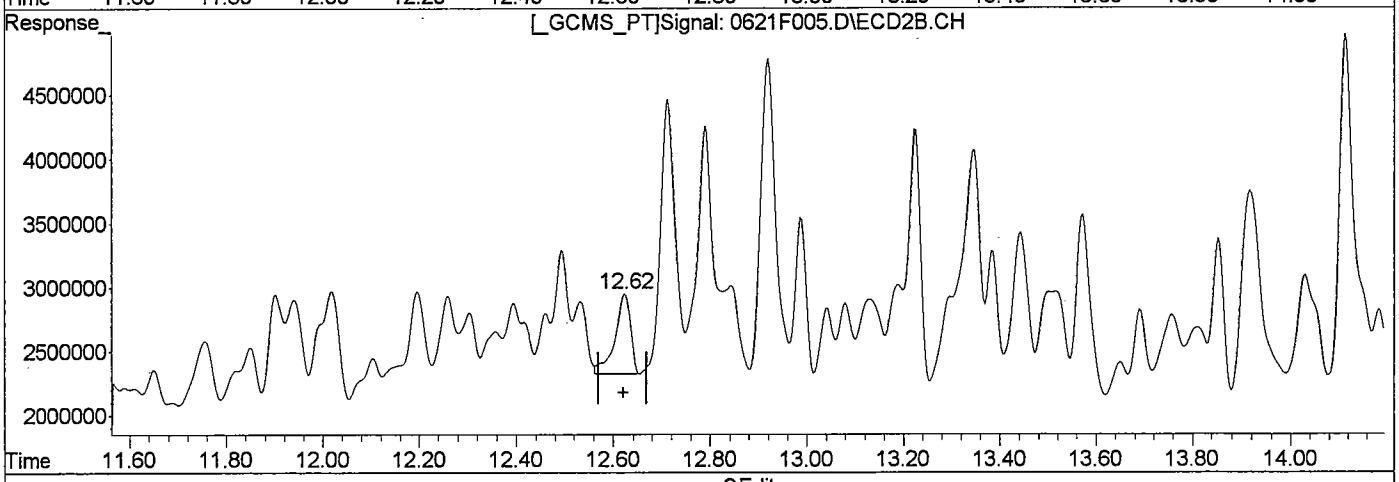
0621F005.D 061107-8081.M Fri Jun 22 08:35:12 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.16min 1142.277ug/L m

response 1614735

(25) Toxaphene #2

12.62min 1143.644ug/L

response 1369118

Auth

JUN 22 2007

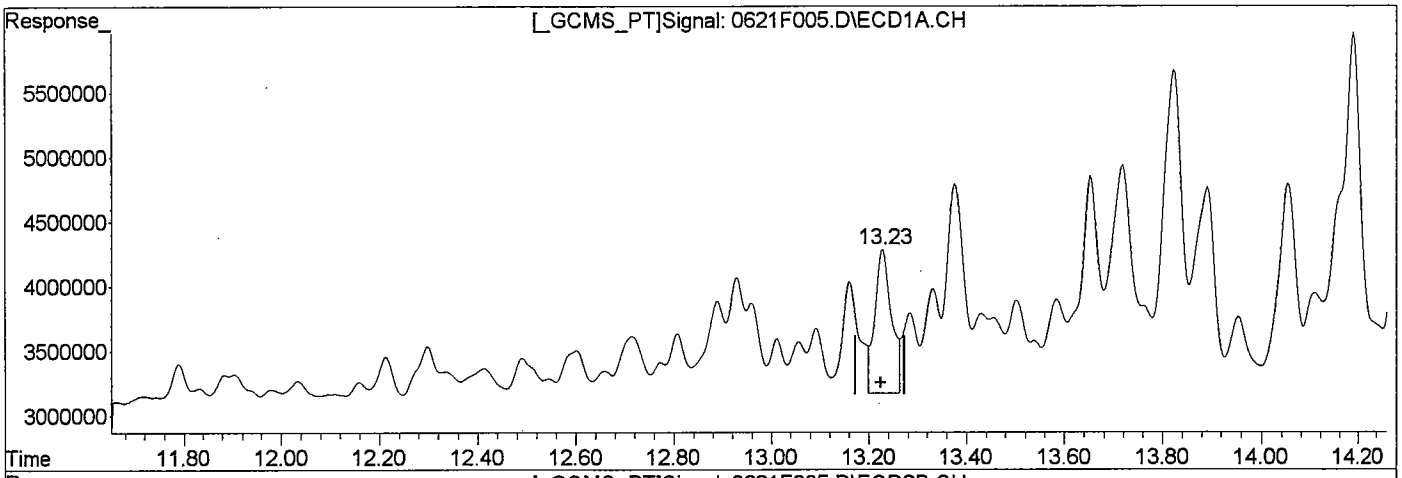
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

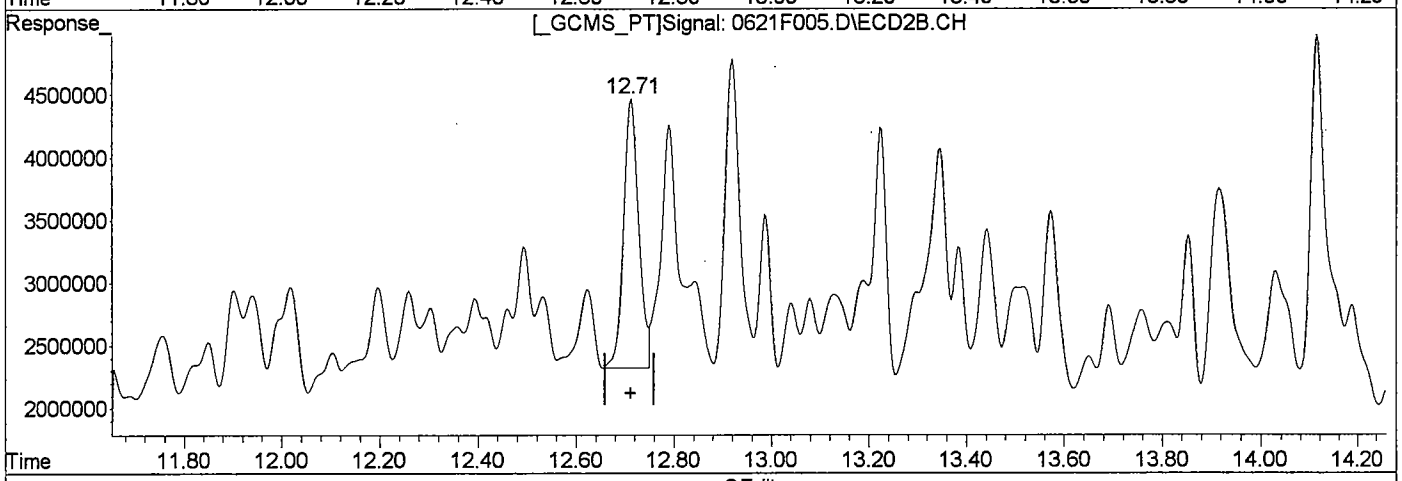
(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:35:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 2246.485ug/L

response 2603519

(26) Toxaphene {2} #2

12.71min 1103.577ug/L

response 4620657

Before

JUN 2 2 2007

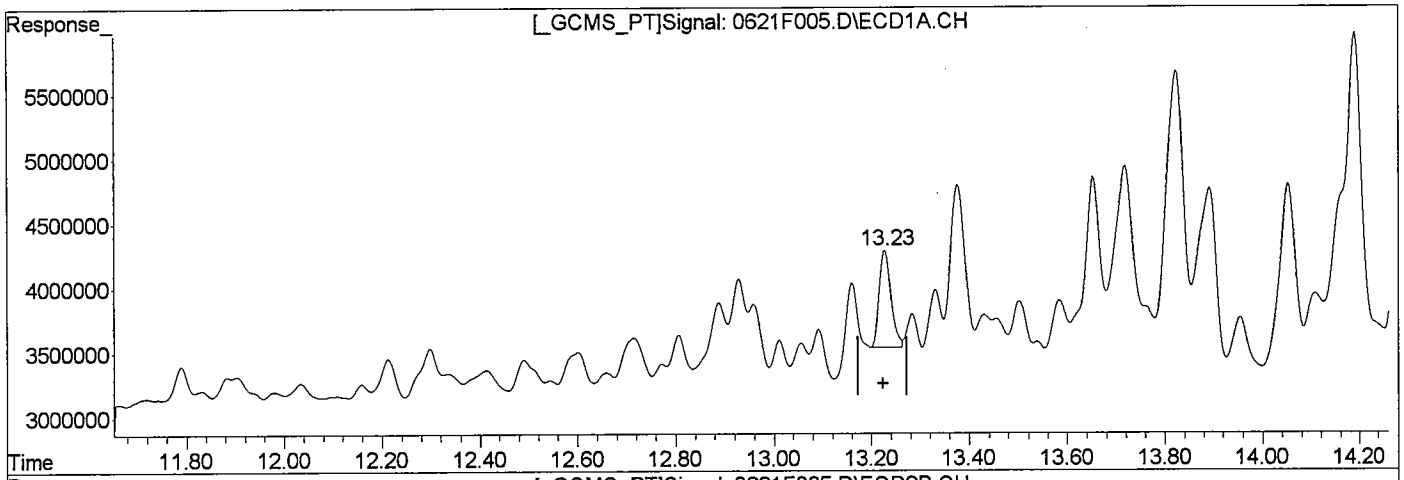
(+) = Expected Retention Time

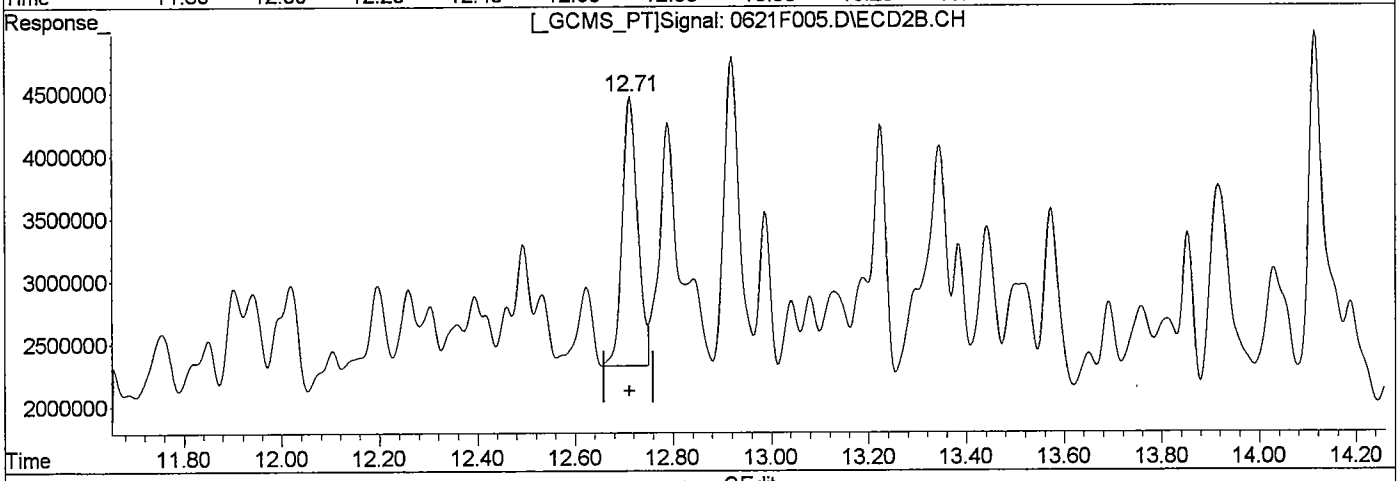
0621F005.D 061107-8081.M Fri Jun 22 08:35:23 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.23min 1063.016ug/L m

response 1231961

(26) Toxaphene {2} #2

12.71min 1103.577ug/L

response 4620657

Analyst [illegible]

JUN 22 2007

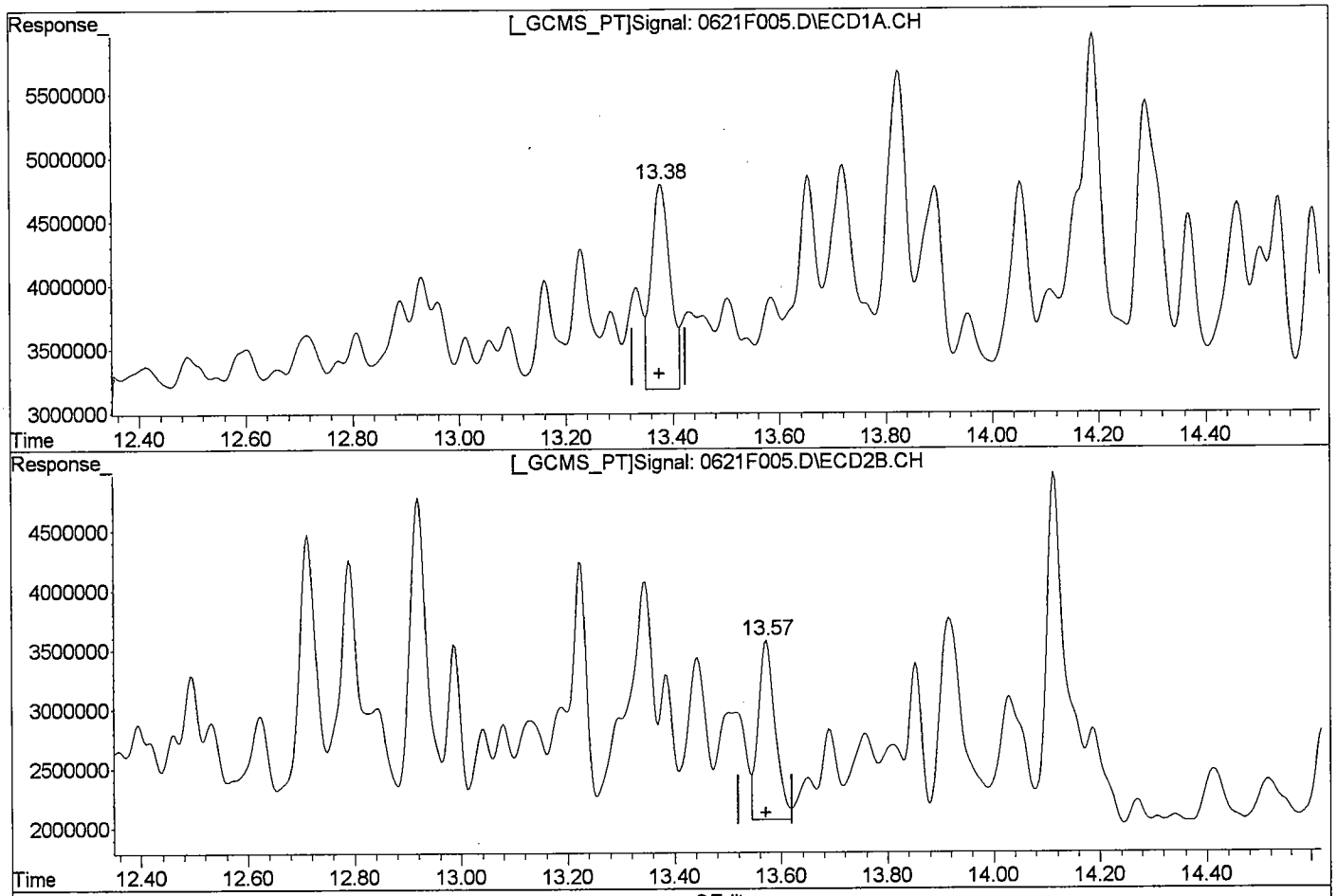
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:35:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.38min 1958.873ug/L

response 3942876

(27) Toxaphene {3} #2

13.57min 1253.839ug/L

response 3246232

Before

JUN 2 2 2007

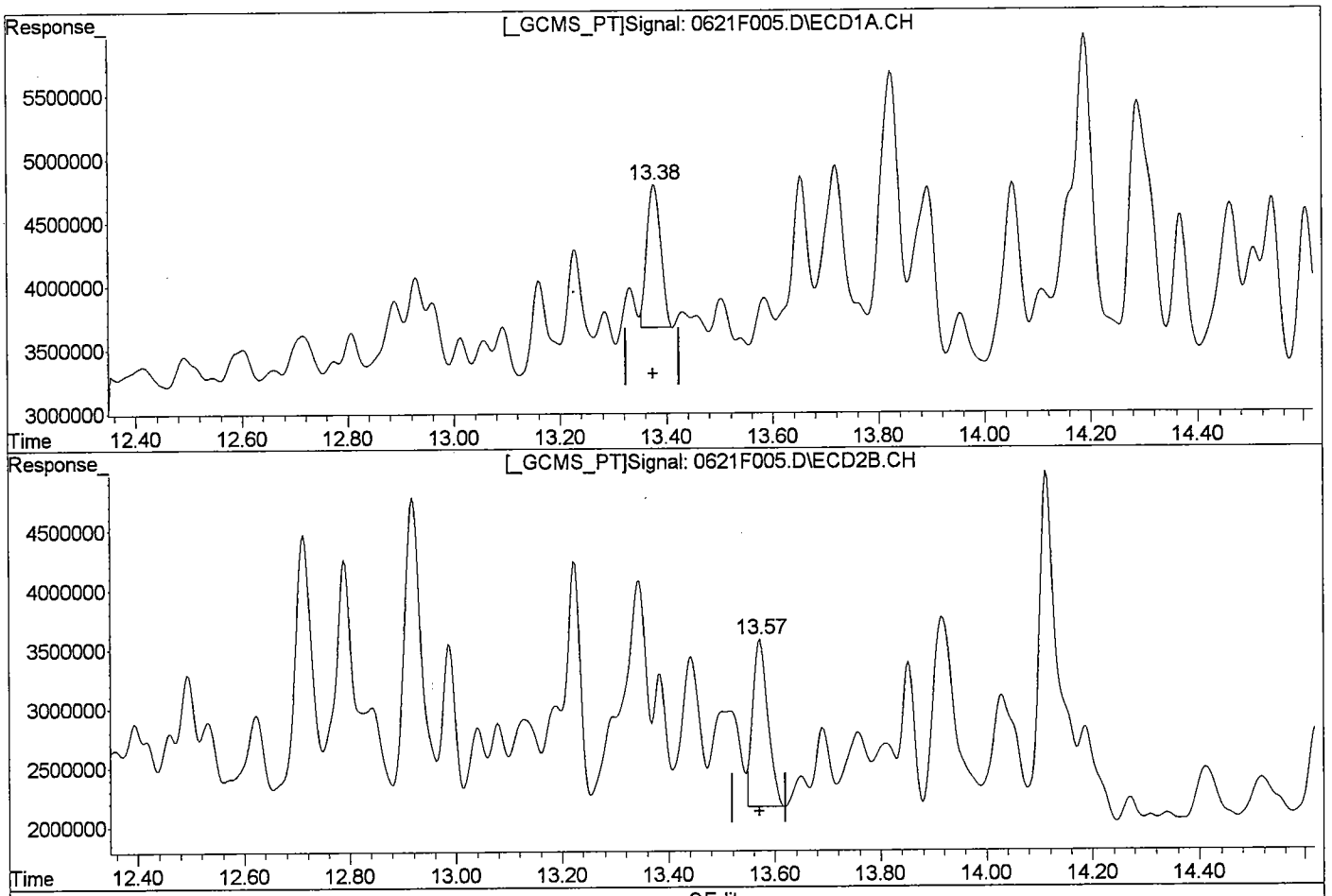
(+) = Expected Retention Time

0621F005.D 061107-8081.M Fri Jun 22 08:35:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(27) Toxaphene {3}

13.38min 1029.535ug/L m

response 2072277

(27) Toxaphene {3} #2

13.57min 1066.889ug/L m

response 2762212

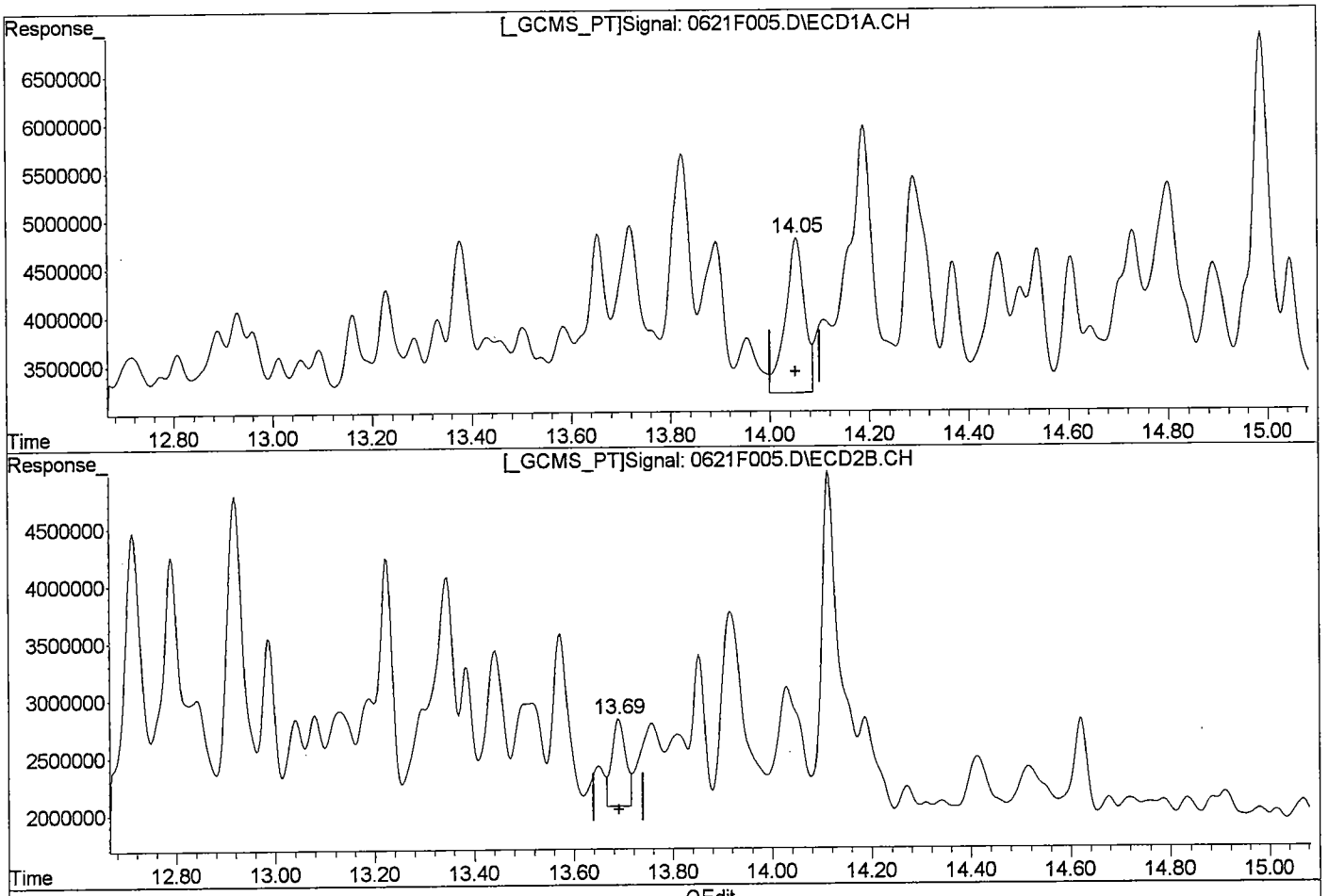
Alter
L... is AC (06/25/07)
JUN 22 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:35:52 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.05min 1469.495ug/L

response 4292116

(28) Toxaphene {4} #2

13.69min 2180.258ug/L

response 1490047

Before

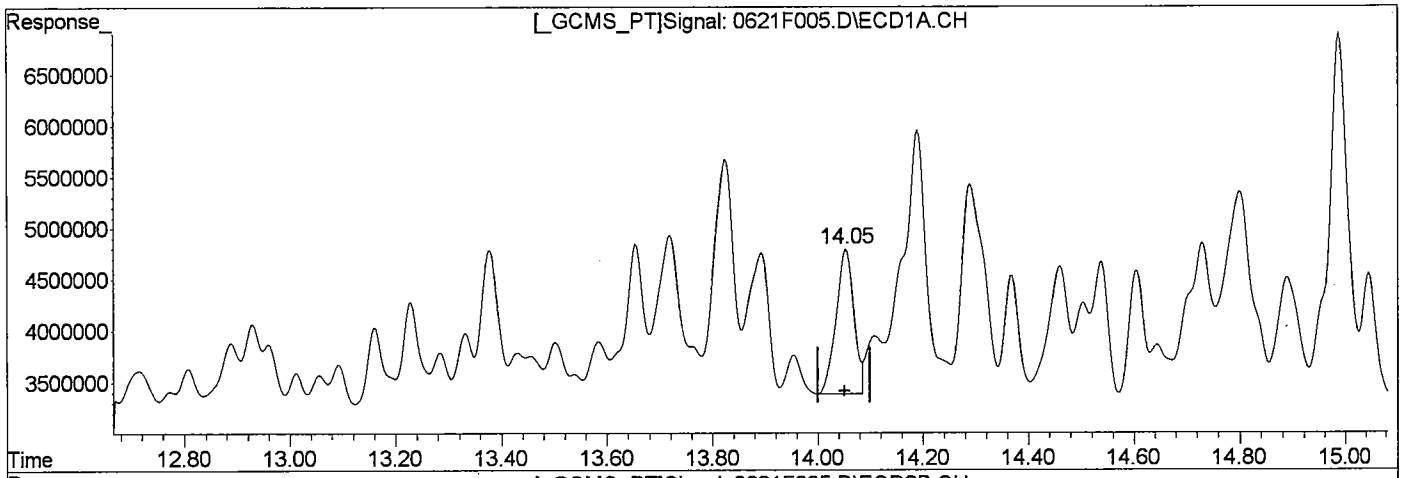
JUN 2 2 2007

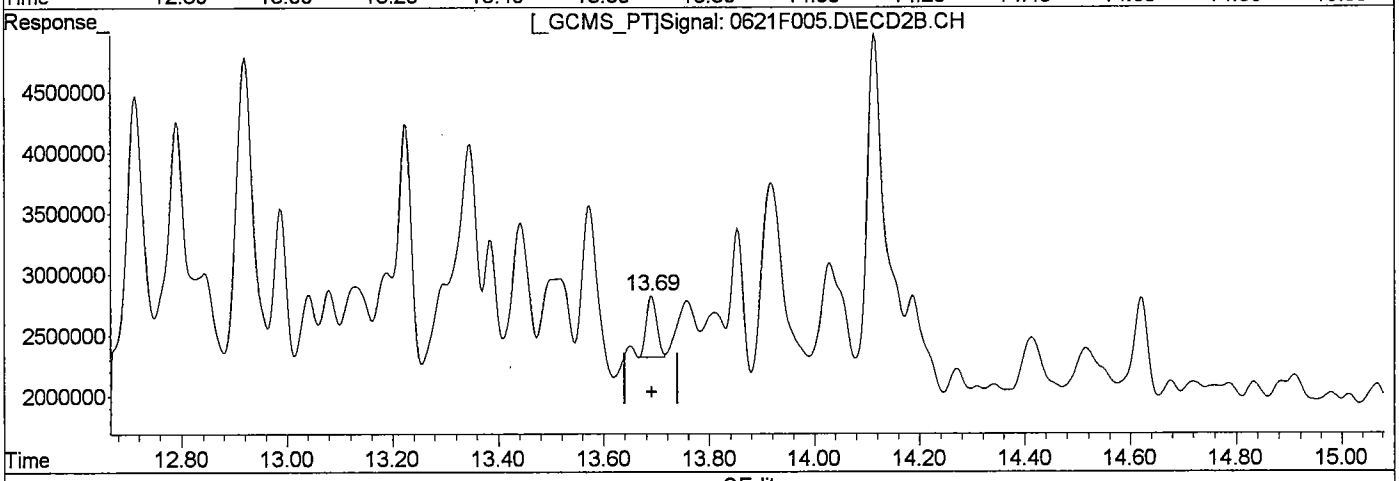
(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:35:56 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.05min 1134.831ug/L m

response 3314626

(28) Toxaphene {4} #2

13.69min 1056.742ug/L m

response 722206

Alter
Initials

JUN 22 2007

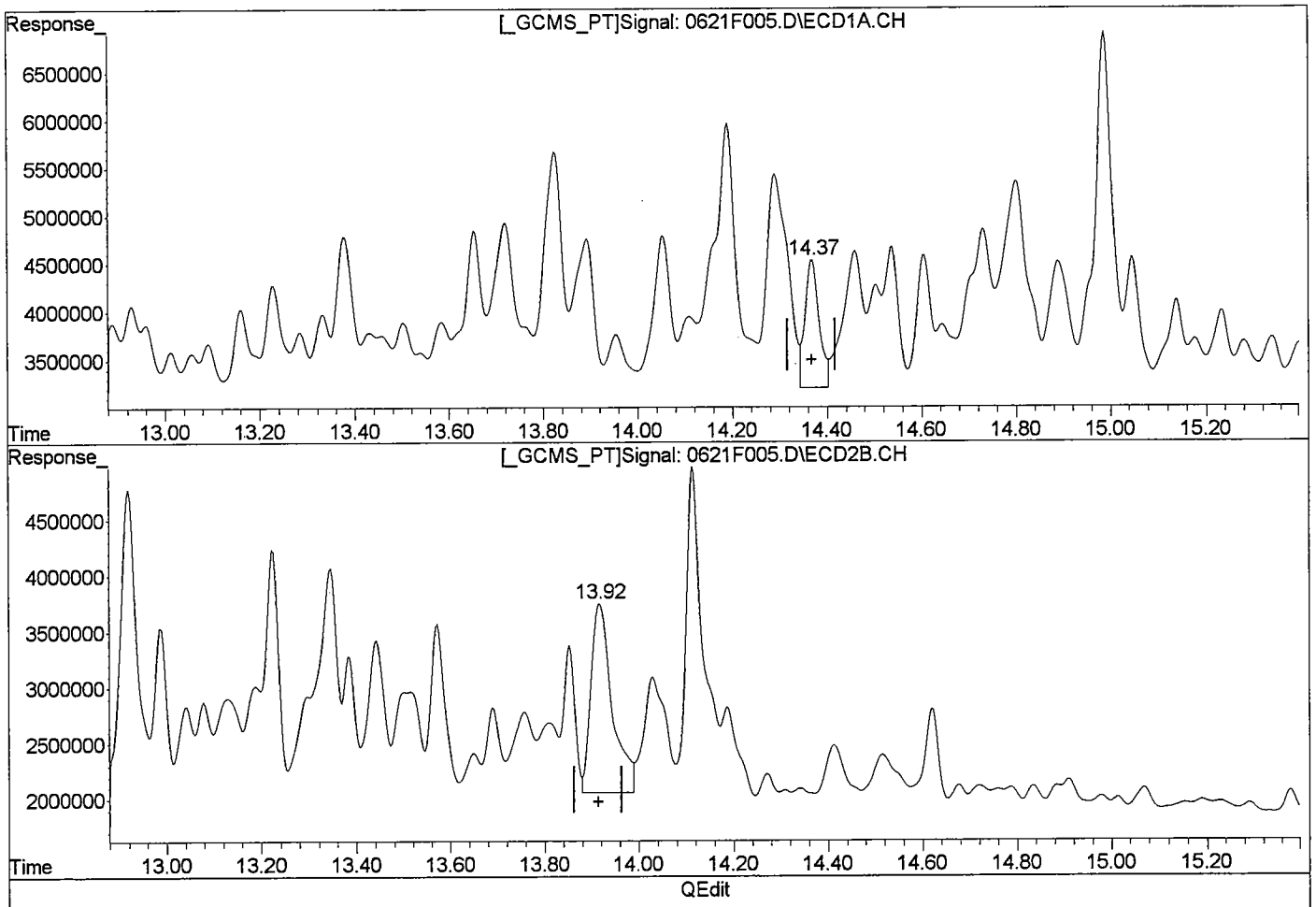
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:36:11 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(29) Toxaphene {5}

14.37min 1710.924ug/L

response 2795702

Before

JUN 2 2 2007

(29) Toxaphene {5} #2

13.92min 1343.080ug/L

response 5292028

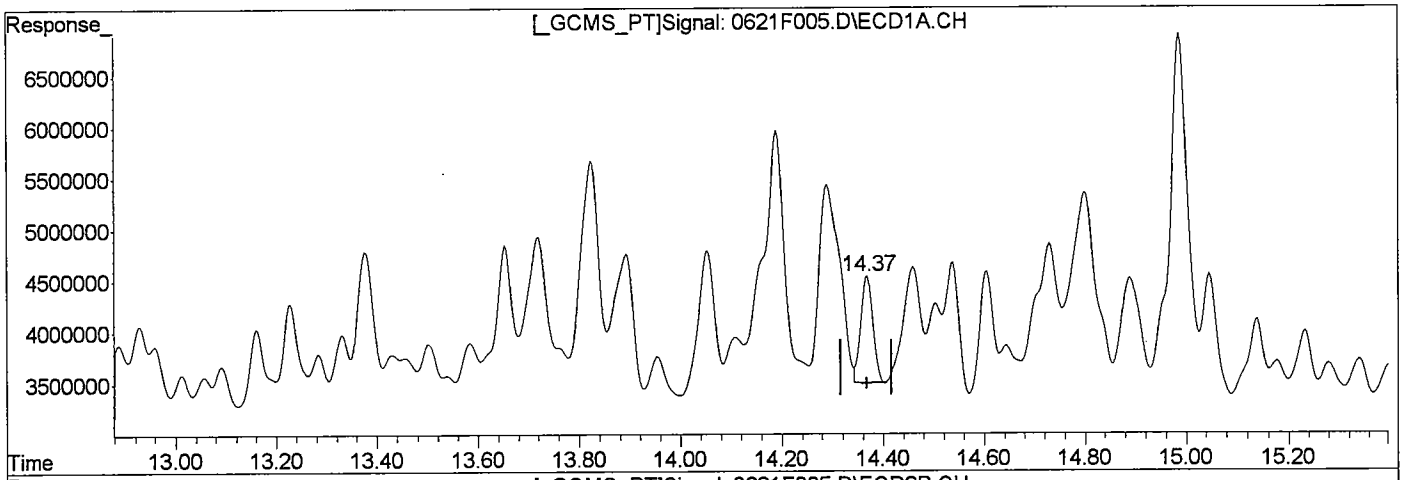
(+) = Expected Retention Time

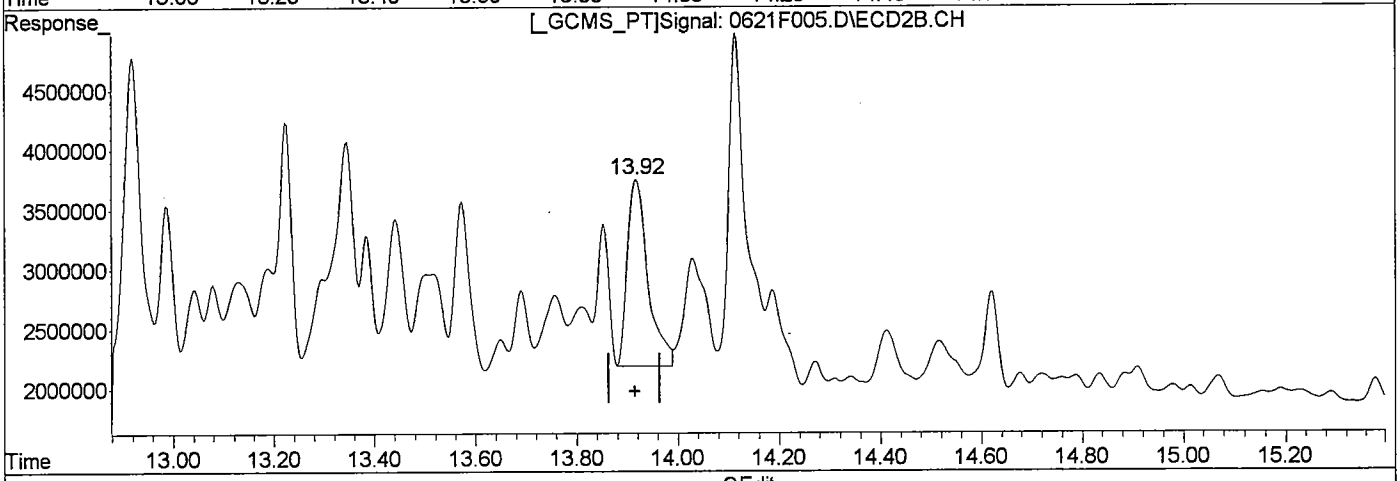
0621F005.D 061107-8081.M Fri Jun 22 08:36:16 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.37min 1051.190ug/L m

response 1717676

(29) Toxaphene {5} #2

13.92min 1130.650ug/L m

response 4455010

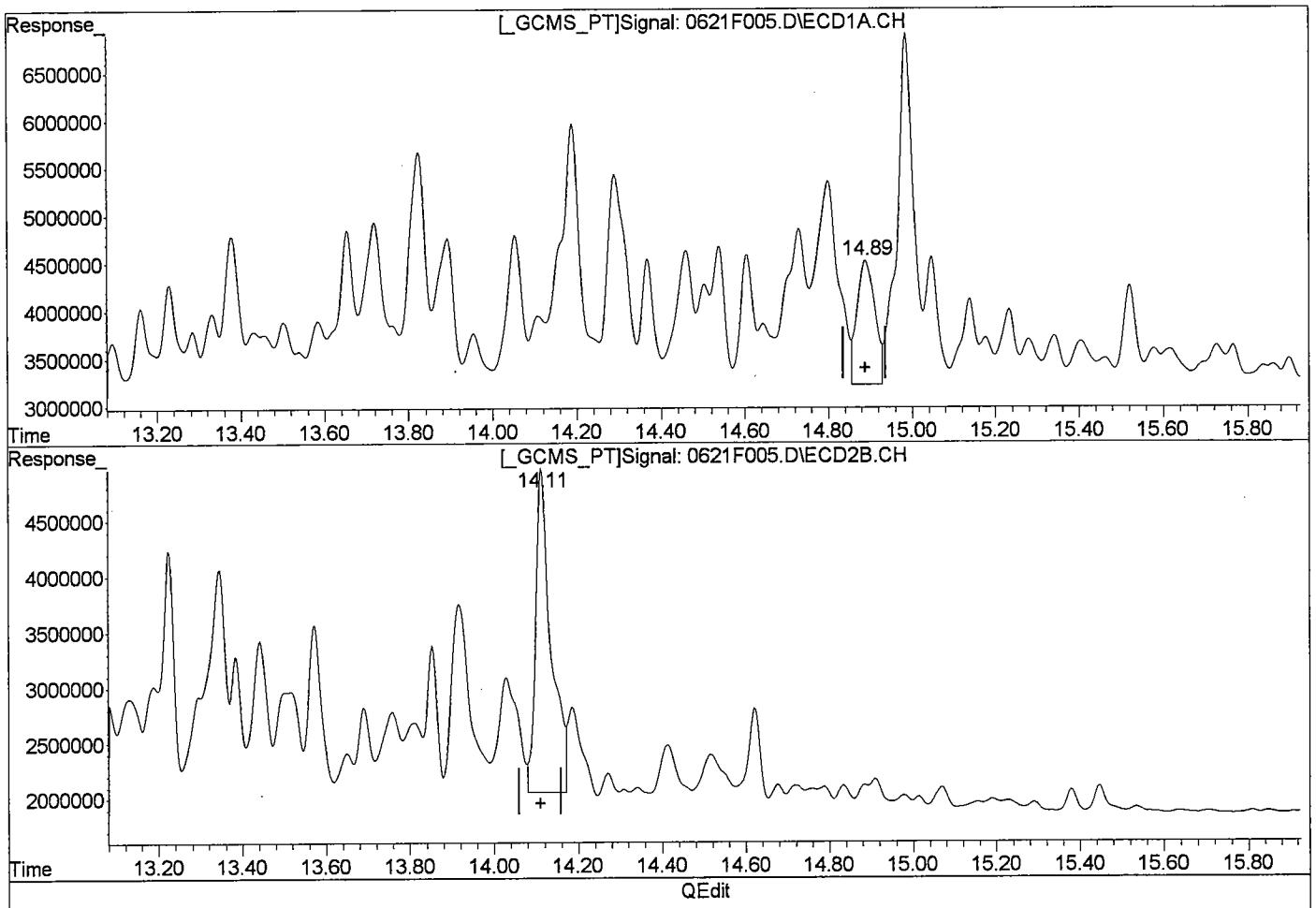
Alter
Initials
JUN 22 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:36:35 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(30) Toxaphene {6}

14.89min 2120.976ug/L

response 3852739

(30) Toxaphene {6} #2

14.11min 1372.176ug/L

response 7405539

Before

JUN 2 2 2007

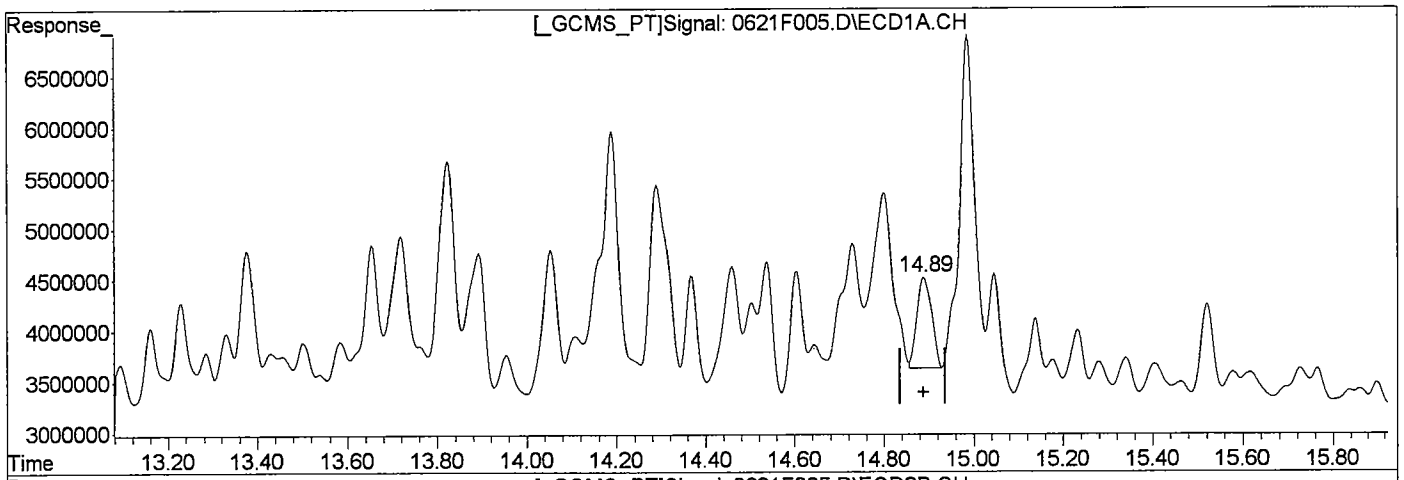
(+) = Expected Retention Time

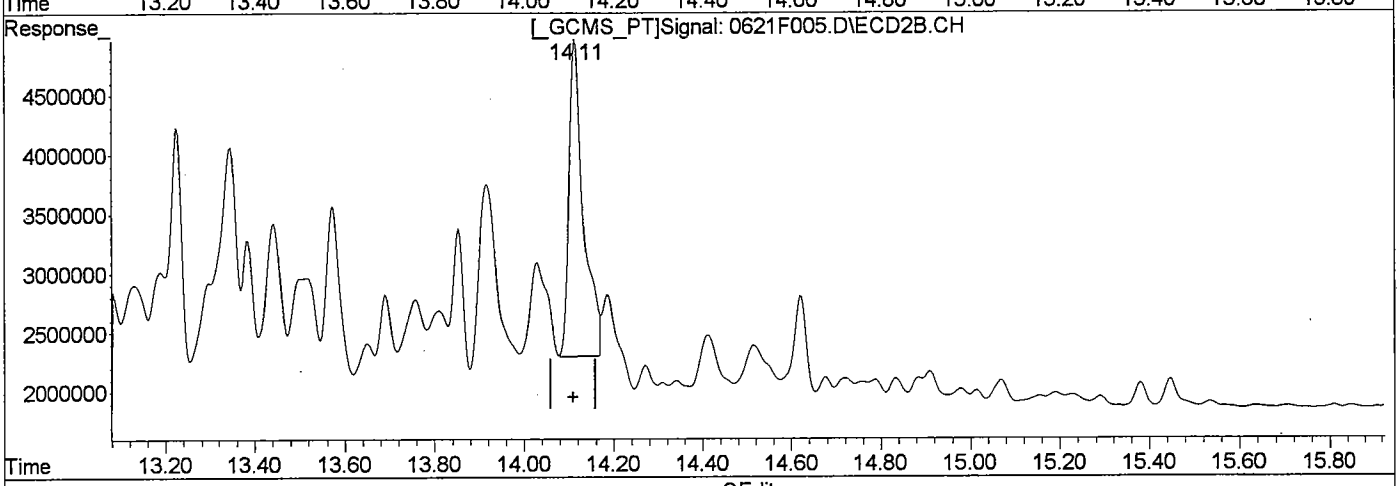
0621F005.D 061107-8081.M Fri Jun 22 08:36:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F005.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F005.D\ECD2B.CH
Acq On : 21 Jun 2007 6:02 pm Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-3 Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.89min 1126.812ug/L m

response 2046847

(30) Toxaphene {6} #2

14.11min 1106.955ug/L m

response 5974159

Auto Int's

JUN 22 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F005.D 061107-8081.M Fri Jun 22 08:36:54 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F021.D
J:\GC23\DATA\062107\0621F022.D

Column ID: DB XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	51	200000	204000	2	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	49	278000	270000	-3	NA	± 15 %	AverageRF
alpha-BHC	50	55	230000	253000	10	NA	± 15 %	AverageRF
beta-BHC	50	54	107000	115000	7	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	54	217000	236000	9	NA	± 15 %	AverageRF
delta-BHC	50	55	197000	216000	9	NA	± 15 %	AverageRF
Heptachlor	50	54	201000	217000	8	NA	± 15 %	AverageRF
Aldrin	50	53	174000	185000	6	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	53	170000	179000	6	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	168000	175000	5	NA	± 15 %	AverageRF
Endosulfan I	50	52	153000	160000	4	NA	± 15 %	AverageRF
alpha-Chlordane	50	52	167000	174000	5	NA	± 15 %	AverageRF
Dieldrin	50	53	165000	176000	6	NA	± 15 %	AverageRF
4,4'-DDE	50	53	153000	161000	5	NA	± 15 %	AverageRF
Endrin	50	53	154000	164000	7	NA	± 15 %	AverageRF
Endosulfan II	50	52	184000	192000	4	NA	± 15 %	AverageRF
4,4'-DDD	50	53	150000	160000	7	NA	± 15 %	AverageRF
Endrin Aldehyde	50	53	166000	175000	6	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	52	225000	235000	5	NA	± 15 %	AverageRF
4,4'-DDT	50	55	184000	202000	10	NA	± 15 %	AverageRF
Endrin Ketone	50	51	298000	307000	3	NA	± 15 %	AverageRF
Methoxychlor	50	52	135000	141000	5	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1200	1410	1680	19	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1200	1160	1390	20	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2010	2290	14	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1300	2920	3840	31	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1200	1630	2000	22	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1300	1820	2290	26	NA	± 100 %	AverageRF
Toxaphene	1000	1200	NA	NA	NA	22 *	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/22/2007

Continuing Calibration Verification Summary
Organochlorine Pesticides

Calibration Type: External Standard
Analysis Method: 8081A
CCV Standard ID: GCPS5-92H

Calibration Date: 06/11/2007
Calibration ID: CAL6343
Analysis Lot: KWG0706945
Units: ug/L

File ID: J:\GC23\DATA\062107\0621F021.D\0621F021C.D
J:\GC23\DATA\062107\0621F022.D\0621F022C.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetrachloro-m-xylene	50	53	179000	191000	6	NA	± 15 %	AverageRF
Decachlorobiphenyl	50	48	185000	176000	-5	NA	± 15 %	AverageRF
alpha-BHC	50	55	235000	259000	10	NA	± 15 %	AverageRF
beta-BHC	50	53	108000	114000	5	NA	± 15 %	AverageRF
gamma-BHC (Lindane)	50	55	223000	245000	10	NA	± 15 %	AverageRF
delta-BHC	50	56	212000	236000	11	NA	± 15 %	AverageRF
Heptachlor	50	54	227000	244000	7	NA	± 15 %	AverageRF
Aldrin	50	54	199000	215000	8	NA	± 15 %	AverageRF
Heptachlor Epoxide	50	53	201000	212000	6	NA	± 15 %	AverageRF
gamma-Chlordane	50	52	203000	212000	4	NA	± 15 %	AverageRF
Endosulfan I	50	51	185000	191000	3	NA	± 15 %	AverageRF
alpha-Chlordane	50	53	197000	207000	5	NA	± 15 %	AverageRF
Dieldrin	50	53	195000	205000	5	NA	± 15 %	AverageRF
4,4'-DDE	50	54	185000	201000	9	NA	± 15 %	AverageRF
Endrin	50	53	175000	184000	5	NA	± 15 %	AverageRF
Endosulfan II	50	51	181000	184000	1	NA	± 15 %	AverageRF
4,4'-DDD	50	53	153000	162000	6	NA	± 15 %	AverageRF
Endrin Aldehyde	50	52	151000	157000	4	NA	± 15 %	AverageRF
Endosulfan Sulfate	50	51	181000	187000	3	NA	± 15 %	AverageRF
4,4'-DDT	50	54	163000	176000	8	NA	± 15 %	AverageRF
Endrin Ketone	50	52	210000	217000	3	NA	± 15 %	AverageRF
Methoxychlor	50	54	94100	102000	9	NA	± 15 %	AverageRF
Toxaphene {1}	1000	1100	1200	1300	8	NA	± 100 %	AverageRF
Toxaphene {2}	1000	1100	4190	4760	14	NA	± 100 %	AverageRF
Toxaphene {3}	1000	1100	2590	2840	10	NA	± 100 %	AverageRF
Toxaphene {4}	1000	1100	683	728	7	NA	± 100 %	AverageRF
Toxaphene {5}	1000	1100	3940	4400	12	NA	± 100 %	AverageRF
Toxaphene {6}	1000	1100	5400	5970	11	NA	± 100 %	AverageRF
Toxaphene	1000	1100	NA	NA	NA	10	± 15 %	NA

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\GC23\DATA\062107\0621F021.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:04
Date Quantitated: 06/22/2007 08:41
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/2007

Secondary Review:

Exception Report

Data File: J:\GC23\DATA\062107\0621F021.D\0621F021C.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:04
Date Quantitated: 06/22/2007 08:41
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/6/2007

Secondary Review:

Printed: 06/26/2007 14:39:47
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F021.D\0621F021c.d			**Vial:**	4
Acqu Date:	06/22/2007 01:04	**Quant Date:**	06/22/2007 08:41	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	7.40	10202731	9538486	50.99	53.22			NA
				%Recovery =	NA	NA	Limits =	16-111	
Decachlorobiphenyl	17.12	16.00	13499428	8813417	48.65	47.72			NA
				%Recovery =	NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC	9.20	8.43	12632052	12938312m	54.84	54.99			
Hexachlorobenzene	9.34	8.27	12871253	12775102	52.37	52.04			
beta-BHC	10.21	9.45	5739348	5684089	53.53	52.73			
gamma-BHC (Lindane)	9.75	9.05	11781511	12270233	54.35	55.14			
delta-BHC	10.63	9.90	10775559	11783848	54.60	55.65			
Heptachlor	10.72	9.62	10851627	12186458	53.89	53.72			
Aldrin	11.24	10.12	9239284	10740087	53.20	53.94			
Isodrin	11.77	10.76	7760328	9113099	52.38	52.78			
Heptachlor Epoxide	11.94	10.97	8969255	10598833	52.78	52.77			
gamma-Chlordane	12.43	11.33	8767689	10602332	52.33	52.21			
Endosulfan I	12.56	11.56	7985120	9536521	52.05	51.47			
alpha-Chlordane	12.51	11.47	8716072	10370255	52.29	52.60			
Dieldrin	12.96	11.99	8780840	10245406	53.25	52.65			
4,4'-DDE	12.74	11.79	8051184	10051231	52.68	54.33			
Endrin	13.31	12.47	8220035m	9221802	53.28	52.60			
Endosulfan II	13.71	12.87	9581180	9204908	52.19	50.74			
4,4'-DDD	13.53	12.66	8008039	8116873	53.36	53.19			
Endrin Aldehyde	13.88	13.21	8749525	7825367	52.79	51.81			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F021.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F021.D\0621F021c.d			**Vial:**	4
Acqu Date:	06/22/2007 01:04	**Quant Date:**	06/22/2007 08:41	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate	14.30	13.51	11770027	9335692	52.35	51.45			
4,4'-DDT	13.98	13.07	10102685	8780231	54.85	53.85			
Endrin Ketone	14.93	14.40	15325886	10867804	51.37	51.73			
Methoxychlor	14.64	14.07	7068701	5114818	52.42	54.37			
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580

DataFile: J:\GC23\DATA\062107\0621F021.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		2.0E+5	2.0E+5	2.0			
alpha-BHC		MS	AverageRF	15		2.3E+5	2.5E+5	9.7			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.6E+5	4.7			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.4E+5	8.7			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	7.1			
delta-BHC		MS	AverageRF	15		2.0E+5	2.2E+5	9.2			
Heptachlor		MS	AverageRF	15		2.0E+5	2.2E+5	7.8			
Aldrin		MS	AverageRF	15		1.7E+5	1.8E+5	6.4			
Isodrin		MS	AverageRF	15		1.5E+5	1.6E+5	4.8			
Heptachlor Epoxide		MS	AverageRF	15		1.7E+5	1.8E+5	5.6			
gamma-Chlordane		MS	AverageRF	15		1.7E+5	1.8E+5	4.7			
alpha-Chlordane		MS	AverageRF	15		1.7E+5	1.7E+5	4.6			
Endosulfan I		MS	AverageRF	15		1.5E+5	1.6E+5	4.1			
4,4'-DDE		MS	AverageRF	15		1.5E+5	1.6E+5	5.4			
Dieldrin		MS	AverageRF	15		1.6E+5	1.8E+5	6.5			
Endrin		MS	AverageRF	15		1.5E+5	1.6E+5	6.6			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.6E+5	6.7			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.9E+5	4.4			
Endrin Aldehyde		MS	AverageRF	15		1.7E+5	1.7E+5	5.6			
4,4'-DDT		MS	AverageRF	15		1.8E+5	2.0E+5	9.7			
Endosulfan Sulfate		MS	AverageRF	15		2.2E+5	2.4E+5	4.7			
Methoxychlor		MS	AverageRF	15		1.3E+5	1.4E+5	4.8			
Endrin Ketone		MS	AverageRF	15		3.0E+5	3.1E+5	2.7			
Decachlorobiphenyl		SURR	AverageRF	15		2.8E+5	2.7E+5	-2.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	5.8

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F021.D\0621F021C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Tetrachloro-m-xylene		SURR	AverageRF	15		1.8E+5	1.9E+5	6.4			
Hexachlorobenzene		MS	AverageRF	15		2.5E+5	2.6E+5	4.1			
alpha-BHC		MS	AverageRF	15		2.4E+5	2.6E+5	10.0			
gamma-BHC (Lindane)		MS	AverageRF	15		2.2E+5	2.5E+5	10.3			
beta-BHC		MS	AverageRF	15		1.1E+5	1.1E+5	5.5			
Heptachlor		MS	AverageRF	15		2.3E+5	2.4E+5	7.4			
delta-BHC		MS	AverageRF	15		2.1E+5	2.4E+5	11.3			
Aldrin		MS	AverageRF	15		2.0E+5	2.1E+5	7.9			
Isodrin		MS	AverageRF	15		1.7E+5	1.8E+5	5.6			
Heptachlor Epoxide		MS	AverageRF	15		2.0E+5	2.1E+5	5.5			
gamma-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	4.4			
alpha-Chlordane		MS	AverageRF	15		2.0E+5	2.1E+5	5.2			
Endosulfan I		MS	AverageRF	15		1.9E+5	1.9E+5	2.9			
4,4'-DDE		MS	AverageRF	15		1.8E+5	2.0E+5	8.7			
Dieldrin		MS	AverageRF	15		1.9E+5	2.0E+5	5.3			
Endrin		MS	AverageRF	15		1.8E+5	1.8E+5	5.2			
4,4'-DDD		MS	AverageRF	15		1.5E+5	1.6E+5	6.4			
Endosulfan II		MS	AverageRF	15		1.8E+5	1.8E+5	1.5			
4,4'-DDT		MS	AverageRF	15		1.6E+5	1.8E+5	7.7			
Endrin Aldehyde		MS	AverageRF	15		1.5E+5	1.6E+5	3.6			
Endosulfan Sulfate		MS	AverageRF	15		1.8E+5	1.9E+5	2.9			
Methoxychlor		MS	AverageRF	15		9.4E+4	1.0E+5	8.7			
Endrin Ketone		MS	AverageRF	15		2.1E+5	2.2E+5	3.5			
Decachlorobiphenyl		SURR	AverageRF	15		1.8E+5	1.8E+5	-4.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	6.0

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:34 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
		System Monitoring Compounds						
1)	s	Tetrachloro-m-xy	8.51	7.40	10202731	9538486	50.990	53.223
24)	s	Decachlorobiphen	17.12	16.00	13499428	8813417	48.645	47.722
		Target Compounds						
2)		alpha-BHC	9.20	8.43	12632052	12938312	54.838	54.985m
3)		Hexachlorobenzen	9.34	8.27	12871253	12775102	52.373	52.040
4)		beta-BHC	10.21	9.45	5739348	5684089	53.532	52.726
5)		gamma-BHC (Linda	9.75	9.05	11781511	12270233	54.348	55.140
6)		delta-BHC	10.63	9.90	10775559	11783848	54.599	55.654
7)		Heptachlor	10.72	9.62	10851627	12186458	53.891	53.722
8)		Aldrin	11.24	10.12	9239284	10740087	53.195	53.935
9)		Isodrin	11.77	10.76	7760328	9113099	52.376	52.776
10)		Heptachlor Epoxi	11.94	10.97	8969255	10598833	52.775	52.770
11)		gamma-Chlordane	12.43	11.33	8767689	10602332	52.328	52.206
12)		Endosulfan I	12.56	11.56	7985120	9536521	52.048	51.470
13)		alpha-Chlordane	12.51	11.47	8716072	10370255	52.288	52.601
14)		Dieldrin	12.96	11.99	8780840	10245406	53.247	52.654
15)		4,4'-DDE	12.74	11.79	8051184	10051231	52.683	54.334
16)		Endrin	13.31	12.47	8220035	9221802	53.282m	52.597
17)		Endosulfan II	13.71	12.87	9581180	9204908	52.188	50.735
18)		4,4'-DDD	13.53	12.66	8008039	8116873	53.357	53.186
19)		Endrin Aldehyde	13.88	13.21	8749525	7825367	52.789	51.810
20)		Endosulfan Sulfa	14.30	13.51	11770027	9335692	52.346	51.453
21)		4,4'-DDT	13.98	13.07	10102685	8780231	54.848	53.853
22)		Endrin Ketone	14.93	14.40	15325886	10867804	51.365	51.734
23)		Methoxychlor	14.64	14.07	7068701	5114818	52.415	54.374

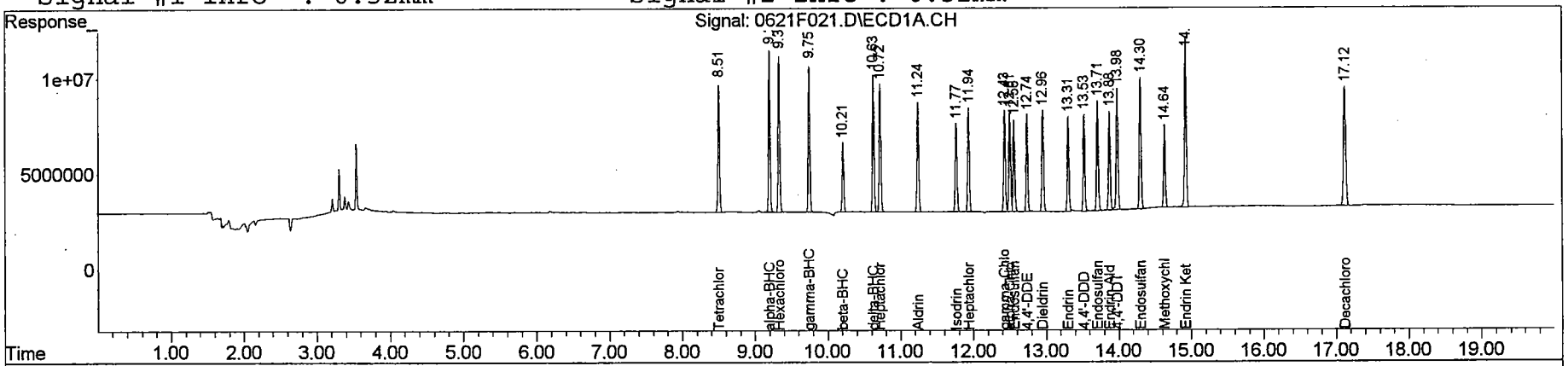
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

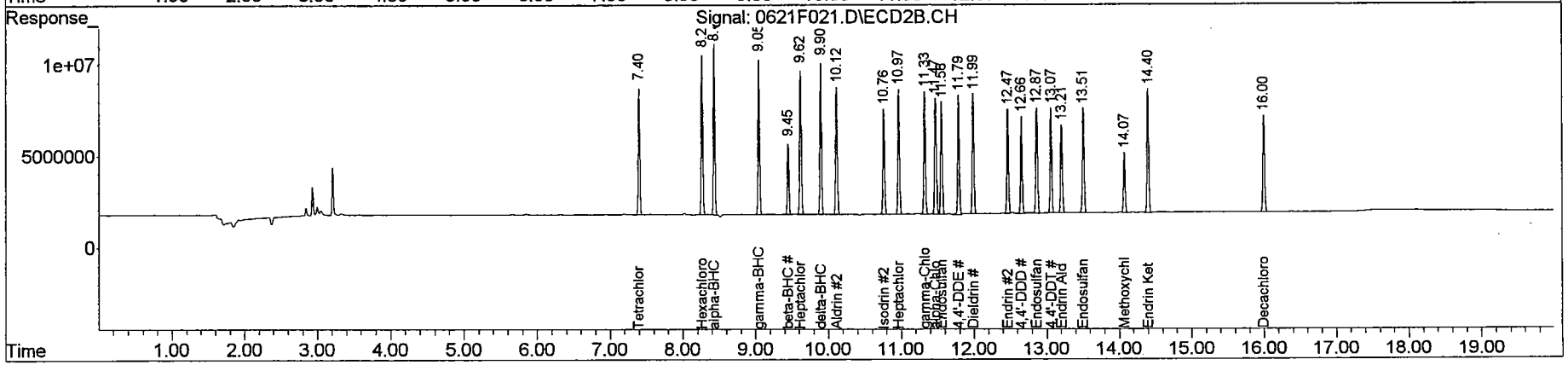
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:41 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

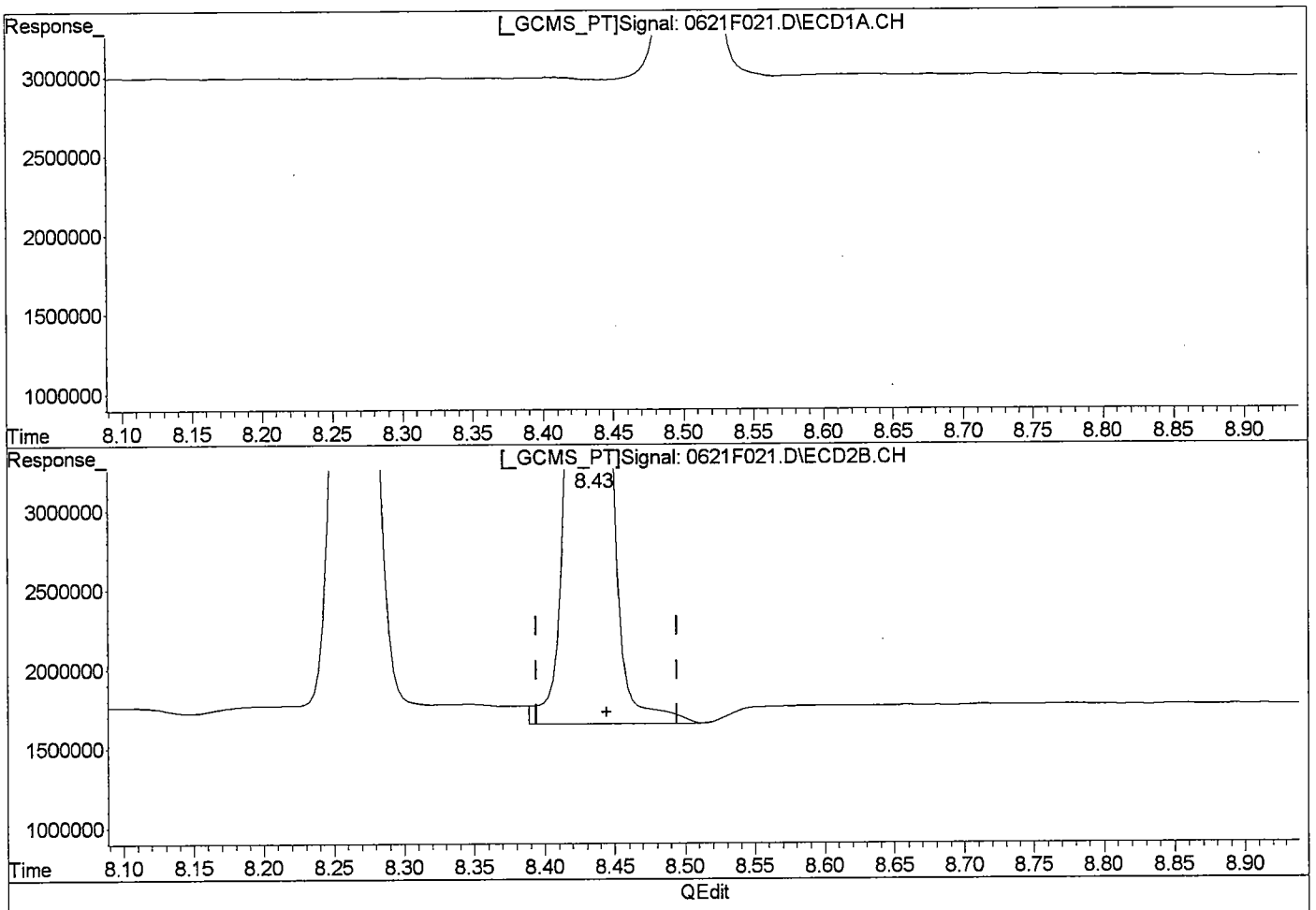




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(2) alpha-BHC
9.20min 54.838ug/L
response 12632052

(2) alpha-BHC #2
8.43min 57.447ug/L
response 13517551

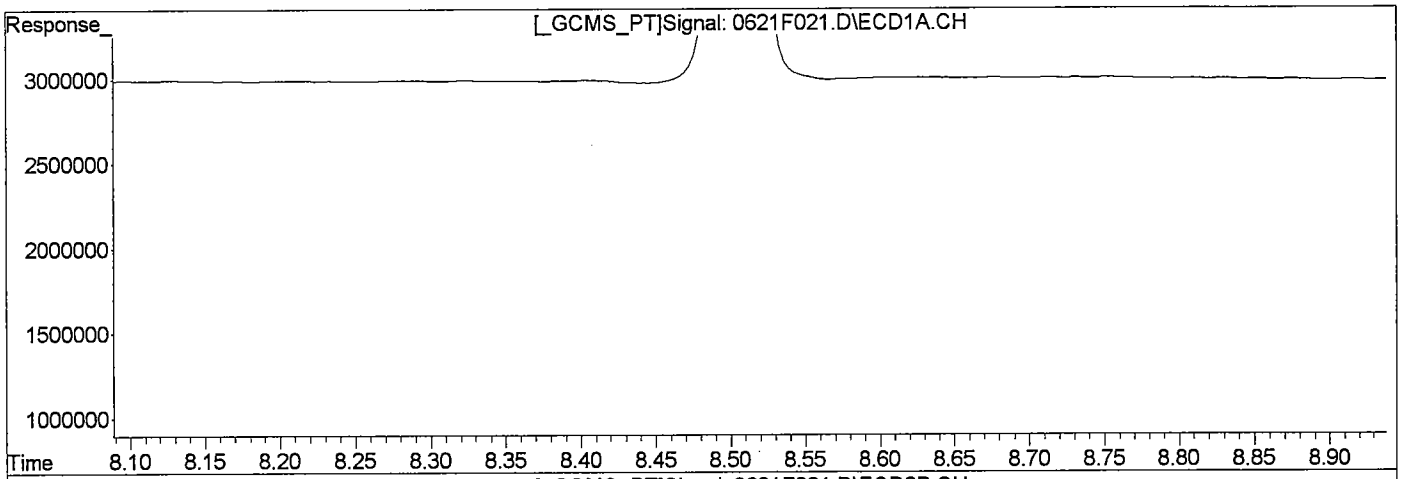
Before
JUN 2 2 2007

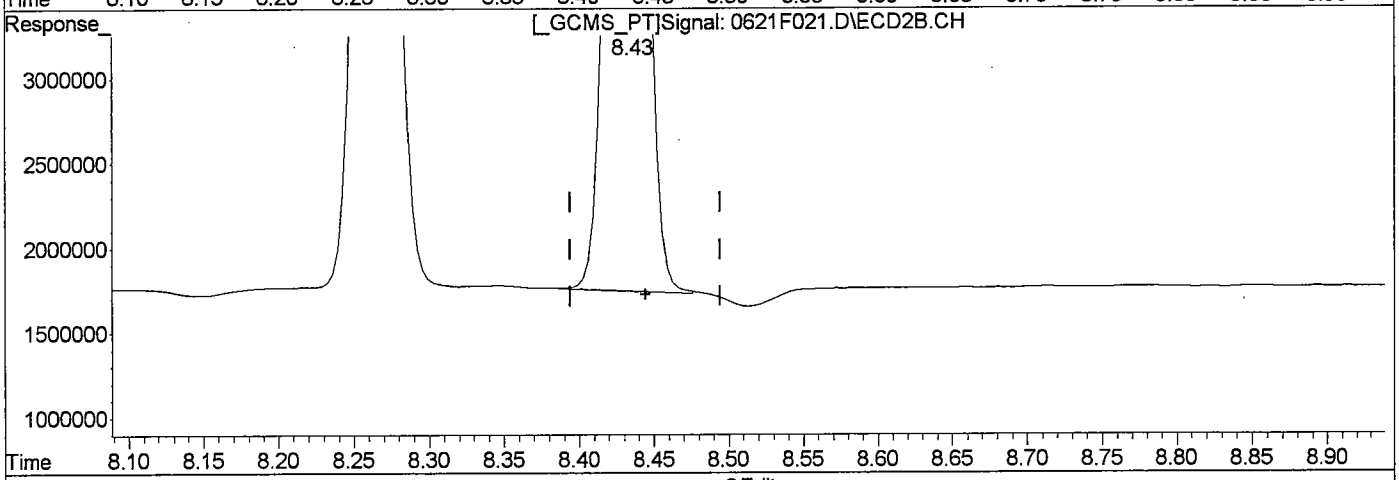
(+) = Expected Retention Time
0621F021.D 061107-8081.M Fri Jun 22 08:41:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(2) alpha-BHC

9.20min 54.838ug/L

response 12632052

(2) alpha-BHC #2

8.43min 54.985ug/L m

response 12938312

Reviewed by: [illegible]

JUN 22 2007

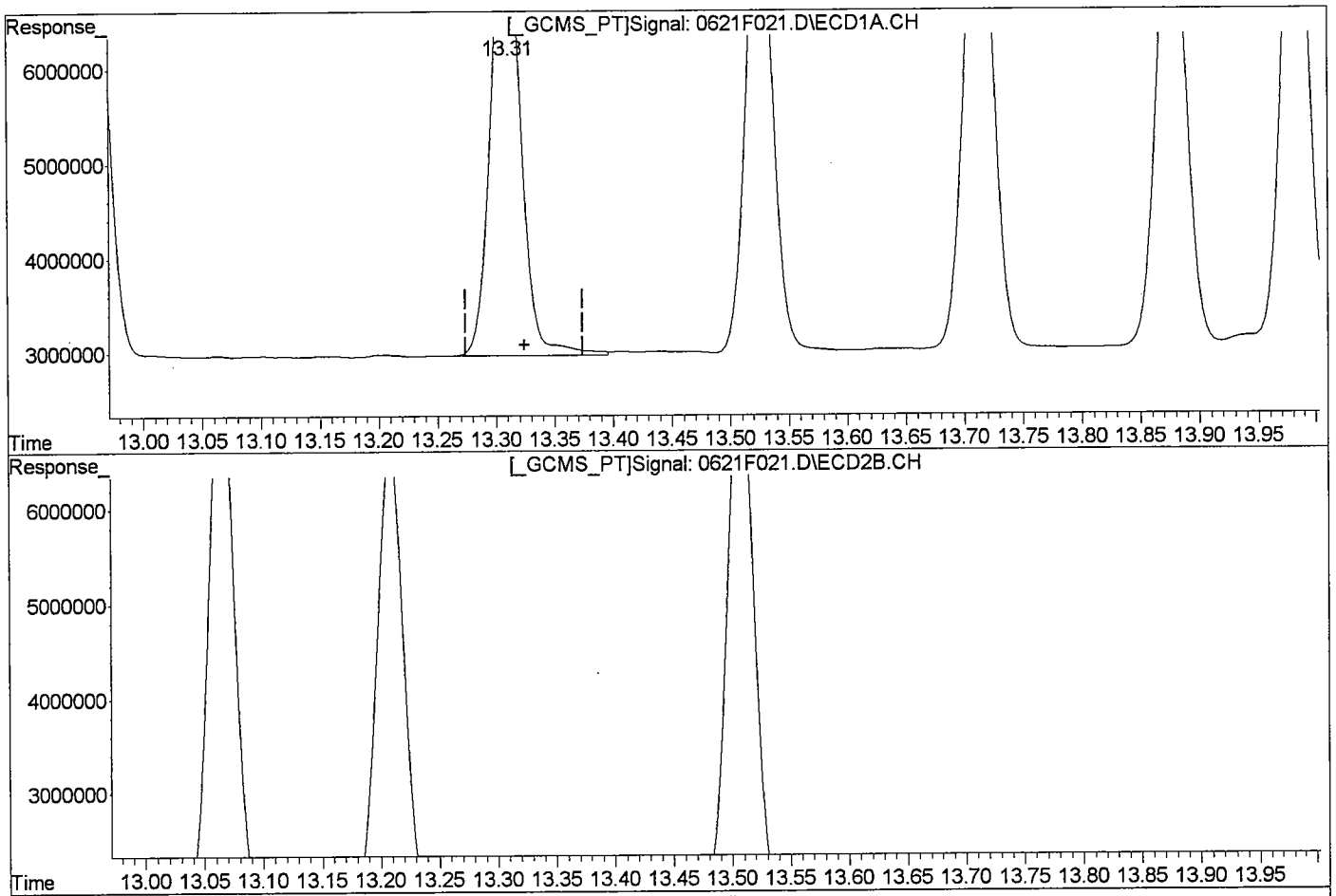
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F021.D 061107-8081.M Fri Jun 22 08:41:26 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(16) Endrin

13.31min 54.781ug/L

response 8451175

(16) Endrin #2

12.47min 52.597ug/L

response 9221802

Before

JUN 2 2 2007

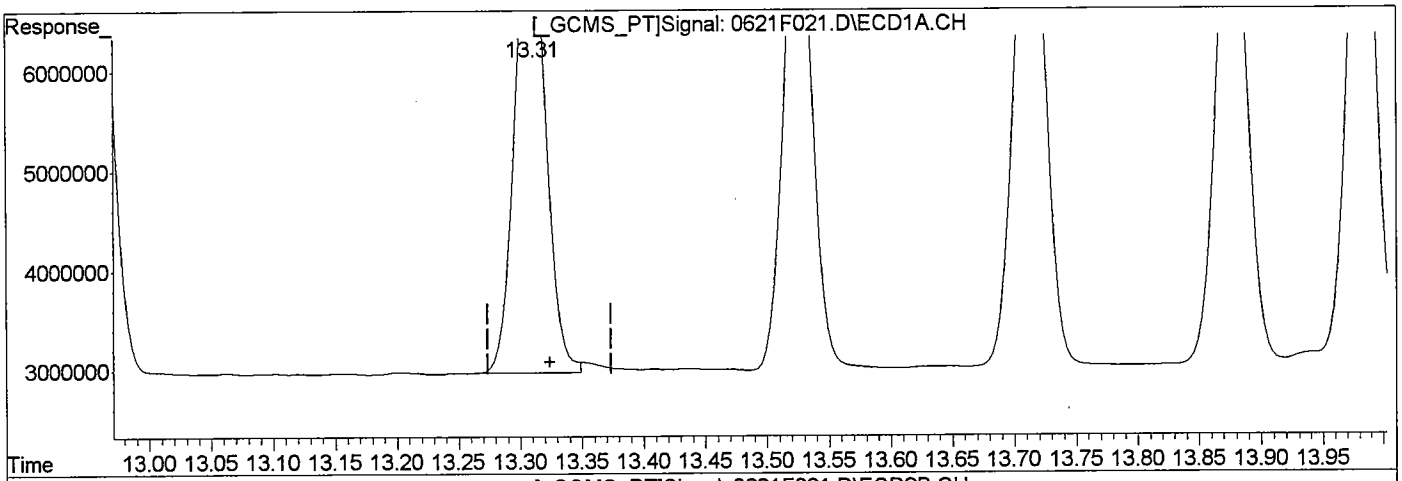
(+) = Expected Retention Time

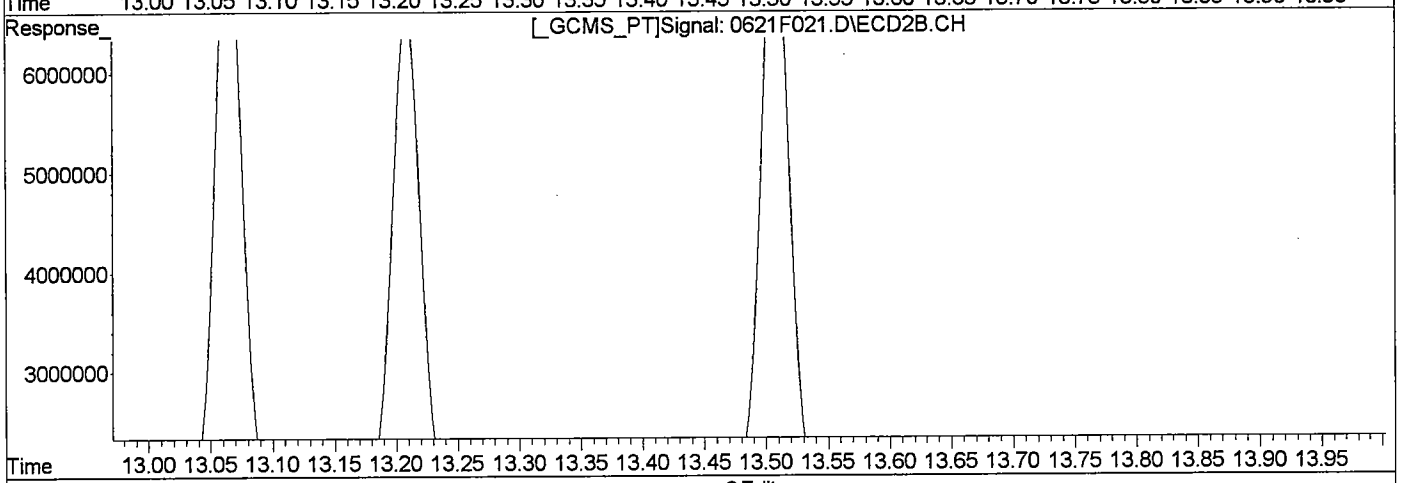
0621F021.D 061107-8081.M Fri Jun 22 08:41:42 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F021.D\ECD1A.CH Vial: 4
Signal #2 : J:\GC23\DATA\062107\0621F021.D\ECD2B.CH
Acq On : 22 Jun 2007 1:04 am Operator: AKamawal
Sample : 8081 @ 50ppb | gcps5-91d | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(16) Endrin

13.31min 53.282ug/L m

response 8220035

(16) Endrin #2

12.47min 52.597ug/L

response 9221802

(+) = Expected Retention Time

0621F021.D 061107-8081.M Fri Jun 22 08:41:48 2007

Exception Report

Data File: J:\GC23\DATA\062107\0621F022.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:30
Date Quantitated: 06/22/2007 08:43
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/07

Secondary Review: 6/28/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F022.D\0621F022C.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:30
Date Quantitated: 06/22/2007 08:43
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: CC 6/26/2007

Secondary Review: in 6/26/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**
Analysis Method:	8081A	**Prep Method:**		
Prep Ref:		**Prep Date:**		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F022.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F022.D\0621F022c.d			**Vial:**	5
Acqu Date:	06/22/2007 01:30	**Quant Date:**	06/22/2007 08:43	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F022.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F022.D\0621F022c.d			**Vial:**	5
Acqu Date:	06/22/2007 01:30	**Quant Date:**	06/22/2007 08:43	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	1,219	1,101			
Toxaphene {1}	13.14	12.61	1676806m	1297760	1,186	1,084			
Toxaphene {2}	13.21	12.70	1387569m	4757631	1,197	1,136			
Toxaphene {3}	13.36	13.56	2289269m	2837988	1,137	1,096			
Toxaphene {4}	14.04	13.67	3839142m	728420m	1,314	1,066			
Toxaphene {5}	14.35	13.90	1996831m	4395967m	1,222	1,116			
Toxaphene {6}	14.87	14.10	2285715m	5972279m	1,258	1,107			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0d	0d	0.0000	0.0000			
Chlordane {2}			0d	0d	0.0000	0.0000			
Chlordane {3}			0d	0d	0.0000	0.0000			
Chlordane {4}			0d	0d	0.0000	0.0000			
Chlordane {5}			0d	0d	0.0000	0.0000			
Chlordane {6}			0d	0d	0.0000	0.0000			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F022.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,219	1,000	21.9 *
Toxaphene {1}		MULTI	AverageRF	100		1.4E+3	1.7E+3	18.6			
Toxaphene {2}		MULTI	AverageRF	100		1.2E+3	1.4E+3	19.7			
Toxaphene {3}		MULTI	AverageRF	100		2.0E+3	2.3E+3	13.7			
Toxaphene {4}		MULTI	AverageRF	100		2.9E+3	3.8E+3	31.4			
Toxaphene {5}		MULTI	AverageRF	100		1.6E+3	2.0E+3	22.2			
Toxaphene {6}		MULTI	AverageRF	100		1.8E+3	2.3E+3	25.8			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	21.9

G.3

6/26/07

2 Compounds Failed CCV Criteria

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F022.D\0621F022C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Toxaphene		TRG	NA	15					1,101	1,000	10.1
Toxaphene {1}		MULTI	AverageRF	100		1.2E+3	1.3E+3	8.4			
Toxaphene {2}		MULTI	AverageRF	100		4.2E+3	4.8E+3	13.6			
Toxaphene {3}		MULTI	AverageRF	100		2.6E+3	2.8E+3	9.6			
Toxaphene {4}		MULTI	AverageRF	100		6.8E+2	7.3E+2	6.6			
Toxaphene {5}		MULTI	AverageRF	100		3.9E+3	4.4E+3	11.6			
Toxaphene {6}		MULTI	AverageRF	100		5.4E+3	6.0E+3	10.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	~~10.1~~

6.0

CC 6/26/07

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:35 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
25)	Toxaphene	13.14	12.61	1676806	1297760	1186.187m	1084.038
26)	Toxaphene {2}	13.21	12.70	1387569	4757631	1197.284m	1136.291
27)	Toxaphene {3}	13.36	13.56	2289269	2837988	1137.339m	1096.157
28)	Toxaphene {4}	14.04	13.67	3839142	728420	1314.410m	1065.834m
29)	Toxaphene {5}	14.35	13.90	1996831	4395967	1222.028m	1115.666m
30)	Toxaphene {6}	14.87	14.10	2285715	5972279	1258.312m	1106.606m

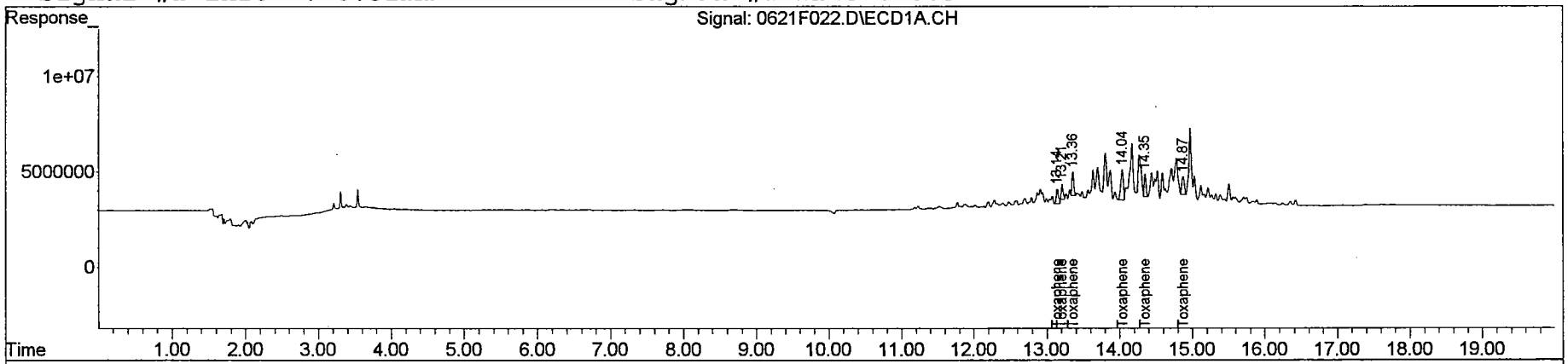
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

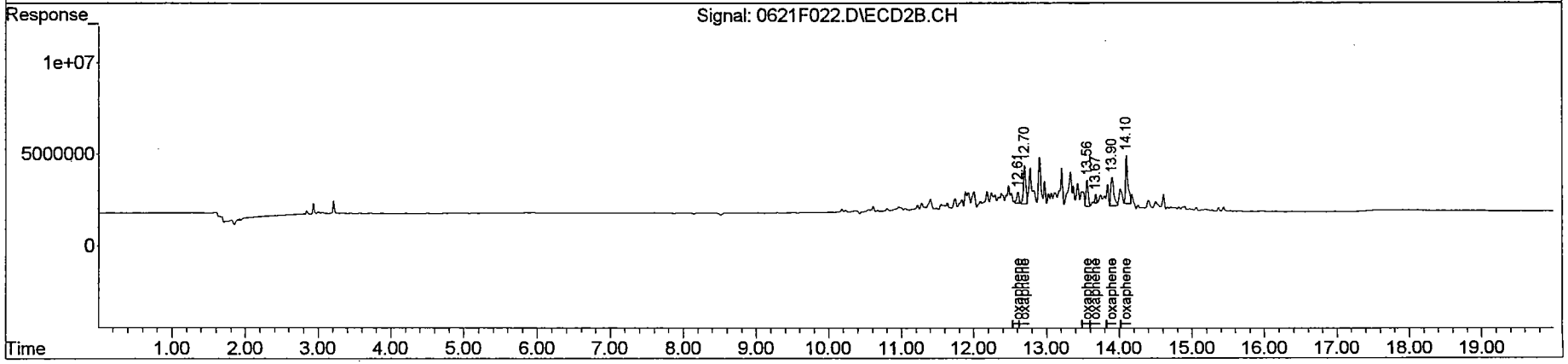
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:43 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

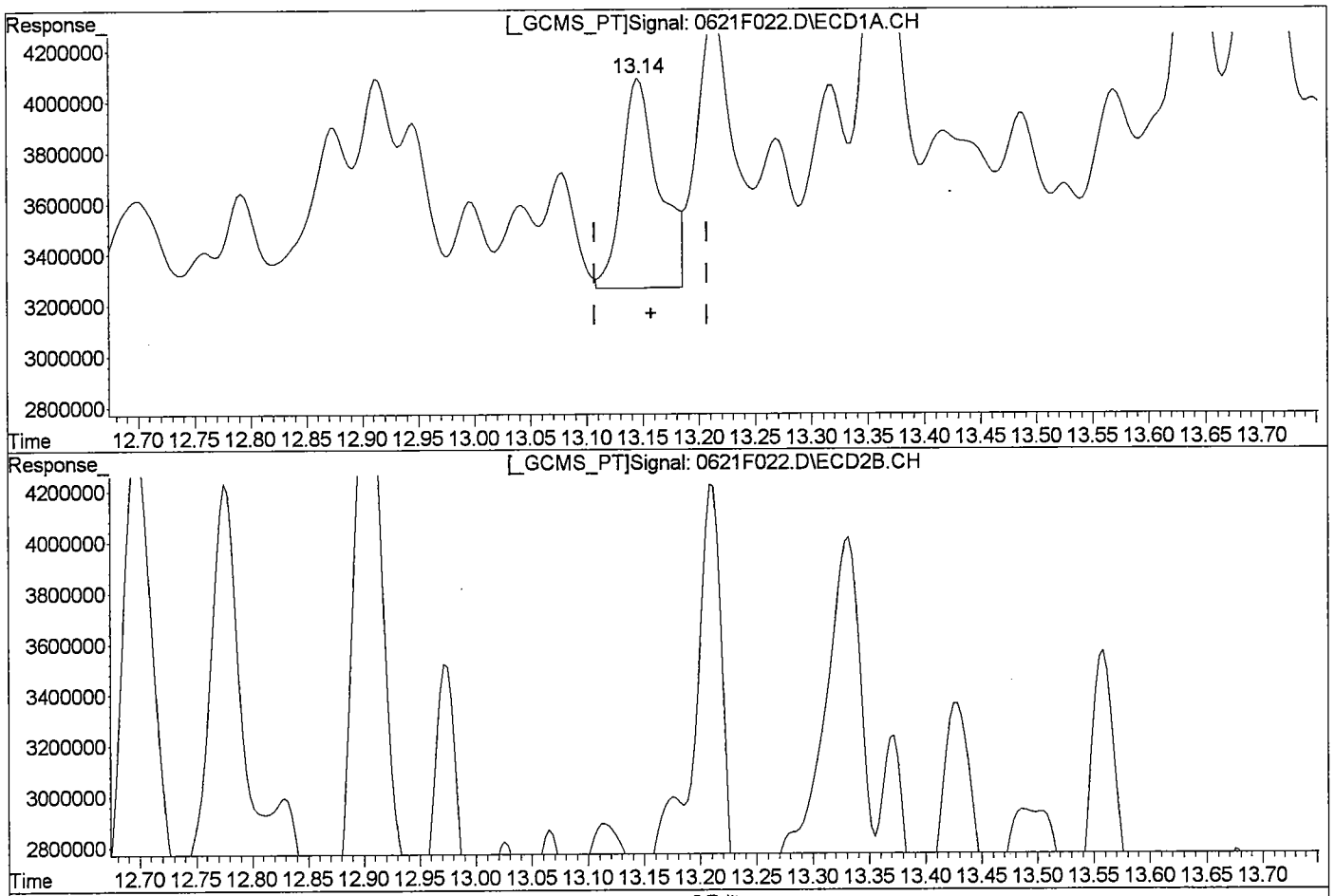




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(25) Toxaphene

13.14min 1348.940ug/L

response 1906875

Before

JUN 2 2 2007

(25) Toxaphene #2

12.61min 1084.038ug/L

response 1297760

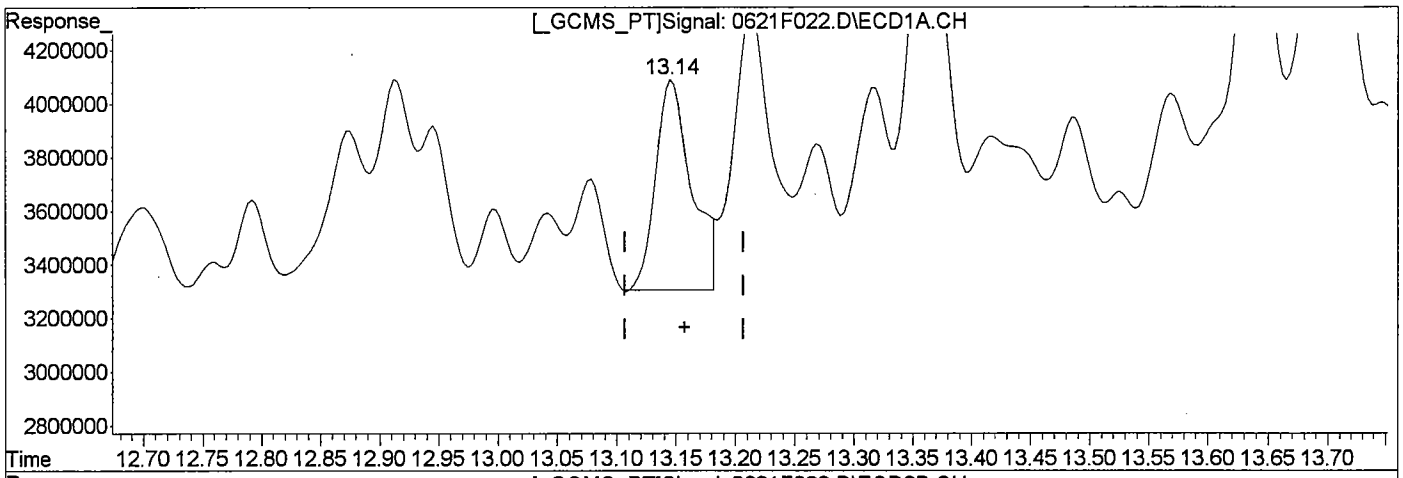
(+) = Expected Retention Time

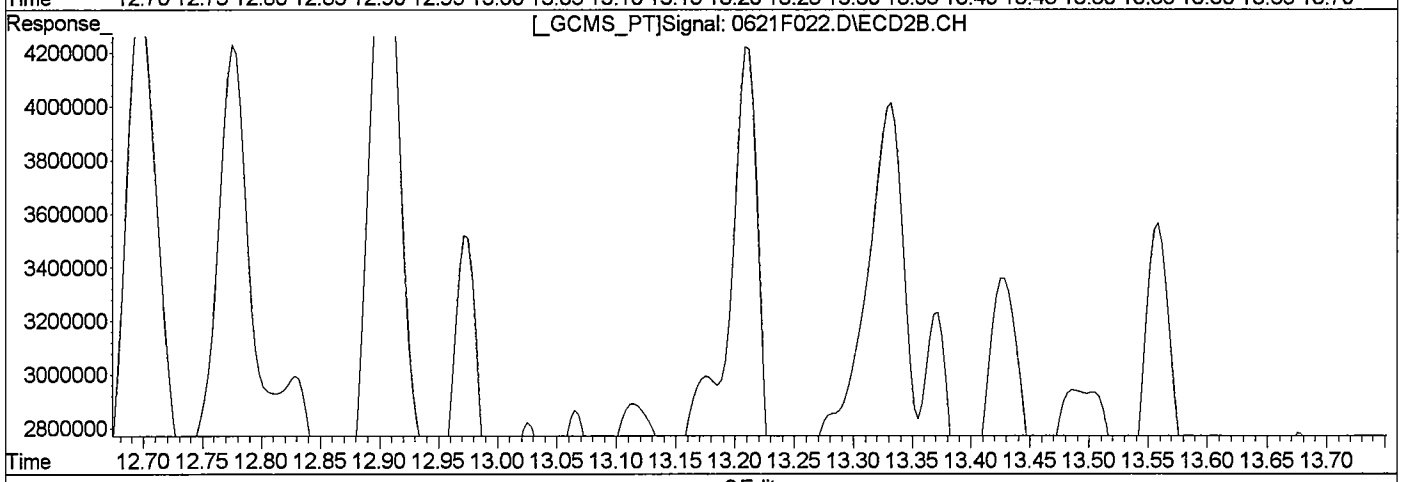
0621F022.D 061107-8081.M Fri Jun 22 08:42:18 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(25) Toxaphene

13.14min 1186.187ug/L m

response 1676806

(25) Toxaphene #2

12.61min 1084.038ug/L

response 1297760

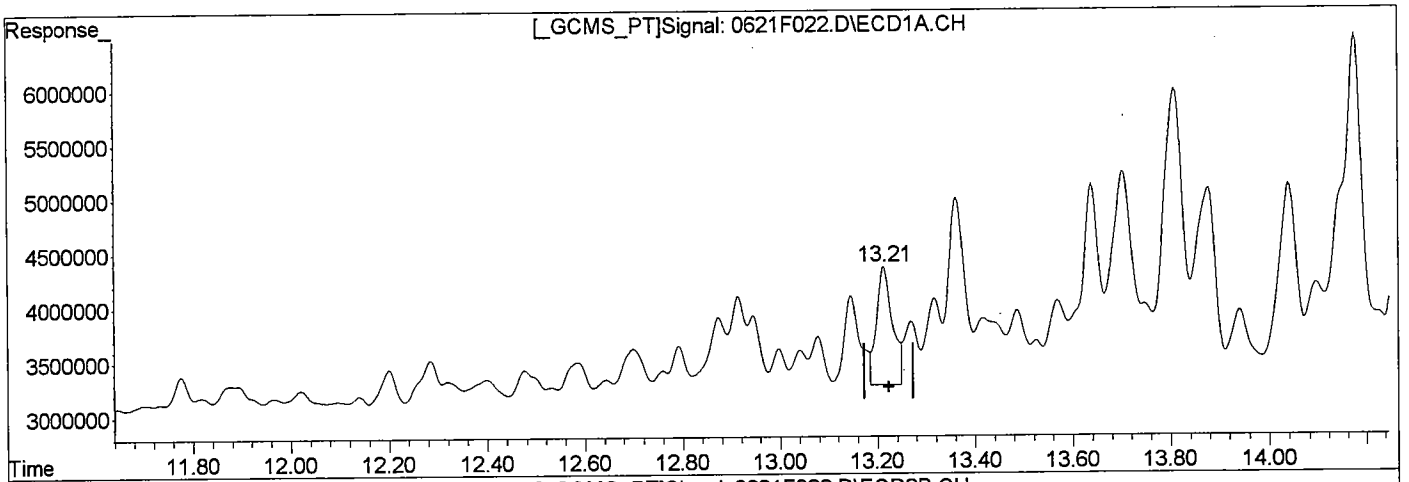
Alter
JUN 22 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

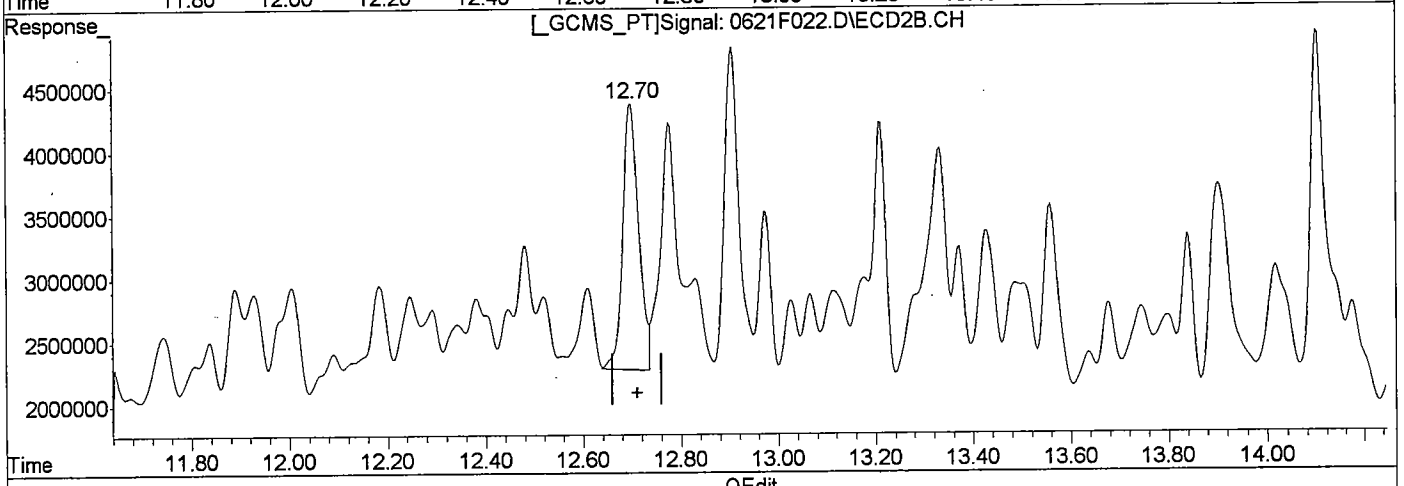
(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 08:42:24 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(26) Toxaphene {2}

13.21min 2138.157ug/L

response 2477975

Before

JUN 2 2 2007

(26) Toxaphene {2} #2

12.70min 1136.291ug/L

response 4757631

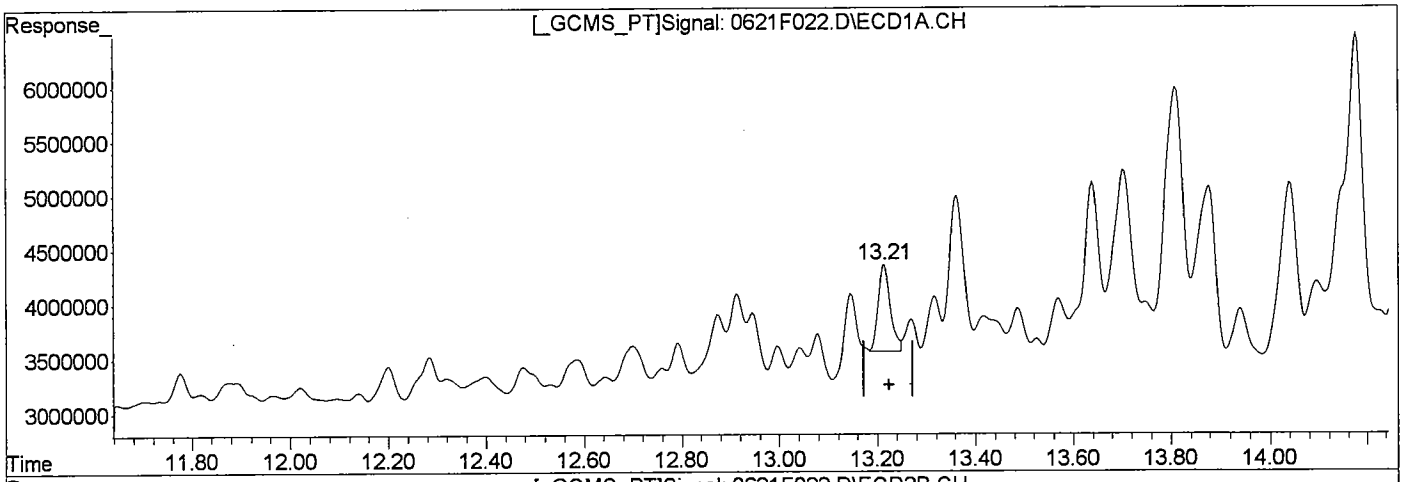
(+) = Expected Retention Time

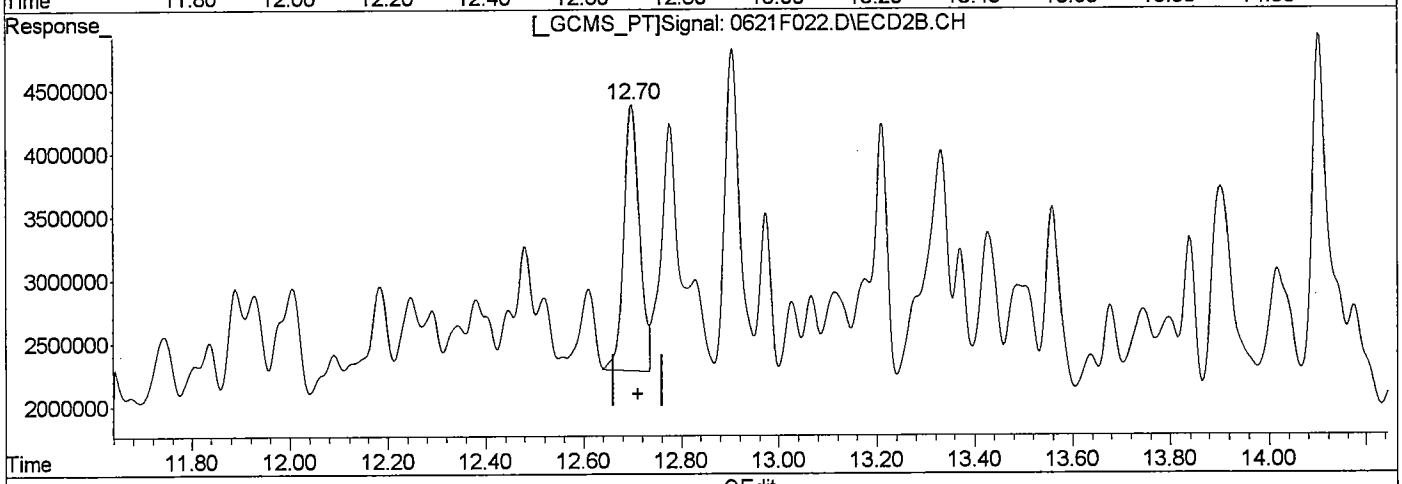
0621F022.D 061107-8081.M Fri Jun 22 08:42:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:43 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(26) Toxaphene {2}

13.21min 1197.284ug/L m

response 1387569

(26) Toxaphene {2} #2

12.70min 1136.291ug/L

response 4757631

After

JUN 22 2007

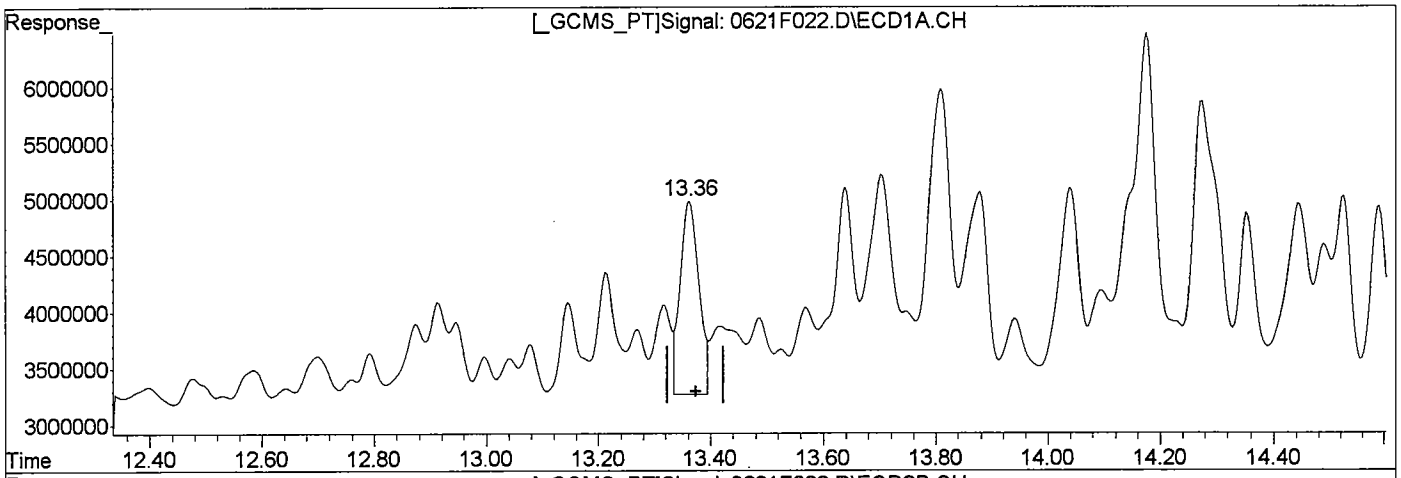
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

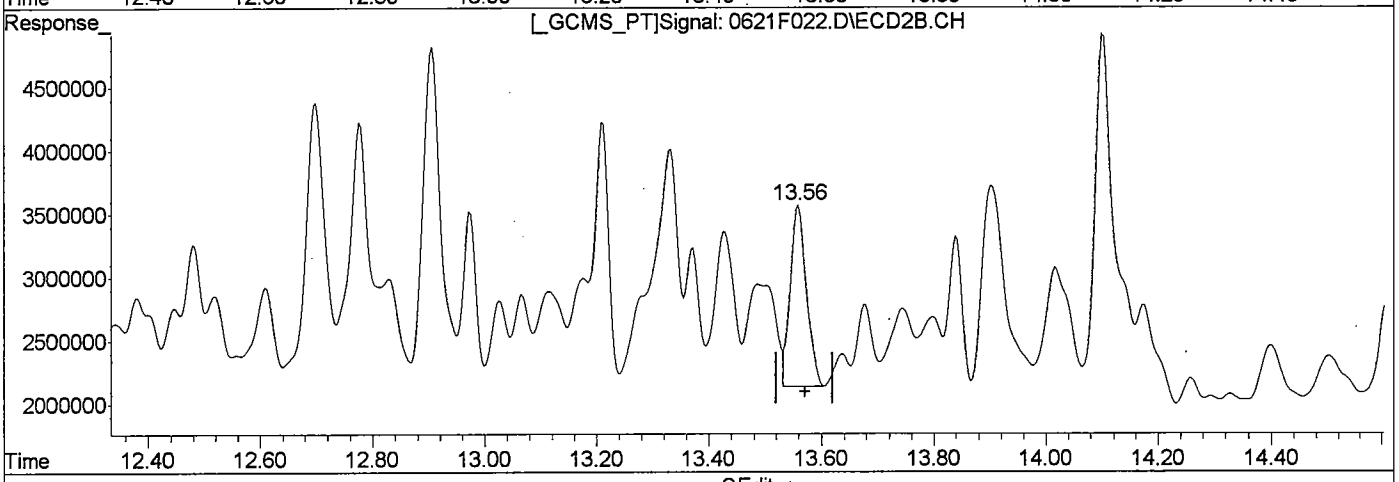
(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 16:47:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.36min 1961.378ug/L

response 3947918

(27) Toxaphene {3} #2

13.56min 1096.157ug/L

response 2837988

Before

JUN 22 2007

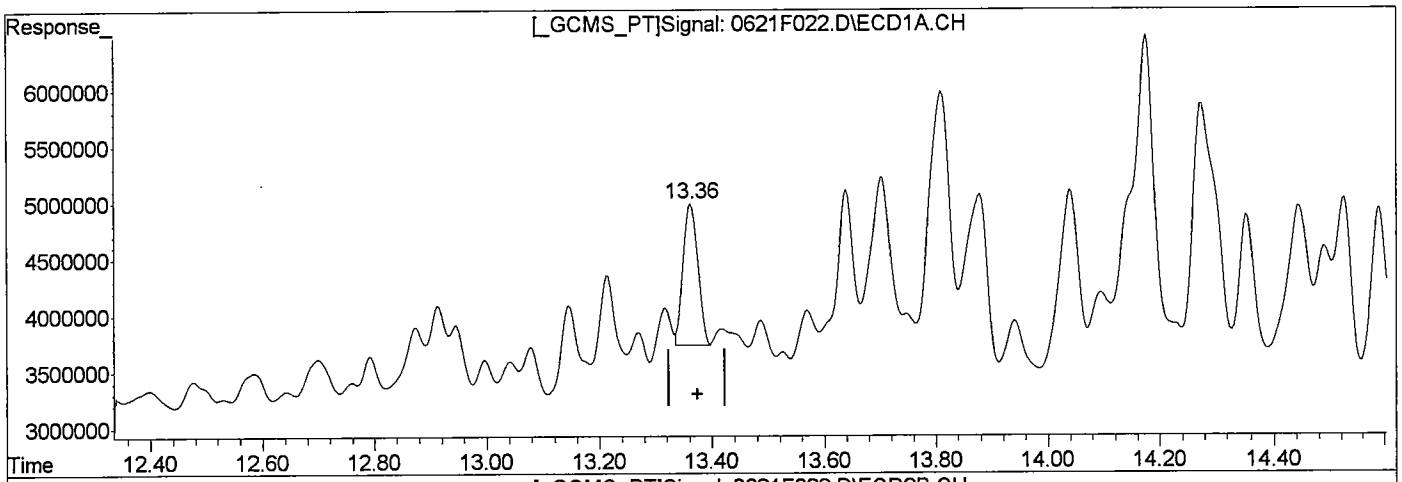
(+) = Expected Retention Time

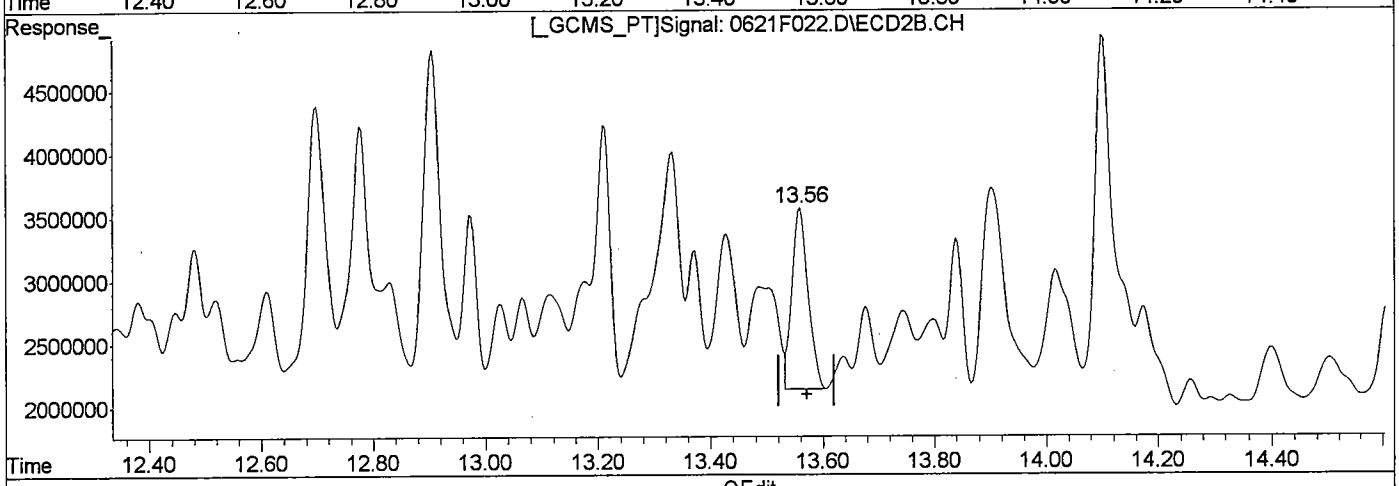
0621F022.D 061107-8081.M Fri Jun 22 08:42:39 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene {3}

13.36min 1137.339ug/L m

response 2289269

(27) Toxaphene {3} #2

13.56min 1096.157ug/L

response 2837988

Alter ... 's

JUN 22 2007

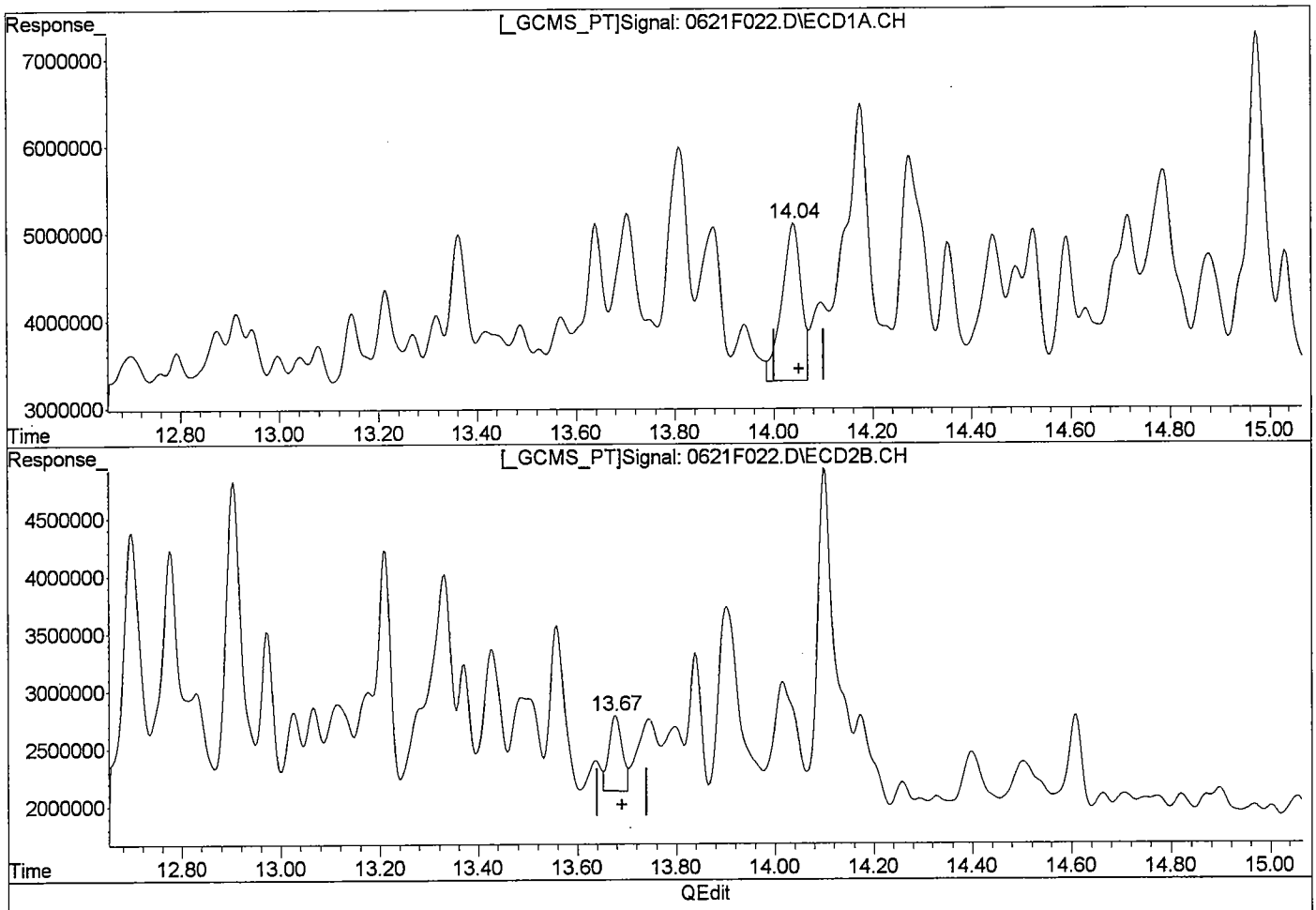
☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 08:42:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(28) Toxaphene {4}

14.04min 1679.862ug/L

response 4906557

(28) Toxaphene {4} #2

13.67min 1783.747ug/L

response 1219061

Before

JUN 2 2 2007

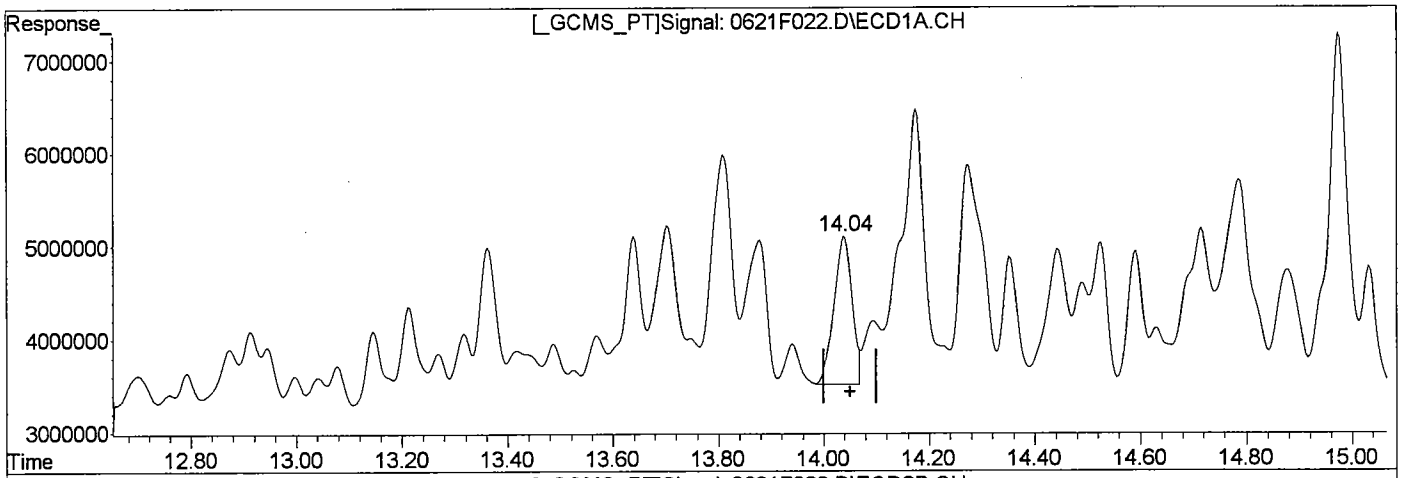
(+) = Expected Retention Time

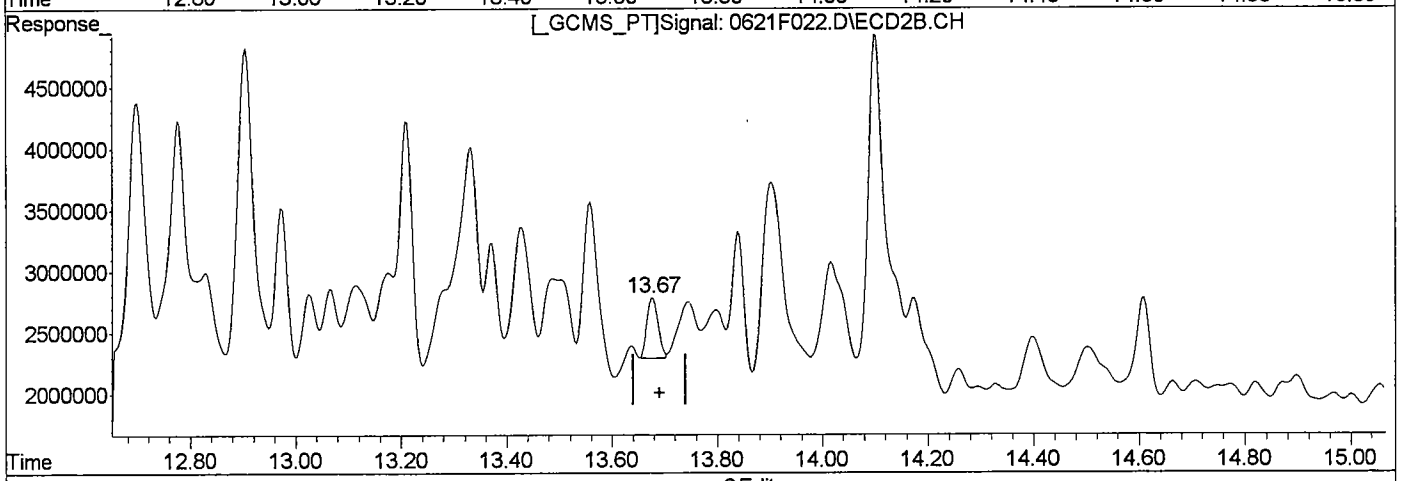
0621F022.D 061107-8081.M Fri Jun 22 08:42:50 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene {4}

14.04min 1314.410ug/L m

response 3839142

(28) Toxaphene {4} #2

13.67min 1065.834ug/L m

response 728420

JUN 22 2007

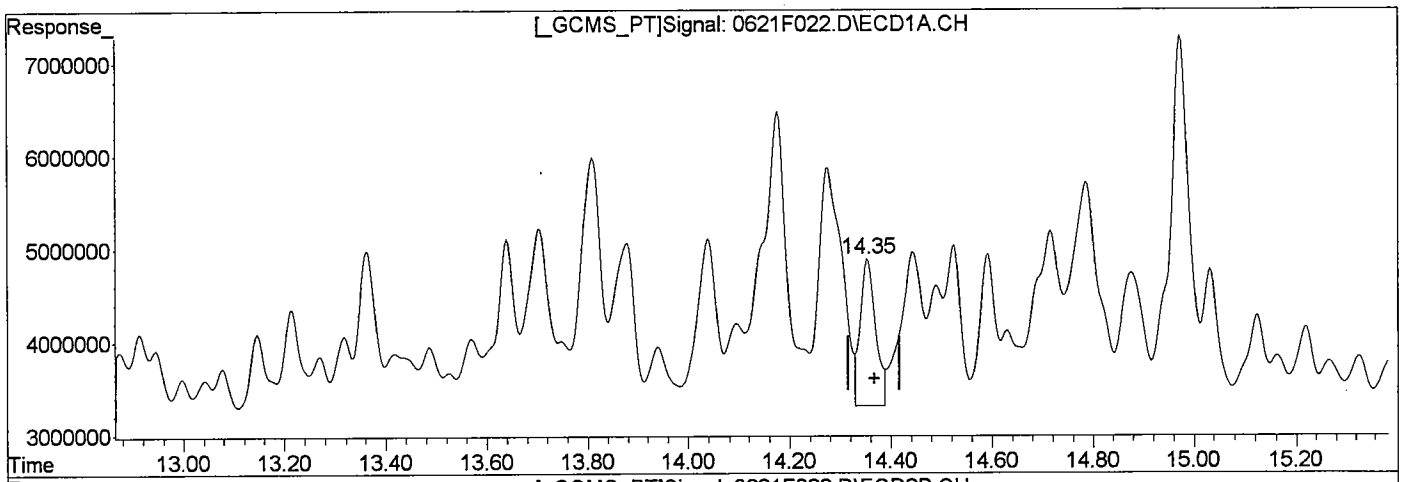
Wrong Peak/Peak not Found
Resolution/shoulder incorrect
Other

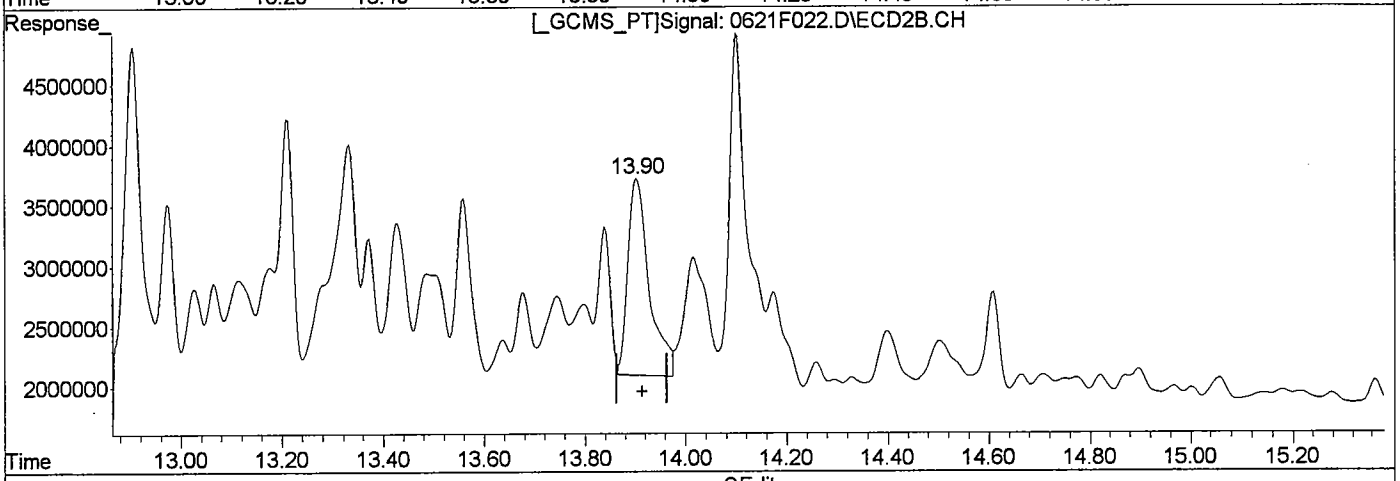
(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 08:42:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





(29) Toxaphene {5}

14.35min 2057.524ug/L

response 3362056

(29) Toxaphene {5} #2

13.90min 1239.080ug/L

response 4882245

Before

JUN 2 2 2007

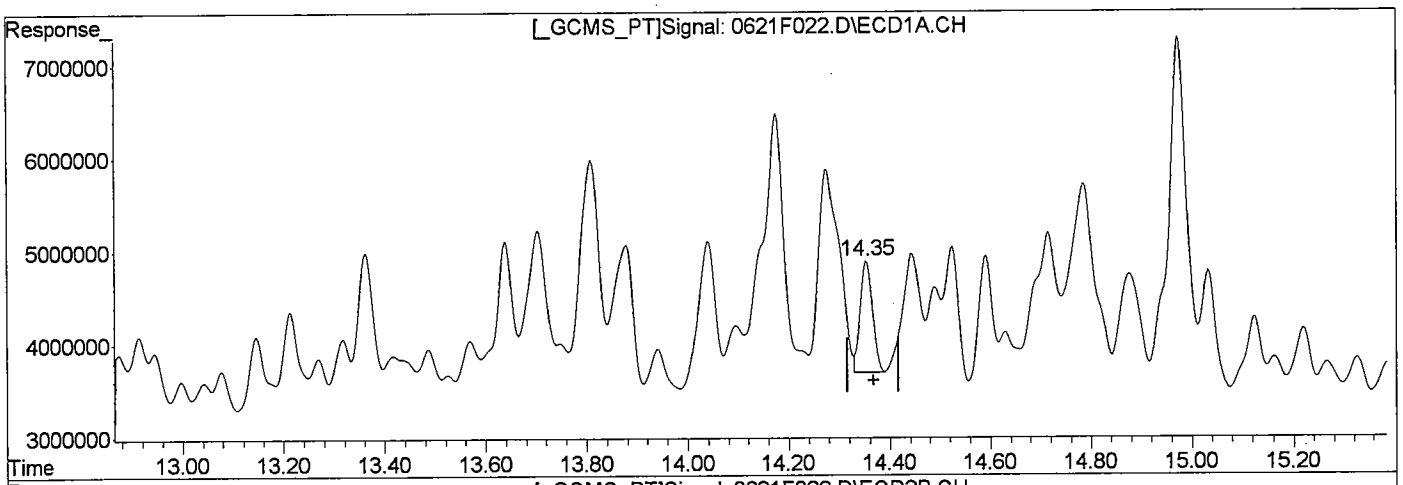
(+) = Expected Retention Time

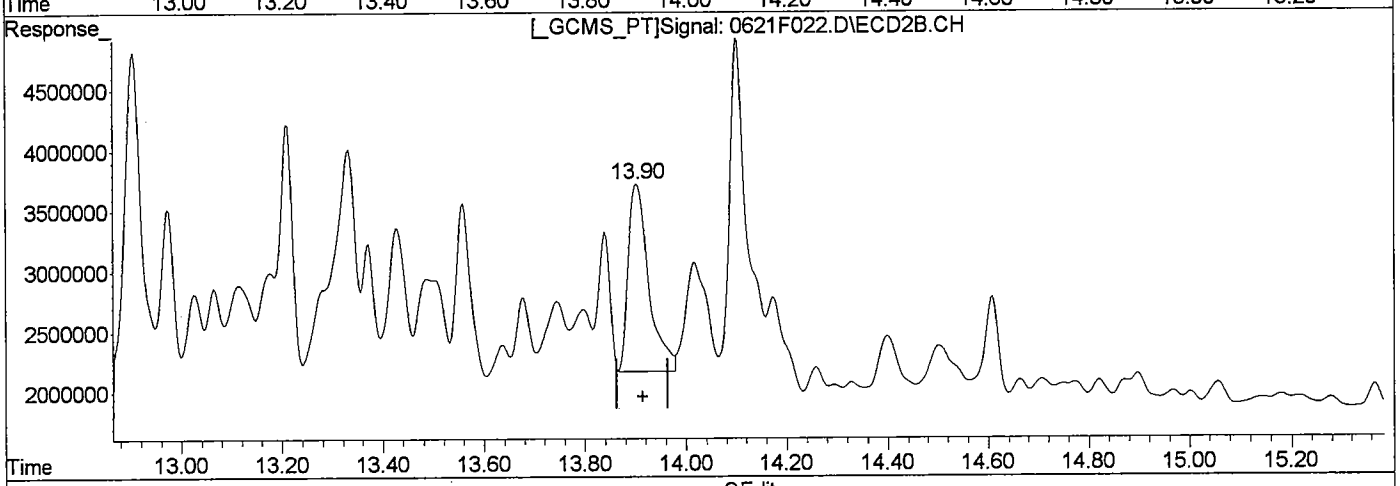
0621F022.D 061107-8081.M Fri Jun 22 08:43:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene {5}

14.35min 1222.028ug/L m

response 1996831

(29) Toxaphene {5} #2

13.90min 1115.666ug/L m

response 4395967

Analyst [illegible]

JUN 22 2007

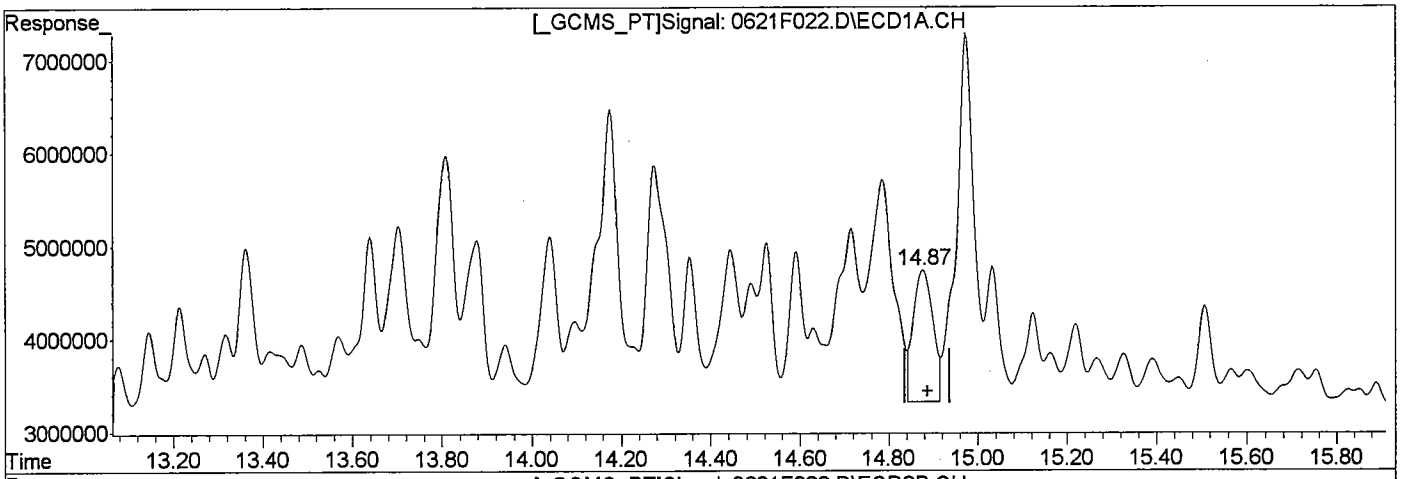
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

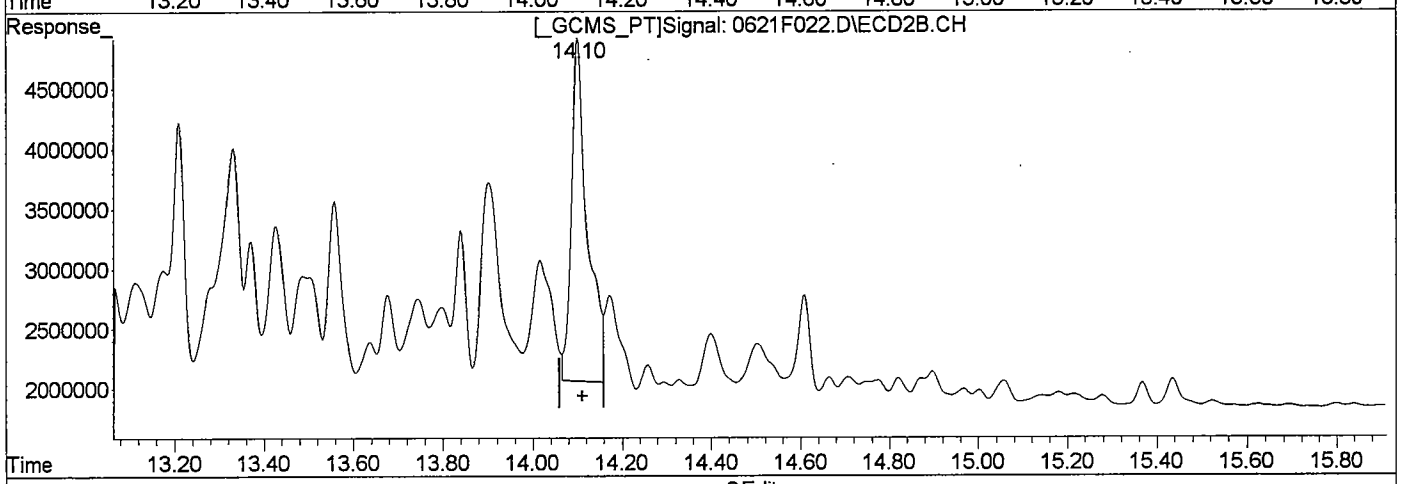
(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 08:43:16 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.87min 2398.478ug/L

response 4356820

Before

JUN 2 2 2007

(30) Toxaphene {6} #2

14.10min 1330.673ug/L

response 7181551

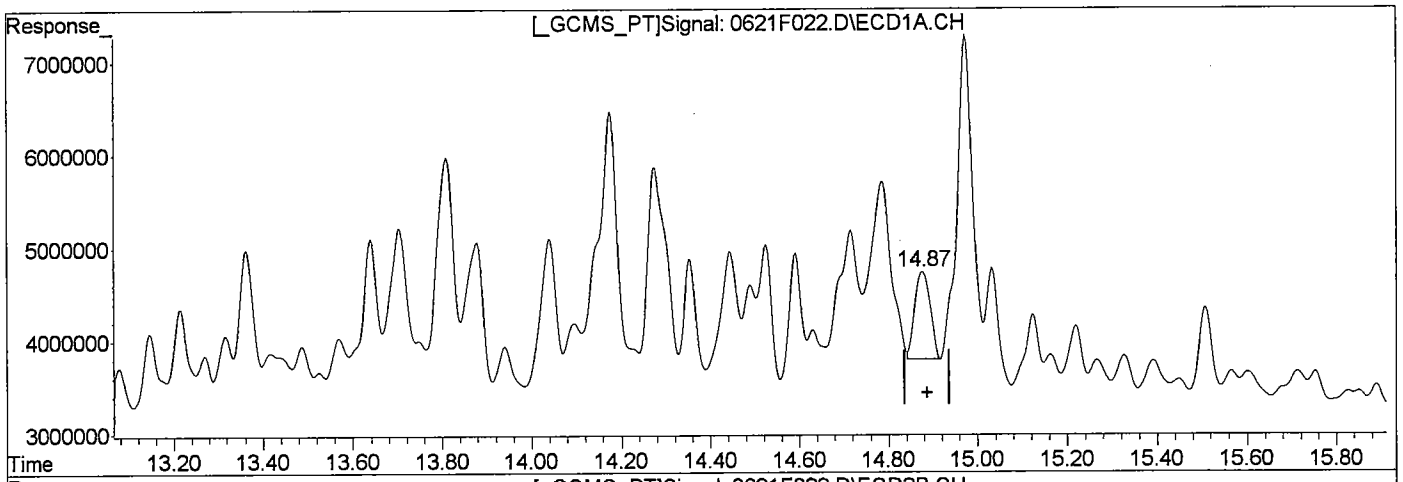
(+) = Expected Retention Time

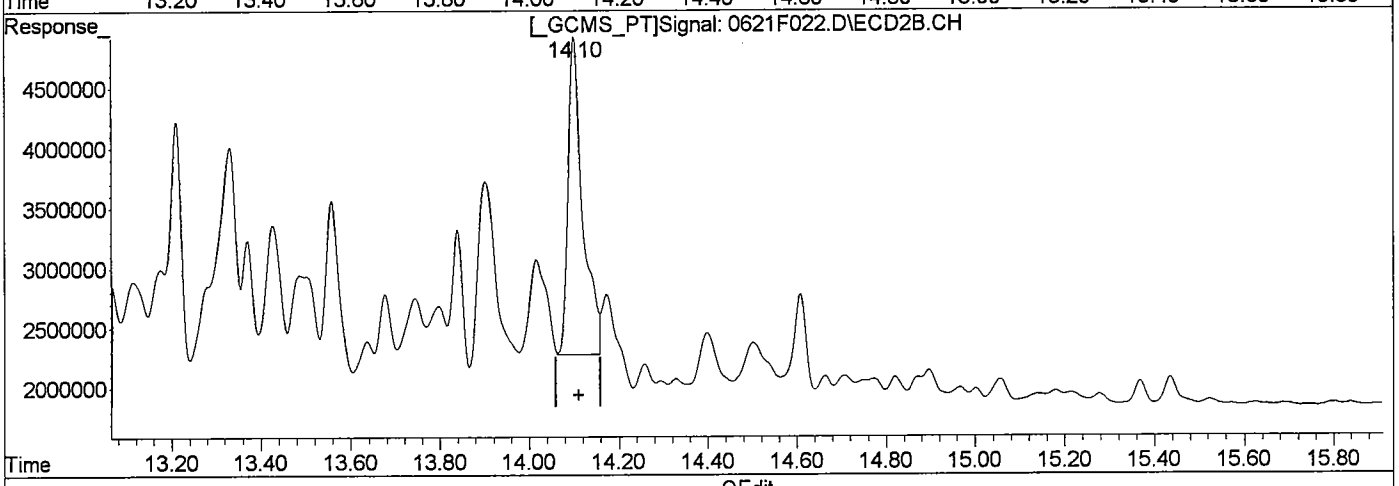
0621F022.D 061107-8081.M Fri Jun 22 08:43:20 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F022.D\ECD1A.CH Vial: 5
Signal #2 : J:\GC23\DATA\062107\0621F022.D\ECD2B.CH
Acq On : 22 Jun 2007 1:30 am Operator: AKamawal
Sample : tox @ 1000ppb | gcps5-92h | KWG0706945-6 Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(30) Toxaphene {6}

14.87min 1258.312ug/L m

response 2285715

(30) Toxaphene {6} #2

14.10min 1106.606ug/L m

response 5972279

Analyst Initials

JUN 22 2007

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F022.D 061107-8081.M Fri Jun 22 08:43:31 2007

Organic Analysis:
Organochlorine Pesticides

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0706602	**Prep Method:**	EPA 3535	**Prep Date:**	06/13/07 00:00
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0704852-002	1349MW100CL	8081A PEST_OC	WATER	1050ml	2ml
K0704934-001	060807-SW	8081A PEST_OC	WATER	1050ml	2ml
K0704934-004	060807-ER	8081A PEST_OC	WATER	1050ml	2ml
KWG0706602-1	Matrix Spike	8081A PEST_OC	WATER	1050ml	2ml
KWG0706602-2	Lab Control Sample	8081A PEST_OC	WATER	1000ml	2ml
KWG0706602-3	Duplicate Lab Control Sampl	8081A PEST_OC	WATER	1000ml	2ml
KWG0706602-4	Matrix Spike	8081A PEST_OC	WATER	950ml	2ml
KWG0706602-5	Lab Control Sample	8081A PEST_OC	WATER	1000ml	2ml
KWG0706602-6	Duplicate Lab Control Sampl	8081A PEST_OC	WATER	1000ml	2ml
KWG0706602-7	Method Blank	8081A PEST_OC	WATER	1050ml	2ml

Lab Code	Parent Lab Code	Comments
KWG0706602-1	K0704934-001	
KWG0706602-4	K0704934-004	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0704852-002	608552	PCB4-93E	100uL			MThompso
K0704934-001	608553	PCB4-93E	100uL			MThompso
K0704934-004	608551	PCB4-93E	100uL			MThompso
KWG0706602-1	608554	PCB4-93E	100uL	GCPS5-92-I	50uL	MThompso
KWG0706602-2	608555	PCB4-93E	100uL	GCPS5-92-I	50uL	MThompso
KWG0706602-3	608556	PCB4-93E	100uL	GCPS5-92-I	50uL	MThompso
KWG0706602-4	608557	PCB4-93E	100uL	GCPS5-89-K	200uL	MThompso
KWG0706602-5	608558	PCB4-93E	100uL	GCPS5-89-K	200uL	MThompso
KWG0706602-6	608559	PCB4-93E	100uL	GCPS5-89-K	200uL	MThompso
KWG0706602-7	608560	PCB4-93E	100uL			MThompso

Comments:

Started By: ALundqui Assisted By: Training Yes No

Completed By: ALundqui Assisted By: Yes No

Reviewed By: Date: 6-19-07 Storage:

Chain of Custody

Relinquished By: ALundquist Date: 06-14-07

Received By: Date: 6-19-07 Extracts Examined Yes No

Preparation Information

Group ID: KWG0706602 **Prep Method:** EPA 3535 **Prep Date:** 06/13/07 00:00
Department: Semivoa GC

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. mL	pH	Int. Vol.	Final Vol.	Surr. Added	Spike Added
1	K0704852-002	1349MW100CL	NA	✓	8081A PEST_OC	WATER	1050	7	NA	2mL	100ul	
2	K0704934-001	060807-SW		✓	8081A PEST_OC	WATER	1050					
3	K0704934-004	060807-ER		✓	8081A PEST_OC	WATER	1050					
4	KWG0706602-1 8081	Matrix Spike 4934-1		✓	8081A PEST_OC	WATER	1050					50ul
5	KWG0706602-2 8081	Lab Control Sample		✓	8081A PEST_OC	WATER	1000					
6	KWG0706602-3 8081	Duplicate Lab Control Sample		✓	8081A PEST_OC	WATER	1000					
7	KWG0706602-4 TOX	Matrix Spike 4934-4		✓	8081A PEST_OC	WATER	950					200ul
8	KWG0706602-5 TOX	Lab Control Sample		✓	8081A PEST_OC	WATER	1000					
9	KWG0706602-6 TOX	Duplicate Lab Control Sample		✓	8081A PEST_OC	WATER	1000					
10	KWG0706602-7	Method Blank		✓	8081A PEST_OC	WATER	1050					

Comments:

8081: GCPS5-92-I 4ppm 50 ul Microsyringe 7 exp: 06-21-07

Surrogate ID: PCB4-93E 2ppm 100ul Epp. A exp: 12-05-07

Spike ID: TOX: GCPS5-89-K 10ppm 200ul Epp. 10 exp: 09-28-07

Witness: MT 6/13/07

Started By: ALundqui Assisted By:

Completed By: ALundquist Assisted By:

Additional Prep Information For Pest/PCB Water by 3535

Service Request # K0704852 K0704934 Work Group # Pest: KWG0706602

PCB: NA

Solvents/Reagents used:

Acetone Lot # 47005 Hexane Lot # 47103

H_2O-Phobic DVB extraction Disk Lot # 605021-PL

Extraction Program # 8081.6 Initial Purge Program # 8081.4

Start (Time/Date/Initial): 12:15 p.m. 06-13-07 AL

Stop (Time/Date/Initial): 2:30 p.m. 06-13-07 AL

Cleanups:

Sulfuric Acid Clean-up (3665): NA (PCB aliquots only)

Clean-up #2: NA ☐ all samples ☐ some samples:

Clean-up #3: NA ☐ all samples ☐ some samples:

Pest Vial: yellow Vial Storage: H-10 Freezer

PCB Vial: NA Vial Storage:

Archived Extract Storage: NA

Comments/Observations:

Enough sample received for MS only.
4852-2 used 2 extraction cartridges.
4934-1 went to Elution stage of extraction before sample had completely loaded. Sample was then extracted ~~BA~~ ~~contaminants~~ shaken out.
AL 06-13-07
Approx 900 ml was lost.

Bench Sheet Review Check List
☑ Hold Times Met (if no, Reason:)
☐ Prep date, dept, method, product code correct in stealth
☐ Spike Information correct
☐ Weights/Volumes and units correct on raw and final bench sheets
☐ Sample IDs have been checked—Bottle numbers appended if required
☐ Names present for: Started by, Completed by, relinquished by, and witnessed by.
☐ Training has been circled
☐ Extract Storage recorded
☐ Additional Prep Sheet completely filled out (NA or line out Blanks)
☐ All clean-ups have been noted on additional prep sheet
☑ Signed service request with Form V, if applicable, has been attached

C:\Documents and Settings\mblack\Local Settings\Temporary Internet Files\OLK2D3\Additional Prep InformationPestPCBWater3535.dc

DILUTION LOG

LAB ID.	ALIQUOT	FINAL VOLUME	DILUTION FACTOR	DATE	ANALYST	COMMENTS
4852-2	100ml	1.0ml	10x	6/21/07	AC	matrix

R:\SVG\FORMS\DILUTION LOG.DOC

Sequence Name: C:\GC23\SEQUENCE\061907.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\061907\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAL 6343

Line	Type	Vial	DataFile	Method	Sample Name	
1	DeleteGC					
2	MaskName -	----R---				
3	IB	1	0619FX01	PESTA	KWG0706830-1 | IB | 8081A	
4	IB	2	0619FX02	PESTA	KWG0706830-1 | IB | 8081A	608
5	PEM	3	0619F003	PESTA	PEM @ 50-100ppb | gcps5-92d |	
6	CCV	4	0619F004	PESTA	8081 @ 50ppb | gcps5-91d | KW	
7	CCV	5	0619F005	PESTA	tox @ 1000ppb | gcps5-92h | K	
8	CCV	6	0619F006	PESTA	chlor @ 500ppb | gcps5-86f |	
9	MB	7	0619F007	PESTA	KWG0706521-4 | MB | 608 Modif	
10	LCS	8	0619F008	PESTA	KWG0706521-2 | LCS | 608 Modi	
11	DLCS	9	0619F009	PESTA	KWG0706521-3 | DLCS | 608 Mod	
12	SMPL	10	0619F010	PESTA	K0704769-001 | 7D060507G	
13	SMPL	11	0619F011	PESTA	K0704866-001 | Effluent Compo	
14	SMPL	12	0619F012	PESTA	K0704872-011 | 8D060707	
15	MS	13	0619F013	PESTA	KWG0706521-1 | K0704872-011MS	
16	SMPL	14	0619F014	PESTA	K0704880-001 | Priority Pollu	
17	SMPL	15	0619F015	PESTA	K0704922-007 | NKWG070606-000	
18	SMPL	16	0619F016	PESTA	K0704922-010 | NTFC070606-000	-NR-see CLN
19	SMPL	17	0619F017	PESTA	K0704922-014 | NTWG070606-000	6-8
20	IB	1	0619F018	PESTA	KWG0706830-4 | IB | 8081A	
21	IB	2	0619F019	PESTA	KWG0706830-4 | IB | 8081A	
22	PEM	3	0619F020	PESTA	PEM @ 50-100ppb | gcps5-92d |	
23	CCV	4	0619F021	PESTA	8081 @ 50ppb | gcps5-91d | KW	
24	CCV	5	0619F022	PESTA	tox @ 1000ppb | gcps5-92h | K	
25	CCV	6	0619F023	PESTA	chlor @ 500ppb | gcps5-86f |	
26	MB	18	0619F024	PESTA	KWG0706602-7 | MB | 8081A PES	
27	LCS	19	0619F025	PESTA	KWG0706602-2 | LCS | 8081A PE	8081
28	DLCS	20	0619F026	PESTA	KWG0706602-3 | DLCS | 8081A P	
29	LCS	21	0619F027	PESTA	KWG0706602-5 | LCS | 8081A PE	tox
30	DLCS	22	0619F028	PESTA	KWG0706602-6 | DLCS | 8081A P	
31	SMPL	23	0619F029	PESTA	K0704852-002 | 1349MW100CL	-NR-see dil
32	SMPL	24	0619F030	PESTA	K0704934-001 | 060807-SW	
33	MS	25	0619F031	PESTA	KWG0706602-1 | K0704934-001MS	8081
34	SMPL	26	0619F032	PESTA	K0704934-004 | 060807-ER	
35	MS	27	0619F033	PESTA	KWG0706602-4 | K0704934-004MS	tox
36	IB	96	0619F034	PESTA	KWG0706830-7 | IB | 8081A	
37	IB	97	0619F035	PESTA	KWG0706830-7 | IB | 8081A	
38	PEM	98	0619F036	PESTA	PEM @ 50-100ppb | gcps5-92d |	
39	CCV	99	0619F037	PESTA	8081 @ 50ppb | gcps5-91d | KW	
40	CCV	100	0619F038	PESTA	tox @ 1000ppb | gcps5-92h | K	
41	MB	28	0619F039	PESTA	KWG0705755-9 | MB | 8081A PES	
42	MDL	29	0619F040	PESTA	KWG0705755-1 | MDL | 8081A PE	
43	MDL	30	0619F041	PESTA	KWG0705755-2 | MDL | 8081A PE	

Last Modified: Wed Jun 20 09:01:08 2007 Page: 1

Sequence Name: C:\GC23\SEQUENCE\061907.S

Line	Type	Vial	DataFile	Method	Sample Name		
44	MDL	31	0619F042	PESTA	KWG0705755-3	MDL	8081A PE
45	MDL	32	0619F043	PESTA	KWG0705755-4	MDL	8081A PE
46	MDL	33	0619F044	PESTA	KWG0705755-5	MDL	8081A PE
47	MDL	34	0619F045	PESTA	KWG0705755-6	MDL	8081A PE
48	MDL	35	0619F046	PESTA	KWG0705755-7	MDL	8081A PE
49	MDL	36	0619F047	PESTA	KWG0705755-8	MDL	8081A PE
50	IB	96	0619F048	PESTA	KWG0706830-10	IB	8081A
51	IB	97	0619F049	PESTA	KWG0706830-10	IB	8081A
52	PEM	98	0619F050	PESTA	PEM @ 50-100ppb	gcps5-92d	
53	CCV	99	0619F051	PESTA	8081 @ 50ppb	gcps5-91d	KW
54	CCV	100	0619F052	PESTA	tox @ 1000ppb	gcps5-92h	K

Exception Report

Data File: J:\GC23\DATA\061907\0619F019.D
Lab ID: KWG0706830-4
RunType: IB
Matrix: MISC

Date Acquired: 06/20/2007 17:05
Date Quantitated: 06/21/2007 10:51
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Printed: 06/21/2007 12:22:56
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\GC23\DATA\061907\0619F019.D\0619F019C.D
Lab ID: KWG0706830-4
RunType: IB
Matrix: MISC

Date Acquired: 06/20/2007 17:05
Date Quantitated: 06/21/2007 10:51
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F019.D\0619F019c.d			**Vial:**	2
Acqu Date:	06/20/2007 17:05	**Quant Date:**	06/21/2007 10:51	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0d	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0	0.0000	0.0000			
Heptachlor Epoxide			0	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0d	0d	0.0000	0.0000			
Endrin			0	0d	0.0000	0.0000			
Endosulfan II			0	0	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F019.D\0619F019c.d			**Vial:**	2
Acqu Date:	06/20/2007 17:05	**Quant Date:**	06/21/2007 10:51	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0d	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0d	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0	0.0000	0.0000			
Toxaphene {2}			0	0d	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0d	0.0000	0.0000			
Toxaphene {6}			0	0d	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0	0	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0	0d	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0	0d	0.0000	0.0000			
Mirex			0d	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F019.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\061907\0619F019.D\ECD2B.CH
Acq On : 20 Jun 2007 5:05 pm Operator: AKamawal
Sample : KWG0706830-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706830\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:02 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Exception Report

Data File: J:\GC23\DATA\061907\0619F020.D
Lab ID: KWG0706830-5
RunType: PEM
Matrix: MISC

Date Acquired: 06/20/2007 17:32
Date Quantitated: 06/21/2007 10:52
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/22/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F020.D\0619F020C.D
Lab ID: KWG0706830-5
RunType: PEM
Matrix: MISC

Date Acquired: 06/20/2007 17:32
Date Quantitated: 06/21/2007 10:52
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: CL 6/21/07

Secondary Review: MJ 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**
Analysis Method:	8081A	**Prep Method:**		
Prep Ref:		**Prep Date:**		

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\061907\0619F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F020.D\0619F020c.d			**Vial:**	3
Acqu Date:	06/20/2007 17:32	**Quant Date:**	06/21/2007 10:52	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	99837	173579		
Endrin	7249051	8569164	3.2	4.1
Endosulfan II	0d	0d		
4,4'-DDD	161831m	139972		
Endrin Aldehyde	52485	67960		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	16043066	16449215	1.6	1.9
Endrin Ketone	184745	297515		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F020.D\0619F020c.d			**Vial:**	3
Acqu Date:	06/20/2007 17:32	**Quant Date:**	06/21/2007 10:52	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:03 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.75	11.79	99837	173579	0.653	0.938	#
16)	Endrin	13.31	12.47	7249051	8569164	46.988	48.874	
18)	4,4'-DDD	13.53	12.66	161831	139972	1.078m	0.917	
19)	Endrin Aldehyde	13.88	13.21	52485	67960	0.317	0.450	#
21)	4,4'-DDT	13.99	13.07	16043066	16449215	87.098	100.890	
22)	Endrin Ketone	14.93	14.40	184745	297515	0.619	1.416	#

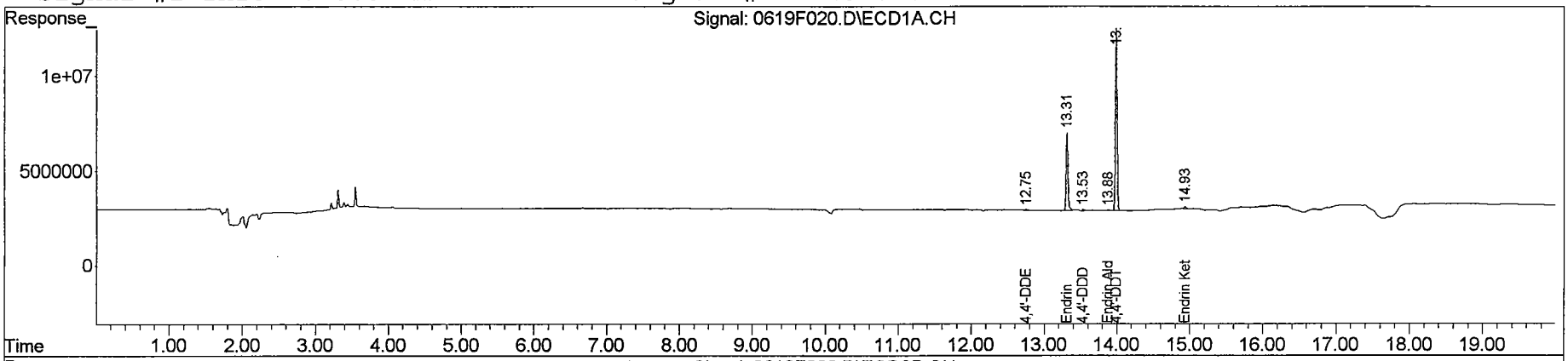
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

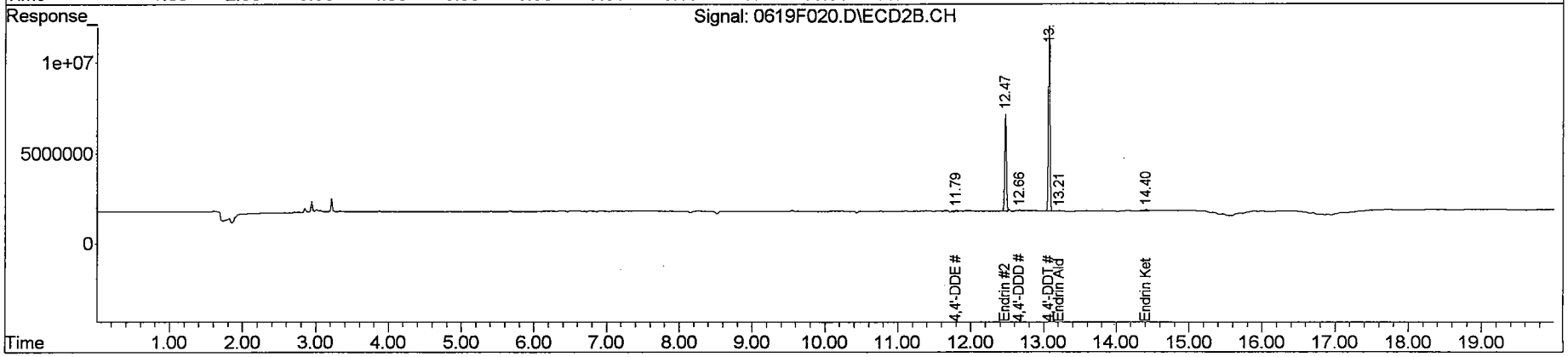
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:52 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

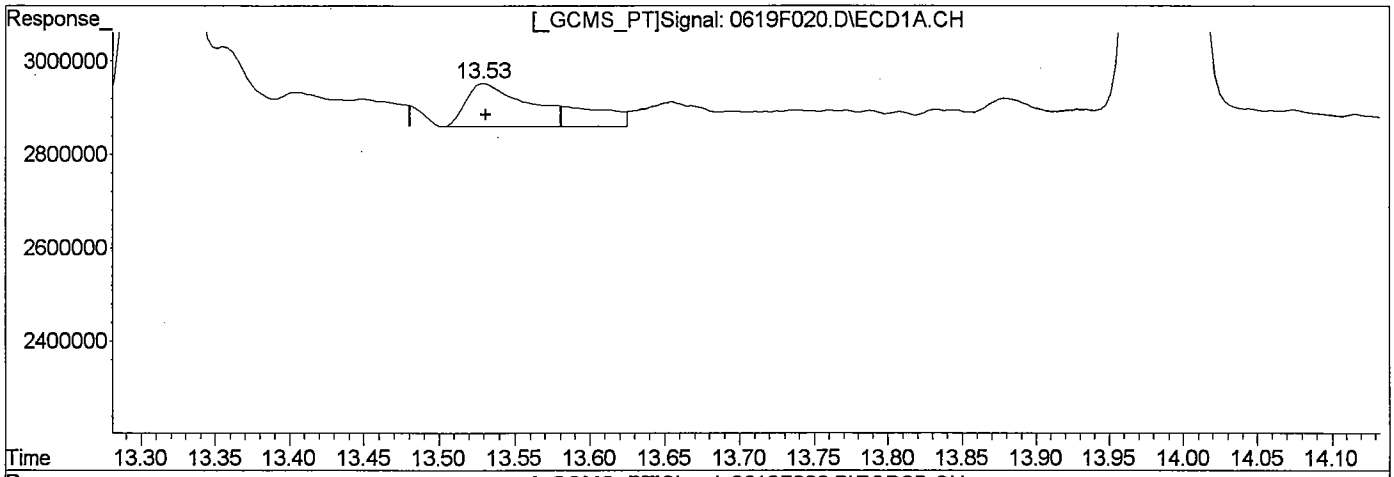


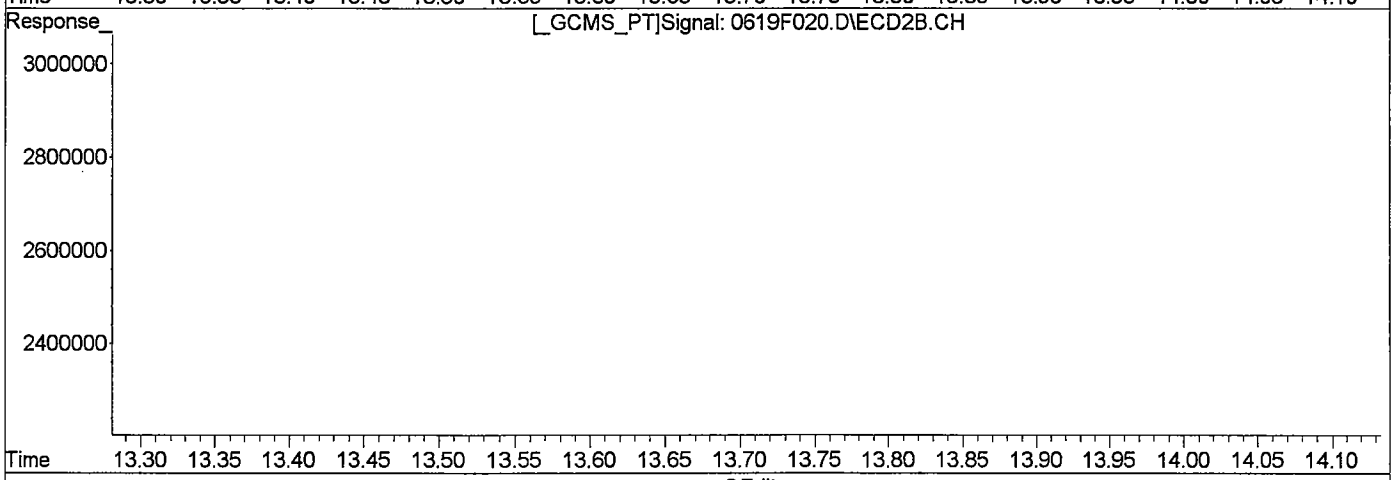


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:20 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 14 08:04:03 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 2.417ug/L

response 362738

(18) 4,4'-DDD #2

12.66min 0.917ug/L

response 139972

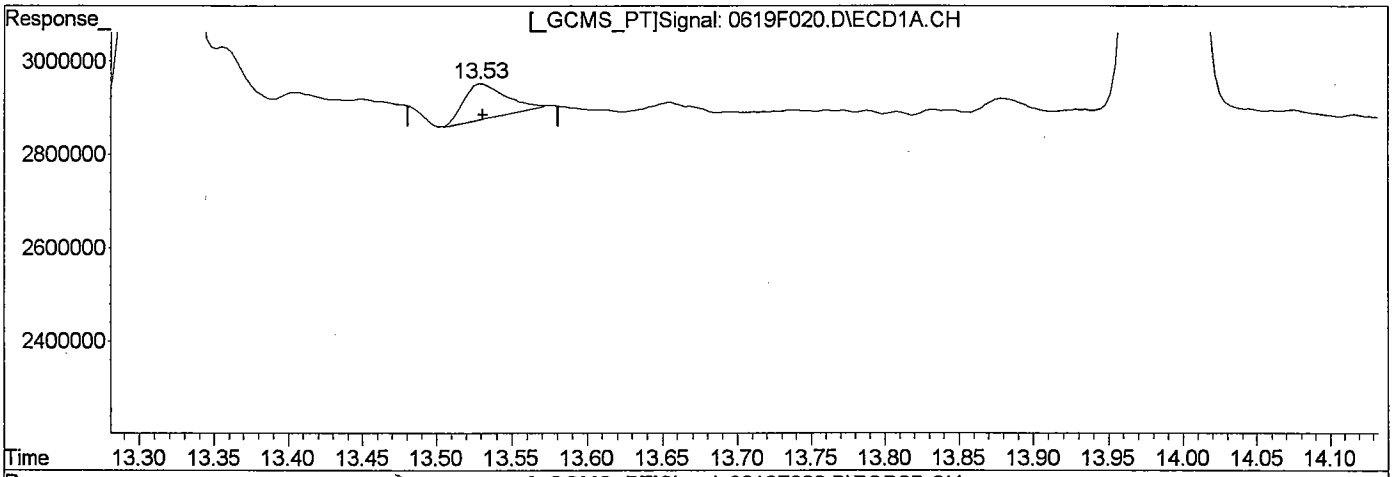
(+) = Expected Retention Time

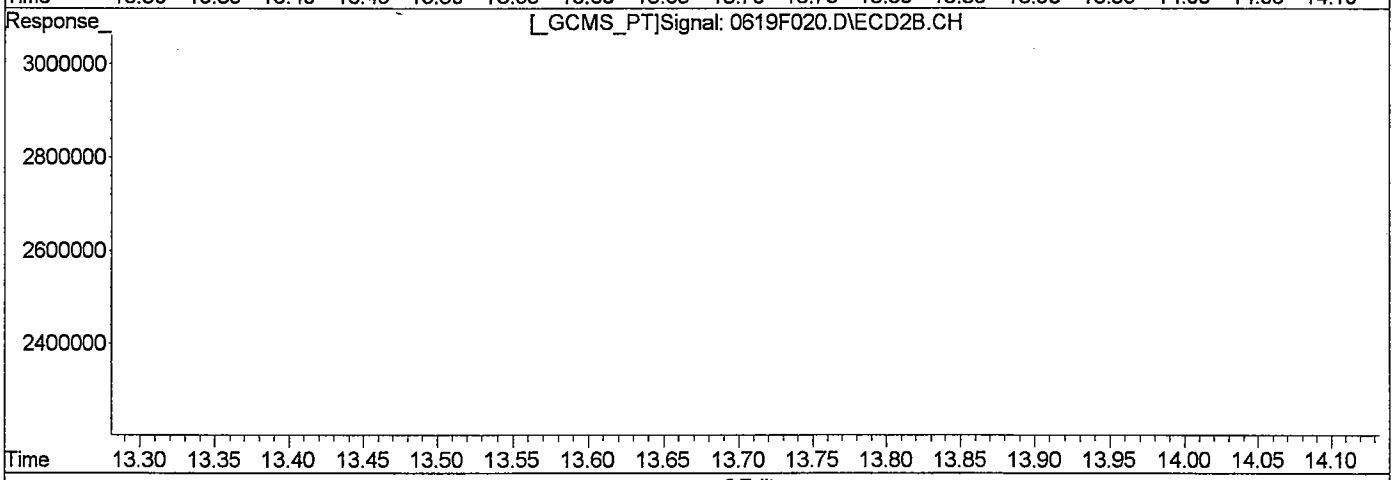
0619F020.D 061107-8081.M Thu Jun 21 10:29:32 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:20 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 14 08:04:03 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 1.019ug/L m

response 152940

(18) 4,4'-DDD #2

12.66min 0.917ug/L

response 139972

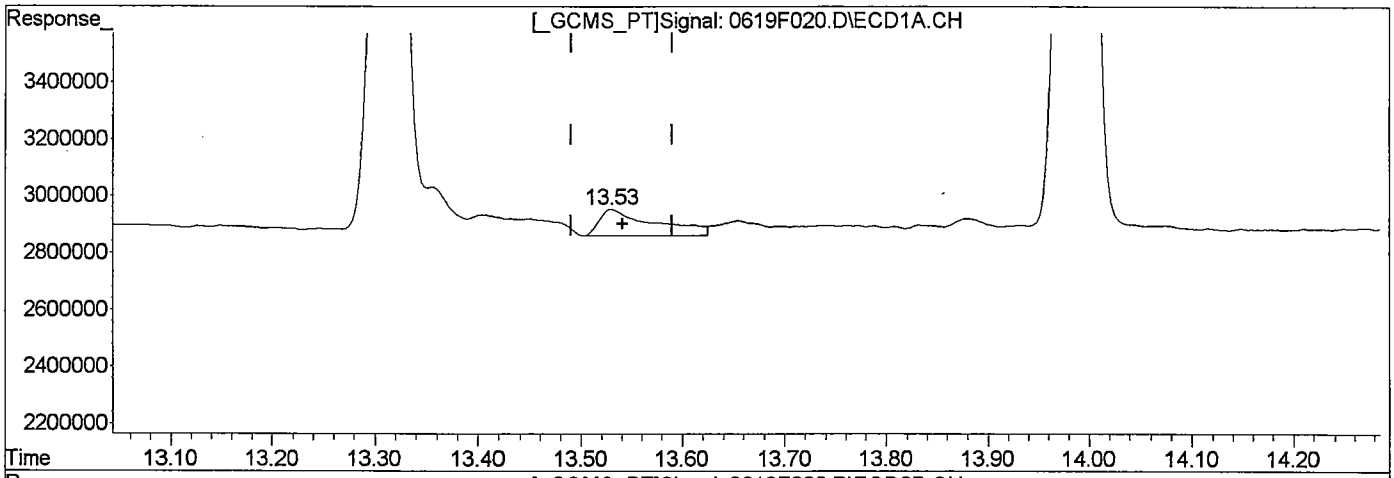
After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

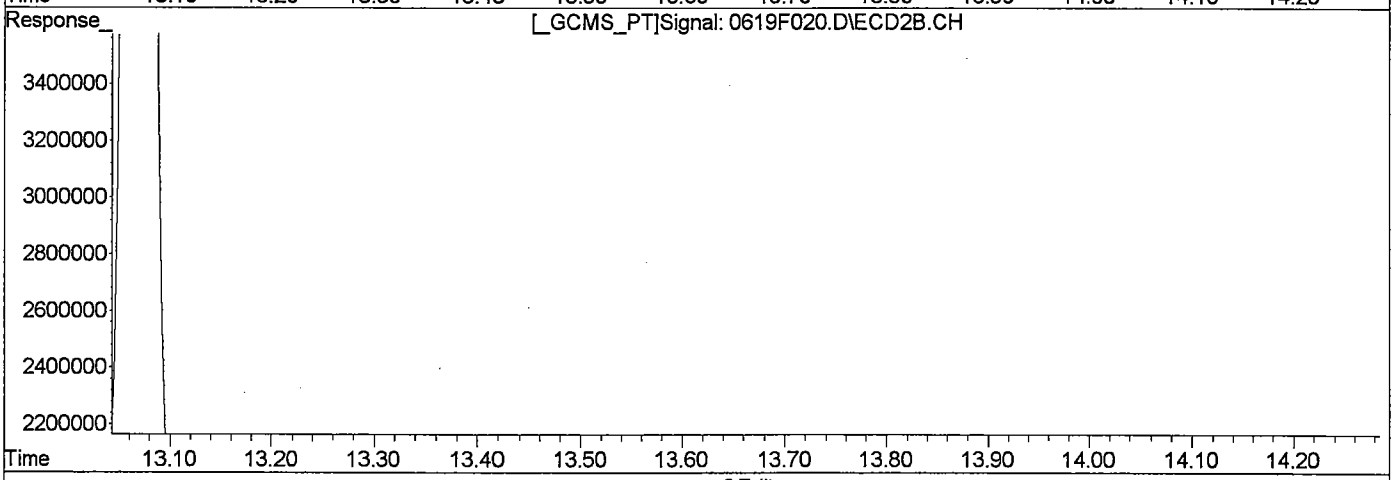
(+) = Expected Retention Time
0619F020.D 061107-8081.M Thu Jun 21 10:29:36 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 2.417ug/L

response 362738

(18) 4,4'-DDD #2

12.66min 0.917ug/L

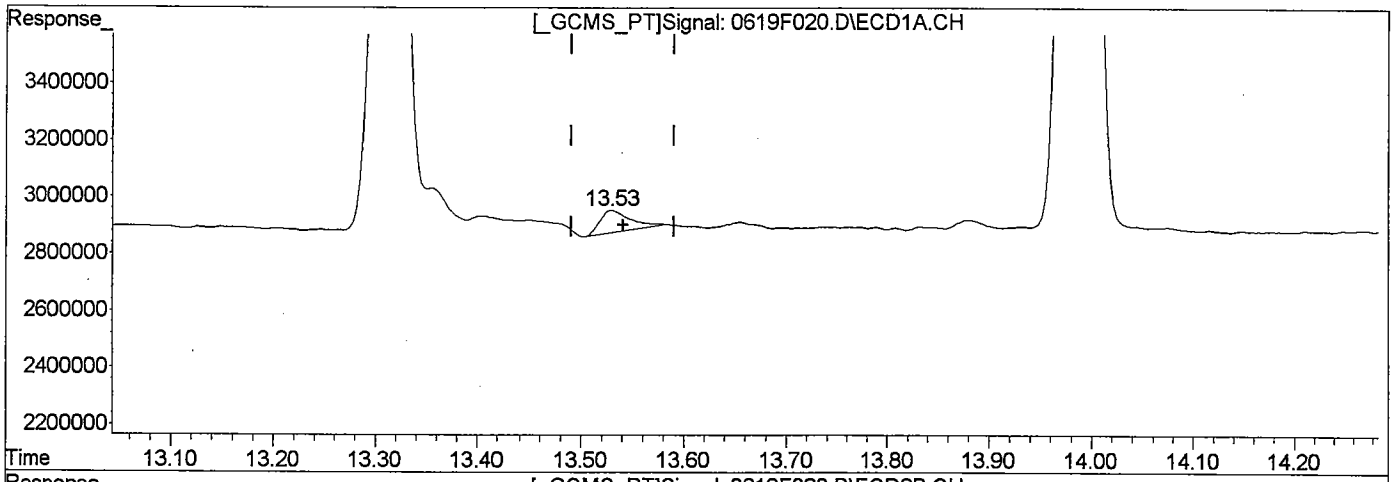
response 139972

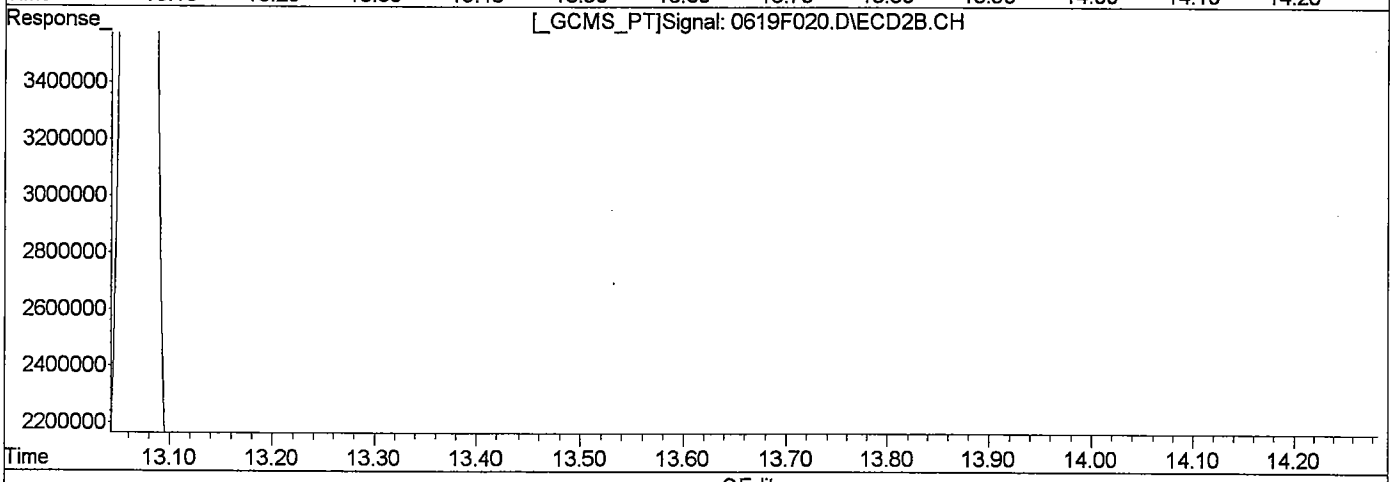
(+) = Expected Retention Time
0619F020.D 061107-8081.M Thu Jun 21 10:52:28 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\061907\0619F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\061907\0619F020.D\ECD2B.CH
Acq On : 20 Jun 2007 5:32 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDD

13.53min 1.078ug/L m

response 161831

(18) 4,4'-DDD #2

12.66min 0.917ug/L

response 139972

After
Initials
JUN 21 2007
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0619F020.D 061107-8081.M Thu Jun 21 10:52:33 2007

Exception Report

Data File: J:\GC23\DATA\061907\0619F023.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 18:52
Date Quantitated: 06/21/2007 10:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F023.D\0619F023C.D
Lab ID: KWG0706830-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/20/2007 18:52
Date Quantitated: 06/21/2007 10:55
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/22/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F023.D\0619F023c.d			**Vial:**	6
Acqu Date:	06/20/2007 18:52	**Quant Date:**	06/21/2007 10:55	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F023.D\0619F023c.d			**Vial:**	6
Acqu Date:	06/20/2007 18:52	**Quant Date:**	06/21/2007 10:55	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	502.63	524.19			
Chlordane {1}	10.73	9.63	6355136	6589964	527.95	523.24			
Chlordane {2}	12.01	11.34	2833644	10739246	507.50	522.02			
Chlordane {3}	12.44	11.37	10163308	6140469	497.38	529.02			
Chlordane {4}	12.52	11.43	7227051	3093235	500.98	534.39			
Chlordane {5}	12.59	11.49	5411736	8116239	495.29	516.95			
Chlordane {6}	13.83	12.92	4061693	4394968	486.72	519.51			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F023.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					502.6	500.0	0.5
Chlordane {1}		MULTI	AverageRF	100		1.2E+4	1.3E+4	5.6			
Chlordane {2}		MULTI	AverageRF	100		5.6E+3	5.7E+3	1.5			
Chlordane {3}		MULTI	AverageRF	100		2.0E+4	2.0E+4	-0.5			
Chlordane {4}		MULTI	AverageRF	100		1.4E+4	1.4E+4	0.2			
Chlordane {5}		MULTI	AverageRF	100		1.1E+4	1.1E+4	-0.9			
Chlordane {6}		MULTI	AverageRF	100		8.3E+3	8.1E+3	-2.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	1.9

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\061907\0619F023.D\0619F023C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					524.2	500.0	4.8
Chlordane {1}		MULTI	AverageRF	100		1.3E+4	1.3E+4	4.6			
Chlordane {2}		MULTI	AverageRF	100		2.1E+4	2.1E+4	4.4			
Chlordane {3}		MULTI	AverageRF	100		1.2E+4	1.2E+4	5.8			
Chlordane {4}		MULTI	AverageRF	100		5.8E+3	6.2E+3	6.9			
Chlordane {5}		MULTI	AverageRF	100		1.6E+4	1.6E+4	3.4			
Chlordane {6}		MULTI	AverageRF	100		8.5E+3	8.8E+3	3.9			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	4.8

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F023.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061907\0619F023.D\ECD2B.CH
Acq On : 20 Jun 2007 6:52 pm Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706830- Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:07 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.73	9.63	6355136	6589964	527.946	523.241
32)	Chlordane {2}	12.01	11.34	2833644	10739246	507.499	522.017
33)	Chlordane {3}	12.44	11.37	10163308	6140469	497.376	529.016
34)	Chlordane {4}	12.52	11.43	7227051	3093235	500.975	534.393
35)	Chlordane {5}	12.59	11.49	5411736	8116239	495.292	516.951
36)	Chlordane {6}	13.83	12.92	4061693	4394968	486.721	519.511

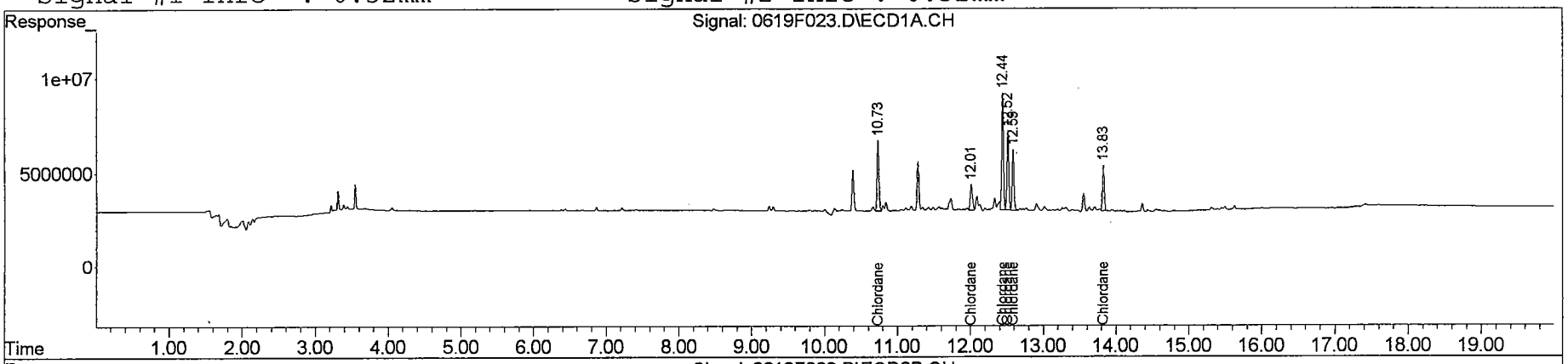
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

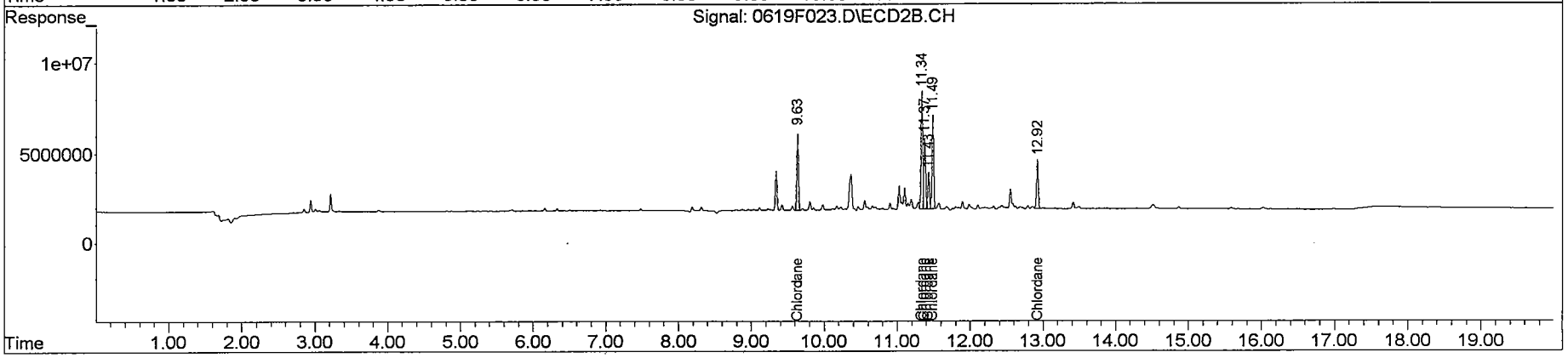
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F023.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\061907\0619F023.D\ECD2B.CH
Acq On : 20 Jun 2007 6:52 pm Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706830- Inst : GC23
Misc : SEMIVOA GC\W0706830\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:55 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\061907\0619F035.D
Lab ID: KWG0706830-7
RunType: IB
Matrix: MISC

Date Acquired: 06/21/2007 00:09
Date Quantitated: 06/21/2007 10:56
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F035.D\0619F035C.D
Lab ID: KWG0706830-7
RunType: IB
Matrix: MISC

Date Acquired: 06/21/2007 00:09
Date Quantitated: 06/21/2007 10:56
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/21/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\061907\0619F035.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F035.D\0619F035c.d			**Vial:**	97
Acqu Date:	06/21/2007 00:09	**Quant Date:**	06/21/2007 10:56	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-7				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0d	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0d	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0	0.0000	0.0000			
Heptachlor Epoxide			0	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0d	0	0.0000	0.0000			
Endrin			0d	0	0.0000	0.0000			
Endosulfan II			0d	0	0.0000	0.0000			
4,4'-DDD			0d	0	0.0000	0.0000			
Endrin Aldehyde			0d	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F035.D				
Data File #2:	J:\GC23\DATA\061907\0619F035.D\0619F035c.d				
Acqu Date:	06/21/2007 00:09			**Instrument:**	GC23
Run Type:	IB	**Quant Date:**	06/21/2007 10:56	**Vial:**	97
Lab ID:	KWG0706830-7			**Dilution:**	1.0
Signal #1:	DB XLB			**Soln Conc. Units:**	ug/L
		Signal #2:	DB-35MS		

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0d	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0d	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0	0.0000	0.0000			
Toxaphene {2}			0d	0	0.0000	0.0000			
Toxaphene {3}			0d	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0	0	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0d	0	0.0000	0.0000			
2,4'-DDT			0	0	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0d	0	0.0000	0.0000			
Hexachlorobutadiene			0d	0	0.0000	0.0000			
			0	0	0.0000	0.0000			

detected at or above MDL
lyte detected above MDL, but below MRL
above MRL also found in Method Blank
lyte concentration above high point of ICAL
umptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F035.D\ECD1A.CH Vial: 97
Signal #2 : J:\GC23\DATA\061907\0619F035.D\ECD2B.CH
Acq On : 21 Jun 2007 12:09 am Operator: AKamawal
Sample : KWG0706830-7 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706830\7-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:23 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

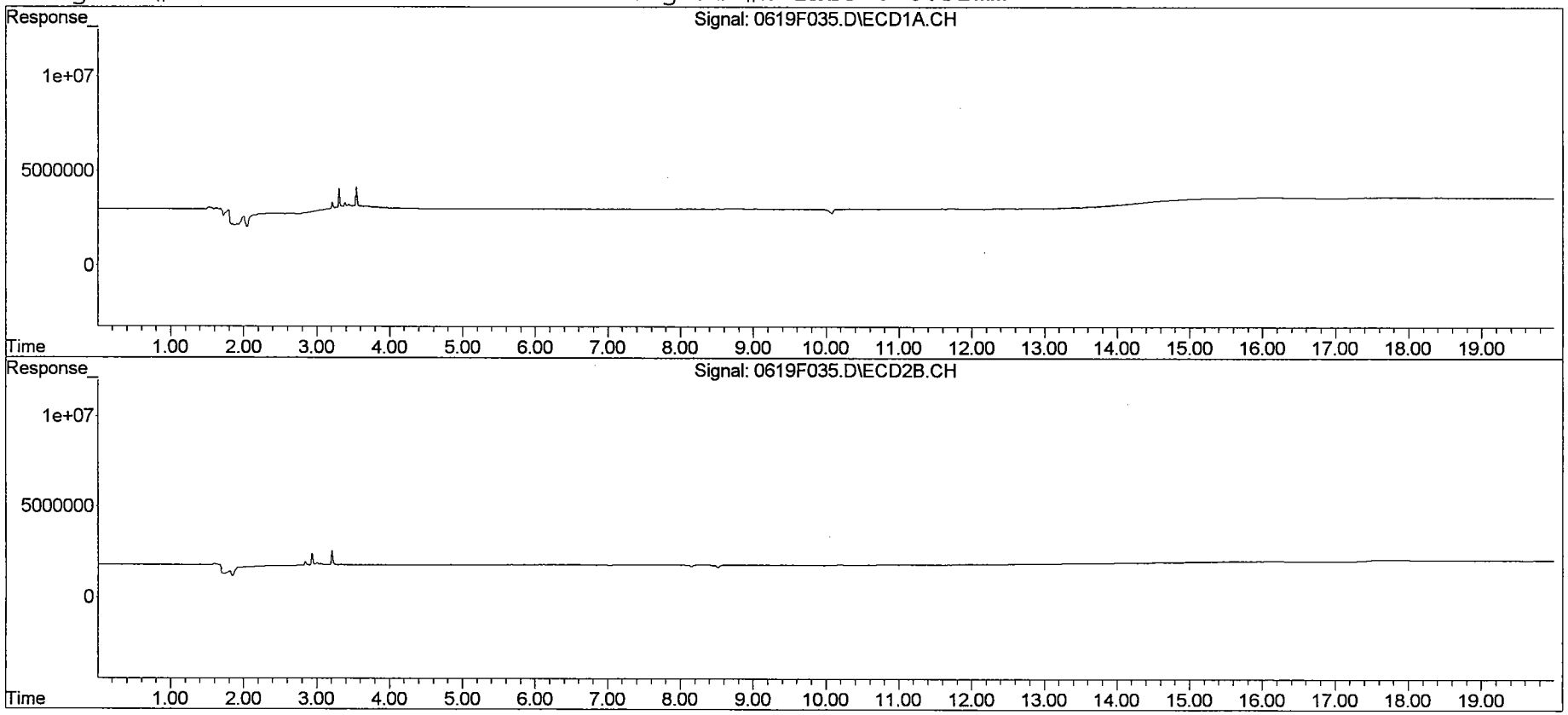
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F035.D\ECD1A.CH Vial: 97
Signal #2 : J:\GC23\DATA\061907\0619F035.D\ECD2B.CH
Acq On : 21 Jun 2007 12:09 am Operator: AKamawal
Sample : KWG0706830-7 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706830\7-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:56 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Exception Report

Data File: J:\GC23\DATA\061907\0619F036.D
Lab ID: KWG0706830-8
RunType: PEM
Matrix: MISC

Date Acquired: 06/21/2007 00:35
Date Quantitated: 06/21/2007 10:57
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: [illegible] 6/21/07

Secondary Review: [illegible] 6/21/07

Exception Report

Data File: J:\GC23\DATA\061907\0619F036.D\0619F036C.D
Lab ID: KWG0706830-8
RunType: PEM
Matrix: MISC

Date Acquired: 06/21/2007 00:35
Date Quantitated: 06/21/2007 10:57
Batch ID: KWG0706830
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: 6/21/07

Secondary Review: 6/27/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706830	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\061907\0619F036.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F036.D\0619F036c.d			**Vial:**	98
Acqu Date:	06/21/2007 00:35	**Quant Date:**	06/21/2007 10:57	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-8				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	104418	175062		
Endrin	8052602	8993485	4.0	2.7
Endosulfan II	0d	0d		
4,4'-DDD	185487	128801		
Endrin Aldehyde	117266	57238		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	18559845	17372560	1.5	1.7
Endrin Ketone	217929	196126		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\061907\0619F036.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\061907\0619F036.D\0619F036c.d			**Vial:**	98
Acqu Date:	06/21/2007 00:35	**Quant Date:**	06/21/2007 10:57	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706830-8				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F036.D\ECD1A.CH Vial: 98
Signal #2 : J:\GC23\DATA\061907\0619F036.D\ECD2B.CH
Acq On : 21 Jun 2007 12:35 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:49:24 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
	Target Compounds							
15)	4,4'-DDE	12.76	11.80	104418	175062	0.683	0.946	#
16)	Endrin	13.32	12.48	8052602	8993485	52.197	51.294	
18)	4,4'-DDD	13.54	12.67	185487	128801	1.236	0.844	#
19)	Endrin Aldehyde	13.89	13.22	117266	57238	0.708	0.379	#
21)	4,4'-DDT	13.99	13.08	18559845	17372560	100.762	106.553	
22)	Endrin Ketone	14.94	14.41	217929	196126	0.730	0.934	#

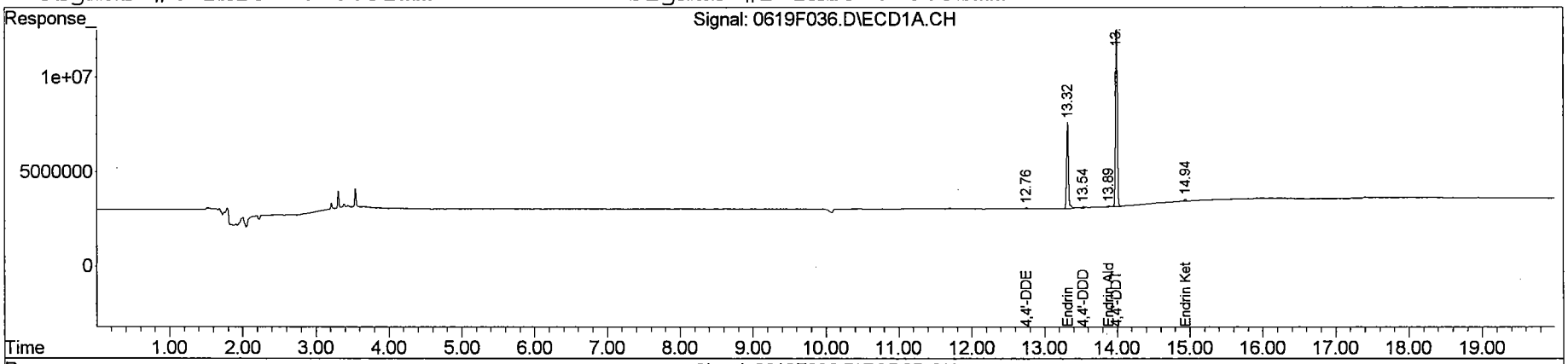
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

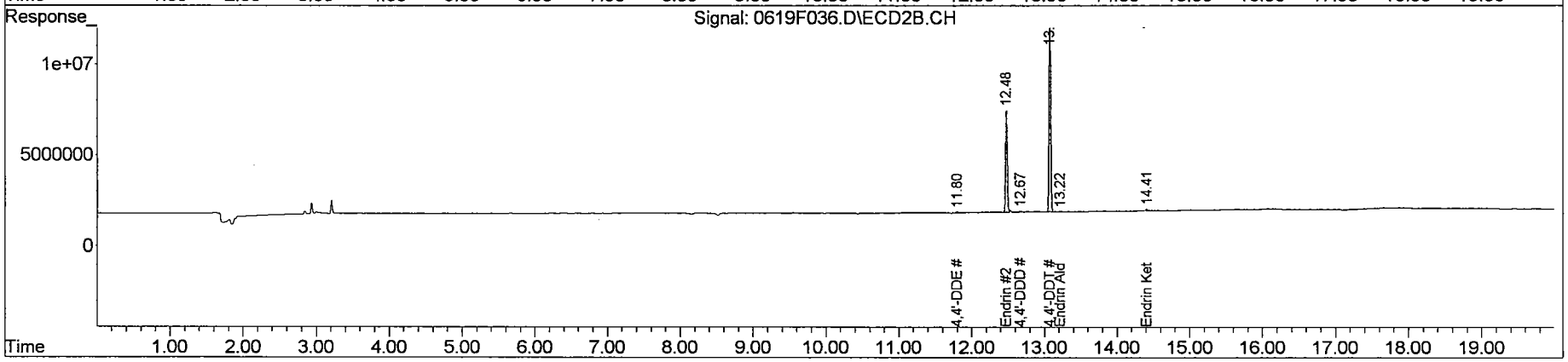
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\061907\0619F036.D\ECD1A.CH Vial: 98
Signal #2 : J:\GC23\DATA\061907\0619F036.D\ECD2B.CH
Acq On : 21 Jun 2007 12:35 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706830 Inst : GC23
Misc : SEMIVOA GC\W0706830\8-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 21 10:57 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Sequence Name: C:\GC23\SEQUENCE\062107.S
Comment:
Operator: AKamawal
Data Path: C:\GC23\DATA\062107\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

CAC 6343

Line	Type	Vial	DataFile	Method	Sample Name
1	DeleteGC				
2	MaskName - ----R---				
3	IB	1	0621F001	PESTA	KWG0706945-1 | IB | 8081A
4	IB	2	0621F002	PESTA	KWG0706945-1 | IB | 8081A
5	PEM	3	0621F003	PESTA	PEM @ 50-100ppb | gcps5-92d |
6	CCV	4	0621F004	PESTA	8081 @ 50ppb | gcps5-91d | KW
7	CCV	5	0621F005	PESTA	tox @ 1000ppb | gcps5-92h | K
8	CCV	6	0621F006	PESTA	chlor @ 500ppb | gcps5-86f |
9	SMPL	7	0621F007	PESTA	K0704527-015 | SL24-01-1'
10	SMPL	8	0621F008	PESTA	K0704608-008 | SL24-07-6'
11	SMPL	9	0621F009	PESTA	K0704852-002 | 1349MW100CL
12	SMPL	10	0621F010	PESTA	K0704631-001 | Manhole
13	MB	11	0621F011	PESTA	KWG0706699-4 | MB | 608 Modif 608
14	LCS	12	0621F012	PESTA	KWG0706699-2 | LCS | 608 Modi
15	DLCS	13	0621F013	PESTA	KWG0706699-3 | DLCS | 608 Mod
16	SMPL	14	0621F014	PESTA	K0704948-007 | 002 COMP
17	SMPL	15	0621F015	PESTA	K0705084-007 | 002 Composite
18	SMPL	16	0621F016	PESTA	P0700578-003 | PLANT EFFLUENT
19	MS	17	0621F017	PESTA	KWG0706699-1 | P0700578-003MS
20	IB	1	0621F018	PESTA	KWG0706945-4 | IB | 8081A
21	IB	2	0621F019	PESTA	KWG0706945-4 | IB | 8081A
22	PEM	3	0621F020	PESTA	PEM @ 50-100ppb | gcps5-92d |
23	CCV	4	0621F021	PESTA	8081 @ 50ppb | gcps5-91d | KW
24	CCV	5	0621F022	PESTA	tox @ 1000ppb | gcps5-92h | K
25	CCV	6	0621F023	PESTA	chlor @ 500ppb | gcps5-86f |
26	MB	18	0621F024	PESTA	KWG0706345-4 | MB | 8081A PES
27	LCS	19	0621F025	PESTA	KWG0706345-3 | LCS | 8081A PE -8081
28	LCS	20	0621F026	PESTA	KWG0706345-7 | LCS | 8081A PE -tox
29	SMPL	21	0621F027	PESTA	K0704681-002 | SERF-01b-000
30	SMPL	22	0621F028	PESTA	K0704681-005 | SERF-01a-000
31	SMPL	23	0621F029	PESTA	K0704681-006 | SE03-06-000
32	SMPL	24	0621F030	PESTA	K0704681-007 | SE03-02-000
33	SMPL	25	0621F031	PESTA	K0704681-010 | SE03-03-000
34	MS	26	0621F032	PESTA	KWG0706345-5 | K0704681-010MS 8081
35	DMS	27	0621F033	PESTA	KWG0706345-6 | K0704681-010DM
36	MS	28	0621F034	PESTA	KWG0706345-12 | K0704681-010M tox
37	DMS	29	0621F035	PESTA	KWG0706345-13 | K0704681-010D
38	IB	96	0621F036	PESTA	KWG0706945-7 | IB | 8081A
39	IB	97	0621F037	PESTA	KWG0706945-7 | IB | 8081A
40	PEM	98	0621F038	PESTA	PEM @ 50-100ppb | gcps5-92d |
41	CCV	99	0621F039	PESTA	8081 @ 50ppb | gcps5-91d | KW
42	CCV	100	0621F040	PESTA	tox @ 1000ppb | gcps5-92h | K
43	SMPL	30	0621F041	PESTA	K0704681-011 | SE03-10-000

Sequence Name: C:\GC23\SEQUENCE\062107.S

Line	Type	Vial	DataFile	Method	Sample Name			
44	SMPL	31	0621F042	PESTA	K0704681-012	SE03-07-000		
45	SMPL	32	0621F043	PESTA	K0704681-013	SE03-01-000		
46	SMPL	33	0621F044	PESTA	K0704681-014	SE03-04-000		
47	SMPL	34	0621F045	PESTA	K0704681-015	SE03-11-000		
48	MS	35	0621F046	PESTA	KWG0706345-8	K0704681-015MS	8081	
49	DMS	36	0621F047	PESTA	KWG0706345-9	K0704681-015DM		
50	MS	37	0621F048	PESTA	KWG0706345-14	K0704681-015M	NK	
51	DMS	38	0621F049	PESTA	KWG0706345-15	K0704681-015D		
52	IB	96	0621F050	PESTA	KWG0706945-10	IB	8081A	
53	IB	97	0621F051	PESTA	KWG0706945-10	IB	8081A	
54	PEM	98	0621F052	PESTA	PEM @ 50-100ppb	gcps5-92d		
55	CCV	99	0621F053	PESTA	8081 @ 50ppb	gcps5-91d	KW	
56	CCV	100	0621F054	PESTA	tox @ 1000ppb	gcps5-92h	K	

Exception Report

Data File: J:\GC23\DATA\062107\0621F002.D
Lab ID: KWG0706945-1
RunType: IB
Matrix: MISC

Date Acquired: 06/21/2007 16:43
Date Quantitated: 06/22/2007 08:32
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	N/A

Primary Review: 6/26/2007

Secondary Review: [illegible]

Exception Report

Data File:	J:\GC23\DATA\062107\0621F002.D\0621F002C.D	**Date Acquired:**	06/21/2007 16:43
Lab ID:	KWG0706945-1	**Date Quantitated:**	06/22/2007 08:32
RunType:	IB	**Batch ID:**	KWG0706945
Matrix:	MISC	**Analysis Method:**	8081A
		MethodJoinID:	MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/26/07

Secondary Review: 06/26/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F002.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F002.D\0621F002c.d			**Vial:**	2
Acqu Date:	06/21/2007 16:43	**Quant Date:**	06/22/2007 08:32	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0d	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0	0.0000	0.0000			
Heptachlor Epoxide			0	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE	12.75	11.78	37597	10607m	0.2460	0.0570			
Endrin			0	0	0.0000	0.0000			
Endosulfan II			0d	0	0.0000	0.0000			
4,4'-DDD			0	0	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F002.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F002.D\0621F002c.d			**Vial:**	2
Acqu Date:	06/21/2007 16:43	**Quant Date:**	06/22/2007 08:32	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-1				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0	0	0.0000	0.0000			
4,4'-DDT			0	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0	0.0000	0.0000			
Toxaphene {2}			0	0	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0d	0	0.0000	0.0000			
Toxaphene {5}			0d	0	0.0000	0.0000			
Toxaphene {6}			0	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0d	0.0000	0.0000			
Chlordane {4}			0	0d	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0	0	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0	0	0.0000	0.0000			
Mirex			0	0	0.0000	0.0000			
Hexachloroethane			0	0	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

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J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F002.D\ECD2B.CH
Acq On : 21 Jun 2007 4:43 pm Operator: AKamawal
Sample : KWG0706945-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:14 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.75	11.78	37597	10607	0.246	0.057m#

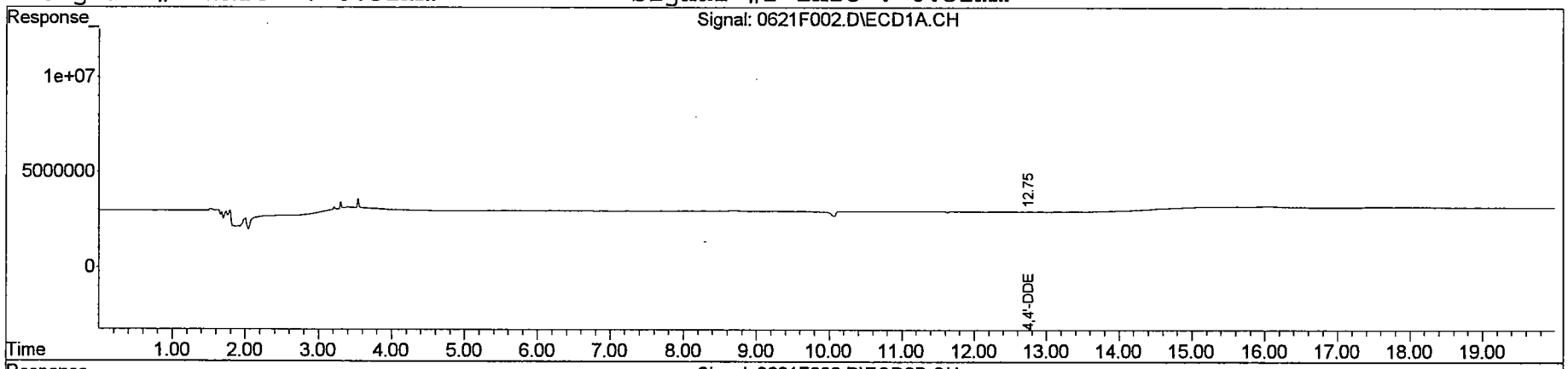
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

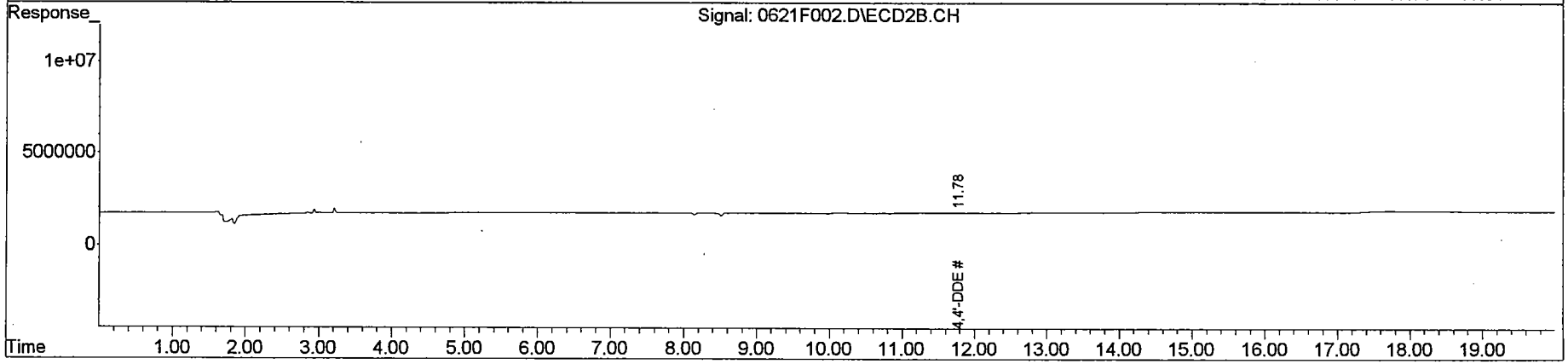
Quantitation Report (Not Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F002.D\ECD2B.CH
Acq On : 21 Jun 2007 4:43 pm Operator: AKamawal
Sample : KWG0706945-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:32 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

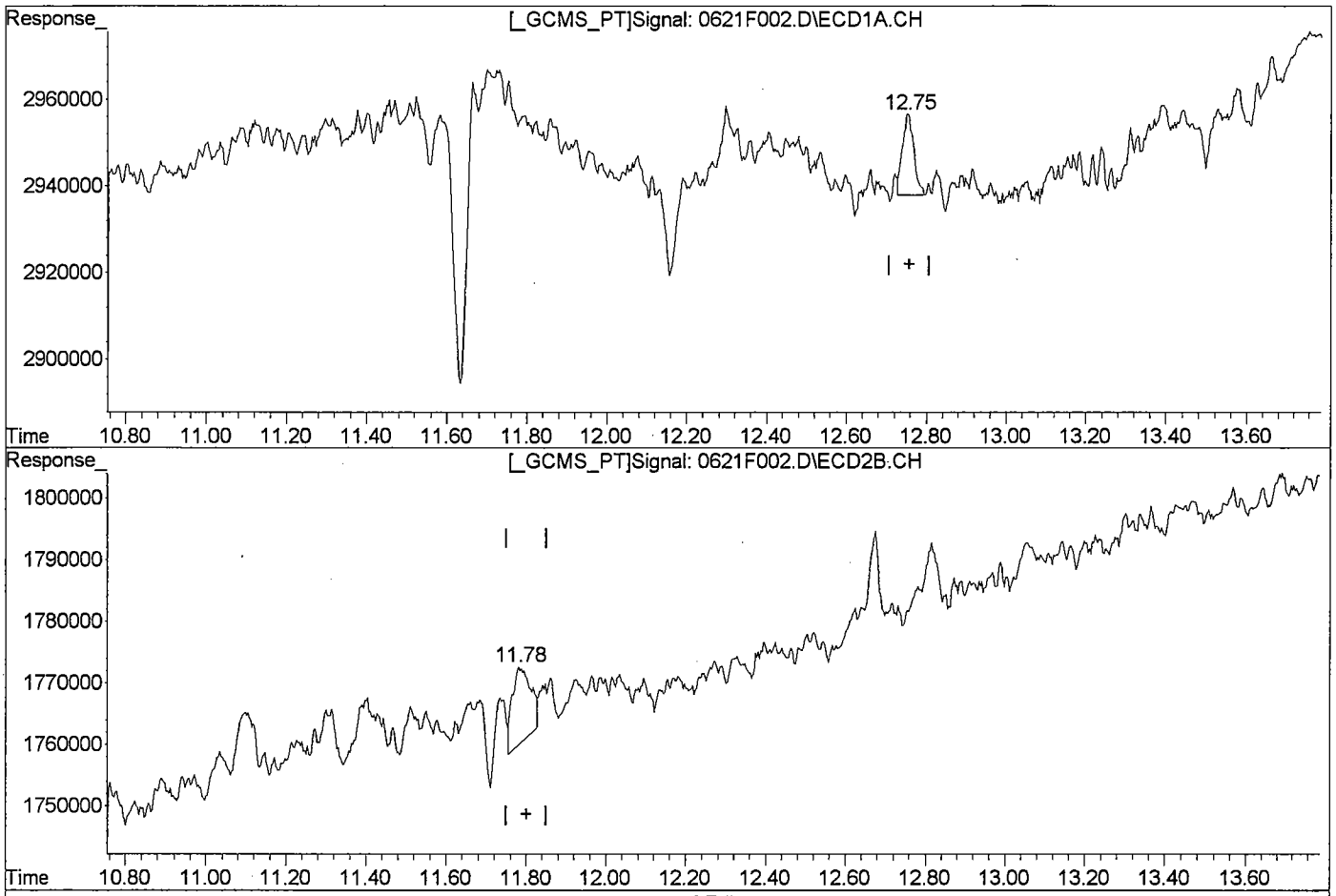




Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F002.D\ECD2B.CH
Acq On : 21 Jun 2007 4:43 pm Operator: AKamawal
Sample : KWG0706945-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



QEdit

(15) 4,4'-DDE

12.75min 0.246ug/L

response 37597

(15) 4,4'-DDE #2

11.78min 0.216ug/L

response 40029

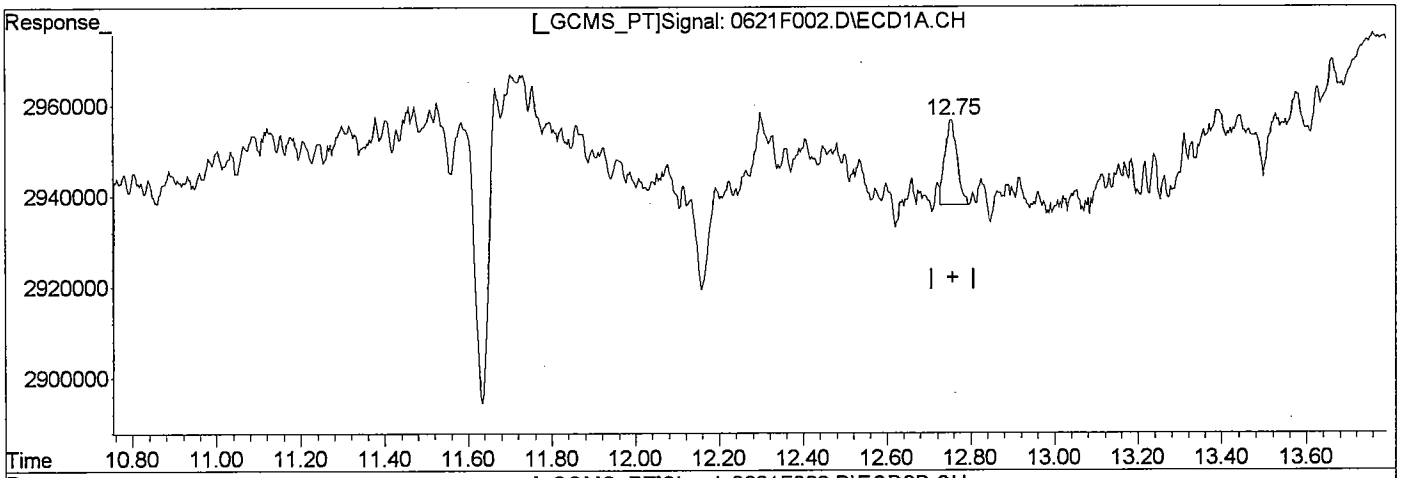
(+) = Expected Retention Time

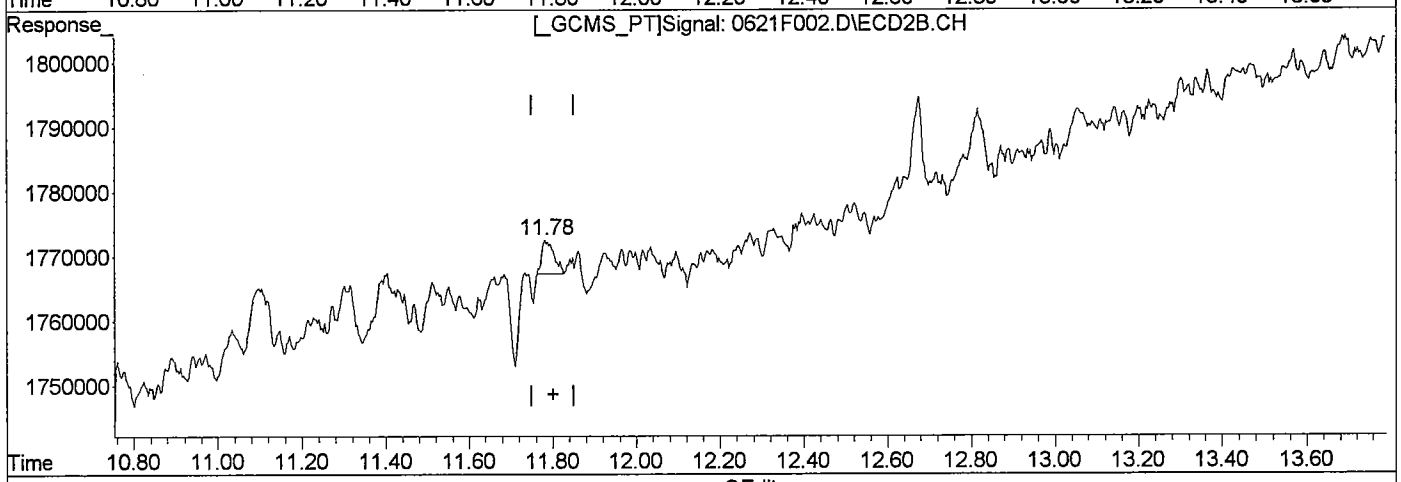
0621F002.D 061107-8081.M Fri Jun 22 08:32:03 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F002.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F002.D\ECD2B.CH
Acq On : 21 Jun 2007 4:43 pm Operator: AKamawal
Sample : KWG0706945-1 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\1-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.75min 0.246ug/L

response 37597

(15) 4,4'-DDE #2

11.78min 0.057ug/L m

response 10607

(+) = Expected Retention Time
0621F002.D 061107-8081.M Fri Jun 22 08:32:11 2007

Exception Report

Data File: J:\GC23\DATA\062107\0621F003.D
Lab ID: KWG0706945-2
RunType: PEM
Matrix: MISC

Date Acquired: 06/21/2007 17:09
Date Quantitated: 06/22/2007 08:32
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: 6/26/07

Secondary Review: MRS

Exception Report

Data File: J:\GC23\DATA\062107\0621F003.D\0621F003C.D
Lab ID: KWG0706945-2
RunType: PEM
Matrix: MISC

Date Acquired: 06/21/2007 17:09
Date Quantitated: 06/22/2007 08:32
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: 6/27/07

Secondary Review: 7/2/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\062107\0621F003.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F003.D\0621F003c.d			**Vial:**	3
Acqu Date:	06/21/2007 17:09	**Quant Date:**	06/22/2007 08:32	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	120344	111869		
Endrin	7587730	8769804	5.1	3.3
Endosulfan II	0d	0d		
4,4'-DDD	137711	144086		
Endrin Aldehyde	149953	102975		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	18153368	17117354	1.4	1.5
Endrin Ketone	256310	191765		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F003.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F003.D\0621F003c.d			**Vial:**	3
Acqu Date:	06/21/2007 17:09	**Quant Date:**	06/22/2007 08:32	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-2				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F003.D\ECD2B.CH
Acq On : 21 Jun 2007 5:09 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:15 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.75	11.79	120344	111869	0.787	0.605
16)	Endrin	13.31	12.47	7587730	8769804	49.184	50.019
18)	4,4'-DDD	13.53	12.66	137711	144086	0.918	0.944
19)	Endrin Aldehyde	13.88	13.21	149953	102975	0.905	0.682
21)	4,4'-DDT	13.99	13.07	18153368	17117354	98.555	104.988
22)	Endrin Ketone	14.93	14.40	256310	191765	0.859	0.913

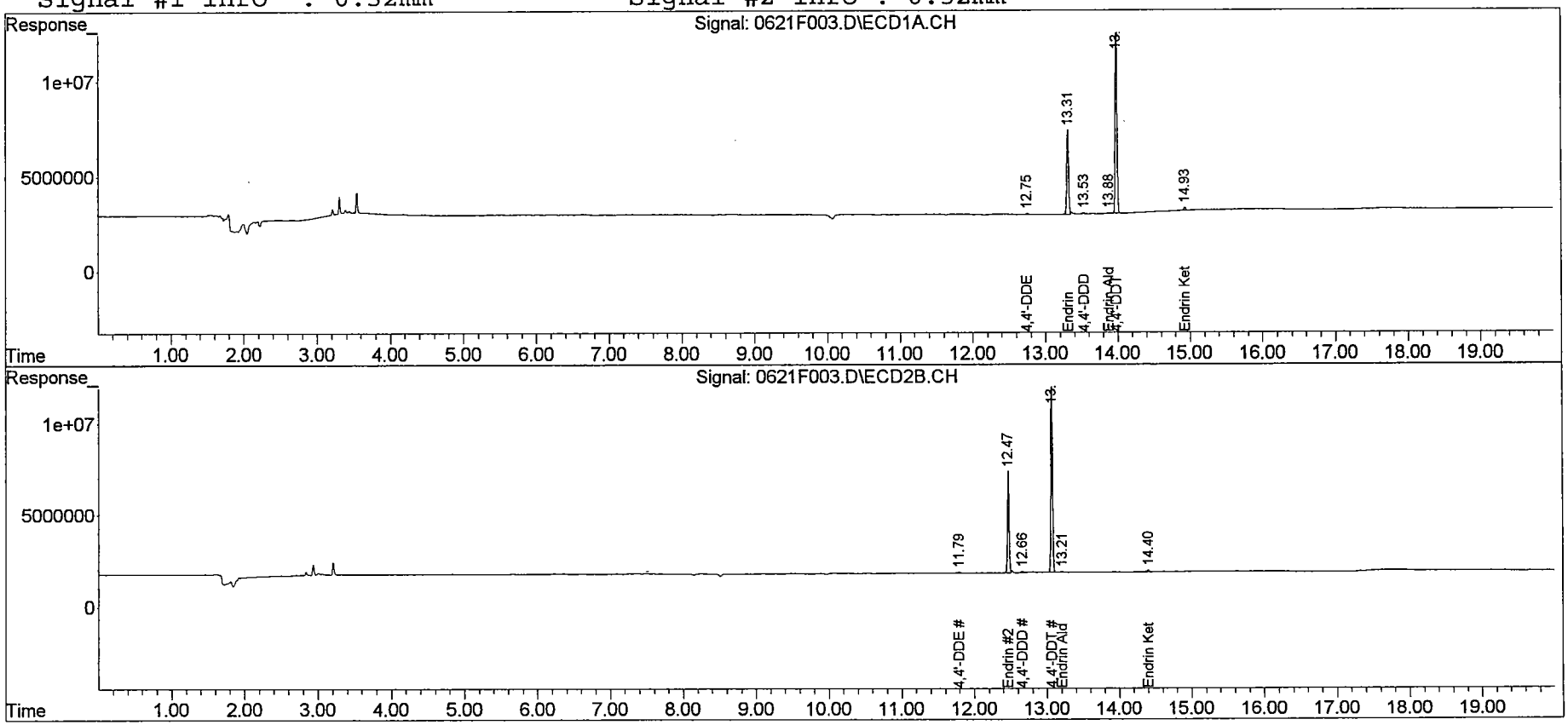
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F003.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F003.D\ECD2B.CH
Acq On : 21 Jun 2007 5:09 pm Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\2-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:32 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Exception Report

Data File:	J:\GC23\DATA\062107\0621F006.D	**Date Acquired:**	06/21/2007 18:29
Lab ID:	KWG0706945-3	**Date Quantitated:**	06/22/2007 08:39
RunType:	CCV	**Batch ID:**	KWG0706945
Matrix:	MISC	**Analysis Method:**	8081A
		MethodJoinID:	MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/07

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F006.D\0621F006C.D
Lab ID: KWG0706945-3
RunType: CCV
Matrix: MISC

Date Acquired: 06/21/2007 18:29
Date Quantitated: 06/22/2007 08:39
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/26/07
Secondary Review: MM (7/3/07)

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F006.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F006.D\0621F006c.d			**Vial:**	6
Acqu Date:	06/21/2007 18:29	**Quant Date:**	06/22/2007 08:39	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F006.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F006.D\0621F006c.d			**Vial:**	6
Acqu Date:	06/21/2007 18:29	**Quant Date:**	06/22/2007 08:39	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-3				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	500.05	508.92			
Chlordane {1}	10.72	9.62	6192963	6416773	514.47	509.49			
Chlordane {2}	12.00	11.32	2759746	10689209	494.27	519.59			
Chlordane {3}	12.43	11.36	10019456	5677986	490.34	489.17			
Chlordane {4}	12.51	11.42	7105713	3017873	492.56	521.37			
Chlordane {5}	12.58	11.47	5302979	7884898	485.34	502.22			
Chlordane {6}	13.81	12.91	4366894	4328689	523.29	511.68			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F006.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					500.0	500.0	0.0
Chlordane {1}		MULTI	AverageRF	100		1.2E+4	1.2E+4	2.9			
Chlordane {2}		MULTI	AverageRF	100		5.6E+3	5.5E+3	-1.1			
Chlordane {3}		MULTI	AverageRF	100		2.0E+4	2.0E+4	-1.9			
Chlordane {4}		MULTI	AverageRF	100		1.4E+4	1.4E+4	-1.5			
Chlordane {5}		MULTI	AverageRF	100		1.1E+4	1.1E+4	-2.9			
Chlordane {6}		MULTI	AverageRF	100		8.3E+3	8.7E+3	4.7			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	2.5

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580

DataFile: J:\GC23\DATA\062107\0621F006.D\0621F006C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					508.9	500.0	1.8
Chlordane {1}		MULTI	AverageRF	100		1.3E+4	1.3E+4	1.9			
Chlordane {2}		MULTI	AverageRF	100		2.1E+4	2.1E+4	3.9			
Chlordane {3}		MULTI	AverageRF	100		1.2E+4	1.1E+4	-2.2			
Chlordane {4}		MULTI	AverageRF	100		5.8E+3	6.0E+3	4.3			
Chlordane {5}		MULTI	AverageRF	100		1.6E+4	1.6E+4	0.4			
Chlordane {6}		MULTI	AverageRF	100		8.5E+3	8.7E+3	2.3			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	2.5

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\062107\0621F006.D\ECD2B.CH
Acq On : 21 Jun 2007 6:29 pm Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706945- Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:17 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.72	9.62	6192963	6416773	514.474	509.490
32)	Chlordane {2}	12.00	11.32	2759746	10689209	494.265	519.585
33)	Chlordane {3}	12.43	11.36	10019456	5677986	490.336	489.172
34)	Chlordane {4}	12.51	11.42	7105713	3017873	492.564	521.374
35)	Chlordane {5}	12.58	11.47	5302979	7884898	485.339	502.216
36)	Chlordane {6}	13.81	12.91	4366894	4328689	523.294	511.676

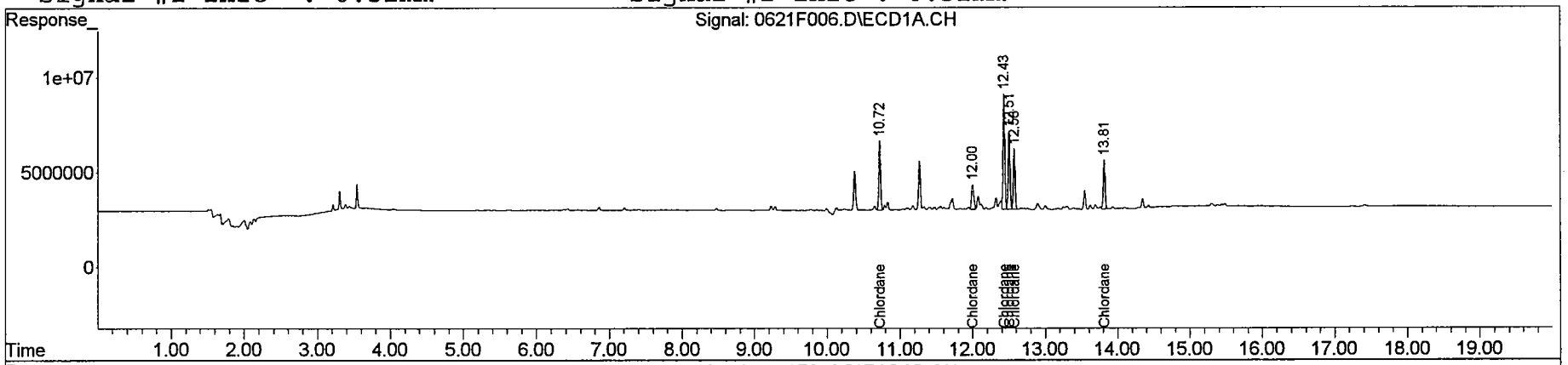
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

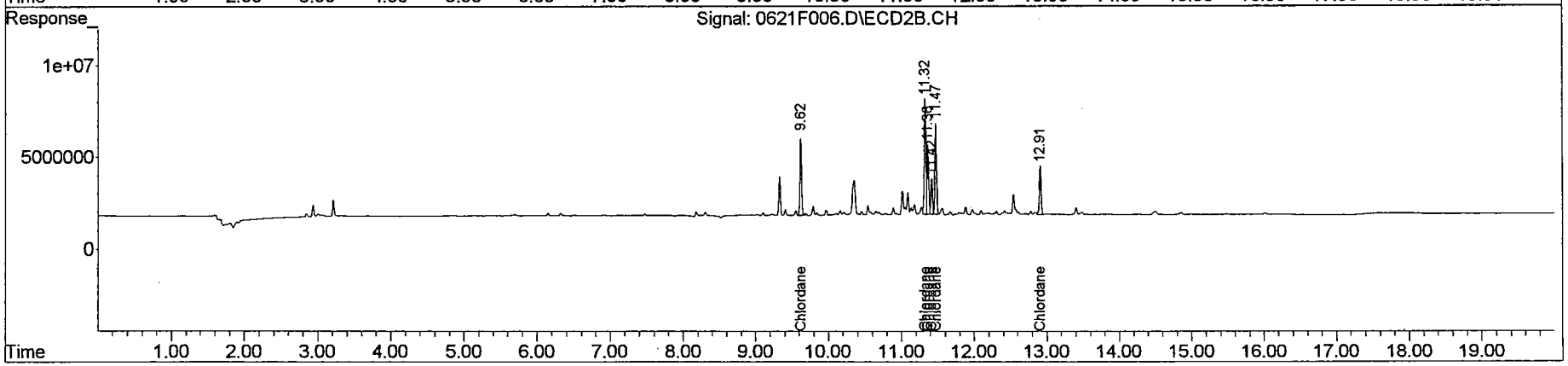
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F006.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\062107\0621F006.D\ECD2B.CH
Acq On : 21 Jun 2007 6:29 pm Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706945- Inst : GC23
Misc : SEMIVOA GC\W0706945\3-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:39 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\062107\0621F019.D
Lab ID: KWG0706945-4
RunType: IB
Matrix: MISC

Date Acquired: 06/22/2007 00:12
Date Quantitated: 06/22/2007 08:40
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/2007

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F019.D\0621F019C.D
Lab ID: KWG0706945-4
RunType: IB
Matrix: MISC

Date Acquired: 06/22/2007 00:12
Date Quantitated: 06/22/2007 08:40
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/26/2007

Secondary Review: 6/28/

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F019.D\0621F019c.d			**Vial:**	2
Acqu Date:	06/22/2007 00:12	**Quant Date:**	06/22/2007 08:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0	0	0.0000	0.0000			
Hexachlorobenzene			0	0	0.0000	0.0000			
beta-BHC			0	0	0.0000	0.0000			
gamma-BHC (Lindane)			0	0	0.0000	0.0000			
delta-BHC			0	0	0.0000	0.0000			
Heptachlor			0	0	0.0000	0.0000			
Aldrin			0	0	0.0000	0.0000			
Isodrin			0	0	0.0000	0.0000			
Heptachlor Epoxide			0	0	0.0000	0.0000			
gamma-Chlordane			0	0	0.0000	0.0000			
Endosulfan I			0	0	0.0000	0.0000			
alpha-Chlordane			0	0	0.0000	0.0000			
Dieldrin			0	0	0.0000	0.0000			
4,4'-DDE			0d	0d	0.0000	0.0000			
Endrin			0	0	0.0000	0.0000			
Endosulfan II			0	0	0.0000	0.0000			
4,4'-DDD			0d	0d	0.0000	0.0000			
Endrin Aldehyde			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F019.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F019.D\0621F019c.d			**Vial:**	2
Acqu Date:	06/22/2007 00:12	**Quant Date:**	06/22/2007 08:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0	0.0000	0.0000			
4,4'-DDT			0	0	0.0000	0.0000			
Endrin Ketone			0	0	0.0000	0.0000			
Methoxychlor			0	0	0.0000	0.0000			
Toxaphene			0	0	0.0000	0.0000			
Toxaphene {1}			0	0d	0.0000	0.0000			
Toxaphene {2}			0	0d	0.0000	0.0000			
Toxaphene {3}			0	0	0.0000	0.0000			
Toxaphene {4}			0	0	0.0000	0.0000			
Toxaphene {5}			0d	0	0.0000	0.0000			
Toxaphene {6}			0d	0	0.0000	0.0000			
Chlordane			0	0	0.0000	0.0000			
Chlordane {1}			0	0	0.0000	0.0000			
Chlordane {2}			0	0	0.0000	0.0000			
Chlordane {3}			0	0	0.0000	0.0000			
Chlordane {4}			0	0	0.0000	0.0000			
Chlordane {5}			0	0	0.0000	0.0000			
Chlordane {6}			0	0	0.0000	0.0000			
Chlorpyrifos			0	0	0.0000	0.0000			
Oxychlordane			0	0	0.0000	0.0000			
2,4'-DDE			0d	0	0.0000	0.0000			
cis-Nonachlor			0d	0	0.0000	0.0000			
2,4'-DDD			0	0	0.0000	0.0000			
trans-Nonachlor			0	0	0.0000	0.0000			
2,4'-DDT			0	0	0.0000	0.0000			
Mirex			0d	0	0.0000	0.0000			
Hexachloroethane			0	0d	0.0000	0.0000			
Hexachlorobutadiene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F019.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F019.D\ECD2B.CH
Acq On : 22 Jun 2007 12:12 am Operator: AKamawal
Sample : KWG0706945-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:31 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L

System Monitoring Compounds

Target Compounds

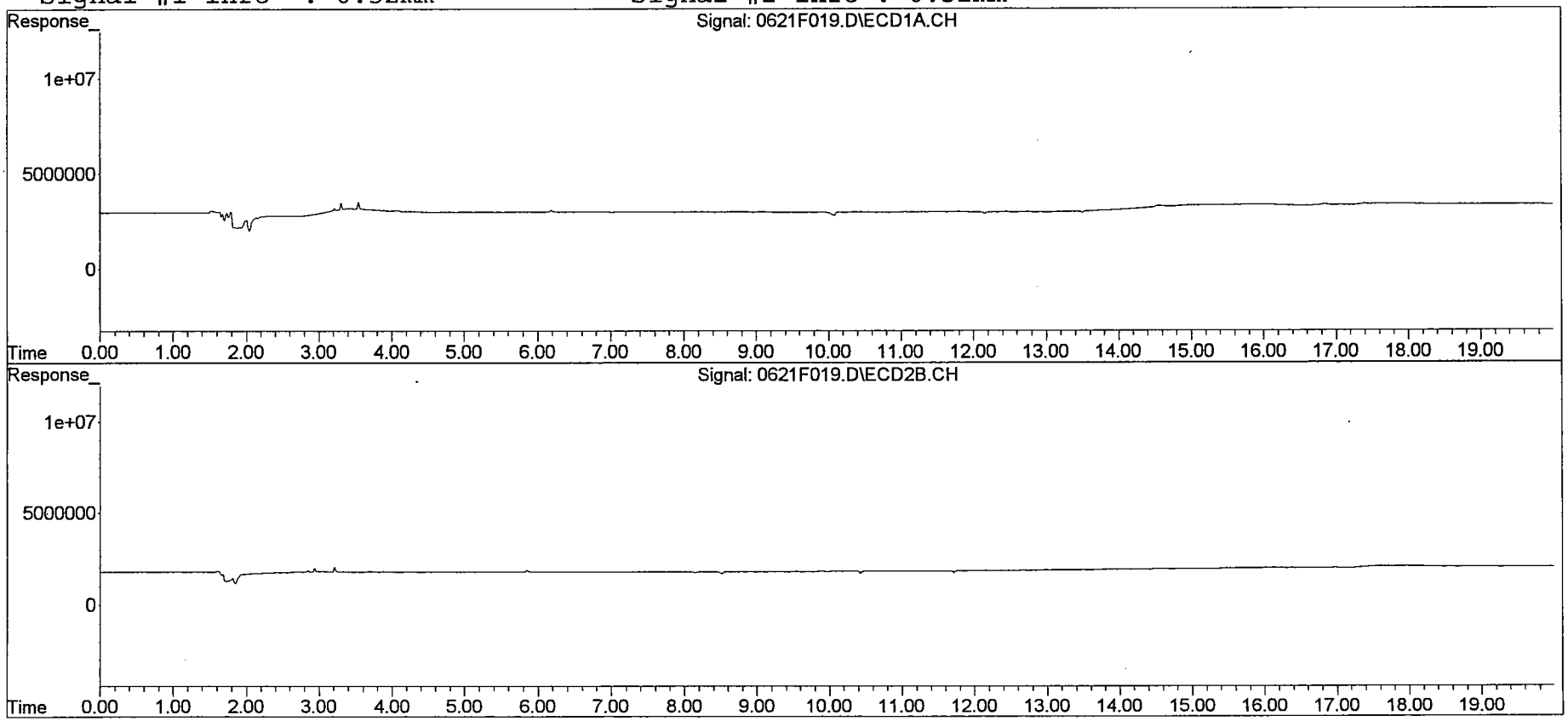
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F019.D\ECD1A.CH Vial: 2
Signal #2 : J:\GC23\DATA\062107\0621F019.D\ECD2B.CH
Acq On : 22 Jun 2007 12:12 am Operator: AKamawal
Sample : KWG0706945-4 | IB | 8081A Inst : GC23
Misc : SEMIVOA GC\W0706945\4-IB.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:40 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



Exception Report

Data File: J:\GC23\DATA\062107\0621F020.D
Lab ID: KWG0706945-5
RunType: PEM
Matrix: MISC

Date Acquired: 06/22/2007 00:38
Date Quantitated: 06/22/2007 08:40
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: 6/26/07

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F020.D\0621F020C.D
Lab ID: KWG0706945-5
RunType: PEM
Matrix: MISC

Date Acquired: 06/22/2007 00:38
Date Quantitated: 06/22/2007 08:40
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Pesticide Breakdown	NA	NA	NA	x	

Primary Review: CC 6/26/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:	Organochlorine Pesticides	**Report List ID:**	LJ4700
MB Ref:		**Method ID:**	MJ580
		Quant based on Report List	

Data File #1:	J:\GC23\DATA\062107\0621F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F020.D\0621F020c.d			**Vial:**	3
Acqu Date:	06/22/2007 00:38	**Quant Date:**	06/22/2007 08:40	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

BreakDown Results

Parameter Name	Resp #1	Respe #2	Percent Breakdown #1	Percent Breakdown #1
Tetrachloro-m-xylene	0d	0d		
Decachlorobiphenyl	0d	0d		
alpha-BHC	0d	0d		
beta-BHC	0d	0d		
gamma-BHC (Lindane)	0d	0d		
delta-BHC	0d	0d		
Heptachlor	0d	0d		
Aldrin	0d	0d		
Heptachlor Epoxide	0d	0d		
gamma-Chlordane	0d	0d		
Endosulfan I	0d	0d		
alpha-Chlordane	0d	0d		
Dieldrin	0d	0d		
4,4'-DDE	107822	74009m		
Endrin	8008615m	8841542	4.1	2.7
Endosulfan II	0d	0d		
4,4'-DDD	286171	159834		
Endrin Aldehyde	132586	76843		
Endosulfan Sulfate	0d	0d		
4,4'-DDT	18994995	17142664	2.0	1.3
Endrin Ketone	207253	169076		
Methoxychlor	0d	0d		
Toxaphene {1}	0d	0d		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F020.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F020.D\0621F020c.d			**Vial:**	3
Acqu Date:	06/22/2007 00:38	**Quant Date:**	06/22/2007 08:40	**Dilution:**	1.0
Run Type:	PEM			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-5				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Toxaphene {2}	0d	0d
Toxaphene {3}	0d	0d
Toxaphene {4}	0d	0d
Toxaphene {5}	0d	0d
Toxaphene {6}	0d	0d
Toxaphene	0	0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:33 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
15)	4,4'-DDE	12.74	11.79	107822	74009	0.706	0.400m#
16)	Endrin	13.30	12.46	8008615	8841542	51.912m	50.428
18)	4,4'-DDD	13.52	12.65	286171	159834	1.907	1.047 #
19)	Endrin Aldehyde	13.87f	13.21	132586	76843	0.800	0.509 #
21)	4,4'-DDT	13.98	13.06	18994995	17142664	103.124	105.143
22)	Endrin Ketone	14.92	14.39	207253	169076	0.695	0.805

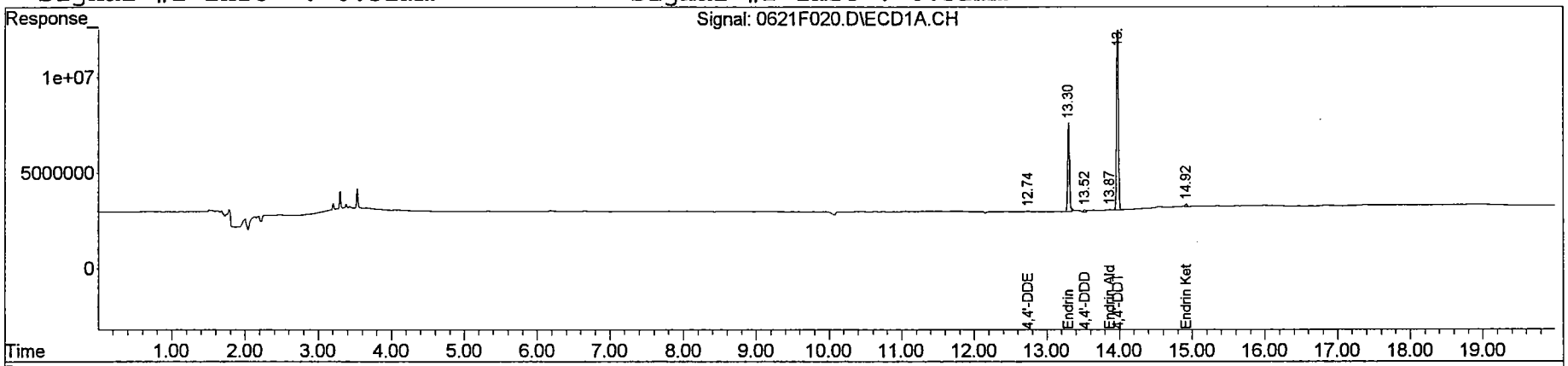
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

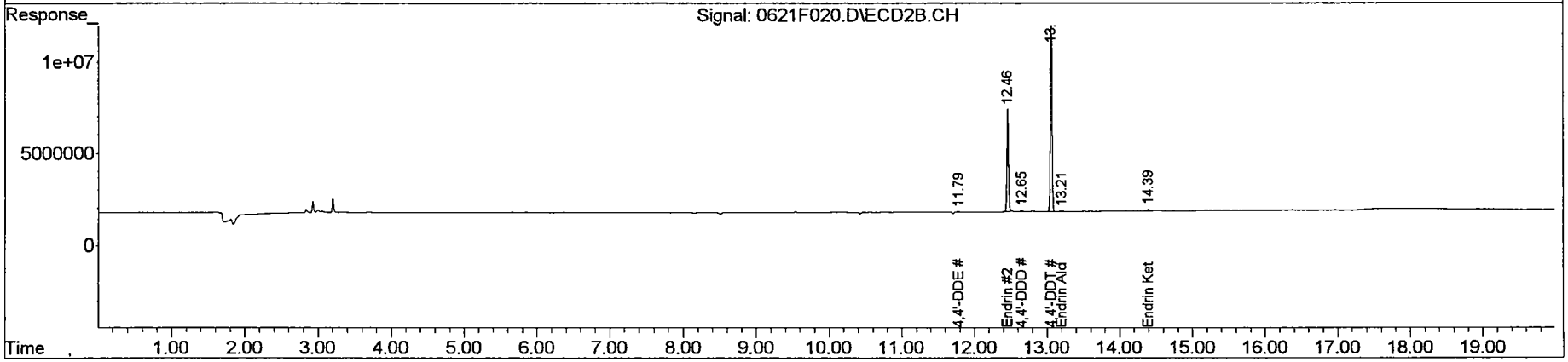
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:40 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

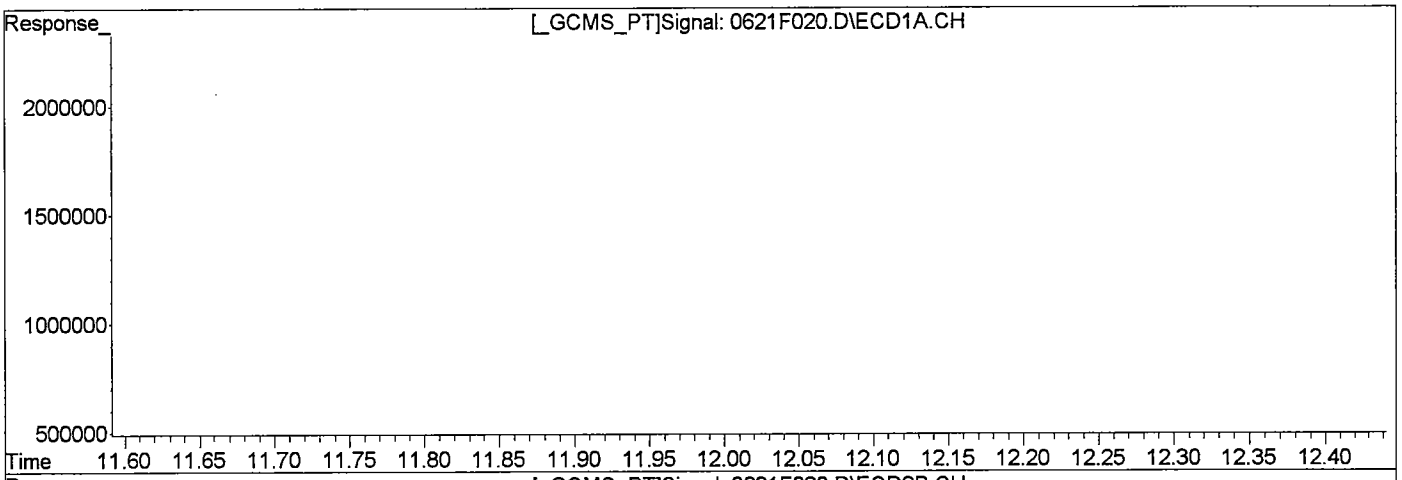


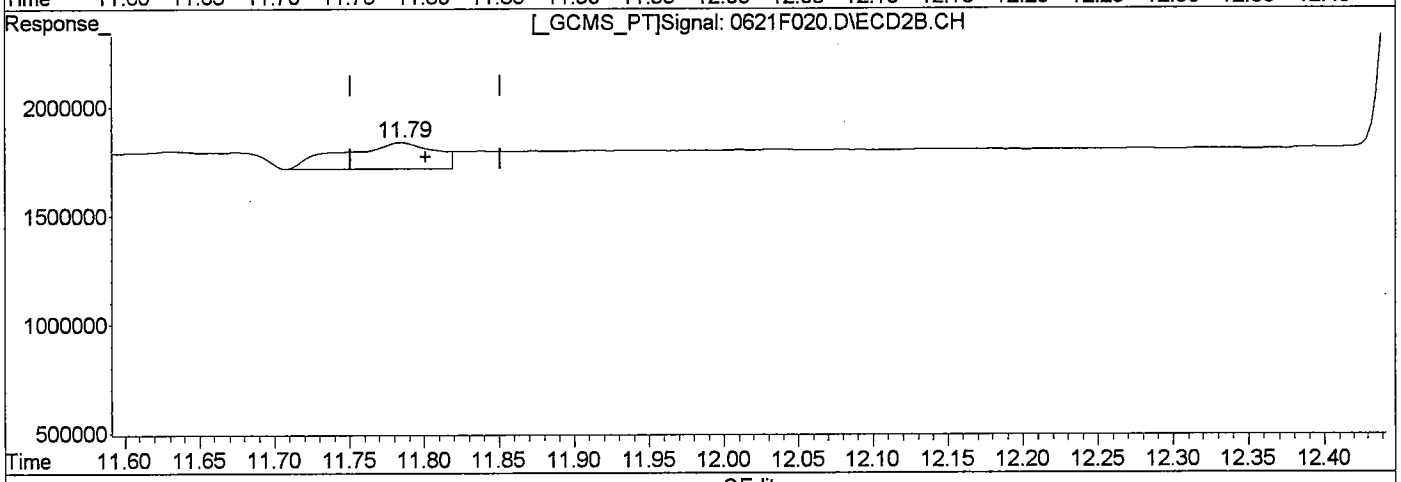


Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 0.706ug/L

response 107822

(15) 4,4'-DDE #2

11.79min 2.930ug/L

response 541974

Before

JUN 2 2 2007

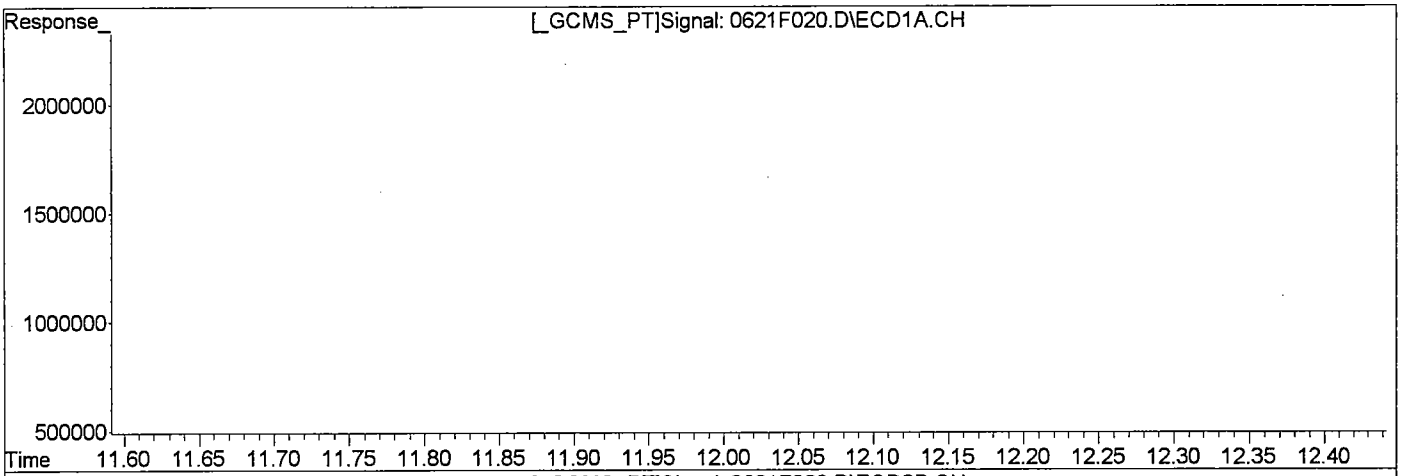
(+) = Expected Retention Time

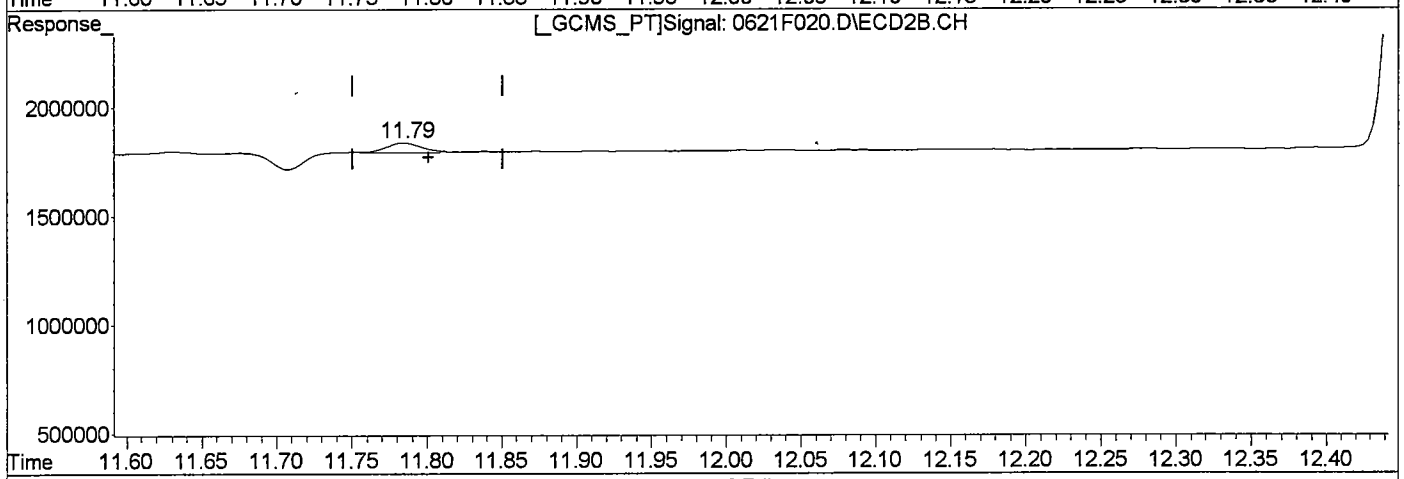
0621F020.D 061107-8081.M Fri Jun 22 08:40:34 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration





QEdit

(15) 4,4'-DDE

12.74min 0.706ug/L

response 107822

(15) 4,4'-DDE #2

11.79min 0.400ug/L m

response 74009

After
Initials

JUN 22 2007

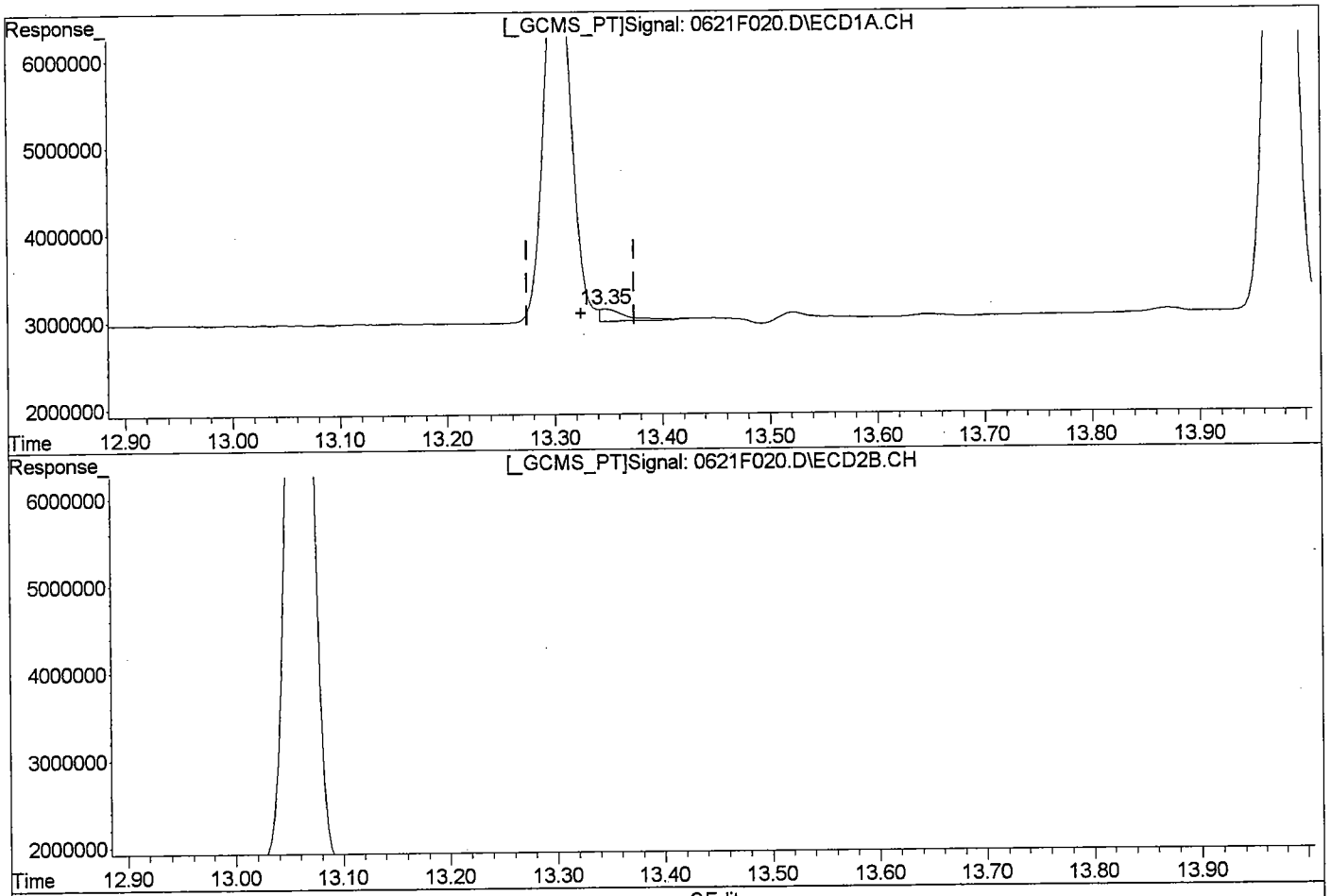
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F020.D 061107-8081.M Fri Jun 22 08:40:41 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(16) Endrin

13.35min 1.433ug/L

response 221010

(16) Endrin #2

12.46min 50.428ug/L

response 8841542

Before

JUN 2 6 2007

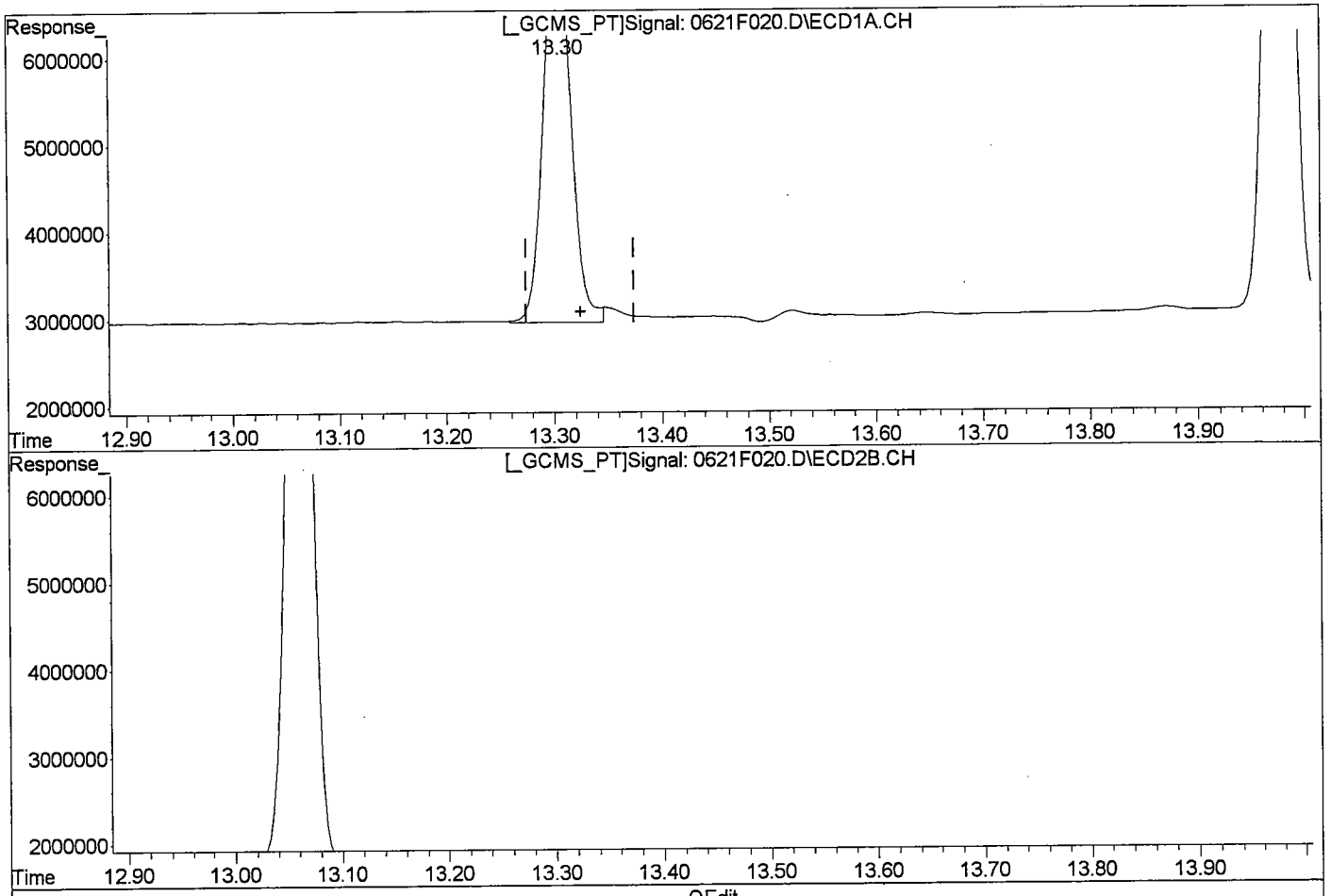
(+) = Expected Retention Time

0621F020.D 061107-8081.M Fri Jun 22 08:40:49 2007

Quantitation Report (Qedit)

Signal #1 : J:\GC23\DATA\062107\0621F020.D\ECD1A.CH Vial: 3
Signal #2 : J:\GC23\DATA\062107\0621F020.D\ECD2B.CH
Acq On : 22 Jun 2007 12:38 am Operator: AKamawal
Sample : PEM @ 50-100ppb | gcps5-92d | KWG0706945 Inst : GC23
Misc : SEMIVOA GC\W0706945\5-PEM.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:30 2007 Quant Results File: 061107-8081.RES

Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration



(16) Endrin

13.30min 51.912ug/L m

response 8008615

After
Initials

JUN 22 2007

(16) Endrin #2

12.46min 50.428ug/L

response 8841542

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

(+) = Expected Retention Time
0621F020.D 061107-8081.M Fri Jun 22 08:40:55 2007

Exception Report

Data File: J:\GC23\DATA\062107\0621F023.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:57
Date Quantitated: 06/22/2007 08:43
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	

Primary Review: 6/26/07

Secondary Review: 6/28/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F023.D\0621F023C.D
Lab ID: KWG0706945-6
RunType: CCV
Matrix: MISC

Date Acquired: 06/22/2007 01:57
Date Quantitated: 06/22/2007 08:43
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: CC 6/26/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC
Prod Code:	8081A	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706945	**Prep Lot:**		**Report Group:**	
Analysis Method:	8081A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ580
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F023.D\0621F023c.d			**Vial:**	6
Acqu Date:	06/22/2007 01:57	**Quant Date:**	06/22/2007 08:43	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	16-111	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NR
			%Recovery =		NA	NA	Limits =	14-145	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
alpha-BHC			0d	0d	0.0000	0.0000			NR
Hexachlorobenzene			0d	0d	0.0000	0.0000			
beta-BHC			0d	0d	0.0000	0.0000			NR
gamma-BHC (Lindane)			0d	0d	0.0000	0.0000			NR
delta-BHC			0d	0d	0.0000	0.0000			NR
Heptachlor			0d	0d	0.0000	0.0000			NR
Aldrin			0d	0d	0.0000	0.0000			NR
Isodrin			0d	0d	0.0000	0.0000			
Heptachlor Epoxide			0d	0d	0.0000	0.0000			NR
gamma-Chlordane			0d	0d	0.0000	0.0000			NR
Endosulfan I			0d	0d	0.0000	0.0000			NR
alpha-Chlordane			0d	0d	0.0000	0.0000			NR
Dieldrin			0d	0d	0.0000	0.0000			NR
4,4'-DDE			0d	0d	0.0000	0.0000			NR
Endrin			0d	0d	0.0000	0.0000			NR
Endosulfan II			0d	0d	0.0000	0.0000			NR
4,4'-DDD			0d	0d	0.0000	0.0000			NR
Endrin Aldehyde			0d	0d	0.0000	0.0000			NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F023.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F023.D\0621F023c.d			**Vial:**	6
Acqu Date:	06/22/2007 01:57	**Quant Date:**	06/22/2007 08:43	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706945-6				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/L #1	ug/L #2	Rpt
Endosulfan Sulfate			0d	0d	0.0000	0.0000			NR
4,4'-DDT			0d	0d	0.0000	0.0000			NR
Endrin Ketone			0d	0d	0.0000	0.0000			NR
Methoxychlor			0d	0d	0.0000	0.0000			NR
Toxaphene			0	0	0.0000	0.0000			NR
Toxaphene {1}			0d	0d	0.0000	0.0000			
Toxaphene {2}			0d	0d	0.0000	0.0000			
Toxaphene {3}			0d	0d	0.0000	0.0000			
Toxaphene {4}			0d	0d	0.0000	0.0000			
Toxaphene {5}			0d	0d	0.0000	0.0000			
Toxaphene {6}			0d	0d	0.0000	0.0000			
Chlordane			0	0	502.70	511.40			
Chlordane {1}	10.72	9.62	6070756	6380747	504.32	506.63			
Chlordane {2}	12.00	11.32	2746230	10356093	491.84	503.39			
Chlordane {3}	12.43	11.36	10098153	6054363	494.19	521.60			
Chlordane {4}	12.50	11.42	7195002	3047202	498.75	526.44			
Chlordane {5}	12.57	11.47	5396210	7891776	493.87	502.65			
Chlordane {6}	13.81	12.91	4449816	4294973	533.23	507.69			
Chlorpyrifos			0d	0d	0.0000	0.0000			
Oxychlordane			0d	0d	0.0000	0.0000			
2,4'-DDE			0d	0d	0.0000	0.0000			
cis-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDD			0d	0d	0.0000	0.0000			
trans-Nonachlor			0d	0d	0.0000	0.0000			
2,4'-DDT			0d	0d	0.0000	0.0000			
Mirex			0d	0d	0.0000	0.0000			
Hexachloroethane			0d	0d	0.0000	0.0000			
Hexachlorobutadiene			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F023.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					502.7	500.0	0.5
Chlordane {1}		MULTI	AverageRF	100		1.2E+4	1.2E+4	0.9			
Chlordane {2}		MULTI	AverageRF	100		5.6E+3	5.5E+3	-1.6			
Chlordane {3}		MULTI	AverageRF	100		2.0E+4	2.0E+4	-1.2			
Chlordane {4}		MULTI	AverageRF	100		1.4E+4	1.4E+4	-0.2			
Chlordane {5}		MULTI	AverageRF	100		1.1E+4	1.1E+4	-1.2			
Chlordane {6}		MULTI	AverageRF	100		8.3E+3	8.9E+3	6.6			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	2.0

Calibration Verification Report

Calibration ID: CAL6343
Method ID: MJ580
DataFile: J:\GC23\DATA\062107\0621F023.D\0621F023C.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Chlordane		TRG	NA	15					511.4	500.0	2.3
Chlordane {1}		MULTI	AverageRF	100		1.3E+4	1.3E+4	1.3			
Chlordane {2}		MULTI	AverageRF	100		2.1E+4	2.1E+4	0.7			
Chlordane {3}		MULTI	AverageRF	100		1.2E+4	1.2E+4	4.3			
Chlordane {4}		MULTI	AverageRF	100		5.8E+3	6.1E+3	5.3			
Chlordane {5}		MULTI	AverageRF	100		1.6E+4	1.6E+4	0.5			
Chlordane {6}		MULTI	AverageRF	100		8.5E+3	8.6E+3	1.5			

Alternate Calibration Evaluation Summary

Maximum Allowable Average %D =	15.0
Calculated Average %D =	2.3

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F023.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\062107\0621F023.D\ECD2B.CH
Acq On : 22 Jun 2007 1:57 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706945- Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:36 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
	Target Compounds						
31)	Chlordane	10.72	9.62	6070756	6380747	504.322	506.629
32)	Chlordane {2}	12.00	11.32	2746230	10356093	491.844	503.393
33)	Chlordane {3}	12.43	11.36	10098153	6054363	494.187	521.598
34)	Chlordane {4}	12.50	11.42	7195002	3047202	498.753	526.441
35)	Chlordane {5}	12.57	11.47	5396210	7891776	493.871	502.654
36)	Chlordane {6}	13.81	12.91	4449816	4294973	533.231	507.691

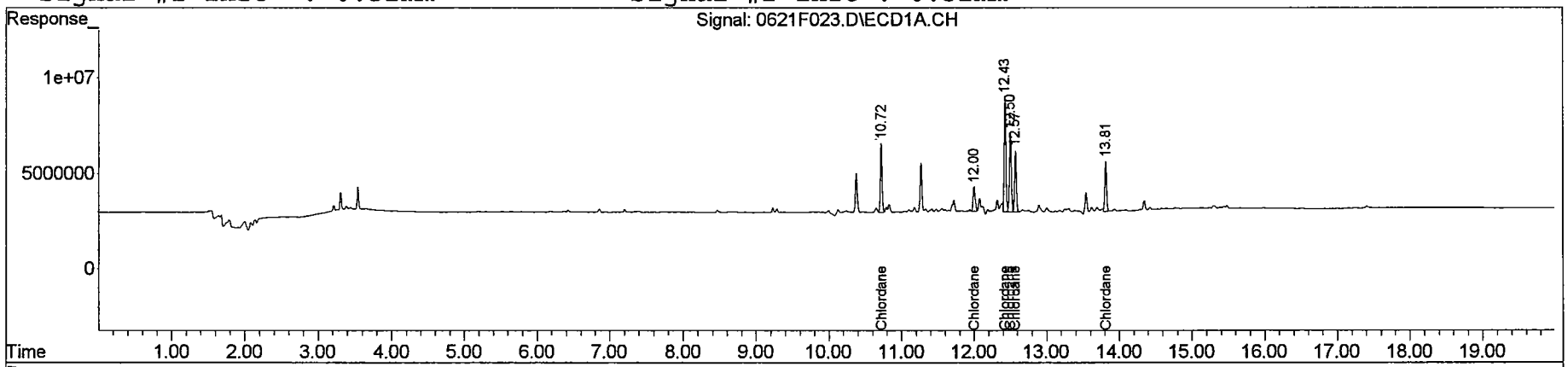
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

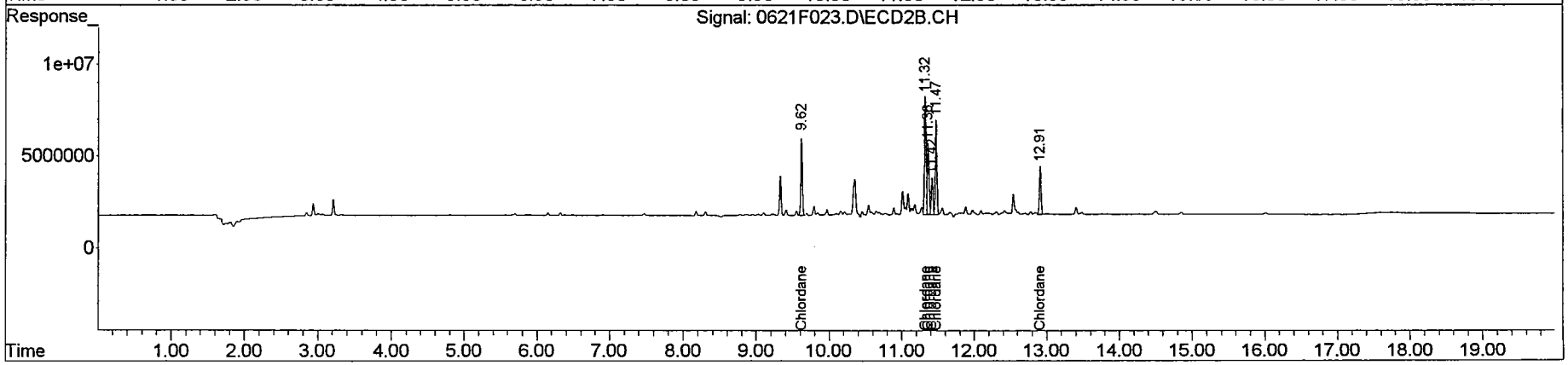
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F023.D\ECD1A.CH Vial: 6
Signal #2 : J:\GC23\DATA\062107\0621F023.D\ECD2B.CH
Acq On : 22 Jun 2007 1:57 am Operator: AKamawal
Sample : chlor @ 500ppb | gcps5-86f | KWG0706945- Inst : GC23
Misc : SEMIVOA GC\W0706945\6-CCV.H Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 8:43 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Exception Report

Data File: J:\GC23\DATA\062107\0621F024.D
Lab ID: KWG0706345-4
RunType: MB
Matrix: SEDIMENT

Date Acquired: 06/22/2007 02:23
Date Quantitated: 06/25/2007 17:09
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Hexachlorobenzene	-15.9	NA	15	
Surrogates	Decachlorobiphenyl	448	14	145	
	Tetrachloro-m-xylene	387	16	111	

Primary Review: 6/26/2007

Secondary Review: 6/26/07

Exception Report

Data File: J:\GC23\DATA\062107\0621F024.D\0621F024C.D
Lab ID: KWG0706345-4
RunType: MB
Matrix: SEDIMENT

Date Acquired: 06/22/2007 02:23
Date Quantitated: 06/25/2007 17:09
Batch ID: KWG0706945
Analysis Method: 8081A
MethodJoinID: MJ580

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	Decachlorobiphenyl	451	14	145	ON
	Tetrachloro-m-xylene	414	16	111	

Primary Review: U Gerwick

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SEDIMENT
Prod Code:	8081A PEST_OC	**Collect Date:**		**Receive Date:**	06/19/2007

Analysis Lot:	KWG0706945	**Prep Lot:**	KWG0706345	**Report Group:**	
Analysis Method:	8081A	**Prep Method:**	EPA 3541		
		Prep Date:	06/07/2007		
Prep Ref:	606395				

Quant Method:	J:\GC23\METHODS\061107-8081.	**Calibration ID:**	CAL6343
Title:			
MB Ref:		**Method ID:**	MJ719
		Quant based on Method	

Data File #1:	J:\GC23\DATA\062107\0621F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F024.D\0621F024c.d			**Vial:**	18
Acqu Date:	06/22/2007 02:23	**Quant Date:**	06/25/2007 17:09	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706345-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/L #1	ug/L #2			Rpt
Tetrachloro-m-xylene	8.51	7.40	15496653	14830662	77.45	82.75			83OK
				%Recovery =	77OK	83OK	Limits =	32-138	
Decachlorobiphenyl	17.12	16.00	24875205	16652747	89.64	90.17			90OK
				%Recovery =	90OK	90OK	Limits =	23-162	

Target Compounds

Final Conc. Units: ug/Kg Wet Weight

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
alpha-BHC			0	0d	0.0000	0.0000	0.19U	0.19U	0.19U
Hexachlorobenzene			0d	0d	0.0000	0.0000	0.52U	0.52U	0.52U
beta-BHC			0	0d	0.0000	0.0000	1.1U	1.1U	1.1U
gamma-BHC (Lindane)			0	0	0.0000	0.0000	0.61U	0.61U	0.61U
delta-BHC			0	0d	0.0000	0.0000	0.97U	0.97U	0.97U
Heptachlor	10.76 +0.04	9.63 +0.01	53588	38472	0.2660	0.1700	0.24U	0.24U	0.24U
Aldrin			0	0	0.0000	0.0000	0.77U	0.77U	0.77U
Isodrin			0d	0d	0.0000	0.0000	0.28U	0.28U	0.28U
Heptachlor Epoxide			0	0d	0.0000	0.0000	0.42U	0.42U	0.42U
gamma-Chlordane			0	0d	0.0000	0.0000	0.26U	0.26U	0.26U
Endosulfan I			0	0	0.0000	0.0000	0.20U	0.20U	0.20U
alpha-Chlordane			0	0	0.0000	0.0000	0.83U	0.83U	0.83U
Dieldrin			0	0	0.0000	0.0000	0.18U	0.18U	0.18U
4,4'-DDE			0	0	0.0000	0.0000	0.36U	0.36U	0.36U
Endrin			0	0	0.0000	0.0000	0.20U	0.20U	0.20U
Endosulfan II			0	0d	0.0000	0.0000	0.25U	0.25U	0.25U
4,4'-DDD			0d	0	0.0000	0.0000	1.0U	1.0U	1.0U
Endrin Aldehyde			0	0d	0.0000	0.0000	0.25U	0.25U	0.25U

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC23\DATA\062107\0621F024.D			**Instrument:**	GC23
Data File #2:	J:\GC23\DATA\062107\0621F024.D\0621F024c.d			**Vial:**	18
Acqu Date:	06/22/2007 02:23	**Quant Date:**	06/25/2007 17:09	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/L
Lab ID:	KWG0706345-4				
Signal #1:	DB XLB	**Signal #2:**	DB-35MS		

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/L #1	ug/L #2	ug/Kg #1	ug/Kg #2	Rpt
Endosulfan Sulfate			0d	0	0.0000	0.0000	0.40U	0.40U	0.40U
4,4'-DDT			0	0d	0.0000	0.0000	0.85U	0.85U	0.85U
Endrin Ketone			0	0	0.0000	0.0000	0.22U	0.22U	0.22U
Methoxychlor	14.65 +0.01	14.08 +0.01	413988	26883	3.07	0.2860	1.72J	1.2U	1.2U
Toxaphene			0	0	0.0000	0.0000	21U	21U	21U
Toxaphene {1}			0	0	0.0000	0.0000	21U	21U	
Toxaphene {2}			0	0d	0.0000	0.0000	21U	21U	
Toxaphene {3}			0	0d	0.0000	0.0000	21U	21U	
Toxaphene {4}			0	0	0.0000	0.0000	21U	21U	
Toxaphene {5}			0	0	0.0000	0.0000	21U	21U	
Toxaphene {6}			0	0d	0.0000	0.0000	21U	21U	
Chlordane			0	0	0.0000	0.0000	11U	11U	11U
Chlordane {1}			0d	0d	0.0000	0.0000	11U	11U	
Chlordane {2}			0d	0d	0.0000	0.0000	11U	11U	
Chlordane {3}			0d	0d	0.0000	0.0000	11U	11U	
Chlordane {4}			0d	0d	0.0000	0.0000	11U	11U	
Chlordane {5}			0d	0d	0.0000	0.0000	11U	11U	
Chlordane {6}			0d	0d	0.0000	0.0000	11U	11U	
Chlorpyrifos			0d	0d	0.0000	0.0000	0.26U	0.26U	0.26U
Oxychlordane			0d	0d	0.0000	0.0000	0.33U	0.33U	0.33U
2,4'-DDE			0d	0d	0.0000	0.0000	0.18U	0.18U	0.18U
cis-Nonachlor			0d	0d	0.0000	0.0000	0.13U	0.13U	0.13U
2,4'-DDD			0d	0d	0.0000	0.0000	0.46U	0.46U	0.46U
trans-Nonachlor			0d	0d	0.0000	0.0000	0.18U	0.18U	0.18U
2,4'-DDT			0d	0d	0.0000	0.0000	0.11U	0.11U	0.11U
Mirex			0d	0d	0.0000	0.0000	0.22U	0.22U	0.22U
Hexachloroethane			0d	0d	0.0000	0.0000	0.93U	0.93U	0.93U
Hexachlorobutadiene			0d	0d	0.0000	0.0000	0.47U	0.47U	0.47U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	17.88 g	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F024.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\062107\0621F024.D\ECD2B.CH
Acq On : 22 Jun 2007 2:23 am Operator: AKamawal
Sample : KWG0706345-4 | MB | 8081A PEST_OC | SEDI Inst : GC23
Misc : SEMIVOA GC\W0706345\4-MB.H | F=10 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 22 08:30:37 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Initial Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
		System Monitoring Compounds							
1)	s	Tetrachloro-m-xy	8.51	7.40	15496653	14830662	77.447	82.753	
24)	s	Decachlorobiphen	17.12	16.00	24875205	16652747	89.637	90.169	
		Target Compounds							
7)		Heptachlor	10.76	9.63	53588	38472	0.266	0.170	#
23)		Methoxychlor	14.65	14.08	413988	26883	3.070	0.286	#

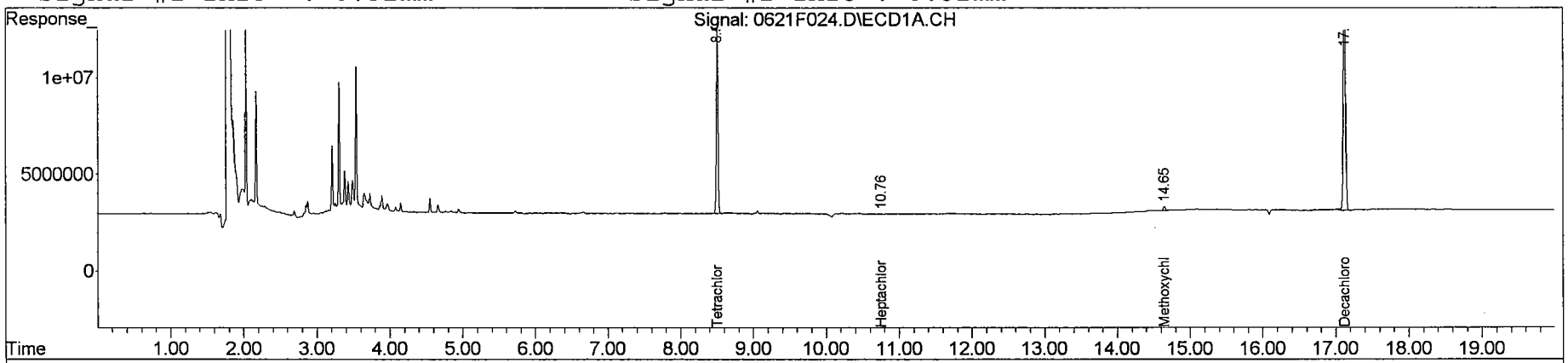
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

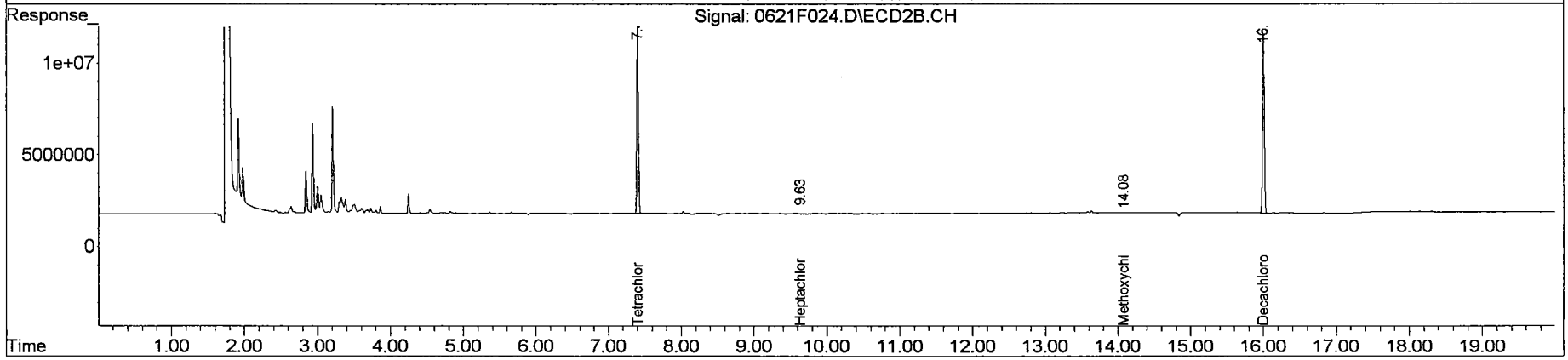
Quantitation Report (QT Reviewed)

Signal #1 : J:\GC23\DATA\062107\0621F024.D\ECD1A.CH Vial: 18
Signal #2 : J:\GC23\DATA\062107\0621F024.D\ECD2B.CH
Acq On : 22 Jun 2007 2:23 am Operator: AKamawal
Sample : KWG0706345-4 | MB | 8081A PEST_OC | SEDI Inst : GC23
Misc : SEMIVOA GC\W0706345\4-MB.H | F=10 D=1 A= Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 25 17:09 2007 Quant Results File: 061107-8081.RES

Quant Method : J:\GC23\METHODS\061107-8081.M (RTE Integrator)
Title : Organochlorine Pesticides
Last Update : Thu Jun 21 10:48:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PESTA.M

Volume Inj. :
Signal #1 Phase : DB XLB Signal #2 Phase: DB-35MS
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Volatile Organic Compounds
EPA Method 8260B

Organic Analysis:
Volatile Organic Compounds

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
1349MW100CL	K0704852-002	06/06/2007	06/07/2007
231GW29CL	K0704852-003	06/06/2007	06/07/2007
FM14EX07GW102CL	K0704852-004	06/06/2007	06/07/2007
TB0606071ACL	K0704852-005	06/06/2007	06/07/2007
1349MW100CLMS	KWG0706882-1	06/06/2007	06/07/2007
1349MW100CLDMS	KWG0706882-2	06/06/2007	06/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jordan

Date: 6/27/7 Title: Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Volatile Organic Compounds

Sample Name: 1349MW100CL
Lab Code: K0704852-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	Ui	0.87	1	06/20/07	06/20/07	KWG0706882	
Benzene	**21**		0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	114	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	76-114	06/20/07	Acceptable
Toluene-d8	114	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	76-114	06/20/07	Acceptable
Toluene-d8	115	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	104	86-115	06/20/07	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Volatile Organic Compounds

Sample Name: TB0606071ACL
Lab Code: K0704852-005

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	TB0606071ACL	**Units:**	ug/L
Lab Code:	K0704852-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	116	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	106	86-115	06/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706882-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706882-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	116	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2		Sur3
1349MW100CL	K0704852-002	97	114	*	105
231GW29CL	K0704852-003	98	114	*	105
FM14EX07GW102CL	K0704852-004	100	115	*	104
TB0606071ACL	K0704852-005	97	116	*	106
Method Blank	KWG0706882-4	97	116	*	105
1349MW100CLMS	KWG0706882-1	111	117	*	110
1349MW100CLDMS	KWG0706882-2	100	116	*	104
Lab Control Sample	KWG0706882-3	112	115	*	109

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007
Time Analyzed: 15:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS04\DATA\062007\0620F010.D
Instrument ID: MS04
Analysis Method: 8260B

Lab Code: KWG0706875-2
Analysis Lot: KWG0706875

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	RT	Area	RT	Area	RT
	Results ==>	1,226,371	13.22	961,217	17.48	531,388	20.12
	Upper Limit ==>	2,452,742	13.72	1,922,434	17.98	1,062,776	20.62
	Lower Limit ==>	613,186	12.72	480,609	16.98	265,694	19.62
	ICAL Result ==>	1,685,477	13.22	1,233,003	17.48	629,037	20.12
Associated Analyses							
Lab Control Sample	KWG0706882-3	1,266,053	13.22	982,082	17.48	537,766	20.11
1349MW100CLMS	KWG0706882-1	1,303,527	13.22	995,301	17.47	551,754	20.12
1349MW100CLDMS	KWG0706882-2	1,552,530	13.22	1,166,458	17.48	602,058	20.11
Method Blank	KWG0706882-4	1,623,568	13.22	1,201,548	17.47	614,227	20.11
TB0606071ACL	K0704852-005	1,622,824	13.22	1,201,274	17.47	609,781	20.11
231GW29CL	K0704852-003	1,621,819	13.22	1,195,294	17.47	610,644	20.11
FM14EX07GW102CL	K0704852-004	1,614,466	13.21	1,191,409	17.47	602,455	20.11
1349MW100CL	K0704852-002	1,632,390	13.22	1,172,637	17.47	603,055	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

Analyte Name	Sample Result	1349MW100CLMS KWG0706882-1 Matrix Spike			1349MW100CLDMS KWG0706882-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	9.79	10.0	98	9.54	10.0	95	65-135	3	35
Benzene	21	29.4	10.0	80	28.3	10.0	69	65-135	4	35
Trichloroethene (TCE)	ND	8.86	10.0	89	8.40	10.0	84	65-135	5	35
Toluene	ND	9.04	10.0	90	8.86	10.0	89	65-135	2	35
Chlorobenzene	ND	7.94	10.0	79	7.68	10.0	77	65-135	3	35

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706882

	Lab Control Sample KWG0706882-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	12.6	10.0	126	57-134
Vinyl Acetate	48.1	50.0	96	10-202
2-Chloroethyl Vinyl Ether	33.3	10.0	333 *	10-180
Chloromethane	9.44	10.0	94	39-134
Vinyl Chloride	9.09	10.0	91	60-125
Bromomethane	8.23	10.0	82	25-163
Chloroethane	8.92	10.0	89	61-126
Acetone	68.5	50.0	137 *	65-136
1,1-Dichloroethene	9.70	10.0	97	65-135
Carbon Disulfide	17.4	20.0	87	59-130
Methylene Chloride	9.48	10.0	95	62-122
trans-1,2-Dichloroethene	8.93	10.0	89	72-119
1,1-Dichloroethane	8.84	10.0	88	66-126
2-Butanone (MEK)	76.9	50.0	154 *	60-143
cis-1,2-Dichloroethene	9.60	10.0	96	74-119
Chloroform	9.35	10.0	94	70-121
1,1,1-Trichloroethane (TCA)	9.44	10.0	94	68-133
Carbon Tetrachloride	9.33	10.0	93	59-147
1,2-Dichloroethane (EDC)	10.8	10.0	108	70-129
Benzene	9.02	10.0	90	65-135
Trichloroethene (TCE)	9.59	10.0	96	65-135
1,2-Dichloropropane	9.56	10.0	96	68-122
Bromodichloromethane	10.8	10.0	108	77-129
2-Hexanone	70.2	50.0	140 *	58-129
cis-1,3-Dichloropropene	11.2	10.0	112	70-129
Toluene	9.63	10.0	96	65-135
trans-1,3-Dichloropropene	10.9	10.0	109	62-123
1,1,2-Trichloroethane	11.2	10.0	112	76-118
4-Methyl-2-pentanone (MIBK)	71.9	50.0	144 *	62-131
Tetrachloroethene (PCE)	9.06	10.0	91	71-117
Dibromochloromethane	11.0	10.0	110	71-129
Chlorobenzene	8.99	10.0	90	65-135
Ethylbenzene	8.85	10.0	89	75-118
Xylenes, Total	28.2	30.0	94	70-130
Styrene	10.0	10.0	100	71-119

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706882

	Lab Control Sample KWG0706882-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	12.7	10.0	127	61-141
1,1,2,2-Tetrachloroethane	11.1	10.0	111	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	18:22

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS04\DATA\062007\0620F016.D
Lab Code:	KWG0706882-4	**Instrument ID:**	MS04
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0706882-3	J:\MS04\DATA\062007\0620F011.D	06/20/07	15:35
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/07	16:10
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/07	16:43
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/07	18:55
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/07	19:28
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/07	20:01
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/07	20:33

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	15:35

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS04\DATA\062007\0620F011.D
Lab Code:	KWG0706882-3	**Instrument ID:**	MS04
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/07	16:10
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/07	16:43
Method Blank	KWG0706882-4	J:\MS04\DATA\062007\0620F016.D	06/20/07	18:22
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/07	18:55
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/07	19:28
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/07	20:01
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/07	20:33

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007
Time Analyzed: 14:27

Tune Summary
Volatile Organic Compounds

File ID: J:\MS04\DATA\062007\0620F009.D
Instrument ID: MS04
Column:

Analysis Method: 8260B
Analysis Lot: KWG0706875

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.5	12103	PASS
75	95	30	60	43.2	31584	PASS
95	95	100	100	100.0	73157	PASS
96	95	5	9	7.4	5437	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	98.5	72077	PASS
175	174	5	9	7.7	5547	PASS
176	174	95	101	96.3	69384	PASS
177	176	5	9	7.0	4866	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0706875-2	J:\MS04\DATA\062007\0620F010.D	06/20/2007	15:02	
Lab Control Sample	KWG0706882-3	J:\MS04\DATA\062007\0620F011.D	06/20/2007	15:35	
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/2007	16:10	
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/2007	16:43	
Method Blank	KWG0706882-4	J:\MS04\DATA\062007\0620F016.D	06/20/2007	18:22	
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/2007	18:55	
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/2007	19:28	
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/2007	20:01	
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/2007	20:33	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS04\DATA\052107\0521F019.D	F	J:\MS04\DATA\052107\0521F024.D
B	J:\MS04\DATA\052107\0521F020.D	G	J:\MS04\DATA\052107\0521F025.D
C	J:\MS04\DATA\052107\0521F021.D	H	J:\MS04\DATA\052107\0521F026.D
D	J:\MS04\DATA\052107\0521F022.D	I	J:\MS04\DATA\052107\0521F027.D
E	J:\MS04\DATA\052107\0521F023.D	J	J:\MS04\DATA\052107\0521F028.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0209	D	2.0	0.0239	E	4.0	0.0250
	F	10	0.0285	G	20	0.0277	H	40	0.0313	I	80	0.0303	J	120	0.0292
2-Chloroethyl Vinyl Ether													E	2.0	0.0229
	F	5.0	0.0206	G	10	0.0281	H	20	0.0327	I	40	0.0317	J	60	0.0340
Methyl tert-Butyl Ether	A	0.20	0.350	B	0.40	0.337	C	1.0	0.353	D	2.0	0.339	E	4.0	0.363
	F	10	0.377	G	20	0.381	H	40	0.391	I	80	0.389	J	120	0.395
1,2-Dichloroethane-d4				B	4.0	0.200	C	5.0	0.193	D	6.0	0.193	E	7.0	0.184
	F	8.0	0.186	G	10	0.179	H	20	0.187	I	40	0.177	J	50	0.176
† Chloromethane				B	0.20	0.341	C	0.50	0.347	D	1.0	0.341	E	2.0	0.362
	F	5.0	0.338	G	10	0.326	H	20	0.338	I	40	0.344	J	60	0.348
‡ Vinyl Chloride	A	0.10	0.281	B	0.20	0.260	C	0.50	0.298	D	1.0	0.321	E	2.0	0.349
	F	5.0	0.322	G	10	0.316	H	20	0.330	I	40	0.331	J	60	0.329
Bromomethane							C	0.50	0.463	D	1.0	0.433	E	2.0	0.416
	F	5.0	0.301	G	10	0.276	H	20	0.270	I	40	0.272	J	60	0.278
Chloroethane				B	0.20	0.222	C	0.50	0.230	D	1.0	0.240	E	2.0	0.252
	F	5.0	0.233	G	10	0.229	H	20	0.231	I	40	0.229	J	60	0.230
Acetone	A	4.0	0.0293	B	10	0.0251	C	20	0.0241	D	40	0.0247	E	80	0.0217
	F	100	0.0234	G	200	0.0265	H	400	0.0244	I	800	0.0231	J	1600	0.0237
‡ 1,1-Dichloroethene	A	0.10	0.186	B	0.20	0.193	C	0.50	0.246	D	1.0	0.255	E	2.0	0.277
	F	5.0	0.259	G	10	0.255	H	20	0.262	I	40	0.261	J	60	0.264
Carbon Disulfide				B	0.20	0.920	C	0.50	0.980	D	1.0	1.02	E	2.0	1.09
	F	5.0	1.03	G	10	1.02	H	20	1.04	I	40	1.04	J	60	1.06
Methylene Chloride							C	0.50	0.445	D	1.0	0.369	E	2.0	0.355
	F	5.0	0.323	G	10	0.308	H	20	0.302	I	40	0.290	J	60	0.292
trans-1,2-Dichloroethene	A	0.10	0.250	B	0.20	0.289	C	0.50	0.319	D	1.0	0.330	E	2.0	0.341
	F	5.0	0.325	G	10	0.323	H	20	0.328	I	40	0.324	J	60	0.325
† 1,1-Dichloroethane				B	0.20	0.452	C	0.50	0.515	D	1.0	0.498	E	2.0	0.527
	F	5.0	0.506	G	10	0.492	H	20	0.497	I	40	0.485	J	60	0.490

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00806	B	10	0.00853	C	20	0.00825	D	40	0.00919	E	80	0.00828
	F	100	0.00911	G	200	0.0110	H	400	0.0103	I	800	0.00981	J	1600	0.0102
cis-1,2-Dichloroethene	A	0.10	0.292	B	0.20	0.291	C	0.50	0.328	D	1.0	0.322	E	2.0	0.340
	F	5.0	0.333	G	10	0.327	H	20	0.331	I	40	0.324	J	60	0.326
‡ Chloroform	A	0.10	0.495	B	0.20	0.470	C	0.50	0.468	D	1.0	0.478	E	2.0	0.501
	F	5.0	0.480	G	10	0.472	H	20	0.474	I	40	0.458	J	60	0.456
1,1,1-Trichloroethane (TCA)	A	0.10	0.252	B	0.20	0.281	C	0.50	0.334	D	1.0	0.369	E	2.0	0.384
	F	5.0	0.359	G	10	0.353	H	20	0.360	I	40	0.351	J	60	0.345
Carbon Tetrachloride				B	0.20	0.242	C	0.50	0.283	D	1.0	0.306	E	2.0	0.327
	F	5.0	0.308	G	10	0.301	H	20	0.309	I	40	0.302	J	60	0.295
1,2-Dichloroethane (EDC)	A	0.10	0.217	B	0.20	0.241	C	0.50	0.239	D	1.0	0.237	E	2.0	0.252
	F	5.0	0.245	G	10	0.240	H	20	0.237	I	40	0.225	J	60	0.221
Benzene	A	0.10	1.08	B	0.20	1.01	C	0.50	1.03	D	1.0	1.07	E	2.0	1.11
	F	5.0	1.08	G	10	1.07	H	20	1.11	I	40	1.10	J	60	1.13
Trichloroethene (TCE)	A	0.10	0.228	B	0.20	0.225	C	0.50	0.262	D	1.0	0.276	E	2.0	0.293
	F	5.0	0.279	G	10	0.279	H	20	0.284	I	40	0.284	J	60	0.288
‡ 1,2-Dichloropropane	A	0.10	0.226	B	0.20	0.233	C	0.50	0.243	D	1.0	0.235	E	2.0	0.252
	F	5.0	0.249	G	10	0.246	H	20	0.253	I	40	0.249	J	60	0.253
Bromodichloromethane				B	0.20	0.284	C	0.50	0.284	D	1.0	0.288	E	2.0	0.298
	F	5.0	0.308	G	10	0.297	H	20	0.301	I	40	0.294	J	60	0.297
2-Hexanone				B	10	0.00810	C	20	0.00941	D	40	0.0114	E	80	0.0106
	F	100	0.0115	G	200	0.0143	H	400	0.0136	I	800	0.0132	J	1600	0.0135
cis-1,3-Dichloropropene	A	0.10	0.279	B	0.20	0.318	C	0.50	0.294	D	1.0	0.297	E	2.0	0.325
	F	5.0	0.342	G	10	0.345	H	20	0.359	I	40	0.361	J	60	0.366
‡ Toluene	A	0.10	0.523	B	0.20	0.574	C	0.50	0.621	D	1.0	0.627	E	2.0	0.670
	F	5.0	0.664	G	10	0.654	H	20	0.676	I	40	0.669	J	60	0.677
trans-1,3-Dichloropropene	A	0.10	0.299	B	0.20	0.295	C	0.50	0.296	D	1.0	0.298	E	2.0	0.319
	F	5.0	0.343	G	10	0.343	H	20	0.358	I	40	0.363	J	60	0.370
1,1,2-Trichloroethane				B	0.20	0.171	C	0.50	0.170	D	1.0	0.175	E	2.0	0.177
	F	5.0	0.185	G	10	0.180	H	20	0.183	I	40	0.183	J	60	0.183
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0111	B	10	0.0104	C	20	0.0114	D	40	0.0137	E	80	0.0122
	F	100	0.0133	G	200	0.0163	H	400	0.0152	I	800	0.0146	J	1600	0.0150
Tetrachloroethene (PCE)	A	0.10	0.283	B	0.20	0.301	C	0.50	0.349	D	1.0	0.373	E	2.0	0.402
	F	5.0	0.377	G	10	0.369	H	20	0.384	I	40	0.385	J	60	0.383

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.266	D	1.0	0.275	E	2.0	0.278
	F	5.0	0.293	G	10	0.288	H	20	0.298	I	40	0.299	J	60	0.304
† Chlorobenzene	A	0.10	0.982	B	0.20	0.981	C	0.50	1.01	D	1.0	1.01	E	2.0	1.06
	F	5.0	1.06	G	10	1.03	H	20	1.06	I	40	1.07	J	60	1.08
‡ Ethylbenzene				B	0.20	0.403	C	0.50	0.445	D	1.0	0.473	E	2.0	0.512
	F	5.0	0.515	G	10	0.519	H	20	0.537	I	40	0.544	J	60	0.551
m,p-Xylenes				B	0.40	0.471	C	1.0	0.530	D	2.0	0.570	E	4.0	0.637
	F	10	0.649	G	20	0.647	H	40	0.681	I	80	0.696	J	120	0.702
o-Xylene	A	0.10	0.465	B	0.20	0.448	C	0.50	0.496	D	1.0	0.520	E	2.0	0.574
	F	5.0	0.611	G	10	0.612	H	20	0.637	I	40	0.643	J	60	0.648
Styrene							C	0.50	0.689	D	1.0	0.737	E	2.0	0.861
	F	5.0	0.959	G	10	0.985	H	20	1.04	I	40	1.07	J	60	1.09
† Bromoform				B	0.20	0.128	C	0.50	0.130	D	1.0	0.132	E	2.0	0.144
	F	5.0	0.156	G	10	0.150	H	20	0.155	I	40	0.159	J	60	0.160
† 1,1,2,2-Tetrachloroethane				B	0.20	0.394	C	0.50	0.395	D	1.0	0.404	E	2.0	0.427
	F	5.0	0.440	G	10	0.405	H	20	0.417	I	40	0.418	J	60	0.425
Toluene-d8				B	4.0	0.820	C	5.0	0.770	D	6.0	0.778	E	7.0	0.697
	F	8.0	0.694	G	10	0.741	H	20	0.735	I	40	0.821	J	50	0.857
4-Bromofluorobenzene				B	4.0	0.390	C	5.0	0.389	D	6.0	0.386	E	7.0	0.379
	F	8.0	0.373	G	10	0.379	H	20	0.389	I	40	0.411	J	50	0.412

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	13.1		≤ 15	0.0271		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	19.5	*	≤ 15	0.0283		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	5.9		≤ 15	0.367		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	4.4		≤ 15	0.186		0.01
† Chloromethane	TRG	AverageRF	% RSD	2.8		≤ 15	0.343		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	8.5		≤ 15	0.314		0.01
Bromomethane	TRG	AverageRF	% RSD	24.6	*	≤ 15	0.339		0.01
Chloroethane	TRG	AverageRF	% RSD	3.7		≤ 15	0.233		0.01
Acetone	TRG	AverageRF	% RSD	8.5		≤ 15	0.0246		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	12.5		≤ 15	0.246		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	4.9		≤ 15	1.02		0.01
Methylene Chloride	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.336		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	8.4		≤ 15	0.315		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.2		≤ 15	0.496		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	10.9		≤ 15	0.00927	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	5.1		≤ 15	0.321		0.01
‡ Chloroform	TRG	AverageRF	% RSD	3.0		≤ 15	0.475		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	12.1		≤ 15	0.339		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	8.0		≤ 15	0.297		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.7		≤ 15	0.235		0.01
Benzene	MS	AverageRF	% RSD	3.4		≤ 15	1.08		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	9.0		≤ 15	0.270		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	3.9		≤ 15	0.244		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	2.8		≤ 15	0.294		0.01
2-Hexanone	TRG	AverageRF	% RSD	18.0	*	≤ 15	0.0117		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	9.4		≤ 15	0.329		0.01
‡ Toluene	MS	AverageRF	% RSD	8.0		≤ 15	0.635		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	9.2		≤ 15	0.328		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	3.3		≤ 15	0.179		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	14.9		≤ 15	0.0133		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	10.8		≤ 15	0.361		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	4.6		≤ 15	0.288		0.01
† Chlorobenzene	MS	AverageRF	% RSD	3.6		≤ 15	1.04		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	9.9		≤ 15	0.500		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	12.8		≤ 15	0.620		0.01
o-Xylene	TRG	AverageRF	% RSD	13.6		≤ 15	0.565		0.01
Styrene	TRG	AverageRF	% RSD	16.4	*	≤ 15	0.929		0.01
† Bromoform	TRG	AverageRF	% RSD	8.9		≤ 15	0.146		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.414		0.30
Toluene-d8	SURR	AverageRF	% RSD	7.4		≤ 15	0.768		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	3.5		≤ 15	0.390		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007
Date Analyzed: 05/22/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6287
Units: PPB

File ID: J:\MS04\DATA\052207\0522F006.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	9.8	0.0283	0.0278	-2	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	10	0.367	0.369	0	NA	± 30 %	AverageRF
Vinyl Acetate	50	49	0.0271	0.0264	-3	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.343	0.347	1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.314	0.332	6	NA	± 20 %	AverageRF
Bromomethane	10	8.5	0.339	0.288	-15	NA	± 40 %	AverageRF
Chloroethane	10	10	0.233	0.239	2	NA	± 40 %	AverageRF
Acetone	50	45	0.0246	0.0219	-11	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.246	0.272	11	NA	± 20 %	AverageRF
Carbon Disulfide	20	20	1.02	1.03	0	NA	± 30 %	AverageRF
Methylene Chloride	10	10	0.336	0.347	3	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.7	0.315	0.307	-3	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	9.3	0.496	0.463	-7	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	54	0.00927	0.0100	8	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.321	0.324	1	NA	± 30 %	AverageRF
‡ Chloroform	10	8.9	0.475	0.424	-11	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.3	0.339	0.317	-7	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	9.0	0.297	0.268	-10	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	8.8	0.235	0.207	-12	NA	± 30 %	AverageRF
Benzene	10	9.6	1.08	1.04	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.7	0.270	0.262	-3	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	9.8	0.244	0.240	-2	NA	± 20 %	AverageRF
Bromodichloromethane	10	9.5	0.294	0.280	-5	NA	± 30 %	AverageRF
2-Hexanone	50	52	0.0117	0.0122	4	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.329	0.345	5	NA	± 30 %	AverageRF
‡ Toluene	10	9.8	0.635	0.622	-2	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	9.8	0.328	0.321	-2	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	10	0.179	0.179	0	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	50	0.0133	0.0133	0	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.7	0.361	0.351	-3	NA	± 30 %	AverageRF
Dibromochloromethane	10	9.7	0.288	0.278	-4	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	1.04	0.995	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	10	0.500	0.502	0	NA	± 20 %	AverageRF
m,p-Xylenes	20	21	0.620	0.639	3	NA	± 30 %	AverageRF
o-Xylene	10	11	0.565	0.617	9	NA	± 30 %	AverageRF
Styrene	10	11	0.929	1.02	10	NA	± 30 %	AverageRF
† Bromoform	10	10	0.146	0.148	2	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.414	0.433	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 05/21/2007
Calibration ID: CAL6287
Analysis Lot: KWG0706875
Units: PPB

File ID: J:\MS04\DATA\062007\0620F010.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	28	0.01	0.367	0.522	42	*	NA	± 30 %	AverageRF
Vinyl Acetate	20	29	0.01	0.0271	0.0394	45	*	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.186	0.211	13		NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	33	0.01	0.0283	0.0924	226	*	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.10	0.343	0.350	2		NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.314	0.323	3		NA	± 20 %	AverageRF
Bromomethane	10	11	0.01	0.339	0.365	8		NA	± 40 %	AverageRF
Chloroethane	10	10	0.01	0.233	0.242	4		NA	± 40 %	AverageRF
Acetone	200	270	0.01	0.0246	0.0334	36	*	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	10	0.01	0.246	0.252	3		NA	± 20 %	AverageRF
Carbon Disulfide	10	10	0.01	1.02	1.06	3		NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.336	0.334	-1		NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.315	0.334	6		NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.10	0.496	0.519	5		NA	± 30 %	AverageRF
2-Butanone (MEK)	200	300	0.01	0.00927	0.0141	52	*	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.321	0.344	7		NA	± 30 %	AverageRF
‡ Chloroform	10	11	0.01	0.475	0.505	6		NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.339	0.384	13		NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.297	0.335	13		NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	12	0.01	0.235	0.294	25		NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.08	1.15	6		NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.270	0.298	10		NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.244	0.267	10		NA	± 20 %	AverageRF
Bromodichloromethane	10	12	0.01	0.294	0.357	21		NA	± 30 %	AverageRF
2-Hexanone	200	310	0.01	0.0117	0.0181	54	*	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	13	0.01	0.329	0.416	27		NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.635	0.720	13		NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	13	0.01	0.328	0.423	29		NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	12	0.01	0.179	0.220	23		NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	320	0.01	0.0133	0.0215	61	*	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	11	0.01	0.361	0.382	6		NA	± 30 %	AverageRF
Dibromochloromethane	10	12	0.01	0.288	0.350	22		NA	± 30 %	AverageRF
† Chlorobenzene	10	10	0.30	1.04	1.07	3		NA	± 30 %	AverageRF
‡ Ethylbenzene	10	11	0.01	0.500	0.525	5		NA	± 20 %	AverageRF
m,p-Xylenes	20	21	0.01	0.620	0.664	7		NA	± 30 %	AverageRF
o-Xylene	10	11	0.01	0.565	0.635	12		NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.929	1.05	13		NA	± 30 %	AverageRF
† Bromoform	10	14	0.10	0.146	0.203	39	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 05/21/2007
Calibration ID: CAL6287
Analysis Lot: KWG0706875
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	12	0.30	0.414	0.493	19	NA	± 30 %	AverageRF
Toluene-d8	10	12	0.01	0.768	0.901	17	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	11	0.01	0.390	0.427	10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 8260B

Analysis Lot: KWG0706875
Instrument ID: MS04

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0620F009.D	GC/MS Tuning - Generic	KWG0706875-1	06/20/2007	14:27		06/20/2007	14:53
0620F010.D	Continuing Calibration Verification	KWG0706875-2	06/20/2007	15:02		06/20/2007	15:28
0620F011.D	Lab Control Sample	KWG0706882-3	06/20/2007	15:35		06/20/2007	16:01
0620F012.D	1349MW100CLMS	KWG0706882-1	06/20/2007	16:10		06/20/2007	16:36
0620F013.D	1349MW100CLDMS	KWG0706882-2	06/20/2007	16:43		06/20/2007	17:09
0620F016.D	Method Blank	KWG0706882-4	06/20/2007	18:22		06/20/2007	18:48
0620F017.D	TB0606071ACL	K0704852-005	06/20/2007	18:55		06/20/2007	19:21
0620F018.D	231GW29CL	K0704852-003	06/20/2007	19:28		06/20/2007	19:54
0620F019.D	FM14EX07GW102CL	K0704852-004	06/20/2007	20:01		06/20/2007	20:27
0620F020.D	1349MW100CL	K0704852-002	06/20/2007	20:33		06/20/2007	20:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/20/2007

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Extraction Lot: KWG0706882
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW100CL	K0704852-002	06/06/07	06/07/07	10.0ml	10.0ml	NA	
231GW29CL	K0704852-003	06/06/07	06/07/07	10.0ml	10.0ml	NA	
FM14EX07GW102CL	K0704852-004	06/06/07	06/07/07	10.0ml	10.0ml	NA	
TB0606071ACL	K0704852-005	06/06/07	06/07/07	10.0ml	10.0ml	NA	
Method Blank	KWG0706882-4	NA	NA	10.0ml	10.0ml	NA	
1349MW100CLMS	KWG0706882-1	06/06/07	06/07/07	10.0ml	10.0ml	NA	
1349MW100CLDMS	KWG0706882-2	06/06/07	06/07/07	10.0ml	10.0ml	NA	
Lab Control Sample	KWG0706882-3	NA	NA	10.0ml	10.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Volatile Organic Compounds

Validation Package

Organic Analysis:
Volatile Organic Compounds

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260B

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2		Sur3
1349MW100CL	K0704852-002	97	114	*	105
231GW29CL	K0704852-003	98	114	*	105
FM14EX07GW102CL	K0704852-004	100	115	*	104
TB0606071ACL	K0704852-005	97	116	*	106
Method Blank	KWG0706882-4	97	116	*	105
1349MW100CLMS	KWG0706882-1	111	117	*	110
1349MW100CLDMS	KWG0706882-2	100	116	*	104
Lab Control Sample	KWG0706882-3	112	115	*	109

Surrogate Recovery Control Limits (%)

Sur1 =	1,2-Dichloroethane-d4	76-114
Sur2 =	Toluene-d8	88-110
Sur3 =	4-Bromofluorobenzene	86-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007
Time Analyzed: 15:02

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS04\DATA\062007\0620F010.D
Instrument ID: MS04
Analysis Method: 8260B

Lab Code: KWG0706875-2
Analysis Lot: KWG0706875

		Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
		Area	RT	Area	RT	Area	RT
	Results ==>	1,226,371	13.22	961,217	17.48	531,388	20.12
	Upper Limit ==>	2,452,742	13.72	1,922,434	17.98	1,062,776	20.62
	Lower Limit ==>	613,186	12.72	480,609	16.98	265,694	19.62
	ICAL Result ==>	1,685,477	13.22	1,233,003	17.48	629,037	20.12
Associated Analyses							
Lab Control Sample	KWG0706882-3	1,266,053	13.22	982,082	17.48	537,766	20.11
1349MW100CLMS	KWG0706882-1	1,303,527	13.22	995,301	17.47	551,754	20.12
1349MW100CLDMS	KWG0706882-2	1,552,530	13.22	1,166,458	17.48	602,058	20.11
Method Blank	KWG0706882-4	1,623,568	13.22	1,201,548	17.47	614,227	20.11
TB0606071ACL	K0704852-005	1,622,824	13.22	1,201,274	17.47	609,781	20.11
231GW29CL	K0704852-003	1,621,819	13.22	1,195,294	17.47	610,644	20.11
FM14EX07GW102CL	K0704852-004	1,614,466	13.21	1,191,409	17.47	602,455	20.11
1349MW100CL	K0704852-002	1,632,390	13.22	1,172,637	17.47	603,055	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

		1349MW100CLMS KWG0706882-1 Matrix Spike			1349MW100CLDMS KWG0706882-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,1-Dichloroethene	ND	9.79	10.0	98	9.54	10.0	95	65-135	3	35
Benzene	21	29.4	10.0	80	28.3	10.0	69	65-135	4	35
Trichloroethene (TCE)	ND	8.86	10.0	89	8.40	10.0	84	65-135	5	35
Toluene	ND	9.04	10.0	90	8.86	10.0	89	65-135	2	35
Chlorobenzene	ND	7.94	10.0	79	7.68	10.0	77	65-135	3	35

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706882

	Lab Control Sample KWG0706882-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Methyl tert-Butyl Ether	12.6	10.0	126	57-134
Vinyl Acetate	48.1	50.0	96	10-202
2-Chloroethyl Vinyl Ether	33.3	10.0	333 *	10-180
Chloromethane	9.44	10.0	94	39-134
Vinyl Chloride	9.09	10.0	91	60-125
Bromomethane	8.23	10.0	82	25-163
Chloroethane	8.92	10.0	89	61-126
Acetone	68.5	50.0	137 *	65-136
1,1-Dichloroethene	9.70	10.0	97	65-135
Carbon Disulfide	17.4	20.0	87	59-130
Methylene Chloride	9.48	10.0	95	62-122
trans-1,2-Dichloroethene	8.93	10.0	89	72-119
1,1-Dichloroethane	8.84	10.0	88	66-126
2-Butanone (MEK)	76.9	50.0	154 *	60-143
cis-1,2-Dichloroethene	9.60	10.0	96	74-119
Chloroform	9.35	10.0	94	70-121
1,1,1-Trichloroethane (TCA)	9.44	10.0	94	68-133
Carbon Tetrachloride	9.33	10.0	93	59-147
1,2-Dichloroethane (EDC)	10.8	10.0	108	70-129
Benzene	9.02	10.0	90	65-135
Trichloroethene (TCE)	9.59	10.0	96	65-135
1,2-Dichloropropane	9.56	10.0	96	68-122
Bromodichloromethane	10.8	10.0	108	77-129
2-Hexanone	70.2	50.0	140 *	58-129
cis-1,3-Dichloropropene	11.2	10.0	112	70-129
Toluene	9.63	10.0	96	65-135
trans-1,3-Dichloropropene	10.9	10.0	109	62-123
1,1,2-Trichloroethane	11.2	10.0	112	76-118
4-Methyl-2-pentanone (MIBK)	71.9	50.0	144 *	62-131
Tetrachloroethene (PCE)	9.06	10.0	91	71-117
Dibromochloromethane	11.0	10.0	110	71-129
Chlorobenzene	8.99	10.0	90	65-135
Ethylbenzene	8.85	10.0	89	75-118
Xylenes, Total	28.2	30.0	94	70-130
Styrene	10.0	10.0	100	71-119

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260B	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706882

	Lab Control Sample KWG0706882-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Bromoform	12.7	10.0	127	61-141
1,1,2,2-Tetrachloroethane	11.1	10.0	111	64-128

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	18:22

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS04\DATA\062007\0620F016.D
Lab Code:	KWG0706882-4	**Instrument ID:**	MS04
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0706882-3	J:\MS04\DATA\062007\0620F011.D	06/20/07	15:35
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/07	16:10
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/07	16:43
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/07	18:55
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/07	19:28
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/07	20:01
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/07	20:33

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/20/2007
Sample Matrix:	Water	**Date Analyzed:**	06/20/2007
		Time Analyzed:	15:35

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS04\DATA\062007\0620F011.D
Lab Code:	KWG0706882-3	**Instrument ID:**	MS04
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B	**Extraction Lot:**	KWG0706882

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/07	16:10
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/07	16:43
Method Blank	KWG0706882-4	J:\MS04\DATA\062007\0620F016.D	06/20/07	18:22
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/07	18:55
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/07	19:28
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/07	20:01
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/07	20:33

Organic Analysis:
Volatile Organic Compounds

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Volatile Organic Compounds

Sample Name: 1349MW100CL
Lab Code: K0704852-002

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	Ui	0.87	1	06/20/07	06/20/07	KWG0706882	
Benzene	**21**		0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	114	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F020.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 20:33
Date Quantitated: 06/21/2007 08:13
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Rerun to confirm ~~results~~ results

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
Continuing Calibration Recovery	Acetone	36.0	NA	30	High Bias <MRL
MB Surrogate Recovery	Toluene-d8	116	88	110	w/in CAS limits
Lab Control Spike	4-Methyl-2-pentanone (MIBK)	144	62	131	Advisory
	2-Chloroethyl Vinyl Ether	333	10	180	⊥
	Toluene-d8	115	88	110	w/in CAS limits
	2-Hexanone	140	58	129	Advisory

Primary Review: HC 6·21·07

Secondary Review: 6/21/7

Printed: 06/21/2007 08:24:47
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS04\DATA\062007\0620F020.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 20:33
Date Quantitated: 06/21/2007 08:13
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Acetone	137	65	136	Advisory
	2-Butanone (MEK)	154	60	143	+
Surrogates	Toluene-d8	114	88	110	w/in CAS limits

Primary Review: HC 6·21·07

Secondary Review: 6/21/07

Printed: 06/21/2007 08:24:47
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	K0704852
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611348	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Report List**	

Data File:	J:\MS04\DATA\062007\0620F020.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 20:33	**Quant Date:**	06/21/2007 08:13	**Vial:**	20
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1632390	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	1172637	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	603055	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	12.70	-0.01	0.00	65	294301	9.68	97	76-114	OK
1	Toluene-d8	15.55	0.00	0.00	98	1434329	11.44	114	88-110	*
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	478883	10.48	105	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0d		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				94	0		0.22	U	
1	Chloroethane	6.61		0.00	64	5574	0.1500	0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	8.22		0.00	43	24887	6.20	6.2	J	
1	Carbon Disulfide	8.64	-0.01	0.00	76	25734	0.1500	0.16	U	
1	Methylene Chloride	9.03		0.00	84	26831	0.4900	0.49	J	
1	Methyl tert-Butyl Ether	9.45	-0.01	0.00	73	9854	0.1600	0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F020.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 20:33	**Quant Date:**	06/21/2007 08:13	**Vial:**	20
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene	12.82	-0.01	0.00	78	3782567	21.47	21		
1	1,2-Dichloroethane (EDC)	12.83		0.00	62	32905	0.8600	0.86	I m	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0**d**		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				100	0**d**		2.7	U	
1	Toluene	15.65		0.00	92	43211	0.4200	0.42	J	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0**d**		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0**d**		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0**d**		0.14	U	
2	Ethylbenzene	17.59		0.00	106	16444	0.2800	0.28	J	
2	m,p-Xylenes	17.72		0.00	106	25590	0.3500	0.35	J	
2	o-Xylene	18.20	-0.01	0.00	106	42723	0.6400	0.64		
2	Styrene				104	0**d**		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0**d**		0.14	U	

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

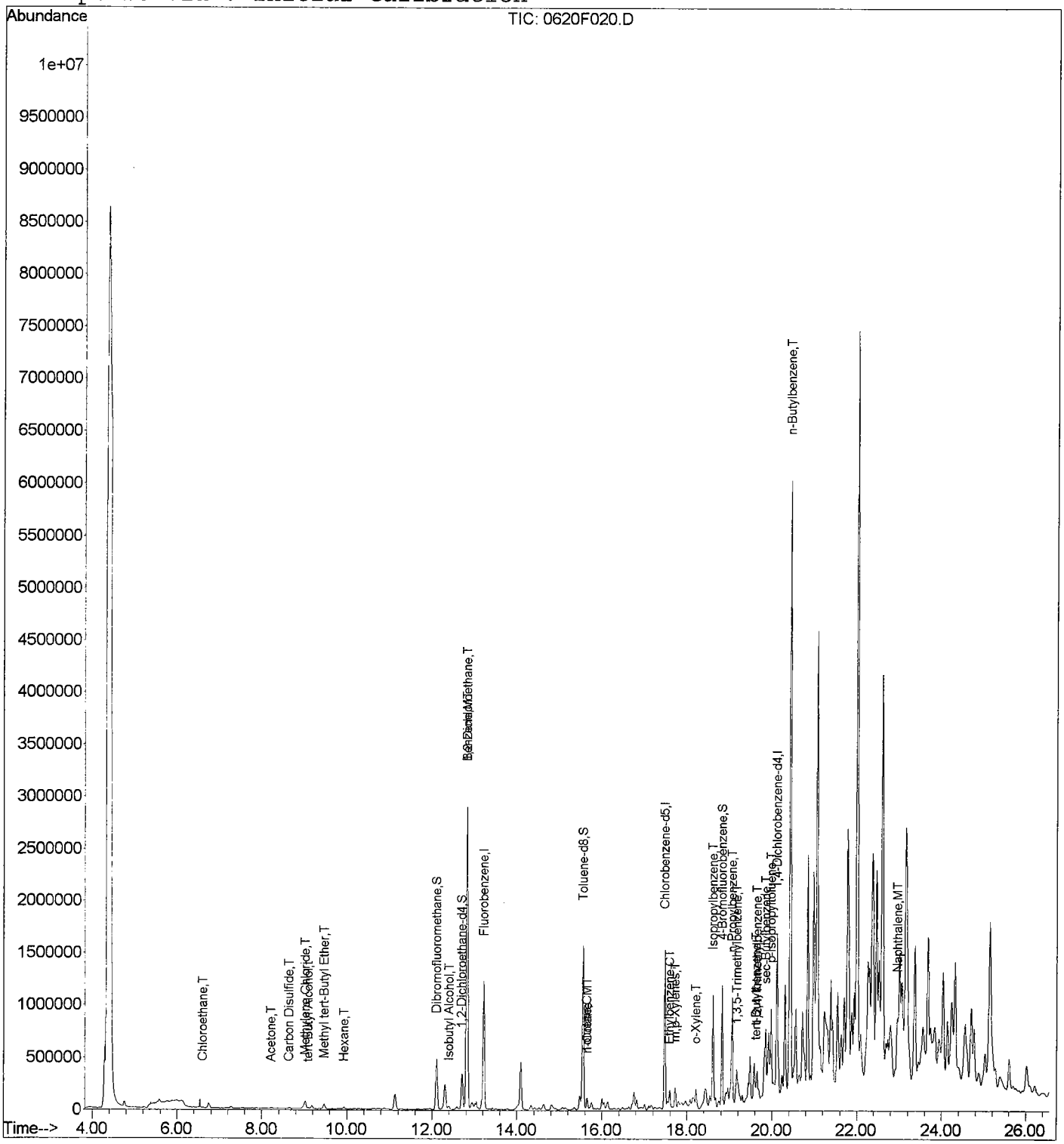
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

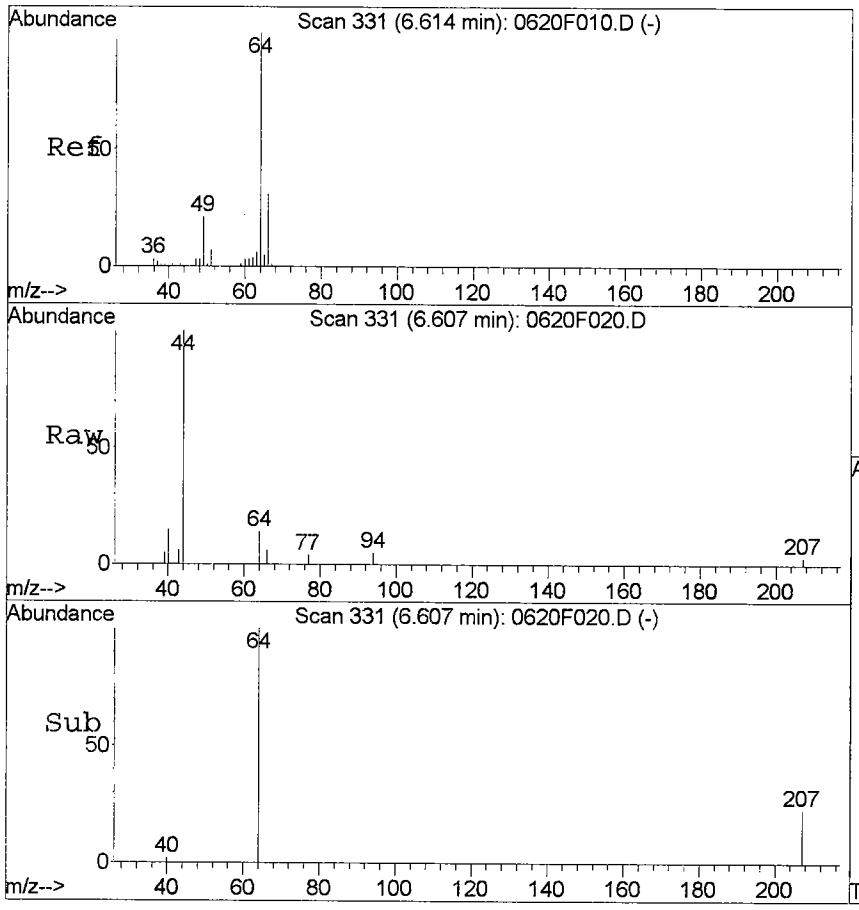
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F020.D
Acq On : 20 Jun 2007 8:33 pm
Sample : K0704852-002
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 8:13 2007

Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00
Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration

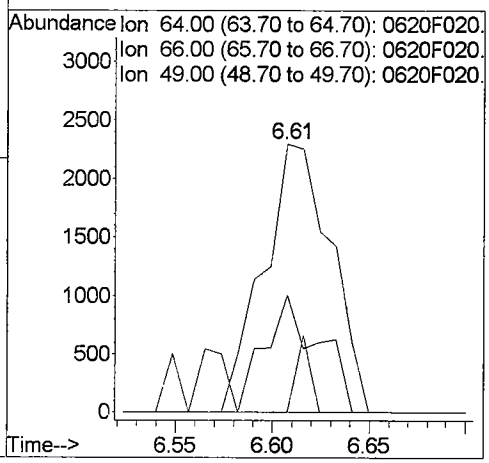


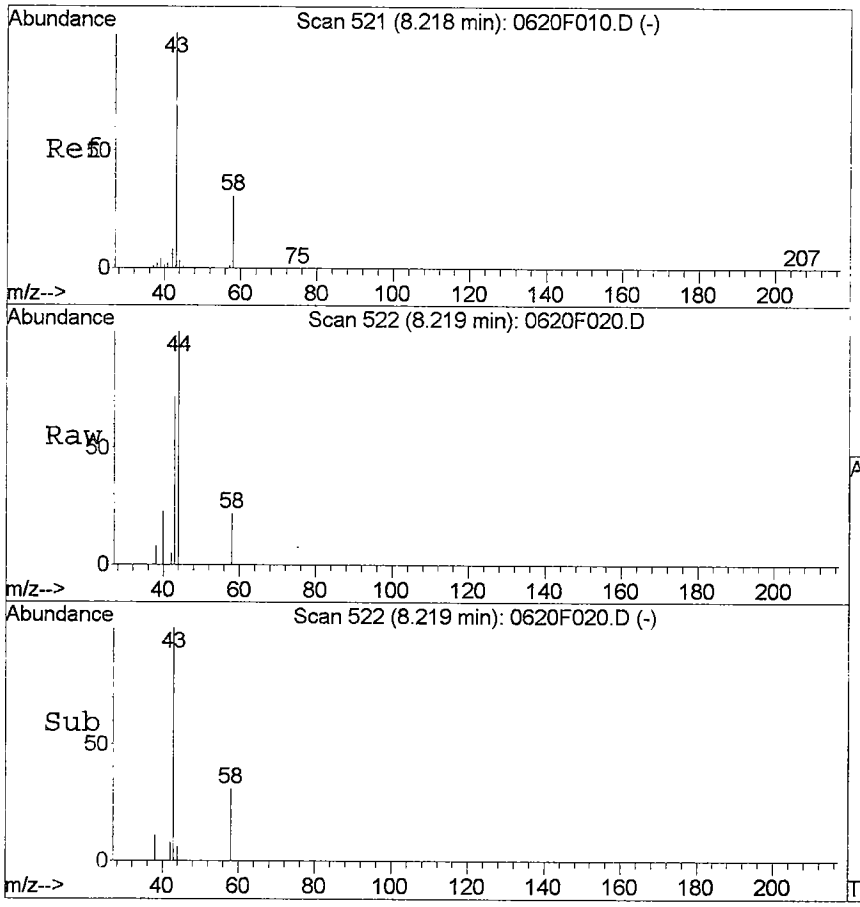


#6
Chloroethane
Concen: 0.15 PPB
RT: 6.61 min Scan# 331
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 64 Resp: 5574

Ion	Ratio	Lower	Upper
64	100		
66	43.8	1.3	61.3
49	0.0	0.0	51.2

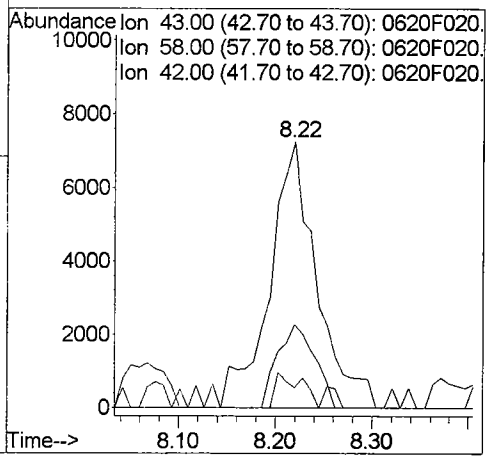


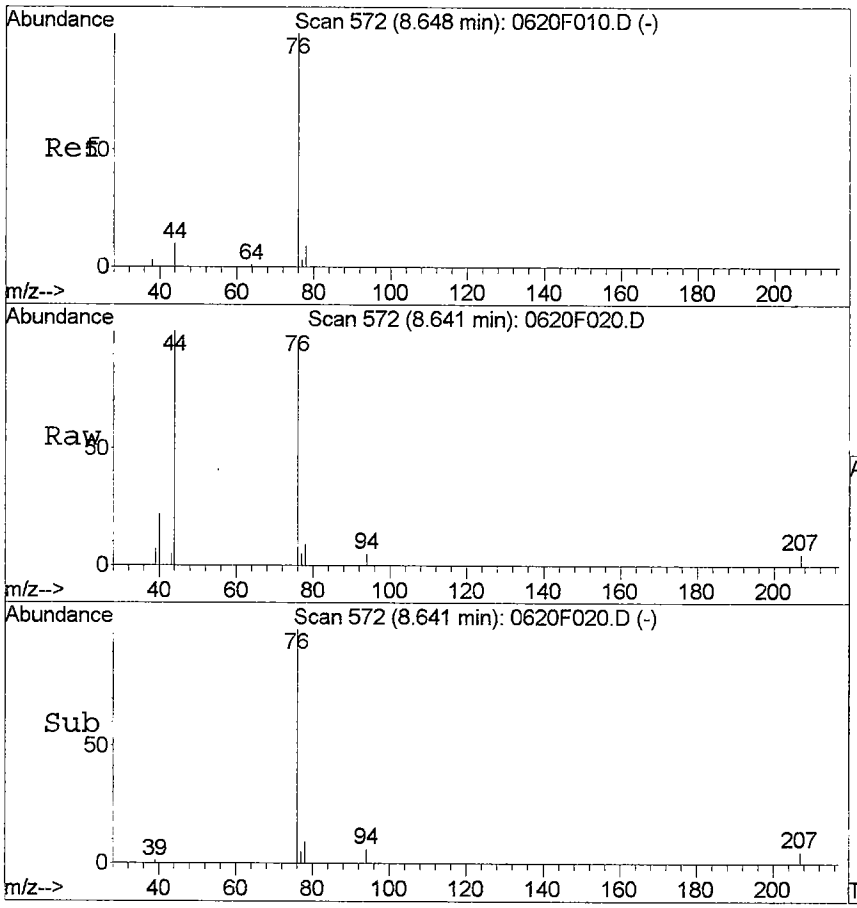


#12
Acetone
Concen: 6.20 PPB
RT: 8.22 min Scan# 522
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 43 Resp: 24887

Ion	Ratio	Lower	Upper
43	100		
58	31.2	0.9	60.9
42	7.6	0.0	38.1

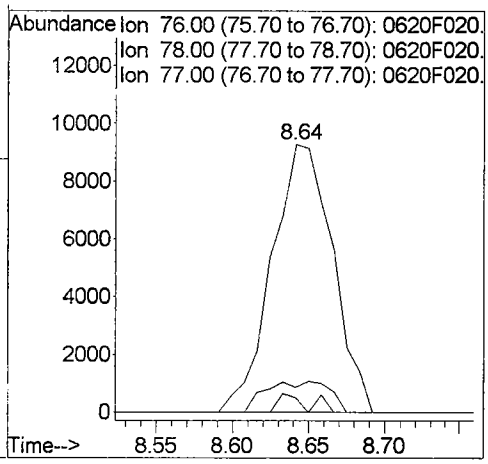


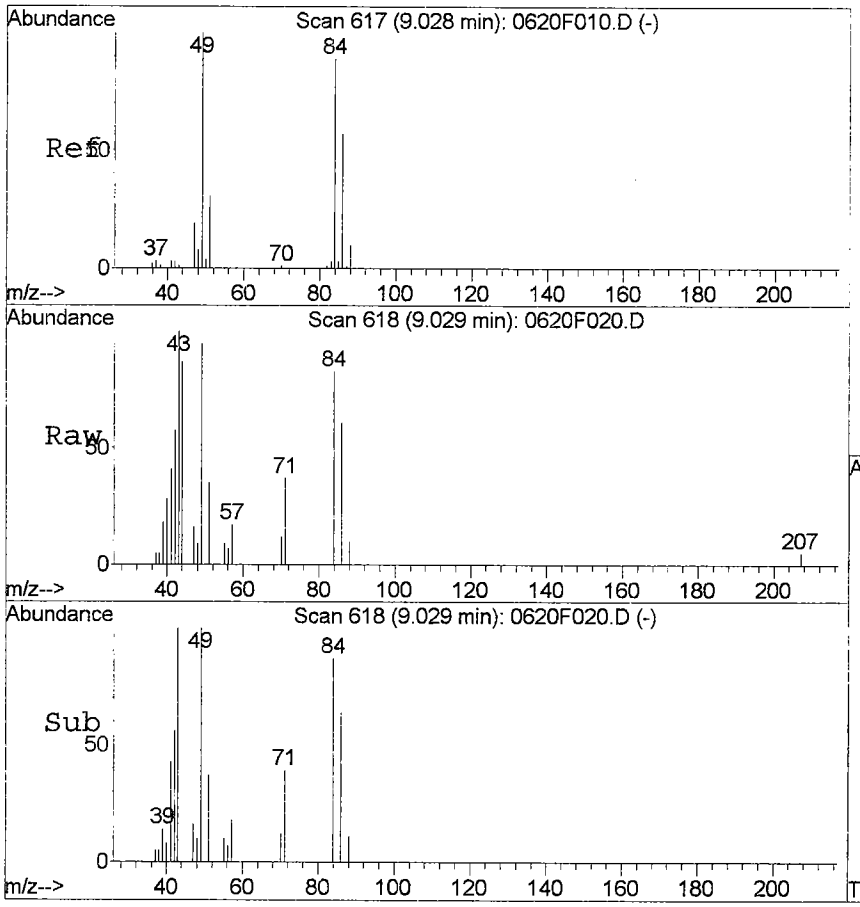


#14
Carbon Disulfide
Concen: 0.15 PPB
RT: 8.64 min Scan# 572
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 76 Resp: 25734

Ion	Ratio	Lower	Upper
76	100		
78	9.4	0.0	39.1
77	5.5	0.0	32.8

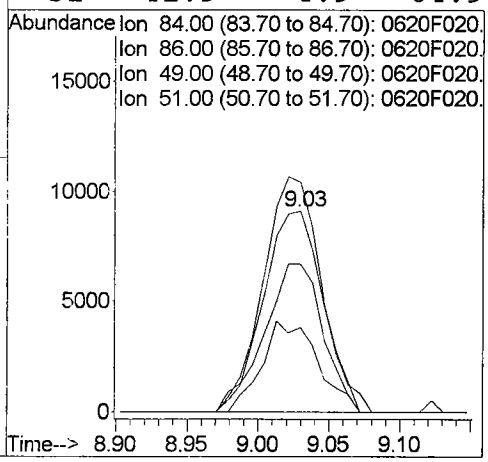


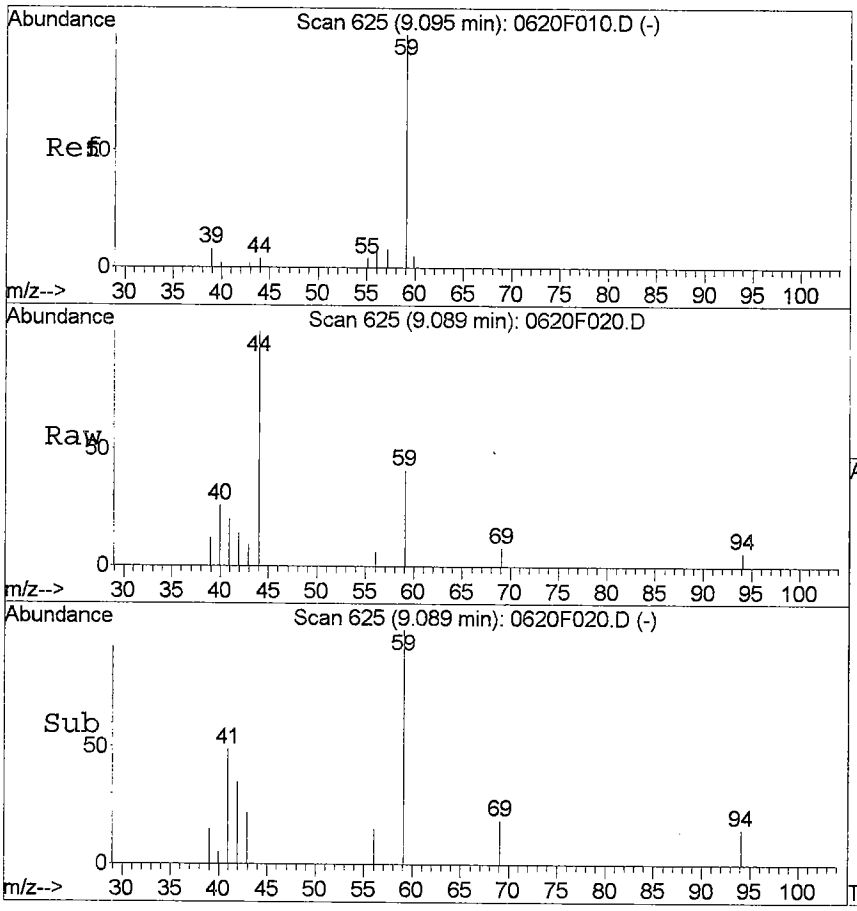


#19
Methylene Chloride
Concen: 0.49 PPB
RT: 9.03 min Scan# 618
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 84 Resp: 26831

Ion	Ratio	Lower	Upper
84	100		
86	73.4	34.3	94.3
49	114.6	82.1	142.1
51	41.9	4.9	64.9

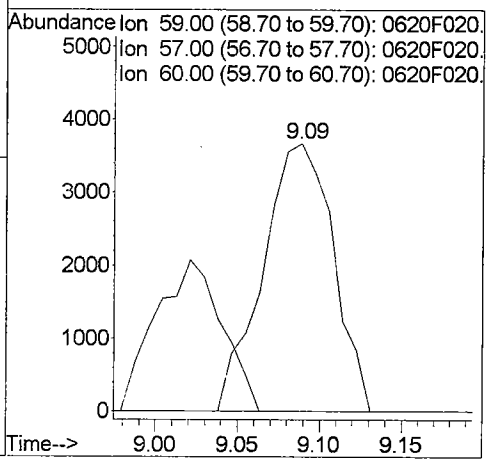


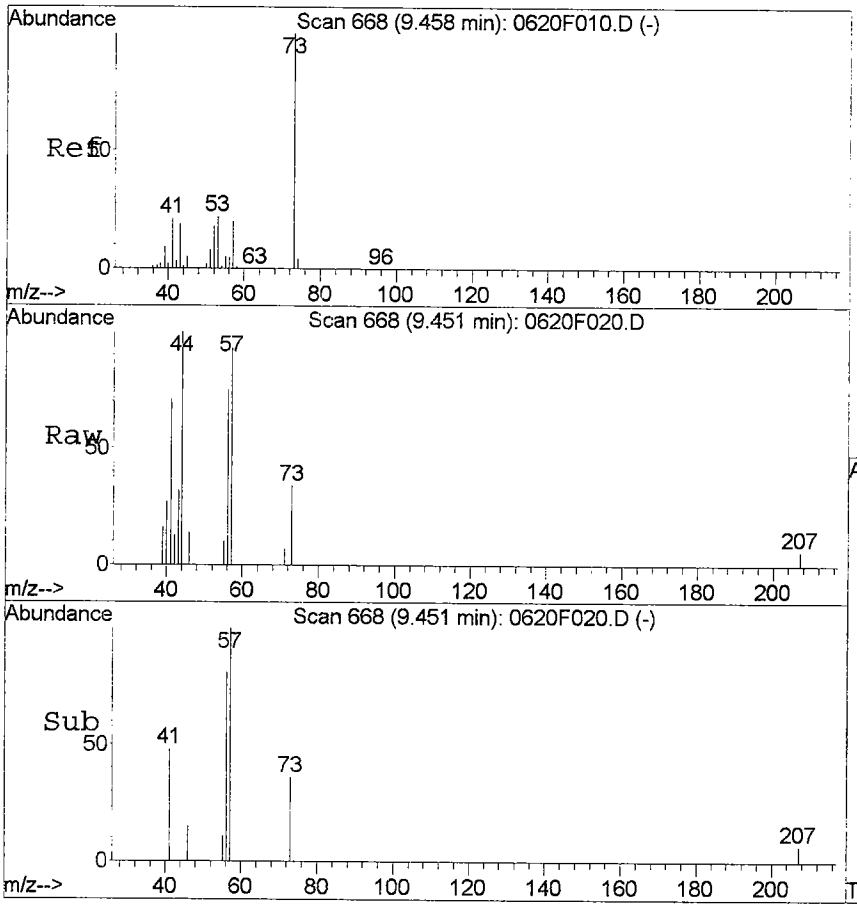


#20
tert-Butyl Alcohol
Concen: 11.87 PPB
RT: 9.09 min Scan# 625
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 59 Resp: 10957

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	37.9
60	0.0	0.0	34.5

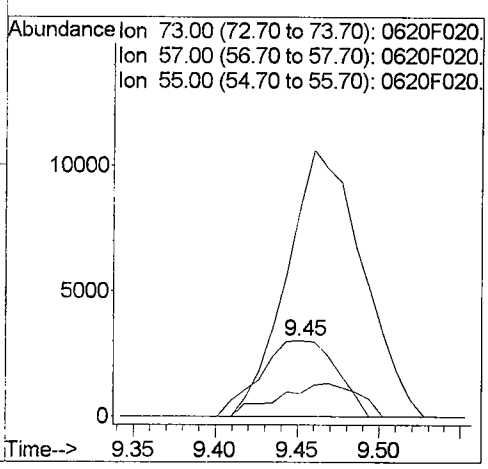


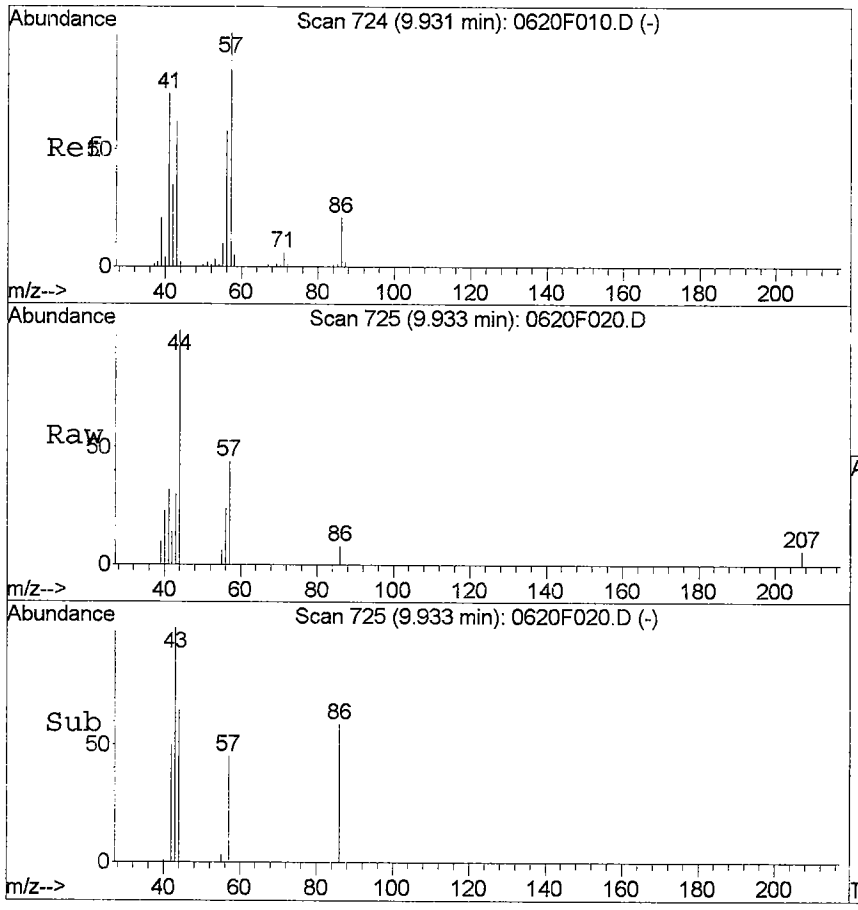


#21
Methyl tert-Butyl Ether
Concen: 0.16 PPB
RT: 9.45 min Scan# 668
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 73 Resp: 9854

Ion	Ratio	Lower	Upper
73	100		
57	276.5	0.0	50.5#
55	30.5	0.0	35.0

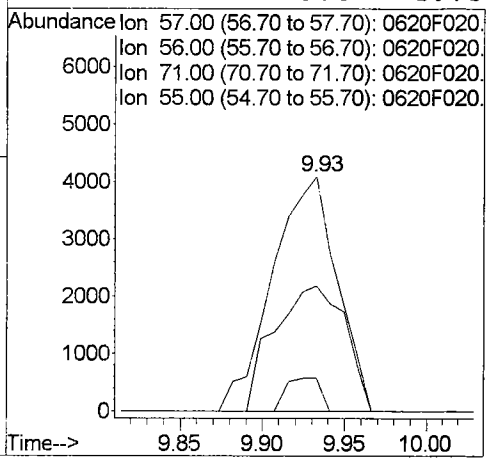


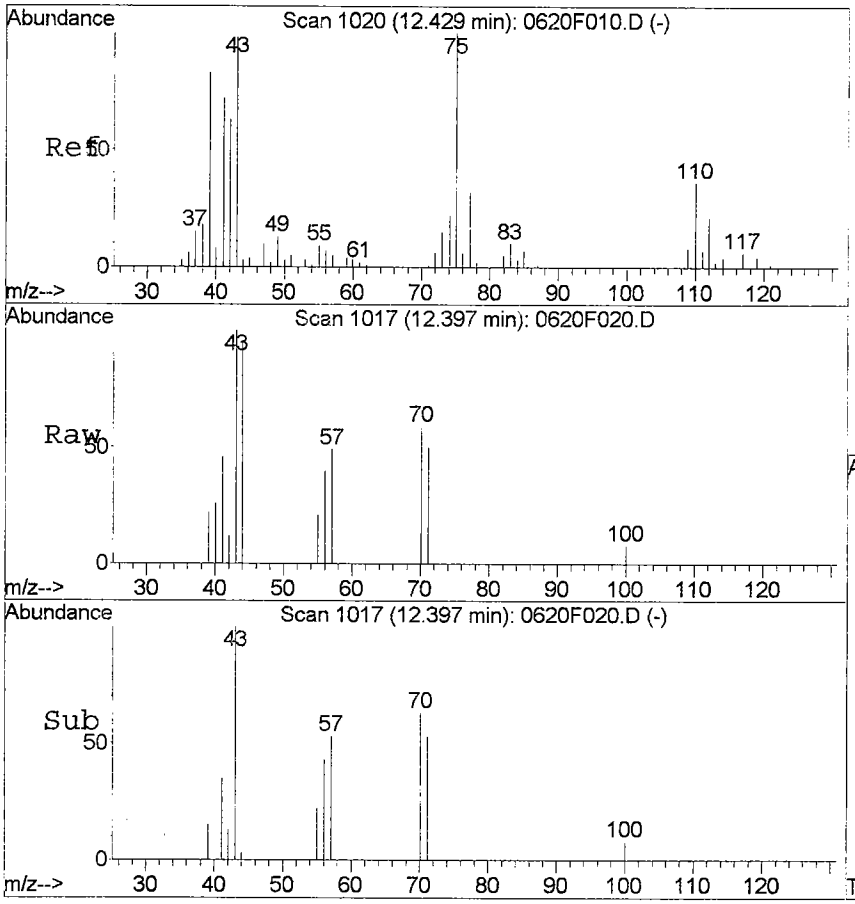


#23
Hexane
Concen: 0.21 PPB
RT: 9.93 min Scan# 725
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 57 Resp: 11144

Ion	Ratio	Lower	Upper
57	100		
56	53.4	28.2	88.2
71	0.0	0.0	36.1
55	14.2	0.0	40.5



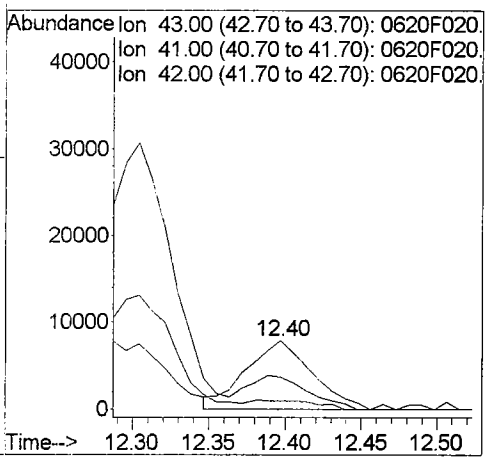


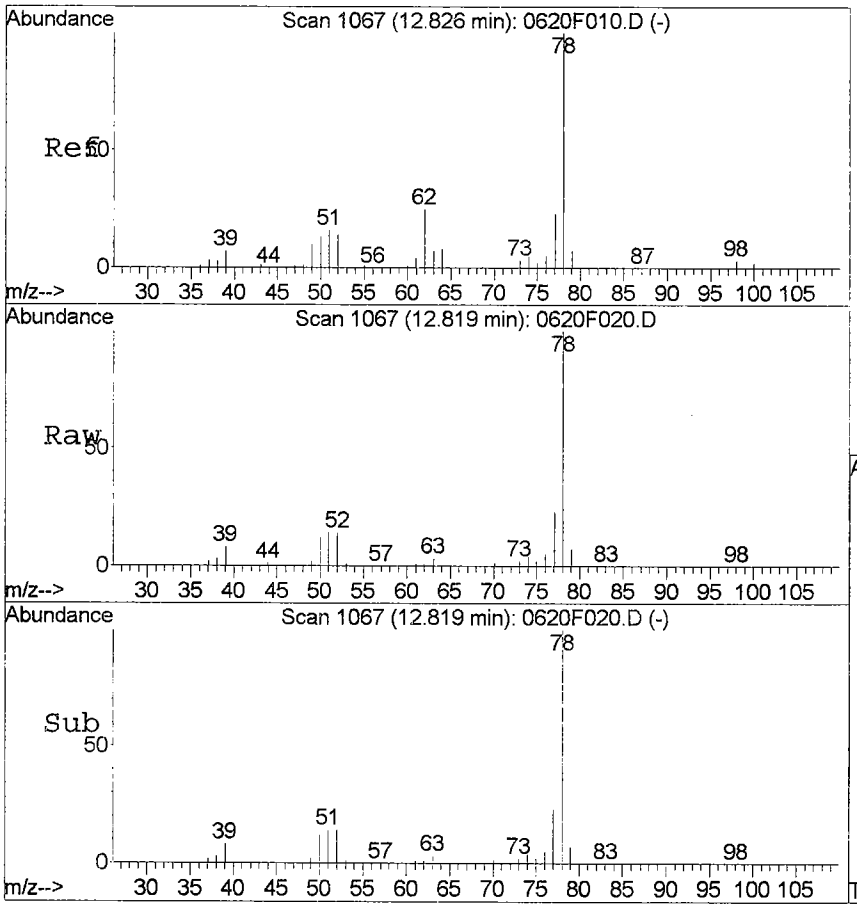
#43
Isobutyl Alcohol
Concen: 69.13 PPB
RT: 12.40 min Scan# 1017
Delta R.T. -0.03 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 43 Resp: 23759

Ion	Ratio	Lower	Upper
43	100		
41	38.9	43.0	103.0#
42	12.3	34.0	94.0#

NT

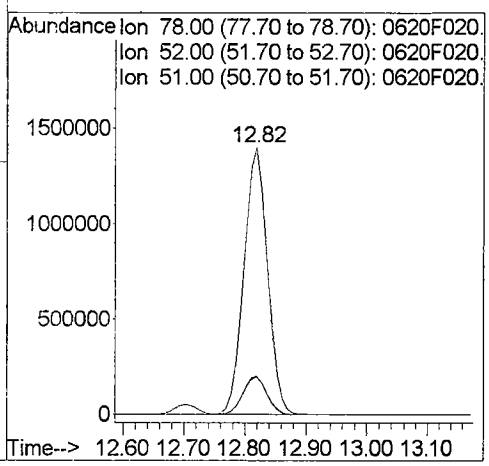


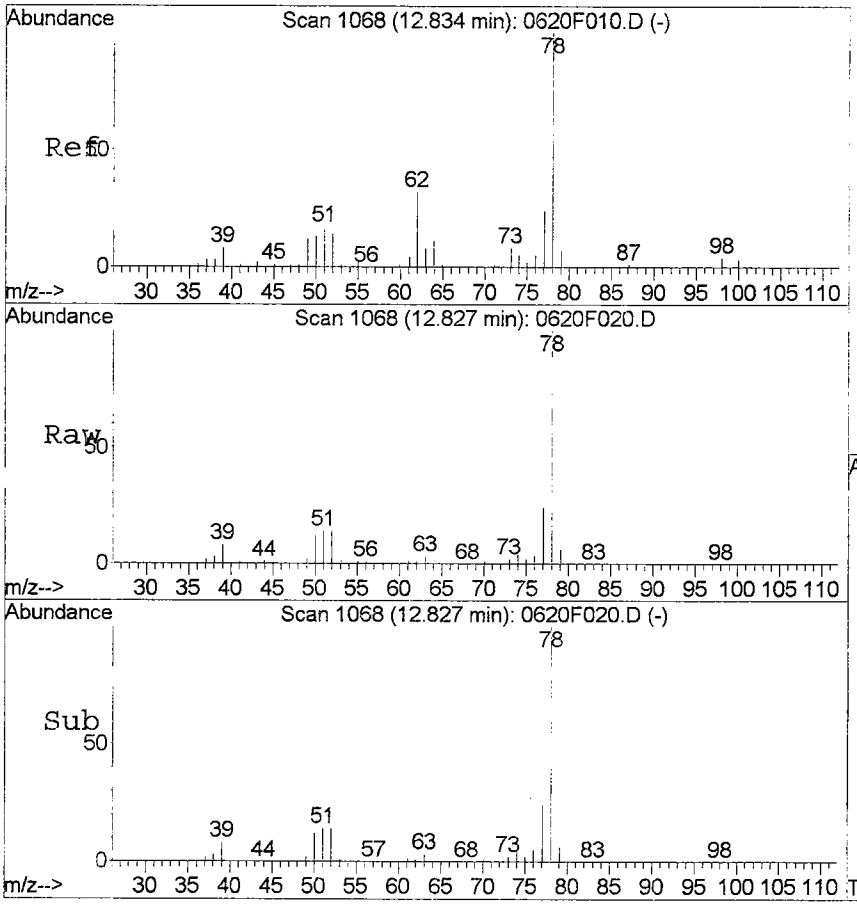


#48
Benzene
Concen: 21.47 PPB
RT: 12.82 min Scan# 1067
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 78 Resp: 3782567

Ion	Ratio	Lower	Upper
78	100		
52	14.4	0.0	44.0
51	14.1	0.0	47.1

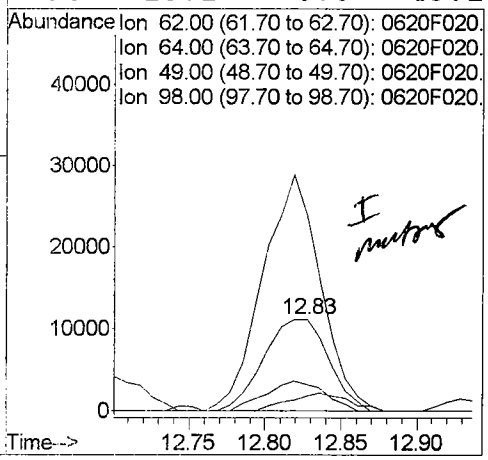


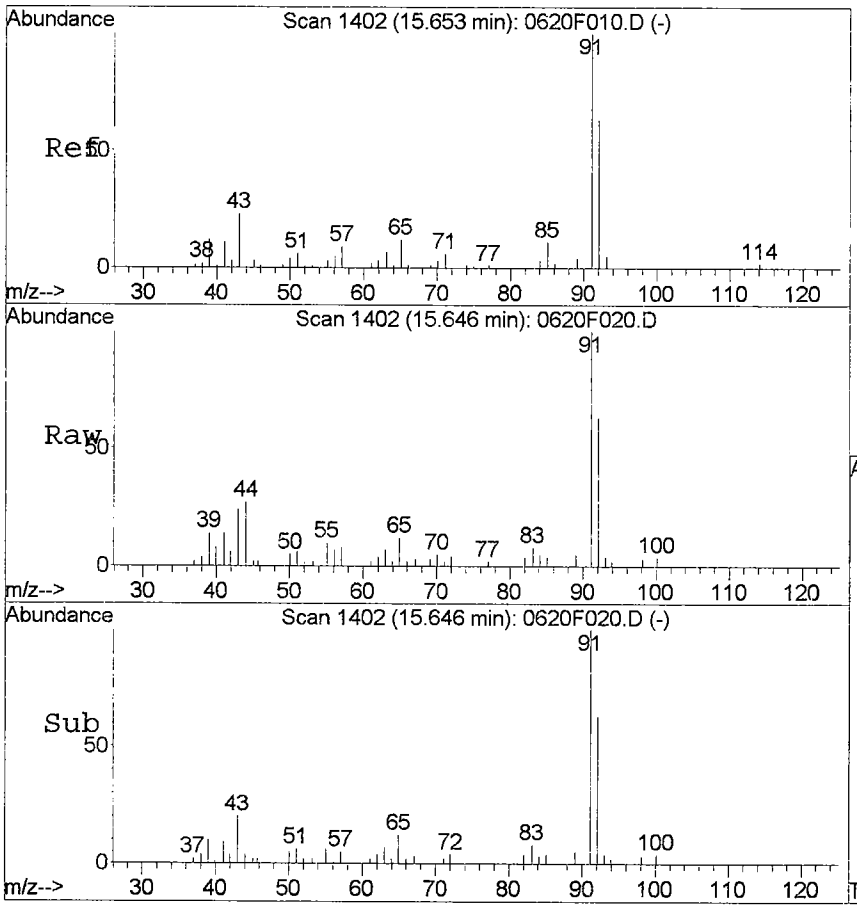


#49
1,2-Dichloroethane
Concen: 0.86 PPB
RT: 12.83 min Scan# 1068
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 62 Resp: 32905

Ion	Ratio	Lower	Upper
62	100		
64	28.5	4.1	64.1
49	213.4	7.1	67.1#
98	16.1	0.0	43.1

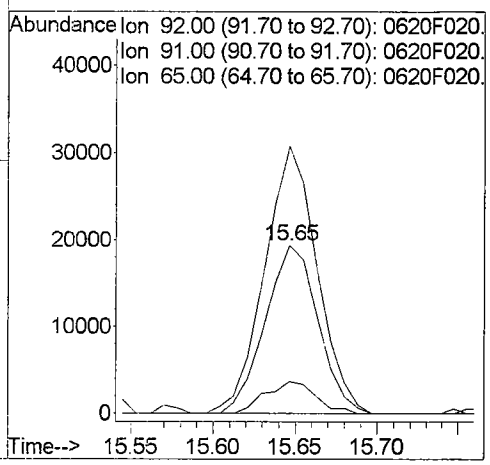


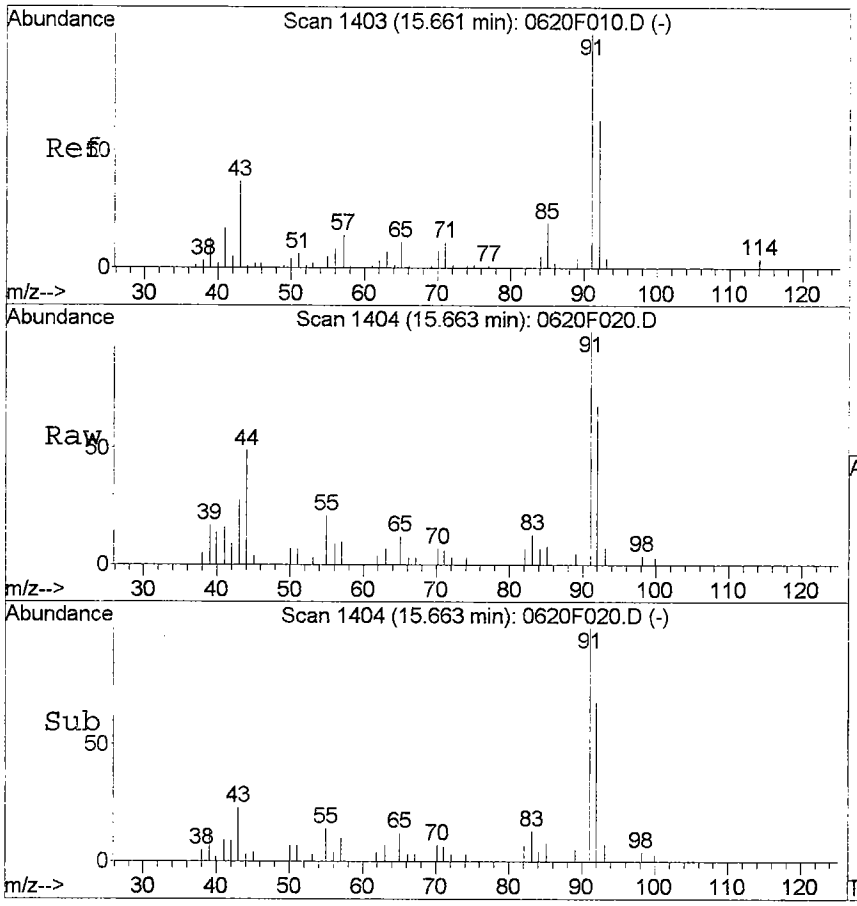


#62
Toluene
Concen: 0.42 PPB
RT: 15.65 min Scan# 1402
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 92 Resp: 43211

Ion	Ratio	Lower	Upper
92	100		
91	159.1	128.3	188.3
65	18.8	0.0	48.3



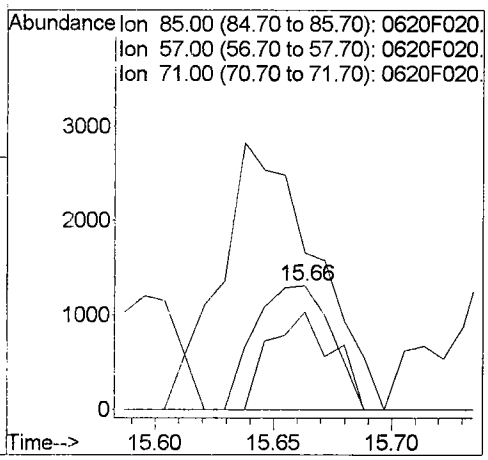


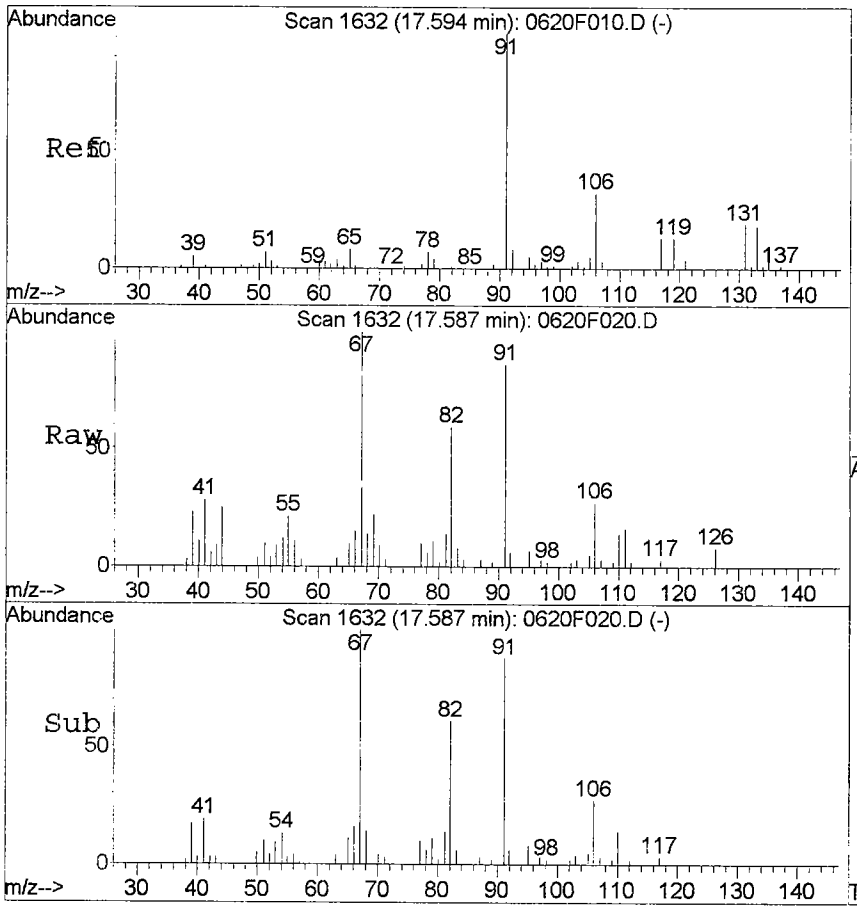
#65
n-Octane
Concen: 0.12 PPB
RT: 15.66 min Scan# 1404
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 85 Resp: 2961

Ion	Ratio	Lower	Upper
85	100		
57	126.4	59.4	89.2#
71	78.8	45.3	67.9#

NT

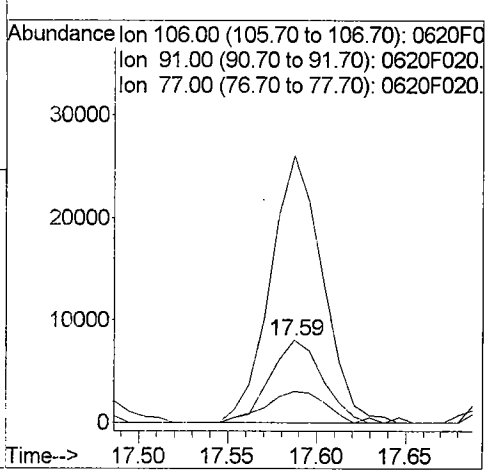


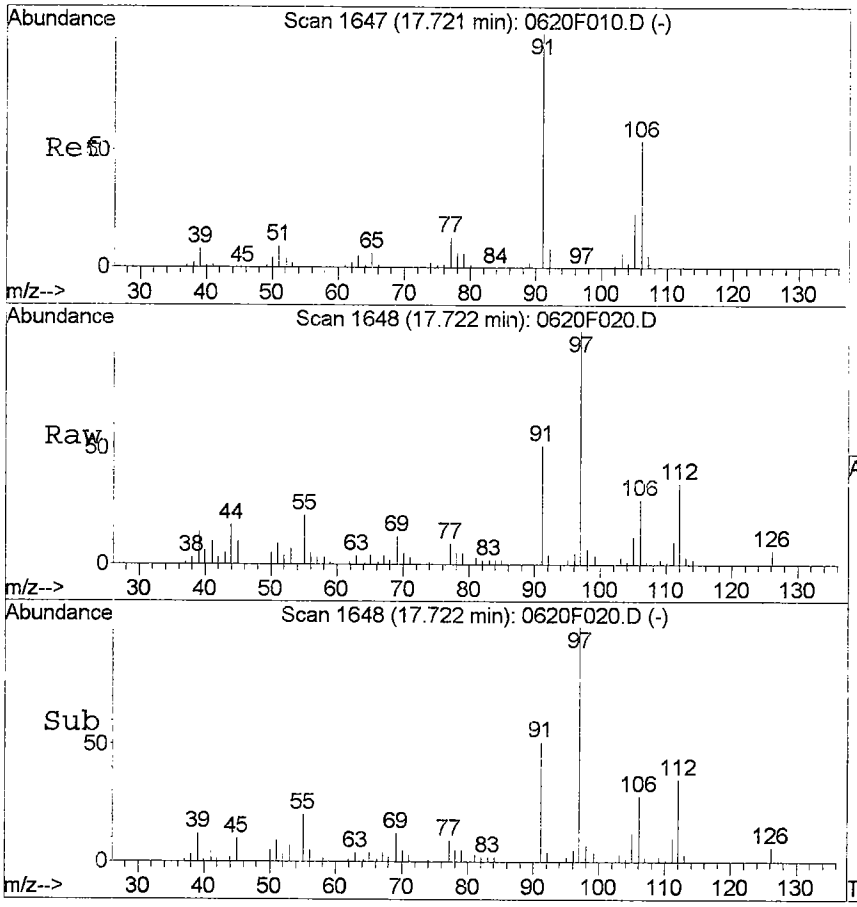


#75
Ethylbenzene
Concen: 0.28 PPB
RT: 17.59 min Scan# 1632
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:106 Resp: 16444

Ion	Ratio	Lower	Upper
106	100		
91	324.3	281.2	341.2
77	37.7	0.0	54.5

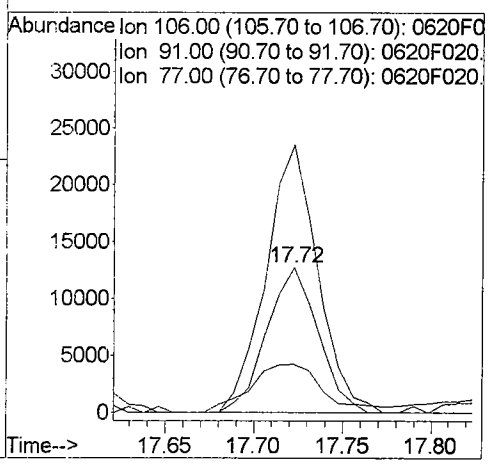


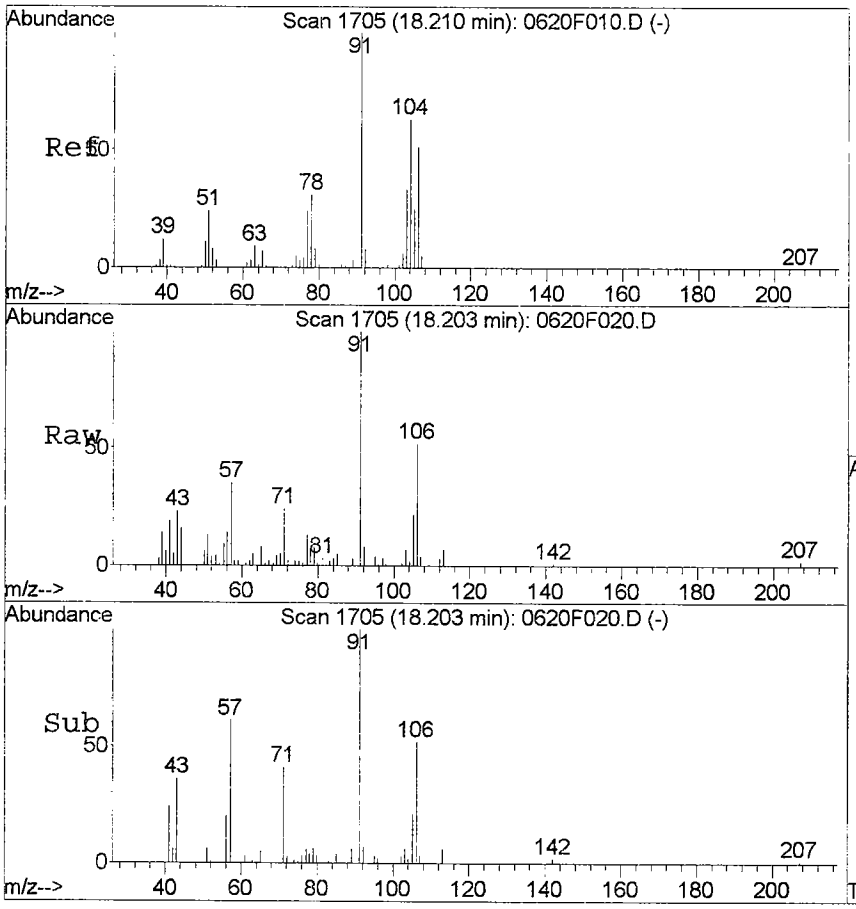


#77
m,p-Xylenes
Concen: 0.35 PPB
RT: 17.72 min Scan# 1648
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:106 Resp: 25590

Ion	Ratio	Lower	Upper
106	100		
91	185.2	154.8	214.8
77	33.2	0.0	53.4

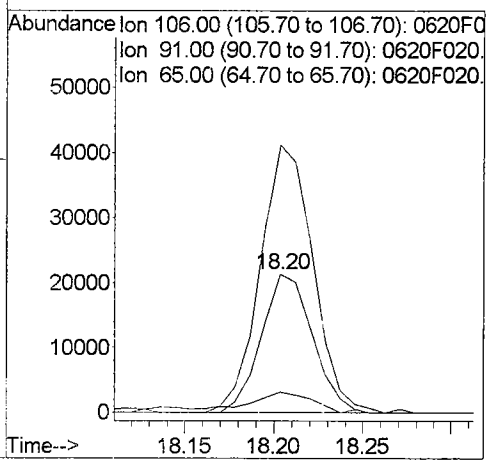


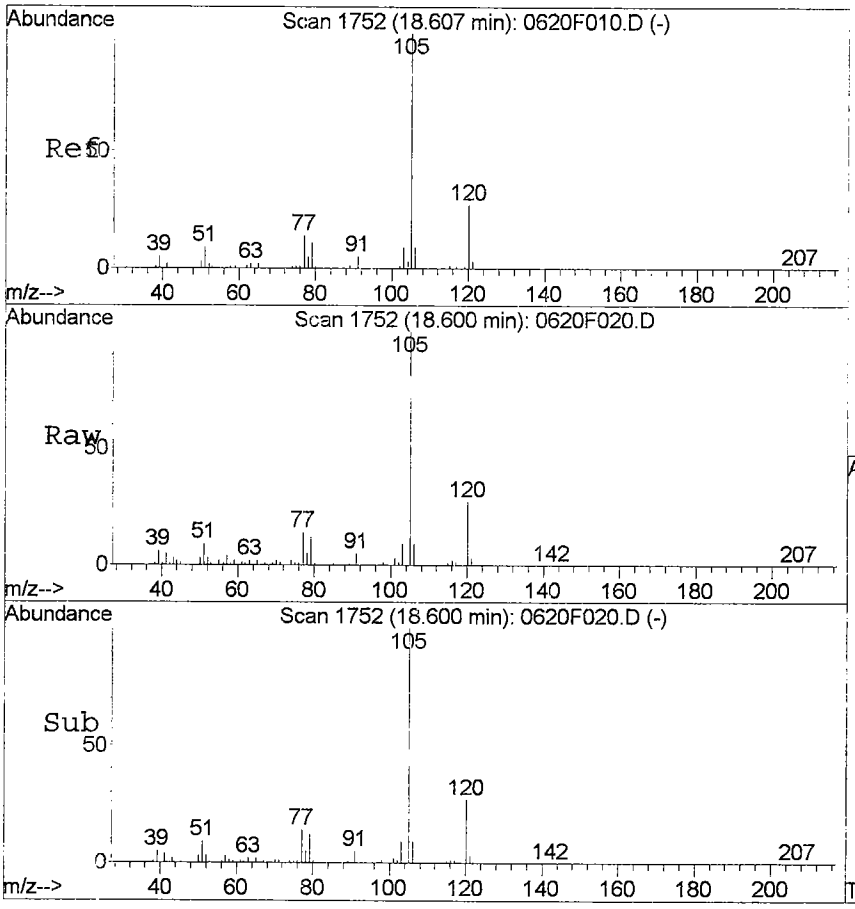


#78
o-Xylene
Concen: 0.64 PPB
RT: 18.20 min Scan# 1705
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:106 Resp: 42723

Ion	Ratio	Lower	Upper
106	100		
91	192.9	165.3	225.3
65	14.8	0.0	44.4

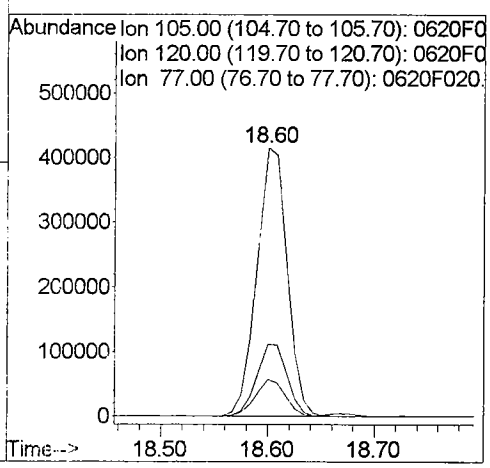


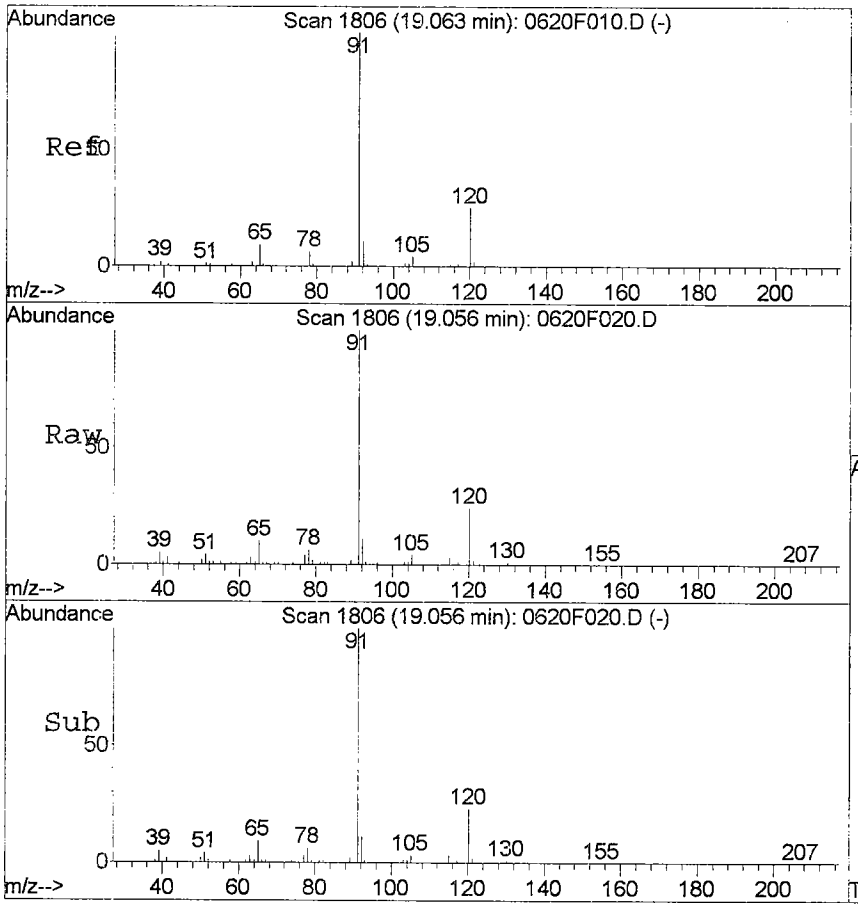


#81
Isopropylbenzene
Concen: 4.93 PPB
RT: 18.60 min Scan# 1752
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:105 Resp: 823203

Ion	Ratio	Lower	Upper
105	100		
120	27.0	0.0	57.4
77	13.8	0.0	43.5

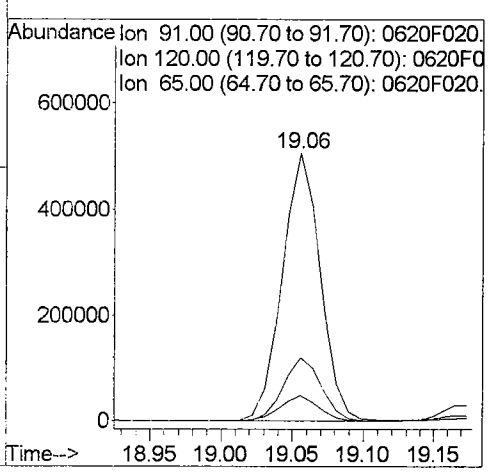


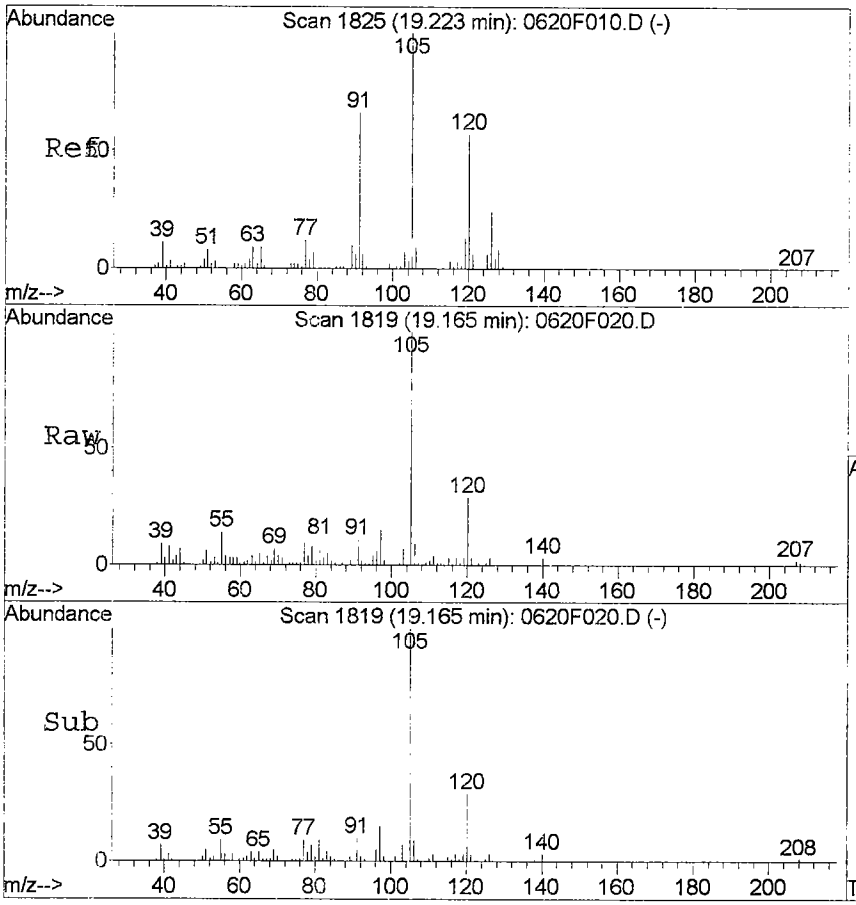


#87
n-Propylbenzene
Concen: 4.62 PPB
RT: 19.06 min Scan# 1806
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 91 Resp: 948266

Ion	Ratio	Lower	Upper
91	100		
120	23.7	0.0	54.8
65	9.4	0.0	39.3

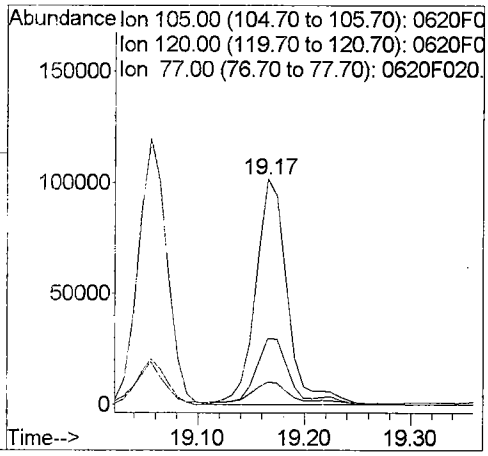


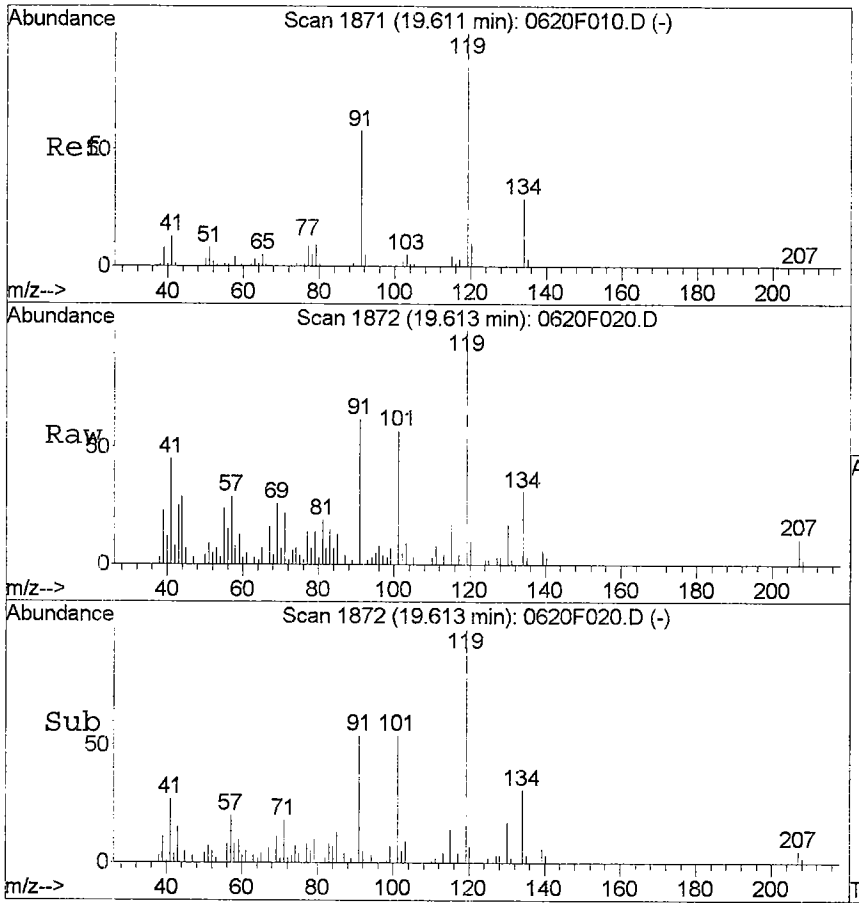


#91
1,3,5-Trimethylbenzene
Concen: 1.57 PPB
RT: 19.17 min Scan# 1819
Delta R.T. -0.06 min NT
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:105 Resp: 211918

Ion	Ratio	Lower	Upper
105	100		
120	29.4	26.9	86.9
77	9.4	0.0	41.8

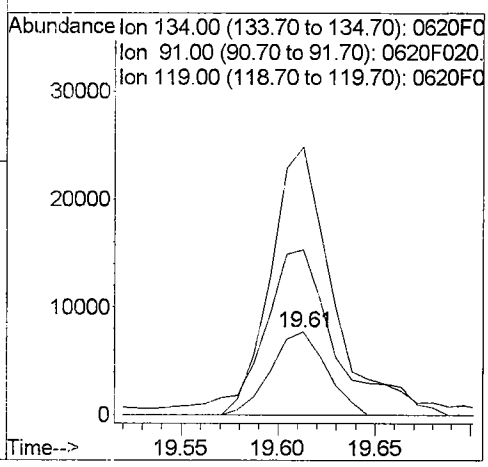


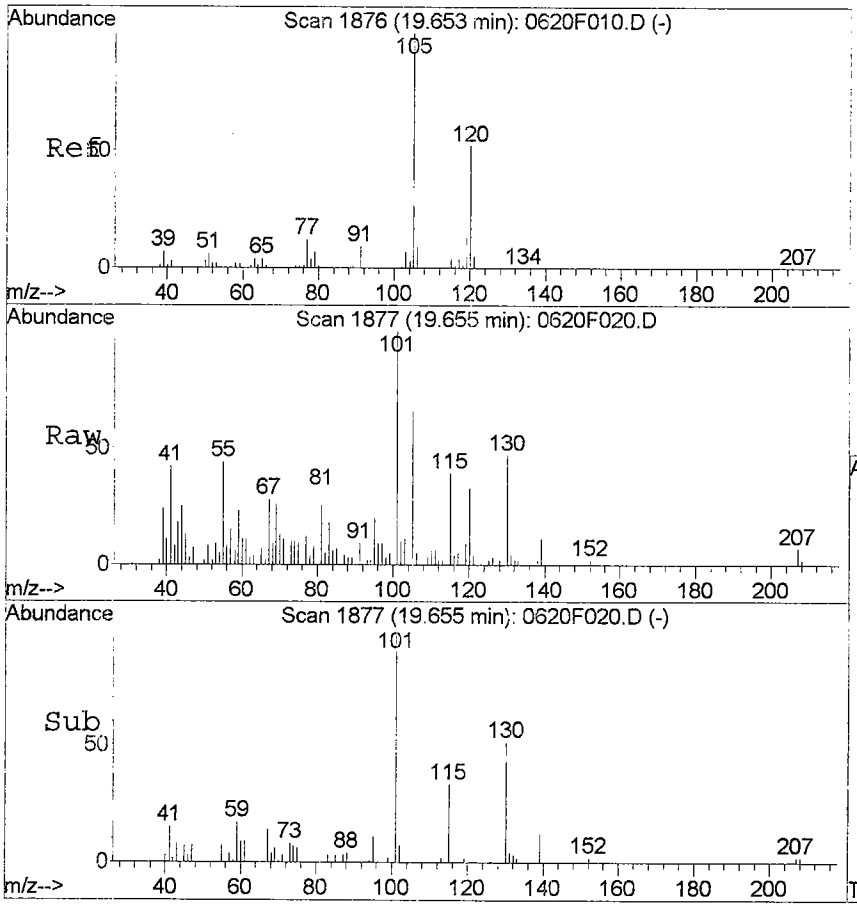


#93
tert-Butylbenzene
Concen: 0.44 PPB
RT: 19.61 min Scan# 1872
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:134 Resp: 15490

Ion	Ratio	Lower	Upper
134	100		
91	185.0	172.8	232.8
119	322.2	317.6	377.6

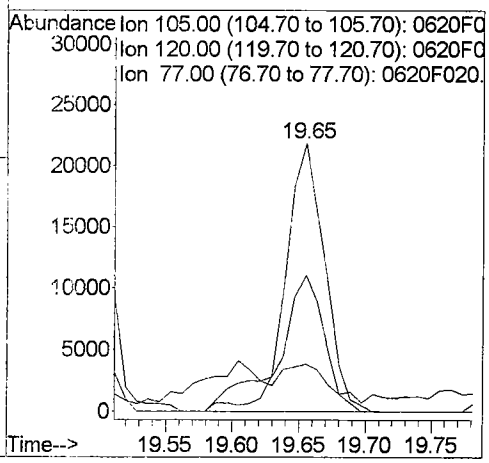


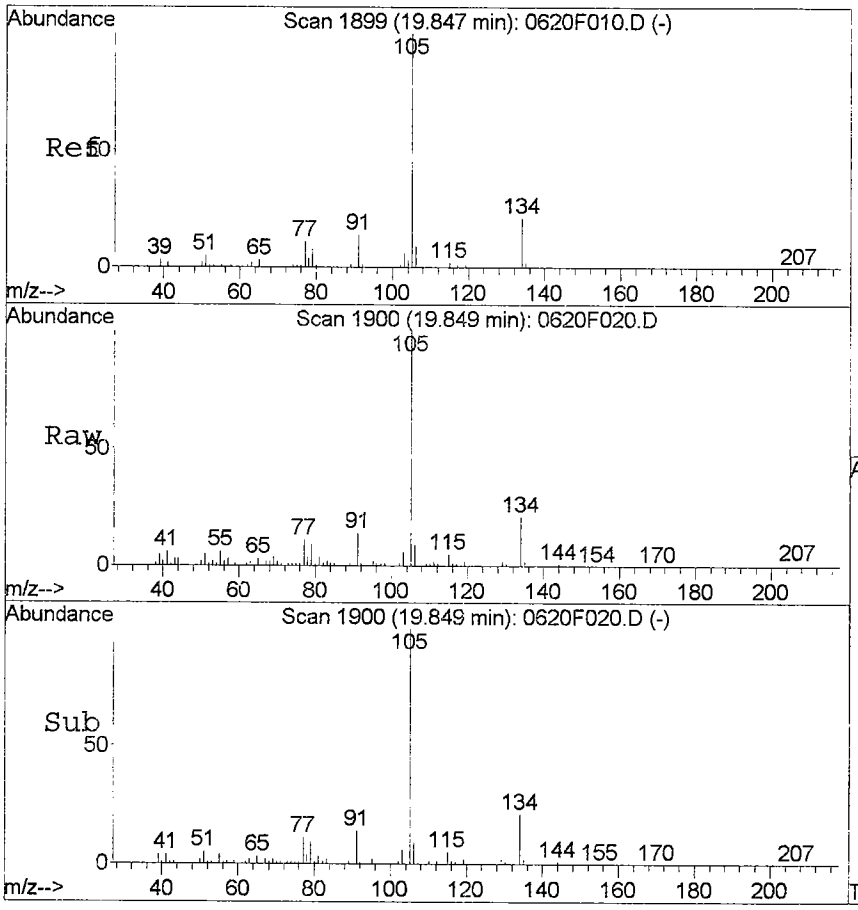


#94
1,2,4-Trimethylbenzene
Concen: 0.33 PPB
RT: 19.65 min Scan# 1877
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:105 Resp: 44498

Ion	Ratio	Lower	Upper
105	100		
120	50.5	22.3	82.3
77	12.4	0.0	41.6

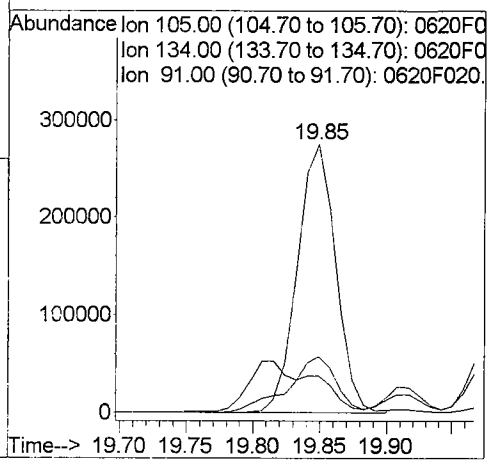


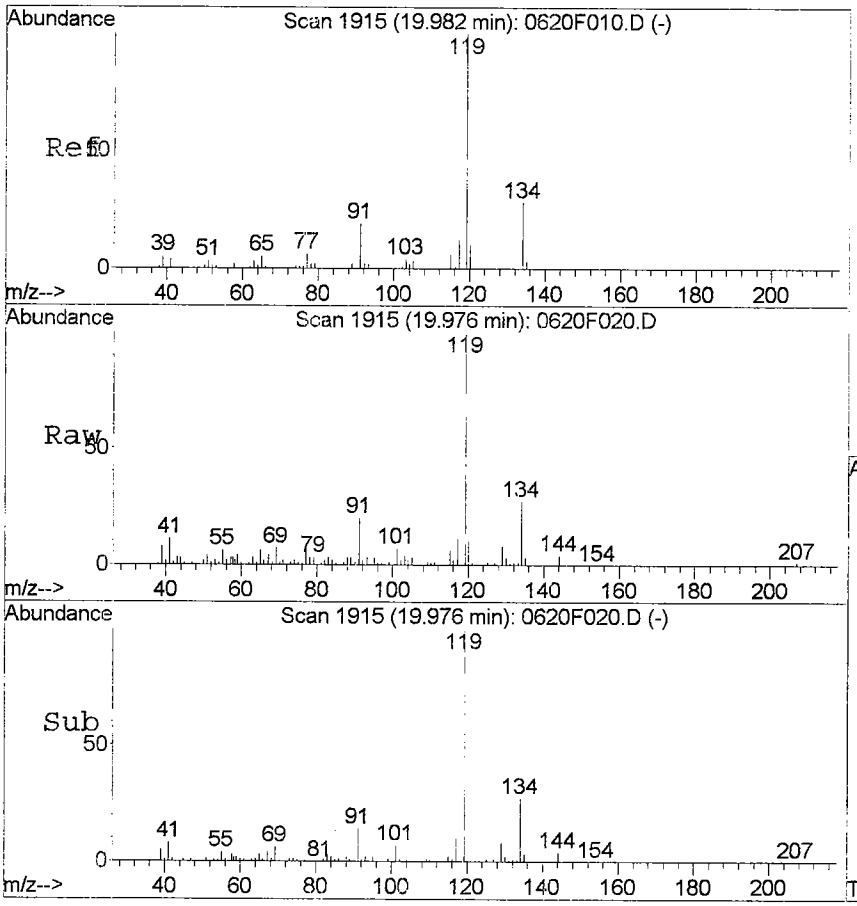


#95
sec-Butylbenzene
Concen: 3.20 PPB
RT: 19.85 min Scan# 1900
Delta R.T. 0.00 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:105 Resp: 552539

Ion	Ratio	Lower	Upper
105	100		
134	20.8	0.0	50.6
91	13.2	0.0	43.7

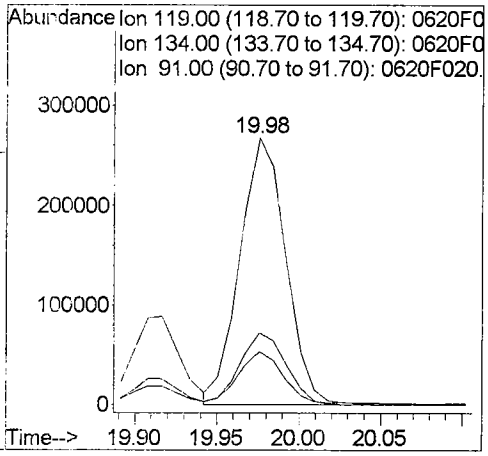


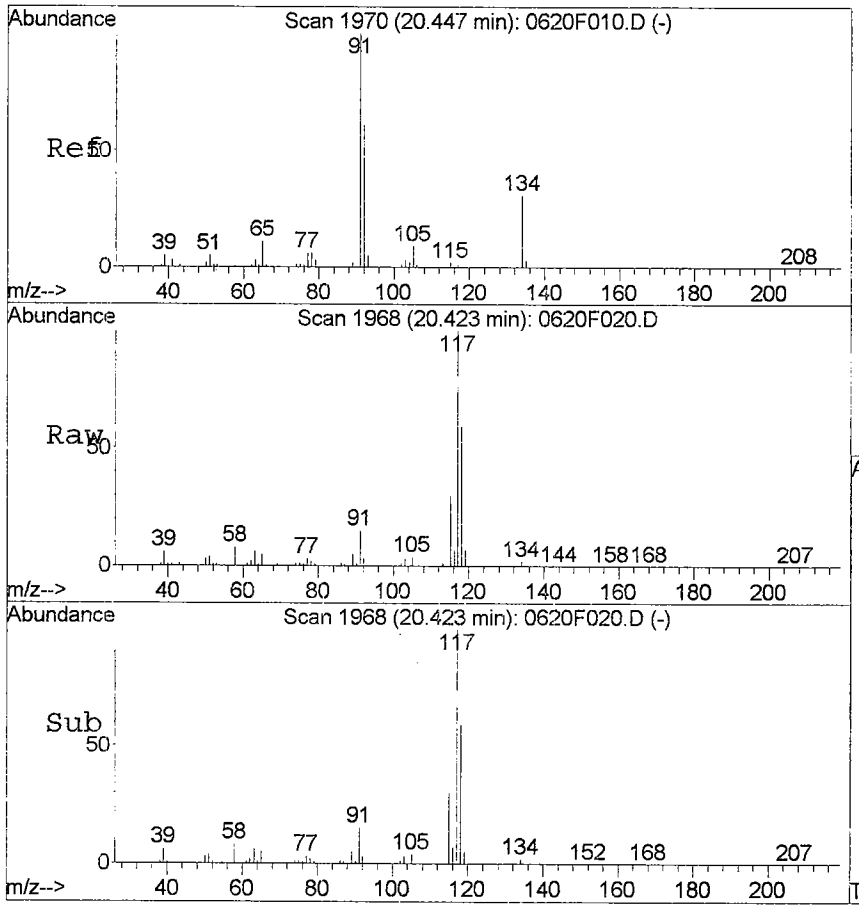


#96
p-Isopropyltoluene
Concen: 3.45 PPB
RT: 19.98 min Scan# 1915
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:119 Resp: 522675

Ion	Ratio	Lower	Upper
119	100		
134	27.0	0.0	58.1
91	19.3	0.0	49.3



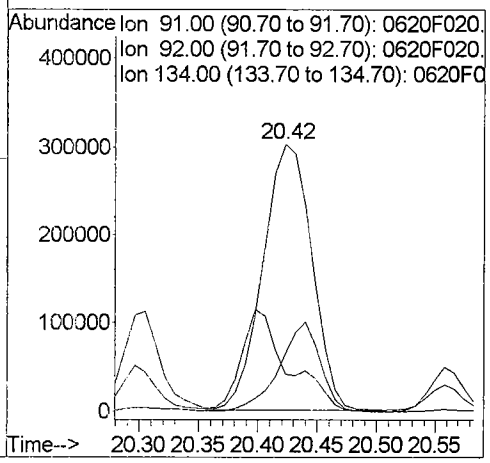


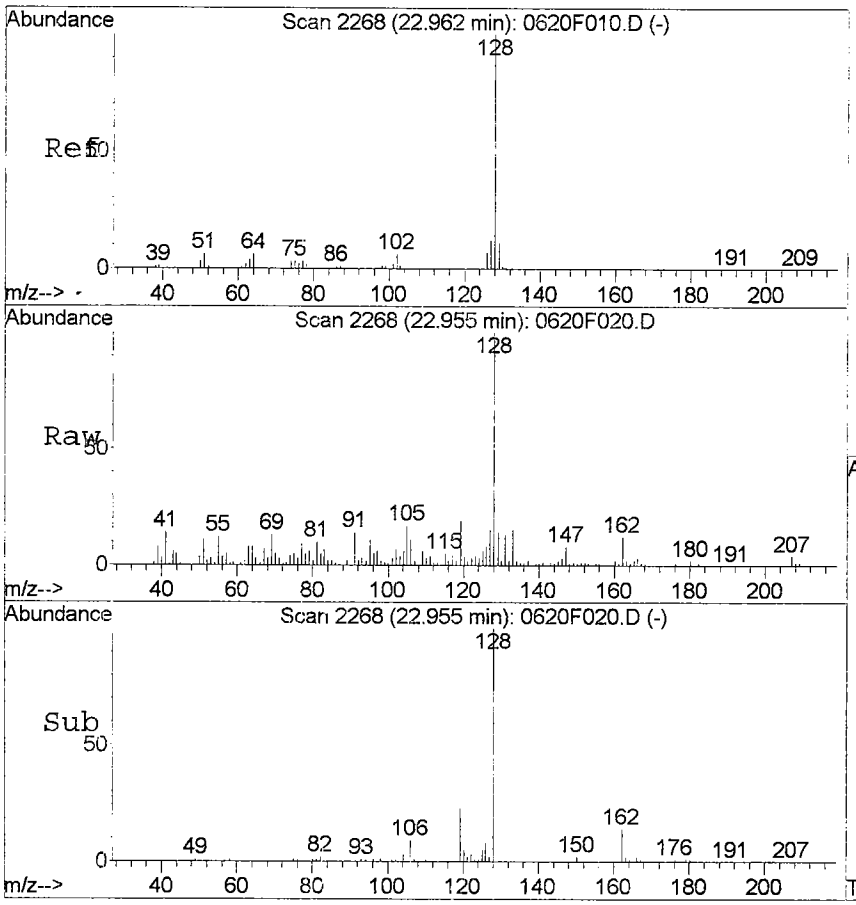
#99
n-Butylbenzene
Concen: 6.82 PPB
RT: 20.42 min Scan# 1968
Delta R.T. -0.02 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion: 91 Resp: 867519

Ion	Ratio	Lower	Upper
91	100		
92	21.6	31.3	91.3#
134	14.0	0.8	60.8

NT

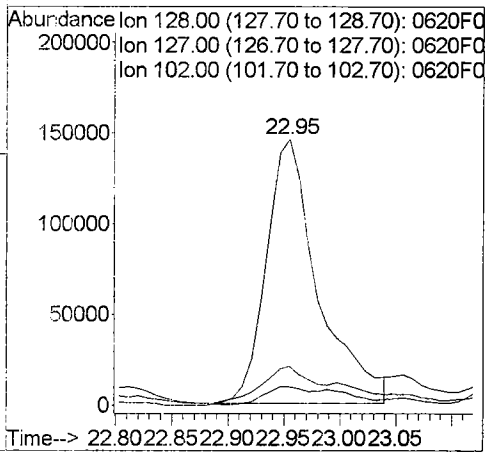




#105
Naphthalene
Concen: 8.96 PPB
RT: 22.95 min Scan# 2268
Delta R.T. -0.01 min
Lab File: 0620F020.D
Acq: 20 Jun 2007 8:33 pm

Tgt Ion:128 Resp: 468542

Ion	Ratio	Lower	Upper
128	100		
127	14.0	0.0	41.8
102	7.0	0.0	36.5



Exception Report

Data File: J:\MS18\DATA\062107\0621F033.D
Lab ID: K0704852-002
RunType: RE
Matrix: WATER

Date Acquired: 06/21/2007 20:10
Date Quantitated: 06/26/2007 11:41
Batch ID: KWG0706924
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	15	NA	14		x
Preparation Holding Time	15	NA	14		x
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

NR
run to confirm hits in MSD run with high surr recovery
Confirm hits
put in

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0093	0.01	NA	
Second Source ICAL Verification	Vinyl Acetate	-54.8	NA	40	NR See Above
Continuing Calibration Recovery	2-Chloroethyl Vinyl Ether	-44.6	NA	40	
Continuing Calibration Minimum RF	2-Butanone (MEK)	0.0089	0.01	NA	

Primary Review: KL 6/27/07
Secondary Review: 6/27/7

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706924	**Prep Lot:**	KWG0706925	**Report Group:**	K0704852
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	613415	**Prep Date:**	06/21/2007		

Quant Method:	J:\MS18\METHODS\061307.M	**Calibration ID:**	CAL6351
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS18\DATA\062107\0621F005.D	**Method ID:**	MJ119
MB Ref:	J:\MS18\DATA\062107\0621F012.D	**Quant based on Report List**	

Data File:	J:\MS18\DATA\062107\0621F033.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 20:10 **H**	**Quant Date:**	06/26/2007 11:41	**Vial:**	29
Run Type:	RE			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.44	0.00	96	440536	10.00	OK
2	Chlorobenzene-d5	8.93	0.00	82	175218	10.00	OK
3	1,4-Dichlorobenzene-d4	11.35	0.00	152	154458	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	5.05	-0.01	0.00	65	80099	9.09	91	76-114	OK
1	Toluene-d8	7.34	0.00	0.00	98	419479	10.44	104	88-110	OK
2	4-Bromofluorobenzene	10.18	0.00	0.00	95	139158	9.42	94	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane	1.61		0.00	64	1379	0.1500	0.23	U	
1	1,1-Dichloroethene	2.17		0.00	96	728	0.0700	0.13	U	
1	Acetone	2.27		0.00	43	9287	8.05	8.1	J	
1	Carbon Disulfide	2.34		0.00	76	5035	0.1400	0.16	U	
1	Methylene Chloride	2.64		0.00	84	6796	0.5600	0.56	J	
1	Methyl tert-Butyl Ether	2.83		0.00	73	2890	0.1500	0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane	3.32	0.01	0.00	63	1149**m**	0.0500	0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene	3.98	0.01	0.00	96	7178	0.5600	0.56		
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0**d**		0.14	U	
1	1,1,1-Trichloroethane (TCA)	4.53		0.00	97	2226	0.1100	0.12	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F033.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 20:10	**H**	**Quant Date:** 06/26/2007 11:41	**Vial:**	29
Run Type:	RE			**Dilution:**	1.0
Lab ID:	K0704852-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene	5.01		0.00	78	1123304	22.49	22		
1	1,2-Dichloroethane (EDC)	5.16		0.00	62	3336	0.3000	0.30	J	
1	Trichloroethene (TCE)	5.89		0.00	95	5539	0.4400	0.44	J	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene	7.41		0.00	92	18526	0.5800	0.58		
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0d		0.14	U	
2	Tetrachloroethene (PCE)	7.97		0.00	164	4276	0.3600	0.36	J	
2	2-Hexanone	8.25		0.00	57	2067	3.68	4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0d		0.14	U	
2	Ethylbenzene	9.06		0.00	106	5155	0.2500	0.25	J	
2	m,p-Xylenes	9.20	0.01	0.00	106	10538	0.4200	0.42	J	
2	o-Xylene	9.61		0.00	106	14389	0.6200	0.62		
2	Styrene				103	0d		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0d		0.14	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

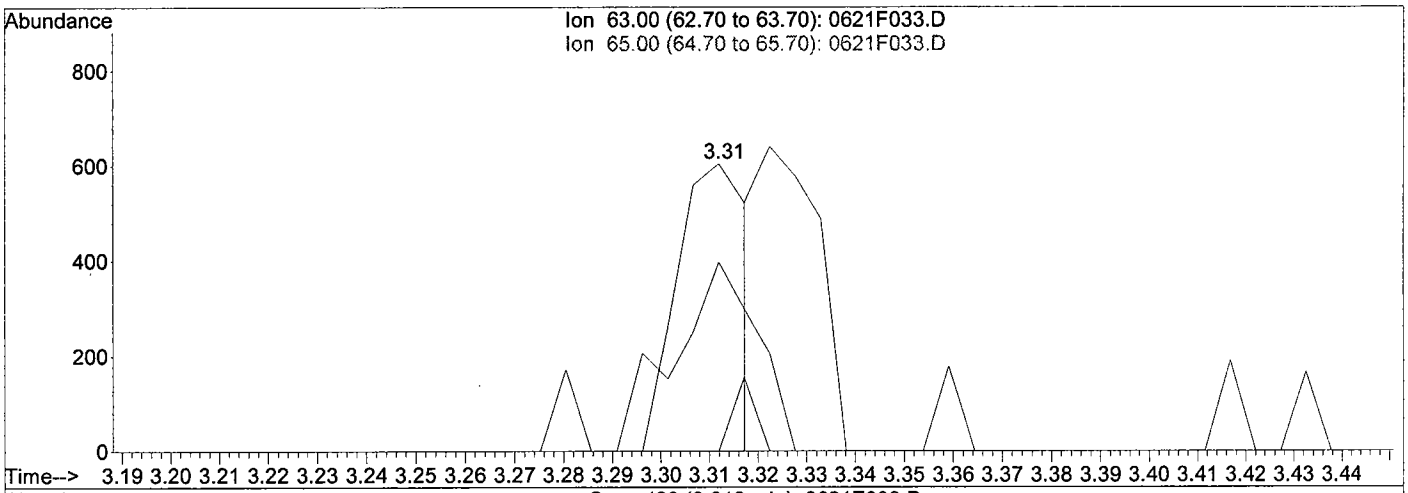
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

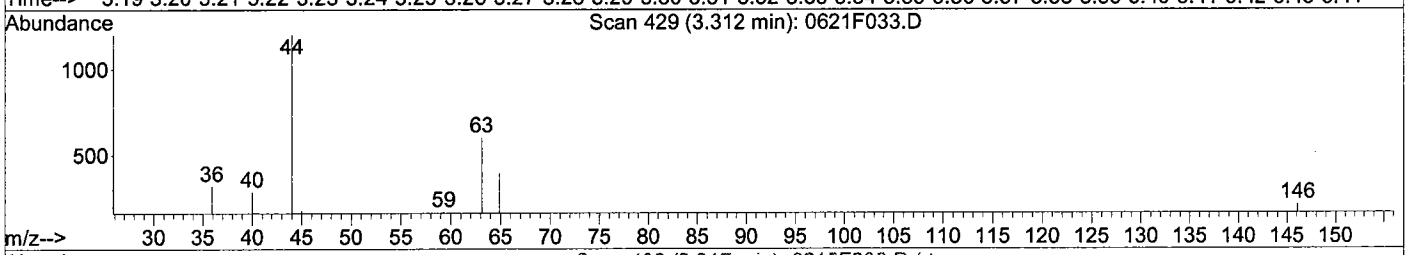
Quantitation Report (Qedit)

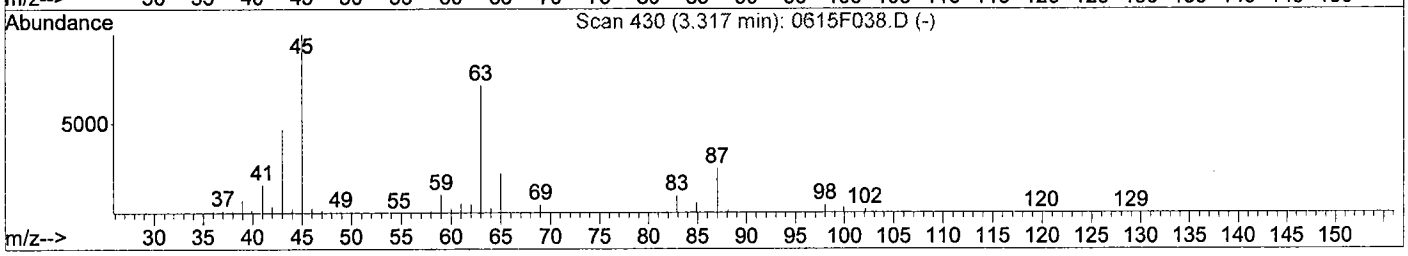
Data File : J:\MS18\DATA\062107\0621F033.D
Acq On : 21 Jun 2007 8:10 pm
Sample : K0704852-002 RE
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 26 11:38 2007

Vial: 29
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration







TIC: 0621F033.D

(25) 1,1-Dichloroethane (PT)

3.31min 0.03PPB

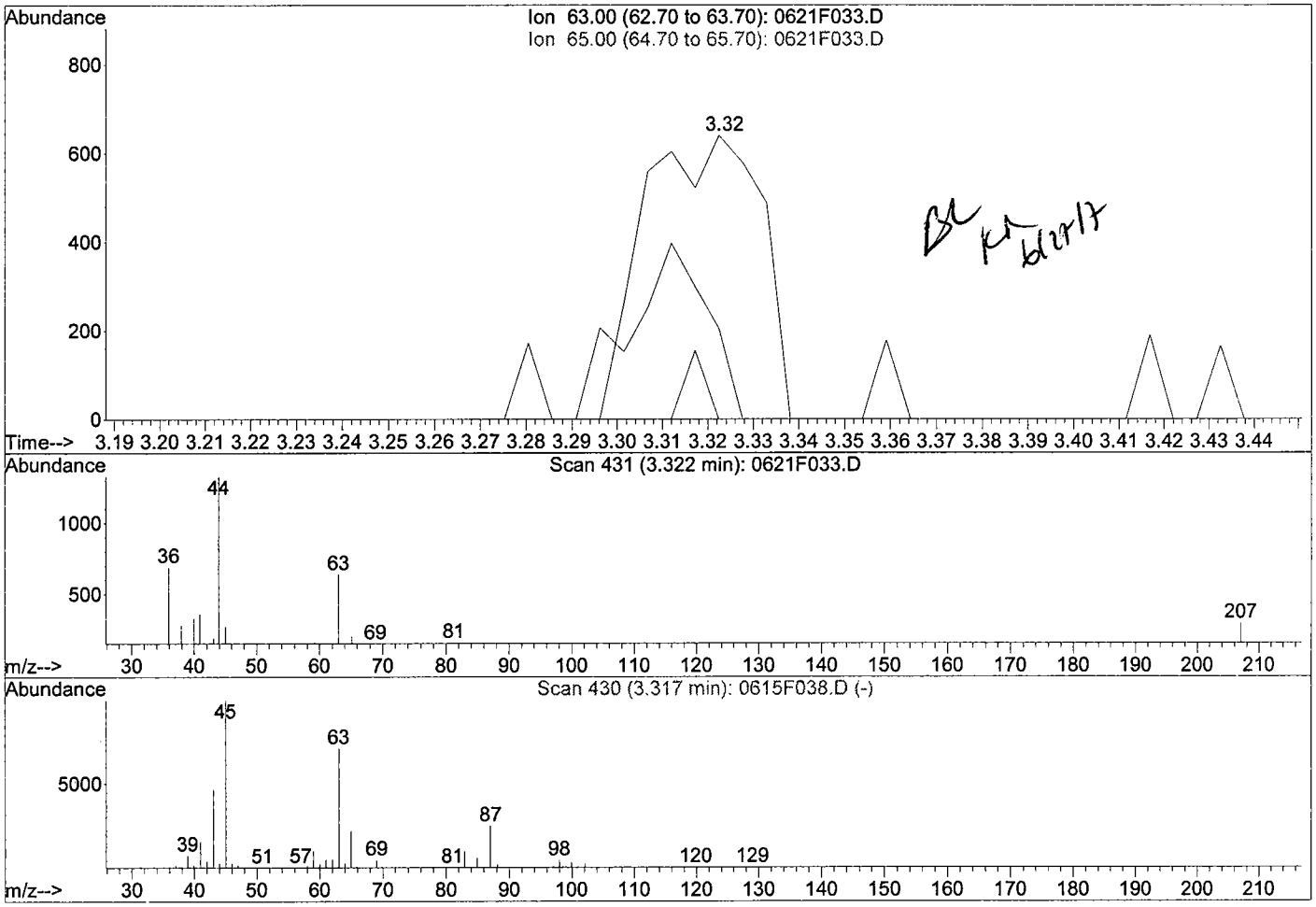
response 612

Ion	Exp%	Act%
63.00	100	100
65.00	30.90	65.73#
83.00	13.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F033.D Vial: 29
Acq On : 21 Jun 2007 8:10 pm Operator:
Sample : K0704852-002 RE Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 26 11:38 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration



TIC: 0621F033.D

(25) 1,1-Dichloroethane (PT)

3.32min 0.05PPB m

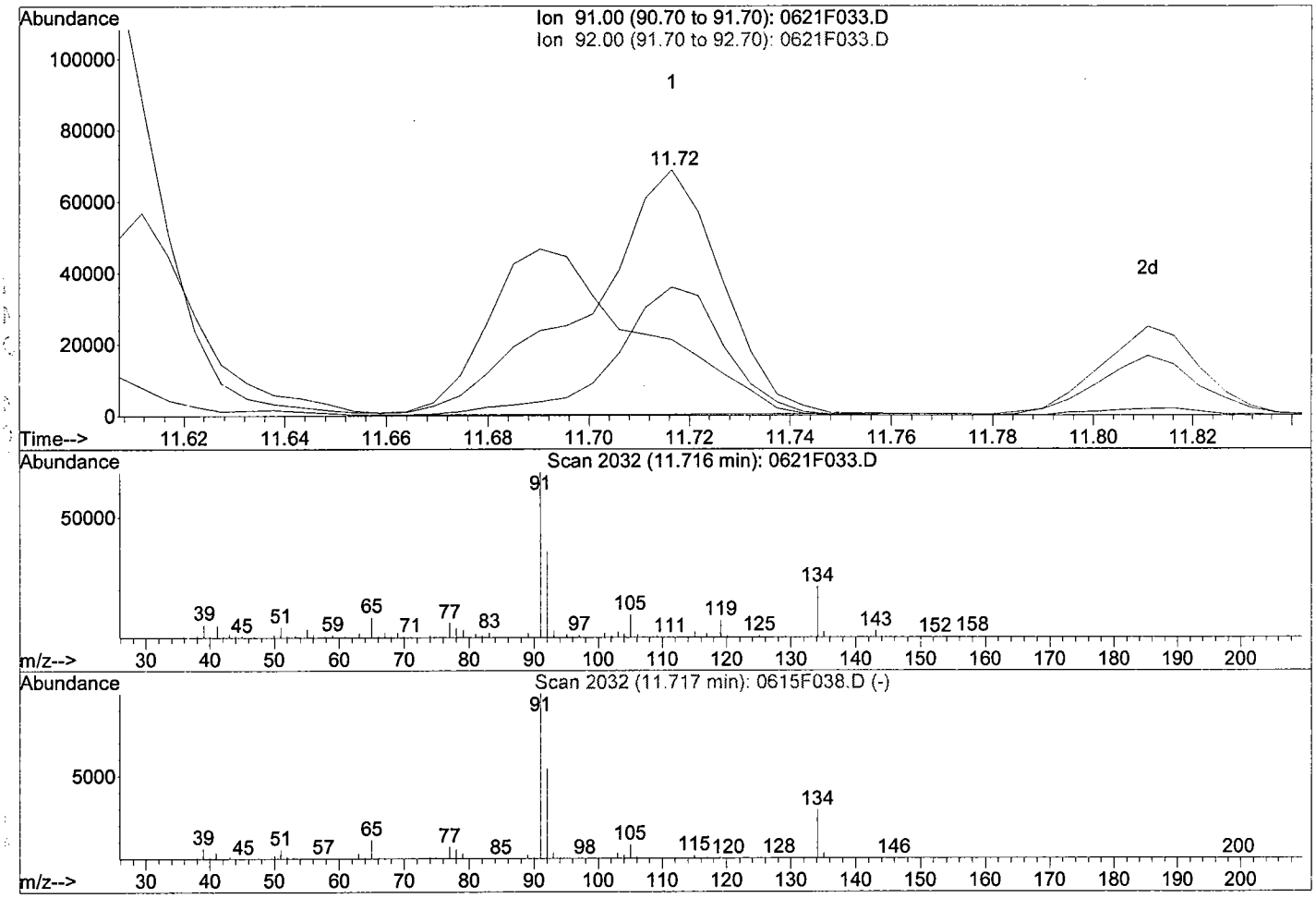
response 1149

Ion	Exp%	Act%
63.00	100	100
65.00	30.90	32.03
83.00	13.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F033.D Vial: 29
Acq On : 21 Jun 2007 8:10 pm Operator:
Sample : K0704852-002 RE Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 26 11:40 2007 Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration



TIC: 0621F033.D

(96) n-Butylbenzene (T)

11.72min 2.74PPB

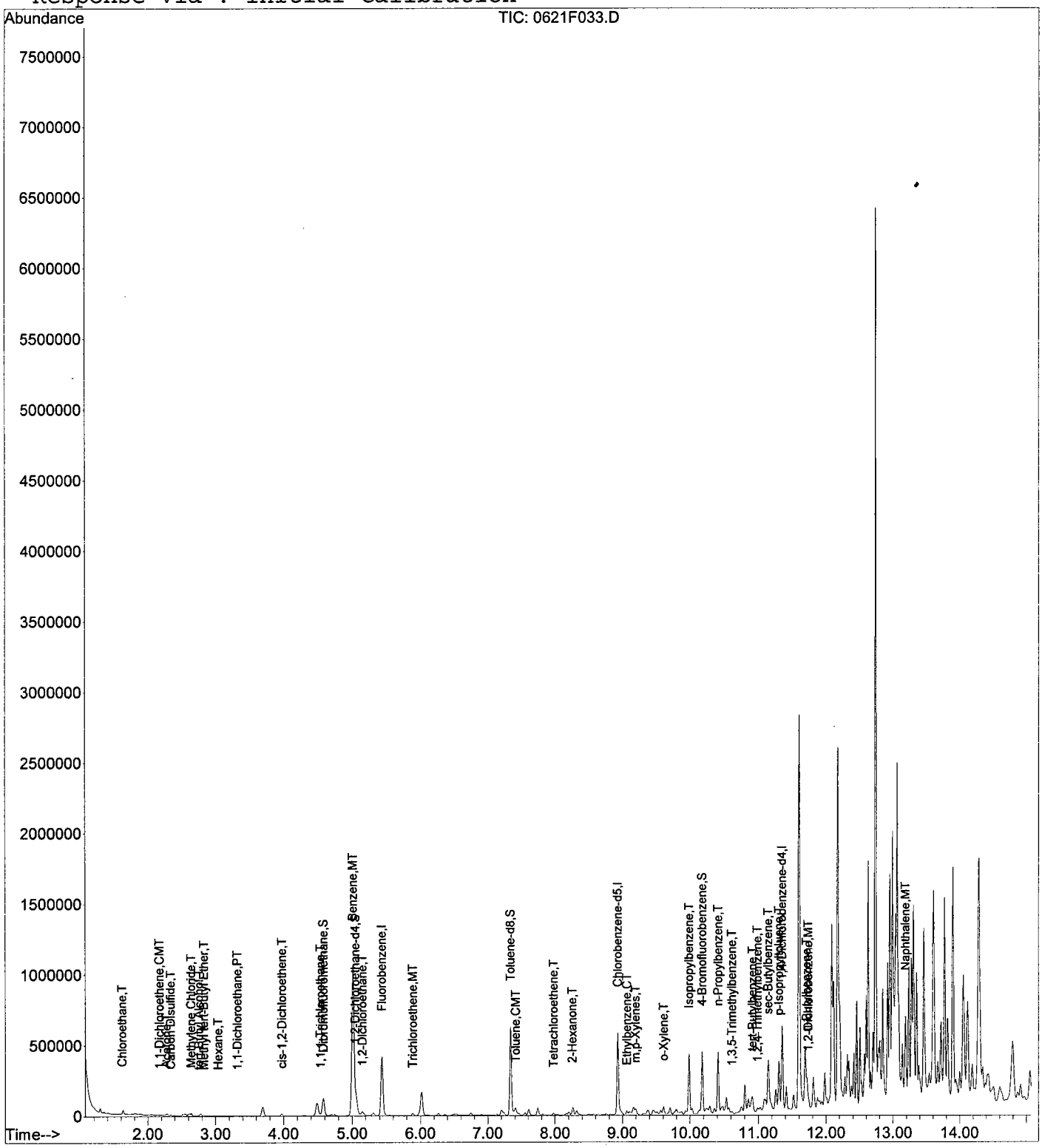
response 127043

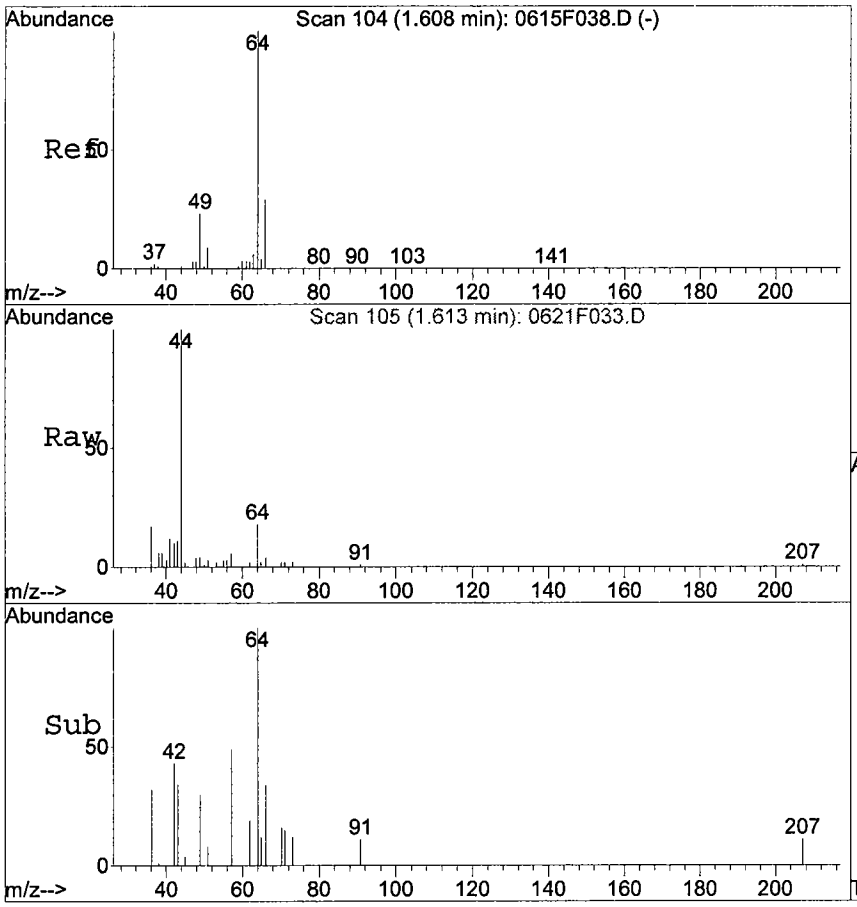
Ion	Exp%	Act%
91.00	100	100
92.00	54.30	52.57
134.00	29.30	31.06
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\062107\0621F033.D Vial: 29
Acq On : 21 Jun 2007 8:10 pm Operator:
Sample : K0704852-002 RE Inst : GC-MS 18
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 26 11:41 2007 Quant Results File: 061307.RES

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration

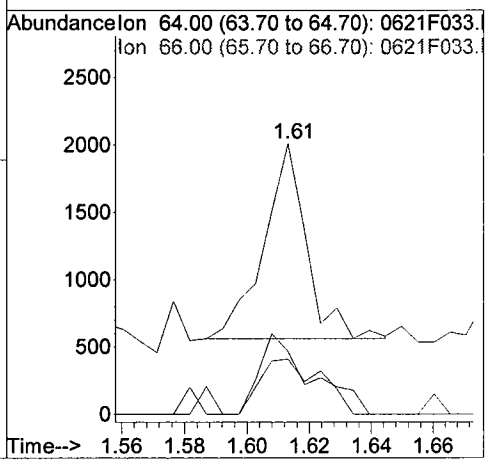


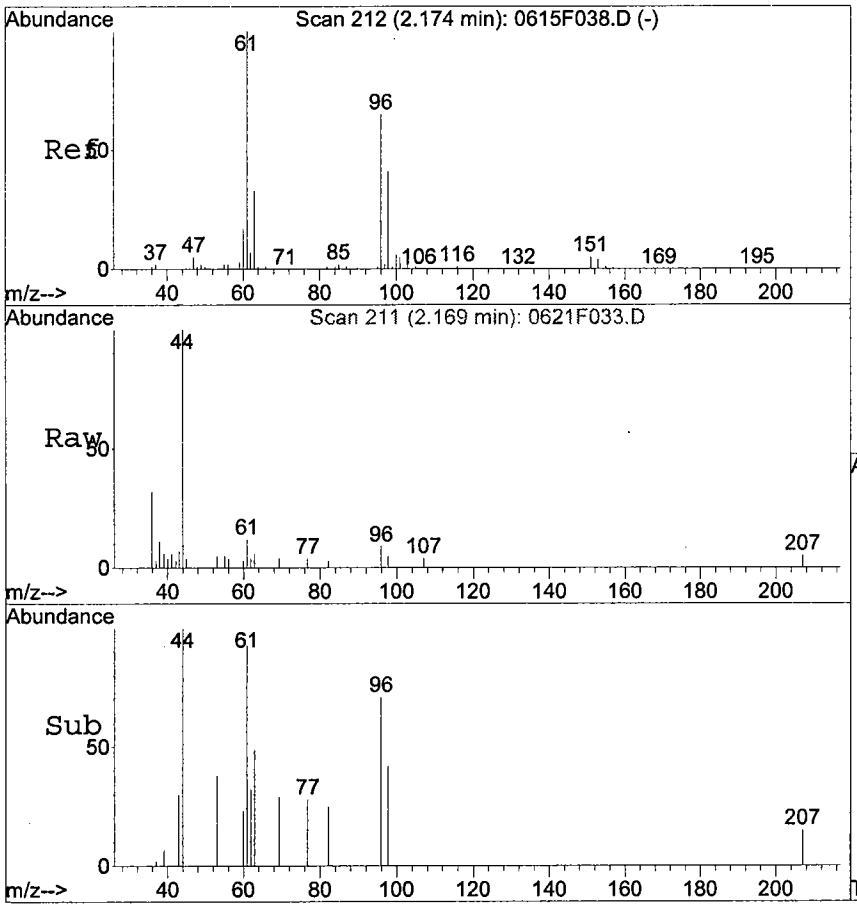


#6
Chloroethane
Concen: 0.15 PPB
RT: 1.61 min Scan# 105
Delta R.T. 0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 64 Resp: 1379

Ion	Ratio	Lower	Upper
64	100		
66	32.2	0.0	59.4
49	28.2	0.0	52.8

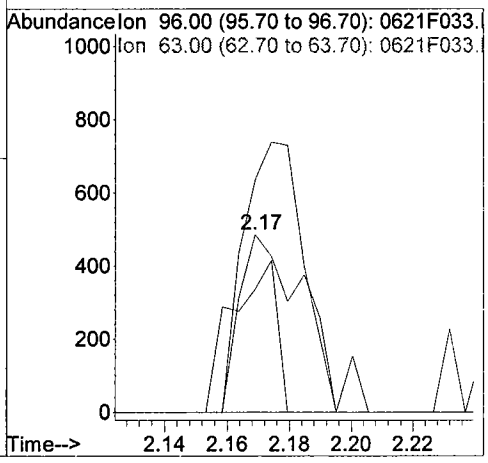


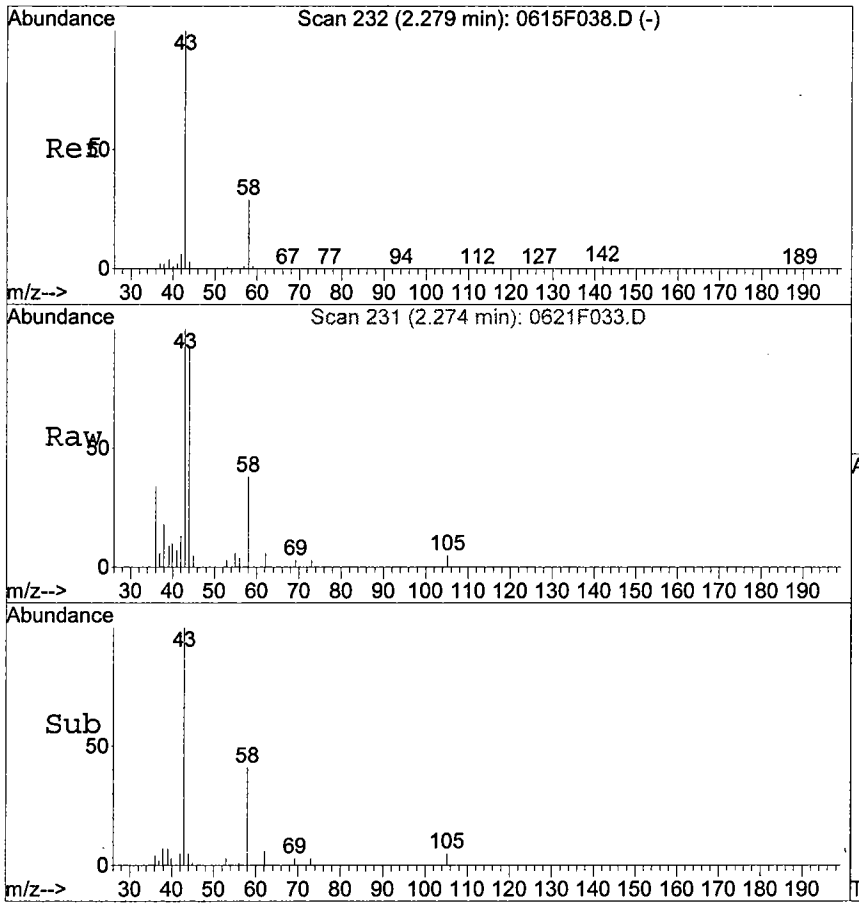


#12
1,1-Dichloroethene
Concen: 0.07 PPB
RT: 2.17 min Scan# 211
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 96 Resp: 728

Ion	Ratio	Lower	Upper
96	100		
63	69.1	20.5	80.5
61	130.9	123.2	183.2

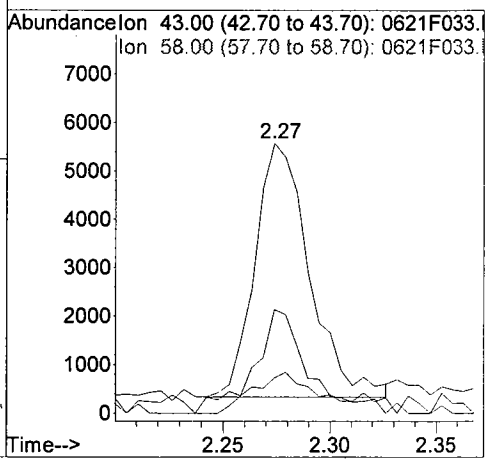


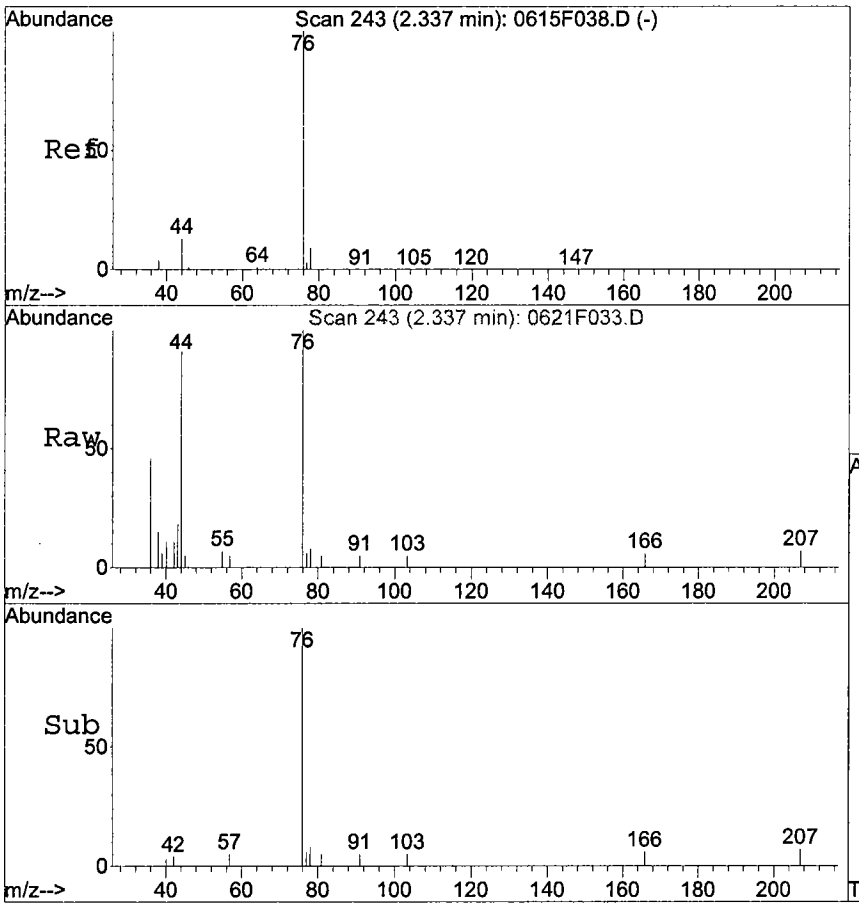


#13
Acetone
Concen: 8.05 PPB
RT: 2.27 min Scan# 231
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 43 Resp: 9287

Ion	Ratio	Lower	Upper
43	100		
58	40.8	0.0	59.4
42	7.7	0.0	36.4

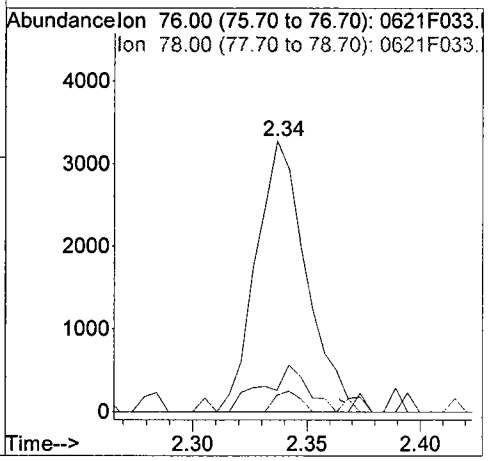


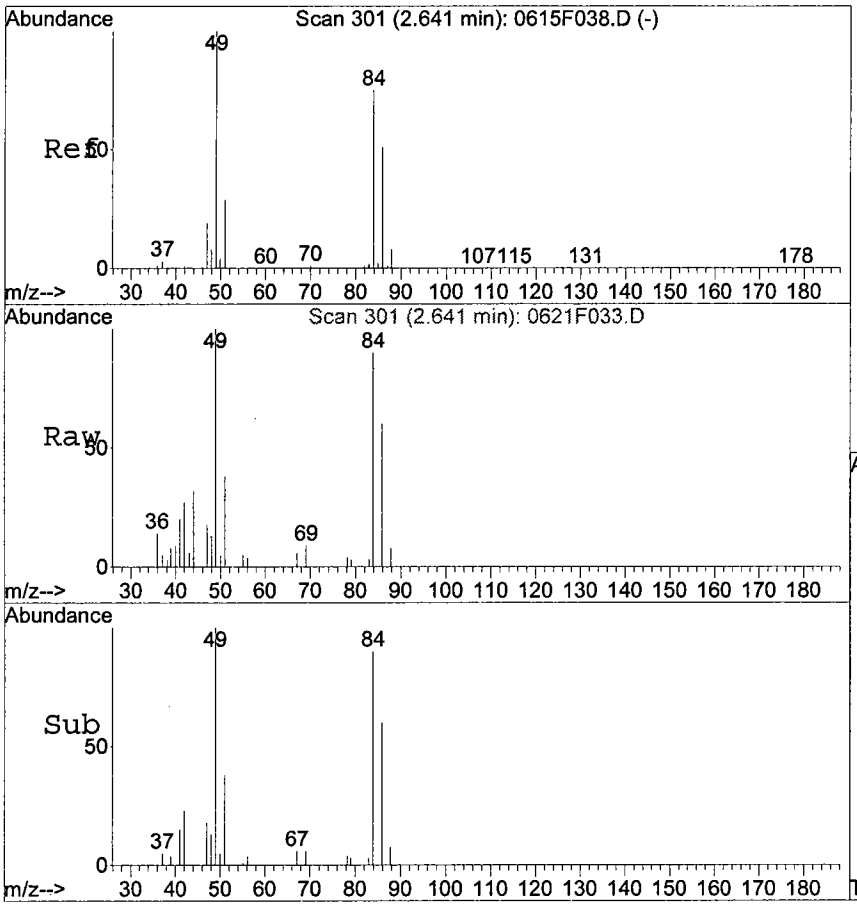


#15
Carbon Disulfide
Concen: 0.14 PPB
RT: 2.34 min Scan# 243
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 76 Resp: 5035

Ion	Ratio	Lower	Upper
76	100		
78	7.9	0.0	39.1
77	6.1	0.0	32.7

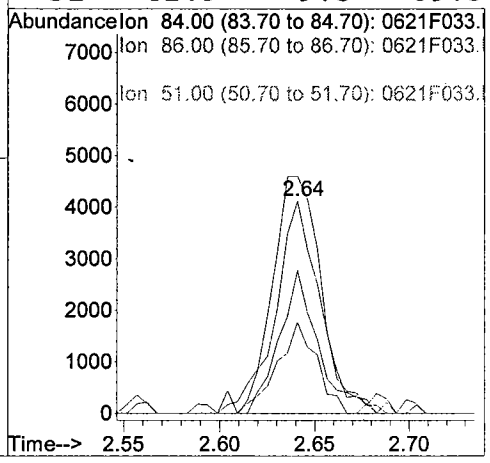


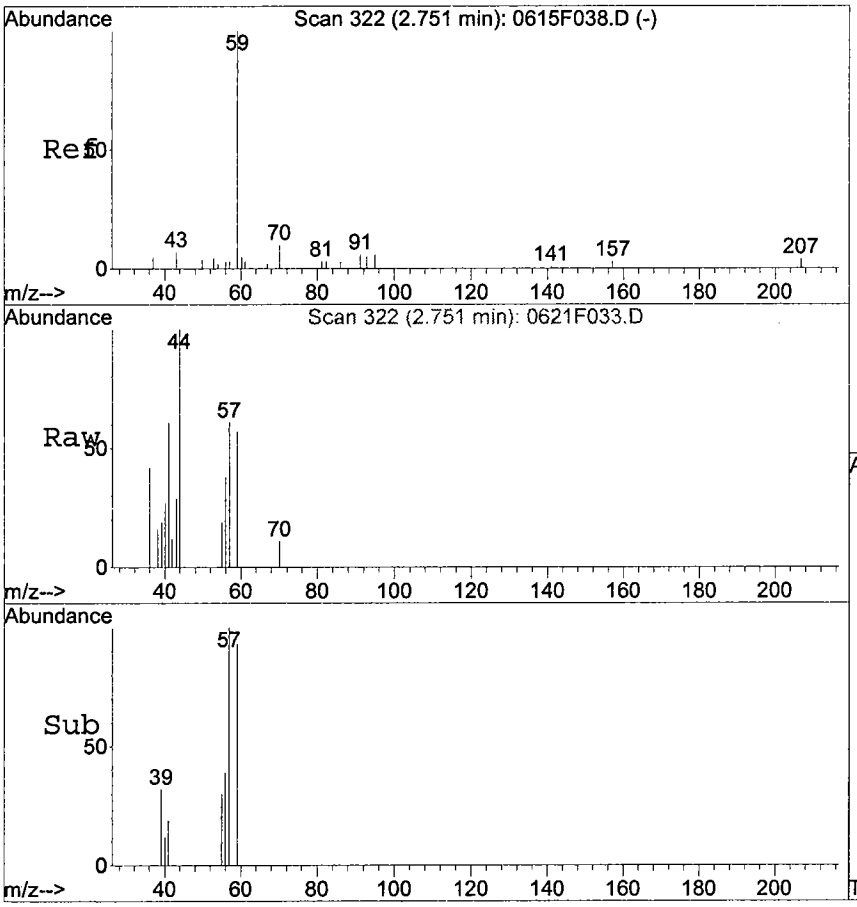


#18
Methylene Chloride
Concen: 0.56 PPB
RT: 2.64 min Scan# 301
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 84 Resp: 6796

Ion	Ratio	Lower	Upper
84	100		
86	67.4	38.0	98.0
49	111.6	103.8	163.8
51	42.9	9.3	69.3

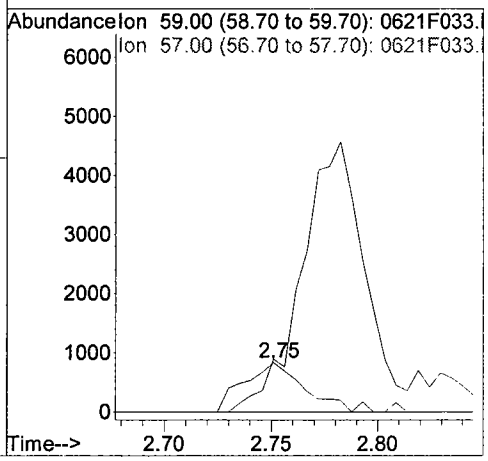


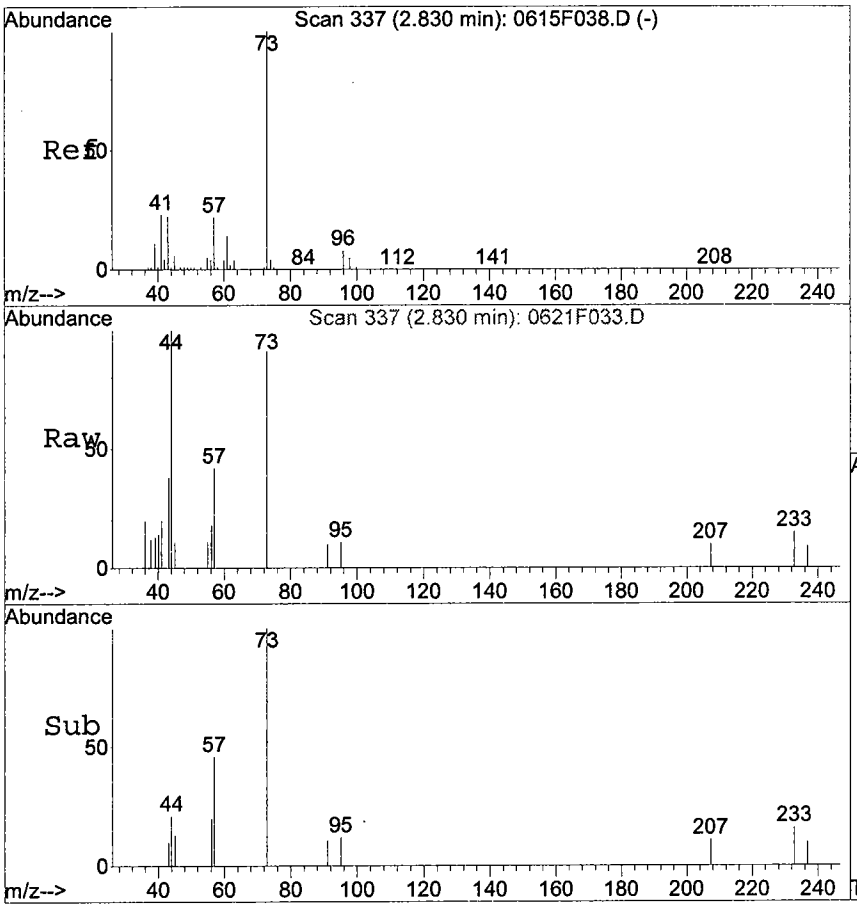


#19
tert-Butyl Alcohol
Concen: 5.86 PPB
RT: 2.75 min Scan# 322
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 59 Resp: 1677

Ion	Ratio	Lower	Upper
59	100		
57	107.4	0.0	33.3#
60	0.0	0.0	31.0

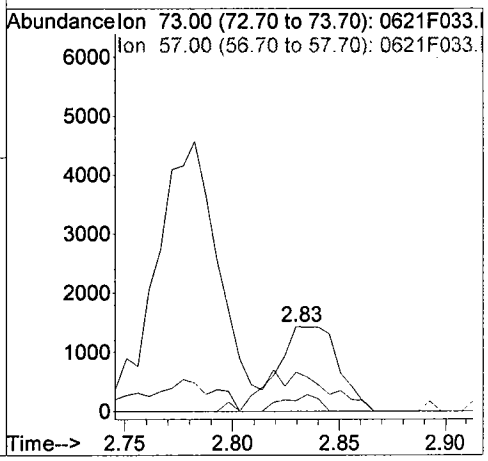


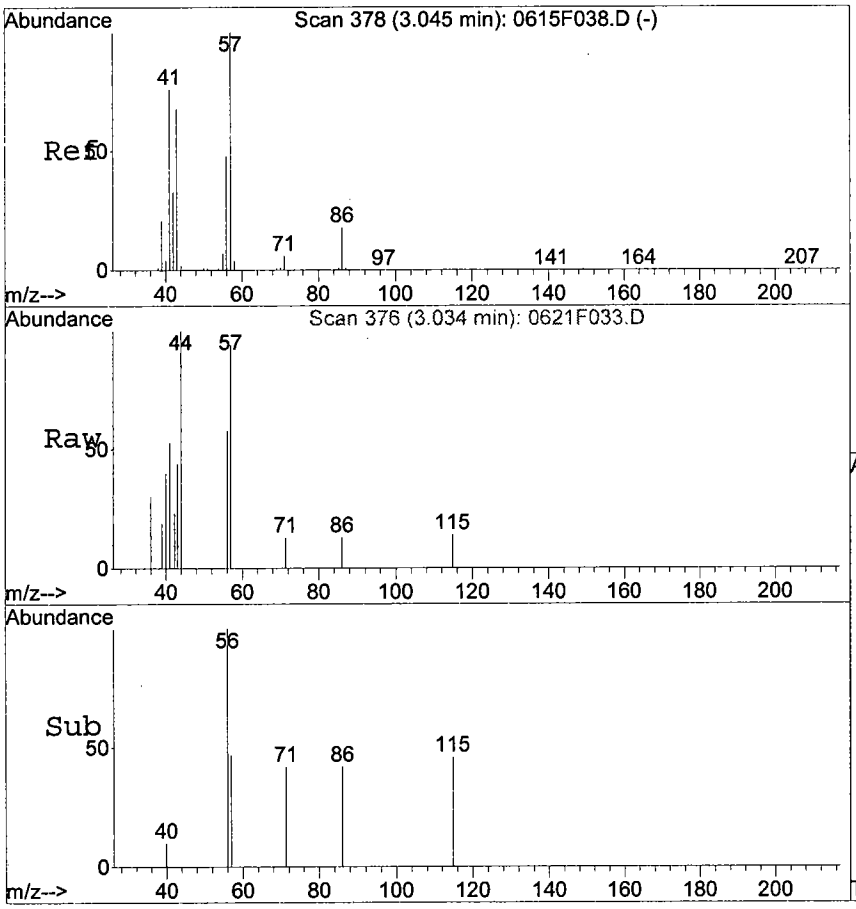


#21
Methyl tert-Butyl Ether
Concen: 0.15 PPB
RT: 2.83 min Scan# 337
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 73 Resp: 2890

Ion	Ratio	Lower	Upper
73	100		
57	46.2	0.0	52.7
55	12.4	0.0	34.8

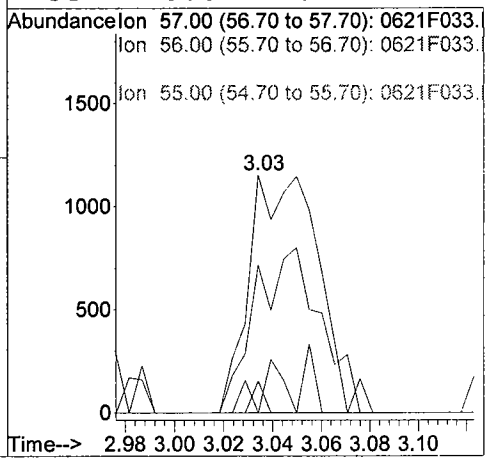


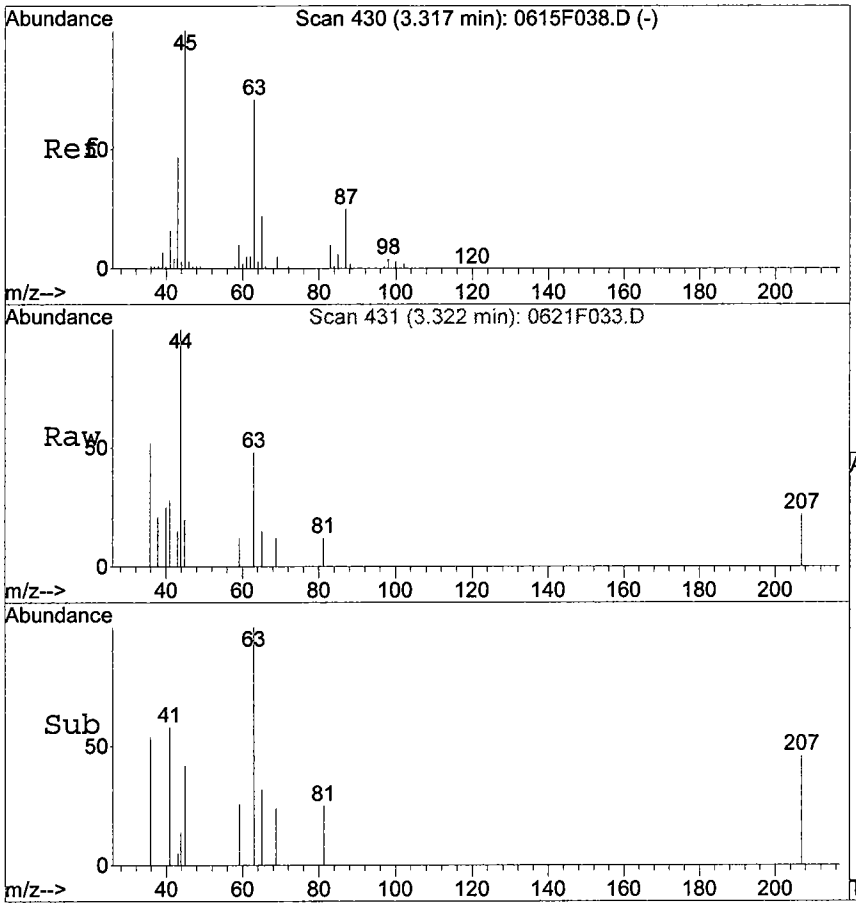


#23
Hexane
Concen: 0.17 PPB
RT: 3.03 min Scan# 376
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 57 Resp: 2254

Ion	Ratio	Lower	Upper
57	100		
56	62.1	18.1	78.1
71	13.6	0.0	36.4
55	0.0	0.0	19.8

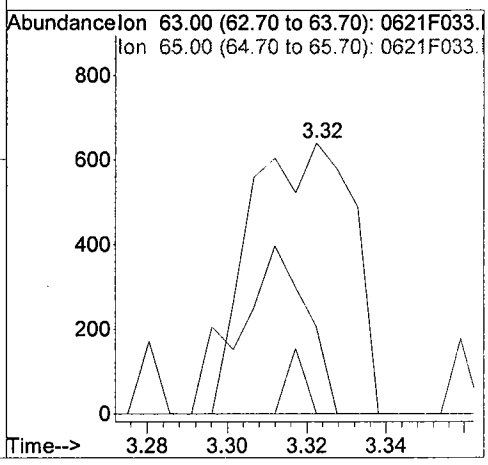


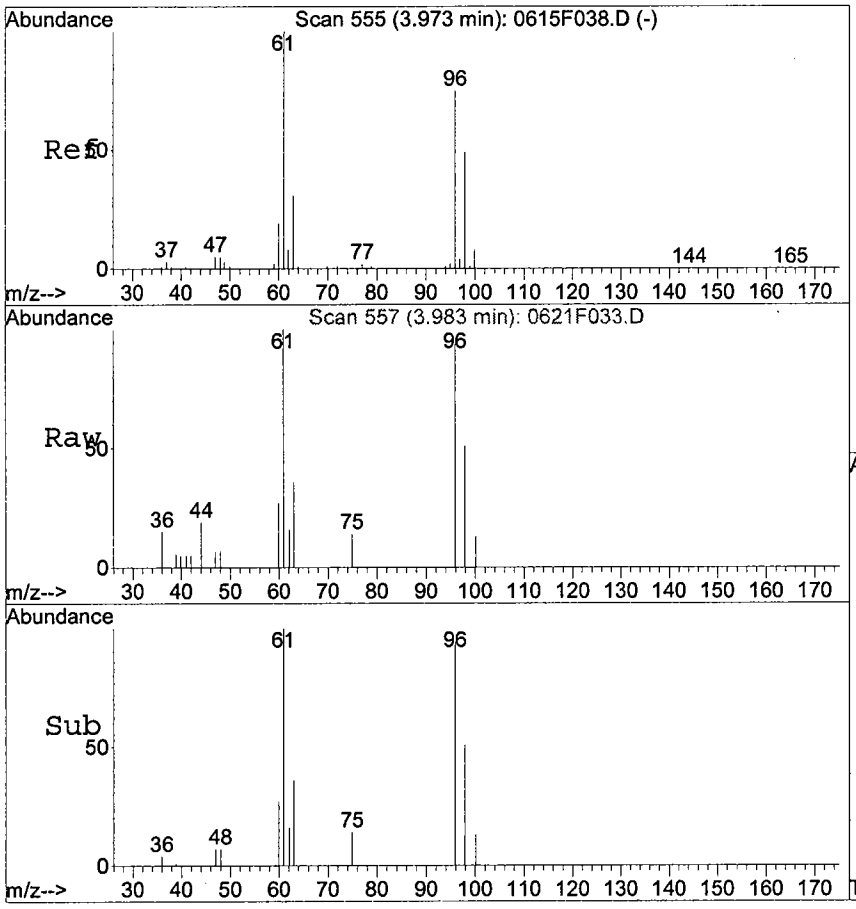


#25
1,1-Dichloroethane
Concen: 0.05 PPB m
RT: 3.32 min Scan# 431
Delta R.T. 0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 63 Resp: 1149

Ion	Ratio	Lower	Upper
63	100		
65	32.0	0.9	60.9
83	0.0	0.0	43.4

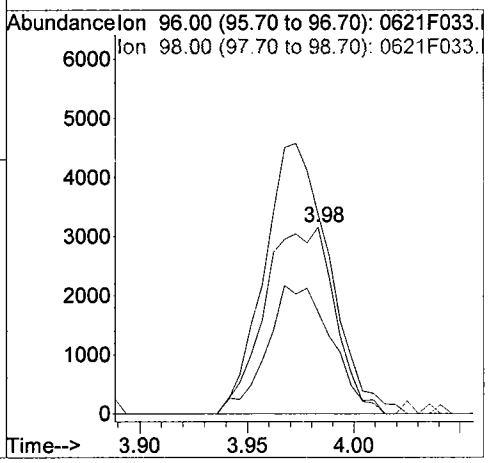


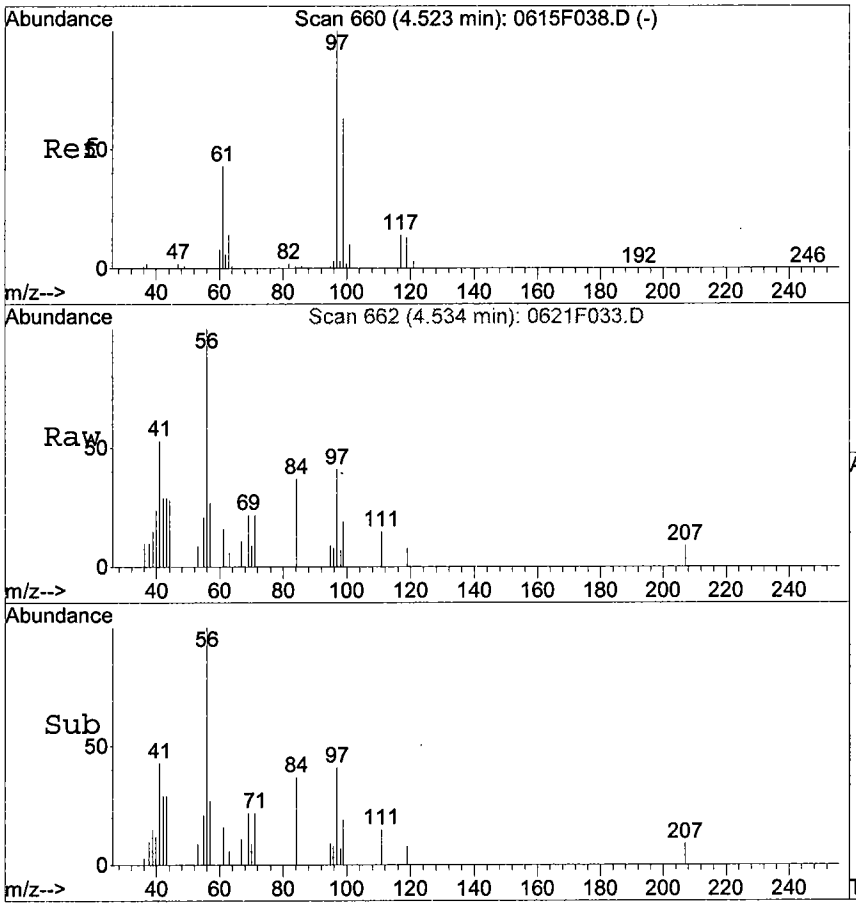


#30
cis-1,2-Dichloroethene
Concen: 0.56 PPB
RT: 3.98 min Scan# 557
Delta R.T. 0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 96 Resp: 7178

Ion	Ratio	Lower	Upper
96	100		
98	54.7	34.6	94.6
61	106.8	103.1	163.1

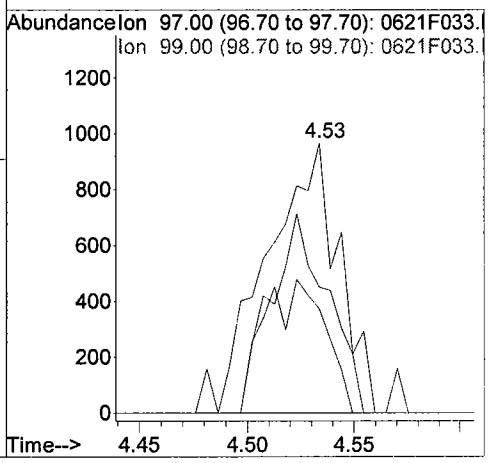


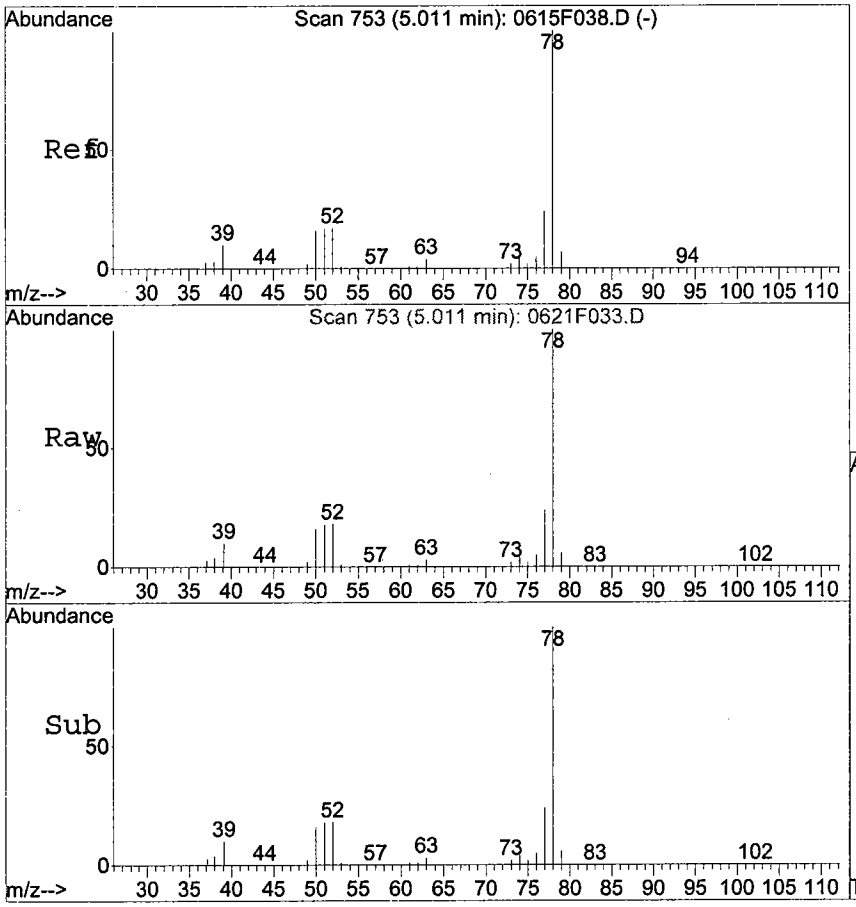


#39
1,1,1-Trichloroethane
Concen: 0.11 PPB
RT: 4.53 min Scan# 662
Delta R.T. 0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 97 Resp: 2226

Ion	Ratio	Lower	Upper
97	100		
99	46.6	33.5	93.5
61	38.5	13.2	73.2

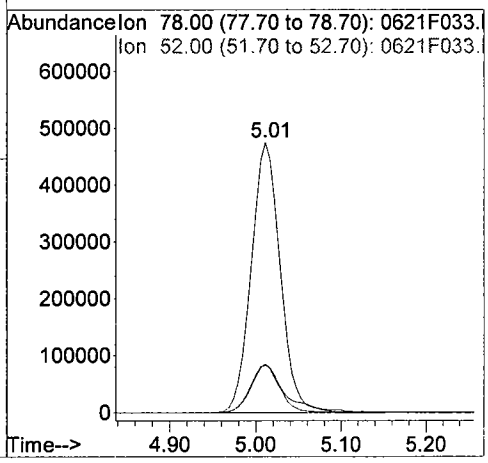


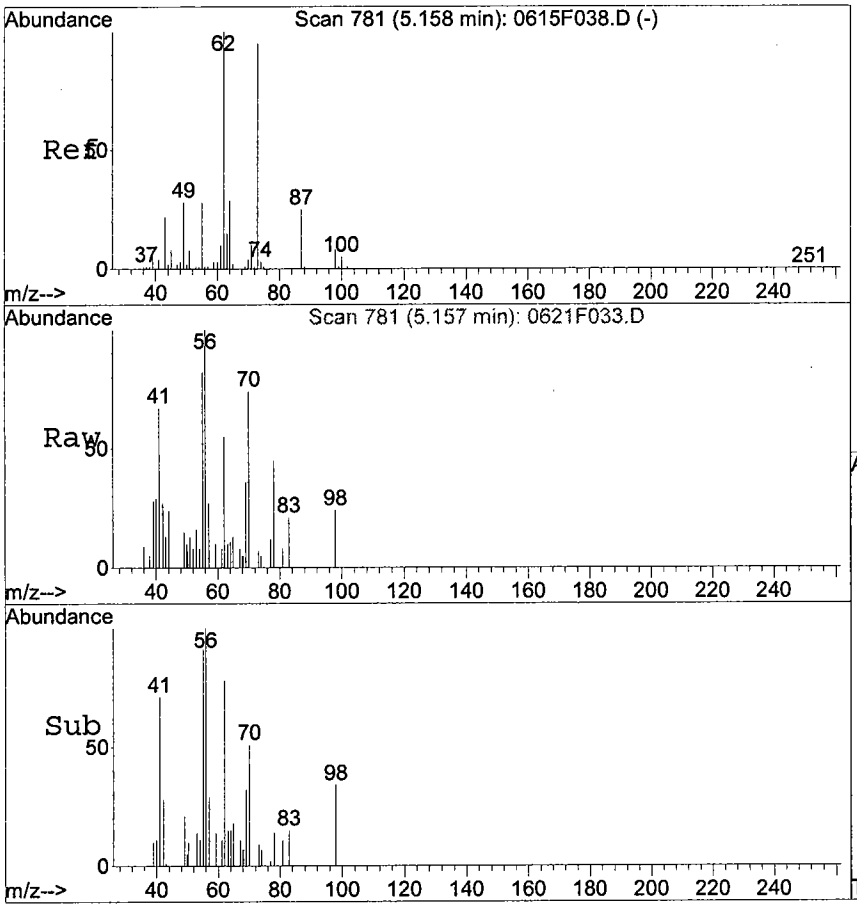


#45
Benzene
Concen: 22.49 PPB
RT: 5.01 min Scan# 753
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 78 Resp: 1123304

Ion	Ratio	Lower	Upper
78	100		
52	17.6	0.0	46.5
51	17.9	0.0	47.4

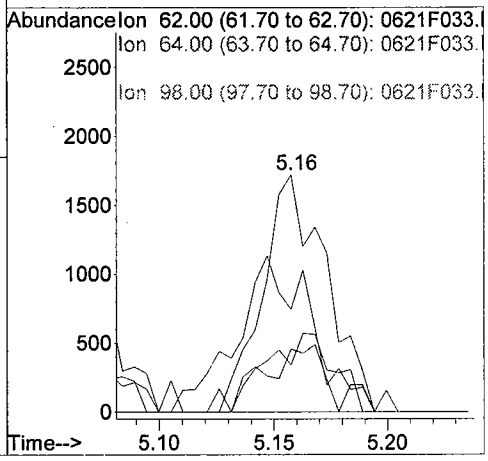


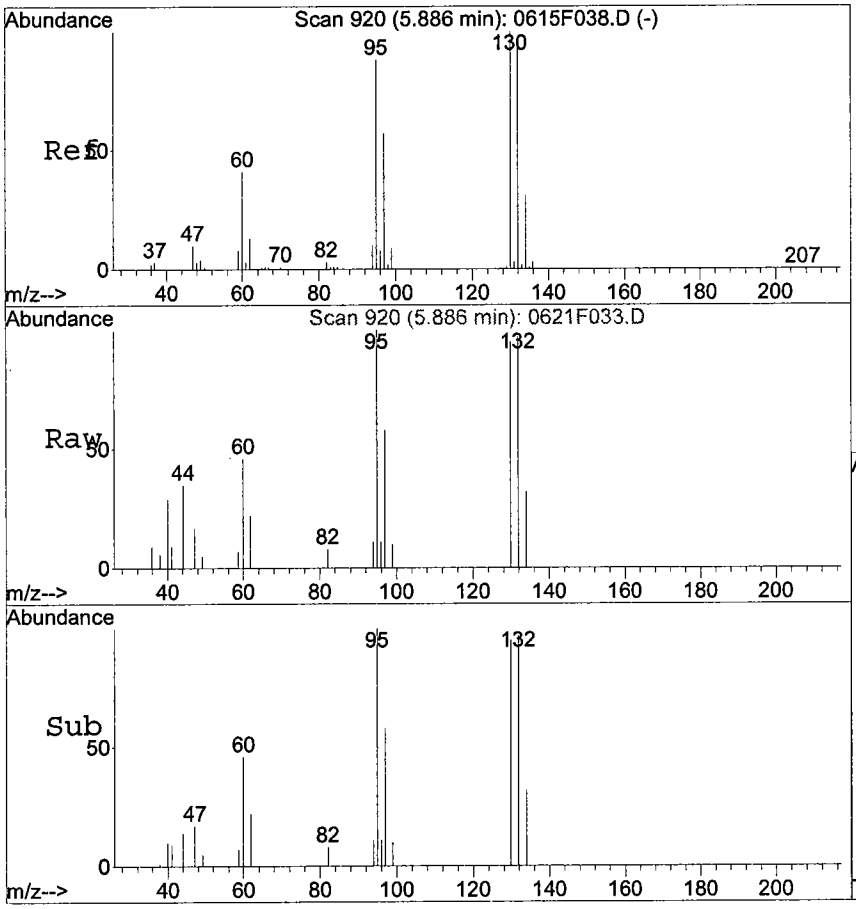


#46
1,2-Dichloroethane
Concen: 0.30 PPB
RT: 5.16 min Scan# 781
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 62 Resp: 3336

Ion	Ratio	Lower	Upper
62	100		
64	19.8	0.0	59.2
49	26.6	0.0	58.4
98	34.2	0.0	38.3

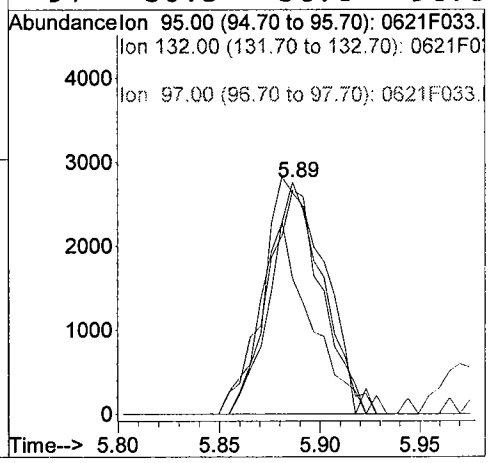


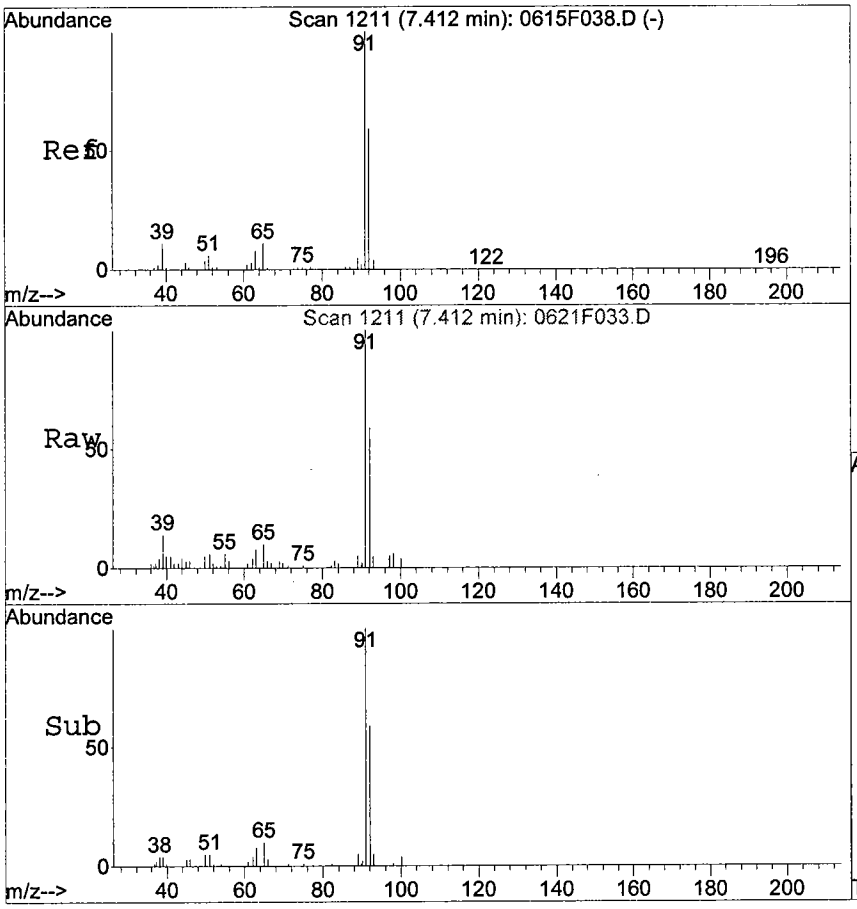


#48
Trichloroethene
Concen: 0.44 PPB
RT: 5.89 min Scan# 920
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 95 Resp: 5539

Ion	Ratio	Lower	Upper
95	100		
132	96.5	77.4	137.4
130	95.4	83.2	143.2
97	58.3	34.4	94.4

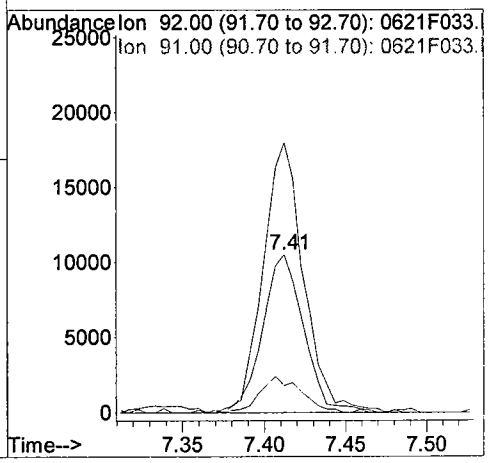


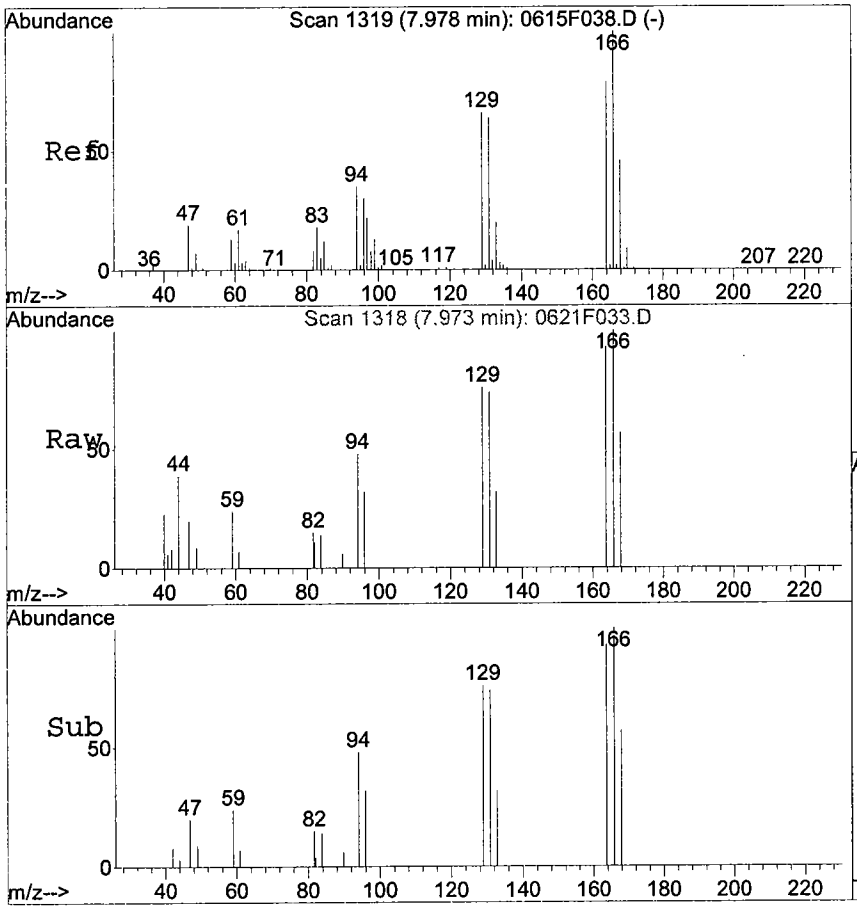


#59
Toluene
Concen: 0.58 PPB
RT: 7.41 min Scan# 1211
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 92 Resp: 18526

Ion	Ratio	Lower	Upper
92	100		
91	170.8	140.8	200.8
65	17.1	0.0	48.6

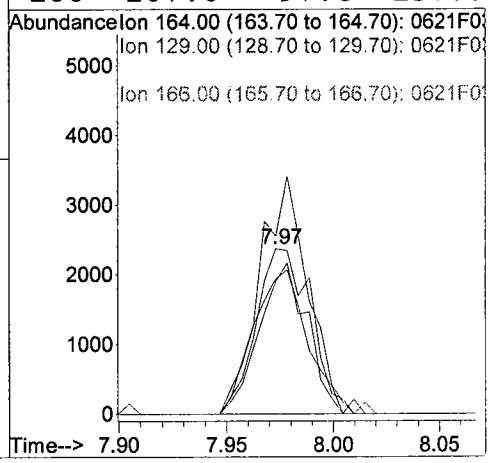


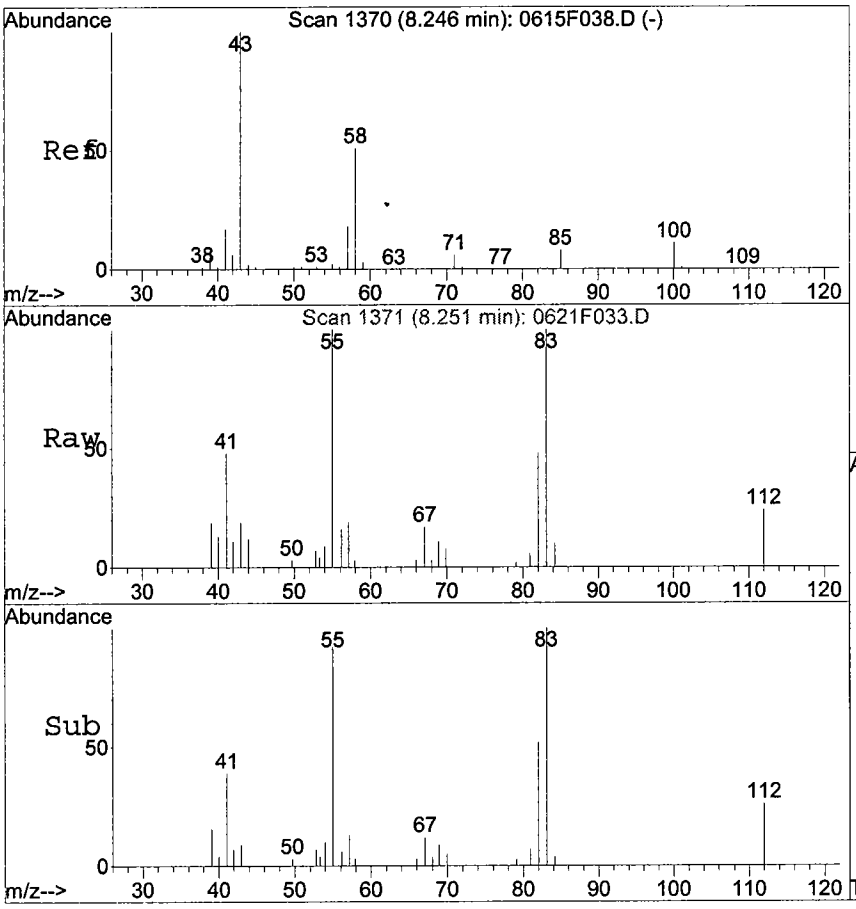


#65
Tetrachloroethene
Concen: 0.36 PPB
RT: 7.97 min Scan# 1318
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:164 Resp: 4276

Ion	Ratio	Lower	Upper
164	100		
129	81.8	53.5	113.5
131	80.1	51.2	111.2
166	107.6	97.4	157.4

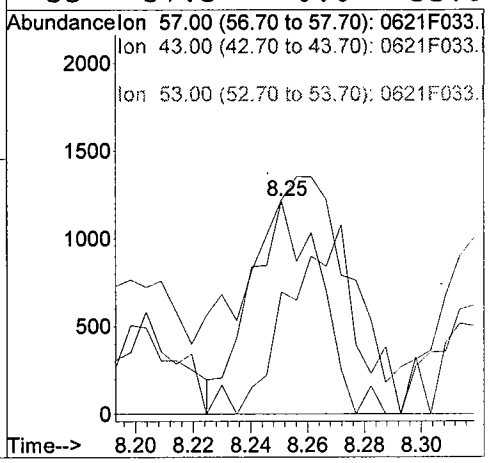


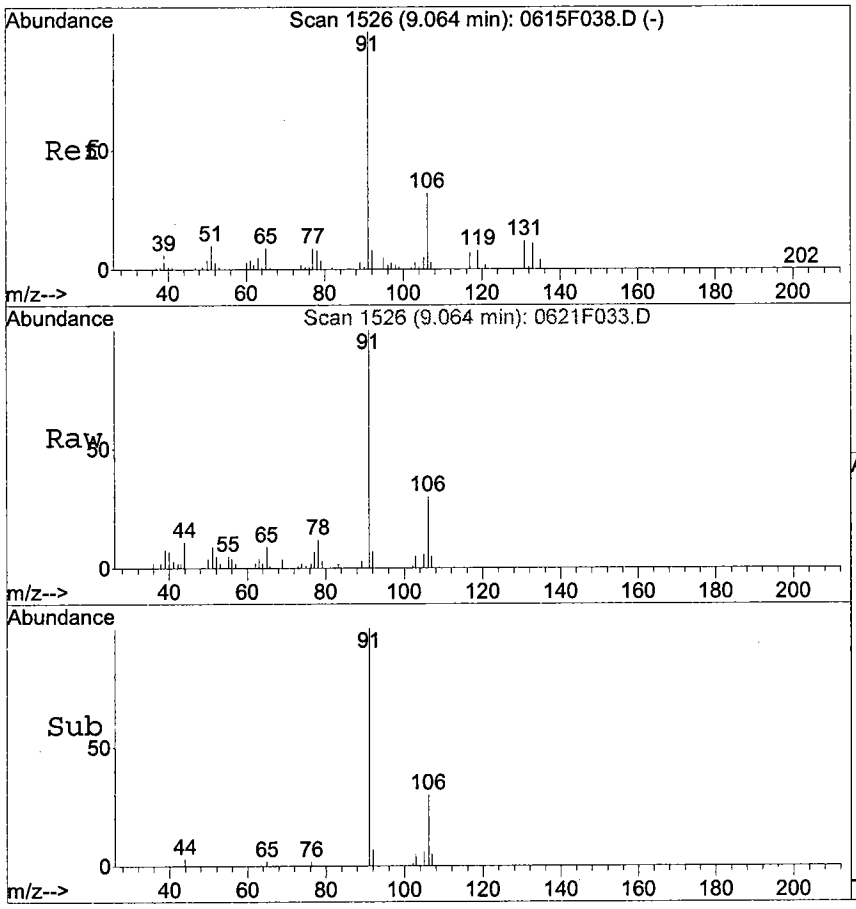


#66
2-Hexanone
Concen: 3.68 PPB
RT: 8.25 min Scan# 1371
Delta R.T. 0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 57 Resp: 2067

Ion	Ratio	Lower	Upper
57	100		
43	85.5	516.6	576.6#
100	0.0	29.5	89.5#
53	57.3	0.0	35.6#

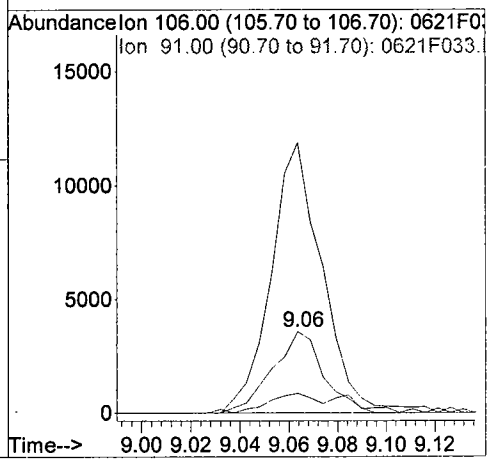


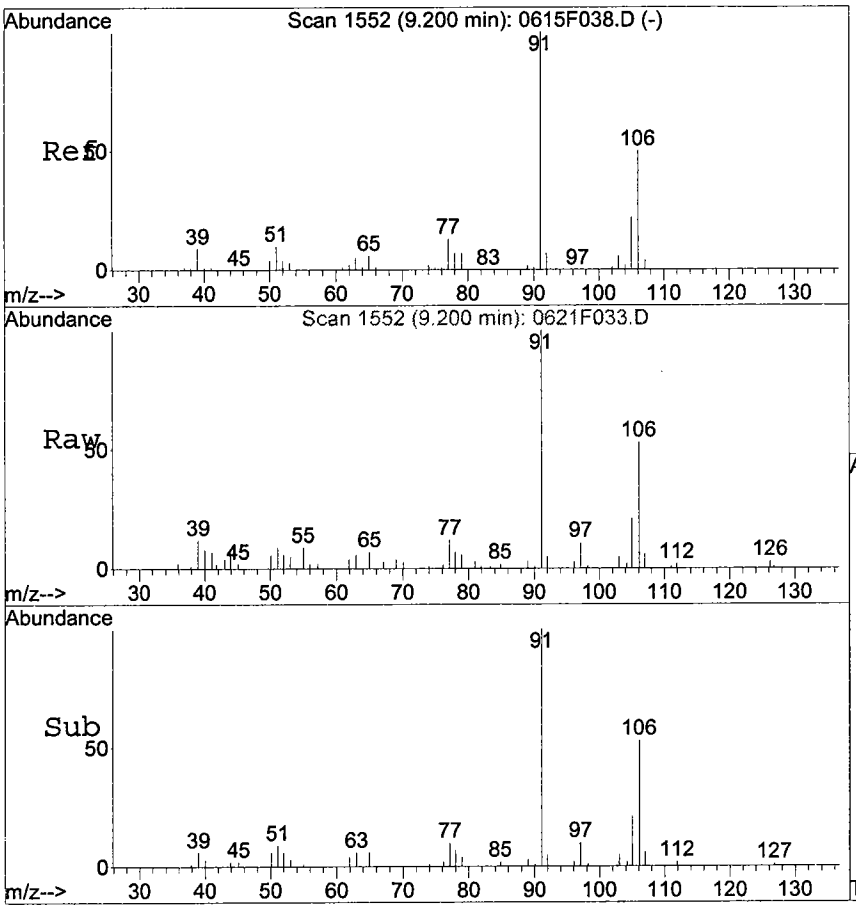


#72
Ethylbenzene
Concen: 0.25 PPB
RT: 9.06 min Scan# 1526
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:106 Resp: 5155

Ion	Ratio	Lower	Upper
106	100		
91	332.7	281.1	341.1
77	23.9	0.0	57.3

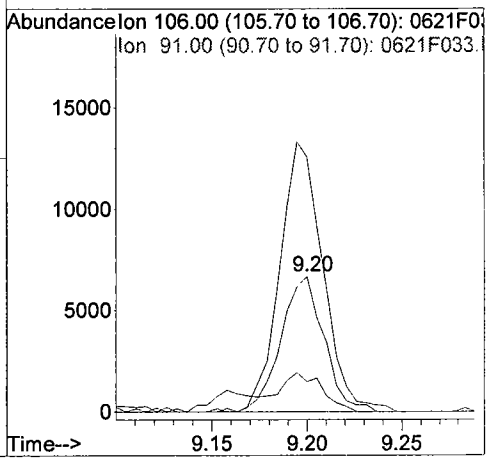


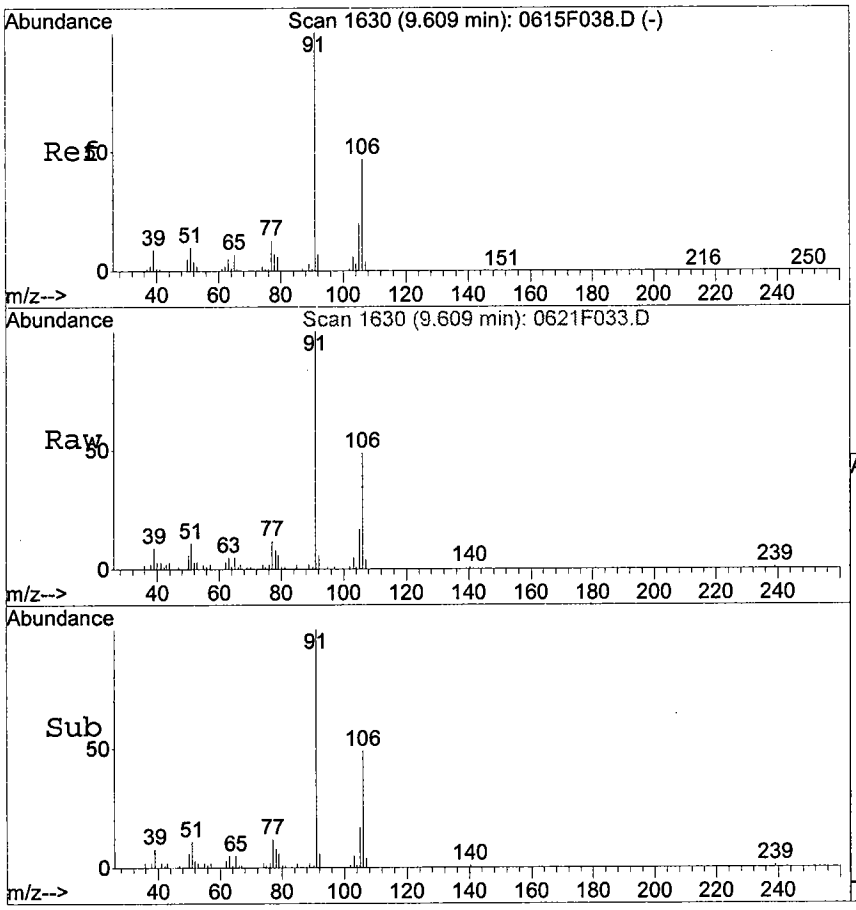


#74
m,p-Xylenes
Concen: 0.42 PPB
RT: 9.20 min Scan# 1552
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:106 Resp: 10538

Ion	Ratio	Lower	Upper
106	100		
91	188.5	168.5	228.5
77	22.1	0.0	55.1

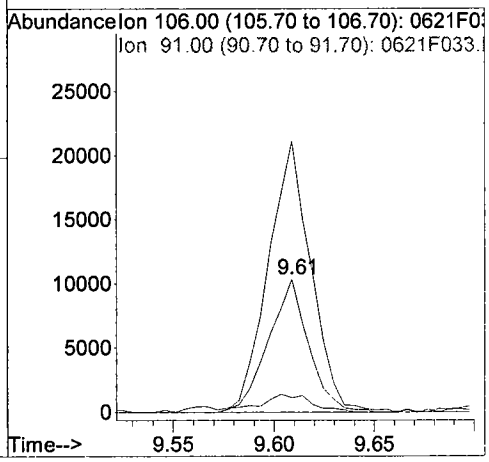


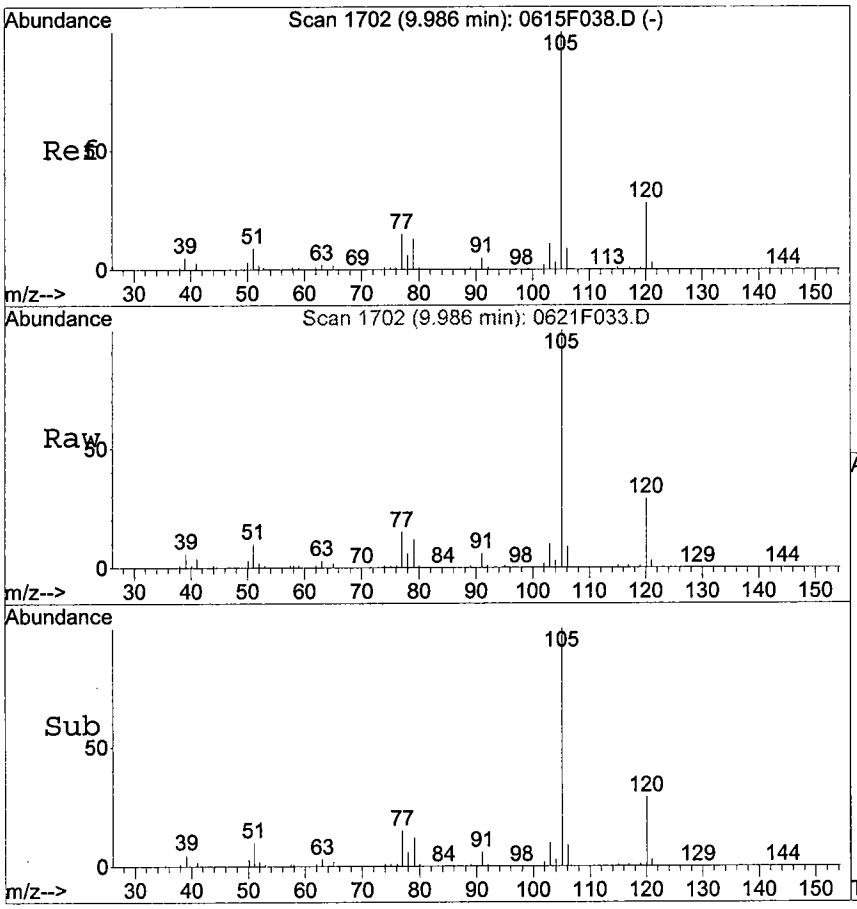


#75
o-Xylene
Concen: 0.62 PPB
RT: 9.61 min Scan# 1630
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:106 Resp: 14389

Ion	Ratio	Lower	Upper
106	100		
91	204.5	181.8	241.8
65	10.9	0.0	45.1

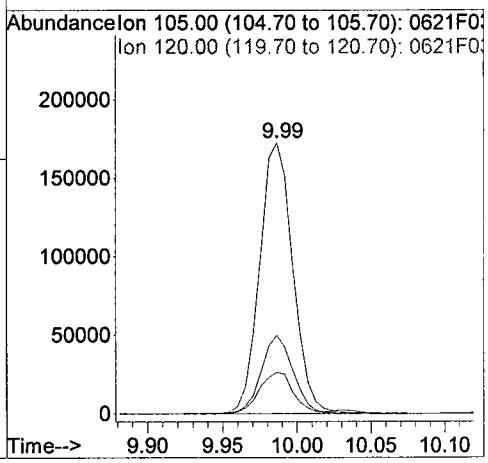


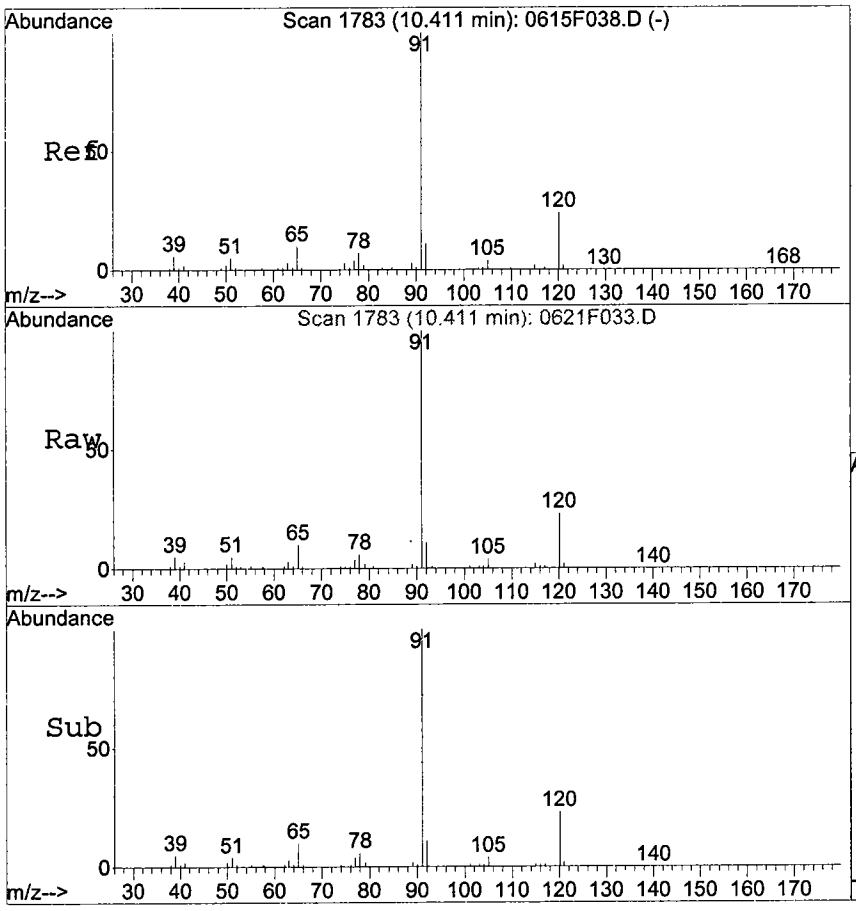


#78
Isopropylbenzene
Concen: 4.25 PPB
RT: 9.99 min Scan# 1702
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:105 Resp: 266720

Ion	Ratio	Lower	Upper
105	100		
120	28.9	0.0	57.8
77	15.3	0.0	45.4

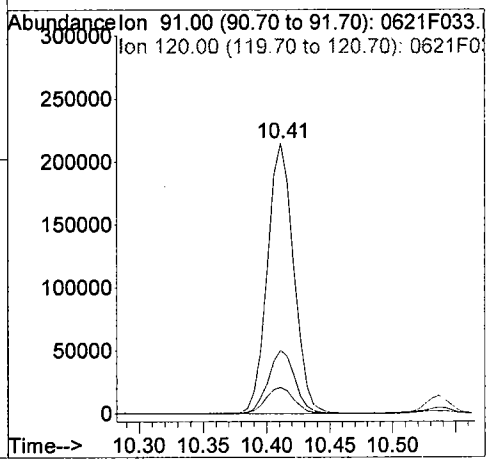


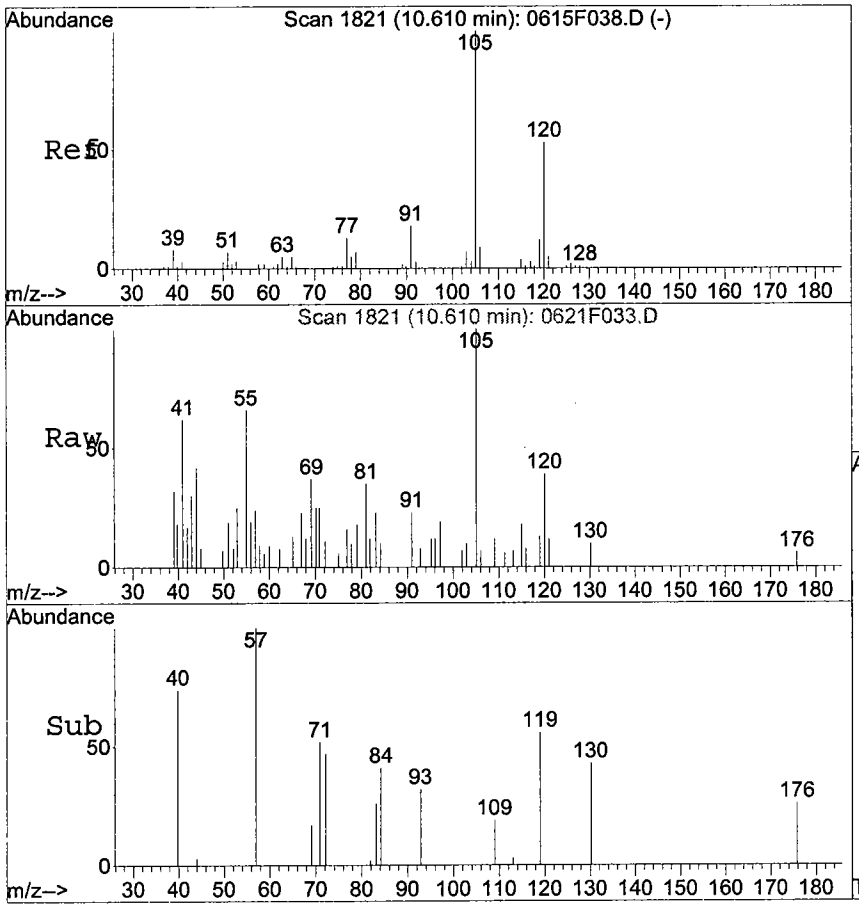


#85
n-Propylbenzene
Concen: 4.37 PPB
RT: 10.41 min Scan# 1783
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 91 Resp: 311241

Ion	Ratio	Lower	Upper
91	100		
120	23.4	0.0	54.1
65	9.7	0.0	40.4

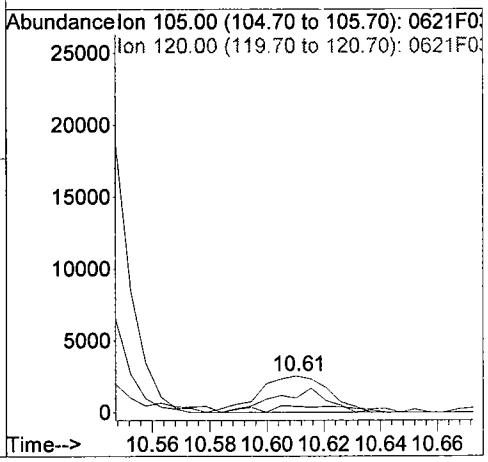


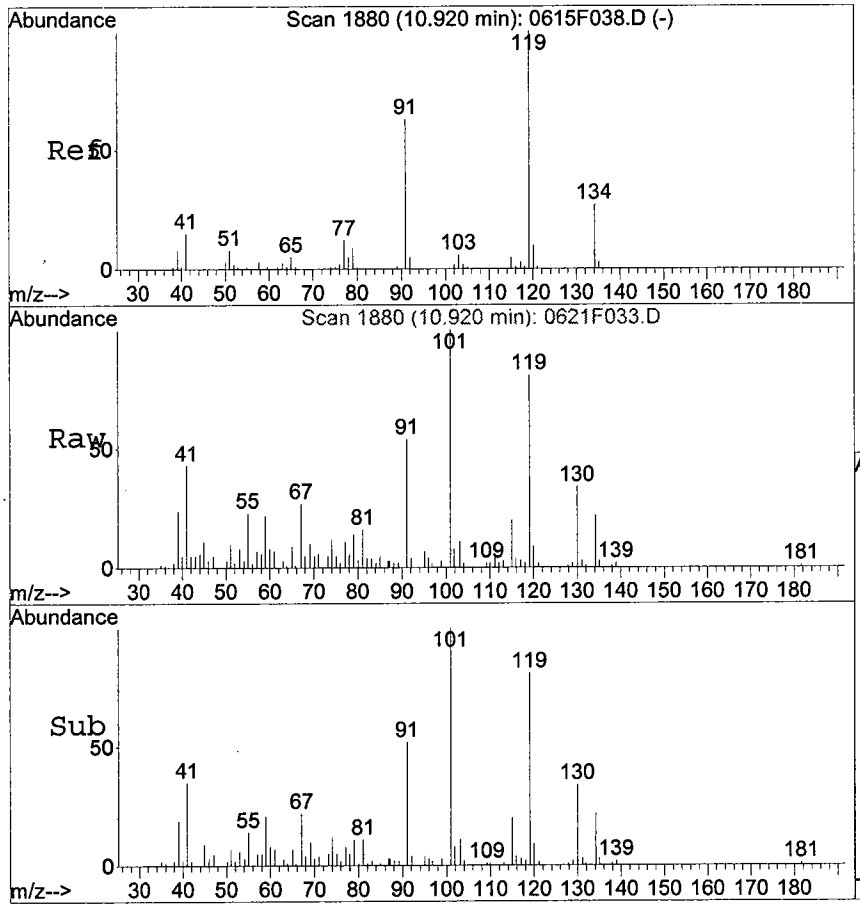


#88
1,3,5-Trimethylbenzene
Concen: 0.09 PPB
RT: 10.61 min Scan# 1821
Delta R.T. 0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:105 Resp: 4272

Ion	Ratio	Lower	Upper
105	100		
120	39.1	22.9	82.9
77	5.8	0.0	42.6

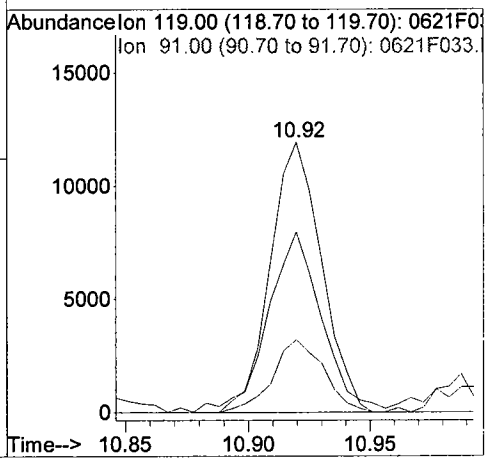


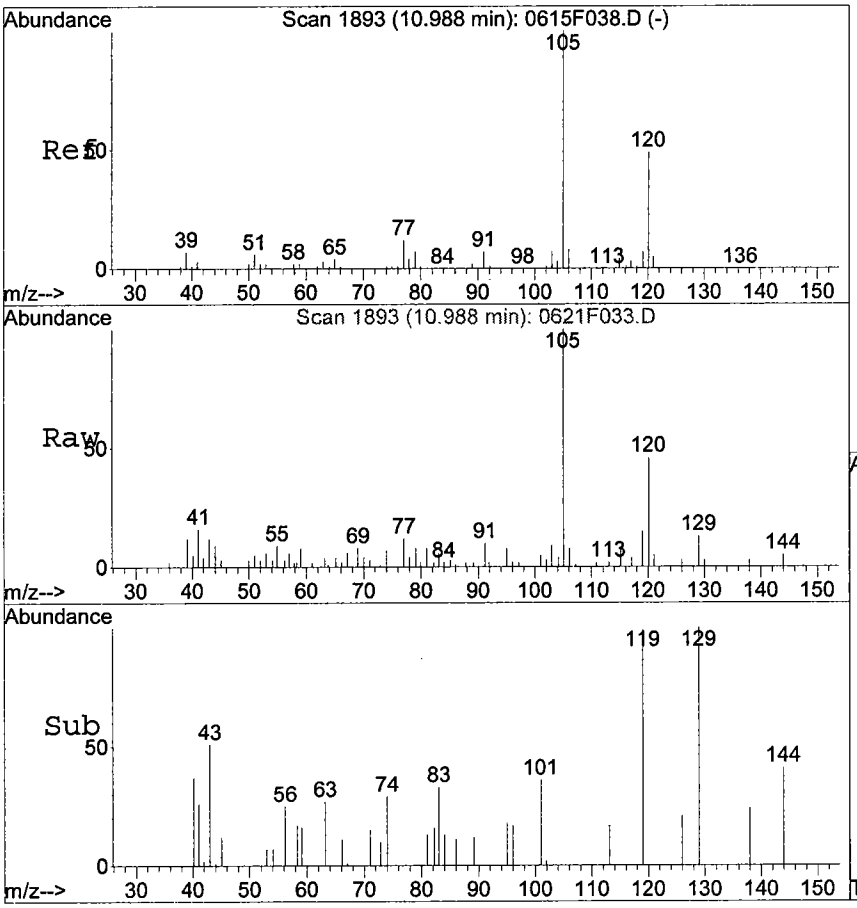


#90
tert-Butylbenzene
Concen: 0.39 PPB
RT: 10.92 min Scan# 1880
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:119 Resp: 17458

Ion	Ratio	Lower	Upper
119	100		
91	65.4	32.8	92.8
134	26.9	0.0	57.1

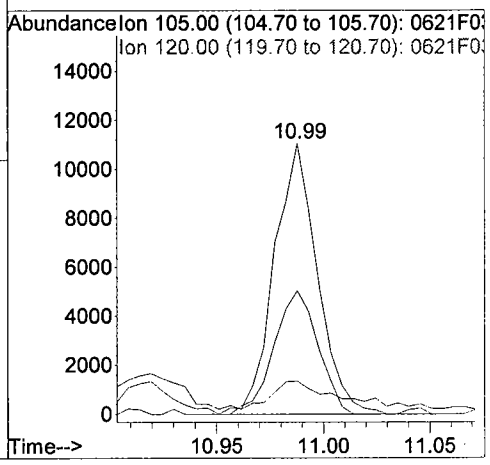


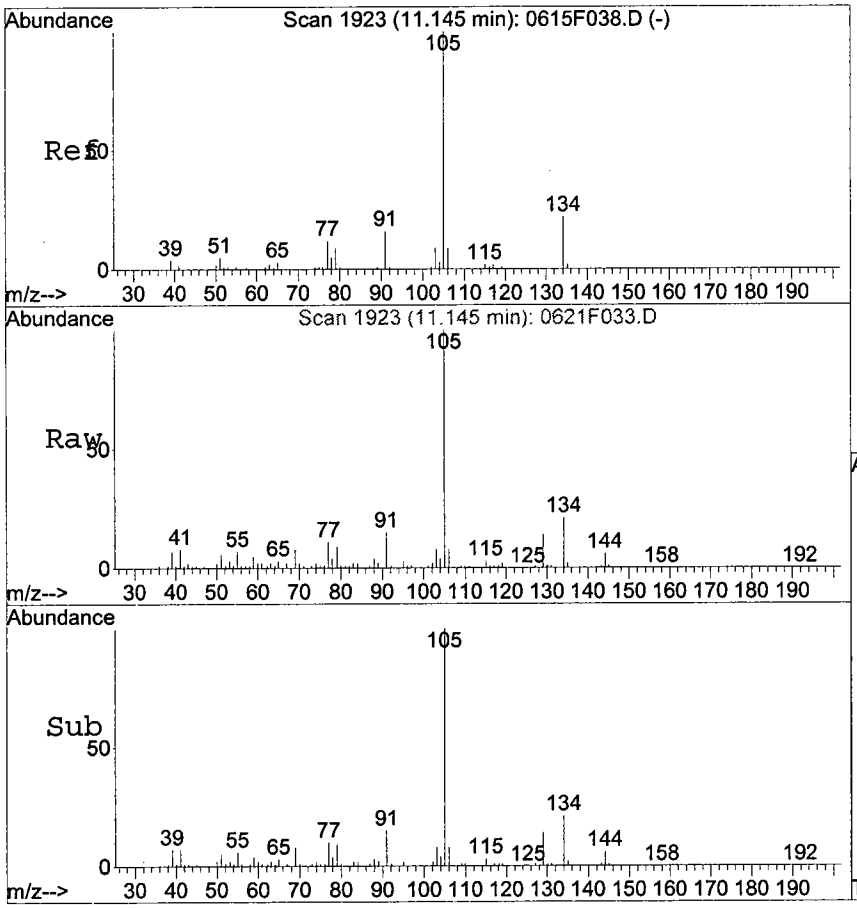


#91
1,2,4-Trimethylbenzene
Concen: 0.32 PPB
RT: 10.99 min Scan# 1893
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:105 Resp: 15447

Ion	Ratio	Lower	Upper
105	100		
120	45.6	19.8	79.8
77	9.4	0.0	42.2

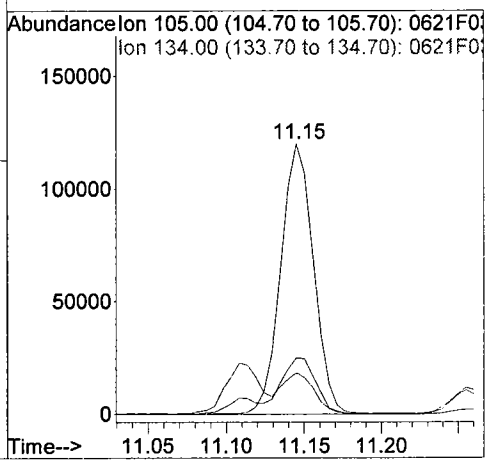


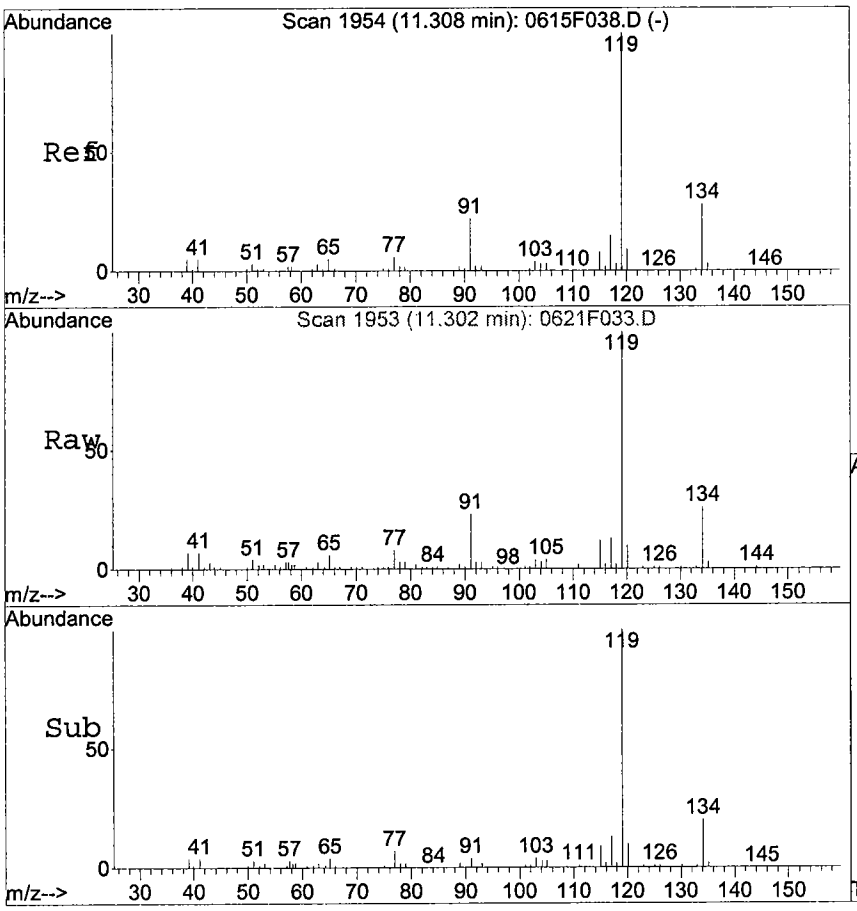


#92
sec-Butylbenzene
Concen: 2.95 PPB
RT: 11.15 min Scan# 1923
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:105 Resp: 175676

Ion	Ratio	Lower	Upper
105	100		
134	20.8	0.0	51.9
91	15.0	0.0	45.8

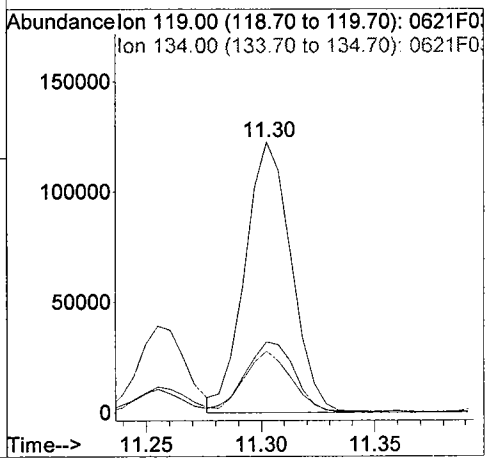


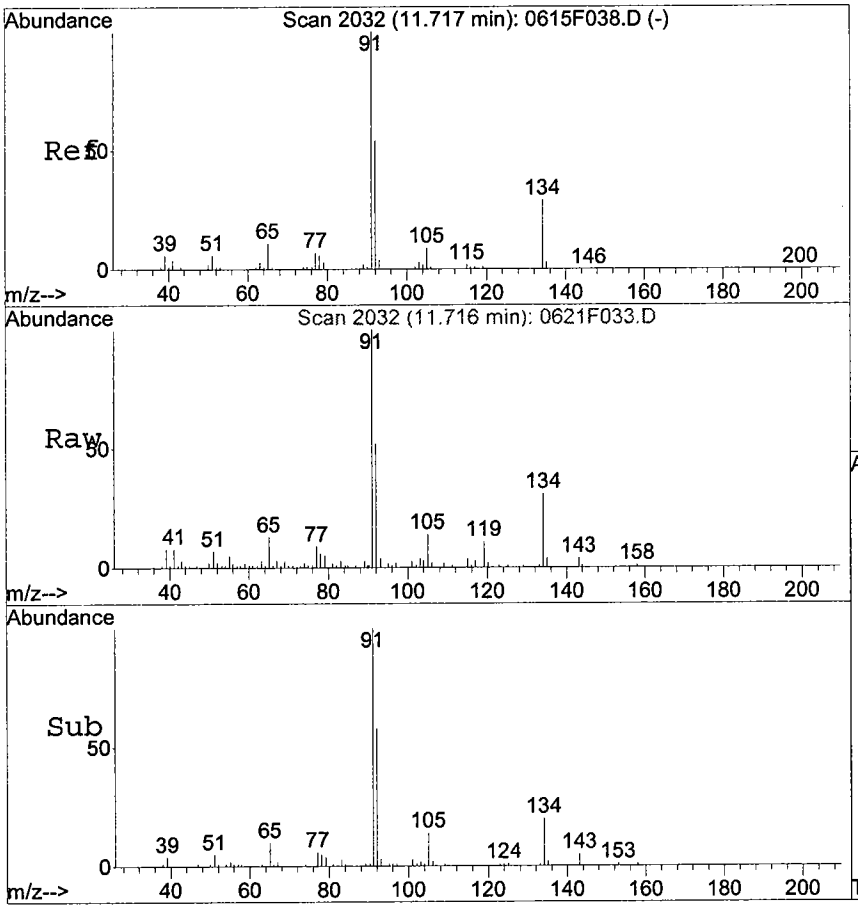


#93
p-Isopropyltoluene
Concen: 3.25 PPB
RT: 11.30 min Scan# 1953
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:119 Resp: 172957

Ion	Ratio	Lower	Upper
119	100		
134	26.1	0.0	58.2
91	22.2	0.0	52.1

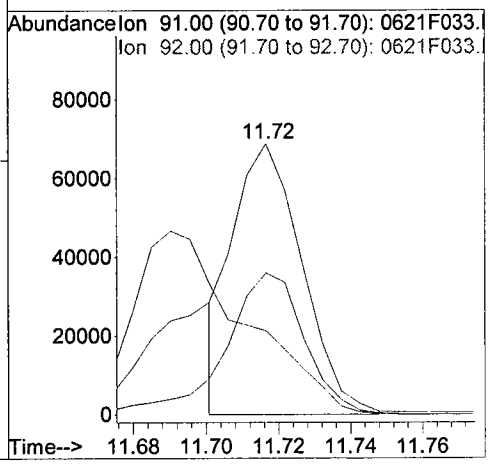


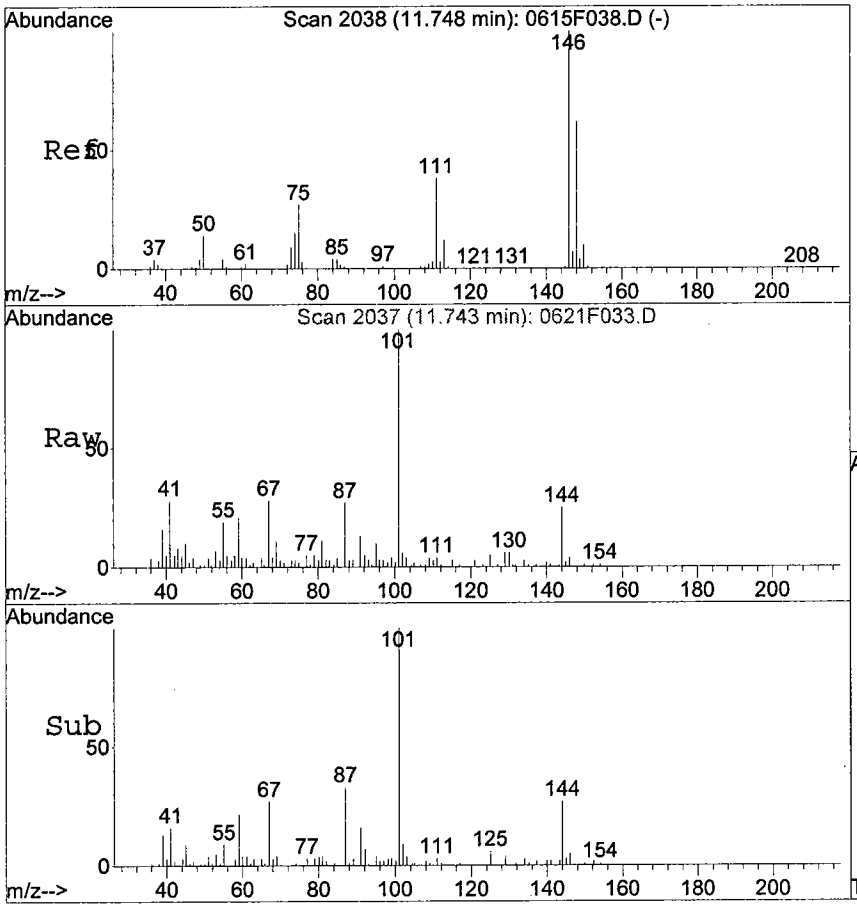


#96
n-Butylbenzene
Concen: 1.98 PPB m
RT: 11.72 min Scan# 2032
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion: 91 Resp: 91718

Ion	Ratio	Lower	Upper
91	100		
92	52.2	24.3	84.3
134	30.9	0.0	59.3

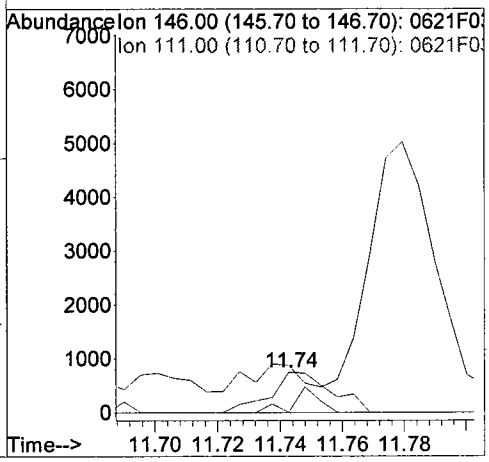


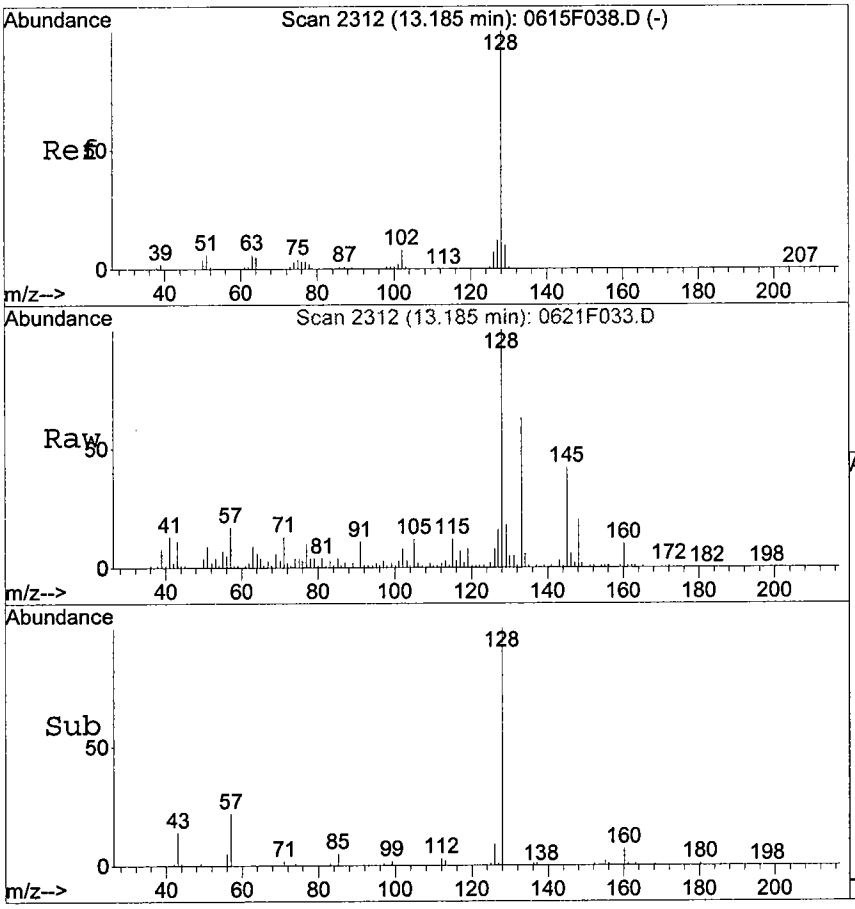


#97
1,2-Dichlorobenzene
Concen: 0.05 PPB
RT: 11.74 min Scan# 2037
Delta R.T. -0.01 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:146 Resp: 1024

Ion	Ratio	Lower	Upper
146	100		
111	66.0	7.7	67.7
148	0.0	32.4	92.4#

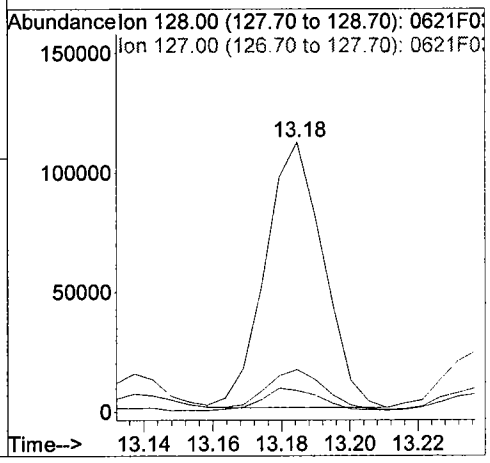




#102
Naphthalene
Concen: 6.38 PPB
RT: 13.18 min Scan# 2312
Delta R.T. -0.00 min
Lab File: 0621F033.D
Acq: 21 Jun 2007 8:10 pm

Tgt Ion:128 Resp: 130699

Ion	Ratio	Lower	Upper
128	100		
127	15.1	0.0	42.1
102	7.5	0.0	38.0



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Volatile Organic Compounds

Sample Name: 231GW29CL
Lab Code: K0704852-003

Units: ug/L
Basis: NA

Extraction Method: EPA 5030B
Analysis Method: 8260B

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	231GW29CL	**Units:**	ug/L
Lab Code:	K0704852-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	98	76-114	06/20/07	Acceptable
Toluene-d8	114	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F018.D
Lab ID: K0704852-003
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 19:28
Date Quantitated: 06/21/2007 08:06
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

N.D for all target analytes in sample

Highest ND

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
MB Surrogate Recovery	Toluene-d8	116	88	110	w/in CAS limits
Lab Control Spike	4-Methyl-2-pentanone (MIBK)	144	62	131	Advisory
	2-Chloroethyl Vinyl Ether	333	10	180	⊥
	Toluene-d8	115	88	110	w/in CAS limits
	2-Hexanone	140	58	129	Advisory
	Acetone	137	65	136	⊥

Primary Review: HC 6·21·07

Secondary Review: [illegible] 6/21/07

Exception Report

Data File: J:\MS04\DATA\062007\0620F018.D
Lab ID: K0704852-003
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 19:28
Date Quantitated: 06/21/2007 08:06
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	2-Butanone (MEK)	154	60	143	Advisory
Surrogates	Toluene-d8	114	88	110	w/in CAS limits

Primary Review: HC 6·21·07

Secondary Review: 6/21/07

Printed: 06/21/2007 08:24:41
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	K0704852
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611349	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Report List**	

Data File:	J:\MS04\DATA\062007\0620F018.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 19:28	**Quant Date:**	06/21/2007 08:06	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-003			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1621819	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	1195294	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	610644	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	12.71	0.00	0.00	65	295807	9.79	98	76-114	OK
1	Toluene-d8	15.55	0.00	0.00	98	1424850	11.44	114	88-110	*
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	488867	10.49	105	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0d		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				94	0d		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	8.22		0.00	43	7712	1.93	4.1	U	
1	Carbon Disulfide	8.65		0.00	76	2420	0.0100	0.16	U	
1	Methylene Chloride				84	0		0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F018.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 19:28	**Quant Date:**	06/21/2007 08:06	**Vial:**	18
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-003			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene	12.82	-0.01	0.00	78	8330	0.0500	0.14	U	
1	1,2-Dichloroethane (EDC)				62	0**d**		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				100	0**d**		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0**d**		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				104	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

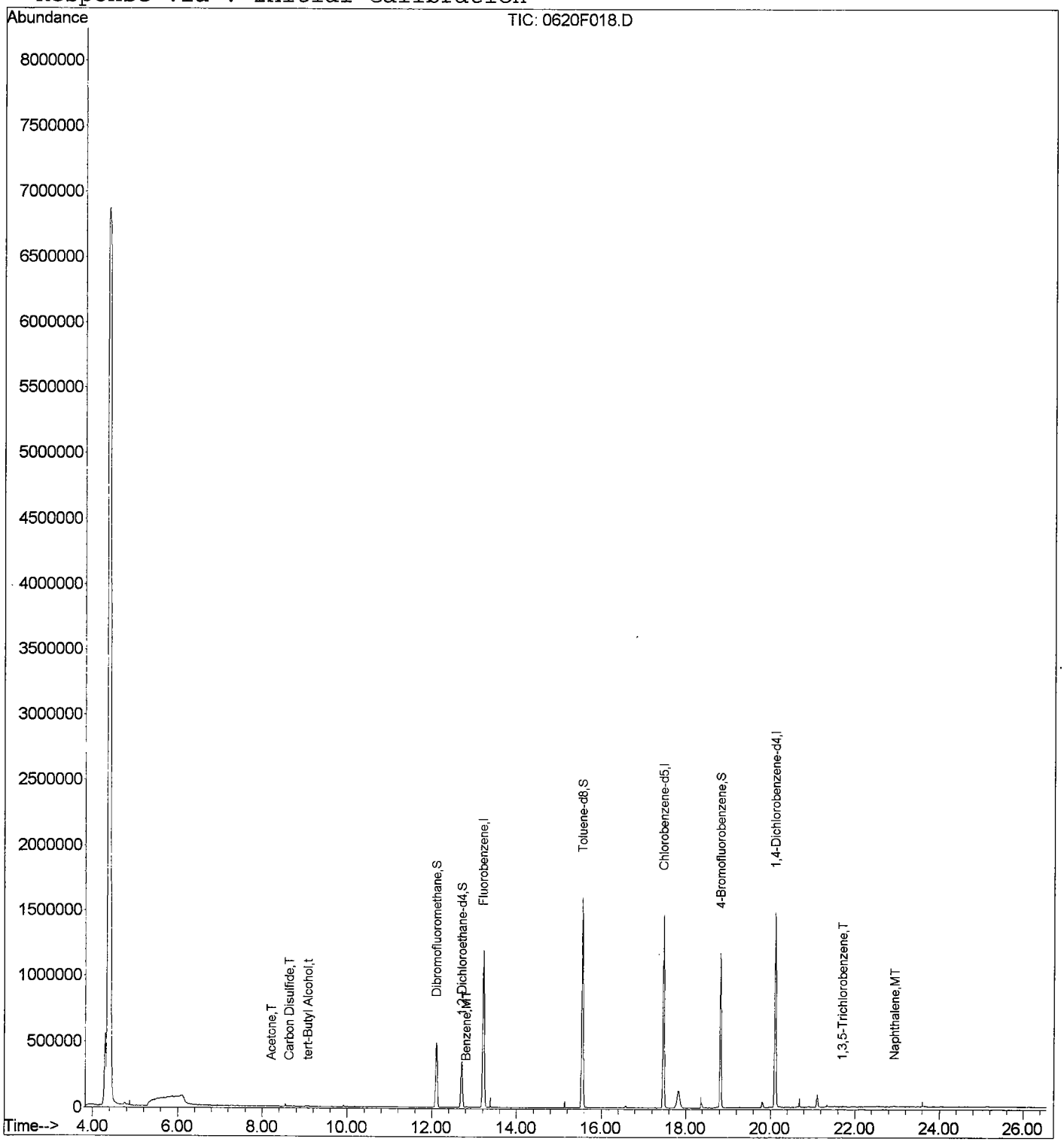
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

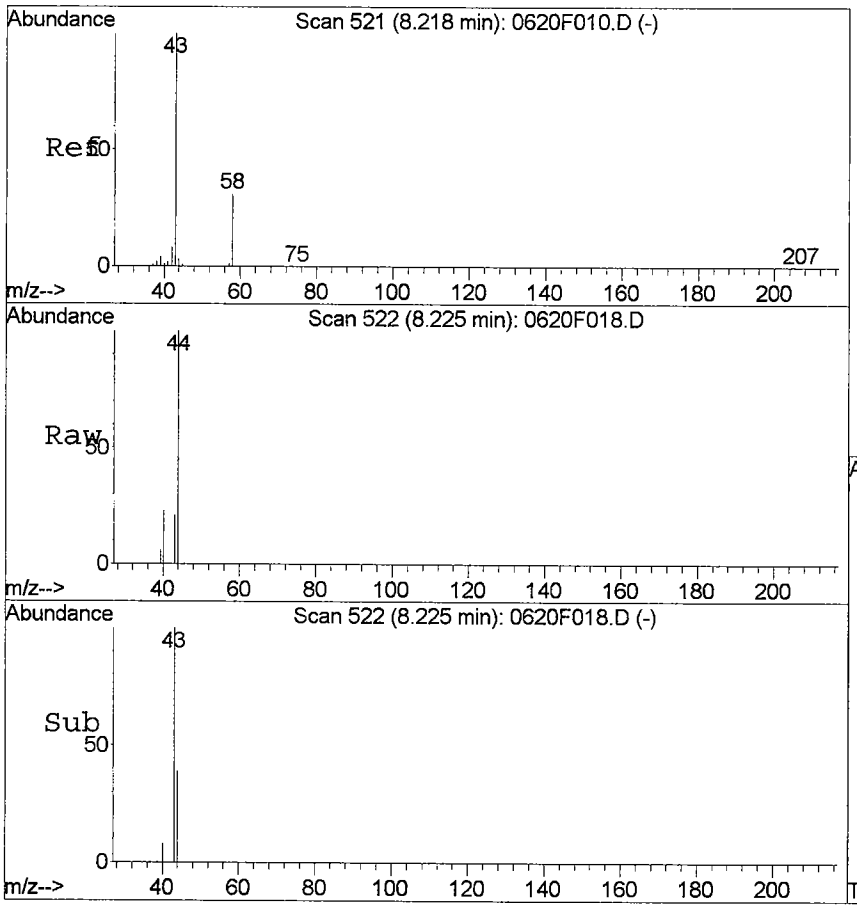
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F018.D Vial: 18
Acq On : 20 Jun 2007 7:28 pm Operator: HC
Sample : K0704852-003 Inst : MS04
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 21 8:06 2007 Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration

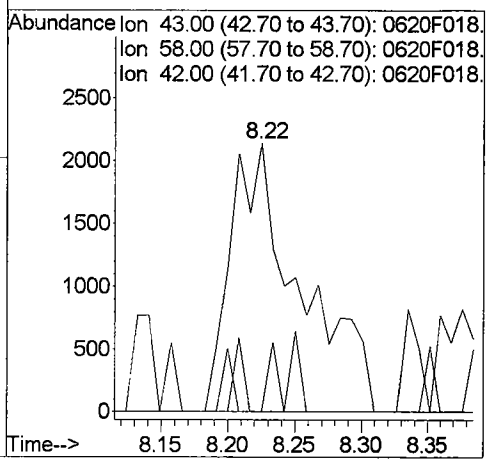


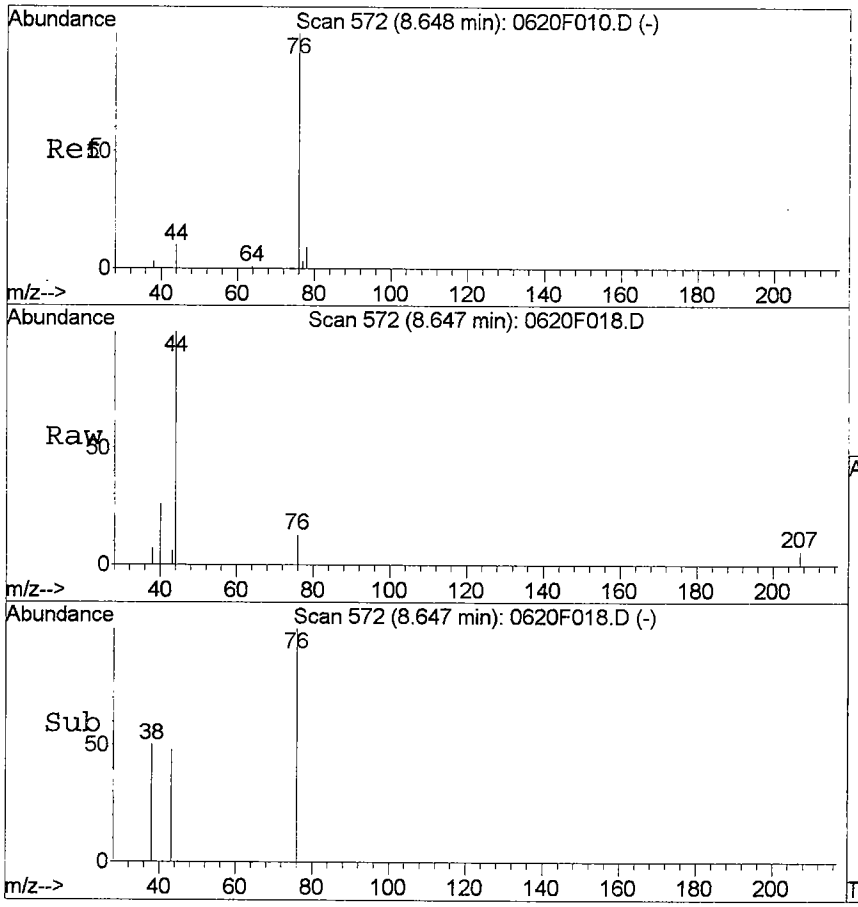


#12
Acetone
Concen: 1.93 PPB
RT: 8.22 min Scan# 522
Delta R.T. 0.01 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion: 43 Resp: 7712

Ion	Ratio	Lower	Upper
43	100		
58	0.0	0.9	60.9#
42	0.0	0.0	38.1

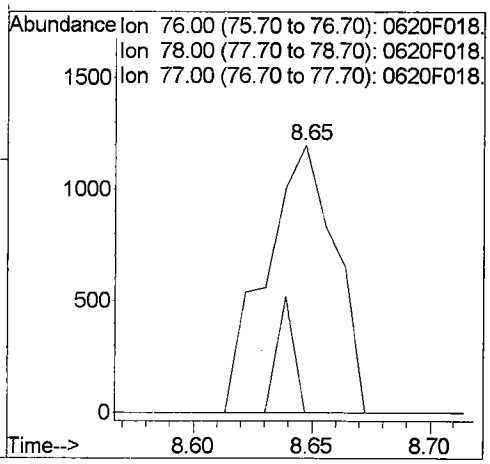


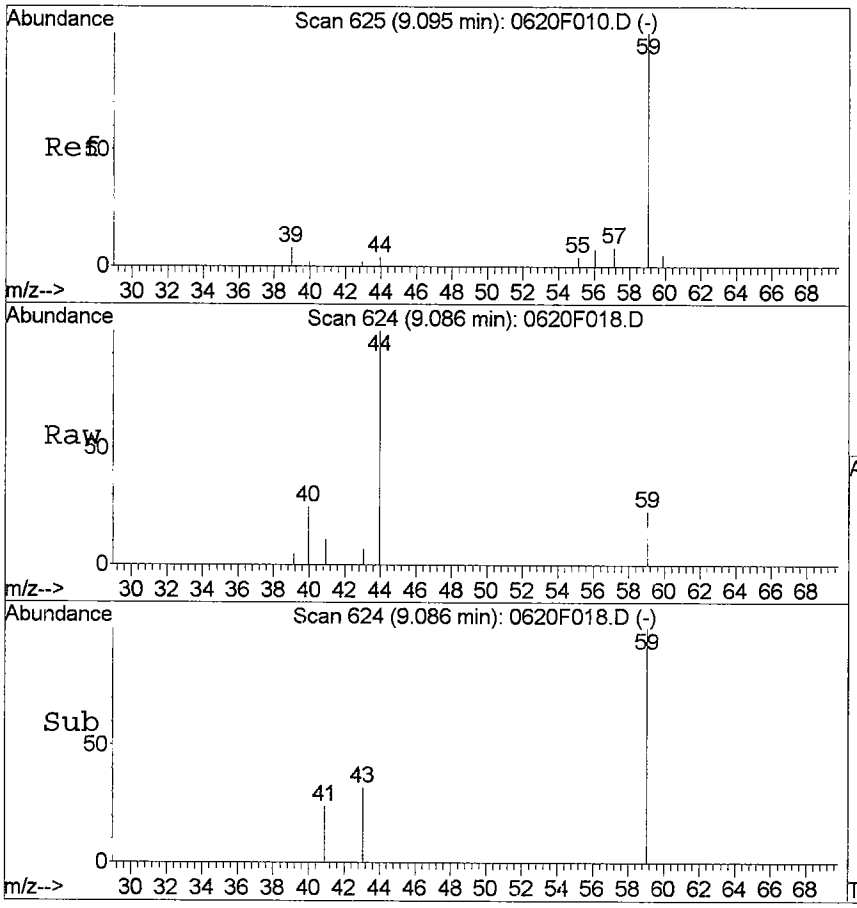


#14
Carbon Disulfide
Concen: 0.01 PPB
RT: 8.65 min Scan# 572
Delta R.T. -0.00 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion: 76 Resp: 2420

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.1
77	0.0	0.0	32.8

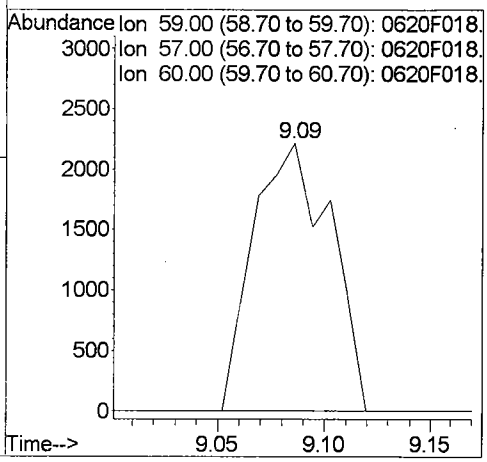


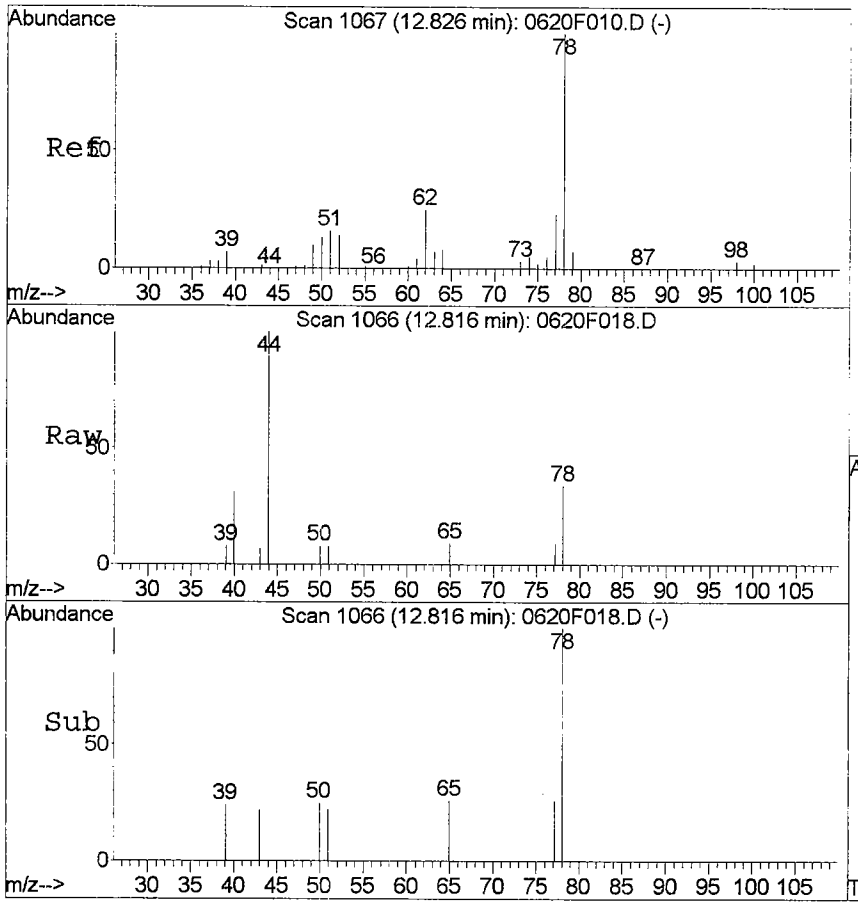


#20
tert-Butyl Alcohol
Concen: 6.10 PPB
RT: 9.09 min Scan# 624
Delta R.T. -0.01 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion: 59 Resp: 5590

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	37.9
60	0.0	0.0	34.5

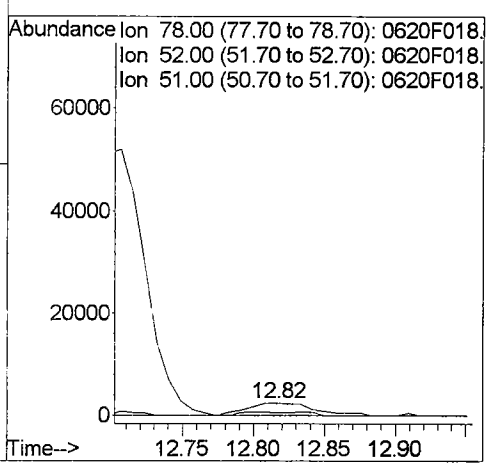


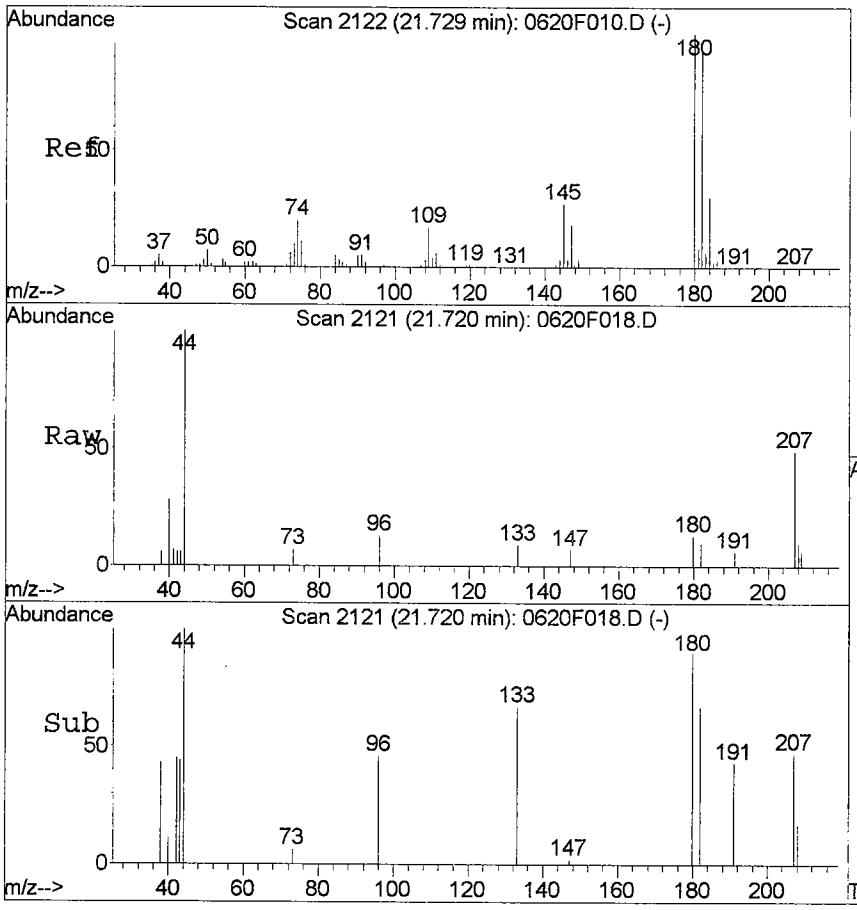


#48
Benzene
Concen: 0.05 PPB
RT: 12.82 min Scan# 1066
Delta R.T. -0.01 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion: 78 Resp: 8330

Ion	Ratio	Lower	Upper
78	100		
52	0.0	0.0	44.0
51	22.2	0.0	47.1

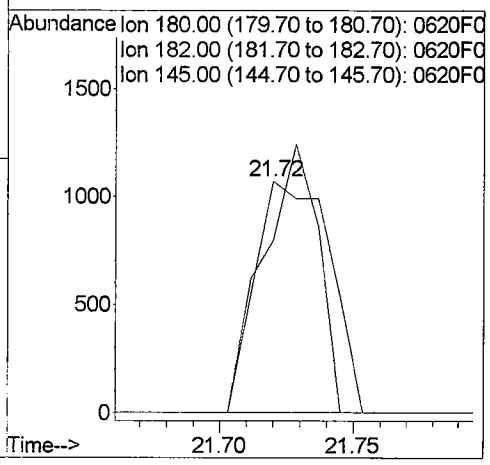


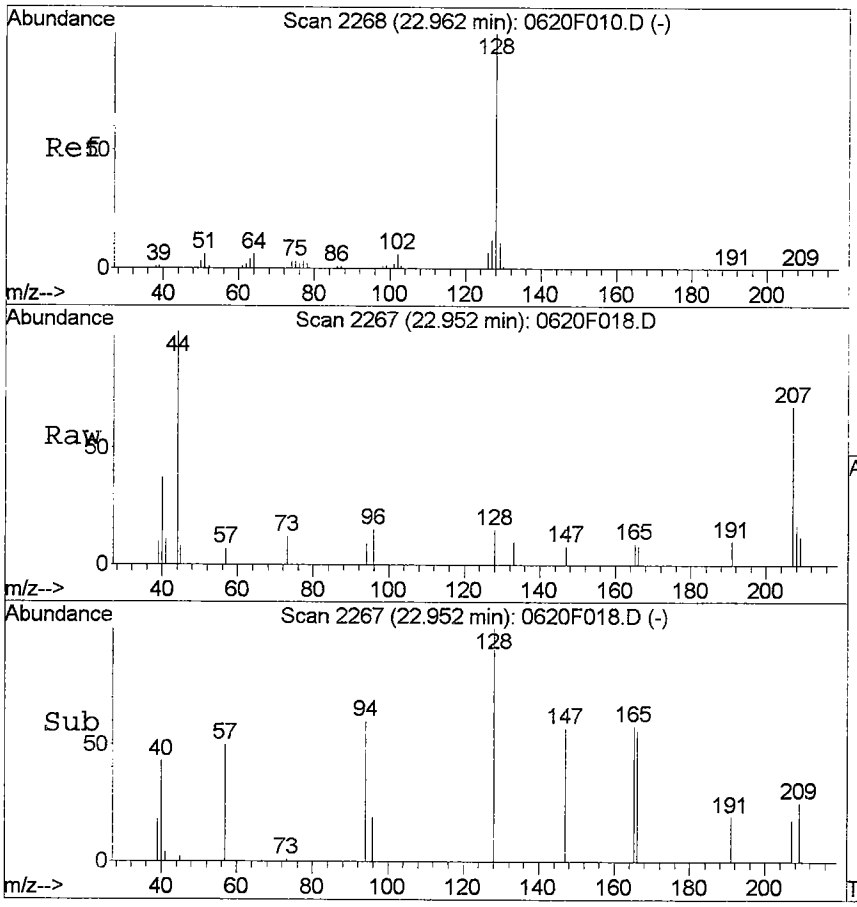


#102
1,3,5-Trichlorobenzene
Concen: 0.03 PPB
RT: 21.72 min Scan# 2121
Delta R.T. -0.01 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion:180 Resp: 2088

Ion	Ratio	Lower	Upper
180	100		
182	74.3	64.2	124.2
145	0.0	0.0	57.1

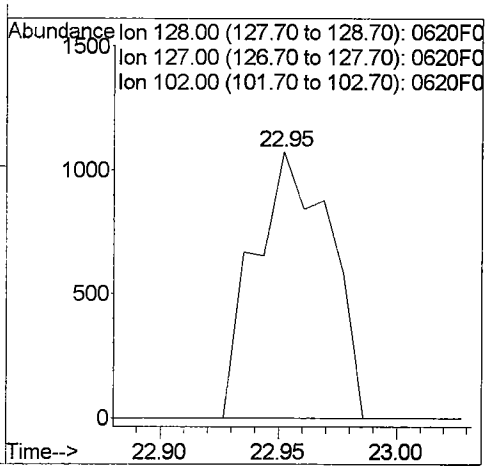




#105
Naphthalene
Concen: 0.04 PPB
RT: 22.95 min Scan# 2267
Delta R.T. -0.01 min
Lab File: 0620F018.D
Acq: 20 Jun 2007 7:28 pm

Tgt Ion:128 Resp: 2381

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	41.8
102	0.0	0.0	36.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	76-114	06/20/07	Acceptable
Toluene-d8	115	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	104	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F019.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 20:01
Date Quantitated: 06/21/2007 08:07
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

N.D for all target analytes in sample.

High bias ND

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
MB Surrogate Recovery	Toluene-d8	116	88	110	w/in CAS limits
Lab Control Spike	4-Methyl-2-pentanone (MIBK)	144	62	131	Advisory
	2-Chloroethyl Vinyl Ether	333	10	180	↓
	Toluene-d8	115	88	110	w/in CAS limits
	2-Hexanone	140	58	129	Advisory
	Acetone	137	65	136	↓

Primary Review: HC 6·21·07

Secondary Review: [illegible] 6/21/07

Printed: 06/21/2007 08:24:44
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS04\DATA\062007\0620F019.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 20:01
Date Quantitated: 06/21/2007 08:07
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	2-Butanone (MEK)	154	60	143	Advisory
Surrogates	Toluene-d8	115	88	110	w/in CAS limits

Primary Review: HZ 6·21·07

Secondary Review: [illegible] 6/21/07

Printed: 06/21/2007 08:24:44
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	K0704852
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611350	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Report List**	

Data File:	J:\MS04\DATA\062007\0620F019.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 20:01	**Quant Date:**	06/21/2007 08:07	**Vial:**	19
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-004			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.21	-0.01	96	1614466	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	1191409	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	602455	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	12.71	0.00	0.00	65	300174	9.98	100	76-114	OK
1	Toluene-d8	15.55	0.00	0.00	98	1419873	11.45	115	88-110	*
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	484637	10.43	104	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane				50	0d		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				94	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone				43	0d		4.1	U	
1	Carbon Disulfide				76	0		0.16	U	
1	Methylene Chloride	9.02	-0.01	0.00	84	2759	0.0500	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F019.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 20:01	**Quant Date:**	06/21/2007 08:07	**Vial:**	19
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-004			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene				78	0d		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0d		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				100	0d		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				104	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

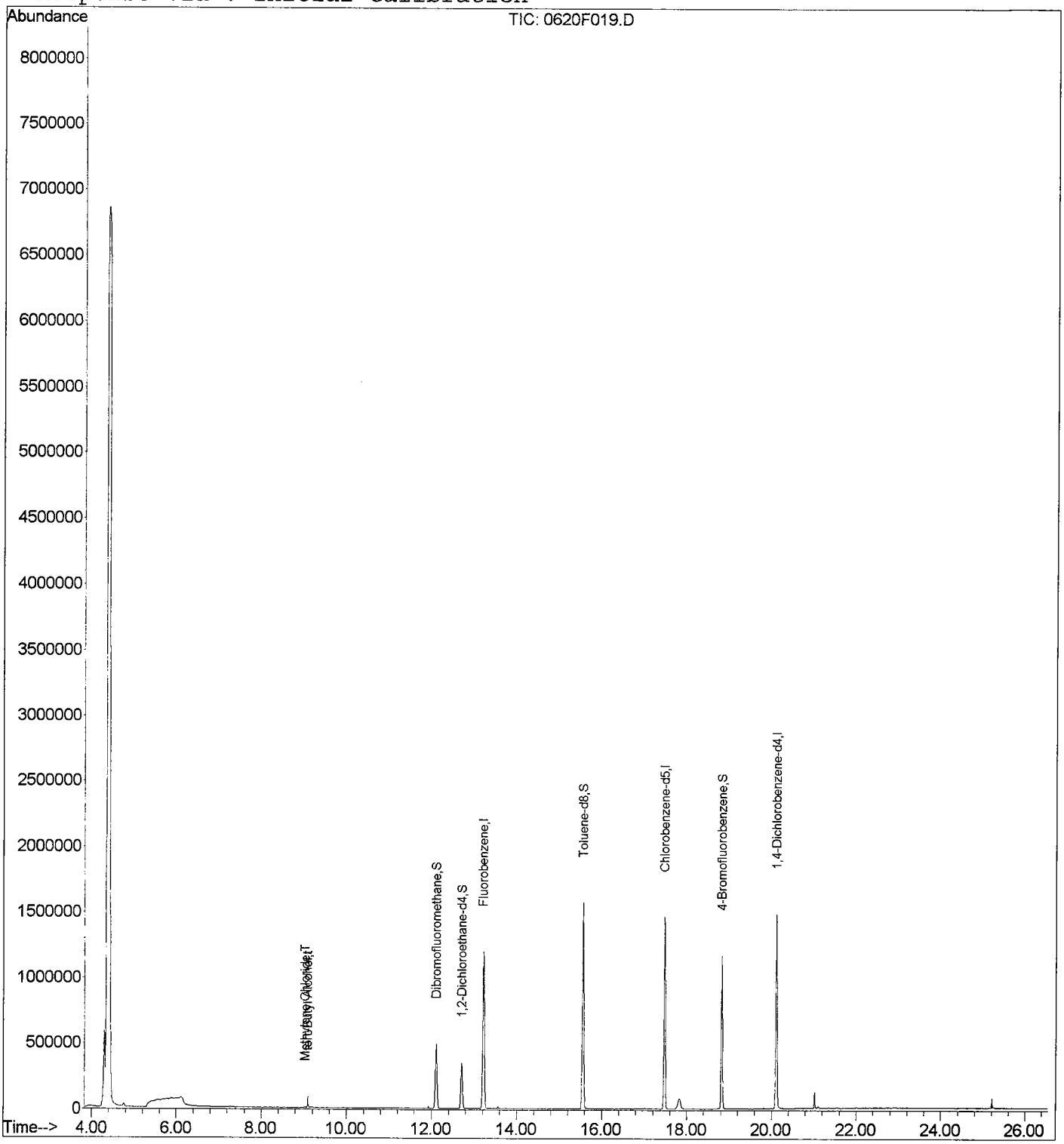
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

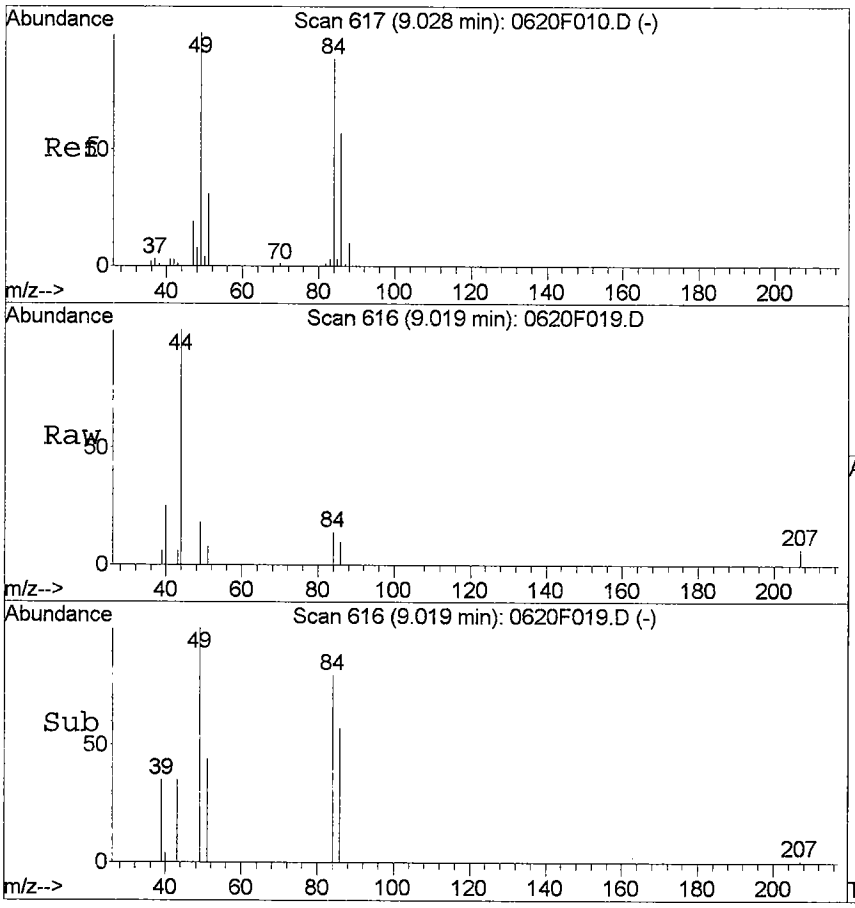
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F019.D
Acq On : 20 Jun 2007 8:01 pm
Sample : K0704852-004
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 8:07 2007

Vial: 19
Operator: HC
Inst : MS04
Multiplr: 1.00
Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration

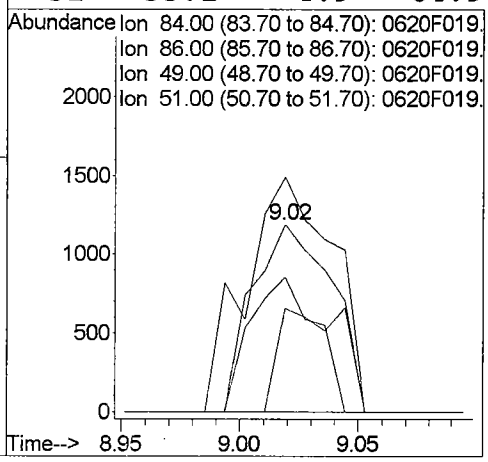


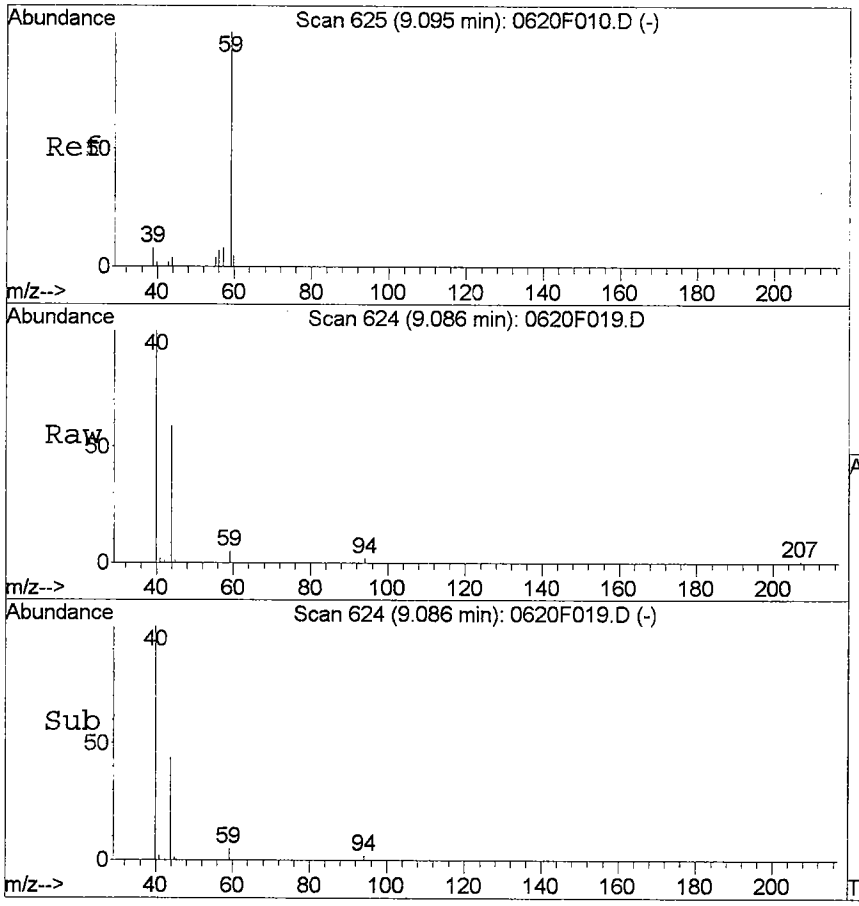


#19
Methylene Chloride
Concen: 0.05 PPB
RT: 9.02 min Scan# 616
Delta R.T. -0.01 min
Lab File: 0620F019.D
Acq: 20 Jun 2007 8:01 pm

Tgt Ion: 84 Resp: 2759

Ion	Ratio	Lower	Upper
84	100		
86	71.7	34.3	94.3
49	125.4	82.1	142.1
51	55.1	4.9	64.9

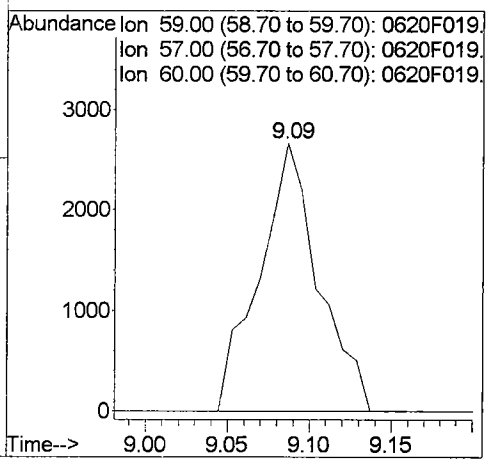




#20
tert-Butyl Alcohol
Concen: 7.35 PPB
RT: 9.09 min Scan# 624
Delta R.T. -0.01 min
Lab File: 0620F019.D
Acq: 20 Jun 2007 8:01 pm

Tgt Ion: 59 Resp: 6709

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	37.9
60	0.0	0.0	34.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	TB0606071ACL	**Units:**	ug/L
Lab Code:	K0704852-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	TB0606071ACL	**Units:**	ug/L
Lab Code:	K0704852-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	116	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	106	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F017.D
Lab ID: K0704852-005
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 18:55
Date Quantitated: 06/21/2007 08:04
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

N.D. for all analytes in sample.
High bar ND

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
MB Surrogate Recovery	Toluene-d8	116	88	110	w/in CAS limits
Lab Control Spike	4-Methyl-2-pentanone (MIBK)	144	62	131	Advisory
	2-Chloroethyl Vinyl Ether	333	10	180	⊥
	Toluene-d8	115	88	110	w/in CAS limits
	2-Hexanone	140	58	129	Advisory
	Acetone	137	65	136	⊥

Primary Review: HC 6·21·07
Secondary Review: 6/21/07

Exception Report

Data File: J:\MS04\DATA\062007\0620F017.D
Lab ID: K0704852-005
RunType: SMPL
Matrix: WATER

Date Acquired: 06/20/2007 18:55
Date Quantitated: 06/21/2007 08:04
Batch ID: KWG0706875
Analysis Method: 8260B
ListJoinID: LJ7877

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	2-Butanone (MEK)	154	60	143	Advisory
Surrogates	Toluene-d8	116	88	110	W/in CAS limits

Primary Review: HC 6·21·07

Secondary Review: 6/21/07

Printed: 06/21/2007 08:39:51
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	K0704852
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611347	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7877
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Report List**	

Data File:	J:\MS04\DATA\062007\0620F017.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:55	**Quant Date:**	06/21/2007 08:04	**Vial:**	17
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-005			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1622824	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	1201274	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	609781	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	1,2-Dichloroethane-d4	12.70	-0.01	0.00	65	294352	9.74	97	76-114	OK
1	Toluene-d8	15.55	0.00	0.00	98	1446159	11.60	116	88-110	*
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	494520	10.56	106	86-115	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	5.33	-0.01	0.00	50	4358	0.0800	0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				94	0d		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone				43	0d		4.1	U	
1	Carbon Disulfide				76	0		0.16	U	
1	Methylene Chloride	9.02	-0.01	0.00	84	4151	0.0800	0.20	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Chloroform				83	0		0.14	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F017.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:55	**Quant Date:**	06/21/2007 08:04	**Vial:**	17
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K0704852-005			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	Benzene	12.82	-0.01	0.00	78	5765	0.0300	0.14	U	
1	1,2-Dichloroethane (EDC)				62	0d		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				100	0d		2.7	U	
1	Toluene				92	0		0.11	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	Dibromochloromethane				129	0		0.11	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	m,p-Xylenes				106	0		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				104	0		0.095	U	
2	Bromoform				173	0		0.28	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

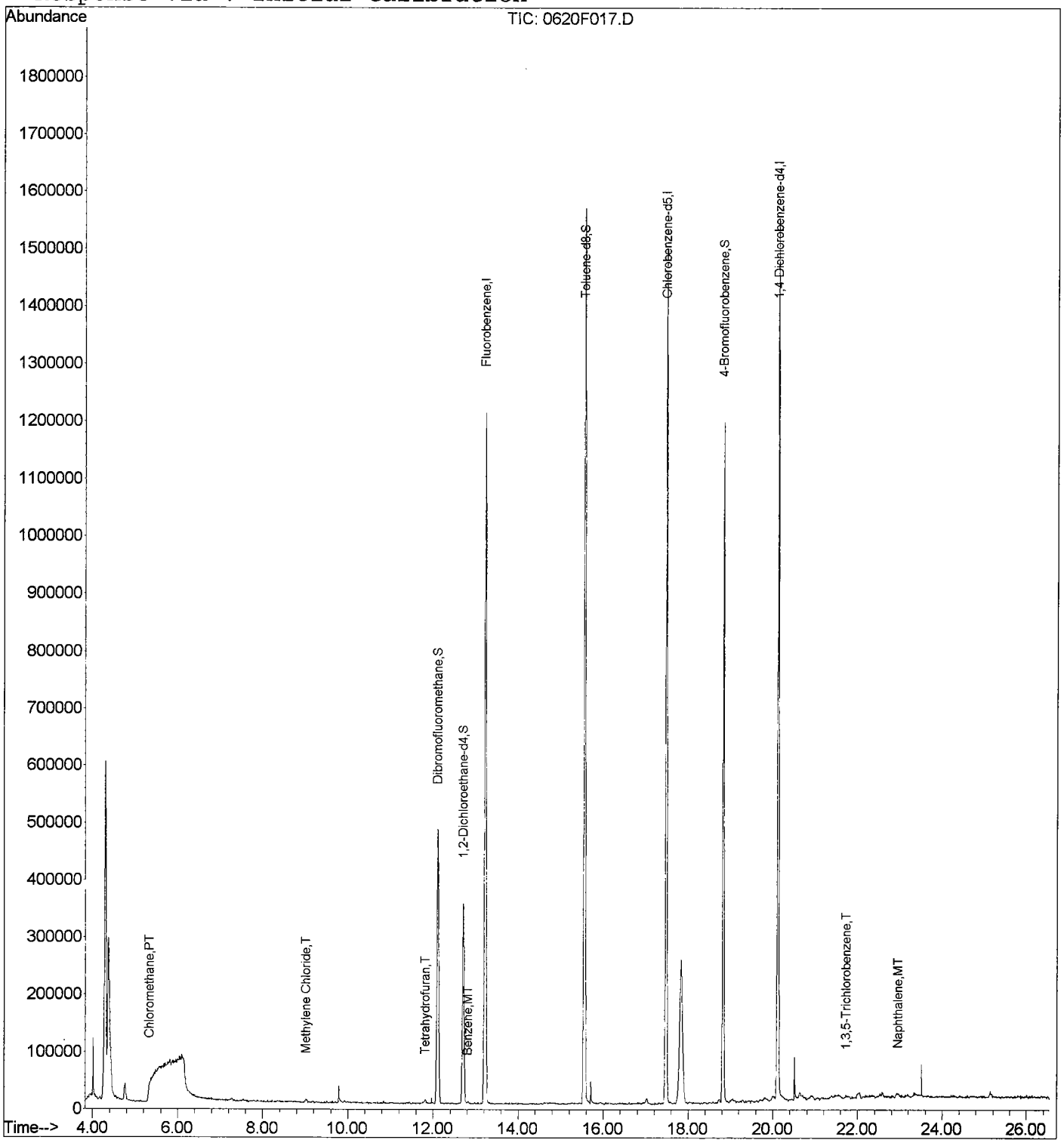
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

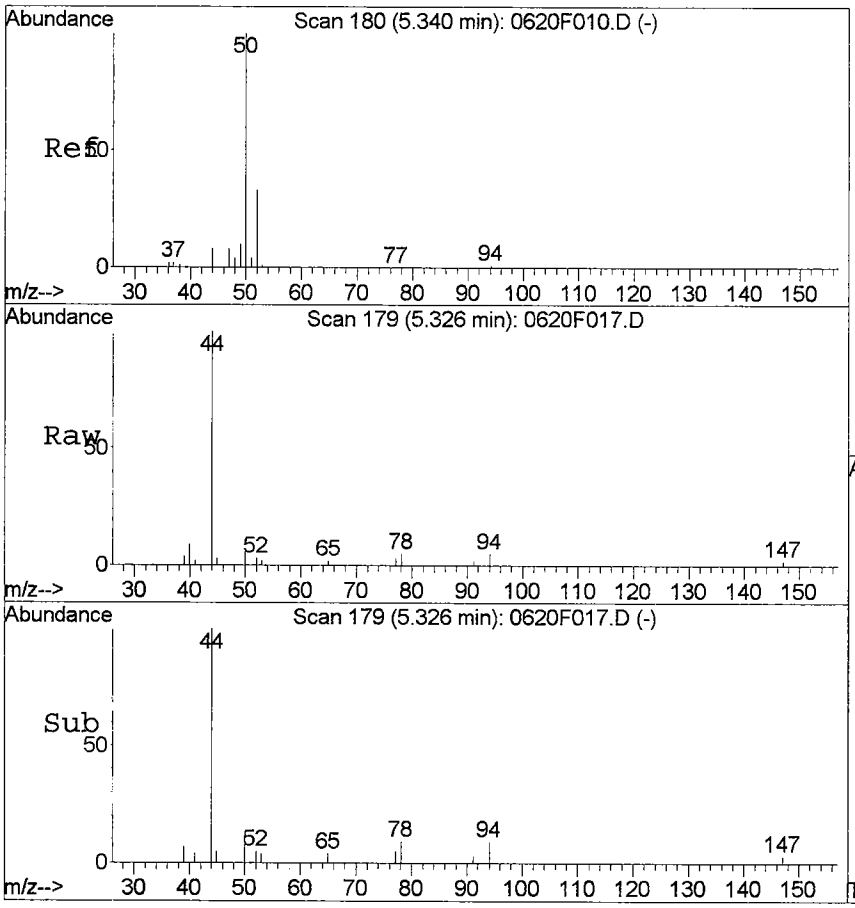
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F017.D
Acq On : 20 Jun 2007 6:55 pm
Sample : K0704852-005 TB35117
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 8:04 2007

Vial: 17
Operator: HC
Inst : MS04
Multiplr: 1.00
Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration

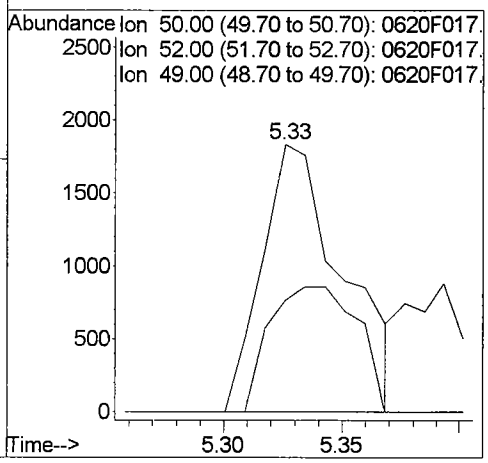


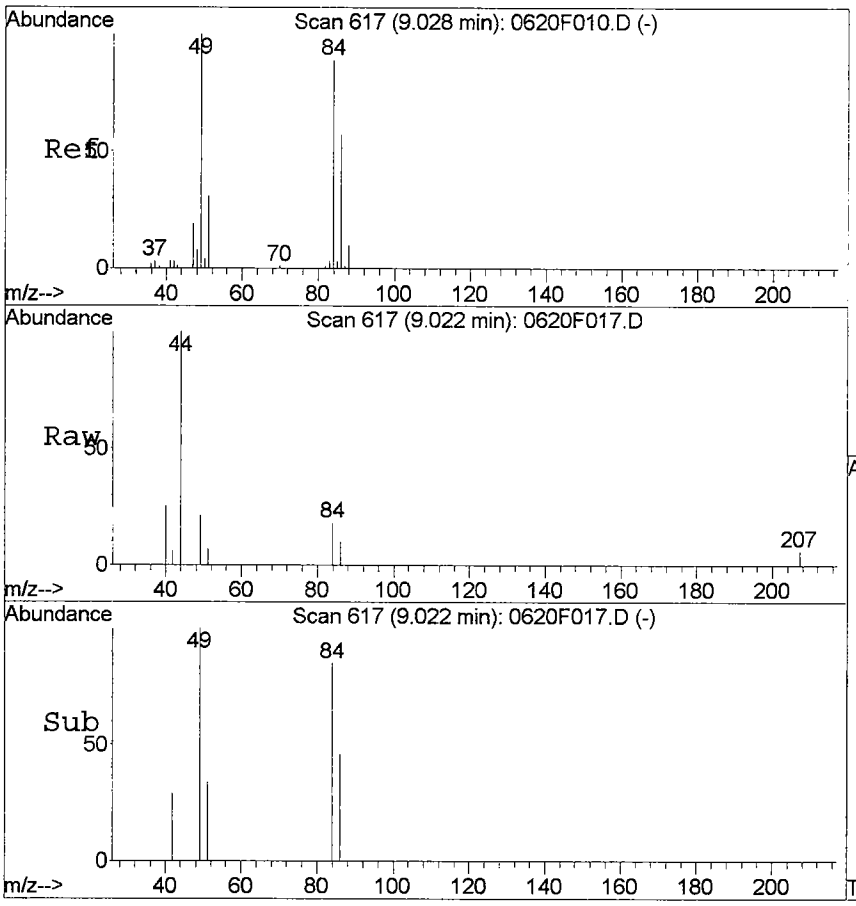


#3
Chloromethane
Concen: 0.08 PPB
RT: 5.33 min Scan# 179
Delta R.T. -0.01 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion: 50 Resp: 4358

Ion	Ratio	Lower	Upper
50	100		
52	41.7	2.8	62.8
49	0.0	0.0	40.5

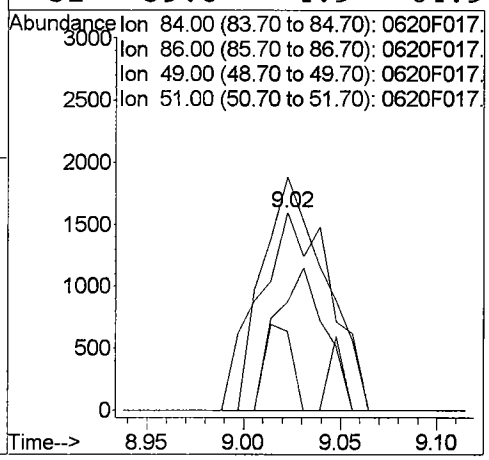


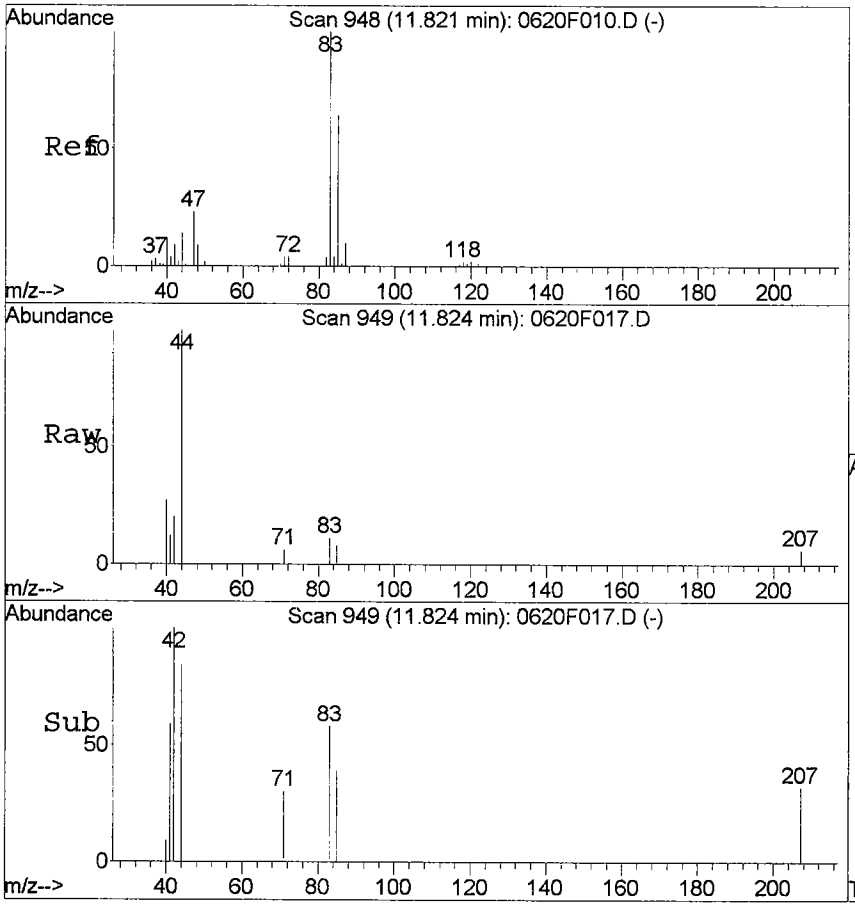


#19
Methylene Chloride
Concen: 0.08 PPB
RT: 9.02 min Scan# 617
Delta R.T. -0.01 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion: 84 Resp: 4151

Ion	Ratio	Lower	Upper
84	100		
86	54.7	34.3	94.3
49	117.7	82.1	142.1
51	39.8	4.9	64.9

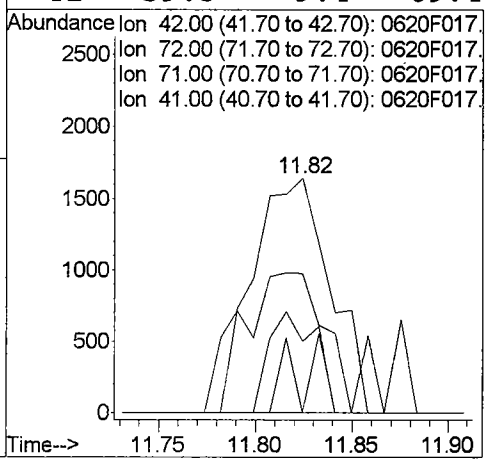


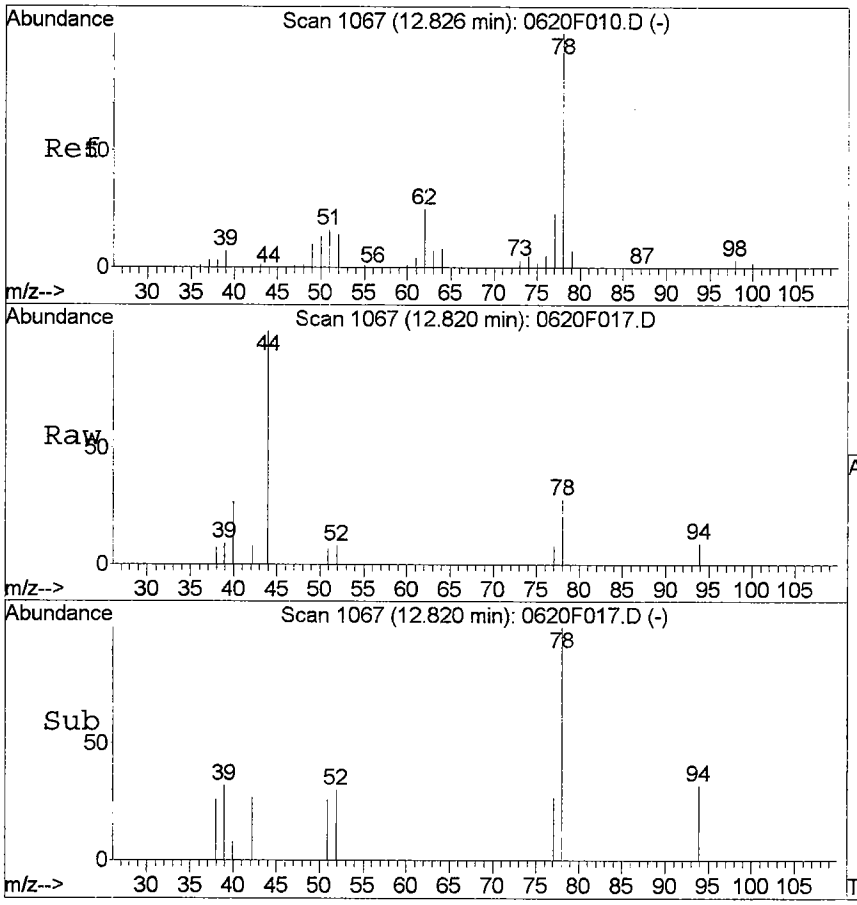


#39
Tetrahydrofuran
Concen: 1.16 PPB
RT: 11.82 min Scan# 949
Delta R.T. 0.00 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion: 42 Resp: 4537

Ion	Ratio	Lower	Upper
42	100		
72	0.0	16.8	76.8#
71	30.5	9.8	69.8
41	59.3	9.4	69.4

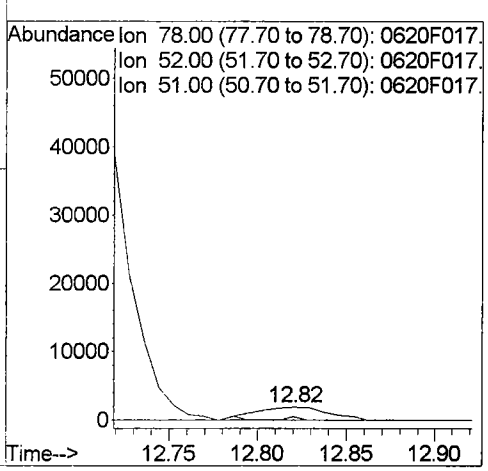


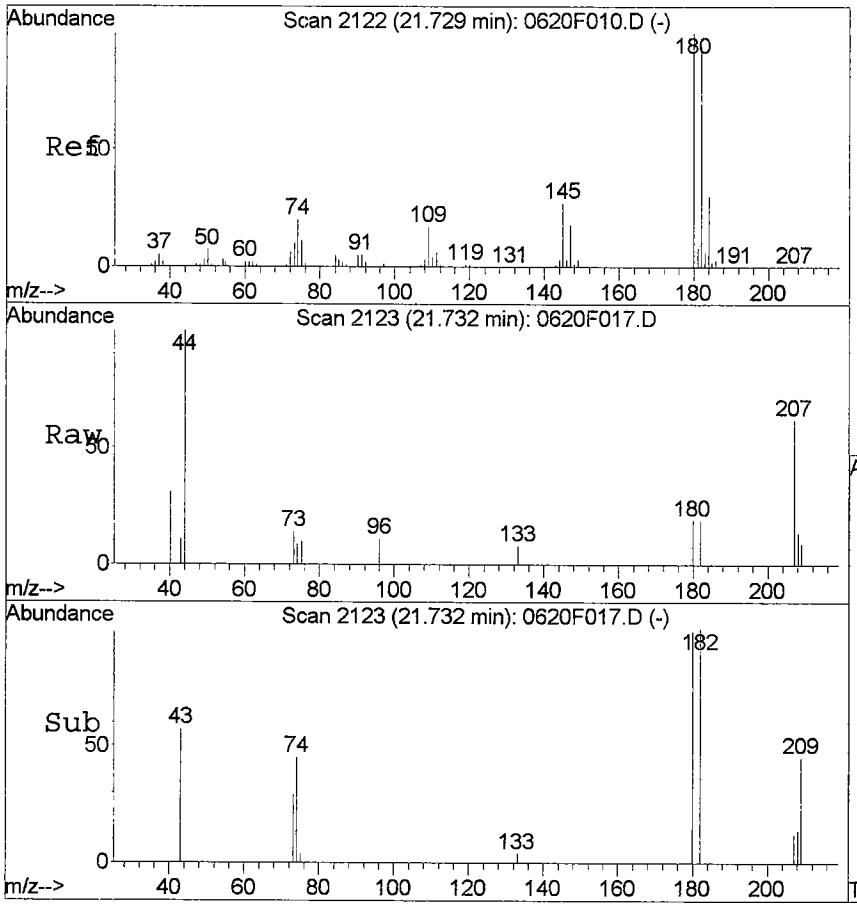


#48
Benzene
Concen: 0.03 PPB
RT: 12.82 min Scan# 1067
Delta R.T. -0.01 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion: 78 Resp: 5765

Ion	Ratio	Lower	Upper
78	100		
52	29.8	0.0	44.0
51	26.0	0.0	47.1

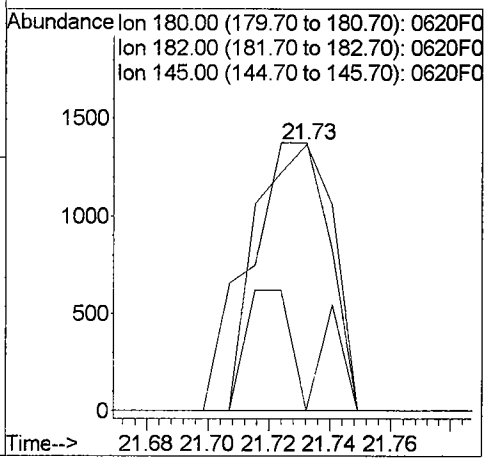


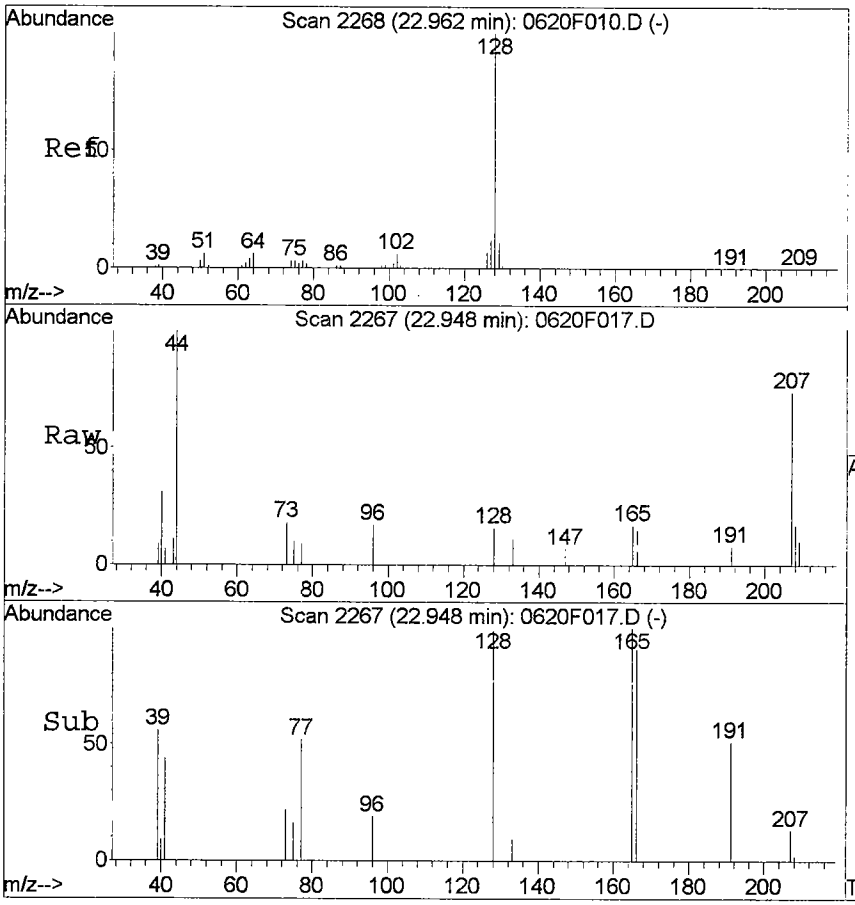


#102
1,3,5-Trichlorobenzene
Concen: 0.04 PPB
RT: 21.73 min Scan# 2123
Delta R.T. 0.00 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion:180 Resp: 2385

Ion	Ratio	Lower	Upper
180	100		
182	100.7	64.2	124.2
145	0.0	0.0	57.1

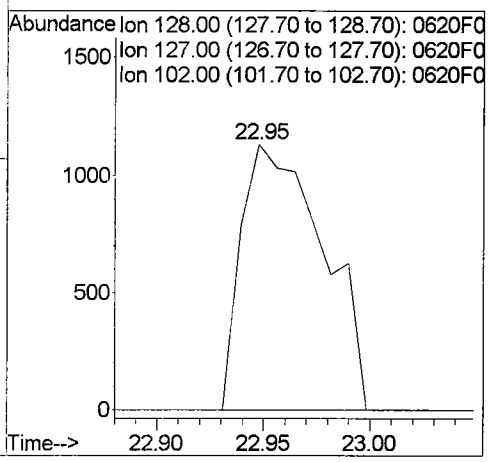




#105
Naphthalene
Concen: 0.06 PPB
RT: 22.95 min Scan# 2267
Delta R.T. -0.01 min
Lab File: 0620F017.D
Acq: 20 Jun 2007 6:55 pm

Tgt Ion:128 Resp: 3026

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	41.8
102	0.0	0.0	36.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706882-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Acetate	ND	U	10	1	06/20/07	06/20/07	KWG0706882	
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	ND	U	5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	ND	U	4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706882-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	ND	U	1.0	1	06/20/07	06/20/07	KWG0706882	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	97	76-114	06/20/07	Acceptable
Toluene-d8	116	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	105	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F016.D
Lab ID: KWG0706882-4
RunType: MB
Matrix: WATER

Date Acquired: 06/20/2007 18:22
Date Quantitated: 06/21/2007 08:02
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0006	0.01	NA	NT
	tert-Butyl Alcohol	0.0057	0.01	NA	↓
	Isobutyl Alcohol	0.0021	0.01	NA	↓
	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
Continuing Calibration Recovery	Tetrahydrofuran	51.2	NA	30	NT
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	↓
	tert-Butyl Alcohol	0.0077	0.01	NA	↓
	Isobutyl Alcohol	0.0034	0.01	NA	↓

Primary Review: HC 6·21·07

Secondary Review: 6/21/07

Printed: 06/21/2007 08:24:35
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611354	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:			
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS04\DATA\062007\0620F016.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:22	**Quant Date:**	06/21/2007 08:02	**Vial:**	16
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706882-4			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1623568	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	1201548	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	614227	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	12.10	-0.01	0.00	113	444862	9.91	99	82-125 OK	
1	1,2-Dichloroethane-d4	12.70	-0.01	0.00	65	294020	9.73	97	49-142 OK	
1	Toluene-d8	15.56	0.01	0.00	98	1441171	11.56	116	87-120 OK	
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	493394	10.53	105	73-118 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.17	U	
1	Chloromethane				50	0d		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				94	0d		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	Dichlorofluoromethane (CFC 21				67	0		0.40	U	
1	Trichlorofluoromethane				101	0		0.14	U	
1	Ethyl Ether				59	0		0.058	U	
1	Trichlorotrifluoroethane				151	0		0.14	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	8.22		0.00	43	11531	2.89	4.1	U	
1	Iodomethane				127	0		0.38	U	
1	Carbon Disulfide				76	0		0.16	U	
1	Acrolein				56	0		6.7	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F016.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:22	**Quant Date:**	06/21/2007 08:02	**Vial:**	16
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706882-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene				41	0		0.16	U	
1	Acetonitrile				41	0		7.5	U	
1	Methylene Chloride	9.03		0.00	84	2975	0.0500	0.20	U	
1	tert-Butyl Alcohol				59	0		1.1	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	n-Hexane				57	0		0.19	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	Acrylonitrile				53	0		0.54	U	
1	Diisopropyl Ether				45	0		0.25	U	
1	Chloroprene				88	0		0.35	U	
1	tert-Butyl Ethyl Ether				59	0		0.075	U	
1	2,2-Dichloropropane				77	0		0.18	U	
1	Ethyl Acetate				70	0		0.79	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Propionitrile				54	0		1.3	U	
1	Methacrylonitrile				67	0		0.45	U	
1	Bromochloromethane				128	0		0.17	U	
1	Chloroform				83	0		0.14	U	
1	tert-Butyl Formate				59	0		0.18	U	
1	Tetrahydrofuran	11.81	-0.01	0.00	42	8108	2.08	2.08	J	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Isobutyl Alcohol				43	0		7.8	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	1,1-Dichloropropene				75	0		0.15	U	
1	tert-Amyl Methyl Ether				55	0d		0.15	U	
1	Benzene				78	0d		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0d		0.12	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	Methyl Methacrylate				69	0		0.36	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	1,4-Dioxane				88	0		26	U	
1	Dibromomethane				93	0		0.12	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	2-Nitropropane				41	0		2.0	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				100	0d		2.7	U	
1	Toluene				92	0		0.11	U	
2	Ethyl Methacrylate				69	0d		0.13	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F016.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:22	**Quant Date:**	06/21/2007 08:02	**Vial:**	16
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706882-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
2	n-Octane				85	0		0.29	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	1,3-Dichloropropane				76	0		0.15	U	
2	Dibromochloromethane				129	0		0.11	U	
2	1,2-Dibromoethane (EDB)				107	0		0.099	U	
2	1-Chlorohexane				55	0**d**		0.13	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0**d**		0.13	U	
2	1,1,1,2-Tetrachloroethane				131	0**d**		0.12	U	
2	m,p-Xylenes				106	0**d**		0.22	U	
2	o-Xylene				106	0**d**		0.11	U	
2	Styrene				104	0**d**		0.095	U	
2	Bromoform				173	0		0.28	U	
2	Isopropylbenzene				105	0		0.11	U	
3	cis-1,4-Dichloro-2-butene				88	0**d**		0.60	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	
3	Bromobenzene				156	0**d**		0.18	U	
3	n-Propylbenzene				91	0**d**		0.098	U	
3	trans-1,4-Dichloro-2-butene				53	0		0.60	U	
3	1,2,3-Trichloropropane				110	0		0.24	U	
3	2-Chlorotoluene				91	0**d**		0.12	U	
3	1,3,5-Trimethylbenzene				105	0		0.13	U	
3	4-Chlorotoluene				91	0**d**		0.12	U	
3	tert-Butylbenzene				134	0		0.13	U	
3	1,2,4-Trimethylbenzene				105	0		0.15	U	
3	sec-Butylbenzene				105	0		0.13	U	
3	4-Isopropyltoluene				119	0		0.13	U	
3	1,3-Dichlorobenzene				146	0		0.11	U	
3	1,4-Dichlorobenzene				146	0		0.12	U	
3	n-Butylbenzene				91	0**d**		0.23	U	
3	1,2-Dichlorobenzene				146	0		0.12	U	
3	1,2-Dibromo-3-chloropropane				157	0		1.0	U	
3	1,3,5-Trichlorobenzene	21.72	-0.01	0.00	180	4179	0.0700	0.35	U	
3	1,2,4-Trichlorobenzene				180	0		0.22	U	
3	Hexachlorobutadiene				225	0		0.28	U	
3	Naphthalene	22.97	0.01	0.00	128	5726	0.1100	0.29	U	
3	1,2,3-Trichlorobenzene				180	0		0.33	U	
	1,1,2-Trifluoroethane				0	0		1.0	U	NR
	1,1-Dichloropropane				0	0		1.0	U	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F016.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 18:22	**Quant Date:**	06/21/2007 08:02	**Vial:**	16
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706882-4			**Soln Conc. Units:**	PPB

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

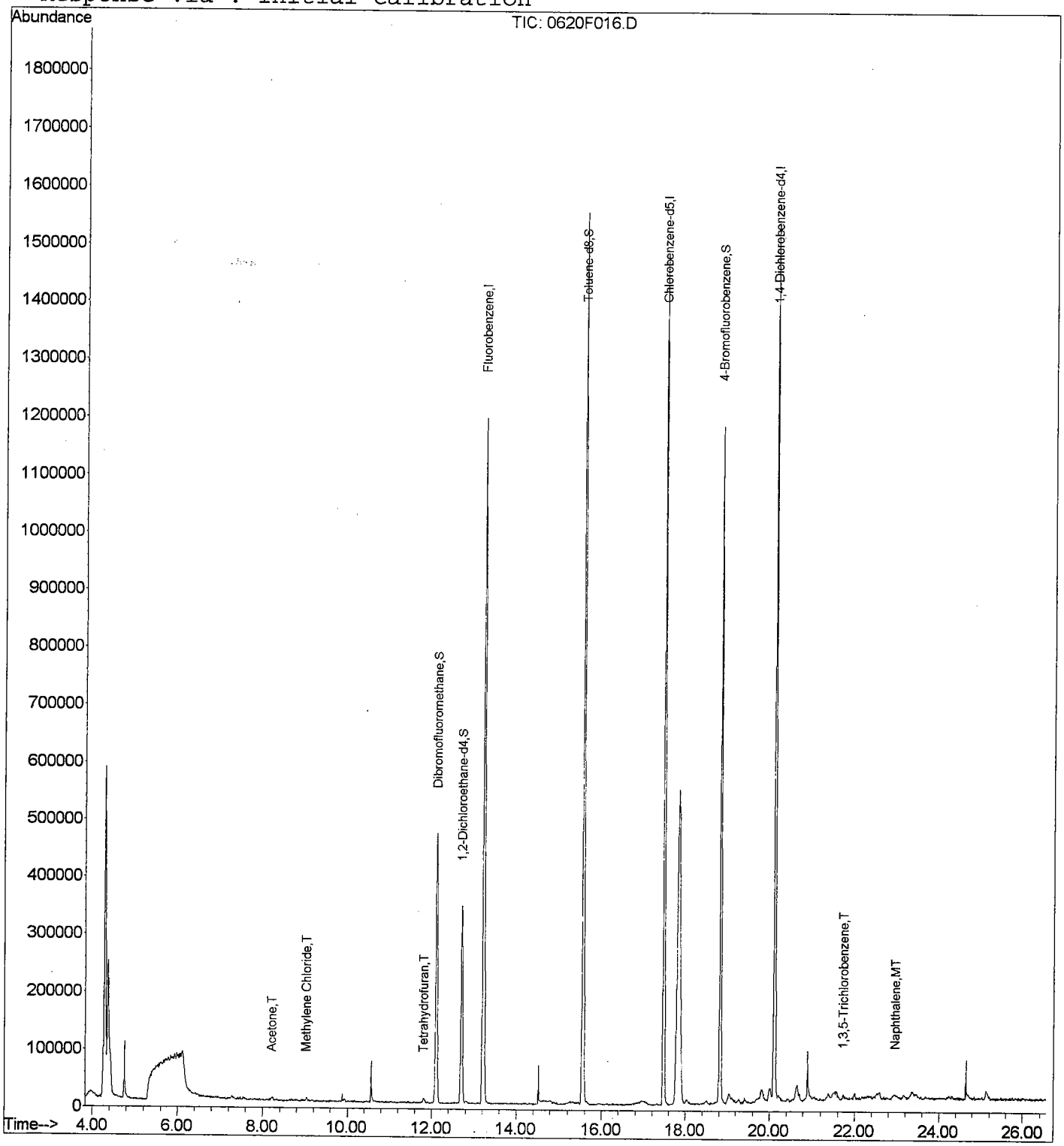
Quantitation Report (QT Reviewed)

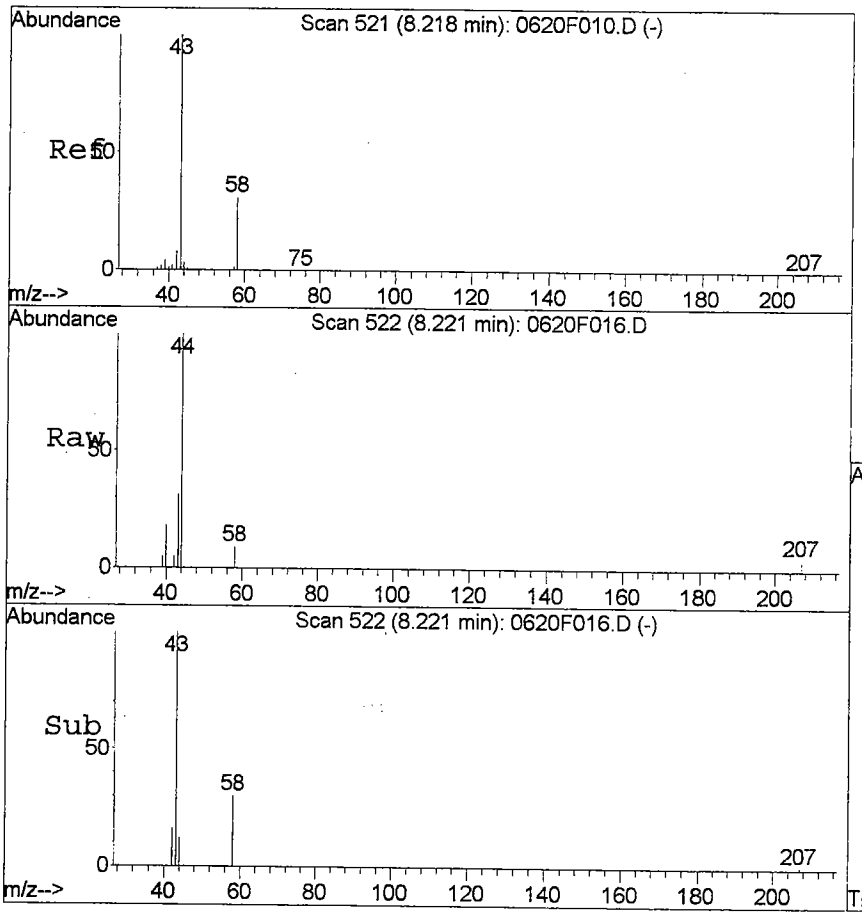
Data File : J:\MS04\DATA\062007\0620F016.D
Acq On : 20 Jun 2007 6:22 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 8:02 2007

Vial: 16
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration

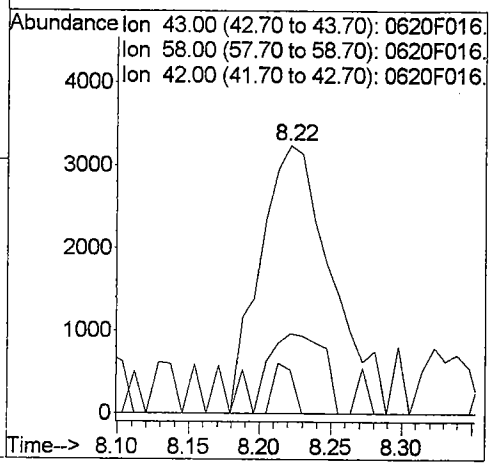


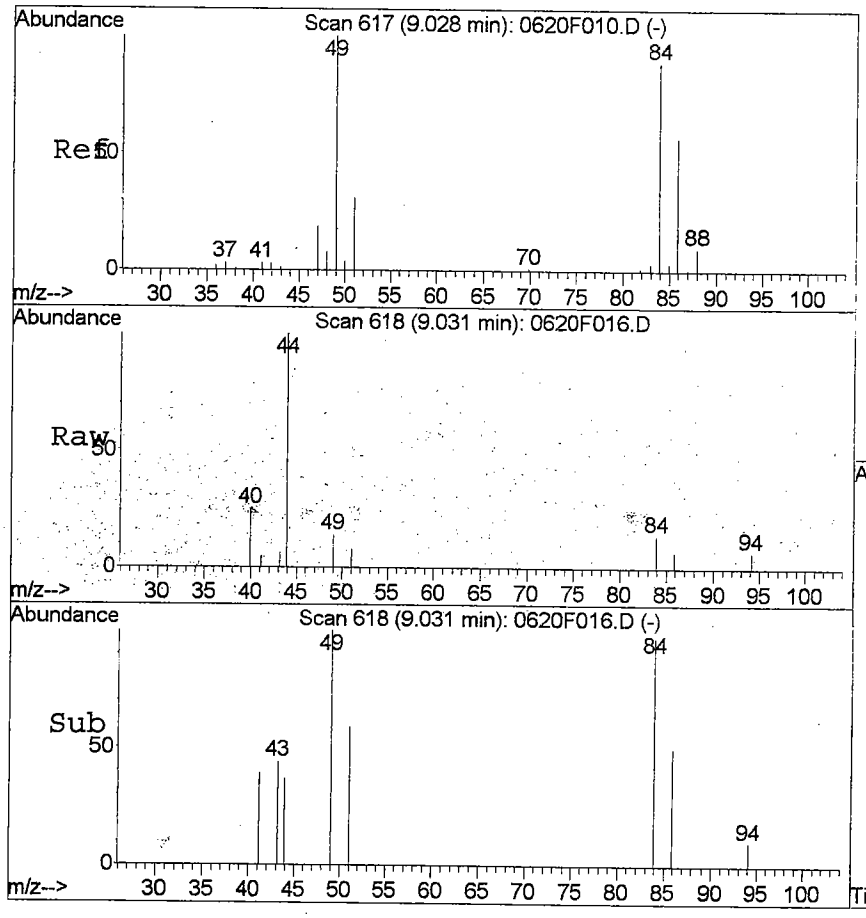


#12
Acetone
Concen: 2.89 PPB
RT: 8.22 min Scan# 522
Delta R.T. 0.00 min
Lab File: 0620F016.D
Acq: 20 Jun 2007 6:22 pm

Tgt Ion: 43 Resp: 11531

Ion	Ratio	Lower	Upper
43	100		
58	29.8	0.9	60.9
42	16.2	0.0	38.1

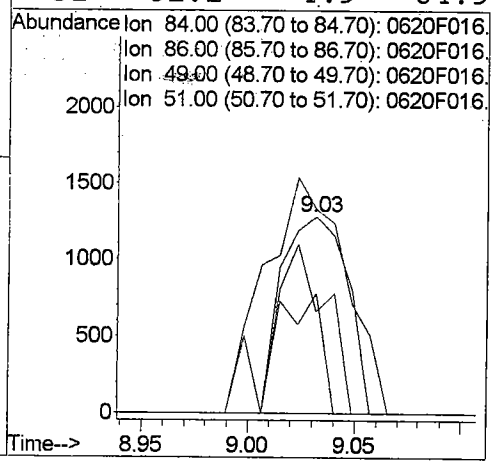


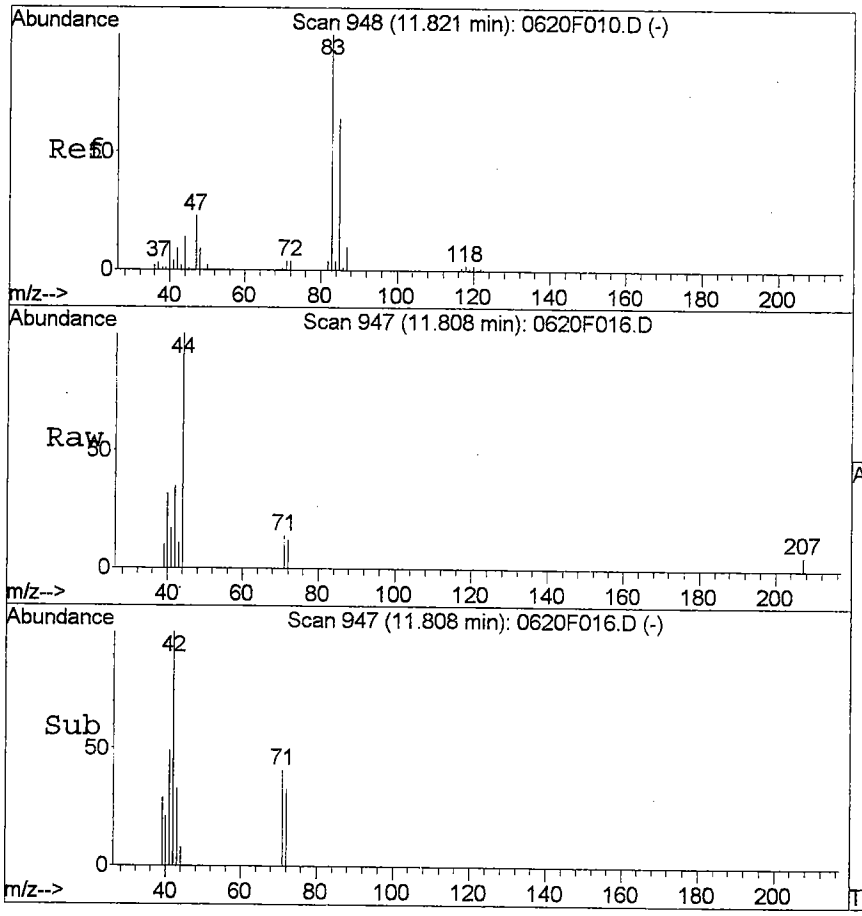


#19
Methylene Chloride
Concen: 0.05 PPB
RT: 9.03 min Scan# 618
Delta R.T. 0.00 min
Lab File: 0620F016.D
Acq: 20 Jun 2007 6:22 pm

Tgt Ion: 84 Resp: 2975

Ion	Ratio	Lower	Upper
84	100		
86	51.7	34.3	94.3
49	103.6	82.1	142.1
51	61.1	4.9	64.9

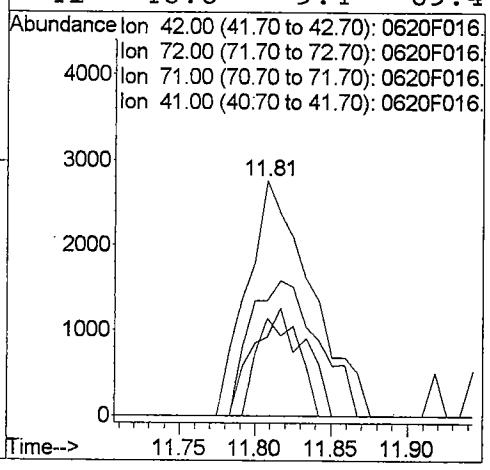


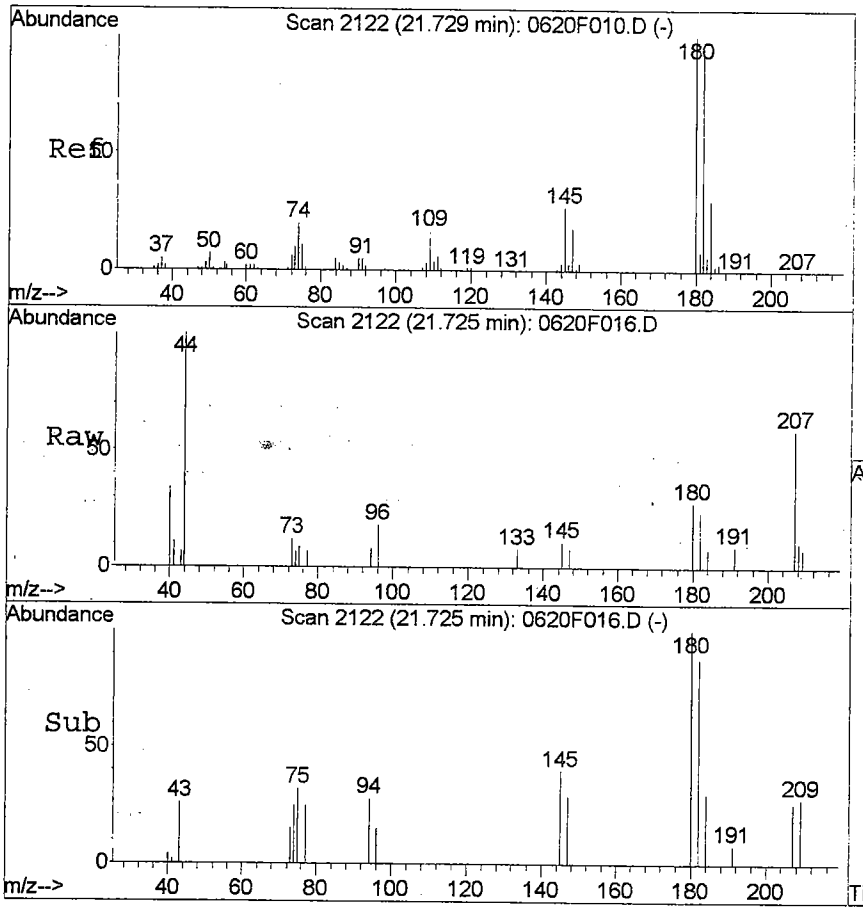


#39
Tetrahydrofuran
Concen: 2.08 PPB
RT: 11.81 min Scan# 947
Delta R.T. -0.01 min
Lab File: 0620F016.D
Acq: 20 Jun 2007 6:22 pm

Tgt Ion: 42 Resp: 8108

Ion	Ratio	Lower	Upper
42	100		
72	33.4	16.8	76.8
71	41.4	9.8	69.8
41	48.8	9.4	69.4

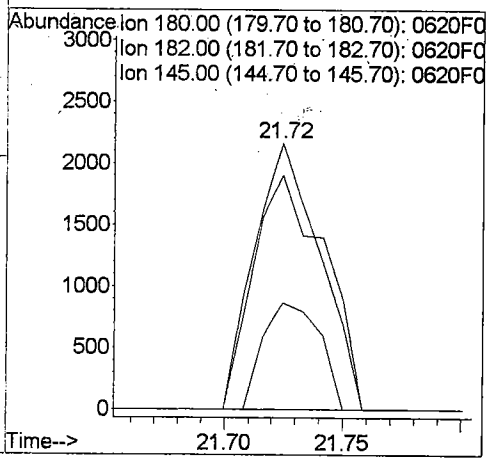


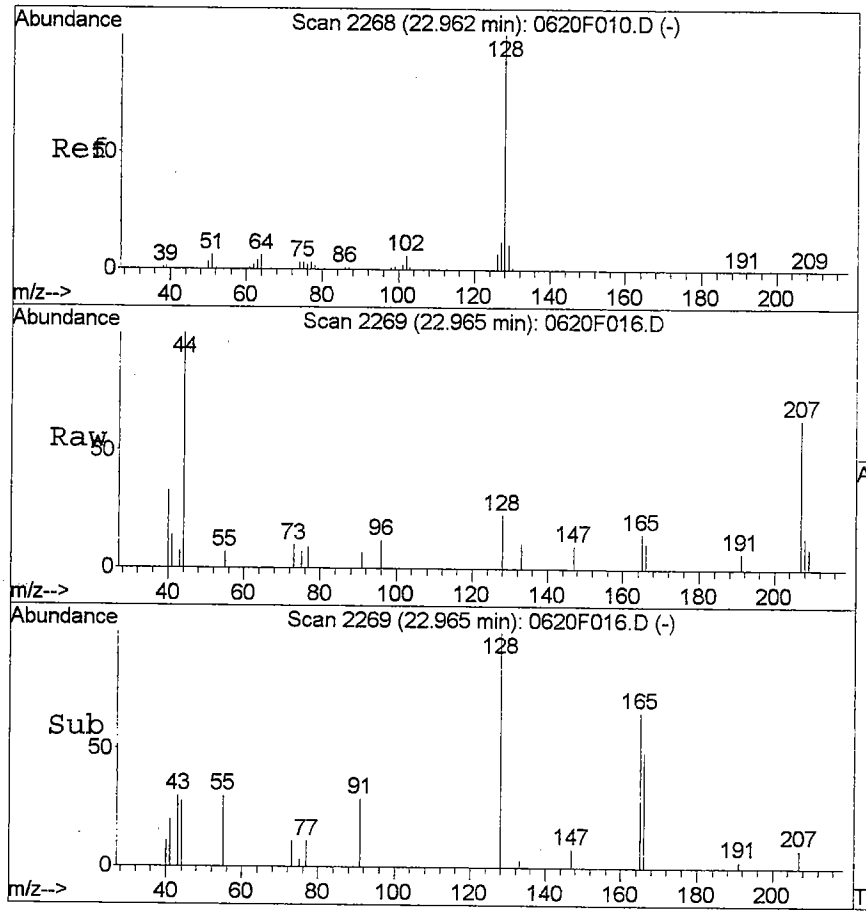


#102
1,3,5-Trichlorobenzene
Concen: 0.07 PPB
RT: 21.72 min Scan# 2122
Delta R.T. -0.00 min
Lab File: 0620F016.D
Acq: 20 Jun 2007 6:22 pm

Tgt Ion:180 Resp: 4179

Ion	Ratio	Lower	Upper
180	100		
182	87.8	64.2	124.2
145	40.1	0.0	57.1

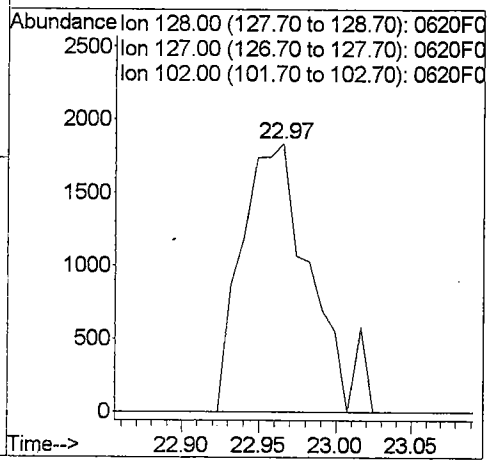




#105
Naphthalene
Concen: 0.11 PPB
RT: 22.97 min Scan# 2269
Delta R.T. 0.00 min
Lab File: 0620F016.D
Acq: 20 Jun 2007 6:22 pm

Tgt Ion:128 Resp: 5726

Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	41.8
102	0.0	0.0	36.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CLMS	**Units:**	ug/L
Lab Code:	KWG0706882-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**11.5**		2.0	1	06/20/07	06/20/07	KWG0706882	*
Vinyl Acetate	**57.2**		10	1	06/20/07	06/20/07	KWG0706882	*
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	**9.22**		1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	**9.56**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	**7.52**		1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	**9.14**		1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	**63.8**		10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	**9.79**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	**17.9**		5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	**8.90**		4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	**8.84**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	**8.45**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	**68.6**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	**9.01**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	**8.65**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	**9.22**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	**8.94**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	**10.7**		0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	**29.4**		0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	**8.86**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	**8.79**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	**9.60**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	**78.0**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	**10.1**		0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	**9.04**		0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	**9.82**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	**10.4**		0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	**66.4**		10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	**7.72**		0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	**9.82**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	**7.94**		0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	**8.04**		0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CLMS	**Units:**	ug/L
Lab Code:	KWG0706882-1	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**25.3**		1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	**9.07**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	**11.8**		1.0	1	06/20/07	06/20/07	KWG0706882	*
1,1,2,2-Tetrachloroethane	**10.7**		0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	111	76-114	06/20/07	Acceptable
Toluene-d8	117	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	110	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F012.D
Lab ID: KWG0706882-1 -- K0704852-002MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 16:10
Date Quantitated: 06/20/2007 17:14
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0006	0.01	NA	NT
	tert-Butyl Alcohol	0.0057	0.01	NA	⊥
	Isobutyl Alcohol	0.0021	0.01	NA	⊥
	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
Continuing Calibration Recovery	Propionitrile	31.4	NA	30	NT
	Acrylonitrile	33.1	NA	30	⊥
	Vinyl Acetate	45.4	NA	40	High Bias
	4-Methyl-2-pentanone (MIBK)	61.5	NA	30	⊥
	Tetrahydrofuran	51.2	NA	30	NT
	Methacrylonitrile	41.5	NA	30	⊥
	Ethyl Acetate	40.1	NA	30	⊥
	cis-1,4-Dichloro-2-butene	44.3	NA	30	⊥

Primary Review: HL 6·21·07

Secondary Review: 6/21/7

Printed: 06/21/2007 08:24:27
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS04\DATA\062007\0620F012.D
Lab ID: KWG0706882-1 -- K0704852-002MS
RunType: MS
Matrix: WATER

Date Acquired: 06/20/2007 16:10
Date Quantitated: 06/20/2007 17:14
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Methyl tert-Butyl Ether	42.1	NA	30	High Bias
	2-Hexanone	54.1	NA	30	⊥
	tert-Butyl Ethyl Ether	37.5	NA	30	NT
	Acetone	36.0	NA	30	High Bias
	Bromoform	38.9	NA	30	⊥
	tert-Butyl Alcohol	36.2	NA	30	NT
	tert-Butyl Formate	69.0	NA	30	⊥
	Isobutyl Alcohol	59.7	NA	30	⊥
	2-Butanone (MEK)	52.2	NA	30	High Bias
	2-Nitropropane	56.1	NA	30	NT
	Methyl Methacrylate	53.9	NA	30	⊥
	1,2-Dibromo-3-chloropropane	33.8	NA	30	⊥
	Ethyl Methacrylate	32.5	NA	30	⊥
	tert-Amyl Methyl Ether	58.0	NA	30	⊥
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	⊥
	tert-Butyl Alcohol	0.0077	0.01	NA	⊥
	Isobutyl Alcohol	0.0034	0.01	NA	⊥

Primary Review: HL 6·21·07

Secondary Review: 6/21/7

Printed: 06/21/2007 08:24:27
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611351	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:			
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Method**	

Data File:	J:\MS04\DATA\062007\0620F012.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:10	**Quant Date:**	06/20/2007 17:14	**Vial:**	12
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0706882-1 -- K0704852-002MS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1303527	10.00	OK
2	Chlorobenzene-d5	17.47	-0.01	117	995301	10.00	OK
3	1,4-Dichlorobenzene-d4	20.12	0.00	152	551754	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	12.11	0.00	0.00	113	386929	10.73	107	82-125	OK
1	1,2-Dichloroethane-d4	12.71	0.00	0.00	65	269982	11.12	111	49-142	OK
1	Toluene-d8	15.55	0.00	0.00	98	1169336	11.68	117	87-120	OK
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	424864	10.95	110	73-118	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	4.85		0.00	85	403361	10.96	11.0		
1	Chloromethane	5.34		0.00	50	412020	9.22	9.22		
1	Vinyl Chloride	5.61		0.00	62	391131	9.56	9.56		
1	Bromomethane	6.39	-0.01	0.00	94	332254	7.52	7.52		
1	Chloroethane	6.61		0.00	64	277431	9.14	9.14		
1	Dichlorofluoromethane (CFC 21	7.00		0.00	67	762478	10.39	10.4		
1	Trichlorofluoromethane	7.14		0.00	101	419325	8.89	8.89		
1	Ethyl Ether	7.66		0.00	59	192863	10.76	10.8		
1	Trichlorotrifluoroethane	8.11		0.00	151	263876	8.36	8.36		
1	1,1-Dichloroethene	8.16	-0.01	0.00	96	313865	9.79	9.79		
1	Acetone	8.23	0.01	0.00	43	204420	63.80	63.8		
1	Iodomethane	8.50		0.00	127	675722m	34.59	34.6		
1	Carbon Disulfide	8.65		0.00	76	2380679	17.86	17.9		
1	Acrolein	7.96		0.00	56	199514	90.50	90.5		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F012.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:10	**Quant Date:**	06/20/2007 17:14	**Vial:**	12
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0706882-1 -- K0704852-002MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene	8.81		0.00	41	1603657m	33.63	33.6		
1	Acetonitrile	8.76	0.01	0.00	41	491218m	307.66	308		
1	Methylene Chloride	9.03		0.00	84	389374	8.90	8.90		
1	tert-Butyl Alcohol	9.09	-0.01	0.00	59	120394	163.39	163		
1	Methyl tert-Butyl Ether	9.46		0.00	73	551332	11.51	11.5		
1	trans-1,2-Dichloroethene	9.52		0.00	96	363300	8.84	8.84		
1	n-Hexane	9.93		0.00	57	866220	20.08	20.1		
1	1,1-Dichloroethane	10.27		0.00	63	545911	8.45	8.45		
1	Vinyl Acetate	10.25		0.00	86	202151	57.20	57.2		
1	Acrylonitrile	9.45		0.00	53	252344	48.87	48.9		
1	Diisopropyl Ether	10.25		0.00	45	1783016	20.22	20.2		
1	Chloroprene	10.43		0.00	88	977233	27.52	27.5		
1	tert-Butyl Ethyl Ether	10.91		0.00	59	1386914	21.92	21.9		
1	2,2-Dichloropropane	11.33		0.00	77	429080	9.97	9.97		
1	Ethyl Acetate	11.31	-0.01	0.00	70	61900	39.77	39.8		
1	cis-1,2-Dichloroethene	11.31	-0.01	0.00	96	377273	9.01	9.01		
1	2-Butanone (MEK)	11.28		0.00	72	82890	68.59	68.6		
1	Propionitrile	11.42		0.00	54	59964	37.04	37.0		
1	Methacrylonitrile	11.69		0.00	67	226254	40.90	40.9		
1	Bromochloromethane	11.75		0.00	128	194363	9.67	9.67		
1	Chloroform	11.83		0.00	83	535847	8.65	8.65		
1	tert-Butyl Formate	11.90	-0.01	0.00	59	281091	24.07	24.1		
1	Tetrahydrofuran	11.82		0.00	42	72282	23.10	23.1		
1	1,1,1-Trichloroethane (TCA)	12.20	-0.01	0.00	97	407065	9.22	9.22		
1	Isobutyl Alcohol	12.43		0.00	43	152102	554.18	554		
1	Carbon Tetrachloride	12.49	0.01	0.00	117	345978	8.94	8.94		
1	1,1-Dichloropropene	12.45		0.00	75	416682	8.88	8.88		
1	tert-Amyl Methyl Ether	12.88		0.00	55	328601	24.62	24.6		
1	Benzene	12.82	-0.01	0.00	78	4138721	29.42	29.4		
1	1,2-Dichloroethane (EDC)	12.83		0.00	62	328961	10.73	10.7		
1	Trichloroethene (TCE)	13.78		0.00	95	311397	8.86	8.86		
1	Methyl Methacrylate	14.17		0.00	69	384887	45.65	45.7		
1	1,2-Dichloropropane	14.15		0.00	63	279343	8.79	8.79		
1	1,4-Dioxane	14.29		0.00	88	48391	571.90	572		
1	Dibromomethane	14.34		0.00	93	169802	10.03	10.0		
1	Bromodichloromethane	14.52		0.00	83	368579	9.60	9.60		
1	2-Chloroethyl Vinyl Ether				63	0d		0.34	U	
1	2-Nitropropane	14.84	-0.01	0.00	41	123364	47.33	47.3		
1	cis-1,3-Dichloropropene	15.15	-0.01	0.00	75	431216	10.06	10.1		
1	4-Methyl-2-pentanone (MIBK)	15.31	-0.01	0.00	100	115368	66.40	66.4		
1	Toluene	15.65		0.00	92	749101	9.04	9.04		
2	Ethyl Methacrylate	15.92		0.00	69	795300	43.40	43.4		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
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D: Result from dilution
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NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F012.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:10	**Quant Date:**	06/20/2007 17:14	**Vial:**	12
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0706882-1 -- K0704852-002MS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
2	n-Octane	15.66		0.00	85	133161	6.17	6.17		
2	trans-1,3-Dichloropropene	15.91		0.00	75	321202	9.82	9.82		
2	1,1,2-Trichloroethane	16.18		0.00	83	184271	10.37	10.4		
2	Tetrachloroethene (PCE)	16.40		0.00	164	276906	7.72	7.72		
2	2-Hexanone	16.44	0.01	0.00	57	91153	78.02	78.0		
2	1,3-Dichloropropane	16.42		0.00	76	371363	9.76	9.76		
2	Dibromochloromethane	16.74		0.00	129	281364	9.82	9.82		
2	1,2-Dibromoethane (EDB)	16.93	-0.01	0.00	107	236917	10.53	10.5		
2	1-Chlorohexane	17.37		0.00	55	194288**m**	6.74	6.74		
2	Chlorobenzene	17.51		0.00	112	818363	7.94	7.94		
2	Ethylbenzene	17.59		0.00	106	399951	8.04	8.04		
2	1,1,1,2-Tetrachloroethane	17.58	-0.01	0.00	131	287180	8.66	8.66		
2	m,p-Xylenes	17.72		0.00	106	986696	15.98	16.0		
2	o-Xylene	18.21		0.00	106	522066	9.28	9.28		
2	Styrene	18.22		0.00	104	839204	9.07	9.07		
2	Bromoform	18.50	-0.01	0.00	173	171859	11.84	11.8		
2	Isopropylbenzene	18.61		0.00	105	1686698	11.91	11.9		
3	cis-1,4-Dichloro-2-butene	18.68		0.00	88	207054	49.21	49.2		
3	1,1,2,2-Tetrachloroethane	18.93	-0.01	0.00	83	245090	10.73	10.7		
3	Bromobenzene	19.04		0.00	156	372404	7.88	7.88		
3	n-Propylbenzene	19.06		0.00	91	2061380	10.99	11.0		
3	trans-1,4-Dichloro-2-butene	18.99		0.00	53	193341	48.86	48.9		
3	1,2,3-Trichloropropane	19.02		0.00	110	68858	10.50	10.5		
3	2-Chlorotoluene	19.21		0.00	91	859006	7.19	7.19		
3	1,3,5-Trimethylbenzene	19.22		0.00	105	800071	6.46	6.46		
3	4-Chlorotoluene	19.32		0.00	91	796106	7.30	7.30		
3	tert-Butylbenzene	19.62	0.01	0.00	134	209239	6.50	6.50		
3	1,2,4-Trimethylbenzene	19.66	0.01	0.00	105	865054	7.03	7.03		
3	sec-Butylbenzene	19.85		0.00	105	1425596	9.02	9.02		
3	4-Isopropyltoluene	19.98		0.00	119	1232913	8.90	8.90		
3	1,3-Dichlorobenzene	20.05		0.00	146	620271	6.91	6.91		
3	1,4-Dichlorobenzene	20.14		0.00	146	623477	6.77	6.77		
3	n-Butylbenzene	20.44	-0.01	0.00	91	1365370	11.73	11.7		
3	1,2-Dichlorobenzene	20.59		0.00	146	564263	7.48	7.48		
3	1,2-Dibromo-3-chloropropane	21.51		0.00	157	46606	12.42	12.4		
3	1,3,5-Trichlorobenzene	21.73		0.00	180	1316785	23.09	23.1		
3	1,2,4-Trichlorobenzene	22.56		0.00	180	260054	6.06	6.06		
3	Hexachlorobutadiene	22.71		0.00	225	50602	3.07	3.07		
3	Naphthalene	22.95	-0.01	0.00	128	1005116**m**	21.00	21.0		
3	1,2,3-Trichlorobenzene	23.30		0.00	180	228496	7.40	7.40		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F012.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:10	**Quant Date:**	06/20/2007 17:14	**Vial:**	12
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0706882-1 -- K0704852-002MS			**Soln Conc. Units:**	PPB

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

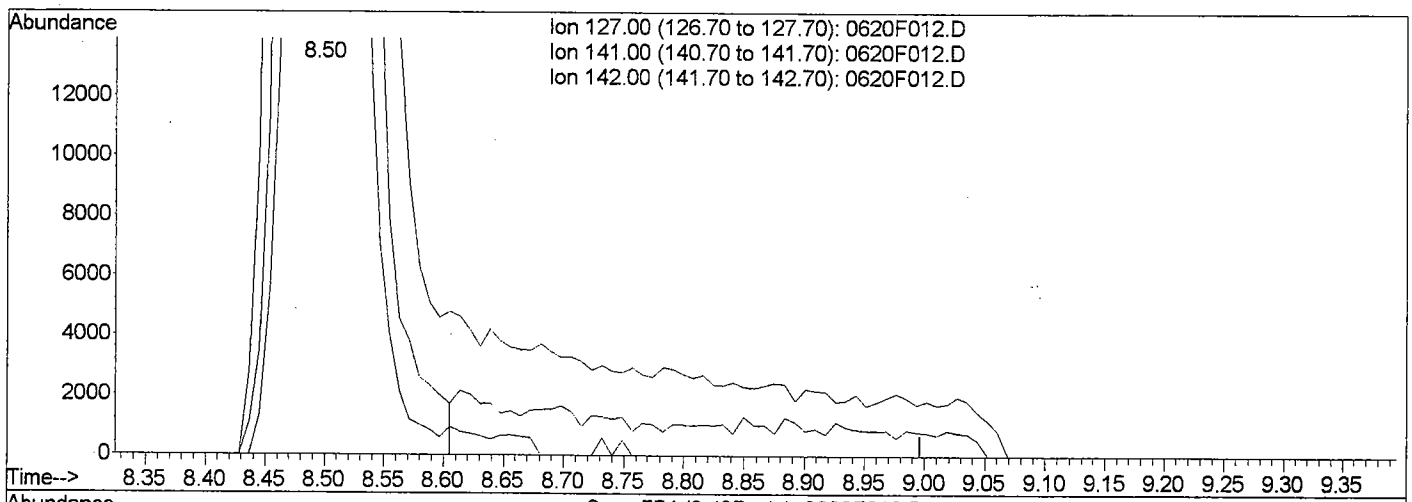
Quantitation Report (Qedit)

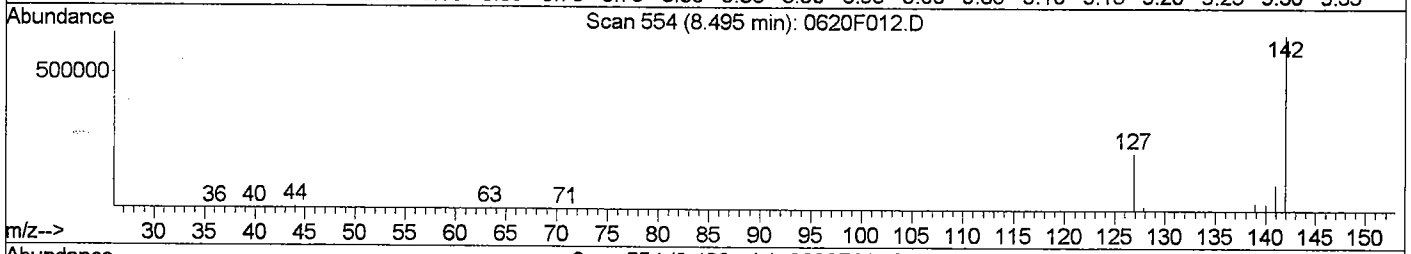
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:36 2007

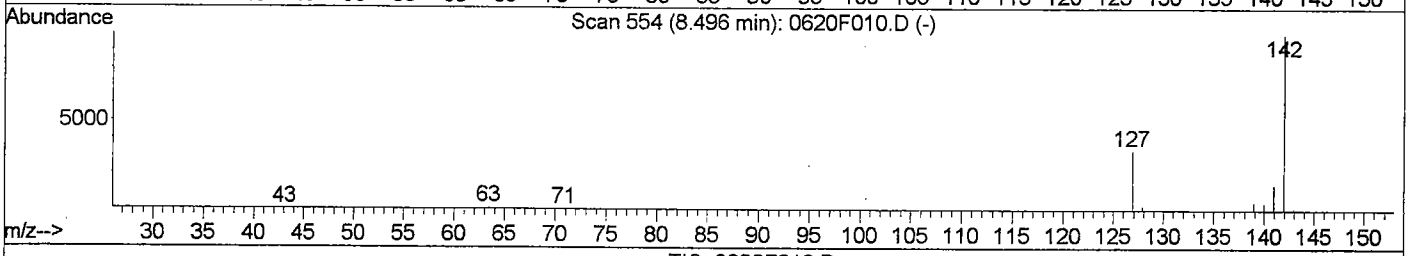
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(13) Iodomethane (T)

8.50min 33.23PPB

response 646917

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	44.30
142.00	293.10	303.12
0.00	0.00	0.00

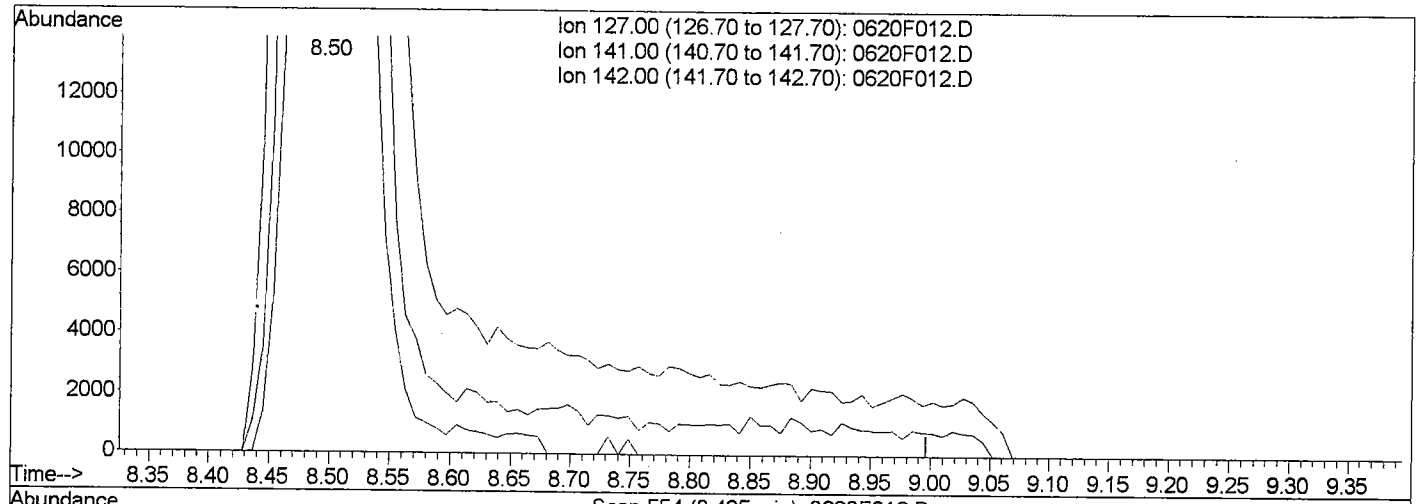
Quantitation Report (Qedit)

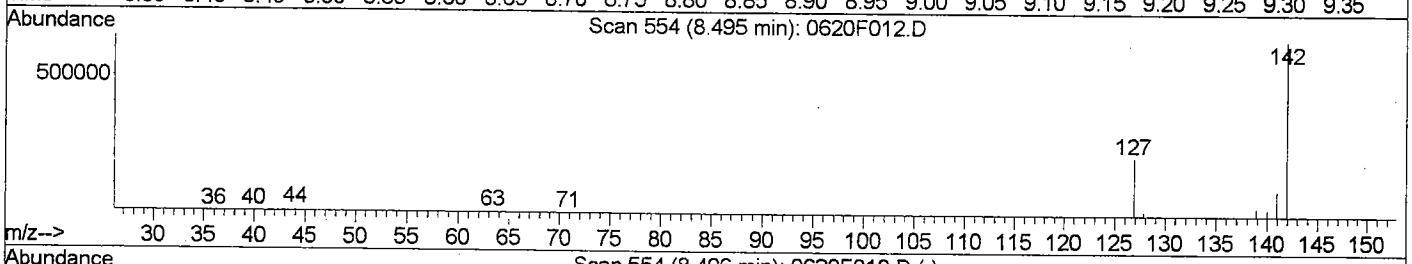
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:37 2007

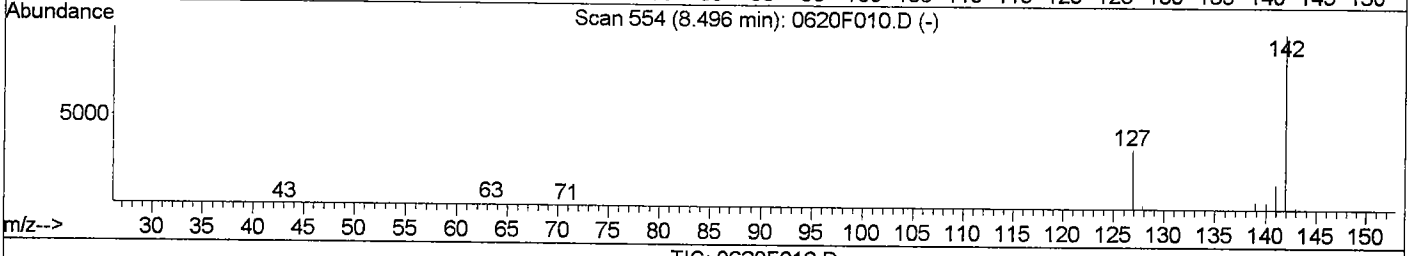
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(13) Iodomethane (T)

8.50min 34.59PPB m

response 675722

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	44.30
142.00	293.10	303.12
0.00	0.00	0.00

Peak Tailing
HL 6.20.07

0620F012.D 052107MS04-8260.M Wed Jun 20 16:37:35 2007

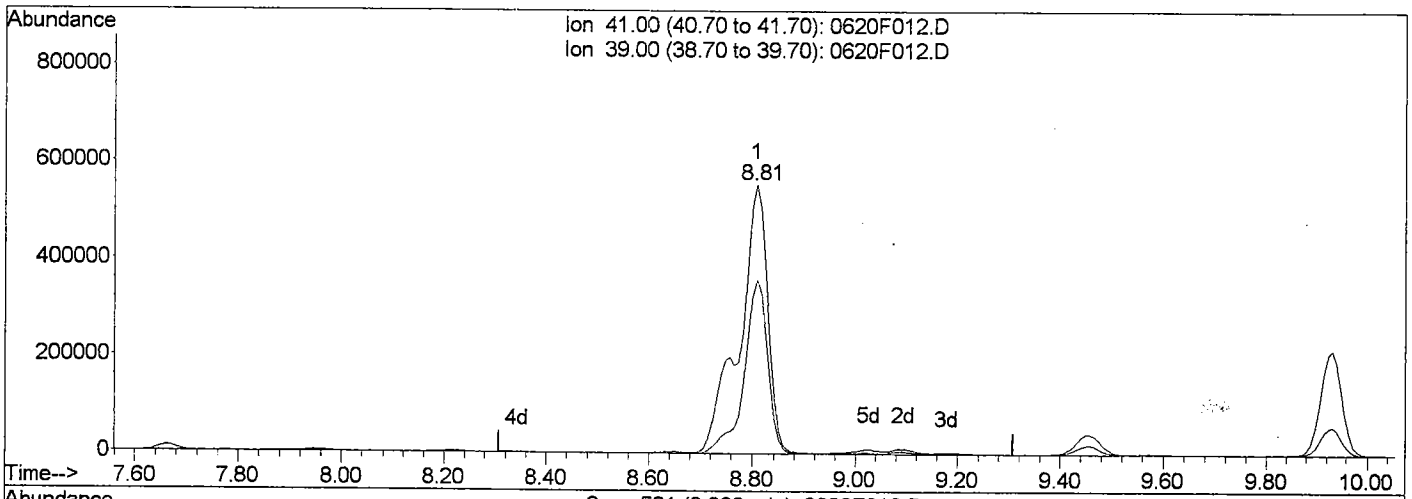
Quantitation Report (Qedit)

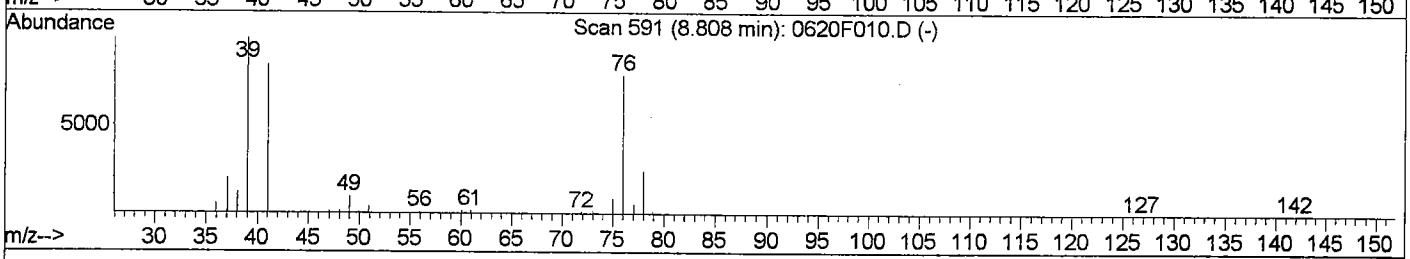
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:37 2007

Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration





TIC: 0620F012.D

(17) 3-Cloro-1-propene (T)

8.81min 43.97PPB

response 2096697

Ion	Exp%	Act%
41.00	100	100
39.00	62.70	64.62
0.00	0.00	0.00
0.00	0.00	0.00

0620F012.D 052107MS04-8260.M Wed Jun 20 16:37:42 2007

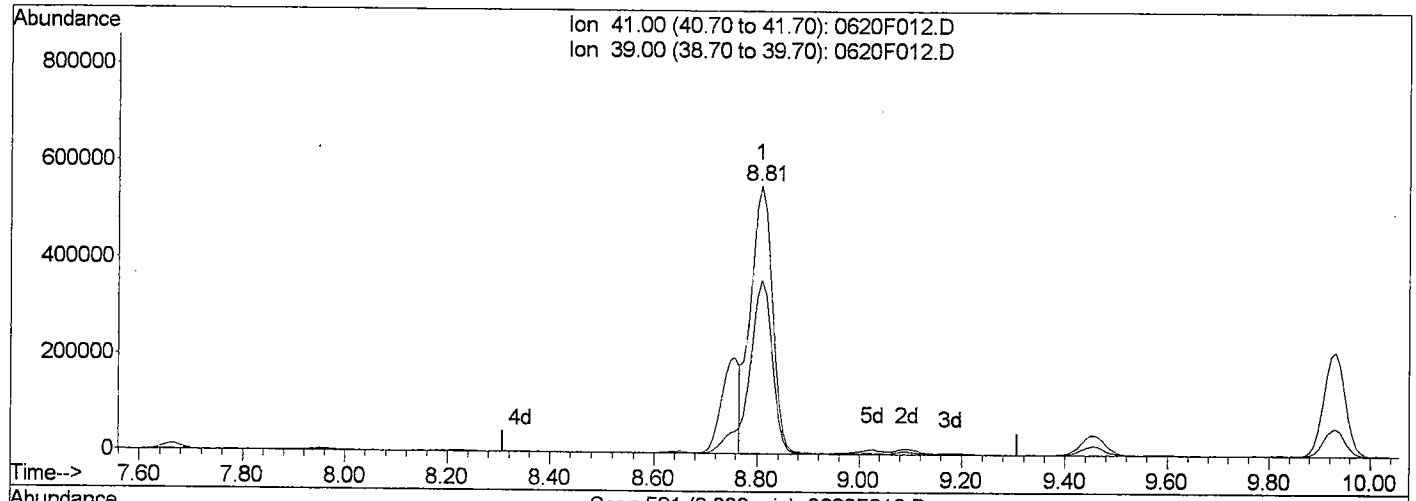
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:37 2007

Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration



TIC: 0620F012.D

(17) 3-Cloro-1-propene (T)

8.81min 33.63PPB m

response 1603657

Ion	Exp%	Act%
41.00	100	100
39.00	62.70	64.75
0.00	0.00	0.00
0.00	0.00	0.00

removed shoulder
HL 6·20·07

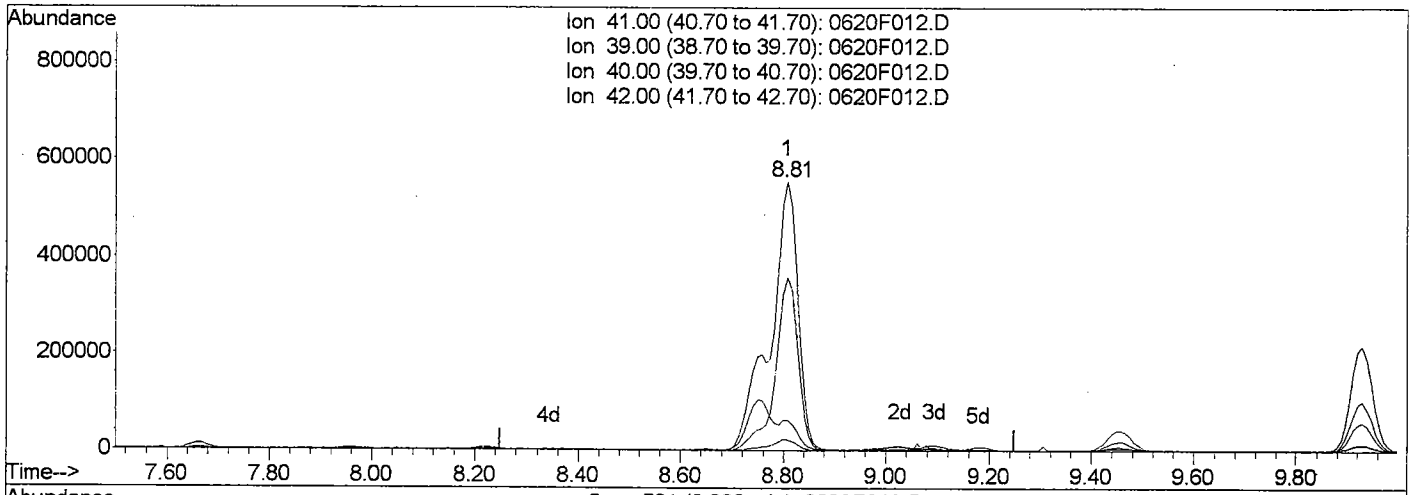
0620F012.D 052107MS04-8260.M Wed Jun 20 16:37:50 2007

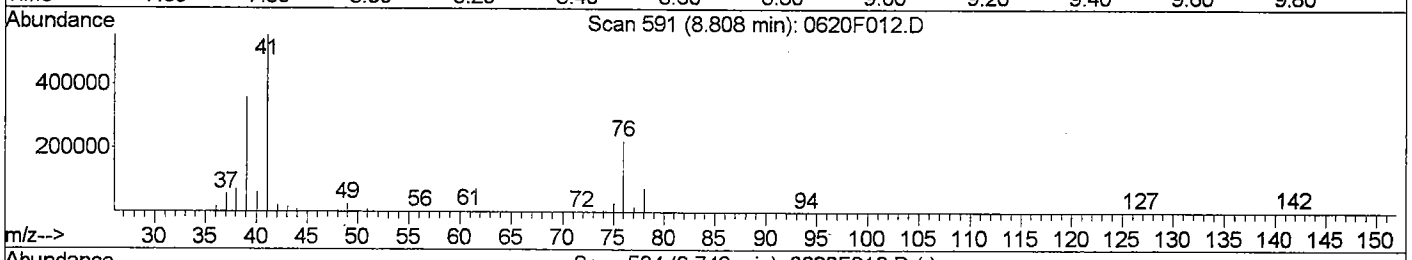
Quantitation Report (Qedit)

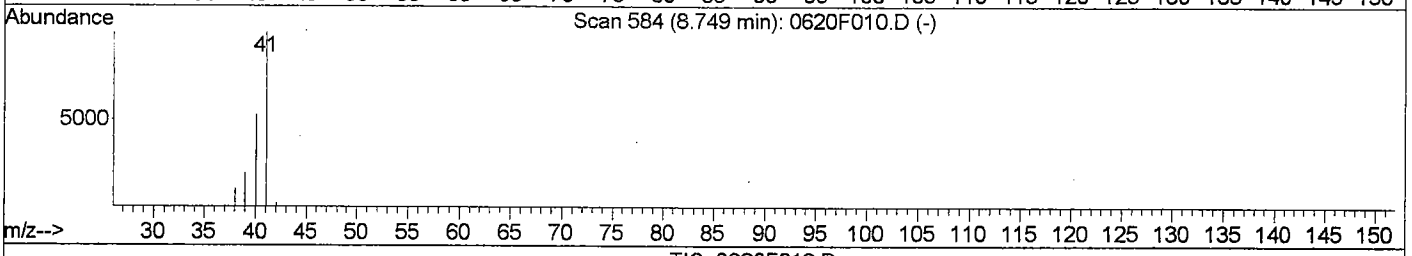
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:37 2007

Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(18) Acetonitrile (T)

8.81min 1313.20PPB

response 2096697

Ion	Exp%	Act%
41.00	100	100
39.00	20.10	64.62#
40.00	52.90	10.89#
42.00	2.90	3.88

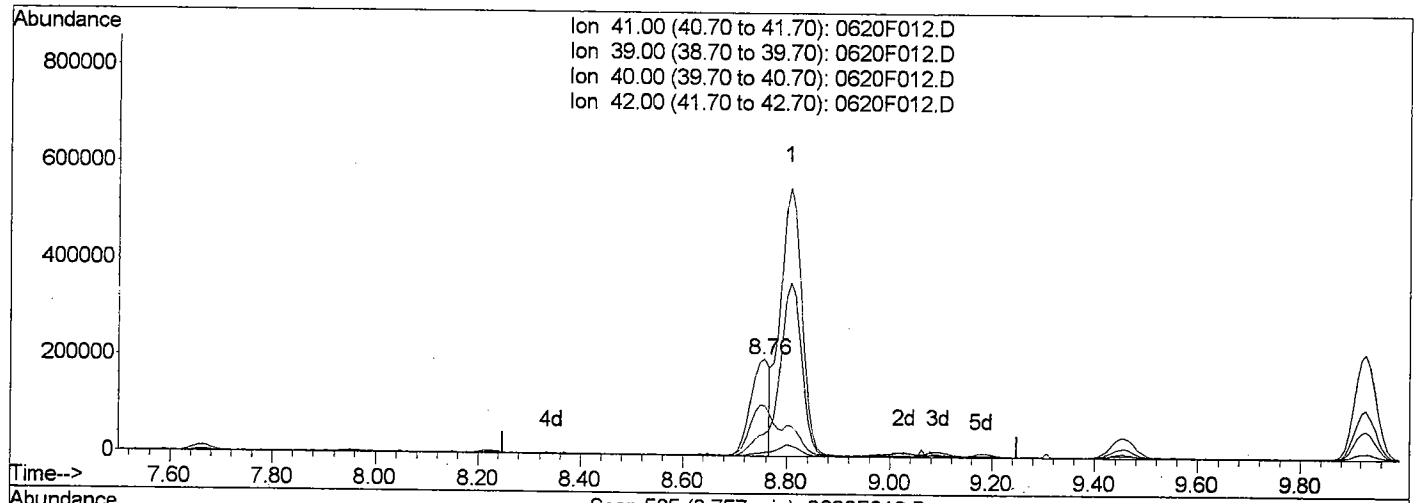
Quantitation Report (Qedit)

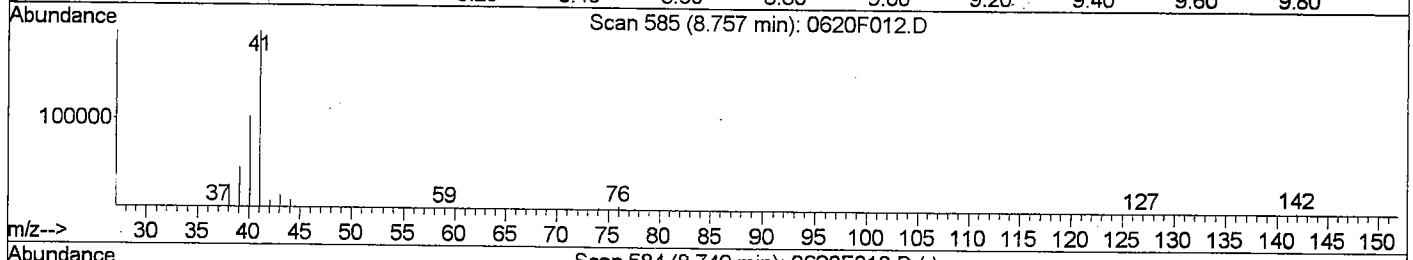
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:38 2007

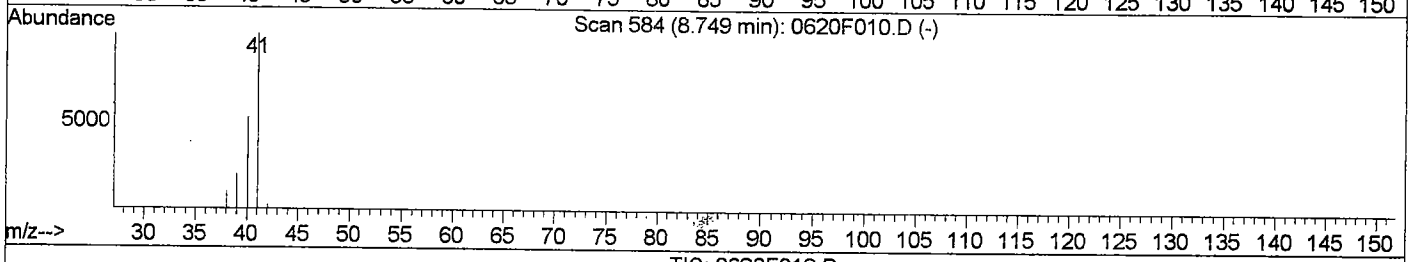
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(18) Acetonitrile (T)

8.76min 307.66PPB m

response 491218

Ion	Exp%	Act%
41.00	100	100
39.00	20.10	22.83
40.00	52.90	52.03
42.00	2.90	3.84

wrong peak
HC 6.20.07

0620F012.D 052107MS04-8260.M Wed Jun 20 16:38:09 2007

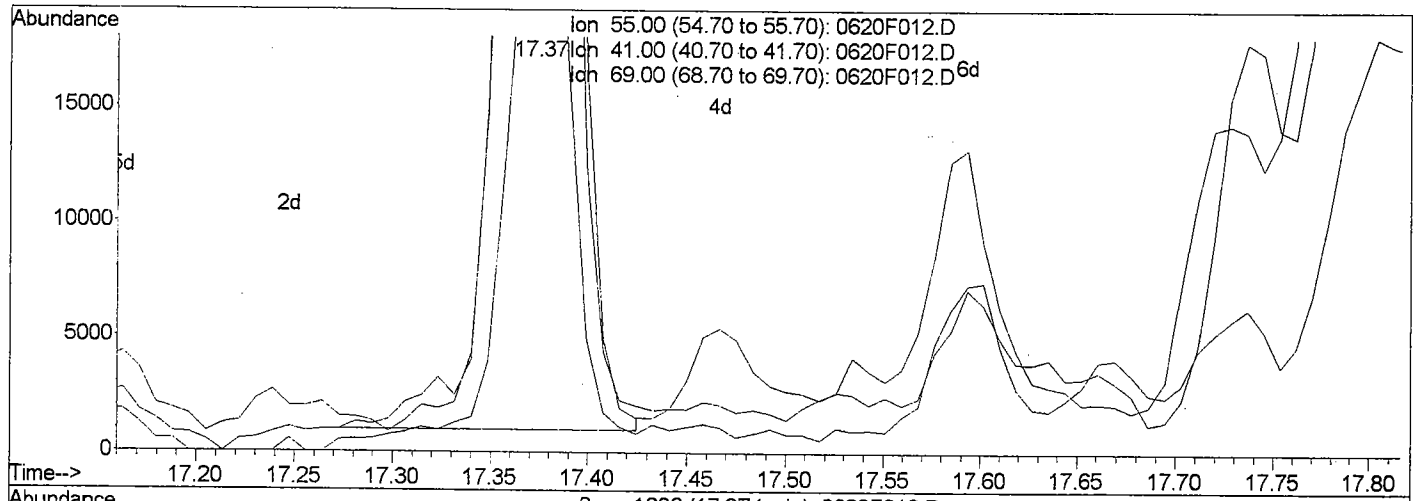
Quantitation Report (Qedit)

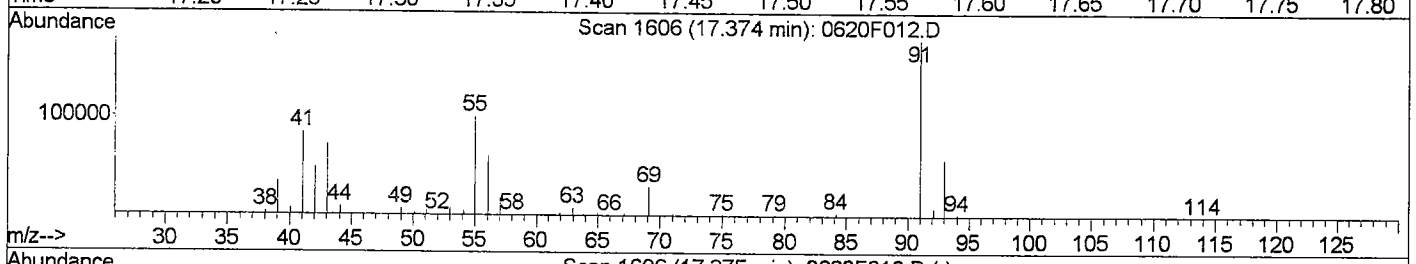
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:40 2007

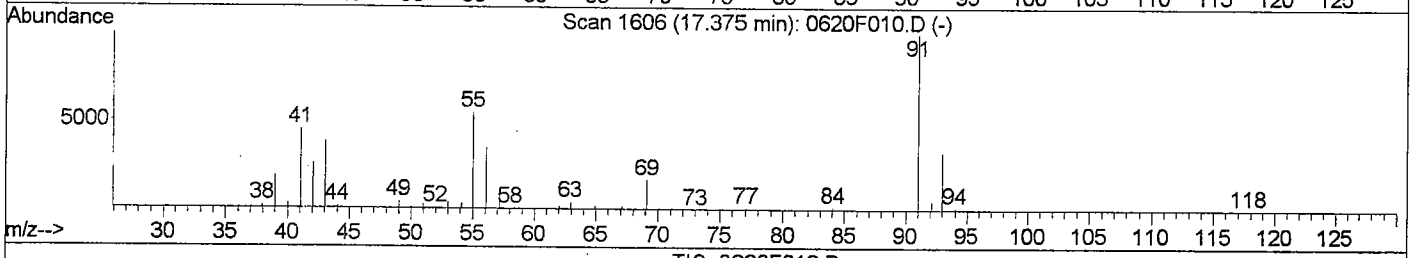
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration







TIC: 0620F012.D

(73) 1-Chlorohexane (T)

17.37min 6.87PPB

response 198208

Ion	Exp%	Act%
55.00	100	100
41.00	82.10	82.36
69.00	30.70	29.74
0.00	0.00	0.00

0620F012.D 052107MS04-8260.M Wed Jun 20 17:14:47 2007

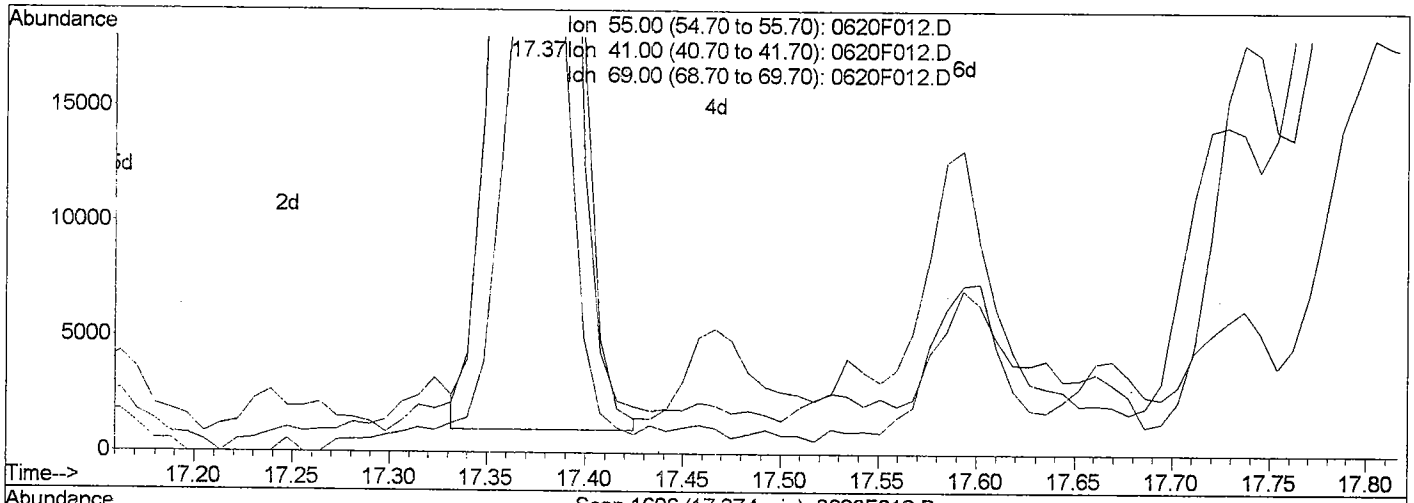
Quantitation Report (Qedit)

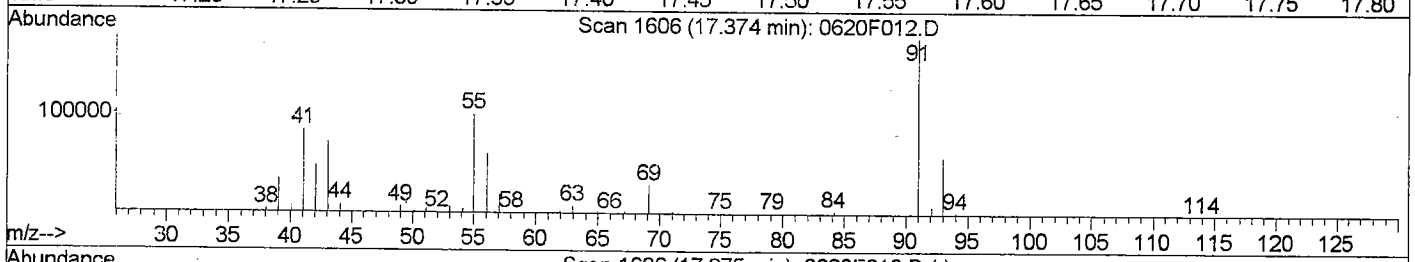
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:14 2007

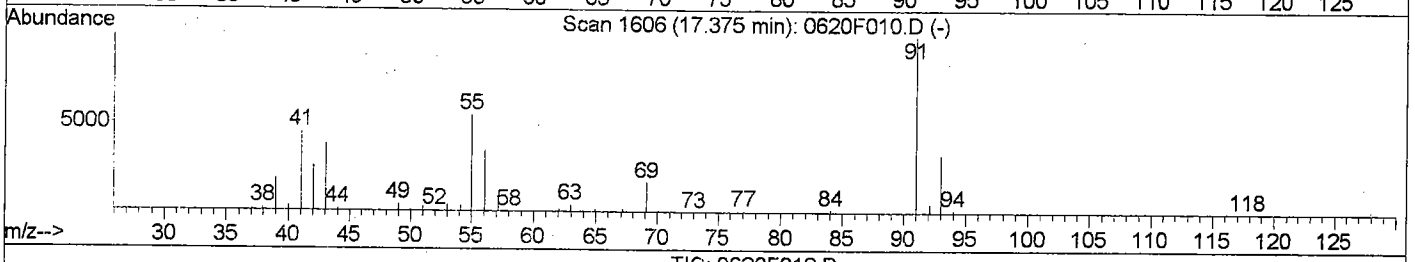
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration







TIC: 0620F012.D

(73) 1-Chlorohexane (T)

17.37min 6.74PPB m

response 194288

Ion	Exp%	Act%
55.00	100	100
41.00	82.10	83.57
69.00	30.70	29.46
0.00	0.00	0.00

removed shoulder
HL 6·20·07

0620F012.D 052107MS04-8260.M Wed Jun 20 17:14:54 2007

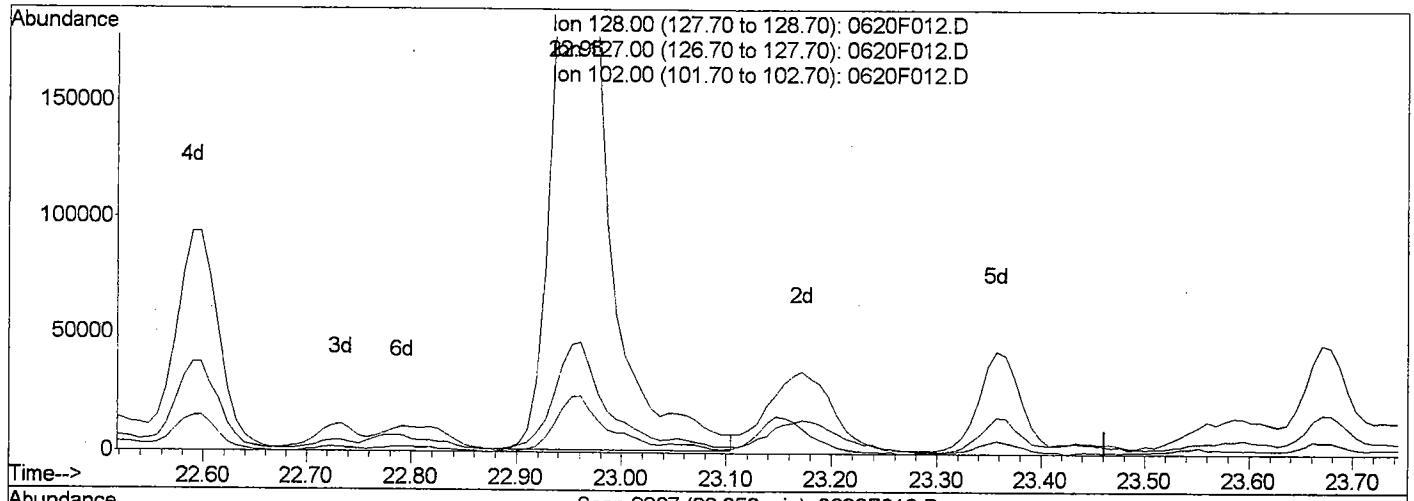
Quantitation Report (Qedit)

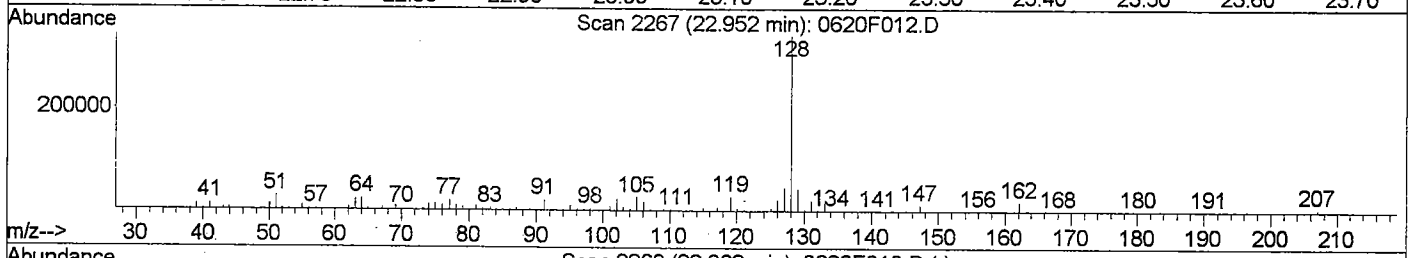
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:38 2007

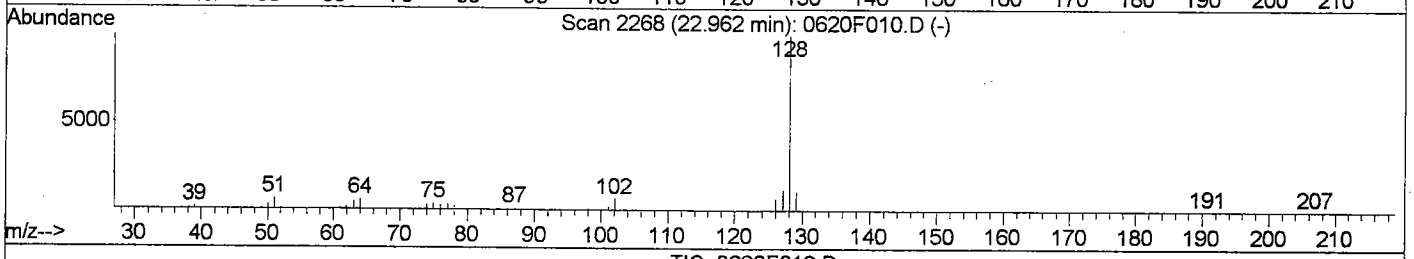
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(105) Naphthalene (MT)

22.95min 21.70PPB

response 1038845

Ion	Exp%	Act%
128.00	100	100
127.00	11.80	12.91
102.00	6.50	6.80
0.00	0.00	0.00

0620F012.D 052107MS04-8260.M Wed Jun 20 16:40:08 2007

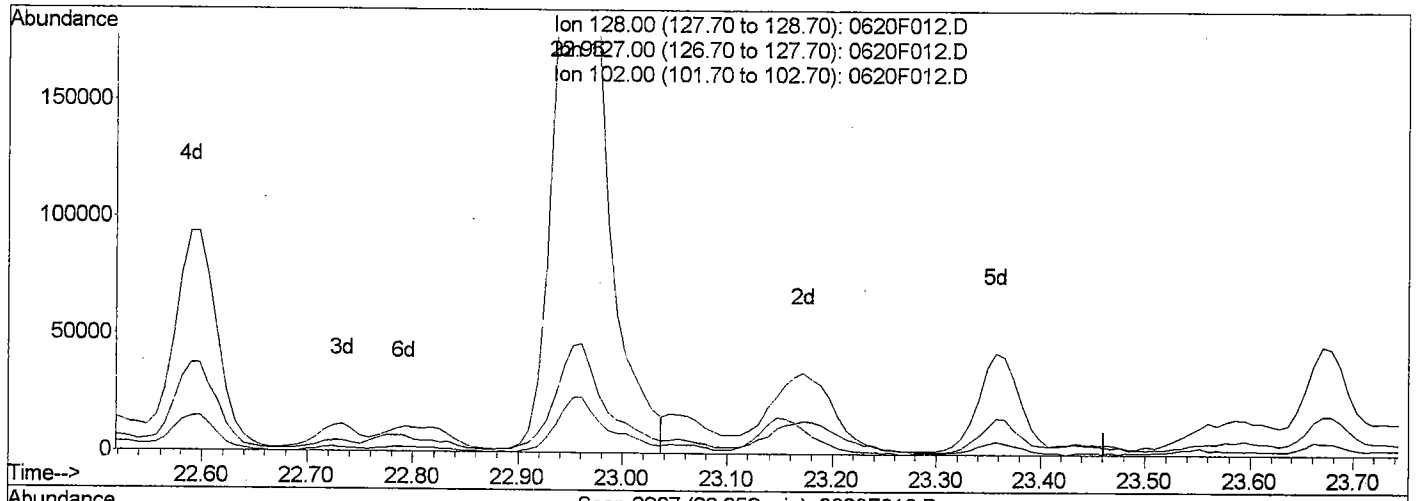
Quantitation Report (Qedit)

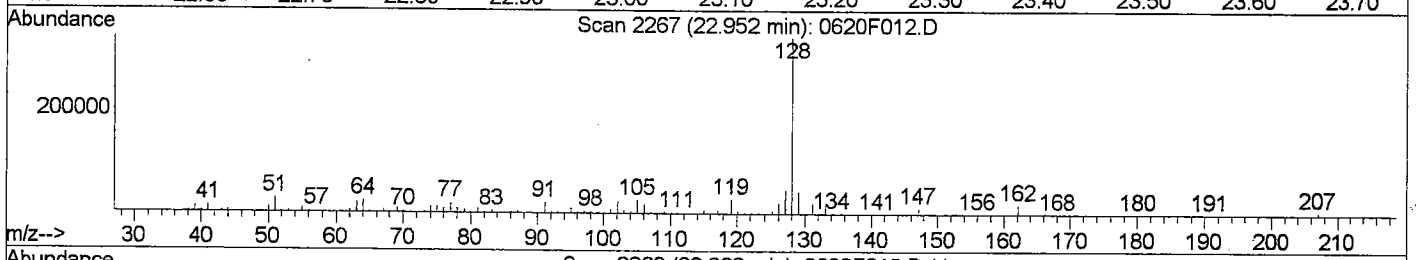
Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:40 2007

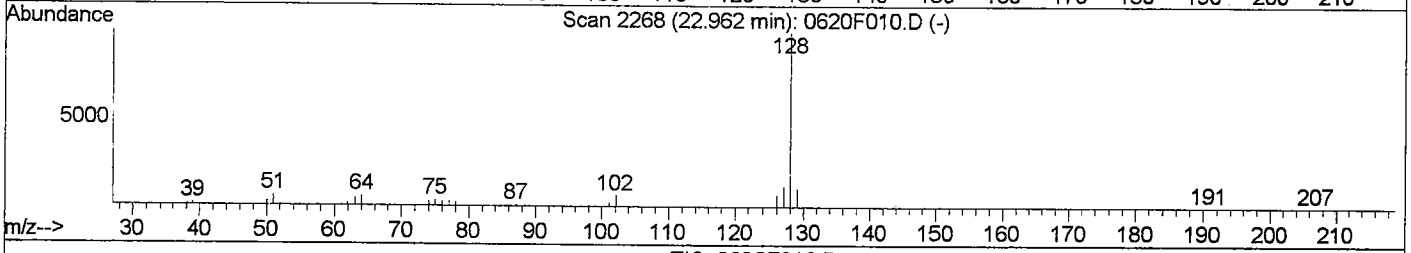
Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F012.D

(105) Naphthalene (MT)

22.95min 21.00PPB m

response 1005116

Ion	Exp%	Act%
128.00	100	100
127.00	11.80	13.21
102.00	6.50	6.78
0.00	0.00	0.00

removed shoulder
HC 6·20·07

0620F012.D 052107MS04-8260.M Wed Jun 20 16:40:16 2007

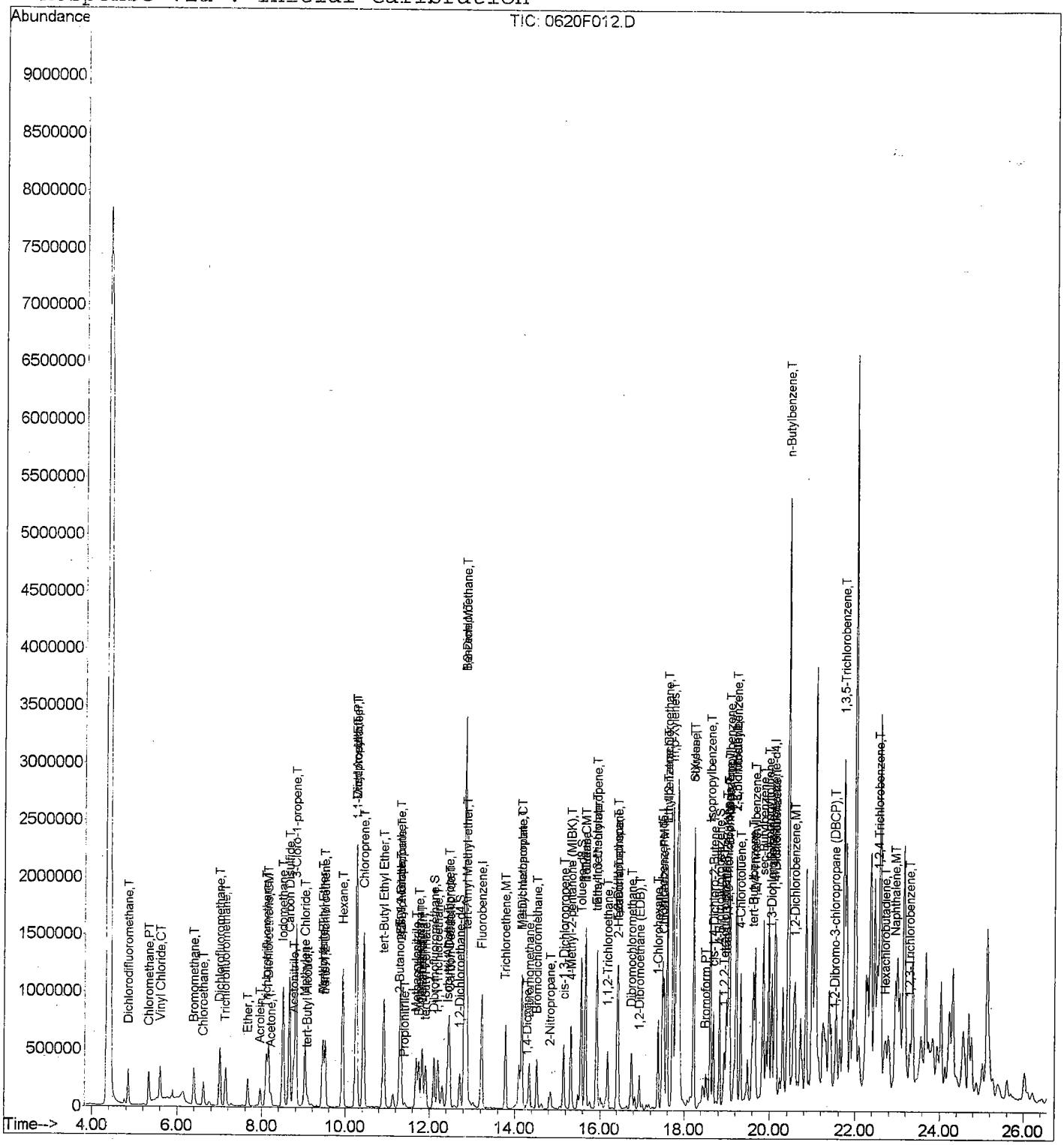
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F012.D
Acq On : 20 Jun 2007 4:10 pm
Sample : K0704852-002 MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:14 2007

Vial: 12
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CLDMS	**Units:**	ug/L
Lab Code:	KWG0706882-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**11.2**		2.0	1	06/20/07	06/20/07	KWG0706882	*
Vinyl Acetate	**57.5**		10	1	06/20/07	06/20/07	KWG0706882	*
2-Chloroethyl Vinyl Ether	ND	U	10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	**8.72**		1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	**8.96**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	**6.85**		1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	**8.68**		1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	**59.4**		10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	**9.54**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	**16.9**		5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	**8.61**		4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	**8.37**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	**7.94**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	**69.0**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	**8.65**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	**7.96**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	**8.22**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	**7.71**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	**9.33**		0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	**28.3**		0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	**8.40**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	**8.65**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	**8.86**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	**79.4**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	**9.96**		0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	**8.86**		0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	**9.41**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	**10.2**		0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	**66.9**		10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	**7.09**		0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	**9.21**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	**7.68**		0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	**7.79**		0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Volatile Organic Compounds

Sample Name:	1349MW100CLDMS	**Units:**	ug/L
Lab Code:	KWG0706882-2	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**24.3**		1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	**8.63**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	**10.6**		1.0	1	06/20/07	06/20/07	KWG0706882	*
1,1,2,2-Tetrachloroethane	**11.0**		0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	100	76-114	06/20/07	Acceptable
Toluene-d8	116	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	104	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F013.D
Lab ID: KWG0706882-2 -- K0704852-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 06/20/2007 16:43
Date Quantitated: 06/20/2007 17:14
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0006	0.01	NA	NT
	tert-Butyl Alcohol	0.0057	0.01	NA	↓
	Isobutyl Alcohol	0.0021	0.01	NA	↓
	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
Continuing Calibration Recovery	Propionitrile	31.4	NA	30	NT
	Acrylonitrile	33.1	NA	30	↓
	Vinyl Acetate	45.4	NA	40	High Bias
	4-Methyl-2-pentanone (MIBK)	61.5	NA	30	↓
	Tetrahydrofuran	51.2	NA	30	NT
	Methacrylonitrile	41.5	NA	30	↓
	Ethyl Acetate	40.1	NA	30	↓
	cis-1,4-Dichloro-2-butene	44.3	NA	30	↓

Primary Review: HC 6.21.07

Secondary Review: 6/21/07

Printed: 06/21/2007 08:24:31
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS04\DATA\062007\0620F013.D
Lab ID: KWG0706882-2 -- K0704852-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 06/20/2007 16:43
Date Quantitated: 06/20/2007 17:14
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Methyl tert-Butyl Ether	42.1	NA	30	High Bias
	2-Hexanone	54.1	NA	30	⊥
	tert-Butyl Ethyl Ether	37.5	NA	30	NT
	Acetone	36.0	NA	30	High Bias
	Bromoform	38.9	NA	30	⊥
	tert-Butyl Alcohol	36.2	NA	30	NT
	tert-Butyl Formate	69.0	NA	30	⊥
	Isobutyl Alcohol	59.7	NA	30	⊥
	2-Butanone (MEK)	52.2	NA	30	High Bias
	2-Nitropropane	56.1	NA	30	NT
	Methyl Methacrylate	53.9	NA	30	⊥
	1,2-Dibromo-3-chloropropane	33.8	NA	30	⊥
	Ethyl Methacrylate	32.5	NA	30	⊥
	tert-Amyl Methyl Ether	58.0	NA	30	⊥
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	⊥
	tert-Butyl Alcohol	0.0077	0.01	NA	⊥
	Isobutyl Alcohol	0.0034	0.01	NA	⊥

Primary Review: HZ 6 21 07

Secondary Review: [illegible]

Printed: 06/21/2007 08:24:31
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611352	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:			
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:	J:\MS04\DATA\062007\0620F016.D	**Quant based on Method**	

Data File:	J:\MS04\DATA\062007\0620F013.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:43	**Quant Date:**	06/20/2007 17:14	**Vial:**	13
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0706882-2 -- K0704852-002DMS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1552530	10.00	OK
2	Chlorobenzene-d5	17.48	0.00	117	1166458	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	602058	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	12.11	0.00	0.00	113	430864	10.03	100	82-125	OK
1	1,2-Dichloroethane-d4	12.71	0.00	0.00	65	288330	9.97	100	49-142	OK
1	Toluene-d8	15.55	0.00	0.00	98	1388269	11.64	116	87-120	OK
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	474725	10.44	104	73-118	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	4.85		0.00	85	412973	9.42	9.42		
1	Chloromethane	5.34		0.00	50	464215	8.72	8.72		
1	Vinyl Chloride	5.61		0.00	62	436550	8.96	8.96		
1	Bromomethane	6.40		0.00	94	360393	6.85	6.85		
1	Chloroethane	6.62	0.01	0.00	64	314037	8.68	8.68		
1	Dichlorofluoromethane (CFC 21	7.00		0.00	67	840828	9.62	9.62		
1	Trichlorofluoromethane	7.14		0.00	101	437401	7.78	7.78		
1	Ethyl Ether	7.66		0.00	59	232940	10.91	10.9		
1	Trichlorotrifluoroethane	8.11		0.00	151	279229	7.43	7.43		
1	1,1-Dichloroethene	8.16	-0.01	0.00	96	364084	9.54	9.54		
1	Acetone	8.22		0.00	43	226859	59.44	59.4		
1	Iodomethane	8.50		0.00	127	702175m	30.52	30.5		
1	Carbon Disulfide	8.65		0.00	76	2686039	16.92	16.9		
1	Acrolein	7.96		0.00	56	250653	95.46	95.5		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F013.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:43	**Quant Date:**	06/20/2007 17:14	**Vial:**	13
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0706882-2 -- K0704852-002DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene	8.81		0.00	41	1918972m	33.79	33.8		
1	Acetonitrile	8.75		0.00	41	639873m	336.49	336		
1	Methylene Chloride	9.03		0.00	84	448891	8.61	8.61		
1	tert-Butyl Alcohol	9.09	-0.01	0.00	59	141424	161.14	161		
1	Methyl tert-Butyl Ether	9.45	-0.01	0.00	73	639936	11.22	11.2		
1	trans-1,2-Dichloroethene	9.51	-0.01	0.00	96	409726	8.37	8.37		
1	n-Hexane	9.93		0.00	57	872531	16.98	17.0		
1	1,1-Dichloroethane	10.27		0.00	63	611262	7.94	7.94		
1	Vinyl Acetate	10.25		0.00	86	242193	57.53	57.5		
1	Acrylonitrile	9.45		0.00	53	304586	49.53	49.5		
1	Diisopropyl Ether	10.25		0.00	45	2156073	20.53	20.5		
1	Chloroprene	10.42	-0.01	0.00	88	1123879	26.57	26.6		
1	tert-Butyl Ethyl Ether	10.91		0.00	59	1630755	21.64	21.6		
1	2,2-Dichloropropane	11.33		0.00	77	454302	8.86	8.86		
1	Ethyl Acetate	11.31	-0.01	0.00	70	74211	40.03	40.0		
1	cis-1,2-Dichloroethene	11.32		0.00	96	431430	8.65	8.65		
1	2-Butanone (MEK)	11.27	-0.01	0.00	72	99232	68.95	69.0		
1	Propionitrile	11.43	0.01	0.00	54	76484	39.67	39.7		
1	Methacrylonitrile	11.70	0.01	0.00	67	271270	41.17	41.2		
1	Bromochloromethane	11.76	0.01	0.00	128	214062	8.94	8.94		
1	Chloroform	11.83		0.00	83	587219	7.96	7.96		
1	tert-Butyl Formate	11.91		0.00	59	257532	18.51	18.5		
1	Tetrahydrofuran	11.81	-0.01	0.00	42	90635	24.32	24.3		
1	1,1,1-Trichloroethane (TCA)	12.20	-0.01	0.00	97	432226	8.22	8.22		
1	Isobutyl Alcohol	12.42	-0.01	0.00	43	202999	621.00	621		
1	Carbon Tetrachloride	12.48		0.00	117	355684	7.71	7.71		
1	1,1-Dichloropropene	12.46	0.01	0.00	75	474878	8.50	8.50		
1	tert-Amyl Methyl Ether	12.87	-0.01	0.00	55	359945	22.65	22.7		
1	Benzene	12.82	-0.01	0.00	78	4746019	28.32	28.3		
1	1,2-Dichloroethane (EDC)	12.83		0.00	62	340866	9.33	9.33		
1	Trichloroethene (TCE)	13.78		0.00	95	351665	8.40	8.40		
1	Methyl Methacrylate	14.17		0.00	69	462814	46.09	46.1		
1	1,2-Dichloropropane	14.15		0.00	63	327435	8.65	8.65		
1	1,4-Dioxane	14.30	0.01	0.00	88	57860	574.14	574		
1	Dibromomethane	14.34		0.00	93	193619	9.60	9.60		
1	Bromodichloromethane	14.52		0.00	83	404925	8.86	8.86		
1	2-Chloroethyl Vinyl Ether				63	0d		0.34	U	
1	2-Nitropropane	14.84	-0.01	0.00	41	124436	40.08	40.1		
1	cis-1,3-Dichloropropene	15.15	-0.01	0.00	75	508370	9.96	9.96		
1	4-Methyl-2-pentanone (MIBK)	15.31	-0.01	0.00	100	138358	66.86	66.9		
1	Toluene	15.65		0.00	92	873646	8.86	8.86		
2	Ethyl Methacrylate	15.92		0.00	69	965380	44.95	45.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F013.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:43	**Quant Date:**	06/20/2007 17:14	**Vial:**	13
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0706882-2 -- K0704852-002DMS			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
2	n-Octane	15.66		0.00	85	87679	3.47	3.47	J	
2	trans-1,3-Dichloropropene	15.90	-0.01	0.00	75	360722	9.41	9.41		
2	1,1,2-Trichloroethane	16.18		0.00	83	212681	10.21	10.2		
2	Tetrachloroethene (PCE)	16.41	0.01	0.00	164	298049	7.09	7.09		
2	2-Hexanone	16.43		0.00	57	108753	79.43	79.4		
2	1,3-Dichloropropane	16.41	-0.01	0.00	76	430728	9.66	9.66		
2	Dibromochloromethane	16.74		0.00	129	309194	9.21	9.21		
2	1,2-Dibromoethane (EDB)	16.93	-0.01	0.00	107	266654	10.11	10.1		
2	1-Chlorohexane	17.38	0.01	0.00	55	211009**m**	6.24	6.24		
2	Chlorobenzene	17.51		0.00	112	927718	7.68	7.68		
2	Ethylbenzene	17.59		0.00	106	454151	7.79	7.79		
2	1,1,1,2-Tetrachloroethane	17.59		0.00	131	309699	7.97	7.97		
2	m,p-Xylenes	17.72		0.00	106	1127676	15.58	15.6		
2	o-Xylene	18.21		0.00	106	573237	8.69	8.69		
2	Styrene	18.22		0.00	104	935824	8.63	8.63		
2	Bromoform	18.51		0.00	173	180434	10.61	10.6		
2	Isopropylbenzene	18.61		0.00	105	1828535	11.01	11.0		
3	cis-1,4-Dichloro-2-butene	18.68		0.00	88	215832	47.01	47.0		
3	1,1,2,2-Tetrachloroethane	18.93	-0.01	0.00	83	273407	10.97	11.0		
3	Bromobenzene	19.04		0.00	156	404959	7.85	7.85		
3	n-Propylbenzene	19.06		0.00	91	2185154	10.67	10.7		
3	trans-1,4-Dichloro-2-butene	18.98	-0.01	0.00	53	205066**m**	47.49	47.5		
3	1,2,3-Trichloropropane	19.01	-0.01	0.00	110	77291	10.81	10.8		
3	2-Chlorotoluene	19.21		0.00	91	921296	7.06	7.06		
3	1,3,5-Trimethylbenzene	19.22		0.00	105	832768	6.17	6.17		
3	4-Chlorotoluene	19.33	0.01	0.00	91	859476	7.22	7.22		
3	tert-Butylbenzene	19.61		0.00	134	206094	5.87	5.87		
3	1,2,4-Trimethylbenzene	19.66	0.01	0.00	105	910101	6.78	6.78		
3	sec-Butylbenzene	19.85		0.00	105	1387987	8.05	8.05		
3	4-Isopropyltoluene	19.98		0.00	119	1208985	7.99	7.99		
3	1,3-Dichlorobenzene	20.05		0.00	146	648435	6.62	6.62		
3	1,4-Dichlorobenzene	20.14		0.00	146	659862	6.57	6.57		
3	n-Butylbenzene	20.44	-0.01	0.00	91	1348056	10.61	10.6		
3	1,2-Dichlorobenzene	20.59		0.00	146	597723	7.26	7.26		
3	1,2-Dibromo-3-chloropropane	21.50	-0.01	0.00	157	50166	12.25	12.3		
3	1,3,5-Trichlorobenzene	21.73		0.00	180	1199230	19.27	19.3		
3	1,2,4-Trichlorobenzene	22.56		0.00	180	247970	5.29	5.29		
3	Hexachlorobutadiene	22.71		0.00	225	33394	1.86	1.86	J	
3	Naphthalene	22.96		0.00	128	1036832	19.85	19.9		
3	1,2,3-Trichlorobenzene	23.29	-0.01	0.00	180	214328	6.36	6.36		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F013.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 16:43	**Quant Date:**	06/20/2007 17:14	**Vial:**	13
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0706882-2 -- K0704852-002DMS			**Soln Conc. Units:**	PPB

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

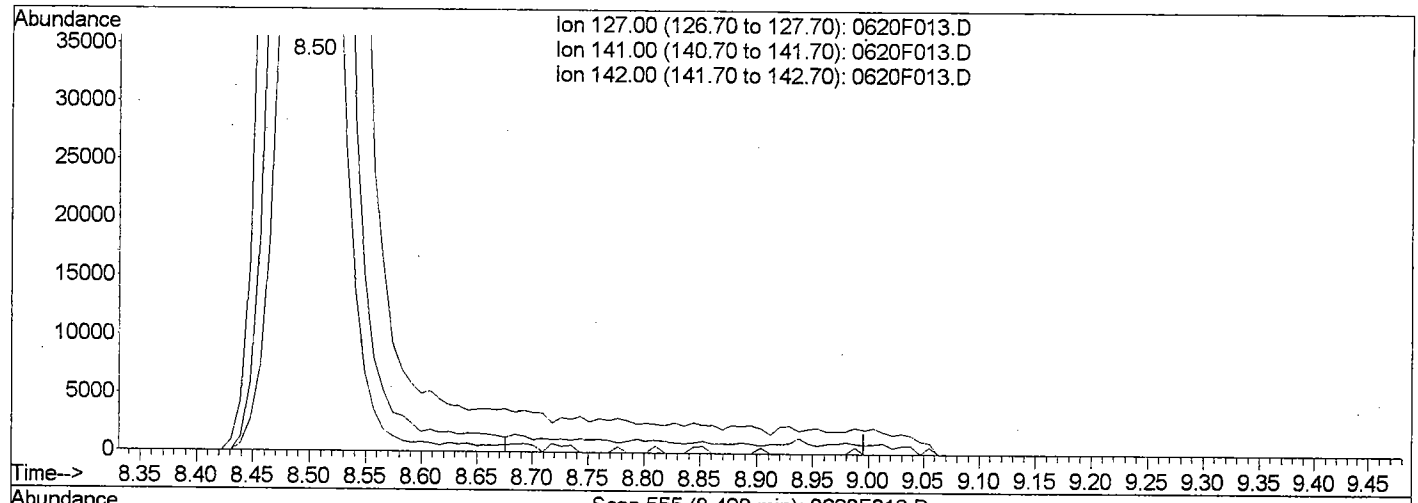
Quantitation Report (Qedit)

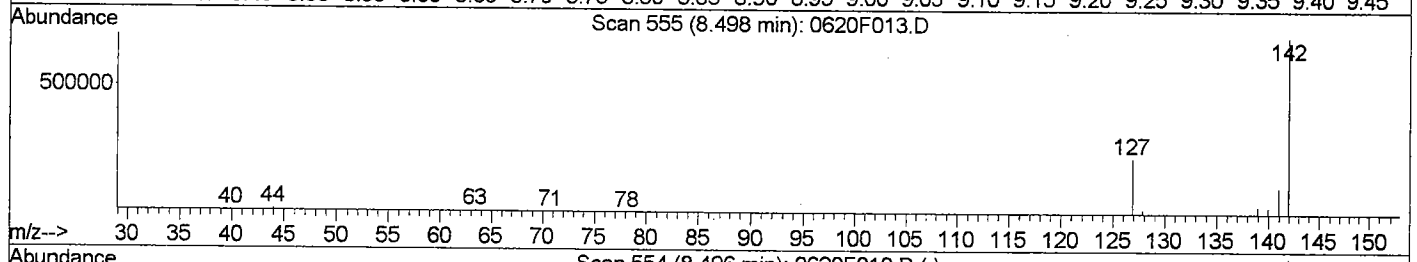
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:11 2007

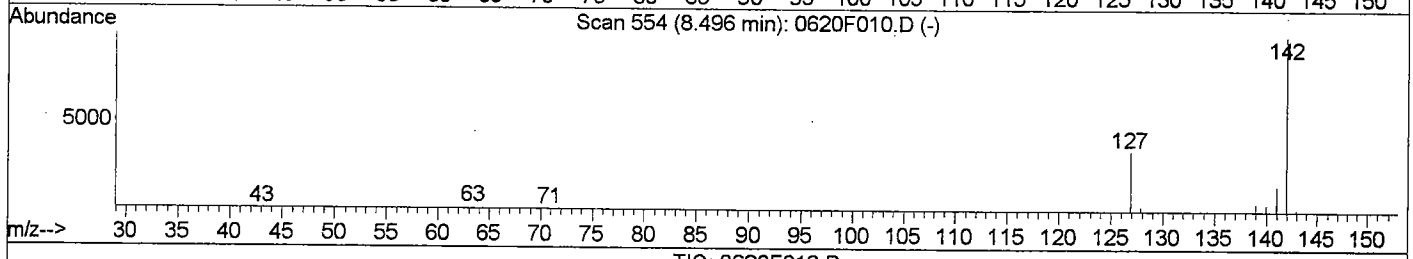
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F013.D

(13) Iodomethane (T)

8.50min 29.68PPB

response 681167

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	46.30
142.00	293.10	318.14
0.00	0.00	0.00

0620F013.D 052107MS04-8260.M Wed Jun 20 17:11:55 2007

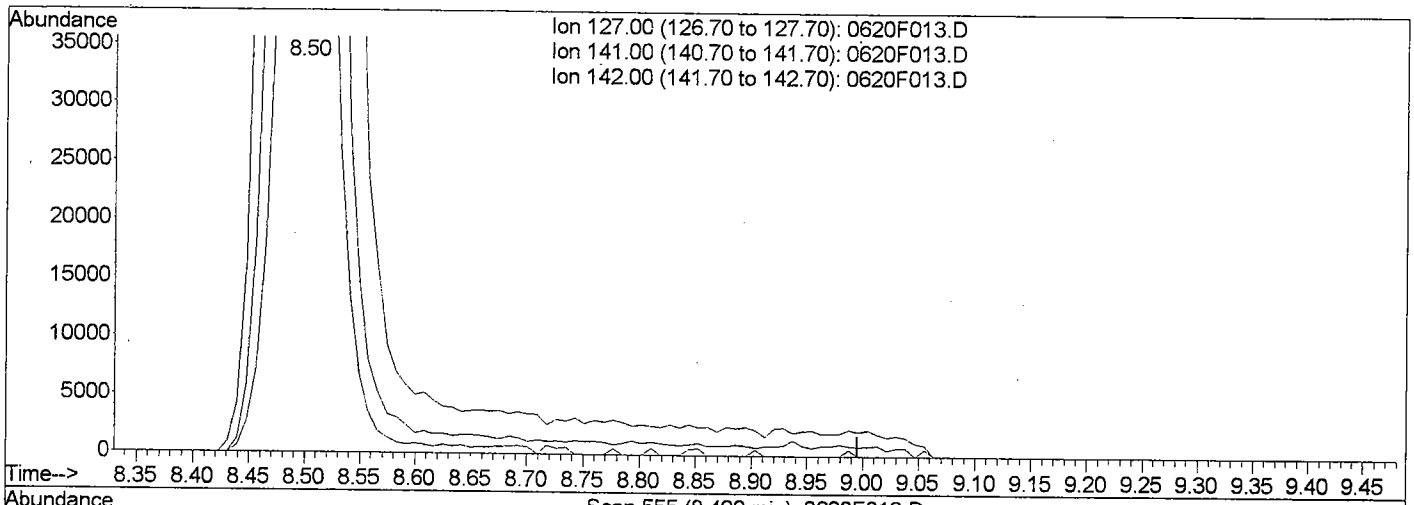
Quantitation Report (Qedit)

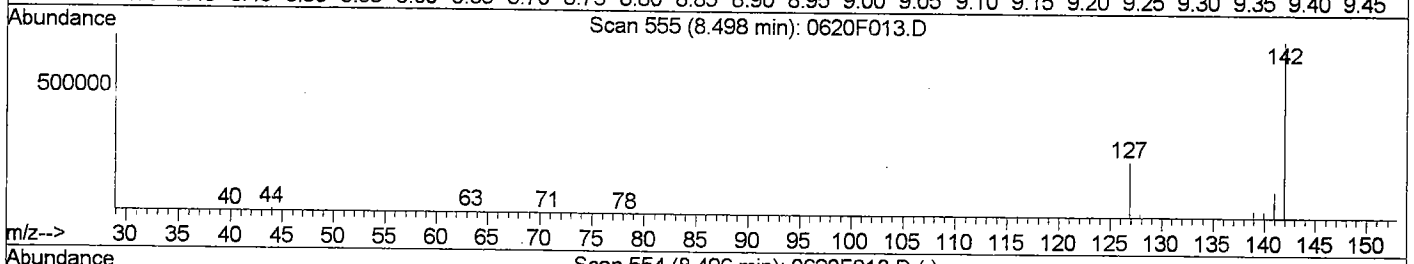
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:11 2007

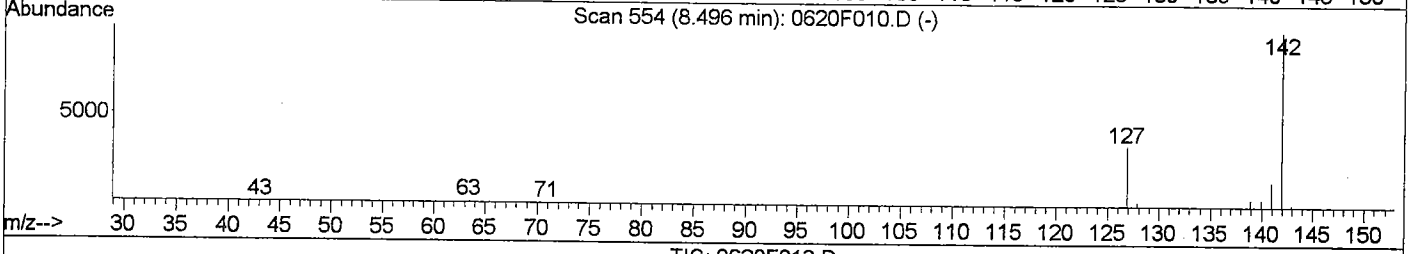
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F013.D

(13) Iodomethane (T)

8.50min 30.52PPB m

response 702175

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	46.30
142.00	293.10	318.14
0.00	0.00	0.00

Peak Tailing
HC 6·20·07

0620F013.D 052107MS04-8260.M Wed Jun 20 17:11:59 2007

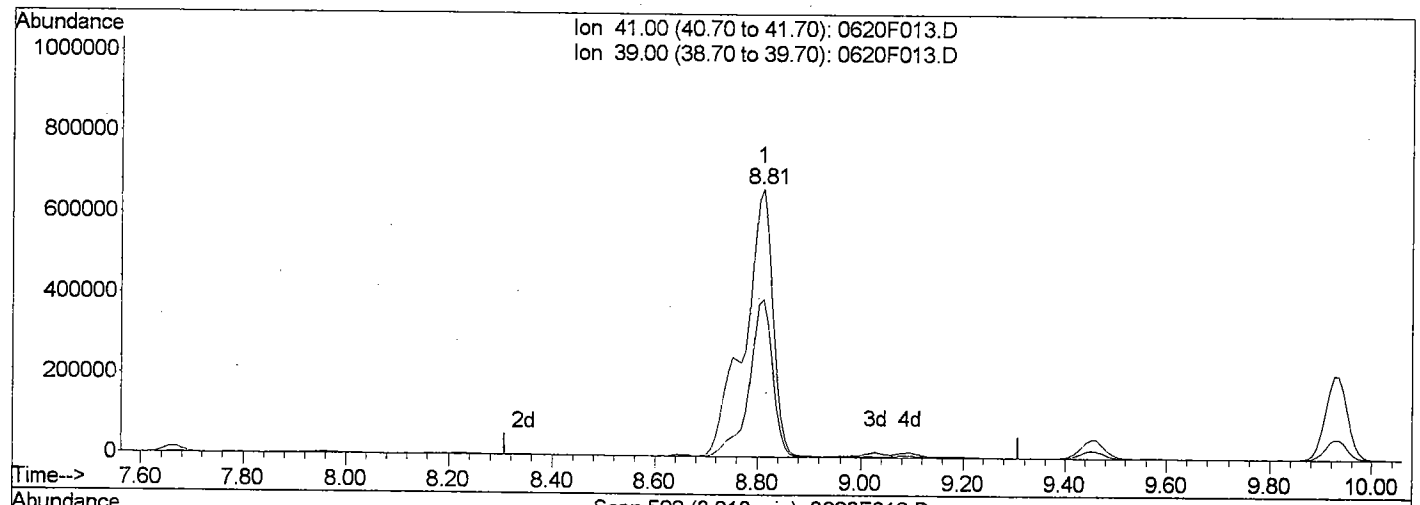
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:12 2007

Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration



(17) 3-Cloro-1-propene (T)

8.81min 45.09PPB

response 2560589

Ion	Exp%	Act%
41.00	100	100
39.00	62.70	58.85
0.00	0.00	0.00
0.00	0.00	0.00

0620F013.D 052107MS04-8260.M Wed Jun 20 17:12:05 2007

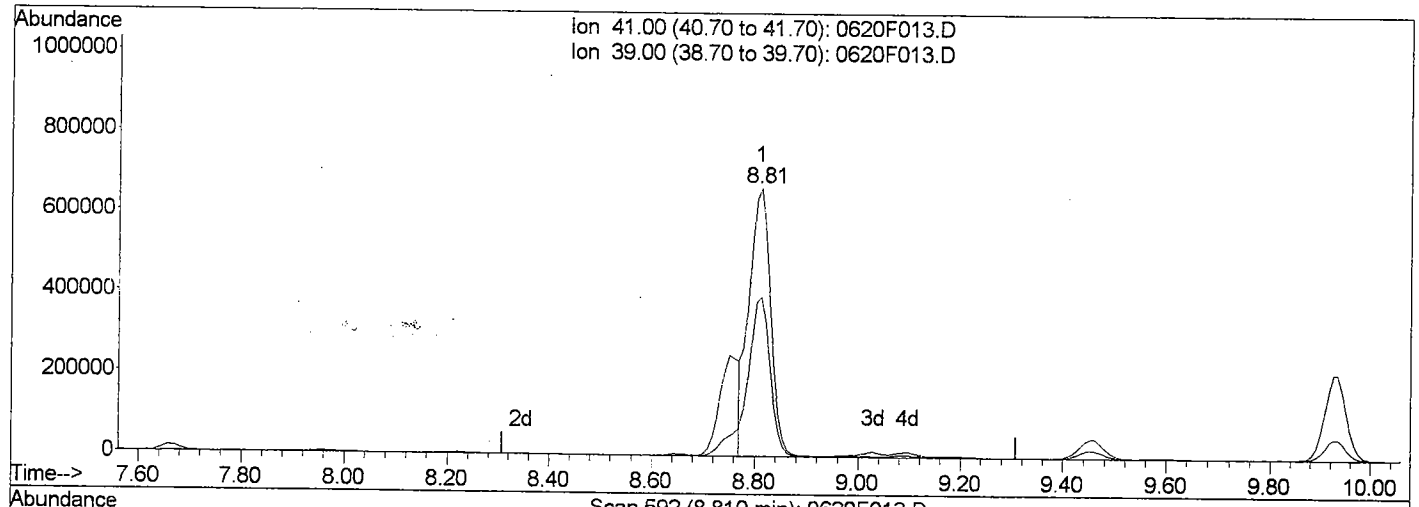
Quantitation Report (Qedit)

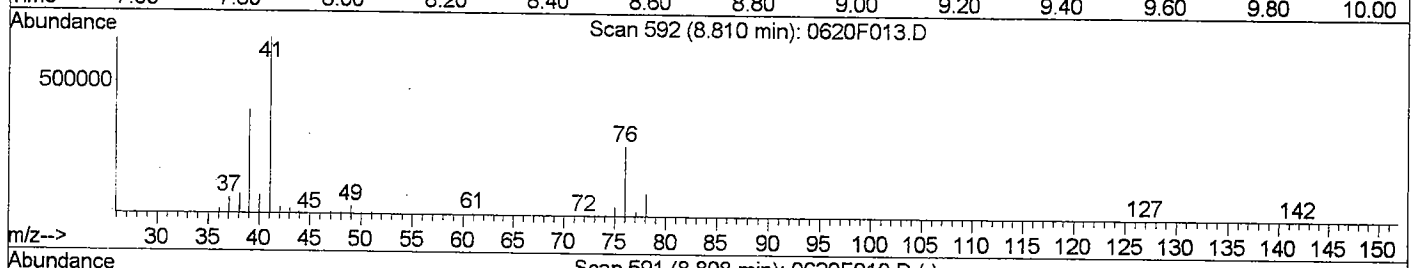
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:12 2007

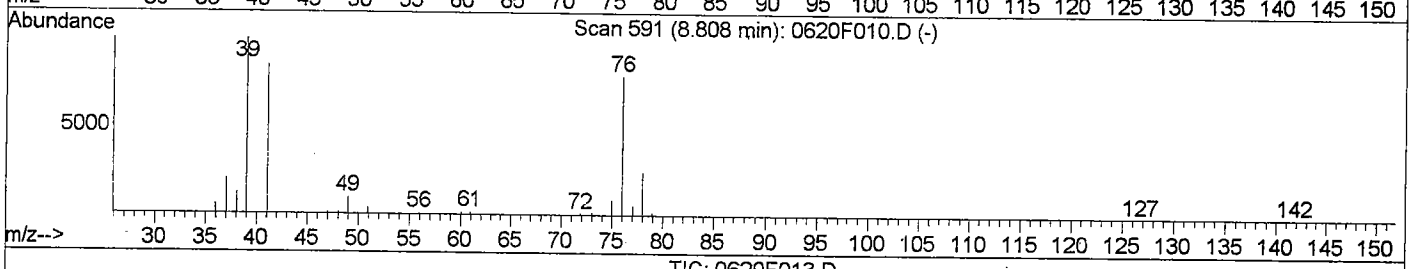
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F013.D

(17) 3-Cloro-1-propene (T)

8.81min 33.79PPB m

response 1918972

Ion	Exp%	Act%
41.00	100	100
39.00	62.70	58.99
0.00	0.00	0.00
0.00	0.00	0.00

removed shoulder
HL 6·20·07

0620F013.D 052107MS04-8260.M Wed Jun 20 17:12:12 2007

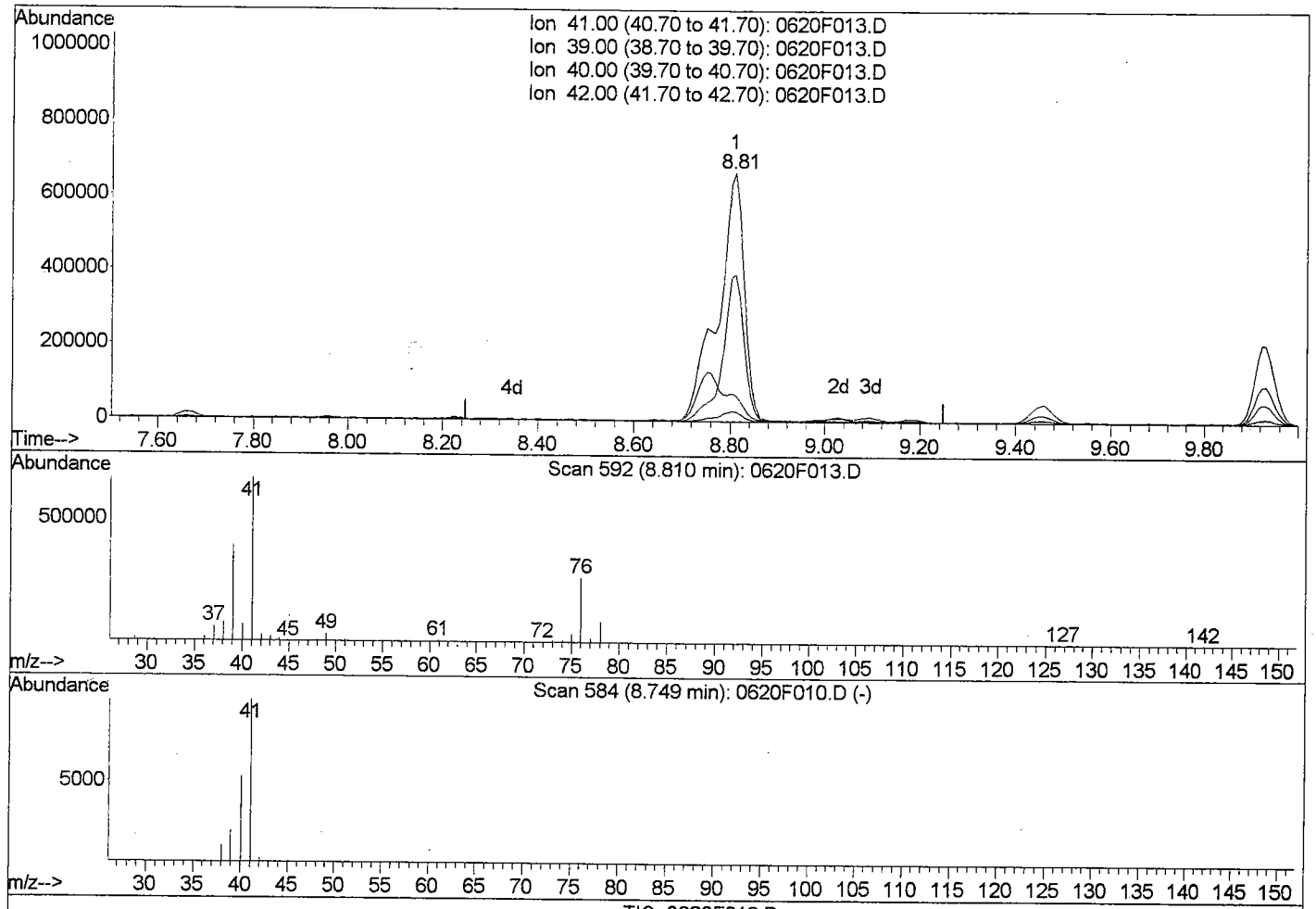
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:12 2007

Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration



TIC: 0620F013.D

(18) Acetonitrile (T)

8.81min 1346.53PPB

response 2560589

Ion	Exp%	Act%
41.00	100	100
39.00	20.10	58.85#
40.00	52.90	10.15#
42.00	2.90	3.86

0620F013.D 052107MS04-8260.M Wed Jun 20 17:12:15 2007

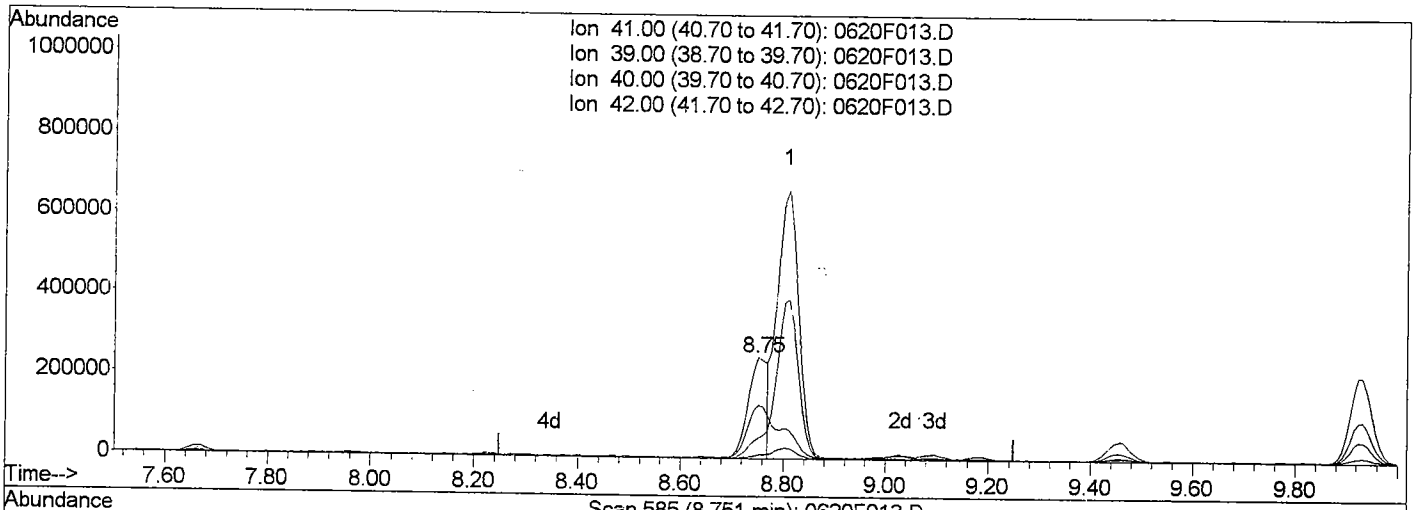
Quantitation Report (Qedit)

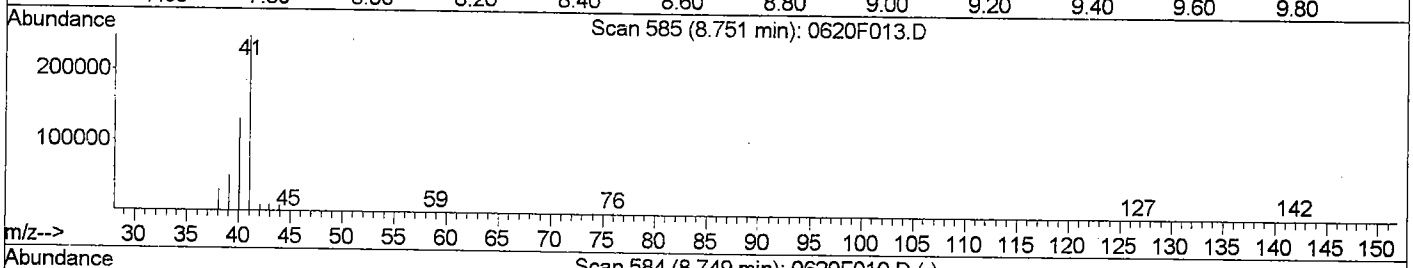
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:12 2007

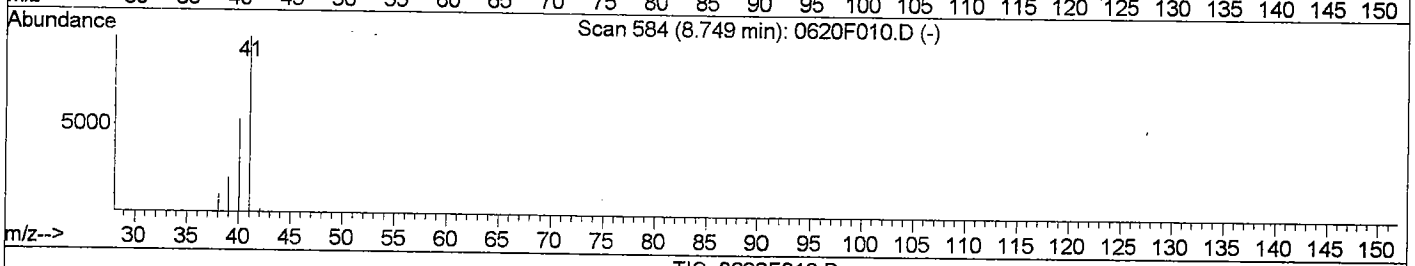
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F013.D

(18) Acetonitrile (T)

8.75min 336.49PPB m

response 639873

Ion	Exp%	Act%
41.00	100	100
39.00	20.10	20.01
40.00	52.90	52.48
42.00	2.90	3.55

wrong peak
HL 6·20·07
HL 6·20·07

0620F013.D 052107MS04-8260.M Wed Jun 20 17:12:25 2007

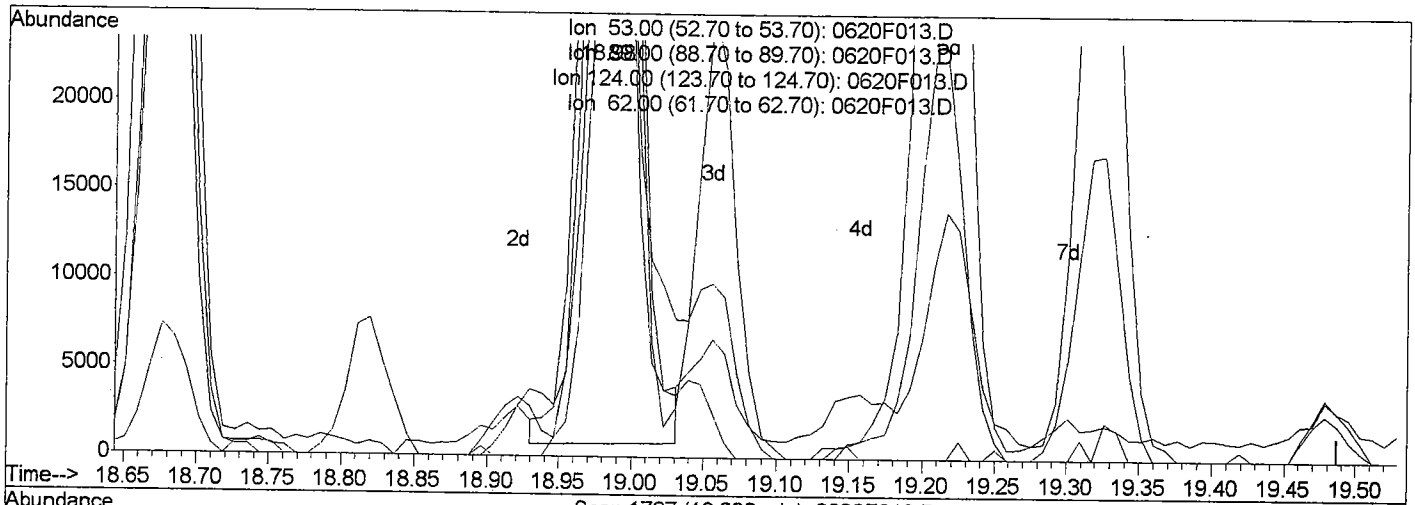
Quantitation Report (Qedit)

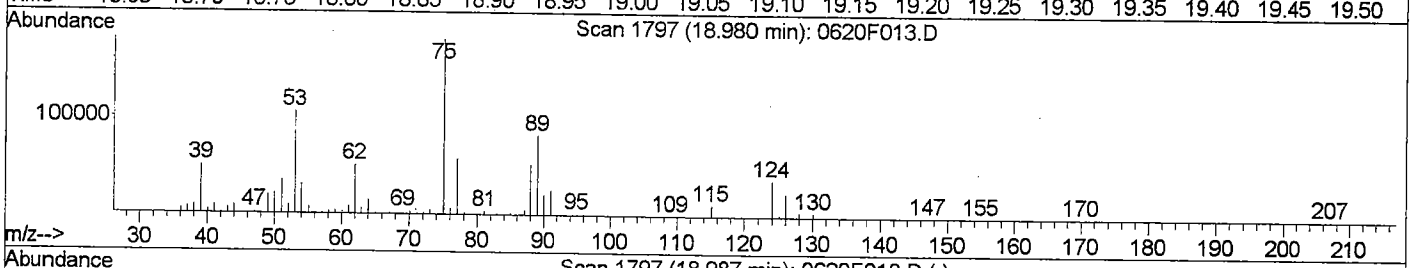
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:12 2007

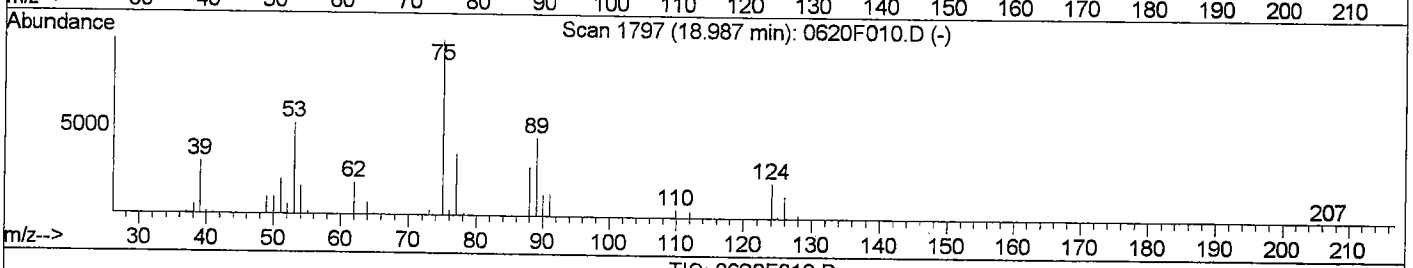
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration







TIC: 0620F013.D

(88) trans-1,3-Dichloro-2-Butene (T)

18.98min 49.57PPB

response 214026

Ion	Exp%	Act%
53.00	100	100
89.00	85.70	79.41
124.00	39.20	33.71
62.00	35.80	45.48

0620F013.D 052107MS04-8260.M Wed Jun 20 17:13:25 2007

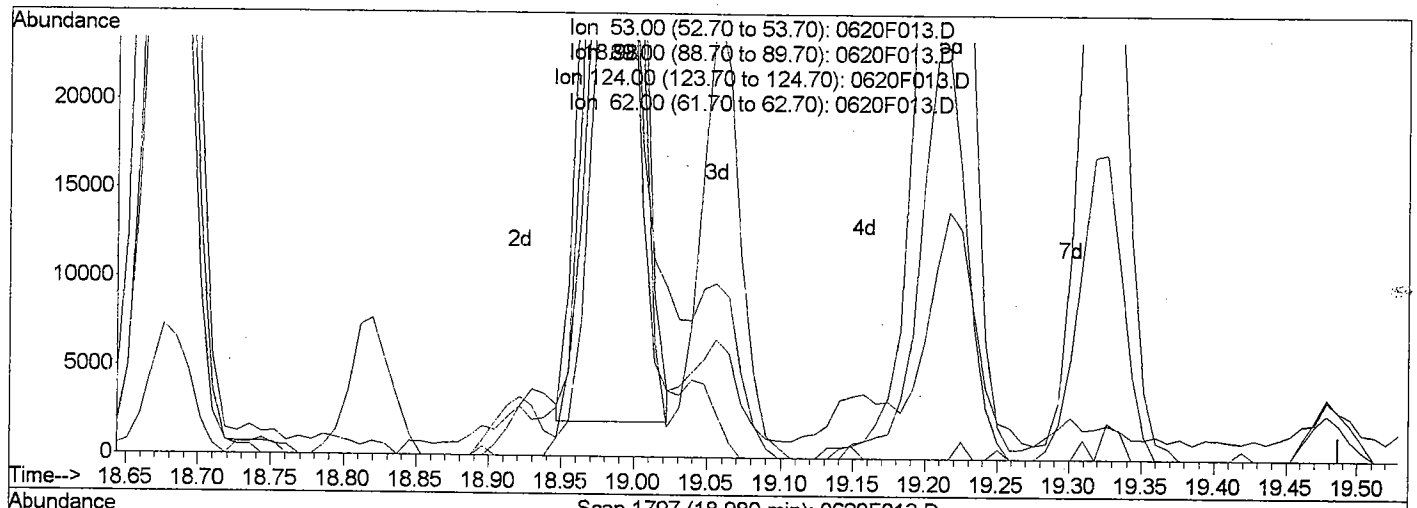
Quantitation Report (Qedit)

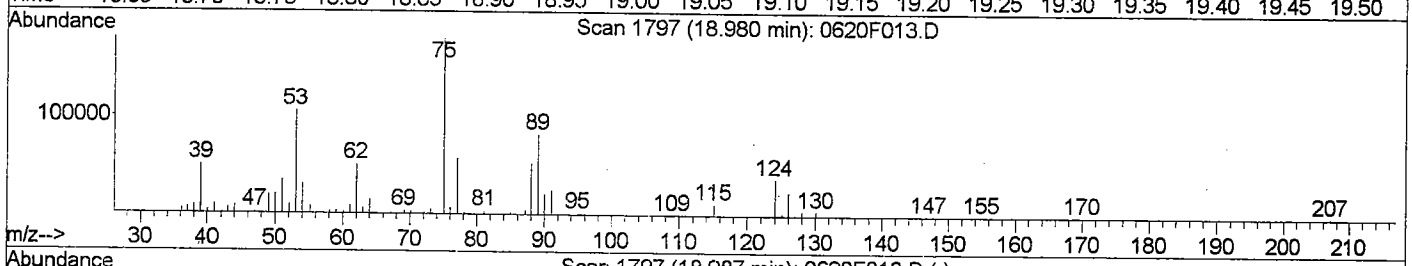
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:13 2007

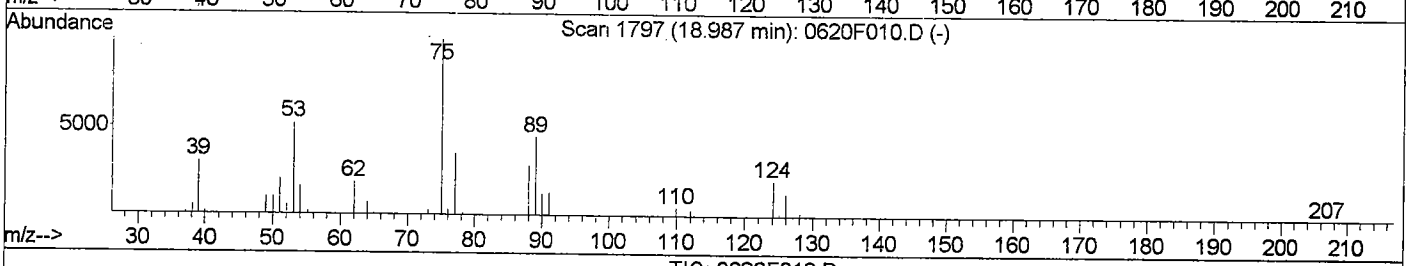
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration







TIC: 0620F013.D

(88) trans-1,3-Dichloro-2-Butene (T)

18.98min 47.49PPB m

response 205066

Ion	Exp%	Act%
53.00	100	100
89.00	85.70	77.89
124.00	39.20	35.72
62.00	35.80	48.16

adjusted baseline
HZ 6·20·07

0620F013.D 052107MS04-8260.M Wed Jun 20 17:13:34 2007

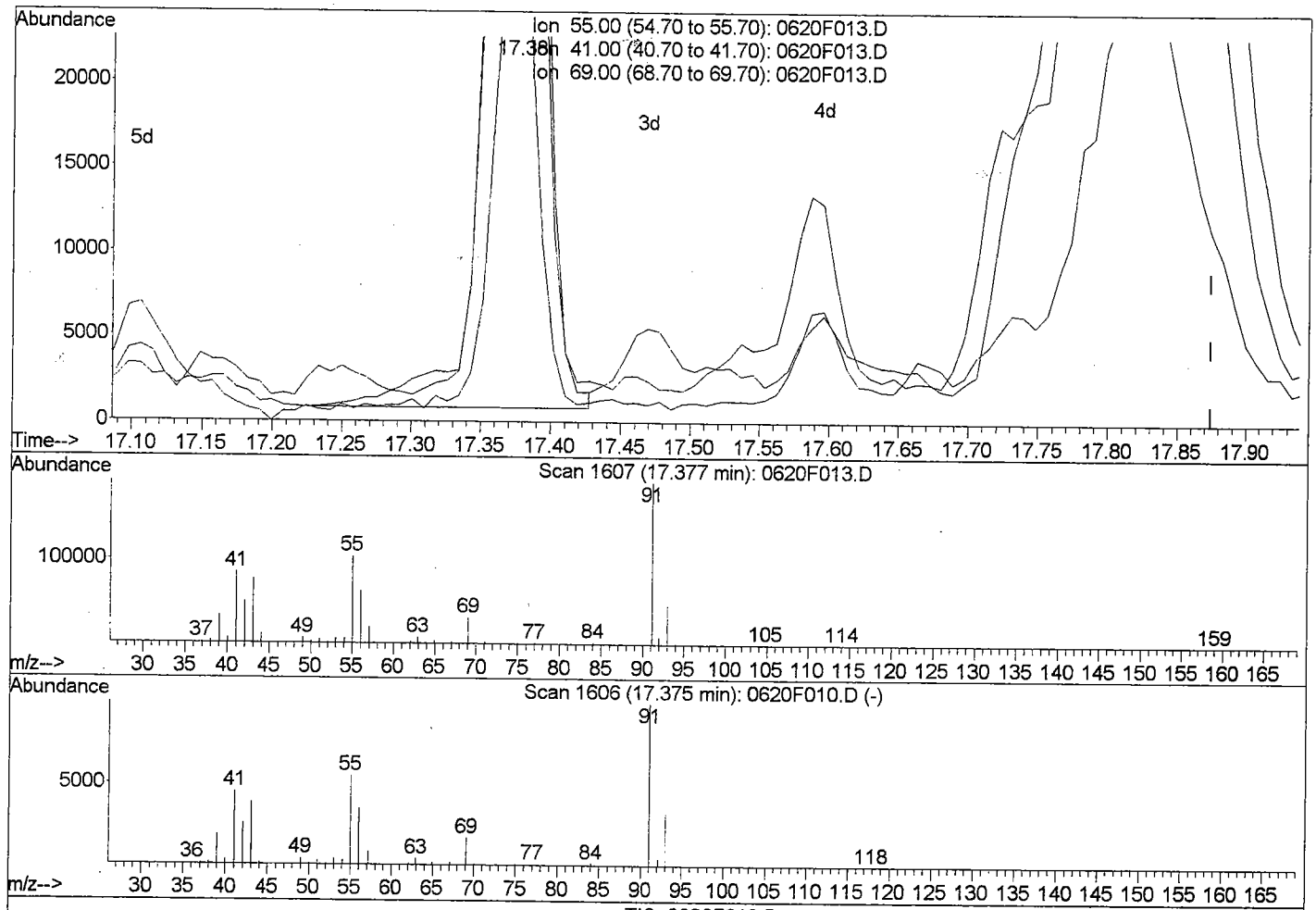
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:13 2007

Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration



(73) 1-Chlorohexane (T)

17.38min 6.47PPB

response 218750

Ion	Exp%	Act%
55.00	100	100
41.00	82.10	79.94
69.00	30.70	29.96
0.00	0.00	0.00

0620F013.D 052107MS04-8260.M Wed Jun 20 17:14:08 2007

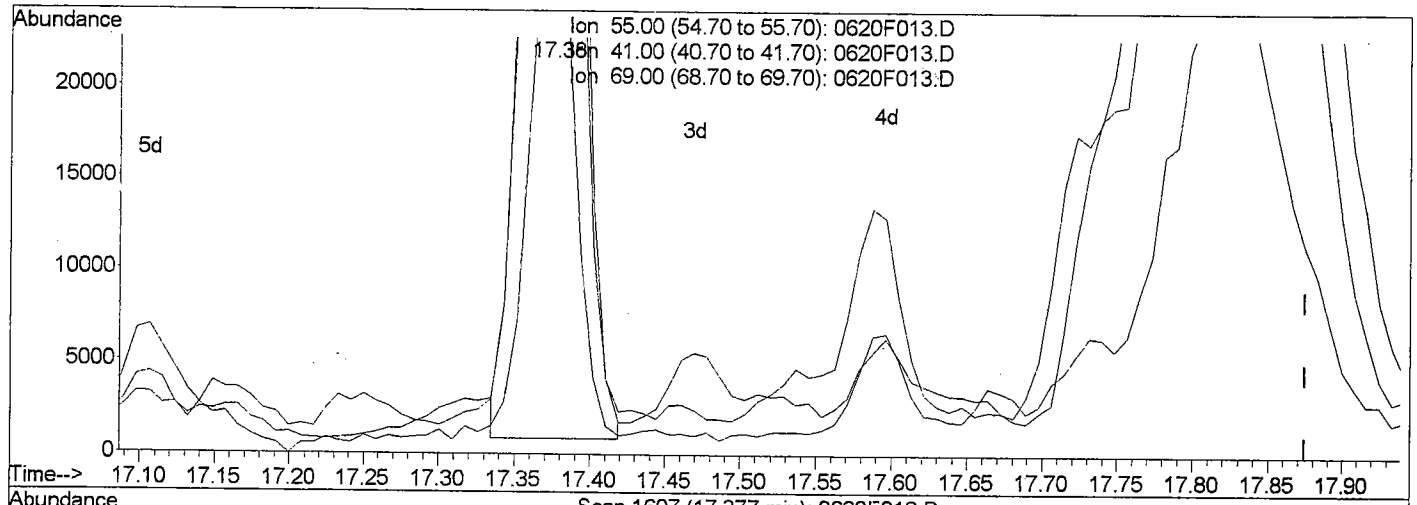
Quantitation Report (Qedit)

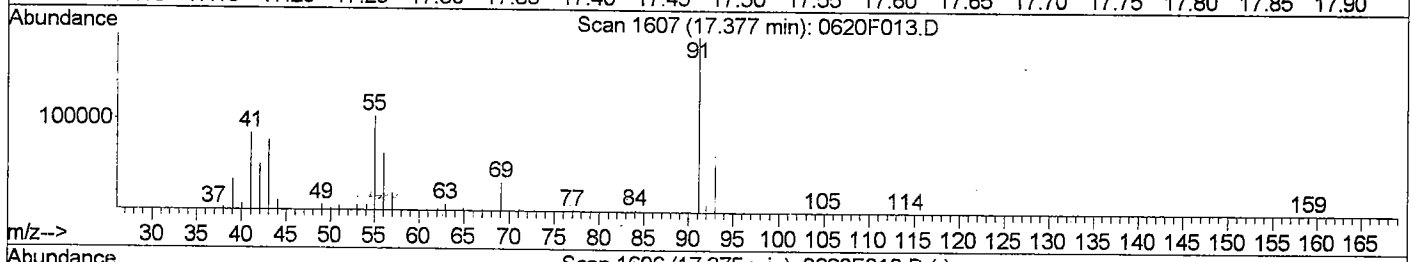
Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:14 2007

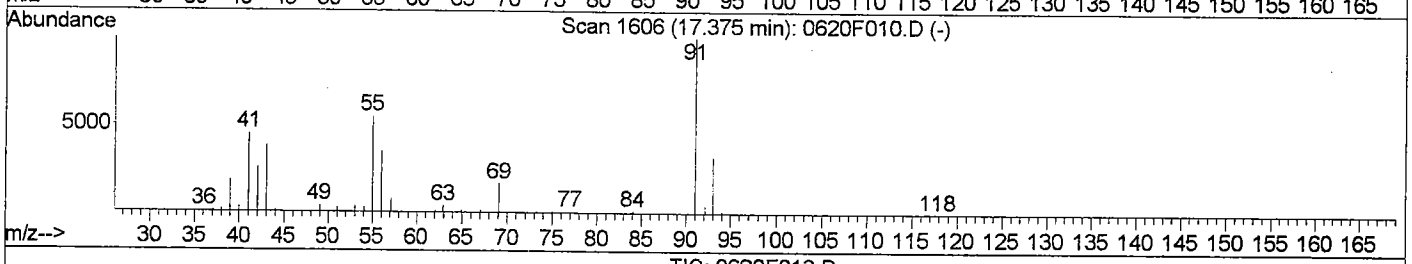
Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Single Level Calibration







TIC: 0620F013.D

(73) 1-Chlorohexane (T)

17.38min 6.24PPB m

response 211009

Ion	Exp%	Act%
55.00	100	100
41.00	82.10	81.65
69.00	30.70	30.56
0.00	0.00	0.00

removed shoulder
HC 6·20·07

0620F013.D 052107MS04-8260.M Wed Jun 20 17:14:16 2007

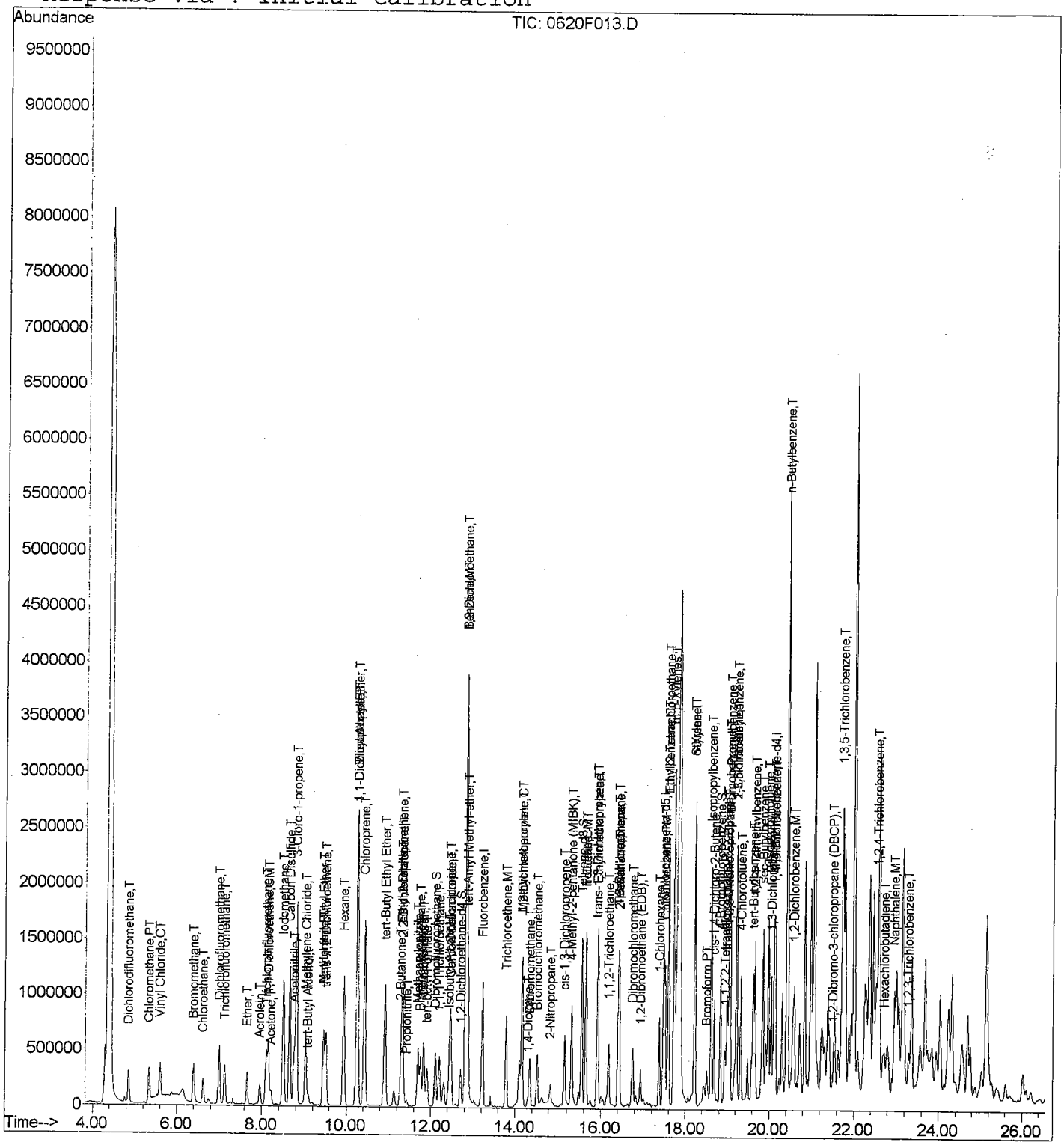
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F013.D
Acq On : 20 Jun 2007 4:43 pm
Sample : K0704852-002 DMS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 17:14 2007

Vial: 13
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706882-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	**12.6**		2.0	1	06/20/07	06/20/07	KWG0706882	*
Vinyl Acetate	**48.1**		10	1	06/20/07	06/20/07	KWG0706882	*
2-Chloroethyl Vinyl Ether	**33.3**		10	1	06/20/07	06/20/07	KWG0706882	*
Chloromethane	**9.44**		1.0	1	06/20/07	06/20/07	KWG0706882	
Vinyl Chloride	**9.09**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromomethane	**8.23**		1.0	1	06/20/07	06/20/07	KWG0706882	
Chloroethane	**8.92**		1.0	1	06/20/07	06/20/07	KWG0706882	
Acetone	**68.5**		10	1	06/20/07	06/20/07	KWG0706882	*
1,1-Dichloroethene	**9.70**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Disulfide	**17.4**		5.0	1	06/20/07	06/20/07	KWG0706882	
Methylene Chloride	**9.48**		4.5	1	06/20/07	06/20/07	KWG0706882	
trans-1,2-Dichloroethene	**8.93**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1-Dichloroethane	**8.84**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Butanone (MEK)	**76.9**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,2-Dichloroethene	**9.60**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chloroform	**9.35**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,1-Trichloroethane (TCA)	**9.44**		0.50	1	06/20/07	06/20/07	KWG0706882	
Carbon Tetrachloride	**9.33**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloroethane (EDC)	**10.8**		0.50	1	06/20/07	06/20/07	KWG0706882	
Benzene	**9.02**		0.50	1	06/20/07	06/20/07	KWG0706882	
Trichloroethene (TCE)	**9.59**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,2-Dichloropropane	**9.56**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromodichloromethane	**10.8**		0.50	1	06/20/07	06/20/07	KWG0706882	
2-Hexanone	**70.2**		10	1	06/20/07	06/20/07	KWG0706882	*
cis-1,3-Dichloropropene	**11.2**		0.50	1	06/20/07	06/20/07	KWG0706882	
Toluene	**9.63**		0.50	1	06/20/07	06/20/07	KWG0706882	
trans-1,3-Dichloropropene	**10.9**		0.50	1	06/20/07	06/20/07	KWG0706882	
1,1,2-Trichloroethane	**11.2**		0.50	1	06/20/07	06/20/07	KWG0706882	
4-Methyl-2-pentanone (MIBK)	**71.9**		10	1	06/20/07	06/20/07	KWG0706882	*
Tetrachloroethene (PCE)	**9.06**		0.50	1	06/20/07	06/20/07	KWG0706882	
Dibromochloromethane	**11.0**		0.50	1	06/20/07	06/20/07	KWG0706882	
Chlorobenzene	**8.99**		0.50	1	06/20/07	06/20/07	KWG0706882	
Ethylbenzene	**8.85**		0.50	1	06/20/07	06/20/07	KWG0706882	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706882-3	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260B		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Xylenes, Total	**28.2**		1.0	1	06/20/07	06/20/07	KWG0706882	
Styrene	**10.0**		0.50	1	06/20/07	06/20/07	KWG0706882	
Bromoform	**12.7**		1.0	1	06/20/07	06/20/07	KWG0706882	*
1,1,2,2-Tetrachloroethane	**11.1**		0.50	1	06/20/07	06/20/07	KWG0706882	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4	112	76-114	06/20/07	Acceptable
Toluene-d8	115	88-110	06/20/07	Outside Control Limits
4-Bromofluorobenzene	109	86-115	06/20/07	Acceptable

Comments:

Exception Report

Data File: J:\MS04\DATA\062007\0620F011.D
Lab ID: KWG0706882-3
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 15:35
Date Quantitated: 06/20/2007 16:03
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Room Temp @ 71° F.

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0006	0.01	NA	NT
	tert-Butyl Alcohol	0.0057	0.01	NA	⊥
	Isobutyl Alcohol	0.0021	0.01	NA	⊥
	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK
Continuing Calibration Recovery	Propionitrile	31.4	NA	30	NT
	Acrylonitrile	33.1	NA	30	⊥
	Vinyl Acetate	45.4	NA	40	High Bias
	4-Methyl-2-pentanone (MIBK)	61.5	NA	30	⊥
	Tetrahydrofuran	51.2	NA	30	NT
	2-Chloroethyl Vinyl Ether	226.1	NA	40	High Bias
	Methacrylonitrile	41.5	NA	30	NT
	Ethyl Acetate	40.1	NA	30	⊥

Primary Review: HZ 6.20.07

Secondary Review: 6/21/7

Printed: 06/20/2007 16:07:26
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\MS04\DATA\062007\0620F011.D
Lab ID: KWG0706882-3
RunType: LCS
Matrix: WATER

Date Acquired: 06/20/2007 15:35
Date Quantitated: 06/20/2007 16:03
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	cis-1,4-Dichloro-2-butene	44.3	NA	30	NT
	Methyl tert-Butyl Ether	42.1	NA	30	High Bias
	2-Hexanone	54.1	NA	30	⊥
	tert-Butyl Ethyl Ether	37.5	NA	30	NT
	Acetone	36.0	NA	30	High Bias
	Bromoform	38.9	NA	30	⊥
	tert-Butyl Alcohol	36.2	NA	30	NT
	tert-Butyl Formate	69.0	NA	30	⊥
	Isobutyl Alcohol	59.7	NA	30	⊥
	2-Butanone (MEK)	52.2	NA	30	High Bias
	2-Nitropropane	56.1	NA	30	NT
	Methyl Methacrylate	53.9	NA	30	⊥
	1,2-Dibromo-3-chloropropane	33.8	NA	30	⊥
	Ethyl Methacrylate	32.5	NA	30	⊥
	tert-Amyl Methyl Ether	58.0	NA	30	⊥
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	⊥
	tert-Butyl Alcohol	0.0077	0.01	NA	⊥
	Isobutyl Alcohol	0.0034	0.01	NA	⊥

Primary Review: HZ 6.20.07

Secondary Review: [illegible] 6/21/07

Printed: 06/20/2007 16:07:26
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**	KWG0706882	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611353	**Prep Date:**	06/20/2007		

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:			
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS04\DATA\062007\0620F011.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:35	**Quant Date:**	06/20/2007 16:03	**Vial:**	11
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706882-3			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1266053	10.00	OK
2	Chlorobenzene-d5	17.48	0.00	117	982082	10.00	OK
3	1,4-Dichlorobenzene-d4	20.11	-0.01	152	537766	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	12.11	0.00	0.00	113	371206	10.60	106	82-125	OK
1	1,2-Dichloroethane-d4	12.71	0.00	0.00	65	262822	11.15	112	49-142	OK
1	Toluene-d8	15.55	0.00	0.00	98	1119964	11.52	115	87-120	OK
2	4-Bromofluorobenzene	18.82	0.00	0.00	95	416641	10.88	109	73-118	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	4.85		0.00	85	362280	10.14	10.1		
1	Chloromethane	5.33	-0.01	0.00	50	409679	9.44	9.44		
1	Vinyl Chloride	5.60	-0.01	0.00	62	361262	9.09	9.09		
1	Bromomethane	6.40		0.00	94	352797	8.23	8.23		
1	Chloroethane	6.62	0.01	0.00	64	263135	8.92	8.92		
1	Dichlorofluoromethane (CFC 21	7.00		0.00	67	733701	10.30	10.3		
1	Trichlorofluoromethane	7.14		0.00	101	400285	8.73	8.73		
1	Ethyl Ether	7.66		0.00	59	207688	11.93	11.9		
1	Trichlorotrifluoroethane	8.11		0.00	151	265701	8.67	8.67		
1	1,1-Dichloroethene	8.16	-0.01	0.00	96	301901	9.70	9.70		
1	Acetone	8.22		0.00	43	213088	68.47	68.5		
1	Iodomethane	8.50		0.00	127	645612m	34.07	34.1		
1	Carbon Disulfide	8.65		0.00	76	2257088	17.43	17.4		
1	Acrolein	7.96		0.00	56	186028	86.88	86.9		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F011.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:35	**Quant Date:**	06/20/2007 16:03	**Vial:**	11
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706882-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene	8.81		0.00	41	1526790	32.97	33.0		
1	Acetonitrile	8.75		0.00	41	520536	335.67	336		
1	Methylene Chloride	9.03		0.00	84	402808	9.48	9.48		
1	tert-Butyl Alcohol	9.10		0.00	59	103770	144.99	145		
1	Methyl tert-Butyl Ether	9.45	-0.01	0.00	73	588024	12.64	12.6		
1	trans-1,2-Dichloroethene	9.51	-0.01	0.00	96	356426	8.93	8.93		
1	n-Hexane	9.93		0.00	57	1224929	29.23	29.2		
1	1,1-Dichloroethane	10.27		0.00	63	555029	8.84	8.84		
1	Vinyl Acetate	10.25		0.00	86	165182	48.12	48.1		
1	Acrylonitrile	9.45		0.00	53	254101	50.67	50.7		
1	Diisopropyl Ether	10.25		0.00	45	1883762	22.00	22.0		
1	Chloroprene	10.42	-0.01	0.00	88	959587	27.82	27.8		
1	tert-Butyl Ethyl Ether	10.91		0.00	59	1477620	24.05	24.1		
1	2,2-Dichloropropane	11.33		0.00	77	401431	9.60	9.60		
1	Ethyl Acetate	11.31	-0.01	0.00	70	62022	41.03	41.0		
1	cis-1,2-Dichloroethene	11.32		0.00	96	390787	9.60	9.60		
1	2-Butanone (MEK)	11.28		0.00	72	90196	76.85	76.9		
1	Propionitrile	11.43	0.01	0.00	54	63993	40.70	40.7		
1	Methacrylonitrile	11.69		0.00	67	221537	41.23	41.2		
1	Bromochloromethane	11.76	0.01	0.00	128	209288	10.72	10.7		
1	Chloroform	11.83		0.00	83	562679	9.35	9.35		
1	tert-Butyl Formate	11.91		0.00	59	313204	27.61	27.6		
1	Tetrahydrofuran	11.82		0.00	42	79556	26.17	26.2		
1	1,1,1-Trichloroethane (TCA)	12.20	-0.01	0.00	97	405027	9.44	9.44		
1	Isobutyl Alcohol	12.42	-0.01	0.00	43	142205	533.46	533		
1	Carbon Tetrachloride	12.48		0.00	117	350726	9.33	9.33		
1	1,1-Dichloropropene	12.46	0.01	0.00	75	422367	9.27	9.27		
1	tert-Amyl Methyl Ether	12.87	-0.01	0.00	55	310630	23.97	24.0		
1	Benzene	12.82	-0.01	0.00	78	1232904	9.02	9.02		
1	1,2-Dichloroethane (EDC)	12.83		0.00	62	320893	10.77	10.8		
1	Trichloroethene (TCE)	13.78		0.00	95	327225	9.59	9.59		
1	Methyl Methacrylate	14.17		0.00	69	377467	46.09	46.1		
1	1,2-Dichloropropane	14.15		0.00	63	295186	9.56	9.56		
1	1,4-Dioxane	14.30	0.01	0.00	88	49308	599.99	600		
1	Dibromomethane	14.34		0.00	93	184290	11.21	11.2		
1	Bromodichloromethane	14.52		0.00	83	401848	10.78	10.8		
1	2-Chloroethyl Vinyl Ether	14.87		0.00	63	119447	33.28	33.3		
1	2-Nitropropane	14.85		0.00	41	109619	43.30	43.3		
1	cis-1,3-Dichloropropene	15.15	-0.01	0.00	75	464129	11.15	11.2		
1	4-Methyl-2-pentanone (MIBK)	15.32		0.00	100	121382	71.93	71.9		
1	Toluene	15.65		0.00	92	775017	9.63	9.63		
2	Ethyl Methacrylate	15.93	0.01	0.00	69	780477	43.17	43.2		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F011.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:35	**Quant Date:**	06/20/2007 16:03	**Vial:**	11
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706882-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
2	n-Octane	15.66		0.00	85	404866	19.02	19.0		
2	trans-1,3-Dichloropropene	15.90	-0.01	0.00	75	349947	10.85	10.9		
2	1,1,2-Trichloroethane	16.18		0.00	83	196234	11.19	11.2		
2	Tetrachloroethene (PCE)	16.41	0.01	0.00	164	320966	9.06	9.06		
2	2-Hexanone	16.43		0.00	57	80917	70.19	70.2		
2	1,3-Dichloropropane	16.42		0.00	76	404479	10.77	10.8		
2	Dibromochloromethane	16.74		0.00	129	310591	10.99	11.0		
2	1,2-Dibromoethane (EDB)	16.94		0.00	107	254588	11.47	11.5		
2	1-Chlorohexane	17.38	0.01	0.00	55	252760	8.88	8.88		
2	Chlorobenzene	17.51		0.00	112	914591	8.99	8.99		
2	Ethylbenzene	17.60	0.01	0.00	106	434693	8.85	8.85		
2	1,1,1,2-Tetrachloroethane	17.59		0.00	131	317456	9.70	9.70		
2	m,p-Xylenes	17.72		0.00	106	1123099	18.43	18.4		
2	o-Xylene	18.21		0.00	106	539895	9.72	9.72		
2	Styrene	18.22		0.00	104	914567	10.02	10.0		
2	Bromoform	18.51		0.00	173	182471	12.74	12.7		
2	Isopropylbenzene	18.61		0.00	105	1186281	8.49	8.49		
3	cis-1,4-Dichloro-2-butene	18.68		0.00	88	196179	47.84	47.8		
3	1,1,2,2-Tetrachloroethane	18.93	-0.01	0.00	83	248011	11.14	11.1		
3	Bromobenzene	19.04		0.00	156	427506	9.28	9.28		
3	n-Propylbenzene	19.06		0.00	91	1580074	8.64	8.64		
3	trans-1,4-Dichloro-2-butene	18.98	-0.01	0.00	53	179243	46.47	46.5		
3	1,2,3-Trichloropropane	19.02		0.00	110	71886	11.25	11.3		
3	2-Chlorotoluene	19.22	0.01	0.00	91	1043023	8.95	8.95		
3	1,3,5-Trimethylbenzene	19.23	0.01	0.00	105	1056233	8.76	8.76		
3	4-Chlorotoluene	19.33	0.01	0.00	91	951072	8.95	8.95		
3	tert-Butylbenzene	19.61		0.00	134	274468	8.75	8.75		
3	1,2,4-Trimethylbenzene	19.66	0.01	0.00	105	1084035	9.04	9.04		
3	sec-Butylbenzene	19.85		0.00	105	1425478	9.25	9.25		
3	4-Isopropyltoluene	19.98		0.00	119	1159868	8.59	8.59		
3	1,3-Dichlorobenzene	20.05		0.00	146	781791	8.93	8.93		
3	1,4-Dichlorobenzene	20.15	0.01	0.00	146	795481	8.87	8.87		
3	n-Butylbenzene	20.44	-0.01	0.00	91	998925	8.80	8.80		
3	1,2-Dichlorobenzene	20.59		0.00	146	689991	9.38	9.38		
3	1,2-Dibromo-3-chloropropane	21.50	-0.01	0.00	157	45236	12.37	12.4		
3	1,3,5-Trichlorobenzene	21.73		0.00	180	2139394	38.48	38.5		
3	1,2,4-Trichlorobenzene	22.56		0.00	180	397479	9.50	9.50		
3	Hexachlorobutadiene	22.71		0.00	225	130546	8.12	8.12		
3	Naphthalene	22.96		0.00	128	576692	12.36	12.4		
3	1,2,3-Trichlorobenzene	23.30		0.00	180	320659	10.65	10.7		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F011.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:35	**Quant Date:**	06/20/2007 16:03	**Vial:**	11
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706882-3			**Soln Conc. Units:**	PPB

Prep Amount:	10.0 ml	**Dilution:**	1.0
Prep Final Vol:	10.0 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

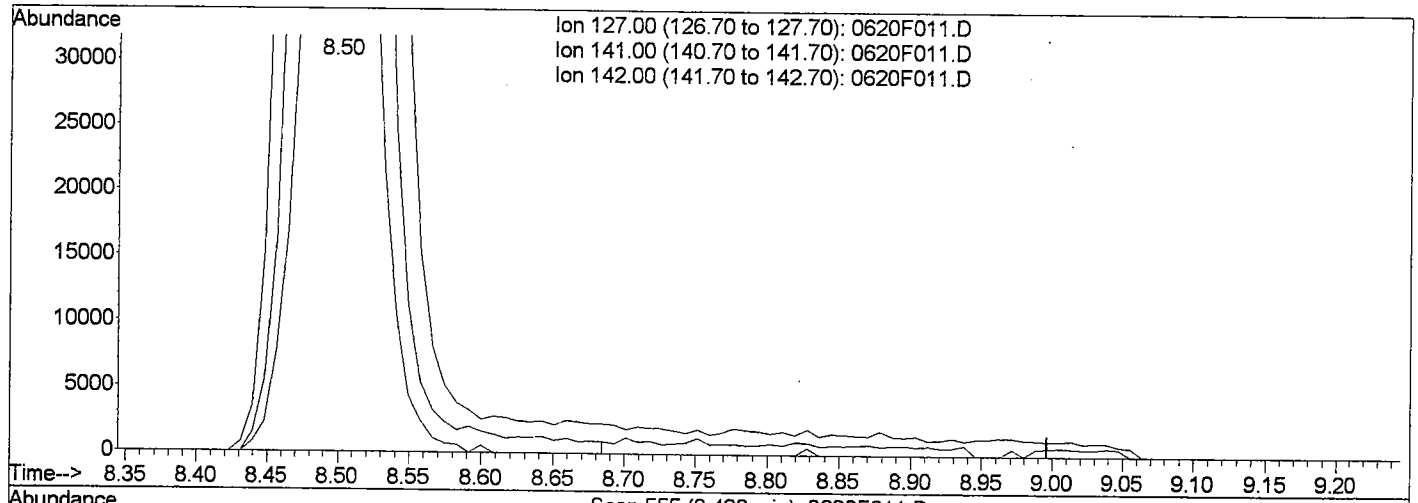
Quantitation Report (Qedit)

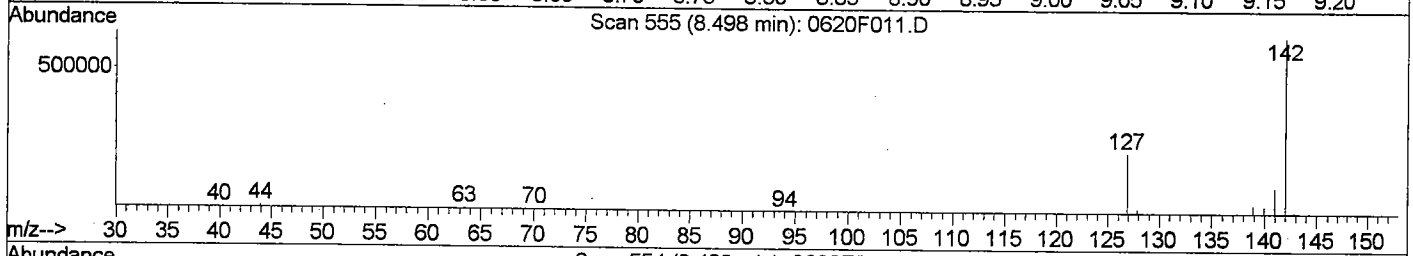
Data File : J:\MS04\DATA\062007\0620F011.D
Acq On : 20 Jun 2007 3:35 pm
Sample : LCS 46VOA45A/41D/39C/39D/44C/38D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:02 2007

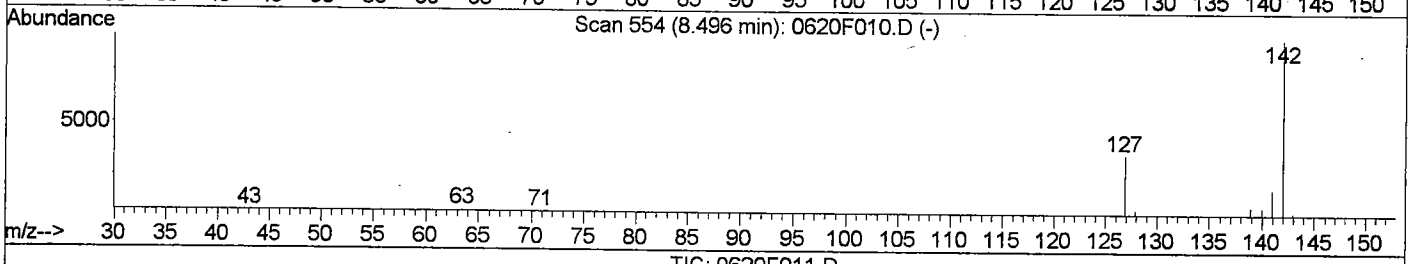
Vial: 11
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F011.D

(13) Iodomethane (T)

8.50min 33.35PPB

response 630821

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	42.19
142.00	293.10	292.71
0.00	0.00	0.00

0620F011.D 052107MS04-8260.M Wed Jun 20 16:02:59 2007

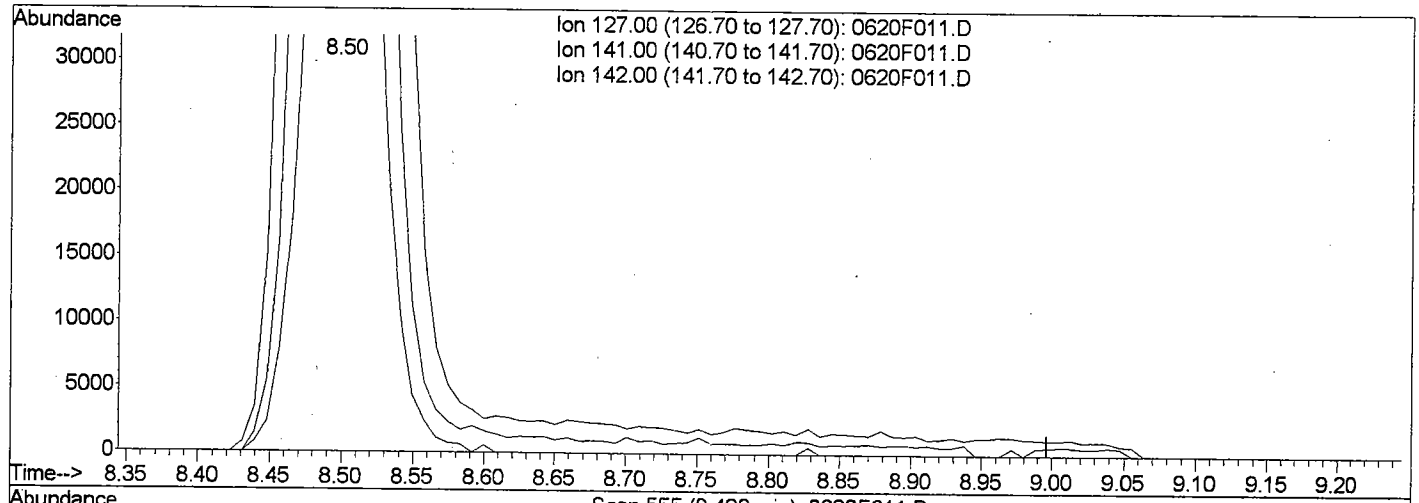
Quantitation Report (Qedit)

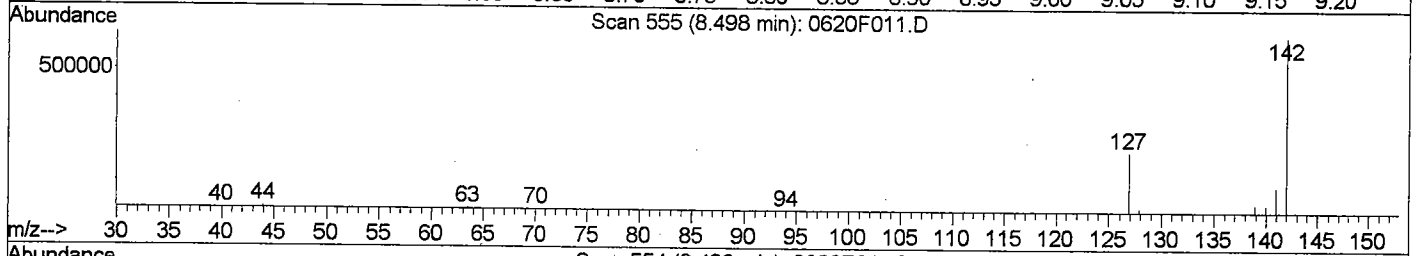
Data File : J:\MS04\DATA\062007\0620F011.D
Acq On : 20 Jun 2007 3:35 pm
Sample : LCS 46VOA45A/41D/39C/39D/44C/38D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:03 2007

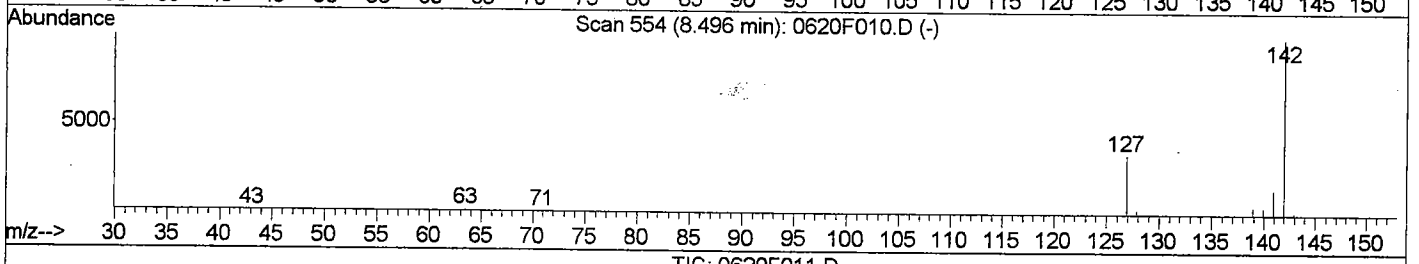
Vial: 11
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Multiple Level Calibration







TIC: 0620F011.D

(13) Iodomethane (T)

8.50min 34.07PPB m

response 645612

Ion	Exp%	Act%
127.00	100	100
141.00	41.80	42.19
142.00	293.10	292.71
0.00	0.00	0.00

Peak Tailing
HL 6·20·07

0620F011.D 052107MS04-8260.M Wed Jun 20 16:03:04 2007

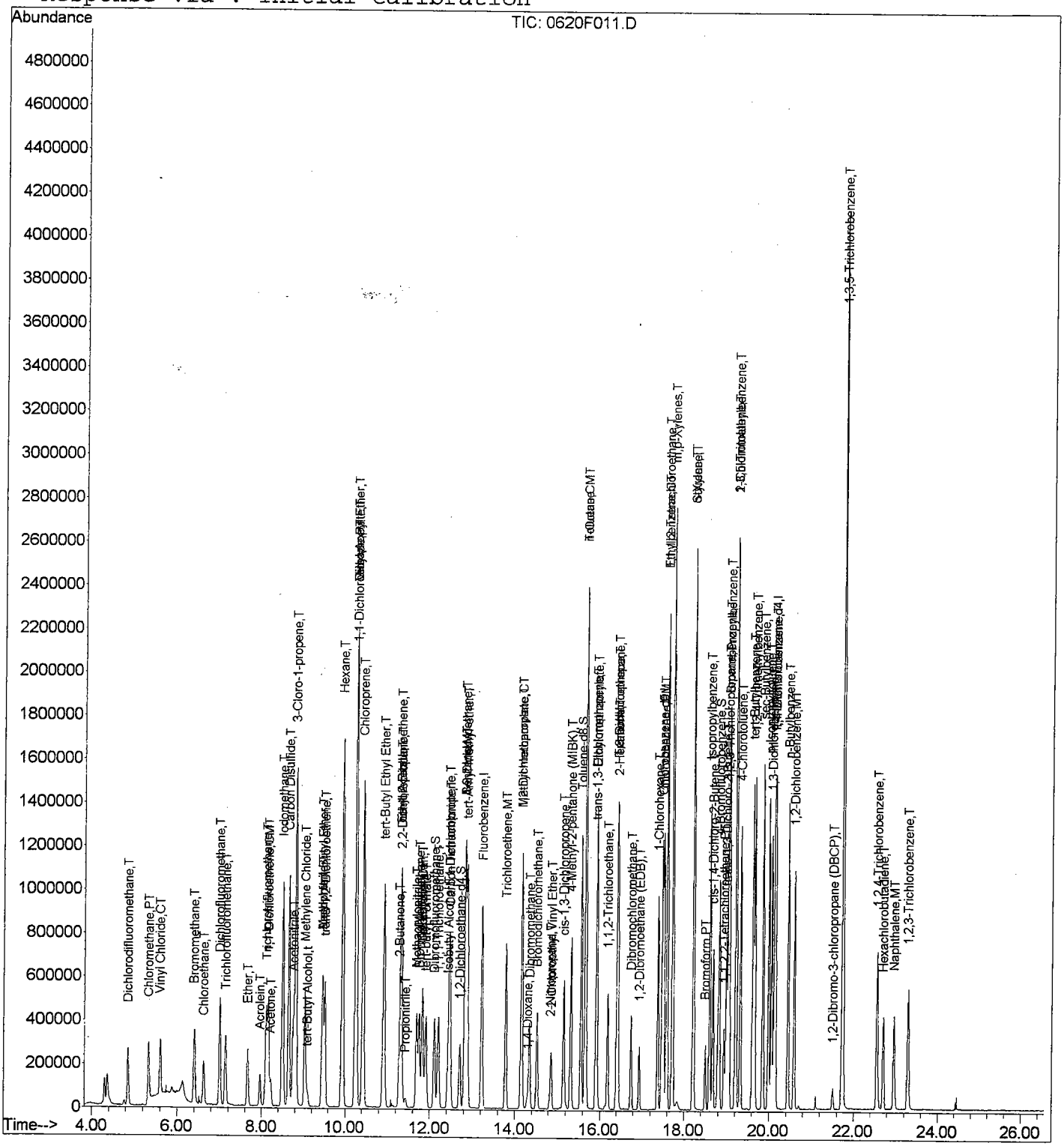
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F011.D
Acq On : 20 Jun 2007 3:35 pm
Sample : LCS 46VOA45A/41D/39C/39D/44C/38D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 16:03 2007

Vial: 11
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007
Time Analyzed: 14:27

Tune Summary
Volatile Organic Compounds

File ID: J:\MS04\DATA\062007\0620F009.D
Instrument ID: MS04
Column:

Analysis Method: 8260B
Analysis Lot: KWG0706875

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.5	12103	PASS
75	95	30	60	43.2	31584	PASS
95	95	100	100	100.0	73157	PASS
96	95	5	9	7.4	5437	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	98.5	72077	PASS
175	174	5	9	7.7	5547	PASS
176	174	95	101	96.3	69384	PASS
177	176	5	9	7.0	4866	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0706875-2	J:\MS04\DATA\062007\0620F010.D	06/20/2007	15:02	
Lab Control Sample	KWG0706882-3	J:\MS04\DATA\062007\0620F011.D	06/20/2007	15:35	
1349MW100CLMS	KWG0706882-1	J:\MS04\DATA\062007\0620F012.D	06/20/2007	16:10	
1349MW100CLDMS	KWG0706882-2	J:\MS04\DATA\062007\0620F013.D	06/20/2007	16:43	
Method Blank	KWG0706882-4	J:\MS04\DATA\062007\0620F016.D	06/20/2007	18:22	
TB0606071ACL	K0704852-005	J:\MS04\DATA\062007\0620F017.D	06/20/2007	18:55	
231GW29CL	K0704852-003	J:\MS04\DATA\062007\0620F018.D	06/20/2007	19:28	
FM14EX07GW102CL	K0704852-004	J:\MS04\DATA\062007\0620F019.D	06/20/2007	20:01	
1349MW100CL	K0704852-002	J:\MS04\DATA\062007\0620F020.D	06/20/2007	20:33	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS04\DATA\062007\0620F009.D
Lab ID: KWG0706875-1
RunType: TUNE
Matrix: WATER

Date Acquired: 06/20/2007 14:27
Date Quantitated:
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: HC 6·20·07

Secondary Review: 6/21/7

Printed: 06/20/2007 15:34:15
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS04\DATA\062007\0620F009.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 14:27	**Quant Date:**		**Vial:**	9
Run Type:	TUNE			**Dilution:**	1.0
Lab ID:	KWG0706875-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.5	12103	Pass
75	95	30	60	43.2	31584	Pass
95	95	100	100	100.0	73157	Pass
96	95	5	9	7.4	5437	Pass
173	174	0	2	0.0	0	Pass
174	95	50	120	98.5	72077	Pass
175	174	5	9	7.7	5547	Pass
176	174	95	101	96.3	69384	Pass
177	176	5	9	7.0	4866	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

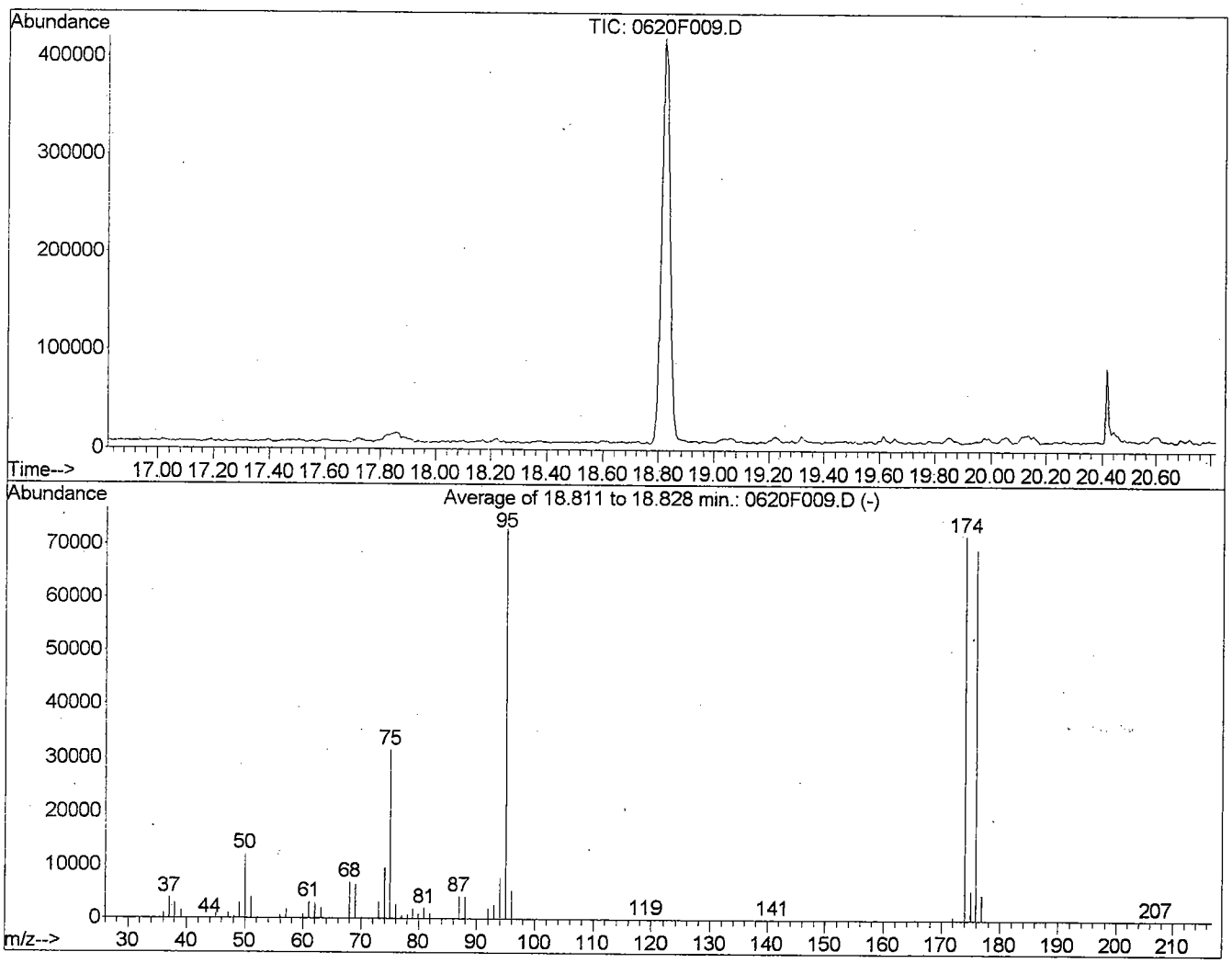
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

BFB

Data File : J:\MS04\DATA\062007\0620F009.D
Acq On : 20 Jun 2007 2:27 pm
Sample : 50NG BFB 46VOA26C
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624

Vial: 9
Operator: HC
Inst : MS04
Multiplr: 1.00



AutoFind: Scans 1777, 1778, 1779; Background Corrected with Scan 1771

HC 6.20.07

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	12103	PASS
75	95	30	60	43.2	31584	PASS
95	95	100	100	100.0	73157	PASS
96	95	5	9	7.4	5437	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	98.5	72077	PASS
175	174	5	9	7.7	5547	PASS
176	174	95	101	96.3	69384	PASS
177	176	5	9	7.0	4866	PASS

0620F009.D 052107MS04-8260.M Wed Jun 20 15:05:00 2007

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS04\DATA\052107\0521F019.D	F	J:\MS04\DATA\052107\0521F024.D
B	J:\MS04\DATA\052107\0521F020.D	G	J:\MS04\DATA\052107\0521F025.D
C	J:\MS04\DATA\052107\0521F021.D	H	J:\MS04\DATA\052107\0521F026.D
D	J:\MS04\DATA\052107\0521F022.D	I	J:\MS04\DATA\052107\0521F027.D
E	J:\MS04\DATA\052107\0521F023.D	J	J:\MS04\DATA\052107\0521F028.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Vinyl Acetate							C	1.0	0.0209	D	2.0	0.0239	E	4.0	0.0250
	F	10	0.0285	G	20	0.0277	H	40	0.0313	I	80	0.0303	J	120	0.0292
2-Chloroethyl Vinyl Ether													E	2.0	0.0229
	F	5.0	0.0206	G	10	0.0281	H	20	0.0327	I	40	0.0317	J	60	0.0340
Methyl tert-Butyl Ether	A	0.20	0.350	B	0.40	0.337	C	1.0	0.353	D	2.0	0.339	E	4.0	0.363
	F	10	0.377	G	20	0.381	H	40	0.391	I	80	0.389	J	120	0.395
1,2-Dichloroethane-d4				B	4.0	0.200	C	5.0	0.193	D	6.0	0.193	E	7.0	0.184
	F	8.0	0.186	G	10	0.179	H	20	0.187	I	40	0.177	J	50	0.176
† Chloromethane				B	0.20	0.341	C	0.50	0.347	D	1.0	0.341	E	2.0	0.362
	F	5.0	0.338	G	10	0.326	H	20	0.338	I	40	0.344	J	60	0.348
‡ Vinyl Chloride	A	0.10	0.281	B	0.20	0.260	C	0.50	0.298	D	1.0	0.321	E	2.0	0.349
	F	5.0	0.322	G	10	0.316	H	20	0.330	I	40	0.331	J	60	0.329
Bromomethane							C	0.50	0.463	D	1.0	0.433	E	2.0	0.416
	F	5.0	0.301	G	10	0.276	H	20	0.270	I	40	0.272	J	60	0.278
Chloroethane				B	0.20	0.222	C	0.50	0.230	D	1.0	0.240	E	2.0	0.252
	F	5.0	0.233	G	10	0.229	H	20	0.231	I	40	0.229	J	60	0.230
Acetone	A	4.0	0.0293	B	10	0.0251	C	20	0.0241	D	40	0.0247	E	80	0.0217
	F	100	0.0234	G	200	0.0265	H	400	0.0244	I	800	0.0231	J	1600	0.0237
‡ 1,1-Dichloroethene	A	0.10	0.186	B	0.20	0.193	C	0.50	0.246	D	1.0	0.255	E	2.0	0.277
	F	5.0	0.259	G	10	0.255	H	20	0.262	I	40	0.261	J	60	0.264
Carbon Disulfide				B	0.20	0.920	C	0.50	0.980	D	1.0	1.02	E	2.0	1.09
	F	5.0	1.03	G	10	1.02	H	20	1.04	I	40	1.04	J	60	1.06
Methylene Chloride							C	0.50	0.445	D	1.0	0.369	E	2.0	0.355
	F	5.0	0.323	G	10	0.308	H	20	0.302	I	40	0.290	J	60	0.292
trans-1,2-Dichloroethene	A	0.10	0.250	B	0.20	0.289	C	0.50	0.319	D	1.0	0.330	E	2.0	0.341
	F	5.0	0.325	G	10	0.323	H	20	0.328	I	40	0.324	J	60	0.325
† 1,1-Dichloroethane				B	0.20	0.452	C	0.50	0.515	D	1.0	0.498	E	2.0	0.527
	F	5.0	0.506	G	10	0.492	H	20	0.497	I	40	0.485	J	60	0.490

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
2-Butanone (MEK)	A	4.0	0.00806	B	10	0.00853	C	20	0.00825	D	40	0.00919	E	80	0.00828
	F	100	0.00911	G	200	0.0110	H	400	0.0103	I	800	0.00981	J	1600	0.0102
cis-1,2-Dichloroethene	A	0.10	0.292	B	0.20	0.291	C	0.50	0.328	D	1.0	0.322	E	2.0	0.340
	F	5.0	0.333	G	10	0.327	H	20	0.331	I	40	0.324	J	60	0.326
‡ Chloroform	A	0.10	0.495	B	0.20	0.470	C	0.50	0.468	D	1.0	0.478	E	2.0	0.501
	F	5.0	0.480	G	10	0.472	H	20	0.474	I	40	0.458	J	60	0.456
1,1,1-Trichloroethane (TCA)	A	0.10	0.252	B	0.20	0.281	C	0.50	0.334	D	1.0	0.369	E	2.0	0.384
	F	5.0	0.359	G	10	0.353	H	20	0.360	I	40	0.351	J	60	0.345
Carbon Tetrachloride				B	0.20	0.242	C	0.50	0.283	D	1.0	0.306	E	2.0	0.327
	F	5.0	0.308	G	10	0.301	H	20	0.309	I	40	0.302	J	60	0.295
1,2-Dichloroethane (EDC)	A	0.10	0.217	B	0.20	0.241	C	0.50	0.239	D	1.0	0.237	E	2.0	0.252
	F	5.0	0.245	G	10	0.240	H	20	0.237	I	40	0.225	J	60	0.221
Benzene	A	0.10	1.08	B	0.20	1.01	C	0.50	1.03	D	1.0	1.07	E	2.0	1.11
	F	5.0	1.08	G	10	1.07	H	20	1.11	I	40	1.10	J	60	1.13
Trichloroethene (TCE)	A	0.10	0.228	B	0.20	0.225	C	0.50	0.262	D	1.0	0.276	E	2.0	0.293
	F	5.0	0.279	G	10	0.279	H	20	0.284	I	40	0.284	J	60	0.288
‡ 1,2-Dichloropropane	A	0.10	0.226	B	0.20	0.233	C	0.50	0.243	D	1.0	0.235	E	2.0	0.252
	F	5.0	0.249	G	10	0.246	H	20	0.253	I	40	0.249	J	60	0.253
Bromodichloromethane				B	0.20	0.284	C	0.50	0.284	D	1.0	0.288	E	2.0	0.298
	F	5.0	0.308	G	10	0.297	H	20	0.301	I	40	0.294	J	60	0.297
2-Hexanone				B	10	0.00810	C	20	0.00941	D	40	0.0114	E	80	0.0106
	F	100	0.0115	G	200	0.0143	H	400	0.0136	I	800	0.0132	J	1600	0.0135
cis-1,3-Dichloropropene	A	0.10	0.279	B	0.20	0.318	C	0.50	0.294	D	1.0	0.297	E	2.0	0.325
	F	5.0	0.342	G	10	0.345	H	20	0.359	I	40	0.361	J	60	0.366
‡ Toluene	A	0.10	0.523	B	0.20	0.574	C	0.50	0.621	D	1.0	0.627	E	2.0	0.670
	F	5.0	0.664	G	10	0.654	H	20	0.676	I	40	0.669	J	60	0.677
trans-1,3-Dichloropropene	A	0.10	0.299	B	0.20	0.295	C	0.50	0.296	D	1.0	0.298	E	2.0	0.319
	F	5.0	0.343	G	10	0.343	H	20	0.358	I	40	0.363	J	60	0.370
1,1,2-Trichloroethane				B	0.20	0.171	C	0.50	0.170	D	1.0	0.175	E	2.0	0.177
	F	5.0	0.185	G	10	0.180	H	20	0.183	I	40	0.183	J	60	0.183
4-Methyl-2-pentanone (MIBK)	A	4.0	0.0111	B	10	0.0104	C	20	0.0114	D	40	0.0137	E	80	0.0122
	F	100	0.0133	G	200	0.0163	H	400	0.0152	I	800	0.0146	J	1600	0.0150
Tetrachloroethene (PCE)	A	0.10	0.283	B	0.20	0.301	C	0.50	0.349	D	1.0	0.373	E	2.0	0.402
	F	5.0	0.377	G	10	0.369	H	20	0.384	I	40	0.385	J	60	0.383

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287
Instrument ID: MS04

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Dibromochloromethane							C	0.50	0.266	D	1.0	0.275	E	2.0	0.278
	F	5.0	0.293	G	10	0.288	H	20	0.298	I	40	0.299	J	60	0.304
† Chlorobenzene	A	0.10	0.982	B	0.20	0.981	C	0.50	1.01	D	1.0	1.01	E	2.0	1.06
	F	5.0	1.06	G	10	1.03	H	20	1.06	I	40	1.07	J	60	1.08
‡ Ethylbenzene				B	0.20	0.403	C	0.50	0.445	D	1.0	0.473	E	2.0	0.512
	F	5.0	0.515	G	10	0.519	H	20	0.537	I	40	0.544	J	60	0.551
m,p-Xylenes				B	0.40	0.471	C	1.0	0.530	D	2.0	0.570	E	4.0	0.637
	F	10	0.649	G	20	0.647	H	40	0.681	I	80	0.696	J	120	0.702
o-Xylene	A	0.10	0.465	B	0.20	0.448	C	0.50	0.496	D	1.0	0.520	E	2.0	0.574
	F	5.0	0.611	G	10	0.612	H	20	0.637	I	40	0.643	J	60	0.648
Styrene							C	0.50	0.689	D	1.0	0.737	E	2.0	0.861
	F	5.0	0.959	G	10	0.985	H	20	1.04	I	40	1.07	J	60	1.09
† Bromoform				B	0.20	0.128	C	0.50	0.130	D	1.0	0.132	E	2.0	0.144
	F	5.0	0.156	G	10	0.150	H	20	0.155	I	40	0.159	J	60	0.160
† 1,1,2,2-Tetrachloroethane				B	0.20	0.394	C	0.50	0.395	D	1.0	0.404	E	2.0	0.427
	F	5.0	0.440	G	10	0.405	H	20	0.417	I	40	0.418	J	60	0.425
Toluene-d8				B	4.0	0.820	C	5.0	0.770	D	6.0	0.778	E	7.0	0.697
	F	8.0	0.694	G	10	0.741	H	20	0.735	I	40	0.821	J	50	0.857
4-Bromofluorobenzene				B	4.0	0.390	C	5.0	0.389	D	6.0	0.386	E	7.0	0.379
	F	8.0	0.373	G	10	0.379	H	20	0.389	I	40	0.411	J	50	0.412

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc. **Service Request:** K0704852
Project: Presidio **Calibration Date:** 05/21/2007

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL6287 **Column:** MS
Instrument ID: MS04

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Vinyl Acetate	TRG	AverageRF	% RSD	13.1		≤ 15	0.0271		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	19.5	*	≤ 15	0.0283		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	5.9		≤ 15	0.367		0.01
1,2-Dichloroethane-d4	SURR	AverageRF	% RSD	4.4		≤ 15	0.186		0.01
† Chloromethane	TRG	AverageRF	% RSD	2.8		≤ 15	0.343		0.10
‡ Vinyl Chloride	TRG	AverageRF	% RSD	8.5		≤ 15	0.314		0.01
Bromomethane	TRG	AverageRF	% RSD	24.6	*	≤ 15	0.339		0.01
Chloroethane	TRG	AverageRF	% RSD	3.7		≤ 15	0.233		0.01
Acetone	TRG	AverageRF	% RSD	8.5		≤ 15	0.0246		0.01
‡ 1,1-Dichloroethene	MS	AverageRF	% RSD	12.5		≤ 15	0.246		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	4.9		≤ 15	1.02		0.01
Methylene Chloride	TRG	AverageRF	% RSD	15.7	*	≤ 15	0.336		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	8.4		≤ 15	0.315		0.01
† 1,1-Dichloroethane	TRG	AverageRF	% RSD	4.2		≤ 15	0.496		0.10
2-Butanone (MEK)	TRG	AverageRF	% RSD	10.9		≤ 15	0.00927	*	0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	5.1		≤ 15	0.321		0.01
‡ Chloroform	TRG	AverageRF	% RSD	3.0		≤ 15	0.475		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	12.1		≤ 15	0.339		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	8.0		≤ 15	0.297		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.7		≤ 15	0.235		0.01
Benzene	MS	AverageRF	% RSD	3.4		≤ 15	1.08		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	9.0		≤ 15	0.270		0.01
‡ 1,2-Dichloropropane	TRG	AverageRF	% RSD	3.9		≤ 15	0.244		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	2.8		≤ 15	0.294		0.01
2-Hexanone	TRG	AverageRF	% RSD	18.0	*	≤ 15	0.0117		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	9.4		≤ 15	0.329		0.01
‡ Toluene	MS	AverageRF	% RSD	8.0		≤ 15	0.635		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	9.2		≤ 15	0.328		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	3.3		≤ 15	0.179		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	14.9		≤ 15	0.0133		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	10.8		≤ 15	0.361		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	4.6		≤ 15	0.288		0.01
† Chlorobenzene	MS	AverageRF	% RSD	3.6		≤ 15	1.04		0.30
‡ Ethylbenzene	TRG	AverageRF	% RSD	9.9		≤ 15	0.500		0.01
m,p-Xylenes	TRG	AverageRF	% RSD	12.8		≤ 15	0.620		0.01
o-Xylene	TRG	AverageRF	% RSD	13.6		≤ 15	0.565		0.01
Styrene	TRG	AverageRF	% RSD	16.4	*	≤ 15	0.929		0.01
† Bromoform	TRG	AverageRF	% RSD	8.9		≤ 15	0.146		0.10
† 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	3.8		≤ 15	0.414		0.30
Toluene-d8	SURR	AverageRF	% RSD	7.4		≤ 15	0.768		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	3.5		≤ 15	0.390		0.01

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 05/21/2007
Date Analyzed: 05/22/2007

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration ID: CAL6287
Units: PPB

File ID: J:\MS04\DATA\052207\0522F006.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2-Chloroethyl Vinyl Ether	10	9.8	0.0283	0.0278	-2	NA	± 40 %	AverageRF
Methyl tert-Butyl Ether	10	10	0.367	0.369	0	NA	± 30 %	AverageRF
Vinyl Acetate	50	49	0.0271	0.0264	-3	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.343	0.347	1	NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	11	0.314	0.332	6	NA	± 20 %	AverageRF
Bromomethane	10	8.5	0.339	0.288	-15	NA	± 40 %	AverageRF
Chloroethane	10	10	0.233	0.239	2	NA	± 40 %	AverageRF
Acetone	50	45	0.0246	0.0219	-11	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	11	0.246	0.272	11	NA	± 20 %	AverageRF
Carbon Disulfide	20	20	1.02	1.03	0	NA	± 30 %	AverageRF
Methylene Chloride	10	10	0.336	0.347	3	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	9.7	0.315	0.307	-3	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	9.3	0.496	0.463	-7	NA	± 30 %	AverageRF
2-Butanone (MEK)	50	54	0.00927	0.0100	8	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	10	0.321	0.324	1	NA	± 30 %	AverageRF
‡ Chloroform	10	8.9	0.475	0.424	-11	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	9.3	0.339	0.317	-7	NA	± 30 %	AverageRF
Carbon Tetrachloride	10	9.0	0.297	0.268	-10	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	8.8	0.235	0.207	-12	NA	± 30 %	AverageRF
Benzene	10	9.6	1.08	1.04	-4	NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	9.7	0.270	0.262	-3	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	9.8	0.244	0.240	-2	NA	± 20 %	AverageRF
Bromodichloromethane	10	9.5	0.294	0.280	-5	NA	± 30 %	AverageRF
2-Hexanone	50	52	0.0117	0.0122	4	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	10	0.329	0.345	5	NA	± 30 %	AverageRF
‡ Toluene	10	9.8	0.635	0.622	-2	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	9.8	0.328	0.321	-2	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	10	0.179	0.179	0	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	50	50	0.0133	0.0133	0	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	9.7	0.361	0.351	-3	NA	± 30 %	AverageRF
Dibromochloromethane	10	9.7	0.288	0.278	-4	NA	± 30 %	AverageRF
† Chlorobenzene	10	9.6	1.04	0.995	-4	NA	± 30 %	AverageRF
‡ Ethylbenzene	10	10	0.500	0.502	0	NA	± 20 %	AverageRF
m,p-Xylenes	20	21	0.620	0.639	3	NA	± 30 %	AverageRF
o-Xylene	10	11	0.565	0.617	9	NA	± 30 %	AverageRF
Styrene	10	11	0.929	1.02	10	NA	± 30 %	AverageRF
† Bromoform	10	10	0.146	0.148	2	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	10	10	0.414	0.433	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

PJ 1 of 2

COLUMBIA ANALYTICAL SERVICES

VOA DAILY ANALYSIS LOG
GCMS 5971 MS-04

ICAL Date: 5 21 07
CAL: 6287

DATE: 5·21·07
OPERATOR H. Conrad
TUNE FILE: BFB4
NEW TUNE? NO
SECOND REVIEW F-A-h. 5/23/7 · N/A TORR N/A °C
ICV/LCS STD# See 05·21·07 Prepsheet
MISC: STD# BFB:46V0A04A
IS/SS STD# 46V0A15D
CCV STD# N/A
MS/D STD# N/A

RUN TIME		SAMPLE NAME	DATA FILE	METHOD	PH	DL	R	COMMENTS
1		Primer	0521F001	8260				
2		Primer	02					
3		IB	03					
4		50ng BFB	04			4.4uL/44mL	✓	NR
5		IB	05					
6		8260 ICAL 0.1PPB	06			See 05·21·07 Prepsheet	✓	
7		0.2PPB	07				✓	
8		0.5PPB	08				✓	
9		1.0PPB	09				✓	
10		2.0PPB	10				✓	
11		5.0PPB	11				✓	
12		10PPB	12				✓	
13		20PPB	13				✓	
14		40PPB	14					
15		IB	15					
16		50ng BFB	16			4.4uL/44mL	✓	
17		IB	17					
18		IB	18				✓	
19		8260 ICAL 0.1 PPB	19			See 5·21·07 prepsheet	✓	
20		0.2PPB	20				✓	
21		0.5PPB	21				✓	
22		1.0PPB	22				✓	
23		2.0 PPB	23				✓	
24		50 PPB	24				✓	
25		10 PPB	25				✓	

LIMS WORKGROUP #

1

pg 2 of 2

COLUMBIA ANALYTICAL SERVICES ICAL Date:_____

VOA DAILY ANALYSIS LOG

GCMS 5971 MS-04

DATE:_____ TUNE FILE:_____

OPERATOR_____ NEW TUNE?_____

see pg 1

SECOND REVIEW_____ _____TORR_____°C

ICV/LCS STD#_____ MISC: STD# _____

IS/SS STD#_____ CCV STD#_____ MS/D STD#_____

RUN TIME		SAMPLE NAME	DATA FILE	METHOD	PH	DL	R	COMMENTS
1		8260 ICAL 20 PPB	0521F026	8260		see 5.21.07 prepsheet	✓	
2		40PPB	27				✓	
3		60 PPB	28				✓	
4		IB	29					NR
5		IB	30					
6		ICV	31			see 5.21.07 prepsheet		
7		ICV	32					
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

#5.22.07

LIMS WORKGROUP #_____

1

INTIAL CALIBRATION CURVE

Date 5·21·07 Analysis: 8260
Prepared By H.Conrad Instrument: MS04
Matrix: Water

Stock Solution #1 46V0A15E Analytes: Surrogates Init. Concentration: 200ppm
Stock Solution #2 46V0A16B Analytes: Low 8260 Init. Concentration: 5/10/20/100/200ppm
Stock Solution #3 46V0A16A Analytes: 8260 Init. Concentration: 50/100/200/1000/2000ppm
Stock Solution #4 46V0A15F Analytes: Ketones Init. Concentration: 2000ppm
Stock Solution #5 46V0A15G Analytes: Low Ketones Init. Concentration: 200ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Aliquot of Stock Solution #4 (µL)	Final Conc. of #4 (µg/L)	Aliquot of Stock Solution #5 (µL)	Final Conc. of #5 (µg/L)	Final Volume (mL)	Notes
-	-	1	0.1	-	-	-	-	1	4	50	
1.0	4	2	0.2	-	-	-	-	2.5	10	50	
1.25	5	5.0	0.5	-	-	-	-	5	20	50	
1.5	6	10	1	-	-	-	-	10	40	50	
1.75	7	-	-	2.0	2	2	80	-	-	50	
2.0	8	-	-	5.0	5	2.5	100	-	-	50	
2.5	10	-	-	10	10	5.0	200	-	-	50	
5	20	-	-	20	20	10	400	-	-	50	
10	40	-	-	40	40	20	800	-	-	50	
12.5	50	-	-	60	60	40	1600	-	-	50	

8260 ICV: 10uL of 50/250ppm Accustd ICV (46V0A13E) + 50uL of 100ppm Acrolein (46V0A14F) + 2.5uL of 200ppm Surrogates (46V0A15E) +
(5·21·07) 5uL of 100ppm Dichlorofluoromethane (46V0A15B) + 5uL of 200ppm n-Octane/TBF/Tetrahydrafuran (46V0A15L) +
7.5uL of 200/2000ppm Appendix ICV (46V0A15A) + 5uL of 200/1000ppm Oxygenate (46V0A13D) to 50 ml.

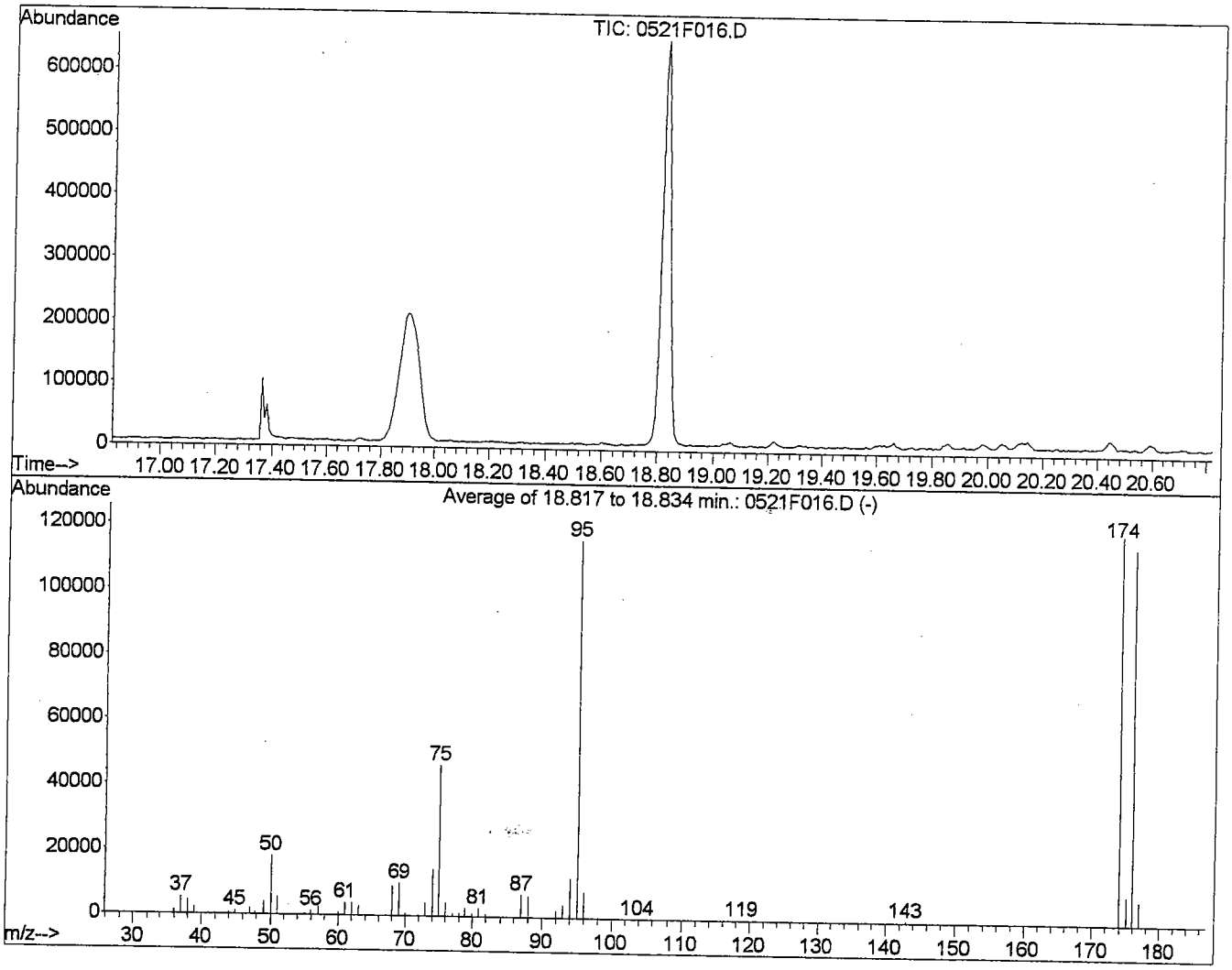
8260 ICV: same as above, except ACCUSTD ICV (46V0A18B) and Acrolein (46V0A18C).
(5·22·07) - 0522F003 & 004. 0522F006 - no surrogates added to ICV.

1503

BFB

Data File : J:\MS04\DATA\052107\0521F016.D
Acq On : 21 May 2007 4:46 pm
Sample : 50NG BFB 46VOA04A
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624

Vial: 16
Operator: HC
Inst : MS04
Multiplr: 1.00



AutoFind: Scans 1777, 1778, 1779; Background Corrected with Scan 1770

HC 5·22·07

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.6	18113	PASS
75	95	30	60	40.0	46498	PASS
95	95	100	100	100.0	116114	PASS
96	95	5	9	6.9	8016	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	103.1	119744	PASS
175	174	5	9	7.4	8889	PASS
176	174	95	101	96.7	115733	PASS
177	176	5	9	6.4	7409	PASS

0521F016.D 052107MS04-8260.M Tue May 22 08:02:50 2007

E-A-h-5/23/7

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F018.D
Acq On : 21 May 2007 5:54 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 11:42:39 2007

Vial: 18
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.23	96	1647044	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1174852	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	574281	10.00 PPB	0.00

System Monitoring Compounds					
41) Dibromofluoromethane	0.00	113	0	0.00 PPB	
Spiked Amount 10.000			Recovery =	0.00%	
47) 1,2-Dichloroethane-d4	0.00	65	0	0.00 PPB	
Spiked Amount 10.000			Recovery =	0.00%	
61) Toluene-d8	0.00	98	0	0.00 PPB	
Spiked Amount 10.000			Recovery =	0.00%	
82) 4-Bromofluorobenzene	0.00	95	0	0.00 PPB	
Spiked Amount 10.000			Recovery =	0.00%	

Target Compounds						Qvalue
19) Methylene Chloride	9.03	84	3585	0.06 PPB		85
96) p-Isopropyltoluene	19.98	119	2210	0.02 PPB		52
99) n-Butylbenzene	20.45	91	2917	0.02 PPB	#	69
102) 1,3,5-Trichlorobenzene	21.73	180	4202	0.07 PPB		93
103) 1,2,4-Trichlorobenzene	22.56	180	4267	0.10 PPB		75
105) Naphthalene	22.95	128	5258	0.11 PPB		72
106) 1,2,3-Trichlorobenzene	23.29	180	4504	0.14 PPB		96

F.A.h. 5/23/7

(#) = qualifier out of range (m) = manual integration

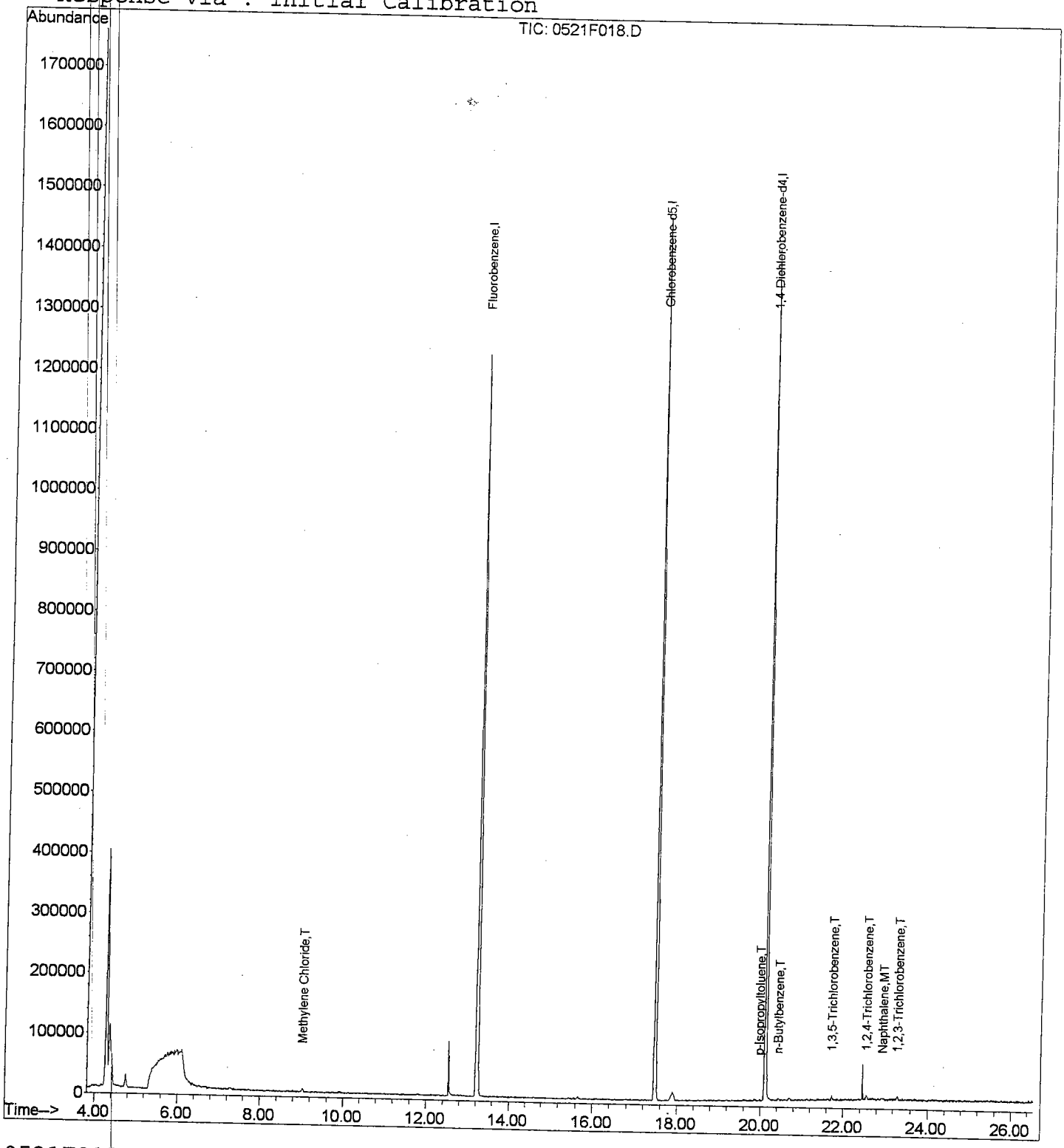
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F018.D
Acq On : 21 May 2007 5:54 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 11:43 2007

Vial: 18
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F019.D
Acq On : 21 May 2007 6:26 pm
Sample : 8260 ICAL 0.1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:44 2007

Vial: 19
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5.22.07
F.A.h. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	1621854	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1163106	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	566446	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	0.00	113	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
47) 1,2-Dichloroethane-d4	0.00	65	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
61) Toluene-d8	0.00	98	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
82) 4-Bromofluorobenzene	0.00	95	0	0.00 PPB	
Spiked Amount 10.000			Recovery	= 0.00%	
Target Compounds					Qvalue
4) Vinyl Chloride	5.61	62	4560	0.09 PPB	84
8) Trichlorofluoromethane	7.15	101	4099	0.07 PPB	87
9) Ether	7.67	59	2107	0.09 PPB	97
10) Trichlorotrifluoroethane	8.11	151	2749	0.07 PPB #	74
11) 1,1-Dichloroethene	8.16	96	3021	0.07 PPB	90
12) Acetone	8.22	43	18991	4.42 PPB	92
19) Methylene Chloride	9.04	84	16368	0.33 PPB	96
21) Methyl tert-Butyl Ether	9.46	73	11357	0.18 PPB	92
22) trans-1,2-Dichloroethene	9.51	96	4052	0.08 PPB	87
28) Chloroprene	10.43	88	10920	0.24 PPB	94
29) tert-Butyl Ethyl Ether	10.91	59	7184	0.09 PPB	92
30) 2,2-Dichloropropane	11.33	77	5108	0.09 PPB	95
32) cis-1,2-Dichloroethene	11.32	96	4732	0.09 PPB	91
33) 2-Butanone	11.29	72	5229	2.94 PPB #	87
36) Bromochloromethane	11.75	128	2053	0.08 PPB	83
37) Chloroform	11.83	83	8030	0.10 PPB	85
40) 1,1,1-Trichloroethane	12.21	97	4084	0.07 PPB	82
45) 1,1-Dichloropropene	12.46	75	3888	0.06 PPB	89
48) Benzene	12.83	78	17506	0.10 PPB	93
49) 1,2-Dichloroethane	12.83	62	3512	0.09 PPB	85
50) Trichloroethene	13.80	95	3690	0.08 PPB #	83
53) 1,2-Dichloropropane	14.16	63	3665	0.09 PPB	94
59) cis-1,3-Dichloropropene	15.16	75	4525	0.08 PPB	92
60) 4-Methyl-2-pentanone (MIBK	15.32	100	7177	2.72 PPB	98
62) Toluene	15.65	92	8486	0.08 PPB	89
66) trans-1,3-Dichloropropene	15.91	75	3480	0.09 PPB	98
68) Tetrachloroethene	16.41	164	3288	0.08 PPB	84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F019.D
Acq On : 21 May 2007 6:26 pm
Sample : 8260 ICAL 0.1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:44 2007

Vial: 19
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
74) Chlorobenzene	17.51	112	11416	0.09 PPB		87
75) Ethylbenzene	17.59	106	3881	0.06 PPB		85
76) 1,1,1,2-Tetrachloroethane	17.59	131	3449	0.09 PPB		92
77) m,p-Xylenes	17.72	106	9920	0.13 PPB		94
78) o-Xylene	18.22	106	5410	0.08 PPB	#	68
79) Styrene	18.22	104	7469	0.07 PPB		87
81) Isopropylbenzene	18.61	105	11648	0.07 PPB		91
86) Bromobenzene	19.04	156	4061	0.08 PPB		89
87) n-Propylbenzene	19.05	91	14233	0.07 PPB		99
90) 2-Chlorotoluene	19.21	91	10348	0.08 PPB		91
91) 1,3,5-Trimethylbenzene	19.22	105	9097	0.07 PPB		92
92) 4-Chlorotoluene	19.32	91	9484	0.08 PPB		98
94) 1,2,4-Trimethylbenzene	19.66	105	9271	0.07 PPB		93
95) sec-Butylbenzene	19.86	105	11633	0.07 PPB		94
96) p-Isopropyltoluene	19.98	119	10096	0.07 PPB		98
97) 1,3-Dichlorobenzene	20.06	146	9002	0.10 PPB		95
98) 1,4-Dichlorobenzene	20.14	146	10287	0.11 PPB		93
99) n-Butylbenzene	20.45	91	9485	0.08 PPB		89
100) 1,2-Dichlorobenzene	20.59	146	8134	0.11 PPB		93
102) 1,3,5-Trichlorobenzene	21.73	180	7103	0.13 PPB		94
103) 1,2,4-Trichlorobenzene	22.56	180	6114	0.15 PPB		82
104) Hexachlorobutadiene	22.72	225	2147	0.13 PPB		92
105) Naphthalene	22.96	128	7053	0.14 PPB		72
106) 1,2,3-Trichlorobenzene	23.30	180	5976	0.20 PPB		87

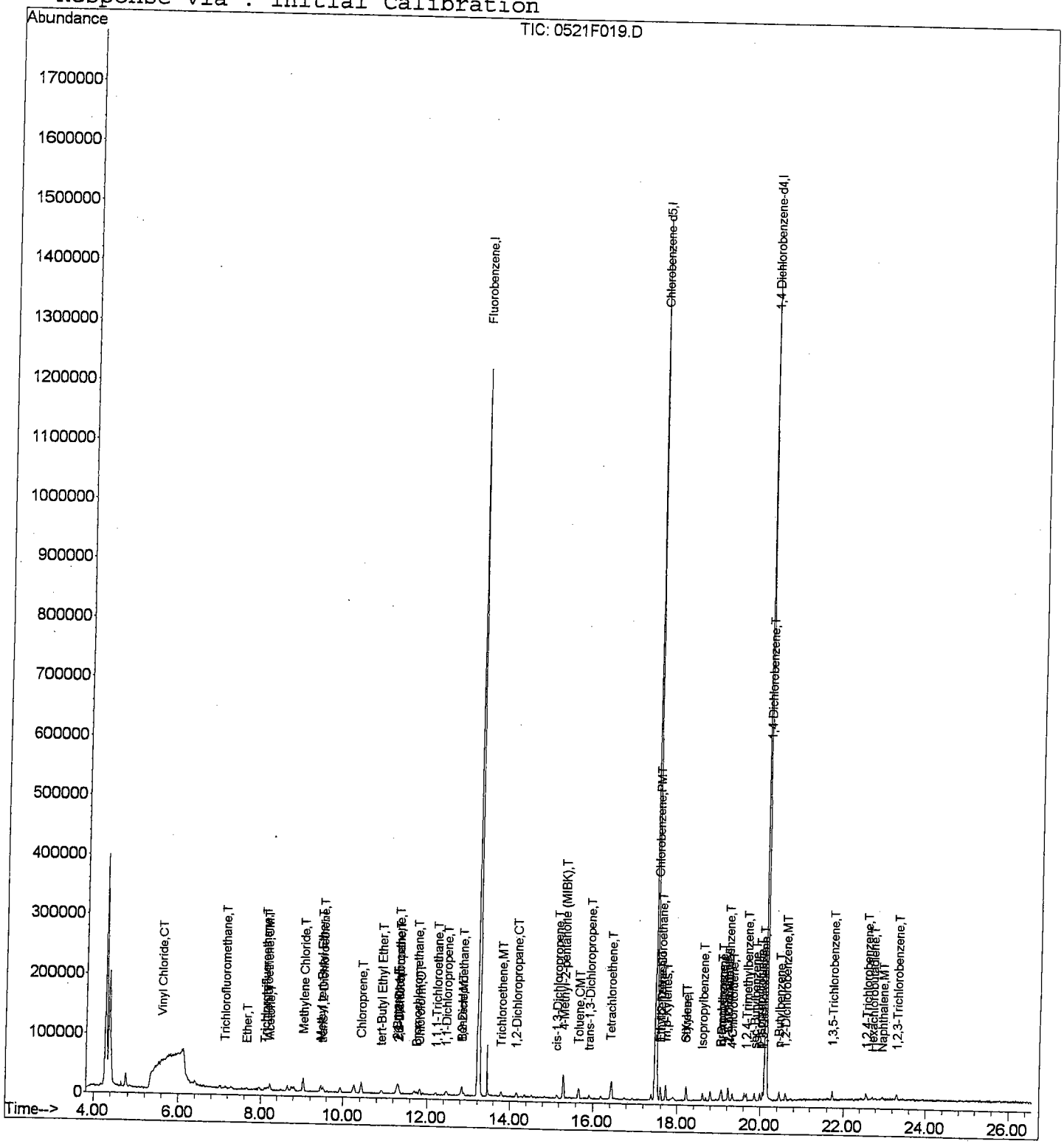
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F019.D
Acq On : 21 May 2007 6:26 pm
Sample : 8260 ICAL 0.1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:18 2007

Vial: 19
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:45 2007

Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F.A.L. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.23	96	1606511	10.00 PPB	0.00
63) Chlorobenzene-d5	17.47	117	1156950	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	566261	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.12	113	196438	4.62 PPB	0.00
Spiked Amount 10.000			Recovery	= 46.20%	
47) 1,2-Dichloroethane-d4	12.71	65	128755	4.48 PPB	0.00
Spiked Amount 10.000			Recovery	= 44.80%	
61) Toluene-d8	15.56	98	527167	4.43 PPB	0.00
Spiked Amount 10.000			Recovery	= 44.30%	
82) 4-Bromofluorobenzene	18.82	95	180514	4.12 PPB	0.00
Spiked Amount 10.000			Recovery	= 41.20%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.85	85	7006	0.15 PPB		89
3) Chloromethane	5.35	50	10953	0.21 PPB		87
4) Vinyl Chloride	5.61	62	8365	0.16 PPB		87
5) Bromomethane	6.40	94	14916	0.34 PPB		94
6) Chloroethane	6.61	64	7137	0.19 PPB		98
7) Dichlorofluoromethane	7.01	67	16246	0.18 PPB		90
8) Trichlorofluoromethane	7.14	101	9080	0.15 PPB		96
9) Ether	7.66	59	3822	0.17 PPB		99
10) Trichlorotrifluoroethane	8.11	151	5929	0.15 PPB		88
11) 1,1-Dichloroethene	8.17	96	6200	0.15 PPB		94
12) Acetone	8.22	43	40276	9.47 PPB		99
13) Iodomethane	8.50	127	2538	0.11 PPB	#	77
14) Carbon Disulfide	8.65	76	29568	0.18 PPB		92
15) Acrolein	7.96	56	10545	3.84 PPB		92
17) 3-Cloro-1-propene	8.82	41	10619m	0.19 PPB		
18) Acetonitrile	8.76	41	17166	8.85 PPB	#	69
19) Methylene Chloride	9.03	84	21205	0.43 PPB		95
21) Methyl tert-Butyl Ether	9.46	73	21675	0.35 PPB		96
22) trans-1,2-Dichloroethene	9.52	96	9292	0.18 PPB		95
23) Hexane	9.94	57	8574	0.16 PPB		89
24) 1,1-Dichloroethane	10.28	63	14515	0.18 PPB		97
27) Diisopropyl Ether	10.26	45	19184	0.17 PPB		91
28) Chloroprene	10.44	88	25510	0.55 PPB		97
29) tert-Butyl Ethyl Ether	10.91	59	14138	0.17 PPB		91
30) 2,2-Dichloropropane	11.33	77	9720	0.18 PPB		96
32) cis-1,2-Dichloroethene	11.31	96	9363	0.18 PPB		89
33) 2-Butanone	11.28	72	13703	7.79 PPB	#	61

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:45 2007

Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
35) Methacrylonitrile	11.70	67	4575	0.63 PPB		87
36) Bromochloromethane	11.76	128	4815	0.19 PPB		88
37) Chloroform	11.85	83	15103	0.20 PPB		89
38) tert-butyl Formate	11.91	59	2485	0.17 PPB	#	73
40) 1,1,1-Trichloroethane	12.21	97	9022	0.16 PPB		78
44) Carbon Tetrachloride	12.49	117	7781	0.16 PPB		84
45) 1,1-Dichloropropene	12.46	75	9026	0.15 PPB		80
46) tert-Amyl Methyl-ether	12.88	55	2952	0.18 PPB	#	60
48) Benzene	12.82	78	32440	0.19 PPB		97
49) 1,2-Dichloroethane	12.83	62	7740	0.20 PPB		90
50) Trichloroethene	13.79	95	7225	0.16 PPB		84
53) 1,2-Dichloropropane	14.16	63	7483	0.19 PPB		94
55) Dibromomethane	14.34	93	3970	0.19 PPB		90
56) Bromodichloromethane	14.53	83	9116	0.19 PPB		91
59) cis-1,3-Dichloropropene	15.16	75	10232	0.18 PPB		93
60) 4-Methyl-2-pentanone (MIBK	15.31	100	16787	6.41 PPB		92
62) Toluene	15.65	92	18438	0.18 PPB		95
65) n-Octane	15.66	85	3883	0.16 PPB	#	84
66) trans-1,3-Dichloropropene	15.90	75	6825	0.17 PPB		90
67) 1,1,2-Trichloroethane	16.18	83	3946	0.19 PPB		90
68) Tetrachloroethene	16.40	164	6974	0.16 PPB		95
69) 2-Hexanone	16.44	57	9376	5.66 PPB	#	81
70) 1,3-Dichloropropane	16.43	76	8328	0.19 PPB		89
72) 1,2-Dibromoethane (EDB)	16.94	107	4631	0.17 PPB		94
73) 1-Chlorohexane	17.37	55	4736	0.14 PPB		95
74) Chlorobenzene	17.52	112	22696	0.19 PPB		94
75) Ethylbenzene	17.59	106	9321	0.16 PPB	#	85
76) 1,1,1,2-Tetrachloroethane	17.58	131	7260	0.18 PPB		88
77) m,p-Xylenes	17.73	106	21816	0.29 PPB		88
78) o-Xylene	18.22	106	10364	0.15 PPB		97
79) Styrene	18.23	104	13507	0.12 PPB		96
80) Bromoform	18.51	173	2964	0.17 PPB		92
81) Isopropylbenzene	18.61	105	22559	0.13 PPB		93
84) cis-1,4-Dichloro-2-Butene	18.68	88	2438	0.54 PPB		89
85) 1,1,2,2-Tetrachloroethane	18.93	83	4459	0.19 PPB		95
86) Bromobenzene	19.04	156	8970	0.18 PPB		87
87) n-Propylbenzene	19.06	91	29296	0.14 PPB		98
90) 2-Chlorotoluene	19.21	91	20237	0.16 PPB		92
91) 1,3,5-Trimethylbenzene	19.22	105	18826	0.14 PPB		95
92) 4-Chlorotoluene	19.32	91	18805	0.16 PPB		98
93) tert-Butylbenzene	19.61	134	4870	0.14 PPB	#	87

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:45 2007

Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
94) 1,2,4-Trimethylbenzene	19.66	105	19115	0.14 PPB	95
95) sec-Butylbenzene	19.85	105	23094	0.14 PPB	99
96) p-Isopropyltoluene	19.98	119	20382	0.13 PPB	91
97) 1,3-Dichlorobenzene	20.05	146	16774	0.18 PPB	97
98) 1,4-Dichlorobenzene	20.15	146	18035	0.20 PPB	98
99) n-Butylbenzene	20.44	91	17411	0.14 PPB	97
100) 1,2-Dichlorobenzene	20.59	146	14198	0.18 PPB	98
102) 1,3,5-Trichlorobenzene	21.74	180	12129	0.22 PPB	92
103) 1,2,4-Trichlorobenzene	22.55	180	9295	0.22 PPB	89
104) Hexachlorobutadiene	22.72	225	3057	0.19 PPB	92
105) Naphthalene	22.96	128	9808	0.20 PPB	72
106) 1,2,3-Trichlorobenzene	23.31	180	7190	0.24 PPB	88

(#) = qualifier out of range (m) = manual integration

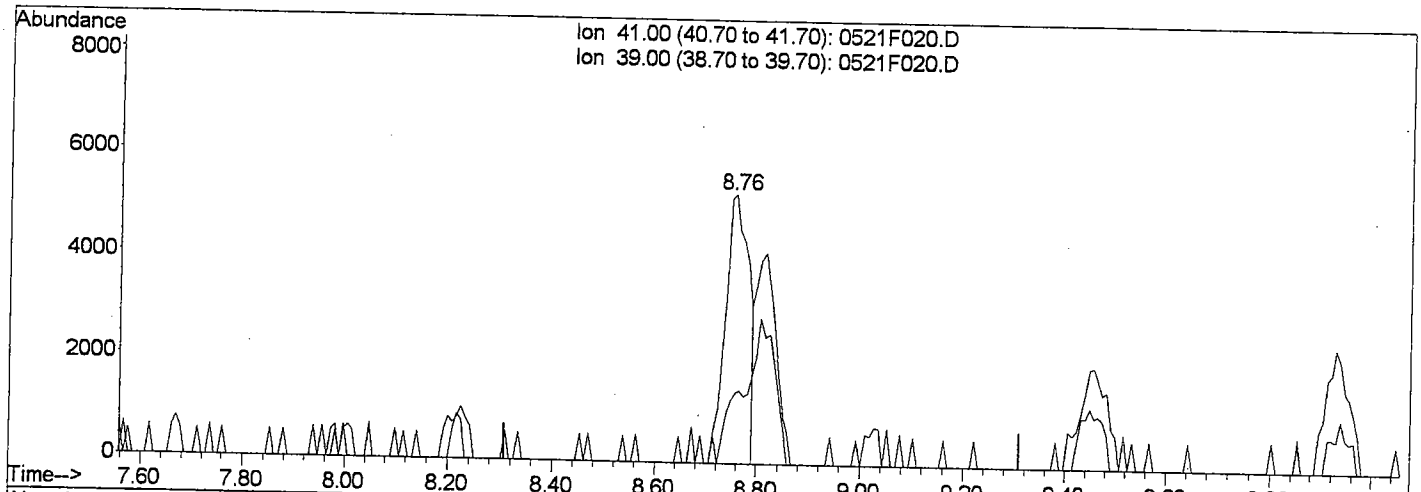
Quantitation Report (Qedit)

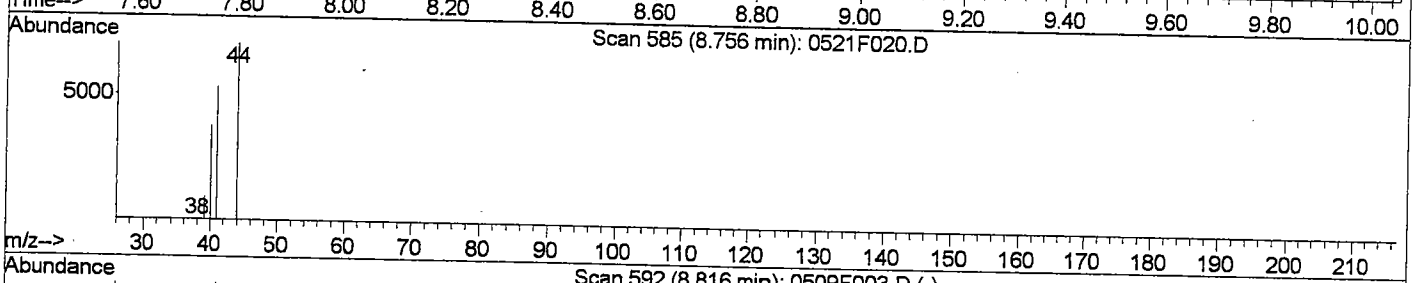
Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:19 2007

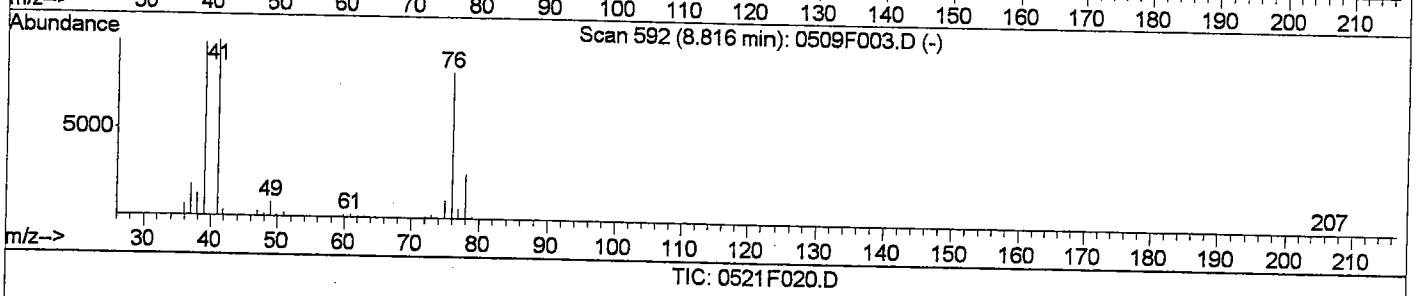
Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F020.D

(17) 3-Cloro-1-propene (T)

8.76min 0.31PPB

response 17166

Ion	Exp%	Act%
41.00	100	100
39.00	60.00	26.05#
0.00	0.00	0.00
0.00	0.00	0.00

0521F020.D 052107MS04-8260.M Tue May 22 08:19:53 2007

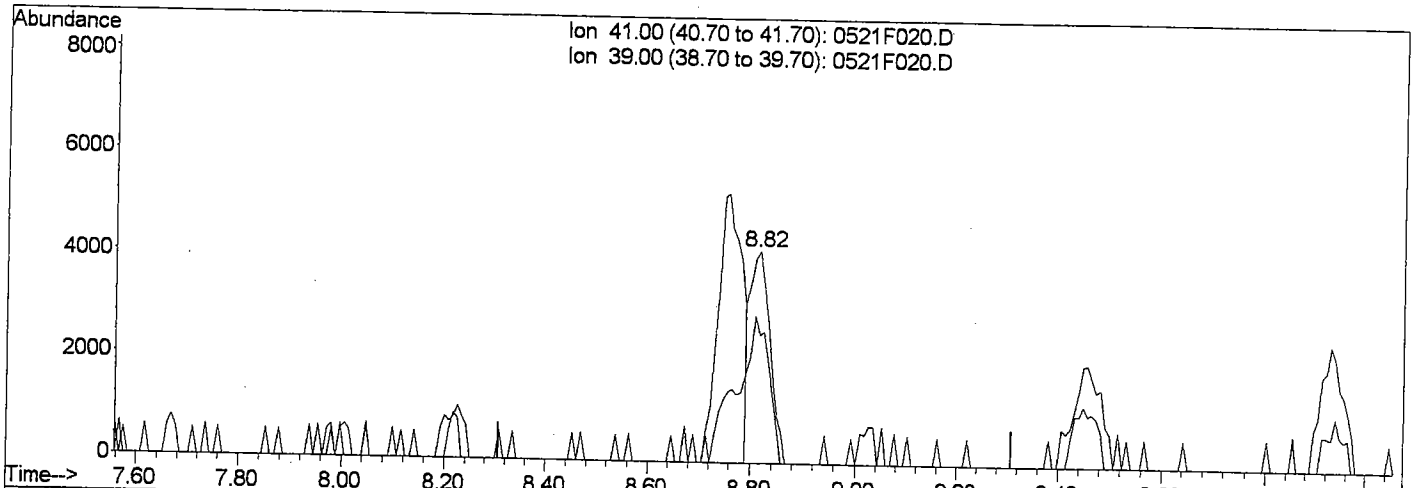
Quantitation Report (Qedit)

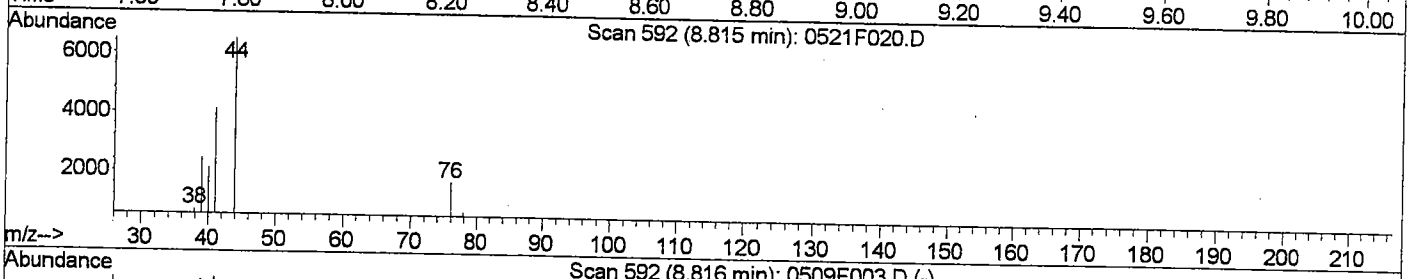
Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:19 2007

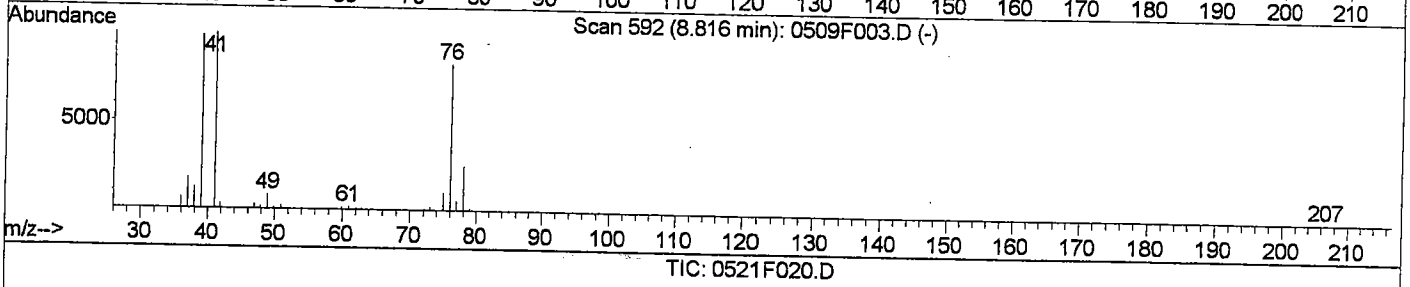
Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F020.D

(17) 3-Cloro-1-propene (T)

8.82min 0.19PPB m

response 10619

Ion	Exp%	Act%
41.00	100	100
39.00	60.00	60.03
0.00	0.00	0.00
0.00	0.00	0.00

wrong peak
HC 5.22.07
F-A-h.5/23/7.

0521F020.D 052107MS04-8260.M Tue May 22 08:19:58 2007

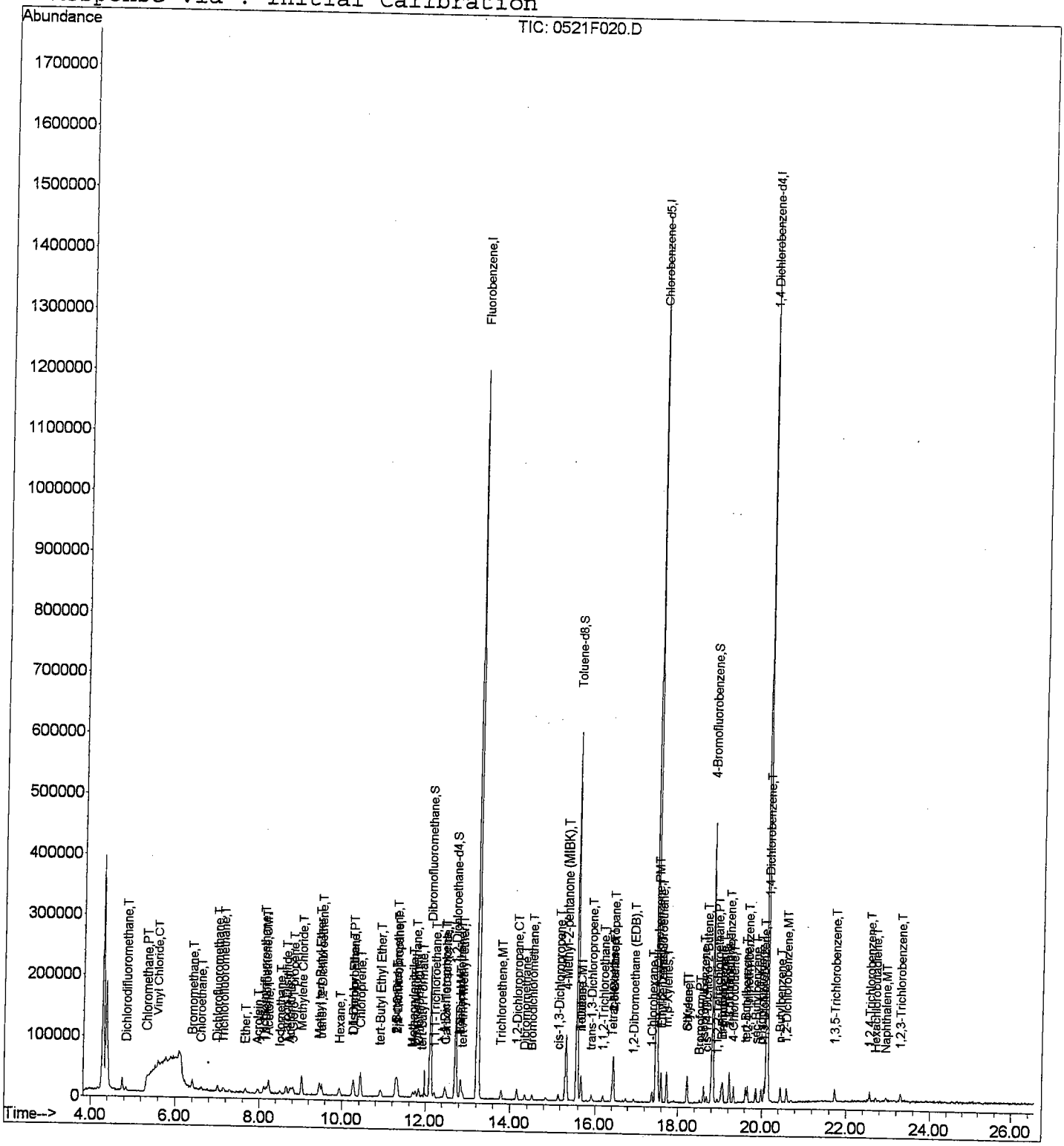
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F020.D
Acq On : 21 May 2007 6:58 pm
Sample : 8260 ICAL 0.2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:21 2007

Vial: 20
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F021.D
Acq On : 21 May 2007 7:30 pm
Sample : 8260 ICAL 0.5 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:47 2007

Vial: 21
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F.A.L. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	13.23	96	1613595	10.00	PPB	0.00
63) Chlorobenzene-d5	17.48	117	1164643	10.00	PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	577413	10.00	PPB	0.00
System Monitoring Compounds						
41) Dibromofluoromethane	12.12	113	229618	5.38	PPB	0.01
Spiked Amount 10.000			Recovery	=	53.80%	
47) 1,2-Dichloroethane-d4	12.71	65	155620	5.39	PPB	0.00
Spiked Amount 10.000			Recovery	=	53.90%	
61) Toluene-d8	15.56	98	621398	5.20	PPB	0.01
Spiked Amount 10.000			Recovery	=	52.00%	
82) 4-Bromofluorobenzene	18.82	95	226657	5.13	PPB	0.00
Spiked Amount 10.000			Recovery	=	51.30%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.84	85	20622	0.44	PPB	97
3) Chloromethane	5.33	50	27976	0.53	PPB	95
4) Vinyl Chloride	5.61	62	24077	0.47	PPB	94
5) Bromomethane	6.40	94	37373	0.84	PPB	91
6) Chloroethane	6.62	64	18525	0.50	PPB	95
7) Dichlorofluoromethane	7.01	67	46360	0.52	PPB	92
8) Trichlorofluoromethane	7.15	101	28475	0.48	PPB	94
9) Ether	7.66	59	11033	0.48	PPB	96
10) Trichlorotrifluoroethane	8.11	151	18002	0.45	PPB	96
11) 1,1-Dichloroethene	8.17	96	19808	0.48	PPB	89
12) Acetone	8.22	43	77799	18.21	PPB	100
13) Iodomethane	8.50	127	11602	0.49	PPB #	85
14) Carbon Disulfide	8.65	76	79098	0.48	PPB	97
15) Acrolein	7.95	56	26001	9.44	PPB	94
17) 3-Cloro-1-propene	8.81	41	29082	0.52	PPB	98
18) Acetonitrile	8.76	41	40456	20.76	PPB	93
19) Methylene Chloride	9.03	84	35909	0.72	PPB	97
21) Methyl tert-Butyl Ether	9.45	73	56997	0.93	PPB	95
22) trans-1,2-Dichloroethene	9.51	96	25738	0.49	PPB	87
23) Hexane	9.93	57	24036	0.45	PPB	89
24) 1,1-Dichloroethane	10.27	63	41581	0.52	PPB	98
25) Vinyl Acetate	10.25	86	3366	0.75	PPB #	82
26) Acrylonitrile	9.44	53	11823	1.83	PPB	95
27) Diisopropyl Ether	10.25	45	50476	0.45	PPB	95
28) Chloroprene	10.43	88	74691	1.62	PPB	97
29) tert-Butyl Ethyl Ether	10.92	59	34700	0.42	PPB	98
30) 2,2-Dichloropropane	11.33	77	26383	0.49	PPB	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F021.D
Acq On : 21 May 2007 7:30 pm
Sample : 8260 ICAL 0.5 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:47 2007

Vial: 21
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31) Ethyl Acetate	11.32	70	3380	1.71 PPB	#	77
32) cis-1,2-Dichloroethene	11.32	96	26481	0.50 PPB		95
33) 2-Butanone	11.28	72	26638	15.07 PPB	#	83
35) Methacrylonitrile	11.69	67	12145	1.67 PPB		94
36) Bromochloromethane	11.76	128	12788	0.50 PPB		90
37) Chloroform	11.83	83	37794	0.50 PPB		98
38) tert-butyl Formate	11.91	59	6905	0.48 PPB	#	73
40) 1,1,1-Trichloroethane	12.20	97	26954	0.47 PPB		95
44) Carbon Tetrachloride	12.48	117	22843	0.47 PPB		89
45) 1,1-Dichloropropene	12.46	75	27041	0.45 PPB		97
46) tert-Amyl Methyl-ether	12.88	55	8261	0.49 PPB	#	45
48) Benzene	12.83	78	82831	0.48 PPB		99
49) 1,2-Dichloroethane	12.83	62	19305	0.50 PPB		95
50) Trichloroethene	13.78	95	21109	0.47 PPB		90
52) Methyl methacrylate	14.17	69	4065	0.38 PPB	#	30
53) 1,2-Dichloropropane	14.16	63	19570	0.49 PPB		88
55) Dibromomethane	14.35	93	10259	0.49 PPB		93
56) Bromodichloromethane	14.52	83	22883	0.48 PPB		99
58) 2-Nitropropane	14.85	41	7836	2.40 PPB		86
59) cis-1,3-Dichloropropene	15.16	75	23757	0.43 PPB		92
60) 4-Methyl-2-pentanone (MIBK	15.32	100	36632	13.94 PPB	#	84
62) Toluene	15.66	92	50068	0.47 PPB		99
64) Ethyl methacrylate	15.93	69	7124	0.33 PPB		86
65) n-Octane	15.67	85	10477	0.42 PPB		92
66) trans-1,3-Dichloropropene	15.91	75	17249	0.43 PPB		96
67) 1,1,2-Trichloroethane	16.19	83	9876	0.47 PPB		86
68) Tetrachloroethene	16.41	164	20334	0.47 PPB		95
69) 2-Hexanone	16.44	57	21920	13.15 PPB	#	90
70) 1,3-Dichloropropane	16.42	76	21917	0.49 PPB		99
71) Dibromochloromethane	16.74	129	15517	0.46 PPB		85
72) 1,2-Dibromoethane (EDB)	16.94	107	12643	0.47 PPB		95
73) 1-Chlorohexane	17.38	55	13378	0.40 PPB		77
74) Chlorobenzene	17.51	112	58980	0.49 PPB		99
75) Ethylbenzene	17.59	106	25933	0.43 PPB		94
76) 1,1,1,2-Tetrachloroethane	17.59	131	18738	0.47 PPB		96
77) m,p-Xylenes	17.72	106	61782	0.82 PPB		96
78) o-Xylene	18.21	106	28866	0.41 PPB		96
79) Styrene	18.22	104	40120	0.35 PPB		97
80) Bromoform	18.51	173	7543	0.43 PPB		89
81) Isopropylbenzene	18.61	105	68229	0.38 PPB		96
84) cis-1,4-Dichloro-2-Butene	18.69	88	6803	1.48 PPB		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F021.D
Acq On : 21 May 2007 7:30 pm
Sample : 8260 ICAL 0.5 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:47 2007

Vial: 21
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85)	1,1,2,2-Tetrachloroethane	18.94	83	11407	0.49 PPB	94
86)	Bromobenzene	19.04	156	24275	0.48 PPB	98
87)	n-Propylbenzene	19.07	91	80909	0.39 PPB	94
89)	1,2,3-Trichloropropane	19.02	110	3365	0.50 PPB	87
90)	2-Chlorotoluene	19.22	91	57311	0.44 PPB	95
91)	1,3,5-Trimethylbenzene	19.23	105	52882	0.39 PPB	93
92)	4-Chlorotoluene	19.33	91	50047	0.42 PPB	96
93)	tert-Butylbenzene	19.61	134	13738	0.39 PPB	93
94)	1,2,4-Trimethylbenzene	19.66	105	52321	0.39 PPB	96
95)	sec-Butylbenzene	19.85	105	66690	0.38 PPB	97
96)	p-Isopropyltoluene	19.99	119	55646	0.36 PPB	97
97)	1,3-Dichlorobenzene	20.05	146	44443	0.47 PPB	99
98)	1,4-Dichlorobenzene	20.15	146	47554	0.51 PPB	99
99)	n-Butylbenzene	20.44	91	49152	0.38 PPB	94
100)	1,2-Dichlorobenzene	20.59	146	37517	0.48 PPB	94
102)	1,3,5-Trichlorobenzene	21.73	180	26839	0.47 PPB	94
103)	1,2,4-Trichlorobenzene	22.56	180	20137	0.48 PPB	100
104)	Hexachlorobutadiene	22.71	225	7929	0.49 PPB	96
105)	Naphthalene	22.96	128	22024	0.44 PPB	90
106)	1,2,3-Trichlorobenzene	23.29	180	16082	0.52 PPB	97

(#) = qualifier out of range (m) = manual integration

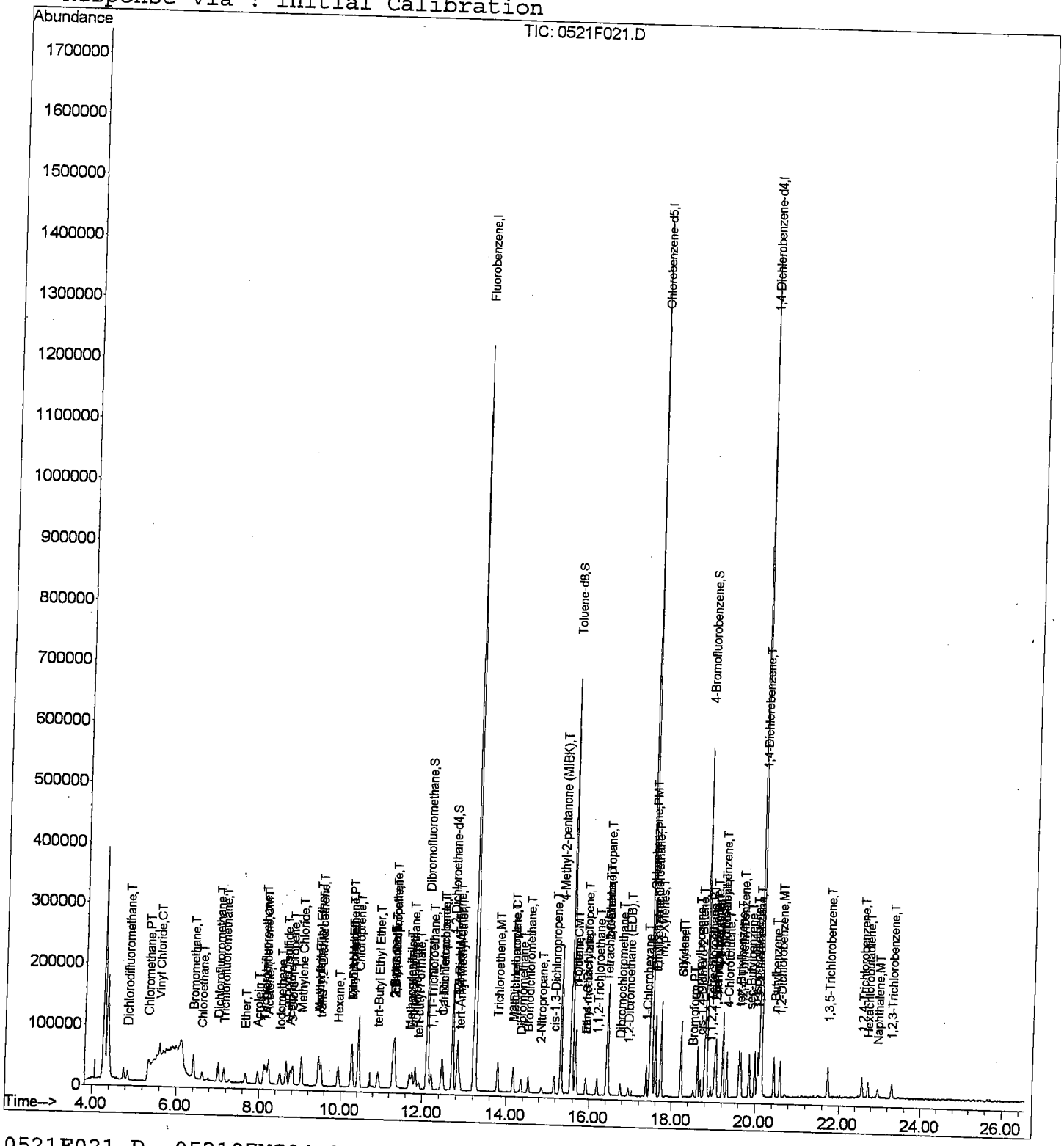
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F021.D
Acq On : 21 May 2007 7:30 pm
Sample : 8260 ICAL 0.5 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:24 2007

Vial: 21
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:48 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F-A-h·5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	1591843	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1154656	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	578326	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.12	113	276179	6.56 PPB	0.00
Spiked Amount 10.000			Recovery	= 65.60%	
47) 1,2-Dichloroethane-d4	12.72	65	184707	6.49 PPB	0.00
Spiked Amount 10.000			Recovery	= 64.90%	
61) Toluene-d8	15.56	98	742653	6.30 PPB	0.00
Spiked Amount 10.000			Recovery	= 63.00%	
82) 4-Bromofluorobenzene	18.82	95	267083	6.10 PPB	0.00
Spiked Amount 10.000			Recovery	= 61.00%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.85	85	46402	1.01 PPB	97
3) Chloromethane	5.33	50	54348	1.05 PPB	97
4) Vinyl Chloride	5.61	62	51081	1.02 PPB	97
5) Bromomethane	6.40	94	68986	1.57 PPB	95
6) Chloroethane	6.61	64	38241	1.05 PPB	99
7) Dichlorofluoromethane	7.00	67	92752	1.05 PPB	99
8) Trichlorofluoromethane	7.15	101	60309	1.04 PPB	92
9) Ether	7.67	59	21169	0.93 PPB	98
10) Trichlorotrifluoroethane	8.12	151	41068	1.05 PPB	96
11) 1,1-Dichloroethene	8.17	96	40650	1.00 PPB	90
12) Acetone	8.22	43	156972	37.25 PPB	98
13) Iodomethane	8.50	127	33864	1.45 PPB	96
14) Carbon Disulfide	8.65	76	162193	1.00 PPB	99
15) Acrolein	7.96	56	50411	18.55 PPB	97
17) 3-Cloro-1-propene	8.81	41	59207m	1.08 PPB	
18) Acetonitrile	8.76	41	73494	38.22 PPB	95
19) Methylene Chloride	9.03	84	58731	1.20 PPB	96
21) Methyl tert-Butyl Ether	9.46	73	107891	1.78 PPB	98
22) trans-1,2-Dichloroethene	9.52	96	52591	1.02 PPB	98
23) Hexane	9.93	57	50553	0.96 PPB	97
24) 1,1-Dichloroethane	10.27	63	79213	1.01 PPB	98
25) Vinyl Acetate	10.25	86	7604	1.72 PPB #	79
26) Acrylonitrile	9.46	53	23264	3.65 PPB	97
27) Diisopropyl Ether	10.25	45	97239	0.88 PPB	97
28) Chloroprene	10.43	88	163670	3.59 PPB	98
29) tert-Butyl Ethyl Ether	10.92	59	69835	0.86 PPB	97
30) 2,2-Dichloropropane	11.33	77	54197	1.02 PPB	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:48 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31) Ethyl Acetate	11.31	70	6936	3.56 PPB		86
32) cis-1,2-Dichloroethene	11.32	96	51193	0.98 PPB		97
33) 2-Butanone	11.29	72	58506	33.55 PPB		96
34) Propionitrile	11.43	54	7696	3.98 PPB		81
35) Methacrylonitrile	11.69	67	23416	3.26 PPB		97
36) Bromochloromethane	11.75	128	25123	1.00 PPB		93
37) Chloroform	11.83	83	76076	1.01 PPB		98
38) tert-butyl Formate	11.91	59	13393	0.94 PPB	#	85
40) 1,1,1-Trichloroethane	12.21	97	58677	1.04 PPB		96
43) Isobutyl Alcohol	12.43	43	12366	37.70 PPB		85
44) Carbon Tetrachloride	12.49	117	48660	1.02 PPB		99
45) 1,1-Dichloropropene	12.46	75	54414	0.92 PPB		93
46) tert-Amyl Methyl-ether	12.88	55	17340	1.05 PPB	#	51
48) Benzene	12.83	78	171016	1.00 PPB		97
49) 1,2-Dichloroethane	12.83	62	37676	0.99 PPB		95
50) Trichloroethene	13.78	95	43932	0.99 PPB		91
52) Methyl methacrylate	14.17	69	8036	0.76 PPB		82
53) 1,2-Dichloropropane	14.16	63	37352	0.95 PPB		94
54) 1,4-Dioxane	14.29	88	3120	30.56 PPB		96
55) Dibromomethane	14.34	93	20125	0.97 PPB		97
56) Bromodichloromethane	14.52	83	45824	0.97 PPB		95
57) 2-Chloroethyl Vinyl Ether	14.88	63	2993	0.67 PPB	#	69
58) 2-Nitropropane	14.85	41	14583	4.53 PPB		92
59) cis-1,3-Dichloropropene	15.16	75	47318	0.86 PPB		96
60) 4-Methyl-2-pentanone (MIBK	15.32	100	86999	33.55 PPB		99
62) Toluene	15.65	92	99730	0.96 PPB		97
64) Ethyl methacrylate	15.93	69	15286	0.71 PPB		94
65) n-Octane	15.67	85	23883	0.97 PPB		95
66) trans-1,3-Dichloropropene	15.91	75	34416	0.87 PPB		97
67) 1,1,2-Trichloroethane	16.18	83	20150	0.97 PPB		98
68) Tetrachloroethene	16.40	164	43034	1.01 PPB		99
69) 2-Hexanone	16.44	57	52691	31.88 PPB		93
70) 1,3-Dichloropropane	16.42	76	42582	0.96 PPB		99
71) Dibromochloromethane	16.74	129	31736	0.95 PPB		96
72) 1,2-Dibromoethane (EDB)	16.94	107	24708	0.93 PPB		99
73) 1-Chlorohexane	17.37	55	31368	0.94 PPB		97
74) Chlorobenzene	17.51	112	117135	0.98 PPB		98
75) Ethylbenzene	17.59	106	54628	0.91 PPB		94
76) 1,1,1,2-Tetrachloroethane	17.59	131	37071	0.95 PPB		96
77) m,p-Xylenes	17.73	106	131598	1.76 PPB		96
78) o-Xylene	18.21	106	60076	0.85 PPB		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:48 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
79)	Styrene	18.23	104	85134	0.75	PPB		97
80)	Bromoform	18.51	173	15193	0.88	PPB		90
81)	Isopropylbenzene	18.61	105	144073	0.81	PPB		97
84)	cis-1,4-Dichloro-2-Butene	18.68	88	13959	3.04	PPB		93
85)	1,1,2,2-Tetrachloroethane	18.94	83	23340	1.00	PPB		89
86)	Bromobenzene	19.04	156	48937	0.97	PPB		97
87)	n-Propylbenzene	19.06	91	182601	0.88	PPB		97
88)	trans-1,3-Dichloro-2-Buten	18.99	53	3744	0.91	PPB		81
89)	1,2,3-Trichloropropane	19.02	110	6994	1.04	PPB		90
90)	2-Chlorotoluene	19.21	91	119444	0.92	PPB		99
91)	1,3,5-Trimethylbenzene	19.22	105	118752	0.87	PPB		98
92)	4-Chlorotoluene	19.32	91	109731	0.92	PPB		96
93)	tert-Butylbenzene	19.62	134	31703	0.90	PPB	#	86
94)	1,2,4-Trimethylbenzene	19.66	105	115888	0.85	PPB		100
95)	sec-Butylbenzene	19.86	105	148701	0.86	PPB		97
96)	p-Isopropyltoluene	19.98	119	124834	0.80	PPB		98
97)	1,3-Dichlorobenzene	20.05	146	91249	0.97	PPB		99
98)	1,4-Dichlorobenzene	20.14	146	91997	0.98	PPB		97
99)	n-Butylbenzene	20.45	91	104009	0.81	PPB		99
100)	1,2-Dichlorobenzene	20.59	146	74845	0.95	PPB		99
101)	1,2-Dibromo-3-chloropropan	21.50	157	3162	0.82	PPB	#	78
102)	1,3,5-Trichlorobenzene	21.73	180	54562	0.95	PPB		99
103)	1,2,4-Trichlorobenzene	22.56	180	39051	0.92	PPB		97
104)	Hexachlorobutadiene	22.70	225	16578	1.02	PPB		86
105)	Naphthalene	22.96	128	40184	0.79	PPB		99
106)	1,2,3-Trichlorobenzene	23.30	180	28014	0.90	PPB		99

(#) = qualifier out of range (m) = manual integration

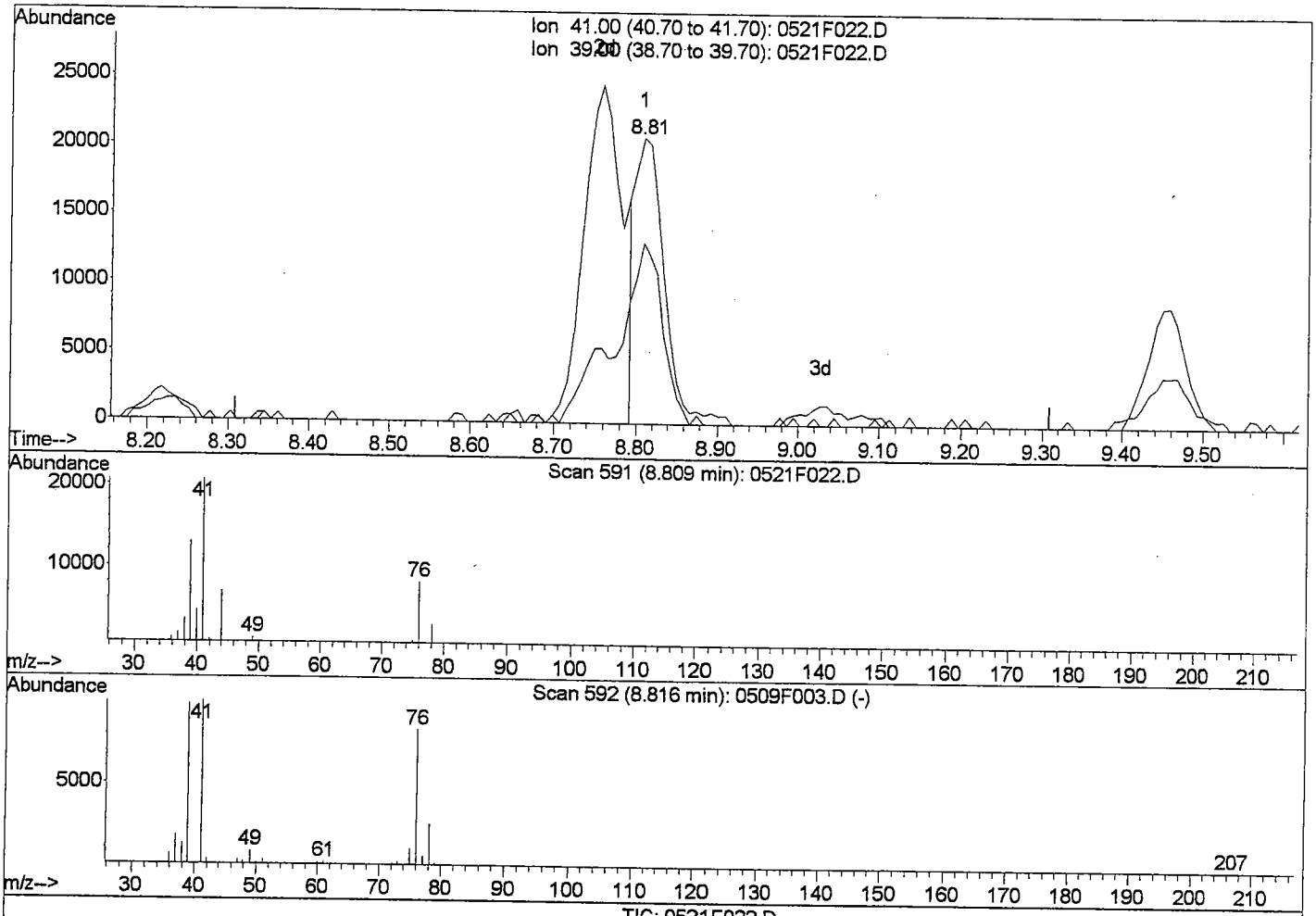
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:25 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(17) 3-Cloro-1-propene (T)

8.81min 0.93PPB

response 50951

Ion	Exp%	Act%
41.00	100	100
39.00	60.00	62.94
0.00	0.00	0.00
0.00	0.00	0.00

0521F022.D 052107MS04-8260.M Tue May 22 08:25:16 2007

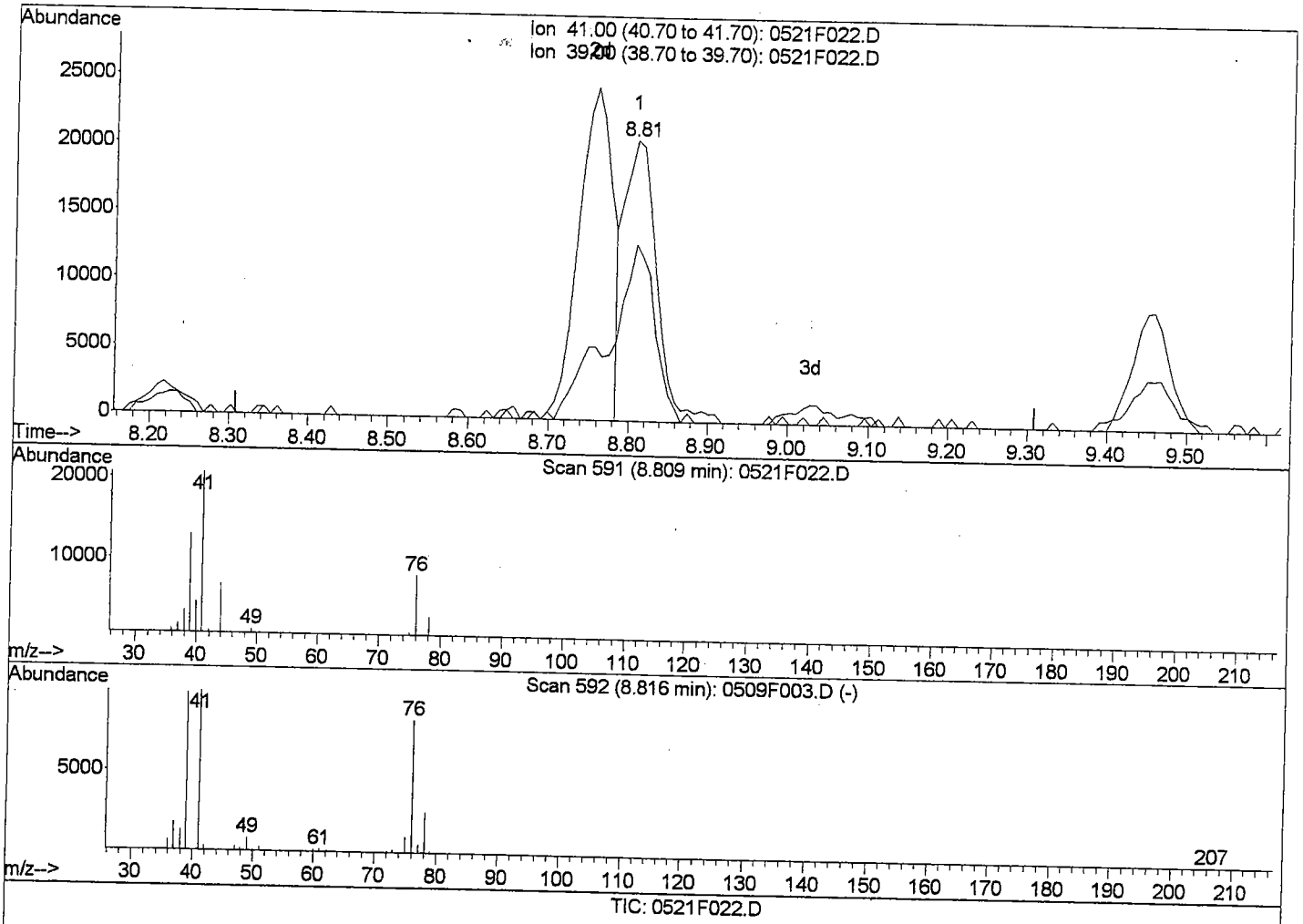
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:25 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(17) 3-Cloro-1-propene (T)

8.81min 1.08PPB m

response 59207

Ion	Exp%	Act%
41.00	100	100
39.00	60.00	62.94
0.00	0.00	0.00
0.00	0.00	0.00

Baseline adjustment
HC 5·22·07
F.A.h. 5/23/7

0521F022.D 052107MS04-8260.M Tue May 22 08:25:22 2007

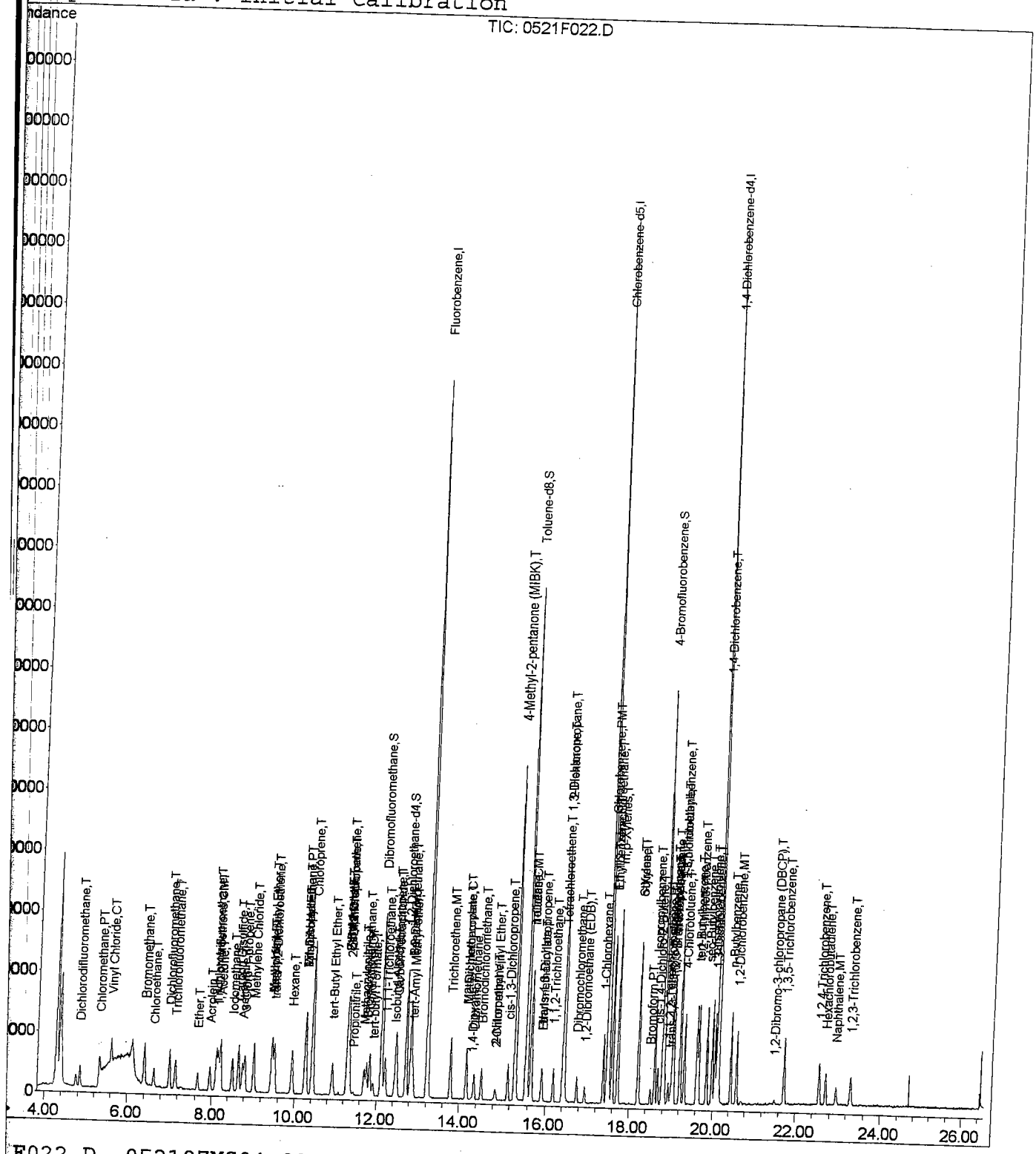
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F022.D
Acq On : 21 May 2007 8:02 pm
Sample : 8260 ICAL 1.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:26 2007

Vial: 22
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:50 2007

Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F.A.h. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.23	96	1615381	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1187014	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	593783	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.12	113	294562	6.90 PPB	0.01
Spiked Amount 10.000			Recovery	= 69.00%	
47) 1,2-Dichloroethane-d4	12.71	65	208409	7.21 PPB	0.00
Spiked Amount 10.000			Recovery	= 72.10%	
61) Toluene-d8	15.55	98	787612	6.58 PPB	0.00
Spiked Amount 10.000			Recovery	= 65.80%	
82) 4-Bromofluorobenzene	18.82	95	315114	7.00 PPB	0.00
Spiked Amount 10.000			Recovery	= 70.00%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.84	85	102207	2.19 PPB	97
3) Chloromethane	5.33	50	116937	2.22 PPB	97
4) Vinyl Chloride	5.60	62	112844	2.21 PPB	99
5) Bromomethane	6.40	94	134373	3.01 PPB	98
6) Chloroethane	6.62	64	81455	2.20 PPB	96
7) Dichlorofluoromethane	7.01	67	199611	2.23 PPB	99
8) Trichlorofluoromethane	7.14	101	133132	2.26 PPB	98
9) Ether	7.66	59	43872	1.91 PPB	94
10) Trichlorotrifluoroethane	8.11	151	90157	2.27 PPB	97
11) 1,1-Dichloroethene	8.16	96	89488	2.17 PPB	100
12) Acetone	8.22	43	280450	65.58 PPB	99
13) Iodomethane	8.50	127	114114m	4.81 PPB	
14) Carbon Disulfide	8.65	76	353593	2.15 PPB	99
15) Acrolein	7.96	56	104700	37.97 PPB	96
17) 3-Cloro-1-propene	8.81	41	118213	2.12 PPB	95
18) Acetonitrile	8.75	41	160042	82.02 PPB	95
19) Methylene Chloride	9.03	84	114848	2.31 PPB	98
20) tert-Butyl Alcohol	9.08	59	9463	11.18 PPB	79
21) Methyl tert-Butyl Ether	9.45	73	234623	3.82 PPB	98
22) trans-1,2-Dichloroethene	9.51	96	110317	2.12 PPB	98
23) Hexane	9.93	57	113011	2.11 PPB	94
24) 1,1-Dichloroethane	10.27	63	170166	2.14 PPB	100
25) Vinyl Acetate	10.25	86	16173	3.61 PPB	95
26) Acrylonitrile	9.45	53	51495	7.96 PPB	92
27) Diisopropyl Ether	10.25	45	219108	1.95 PPB	95
28) Chloroprene	10.43	88	376534	8.14 PPB	98
29) tert-Butyl Ethyl Ether	10.92	59	156476	1.90 PPB	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:50 2007

Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	117538	2.18 PPB		97
31) Ethyl Acetate	11.32	70	15721	7.95 PPB		91
32) cis-1,2-Dichloroethene	11.32	96	109885	2.08 PPB		99
33) 2-Butanone	11.28	72	106972	60.45 PPB		96
34) Propionitrile	11.43	54	15741	8.02 PPB		93
35) Methacrylonitrile	11.70	67	53646	7.35 PPB		96
36) Bromochloromethane	11.76	128	53242	2.08 PPB		90
37) Chloroform	11.83	83	161793	2.12 PPB		98
38) tert-butyl Formate	11.91	59	26586	1.84 PPB		89
40) 1,1,1-Trichloroethane	12.20	97	123912	2.17 PPB		98
43) Isobutyl Alcohol	12.43	43	26016	78.16 PPB		96
44) Carbon Tetrachloride	12.48	117	105776	2.18 PPB		98
45) 1,1-Dichloropropene	12.47	75	124197	2.08 PPB		98
46) tert-Amyl Methyl-ether	12.87	55	35322	2.11 PPB	#	71
48) Benzene	12.83	78	358018	2.07 PPB		99
49) 1,2-Dichloroethane	12.83	62	81518	2.10 PPB		97
50) Trichloroethene	13.78	95	94658	2.10 PPB		92
52) Methyl methacrylate	14.17	69	18994	1.77 PPB		89
53) 1,2-Dichloropropane	14.15	63	81498	2.05 PPB		97
54) 1,4-Dioxane	14.30	88	7411	71.53 PPB		94
55) Dibromomethane	14.35	93	44456	2.10 PPB		98
56) Bromodichloromethane	14.53	83	96366	2.01 PPB		100
57) 2-Chloroethyl Vinyl Ether	14.88	63	7396	1.63 PPB		88
58) 2-Nitropropane	14.85	41	30897	9.45 PPB		92
59) cis-1,3-Dichloropropene	15.16	75	104918	1.88 PPB		97
60) 4-Methyl-2-pentanone (MIBK	15.32	100	158158	60.10 PPB		97
62) Toluene	15.66	92	216423	2.05 PPB		99
64) Ethyl methacrylate	15.93	69	36085	1.63 PPB		95
65) n-Octane	15.66	85	51942	2.04 PPB		96
66) trans-1,3-Dichloropropene	15.91	75	75770	1.86 PPB		99
67) 1,1,2-Trichloroethane	16.19	83	41956	1.96 PPB		95
68) Tetrachloroethene	16.41	164	95445	2.18 PPB		98
69) 2-Hexanone	16.43	57	100337	59.05 PPB		96
70) 1,3-Dichloropropane	16.42	76	93170	2.05 PPB		96
71) Dibromochloromethane	16.74	129	66073	1.93 PPB		99
72) 1,2-Dibromoethane (EDB)	16.94	107	53491	1.96 PPB		93
73) 1-Chlorohexane	17.38	55	67874	1.97 PPB		99
74) Chlorobenzene	17.51	112	251925	2.05 PPB		99
75) Ethylbenzene	17.60	106	121568	1.97 PPB		97
76) 1,1,1,2-Tetrachloroethane	17.59	131	81630	2.03 PPB		97
77) m,p-Xylenes	17.72	106	302321	3.93 PPB		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:50 2007

Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
78)	o-Xylene	18.21	106	136194	1.88 PPB	98
79)	Styrene	18.22	104	204323	1.75 PPB	98
80)	Bromoform	18.51	173	34127	1.92 PPB	98
81)	Isopropylbenzene	18.61	105	341545	1.88 PPB	99
84)	cis-1,4-Dichloro-2-Butene	18.69	88	33522	7.10 PPB	94
85)	1,1,2,2-Tetrachloroethane	18.94	83	50684	2.11 PPB	95
86)	Bromobenzene	19.04	156	105930	2.04 PPB	97
87)	n-Propylbenzene	19.06	91	417759	1.96 PPB	99
88)	trans-1,3-Dichloro-2-Buten	18.99	53	7945	1.87 PPB	83
89)	1,2,3-Trichloropropane	19.01	110	14209	2.05 PPB	95
90)	2-Chlorotoluene	19.22	91	269901	2.02 PPB	99
91)	1,3,5-Trimethylbenzene	19.23	105	271158	1.94 PPB	97
92)	4-Chlorotoluene	19.33	91	242740	1.98 PPB	99
93)	tert-Butylbenzene	19.61	134	69702	1.92 PPB	96
94)	1,2,4-Trimethylbenzene	19.66	105	271259	1.94 PPB	99
95)	sec-Butylbenzene	19.85	105	346545	1.94 PPB	99
96)	p-Isopropyltoluene	19.99	119	302695	1.90 PPB	99
97)	1,3-Dichlorobenzene	20.05	146	197844	2.04 PPB	100
98)	1,4-Dichlorobenzene	20.15	146	201251	2.08 PPB	99
99)	n-Butylbenzene	20.44	91	245790	1.86 PPB	100
100)	1,2-Dichlorobenzene	20.59	146	162125	2.00 PPB	99
101)	1,2-Dibromo-3-chloropropan	21.50	157	7595	1.93 PPB	85
102)	1,3,5-Trichlorobenzene	21.73	180	117321	1.99 PPB	98
103)	1,2,4-Trichlorobenzene	22.56	180	84128	1.94 PPB	96
104)	Hexachlorobutadiene	22.71	225	35555	2.13 PPB	97
105)	Naphthalene	22.96	128	94503	1.82 PPB	98
106)	1,2,3-Trichlorobenzene	23.30	180	64027	2.00 PPB	93

(#) = qualifier out of range (m) = manual integration

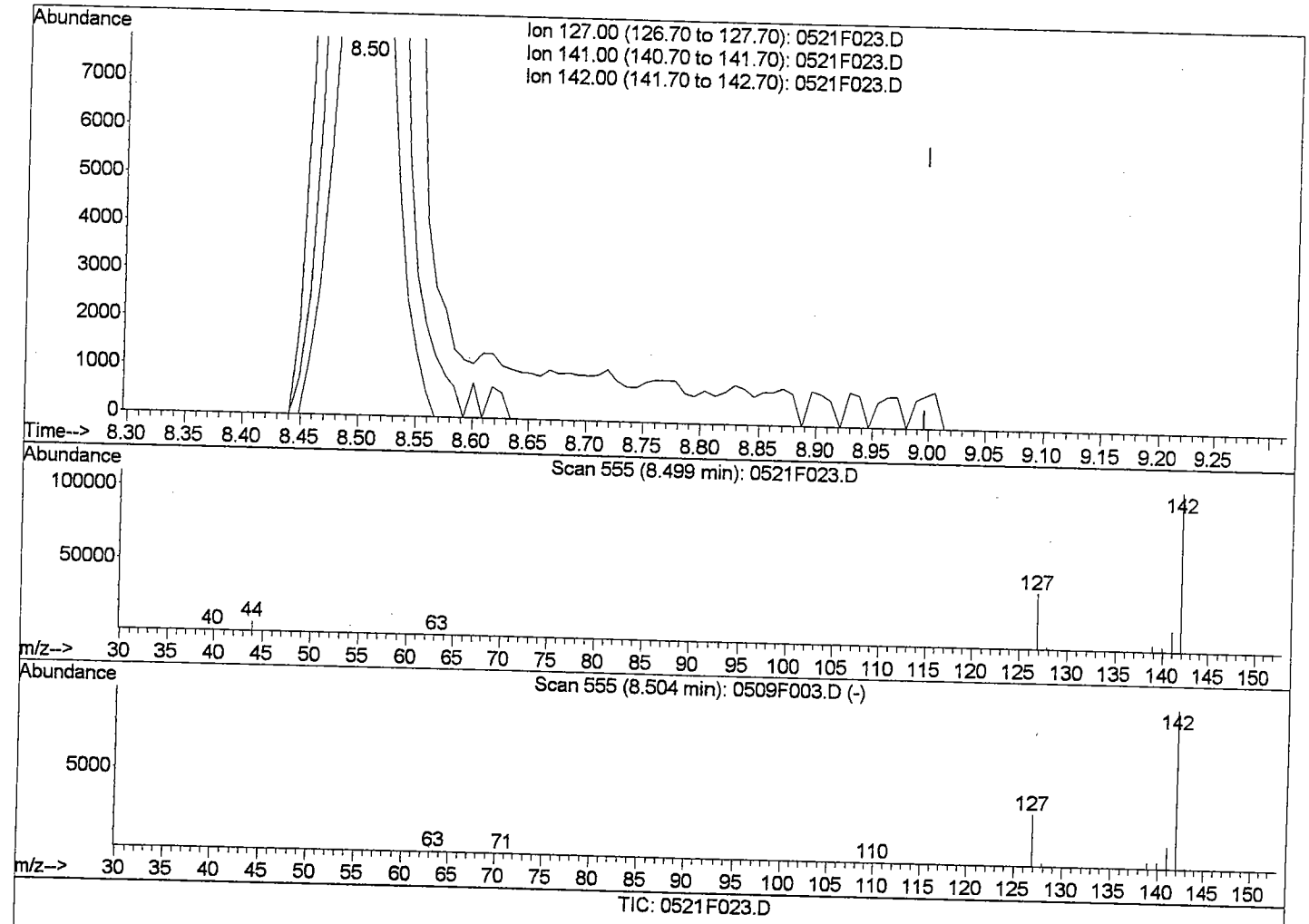
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:07 2007

Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 4.77PPB

response 113157

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	39.36
142.00	303.00	278.65
0.00	0.00	0.00

0521F023.D 052107MS04-8260.M Tue May 22 08:27:35 2007

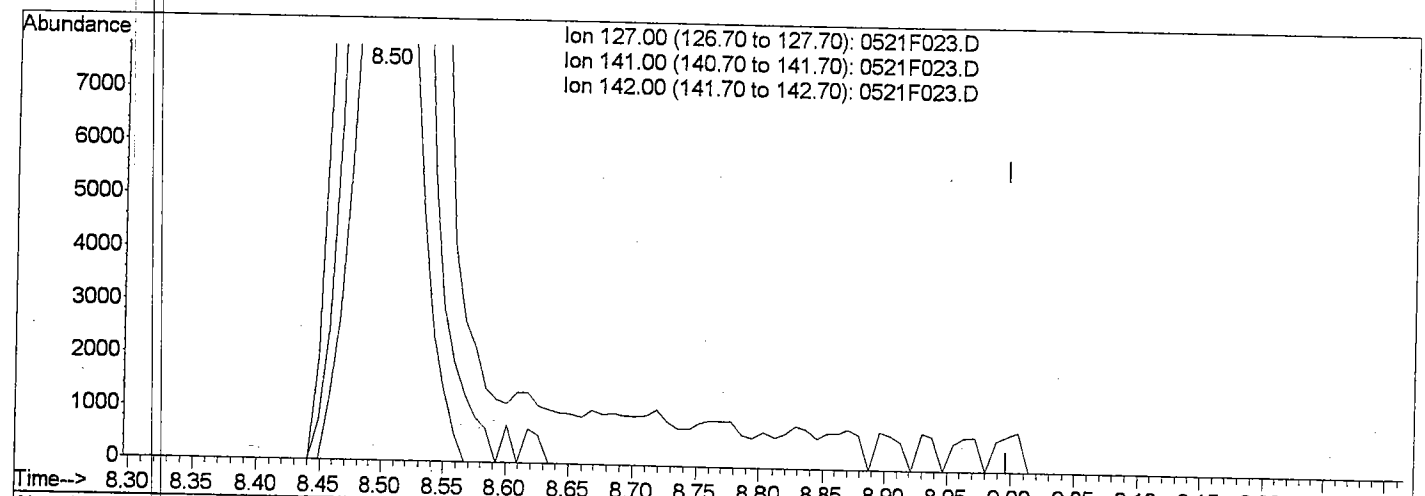
Quantitation Report (Qedit)

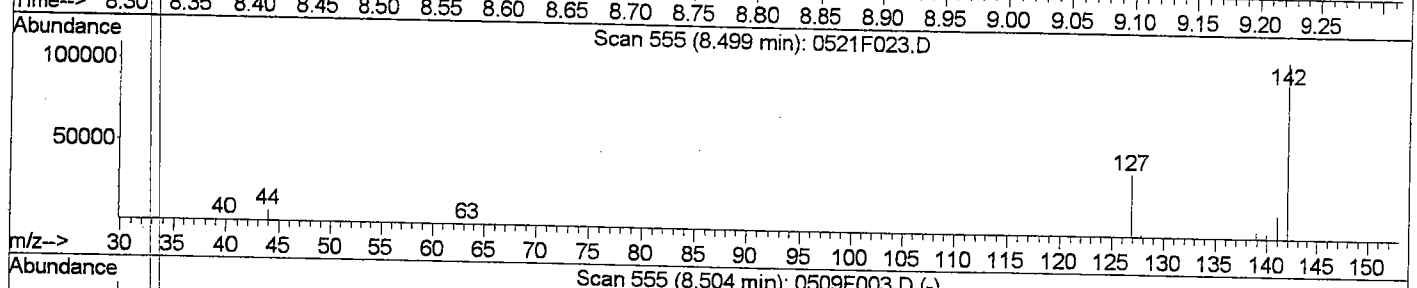
Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:27 2007

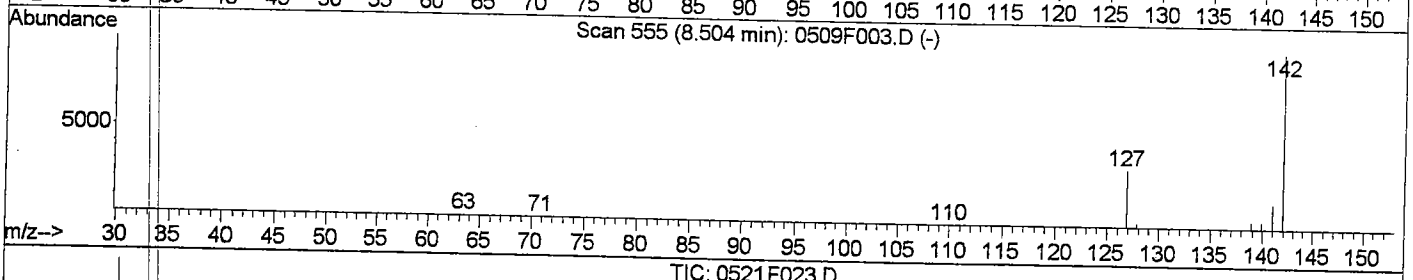
Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F023.D

(13) Iodomethane (T)
8.50min 4.81PPB m
response 114114

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	39.36
142.00	303.00	278.65
0.00	0.00	0.00

Peak Tailing
HC 5·22·07
F.A.h. 5/23/7

0521F023.D 052107MS04-8260.M Tue May 22 08:27:40 2007

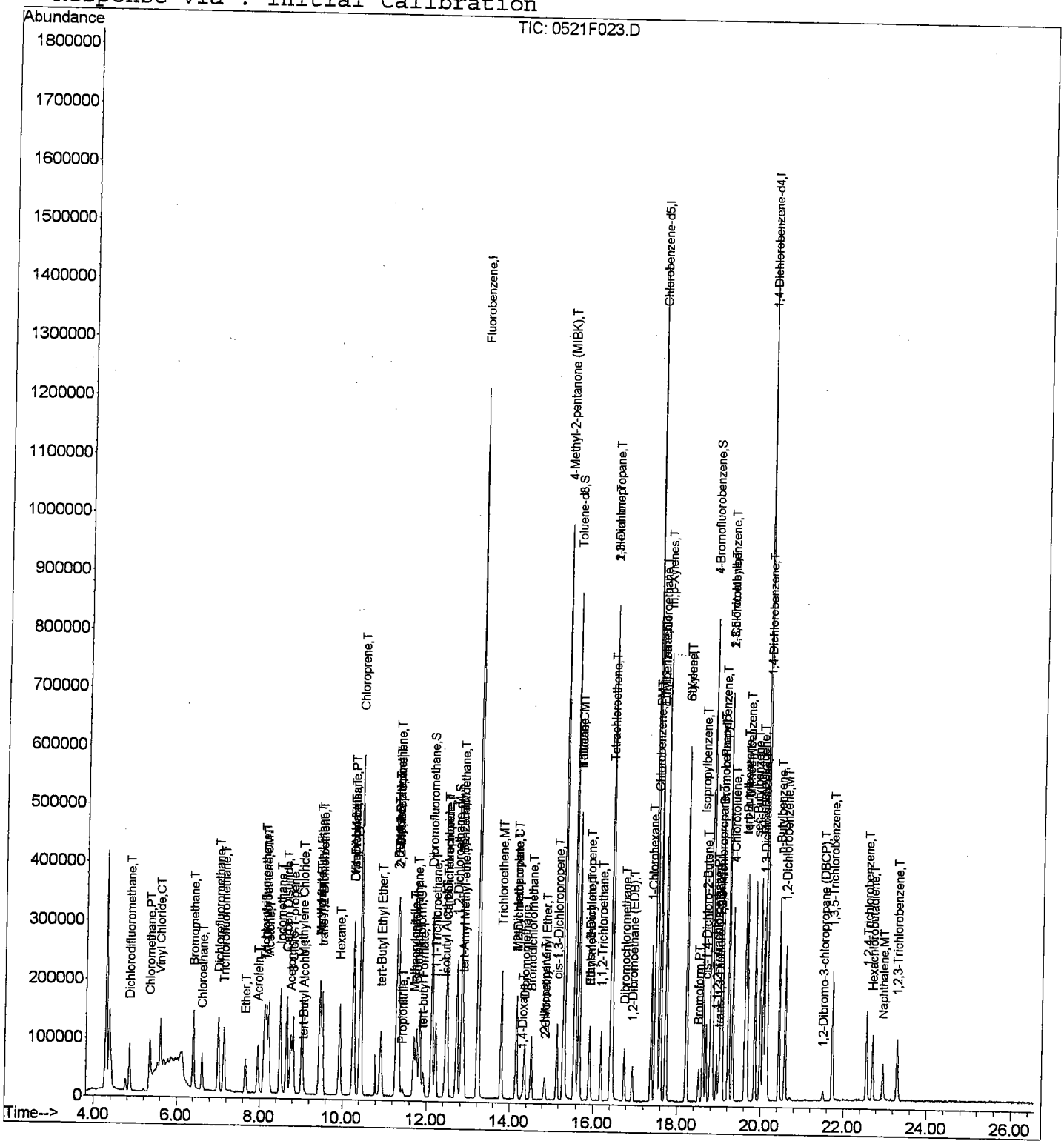
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F023.D
Acq On : 21 May 2007 8:34 pm
Sample : 8260 ICAL 2.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:28 2007

Vial: 23
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:51 2007

Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5.22.07
F.A.L. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	1616097	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1188337	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	606645	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.11	113	343201	8.03 PPB	0.00
Spiked Amount 10.000			Recovery	= 80.30%	
47) 1,2-Dichloroethane-d4	12.71	65	240289	8.31 PPB	0.00
Spiked Amount 10.000			Recovery	= 83.10%	
61) Toluene-d8	15.55	98	897141	7.49 PPB	0.00
Spiked Amount 10.000			Recovery	= 74.90%	
82) 4-Bromofluorobenzene	18.82	95	354876	7.88 PPB	0.00
Spiked Amount 10.000			Recovery	= 78.80%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.84	85	237119	5.08 PPB	99
3) Chloromethane	5.33	50	272739	5.17 PPB	99
4) Vinyl Chloride	5.61	62	260381	5.10 PPB	99
5) Bromomethane	6.41	94	243486	5.45 PPB	96
6) Chloroethane	6.62	64	188315	5.08 PPB	98
7) Dichlorofluoromethane	7.00	67	461721	5.16 PPB	98
8) Trichlorofluoromethane	7.14	101	304509	5.16 PPB	99
9) Ether	7.66	59	114776	4.99 PPB	98
10) Trichlorotrifluoroethane	8.11	151	204430	5.15 PPB	98
11) 1,1-Dichloroethene	8.16	96	209461	5.08 PPB	99
12) Acetone	8.22	43	378077	88.38 PPB	98
13) Iodomethane	8.50	127	403310m	16.98 PPB	
14) Carbon Disulfide	8.65	76	829473	5.04 PPB	100
15) Acrolein	7.96	56	278476	100.94 PPB	100
17) 3-Cloro-1-propene	8.81	41	278673	4.99 PPB	99
18) Acetonitrile	8.75	41	411413	210.74 PPB	99
19) Methylene Chloride	9.03	84	261306	5.25 PPB	98
20) tert-Butyl Alcohol	9.08	59	23927	28.26 PPB	96
21) Methyl tert-Butyl Ether	9.45	73	608656	9.90 PPB	99
22) trans-1,2-Dichloroethene	9.51	96	262666	5.03 PPB	95
23) Hexane	9.93	57	267231	4.99 PPB	97
24) 1,1-Dichloroethane	10.27	63	408964	5.14 PPB	99
25) Vinyl Acetate	10.25	86	46090	10.28 PPB #	93
26) Acrylonitrile	9.45	53	132815	20.52 PPB	98
27) Diisopropyl Ether	10.25	45	558179	4.96 PPB	99
28) Chloroprene	10.43	88	922962	19.95 PPB	99
29) tert-Butyl Ethyl Ether	10.91	59	402831	4.90 PPB	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:51 2007

Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	273403	5.07 PPB		98
31) Ethyl Acetate	11.31	70	39933	20.19 PPB		94
32) cis-1,2-Dichloroethene	11.32	96	269438	5.11 PPB		99
33) 2-Butanone	11.27	72	147302	83.20 PPB		94
34) Propionitrile	11.44	54	40978	20.87 PPB		92
35) Methacrylonitrile	11.70	67	143215	19.62 PPB		96
36) Bromochloromethane	11.76	128	131033	5.12 PPB		95
37) Chloroform	11.83	83	387493	5.08 PPB		99
38) tert-butyl Formate	11.91	59	68114	4.71 PPB		98
39) Tetrahydrofuran	11.81	42	20397	5.15 PPB		95
40) 1,1,1-Trichloroethane	12.21	97	290382	5.09 PPB		98
43) Isobutyl Alcohol	12.43	43	66432	199.48 PPB		98
44) Carbon Tetrachloride	12.48	117	249227	5.13 PPB		98
45) 1,1-Dichloropropene	12.46	75	299851	5.01 PPB		99
46) tert-Amyl Methyl-ether	12.88	55	89611	5.36 PPB	#	82
48) Benzene	12.83	78	876200	5.06 PPB		99
49) 1,2-Dichloroethane	12.84	62	197726	5.10 PPB		99
50) Trichloroethene	13.78	95	225098	4.99 PPB		96
52) Methyl methacrylate	14.17	69	51442	4.78 PPB		92
53) 1,2-Dichloropropane	14.15	63	201423	5.06 PPB		97
54) 1,4-Dioxane	14.30	88	19642	189.50 PPB		94
55) Dibromomethane	14.35	93	108908	5.15 PPB		99
56) Bromodichloromethane	14.52	83	248524	5.17 PPB		98
57) 2-Chloroethyl Vinyl Ether	14.87	63	16660	3.67 PPB		89
58) 2-Nitropropane	14.84	41	82005	25.07 PPB		92
59) cis-1,3-Dichloropropene	15.16	75	276090	4.95 PPB		98
60) 4-Methyl-2-pentanone (MIBK	15.32	100	215151	81.73 PPB		99
62) Toluene	15.65	92	536458	5.07 PPB		99
64) Ethyl methacrylate	15.92	69	102770	4.63 PPB		99
65) n-Octane	15.66	85	128750	5.06 PPB		97
66) trans-1,3-Dichloropropene	15.91	75	203529	4.99 PPB		99
67) 1,1,2-Trichloroethane	16.19	83	109983	5.13 PPB		98
68) Tetrachloroethene	16.41	164	223995	5.11 PPB		99
69) 2-Hexanone	16.44	57	136874	80.47 PPB		98
70) 1,3-Dichloropropane	16.42	76	234897	5.17 PPB		98
71) Dibromochloromethane	16.74	129	174235	5.08 PPB		98
72) 1,2-Dibromoethane (EDB)	16.94	107	140114	5.13 PPB		97
73) 1-Chlorohexane	17.38	55	173288	5.02 PPB		96
74) Chlorobenzene	17.51	112	627372	5.10 PPB		100
75) Ethylbenzene	17.60	106	305931	4.96 PPB		99
76) 1,1,1,2-Tetrachloroethane	17.59	131	205768	5.10 PPB		99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:51 2007

Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) m,p-Xylenes	17.72	106	770913	10.02 PPB	99
78) o-Xylene	18.21	106	363211	5.00 PPB	97
79) Styrene	18.22	104	570084	4.87 PPB	99
80) Bromoform	18.51	173	92692	5.22 PPB	99
81) Isopropylbenzene	18.61	105	896221	4.92 PPB	98
84) cis-1,4-Dichloro-2-Butene	18.68	88	94838	19.66 PPB	97
85) 1,1,2,2-Tetrachloroethane	18.93	83	133549	5.43 PPB	94
86) Bromobenzene	19.04	156	274604	5.17 PPB	99
87) n-Propylbenzene	19.06	91	1077540	4.94 PPB	99
88) trans-1,3-Dichloro-2-Buten	18.98	53	21144	4.88 PPB	84
89) 1,2,3-Trichloropropane	19.02	110	37158	5.25 PPB	96
90) 2-Chlorotoluene	19.22	91	691794	5.06 PPB	99
91) 1,3,5-Trimethylbenzene	19.22	105	715398	5.01 PPB	98
92) 4-Chlorotoluene	19.33	91	631625	5.04 PPB	100
93) tert-Butylbenzene	19.61	134	185033	4.98 PPB	99
94) 1,2,4-Trimethylbenzene	19.66	105	714066	5.01 PPB	100
95) sec-Butylbenzene	19.85	105	907332	4.98 PPB	99
96) p-Isopropyltoluene	19.98	119	806226	4.95 PPB	99
97) 1,3-Dichlorobenzene	20.05	146	518054	5.23 PPB	100
98) 1,4-Dichlorobenzene	20.14	146	516204	5.23 PPB	99
99) n-Butylbenzene	20.44	91	663343	4.92 PPB	97
100) 1,2-Dichlorobenzene	20.59	146	435229	5.26 PPB	99
101) 1,2-Dibromo-3-chloropropan	21.50	157	21666	5.38 PPB	96
102) 1,3,5-Trichlorobenzene	21.73	180	307262	5.09 PPB	98
103) 1,2,4-Trichlorobenzene	22.56	180	225915	5.09 PPB	99
104) Hexachlorobutadiene	22.71	225	87715	5.14 PPB	99
105) Naphthalene	22.96	128	262142	4.94 PPB	99
106) 1,2,3-Trichlorobenzene	23.30	180	169970	5.20 PPB	98

(#) = qualifier out of range (m) = manual integration

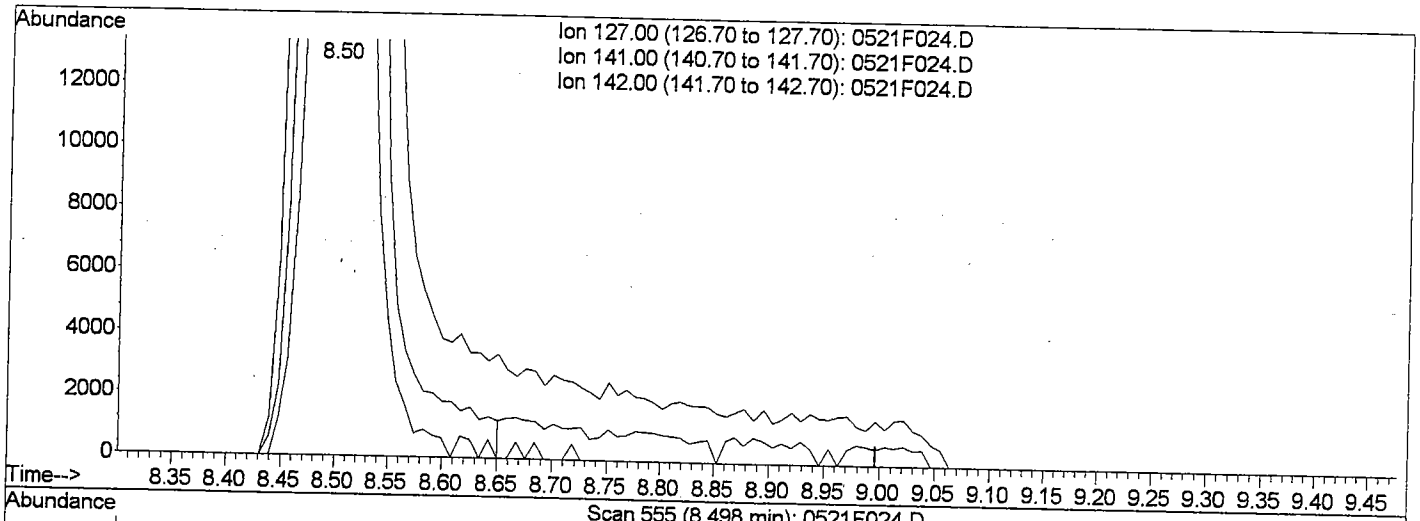
Quantitation Report (Qedit)

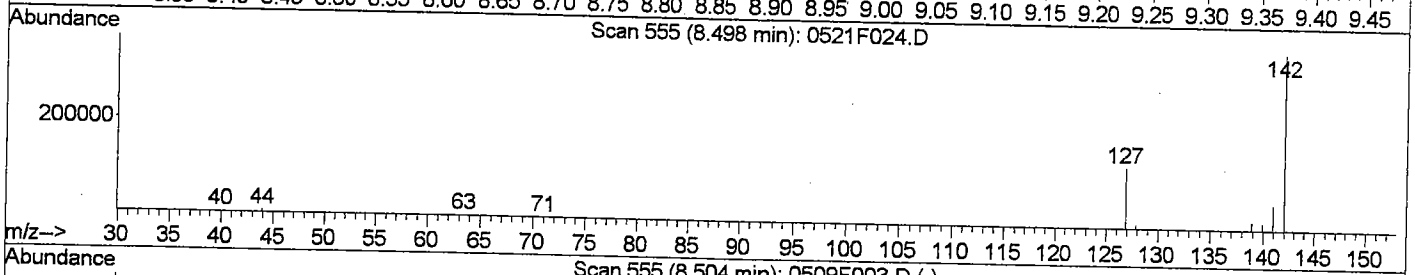
Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:07 2007

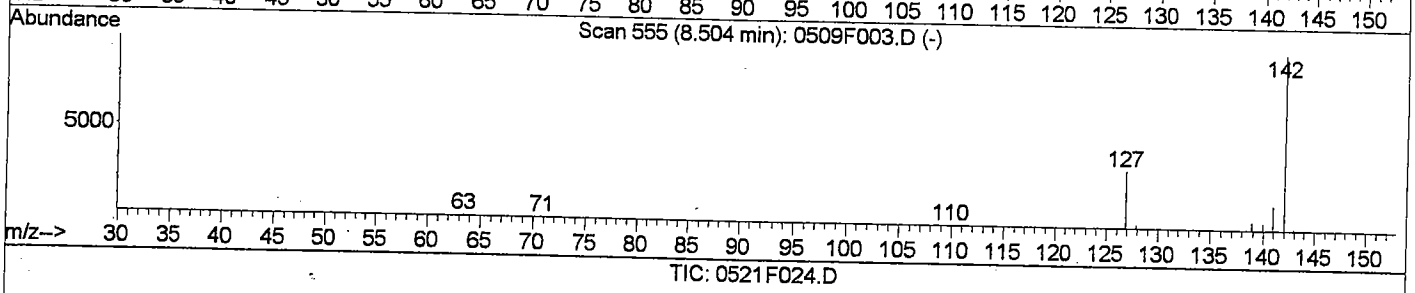
Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F024.D

(13) Iodomethane (T)

8.50min 16.25PPB

response 385999

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	41.30
142.00	303.00	286.72
0.00	0.00	0.00

0521F024.D 052107MS04-8260.M Tue May 22 08:29:43 2007

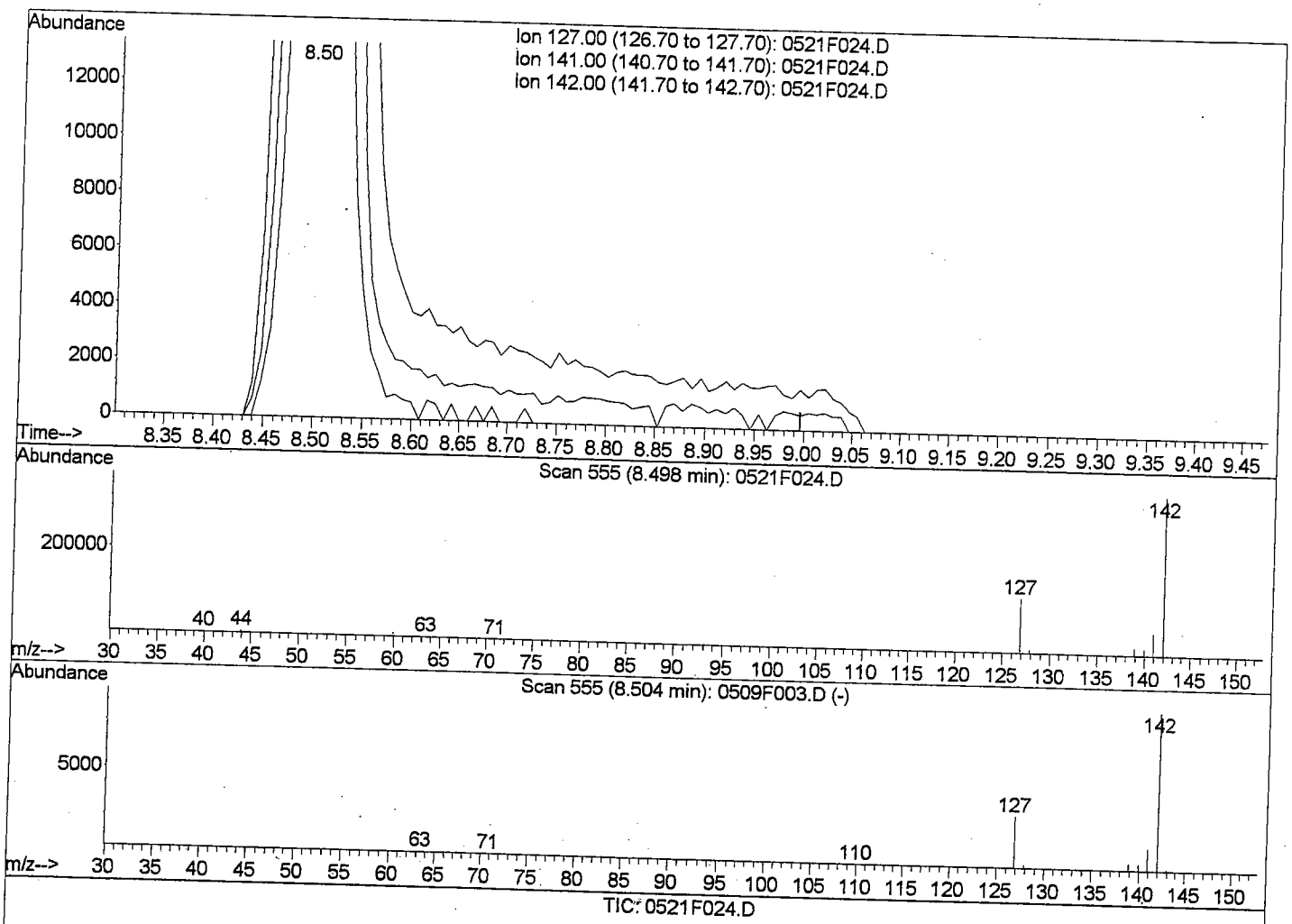
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:29 2007

Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 16.98PPB m

response 403310

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	41.30
142.00	303.00	286.72
0.00	0.00	0.00

Peak Tailing
HC 5.22.07
F.A.h. 5/23/7.

0521F024.D 052107MS04-8260.M Tue May 22 08:29:47 2007

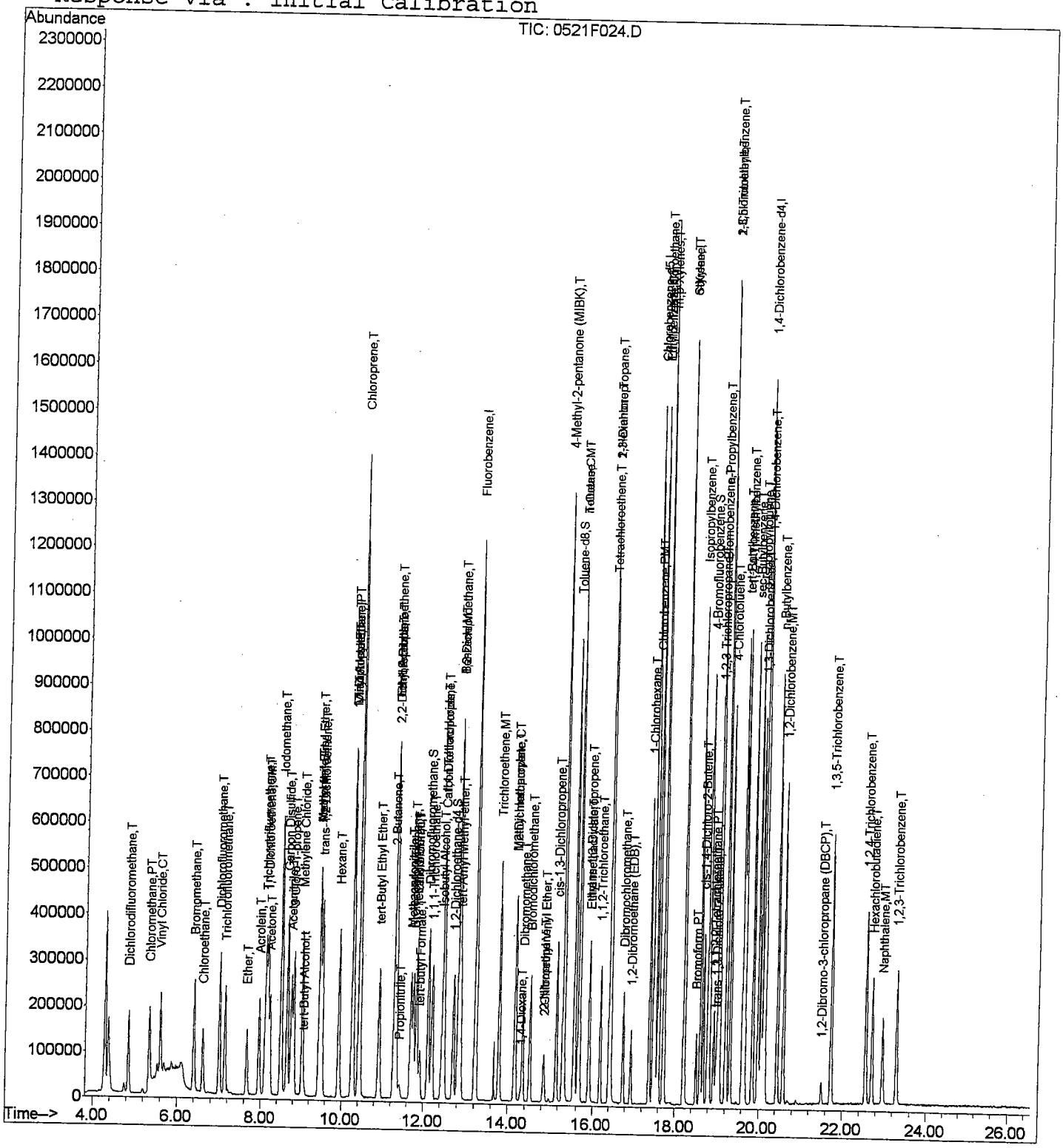
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F024.D
Acq On : 21 May 2007 9:06 pm
Sample : 8260 ICAL 5.0 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:30 2007

Vial: 24
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:05:32 2007

Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F·A·h·5/23/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	13.22	96	1685477	10.00	PPB	0.00
63) Chlorobenzene-d5	17.48	117	1233003	10.00	PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	629037	10.00	PPB	0.00
System Monitoring Compounds						
41) Dibromofluoromethane	12.11	113	445678	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	
47) 1,2-Dichloroethane-d4	12.71	65	301527	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	
61) Toluene-d8	15.55	98	1249135	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	
82) 4-Bromofluorobenzene	18.82	95	467417	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.84	85	486380	10.00	PPB	100
3) Chloromethane	5.33	50	550180	10.00	PPB	100
4) Vinyl Chloride	5.61	62	532256	10.00	PPB	100
5) Bromomethane	6.40	94	465537	10.00	PPB	100
6) Chloroethane	6.61	64	386381	10.00	PPB	100
7) Dichlorofluoromethane	7.00	67	933606	10.00	PPB	100
8) Trichlorofluoromethane	7.14	101	615875	10.00	PPB	100
9) Ether	7.66	59	239998	10.00	PPB	100
10) Trichlorotrifluoroethane	8.11	151	414086	10.00	PPB	100
11) 1,1-Dichloroethene	8.16	96	429849	10.00	PPB	100
12) Acetone	8.22	43	892351	200.00	PPB	100
13) Iodomethane	8.50	127	990784m	40.00	PPB	
14) Carbon Disulfide	8.65	76	1715151	10.00	PPB	100
15) Acrolein	7.96	56	575471	200.00	PPB	100
17) 3-Cloro-1-propene	8.81	41	582929	10.00	PPB	100
18) Acetonitrile	8.75	41	814405	400.00	PPB	100
19) Methylene Chloride	9.03	84	518693	10.00	PPB	100
20) tert-Butyl Alcohol	9.09	59	44147	50.00	PPB	100
21) Methyl tert-Butyl Ether	9.45	73	1282649	20.00	PPB	100
22) trans-1,2-Dichloroethene	9.51	96	544222	10.00	PPB	100
23) Hexane	9.93	57	559061	10.00	PPB	100
24) 1,1-Dichloroethane	10.27	63	829035	10.00	PPB	100
25) Vinyl Acetate	10.25	86	93478	20.00	PPB	100
26) Acrylonitrile	9.45	53	269967	40.00	PPB	100
27) Diisopropyl Ether	10.25	45	1174232	10.00	PPB	100
28) Chloroprene	10.43	88	1929828	40.00	PPB	100
29) tert-Butyl Ethyl Ether	10.92	59	857519	10.00	PPB	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:05:32 2007

Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) 2,2-Dichloropropane	11.33	77	562940	10.00 PPB	100
31) Ethyl Acetate	11.31	70	82518	40.00 PPB	100
32) cis-1,2-Dichloroethene	11.32	96	550361	10.00 PPB	100
33) 2-Butanone	11.28	72	369299	200.00 PPB	100
34) Propionitrile	11.43	54	81925	40.00 PPB	100
35) Methacrylonitrile	11.70	67	304483	40.00 PPB	100
36) Bromochloromethane	11.75	128	266716	10.00 PPB	100
37) Chloroform	11.83	83	795448	10.00 PPB	100
38) tert-butyl Formate	11.91	59	150836	10.00 PPB	100
39) Tetrahydrofuran	11.81	42	41303	10.00 PPB	100
40) 1,1,1-Trichloroethane	12.21	97	594891	10.00 PPB	100
43) Isobutyl Alcohol	12.43	43	138926	400.00 PPB	100
44) Carbon Tetrachloride	12.48	117	506612	10.00 PPB	100
45) 1,1-Dichloropropene	12.45	75	623615	10.00 PPB	100
46) tert-Amyl Methyl-ether	12.88	55	174474	10.00 PPB	100
48) Benzene	12.83	78	1807664	10.00 PPB	100
49) 1,2-Dichloroethane	12.83	62	404159	10.00 PPB	100
50) Trichloroethene	13.79	95	470168	10.00 PPB	100
52) Methyl methacrylate	14.17	69	112203	10.00 PPB	100
53) 1,2-Dichloropropane	14.15	63	414825	10.00 PPB	100
54) 1,4-Dioxane	14.29	88	43241	400.00 PPB	100
55) Dibromomethane	14.35	93	220734	10.00 PPB	100
56) Bromodichloromethane	14.52	83	501171	10.00 PPB	100
57) 2-Chloroethyl Vinyl Ether	14.87	63	47356	10.00 PPB	100
58) 2-Nitropropane	14.85	41	170573	50.00 PPB	100
59) cis-1,3-Dichloropropene	15.16	75	581811	10.00 PPB	100
60) 4-Methyl-2-pentanone (MIBK	15.32	100	549125	200.00 PPB	100
62) Toluene	15.65	92	1103143	10.00 PPB	100
64) Ethyl methacrylate	15.92	69	230263	10.00 PPB	100
65) n-Octane	15.66	85	264175	10.00 PPB	100
66) trans-1,3-Dichloropropene	15.91	75	423517	10.00 PPB	100
67) 1,1,2-Trichloroethane	16.19	83	222236	10.00 PPB	100
68) Tetrachloroethene	16.40	164	454613	10.00 PPB	100
69) 2-Hexanone	16.44	57	352987	200.00 PPB	100
70) 1,3-Dichloropropane	16.42	76	471414	10.00 PPB	100
71) Dibromochloromethane	16.74	129	355544	10.00 PPB	100
72) 1,2-Dibromoethane (EDB)	16.94	107	283320	10.00 PPB	100
73) 1-Chlorohexane	17.38	55	358032	10.00 PPB	100
74) Chlorobenzene	17.51	112	1275613	10.00 PPB	100
75) Ethylbenzene	17.59	106	640347	10.00 PPB	100
76) 1,1,1,2-Tetrachloroethane	17.59	131	418590	10.00 PPB	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:05:32 2007

Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77)	m,p-Xylenes	17.72	106	1596418	20.00 PPB	100
78)	o-Xylene	18.21	106	754249	10.00 PPB	100
79)	Styrene	18.22	104	1214081	10.00 PPB	100
80)	Bromoform	18.51	173	184414	10.00 PPB	100
81)	Isopropylbenzene	18.61	105	1888243	10.00 PPB	100
84)	cis-1,4-Dichloro-2-Butene	18.67	88	200078	40.00 PPB	100
85)	1,1,2,2-Tetrachloroethane	18.94	83	254928	10.00 PPB	100
86)	Bromobenzene	19.04	156	550744	10.00 PPB	100
87)	n-Propylbenzene	19.05	91	2259668	10.00 PPB	100
88)	trans-1,3-Dichloro-2-Buten	18.99	53	44895	10.00 PPB	100
89)	1,2,3-Trichloropropane	19.02	110	73459	10.00 PPB	100
90)	2-Chlorotoluene	19.21	91	1416873	10.00 PPB	100
91)	1,3,5-Trimethylbenzene	19.22	105	1481332	10.00 PPB	100
92)	4-Chlorotoluene	19.32	91	1300326	10.00 PPB	100
93)	tert-Butylbenzene	19.61	134	385263	10.00 PPB	100
94)	1,2,4-Trimethylbenzene	19.65	105	1478021	10.00 PPB	100
95)	sec-Butylbenzene	19.85	105	1888685	10.00 PPB	100
96)	p-Isopropyltoluene	19.98	119	1688095	10.00 PPB	100
97)	1,3-Dichlorobenzene	20.05	146	1026245	10.00 PPB	100
98)	1,4-Dichlorobenzene	20.14	146	1023325	10.00 PPB	100
99)	n-Butylbenzene	20.45	91	1397295	10.00 PPB	100
100)	1,2-Dichlorobenzene	20.59	146	858133	10.00 PPB	100
101)	1,2-Dibromo-3-chloropropan	21.50	157	41737	10.00 PPB	100
102)	1,3,5-Trichlorobenzene	21.73	180	625915	10.00 PPB	100
103)	1,2,4-Trichlorobenzene	22.56	180	459793	10.00 PPB	100
104)	Hexachlorobutadiene	22.71	225	177096	10.00 PPB	100
105)	Naphthalene	22.95	128	550349	10.00 PPB	100
106)	1,2,3-Trichlorobenzene	23.30	180	338930	10.00 PPB	100

(#) = qualifier out of range (m) = manual integration

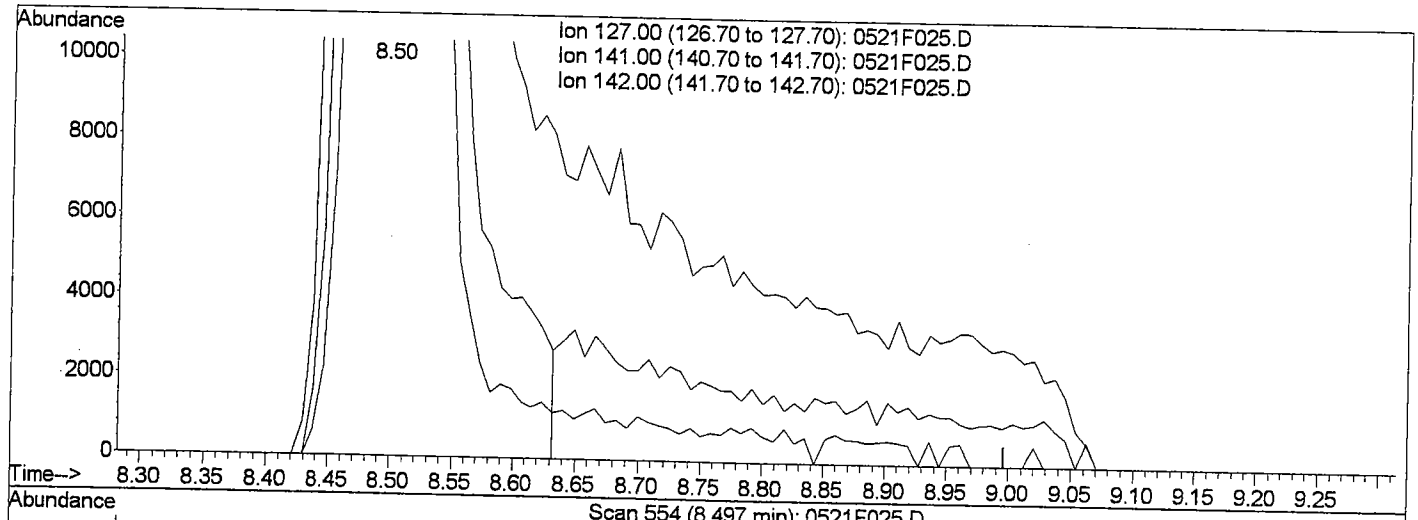
Quantitation Report (Qedit)

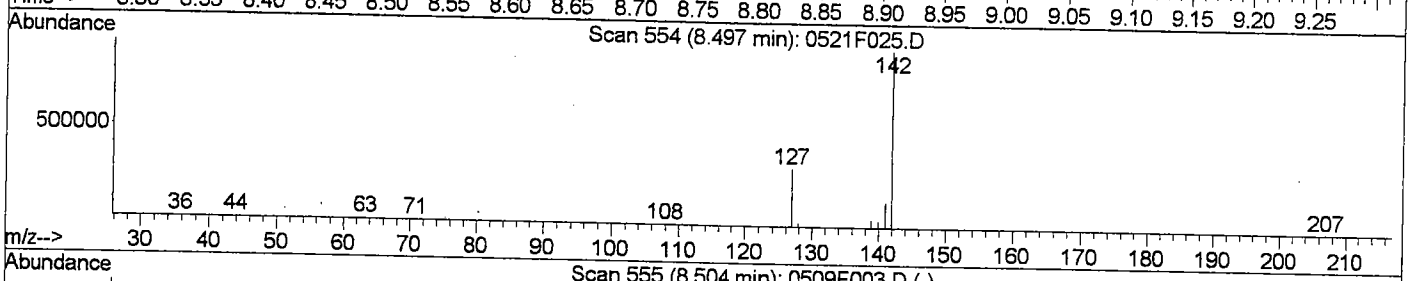
Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:05 2007

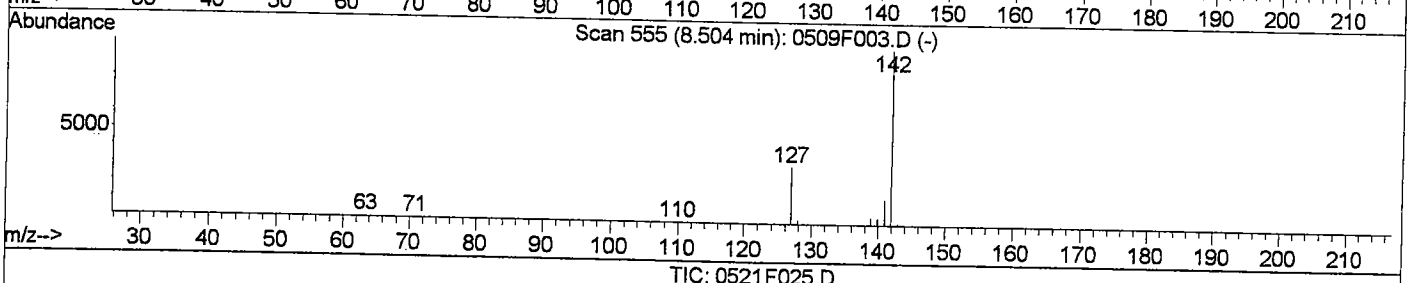
Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F025.D

(13) Iodomethane (T)

8.50min 38.32PPB

response 949211

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.14
142.00	303.00	303.04
0.00	0.00	0.00

0521F025.D 052107MS04-8260.M Tue May 22 08:05:58 2007

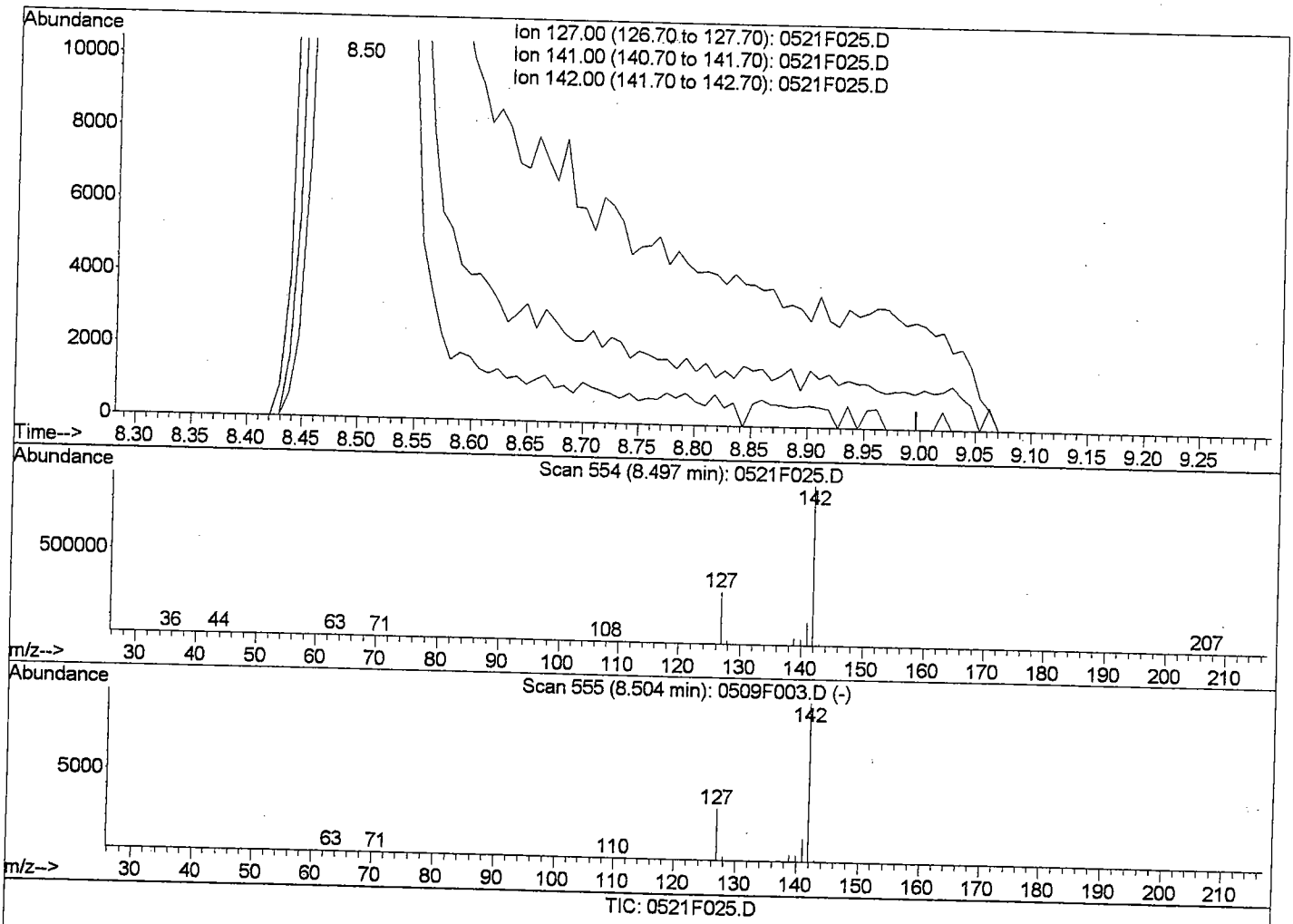
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:06 2007

Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 40.00PPB m

response 990784

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.14
142.00	303.00	303.04
0.00	0.00	0.00

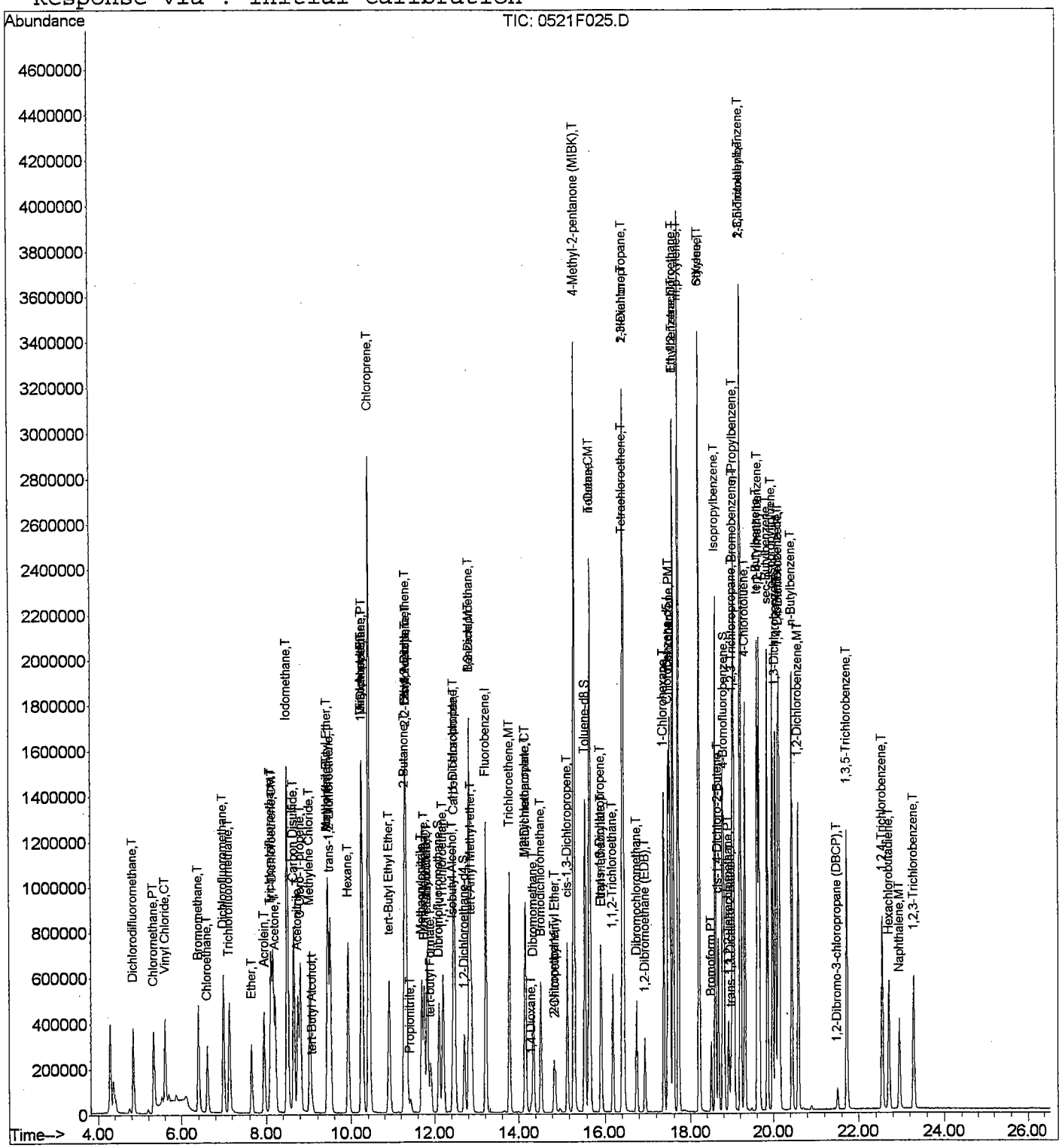
Peak Tailing
HC 5·21·07
F-A-h. 5/23/7

0521F025.D 052107MS04-8260.M Tue May 22 08:06:03 2007

Data File : J:\MS04\DATA\052107\0521F025.D
Acq On : 21 May 2007 9:38 pm
Sample : 8260 ICAL 10 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:06 2007

Vial: 25
Operator: HC
Inst : MS04
Multiplr: 1.00
Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:52 2007

Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F-A-h. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.23	96	1741788	10.00 PPB	0.00
63) Chlorobenzene-d5	17.47	117	1265713	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	644058	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.11	113	941599	20.44 PPB	0.00
Spiked Amount 10.000			Recovery	= 204.40%	
47) 1,2-Dichloroethane-d4	12.71	65	649843	20.85 PPB	0.00
Spiked Amount 10.000			Recovery	= 208.50%	
61) Toluene-d8	15.55	98	2560655	19.84 PPB	0.00
Spiked Amount 10.000			Recovery	= 198.40%	
82) 4-Bromofluorobenzene	18.82	95	984443	20.52 PPB	0.00
Spiked Amount 10.000			Recovery	= 205.20%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.84	85	1038864	20.67 PPB	98
3) Chloromethane	5.33	50	1178178	20.72 PPB	99
4) Vinyl Chloride	5.60	62	1147923	20.87 PPB	100
5) Bromomethane	6.40	94	941341	19.57 PPB	99
6) Chloroethane	6.62	64	803201	20.12 PPB	99
7) Dichlorofluoromethane	7.00	67	1949869	20.21 PPB	99
8) Trichlorofluoromethane	7.14	101	1291470	20.29 PPB	100
9) Ether	7.66	59	505382	20.38 PPB	98
10) Trichlorotrifluoroethane	8.11	151	874619	20.44 PPB	99
11) 1,1-Dichloroethene	8.16	96	913743	20.57 PPB	99
12) Acetone	8.21	43	1698449	368.36 PPB	99
13) Iodomethane	8.50	127	2239895m	87.50 PPB	
14) Carbon Disulfide	8.65	76	3631742	20.49 PPB	99
15) Acrolein	7.95	56	1251075	420.74 PPB	99
17) 3-Cloro-1-propene	8.81	41	1344457	22.32 PPB	98
18) Acetonitrile	8.74	41	1625316	772.48 PPB	98
19) Methylene Chloride	9.03	84	1053654	19.66 PPB	99
20) tert-Butyl Alcohol	9.09	59	95119	104.25 PPB	98
21) Methyl tert-Butyl Ether	9.45	73	2723514	41.09 PPB	100
22) trans-1,2-Dichloroethene	9.51	96	1141082	20.29 PPB	99
23) Hexane	9.93	57	1230698	21.30 PPB	99
24) 1,1-Dichloroethane	10.27	63	1731186	20.21 PPB	99
25) Vinyl Acetate	10.25	86	218400	45.22 PPB	96
26) Acrylonitrile	9.45	53	572925	82.14 PPB	97
27) Diisopropyl Ether	10.25	45	2506512	20.66 PPB	99
28) Chloroprene	10.42	88	4171534	83.67 PPB	99
29) tert-Butyl Ethyl Ether	10.91	59	1846840	20.84 PPB	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:52 2007

Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	1169557	20.10 PPB		98
31) Ethyl Acetate	11.31	70	174260	81.74 PPB		97
32) cis-1,2-Dichloroethene	11.32	96	1152686	20.27 PPB		99
33) 2-Butanone	11.28	72	719145	376.87 PPB		96
34) Propionitrile	11.43	54	174812	82.59 PPB		95
35) Methacrylonitrile	11.69	67	650706	82.72 PPB		97
36) Bromochloromethane	11.76	128	551310	20.00 PPB		95
37) Chloroform	11.83	83	1649481	20.07 PPB		99
38) tert-butyl Formate	11.91	59	354740	22.76 PPB		97
39) Tetrahydrofuran	11.82	42	80568	18.88 PPB		89
40) 1,1,1-Trichloroethane	12.20	97	1255074	20.42 PPB		98
43) Isobutyl Alcohol	12.42	43	293073	816.54 PPB		99
44) Carbon Tetrachloride	12.48	117	1076966	20.57 PPB		100
45) 1,1-Dichloropropene	12.46	75	1348858	20.93 PPB		100
46) tert-Amyl Methyl-ether	12.87	55	357082	19.80 PPB		97
48) Benzene	12.82	78	3863410	20.68 PPB		99
49) 1,2-Dichloroethane	12.83	62	824733	19.75 PPB		98
50) Trichloroethene	13.78	95	990025	20.38 PPB		98
52) Methyl methacrylate	14.17	69	254663	21.96 PPB		90
53) 1,2-Dichloropropane	14.15	63	879972	20.53 PPB		98
54) 1,4-Dioxane	14.30	88	90546	810.52 PPB		95
55) Dibromomethane	14.34	93	460217	20.18 PPB		95
56) Bromodichloromethane	14.53	83	1049569	20.27 PPB		99
57) 2-Chloroethyl Vinyl Ether	14.87	63	114062	23.31 PPB		94
58) 2-Nitropropane	14.85	41	366347	103.92 PPB		95
59) cis-1,3-Dichloropropene	15.15	75	1251274	20.81 PPB		98
60) 4-Methyl-2-pentanone (MIBK	15.31	100	1062150	374.35 PPB	#	90
62) Toluene	15.66	92	2353180	20.64 PPB		99
64) Ethyl methacrylate	15.93	69	519919	22.00 PPB		98
65) n-Octane	15.66	85	585012	21.57 PPB		97
66) trans-1,3-Dichloropropene	15.90	75	906442	20.85 PPB		98
67) 1,1,2-Trichloroethane	16.18	83	463884	20.33 PPB		97
68) Tetrachloroethene	16.41	164	971306	20.81 PPB		98
69) 2-Hexanone	16.43	57	686690	379.02 PPB	#	90
70) 1,3-Dichloropropane	16.42	76	989607	20.45 PPB		97
71) Dibromochloromethane	16.74	129	754284	20.67 PPB		99
72) 1,2-Dibromoethane (EDB)	16.94	107	597115	20.53 PPB		97
73) 1-Chlorohexane	17.38	55	789495	21.48 PPB		98
74) Chlorobenzene	17.51	112	2692770	20.56 PPB		99
75) Ethylbenzene	17.59	106	1360204	20.69 PPB		95
76) 1,1,1,2-Tetrachloroethane	17.59	131	887254	20.65 PPB		99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:52 2007

Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) m,p-Xylenes	17.72	106	3449018	42.09 PPB	98
78) o-Xylene	18.21	106	1613065	20.83 PPB	97
79) Styrene	18.22	104	2636018	21.15 PPB	98
80) Bromoform	18.51	173	391738	20.69 PPB	99
81) Isopropylbenzene	18.61	105	4158549	21.45 PPB	99
84) cis-1,4-Dichloro-2-Butene	18.68	88	437825	85.49 PPB	97
85) 1,1,2,2-Tetrachloroethane	18.93	83	537762	20.60 PPB	97
86) Bromobenzene	19.03	156	1148938	20.38 PPB	93
87) n-Propylbenzene	19.06	91	4907851	21.21 PPB	99
88) trans-1,3-Dichloro-2-Buten	18.98	53	93410	20.32 PPB	97
89) 1,2,3-Trichloropropane	19.01	110	150063	19.95 PPB	91
90) 2-Chlorotoluene	19.21	91	3023336	20.84 PPB	99
91) 1,3,5-Trimethylbenzene	19.23	105	3200414	21.10 PPB	98
92) 4-Chlorotoluene	19.32	91	2760135	20.73 PPB	97
93) tert-Butylbenzene	19.61	134	836660	21.21 PPB	98
94) 1,2,4-Trimethylbenzene	19.66	105	3189168	21.07 PPB	100
95) sec-Butylbenzene	19.85	105	4163024	21.53 PPB	99
96) p-Isopropyltoluene	19.98	119	3700645	21.41 PPB	99
97) 1,3-Dichlorobenzene	20.05	146	2160070	20.56 PPB	99
98) 1,4-Dichlorobenzene	20.15	146	2132223	20.35 PPB	99
99) n-Butylbenzene	20.44	91	3094831	21.63 PPB	99
100) 1,2-Dichlorobenzene	20.59	146	1795690	20.44 PPB	100
101) 1,2-Dibromo-3-chloropropan	21.50	157	90422	21.16 PPB	95
102) 1,3,5-Trichlorobenzene	21.73	180	1332664	20.79 PPB	99
103) 1,2,4-Trichlorobenzene	22.55	180	981399	20.85 PPB	99
104) Hexachlorobutadiene	22.70	225	384087	21.18 PPB	98
105) Naphthalene	22.96	128	1214203	21.55 PPB	99
106) 1,2,3-Trichlorobenzene	23.29	180	729628	21.03 PPB	99

(#) = qualifier out of range (m) = manual integration

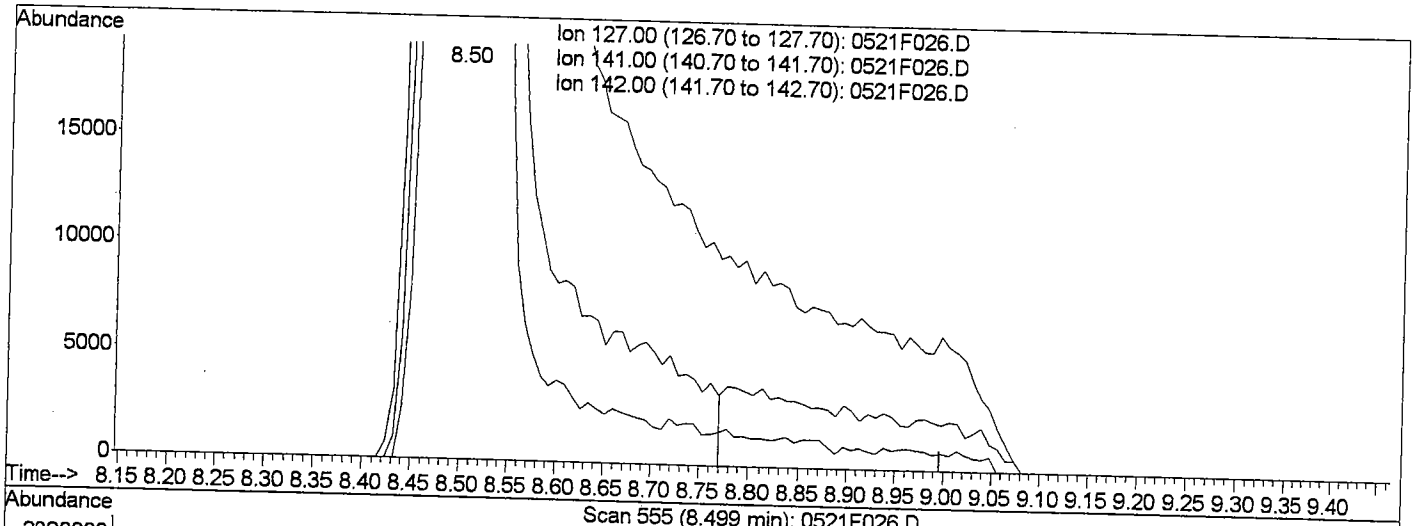
Quantitation Report (Qedit)

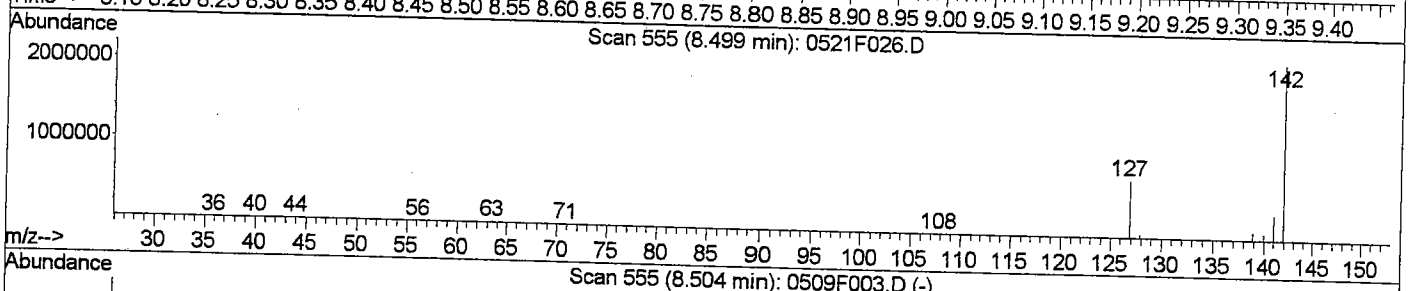
Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:07 2007

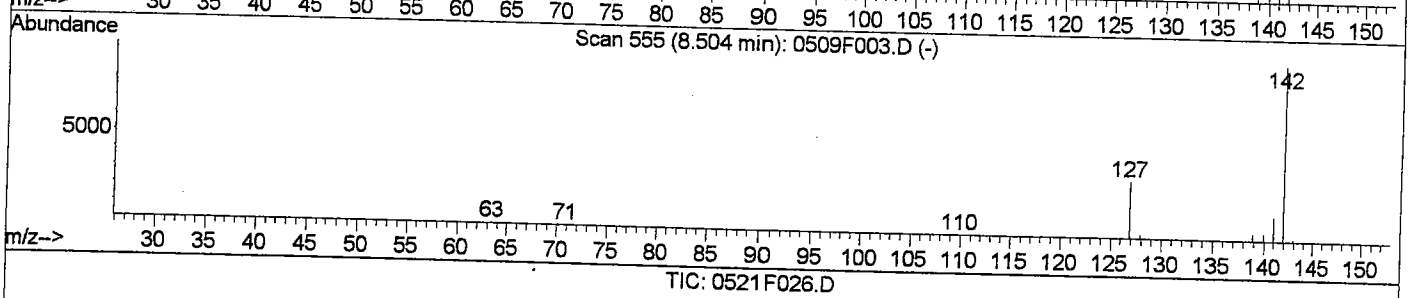
Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F026.D

(13) Iodomethane (T)

8.50min 85.74PPB

response 2194701

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.61
142.00	303.00	306.96
0.00	0.00	0.00

0521F026.D 052107MS04-8260.M Tue May 22 08:09:48 2007

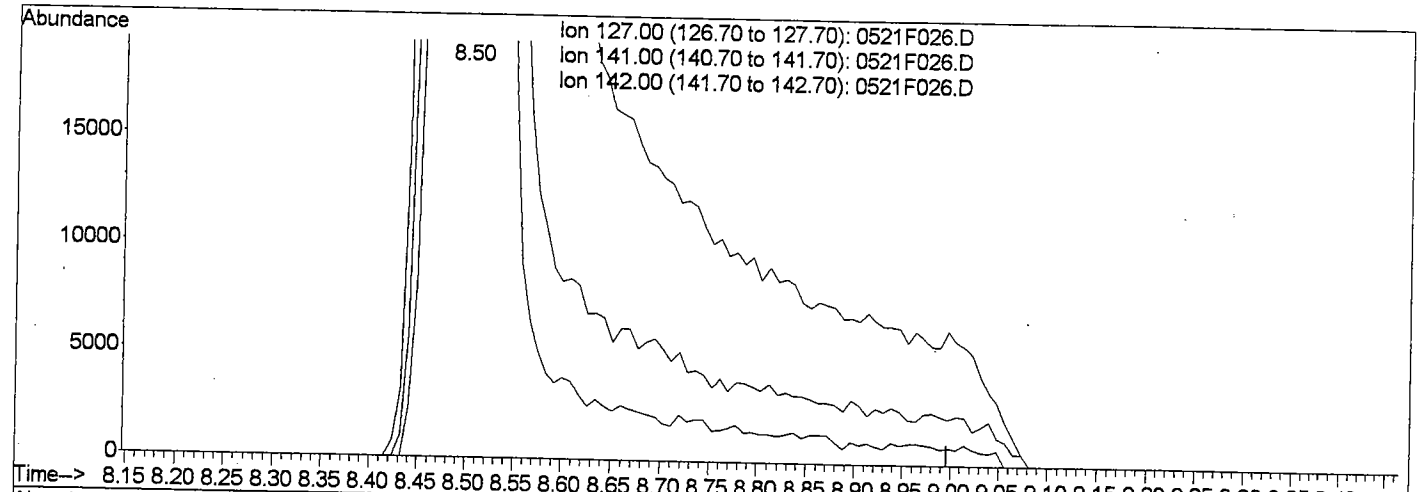
Quantitation Report (Qedit)

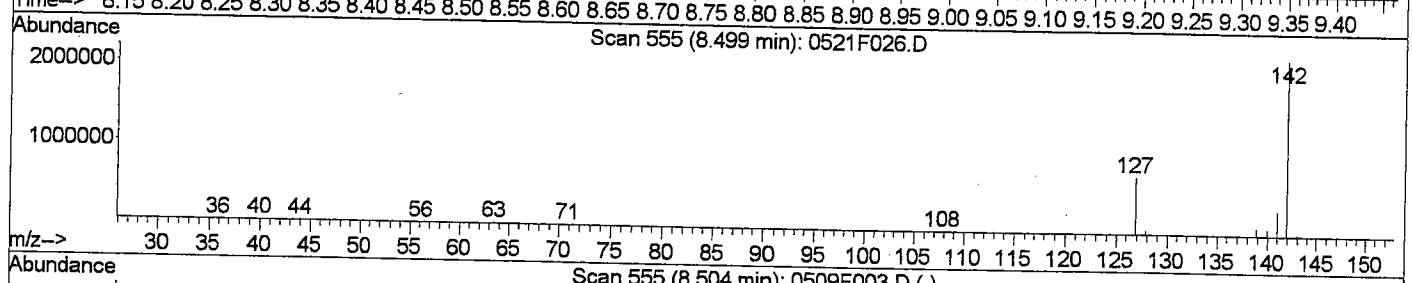
Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:09 2007

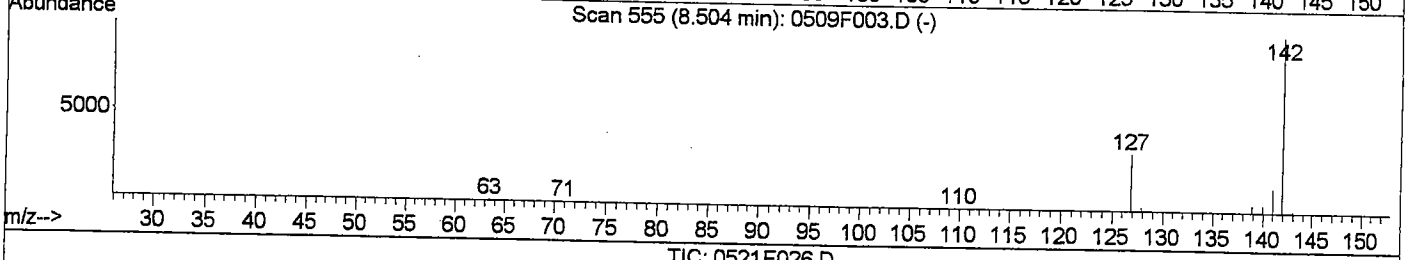
Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F026.D

(13) Iodomethane (T)

8.50min 87.50PPB m

response 2239895

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.61
142.00	303.00	306.96
0.00	0.00	0.00

Peak Tailing
HC 5.22.07
F-A-h. 5/23/7

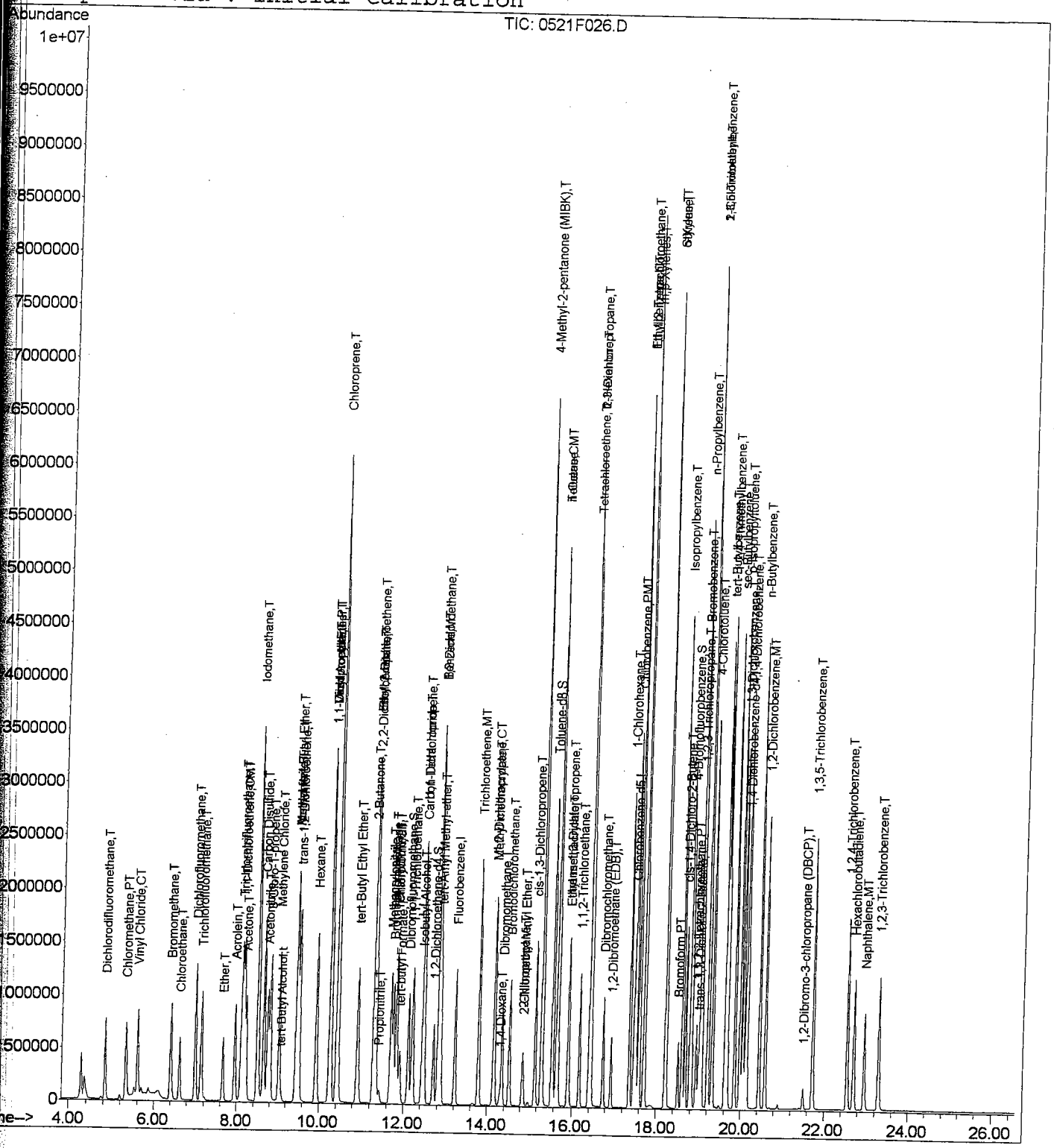
0521F026.D 052107MS04-8260.M Tue May 22 08:09:53 2007

Data File : J:\MS04\DATA\052107\0521F026.D
Acq On : 21 May 2007 10:10 pm
Sample : 8260 ICAL 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:10 2007

Vial: 26
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:55 2007

Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F.A.L. 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	1841087	10.00 PPB	0.00
63) Chlorobenzene-d5	17.48	117	1311012	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	660383	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.11	113	2007508	41.24 PPB	0.00
Spiked Amount 10.000			Recovery	= 412.40%	
47) 1,2-Dichloroethane-d4	12.71	65	1305460	39.64 PPB	0.00
Spiked Amount 10.000			Recovery	= 396.40%	
61) Toluene-d8	15.55	98	6048248	44.33 PPB	0.00
Spiked Amount 10.000			Recovery	= 443.30%	
82) 4-Bromofluorobenzene	18.82	95	2156763	43.40 PPB	0.00
Spiked Amount 10.000			Recovery	= 434.00%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.84	85	2143554	40.35 PPB	99
3) Chloromethane	5.33	50	2530102	42.10 PPB	99
4) Vinyl Chloride	5.60	62	2438541	41.94 PPB	99
5) Bromomethane	6.41	94	1999827	39.33 PPB	100
6) Chloroethane	6.62	64	1686620	39.96 PPB	99
7) Dichlorofluoromethane	7.00	67	4049682	39.71 PPB	99
8) Trichlorofluoromethane	7.14	101	2672781	39.73 PPB	99
9) Ether	7.66	59	1062534	40.53 PPB	98
10) Trichlorotrifluoroethane	8.11	151	1809361	40.00 PPB	98
11) 1,1-Dichloroethene	8.16	96	1921184	40.92 PPB	99
12) Acetone	8.21	43	3401516	697.94 PPB	98
13) Iodomethane	8.50	127	4751467m	175.61 PPB	
14) Carbon Disulfide	8.65	76	7673368	40.96 PPB	99
15) Acrolein	7.95	56	2572863	818.60 PPB	99
17) 3-Cloro-1-propene	8.81	41	2847633	44.72 PPB	98
18) Acetonitrile	8.74	41	3432131	1543.23 PPB	97
19) Methylene Chloride	9.03	84	2135604	37.69 PPB	99
20) tert-Butyl Alcohol	9.09	59	202839	210.31 PPB	99
21) Methyl tert-Butyl Ether	9.45	73	5732314	81.83 PPB	100
22) trans-1,2-Dichloroethene	9.51	96	2382786	40.08 PPB	99
23) Hexane	9.93	57	2670926	43.74 PPB	99
24) 1,1-Dichloroethane	10.27	63	3573050	39.46 PPB	99
25) Vinyl Acetate	10.25	86	446314	87.42 PPB	97
26) Acrylonitrile	9.45	53	1195198	162.12 PPB	99
27) Diisopropyl Ether	10.25	45	5310160	41.40 PPB	99
28) Chloroprene	10.43	88	8824237	167.44 PPB	100
29) tert-Butyl Ethyl Ether	10.91	59	3927924	41.93 PPB	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:55 2007

Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	2403831	39.09 PPB		97
31) Ethyl Acetate	11.31	70	365126	162.03 PPB		98
32) cis-1,2-Dichloroethene	11.32	96	2388921	39.74 PPB		99
33) 2-Butanone	11.27	72	1445477	716.66 PPB		98
34) Propionitrile	11.43	54	368773	164.84 PPB		95
35) Methacrylonitrile	11.69	67	1369987	164.76 PPB		98
36) Bromochloromethane	11.76	128	1131006	38.82 PPB		93
37) Chloroform	11.83	83	3376099	38.86 PPB		100
38) tert-butyl Formate	11.91	59	733651	44.53 PPB		94
39) Tetrahydrofuran	11.81	42	171986	38.12 PPB		97
40) 1,1,1-Trichloroethane	12.20	97	2581636	39.73 PPB		98
43) Isobutyl Alcohol	12.42	43	637819	1681.21 PPB		97
44) Carbon Tetrachloride	12.48	117	2221533	40.14 PPB		98
45) 1,1-Dichloropropene	12.46	75	2834086	41.60 PPB		99
46) tert-Amyl Methyl-ether	12.87	55	712104	37.36 PPB	#	84
48) Benzene	12.82	78	8117090	41.11 PPB		99
49) 1,2-Dichloroethane	12.84	62	1656173	37.51 PPB		99
50) Trichloroethene	13.78	95	2088206	40.66 PPB		98
52) Methyl methacrylate	14.17	69	553419	45.15 PPB		91
53) 1,2-Dichloropropane	14.15	63	1834389	40.48 PPB		97
54) 1,4-Dioxane	14.30	88	196669	1665.52 PPB		98
55) Dibromomethane	14.34	93	943370	39.13 PPB		96
56) Bromodichloromethane	14.52	83	2161830	39.49 PPB		100
57) 2-Chloroethyl Vinyl Ether	14.87	63	233517	45.14 PPB		94
58) 2-Nitropropane	14.84	41	765005	205.29 PPB		95
59) cis-1,3-Dichloropropene	15.15	75	2657805	41.82 PPB		99
60) 4-Methyl-2-pentanone (MIBK	15.31	100	2155220	718.62 PPB	#	87
62) Toluene	15.65	92	4925157	40.87 PPB		99
64) Ethyl methacrylate	15.92	69	1128158	46.08 PPB		98
65) n-Octane	15.66	85	1220722	43.46 PPB		98
66) trans-1,3-Dichloropropene	15.90	75	1904815	42.30 PPB		99
67) 1,1,2-Trichloroethane	16.18	83	961508	40.69 PPB		99
68) Tetrachloroethene	16.41	164	2018842	41.77 PPB		98
69) 2-Hexanone	16.43	57	1385831	738.48 PPB	#	86
70) 1,3-Dichloropropane	16.42	76	2032220	40.54 PPB		97
71) Dibromochloromethane	16.74	129	1569877	41.53 PPB		99
72) 1,2-Dibromoethane (EDB)	16.94	107	1237080	41.07 PPB		97
73) 1-Chlorohexane	17.38	55	1671433	43.91 PPB		98
74) Chlorobenzene	17.51	112	5620531	41.44 PPB		99
75) Ethylbenzene	17.60	106	2850159	41.86 PPB		97
76) 1,1,1,2-Tetrachloroethane	17.59	131	1833897	41.20 PPB		99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:55 2007

Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) m,p-Xylenes	17.72	106	7294798	85.95 PPB	93
78) o-Xylene	18.21	106	3370225	42.02 PPB	99
79) Styrene	18.22	104	5629590	43.61 PPB	98
80) Bromoform	18.51	173	835119	42.59 PPB	99
81) Isopropylbenzene	18.61	105	8835188	44.01 PPB	99
84) cis-1,4-Dichloro-2-Butene	18.68	88	925719	176.29 PPB	96
85) 1,1,2,2-Tetrachloroethane	18.93	83	1105261	41.30 PPB	98
86) Bromobenzene	19.03	156	2370943	41.01 PPB	91
87) n-Propylbenzene	19.06	91	10500684	44.26 PPB	99
88) trans-1,3-Dichloro-2-Buten	18.98	53	204748	43.44 PPB	94
89) 1,2,3-Trichloropropane	19.01	110	311520	40.39 PPB	92
90) 2-Chlorotoluene	19.21	91	6304263	42.38 PPB	98
91) 1,3,5-Trimethylbenzene	19.22	105	6709451	43.14 PPB	99
92) 4-Chlorotoluene	19.33	91	5807613	42.54 PPB	99
93) tert-Butylbenzene	19.61	134	1754736	43.38 PPB	98
94) 1,2,4-Trimethylbenzene	19.66	105	6638068	42.78 PPB	99
95) sec-Butylbenzene	19.85	105	8925426	45.01 PPB	98
96) p-Isopropyltoluene	19.98	119	7845483	44.27 PPB	98
97) 1,3-Dichlorobenzene	20.05	146	4468565	41.48 PPB	99
98) 1,4-Dichlorobenzene	20.14	146	4387385	40.84 PPB	99
99) n-Butylbenzene	20.44	91	6585959	44.90 PPB	98
100) 1,2-Dichlorobenzene	20.59	146	3718542	41.28 PPB	99
101) 1,2-Dibromo-3-chloropropan	21.50	157	193400	44.14 PPB	90
102) 1,3,5-Trichlorobenzene	21.73	180	2757646	41.97 PPB	100
103) 1,2,4-Trichlorobenzene	22.55	180	2033073	42.12 PPB	98
104) Hexachlorobutadiene	22.71	225	803287	43.21 PPB	98
105) Naphthalene	22.96	128	2585945	44.76 PPB	99
106) 1,2,3-Trichlorobenzene	23.29	180	1504995	42.30 PPB	99

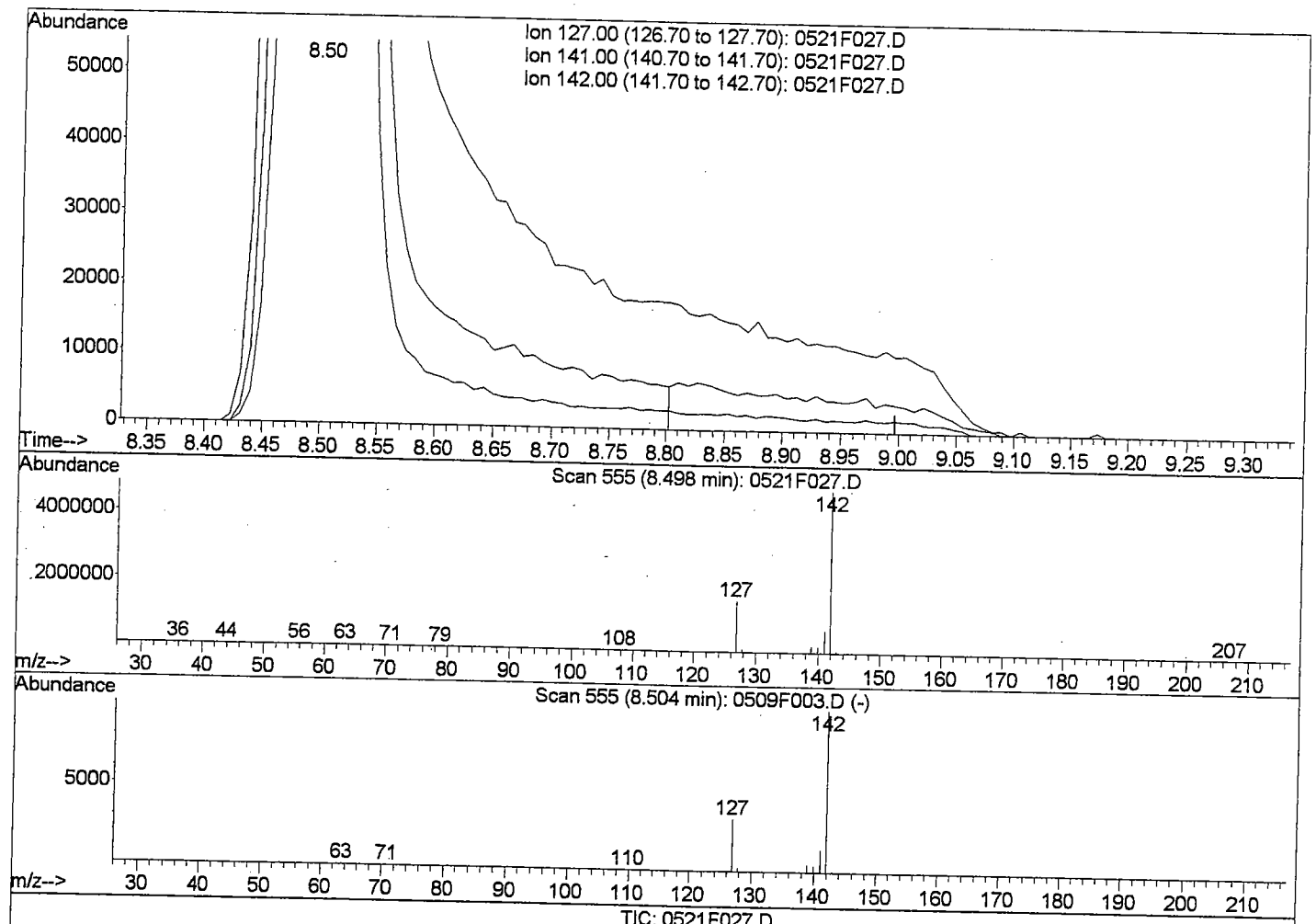
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:07 2007

Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 173.00PPB

response 4680879

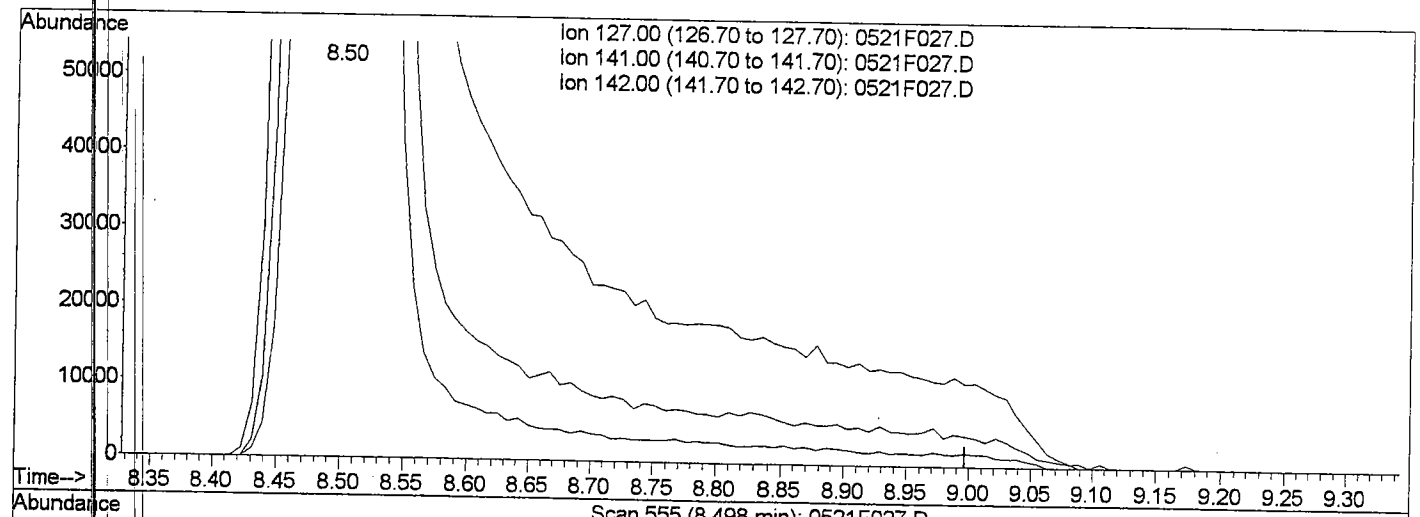
Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.58
142.00	303.00	315.47
0.00	0.00	0.00

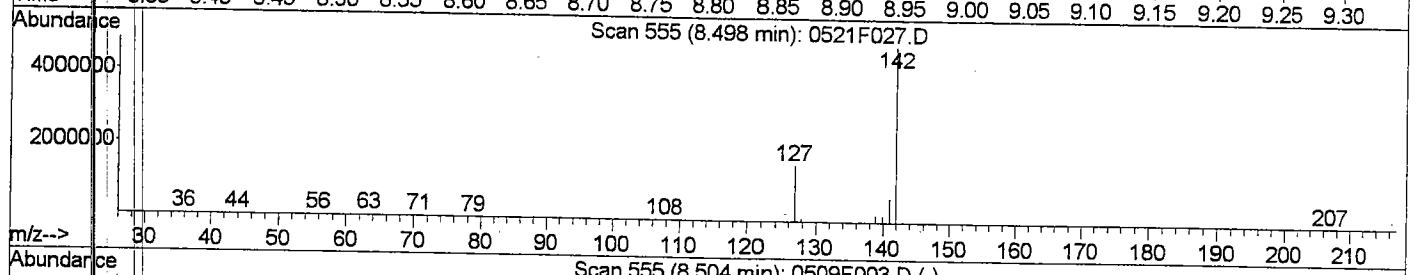
Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:11 2007

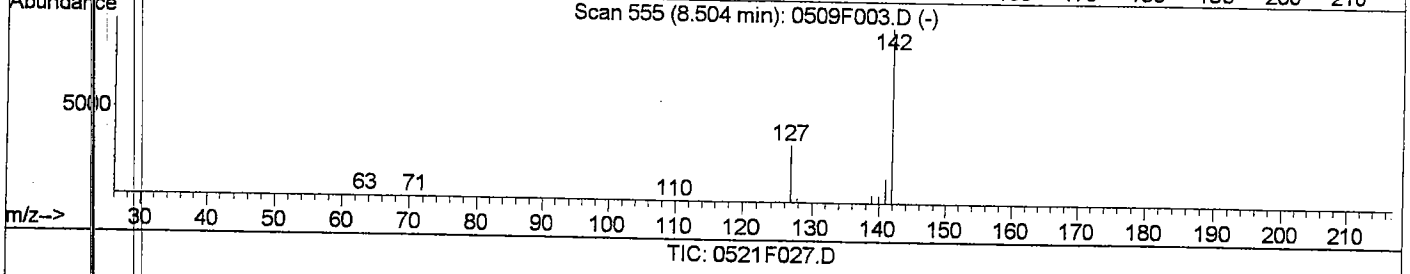
Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration







TIC: 0521F027.D

(13) Iodomethane (T)

8.50min 175.61PPB m

response 4751467

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.58
142.00	303.00	315.47
0.00	0.00	0.00

Peak Tailing
HC 5.22.07
F.A.h. 5/23/7

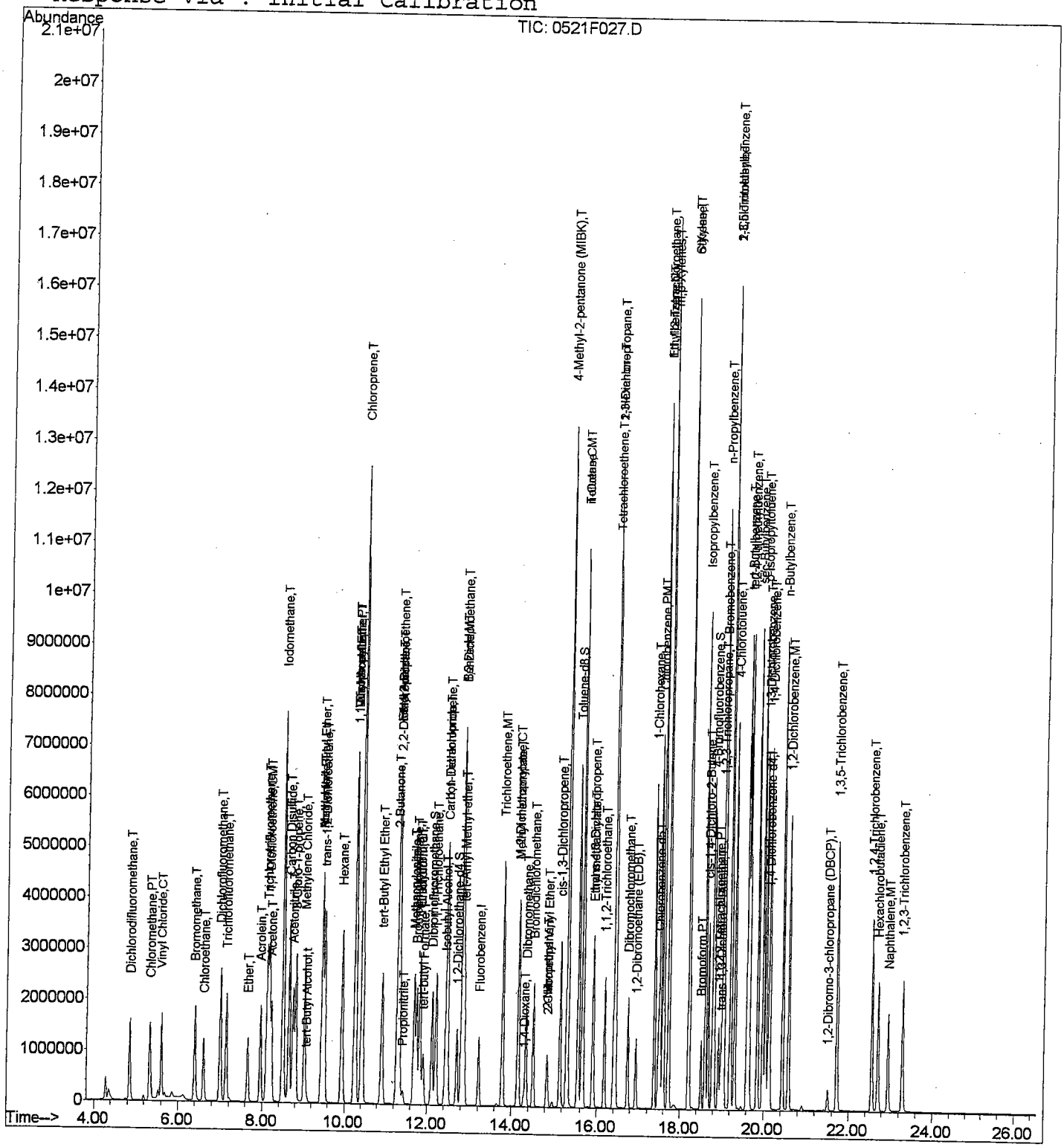
0521F027.D 052107MS04-8260.M Tue May 22 08:11:29 2007

Data File : J:\MS04\DATA\052107\0521F027.D
Acq On : 21 May 2007 10:42 pm
Sample : 8260 ICAL 40 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:11 2007

Vial: 27
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



Calibration Report (QT Reviewed)

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:56 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
FAh 5/23/7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	13.22	96	1915137	10.00	PPB	0.00
63) Chlorobenzene-d5	17.48	117	1364523	10.00	PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	673122	10.00	PPB	0.00
System Monitoring Compounds						
41) Dibromofluoromethane	12.11	113	2649010	52.31	PPB	0.00
Spiked Amount 10.000			Recovery =	523.10%		
47) 1,2-Dichloroethane-d4	12.71	65	1689204	49.30	PPB	0.00
Spiked Amount 10.000			Recovery =	493.00%		
61) Toluene-d8	15.55	98	8209290	57.84	PPB	0.00
Spiked Amount 10.000			Recovery =	578.40%		
82) 4-Bromofluorobenzene	18.82	95	2811470	54.35	PPB	0.00
Spiked Amount 10.000			Recovery =	543.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.84	85	3310602	59.90	PPB	99
3) Chloromethane	5.33	50	4003024	64.03	PPB	99
4) Vinyl Chloride	5.60	62	3785421	62.59	PPB	100
5) Bromomethane	6.40	94	3196050	60.42	PPB	99
6) Chloroethane	6.62	64	2647566	60.31	PPB	99
7) Dichlorofluoromethane	7.00	67	6325120	59.62	PPB	98
8) Trichlorofluoromethane	7.14	101	4081941	58.33	PPB	100
9) Ether	7.66	59	1690946	62.01	PPB	100
10) Trichlorotrifluoroethane	8.11	151	2752211	58.49	PPB	100
11) 1,1-Dichloroethene	8.16	96	3030213	62.04	PPB	98
12) Acetone	8.21	43	7252230	1430.50	PPB	98
13) Iodomethane	8.50	127	7519887m	267.18	PPB	
14) Carbon Disulfide	8.65	76	12194634	62.57	PPB	99
15) Acrolein	7.95	56	4117957	1259.54	PPB	99
17) 3-Cloro-1-propene	8.81	41	4594505	69.37	PPB	99
18) Acetonitrile	8.74	41	5650798	2442.60	PPB	98
19) Methylene Chloride	9.03	84	3358217	56.98	PPB	98
20) tert-Butyl Alcohol	9.09	59	340638	339.54	PPB	100
21) Methyl tert-Butyl Ether	9.45	73	9078801	124.59	PPB	99
22) trans-1,2-Dichloroethene	9.51	96	3731984	60.35	PPB	99
23) Hexane	9.93	57	4235221	66.67	PPB	98
24) 1,1-Dichloroethane	10.27	63	5630767	59.77	PPB	99
25) Vinyl Acetate	10.25	86	671986	126.53	PPB #	94
26) Acrylonitrile	9.45	53	1886013	245.93	PPB	99
27) Diisopropyl Ether	10.25	45	8597717	64.44	PPB	97
28) Chloroprene	10.43	88	13912335	253.78	PPB	98
29) tert-Butyl Ethyl Ether	10.91	59	6274077	64.39	PPB	99

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:56 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	3669793	57.37 PPB		97
31) Ethyl Acetate	11.31	70	574275	244.99 PPB		98
32) cis-1,2-Dichloroethene	11.32	96	3740766	59.82 PPB		99
33) 2-Butanone	11.27	72	3121272	1487.67 PPB		98
34) Propionitrile	11.43	54	587016	252.24 PPB		99
35) Methacrylonitrile	11.70	67	2193689	253.63 PPB		99
36) Bromochloromethane	11.76	128	1743381	57.53 PPB		96
37) Chloroform	11.83	83	5245119	58.03 PPB		100
38) tert-butyl Formate	11.91	59	1169099	68.21 PPB		93
39) Tetrahydrofuran	11.82	42	273570	58.29 PPB		94
40) 1,1,1-Trichloroethane	12.20	97	3968561	58.71 PPB		99
43) Isobutyl Alcohol	12.42	43	1102717	2794.24 PPB		98
44) Carbon Tetrachloride	12.48	117	3389927	58.89 PPB		98
45) 1,1-Dichloropropene	12.46	75	4422180	62.41 PPB		100
46) tert-Amyl Methyl-ether	12.87	55	1093782	55.17 PPB	#	77
48) Benzene	12.83	78	12956371	63.08 PPB		97
49) 1,2-Dichloroethane	12.83	62	2536170	55.23 PPB		96
50) Trichloroethene	13.78	95	3310396	61.97 PPB		98
52) Methyl methacrylate	14.17	69	911292	71.48 PPB		87
53) 1,2-Dichloropropane	14.15	63	2906568	61.66 PPB		97
54) 1,4-Dioxane	14.30	88	346890	2824.09 PPB		99
55) Dibromomethane	14.35	93	1473030	58.73 PPB		98
56) Bromodichloromethane	14.52	83	3414513	59.96 PPB		100
57) 2-Chloroethyl Vinyl Ether	14.87	63	390869	72.64 PPB		95
58) 2-Nitropropane	14.84	41	1192765	307.71 PPB		98
59) cis-1,3-Dichloropropene	15.16	75	4210357	63.69 PPB		98
60) 4-Methyl-2-pentanone (MIBK	15.32	100	4611085	1478.04 PPB	#	56
62) Toluene	15.66	92	7778975	62.06 PPB		98
64) Ethyl methacrylate	15.93	69	1834900	72.01 PPB		98
65) n-Octane	15.66	85	1913902	65.47 PPB		97
66) trans-1,3-Dichloropropene	15.90	75	3027329	64.59 PPB		97
67) 1,1,2-Trichloroethane	16.18	83	1500324	61.00 PPB		99
68) Tetrachloroethene	16.41	164	3135323	62.32 PPB		99
69) 2-Hexanone	16.43	57	2956964	1513.91 PPB	#	74
70) 1,3-Dichloropropane	16.42	76	3175839	60.88 PPB		97
71) Dibromochloromethane	16.74	129	2486428	63.19 PPB		100
72) 1,2-Dibromoethane (EDB)	16.94	107	1971651	62.88 PPB		97
73) 1-Chlorohexane	17.38	55	2608173	65.83 PPB		98
74) Chlorobenzene	17.51	112	8871185	62.84 PPB		98
75) Ethylbenzene	17.60	106	4511755	63.67 PPB		94
76) 1,1,1,2-Tetrachloroethane	17.59	131	2848435	61.49 PPB		100

(#) = qualifier out of range (m) = manual integration

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 08:07:56 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) m,p-Xylenes	17.72	106	11502398	130.21 PPB #	59
78) o-Xylene	18.21	106	5308983	63.60 PPB	98
79) Styrene	18.22	104	8917567	66.37 PPB	97
80) Bromoform	18.51	173	1307108	64.05 PPB	100
81) Isopropylbenzene	18.61	105	13186967	63.11 PPB	96
84) cis-1,4-Dichloro-2-Butene	18.68	88	1453734	271.60 PPB	95
85) 1,1,2,2-Tetrachloroethane	18.93	83	1714848	62.86 PPB	97
86) Bromobenzene	19.03	156	3683030	62.49 PPB	92
87) n-Propylbenzene	19.06	91	14576063	60.28 PPB	87
88) trans-1,3-Dichloro-2-Buten	18.98	53	320289	66.67 PPB	92
89) 1,2,3-Trichloropropane	19.01	110	482948	61.44 PPB	89
90) 2-Chlorotoluene	19.21	91	9921512	65.44 PPB	98
91) 1,3,5-Trimethylbenzene	19.23	105	10587249	66.79 PPB	99
92) 4-Chlorotoluene	19.32	91	9120727	65.55 PPB	97
93) tert-Butylbenzene	19.61	134	2723543	66.06 PPB	97
94) 1,2,4-Trimethylbenzene	19.66	105	10425553	65.92 PPB	98
95) sec-Butylbenzene	19.85	105	13505701	66.83 PPB	96
96) p-Isopropyltoluene	19.98	119	12062398	66.78 PPB	99
97) 1,3-Dichlorobenzene	20.05	146	6937598	63.17 PPB	99
98) 1,4-Dichlorobenzene	20.14	146	6837275	62.44 PPB	99
99) n-Butylbenzene	20.44	91	10410445	69.62 PPB	98
100) 1,2-Dichlorobenzene	20.59	146	5774461	62.88 PPB	99
101) 1,2-Dibromo-3-chloropropan	21.50	157	307805	68.92 PPB	92
102) 1,3,5-Trichlorobenzene	21.73	180	4303060	64.25 PPB	99
103) 1,2,4-Trichlorobenzene	22.55	180	3201195	65.06 PPB	99
104) Hexachlorobutadiene	22.70	225	1241351	65.50 PPB	98
105) Naphthalene	22.96	128	4147242	70.42 PPB	99
106) 1,2,3-Trichlorobenzene	23.29	180	2367457	65.28 PPB	98

(#) = qualifier out of range (m) = manual integration

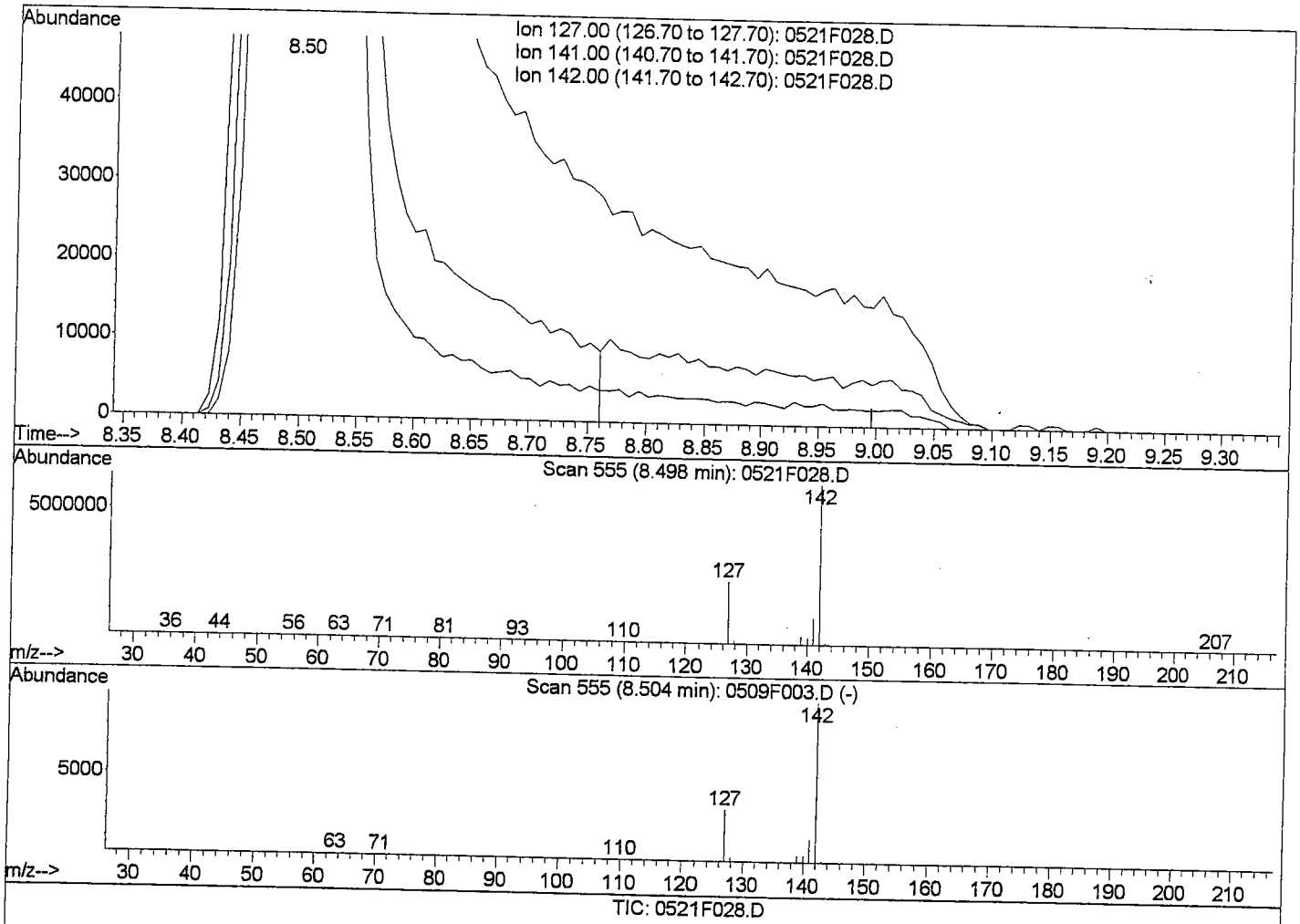
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:07 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 262.94PPB

response 7400592

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.17
142.00	303.00	258.87#
0.00	0.00	0.00

0521F028.D 052107MS04-8260.M Tue May 22 08:12:57 2007

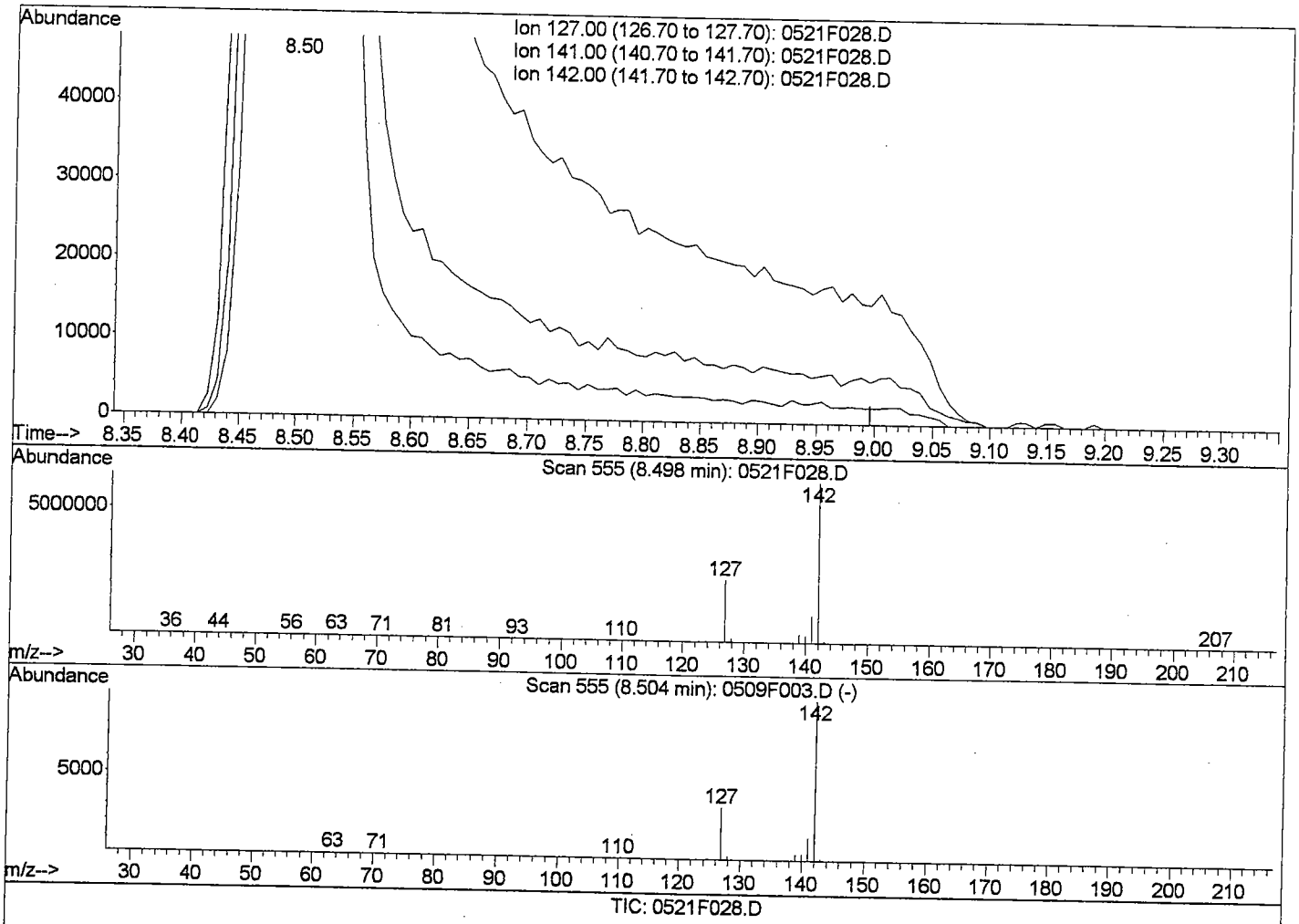
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:13 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 267.18PPB m

response 7519887

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	43.17
142.00	303.00	258.87#
0.00	0.00	0.00

Peak Tailing
HC 5.22.07

F.A.h. 5/23/7.

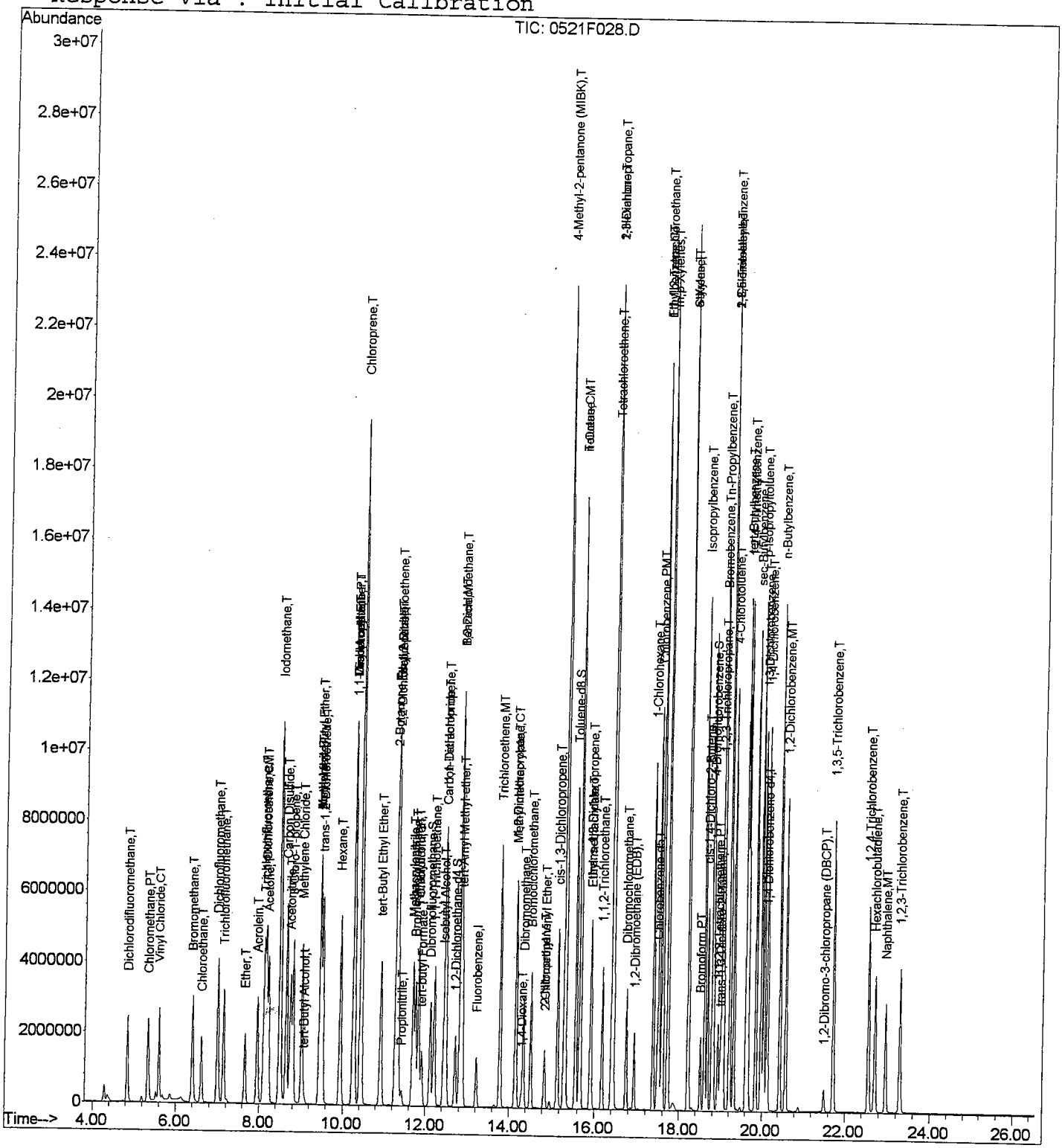
0521F028.D 052107MS04-8260.M Tue May 22 08:13:04 2007

Data File : J:\MS04\DATA\052107\0521F028.D
Acq On : 21 May 2007 11:14 pm
Sample : 8260 ICAL 60 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 8:13 2007

Vial: 28
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 08:05:05 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES
VOA DAILY ANALYSIS LOG
GCMS 5971 MS-04

ICAL Date: 5·21·07
CAL: 6287
TUNE FILE: BFB.U
NEW TUNE? NO
N/A TORR N/A °C

DATE: 5·22·07
OPERATOR H.Conrad
SECOND REVIEW F-A-h-5/23/7
ICV/LCS STD# See 5·21·07 prepsheet
MISC: STD# BFB: 46VOA04A
(IS)/SS STD# 46VOA15D
CCV STD# N/A
MS/D STD# N/A

RUN TIME		SAMPLE NAME	DATA FILE	METHOD	PH	DL	R	COMMENTS
1		Primer	0522F001	8260				
2		50ng BFB	02			4.4uL/44mL	✓	
3		ICV	03			See 05·21·07 prepsheet		(NR)
4		ICV	04				✓	
5		IB	05					Suspect 1,4 Dioxane carryover.
6		ICV	06			See 05·21·07 prepsheet		
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

HL 5.22.07

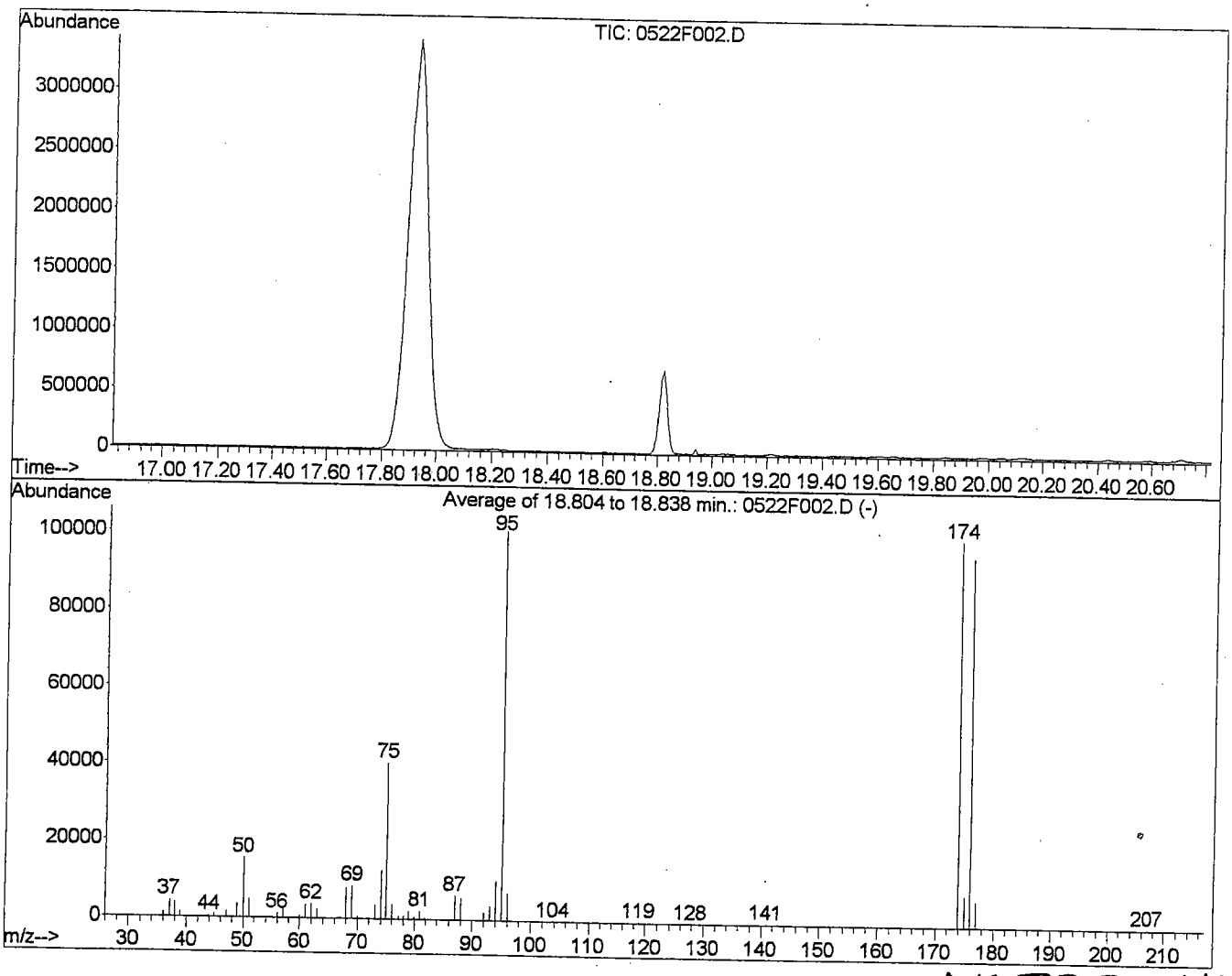
LIMS WORKGROUP #

1

BFB

Data File : J:\MS04\DATA\052207\0522F002.D
Acq On : 22 May 2007 9:40 am
Sample : 50NG BFB 46OA04A
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624

Vial: 2
Operator: HC
Inst : MS04
Multiplr: 1.00



Spectrum Information: Average of 18.804 to 18.838 min. AVG. TOP 5 SCANS - SCAN 1768

HC 52207

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.3	15458	PASS
75	95	30	60	40.1	40560	PASS
95	95	100	100	100.0	101084	PASS
96	95	5	9	7.2	7230	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.2	100227	PASS
175	174	5	9	8.0	8045	PASS
176	174	95	101	95.7	95880	PASS
177	176	5	9	6.9	6623	PASS

0522F002.D 052107MS04-8260.M Tue May 22 10:09:09 2007

FAh 5/23/7

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F005.D
Acq On : 22 May 2007 12:02 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:25:45 2007

Vial: 5
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5.22.07
F.A.h 5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	1970642	10.00 PPB	0.00
63) Chlorobenzene-d5	17.47	117	1395161	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.12	152	712608	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.12	113	511625	9.39 PPB	0.00
Spiked Amount 10.000			Recovery =	93.90%	
47) 1,2-Dichloroethane-d4	12.71	65	314365	8.57 PPB	0.00
Spiked Amount 10.000			Recovery =	85.70%	
61) Toluene-d8	15.56	98	1630199	10.77 PPB	0.00
Spiked Amount 10.000			Recovery =	107.70%	
82) 4-Bromofluorobenzene	18.82	95	556035	10.22 PPB	0.00
Spiked Amount 10.000			Recovery =	102.20%	
Target Compounds					Qvalue
12) Acetone	8.23	43	3272	0.68 PPB #	48
14) Carbon Disulfide	8.66	76	6829	0.03 PPB	71
18) Acetonitrile	8.75	41	2669	1.11 PPB #	54
19) Methylene Chloride	9.03	84	5506	0.08 PPB	82
20) tert-Butyl Alcohol	9.09	59	6015	5.40 PPB	79
23) Hexane	9.92	57	9267	0.14 PPB	82
39) Tetrahydrofuran	11.83	42	3243	0.69 PPB #	33
43) Isobutyl Alcohol	12.44	43	5549	13.37 PPB	88
54) 1,4-Dioxane	14.29	88	8811	68.88 PPB	92
62) Toluene	15.65	92	2182	0.02 PPB	80
65) n-Octane	15.67	85	5612	0.19 PPB	92
74) Chlorobenzene	17.51	112	2479	0.02 PPB #	45
77) m,p-Xylenes	17.72	106	3971	0.05 PPB #	67
78) o-Xylene	18.21	106	2327	0.03 PPB	88
79) Styrene	18.22	104	3453	0.03 PPB #	68
81) Isopropylbenzene	18.61	105	7437	0.04 PPB	91
86) Bromobenzene	19.03	156	2122	0.03 PPB #	61
87) n-Propylbenzene	19.06	91	12899	0.05 PPB	94
90) 2-Chlorotoluene	19.21	91	9311	0.06 PPB	96
91) 1,3,5-Trimethylbenzene	19.22	105	10199	0.06 PPB	95
92) 4-Chlorotoluene	19.31	91	8388	0.06 PPB	92
93) tert-Butylbenzene	19.61	134	2720	0.07 PPB #	73
94) 1,2,4-Trimethylbenzene	19.65	105	11625	0.07 PPB	87
95) sec-Butylbenzene	19.85	105	16281	0.08 PPB	93
96) p-Isopropyltoluene	19.98	119	14442	0.08 PPB	91
97) 1,3-Dichlorobenzene	20.05	146	10944	0.09 PPB	97
98) 1,4-Dichlorobenzene	20.14	146	10906	0.09 PPB	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F005.D
Acq On : 22 May 2007 12:02 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:25:45 2007

Vial: 5
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
99) n-Butylbenzene	20.44	91	17701	0.12 PPB	93
100) 1,2-Dichlorobenzene	20.59	146	10256	0.11 PPB	90
102) 1,3,5-Trichlorobenzene	21.73	180	64514	0.88 PPB	96
103) 1,2,4-Trichlorobenzene	22.56	180	17912	0.32 PPB	92
104) Hexachlorobutadiene	22.71	225	5865	0.28 PPB	93
105) Naphthalene	22.96	128	26914	0.44 PPB	96
106) 1,2,3-Trichlorobenzene	23.30	180	21762	0.55 PPB	97

(#) = qualifier out of range (m) = manual integration

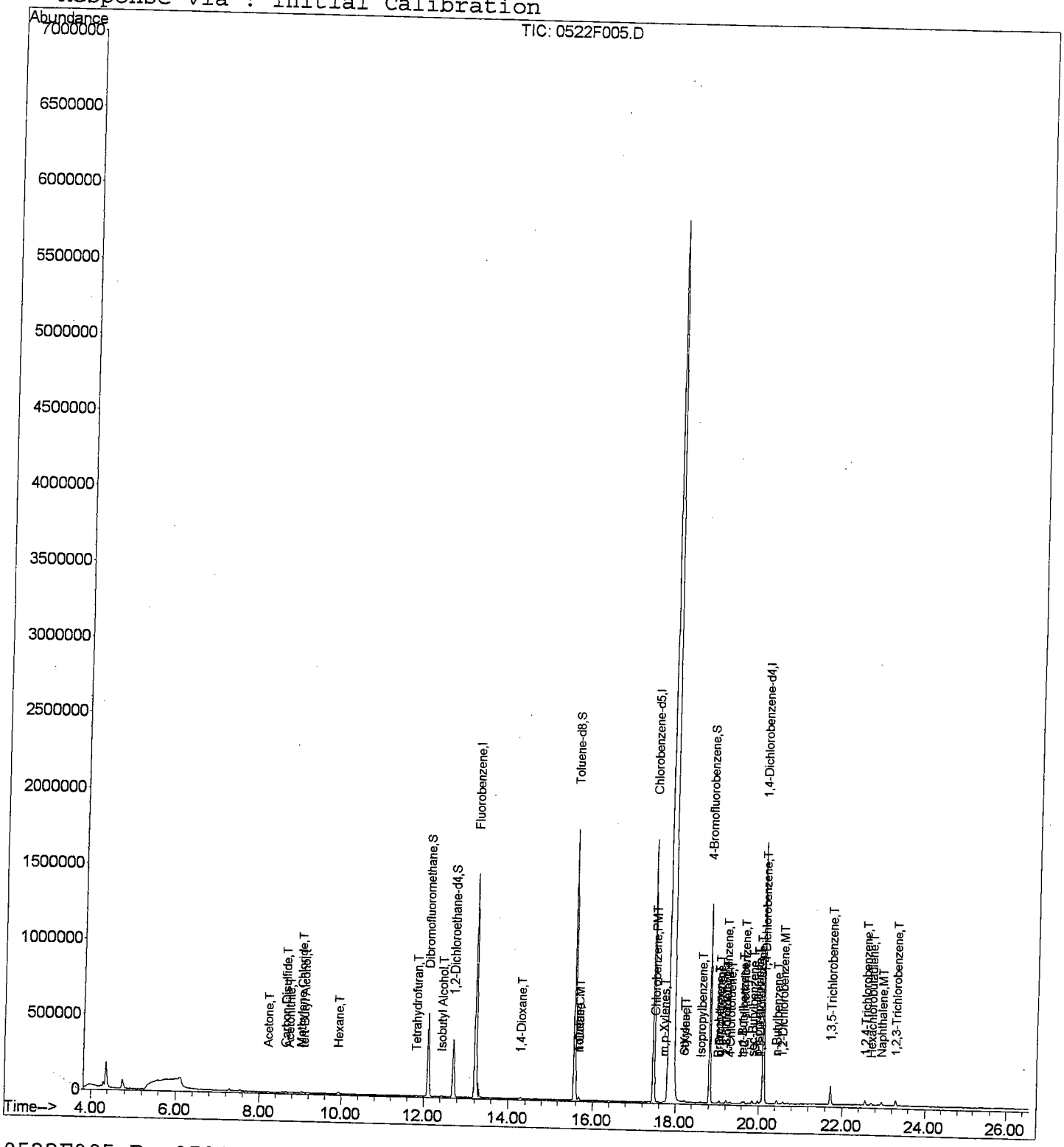
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F005.D
Acq On : 22 May 2007 12:02 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:27 2007

Vial: 5
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:13:34 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 5·22·07
F·A·h·5/23/7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	13.22	96	2015839	10.00 PPB	0.00
63) Chlorobenzene-d5	17.47	117	1426387	10.00 PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	714024	10.00 PPB	0.00
System Monitoring Compounds					
41) Dibromofluoromethane	12.11	113	532822	9.56 PPB	0.00
Spiked Amount 10.000			Recovery =	95.60%	
47) 1,2-Dichloroethane-d4	12.70	65	327620	8.73 PPB	0.00
Spiked Amount 10.000			Recovery =	87.30%	
61) Toluene-d8	15.55	98	1686821	10.89 PPB	0.00
Spiked Amount 10.000			Recovery =	108.90%	
82) 4-Bromofluorobenzene	18.82	95	564813	10.16 PPB	0.00
Spiked Amount 10.000			Recovery =	101.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.84	85	557415	9.79 PPB	99
3) Chloromethane	5.33	50	699331	10.12 PPB	98
4) Vinyl Chloride	5.60	62	669150	10.58 PPB	98
5) Bromomethane	6.40	94	580645	8.50 PPB	98
6) Chloroethane	6.61	64	480894	10.24 PPB	99
7) Dichlorofluoromethane	7.00	67	1035048	9.12 PPB	97
8) Trichlorofluoromethane	7.14	101	630106	8.64 PPB	99
9) Ether	7.65	59	289792	10.45 PPB	99
10) Trichlorotrifluoroethane	8.11	151	452905	9.28 PPB	98
11) 1,1-Dichloroethene	8.16	96	549033	11.08 PPB	97
12) Acetone	8.21	43	221176	44.64 PPB	98
13) Iodomethane	8.50	127	842567m	28.40 PPB	
14) Carbon Disulfide	8.64	76	4141383	20.09 PPB	99
15) Acrolein	7.95	56	405031	118.81 PPB	97
17) 3-Cloro-1-propene	8.80	41	2611363	35.42 PPB	98
18) Acetonitrile	8.74	41	667340	270.28 PPB	97
19) Methylene Chloride	9.03	84	699640	10.34 PPB	99
20) tert-Butyl Alcohol	9.08	59	115081	100.99 PPB	98
21) Methyl tert-Butyl Ether	9.44	73	744352	10.05 PPB	99
22) trans-1,2-Dichloroethene	9.51	96	619468	9.74 PPB	99
23) Hexane	9.92	57	2257847	33.84 PPB	99
24) 1,1-Dichloroethane	10.26	63	933178	9.34 PPB	99
25) Vinyl Acetate	10.25	86	266137	48.69 PPB #	93
26) Acrylonitrile	9.45	53	329783	41.30 PPB	99
27) Diisopropyl Ether	10.25	45	2691458	19.74 PPB	99
28) Chloroprene	10.42	88	1614302	29.40 PPB	97
29) tert-Butyl Ethyl Ether	10.91	59	1928765	19.72 PPB	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:13:34 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30) 2,2-Dichloropropane	11.33	77	660069	9.91 PPB		97
31) Ethyl Acetate	11.31	70	75883	31.53 PPB		90
32) cis-1,2-Dichloroethene	11.31	96	652775	10.08 PPB		97
33) 2-Butanone	11.28	72	101086	54.09 PPB	#	69
34) Propionitrile	11.43	54	74015	29.57 PPB		97
35) Methacrylonitrile	11.69	67	276714	32.35 PPB		98
36) Bromochloromethane	11.75	128	294412	9.47 PPB		95
37) Chloroform	11.82	83	855489	8.93 PPB		99
38) tert-butyl Formate	11.91	59	386359	21.39 PPB		94
39) Tetrahydrofuran	11.82	42	96999	20.04 PPB		90
40) 1,1,1-Trichloroethane	12.20	97	638034	9.34 PPB		99
43) Isobutyl Alcohol	12.42	43	138972	327.42 PPB		97
44) Carbon Tetrachloride	12.48	117	540028	9.02 PPB		99
45) 1,1-Dichloropropene	12.45	75	707148	9.74 PPB		99
46) tert-Amyl Methyl-ether	12.87	55	352901	17.10 PPB	#	89
48) Benzene	12.82	78	2094488	9.63 PPB		99
49) 1,2-Dichloroethane	12.83	62	416656	8.79 PPB		95
50) Trichloroethene	13.78	95	528326	9.72 PPB		99
52) Methyl methacrylate	14.17	69	442739	33.96 PPB	#	62
53) 1,2-Dichloropropane	14.15	63	483424	9.83 PPB	#	65
54) 1,4-Dioxane	14.29	88	39339	300.64 PPB		98
55) Dibromomethane	14.34	93	245896	9.39 PPB		98
56) Bromodichloromethane	14.52	83	563741	9.50 PPB		99
57) 2-Chloroethyl Vinyl Ether	14.87	63	56057	9.81 PPB		97
58) 2-Nitropropane	14.84	41	108002	26.79 PPB		95
59) cis-1,3-Dichloropropene	15.15	75	695410	10.49 PPB		99
60) 4-Methyl-2-pentanone (MIBK	15.31	100	134449	50.04 PPB	#	87
62) Toluene	15.65	92	1253913	9.79 PPB		99
64) Ethyl methacrylate	15.93	69	968193	36.87 PPB		98
65) n-Octane	15.66	85	646683	20.92 PPB		98
66) trans-1,3-Dichloropropene	15.90	75	457627	9.77 PPB		89
67) 1,1,2-Trichloroethane	16.18	83	255588	10.04 PPB		99
68) Tetrachloroethene	16.41	164	499971	9.72 PPB		98
69) 2-Hexanone	16.43	57	87206	52.09 PPB	#	90
70) 1,3-Dichloropropane	16.41	76	544123	9.98 PPB		97
71) Dibromochloromethane	16.74	129	395965	9.65 PPB		99
72) 1,2-Dibromoethane (EDB)	16.93	107	318033	9.86 PPB		98
73) 1-Chlorohexane	17.37	55	434898	10.52 PPB		98
74) Chlorobenzene	17.51	112	1419401	9.60 PPB		98
75) Ethylbenzene	17.59	106	715808	10.04 PPB		94
76) 1,1,1,2-Tetrachloroethane	17.58	131	453307	9.54 PPB		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:13:34 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
77) m,p-Xylenes	17.72	106	1823298	20.60 PPB	97
78) o-Xylene	18.20	106	879522	10.91 PPB	97
79) Styrene	18.22	104	1454216	10.97 PPB	97
80) Bromoform	18.50	173	211372	10.16 PPB	99
81) Isopropylbenzene	18.60	105	1998505	9.84 PPB	99
84) cis-1,4-Dichloro-2-Butene	18.68	88	195299	35.87 PPB	92
85) 1,1,2,2-Tetrachloroethane	18.93	83	308900	10.45 PPB	96
86) Bromobenzene	19.03	156	607185	9.92 PPB	93
87) n-Propylbenzene	19.06	91	2637001	10.86 PPB	99
88) trans-1,3-Dichloro-2-Buten	18.98	53	195624	38.20 PPB	94
89) 1,2,3-Trichloropropane	19.01	110	85540	10.08 PPB	93
90) 2-Chlorotoluene	19.21	91	1638248	10.59 PPB	98
91) 1,3,5-Trimethylbenzene	19.22	105	1680550	10.49 PPB	99
92) 4-Chlorotoluene	19.32	91	1483196	10.51 PPB	97
93) tert-Butylbenzene	19.61	134	443980	10.66 PPB	98
94) 1,2,4-Trimethylbenzene	19.66	105	1693799	10.64 PPB	99
95) sec-Butylbenzene	19.85	105	2387308	11.67 PPB	99
96) p-Isopropyltoluene	19.98	119	1891486	10.55 PPB	99
97) 1,3-Dichlorobenzene	20.04	146	1141693	9.82 PPB	99
98) 1,4-Dichlorobenzene	20.14	146	1130326	9.49 PPB	100
99) n-Butylbenzene	20.44	91	1666665	11.06 PPB	99
100) 1,2-Dichlorobenzene	20.58	146	948852	9.71 PPB	99
101) 1,2-Dibromo-3-chloropropan	21.50	157	47170	9.71 PPB	97
102) 1,3,5-Trichlorobenzene	21.72	180	2963157	40.14 PPB	99
103) 1,2,4-Trichlorobenzene	22.55	180	527272	9.49 PPB	97
104) Hexachlorobutadiene	22.70	225	216650	10.15 PPB	97
105) Naphthalene	22.96	128	661083	10.67 PPB	98
106) 1,2,3-Trichlorobenzene	23.29	180	389131	9.74 PPB	99

(#) = qualifier out of range (m) = manual integration

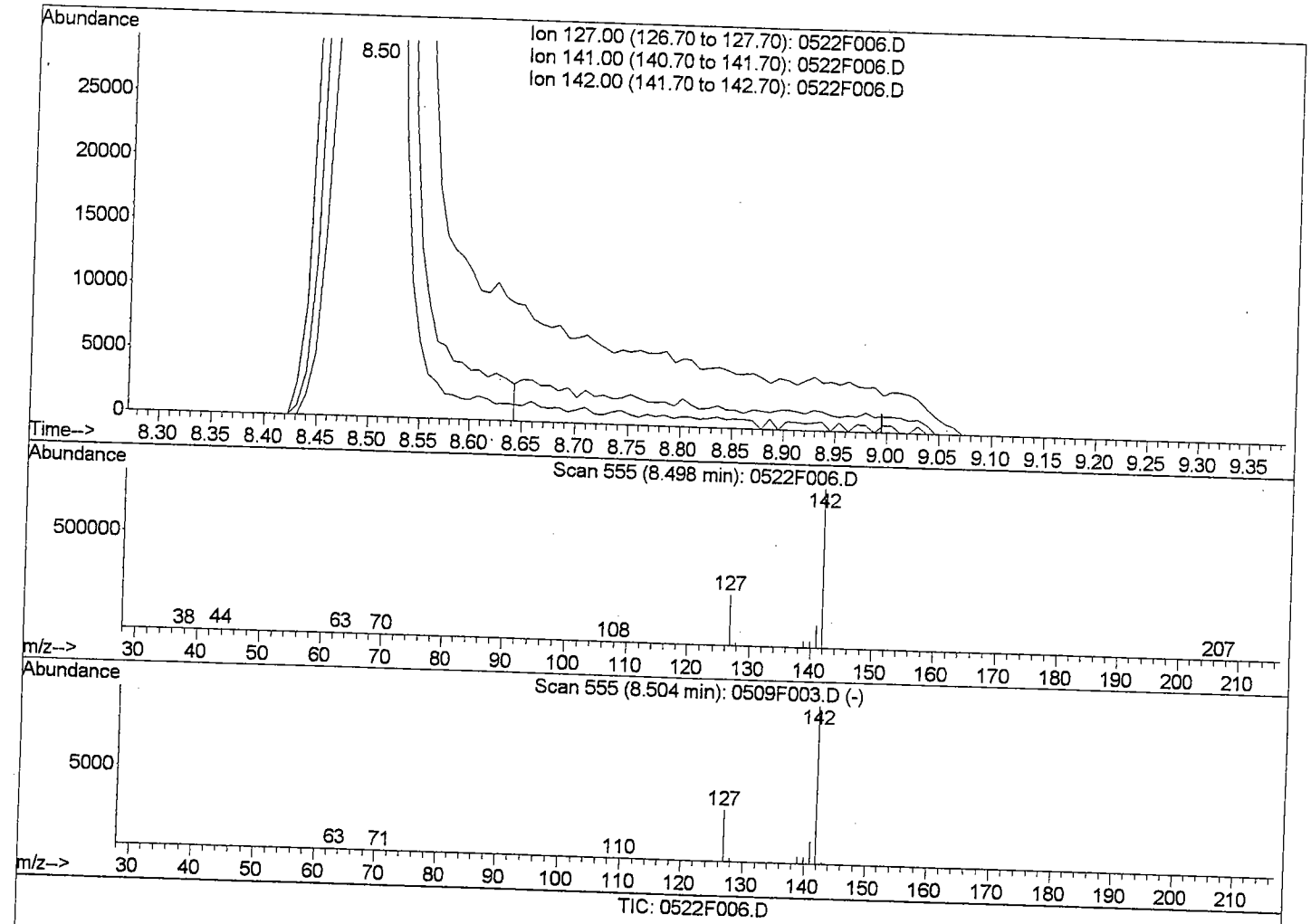
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:13 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 27.16PPB

response 801830

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	44.10
142.00	303.00	313.73
0.00	0.00	0.00

0522F006.D 052107MS04-8260.M Tue May 22 13:13:55 2007

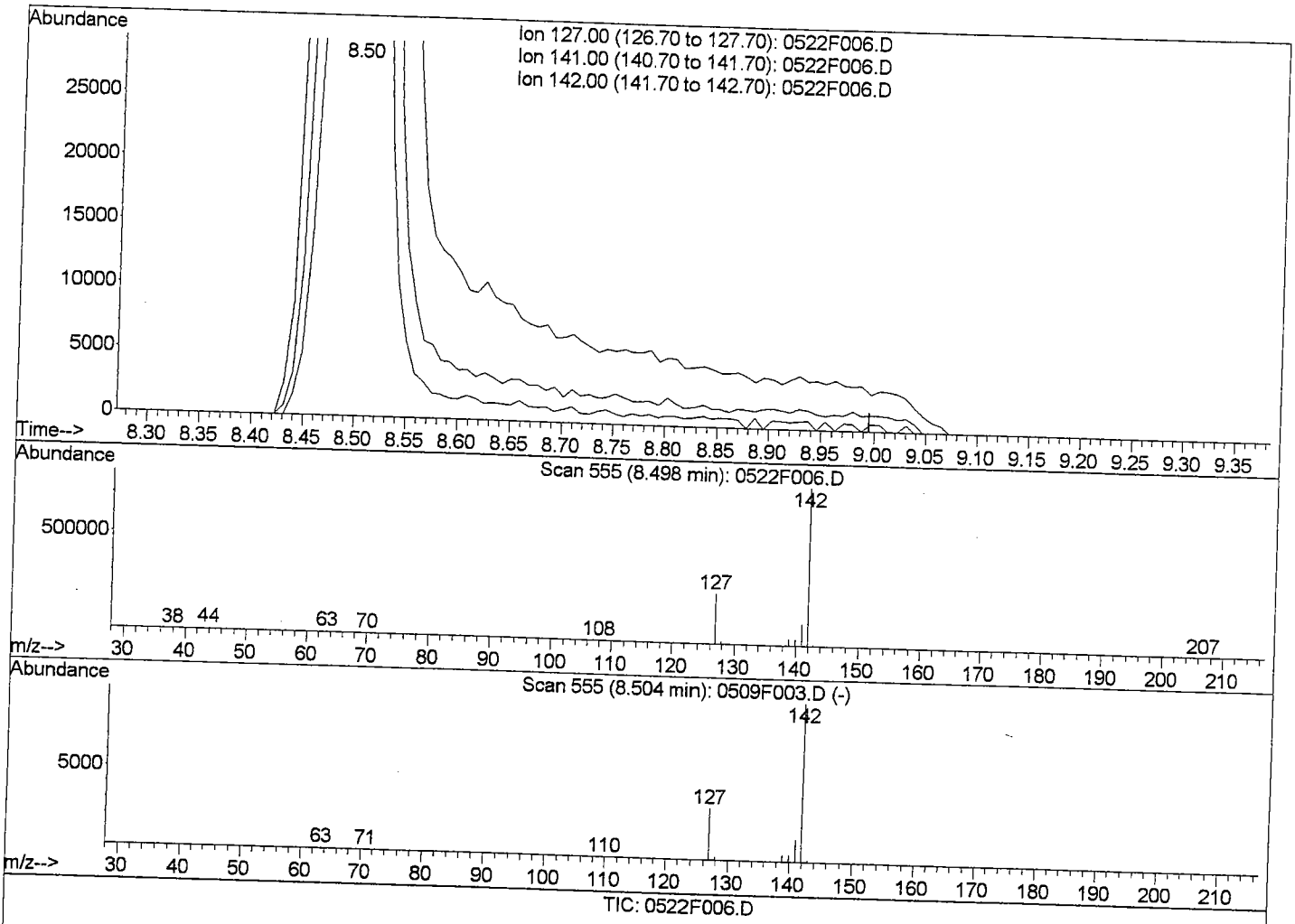
Quantitation Report (Qedit)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:13 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Multiple Level Calibration



(13) Iodomethane (T)

8.50min 28.40PPB m

response 842567

Ion	Exp%	Act%
127.00	100	100
141.00	43.10	44.10
142.00	303.00	313.73
0.00	0.00	0.00

Peak Tailing
HL 5.22.07
F-A.h. 5/23/7.

0522F006.D 052107MS04-8260.M Tue May 22 13:13:59 2007

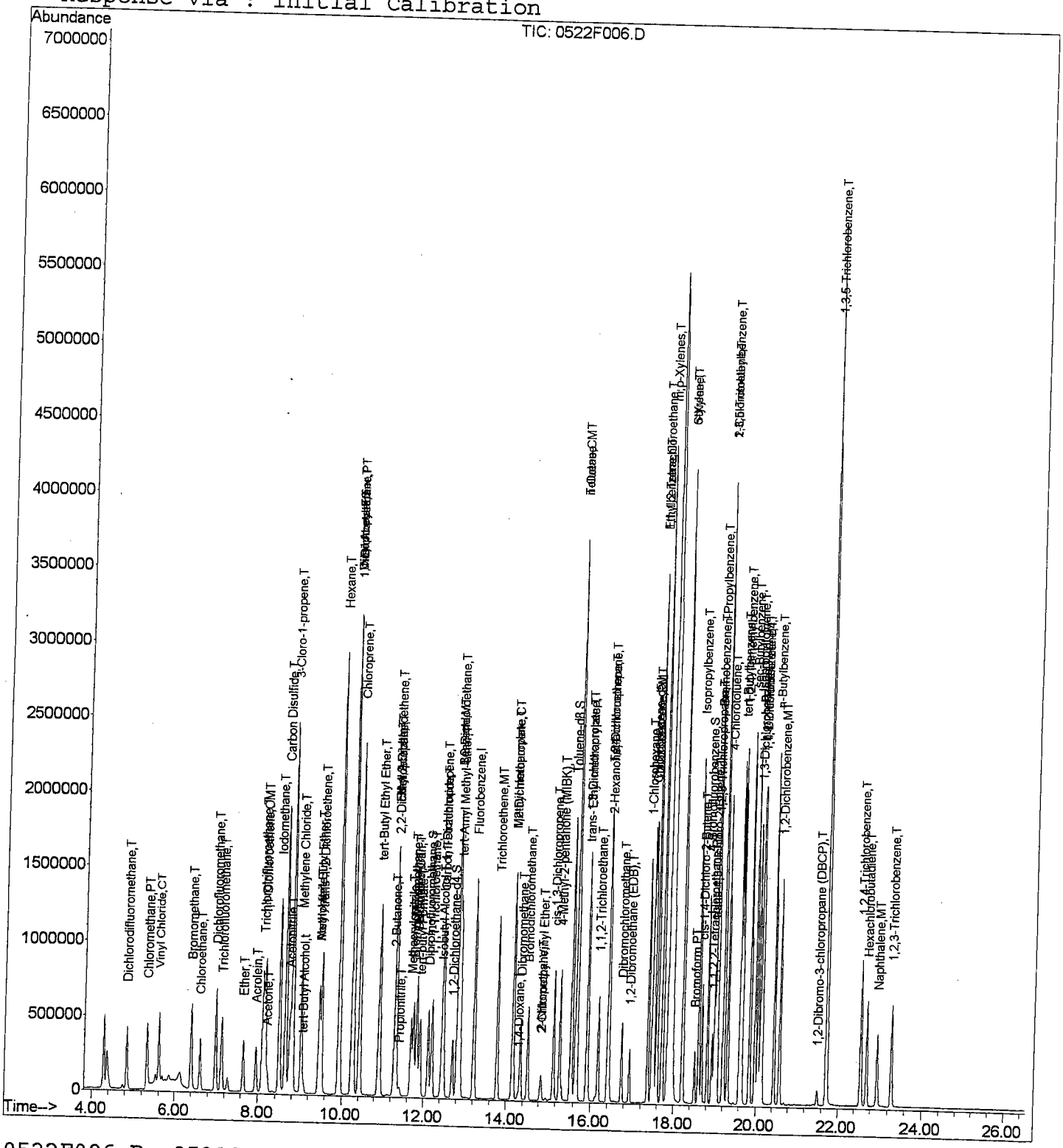
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\052207\0522F006.D
Acq On : 22 May 2007 12:34 pm
Sample : ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: May 22 13:14 2007

Vial: 6
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Tue May 22 11:41:14 2007
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 05/21/2007
Calibration ID: CAL6287
Analysis Lot: KWG0706875
Units: PPB

File ID: J:\MS04\DATA\062007\0620F010.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
Methyl tert-Butyl Ether	20	28	0.01	0.367	0.522	42	*	NA	± 30 %	AverageRF
Vinyl Acetate	20	29	0.01	0.0271	0.0394	45	*	NA	± 40 %	AverageRF
1,2-Dichloroethane-d4	10	11	0.01	0.186	0.211	13		NA	± 30 %	AverageRF
2-Chloroethyl Vinyl Ether	10	33	0.01	0.0283	0.0924	226	*	NA	± 40 %	AverageRF
† Chloromethane	10	10	0.10	0.343	0.350	2		NA	± 40 %	AverageRF
‡ Vinyl Chloride	10	10	0.01	0.314	0.323	3		NA	± 20 %	AverageRF
Bromomethane	10	11	0.01	0.339	0.365	8		NA	± 40 %	AverageRF
Chloroethane	10	10	0.01	0.233	0.242	4		NA	± 40 %	AverageRF
Acetone	200	270	0.01	0.0246	0.0334	36	*	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	10	10	0.01	0.246	0.252	3		NA	± 20 %	AverageRF
Carbon Disulfide	10	10	0.01	1.02	1.06	3		NA	± 30 %	AverageRF
Methylene Chloride	10	9.9	0.01	0.336	0.334	-1		NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.315	0.334	6		NA	± 30 %	AverageRF
† 1,1-Dichloroethane	10	10	0.10	0.496	0.519	5		NA	± 30 %	AverageRF
2-Butanone (MEK)	200	300	0.01	0.00927	0.0141	52	*	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	10	11	0.01	0.321	0.344	7		NA	± 30 %	AverageRF
‡ Chloroform	10	11	0.01	0.475	0.505	6		NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.339	0.384	13		NA	± 30 %	AverageRF
Carbon Tetrachloride	10	11	0.01	0.297	0.335	13		NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	10	12	0.01	0.235	0.294	25		NA	± 30 %	AverageRF
Benzene	10	11	0.01	1.08	1.15	6		NA	± 30 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.270	0.298	10		NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	10	11	0.01	0.244	0.267	10		NA	± 20 %	AverageRF
Bromodichloromethane	10	12	0.01	0.294	0.357	21		NA	± 30 %	AverageRF
2-Hexanone	200	310	0.01	0.0117	0.0181	54	*	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	10	13	0.01	0.329	0.416	27		NA	± 30 %	AverageRF
‡ Toluene	10	11	0.01	0.635	0.720	13		NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	10	13	0.01	0.328	0.423	29		NA	± 30 %	AverageRF
1,1,2-Trichloroethane	10	12	0.01	0.179	0.220	23		NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	200	320	0.01	0.0133	0.0215	61	*	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	10	11	0.01	0.361	0.382	6		NA	± 30 %	AverageRF
Dibromochloromethane	10	12	0.01	0.288	0.350	22		NA	± 30 %	AverageRF
† Chlorobenzene	10	10	0.30	1.04	1.07	3		NA	± 30 %	AverageRF
‡ Ethylbenzene	10	11	0.01	0.500	0.525	5		NA	± 20 %	AverageRF
m,p-Xylenes	20	21	0.01	0.620	0.664	7		NA	± 30 %	AverageRF
o-Xylene	10	11	0.01	0.565	0.635	12		NA	± 30 %	AverageRF
Styrene	10	11	0.01	0.929	1.05	13		NA	± 30 %	AverageRF
† Bromoform	10	14	0.10	0.146	0.203	39	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/20/2007

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 05/21/2007
Calibration ID: CAL6287
Analysis Lot: KWG0706875
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
† 1,1,2,2-Tetrachloroethane	10	12	0.30	0.414	0.493	19	NA	± 30 %	AverageRF
Toluene-d8	10	12	0.01	0.768	0.901	17	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	11	0.01	0.390	0.427	10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Exception Report

Data File: J:\MS04\DATA\062007\0620F010.D
Lab ID: KWG0706875-2
RunType: CCV
Matrix: WATER

Date Acquired: 06/20/2007 15:02
Date Quantitated: 06/20/2007 15:30
Batch ID: KWG0706875
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0006	0.01	NA	NT
	tert-Butyl Alcohol	0.0057	0.01	NA	⊥
	Isobutyl Alcohol	0.0021	0.01	NA	⊥
	2-Butanone (MEK)	0.0093	0.01	NA	MRL CHECK

Room Temp @ 71° F.

Primary Review: HL 6·20·07

Secondary Review: 6/21/7

Printed: 06/20/2007 15:34:18
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	06/20/2007

Analysis Lot:	KWG0706875	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS04\METHODS\052107MS04-8	**Calibration ID:**	CAL6287
Title:			
Tune Ref:	J:\MS04\DATA\062007\0620F009.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS04\DATA\062007\0620F010.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:02	**Quant Date:**	06/20/2007 15:30	**Vial:**	10
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706875-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	13.22	0.00	96	1226371	10.00	OK
2	Chlorobenzene-d5	17.48	0.00	117	961217	10.00	OK
3	1,4-Dichlorobenzene-d4	20.12	0.00	152	531388	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	12.11			113	369783	10.90		82-125	NA
1	1,2-Dichloroethane-d4	12.71			65	258183	11.31		49-142	NA
1	Toluene-d8	15.55			98	1105241	11.73		87-120	NA
2	4-Bromofluorobenzene	18.82			95	410388	10.95		73-118	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	4.85			85	397084	11.47			
1	Chloromethane	5.34			50	428643	10.20			
1	Vinyl Chloride	5.61			62	395748	10.28			
1	Bromomethane	6.40			94	447212	10.77			
1	Chloroethane	6.61			64	296355	10.37			
1	Dichlorofluoromethane (CFC 21	7.00			67	711430	10.31			
1	Trichlorofluoromethane	7.14			101	492818	11.10			
1	Ethyl Ether	7.66			59	213543	12.66			
1	Trichlorotrifluoroethane	8.11			151	305517	10.29			
1	1,1-Dichloroethene	8.17			96	309215	10.26			
1	Acetone	8.22			43	819817	271.95			
1	Iodomethane	8.50			127	771034m	41.37			
1	Carbon Disulfide	8.65			76	1294840	10.32			
1	Acrolein	7.96			56	361540	174.32			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F010.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:02	**Quant Date:**	06/20/2007 15:30	**Vial:**	10
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706875-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene	8.81			41	489383m	10.91			
1	Acetonitrile	8.75			41	734758	489.15			
1	Methylene Chloride	9.03			84	409241	9.94			
1	tert-Butyl Alcohol	9.10			59	47211	68.10			
1	Methyl tert-Butyl Ether	9.46			73	1281000	28.42			
1	trans-1,2-Dichloroethene	9.52			96	409891	10.60			
1	n-Hexane	9.93			57	426531	10.51			
1	1,1-Dichloroethane	10.27			63	636927	10.48			
1	Vinyl Acetate	10.25			86	96721	29.09			
1	Acrylonitrile	9.45			53	258664	53.25			
1	Diisopropyl Ether	10.25			45	1029878	12.41			
1	Chloroprene	10.43			88	1422744	42.59			
1	tert-Butyl Ethyl Ether	10.91			59	818564	13.75			
1	2,2-Dichloropropane	11.33			77	491479	12.13			
1	Ethyl Acetate	11.32			70	82071	56.05			
1	cis-1,2-Dichloroethene	11.32			96	421894	10.70			
1	2-Butanone (MEK)	11.28			72	346088	304.42			
1	Propionitrile	11.42			54	80044	52.56			
1	Methacrylonitrile	11.69			67	294554	56.60			
1	Bromochloromethane	11.75			128	230162	12.17			
1	Chloroform	11.83			83	619223	10.63			
1	tert-Butyl Formate	11.91			59	185709	16.90			
1	Tetrahydrofuran	11.82			42	44531	15.12			
1	1,1,1-Trichloroethane (TCA)	12.21			97	470473	11.33			
1	Isobutyl Alcohol	12.43			43	164977	638.91			
1	Carbon Tetrachloride	12.48			117	410750	11.28			
1	1,1-Dichloropropene	12.45			75	488418	11.06			
1	tert-Amyl Methyl Ether	12.88			55	198357	15.80			
1	Benzene	12.83			78	1407984	10.64			
1	1,2-Dichloroethane (EDC)	12.83			62	360279	12.49			
1	Trichloroethene (TCE)	13.78			95	365157	11.04			
1	Methyl Methacrylate	14.17			69	122075	15.39			
1	1,2-Dichloropropane	14.15			63	327508	10.95			
1	1,4-Dioxane	14.29			88	35314	443.61			
1	Dibromomethane	14.34			93	203985	12.81			
1	Bromodichloromethane	14.52			83	438277	12.14			
1	2-Chloroethyl Vinyl Ether	14.87			63	113369	32.61			
1	2-Nitropropane	14.85			41	191473	78.07			
1	cis-1,3-Dichloropropene	15.16			75	510277	12.66			
1	4-Methyl-2-pentanone (MIBK)	15.32			100	527868	322.92			
1	Toluene	15.65			92	882797	11.33			
2	Ethyl Methacrylate	15.92			69	234444	13.25			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS04\DATA\062007\0620F010.D			**Instrument:**	MS04
Acqu Date:	06/20/2007 15:02	**Quant Date:**	06/20/2007 15:30	**Vial:**	10
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706875-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
2	n-Octane	15.66			85	205342	9.86			
2	trans-1,3-Dichloropropene	15.91			75	406396	12.87			
2	1,1,2-Trichloroethane	16.18			83	211017	12.30			
2	Tetrachloroethene (PCE)	16.40			164	366918	10.59			
2	2-Hexanone	16.43			57	347745	308.21			
2	1,3-Dichloropropane	16.42			76	441809	12.02			
2	Dibromochloromethane	16.74			129	336709	12.17			
2	1,2-Dibromoethane (EDB)	16.94			107	276825	12.74			
2	1-Chlorohexane	17.37			55	274897	9.87			
2	Chlorobenzene	17.51			112	1025987	10.30			
2	Ethylbenzene	17.59			106	504546	10.50			
2	1,1,1,2-Tetrachloroethane	17.59			131	363594	11.36			
2	m,p-Xylenes	17.72			106	1277109	21.41			
2	o-Xylene	18.21			106	610278	11.23			
2	Styrene	18.22			104	1008032	11.28			
2	Bromoform	18.51			173	194675	13.89			
2	Isopropylbenzene	18.61			105	1514292	11.07			
3	cis-1,4-Dichloro-2-butene	18.68			88	233862	57.71			
3	1,1,2,2-Tetrachloroethane	18.94			83	262038	11.91			
3	Bromobenzene	19.04			156	476017	10.45			
3	n-Propylbenzene	19.06			91	1830429	10.13			
3	trans-1,4-Dichloro-2-butene	18.99			53	49112	12.89			
3	1,2,3-Trichloropropane	19.02			110	78253	12.40			
3	2-Chlorotoluene	19.21			91	1171403	10.18			
3	1,3,5-Trimethylbenzene	19.22			105	1226962	10.29			
3	4-Chlorotoluene	19.32			91	1072460	10.21			
3	tert-Butylbenzene	19.61			134	311119	10.03			
3	1,2,4-Trimethylbenzene	19.65			105	1239390	10.46			
3	sec-Butylbenzene	19.85			105	1543433	10.14			
3	4-Isopropyltoluene	19.98			119	1389295	10.41			
3	1,3-Dichlorobenzene	20.05			146	882592	10.20			
3	1,4-Dichlorobenzene	20.14			146	882703	9.96			
3	n-Butylbenzene	20.45			91	1177370	10.50			
3	1,2-Dichlorobenzene	20.59			146	768555	10.57			
3	1,2-Dibromo-3-chloropropane	21.51			157	48343	13.38			
3	1,3,5-Trichlorobenzene	21.73			180	539957	9.83			
3	1,2,4-Trichlorobenzene	22.56			180	437179	10.57			
3	Hexachlorobutadiene	22.71			225	151841	9.56			
3	Naphthalene	22.96			128	586213	12.72			
3	1,2,3-Trichlorobenzene	23.30			180	336550	11.32			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

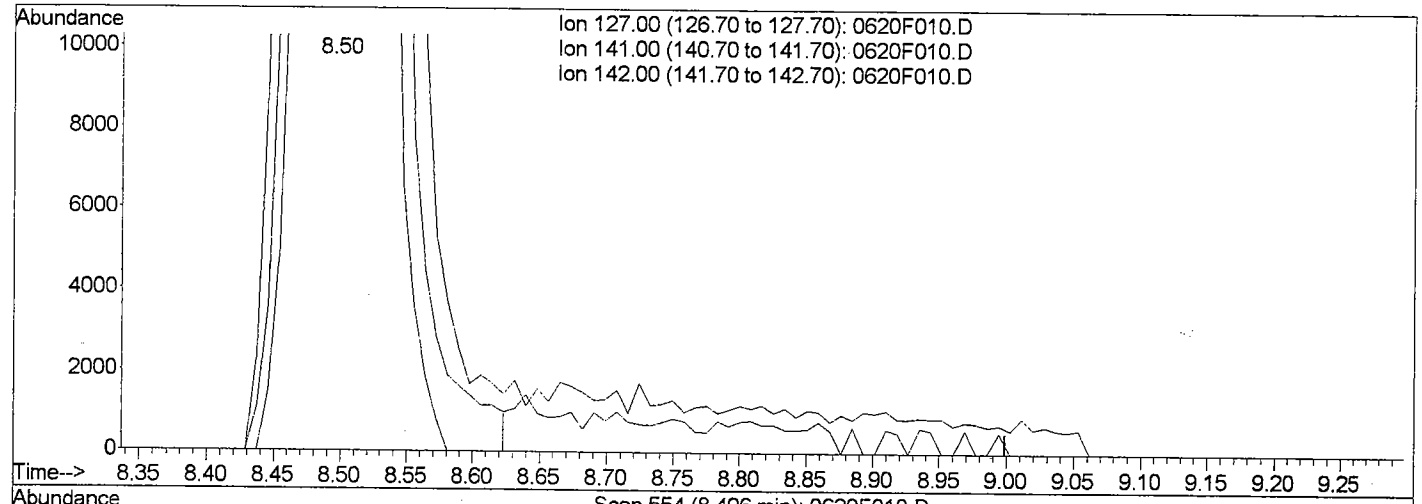
Quantitation Report (Qedit)

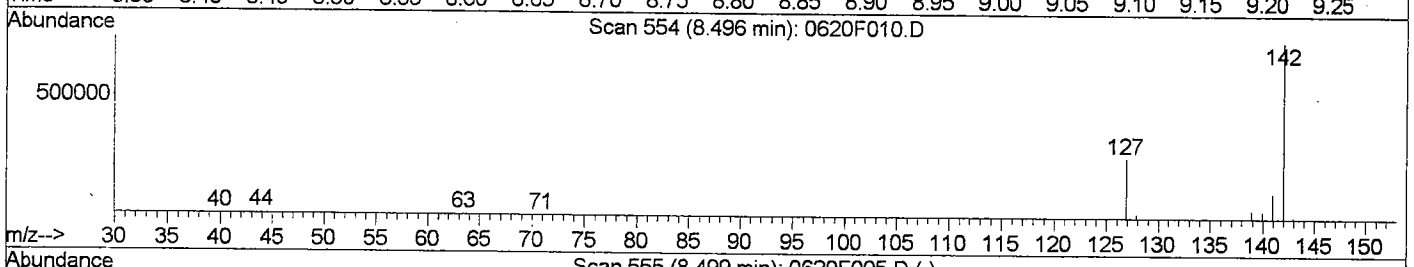
Data File : J:\MS04\DATA\062007\0620F010.D
Acq On : 20 Jun 2007 3:02 pm
Sample : CCV 46VOA29F/43A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 15:29 2007

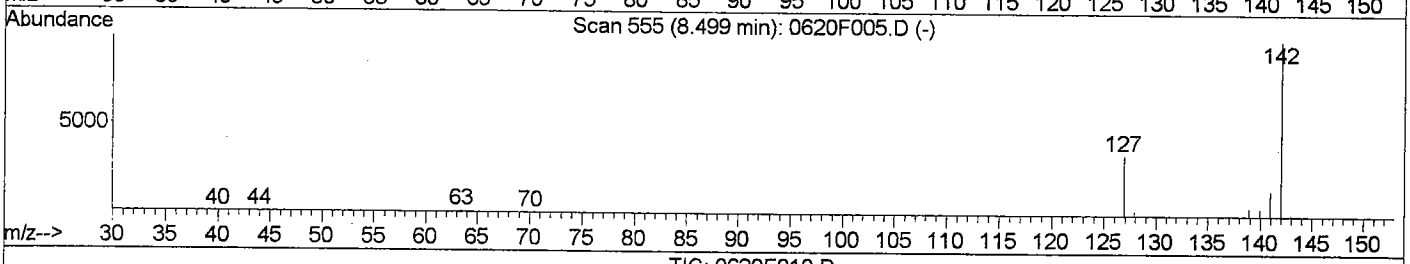
Vial: 10
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 12:25:56 2007
Response via : Multiple Level Calibration







TIC: 0620F010.D

(13) Iodomethane (T)

8.50min 40.70PPB

response 757712

Ion	Exp%	Act%
127.00	100	100
141.00	41.70	41.80
142.00	291.10	293.12
0.00	0.00	0.00

0620F010.D 052107MS04-8260.M Wed Jun 20 15:29:45 2007

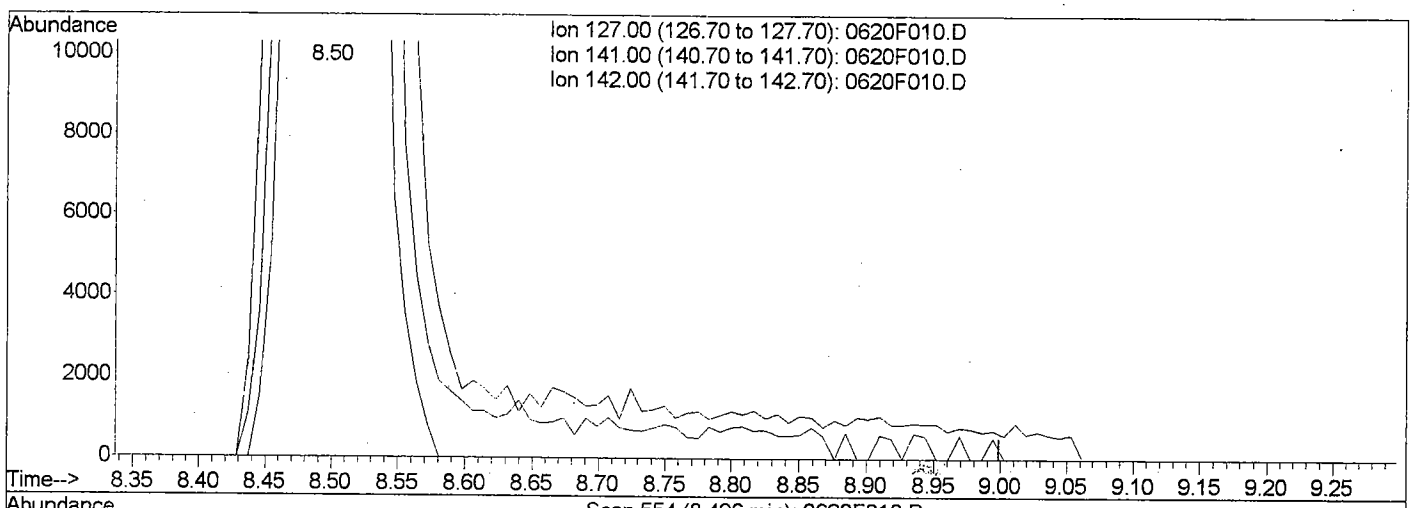
Quantitation Report (Qedit)

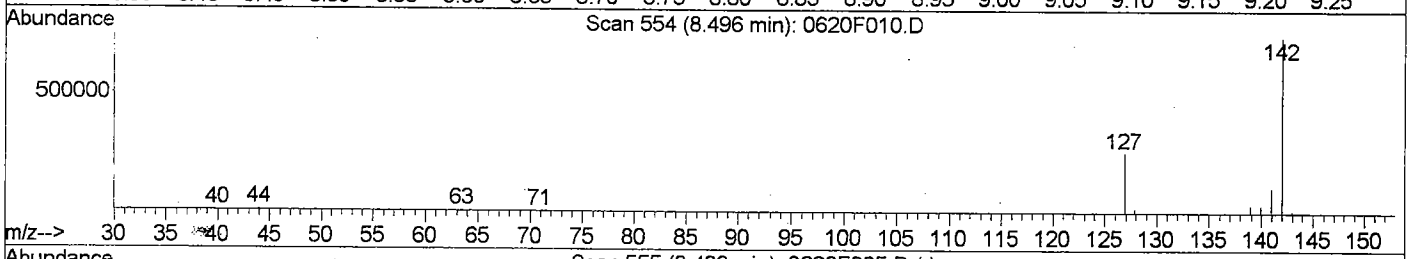
Data File : J:\MS04\DATA\062007\0620F010.D
Acq On : 20 Jun 2007 3:02 pm
Sample : CCV 46VOA29F/43A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 15:29 2007

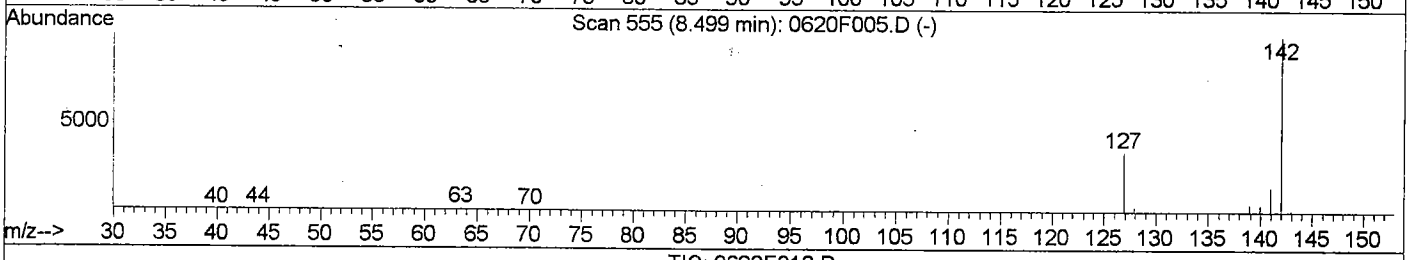
Vial: 10
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 12:25:56 2007
Response via : Multiple Level Calibration







TIC: 0620F010.D

(13) Iodomethane (T)

8.50min 41.37PPB m

response 771034

Ion	Exp%	Act%
127.00	100	100
141.00	41.70	41.80
142.00	291.10	293.12
0.00	0.00	0.00

Peak Tailing
HL 6-20-07

0620F010.D 052107MS04-8260.M Wed Jun 20 15:29:49 2007

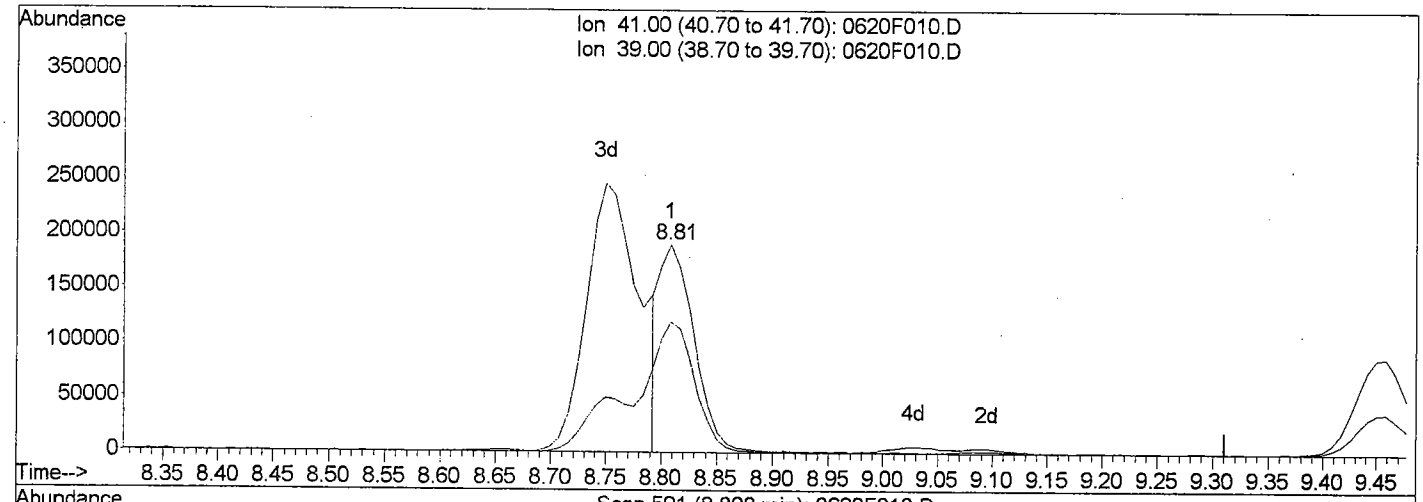
Quantitation Report (Qedit)

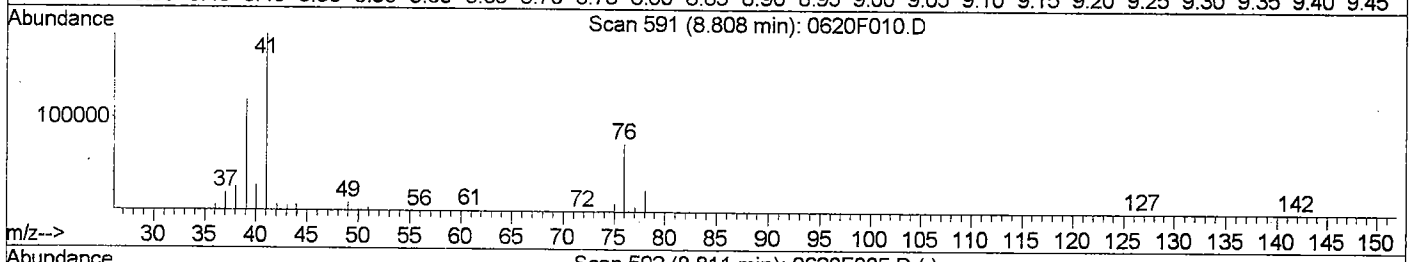
Data File : J:\MS04\DATA\062007\0620F010.D
Acq On : 20 Jun 2007 3:02 pm
Sample : CCV 46VOA29F/43A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 15:29 2007

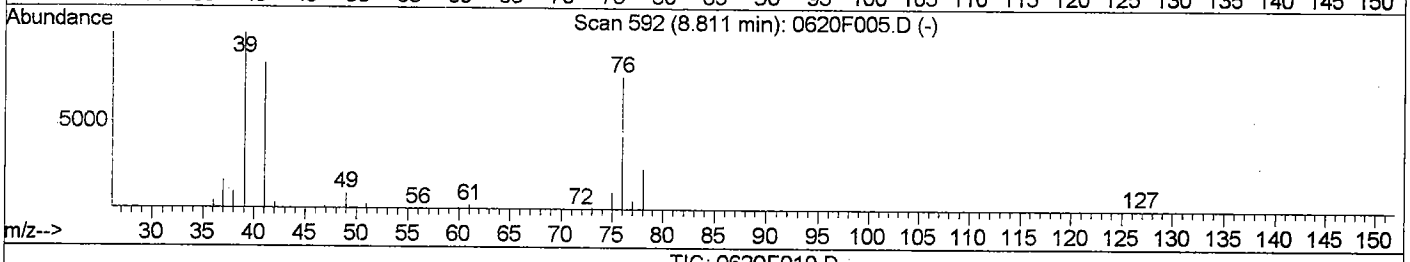
Vial: 10
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 12:25:56 2007
Response via : Multiple Level Calibration







TIC: 0620F010.D

(17) 3-Cloro-1-propene (T)

8.81min 9.29PPB

response 416800

Ion	Exp%	Act%
41.00	100	100
39.00	63.30	63.01
0.00	0.00	0.00
0.00	0.00	0.00

0620F010.D 052107MS04-8260.M Wed Jun 20 15:29:58 2007

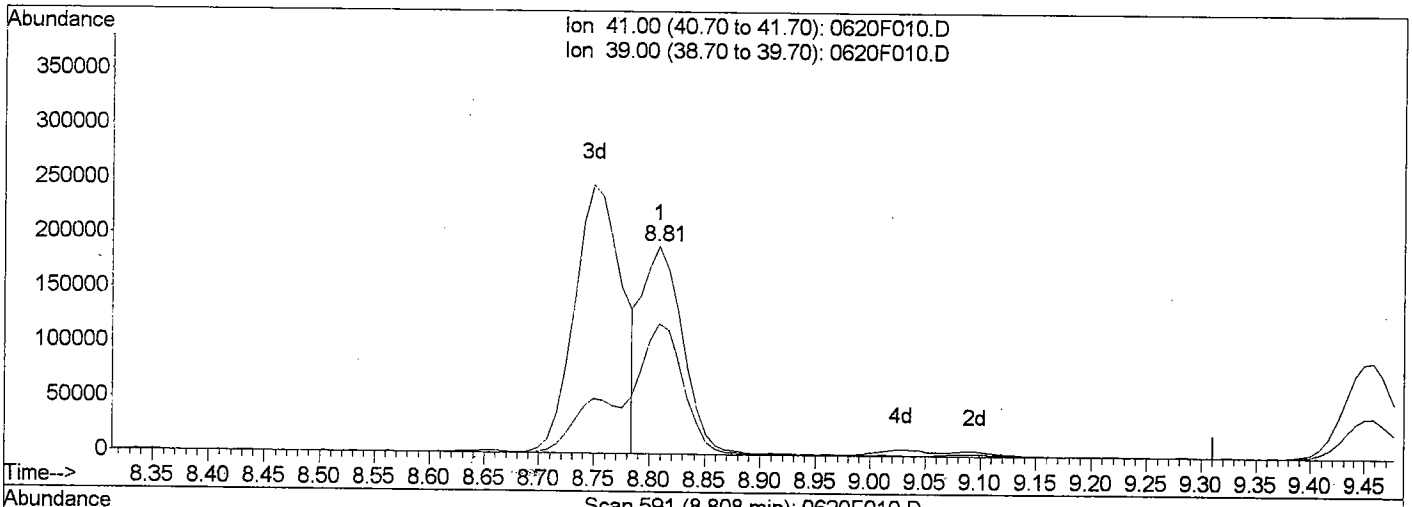
Quantitation Report (Qedit)

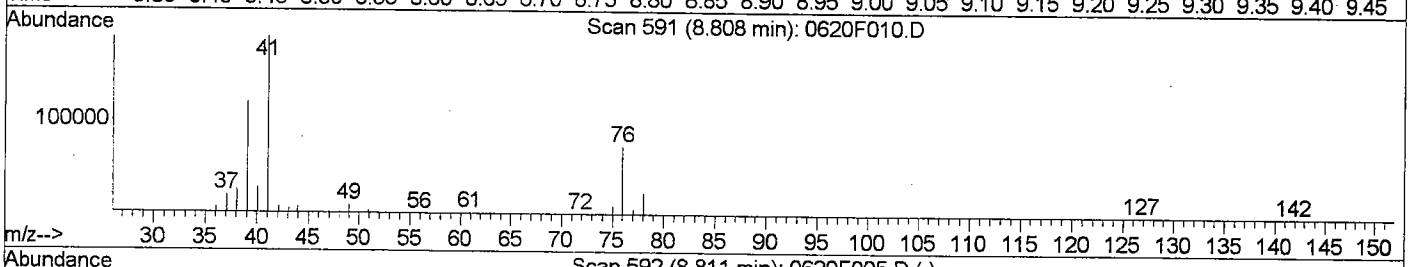
Data File : J:\MS04\DATA\062007\0620F010.D
Acq On : 20 Jun 2007 3:02 pm
Sample : CCV 46VOA29F/43A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 15:30 2007

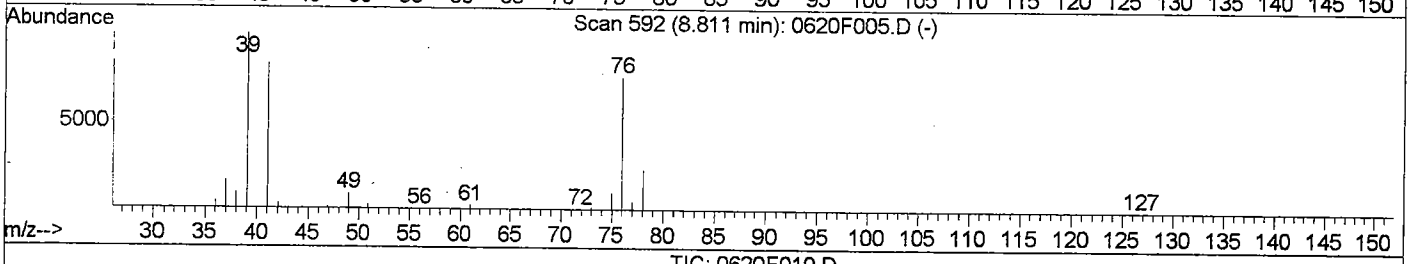
Vial: 10
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 12:25:56 2007
Response via : Multiple Level Calibration







TIC: 0620F010.D

(17) 3-Cloro-1-propene (T)

8.81min 10.91PPB m

response 489383

Ion	Exp%	Act%
41.00	100	100
39.00	63.30	62.73
0.00	0.00	0.00
0.00	0.00	0.00

Baseline Adjustment
HL 6·20·07

6/21/7

0620F010.D 052107MS04-8260.M Wed Jun 20 15:30:06 2007

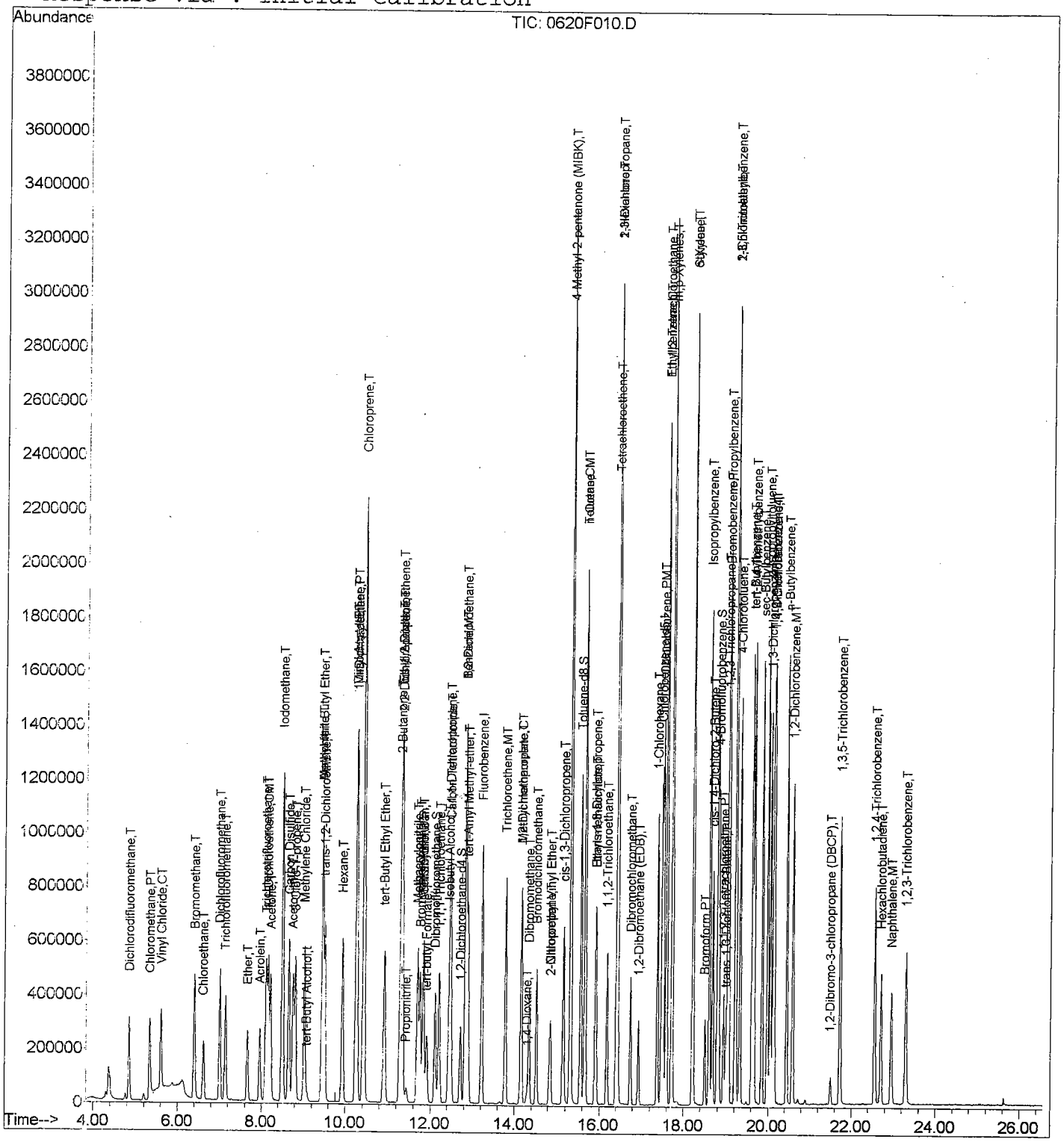
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F010.D
Acq On : 20 Jun 2007 3:02 pm
Sample : CCV 46VOA29F/43A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 20 15:30 2007

Vial: 10
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

VOA DAILY ANALYSIS LOG
GCMS 5971 MS-04

DATE: 6·20·07 CAL: 6287
OPERATOR H.Conrad TUNE FILE: BFB4
46VOA45A/41D/39C/39D SECOND REVIEW 7/6/2007 NEW TUNE? NO
ICV/LCS STD# 44C/38D MISC: STD# BFB: 46VOA26C, MRL: 46VOA29F N/A TORR N/A °C
IS/SS STD# 46VOA39B CCV STD# 46VOA29F/43A MS/D STD# See LCS

RUN TIME	SAMPLE NAME	DATA FILE	METHOD	PH	DL	R	COMMENTS
1	IB	0620F001	8260				replaced H_2O probe.
2	IB	02					
3	Primer	03					
4	50ng BFB	04			4.4uL/44mL	✓	
5	CCV	05			5uL+10uL/50mL	✓	NR
6	IB	06					
7	IB	07					
8	Primer	08					
9	50ng BFB	09			4.4 uL/44mL	✓	
10	CCV	10			5uL+10uL/50mL	✓	
11	LCS	11			10uL+50uL+5uL+5uL+5uL+7.5uL/50mL	✓	
12	K4852-02 MS	12		<2		✓	
13	02 DMS	13				✓	
14	IB	14					
15	MRL CHECK	15			.25uL/50mL	✓	
16	MB	16				✓	
17	K4852-05	17		<2			TB: 35117
18	03	18					
19	04	19					
20	02	20					
21							
22							
23							
24							
25							HL 6·21·07

LIMS WORKGROUP # KWG0706875A /KWG0706882P
HL 6·20·07

1

VOADAY.LOG/WPD

Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F015.D
Acq On : 20 Jun 2007 5:49 pm
Sample : MRL CHECK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 07:57:18 2007

Vial: 15
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8260

Quant Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration
DataAcq Meth : 8260

HC 6·21·07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	13.22	96	1621313	10.00	PPB	0.00
63) Chlorobenzene-d5	17.47	117	1210718	10.00	PPB	0.00
83) 1,4-Dichlorobenzene-d4	20.11	152	620326	10.00	PPB	0.00
System Monitoring Compounds						
41) Dibromofluoromethane	12.10	113	440916	9.83	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.30%	
47) 1,2-Dichloroethane-d4	12.70	65	289781	9.60	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.00%	
61) Toluene-d8	15.56	98	1436552	11.53	PPB	0.00
Spiked Amount 10.000			Recovery	=	115.30%	
82) 4-Bromofluorobenzene	18.82	95	501983	10.64	PPB	0.00
Spiked Amount 10.000			Recovery	=	106.40%	

Target Compounds							Qvalue
12) Acetone	8.22	43	61963	15.55	PPB		94
14) Carbon Disulfide	8.64	76	2491	0.02	PPB		79
19) Methylene Chloride	9.03	84	5049	0.09	PPB		87
33) 2-Butanone	11.29	72	21603	14.37	PPB	# TV=10	71
39) Tetrahydrofuran	11.81	42	7906	2.03	PPB		90
60) 4-Methyl-2-pentanone (MIBK	15.31	100	29771	13.78	PPB	#	83
69) 2-Hexanone	16.43	57	20779	14.62	PPB		94
95) sec-Butylbenzene	19.84	105	3331	0.02	PPB		65
96) p-Isopropyltoluene	19.99	119	3877	0.02	PPB		50
99) n-Butylbenzene	20.44	91	5550	0.04	PPB		82
102) 1,3,5-Trichlorobenzene	21.73	180	7765	0.12	PPB		85
103) 1,2,4-Trichlorobenzene	22.56	180	3035	0.06	PPB		80
105) Naphthalene	22.95	128	10191	0.19	PPB		84
106) 1,2,3-Trichlorobenzene	23.30	180	3527	0.10	PPB		94

6/21/7

(#) = qualifier out of range (m) = manual integration

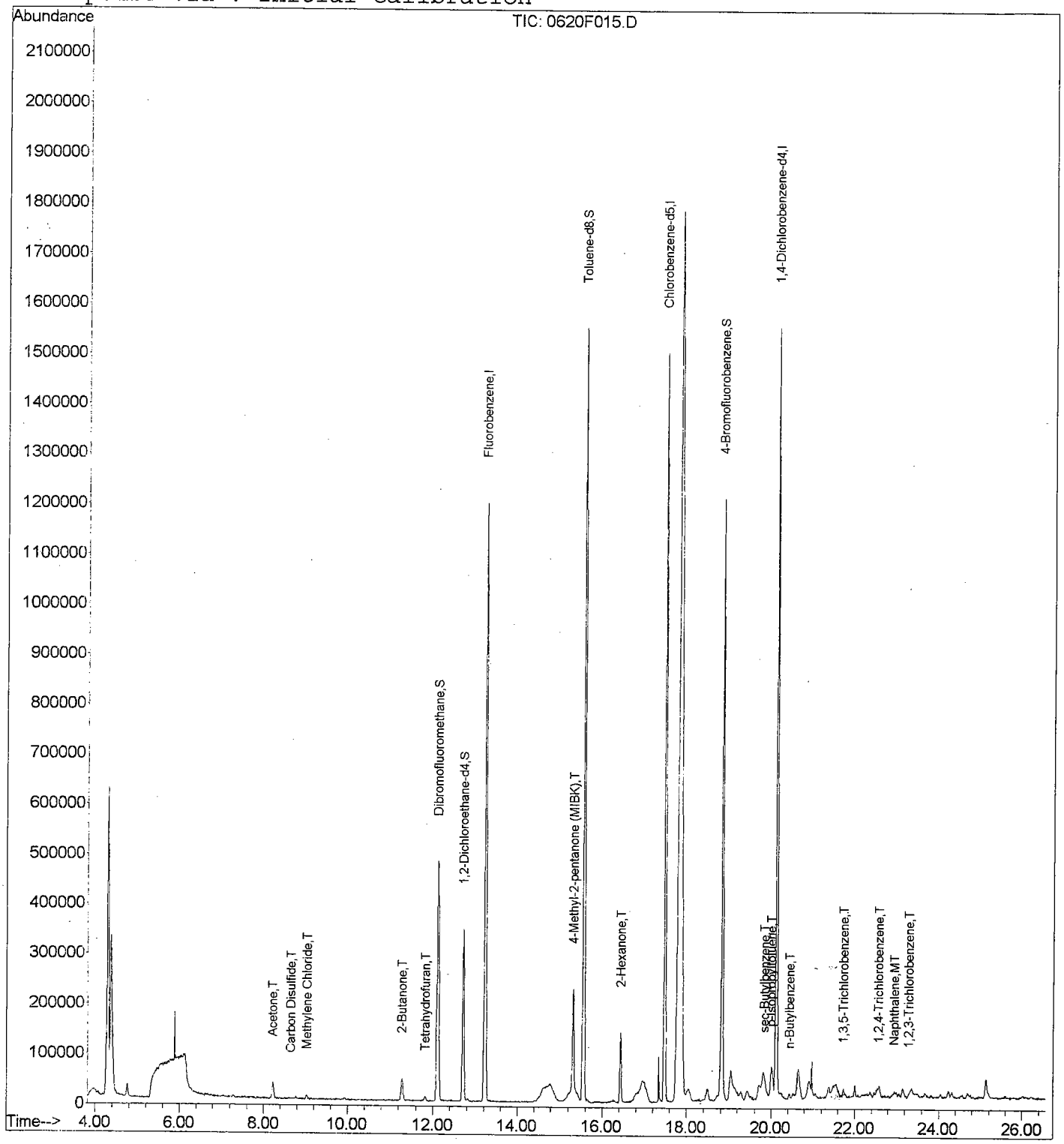
Quantitation Report (QT Reviewed)

Data File : J:\MS04\DATA\062007\0620F015.D
Acq On : 20 Jun 2007 5:49 pm
Sample : MRL CHECK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 7:58 2007

Vial: 15
Operator: HC
Inst : MS04
Multiplr: 1.00

Quant Results File: 052107MS04-8

Method : J:\MS04\METHODS\052107MS04-8260.M (RTE Integrator)
Title : VOA MS04 EPA Method 8260B/624
Last Update : Wed Jun 20 15:31:15 2007
Response via : Initial Calibration



Date: 6/12/17

By: Klessone

IS/SS Std. ID: 46WA-44B

CCV Std ID: 46WA-35B/43A

LCS/ICV Std ID: 46WA 45A/ 45C/ 39C/ 39D/ 40C/ 38D

BFB Std. ID: 46WA-26C

Columbia Analytical Services, Inc.

Injection Log

MS18 - Agilent 5973

Tune File: BFBu

New Tune: No

87474

ICAL Date: 6/13/17 Cal 6351

Second RV: 6/27/17

LIMS ID: KW0070692 4/6925

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	IB	0621F021	8260.M				
2	BFB	2					pH
3	CCV	3					
4	LCS	4					
5	BFB	5		5µl→50ml			
6	CCV	6		5/10µl→250ml			
7	LCS	7		10/50/5/6/5/25µl→50ml			
8	K5103-6MS Dil	8		50x 1ml→50ml 10/50/5/6/5/25µl→50ml			
9	↓ 60mg Dil	9		↓	✓		
10	IB	10					
11	MB	11		0.25/0.5µl→5ml			
12	MB	12					
13	K5323-1	13			L2		TB35001 01
14	↓ 2	14					03
15	↓ 3	15					03
16	K5103-21	16					
17	K5182-1	17					TB34922
18	↓ 2	18					
19	K5103-8	19					
20	↓ 9	20					
21	K5108-2 Dil	21		10x 5ml→50ml			
22	↓ 4 Dil	22		↓			
23	K5103 6 Dil	23		50x 1ml→50ml			
24	6 Dup	24		5x 10ml→50ml			
25	12 Dil	25		10x 5ml→50ml			
26	12	26					
27	11 Dil	27		200x 250µl→50ml			

Date: 6/2/7

By:

IS/SS Std. ID:

Columbia Analytical Services, Inc.
Injection Log
MS18 - Agilent 5973

Tune File:

New Tune:

CCV Std ID:

LCS/ICV Std ID:

BFB Std. ID:

ICAL Date:

Second RV:

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	KS103- 11 Base	062IFO 28	8260-M	20x 2.5ml → 50ml	C2		
2	7 D.I	29		20 x 2.5ml → 50ml			
3	7 Base	30		20x 2.5ml → 50ml			
4	10 D.I	31		100x 500ml → 50ml			
5	10 Base	32		10x 5ml → 50ml			
6	K4052 - 2AE	33					
7	KS103- 15	34					
8	17	35					
9	18 D.I	36		10x 5ml → 50ml			
10	18	37					
11	19 D.I	38		10x 5ml → 50ml			
12	19	39					
13	KS063- 5 Base	40		20x 2.5ml → 50ml			
14	1B	41					
15	1BA- MRL Equip	42					
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

Exception Report

Data File: J:\MS18\DATA\062107\0621F005.D
Lab ID: KWG0706924-1
RunType: BFB
Matrix: WATER

Date Acquired: 06/21/2007 10:52
Date Quantitated:
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: KA Chilr

Secondary Review: 6/22/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706924	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\061307.M	**Calibration ID:**	CAL6351
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS18\DATA\062107\0621F005.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 10:52	**Quant Date:**		**Vial:**	2
Run Type:	BFB			**Dilution:**	1.0
Lab ID:	KWG0706924-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.7	7488	Pass
75	95	30	60	50.8	20320	Pass
95	95	100	100	100.0	40000	Pass
96	95	5	9	6.8	2705	Pass
173	174	0	2	0.8	286	Pass
174	95	50	120	87.4	34976	Pass
175	174	5	9	7.6	2670	Pass
176	174	95	101	97.5	34104	Pass
177	176	5	9	7.1	2420	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

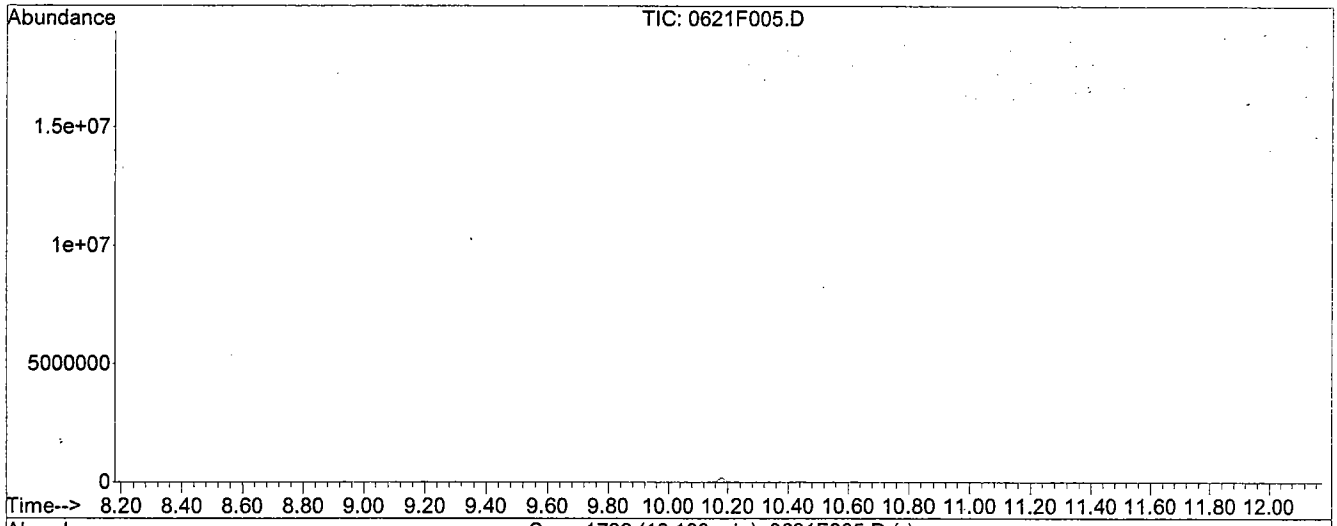
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

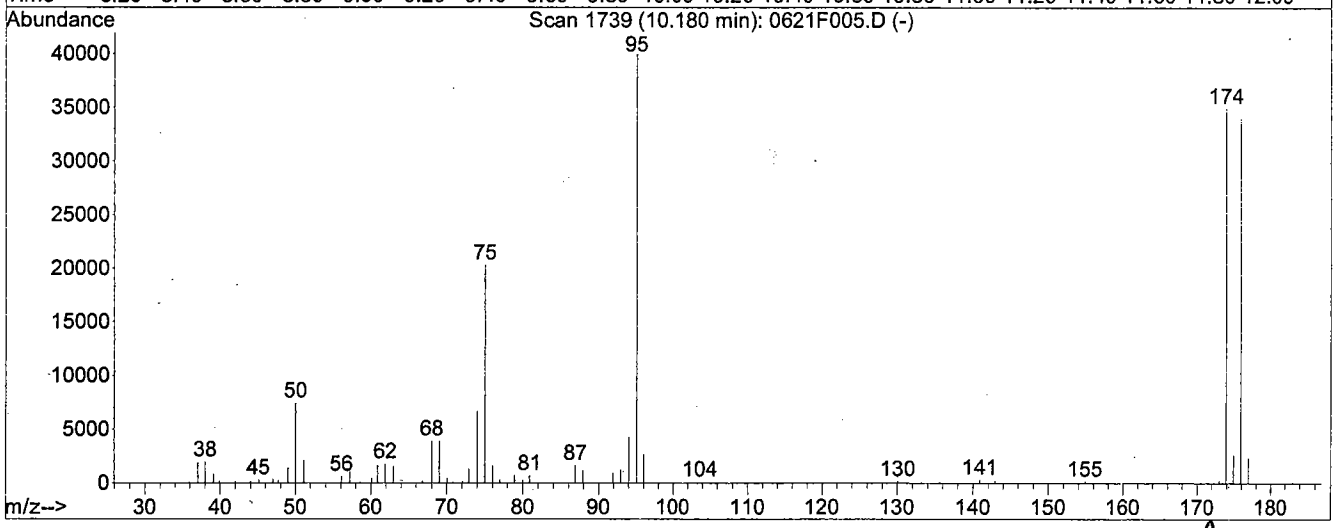
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

BFB

Data File : J:\MS18\DATA\062107\0621F005.D
Acq On : 21 Jun 2007 10:52 am
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B

Vial: 2
Operator:
Inst : GC-MS 18
Multiplr: 1.00





Spectrum Information: Scan 1739 after - 1730 scan RR 5/11/7 [illegible]

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	7488	PASS
75	95	30	60	50.8	20320	PASS
95	95	100	100	100.0	40000	PASS
96	95	5	9	6.8	2705	PASS
173	174	0.00	2	0.8	286	PASS
174	95	50	120	87.4	34976	PASS
175	174	5	9	7.6	2670	PASS
176	174	95	101	97.5	34104	PASS
177	176	5	9	7.1	2420	PASS

0621F005.D 061307.M Thu Jun 21 11:28:45 2007

Exception Report

Data File: J:\MS18\DATA\062107\0621F006.D
Lab ID: KWG0706924-2
RunType: CCV
Matrix: WATER

Date Acquired: 06/21/2007 11:12
Date Quantitated: 06/21/2007 11:30
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0008	0.01	NA	NT
	Acetonitrile	0.0056	0.01	NA	
	tert-Butyl Alcohol	0.0065	0.01	NA	
	Isobutyl Alcohol	0.0029	0.01	NA	
	2-Butanone (MEK)	0.0093	0.01	NA	µmu
Second Source ICAL Verification	Vinyl Acetate	-54.8	NA	40	NT

Primary Review: KA 6/21/07

Secondary Review: 6/22/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706924	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS18\METHODS\061307.M	**Calibration ID:**	CAL6351
Title:			
Tune Ref:	J:\MS18\DATA\062107\0621F005.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\062107\0621F006.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:12	**Quant Date:**	06/21/2007 11:30	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706924-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.44	0.00	96	439709	10.00	OK
2	Chlorobenzene-d5	8.93	0.00	82	161837	10.00	OK
3	1,4-Dichlorobenzene-d4	11.35	0.00	152	148245	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.58			113	86507	9.82		82-125	NA
1	1,2-Dichloroethane-d4	5.06			65	79509	9.04		49-142	NA
1	Toluene-d8	7.34			98	423678	10.56		87-120	NA
2	4-Bromofluorobenzene	10.18			95	137420	10.07		73-118	NA

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.12			85	128026	10.49			
1	Chloromethane	1.24			50	164468	10.01			
1	Vinyl Chloride	1.31			62	148534	10.06			
1	Bromomethane	1.54			96	69149	8.12			
1	Chloroethane	1.61			64	82679	8.95			
1	Dichlorofluoromethane (CFC 21	1.76			67	210794	9.34			
1	Trichlorofluoromethane	1.77			101	180577	9.30			
1	Ethyl Ether	1.99			59	60590	9.43			
1	Acrolein	2.15			56	108965	234.90			
1	Trichlorotrifluoroethane	2.15			151	89620	9.18			
1	1,1-Dichloroethene	2.17			96	95684	8.96			
1	Acetone	2.27			43	204496	177.50			
1	Iodomethane	2.31			142	455552	33.90			
1	Carbon Disulfide	2.34			76	286262	8.04			
1	3-Chloro-1-propene	2.50			76	58848	8.75			

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F006.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:12	**Quant Date:**	06/21/2007 11:30	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706924-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.60			40	101475	414.13			
1	Methylene Chloride	2.64			84	94434	7.80			
1	tert-Butyl Alcohol	2.76			59	16423	57.50			
1	Acrylonitrile	2.94			53	58884	38.16			
1	Methyl tert-Butyl Ether	2.83			73	376597	19.22			
1	trans-1,2-Dichloroethene	2.85			96	118076	9.09			
1	n-Hexane	3.04			57	131258	9.93			
1	Diisopropyl Ether	3.32			45	375404	10.11			
1	1,1-Dichloroethane	3.31			63	213800	9.58			
1	Vinyl Acetate	3.37			86	23566	18.17			
1	Chloroprene	3.37			53	878990	37.07			
1	tert-Butyl Ethyl Ether	3.72			59	265566	9.94			
1	2,2-Dichloropropane	3.93			77	166870	8.56			
1	cis-1,2-Dichloroethene	3.97			96	118562	9.33			
1	2-Butanone (MEK)	4.04			72	77963	190.33			
1	Propionitrile	4.20			54	19176	36.66			
1	Ethyl Acetate	4.07			61	20853	35.45			
1	Methacrylonitrile	4.33			67	72761	36.64			
1	Bromochloromethane	4.27			128	41925	9.52			
1	Tetrahydrofuran	4.28			71	4526	10.21			
1	Chloroform	4.37			83	192230	9.34			
1	tert-Butyl Formate	4.40			59	10315	2.35			
1	1,1,1-Trichloroethane (TCA)	4.53			97	170268	8.53			
1	Carbon Tetrachloride	4.68			117	137759	8.13			
1	1,1-Dichloropropene	4.74			75	166854	9.47			
1	Isobutyl Alcohol	5.09			43	38144	302.67			
1	Benzene	5.01			78	477891	9.58			
1	1,2-Dichloroethane (EDC)	5.16			62	106511	9.54			
1	tert-Amyl Methyl Ether	5.18			55	57186	10.29			
1	Trichloroethene (TCE)	5.89			95	115469	9.27			
1	1,2-Dichloropropane	6.22			63	105228	9.62			
1	Dibromomethane	6.36			93	37556	9.15			
1	Methyl Methacrylate	6.41			69	33979	8.99			
1	1,4-Dioxane	6.41			88	6833	188.07			
1	Bromodichloromethane	6.57			83	102801	8.41			
1	2-Nitropropane	6.95			43	38030	30.73			
1	2-Chloroethyl Vinyl Ether	6.98			63	20812	5.54			
1	cis-1,3-Dichloropropene	7.11			75	130422	9.16			
1	4-Methyl-2-pentanone (MIBK)	7.31			58	320451	200.13			
1	Toluene	7.41			92	300416	9.49			
2	n-Octane	7.52			85	48130	9.21			
2	trans-1,3-Dichloropropene	7.78			75	91404	8.79			
2	Ethyl Methacrylate	7.85			69	70031	9.44			

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F006.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:12	**Quant Date:**	06/21/2007 11:30	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG0706924-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	7.97			83	50180	9.65			
2	Tetrachloroethene (PCE)	7.97			164	99692	9.03			
2	2-Hexanone	8.25			57	101463	195.34			
2	1,3-Dichloropropane	8.15			76	110349	9.81			
2	Dibromochloromethane	8.34			129	55231	8.42			
2	1,2-Dibromoethane (EDB)	8.45			107	54269	9.72			
2	1-Chlorohexane	8.96			91	154733	8.93			
2	Chlorobenzene	8.96			112	312016	9.82			
2	Ethylbenzene	9.06			106	183368	9.56			
2	1,1,1,2-Tetrachloroethane	9.07			131	86068	8.99			
2	m,p-Xylenes	9.19			106	444217	19.03			
2	o-Xylene	9.61			106	207390	9.64			
2	Styrene	9.64			103	146323m	9.46			
2	Bromoform	9.83			173	25925	7.72			
2	Isopropylbenzene	9.99			105	560397	9.67			
2	cis-1,4-Dichloro-2-butene	10.15			89	18009	32.11			
3	1,1,2,2-Tetrachloroethane	10.39			83	55283	9.80			
3	trans-1,4-Dichloro-2-butene	10.46			53	10628	8.06			
3	Bromobenzene	10.31			156	115839	9.36			
3	n-Propylbenzene	10.41			91	664415	9.73			
3	1,2,3-Trichloropropane	10.43			110	18202	10.20			
3	2-Chlorotoluene	10.51			91	381976	9.94			
3	1,3,5-Trimethylbenzene	10.61			105	459676	9.76			
3	4-Chlorotoluene	10.63			91	427112	9.48			
3	tert-Butylbenzene	10.92			119	415891	9.79			
3	1,2,4-Trimethylbenzene	10.99			105	433032	9.46			
3	sec-Butylbenzene	11.14			105	556554	9.75			
3	4-Isopropyltoluene	11.30			119	495468	9.69			
3	1,3-Dichlorobenzene	11.27			146	236845	9.52			
3	1,4-Dichlorobenzene	11.38			146	227111	9.50			
3	n-Butylbenzene	11.72			91	411478	9.26			
3	1,2-Dichlorobenzene	11.75			146	199241	9.61			
3	1,2-Dibromo-3-chloropropane	12.47			155	8165	11.09			
3	1,3,5-Trichlorobenzene	12.58			180	175868	8.81			
3	1,2,4-Trichlorobenzene	13.01			180	133049	8.90			
3	Hexachlorobutadiene	13.10			225	88722	8.78			
3	Naphthalene	13.18			128	185216	9.42			
3	1,2,3-Trichlorobenzene	13.36			180	112842	9.21			

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B: Hit above MRL also found in Method Blank
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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Calibration Verification Report

Calibration ID: CAL6351
Method ID: MJ119
DataFile: J:\MS18\DATA\062107\0621F006.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Dichlorodifluoromethane		TRG	AverageRF	40	0.01	0.277	0.291	4.9			
Chloromethane	SPCC	TRG	AverageRF	40	0.10	0.374	0.374	0.1			
Vinyl Chloride	CCC	TRG	AverageRF	20	0.01	0.336	0.338	0.6			
Bromomethane		TRG	AverageRF	40	0.01	0.194	0.157	-18.8			
Chloroethane		TRG	AverageRF	40	0.01	0.210	0.188	-10.5			
Dichlorofluoromethane (CFC 21)		TRG	AverageRF	30	0.01	0.513	0.479	-6.6			
Trichlorofluoromethane		TRG	AverageRF	30	0.01	0.442	0.411	-7.0			
Ethyl Ether		TRG	AverageRF	30	0.01	0.146	0.138	-5.7			
Acrolein		TRG	AverageRF	40	0.01	0.011	0.012	17.4			
Trichlorotrifluoroethane		TRG	AverageRF	30	0.01	0.222	0.204	-8.2			
1,1-Dichloroethene	CCC	MS	AverageRF	20	0.01	0.243	0.218	-10.4			
Acetone		TRG	AverageRF	30	0.01	0.026	0.023	-11.2			
Iodomethane		TRG	AverageRF	40	0.01	0.306	0.259	-15.3			
Carbon Disulfide		TRG	AverageRF	30	0.01	0.810	0.651	-19.6			
3-Chloro-1-propene		TRG	AverageRF	40	0.01	0.153	0.134	-12.5			
Acetonitrile		TRG	AverageRF	30	0.01	0.006	0.006 *	3.5			
Methylene Chloride		TRG	AverageRF	30	0.01	0.275	0.215	-22.0			
tert-Butyl Alcohol		TRG	AverageRF	30	0.01	0.006	0.007 *	15.0			
Methyl tert-Butyl Ether		TRG	AverageRF	30	0.01	0.446	0.428	-3.9			
trans-1,2-Dichloroethene		TRG	AverageRF	30	0.01	0.295	0.269	-9.1			
Acrylonitrile		TRG	AverageRF	30	0.01	0.035	0.033	-4.6			
n-Hexane		TRG	AverageRF	30	0.01	0.301	0.299	-0.7			
1,1-Dichloroethane	SPCC	TRG	AverageRF	30	0.10	0.507	0.486	-4.2			
Diisopropyl Ether		TRG	AverageRF	30	0.01	0.844	0.854	1.1			
Chloroprene		TRG	AverageRF	30	0.01	0.539	0.500	-7.3			
Vinyl Acetate		TRG	AverageRF	40	0.01	0.029	0.027	-9.1			
tert-Butyl Ethyl Ether		TRG	AverageRF	30	0.01	0.608	0.604	-0.6			
2,2-Dichloropropane		TRG	AverageRF	30	0.01	0.443	0.380	-14.4			
cis-1,2-Dichloroethene		TRG	AverageRF	30	0.01	0.289	0.270	-6.7			
2-Butanone (MEK)		TRG	AverageRF	30	0.01	0.009	0.009 *	-4.8			
Ethyl Acetate		TRG	AverageRF	30	0.01	0.013	0.012	-11.4			
Propionitrile		TRG	AverageRF	30	0.01	0.012	0.011	-8.3			
Bromochloromethane		TRG	AverageRF	30	0.01	0.100	0.095	-4.8			
Tetrahydrofuran		TRG	AverageRF	30	0.01	0.010	0.010	2.1			
Methacrylonitrile		TRG	AverageRF	30	0.01	0.045	0.041	-8.4			
Chloroform	CCC	TRG	AverageRF	20	0.01	0.468	0.437	-6.6			
tert-Butyl Formate		TRG	AverageRF	30	0.01	0.100	0.023	-76.5 *			
1,1,1-Trichloroethane (TCA)		TRG	AverageRF	30	0.01	0.454	0.387	-14.7			
Dibromofluoromethane		SURR	AverageRF	30	0.01	0.200	0.197	-1.8			
Carbon Tetrachloride		TRG	AverageRF	30	0.01	0.385	0.313	-18.7			
1,1-Dichloropropene		TRG	AverageRF	30	0.01	0.401	0.379	-5.3			
Benzene		MS	AverageRF	30	0.01	1.134	1.087	-4.2			
1,2-Dichloroethane-d4		SURR	AverageRF	30	0.01	0.200	0.181	-9.6			
Isobutyl Alcohol		TRG	AverageRF	30	0.01	0.003	0.002 *	-24.3			
1,2-Dichloroethane (EDC)		TRG	AverageRF	30	0.01	0.254	0.242	-4.6			
tert-Amyl Methyl Ether		TRG	AverageRF	30	0.01	0.126	0.130	2.9			
Trichloroethene (TCE)		MS	AverageRF	30	0.01	0.283	0.263	-7.3			
1,2-Dichloropropane	CCC	TRG	AverageRF	20	0.01	0.249	0.239	-3.8			

3 Compounds Failed CCV Criteria

Calibration Verification Report

Calibration ID: CAL6351
Method ID: MJ119
DataFile: J:\MS18\DATA\062107\0621F006.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
Dibromomethane		TRG	AverageRF	30	0.01	0.093	0.085	-8.5			
1,4-Dioxane		TRG	AverageRF	30	0.01	0.001	0.001 *	-14.4			
Methyl Methacrylate		TRG	AverageRF	30	0.01	0.086	0.077	-10.1			
Bromodichloromethane		TRG	AverageRF	30	0.01	0.278	0.234	-15.9			
2-Nitropropane		TRG	AverageRF	30	0.01	0.028	0.017	-38.5 *			
2-Chloroethyl Vinyl Ether		TRG	AverageRF	40	0.01	0.085	0.047	-44.6 *			
cis-1,3-Dichloropropene		TRG	AverageRF	30	0.01	0.324	0.297	-8.4			
4-Methyl-2-pentanone (MIBK)		TRG	AverageRF	30	0.01	0.036	0.036	0.1			
Toluene-d8		SURR	AverageRF	30	0.01	0.912	0.964	5.6			
Toluene	CCC	MS	AverageRF	20	0.01	0.720	0.683	-5.1			
n-Octane		TRG	AverageRF	30	0.01	0.323	0.297	-7.9			
trans-1,3-Dichloropropene		TRG	AverageRF	30	0.01	0.642	0.565	-12.1			
Ethyl Methacrylate		TRG	AverageRF	30	0.01	0.458	0.433	-5.6			
1,1,2-Trichloroethane		TRG	AverageRF	30	0.01	0.321	0.310	-3.5			
Tetrachloroethene (PCE)		TRG	AverageRF	30	0.01	0.682	0.616	-9.7			
1,3-Dichloropropane		TRG	AverageRF	30	0.01	0.695	0.682	-1.9			
2-Hexanone		TRG	AverageRF	30	0.01	0.032	0.031	-2.3			
Dibromochloromethane		TRG	AverageRF	30	0.01	0.405	0.341	-15.8			
1,2-Dibromoethane (EDB)		TRG	AverageRF	30	0.01	0.345	0.335	-2.8			
1-Chlorohexane		TRG	AverageRF	30	0.01	1.070	0.956	-10.7			
Chlorobenzene	SPCC	MS	AverageRF	30	0.30	1.964	1.928	-1.8			
Ethylbenzene	CCC	TRG	AverageRF	20	0.01	1.185	1.133	-4.4			
1,1,1,2-Tetrachloroethane		TRG	AverageRF	30	0.01	0.591	0.532	-10.1			
m,p-Xylenes		TRG	AverageRF	30	0.01	1.443	1.372	-4.9			
o-Xylene		TRG	AverageRF	30	0.01	1.329	1.281	-3.6			
Styrene		TRG	AverageRF	30	0.01	0.956	0.904	-5.4			
Bromoform	SPCC	TRG	AverageRF	30	0.10	0.208	0.160	-22.8			
Isopropylbenzene		TRG	AverageRF	30	0.01	3.582	3.463	-3.3			
cis-1,4-Dichloro-2-butene		TRG	AverageRF	30	0.01	0.035	0.028	-19.7			
4-Bromofluorobenzene		SURR	AverageRF	30	0.01	0.843	0.849	0.7			
Bromobenzene		TRG	AverageRF	30	0.01	0.835	0.781	-6.4			
1,1,2,2-Tetrachloroethane	SPCC	TRG	AverageRF	30	0.30	0.380	0.373	-2.0			
n-Propylbenzene		TRG	AverageRF	30	0.01	4.607	4.482	-2.7			
1,2,3-Trichloropropane		TRG	AverageRF	30	0.01	0.120	0.123	2.0			
trans-1,4-Dichloro-2-butene		TRG	AverageRF	30	0.01	0.089	0.072	-19.4			
2-Chlorotoluene		TRG	AverageRF	30	0.01	2.591	2.577	-0.6			
1,3,5-Trimethylbenzene		TRG	AverageRF	30	0.01	3.176	3.101	-2.4			
4-Chlorotoluene		TRG	AverageRF	30	0.01	3.039	2.881	-5.2			
tert-Butylbenzene		TRG	AverageRF	30	0.01	2.865	2.805	-2.1			
1,2,4-Trimethylbenzene		TRG	AverageRF	30	0.01	3.086	2.921	-5.4			
sec-Butylbenzene		TRG	AverageRF	30	0.01	3.851	3.754	-2.5			
1,3-Dichlorobenzene		TRG	AverageRF	30	0.01	1.678	1.598	-4.8			
4-Isopropyltoluene		TRG	AverageRF	30	0.01	3.450	3.342	-3.1			
1,4-Dichlorobenzene		TRG	AverageRF	30	0.01	1.613	1.532	-5.0			
n-Butylbenzene		TRG	AverageRF	30	0.01	2.999	2.776	-7.4			
1,2-Dichlorobenzene		MS	AverageRF	30	0.01	1.399	1.344	-3.9			
1,2-Dibromo-3-chloropropane		TRG	AverageRF	30	0.01	0.050	0.055	10.9			
1,3,5-Trichlorobenzene		TRG	AverageRF	30	0.01	1.347	1.186	-11.9			

3 Compounds Failed CCV Criteria

Calibration Verification Report

Calibration ID: CAL6351
Method ID: MJ119

DataFile: J:\MS18\DATA\062107\0621F006.D

Parameter Name	Type	PARM Type	Curve Fit	Method Criteria	Min RF	ICAL RF	CCV RF	%Diff	Sol'n Conc.	True Value	% Drift
1,2,4-Trichlorobenzene		TRG	AverageRF	30	0.01	1.008	0.897	-11.0			
Hexachlorobutadiene		TRG	AverageRF	30	0.01	0.682	0.598	-12.2			
Naphthalene		MS	AverageRF	30	0.01	1.326	1.249	-5.8			
1,2,3-Trichlorobenzene		TRG	AverageRF	30	0.01	0.826	0.761	-7.9			

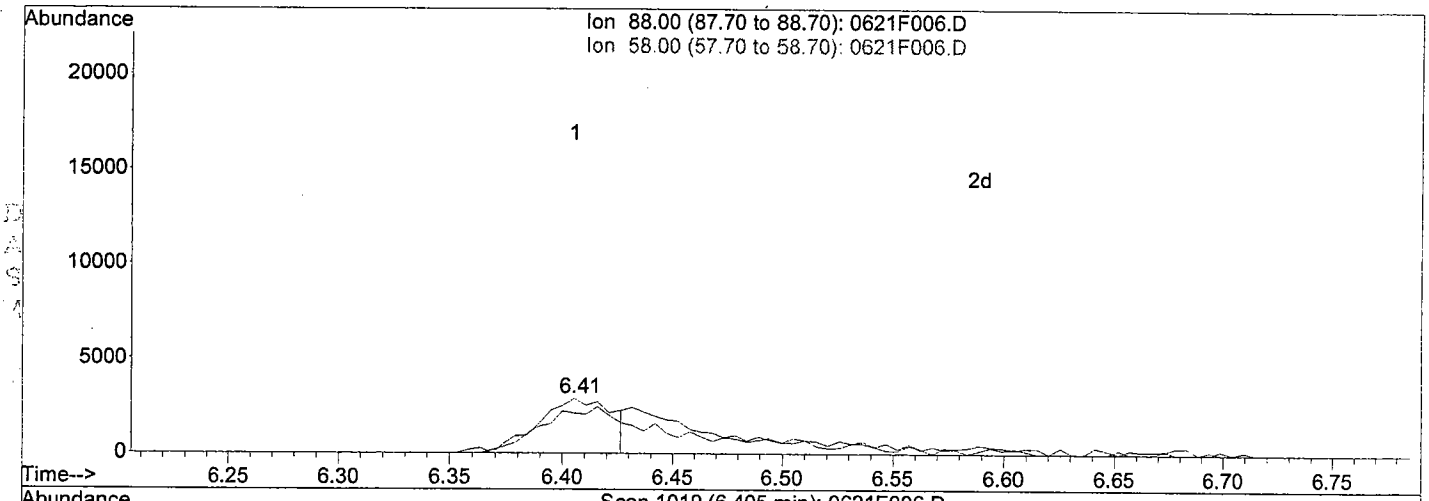
3 Compounds Failed CCV Criteria

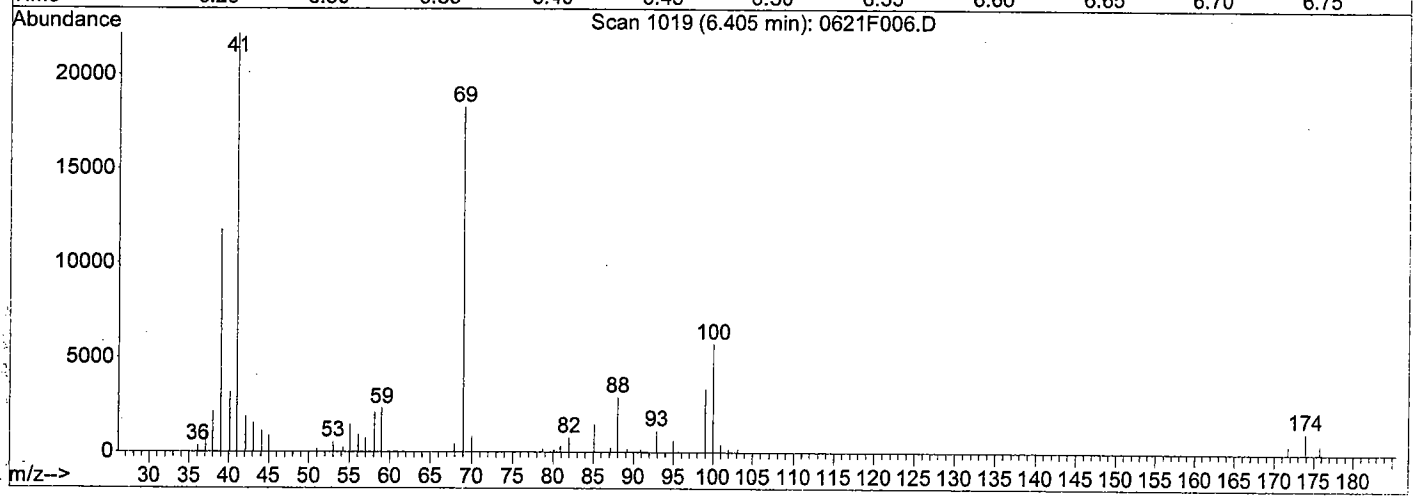
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F006.D
Acq On : 21 Jun 2007 11:12 am
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:30 2007

Vial: 3
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration





TIC: 0621F006.D

(52) 1,4-Dioxane (T)

6.41min 188.07PPB

response 6833

Ion	Exp%	Act%
88.00	100	100
58.00	68.60	73.11
0.00	0.00	0.00
0.00	0.00	0.00

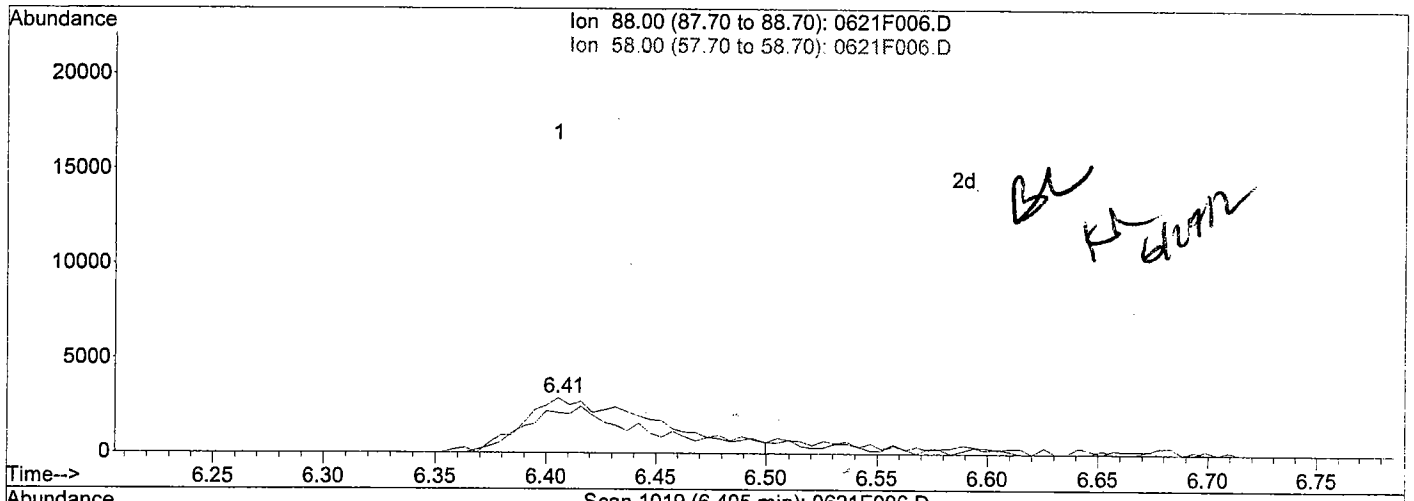
0621F006.D 061307.M Wed Jun 27 06:43:35 2007

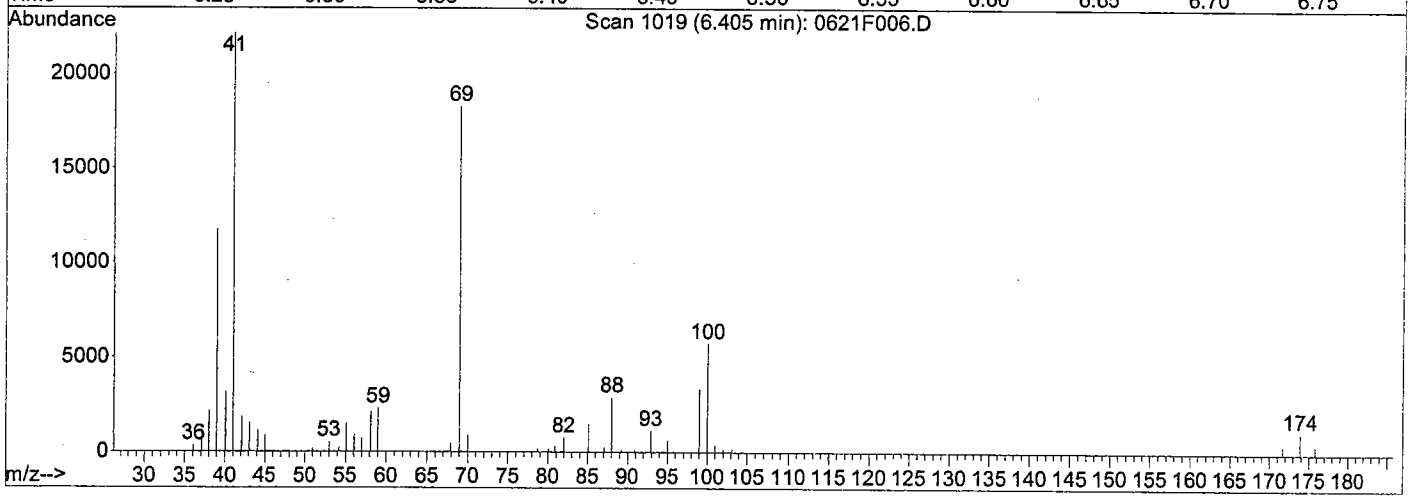
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F006.D
Acq On : 21 Jun 2007 11:12 am
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 27 6:43 2007

Vial: 3
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration





TIC: 0621F006.D

(52) 1,4-Dioxane (T)

6.41min 342.35PPB m

response 12438

Ion	Exp%	Act%
88.00	100	100
58.00	68.60	73.11
0.00	0.00	0.00
0.00	0.00	0.00

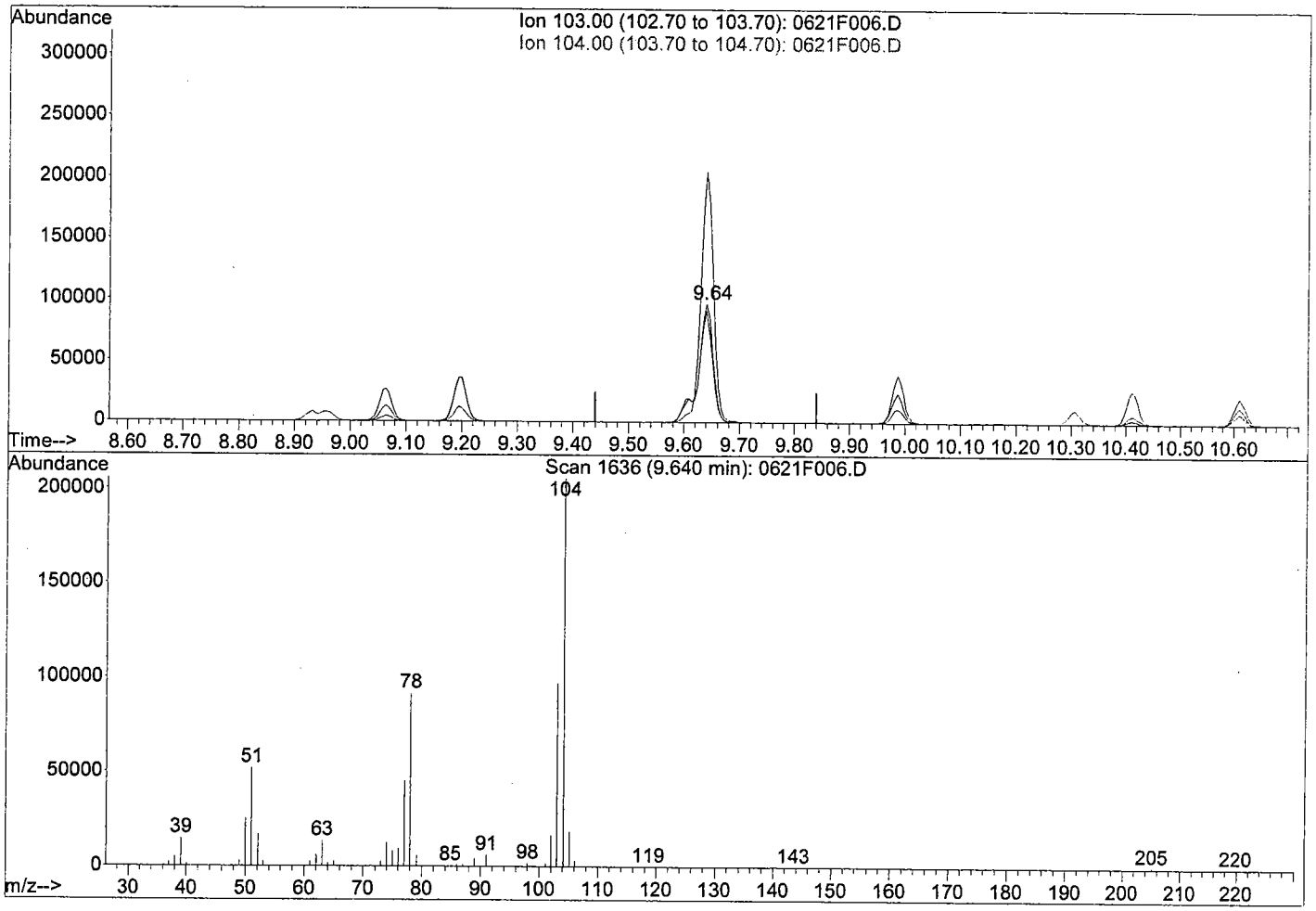
0621F006.D 061307.M Wed Jun 27 06:43:47 2007

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F006.D
Acq On : 21 Jun 2007 11:12 am
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:28 2007

Vial: 3
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration



TIC: 0621F006.D

(76) Styrene (T)

9.64min 11.35PPB

response 175669

Ion	Exp%	Act%
103.00	100	100
104.00	205.50	212.17
78.00	87.90	94.47
0.00	0.00	0.00

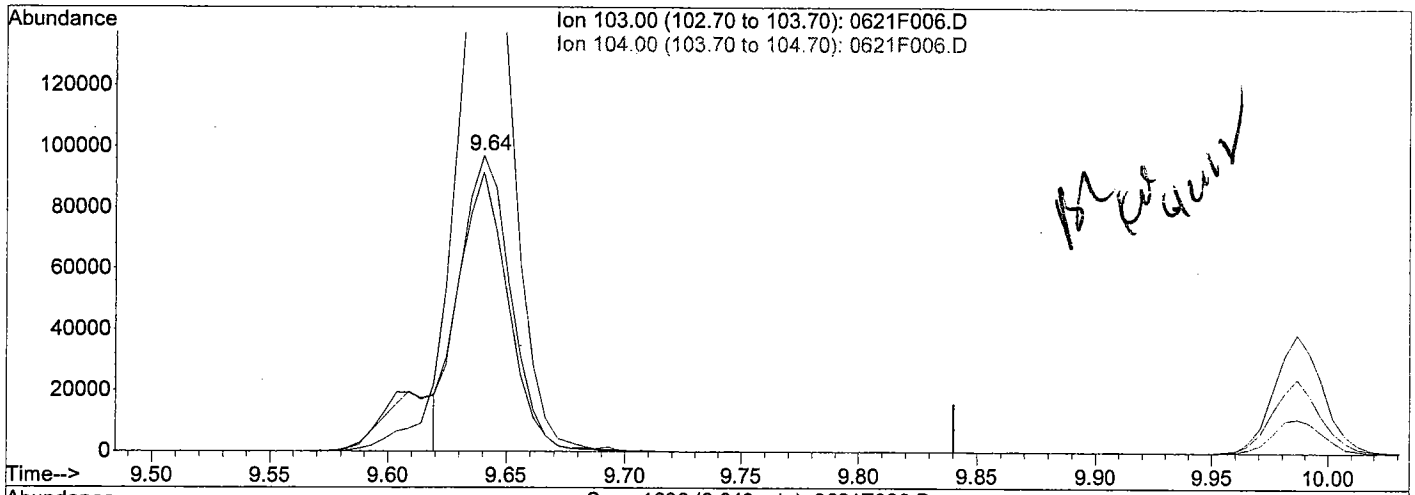
0621F006.D 061307.M Thu Jun 21 11:30:24 2007

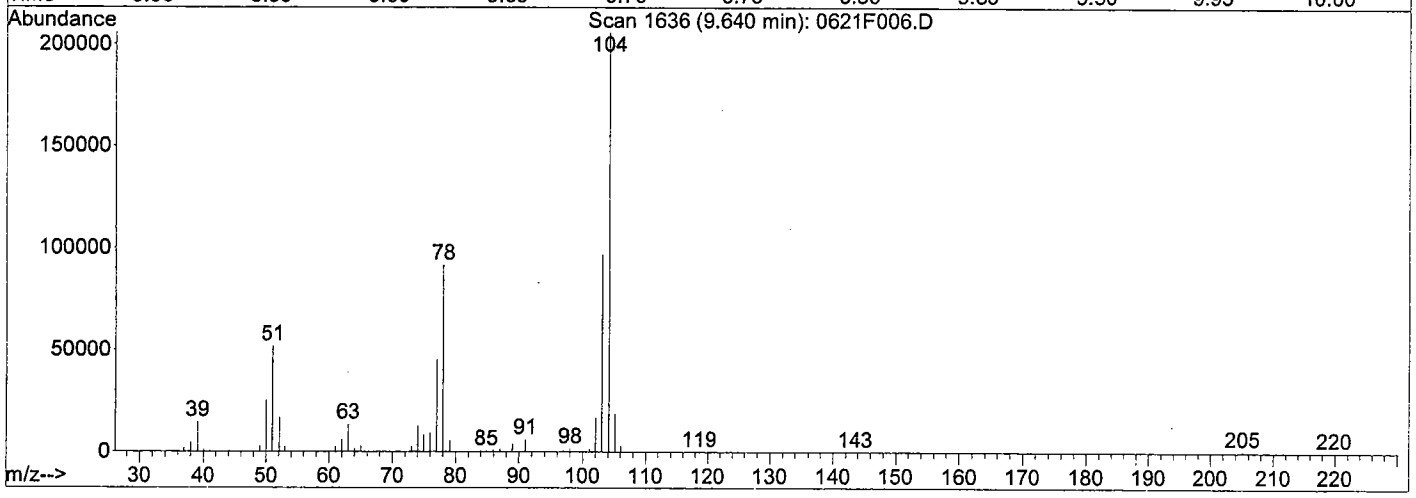
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F006.D
Acq On : 21 Jun 2007 11:12 am
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:30 2007

Vial: 3
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration





TIC: 0621F006.D

(76) Styrene (T)

9.64min 9.46PPB m

response 146323

Ion	Exp%	Act%
103.00	100	100
104.00	205.50	212.17
78.00	87.90	94.47
0.00	0.00	0.00

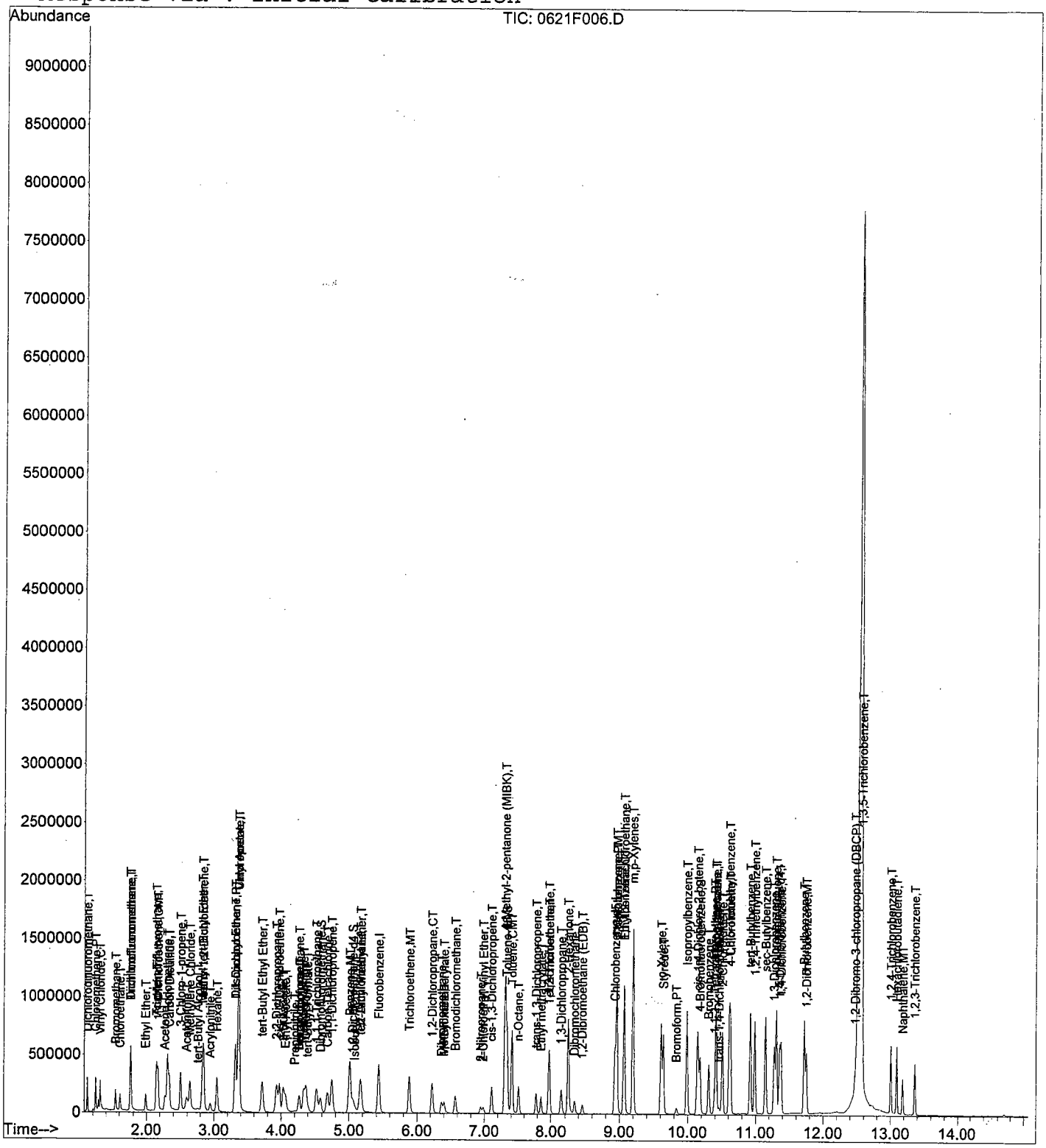
0621F006.D 061307.M Thu Jun 21 11:30:30 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\062107\0621F006.D
Acq On : 21 Jun 2007 11:12 am
Sample : CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:30 2007

Vial: 3
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\062107\0621F011.D
Acq On : 21 Jun 2007 12:54 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:17:14 2007

Vial: 7
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Quant Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration
DataAcq Meth : 8260

KM 6/21/07

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.43	96	440465	10.00	PPB	0.00
60) Chlorobenzene-d5	8.93	82	160883	10.00	PPB	0.00
81) 1,4-Dichlorobenzene-d4	11.35	152	144876	10.00	PPB	0.00
System Monitoring Compounds						
40) Dibromofluoromethane	4.58	113	80827	9.16	PPB	0.00
Spiked Amount 10.000			Recovery = 91.60%			
44) 1,2-Dichloroethane-d4	5.05	65	78009	8.85	PPB	0.00
Spiked Amount 10.000			Recovery = 88.50%			
58) Toluene-d8	7.34	98	420263	10.46	PPB	0.00
Spiked Amount 10.000			Recovery = 104.60%			
80) 4-Bromofluorobenzene	10.18	95	135894	10.02	PPB	0.00
Spiked Amount 10.000			Recovery = 100.20%			

Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.12	85	3595	0.29	PPB		91
3) Chloromethane	1.24	50	6140	0.37	PPB		98
4) Vinyl Chloride	1.31	62	5241	0.35	PPB		90
5) Bromomethane	1.54	96	2887	0.34	PPB		82
6) Chloroethane	1.61	64	2834	0.31	PPB		97
7) Dichlorofluoromethane	1.75	67	6574	0.29	PPB		85
8) Trichlorofluoromethane	1.76	101	5104	0.26	PPB		89
9) Ethyl Ether	1.99	59	1738	0.27	PPB	#	78
10) Acrolein	2.15	56	3918	8.43	PPB		97
11) Trichlorotrifluoroethane	2.14	151	2900	0.30	PPB		97
12) 1,1-Dichloroethene	2.17	96	2987	0.28	PPB		84
13) Acetone	2.27	43	6777	5.87	PPB		88
14) Iodomethane	2.31	142	12166	0.90	PPB		89
15) Carbon Disulfide	2.34	76	8282	0.23	PPB		87
16) 3-Chloro-1-propene	2.51	76	1916	0.28	PPB	#	52
17) Acetonitrile	2.59	40	2827	11.52	PPB	#	75
18) Methylene Chloride	2.64	84	5891	0.49	PPB		94
19) tert-Butyl Alcohol	2.77	59	928	3.24	PPB	#	1
20) Acrylonitrile	2.94	53	2163	1.40	PPB		80
21) Methyl tert-Butyl Ether	2.84	73	11246	0.57	PPB		96
22) trans-1,2-Dichloroethene	2.85	96	4012	0.31	PPB		90
23) Hexane	3.04	57	5726	0.43	PPB		95
24) Diisopropyl Ether	3.32	45	11021	0.30	PPB		90
25) 1,1-Dichloroethane	3.31	63	7095	0.32	PPB		83
26) Vinyl Acetate	3.38	86	709	0.55	PPB	#	1
27) Chloroprene	3.36	53	24405	1.03	PPB		94
28) tert-Butyl Ethyl Ether	3.72	59	7279	0.27	PPB		76
29) 2,2-Dichloropropane	3.93	77	4644	0.24	PPB		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\062107\0621F011.D
Acq On : 21 Jun 2007 12:54 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:17:14 2007

Vial: 7
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Quant Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	cis-1,2-Dichloroethene	3.98	96	3449	0.27	PPB		87
31)	2-Butanone	4.03	72	1459	3.56	PPB	V #10	80
32)	Propionitrile	4.20	54	511	0.98	PPB		70
33)	Ethyl Acetate	3.97	61	4941	8.38	PPB	#	18
34)	Methacrylonitrile	4.34	67	2123	1.07	PPB	#	36
35)	Bromochloromethane	4.27	128	1392	0.32	PPB		85
37)	Chloroform	4.37	83	6362	0.31	PPB		94
39)	1,1,1-Trichloroethane	4.52	97	5363	0.27	PPB		84
41)	Carbon Tetrachloride	4.68	117	3339	0.20	PPB		79
42)	1,1-Dichloropropene	4.74	75	5180	0.29	PPB		91
43)	Isobutyl Alcohol	5.18	43	2546	20.17	PPB	V=20	72
45)	Benzene	5.01	78	15086	0.30	PPB		95
46)	1,2-Dichloroethane	5.16	62	3356	0.30	PPB		90
47)	tert-Amyl Methyl Ether	5.17	55	1219	0.22	PPB	#	54
48)	Trichloroethene	5.88	95	3452	0.28	PPB		83
49)	1,2-Dichloropropane	6.23	63	3287	0.30	PPB		82
50)	Dibromomethane	6.37	93	1009	0.25	PPB		84
51)	Methyl methacrylate	6.39	69	951	0.25	PPB	#	51
53)	Bromodichloromethane	6.57	83	2858	0.23	PPB	#	61
54)	2-Nitropropane	6.94	43	1100	0.89	PPB	#	75
55)	2-Chloroethyl Vinyl Ether	6.98	63	702	0.19	PPB	# V=.05	64
56)	cis-1,3-Dichloropropene	7.10	75	3340	0.23	PPB		80
57)	4-Methyl-2-pentanone (MIBK	7.31	58	10393	6.48	PPB	#	14
59)	Toluene	7.41	92	9288	0.29	PPB		96
61)	n-Octane	7.52	85	2411	0.46	PPB		77
62)	trans-1,3-Dichloropropene	7.77	75	2386	0.23	PPB		90
63)	Ethyl methacrylate	7.85	69	2194	0.30	PPB	#	67
64)	1,1,2-Trichloroethane	7.97	83	1632	0.32	PPB		81
65)	Tetrachloroethene	7.98	164	3264	0.30	PPB		87
66)	2-Hexanone	8.25	57	2124	4.11	PPB		97
67)	1,3-Dichloropropane	8.15	76	3406	0.30	PPB		87
68)	Dibromochloromethane	8.34	129	1381	0.21	PPB		83
69)	1,2-Dibromoethane (EDB)	8.45	107	1622	0.29	PPB		77
70)	1-Chlorohexane	8.95	91	5571	0.32	PPB		76
71)	Chlorobenzene	8.96	112	9757	0.31	PPB		90
72)	Ethylbenzene	9.06	106	5568	0.29	PPB		91
73)	1,1,1,2-Tetrachloroethane	9.06	131	2091	0.22	PPB		83
74)	m,p-Xylenes	9.19	106	12834	0.55	PPB		95
75)	o-Xylene	9.61	106	6344	0.30	PPB	#	73
76)	Styrene	9.65	103	5440	0.35	PPB	#	71
77)	Bromoform	9.83	173	538	0.16	PPB	#	37
78)	Isopropylbenzene	9.99	105	16952	0.29	PPB		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\062107\0621F011.D
Acq On : 21 Jun 2007 12:54 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:17:14 2007

Vial: 7
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Quant Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
79)	cis-1,4-Dichloro-2-butene	10.51	89	2182	3.91	PPB	#	1
82)	1,1,2,2-Tetrachloroethane	10.40	83	1538	0.28	PPB		87
83)	trans-1,4-Dichloro-2-buten	10.45	53	634	0.49	PPB		76
84)	Bromobenzene	10.31	156	3890	0.32	PPB		96
85)	n-Propylbenzene	10.41	91	20611	0.31	PPB		94
86)	1,2,3-Trichloropropane	10.43	110	508	0.29	PPB	#	62
87)	2-Chlorotoluene	10.51	91	12948	0.34	PPB		90
88)	1,3,5-Trimethylbenzene	10.62	105	14150	0.31	PPB		99
89)	4-Chlorotoluene	10.63	91	14862	0.34	PPB		96
90)	tert-Butylbenzene	10.92	119	11792	0.28	PPB		92
91)	1,2,4-Trimethylbenzene	10.99	105	13893	0.31	PPB		92
92)	sec-Butylbenzene	11.15	105	17103	0.31	PPB		98
93)	p-Isopropyltoluene	11.30	119	14907	0.30	PPB		98
94)	1,3-Dichlorobenzene	11.28	146	8667	0.36	PPB		97
95)	1,4-Dichlorobenzene	11.38	146	8220	0.35	PPB		94
96)	n-Butylbenzene	11.72	91	13156	0.30	PPB		95
97)	1,2-Dichlorobenzene	11.75	146	7122	0.35	PPB		86
98)	1,2-Dibromo-3-chloropropan	12.53	155	46415	64.51	PPB	#	37
99)	1,3,5-Trichlorobenzene	12.58	180	11318	0.58	PPB	#	25
100)	1,2,4-Trichlorobenzene	13.01	180	5285	0.36	PPB		98
101)	Hexachlorobutadiene	13.10	225	2767	0.28	PPB		91
102)	Naphthalene	13.18	128	7402	0.39	PPB		87
103)	1,2,3-Trichlorobenzene	13.36	180	4424	0.37	PPB		88

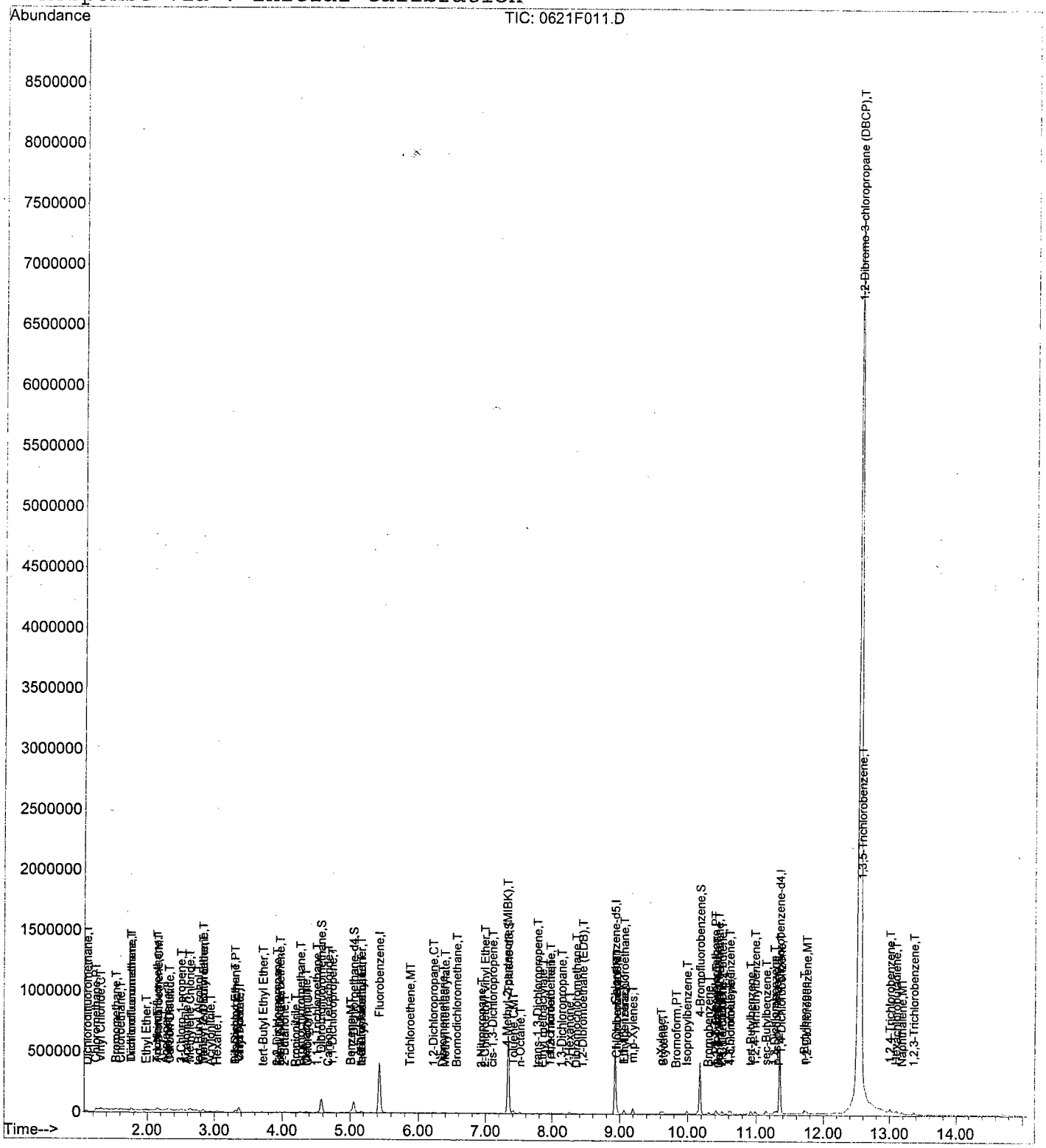
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : J:\MS18\DATA\062107\0621F011.D
Acq On : 21 Jun 2007 12:54 pm
Sample : MRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:17 2007

Vial: 7
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration



Exception Report

Data File: J:\MS18\DATA\062107\0621F012.D
Lab ID: KWG0706925-4
RunType: MB
Matrix: WATER

Date Acquired: 06/21/2007 13:14
Date Quantitated: 06/22/2007 07:02
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0008	0.01	NA	MRL
	Acetonitrile	0.0056	0.01	NA	NT
	tert-Butyl Alcohol	0.0065	0.01	NA	I
	Isobutyl Alcohol	0.0029	0.01	NA	MRL
	2-Butanone (MEK)	0.0093	0.01	NA	I
Second Source ICAL Verification	Vinyl Acetate	-54.8	NA	40	NT
Continuing Calibration Recovery	2-Chloroethyl Vinyl Ether	-44.6	NA	40	MRL
	tert-Butyl Formate	-76.5	NA	30	NT
	2-Nitropropane	-38.5	NA	30	I
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	MRL
	Acetonitrile	0.0058	0.01	NA	NT
	tert-Butyl Alcohol	0.0075	0.01	NA	I
	Isobutyl Alcohol	0.0022	0.01	NA	MRL

Primary Review: KA 6/27/07

Secondary Review: 6/27/7

Exception Report

Data File: J:\MS18\DATA\062107\0621F012.D
Lab ID: KWG0706925-4
RunType: MB
Matrix: WATER

Date Acquired: 06/21/2007 13:14
Date Quantitated: 06/22/2007 07:02
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	2-Butanone (MEK)	0.0089	0.01	NA	

Primary Review: KA 6/28/07

Secondary Review: 6/28/07

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706924	**Prep Lot:**	KWG0706925	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611734	**Prep Date:**	06/21/2007		

Quant Method:	J:\MS18\METHODS\061307.M	**Calibration ID:**	CAL6351
Title:			
Tune Ref:	J:\MS18\DATA\062107\0621F005.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\062107\0621F012.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 13:14	**Quant Date:**	06/22/2007 07:02	**Vial:**	8
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706925-4			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.44	0.00	96	437455	10.00	OK
2	Chlorobenzene-d5	8.93	0.00	82	161606	10.00	OK
3	1,4-Dichlorobenzene-d4	11.35	0.00	152	144910	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.58	0.00	0.00	113	82011	9.36	94	82-125 OK	
1	1,2-Dichloroethane-d4	5.05	-0.01	0.00	65	78750	9.00	90	49-142 OK	
1	Toluene-d8	7.34	0.00	0.00	98	415370	10.41	104	87-120 OK	
2	4-Bromofluorobenzene	10.18	0.00	0.00	95	133424	9.79	98	73-118 OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.17	U	
1	Chloromethane				50	0		0.14	U	
1	Vinyl Chloride				62	0		0.042	U	
1	Bromomethane				96	0		0.22	U	
1	Chloroethane				64	0		0.23	U	
1	Dichlorofluoromethane (CFC 21				67	0		0.40	U	
1	Trichlorofluoromethane				101	0		0.14	U	
1	Ethyl Ether				59	0		0.058	U	
1	Acrolein	2.15		0.00	56	923	2.00	6.7	U	
1	Trichlorotrifluoroethane				151	0		0.14	U	
1	1,1-Dichloroethene				96	0		0.13	U	
1	Acetone	2.28	0.01	0.00	43	857	0.7500	4.1	U	
1	Iodomethane				142	0d		0.38	U	
1	Carbon Disulfide				76	0d		0.16	U	
1	3-Chloro-1-propene				76	0d		0.16	U	

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F012.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 13:14	**Quant Date:**	06/22/2007 07:02	**Vial:**	8
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706925-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile				40	0d		7.5	U	
1	Methylene Chloride	2.64		0.00	84	1503	0.1200	0.20	U	
1	tert-Butyl Alcohol				59	0		1.1	U	
1	Acrylonitrile				53	0d		0.54	U	
1	Methyl tert-Butyl Ether				73	0		0.20	U	
1	trans-1,2-Dichloroethene				96	0		0.15	U	
1	n-Hexane				57	0d		0.19	U	
1	Diisopropyl Ether				45	0d		0.25	U	
1	1,1-Dichloroethane				63	0		0.11	U	
1	Vinyl Acetate				86	0		0.67	U	
1	Chloroprene				53	0d		0.35	U	
1	tert-Butyl Ethyl Ether				59	0		0.075	U	
1	2,2-Dichloropropane				77	0		0.18	U	
1	cis-1,2-Dichloroethene				96	0		0.12	U	
1	2-Butanone (MEK)				72	0		2.3	U	
1	Propionitrile				54	0		1.3	U	
1	Ethyl Acetate				61	0		0.79	U	
1	Methacrylonitrile				67	0		0.45	U	
1	Bromochloromethane				128	0		0.17	U	
1	Tetrahydrofuran				71	0		0.84	U	
1	Chloroform				83	0		0.14	U	
1	tert-Butyl Formate				59	0		0.18	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.12	U	
1	Carbon Tetrachloride				117	0		0.14	U	
1	1,1-Dichloropropene				75	0		0.15	U	
1	Isobutyl Alcohol				43	0		7.8	U	
1	Benzene				78	0		0.14	U	
1	1,2-Dichloroethane (EDC)				62	0		0.12	U	
1	tert-Amyl Methyl Ether				55	0		0.15	U	
1	Trichloroethene (TCE)				95	0		0.14	U	
1	1,2-Dichloropropane				63	0		0.14	U	
1	Dibromomethane				93	0		0.12	U	
1	Methyl Methacrylate				69	0		0.36	U	
1	1,4-Dioxane				88	0		26	U	
1	Bromodichloromethane				83	0		0.11	U	
1	2-Nitropropane				43	0d		2.0	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.34	U	
1	cis-1,3-Dichloropropene				75	0		0.11	U	
1	4-Methyl-2-pentanone (MIBK)				58	0d		2.7	U	
1	Toluene				92	0		0.11	U	
2	n-Octane				85	0d		0.29	U	
2	trans-1,3-Dichloropropene				75	0		0.090	U	
2	Ethyl Methacrylate				69	0		0.13	U	

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F012.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 13:14	**Quant Date:**	06/22/2007 07:02	**Vial:**	8
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706925-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane				83	0		0.14	U	
2	Tetrachloroethene (PCE)				164	0		0.13	U	
2	2-Hexanone				57	0		4.0	U	
2	1,3-Dichloropropane				76	0		0.15	U	
2	Dibromochloromethane				129	0		0.11	U	
2	1,2-Dibromoethane (EDB)				107	0		0.099	U	
2	1-Chlorohexane				91	0d		0.13	U	
2	Chlorobenzene				112	0		0.14	U	
2	Ethylbenzene				106	0		0.13	U	
2	1,1,1,2-Tetrachloroethane				131	0		0.12	U	
2	m,p-Xylenes				106	0d		0.22	U	
2	o-Xylene				106	0		0.11	U	
2	Styrene				103	0		0.095	U	
2	Bromoform				173	0		0.28	U	
2	Isopropylbenzene				105	0d		0.11	U	
2	cis-1,4-Dichloro-2-butene				89	0		0.60	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.14	U	
3	trans-1,4-Dichloro-2-butene				53	0		0.60	U	
3	Bromobenzene				156	0		0.18	U	
3	n-Propylbenzene				91	0d		0.098	U	
3	1,2,3-Trichloropropane				110	0		0.24	U	
3	2-Chlorotoluene				91	0d		0.12	U	
3	1,3,5-Trimethylbenzene				105	0d		0.13	U	
3	4-Chlorotoluene				91	0d		0.12	U	
3	tert-Butylbenzene				119	0		0.13	U	
3	1,2,4-Trimethylbenzene				105	0d		0.15	U	
3	sec-Butylbenzene				105	0d		0.13	U	
3	4-Isopropyltoluene				119	0d		0.13	U	
3	1,3-Dichlorobenzene	11.27		0.00	146	1102m	0.0500	0.11	U	
3	1,4-Dichlorobenzene	11.37	-0.01	0.00	146	1356	0.0600	0.12	U	
3	n-Butylbenzene	11.72		0.00	91	2228	0.0500	0.23	U	
3	1,2-Dichlorobenzene				146	0d		0.12	U	
3	1,2-Dibromo-3-chloropropane				155	0d		1.0	U	
3	1,3,5-Trichlorobenzene	12.58		0.00	180	4783	0.2500	0.35	U	
3	1,2,4-Trichlorobenzene	13.01		0.00	180	1260	0.0900	0.22	U	
3	Hexachlorobutadiene	13.10		0.00	225	815	0.0800	0.28	U	
3	Naphthalene	13.18		0.00	128	1683	0.0900	0.29	U	
3	1,2,3-Trichlorobenzene	13.36		0.00	180	1133	0.0900	0.33	U	
	1,1,2-Trifluoroethane				0	0		1.0	U	NR
	1,1-Dichloropropane				0	0		1.0	U	NR

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?: Insufficient information to determine acceptance
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c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F012.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 13:14	**Quant Date:**	06/22/2007 07:02	**Vial:**	8
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0706925-4			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
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d: Compound manually deleted
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*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

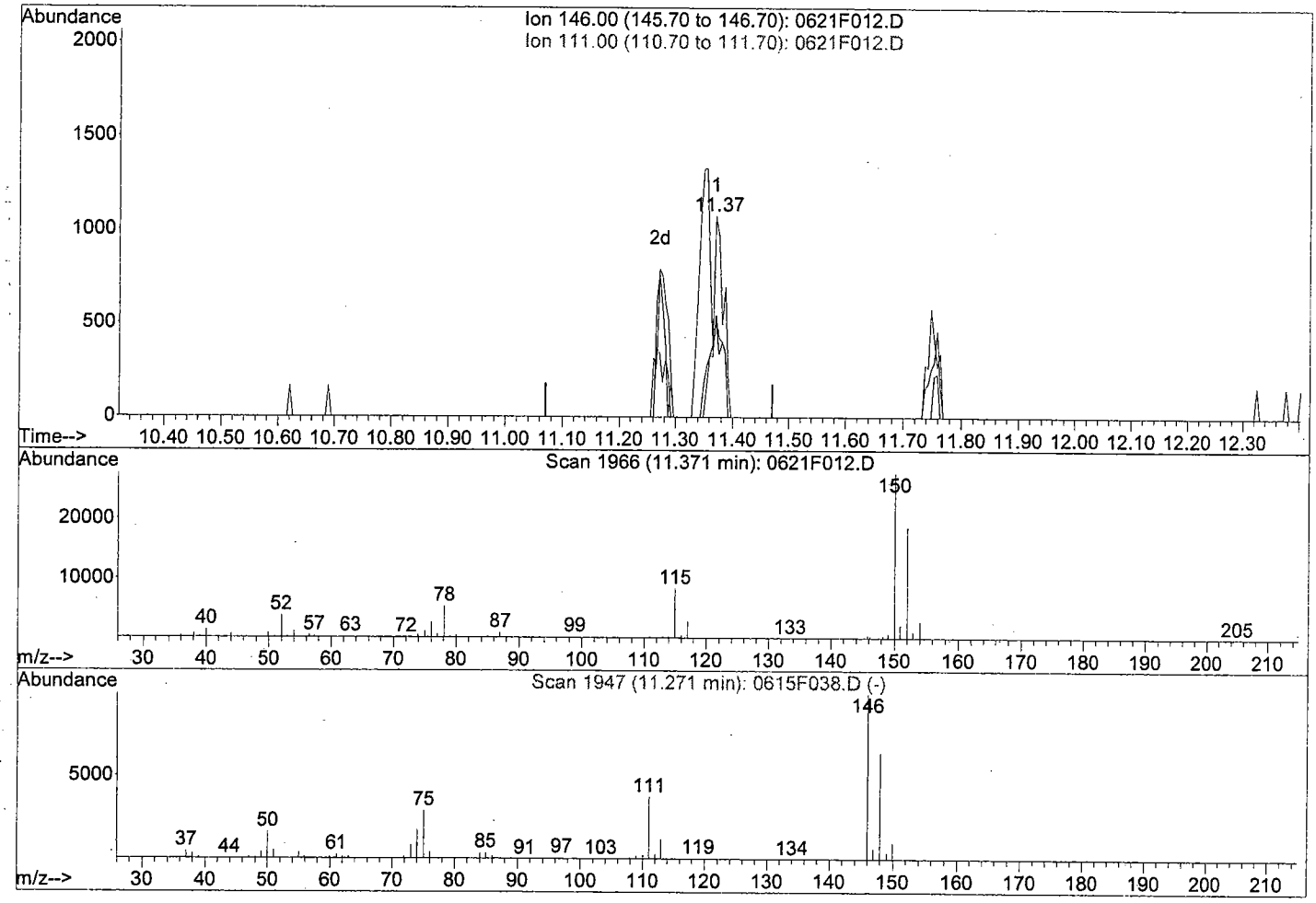
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F012.D
Acq On : 21 Jun 2007 1:14 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:32 2007

Vial: 8
Operator:
Inst : GC-MS 18
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration



TIC: 0621F012.D

(94) 1,3-Dichlorobenzene (T)

11.37min 0.06PPB

response 1356

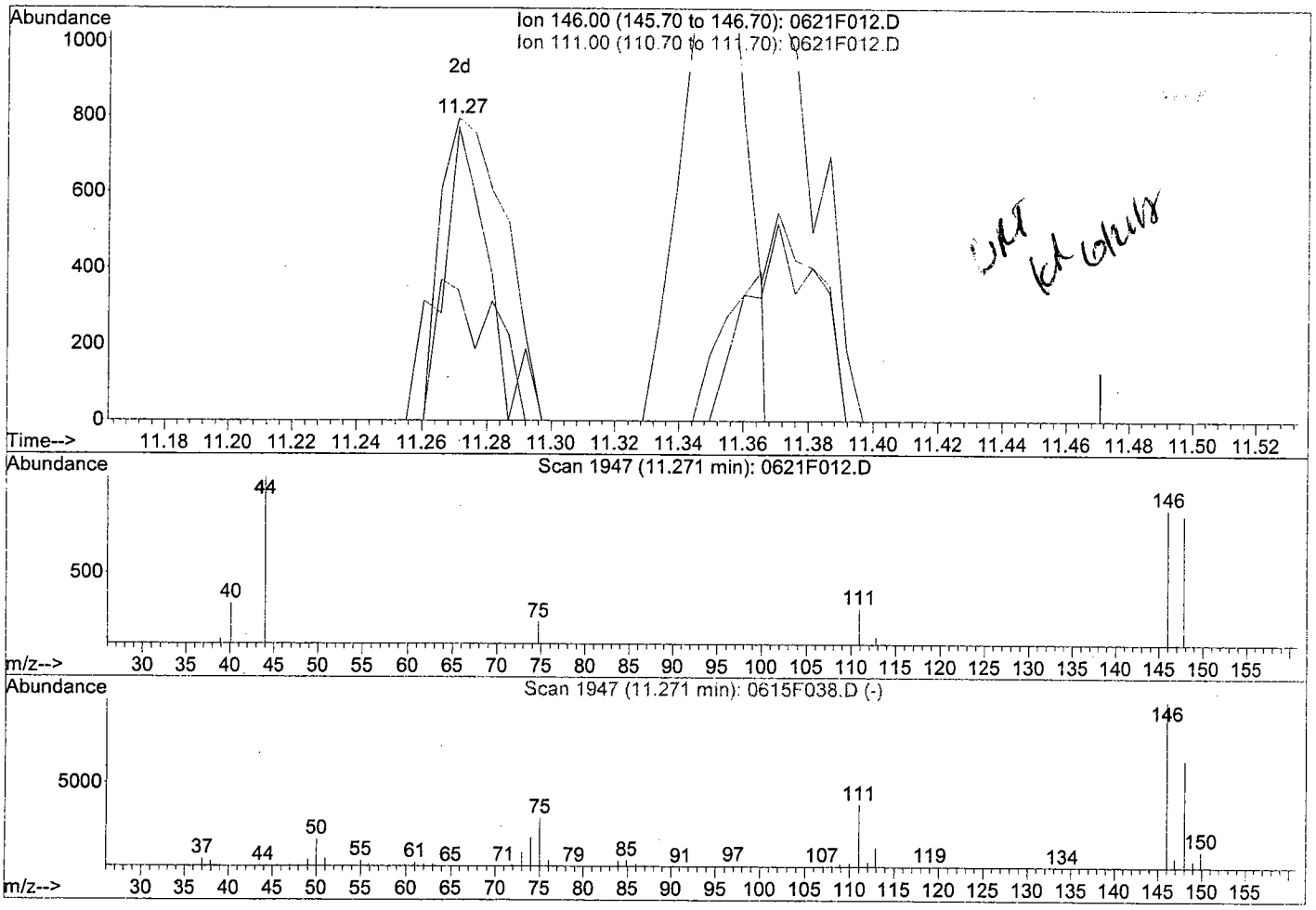
Ion	Exp%	Act%
146.00	100	100
111.00	37.70	50.88
148.00	64.70	48.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F012.D
Acq On : 21 Jun 2007 1:14 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:32 2007

Vial: 8
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration



TIC: 0621F012.D

(94) 1,3-Dichlorobenzene (T)

11.27min 0.05PPB m

response 1102

Ion	Exp%	Act%
146.00	100	100
111.00	37.70	43.07
148.00	64.70	96.98#
0.00	0.00	0.00

0621F012.D 061307.M Thu Jun 21 13:33:02 2007

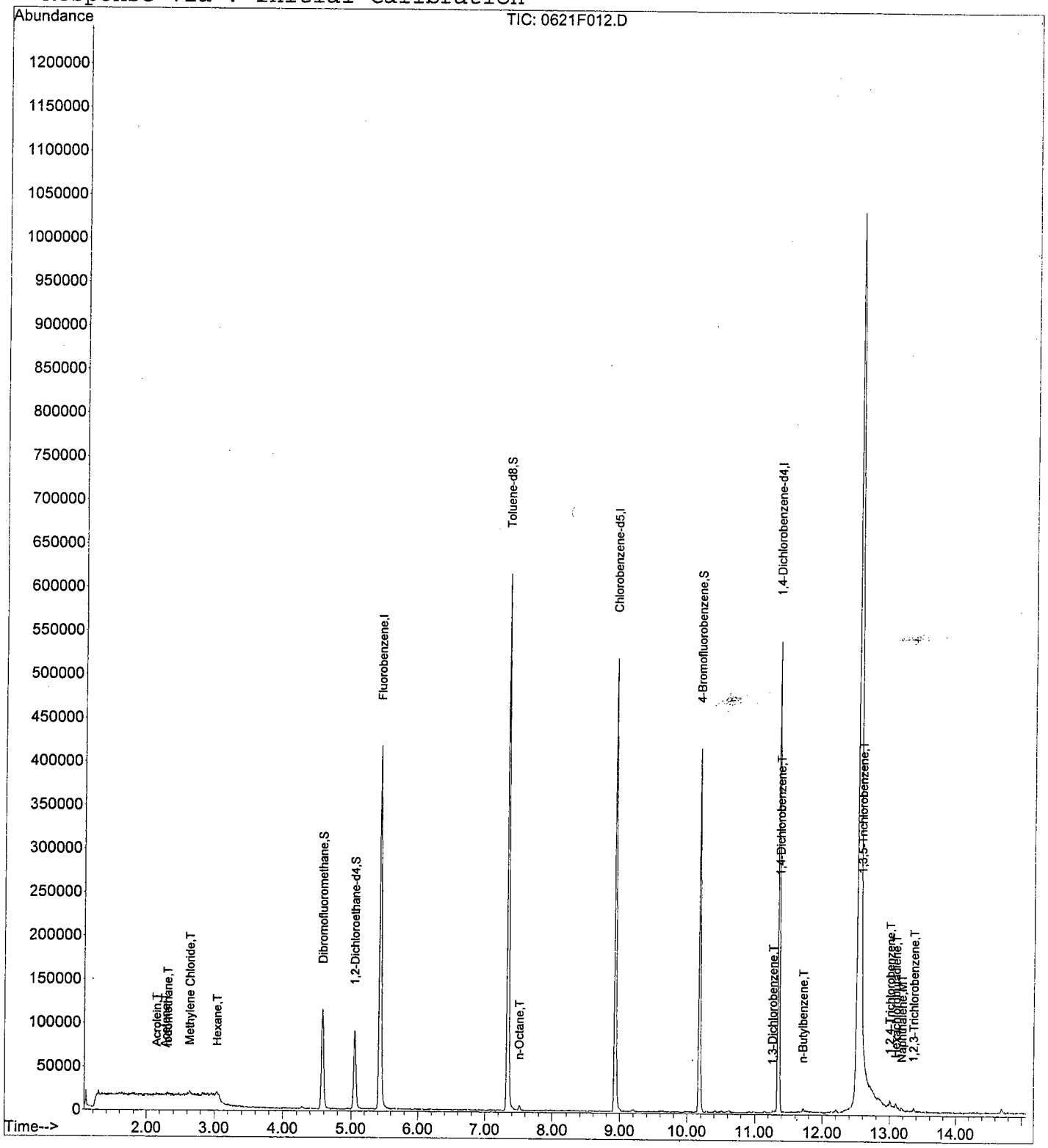
Quantitation Report (QT Reviewed)

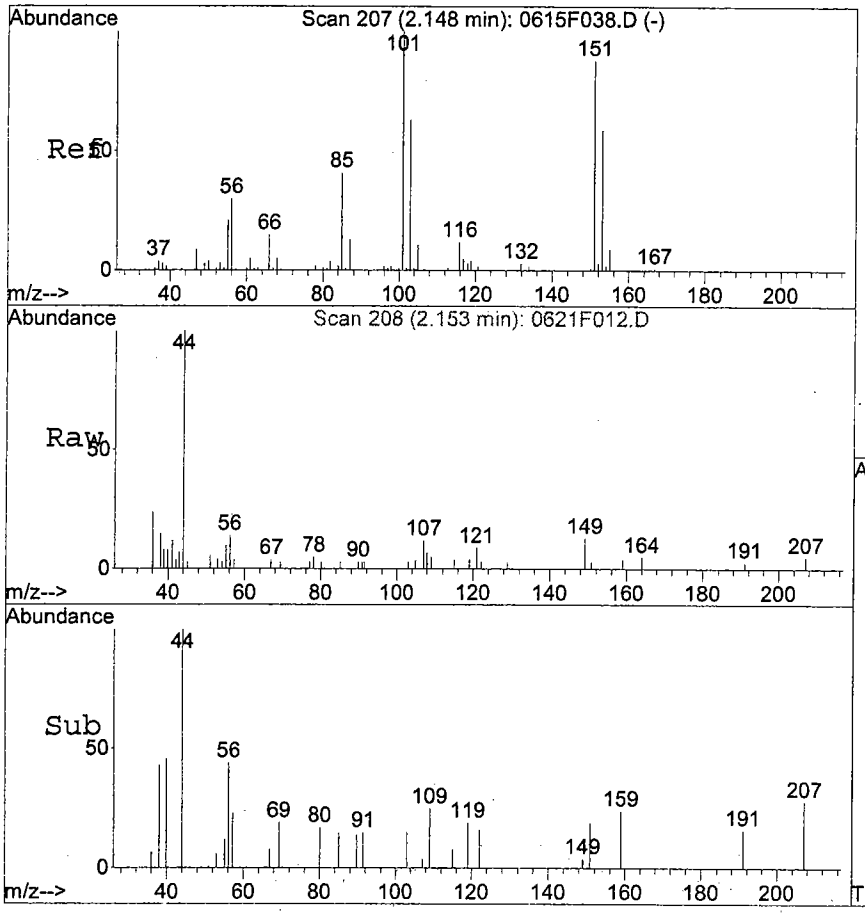
Data File : J:\MS18\DATA\062107\0621F012.D
Acq On : 21 Jun 2007 1:14 pm
Sample : MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 13:33 2007

Vial: 8
Operator:
Inst : GC-MS 18
Multiplr: 1.00

Quant Results File: 061307.RES

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration

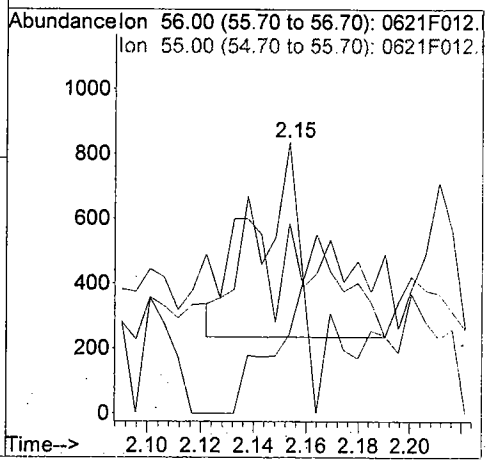


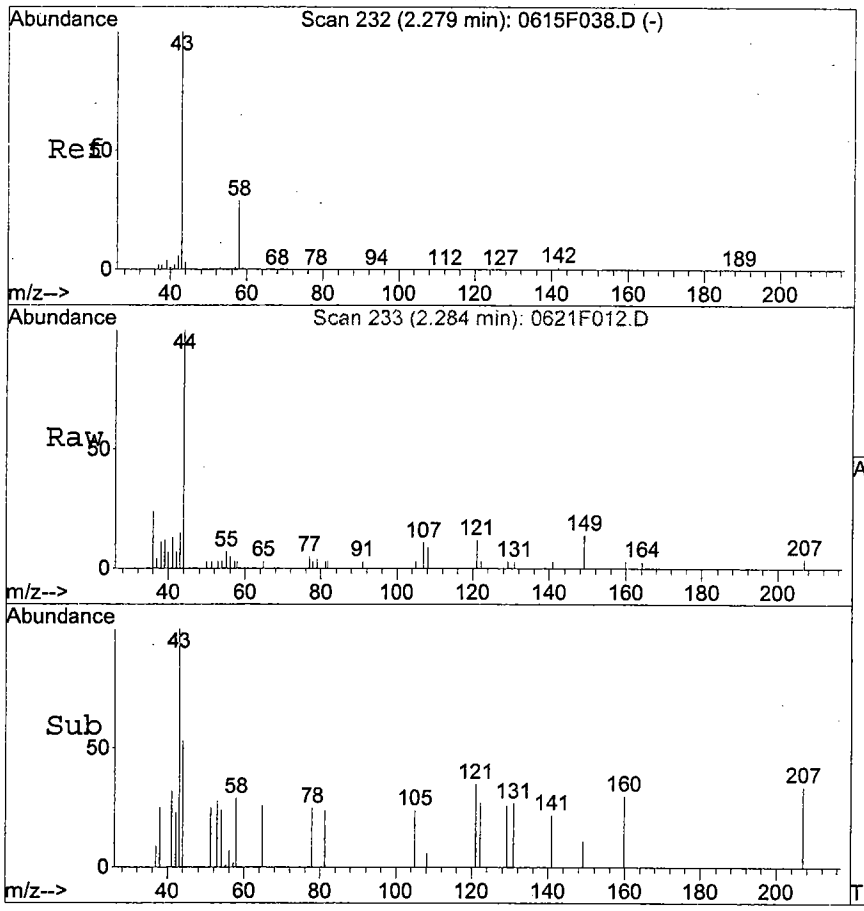


#10
Acrolein
Concen: 2.00 PPB
RT: 2.15 min Scan# 208
Delta R.T. 0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion: 56 Resp: 923

Ion	Ratio	Lower	Upper
56	100		
55	16.0	41.8	101.8#
53	40.4	0.0	39.2#

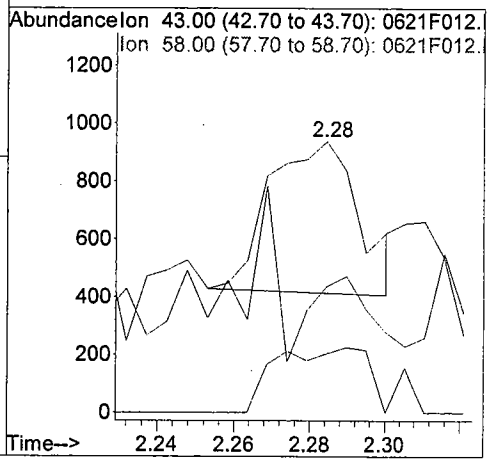


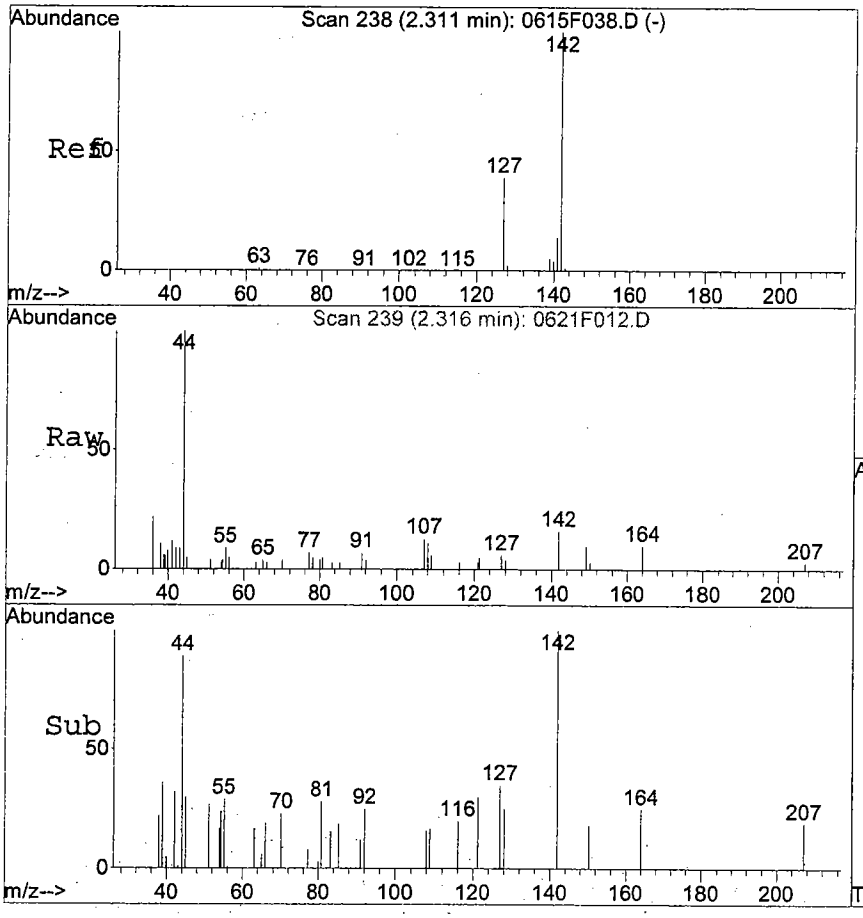


#13
Acetone
Concen: 0.75 PPB
RT: 2.28 min Scan# 233
Delta R.T. 0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion: 43 Resp: 857

Ion	Ratio	Lower	Upper
43	100		
58	40.0	0.0	59.4
42	31.2	0.0	36.4

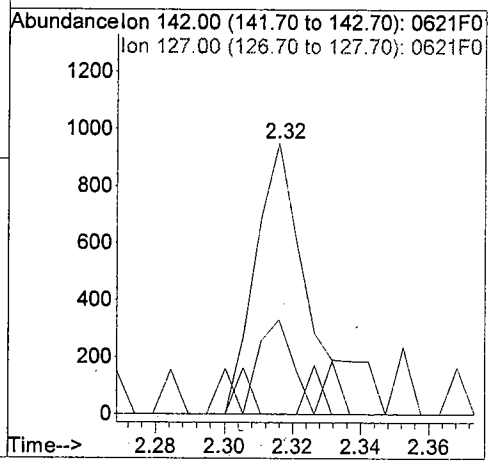


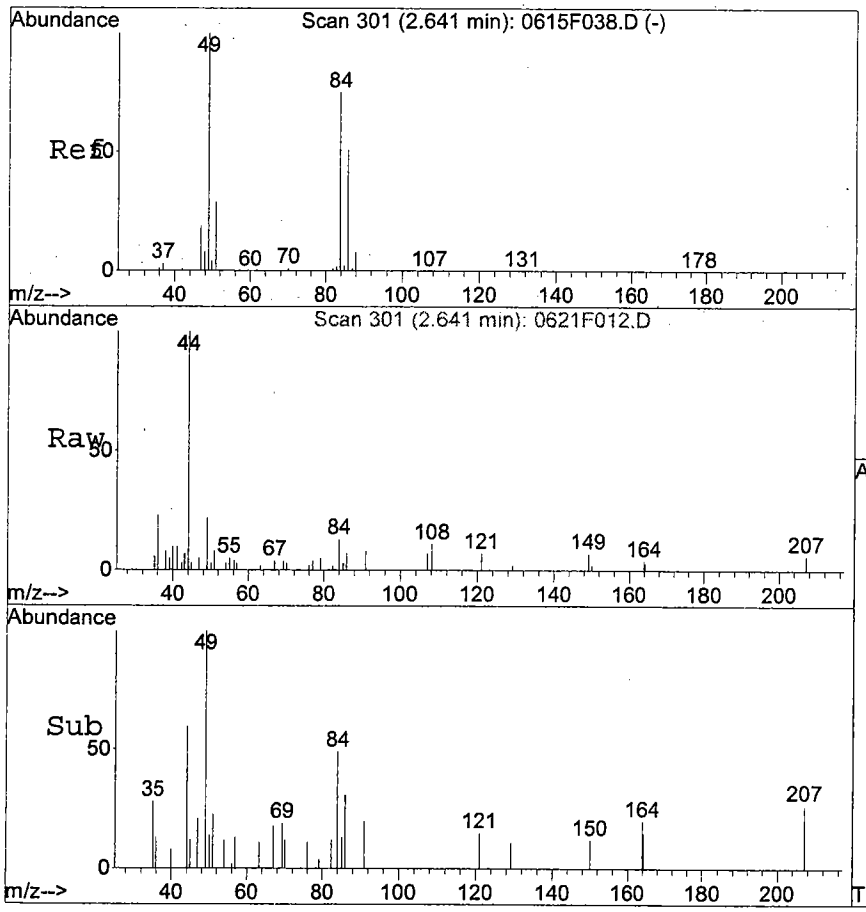


#14
Iodomethane
Concen: 0.08 PPB
RT: 2.32 min Scan# 239
Delta R.T. 0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:142 Resp: 1055

Ion	Ratio	Lower	Upper
142	100		
127	34.8	8.6	68.6
141	0.0	0.0	43.7

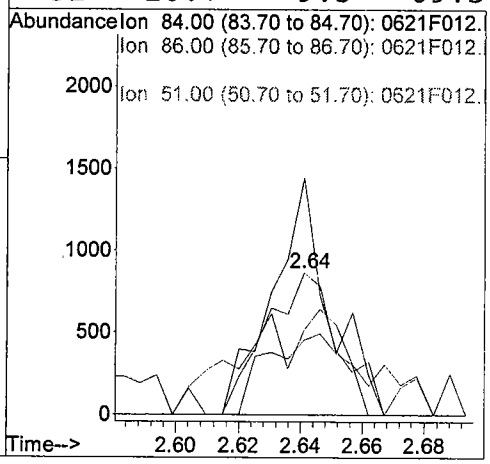


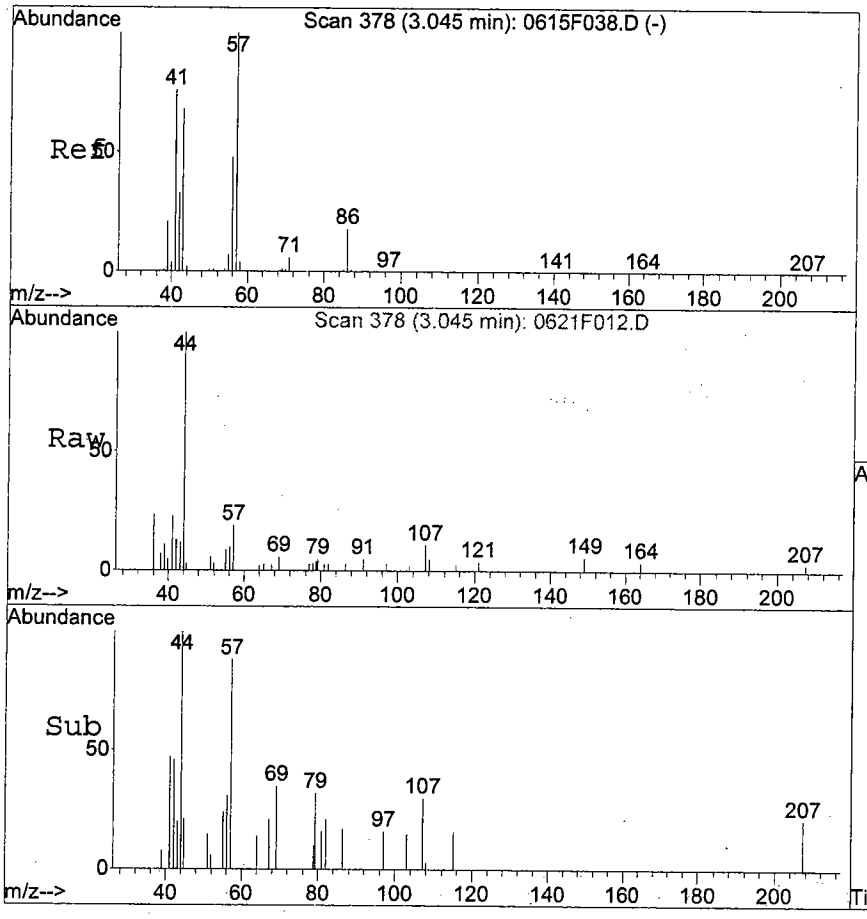


#18
Methylene Chloride
Concen: 0.12 PPB
RT: 2.64 min Scan# 301
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion: 84 Resp: 1503

Ion	Ratio	Lower	Upper
84	100		
86	52.5	38.0	98.0
49	167.3	103.8	163.8#
51	28.7	9.3	69.3



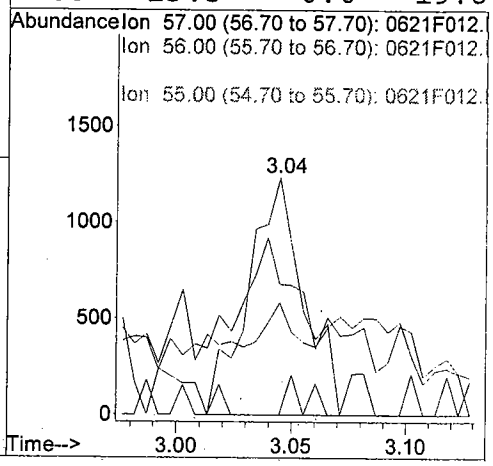


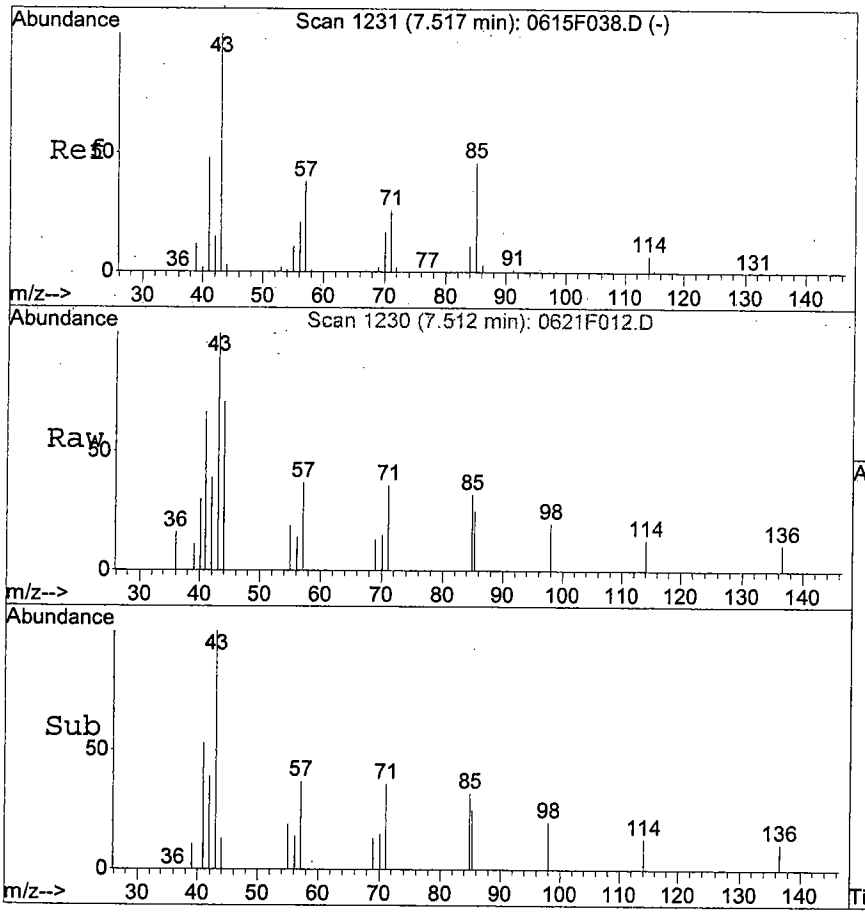
#23
Hexane
Concen: 0.17 PPB
RT: 3.04 min Scan# 378
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

deleted for Tics

Tgt Ion: 57 Resp: 2191

Ion	Ratio	Lower	Upper
57	100		
56	32.9	18.1	78.1
71	0.0	0.0	36.4
55	13.5	0.0	19.8



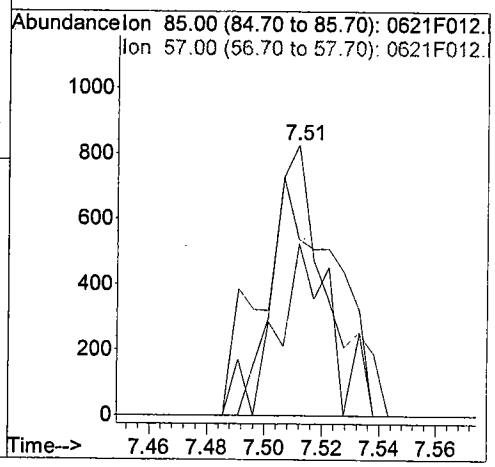


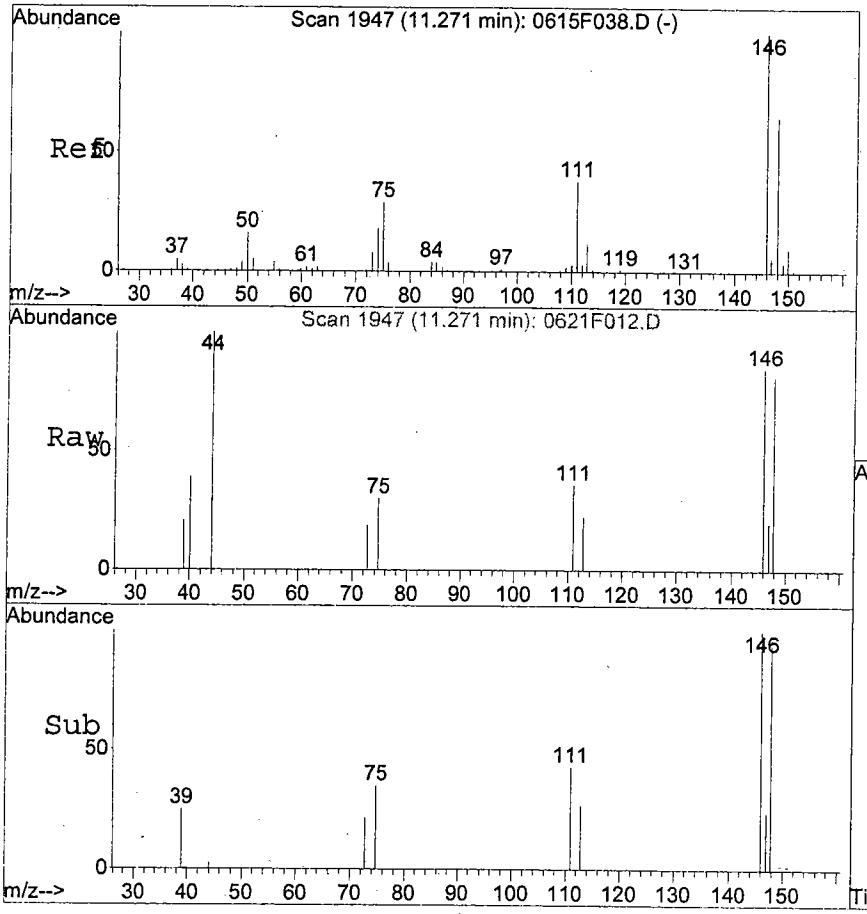
#61
n-Octane
Concen: 0.23 PPB
RT: 7.51 min Scan# 1230
Delta R.T. -0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

deleted for Tics

Tgt Ion: 85 Resp: 1219

Ion	Ratio	Lower	Upper
85	100		
57	65.0	52.7	112.7
71	63.4	27.7	87.7

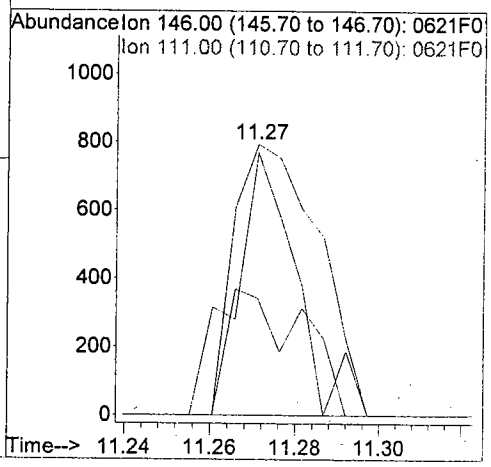


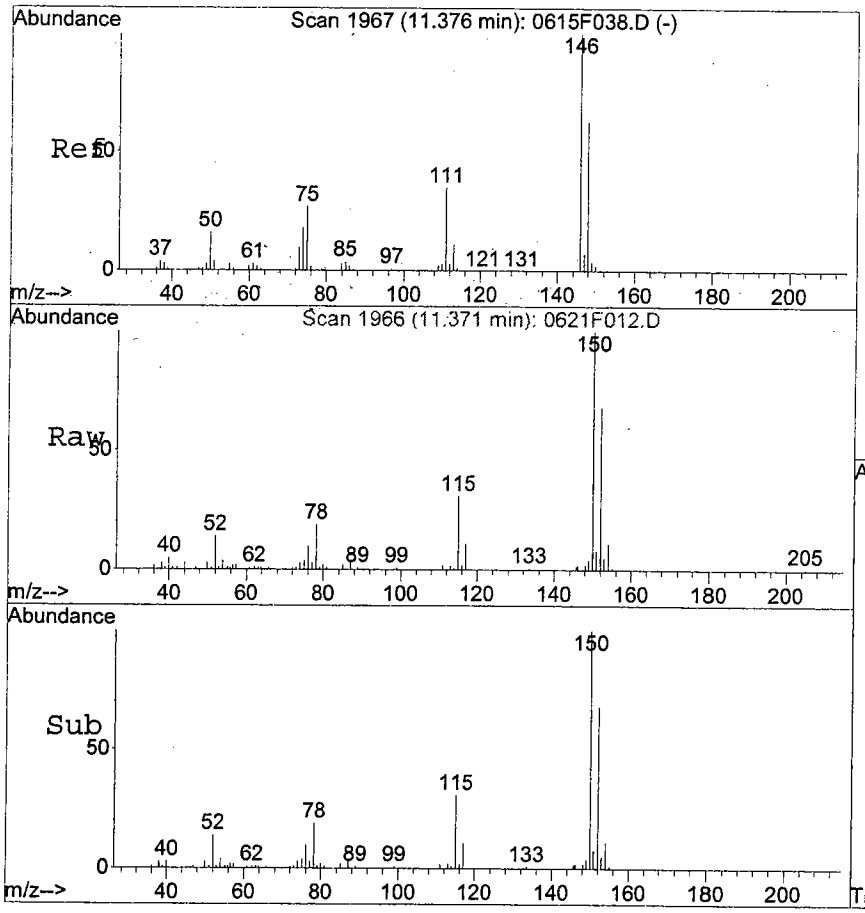


#94
1,3-Dichlorobenzene
Concen: 0.05 PPB m
RT: 11.27 min Scan# 1947
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:146 Resp: 1102

Ion	Ratio	Lower	Upper
146	100		
111	43.1	7.7	67.7
148	97.0	34.7	94.7#

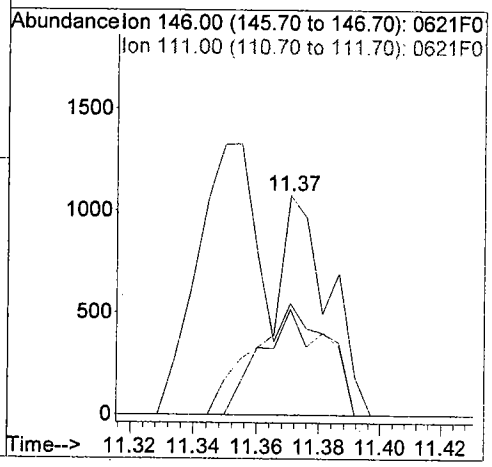


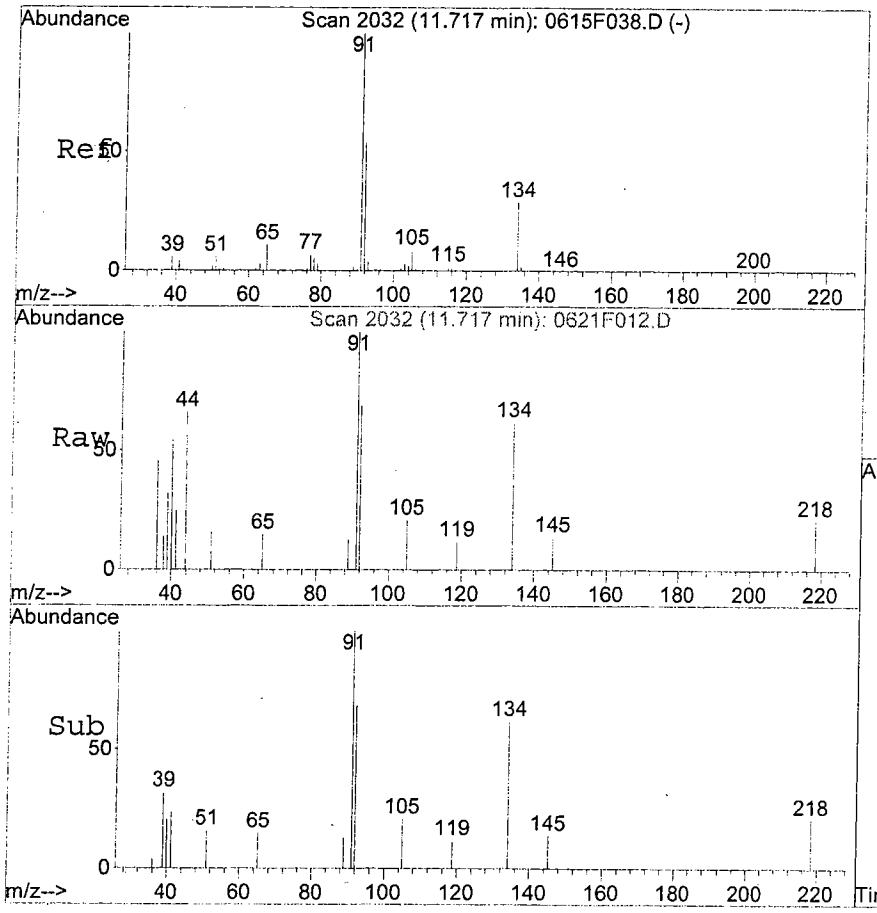


#95
1,4-Dichlorobenzene
Concen: 0.06 PPB
RT: 11.37 min Scan# 1966
Delta R.T. -0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:146 Resp: 1356

Ion	Ratio	Lower	Upper
146	100		
111	50.9	5.0	65.0
148	48.2	33.5	93.5

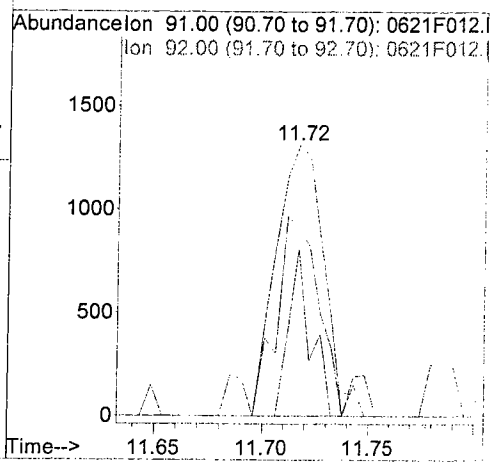


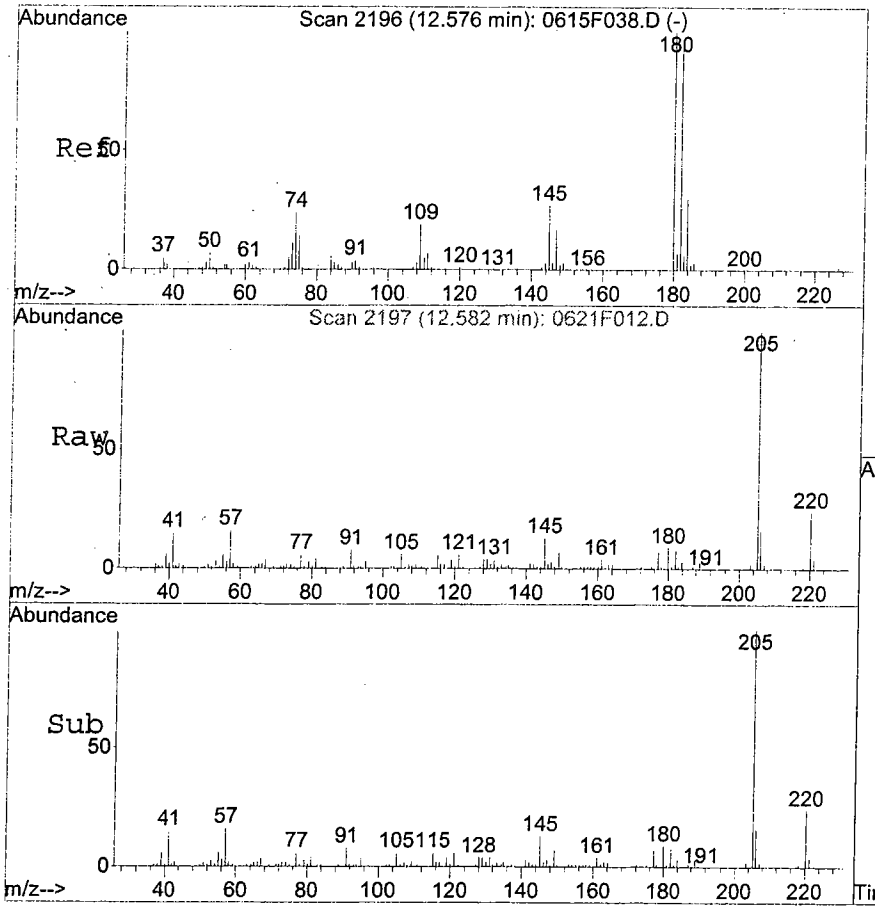


#96
n-Butylbenzene
Concen: 0.05 PPB
RT: 11.72 min Scan# 2032
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion: 91 Resp: 2228

Ion	Ratio	Lower	Upper
91	100		
92	69.2	24.3	84.3
134	61.8	0.0	59.3#

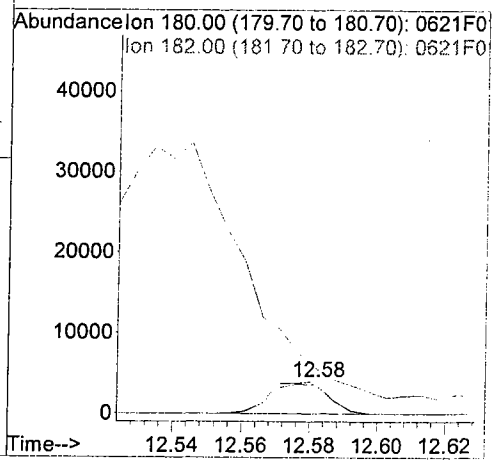


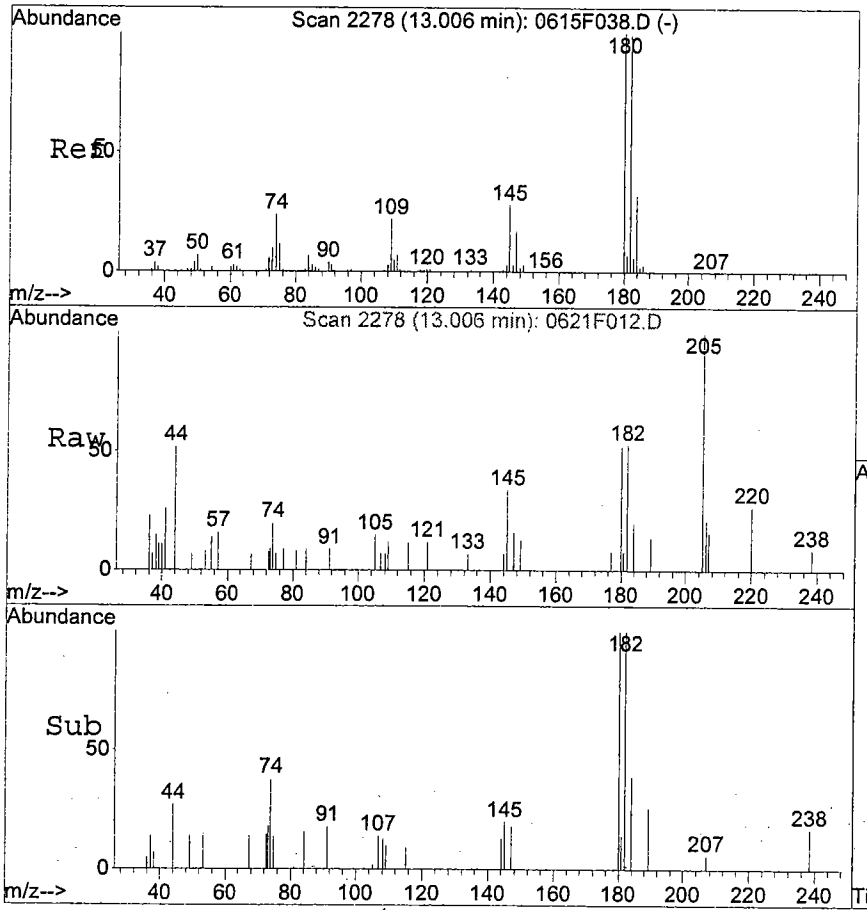


#99
1,3,5-Trichlorobenzene
Concen: 0.25 PPB
RT: 12.58 min Scan# 2197
Delta R.T. 0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:180 Resp: 4783

Ion	Ratio	Lower	Upper
180	100		
182	90.1	64.7	124.7
145	92.4	0.0	57.1#

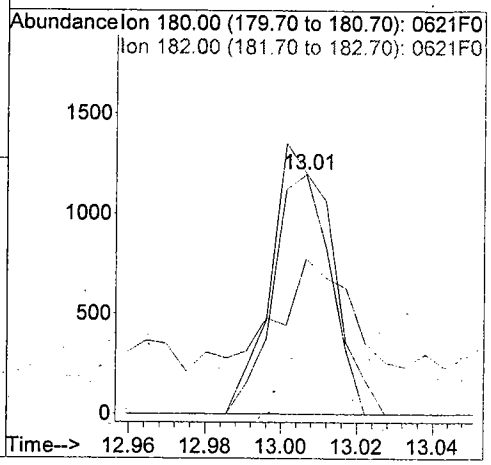


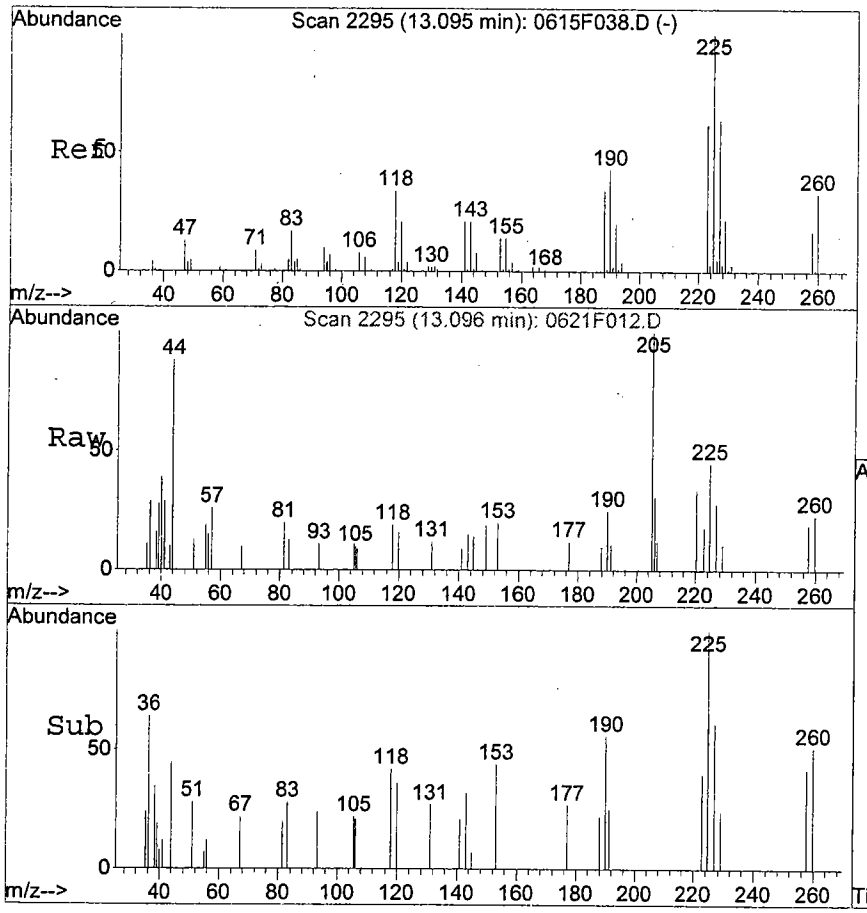


#100
1,2,4-Trichlorobenzene
Concen: 0.09 PPB
RT: 13.01 min Scan# 2278
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:180 Resp: 1260

Ion	Ratio	Lower	Upper
180	100		
182	87.8	69.4	129.4
145	37.9	0.0	58.5

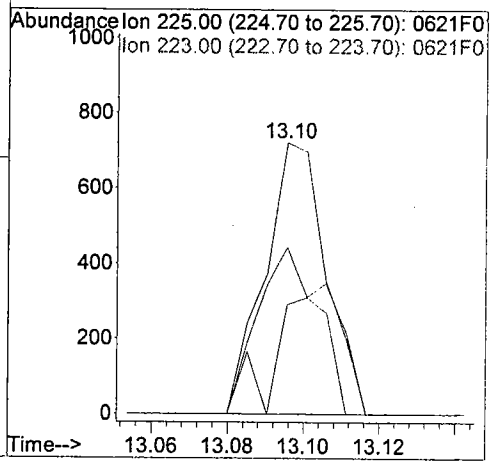


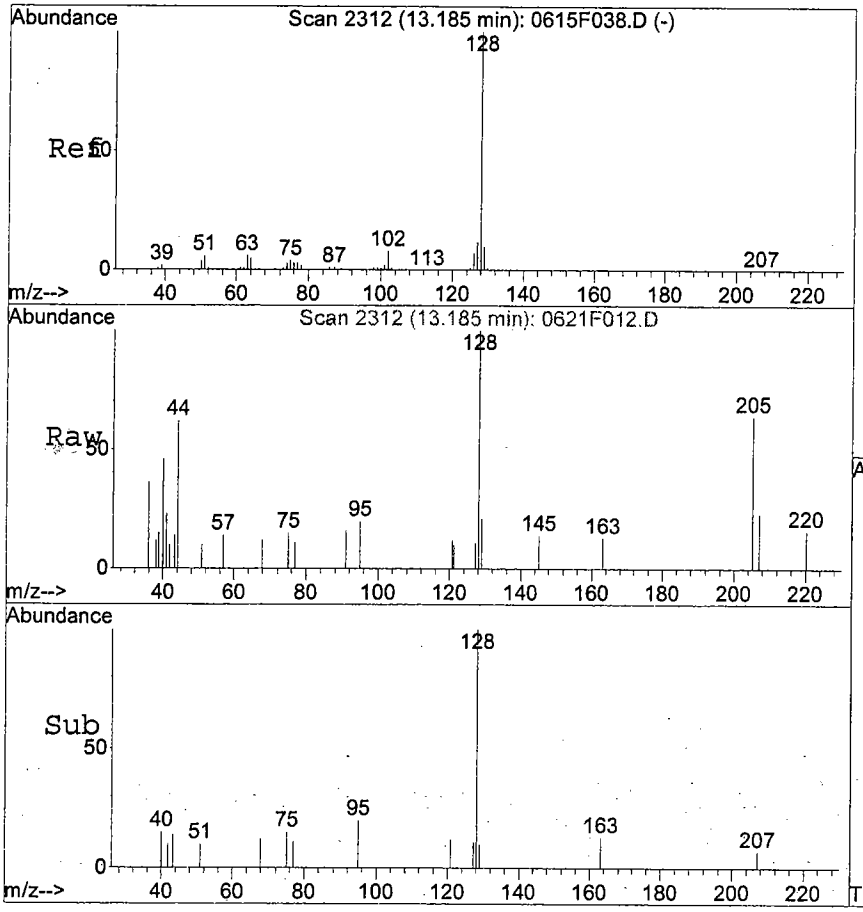


#101
Hexachlorobutadiene
Concen: 0.08 PPB
RT: 13.10 min Scan# 2295
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:225 Resp: 815

Ion	Ratio	Lower	Upper
225	100		
223	40.4	31.9	91.9
227	61.4	34.1	94.1

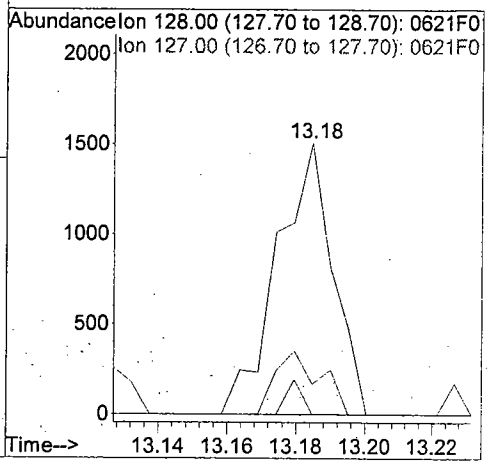


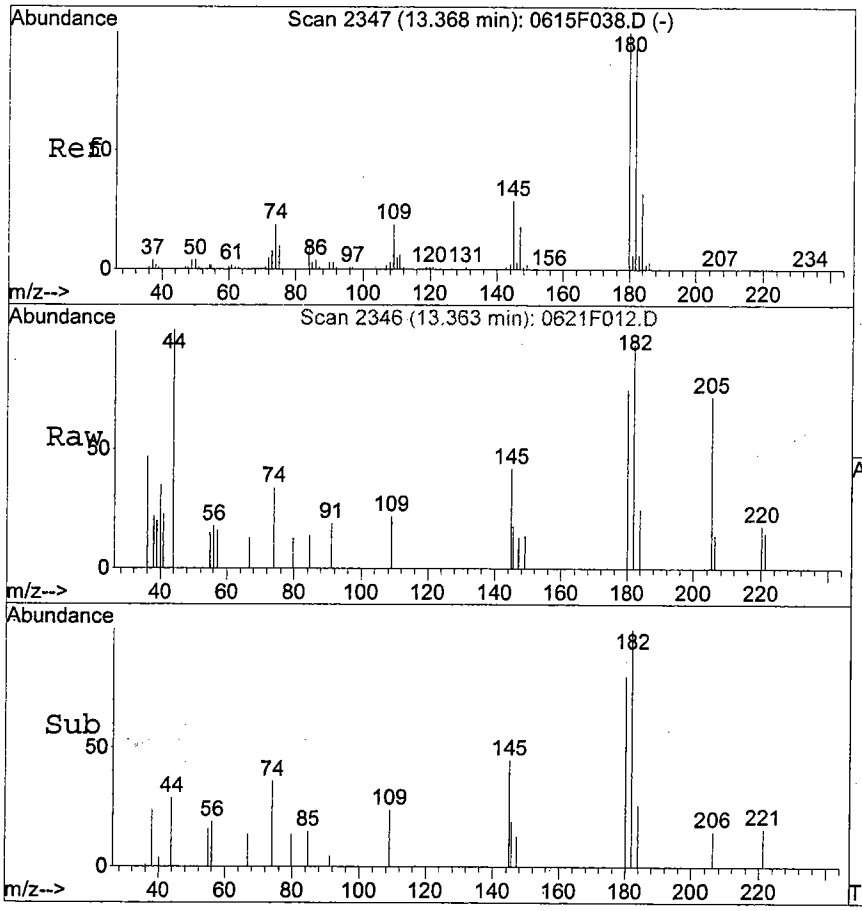


#102
Naphthalene
Concen: 0.09 PPB
RT: 13.18 min Scan# 2312
Delta R.T. 0.00 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:128 Resp: 1683

Ion	Ratio	Lower	Upper
128	100		
127	11.1	0.0	42.1
102	0.0	0.0	38.0

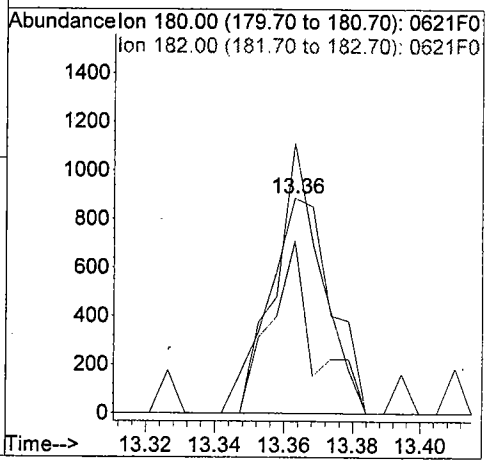




#103
1,2,3-Trichlorobenzene
Concen: 0.09 PPB
RT: 13.36 min Scan# 2346
Delta R.T. -0.01 min
Lab File: 0621F012.D
Acq: 21 Jun 2007 1:14 pm

Tgt Ion:180 Resp: 1133

Ion	Ratio	Lower	Upper
180	100		
182	125.6	66.3	126.3
145	80.2	0.0	59.3#



Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 21 Jun 2007 1:14 pm
Data File: J:\MS18\DATA\062107\0621F012.D
Name: MB
Misc:
Method: J:\MS18\METHODS\061307.M (RTE Integrator)
Title: VOA MS18 EPA Method 8260B
Library Searched: L:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Exception Report

Data File: J:\MS18\DATA\062107\0621F007.D
Lab ID: KWG0706925-3
RunType: LCS
Matrix: WATER

Date Acquired: 06/21/2007 11:31
Date Quantitated: 06/21/2007 11:52
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA		x
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0008	0.01	NA	MRL
	Acetonitrile	0.0056	0.01	NA	NT
	tert-Butyl Alcohol	0.0065	0.01	NA	↓
	Isobutyl Alcohol	0.0029	0.01	NA	MRL
	2-Butanone (MEK)	0.0093	0.01	NA	↓
Second Source ICAL Verification	Vinyl Acetate	-54.8	NA	40	NT
Continuing Calibration Recovery	2-Chloroethyl Vinyl Ether	-44.6	NA	40	MRL
	tert-Butyl Formate	-76.5	NA	30	NT
	2-Nitropropane	-38.5	NA	30	↓
Continuing Calibration Minimum RF	1,4-Dioxane	0.0007	0.01	NA	MRL
	Acetonitrile	0.0058	0.01	NA	NT
	tert-Butyl Alcohol	0.0075	0.01	NA	↓
	Isobutyl Alcohol	0.0022	0.01	NA	MRL

Primary Review: KL 6/27/7

Secondary Review: 6/27/7

Exception Report

Data File: J:\MS18\DATA\062107\0621F007.D
Lab ID: KWG0706925-3
RunType: LCS
Matrix: WATER

Date Acquired: 06/21/2007 11:31
Date Quantitated: 06/21/2007 11:52
Batch ID: KWG0706924
Analysis Method: 8260B
MethodJoinID: MJ119

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	2-Butanone (MEK)	0.0089	0.01	NA	

Primary Review: KW 06/27/07

Secondary Review: 6/27/7

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8260B VOC_FP	**Collect Date:**		**Receive Date:**	06/21/2007

Analysis Lot:	KWG0706924	**Prep Lot:**	KWG0706925	**Report Group:**	
Analysis Method:	8260B	**Prep Method:**	EPA 5030B		
Prep Ref:	611733	**Prep Date:**	06/21/2007		

Quant Method:	J:\MS18\METHODS\061307.M	**Calibration ID:**	CAL6351
Title:			
Tune Ref:	J:\MS18\DATA\062107\0621F005.D	**Method ID:**	MJ119
MB Ref:		**Quant based on Method**	

Data File:	J:\MS18\DATA\062107\0621F007.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:31	**Quant Date:**	06/21/2007 11:52	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706925-3			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.44	0.00	96	436474	10.00	OK
2	Chlorobenzene-d5	8.93	0.00	82	163255	10.00	OK
3	1,4-Dichlorobenzene-d4	11.35	0.00	152	148025	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.58	0.00	0.00	113	84885	9.71	97	82-125	OK
1	1,2-Dichloroethane-d4	5.06	0.00	0.00	65	78270	8.96	90	49-142	OK
1	Toluene-d8	7.34	0.00	0.00	98	418119	10.50	105	87-120	OK
2	4-Bromofluorobenzene	10.18	0.00	0.00	95	137931	10.02	100	73-118	OK

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.12		0.00	85	128366	10.60	10.6		
1	Chloromethane	1.24		0.00	50	155015	9.50	9.50		
1	Vinyl Chloride	1.31		0.00	62	146802	10.02	10.0		
1	Bromomethane	1.54		0.00	96	63691	7.54	7.54		
1	Chloroethane	1.61		0.00	64	77553	8.46	8.46		
1	Dichlorofluoromethane (CFC 21	1.76		0.00	67	223074	9.96	9.96		
1	Trichlorofluoromethane	1.77		0.00	101	157232	8.16	8.16		
1	Ethyl Ether	1.99		0.00	59	57875	9.07	9.07		
1	Acrolein	2.15		0.00	56	55287	120.07	120		
1	Trichlorotrifluoroethane	2.15		0.00	151	83529	8.62	8.62		
1	1,1-Dichloroethene	2.17		0.00	96	100384	9.47	9.47		
1	Acetone	2.27		0.00	43	50089	43.80	43.8		
1	Iodomethane	2.31		0.00	142	381236	28.58	28.6		
1	Carbon Disulfide	2.34		0.00	76	582468	16.47	16.5		
1	3-Chloro-1-propene	2.50		0.00	76	193851	29.02	29.0		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F007.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:31	**Quant Date:**	06/21/2007 11:52	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706925-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Acetonitrile	2.59	-0.01	0.00	40	79092	325.18	325		
1	Methylene Chloride	2.64		0.00	84	101703	8.47	8.47		
1	tert-Butyl Alcohol	2.75	-0.01	0.00	59	31026	109.44	109		
1	Acrylonitrile	2.94		0.00	53	59841	39.06	39.1		
1	Methyl tert-Butyl Ether	2.83		0.00	73	179566	9.23	9.23		
1	trans-1,2-Dichloroethene	2.85		0.00	96	109200	8.47	8.47		
1	n-Hexane	3.04		0.00	57	379691	28.94	28.9		
1	Diisopropyl Ether	3.32		0.00	45	738680	20.05	20.1		
1	1,1-Dichloroethane	3.31		0.00	63	212088	9.58	9.58		
1	Vinyl Acetate	3.37		0.00	86	47258	36.72	36.7		
1	Chloroprene	3.37		0.00	53	590770	25.10	25.1		
1	tert-Butyl Ethyl Ether	3.72		0.00	59	500569	18.87	18.9		
1	2,2-Dichloropropane	3.93		0.00	77	155491	8.03	8.03		
1	cis-1,2-Dichloroethene	3.97		0.00	96	117914	9.35	9.35		
1	2-Butanone (MEK)	4.03	-0.01	0.00	72	18059	44.41	44.4		
1	Propionitrile	4.19	-0.01	0.00	54	14886	28.67	28.7		
1	Ethyl Acetate	4.07		0.00	61	18100	31.00	31.0		
1	Methacrylonitrile	4.33		0.00	67	55356	28.08	28.1		
1	Bromochloromethane	4.27		0.00	128	39620	9.07	9.07		
1	Tetrahydrofuran	4.27	-0.01	0.00	71	7821	17.78	17.8		
1	Chloroform	4.37		0.00	83	181754	8.90	8.90		
1	tert-Butyl Formate	4.40		0.00	59	15667	3.60	3.60		
1	1,1,1-Trichloroethane (TCA)	4.52	-0.01	0.00	97	164076	8.28	8.28		
1	Carbon Tetrachloride	4.69	0.01	0.00	117	133287	7.92	7.92		
1	1,1-Dichloropropene	4.75	0.01	0.00	75	156464	8.95	8.95		
1	Isobutyl Alcohol	5.08	-0.01	0.00	43	31833	254.46	254		
1	Benzene	5.01		0.00	78	451941	9.13	9.13		
1	1,2-Dichloroethane (EDC)	5.16		0.00	62	99308	8.96	8.96		
1	tert-Amyl Methyl Ether	5.17	-0.01	0.00	55	108589	19.68	19.7		
1	Trichloroethene (TCE)	5.89		0.00	95	112328	9.08	9.08		
1	1,2-Dichloropropane	6.23	0.01	0.00	63	100730	9.27	9.27		
1	Dibromomethane	6.36		0.00	93	35409	8.69	8.69		
1	Methyl Methacrylate	6.41		0.00	69	101650	27.10	27.1		
1	1,4-Dioxane	6.40	-0.01	0.00	88	8363	231.89	232		
1	Bromodichloromethane	6.56	-0.01	0.00	83	101564	8.37	8.37		
1	2-Nitropropane	6.95		0.00	43	20601	16.77	16.8		
1	2-Chloroethyl Vinyl Ether	6.98		0.00	63	20226	5.43	5.43		
1	cis-1,3-Dichloropropene	7.11		0.00	75	122319	8.65	8.65		
1	4-Methyl-2-pentanone (MIBK)	7.31		0.00	58	76000	47.82	47.8		
1	Toluene	7.41		0.00	92	277852	8.84	8.84		
2	n-Octane	7.52		0.00	85	89700	17.02	17.0		
2	trans-1,3-Dichloropropene	7.78		0.00	75	80595	7.68	7.68		
2	Ethyl Methacrylate	7.85		0.00	69	219121	29.28	29.3		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F007.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:31	**Quant Date:**	06/21/2007 11:52	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706925-3			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	1,1,2-Trichloroethane	7.97		0.00	83	46354	8.84	8.84		
2	Tetrachloroethene (PCE)	7.98	0.01	0.00	164	95773	8.60	8.60		
2	2-Hexanone	8.25		0.00	57	22606	43.14	43.1		
2	1,3-Dichloropropane	8.15		0.00	76	106072	9.34	9.34		
2	Dibromochloromethane	8.34		0.00	129	53169	8.03	8.03		
2	1,2-Dibromoethane (EDB)	8.46	0.01	0.00	107	49612	8.81	8.81		
2	1-Chlorohexane	8.95	-0.01	0.00	91	154344	8.83	8.83		
2	Chlorobenzene	8.96		0.00	112	293106	9.14	9.14		
2	Ethylbenzene	9.06		0.00	106	176858	9.14	9.14		
2	1,1,1,2-Tetrachloroethane	9.07		0.00	131	81810	8.48	8.48		
2	m,p-Xylenes	9.19		0.00	106	423161	17.97	18.0		
2	o-Xylene	9.61		0.00	106	197968	9.12	9.12		
2	Styrene	9.64		0.00	103	149375m	9.57	9.57		
2	Bromoform	9.83		0.00	173	24422	7.21	7.21		
2	Isopropylbenzene	9.99		0.00	105	484793	8.29	8.29		
2	cis-1,4-Dichloro-2-butene	10.15		0.00	89	14311	25.29	25.3		
3	1,1,2,2-Tetrachloroethane	10.39		0.00	83	52642	9.35	9.35		
3	trans-1,4-Dichloro-2-butene	10.46		0.00	53	38556	29.30	29.3		
3	Bromobenzene	10.31		0.00	156	109444	8.86	8.86		
3	n-Propylbenzene	10.41		0.00	91	637001	9.34	9.34		
3	1,2,3-Trichloropropane	10.43		0.00	110	16490	9.26	9.26		
3	2-Chlorotoluene	10.51		0.00	91	364830	9.51	9.51		
3	1,3,5-Trimethylbenzene	10.61		0.00	105	433206	9.21	9.21		
3	4-Chlorotoluene	10.63		0.00	91	409345	9.10	9.10		
3	tert-Butylbenzene	10.92		0.00	119	394301	9.30	9.30		
3	1,2,4-Trimethylbenzene	10.99		0.00	105	424278	9.29	9.29		
3	sec-Butylbenzene	11.15	0.01	0.00	105	567923	9.96	9.96		
3	4-Isopropyltoluene	11.30		0.00	119	464646	9.10	9.10		
3	1,3-Dichlorobenzene	11.27		0.00	146	224291	9.03	9.03		
3	1,4-Dichlorobenzene	11.38		0.00	146	219829	9.21	9.21		
3	n-Butylbenzene	11.72		0.00	91	403710	9.09	9.09		
3	1,2-Dichlorobenzene	11.75		0.00	146	188085	9.08	9.08		
3	1,2-Dibromo-3-chloropropane	12.48	0.01	0.00	155	6127	8.33	8.33		
3	1,3,5-Trichlorobenzene	12.58		0.00	180	725893	36.40	36.4		
3	1,2,4-Trichlorobenzene	13.01		0.00	180	135038	9.05	9.05		
3	Hexachlorobutadiene	13.10		0.00	225	90272	8.94	8.94		
3	Naphthalene	13.18		0.00	128	183649	9.35	9.35		
3	1,2,3-Trichlorobenzene	13.36		0.00	180	113197	9.26	9.26		
	1,1,2-Trifluoroethane				0	0		1.0	UJ	NR
	1,1-Dichloropropane				0	0		1.0	UJ	NR

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS18\DATA\062107\0621F007.D			**Instrument:**	GC-MS 18
Acqu Date:	06/21/2007 11:31	**Quant Date:**	06/21/2007 11:52	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0706925-3			**Soln Conc. Units:**	PPB

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

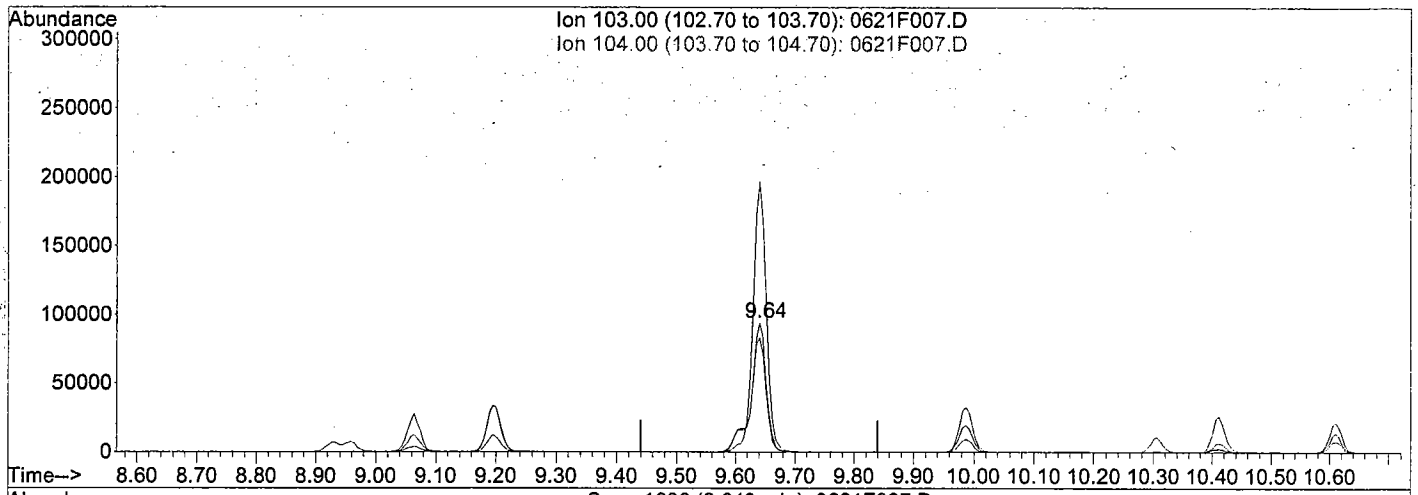
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

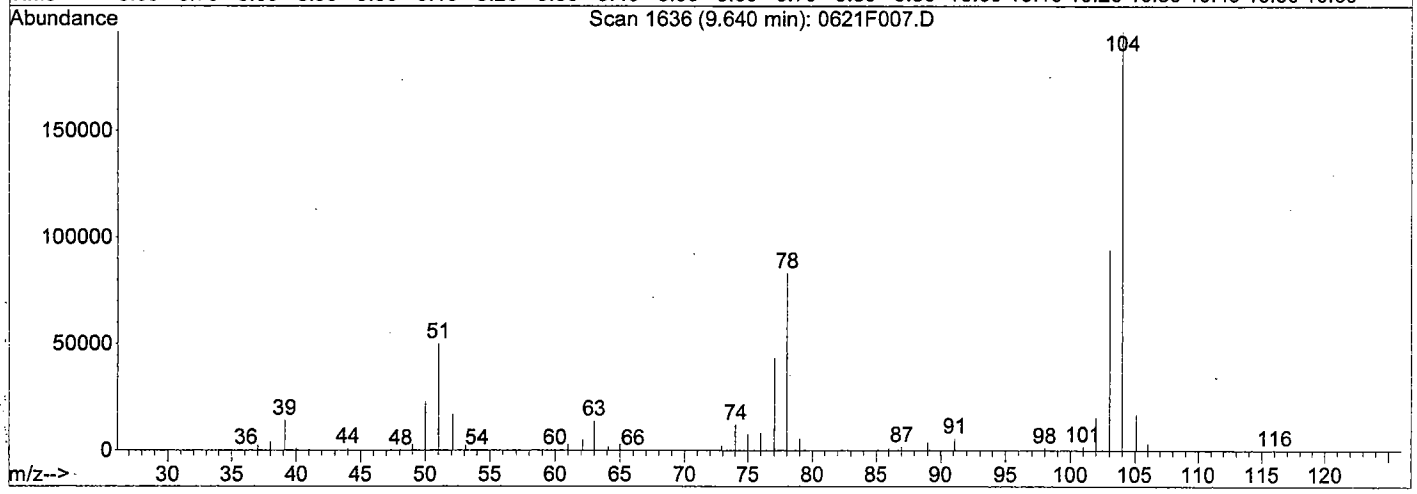
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F007.D
Acq On : 21 Jun 2007 11:31 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:51 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration





TIC: 0621F007.D

(76) Styrene (T)

9.64min 10.69PPB

response 166864

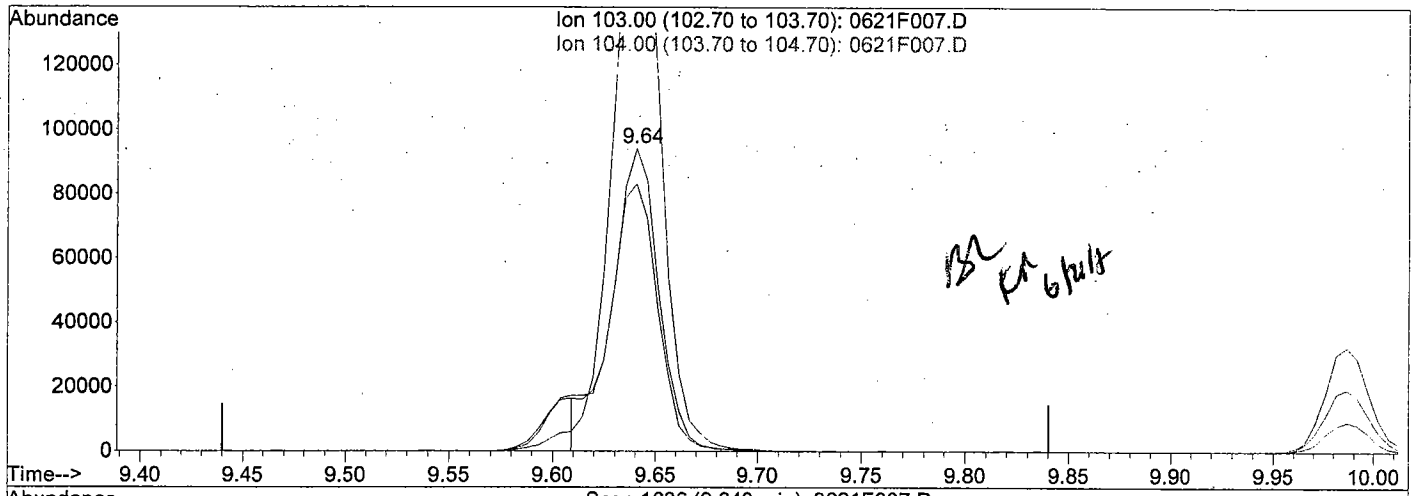
Ion	Exp%	Act%
103.00	100	100
104.00	205.50	208.96
78.00	87.90	88.26
0.00	0.00	0.00

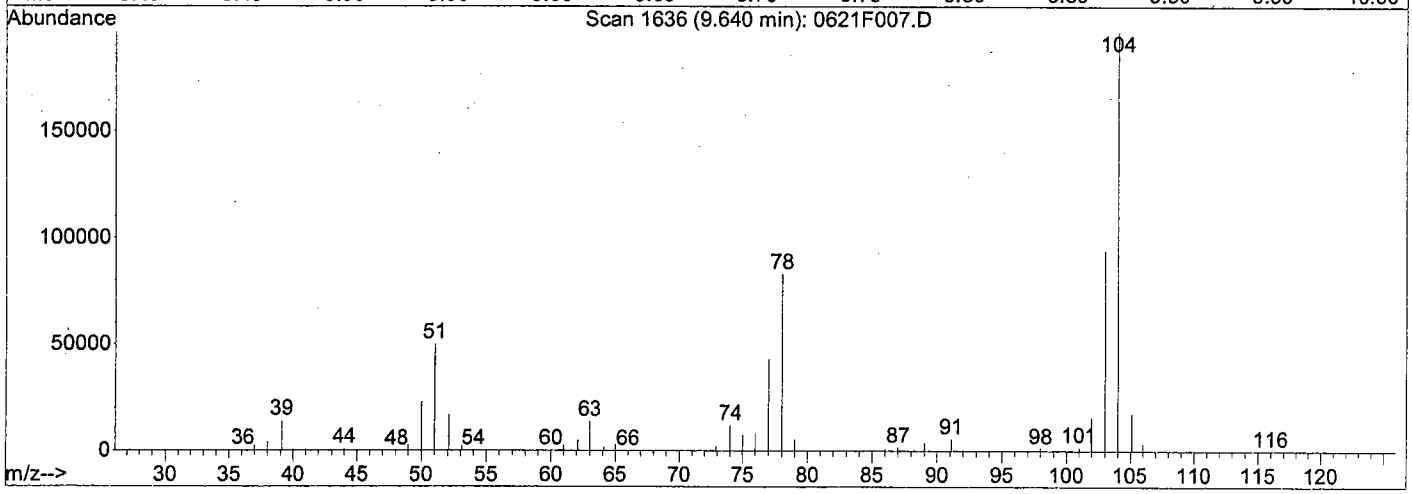
Quantitation Report (Qedit)

Data File : J:\MS18\DATA\062107\0621F007.D
Acq On : 21 Jun 2007 11:31 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:52 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Multiple Level Calibration





TIC: 0621F007.D

(76) Styrene (T)

9.64min 9.57PPB m

response 149375

Ion	Exp%	Act%
103.00	100	100
104.00	205.50	208.96
78.00	87.90	88.26
0.00	0.00	0.00

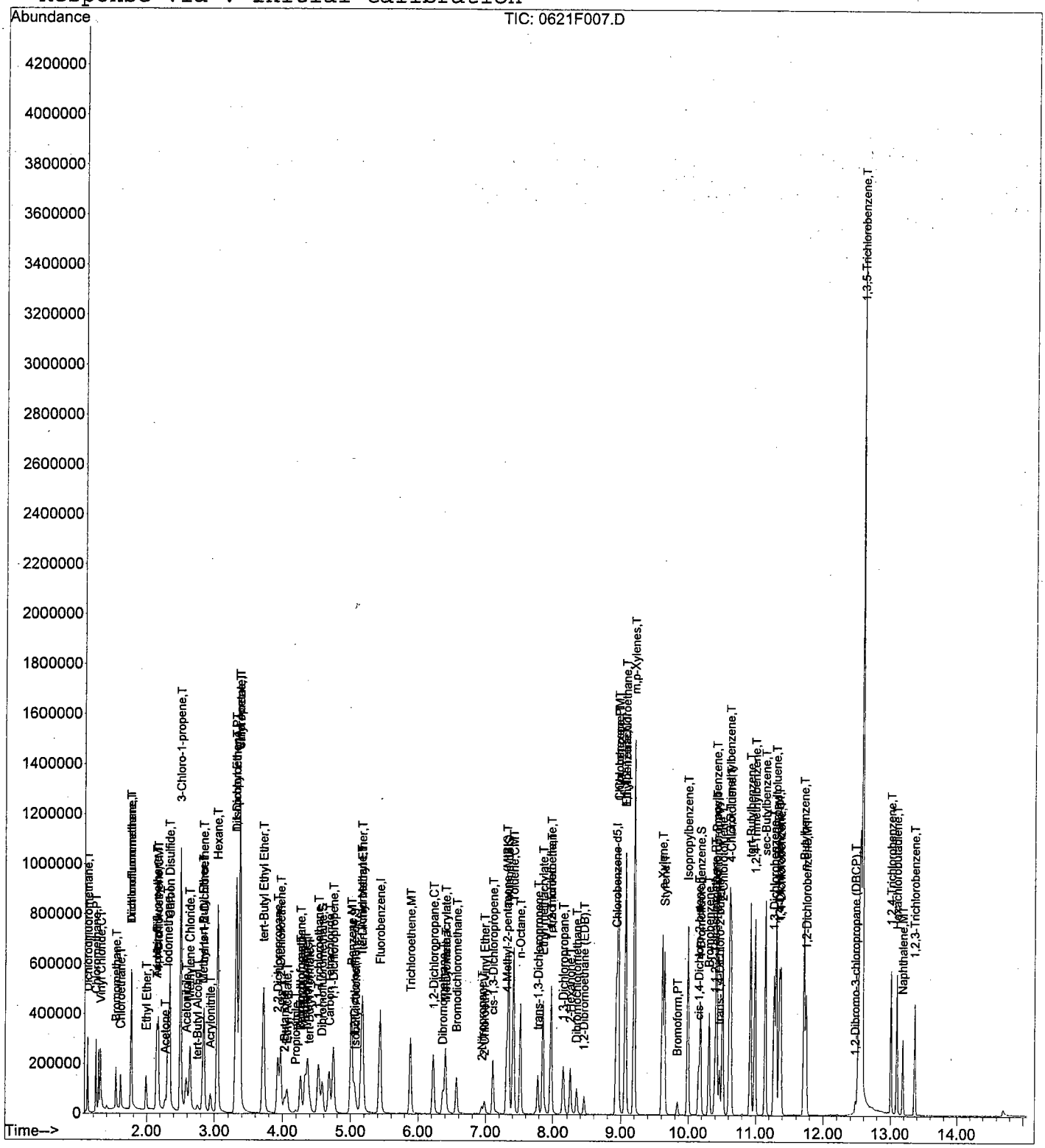
0621F007.D 061307.M Thu Jun 21 11:52:26 2007

Quantitation Report (QT Reviewed)

Data File : J:\MS18\DATA\062107\0621F007.D
Acq On : 21 Jun 2007 11:31 am
Sample : LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 21 11:52 2007

Vial: 4
Operator:
Inst : GC-MS 18
Multiplr: 1.00
Quant Results File: 061307.RES

Method : J:\MS18\METHODS\061307.M (RTE Integrator)
Title : VOA MS18 EPA Method 8260B
Last Update : Mon Jun 18 14:22:46 2007
Response via : Initial Calibration



Polynuclear Aromatic Hydrocarbons

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
1349MW100CL	K0704852-002	06/06/2007	06/07/2007
FM14EX07GW102CL	K0704852-004	06/06/2007	06/07/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Trish Lorr

Name: TRISH LORR

Date: 06/26/07

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Fluorene	**15**	D	2.0	10	06/11/07	06/14/07	KWG0706513	
Phenanthrene	ND	Ui	110	100	06/11/07	06/14/07	KWG0706513	
Anthracene	**3.1**		0.096	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	Ui	13	10	06/11/07	06/14/07	KWG0706513	
Pyrene	ND	Ui	4.0	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	1159	42-137	06/12/07	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Polynuclear Aromatic Hydrocarbons

Sample Name: FM14EX07GW102CL
Lab Code: K0704852-004

Units: ug/L
Basis: NA

Extraction Method: EPA 3510C
Analysis Method: 8310

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Fluorene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Anthracene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	101	42-137	06/12/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0706513-3

Extraction Method: EPA 3510C
Analysis Method: 8310

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Fluorene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Anthracene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	100	42-137	06/12/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510C
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
1349MW100CL	K0704852-002	1159	*
FM14EX07GW102CL	K0704852-004	101	
Method Blank	KWG0706513-3	100	
Lab Control Sample	KWG0706513-1	98	
Duplicate Lab Control Sample	KWG0706513-2	100	

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl	42-137

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/11/2007
Sample Matrix:	Water	**Date Analyzed:**	06/12/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8310	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706513

	Lab Control Sample KWG0706513-1 Lab Control Spike			Duplicate Lab Control Sample KWG0706513-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	6.95	10.0	70	6.63	10.0	66	65-101	5	30
Acenaphthylene	7.51	10.0	75	7.16	10.0	72	70-96	5	30
Acenaphthene	7.42	10.0	74	7.10	10.0	71	70-100	4	30
Fluorene	0.758	1.00	76	0.745	1.00	75	70-100	2	30
Phenanthrene	0.831	1.00	83	0.831	1.00	83	74-106	0	30
Anthracene	0.844	1.00	84	0.857	1.00	86	74-107	2	30
Fluoranthene	0.836	1.00	84	0.852	1.00	85	74-104	2	30
Pyrene	0.863	1.00	86	0.903	1.00	90	69-117	5	30
Benz(a)anthracene	0.902	1.00	90	0.958	1.00	96	77-109	6	30
Chrysene	0.925	1.00	93	0.938	1.00	94	74-108	1	30
Benzo(b)fluoranthene	0.944	1.00	94	0.955	1.00	96	77-109	1	30
Benzo(k)fluoranthene	0.913	1.00	91	0.943	1.00	94	78-110	3	30
Benzo(a)pyrene	0.889	1.00	89	0.918	1.00	92	73-106	3	30
Dibenz(a,h)anthracene	0.814	1.00	81	0.857	1.00	86	52-129	5	30
Benzo(g,h,i)perylene	0.912	1.00	91	0.878	1.00	88	55-130	4	30
Indeno(1,2,3-cd)pyrene	0.855	1.00	86	0.859	1.00	86	43-137	0	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/11/2007
Sample Matrix:	Water	**Date Analyzed:**	06/12/2007
		Time Analyzed:	21:03

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\061207PA\06120008.D
Lab Code:	KWG0706513-3	**Instrument ID:**	LC06
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0706513

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
FM14EX07GW102CL	K0704852-004	J:\LC06\DATA\061207PA\06120006.D	06/12/07	20:22
Lab Control Sample	KWG0706513-1	J:\LC06\DATA\061207PA\06120009.D	06/12/07	21:24
Duplicate Lab Control Sample	KWG0706513-2	J:\LC06\DATA\061207PA\06120010.D	06/12/07	21:45
1349MW100CL	K0704852-002	J:\LC06\DATA\061207PA\06120011.D	06/12/07	22:06
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140023.D	06/14/07	17:21
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140024.D	06/14/07	17:42

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706513-1	**Lab Code:**	KWG0706513-2
File ID:	J:\LC06\DATA\061207PA\06120009.D	**File ID:**	J:\LC06\DATA\061207PA\06120010.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	06/11/2007	**Date Extracted:**	06/11/2007
Date Analyzed:	06/12/2007	**Date Analyzed:**	06/12/2007
Time Analyzed:	21:24	**Time Analyzed:**	21:45

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0706513

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
FM14EX07GW102CL	K0704852-004	J:\LC06\DATA\061207PA\06120006.D	06/12/07	20:22
Method Blank	KWG0706513-3	J:\LC06\DATA\061207PA\06120008.D	06/12/07	21:03
1349MW100CL	K0704852-002	J:\LC06\DATA\061207PA\06120011.D	06/12/07	22:06
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140023.D	06/14/07	17:21
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140024.D	06/14/07	17:42

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz(a)anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo(b)fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo(k)fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo(a)pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Benzo(g,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Indeno(1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D\03280030c.d

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Benzo(b)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(k)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benz(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120005.D\06120005C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	123000	6		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38500	6		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24500	6		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13900	11		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	178000	10		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	396000	8		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	780000	4		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.2	97500	109000	12		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	85800	10		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.1	244000	259000	6		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	418000	10		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	273000	291000	7		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	168000	180000	7		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	265000	6		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	3.0	55100	81300	48	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	94200	6		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	229000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120005.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3090000	5	NA	± 15 %	AverageRF
Naphthalene	20	19	1550000	1500000	-3	NA	± 15 %	AverageRF
Acenaphthene	20	20	816000	831000	2	NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6750000	5	NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5470000	3	NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9120000	0	NA	± 15 %	AverageRF
Fluoranthene	2.0	1.9	4750000	4600000	-3	NA	± 15 %	AverageRF
Pyrene	2.0	1.9	25900000	24200000	-7	NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.1	14400000	14800000	3	NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9950000	7	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3340000	4	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17000000	5	NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12400000	4	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.1	5420000	5690000	5	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.3	8760000	10000000	15	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	14900000	5	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120014.D\06120014C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	123000	6		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38700	7		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24700	7		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13600	8		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	180000	11		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	368000	395000	7		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	777000	4		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	110000	13		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	85500	10		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.2	244000	267000	10		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	415000	9		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	273000	289000	6		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	168000	178000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	265000	6		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.8	55100	76300	39	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	93900	5		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	228000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120014.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3100000	6		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1550000	0		NA	± 15 %	AverageRF
Acenaphthene	20	21	816000	849000	4		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6790000	5		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5680000	7		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9060000	0		NA	± 15 %	AverageRF
Fluoranthene	2.0	1.9	4750000	4600000	-3		NA	± 15 %	AverageRF
Pyrene	2.0	2.1	25900000	26600000	3		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.1	14400000	15100000	5		NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9930000	6		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3370000	5		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17200000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12500000	5		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.1	5420000	5630000	4		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	11000000	25	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	14100000	15200000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061407PA\06140021.D\06140021C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	124000	7		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38700	7		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24800	7		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13700	10		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	182000	12		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	402000	9		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	798000	6		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	112000	15		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	87300	12		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.2	244000	272000	12		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	417000	10		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.2	273000	293000	8		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.2	168000	183000	9		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	268000	7		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.4	55100	64800	18	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	94500	6		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	234000	10		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061407PA\06140021.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3140000	7		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1550000	0		NA	± 15 %	AverageRF
Acenaphthene	20	20	816000	835000	2		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6710000	4		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5480000	3		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9180000	1		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.1	4750000	4890000	3		NA	± 15 %	AverageRF
Pyrene	2.0	2.0	25900000	26400000	2		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.1	14400000	15000000	4		NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9960000	7		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3400000	6		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17300000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12700000	7		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.0	5420000	5390000	-1		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	10900000	24	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	15000000	6		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061407PA\06140025.D\06140025C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	124000	7	NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38800	7	NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24700	7	NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	180000	11	NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	398000	8	NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	788000	5	NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	111000	14	NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	86200	11	NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.2	244000	270000	11	NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	417000	10	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.2	273000	293000	8	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.2	168000	183000	9	NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.2	249000	268000	8	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.3	55100	62700	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.2	89200	96100	8	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	236000	11	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061407PA\06140025.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3120000	6		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1560000	0		NA	± 15 %	AverageRF
Acenaphthene	20	21	816000	842000	3		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6720000	4		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.0	5320000	5410000	2		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9270000	2		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.1	4750000	4940000	4		NA	± 15 %	AverageRF
Pyrene	2.0	2.1	25900000	26700000	3		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.1	14400000	15000000	5		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	9320000	10000000	8		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3370000	5		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17200000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12700000	6		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	1.9	5420000	5260000	-3		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	10900000	24	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	15000000	7		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8310

Analysis Lot: KWG0706622
Instrument ID: LC06
Column: DAD Vydac C

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
06120003.D	Instrument Blank	KWG0706622-5	6/12/2007	19:19		6/12/2007	19:32
06120005.D	Continuing Calibration Verification	KWG0706622-1	6/12/2007	20:01		6/12/2007	20:14
06120006.D	FM14EX07GW102CL	K0704852-004	6/12/2007	20:22		6/12/2007	20:35
06120007.D	ZZZZZZ	ZZZZZZ	6/12/2007	20:42		6/12/2007	20:55
06120008.D	Method Blank	KWG0706513-3	6/12/2007	21:03		6/12/2007	21:16
06120009.D	Lab Control Sample	KWG0706513-1	6/12/2007	21:24		6/12/2007	21:37
06120010.D	Duplicate Lab Control Sample	KWG0706513-2	6/12/2007	21:45		6/12/2007	21:58
06120011.D	1349MW100CL	K0704852-002	6/12/2007	22:06		6/12/2007	22:19
06120012.D	ZZZZZZ	ZZZZZZ	6/12/2007	22:27		6/12/2007	22:40
06120013.D	ZZZZZZ	ZZZZZZ	6/12/2007	22:48		6/12/2007	23:01
06120014.D	Continuing Calibration Verification	KWG0706622-2	6/12/2007	23:08		6/12/2007	23:21
06120015.D	Instrument Blank	KWG0706622-6	6/12/2007	23:29		6/12/2007	23:42
06140021.D	Continuing Calibration Verification	KWG0706622-3	6/14/2007	16:39		6/14/2007	16:52
06140022.D	Instrument Blank	KWG0706622-7	6/14/2007	17:00		6/14/2007	17:13
06140023.D	1349MW100CL	K0704852-002	6/14/2007	17:21		6/14/2007	17:34
06140024.D	1349MW100CL	K0704852-002	6/14/2007	17:42		6/14/2007	17:55
06140025.D	Continuing Calibration Verification	KWG0706622-4	6/14/2007	18:03		6/14/2007	18:16
06140026.D	Instrument Blank	KWG0706622-8	6/14/2007	18:24		6/14/2007	18:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Extracted: 06/11/2007

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510C
Analysis Method: 8310

Extraction Lot: KWG0706513
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
1349MW100CLDL	K0704852-002	06/06/07	06/07/07	1050ml	1.0ml	NA	
1349MW100CL	K0704852-002	06/06/07	06/07/07	1050ml	1.0ml	NA	
FM14EX07GW102CL	K0704852-004	06/06/07	06/07/07	1040ml	1.0ml	NA	
Method Blank	KWG0706513-3	NA	NA	1000ml	1.0ml	NA	
Lab Control Sample	KWG0706513-1	NA	NA	1000ml	1.0ml	NA	
Duplicate Lab Control Sample	KWG0706513-2	NA	NA	1000ml	1.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007
		Date Extracted:	06/11/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	1349MW100CL	**Units:**	ug/L
Lab Code:	K0704852-002	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	MRL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Fluorene	2.0	15	22	37.8	D	10	06/14/07
Anthracene	0.096	3.1	2.8	10.2		1	06/12/07

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3510C
Analysis Method: 8310

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
1349MW100CL	K0704852-002	1159	*
FM14EX07GW102CL	K0704852-004	101	
Method Blank	KWG0706513-3	100	
Lab Control Sample	KWG0706513-1	98	
Duplicate Lab Control Sample	KWG0706513-2	100	

Surrogate Recovery Control Limits (%)

Sur1 = p-Terphenyl	42-137

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/11/2007
Sample Matrix:	Water	**Date Analyzed:**	06/12/2007

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3510C	**Units:**	ug/L
Analysis Method:	8310	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0706513

	Lab Control Sample KWG0706513-1 Lab Control Spike			Duplicate Lab Control Sample KWG0706513-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	6.95	10.0	70	6.63	10.0	66	65-101	5	30
Acenaphthylene	7.51	10.0	75	7.16	10.0	72	70-96	5	30
Acenaphthene	7.42	10.0	74	7.10	10.0	71	70-100	4	30
Fluorene	0.758	1.00	76	0.745	1.00	75	70-100	2	30
Phenanthrene	0.831	1.00	83	0.831	1.00	83	74-106	0	30
Anthracene	0.844	1.00	84	0.857	1.00	86	74-107	2	30
Fluoranthene	0.836	1.00	84	0.852	1.00	85	74-104	2	30
Pyrene	0.863	1.00	86	0.903	1.00	90	69-117	5	30
Benz(a)anthracene	0.902	1.00	90	0.958	1.00	96	77-109	6	30
Chrysene	0.925	1.00	93	0.938	1.00	94	74-108	1	30
Benzo(b)fluoranthene	0.944	1.00	94	0.955	1.00	96	77-109	1	30
Benzo(k)fluoranthene	0.913	1.00	91	0.943	1.00	94	78-110	3	30
Benzo(a)pyrene	0.889	1.00	89	0.918	1.00	92	73-106	3	30
Dibenz(a,h)anthracene	0.814	1.00	81	0.857	1.00	86	52-129	5	30
Benzo(g,h,i)perylene	0.912	1.00	91	0.878	1.00	88	55-130	4	30
Indeno(1,2,3-cd)pyrene	0.855	1.00	86	0.859	1.00	86	43-137	0	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Extracted:**	06/11/2007
Sample Matrix:	Water	**Date Analyzed:**	06/12/2007
		Time Analyzed:	21:03

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\LC06\DATA\061207PA\06120008.D
Lab Code:	KWG0706513-3	**Instrument ID:**	LC06
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0706513

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
FM14EX07GW102CL	K0704852-004	J:\LC06\DATA\061207PA\06120006.D	06/12/07	20:22
Lab Control Sample	KWG0706513-1	J:\LC06\DATA\061207PA\06120009.D	06/12/07	21:24
Duplicate Lab Control Sample	KWG0706513-2	J:\LC06\DATA\061207PA\06120010.D	06/12/07	21:45
1349MW100CL	K0704852-002	J:\LC06\DATA\061207PA\06120011.D	06/12/07	22:06
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140023.D	06/14/07	17:21
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140024.D	06/14/07	17:42

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0706513-1	**Lab Code:**	KWG0706513-2
File ID:	J:\LC06\DATA\061207PA\06120009.D	**File ID:**	J:\LC06\DATA\061207PA\06120010.D
Instrument ID:	LC06	**Instrument ID:**	LC06
Date Extracted:	06/11/2007	**Date Extracted:**	06/11/2007
Date Analyzed:	06/12/2007	**Date Analyzed:**	06/12/2007
Time Analyzed:	21:24	**Time Analyzed:**	21:45

Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310	**Extraction Lot:**	KWG0706513

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
FMHEX07GW102CL	K0704852-004	J:\LC06\DATA\061207PA\06120006.D	06/12/07	20:22
Method Blank	KWG0706513-3	J:\LC06\DATA\061207PA\06120008.D	06/12/07	21:03
1[illegible]MW100CL	K0704852-002	J:\LC06\DATA\061207PA\06120011.D	06/12/07	22:06
13[illegible]MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140023.D	06/14/07	17:21
1349MW100CL	K0704852-002	J:\LC06\DATA\061407PA\06140024.D	06/14/07	17:42

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: K0704852
Date Collected: 06/06/2007
Date Received: 06/07/2007

Polynuclear Aromatic Hydrocarbons

Sample Name: 1349MW100CL
Lab Code: K0704852-002

Extraction Method: EPA 3510C
Analysis Method: 8310

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	0.96	1	06/11/07	06/12/07	KWG0706513	
Fluorene	**15**	D	2.0	10	06/11/07	06/14/07	KWG0706513	
Phenanthrene	ND	Ui	110	100	06/11/07	06/14/07	KWG0706513	
Anthracene	**3.1**		0.096	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	Ui	13	10	06/11/07	06/14/07	KWG0706513	
Pyrene	ND	Ui	4.0	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.096	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	1159	42-137	06/12/07	Outside Control Limits

Comments:

Exception Report

Data File: J:\LC06\DATA\061207PA\06120011.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 22:06
Date Quantitated: 06/13/2007 18:10
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	p-Terphenyl	1159	42	137	
Above Highest ICAL Level	Fluoranthene	10.25	NA	10	
	Fluorene	13.49	NA	10	
	p-Terphenyl	115.92	NA	100	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\061207PA\06120011.D\06120011C.D
Lab ID: K0704852-002
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 22:06
Date Quantitated: 06/13/2007 18:10
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	p-Terphenyl	765	42	137	
Above Highest ICAL Level	Pyrene	211.20	NA	10	
	Phenanthrene	61.44	NA	10	
	Fluorene	24.37	NA	10	

Primary Review: VMU 6/15/07

Secondary Review: MMh

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	K0704852
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607765	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\061207PA\06120011.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120011.D\06120011c.d			**Vial:**	16
Acqu Date:	06/12/2007 22:06	**Quant Date:**	06/13/2007 18:10	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.19 +0.05	7.16 +0.04	340532823	8895202	115.92	76.46			1159*
				%Recovery =	1159*	765*	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
Acenaphthene			0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene	4.18 +0.01	4.16 +0.01	87086741	3951965	13.49	24.37	13E	23E	NR
Phenanthrene		4.70	0	22611232	0.0000	61.44	0.013U	59E	NR
Anthracene	5.08 -0.14	5.22 +0.02	30067249m	2237390m	3.30	2.98	3.1	2.8	3.1
Fluoranthene	5.85 +0.04		48651904	0	10.25	0.0000	9.8E	0.037U	NR
Pyrene	6.14 -0.01	6.10 -0.02	106765663	16402645	4.12	211.20	4.0Ui	210UiE	4.0Ui
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene			0	0	0.0000	0.0000	0.067U	0.067U	0.067U
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene			0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene			0	0	0.0000	0.0000	0.035U	0.035U	0.035U
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	1.0
Prep Final Vol:	1.0 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061207PA\06120011.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120011.D\06120011c.d			**Vial:**	16
Acqu Date:	06/12/2007 22:06	**Quant Date:**	06/13/2007 18:10	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

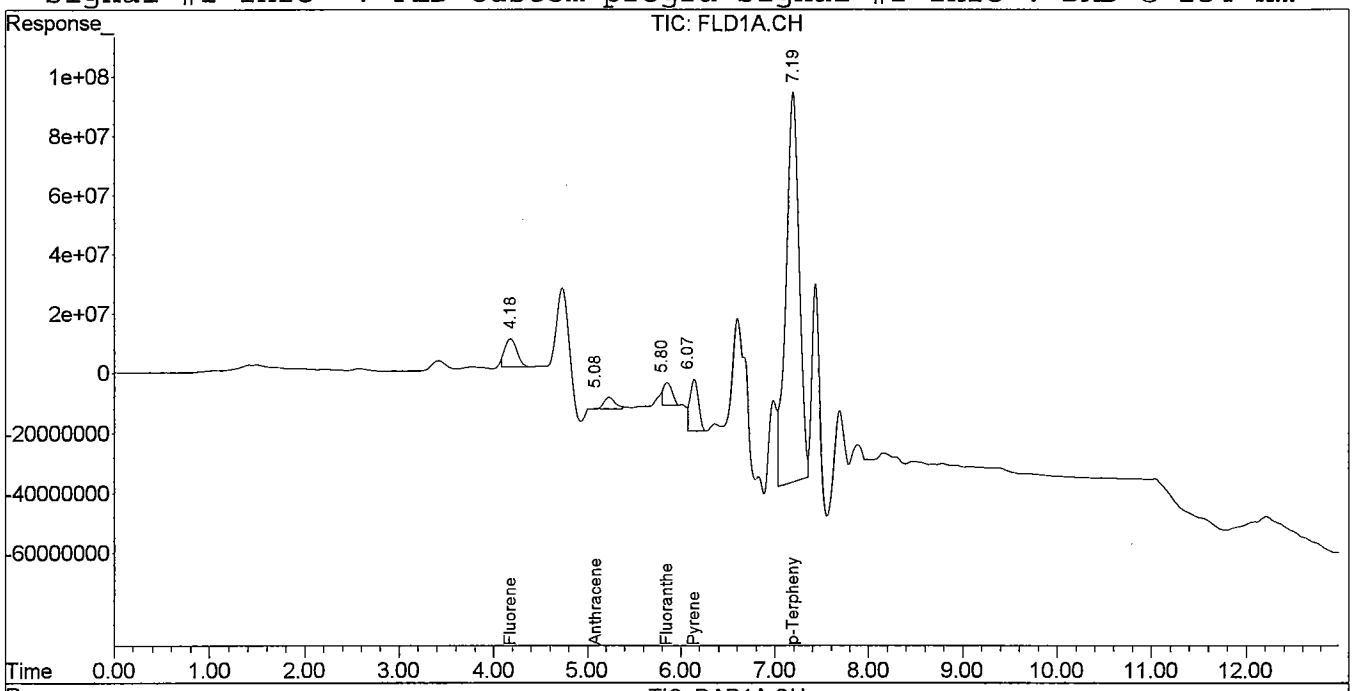
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

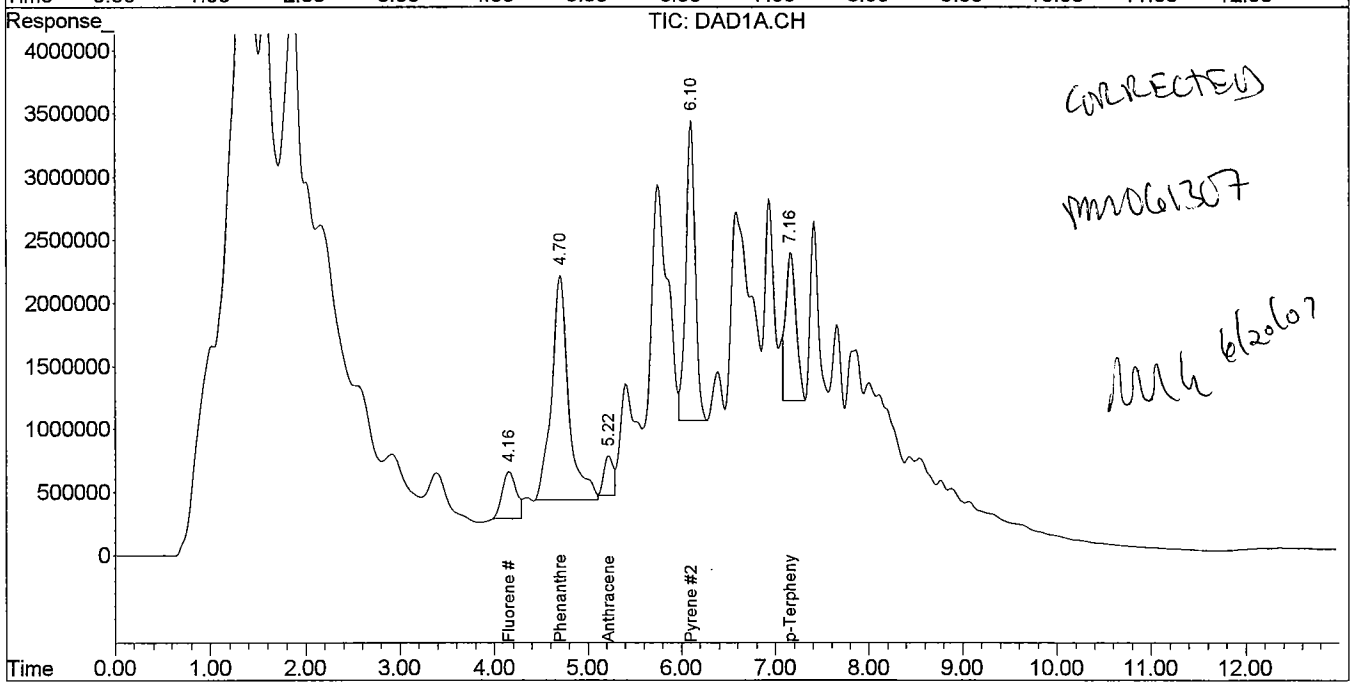
Quantitation Report (QT Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120011.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\061207PA\06120011.D\DAD1A.CH
Acq On : 12-Jun-2007, 22:06:19 Operator: PM
Sample : K0704769-001 pm061307 Inst : G1321A
Misc : 4852-2 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 18:10 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm



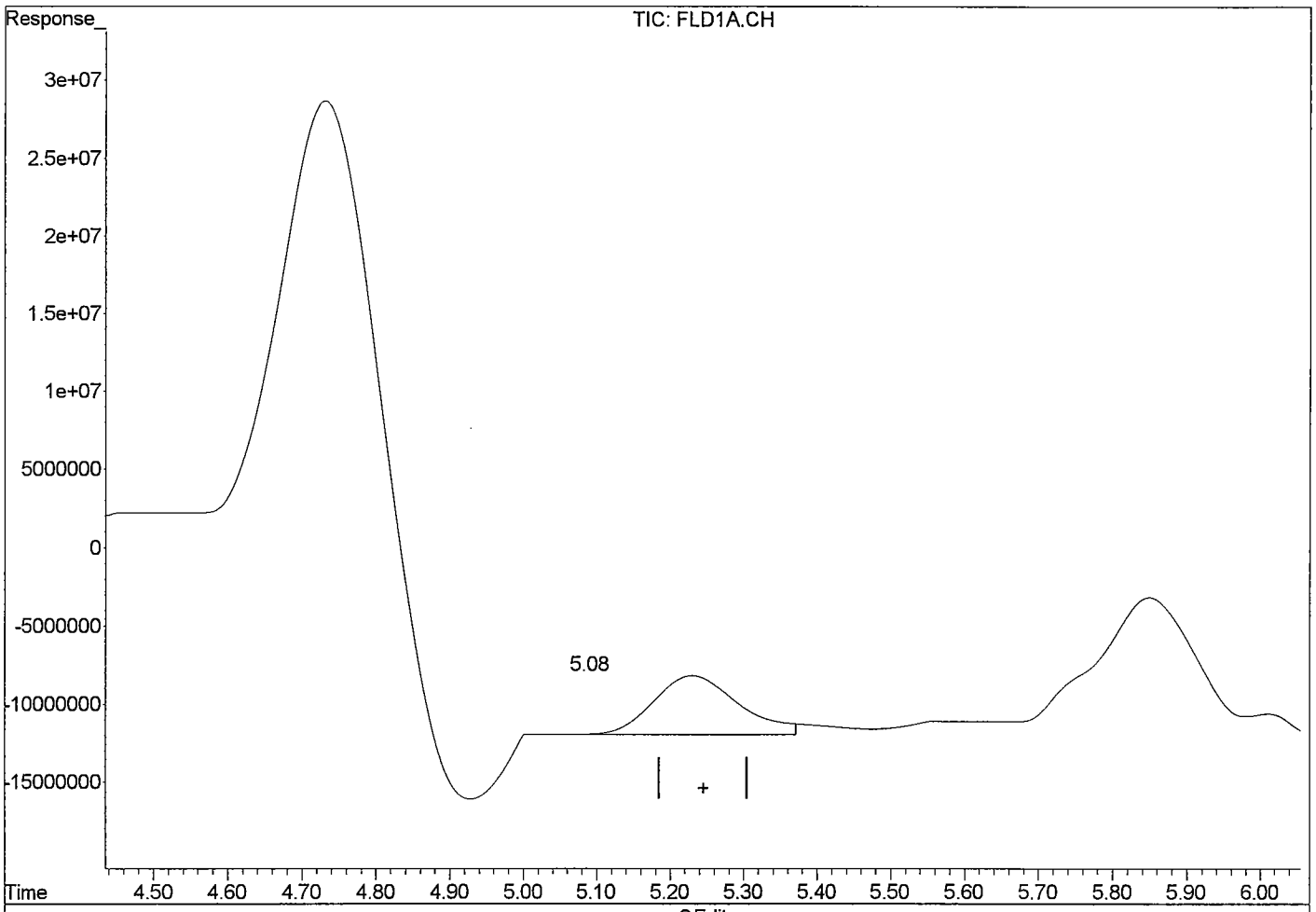


CORRECTED
pm061307
MMh 6/20/07

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061207PA\06120011.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\061207PA\06120011.D\DAD1A.CH
Acq On : 12-Jun-2007, 22:06:19 Operator: PM
Sample : K0704~~769-001~~ PM061507 Inst : G1321A
Misc : 4852-2 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration



(7) Anthracene (t)

5.08min 3.304ug/mL manual

response 30067249

PM061307

MM 6/26/07

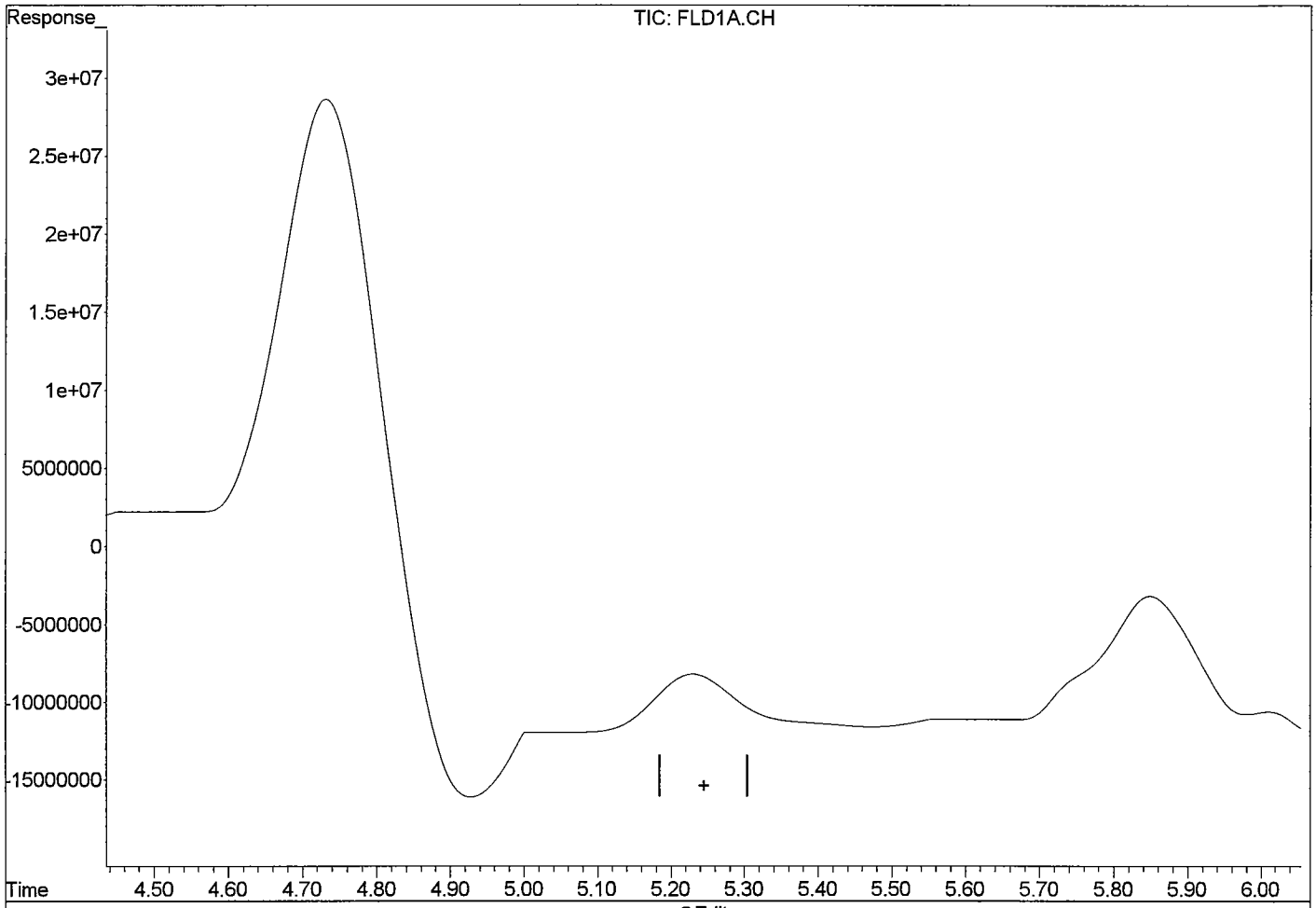
(+) = Expected Retention Time

06120011.D 0328PAHS.M Wed Jun 13 18:10:04 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061207PA\06120011.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\061207PA\06120011.D\DAD1A.CH
Acq On : 12-Jun-2007, 22:06:19 Operator: PM
Sample : K0704769-001 PM061307 Inst : G1321A
Misc : 4852-2 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration



(7) Anthracene (t)

5.25min 0.000ug/mL

response 0

ORIGINAL

PM

PM 6/20/07

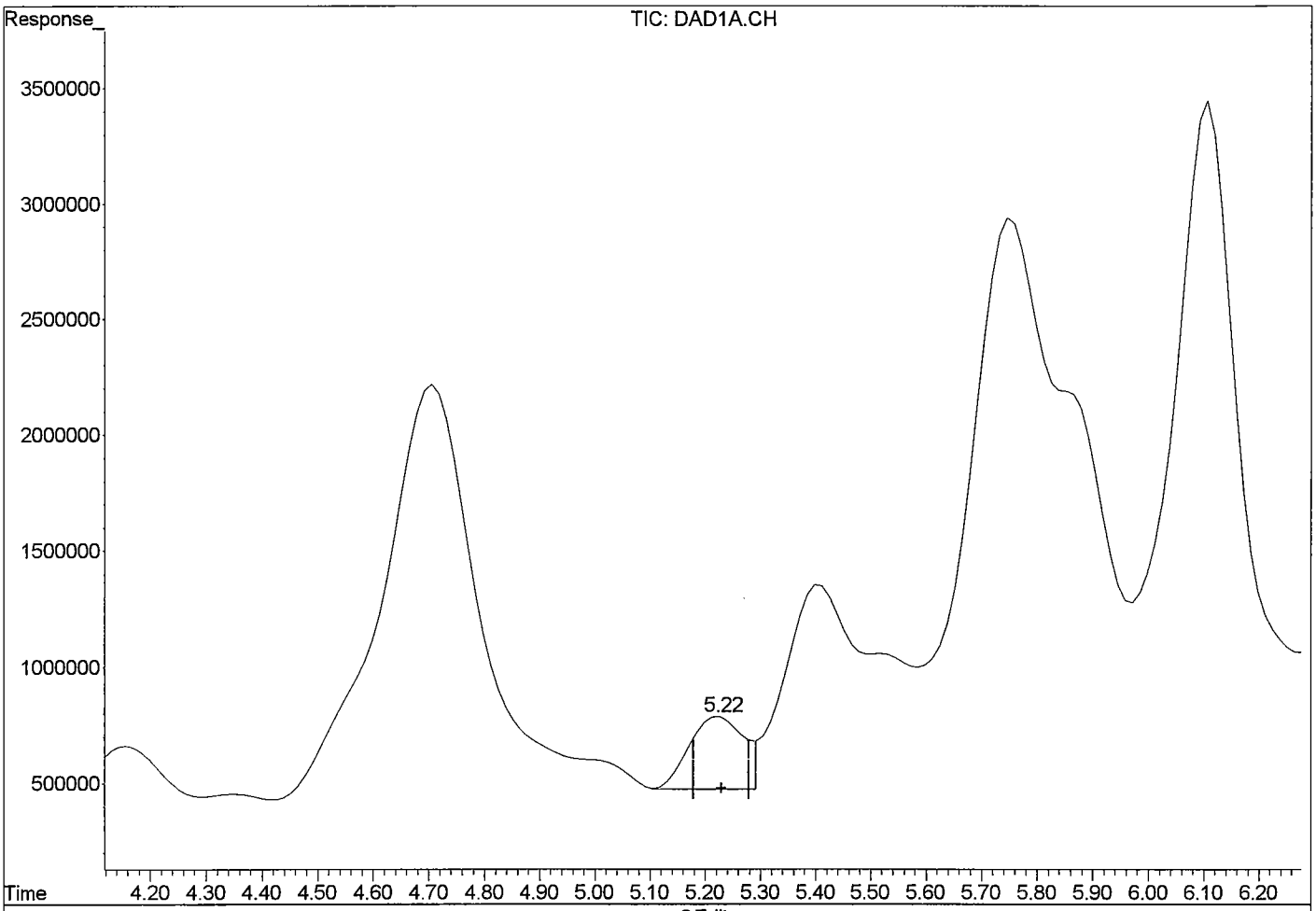
(+) = Expected Retention Time

06120011.D 0328PAHS.M Wed Jun 13 18:09:46 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061207PA\06120011.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\061207PA\06120011.D\DAD1A.CH
Acq On : 12-Jun-2007, 22:06:19 Operator: PM
Sample : K0704769-001 PM1061507 Inst : G1321A
Misc : 04852-002 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration



(26) Anthracene #2 (t)

5.22min 2.983ug/mL manual

response 2237390

PM061307

6/20/07

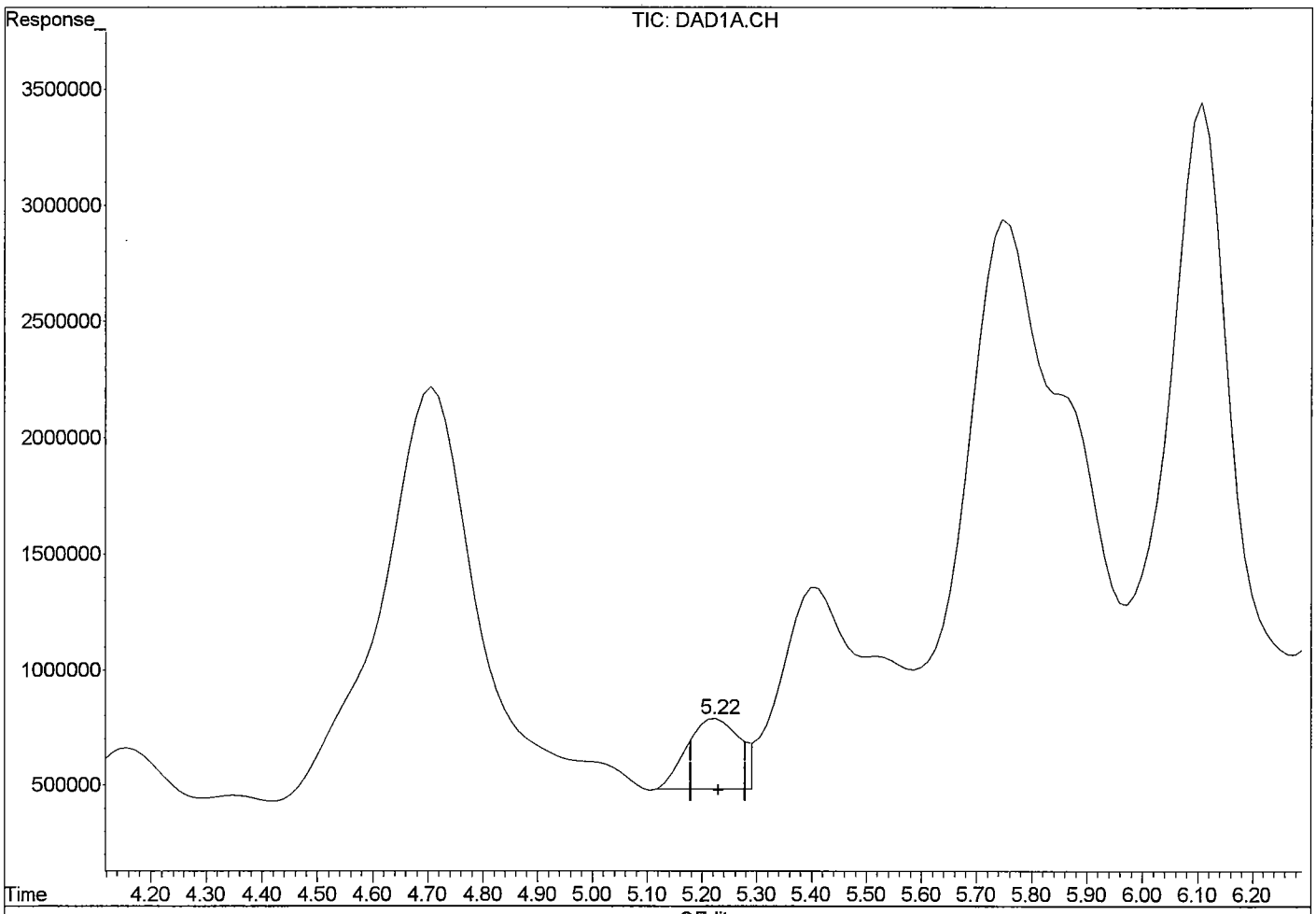
(+) = Expected Retention Time

06120011.D 0328PAHS.M Wed Jun 13 18:10:59 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061207PA\06120011.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\061207PA\06120011.D\DAD1A.CH
Acq On : 12-Jun-2007, 22:06:19 Operator: PM
Sample : K070~~4769-001~~ Inst : G1321A
Misc : 4852-002 PM 061507 Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration



(26) Anthracene #2 (t)

5.22min 2.870ug/mL

response 2152338

ORIGINAL

PM

PM 6/20/07

(+) = Expected Retention Time

06120011.D 0328PAHS.M Wed Jun 13 18:10:18 2007

Exception Report

Data File: J:\LC06\DATA\061407PA\06140023.D
Lab ID: K0704852-002
RunType: DL
Matrix: WATER

Date Acquired: 06/14/2007 17:21
Date Quantitated: 06/14/2007 19:36
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	p-Terphenyl	3636	42	137	
Above Highest ICAL Level	Phenanthrene	10.28	NA	10	

Primary Review: PMU 061507

Secondary Review: MM

Exception Report

Data File: J:\LC06\DATA\061407PA\06140023.D\06140023C.D
Lab ID: K0704852-002
RunType: DL
Matrix: WATER

Date Acquired: 06/14/2007 17:21
Date Quantitated: 06/14/2007 19:36
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA		x
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	p-Terphenyl	782	42	137	
Above Highest ICAL Level	Pyrene	22.14	NA	10	

Primary Review: 06/15/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	K0704852
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607765	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\061407PA\06140023.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140023.D\06140023c.d			**Vial:**	19
Acqu Date:	06/14/2007 17:21	**Quant Date:**	06/14/2007 19:36	**Dilution:**	10.0
Run Type:	DL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.11 +0.03	7.08 +0.03	106801151	909918	36.36	7.82			NR
				%Recovery =	3636*	782*	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	1.3U	1.3U	NR
Acenaphthylene			0	0	0.0000	0.0000		1.2U	NR
Acenaphthene			0	0	0.0000	0.0000	1.5U	1.5U	NR
Fluorene	4.10 -0.01	4.08 -0.01	10474344m	381743m	1.62	2.35	15D	22D	15D
Phenanthrene	4.67 +0.01	4.63 -0.01	54701633	1954849m	10.28	5.31	98ED	51D	Conf
Anthracene	5.15 -0.01	5.15	2401288	229066	0.2640	0.3050	2.5D	2.9D	NR
Fluoranthene	5.71 -0.04		6293250m	0	1.33	0.0000	13Ui	2.0Ui	13Ui
Pyrene	6.07 -0.02	6.03 -0.04	8732175	1719710	0.3370	22.14	3.2D	210ED	NR
Benz(a)anthracene			0	0	0.0000	0.0000	0.21U	0.21U	NR
Chrysene			0	0	0.0000	0.0000	0.21U	0.21U	NR
Benzo(b)fluoranthene			0	0	0.0000	0.0000	0.67U	0.67U	NR
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.33U	0.33U	NR
Benzo(a)pyrene			0	0	0.0000	0.0000	0.12U	0.12U	NR
Dibenz(a,h)anthracene			0	0	0.0000	0.0000	0.35U	0.35U	NR
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.36U	0.36U	NR
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.34U	0.34U	NR

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	10.0
Prep Final Vol:	1.0 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061407PA\06140023.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140023.D\06140023c.d			**Vial:**	19
Acqu Date:	06/14/2007 17:21	**Quant Date:**	06/14/2007 19:36	**Dilution:**	10.0
Run Type:	DL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

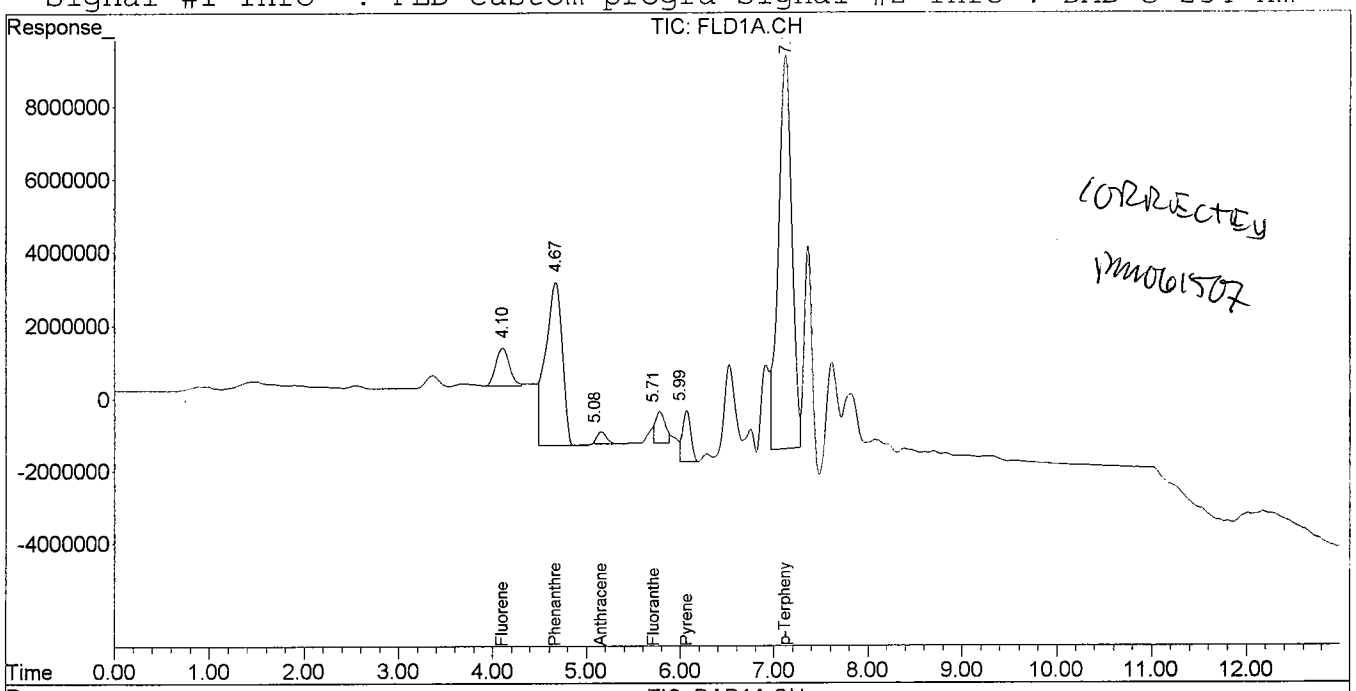
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

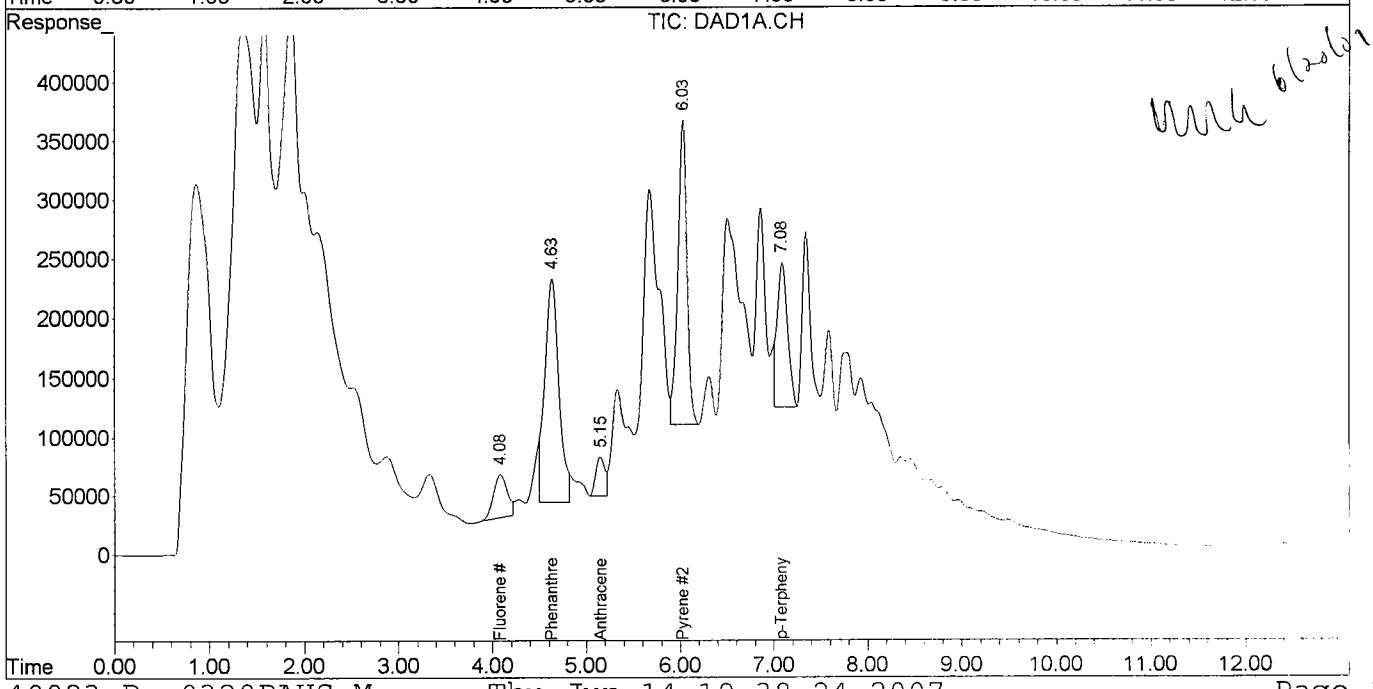
Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:36 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm



CORRECTED
PM061507

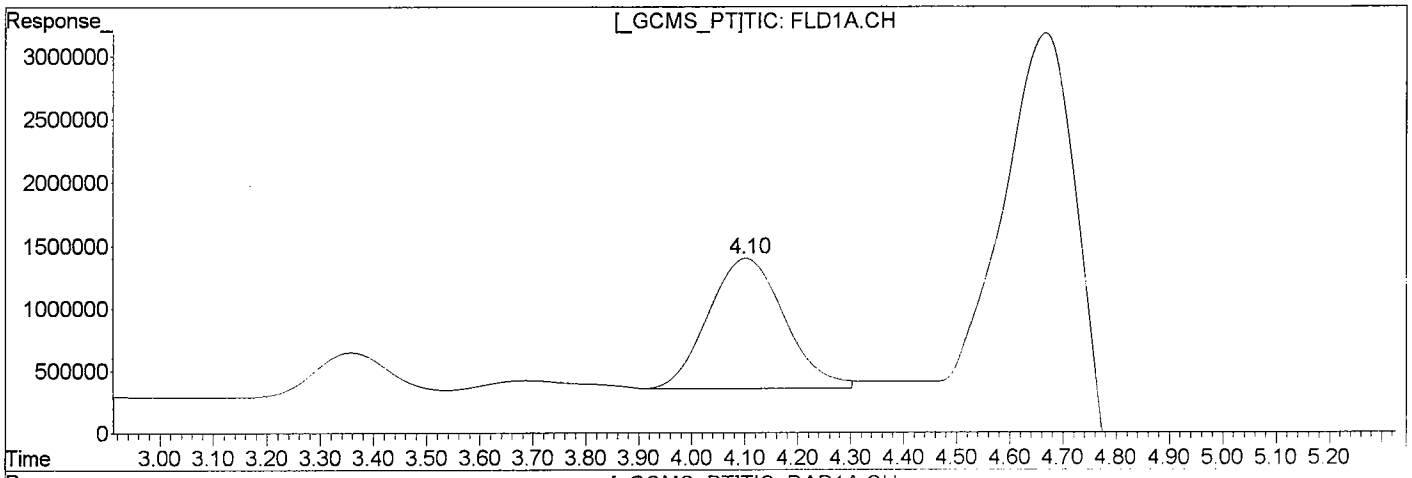


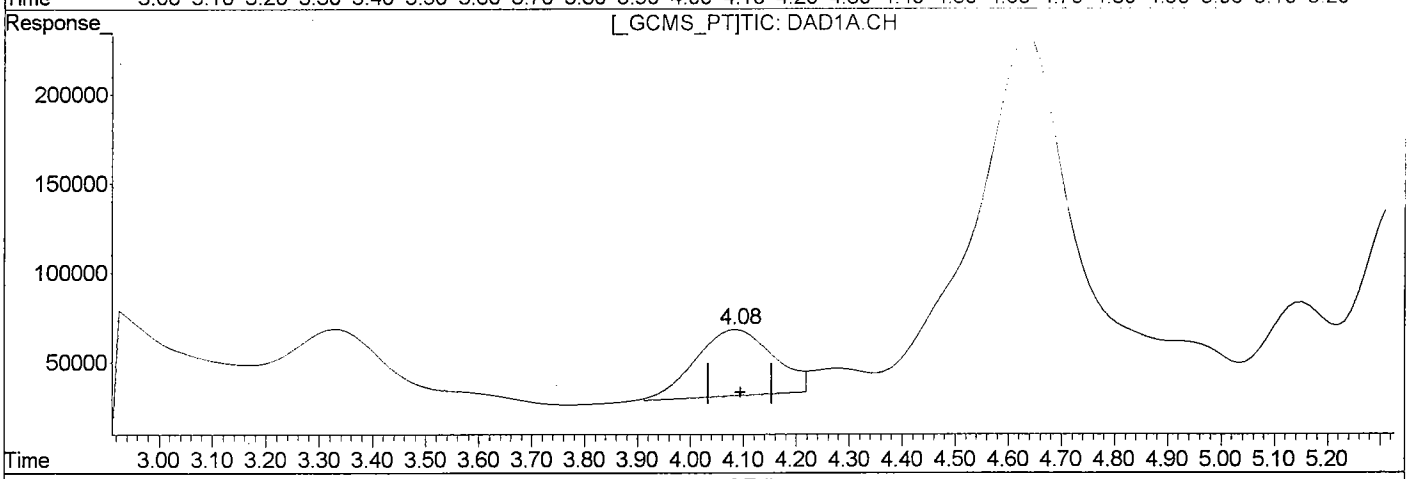
MMK 6/20/07

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





QEdit

(5) Fluorene (t)

4.10min 1.623ug/mL m

response 10474344

MANUALS
PM 061407

(5) Fluorene #2 (t)

4.08min 2.354ug/mL m

response 381743

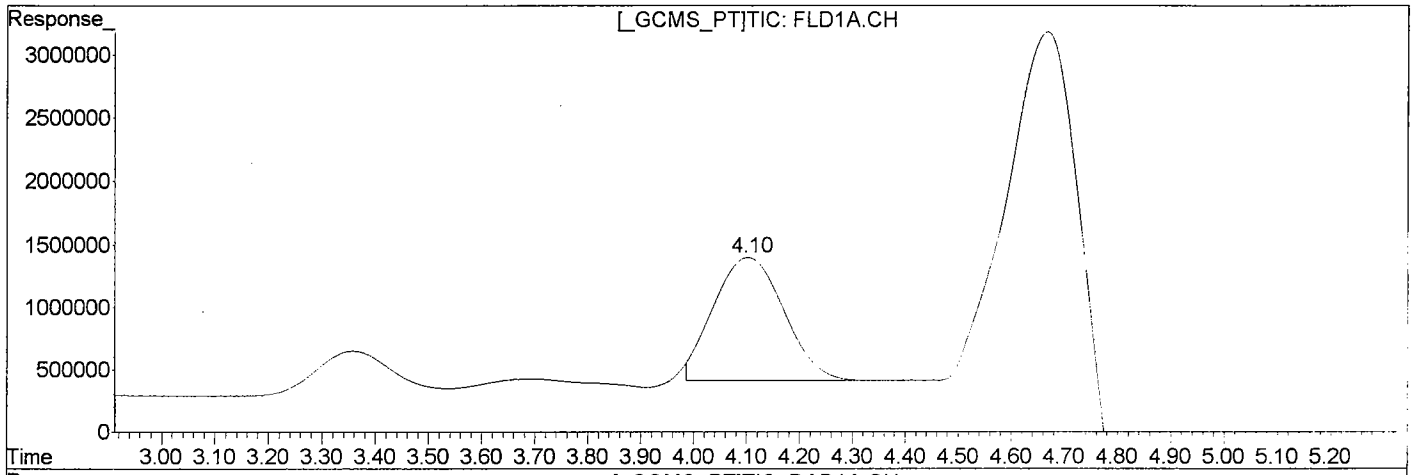
MRK 6/20/07

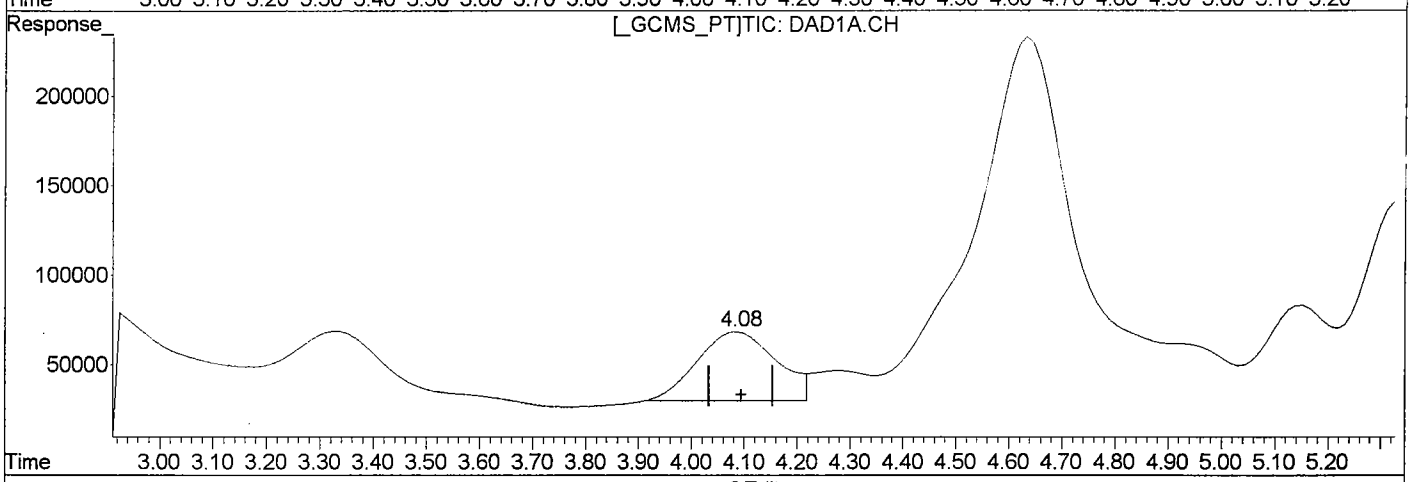
(+) = Expected Retention Time
06140023.D 0328PAHS.M Thu Jun 14 19:34:38 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





(5) Fluorene (t)

4.10min 1.418ug/mL

response 9152397

ORIGINALS

(5) Fluorene #2 (t)

4.08min 2.504ug/mL

response 405958

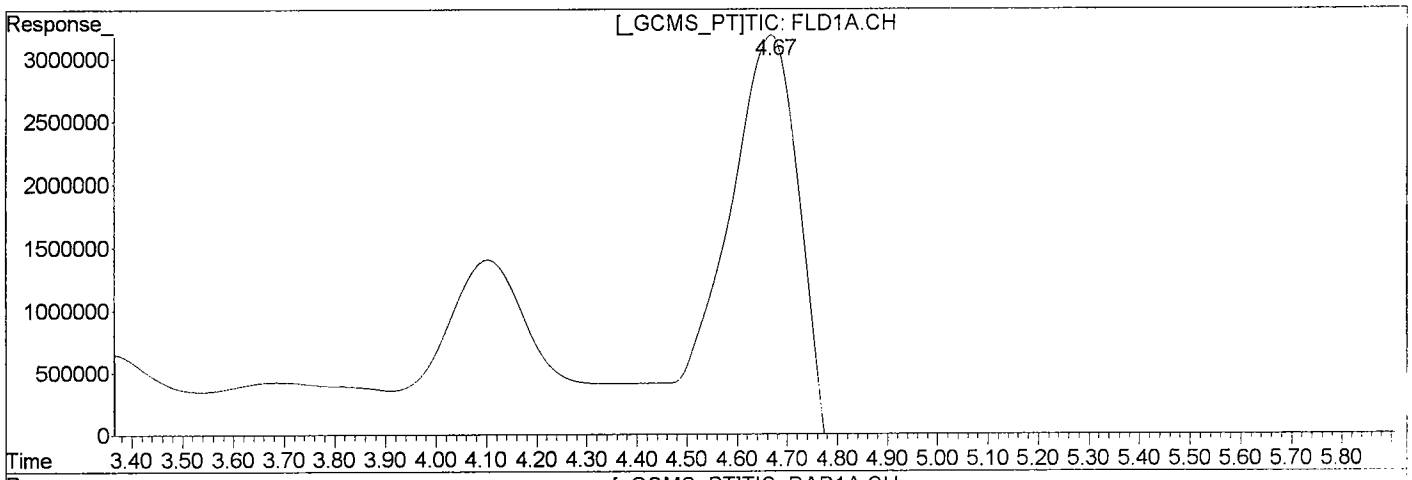
(+) = Expected Retention Time

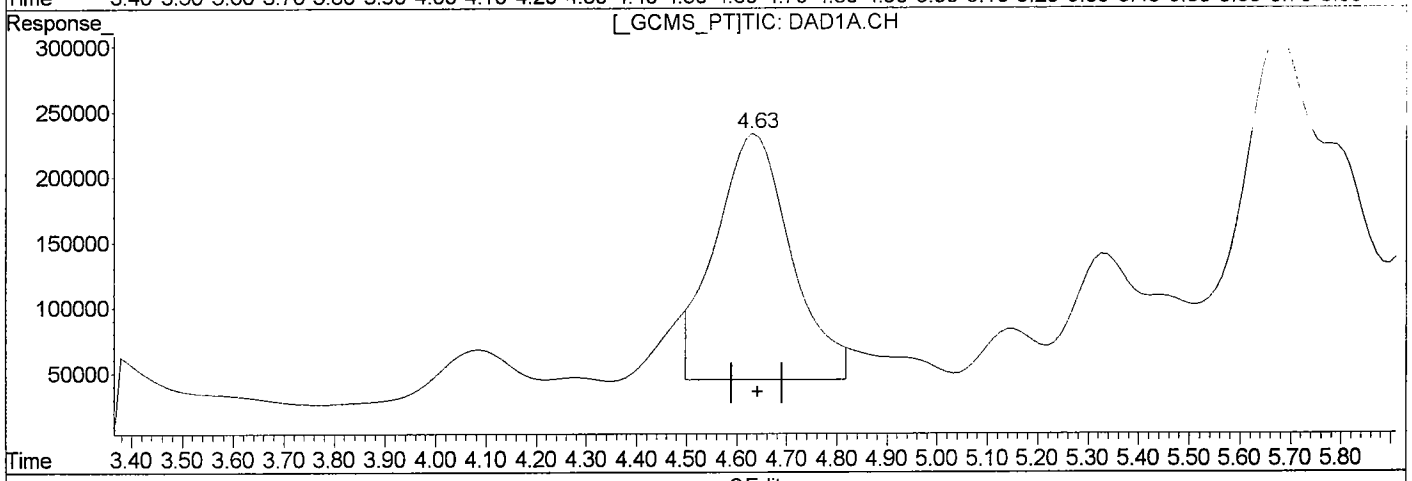
06140023.D 0328PAHS.M Thu Jun 14 19:33:43 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





(6) Phenanthrene (t)

4.67min 10.280ug/mL

response 54701633

(RAISED MRL)
(NO SPECTRUM MATCH)

(6) Phenanthrene #2 (t)

4.63min 5.312ug/mL m

response 1954849

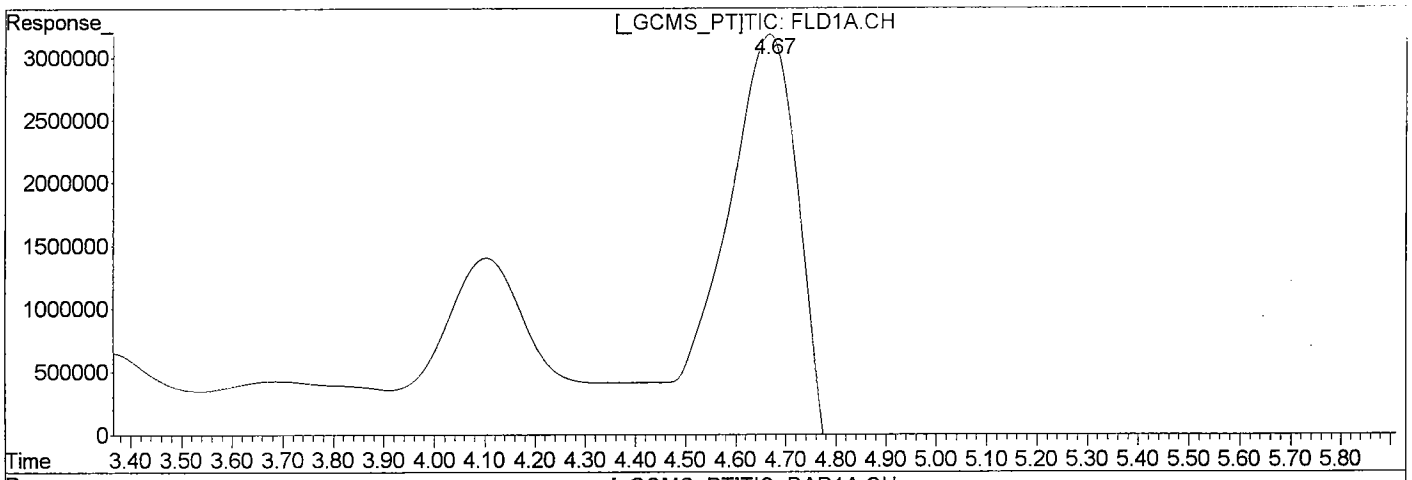
061407
061407

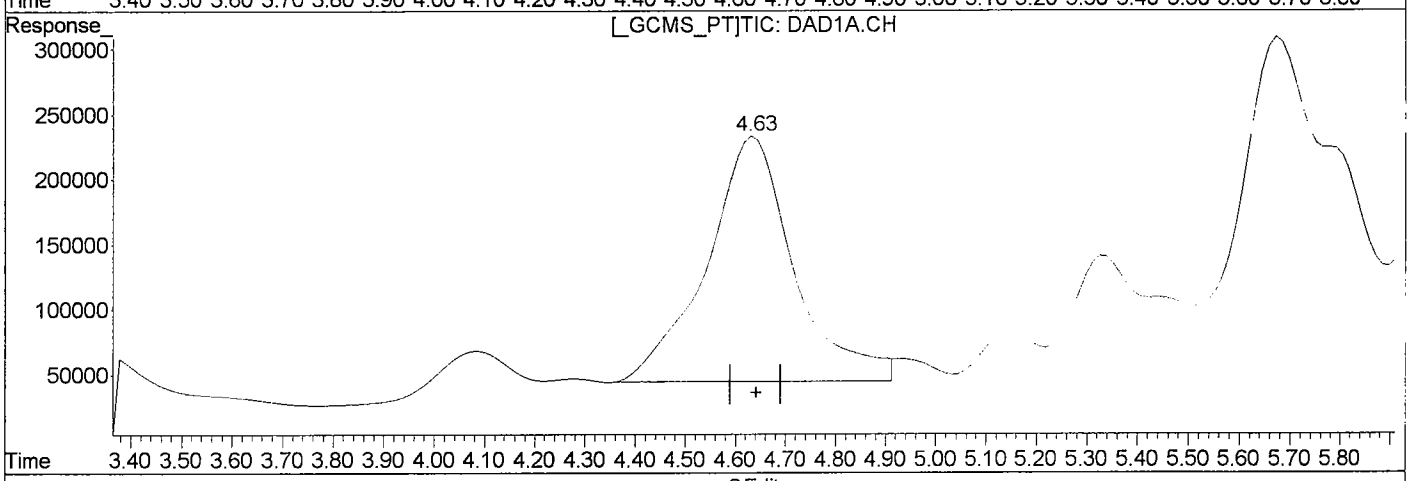
(+) = Expected Retention Time
06140023.D 0328PAHS.M Thu Jun 14 19:35:31 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





QEdit

(6) Phenanthrene (t)

4.67min 10.280ug/mL

response 54701633

(6) Phenanthrene #2 (t)

4.63min 6.165ug/mL

response 2268841

ORIGINAL
MM

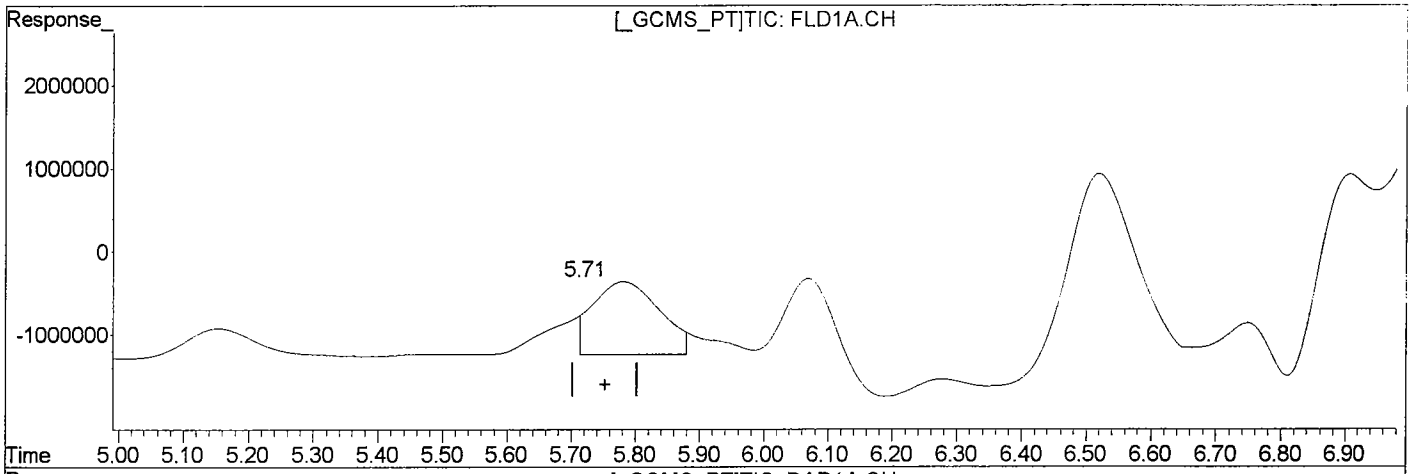
MM 6/20/07

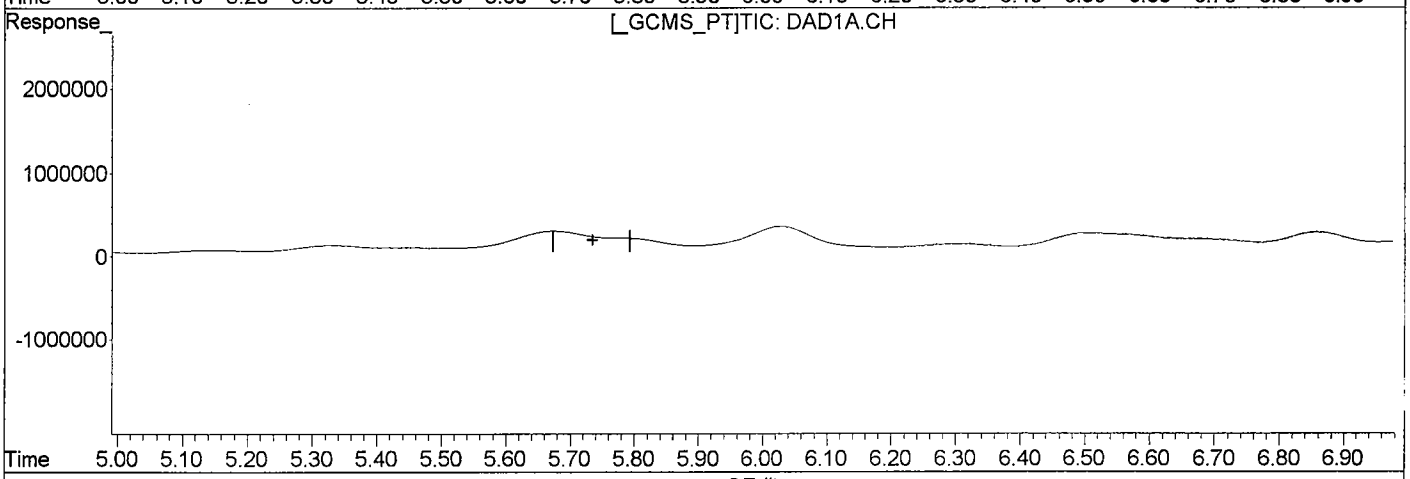
(+) = Expected Retention Time
06140023.D 0328PAHS.M Thu Jun 14 19:34:58 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





QEdit

(8) Fluoranthene (t)

5.71min 1.326ug/mL m auun | MMU6/4/07

response 6293250

(RAISED MRL)

(8) Fluoranthene #2 (t)

0.00min 0.000ug/mL

response 0

MMU 6/20/07

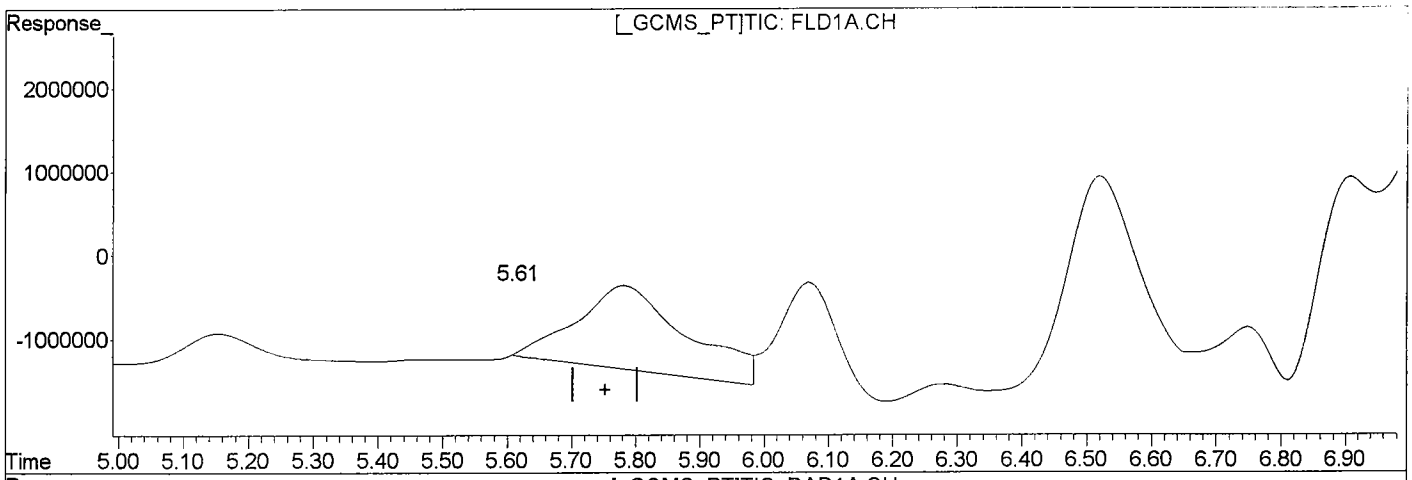
(+) = Expected Retention Time

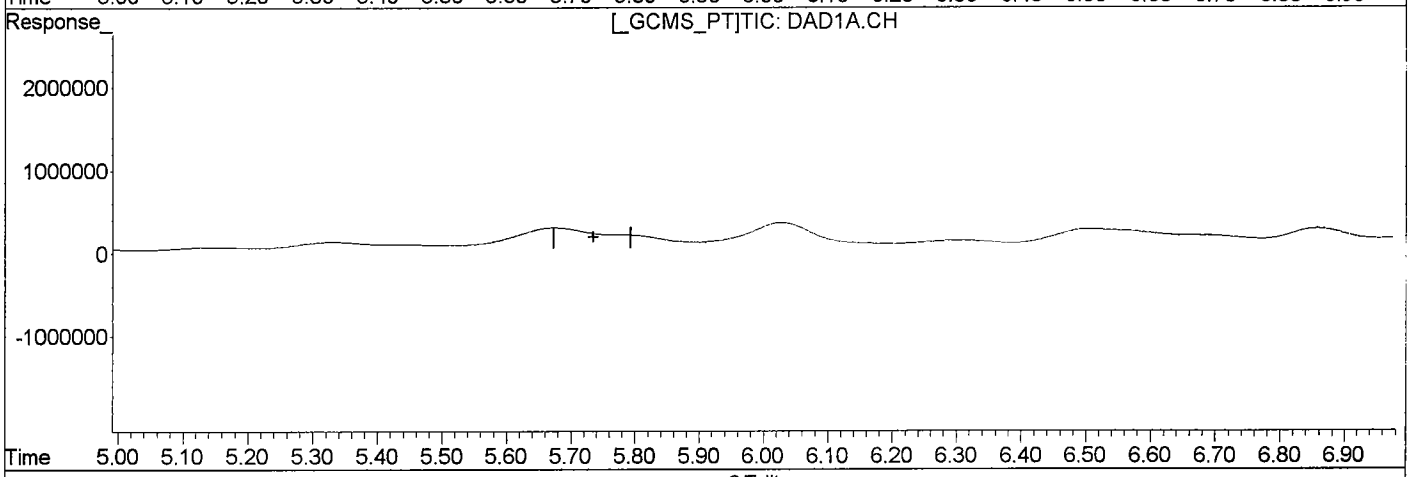
06140023.D 0328PAHS.M Thu Jun 14 19:36:27 2007

Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140023.D\FLD1A.CH Vial: 19
Signal #2 : J:\LC06\DATA\061407PA\06140023.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:21:37 Operator: PM
Sample : K04852-002 10X Inst : G1321A
Misc : Multiplr: 10.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





QEdit

(8) Fluoranthene (t)

5.78min 2.508ug/mL

response 11900739

ORIGINAL

(8) Fluoranthene #2 (t)

0.00min 0.000ug/mL

response 0

(+) = Expected Retention Time

06140023.D 0328PAHS.M Thu Jun 14 19:36:00 2007

Exception Report

Data File: J:\LC06\DATA\061407PA\06140024.D
Lab ID: K0704852-002
RunType: DL
Matrix: WATER

Date Acquired: 06/14/2007 17:42
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	*	NA	NA		x

Primary Review: PMcel 5/07

Secondary Review: AMG

Exception Report

Data File: J:\LC06\DATA\061407PA\06140024.D\06140024C.D
Lab ID: K0704852-002
RunType: DL
Matrix: WATER

Date Acquired: 06/14/2007 17:42
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	*	NA	NA		x

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Dibenz(a,h)anthracene	17.8	NA	15	

Primary Review: PMW 6/15/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	K0704852
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607765	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\061407PA\06140024.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140024.D\06140024c.d			**Vial:**	20
Acqu Date:	06/14/2007 17:42	**Quant Date:**	06/14/2007 19:31	**Dilution:**	100.0
Run Type:	DL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.11 +0.03	7.08 +0.03	10863612	95084	3.70	0.8170			NR
				%Recovery =	3698#	817#	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	13U	13U	NR
Acenaphthylene			0	0	0.0000	0.0000		12U	NR
Acenaphthene			0	0	0.0000	0.0000	15U	15U	NR
Fluorene	4.10 -0.01	4.08 -0.01	916012	44564	0.1420	0.2750	14JD	26D	NR
Phenanthrene	4.66	4.63 -0.01	5710949	245002	1.07	0.6660	110Ui	64Ui	110Ui
Anthracene	5.16	5.14 -0.01	178740	24134	0.0200	0.0320	1.9JD	3.0JD	NR
Fluoranthene	5.79 +0.04		1146759	0	0.2420	0.0000	23D	3.7U	NR
Pyrene	6.07 -0.02	6.03 -0.04	923634	177015	0.0360	2.28	3.4JD	220D	NR
Benz(a)anthracene			0	0	0.0000	0.0000	2.1U	2.1U	NR
Chrysene			0	0	0.0000	0.0000	2.1U	2.1U	NR
Benzo(b)fluoranthene			0	0	0.0000	0.0000	6.7U	6.7U	NR
Benzo(k)fluoranthene			0	0	0.0000	0.0000	3.3U	3.3U	NR
Benzo(a)pyrene			0	0	0.0000	0.0000	1.2U	1.2U	NR
Dibenz(a,h)anthracene		9.48 +0.03	0	8749	0.0000	0.1590CCV	3.5U	15JD	NR
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	3.6U	3.6U	NR
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	3.4U	3.4U	NR

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1050 ml	**Dilution:**	100.0
Prep Final Vol:	1.0 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061407PA\06140024.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140024.D\06140024c.d			**Vial:**	20
Acqu Date:	06/14/2007 17:42	**Quant Date:**	06/14/2007 19:31	**Dilution:**	100.0
Run Type:	DL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-002				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

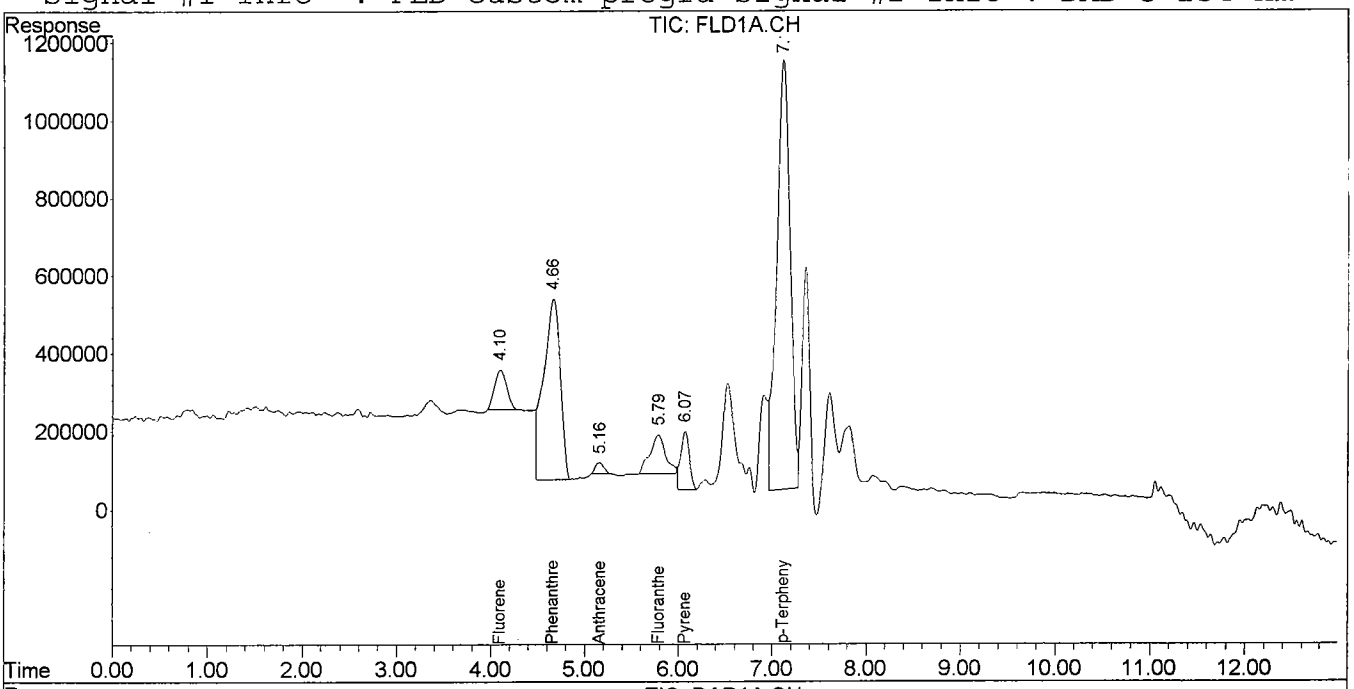
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

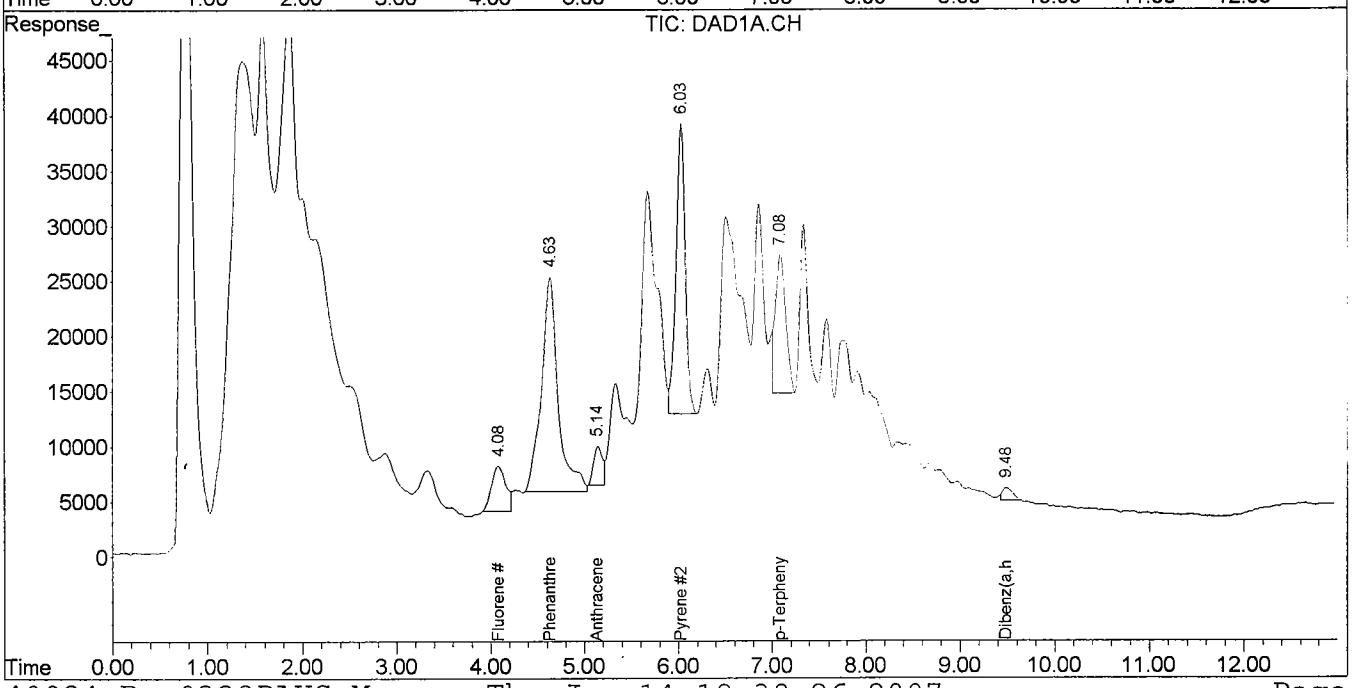
Quantitation Report (QT Reviewed)

Signal #1 : J:\LC06\DATA\061407PA\06140024.D\FLD1A.CH Vial: 20
Signal #2 : J:\LC06\DATA\061407PA\06140024.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:42:27 Operator: PM
Sample : K04852-002 100X Inst : G1321A
Misc : Multiplr: 100.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

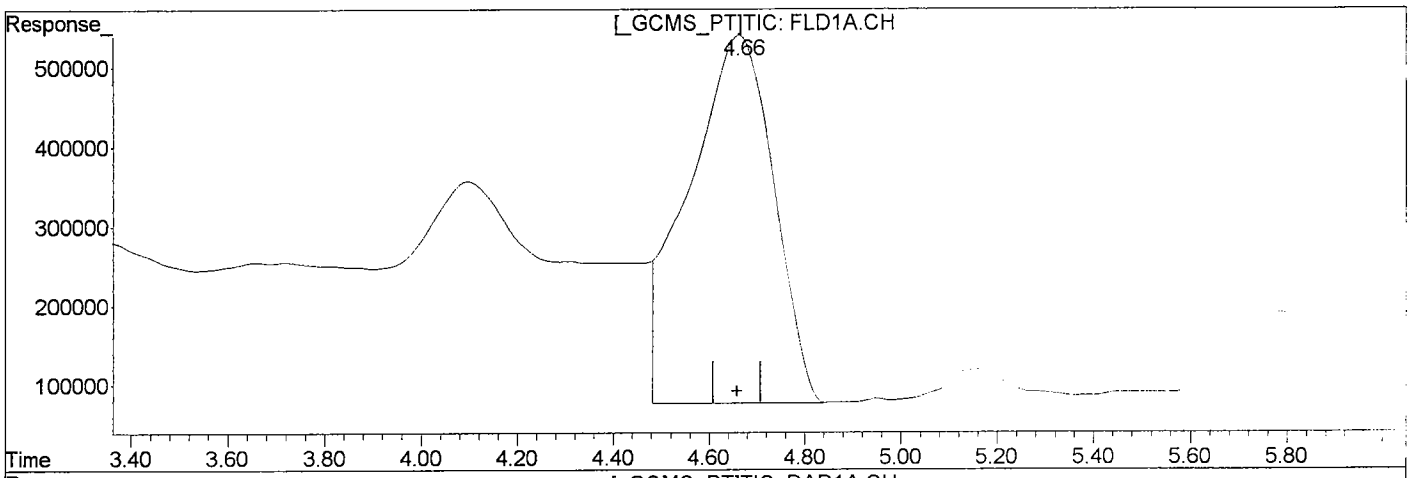


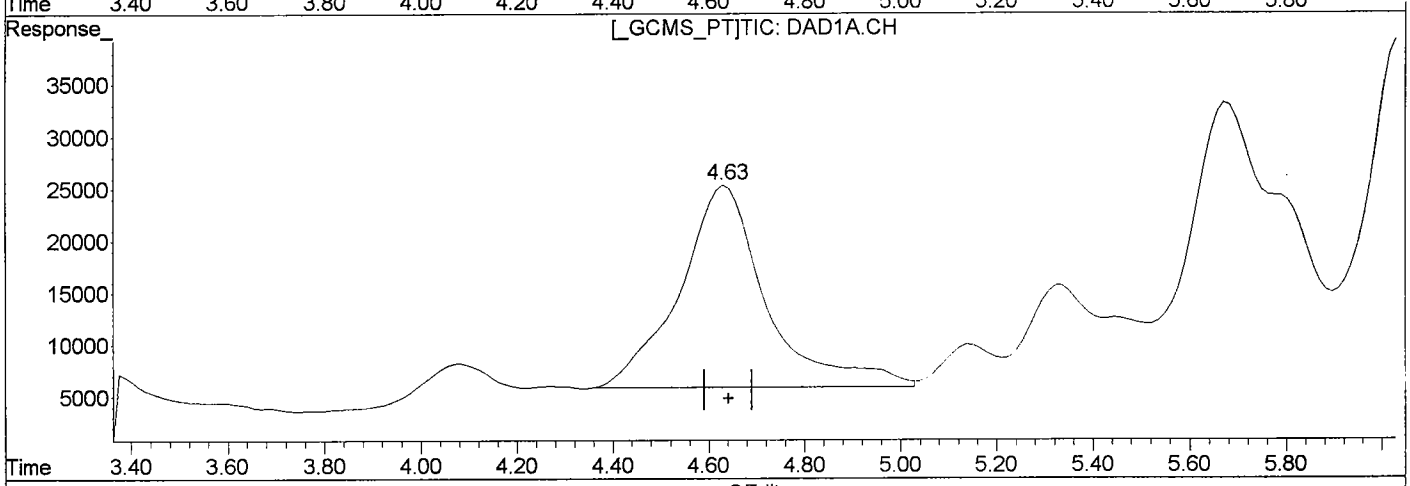


Quantitation Report (Qedit)

Signal #1 : J:\LC06\DATA\061407PA\06140024.D\FLD1A.CH Vial: 20
Signal #2 : J:\LC06\DATA\061407PA\06140024.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:42:27 Operator: PM
Sample : K04852-002 100X Inst : G1321A
Misc : Multiplr: 100.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration





QEdit

(6) Phenanthrene (t)

4.66min 1.073ug/mL

response 5710949

DETAILS

(6) Phenanthrene #2 (t)

4.63min 0.666ug/mL

response 245002

(+) = Expected Retention Time

06140024.D 0328PAHS.M Thu Jun 14 19:37:17 2007

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	06/06/2007
Sample Matrix:	Water	**Date Received:**	06/07/2007

Polynuclear Aromatic Hydrocarbons

Sample Name:	FM14EX07GW102CL	**Units:**	ug/L
Lab Code:	K0704852-004	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	0.97	1	06/11/07	06/12/07	KWG0706513	
Fluorene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Anthracene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.097	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl-d14	101	42-137	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\061207PA\06120006.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 20:22
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\061207PA\06120006.D\06120006C.D
Lab ID: K0704852-004
RunType: SMPL
Matrix: WATER

Date Acquired: 06/12/2007 20:22
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Dibenz(a,h)anthracene	47.8	NA	15	
Continuing Calibration Recovery (Closing)	Dibenz(a,h)anthracene	38.6	NA	15	

Primary Review: PM061507

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**	06/06/2007	**Receive Date:**	06/07/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	K0704852
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607764	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:	Polynuclear Aromatic Hydrocarbons	**Report List ID:**	LJ2763
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	**Method ID:**	MJ277
		Quant based on Report List	

Data File #1:	J:\LC06\DATA\061207PA\06120006.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120006.D\06120006c.d			**Vial:**	11
Acqu Date:	06/12/2007 20:22	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-004				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.15 +0.01	7.13 +0.01	29446658	1171289	10.02	10.07			101OK
				%Recovery =	100OK	101OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.59 +0.02		44445	0	0.0290	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
Acenaphthene			0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene		4.72 +0.02	0	734	0.0000	0.0020	0.013U	0.013U	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene		5.85 +0.06	0	4312	0.0000	0.0440	0.037U	0.042J	0.037U
Pyrene			0	0	0.0000	0.0000	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene		8.40 +0.06	0	7451	0.0000	0.0270	0.067U	0.067U	0.067U
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene			0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.57 +0.03	0	95470	0.0000	1.73CCV	0.035U	1.7	0.035U
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1040 ml	**Dilution:**	1.0
Prep Final Vol:	1.0 ml	**Unit Factor:**	1000

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061207PA\06120006.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120006.D\06120006c.d			**Vial:**	11
Acqu Date:	06/12/2007 20:22	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ug/mL
Lab ID:	K0704852-004				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

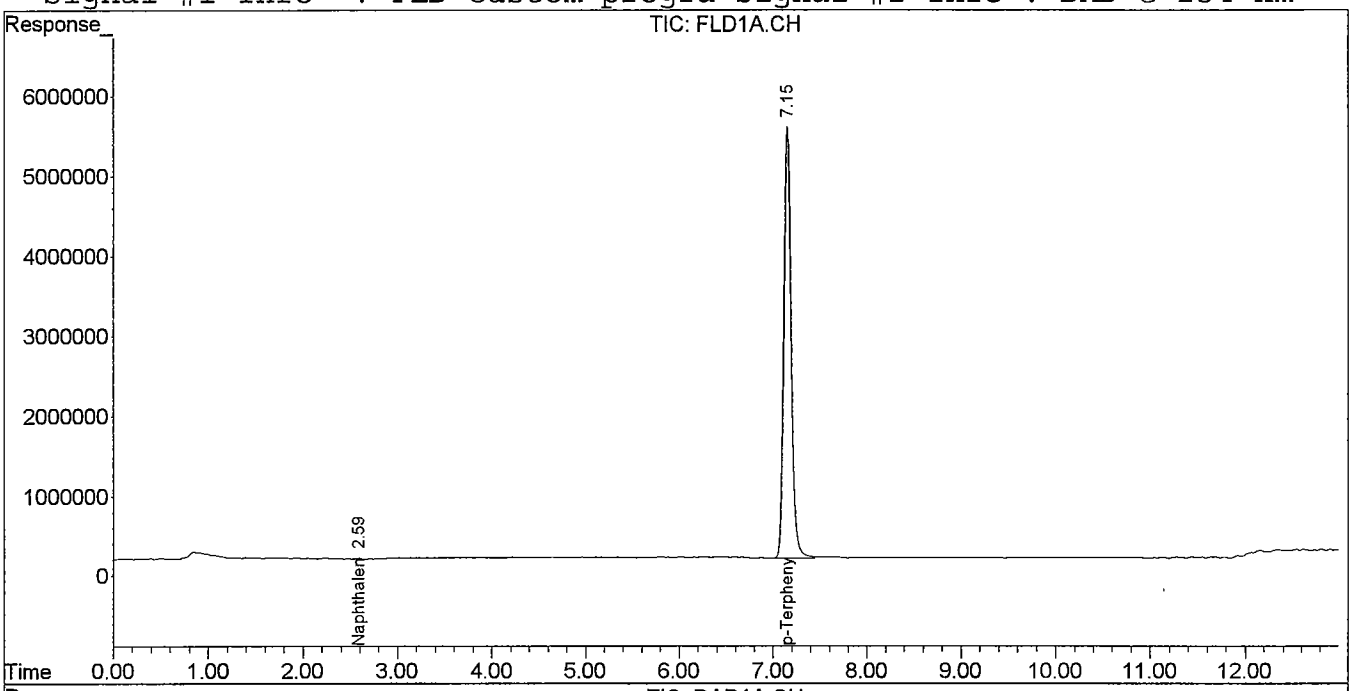
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

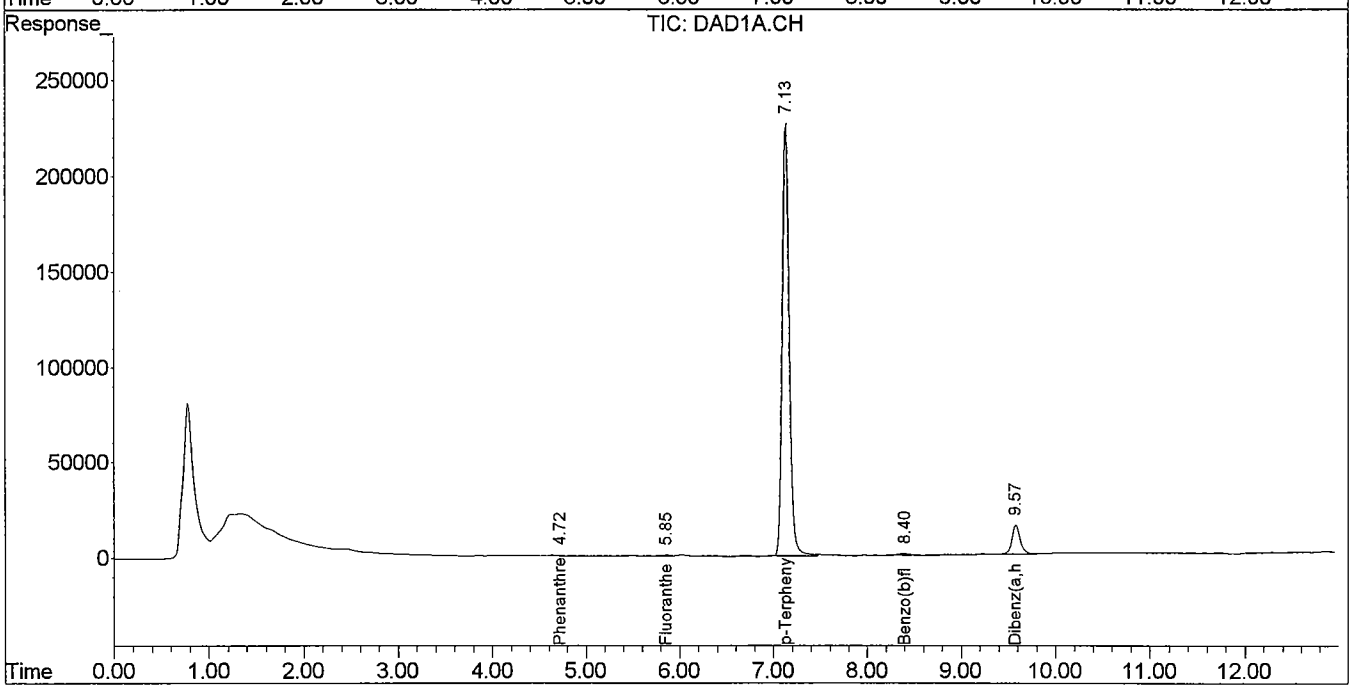
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120006.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\061207PA\06120006.D\DAD1A.CH
Acq On : 12-Jun-2007, 20:22:07 Operator: PM
Sample : K0704852-004 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0706513-3	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	ND	U	1.0	1	06/11/07	06/12/07	KWG0706513	
Fluorene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Anthracene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)anthracene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Chrysene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	ND	U	0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	ND	U	0.10	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	100	42-137	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\061207PA\06120008.D
Lab ID: KWG0706513-3
RunType: MB
Matrix: WATER

Date Acquired: 06/12/2007 21:03
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: Jm061507

Secondary Review: MMh

Exception Report

Data File: J:\LC06\DATA\061207PA\06120008.D\06120008C.D
Lab ID: KWG0706513-3
RunType: MB
Matrix: WATER

Date Acquired: 06/12/2007 21:03
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Dibenz(a,h)anthracene	47.8	NA	15	
Continuing Calibration Recovery (Closing)	Dibenz(a,h)anthracene	38.6	NA	15	

Primary Review: 061507

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607768	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120008.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120008.D\06120008c.d			**Vial:**	13
Acqu Date:	06/12/2007 21:03	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.14	7.12	29153537	1163900	9.92	10.01			100OK
				%Recovery =	99OK	100OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000	0.13U	0.13U	0.13U
Acenaphthylene			0	0	0.0000	0.0000		0.12U	0.12U
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000	0.14U	0.14U	0.14U
Acenaphthene			0	0	0.0000	0.0000	0.15U	0.15U	0.15U
Fluorene			0	0	0.0000	0.0000	0.018U	0.018U	0.018U
Phenanthrene			0	0	0.0000	0.0000	0.013U	0.013U	0.013U
Anthracene			0	0	0.0000	0.0000	0.0099U	0.0099U	0.0099U
Fluoranthene			0	0	0.0000	0.0000	0.037U	0.037U	0.037U
Pyrene			0	0	0.0000	0.0000	0.024U	0.024U	0.024U
Benz(a)anthracene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Chrysene			0	0	0.0000	0.0000	0.021U	0.021U	0.021U
Benzo(b)fluoranthene			0	0	0.0000	0.0000	0.067U	0.067U	0.067U
Benzo(k)fluoranthene			0	0	0.0000	0.0000	0.033U	0.033U	0.033U
Benzo(a)pyrene			0	0	0.0000	0.0000	0.012U	0.012U	0.012U
Dibenz(a,h)anthracene		9.57 +0.03	0	47866	0.0000	0.8690CCV	0.035U	0.869	0.035U
Benzo(g,h,i)perylene			0	0	0.0000	0.0000	0.036U	0.036U	0.036U
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000	0.034U	0.034U	0.034U

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061207PA\06120008.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120008.D\06120008c.d			**Vial:**	13
Acqu Date:	06/12/2007 21:03	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.0 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

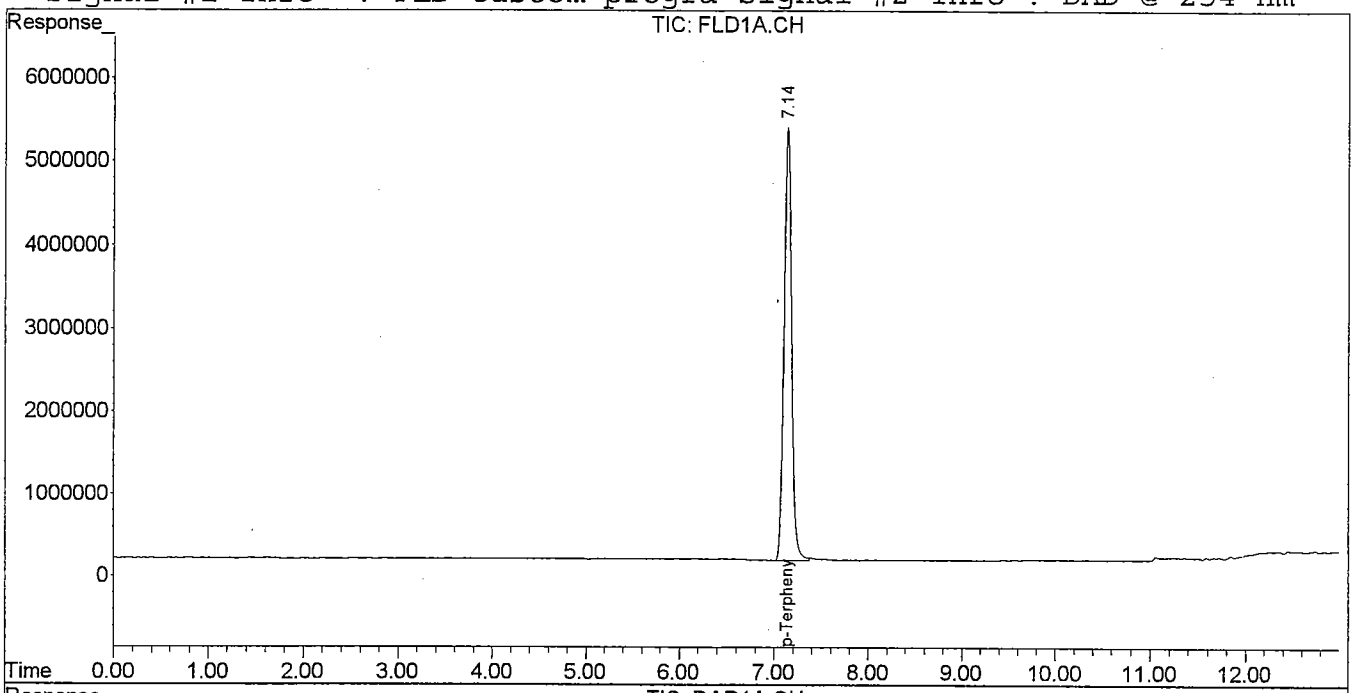
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

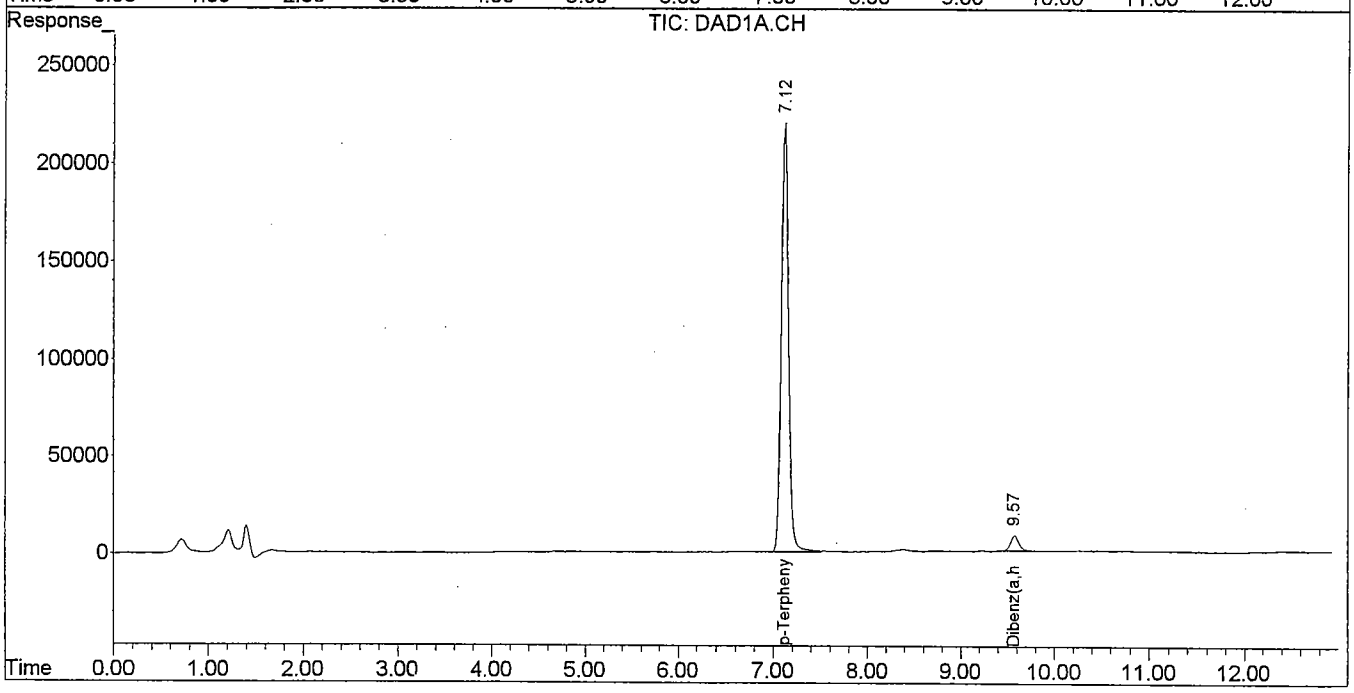
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120008.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\061207PA\06120008.D\DAD1A.CH
Acq On : 12-Jun-2007, 21:03:48 Operator: PM
Sample : KWG0706513~~LCS~~ MB PM061307 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706513-1	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**6.95**		1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	**7.51**		1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	**7.42**		1.0	1	06/11/07	06/12/07	KWG0706513	
Fluorene	**0.758**		0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	**0.831**		0.10	1	06/11/07	06/12/07	KWG0706513	
Anthracene	**0.844**		0.10	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	**0.836**		0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	**0.863**		0.20	1	06/11/07	06/12/07	KWG0706513	
Benz(a)anthracene	**0.902**		0.10	1	06/11/07	06/12/07	KWG0706513	
Chrysene	**0.925**		0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	**0.944**		0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	**0.913**		0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	**0.889**		0.10	1	06/11/07	06/12/07	KWG0706513	
Dibenz(a,h)anthracene	**0.814**	P	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	**0.912**		0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	**0.855**		0.10	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
[illegible]	98	42-137	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\061207PA\06120009.D
Lab ID: KWG0706513-1
RunType: LCS
Matrix: WATER

Date Acquired: 06/12/2007 21:24
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	25.1	NA	15	

Primary Review: PMore1507

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\061207PA\06120009.D\06120009C.D
Lab ID: KWG0706513-1
RunType: LCS
Matrix: WATER

Date Acquired: 06/12/2007 21:24
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Dibenz(a,h)anthracene	47.8	NA	15	
Continuing Calibration Recovery (Closing)	Dibenz(a,h)anthracene	38.6	NA	15	

Primary Review: PMC 6/15/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607766	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120009.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120009.D\06120009c.d			**Vial:**	14
Acqu Date:	06/12/2007 21:24	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-1				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.15 +0.01	7.14 +0.02	28448235	1140734	9.68	9.81			98OK
			%Recovery =		97OK	98OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	2.55	10703448	251670	6.89	6.95	6.89	6.95	**6.95**
Acenaphthylene		2.98	0	173603	0.0000	7.51		7.51	**7.51**
2-Methylnaphthalene/Dibe	3.60	3.58	4530126	211944	6.98	7.38	6.98	7.38	**7.38**
Acenaphthene	3.91	3.89 +0.01	5914323	93047	7.25	7.42	7.25	7.42	7.42
Fluorene	4.18 +0.01	4.15	4812707	122934	0.7460	0.7580	0.746	0.758	**0.758**
Phenanthrene	4.73 +0.01	4.71 +0.01	4220284	305943	0.7930	0.8310	0.793	0.831	**0.831**
Anthracene	5.23 +0.01	5.22 +0.02	7552186	633078	0.8300	0.8440	0.830	0.844	**0.844**
Fluoranthene	5.82 +0.01	5.81 +0.02	3754591	81475	0.7910	0.8360	0.791	0.836	**0.836**
Pyrene	6.16 +0.01	6.14 +0.02	21036043	67041	0.8120	0.8630	0.812	0.863	**0.863**
Benz(a)anthracene	7.33 +0.01	7.31 +0.01	12764343	219759	0.8870	0.9020	0.887	0.902	**0.902**
Chrysene	7.50 +0.01	7.49 +0.02	8411745	351710	0.9020	0.9250	0.902	0.925	**0.925**
Benzo(b)fluoranthene	8.38 +0.02	8.37 +0.03	2861975	257294	0.8890	0.9440	0.889	0.944	**0.944**
Benzo(k)fluoranthene	8.70 +0.03	8.69 +0.05	14709394	153756	0.9060	0.9130	0.906	0.913	**0.913**
Benzo(a)pyrene	9.04 +0.04	9.02 +0.04	10540098	221634	0.8830	0.8890	0.883	0.889	**0.889**
Dibenz(a,h)anthracene	9.61 +0.05	9.59 +0.05	4408975	128470	0.8140	2.33 CCV	0.814	2.33	**0.814**P
Benzo(g,h,i)perylene	9.95 +0.06	9.93 +0.06	9203500	81330	1.05 CCV	0.9120	1.05	0.912	**0.912**
Indeno(1,2,3-cd)pyrene	10.14 +0.07	10.11 +0.07	12045094	181050	0.8530	0.8550	0.853	0.855	**0.855**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061207PA\06120009.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120009.D\06120009c.d			**Vial:**	14
Acqu Date:	06/12/2007 21:24	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-1				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.0 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

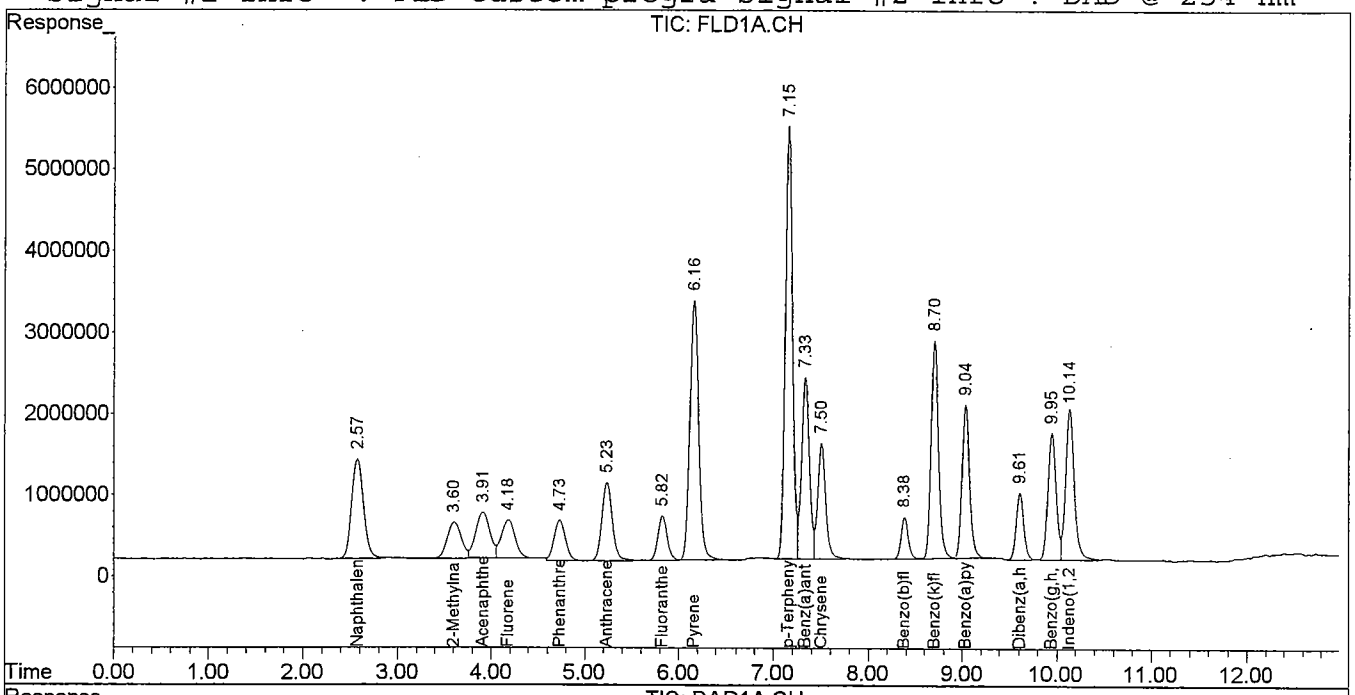
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

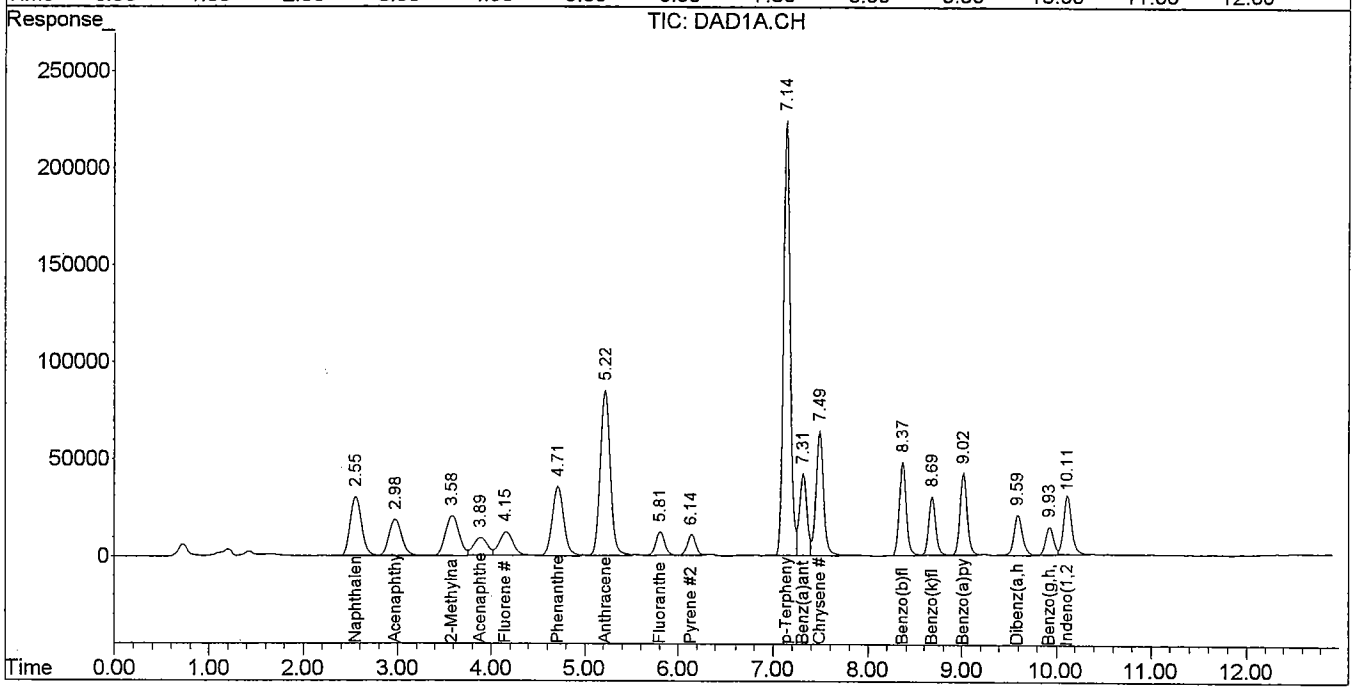
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120009.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\061207PA\06120009.D\DAD1A.CH
Acq On : 12-Jun-2007, 21:24:41 Operator: PM
Sample : KWG0706513~~DLCS~~ LCS Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0706513-2	**Basis:**	NA
Extraction Method:	EPA 3510C	**Level:**	Low
Analysis Method:	8310		

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**6.63**		1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthylene	**7.16**		1.0	1	06/11/07	06/12/07	KWG0706513	
Acenaphthene	**7.10**		1.0	1	06/11/07	06/12/07	KWG0706513	
Fluorene	**0.745**		0.20	1	06/11/07	06/12/07	KWG0706513	
Phenanthrene	**0.831**		0.10	1	06/11/07	06/12/07	KWG0706513	
Anthracene	**0.857**		0.10	1	06/11/07	06/12/07	KWG0706513	
Fluoranthene	**0.852**		0.20	1	06/11/07	06/12/07	KWG0706513	
Pyrene	**0.903**		0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)anthracene	**0.958**		0.10	1	06/11/07	06/12/07	KWG0706513	
Chrysene	**0.938**		0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(b)fluoranthene	**0.955**		0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(k)fluoranthene	**0.943**		0.10	1	06/11/07	06/12/07	KWG0706513	
Benzo(a)pyrene	**0.918**		0.10	1	06/11/07	06/12/07	KWG0706513	
Dibenzo(a,h)anthracene	**0.857**	P	0.20	1	06/11/07	06/12/07	KWG0706513	
Benzo(g,h,i)perylene	**0.878**		0.20	1	06/11/07	06/12/07	KWG0706513	
Indeno(1,2,3-cd)pyrene	**0.859**		0.10	1	06/11/07	06/12/07	KWG0706513	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
p-Terphenyl	100	42-137	06/12/07	Acceptable

Comments:

Exception Report

Data File: J:\LC06\DATA\061207PA\06120010.D
Lab ID: KWG0706513-2
RunType: DLCS
Matrix: WATER

Date Acquired: 06/12/2007 21:45
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	Benzo(g,h,i)perylene	25.1	NA	15	

Primary Review: Mcl 507

Secondary Review: MM

Exception Report

Data File: J:\LC06\DATA\061207PA\06120010.D\06120010C.D
Lab ID: KWG0706513-2
RunType: DLCS
Matrix: WATER

Date Acquired: 06/12/2007 21:45
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Calibration Verification Ave %D	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Calibration Verification Ave %D (Closing)	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA		x
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Dibenz(a,h)anthracene	47.8	NA	15	
Continuing Calibration Recovery (Closing)	Dibenz(a,h)anthracene	38.6	NA	15	

Primary Review: Michel 507

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/11/2007

Analysis Lot:	KWG0706622	**Prep Lot:**	KWG0706513	**Report Group:**	
Analysis Method:	8310	**Prep Method:**	EPA 3510C		
Prep Ref:	607767	**Prep Date:**	06/11/2007		

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:	J:\LC06\DATA\061207PA\06120008.D	Method ID:	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120010.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120010.D\06120010c.d			**Vial:**	15
Acqu Date:	06/12/2007 21:45	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.14	7.11 -0.01	29180786	1162932	9.93	10.00			100OK
			%Recovery =		99OK	100OK	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	2.55	10231255	239986	6.59	6.63	6.59	6.63	**6.63**
Acenaphthylene		2.97 -0.01	0	165594	0.0000	7.16		7.16	**7.16**
2-Methylnaphthalene/Dibe	3.60	3.58	4323512	200052	6.66	6.96	6.66	6.96	6.96
Acenaphthene	3.90 -0.01	3.89 +0.01	5718023	89037	7.01	7.10	7.01	7.10	**7.10**
Fluorene	4.17	4.15	4700661	120791	0.7280	0.7450	0.728	0.745	**0.745**
Phenanthrene	4.72	4.70	4307274	305742	0.8090	0.8310	0.809	0.831	**0.831**
Anthracene	5.22	5.19 -0.01	7595653	642430	0.8350	0.8570	0.835	0.857	**0.857**
Fluoranthene	5.81	5.78 -0.01	3696158	83056	0.7790	0.8520	0.779	0.852	**0.852**
Pyrene	6.15	6.13 +0.01	21616908	70150	0.8350	0.9030	0.835	0.903	**0.903**
Benz(a)anthracene	7.32	7.30	13043575	233513	0.9070	0.9580	0.907	0.958	**0.958**
Chrysene	7.49	7.46 -0.01	8577573	356545	0.9200	0.9380	0.920	0.938	**0.938**
Benzo(b)fluoranthene	8.36	8.34	2940075	260348	0.9130	0.9550	0.913	0.955	**0.955**
Benzo(k)fluoranthene	8.68 +0.01	8.66 +0.02	15000835	158882	0.9240	0.9430	0.924	0.943	**0.943**
Benzo(a)pyrene	9.01 +0.01	8.99 +0.01	10845897	228695	0.9080	0.9180	0.908	0.918	**0.918**
Dibenz(a,h)anthracene	9.58 +0.02	9.57 +0.03	4643703	124038	0.8570	2.25 CCV	0.857	2.25	**0.857**P
Benzo(g,h,i)perylene	9.92 +0.03	9.90 +0.03	9085055	78258	1.04 CCV	0.8780	1.04	0.878	**0.878**
Indeno(1,2,3-cd)pyrene	10.11 +0.04	10.09 +0.05	12122976	181842	0.8580	0.8590	0.858	0.859	**0.859**

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount: 1000 ml **Dilution:** 1.0

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\LC06\DATA\061207PA\06120010.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120010.D\06120010c.d			**Vial:**	15
Acqu Date:	06/12/2007 21:45	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706513-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Prep Final Vol: 1.0 ml **Unit Factor:** 1000

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

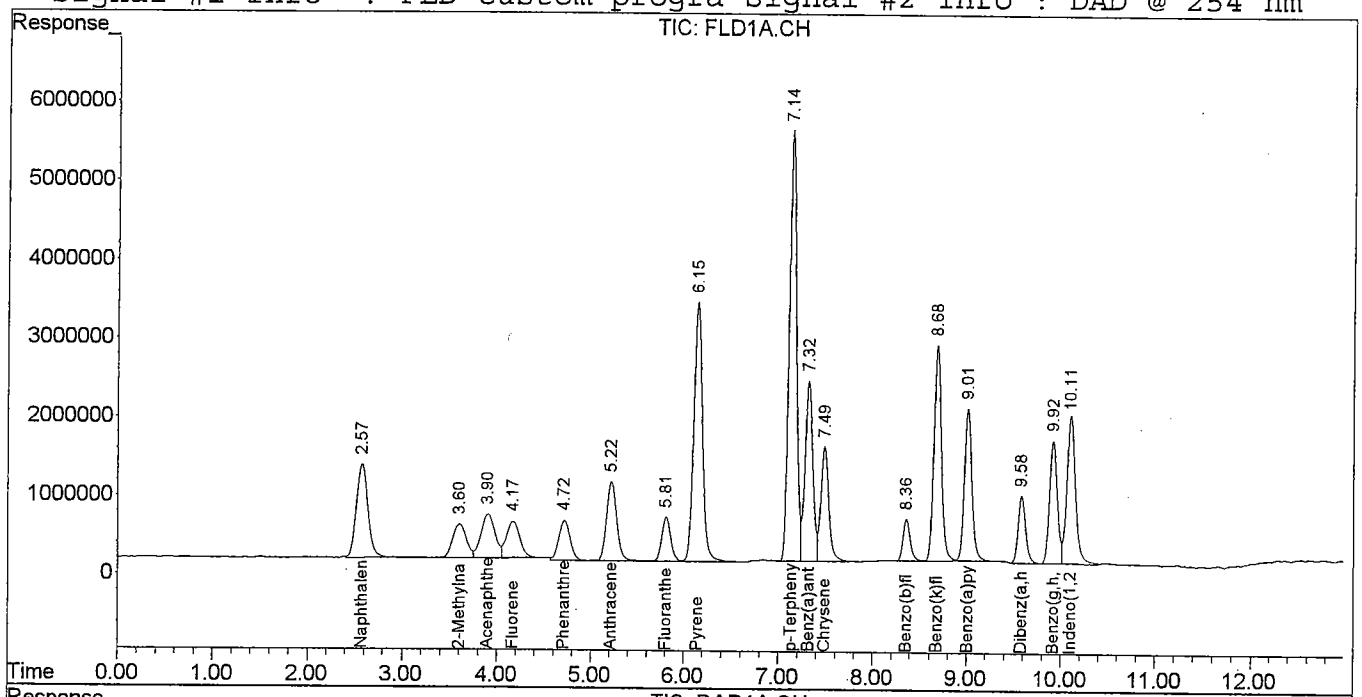
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

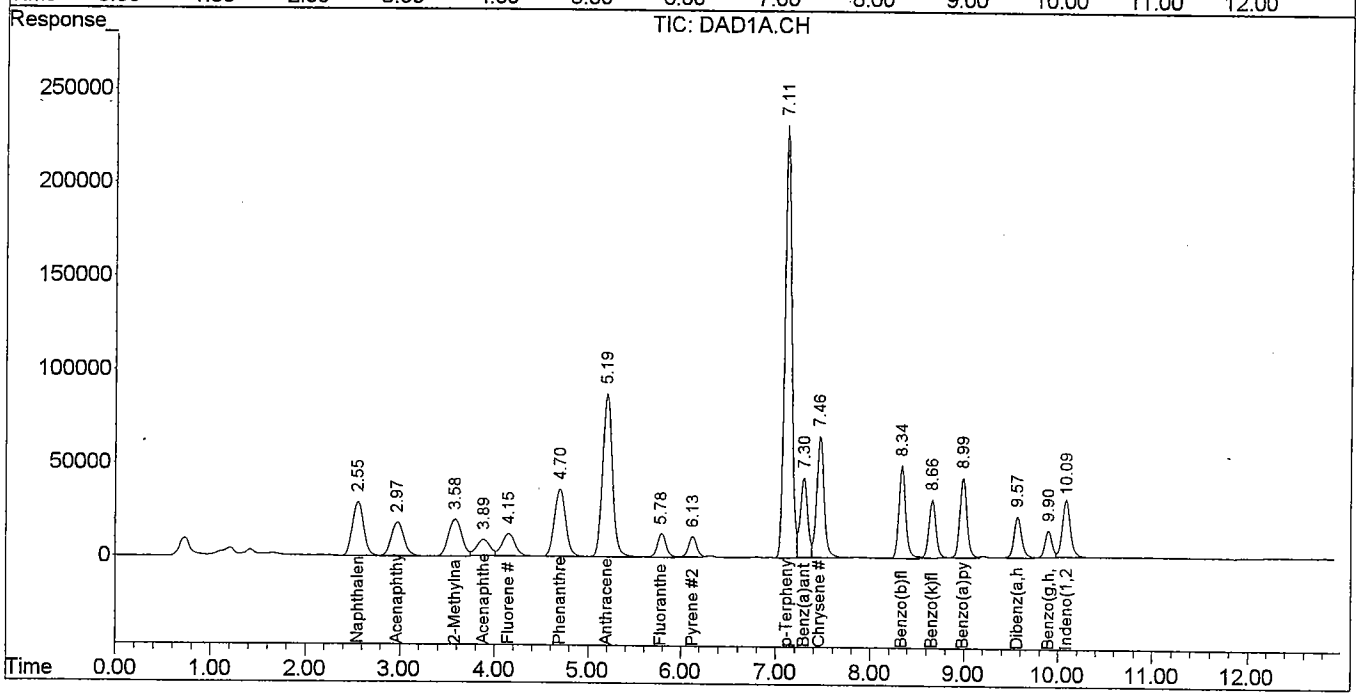
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120010.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\061207PA\06120010.D\DAD1A.CH
Acq On : 12-Jun-2007, 21:45:30 Operator: PM
Sample : KWG0706513~~MB~~ Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D\03280022c.d	E	J:\LC06\DATA\032807PA\03280026.D\03280026c.d
B	J:\LC06\DATA\032807PA\03280023.D\03280023c.d	F	J:\LC06\DATA\032807PA\03280027.D\03280027c.d
C	J:\LC06\DATA\032807PA\03280024.D\03280024c.d	G	J:\LC06\DATA\032807PA\03280028.D\03280028c.d
D	J:\LC06\DATA\032807PA\03280025.D\03280025c.d		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	1.15E+5	B	2.0	1.19E+5	C	5.0	1.15E+5	D	10	1.17E+5	E	20	1.18E+5
	F	50	1.15E+5	G	100	1.17E+5									
Naphthalene	A	1.0	35200	B	2.0	36700	C	5.0	35200	D	10	36300	E	20	36700
	F	50	36300	G	100	36900									
Acenaphthylene	A	1.0	21600	B	2.0	22300	C	5.0	23100	D	10	23300	E	20	23900
	F	50	23600	G	100	24100									
Acenaphthene	A	1.0	11300	B	2.0	11300	C	5.0	11700	D	10	13100	E	20	13400
	F	50	13500	G	100	13400									
Fluorene	A	0.10	1.58E+5	B	0.20	1.42E+5	C	0.50	1.50E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.69E+5	G	10	1.73E+5									
Phenanthrene	A	0.10	3.37E+5	B	0.20	3.71E+5	C	0.50	3.64E+5	D	1.0	3.74E+5	E	2.0	3.80E+5
	F	5.0	3.74E+5	G	10	3.77E+5									
Anthracene	A	0.10	7.62E+5	B	0.20	7.61E+5	C	0.50	7.61E+5	D	1.0	7.75E+5	E	2.0	7.72E+5
	F	5.0	7.30E+5	G	10	6.89E+5									
Fluoranthene	A	0.10	91600	B	0.20	88100	C	0.50	93200	D	1.0	99800	E	2.0	1.04E+5
	F	5.0	1.02E+5	G	10	1.04E+5									
Pyrene	A	0.10	70100	B	0.20	73400	C	0.50	75100	D	1.0	79200	E	2.0	82100
	F	5.0	81300	G	10	82500									
Benz[a]anthracene	A	0.10	2.25E+5	B	0.20	2.44E+5	C	0.50	2.45E+5	D	1.0	2.48E+5	E	2.0	2.48E+5
	F	5.0	2.48E+5	G	10	2.48E+5									
Chrysene	A	0.10	3.54E+5	B	0.20	3.80E+5	C	0.50	3.79E+5	D	1.0	3.87E+5	E	2.0	3.89E+5
	F	5.0	3.86E+5	G	10	3.86E+5									
Benzo[b]fluoranthene	A	0.10	2.72E+5	B	0.20	2.67E+5	C	0.50	2.69E+5	D	1.0	2.73E+5	E	2.0	2.76E+5
	F	5.0	2.74E+5	G	10	2.77E+5									
Benzo[k]fluoranthene	A	0.10	1.61E+5	B	0.20	1.64E+5	C	0.50	1.66E+5	D	1.0	1.71E+5	E	2.0	1.73E+5
	F	5.0	1.71E+5	G	10	1.73E+5									
Benzo[a]pyrene	A	0.10	2.40E+5	B	0.20	2.43E+5	C	0.50	2.50E+5	D	1.0	2.51E+5	E	2.0	2.55E+5
	F	5.0	2.51E+5	G	10	2.54E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Dibenz(a,h)anthracene	A	0.10	55900	B	0.20	55700	C	0.50	55700	D	1.0	54100	E	2.0	55200
	F	5.0	54100	G	10	54700									
Fen[illegible]e,h,i)perylene	A	0.10	80200	B	0.20	89600	C	0.50	90100	D	1.0	91200	E	2.0	91900
	F	5.0	90000	G	10	91300									
Inde[illegible](1,2,3-cd)pyrene	A	0.10	2.00E+5	B	0.20	2.06E+5	C	0.50	2.09E+5	D	1.0	2.16E+5	E	2.0	2.16E+5
	F	5.0	2.16E+5	G	10	2.19E+5									

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: DAD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.2		≤ 20
Naphthalene	MS	AverageRF	% RSD	2.0		≤ 20
Acenaphthylene	MS	AverageRF	% RSD	3.9		≤ 20
Acenaphthene	MS	AverageRF	% RSD	8.3		≤ 20
Fluorene	MS	AverageRF	% RSD	7.7		≤ 20
Phenanthrene	MS	AverageRF	% RSD	4.0		≤ 20
Anthracene	MS	AverageRF	% RSD	4.1		≤ 20
Fluoranthene	MS	AverageRF	% RSD	6.6		≤ 20
Pyrene	MS	AverageRF	% RSD	6.2		≤ 20
Benzo(a)anthracene	MS	AverageRF	% RSD	3.5		≤ 20
Chrysene	MS	AverageRF	% RSD	3.2		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.3		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	2.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	2.2		≤ 20
Dibenzo(a,h)anthracene	MS	AverageRF	% RSD	1.4		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	4.5		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	3.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Calibration Date:**	03/28/2007
		Date Analyzed:	03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration ID:**	CAL6170
Analysis Method:	8310	**Units:**	ug/mL
File ID:	J:\LC06\DATA\032807PA\03280030.D\03280030c.d	**Column ID:**	DAD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	9.7	36200	35000	-3	NA	± 15 %	AverageRF
Acenaphthylene	10	10	23100	23700	2	NA	± 15 %	AverageRF
Acenaphthene	10	11	12500	13300	6	NA	± 15 %	AverageRF
Fluorene	1.0	1.1	162000	173000	6	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	368000	383000	4	NA	± 15 %	AverageRF
Anthracene	1.0	1.0	750000	780000	4	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.97	97500	94600	-3	NA	± 15 %	AverageRF
Pyrene	1.0	1.0	77700	79700	3	NA	± 15 %	AverageRF
Benz(a)anthracene	1.0	0.97	244000	235000	-3	NA	± 15 %	AverageRF
Chrysene	1.0	0.99	380000	377000	-1	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	273000	277000	2	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	168000	174000	3	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	249000	253000	1	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	55100	61400	12	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	89200	95100	7	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.97	212000	205000	-3	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Level ID	File ID	Level ID	File ID
A	J:\LC06\DATA\032807PA\03280022.D	E	J:\LC06\DATA\032807PA\03280026.D
B	J:\LC06\DATA\032807PA\03280023.D	F	J:\LC06\DATA\032807PA\03280027.D
C	J:\LC06\DATA\032807PA\03280024.D	G	J:\LC06\DATA\032807PA\03280028.D
D	J:\LC06\DATA\032807PA\03280025.D		

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
p-Terphenyl	A	1.0	2.97E+6	B	2.0	3.00E+6	C	5.0	2.87E+6	D	10	2.92E+6	E	20	2.94E+6
	F	50	2.91E+6	G	100	2.95E+6									
Naphthalene	A	1.0	1.62E+6	B	2.0	1.56E+6	C	5.0	1.61E+6	D	10	1.56E+6	E	20	1.60E+6
	F	50	1.50E+6	G	100	1.43E+6									
Acenaphthene	A	1.0	8.49E+5	B	2.0	8.23E+5	C	5.0	8.02E+5	D	10	8.11E+5	E	20	8.19E+5
	F	50	8.00E+5	G	100	8.09E+5									
Fluorene	A	0.10	6.56E+6	B	0.20	6.53E+6	C	0.50	6.33E+6	D	1.0	6.46E+6	E	2.0	6.52E+6
	F	5.0	6.36E+6	G	10	6.43E+6									
Phenanthrene	A	0.10	5.14E+6	B	0.20	5.30E+6	C	0.50	5.33E+6	D	1.0	5.39E+6	E	2.0	5.38E+6
	F	5.0	5.31E+6	G	10	5.40E+6									
Anthracene	A	0.10	8.97E+6	B	0.20	9.52E+6	C	0.50	9.35E+6	D	1.0	8.91E+6	E	2.0	9.03E+6
	F	5.0	8.90E+6	G	10	9.02E+6									
Fluoranthene	A	0.10	4.98E+6	B	0.20	5.50E+6	C	0.50	4.61E+6	D	1.0	4.62E+6	E	2.0	4.49E+6
	F	5.0	4.44E+6	G	10	4.57E+6									
Pyrene	A	0.10	2.56E+7	B	0.20	2.57E+7	C	0.50	2.55E+7	D	1.0	2.61E+7	E	2.0	2.63E+7
	F	5.0	2.59E+7	G	10	2.61E+7									
Benz(a)anthracene	A	0.10	1.45E+7	B	0.20	1.42E+7	C	0.50	1.43E+7	D	1.0	1.44E+7	E	2.0	1.45E+7
	F	5.0	1.43E+7	G	10	1.45E+7									
Chrysene	A	0.10	8.91E+6	B	0.20	9.14E+6	C	0.50	9.34E+6	D	1.0	9.47E+6	E	2.0	9.47E+6
	F	5.0	9.43E+6	G	10	9.51E+6									
Indeno(1,2,3-cd)fluoranthene	A	0.10	3.30E+6	B	0.20	3.28E+6	C	0.50	3.17E+6	D	1.0	3.15E+6	E	2.0	3.22E+6
	F	5.0	3.16E+6	G	10	3.25E+6									
Benzo(b)fluoranthene	A	0.10	1.63E+7	B	0.20	1.64E+7	C	0.50	1.61E+7	D	1.0	1.63E+7	E	2.0	1.64E+7
	F	5.0	1.61E+7	G	10	1.61E+7									
Benzo(a)pyrene	A	0.10	1.17E+7	B	0.20	1.19E+7	C	0.50	1.19E+7	D	1.0	1.21E+7	E	2.0	1.21E+7
	F	5.0	1.20E+7	G	10	1.20E+7									
Dibenz(a,h)anthracene	A	0.10	5.29E+6	B	0.20	5.35E+6	C	0.50	5.38E+6	D	1.0	5.45E+6	E	2.0	5.49E+6
	F	5.0	5.44E+6	G	10	5.53E+6									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Benzo(g,h,i)perylene	A	0.10	7.74E+6	B	0.20	8.14E+6	C	0.50	8.66E+6	D	1.0	9.02E+6	E	2.0	9.64E+6
	F	5.0	8.62E+6	G	10	9.48E+6									
Indeno(1,2,3-cd)pyrene	A	0.10	1.41E+7	B	0.20	1.42E+7	C	0.50	1.38E+7	D	1.0	1.41E+7	E	2.0	1.42E+7
	F	5.0	1.41E+7	G	10	1.43E+7									

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL6170
Instrument ID: LC06

Column: FLD Vydac C

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
p-Terphenyl	SURR	AverageRF	% RSD	1.5		≤ 20
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 20
Acenaphthene	MS	AverageRF	% RSD	2.0		≤ 20
Fluorene	MS	AverageRF	% RSD	1.3		≤ 20
Phenanthrene	MS	AverageRF	% RSD	1.7		≤ 20
Anthracene	MS	AverageRF	% RSD	2.6		≤ 20
Fluoranthene	MS	AverageRF	% RSD	7.9		≤ 20
Pyrene	MS	AverageRF	% RSD	1.1		≤ 20
Benzo(a)anthracene	MS	AverageRF	% RSD	1.0		≤ 20
Chrysene	MS	AverageRF	% RSD	2.4		≤ 20
Benzo(b)fluoranthene	MS	AverageRF	% RSD	1.9		≤ 20
Benzo(k)fluoranthene	MS	AverageRF	% RSD	0.8		≤ 20
Benzo(a)pyrene	MS	AverageRF	% RSD	1.0		≤ 20
Dibenzo(a,h)anthracene	MS	AverageRF	% RSD	1.5		≤ 20
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	7.8		≤ 20
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	1.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Calibration Date: 03/28/2007
Date Analyzed: 03/28/2007

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration ID: CAL6170
Units: ug/mL

File ID: J:\LC06\DATA\032807PA\03280030.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	10	10	1550000	1560000	0	NA	± 15 %	AverageRF
Acenaphthene	10	9.9	816000	810000	-1	NA	± 15 %	AverageRF
Fluorene	1.0	0.99	6450000	6380000	-1	NA	± 15 %	AverageRF
Phenanthrene	1.0	1.0	5320000	5460000	3	NA	± 15 %	AverageRF
Anthracene	1.0	0.99	9100000	9010000	-1	NA	± 15 %	AverageRF
Fluoranthene	1.0	0.95	4750000	4520000	-5	NA	± 15 %	AverageRF
Pyrene	1.0	0.98	25900000	25400000	-2	NA	± 15 %	AverageRF
Benzo(a)anthracene	1.0	0.96	14400000	13800000	-4	NA	± 15 %	AverageRF
Chrysene	1.0	0.98	9320000	9110000	-2	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	1.0	1.0	3220000	3220000	0	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	1.0	1.0	16200000	16500000	2	NA	± 15 %	AverageRF
Benzo(a)pyrene	1.0	1.0	11900000	12000000	0	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	1.0	1.1	5420000	6170000	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	1.0	1.1	8760000	9920000	13	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	1.0	0.94	14100000	13300000	-6	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

DATA ANALYSIS PARAMETERS

Method Name: J:\LC06\METHODS\0328PAHS.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: Yes
File: No

Integration Events: Meth Default

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Quantitative Report Settings

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: No

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0328PAHs aka CAL6170
Calibration Last Updated: Wed Mar 28 22:27:12 2007

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes
Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

1) Naphthalene ( )
Ret. Time 2.58 min., Extract & Integrate from 2.53 to 2.63 min.

Lvl ID Conc (ug/mL) Response

CCV	10.000	-1
1	1.000	1616285
2	2.000	3117249
3	5.000	8051900
4	10.000	15618134
5	20.000	32030393
6	50.000	74936469
7	100.000	142915511

Curve Fit: Avg. RF

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2) Acenaphthylene ( )

Ret. Time 3.16 min., Extract & Integrate from 3.16 to 3.16 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

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3) 2-Methylnaphthalene ( )

Ret. Time 3.63 min., Extract & Integrate from 3.58 to 3.68 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	675582
2		2.000	1326316
3		5.000	3193656
4		10.000	6393320
5		20.000	13036535
6		50.000	31616711
7		100.000	64106201

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Curve Fit: Avg. RF

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4) Acenaphthene ( )

Ret. Time 3.93 min., Extract & Integrate from 3.87 to 3.99 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	849080
2		2.000	1645409
3		5.000	4012450
4		10.000	8107649
5		20.000	16380514
6		50.000	40017661
7		100.000	80863233

Curve Fit: Avg. RF

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5) Fluorene ( )
Ret. Time 4.21 min., Extract & Integrate from 4.16 to 4.26 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	655851
2		0.200	1305788
3		0.500	3165885
4		1.000	6455183
5		2.000	13037373
6		5.000	31796156
7		10.000	64296595

Curve Fit: Avg. RF

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6) Phenanthrene ( )
Ret. Time 4.76 min., Extract & Integrate from 4.71 to 4.81 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	513510
2		0.200	1059577
3		0.500	2662862
4		1.000	5391539
5		2.000	10768593
6		5.000	26562195
7		10.000	54003564

Curve Fit: Avg. RF

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7) Anthracene ( )
Ret. Time 5.27 min., Extract & Integrate from 5.21 to 5.33 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	896935
2		0.200	1904593
3		0.500	4673208
4		1.000	8912960
5		2.000	18057968
6		5.000	44482232
7		10.000	90242988

Curve Fit: Avg. RF

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8) Fluoranthene ( )
Ret. Time 5.85 min., Extract & Integrate from 5.80 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	498389
2		0.200	1100137
3		0.500	2306705
4		1.000	4619076
5		2.000	8974769
6		5.000	22188195

7	10.000	45749539

Curve Fit: Avg. RF

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9) Pyrene ( )

Ret. Time 6.19 min., Extract & Integrate from 6.14 to 6.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	2561788
2		0.200	5141694
3		0.500	12770395
4		1.000	26079628
5		2.000	52604582
6		5.000	129344510
7		10.000	261327859

Curve Fit: Avg. RF

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10) p-Terphenyl ( )

Ret. Time 7.19 min., Extract & Integrate from 7.13 to 7.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	2971418
2		2.000	6004467
3		5.000	14350937
4		10.000	29220571
5		20.000	58778300
6		50.000	145291735
7		100.000	295250656

Curve Fit: Avg. RF

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11) Benz(a)anthracene ( )

Ret. Time 7.37 min., Extract & Integrate from 7.29 to 7.45 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1453538
2		0.200	2842764
3		0.500	7127365
4		1.000	14376186
5		2.000	28969567
6		5.000	71452786
7		10.000	145456474

PM 032907

Curve Fit: Avg. RF

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12) Chrysene ( )

Ret. Time 7.55 min., Extract & Integrate from 7.49 to 7.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	890676

2	0.200	1827784
3	0.500	4671564
4	1.000	9470153
5	2.000	18934947
6	5.000	47147677
7	10.000	95127195

Curve Fit: Avg. RF

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13) Benzo(b)fluoranthene ( )
Ret. Time 8.42 min., Extract & Integrate from 8.34 to 8.50 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	329575
2		0.200	656278
3		0.500	1585127
4		1.000	3153643
5		2.000	6444928
6		5.000	15785292
7		10.000	32512842

Curve Fit: Avg. RF

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14) Benzo(k)fluoranthene ( )
Ret. Time 8.74 min., Extract & Integrate from 8.66 to 8.82 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1627349
2		0.200	3275877
3		0.500	8030146
4		1.000	16291932
5		2.000	32802216
6		5.000	80609520
7		10.000	161243738

PM 032407

Curve Fit: Avg. RF

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15) Benzo(a)pyrene ( )
Ret. Time 9.08 min., Extract & Integrate from 8.99 to 9.17 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1172902
2		0.200	2376819
3		0.500	5951067
4		1.000	12087980
5		2.000	24120811
6		5.000	59849384
7		10.000	119668076

Curve Fit: Avg. RF

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16) Dibenz(a,h)anthracene ( )

Ret. Time 9.65 min., Extract & Integrate from 9.56 to 9.74 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	528930
2		0.200	1070467
3		0.500	2690421
4		1.000	5454531
5		2.000	10970124
6		5.000	27193125
7		10.000	55313300

Curve Fit: Avg. RF

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17) Benzo(g,h,i)perylene ( )
Ret. Time 9.98 min., Extract & Integrate from 9.89 to 10.07 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	774212
2		0.200	1628378
3		0.500	4330750
4		1.000	9022809
5		2.000	19289508
6		5.000	43105690
7		10.000	94801391

Curve Fit: Avg. RF

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18) Indeno(1,2,3-cd)pyrene ( )
Ret. Time 10.18 min., Extract & Integrate from 10.07 to 10.29 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	1409282
2		0.200	2839793
3		0.500	6922934
4		1.000	14068661
5		2.000	28429576
6		5.000	70621147
7		10.000	143425917

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Curve Fit: Avg. RF

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19) Signal #2 ( )
Ret. Time 0.00 min., Extract & Integrate from 0.00 to 0.00 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		not used for this compound	
1		not used for this compound	
2		not used for this compound	
3		not used for this compound	
4		not used for this compound	
5		not used for this compound	
6		not used for this compound	
7		not used for this compound	

Curve Fit: Avg. RF

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20) Naphthalene #2 ( )
Ret. Time 2.56 min., Extract & Integrate from 2.51 to 2.61 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	35239
2		2.000	73393
3		5.000	175786
4		10.000	362793
5		20.000	733964
6		50.000	1816789
7		100.000	3694782

Curve Fit: Avg. RF

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21) Acenaphthylene #2 ( )
Ret. Time 2.98 min., Extract & Integrate from 2.92 to 3.04 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	21595
2		2.000	44570
3		5.000	115264
4		10.000	233229
5		20.000	478156
6		50.000	1181484
7		100.000	2406259

Curve Fit: Avg. RF

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22) 2-Methylnaphthalene #2 ( )
Ret. Time 3.60 min., Extract & Integrate from 3.54 to 3.66 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	27178
2		2.000	56062
3		5.000	140130
4		10.000	290014
5		20.000	593155
6		50.000	1465419
7		100.000	2994696

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Curve Fit: Avg. RF

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23) Acenaphthene #2 ( )
Ret. Time 3.90 min., Extract & Integrate from 3.85 to 3.95 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	11308
2		2.000	22613
3		5.000	58571

4	10.000	131301
5	20.000	267348
6	50.000	673607
7	100.000	1343628

Curve Fit: Avg. RF

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24) Fluorene #2 ( )
Ret. Time 4.18 min., Extract & Integrate from 4.12 to 4.24 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	15757
2		0.200	28386
3		0.500	75046
4		1.000	171038
5		2.000	346458
6		5.000	842802
7		10.000	1726074

Curve Fit: Avg. RF

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25) Phenanthrene #2 ( )
Ret. Time 4.74 min., Extract & Integrate from 4.69 to 4.79 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	33664
2		0.200	74146
3		0.500	181890
4		1.000	374224
5		2.000	759025
6		5.000	1868551
7		10.000	3774932

pm032907

Curve Fit: Avg. RF

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26) Anthracene #2 ( )
Ret. Time 5.25 min., Extract & Integrate from 5.20 to 5.30 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	76159
2		0.200	152285
3		0.500	380578
4		1.000	774610
5		2.000	1543469
6		5.000	3647690
7		10.000	6894749

Curve Fit: Avg. RF

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27) Fluoranthene #2 ( )
Ret. Time 5.84 min., Extract & Integrate from 5.78 to 5.90 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	9164
2		0.200	17621
3		0.500	46619
4		1.000	99801
5		2.000	207035
6		5.000	510608
7		10.000	1039098

Curve Fit: Avg. RF

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28) Pyrene #2 ( )
Ret. Time 6.17 min., Extract & Integrate from 6.12 to 6.22 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	7014
2		0.200	14671
3		0.500	37542
4		1.000	79224
5		2.000	164170
6		5.000	406326
7		10.000	824890

Curve Fit: Avg. RF

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29) p-Terphenyl #2 ( )
Ret. Time 7.17 min., Extract & Integrate from 7.11 to 7.23 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		10.000	-1
1		1.000	114938
2		2.000	237213
3		5.000	573021
4		10.000	1165706
5		20.000	2350454
6		50.000	5768380
7		100.000	11673630

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Curve Fit: Avg. RF

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30) Benz(a)anthracene #2 ( )
Ret. Time 7.36 min., Extract & Integrate from 7.28 to 7.44 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	22458
2		0.200	48797
3		0.500	122386
4		1.000	248426
5		2.000	496343
6		5.000	1238659
7		10.000	2482982

Curve Fit: Avg. RF

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31) Chrysene #2 ( )
Ret. Time 7.53 min., Extract & Integrate from 7.47 to 7.59 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	35394
2		0.200	76066
3		0.500	189443
4		1.000	387238
5		2.000	777432
6		5.000	1930709
7		10.000	3862295

Curve Fit: Avg. RF

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32) Benzo(b)fluoranthene #2 ( )
Ret. Time 8.40 min., Extract & Integrate from 8.31 to 8.49 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	27248
2		0.200	53458
3		0.500	134375
4		1.000	272534
5		2.000	552249
6		5.000	1367885
7		10.000	2767895

Curve Fit: Avg. RF

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33) Benzo(k)fluoranthene #2 ( )
Ret. Time 8.72 min., Extract & Integrate from 8.64 to 8.80 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	16097
2		0.200	32788
3		0.500	83124
4		1.000	171306
5		2.000	345666
6		5.000	855438
7		10.000	1725568

Curve Fit: Avg. RF

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34) Benzo(a)pyrene #2 ( )
Ret. Time 9.05 min., Extract & Integrate from 8.99 to 9.11 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	24039
2		0.200	48515
3		0.500	125020
4		1.000	251443
5		2.000	509324

6	5.000	1256720
7	10.000	2541208

Curve Fit: Avg. RF

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35) Dibenz(a,h)anthracene #2 ( )
Ret. Time 9.62 min., Extract & Integrate from 9.53 to 9.71 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	5590
2		0.200	11144
3		0.500	27868
4		1.000	54054
5		2.000	110410
6		5.000	270343
7		10.000	547025

Curve Fit: Avg. RF

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36) Benzo(g,h,i)perylene #2 ( )
Ret. Time 9.96 min., Extract & Integrate from 9.87 to 10.05 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	8022
2		0.200	17914
3		0.500	45055
4		1.000	91202
5		2.000	183728
6		5.000	449845
7		10.000	913046

Curve Fit: Avg. RF

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37) Indeno(1,2,3-cd)pyrene #2 ( )
Ret. Time 10.16 min., Extract & Integrate from 10.07 to 10.25 min.

Lvl	ID	Conc (ug/mL)	Response
CCV		1.000	-1
1		0.100	20018
2		0.200	41262
3		0.500	104472
4		1.000	215803
5		2.000	431674
6		5.000	1080621
7		10.000	2189286

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Curve Fit: Avg. RF

END OF DATA ANALYSIS PARAMETERS

Thu Mar 29 11:37:20 2007

PM032907

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:11 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.16	2971418	114938	1.010	0.987	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	1616285	35239	1.017	0.978	
2)	t	Acenaphthylene	0.00	2.98	0	21595	N.D.	0.946	#
3)	t	2-Methylnaphthal	3.62	3.60	675582	27178	1.033	0.958	
4)	t	Acenaphthene	3.92	3.90	849080	11308	1.034	0.930	
5)	t	Fluorene	4.20	4.18	655851	15757	0.101	0.099	
6)	t	Phenanthrene	4.76	4.73	513510	33664	0.097	0.092	
7)	t	Anthracene	5.25	5.24	896935	76159	0.098	0.099	
8)	t	Fluoranthene	5.84	5.82	498389	9164	0.103	0.096	
9)	t	Pyrene	6.18	6.16	2561788	7014	0.099	0.092	
11)	t	Benz(a)anthracen	7.36	7.34	1453538	22458	0.101	0.093	
12)	t	Chrysene	7.53	7.52	890676	35394	0.096	0.094	
13)	t	Benzo(b)fluorant	8.41	8.38	329575	27248	0.102	0.100	
14)	t	Benzo(k)fluorant	8.73	8.70	1627349	16097	0.100	0.096	
15)	t	Benzo(a)pyrene	9.06	9.04	1172902	24039	0.098	0.097	
16)	t	Dibenz(a,h)anthr	9.64	9.61	528930	5590	0.098	0.101	
17)	t	Benzo(g,h,i)pery	9.96	9.94	774212	8022	0.088	0.091	
18)	t	Indeno(1,2,3-cd)	10.16	10.14	1409282	20018	0.100	0.096	

PM 032907

MLL

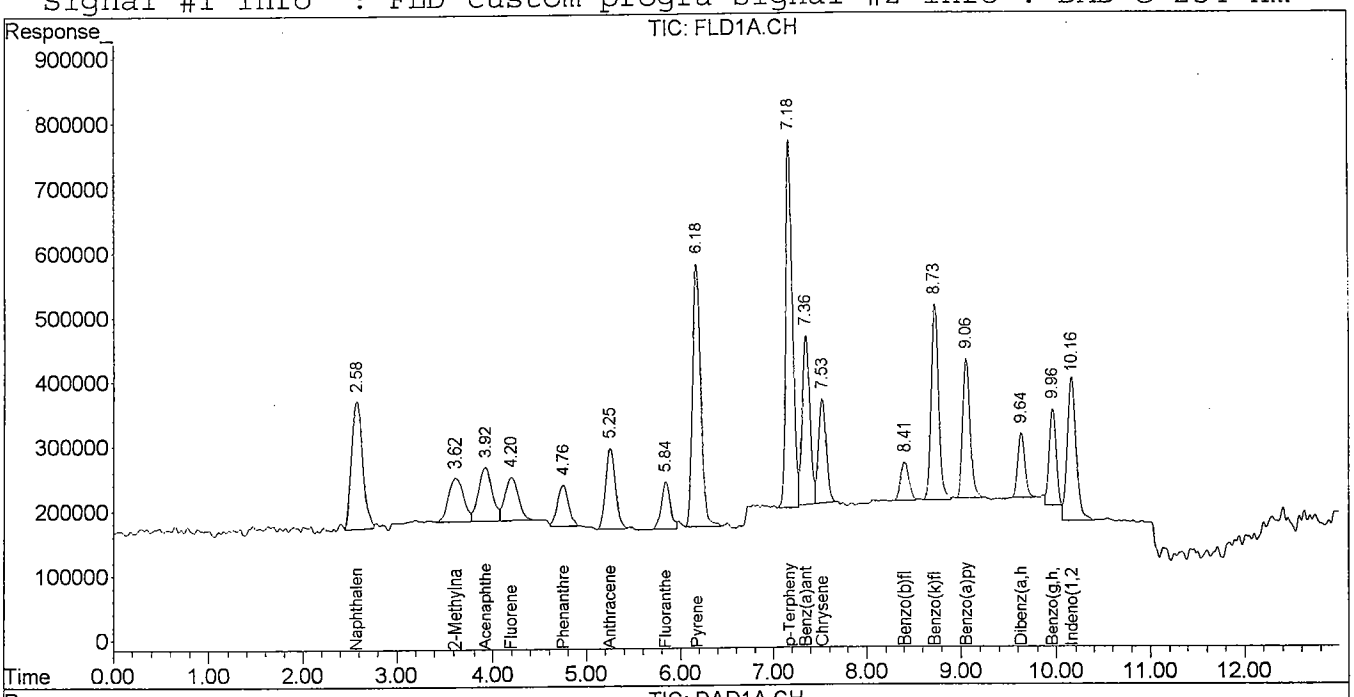
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

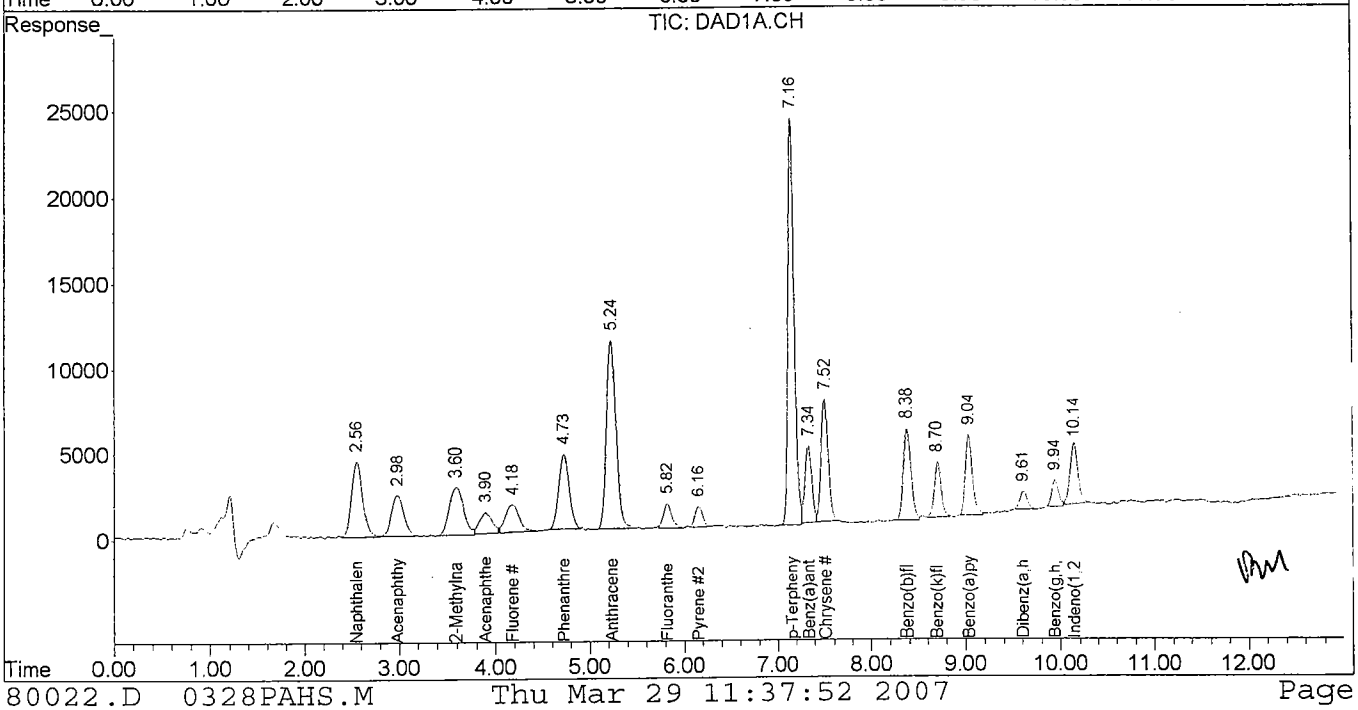
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280022.D\FLD1A.CH Vial: 11
Signal #2 : J:\LC06\DATA\032807PA\03280022.D\DAD1A.CH
Acq On : 28-Mar-2007, 18:44:12 Operator: Paul
Sample : 8-9C 1/0.1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
		System Monitoring Compounds						
10)	s	p-Terphenyl	7.18	7.16	6004467	237213	2.042	2.037
		Target Compounds						
1)	t	Naphthalene	2.58	2.56	3117249	73393	1.961	2.038
2)	t	Acenaphthylene	0.00	2.99	0	44570	N.D.	1.952 #
3)	t	2-Methylnaphthal	3.62	3.60	1326316	56062	2.029	1.975
4)	t	Acenaphthene	3.92	3.91	1645409	22613	2.005	1.859
5)	t	Fluorene	4.20	4.19	1305788	28386	0.202	0.179
6)	t	Phenanthrene	4.74	4.73	1059577	74146	0.200	0.203
7)	t	Anthracene	5.25	5.24	1904593	152285	0.208	0.199
8)	t	Fluoranthene	5.84	5.83	1100137	17621	0.227	0.185
9)	t	Pyrene	6.18	6.16	5141694	14671	0.198	0.193
11)	t	Benz(a)anthracen	7.36	7.35	2842764	48797	0.198	0.202
12)	t	Chrysene	7.53	7.52	1827784	76066	0.197	0.201
13)	t	Benzo(b)fluorant	8.41	8.39	656278	53458	0.204	0.197
14)	t	Benzo(k)fluorant	8.73	8.72	3275877	32788	0.201	0.196
15)	t	Benzo(a)pyrene	9.06	9.05	2376819	48515	0.199	0.196
16)	t	Dibenz(a,h)anthr	9.64	9.63	1070467	11144	0.197	0.201
17)	t	Benzo(g,h,i)pery	9.97	9.96	1628378	17914	0.185	0.202
18)	t	Indeno(1,2,3-cd)	10.17	10.16	2839793	41262	0.202	0.197

PM032907

MK

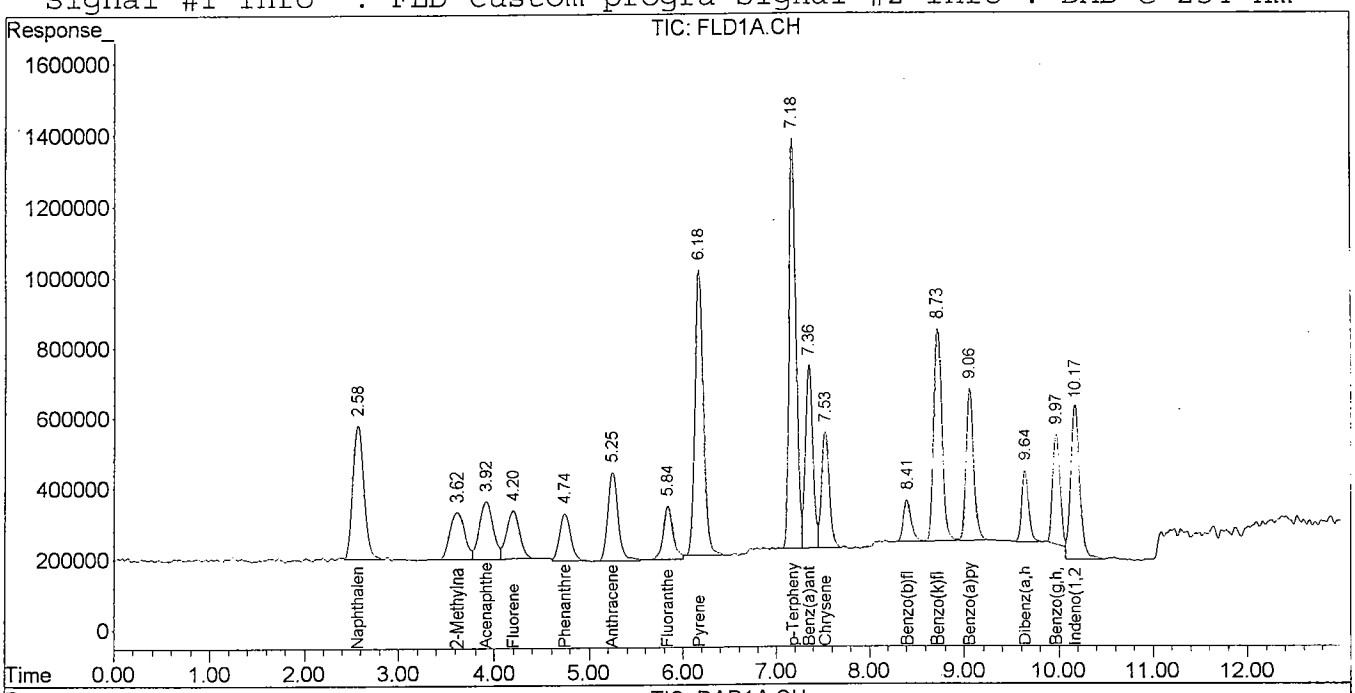
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

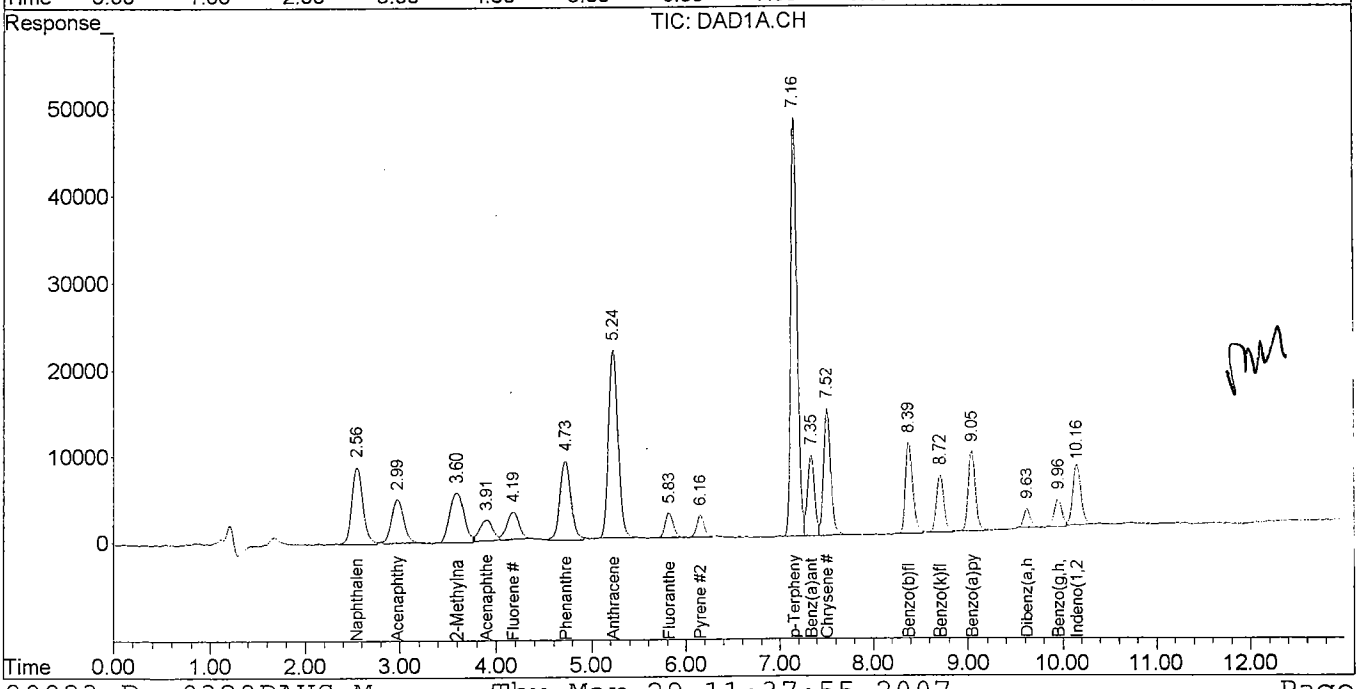
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280023.D\FLD1A.CH Vial: 12
Signal #2 : J:\LC06\DATA\032807PA\03280023.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:08:02 Operator: Paul
Sample : 8-9B 2/0.2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:12 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.16	14350937	573021	4.880	4.921	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	8051900	175786	5.065	4.881	
2)	t	Acenaphthylene	0.00	2.99	0	115264	N.D.	5.048	#
3)	t	2-Methylnaphthal	3.62	3.60	3193656	140130	4.885	4.938	
4)	t	Acenaphthene	3.93	3.91	4012450	58571	4.888	4.815	
5)	t	Fluorene	4.20	4.19	3165885	75046	0.489	0.473	
6)	t	Phenanthrene	4.76	4.74	2662862	181890	0.502	0.498	
7)	t	Anthracene	5.26	5.24	4673208	380578	0.510	0.497	
8)	t	Fluoranthene	5.85	5.83	2306705	46619	0.477	0.489	
9)	t	Pyrene	6.18	6.16	12770395	37542	0.493	0.494	
11)	t	Benz(a)anthracen	7.37	7.35	7127365	122386	0.496	0.506	
12)	t	Chrysene	7.54	7.52	4671564	189443	0.504	0.501	
13)	t	Benzo(b)fluorant	8.41	8.39	1585127	134375	0.492	0.495	
14)	t	Benzo(k)fluorant	8.73	8.71	8030146	83124	0.492	0.498	
15)	t	Benzo(a)pyrene	9.07	9.04	5951067	125020	0.498	0.504	
16)	t	Dibenz(a,h)anthr	9.64	9.63	2690421	27868	0.496	0.504	
17)	t	Benzo(g,h,i)pery	9.98	9.95	4330750	45055	0.493	0.509	
18)	t	Indeno(1,2,3-cd)	10.18	10.15	6922934	104472	0.492	0.499	

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MM

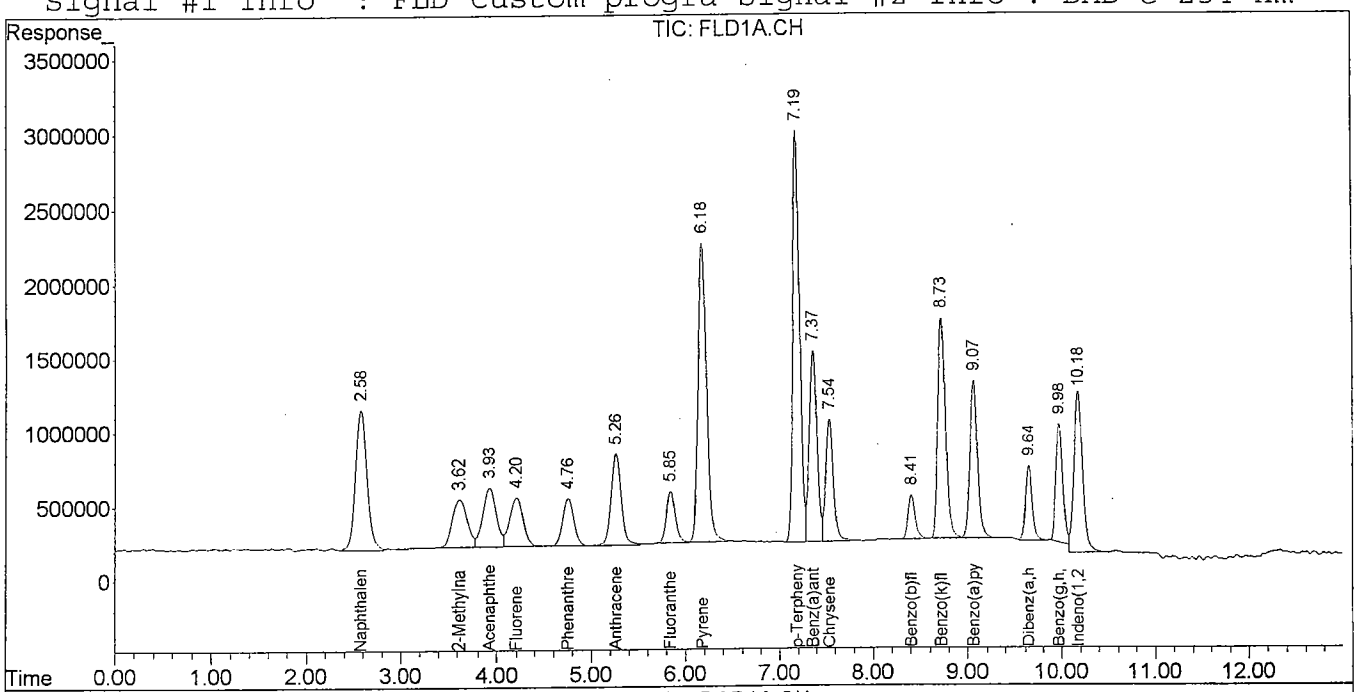
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

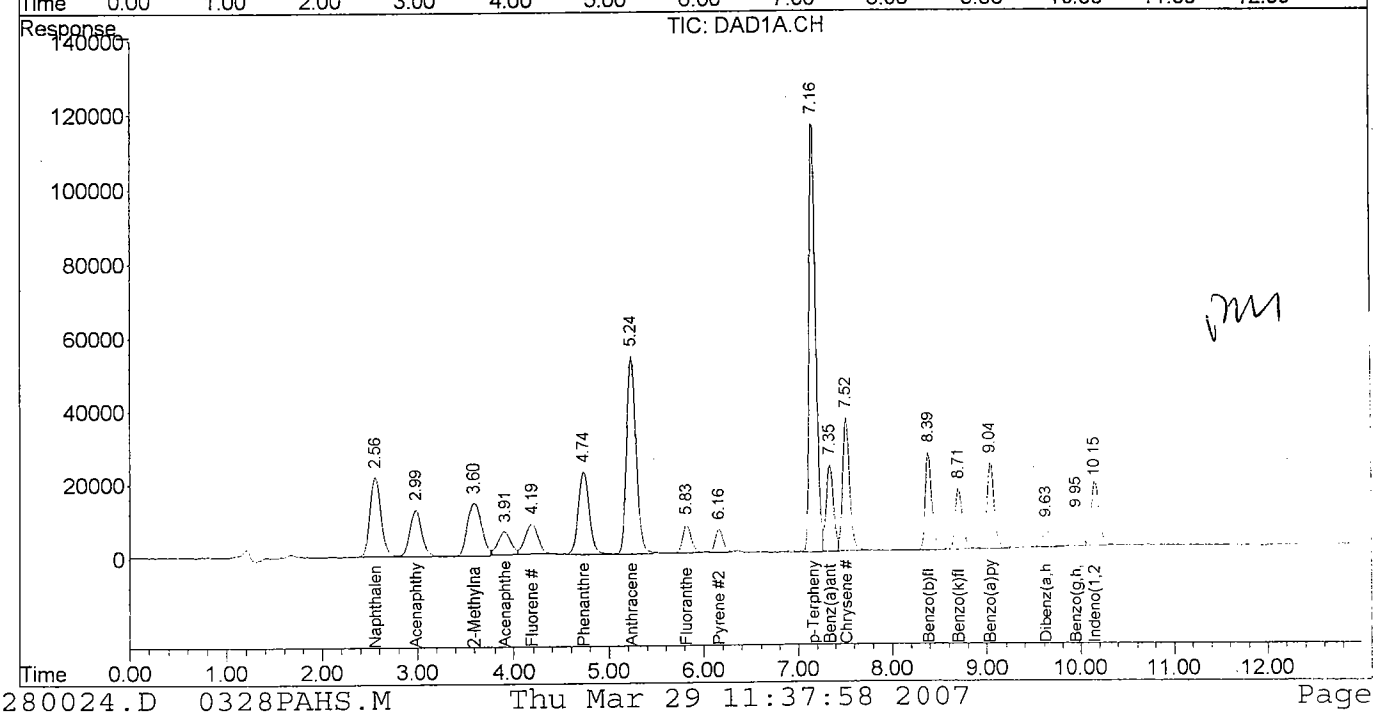
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280024.D\FLD1A.CH Vial: 13
Signal #2 : J:\LC06\DATA\032807PA\03280024.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:29:03 Operator: Paul
Sample : 8-9A 5/0.5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.17	29220571	1165706	9.936	10.010	
		Target Compounds							
1)	t	Naphthalene	2.58	2.56	15618134	362793	9.824	10.074	
2)	t	Acenaphthylene	0.00	2.98	0	233229	N.D.	10.215	#
3)	t	2-Methylnaphthal	3.63	3.60	6393320	290014	9.780	10.219	
4)	t	Acenaphthene	3.93	3.90	8107649	131301	9.878	10.793	
5)	t	Fluorene	4.21	4.18	6455183	171038	0.996	1.077	
6)	t	Phenanthrene	4.76	4.74	5391539	374224	1.016	1.025	
7)	t	Anthracene	5.27	5.25	8912960	774610	0.973	1.011	
8)	t	Fluoranthene	5.85	5.84	4619076	99801	0.954	1.048	
9)	t	Pyrene	6.19	6.17	26079628	79224	1.006	1.043	
11)	t	Benz(a)anthracen	7.37	7.34	14376186	248426	1.000	1.027	
12)	t	Chrysene	7.55	7.53	9470153	387238	1.022	1.025	
13)	t	Benzo(b)fluorant	8.42	8.40	3153643	272534	0.978	1.004	
14)	t	Benzo(k)fluorant	8.74	8.72	16291932	171306	0.998	1.025	
15)	t	Benzo(a)pyrene	9.08	9.05	12087980	251443	1.012	1.015	
16)	t	Dibenz(a,h)anthr	9.65	9.62	5454531	54054	1.006	0.977	
17)	t	Benzo(g,h,i)pery	9.98	9.96	9022809	91202	1.026	1.029	
18)	t	Indeno(1,2,3-cd)	10.18	10.16	14068661	215803	0.999	1.031	

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mh

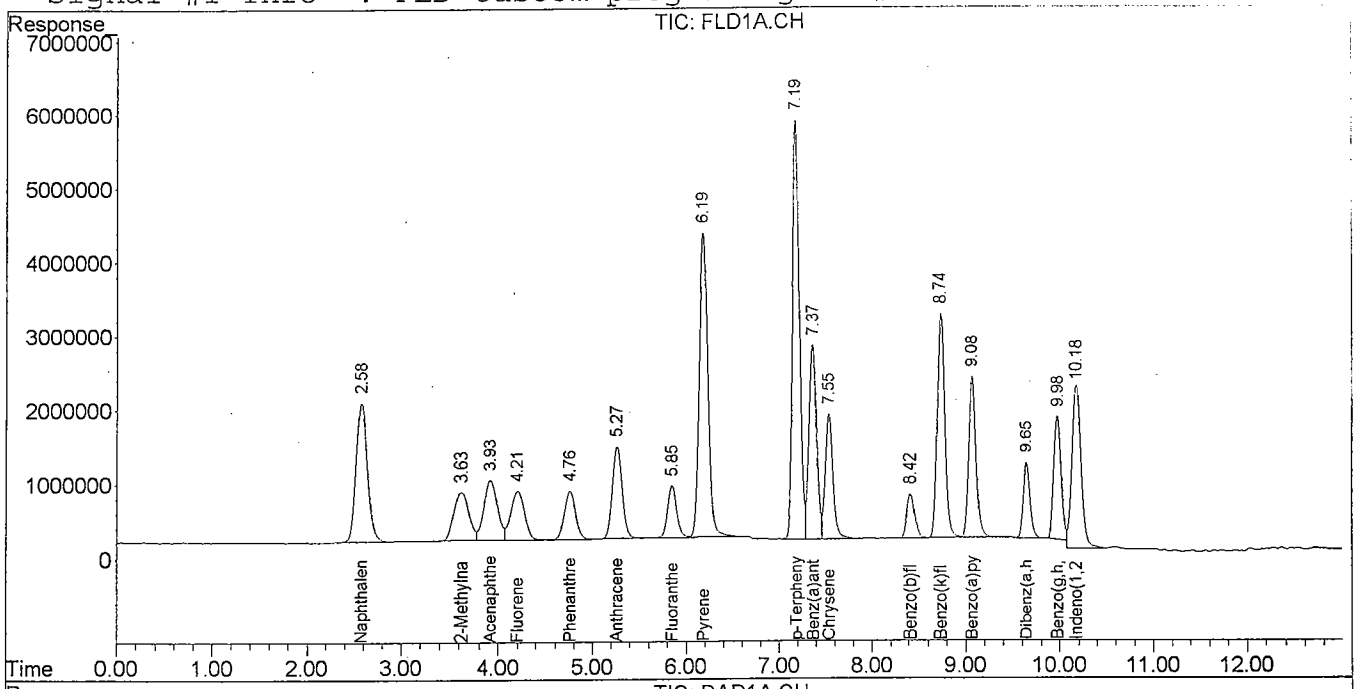
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

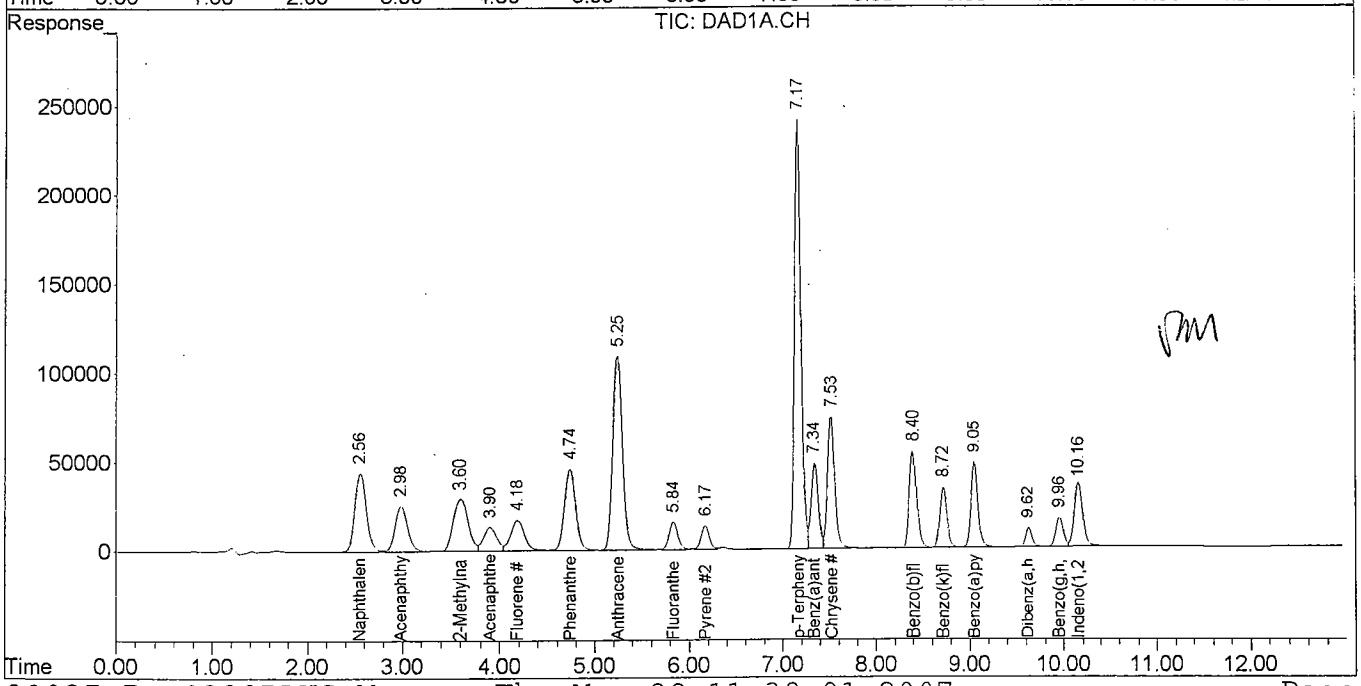
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280025.D\FLD1A.CH Vial: 14
Signal #2 : J:\LC06\DATA\032807PA\03280025.D\DAD1A.CH
Acq On : 28-Mar-2007, 19:55:47 Operator: Paul
Sample : 8-8Q 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





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Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32:14 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.19	7.16	58778300	2350454	19.986	20.185	
		Target Compounds							
1)	t	Naphthalene	2.57	2.56	32030393	733964	20.148	20.380	
2)	t	Acenaphthylene	0.00	2.97	0	478156	N.D.	20.942	#
3)	t	2-Methylnaphthal	3.61	3.59	13036535	593155	19.942	20.901	
4)	t	Acenaphthene	3.92	3.89	16380514	267348	19.956	21.976	
5)	t	Fluorene	4.20	4.17	13037373	346458	2.012	2.182	
6)	t	Phenanthrene	4.75	4.73	10768593	759025	2.029	2.080	
7)	t	Anthracene	5.26	5.24	18057968	1543469	1.972	2.015	
8)	t	Fluoranthene	5.85	5.83	8974769	207035	1.854	2.173	
9)	t	Pyrene	6.18	6.16	52604582	164170	2.030	2.161	
11)	t	Benz(a)anthracen	7.37	7.35	28969567	496343	2.016	2.051	
12)	t	Chrysene	7.55	7.52	18934947	777432	2.044	2.058	
13)	t	Benzo(b)fluorant	8.42	8.40	6444928	552249	1.999	2.035	
14)	t	Benzo(k)fluorant	8.75	8.73	32802216	345666	2.010	2.069	
15)	t	Benzo(a)pyrene	9.08	9.05	24120811	509324	2.019	2.055	
16)	t	Dibenz(a,h)anthr	9.66	9.64	10970124	110410	2.023	1.996	
17)	t	Benzo(g,h,i)pery	9.99	9.96	19289508	183728	2.194	2.074	
18)	t	Indeno(1,2,3-cd)	10.19	10.16	28429576	431674	2.019	2.061	

PM 032907

MMa

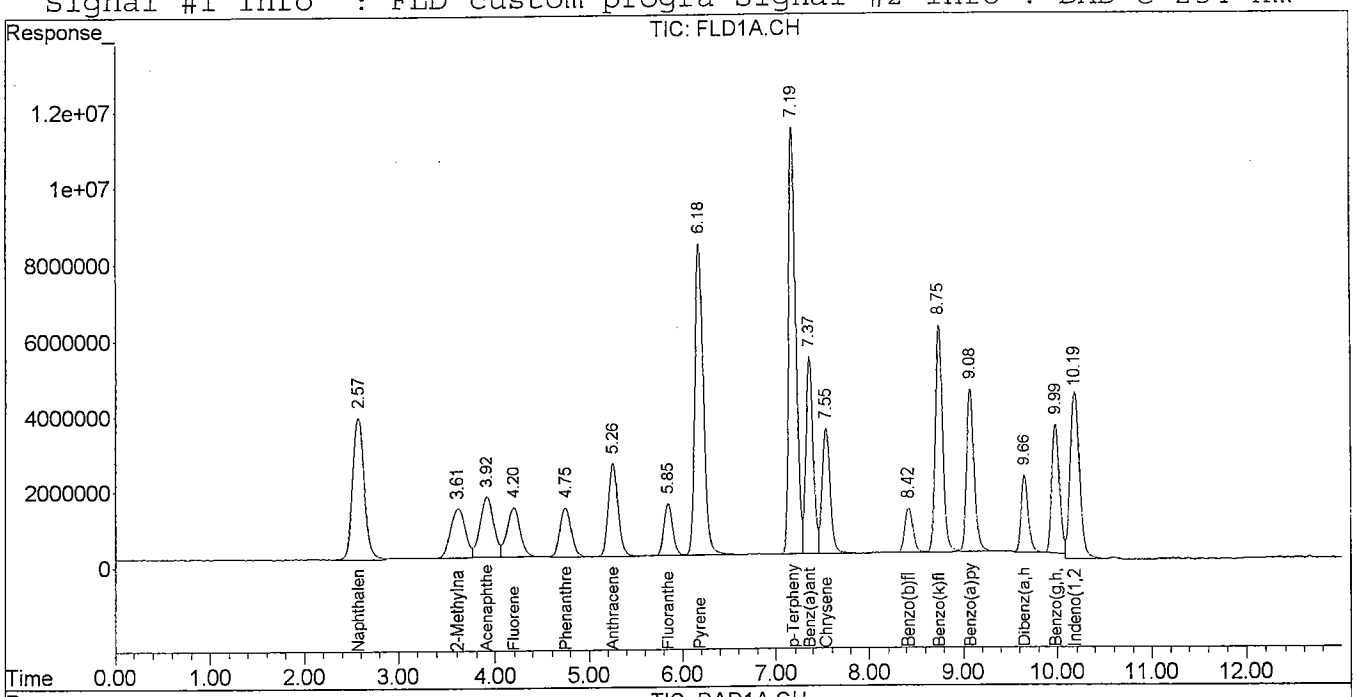
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

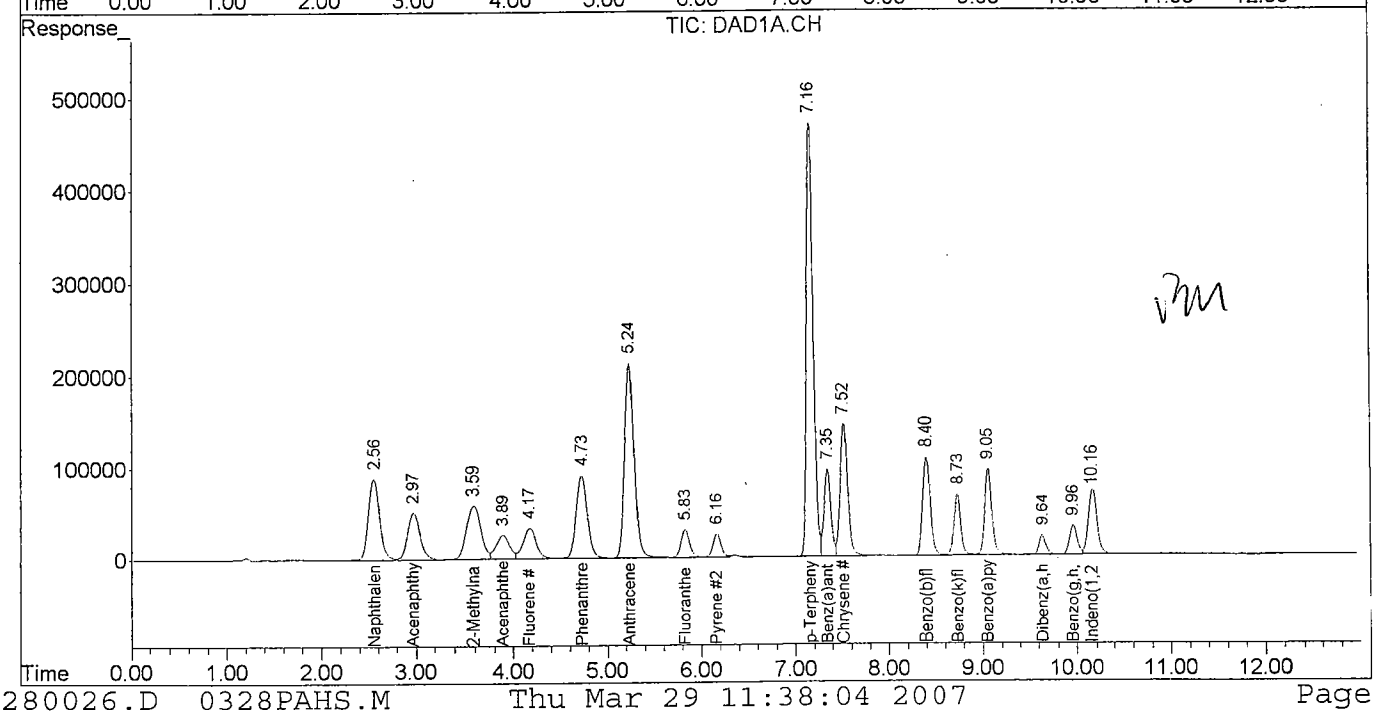
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280026.D\FLD1A.CH Vial: 15
Signal #2 : J:\LC06\DATA\032807PA\03280026.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:16:45 Operator: Paul
Sample : 8-8P 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:22:27 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-8O 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35:13 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	7.18	7.17	145.3E6	5768380	49.403	49.536	
		Target Compounds							
1)	t	Naphthalene	2.58	2.57	74936469	1816789	47.138	50.447	
2)	t	Acenaphthylene	0.00	2.99	0	1181484	N.D.	51.745	#
3)	t	2-Methylnaphthal	3.62	3.61	31616711	1465419	48.364	51.638	
4)	t	Acenaphthene	3.92	3.90	40017661	673607	48.754	55.371	
5)	t	Fluorene	4.20	4.18	31796156	842802	4.908	5.308	
6)	t	Phenanthrene	4.76	4.74	26562195	1868551	5.005	5.120	
7)	t	Anthracene	5.26	5.25	44482232	3647690	4.858	4.761	
8)	t	Fluoranthene	5.85	5.83	22188195	510608	4.583	5.360	
9)	t	Pyrene	6.18	6.17	129.3E6	406326	5.004	5.348	
11)	t	Benz(a)anthracen	7.37	7.35	71452786	1238659	4.971	5.119	
12)	t	Chrysene	7.55	7.53	47147677	1930709	5.089	5.110	
13)	t	Benzo(b)fluorant	8.42	8.39	15785292	1367885	4.895	5.039	
14)	t	Benzo(k)fluorant	8.74	8.73	80609520	855438	4.951	5.121	
15)	t	Benzo(a)pyrene	9.07	9.06	59849384	1256720	5.016	5.071	
16)	t	Dibenz(a,h)anthr	9.64	9.63	27193125	270343	5.043	4.887	
17)	t	Benzo(g,h,i)pery	9.97	9.95	43105690	449845	4.988	5.078	
18)	t	Indeno(1,2,3-cd)	10.17	10.15	70621147	1080621	5.014	5.160	

PM 032907

MA

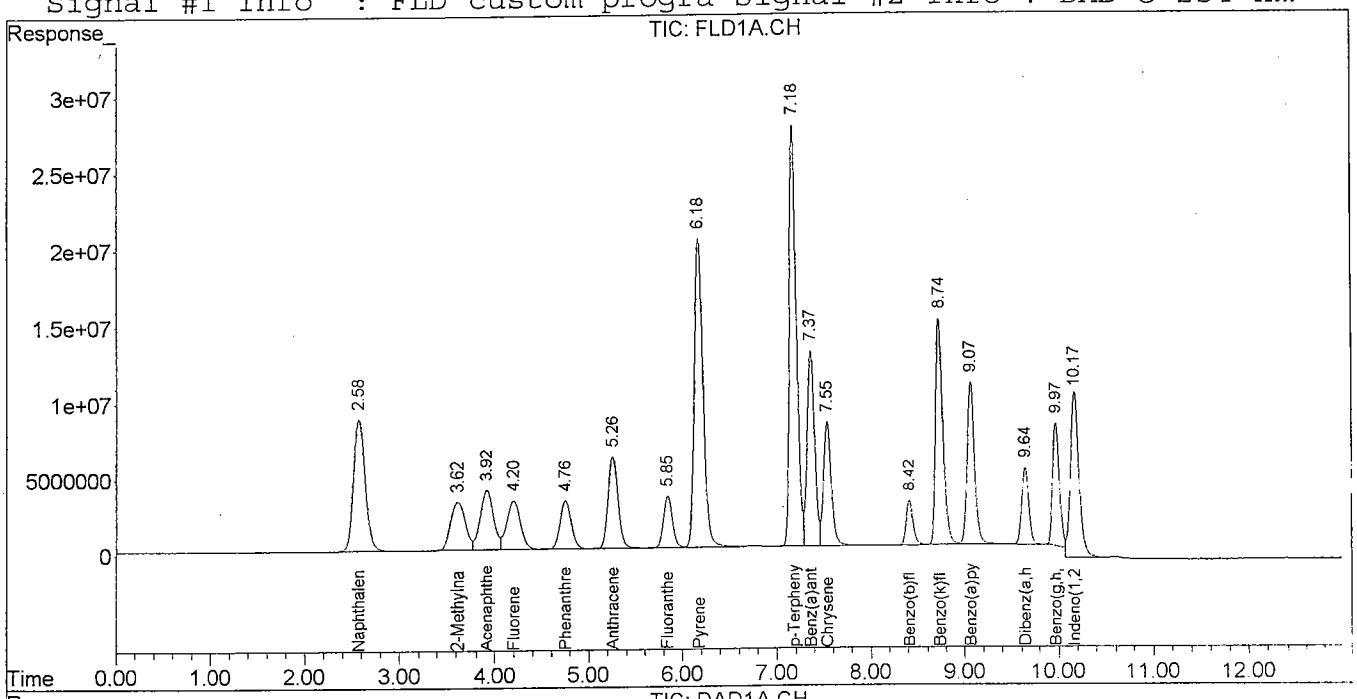
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

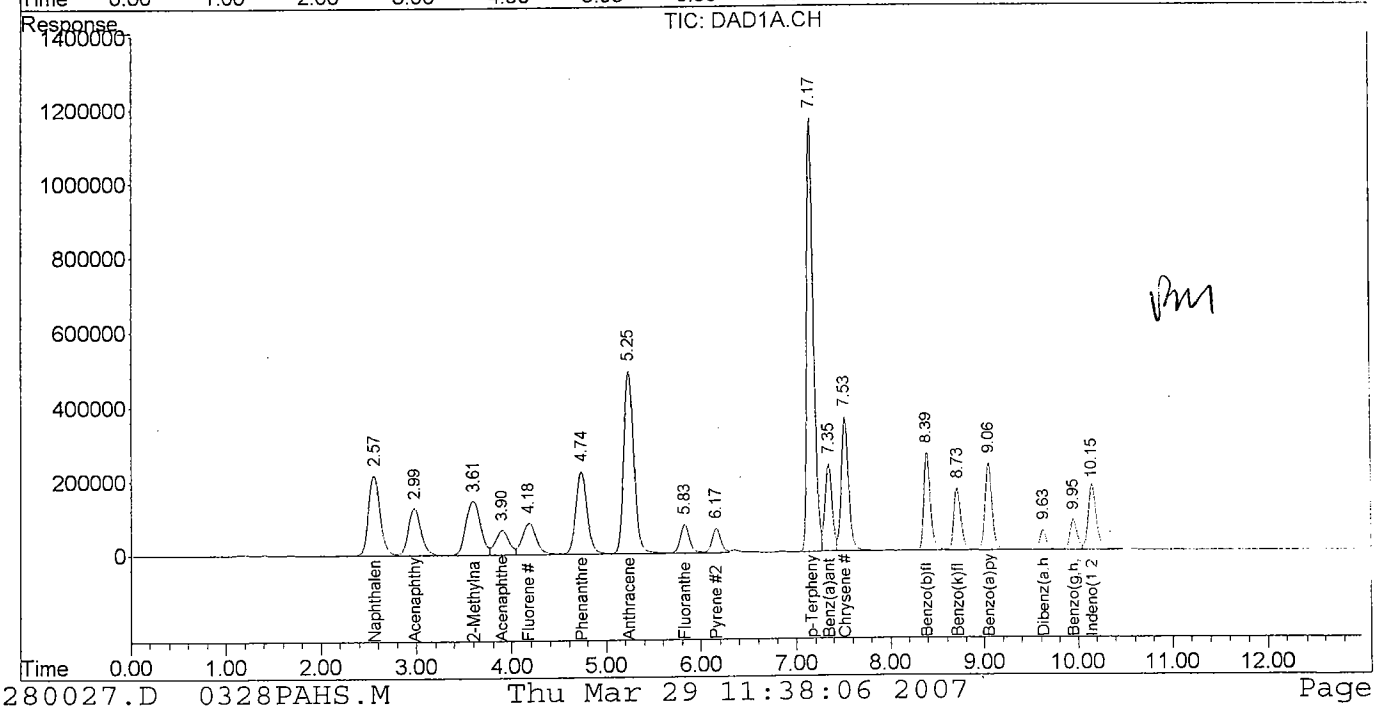
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280027.D\FLD1A.CH Vial: 16
Signal #2 : J:\LC06\DATA\032807PA\03280027.D\DAD1A.CH
Acq On : 28-Mar-2007, 20:43:25 Operator: Paul
Sample : 8-8O 50/5 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 21:35 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:33:02 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





PM

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25:32 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
		System Monitoring Compounds						
10)	s	p-Terphenyl	7.17	7.16	295.3E6	11673630	100.593	100.403
		Target Compounds						
1)	t	Naphthalene	2.58	2.56	142.9E6	3694782	90.765	102.440
2)	t	Acenaphthylene	0.00	2.98	0	2406259	N.D.	104.777 #
3)	t	2-Methylnaphthal	3.62	3.60	64106201	2994696	98.601	104.953
4)	t	Acenaphthene	3.92	3.90	80863233	1343628	98.927	108.505
5)	t	Fluorene	4.21	4.18	64296595	1726074	9.955	10.761
6)	t	Phenanthrene	4.76	4.73	54003564	3774932	10.174	10.302
7)	t	Anthracene	5.26	5.24	90242988	6894749	9.903	9.072
8)	t	Fluoranthene	5.85	5.82	45749539	1039098	9.584	10.779
9)	t	Pyrene	6.18	6.17	261.3E6	824890	10.108	10.733
11)	t	Benz(a)anthracen	7.37	7.34	145.5E6	2482982	10.130	10.220
12)	t	Chrysene	7.54	7.52	95127195	3862295	10.237	10.185
13)	t	Benzo(b)fluorant	8.42	8.40	32512842	2767895	10.118	10.184
14)	t	Benzo(k)fluorant	8.74	8.72	161.2E6	1725568	9.920	10.288
15)	t	Benzo(a)pyrene	9.08	9.05	119.7E6	2541208	10.023	10.230
16)	t	Dibenz(a,h)anthr	9.65	9.62	55313300	547025	10.243	9.925
17)	t	Benzo(g,h,i)pery	9.98	9.96	94801391	913046	10.974	10.279
18)	t	Indeno(1,2,3-cd)	10.18	10.16	143.4E6	2189286	10.179	10.399

PM 032907

MMa

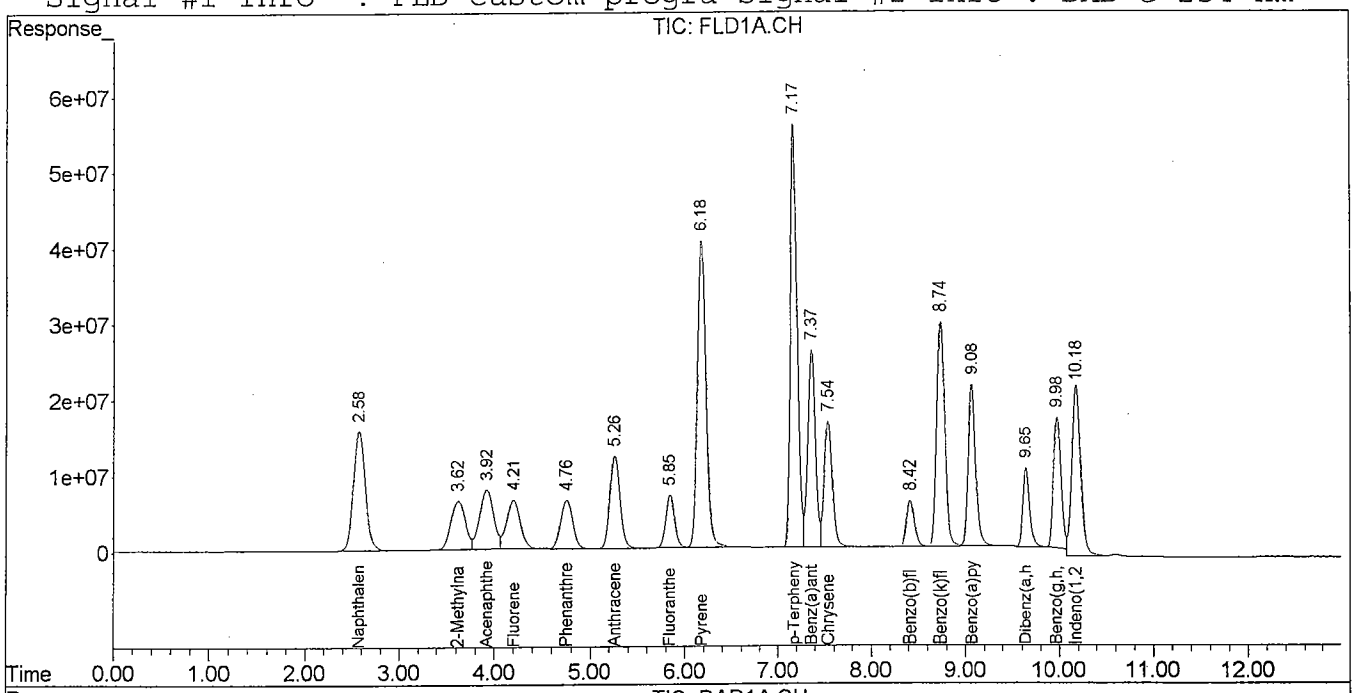
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

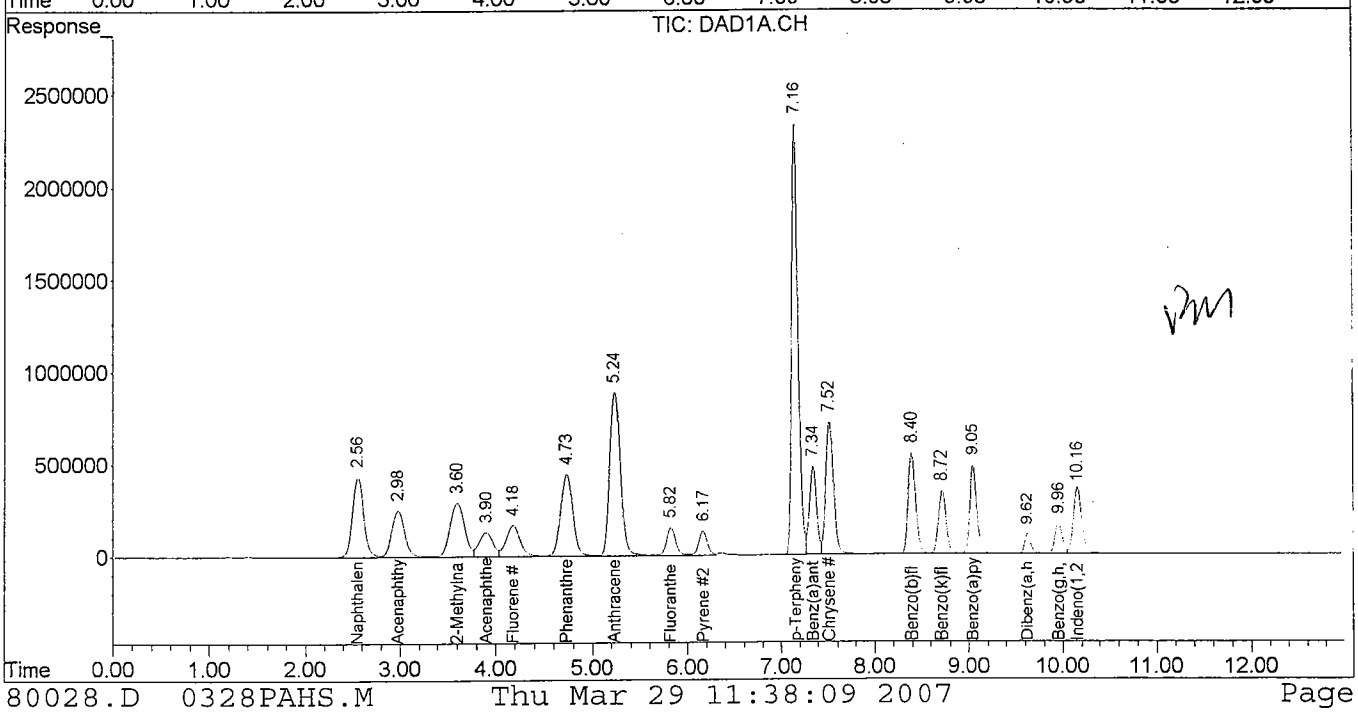
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280028.D\FLD1A.CH Vial: 17
Signal #2 : J:\LC06\DATA\032807PA\03280028.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:07:16 Operator: Paul
Sample : 8-8N 100/10 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:25 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 21:37:13 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51:18 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Initial Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
		System Monitoring Compounds							
10)	s	p-Terphenyl	0.00	0.00	0	0	N.D.	N.D.	
		Target Compounds							
1)	t	Naphthalene	2.57	2.55	15613155	349828	10.048	9.666	
2)	t	Acenaphthylene	0.00	2.98	0	236722	N.D.	10.238	#
3)	t	2-Methylnaphthal	3.62	3.59	6289944	290383	9.694	10.105	
4)	t	Acenaphthene	3.92	3.90	8097489	132922	9.922	10.605	
5)	t	Fluorene	4.20	4.18	6382965	172630	0.989	1.065	
6)	t	Phenanthrene	4.76	4.74	5455013	383185	1.025	1.041	
7)	t	Anthracene	5.27	5.25	9009446	780460	0.990	1.041	
8)	t	Fluoranthene	5.85	5.83	4515083	94550	0.951	0.970	
9)	t	Pyrene	6.19	6.17	25445981	79730	0.983	1.027	
11)	t	Benz(a)anthracen	7.38	7.35	13768617	235418	0.957	0.966	
12)	t	Chrysene	7.55	7.53	9112870	376550	0.977	0.990	
13)	t	Benzo(b)fluorant	8.42	8.41	3222467	277265	1.001	1.017	
14)	t	Benzo(k)fluorant	8.75	8.73	16510612	174111	1.017	1.034	
15)	t	Benzo(a)pyrene	9.08	9.06	11993613	252748	1.004	1.014	
16)	t	Dibenz(a,h)anthr	9.66	9.63	6168325	61443	1.138	1.116	
17)	t	Benzo(g,h,i)pery	9.99	9.97	9917288	95106	1.132	1.066	
18)	t	Indeno(1,2,3-cd)	10.19	10.17	13338604	204710	0.944	0.967	

PM 032907

AMU

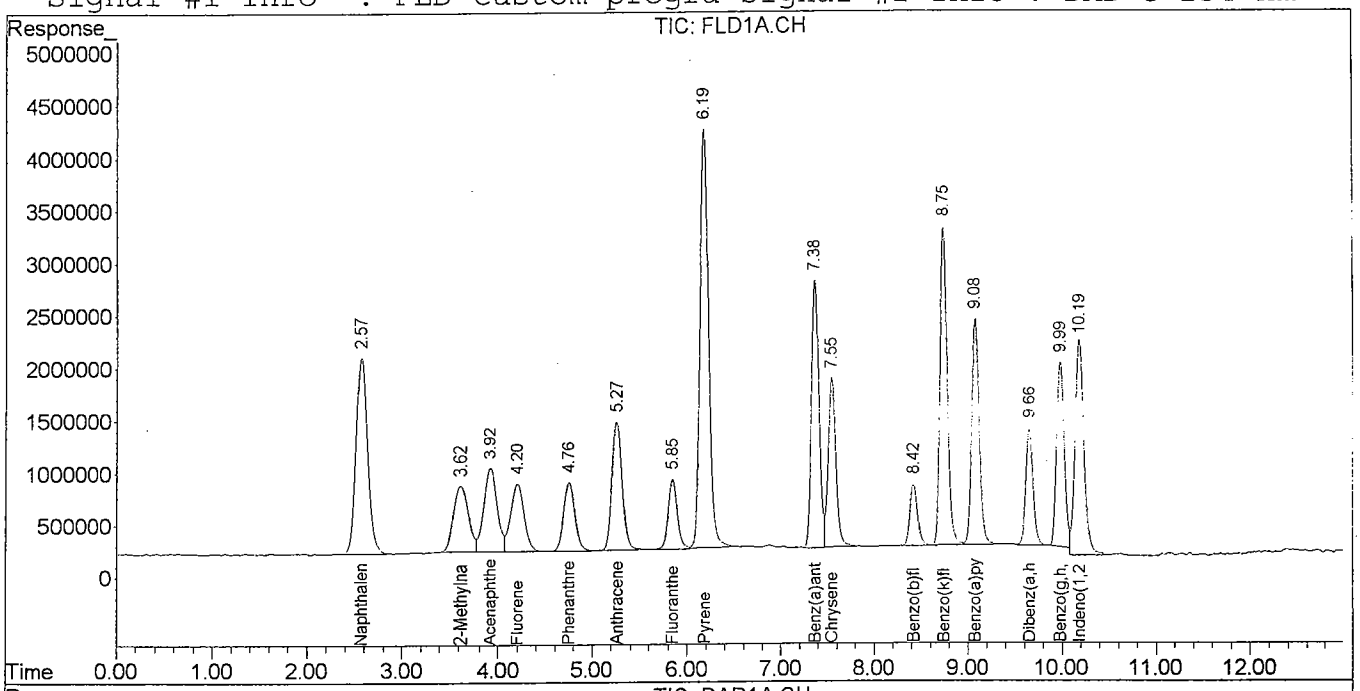
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

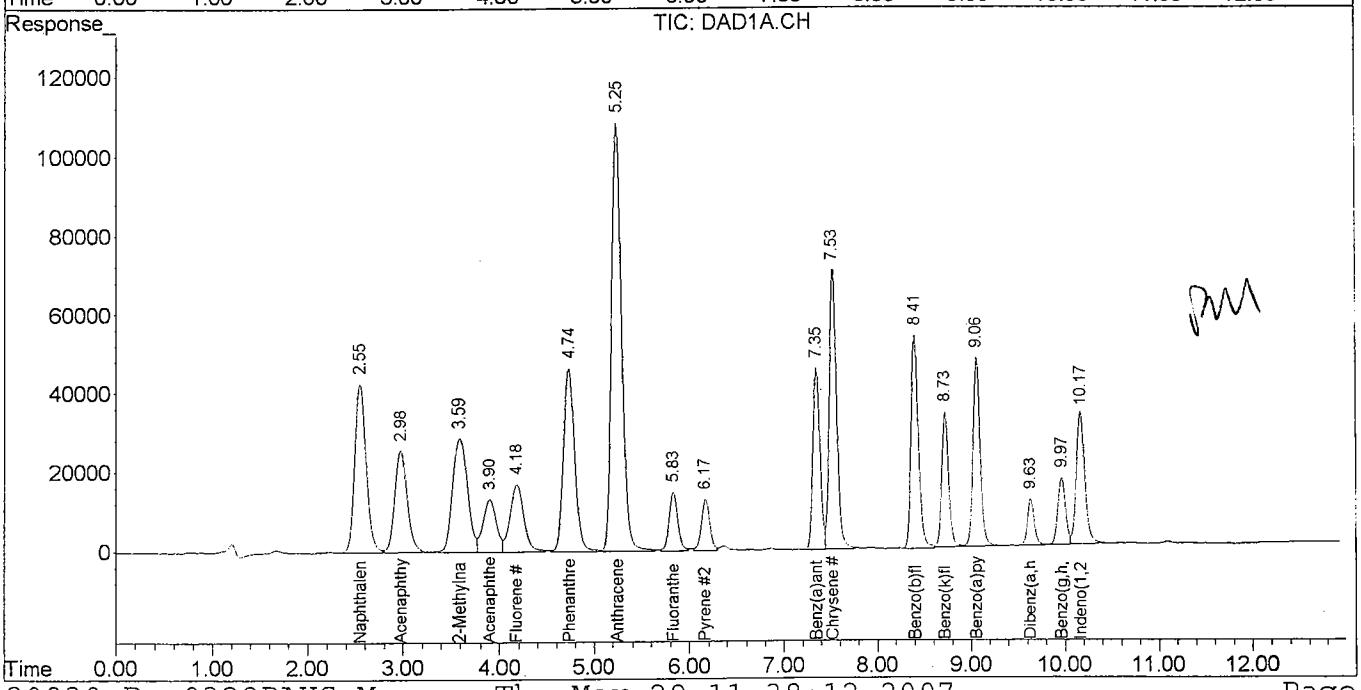
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\032807PA\03280030.D\FLD1A.CH Vial: 18
Signal #2 : J:\LC06\DATA\032807PA\03280030.D\DAD1A.CH
Acq On : 28-Mar-2007, 21:54:58 Operator: Paul
Sample : ICV 8-9D 10/1 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Mar 28 22:51 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL
Last Update : Wed Mar 28 22:27:12 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120005.D\06120005C.D

Column ID: DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	123000	6		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38500	6		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24500	6		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13900	11		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	178000	10		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	396000	8		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	780000	4		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.2	97500	109000	12		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	85800	10		NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.1	244000	259000	6		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	418000	10		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	273000	291000	7		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	168000	180000	7		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	265000	6		NA	± 15 %	AverageRF
Dibenzo(a,h)anthracene	2.0	3.0	55100	81300	48	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	94200	6		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	229000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061207PA\06120005.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3090000	5	NA	± 15 %	AverageRF
Naphthalene	20	19	1550000	1500000	-3	NA	± 15 %	AverageRF
Acenaphthene	20	20	816000	831000	2	NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6750000	5	NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5470000	3	NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9120000	0	NA	± 15 %	AverageRF
Fluoranthene	2.0	1.9	4750000	4600000	-3	NA	± 15 %	AverageRF
Pyrene	2.0	1.9	25900000	24200000	-7	NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.1	14400000	14800000	3	NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9950000	7	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3340000	4	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17000000	5	NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12400000	4	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.1	5420000	5690000	5	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.3	8760000	10000000	15	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	14900000	5	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\061207PA\06120005.D
Lab ID: KWG0706622-1
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 20:01
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM061507

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\061207PA\06120005.D\06120005C.D
Lab ID: KWG0706622-1
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 20:01
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 061507

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120005.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120005.D\06120005c.d			**Vial:**	2
Acqu Date:	06/12/2007 20:01	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-1				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.14	7.12	61787749	2467109	21.03	21.21			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.57	2.55	30047855	769609	19.34	21.26			
Acenaphthylene		2.98	0	490935	0.0000	21.23			
2-Methylnaphthalene/Dibe	3.60	3.58	12964040	611396	19.98	21.28			
Acenaphthene	3.91	3.88	16616211	278275	20.36	22.20			
Fluorene	4.17	4.15	13495143	355848	2.09	2.20			
Phenanthrene	4.72	4.70	10936112	791349	2.06	2.15			
Anthracene	5.22	5.20	18230553	1559383	2.00	2.08			
Fluoranthene	5.81	5.79	9192300	218003	1.94	2.24			
Pyrene	6.15	6.12	48314604	171621	1.87	2.21			
Benz(a)anthracene	7.32	7.30	29644677	518118	2.06	2.13			
Chrysene	7.49	7.47	19896011	835526	2.13	2.20			
Benzo(b)fluoranthene	8.36	8.34	6670448	581187	2.07	2.13			
Benzo(k)fluoranthene	8.67	8.64	33958950	360346	2.09	2.14			
Benzo(a)pyrene	9.00	8.98	24877498	529147	2.08	2.12			
Dibenz(a,h)anthracene	9.56	9.54	11372635	162694	2.10	2.96			
Benzo(g,h,i)perylene	9.89	9.87	20065814	188405	2.29	2.11			
Indeno(1,2,3-cd)pyrene	10.07	10.04	29774584	458984	2.11	2.17			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

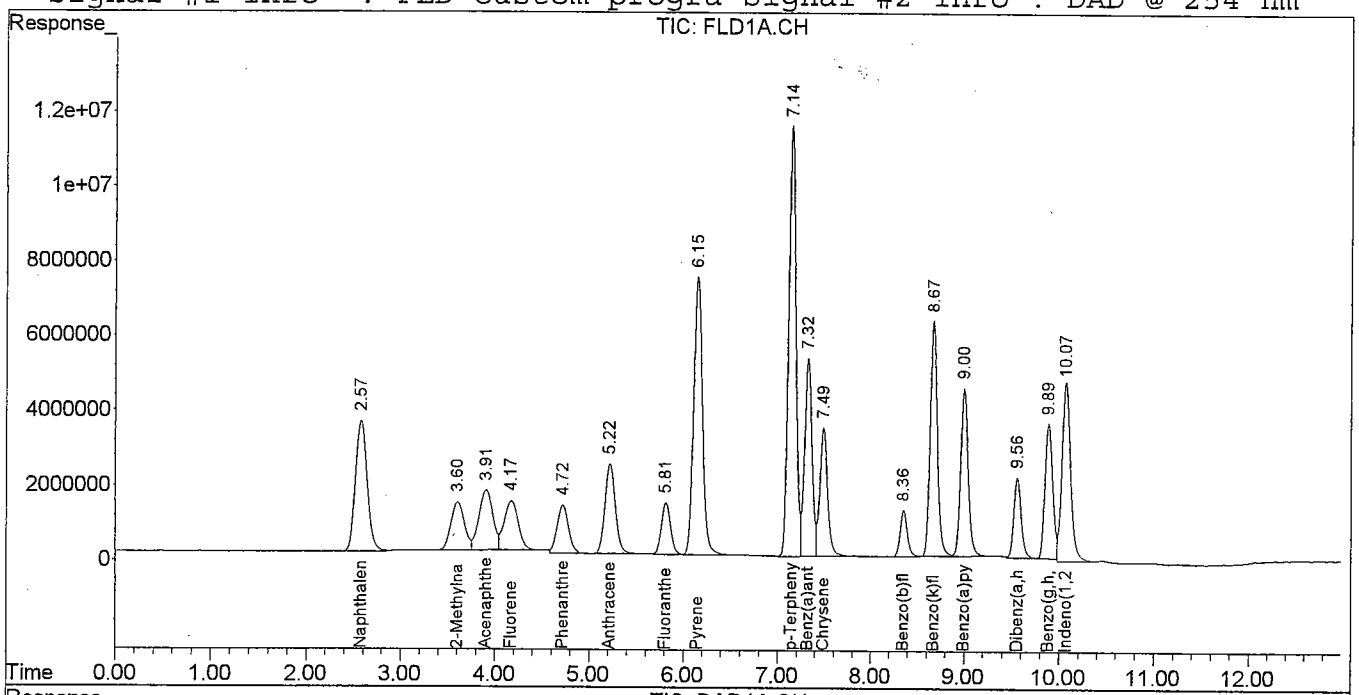
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

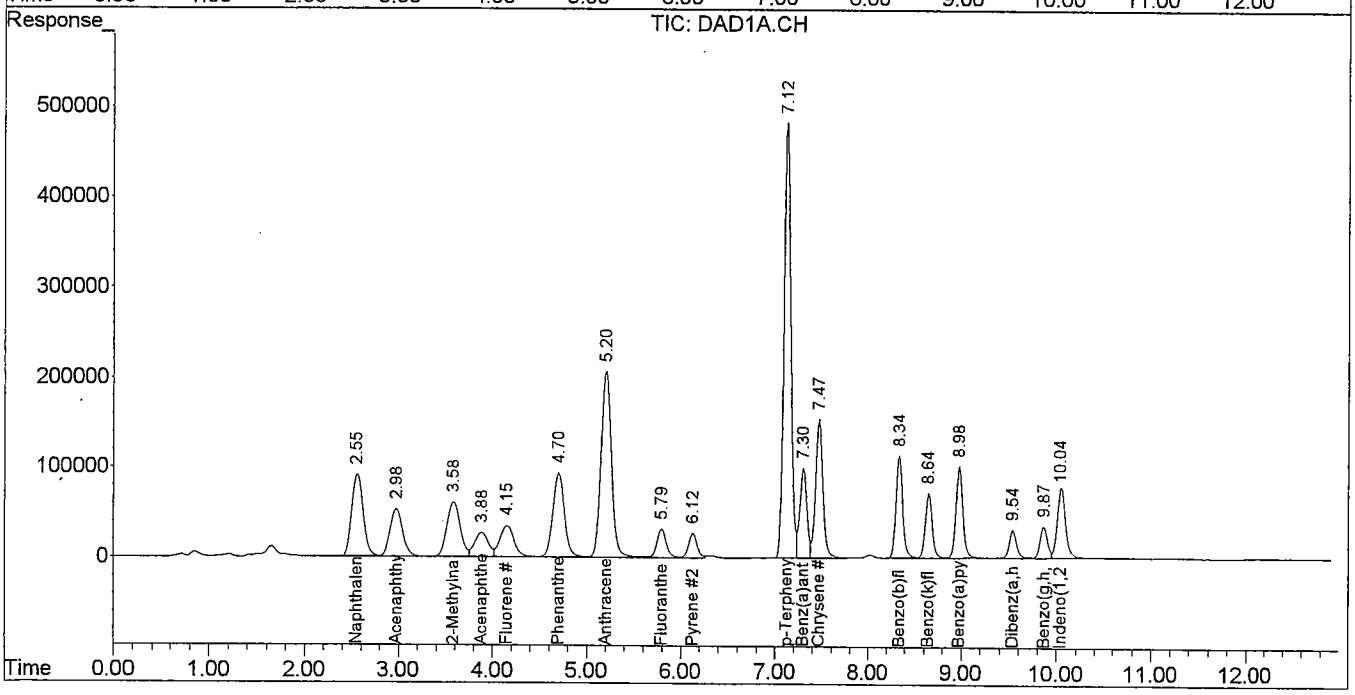
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120005.D\FLD1A.CH Vial: 2
Signal #2 : J:\LC06\DATA\061207PA\06120005.D\DAD1A.CH
Acq On : 12-Jun-2007, 20:01:17 Operator: PM
Sample : 8-8P PAH 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Analyzed:**	06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration Date:**	03/28/2007
Analysis Method:	8310	**Calibration ID:**	CAL6170
		Analysis Lot:	KWG0706622
		Units:	ug/mL
File ID:	J:\LC06\DATA\061207PA\06120014.D\06120014C.D	**Column ID:**	DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	123000	6		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38700	7		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24700	7		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13600	8		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	180000	11		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	368000	395000	7		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	777000	4		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	110000	13		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	85500	10		NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.2	244000	267000	10		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	415000	9		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	273000	289000	6		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	168000	178000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	265000	6		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.8	55100	76300	39	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	93900	5		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	228000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Analyzed:**	06/12/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration Date:**	03/28/2007
Analysis Method:	8310	**Calibration ID:**	CAL6170
		Analysis Lot:	KWG0706622
		Units:	ug/mL
File ID:	J:\LC06\DATA\061207PA\06120014.D	**Column ID:**	FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3100000	6		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1550000	0		NA	± 15 %	AverageRF
Acenaphthene	20	21	816000	849000	4		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6790000	5		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5680000	7		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9060000	0		NA	± 15 %	AverageRF
Fluoranthene	2.0	1.9	4750000	4600000	-3		NA	± 15 %	AverageRF
Pyrene	2.0	2.1	25900000	26600000	3		NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.1	14400000	15100000	5		NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9930000	6		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3370000	5		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17200000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12500000	5		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.1	5420000	5630000	4		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	11000000	25	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	14100000	15200000	8		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\061207PA\06120014.D
Lab ID: KWG0706622-2
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 23:08
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 6/15/07

Secondary Review: AMK

Exception Report

Data File: J:\LC06\DATA\061207PA\06120014.D\06120014C.D
Lab ID: KWG0706622-2
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 23:08
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 06/15/07

Secondary Review: MMh

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120014.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120014.D\06120014c.d			**Vial:**	2
Acqu Date:	06/12/2007 23:08	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-2				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.14	7.12	62063761	2460001	21.13	21.15			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.56	2.55	30936539	773351	19.91	21.37			
Acenaphthylene		2.96	0	493966	0.0000	21.36			
2-Methylnaphthalene/Dibe	3.58	3.56	13367888	616111	20.60	21.44			
Acenaphthene	3.88	3.87	16983493	271839	20.81	21.69			
Fluorene	4.15	4.13	13576424	360626	2.10	2.22			
Phenanthrene	4.71	4.69	11352863	790842	2.13	2.15			
Anthracene	5.22	5.20	18127515	1554310	1.99	2.07			
Fluoranthene	5.81	5.79	9199384	220129	1.94	2.26			
Pyrene	6.15	6.12	53166204	170950	2.05	2.20			
Benz(a)anthracene	7.33	7.31	30197452	533953	2.10	2.19			
Chrysene	7.50	7.48	19850421	830385	2.13	2.18			
Benzo(b)fluoranthene	8.37	8.35	6743155	578126	2.10	2.12			
Benzo(k)fluoranthene	8.69	8.67	34383854	356106	2.12	2.11			
Benzo(a)pyrene	9.02	9.00	25098223	530057	2.10	2.13			
Dibenz(a,h)anthracene	9.59	9.57	11267306	152611	2.08	2.77			
Benzo(g,h,i)perylene	9.93	9.91	21923743	187714	2.50	2.11			
Indeno(1,2,3-cd)pyrene	10.11	10.09	30376123	456323	2.15	2.16			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

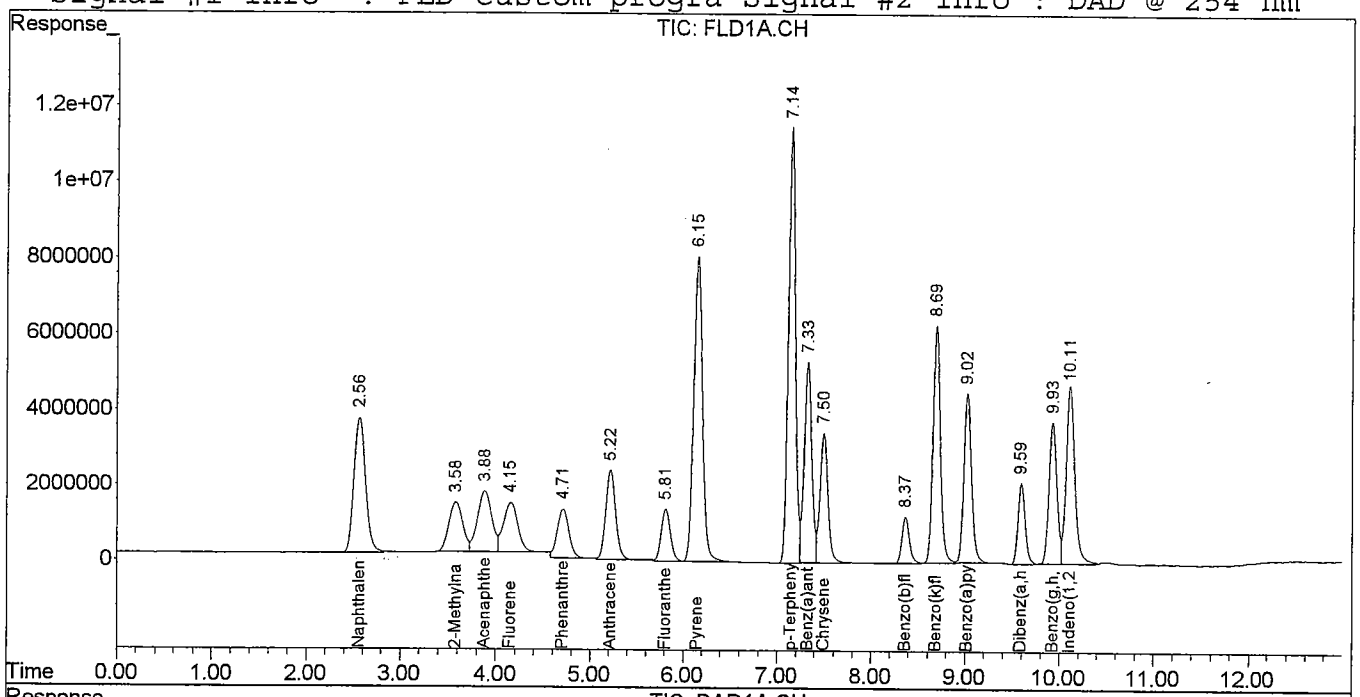
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

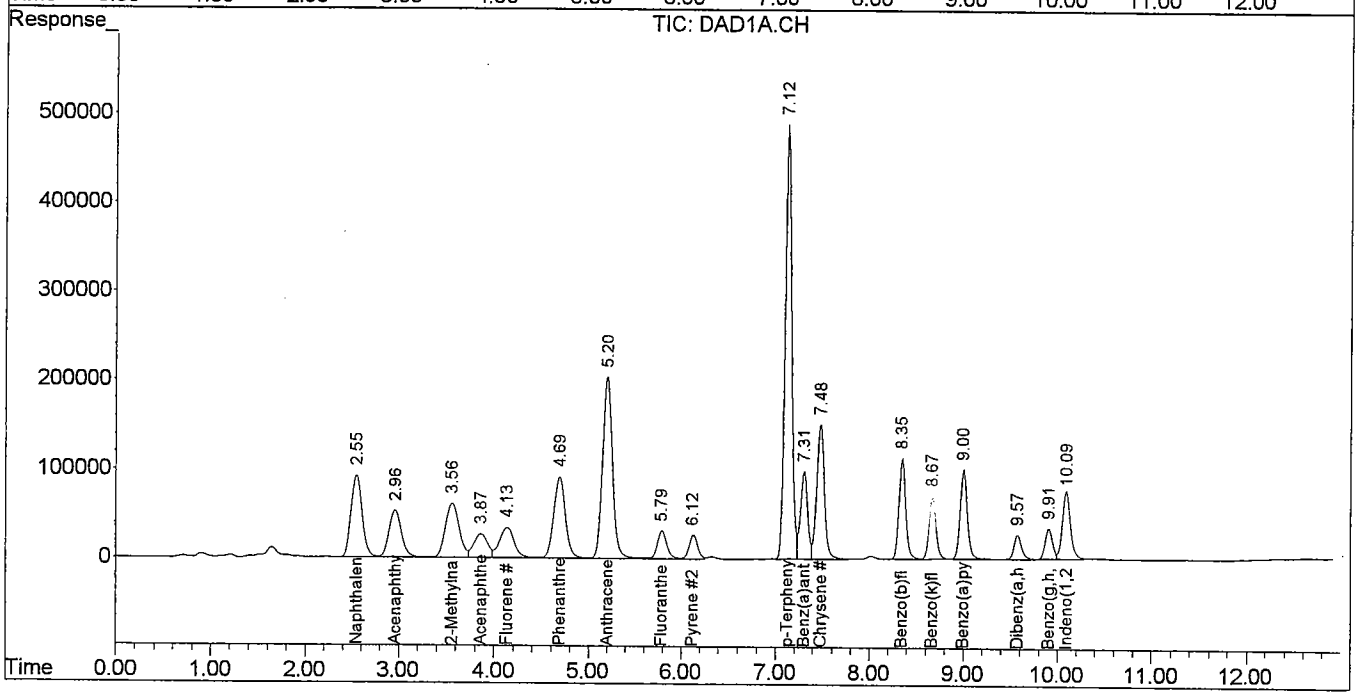
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120014.D\FLD1A.CH Vial: 2
Signal #2 : J:\LC06\DATA\061207PA\06120014.D\DAD1A.CH
Acq On : 12-Jun-2007, 23:08:52 Operator: PM
Sample : 8-8P PAH 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Analyzed:**	06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration Date:**	03/28/2007
Analysis Method:	8310	**Calibration ID:**	CAL6170
		Analysis Lot:	KWG0706622
		Units:	ug/mL
File ID:	J:\LC06\DATA\061407PA\06140021.D\06140021C.D	**Column ID:**	DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	124000	7		NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38700	7		NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24800	7		NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13700	10		NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	182000	12		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	402000	9		NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	798000	6		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	112000	15		NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	87300	12		NA	± 15 %	AverageRF
Benz(a)anthracene	2.0	2.2	244000	272000	12		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	417000	10		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.2	273000	293000	8		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.2	168000	183000	9		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	249000	268000	7		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.4	55100	64800	18	*	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.1	89200	94500	6		NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	234000	10		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: K0704852
Date Analyzed: 06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: External Standard
Analysis Method: 8310

Calibration Date: 03/28/2007
Calibration ID: CAL6170
Analysis Lot: KWG0706622
Units: ug/mL

File ID: J:\LC06\DATA\061407PA\06140021.D

Column ID: FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3140000	7		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1550000	0		NA	± 15 %	AverageRF
Acenaphthene	20	20	816000	835000	2		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6710000	4		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.1	5320000	5480000	3		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9180000	1		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.1	4750000	4890000	3		NA	± 15 %	AverageRF
Pyrene	2.0	2.0	25900000	26400000	2		NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.1	14400000	15000000	4		NA	± 15 %	AverageRF
Chrysene	2.0	2.1	9320000	9960000	7		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3400000	6		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17300000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12700000	7		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.0	5420000	5390000	-1		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	10900000	24	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	15000000	6		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\061407PA\06140021.D
Lab ID: KWG0706622-3
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 16:39
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMU061507

Secondary Review: AMH

Exception Report

Data File: J:\LC06\DATA\061407PA\06140021.D\06140021C.D
Lab ID: KWG0706622-3
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 16:39
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 061507

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061407PA\06140021.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140021.D\06140021c.d			**Vial:**	2
Acqu Date:	06/14/2007 16:39	**Quant Date:**	06/14/2007 19:31	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-3				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.08	7.05	62744873	2479612	21.36	21.31			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.55	2.53	30940708	774072	19.91	21.39			
Acenaphthylene		2.93	0	495142	0.0000	21.41			
2-Methylnaphthalene/Dibe	3.55	3.52	13368305	619258	20.60	21.55			
Acenaphthene	3.84	3.83	16702415	274819	20.47	21.93			
Fluorene	4.11	4.09	13417470	363623	2.08	2.24			
Phenanthrene	4.66	4.64	10967225	803769	2.06	2.18			
Anthracene	5.16	5.15	18352697	1596441	2.02	2.13			
Fluoranthene	5.75	5.73	9775726	224179	2.06	2.30			
Pyrene	6.09	6.07	52764761	174620	2.04	2.25			
Benz(a)anthracene	7.25	7.24	29933683	543967	2.08	2.23			
Chrysene	7.42	7.40	19927958	833031	2.14	2.19			
Benzo(b)fluoranthene	8.29	8.27	6798645	586704	2.11	2.15			
Benzo(k)fluoranthene	8.60	8.57	34568246	366451	2.13	2.18			
Benzo(a)pyrene	8.92	8.91	25453239	535529	2.13	2.15			
Dibenz(a,h)anthracene	9.48	9.45	10772807	129665	1.99	2.36			
Benzo(g,h,i)perylene	9.80	9.77	21715233	189082	2.48	2.12			
Indeno(1,2,3-cd)pyrene	9.97	9.95	30088364	467148	2.13	2.21			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

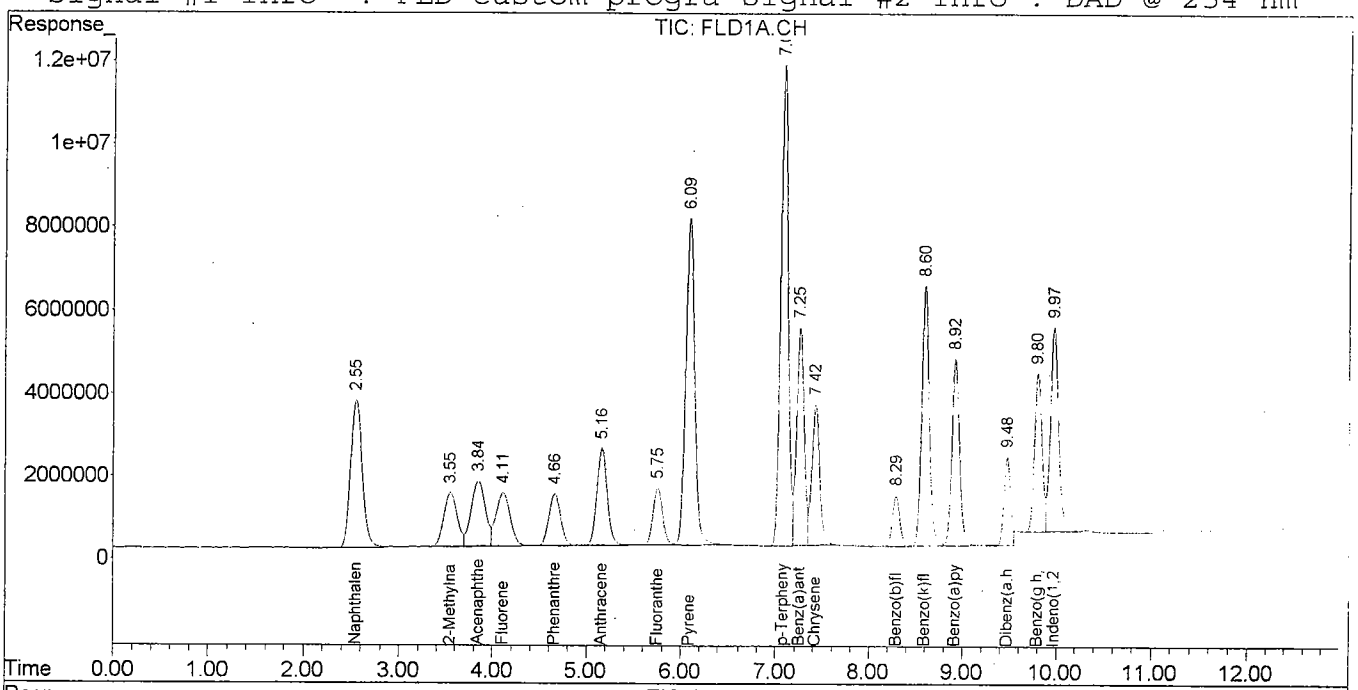
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

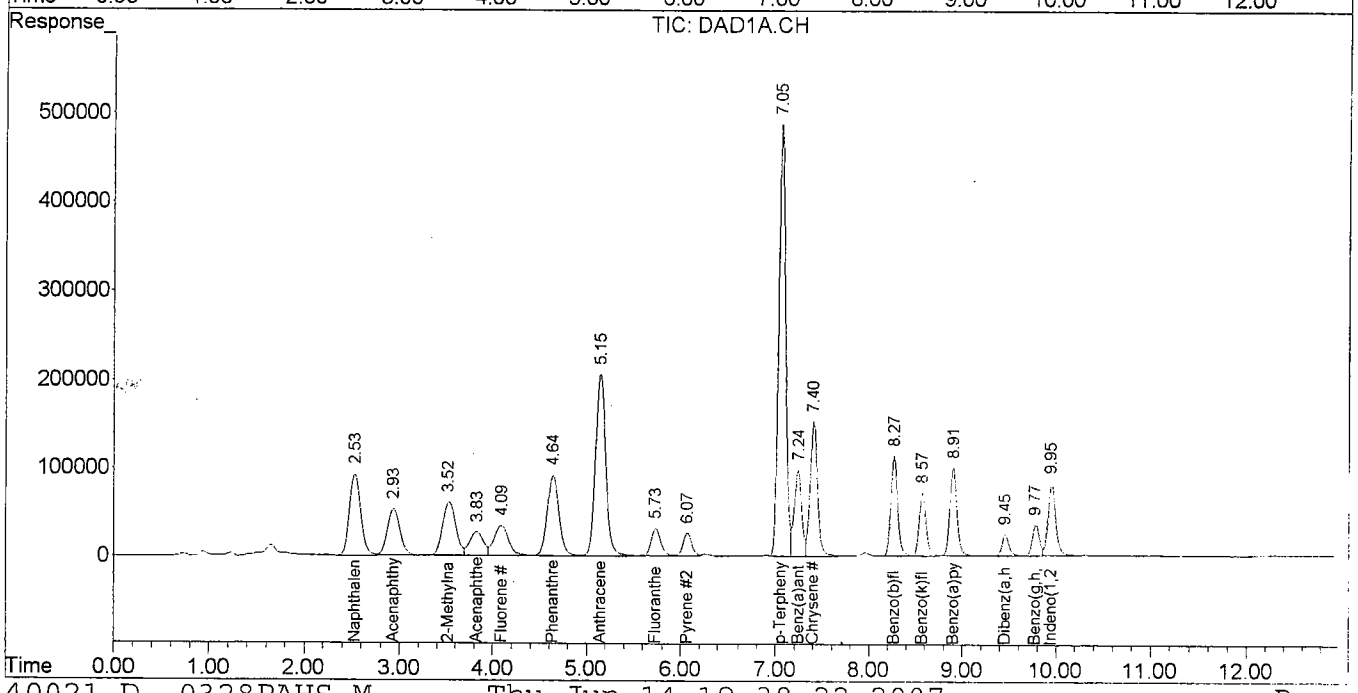
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061407PA\06140021.D\FLD1A.CH Vial: 2
Signal #2 : J:\LC06\DATA\061407PA\06140021.D\DAD1A.CH
Acq On : 14-Jun-2007, 16:39:54 Operator: PM
Sample : 8-8P PAH 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Analyzed:**	06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration Date:**	03/28/2007
Analysis Method:	8310	**Calibration ID:**	CAL6170
		Analysis Lot:	KWG0706622
		Units:	ug/mL
File ID:	J:\LC06\DATA\061407PA\06140025.D\06140025C.D	**Column ID:**	DAD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	116000	124000	7	NA	± 15 %	AverageRF
Naphthalene	20	21	36200	38800	7	NA	± 15 %	AverageRF
Acenaphthylene	20	21	23100	24700	7	NA	± 15 %	AverageRF
Acenaphthene	20	22	12500	13700	9	NA	± 15 %	AverageRF
Fluorene	2.0	2.2	162000	180000	11	NA	± 15 %	AverageRF
Phenanthrene	2.0	2.2	368000	398000	8	NA	± 15 %	AverageRF
Anthracene	2.0	2.1	750000	788000	5	NA	± 15 %	AverageRF
Fluoranthene	2.0	2.3	97500	111000	14	NA	± 15 %	AverageRF
Pyrene	2.0	2.2	77700	86200	11	NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.2	244000	270000	11	NA	± 15 %	AverageRF
Chrysene	2.0	2.2	380000	417000	10	NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.2	273000	293000	8	NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.2	168000	183000	9	NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.2	249000	268000	8	NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	2.3	55100	62700	14	NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.2	89200	96100	8	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.2	212000	236000	11	NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Treadwell and Rollo, Inc.	**Service Request:**	K0704852
Project:	Presidio	**Date Analyzed:**	06/14/2007

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type:	External Standard	**Calibration Date:**	03/28/2007
Analysis Method:	8310	**Calibration ID:**	CAL6170
		Analysis Lot:	KWG0706622
		Units:	ug/mL
File ID:	J:\LC06\DATA\061407PA\06140025.D	**Column ID:**	FLD Vydac C

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
p-Terphenyl	20	21	2940000	3120000	6		NA	± 15 %	AverageRF
Naphthalene	20	20	1550000	1560000	0		NA	± 15 %	AverageRF
Acenaphthene	20	21	816000	842000	3		NA	± 15 %	AverageRF
Fluorene	2.0	2.1	6450000	6720000	4		NA	± 15 %	AverageRF
Phenanthrene	2.0	2.0	5320000	5410000	2		NA	± 15 %	AverageRF
Anthracene	2.0	2.0	9100000	9270000	2		NA	± 15 %	AverageRF
Fluoranthene	2.0	2.1	4750000	4940000	4		NA	± 15 %	AverageRF
Pyrene	2.0	2.1	25900000	26700000	3		NA	± 15 %	AverageRF
Benzo(a)anthracene	2.0	2.1	14400000	15000000	5		NA	± 15 %	AverageRF
Chrysene	2.0	2.2	9320000	10000000	8		NA	± 15 %	AverageRF
Benzo(b)fluoranthene	2.0	2.1	3220000	3370000	5		NA	± 15 %	AverageRF
Benzo(k)fluoranthene	2.0	2.1	16200000	17200000	6		NA	± 15 %	AverageRF
Benzo(a)pyrene	2.0	2.1	11900000	12700000	6		NA	± 15 %	AverageRF
Dibenz(a,h)anthracene	2.0	1.9	5420000	5260000	-3		NA	± 15 %	AverageRF
Benzo(g,h,i)perylene	2.0	2.5	8760000	10900000	24	*	NA	± 15 %	AverageRF
Indeno(1,2,3-cd)pyrene	2.0	2.1	14100000	15000000	7		NA	± 15 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: J:\LC06\DATA\061407PA\06140025.D
Lab ID: KWG0706622-4
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 18:03
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 06/15/07

Secondary Review: MK

Exception Report

Data File: J:\LC06\DATA\061407PA\06140025.D\06140025C.D
Lab ID: KWG0706622-4
RunType: CCV
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 18:03
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMcGel 5/07

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061407PA\06140025.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140025.D\06140025c.d			**Vial:**	2
Acqu Date:	06/14/2007 18:03	**Quant Date:**	06/14/2007 19:31	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-4				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.08	7.06	62452001	2488770	21.26	21.39			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.54	2.52	31162020	776046	20.06	21.44			
Acenaphthylene		2.92	0	494213	0.0000	21.37			
2-Methylnaphthalene/Dibe	3.54	3.51	13479478	619154	20.77	21.55			
Acenaphthene	3.83	3.82	16831506	274183	20.62	21.88			
Fluorene	4.10	4.08	13442127	359786	2.08	2.22			
Phenanthrene	4.65	4.63	10818776	796910	2.03	2.17			
Anthracene	5.16	5.14	18544063	1575579	2.04	2.10			
Fluoranthene	5.75	5.72	9874842	221613	2.08	2.27			
Pyrene	6.08	6.07	53383913	172380	2.06	2.22			
Benz(a)anthracene	7.26	7.23	30092655	539032	2.09	2.21			
Chrysene	7.43	7.40	20077844	834046	2.15	2.19			
Benzo(b)fluoranthene	8.29	8.27	6738637	585958	2.09	2.15			
Benzo(k)fluoranthene	8.60	8.58	34387927	366118	2.12	2.17			
Benzo(a)pyrene	8.93	8.91	25404005	536646	2.13	2.15			
Dibenz(a,h)anthracene	9.49	9.47	10520717	125318	1.94	2.28			
Benzo(g,h,i)perylene	9.81	9.79	21714328	192236	2.48	2.16			
Indeno(1,2,3-cd)pyrene	9.99	9.96	30097743	471738	2.13	2.23			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

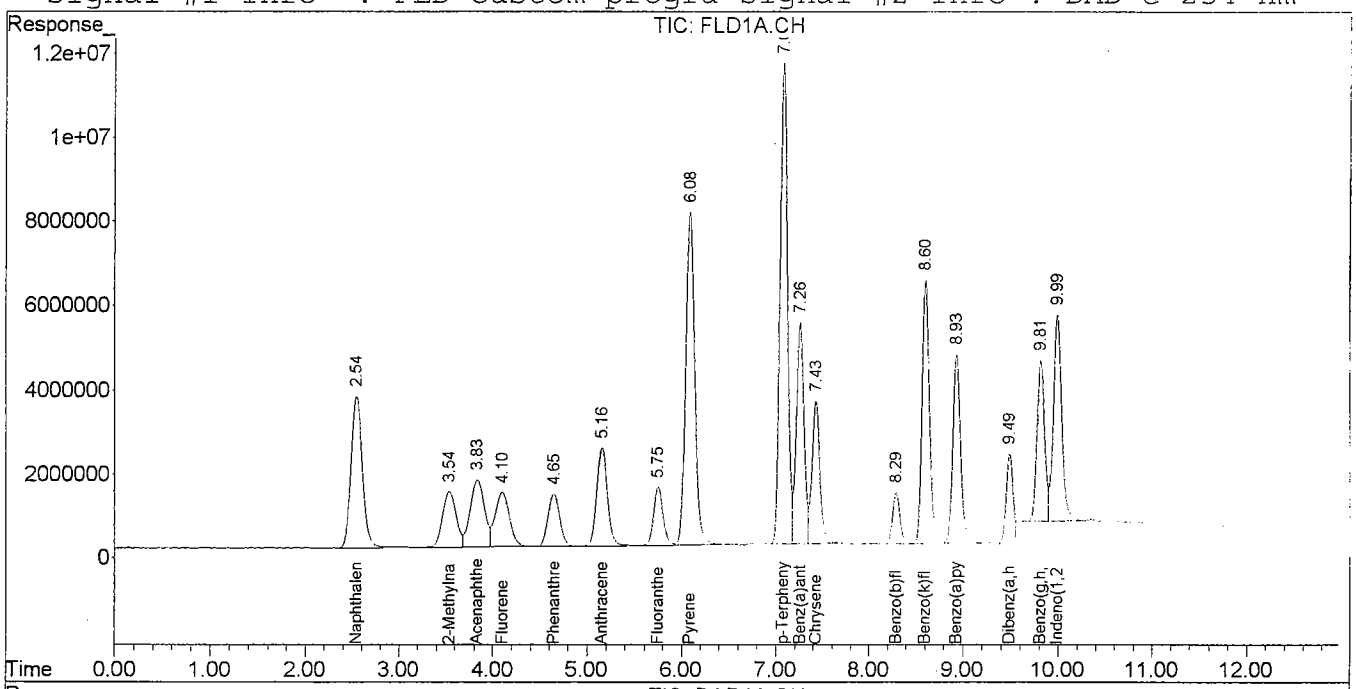
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

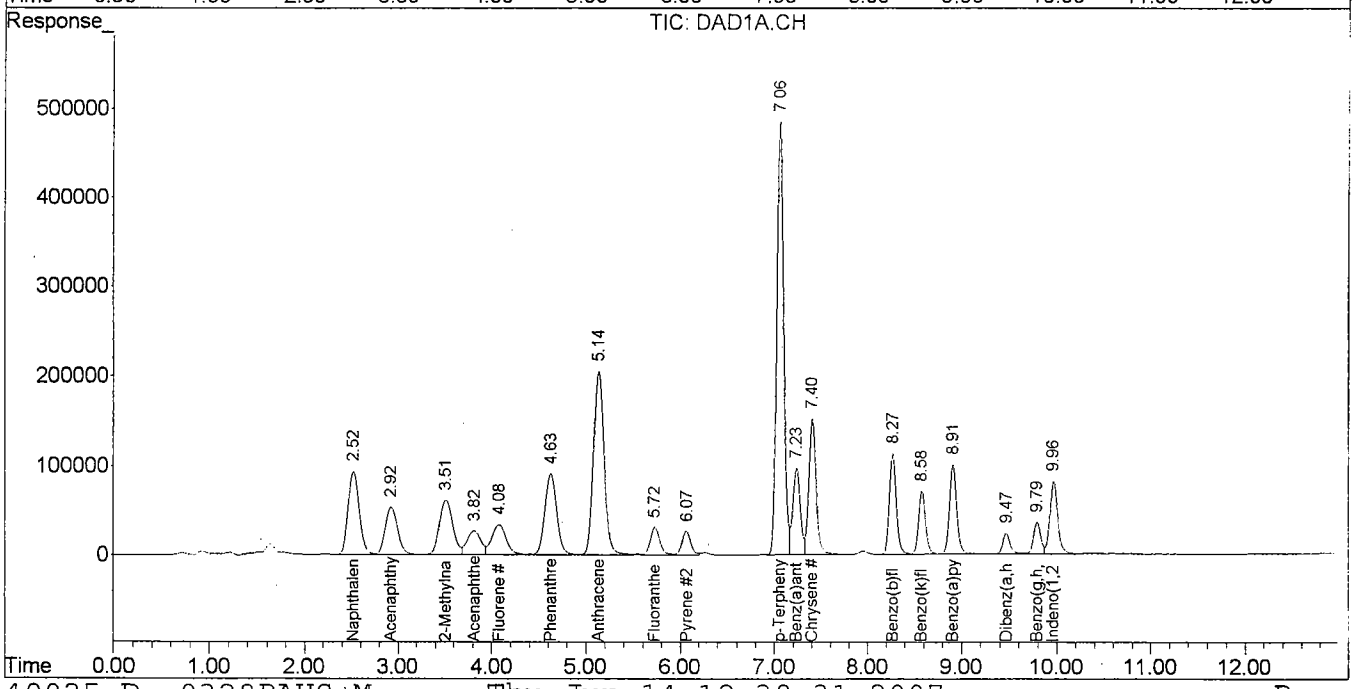
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061407PA\06140025.D\FLD1A.CH Vial: 2
Signal #2 : J:\LC06\DATA\061407PA\06140025.D\DAD1A.CH
Acq On : 14-Jun-2007, 18:03:16 Operator: PM
Sample : 8-8P PAH 20/2 Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG0706513	**Prep Method:**	EPA 3510C	**Prep Date:**	06/11/07 10:30
Department:	Petroleum HC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.
K0704769-001	7D060507G	610 PAH	WATER	1000ml	1.0ml
K0704852-002	1349MW100CL	8310 PAH	WATER	1050ml	1.0ml
K0704852-004	FM14EX07GW102CL	8310 PAH	WATER	1040ml	1.0ml
K0704872-011	8D060707	610 PAH	WATER	1000ml	1.0ml
KWG0706513-1	Lab Control Sample	8310 PAH	WATER	1000ml	1.0ml
KWG0706513-2	Duplicate Lab Control Sampl	8310 PAH	WATER	1000ml	1.0ml
KWG0706513-3	Method Blank	8310 PAH	WATER	1000ml	1.0ml
KWG0706513-4	Matrix Spike	610 PAH	WATER	950ml	1.0ml

Lab Code	Parent Lab Code	Comments
KWG0706513-4	K0704769-001	

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K0704769-001	607763	HCSV8-15H	100uL			SJones
K0704852-002	607765	HCSV8-15H	100uL			SJones
K0704852-004	607764	HCSV8-15H	100uL			SJones
K0704872-011	607762	HCSV8-15H	100uL			SJones
KWG0706513-1	607766	HCSV8-15H	100uL	HCSV8-7C	100uL	SJones
KWG0706513-2	607767	HCSV8-15H	100uL	HCSV8-7C	100uL	SJones
KWG0706513-3	607768	HCSV8-15H	100uL			SJones
KWG0706513-4	607769	HCSV8-15H	100uL	HCSV8-7C	100uL	SJones

Comments:

Started By: AMillard Assisted By: — Training Yes No

Completed By: SJones Assisted By: — Yes No

Reviewed By: PM Date: 061207 Storage: Box 8B

Chain of Custody

Relinquished By: S. Jones Date: 6/11/07

Received By: PM Date: 061207 Extracts Examined Yes No

Preparation Information

Group ID:	KWG0706513	**Prep Method:**	EPA 3510C	**Prep Date:**	06/11/07 10:30
Department:	Petroleum HC				

#	Lab Code	Client ID	B#	√	Product	Matrix	Amt. Ext. mL	pH	Int. Vol.	Final Vol. mL	Surr. Added	Spike Added
1	K0704769-001	7D060507G		✓	610 PAH	WATER	1000	NA	NA	1.0	100ml	NA
(E) 2	K0704852-002	1349MW100CL		✓	8310 PAH	WATER	1050					
3	K0704852-004	FM14EX07GW102CL		✓	8310 PAH	WATER	1040					
4	K0704872-011	8D060707		✓	610 PAH	WATER	1000					↓
5	KWG0706513-1	Lab Control Sample			8310 PAH	WATER						100ml
6	KWG0706513-2	Duplicate Lab Control Sample			8310 PAH	WATER						↓
7	KWG0706513-3	Method Blank			8310 PAH	WATER	↓					NA
8	KWG0706513-4	Matrix Spike 4769-1			610 PAH	WATER	950	↓	↓	↓	↓	100ml

DCM Lot # CT171

Glass Wool Lot # GW042007

Na_2SO_4 Lot # 4630652

Sonic Horn Tuned NA
Initial / Date

Comments: (E) - formed a heavy emulsion

Surrogate ID: HCSV8-15H

Spike ID: HCSV8-7C

Witness: S. Jones 6/11/07

Started By: AMillard

Assisted By: —

Completed By: ~~AMillard~~ SJ - PM 06/12/07

Assisted By:

COLUMBIA ANALYTICAL SERVICES, INC.

PHC Dilution Log

LAB I.D.	ALIQUOT	FINAL VOLUME	CUMULATIVE DILUTION FACTOR	DATE	ANALYST	COMMENTS
4852-2	100ml	1ml	10x	061407	PM	
-2 10x	100ml	1ml	100x	061407	PM	

Exception Report

Data File: J:\LC06\DATA\061207PA\06120003.D
Lab ID: KWG0706622-5
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 19:19
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PM061507

Secondary Review: MMh

Printed: 06/14/2007 20:06:50
u:\Stealth\Crystal.rpt\except2.rpt

Exception Report

Data File: J:\LC06\DATA\061207PA\06120003.D\06120003C.D
Lab ID: KWG0706622-5
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 19:19
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMU061507

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120003.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120003.D\06120003c.d			**Vial:**	1
Acqu Date:	06/12/2007 19:19	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-5				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene		2.93	0	1073	0.0000	0.0460			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene			0	0	0.0000	0.0000			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene	7.56		254665	0	0.0270	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene			0	0	0.0000	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene		9.60	0	313831	0.0000	5.70			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

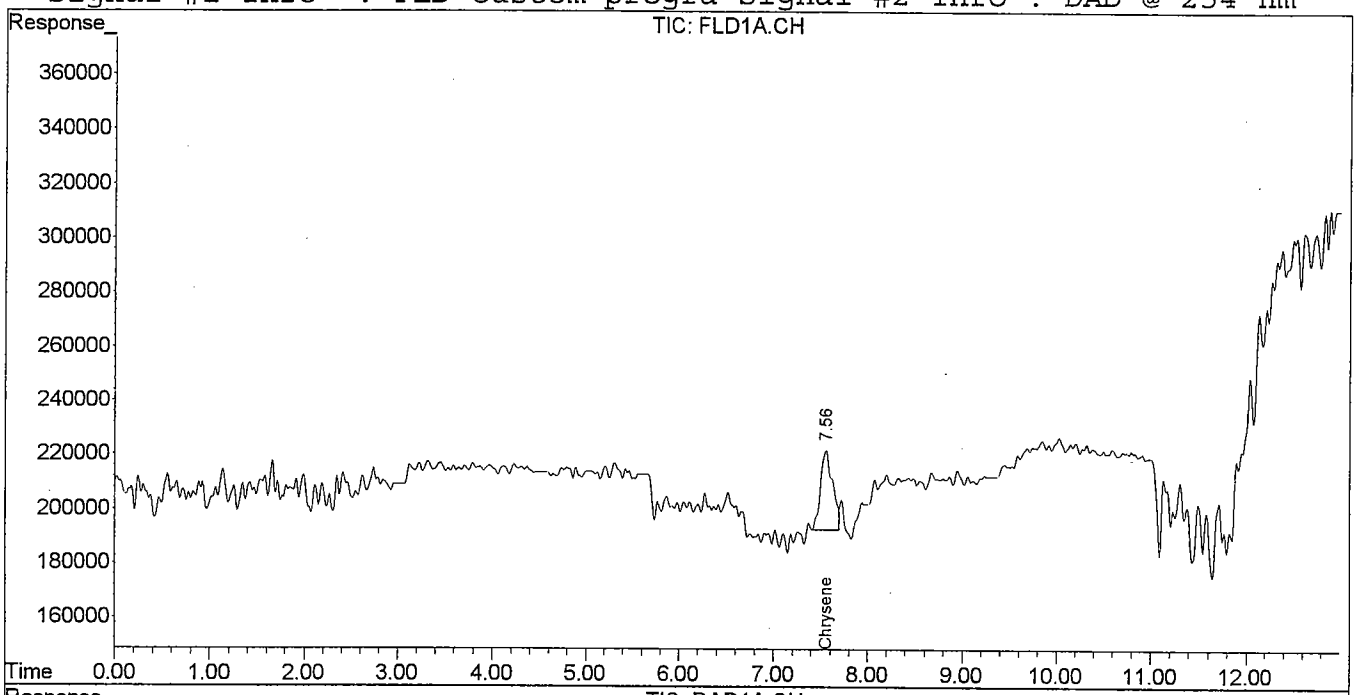
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

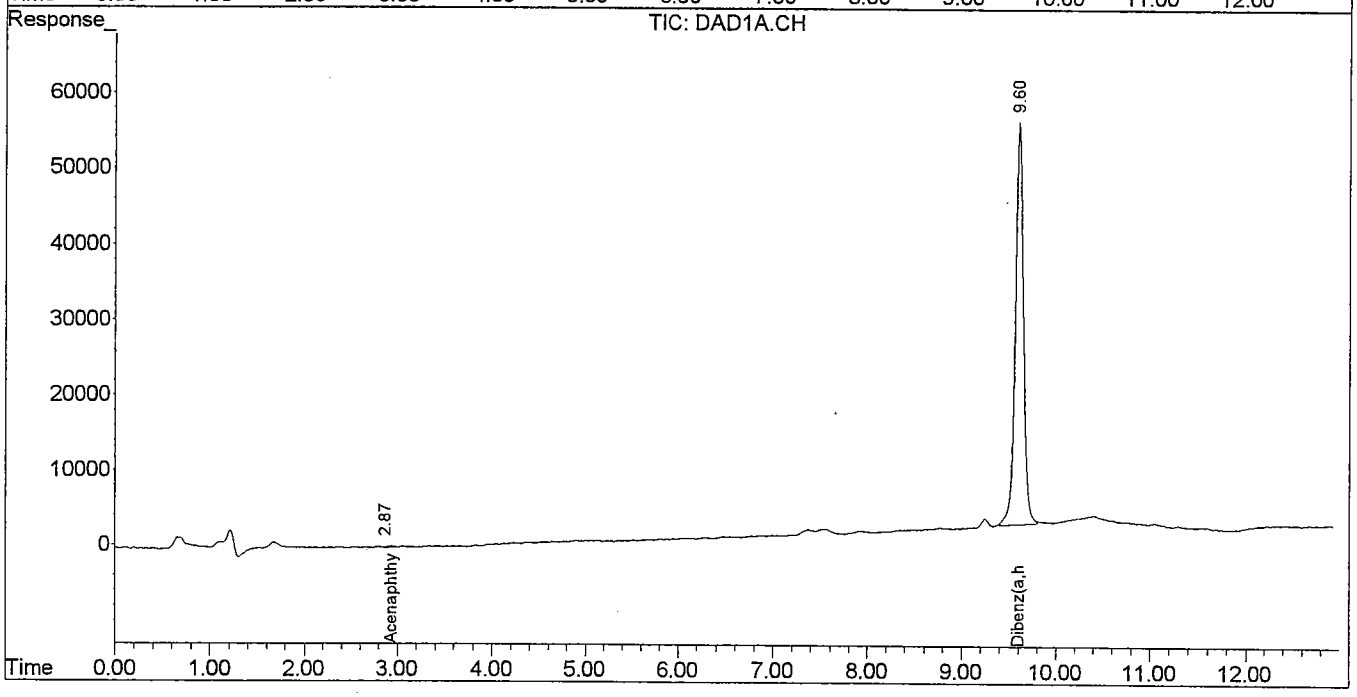
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120003.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\061207PA\06120003.D\DAD1A.CH
Acq On : 12-Jun-2007, 19:19:40 Operator: PM
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\061207PA\06120015.D
Lab ID: KWG0706622-6
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 23:29
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [illegible]

Secondary Review: [illegible]

Exception Report

Data File: J:\LC06\DATA\061207PA\06120015.D\06120015C.D
Lab ID: KWG0706622-6
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/12/2007 23:29
Date Quantitated: 06/13/2007 17:28
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: DMorel 507

Secondary Review: [illegible]

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061207PA\06120015.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061207PA\06120015.D\06120015c.d			**Vial:**	1
Acqu Date:	06/12/2007 23:29	**Quant Date:**	06/13/2007 17:28	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-6				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene			0	0	0.0000	0.0000			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene		8.28	0	665	0.0000	0.0020			
Benzo(k)fluoranthene			0	0	0.0000	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene		9.57	0	19955	0.0000	0.3620			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

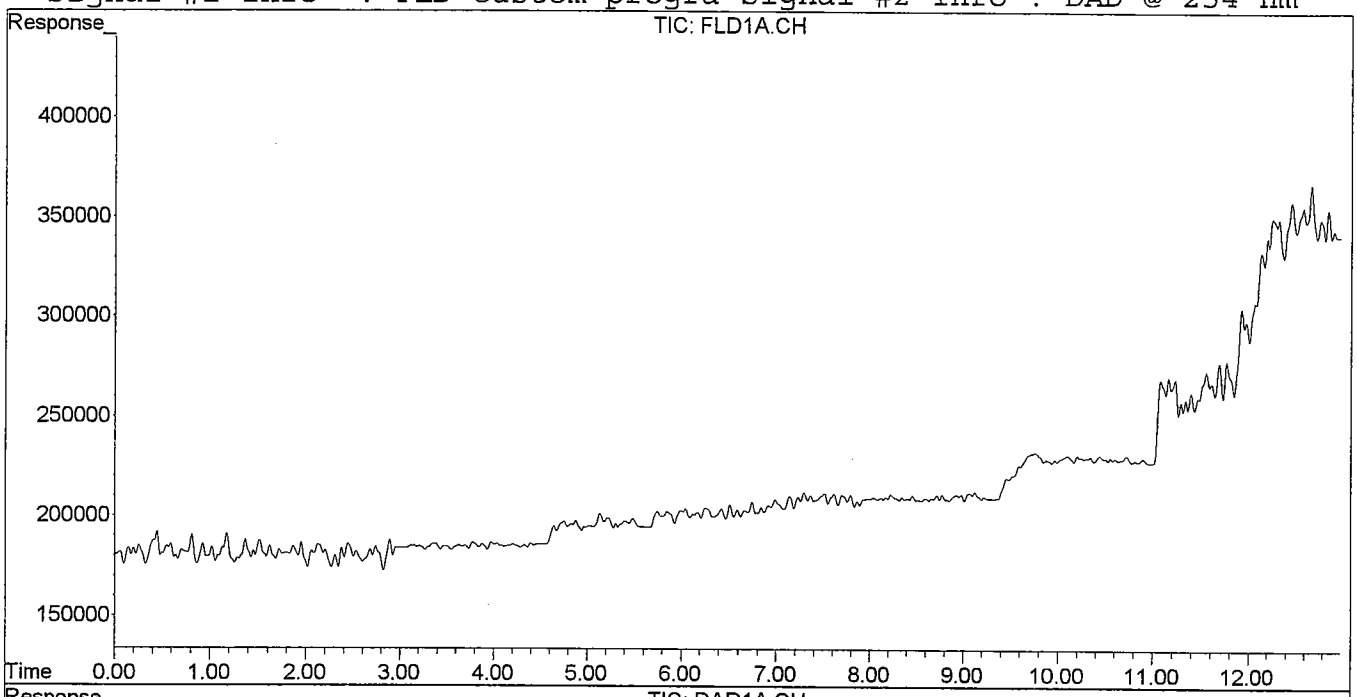
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

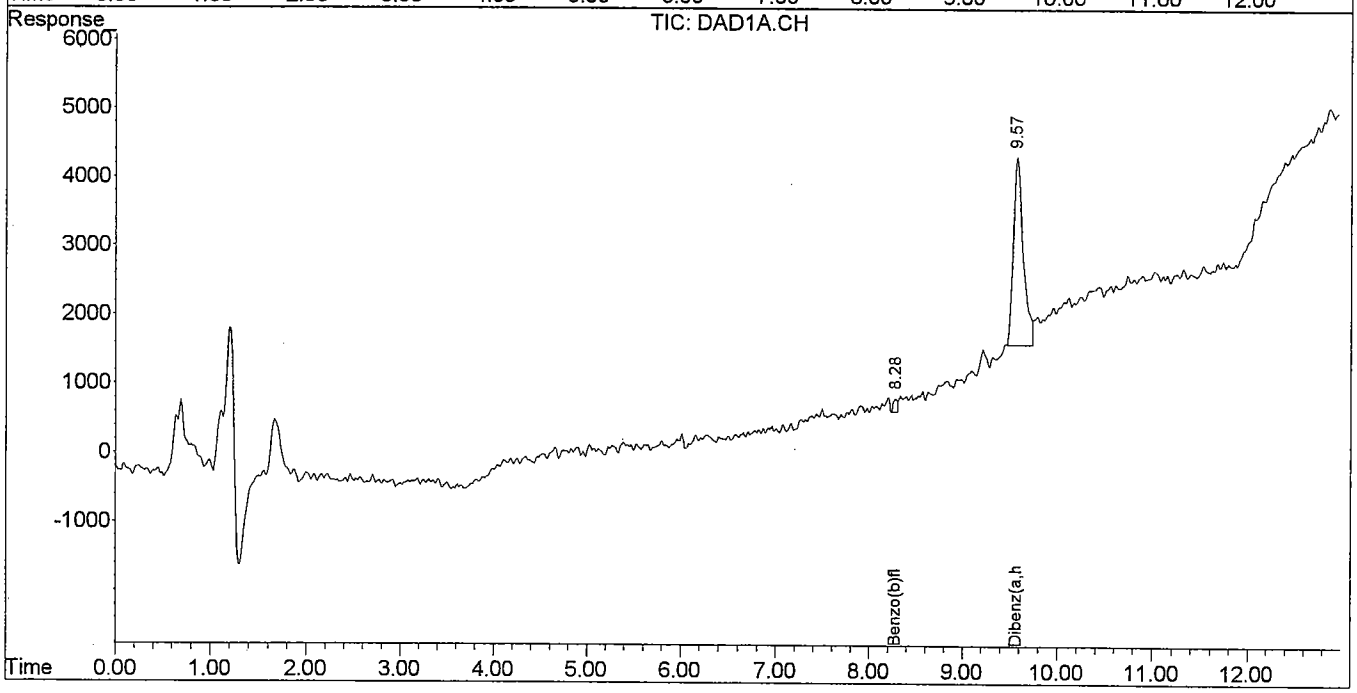
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061207PA\06120015.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\061207PA\06120015.D\DAD1A.CH
Acq On : 12-Jun-2007, 23:29:41 Operator: PM
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 13 17:28 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Tue Jun 12 19:19:33 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\061407PA\06140022.D
Lab ID: KWG0706622-7
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 17:00
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 06/15/07

Secondary Review:

Exception Report

Data File: J:\LC06\DATA\061407PA\06140022.D\06140022C.D
Lab ID: KWG0706622-7
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 17:00
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMW 6/15/07

Secondary Review: MMG

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061407PA\06140022.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140022.D\06140022c.d			**Vial:**	1
Acqu Date:	06/14/2007 17:00	**Quant Date:**	06/14/2007 19:31	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-7				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	7.07		46104	0	0.0160	0.0000			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene	2.56		30728	0	0.0200	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene			0	0	0.0000	0.0000			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene			0	0	0.0000	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene		9.48	0	15711	0.0000	0.2850			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

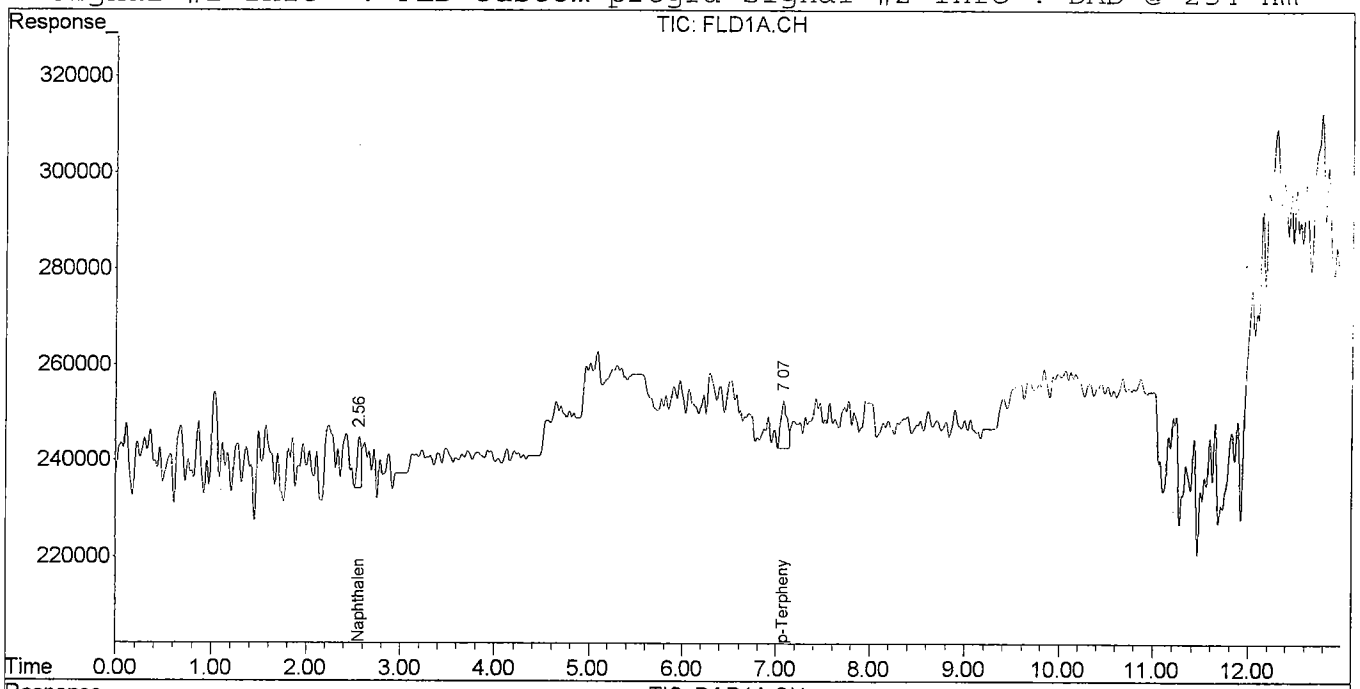
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

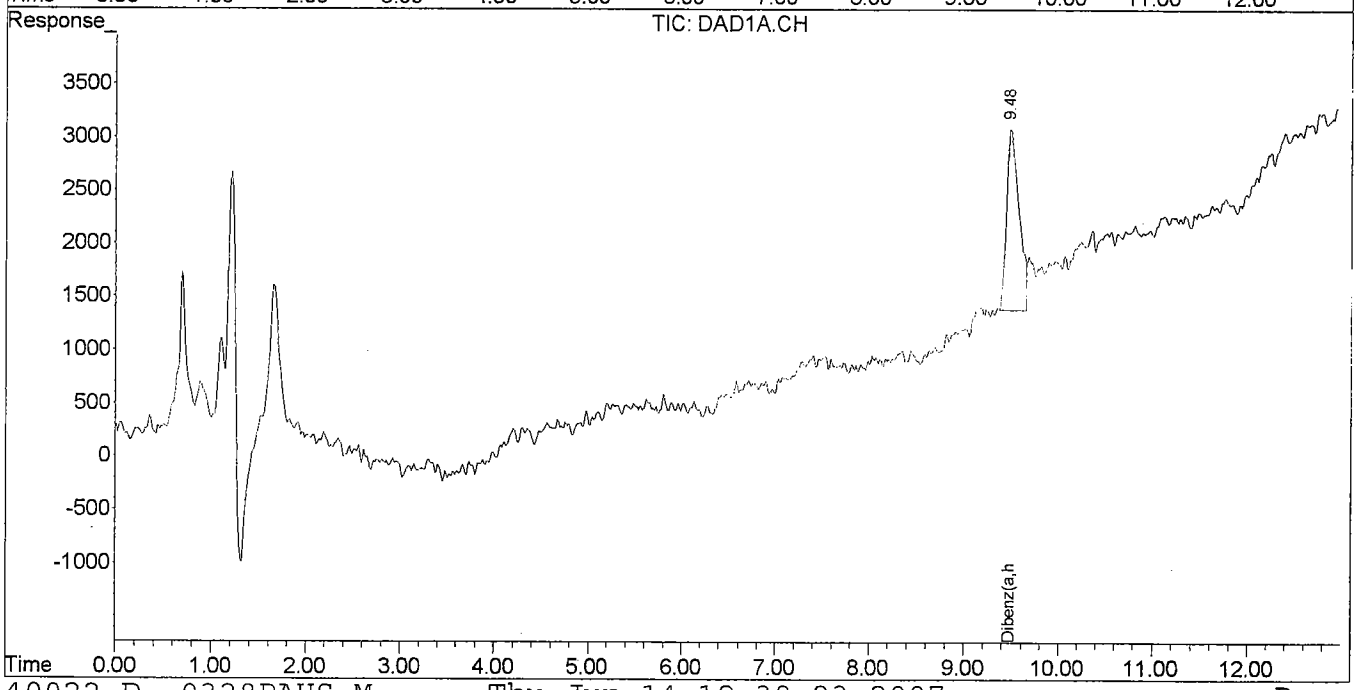
Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061407PA\06140022.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\061407PA\06140022.D\DAD1A.CH
Acq On : 14-Jun-2007, 17:00:42 Operator: PM
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm





Exception Report

Data File: J:\LC06\DATA\061407PA\06140026.D
Lab ID: KWG0706622-8
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 18:24
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: Mudel 507

Secondary Review: MG

Exception Report

Data File: J:\LC06\DATA\061407PA\06140026.D\06140026C.D
Lab ID: KWG0706622-8
RunType: IB
Matrix: AQUEOUS WASTE

Date Acquired: 06/14/2007 18:24
Date Quantitated: 06/14/2007 19:31
Batch ID: KWG0706622
Analysis Method: 8310
MethodJoinID: MJ277

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source Ave %D	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: PMW 6/15/07

Secondary Review: MMC

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	AQUEOUS WAST
Prod Code:	8310 PAH	**Collect Date:**		**Receive Date:**	06/13/2007

Analysis Lot:	KWG0706622	**Prep Lot:**		**Report Group:**	
Analysis Method:	8310	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\LC06\METHODS\0328PAHS.M	**Calibration ID:**	CAL6170
Title:			
MB Ref:		**Method ID:**	MJ277
		Quant based on Method	

Data File #1:	J:\LC06\DATA\061407PA\06140026.D			**Instrument:**	LC06
Data File #2:	J:\LC06\DATA\061407PA\06140026.D\06140026c.d			**Vial:**	1
Acqu Date:	06/14/2007 18:24	**Quant Date:**	06/14/2007 19:31	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ug/mL
Lab ID:	KWG0706622-8				
Signal #1:	FLD Vydac C-18 4.6 x 150 mm	**Signal #2:**	DAD Vydac C-18 4.6 x 150 mm		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ug/mL #1	ug/mL #2			Rpt
p-Terphenyl	0.00		0	0		0.0000			NA
			%Recovery =		NA	NA	Limits =	42-137	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ug/mL #1	ug/mL #2	ug/L #1	ug/L #2	Rpt
Naphthalene			0	0	0.0000	0.0000			
Acenaphthylene			0	0	0.0000	0.0000			
2-Methylnaphthalene/Dibe			0	0	0.0000	0.0000			
Acenaphthene			0	0	0.0000	0.0000			
Fluorene			0	0	0.0000	0.0000			
Phenanthrene			0	0	0.0000	0.0000			
Anthracene			0	0	0.0000	0.0000			
Fluoranthene			0	0	0.0000	0.0000			
Pyrene			0	0	0.0000	0.0000			
Benz(a)anthracene			0	0	0.0000	0.0000			
Chrysene			0	0	0.0000	0.0000			
Benzo(b)fluoranthene			0	0	0.0000	0.0000			
Benzo(k)fluoranthene			0	0	0.0000	0.0000			
Benzo(a)pyrene			0	0	0.0000	0.0000			
Dibenz(a,h)anthracene		9.49	0	9585	0.0000	0.1740			
Benzo(g,h,i)perylene			0	0	0.0000	0.0000			
Indeno(1,2,3-cd)pyrene			0	0	0.0000	0.0000			

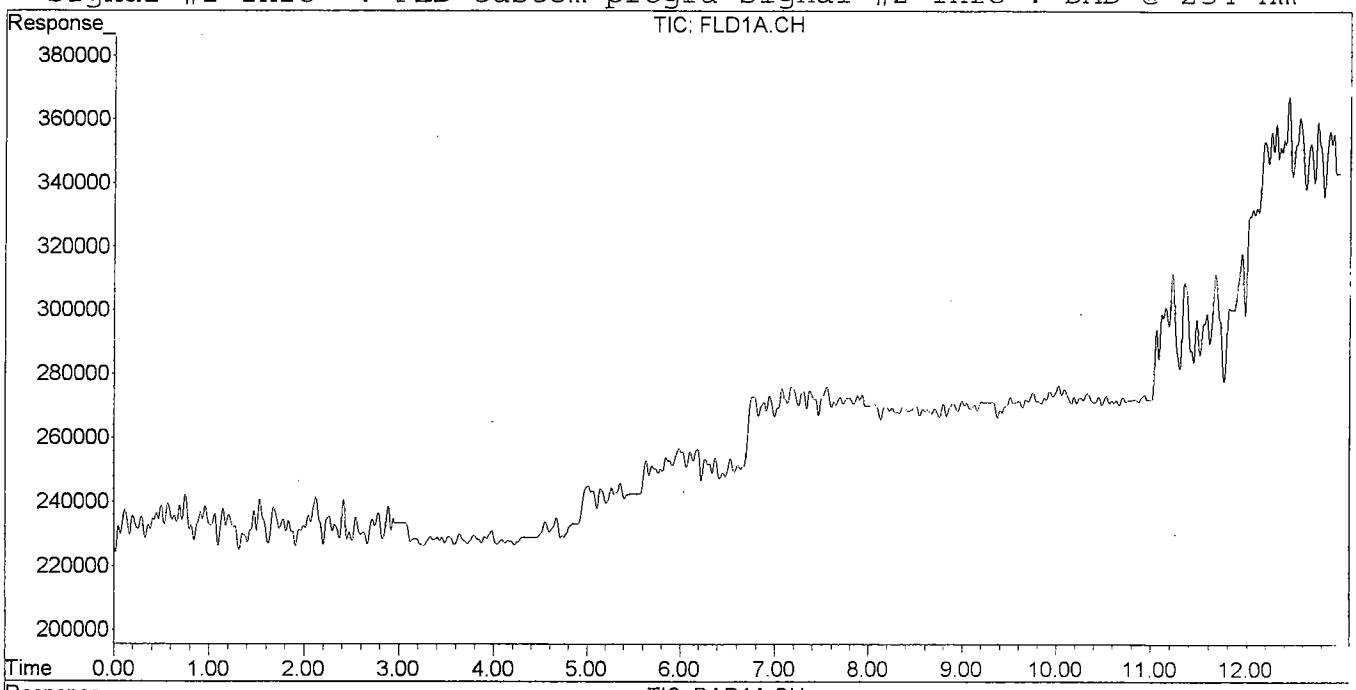
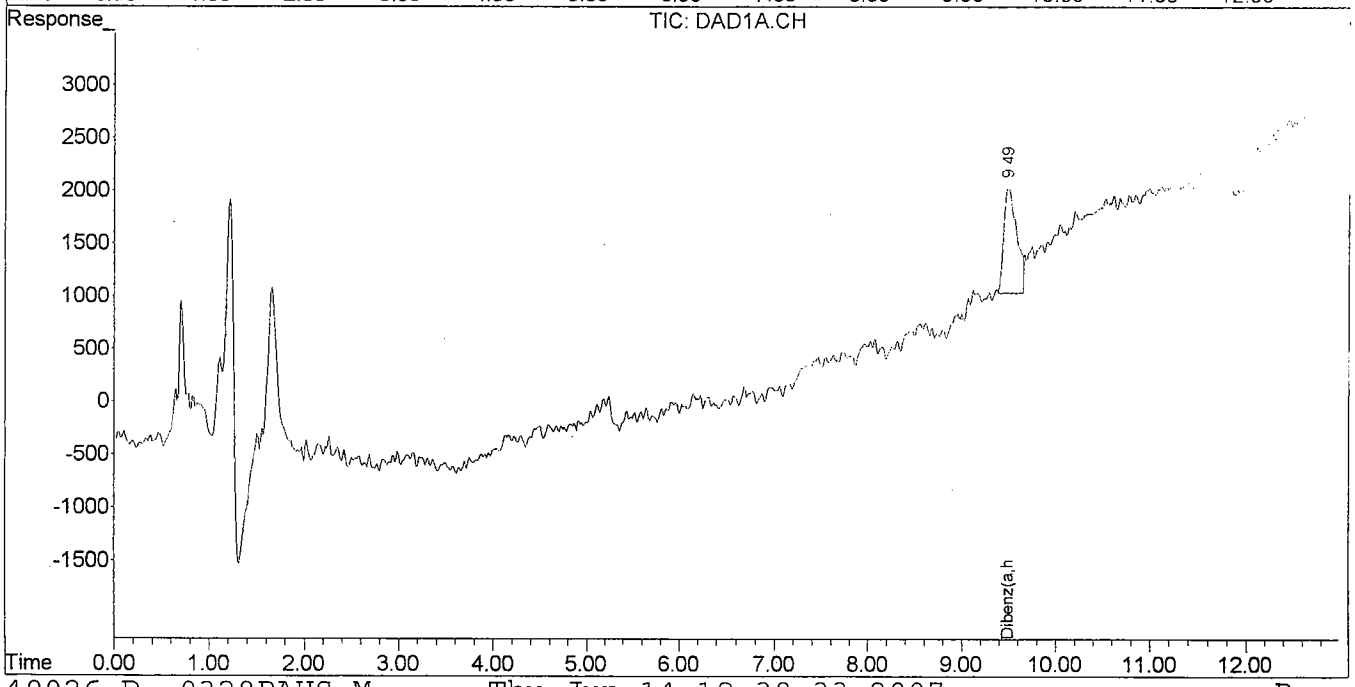
U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Not Reviewed)

Signal #1 : J:\LC06\DATA\061407PA\06140026.D\FLD1A.CH Vial: 1
Signal #2 : J:\LC06\DATA\061407PA\06140026.D\DAD1A.CH
Acq On : 14-Jun-2007, 18:24:05 Operator: PM
Sample : acetonitrile Inst : G1321A
Misc : Multiplr: 1.00
IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT2.P
Quant Time: Jun 14 19:31 2007 Quant Results File: 0328PAHS.RES

Quant Method : J:\LC06\METHODS\0328PAHS.M (RTE Integrator)
Title : 0328PAHs aka CAL6170
Last Update : Thu Jun 14 17:15:44 2007
Response via : Multiple Level Calibration
DataAcq Meth : PAH.M

Volume Inj. : 20uL
Signal #1 Phase : FLD Vydac C-18 4. Signal #2 Phase: DAD Vydac C-18 4.6 x
Signal #1 Info : FLD custom progra Signal #2 Info : DAD @ 254 nm